



Town of Apex North Carolina
P.O. Box 250
Apex, NC 27502
(919) 249-3426
www.apexnc.org

11/21/2024

Jeff Roach
1125 Apex Peakway
Apex, NC 27502

RE: Tingen Corners (fka Seymour PUD) Master Subdivision Plan
Review No. 2

**** DISCLAIMER: ADDITIONAL COMMENTS MAY BE ADDED UP TO AND DURING THE STAFF PORTION OF TRC ****

This is a revised comment letter for November. Staff has closed some additional comments and opened a new one. Please review carefully. If you have questions, please contact staff directly.

Open Issues: 104

Development Services

General Issues

1. Construction Plan Approval Requirements

Town of Apex North
Carolina

Jean Weatherman
9/17/24 8:14 AM
Master Subdivision
Plan - Residential - 1

All construction plans must meet the following requirements **prior to construction plan approval**. All of these conditions **may or may not** apply to your particular project:

- All water and gravity sanitary sewer extension permits must be issued by the Town of Apex (Town).
- All private State sewer permits must be issued.
- All new pump stations/force mains as well as modifications to existing pump stations/force mains must be permitted by the State.
- All 401 Water Quality Certifications, 404 Permits, and applicable State-regulated Riparian Buffer Authorizations (e.g. Neuse River Basin Buffer Rules), and any other environmental or pipeline permits must be approved by the appropriate Town, State and/or Federal agencies. Any mitigation payments need to be made and receipts supplied to Development Services.
- Property must be annexed prior to construction plan approval.
- **All State Department of Transportation driveway permits and encroachment agreements must be approved.**
- All off site improvement plans must be approved.
- Infrastructure Inspection Fees will be assessed with the final Construction Plan submittal. 50% of the fees will be due prior to final Construction Plan approval. The balance will be due prior to plat (residential) or Certificate of Occupancy (commercial).

Peak Engineering &
Design, PLLC

Jeff Roach
9/24/24 12:45 PM
Master Subdivision
Plan - Residential - 1

Client has been made aware of the requirements for approvals to start construction.

Town of Apex North
Carolina
Jean Weatherman
10/30/24 8:50 AM
Master Subdivision
Plan - Residential - 2

Comment will remain open as a reminder. Thanks.

Parks and Recreation

007_MSP C100-SITE.pdf [6 redlines] (Page 1) [1] 007_MSP C100-SITE

2. Callout B

Town of Apex North
Carolina
Tyler Gumprecht
9/18/24 12:09 PM
Master Subdivision
Plan - Residential - 1

Would the developer be interested in constructing a portion of Big Branch Greenway west of Big Branch—for credit against the Recreation Fee-in-Lieu? Greenway would run from major collector to Apex Peakway. Alignment as-shown is on TOA owned property. If this were to be constructed additional easements would need to be acquired.

Peak Engineering &
Design, PLLC
Jeff Roach
10/2/24 8:49 AM
Master Subdivision
Plan - Residential - 1

After conversation with the builder, the east side of Tingen Road will be developed after the west side due to sewer availability. For this reason, the funds will not be available from the P&R subdivision fees to off-set the cost of the greenway construction. For this reason, the builder is going to say no to the greenway extension through the Town's property near Bradley Terrace.

Town of Apex North
Carolina
Tyler Gumprecht
10/16/24 11:14 AM
Master Subdivision
Plan - Residential - 2

We understand. We'd like to keep this option on the table as the project develops through the site planning process—should anything change with project phasing etc.

3. Cloud+ B

Town of Apex North
Carolina
Tyler Gumprecht
10/16/24 11:32 AM
Master Subdivision
Plan - Residential - 2

Add Greenway Curb Ramp

4. Cloud+ B

Town of Apex North
Carolina
Tyler Gumprecht
10/16/24 11:32 AM
Master Subdivision
Plan - Residential - 2

Add Greenway Curb Ramp

009_MSP C102-SITE-TR1-2.pdf [11 redlines] (Page 1) [1] 009_MSP C102-SITE-TR1-2

5. Callout B

Town of Apex North Carolina Tyler Gumprecht 9/18/24 11:37 AM Master Subdivision Plan - Residential - 1	Please use Greenway Curb Ramp 900.07
Peak Engineering & Design, PLLC Jeff Roach 9/25/24 12:23 PM Master Subdivision Plan - Residential - 1	Call out updated, C708 sheet added to plan set
Town of Apex North Carolina Tyler Gumprecht 10/16/24 11:28 AM Master Subdivision Plan - Residential - 2	Thank you. Please locate curb ramps on plans. See additional call-out for details.

6. Callout B

Town of Apex North Carolina Tyler Gumprecht 9/18/24 3:58 PM Master Subdivision Plan - Residential - 1	Please use Greenway Curb Ramp 900.07
Peak Engineering & Design, PLLC Jeff Roach 9/25/24 12:23 PM Master Subdivision Plan - Residential - 1	Call out updated, C708 sheet added to plan set
Town of Apex North Carolina Tyler Gumprecht 10/16/24 11:28 AM Master Subdivision Plan - Residential - 2	Thank you. Please locate curb ramps on plans. See additional call-out for details.

009_MSP C102-SITE-TR1-2.pdf [7 redlines] (Page 1) [1] 009_MSP C102-SITE-TR1-2

7. Cloud+ B

Town of Apex North Carolina Tyler Gumprecht 10/16/24 11:38 AM Master Subdivision Plan - Residential - 2	This greenway access needs to be 10' all the way to Padstone Dr. As currently shown does not meet TOA Design Specs and Standards.
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Planner Comments

General Issues

8. Subdivision Requirements

Town of Apex North
Carolina
Shelly Mayo
10/7/24 9:47 AM
Master Subdivision
Plan - Residential - 2

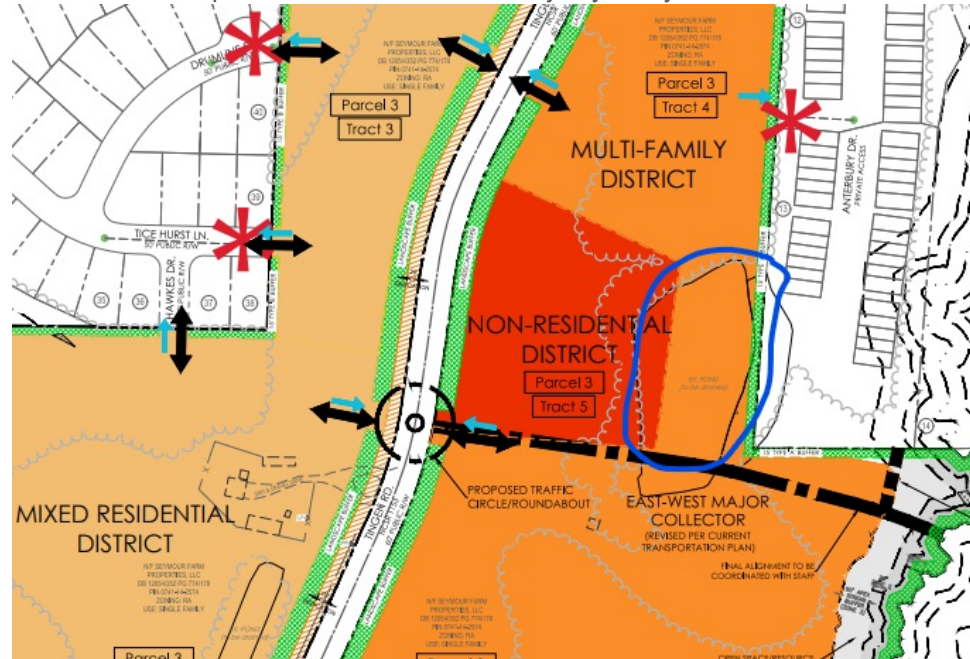
Please provide a separate RCA plan sheet to make it clear to staff what is being counted as RCA. The various hatching makes it a little difficult to follow.

9. General

Town of Apex North
Carolina
Shelly Mayo
11/21/24 8:59 AM
Master Subdivision
Plan - Residential - 2

Apologies for the late comment.

Per the PUD layout, there is supposed to be a section of residential between the non-residential district and the adjacent townhomes. The current layout of the non-residential section is not compliant with the PUD. Please adjust your layout.



001_MSP C000-COVER.pdf [9 redlines]

10. Townhouse Requirements

Town of Apex North
Carolina
Shelly Mayo
9/13/24 11:45 AM
Master Subdivision
Plan - Residential - 1

Please finish the guest parking calculations for TH and list the number required vs the number shown.

Peak Engineering &
Design, PLLC
Jeff Roach
10/2/24 12:47 PM
Master Subdivision
Plan - Residential - 1

Parking for each tract within the development has been included in the overall Phasing plan (sheet C101). The Commercial Area and Amenity Site are excluded from parking calcs at this time. Cover Sheet has been left along showing parking requirements...not the actual numbers.

Town of Apex North
Carolina
Shelly Mayo
11/15/24 11:06 AM
Master Subdivision
Plan - Residential - 2

I understand why you've done this, but please show the calculations and provided parking for each section of the development on the cover sheet.

006_MSP C006-DEMO.pdf [3 redlines]

11. General

Town of Apex North
Carolina
Shelly Mayo
9/10/24 10:20 AM
Master Subdivision
Plan - Residential - 1

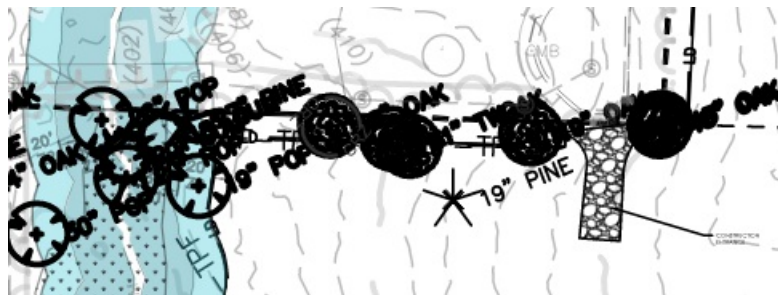
The maximum scale that we can review is 1:50. Please provide enlarged sheets that match the extent of the other plan sheet types.

Peak Engineering &
Design, PLLC
Jeff Roach
10/2/24 3:45 PM
Master Subdivision
Plan - Residential - 1

Prev town submittals and approved plans have allowed the use of existing condition plans to be at scale greater than 50'

Town of Apex North
Carolina
Shelly Mayo
11/14/24 3:39 PM
Master Subdivision
Plan - Residential - 2

It's regrettable that this requirement hasn't been enforced consistently. It is the policy and is stated clearly on the application. The current scale is making it difficult for staff to read and review the tree survey that's shown on the plans so that we can confirm that accurate and adequate measures are provided on the other sheets. below is a screenshot taken with the document enlarged to 100%. We can't tell how many trees are clustered together, what size they are, or if any of them are being removed.



[Ver. 3] [Edited By Shelly Mayo]

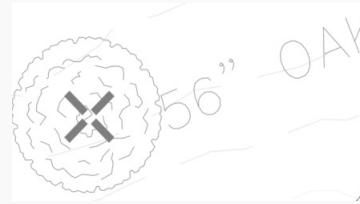
12. Demo Plan

Town of Apex North
Carolina
Shelly Mayo
9/17/24 4:21 PM
Master Subdivision
Plan - Residential - 1

Please mark all specimen trees to be removed, if any.

Peak Engineering &
Design, PLLC
Jeff Roach
10/2/24 3:20 PM
Master Subdivision
Plan - Residential - 1

Trees for removal and evaluation are shown on the demo plan
DEMO EVAL



Town of Apex North
Carolina
Shelly Mayo
11/13/24 5:24 PM
Master Subdivision
Plan - Residential - 2

Could you please make the Xs larger? It's difficult to see them in many cases because of how small they are.

13. Demo Plan

Town of Apex North
Carolina
Shelly Mayo
9/19/24 2:14 PM
Master Subdivision
Plan - Residential - 1

Please show the critical root zones on all trees to be kept. The radius of the critical root zone is 1 foot per 1 inch diameter at breast height. Where the CRZ is shown, it's shown half as large as it should be.

[[Ver. 2](#)] [Edited By Shelly Mayo]

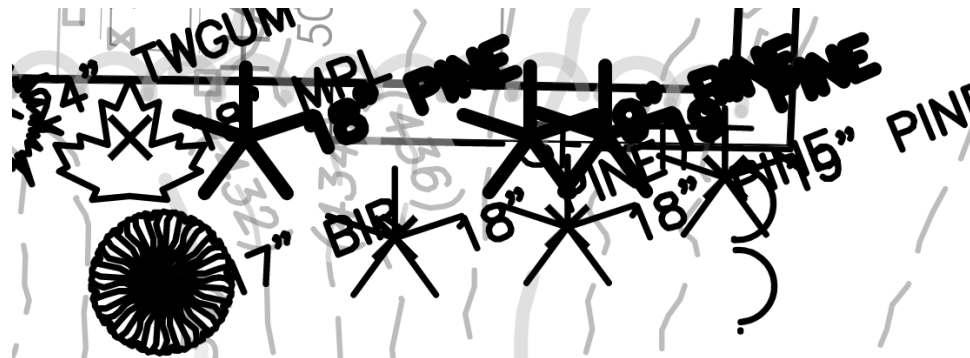
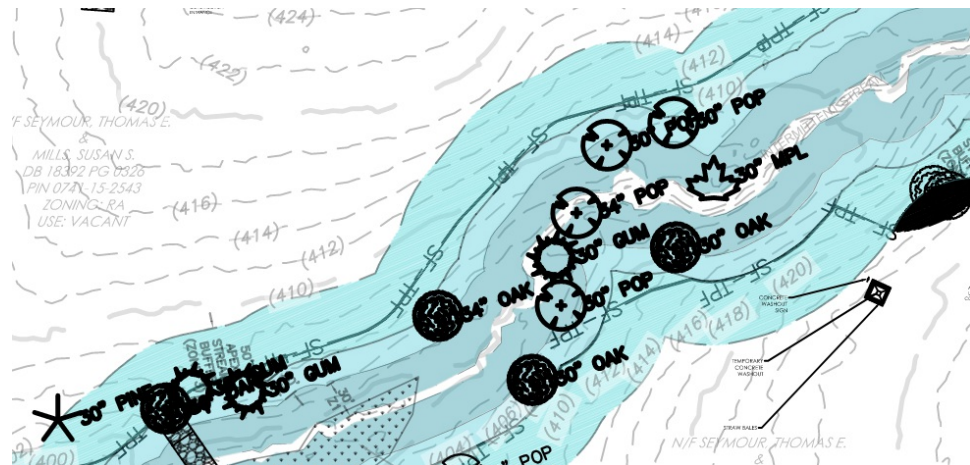
Peak Engineering &
Design, PLLC
Jeff Roach
10/3/24 5:19 PM
Master Subdivision
Plan - Residential - 1

The CRZs have been adjusted/corrected to meet Town standards.

