



# SUBDIVISION REPORT - CONCEPT/DEVELOPMENT PLAN

► **FILE #:** 3-SI-25-C

**AGENDA ITEM #:** 48

3-K-25-DP

**AGENDA DATE:** 3/13/2025

► **SUBDIVISION:** 2921 BRADLEY LAKE LANE

► **APPLICANT/DEVELOPER:** MESANA INVESTMENTS, LLC

OWNER(S): Scott Davis Mesana Investments, LLC

TAX IDENTIFICATION: 92 057, 053 (PART OF)

[View map on KGIS](#)

JURISDICTION: County Commission District 3

STREET ADDRESS: 2921 BRADLEY LAKE LN (0 Bradley Lake Ln)

► **LOCATION:** South side of Bradley Lake Ln, southeast of Jumping Jack Ln

GROWTH POLICY PLAN: Urban Growth Area (Outside City Limits)

FIRE DISTRICT: Karns Fire Department

WATERSHED: Grassy Creek

► **APPROXIMATE ACREAGE:** 19.79 acres

► **ZONING:** PR(k) (Planned Residential, with conditions) up to 6 du/ac, A (Agricultural), I (Industrial)

► **EXISTING LAND USE:** Agriculture/Forestry/Vacant Land

► **PROPOSED USE:** Attached and detached residential subdivision

SURROUNDING LAND USE AND ZONING: North: Agriculture/forestry/vacant land, single family residential - PR (Planned Residential) up to 4 du/ac in the County  
South: Agriculture/forestry/vacant land, single family residential - PR (Planned Residential) up to 3 du/ac in the County, RN-2 (Single-Family Residential Neighborhood), (C) former planned district, HP (Hillside Protection Overlay) in the City  
East: Rural residential - A (Agricultural) in the County  
West: Single family residential - RN-1 (Single-Family Residential Neighborhood), HP (Hillside Protection Overlay) in the City

► **NUMBER OF LOTS:** 85

SURVEYOR/ENGINEER: Chris Sharp, P.E., Urban Engineering, Inc.

ACCESSIBILITY: Access is via Bradley Lake Lane, an unstriped local street with 12-ft of pavement width within a 50-ft right-of-way.

► **SUBDIVISION VARIANCES REQUIRED:** VARIANCES :  
None

**ALTERNATIVE DESIGN STANDARD REQUIRING PLANNING COMMISSION APPROVAL:**

1. Reduce the minimum horizontal curve radius on Road A from 250 ft to 200 ft at STA 4+30.39 (Section 3.04.I.1.b.1)
2. Reduce the minimum street frontage from 25 ft to 24 ft for attached

house lots for internal units, those attached to two other dwelling units (Section 3.03.B.2)

**ALTERNATIVE DESIGN STANDARDS REQUIRING KNOX COUNTY ENGINEERING AND PUBLIC WORKS APPROVAL (PLANNING COMMISSION APPROVAL NOT REQUIRED):**

1. Increase the maximum intersection grade from 1 percent to 2 percent on Road A, Road B, and Road C at Bradley Lake Lane (Section 3.04.H.3)
2. Increase the maximum intersection grade from 1 percent to 2 percent on Road B at Road A (Section 3.04.H.3)
3. Reduce the minimum private right-of-way width from 50 ft to 40 ft (Section 3.03.E.3.a)

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**STAFF RECOMMENDATION:**

- **Approve the alternative design standards based on the justification provided by the applicant and recommendations of the Knox County Department of Engineering and Public Works.**

**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. 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 2921 Bradley Lake Lane Subdivision Transportation Impact Study (TIS) (AJAX Engineering, 2/4/2025) as required by Knox County Engineering and Public Works during the design plan phase, including but not limited to the recommendations to re-examine the southbound left turn lane on Amherst Road at Bradley Lake Lane at full build-out of the 2921 Bradley Lake Lane Subdivision. The applicant must post a bond with Knox County Engineering and Public Works for the estimated cost of the southbound turn lane as recommended by the TIS before the final plat for the first phase of the subdivision is certified to record. Upon full build-out of the subdivision, the applicant must perform traffic counts as recommended by the TIS to determine if the turn lane warrant is met.
5. 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 cost of these improvements is the responsibility of the property owner. These improvements include, but are not limited to, widening the Bradley Lake Lane pavement width to 20 ft from the easternmost access point (Road C) for the proposed subdivision to the Spring Lake Farms subdivision entrance (Jumping Jack Lane), and a sidewalk on one side of Bradley Lake Lane along the subdivision's frontage per the requirements of the Knox County Sidewalk Ordinance (Chapter 54, Article IV of the Knox County Code). The details regarding the road widening and sidewalk will be determined during the design plan phase.
6. Maintaining a 35 ft non-disturbance area and Type 'C' landscape screen (Exhibit C) along the west and south property boundaries, and providing a Type 'C' landscape screen between the attached houses and the east property boundary, per zoning condition #2 (11-K-24-RZ). This does not apply to the portion of the property zoned A (Agricultural). Existing trees that meet the intent of the Type 'C' landscape screen may count toward the screening requirement. A landscape plan must be submitted to the Planning staff for review and approval before grading permits are issued.
7. Installing high-visibility fencing at the edge of the 35-ft non-disturbance area and any existing trees outside the non-disturbance area that are being maintained and counted towards the required Type 'C' landscape screening. The high-visibility fencing must be installed before grading activities commence and maintained until construction is complete.
8. Submitting a geotechnical report for review and approval by Knox County Engineering and Public Works during the design plan phase to determine if any areas shown as closed depression on the concept plan are required to be shown on the final plat as a closed contour sinkhole with a 50 ft buffer as required by Section 3.06.B of the Subdivision Regulations. If any building construction is proposed within the 50 ft buffer area around the designated sinkholes/depressions (including the depressions), a geotechnical report must be prepared by a registered engineer to determine soil stability, and that report must be submitted to the Knox County Department of Engineering and Public Works for consideration. Any construction in these areas is subject to approval by the County following a review of the report. Engineered footings must be designed for

these areas. For those lots that do not have a building site outside of the 50 ft buffer, approval by Knox County will be required prior to final plat approval. The sinkholes/depressions and 50 ft buffer shall be designated on the final plat even if they are approved to be filled.

9. Providing a stream determination study to the Knox County Department of Engineering and Public Works for review and approval during the design plan phase regarding the potential stream in the southern portion of the site. The required stream buffers must be provided on the final plat if this is determined to be a stream. This may impact the alignment of Road A, and several lots may have to be consolidated or eliminated to provide buildable area outside the stream buffers.

10. The subdivision name for the attached houses may be required to be a different name because there is not an internal road connection with the single-family portion of the development (Section 2.10.G.1 of the Sub Regs).

11. Installation of the sidewalk connection between the turnaround on Road C and Road B, as shown on the concept plan.

12. Provide the A (Agricultural) and I (Industrial) zoning boundary line on lot 1 on the final plat and include the setbacks for those zones in the plat notes.

13. Meeting all applicable requirements of the Knox County Department of Engineering and Public Works.

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

15. 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 32 attached and 53 detached residential lots, and reduction of the peripheral setback from 35 ft to 25 ft along the Bradley Lake Lane frontage as shown on the development plan, subject to 4 conditions.**

1. Meeting all applicable requirements of the Knox County Zoning Ordinance and the four zoning conditions.
2. The maximum height of the attached dwellings shall be 35 feet.
3. The land disturbance within the HP (Hillside Protection) area shall not exceed the proposed 12.8 acres.
4. If the right-of-way dedication along Bradley Lake Lane is less than 25 ft from the road's centerline, as proposed on the concept plan, the peripheral setback will be increased in depth the same amount, provided, however, it shall not be required to exceed 35 ft.

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 has 32 attached and 53 detached residential lots on the 19.4 acres zoned PR (Planned Residential). In December 2024, the property was rezoned from A (Agricultural) to PR(k) up to 6 du/ac, subject to 4 conditions (11-K-24-RZ). In the northwest corner of the site, 0.39 acres zoned A (Agricultural) is incorporated into lot 1. The total site area is 19.79 acres.

Access to the site is from Bradley Lake Lane, which is required to be widened to a minimum width of 20 ft from the easternmost access point to the Spring Lake Farms subdivision entrance (Jumping Jack Lane), and a sidewalk is required on one side of Bradley Lake Lane along the subdivision's frontage. Providing connections to adjacent properties is limited by topography and the use of a private right-of-way in the case of Road C for the attached houses. There is an internal sidewalk connection between the turnaround on Road C and Road B. The sidewalk on Bradley Lake Lane will provide connectivity to the Spring Lake Farms subdivision and Amherst Road once the gap in the sidewalk between the subject property and Jumping Jack Lane is installed by Knox County. If properties to the west along Bradley Lake Lane are developed in the future, it is anticipated the sidewalk will be further extended to those developments.

**ZONING CONDITIONS**

- 1) Improving Bradley Lake Lane to current roadway standards from the access point of the future development on the subject property to the entrance of the Spring Lake Farms subdivision.
- 2) 35 ft landscape buffer Type 'C' along the existing residence.
- 3) Traffic impact study.
- 4) Bradley Lake Ln is to be expanded to 20 ft at the expense of the developer.

With the recommended approval conditions, the concept plan and development plan conform with the zoning conditions.

**TRANSPORTATION IMPACT STUDY (TIS)**

The scope of the TIS is to determine and evaluate the potential impacts of the development on the adjacent transportation system. The study includes a review of the primary access roads, the entrance intersections, and the existing adjacent intersection of Amherst Road at Bradley Lake Lane. The most significant conclusion and recommendation is that a left turn lane on Amherst Road at the Bradley Lake Lane intersection is warranted due to the estimated thru traffic generated by an adjacent development that is under construction. The turn lane is not warranted when the estimated thru traffic is not included from this adjacent development. Because the TIS may overestimate the thru traffic volume from the adjacent development, the recommendation is to re-examine the intersection the 2921 Bradley Lake Lane Subdivision is entirely built-out to determine if the turn lane warrant is met.

#### 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(k) (Planned Residential) up to 6 du/ac, subject to four conditions.

A. The PR zone allows attached and detached houses as permitted uses. 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 zoning conditions required the developer to widen Bradley Lake Lane from the Spring Hill Farms entrance to the entrances of the proposed subdivision, submit a transportation impact study, and provide a 35-ft Type 'C' landscape buffer when adjacent to existing residential uses. With the notes on the concept plan and the recommended conditions, this proposal meets the zoning conditions.

C. The PR zoning allows consideration of up to 6 du/ac. The proposed subdivision has a density of 4.4 du/ac.

D. The PR zone established a maximum height for detached houses, but the Planning Commission establishes the maximum height for all other uses. Staff recommends a maximum height of 35 ft for the attached houses, consistent with the other residential houses in the general area.

##### 2) COMPREHENSIVE PLAN - IMPLEMENTATION POLICIES

A. The 19.79-acre site has approximately 17.18 acres in the HP (Hillside Protection) area. The slope analysis recommends a disturbance budget of 11.25 acres in the HP area, and this proposal disturbs approximately 12.8 acres. Staff is recommending a condition that the grading in the HP area be no more than the proposed 12.8 acres. This is consistent with Policy 7, which encourages development practices that conserve and connect natural features and habitat.

B. The proposed two-story attached residential structures with pitched roofs and landscape screening around the east, west, and south boundaries, is consistent with Policy 2, ensuring that development is sensitive to existing community character.

##### 3) COMPREHENSIVE PLAN - FUTURE LAND USE MAP

A. The subject property is located in the SR (Suburban Residential) and HP (Hillside Protection) place types. The SR place type recommends single-family residential as a "primary use" and attached residential as a "secondary use."

B. The recommended condition that attached houses have a maximum height of 35 ft is consistent with the SR place type recommendation that they be of the scale of a single-family home. The proposed townhouses are two-story with pitched roofs.

##### 4) KNOXVILLE - FARRAGUT - KNOX COUNTY GROWTH POLICY PLAN

A. The property is within the Urban Growth Boundary. The purposes of the Urban Growth Boundary designation are to encourage a reasonably compact pattern of development, promote expansion of the Knoxville and Knox County economy, offer a wide range of housing choices, and coordinate the actions of the public and private sectors, particularly with regard to 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.

