

MIDDLESEX TOWNSHIP
CUMBERLAND COUNTY, PENNSYLVANIA

ORDINANCE NO. 10-2008

AN ORDINANCE OF THE BOARD OF SUPERVISORS OF MIDDLESEX TOWNSHIP, CUMBERLAND COUNTY, PENNSYLVANIA, AMENDING THE MIDDLESEX TOWNSHIP SUBDIVISION AND LAND DEVELOPMENT ORDINANCE AND THE MIDDLESEX TOWNSHIP ZONING ORDINANCE TO PROVIDE, AMONG OTHER AMENDMENTS, FOR CONSERVATION DESIGN.

BE IT HEREBY ENACTED AND ORDAINED, and it is hereby enacted by the Board of Township Supervisors in and for the Township of Middlesex, Cumberland County, Pennsylvania, as follows:

SECTION 1: The Middlesex Township Subdivision and Land Development Ordinance is hereby amended as follows:

A. Article II, Definitions of Terms, Section 202, is hereby amended as follows:

1. The following new definitions are hereby added to Section 202 and to the extent such words or terms below presently exist in Section 202, such words or terms shall be amended hereby to have the meanings set forth as follows:

BERM - An earthen mound designed to create a visual and sound barrier between a use and adjoining properties, streets, and adjacent uses.

SCREEN BUFFER OR VISUAL SCREEN - A well-maintained hedge, landscaped berm, or other vegetative materials which upon planting or installation is both of sufficient height and of sufficient density to conceal from the view of adjacent properties the structures and uses on the premise where the screening is located.

CALIPER - The diameter of a tree trunk measured 6 inches above the ground for a tree measuring up to and including 4 inches in diameter and 12 inches above the ground for a tree measuring above 4 inches in diameter. The term applies to nursery stock.

COMMON FACILITIES - All the real property and improvements, owned in common by residents within the development; which is served by the facilities. Common facilities include, without limitation, landscaped areas, buffers, Common Open Space land not included within title lines of any privately owned lot, and street rights-of-way not dedicated to the municipality.

COMMUNITY ASSOCIATION - A non-profit organization comprised of homeowners or property owners, the function of which is to maintain and administer property owned in common by members of the association or by the association, to protect and enhance the value of the property owned individually by each of the members. Homeowners Associations and Condominium Associations are types of Community Associations.

CONDOMINIUM - Real estate, portions of which is designated for separate ownership and the remainder of which is designated for common ownership solely by the owners of those separate portions, in accordance with the Pennsylvania Uniform Condominium Act 1980-82, as amended.

CONSERVATION AREAS, PRIMARY (PCA) - Lands upon which primary resources are located in conservation subdivisions. All Primary Conservation Areas are required to be located within Open Space lands.

CONSERVATION AREAS, SECONDARY (SCA) - Lands containing secondary resources that are conserved as a part of Open Space lands.

CONSERVATION DESIGN – A method of subdivision design as described in Article IV of this Ordinance.

CONSERVATION SUBDIVISION – Lots created by the conservation design methods of subdivision design, as described in Article IV of the Ordinance.

CONSERVANCY LOT - A large, privately owned and maintained lot, containing an existing dwelling, farm complex, or historic structure, comprising part of the required Open Space land in a conservation subdivision.

CONSTRAINED LAND - Selected resources listed in Zoning Ordinance, multiplied by a protection factor and totalled.

DBH (DIAMETER AT BREAST HEIGHT) - The diameter of a tree trunk measured 4.5 feet above the ground at the base of the tree. If a tree divides or splits into multiple trunks below 4.5 feet, the trunk is measured at its most narrow point beneath the split. The term applies to trees in the field (not nursery stock).

DWELLING, FRONT FACADE - The plane of the facade of the building closest to the street right-of-way, excluding stoops, porticos, open colonnades, and open porches.

GARAGE, FRONT LOADED - A garage having its vehicular entry door facing the street.

GARAGE, SIDE LOADED - A garage having its vehicular entry door facing the side yard.

GARAGE, REAR LOADED - A garage having its vehicular entry door facing an alley or rear lane.

GEOLOGIST, PROFESSIONAL - A person duly licensed as a professional geologist by the Commonwealth of Pennsylvania.

GREENWAY LAND OR OPEN SPACE LAND - A parcel or parcels of land and/or water, within a conservation subdivision consisting of open space and set aside for the protection of natural and cultural resources. Greenway land consists of Primary and Secondary Conservation Areas and is permanently restricted against further development. The terms “Greenway” and “Greenway land” are synonymous.

GROUNDWATER – Water that occurs in the subsurface and fills or saturates the porous openings, fractures, and fissures of underground soils and rock units.

HEDGEROW - A linear plant community dominated by trees and/or shrubs. Hedgerows often occur along roads, fence lines, property lines, or between fields, and may occur naturally or be specially planted (e.g. as a windbreak).

HISTORIC RESOURCE or HISTORICALLY SIGNIFICANT SITE- Any structure or site that is:

- A. Listed individually in the National Register of Historic Places (a listing maintained by the U.S. Department of the Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;
- B. Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;
- C. Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior; or
- D. Individually listed on a County or local inventory of historic places in communities with historic preservation programs that have been certified either:
 - 1. By an approved State program as determined by the Secretary of the Interior; or
 - 2. Directly by the Secretary of the Interior in states without an approved program.

- E. Individually listed on the most recent inventory of the Cumberland County Historical Society Register or the Cumberland County Planning Commission inventory.

HOMEOWNERS ASSOCIATION - A non-profit organization comprised of homeowners or property owners, planned and operated under negotiated and approved rules and regulations, for the purpose of administering the needs of residents through the maintenance of community owned property. This term is synonymous with homes association and with property owners association.

INFILTRATION – Movement of surface water into the soil, where it is absorbed by plant roots, evaporated into the atmosphere, or percolates downward to recharge ground water.

INVASIVE PLANT SPECIES - Predominantly non-native 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 in Pennsylvania are listed on an inventory, as developed and updated from time to time by the Pennsylvania Department of Conservation of Natural Resources.

LAND DISTURBANCE - Any activity, which exposes soils, alters topography and/or alters woody vegetation, except for removal of a safety hazard, diseased trees, or invasive plant species.

LANDSCAPE ARCHITECT, REGISTERED - A person duly licensed as a professional landscape architect by the Commonwealth of Pennsylvania.

LANDSCAPING - The planting of turf, trees, shrubs, and other appropriate vegetative materials and ground cover within the open areas of a lot other than for agricultural purposes, and including the maintenance and replacement thereof, for the purposes of erosion control, retention of precipitation, protection against the elements and promotion of human comfort and welfare.

NATIVE SPECIES – A species of plant or other organism that currently or previously inhabited or grew in a specified location, and which was not introduced to that location as a result of human activity, either intentional or accidental. The term “native” species generally refers to a species whose range was located within a large area like a continent or a nation. The term “indigenous” species is typically used to refer to a species whose original range extended into a smaller area like a state, county, or watershed.

PA DEP - The Department of Environmental Protection of the Commonwealth of Pennsylvania.

PLAN OR PLAT - The map or plat of a subdivision or land development complete with a drawing and supplementary data, whether sketch, preliminary or final.

A. PLAN, SKETCH – An informal plan, not necessarily to exact scale, indicating salient existing features of a tract and its surroundings and the general layout of a proposed subdivision or land development as prepared in accordance with this Ordinance.

B. PLAN, PRELIMINARY – A plan of a proposed subdivision or land development, including all supplementary information required by this Ordinance, to obtain preliminary approval and prepared in accordance with this Ordinance.

C. PLAN, FINAL – A complete and exact subdivision or land development plan, including all supplementary data, prepared in accordance with this Ordinance for official approval and recording.

D. PLAN, LOT ADDITION – A complete and exact subdivision plan, including all supplementary data, prepared in accordance with this Ordinance that is intended to convey a parcel of ground located immediately adjacent to other property owned by the intended grantee that is being added to the grantee's existing lot of record.

E. PLAN, LOT CONSOLIDATION – A plan whereby the entire area of two or more adjacent existing lots of record are combined or consolidated to effectually eliminate one or more original lots into one new lot.

PRIMARY CONSERVATION AREA - see Conservation Area, Primary

REGISTERED DESIGN PROFESSIONAL - A professional engineer, land surveyor or professional geologist licensed by the State Registration Board for Professional Engineers, Land Surveyors and Geologists under the act of May 23, 1945 (P.L. 913, No. 367), known as the "Engineer, Land Surveyor and Geologist Registration Law, " a landscape architect who is licensed by the State Board of Landscape Architects under the act of January 24, 1966 (1965 P.L. 1527, No. 535), known as the "Landscape Architect's Registration Law, " or any corporation or association, including professional corporations, organized or registered under the act of December 21, 1988 (P.L. 1444, No.177), known as the "General Association Act of 1988," practicing engineering, landscape architecture or surveying in this Commonwealth. (The above definition was adapted from the definition of "construction design professional" in the laws of the Commonwealth of Pennsylvania (77 P.S. 25.3 et seq.) Generally, an individual who is registered or licensed to practice their respective design profession as defined by the statutory requirements for the professional registration laws of the state or jurisdiction in which the project is to be constructed.

RESOURCES, PRIMARY - Resources consisting of 100-year floodplain (including the floodway), wetlands, and prohibitive steep slopes (above 25 percent). In conservation subdivision, all lands containing primary resources are called Primary Conservation Areas. See a list of such features in Section 4.02 C.3. of the Zoning Ordinance.

RESOURCES, SECONDARY - Natural or cultural features outside Primary Conservation Areas that are worthy of conservation by inclusion in Greenway land. See a

prioritized list of such features in Section 4.02 C.4. of the Zoning Ordinance. Lands containing secondary resources that are conserved are called Secondary Conservation Areas.

RIPARIAN BUFFER – A riparian buffer is an area of trees and other vegetation adjacent to a watercourse that forms a transition area between the aquatic and terrestrial environment. The riparian buffer provides the following benefits: reduces the amount of nutrients, sediments, pesticides, and other harmful substances that reach watercourses, wetlands, and other surface water bodies; provides for shading of the aquatic environment to moderate temperatures and protect fish habitat; provides organic matter which provides food and habitat for bottom dwelling organisms essential to the food chain; increases stream bank stability and reduces stream bank erosion and sediment production; conserves natural features important to land and water features (e.g., headwater areas, groundwater recharge zones, streams, prime wildlife habitat); and conserves natural, scenic, and recreation areas and promotes the functioning of interconnected natural greenway lands.

RIPARIAN BUFFER, FORESTED OR FORESTED RIPARIAN BUFFER – An area of trees, usually accompanied by shrubs and other vegetation, adjacent to a body of water and managed to maintain the integrity of stream channels and shorelines to: 1) reduce the impact of upland sources of pollution by trapping, filtering, and converting sediments, nutrients, and other chemicals, and 2) supply food, cover, and thermal protection to fish and other wildlife.

SECONDARY CONSERVATION AREA - See Conservation Area, Secondary

SPECIMEN TREE - A unique, rare, or otherwise specifically selected tree or plant considered worthy of conservation by the municipality, because of its species, size, age, shape, form, historical importance, or any other significant characteristics, including listing as a Species of Special Concern by the Commonwealth of Pennsylvania. All healthy trees over 20 inches DBH are considered specimen.

COMMENTARY: Not all trees reach specimen size at the same diameter. For example, a dogwood or sassafras is considered large at 20 inches, while an oak may not be considered large until it is about 32 inches. A more accurate, but more complex, method of designating specimen trees is to give size parameters for each species, as in the following table.

Non-invasive species not listed in the table, having a DBH 20 inches or greater, are considered specimen.

Species	Min. Size (DBH)	Species	Min. Size (DBH)	Species	Min. Size (DBH)
		<i>Locust</i>	<i>30"</i>	<i>Sassafras</i>	<i>20"</i>

<i>Ash</i>	<i>32"</i>	<i>Maple</i>	<i>32"</i>	<i>Spruce</i>	<i>30"</i>
<i>Beech</i>	<i>32"</i>			<i>Sycamore</i>	<i>36"</i>
<i>Cherry</i>	<i>24"</i>	<i>Oak</i>	<i>32"</i>	<i>Tulip Tree</i>	<i>36"</i>
<i>Elm</i>	<i>30"</i>	<i>Osage Orange</i>	<i>20"</i>	<i>Walnut</i>	<i>30"</i>
<i>Hemlock</i>	<i>30"</i>	<i>Pine</i>	<i>30"</i>	<i>Hickory</i>	<i>32"</i>

STEEP SLOPES - Areas of land, 3,000 square feet or greater, where the grade is 15 percent or greater. Steep slopes are divided into 2 categories:

- A. Precautionary moderate to steep slopes are those areas of land where the grade is 15 to 25 percent.
- B. Prohibitive steep slopes are those areas of land where the grade is greater than 25 percent.

Slope shall be measured as the change in elevation over the horizontal distance between consecutive contour lines. Slope shall be measured over 3 consecutive 2- foot contour intervals (6 cumulative vertical feet of slope). All slope measurements shall be determined by a topographic survey signed and sealed by a registered surveyor or engineer licensed to practice in Pennsylvania.

TERMINAL VISTA - The visual scene terminating the view down a road or street, as at an intersection or on the outside of a curve.

TRACT AREA, ADJUSTED OR ADJUSTED TRACT AREA - The gross tract area minus the constrained land.

TRACT AREA, GROSS - The total amount of land contained within the limits of the legally described property lines bounding the tract.

WETLANDS - Areas that are inundated and saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions, including swamps, marshes, bogs, and similar areas. Any area meeting the official wetland definition of the U.S. Army Corps of Engineers or the Pennsylvania Department of Environmental Protection, as amended, shall be considered a wetland for the purposes of this Ordinance. In the event the definition of wetland accepted by the U.S. Army Corps of Engineers conflicts with the definition of a wetland accepted by the Pennsylvania Department of Environmental Protection, the more restrictive definition shall apply.

WOODLANDS - A tree mass or plant community in which tree species are dominant or co-dominant and the branches of the trees form a complete, or nearly complete, aerial canopy. Any area, grove, or stand of mature or largely mature trees (larger than 6 inches DBH) covering an area of 1/4 acre or more, or consisting of 10 individual trees larger than 6 inches DBH, shall be considered a woodland. The extent of any woodland plant community or any part thereof shall be measured from the outer-most drip line of all the trees in the plant community.

WOODLAND DISTURBANCE - Any activity that 1) alters the existing structure of a woodland or hedgerow, including the cutting or removal of canopy trees, sub-canopy trees, understory shrubs and vines, and herbaceous woodland floor species; 2) constitutes a land disturbance within a woodland or hedgerow. Woodland disturbance does not include the selective cutting or removal of invasive plant species. (See INVASIVE PLANT SPECIES)

YIELD PLAN OR YIELD PLAT – A method of evaluating the maximum possible number of residential dwelling units that can be constructed on a property under the current zoning district regulations, as detailed in Article IV, section 4.03 B.2. of the Zoning Ordinance.

OPEN SPACE - A parcel or parcels of land or an area of water, or a combination of land and water, within a development site, designed and intended for the use and enjoyment by the residents of such development and possibly the general public. Open space shall be substantially free of structures, but may contain such improvements as are in the finally approved development plan, and shall not include individually owned private yards, except in the case of approved conservancy lots. Open space is permanently restricted against further development. Open Space may be a combination of natural or naturalized areas (such as the Township interconnected greenway network) plus more intensely managed areas (such as lawn, recreational areas or play fields).

OPEN SPACE, COMMON OR COMMON OPEN SPACE - A parcel or parcels of land or an area of water, including natural areas, or a combination of land and water within a development site and designed and intended for the use or enjoyment of residents of a development, not including streets, off-street parking areas, and areas set aside for public facilities.

OPEN SPACE, COMMON GREENS - An area of Greenway land comprised of open space located internal to the developed areas and surrounded by streets on at least 2 and often 3 or 4 sides; around which dwellings are arranged and organized. To the maximum extent possible, dwellings shall face the green with the front façade of the dwelling. Common greens shall have a minimum area of 0.1 acre and a maximum area of 1.0 acre. A common green serving more than four (4) dwellings shall preferably be surrounded by roads, or at a minimum, abut a road on at least one side for a length equal to twenty-five percent (25%) of its circumference.

OPEN SPACE, UDA OR UDA OPEN SPACE - Land reserved, dedicated or conserved in perpetuity for passive recreation, active recreation, multi-use trails and rear access

farm lanes used for trails, private open space, common open space and natural areas and / or outdoor civic spaces.

OPEN SPACE, USEABLE OR USABLE OPEN SPACE - The unenclosed portion of the ground of a lot which is not devoted to driveways or parking spaces, which is free of structures of any kind, of which not more than 25% is roofed for shelter purposes only, and which is available and accessible to all occupants of the building or buildings on the said lot for purposes of active or passive outdoor recreation.

WATERCOURSE – A channel or conveyance of surface water, such as a stream creek, or run, having a defined bed and banks, whether natural or artificial, with perennial or intermittent flow. For the purposes of the Ordinance, a watercourse shall not include manmade swales constructed expressly for the purpose of stormwater management.

WATERCOURSE, EPHEMERAL – A stream or portion of a stream that flows only in direct response to precipitation. It receives little or no water from springs and no long-continued supply from melting snow or other sources. Its channel is at all times above the water table. The term may be arbitrarily restricted to streams which do not flow continuously during periods of the month.

WATERCOURSE, INTERMITTENT – A defined channel in which surface water is absent during a portion of the year, as ground water levels drop below the channel bottom.

WATERCOURSE, PERENNIAL - A defined channel containing surface water throughout the year.

2. The following words and terms and their definitions contained in Section 202 are hereby deleted: “PaDER”, “Planned Residential Development” and “Plat”.

B. Article III, General Procedures and Processing Requirements, is hereby amended as follows:

1. Section 301 is hereby amended in its entirety to provide as follows:

Section 301. Prior to Submission

All preliminary and final subdivision or land development plans shall be referred to and reviewed by the Planning Commission and shall be acted on by the Board of Supervisors in accordance with the procedures specified in this Article and in other sections of this Ordinance. Any application not processed as required herein

shall be null and void unless it was made prior to the adoption of these regulations.

Copies of this Ordinance shall be available on request for the use of any person who desires information concerning subdivision standards and procedures in effect within the Township. Any prospective subdivider may meet with the Township Planning Commission to discuss and review tentative plans and/or the provisions of this Ordinance.

No plans except sketch plans, and those for properties in the CD-Conservation Design Overlay Districts, will be considered by the Planning Commission unless the applicant submits said plans in accordance with the requirements set forth in Article V Sections 501, 502 and 503, along with the required Application for Subdivision and Land Development, all required supporting documentation and the required fees to the Township Secretary not less than ten (10) working days prior to the first regularly scheduled meeting of the Planning Commission each month. No application shall be deemed filed unless all requirements have been met and all fees therefore paid in full. Incomplete submissions shall not be distributed for review.

2. Section 302 is hereby amended in its entirety to provide as follows:

Section 302. Preparation of Plans

All Preliminary and Final plans, plats and surveys shall adhere to the laws of the Commonwealth of Pennsylvania, including but not limited to the specifications set forth by the following laws, as from time to time reenacted and amended; the act of May 23, 1945, P.L.913, No.367 (63 P.S. 148 et seq.), known as the “Engineer, Land Surveyor and Geologist Registration Law”, except that this requirement shall not preclude the preparation of a plat in accordance with the act of January 24, 1966, 1965 P.L.1527, No.535 (63 P.S. 901 et seq.), known as the “Landscape Architects Registration Law,” when it is appropriate to prepare the plat using professional services as set forth in the definition of the “practice of landscape architecture” under section 2 of that act. All Preliminary and Final plans, plats and surveys shall bear a certification, as defined in Article II of this Ordinance, of the Registered Design Professional(s), duly registered in the Commonwealth of Pennsylvania to perform such duties, who are responsible for preparation of the plans.

