

# SUBDIVISION REPORT - CONCEPT/USE ON REVIEW

► **FILE #:** 4-SE-22-C

**AGENDA ITEM #:** 38

4-I-22-UR

**AGENDA DATE:** 4/14/2022

► **SUBDIVISION:** W. GALLAHER FERRY SUBDIVISION

► **APPLICANT/DEVELOPER:** BALL HOMES, LLC

OWNER(S): Kathleen H. Davis

TAX IDENTIFICATION: 129 035

[View map on KGIS](#)

JURISDICTION: County Commission District 6

STREET ADDRESS: 2205 W. Gallaher Ferry Rd.

► **LOCATION:** North side of Hickory Creek Road, west side of Gallaher Ferry Road

SECTOR PLAN: Northwest County

GROWTH POLICY PLAN: Rural Area

WATERSHED: Conner Creek

► **APPROXIMATE ACREAGE:** 23.26 acres

► **ZONING:** PR (Planned Residential)

► **EXISTING LAND USE:** Vacant land

► **PROPOSED USE:** Detached residential subdivision

SURROUNDING LAND USE AND ZONING: North: Agriculture/forestry/vacant -- A (Agricultural)  
South: Agriculture/forestry/vacant, single family residential -- A (Agricultural), PR (Planned Residential)  
East: Agriculture/forestry/vacant, rural residential, single family residential -- A (Agricultural)  
West: Agriculture/forestry/vacant, rural residential -- A (Agricultural), PR (Planned Residential)

► **NUMBER OF LOTS:** 81

SURVEYOR/ENGINEER: Brian Stephens / Ball Homes, LLC

ACCESSIBILITY: Access is via West Gallaher Ferry Rd, a local street with 19-20 ft of pavement width within 40-50 ft of right-of-way; and via Hickory Creek Road, a minor arterial with 23 ft of pavement width within 50-60 ft of right-of-way.

► **SUBDIVISION VARIANCES REQUIRED:** **VARIANCES**  
1. Reduce the minimum tangent for broken back curves from 150 ft to 94.8 ft on Road 'E' between STA 1+40.98 and 2+35.78.  
2. Reduce the minimum intersection approach vertical curve for W. Gallaher Ferry Road at Hickory Creek Road from K=25 to K=15.  
3. Reduce the minimum vertical curve K value on W. Gallaher Ferry Road from K=25 to K=20 at STA 9+48  
4. Reduce the minimum vertical curve K value on W. Gallaher Ferry Road from K=25 to K=20 at STA 11+34

**ALTERNATIVE DESIGN STANDARDS REQUIRING KNOXVILLE-KNOX COUNTY PLANNING COMMISSION APPROVAL**

1. Increase the maximum grade for W. Gallaher Ferry Road from 12 percent to 12.5 percent
2. Reduce the minimum horizontal curve radius from 250 ft to 150 ft on Road 'D' between STA 5+16.81 and 5+92.02

**ALTERNATIVE DESIGN STANDARDS REQUIRING KNOX COUNTY ENGINEERING AND PUBLIC WORKS APPROVAL**

1. Increase the maximum intersection grade from 1 percent to 3 percent at the intersection of W. Gallaher Ferry Road at Hickory Creek Road.

---

**STAFF RECOMMENDATION:**

- **Approve variances 1-4 and alternative design standards 1-2 on the recommendations of the Knox County Department of Engineering and Public Works and because the site conditions restrict compliance with the Subdivision Regulations and the proposed variances will not create a traffic hazard.**

**Approve the Concept Plan subject to 13 conditions.**

1. Connection to sanitary sewer and meeting any 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. [REVISED 4/11/2022] Implementing the recommendations of the W Gallaher Ferry Road Subdivision Transportation Impact Study (Fulghum MacIndoe, revised 3/25/2022), as revised and approved by Planning Commission staff and Knox County Engineering and Public Works (see Exhibit A), including but not limited to the realignment of W. Gallaher Ferry Road as proposed on the Concept Plan (revised 3/28/2022) and obtaining any necessary off-site grading/construction easements. The final design of the road alignment and timing of the construction are to be worked out with Knox County Engineering and Public Works during the design plan phase. All off-site road improvements are to be completed before the first phase of the subdivision is platted. If any portion of the proposed W. Gallaher Ferry Road changes from the proposed realignment, Planning and Knox County Engineering and Public Works staff may require a new Concept Plan to be approved by the Planning Commission or the elimination of some or all of the lots with direct access to W. Gallaher Ferry Road.
4. Providing a vehicular turnaround for Lots 1-14, located outside of the public right-of-way and any required sight distance easements.
5. Providing a sidewalk connection from the internal road system of the subdivision to the intersection of Hickory Creek Road and W. Gallaher Ferry Road. The timing of the sidewalk installation shall be worked out with Knox County Engineering and Public Works during the design plan phase.
6. Providing a 300 ft sight distance easement on the final plat along the W. Gallaher Ferry Road frontage, south of the Road 'A' intersection, as shown on the Concept Plan and as required by Knox County Engineering and Public Works during the design plan phase.
7. Extending the existing driveways to the new W. Gallaher Ferry Road alignment and providing any necessary access easements for the property on the southeast side of the road (parcel 129 03516). The location of the driveway connections and access easements shall be worked out during the design plan phase.
8. Providing a note on the final plat that all structures are to be located outside of the 50-ft buffer (building setback) for sinkholes/closed contours unless a geotechnical study prepared by a registered engineer states that building within the 50-ft sinkhole/closed contour buffer (building setback) is acceptable and the study is approved by the Knox County Department of Engineering and Public Works. The geotechnical study must be reviewed and approved by Knox County Department of Engineering and Public Works prior to approval of a plat for any proposed lots that do not have adequate building area outside of the 50-ft buffer (building setback) area. Building construction is not permitted within the sinkhole/closed contour area or any required drainage easement for the sinkhole/closed contour area.
9. Dedicating 30 ft of ROW from the centerline of Hickory Creek Road as required the Major Road Plan.
10. Meeting all applicable requirements of the Knox County Zoning Ordinance.
11. Meeting all applicable requirements of the Knox County Department of Engineering and Public Works.
12. Submitting to Planning staff prior to final plat review by the Planning Commission or Planning staff, the certification of design plan approval form as required by the Knoxville-Knox County Subdivision Regulations.
13. Prior to certification of the final plat for the subdivision, establishing a property owners association that will be responsible for the maintenance of the common areas, amenities, and drainage system.

► **Approve the development plan for up to 81 detached dwelling units on individual 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 district and the criteria for approval of a use on review.

**COMMENTS:**

Condition #3 was revised 4/11/2022 to include a requirement that all off-site road improvements are to be completed before the first phase of the subdivision is platted.

\*\*\*\*\*

This proposal is for an 81-lot detached residential subdivision on 23.26 acres at a density of 3.48 du/ac. The property was rezoned from A (Agricultural) to PR (Planned Residential) up to 3.5 du/ac in January 2022 (12-K-21-RZ). W. Gallaher Ferry Road will be realigned by the developer along their frontage to correct deficiencies in the existing road design.

