SUBDIVISION REPORT - CONCEPT/DEVELOPMENT PLAN

▶ **FILE #:**	**8-SB-26-C**	**AGENDA ITEM #:**	**15**
	8-B-26-DP	**AGENDA DATE:**	**10/1/2026**
POSTPONEMENT(S):	8/13/26, 9/10/2026		
▶ **SUBDIVISION:**	**CARTER VALLEY (FORMERLY CARTER MILL, PHASE 9)**		
▶ **APPLICANT/DEVELOPER:**	**SKYCREST ENGINEERING SERVICES LLC**		
OWNER(S):	Winston D Cox Carter Mill LLC		

TAX IDENTIFICATION:	74 00101 (PARTIAL)	**View map on KGIS**
JURISDICTION:	County Commission District 8	
STREET ADDRESS:	0 CARTER MILL DR	
▶ **LOCATION:**	**South side of Carter Mill Dr, east of McCubbins Rd**	
GROWTH POLICY PLAN:	Planned Growth Area	
FIRE DISTRICT:	Rural Metro Fire	
WATERSHED:	Lyon Creek	
▶ **APPROXIMATE ACREAGE:**	**77.82 acres**	

▶ **ZONING:**	**PR (Planned Residential), up to 2.5 du/ac**
PLACE TYPE:	RC (Rural Conservation), HP (Hillside Ridgetop Protection)
▶ **EXISTING LAND USE:**	**Agriculture/Forestry/Vacant Land**
▶ **PROPOSED USE:**	**Detached residential subdivision**
SURROUNDING LAND USE AND ZONING:	North: Agriculture/forestry/vacant land, single family residential - PR (Planned Residential) up to 2.5 du/ac, A (Agricultural) South: Agriculture/forestry/vacant land - PR (Planned Residential) up to 2 du/ac, A (Agricultural) East: Single family residential - PR (Planned Residential) up to 2.5 du/ac West: Agriculture/forestry/vacant land - A (Agricultural)

▶ **NUMBER OF LOTS:**	**121**
SURVEYOR/ENGINEER:	Casey Potter Skycrest Engineering Services LLC
ACCESSIBILITY:	Access is via Carter Mill Drive, a minor collector with a pavement width that varies between 13.6 ft and 20 ft of pavement width within a 50-ft right-of-way.
▶ **SUBDIVISION VARIANCES REQUIRED:**	**VARIANCES** **None.** **ALTERNATIVE DESIGN STANDARD REQUIRING PLANNING COMMISSION APPROVAL** **None.** **ALTERNATIVE DESIGN STANDARD REQUIRING KNOX COUNTY ENGINEERING AND PUBLIC WORKS APPROVAL (PLANNING COMMISSION APPROVAL NOT REQUIRED)**

1) Increase the maximum intersection grade of Road 'N' from 1 percent to 2 percent at Carter Mill Road.
2) Increase the maximum intersection grade of Road 'O', Road 'P', Road 'Q', and Road 'R' from 1 percent to 2 percent at Road 'N'.

STAFF RECOMMENDATION:

- **Approve the Concept Plan subject to 11 conditions.**

1. Connection to sanitary sewer and meeting other relevant utility provider requirements.
2. Providing street names consistent with the Uniform Street Naming and Addressing System within Knox County (County Ord. 91-1-102).
3. If during design plan approval or construction of the development, it is discovered that unforeseen off-site improvements within the right-of-way are necessary as caused by the development, the developer will either enter into a memorandum of understanding (MOU) with the County for these improvements or reimburse the County for their direct expenses (if completed by County crews) to make corrections deemed necessary.
4. Implementing the recommendations of the Carter Ridge Phase IX (n/k/a Carter Valley) Subdivision Transportation Impact Study (AJAX Engineering, 6/1/2026) as required by Knox County Engineering and Public Works during the design plan phase.
5. Widening Carter Mill Road to 20 ft along the full length of the property's frontage, and to 18 ft from the western edge of the property to the McCubbins Road intersection to ensure safe roadway conditions after the construction of this subdivision. The AASHTO publication "Guidelines for Geometric Design of Low - Volumes Roads 2019" identifies roadways like Carter Mill Road as a Minor Access Road and for traffic volumes between 400-2000 ADT the minimum width recommended is 18 feet.
6. Entering into a memorandum of understanding (MOU) with Knox County Engineering and Public Works for completing off-site improvements per Chapter 54, Article V of the Knox County Code (Ord. O-23-4-102). The property owner (applicant) shall be responsible for these improvements, except for the final asphalt surface course, which will be the responsibility of Knox County.
7. Installing sidewalks per Chapter 54, Article IV of the Knox County Code, including but not limited to, the Carter Mill Road frontage and the sections of Road 'N' that exceed 1,000 vehicle trips per day. The location of the required sidewalks will be determined by Knox County Engineering and Public Works during the design plan phase. Any sidewalks installed that are not required must be maintained by the homeowner's association.
8. Providing a note on the final plat that all lots shall have access from the internal roads only.
9. Meeting all applicable requirements of the Knox County Department of Engineering and Public Works.
10. Meeting all applicable requirements of the Knox County Zoning Ordinance.
11. Before certification of the final plat for the subdivision, establish a property owners association or other legal entity responsible for maintaining common facilities, such as common areas, amenities, private roads, and/or stormwater drainage systems.

- **Approve the development plan for up to 121 detached residential lots, subject to 1 condition.**

1. Meeting all applicable requirements of the Knox County Zoning Ordinance.

With the conditions noted, this plan meets the requirements for approval in the PR zone and the criteria for approval of a development plan.

COMMENTS:

This subdivision is for 121 detached residential lots on 77.82 acres (1.56 du/ac). In 2025, the subject property was rezoned from A (Agricultural) to PR (Planned Residential) up to 2.5 du/ac (2-C-05-RZ). The subdivision will have one access point to Carter Mill Road.

BACKGROUND SUMMARY

The subject property is the last phase of a 261-acre residential development initiated in 1998 by Carter Mill LLC (a/k/a Carter Mill GP). To date, 435 lots have been approved in the Carter Mill and Carter Ridge subdivisions over eight phases. Carter Mill LLC still owns the subject property, with Skycrest Engineering Services LLC as the applicant/developer of the proposed Carter Valley subdivision (f/k/a Carter Ridge, Phase 9). In 2005, the Carter Valley property was approved for 112 lots (Planning File 3-SH-05-C / 3-J-05-UR). The current proposal increases this to 121 lots. See Exhibit C for the timeline approvals.

VESTING

In 2005, Carter Mill LLC obtained concept plan approval for 412 lots on the south side of Carter Mill Drive (3-

SH-05-C/3-J-05-UR). At that time, the Subdivision Regulations based extensions of vesting rights on final plat submittals. A concept plan was vested for 2 years starting on the day of the Planning Commission approval. If a final plat was submitted for review, the vesting period was extended for 2 years from the final plat approval date. In a multi-phase development, the vesting period could not exceed 5 years unless the developer requested and received Planning Commission approval to extend the vesting for an additional 5 years (maximum of 10 years). Taking into account the prescribed vesting timeline, the subject property's 2005 concept plan approval lost its vesting in December 2007 when the timeframe between final plat submittals exceeded 2 years.

In 2008, 2017, and 2023, the Planning Commission approved concept plans for previous phases of the development that had expired. None of the approvals were for future phases. A new concept plan for this expired concept plan is consistent with how previous requests were reviewed and approved. The Carter Valley property is no longer vested and must meet all current development regulations.

PEDESTRIAN AND ROAD IMPROVEMENTS

Sidewalks are required along the Carter Mill Road frontage of the property, tying into the existing sidewalk to the east, and for the portion of Road 'N' that exceeds 1,000 vehicle trips per day. The applicant has proposed sidewalks on all internal streets; however, if installed, the homeowner's association must maintain any sidewalks not required by the Knox County sidewalk ordinance.

Carter Mill Road was widened to 20 ft from the subject property to S Carter School Road by the developer of the Carter Ridge subdivision, who is also the current owner of the subject property. If this application is approved, the substandard portion of Carter Mill Road in front of the subject property needs to be widened to 20 ft, and the remainder of Carter Mill Road to the west must be widened to 18 ft to ensure safe roadway conditions after the construction of this subdivision. The AASHTO publication "Guidelines for Geometric Design of Low - Volumes Roads 2019" identifies roadways like Carter Mill Road as a Minor Access Road and for traffic volumes between 400-2000 ADT the minimum width recommended is 18 feet. The applicant must enter into a Memorandum of Understanding with Knox County for the off-site work within the public right-of-way, based on the cost sharing arrangement outlined in Condition # 6.

DEVELOPMENT PLAN ANALYSIS PER ARTICLE 6, SECTION 6.50.06 (APPROVAL OR DENIAL)
In the exercise of its administrative judgment, the Planning Commission shall determine if the proposed plan is in harmony with the general purpose and intent of the zoning ordinance and adopted plans.

1) ZONING ORDINANCE - PR (Planned Residential) up to 2.5 du/ac.
A. The PR zone allows detached houses as a permitted use. The administrative procedures for the PR zone require the Planning Commission to approve the development plan before permits can be issued (Knox County Zoning Ordinance Article 5, Section 5.13.15).
B. The PR zoning allows consideration of up to 2.5 du/ac. The proposed subdivision has a density of 1.56 du/ac for the 77.82 acres associated with this proposal.
C. The overall PR zone district, encompassing approximately 218 acres, will have a density of 2.17 du/ac for all approved lots. See the "Master Plan" attached to the concept plan for Carter Ridge, Phases VI-VIII (1-SH-23-C/1-G-23-DP) for a summary of the approvals in this zone district prior to this proposal (Carter Valley), which is referred to as Carter Ridge, Phase IX.

2) COMPREHENSIVE PLAN - IMPLEMENTATION POLICIES
A. The proposed disturbance area in relation to the slope analysis is consistent with Policy 2.3, to provide protections for ridges, views, and open spaces.
B. The development will have 51 percent of the land area in open space. This is consistent with Policy 2, ensuring that development is sensitive to the existing community character by separating the proposed house lots and adjacent properties.
C. Per the Knox County Sidewalk Ordinance, the existing sidewalk system must be extended along the site's Carter Mill Road frontage and for the portion of Road 'N' that exceeds 1,000 vehicle trips per day, consistent with Implementation Policy 11, to promote connectivity with new development.

3) COMPREHENSIVE PLAN - FUTURE LAND USE MAP
A. The subject property is located in the RC (Rural Conservation) place type and HP (Hillside Protection) area. The RC place type is intended to conserve forested areas, ridges, wetlands, and other significant natural areas by clustering development and minimizing land disturbance. RC recommends single-family residential in a conservation pattern as a "primary use."
B. Single family residential subdivisions shall be clustered in a pattern that preserves 50 percent or more open

space on the site. This development has 51 percent of the site in open space.
C. The site has 66 acres in the HP (Hillside Protection) area. The slope analysis recommends a disturbance budget of 40 acres in the HP area, and this proposal disturbs approximately 27 acres.

