

CALN TOWNSHIP ZONING ORDINANCE UPDATE

MEETING #18 AGENDA

November 20, 2025 – 6:30pm

Caln Township Municipal Building

- 1. Review Meeting Minutes**
- 2. Status of Historic Resource Protection Ordinance**
- 3. Mixed-Use Village Overlay District:** Discuss letter dated September 17, 2025 submitted Ryan M. Furlong of Riley Riper Hollin & Collagrecó
- 4. Review Proposed Updates to Article V Natural Resource Protection (dated November 13, 2025) per EAC comments/questions**
- 5. Any other comments on the draft Zoning Ordinance?**
- 6. Discuss Next Steps and Tentative Timeline**
- 7. Public Comment**
- 8. Confirm Date of Next Meeting**

NS responses in red font. Revisions are in Natural Resource sections (attached).

Art. V – Natural and Historic Resources Protection Standards:

- Do these requirements belong as part of Zoning or would we be better served having them in a separate ordinance section? See [Easttown Ch. 274](#) and [455-31\(zoning\)](#). *Would be a stand-alone ordinance if township wants to apply these regulations to activities that do not require a permit under zoning.*
- Should we be clear that these requirements apply to all activities within all zones? Do we need to capture the requirements in each of the sections as separate / segregable township wide overlap districts for the sake of defining applicability? *See revision to General Provisions & Applicability*
- Should we have a section, as part of general applicability, that specifies to whom these requirements apply? For example, are we just asking for resource protection plans from SALDO applicants or from a broader range (as some of the requirements in the specific sections appear to apply more broadly to building permit applicants as well). *See revision to General Provisions & Applicability*

155-36: *See revision to General Provisions & Applicability*

- Does this apply to all parcels or only those requiring SALDO? We are seeking clarity as to whether this would apply to any / all permitted land disturbances or just to those under SALDO.
- For subpart A, is the “and” intended to be read as an “or”, such that it would apply even if the resources are located on adjacent properties? Or does the second use of the word “property” really mean “area of disturbance”—so that, read together, it would apply when the resource is (1) on the parcel and (2) within 100ft of the proposed area of disturbance (as sought per permit)?
- For subpart B, would it make sense to list the identified resources (i.e., wetlands, steep slopes, historic resources, etc.)?

155-37:

- There is no mention of the resource protection plan here. *Plan requirements are in subsection F.*
- Should this section be expanded to include watercourses? See [Easttown](#) as an example. If so, we’d also need to make clear how we delineate the boundaries of other watercourses. *See revision to 155-37A*
- How should these requirements be read in conjunction with [SALDO 137-44.1](#) (RPZ)? As it stands, the two sections would appear to potentially contradict each other—or at least it’s not clear how to comply with both. *They do seem to contradict.*

155-38:

- The EAC proposes to define steep slopes to include **moderately** and very steep slopes for clarity and enacting stricter limits for disturbance on all steep slopes. Suggesting text forthcoming – but we suggest 0% disturbance on Very Steep Slopes and 30% disturbance on Moderately Steep Slopes (see [E. Brandywine Township](#)). **Changed definition to include “moderate.” Agree with 30% limit on Moderate, but Very Steep Slope typically limited to 15% disturbance. Also construction on VS Slopes is limited to utilities and an access road.**
- Are the requirements in this section intended to apply to all applicants (including those for building permits) or just SALDO applicants? **All applicants...this is now covered in the revised General Provisions and Applicability section**
- The EAC is also proposing to remove the stated exception for solar projects. **Struck it out (subsection K).**

Art. II – Definitions:

- We need to add a definition for “native plantings”. As it stands, the language swaps back and forth between native plants and indigenous plants. All instances of indigenous should be changed to native, and we’ll find a definition for native. **Native planting is usually not defined, but send me a definition that you like. Changed all “indigenous” to “native”**

155-43:

- Brandywine Flood Study recommends setting the design flood elevation at 2’ higher than FEMA base flood elevation:
https://issuu.com/thebrandywine/docs/brandywine_flood_study_report?fr=xKAE9zw4SA
See definition of Regulatory Flood Elevation on page 111 of the draft Zoning Ord. It includes a freeboard of 1-1/2 feet. Increase this to 2 feet?

155-71:

- Should plug-in electric vehicle charging stations as permitted accessory uses be added to other non-residential districts as well? **Could add EV charging stations as a permitted accessory use to section 155-113B (Accessory Uses and Structures applicable to non-res uses in all zoning districts). Could also, revise 155-147 (Off-street parking requirements) to require a certain number or percentage of parking spaces to be EV charging.**

155-125:

- See our proposed list of trees and shrubs in spreadsheet attached. Section **155-125D** categorizes the approved list of trees as (1) street trees, (2) canopy trees, (3) flowering trees, (4) evergreen trees, (5) hedges or hedgerows, and (6) shrubs. **Can you break your list into these categories?**

Proposed Updates to Article II Definitions: Terms Related to Natural Resource Protection**DISTURBANCE**

Any activity which exposes soils, alters topography, alters vegetation, and/or alters a watercourse or wetland, except for removal of a safety hazard, diseased trees, or invasive vegetation. Disturbance also includes the moving, depositing, storing, or stockpiling of soil, rock, or other materials.

DRIP LINE

The outermost edge of a roof including eaves, overhangs and gutters. A generally circular line, the circumference of which is determined by the outer reaches of a tree's widest branching points.

HERITAGE TREE

A tree or plant that is considered by the Township to be worthy of conservation due to its age, historical or cultural importance, size, shape, form, visual prominence, scenic qualities, or listing by the PA Natural Heritage Program as a rare, threatened, endangered, or vulnerable species.

INTERIOR FOREST

An area of woodland that provides specialized habitat for certain species, interior forest is a minimum of 3.75 acres and is located at least 300 feet from the outermost drip line of all trees in the larger woodland area. The larger woodland area must be a minimum of 25 contiguous acres.