**ROAD REALIGNMENT**

The developer has entered into an agreement with Knox County Engineering and Public Works to realign and improve approximately ¼ mile (1,500 feet) of W. Gallaher Ferry Road. The improvements include the following:

- 1) Widen the road from approximately 19 feet to 22 feet from Hickory Creek Road to the northeast boundary line.
- 2) Adjust the Hickory Creek Road intersection to a 90-degree angle. The current intersection angle is approximately 50 degrees which is less than the minimum 75-degree angle required by the Subdivision Regulations.
- 3) Increase the horizontal curve radius of the sharp curve to meet the minimum requirements of the Subdivision Regulations (250 ft radius), approximately 750 ft from the Hickory Creek Road intersection.
- 4) Increase the crest vertical curve radius south the Road 'A' access by lowering the road grade 5-6 feet. This will remove the existing blind hill and allow the Road 'A' access point to achieve the minimum 300 ft sight distance looking to the south. The resulting crest vertical curve will have a K value of 20 which is less than the minimum K value of 25 that the Subdivision Regulations require. Knox County Engineering and Public Works recommend approval of the requested variance because the proposed vertical curve allows for the 200 ft stopping sight distance recommended by the AASHTO road design standards.

**TRANSPORTATION IMPACT STUDY**

The W Gallaher Ferry Subdivision Transportation Impact Study (Fulghum MacIndoe, revised 3/25/2022) recommends the realigned W. Gallaher Ferry Road geometry outlined above and concludes that turn lanes on Hickory Creek Road are not warranted. The TIS evaluated the available sight distance at the Road 'A' intersection but this was to the current W. Gallaher Ferry Road alignment, not the proposed realignment. The applicant's traffic engineer provided a supplemental sight distance study to verify Road 'A' will have the required sight distance of 300 ft after W. Gallaher Ferry Road is realigned (see Exhibit B). The study shows that the line of sight extends outside of the right-of-way, so a sight distance easement is required across the proposed common area south of Road 'A' and Lot 14. Additional sight distance easements may be necessary across the frontage of lots 11-13, but this will be evaluated during the design plan phase.

**LOTS FRONTING ON W. GALLAHER FERRY ROAD**

This proposal has 14 lots that front and directly access the realigned W. Gallaher Ferry Road. The Subdivision Regulations requires residential lots to have vehicular turnarounds if access is provided from a collector or arterial street. West Gallaher Ferry Road is classified as a local street, but for safety reasons, staff is recommending that turnarounds be provided on Lots 1-14 because of the curves and hills in this short stretch of road (condition #4). Also, the TIS mentions that even though W. Gallaher Ferry Road is classified as a local street, it functions more like a collector.

**PEDESTRIAN CONNECTION**

The proposed subdivision does not have internal sidewalks but a sidewalk connection from the internal road system is provided to the Hickory Creek Road intersection. The current proposal is to extend the sidewalk from the Road 'C' cul-de-sac but it can be moved if this location is not feasible. The subdivision on the south side of Hickory Creek Road was required to provide a greenway easement along its entire road frontage. It is anticipated that a greenway or sidewalk will be installed along Hickory Creek Road but there are no current plans for the construction.

## HILLSIDE PROTECTION

There is 7.99 acres of the 23.26-acre property within the Hillside Protection (HP) area. The slope analysis recommends disturbing a maximum of 7.4 acres of the HP area (92.1%). The proposed disturbance within the HP area is 7.24 acres. There is a discrepancy between the total land area of the site according to the slope analysis (25.29 acres) and the Concept Plan (23.26 acres). Regardless, the total acres disturbed is within the limits recommended by the slope analysis.

## SETBACKS

The applicant proposes a 10 ft side street setback for Lots 74 & 75, as shown on the Concept Plan. Section 3.30.02 of the Knox County Zoning Ordinance allows the side yard next to the side road to be  $\frac{1}{2}$  the minimum width of the required front yard. The reduced side street setback is only applicable to corner lots that face (front) parallel streets and have rear yards that abut.

## DEVELOPMENT STANDARDS FOR USES PERMITTED ON REVIEW (ARTICLE 4.10 – SECTION 2)

The planning commission, in the exercise of its administrative judgment, shall be guided by adopted plans and policies, including the general plan and the following general standards:

### 1) THE PROPOSED USE IS CONSISTENT WITH THE ADOPTED PLANS AND POLICIES, INCLUDING THE GENERAL PLAN AND SECTOR PLAN.

- A. The Northwest County Sector Plan recommends RR (Rural Residential) and HP (Hillside Protection) for the site. The RR land use allows consideration of up to 2 du/ac, and under certain circumstances, up to 3 du/ac.
- B. The property is in the Rural area on the Knoxville-Knox County-Farragut Growth Policy Plan map which allows consideration of up to 2 du/ac, and under certain circumstances, up to 3 du/ac.
- C. In January 2022, Knox County Commission approved rezoning the property to PR (Planned Residential) up to 3.5 du/ac, with consideration to allow additional density because of proposed road improvements to W. Gallaher Ferry Road as part of this development.
- D. The site has 7.99 acres within HP (Hillside Protection) area, and the slope analysis recommends disturbing a maximum of 7.4 acres of the HP area. The proposed disturbance within the HP area is 7.24 acres.

### 2) THE USE IS IN HARMONY WITH THE GENERAL PURPOSE AND INTENT OF THE ZONING ORDINANCE.

- A. The PR (Planned Residential) zone is intended to provide optional methods of land development which encourage more imaginative solutions to environmental design problems. Residential areas thus established would be characterized by a unified building and site development program, open space for recreation and provision for commercial, religious, educational, and cultural facilities which are integrated with the total project by unified architectural and open space treatment. Each planned unit development shall be compatible with the surrounding or adjacent zones. Such compatibility shall be determined by the planning commission by review of the development plans.
- B. The property is zoned PR up to 3.5 du/ac, and the proposed density is 3.48 du/ac.
- C. The proposed lot layout clusters the house lots away from sinkholes and for a portion of the property to be dedicated to the realignment of W. Gallaher Ferry Road.

### 3) THE USE IS COMPATIBLE WITH THE CHARACTER OF THE NEIGHBORHOOD WHERE IT IS PROPOSED, AND WITH THE SIZE AND LOCATION OF BUILDINGS IN THE VICINITY.

- A. The proposed detached residential lots are consistent with other residential subdivisions in the area.

### 4) THE USE WILL NOT SIGNIFICANTLY INJURE THE VALUE OF ADJACENT PROPERTY.

- A. The proposed detached residential subdivision is compatible with the surrounding detached residential uses and will not significantly impact the value of the adjacent property.

### 5) THE USE WILL NOT DRAW ADDITIONAL TRAFFIC THROUGH RESIDENTIAL AREAS.

- A. The subdivision will access the portion of W. Gallaher Ferry Road that is being realigned and widened by the developer.

### 6) THE NATURE OF DEVELOPMENT IN THE SURROUNDING AREA IS NOT SUCH AS TO POSE A POTENTIAL HAZARD TO THE PROPOSED USE OR TO CREATE AN UNDESIRABLE ENVIRONMENT FOR THE PROPOSED USE.

- A. There are no known uses in the area that could be a potential hazard or create an undesirable environment for the proposed use.

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.

