

SUBDIVISION REPORT -CONCEPT/USE ON REVIEW

AGENDA ITEM #: ► FILE #: 6-SD-22-C 32

> AGENDA DATE: 6-G-22-UR 7/14/2022

POSTPONEMENT(S): 6/9/2022

SUBDIVISION: **ANDES HILL**

APPLICANT/DEVELOPER: **TURNER HOMES, LLC**

Buckner Investment Trust OWNER(S):

105 A A 017 & 002 TAX IDENTIFICATION: View map on KGIS

JURISDICTION: County Commission District 6

STREET ADDRESS: 8531 Troutman Ln. (1925 Andes Rd.)

► LOCATION: West side of Andes Rd., north side of Troutman

SECTOR PLAN: Northwest County Planned Growth Area

WATERSHED: **Beaver Creek**

APPROXIMATE ACREAGE: 14.61 acres

GROWTH POLICY PLAN:

ZONING: PR (Planned Residential)

EXISTING LAND USE: Vacant land, Single family residential

Attached residential subdivision PROPOSED USE:

North: Attached residential / PR (Planned Residential) SURROUNDING LAND South: Single family residential / A (Agricultural) **USE AND ZONING:**

East: Single family residential / PR (Planned Residential), A (Agricultural)

West: Single family residential / PR (Planned Residential)

96 NUMBER OF LOTS:

SURVEYOR/ENGINEER: Stefan Claar Turner Homes, LLC

ACCESSIBILITY: Access is via Andes Road, a major collector road with 21 ft of pavement

width within 60 ft of right-of-way; and via Troutman Lane, a local street with

19 ft of pavement width within 47 ft of right-of-way.

SUBDIVISION VARIANCES

REQUIRED:

VARIANCES

1. Reduce the minimum broken back tangent from 150' to 10' from STA

15+98.24 to 16+08.25

2. Reduce the minimum intersection separation between Road 'A' and

Norway Street from 300' to 176'

3. Reduce the minimum intersection right-of-way radius on the north

side of Road 'A' at Andes Road from 25' to 0'

4. Reduce the minimum intersection curb radius on the north side of

Road 'A' at Andes Road from 25' to 12'

5. Reduce the minimum vertical curve K value from K=25 to K=20.73 on

Road 'A' at STA 13+87.72

ALTERNATIVE DESIGN STANDARDS REQUIRING KNOXVILLE-KNOX COUNTY PLANNING COMMISSION APPROVAL

- 1. Reduce the minimum private right-of-way width from 50' to 40' from STA 7+00 to the terminus of the road
- 2. Reduce the minimum pavement width from 26' to 25'
- 3. Reduce the minimum horizontal curve radius from 250' to 100' on Road 'A' at STA 6+35.70
- 4. Reduce the minimum horizontal curve radius from 250' to 100' on Road 'A' at STA 14+42.13
- 5. Reduce the minimum horizontal curve radius from 250' to 100' on Road 'A' at STA 16+08.25
- 6. Reduce the minimum horizontal curve radius from 250' to 100' on Road 'A' at STA 21+14.41

STAFF RECOMMENDATION:

▶ Approve the requested variances and alternative design standards based on the justifications provided by the applicant, the recommendations of the Knox County Department of Engineering and Public Works, and the proposal will not create a safety hazard.

Approve the Concept Plan subject to 15 conditions.

- 1) Connection to sanitary sewer and meeting other relevant utility provider requirements.
- 2) Provision of street names consistent with the Uniform Street Naming and Addressing System within Knox County (County Ord. 91-1-102).
- 3) Meeting the parking lot setback requirements per Article 3, Section 3.51.08 (Parking Lot Setbacks), and all other applicable requirements of the Knox County Zoning Ordinance.
- 4) Providing guest parking as shown to permit 20 ft lot widths for attached dwelling units per Section 3.03.B.1. of the Knoxville-Knox County Subdivision Regulations. Modifications to the guest parking may be reviewed and approved by Planning Commission staff and Knox County Engineering and Public Works during the design plan phase.
- 5) Providing a sight distance easement across the lots on the inside of the horizontal curves with a radius less than 200 ft per the requirements of Knox County Engineering and Public Works during the design plan phase. The driveways on these lots must be located outside of the sight distance easement and shown on the plat, or the driveways must have a depth of 20 ft beyond the sight distance easement if they cannot be located outside of the sight distance easement.
- 6) Certifying that the driveway locations on Troutman Lane have the required sight distance, with review and approval by Knox County Engineering and Public Works during the design plan phase.
- 7) Implementation of the conclusions and recommendations outlined in the Andes Hill SubdivisionTransportation Impact Study prepared by AJAX Engineering (April 25, 2022), and approved by the Knox County Department of Engineering and Public Works and Planning staff (see Exhibit A).
- 8) Revising the road profile to obtain a minimum 1 percent grade, with review and approval by Knox County Engineering and Public Works during the design plan phase.
- 9) Providing a note on the final plat that the private right-of-way are not public streets and will not be maintained by Knox County.
- 10) Providing a not on the final plat that the private right-of-way shall function as a utility easement.
- 11) Installation of all utilities underground per the requirements of Section 3.10.D (Electric, Gas, Telephone, and Other Utilities) of the Subdivision Regulations, unless documentation is provided to and approved by the Utility Agency and Planning staff.
- 12) Meeting all applicable requirements of West Knox Utilities District, including but not limited to easements for utilities that must be installed and/or maintained using areas outside of the private right-of-way.
- 13) All lots with a front setback less than 20 ft must provide a two-car garage.
- 14) Meeting all applicable requirements of the Knox County Department of Engineering and Public Works and City of Knoxville Department of Engineering.
- 15) Prior to certification of the final plat for the subdivision, establish a property owners association responsible for the maintenance of the common areas, private right-of-way, amenities, and drainage system.
- ► Approve the development plan for a residential subdivision with up to 91 attached dwellings and 5 detached dwellings, a reduction of the peripheral setback to 25 ft, and an 18.5 ft front yard setback for lots 29-54, subject to 4 conditions.