INVASIVE PLANT SPECIES

Predominantly non-native (to Pennsylvania) tree, shrub, vine, or herbaceous species that grow or reproduce aggressively, usually because they have few or no natural predators, and which can so dominate that they out-compete many native plant species. Invasive plant species are those species listed on the Invasive Plant List produced and maintained by the Pennsylvania Department of Conservation and Natural Resources.

OLD GROWTH FOREST – Woodland areas that have been in existence for 100 years or more.

STEEP SLOPES

Those areas of land which have a range of slope of 15% or greater but less than 20% in predevelopment condition. Steep slopes are divided into 2 categories:

A. MODERATELY STEEP SLOPES

Those areas which have a range of slope of 15% or greater but less than 20% in predevelopment condition.

B. VERY STEEP SLOPES

Those areas which have a range of slope 20% or greater in predevelopment condition.

SPECIMEN TREE

Any tree considered to be of specimen quality as determined by a Pennsylvania registered landscape architect, certified arborist, or horticulturist, or which generally falls within the parameters included in the table below. The examples of specimen trees in the table below are intended to provide general guidelines and examples of what constitutes a specimen tree and are not considered all-inclusive for the purpose of defining specimen vegetation.

Species	Min. Size	Species	Min. Size	Species	Min. Size
Apple	24" DBH	Locust	30" DBH	Spruce	30" DBH
Ash	32" DBH	Maple	32" DBH	Sycamore	36" DBH
Beech	32" DBH	Oak	32" DBH	Tulip Poplar	36" DBH
Cherry	24" DBH	Osage Orange	20" DBH	Walnut	30" DBH
Elm	30" DBH	Pine	30" DBH	Hickory	32" DBH
Hemlock	30" DBH	Sassafras	20" DBH		
<i>Source: Brandywine Conservancy, Environmental Management Center</i>					

WETLAND BUFFER

The transitional area extending a specified distance from the outer limit of the wetland which serves as a buffer to protect the wetland.

WOODLAND, CRITICAL – Interior forest areas, old growth forests, woodlands within a riparian buffer area, woodlands within a wetland buffer area, or woodlands within a Core Habitat Area delineated by the Pennsylvania Natural Heritage Program or other habitat area determined to support rare, threatened, or endangered species.

Article V. Natural ~~and Historic~~ Resource Protection Standards **(Overlay District?)**

§155-35 Statement of Intent

- A. ~~The following natural and historic resource protection standards are established to promote public health, safety, and welfare by minimizing adverse impacts to the environmental and the plants, animals, and humans that live within it, and to preserve and promote the history of Caln Township. These standards are intended to meet the following specific purposes:~~
- ~~(1) Implement the goals, objectives and policies of the Caln Township Comprehensive Plan related to protection of natural and historic resources and open space land.~~
 - ~~(2) Promote and implement the PA Municipalities Planning Code providing for the protection and preservation of natural and historic resources through Zoning Ordinances.~~
 - ~~(3) Protect the Township's potable water supply and quality.~~
 - ~~(4) Reduce potential hazards and adverse financial impacts to the community that may result from degradation of natural resources.~~
 - ~~(5) Capitalize on financial benefits derived from the natural infrastructure functions that natural resources provide, such as stormwater management, filtration of contaminants, and flood control.~~
 - ~~(6) Preserve the natural resources and landscapes that screen and buffer the Township's developed areas.~~
 - ~~(7) Protect historic buildings, structures, objects, and sites within Caln Township.~~

§155-36 **Applicability and General Provisions**

- ~~A. A Resource Protection Plan shall be included in all subdivision and land development plan submissions where the specific resources regulated by this Article V are located on the property proposed for development and within 100 feet of the property proposed for development.~~
- ~~B. The Resource Protection Plan shall identify the individual resources and show how these resources will be protected and enhanced.~~
- A. ~~It shall be a violation of this Chapter to regrade, fill, pipe, divert, channel, build upon, or otherwise alter or disturb a natural resource specified in this Article prior to the submission, review, and approval by the Township of applications for zoning or building permits; subdivision or land development plans; conditional use or special exception approvals; zoning variances; timber harvesting plans; or any other applicable permit or approval required by the Township that would involve disturbance of natural resources specified in this Article.~~
- B. ~~Overlay district? The Natural Resource Protection District shall overlay the base zoning districts. In the event that the provisions of this Article and the base zoning district are in conflict, the more restrictive provision shall apply.~~**
- C. ~~Should the boundaries or delineations of any section of this Article be revised as a result of legislative or administrative action or judicial decision, the requirements of the underlying base zoning district shall apply.~~**

- D. In the event that two or more natural resources identified in this Article overlap, the resource with the most restrictive standard (the least amount of permitted disturbance, or the greatest buffer distance) shall apply to the area of overlap.
- E. Where disturbance of a natural resource is permitted, it shall not take place until it has been determined by the Township Zoning Officer, Township Engineer or another professional designated by the Township that such disturbance is consistent with the provisions of this Article and other applicable Township ordinance provisions or federal or state regulations.
- F. Restrictions to the disturbance of natural resources shall apply before, during, and after construction or other permitted activity takes place on a site.

§155-37 Watercourses, Wetlands and Hydric Soils

- A. The purpose and objective of the Watercourses, Wetlands and Hydric Soil protection regulations are outlined as follows:
- (1) To direct growth, development and revitalization efforts by considering environmentally sensitive land areas.
 - (2) To achieve and sustain a high quality natural resource system and to protect a natural diversity of ecosystems.
 - (3) To provide aquatic habitats, which are essential breeding, rearing and feeding grounds for many species of fish, plants and other wildlife.
 - (4) To develop a protective zone to serve as a natural filter in the removing of pollutants such as bacteria, acid and sediment from groundwater and surface water.
 - (5) To implement an effective hydrological and stormwater management program that adequately addresses surface drainage, groundwater recharge and soil erosion control measures.
 - (6) To implement best management practices.
 - (7) To implement the recommendations concerning natural features, conservation management and land use, as outlined within the Caln Township Comprehensive Plan.
- B. Watercourses shall not be regraded, filled, piped, diverted, channeled, built upon, or otherwise altered or disturbed except for activities waived or permitted under Pennsylvania DEP regulations or federal regulations. In the case of an application for subdivision or land development, watercourses on the affected lot shall also be subject to the riparian buffer standards in Chapter 137, Subdivision and Land Development. [OR...move the riparian buffer standards to Zoning so that they apply in all cases, not just subdivision and land development.]
- C. Areas of Wetlands and Hydric Soils shall include the following land and water features:
- (1) All areas delineated as wetlands on the most recent National Wetlands Inventory Maps as prepared by the United States Fish and Wildlife Service.
 - (2) All areas delineated as wetlands by a qualified professional or soil scientist with experience in delineating wetlands.
 - (3) All areas delineated as wetlands by the United States Army Corps of Engineers, as part of a jurisdictional determination.

