Planning KNOXVILLE KNOX COUNTY	

SUBDIVISION REPORT -CONCEPT/DEVELOPMENT PLAN

FILE #: 11-SH-24-C	AGENDA ITEM #: 62
11-K-24-DP	AGENDA DATE: 11/14/2024
SUBDIVISION:	0 ASHEVILLE HIGHWAY
APPLICANT/DEVELOPER:	MESANA INVESTMENTS, LLC (OPTION HOLDER)
OWNER(S):	Vaulton Family Holdings, LLC
TAX IDENTIFICATION:	62 02308, 02309 View map on KGI
JURISDICTION:	County Commission District 8
STREET ADDRESS:	0 ASHEVILLE HWY
LOCATION:	North side of Asheville Hwy, east of N Wooddale Rd
GROWTH POLICY PLAN:	Urban Growth Area (Outside City Limits)
FIRE DISTRICT:	Rural Metro Fire
WATERSHED:	Sinking East Creek
APPROXIMATE ACREAGE:	10.24 acres
ZONING:	PR (Planned Residential) up to 12 du/ac
EXISTING LAND USE:	Agriculture/Forestry/Vacant Land
PROPOSED USE:	Attached residential subdivision
SURROUNDING LAND USE AND ZONING:	North: Agriculture/forestry/vacant land - A (Agricultural) South: Public/quasi-public land (church), Industrial, agriculture/forestry/vacant land - A (Agricultural), CA (General Business) East: Rural residential - CA (General Business), A (Agricultural) West: Agriculture/forestry/vacant land - CA (General Business), A (Agricultural)
NUMBER OF LOTS:	114
SURVEYOR/ENGINEER:	Chris Sharp, P.E. Urban Engineering, Inc.
ACCESSIBILITY:	Access is via Asheville Highway, a median-divided major arterial with 4 lanes within a right-of-way that varies from 138 to 143 ft.
 SUBDIVISION VARIANCES REQUIRED: 	VARIANCE: 1. Reduce the K value of Road D from 25 to 20 between stations 0+93.00 and 3+96.90.
	ALTERNATIVE DESIGN STANDARDS - PLANNING COMMISSION APPROVAL None
	ALTERNATIVE DESIGN STANDARDS - ENGINEERING APPROVAL 1. Reduce the right of way width from 50' to 40' (Public Roads A and B). 2. Increase the intersection grade from 1% to 2% at all intersections of

STAFF RECOMMENDATION:

Approve the variance to reduce the K value of Road D from 25 to 20 between stations 0+93.00 and 3+96.90, based on the following evidence of hardships.

A. The property is relatively steep at the location of Road D, with a maximum elevation change of 22 ft from the middle of the road to its northern terminus.

B. The steepest portion of this property coincides with the location of the request, and the topography is unique to the property.

C. Approval of the variance is not anticipated to be detrimental to public safety, health, or welfare because this is a private road with no through connection. The Knox County Department of Engineering and Public Works recommends approval of this variance based on the justification provided by the applicant.

Approve the concept plan subject to 10 conditions.

1) Connecting to sanitary sewer and meeting other relevant utility provider requirements.

2) Providing street names that are consistent with the Uniform Street Naming and Addressing System within Knox County (County Ord. 91-1-102).

3) Implementing the recommendations of the 0 Asheville Highway Subdivision Traffic Impact Study (Ajax Engineering, 10/30/2024) as required by Knox County Engineering and Public Works and the Tennessee Department of Engineering during the design plan phase. See Exhibit B.

4) Entering into a Memorandum of Understanding 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).
5) 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, 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.

6) Installing a landscape buffer along the southern boundary, as shown on the plan. The detailed landscape plan must be submitted to Planning staff for review and approval before grading permits are issued.
7) Meeting all applicable requirements of the Knox County Zoning Ordinance, including but not limited to ensuring that lots 1, 19, 106, and 111 meet all setback requirements.