AGENDA ITEM #: 32 FILE #: 6-SD-22-C CORRECTED 7/12/2022 09:32 AM MIKE REYNOLDS PAGE #: 32-2

- 1) Meeting all applicable requirements of the Knox County Zoning Ordinance.
- 2) Providing a privacy fence along the east, west, and northwest boundary lines, located to the rear of lots 11-28 and 55-84, and on the outside of the road curve opposite of lot 2, as shown on the Concept Plan.
- 3) Installing the proposed sidewalk on at least one side of all streets and meeting all applicable ADA design standards.
- 4) The maximum height of the attached dwellings shall be 35 feet.

COMMENTS:

CORRECTION (7/12/2022) -- The staff recommendation for the development plan was amended to list the correct lots where an 18.5 ft front setback is requested (Lots 29-54). The report dated 7/7/2022 listed lots 43-54.

This proposal is for a 96-lot residential development on 14.61 acres at a density of 6.57 du/ac. This includes 91 lots for attached dwellings, 3 lots for detached dwellings that front Troutman Lane, and 1 lot for two existing houses on Lot 1. The property was rezoned from A (Agricultural) to PR (Planned Residential) up to 7 du/ac in March 2022 (1-N-22-RZ). The proposed private right-of-way is 40 ft wide with a pavement width of 24 ft. The private right-of-way width is 50 ft from Andes Road to Lot 2.

The Transportation Impact Study for the Andes Hill Subdivision (AJAX Engineering, revised 4/25/2022) studied the proposed access point on Andes Road. The only recommendation at the proposed entrance is for a registered land surveyor to confirm that the sight distance is available to the north because of the vertical curve in Andes Road, a utility pole, and road signage.

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 7 du/ac:

- a) The PR zone allows detached- and attached-dwellings 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 (Article 5, Section 5.13.15).
- b) This PR zone district is approved for a maximum of 7 du/ac. The proposed density is 6.57 du/ac. The density from Lot 1 is being transferred to the Andes Hill Subdivision. Lot 1 is being approved to allow the two existing houses to remain on the single lot, or they could be subdivided onto separate lots.
- c) The maximum height is determined by the Planning Commission for any use other than houses and duplexes. Staff recommends a maximum height of 35 ft for the attached dwellings, which is consistent with the maximum height allowed on surrounding properties.
- d) The peripheral setback is 35 feet, however, the planning commission may reduce it to 15 feet when the adjacent property is zoned agricultural or residential. The applicant is requesting a peripheral setback of 25 ft and proposes to install a privacy fence along the boundaries when the attached dwellings are adjacent to residential uses.

2) GENERAL PLAN - DEVELOPMENT POLICIES

- a) Ensure that the context of new development, including scale and compatibility, does not impact existing neighborhoods and communities (Policy 9.3) Staff is recommending a maximum height of 35 ft for the attached dwellings, which is consistent with the allowed height on adjacent properties. The proposed peripheral setback reduction should have minimal impact on adjacent properties with the proposed privacy fencing installed.
- b) Encourage a mixture of housing sizes and prices within planned residential developments (Policy 9.8) This development primarily includes attached houses and a few detached houses. The attached houses will have different sizes and presumably different price points.

3) NORTHWEST COUNTY SECTOR PLAN

- a) The property is classified MDR (Medium Density Residential), which allows consideration of up to 12 du/ac. The development will have a density of 6.57 du/ac.
- b) Approximately 1.56 acres in the southern portion of the property along Troutman Lane is located in the HP (Hillside Protection) area (see the attached slope analysis). The slope analysis recommends a land disturbance budget of 1.0 acre, or 62 percent of the HP area. The applicant is proposing to disturb 100 percent of the HP area.

