

# SUBDIVISION REPORT - CONCEPT/USE ON REVIEW

► FILE #: 1-SA-22-C AGENDA ITEM #: 15

1-D-22-UR AGENDA DATE: 3/10/2022

POSTPONEMENT(S): 1/13/2022, 2/10/2022

► SUBDIVISION: BROWN PROPERTY- COUCH MILL ROAD

► APPLICANT/DEVELOPER: SAFE HARBOR DEVELOPMENT, LLC

OWNER(S): Hardin Valley Farm, LLC

TAX IDENTIFICATION: 117 8 (PART OF) View map on KGIS

JURISDICTION: County Commission District 6
STREET ADDRESS: 11636 Hardin Valley Rd.

► LOCATION: South side of Couch Mill Road, west of Caspian Drive

SECTOR PLAN: Northwest County

GROWTH POLICY PLAN: Rural Area

WATERSHED: Conner Creek

APPROXIMATE ACREAGE: 131.2 acres

ZONING: PR (Planned Residential)

EXISTING LAND USE: Vacant land

▶ PROPOSED USE: Detached & attached residential subdivision

SURROUNDING LAND

North: Agriculture/forestry/vacant, single family residential, rural residential -
USE AND ZONING:

A (Agricultural)

South: Agriculture/forestry/vacant -- A (Agricultural)

East: Agriculture/forestry/vacant, single family residential, rural residential --

A (Agricultural)

West: Agriculture/forestry/vacant -- A (Agricultural)

► NUMBER OF LOTS: 359

SURVEYOR/ENGINEER: David Harbin / Batson, Himes, Norvell & Poe

ACCESSIBILITY: Access is via Couch Mill Rd, a major collector street with 18ft of pavement

width within 50-60ft of right-of-way.

SUBDIVISION VARIANCES

**REQUIRED:** 

**VARIANCES** 

1) Reduce the minimum tangent length between broken back curves

from 150 ft to 123 ft on Road 'C' from STA 5+97 to 7+20

ALTERNATIVE DESIGN STANDARDS REQUIRING KNOXVILLE-KNOX

**COUNTY PLANNING COMMISSION APPROVAL** 

1) Reduce the minimum horizontal curve radius from 250 ft to 125 ft on

Road' B' at STA 21+50

ALTERNATIVE DESIGN STANDARDS REQUIRING KNOX COUNTY

## **ENGINEERING AND PUBLIC WORKS APPROVAL**

1) Increase the intersection grade from 1 percent to up to 3 percent for the intersections listed in Note #13 on the Concept Plan.

### STAFF RECOMMENDATION:

▶ Approve the variance and alternative design standard based on the justifications provided by the applicant and the recommendations of the Knox County Department of Engineering and Public Works, and because the site conditions restrict compliance with the Subdivision Regulations and will not create a traffic hazard.

# Approve the Concept Plan subject to 16 conditions.

- 1. Connection to sanitary sewer and meeting any other relevant requirements of the utility provider.
- 2. Provision of street names consistent with the Uniform Street Naming and Addressing System within Knox County (County Ord. 91-1-102).
- 3. All sidewalks and crosswalks within the public right-of-way shall meet the applicable ADA standards. The design details shall be worked out with Knox County Engineering and Public Works during the design plan phase.
- 4. Implementation of the street and intersection improvements and recommendations outlined in the Couch Mill Road Subdivision Transportation Impact Study prepared by AJAX Engineering (Revised 2/18/2022), as revised and approved by the Knox County Department of Engineering and Public Works and Planning staff (see Exhibit A). 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 during the design plan stage for the subdivision. 5. Providing a minimum 200-ft sight distance easement across Lot 162 on the final plat. The driveway on this lot must have a depth of 20-ft beyond the sight distance easement.
- 6. Providing the 25-ft common area along the Couch Mill Road frontage where the adjacent lots do not meet the double frontage lot depth standard per Section 3.02.A.4. of the Subdivision Regulations.
- 7. Providing the proposed road stub-outs per Section 3.04.C.2.b. of the Subdivision Regulations.
- 8. Providing notification of future street connections at the terminus of the stub-out per Section 3.04.C.2.d. of the Subdivision Regulations.
- 9. Providing the location of all sinkholes/closed contours and the 50-ft buffer (building setback) on the final plat per Section 3.06.B of the Subdivision Regulations.
- 10. Providing a note on the final plat that all structures are to be located outside of the 50-ft buffer (building setback) for sinkholes/closed contours unless a geotechnical study prepared by a registered engineer states that building within the 50-ft sinkhole/closed contour buffer (building setback) is acceptable and the study is approved by the Knox County Department of Engineering and Public Works. The geotechnical study must be reviewed and approved by Knox County Department of Engineering and Public Works prior to approval of a plat for any proposed lots that do not have adequate building area outside of the 50-ft buffer (building setback) area. Building construction is not permitted within the sinkhole/closed contour area or any required drainage easement for the sinkhole/closed contour area.
- 11. Meeting all applicable requirements of the Knox County Zoning Ordinance.
- 12. Meeting all applicable requirements of the Knox County Department of Engineering and Public Works.
- 13. Providing a note on the final plat that all lots will have access to internal streets.
- 14. Submitting to Planning staff prior to final plat review by the Planning Commission or Planning staff, the certification of design plan approval form as required by the Knoxville-Knox County Subdivision Regulations.
- 15. Prior to certification of the final plat for the subdivision, establishing a property owners association that will be responsible for the maintenance of the common areas, amenities, and drainage system.
- 16. [ADDED 3/8/2022] Per discussion at County Commission, offsite improvements (including sidewalk and intersection improvements at Sam Lee/Steele/Swafford) shall be completed in partnership with Knox County Engineering and Public Works. Before issuing a plat, an agreement codifying the timeline and cost-sharing shall be executed.
- ▶ Approve the development plan for 359 detached residential houses on individual lots and the peripheral setback reduction from 35 ft to 25 ft for all double frontage lots with an adjacent 25-ft common area strip along the Couch Mill Road frontage, subject to 2 conditions.
  - 1. Meeting all applicable requirements of the Knox County Zoning Ordinance.
  - 2. Providing a minimum 20-ft wide common area strip along the northeast boundary of the development, to the rear of Lots 3 16, as proposed.