8) Meeting all applicable requirements of the Knox County Department of Engineering and Public Works.
9) Before certification of the final plat for the subdivision, establishing 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.

10) Providing suitable turnarounds meeting American Association of State Highway and Transportation Officials (AASHTO) standards on Road B and Road E, as required by section 3.04.K.3 of the Subdivision Regulations, with review and approval by Knox County Engineering and Public Works during the design plan phase.

Approve the development plan for a residential subdivision of up to 111 attached dwellings in the PR zone, subject to 2 conditions.

1) Meeting all applicable requirements of the Knox County Zoning Ordinance, including but not limited to, ensuring that lots 1, 19, 106, and 111 meet all setback requirements.

2) The maximum height of the attached dwellings shall be 35 feet.

COMMENTS:

The applicant is proposing to subdivide this 10.24-acre property consisting of two parcels into 111 lots for attached houses at a density of 10.84 du/ac. The Planning Commission approved the PR zone for this property in June of 2024 with a density up to 12 du/ac. The dwelling units are attached in different combinations, resulting in three duplexes and twenty townhouse structures of 3-6 units.

TRANSPORTATION IMPACT STUDY (TIS)

The TIS studied the impact of the additional traffic at the proposed access point on Asheville Highway and the intersections of Wooddale Road to the west and Cash Road to the east. A major recommendation of the study is to permit a median opening on Asheville Highway with an eastbound left-turn lane for the proposed development. The developer will need to apply for this permit and coordinate with TDOT regarding their specific requirements for this entrance and the recommended median opening design. Numerous

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recommendations were made for the proposed entrance and the internal roads of the subdivision. The study, however, recommended no improvement for the intersections at Wooddale Road and Cash Road, and suggested that TDOT should monitor the Wooddale Road intersection for further evaluation.

VARIANCE:

Vertical curves of a street are designed based on the Rate of Vertical Curvature, K, referred to as K value. K value expresses the abruptness of the grade change in a single value. For subdivisions in Knox County, section 3.04.1.4.b of the Subdivision Regulations requires a minimum K value of 25 for local streets. The property is relatively steep at the location of the variance request, which makes it challenging to meet the requirement for Road D. Staff recommends approval of the variance since this a private road with no through connectively to be used for internal circulation of the subdivision only. The Knox County Department of Engineering and Public Works also recommends approval of this request.

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

1) ZONING ORDINANCE

PR (Planned Residential) with up to 12 du/ac:

A. The PR zone allows attached dwellings as a permitted use. The administrative procedures for the PR zone require the Planning Commission to approve the development plan before permits can be issued (Article 5, Section 5.13.15).

B. The proposed density of 10.84 du/ac is below the approved density of 12 du/ac.

C. With the recommend condition # 1, the site layout will conform to the lot size and setback requirements of the zone.

2) KNOX COUNTY COMPREHENSIVE PLAN - IMPLEMENTATION POLICIES

A. Create neighborhoods with a variety of housing types and amenities in close proximity (Policy 5). – The property is located within two miles of Carter Park and Carter Elementary, Carter High, and Sunnyview schools. B. Encourage development practices that conserve and connect natural features and habitat (Policy 7). – The development proposes a landscape screen along Asheville Highway. This is also consistent with the East Knox Community Plan which calls out to preserve and enhance the area's rural character and landscape.

3) FUTURE LAND USE MAP

A. The property has the CMU (Corridor Mixed-use) place type. Attached houses are recommended as "secondary uses" in the CMU place type.

B. Two-story townhouses with 20-ft front setbacks are consistent with the CMU place type's recommended building form.

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-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 not in opposition to any of these criteria.

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

Schools affected by this proposal: Sunnyview Pr/Chilhowee Int, Carter Middle, and Carter High.

• Potential new school population is estimated using locally-derived data on public school student yield generated by new housing.

• Students are assigned to schools based on current attendance zones as determined by Knox County Schools. Students may request transfers to different zones, and zone boundaries are subject to change.