[[Ver. 3](#)] [Edited By Jeff Roach]

Town of Apex North
Carolina
Shelly Mayo
11/13/24 5:43 PM
Master Subdivision
Plan - Residential - 2

The CRZ is missing for several trees within the RCA and perimeter buffers. Please correct this. The two screenshots below are just 2 examples from the plans. there are more.



[Ver. 2] [Edited By Shelly Mayo]

14. Demo Plan

Town of Apex North
Carolina
Shelly Mayo
9/17/24 4:24 PM
Master Subdivision
Plan - Residential - 1

Please show where the staging area(s) for dirt and materials will be.

Peak Engineering &
Design, PLLC
Jeff Roach
10/2/24 3:27 PM
Master Subdivision
Plan - Residential - 1

The staging and stock pile area(s) are shown on the demo plan sheet, one ea tract 1-2 and 3-5



Town of Apex North
Carolina
Shelly Mayo
11/13/24 5:37 PM
Master Subdivision
Plan - Residential - 2

The text for these notes is tiny and illegible at anything less than 260% enlargement. Since individual contractors are regularly given a single sheet in the field, it's important to make sure that the font is legible at a 100% enlarged size. Please adjust the font size.

009_MSP C102-SITE-TR1-2.pdf [11 redlines]

15. Layout Sheet

Town of Apex North Carolina Shelly Mayo 9/10/24 10:19 AM Master Subdivision Plan - Residential - 1	Please show the preserved trees on the layout sheets.
Peak Engineering & Design, PLLC Jeff Roach 10/1/24 4:26 PM Master Subdivision Plan - Residential - 1	Site plan sheets now show the trees
Town of Apex North Carolina Shelly Mayo 11/14/24 5:24 PM Master Subdivision Plan - Residential - 2	The trees are shown, but in a very light grey that doesn't really show up well. Could you darken the line type slightly? Also, the CRZ is missing in most cases. [Ver. 2] [Edited By Shelly Mayo]

16. Townhouse Requirements

Town of Apex North Carolina Shelly Mayo 9/13/24 11:19 AM Master Subdivision Plan - Residential - 1	The UDO requires that driveways be shown for all townhomes. Please update your sheets to show the driveways on all sheets.
Peak Engineering & Design, PLLC Jeff Roach 10/2/24 11:05 AM Master Subdivision Plan - Residential - 1	This is a checklist requirement - not UDO. Subdivision Layout Sheet, item #7 from the ckecklist is referring to existing and proposed curb cuts/driveways. It does not specifically reference townhomes. We understand staff's request but cannot show driveways as we continue to work with the builder on final product and location of the driveways to avoid utility conflicts. [Ver. 3] [Edited By Jeff Roach]
Town of Apex North Carolina Shelly Mayo 11/14/24 4:32 PM Master Subdivision Plan - Residential - 2	I apologize for getting the source wrong.The checklist items are also required. We understand that the driveway locations may be an approximation at this time and will likely change in future submittals, but that information is still helpful to staff. Please add it to your next submittal.

17. Townhouse Requirements

Town of Apex North Carolina Shelly Mayo 9/13/24 11:28 AM Master Subdivision Plan - Residential - 1	Per Section 8.3.4.E.2: Driveways serving all residential properties shall be at least 20 feet in length as measured from the back of the sidewalk or, where no sidewalk exists, from the back of the curb. Driveways accessed by an alley shall be exempt from this standard.
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Peak Engineering & Design, PLLC Jeff Roach 10/2/24 11:06 AM Master Subdivision Plan - Residential - 1	Since there are alley loaded TH units, the 20' minimum driveway depth is not applicable for all units within the development (Apex detail 300.07 specifies alternate parking for alley loading). Driveways for standard THs and single-family homes follow the standards outlined by staff in this comment (the front building setback is 20' to comply with the driveway requirement). [Ver. 3] [Edited By Jeff Roach]
Town of Apex North Carolina Shelly Mayo 11/14/24 4:34 PM Master Subdivision Plan - Residential - 2	The quoted section of the UDO includes a sentence stating that alley loaded driveways are not required to meet the 20' minimum. In order to confirm that applicable driveways meet this minimum, please show them on the plan sheets.

18. Townhouse Requirements

Town of Apex North Carolina Shelly Mayo 9/13/24 11:33 AM Master Subdivision Plan - Residential - 1	UDO Section 8.3.4.D states: Guest parking shall be designated within common areas and be distributed throughout residential projects. Striped on-street parking may be counted toward guest parking requirements. For Townhouse, detached and Townhouse, guest parking shall be distributed so that there is at least one parking space within 200' of each townhouse lot. Several TH lots are exceed this distance to guest parking. Please adjust your layout.
Peak Engineering & Design, PLLC Jeff Roach 10/2/24 9:29 AM Master Subdivision Plan - Residential - 1	Additional parking spaces or the adjustment of parking spaces, has been completed to make sure the development complies with standard parking distance requirements. 3 additional parking spaces have been added to make sure we comply. [Ver. 2] [Edited By Jeff Roach]
Town of Apex North Carolina Shelly Mayo 11/14/24 4:44 PM Master Subdivision Plan - Residential - 2	Lots 97-101 and 227-229 aren't within 200' of a guest parking spot. Please correct this.

19. Subdivision Requirements

Town of Apex North Carolina Shelly Mayo 9/17/24 4:49 PM Master Subdivision Plan - Residential - 1	Per UDO Sec. 7.3.1.A.8, The play lawn shall be situated to allow vehicular access for maintenance purposes. The play lawn 5 behind lots 73 & 74 doesn't have vehicular access. Please correct this. [Ver. 2] [Edited By Shelly Mayo]
Peak Engineering & Design, PLLC Jeff Roach 10/2/24 9:30 AM Master Subdivision Plan - Residential - 1	Vehicular access is serviced via the sanitary sewer public easement for the location in question. [Ver. 2] [Edited By Jeff Roach]

Town of Apex North Carolina Shelly Mayo 11/14/24 4:59 PM Master Subdivision Plan - Residential - 2	Sewer easements do not count as vehicular access points for play lawns. Please adjust.
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013_MSP L-1 OVERALL LANDSCAPE PLAN.pdf [0 redlines]

20. Landscaping Plan

Town of Apex North Carolina Shelly Mayo 9/17/24 2:56 PM Master Subdivision Plan - Residential - 1	As required in Section 8.1.2(B)(2)(f) of the UDO, please document whether the existing buffers meet the required buffer type standard by means of a tree survey or other appropriate means. Ground level pictures of the existing vegetation within buffers is recommended. A note to this effect also needs to be added to the plan.
Peak Engineering & Design, PLLC Jeff Roach 10/4/24 11:42 AM Master Subdivision Plan - Residential - 1	See PDF 013 for Note Current Tree survey does not capture opacity. RCA and existing buffers will remain undisturbed. Apex zoning compliance officer and engineer will evaluate during construction.
Town of Apex North Carolina Shelly Mayo 11/15/24 4:21 PM Master Subdivision Plan - Residential - 2	If you'd prefer to have your landscape architect show the buffers as being planted with all new vegetation, then adjust on site, you can. We've generally requested pictures of the buffer instead to determine if an area needs to be fully planted or just supplemented to meet the opacity and spacing requirements. Ordering this amount of vegetation will be very expensive for your client though.

21. Landscaping Plan

Town of Apex North Carolina Shelly Mayo 9/19/24 3:48 PM Master Subdivision Plan - Residential - 1	Where there are slopes of 3:1 or steeper, appropriate slope retention landscaping should be shown and provided. Please see UDO Sec. 8.1.4 for specifics.
Peak Engineering & Design, PLLC Jeff Roach 10/4/24 11:11 AM Master Subdivision Plan - Residential - 1	Grading is a work in progress at MSP, the intent is such that the plan will be no less than 3:1 and where this is not possible, the builder and design team will use other methods to make up the slopes. Retaining wall are places where these tight slopes may be happening. Grading has been adjusted

Town of Apex North Carolina Shelly Mayo 11/15/24 4:41 PM Master Subdivision Plan - Residential - 2	We understand that final grading isn't done, but that doesn't excuse the site from showing adequate slope retention on the landscaping plans. As your grading plan is adjusted, you'll need to adjust the slope retention too. Appropriate ground cover (nonturf grasses, perennials, woody vegetation, etc.) needs to be shown based on the requirements for each slope. All slopes equal to 2:1 shall be stabilized with a suitable combination of plantings and permanent slope retention devices. Slopes equal to or greater than 3:1 shall not be stabilized with turf grasses, but shall be stabilized with other permanent ground cover referenced in the Town of Apex Design and Development Manual. If it's easier, you can show these as hatching or shading on the plans. Other engineering firms have shown them that way. [Ver. 2] [Edited By Shelly Mayo]
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013_MSP L-1 OVERALL LANDSCAPE PLAN.pdf [0 redlines]

22. Landscaping Plan

Town of Apex North Carolina Shelly Mayo 11/15/24 2:49 PM Master Subdivision Plan - Residential - 2	Please remove the landscaping shown within the dry utility easements between townhomes.
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018_MSP L-2 LANDSCAPE PLAN-GNOTE.pdf [12 redlines]

23. Landscaping Plan

Town of Apex North Carolina Shelly Mayo 9/17/24 2:58 PM Master Subdivision Plan - Residential - 1	Please list the approved zoning conditions that apply to the landscape plan on this sheet. Generally, subcontractors are only given the sheet that pertains to their contract. Listing the pertinent zoning conditions on that sheet makes it easier for the subcontractor, GC and Zoning Compliance Officers to find it when they're in the field.
Peak Engineering & Design, PLLC Jeff Roach 10/4/24 11:13 AM Master Subdivision Plan - Residential - 1	All Approved zoning conditions are shown (located) on Sheets C001/C002; individual grading, site, utility notes are included on the specific section of the plan set.
Town of Apex North Carolina Shelly Mayo 11/15/24 4:42 PM Master Subdivision Plan - Residential - 2	This is a typical request and makes it much more likely that the zoning conditions will be obeyed in the field. Please make this change.

24. Landscaping Plan

Town of Apex North Carolina Shelly Mayo 9/17/24 2:59 PM Master Subdivision Plan - Residential - 1	UDO Section 8.2.4 requires the following building landscaping: <u>Townhome Development:</u> All townhome development shall install at least one (1) small ornamental type tree and two (2) shrubs per lot, to be located within HOA-owned commons areas. This is above and beyond any vehicular use area landscaping requirements, screening requirements, buffers, and Resource Conservation Area plantings. Please provide the calculations for the number of trees and shrubs provided. You state that they're provided, but not the number.						
Peak Engineering & Design, PLLC Jeff Roach 10/4/24 11:14 AM Master Subdivision Plan - Residential - 1	Townhome lot landscaping has been updated						
Town of Apex North Carolina Shelly Mayo 11/15/24 4:46 PM Master Subdivision Plan - Residential - 2	Where? I'm looking at sheet L-2 and don't see that calculation. A table needs to be added. <table border="1"> <tr> <td>Townhome lots</td><td>351</td></tr> <tr> <td>Small trees (1/lot)</td><td>351</td></tr> <tr> <td>Shrubs (2/lot)</td><td>702</td></tr> </table>	Townhome lots	351	Small trees (1/lot)	351	Shrubs (2/lot)	702
Townhome lots	351						
Small trees (1/lot)	351						
Shrubs (2/lot)	702						

25. Landscaping Plan

Town of Apex North Carolina Shelly Mayo 9/17/24 3:40 PM Master Subdivision Plan - Residential - 1	This rezoning case for this project includes the following zoning condition: <u>At least 75% of plants shall be native species. Landscaping will be coordinated with and approved by the Planning Department at site or subdivision review</u> Please adjust the plant list to meet the zoning condition. If you need suggestions, please refer to the Town's Design and Development Manual or email Planner Shelly Mayo.
Peak Engineering & Design, PLLC Jeff Roach 10/4/24 11:15 AM Master Subdivision Plan - Residential - 1	Plant list has been updated
Town of Apex North Carolina Shelly Mayo 11/15/24 4:58 PM Master Subdivision Plan - Residential - 2	The list still doesn't include enough native species to meet the zoning requirement. If you'd like suggestions, I'm happy to help.

024_MSP C300-GRADE.pdf [0 redlines]

26. Grading Plan

Town of Apex North Carolina Shelly Mayo 9/19/24 2:47 PM Master Subdivision Plan - Residential - 1	Per the checklist, please label all slopes that 3:1 or steeper and call out 2:1 separately on the plan sheets. If you'd prefer, you may shade the slopes as long as 2:1 slopes are shaded differently than 3:1. [Ver. 2] [Edited By Shelly Mayo]
Peak Engineering & Design, PLLC Jeff Roach 10/4/24 8:09 AM Master Subdivision Plan - Residential - 1	Grading is a work in progress at MSP, the intent is such that the plan will be no less than 3:1 and where this is not possible, the builder and design team will use other methods to make up the slopes. Retaining wall are places where these tight slopes may be happening. Grading has been adjusted
Town of Apex North Carolina Shelly Mayo 11/15/24 4:59 PM Master Subdivision Plan - Residential - 2	THanks for that explanation, but we still need you to label the areas that are currently shown with slopes between 3:1 and 2:1.