4) KNOXVILLE - FARRAGUT - KNOX COUNTY GROWTH POLICY PLAN
A. The property is within the Planned Growth Area. The purposes of the Planned Growth Area designation are to encourage a reasonably compact pattern of development, promote expansion of the Knox County economy, offer a wide range of housing choices, and coordinate the actions of the public and private sectors, particularly with regard to the provision of adequate roads, utilities, schools, drainage, and other public facilities and services. – The proposed development is consistent with the growth plan.

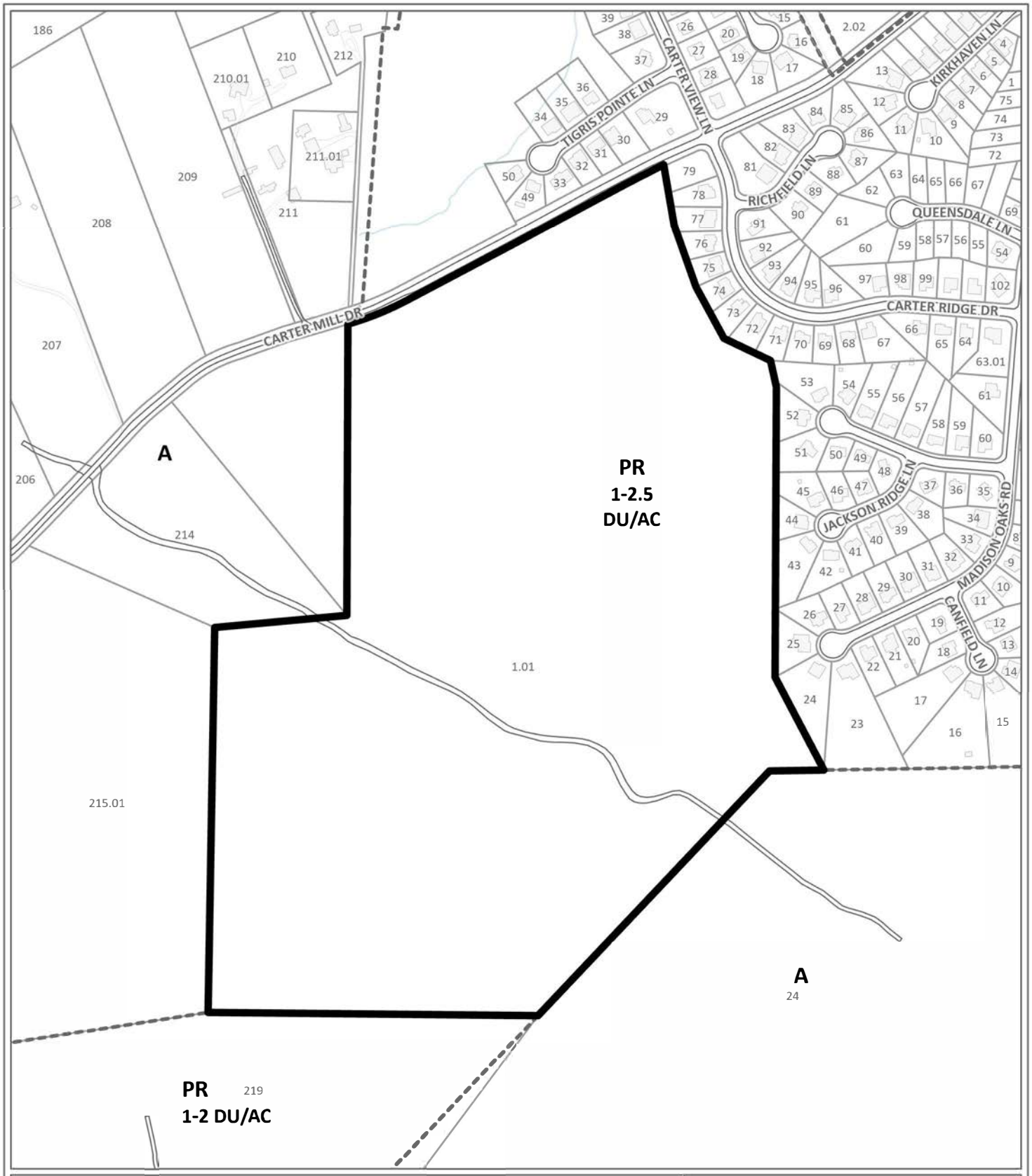
ESTIMATED TRAFFIC IMPACT: A traffic impact study was prepared by the applicant. The findings of that study were used in formulating the recommendations of this staff report.

ESTIMATED STUDENT YIELD: 31 (public school children, grades K-12)

Schools affected by this proposal: Carter Elementary, Carter Middle, and Carter High.

- Potential new school population is estimated using locally-derived data on public school student yield generated by new housing.
- Students are assigned to schools based on current attendance zones as determined by Knox County Schools. Students may request transfers to different zones, and zone boundaries are subject to change.
- Estimates presume full build-out of the proposed development. Build-out is subject to market forces, and timing varies widely from proposal to proposal.
- Student yields from new development do not reflect a net addition of children in schools. Additions occur incrementally over the build-out period. New students may replace current population that ages through the system or moves from the attendance zone.

The Planning Commission's approval or denial of this request is final, unless the action is appealed. For more information on the appeal process, contact Knoxville-Knox County Planning.



CONCEPT PLAN / DEVELOPMENT PLAN **8-SB-26-C / 8-B-26-DP**

Detached residential subdivision in PR (Planned Residential), 1-2.5 DU/AC

Original Print Date: 7/14/2026

*Knoxville - Knox County Planning Commission * City / County Building * Knoxville, TN 37902*