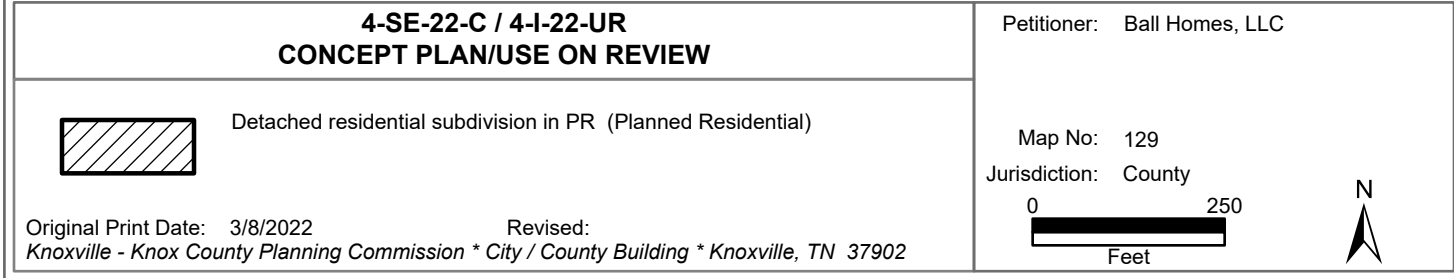
ESTIMATED STUDENT YIELD: 33 (public school children, grades K-12)

Schools affected by this proposal: Hardin Valley Elementary, Hardin Valley Middle, and Hardin Valley Academy.

- 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 Board of Zoning Appeals. The date of the Knox County Board of Zoning Appeals hearing will depend on when the appeal application is filed.



---

## *Requested Variances & Alternative Design Standards*

---

### 4-SE-22-C / 4-I-22-UR – W GALLAHER FERRY ROAD

#### **VARIANCES**

1. Reduce the minimum tangent for broken back curves from 150 ft to 94.8 ft on Road 'E' between STA 1+40.98 and 2+35.78.
2. Reduce the minimum intersection approach vertical curve for W. Gallaher Ferry Road at Hickory Creek Road from K=25 to K=15.
3. Reduce the minimum vertical curve K value on W. Gallaher Ferry Road from K=25 to K=20 at STA 9+48
4. Reduce the minimum vertical curve K value on W. Gallaher Ferry Road from K=25 to K=20 at STA 11+34

#### **ALTERNATIVE DESIGN STANDARDS REQUIRING KNOXVILLE-KNOX COUNTY PLANNING COMMISSION APPROVAL**

1. Increase the maximum grade for W. Gallaher Ferry Road from 12 percent to 12.5 percent
2. Reduce the minimum horizontal curve radius from 250 ft to 150 ft on Road 'D' between STA 5+16.81 and 5+92.02

#### **ALTERNATIVE DESIGN STANDARDS REQUIRING KNOX COUNTY ENGINEERING AND PUBLIC WORKS APPROVAL**

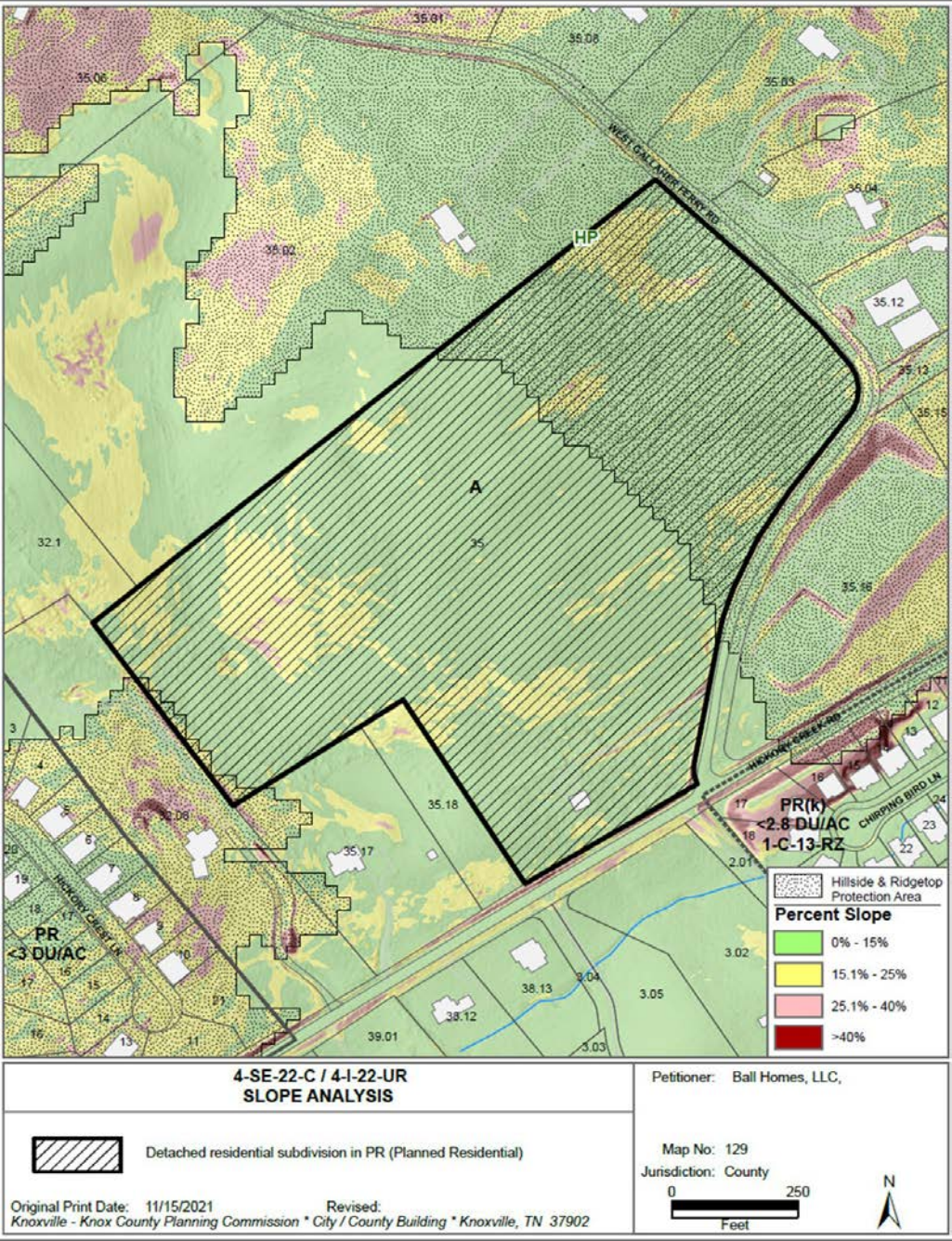
1. Increase the maximum intersection grade from 1 percent to 3 percent at the intersection of W. Gallaher Ferry Road at Hickory Creek Road.