3. The title to Section 303 and Section 303.c only are hereby amended to provide as follows:

Section 303. Submittal of Plans, except those proposing Residential Development of Properties in the CD-Conservation Design Overlay Zoning Districts

- c. The name of the Registered Design Professional(s) in responsible charge for preparing the Plan.

- 4. A new Section 304 is hereby added to provide as follows:

Section 304. Submittal of Plans for Residential Development of Properties in the CD-Conservation Design Overlay Zoning Districts

Following is a sequential overview of plan submittal procedures for residential development of properties in the CD-Conservation Design Overlay Zoning Districts. The following steps shall be followed sequentially, and may be combined only at the discretion of Middlesex Township:

- a. Required Pre-Application Meeting with applicant, Township staff, Township consultants and Township Planning Commission.

A Pre-Application Meeting is required between the applicant, the applicant's consultants, Township staff and consultants and the Planning Commission (or a properly appointed subcommittee of the Planning Commission) before submission of a plan, particularly for proposals that involve the creation of new streets or storm water facilities. The purposes of the Pre-Application Meeting are to discuss the applicant's objectives and to introduce the applicant to Middlesex Township's zoning, subdivision and land development regulations and procedures including fees and schedules for plan submissions, site visits and formal review meetings. The Pre-Application Meeting shall not constitute the official filing of an application for plan approval, and all such meetings and/or review shall be considered informal and non-binding.
- b. Required Preparation of Site Context Map and Conservation Analysis, as described in Article V Section 501 of this Ordinance.

Applicants shall submit Site Context Map and Conservation Analysis, prepared in accordance with the requirements set forth in Article V Section 501 herein. The plan shall familiarize Township staff with existing conditions on the applicant's property and within its immediate vicinity and provide a complete and factual reference (if a site visit is desired) for them in making a site visit. The Site Context Map and Conservation Analysis shall be provided prior to or at the site visit, to form the basis for the development design as shown on the Optional Sketch Plan and shall be submitted with the Preliminary Plan, if the Optional Sketch Plan is not submitted.

- c. Required Site Visit by applicant, Township staff, Township consultants and Township Planning Commission.
- (1) Applicants must arrange for a site visit, (after completion of the Site Context Map and Conservation Analysis) of the property by Middlesex Township staff and consultants and the Planning Commission (or a properly appointed subcommittee of the Planning Commission). Copies of the Site Context Map and Conservation Analysis shall be distributed at that on-site meeting. Applicants, their consultants, and the landowner are encouraged to accompany the Planning Commission.
 - (2) The purpose of the visit is to familiarize Township staff, consultants and Planning Commission (or a properly appointed subcommittee of the Planning Commission) with the property's existing conditions and special features, to identify potential site design issues, and to provide an informal opportunity to discuss site design concepts, including the general layout of designated greenway/open space lands (if applicable), and potential locations for proposed buildings and street alignments. Comments made by Township staff, consultants and Planning Commission shall be interpreted as being only suggested. It shall be understood by all parties that no formal recommendations can be offered, and no official decisions can be made, at the Site Visit.
 - (3) Following the site visit, the applicant and Township staff and Planning Commission (or a properly appointed subcommittee of the Planning Commission) shall develop a mutual understanding on the general approach for subdividing and/or developing the property in accordance with the four-step design procedure described in Article VII Section 720 of this Ordinance, where applicable.
- d. Required Pre-Sketch Plan Conference with applicant, Township staff, Township consultants and Township Planning Commission.
- If the applicant desires to submit an Optional Sketch Plan, after the site visit and prior to Sketch Plan submission, a conference with the applicant, Township staff, Township consultants and Planning Commission (or a properly appointed subcommittee of the Planning Commission) is required, particularly for proposals that involve the creation of new streets or storm water facilities. The purposes of the Pre-Sketch Plan Conference

are to review the plan and discuss if and how the Sketch Plan meets the design requirements of Article IV of the Zoning Ordinance and the four-step design procedure described in Article VII Section 720 of this Ordinance, and any other applicable requirements of Township Ordinances. The applicant may also request information on Middlesex Township's zoning, subdivision and land development regulations and procedures including fees and schedules for plan submissions, etc. The Pre-Sketch Plan Conference shall not constitute the official filing of an application for plan approval, and all review comments at the conference shall be considered informal and non-binding. At the discretion of the Commission, this conference may be combined with the site visit.

- e. Optional Sketch Plan Submission and Review by applicant, Township staff, Township consultants and Township Planning Commission.
Submission of an Optional Sketch Plan is not required, but strongly encouraged as an important, valuable and highly recommended step that may speed the review process. If an Optional Sketch Plan is submitted the, in accordance with other requirements of Sections 301 and 303 of this Ordinance, copies of an Optional Sketch Plan, meeting the requirements set forth in Sections 401 and 402, may be submitted to the Township Secretary during business hours for distribution to the Township Planning Commission, the County Planning Commission, the Township Engineer and applicable Township advisory boards (e.g. parks and recreation board, or an environmental advisory board, etc.) at least ten (10) days prior to the Planning Commission meeting at which the Sketch Plan is to be discussed. A Sketch Plan shall not constitute an official filing of an application for plan approval, and all review by Township staff or Planning Commission shall be considered informal and non-binding.
- f. Required Preliminary Plan in accordance with requirements in Article V of this Ordinance.
- g. Required Final Plan in accordance with requirements in Article VI of this Ordinance.

5. Former Section 304 is hereby renumbered and designated Section 305.

Former Section 304 i.(1), now re-designated Section 305.i(1) is hereby amended in its entirety as follows, and new paragraph k. (Section 305.k) is hereby added as set forth below:

i. Recording Plans and Deeds

- (1) Upon the approval of a final plan, the developer shall, within ninety (90) days of such final approval or ninety (90) days after the date of delivery of an approved plan signed by the governing body following completion of conditions imposed for such approval, whichever is later, record such plan in the Office of the Recorder of Deeds for Cumberland County.
The Recorder of Deeds shall not accept any plan for recording unless such plan officially notes the approval of the Board of Township Supervisors and review by the Cumberland County Planning Commission.
The applicant shall bear any costs required to provide the Recorder of Deeds with a recordable plan in the required 18 inches x 24 inches format.

k. Conditions of Final Plan Approval

Approval of any Final Plan shall, in addition to any other applicable provisions of this Ordinance, shall be subject to the following conditions:

- (1) Where applicable, the landowner shall execute a Developer's Agreement, verifying that he agrees to construct all required improvements and common amenities, and further verifying that he guarantees completion and maintenance of these improvements and amenities through a type of financial security acceptable to the municipality.
- (2) Where applicable, the landowner shall submit to the Township financial security to cover the cost of all required improvements and common amenities, in accordance with Section 1301 of this Ordinance.
- (3) The landowner agrees, if requested, to tender to the Township a deed of dedication in a form satisfactory to the Township Solicitor for streets and improvements thereto, including street paving, water mains, fire hydrants, storm sewers, inlets, pumping stations and other appurtenances as shall be constructed as public improvements within the public right-of-way and are required for the promotion of public welfare, after all streets and improvements to be dedicated to the municipality are completed and are certified as being satisfactory by the Township Engineer. The Board of Supervisors may require that the applicant provide a certificate

from a duly licensed title insurance company certifying that the title to be conveyed is good and marketable, free of all liens and encumbrances, except utility easements, before any property is accepted by the Township.

- (4) Whenever the landowner is providing open space as part of the development, an easement in perpetuity restricting such open space against further subdivision or development shall be executed between the landowner and the Township or a conservation organization acceptable to the Township.
- (5) The landowner shall submit to the Township all required permits, approvals or waivers from agencies having jurisdiction over ancillary matters necessary to effect the subdivision or land development, such as Pennsylvania Department of Transportation, Pennsylvania Department of Environmental Protection (PA DEP), Pennsylvania Public Utility Commission, Cumberland County Soil Conservation Service, U.S. Army Corps of Engineers or other applicable agency.
- (6) All final approvals or waivers required by Federal, State and County agencies for development in accord with the Detailed Final Plan including, but not limited to, approval of the Sewage Facilities Planning Module by the PA DEP, approval by the Cumberland County Soil Conservation Service, and a highway occupancy permit, if required, from the Pennsylvania Department of Transportation shall be presented to the municipality.

6. Sections 306 and 307 are hereby amended in their entirety to provide as follows:

Section 306. Major and Minor Subdivision or Land Development Plans - Classification

- a. For purposes of procedure, all applications shall be classified as either major or minor subdivision or land developments:

- (1) Minor Subdivision or Land Development. Any subdivision or land development plan in which the following conditions are met shall be considered a minor subdivision or land development.
 - (a) No public street or access road is constructed or is required to be widened;
 - (b) No other completion of public improvement or guarantee thereof is required other than individual on-lot stormwater management systems;
 - (c) No earthmoving activities will take place except those incidental to construction of a single-family dwelling on each lot; and
 - (d) No parcel is subdivided into more than three (3) lots.
- (2) Major subdivision or land development. Any subdivision or land development plan not in compliance with Section 306.a.(1)or any part thereof, or for any use other than single- family residential, shall be considered a major subdivision or land development.
- (3) After one (1) minor subdivision has taken place within any given tract, the applicant shall be required to submit a complete Preliminary Plan for the entire tract on the next subsequent application, unless the size, frequency and interrelationship of the prior subdivision clearly does not warrant such as determined by the Board of Township Supervisors.

b. Review

- (1) The proposed subdivision or land development shall be subject to all review procedures specified in this article.
- (2) All plans submitted as a Minor Plan shall include supporting documents which comply in all applicable respects with the requirements for both Preliminary and Final Plans and shall be titled Final Minor Plan. The Planning Commission shall review the plan for both Preliminary and Final requirements, thereby

excusing the applicant from submitting a separate Preliminary Plan.

- (3) When a subdivision or land development plan includes only a portion of a landowner's entire tract, or when such portion is contiguous to an adjoining tract of the landowner, a layout shall be included showing future potential subdivision of all the contiguous lands belonging to the landowner to ensure that the subdivision may be accomplished in accordance with current codes and with appropriate access. Submission and review of the layout described in this section shall not constitute approval of the future subdivision shown thereon.

Section 307. Additions to and/or Consolidation of Existing Lots

A Lot Addition and/or Lot Consolidation is any subdivision creating a lot that is to be added to an existing contiguous lot of record of separate ownership and where no new building lot or land development is proposed. It is solely intended to convey a parcel of land located immediately adjacent to the other property owned by the intended grantee, which is being added to the grantee's existing lot. The size of one lot will increase in an equal amount by which the size of an adjacent lot(s) will decrease. In the case of a Lot Consolidation Plan, the entire area of one or more lots is added to an adjacent lot thereby in effect eliminating one or more original lots. These plans are processed as Minor Subdivision Plans.

A parcel of land may be added to an existing recorded lot by filing a Final Lot Addition Plan and/or a Final Lot Consolidation Plan for the sole purpose of increasing the lot size provided that:

- a. The parcel to be added must be contiguous to the existing lot and must maintain or improve the overall straightness of lot lines.
- b. The Plan prepared for the addition of such parcel shall follow the procedures outlined in Article VI Section of this Ordinance except that the plan should be titled Final Lot Addition Subdivision Plan and/or Final Lot Consolidation Subdivision Plan and a separate Preliminary Plan need not be filed.
- c. In any subdivision creating a lot addition (including a side lot addition), the lot addition shall be required to be merged by deed into the tract to which it is being added and any future proposal to subdivide any portion of the tracts so merged shall be in accordance with all requirements of the Pennsylvania Municipalities Planning code (or any successor code or authority), this Subdivision and Land Development Ordinance and the

Middlesex Township Zoning Ordinance. A copy of the proposed deed of merger shall be submitted to the Township for review and approval as a condition of plan approval and the requirements and conditions provided above shall appear as a note on the subdivision plan.

7. Former Section 307 and Sections 308, 309 and 310 are hereby consecutively renumbered and re-designated as Sections 308, 309, 310 and 311, respectively.

C. Article IV, Optional Sketch Plan Submission, is hereby amended as follows:

1. The title of Article IV is hereby amended to be “Optional Sketch Plan Submission And Review”.

2. Section 401 is hereby amended as follows:

a. The five existing separate paragraphs of Section 401 are hereby designated and re-identified in their same order consecutively as Section 401.a through 401.f.

b. New Section 401.a is hereby amended in its entirety to provide as follows:

- a. Prior to the submission of a Preliminary Plan, the developer may submit a Sketch Plan to the Township Secretary during business hours for distribution to the Planning Commission, the Township Engineer and applicable municipal advisory boards (e.g. parks and recreation board, or an environmental advisory board, etc.) at least ten (10) days prior to the Planning Commission meeting at which the Sketch Plan is to be discussed. A Sketch Plan shall not constitute an official filing of an application for plan approval, and all review by Township staff or Planning Commission shall be considered informal and non-binding. Sketch Plan submission is strongly encouraged by the Township as a way of helping applicants and officials develop a better understanding of the property and to help establish an overall design approach that respects its special or noteworthy features, while providing for the density permitted under the Zoning Ordinance, particularly in the case of proposed Open Space Residential Development in the RT-Residential Towne Zoning Districts, or proposed Conservation Subdivision in the CD-Conservation Design Overlay Districts.

- c. New Section 401.c is amended only by deleting the words “Resources (PaDER)” and substituting for those words the words “Protection (PaDEP)”.
- d. New Section 401.f is hereby added to provide as follows:
 - f. The developer may also request an informal and non-binding review of the Sketch Plan by the Cumberland County Planning Commission.

3. Section 402 is hereby amended in its entirety to provide as follows:

Section 402. Requested Information

To provide a full understanding of the site’s potential and to facilitate the most effective exchange with the Planning Commission, the Sketch Plan shall include the information listed below.

- a. Schematic layout indicating a general concept for land conservation and development.
- b. Proposed location of buildings and major structures, parking areas and other improvements.
- c. General description of proposed method of water supply, sewage disposal, stormwater management, and provisions for other utilities.
- d. Submission of the Conservation Analysis per requirements of Article V Section 501.b., except that Existing Resources Inventory Mapping as required by Article V Section 501.c.(2)(a), may use existing and proposed contours of the site at vertical intervals of at least ten (10) feet, interpolated from existing United States Geologic Survey (U.S.G.S.) topographic maps, and not from field data.

4. New Section 403 is hereby added to provide as follows:

Section 403. Review Procedure

- a. The Planning Commission shall review the Sketch Plan in accordance with the criteria contained in this Ordinance and with other applicable Ordinances of the Township. Their review shall informally advise the

developer of the extent to which the proposed subdivision or land development conforms to the relevant standards of this Ordinance, and may suggest possible plan modifications that would increase its degree of conformance. Their review shall include but is not limited to:

- (1) The location of all areas proposed for land disturbance (streets, foundations, yards, septic disposal systems, storm water management areas, etc.) with respect to notable features of natural or cultural significance as identified in the applicant's Conservation Analysis and on the Municipality's Map of Primary Conservation Areas (available if and when it is published from time to time by the Township) or alternatively in The Middlesex Township Comprehensive Plan, enacted February 5, 2003 and as revised from time to time, part two section 3.0 Environmental Resources and Figure 3-1 Environmental Features Map;
- (2) When open space is provided:
 - (a) The potential for open space connections with existing or potential open space on adjoining parcels.
 - (b) The relationship of buildings to open space.
 - (c) Pedestrian access to open space.
 - (d) Compliance with the design standards in Article XII.
- (3) The potential for street connections with existing streets, other proposed streets, or potential developments on adjoining parcels;
- (4) The location of proposed access points along the existing road network;
- (5) The proposed building density and impervious coverage;
- (6) The compatibility of the proposal with respect to the objectives and policy recommendations of the Middlesex Township Comprehensive Plan; and
- (7) Consistency with the Zoning Ordinance.

- b. The Planning Commission may submit either its written comments or approved meeting minutes pertaining to the Sketch Plan to the developer, the Board of Supervisors, and other relevant planning or review agencies.
- c. The Planning Commission may request that the applicant submit additional drafts of the Sketch Plan, as revised to address its comments, to ensure that its comments have been properly incorporated into the revised plan. This request may be included in the written comments or approved meeting minutes described in Section 403 b.

D. Article V, Preliminary Plan Submission, is hereby amended as follows:

1. The title of Article V is hereby amended to be “Preliminary Plan Submission And Review”.

2. Existing Section 501, 502 and 503 are hereby deleted in their entirety and the following Sections 501, 502, 503 and 504 hereby adopted:

Section 501. Pre-Application Meeting Requirements

A Pre-Application Meeting is required between the applicant, the applicant’s consultants, Township staff and consultants and the Planning Commission (or a properly appointed subcommittee of the Planning Commission) before submission of a preliminary plan, particularly for proposals that involve the creation of new streets or storm water facilities. The purposes of the Pre-Application Meeting are to discuss the applicant’s objectives and to introduce the applicant to Middlesex Township’s zoning, subdivision and land development regulations and procedures including fees and schedules for plan submissions, site inspections and formal review meetings. The Pre-Application Meeting shall not constitute the official filing of an application for preliminary plan approval, and all such meetings and/or review shall be considered informal and non-binding.

Section 502. Preliminary Plan Requirements.

- a. Not less than ten (10) working days prior to the first regularly scheduled meeting of the Planning Commission each month, the applicant shall submit two (2) copies of the Application for Review of Preliminary Subdivision Plan or Preliminary Land Development Plan and twelve (12) copies of the Preliminary Plan. The Preliminary Plan shall be prepared by

a Registered Design Professional(s) as defined in Article II of this Ordinance in accordance with the requirements set forth in Article III Section 302 of this Ordinance.

b. Submission Requirements:

The submission requirements for a Preliminary Plan shall consist of the following elements, and shall be prepared in accordance with the data requirements and drafting standards (Section 502.c) described herein:

(1) Site Context Map in accordance with Section 502 c.(1)

(2) Conservation Analysis:

A Conservation Analysis consists of Existing Resources Inventory Mapping and a Site Analysis Report as set forth below:

(a) Existing Resources Inventory Mapping in accordance with Section 502.c. (2) (a)

(b) Site Analysis Report in accordance with Section 502.c.(2)(b)

(3) Preliminary Improvements Plan in accordance with 502.c. (3)

(4) All Supporting Documentation specified in Section 503.

c. Plan Data Requirements and Drafting Standards

The following plans shall bear the printed name, signature, address, telephone number registration number, seal and certification of the Registered Design Professional(s) responsible for preparation of the plan, as detailed in Section 502.c.(4)(f). of this Ordinance.

(1) SITE CONTEXT MAP

A map or maps showing the location of the proposed subdivision within its neighborhood context shall be submitted. For sites under 100 acres in area, such maps shall be at a scale not less than 1 inch = 200 feet, and shall show the relationship of the subject property to natural and man-made features existing within 1,000 feet of the site. For sites of 100 acres or more, the scale shall be 1 inch = 400 feet, and shall show the above relationships within 2,000 feet of the site. The features that shall be shown on the Site Context Map includes stream valleys, wetland complexes from maps published

by the U.S. Fish & Wildlife Service or the United States Department of Agriculture (U.S.D.A.) Natural Resources Conservation Service, woodlands over one-half acre in area from aerial photographs, ridge lines, public roads and trails, public land, and land protected under conservation easements.

(2) CONSERVATION ANALYSIS

For all subdivisions (except minor subdivisions) and land development applications, an applicant shall prepare a conservation analysis consisting of Existing Resources Inventory Mapping and a Site Analysis Report. The Existing Resources Inventory Maps shall provide the developer and the municipality with a comprehensive analysis of existing conditions, both on the proposed development site and within 500 feet of the site. Conditions beyond the parcel boundaries may be described on the basis of existing published data available from governmental agencies, and from aerial photographs.