AGENDA ITEM #: 32 FILE #: 6-SD-22-C CORRECTED 7/12/2022 09:32 AM MIKE REYNOLDS PAGE #: 32-3

- 4) Knoxville Farragut Knox County Growth Policy Plan
- a) The property is within the Planned Growth Boundary. The purposes of the Planned Growth Boundary designation are to encourage a reasonably compact pattern of development, promote the 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.

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: 7 (public school children, grades K-12)

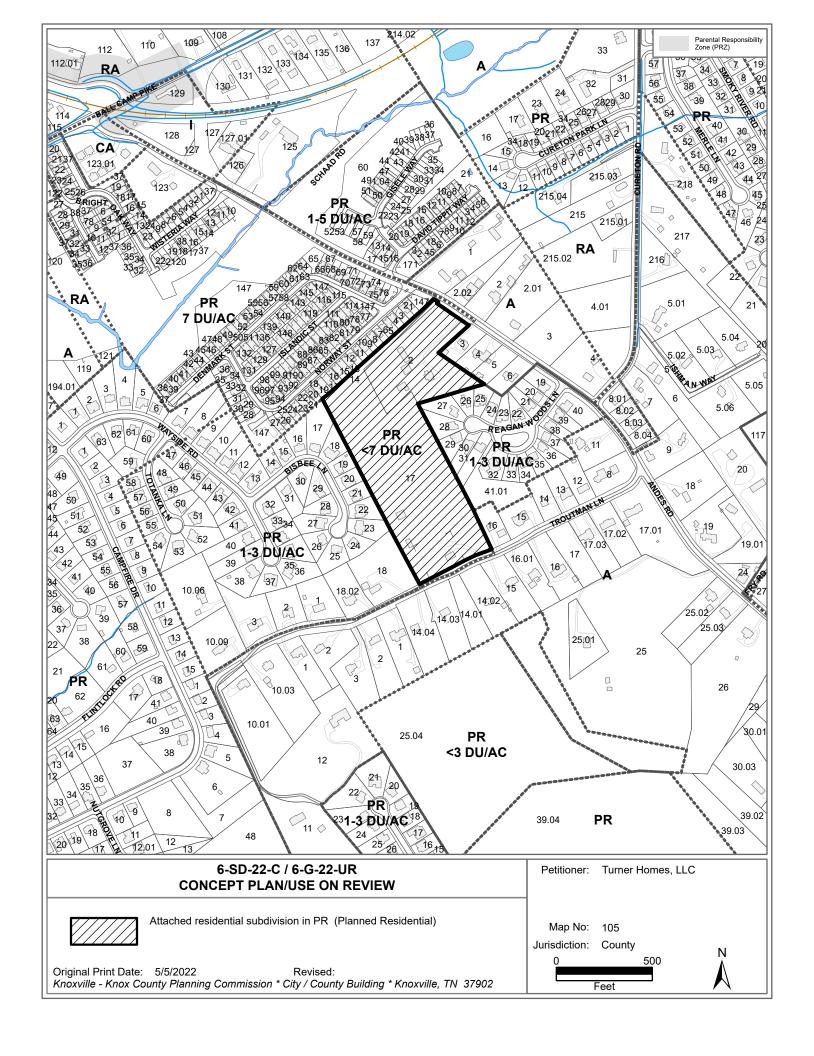
Schools affected by this proposal: Ball Camp Elementary, Karns Middle, and Karns High.

- 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.

Knoxville-Knox County Planning Commission's approval or denial of this concept plan request is final, unless the action is appealed to Knox County Chancery Court. The date of the Knox County Chancery Court hearing will depend on when the appeal application is filed.

Knoxville-Knox County Planning Commission's approval or denial of this use on review request is final, unless the action is appealed to the Knox County Chancery Court. The date of the Knox County Chancery Court hearing will depend on when the appeal application is filed.

AGENDA ITEM #: 32 FILE #: 6-SD-22-C CORRECTED 7/12/2022 09:32 AM MIKE REYNOLDS PAGE #: 32-4



Requested Variances & Alternative Design Standards

6-SD-22-C / 6-G-22-C- ANDES HILL SUBDIVISION

VARIANCES

- 1. Reduce the minimum broken back tangent from 150' to 10' from STA 15+98.24 to 16+08.25
- Reduce the minimum intersection separation between Road 'A' and Norway Street from 300' to 176'
- 3. Reduce the minimum intersection right-of-way radius on the north side of Road 'A' at Andes Road from 25' to 0'
- 4. Reduce the minimum intersection curb radius on the north side of Road 'A' at Andes Road from 25' to 12'
- 5. Reduce the minimum vertical curve K value from K=25 to K=20.73 on Road 'A' at STA 13+87.72

