

**TECHNICAL REVIEW COMMITTEE
PRELIMINARY COMMENTS AND/OR RECOMMENDED CONDITIONS**

Note: Village Planning staff is responsible for coordinating the Technical Review of Preliminary Major Subdivision Plat Approval Requests; please contact the appropriate Department at the phone # indicated below if you have any questions about the comments or recommendations listed. Further, please note that additional information may be forthcoming from Departments that indicate “See Emailed Comments” or another similar phrase. A list of recommended conditions from this Technical Review Committee will be sent to you via fax generally by the end of the business day on Friday the week prior to the Planning Board Public Hearing.

PROJECT CASE #: C-21-002 **PARCEL PIN:** PIN 5892-16-7553

PROJECT TITLE/DESCRIPTION: Tudor Oaks Subdivision

UDO: Preliminary major subdivision approval

NC DOT District 2: Sr. Assistant District Engineer, Randy Ogburn (336-747-7900)

- Encroachment agreements are required for any work or utility ties needed within the right of way.

Winston-Salem/Forsyth County Inspections (Zoning), Elizabeth Colyer (336-727-2626) elizabethrc@cityofws.org

- No comments

Winston-Salem (Erosion Control/Floodplain Program Manager) Matthew Osborne (336-747-7453) matthewo@cityofws.org

- If the proposed project creates more than 10,000 sq. ft. of land disturbance (20,000 sq. ft. of land disturbance for Single-Family Dwelling construction), a Grading/Erosion Control Permit will be required prior to the start of work. In order to obtain this permit you must submit a professionally designed Erosion and Sedimentation Control Plan along with an original signed/notarized Financial Responsibility/Ownership (FRO) form for review and approval. Please submit the plan through the electronic plan review portal as application type 04.02 Grading/Erosion Control Permit at the following link: <https://winston-salem.idtplans.com/secure/>
- Stream channel and/or wetland impacts are shown on this plan. US Army Corp of Engineers 404 and/or North Carolina Department of Environmental Quality - Division of Water Resources 401 permits may be required for these stream channel/wetland impacts. If these permits are required a Grading/Erosion Control Permit will not be issued until copies of these permits are provided. Please contact Sue Homewood with NCDEQ - DWR (336-776-9800) to determine if either of these permits will be required for this project.

Clemmons Public Works/Stormwater, Michael Gunnell (336-766-9170) mgunnell@clemmons.org

- See attached

Clemmons Fire Jerry Brooks (336-766-4114)

- No comments

Forsyth County Fire Scott Routh (336-703-2550) routhcs@forsyth.cc

- No comments

Winston-Salem/Forsyth County Utilities, Chris Jones (336-747-7499) charlesj@cityofws.org

- Submit water/sewer extension plans to utilities plan review for permitting/approval. Water meters purchased through COWS. System development fees due at the time of meter purchase. Will the road fall within public R/W? There is not sufficient easement/ r/w for our utilities. We will need at least 10' from the centerline of the mains for an exclusive public utility easement. Also, the water and sewer alignments are in conflict with the proposed tree line.

Clemmons Planning, Nasser Rahimzadeh (336-766-7511) nasser@clemmons.org

- Access easement/private roads for lots 18-21 fail to comply with B.3-1.2(N) Width of Private Access Easements and Private Streets...An access easement, or private street, connecting a public street or highway to principal uses which depend upon such easement for access, shall be not less than twenty-five (25) feet in width and shall be recorded in the office of the Register of Deeds. Any use abutting such easement shall be located on a zoning lot and shall comply with all dimensional requirements of the applicable district. No zoning permit shall be issued for a principal use not abutting upon a public street or a private street which complies with this provision. This width requirement does not apply to any driveway located on a zoning lot or to any alley.
- Lots shall comply with RS-9 dimensional requirements
- Monument sign shall comply with sight triangle and include a subdivision sign easement on final plat
- Per table B.3.8 Off-Street Parking Requirements, single family residential buildings shall provide 2 spaces per dwelling unit. Provide sufficient information to indicate compliance.
- Development shall protect trees toward TSA calculations per B.3-4.2.1(A)(5) "Tree Protection During Construction...To receive credit for existing trees proposed for preservation, the TSA must be protected from direct and indirect root damage, and trunk and crown disturbance. The tree protection area shall be reviewed by the Public Works Director and Director of Inspections and/or designee. The following standards shall apply:
 - (a)The tree save area (TSA) shall include all area located within the Critical Root Zone or as delineated in the field by the Director of Inspections or designee.
 - (b)Construction site activities, such as parking, material storage, dirt stockpiling, concrete washout, and other similar activities, shall

not be permitted within a tree save area (TSA).