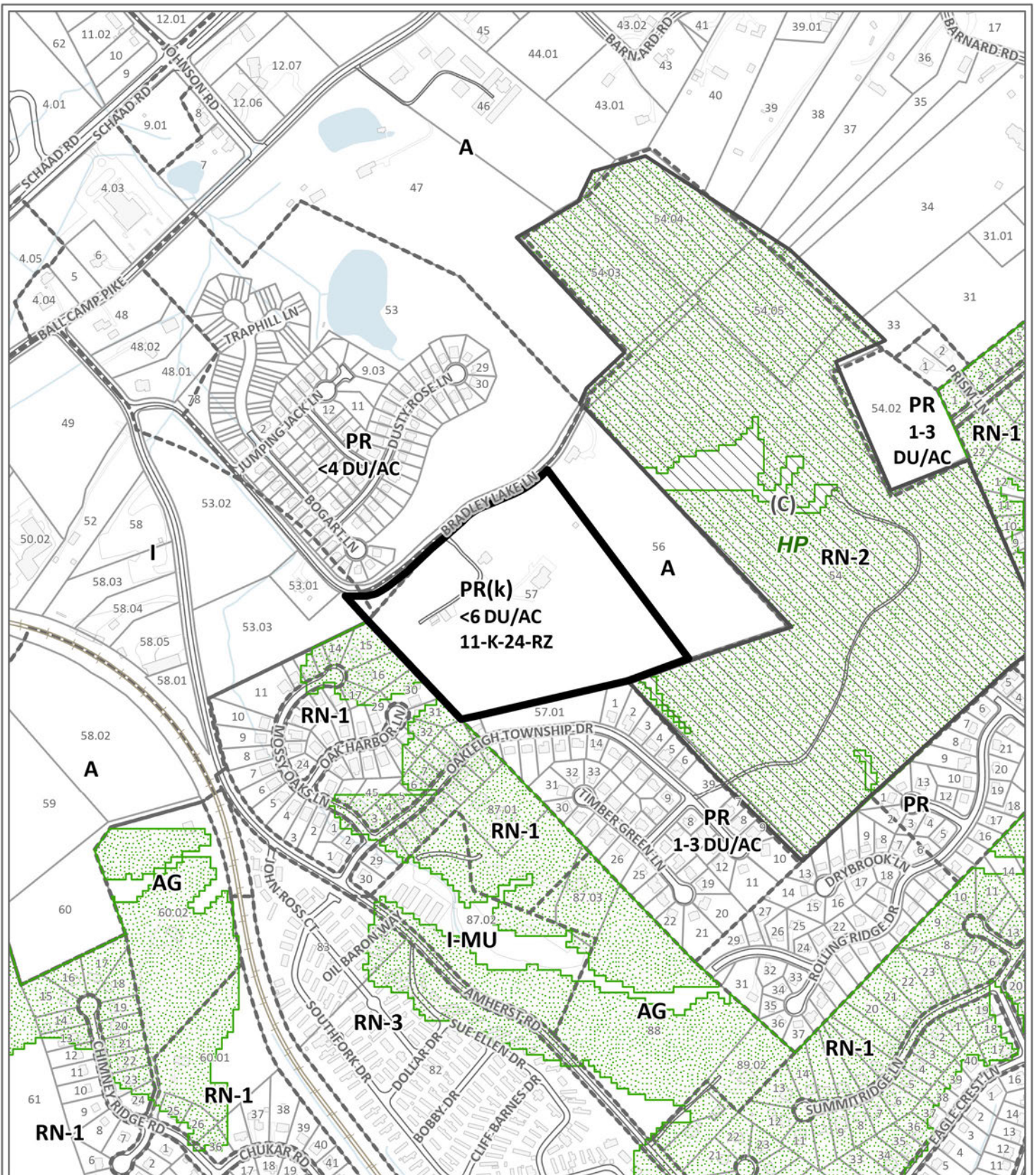
**ESTIMATED STUDENT YIELD:** 24 (public school children, grades K-12)

Schools affected by this proposal: Amherst 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.

The Planning Commission's approval or denial of this development plan request is final, unless the action is appealed either to the Board of Zoning Appeals or to a court of competent jurisdiction within thirty (30) days of the decision being appealed (Knox County, Tennessee Code of Ordinances, Appendix A, Zoning, 6.50.08).



# CONCEPT PLAN / DEVELOPMENT PLAN

3-SI-25-C / 3-K-25-DP

Petitioner: Mesana Investments, LLC



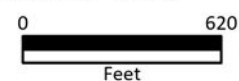
Attached and detached residential subdivision in PR(k) (Planned Residential) <6 DU/AC, A (Agricultural), I (Industrial)

Original Print Date: 2/5/2025

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

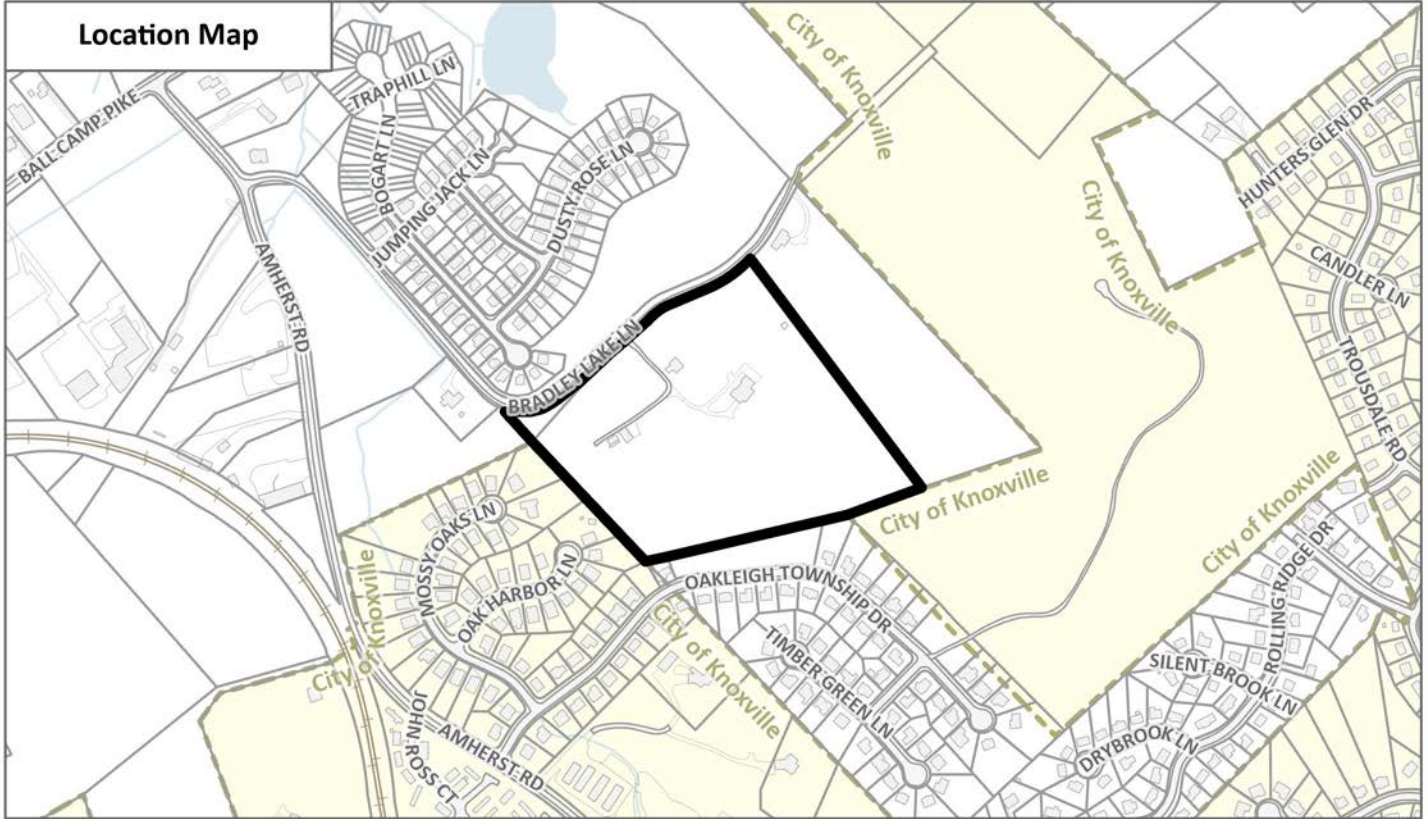
Map No: 92

Jurisdiction: County



## Exhibit A. Contextual Images

Location Map



Aerial Map

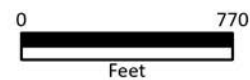


CONTEXTUAL MAPS 1

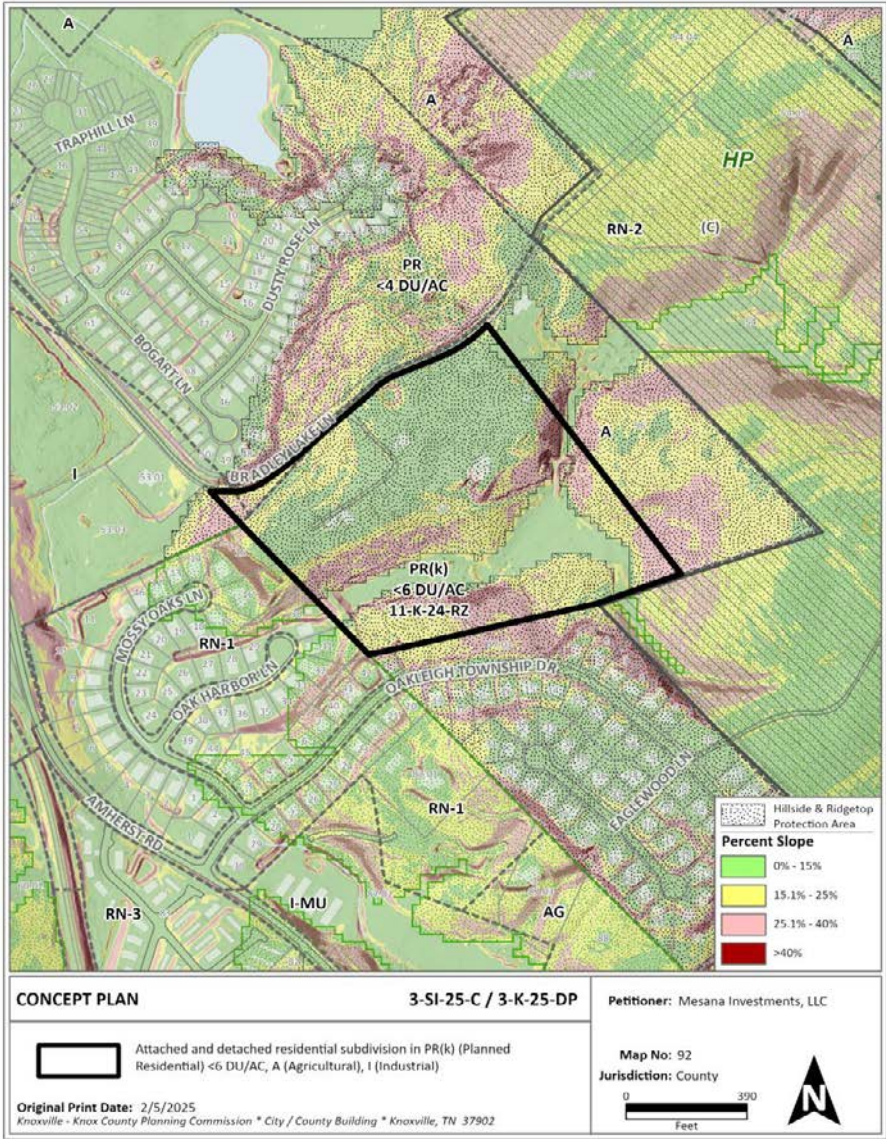
3-SI-25-C / 3-K-25-DP



Case boundary



CATEGORY	ACRES	RECOMMENDED DISTURBANCE BUDGET (Percent)	DISTURBANCE AREA (Acres)
Total Area of Site	20.27		
Non-Hillside	3.09	N/A	
0-15% Slope	7.70	100%	7.70
15-25% Slope	5.68	50%	2.84
25-40% Slope	3.30	20%	0.66
Greater than 40% Slope	0.51	10%	0.05
Ridgetops			
Hillside Protection (HP) Area	17.18	Recommended disturbance budget within HP Area (acres)	11.25
		Percent of HP Area	65.5%



CONCEPT PLAN

U.E.I. PROJECT NO. 2411046

2921 BRADLEY LAKE LANE

SITE ADDRESS: 2921 BRADLEY LAKE LANE, KNOXVILLE, TENNESSEE 37921  
TAX MAP: 92, PARCEL: 57 & PART OF 53



LOCATION MAP

DEVELOPER:

MESANA INVESTMENTS, LLC  
P.O. BOX 11315  
KNOXVILLE, TN 37939



SITE ENGINEER:  
URBAN ENGINEERING, INC.  
CHRIS SHARP  
10330 HARDIN VALLEY RD, #201  
KNOXVILLE, TENNESSEE 37932  
(865) 966-1924

SPECIFICATIONS

EXCEPT WHERE DIRECTED OTHERWISE BY THE PLANS, WORKMANSHIP AND MATERIAL (BUT NOT MEASUREMENT AND PAYMENT) FOR THIS PROJECT SHALL BE IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS AND STANDARDS.