27. Grading Plan

Town of Apex North Carolina Shelly Mayo 9/19/24 2:47 PM Master Subdivision Plan - Residential - 1	Please adjust the TPF as shown on the plans. Staff has marked up the sheets to show where the TPF should be in red. [Ver. 2] [Edited By Shelly Mayo]
Peak Engineering & Design, PLLC Jeff Roach 10/4/24 8:06 AM Master Subdivision Plan - Residential - 1	TPF has been adjusted in most areas. Grading is a work in progress at MSP
Town of Apex North Carolina Shelly Mayo 11/18/24 8:46 AM Master Subdivision Plan - Residential - 2	Staff has marked additional areas that must be adjusted. Please make those corrections.

28. Grading Plan

Town of Apex North Carolina Shelly Mayo 9/17/24 3:43 PM Master Subdivision Plan - Residential - 1	Please show the approved zoning conditions related to the grading sheets on those sheets. Contractors are often given just one sheet to work from. Showing the zoning conditions on the pertinent sheets makes it easier for contractors, GCs and the Zoning Compliance Officers to find them in the field.
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Peak Engineering & Design, PLLC Jeff Roach 10/3/24 5:23 PM Master Subdivision Plan - Residential - 1	All Approved zoning conditions are shown (located) on Sheets C001/C002; individual grading, site, utility notes are included on the specific section of the planset. [Ver. 2] [Edited By Jeff Roach]
Town of Apex North Carolina Shelly Mayo 11/15/24 5:00 PM Master Subdivision Plan - Residential - 2	As with the landscaping conditions, this is something that staff has found helps significantly in the field. We're not asking for all zoning conditions. Just the ones that pertain to grading. please make this change.

29. Grading Plan

Town of Apex North Carolina Shelly Mayo 9/19/24 2:48 PM Master Subdivision Plan - Residential - 1	Please adjust the grading plan to comply with the following zoning condition. Staff has highlighted some areas that appear to be non-compliant. If you believe that some of these areas comply, please contact staff to demonstrate how you are minimizing the impacts to the buffers. No clearing or land disturbance shall be permitted within the riparian buffer, except the minimum necessary to install required road and utility infrastructure and SCM outlets. The SCM water storage and treatment shall not be permitted within the riparian buffer. Sewer infrastructure shall be designed to minimize impacts to riparian buffers. [Ver. 2] [Edited By Shelly Mayo]
Peak Engineering & Design, PLLC Jeff Roach 10/2/24 9:42 AM Master Subdivision Plan - Residential - 1	The SCMs are an allowable use within Zone 3 of the buffer per language within the UDO and zoning documents. Section 6.1.11 notes the use of SCMs in buffer zones and has always been interpreted as permitting SCMs in zone 3...this is what is shown on the grading plans throughout the site.
Town of Apex North Carolina Shelly Mayo 11/18/24 8:46 AM Master Subdivision Plan - Residential - 2	Per the email from the Planning Director on 11.15.2024, after reviewing the entire PUD her interpretation is that the EAB zoning condition supercedes the UDO. The entire riparian buffer cannot be impacted regardless of zone, given that no zones were specified in the condition. Please adjust your plan to remove the any grading except what's explicitly allowed in the condition. [Ver. 2] [Edited By Shelly Mayo]

30. Grading Plan

Town of Apex North Carolina Shelly Mayo 9/17/24 4:56 PM Master Subdivision Plan - Residential - 1	Per section 8.2.6(c)(4) of the UD0: <i>No Development Within the Required Buffer</i> The required buffer shall not contain any development, built-upon area, or site features that do not function to meet the standards of this section or that require removal of existing vegetation, except for signs within platted sign easements and utilities within public utility easements. Please adjust your plans to remove any grading from the buffers.
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Peak Engineering & Design, PLLC Jeff Roach 10/3/24 5:23 PM Master Subdivision Plan - Residential - 1	Grading has been adjusted to avoid perimeter buffer impacts. TPF location adjustments have also been made on various sheets.
Town of Apex North Carolina Shelly Mayo 11/18/24 8:49 AM Master Subdivision Plan - Residential - 2	Please adjust the TPF on the NW corner of tingen rd. The TPF has to be along the preserved area. In this spot, you're proposing sidepath within the buffer so the TPF needs to be along the inner edge of the sidepath.

31. Retaining Walls

Town of Apex North Carolina Shelly Mayo 9/18/24 4:32 PM Master Subdivision Plan - Residential - 1	Please show the top and bottom elevations of the all retaining walls on the layout, grading and landscaping sheets.
Peak Engineering & Design, PLLC Jeff Roach 10/4/24 8:26 AM Master Subdivision Plan - Residential - 1	BW/TW has been shown on the C300 grading and LA sheet to be added as Grading is a work in progress at MSP
Town of Apex North Carolina Shelly Mayo 11/18/24 9:51 AM Master Subdivision Plan - Residential - 2	those measurements aren't shown on the individual sheets. TW/BW need to be shown on the individual grading, utility and landscaping sheets. We understand that it may change, but showing it at MSP gives us an idea of what's planned.

32. Retaining Walls

Town of Apex North Carolina Shelly Mayo 9/18/24 4:32 PM Master Subdivision Plan - Residential - 1	Please show the total area of disturbance required to install a retaining wall. Staff's understanding is that a distance equal to 100% of the height of the wall must be disturbed in order to install the required supports for a wall. If this is the case, please ensure that the wall is located far enough back from any RCA and/or buffers to avoid any disturbance in those protected areas.
Peak Engineering & Design, PLLC Jeff Roach 10/4/24 8:29 AM Master Subdivision Plan - Residential - 1	The retaining wall easement has been shown around ea retaining wall indicating the disturbance limit as well as the HOA access/maintenance easement.

Town of Apex North
Carolina
Shelly Mayo
11/18/24 9:53 AM
Master Subdivision
Plan - Residential - 2

I don't see this. Was the layer left off?

33. Retaining Walls

Town of Apex North
Carolina
Shelly Mayo
9/18/24 4:32 PM
Master Subdivision
Plan - Residential - 1

For all retaining walls that cross two or more individual lots, please show them centered within appropriately sized HOA Maintenance and Access Easements. The width of the easement is dependent on the height of the wall and depth of the tiebacks.

Peak Engineering &
Design, PLLC
Jeff Roach
10/4/24 8:31 AM
Master Subdivision
Plan - Residential - 1

The walls are shown centered in the easement. The retaining wall easement has been shown around ea retaining wall indicating the disturbance limit as well as the HOA access/maintenance easement. Final width will be adjusted during the vertical design at CD once MSP has been approved.

Town of Apex North
Carolina
Shelly Mayo
11/18/24 9:57 AM
Master Subdivision
Plan - Residential - 2

Please keep in mind that retaining wall tiebacks aren't typically allowed to encroach into RCA, buffers, ROW, and wet or dry utility easements. They are also not supposed to extend into the foundation area of a residence.

34. Grading Plan

Town of Apex North
Carolina
Shelly Mayo
9/19/24 2:44 PM
Master Subdivision
Plan - Residential - 1

Please adjust the TPF shown on your plans. They currently show grading into the CRZ of trees within the buffers and RCA.

Per the UDO, grading or other impacts may not occur with the critical root zone of protected trees within a required buffer and RCA. UDO Sec. 8.1.2.F specifically protects trees and other vegetation within the RCA and buffers.

F. Development Activity Inside of the RCA

1. No development, including grading or vegetation removal or alteration, shall occur as part of the development project or associated construction activity inside the RCA except as provided in subsections 3 and 4 below.

UDO Sec. 8.1.3.D provides additional standards for impacting trees outside of the buffer and RCA, as shown below.

Tree Protection During Construction and Grading Activities - In addition to the general requirements for protection of natural resources during construction and grading activities set forth in Sec. 8.1.2.F, the following specific standards shall apply to protect all trees and vegetation on a development site throughout the site development and construction process:

Peak Engineering &
Design, PLLC
Jeff Roach
10/3/24 4:41 PM
Master Subdivision
Plan - Residential - 1

Grading and CRZ areas have been adjust to meet this section

Town of Apex North
Carolina
Shelly Mayo
11/18/24 9:58 AM
Master Subdivision
Plan - Residential - 2

Since the scale of the tree survey is making it difficult to evaluate the preserved trees, this comment will remain open until staff can fully evaluate it.

024_MSP C300-GRADE.pdf [0 redlines]

35. RCA

Town of Apex North
Carolina
Shelly Mayo
11/15/24 3:59 PM
Master Subdivision
Plan - Residential - 2

The tree protection fence will need to be adjusted in order to save the critical root zone (CRZ) of all specimen trees within the perimeter buffers and RCA. Please review UDO Section 8.1.3 Tree and Vegetation Conservation. Specifically, Sections C and D.

UDO Sec. 8.1.3.G.2.c:

The proposed methods for protection shall be reviewed and approved as part of the Site Plan and/or Master Subdivision Plan approval process and must be clearly indicated on plans. **If construction is proposed within any saved area, a registered architect, engineer, or landscape architect, certified arborist, or horticulturalist, must submit detailed plans indicating how the sensitive area will be protected, and shall supervise all construction activity within such areas.** Protection measures must adhere to generally accepted good design standards and practices.

The current tree survey does not address the health of the trees where their CRZ extends outside the RCA and buffers and will be impacted by grading/demolition. An arborist report is required to identify the health, how much of the CRZ area will be impacted and the steps needed to protect the health of the trees.

025_MSP C302-GRADE-TR1-2.pdf [56 redlines]

36. Buffers

Town of Apex North
Carolina
Shelly Mayo
9/13/24 4:10 PM
Master Subdivision
Plan - Residential - 1

Per UDO Section 8.2.6.C.4:

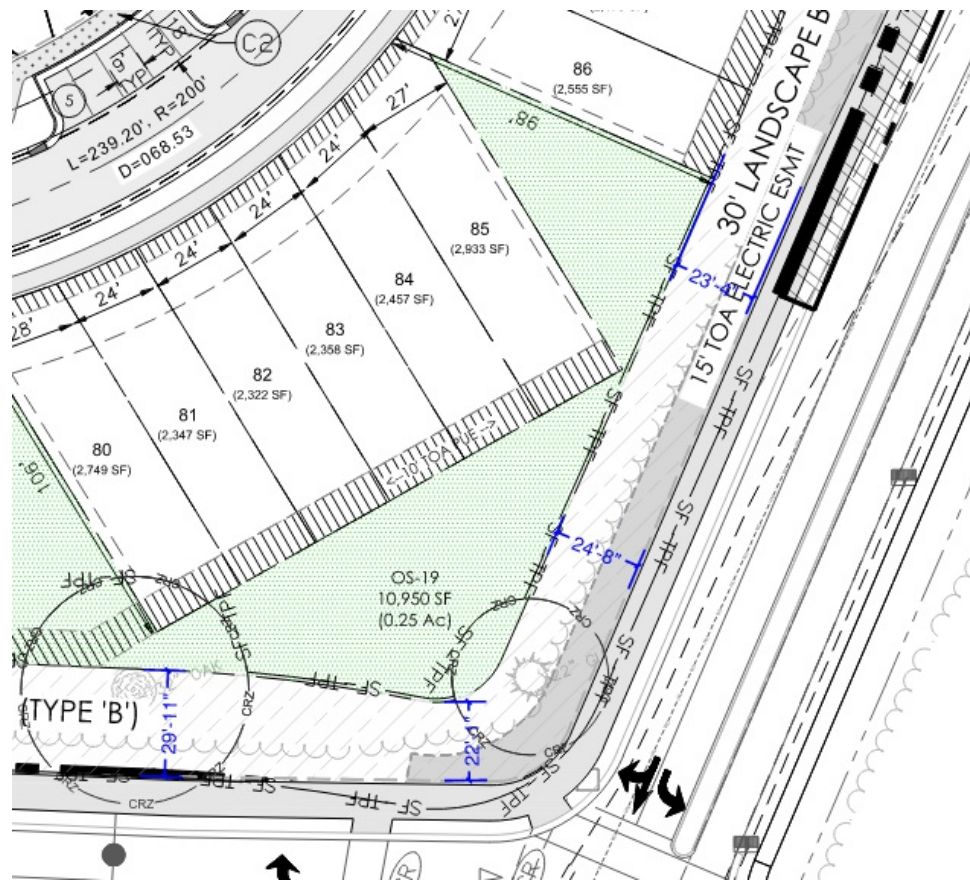
The required buffer shall not contain any development, built-upon area, or site features that do not function to meet the standards of this Section or that require removal of existing vegetation, except for signs within platted sign easements, utilities within public utility easements, and public art on private property within a platted public art on private property easement (see Secs. 8.1.2.C.8 and 8.2.2.C.2.a).

Please adjust your plans to meet this requirement. The buffer on the NW corner of Tingen Rd and the Peakway is only 23' wide, instead of the required 30'. Please adjust it.

The Peakway R/W and buffer are consistent with the 30ft buffer along this section. Town required public access easement and side path line work may be causing some confusion here.

[[Ver. 2](#)] [Edited By Jeff Roach]

The way it's drawn on the site plan, the ROW line isn't clear. I was under the impression, that the side path would be entirely within the ROW. Is the sidepath encroaching 5' into the buffer?