#### **KNOX COUNTY ENGINEERING AND PUBLIC WORKS RECOMMENDATION:**

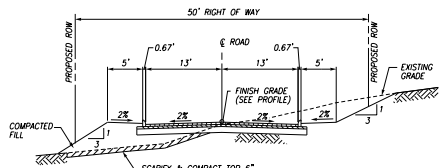
Approve as requested



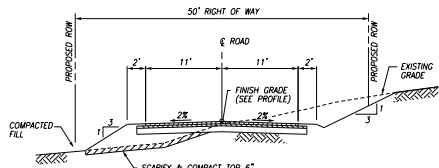
CATEGORY	ACRES	RECOMMENDED DISTURBANCE BUDGET (Percent)	DISTURBANCE AREA (Acres)
Total Area of Site	25.29		
Non-Hillside	17.3	N/A	
0-15% Slope	6.78	100%	6.8
15-25% Slope	1.13	50%	0.6
25-40% Slope	0.08	20%	0.0
Greater than 40% Slope	0	10%	0.0
Ridgetops	0		
Hillside Protection (HP) Area	7.99	Recommended disturbance budget within HP Area (acres)	7.4
		Percent of HP Area	92.1%



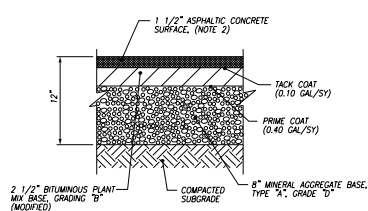




1 TYPICAL 26' PUBLIC ROAD SECTION  
NTS

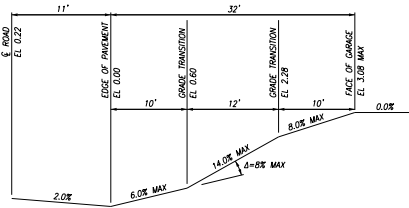


2 TYPICAL 22' PUBLIC ROAD SECTION  
NTS

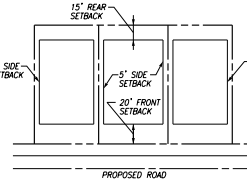


3 ASPHALT PAVEMENT SECTION  
NTS

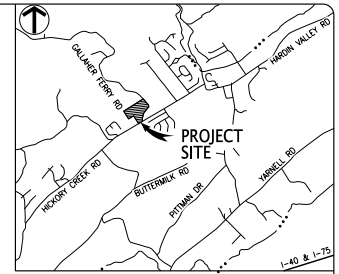
NOTES:  
1. PAVEMENT HAS NOT BEEN DESIGNED FOR CONSTRUCTION TRAFFIC ACTIVITIES. USE OF THESE SURFACES FOR CONSTRUCTION ACTIVITIES SHALL BE DONE AT THE CONTRACTOR'S CONVENIENCE AND RISK. DAMAGE TO PAVEMENT RESULTING FROM THESE ACTIVITIES SHALL BE REPAIRED IN CONFORMANCE WITH THE INITIAL PAVEMENT SPECIFICATIONS.  
2. ASPHALTIC CONCRETE SURFACE COURSE SHALL BE GRADE "E" MIX FOR ROADS WITH A SLOPE LESS THAN OR EQUAL TO ONE PER CENT. FOR SLOPES GREATER, USE GRADE "D" MIX.



4 TYPICAL DRIVEWAY PROFILE  
NTS



5 TYPICAL INTERIOR LOT  
NTS



#### GENERAL NOTES:

- THE BOUNDARY DATA WAS PROVIDED BY LYNCH SURVEYS, LLC DATED FEBRUARY 3, 2022. THE TOPOGRAPHIC DATA WAS TAKEN FROM KIDS THAT WAS OBTAINED NOVEMBER 4, 2021.
- PROPERTY CONCERNED REFLECTS PARCEL 129.035 AS SHOWN IN KNOX COUNTY C11 MAP 129.035. ZONING FOR THE PROPERTY IS PR. PLANNED RESIDENTIAL. TOTAL AREA = 23.26 AC.
- BUILDING SETBACKS ARE 20'-FT. IN FRONT, 5'-FT. ON SIDE, AND 15'-FT. IN REAR. THE PERIPHERAL SETBACK IS 35'-FT.
- ACCESS TO LOTS IS RESTRICTED TO INTERNAL STREETS. LOTS 1-14 ACCESSED OFF OF W. GALLAHER FERRY RD.
- UTILITY & DRAINAGE EASEMENT INSIDE ROAD FRONTAGE AND S/D PERMETER LOT LINES. 5' EACH SIDE OF ALL INTERIOR LOT LINES.
- PROPOSED IMPROVEMENTS INCLUDE: 26' WIDE PUBLIC ROAD, EXTRUDED CURB, STORM SEWER, SANITARY SEWER, WATER, ELECTRIC, TELEPHONE, AND CABLE TV.
- MPC FILE NUMBERS: 4-SE-22-C / 4-1-22-UR

#### PROPOSED DENSITY

PARCEL ZONED PR ALLOWED DENSITY	3.5 DU/AC
PROPERTY ZONED PR AREA	23.26 AC
SINGLE FAMILY DWELLING UNITS	81 UNITS
PROPOSED DENSITY	3.48 DU/AC

#### UTILITY OWNERS:

WATER & SEWER	GAS
WEST KNOX UTILITY DISTRICT (WKUD) P.O. BOX 51370 KNOXVILLE, TN 37950-1370 CONTACT: MR. WAYNE HASTINGS OFFICE PHONE: 865.690.2521	KNOXVILLE UTILITIES BOARD (KUB) P.O. BOX 59017 KNOXVILLE, TN 37950-9017 CONTACT: MR. CHRIS MCCORMACK OFFICE PHONE: 865.558.2123
ELECTRIC	TELEPHONE
LENOR CITY UTILITY BOARD (LCUB) P.O. BOX 449 LENOR CITY, TN 37771 CONTACT: MR. MITCH LEBETTER OFFICE PHONE: 865.988.0757	AT&T 9733 PARKSIDE DRIVE KNOXVILLE, TN 37922 CONTACT: MS. WICKIE DALEY OFFICE PHONE: 865.538.8511

#### ALTERNATIVE DESIGN STANDARDS REQUIRING PLANNING COMMISSION APPROVAL:

- INCREASE THE MAX GRADE FOR W. GALLAHER FERRY RD FROM 12% TO 12.5%

#### VARIANCES REQUIRING PLANNING COMMISSION APPROVAL:

- REDUCE W. GALLAHER FERRY RD K VALUE FROM 25 TO 20 AT STA 9+48
- REDUCE W. GALLAHER FERRY RD K VALUE FROM 25 TO 20 AT STA 11+34

#### ALTERNATIVE DESIGN STANDARDS APPROVED BY KNOX COUNTY ENGINEERING AND PUBLIC WORKS:

- INCREASE THE INTERSECTION GRADE AT HICKORY CREEK RD FROM 1% TO 3%

#### LEGEND:

	PROPOSED ASPHALT PAVEMENT
	PROPOSED ROAD NUMBER
	PROPOSED PROPERTY/ROAD LINE
	EXISTING PROPERTY LINE
	PROPOSED ROAD CENTER LINE

#### ENGINEERING CERTIFICATION:

I HEREBY CERTIFY THAT I AM A 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 ALL APPLICABLE PROVISIONS OF THE KNOXVILLE-KNOX COUNTY SUBDIVISION REGULATIONS EXCEPT AS HAS BEEN IDENTIFIED AND DESCRIBED IN A REPORT FILED WITH THE METROPOLITAN PLANNING COMMISSION.