- (4) All areas encompassed by hydric soils, as defined and mapped by the United States Department of Agriculture, National Resources Conservation Service.
 - (5) All areas encompassed by high water table soils with hydric characteristics, as defined and mapped by the United States Department of Agriculture, National Resources Conservation Service.
- D. The delineated areas of Wetlands and Hydric Soils shall be subject to the interpretation of the Zoning Officer. ???
- E. Should a dispute arise concerning the interpretation of the boundaries of delineated Wetland and Hydric Soil areas, the person aggrieved by the interpretation may file an appeal with the Zoning Hearing Board. In all cases, the burden of proof and submission of technical evidence shall be the responsibility of the person appealing the interpretation of the Zoning Officer. ???
- F. For all areas that have been delineated as a wetlands area, the following provisions and restrictions shall apply:
- (1) ~~If a jurisdictional determination has been approved by the United States Army Corps of Engineers, a twenty five-foot buffer zone shall be applied to all areas that have been delineated as wetlands, as measured from the perimeter of the wetlands area. Within this twenty-five foot buffer zone, no earth disturbance activities or improvements shall be permitted unless approved by the Zoning Hearing Board as a special exception pursuant to the provisions of this chapter. [Conflict with SALDO's riparian buffer zones of 15, 50, and 100?]~~
 - (2) ~~If a jurisdictional determination has not been approved by the United States Army Corps of Engineers, a A fifty-foot buffer zone shall be applied to all areas that have been delineated as wetlands, as measured from the perimeter of the wetlands area. Within this fifty-foot buffer zone, no earth disturbance activities or improvements shall be permitted unless it has been approved by the Zoning Hearing Board as a Special Exception. [Conflict with SALDO's riparian buffer zones of 15, 50, and 100?]~~
 - (3) The Caln Township Engineer shall review all of the plans, drawings, and documents relating to any encroachments or planned earth disturbance activities in areas delineated as wetlands, including any jurisdictional determination approved by the United States Army Corps of Engineers, and he shall report his findings to the Zoning Hearing Board and if necessary, attend the zoning hearing to present his findings and recommendations.
- G. Application for Special Exception.
- (1) In any instance where the Zoning Hearing Board is required to consider an application for earth disturbance activity, such application shall be authorized as a Special Exception.
 - (2) Applications filed with the Zoning Hearing Board shall contain the basis upon which the application is sought, and a description of the relief sought. Plans submitted shall be prepared by a licensed professional engineer and shall include, at a minimum, the following information:
 - (a) Location of streams, creeks, watercourses, ponds, lakes and other water resources on the property to be developed.
 - (b) Delineated area of wetlands and wetland buffers.

- (c) The plans must be drawn to scale and show the nature, location, dimensions and elevations of the lot and existing and proposed uses, together with photographs or drawings showing the existing uses and vegetation within the required buffer zone.
 - (d) Profile showing the slope of the bottom of the stream, creek, watercourse, lake, pond or other water resource, together with the elevation of the adjoining land areas that are proposed for the earth disturbance activities or development.
 - (e) Any additional information that the applicant or Township Engineer deems relevant and necessary to evaluate the special exception application.
- (3) In addition to the criteria and standards set forth in §155-180 of this chapter, the following criteria shall be considered by the Zoning Hearing Board in rendering a decision on a special exception application:
- (a) That the application is for good and sufficient cause.
 - (b) The danger that the proposed earth disturbance activities or development will have upon the wetlands, the ecosystems and the aquatic habitats which may live in the wetlands.
 - (c) That there are no alternative locations for the proposed earth disturbance activities or development outside of the buffer zone.
 - (d) Whether any modifications to the plans or conditions of approval would achieve the purposes and objectives of Section 155-35A.
 - (e) Whether the proposed development is consistent with the Township's Comprehensive Plan.
 - (f) Whether the strict application of the ordinance would deny the applicant a reasonable use of the property or otherwise render the property unusable or unsalable for development.
 - (g) Evidence that all other necessary governmental permits such as those required by state or federal laws have been obtained or will be obtained prior to land development approval or, in the case where land development approval is not needed, prior to building permit approval. If such permits have not been obtained, the Zoning Hearing Board may impose it as a condition of special exception approval that all permits be obtained prior to the issuance of any permit necessary for the earth disturbance.

§155-38 Steep Slopes

A. Purposes. The purposes of this section are to:

- (1) Promote the public health, safety and welfare by the protection of steep slope areas and by encouraging the retention of open space located and designed so as to constitute a harmonious and appropriate part of the physical development of Caln Township.
- (2) Permit only those uses of steep slope areas which are compatible with the conservation of natural conditions and natural vegetation, and which maintain stable soil conditions by minimizing disturbances to vegetative ground covers and by restricting the regrading of steep slope areas.

- (3) Limit soil erosion and the resultant destruction of land, siltation of streams and damage to the property of individuals.
- (4) Protect low-lying areas from flooding by limiting the increase in stormwater runoff caused by grading of sloped areas, changes of ground cover or the erection of structures.
- (5) Maintain the ecological integrity and habitat value of steeply sloped areas, i.e., **indigenous-native** vegetation and wildlife, which could be adversely affected by otherwise permitted disturbances.
- (6) Allow the continuing replenishment of groundwater resources and the maintenance of springs.