- ELECTRICAL - AS DIRECTED BY KNOXVILLE UTILITIES BOARD
- GAS - AS DIRECTED BY KNOXVILLE UTILITIES BOARD
- WATER & SEWER - AS DIRECTED BY KNOXVILLE UTILITIES BOARD
- TELEPHONE - AS DIRECTED BY AT&T
- CABLE - AS DIRECTED BY COMCAST
- SITE DEVELOPMENT - KNOX COUNTY STANDARDS AND SPECIFICATIONS

SHEET INDEX

TITLE

TITLE SHEET

KEY SHEET / TYPICAL SECTION

SITE PLAN

ROAD PROFILES

PRELIMINARY GRADING PLANS

SHEET

C-0

C-1

C-2 & C-3

C-4 & C-5

C-6 & C-7

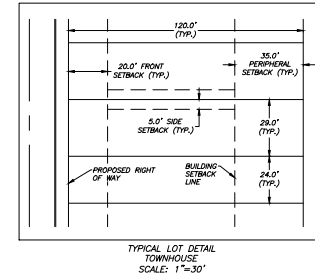
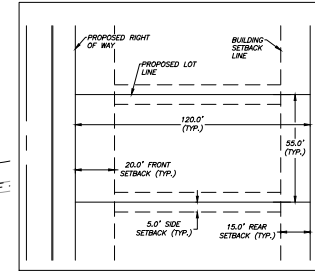
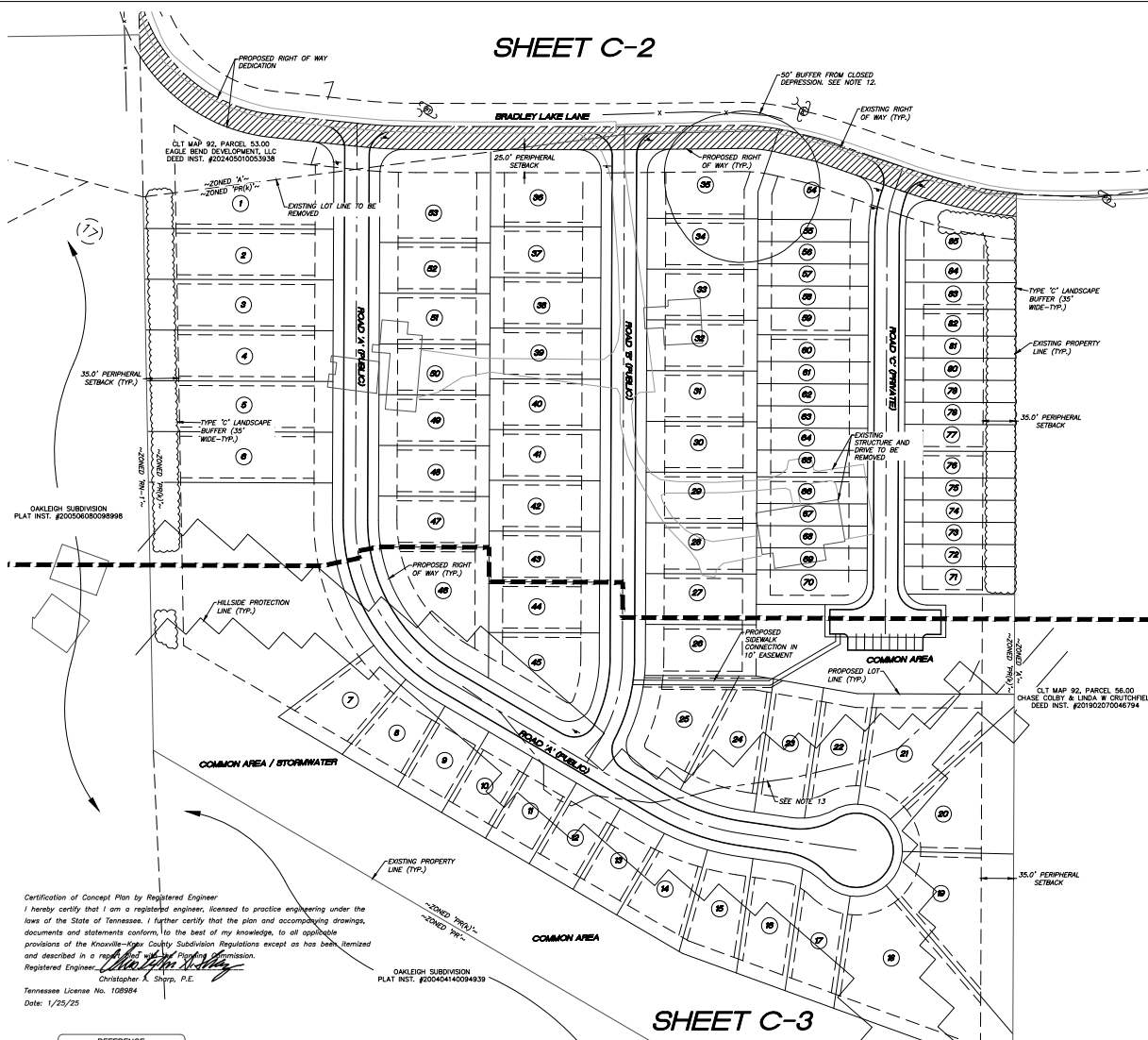


Revised: 3/5/2025

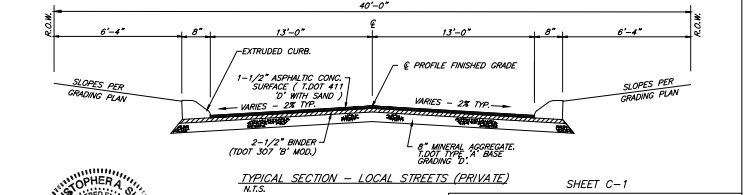
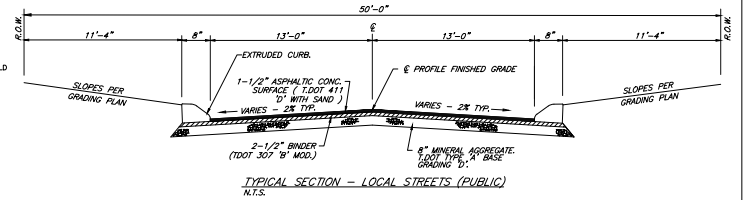
MPC FILE# 3-SI-25-C/3-K-25-DP

4	3/5/25	SUBMITTAL 4
3	2/26/25	SUBMITTAL 3
2	2/18/25	SUBMITTAL 2
ISSUE NO.	DATE	DESCRIPTION

# SHEET C-2



- SITE PLAN NOTES:**
- 082057 IS ZONED "PRN" <6 DU/AC. REQUIRED BUILDING SETBACKS ARE AS FOLLOWS:  
FRONT: 20'  
REAR: 15'  
SIDE: 5', UNLESS BETWEEN ATTACHED DWELLINGS, IN WHICH CASE THE SETBACK IS ZERO (0) FEET.  
REFER TO FILE # 11-K-24-RZ FOR CONDITIONS OF REZONING.
  - THE PORTION OF 082053 IS ZONED "A". SETBACKS ARE AS FOLLOWS:  
FRONT: 40'  
REAR: 35'
  - THE LOCATIONS OF ALL UNDERGROUND UTILITIES SHOWN HEREON ARE APPROXIMATE AND ARE BASED ON FIELD LOCATION OF VISIBLE STRUCTURES SUCH AS CATCH BASINS, MANHOLES, WATER VALVES, ETC., AND COMPILING INFORMATION FROM PLANS SUPPLIED BY VARIOUS UTILITY COMPANIES AND GOVERNMENT AGENCIES. THE CONTRACTOR SHALL NOTIFY IN WRITING ALL UTILITY COMPANIES AND GOVERNMENT AGENCIES AND ALSO CALL TENN ONE-CALL PRIOR TO ANY EXCAVATION WORK TO VERIFY INFORMATION SHOWN AND DETERMINE THE LAYOUT OF THE IRRIGATION SYSTEM AND IF ADDITIONAL IMPROVEMENTS MAY EXIST.
  - HORIZONTAL COORDINATES ARE TENNESSEE STATE PLANE, VERTICAL DATUM IS NAVD83.
  - ALL WORK SHALL BE IN ACCORDANCE WITH KNOX COUNTY'S SPECIFICATIONS FOR SITE DEVELOPMENT.
  - THE CURRENT TOTAL AREA OF THE DEVELOPMENT IS 18.4 ACRES (IN PR). 0.39-ACRE (IN A).
  - THE DEVELOPMENT PROPOSES 85-UNITS (4.4 UNITS PER ACRE).
  - A HOMEOWNERS ASSOCIATION SHALL BE ESTABLISHED TO ADDRESS MAINTENANCE OF THE COMMON AREAS.
  - 10' UTILITY AND DRAINAGE EASEMENTS SHALL BE RESERVED ALONG ALL EXTERIOR BOUNDARY LINES AND PUBLIC RIGHT OF WAY. 5' UTILITY AND DRAINAGE EASEMENTS SHALL BE RESERVED ALONG ALL INTERIOR LOT LINES EXCEPT WHERE UNDER BUILDINGS.
  - THE TOTAL AREA OF THE PROPERTY COVERED BY HILLSIDE PROTECTION IS 16.3 ACRES.
  - SEE SHEET C-1 FOR LOCAL STREET TYPICAL SECTION.
  - PROPOSED OPEN SPACE (INCLUDING EASEMENTS, & AREAS WITHIN STORM WATER DETENTION AREAS) = 3.55+ ACRES (17.3%).
  - GEOTECHNICAL TESTING SHALL BE REQUIRED TO REMOVE THE 50' BUFFER.
  - A PARTIAL BLUE LINE APPEARS ON KIDS. A HYDROLOGIC DETERMINATION MAY BE REQUIRED TO DETERMINE WHETHER OR NOT THE FEATURE REQUIRES BUFFERING.
  - BRADLEY LAKE LANE SHALL BE WIDENED TO 30' OF PAVEMENT FROM JUMPING JACK LANE TO ROAD "C" (APPROX. 1,680 LF.) WITH A POTENTIAL 5' SIDEWALK. THE DESIGN IS TO BE REVIEWED AND APPROVED BY KCEPW DURING THE DESIGN PHASE.