With the conditions noted, this plan meets the requirements for approval of a Concept Plan and Use on Review in a PR zoning district.

### **COMMENTS:**

Condition #16 was added 3/8/2022.

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This proposal is for a 359-lot detached residential subdivision on 131.2 acres, at a density of 2.74 du/ac. There are two access points to Couch Mill Road and three stub-out roads to the large undeveloped properties to the south. There are several large sinkholes on the site, many of which are proposed as open space amenities with walking trails. The property was rezoned from A (Agricultural) to PR (Planned Residential) up to 3 du/ac on January 24, 2022 (12-I-21-RZ).

## **AMENITIES**

The 33.54 acres of common areas are primarily located around sinkholes and provide buffers to adjacent houses. Several walking trails in the common areas make internal pedestrian connections throughout the neighborhood. A community pool, bathhouse, and playground are proposed near the western entrance to the site with access to Road 'G'.

# TRANSPORTATION IMPACT STUDY (TIS)

The conclusions and recommendations of the Coach Mill Road TIS (AJAX Engineering, 2/18/2022) are presented in Exhibit A. The primary recommendation is to widen Coach Mill Road to 21' from the western entrance (Road 'G') to the Steele Road intersection. The study concluded that the Sam Lee Road/Swafford Road/Steele Road 4-way intersection does not warrant conversion from a 2-way stop control to 4-way stop control. The study further recommends that Knox County consider converting this intersection to a roundabout because of the large, undeveloped tracts remaining in this area (see condition #16). The TIS makes additional recommendations regarding the design of the new internal streets.

### CONNECTIVITY

This proposal has two access points to Couch Mill Road and three stub-out roads to properties that border to the south. Two of the proposed stub-outs are located on the east half of the development and connect to the remaining portion of the subject property. The third stub-out is located in the southwest corner of the property. Multiple stub-outs are desired for this property because it is the most feasible opportunity for a north-south connection between Hardin Valley Road and Couch Mill Road/Sam Lee Road, west of Steele Road. This is approximately the same location as the proposed north-south connector proposed in the Hardin Valley Mobility Plan (2019) (see Exhibit B).

# **SIDEWALKS**

The applicant is proposing sidewalks on one side of all roads within the subdivision and sidewalk along the Couch Mill Road/Sam Lee Road from the western access point (Road 'G') to the Sam Lee Road/Swafford Road/Steele Road intersection. The Knox County sidewalk ordinance requires sidewalks along the Couch Mill Road frontage and on internal roads that is projected to have over 1000 daily vehicle trips. At the request of Knox County Engineering and Public Works, some of the sidewalk required along the western portion of the Couch Mill Road frontage will be constructed on Sam Lee Road to the east, to make a sidewalk connection to Steele Road. The final details of the sidewalks will be determined during the design plan phase.

## HILLSIDE PROTECTION AREA

There is 37.48 acres of this site within the Hillside Protection (HP) area, most of which is located around the large sinkholes in the northwest portion of the property. Besides the slope associated with the sinkholes, the property consists mainly of rolling hills. The slope analysis for this site recommends disturbing a maximum of 23 acres in the HP area. This proposal disturbs approximately 20.9 acres of the HP area and complies with the Hillside and Ridgetop Protection Plan recommendations.