(a) EXISTING RESOURCES INVENTORY MAPPING:

Maps shall be prepared at the scale of 1 inch = 50 feet, 1 inch = 100 feet or 1 inch = 200 feet, and shall show lands with conservation value, including but not limited to the following:

1. An aerial photograph, taken in the last five years, enlarged to a scale not less detailed than 1 inch = 400 feet, with the site boundaries clearly marked.
2. Existing (from field data) and proposed contours of the site at vertical intervals of two (2) feet for areas with an average slope of ten percent (10%) or less and at intervals of five (5) feet for areas with an average slope exceeding ten percent (10%).
3. Slopes shall be classified and shown on the Existing Resources Inventory Map. Slopes equal to or greater than 25 percent will be considered steep and must be highlighted on the inventory map.
4. The location and delineation of ponds, streams, ditches, drains, natural or artificial drainage swales, as well as the 100-year floodplains and wetlands, as defined in the Zoning Ordinance. Additional areas of wetlands on the proposed development parcel shall also be indicated, as evident from testing, visual inspection, or from the presence of wetland vegetation.

5. All watercourses, streams and/or drainage courses located on or within 200 feet of the subject property must be shown, including the off-site drainage areas for all streams entering the subject property. Streams will be classified as either perennial or intermittent.
6. The delineation of lands subject to flooding as set forth in Article IX of this Ordinance relative to Floodplain Area Regulations.
7. Natural forest and tree cover shall be shown on the inventory map as a circumferential line around all forest and tree stands.
8. Individual trees with a caliper in excess of 12 inches shall be located on the inventory map.
9. Hedgerows shall be located on the inventory map.
10. Class I, II and III soils as mapped by the U.S.D.A., Natural Resources Conservation Service in the most recent published soil survey for Cumberland County.
11. Erodible soils on slopes over 25 percent slope
12. Cumberland County Natural Diversity Inventory Sites.
13. Geologic formations on the proposed development parcel, including rock outcroppings, cliffs, sinkholes, and fault lines, based on available published information or more detailed data obtained by the applicant.
14. All existing man-made features including but not limited to streets, driveways, farm roads, woods roads, buildings, foundations, walls, wells, drainage fields, tanks (aboveground or underground), dumps, utilities, fire hydrants, and storm and sanitary sewers. Indicate all man-made features to be demolished and removed.
15. Locations of all historically significant sites or structures on the tract, including but not limited to buildings, cellar holes, stone walls, earthworks, and graves.
16. Locations of trails that have been in public use (pedestrian, equestrian, bicycle, etc.)

17. All easements and other encumbrances of the property, which are or have been filed of record with the Recorder of Deeds of Cumberland County, shall be shown on the plan.
18. Total acreage of the property tract, the Adjusted Tract Area and the constrained land area with detailed supporting calculations (see Article IV, Section 4.02 of the Zoning Ordinance).

(b) SITE ANALYSIS REPORT

1. A Site Analysis Report shall be prepared for all major subdivision and land development applications to categorize the impacts of the proposed activities and physical alterations on those resources shown on the Existing Resources Inventory Mapping. All proposed improvements, including but not necessarily limited to grading, fill, streets, buildings, utilities and stormwater detention facilities, as proposed in the Preliminary Plan documents, shall be taken into account in preparing the Resource Impact and Conservation Plan, which shall clearly demonstrate that the applicant has minimized site disturbance to the greatest extent practicable.
2. The applicant shall submit the Site Analysis Report as a written report divided into the following parts:
1) description of current and potential value of existing resources as documented in Section 501.c.2 (a), 2) impacts of the proposed subdivision on existing resources and 3) measures taken to minimize and control such impacts both during and following the period of site disturbance and construction.

(3) PRELIMINARY IMPROVEMENTS PLAN

All preliminary plans shall conform to the requirements of Article XII Resource Conservation and Open Space Delineation Standards. All Conservation Subdivisions shall conform to the requirements of Article XII Sections 1203, 1204 and 1205. The submittal shall contain the following specifications:

- (a) Historic resources, trails and significant natural features, including topography, areas of steep slope, wetlands, 100-year floodplains, swales, rock outcroppings, existing vegetation, and existing utilities, and other site features, as indicated on the Existing Resources Inventory Maps.
- (b) Names of all abutting property owners and respective deed references.
- (c) If construction is to occur in phases, a plan showing the progression of phases, how each phase relates to completed and future phases, and a time line indicating when each phase is to be commenced and completed.
- (d) Boundaries of the property being subdivided showing bearings and distances, a statement of total acreage of the property, the total number of lots being proposed and the location of municipal boundaries.
- (e) All existing and proposed easements and rights-of-way and the purpose for which the easements and rights-of-way have been established.
- (f) Zoning data, including any changes in the existing zoning to be requested by the subdivider.
- (g) All existing buildings, sewers, water mains, culverts, utility lines, fuel storage tanks and other significant man-made features.
- (h) The layout of lots showing approximate dimensions, lot numbers, approximate area of each lot and a summary table identifying the number of proposed structures and dwelling units.
- (i) A copy of any deed restrictions imposed on the property as a condition of sale by the present owner.

- (j) Front, side and rear building setback lines.
- (k) Existing and Proposed Streets
 - 1. Location, alignment, width and tentative names of all proposed streets and street rights-of-way, including all street extensions or spurs that are reasonably necessary to provide adequate street connections and facilities to adjoining development or undeveloped areas.
 - 2. Typical street cross section drawings, showing rights-of-way or easement widths, approximate grades, slope of crowns, cartway and shoulder widths, including paving details with depth and type of construction materials for required sub-base, base and top layers shall be shown for all proposed streets, alleys or easements for future streets or alleys.
 - 3. All existing or proposed streets on or adjacent to the tract, including existing or tentative names, existing right-of-way widths, proposed dedicated right-of-way widths and cartway widths.
 - 4. Clear sight triangles at street intersections, as set forth in Section 703 c. (10) (b) of this Ordinance.
- (l) Where community sewage service is to be allowed, the conceptual layout of proposed sewage systems, including but not limited to the designated locations of sewer mains and sewage treatment plants, showing the type and degree of treatment intended and the size and capacity of treatment facilities.
- (m) Where central water service is to be allowed, the conceptual layout of proposed water distribution facilities including water mains, fire hydrants, storage tanks and, where appropriate, wells or other water sources.

- (n) When on-site sewage disposal systems are proposed, the location of all soil probe test holes and percolation test holes (including failed probe and percolation holes) that were examined. Clearly show required approved primary and alternate on-site sewage disposal system absorption area sites for each lot. All approved sites shall be clearly distinguished from unapproved sites.
- (o) When on-site water supplies are proposed, the approximate location of all proposed well sites and the exact location of all existing well sites shall be shown. For lots also to be served by on-site sewage disposal systems, 100-foot isolation distances between well sites and sewage disposal absorption areas shall be drawn on the Plan.
- (p) Limit-of-disturbance line (must be exact in relation to the retention of existing trees proposed to be saved).
- (q) If land to be subdivided lies partly in or abuts another municipality, the applicant shall submit information concerning the location and conceptual design of streets, layout and size of lots and provisions of public improvements on land subject to the applicant's control within the adjoining municipalities. Evidence of approval of this information by appropriate officials of the adjoining municipalities also shall be submitted.
- (r) Where the location of on-site sewage disposal systems are proposed in the common open space area, each lot's required approved primary and alternate on-site sewage disposal system absorption area sites shall be shown and clearly indicated along with the exact location of all passed and failed probe test holes and percolation test holes. Soils testing results shall be provided with the required Sewage Facilities Planning Module.
- (s) Approximate location of proposed curbs, sidewalks, drives, street trees and existing vegetation to be retained.
- (t) Building locations and respective parking areas.

- (u) Where the Preliminary Plan covers only a part of the subdivider's holdings, a key map at a scale not smaller than four hundred (400) feet to the inch, showing the entire tract, its topography at contour intervals of at least twenty (20) feet, its manmade and natural features, and the proposed street layout for the entire tract; abutting streets and names of abutting property owners; and the portion of the tract included in the Preliminary Plan submission.
- (v) Location of proposed sanitary and storm sewers, water mains and fire hydrants.

(4) COVER SHEET REQUIREMENTS

- (a) Proposed project name and municipality or municipalities in which located.
- (b) Signature blocks and date spaces for recommendation/approval by the following:
 - 1. Township Planning Commission
 - 2. Board of Township Supervisors. The Signature block shall appear as follows:

MIDDLESEX TOWNSHIP BOARD OF SUPERVISORS
PLAN APPROVAL CERTIFICATION

This Plan approved or conditionally approved
the ____ day of _____ 200____
by the MIDDLESEX TOWNSHIP BOARD OF
SUPERVISORS

All conditions, if any imposed with respect to such
approval have been met on this _____ day of
_____ 200____

Chairman, Board of Supervisors

Township Secretary

- 3. Township Municipal Authority (When plan proposes connection to public sewer and/or water utilities, or is within an area planned for future

service by public utilities on the approved Township Sewage Facilities Plan required by Pennsylvania Act 537, "The Sewage Facilities Act")

- (c) Name(s) and address(es) of record owner(s) and subdivider(s).
- (d) Signature(s) of the legal and/or equitable owner(s) certifying concurrence with the Plan.
- (e) A location map, for the purpose of locating the property being subdivided, showing the relationship of adjoining property to all streets, roads and municipal boundaries and drawn to a scale of not less than 1 inch = 2,000 feet.
- (f) Printed name, signature, address, telephone number registration number and appropriate seal(s) of the Registered Design Professional(s) responsible for preparation of the plan; including but not limited to the following certifications:
 - 1. Certification, along with printed name, date, signature and seal, of the Professional Land Surveyor certifying the accuracy of the survey information shown and described on the plan; along with certification including the following specific language:

"I hereby certify to the Board of Supervisors of Middlesex Township that to the best of my knowledge, based on recent actual observation of the site, the survey and plan shown and described hereon is true and correct to the accuracy required by the Middlesex Township Subdivision and Land Development Ordinance and in accordance with the laws of the Commonwealth of Pennsylvania."
 - 2. Certification, along with printed name, date, signature and seal, of the Professional Engineer certifying the accuracy of the engineering details shown and described on the plan; along with

certification including the following specific language:

“I hereby certify to the Board of Supervisors of Middlesex Township that to the best of my knowledge, based on recent actual observation of the site, the engineering details and plan shown and described hereon are true and correct to the accuracy required by the Middlesex Township Subdivision and Land Development Ordinance and in accordance with the laws of the Commonwealth of Pennsylvania.”

3. Certification, along with printed name, date, signature and seal, of the Professional Geologist certifying the accuracy of the engineering details shown and described on the plan; along with certification including the following specific language:

“I hereby certify to the Board of Supervisors of Middlesex Township that to the best of my knowledge, based on recent actual observation of the site, the geologic details and plan shown and described hereon are true and correct to the accuracy required by the Middlesex Township Subdivision and Land Development Ordinance and in accordance with the laws of the Commonwealth of Pennsylvania.”

4. Certification, along with printed name, date, signature and seal, of the Registered Landscape Architect certifying the accuracy of the landscaping details shown and described on the plan; along with certification including the following specific language:

“I hereby certify to the Board of Supervisors of Middlesex Township that to the best of my knowledge, based on recent actual observation of the site, the specific details and plan shown and described hereon are true and correct to the accuracy required by the Middlesex Township Subdivision and Land Development Ordinance and in accordance with the laws of the Commonwealth of Pennsylvania.”

5. Certification, along with printed name, date, signature and seal, of other Registered Design Professionals certifying the accuracy of the appropriate details shown and described on the plan; along with certification including the following specific language:

“I hereby certify to the Board of Supervisors of Middlesex Township that to the best of my knowledge, based on recent actual observation of the site, the specific details and plan shown and described hereon are true and correct to the accuracy required by the Middlesex Township Subdivision and Land Development Ordinance and in accordance with the laws of the Commonwealth of Pennsylvania.”

- (g) If applicable, a list of requested modification of requirements of one or more provisions of this Ordinance, as detailed in Article XIV of this Ordinance.

(5) DRAFTING REQUIREMENTS

- (a) Plans shall be on sheet sizes no larger than 24 inches x 36 inches and drawn to a scale not smaller than 1 inch = 100 feet. If the Plan requires more than one sheet, each sheet shall be numbered and sheet layout index shall be provided. The Board of Township Supervisors may require final plans at a scale of 1 inch = 50 feet as a condition of preliminary approval to assure legibility in cases warranted by the complexity of the proposal.
- (b) The designation, Preliminary Plan.
- (c) North point (with north point oriented to the top of the plan sheet), graphic scale, written scale, and date, including the month, day, and year that the original drawing was completed, and the month, day and year for each revision, if any.
- (d) Dimensions shall be set in feet.

- (e) Each sheet shall be numbered and the plan shall provide an adequate legend indicating clearly which features are existing and which are proposed.

Section 503. Supporting Documentation

- a. A PA DEP Sewage Facilities Planning Module for Land Development.
- b. In the event that the Plans propose extension of public sewage and/or water service into the project by any authority or jurisdiction other than the Middlesex Township Municipal Authority, a statement from the applicable authority or jurisdiction regarding the adequacy of such extension shall be submitted.
- c. A preliminary Traffic Impact Study in accordance with Article VII Section 717, where required therein.
- d. An erosion and sedimentation control plan in accordance with standards of the Cumberland County Conservation District and/or PA DEP requirements.
- e. Verification of compliance with Floodplain Area and Wetlands Regulations as set forth herein.
- f. A preliminary Grading Plan in accordance with Article XI.
- g. Preliminary Community Association Documents.
 - (1) A Community Association Document, also known as a Homeowner's Association Document or a Condominium Association Document, shall be provided for all subdivision and land development applications which propose lands or facilities to be used or owned in common by all or a portion of the residents of that subdivision or land development and not deeded to the municipality.
 - (2) The elements of the Community Association Document shall include, but shall not necessarily be limited to the following:
 - (a) A description of all lands and facilities to be owned by the Community Association. This description shall include a map of the proposal highlighting the precise location of those lands and facilities.

- (b) Statements setting forth the powers, duties, and responsibilities of the Community Association, including the services to be provided.
- (c) A Declaration of Covenants, Conditions, and Restrictions, giving perpetual easement to the lands and facilities owned by the Community Association. The Declaration shall be a legal document, which also provides for automatic Association membership for all owners in the subdivision or land development and shall describe the mechanism by which owners participate in the Association, including voting, elections, and meetings. Furthermore, it shall give power to the Association to own and maintain the common property and to make and enforce rules.
- (d) Statements prescribing the process by which Community Association decisions are reached and setting forth the authority to act.
- (e) Statements requiring each owner within the subdivision or land development to become a member of the Community Association.
- (f) Statements setting cross covenants or contractual terms binding each owner to all other owners for mutual benefit and enforcement.
- (g) Requirements for all owners to provide a pro rata share of the cost of the operations of the Community Association.
- (h) A process of collection and enforcement to obtain funds from owners who fail to comply.
- (i) A process for transition of control of the Community Association from the developer to the unit owners.

- (j) Statements describing how the lands and facilities of the Community Association will be insured, including limit of liability.
 - (k) Provisions for the dissolution of the Community Association, in the event such dissolution should become inevitable.
- h. A preliminary Environmental Impact Assessment Report in accordance with Article VII Section 718, where required therein. In addition to the requirements above, the following information is required to be submitted for all major subdivision or land developments as defined in Article III Section 305, for all developments proposed in the CDO-Conservation Design Overlay Zoning Districts, and for other development for which such information is required by the Board of Supervisors upon recommendation by the Township Engineer, Township Municipal Authority, Township staff or consultants.
 - (1) A preliminary Feasibility Report of Water Facilities, when on-site water supply is proposed and information from existing geologic mapping and/or hydrogeologic reports and/or water availability reports of nearby existing drinking water wells indicates that groundwater yields may not be suitable to provide adequate water for the proposed development.
 - (2) A hydrogeologic study when on-site sewage disposal systems are proposed in carbonate geology and/or within one-quarter mile of an existing drinking water wells with nitrate levels above 7 milligrams per liter (mg/l). The hydrogeologic study must document the impact of on-site sewage disposal systems on the existing drinking water wells and make provisions to mitigate potential impacts.
 - (3) A geotechnical report prepared by a Pennsylvania registered Professional Engineer or Professional Geologist.
 - (a) When it is determined that the developer cannot avoid building on soils with severe limitations and there are concerns with respect to structural safety and/or environmental degradation, such a report is required.

- (b) The report will provide more detail of soils and geologic characteristics in order to determine that soils can support development using suitable engineering measures.
- (4) Woodlands Evaluation Report prepared by a forester, landscape architect, horticulturist or another qualified professional acceptable to Middlesex Township Board of Supervisors.
 - (a) This evaluation shall be submitted as a written report.
 - (b) At a minimum, the report shall include one or more maps indicating boundaries and conditions of woodland areas accompanied by a report addressing the following criteria:
 - 1. Configuration and size.
 - 2. Present conditions, i.e., stocking, health and species composition.
 - 3. Ecological functions: i.e., in protecting steep slopes, erodible soils, maintaining stream quality and providing for wildlife habitats.
 - 4. Proposed impact to woodlands, i.e. approximate acreage of wooded area to be disturbed.
 - 5. Relationship to woodlands on adjoining and nearby properties and the potential for maintaining continuous woodland areas.
- i. Preliminary Open Space Ownership and Management Plan.
 For conservation subdivisions and other development with designated open space, the applicant shall submit a preliminary open space ownership and management plan. The preliminary open space ownership and management plan shall detail approximate boundaries, approximate acreage and proposed ownership of all proposed Open Space areas, describe the entities responsible for maintaining various elements of the property and describe management objectives and techniques for each part of the property. Such management plans shall be consistent with the requirements of the Zoning Ordinance Section 4.03 H.2.

Section 504. Review Procedure

- a. Copies of the Preliminary Plan and Supporting Documentation shall be distributed by the Township Secretary to the following reviewing and advisory bodies for comment and report:
 - (1) Township Engineer;
 - (2) Cumberland County Planning Commission;
 - (3) Township Planning Commission; and
 - (4) Township Municipal Authority (When plan proposes connection to public sewer and/or water utilities, or is within an area planned for future service by public utilities on the approved Township Sewage Facilities Plan required by Pennsylvania Act 537, “The Sewage Facilities Act”)

Additionally, Preliminary Plans shall be submitted to adjacent municipalities and governmental agencies or authorities that may be affected by the Plan.

- b. At a regular or special Planning Commission meeting following receipt of reports from agencies listed above, but in no case later than sixty (60) days from the time of Preliminary Plan submission, the Planning Commission shall:
 - (1) Review the applicant's submission.
 - (2) Review all reports received.
 - (3) Discuss submission with applicant, or applicant's agent.
 - (4) Evaluate the plan, reports, and discussion.
 - (5) Determine whether the Preliminary Plan meets the objectives and requirements of this Ordinance and other Ordinances of the Township.
 - (6) Determine any required supplemental plans and/or studies, such as Traffic Impact Studies, Environmental Impact Assessment Reports, etc.
 - (7) Either recommends approval, disapproval or conditional approval of the Preliminary Plan.
 - (8) Submit its reports to the Board of Township Supervisors.

When the Planning Commission recommends disapproval in terms as filed, the decision shall specify the defects found in the application and describe the requirements which have not been met and shall, in each case, cite to the provisions of the Ordinance relied upon.

