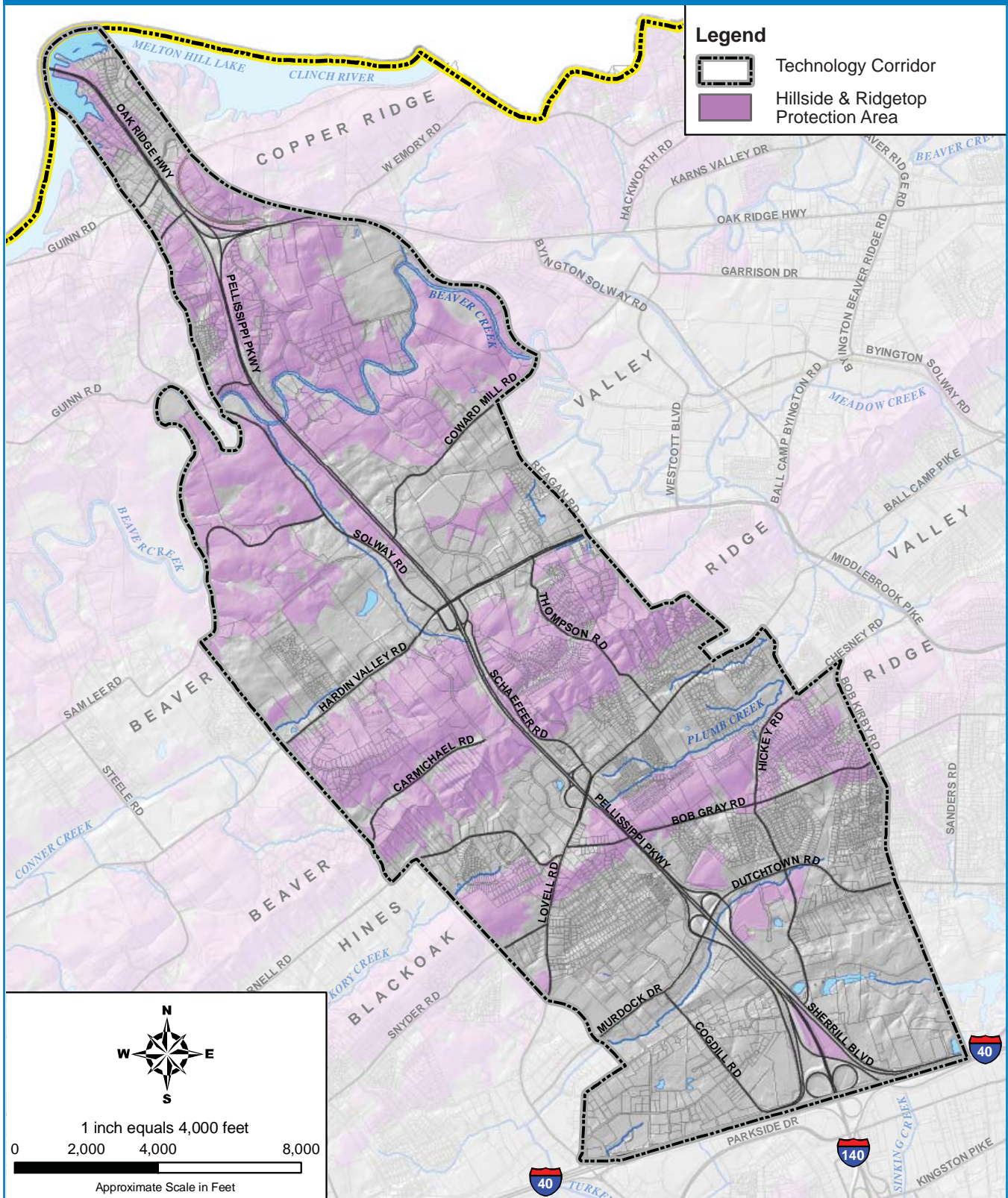


Map 3: Tennessee Technology Corridor Hillside and Ridgetop Protection Areas



Section 1.12: Hillside and Ridgetop Development

Portions of the Technology Corridor are characterized by moderate to steep slopes which present challenges for development in regard to public safety, environmental concerns and visual continuity. All development within or partially within hillside and ridgetop protection areas (areas with slopes in excess of 15%) shall be subject to TTCDA approval. In order to provide the proper development guidance for such areas, the following standards and requirements shall apply.

GUIDELINES

1.12.1 SITE DEVELOPMENT

- A. To reduce the amount of site disturbance, the maximum building footprint for office and medium density residential uses shall not exceed 5,000 square feet per building per two acres in hillside and ridgetop protection areas. (Example: A four-acre site would be allowed two buildings, each with a 5,000 sq. ft. footprint.)
- B. Development sites should be prepared in such a manner so that the use of retaining walls is minimized. The maximum allowable height of a retaining wall shall not exceed six (6) feet for a side yard, which may not extend into a required front yard adjacent to a street. The maximum allowable height for a retaining wall in a rear yard shall not exceed eight (8) feet. If a greater height is necessary, two (2) retaining walls at a maximum height of four (4) feet shall be terraced with a minimum horizontal width of four (4) feet and maximum horizontal width of eight (8) feet of separation. The maximum slope between the two walls shall be 2:1. An alternative

retaining wall design may be approved if it is consistent with the city or county engineering requirements and such that the amount of land disturbance shall not exceed the maximum allowed under 1.12.4.

- C. In addition to these requirements and any other requirement in the Design Guidelines regarding site preparation and grading, the policies of Knoxville and Knox County pertaining to hillside and ridgetop development shall be followed.

1.12.2 DEVELOPMENT INTENSITY

- A. In hillside and ridgetop protection areas, the maximum allowable height of a structure shall not exceed 35 ft., measured from the average natural grade of the building site.
- B. Ground area coverage shall not exceed 5,000 sq. ft. per two acres.
- C. Floor area ratio shall be determined by the relationship of the building's total square footage to the size of the site and how much of the site can be disturbed (or 50% maximum).
- D. Impervious area ratio shall not exceed 50% on slopes ranging from 15% to 24.99%.

1.12.3 SETBACKS

- A. Waivers to the setbacks listed under Section 1.4.1 may be required to preserve and maintain hillsides and ridgetops, as shown in Map 3.
- B. Setbacks respecting hillside and ridgetop conditions may also be approved under the provisions of Section 1.4.3 regarding unified developments.

1 Site Design

1.12.4 OPEN SPACE

- A. The criteria for the conservation of hillside and ridgetop protection areas focus on the prevention of erosion and the preservation of vegetation and scenic views. As such, new development (other than low density residential uses, as defined by the *Knoxville-Knox County General Plan*), including parking areas, artificial berms, and detention/retention ponds, should not be permitted on slopes in excess of 25%. Map 3 shows the Hillside and Ridgetop Protection Areas in the Technology Corridor.
- B. With the exception of road access, the following requirements shall apply:

Table 5: Slope Conservation

Slope	Land Conservation	Land Disturbance	New Development Permitted
25% or more	100%*	0%*	0%*
15% - 24.99%	50%	50%	50%
0 - 14.99%	Negotiable	Negotiable	Negotiable

*Some disturbance may be allowed to accommodate road access.

1.12.5 CIRCULATION

- A. Roadway and driveway design should respect the site's topography.
- B. The amount of area devoted to roadways and driveways shall be determined by the amount of disturbance allowed on the site, not to exceed 50%.

1.12.6 PARKING

- A. Under building parking structures, or terraced parking, should be used to preserve hillside and ridgetop protection areas.
- B. Shared parking and on-street parallel parking bays should be used where possible to minimize land and soil disturbance, minimize impervious surface coverage, and achieve excellence of design and aesthetic sensitivity. Parking minimums may be reduced on a case-by-case basis in hillside and ridgetop protection areas.
- C. Grading for parking lot construction is prohibited in areas with natural slopes of 25% or greater.
- D. Maximum allowed parking for office, office park and multi-tenant office buildings shall not exceed 2 spaces per 1000 sq. ft. of gross floor area.

Figure 8: Under-Building Parking with Hillside Development Example