Petitioner: Skycrest Engineering Services LLC

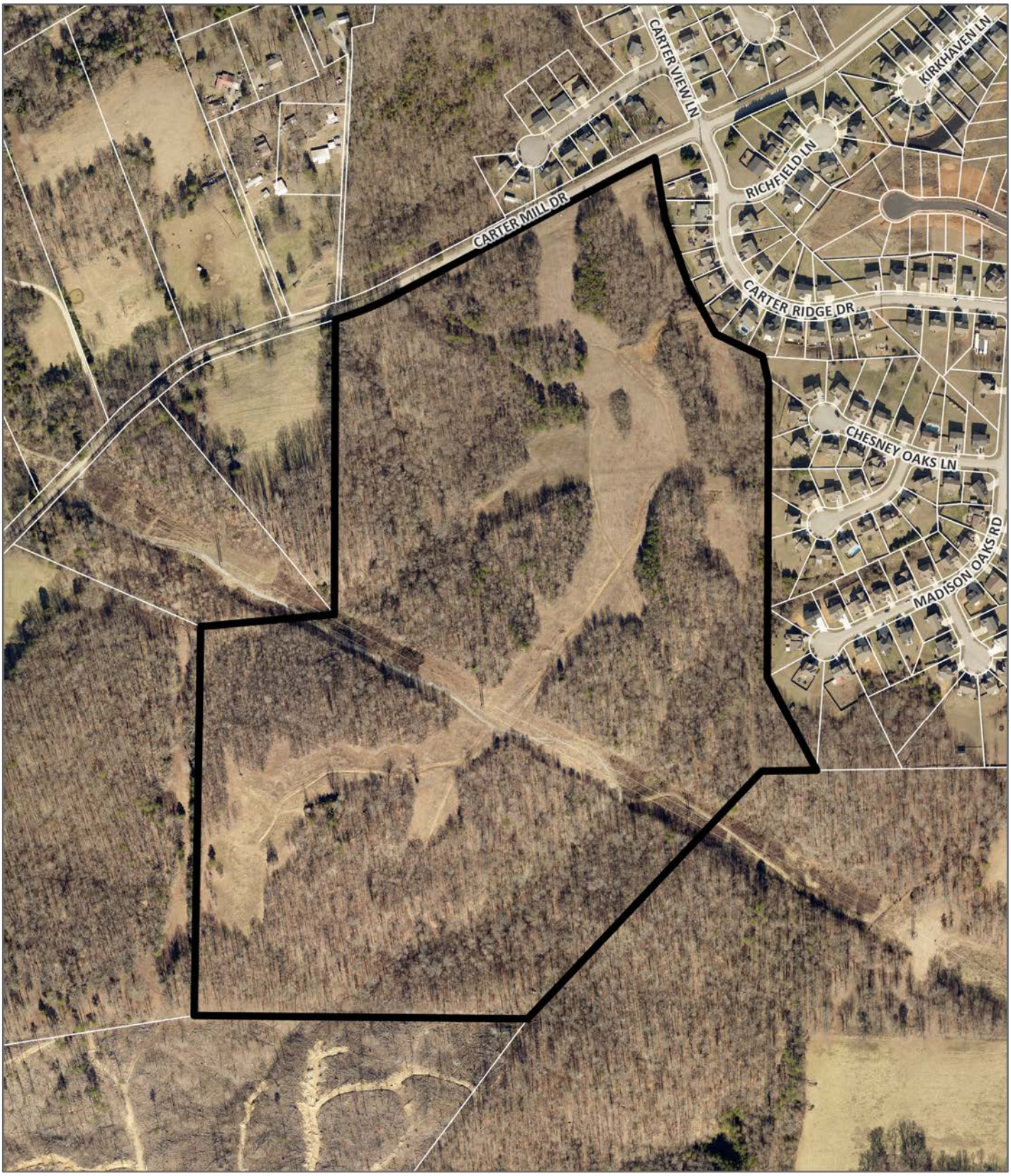
Map No: 74

Jurisdiction: County

0 430 Feet

N

Exhibit A. Contextual Images



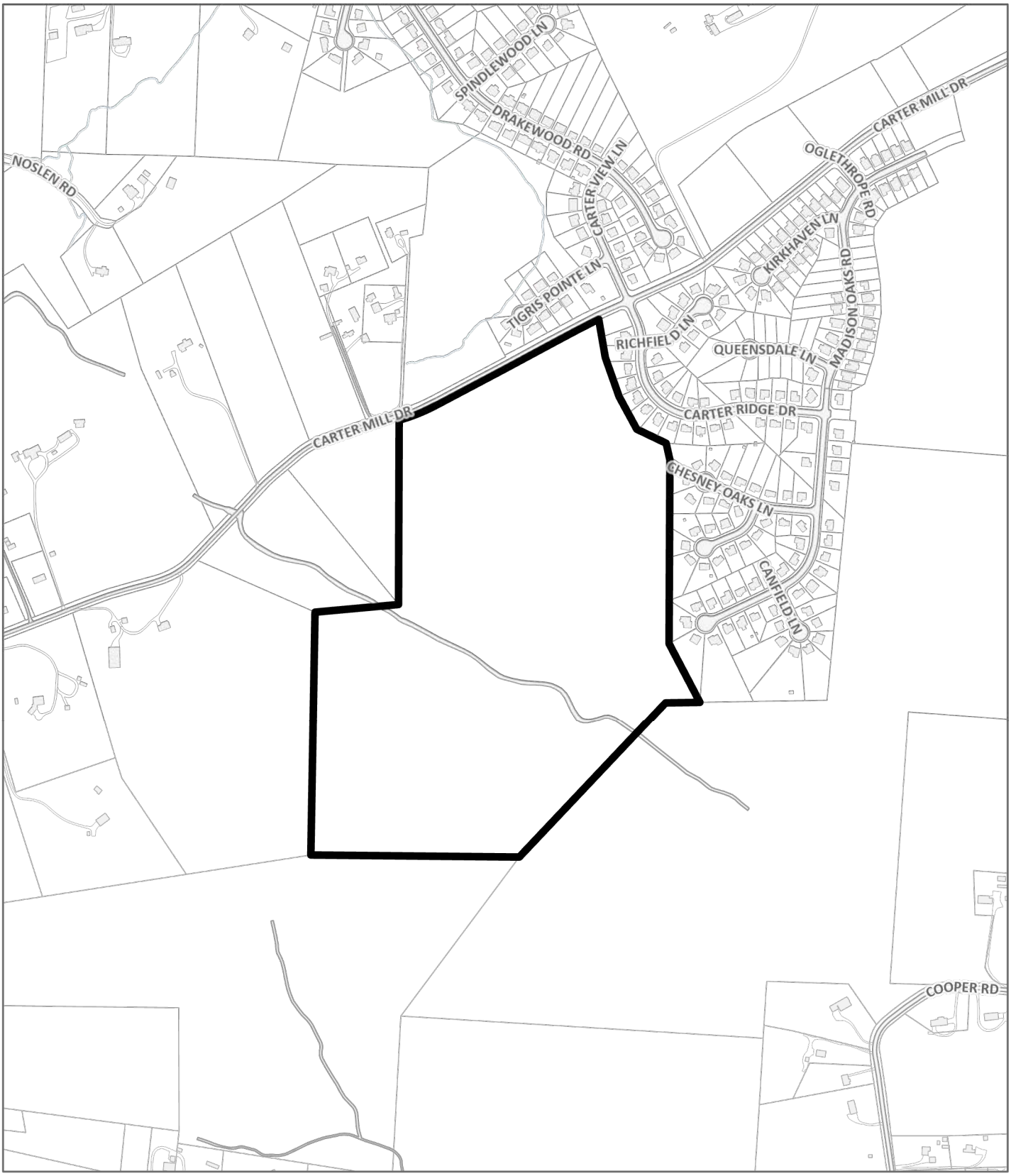
AERIAL MAP

Case boundary

0 430
Feet

N

Exhibit A. Contextual Images



LOCATION MAP **8-SB-26-C / 8-B-26-DP**

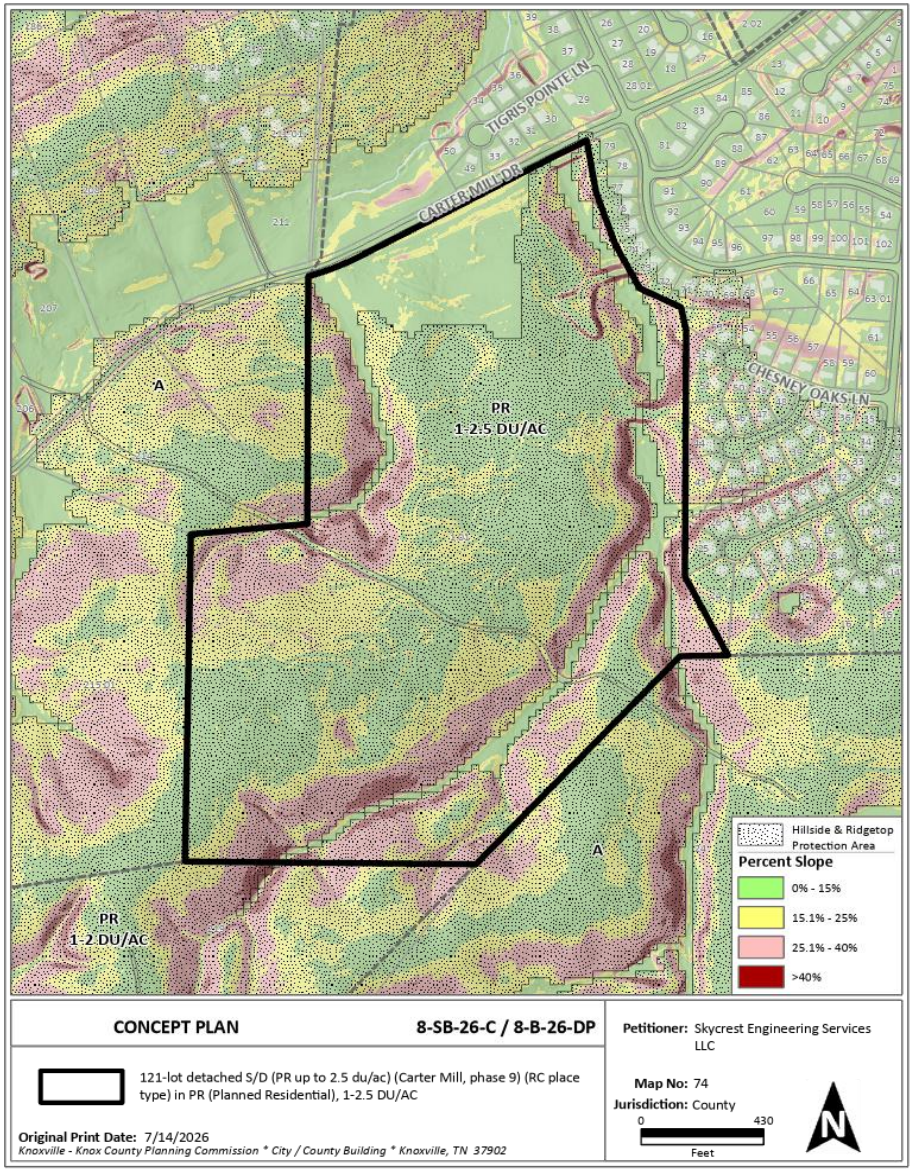
Case boundary

0 690
Feet

N

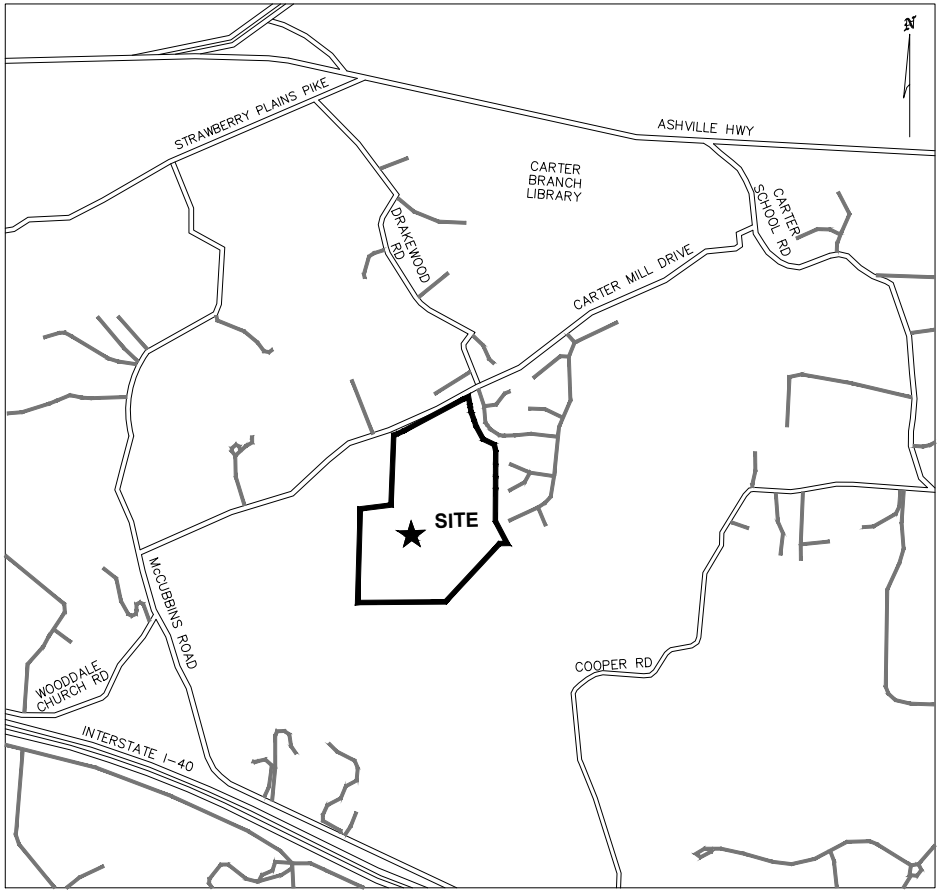
Staff - Slope Analysis
Case: 8-SB-26-C

CATEGORY	ACRES	RECOMMENDED DISTURBANCE BUDGET (Percent)	DISTURBANCE AREA (Acres)
Total Area of Site	**76.32**		
Non-Hillside	10.58	N/A	
0-15% Slope	27.46	100%	27.46
15-25% Slope	19.36	50%	9.68
25-40% Slope	15.79	20%	3.16
Greater than 40% Slope	3.14	10%	0.31
Ridgetops			
Hillside Protection (HP) Area	65.74	Recommended disturbance budget within HP Area (acres)	**40.61**
		Percent of HP Area	**61.8%**



CONCEPTUAL PLAN
CARTER VALLEY

PARCEL ID: 074 00101
KNOX COUNTY, TN
JULY, 2026



LOCATION MAP
(NTS)

CONTACT INFORMATION

OWNER: WINSTON D COX
CARTER MILL LLC
PHONE: 404-858-0532

DEVELOPER: TIM WYATT
725 N 5TH ST, SUITE 100
JACKSONVILLE, OR 97530
PHONE: (678) 492-0928

SURVEYOR: RYAN LYNCH, RLS
LYNCH SURVERYS LLC
4405 COSTER ROAD
KNOXVILLE, TN 37912
PHONE: (865) 584-2630

CIVIL ENGINEER: XIA ZHU, PE
SKYCREST ENGINEERING SERVICES, INC.
725 N 5TH ST, SUITE 100
JACKSONVILLE, OR 97530
PHONE: (541) 824-7150

SEWER, WATER, POWER FIBER, GAS: KUB
4505 MIDDLEBROOK PIKE,
KNOXVILLE, TN 97502
PHONE: (865) 524-2911

8-SB-26-C / 8-B-26-DP
Revised: 7/27/2026

REVISIONS

#	DATE

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Professional Seal:
XIA ZHU
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 118801
STATE OF TENNESSEE

811
Know what's below.
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DATE: 7-27-2026
PROJECT #: 2026-02
DRAWN BY: CJP
CHECKED BY: XZ
APPROVED BY:
NOTES:

CONCEPTUAL PLAN
CARTER VALLEY
KNOX COUNTY, TN
FILE #: 8-SB-26-C / 8-B-26-DP

SHEET TITLE:
COVER SHEET

DRAWING NO.:
C001

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LEGEND:

PROPOSED	EXISTING	
		BUILDING
		CURB
		ROAD
	X	FENCING
		LOT LINE
OHP	OHP	POWER - OVERHEAD
		PROPERTY LINE
		SIDEWALK
		EASEMENT
		POWER METER
		JUNCTION BOX
		POWER/UTILITY POLE
		TELEPHONE/COMMUNICATIONS RISER
		ASPHALT
		SIDEWALK
		GRAVEL

SITE NOTES:

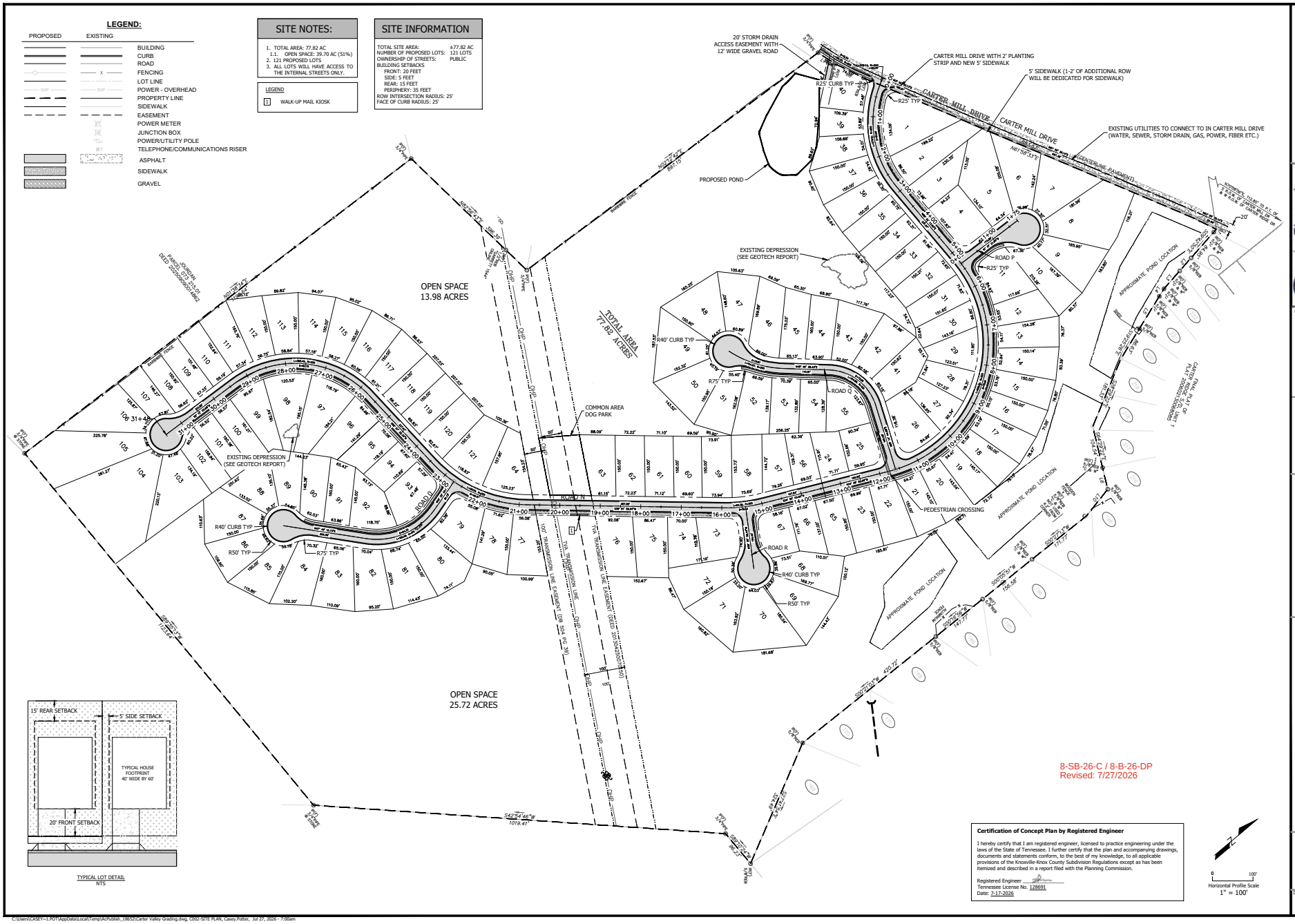
1. TOTAL AREA: 77.82 AC
   1.1. OPEN SPACE: 39.70 AC (51%)
2. 121 PROPOSED LOTS
3. ALL LOTS WILL HAVE ACCESS TO THE INTERNAL STREETS ONLY.

LEGEND

1 WALK-UP MAIL KIOSK

SITE INFORMATION

TOTAL SITE AREA:	±77.82 AC
NUMBER OF PROPOSED LOTS:	121 LOTS
OWNERSHIP OF STREETS:	PUBLIC
BUILDING SETBACKS	
FRONT: 20 FEET	
SIDE: 5 FEET	
REAR: 15 FEET	
PERIPHERY: 35 FEET	
ROW INTERSECTION RADIUS: 25'	
FACE OF CURB RADIUS: 25'	



Certification of Concept Plan by Registered Engineer

I hereby certify that I am registered engineer, licensed to practice engineering under the laws of the State of Tennessee. I further certify that the plan and accompanying drawings, documents and statements conform, to the best of my knowledge, to all applicable provisions of the Knoxville-Knox County Subdivision Regulations except as has been itemized and described in a report filed with the Planning Commission.

Registered Engineer _____
Tennessee License No. 128691
Date: 7-17-2026

REVISIONS

#	DATE

Skycrest Engineering Services Inc.
725 N 5th St, Suite 100
Jacksonville, Oregon 97530
T 541.824.7150
www.skycrest-engineering.com

Professional Seal:

XIA ZHU
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 128691
STATE OF TENNESSEE

811 Know what's below. Call before you dig.

DATE: 7-27-2026
PROJECT #: 2026-02
DRAWN BY: CJP
CHECKED BY: XZ
APPROVED BY:
NOTES:

CONCEPTUAL PLAN
CARTER VALLEY
KNOX COUNTY, TN
FILE #: 8-SB-26-C / 8-B-26-DP

SHEET TITLE:

SITE PLAN

DRAWING NO.:

C002

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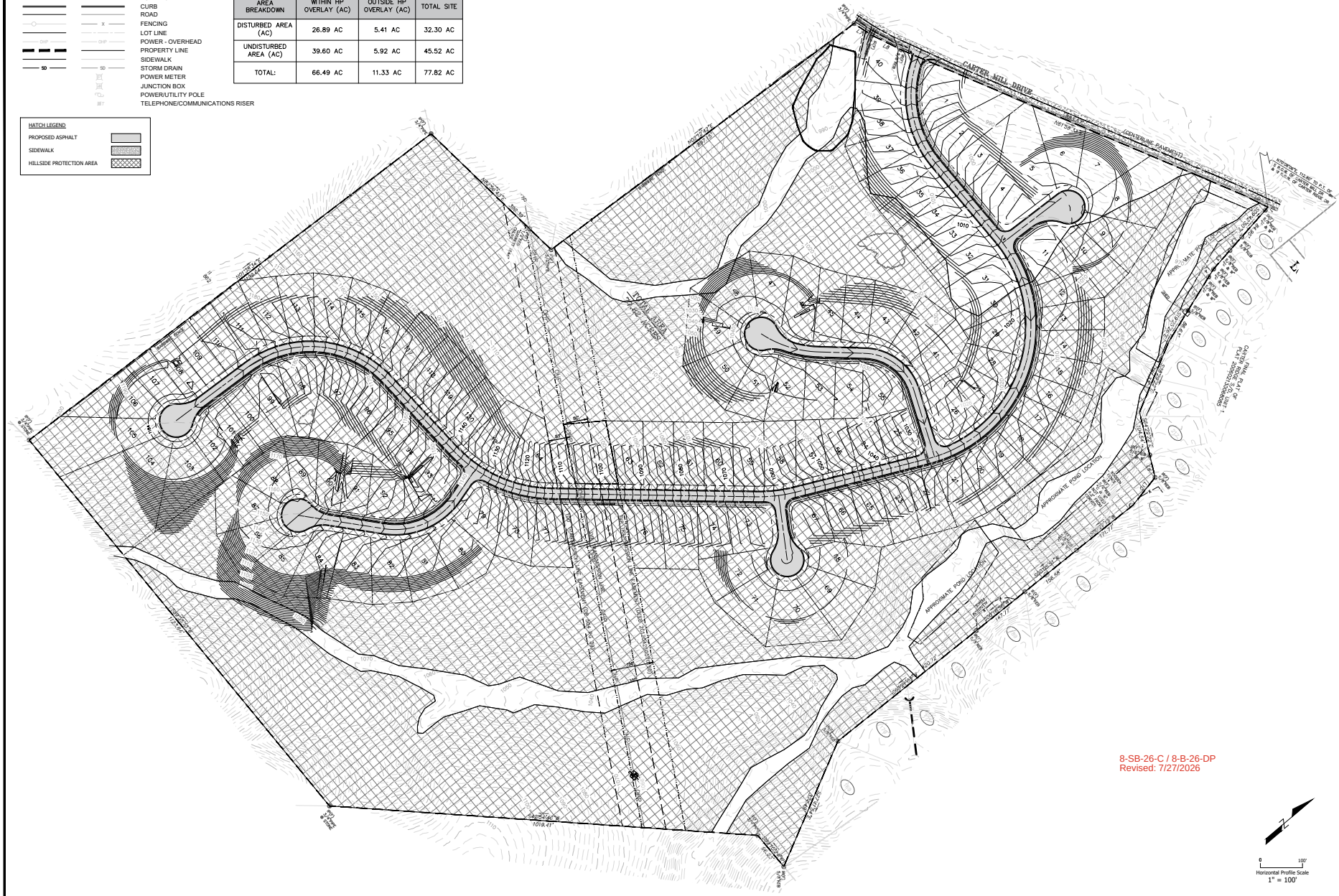
LEGEND:

PROPOSED	EXISTING	
		BUILDING
		CURB
		ROAD
		FENCING
		LOT LINE
		POWER - OVERHEAD
		PROPERTY LINE
		SIDEWALK
		STORM DRAIN
		POWER METER
		JUNCTION BOX
		POWER/UTILITY POLE
		TELEPHONE/COMMUNICATIONS RISER

HATCH LEGEND

- PROPOSED ASPHALT
- SIDEWALK
- HILLSIDE PROTECTION AREA

HILLSIDE PROTECTION OVERLAY			
AREA BREAKDOWN	WITHIN HP OVERLAY (AC)	OUTSIDE HP OVERLAY (AC)	TOTAL SITE
DISTURBED AREA (AC)	26.89 AC	5.41 AC	32.30 AC
UNDISTURBED AREA (AC)	39.60 AC	5.92 AC	45.52 AC
TOTAL:	66.49 AC	11.33 AC	77.82 AC