- (9) The Township Planning Commission shall transmit the plans and report its decision, comments and/or recommendations in writing to the Board of Township Supervisors via the Township Secretary not less than seven (7) calendar days before the official meeting to be held to consider approval or disapproval of the Plan.
- c. During the course of the Planning Commission's review of the Preliminary Plan and prior to any action by the Board of Township Supervisors within the required ninety (90) day review period, the Preliminary Plan may be revised by the applicant. The required number of copies of the revised plan shall be submitted which shall note the dates of any and all revisions and a summary of the nature thereof. One of the copies submitted shall be color coded to identify the revisions. If it is determined that the revision(s) are of a substantial nature, the applicant shall sign a statement stipulating that a new ninety (90) day time period shall commence from the date of the Planning Commission's meeting next following the filing of the revised Preliminary Plan. In the alternative, the applicant shall sign a statement granting an extension of time for a lesser period to be concurred with by the Planning Commission. The additional reviews required for revised plans may require the payment of additional fees by the applicant.
- d. Upon review of a subdivision or land development plan, the Township Engineer shall make comments and recommendations in writing to the Township Planning Commission and the Board of Township Supervisors.
- e. The Board of Township Supervisors shall render its decision and communicate it to the applicant in accordance with the requirements of Section 304 of this Ordinance.

E. Article VI, Final Plan Submission, is hereby amended as follows:

1. The title of Article VI is hereby amended to be “Final Plan Submission And Review”.

2. Section 601 is hereby deleted and the following Section adopted in its place:

Section 601. Pre-Application Meeting Requirements

A Pre-Application Meeting is required between the applicant, the applicant’s consultants, Township staff and consultants and the Planning Commission (or a properly appointed subcommittee of the Planning Commission) before submission of a final plan, particularly for proposals that involve the creation of new streets or storm water facilities. The purposes of the Pre-Application Meeting are to discuss the applicant’s objectives and to introduce the applicant to Middlesex Township’s zoning, subdivision and land development regulations and procedures including fees and schedules for plan submissions, site inspections and formal review meetings. The Pre-Application Meeting shall not constitute the official filing of an application for final plan approval, and all such meetings and/or review shall be considered informal and non-binding.

3. A new Section designated as Section 602 is hereby adopted as follows:

Section 602. Final Plan Requirements.

Not less than ten (10) working days prior to the first regularly scheduled meeting of the Planning Commission each month, the Applicant shall submit two (2) copies of an application for Review of Final Subdivision or Land Development Plan and twelve (12) copies of the Final Plan to the Township. The Final Plan shall be prepared by a Registered Design Professional(s) as defined in Article II of this Ordinance in accordance with the requirements set forth in Article III Section 302 of this Ordinance. Final Plans shall conform in all details with Preliminary Plans as previously approved, and any conditions specified in the approval of Preliminary Plans shall be incorporated in the Final Plans. A detailed Final plan shall consist of and be prepared in accordance with the following:

a. Drafting Standards

- (1) The Final Plan shall be prepared in accordance with all drafting standards as required in Section 502 c. herein.
- (2) The Final Plan shall be prepared at the scale of 1 inch = 100 feet unless a larger scale has been required as a condition of preliminary approval.

- (3) Where more than one sheet is required, an index sheet of the entire subdivision or land development shall be shown on a sheet of the same size.
- (4) The Final Plan shall be drawn on durable material and shall be formatted so that it is legible when reduced to 18 inches x 24 inches size for recording.

b. Final Improvements Construction Plan

- (1) The Final Plan shall bear the printed name, signature, address, telephone number registration number, seal and certification of the Registered Design Professional(s) responsible for preparation of the plan, as detailed in Section 602.b.(11) of this Ordinance.
- (2) The designation, Final Plan and date submitted.
- (3) Proposed and existing tract boundary lines, right-of-way lines of streets, easements, and other rights-of-way and property lines of residential lots and other sites with accurate dimensions, bearings, or internal angles, and radii, arcs, and deflection angles. The error of closure shall not be more than one part in ten thousand (1:10,000).
- (4) The information required to be shown or provided with the Preliminary Plan as listed in Sections 501 and 502.
- (5) The location of sidewalks and street lights.
- (6) Profiles showing proposed street, sidewalk and curbing construction.
- (7) The location of proposed survey monuments.
- (8) Statement by owner offering dedication of streets, rights-of-way and any sites for public uses which are to be dedicated.
- (9) Signature blocks and date spaces for recommendation/approval by the following:
 - (a) Township Planning Commission
 - (b) Board of Township Supervisors

(c) Township Municipal Authority (where required)

(d) Cumberland County Planning Commission

(10) PA DEP code number referencing approval of the PA DEP Sewage Facilities Planning Module for Land Development.

(11) Printed name, signature, address, telephone number registration number and appropriate seal(s) of the Registered Design Professional(s) responsible for preparation of the plan, in accordance with Article V Section 502.c.(4)(f) of this Ordinance.

4. The Section previous identified as Section 602 is hereby re-designated as Section 603.

5. The following provisions of the Section re-designated as Section 603 are hereby amended:

a. Section 603.e is hereby amended to provide as follows:

e. An overall Grading Plan in accordance with Section 1103 herein.

b. Section 603.h is hereby amended to provide as follows:

h. A Landscaping Plan showing the type and location of all plantings, in accordance with Article XII herein.

c. New Sections 603.k and 603.l are hereby adopted as follows:

k. Final Open Space Ownership and Management Plan.
For conservation subdivisions and other development with designated open space, the applicant shall submit a final open space ownership and management plan. The final open space ownership and management plan shall detail exact boundaries described by metes and bounds descriptions, exact acreages and proposed ownership of all proposed Open Space areas, describe the entities responsible for maintaining various elements of the property and describe management objectives and techniques for each part of the property. Such management plans shall be consistent with the requirements of Zoning Ordinance Section 4.03 H.2.

I. Final Community Association Documents

- (1) A Community Association Document, also known as a Homeowner's Association Document or a Condominium Association Document, shall be provided for all subdivision and land development applications which propose lands or facilities to be used or owned in common by all or a portion of the residents of that subdivision or land development and not deeded to the municipality.
- (2) The elements of the Community Association Document shall include, but shall not necessarily be limited to the following:
 - (a) A description of all lands and facilities to be owned by the Community Association. This description shall include a map of the proposal highlighting the precise location of those lands and facilities.
 - (b) Statements setting forth the powers, duties, and responsibilities of the Community Association, including the services to be provided.
 - (c) A Declaration of Covenants, Conditions, and Restrictions, giving perpetual easement to the lands and facilities owned by the Community Association. The Declaration shall be a legal document, which also provides for automatic Association membership for all owners in the subdivision or land development and shall describe the mechanism by which owners participate in the Association, including voting, elections, and meetings. Furthermore, it shall give power to the Association to own and maintain the common property and to make and enforce rules.
 - (d) Statements prescribing the process by which Community Association decisions are reached and setting forth the authority to act.
 - (e) Statements requiring each owner within the subdivision or land development to become a member of the Community Association.
 - (f) Statements setting cross covenants or contractual terms binding each owner to all other owners for mutual benefit and enforcement.
 - (g) Requirements for all owners to provide a pro rata share of the cost of the operations of the Community Association.
 - (h) A process of collection and enforcement to obtain funds from owners who fail to comply.
 - (i) A process for transition of control of the Community Association from the developer to the unit owners.

- (j) Statements describing how the lands and facilities of the Community Association will be insured, including limit of liability.
- (k) Provisions for the dissolution of the Community Association, in the event such dissolution should become inevitable.

5. The Section previous identified as Section 603 is hereby re-designated as Section 604.

6. The following provisions of the Section re-designated as Section 604 are hereby amended:

a. Section 604.a is hereby amended to amend Section 604.a(3) thereof and to add an addition Section 604.a(4) as follows:

- (3) Township Planning Commission; and
- (4) Township Municipal Authority (When plan proposes connection to public sewer and/or water utilities, or is within an area planned for future service by public utilities on the approved Township Sewage Facilities Plan required by Pennsylvania Act 537, “The Sewage Facilities Act”)

b. The reference to Section 304 in Section 604.e is hereby changed to Section 305.

F. Article VII, Design And Construction Standards, is hereby amended to include new Sections 719 and 720 as follows:

Section 719. Landscaping Requirements

a. Purpose

The intent of this Section is to promote practical and attractive development within Middlesex Township by:

- (1) Minimizing erosion and sedimentation, and stimulating

groundwater recharge.

- (2) Minimizing glare and heat on proposed hard surfaces, and reducing noise pollution.
- (3) Stimulating air purification and oxygen regeneration.
- (4) Maintaining existing, healthy vegetation.
- (5) Providing harmonious development on properties adjacent to incongruous zoning districts or uses by providing minimum landscaping requirements.

b. Scope

A Landscape Plan shall be required for each land development plan at both the Preliminary and Final Plan submittals. In addition to other Plan requirements set forth in this Ordinance, the following is required for submission:

(1) Preliminary Landscape Plan.

The Preliminary Landscape Plan shall be drawn at a scale of not less than 1 inch = 50 feet. It shall be coordinated with the overall site plan and contain the following:

- (a) Building and paved area layout.
- (b) Location of all outside storage and trash receptacle areas.
- (c) Existing and proposed underground and aboveground utilities, such as site lighting, transformers, hydrants, manholes, etc.
- (d) Preliminary grading plan delineating areas with slopes in excess of 3:1.
- (e) Fences and walls.
- (f) Existing wooded areas; existing wooded areas to remain; and existing and proposed water bodies.
- (g) Species of proposed trees, shrubs, groundcover and grass.
- (h) Areas to be planted with proposed species other than grass.

(2) Final Landscape Plan.

The Final Landscape Plan shall be drawn in greater detail and shall contain the following:

- (a) All plan elements required for the Preliminary Plan.
 - (b) Plant schedule, indicating the botanical and common names, height or spread, caliper and quantity of all proposed plant material.
 - (c) Details for the planting and staking of trees.
 - (d) Existing trees with trunks 18 inches in diameter or greater (measured 6 inches above existing ground level), existing wooded areas and existing and proposed water bodies.
 - (e) Location and spacing of all proposed plant material.
- (3) Final Landscape Plans shall be certified by a Landscape Architect registered by the Commonwealth of Pennsylvania. These plans shall also be reviewed by the Township Engineer and approved by the Board of Township Supervisors.

c. Landscape Requirements.

- (1) The requirements of this section are used to judge the adequacy of subdivision and land development proposals.
- (2) The locations, dimensions and spacing of required plantings should be adequate for their proper growth and maintenance, taking into account the sizes of such plantings at maturity and their present and future environmental requirements, such as wind, moisture and sunlight.
- (3) The type(s) of plantings shall be limited or carefully selected for locations where they will not be disturbed or contribute to conditions hazardous to the public safety. Such locations include, but shall not be limited to: public street rights-of-way; underground and aboveground utilities; and sight triangle areas required for unobstructed views at street intersections.
- (4) Obstructions to Vision. No bushes or shrubs exceeding thirty

(30) inches in height, or at such lesser height which due to ground elevations would obstruct the vision of motorists, shall be permitted within any required clear sight-triangle nor within ten (10) feet of the right-of-way line adjacent to access drives; and all street trees shall be kept free of branches and foliage from the ground level to a height of at least six (6) feet.

(5) All plant materials used shall, at the time of planting, meet the requirements as stated in Section 719 d. of this Ordinance.

(6) Street Trees.

(a) When required. Street trees shall be planted for any subdivision or land development where suitable street trees do not exist, as part of the design and construction of:

1. New streets.
2. New sidewalks or pedestrian ways.
3. Existing streets, sidewalks, pedestrian ways, highways, bicycle trails or pathways when they abut or lie within the subdivision or land development.
4. Access driveways to residential developments serving more than four (4) dwelling units.

(b) Spacing. Street trees shall be planted no closer than forty (40) feet on center for each side of the street. The number of street trees to be provided shall be based on providing at least one tree for every eighty (80) feet of distance along the right-of-way line.

(c) Setback. Street trees shall be planted a minimum distance of five (5) feet outside and parallel to the right-of-way line, unless otherwise approved by the Board of Supervisors. Trees located at intersections shall respect the clear sight triangles.

(d) Existing trees along a street which are suitable as street trees and can be counted toward the street tree requirement if they are of a suitable species as listed in Section 719.d. of this Ordinance, are over six (6) inches in caliper and are located a maximum distance of ten (10) feet outside and parallel to the right-of-way line.

- (e) All street trees shall be a minimum of fifteen (15') feet in height when planted. Street trees shall be selected and planted so that at maturity they will provide adequate shade during the summer along the public street(s).
 - (f) All street trees shall have a minimum two and one-half (2.5) inch caliper when planted.
- (7) Existing Trees. Existing trees shall be protected to prevent unnecessary destruction.
- (a) At least twenty-five (25%) percent of the number of trees (minimum trunk caliper of five (5) inches at six (6) inches above the ground) that exist at the time of plan submission shall be maintained or replaced immediately following construction. Replacement trees shall be a minimum trunk caliper of two and one-half (2.5) inches at a height of six (6) inches above finished grade.
 - (b) Existing trees as described below shall not be removed without the express approval of the Board of Township Supervisors, upon recommendation of the Township Planning Commission:
 - 1. All trees having a diameter of thirty (30) inches or greater or any tree identified as a national, state or county "champion tree: by the PA Forestry Association - designated as "outstanding trees".
 - 2. Trees, shrubs or plants identified on the list of rare, threatened and endangered species of the U. S. Fish and Wildlife Service - designated as "rare, threatened and endangered species".
 - 3. Trees that are part of an historic site or associated with an historic structure - designated as "trees of historic significance".
- (8) Where on-lot sewage disposal systems are proposed, trees shall not be placed over top of the area where the proposed septic tank and drain field are to be constructed, and shall be isolated from all portions of the on-lot sewage disposal system as required by PA DEP regulations.

- (9) All shrubbery and plants shall have a normal habit of growth, and shall be sound, healthy, vigorous and free of disease, insects, insect eggs and larvae.
- (10) All trees shall have a minimum trunk diameter of two and one-half (2.5) inches at a height of six (6) inches above finished grade.
- (11) All plantings shall be performed in conformance with good nursery and landscape practices and in accordance with other standards that are established by the Township.
- (12) Requirements for the measurement, branching, grading, quality and burlapping of all shrubbery shall follow the code of standards recommended by the American Association of Nurserymen, Inc., in the American Standard Nursery Stock, ANSIZ60, 1-1973, as amended.
- (13) Screen Buffer.
 - (a) Screen Buffers are required, but not limited to, the following conditions:
 - 1. Where a proposed commercial, industrial, or institutional use abuts an existing residential use or residential district.
 - 2. Where any proposed multi-family residential use abuts an existing single-family detached, single-family semi-detached, or two-family detached dwelling.
 - 3. Where residential uses abut any railroad or limited access highway, or any other arterial highway in the case of reverse frontage or where marginal or rear access is provided.
 - 4. Around all open sides of any common utility yard and outdoor equipment or refuse storage area in multi-family residential developments.
 - 5. All service, delivery, loading and outdoor storage and trash disposal areas shall be screened from all residential districts, public streets, parking lots and pedestrian walkways. These areas shall be totally screened from the above listed places by the use of fences, walls, berms, evergreen plant material, or a

combination of these, not less than six (6) feet in height.

6. All mechanical equipment not enclosed in a structure shall be fully and completely screened in a manner compatible with the architectural and landscaping style of the remainder of the lot. Such screening shall be subject to Land Development Plan and architectural review by the Board of Supervisors.
7. Water towers, storage tanks, processing equipment, fans, skylights, cooling towers, vents and any other structure or equipment which rise above the roof line shall be architecturally compatible or effectively shielded from view from any public or private dedicated street by an architecturally sound method which shall be approved, in writing, by the Township before construction or erection of said structures or equipment.
8. Elsewhere when required by Ordinance or as deemed necessary by the Planning Commission and/or Board of Supervisors.

(b) Wherever natural screening is being provided to meet a screening requirement of the Zoning Ordinance, the following landscape requirements must be adhered to:

1. The entire perimeter of any commercial, industrial or institutional property undergoing development shall be provided with a minimum of twenty (20) foot wide planting strip if adjacent to a residential use or district, which will act as an effective screen separating uses.
2. Vegetative screening shall include a variety of deciduous and evergreen species that are indigenous to the area so as to provide a year round visual buffer. Trees and shrubs used for screening shall consist of at least fifty percent (50%) evergreen trees and shrubs and shall be so arranged as to provide an immediate visual screen of fifty percent (50%). Evergreen trees shall be at least six (6) feet in height at the time of planting.

3. Vegetative screening shall incorporate earthen mounds or berms, wherever possible, to improve sound as well as visual buffering, and shall be broken at points of vehicular or pedestrian access.
4. Plant materials used in the screen planting shall be at least six (6) feet in height when planted and be of a species which will produce a complete visual screen or at least eight (8) feet in height at maturity.
5. When additional height is deemed necessary, a row of trees planted at intervals of not more than forty (40) feet on center shall be provided.
6. No plantings shall be placed with their center closer than five (5) feet from the property line.
7. All existing trees within a required planting strip above three (3) inches in caliper and/or eight (8) feet in height shall be preserved wherever possible.
8. Screening shall be designed so the clear-sight triangles at intersections are not obstructed.
9. Screening design, including the type of plant materials used, spacing of plant materials, and the use and location of earthen berms, shall be subject to review and approval by the Board of Supervisors upon the recommendation of the Planning Commission.
10. Vegetative screens shall be perpetually maintained during the period the principal use causing the need for screening is in operation. Any plant material that does not survive shall be replaced within six (6) months.
11. Walls, ornamental structures, fences and berms, or a combination of these, not less than five (5) feet in height may be used in combination with appropriate plant material subject to the specific land use areas involved and as approved by the Board of Supervisors.
12. Innovative means of screening are encouraged; however, as a guideline to quantity of materials

required, there shall be a minimum of one (1) tree for each twelve (12) lineal feet of property line. Straight rows are strongly discouraged.

13. Windbreaks - The use of planting rows to serve as windbreaks to control the drifting of snow across public and private thoroughfares as well as for general comfort is recommended.

14. Individual Lot/Building Area Requirements.

- (a) In addition to the landscape requirements for street trees, buffers, off-street parking areas, detention basins and service areas, each new building lot shall provide one deciduous or evergreen tree per every one thousand (1,000) square feet of gross floor area of building.
- (b) Any area on the development site not used for buildings, paved areas or buffer plantings, (excluding natural woodlands), shall be planted with an all-season ground cover or lawn and other landscape materials.
- (c) When designing the landscape for an individual lot or building area, due consideration shall be given to the location and selection of plantings and other landscape features to:
 1. Provide visual interest.
 2. Define outdoor spaces.
 3. Complement proposed architectural styles.
 4. Group materials according to specific needs and objectives on the site and as appropriate to the overall site design.

15. Off-Street Parking Areas.

- (a) Landscaping areas shall be required for any parking lot area which provides more than ten (10) parking spaces to reduce wind and air turbulence, heat and noise, and the glare of vehicle lights; to reduce the level of carbon dioxide; to provide shade; to improve stormwater drainage problems; to replenish the groundwater table; and to provide for a more attractive setting.

- (b) Required landscaping areas shall be planted with a combination of shade trees, shrubs, other acceptable plant materials and lawn or other ground covers.
- (c) Required landscaping areas shall be at least ten (10') feet in width.
- (d) Except as specified otherwise in this section, required landscaping areas shall be reasonably dispersed throughout the parking lot.
- (e) For any parking lot facility containing two thousand (2,000) square feet or less of gross area (measured from the outside edge of paving), a minimum of five (5) percent of the gross area of the parking lot shall be devoted to interior landscaping areas, which areas shall include a minimum of one (1) deciduous shade tree per twenty (10) parking spaces. No more than twenty-five (25) parking spaces shall be placed in a continuous row without an intervening landscaping island of at least ten (10) feet in width and extending the length of the parking stalls.
- (f) For any parking lot facility containing more than two thousand (2,000) square feet of gross area (measured from the outside edge of paving), a minimum of ten (10) percent of the gross area of the parking lot shall be devoted to interior landscaping areas, which areas shall include a minimum of one (1) deciduous shade tree per twenty (20) parking spaces.
- (g) Off-street parking lots shall be screened in accordance with the above regulations relating to buffers. Further, any parking lot area perpendicular to and within one hundred (100) feet of a public street or intersection shall be screened with either a hedge, berm, fence, a combination of these features, or other measure to prevent distraction or confusion to passing motorists from parking car's headlights.