ALTERNATIVE DESIGN STANDARDS REQUIRING KNOXVILLE-KNOX COUNTY PLANNING COMMISSION APPROVAL

- 1. Reduce the minimum private right-of-way width from 50' to 40' from STA 7+00 to the terminus of the road
- 2. Reduce the minimum pavement width from 26' to 25'
- 3. Reduce the minimum horizontal curve radius from 250' to 100' on Road 'A' at STA 6+35.70
- 4. Reduce the minimum horizontal curve radius from 250' to 100' on Road 'A' at STA 14+42.13
- Reduce the minimum horizontal curve radius from 250' to 100' on Road 'A' at STA 16+08.25
- 6. Reduce the minimum horizontal curve radius from 250' to 100' on Road 'A' at STA 21+14.41

ALTERNATIVE DESIGN STANDARDS REQUIRING KNOX COUNTY ENGINEERING AND PUBLIC WORKS APPROVAL

1. None identified

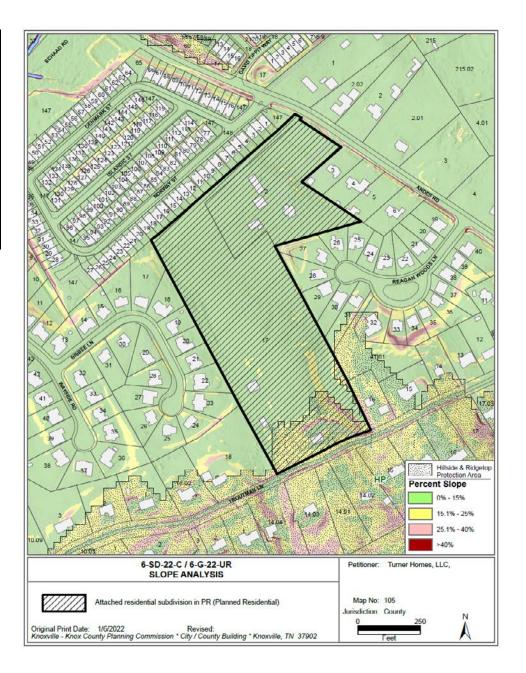
KNOX COUNTY ENGINEERING AND PUBLIC WORKS RECOMMENDATION:

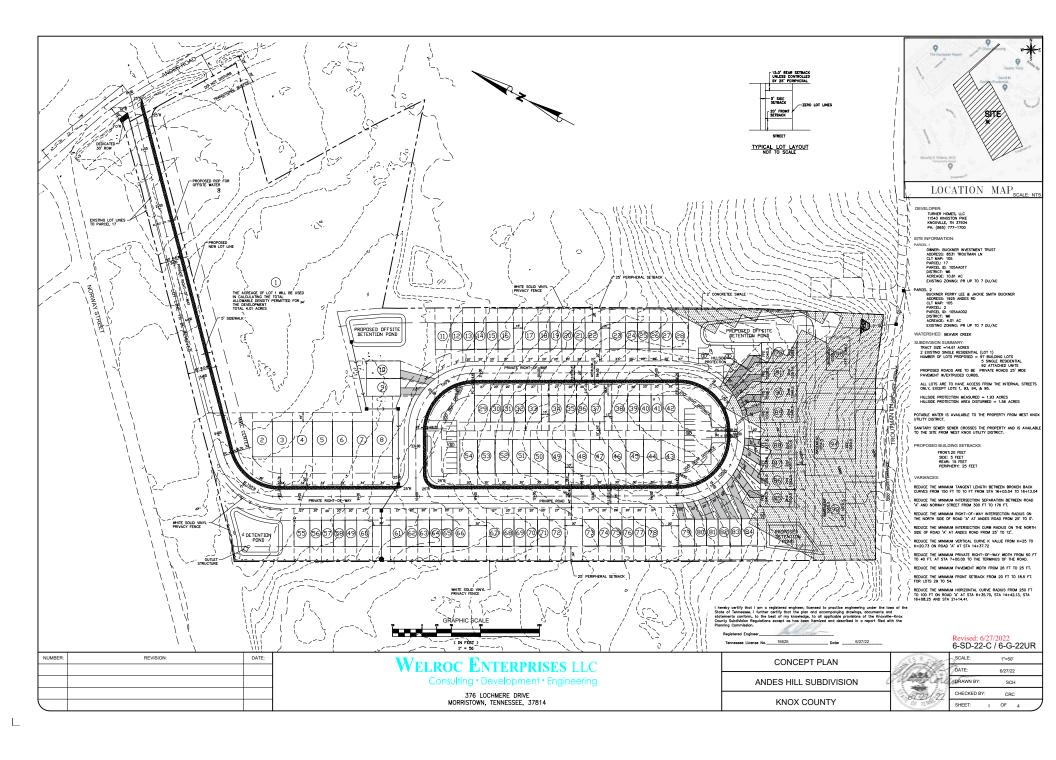
Approve
SE 7/17/2022

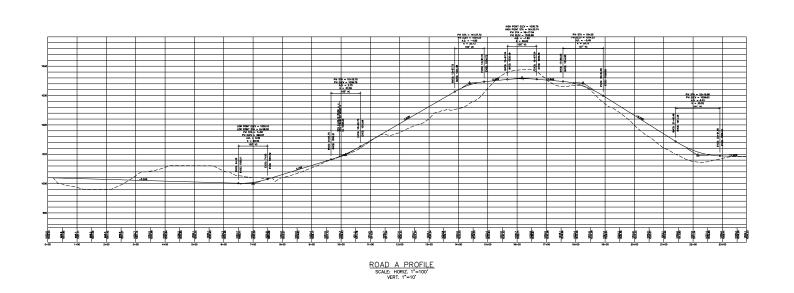
7/5/2022 Page 1 of 1

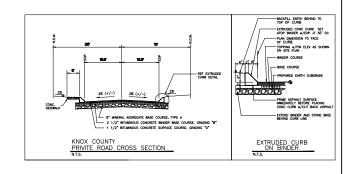
Case: 6-SD-22-C / 6-G-22-UR

CATEGORY	ACRES	RECOMMENDED DISTURBANCE BUDGET (Percent)	DISTURBANCE AREA (Acres)
Total Area of Site	14.08		
Non-Hillside	12.52	N/A	
0-15% Slope	0.47	100%	0.5
15-25% Slope	0.92	50%	0.5
25-40% Slope	0.16	20%	0.0
Greater than 40% Slope	0.01	10%	0.0
Ridgetops	0		
Hillside Protection (HP) Area	1.56	Recommended disturbance budget within HP Area (acres)	1.0
		Percent of HP Area	62%