Horizontal Profile Scale
1" = 100'

REVISIONS

#	DATE

Skycrest Engineering Services Inc.
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No. 120841
STATE OF TENNESSEE

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PROJECT #: 2026-02
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CHECKED BY: XZ
APPROVED BY:
NOTES:

CONCEPTUAL PLAN
CARTER VALLEY
KNOX COUNTY, TN
FILE #: 8-SB-26-C / 8-B-26-DP

SHEET TITLE:
GRADING PLAN

DRAWING NO.:
C003

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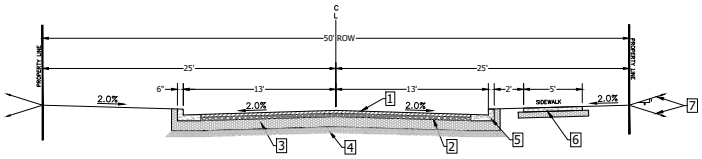
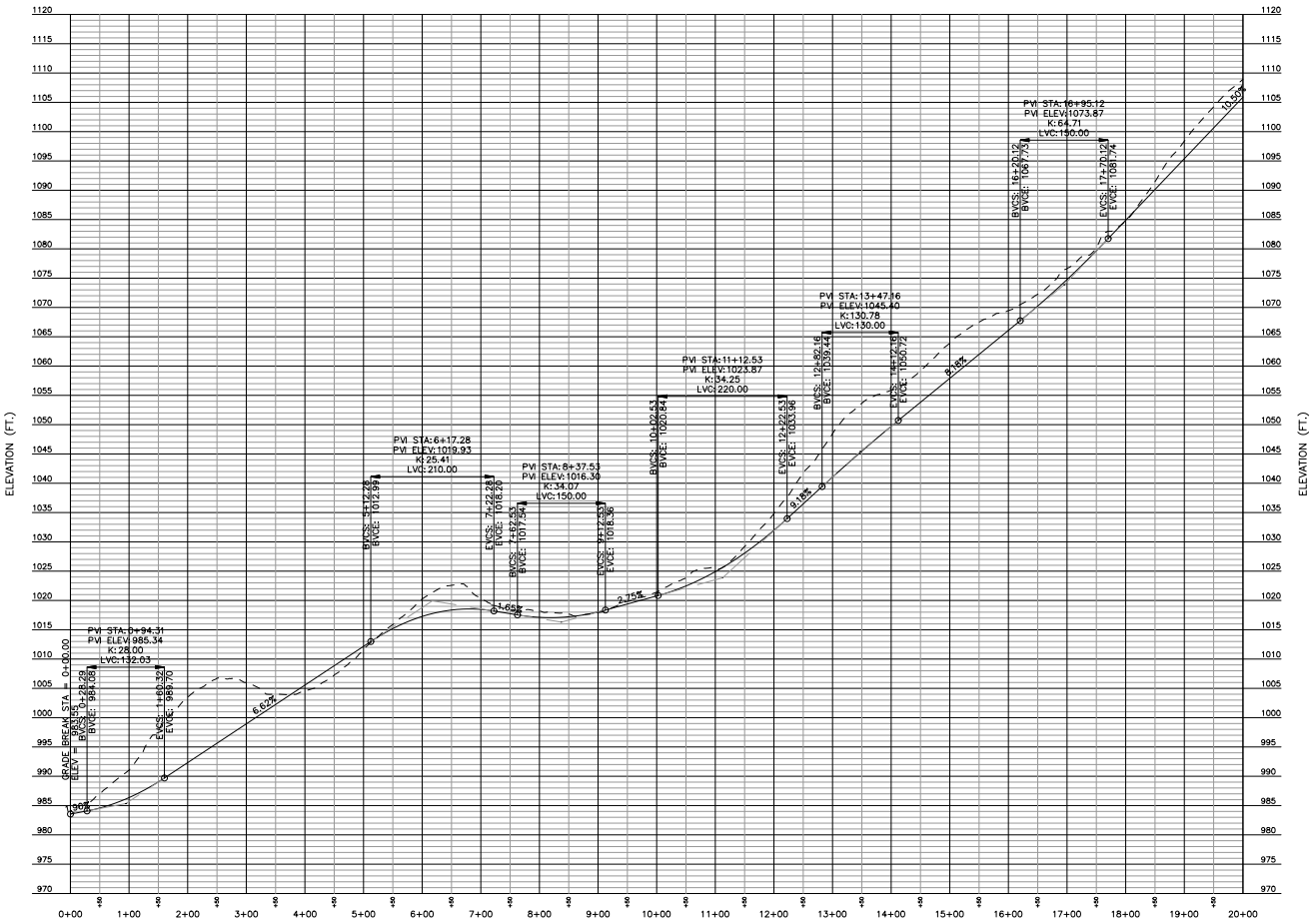


TYPICAL ROAD SECTION FOR ALL INTERNAL STREETS

TYPICAL SECTION CONSTRUCTION NOTES:

1. 1 ½" ASPHALT SURFACE COURSE (GRADING E)
   NOTE: ROAD GRADES GREATER THAN 10% REQUIRE "D" MIX
2. 2 ½" ASPHALTIC CONCRETE BINDER (GRADE "B" MODIFIED)
3. 8" BASE STONE TDOT TYPE 33-P (PUG) 303-01 TYPE A, GRADING D (PER KNOX COUNTY).
4. COMPACTED SUBGRADE (PER KNOX COUNTY).
5. 24" SLOPING CONCRETE CURB & GUTTER PER TDOT STANDARD DRAWING RP-SC-1 WITH ONLY 6" WIDTH OF CURB.
6. 4' TYPICAL SIDEWALK
7. BACKFILL OR CUT SLOPE 2 TO 1 (TYP.)



ROAD N PROFILE

REVISIONS

#	DATE

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www.skycrest-engineering.com

Professional Seal:

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AGRICULTURE
COMMERCE
No. 128801
STATE OF TENNESSEE

811
Know what's below.
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DATE: 7-27-2026
PROJECT #: 2026-02
DRAWN BY: CJP
CHECKED BY: XZ
APPROVED BY:
NOTES:

CONCEPTUAL PLAN
CARTER MILL PH 9
KNOX COUNTY, TN

SHEET TITLE:
PROFILES

DRAWING NO.:
C004

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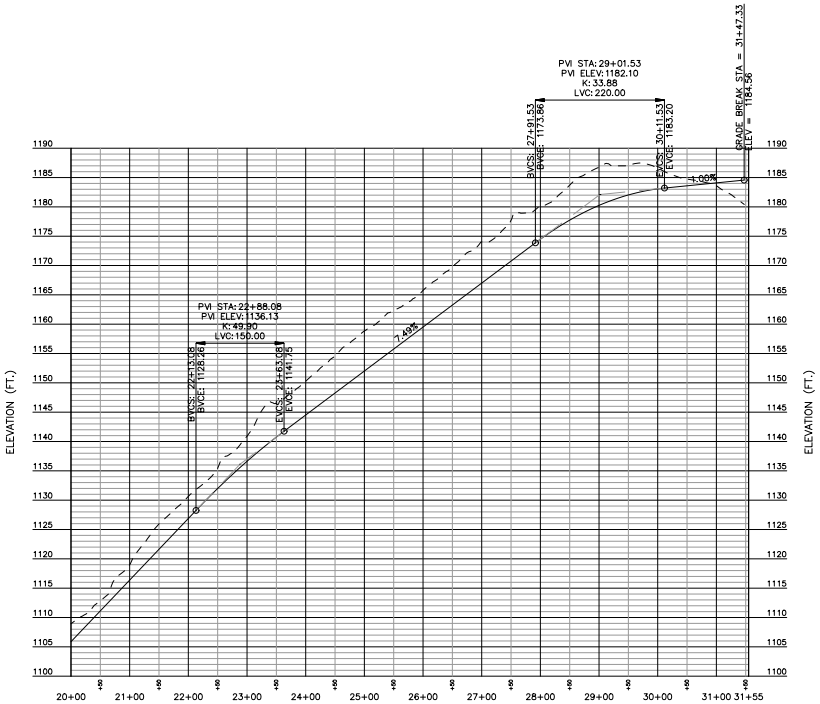
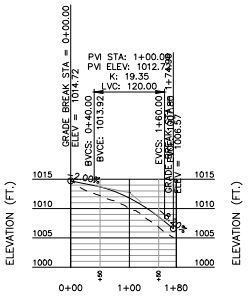
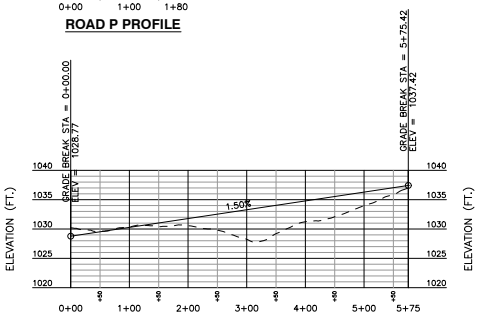


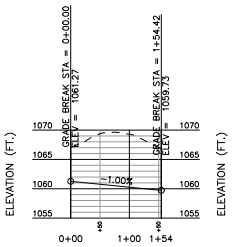
ROAD N PROFILE



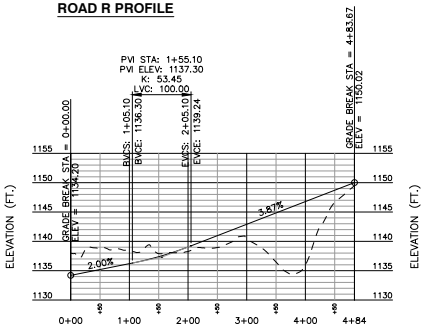
ROAD P PROFILE



ROAD Q PROFILE



ROAD R PROFILE



ROAD O PROFILE

8-SB-26-C / 8-B-26-DP
Revised: 7/27/2026

REVISIONS

#	DATE

Skycrest Engineering Services Inc.
725 N 5th St, Suite 100
Jacksonville, Oregon 97530
T 541.824.7150
www.skycrest-engineering.com

Professional Seal:

XIA ZHU
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 128801
STATE OF TENNESSEE