~~B. Definitions. As used in this section, the following terms shall have the meanings indicated below: *already defined in Article II*~~

~~STEEP SLOPES: Those areas which have a range of slope of 15% or greater but less than 20% in predevelopment condition.~~

~~VERY STEEP SLOPES: Those areas which have a range of slope 20% or greater in predevelopment condition.~~

B. Rules for interpretation of **moderately** steep slopes and very steep slopes:

- ~~(1) **Steep Slopes and Very Steep Slopes shall be shown on the Resource Protection Plan submitted with all land development plans.**~~
- (2) Should **moderately** steep slope and very steep slope boundaries be revised as a result of judicial decision, the zoning requirements applicable to the area in question shall revert to the requirements of the underlying zoning district(s) without consideration of this section.
- (3) Delineation of boundaries.
 - (a) In any application for subdivision and/or land development, the applicant shall, using two-foot contours, delineate **moderately** steep slopes and very steep slopes. Further, the applicant shall use an actual field topographic survey as the source of contour information and the basis for depicting such slope categories which shall be differentiated with separate symbols and legend. However, these regulations shall only apply in the following cases:
 - [1] In the case of a subdivision and/or land development, where two-foot contours shall be shown, the representative sample of a **moderately** steep slope or very steep slope shall be based on a cumulative change in grade of six feet or more. Therefore, all **moderately** steep slope and very steep slope areas shall be shown, but only those occurring over three consecutive contour intervals will invoke the use restrictions herein.
 - (b) Once delineated, the mapping submitted by the applicant will be reviewed by the Township Engineer. The applicant will be required to follow all regulations of this section for those areas which reflect **moderately** steep slope and very steep slope conditions as determined through the Township Engineer's review.

C. Plan requirements for **moderately** steep slopes or very steep slopes. Where any site has located on it the existence of **moderately** steep slopes or very steep slopes, the applicant

shall supply the following information at the time of application for subdivision and land development approval or a building permit application:

- (1) Subdivision or development plan application. The following information shall be provided:
 - (a) A site plan of the property indicating the existing grades with contour lines at two-foot intervals and proposed grades within the areas of the proposed construction.
 - (b) A landscaping plan indicating proposed paved areas, storm drainage facilities, retaining walls and ground cover, together with trees and ornamental shrub locations.
 - (c) A soil erosion and sedimentation control plan showing how disturbed ground areas will be protected during construction and how disturbed ground areas will be permanently stabilized. All soil erosion and sedimentation control measures shall follow the requirements of the Pennsylvania Department of Environmental Protection, Erosion and Sedimentation Control Manual, latest edition.
 - (d) A plan profile and typical cross sections of the entrance drive and the proposed public street providing access to such drive.
 - (e) A plan for on-site sewage disposal facilities if connection to a public sanitary sewer system is not contemplated.
 - (2) Building permit application. In addition to the above information, the following additional information shall be provided:
 - (a) Architectural plans, elevations and sections for all permitted buildings, structures or construction, accompanied by a drainage plan and a soil erosion and sedimentation control plan.
 - (b) A statement prepared, signed and sealed by a registered architect or a licensed civil or structural engineer describing in detail the building methods to be used in overcoming foundation and other structural problems created by slope conditions, how the natural slopes and watershed will be preserved substantially undisturbed, the method proposed to prevent soil erosion, and details of how overland stormwater runoff and groundwater will be diverted away from all building areas below finished grade.
- D. Limitation of ~~construction disturbance~~ on moderately steep slopes. ~~The construction, erection and development of buildings or structures~~ Disturbance on moderately steep slopes shall be subject to the following limitations:
- (1) ~~The total amount of impervious surface that may be installed or maintained shall not exceed 80% of the maximum amount of impervious surface permitted in the underlying base zoning district.~~
 - (2) The allowable disturbance of all moderately steep slopes on the entire tract shall be a maximum of 75%-30%.
- E. Permitted uses on very steep slopes. The uses permitted on very steep slopes shall be limited to the following:
- (1) Open space ~~reserved as part of a land development so long as no more than 25% of the open space has a slope greater than 25%.~~

- (2) Wildlife sanctuary, woodland preserve, arboretum (exclusive of buildings or structures) and recreation areas (exclusive of buildings or structures).
- (3) Tree farming, forestry and other agricultural uses (exclusive of buildings or structures) when conducted according to conservation measures approved by the Soil-USDA Natural Resources Conservation Service.

F. Restriction of construction and usesLimitation of disturbance on very steep slopes.

- (1) That portion of any site, parcel or lot that is within very steep slopes shall not be included in the calculation of net lot area, with the following limitation: very steep slopes need not be netted out in the calculation of net lot area if the minimum net lot area (without reference to steep slopes) is increased to 133% of the minimum lot size required by the underlying base zoning district regulations.
- (2) The total amount of impervious surface that may be installed or maintained shall not exceed 70% of the maximum amount of impervious surface permitted in the underlying base zoning district. The percent of maximum impervious coverage referred to above shall be calculated on the total lot area.
- (3) Unless permitted by special exception pursuant to Subsection G below, or permitted by conditional use pursuant to Subsection K below, there shall be no erection or construction of any building, structure, road, driveway, parking area or other similar structure or impervious surface on very steep slopes.
- (4) The allowable disturbance of all very steep slopes on the entire tract shall be a maximum of 50%15%.