16. Service, Loading and Trash Disposal Areas.

- (a) All service, delivery, loading and outdoor storage and

trash disposal areas shall be screened from all residential districts, public streets, parking lots and pedestrian walkways.

- (b) These areas shall be totally screened from the above listed places by the use of fences, walls, berms, evergreen plant material, or a combination of these, not less than six (6) feet in height.

- 17. Any part or portion of a site which is not used for buildings or other structures, loading and parking spaces and aisles, sidewalks and designated storage areas shall be planted and maintained with landscaping.
- 18. Except for single-family detached, single-family semi-detached and two- family detached dwellings, any part or portion of a site which is not used for buildings or other structures, loading and parking spaces and aisles, sidewalks and designated storage areas shall be landscaped according to an overall plan, prepared and approved as part of the Land Development Plan. A replacement program for non-surviving plants shall be included.

d. Recommended Plant Materials

- 1. Species selection shall be based upon the existing site conditions including the site geology, hydrology, soils and microclimate, as well as functional considerations of screening, energy conservation and architectural compatibility.
- 2. Unless noted otherwise in this section, all newly planted landscaping trees shall have a minimum two (2) inch caliper at the time of planting.
- 3. The following is a recommended list of street trees for use in Middlesex Township. However, the Township Board of Supervisors may permit other planting types if they are hardy to the area, are not subject to blight or disease and are of the same general character and growth habit as those listed below. Newly planted street trees shall have a minimum two and one-half (2.5) inch caliper at the time of planting.

LIST OF RECOMMENDED STREET TREES

Small Street Trees (for clearances less than 20 feet and under overhead lines)

	<u>Common Name</u>	<u>Botanical Name</u>
1.	Trident Maple	Acer buergerianum
2.	Paperbark maple	Acer griseum
3.	Tatarian maple	Acer tataricum
4.	Serviceberry species ¹	Amelanchier spp.
5.	Hornbeam species ²	Carpinus spp.
6.	Eastern redbud	Cercis canadensis
7.	Chinese fringetree	Chionanthus retusus
8.	Dogwood species ³	Cornus spp.
9.	American smoke-tree	Cotinus obovatus
10.	Hawthorn species ⁴	Crataegus spp.
11.	Star magnolia	Magnolia stallata
12.	Sweetbay magnolia	Magnolia virginiana
13.	Crabapple species and cultivars	Malus spp.
14.	Cherry species ⁵	Prunus spp.
15.	Japanese tree lilac	Syringa reticulata

1 tree form only

2 including American, Korean, Looseflower

3 including Pagoda, Giant, Flowering, Kousa, Cornelian cherry, Japanese cornell

4 including Thornless cockspur, Marshalls, Glossy, Washington, Green, Lavallo

5 including Okame, Oriental

Medium Street Trees (for clearances from 20 to 35 feet, not under overhead lines)

	<u>Common Name</u>	<u>Botanical Name</u>
1.	Hedge maple	Acer campestre
2.	Purpleblow maple	Acer truncatum
3.	Red horse chestnut	Aesculus x carnea
4.	Asian white birch	Betula platphylla var. japonica
5.	European hornbeam	Carpinus betulus
6.	American yellowwood	Cladrastis kentukea
7.	Carolina silverbell	Halesia Carolina
8.	Magnolia species ⁶	Magnolia spp.
9.	American hop-hornbeam	Ostrya virginiana
10.	Sourwood	Oxydendron arboreum
11.	Persian parrotia ⁷	Parrotia persica
12.	Amur cork-tree	Phellodendron amurense
13.	Cherry species ⁸	Prunus spp.
14.	Korean mountain ash	Sorbus alnifolia

- 6 including Yulan, Galaxy, Southern magnolia cultivars, Kobus, Merrill Loebner
- 7 male clone only
- 8 including Sargent, Higan, Yoshino

Large Street Trees (for clearances greater than 35 feet, not under overhead lines)

	<u>Common Name</u>	<u>Botanical Name</u>
1.	Red maple	<i>Acer rubrum</i>
2.	Common hackberry	<i>Celtis occidentalis</i>
3.	White ash	<i>Fraxinus americana</i>
4.	Green ash	<i>Fraxinus americana</i>
5.	Ginkgo ⁹	<i>Ginkgo biloba</i>
6.	Thornless honeylocust	<i>Gleditsia triacanthos</i> var. <i>inermis</i>
7.	Kentucky Coffee-tree	<i>Gymnocladus dioica</i>
8.	Sweetgum	<i>Liquidambar styraciflua</i>
9.	Black gum	<i>Nyssa sylvatica</i>
10.	Dawn redwood	<i>Metasequoia glyptostroboides</i>
11.	London plane-tree	<i>Platanus x acerifolia</i>
12.	Oak species ¹⁰	<i>Quercus</i> spp
13.	Japanese scholar-tree	<i>Sophora japonica</i>
14.	Common baldcypress	<i>Taxodium distichum</i>
15.	Linden species ¹¹	<i>Tilia</i> spp.

9 male clone only

10 including White, Swamp white, Scarlet, Shingle, Bur, Pin, Willow, Red, Shumard, Black

11 including American (basswood), Silver, Littleleaf

Source: Morris Arboretum, "Recommended Trees for Metropolitan Areas" and Pennsylvania State University, College of Agricultural Sciences, "Street Tree Fact Sheets", as compiled by Sandra Insalaco, Forester, Pennsylvania Department of Conservation and Natural Resources, Bureau of Forestry, September 2005.

- 3. In no circumstances will any of the following trees be permitted to be planted as street trees:
 - (a) Poplars - all varieties.
 - (b) Willows - all varieties.
 - (c) White or Silver Maple (*Acer saccharinum*).
 - (d) Aspen - all varieties.

- (e) Common Black Locust.
- (f) Pear – all varieties.
- (g) Goldenrain Tree, botanical name-Koelreuteria paniculata.

Section 720. Conservation Subdivision Design Process and General Design Guidelines for Location of Site Improvements.

Following the Conservation Analysis, all residential subdivisions in the Conservation Subdivision Overlay District, except standard single-family lotting on small tracts (less than 6 acres), estate lots, or conservation lots with no required open space shall generally follow a four-step design process as described below. Guidelines presented in Section 720b should also be considered in the process of designing and siting uses in the Conservation Subdivision Overlay District. Graphics in these regulations are included for illustrative purposes.

a. CONSERVATION SUBDIVISION DESIGN FOUR STEP PROCESS.

(1) Step 1: Delineation of Open Space Lands and Development Areas

- (a) The minimum percentage and acreage of required Open Space lands should be calculated by the applicant and submitted as part of the Sketch Plan or Preliminary Plan in accordance with the provisions of this Ordinance and of the Zoning Ordinance.
- (b) Primary Conservation Areas, per Article IV Section 4.02.C.3.a. of the Zoning Ordinance, comprising of the following resources; floodways, floodplains or special flood hazard areas, wetlands and areas of steep slopes greater than twenty-five percent (25%) shall be clearly delineated by showing their actual boundaries as well as the types of resources included within them.
- (c) Secondary Conservation Areas, per Article IV Section 4.02.C.4.a. of the Zoning Ordinance, comprising of the following resources; established wellhead protection zones, mapped groundwater recharge areas, other areas of likely groundwater recharge, watercourses without defined floodways or floodplains, other flood areas and otherwise protected areas, riparian buffer areas, areas of wet soils, swales, springs and other lowland areas, prime farmland soils of capability Class I and Class II, farmland soils of statewide importance in capability Class III, areas of moderate to steep slopes from fifteen percent (15%) to

twenty-five percent (25%), areas of forested lands and healthy woodlands, areas of hedgerows, groups of trees and large individual trees of botanical significance, areas of other significant natural features including topographic or geologic features, areas of significant natural areas of species listed as endangered, threatened, or of special concern, areas of existing or potential wildlife habitats, areas of park and recreation space designated for public use, areas of historic structures and sites, areas of greenways, areas of existing scenic views, areas containing or in proximity to existing connecting trails and areas in proximity to or with logical relationship to other open space shall be clearly delineated by showing their actual boundaries as well as the types of resources included within them.

- (d) Total Open Space area requirements shall include all Primary Conservation Areas and those parts of the remaining buildable lands with the highest resource significance (Secondary Conservation Areas) as described in Section 1204 a. of this Ordinance.
- (e) Development areas constitute the remaining lands of the tract outside of the designated Open Space areas, where house sites, streets and lots are to be delineated in accordance with steps 2, 3 and 4 below.
- (f) Preferred locations for sewage treatment and disposal facilities, whether for public sewer facilities, individual or community onlot sewage treatment and disposal systems or for other sewage treatment and disposal systems; shall be identified using the Conservation Analysis as a base map. Opportunities to use these facilities as buffers between the proposed open space and development areas are encouraged.
- (g) Preferred locations for stormwater management facilities shall be identified using the Conservation Analysis as a base map. Opportunities to use these facilities as buffers between the proposed open space and development areas are encouraged. To the extent possible, these facilities should be located in areas identified as groundwater recharge areas as indicated on the Conservation Analysis. Design of the facilities should strive to use the natural capacity and features of the site to facilitate the management of stormwater generated by the conservation subdivision.

Examples of Primary Conservation Areas
(see Section 12.04 a. for complete list)

Floodways

Floodplains or SFH Areas

Wetlands

Steep Slopes (greater than 25%)

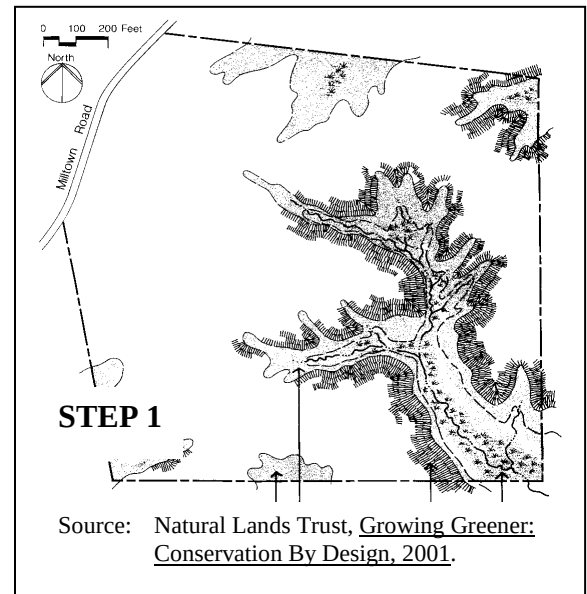
Examples of Secondary Conservation Areas
(see Section 12.04 a. for complete list)

Wellhead Protection Zones

Groundwater Recharge Areas

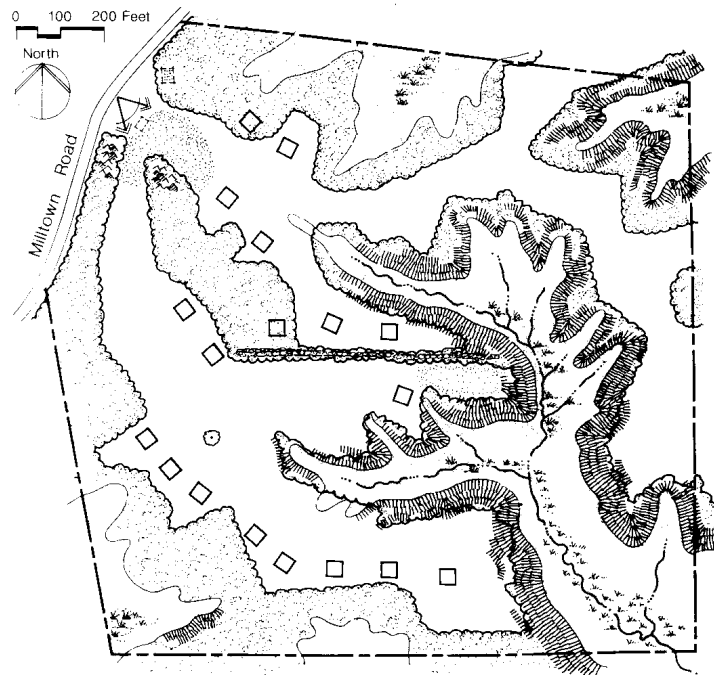
Riparian Buffers

Forested Lands



(2) Step 2: Location of Dwelling Sites.

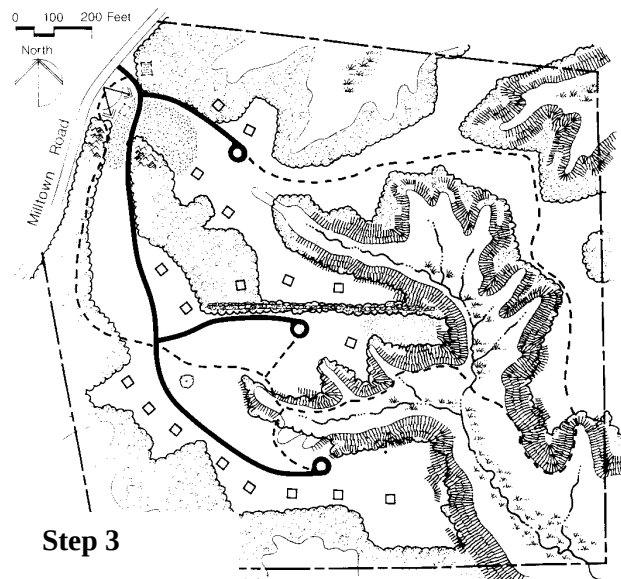
- (a) Potential dwelling sites shall be tentatively located using the proposed Open Space lands as a base map as well as other relevant data on the Existing Resources Inventory Maps such as slopes and soils.
- (b) Potential dwelling sites shall be located not closer than one hundred (100) feet from Primary Conservation Areas and fifty (50) feet from Secondary Conservation Areas.



Step 2

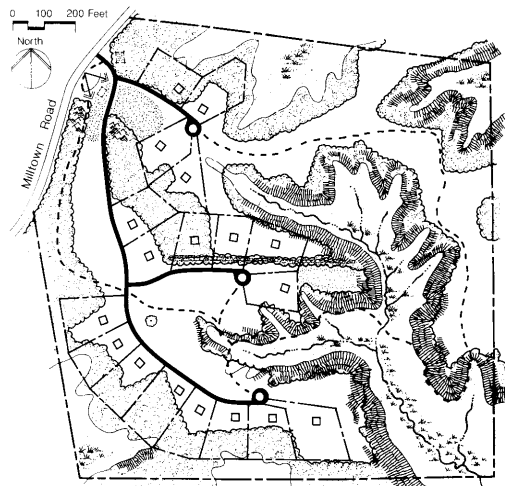
Source: Natural Lands Trust, Growing Greener: Conservation By Design, 2001.

- (3) Step 3: Alignment of Streets and Trails. Upon designating the dwelling sites, a street plan shall be designed to provide vehicular access to each house, complying with the standards in Article 7 herein.
- (a) Impacts of the street plan on proposed Open Space lands shall be minimized, particularly with respect to crossing environmentally sensitive areas such as wetlands and traversing slopes exceeding fifteen percent (15%).
 - (b) Aligning streets parallel to contours shall minimize steep grades and switchbacks.
 - (c) Street connections shall be encouraged to facilitate access to and from dwellings in different parts of the conservation subdivision property (and adjoining properties). New cul-de-sac type streets to be maintained by the Township should be minimized or eliminated if possible by designing interconnecting interior street networks.
 - (d) A preliminary network of trails shall also be shown, connecting streets with various natural and cultural features in the conserved Open Space lands. Potential trail connections to adjacent parcels shall also be shown.



Source: Growing Greener: Conservation By Design, 2001.

- (4) Step 4: Drawing in the Lot Lines. Upon completion of the preceding three steps, lot lines are drawn as required to delineate the boundaries of individual residential lots.



Source: Natural Lands Trust, Growing Greener: Conservation By Design, 2001.

b. GENERAL DESIGN GUIDELINES FOR LOCATION OF SITE IMPROVEMENTS.

The relative location of site improvements to each other and to existing and/or proposed natural features influences the landscape and character of a residential community developed on a conservation subdivision property.

The following general guidelines are examples of acceptable methods to design and locate site improvements in relation to existing or proposed features of the conservation subdivision property. They should not be considered the only acceptable method to design and locate site improvements.

Four basic elements influence the landscape and character of a residential community: Landform characterized by gradient, slope and aspect or orientation; Vegetation characterized by species and massing; Structures characterized by setback, mass and height of structures and roof form; and finally Circulation Systems both vehicular and pedestrian characterized by alignment, width and edge treatment.

- (1) Landform: The character and diversity of the natural landform should be reflected in grading to accommodate development.

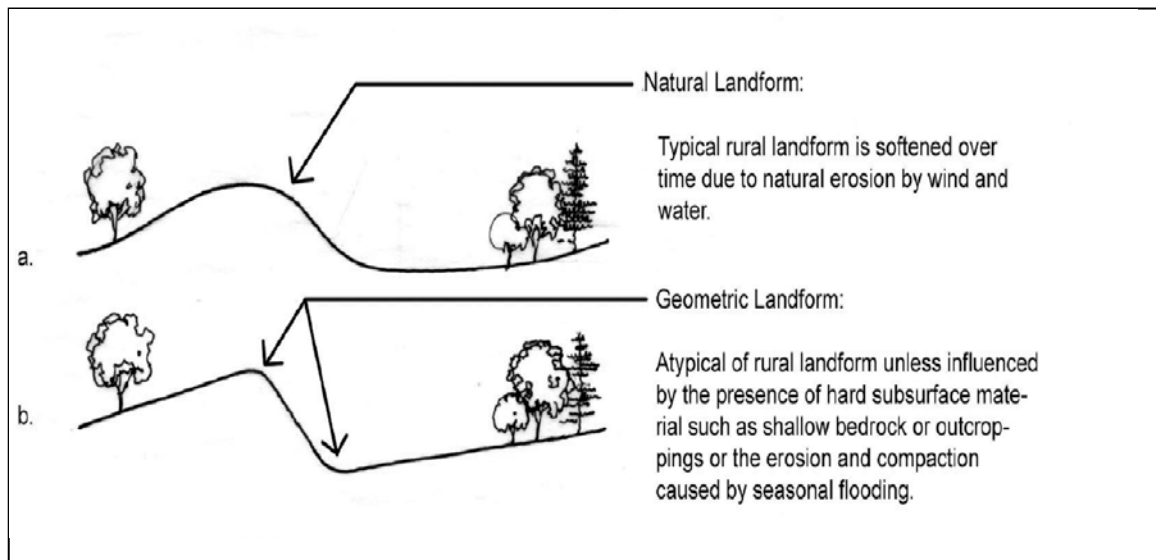


Figure 720.1: Landform Character

- (a) Minimize cuts and fills. When grading is necessary, slopes should be graded to mimic existing slopes and blend smoothly into the surrounding landform.