Revised: 3/5/2025

MPC FILE# 3-SI-25-C/3-K-25-DP

REVISION	DATE	DESCRIPTION	BY
3	3/3/25	SUBMITTAL 4	CAS
2	2/26/25	SUBMITTAL 3	CAS
1	2/18/25	SUBMITTAL 2	CAS

<b>SITE PLAN - OVERALL</b> <b>2921 BRADLEY LAKE LANE</b> SITE ADDRESS: 2921 BRADLEY LAKE LANE (37921)	
DIST. NO. W6 CLT MAP 92 SCALE: 1"=60'	KNOX CO., TN PARCEL 57 & PART OF 53 JUNE 25, 2022
DEVELOPER: MESANA INVESTMENTS, LLC P.O. BOX 11315 KNOXVILLE, TN 37939	
URBAN ENGINEERING, INC. 10330 HARDIN VALLEY RD, #201 KNOXVILLE, TENNESSEE 37932 (865) 966-1924	
DWG. CLM	DWG. NO. 2411046

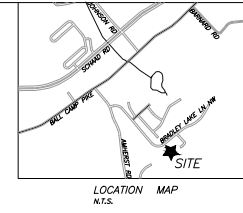
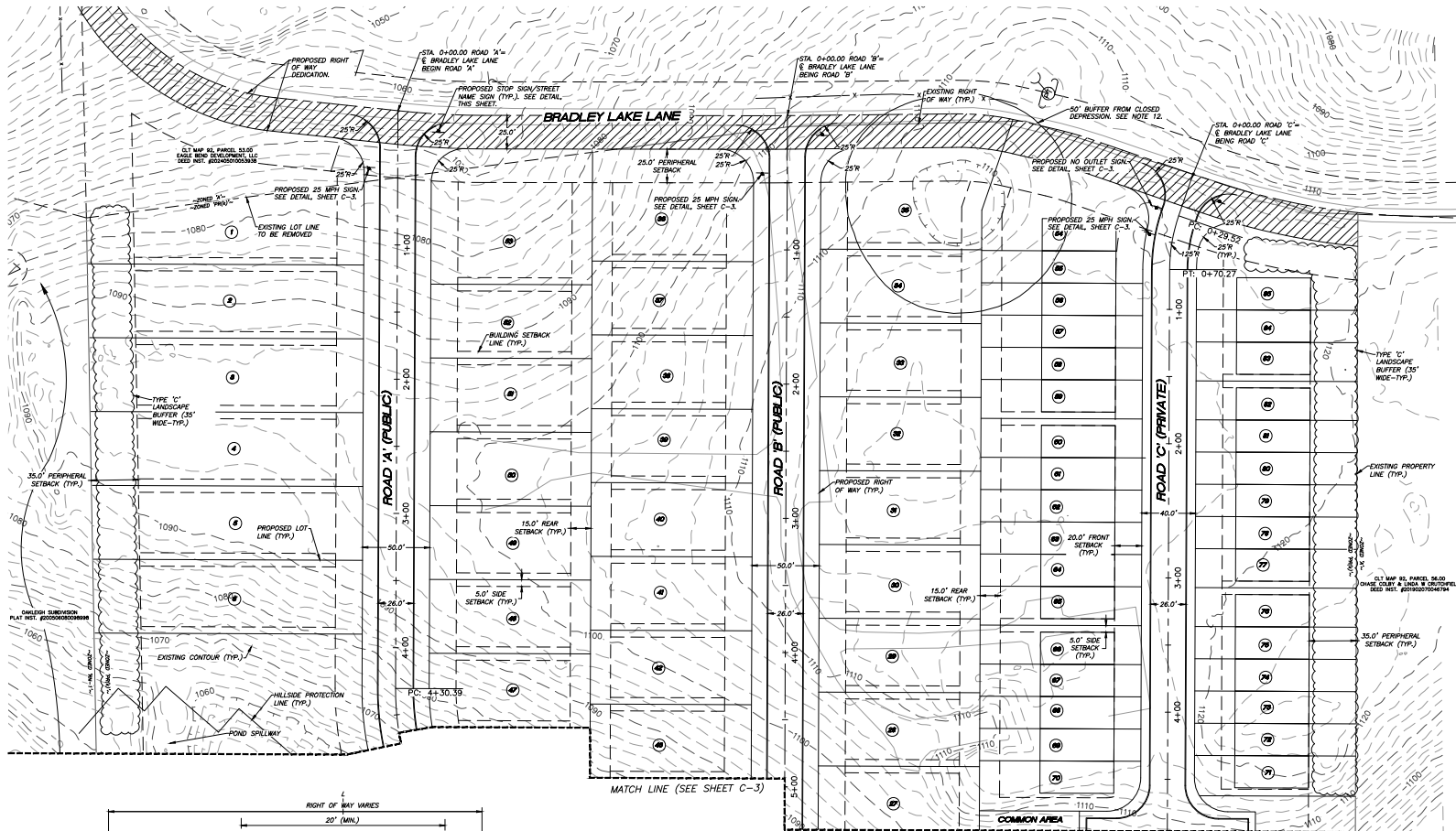
Certification of Concept Plan by Registered Engineer  
I hereby certify that I am a registered engineer, licensed to practice engineering under the laws of the State of Tennessee. I further certify that the plan and accompanying drawings, documents and statements conform, to the best of my knowledge, to all applicable provisions of the Knoxville-Jefferson County Subdivision Regulations except as has been itemized and described in a separate sheet of this registration submission.  
Registered Engineer: *Christopher A. Shopp, P.E.*  
Christopher A. Shopp, P.E.  
Tennessee License No. 108984  
Date: 1/25/25

REFERENCE:  
DEED INST. 202108300017512

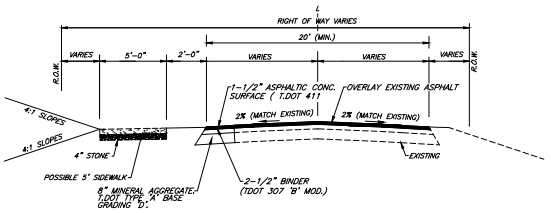
ALL WORKMANSHIP AND MATERIALS SHALL BE PER KNOX COUNTY STANDARD SPECIFICATIONS FOR SITE DEVELOPMENT PERMITS.

- VARIANCE / ALTERNATIVE DESIGN STANDARDS:**
- INCREASE THE CENTERLINE GRADE FROM 1% TO 2% AT THE FOLLOWING INTERSECTIONS:  
• ROAD A AT BRADLEY LAKE  
• ROAD B AT BRADLEY LAKE  
• ROAD C AT BRADLEY LAKE  
• ROAD D AT ROAD A
  - REDUCE RIGHT OF WAY WIDTH FROM 50' TO 40' (ROAD C-PRIVATE).
  - REDUCE THE REQUIRED STREET FRONTAGE TO 24'.
  - REDUCE THE CENTERLINE RADIUS FROM 250' TO 200' BETWEEN STATIONS 4+35.39 AND 6+35.34 (ROAD A).
  - REDUCE THE CENTERLINE RADIUS FROM 250' TO 175' BETWEEN STATIONS 6+70.05 AND 6+80.01 (ROAD A).





- SITE PLAN NOTES:**
- 092057 IS ZONED "P(R)" <6 DU/AC. REQUIRED BUILDING SETBACKS ARE AS FOLLOWS:  
 FRONTAL: 20'  
 REAR/YERBY: BRADLEY LAKE LANE 25'  
 ALL OTHERS 35'  
 SIDE: 5' UNLESS BETWEEN ATTACHED DWELLINGS, IN WHICH CASE THE SETBACK IS ZERO (0) FEET.  
 REAR: 15'  
 \* REFER TO FILE # 11-K-24-RZ FOR CONDITIONS OF REZONING.  
 THE PORTION OF 092057 IS ZONED "X". SETBACKS ARE AS FOLLOWS:  
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  - HORIZONTAL COORDINATES ARE TENNESSEE STATE PLANE, VERTICAL DATUM IS NAVD83.
  - ALL WORK SHALL BE IN ACCORDANCE WITH KNOX COUNTY'S SPECIFICATIONS FOR SITE DEVELOPMENT.
  - THE CURRENT TOTAL AREA OF THE DEVELOPMENT IS 19.4 ACRES (IN PR), 0.39-ACRE (IN A).
  - THE DEVELOPMENT PROPOSES 85-UNITS (4.4 UNITS PER ACRE).
  - A HOMEOWNERS ASSOCIATION SHALL BE ESTABLISHED TO ADDRESS MAINTENANCE OF THE COMMON AREAS.
  - 10' UTILITY AND DRAINAGE EASEMENTS SHALL BE RESERVED ALONG ALL EXTERIOR BOUNDARY LINES AND PUBLIC RIGHT OF WAY. 5' UTILITY AND DRAINAGE EASEMENTS SHALL BE RESERVED ALONG ALL INTERIOR LOT LINES EXCEPT WHEN UNDER BUILDINGS.
  - THE TOTAL AREA OF THE PROPERTY COVERED BY HILLSIDE PROTECTION IS 16.3 ACRES.
  - SEE SHEET C-1 FOR LOCAL STREET TYPICAL SECTION.
  - PROPOSED OPEN SPACE (INCLUDING EASEMENTS, & AREAS WITHIN STORM WATER DETENTION AREAS) = 3.354 ACRES (11.3%).
  - GEOTECHNICAL TESTING SHALL BE REQUIRED TO REMOVE THE 90' BUFFER.
  - A PARTIAL BLUE LINE APPEARS ON KIDS, A HYDROLOGIC DETERMINATION MAY BE REQUIRED TO DETERMINE WHETHER OR NOT THE FEATURE REQUIRES BUFFERING.
  - BRADLEY LAKE LANE SHALL BE WIDENED TO 30' OF PAVEMENT FROM BRADLEY LAKE LANE TO ROAD "C" (APPROX. 1,560 L.F.) WITH A POTENTIAL 5' SIDEWALK. THE DESIGN IS TO BE REVIEWED AND APPROVED BY KCDPM DURING THE DESIGN PHASE.



TYPICAL SECTION BRADLEY LAKE LANE  
N.T.S.

REFERENCE:  
DEED INST. 20210830017512

Revised: 3/5/2025

MPC FILE# 3-SI-25-C/3-K-25-DP

ALL WORKMANSHIP AND MATERIALS SHALL BE PER KNOX COUNTY STANDARD SPECIFICATIONS FOR SITE DEVELOPMENT PERMITS.

REVISION	DATE	DESCRIPTION	BY
3	3/5/25	SUBMITTAL 4	CAS
2	2/26/25	SUBMITTAL 3	CAS
1	2/18/25	PER PLANNING / EIR COMMENTS	CAS

SHEET C-2

**SITE PLAN**

**2921 BRADLEY LAKE LANE**

SITE ADDRESS: 2921 BRADLEY LAKE LANE (37921)

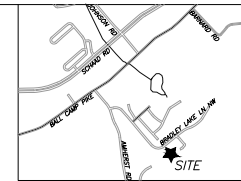
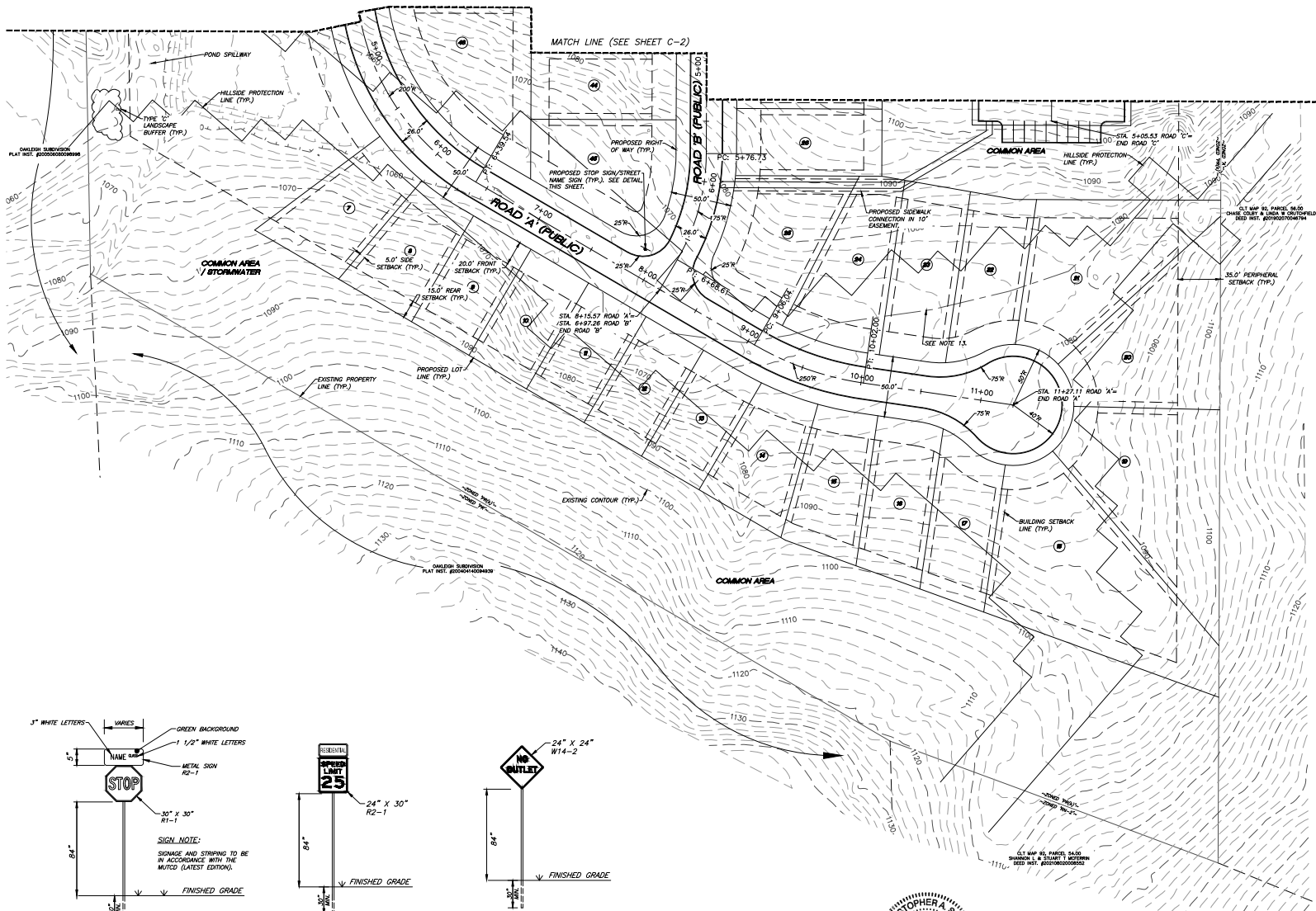
DIST. NO. W6 KNOX CO., TN  
CLT MAP 92 PARCEL 57 & PART OF 53  
SCALE: 1"=40' JUNE 25, 2022