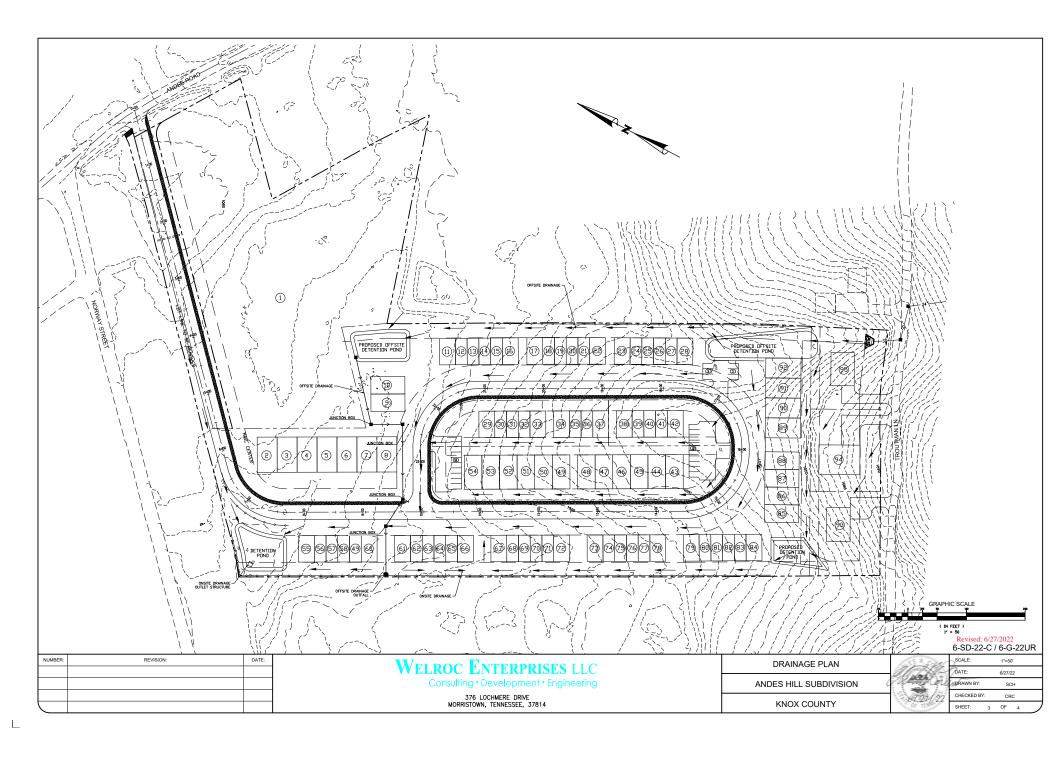


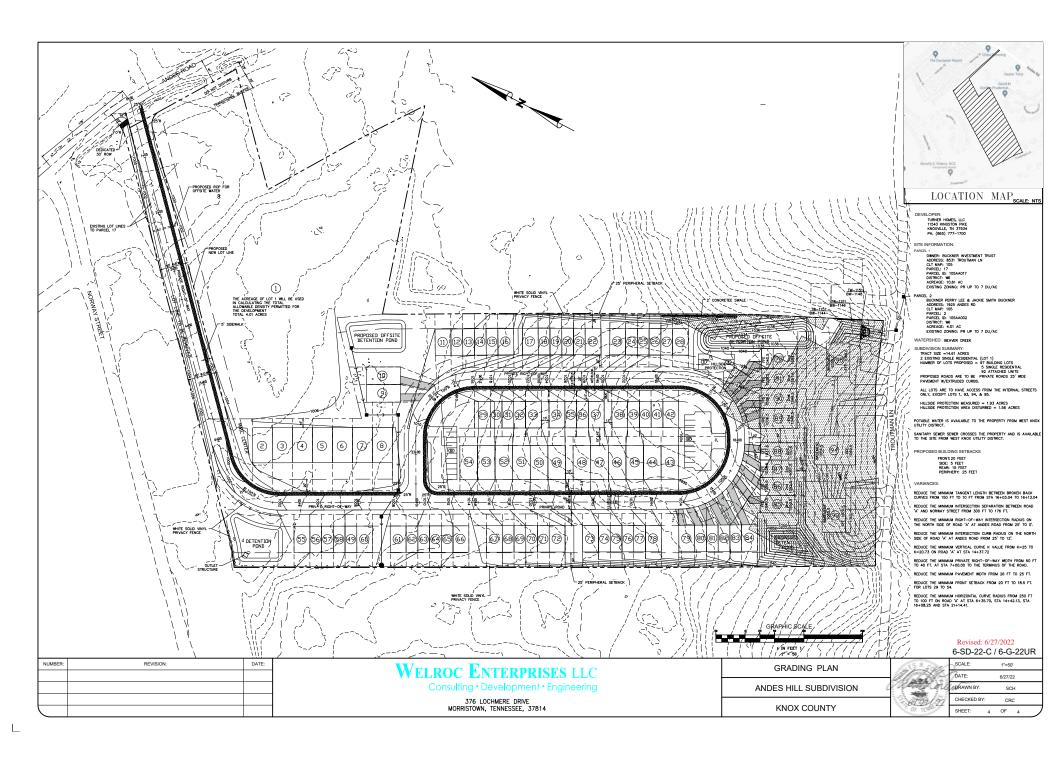
Revised: 6/27/2022 6-SD-22-C / 6-G-22UR

William C. Evennmerous II.	DATE:	REVISION:	JMBER:
WELROC ENTERPRISES LLO			
Consulting • Development • Engineerin			
376 LOCHMERE DRIVE			
MORRISTOWN, TENNESSEE, 37814			

ROAD PROFILE	300
ANDES HILL SUBDIVISION	
KNOX COUNTY	, WW.

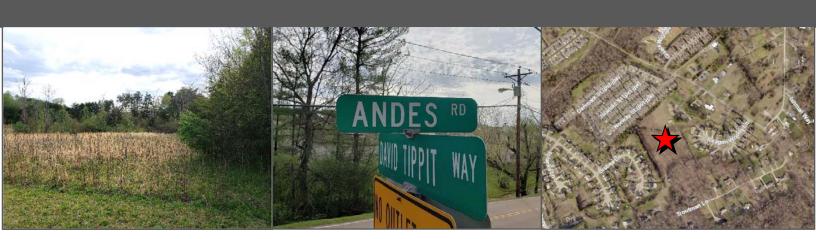
	U-3D-22-		0-0	-220	יוכ
15 8 SW	SCALE:		AS NO	ΓED	
	DATE:		6/27/2	22	
6192199	DRAWN BY:	SCH			
	CHECKED BY:	BY: CRC			
OF TEN	SHEET:	2	OF	4	







Transportation Impact Study Andes Hill Subdivision Knox County, Tennessee



April 2022

Prepared for: Turner Homes, LLC 11543 Kingston Pike Knoxville, TN 37934



6-SD-22-C / 6-G-22-UR TIS Version 1 4/25/2022

CONCLUSIONS & RECOMMENDATIONS

The following is an overview of recommendations to minimize the transportation impacts of the proposed Andes Hill Subdivision on the adjacent transportation system while attempting to achieve an acceptable traffic flow and safety level.



Andes Road at Proposed Entrance: The 2025 projected level of service calculations for the Proposed Entrance intersection at Andes Road resulted in low vehicle delays. The construction of left and right-turn lanes on Andes Road for entering traffic is not warranted at the Proposed Entrance. A single exiting lane for the development entrance will be sufficient.