• Estimates presume full build-out of the proposed development. Build-out is subject to market forces, and timing varies widely from proposal to proposal.

• Student yields from new development do not reflect a net addition of children in schools. Additions occur incrementally over the build-out period. New students may replace current population that ages through the system or moves from the attendance zone.

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).







O ASHEVILLE HIGHWAY

SITE ADDRESS: O ASHEVILLE HIGHWAY, KNOXVILLE, TENNESSEE 37924 CLT MAP 62, PARCELS 23.08, 23.09



LOCATION MAP - N.T.S.

DEVELOPER: EAGLE BEND DEVELOPMENT LLC 1920 EBENEZER ROAD KNOXVILLE, TN 37922



AND MATERIAL (BUT	SPECIFICATIONS SECTED OTHERWISE BY THE PLANS, WORKMANSHIP T NOT MEASUREMENT AND PAYMENTJ FOR THIS IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS
ELECTRICAL GAS WATER SEWER TELEPHONE	 AS DIRECTED BY KNOXVILLE UTILITIES BOARD AS DIRECTED BY ATAT
CABLE	- AS DIRECTED BY COMCAST

SITE DEVELOPMENT - KNOX COUNTY STANDARDS AND SPECIFICATIONS

SHEET INDEX

TITLE	<u>SHEET</u>
TITLE SHEET	C-0
KEY SHEET / TYPICAL SECTION	C-1
SITE PLAN	C-2 & C-3
ROAD PROFILES	C−4 & C−5
PRELIMINARY DRAINAGE PLAN	С-6
EXTERIOR ELEVATIONS	A3.4

Revised: 11/4/2024

MPC FILE# 11-SH-24-C/11-K-24-DP

Certification of Concept Pion by Registered Engineer I hereby certify that I on a registered engineer, itemate to practice argineering under the law of the State of Termansee, I interesting that the pion and accompanying drawing, documents and statements conform. Is the best of my knowledge, to it applicable provide the statement of the state of my knowledge, to it applicable indications and statements conform. In the best of my knowledge, to it applicable indications and statements and statements and the statement and statement to applicable the statement of the statement and statement to applicable the statement of the statement indications in the statement of the statement of the statement provide the statement of the statement of the statement of the statement provide the statement of the statement of the statement of the statement provide the statement of the s

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4	11/4/24	SUBMITTAL 4	
3	10/30/24	SUBMITTAL 3	
2	10/30/24 10/28/24	SUBMITTAL 2	
ISSUE NO.	DATE	DESCRIPTION	

SHEET C-0

















Variances

File No: 11-SH-24-C

The Planning Commission may reduce or otherwise vary the requirements of the Subdivision Regulations when it finds the hardship criteria are met. In granting such variances, the Planning Commission may attach and require whatever conditions it feels are necessary to secure the basic objectives of the varied regulations. Any variance granted by the Planning Commission shall be noted in its official minutes along with the justification for granting the variance (Subdivision Regulations, Section 1.05).

HARDSHIP CONDITIONS TO BE MET:

- 1 **Conditions Required:** Where the Planning Commission finds that extraordinary hardships or particular difficulties may result from the strict compliance with these regulations, they may, after written application, grant variations to the regulations, subject to specified conditions, so that substantial justice may be done and the public interest secured, provided that such variations shall not have the effect of nullifying the intent and purpose of these regulations or the comprehensive plan.
- 2 Evidence of Hardship Required: The Planning Commission shall not grant variations to these regulations if the purpose of the variation is solely for financial gain. The Planning Commission shall not grant variations to the Subdivision Regulations unless they make findings based upon the evidence presented to them in each specific case that the following hardships are met:
 - a. Because of the particular surroundings, shape, or topographical conditions of the specific property involved, a particular hardship to the owner would result, as distinguished from a mere inconvenience, if the strict letter of the regulations were adhered to.
 - b. The conditions upon which the request for a variation is based is unique to the property for which the variation is sought and is not applicable, generally, to other property, and has not been created by any person having an interest in the property.
 - c. The granting of the variation will not be detrimental to the public safety, health, or welfare, or injurious to other property or improvements in the neighborhood in which the property is located.