Page 19 of 49

Town of Apex North Carolina Shelly Mayo 9/19/24 4:20 PM Master Subdivision Plan - Residential - 1	Staff would like to suggest converting lot 22 into open space and/or RCA. There are several reasons for this: 1. the grading for the lot extends into the riparian buffer and could be reduced or avoided entirely. Because of the zoning conditions, a retaining wall looks like it would be necessary to keep the grading out of the riparian buffer. 2. Connecting the greenway to Padstone will be even more difficult if you add a driveway. 3. There's an existing 56" diameter Oak tree called out on your survey. Staff looked at it and it appears to be in very good health. There aren't many trees of that size and health in town. (see uploaded pic in staff folders)
Peak Engineering & Design, PLLC Jeff Roach 10/3/24 5:28 PM Master Subdivision Plan - Residential - 1	1. The lot's building can be oriented to minimize impact on this significant tree. This tree is not required to be saved, however has been marked with the dashed 'X' to attempt to save the tree. Various options are being discuss for this tree. 2. The connection of the greenway to Padstone will not change with or without the driveway. The builder will evaluate the lot independently for the best connection option. 3. The builder is aware of the tree and is looking at options to avoid the tree without the loss of lot 22. Possible option (as discussed at TRC) is to keep frontage on Padstone Drive but provide a shared driveway with lot 15 (to the SW) to minimize disturbance to the tree. [Ver. 3] [Edited By Jeff Roach]
Town of Apex North Carolina Shelly Mayo 11/15/24 11:26 AM Master Subdivision Plan - Residential - 2	During our conversation on Thurs, 11/24, you showed a potential layout that could preserve this tree. This comment will remain open until the next submittal to determine if that was able to be accomplished.

Planning (Planner)

005_MSP C005-EX COND-TS.pdf [3 redlines] (Page 1) [1] 005_MSP C005-EX COND-TS

38. Text Box B

Town of Apex North Carolina Shelly Mayo 9/6/24 10:15 AM Master Subdivision Plan - Residential - 1	Please make the text for the tree survey less bold. It's difficult to read.
Peak Engineering & Design, PLLC Jeff Roach 10/1/24 4:51 PM Master Subdivision Plan - Residential - 1	printed color revised
Town of Apex North Carolina Shelly Mayo 11/15/24 11:13 AM Master Subdivision Plan - Residential - 2	I'm sorry, but that hasn't helped. It's still difficult to read and illegible in many places.

39. Text Box B

Town of Apex North Carolina Shelly Mayo 9/6/24 10:19 AM Master Subdivision Plan - Residential - 1	There are several tree labels that overlap, which makes it impossible to read them. Could you please clean that up?
Peak Engineering & Design, PLLC Jeff Roach 10/2/24 8:26 AM Master Subdivision Plan - Residential - 1	Labels are tweaked to help legibility.
Town of Apex North Carolina Shelly Mayo 11/15/24 11:14 AM Master Subdivision Plan - Residential - 2	Sorry, but that didn't help much. I think the only thing that will really make it better is enlarged sheets.

[006_MSP C005-DEMO.pdf](#) [2 redlines] (Page 1) [1] 006_MSP C005-DEMO

40. Callout B

Town of Apex North Carolina Shelly Mayo 11/13/24 5:44 PM Master Subdivision Plan - Residential - 2	Please remove this note. This is not permitted. The UDO requires that any preserved trees be protected by TPF and appropriate protection measures. If those trees are not protected from the beginning, our experience is that the contractors will remove them. It's better to call that out from the beginning if that's the intention. [Ver. 2] [Edited By Shelly Mayo]
--	---

[017_MSP L-1.4 PARTIAL LANDSCAPE PLAN-TR5.pdf](#) [6 redlines] (Page 1)

41. Callout B

Town of Apex North Carolina Shelly Mayo 11/15/24 2:53 PM Master Subdivision Plan - Residential - 2	There isn't enough space for the trees to grow between the townhome buildings. Please relocate these trees to other unplanted common areas.
--	---

42. Text Box B

Town of Apex North Carolina Shelly Mayo 11/15/24 2:56 PM Master Subdivision Plan - Residential - 2	Show the sidewalk connections from the TH units to the sidewalk along the road.
--	---

43. Text Box B

Town of Apex North
Carolina
Shelly Mayo
11/15/24 2:56 PM
Master Subdivision
Plan - Residential - 2

The retaining wall tiebacks aren't shown on the landscaping sheets. Trees and shrubs aren't allowed to be planted within the geogrid.

44. Text Box B

Town of Apex North
Carolina
Shelly Mayo
11/15/24 4:11 PM
Master Subdivision
Plan - Residential - 2

On each landscaping sheet, please provide a legend showing each species and the unique symbol used to show it.

018_MSP L-2 LANDSCAPE PLAN-GNOTE.pdf [15 redlines] (Page 1)

45. Text Box B

Town of Apex North
Carolina
Shelly Mayo
11/15/24 2:35 PM
Master Subdivision
Plan - Residential - 2

Please provide symbols for each species of plant shown.

46. Callout B

Town of Apex North
Carolina
Shelly Mayo
11/15/24 4:49 PM
Master Subdivision
Plan - Residential - 2

Please make sure the key letters match the names of the species. It's confusing otherwise.
[Ver. 2] [Edited By Shelly Mayo]

025_MSP C302-GRADE-TR1-2.pdf [56 redlines] (Page 1) [1] 025_MSP C302-GRADE-TR1-2

47. Text Box B

Town of Apex North
Carolina
Shelly Mayo
9/17/24 4:36 PM
Master Subdivision
Plan - Residential - 1

Is this area next to lot 54 supposed to be the SCM maintenance and access easement?

Peak Engineering &
Design, PLLC
Jeff Roach
10/2/24 9:52 AM
Master Subdivision
Plan - Residential - 1

That is correct. Is there a question concerning the area?
[Ver. 2] [Edited By Jeff Roach]

Town of Apex North
Carolina
Shelly Mayo
11/18/24 8:36 AM
Master Subdivision
Plan - Residential - 2

It's not labeled that way. Please add the label.

48. Callout B

Town of Apex North
Carolina
Shelly Mayo
9/18/24 11:54 AM
Master Subdivision
Plan - Residential - 1

It looks like the driveway for lot 70 will not be able to meet the minimum width for a 2 car garage without encroaching into a utility easement.

Peak Engineering &
Design, PLLC
Jeff Roach
10/1/24 9:22 AM
Master Subdivision
Plan - Residential - 1

We will look to get this lot and lot 69 and exception to encroach into the easement. Once into CD, this could be resolved or not a requirement.

Town of Apex North
Carolina
Shelly Mayo
11/18/24 8:37 AM
Master Subdivision
Plan - Residential - 2

Staff will leave this open as a reminder to review at CDs.

49. Callout B

Town of Apex North
Carolina
Shelly Mayo
9/18/24 3:22 PM
Master Subdivision
Plan - Residential - 1

Isn't there supposed to be 20' more of riparian buffer adjacent to play lawn 1? Is this being averaged? If so, where? UDO Sec. 7.3.1.A.1 explicitly states that play lawns cannot be in public park land dedication areas, Resource Conservation Areas, any type of required buffer, SCMs, floodplains, floodways, or wetlands.
[[Ver. 4](#)] [Edited By Shelly Mayo]

Peak Engineering &
Design, PLLC
Jeff Roach
10/3/24 5:32 PM
Master Subdivision
Plan - Residential - 1

This area is hatched representing the watershed swap. With the swap, the area is outside of the areas noted above (RCA, buffers, etc.).
[[Ver. 2](#)] [Edited By Jeff Roach]

Town of Apex North
Carolina
Shelly Mayo
11/18/24 8:39 AM
Master Subdivision
Plan - Residential - 2

Per the Planning Director's email on 11.15.2024, buffer averaging is not permitted. Please adjust this.

025_MSP C302-GRADE-TR1-2.pdf [10 redlines] (Page 1) [1] 025_MSP C302-GRADE-TR1-2

50. Text Box B

Town of Apex North
Carolina
Shelly Mayo
11/15/24 5:01 PM
Master Subdivision
Plan - Residential - 2

It's difficult to see the trees on this sheet. please make them black and show the critical root zone.

026_MSP C303-GRADE-TR3.pdf [16 redlines] (Page 1) [1] 026_MSP C303-GRADE-TR3

51. Text Box B

Town of Apex North
Carolina
Shelly Mayo
9/18/24 4:26 PM
Master Subdivision
Plan - Residential - 1

The slope shown on PL 3 is steeper than 2%. Please adjust it.

Peak Engineering &
Design, PLLC
Jeff Roach
10/2/24 8:28 AM
Master Subdivision
Plan - Residential - 1

Play lawn labels are noted to be constructed at a max 2% slope. Final grading to be incorporated as plans are approved to go to CDs

Town of Apex North
Carolina
Shelly Mayo
11/18/24 8:39 AM
Master Subdivision
Plan - Residential - 2

This comment will remain open as a reminder to staff.

027_MSP C304-GRADE-TR4.pdf [24 redlines] (Page 1) [1] 027_MSP C304-GRADE-TR4

52. Text Box B

Town of Apex North
Carolina
Shelly Mayo
9/18/24 4:29 PM
Master Subdivision
Plan - Residential - 1

The slope on PL 4 is steeper than 2%. Please adjust it.

Peak Engineering &
Design, PLLC
Jeff Roach
10/2/24 8:28 AM
Master Subdivision
Plan - Residential - 1

Play lawn labels are noted to be constructed at a max 2% slope. Final grading to be incorporated as plans are approved to go to CDs

Town of Apex North
Carolina
Shelly Mayo
11/18/24 8:40 AM
Master Subdivision
Plan - Residential - 2

This comment will remain open as a reminder to staff.

53. Callout B

Town of Apex North Carolina Shelly Mayo 9/19/24 4:07 PM Master Subdivision Plan - Residential - 1	Is it possible to adjust the utilities for the rear loaded THs, so that they cluster together and impact the buffer plantings less along Tingen & the new collector? Next to each other in groups of 2?
Peak Engineering & Design, PLLC Jeff Roach 10/2/24 9:54 AM Master Subdivision Plan - Residential - 1	Lot utilities will be cluster with water out to Tingen and a request for exception to provided sewer in the alley (as approved with Veridia). This will reduce buffer impacts. [Ver. 2] [Edited By Jeff Roach]
Town of Apex North Carolina Shelly Mayo 11/18/24 8:40 AM Master Subdivision Plan - Residential - 2	This comment will remain open as a reminder to staff.

[028_MSP C305-GRADE-TR5.pdf](#) [4 redlines] (Page 1) [1] [028_MSP C305-GRADE-TR5](#)

54. Text Box B

Town of Apex North Carolina Shelly Mayo 9/18/24 4:31 PM Master Subdivision Plan - Residential - 1	A portion of PL 2 is steeper than 2% slope. Please adjust it.
Peak Engineering & Design, PLLC Jeff Roach 10/3/24 5:33 PM Master Subdivision Plan - Residential - 1	Play lawn labels are noted to be constructed at a max 2% slope. Final grading to be incorporated as plans are approved to go to CDs. There may be a need to add a small retaining wall during final grading. [Ver. 2] [Edited By Jeff Roach]
Town of Apex North Carolina Shelly Mayo 11/18/24 8:40 AM Master Subdivision Plan - Residential - 2	This comment will remain open as a reminder to staff.

[028_MSP C305-GRADE-TR5.pdf](#) [10 redlines] (Page 1) [1] [028_MSP C305-GRADE-TR5](#)

55. Callout B

Town of Apex North Carolina Shelly Mayo 11/18/24 10:05 AM Master Subdivision Plan - Residential - 2	Why aren't the buffers along Tingen Rd surrounded by TPF? Just for the record? It doesn't look like you're planning to grade within them. [Ver. 2] [Edited By Shelly Mayo]
--	---

Planning (Transportation Planning)

[007_MSP C100-SITE.pdf](#) [6 redlines] (Page 1) [1] [007_MSP C100-SITE](#)

56. Callout B

Town of Apex North Carolina June Cowles 9/16/24 3:53 PM Master Subdivision Plan - Residential - 1	Please include a turn around or cul-de-sac.
Peak Engineering & Design, PLLC Jeff Roach 10/3/24 5:36 PM Master Subdivision Plan - Residential - 1	Lennar is currently in discussion with SV HOA regarding a street extension to Stanwood Drive. In addition, the street stub is less than 150' for a possible future extension. Discussion was held with TRC regarding the connection to Stanwood. [Ver. 2] [Edited By Jeff Roach]
Town of Apex North Carolina June Cowles 10/13/24 7:46 PM Master Subdivision Plan - Residential - 2	Thanks for the update. Hope they get it.