## **SINKHOLES**

There are several large sinkholes on this property which are identified with grey shading on plan sheet C3 (Sinkhole Site Plan). The dashed line around the sinkholes represents the 50 ft buffer around the uppermost closed contour of the feature required by the Subdivision Regulations (Section 3.06.B.). Each lot must have a buildable area outside of the closed contour of a sinkhole. Still, a house can be built within the 50 ft buffer if a geotechnical study prepared by a registered engineer states that building within the 50 ft sinkhole area is acceptable. The houses must also have engineered foundations. During the design plan phase, the uppermost closed contour of the sinkholes will be further defined and could result in the sinkholes being larger than depicted on this Concept Plan and could result in the loss of lots.

### VARIANCES AND ALTERNATIVE DESIGN STANDARDS

The applicant's engineer listed the requested deviations from the Subdivision Regulations on the Variances/Alternative Design Standards Request form (attached), as well as the stated hardships for the requests. The Knox County Engineering and Public Works department agrees with the requested variance and alternative design standard. The alternative design standard requested for the various intersection grades will be reviewed in more detail during the design plan phase to ensure ADA standards are met where there are crosswalks.

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

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

- 1) THE PROPOSED USE IS CONSISTENT WITH THE ADOPTED PLANS AND POLICIES, INCLUDING THE GENERAL PLAN AND SECTOR PLAN.
- A. The Northwest County Sector Plan designates this property for rural residential uses with a maximum density 3 du/ac. The proposed development with a density of 2.74 du/ac is consistent with the Sector Plan.
- B. There are 37 acres of this 131-acre property located in the Hillside Protection (HP) area. The maximum land disturbance recommended within the HP area is 23 acres (see the attached slope analysis). This proposal will disturb 20.9 acres within the HP area and is consistent with the HP land disturbance guidelines.
- C. The Hardin Valley Mobility Plan (2019) recommends a north-south connector from Couch Mill Road to Hardin Valley Road (and the proposed east-west connector between Steele Road and Mission Hill Lane). The proposed stub-out roads will provide multiple opportunities to realize the north-south connector. This proposed east-west connector is south of the subject property. See Exhibit B.
- 2) THE USE IS IN HARMONY WITH THE GENERAL PURPOSE AND INTENT OF THE ZONING ORDINANCE.
- A. The PR (Planned Residential) zone is intended to provide optional methods of land development whichencourage more imaginative solutions to environmental design problems. Residential areas thus established would be characterized by a unified building and site development program, open space for recreation and provision for commercial, religious, educational, and cultural facilities which are integrated with the total project by unified architectural and open space treatment. Each planned unit development shall be compatible with the surrounding or adjacent zones. Such compatibility shall be determined by the planning commission by review of the development plans.
- B. The proposed subdivision will have detached residential lot sizes comparable to those in existing and recently approved subdivisions in the area.
- C. The applicant is proposing a 20-ft wide common area strip along the northeast property boundary to provide a buffer to the adjacent residential subdivision.
- D. The residential lots are being clustered to buildable areas outside of the closed contour of the sinkholes.
- E. The property is zoned PR up to 3 du/ac, and the proposed subdivision has a density of 2.74 du/ac.
- 3) THE USE IS COMPATIBLE WITH THE CHARACTER OF THE NEIGHBORHOOD WHERE IT IS PROPOSED. AND WITH THE SIZE AND LOCATION OF BUILDINGS IN THE VICINITY.
- A. The proposed subdivision will have detached residential lot sizes and setbacks that are similar to others in the area.
- B. The 25-ft common area strip along the Couch Mill Road frontage will create separation between the roadway and the house lots.
- C. The applicant is proposing a 20-ft common area strip on the northeast boundary as a buffer to the adjacent residential subdivision.
- 4) THE USE WILL NOT SIGNIFICANTLY INJURE THE VALUE OF ADJACENT PROPERTY.
- A. The use of the property for single-family residential should not significantly injure the value of the adjacent properties.
- 5) THE USE WILL NOT DRAW ADDITIONAL TRAFFIC THROUGH RESIDENTIAL AREAS.
- A. The development has direct access to Couch Mill Road, a major collector street.
- 6) THE NATURE OF DEVELOPMENT IN THE SURROUNDING AREA IS NOT SUCH AS TO POSE A POTENTIAL HAZARD TO THE PROPOSED USE OR TO CREATE AN UNDESIRABLE ENVIRONMENT FOR THE PROPOSED USE.
- A. There are no known uses in the area that could be a potential hazard or create an undesirable environment for the proposed residential use.

ESTIMATED TRAFFIC IMPACT: A traffic impact study was prepared by the applicant. The findings of that study were used in formulating the recommendations of this staff report.

ESTIMATED STUDENT YIELD: 155 (public school children, grades K-12)

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

- Potential new school population is estimated using locally-derived data on public school student yield generated by new housing.
- Students are assigned to schools based on current attendance zones as determined by Knox County Schools. Students may request transfers to different zones, and zone boundaries are subject to change.
- Estimates presume full build-out of the proposed development. Build-out is subject to market forces, and timing varies widely from proposal to proposal.
- Student yields from new development do not reflect a net addition of children in schools. Additions occur incrementally over the build-out period. New students may replace current population that ages through the system or moves from the attendance zone.

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

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