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: 2024.10.31 11:30:09	Christopher Sharp	10/31/24
Signature	Printed Name	Date

It is the applicant's responsibility to identify the hardship that would result, as distinguished from a mere inconvenience, if the strict letter of the regulations was adhered to. Each of the variance criteria must be addressed in the comments below with specific facts regarding the unique details of the property and/or project, as applicable.

1. VARIANCE REQUESTED:

Reduce the K value from 25 to 20 between stations 0+93.00 & 3+96.90 (Road D).

Specify the hardship that would result for each of the variance criteria:

A. Pertaining to the particular surroundings, shape, or topographical conditions of the subject property:

The property is relatively steep at the location of the request.

B. Pertaining to conditions unique to the property that are not applicable to other property and has not been created by any person having an interest in the property.

The vertical curve meets the requirements of AASHTO.

C. Pertaining to the granting of a variance will not be detrimental to public safety, health, or welfare, or injurious to other property or improvements in the neighborhood in which the property is located.

Granting the variance will not create an unsafe condition and will not negatively impact neighboring properties.

To be completed by the City or County Department of Engineering, as applicable:

Engineering supports the variance requested (to be completed during review process): YES \times NO \Box Engineering Comments:



Steve Elliott



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 S	Digitally signed by Chris Sharp Date: 2024.09.30 14:25:50 -04'00'	Christopher Sharp	9/30/24
Signature		Printed Name	Date
	Knoxville-Knox Count	y Planning KnoxPlanning.org	

Knoxville-Knox County Planning | KnoxPlanning.org 400 Main Street, Suite 403 | Knoxville, TN 37902 | 865.215.2500 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 all intersections.

Approval required by: Planning Commission

Engineering

Engineering supports the alternative design standard requested (to be completed during review process): YES XNO □ Engineering Comments: Stave Clivett

2. ALTERNATIVE DESIGN STANDARD REQUESTED:

Decrease the required right of way width from 50' to 40' (private roads).

Approval required by: Planning Commission

Engineering

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

Steve (Eliott

3. ALTERNATIVE DESIGN STANDARD REQUESTED:

Approval required by: Planning Commission □ Engineering □

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





Transportation Impact Study 0 Asheville Highway Subdivision Knox County, Tennessee



Revised October 2024

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



CONCLUSIONS & RECOMMENDATIONS

The following is an overview of recommendations to minimize the transportation impacts of the 0 Asheville Highway Subdivision on the adjacent transportation system while attempting to achieve an acceptable traffic flow and safety level. The recommendations also take into account the nearby non-related proposed residential subdivisions along Asheville Highway.



Asheville Highway at South and North Wooddale Road: This intersection currently operates with high vehicle delays in the existing AM and PM peak hours, particularly for the southbound approach of North Wooddale Road. These delays are expected to worsen if overall general growth on Asheville Highway increases in the future, even without adding generated trips from the proposed 0 Asheville Highway Subdivision and other non-related planned residential subdivisions included in the analyses. However, the vehicle queues were calculated to be short due to the minimal volumes on the side streets. It should be noted that when considerable vehicle delays are calculated for minor side streets, this does not always necessitate mitigation. If only one vehicle experiences a significant delay in attempting to enter a high-volume major street, mitigation is neither realistic nor cost-effective.

Subsequently, it is recommended that TDOT monitor this intersection for further evaluation. A fatal crash occurred at this intersection in 2021. While it appears that there have not been any recorded fatalities since then, the combination of the general future traffic growth, the large expanse of the intersection, the existing established need for flashing beacons, and the high side street vehicle delays, this intersection needs to be monitored for potential improvements. The side street volumes on South and North Wooddale Road are not expected to be substantial enough to meet volume-related warrant thresholds for a traffic signal. However, vehicle crashes may necessitate the need. Additionally, any future development on South or North Wooddale Road could significantly increase side street volumes to meet threshold warrants for a potential traffic signal.