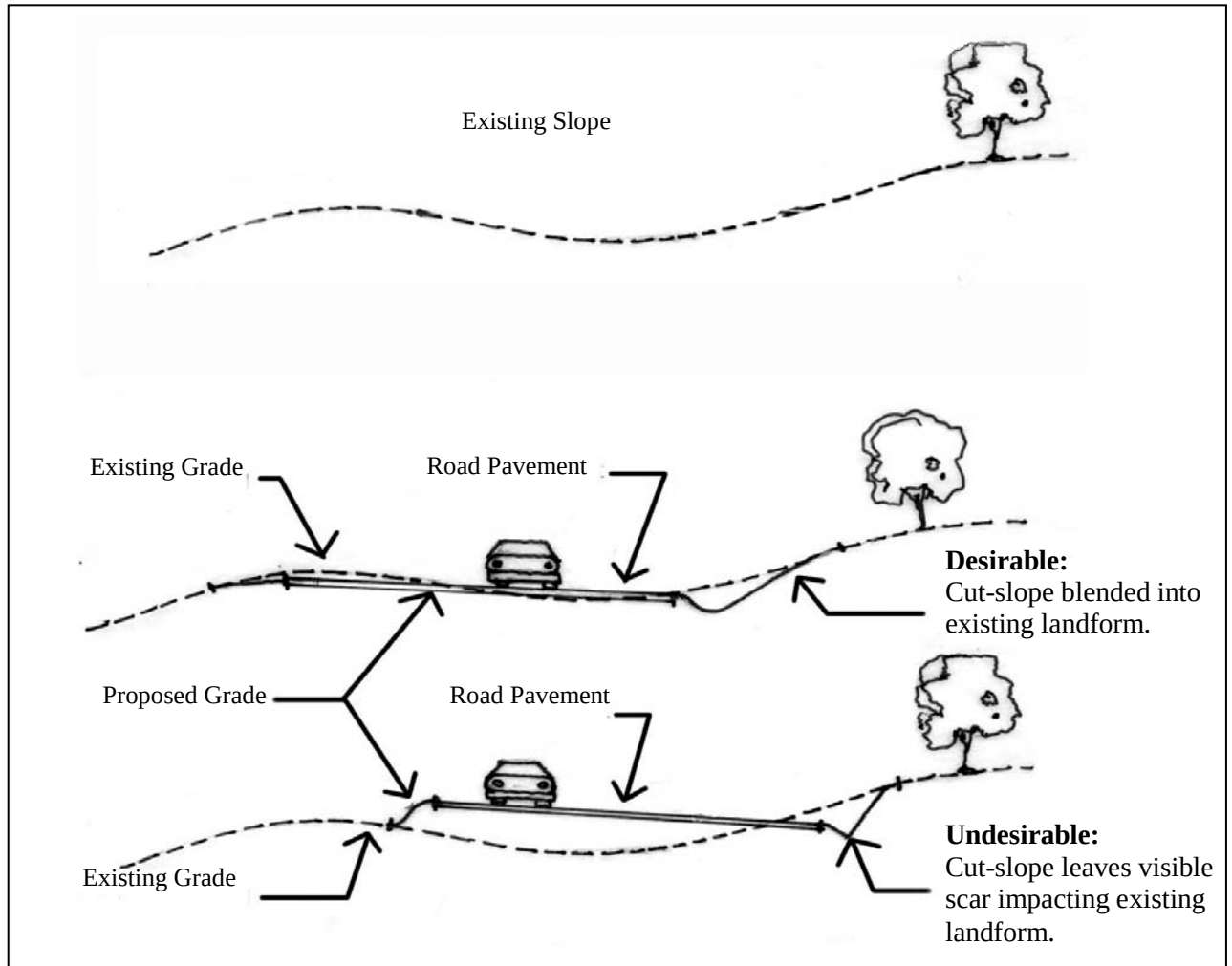


Figure 720.2: Blending Grading into Existing Landform

- (b) Conservation subdivision design should reflect and reinforce the existing topographic features of the property and should not erase landforms that are indigenous to the property.

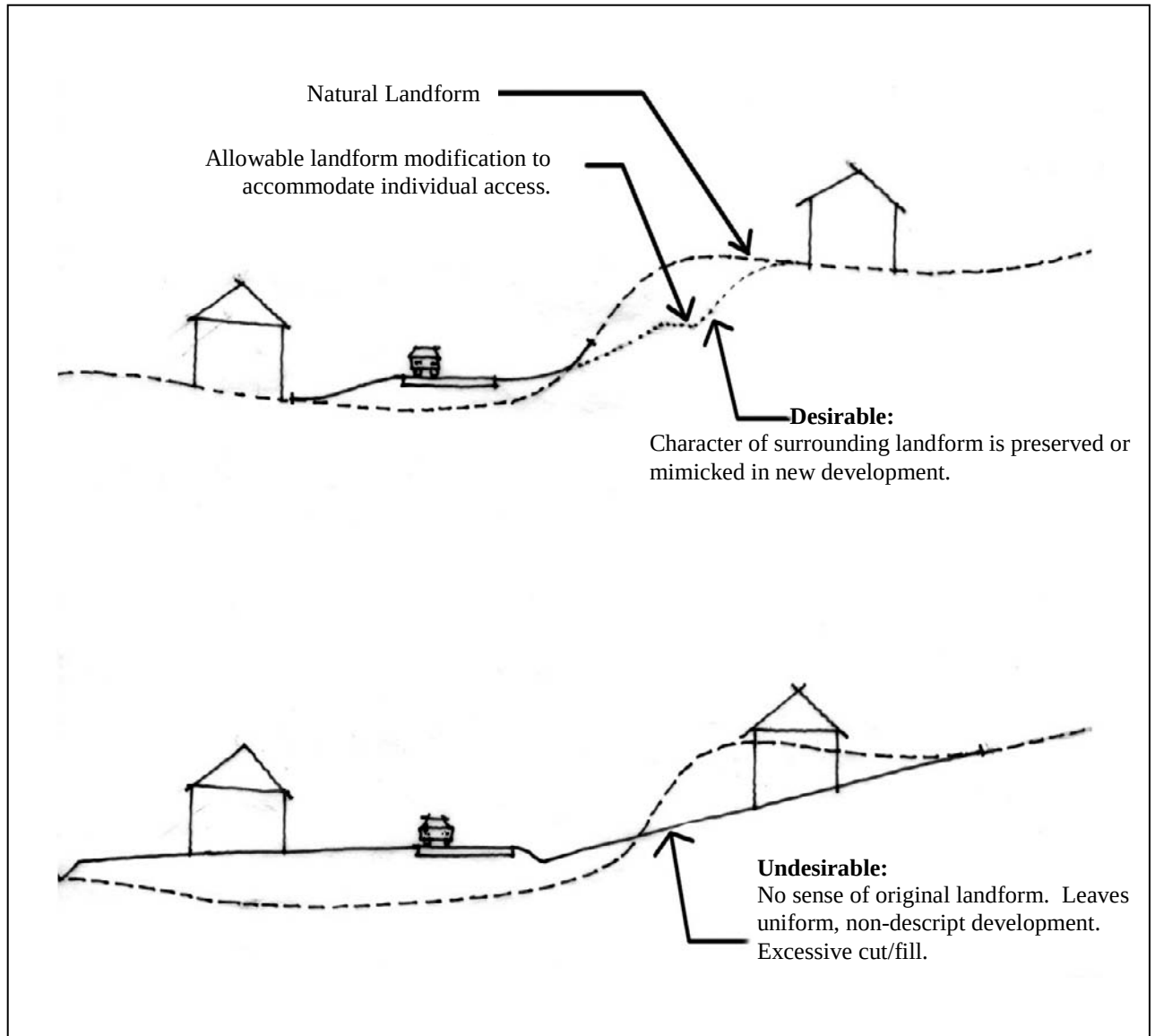
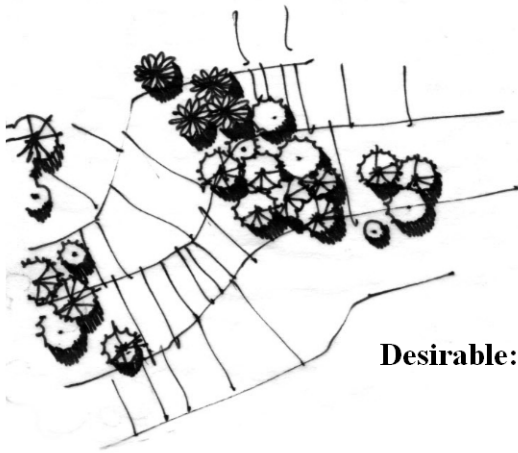


Figure 720.3: Landform Preservation

- (2) **Vegetation:** In addition to the benefits plants offer the ecological system, (soil stabilization, clean air, wildlife habitat), their presence or absence, how they are configured or arranged, and their species has a significant influence on development character. Every effort should be made to:

- (a) Preserve existing vegetation patterns and species mix and density.
- (b) Select and place new vegetation in ways that enhance the indigenous vegetation characteristics.
- (c) Vegetation in undeveloped rural areas is typically clustered. To the extent possible, rural vegetation should not be in geometric patterns that are associated with the urban environment.



Desirable: Diverse species content and clustered vegetation patterns are a result of natural propagation and succession and should be used in rural settings.

Undesirable: Geometric alignment and designated species content are more appropriate for urban areas.

Figure 720.4: Vegetation Types and Patterns

- (d) In the rural environment vegetation, not structures, is the primary determinant of how far we can see and where we look.
- (e) Use existing vegetation and topography to buffer and screen new buildings if possible.

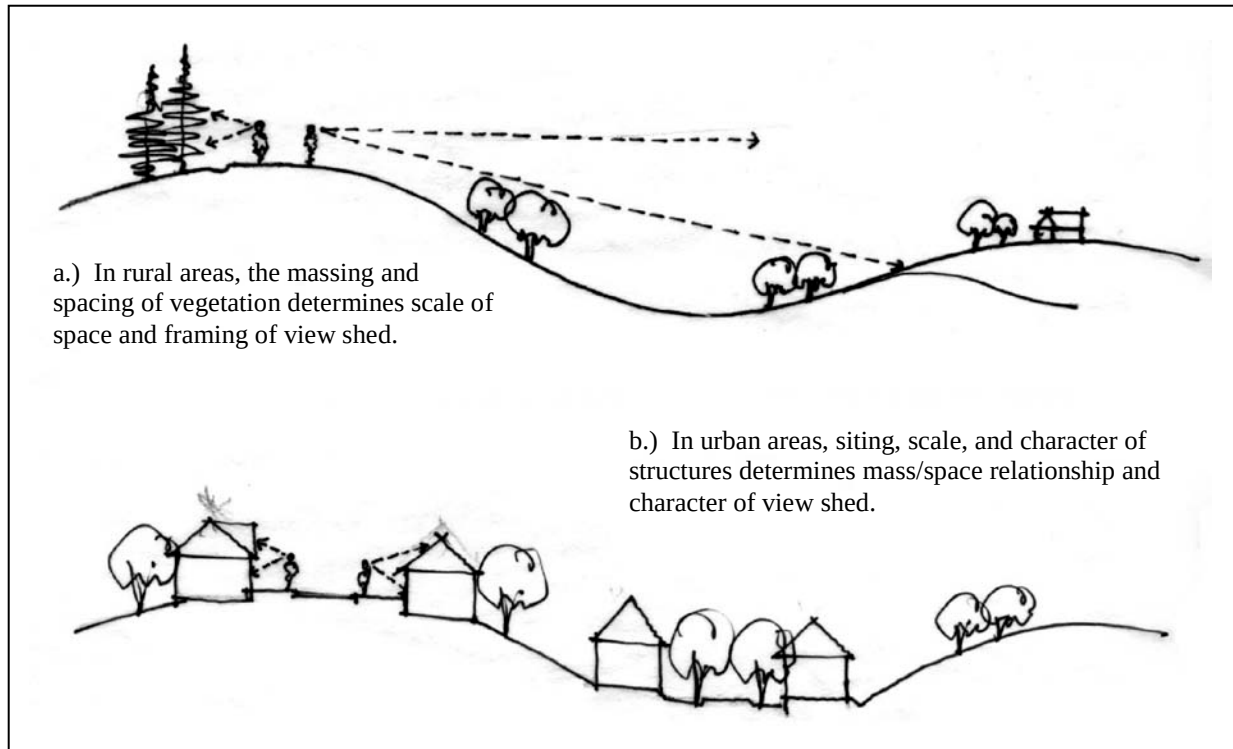


Figure 720.5: Framing Views

- (3) **Structures:** The height, placement, forms and patterns of building envelopes can establish an urban or rural character to any development. The intent of this section is to identify building envelopes, forms, and patterns that are complimentary to and reflective of rural characteristics.
 - (a) Building envelopes in rural areas should be designed to maximize the preservation of the site's natural features (e.g. landform, vegetation). Whereas, in more urban environments, sites are more often modified to accomodate the building.

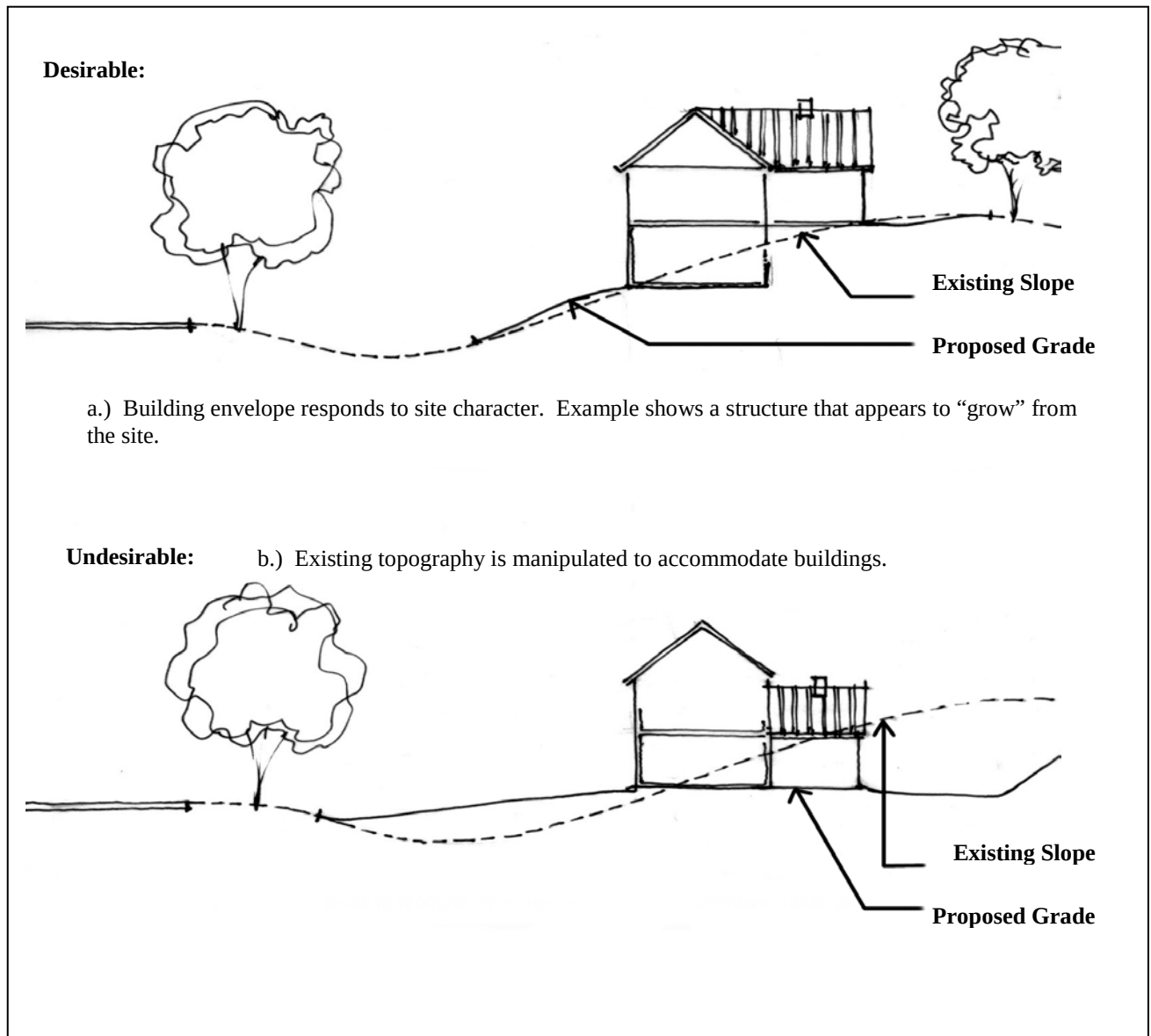


Figure 720.6: Siting of Structures

- (b) The placement of building envelopes in relationship to streets and highways critically affects the character of a community. Varied setbacks provide a different experience than a street where buildings are placed uniformly along a street. Rural placement is historically deeper and more varied than in urban environments and therefore recommended.

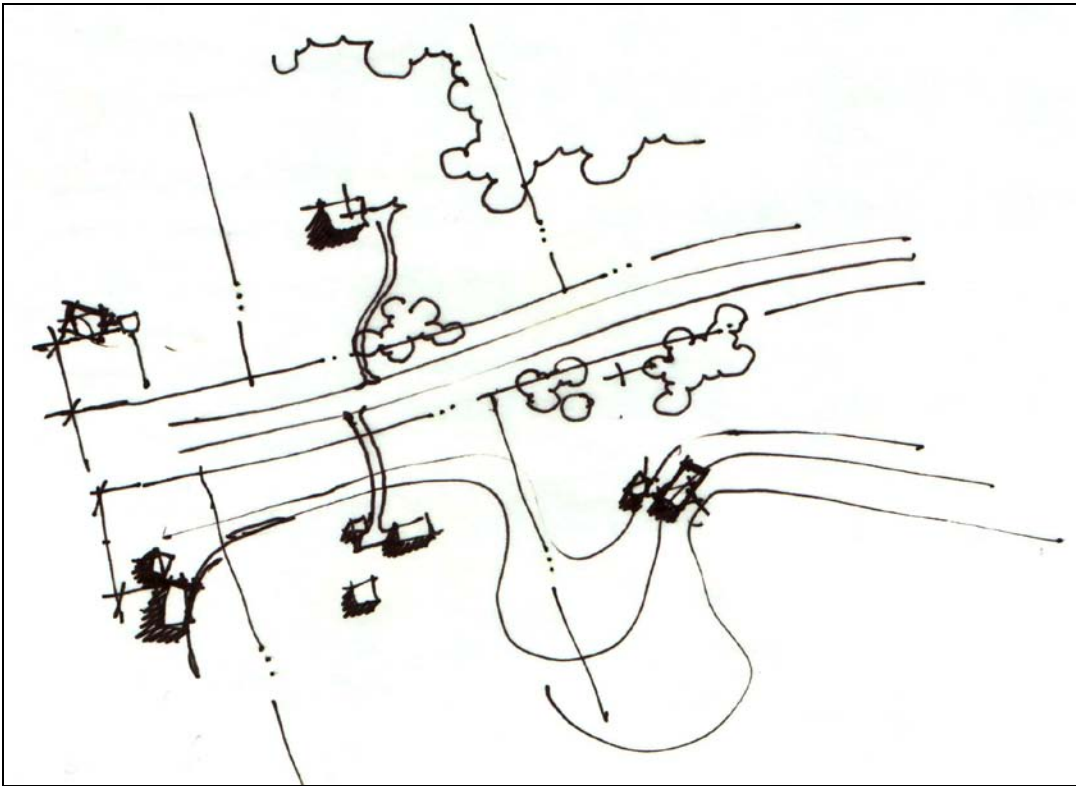


Figure 720.7: Rural Road with Varied Setbacks

- (c) When building envelopes must be placed in open fields, they should be oriented to and reflect the alignment and orientation of the existing topography and other natural features.

