



**Planning, Development
and Transportation**
Transportation Planning
305 Chestnut Street
PO Box 1810
Wilmington, NC 28402-1810

DATE: 12.20.2016
TO: ProTrak
FROM: Bill McDow
Transportation Planning

910 341-3258
910 341-7801 fax
www.wilmingtonnc.gov
Dial 711 TTY/Voice

■ **THE WOODLANDS AT ECHO FARMS DEVELOPMENT [TRC Plan Review]**

↻ Initial Review Note ↻

All comments are based on adopted policy documents, specific City of Wilmington Land Development Code (CofW LDC) and City of Wilmington Technical Standards and Specifications Manual (CofWTSSM) requirements in effect at the time of this review. These have been noted after the comment as appropriate for your ease in further research. The City Engineer may administratively approve dimensional variance requests per LDC Sec. 18-348. If the Applicant feels further interpretation is in order, please contact Transportation Planning directly to discuss in additional detail. Please apply for all administrative variances in writing, an email is acceptable or this may be included on the plan set. Please see Sec. 18-348 of the Land Development Code for the information required to process a variance request.

BASE INFORMATION:

- Please show the conditions on and surrounding this parcel on Independence Blvd. Show all adjacent traffic signs, lane configurations, traffic control devices and pavement markings on the site inventory plan. Please refer to the Technical Standards and Specifications Manual (link is below) Ch. VII C.1.a.2. for specific information and distance requirements. Contact Traffic Engineering at 341-7888 if you need assistance locating these elements.
- Show driveways and streets along Independence Blvd, including those across the street.
- Please prepare a list of variances for SRB/ TRC review.
- The plans appear to be SRB and not TRC plans. Provide additional required elements for the TRC plan, including locations of all types of parking, (on-street, Accessible Parking, and Bicycle), sidewalks, driveway locations to Townhouse units, dimensions, etc.

TRAFFIC IMPACT:

- ❖ A Traffic Impact Analysis (TIA) is underway for this development. Please contact Amy Kimes, PE, (910) 473-5130, amy.kimes@wilmingtonnc.gov to discuss the TIA review process and current discussions. TIA improvements will be required to be incorporated into these plans.

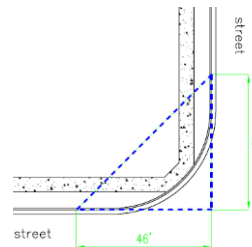
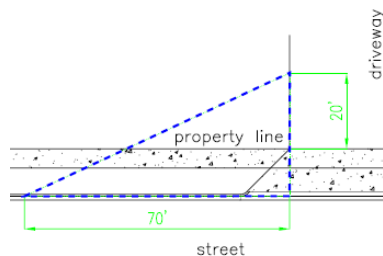
TECHNICAL STANDARDS – NEW ROADS:

1. The proposed street network for this project is not shown. Provide a sheet that lists all proposed streets along with the existing streets and distances between adjacent streets. The current sheets do not show all the streets around Tracts 3A and 3C. Also, only a portion of Tract 3C is shown on this plan set.
2. Show match lines to adjacent plan sheets for this project.
3. Provide street names for all proposed streets. Contact Jim Sahlie, PE for street name approval.
4. Jim Sahlie, PE, City GIS has determined that Road V and Road T should not be separate streets. Combine Road T and Road V into one street.
5. The cul-de-sac labeled Road S appears to be shorter than the 138' minimum length. The length of a Cul-de-sac is measured from the curblines of the intersecting through street to the bottom of the bulb or end of roadway. A variance may be required. [7-5 CofW Tech Stds]
6. Show a pavement cross section for the proposed streets.

7. The project has intersections of that are closer than the required 200'/400' minimum distance between centerlines, per the City's technical standards. A variance request may be required. [\[7-5 CofW Tech Stds\]](#) The intersections with centerline distances less than 400' include:
 - (a) All streets in Tract 3C, such as Road P and adjacent streets.
 - (b) Intersection of St Anne's Moor and entrance street to Tract 3C.
 - (c) Intersection of Road J and Foxhall Court.
 - (d) Intersection of Road E and Belfairs Drive/Appleton Way Roundabout.
 - (e) Intersection of Road T and Independence Blvd.
- 8.
9. Connect the northern section of Road L, (by Townhouse Unit #1) to Road M. If this connection is not made, then Road M must be upgraded to Collector Street standards and 60' ROW.
10. Show centerline geometry of new streets, including the Horizontal Centerline Radius and Tangent Length between horizontal curves.
11. If streets do not meet the minimum horizontal centerline radius of 100' for local roads and 200' for collector streets. A variance request may be required.
12. If streets do not meet the minimum tangent length between reverse curves of 100'. A variance request may be needed.
13. Show wheelchair ramps at each street corner with sidewalk present, per City standards.
14. The minimum street corner radii is 35', please label the dimensions. [\[7-5 CofW Tech Stds\]](#)
15. Show proposed fire hydrants. All on street parking shall be at least 15' from fire hydrants.
16. Show proposed turn lanes on Independence Blvd. for this development, including proposed connections to Road V, and Road R.
17. Provide a street cross section that shows On-street Parking.