DEVELOPER: MESANA INVESTMENTS, LLC  
P.O. BOX 11315  
KNOXVILLE, TN 37939

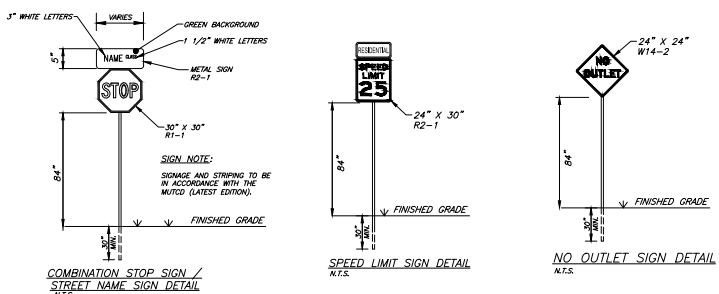
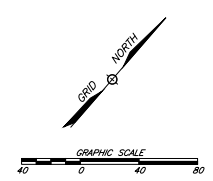
URBAN ENGINEERING, INC.  
10330 HARDIN VALLEY RD, #201  
KNOXVILLE, TENNESSEE 37932  
(865) 966-1924

DWG. NO. 2411048





- SITE PLAN NOTES:**
- 092027 IS ZONED "PR(Q)" <6 DU/AC. REQUIRED BUILDING SETBACKS ARE AS FOLLOWS:  
 FRONT: 40'  
 SIDE/REAR: BRADLEY LAKE LANE 25'  
 ALL OTHERS 35'  
 SIDE: 5', UNLESS BETWEEN ATTACHED DWELLINGS, IN WHICH CASE THE SETBACK IS ZERO (0) FEET.  
 REAR: 15'  
 REFER TO FILE # 11-K-24-RZ FOR CONDITIONS OF REZONING.  
 THE PORTION OF 092053 IS ZONED "A". SETBACKS ARE AS FOLLOWS:  
 FRONT: 40'  
 SIDE: 50'
  - THE LOCATIONS OF ALL UNDERGROUND UTILITIES SHOWN HEREON ARE APPROXIMATE AND ARE BASED ON FIELD LOCATION OF VISIBLE STRUCTURES SUCH AS CATCH BASINS, MANHOLES, WATER VALVES, ETC., AND COMING INFORMATION FROM PLANS SUPPLIED BY VARIOUS UTILITY COMPANIES AND GOVERNMENT AGENCIES. THE CONTRACTORS SHALL NOTIFY IN WRITING ALL UTILITY COMPANIES AND GOVERNMENT AGENCIES AND ALSO CALL TOWN ONE-CALL PRIOR TO ANY EXCAVATION WORK, TO VERIFY INFORMATION SHOWN AND DETERMINE THE LAYOUT OF THE IRRIGATION SYSTEM AND IF ADDITIONAL IMPROVEMENTS MAY EXIST.
  - HORIZONTAL COORDINATES ARE TENNESSEE STATE PLANE. VERTICAL DATUM IS NAVD83.
  - ALL WORK SHALL BE IN ACCORDANCE WITH KNOX COUNTY'S SPECIFICATIONS FOR SITE DEVELOPMENT.
  - THE CURRENT TOTAL AREA OF THE DEVELOPMENT IS 19.4 ACRES (IN PPL: 0.39-ACRE (IN A)).
  - THE DEVELOPMENT PROPOSES 85-UNITS (4.4 UNITS PER ACRE).
  - A HOMEOWNERS ASSOCIATION SHALL BE ESTABLISHED TO ADDRESS MAINTENANCE OF THE COMMON AREAS.
  - 10' UTILITY AND DRAINAGE EASEMENTS SHALL BE RESERVED ALONG ALL EXISTING BOUNDARY LINES AND PUBLIC RIGHT OF WAY. 5' UTILITY AND DRAINAGE EASEMENTS SHALL BE RESERVED ALONG ALL INTERIOR LOT LINES EXCEPT WHEN UNDER BUILDINGS.
  - THE TOTAL AREA OF THE PROPERTY COVERED BY HILLSIDE PROTECTION IS 16.3 ACRES.
  - SEE SHEET C-1 FOR LOCAL STREET TYPICAL SECTION.
  - PROPOSED OPEN SPACE (INCLUDING EASEMENTS, & AREAS WITHIN STORM WATER DETENTION AREAS) = 3.35± ACRES (17.3%).
  - GEOTECHNICAL TESTING SHALL BE REQUIRED TO REMOVE THE 50' BUFFER.
  - A PARTIAL BLUE LINE APPEARS ON KIDS A HYDROLOGIC DETERMINATION MAY BE REQUIRED TO DETERMINE WHETHER OR NOT THE FEATURE REQUIRES BUFFERING.
  - BRADLEY LAKE LANE SHALL BE WIDENED TO 20' OF PAVEMENT FROM JUMPING JACK LANE TO ROAD "C" (APPROX. 1,500 L.F.) WITH A POTENTIAL 5' SIDEWALK. THE DESIGN IS TO BE REVIEWED AND APPROVED BY KCEPW DURING THE DESIGN PHASE.



Revised: 3/5/2025  
**MPC FILE# 3-SI-25-C/3-K-25-DP**

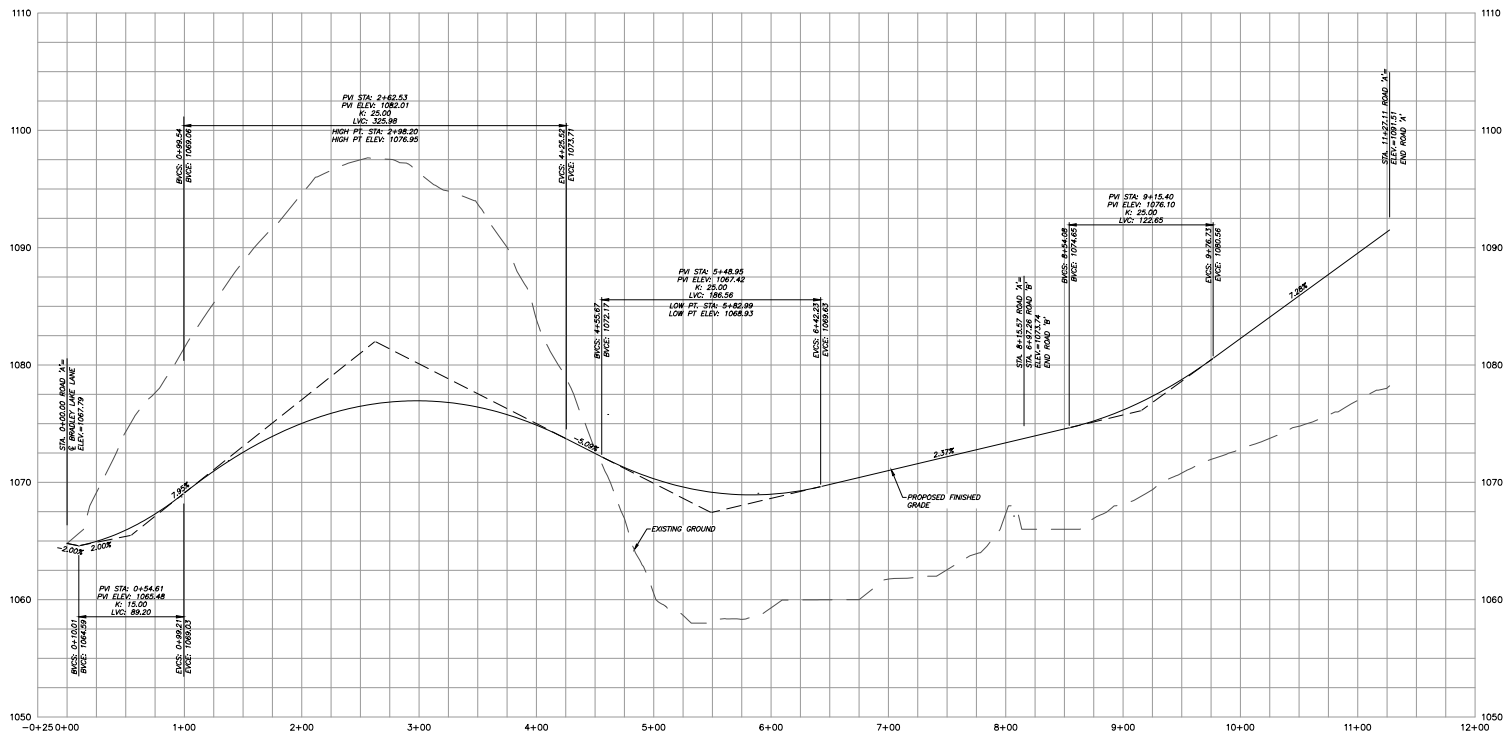
<b>SHEET C-3</b> SITE PLAN <b>2921 BRADLEY LAKE LANE</b> SITE ADDRESS: 2921 BRADLEY LAKE LANE (37921)	
DIST. NO. W6 CLT MAP 92 SCALE: 1"=40'	KNOX CO., TN. PARCEL 57 & PART OF 53 JUNE 25, 2022
DEVELOPER: <b>MESANA INVESTMENTS, LLC</b> P.O. BOX 11315 KNOXVILLE, TN 37939	
URBAN ENGINEERING, INC. 10330 HARDIN VALLEY RD, #201 KNOXVILLE, TENNESSEE 37932 (865) 966-1924	
DWG: CLM	DWG. NO. 2411046

REVISION	DATE	DESCRIPTION	BY
3	3/5/25	SUBMITTAL 4	CAS
2	2/26/25	SUBMITTAL 3	CAS
1	2/18/25	PER PLANNING / EIR COMMENTS	CAS



REFERENCE:  
 DEED INST. 202108300017512

ALL WORKMANSHIP AND MATERIALS SHALL BE PER KNOX COUNTY STANDARD SPECIFICATIONS FOR SITE DEVELOPMENT PERMITS.