[009_MSP C102-SITE-TR1-2.pdf](#) [11 redlines] (Page 1) [1] [009_MSP C102-SITE-TR1-2](#)

57. Callout B

Town of Apex North Carolina June Cowles 9/20/24 10:10 AM Master Subdivision Plan - Residential - 1	There is a 56 inch Oak tree in this location. Can the Oak tree be within an open space area tied to the greenway instead of the lot? Is it possible to extend the cul-de-sac to gain 1 lot and combine the oak tree with the greenway and eliminate the greenway driveway crossing? The PUD condition eliminates the maximum cul-de-sac length due to environmental features. [Ver. 3] [Edited By June Cowles]
Peak Engineering & Design, PLLC Jeff Roach 10/3/24 5:38 PM Master Subdivision Plan - Residential - 1	See comment 59 response. In summary: 1. The lot's building can be oriented to minimize impact on this significant tree. This tree is not required to be saved, however has been marked with the dashed 'X' to attempt to save the tree. Various options are being discuss for this tree. 2. The connection of the greenway to Padstone will not change with or without the driveway. The builder will evaluate the lot independently for the best connection option. 3. The builder is aware of the tree and is looking at options to avoid the tree without the loss of lot 22. Possible option (as discussed at TRC) is to keep frontage on Padstone Drive but provide a shared driveway with lot 15 (to the SW) to minimize disturbance to the tree. [Ver. 2] [Edited By Jeff Roach]
Town of Apex North Carolina June Cowles 11/14/24 3:29 PM Master Subdivision Plan - Residential - 2	Thank you for looking at options [Ver. 3] [Edited By June Cowles]

[026_MSP C303-GRADE-TR3.pdf](#) [8 redlines] (Page 1) [1] [026_MSP C303-GRADE-TR3](#)

58. Callout B

Town of Apex North Carolina June Cowles 11/14/24 3:57 PM Master Subdivision Plan - Residential - 2	Please relocate sidewalk into the middle of the Open Space. Or at least away from Lot 165 to have some landscaping (trees) on either side of the sidewalk. (shown on the landscape plan). [Ver. 2] [Edited By June Cowles]
---	--

Russell Dalton, Transportation Engineer

[007_MSP C100-SITE.pdf](#) [6 redlines]

59. Street Stubs

Town of Apex North Carolina Russell Dalton 9/19/24 8:27 AM Master Subdivision Plan - Residential - 1	Change turnaround stub at Lot 306 to a cul-de-sac. I've confirmed with Planning there is no future connectivity expected there.
Peak Engineering & Design, PLLC Jeff Roach 10/3/24 12:05 PM Master Subdivision Plan - Residential - 1	Alley pavement has been pulled back to turn around bulb. Since there is no culdesac details available, this turn around bulb for a full street section should provide sufficient maneuverability.
Town of Apex North Carolina Russell Dalton 11/15/24 9:19 AM Master Subdivision Plan - Residential - 2	This still looks like a stub street turnaround rather than a cul de sac. Cul de sac is required with curb to meet standards.

60. Street Stubs

Town of Apex North Carolina Russell Dalton 9/19/24 8:28 AM Master Subdivision Plan - Residential - 1	Change stub at Lot 174 to a cul-de-sac. I've confirmed with Planning there is no future connectivity expected there.
Peak Engineering & Design, PLLC Jeff Roach 10/2/24 12:40 PM Master Subdivision Plan - Residential - 1	Per email correspondence with staff, we are reaching out to the Salem Village HOA to provide a roadway connection to Stanwood Drive. If the discussions breakdown (no connection with the HOA), a cul-de-sac, "eyebrown", or 90 degree bubble will be added in this area. This will be resolved as quickly as possible with SV HOA.
Town of Apex North Carolina Russell Dalton 11/15/24 9:52 AM Master Subdivision Plan - Residential - 2	Noted. This will need to resolved before CDs whether it is converted to a cul de sac or connected. I don't recommend approving subdivision plans with this question outstanding. [Ver. 3] [Edited By Russell Dalton]

61. Sidewalks

Town of Apex North Carolina Russell Dalton 9/19/24 10:16 AM Master Subdivision Plan - Residential - 1	Revise ramps to meet Town standard for new construction, dual directional ramps (not corner ramps), all plan sheets. Label ramps by type. See Apex standard details.
Peak Engineering & Design, PLLC Jeff Roach 10/1/24 9:41 AM Master Subdivision Plan - Residential - 1	The ramps will get converted to the town standards on or before CD submission
Town of Apex North Carolina Russell Dalton 11/15/24 9:27 AM Master Subdivision Plan - Residential - 2	This will need to be done before CDs. Thank you.

62. Intersections

Town of Apex North Carolina Russell Dalton 9/19/24 4:09 PM Master Subdivision Plan - Residential - 1	Show linework for tie-in to Wragby Lane for the street extension.
Peak Engineering & Design, PLLC Jeff Roach 10/2/24 8:54 AM Master Subdivision Plan - Residential - 1	Line work extended where applicable
Town of Apex North Carolina Russell Dalton 11/15/24 9:31 AM Master Subdivision Plan - Residential - 2	Please complete curb tie-in linework.

009_MSP C102-SITE-TR1-2.pdf [11 redlines]

63. Miscellaneous signs

Town of Apex North Carolina Russell Dalton 9/20/24 4:52 PM Master Subdivision Plan - Residential - 1	Please label all stop signs. I see at least one "S2" label missing, corner of Lot 92. Please label street names on all sheets. Additionally, please add stop signs on both approaches to any/all right-angle bulb-out intersections (two streets entering a cul-de-sac). [Ver. 3] [Edited By Russell Dalton]
--	--

Peak Engineering & Design, PLLC Jeff Roach 10/2/24 9:02 AM Master Subdivision Plan - Residential - 1	Added to bulb out. No sign added off Apex Peakway towards bulb in ph1/2 for stack/safety concerns.
Town of Apex North Carolina Russell Dalton 11/15/24 9:36 AM Master Subdivision Plan - Residential - 2	In that case, please add "INBOUND TRAFFIC DOES NOT STOP" placard to the westbound stop sign at that bulb out. Thank you.

010_MSP C103-SITE-TR3.pdf [18 redlines]

64. Sight triangles

Town of Apex North Carolina Russell Dalton 9/20/24 4:51 PM Master Subdivision Plan - Residential - 1	Check AASHTO sight lines and confirm all intersections meet design speed. I see intersections in/adjacent to curves where the standard 10'x70' sight triangle easement may not be enough.
Peak Engineering & Design, PLLC Jeff Roach 10/3/24 5:52 PM Master Subdivision Plan - Residential - 1	With a 25 mph design speed, short blocks, narrow streets, and various speed reduction items (driveways, parking spaces, intersections, alleys, etc.), the sight distance should not be an issue but we will evaluate with the Plan/Profiles within the CD package.
Town of Apex North Carolina Russell Dalton 11/15/24 9:37 AM Master Subdivision Plan - Residential - 2	Noted, to remain open to be addressed at CDs.

010_MSP C103-SITE-TR3.pdf [0 redlines]

65. Proposed infrastructure

Town of Apex North Carolina Russell Dalton 11/15/24 9:41 AM Master Subdivision Plan - Residential - 2	There is curb delineation linework missing from this sheet along proposed streets. I see light shading but not the lines.
--	---

012_MSP C105-SITE-TR5.pdf [0 redlines]

66. Connectivity

Town of Apex North Carolina Russell Dalton 11/15/24 9:25 AM Master Subdivision Plan - Residential - 2	Show linework for tie in at Drumline Drive and provide ramps for crossing the street where sidewalk on both sides transitions to sidewalk on one side of the existing street at the bulb out intersection.
--	---

67. Proposed infrastructure

Town of Apex North Carolina Russell Dalton 11/15/24 9:40 AM Master Subdivision Plan - Residential - 2	There is curb delineation linework missing from this sheet along proposed streets. I see light shading but not the lines.
--	--

031 Tingen Corners 15% Offsite Roadway 3.pdf [2 redlines]

68. Proposed infrastructure

Town of Apex North Carolina Russell Dalton 11/15/24 9:48 AM Master Subdivision Plan - Residential - 2	Tingen Rd pavement sections do not meet throughfare standards and should be amended to satisfy minimum requirements.
--	---

Samantha Ewens

009_MSP C102-SITE-TR1-2.pdf [11 redlines]

69. Accessibility

Town of Apex North Carolina Samantha Ewens 9/19/24 10:44 AM Master Subdivision Plan - Residential - 1	Please review requirements for accessible parallel parking spots. LINK: R3: Technical Requirements (access-board.gov)
Peak Engineering & Design, PLLC Jeff Roach 10/3/24 5:53 PM Master Subdivision Plan - Residential - 1	These 3 spaces have been revised to the ADA parallel dimensions. [Ver. 2] [Edited By Jeff Roach]

012_MSP C105-SITE-TR5.pdf [0 redlines]

70. Accessibility

Town of Apex North Carolina Samantha Ewens 11/17/24 5:23 PM Master Subdivision Plan - Residential - 2	Mail kiosks are required to be accessible on all sides where it can be accessed. So if post office personnel can access from the rear, then the accessible path must continue from the front around the side and to the back. Some of your kiosks are drawn with clear space in the back, but not on the side. Others are shown with no clear space behind.
--	---

71. Accessibility

Town of Apex North Carolina Samantha Ewens 11/17/24 5:24 PM Master Subdivision Plan - Residential - 2	What is the intent behind the hatching on certain sidewalk sections (with + symbols)? I can't find the pattern on any key.
--	---

Stormwater Engineering

General Issues

72. SCM design

Town of Apex North Carolina Hannah Behr 10/23/24 8:17 AM Master Subdivision Plan - Residential - 2	SCM access and maintenance easements need to be at least 10' around entire SCM. SCM 5 will cause a large buffer disturbance get that]
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004_MSP C004-EX COND.pdf [3 redlines]

73. grading

Town of Apex North Carolina Hannah Behr 8/22/24 2:07 PM Master Subdivision Plan - Residential - 1	LIDAR or topography verified by a professional land surveyor must be utilized to generate the existing contour elevations. <u>Please specify the topo survey source on the existing conditions sheet.</u> <u>No Wake County topo allowed.</u>
Peak Engineering & Design, PLLC Jeff Roach 10/2/24 12:32 PM Master Subdivision Plan - Residential - 1	LIDAR currently being used. Survey used for creek, streams, and wetlands. Lennar will be completing full topo of the property one they are through their Due Diligence period with the property owners (and the leaves fall off the trees).

Taylor Jarrell

General Issues

74. Road Name Application

Town of Apex North Carolina Taylor Jarrell 9/5/24 9:30 AM Master Subdivision Plan - Residential - 1	When street names are available, please submit them for review.
Peak Engineering & Design, PLLC Jeff Roach 10/2/24 11:30 AM Master Subdivision Plan - Residential - 1	Street names have been submitted. Staff has forwarded to Wake County for approval.

Town of Apex North Carolina Taylor Jarrell 11/15/24 2:09 PM Master Subdivision Plan - Residential - 2	10 out of 13 street names are approvable at this time they are listed below. Please submit more names for review. Astoria View Nebula Universe Oliana Isadora Birch View Lily Arbor Harper Creek Ramiro Thornvale
--	--

Traffic

[033_MSP Seymour Offsite Prelim Roadway Plans_6.pdf \[2 redlines\]](#) (Page 1)

75. Callout B

Town of Apex North Carolina Russell Dalton 9/19/24 9:58 AM Master Subdivision Plan - Residential - 1	Need linework for existing features along offsite path extension for parcels & roadway [Ver. 2] [Edited By Russell Dalton]
Peak Engineering & Design, PLLC Jeff Roach 10/3/24 8:38 AM Master Subdivision Plan - Residential - 1	We are still waiting on survey for these areas. We've added GIS property lines and aerial imagery for the purpose of clarity. (KH response)
Town of Apex North Carolina Russell Dalton 11/19/24 3:31 PM Master Subdivision Plan - Residential - 2	Noted, comment to remain open until completed. [Ver. 2] [Edited By Russell Dalton]

[035_MSP Seymour Offsite Prelim Roadway Plans_8.pdf \[8 redlines\]](#) (Page 1)

76. Callout B

Town of Apex North Carolina Russell Dalton 9/19/24 9:49 AM Master Subdivision Plan - Residential - 1	Northbound left on Tingen at Peakway: need to add extra 50' decel full width to 150' storage. [Ver. 3] [Edited By Russell Dalton]
Peak Engineering & Design, PLLC Jeff Roach 10/3/24 8:38 AM Master Subdivision Plan - Residential - 1	The comments from the Town regarding the Seymour PUD (dated 8/30/23) "recommend construction of a northbound left-turn lane with approximately 100 feet of storage and appropriate deceleration and taper...". 100 feet of storage and appropriate deceleration and taper is what is shown. (KH response)

[Town of Apex North Carolina](#)
Russell Dalton
11/19/24 3:34 PM
Master Subdivision
Plan - Residential - 2

The zoning conditions require 150 feet of storage plus decel and taper for the northbound left turn.

77. Callout B

[Town of Apex North Carolina](#)
Russell Dalton
9/19/24 9:29 AM
Master Subdivision
Plan - Residential - 1

Show existing Tingen Rd linework and tie-in north of project.

[Peak Engineering & Design, PLLC](#)
Jeff Roach
10/3/24 8:39 AM
Master Subdivision
Plan - Residential - 1

We are still waiting on survey for these areas. We've added GIS property lines and aerial imagery for the purpose of clarity. (KH response)

[Town of Apex North Carolina](#)
Russell Dalton
11/19/24 3:36 PM
Master Subdivision
Plan - Residential - 2

Noted, comment to remain open until completed.

78. Callout B

[Town of Apex North Carolina](#)
Russell Dalton
9/19/24 9:59 AM
Master Subdivision
Plan - Residential - 1

Show linework for tie-ins to existing intersection on Peakway east of Tingen. [[Ver. 2](#)] [Edited By Russell Dalton]

[Peak Engineering & Design, PLLC](#)
Jeff Roach
10/3/24 8:40 AM
Master Subdivision
Plan - Residential - 1

We are still waiting on survey for these areas. We've added GIS property lines and aerial imagery for the purpose of clarity. We added a tie in to the north side of the intersection where widening is proposed. (KH response)

[Town of Apex North Carolina](#)
Russell Dalton
11/19/24 3:36 PM
Master Subdivision
Plan - Residential - 2

Noted, comment to remain open until completed.

[036_MSP Seymour_Offsite_Prelim_Roadway_Plans_9.pdf](#) [4 redlines] (Page 1)

79. Callout B

Town of Apex North Carolina Russell Dalton 9/19/24 3:51 PM Master Subdivision Plan - Residential - 1	Show tie-in to existing sidewalk on Padstone Drive and linework with tie-ins to existing intersection (south leg not shown).
Peak Engineering & Design, PLLC Jeff Roach 10/2/24 8:39 PM Master Subdivision Plan - Residential - 1	Sidewalk extension linework added to plan
Town of Apex North Carolina Russell Dalton 11/19/24 3:43 PM Master Subdivision Plan - Residential - 2	Please show 10' directional ramp locations on each side of the Peakway at location of new crosswalk. Label appears to be further away and ramps not shown. Add linework for south side of intersection.