- 1a) It is recommended that a Stop Sign (R1-1) be installed, and a 24" white stop bar be applied to the Proposed Entrance approach at Andes Road. The stop bar should be applied a minimum of 4 feet away from the edge of the intersecting roadway and placed at the desired stopping point that maximizes the sight distance.
- 1b) Sight distances at the Proposed Entrance approach must not be impacted by future landscaping, signage, or vegetation. Based on a posted speed limit of 30-mph on Andes Road, the desirable intersection sight distance is 300 feet looking in each direction at each entrance. The required stopping sight distance is 195 feet looking to the north and 205 feet to the south at the Proposed Entrance. A visual inspection determined that the intersection and stopping sight distances are available. However, the view to the north is reduced by the vertical curvature of Andes Road, a utility pole, and road signage. The site designer must ensure that these sight distances are accounted for and provided in the design plans. It is recommended that a registered land surveyor confirm that the sight distances are available at the Proposed Entrance location on Andes Road.
- 1c) Knox County requires a 300-foot minimum intersection spacing distance on Collector roads. The intersection of Andes Road at the Proposed Entrance will be 150 feet away to the southeast from Norway Street.

The site designer should request a variance to allow the proposed intersection spacing to be less than the minimum. This variance should be requested since the development property only has a narrow and limited access point to provide an entrance on Andes Road. Shifting the Proposed Entrance further away from Norway Street is not an option



due to the property frontage limitations.

The longest calculated 95th percentile vehicle queue length for the existing northbound left-turn movement at Norway Street on Andes Road in the PM peak hour is only 2.5 feet. This queue length result is shown in the Synchro software results in Appendix F. This calculated queue suggests that vehicles turning left from Andes Road onto Norway Street at Chip's Crossing Subdivision will not back up to the Proposed Entrance for Andes Hill Subdivision. Andes Hill Subdivision entering vehicles from the north, turning right at the Proposed Entrance, will not experience vehicle queues since this is a free movement without conflicts. Traffic operations from the entering right-turning movement at the Proposed Entrance will not back up to the Andes Road at Norway Street intersection. It is not expected that the traffic operations on Andes Road at the intersection of Norway Street will be detrimental to traffic operations at the Proposed Entrance for Andes Hill Subdivision and vice versa.

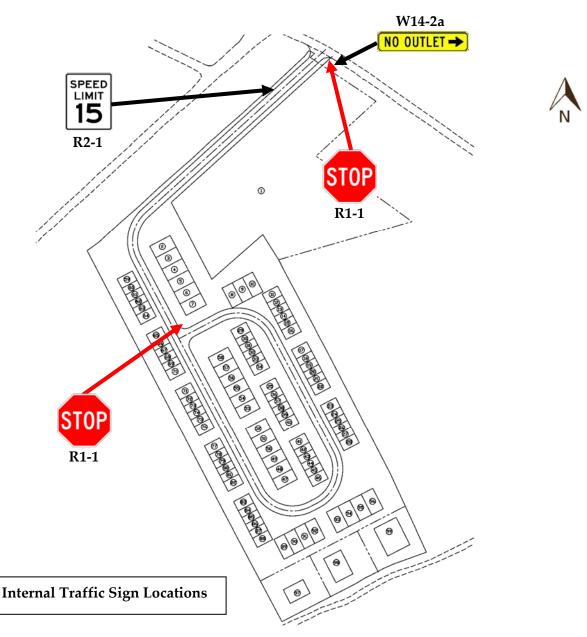
Furthermore, while the proposed intersection spacing does not meet the requirement on a collector road, it will meet the local road intersection spacing requirement of 150 feet. The proposed spacing of 150 feet will provide greater spacing than what currently exists on Andes Road between Norway Street and David Tippit Way, which is only 130 feet.





<u>Andes Hill Subdivision Internal Roads:</u> The layout plan shows one entrance on Andes Road constructed for the development, as shown in Figure 3.

- A 15-mph Speed Limit Sign (R2-1) is recommended to be posted near the beginning of the development entrance off Andes Road. Since the entrance driveway will not be a public road, a posted speed limit of less than 25-mph is acceptable. It is recommended that a "No Outlet" Sign (W14-2a) be installed at the front of the subdivision at Andes Road. This sign can be installed below the street name sign.
- 2b) Stop Signs (R1-1) with 24" white stop bars and other traffic signage are recommended to be installed at the internal locations, as shown below:





- 2c) Sight distance at the new internal road intersection must not be impacted by signage, parked cars, or future landscaping. With a proposed speed limit of 15-mph in the development, the internal intersection sight distance is 170 feet. The required stopping sight distance is 80 feet for a level road grade. The site designer should ensure that internal sight distance lengths are met.
- 2d) Traffic calming measures may be needed to decrease internal vehicle speeds. The internal roadway has long and straight segments. It is recommended that the site designer consider installing speed humps or speed tables within the development to reduce internal speeds.
- 2e) All drainage grates and covers for the residential development must be pedestrian and bicycle safe.
- 2f) Sidewalks are proposed on one side of the internal roadway. Sidewalks should have appropriate ADA-compliant ramps at intersection corners, and the internal sidewalks are recommended to be 5 feet minimum in width to meet Knox County regulations. White crosswalks should be marked on the road pavement internally where pedestrians are expected to cross.
- 2g) If directed by the local post office, the site designer should include a parking area within the development for a centralized mail delivery center. The site plan shows a general location at the front of the development, but a specific plan with a parking area should be designed and provided.
- 2h) All road grade and intersection elements should be designed to AASHTO, TDOT, and Knox County specifications and guidelines to ensure proper operation.