REGISTERED ENGINEER CHRISTOPHER H. COLLIER, P.E.  
TENNESSEE CERTIFICATE NO. 119773

4-SE-22-C / 4-1-22-UR  
3/28/2022



PRELIMINARY  
NOT FOR  
CONSTRUCTION

W. GALLAHER FERRY ROAD  
SUBDIVISION  
2205 W. GALLAHER FERRY ROAD  
KNOXVILLE, TENNESSEE 37932

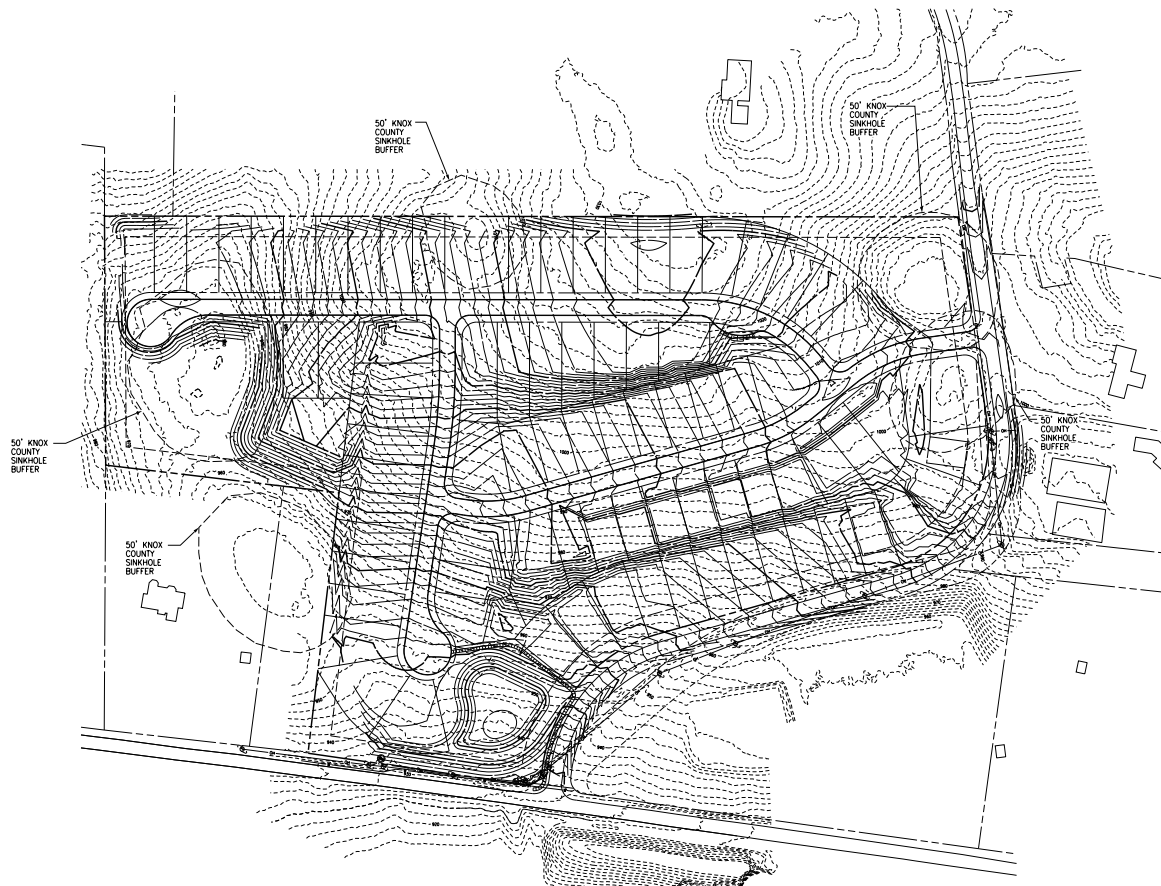
BALL HOMES, LLC  
3509 WALDEN DRIVE  
KNOXVILLE, TN 37917  
CONTACT: MR. CHRIS MCCORMACK  
TELEPHONE NO.: 865.268.1931

CONCEPT PLAN

Project	Sheet
592.014	C1
Date	Scale
02/28/22	1"=100'
Revision/Issue	No.
03/28/22 REVISED PER MPC COMMENTS ISSUED CONCEPT PLAN	1

File Name: 4-SE-22-C / 4-I-22-UR.dwg  
Plot Name: 4-SE-22-UR  
Plot Date: 02/28/22

©2022 FULGHUM MACINDOE & ASSOCIATES, INC. THIS DOCUMENT SHALL NOT BE LOANED, COPIED, REPRODUCED, TRANSMITTED TO ANYONE WITHIN OR OUTSIDE OF THE COMPANY OR BE REPRODUCED IN ANY MANNER WITHOUT THE WRITTEN PERMISSION OF FULGHUM MACINDOE & ASSOCIATES, INC. ALL RIGHTS ARE RESERVED.



4-SE-22-C / 4-I-22-UR  
3/28/2022

LEGEND:

- PROPOSED PROPERTY/ROW LINE
- EXISTING PROPERTY LINE
- EXISTING CONTOUR
- PROPOSED CONTOUR



10330 HARDEN VALLEY ROAD  
SUITE 201  
KNOXVILLE, TN 37932  
OFFICE: 865.690.6419  
FAX: 865.690.6449  
www.fulghummacindoe.com

