

CASE SUMMARY

APPLICATION TYPE: SUBDIVISION
CONCEPT PLAN



File Number: 9-SB-20-C **Related File Number:** 9-D-20-UR
Application Filed: 7/27/2020 **Date of Revision:**
Applicant: URBAN ENGINEERING, INC.

PROPERTY INFORMATION

General Location: West side of Brakebill Rd., south side of Hammer Rd.
Other Parcel Info.:
Tax ID Number: 72 267 & 26701 **Jurisdiction:** County
Size of Tract: 100.6 acres
Accessibility: Access is via Brakebill Rd., a major collector street with an 17'-20' pavement width within a 55' right-of-way, and Hammer Rd., a minor collector street with a 16' pavement width within a 50' right-of-way.

GENERAL LAND USE INFORMATION

Existing Land Use: Vacant
Surrounding Land Use: North: Residences / A (Agricultural), PR (Planned Residential) & RA (Low Density Residential)
South: Vacant land, residence / A (Agricultural)
East: Residences, place of worship, vacant land / A (Agricultural)
West: Residences, vacant land / A (Agricultural) & PR (Planned Residential)
Proposed Use: Detached and attached residential subdivision **Density:** 3.20 du/ac
Sector Plan: East County **Sector Plan Designation:**
Growth Policy Plan: Urban Growth Area
Neighborhood Context:

ADDRESS/RIGHT-OF-WAY INFORMATION (where applicable)

Street: 521 & 601 Brakebill Rd.
Location:
Proposed Street Name:
Department-Utility Report:
Reason:

ZONING INFORMATION (where applicable)

Current Zoning: PR (Planned Residential)
Former Zoning:
Requested Zoning:
Previous Requests:
Extension of Zone:
History of Zoning:

PLAN INFORMATION (where applicable)

Current Plan Category:

Requested Plan Category:

SUBDIVISION INFORMATION (where applicable)

Subdivision Name: Brakebill Road Subdivision

No. of Lots Proposed: 322 No. of Lots Approved: 0

Variances Requested: VARIANCES:

- 1) REDUCE THE TANGENT BETWEEN BROKE BACK CURVES ON ROAD 'C' FROM 150 TO 118.25' BETWEEN STATIONS 13+01.59 AND 14+19.84.
- 2) REDUCE THE TANGENT BETWEEN BROKE BACK CURVES ON ROAD 'E' FROM 150 TO 23.27' BETWEEN STATIONS 2+34.16 AND 2+57.53.

ALTERNATIVE DESIGN STANDARDS REQUIRING APPROVAL BY THE PLANNING COMMISSION:

- 1) REDUCE THE CENTERLINE RADIUS ON ROAD 'C' FROM 250' TO 125' BETWEEN STATIONS 14+19.84 AND 15+40.65.
- 2) REDUCE THE CENTERLINE RADIUS ON ROAD 'C' FROM 250' TO 175' BETWEEN STATIONS 19+63.65 AND 22+95.82.
- 3) REDUCE THE CENTERLINE RADIUS ON ROAD 'D' FROM 250' TO 125' BETWEEN STATIONS 1+06.77 AND 1+44.96.
- 4) REDUCE THE CENTERLINE RADIUS ON ROAD 'E' FROM 250' TO 150' BETWEEN STATIONS 0+37.03 AND 0+98.00.
- 5) REDUCE THE CENTERLINE RADIUS ON ROAD 'E' FROM 250' TO 200' BETWEEN STATIONS 2+57.53 AND 5+59.28.
- 6) REDUCE THE MINIMUM K VALUE ON ROAD 'C' FROM 25 TO 20 BETWEEN STATIONS 1+67.56 AND 4+12.42, 17+10.67 AND 18+61.15, 35+27.18 AND 38+01.64.
- 7) REDUCE THE MINIMUM K VALUE ON ROAD 'D' FROM 25 TO 20 BETWEEN STATIONS 12+04.79 AND 13+09.63.
- 8) REDUCE THE MINIMUM STREET FRONTAGE FOR THE ATTACHED RESIDENTIAL LOTS IN THE ROAD 'E' AND ROAD 'F' CUL-DE-SAC FROM 25' TO 16.3', AND 25' TO 20' FOR ALL OTHER ATTACHED RESIDENTIAL LOTS.