(c) Protective barriers shall be installed around the tree save area (TSA) as necessary prior to the issuance of a grading permit.”

- Staff strongly recommends native flora species
- Site plan shall comply with Form 1 Submittal Requirements per B.7-4.1
- Stub street to the western property line per D.4(B)(1)(f) “All subdivisions shall dedicate right-of-way and construct stub streets to any adjoining properties to facilitate traffic circulation within the context of the overall transportation network. All stub streets shall meet the design and construction criteria required by each governmental jurisdiction and shall be constructed to the property line or bonded before final plats are approved for the sections of the subdivision where said streets are located. All stub streets shall be designed, constructed, and placed in locations which will permit the future extension of these streets. Any developments proposed adjacent to recorded but unbuilt stub streets shall construct the stub street through to the nearest public street inside the adjacent development. Any exemption from this regulation shall be based on the length, cost, and construction difficulties of connecting stub streets to adjacent developments resulting from natural topographic features, constructed improvements, or existing or future location of streets or lots; such exemption shall be decided by the Elected Body. Said exemption shall pertain to the dedication of right-of-way and/or construction of the stub street.”
- Please configure T-shaped turnaround per D.4(B)(1)(h) “Except in unusual circumstances, culs-de-sac or other dead-end streets, designed to be so permanently, shall not be longer than one thousand two hundred (1,200) feet and shall have either a cul-de-sac or a T-shaped turnaround installed at the end. Cul-de-sac shall have an improved circular turnaround with a minimum radius of forty (40) feet with a minimum public right-of-way radius of fifty (50) feet centered on the improved street area. T-shaped turnarounds shall have an improved street area of twenty-six (26) feet by sixty (60) feet with twenty-five (25) foot radii perpendicular and symmetrically located at the end of the street. The public right-of-way for these turnarounds shall be a minimum of forty-five (45) feet by seventy-five (75) feet centered on the improved street area. In cases where streets are built to adjoining property lines and are to be extended in the future, the board may grant a temporary T-shaped turnaround having a paved roadway area of not less than forty (40) feet in width and forty-eight (48) feet in length perpendicular to the main roadway with curve radii of not less than ten (10) feet. Said temporary T-shaped turnaround shall have a right-of-way of not less than fifty (50) feet as an extension of the main roadway with the paved roadway area centered in the right-of-way. There shall be a ten (10) foot by sixty (60) foot temporary construction and maintenance easement at the end and on both sides of the temporary T-shaped turnaround. Said easements shall be removed when the street is extended and the temporary T-shaped turnaround removed.”
- Recommend use of cul-de-sac for lots 18-21 so all lots may have direct access to a public road
- Please show sight distance easements per D.4(B)(1)(n) “All new subdivisions will have triangular sight distance easements shown in dashed lines at all street intersections and so noted on the final plat map. These easements will remain free of all structures, trees, shrubbery, driveways, and signs, except utility poles, fire hydrants, and traffic control signs. Sight easements shall be ten (10) feet by seventy (70) feet running from the intersection along the right-of-way of the pertinent street.”
- Utilities shall comply with D.4(B)(3)(d) “Electricity, Telephone, Cable Television and Natural Gas...All distribution lines and lines

providing direct service to individual properties for electricity, telephone and cable television shall be installed underground, unless required by the utility provider to be placed aboveground.”