811
Know what's below.
Call before you dig.

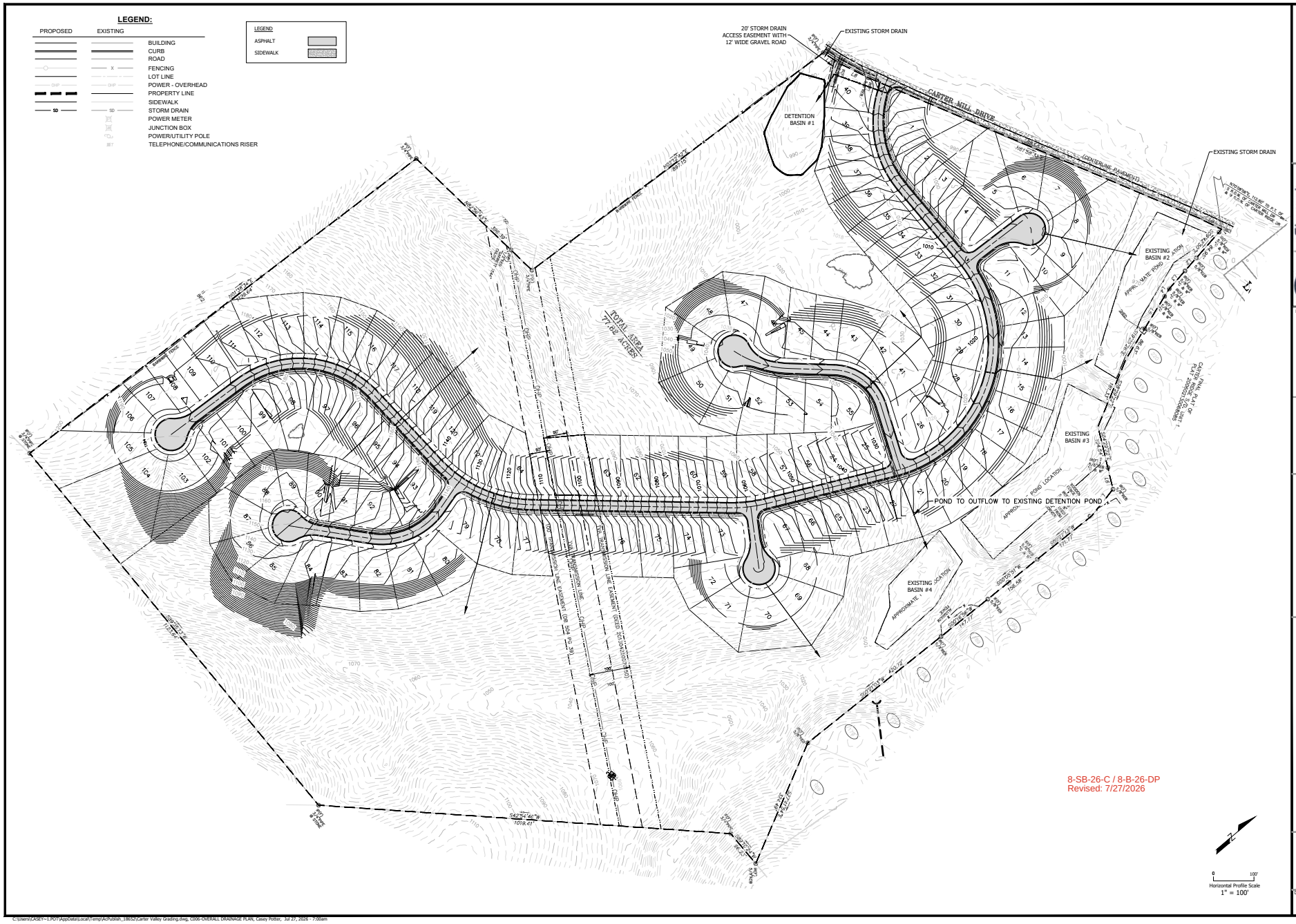
DATE: 7-27-2026
PROJECT #: 2026-02
DRAWN BY: CJP
CHECKED BY: XZ
APPROVED BY:
NOTES:

CONCEPTUAL PLAN
CARTER MILL PH 9
KNOX COUNTY, TN

SHEET TITLE:
PROFILES 2

DRAWING NO.:
C005

C:\Users\CASEY~1.POT\AppData\Local\Temp\AcPublish_18652\Carter Valley Grading.dwg, C005-PROFILES 2, Casey.Potter, Jul 27, 2026 - 7:00am



REVISIONS

#	DATE

Skycrest Engineering Services Inc.
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Jacksonville, Oregon 97530
T 541.824.7150
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Professional Seal:

XIA ZHU
REGISTERED ENGINEER
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COMMERCE
No. 128891
STATE OF TENNESSEE

811
Know what's below.
Call before you dig.

DATE: 7-27-2026
PROJECT #: 2026-02
DRAWN BY: CJP
CHECKED BY: XZ
APPROVED BY:
NOTES:

CONCEPTUAL PLAN
CARTER MILL PH 9
KNOX COUNTY, TN

SHEET TITLE:
OVERALL DRAINAGE PLAN

DRAWING NO.:
C006

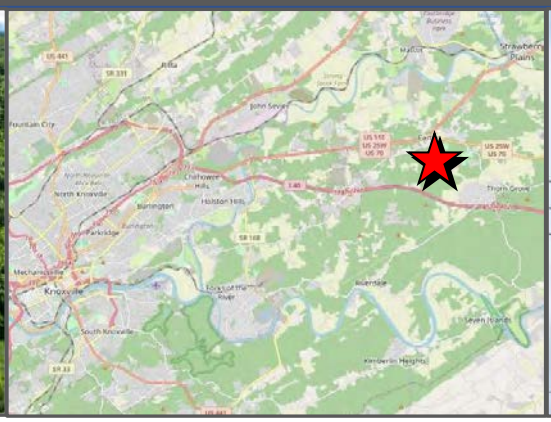
C:\Users\CASEY~1.POT\AppData\Local\Temp\AcPublish_18652\Carter Valley Grading.dwg, C006-OVERALL DRAINAGE PLAN, Casey Potter, Jul 27, 2026 - 7:00am

EXHIBIT B

AJAX ENGINEERING

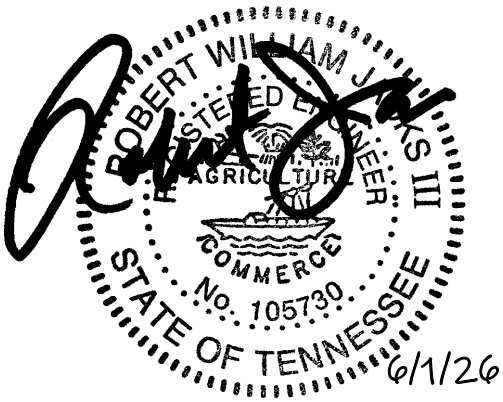
CIVIL ENGINEERING / TRAFFIC ENGINEERING

Transportation Impact Study
Carter Ridge Phase IX
Knox County, Tennessee



June 2026

Prepared for:
Skycrest Development
725 N 5th Street, Suite 100
Jacksonville, OR 97530



8-SB-26-C / 8-B-26-DP
TIS Version 1
6/1/2026

11812 Black Road / Knoxville, TN 37932 • (865) 556-0042 • ajaxengineering@gmail.com

CONCLUSIONS & RECOMMENDATIONS

The following is an overview of recommendations to minimize the transportation impacts of Carter Ridge Phase IX and the other remaining phases of VI, VII, and VIII yet to be built on the adjacent transportation system while achieving acceptable traffic flow and safety levels.

1 **Carter Mill Drive at Proposed Entrance for Phase IX**: A single exit lane for Phase IX of the Carter Ridge Subdivision, allowing both left and right turn movements at Carter Mill Drive, will be sufficient, according to the calculations. The delays associated with these exiting vehicle movements are projected to be minimal in the projected 2029 conditions.

1a) Future landscaping, existing vegetation, or proposed signage must not impact the intersection sight distances looking from the Proposed Entrance to the west and east on Carter Mill Drive.

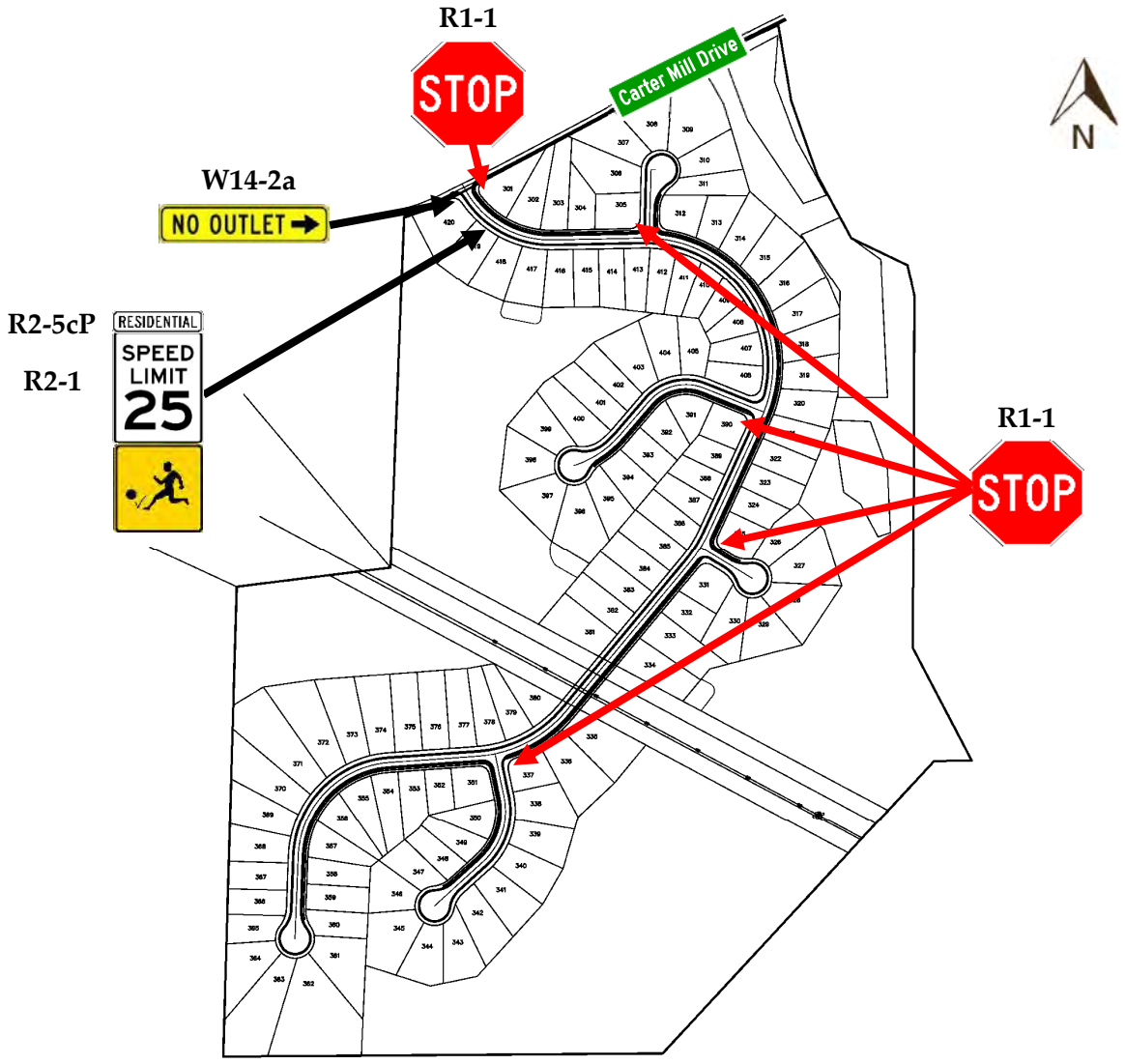
1b) Based on a posted speed limit of 30 mph on Carter Mill Drive, the required intersection sight distance is 300 feet for exiting left and right-turning vehicles. The existing sight distances from Carter Mill Drive at the Proposed Entrance location were visually estimated to be adequate in both directions, assuming the existing vegetation on the south side of Carter Mill Drive along the property's road frontage will be removed during construction.