TECHNICAL STANDARDS – ACCESS (driveway, sidewalk, and sight distance):

18. The plans show structures that appear to be cart paths. Provide information on demo/ upgrades.
19. Provide a sidewalk connection between the buildings and the public sidewalk.
20. Provide sidewalk to the amenity areas, Mail Kiosk, Club house, Pool and Pool house.
21. The Mail Kiosk, pool and club house must be ADA accessible. Provide ADA path to these structures.
22. Some of the proposed driveways do not intersect the street at a 90 degree angle. The driveways must have a minimum 75 degree angle. [\[7-11 #3 CofW Tech Stds\]](#)
23. Provide driveway connections to the Townhouses. If the curb transitions to non-vertical curb at the Townhouse driveway aprons, please show the transition area and a detail on the site details sheet.
24. Public sidewalk is required on the frontage of public streets. Please provide sidewalk on site frontage.
25. Distinguish between proposed and existing sidewalk(s) and provide dimensions.
26. Show all adjacent traffic signs and pavement markings on the plan. [\[Sec. 18-529\(b\)\(2\) CofW LDC\]](#)
27. Show and apply the City's 20'x70' sight distance triangle at each driveway and the City's 46'x46' sight distance triangle at each street corner intersection on the site plan and landscaping plan. [\[Sec.18-529\(c\)\(3\)CofW LDC\]](#) Add a note indicating that all proposed vegetation within sight triangles shall not interfere with clear visual sight lines from 30"-10'. [\[Sec.18-566 CofW LDC\]](#)



TECHNICAL STANDARDS – PARKING:

28. Provide vertical curbing adjacent to on-street parking.
29. Provide sidewalk adjacent to On-street parking areas. Do not end sidewalk prior to the parking.

30. Provide parking at the amenity areas and public areas. [\[Sec.18-526 CofW LDC\]](#)
31. Dimension parking stalls, radii and parking aisles. [\[Sec. 18-529\(b\)\(2\) CofW LDC\]](#)
32. The minimum radius is 25' for any portion of a parking lot adjacent to a travel way (i.e. islands at the end of a parking bay) for parking that is open to the public. If the travel way will not be used for emergency service vehicles or truck traffic, you may request a tighter radius, the minimum is 15'. [\[Chapter VII, Detail SD 15-13 CofWTSSM\]](#)
33. Twenty-four feet (24') is the minimum drive aisle width behind perpendicular parking.
34. Please dimension backing stubs. [\[Chapter VII ,Detail SD 15-12 CofWTSSM\]](#)
35. Provide a turning movement analysis of a Trash Truck, Fire Truck and WB-50 vehicle at the MF sites and vehicle Turnaround locations, such as Road L, Road T and Road U.
36. Provide bicycle parking in accordance with Section 18-528 of the City of Wilmington Land development Code. Graphically show the location of the parking. Add the number required and proposed to the site development data. [\[Sec.18-528 CofW LDC\]](#)

TECHNICAL STANDARDS – Barrier Free Design:

37. Ensure to show proposed 5' sidewalk adjacent to buildings. In areas where sidewalk is adjacent to 90 degree parking spaces provide an allowance for a 2.5' vehicle overhang to meet ADA requirements. 4' of the sidewalk must remain clear for pedestrian use. [\[Chapter VII, Detail SD 15-13 CofWTSSM\]](#)
38. Please show location of handicap ramp(s) and signs and provide details on the plan.
39. Note/label the plan with spot elevations that clearly indicate the accessible route from the HC space(s) to the buildings. [\[Sec. 18-529\(b\)\(2\) CofW LDC\]](#)

GENERAL NOTES TO ADD TO THE PLAN:

- A. All pavement markings in public rights-of-way and for driveways are to be thermoplastic and meet City and/or NCDOT standards. [\[Detail SD-13 CofW Tech Stds\]](#)
- B. All signs and pavement markings in areas open to public traffic are to meet MUTCD (Manual on Uniform Traffic Control Devices) standards. [\[Detail SD 15-13 CofW Tech Stds\]](#)
- C. All traffic control signs and markings off the right-of-way are to be maintained by the property owner in accordance with MUTCD standards.
- D. All parking stall markings and lane arrows within the parking areas shall be white.
- E. A utility cut permit is required for each open cut of a City street. Note this on the plan and contact 341-5888 for more details. In certain cases an entire resurfacing of the area being open cut may be required.
- F. It shall be the responsibility of the subdivider to erect official street name signs at all intersections associated with the subdivision in accordance with the Technical Standards and Specifications Manual. The subdivider may acquire and erect official street name signs or may choose to contract with the city to install the street signs and the subdivider shall pay the cost of such installation. Contact Traffic Engineering at 341-7888 to discuss installation of traffic and street name signs. Proposed street names must be approved prior to installation of street name signs.
- G. Any broken or missing sidewalk panels, driveway panels and curbing will be replaced.
- H. A landscaping plan indicating the location of required street trees shall be submitted to the City of Wilmington Traffic Engineering Division and Parks and Recreation Department for review and approval prior to the recording of the final plat. [\[SD 15-14 CofW Tech Stds\]](#)
- I. Contact Traffic Engineering at 341-7888 (48) hours prior to any excavation in the right of way.

MISCELLANEOUS:

- ❖ Permitting of business identification signage is a separate process. NCDOT/ City of Wilmington will not allow obstructions within the right of way.

Please let me know if you have any questions or if I can be of further assistance as this development moves through the review process.