- Please comply with D.4(B)(4)(c)(i) “If the subdivider desires to make a payment in lieu of the dedication of land, a letter to that effect shall be submitted with the preliminary plat.”
- Sidewalk thickness shall comply with D.4(B)(6) “Sidewalks...For subdivisions with fifty (50) percent or more of the lots one acre or smaller in size five (5) foot minimum sidewalks, five (5) inches in thickness shall be required along one side of all residential streets. Sidewalks shall conform to ADA requirements and the Village of Clemmons installation and maintenance requirements.”
- Please comply with the D.4(B)(10)(c) “Any markers, signs, or monuments with the name of the subdivision shall be issued a sign permit from the Inspections Division prior to installation. All such signs shall be located outside public rights-of-way, outside sight easements, and at major entrances to the subdivision. If such markers are contemplated in the subdivision, the final plat shall show the locations of these easements.”
- Note D.4(B)(10)(h) “Tree preservation planting areas shall be cordoned off during construction and protected from encroachment. The minimum area to be cordoned off shall consist of the critical root zone of the tree or an area ten (10) feet from the tree's trunk in all directions, whichever is the greater area. The protection measures shall be properly maintained during site development and shall not be removed prior to final landscaping. For the purposes of this section, encroachment is defined as the ground surface disturbance caused by grading: impervious surface cover; equipment, material, or earth storage; or by temporary or permanent construction vehicle access or circulation.”

Clemmons Planning, Jeff Vaughn (336-766-7511) jvaughn@clemmons.org

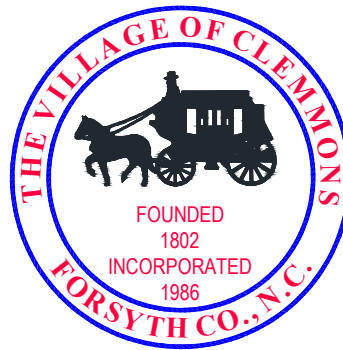
- Provide telephone numbers/emails for owners/developers
- Indicate zoning of adjacent properties
- Provide density calculations
- Provide proposed street name and label as public
- Label parking dimensions at mail kiosk
- Label Middlebrook Dr w/SR number if applicable
- Show driveways/cross streets within a 100’ of proposed access point
- Let’s talk about note #15 under Site Plan Notes
- Stub connection to the Hampton property to the South?
- Stub connection to the Ogilvie property to the NE?
- 25’ access easement must be provided to Lots 19 & 20
- How is the tree save area to be accessed for maintenance?
- There may be additional comments as plan progresses

Winston-Salem/Forsyth County GIS Mapping and Design, Carly Everhart (336) 747-7012 carlye@cityofws.org

- No comments

Forsyth County Addressing, Gloria Alford (336-703-2337) alfordgd@forsyth.cc

- Tudor Oaks Dr will extend, the road around lots 13-15 will need to be named. Please contact MapForsyth Addressing team in regard to street naming. My email is alfordgd@forsyth.cc



PUBLIC WORKS

6/16/2021

Subject: Tudor Oaks Subdivision TRC Comments

Below are the TRC comments provided by the Public Works, Engineering, and Stormwater Department:

1. Stormwater application and fees are required.
2. A grading permit will be required from the City of Winston-Salem.
3. The connection to Middlebrook will require a driveway application, as will all residential driveways for this subdivision. The connection to Middlebrook will be and NCDOT application that we will need to sign, the others are all issued by Village of Clemmons Public Works.
4. Adjust all notes to state rolled curb instead of valley curb. Valley curb is no longer accepted in Clemmons.
5. Sidewalk shall curve with the radii at the Middlebrook Connection. Add a handicap ramp to both sides of the driveway connection and show a thermoplastic cross walk.
6. Remove all of sanitary sewer from underneath of the roadway. All utilities shall be located outside of the roadway. Any crossings shall be perpendicular and the shortest extent possible.
7. Waterline shall remain on the opposite side of the road once crossing the creek.
8. Show stop bars and stop signs at all intersections.
9. Add a note that no utility features will be allowed to be placed in the roadway, curb, driveway or sidewalk. That includes meters, manhole lids, valves, etc. for all utilities (sewer, power, gas, communication, water, and any others).
10. Proposed preliminary grading will not work for drainage and protection of homes from runoff. Consider installing retaining walls to provide room in the back of the lots for adequate drainage.
11. Stream crossing will require Army Corps of Engineers and NCDEQ permits.
 - a. Must be designed per Army Corps of Engineers/NCDEQ stream crossing standards (maintain a stream bed through the pipe). PCN Submittal.

