Concerns, recommendations and questions related to Locust Hill project 7-SB-25-C

8-6-25 Submitted on behalf of residents on Locust Hill Lane and Chapman Hwy

The homeowners on Locust Hill Lane and Chapman Highway are part of a close community that is concerned about the scope of the subdivision being proposed for the woods between these two streets. Although we are not against development, we do feel this proposal is too large for this community of houses that were built in the 1940s and 1950s. Our primary concerns are these:

Safety

- 1. Locust Hill Lane is approximately 16 feet wide. It is a dead-end road with no turnaround area at the end. Visibility in and out of Locust Hill onto Chapman Highway is extremely limited. There is no turn lane or traffic light at the busy intersection, and several wrecks occur in that area routinely.
- 2. The proposal specifies single driveways for up to two cars. Beyond that, street parking is specified on the edge of narrow Locust Hill. We have had several occasions where emergency vehicles had difficulty turning around with patients for transport to the hospital. A fire engine recently was forced to back down Locust Hill to Chapman Highway. With the addition of resident parking on the street, this becomes even more dangerous. We have a number of residents with health issues.
- 3. Adding more residents and more cars also adds to the danger of turning on or off Chapman Highway. Certain times during the year, grass along the road is so high that drivers pulling onto Chapman cannot see North-bound traffic. The Chapman Highway Corridor Study, prepared by the Knoxville-Knox County Metropolitan Planning Commission in 2006 recommends a turn lane and sight distance improvements in the area of the Locust Hill and Chapman intersection (page 30 of report, posted on MPC comments site for this proposal).
- 4. We are concerned about parking for construction vehicles, which is not defined in the proposal. This would be a significant disruption to our community. It also creates issues for emergency vehicles, as well as service vehicles making deliveries.

Hillside Development Policy

5. The City of Knoxville passed Hillside and Ridgetop Protection Plan regulations in 2012. This proposed development appears to fall in the Hillside and Ridgetop Protection Area (see Map 7 of handout). According the the city regulations, the protection area has restrictions on use and the amount of land that can be disturbed, depending on slope. This development proposal appears to be using an average slope of all nine initial lots proposed. We believe it is more appropriate to calculate the slope on each lot separately. For example, the slope of existing lots #4 & #5 is 28%. If individual lot slopes are used, according to the Hillside regulations, the maximum land disturbance recommended is 20% (see Table 3 of handout).

Is this proposal in compliance with Hillside and Ridgetop Protection Plan? Were any recommendations of the Chapman Highway Corridor Study prepared by the Knoxville Knox County Metropolitan Planning Commission in 2006 considered?

Water basin, geological and environmental risks

- 6. This area is rugged terrain with caves, rocky areas, established trees and an old road used for access long before houses were built. It is atop a karst cave system. A karst cave is defined as formations created by the dissolution of soluble rocks, such as limestone, by acidic water. The area includes shale rock, which is known for clay, silt and mud layers that easily break and shift. This area appears to be connected to the Goose Creek and Baker Creek watersheds.
- 7. Water drainage collects in various culverts at the base of the proposed development and onto the existing three homes on Chapman Highway. We are uncertain how the runoff will be directed and where it will accumulate in a detention pond. Will that create a hazard for people and animals, while also adding to mosquito habitats? In addition, erosion along Locust Hill Lane is already evident, an issue that could be made worse by cutting trees and brush. Those trees currently provide highway noise barriers for the existing homes.

Wildlife and ecology concerns

8. The entire area is an active wildlife corridor, with deer, turkeys, hawks, fox, migrating birds and even a bald eagle regularly spotted. Further reduction of this habitat could increase wildlife being hit by cars on surrounding roads.

We would like to propose the following recommendations:

- a. Further impact studies of this proposal, including geological and hydrological analysis
- b. Address any consideration of Locust Hill Lane widening, including what land from existing homeowners would need to used
- c. Detailed outline by city engineers of the proposal
- d. A reduction of proposed lots:

Combine lots 1 & 2 and build a single home with a 50-foot front setback Combine lots 3 & 4 and build a single home with 50-foot front setback Eliminate lots 4 & 5, due to the 28% slope

- e. Request for city monitoring of tree removal in order to cut as few trees as possible; the city arborist has informed us that he can provide consultation with the developer to reduce unnecessary tree removal.
- f. Request for city monitoring of construction vehicles, parking, portable toilets and equipment to ensure least amount of impact on residents and protect traffic flow on and off Locust Hill.

- g. We believe a good model to follow for this proposal is the recent Monterey Oaks proposal (7-SA-25-C) which was approved with rigorous constraints by the Planning Commission on 7/10/25, subject to nine conditions emphasizing compliance with the Hillside and Ridgetop Protection Plan to limit disturbance.
- h. Finally, we would like answers to the following questions:
- -What is the process for improving the road infrastructure, including the two blind curves on Locust Hill? Who will incur that cost?
- -Will site preparation be completed on all parcels prior to building?
- -Is the developer going to be the builder or is he simply developing the lots?

We feel that the residents and any future home owners deserve a responsible building plan and request a postponement until these issues have been addressed in the proposal.

Thank you.
Residents living in the impacted area

Relevant pages (31-33) from Hillside and Ridgetop Protection Plan (2012), referred to in this document:

Hillside and Ridgetop Protection Area

Knoxville-Knox County's General Plan and sector plans have identified steep slope protection areas since the 1990s. The significant use of those maps has been: (1) to depict areas that are appropriate for less intense uses, particularly residential uses, and (2) to enable the planning commission, city council and county commission to have a process to consider rezoning requests for hillside areas on a consistent basis. This process has been used to create "planned zoning districts," such as planned residential, so that an appropriate density can be determined and environmental constraints can be identified at the time of rezoning. Planned zoning districts also require site plan review so that a development and conservation plan, which depicts housing sites, roads and open spaces, can be established to conserve sensitive forested hillside areas.

The Hillside and Ridgetop Protection Plan map (see page 32) is proposed for much of the same purposes with the addition that flatter areas on the tops of ridges are included in the map. This is made possible on a systematic basis by advances in geographic information system (GIS) mapping that can identify those flat areas above a steep slope, including "ridgetops." This is significant because one of the overall objectives in creating the task force and this plan was to address ridgetop protection, including appropriate density, siting of structures, clearing and development standards.

The new Hillside and Ridgetop Protection Area is proposed to conserve natural terrain, water resources and scenic qualities associated with the ridges, while allowing development under certain circumstances. The map shows that there are diverse shapes to our ridges. Some have exceedingly steep hillsides, while others are lopsided, having a steep side and gently sloping side. These characteristics relate to underlying geological formations (see Background, pages 7 - 8). However, there is a common set of general development principles that can be used to conserve natural terrain.

- The steeper the slope, the lesser the amount of housing density and development intensity.
- The steeper the slope, the lesser the amount of land disturbance and a greater amount of conservation.
- The tops of ridges define the "crown" of Knox County's natural beauty and are worthy of conservation.

The plan maps and the policies are significant tools in minimizing negative impacts of construction on steep hillsides, including excessive deforestation, soil erosion, water quality degradation, landslides and loss of natural beauty.

Characteristics of the Hillside and Ridgetop Protection Area

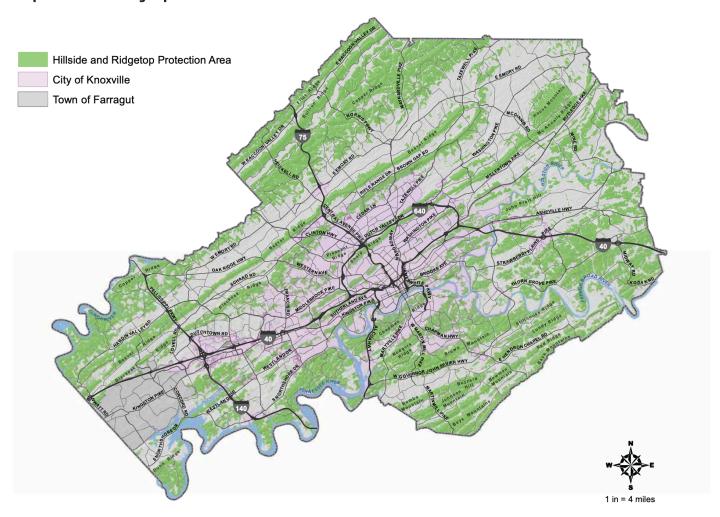
The Hillside and Ridgetop Protection Area, also known as the Hillside Area, is characterized by slopes that are 15 percent and greater and at least five acres in size and flatter areas on ridges, including their summits. Within this area, most hillsides have a 15 to 40 percent slope while approximately 13 percent of the slopes are over 40 percent.

As slopes increase, the stability of soils generally decreases, thus the likelihood of soil failure is greater on steeper slopes, especially where more unstable soils are found (see Map 4: Soil Slippage Potential, page 12).

The Hillside and Ridgetop Protection Area also contains the vast majority of Knox County's forested resources, especially in the Rural Area (see Map 5: Knoxville, Knox County, and Farragut Growth Plan, page 18). Since these areas are mostly undisturbed, ridges are significant wildlife corridors. Species richness, as demonstrated through the work of the Tennessee Department of Wildlife and Fisheries, is also greater on ridges (see pages 4 and 5).

| Table 2: Proposed Hillside and Ridgetop Protection Area Acreage by Percent of Slope | | |
|---|---------|--|
| Percent Slope | Acres | Percent of Hillside and Ridgetop Protection Area |
| 0 - 15 | 38,024 | 29 |
| 15 - 25 | 43,424 | 33 |
| 25 - 40 | 33,034 | 25 |
| 40 or more | 16,625 | 13 |
| TOTAL | 131,107 | 100 |

Map 7: Hillside and Ridgetop Protection Plan



 $32\,-$ The Knoxville Knox County Hillside and Ridgetop Protection Plan

Zoning and Development Policies

Zoning is the foundation for land use control in Knoxville and Knox County. Over the last two decades, MPC, the city council and county commission have made rezoning decisions based on the capability of land to sustain certain intensities of development, recognizing that steep slope and flooding conditions pose limitations. The zoning codes contain limitations on the height of building, which is 35 feet in the zoning districts that are currently within the Hillside and Ridgetop Protection Area. No changes are recommended to the building height limitation on steep slopes and ridgetops.

The Growth Policy Plan, General Plan and sector plans contain policies regarding recommended residential densities relative to the degree of slope. The following represents a refinement of those policies recognizing that there are significant geologic hazards and engineering constraints to development on the steepest slopes.



An example of two dwelling units per acre in the 15 to 25 percent slope group

LOW DENSITY AND RURAL RESIDENTIAL USES

Density and Land Disturbance Guidelines

As proposals for changes to the zoning map and development plans/concept plans are considered, the following factors are recommended to determine the overall allowable density for residential rezonings and the overall land disturbance allowable in new development or subdivisions for those portions of parcels that are within the Hillside and Ridgetop Protection Area. These factors should be codified as regulations in the future. The areas of the Growth Policy Plan referenced below are presented on page 18.

Table 3: Residential Density and Land Disturbance Guidelines for Recommendations on Changes to the Zoning Map and Development Plan/Concept Plan Review within the Hillside and Ridgetop Protection Area that is within the Urban Growth and the Planned Growth Area

| Percent of Slope | Recommended Maximum Density Factor* | Recommended Maximum Land Disturbance Factor** |
|------------------|--|--|
| 0 - 15 | Knox County: 5 dua City of Knoxville: 6 dua | 100% |
| 15 - 25 | 2 dua | 50% |
| 25 - 40 | 0.5 dua | 20% |
| 40 or more | 0.2 dua | 10% |
| Ridgetops*** | *** | *** |

dua: dwelling units per acre

- * These factors should be considered guidelines to determine an overall recommended residential density for requests for changes to the zoning map to planned residential (RP-1 in the city and PR in the county) zone districts that are considered by the Metropolitan Planning Commission prior to being considered by the appropriate legislative body. The resulting zone district development right would be considered a budget for dwelling units to be applied over the entire proposed development.
- ** Until such time as regulations are codified by the appropriate legislate body, these factors should be considered guidelines to determine an overall recommended land disturbance area for development plans and concept plans that are considered for approval by the Metropolitan Planning Commission. The overall land disturbance area would be considered a budget for land disturbance to be applied over the entire proposed development.
- *** Ridgetops are generally the more level areas on the highest elevations of a ridge. Because the shapes of Knox County ridges are so varied (see pages 8 – 9), the ridgetop area should be determined on a case-by-case basis with each rezoning and related development proposal.