PROFILE VIEW: ROAD 'A'  
 1"=50' (HORIZONTAL)  
 1"=5' (VERTICAL)

Revised: 3/5/2025

MPC FILE# 3-SI-25-C/3-K-25-DP

REVISION	DATE	DESCRIPTION	BY
2	2/26/25	SUBMITTAL 3	CAS
1	2/17/25	GENERAL REVISIONS	CAS

SHEET C-4

ROAD 'A' PROFILE

2921 BRADLEY LAKE LANE

SITE ADDRESS: 2921 BRADLEY LAKE LANE (37921)

DIST. NO. W6

KNOX CO., TN

CLT MAP 92

PARCEL 57.00

SCALE: AS NOTED

JUNE 25, 2022

DEVELOPER:

MESANA INVESTMENTS, LLC  
 P.O. BOX 11315  
 KNOXVILLE, TN 37939



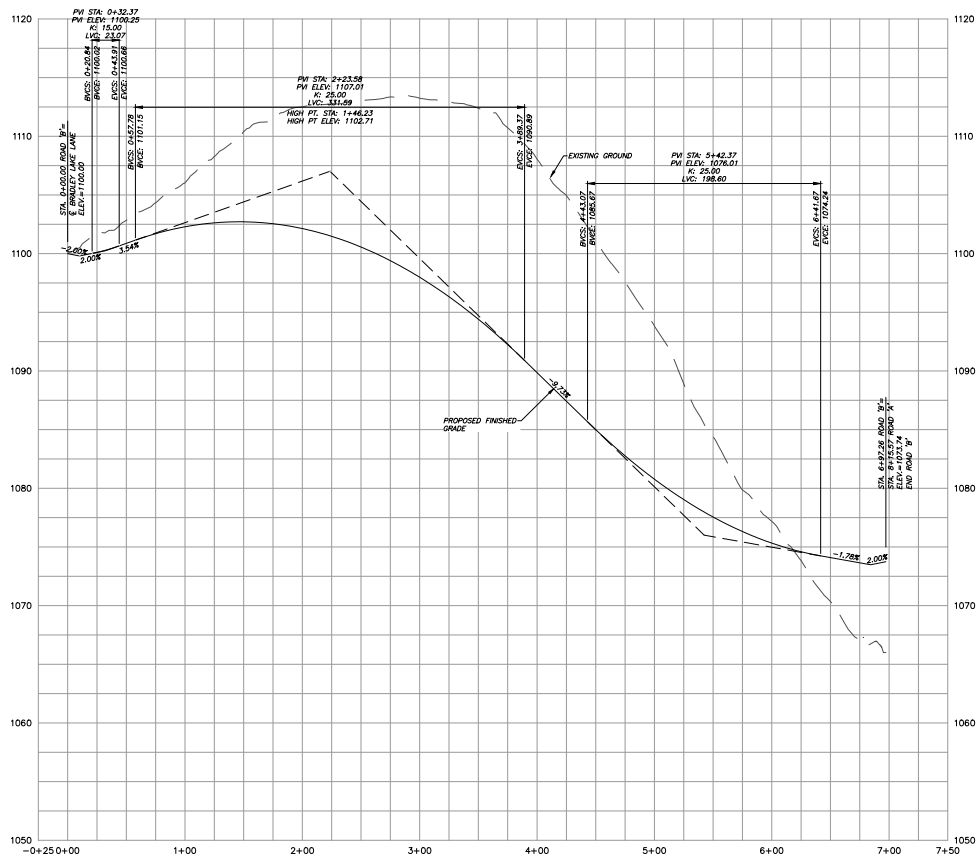
URBAN ENGINEERING, INC.  
 10330 HARDIN VALLEY RD., #201  
 KNOXVILLE, TENNESSEE 37932  
 (865) 966-1924

DWG: CLM

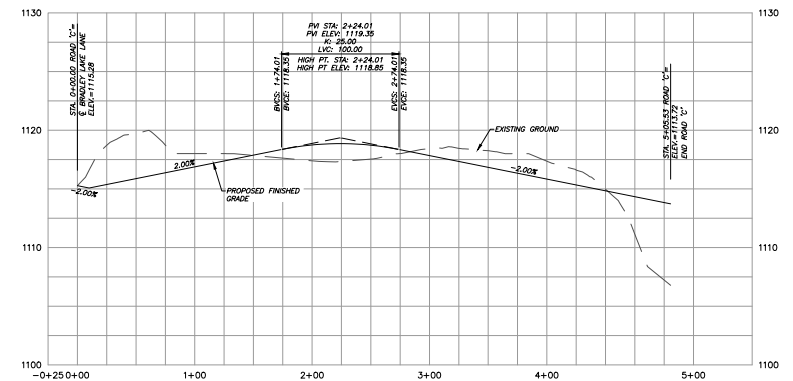
CHK: CAS

DWG. NO. 2411046





**PROFILE VIEW: ROAD 'B'**  
1"=50' (HORIZONTAL)  
1"=5' (VERTICAL)



**PROFILE VIEW: ROAD 'C'**  
1"=50' (HORIZONTAL)  
1"=5' (VERTICAL)



Revised: 3/5/2025

MPC FILE# 3-SI-25-C/3-K-25-DP

REVISION	DATE	DESCRIPTION	BY
2	2/26/25	SUBMITTAL 3	CAS
1	2/17/25	GENERAL REVISIONS	CAS



SHEET C-5

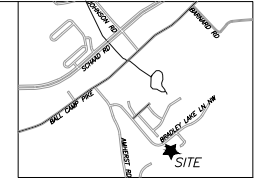
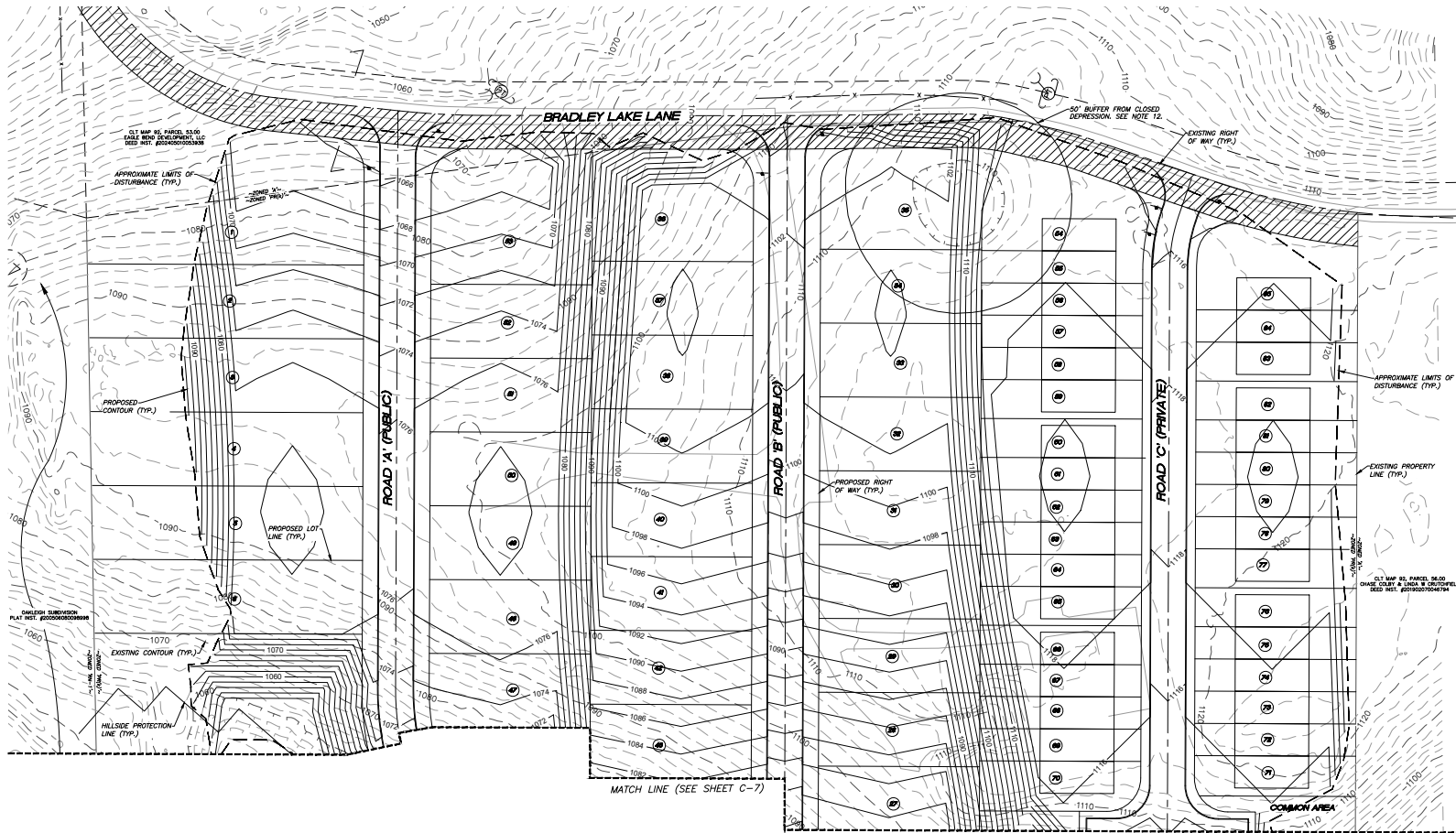
ROADS 'B' AND 'C' PROFILES  
**2921 BRADLEY LAKE LANE**  
SITE ADDRESS: 2921 BRADLEY LAKE LANE (37921)

DIST. NO. W6 KNOX CO., TN  
CLT MAP 92 PARCEL 57 & PART OF 53  
SCALE: AS NOTED JUNE 25, 2022

DEVELOPER: MESANA INVESTMENTS, LLC  
P.O. BOX 11315  
KNOXVILLE, TN 37939

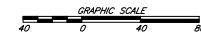
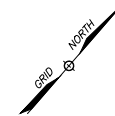
URBAN ENGINEERING, INC.  
10330 HARDIN VALLEY RD., #201  
KNOXVILLE, TENNESSEE 37932  
(865) 966-1924

DWG. NO. 2411046



LOCATION MAP  
N.T.S.

GRADING PLAN NOTE:  
1. APPROXIMATELY 12.8-ACRES TO BE DISTURBED IN HP.



Revised: 3/5/2025

MPC FILE# 3-SI-25-C/3-K-25-DP

REFERENCE:  
DEED INST. 20210830017512

ALL WORKMANSHIP AND MATERIALS SHALL BE PER  
KNOX COUNTY STANDARD SPECIFICATIONS  
FOR SITE DEVELOPMENT PERMITS.

REVISION	DATE	DESCRIPTION	BY
2	2/26/25	SUBMITTAL 3	CAS
1	2/18/25	ADDED PER EIR COMMENTS	CAS

SHEET C-6

PRELIMINARY GRADING PLAN

2921 BRADLEY LAKE LANE

SITE ADDRESS: 2921 BRADLEY LAKE LANE (37921)

DIST. NO. W6

KNOX CO., TN

CLT MAP 92

PARCEL 57.00

SCALE: 1"=40'

JUNE 25, 2022

DEVELOPER:

MESANA INVESTMENTS, LLC  
P.O. BOX 11315  
KNOXVILLE, TN 37939



URBAN ENGINEERING, INC.  
10330 HARDIN VALLEY RD., #201  
KNOXVILLE, TENNESSEE 37932  
(865) 966-1924

DWG. NO.

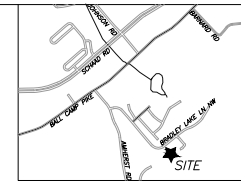
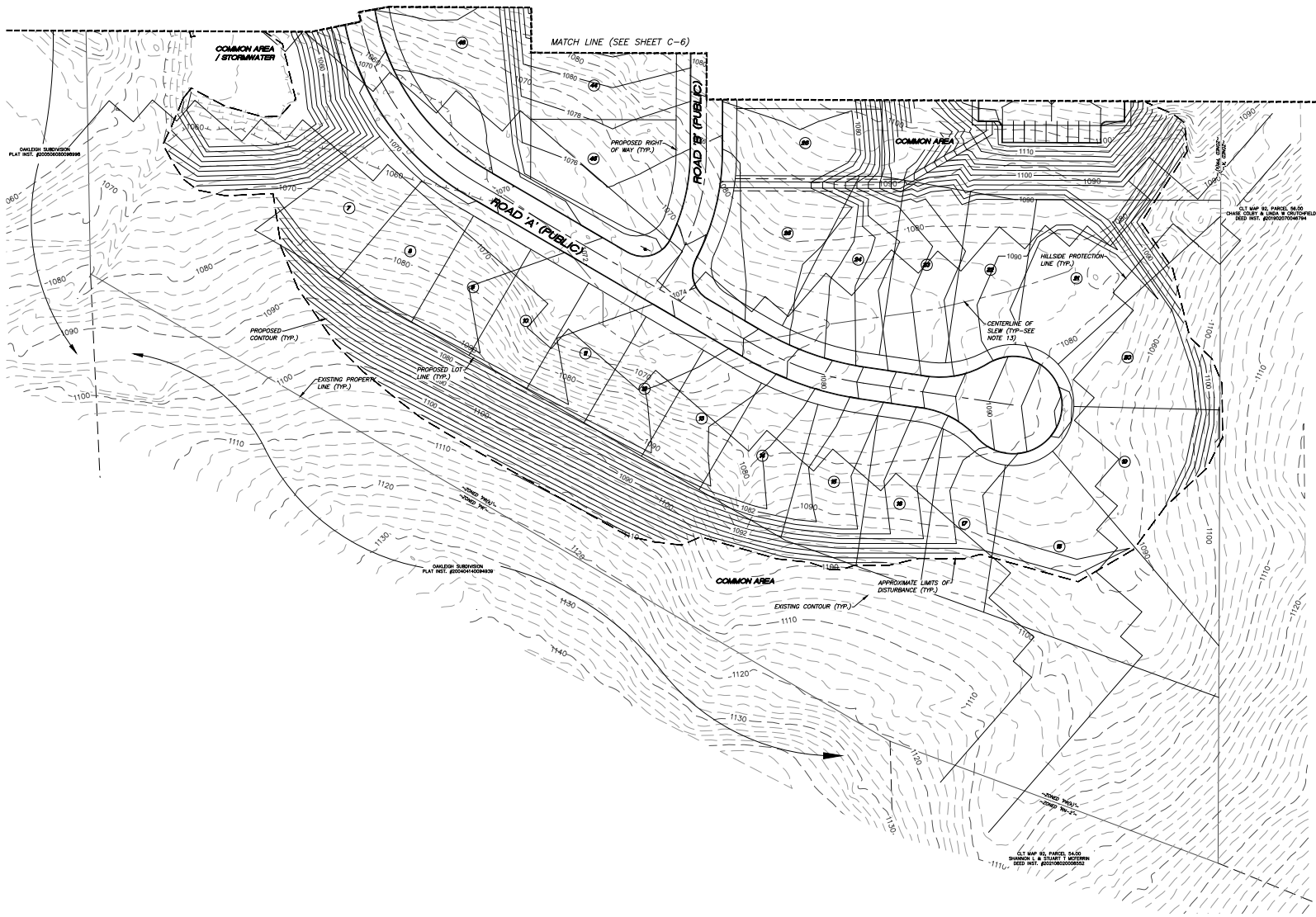
CHK. CAS

DATE

BY

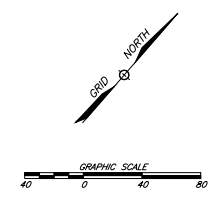
DWG. NO. 2411046





LOCATION MAP  
N.T.S.