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

- 1) INCREASE THE MAXIMUM INTERSECTION GRADE FROM 1 % TO 2%.

S/D Name Change:

OTHER INFORMATION (where applicable)

Other Bus./Ord. Amend.:

PLANNING COMMISSION ACTION AND DISPOSITION

Planner In Charge: Mike Reynolds

Staff Recomm. (Abbr.): APPROVE variance 1-2 and alternative design standards 1-8 based on the recommendations of the Knox County Department of Engineering and Public Works and because the site conditions restrict compliance with the Subdivision Regulations and the proposed variances and alternative design standards will not create a traffic hazard.

APPROVE the Concept Plan subject to 13 conditions.

Staff Recomm. (Full):

1. Connection to sanitary sewer and meeting any other relevant requirements of the utility provider.
2. Provision of street names which are consistent with the Uniform Street Naming and Addressing System within Knox County (Ord 91-1-102).
3. Installation of all sidewalks required by the Knox County sidewalk ordinance (Ord 19-12-101) or as otherwise required by Knox County Engineering and Public Works, and the two pedestrian paths from Road 'A' and Road 'E' to the clubhouse and pool amenity area, as identified on the concept plan. All sidewalks that are not required by the Knox County Department of Engineering and Public Works are to be maintained by the homeowners association, as noted on the concept plan. If the sidewalk on Road 'C' is removed east of Road 'A' during the design plan phase, and pedestrian path shall be provided from Road 'C' to Road 'A' in the common area adjacent to Lots 201 and 232. An alternative location for this pedestrian path can be approved by Planning Commission staff and the Knox County Department of Engineering and Public Works during the design plan phase. A bond shall be provided

to the Knox County Department of Engineering and Public Works by the developer in an amount sufficient to guarantee the installation of the sidewalks and pedestrian paths.

4. Installation of a sidewalk on Brakebill Road as required by Knox County Engineering and Public Works during the design plan phase.
5. Implementation of the street and intersection improvement recommendations outlined in the Transportation Impact Study (TIS) prepared by Ajax Engineering (August 31, 2020), as revised, and reviewed and approved by Planning Commission staff, Knox County Engineering and Public Works, Knoxville Department of Engineering, and Tennessee Department of Transportation (TDOT). The design details and timing of the installation of the improvements shall be worked out with the Knox County Department of Engineering and Public Works, Knoxville Department of Engineering and TDOT during the design plan stage for the subdivision and the required road improvements shall be completed prior to approval of the final plat for the subdivision.
6. The widening of Brakebill Road from Strawberry Plains Pike through the intersection of Hammer Road in accordance with Knox County Standards, including the installation of the left turn lane at the subdivision entrance, shall be completed prior to the approval of a final plat for the subdivision.
7. The widening of Hammer Road from Brakebill Road to the Hammer Road subdivision entrance (Road 'B'), to a minimum width of 18', with tapers on the west side of the entrance if necessary, shall be completed prior to the approval of a final plat for the subdivision.
8. Providing guest parking on Road 'E' and/or Road 'F' for the attached dwellings. The parking can be provided in one parking lot as shown on the concept plan or dispersed in smaller groupings of parking spaces with review and approval by Planning Commission staff and the Knox County Department of Engineering and Public Works. Any parking lot consisting of 6 or parking spaces shall be setback 10' from the front lot line (street lot line) and 10' from side lot lines.
9. Providing a note on the final plat that lots 196-201 shall have a minimum driveway depth of 25' from the front lot line (street lot line) and lots 78-88 and 184-195 shall have a minimum driveway depth of 30' from the front lot line (street lot line).
10. Placing a note on the final plat that all lots will have access only to the internal street system.
11. Meeting all applicable requirements of the Knox County Department of Engineering and Public Works.
12. Prior to certification of the final plat for the subdivision, establishing a property owners association that will be responsible for the maintenance of the common areas, recreational amenities, sidewalks and drainage system.
13. Submitting to Planning Commission staff prior to final plat review by the Planning Commission or Planning staff, the certification of design plan approval form as required by the Knoxville-Knox County Subdivision Regulations (Section 2.08, Design Plan -- Major Subdivisions).