<u>Asheville Highway at Cash Road</u>: This intersection is projected to operate with average vehicle delays and minimal vehicle queues. No specific recommendations are offered for this intersection.

The 0 Asheville Highway Subdivision was originally proposed without a median opening on Asheville Highway at the Proposed Entrance location. This arrangement would have required the future subdivision residents to perform U-turn movements at the upstream and downstream median openings at South and North Wooddale Road and Cash Road. However, one of the main factors in abandoning this and proposing a median opening at the Proposed Entrance was the reduced sight distance from the eastbound left-turn lane on Asheville Highway at Cash Road.

U-turn maneuvers require substantial sight distance. A U-turn's sight distance must be long enough to allow a motorist to perceive a gap in the oncoming traffic, complete the U-turn, and accelerate to the road's operating speed without causing the approaching vehicles to reduce their speed substantially.

NCHRP Report 524, <u>Safety of U-Turns</u> at Unsignalized Median Openings, by



View of Sight Distance at the Eastbound Left-Turn Lane on Asheville Highway at Cash Road (Looking East)

the Transportation Research Board, provides guidance for these traffic maneuvers. The report lists the <u>Florida Median Handbook</u> as a resource for recommended sight distance requirements for U-turns at unsignalized median openings. Based on Table 8 in this handbook, for a speed of 55 mph (the posted speed limit), the table recommends a sight distance of 1,250 feet. This distance is provided for passenger cars based on a two-second reaction time, a U-turn maneuver beginning at 0 mph, and a 50-foot clearance factor.

A sight distance length of 1,250 feet is not currently available from the eastbound left-turn lane on Asheville Highway at Cash Road, looking towards the east. This reduction in sight distance is primarily due to the slight vertical curve just east of the intersection, which restricts further distance viewing of oncoming vehicles. The vegetation in the median is currently unmowed, which also contributes to limiting the view of oncoming



traffic. With these restrictions, at most, the available sight distance to the east is approximately 550 feet. For those reasons, the initial decision that would require motorists to perform U-turns to enter and exit the subdivision was abandoned, and a median opening on Asheville Highway at the Proposed Entrance was proposed as part of the development.



Conclusions & Recommendations



<u>Asheville Highway at Proposed Entrance</u>: This intersection is projected to operate with average vehicle delays and minimal vehicle queues. However, the southbound exiting lane is projected to operate at LOS F during the AM and PM peak hours.

- 3a) It is recommended that a median opening be permitted on Asheville Highway for the Proposed Entrance due to sight distance restrictions at Cash Road and the considerable side street delays on South and North Wooddale Road. Because of these limitations, a median opening should be provided that would eliminate the need for U-turns occurring on Asheville Highway at these existing upstream and downstream intersections, which would otherwise be necessary for entering and exiting subdivision vehicles. While beneficial for the proposed subdivision, it should be noted that this median opening may become attractive for motorists who want to perform a U-turn that would otherwise use the upstream and downstream openings at Cash Road and South and North Wooddale Road. This median opening should be midway between North Wooddale Road and Cash Road, nearly 890 feet from each existing intersecting street.
- 3b) The construction of a westbound right-turn lane on Asheville Highway for traffic entering at the proposed Road "A" Entrance is not warranted based on the projected 2028 traffic volumes. However, the need for an eastbound left-turn lane on Asheville Highway at the proposed median opening for traffic entering is projected to be warranted.