- b. Must be designed to convey the 25 year 6 hr storm event plus the normal flow of the stream. Will require extensive watershed modeling.
- 12. Add Note to Watershed Notes “The stormwater SCM/BMP for this subdivision has been designed for a specific impervious and drainage area. Any alterations to this subdivision must be approved and permitted by Village of Clemmons staff prior to any alterations occurring. Failure to obtain a Village of Clemmons permit will result in the issuance of penalties to the maximum extent possible.”
- 13. Add a note that all storm drainage must be CCTV’ed by the developer prior to acceptance and release of any financial sureties by the Village of Clemmons.
- 14. Show site distance triangles at all intersections.
- 15. Add additional stormwater structures in the roadway to eliminate long spans of storm under the center of the roadway.
- 16. An environmental assessment of this property should have already been done on this property to assess wetlands and streams. Buffers will apply to the top of bank or outer extent of those features.
- 17. Provide a typical lot layout showing the following:
 - a. Total Impervious (Max) area of the lot: _____
 - b. Driveway impervious area (24’ Max): _____
(NOTE: all driveways shall be designed and calculated as 24’ wide regardless of a lesser intended width, adjust all calculations accordingly.)
 - c. Building Footprint: _____
 - d. Sidewalks/Patios/Etc.: _____
 - e. Approximate locations of all structures and setbacks.
- 18. Show all crosswalk locations and a schematic of the crosswalk pattern, especially connecting the kiosk sidewalk over to the other sidewalk.
- 19. Stop and street signs are required at street intersections. Add a note that signs are to be purchased by the developer and delivered to Village of Clemmons staff for installation.
- 20. Show all private drainage easements and clearly note that all impervious area for this site shall be capture and conveyed to the stormwater treatment system at all times. Failure to capture/treat any runoff from this development will result in a Notice of Violation from the Village of Clemmons Stormwater Department.

21. Add a note to your typical lot layout that all drainage inlets outside of the right of way must be drop/throat inlets with a 4" (min) throat depth and a 4" slab top lid.
22. All new utilities shall be jack and bored underneath of existing roads.
23. Clearly label all common areas.
24. Add a note that all roof drains shall be smooth wall sch. 40 pvc. Single wall corrugated plastic will not be accepted.
25. Show turnarounds at dead ends of the streets per Village ordinances and Fire Department Requirements. Current turnaround is too small, see NC Fire Code Appendix D Fire Apparatus Access Rods Figure D103.1.
26. Add a note to the typical lot layout that the minimum distance between the garage door and the closest edge of sidewalk must be 20'.
27. All water and sanitary sewer lines must be a minimum of 3' from the back of curb.
28. All proposed roads shall meet the minimum design requirements as specified in the NCDOT Subdivision Roads Minimum Construction Standards based on the Design Speed and Terrain Classification.
29. For Stub Streets, signage shall be placed that meets the MUTCD standard indicating the road ends ahead, no outlet, and reflective indicators at the street end.
30. Required turn around areas shall not be used as a residential driveway and shall have "No Parking Signs" installed by the Developer.
31. Lot 19 and Lot 20 driveway situation does not meet residential driveway connection ordinances found in Chapter 94 of the Village of Clemmons Code of Ordinances. Driveways must maintain separation and are not allowed to be shared. Driveways also must be 5' from the property line.
32. Show subdivision monument sign location.
33. Add a note that internal street lights shall be the responsibility of the Home Owners Association except for those at intersections, which the Village of Clemmons will provide.
34. Adjust note 15, to state: "Developer shall bond or provide a letter for the sidewalk, curb and gutter, roadway, and all other infrastructure within the right of way. The letter shall state that 125% of the sidewalk, curb and gutter, roadway and all other infrastructure

within the right of way shall be installed within two (2) years from the issuance of the first house building permit.

35. Show sidewalk easement around all sidewalks that over-lap the right of way line.
36. Add a note to the plans that all lots adjacent to a stream shall be assessed for flooding elevations and shall be placed a minimum of 2' above any potential flood zone.

Please do not hesitate to call if you have any questions or need any assistance with the submittal.

Sincerely,

Wes Kimbrell, PE
Stormwater Engineer
The Village of Clemmons