PRELIMINARY  
NOT FOR  
CONSTRUCTION

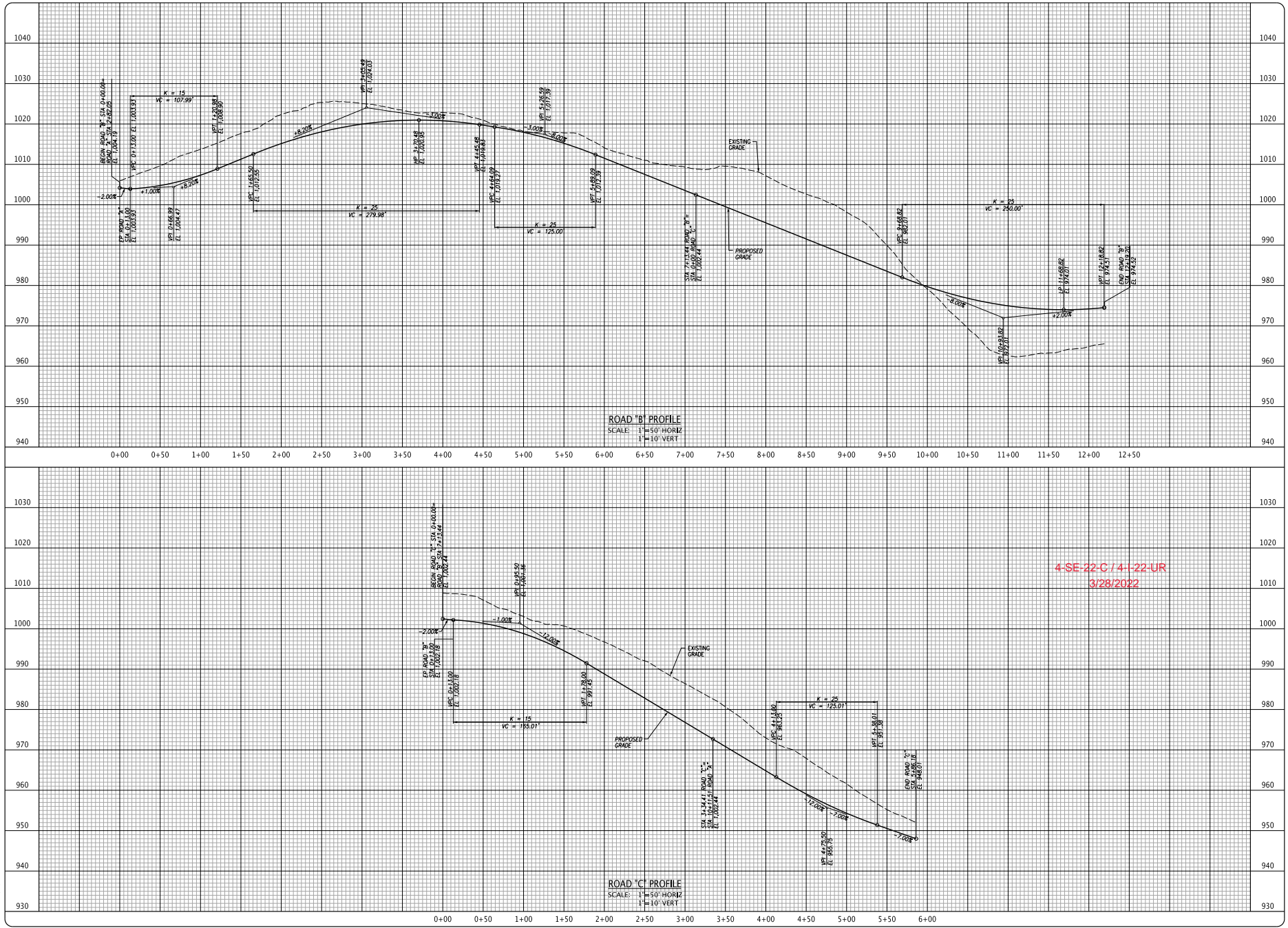
W GALLAHER FERRY ROAD  
SUBDIVISION  
2205 W GALLAHER FERRY ROAD  
KNOXVILLE, TENNESSEE 37932

BALL HOMES, LLC  
3600 WALDEN DRIVE  
KNOXVILLE, TN 37921  
CONTACT: J. B. BALL  
TELEPHONE NO.: 865.268.1191

PRELIMINARY GRADING  
PLAN

PROJECT	ISSUED BY	DATE	REVISION/ISSUE	DATE
592.014	CNC	03/28/22		
02/28/22				
1"=100'				





10330 HARDEN VALLEY ROAD  
 SUITE 201  
 KNOXVILLE, TN 37932  
 OFFICE: 865.690.6419  
 FAX: 865.690.6448  
 www.fulghummacindoe.com

PRELIMINARY  
 NOT FOR  
 CONSTRUCTION

W GALLAHER FERRY ROAD  
 SUBDIVISION  
 2205 W GALLAHER FERRY ROAD  
 KNOXVILLE, TENNESSEE 37932

BALL HOMES, LLC  
 3609 WALDEN DRIVE  
 WASHINGTON, KY 40317  
 CONTACT: J. BALL  
 TELEPHONE NO.: 855.268.1191

# ROAD PROFILES

PROJ. WSE.	DESIGNED BY	CHECK	DATE
592.014	CNC		02/28/22
NO.	REVISION/ISSUE	DATE	BY
1	REVISED PREP W/C	03/28/22	
2	ISSUED CONCEPT PLAN	02/28/22	

Project: 592.014  
 Date: 02/28/22  
 Scale: AS NOTED  
 Sheet: C4

# W GALLAHER FERRY ROAD SUBDIVISION

## Transportation Impact Analysis

2205 W Gallaher Ferry Road

Knoxville, TN 37932

### A Transportation Impact Analysis for the W Gallaher Ferry Road Subdivision

Submitted to

**Knoxville - Knox County Planning**

Revised March 25, 2022

February 28, 2022

FMA Project No. 592.014

Submitted By:



4-SE-22-C / 4-I-22-UR

Version 2

3/25/2022



## **6 Turn Lane Warrant Analysis**

---

The intersection of Hickory Creek Road at W Gallaher Ferry Road was evaluated to determine if a westbound right turn lane or an eastbound left turn lane are warranted. The Knox County Department of Engineering and Public Works handbook, "Access Control and Driveway Design Policy," was used to analyze the information.

There are no turn lanes warranted at the intersection of Hickory Creek Road at W Gallaher Ferry Road during either the AM or PM peak hours after the full buildout of the W Gallaher Ferry Road Subdivision.

The intersection of W Gallaher Ferry Road at the proposed driveway connection (Driveway "A") was evaluated to determine if a northbound left turn lane or southbound right turn lane are warranted. The Knox County Department of Engineering and Public Works handbook, "Access Control and Driveway Design Policy," was used to analyze the information.

There are no turn lanes warranted at the intersection of W Gallaher Ferry Road at Driveway "A" during either the AM or PM peak hours after the full buildout of the W Gallaher Ferry Road Subdivision,

The turn lane warrant worksheets and analysis are included in Attachment 8.

## **7 Conclusions and Recommendations**

---

### **7.1 W Gallaher Ferry Road @ Hickory Creek Road**

The existing, background and full buildout conditions at the unsignalized intersection of W Gallaher Ferry Road at Hickory Creek Road were analyzed using the Highway Capacity Software (HCS7).

The existing traffic conditions for the eastbound left turn movement (Hickory Creek Road) operate at a LOS A during both the AM and PM peak hours and the southbound approach (W Gallaher Ferry Road) operates at a LOS A during both the AM and PM peak hours.

The background traffic conditions for the eastbound left turn movement (Hickory Creek Road) operate at a LOS A during both the AM and PM peak hours and the southbound approach (W Gallaher Ferry Road) operates at a LOS B during both the AM and PM peak hours.



After the completion of the W Gallaher Ferry Road residential development the full buildout traffic conditions for the intersection of W Gallaher Ferry Road at Hickory Creek Road will operate as follows. The eastbound left turn movement (Hickory Creek Road) will continue to operate at a LOS A during both the AM and PM peak hours. The southbound approach (W Gallaher Ferry Road) will continue to operate at a LOS B during both the AM and PM peak hours.

The 95% queue length is defined as the queue length that has only a 5-percent probability of being exceeded during the analysis time period. The 95% queue length is typically used to determine the length of turning lanes in order to minimize the risk of blockage.

The unsignalized intersection capacity analysis shows the full buildout 95% queue length for the southbound approach (W Gallaher Ferry Road) of less than one car length during both the AM and PM peak hours. Based on the HCS7 queue analysis the existing storage at the intersection of W Gallaher Ferry Road at Hickory Creek Road is adequate and no improvements to the intersection are necessary in order to accommodate the W Gallaher Ferry Road residential development.

A westbound right turn lane and an eastbound left turn lane on Hickory Creek Road are not warranted during either the AM or PM peak hours per the Knox County Department of Engineering and Public Works handbook, "Access Control and Driveway Design Policy."