G. Special exception uses on very steep slopes. The following uses shall be permitted on very steep slopes by special exception when authorized by the Zoning Hearing Board, subject to the requirements of this section. In addition, the Zoning Hearing Board shall consider the extent to which the requested use will disrupt the stability of soils and natural vegetation and contribute to soil erosion before and after construction or installation of the permitted use. The Zoning Hearing Board shall attach such reasonable conditions as it determines necessary and reasonable in furthering the intent and purpose of this section. The uses which shall be permitted on very steep slopes by special exception shall be as follows:

- (1) Sealed public water supply wells that have been approved by all regulatory agencies having jurisdiction.
- (2) Stormwater detention basins.
- (3) Sanitary or storm sewers that have been approved by all regulatory agencies having jurisdiction.
- (4) Access roads suitable for passage or emergency vehicles in the event of fire or accident. Such road shall be constructed only when no viable alternative for emergency access exists, provided that all requirements of applicable codes and ordinances are met, and subject to approval by all regulatory authorities having jurisdiction.
- (5) One primary road which is designed and intended to serve as an access road to a subdivision or a driveway which is designated and intended to serve as sole access to a lot therein, provided that there is no other feasible way to design access to the property without crossing very steep slopes. The criteria for construction of a public or private street or driveway on very steep slopes is as follows:

- (a) Such street or driveway shall be proposed for construction only when no viable alternative for access exists. The burden shall be upon the applicant to show that no other alternative exists.
 - (b) The proposed road or driveway shall be placed as close to the natural contour of the land in order to minimize cutting and filling.
 - (c) The construction standards and specifications of the proposed street(s) shall comply with the standards and specifications of §§ 137-35 through 137-43 of Chapter 137 of the Caln Code (the Subdivision and Land Development Ordinance), and the construction standards and specifications of the proposed driveway(s) shall comply with the standards and specifications of the Caln Township Driveway Ordinance, Ordinance No. 2002-2, enacted on April 25, 2002.
 - (d) The proposed street shall be designed to preclude direct discharge of stormwater into a watercourse without natural filtration provided by a filtration bed and/or detention basin sized in accordance with accepted design criteria for stormwater management.
 - (e) The construction of the proposed street or driveway shall be preceded by the installation of the proposed storm drainage and soil erosion and sedimentation control measures.
 - (f) Criteria for compaction and stabilization of cutting and filling areas shall be proposed by the applicant. Such criteria shall be in accordance with acceptable engineering standards and shall be subject to approval of the Township Engineer.
- H. Nonconformities. If the imposition of the regulations set forth in this section results in any existing lot becoming nonconforming in terms of area requirements, such lot may not be subdivided but may be developed despite these regulations.
- I. Standards for approval of development.
- (1) The Board of Commissioners shall consider the following criteria before approving any uses on **moderately** steep slopes and very steep slopes and the Zoning Hearing Board shall consider the following criteria before approving any of the uses which are permitted by special exception on very steep slopes:
 - (a) The degree of modification proposed within the district to the topographic, soil and vegetation resources and the techniques proposed to mitigate potential environmental impacts.
 - (b) The effect the development would have on adjacent properties.
 - (2) The applicant shall provide evidence that:
 - (a) **Moderately** steep slopes or very steep slopes are being proposed for development since no other alternative location is feasible or practical on the basis of access, topography or other physical design considerations.
 - (b) Earthmoving activities and vegetation removal will be conducted only to the extent necessary to accommodate proposed uses and structures and in a manner that will not cause excessive surface water runoff, soil erosion, sedimentation and unstable soil conditions. Further, it shall be demonstrated that any and all reasonable mitigation techniques and procedures will be utilized or have been considered in the preparation of the subdivision and/or land development plan.

- (c) Proposed buildings and structures are of sound engineering design, and footings are designed in response to the site's slope, soil and bedrock characteristics and, where applicable, shall extend to stable soil and/or bedrock.
- J. Liability. Neither the approval nor the granting of any construction permit, subdivision or land development approval or site development plan involving any land governed by the provisions of this section by an officer, employee or agency of the Township or its officers, officials, employees or agencies shall create liability upon or provide a cause of action against the Township, its officers, agencies, agents or employees for any damage that may result pursuant thereto.
- K. ~~Solar energy production facility. Notwithstanding any other limitation in this chapter, a solar energy production facility, along with its accessory uses, shall be permitted on steep and very steep slopes in the Institutional District if approved by conditional use of the Board of Commissioners. Pruning and/or topping of trees located on the subject property so as to prevent shading of solar panels making up a solar energy production facility shall be permitted within the steep and very steep slopes of a solar energy production facility if approved as part of the conditional use application. In addition, an access road/driveway of a solar energy production facility shall be permitted within very steep slopes, provided that it is no more than 16 feet in width and the cumulative total length does not exceed 1,000 lineal feet.~~

§155-39 Woodland Protection and Management ~~Overlay District~~

- A. ~~The Woodland Protection and Management Overlay District shall be a conservation overlay to the underlying zoning districts of Caln Township.~~ The purpose and objective of the Woodland Protection and Management ~~Overlay District~~ provisions is outlined as follows:
 - (1) To protect areas classified as woodlands from inappropriate subdivision, land development and conservation management activities.
 - (2) To acknowledge that woodlands are a vital resource and provide a number of community benefits, including: minimizing erosion on areas of steep slopes and streambanks; improving groundwater quality and quantity by filtering out pollution and sediment; providing wildlife habitats for plants and animals; providing effective stormwater management and erosion control; providing shade from direct sunlight and reduces temperatures; stabilizing adverse climate conditions by providing buffer and wind breaks; providing active and passive recreation opportunities; enhancing the scenic characteristics; and reducing air pollution by absorbing airborne pollutants.
 - (3) To establish forestry and timber regulations that will effectively promote good forest stewardship, protect the rights of adjoining property owners and minimize the potential of adverse environmental impacts created by inappropriate timber harvesting.
 - (4) To minimize the clear cutting of woodlands and other earth disturbance activities which may create adverse environmental and ecological impacts.
 - (5) To implement the recommendations concerning natural features, conservation management and land use, as outlined within the Caln Township Comprehensive Plan.

B. ~~The~~ Woodland Protection and Management ~~Overlay District~~ shall include the following activities:

- (1) Woodland extraction and tree replacement provisions, which apply to all subdivision and land development activities, subject to § 155-40 of this chapter.
- (2) Forestry, timber harvesting, tree harvesting and logging regulations, which apply to all operations involved with the cutting down of trees and removal of logs from woodlands or forests for the primary purpose of sale and commercial processing into wood products, subject to § 155-41 of this chapter.