44





Planning Sector

Development Request

SUBDIVISION ZC

Planning KNOXVILLE I KNOX COUNTY	DEVELOPMENT ☐ Development Plan Planned Development ☐ Use on Review / Special Use ☐ Hillside Protection COA	SUBDIVISION ■ Concept Plan □ Final Plat	ZONING ☐ Plan Amendment SP ☐ OYP ☐ Rezoning
Turner Homes, LLC Andes H	ill Subdivision		
Applicant Name	L 0. 0000	Affilia	ation
April 25, 2022	June 9, 2022 -May 12, 2022		File Number(s
Date Filed	Meeting Date (if applicable)		1 N 22 RZ 1-E-22-SP
CORRESPONDENCE	Il correspondence related to this and live in		2-C / 6-G-22-UF
	Il correspondence related to this application		
■ Applicant ☐ Property Owner Stefan Claar Director of Land		eyor Engineer Arcl	hitect/Landscape Architect
Name		rner Homes, LLC	
11543 Kingston Pike		npany	
Address		oxville TN	37814
865-777-1700	City	E 300-51	ZIP
	Stefan.claar@turnerhom	es.com	
Phone	Email		
CURRENT PROPERTY INFO			
Buckner Investment Trust	8531 Troutman La	ne	865-804-9802
Property Owner Name (if different)	Property Owner Addre	ess	Property Owner Phone
8531 Troutman Lane & 1925	Andes Road	105 A A 017 & 105 A	
Property Address		Parcel ID	
West Knox Utility	West Knox		N
Sewer Provider	Water Provide		Septic (Y/N)
STAFF USE ONLY			3eptic (1/14)
West side of Andes Road, no	orth side of Troutman Lane		
General Location		14.61 a	
2 :1	DD (")		
☐ City ☑ County 6th District	PR (pending) Zoning District	Rural residential & Existing Land Use	vacant land
Northwest County	MDR (pending)	(W)	ed Growth

Sector Plan Land Use Classification

Growth Policy Plan Designation

Development Plan Use on Review / Special Use	e Hillside Protect	ion COA		Related C	ity Permit Number(s)	
Residential Non-Residential				***		
Home Occupation (specify) Attached Family Dwell	ling Units					
Other (specify)						
SUBDIVISION REQUEST						
Andes Hill	, [9	98 total un	its]	Related Re	ezoning File Number	
Proposed Subdivision Name	95 attached [9		detrol	cd, 1-	N-22-RZ	
Unit / Phase Number ☐ Combine Parcels ☐ Div	vide Parcei ————			idence	3	
OF attached six als for 11 I		nber of Lots		£: .	~ _	
Other (specify)	ening units with th	Tee Reside	inuai single	ramily n	ousing on Troutn	
Attachments / Additional Requirements The	95 attached	lown	homes c	re e	intered off	
Attachments / Additional Requirements The 2001NG REQUEST	ed The 3 de	tached	humes	are	Traitmen L	
MDR approved by Planning C					Plat File Number	
Proposed Zoning						
■ Plan Amendment Change 7 day	ing with pre	racie	•			
Proposed Plan Designation 7 dwelling units per acro non	on(ś) /				4	
	Rezoning Requests					
☐ Other (specify)						
STAFF USE ONLY						
PLAT TYPE		Fee 1			Total	
☐ Staff Review ☐ Planning Commission		400	0	Disas	iotai	
ATTACHMENTS		108 Fee 2	Concept Plan			
Property Owners / Option Holders	uest	1662	(98 lots x 9	\$30/lot)	\$3,440	
ADDITIONAL REQUIREMENTS ☐ Design Plan Certification (Final Plat)			+ \$500		\$3,440 payment AK	
✓ Use on Review / Special Use (Concept Plan)		Fee 3				
☐ Traffic Impact Study						
COA Checklist (Hillside Protection)						
AUTHORIZATION >2						
0/- 1/10 1 25						
11	irner Homes, LLC A	ndes Hill :	Subdivision	4/25/	2022	
	ase Print			Date		
	orlew@enterprises	s.com	5.			
Phone Number Em	ail					
See attached authorization letters Bu	ckner Investment	Trust		4/25/	2022	

Please Print

Date

Property Owner Signature