Transportation Planning

General Issues

80. Transit - Bus Stops

Town of Apex North Carolina Katie Schwing 9/20/24 9:18 AM Master Subdivision Plan - Residential - 1	Need to show bus stops at master subdivision stage. Per the PUD: <i>The project shall construct two public bus stops along Tingen Road with exact locations to be determined at the time of Site Plan or Master Subdivision Plan and according to the specifications outlined below. The bus stops shall meet the approved Town of Apex bus stop standard construction specifications ("Town Standards") and be located in the public right of way, subject to approval of Town and NCDOT staff.</i> • <i>If no bus service is in operation along the Property's Tingen Road frontage at the time of Master Subdivision Construction Drawing approval, developer shall only be required to construct the concrete pad to Town standards. No other amenities (bench, trash receptable, bike racks) shall be required.</i> • <i>If bus service is in operation along the Property's Tingen Road frontage at the time of Master Subdivision Construction Drawing approval, developer shall construct the complete bus stop to Town Standards including a bench, trash receptable, and two bike racks.</i> • <i>The bus stops shall comply with all ADA and PROWAG accessibility guidelines.</i>
Peak Engineering & Design, PLLC Jeff Roach 10/3/24 3:49 PM Master Subdivision Plan - Residential - 1	Plans have been revised to incorporate the concrete pads along Tingen Road per the zoning condition.

Town of Apex North
Carolina
Katie Schwing
11/12/24 3:01 PM
Master Subdivision
Plan - Residential - 2

Thanks. Please include standard detail (see 300.32 in the Town's engineering specifications) and please indicate dimensions for the pads.

007_MSP C100-SITE.pdf [6 redlines]

81. PUD-CZ Special Requirements

Town of Apex North
Carolina
June Cowles
9/20/24 10:08 AM
Master Subdivision
Plan - Residential - 1

Cross access/stream PUD condition states that if a street is not connected across the stream, then a pedestrian connection shall be constructed to link the two sides of the subdivision. Please show the connection within the northwestern section over the stream. In addition, the condition states that IF the Army Corps or other governmental agency does not permit the stream crossing....Please provide a letter from the Army Corp of other governmental agency that is not allowing the stream crossing. This can be included/discussed at the Apex Peakway meeting between TID staff, Army Corp, and the applicant.
[Ver. 3] [Edited By June Cowles]

Peak Engineering &
Design, PLLC
Jeff Roach
10/4/24 8:36 AM
Master Subdivision
Plan - Residential - 1

A pedestrian crossing has been added from lot 15 (single-family) to lot 54 (townhomes). Final design of crossing - boardwalk or paved path - to be coordinated with the USACE for approval. Will coordination with Planning staff is USACE pushes back on the pedestrian crossing.

Town of Apex North
Carolina
June Cowles
10/13/24 7:58 PM
Master Subdivision
Plan - Residential - 2

I will keep this open until a meeting with USACE and Town staff has been completed and a decision on the creek. Thanks.
[Ver. 2] [Edited By June Cowles]

010_MSP C103-SITE-TR3.pdf [18 redlines]

82. Roundabout.

Town of Apex North
Carolina
June Cowles
9/20/24 2:27 PM
Master Subdivision
Plan - Residential - 1

Will the roundabout include low shrubs/groundcover?



[Ver. 6] [Edited By June Cowles]

Peak Engineering & Design, PLLC Jeff Roach 10/3/24 5:59 PM Master Subdivision Plan - Residential - 1	Landscaping is currently not shown within the round about. Likely to be grass but we have alerted the builder to this comment to provide direction. Comment should be closed as this is not a requirement...but an enhancement to the project.
Town of Apex North Carolina June Cowles 10/13/24 8:00 PM Master Subdivision Plan - Residential - 2	In speaking with TID staff, they request low shrubs. low drought tolerant shrubs are preferred over grass (alot of maintenance compared to low drought tolerant shrubs/ground cover).

015_MSP L-1.2 PARTIAL LANDSCAPE PLAN-TR3.pdf [1 redline]

83. townhouse path to sidepath main street sidewalk

Town of Apex North Carolina June Cowles 9/20/24 10:24 AM Master Subdivision Plan - Residential - 1	How will the townhouse paths be connected to the sidepaths and sidewalks? Individually or with a single path? Suggestions include 2-3 townhouse sharing a path to the public sidewalk. (looking to reduce the number of paths which cuts through the buffer). A subdivision, Preswick shared several townhouse paths with a reduced number of paths to the public sidewalk. [Ver. 2] [Edited By June Cowles]
Peak Engineering & Design, PLLC Jeff Roach 10/2/24 12:19 PM Master Subdivision Plan - Residential - 1	Since the buffer is a 15' Type 'E' buffer with trees along Tingen Road, the trees (large or small) will be spaced approximately 30-40' apart. The spacing of the trees will allow sidewalks from each lot directly to Tingen Road.
Town of Apex North Carolina June Cowles 10/13/24 8:02 PM Master Subdivision Plan - Residential - 2	Other developments have provided a shared path between 2 or 3 lots. Please consider this design. Veridea is one development that is providing this type of shared path. This design (shared path) saves money, impervious surface, and increases area for buffer planting space.

Tyler Gumprecht-PR&CR

General Issues

84. Transportation Required Connections to Greenway

Town of Apex North Carolina Tyler Gumprecht 9/18/24 11:44 AM Master Subdivision Plan - Residential - 1	The connections from the cul-de-sac's to the greenway in Tracts 1 & 2 could be accepted at TOA Greenway--if the developer were to turn these connecting paths over to the Town. If so, they should meet TOA greenway standards. However, since these connections are required by transportation, they cannot be considered for credit against the Recreation FIL.
Peak Engineering & Design, PLLC Jeff Roach 10/2/24 9:14 AM Master Subdivision Plan - Residential - 1	2 Connections have been made in the section per previous comment

Water Resources - Utilities

85. Preliminary Capacity calculations B

Town of Apex North Carolina Jackie Dillon 9/13/24 11:16 AM Master Subdivision Plan - Residential - 1	Please provide proposed capacity calculations.
Peak Engineering & Design, PLLC Jeff Roach 10/3/24 6:01 PM Master Subdivision Plan - Residential - 1	Preliminary sewer capacity estimates have been included on the Site Data Table within the Cover Sheet. - West of Tingen Road - 226 lots x 300 GPD - East of Tingen Road - (178 lots x 300 GPD) + (50,000 SF x 120 GPD/1,000 SF) (commercial component is the maximum building area from the zoning - actual is TBD) [Ver. 2] [Edited By Jeff Roach]
Town of Apex North Carolina Jackie Dillon 11/4/24 3:14 PM Master Subdivision Plan - Residential - 2	Thanks for the breakdown, please provide the total number as well broken down by pump station. Will there be any amenity centers within the development? [Ver. 2] [Edited By Jackie Dillon]

86. Sampling Station B

Town of Apex North Carolina Jackie Dillon 9/13/24 11:16 AM Master Subdivision Plan - Residential - 1	Sampling Stations shall be provided at all new development projects at the following rates: a) One (1) for every 200 residential units b) One (1) for every 10 acres of non-residential c) One (1) per institutional facility with more than 100,000 square feet d) One (1) for every 100 residential units and 5 acres of non-residential in projects with multiple uses. e) As otherwise required by the Water Resources Department. For phased development projects, sampling stations are calculated based on the total number of units, acreage, or square footage (as applicable) at total build-out. At least one sampling station shall be installed within the first phase of a phased development, with subsequent stations installed with the phase of which the next sampling station is warranted based on the rates listed above. Padlocks for sampling stations shall be provided by the Town of Apex Water Resources Department. The sampling station requirement may be waived in cases where area sampling is already deemed sufficient by the Town. Sampling stations shall be installed per the standard detail and provided as a self contained manufactured assembly with locking aluminum housing, stainless steel tube and unthreaded spigot. Sampling stations shall not be connected to a service line.
Peak Engineering & Design, PLLC Jeff Roach 10/3/24 12:20 PM Master Subdivision Plan - Residential - 1	Two sampling stations have been added to the overall development of 406 units Tract 1/2 has one located near the Wragby culdesac and the other is in the lower S.E corner culdesac (Tract 4)

Town of Apex North Carolina Jackie Dillon 10/14/24 1:59 PM Master Subdivision Plan - Residential - 2	I don't see street names to find where these locations are. Please place one of the sampling stations off of the water service for one of the commercial sites. Should be behind the meter as shown in the detail.
---	---

008_MSP C101-PHASES.pdf [1 redline] (Page 1) [1] 008_MSP C101-PHASES

87. Sequence notes B

Town of Apex North Carolina Jackie Dillon 9/13/24 11:16 AM Master Subdivision Plan - Residential - 1	For Track 4 and 5 please add notes that offsite sewer CD plans will need to be signed prior to approval.
---	---

Peak Engineering & Design, PLLC Jeff Roach 10/2/24 11:53 AM Master Subdivision Plan - Residential - 1	Approval of the Northern Big Branch Sewer Outfall construction documents will NOT delay Master Subdivision Plan approval of the development. Tracks 4 & 5 Construction Documents cannot be approved with the proposed sewer outfall. Just a clarification that the owner has been made aware of.
--	---

Town of Apex North Carolina Jackie Dillon 10/14/24 2:01 PM Master Subdivision Plan - Residential - 2	Not finding the note.
---	------------------------------

016_MSP L-1.3 PARTIAL LANDSCAPE PLAN-TR4.pdf [1 redline] (Page 1) [1] 016_MSP L-1.3 PARTIAL LANDSCAPE PLAN-TR4

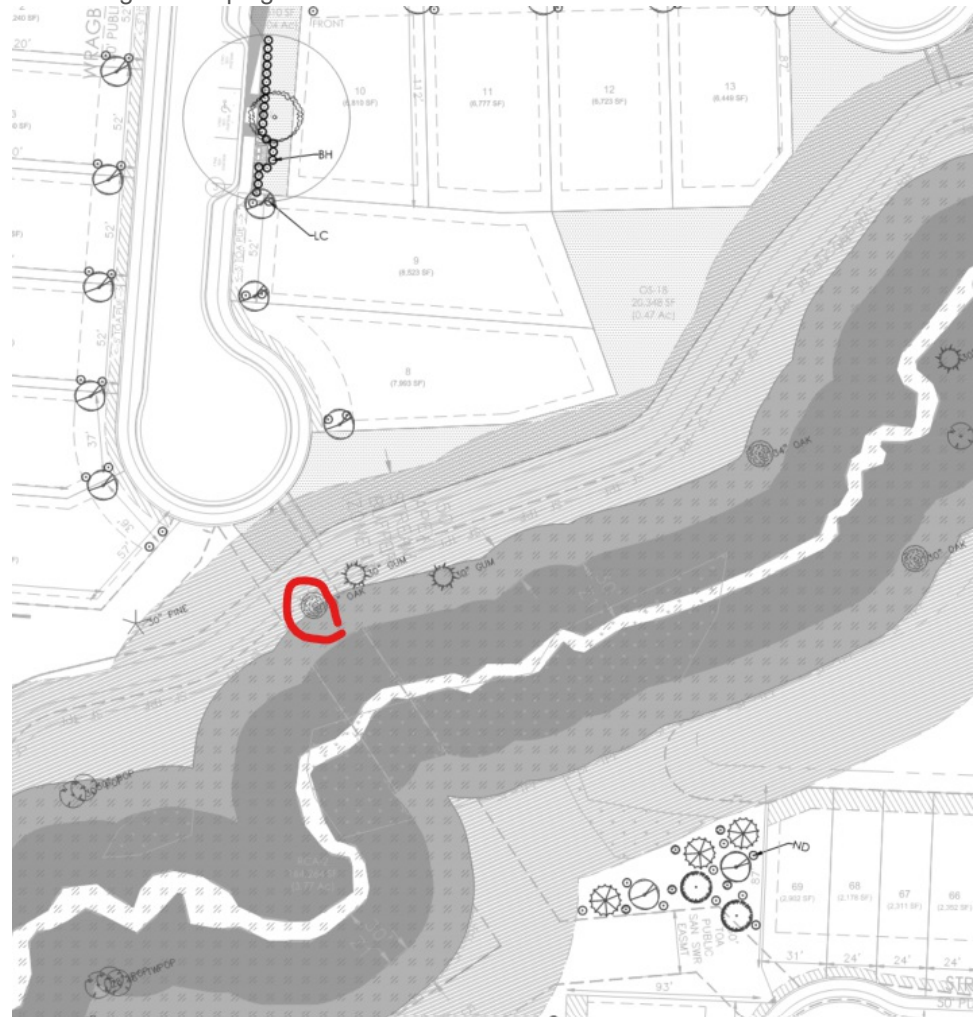
88. Easement encroachment B

Town of Apex North Carolina Jackie Dillon 9/18/24 9:27 AM Master Subdivision Plan - Residential - 1	No part of any structure, including substructures and overhangs, equipment, private utility line (including water, irrigation, and/or sewer lines), retaining walls, embankments, impoundments, privately maintained greenways and paths, landscaping, or other elements, both temporary or permanent, which may inhibit maintenance operations shall be constructed within a utility easement and no grading may occur within any Apex utility easement prior to obtaining final construction plan approval, a building permit, or an encroachment agreement or prior approval from the Water Resources and/or Electric Utilities Department.
--	---

Peak Engineering & Design, PLLC Jeff Roach 10/4/24 8:37 AM Master Subdivision Plan - Residential - 1	Owner has been informed of the requirements associated with easements and encroachments.
---	---

Town of Apex North
Carolina
Jackie Dillon
10/14/24 2:11 PM
Master Subdivision
Plan - Residential - 2

Still seeing landscaping in easements.