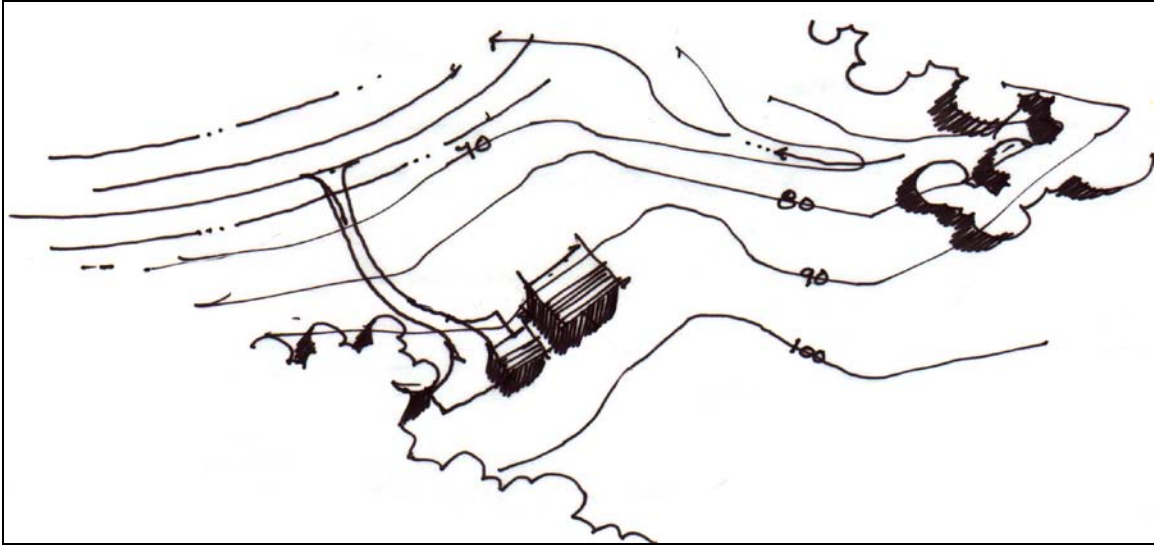


Figure 720.8: Orient Structures to align with Topography

- (d) Site building envelopes so that future buildings will be screened by treetops and crest lines of hills as seen from public places and roads. Use vegetation as a backdrop to reduce the prominence of the structure. Wherever possible, open views by selective cutting of small trees and pruning lower branches of large trees, rather than by clearing large areas or removing mature trees.
- (e) Group building envelopes and place them behind tree lines or knolls rather than spreading them out across the landscape..

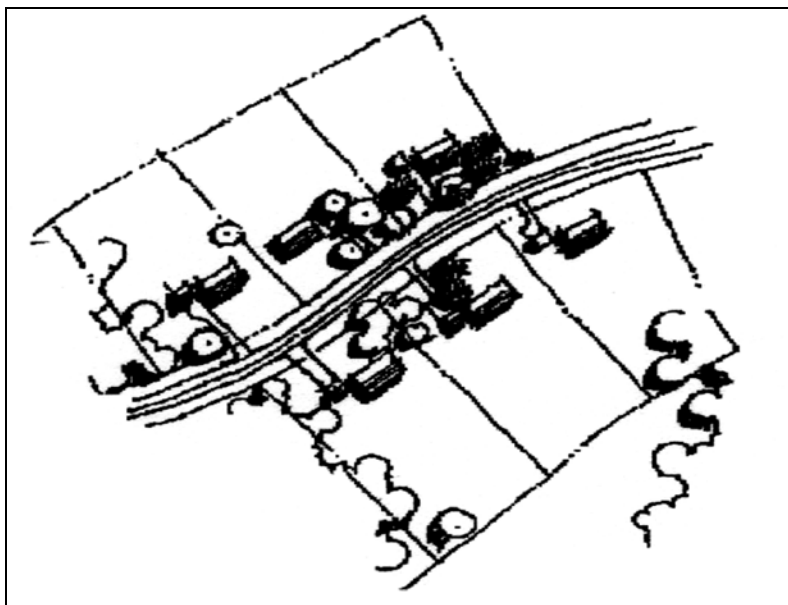


Figure 720.9: Neighborhood Conservation Configuration

- (f) The dominant visual context from the rural roads should be of natural and agricultural features, with structures visually subservient. Typically development should be interior lot development with the majority of the immediate roadway view shed preserved.
- (g) The following design guidelines apply only to structures in conservation subdivisions, and are meant to be examples but should not be considered the only acceptable solutions. The intent is to have the mass and roof forms of structures contribute to the rural character of the development.
 - 1. Massing of structures or structural elements influences rural character. Historically, rural buildings were often an assemblage of additions. These additions over time created a complexity of roof forms that have become icons associated with our rural agrarian environments.
 - 2. Rural roof form options include, but are not limited to the following; symmetrically pitched or hip roofs with or without gables and horse barn type roof ends.
- (4) **Circulation Systems:** Circulation systems are comprised of both vehicular and pedestrian systems. In general rural vehicular and pedestrian systems are curvilinear in alignment, a pattern that evolved out of historic systems following the lines of least resistance (e.g. stream corridors) following natural landforms. It is only in more urbanized conditions that roads and streets should take on geometric forms reflecting the built environments they move through.
 - (a) Vehicular and pedestrian circulation systems should retain and reuse historic farm roads and lanes. This guideline allows a development to build upon the site's historic context while minimizing clearing and disruption to the landscape. Care should be taken to apply this guideline only where its implementation would not destroy the historic lanes, hedgerows and stone walls it was meant to preserve.

1. Otherwise, vehicular and pedestrian circulation systems should be arranged to reflect the patterns of the site landform, vegetation, water bodies and vegetation massing.
2. Minimize clearing of vegetation at the edge of a road, clearing only as much as is necessary to create a driveway entrance with adequate sight distance. Use curves in the driveway to increase the screenings of buildings.
3. Rural road edges are historically unprotected (e.g. no curbs, or gutters, with only a shoulder to use for safety).
4. Sidewalks should only be used to connect facilities within areas of concentrated development.

G. Article XII, Landscaping Requirements, is hereby deleted in its entirety.

Article XII, Resource Conservation and Open Space Delineation Standards, as set forth below, is hereby adopted:

ARTICLE XII

Resource Conservation and Open Space Delineation Standards

Section 1201. Application.

The standards for resource conservation, as set forth in this Article, shall apply to all subdivision and land developments in Middlesex Township and shall not be construed to limit an individual's right to practice forestry on his or her land. The standards for Open Space delineation shall apply to all subdivision and land developments within the Conservation Design Overlay Districts.

SECTION 1202. Planning and Design Standards.

- a. General Standards to Minimize Adverse Impacts. All subdivisions and land developments shall minimize or avoid if possible any adverse impacts on Middlesex Township's natural, cultural and historic resources, as defined below.

- b. Groundwater Resources. This section is intended to ensure that Middlesex Township's groundwater resources are protected for purposes of providing water supplies for its residents and businesses, and to protect the base flow of Middlesex Township's surface waters.

- (1) The proposed subdivision and land development of any tract shall be designed to cause the least disturbance to natural infiltration and percolation of precipitation to the groundwater table, through careful planning of vegetation and land disturbance activities, and the placement of streets, buildings and other impervious surfaces.
- (2) The proposed stormwater management design shall consider Stormwater Best Management Practices in a manner so as to replicate predevelopment hydrology such that it addresses recharge of the groundwater.

- c. Stream Valleys, Swales, Springs, and Other Lowland Areas

Stream channels and floodplains and other wetland areas are resources that warrant restrictive land use controls because of flooding hazards to human life and property, groundwater recharge functions, importance to water quality and the health of aquatic communities, and wildlife habitats.

- (1) The site plan layout shall avoid the following:
 - (a) Disturbance to streams including stream buffers and drainage swales.
 - (b) Disturbance to year-round wetlands and areas with seasonally high water tables.
- (2) Stream valleys and other wetland areas shall be designated as Open Space.
 - (a) In certain instances, seasonal high water table soils may be excluded from the Open Space where it can be demonstrated that they are suitable for low-density residential uses and conventional on-site sewage systems.
 - (b) In certain instances, stormwater management structures creating attractive landscape features such as stormwater wet ponds as referenced in the Pennsylvania Stormwater Best Management Practices Manual may be included in the required Open Space. If a stormwater management structure is proposed to be included in the required Open

Space, applicant must present sufficient information to prove the stormwater management structure is safe and useful for active and/or passive recreation or is a scenic asset to the development.

- d. Woodlands. Woodlands on any tract proposed for subdivision or land development shall be evaluated as per Section 503.h.(4), to determine the extent to which such woodlands should be designated partly or entirely as Open Space or development lands.
 - (1) In designing a subdivision and land development plan for any tract, the applicant shall be guided by the following standards:
 - (a) Proposed site improvements shall be located, designed and constructed to minimize the loss or degradation of woodland areas.
 - (b) Subdivisions shall be designed to preserve woodlands along roadways, property lines and lines occurring within a site such as streams, swales, stone fences and hedgerows. Such lines and the native vegetation associated with them shall be preserved as buffers between adjacent properties and between areas being subdivided within a property. Preserved natural buffers shall count toward buffer requirements as specified in the Zoning Ordinance or elsewhere in this Ordinance. Preservation shall include ground, shrub, understory and canopy vegetation.
 - (c) Disturbance or removal of woodlands occupying environmentally sensitive areas shall be undertaken only when approved by the Board of Supervisors and on a limited, selective basis to minimize the adverse impacts of such actions. This shall include but not necessarily be limited to, vegetation performing important soil stabilizing functions on wet soils, stream banks and sloping lands.
 - (2) No clearing or earth disturbance (except for soil analysis for proposed sewage disposal systems) shall be permitted on a site before the approval of the preliminary subdivision and land development plan. The determination of sight distance clearances along roadways shall be made graphically and not by clearing on-site prior to final plan approval.

- e. Slopes. Moderately sloping lands (15 to 25 percent) and steeply sloping lands (greater than 25 percent) are prone to severe erosion if disturbed. Areas of steep slope shall be preserved as described below.
- (1) No site disturbance shall be allowed on slopes exceeding 25 percent except grading for a portion of a driveway to a single family dwelling when it can be demonstrated that no other routing which avoids slopes exceeding 25 percent is feasible.
 - (2) On slopes from 15 to 25 percent, the only permitted grading beyond the terms described above shall be in conjunction with the siting of a single family dwelling, its access driveway and an onlot sewage disposal system.
 - (3) Permitting and siting of onlot sewage disposal systems on slopes up to twenty-five percent (25%) shall be in accordance with requirements of the PA Code, title 25, chapter 73, section 73.12.
 - (4) Finished slopes of all cuts and fills shall not exceed twenty-five percent (25%). Roads and driveways shall follow the line of existing topography to minimize the required cut and fill.
- f. Significant Natural Areas and Features
- Natural areas containing rare or endangered plants and animals, as well as other features of natural significance exist throughout Middlesex Township. Both the Pennsylvania Statewide Natural Diversity Inventory and the Cumberland County Natural Diversity Inventory have documented the location of some of these, whereas for others, only their general locations are known. Subdivision applicants shall take all reasonable measures to protect significant natural areas and features either identified by the Middlesex Township Map of Primary Conservation Areas (most current version, when available, as published from time to time), Natural Features Mapping in the Middlesex Township Comprehensive Plan, the Pennsylvania Statewide Natural Diversity Inventory, the Cumberland County Natural Diversity Inventory, other published reports or by the applicant's Conservation Analysis (as required in Section 501.b.(2) by incorporating them into proposed Open Space areas or avoiding their disturbance in areas proposed for development.

g. Trails

- (1) When a subdivision or land development proposal is traversed by or abuts an existing trail customarily used by pedestrians and/or equestrians, the Board of Supervisors may require the applicant to make provisions for continued recreational use of the trail.
- (2) The applicant may alter the course of the trail within the tract for which development is proposed under the following conditions:
 - (a) The points at which the trail enters and exits the tract remain unchanged.
 - (b) The proposed alteration exhibits quality trail design according to generally accepted principles of landscape architecture (e.g. Bureau of State Parks publication Non-Motorized Trails).
 - (c) The proposed alteration does not coincide with a paved road intended for use by motorized vehicles.
- (3) When trails are intended for public or private use, they shall be protected by a permanent conservation easement on the properties on which they are located. The width of the protected area in which the trail is located should be a minimum of ten (10) feet. The language of the conservation easement shall be to the satisfaction of the Board of Supervisors upon recommendation of the Township Solicitor.
- (4) The land area permanently designated for trails for public use may allow a design incentive that may be applied to increase the maximum possible number of dwelling units allowed on a Conservation Subdivision property in accordance with Article IV Section 4.03 B.3.b. of the Zoning Ordinance.
- (5) An applicant may propose and develop a new trail. If said trail is available for use by the general public and connects with an existing trail, the land area protected for said trail may be credited toward the open space requirement for Conservation Subdivisions as described in Article IV Section 4.02 D. of the Zoning Ordinance.

- (6) Trail improvements shall demonstrate adherence to principles of quality trail design according to generally accepted principles of landscape architecture (e.g. Bureau of State Parks publication Non-Motorized Trails).
- (7) Trails shall have a vertical clearance of no less than ten (10) feet.
- (8) Width of the trail surface may vary depending upon type of use to be accommodated, but in no case shall be less than three (3) feet or greater than six (6) feet.
- (9) No trail shall be designed with the intent to accommodate motorized vehicles.

h. North Mountain Conservation Areas.

All subdivisions or land development proposals in the OS – Conservation Open Space Zoning Districts that fall within the North Mountain Conservation Areas shall be in accordance with the requirements of Article V of the Zoning Ordinance.

SECTION 1203. Design Process for Conservation Subdivisions.

- a. Resource Inventory and Analysis. The tract's resources shall be identified in a Conservation Analysis and delineated on the Existing Resources Inventory Mapping and a Site Analysis Report, as required in Section 501.b.(2).
- b. Four-Step Design Process. Following the resource inventory and analysis, all conservation subdivisions shall follow a four-step design process as described in Section 720 a. Applicants shall document the design process.

SECTION 1204. Open Space Design Review Standards.

- a. Prioritized List of Resources to be Conserved. Open Space areas shall include the following resources, as identified through the Conservation Analysis described in Section 502.c.2.

- (1) Primary Conservation Areas as detailed in Zoning Ordinance Section 4.02 C. 3.
 - (a) Floodways as detailed on the most recently published national flood insurance program mapping by the US Federal Emergency Management Agency.
 - (b) Floodplains or Special Flood Hazard Areas, as detailed on the most recently published national flood insurance program mapping by the US Federal Emergency Management Agency.
 - (c) Wetlands as detailed on the most recently published National Wetlands Inventory mapping by the US Fish and Wildlife Service, as published from time to time; or as located by field wetland survey conducted by a qualified individual and verified by appropriate employees of the Pennsylvania Department of Environmental Protection (PA DEP) or the US Army Corps of Engineers.
 - (d) Areas of steep slopes greater than twenty-five percent (25%) as verified on final plan by field survey.
- (2) Secondary Conservation Areas as detailed in Zoning Ordinance Section 4.02 C. 4.
 - (a) Areas of established wellhead protection zones.
 - (b) Mapped groundwater recharge areas of existing or potential groundwater supplies and surface water bodies as identified on Plate #2 in the addendum to the Groundwater Availability and Well Siting Study (Middlesex Township, Cumberland County, Pennsylvania; September 1999) or as changed based upon hydrogeologic and or other studies adopted by the Board of Supervisors from time to time.
 - (c) Areas where precipitation is most likely to recharge local groundwater resources because of topographic and soil conditions causing high rates of infiltration and percolation.
 - (d) Areas of watercourses without studied and defined floodways or floodplains.
 - (e) Other Flood Areas and Otherwise Protected Areas, as detailed on the most recently published national flood

insurance program mapping by the US Federal Emergency Management Agency.

- (f) Riparian buffer areas located parallel to and a minimum distance of seventy-five (75) feet from each side of the top of banks of all watercourses (measured in a direction away from the watercourse, horizontally on a line parallel to the water surface in the watercourse, beginning at the top of the defined bank, at bankfull flow, with the location of the top of defined bank being reviewed by the Township Engineer and approved by the Board of Supervisors).
- (g) Areas having wet soils, swales, springs and other lowland areas, including adjacent buffer areas which may be required to insure their protection.
- (h) Areas of prime farmland soil, within capability Class I and Class II, as defined in the Soil Survey of Cumberland and Perry Counties, Pennsylvania, published by the USDA Soil Conservation Service, issued April 1986 and as amended from time to time.
- (i) Areas of farmland soil of statewide importance, within capability Class III, as defined in the Soil Survey of Cumberland and Perry Counties, Pennsylvania, published by the USDA Soil Conservation Service, issued April 1986 and as amended from time to time.
- (j) Areas of moderate to steep slopes from fifteen percent (15%) to twenty-five percent (25%), particularly those adjoining watercourses and ponds, where disturbance and resulting soil erosion and sedimentation could be detrimental to water quality, but including all such areas of moderate to steep slopes.
- (k) Areas of forested lands and healthy woodlands, particularly those performing important ecological functions such as soil stabilization and protection of streams, wetlands and wildlife habitats, but including all such areas of forested lands and healthy woodlands.
- (l) Areas of hedgerows, groups of trees and large individual trees of botanic significance.

- (m) Areas of other significant natural features including topographic or geologic features like rock outcroppings, caves or natural karst features.
- (n) Areas of significant natural areas of species listed as endangered, threatened, or of special concern, such as those listed in the Statewide Natural Diversity Inventory.
- (o) Areas of existing or potential wildlife habitats.
- (p) Areas of park and recreation space designated for public use.
- (q) Areas of historic structures and sites.
- (r) Areas of greenways identified in the Middlesex Township Comprehensive Plan and or other studies agreed upon by the Board of Supervisors from time to time.
- (s) Areas of existing scenic views identified in the Middlesex Township Comprehensive Plan and or other studies agreed upon by the Board of Supervisors from time to time.
- (t) Areas containing or in proximity to existing trails connecting the property to other locations in Middlesex Township.
- (u) Areas in proximity to or with logical relationship to other Open Space.

b. Other Design Considerations. The configuration of proposed Open Space set aside for common use in residential subdivisions shall comply with the following standards:

- (1) No structures shall be permitted with the exception of historic buildings, stone walls, and structures related to Open Space uses. The Board of Supervisors may grant approval of structures and improvements required for storm drainage, sewage treatment and water supply within the Open Space provided that such facilities would not be detrimental to the Open Space and take away from its aesthetic and natural resource value.
- (2) Forty percent (40%) of dwelling units shall face the required Open Space either directly or across a street.

- (3) A minimum of three percent (3%) of the required Open Space shall be Formal Open Space set aside as greens, commons or squares.
- (4) Open Space areas shall be suitable for active recreational uses to the extent deemed necessary by the Board of Supervisors, without interfering with adjacent dwelling units, parking, driveways, and roads.
- (5) The Open Space land shall be interconnected wherever possible to provide a continuous network of Open Space within and adjoining the subdivision.
- (6) Screen buffers shall be provided to adjoining parks, scenic roadways, preserves or other protected lands in accordance with Section 719 c.(13) of this Ordinance or in the Zoning Ordinance.
- (7) Pedestrian pathways shall be provided from residences to the Open Space area, except in those cases where part of the Open Space is located within private dwelling lots and under private ownership. Consideration shall be given to providing for public access on such trails if they are linked to other publicly accessible pathway systems within Middlesex Township. Provisions should be made for access to the Open Space, as required for land management and emergency purposes.
- (8) Public or private streets shall not divide Open Space areas, except where necessary for proper traffic circulation.
- (9) Conservation easements shall be made subject to such agreement with Middlesex Township and shall be duly recorded in the office of the County Recorder of Deeds as required by the Board of Supervisors for the purpose of preserving the common open space for such uses.
- (10) Provide pedestrian and maintenance access to open space such that no more than 15 lots shall be contiguous to each other without a centrally located access point meeting the following standards:
 - (a) The minimum width of the access strip shall ideally equal the minimum width of a lot, and in no case shall be less than 50 feet.
 - (b) The minimum width of the access strip shall extend the full depth of the adjacent lots.
 - (c) Access to open space used for agriculture or horticulture may be restricted or prohibited for public safety and to prevent interference with agricultural operations.
- (11) Open space shall generally not include parcels smaller than 3 acres, have a length-to-width ratio of less than 4:1, or be less than seventy-five (75) feet in width, except for such lands specifically

designed as neighborhood greens, playing fields, trail links and boulevard or cul-de-sac islands.