GRADING PLAN NOTE:  
1. APPROXIMATELY 12.8-ACRES TO BE DISTURBED IN HP.



SHEET C-7

PRELIMINARY GRADING PLAN	
<b>2921 BRADLEY LAKE LANE</b>	
SITE ADDRESS: 2921 BRADLEY LAKE LANE (37921)	
DIST. NO. W6	KNOX CO., TN.
CLT MAP 92	PARCEL 57.00
SCALE: 1"=40'	JUNE 25, 2022
DEVELOPER: MESANA INVESTMENTS, LLC	
P.O. BOX 11315	
KNOXVILLE, TN 37939	
URBAN ENGINEERING, INC.	
10330 HARDIN VALLEY RD., #201	
KNOXVILLE, TENNESSEE 37932	
(865) 966-1924	
DWN: CLM	CHK: CAS
DWG. NO. 2411046	

Revised: 3/5/2025

MPC FILE# 3-SI-25-C/3-K-25-DP

REFERENCE:  
DEED INST. 202108300017512

ALL WORKMANSHIP AND MATERIALS SHALL BE PER  
KNOX COUNTY STANDARD SPECIFICATIONS  
FOR SITE DEVELOPMENT PERMITS.

REVISION	DATE	DESCRIPTION	BY
2	2/26/25	SUBMITTAL 3	CAS
1	2/18/25	ADDED PER EIR COMMENTS	CAS



3-SI-25-C / 3-K-25-DP  
2/28/2025



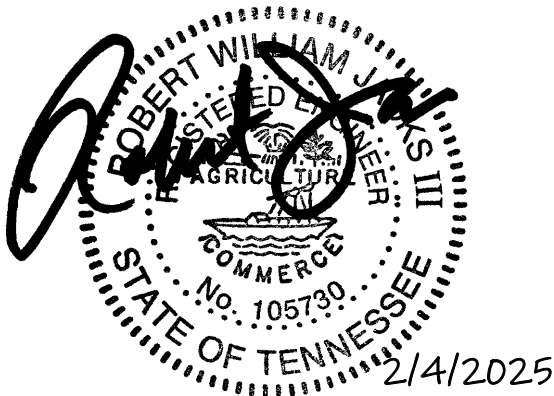


# Transportation Impact Study 2921 Bradley Lake Lane Subdivision Knox County, Tennessee



Updated February 2025

Prepared for:  
Mesana Investments, LLC  
P.O. Box 11315  
Knoxville, TN 37939



3-SI-25-C / 3-K-25-DP  
TIS Version 2  
2/4/2025

## CONCLUSIONS & RECOMMENDATIONS

The following is an overview of recommendations to minimize the transportation impacts of the 2921 Bradley Lake Lane Subdivision on the adjacent transportation system while attempting to achieve an acceptable traffic flow and safety level.



**Amherst Road at Bradley Lake Lane:** This intersection is projected to operate with average to reasonable vehicle delays and minimal vehicle queues for all movements.

- 1a) A separate southbound left-turn lane on Amherst Road at Bradley Lake Lane is not warranted based on the projected 2028 volumes strictly based on the trips generated by the future residences in the second phase of Spring Lake Farms Subdivision and 2921 Bradley Lake Lane Subdivision. However, due to the estimated thru trips generated by the Maddox Companies sports facility at the intersection, by 2028, the intersection is projected to experience volumes that warrant the need for a southbound left-turn lane on Amherst Road at Bradley Lake Lane.

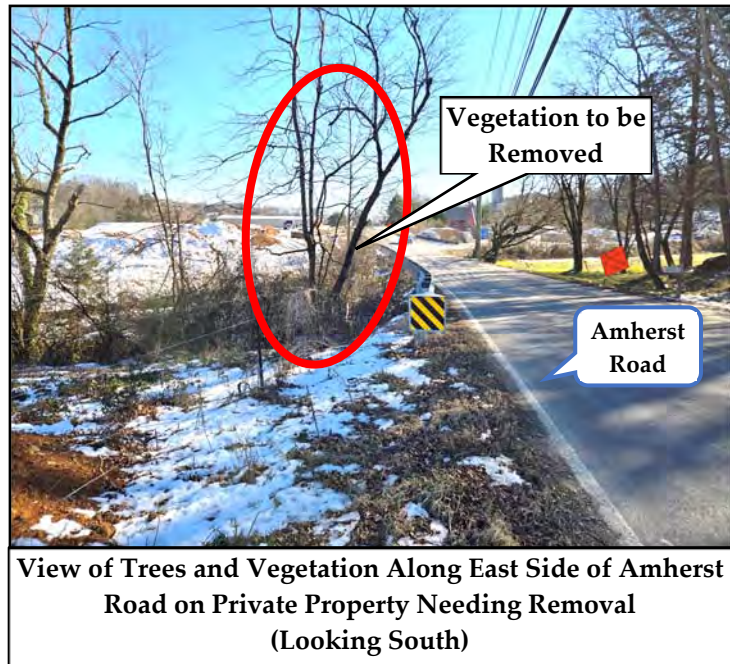
Since the results produced in the study are based on a land use with limited data in the ITE's Trip Generation Manual and may overestimate the number of trips that the sports facility could generate, it is recommended that the need for a southbound left-turn lane be re-examined in 2028 or when all three developments are entirely constructed and occupied. This re-examination would need to conduct new traffic counts at the intersection to determine if the trips generated by all three developments and the background traffic meet the threshold for a turn lane. The developer and the County should agree to a Memorandum of Understanding (MOU) that if the future volumes at the intersection during the re-examination meet the turn lane threshold, plans can be made to provide a southbound left-turn lane on Amherst Road at Bradley Lake Lane.

- 1b) Future landscaping or signage must not impact the intersection sight distance from Bradley Lake Lane at Amherst Road.
- 1c) Based on a posted speed limit of 30 mph on Amherst Road, the required intersection sight distance is 300 feet for exiting left and right-turning vehicles. The existing sight distances from Bradley Lake Lane at Amherst Road were estimated visually to be adequate in both directions. However, several items to the south of this intersection,

including a horizontal curve on Amherst Road, vegetation, and existing fence posts along the eastern side of the road, hinder further distance viewing to the south.

Due to these items reducing the potential amount of sight distance to the south and its benefits if it were extended, it is recommended that an existing tree and vegetation

along the east side of Amherst Road be removed. This tree and vegetation are on private property and along an existing creek. The Maddox Companies own this property, and the site plan for their proposed sports facility does not show any activity in this area. Nonetheless, this property owner should be approached to determine if these items can be removed and maintained in future conditions. Knox County should facilitate this recommendation since it affects motorists on the public roadway, and the tree and vegetation are on private property.





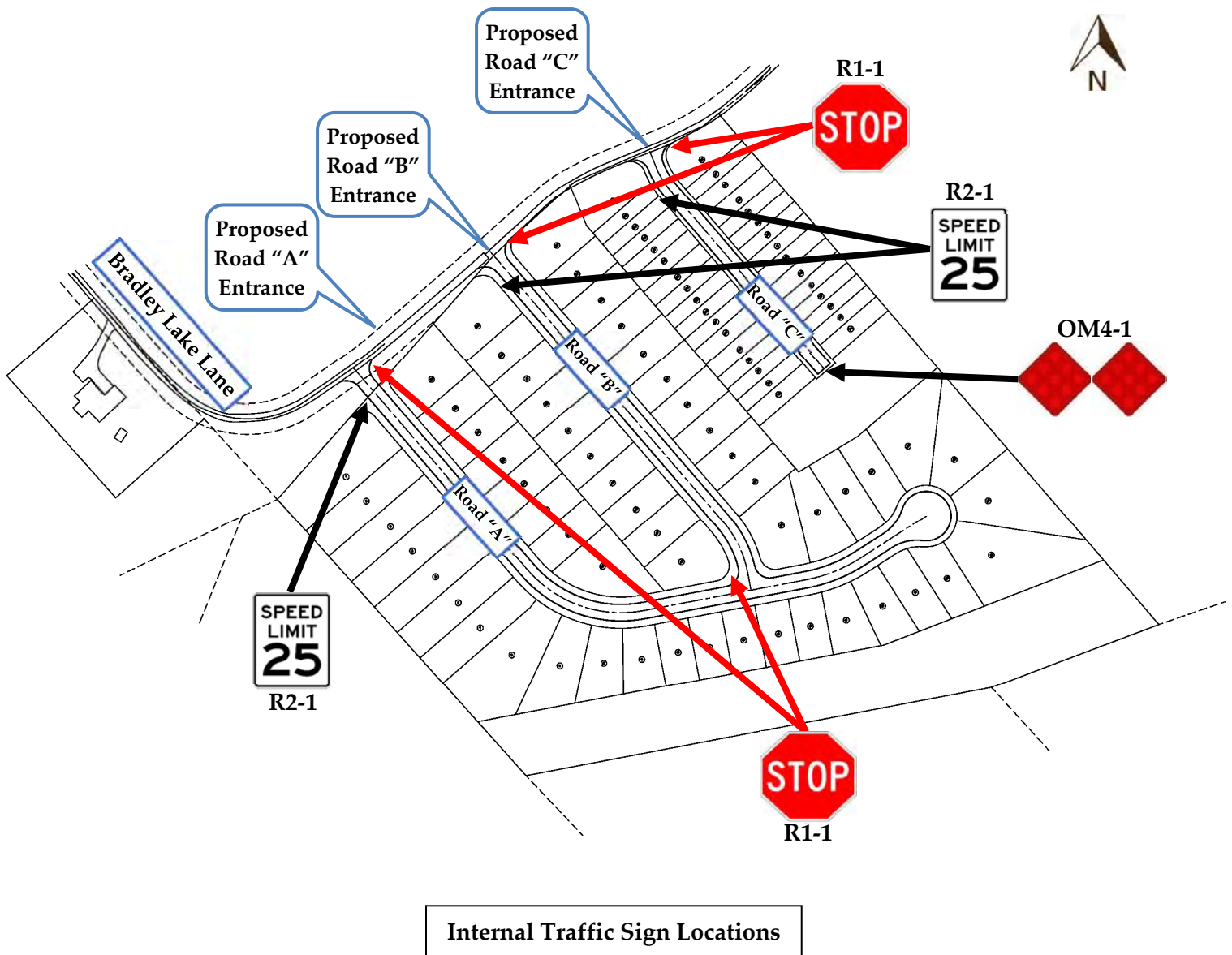
**Bradley Lake Lane at Proposed Road “A”, “B”, and “C” Entrances:** While not specifically calculated, these intersections are expected to operate with little to no vehicle delays and queues due to the near-zero conflicting volumes on Bradley Lake Lane.

