



SUBDIVISION REPORT - CONCEPT/DEVELOPMENT PLAN

▶ **FILE #:** 10-SB-23-C
10-B-23-DP

AGENDA ITEM #: 37
AGENDA DATE: 10/5/2023

▶ **SUBDIVISION:** CMH HOMES, INC ON TIPTON STATION ROAD

▶ **APPLICANT/DEVELOPER:** CMH HOMES, INC

OWNER(S): CMH Homes, Inc

TAX IDENTIFICATION: 148 10804, 10806 [View map on KGIS](#)

JURISDICTION: County Commission District 9

STREET ADDRESS: 2116 TIPTON STATION RD (2120 TIPTON STATION RD)

▶ **LOCATION:** South side of Tipton Station Rd, east of Poplar Wood Trl

SECTOR PLAN: South County

GROWTH POLICY PLAN: Planned Growth Area

WATERSHED: Stock Creek

▶ **APPROXIMATE ACREAGE:** 20.21 acres

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

▶ **EXISTING LAND USE:** Single Family Residential, Agriculture/Forestry/Vacant Land

▶ **PROPOSED USE:** Detached residential subdivision

SURROUNDING LAND USE AND ZONING: North: Rural residential, single family residential - A (Agricultural), PR (Planned Residential) up to 4 du/ac
South: Agriculture/forestry/vacant - A (Agricultural)
East: Rural residential, Public/quasi-public land - A (Agricultural)
West: Rural residential, single family residential - RB (General Residential), PR (Planned Residential) up to 3 du/ac

▶ **NUMBER OF LOTS:** 71

SURVEYOR/ENGINEER: David Harbin Batson Himes Norvell & Poe

ACCESSIBILITY: Access is via Tipton Station Road, a major collector street with a 20-ft pavement width within a 40-ft right-of-way.

▶ **SUBDIVISION VARIANCES REQUIRED:** **VARIANCES (revised 10/3/2023)**
1. Reduce the minimum vertical curve on Road 'A' from K=25 to K=15 at PVI STA 5+25
2. Reduce the minimum vertical curve on Road 'E' from K=25 to K=15 at PVI STA 1+00

ALTERNATIVE DESIGN STANDARDS REQUIRING KNOXVILLE-KNOX COUNTY PLANNING COMMISSION APPROVAL

1. Reduce the minimum horizontal curve radius on Road 'B' from 250 ft to 100 ft at STA 6+50

ALTERNATIVE DESIGN STANDARDS REQUIRING KNOX COUNTY

ENGINEERING AND PUBLIC WORKS APPROVAL

**** See attached variance and alternative design request form**

STAFF RECOMMENDATION:

- **Approve the variances based on the evidence of hardship presented by the applicant and recommendations of the Knox County Department of Engineering and Public Works.**

The variances requested are necessary because of:

- The topographical conditions of the subject property (1.05.A.2.a)
- The conditions upon which the variation is requested are unique to the subject property and not created by someone having an interest in the property (1.05.A.2.b)
- The request of the variation is not based exclusively upon financial gain (1.05.A.2.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. (1.05.A.2.d)

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

Approve the Concept Plan subject to 9 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), including but not limited to addressing reassignment for the existing residences that will access the new internal roads.
 - 3) Constructing a sidewalk connection to the school property from the Road 'D' cul-de-sac, as shown on the Concept Plan. The sidewalk shall be located in a common area. The design details will be worked out with Knox County Engineering and Public Works during the design plan phase.
 - 4) Providing a Transportation Impact Letter (TIL) for review and approval to Planning and Knox County Engineering and Public Works (EPW) staff during the design plan phase to determine if a westbound left turn lane and eastbound right turn lane on Tipton Station Road are warranted. If warranted, the applicant must enter into a Memorandum of Understanding with Knox County Engineering and Public Works per Chapter 54, Article V of the Knox County Code (Ord. O-23-4-102). The scope of work for the TIL will be provided by Planning and EPW staff to the applicant upon request.
 - 5) Providing the Road 'D' stub-out as shown on the concept plan and providing notification of future connection per section 3.04.C.2 of the Subdivision Regulations. The paved surface of the stub-out can be stopped short of the adjacent property line if determined necessary by Knox County Engineering and Public Works during the design plan phase to more easily allow for connection from the adjacent property in the future.
 - 6) Access must remain open at all times to the properties to the south that utilize the existing 50 ft joint permanent access easement and driveway through the subject property.
 - 7) Providing a sight distance easement on Lot 50 if required by Knox County Engineering and Public Works during the design plan phase.
 - 8) Meeting all applicable requirements of the Knox County Department of Engineering and Public Works.
 - 9) Meeting all applicable requirements of the Knox County Zoning Ordinance.
- **Approve the development plan for a residential subdivision with up to 71 detached houses on individual lots and reduction of the peripheral setback on lot 1 from 35 ft to 25 ft along the eastern property boundary, subject to 1 condition.**
- 1) Meeting all applicable requirements of the Knox County Zoning Ordinance.

With the conditions noted, this plan meets the requirements for approval in the PR district and the criteria for approval of a development plan.

COMMENTS:

This proposal is for a residential subdivision with up to 71 detached houses on individual lots on approximately 20.21 acres (3.51 du/ac). The property was rezoned from A (Agricultural) to PR (Planned Residential) up to 3.7 du/ac in September 2023 (8-F-23-RZ).