§155-40 **Woodland Extraction and Replacement** **[See B(1) above...are these standards intended to apply to subdivision and land development only or to all permit applications?]**

A. Woodland extraction shall be permitted within all zoning districts, provided it is conducted in a manner to facilitate all necessary site improvements, as identified on an approved subdivision plan, land development plan, erosion and sedimentation control plan and/or building plan. For the purposes of this Code, "woodland extraction" is hereby defined as the clear cutting or removal of mature trees, as measured ~~sixtwelve~~ inches or more in caliper, to provide area for improvements on an individual lot or parcel of land, as the mature trees exist in predevelopment conditions.

~~B. The following provisions shall apply to all lots or parcels, regardless of their size, where woodland extraction measures are proposed on at least 20% but less than 40% of the lot or parcel, as the mature trees exist in predevelopment conditions:~~

- ~~(1) The removal of mature trees and other significant vegetation shall be mitigated by the replacement of two trees per lot or parcel. At least one tree shall be considered as a street tree, with a minimum caliper of three inches and located 10 feet from the street right-of-way line. The other tree shall have a minimum caliper of three inches and be shall planted within the internal area of each lot or parcel.~~
- ~~(2) For areas designated as common open space or utility parcels, the removal of mature trees and other significant vegetation shall be mitigated by the replacement of five trees per acre. Where feasible, street trees should be incorporated into the landscaping design. All street trees shall have a minimum caliper of three inches and located at least 10 feet from the street right-of-way line. The other trees shall have a minimum caliper of three inches and be shall planted within the internal area of the common open space or utility parcel.~~
- ~~(3) In order to satisfy these conditions, the applicant shall submit a landscaping plan to Caln Township for review and consideration. The landscaping plan shall be prepared by a landscape architect registered within the Commonwealth of Pennsylvania. The size, type or species, location and planting specification of the replacement trees, as well as all vegetative cover, shall be specified on the landscaping plan.~~
- ~~(4) Where the provisions of this section cannot be feasibly implemented, the required replacement trees shall be planted in an area designated as common open space within the development or any parcel of land owned and maintained by Caln Township. The location of these replacement trees shall be subject to the approval by the Board of Commissioners.~~

C. The following provisions shall apply to all lots or parcels, regardless of their size, where woodland extraction measures are proposed on at least 40% but less than 60% of the lot or parcel, as the mature trees exist in predevelopment conditions:

- (1) The removal of mature trees and other significant vegetation shall be mitigated by the replacement of three trees per lot or parcel. At least one tree shall be considered as a street tree, with a minimum caliper of three inches and located 10 feet from the street right-of-way line. The other two trees shall have a minimum caliper of three inches and be shall planted within the internal area of each lot or parcel.
- (2) For areas designated as common open space or utility parcels, the removal of mature trees and other significant vegetation shall be mitigated by the replacement of 10 trees per acre. Where feasible, street trees should be incorporated into the landscaping design. All street trees shall have a minimum caliper of three inches and located at least 10 feet from the street right-of-way line. The other trees shall have a minimum caliper of three inches and be shall planted within the internal area of the common open space or utility parcel.
- (3) In order to satisfy these conditions, the applicant shall submit a landscaping plan to Caln Township for review and consideration. Unless otherwise permitted by the Caln Township Board of Commissioners as part of a subdivision or land development plan application, the landscaping plan shall be prepared by a landscape architect registered within the Commonwealth of Pennsylvania. The size, type or species, location and planting specification of the replacement trees, as well as all vegetative cover, shall be specified on the landscaping plan.
- (4) Location of replacement trees:
 - (a) Where the provisions of this section cannot be feasibly implemented, the required replacement trees shall be planted in the following locations:
 - [1] In an area designated as common open space within the development.
 - [2] On a parcel of land owned and maintained by Caln Township.
 - [3] On a parcel of land owned and maintained by either Chester County, the Coatesville Area School District and any other public, nonprofit or conservation group willing to accept responsibility for the replacement trees.
 - (b) The location of these replacement trees shall be subject to the approval by the Board of Commissioners.

D. Unless otherwise approved by the Board of Commissioners, woodland extraction measures should not account for the removal or clear cutting of 60% or more of the mature trees that are located on a lot or parcel in predevelopment conditions.

E. If additional trees are removed or extracted for the purposes of grading or municipal improvements during the construction sequence, the applicant shall replace all such trees at a ratio of three replacement trees per each mature tree that has been incidentally timbered and/or cleared. The type and location of all such replacement trees shall be subject to the approval of the Board of Commissioners.

B. Specimen trees and heritage trees. Does Twp have any heritage trees?

- (1) Specimen trees and heritage trees shall not be removed from any lot or tract except where the landowner demonstrates to the satisfaction of the Board of Commissioners

that such removal is essential to eliminate a hazardous condition(s). In consideration of any need for removal, the Township may engage the services of an arborist, reasonable costs therefore to be borne by the landowner. Where permitted, removal of specimen trees and heritage trees shall be minimized.

(a) To the minimum extent necessary to enable retention of specimen trees and heritage trees while providing for lawful use, modification to otherwise applicable area and bulk requirements may be approved by the Board of Commissioners as part of any applicable subdivision or land development application, or by the Zoning Officer as part of any applicable building permit.

(2) Where any applicant for building, zoning, subdivision or land development approval establishes conservation restrictions acceptable to the Township which shall result in the conservation of specimen trees or heritage trees, all such trees to be retained shall be credited toward any tree replacement required under § 155-40K at the ratio of four trees credited for each specimen or heritage tree retained.

C. Tree and woodland protection.

(1) Unless undertaken as a timber harvesting operation conducted in compliance with an approved timber harvesting plan, the following woodland disturbance limitations shall apply.

(a) Critical woodlands: maximum disturbance of 5%.

(b) Non-critical woodlands on residential tracts: maximum disturbance of 35%.

(c) Non-critical woodlands on non-residential tracts: maximum disturbance of 50%.

(2) Disturbance of critical woodlands shall be permitted only when there is no possible alternative disturbance on non-critical woodlands.

(3) Any disturbance in excess of the limitations specified in §155-40B shall be subject to the tree and woodland replacement requirements on §155-40K.