020_MSP C202-UTILS-TR1-2.pdf [7 redlines] (Page 1) [1] 020_MSP C202-UTILS-TR1-2

89. Text Box B

Town of Apex North
Carolina
Jackie Dillon
9/13/24 11:16 AM
Master Subdivision
Plan - Residential - 1

Services aren't connecting correctly to the main.

Peak Engineering &
Design, PLLC
Jeff Roach
10/3/24 6:04 PM
Master Subdivision
Plan - Residential - 1

90 connections for service laterals will be created at CD level. They are turned off for MSP to avoid conflicting information (and numerous adjustments as lots are tweaked through MSP).
[Ver. 2] [Edited By Jeff Roach]

Town of Apex North
Carolina
Jackie Dillon
10/14/24 2:19 PM
Master Subdivision
Plan - Residential - 2

This is a requirement of MSP.

UTILITY PLAN			
#	Requirement	Additional Information	Reference
	transformers and meters. Ensure that all point of delivery issues are coordinated with the TOA Electrical Utility Division or Progress Energy.	provide an easement clear of buildings, pavement, landscaped areas, and similar protected areas.	209B
8.	Transformers must be located 10' off the building where there are openings (doors, windows, etc.) and 3' off of solid masonry. The grade to the transformer must slope away from the building.	A minimum of 10' in front and 3' on sides and back of transformer is needed for installation and maintenance.	TOA Spec 209
9.	Transformers shall not be located within required landscaped areas or islands unless additional space has been allocated for this purpose.		
10.	Indicate location, size and materials used for water sanitary sewer lines and force main lines. Show water meter and clean out connections from building(s) to public lines. Include size and material of appurtenances. If well or septic system, indicate proposed location.	For well or septic system, appropriate permits from Wake County are required before building permit can be issued.	TOA Spec. 100
11.	Indicate locations of utility poles, fire hydrants,		

[Ver. 2] [Edited By Jackie Dillon]

90. Text Box B

Town of Apex North
Carolina
Jackie Dillon
9/13/24 11:16 AM
Master Subdivision
Plan - Residential - 1

Easement for hydrant

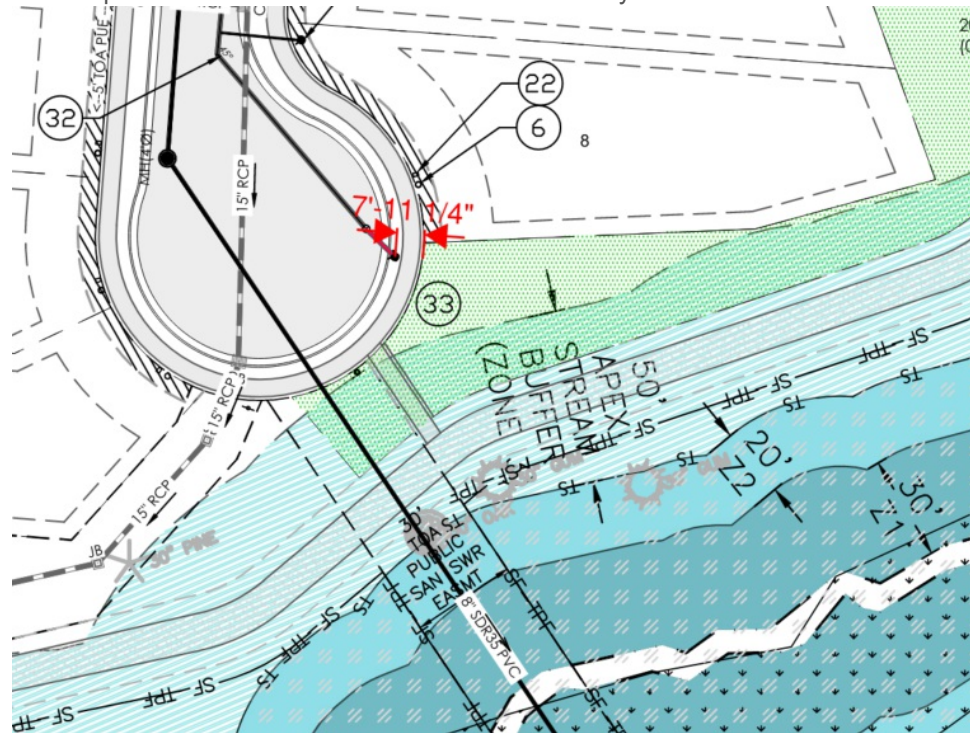
Peak Engineering &
Design, PLLC
Jeff Roach
10/3/24 12:22 PM
Master Subdivision
Plan - Residential - 1

Hydrant was moved to it's correct location behind back of curb

Town of Apex North
Carolina

Jackie Dillon
10/14/24 2:41 PM
Master Subdivision
Plan - Residential - 2

A clear level space within the right-of way or public utility easement of at least 10 feet shall be provided and maintained on all sides of a fire hydrant for immediate access.



021_MSP C203-UTILS-TR3.pdf [18 redlines] (Page 1) [1] 021_MSP C203-UTILS-TR3

91. Taps B

Town of Apex North
Carolina

Jackie Dillon
9/13/24 11:16 AM
Master Subdivision
Plan - Residential - 1

No taps shall be made within 3-feet of the bell or spigot end of the pipe or within 20 feet of a dead end

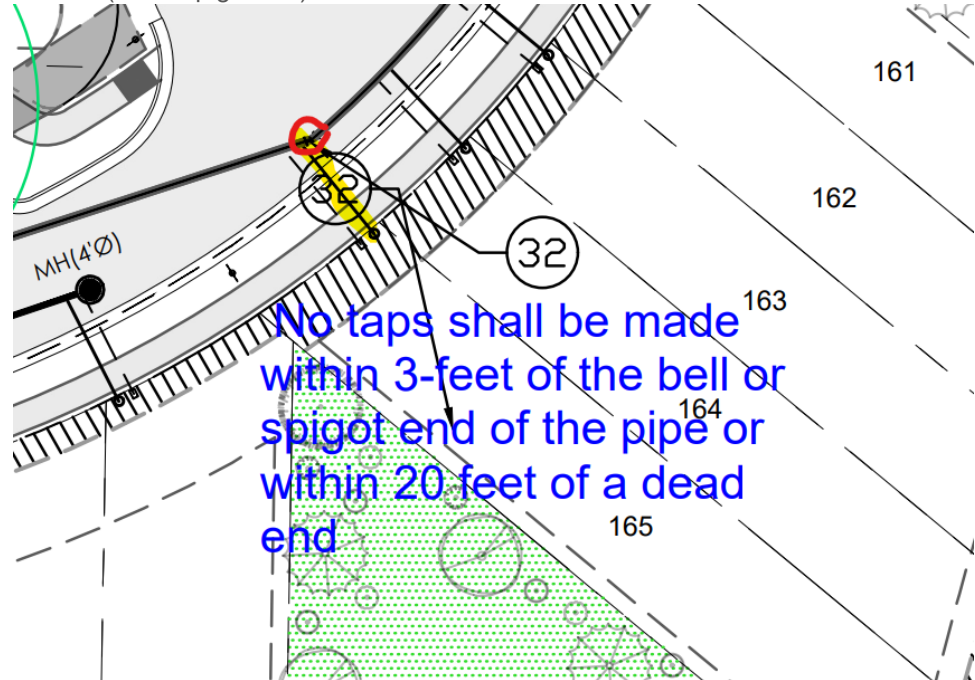
Peak Engineering &
Design, PLLC
Jeff Roach
10/3/24 6:04 PM
Master Subdivision
Plan - Residential - 1

Typical Town of Apex standard. The markup was not pointing to a specific location on the C203 sheet.

[[Ver. 3](#)] [Edited By Jeff Roach]

Town of Apex North
Carolina
Jackie Dillon
10/14/24 2:47 PM
Master Subdivision
Plan - Residential - 2

At bend (bell & spigot end)



92. Text Box B

Town of Apex North
Carolina
Jackie Dillon
9/13/24 11:16 AM
Master Subdivision
Plan - Residential - 1

Sewer services but no sewer line? Are duplicate services needed?

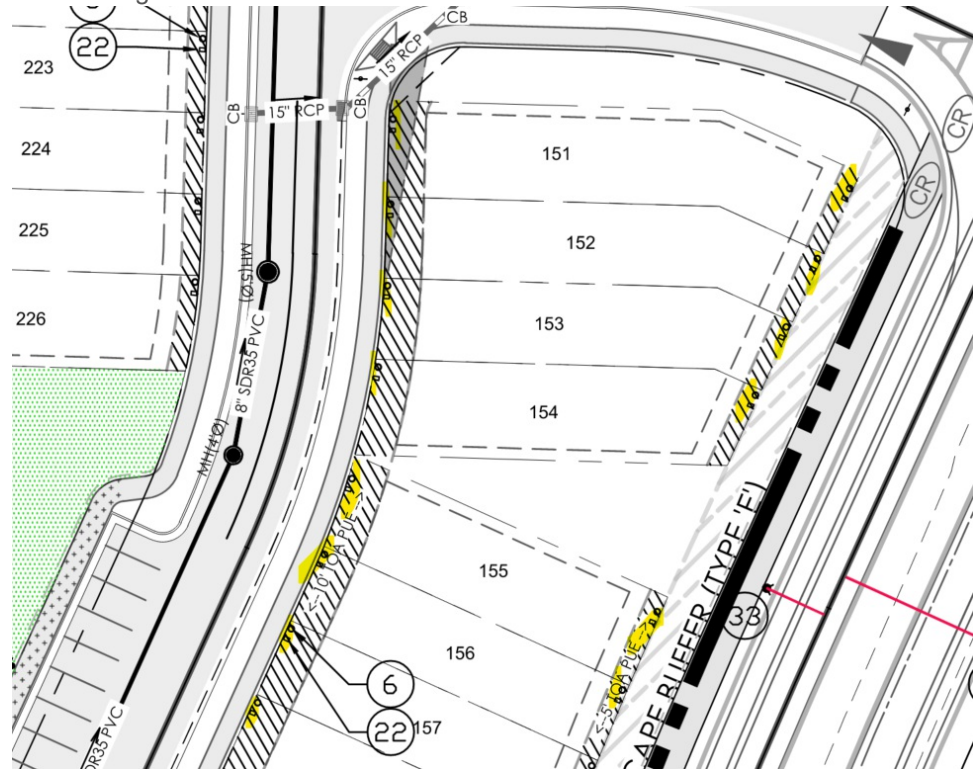
Peak Engineering &
Design, PLLC
Jeff Roach
10/3/24 6:05 PM
Master Subdivision
Plan - Residential - 1

Sewer has been added to this section for these rear loaded townhomes. Not planning to provide duplicate service laterals.

[[Ver. 2](#)] [Edited By Jeff Roach]

Town of Apex North
Carolina
Jackie Dillon
10/14/24 2:49 PM
Master Subdivision
Plan - Residential - 2

Still showing double services.



93. Easement B

Town of Apex North
Carolina
Jackie Dillon
9/13/24 11:16 AM
Master Subdivision
Plan - Residential - 1

Why 10'?

Peak Engineering &
Design, PLLC
Jeff Roach
10/2/24 9:19 AM
Master Subdivision
Plan - Residential - 1

These are rear loaded townhomes, pls consult with Rodney for addition conversations if there needs to be an updated dimension here.

Town of Apex North Carolina
 Jackie Dillon
 10/14/24 2:53 PM
 Master Subdivision
 Plan - Residential - 2

Please use the correct labeling for water and sewer utility easements as required per spec:
 Section 600: Dedicated easements for water mains and appurtenances shall be recorded as "Town of Apex Public Waterline Easement."
 Section 700: Dedicated easements for sewer mains and appurtenances shall be recorded as "Town of Apex Public Sanitary Sewer Easement"

94. Hydrant Valve B

Town of Apex North Carolina
 Jackie Dillon
 9/13/24 11:16 AM
 Master Subdivision
 Plan - Residential - 1

Show location of hydrant valve on all hydrants.

Peak Engineering & Design, PLLC
 Jeff Roach
 10/3/24 6:06 PM
 Master Subdivision
 Plan - Residential - 1

The Utility Call-out "33" (Fh assembly) is inclusive of the tee, valve and hydrant assembly. Future plan and profiles will provide additional detail when CDs are submitted. FHs are colored at MSP for spacing conformity.
 [Ver. 2] [Edited By Jeff Roach]

Town of Apex North Carolina
 Jackie Dillon
 10/14/24 2:59 PM
 Master Subdivision
 Plan - Residential - 2

We need to verify that no valves are being proposed in the curb.

UTILITY PLAN		
#	Requirement	Additional
	transformers and meters. Ensure that all point of delivery issues are coordinated with the TOA Electrical Utility Division or Progress Energy.	provide an easement clear of landscaped areas, and similar
8.	Transformers must be located 10' off the building where there are openings (doors, windows, etc.) and 3' off of solid masonry. The grade to the transformer must slope away from the building.	A minimum of 10' in front of a transformer is needed for installation
9.	Transformers shall not be located within required landscaped areas or islands unless additional space has been allocated for this purpose.	
10.	Indicate location, size and materials used for water sanitary sewer lines and force main lines. Show water meter and clean out connections from building(s) to public lines. Include size and material of appurtenances. If well or septic system, indicate proposed location.	For well or septic system, a permit from Wake County are required to be issued.
11.	Indicate locations of utility poles, fire hydrants, transformers, light poles, light fixtures, etc.	

95. Cleanout Spacing B

Town of Apex North Carolina
 Jackie Dillon
 9/13/24 11:16 AM
 Master Subdivision
 Plan - Residential - 1

Alignment location of the sewer line makes it hard to meet this requirement:
 Cleanouts are required on all services with a maximum spacing of 50 feet for four (4) inch lines and 100 feet for six (6) inch lines. The first cleanout from the main/manhole shall be maintained by the Town and shall be installed one (1) foot inside the right of way line or edge of easement. All cleanouts shall extend a minimum of 6 inches above finished grade with brass caps or meet the optional cleanout method requirements in accordance with the Standard Details. Town maintenance of sewer services shall terminate at the first cleanout.