Comments:

Summary

This proposal is to develop 227 detached and 95 attached residential lots on this 110.6-acre tract with a density of 3.20 du/ac. The proposed subdivision will have access to both Brakebill Road and Hammer Road. The Brakebill Road access will be approximately .5 miles from the Strawberry Plains Pike intersection and .85 miles from the Asheville Highway intersection.

The proposed attached residential units will be developed in clusters of two (semi-detached) units with the exception of one cluster with three units. Most of the lots will have a lot width of at least 25', however, the lots on the end of the cul-de-sac radii will have lot frontage widths as low as 16.3'. The middle unit in the one proposed 3-unit cluster will have a lot width of 20'. While this is not an issue with an apartment or condominium development, with each unit being tied to a lot, the lots do not meet the minimum lot frontage requirement of 25'. The applicant is requesting a variance from the minimum lot frontage requirement for these lots.

Background

This site was rezoned to PR (Planned Residential) at a density of up to 9 du/ac by Knox County Commission on March 26, 2018 (2-C-18-RZ). In 2018, phase 1 of a mixed-use development was approved with 246 detached and 78 attached residential lots (5-SB-18-C / 5-E-18-UR). The proposal included a future multi-family complex on 14.04 acres and 4.10 acres of commercial area, which would have required a separate Use on Review approval by the Planning Commission. The PR zone allows 1 acre of commercial uses for each 100 dwelling units. The current proposal does not include multi-family or commercial uses.

Plan Recommendations

The East County Sector Plan, adopted in 2010 (see Exhibit B), recommends that future Brakebill Road improvements include "complete streets" elements (such as bike lanes and sidewalks) and to construct new roads to improve connectivity and access in the general area. Brakebill Road is also recommended to be a greenway connector, which means pedestrian facilities should be installed for access to potential greenway corridors to the north and south. These road improvements become increasingly important if the large undeveloped area to the east of Brakebill Road is developed as

recommended by the East County Sector Plan (ECO-2) with a mix of business park, technology (research and development) park, town center, or office/medium density residential uses. The subject site is designated as medium density residential/office (MDR/O) on the sector plan.

This subdivision proposal includes widening Brakebill Road from Strawberry Plains Pike to Hammer Road and a sidewalk may be required by Knox County Engineering and Public Works along the Brakebill Road frontage and potentially to the Strawberry Plains Pike intersection. The future road connection proposed in the sector plan would extend Rufus Graham Road (Huckleberry Springs Road) from Strawberry Plains Pike to Brakebill Road. This road extension is proposed because the existing Brakebill Road intersection at Strawberry Plains Pike is too close to the I-40 interchange and cannot be adequately improved to handle the potential future traffic as the area northeast of the interchange continues to build-out. This would also create a better connection between Asheville Highway and Strawberry Plains Pike.

Transportation Impact Study (TIS)

The TIS prepared by Ajax Engineering (see excerpts in Exhibit A) outlines extensive improvements needed at the Strawberry Plains Pike intersection which are not anticipated to be required as part of this development proposal. The issues at this intersection are known and are not easily fixed without requiring significant changes to other portions of Strawberry Plains Pike and the interstate ramps. As outlined above, new road connections are needed in this area which will reduce traffic to this intersection and functionally improve the road network.

The recommended road improvements that will be required for this proposal is widening Brakebill Road to a minimum of 20 feet from Strawberry Plains Pike to Hammer Road, and Hammer Road to a minimum of 18 feet from Brakebill Road to the Road 'B' access. A left turn lane is recommended at the Brakebill Road and Road 'A' intersection. The design of the left turn lane will be finalized during design plan review as required by Knox County Engineering and Public Works because the current design does not meet the Knox County design standards. The internal streets are to be posted at 25 MPH.