- 2a) It is recommended that a Stop Sign (R1-1) be installed and a 24” white stop bar be applied to the Proposed Entrance approaches at Bradley Lake Lane. The stop bars should be applied a minimum of 4 feet away from the edge of Bradley Lake Lane and placed at the desired stopping point that maximizes the sight distance.
- 2b) Intersection sight distance from the Proposed Entrances at Bradley Lake Lane must not be impacted by future landscaping, signage, or vegetation.
- 2c) Based on an assumed maximum speed limit of 30 mph on Bradley Lake Lane, the required intersection sight distance is 300 feet for exiting vehicles at the proposed entrances. The existing sight distances were estimated visually to be inadequate in at least one direction at all of the proposed entrance locations based on an assumed maximum of 30 mph. Sight distance to the east and west from the proposed entrance locations is currently limited due to vegetation on both sides of Bradley Lake Lane and horizontal curves. This vegetation will need to be removed during construction, which will likely allow for more than 300 feet of sight distance at each entrance location. The site designer must ensure that the intersection sight distances are accounted for and provided in the design plans for all three proposed entrances.



**2921 Bradley Lake Lane Subdivision Internal Roads:** The layout plan shows three new streets, as shown in Figure 3.

- 3a) A 25-mph Speed Limit Sign (R2-1) is recommended to be posted near the beginning of the Proposed Entrance roads off Bradley Lake Lane.
- 3b) A Stop Sign (R1-1) with a 24" white stop bar is recommended to be installed at the internal road intersection, as shown in the image below. Dual end-of-roadway object markers (OM4-1) should be installed at the end of subdivision Road "C". A hammerhead turnaround for vehicles should also be provided at the end of Road "C".



- 3c) Five proposed lots in the subdivision are adjacent to and south of Bradley Lake Lane. All of these lots will have access to either Road "A", "B", or "C" and should not be allowed direct access to Bradley Lake Lane.
- 3d) Sight distance at the new internal intersections must not be impacted by new signage, parked cars, or future landscaping. With a proposed speed limit of 25-mph in the development, the required internal intersection sight distance is 250 feet. The site designer should ensure that this internal sight distance length is met.
- 3e) 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 subdivision residents.
- 3f) All drainage grates and covers for the residential development must be pedestrian and bicycle-safe.
- 3g) The internal roads in the proposed subdivision will have long, straight road segments. Straight road segments encourage higher vehicle speeds. It is recommended that the civil site designer consider including traffic calming measures on these internal roads, such as speed humps or tables. Specifics regarding this recommendation should be discussed in the design phase with Knox County Engineering.
- 3h) All road and intersection elements should be designed to AASHTO and Knox County specifications and guidelines to ensure proper operation.



**Other Transportation Issues:** Several other transportation items must be addressed to develop the 2921 Bradley Lake Lane Subdivision. A few of these are unrelated and not contributable to development and are included in the following:

4a) As part of approving the rezoning of the development property to Planned Residential (PR), Knox County included an amendment that Bradley Lake Lane “be expanded to 20 ft at the expense of developer”. Based on this amendment, it is recommended that Bradley Lake Lane be widened to 20 feet from Jumping Jack Lane to just past the Proposed Road “B” Entrance, approximately 1,550 feet. The pavement width of this section of Bradley Lake Lane was measured every 150 feet and indicated current asphalt widths that fluctuated between 9.5 and 12 feet.

4b) As discussed, a warning sign at the sharp horizontal curve on Bradley Lake Lane for travel towards Amherst Road has been damaged, fallen from its post, and is lying on the side of the road. However, the advisory 15 mph plaque on the post remains. This sign, a Turn Sign (W1-1R), should be reinstalled and the post straightened. To adequately warn motorists heading in the opposite direction towards the proposed subdivision, a Turn Sign (W1-1L) with an advisory 15 mph plaque (W13-1P) on a single post should also be installed on Bradley Lake Lane in advance of the sharp horizontal curve.



4c) Furthermore, due to the steepness of the cut slope produced by the Spring Lake Farm Subdivision construction, consideration should be given to providing a guardrail on the north side of Bradley Lake Lane, just east and up to the sharp horizontal curve. This cut slope is 2:1 and has an elevation change of approximately 25 feet from the top to the base at its maximum. The toe of the cut slope ends in the backyard of three single-family detached



houses in the first phase of Spring Lake Farms Subdivision. Details regarding this road widening and the potential need for a guardrail should be discussed further with Knox County Engineering and Public Works.

- 4d) Due to several off-road crashes with objects on Amherst Road near Bradley Lake Lane, it is recommended that the County review the identified individual crash reports to determine if the narratives or other information could provide further insight as to the cause of these crashes and whether if there are identifiable modifications that could reduce these types of crashes. The crash data on Amherst Road near Bradley Lake Lane indicated a couple of crashes due to collisions with ditches. This section of Amherst Road currently has evidence of vehicles off-tracking the pavement. The crash data review may indicate that the edges of Amherst Road could be supplemented with additional pavement to reduce vehicles leaving the



**Vehicle Off-Tracking on Amherst Road near Bradley Lake Lane (Looking South)**

roadway. At a minimum, due to the successive reverse curves on Amherst Road near Bradley Lake Lane, posting Reverse Turn (W1-3) signs in advance of these curves in both directions on Amherst Road may be beneficial. Reverse Turn (W1-3) signs would be appropriate in this situation since there are two changes in the roadway alignment in opposite directions and are separated by a tangent distance of less than 600 feet, as described in the Manual on Uniform Traffic Control Devices (MUTCD).

- 4e) Knox County is recommended to install a 25-mph Speed Limit Sign (R2-1) on Bradley Lake Lane for vehicles turning off Amherst Road and traveling towards the 2921 Bradley Lake Lane Subdivision and the Spring Lake Farms Subdivision. This speed would be appropriate due to Bradley Lake Lane's sharp horizontal curve (with an already posted advisory speed of 15 mph) and residential nature.

## Type “C” Screen: Partial

**APPROPRIATE LOCATION:** Between parking lots and public streets; boundaries of industrial and office development

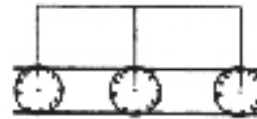
**NOTE:** Landscape buffer strips should be a minimum of 8 feet in width, and sown with grass or ground cover for their full width, allowing for mulch at the base of plantings.

- A row of small evergreen trees

TREE HEIGHT  
Installed: 6 ft.  
Mature: 15 ft.



Maximum 20' Centers

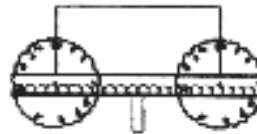


- A row of large broad leaf evergreen trees with a 3 ft. high wall or hedge (deciduous species of similar size & form could be used for every second tree)

TREE HEIGHT  
Installed: 8 ft.  
Mature: 40 ft.



Maximum 50' Centers



SHRUB HEIGHT  
Installed: 2 ft.  
Mature: 3 ft.



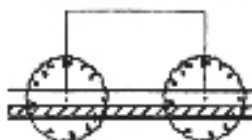
Maximum 3' Centers

- A row of evergreen conifers with a 3 ft. high earth berm or solid fence or wall

TREE HEIGHT  
Installed: 6 ft.  
Mature: 15 ft.



Maximum 40' Centers



### INTRODUCTION

Landscape screening reduces the impact of intense development upon adjacent land uses by providing visual separation, reducing the transmission of glare and air pollution, and limiting access. Screening also promotes the aesthetic appeal of a neighborhood and promotes higher property values.

This series of design guidelines defines several types of landscape screen. Each type is applicable to a certain intensity of conflict between adjacent land uses. Each screen type is illustrated by several planting schemes with an equivalent height, density and opacity of landscaping.

Planning uses these guidelines to illustrate desirable levels of screening appropriate to various site planning situations. Creative alternatives which achieve a comparable effect are encouraged.

The contents of these guidelines are advisory and are intended to supplement, but not replace, the requirements of the Knoxville Zoning Ordinance and the Knox County Zoning Ordinance.

# 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.***

**Chris Sharp**

Digitally signed by Chris Sharp  
Date: 2025.01.23 14:58:17  
-05'00'

Christopher Sharp

1/23/25

Signature

Printed Name

Date

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 centerline grade from 1% to 2% at the following intersections: A at Bradley Lake, B at Bradley Lake, C at Bradley Lake, B at A To create more positive drainage.

**Approval required by:** Planning Commission ☐ Engineering ☒

**Engineering supports the alternative design standard requested**

**(to be completed during review process):** YES ☒ NO ☐

**Engineering Comments:**

Approve SE

### 2. ALTERNATIVE DESIGN STANDARD REQUESTED:

Reduce the centerline radius from 250' to 200' (Sta. 4+30.39 to 6+39.54 Road A) to minimize grading.

**Approval required by:** Planning Commission ☒ Engineering ☐

**Engineering supports the alternative design standard requested**

**(to be completed during review process):** YES ☒ NO ☐

**Engineering Comments:**

Approve SE

### 3. ALTERNATIVE DESIGN STANDARD REQUESTED:

Reduce the centerline radius from 250' to 175' (Sta. 5+76.73 to 6+68.61 Road B) to create a perpendicular intersection.

**Approval required by:** Planning Commission ☒ Engineering ☐

**Engineering supports the alternative design standard requested**

**(to be completed during review process):** YES ☒ NO ☐

**Engineering Comments:**

Approve SE

#### 4. ALTERNATIVE DESIGN STANDARD REQUESTED:

Reduce the required street frontage from 25' to 24' to accommodate townhomes.

Approval required by: Planning Commission ☒ Engineering ☐

Engineering supports the alternative design standard requested

(to be completed during review process): YES ☒ NO ☐

Engineering Comments:

Approve SE

#### 5. ALTERNATIVE DESIGN STANDARD REQUESTED:

Reduce the private road rights of way from 50' to 40' (private R.O.W.) to condense grading.

Approval required by: Planning Commission ☐ Engineering ☒

Engineering supports the alternative design standard requested

(to be completed during review process): YES ☒ NO ☐

Engineering Comments:

Approve SE



# Development Request

## DEVELOPMENT

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

## SUBDIVISION

- ☒ Concept Plan  
☐ Final Plat

## ZONING

- ☐ Plan Amendment  
☐ SP ☐ PA  
☐ Rezoning

Mesana Investments, LLC

Option Holder

Applicant Name

Affiliation

1/21/24

3/13/25

File Number(s)

Date Filed

Meeting Date (if applicable)

## 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

Chris Sharp

Urban Engineering, Inc.

Name

Company

10330 Hardin Valley Road, Suite 201

Knoxville

TN

37932

Address

City

State

ZIP

(865) 966-1924

Phone

Email

## CURRENT PROPERTY INFO

M.R. Rhodes

2921 Bradley Lake Lane (37921)

Property Owner Name (if different)

Property Owner Address

Property Owner Phone

2921 Bradley Lake Lane (37921)

092 057

Property Address

Parcel ID

KUB

KUB

Sewer Provider

Water Provider

Septic (Y/N)

## COMMUNITY ENGAGEMENT

Sign and return the **Public Notice & Community Engagement** form with this application.

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). We require applicants to acknowledge their role in this process.

**DEVELOPMENT REQUEST**

- ☒ Development Plan   ☐ Use on Review / Special Use   ☐ Hillside Protection COA  
☐ Residential   ☐ Non-Residential

Related City Permit Number(s)

Home Occupation (specify) \_\_\_\_\_

Other (specify) \_\_\_\_\_

**SUBDIVISION REQUEST**

2921 Bradley Lake Lane

Related Rezoning File Number

Proposed Subdivision Name

84

☐ Combine Parcels   ☒ Divide Parcel

Total Number of Lots Created

☐ Other (specify) \_\_\_\_\_☐ Attachments / Additional Requirements**ZONING REQUEST**☐ Zoning Change

Proposed Zoning

Pending Plat File Number

☐ Plan Amendment Change

Proposed Plan Designation(s)

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  
☐ Amendment Request (*Comprehensive Plan*)

**ADDITIONAL REQUIREMENTS**

- ☐ Use on Review / Special Use (*Concept Plan*)  
☐ Traffic Impact Study  
☐ COA Checklist (*Hillside Protection*)

Fee 1	Total
Fee 2	
Fee 3	

**AUTHORIZATION**

By signing below, I declare under penalty of perjury the foregoing is true and correct: 1) He/she/it is the owner of the property AND 2) The application and all associated materials are being submitted with his/her/its consent. If there are additional owners or options holders, each additional individual must sign the Property Owners/Option Holders Form.

Applicant Signature

RAY KROOKS  
Print Name / AffiliationJAN 23, 2025  
DateProperty Owner  
Phone Number (865) 693-3356

Email

1-23-2025

Property Owner Signature

Scott Davis  
Please Print

Date Paid



# Public Notice and Community Engagement

## 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.

## 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).

### 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.*

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

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

Date to be Posted

Date to be Removed

Applicant Signature

Applicant Name

Date

FILE NUMBER