According to TDOT's <u>Highway System Access Manual</u>, the functional area for an exclusive turn lane includes the "lane change and deceleration distance" and the storage length. The bay taper length is included in the lane change and deceleration distance, as shown in the following TDOT diagram:





The lane change and deceleration distance are a function of vehicle speeds, and the designer can assume some deceleration before the lane change. For this proposed left-turn lane on Asheville Highway, a vehicle speed of 45 mph was assumed, with vehicle speeds slightly reduced due to some deceleration occurring before the lane change. Thus, the recommended lengths for this proposed left-turn lane include a lane change and deceleration distance of 340 feet and a storage length of 50 feet, for a total of 390 feet. The longest 95th percentile vehicle queue length for the eastbound left-turn lane on Asheville Highway was calculated to be 3 and 5 feet in the AM and PM peak hours, respectively, in 2028 and will be fully contained within a storage length of 50 feet. The bay taper length within the lane change and deceleration distance is recommended to be 180 feet (15:1). With a 180-foot bay taper, the full-width left-turn lane will be 210 feet long.

- 3c) Due to the projected high vehicle delays for exiting southbound left turns from the proposed subdivision towards the east, separate left and right turn lanes are recommended for the Proposed Entrance approach at Asheville Highway. The left-turn lane should have a minimum vehicle storage of 75 feet, and the right-turn lane should be a continuation of the Road "A" southbound lane traveling towards the highway. The separate left and right exiting lanes for the development at Asheville Highway should be marked on the pavement with the appropriate white turn arrows and delineated with white lane lines.
- 3d) The construction of the Proposed Entrance on Asheville Highway will require a TDOT Highway Entrance Permit. The developer will need to apply for this permit and

coordinate with TDOT regarding their specific requirements for this entrance and the recommended median opening design.

 3e) Many regulatory signs should be installed to avoid and help prevent wrong-way vehicles on Asheville Highway at the Proposed Entrance. Figure 2.10 in TDOT's Traffic Design Manual illustrates the signage





required for the Proposed Entrance at Asheville Highway.

3f) Intersection sight distance at the Proposed Entrance at Asheville Highway must not be impacted by future landscaping, signage, or existing or future vegetation. Based on a posted speed limit of 55 mph on Asheville Highway, the required intersection sight distance is 750 feet for exiting left and 530 feet for right-turning vehicles. The existing sight distances at the Proposed Entrance location were estimated visually to be adequate in both directions. The site designer must ensure that the intersection sight distances are accounted for and provided in the design plans.





<u>**0** Asheville Highway Subdivision Internal Roads</u>: The layout plan shows five new private streets, as shown in Figure 3.

- 4a) A 15-mph Speed Limit Sign (R2-1) is recommended to be posted near the beginning of the Proposed Entrance, Road "A", off Asheville Highway. Since the subdivision streets will not be public roads, a posted speed limit of less than 25-mph is acceptable. It is also recommended that a "No Outlet" Sign (W14-2a) be posted at the front of the subdivision. This sign can be posted above or below the street name sign.
- 4b) Stop Signs (R1-1) with 24" white stop bars are recommended to be installed at the internal road locations, as shown in the image below.





- 4c) The Stop Sign (R1-1) on the Road "A" entrance approach to Asheville Highway should include a One-Way Sign (R6-1) and a Divided Highway Sign (R6-3), as shown in Figure 2.10 in the TDOT Traffic Design Manual.
- 4d) Dual end-of-roadway object markers (OM4-1) should be installed at the end of the subdivision's internal roads, as shown in the image. The ends of these internal roads should include hammerhead turnarounds to facilitate motorists' ability to turn around. Furthermore, additional signs should be posted internally at the western end of Road "B", the northern end of Road "D", and the western and eastern ends of Road "E" to follow Knoxville-Knox County Subdivision regulations. These signs are for notification of possible future street connections. They should state, "NOTICE This road may be extended and connected to the west / north / east for more info. contact Knox Co. Engineering & Public Works (865) 215-5800".
- 4e) The proposed lots within the development adjacent to Asheville Highway should not be allowed direct access to the south.
- 4f) 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 15-mph in the development, the required internal intersection sight distance is 170 feet. The site designer should ensure that internal sight distance lengths are met.
- 4g) 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.
- 4h) All drainage grates and covers for the residential development must be pedestrian and bicycle-safe.
- 4i) Several 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.
- 4j) All road and intersection elements should be designed to AASHTO, TDOT, and Knox County specifications and guidelines to ensure proper operation.