ROAD STUB-OUT

The applicant proposes a road stub-out at the southern terminus of Road 'D'. This is also a condition of approval (#5). The concept plan shows the paved road surface extending to the southern boundary of the

development. The recommended condition allows Knox County Engineering and Public Works to approve the pavement to stop short of the southern boundary if it will more easily allow the future road connection to tie in.

TRANSPORTATION AND SIDEWALK IMPROVEMENTS

A sidewalk connection is provided from the Road 'D' cul-de-sac to the South-Doyle High School property line. Condition #3 recommends that the sidewalk be located in a common area rather than an easement across lot 20.

Condition #4 requires that the applicant submit a transportation impact letter (TIL) during the design plan phase to evaluate the need for a right or left turn lane on Tipton Station Road. If either is warranted, the applicant must enter into a Memorandum of Understanding with Knox County Engineering and Public Works to install the turn lane(s). A transportation impact study (TIS) was not required for this request because the projected traffic generation is less than 750 vehicle trips per day. However, because the access is so close to a school, staff recommends a limited study examining whether turn lanes are warranted.

VARIANCES AND ALTERNATIVES DESIGN STANDARDS

(Revised 10/3/2023) Variance #1 and 2: These two vertical curves are in locations where significant grading is required to tie in the proposed road grades at intersections. They are also near intersections with stop conditions. Because of this proximity, vehicle speeds in both directions should be lower than the speed limit of 25 mph in residential subdivisions. The reduced K value (increased sharpness of the curve) should not be a safety concern because of the reduced speeds. The proposed K=20 for both meet AASHTO standards for stopping sight distance at 20 mph. The vertical curve on Road 'A' also meets the AASHTO standard for 30 mph.

(Revised 10/3/2023) Variance #3: No longer required based on the revised concept plan dated 10/3/2023

Alternative Design Standard #1: When a road is longer than 1,000 ft, the subdivision regulations require the horizontal curve radius to be a minimum of 250 ft. Otherwise, the minimum horizontal curve radius is 100 ft. Road 'B' is 1,050 ft long from its intersection with Road 'D' to its terminus south of its Road 'E' intersection. While the road is longer than 1,000 ft, the road segments on either side of the Road 'A' intersection are significantly less than 1,000 ft. Very little vehicle traffic will travel the full distance of Road 'B'. The proposed 1,000 ft radius is near Road 'A', which is where most traffic will come from, and it is expected that vehicles will still be accelerating and that the sharp turn will naturally keep speeds below the posted 25 mph speed limit through the curve. The minimum horizontal curve radius for AASHTO at 20 mph is 86 ft.

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) up to 3.7 du/ac:

a) The PR zone allows houses 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) This PR zone district is approved for a maximum of 3.7 du/ac. The proposed density for the subdivision is 3.51 du/ac.

C) The peripheral setback is 35 ft and the Planning Commission has the authority to reduce the setback to 15 ft when adjacent to agricultural and residential zones. The existing house on Lot 1 is approximately 25 ft from the eastern lot line. The reduction will ensure the existing structure remains conforming to setbacks.

2) GENERAL PLAN – DEVELOPMENT POLICIES

a) Policy 4.2, Require vehicular and pedestrian connections between subdivisions to encourage safe access to community facilities and to reduce reliance on the automobile. – A stub-out is provided on the southeastern boundary of the development. In addition, a sidewalk connection is provided to the South-

b) Policy 9.3, Ensure that the context of new development, including scale and compatibility, does not impact existing neighborhoods and communities – The two existing houses near Tipton Station Road will remain, so the setting of houses along Tipton Station Road will not change, with exception of a road being constructed between the two houses.

3) SOUTH COUNTY SECTOR PLAN

a) The property is classified as LDR (Low Density Residential) on the sector plan, which allows consideration of up to 5 du/ac. The proposed density is 3.51 du/ac.

B) The southwest portion of the property is in the SP (Stream Protection) area. The SP area includes the FEMA 100- and 500-year floodplains. The 100-year floodplain can be filled up to half the distance between the outer edge of the floodplain and the floodway. The floodplain on the subject property is a significant distance from the floodway and can be entirely filled on this site.

4) KNOXVILLE – FARRAGUT – KNOX COUNTY GROWTH POLICY PLAN

a) The property is within the Planned Growth Boundary. The purposes of the Planned Growth Boundary designation are to encourage a reasonably compact pattern of development, promote the expansion of the Knox County economy, offer a wide range of housing choices, and coordinate the actions of the public and private sectors, particularly with regard to the provision of adequate roads, utilities, schools, drainage and other public facilities and services.

ESTIMATED TRAFFIC IMPACT: 736 (average daily vehicle trips)

Average Daily Vehicle Trips are computed using national average trip rates reported in the latest edition of "Trip Generation," published by the Institute of Transportation Engineers. Average Daily Vehicle Trips represent the total number of trips that a particular land use can be expected to generate during a 24-hour day (Monday through Friday), with a "trip" counted each time a vehicle enters or exits a proposed development.

ESTIMATED STUDENT YIELD: 16 (public school children, grades K-12)

Schools affected by this proposal: Bonny Kate Elementary, South Doyle Middle, and South Doyle 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).