1c) It is recommended that a Stop Sign (R1-1) be posted and a 24" white stop bar be applied to the Proposed Entrance approach at Carter Mill Drive. The stop bar should be applied a minimum of 4 feet away from the traveled edge of Carter Mill Drive and placed at the desired stopping point that maximizes the sight distance.

2 **<u>Carter Ridge Phase IX Internal Roads:</u>** The site layout plan shows five new streets, as shown in Figure 3.

2a) A 25-mph Speed Limit Sign (R2-1) with additional plaque signage is recommended to be posted near the beginning of the Proposed Entrance road off Carter Mill Drive. It is also recommended that a "No Outlet" Sign (W14-2a) be posted at the front of the subdivision. This sign can be posted above or below the street name sign.

2b) Stop Signs (R1-1) are recommended to be installed on the minor approaches at the internal roadway T-intersections, as shown in the image below with other recommended signage.



Internal Traffic Sign Locations

2c) Sight distances at the new internal intersections must not be impacted by new signage, parked cars, or future landscaping. The civil site designer should ensure that appropriate internal sight distances will be met.

2d) If directed by the local post office, the site designer should include a parking area and a centralized mail delivery center within the development for the Phase IX subdivision residents.

2e) All drainage grates and covers for the residential development must be pedestrian and bicycle-safe.

2f) Internal sidewalks are proposed along one side of each road in Phase IX. Concrete sidewalks should be 5 feet wide and have appropriate ADA-compliant ramps at intersection corners with detectable surfaces. White-painted crosswalks should be installed on internal road pavement at locations where pedestrians are expected to cross. Internal crosswalks should be white transverse pavement markings as shown in TDOT Standard Drawing T-M-4.

2g) As provided for the other phases of the Carter Ridge Subdivision that face and abut Carter Mill Drive, a 5-foot-wide sidewalk should be constructed along the road frontage of Phase IX on the southern side of Carter Mill Drive and connect to the short stub already provided west of the Carter Mill Drive at Carter Ridge Drive / Carter View Lane intersection.

2h) The main internal road in Phase IX will have long, straight road segments with steep road grades due to the existing terrain. Straight road segments with steep grades encourage higher vehicle speeds. It is recommended that the site designer consider traffic calming measures on this main internal road, and this should be discussed with Knox County in the detailed design phase.

2i) All road and intersection elements should be designed in accordance with the American Association of State Highway and Transportation Officials (AASHTO) and the Manual on Uniform Traffic Control Devices (MUTCD), as well as TDOT and Knox County's specifications and guidelines, to ensure proper roadway operations.

3

Carter Mill Drive: As discussed and described previously, the western section of Carter Mill Drive is narrow in width and difficult to safely traverse with vehicles simultaneously traveling in opposite directions. This narrow width is outside of the portion that was widened to 20 feet to allow for the initial development of the Carter Ridge Subdivision. This western section of Carter Mill Drive also has other issues outside narrow road widths that are problematic for safe travel with ever-increasing volumes.

The average width of the western section of Carter Mill Drive (west of the Proposed Entrance location for Phase IX – approximately 3,545 feet) was calculated to be 15.7 feet and has limited shoulders outside the pavement, faded to non-existent pavement markings, limited warning road signage, possibly substandard sight distances when vegetation is growing and unmaintained, pavement edge drop-offs, and the pavement surface on this section appears to be approaching the end of its useful life. The narrowest pavement width measured on the western section of Carter Mill Drive was 13.6 feet.

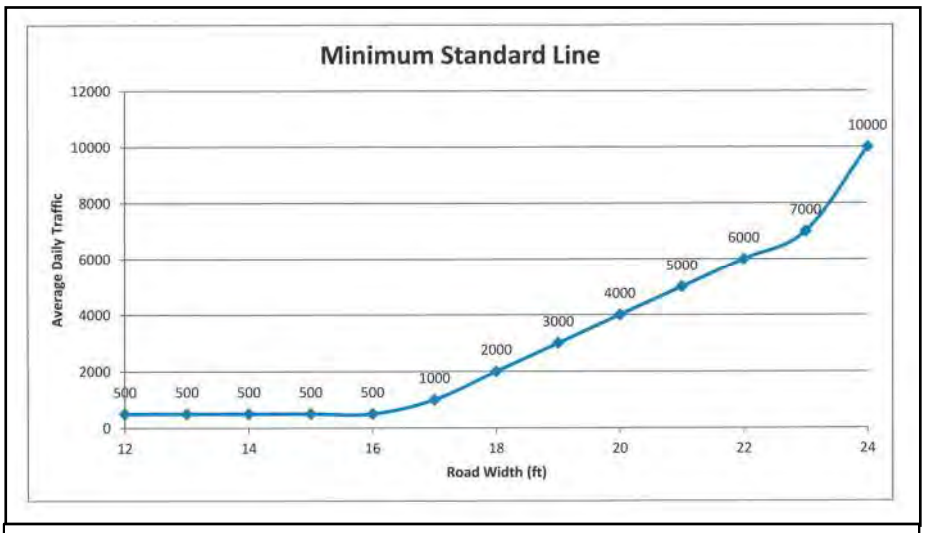
Carter Mill Drive's western section will require improvements to safely and effectively serve both current and future users. Demand on this roadway is currently relatively light. Still, it is expected to increase with each subsequent phase of the Carter Ridge Subdivision being constructed and general background traffic growth in the area. Any improvements must carefully balance safety considerations with the corridor's physical constraints. Providing an improved roadway that balances the need for safe vehicle passage with the surrounding terrain and existing alignment requires careful engineering judgment and trade-offs.

As calculated previously in the Trip Generation section of this report, the remaining phases in the Carter Ridge Subdivision by 2029 are projected to generate an additional 2,919 daily trips on top of the trips that are already occurring. Utilizing the assumed trip distribution in this report, with between 25 – 30% of these trips during the peak hours traveling to and from the west on Carter Mill Drive, the total daily amount of traffic on this section from the homes in the remaining phases of Carter Ridge Subdivision, on the higher end (30%), could be estimated to be approximately 875 additional vehicles per day.

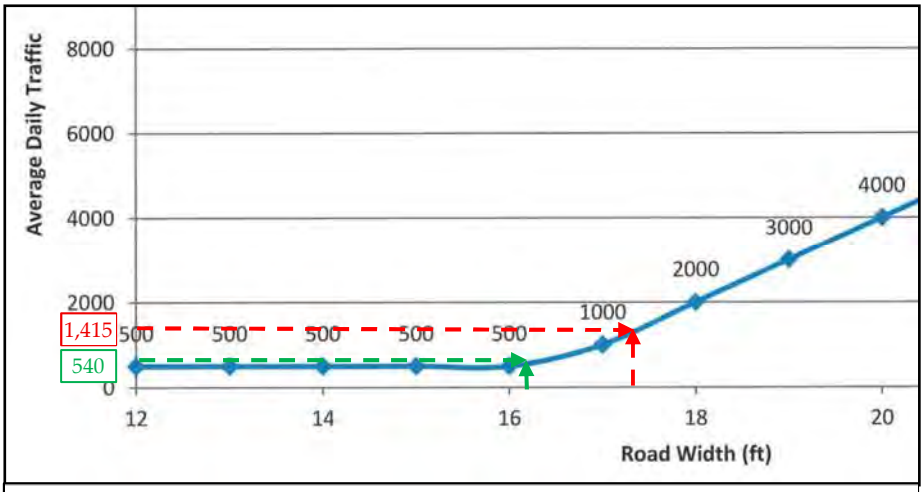
The existing baseline daily traffic on the western section of Carter Mill Drive can be approximated by assuming that the PM peak hour thru volumes shown at the Proposed Entrance location on Carter Mill Drive in Figure 4 is, by using a rule of thumb, 10% of the daily traffic. With this assumption of 10%, the current daily traffic for the western section

of Carter Mill Drive can be estimated to be 540 vehicles (25+29/10%). Adding the calculated daily trips from the additional remaining phases of the subdivision would result in daily traffic of 1,415 vehicles on the western section of Carter Mill Drive in 2029 (2029 daily count = 540 + 2,919 * 30% = 1,415 vehicles).

For planning purposes, Knox County (TN) Engineering and Public Works has published a "Minimum Standard Line" chart that relates average daily traffic (ADT) to the desired pavement width to be provided. A graph of this minimum standard from Knox County is shown in the images below. The first image is the full graph, and the second is an enlarged section for clarity of the results in this study. The second graph includes data in red for the calculated 2029 daily traffic with all subdivision phases constructed. The data in green represents the estimated current daily traffic on the western section of Carter Mill Drive.



Knox County Engineering and Public Works Minimum Standard Line – ADT vs. Road Width



Knox County Engineering and Public Works Minimum Standard Line – ADT vs. Road Width (Enlarged)

According to the Knox County chart, the current estimated daily traffic on the western section of Carter Mill Drive would indicate a desired road width just over 16 feet. Carter Mill Drive, on its western section, had road width measurements between Station 12+50 and 42+50 that ranged from 13.6 feet to 17.6 feet, with most measurements being in the 14 – 16-foot range, less than desired, as demonstrated in the graph.

A road width of 18 feet would be appropriate for up to approximately 2,000 vehicles per day based on Knox County's ADT/road width minimum standard. The projected 2029 daily traffic volume on the western section of Carter Mill Drive, including traffic from Phases VI–IX, is estimated at approximately 1,415 vehicles per day — well below this threshold.

Therefore, widening the western section of Carter Mill Drive to a target width of 18 feet is recommended as the ultimate goal by the time all phases of the Carter Ridge Subdivision are completed and occupied in 2029. This width will provide adequate capacity and improved safety for projected traffic volumes. Widening this section beyond 18 feet to a full 20 feet to match the eastern portion of Carter Mill Drive could be considered impractical in many locations due to the more aggressive terrain, winding horizontal alignments, and right-of-way constraints present on the western end. Widening beyond 18 feet could also encourage higher vehicle speeds, which would be incompatible with the existing geometry, steep grades, and roadside hazards.

Where feasible and consistent with the original subdivision approval, the road frontage directly adjacent to Phase IX should be widened to 20 feet; however, 18 feet should be the standard applied to the remainder of the western section.

As such, recommendations for the western section of Carter Mill Drive are broken into immediate (2026) and future (2029) needs and actions in the following.