Development Request

DEVELOPMENT

Development Plan

□ Planned Development

☐ Hillside Protection COA

Use on Review / Special Use

SUBDIVISION

Concept PlanFinal Plat

ZONING

🗌 Rezoning

Plan Amendment

Sector Plan

City OYP / County Comp Plan

Mesana Investments, LLC		Ор	tion Holder	
Applicant Name		Aff	iliation	
10/2/2024	11/14/2024	11-SH-24-0	C / 11-K-24-DP	
Date Filed	Meeting Date (if applicable)	File Numbe	er(s)	
CORRESPONDENCE	All correspondence related to this applicat	ion should be directed to	the approved contact	t listed below.
Chris Sharp, P.E. Urban Enginee	ring, Inc.			
Name / Company				
10330 Hardin Valley Rd. Pk. Suit	te 201 Knoxville TN 37932			
Address				
865-966-1924 / chris@urban-en	ng.com			
Phone / Email				
CURRENT PROPERTY INFO	0			
Vaulton Family Holdings, LLC	7808 Asheville Hwy Knoxvill	e TN 37924		
Owner Name (if different)	Owner Address		Owner Phone /	Email
0 ASHEVILLE HWY / 0 ASHEVILL	E HWY			
Property Address				
62 02308, 02309			10.24 acres	
Parcel ID	Par	t of Parcel (Y/N)?	Tract Size	
Knoxville Utilities Board	Knoxville Utili	ties Board		No
Sewer Provider	Water Provide	r		Septic (Y/N)

COMMUNITY ENGAGEMENT

Sign and return the **Public Notice and 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 Revie	ew / Special Use		Related City	Permit Number(s)
□ Hillside Protection COA □	Residential	Non-resid	lential		
Home Occupation (specify)					
Other (specify) 114-lot subdivision for single family hous	ses				
SUBDIVSION REQUEST					
0 Asheville Highway				Related Rezo	ning File Number
Proposed Subdivision Name					
		114			
Unit / Phase Number Split Parcels	Tot	tal Number of Lot	s Created		
Additional Information					
Attachments / Additional Requirements					
ZONING REQUEST					
Coning				Pending Pl	at File Number
Change Proposed Zoning					
🗌 Plan					
Amendment Proposed Plan Designation(s)					
10.96 du/ac					
Proposed Density (units/acre) Previous Rezoning Requese Additional Information	ests				
STAFF USE ONLY					
PLAT TYPE Staff Review Planning Commission			Fee 1		Total
			\$1,600.00		
ATTACHMENTS Property Owners / Option Holders Variance Rec	quest		Fee 2		
Amendment Request (Comprehensive Plan)	quest		1002		
ADDITIONAL REQUIREMENTS					
Use on Review / Special Use (Concept Plan)			Fee 3		
Traffic Impact Study					
COA Checklist (Hillside Protection)					
AUTHORIZATION					
□ I declare under penalty of perjury the foregoing is true and		e/she/it is the own	er of the prop	perty, AND 2) th	e application and
all associated materials are being submitted with his/her/it Mesana Investm					10/2/2024
Applicant Signature Please Print					Date
Phone / Email					