(4) Where there is a conflict between the disturbance limits or other standard of this subsection B, and any other section of this chapter 155 or the Caln Township Code, the more restrictive disturbance limit or standard shall apply.

(5) Disturbance limitations shall be measured based on the extent of the woodland at the time of first submission of applicable application(s) after the adoption of this section, and shall be indicated on applicable plan(s). The extent of any area of woodland disturbance shall be measured to include the entire area within the drip line of any tree where any part of the area within the drip line of said tree is subject to woodland disturbance. Any disturbance limitation shall run with the land. Subsequent applications shall be subject to the initial determination of disturbance limitations, regardless of intervening disturbance which may have occurred. If, at any time within three years prior to an applicable application, there had existed a greater extent of woodland, such greater area shall be utilized to calculate the extent of woodland disturbance and the limitations set forth herein.

(6) In determining where necessary woodland disturbance shall occur, the following factors shall be considered by the applicant and the Township:

(a) The impacts on any interior forest area; riparian buffer area; steep slope area; rare, threatened, or endangered species habitat area; visual screening; and viewsheds.

- (b) The locations of healthy mature woodland stands and the benefits of their conservation.
- (c) The impacts of separating, dividing, or encroaching on wildlife travel corridors or extensive habitat areas.
- (d) The Township should not unreasonably restrict woodland disturbance where limited disturbance may permit siting of buildings in less visually obtrusive areas of the tract.
- (7) Any disturbance shall be conducted in such a manner as to provide the least alteration or disturbance necessary of the existing woodlands and other vegetation. Clear-cutting shall be minimized and trees shall be selectively removed.
- (8) Remaining undisturbed woodlands and other vegetation shall interconnect with wooded areas of adjacent properties to preserve continuous woodland corridors and allow for the normal movement, dispersion, and migration of wildlife.
- (9) In accordance with §150-40E, woodlands, individual trees, and other vegetation that are to be removed shall be designated on the landscape plan as "To be Removed." Woodlands, individual trees, and other vegetation that are to remain on the site shall be designated on the landscape plan as "To Remain." Woodlands, individual trees, and other vegetation to remain on the site shall be protected in accordance with the following:
 - (a) A tree protection zone (TPZ), which is an area radial to the trunk of the tree or to the woodland area to be preserved, shall be established. The TPZ shall extend to the edge of the critical root zone (CRZ) of the woodland area to be protected, or in the case of an individual tree, to the critical root zone of the tree. The critical root zone is the distance from the tree trunk that equals one foot for every one inch of the tree's diameter at breast height (dbh).
 - (b) Prior to construction, trees or woodlands to be preserved that are within 50 feet of any proposed construction, grading, clearing, or related activity shall have their TPZ demarcated by minimum 4-foot high, orange construction fencing or approved equivalent. The fencing shall be installed along the outer edge of the delineated TPZ, shall be maintained until all construction activities have been completed, and shall be inspected by the Township prior to initial disturbance and, thereafter, at its discretion.
 - (c) No disturbance, earth compaction, vehicular or foot traffic, construction of proposed improvements or utilities, or other disturbance shall occur within the TPZ.
 - (d) Construction materials, equipment, soil and/or debris shall not be stored nor disposed of within the TPZ.
 - (e) No toxic materials shall be stored within 100 feet of a TPZ.
 - (f) Sediment, retention, and detention basins shall not be located within the TPZ, nor shall they discharge into the TPZ.
 - (g) No boards or other material shall be nailed or otherwise attached to any trees during construction.
 - (h) Roots shall not be cut within the critical root zone of any trees to remain.
 - (i) Tree trunks, limbs, and exposed roots damaged during construction shall be protected from further damage by being treated immediately in accordance with accepted professional landscape procedures.

D. Tree and woodland replacement.

(1) Replacement of trees removed in excess of the disturbance limits set forth in §155-40B shall be required. For each tree greater than 12 inches dbh to be removed, required replacement trees shall be planted and shall be calculated in accordance with the table below. For each evergreen tree to be removed a minimum of one of the required replacements trees shall be an evergreen tree of eight feet minimum height.

For Each Tree to be Removed	Minimum Number and Caliper of Replacement Trees
One, 12 to 18 inch dbh	Two, 2 inch dbh
One, 18 to 24 inch dbh	Three, 2 inch dbh
One, 24 to 36 inch dbh	Four, 2 inch dbh
One, greater than 36 inch dbh	Six, 2 inch dbh

(2) Required replacement shrubs. For each 100 square feet of woodland disturbance area, or fraction thereof, in excess of the disturbance limits set forth in §155-40B, and regardless of the character and sizes of the disturbed vegetation, a minimum of one shrub at least 24 inches to 30 inches in height shall be planted in addition to any required tree replacement.

(3) Deciduous replacement trees shall be eight feet minimum height if multi-stem trees.

(4) The removal of declining, damaged, diseased or invasive trees, or those which present a hazard are exempt from the tree replacement requirement.

(5) Where the area of proposed woodland disturbance is greater than one acre, square feet, the applicant may determine the number and dbh of trees to be removed and replaced based on an inventory of trees within a sample area. Such sample area shall be a minimum of 100-by-100 feet within the proposed area of disturbance. Where more than one woodland type exists within the proposed area of disturbance, a minimum 100-by-100 foot area shall be sampled within each woodland type, and the boundaries of such woodland types shall be shown on a landscape plan.

(6) Where required replacement trees cannot be feasibly implemented due to the size of the site or other limitations, the required replacement trees shall be planted the following locations, subject to approval by the Board of Commissioners:

(a) On a parcel of land owned and maintained by Caln Township.

(b) On a parcel of land owned and maintained by either Chester County, the Coatesville Area School District and any other public, nonprofit or conservation group willing to accept responsibility for the replacement trees.

(7) Required replacement plantings shall be in addition to any required street trees or any other landscape material required under the provisions of this chapter or Chapter 137, Subdivision and Land Development.