The minimum required sight distance for a road with a posted speed limit of 40 mph is 400 feet in each direction in accordance with the "Knoxville-Knox County Subdivision Regulations" amended through February 13, 2020. FMA measured the sight distance at the existing intersection of W Gallaher Ferry Road at Hickory Creek Road in February 2022. At 15 feet from the edge of pavement the existing sight distance is greater than 450 feet eastbound and greater than 450 feet westbound. Any existing site distance measurements may not reflect the future conditions at the intersection after road realignment and will need to be re-verified.

## **7.2 W Gallaher Ferry Road @ Driveway Connection (Road "A")**

W Gallaher Ferry Road is not classified by the Major Road Plan; therefore, it is considered a local street. The minimum intersection spacing required on a local street is 125 feet per the "Knoxville-Knox County Subdivision Regulations" amended through February 13, 2020. The driveway connection (Road "A") is located approximately 1,250 feet north of the intersection with Hickory Creek Road and exceeds the typical minimum separation on a local street; therefore, no change is necessary.

A southbound right turn lane and a northbound left turn lane on W Gallaher Ferry Road are not warranted during either the AM or PM peak hours per the Knox County Department of Engineering and Public Works handbook, "Access Control and Driveway Design Policy."

The minimum required sight distance for a road with a posted speed limit of 30 mph is 300 feet in each direction in accordance with the "Knoxville-Knox County Subdivision Regulations" amended through February 13, 2020. FMA measured the sight distance at the proposed intersection of W Gallaher Ferry Road at the driveway connection (Road "A") in February 2022. At 15 feet from the edge of pavement the sight distance at the proposed intersection is greater than 350 feet looking to the north and 325 feet looking to the south. Attachment 9 shows photos of the sight distance at the proposed intersection.

Any existing site distance measurements may not reflect the future conditions at the intersection after road realignment and will need to be re-verified. Sight distance must also be verified for all future driveway connections shown for lots in the subdivision that are fronting on W Gallaher Ferry Road.

Any required sight distance easements for the internal subdivision intersections of Road "A", Road "B" and Road "C" should be coordinated with Knox County Engineering and Public Works and included on the final design drawings prior to construction of the subdivision.

The width of Road "A", Road "B" and Road "C" will have a width of 26 feet in accordance with the "Knoxville-Knox County Subdivision Regulations" amended through February 13, 2020.

### **7.3 W Gallaher Ferry Road**

W Gallaher Ferry Road is currently aligned with Hickory Creek Road at an approximate fifty-degree angle. The existing width of W Gallaher Ferry Road at the intersection with Hickory Creek Road is approximately 19 feet. W Gallaher Ferry Road is not classified per the Major Road Plan, but it functions more like a collector than a local subdivision street.

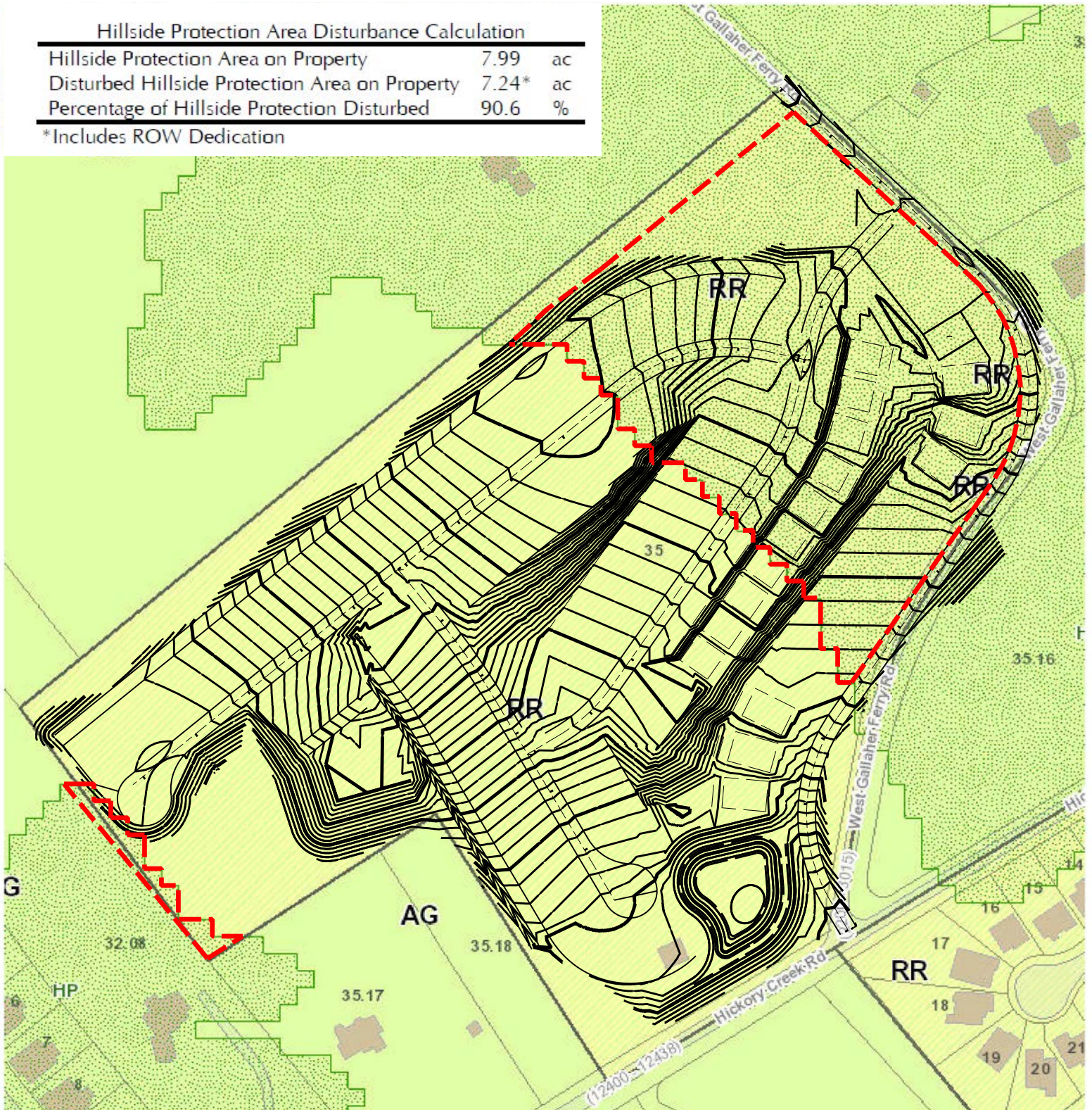
The concept plan for the W Gallaher Ferry Subdivision proposes the realignment of W Gallaher Ferry Road between the intersection of Hickory Creek Road at station 0+00 to station 15+08.40. The realignment includes adjusting the angle of the intersection to a ninety-degree angle and widening the existing roadway. Any proposed roadway improvements need to be coordinated with Knox County Engineering and Public Works.