	Vaulton Family Holdings, LLC	10/2/2024
Property Owner Signature	Please Print	Date

o signature verification: dtlp.us/tilq-Esdr-qPXM while a ana jui out this form at your convenience. In the application digitally (or print, sign, and scan).			e completed form x County Planning applications@kn	g offices		Reset Fo
Planning KNOXVILLE KNOX COUNTY	DEVELOPME Developme Planned Development	evelopment view / Special Us	SOBDIN Cont Fina	cept Plan	ZONIN Plan	G Amendment □ SP □ PA
Mesana Investments, LLC				Optic	on Holder	
Applicant Name	11/14/2	2024	Affili	ation		
8/19/24	10/3/2					File Number(
Date Filed	Meeting	Date (if applicable)		-		
	correspondence re	elated to this applic	ation should be dir	rected to the ap	proved con	tact listed below
🗌 Applicant 🛛 Property Owner	- 🗌 Option Hold	der 🗌 Project Su	rveyor 🔳 Engir	neer 🗌 Archi	tect/Landso	cape Architect
Chris Sharp			Urban Enginee	ring, Inc.		
Name		(Company			
10330 Hardin Valley Road, S	uite 201		Knoxville	TN		37932
Address		(City	State		ZIP
(865) 966-1924	chris@	urban-eng.com				
Phone	Email					
CURRENT PROPERTY INFO						
Vaulton Family Holdings, LLC	;	7808 Asheville	Hwy (37924)			
Property Owner Name (if different)		Property Owner Ac	dress		Property	Owner Phone
0 Asheville Highway			062 023	308 & 062 0	2309	
e / lefter ine finginitely			Parcel ID			
Property Address						
		KUB				

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.

JULY 2024

DEVELOPMENT REQUEST				
 Development Plan Use on Review / Special Use Hillsic Residential Non-Residential Home Occupation (specify) 	Related	City Permit Number(s)		
Other (specify) 114-lot subdivision for single family house	S			
SUBDIVISION REQUEST				
		Related	Rezoning File Number	
Proposed Subdivision Name	114			
Unit / Phase Number	eated			
Other (specify)				
Attachments / Additional Requirements				
ZONING REQUEST				
Zoning Change Proposed Zoning	Pendi	Pending Plat File Number		
Plan Amendment Change Proposed Plan Designation(s)				
Proposed Density (units/acre) Previous Rezoning Re	quests			
Other (specify)				
STAFF USE ONLY				
PLAT TYPE	Fee 1		Total	
Staff Review Planning Commission	0102	1,600	1,600.00	
ATTACHMENTS Property Owners / Option Holders Variance Request	Fee 2			
Amendment Request (Comprehensive Plan)				
DDITIONAL REQUIREMENTS Fee 3 Use on Review / Special Use (Concept Plan) Fee 3 Traffic Impact Study COA Checklist (Hillside Protection)				
AUTHORIZATION				

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

Scott Davis	dotloop verified 08/05/24 11:20 AM EDT 4TRO-UIDZ-DR9P-3IMZ	Mesana Investments, LLC	08/05/2024
Applicant Signature		Please Print	Date
(865) 806-8008		swd444@gmail.com	
Phone Number		Email	
Barry Vaulton	dotloop verified 08/05/24 1:57 PM EDT SWM9-KO6V-15WJ-F3ZX	Barry Vaulton	
Property Owner Signature		Please Print	Date Paid



NAMES OF ALL PROPERTY OWNERS INVOLVED OR HOLDERS OF OPTION ON SAME MUST BE LISTED BELOW:

Please print or type in black ink:

NAME	ADDRESS	CITY	STATE	ZIP	OWNER / OPTION	
Barry Vaulton	7808 ASHEVILLE I	7808 ASHEVILLE HWY KNOXVILLE TN 37924				

this signed form with your completed application



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.

> Have you engaged the surrounding property owners

to discuss your request?

No, but I plan to prior to the

Planning Commission meeting

🗌 Yes 🗌 No

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.

11/01/2024

11/15/2024

Date to be Posted

Date to be Removed

Trey Ridenour

dotloop verified 09/30/24 3:02 PM EDT FL7O-D9TG-MUNX-LPOG

Applicant Signature

Applicant Name

Mesana Investments, LLC

Date 11-SH-24-C & 11-K-24-DP

09/30/2024

FILE NUMBER