Open Space / Amenities

The primary amenity proposed for this subdivision is a clubhouse and pool which is accessed by vehicle from Brakebill Road and there are pedestrian connections to Road 'A' and Road 'E'. The intent is to convert the existing house for use as the clubhouse. The large common area on the west and southwest portion of the property does not have a programmed use at this time but there is a note on the plan that states it could be used for unpaved trails. The subdivision includes sidewalks on all streets, however, most of these will be elective and not required by the Knox County sidewalk ordinance. The main entry road, Road 'A', may meet the threshold of 1,000 average daily trips (ADT) to require a sidewalk on one side of the road and if so, would be maintained by Knox County. Any road segments with sidewalks that do not meet this ADT threshold will be maintained by the HOA. If the sidewalk shown on Road 'C' is removed during the design plan phase, staff is recommending that a pedestrian path be provided between Road 'C' and Road 'A' in the common area adjacent to Lots 201 & 232.

Action: Approved as Modified **Meeting Date:** 10/8/2020

Details of Action:

1. Connection to sanitary sewer and meeting any other relevant requirements of the utility provider.
2. Provision of street names which are consistent with the Uniform Street Naming and Addressing System within Knox County (Ord 91-1-102).
3. Installation of all sidewalks required by the Knox County sidewalk ordinance (Ord 19-12-101) or as otherwise required by Knox County Engineering and Public Works, and the two pedestrian paths from Road 'A' and Road 'E' to the clubhouse and pool amenity area, as identified on the concept plan. All sidewalks that are not required by the Knox County Department of Engineering and Public Works are to be maintained by the homeowners association, as noted on the concept plan. If the sidewalk on Road 'C' is removed east of Road 'A' during the design plan phase, and pedestrian path shall be provided from Road 'C' to Road 'A' in the common area adjacent to Lots 201 and 232. An alternative location for this pedestrian path can be approved by Planning Commission staff and the Knox County Department of Engineering and Public Works during the design plan phase. A bond shall be provided to the Knox County Department of Engineering and Public Works by the developer in an amount sufficient to guarantee the installation of the sidewalks and pedestrian paths.
4. Installation of a sidewalk on Brakebill Road as required by Knox County Engineering and Public Works during the design plan phase.
5. Implementation of the street and intersection improvement recommendations outlined in the Transportation Impact Study (TIS) prepared by Ajax Engineering (August 31, 2020), as revised, and reviewed and approved by Planning Commission staff, Knox County Engineering and Public Works, Knoxville Department of Engineering, and Tennessee Department of Transportation (TDOT). The design details and timing of the installation of the improvements shall be worked out with the Knox County Department of Engineering and Public Works, Knoxville Department of Engineering and TDOT during the design plan stage for the subdivision and the required road improvements shall be

completed prior to approval of the final plat for the subdivision.

6. The widening of Brakebill Road from Strawberry Plains Pike through the intersection of Hammer Road in accordance with Knox County Standards, including the installation of the left turn lane at the subdivision entrance, shall be completed prior to the approval of a final plat for the subdivision.

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10. Placing a note on the final plat that all lots will have access only to the internal street system.

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

12. Prior to certification of the final plat for the subdivision, establishing a property owners association that will be responsible for the maintenance of the common areas, recreational amenities, sidewalks and drainage system.

13. Submitting to Planning Commission staff prior to final plat review by the Planning Commission or Planning staff, the certification of design plan approval form as required by the Knoxville-Knox County Subdivision Regulations (Section 2.08, Design Plan -- Major Subdivisions).

14. [Added by Planning Commission] The sidewalk along Brakebill Road is to be extended to Strawberry Plains Pike.

Summary of Action:

APPROVE variance 1-2 and alternative design standards 1-8 based on the recommendations of the Knox County Department of Engineering and Public Works and because the site conditions restrict compliance with the Subdivision Regulations and the proposed variances and alternative design standards will not create a traffic hazard.

APPROVE the Concept Plan subject to 14 conditions. [Planning Commission added condition #14]

Date of Approval:

10/8/2020

Date of Denial:

Postponements:

9/10/2020

Date of Withdrawal:

Withdrawn prior to publication?: **Action Appealed?:**

LEGISLATIVE ACTION AND DISPOSITION

Legislative Body:

Date of Legislative Action:

Date of Legislative Action, Second Reading:

Ordinance Number:

Other Ordinance Number References:

Disposition of Case:

Disposition of Case, Second Reading:

If "Other":

If "Other":

Amendments:

Amendments:

Date of Legislative Appeal:

Effective Date of Ordinance: