

Conservation

Introduction

Conservation Community Character policy is found in all Transect Categories except T6 Downtown. Its intent is to preserve environmentally sensitive land features through protection and remediation. Environmentally sensitive land features are kept in a natural state and any development is minimal to protect water quality, minimize infrastructure and public service costs, and preserve the unique environmental diversity of Davidson County, which is important to its healthy economy and overall sustainability.

Conservation policy is mapped to identify land with sensitive environmental features. These features include, but are not limited to, view sheds, steep slopes, stream corridors, floodway/floodplains, rare or special plant or animal habitats, wetlands and unstable or problem soils. These sensitive environmental features are subject to all appropriate local, state and federal regulations. Additional special policies to address concerns unique to the site may be applied through the Community Planning or the Detailed Design Plan process.

Conservation policy is most prevalent in the T2 Rural Transect Category, which is rural in large part because of the widespread presence of environmentally sensitive features including steep slopes. Within T2 Rural Areas, the primary intent of the policy is preservation rather than remediation. Remedial situations will be more commonly found in the more intensely developed Transect Categories, such as T3 Suburban, T4 Urban, and T5 Center. T6 Downtown contains no Conservation policy because of its fully developed urban condition.

While the Nashville/Davidson County General Plan calls for preservation of environmental features, and the community often values preservation of environmental features, preservation is not always possible if the property owner cannot achieve some economic value from their property. However, the presence of environmentally sensitive features often diminishes the development capacity of property. Communities must be open to allowing property owners to realize some economic value for their property, while at the same time, property owners must be prepared to utilize unique development tools and options for land that contains environmental constraints and recognize that the initial value of the land may be compromised by the presence of environmentally sensitive features.

The balance between realizing value from one's property and preserving environmentally sensitive land can be achieved through regulatory or incentive-based tools. Agencies at all levels of government, non-profit entities, and the private sector are encouraged to cooperate to develop and use innovative regulatory and incentive-based tools, such as conservation easements, land trusts and transfer of development rights (TDR) programs. These tools help to facilitate the preservation of environmentally sensitive land features and their use as assets to the community.



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Policy Intent

Preserve and enhance environmentally sensitive land within all Transect Categories. Conservation policy identifies land with sensitive environmental features including, but not limited to, view sheds, stream corridors, steep slopes, floodway/floodplains, rare or special plant or animal habitats, wetlands and unstable or problem soils.

In Davidson County, with its diversity of environmental features, Conservation Policy is applied throughout all Transect Categories except T6 Downtown, to preserve or enhance environmentally sensitive features. Conservation policy will be most commonly found in T2 Rural Areas, which remain rural in large part because of the widespread presence of environmentally sensitive features including steep slopes and floodplain/floodway. Within T2 Rural Areas, the primary intent of Conservation Policy is preservation. An example would be leaving forested steep slopes in their natural state. Remedial situations where the policy intent is to enhance rather than to preserve will be more commonly found in the more intensely developed Transect Categories. An example of such enhancement through remediation would be the daylighting of a culverted stream in a T5 Regional Center.



General Characteristics

Conservation Policy areas vary widely in the specific constraints they present to development. In Davidson County, the bulk of environmentally constrained land falls under two categories: steep slopes and floodplains. Often, other environmentally sensitive features such as wetlands and unstable or other problem soils are associated with these two categories. In T2 Rural Transect, the primary environmentally sensitive features are steep slopes and floodplain/floodway areas. In T3 Suburban, these features are also present, but they are less widespread and tend to be at the edges of that Transect area or in isolated areas within it. In T4 Urban Transect, steep slopes are rarer in relation to floodplain areas. This reflects the fact that most T4 Urban development has occurred or is planned to occur on level land. In the T5 Center Transect Category, environmental constraints are almost exclusively confined to floodplains.



Rare plant and animal species and problem soils may be found in all Transect Categories. They are, however, most commonly found in the T2 Rural and T3 Suburban Transect Categories. Because of the highly developed condition, T4 Urban, T5 Center, and T6 Downtown see limited rare plant and animal species. Districts, with their wide variety of locations and development patterns, also exhibit a variety of environmental constraints. Most notably, Industrial Districts are commonly located along the floodplain of the Cumberland River, which as discussed below is treated differently from other floodplain areas of the County in key respects.



Although development in the Conservation policy is generally consistent with the character of the Transect Category in which it is located, development may vary in some respects from the character of its surroundings. For example, residential development in Conservation Policy in a T2 Rural Area may take the form of a grouping of homes spaced more closely together relative to other development in T2 Rural Areas and surrounded by a large

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amount of open space because environmental constraints limit the ability to place the homes in any other way on the property. Another example is found in T4 Urban Areas where development is generally found on a complete street grid without cul-de-sacs. However, if Conservation policy is used to protect a stream or a steep slope, then a cul-de-sac may, in limited cases, be appropriate in T4 Urban Areas.

The following is a list of environmentally sensitive features frequently found in Davidson County. Development on land with these features is regulated by applicable local, state, and federal regulations and may be subject to additional special policies applied during the Community Planning or the Detailed Design Plan process.

Floodplain – Land area, including the floodway of any river, stream or watercourse, susceptible to being inundated by water as identified by the 100-year flood.

Floodways – The channel of a stream that has current, direction and velocity during a flood, and in which debris may be carried.

Rare Plant and Animal Species, including Cedar Glades – There are several rare plant and animal species in Nashville. Cedar Glades are communities of rare plant species that are found nowhere else in the world but Middle Tennessee. They are most concentrated in the vicinity of J. Percy Priest Reservoir in the Antioch-Priest Lake and Donelson-Hermitage-Old Hickory Communities.

Ridgelines – Points of higher ground that separate two adjacent streams, watersheds, or valleys.

Steep Slopes – Those areas of land with slopes that are 20 percent or greater. This includes areas of steep hillsides, and steeply sloping land leading to ridge tops and bluffs. Policies for treatment of steep slopes apply not only to areas that are large and contiguous enough to be mapped on the Community Character Policy Plan, but also on areas of steep slopes that are too small to be so mapped. These will be identified during the site planning process and generally can also be found through the Metro geographic information system database. Areas of human-made steep slopes, such as berms and retaining walls, are not considered steep slopes for the purposes of this section. The development of these is guided rather by following principles regarding stormwater management presented in the General Principles section of this document as well as Metro's grading and building regulations.

Stream Corridors – These include, at a minimum, stream channels that convey water for at least part of the year and the regulatory water quality buffer that surrounds the stream channel. Stream corridors may in some instances include steeply sloped uplands that extend beyond the regulatory water quality buffer.

Unstable/Problem Soils – Unstable soils are typically associated with steep slopes or the bases of steep slopes. The former are generally



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Bodine-Sulfura soils and the latter is most commonly Dellrose. Problem soils include sinkholes and wetland soils.

View sheds – Areas of the natural landscape which have been identified from defined viewpoints and that have inherent scenic qualities and/or aesthetic values.

Other environmentally sensitive features, include, but are not limited, to wildlife corridors and fragile geological formations. These may be identified during the Community Planning process.

Application

Conservation policy is applied to areas where environmentally sensitive features are identified. Conservation policy areas include the environmentally constrained features themselves along with any land lacking such constraints that must be accessed through the environmentally constrained land.



Conservation Policy may be applied in three circumstances. First, it is applied to undeveloped areas that are generally unsuitable for development due to environmentally sensitive features. Second, it is applied to areas that have been developed, but retain environmentally sensitive features (for example, floodplain and floodway) that need protection if redevelopment or further intensification occurs. Third, in cases of developed land, Conservation Policy may be used for the remediation of environmentally sensitive features that may have been compromised during site construction.



All development in Conservation Policy is required to follow all Metro, state and federal laws with regard to development on or around environmentally sensitive features.

Appropriate Land Uses

Due to their environmentally sensitive character, Conservation areas are generally unsuitable for conventional suburban or urban development. In some cases, development of any kind is discouraged in Conservation areas within the limits of property rights law, and alternative approaches such as conservation easements or transfer of development rights (TDR) are strongly encouraged.



In other Conservation areas, very low intensity residential and open space developments may be appropriate. Examples of low intensity open space development include athletic fields, hiking trails, picnic shelters, and nature centers that exemplify site-sensitive design. Only rarely are non-residential, non open space uses found in these areas, and when they are, urban design differs from conventional approaches in terms of such elements as building placement and massing, parking arrangement, and construction and grading techniques. Most commonly, these commercial, office, and mixed uses will be found in T4 Urban and T5 Center Conservation areas. In some instances, such as steep slopes, Conservation Policy may not be applied to environmentally constrained land in T4 Urban and T5 Center Areas because those areas are, for the most part, already developed.

In T2 Rural Areas, agricultural land uses may also be found in Conservation

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Policy, particularly agricultural uses that minimize native vegetation removal on steep slopes and stream banks.

Industrial development associated with Districts may be appropriate in the floodplain along the Cumberland River, given the unique role that it plays in Nashville/Davidson County's economy as a working river with flood control measures in place. In such cases, consideration should be given to surrounding Community Character Policies, and Industrial Policy may be applied in lieu of Conservation Policy. It may be advisable to utilize Special Policies in the Community Plan or Detailed Design Plans to provide additional guidance.

Examples of Potentially Appropriate Land Uses: (In alphabetical order)

Residential

Civic or Public Benefit

Agricultural

Industrial in floodplain sites along the Cumberland River

Existing commercial uses are sometimes found in CO policy areas. Guidance for these uses is provided in the applicable community plan. New commercial uses are discouraged.

Uses that have high lot coverage, large building footprint, considerable parking needs and significant impervious surface are rarely found in Conservation Policy.

Design Principles – General

The following list of design principles applies to *all* environmentally sensitive features.

Access – Access is designed to provide minimum disruption to environmentally sensitive features with excessive grading and cut and fill minimized.

Building Form (Mass, Orientation, Placement) – The building form is in character with the existing development pattern of the neighborhood or area in terms of its mass, orientation and placement, to the extent that this character minimizes disturbance of existing environmental features. Building heights are in keeping with buildings in surrounding Community Character Policy areas. Buildings are massed to leave small footprints in relation to the lot size. Buildings are oriented to face any main thoroughfares, or to protect any viewsheds or sensitive environmental features.

Density/Intensity – Density and intensity are secondary to form of development and are designed to preserve sensitive environmental features. The density and intensity of development for the environmentally constrained portions of a site is lower than for the more developable portion of a site, to an extent that preserves the essential integrity of the natural landform and vegetation. Specific residential densities or intensity in Conservation Areas are determined during the planning process by physical site characteristics, Transect Category, adjacent Community

Zoning Districts

- AG
- AR2a
- SP
- Other zoning districts may be appropriate based on the locational characteristics of the subject property and the ability of the applicant to document that the proposed zoning district is consistent with the policy



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Character Policy areas, and the impact that the proposed development would have on the environmental feature in question. In general, the more environmentally sensitive the site is, the lower the acceptable density or intensity of development is. The adequacy of the infrastructure (including, but not limited to, roads and sewers) and the feasibility of extending infrastructure is also considered. In all cases, the density and intensity and their appropriate form are established through the Community Planning or Detailed Design Plan process, to be in keeping with preservation and remediation goals and the goals and objectives of the Community Plan. In the case of environmentally sensitive land that has been disturbed, efforts are made to remediate any alteration that has occurred in these areas as development/redevelopment occurs.



Development Arrangement – Development is grouped on the site to preserve the environmentally sensitive features. Lot configuration and right-of-way prioritize the preservation of environmentally sensitive features over consistency with surrounding lot and right-of-way patterns. Site specific vegetation, viewsheds and topography are used to determine where buildings are best located to minimize environmental disturbance. Context sensitive setbacks are designed to preserve scenic view sheds when to do so will not interfere with the need to observe site-sensitive setbacks that preserve sensitive environmental features. Sensitive environmental features are used as site amenities.



Innovative development techniques are utilized to minimize environmental disturbance, resulting in infrequent use of standard building designs, most particularly in the case of non-residential development. Grading is minimized.

Design Principles per Environmentally Sensitive Feature

Floodways – Development does not occur in floodways. Development is either grouped elsewhere on the site, the site is consolidated with an adjacent property to produce a developable site, or development rights are transferred.

Floodplains – Management of floodplains is addressed as a preventative measure in greenfield development situations and a remediation measure in areas where development has occurred.

In greenfield areas, the majority of the natural floodplain area (including all of the floodway) is left in its undisturbed natural state. Clearing of trees and brush from this area is avoided. Portions of the floodplain or waterway may be incorporated into private or public open space associated with parks and recreational, and civic and public benefit uses.

Low intensity land uses are developed in those portions of floodplains that are permitted to be disturbed, again keeping disturbance to a minimum. Where a site containing floodplain also contains land that is outside the floodplain, development should be such that the buildings are grouped on the portion of the site that is not floodplain, leaving the floodplain for the creation of public or private open space. In order to



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maintain water quality, facilitate flood control, and ensure public safety, the development potential for the flood prone portion of a site is lower than it is for the developable portion of a site.

To remediate areas where the floodplain and floodway have been compromised by development, the floodplain and floodway are identified during the Community Planning or the Detailed Design Plan process. As redevelopment occurs, lands within the floodplain and floodway should be reclaimed and protected in the manner addressed above.

Rare Plant or Animal Species – Once alerted by the Planning Department to the potential presence of rare plant or animal species on a development site, developers consult with the State of Tennessee to determine the actual presence of any such species on the site. If any such are present, their habitat is left undisturbed through methods such as site design techniques, conservation easements, and transfer of development rights. The development potential of a site containing rare plant or animal species may be lower than for other nearby sites lacking similar environmental features.

Ridgelines – Rooftops of any building or structure are below the defined ridgeline and/or are buffered using mature stands of trees and native plants and vegetation, unless located within a T5 Center Area, where buildings may project above a defined ridgeline.

Steep Slopes – Development is such that buildings are grouped on the portion of the lot with slopes less than 20 percent, leaving the remaining steep slope areas as open space. Building footprints remain small in relation to the lot size and the form of the building is designed to fit the natural contours of the site. The development potential of the site may vary depending on the steepness of the slopes on the site and the accessibility to portions of the site that are level. Some areas of Conservation policy, especially in T2 Rural, may be level, but may not be accessible without disturbing steep slopes. The development intensity of these isolated level areas is therefore also kept low.

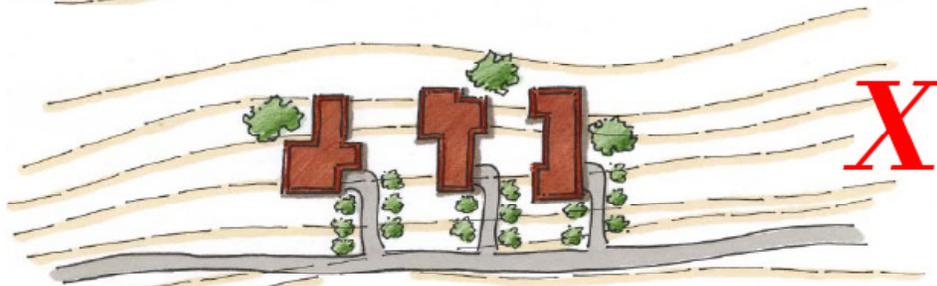
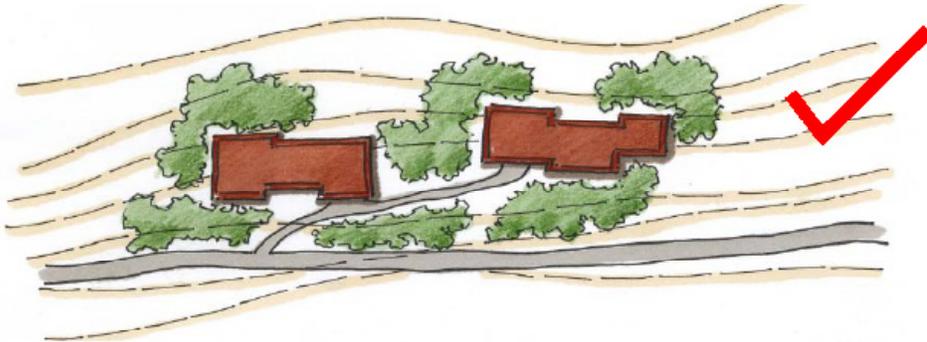
Development potential for the steeply sloping portions of a site is lower than for the more level portion of a site. In all cases, the development potential is determined based on the ability of the proposed development to preserve the essential integrity of the natural landform and vegetation including mature stands of trees, which are essential for slope stabilization and water quality.

The following graphics illustrate appropriate techniques for developing on steep slopes and ridgelines.



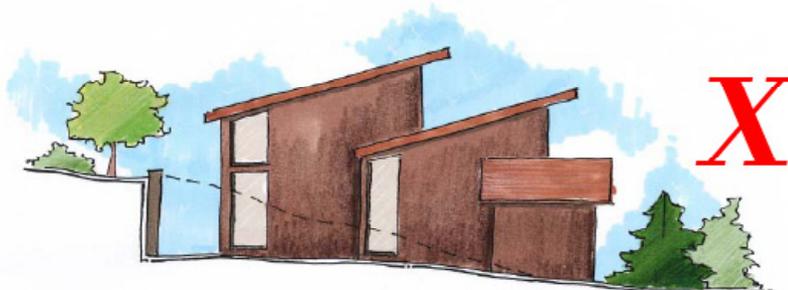
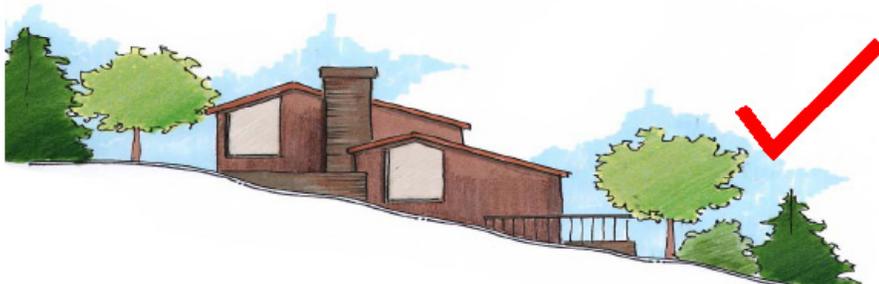
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Access, Building Form & Character



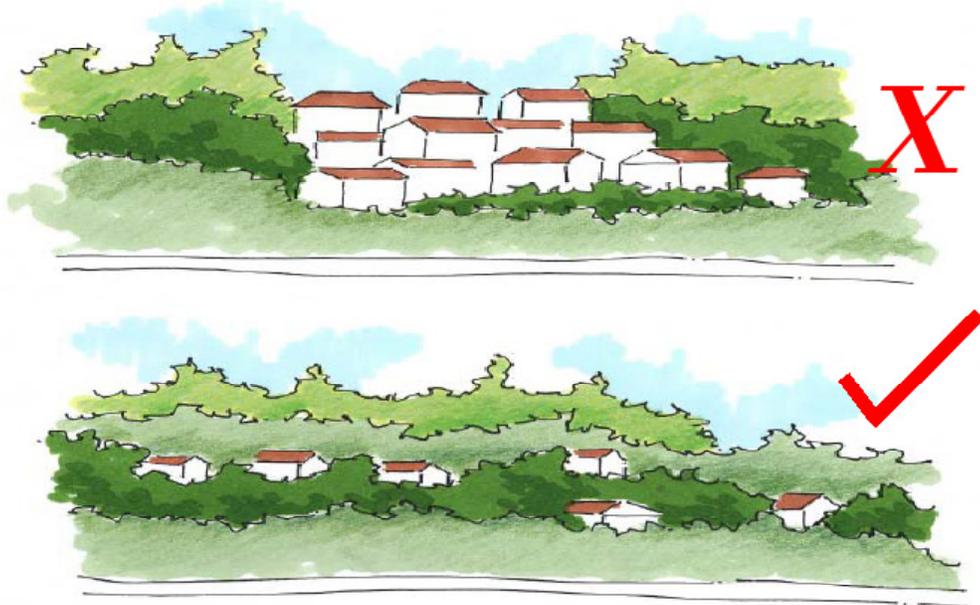
Consolidated driveways are preferred over individual driveways for each lot or building. Driveways should be constructed parallel to the natural slope rather than perpendicular to it, thus minimizing alteration of the landform.

Access, Building Form & Character



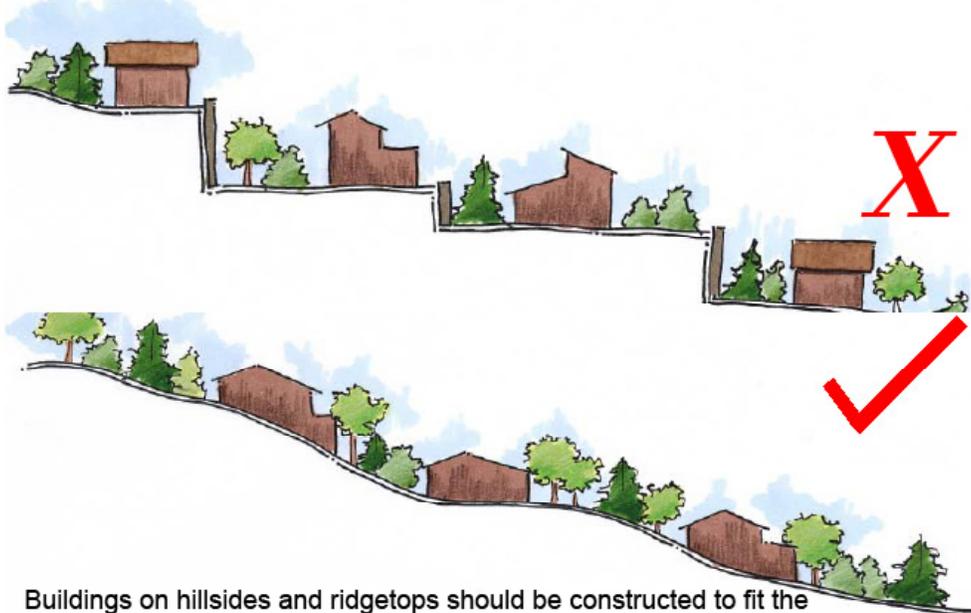
Development should be constructed in a manner that follows existing contours as much as possible, particularly in sensitive areas such as steep slopes and unstable soils.

View Shed and Tree Protection



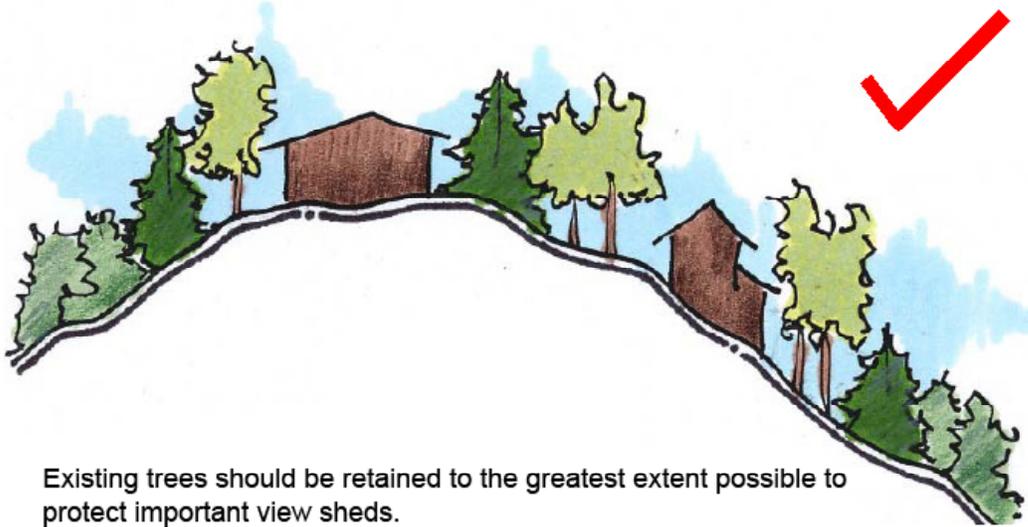
Existing vegetation on slopes and ridgelines should be preserved to the greatest extent possible.

View Shed and Tree Protection



Buildings on hillsides and ridgetops should be constructed to fit the natural contours of the land rather than altering them through such means as significant grading and the construction of retaining walls.

View Shed and Tree Protection



Existing trees should be retained to the greatest extent possible to protect important view sheds.

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Stream Corridors – At a minimum, the stream and regulatory buffer are left undisturbed. Stream crossings are minimized and when made are done in the least impactful manner. Stream corridors are utilized as part of the stormwater drainage system for the development and are also used as community amenities and greenway corridors. The development potential of a site containing stream corridors may be lower than for other nearby sites lacking similar environmental features.



Unstable and Problem Soils – Geotechnical studies may be required prior to site development in parts of the county where unstable or other problem soils are known to exist. Once discovered on a site, problem soils are left undisturbed through methods such as site design techniques, conservation easements, and transfer of development rights. The development potential of a site containing unstable or problem soils may be lower than for other nearby sites lacking similar environmental features.

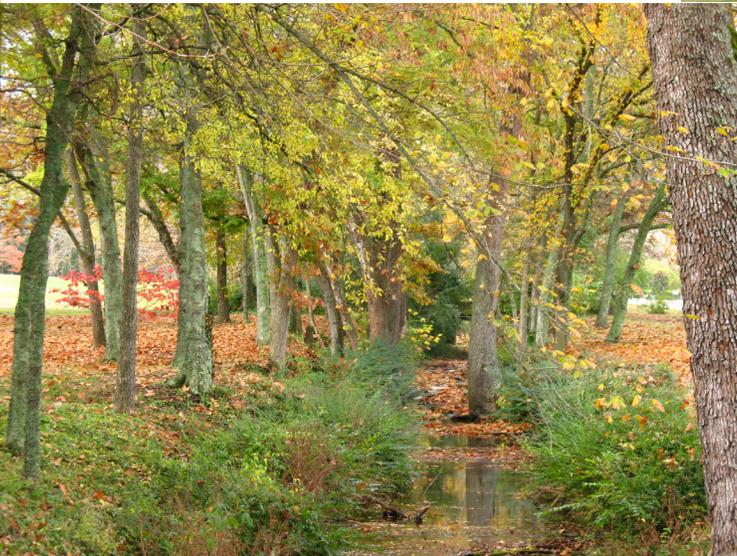
View sheds – Buildings do not impede in the defined view shed. Rooftops of any building or structure are below the perceived skyline and/or are buffered using mature stands of trees and native plants and vegetation.

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Conservation policy is applied across all Transect categories except Downtown. Because of this, the development environment surrounding sensitive natural features varies across the county. Shown to the left is a preserved hillside in West Meade with a suburban residential neighborhood in the valley.

Conservation policy in a rural setting in Bells Bend where the steep forested hillsides are preserved and the floodplain is used for agriculture.



A stream corridor is preserved in West Nashville.