<u>Summary Timeline of External Transportation Recommendations</u>:

- 2026 Immediate Recommendations:
  - Identify and prioritize locations where Carter Mill Drive is less than 16 feet wide and widen the pavement to a minimum of 18 feet.
  - Post a Speed Limit Sign (R2-1) of 30 mph for westbound traffic on Carter Mill Drive to the west of the intersection with Carter Ridge Drive / Carter View Lane.

- Install a "Narrow Road" Sign (W5-2) 250 feet to the east of the existing 30-mph Speed Limit Sign posted on Carter Mill Drive off McCubbins Road for eastbound traffic.

- After widening, install 6-inch white edge lines on the newly widened segments along Carter Mill Drive.
- Install "Two-Way Traffic" Signs (W6-3) for both directions of travel with advisory speed plaques (W13-1P), preferably stating 20 mph or less. These signs should be posted on both ends of Carter Mill Drive's narrower western section and where horizontal curves warrant additional caution.

W6-3

W13-1P

- Aggressively clear vegetation and trees within the right-of-way along the western section of Carter Mill Drive to improve sight distance and roadside safety.
- All utility poles within this western section of Carter Mill Drive and adjacent to the roadway, if not relocated away from the roadway, should be delineated with all-yellow horizontal or vertical retroreflective signs (OM2-2V or OM2-2H) facing oncoming traffic.

- 2029 Future Recommendations (or earlier if feasible):
  - Widen the western section of Carter Mill Drive to a consistent 18-foot paved width if not already completed by 2029. When widening to 18 feet, consideration should be given to using a SafetyEdge℠ at the pavement edges, which shapes the pavement at a 30-degree angle during the paving process.
  - The initial approval for the Carter Ridge Subdivision stipulated that prior to final plat approval for any lots in the development, Carter Mill Drive needed to be widened to 20 feet along the entire frontage of the site. This initial road widening of Carter Mill Drive terminated approximately 200 feet to the east of the subdivision property's westernmost point, which includes the development parcel for Phase IX. This remaining unwidened section of Carter Mill Drive is directly in front of Phase IX and should be widened to 20 feet. Beyond that point, the pavement should be properly transitioned to the narrower road section to the west.
  - After all the phases of Carter Ridge Subdivision are completed, the pavement markings on the already 20-foot-wide eastern and central sections of Carter Mill Drive, including the double yellow centerline and

white edge lines, should be reapplied.

The developer should be responsible for widening Carter Mill Drive to 20 feet along the full road frontage of Phase IX, consistent with the original subdivision approval conditions. It is recommended that Knox County and the developer coordinate regarding any potential shared improvements to the broader western section of Carter Mill Drive beyond the Phase IX road frontage.

TIMELINE OF APPROVALS – Carter Mill and Carter Ridge Subdivisions

OWNERSHIP (PRIOR TO CONCEPT PLAN APPROVAL)

- 1998 - Carter Mill LLC purchased approximately 290 acres; 285 acres zoned A (Agricultural) and 1.5 acres zoned CA (General Business)
- 2021 – Carter Mill LLC sold Carter Ridge Subdivision, Phases 6-8, to Oakland LLC (51.1 acres)

REZONING

- 1998 – A (Agricultural) to PR (Planned Residential) < 2 du/ac (283 ac) and CA (8 ac) – Owner: Carter Mill LLC (2-H-98-RZ)
- 2005 – PR < 2 du/ac to PR < 2.5 du/ac (187 ac) – Owner: Carter Mill LLC (2-C-05-RZ)

CONCEPT PLAN – Carter Mill Subdivision, north side of Carter Mill Drive

- 1998 – Carter Mill Subdivision (north of Carter Mill Drive), 135 lots (76 ac) – Owner: Carter Mill LLC (3-SF-98-C / 3-I-98-UR)
    - Final plat approved for 85 lots in January 1999 (Unit 1). Vesting extended to January 2001. Expired.
- 2003 – Carter Mill Subdivision, resubmittal of concept plan for remaining 50 lots (32 ac) – Owner: Carter Mill LLC (3-SI-03-C / 3-H-03-UR)
    - Final plat approved for 48 lots in November 2004 (Unit 2). Vesting extended to November 2006. Expired.
- 2007 – Carter Mill Subdivision, resubmittal of concept plan for remaining 3 lots – Owner: Carter Mill LLC (7-SF-07-C)
    - Carter Mill Subdivision complete.

CONCEPT PLAN – Carter Ridge Subdivision, south side of Carter Mill Drive

- 2005 – Carter Ridge Subdivision (south side of Carter Mill Drive) – 412 lots (185 ac) – Owner: Carter Mill LLC (3-SH-05-C / 3-J-05-UR)
    - Final plat for Unit 1 approved for 102 lots in December 2005 (a/k/a Phase 3). Vesting extended to December 2007.
    - Concept plan expired for Phases 4-9.

- 2008 – Carter Ridge Subdivision, resubmittal of concept plan for Phase 4 – 48 lots (14.9 acres) – Owner: Carter Mill LLC (11-SF-08-C)
    - Concept plan expired in November 2010.
- 2017 – Carter Ridge Subdivision, resubmittal of concept plan for Phases 4 & 5 – 75 lots (19 acres) – Owner: Carter Mill LLC (7-SA-17-C / 7-C-17-UR)
    - Concept plan expired in July 2019.
- 2019 – Carter Ridge Subdivision, resubmittal of concept plan for Phases 4 & 5 – 75 lots (19 acres) – Owner: Carter Mill LLC (10-SA-19-C)
    - Phases are complete.
- 2023 – Carter Ridge Subdivision, resubmittal of concept plan for Phases 6-8 – 127 lots (51.1 acres) – Owner: Oakland, LLC (1-SH-23-C/1-G-23-DP)
    - Final plat approved for Carter Ridge, Phase 6, in August 2026.
- 2026 – Carter Valley Subdivision (f/k/a Carter Ridge, Phase 9), resubmittal of concept plan – 121 lots (77.82 acres) – Owner: Carter Mill LLC

(1) Download and fill out this form at your convenience.
(2) Sign the form digitally or print, sign, and scan.
(3) This form must be submitted as an attachment to your application. Print the completed form if applying in person or send it via email with your completed application.

Reset Form

Planning
KNOXVILLE | KNOX COUNTY

Alternative Design Standards

The minimum design and performance standards shall apply to all subdivisions unless an alternative design standard is permitted within Article 3 Section 3.01.D, Application of Alternative Design Standards, or Article 4.01.C, Street Standards (within Hillside and Ridgetop Areas).

There are some alternative design standards that require Planning Commission approval, and some that can be approved by the Engineering Departments of the City or County. However, the City or County Engineering Departments, as applicable, will provide review comments on any alternative design proposed. These comments will be provided during the review process.

Alternative Design Standards Requiring Planning Commission Approval

Section 3.03.B.2 - Street frontage in the PR (Planned Residential) zone, Knox County
Section 3.03.E.1.e – Maximum grade of private right-of-way
Section 3.03.E.3.a – Pavement width reduction, private rights-of-way serving 6 or more lots
Section 3.04.H.2 – Maximum grade, public streets
Section 3.04.I.1.b.1 – Horizontal curves, local streets in Knox County

Alternative Design Standards Approved by the Engineering Departments of the City of Knoxville or Knox County

Section 3.03.E.3.a – Right-of-way width reduction, private rights-of-way serving 6 or more lots
Section 3.04.A.3.c – Right-of-way dedication, new subdivisions
Section 3.04.F.1 – Right-of-way reduction, local streets
Section 3.04.G.1 – Pavement width reduction, local streets
Section 3.04.H.3 – Intersection grade, all streets
Section 3.04.J.2 – Corner radius reduction in agricultural, residential, and office zones
Section 3.04.J.3 – Corner radius reduction in commercial and industrial zones
Section 3.11.A.2 – Standard utility and drainage easement

By signing this form, I certify that the criteria for a variance have been met for each request, and that any and all requests needed to meet the Subdivision Regulations are requested above or are attached. I understand and agree that no additional variances can be acted upon by the legislative body upon appeal and none will be requested.

Signature	Printed Name	Date
	Xia Zhu	7/27/26

For each alternative design standard requested, identify how the proposed alternative design either meets the intent of the standard in the Subdivision Regulations or meets an alternative, nationally recognized engineering standard such as The American Association of State Highway and Transportation Officials (AASHTO) or Public Right-of-Way Accessibility Guidelines (PROWAG).

1. ALTERNATIVE DESIGN STANDARD REQUESTED:

Increase the minimum intersections grade from 1% to 2% at the intersections of Road P at Road N, Road Q at Road N, Road O at Road N, and Road N at Carter Mill Drive.

Approval required by: Planning Commission ☐ Engineering ■

Engineering supports the alternative design standard requested
(to be completed during review process): YES ■ NO ☐
Engineering Comments:

APPROVED
By Steve Elliott at 1:11 pm, Aug 06, 2026

2. ALTERNATIVE DESIGN STANDARD REQUESTED:

Approval required by: Planning Commission ☐ Engineering ☐

Engineering supports the alternative design standard requested
(to be completed during review process): YES ☐ NO ☐
Engineering Comments:

3. ALTERNATIVE DESIGN STANDARD REQUESTED:

Approval required by: Planning Commission ☐ Engineering ☐

Engineering supports the alternative design standard requested
(to be completed during review process): YES ☐ NO ☐
Engineering Comments:

Public Notice and Community Engagement

Planning strives to provide community members with information about upcoming cases in a variety of ways. In addition to posting public notice signs, our agency encourages applicants to provide information and offer opportunities for dialogue related to their upcoming case(s). The contact information you provide in your application may be used for that purpose. We require applicants to acknowledge their role in this process.

Sign Posting and Removal

The Administrative Rules and Procedures of the Knoxville-Knox County Planning Commission require a sign to be posted on the property for each application subject to consideration by the Planning Commission.

Planning staff will post the required sign. If a replacement sign(s) is needed, the applicant is responsible for picking up the new sign(s) from Planning and will be charged $10 for each replacement.

Location and Visibility

The sign must be posted on the nearest adjacent/frontage street and in a location clearly visible to vehicles traveling in either direction. If the property has more than one street frontage, the sign should be placed along the street that carries more traffic. Planning staff may recommend a preferred location for the sign to be posted at the time of application.

Timing

The sign(s) must be posted not less than 12 days prior to the scheduled Planning Commission public hearing and must remain in place until the day after the meeting. In the case of a postponement, the sign can either remain in place or be removed and reposted not less than 12 days prior to the next Planning Commission meeting. The applicant is responsible for removing the sign after the application has been acted upon by the Planning Commission.

Acknowledgement

***By signing below**, you acknowledge that public notice signs must be posted and visible on the property consistent with the guidelines above and between the dates listed below.*

8/1/2026 — Date to be Posted

8/14/2026 — Date to be Removed

Have you engaged the surrounding property owners to discuss your request?

- ☐ Yes
- ☑ No
- ☐ No, but I plan to prior to the Planning Commission meeting

Casey Potter — Applicant Signature

Digitally signed by Casey Potter
Location: Washington Terrace, UT

Casey Potter — Applicant Name

5/22/2026 — Date