Peak Engineering &
Design, PLLC
Jeff Roach
10/2/24 11:49 AM
Master Subdivision
Plan - Residential - 1

This supports our request to install gravity sewer within the public alleys east and west of Tingen Road. With approval, the laterals will be kept within Town standards.

Town of Apex North
Carolina
Jackie Dillon
10/14/24 6:47 PM
Master Subdivision
Plan - Residential - 2

Has the exception been submitted for utilities in the alleys?

96. Additional easement needed B

Town of Apex North
Carolina
Jackie Dillon
9/13/24 11:16 AM
Master Subdivision
Plan - Residential - 1

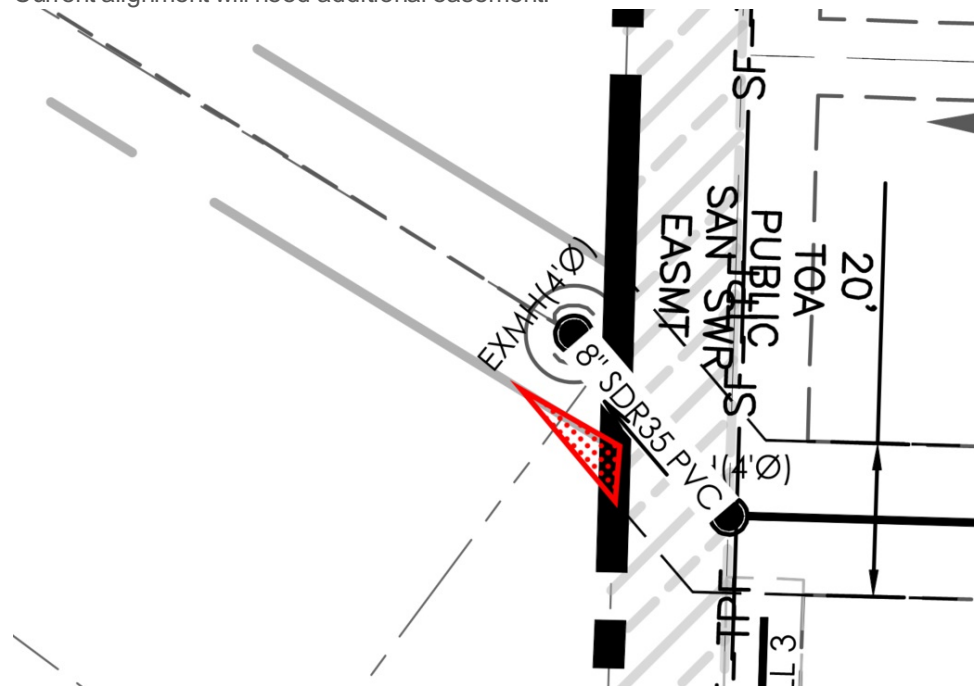
Town of Apex Public Sanitary Sewer Easement will need to be acquired,

Peak Engineering &
Design, PLLC
Jeff Roach
10/2/24 9:25 AM
Master Subdivision
Plan - Residential - 1

Route to access existing has been updated.

Town of Apex North
Carolina
Jackie Dillon
10/14/24 6:45 PM
Master Subdivision
Plan - Residential - 2

Current alignment will need additional easement.



97. Water Ext. B

Town of Apex North Carolina Jackie Dillon 9/16/24 7:36 PM Master Subdivision Plan - Residential - 1	Water is not necessary.
Peak Engineering & Design, PLLC Jeff Roach 10/3/24 12:43 PM Master Subdivision Plan - Residential - 1	I know, I prefer beer too!
Town of Apex North Carolina Jackie Dillon 10/14/24 6:37 PM Master Subdivision Plan - Residential - 2	Understand.... Just another dead-end waterline. Don't understand the design. Doesn't look like it will ever extend(road stub)

022_MSP C204-UTILS-TR4.pdf [3 redlines] (Page 1) [1] 022_MSP C204-UTILS-TR4

98. BOA dead end B

Town of Apex North Carolina Jackie Dillon 9/16/24 7:36 PM Master Subdivision Plan - Residential - 1	Why is this ending in a BOA? Is this road for future connection? "Where water mains dead end, or are terminated for future extension, at least one full length section of ductile iron pipe shall be installed with a thrust collar, main line valve, and blow-off assembly. This dead end shall terminate within a right-of-way or dedicated public utility easement, and shall extend to the property line. Connections to existing dead end mains in adjacent streets may be required, as directed by the Water Resources Department, in order to enhance flow, water quality, and/or pressure in the affected area."
Peak Engineering & Design, PLLC Jeff Roach 10/3/24 4:47 PM Master Subdivision Plan - Residential - 1	The alley has been treated such as to not extend per Russell, this is a short dead end line that terminates with a valve, length of pipe and blow off.

99. water label B

Town of Apex North Carolina Jackie Dillon 9/16/24 7:36 PM Master Subdivision Plan - Residential - 1	Label wm size material just like sewer.
Peak Engineering & Design, PLLC Jeff Roach 10/3/24 1:31 PM Master Subdivision Plan - Residential - 1	The water main size and material is called out via the utility legend for MSP approval. Once the fire flow and water line sizes are confirmed, the Construction drawing utility sheets will be updated.

Town of Apex North
Carolina

Jackie Dillon

10/14/24 6:52 PM

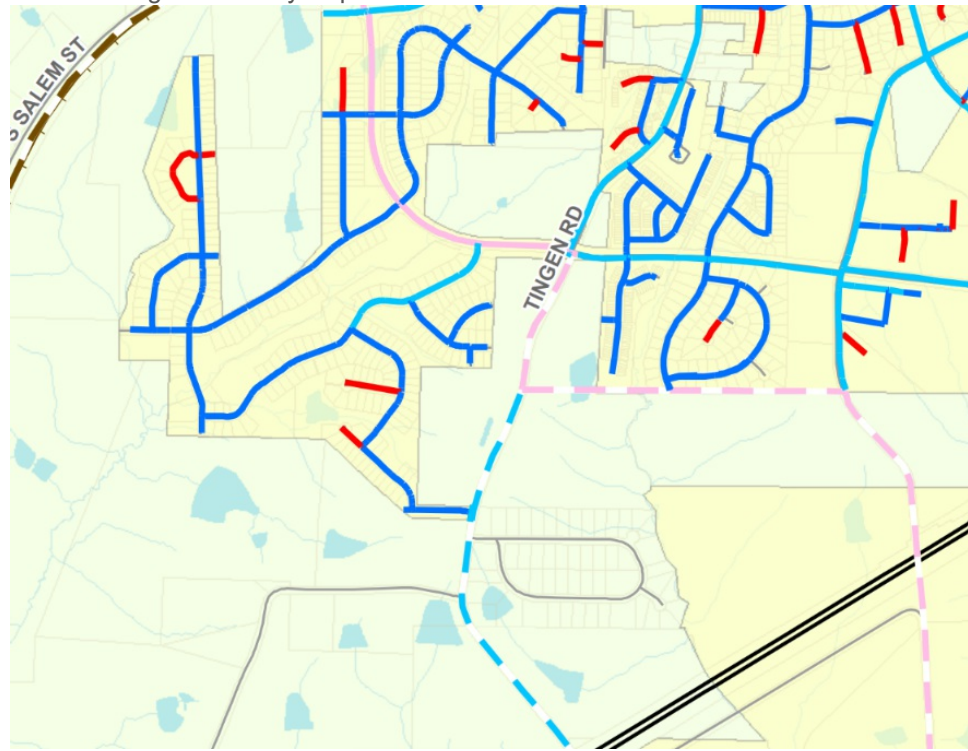
Master Subdivision
Plan - Residential - 2

Water transmission lines shall be located and sized in accordance with the current "Water System Master Plan" or as directed by the Town, and shall extend to the adjacent properties to provide an adequate network.

Pale pink=16"

Teal= 12"

I'm not seeing the 16" on your plans.



[Ver. 3] [Edited By Jackie Dillon]

100. Culde-sac hydrant B

Town of Apex North
Carolina

Jackie Dillon

9/18/24 9:27 AM

Master Subdivision
Plan - Residential - 1

For single-family residential projects, a hydrant shall be located at the end of all culde-sacs, or other terminus not planned to be extended, and shall not include any bends within the radius of the cul-de-sac.

Peak Engineering &
Design, PLLC

Jeff Roach

10/3/24 1:28 PM

Master Subdivision
Plan - Residential - 1

This standard needs a review. The hydrant leg doesn't start until after the last residential connection. For that reason it may be necessary to bend the water with an off center culdesac.

Town of Apex North
Carolina

Jackie Dillon

10/14/24 6:50 PM

Master Subdivision
Plan - Residential - 2

Are you asking for an exception?
Could you switch locations of the water and sewer in this stretch to meet this requirement on the water?

022_MSP C204-UTILS-TR4.pdf [1 redline] (Page 1) [1] 022_MSP C204-UTILS-TR4

101. Future Amenity B

Town of Apex North
Carolina
Jackie Dillon
10/15/24 11:20 AM
Master Subdivision
Plan - Residential - 2

Where will this lot be served by sewer?

023_MSP C205-UTILS-TR5.pdf [7 redlines] (Page 1) [1] 023_MSP C205-UTILS-TR5

102. Connection to existing B

Town of Apex North
Carolina
Jackie Dillon
9/16/24 7:36 PM
Master Subdivision
Plan - Residential - 1

Show existing water and connection, valve & boa not required at connection. Remove existing blow off.

Peak Engineering &
Design, PLLC
Jeff Roach
10/3/24 4:48 PM
Master Subdivision
Plan - Residential - 1

Utility plan show connecting to existing. However, since this is a private street, no thru traffic is still noted on the plan

Town of Apex North
Carolina
Jackie Dillon
10/14/24 7:04 PM
Master Subdivision
Plan - Residential - 2

Show the limits of the PUE that includes both of the public water and sewer that you are trying to at this location. Provide the reference to it.

103. Valves B

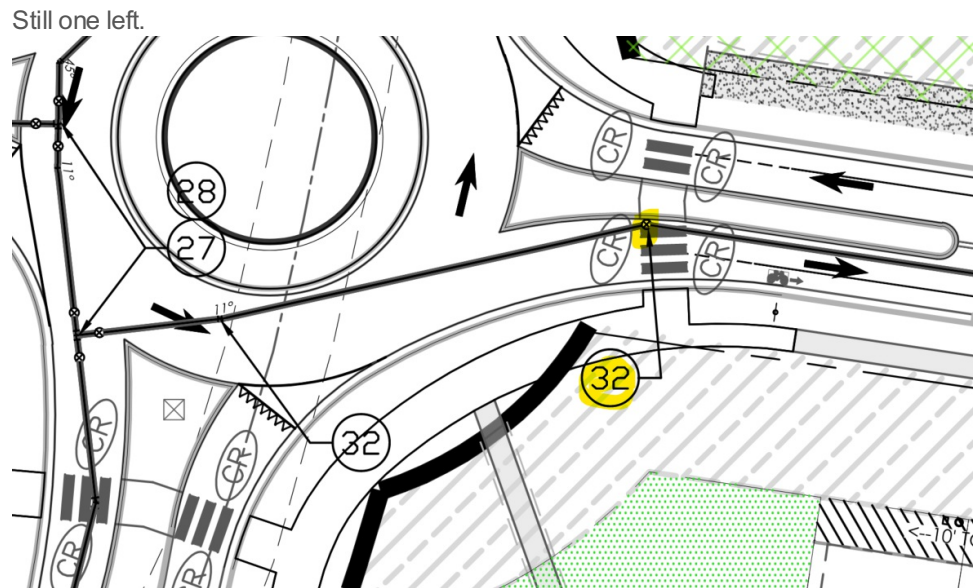
Town of Apex North
Carolina
Jackie Dillon
9/18/24 9:27 AM
Master Subdivision
Plan - Residential - 1

32 is a bend but you are showing symbol of a valve.
[Ver. 2] [Edited By Jackie Dillon]

Peak Engineering &
Design, PLLC
Jeff Roach
10/2/24 9:50 AM
Master Subdivision
Plan - Residential - 1

Symbol corrected, good catch!

Town of Apex North
Carolina
Jackie Dillon
10/14/24 7:11 PM
Master Subdivision
Plan - Residential - 2



036_MSP Seymour Offsite Prelim Roadway Plans_9.pdf [4 redlines] (Page 1)

104. Ex Water B

Town of Apex North
Carolina
Jackie Dillon
9/18/24 9:27 AM
Master Subdivision
Plan - Residential - 1

Construction activities involving existing Water Mains: a) The existing water main must remain active and protected during all phases of construction. The contractor must provide a plan for the structural protection of the existing water main. b) A proposed construction sequence must be submitted for any demolition of a portion of existing water main. The plan must be reviewed and approved by the Water Resources Department. c) Any approved disruption to water service requires advance notice and coordination. Coordination with Water Resources staff is required no later than 14-business days prior to any disruption to allow adequate time for planning and public notification

Peak Engineering &
Design, PLLC
Jeff Roach
10/3/24 6:10 PM
Master Subdivision
Plan - Residential - 1

Added note to the Kimley Horn offsite (Tingen Road) improvement plans (sheet C500). This is a CD comment that will be noted throughout the development, will be hammered home at the pre-con meeting, and will be discussed in multiple meetings with the engineer, builder, and contractor. Notes added or part of the Town's standard specifications.
[Ver. 2] [Edited By Jeff Roach]

Town of Apex North
Carolina
Jackie Dillon
10/14/24 7:16 PM
Master Subdivision
Plan - Residential - 2

Don't see it added.