## Hillside Protection Area Disturbance Calculation

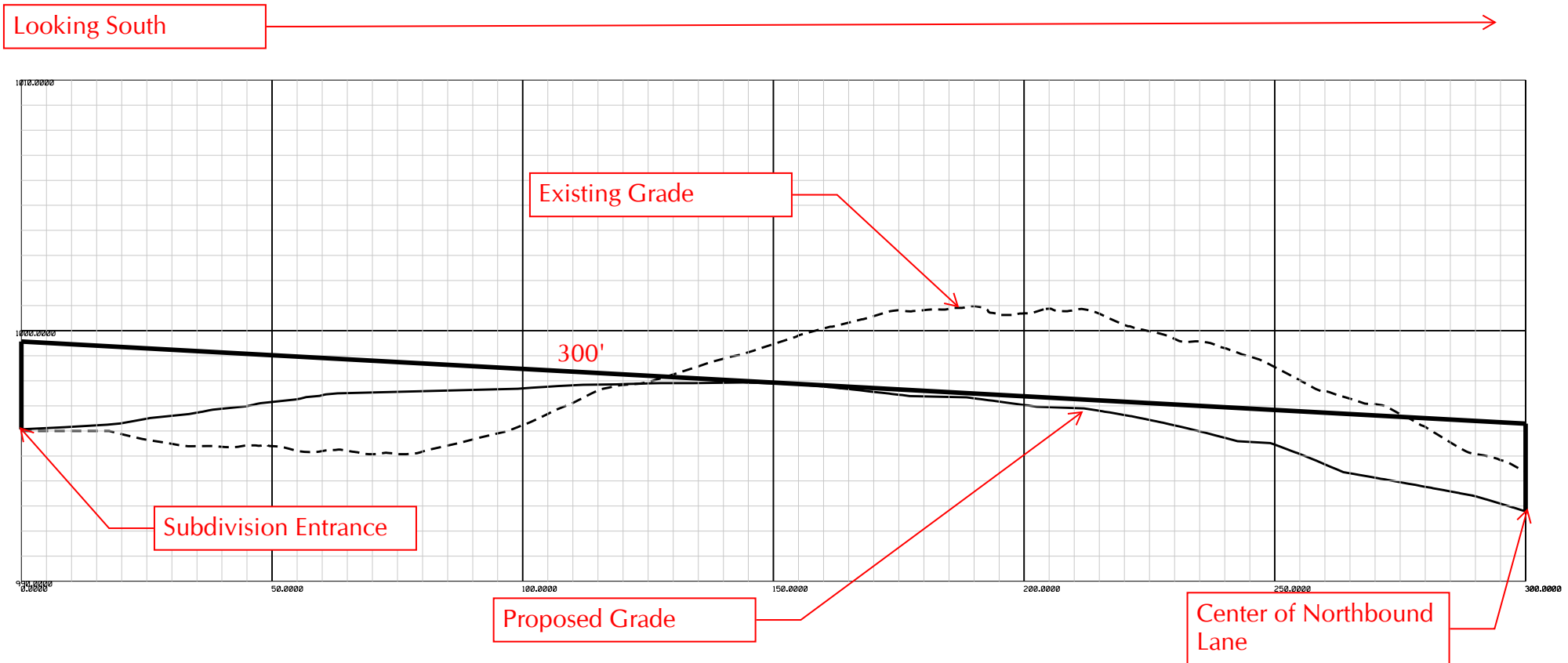
Hillside Protection Area on Property	7.99	ac
Disturbed Hillside Protection Area on Property	7.24*	ac
Percentage of Hillside Protection Disturbed	90.6	%

\*Includes ROW Dedication





# Sight Distance (Subdivision Entrance Looking South on W. Gallaher Ferry Road)





# Development Request

## DEVELOPMENT

- ☐ Development Plan  
☒ ~~Planned Development~~  
☒ Use on Review / Special Use  
☐ Hillside Protection COA

## SUBDIVISION

- ☒ Concept Plan  
☐ Final Plat

## ZONING

- ☐ Plan Amendment  
☐ SP ☐ OYP  
☐ Rezoning

Ball Homes, LLC

Developer

Applicant Name

Affiliation

2/28/2022

April 14, 2022

File Number(s)

Date Filed

Meeting Date (if applicable)

4-SE-22-C  
4-I-22-UR

## CORRESPONDENCE

All correspondence related to this application should be directed to the approved contact listed below.

- ☒ Applicant ☐ Property Owner ☐ Option Holder ☐ Project Surveyor ☐ Engineer ☐ Architect/Landscape Architect

Mr. Brian Stephens

Ball Homes, LLC

Name

Company

3609 Walden Drive

Lexington

KY

40517

Address

City

State

ZIP

859.268.1191

bstephens@ballhomes.com

Phone

Email

## CURRENT PROPERTY INFO

Kathleen H. Davis

2409 West Gallaher Ferry Rd, Knoxville, TN

Property Owner Name (if different)

Property Owner Address

Property Owner Phone

2205 West Gallaher Ferry Rd, Knoxville, TN, 37932

129 035

Property Address

Parcel ID

WKUD

WKUD

N

Sewer Provider

Water Provider

Septic (Y/N)

## STAFF USE ONLY

North side of Hickory Creek Rd, west side of Gallaher Ferry Rd

23.26 acres

General Location

Tract Size

☐ City ☒ County  
 District

6th

PR (Planned Residential)

Vacant land

Zoning District

Existing Land Use

Northwest County

RR & HP

Rural area

Planning Sector

Sector Plan Land Use Classification

Growth Policy Plan Designation

November 22, 2021

## DEVELOPMENT REQUEST

☐ Development Plan ☒ Use on Review / Special Use ☐ Hillside Protection COA  
☒ Residential ☐ Non-Residential  
 Home Occupation (specify) Single Family Residential  
 Other (specify) Detached residential subdivision

Related City Permit Number(s)

## SUBDIVISION REQUEST

W Gallaher Ferry Subdivision

Proposed Subdivision Name

81

Unit / Phase Number ☐ Combine Parcels ☒ Divide Parcel

Total Number of Lots Created

☐ Other (specify) Detached residential subdivision

☒ Attachments / Additional Requirements

Related Rezoning File Number

12-K-21-RZ  
12-B-21-SP

## ZONING REQUEST

☐ Zoning Change Proposed Zoning

☐ Plan Amendment Change Proposed Plan Designation(s)

Pending Plat File Number

Proposed Density (units/acre)

Previous Rezoning Requests

☐ Other (specify)

## STAFF USE ONLY

### PLAT TYPE

☐ Staff Review ☐ Planning Commission

### ATTACHMENTS

☐ Property Owners / Option Holders ☐ Variance Request

### ADDITIONAL REQUIREMENTS

☐ Design Plan Certification (Final Plat)

☐ Use on Review / Special Use (Concept Plan)

☒ Traffic Impact Study

☐ COA Checklist (Hillside Protection)

Fee 1		Total
406	UOR	
Fee 2		
Fee 3		
		\$3,626

## AUTHORIZATION

  
Applicant Signature

Ball Homes, LLC

Please Print

2/24/22  
Date

859.268.1191

bstephens@ballhomes.com

Phone Number

Email

*The Estate of Kathleen H Davis, Co-Executor Susan Pate*

dotloop verified  
02/28/22 11:39 AM EST  
4W6N-NCWN-V4KD-76LM

Susan Pate, Co executor of Kathleen H Davis Estate

02/28/2022

Property Owner Signature

Please Print

Date

3/1/22 swn