(8) Required replacement vegetation shall be selected from the approved list specified under § 155-125 of this chapter. Required replacement vegetation and their measurement shall conform to the standards of the publications "American or U.S.A. Standard for Nursery Stock", ANSI or U.S.A.S. Z60.1 of the American Association of

Nurserymen, as amended. All plant material used on the site shall have been grown so as to have a high likelihood of survival on the site (e.g., grown specifically for planting in the applicable USDA hardiness zone) and shall be nursery grown.

- (9) Because of the many benefits of native plants, the use of nursery-grown free-fruiting native trees and shrubs shall be required. Species selection should reflect species diversity characteristics of the native woodland.
- (10) Species selection and planting locations shall consider suitability based on site conditions (soils, geology, hydrology, etc.), maintenance (hardiness, longevity, disease/insect resistance, etc), and functional and design objectives of the plantings (landscape buffer, screening, riparian buffer reforestation, existing woodland enhancement, etc).
- (11) Invasive species, as identified on the most recent version of the Pennsylvania Invasive Plant Species List, shall not be planted under any circumstances for any Township permitted activity, and where present their eradication or management should be implemented to the maximum extent possible.
- (12) All replacement plantings shall be guaranteed and maintained in a healthy and/or sound condition for at least 18 months. If a replacement planting dies or is dying within the guarantee period, the landowner shall replace the dead or dying planting. In addition, the applicant may be required to escrow sufficient additional funds for the maintenance and/or replacement of the proposed vegetation during the 18 month replacement period, and to provide for the removal and replacement of vegetation damaged during construction, based upon the recommendation of the Township Engineer or Pennsylvania-registered landscape architect.

E. Plan information.

- (1) The applicant shall submit a landscaping plan to Caln Township for review and consideration. The landscaping plan shall be prepared by a landscape architect registered within the Commonwealth of Pennsylvania and shall depict woodlands, individual trees, and other vegetation that are to be removed and to remain, in accordance with 150-40C(9), and the sizes, species selection, location, and planting specifications of all replacement vegetation.
- (2) The locations, selected species and sizes of all replacement plantings, along with a planting schedule tied to the timing and/or phasing of the development, shall be indicated on the final land development plan.

Pages from Floodplain section...

[3] The front, side or rear yard setbacks required for a development of any lot or tract in any zoning district wherein the portion of the lot within the floodplain area may lie, provided that documentation of the existence of such floodplain area is recorded with the Chester County Recorder of Deeds at time of the initial conveyance of any such lot or tract of land.

[4] Permeable parking areas and roads to serve other permitted uses in the identified floodplain area or where required by the regulations for any contiguous district.

(2) Elevation and floodproofing requirements. Within any identified floodplain area any new construction or substantial improvements shall be prohibited unless permitted by right, or by the grant of a variance. If a use is permitted by right or a variance is obtained for new construction or substantial improvements in the identified floodplain area, then the following provisions apply:

(a) Residential structures.

[1]
Increase
regulatory
flood elev
from 1-1/2
to 2 ft?

[1] In AE, A1-30, and AH Zones, any new construction or substantial improvement shall have the lowest floor (including basement) elevated up to, or above, the regulatory flood elevation.

[2] In A Zones, where there are no base flood elevations specified on the FIRM, any new construction or substantial improvement shall have the lowest floor (including basement) elevated up to, or above, the regulatory flood elevation determined in accordance with this section.

[3] In AO Zones, any new construction or substantial improvement shall have the lowest floor (including basement) at or above the highest adjacent grade at least as high as the depth number specified on the FIRM.

[4] The design and construction standards and specifications contained in the 2009 International Building Code (IBC) and in the 2009 International Residential Code (IRC) or the latest edition thereof adopted by the Commonwealth of Pennsylvania, and ASCE 24 and 34 Pa. Code (Chapters 401 to 405, as amended) shall be utilized, where they are more restrictive.

(b) Nonresidential structures.

[1] In AE, A1-30 and AH Zones, any new construction or substantial improvement of a nonresidential structure shall have the lowest floor (including basement) elevated up to, or above, the regulatory flood elevation, or be designed and constructed so that the space enclosed below the regulatory flood elevation:

[a] Is floodproofed so that the structure is watertight with walls substantially impermeable to the passage of water; and

[b] Has structural components with the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy.

[2] In A Zones, where no base flood elevations are specified on the FIRM, any new construction or substantial improvement shall have the lowest floor (including basement) elevated or completely floodproofed up to, or above, the regulatory flood elevation determined in accordance with this section.

POST-FIRM STRUCTURE — A structure for which construction or substantial improvement occurred after December 31, 1974, or on or after the Township's initial Flood Insurance Rate Map (FIRM) dated September 30, 1981, whichever is later, and, as such, would be required to be compliant with the regulations of the National Flood Insurance Program.

PRE-FIRM STRUCTURE — A structure for which construction or substantial improvement occurred on or before December 31, 1974, or before the Township's initial Flood Insurance Rate Map (FIRM) dated September 30, 1981, whichever is later, and, as such, would not be required to be compliant with the regulations of the National Flood Insurance Program.

RECREATIONAL VEHICLE — A vehicle which is:

- (a) Built on a single chassis;
- (b) Not more than 400 square feet, measured at the largest horizontal projections;
- (c) Designed to be self-propelled or permanently towable by a light-duty truck;
- (d) Not designed for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

Increase
to 2 feet?

REGULATORY FLOOD ELEVATION — The base flood elevation (BFE) or estimated flood height as determined using simplified methods plus a freeboard safety factor of 1 1/2 feet. The freeboard safety factor also applies to utilities and ductwork.

SPECIAL FLOOD HAZARD AREA (SFHA) — An area in the floodplain subject to a one-percent-or-greater chance of flooding in any given year. It is shown on the FIRM as Zone A, AO, A1-A30, AE, A99 or AH.

START OF CONSTRUCTION — Includes substantial improvement and other proposed new development and means the date the permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement, or other improvement was within 180 days after the date of the permit and shall be completed within 12 months after the date of issuance of the permit unless a time extension is granted, in writing, by the Floodplain Administrator. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading, and filling; nor does it include the installation of streets and walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.