- (12) Open space shall help minimize views of new dwellings from exterior roads and abutting properties by the use of changes in topography, existing vegetation, or additional landscaping which meets the landscaping requirements of the Subdivision and Land Development Ordinance.
- (13) Open space that is not wooded or farmed shall be landscaped in accordance with the landscaping requirements and Open Space Management Plan standards of the Subdivision and Land Development Ordinance.
- (14) Open space shall be consistent with the policies of the Middlesex Township Comprehensive Plan.
- (15) Open space shall be delineated on the ground by any or all of the methods listed below. The Board of Supervisors shall have the sole discretion of approving the location, design and materials used for the delineation of open space.
 - (a) Markers.
 - (b) Small signs, in accordance with requirements for Type P7 on-site signs as detailed in Section 14.16 of this Ordinance.
 - (c) Individual sections of split rail or post & rail fencing, as long as the fencing is not continuous and does not restrict or prohibit public access.
 - (d) Vegetative plantings, landscaping.
 - (e) Other similar and appropriate methods.

- c. Ownership and Maintenance. Applicants shall demonstrate compliance with Open Space ownership standards in Article IV Section 4.03 G. of the Zoning Ordinance and Open Space maintenance standards in Article IV Section 4.03 H. of the Zoning Ordinance.

SECTION 1205. Dedication of Open Space Land for Public Use.

The following standards shall apply to new subdivisions involving ten (10) or more dwelling units.

- a. Unless otherwise required in this or other Township Ordinances, applicants shall be required to set aside five percent of their gross tract acreage as undivided recreational land designated for public usage. Such land shall be suitable for active and/or passive recreation, with at least half

of the land area set aside proven to be suitable for active sports, where such facilities are required by the Board of Supervisors.

- b. The applicant may propose one of the following alternative in lieu of dedication of recreation land for public usage:
 - (1) The applicant may offer an area of land limited to recreational usage by the residents of the proposed subdivision. If land is set aside in this manner for private recreational use, it shall also be permanently protected through a conservation easement enforceable by Middlesex Township and/or a land trust, prohibiting future non recreational (or commercial recreational) uses.
 - (2) The applicant may offer to pay a fee to Middlesex Township in lieu of any recreational land set aside as per the requirements of Section 705.E. Situations in which it would be appropriate for Middlesex Township to accept such offers include cases where the land would not provide a particular public benefit because of its small size or location. Exceptions to this rule, where public use of relatively small land areas would still be appropriate, include situations in which the land could be used to buffer or extend public parks or public school grounds, or could provide potential linkage in a future Township trail network.
 - (3) The decision whether to accept a fee-in-lieu offer by the applicant shall lie with the Board of Supervisors as per Section 705 E. of this Ordinance.
 - (4) If adequate in area and acceptable to the Board of Supervisors, the open space provided in conservation subdivisions shall satisfy all or part of the recreational land set aside as per the requirements of Section 705.E. If a fee-in lieu is provided, in accordance with Section 1205.b.(2) and 1205.b.(3) above, the acreage represented by the fee shall not qualify as meeting part of the open space requirement.

SECTION 1206. Resource Conservation Standards for Site Preparation and Cleanup.

Conservation practices during site preparation and cleanup shall meet the following requirements.

- a. Protection of Vegetation from Mechanical Injury. Where earthwork, grading, or construction activities will take place in or adjacent to woodlands, or specimen trees or other significant vegetation or site features, the Board of Supervisors may require that the limit of disturbance be delineated and vegetation protected through installation of temporary construction fencing or another secure demarcation to be located on the dripline of tree masses or mature trees standing alone. Such fencing shall be installed prior to commencing of and shall be maintained throughout the period of construction activity.
- b. Protection of Vegetation from Grading Change. Grade changes to occur at any location of the property shall not result in an alteration to soil or drainage conditions which would adversely affect existing vegetation to be retained following site disturbance, unless adequate provisions are made to protect such vegetation and its root systems.
- c. Protection of Vegetation from Excavations
 - (1) When digging trenches for utility lines or similar uses, disturbances to the root zones of all woody vegetation shall be minimized.
 - (2) If trenches must be excavated in the root zone, all disturbed roots shall be cut as cleanly as possible. The trench shall be backfilled as quickly as possible.
- d. Protection of Topsoil
 - (1) No topsoil shall be removed from the site.
 - (2) Prior to grading operations or excavation, topsoil in the area to be disturbed shall be removed and stored on site.
 - (3) Topsoil removed shall be redistributed and stabilized as quickly as possible following the establishment of required grades for a project or project phase. All exposed earth surfaces shall be stabilized by hydroseeding on slopes of less than ten percent, and by sodding or hydro seeding on slopes exceeding ten percent.

SECTION 2: The Middlesex Township Zoning Ordinance is hereby amended as

follows:

A. Article II, Definitions, Section 2.03, Terms Defined, is hereby amended as

follows:

1. The following new definitions are hereby added to Section 2.03 and to the extent such words or terms below presently exist in Section 2.03, such words or terms shall be amended hereby to have the meanings set forth as follows:

BERM - An earthen mound designed to create a visual and sound barrier between a use and adjoining properties, streets, and adjacent uses.

SCREEN BUFFER OR VISUAL SCREEN - A well-maintained hedge, landscaped berm, or other vegetative materials which upon planting or installation is both of sufficient height and of sufficient density to conceal from the view of adjacent properties the structures and uses on the premise where the screening is located.

CALIPER - The diameter of a tree trunk measured 6 inches above the ground for a tree measuring up to and including 4 inches in diameter and 12 inches above the ground for a tree measuring above 4 inches in diameter. The term applies to nursery stock.

COMMON FACILITIES - All the real property and improvements, owned in common by residents within the development; which is served by the facilities. Common facilities include, without limitation, landscaped areas, buffers, Common Open Space land not included within title lines of any privately owned lot, and street rights-of-way not dedicated to the municipality.

COMMUNITY ASSOCIATION - A non-profit organization comprised of homeowners or property owners, the function of which is to maintain and administer property owned in common by members of the association or by the association, to protect and enhance the value of the property owned individually by each of the members. Homeowners Associations and Condominium Associations are types of Community Associations.

CONDOMINIUM - Real estate, portions of which is designated for separate ownership and the remainder of which is designated for common ownership solely by the owners of those separate portions, in accordance with the Pennsylvania Uniform Condominium Act 1980-82, as amended.

CONSERVATION AREAS, PRIMARY (PCA) - Lands upon which primary resources are located in conservation subdivisions. All Primary Conservation Areas are required to be located within Open Space lands.

CONSERVATION AREAS, SECONDARY (SCA) - Lands containing secondary resources that are conserved as a part of Open Space lands.

CONSERVATION DESIGN – A method of subdivision design as described in Article IV of this Ordinance.

CONSERVATION SUBDIVISION – Lots created by the conservation design methods of subdivision design, as described in Article IV of the Ordinance.

CONSERVANCY LOT - A large, privately owned and maintained lot, containing an existing dwelling, farm complex, or historic structure, comprising part of the required Open Space land in a conservation subdivision.

CONSTRAINED LAND - Selected resources listed in Zoning Ordinance, multiplied by a protection factor and totalled.

DBH (DIAMETER AT BREAST HEIGHT) - The diameter of a tree trunk measured 4.5 feet above the ground at the base of the tree. If a tree divides or splits into multiple trunks below 4.5 feet, the trunk is measured at its most narrow point beneath the split. The term applies to trees in the field (not nursery stock).

DWELLING, FRONT FACADE - The plane of the facade of the building closest to the street right-of-way, excluding stoops, porticos, open colonnades, and open porches.

GARAGE, FRONT LOADED - A garage having its vehicular entry door facing the street.

GARAGE, SIDE LOADED - A garage having its vehicular entry door facing the side yard.

GARAGE, REAR LOADED - A garage having its vehicular entry door facing an alley or rear lane.

GEOLOGIST, PROFESSIONAL - A person duly licensed as a professional geologist by the Commonwealth of Pennsylvania.

GREENWAY LAND OR OPEN SPACE LAND - A parcel or parcels of land and/or water, within a conservation subdivision consisting of open space and set aside for the protection of natural and cultural resources. Greenway land consists of Primary and Secondary Conservation Areas and is permanently restricted against further development. The terms “Greenway” and “Greenway land” are synonymous.

GROUNDWATER – Water that occurs in the subsurface and fills or saturates the porous openings, fractures, and fissures of underground soils and rock units.

HEDGEROW - A linear plant community dominated by trees and/or shrubs. Hedgerows often occur along roads, fence lines, property lines, or between fields, and may occur naturally or be specially planted (e.g. as a windbreak).

HISTORIC RESOURCE OR HISTORICALLY SIGNIFICANT SITE - Any structure or site that is:

- A. Listed individually in the National Register of Historic Places (a listing maintained by the U.S. Department of the Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;
- B. Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;
- C. Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior; or
- D. Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:
 - 1. By an approved State program as determined by the Secretary of the Interior; or
 - 2. Directly by the Secretary of the Interior in states without an approved program.
- E. Individually listed on the most recent inventory of the Cumberland County Historical Society Register or the Cumberland County Planning Commission inventory.

HOMEOWNERS ASSOCIATION - A non-profit organization comprised of homeowners or property owners, planned and operated under negotiated and approved rules and regulations, for the purpose of administering the needs of residents through the maintenance of community owned property. This term is synonymous with homes association and with property owners association.

INFILTRATION – Movement of surface water into the soil, where it is absorbed by plant roots, evaporated into the atmosphere, or percolates downward to recharge ground water.

INVASIVE PLANT SPECIES - Predominantly non-native 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 in Pennsylvania are listed on an inventory, as developed and updated from time to time by the Pennsylvania Department of Conservation of Natural Resources.

LAND DISTURBANCE - Any activity, which exposes soils, alters topography and/or alters woody vegetation, except for removal of a safety hazard, diseased trees, or invasive plant species.

LANDSCAPE ARCHITECT, REGISTERED - A person duly licensed as a professional landscape architect by the Commonwealth of Pennsylvania.

LANDSCAPING - The planting of turf, trees, shrubs, and other appropriate vegetative materials and ground cover within the open areas of a lot other than for agricultural purposes, and including the maintenance and replacement thereof, for the purposes of erosion control, retention of precipitation, protection against the elements and promotion of human comfort and welfare.

NATIVE SPECIES – A species of plant or other organism that currently or previously inhabited or grew in a specified location, and which was not introduced to that location as a result of human activity, either intentional or accidental. The term “native” species generally refers to a species whose range was located within a large area like a continent or a nation. The term “indigenous” species is typically used to refer to a species whose original range extended into a smaller area like a state, county, or watershed.

PA DEP - The Department of Environmental Protection of the Commonwealth of Pennsylvania.

PennDOT: The Pennsylvania Department of Transportation.

PLAN OR PLAT - The map or plat of a subdivision or land development complete with a drawing and supplementary data, whether sketch, preliminary or final.

A. PLAN, SKETCH – An informal plan, not necessarily to exact scale, indicating salient existing features of a tract and its surroundings and the general layout of a proposed subdivision or land development as prepared in accordance with this Ordinance.

B. PLAN, PRELIMINARY – A plan of a proposed subdivision or land development, including all supplementary information required by this Ordinance, to obtain preliminary approval and prepared in accordance with this Ordinance.

C. PLAN, FINAL – A complete and exact subdivision or land development plan, including all supplementary data, prepared in accordance with this Ordinance for official approval and recording.

D. PLAN, LOT ADDITION – A complete and exact subdivision plan, including all supplementary data, prepared in accordance with this Ordinance that is intended to convey a parcel of ground located immediately adjacent to other property owned by the intended grantee that is being added to the grantee’s existing lot of record.

E. **PLAN, LOT CONSOLIDATION** – A plan whereby the entire area of two or more adjacent existing lots of record are combined or consolidated to effectually eliminate one or more original lots into one new lot.

PRIMARY CONSERVATION AREA - see Conservation Area, Primary

REGISTERED DESIGN PROFESSIONAL - A professional engineer, land surveyor or professional geologist licensed by the State Registration Board for Professional Engineers, Land Surveyors and Geologists under the act of May 23, 1945 (P.L. 913, No. 367), known as the "Engineer, Land Surveyor and Geologist Registration Law, " a landscape architect who is licensed by the State Board of Landscape Architects under the act of January 24, 1966 (1965 P.L. 1527, No. 535), known as the "Landscape Architect's Registration Law, " or any corporation or association, including professional corporations, organized or registered under the act of December 21, 1988 (P.L. 1444, No.177), known as the "General Association Act of 1988," practicing engineering, landscape architecture or surveying in this Commonwealth. (The above definition was adapted from the definition of "construction design professional" in the laws of the Commonwealth of Pennsylvania (77 P.S. 25.3 et seq.) Generally, an individual who is registered or licensed to practice their respective design profession as defined by the statutory requirements for the professional registration laws of the state or jurisdiction in which the project is to be constructed.

RESOURCES, PRIMARY - Resources consisting of 100-year floodplain (including the floodway), wetlands, and prohibitive steep slopes (above 25 percent). In conservation subdivision, all lands containing primary resources are called Primary Conservation Areas. See a list of such features in Section 4.02 C.3. of the Zoning Ordinance.

RESOURCES, SECONDARY - Natural or cultural features outside Primary Conservation Areas that are worthy of conservation by inclusion in Greenway land. See a prioritized list of such features in Section 4.02 C.4. of the Zoning Ordinance. Lands containing secondary resources that are conserved are called Secondary Conservation Areas.

RIPARIAN BUFFER – A riparian buffer is an area of trees and other vegetation adjacent to a watercourse that forms a transition area between the aquatic and terrestrial environment. The riparian buffer provides the following benefits: reduces the amount of nutrients, sediments, pesticides, and other harmful substances that reach watercourses, wetlands, and other surface water bodies; provides for shading of the aquatic environment to moderate temperatures and protect fish habitat; provides organic matter which provides food and habitat for bottom dwelling organisms essential to the food chain; increases stream bank stability and reduces stream bank erosion and sediment production; conserves natural features important to land and water features (e.g., headwater areas, groundwater recharge zones, streams, prime wildlife habitat); and conserves natural, scenic, and recreation areas and promotes the functioning of interconnected natural greenway lands.

RIPARIAN BUFFER, FORESTED OR FORESTED RIPARIAN BUFFER – An area of trees, usually accompanied by shrubs and other vegetation, adjacent to a body of water and managed to maintain the integrity of stream channels and shorelines to: 1) reduce the impact of upland sources of pollution by trapping, filtering, and converting sediments, nutrients, and other chemicals, and 2) supply food, cover, and thermal protection to fish and other wildlife.

SECONDARY CONSERVATION AREA - See Conservation Area, Secondary

SPECIMEN TREE - A unique, rare, or otherwise specifically selected tree or plant considered worthy of conservation by the municipality, because of its species, size, age, shape, form, historical importance, or any other significant characteristics, including listing as a Species of Special Concern by the Commonwealth of Pennsylvania. All healthy trees over 20 inches DBH are considered specimen.

COMMENTARY: Not all trees reach specimen size at the same diameter. For example, a dogwood or sassafras is considered large at 20 inches, while an oak may not be considered large until it is about 32 inches. A more accurate, but more complex, method of designating specimen trees is to give size parameters for each species, as in the following table.

Non—invasive species not listed in the table, having a DBH 20 inches or greater, are considered specimen.

Species	Min. Size (DBH)	Species	Min. Size (DBH)	Species	Min. Size (DBH)
		<i>Locust</i>	<i>30"</i>	<i>Sassafras</i>	<i>20"</i>
<i>Ash</i>	<i>32"</i>	<i>Maple</i>	<i>32"</i>	<i>Spruce</i>	<i>30"</i>
<i>Beech</i>	<i>32"</i>			<i>Sycamore</i>	<i>36"</i>
<i>Cherry</i>	<i>24"</i>	<i>Oak</i>	<i>32"</i>	<i>Tulip Tree</i>	<i>36"</i>
<i>Elm</i>	<i>30"</i>	<i>Osage Orange</i>	<i>20"</i>	<i>Walnut</i>	<i>30"</i>
<i>Hemlock</i>	<i>30"</i>	<i>Pine</i>	<i>30"</i>	<i>Hickory</i>	<i>32"</i>

STEEP SLOPES - Areas of land, 3,000 square feet or greater, where the grade is 15 percent or greater. Steep slopes are divided into 2 categories:

- A. Precautionary moderate to steep slopes are those areas of land where the grade is 15 to 25 percent.
- B. Prohibitive steep slopes are those areas of land where the grade is greater than 25 percent.

Slope shall be measured as the change in elevation over the horizontal distance between consecutive contour lines. Slope shall be measured over 3 consecutive 2- foot contour intervals (6 cumulative vertical feet of slope). All slope measurements shall be determined by a topographic survey signed and sealed by a registered surveyor or engineer licensed to practice in Pennsylvania.

TERMINAL VISTA - The visual scene terminating the view down a road or street, as at an intersection or on the outside of a curve.

TRACT AREA, ADJUSTED OR ADJUSTED TRACT AREA - The gross tract area minus the constrained land.

TRACT AREA, GROSS - The total amount of land contained within the limits of the legally described property lines bounding the tract.

WETLANDS - Areas that are inundated and saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions, including swamps, marshes, bogs, and similar areas. Any area meeting the official wetland definition of the U.S. Army Corps of Engineers or the Pennsylvania Department of Environmental Protection, as amended, shall be considered a wetland for the purposes of this Ordinance. In the event the definition of wetland accepted by the U.S. Army Corps of Engineers conflicts with the definition of a wetland accepted by the Pennsylvania Department of Environmental Protection, the more restrictive definition shall apply.

WOODLANDS - A tree mass or plant community in which tree species are dominant or co-dominant and the branches of the trees form a complete, or nearly complete, aerial canopy. Any area, grove, or stand of mature or largely mature trees (larger than 6 inches DBH) covering an area of 1/4 acre or more, or consisting of 10 individual trees larger than 6 inches DBH, shall be considered a woodland. The extent of any woodland plant community or any part thereof shall be measured from the outer-most drip line of all the trees in the plant community.

WOODLAND DISTURBANCE - Any activity that 1) alters the existing structure of a woodland or hedgerow, including the cutting or removal of canopy trees, sub-canopy trees, understory shrubs and vines, and herbaceous woodland floor species; 2) constitutes a land disturbance within a woodland or hedgerow. Woodland disturbance does not

include the selective cutting or removal of invasive plant species. (See INVASIVE PLANT SPECIES)

YIELD PLAN OR YIELD PLAT – A method of evaluating the maximum possible number of residential dwelling units that can be constructed on a property under the current zoning district regulations, as detailed in Article IV, section 4.03 B.2. of this Ordinance.

OPEN SPACE - A parcel or parcels of land or an area of water, or a combination of land and water, within a development site, designed and intended for the use and enjoyment by the residents of such development and possibly the general public. Open space shall be substantially free of structures, but may contain such improvements as are in the finally approved development plan, and shall not include individually owned private yards, except in the case of approved conservancy lots. Open space is permanently restricted against further development. Open Space may be a combination of natural or naturalized areas (such as the Township interconnected greenway network) plus more intensely managed areas (such as lawn, recreational areas or play fields).

OPEN SPACE, COMMON OR COMMON OPEN SPACE - A parcel or parcels of land or an area of water, including natural areas, or a combination of land and water within a development site and designed and intended for the use or enjoyment of residents of a development, not including streets, off-street parking areas, and areas set aside for public facilities.

OPEN SPACE, COMMON GREENS - An area of Greenway land comprised of open space located internal to the developed areas and surrounded by streets on at least 2 and often 3 or 4 sides; around which dwellings are arranged and organized. To the maximum extent possible, dwellings shall face the green with the front façade of the dwelling. Common greens shall have a minimum area of 0.1 acre and a maximum area of 1.0 acre. A common green serving more than four (4) dwellings shall preferably be surrounded by roads, or at a minimum, abut a road on at least one side for a length equal to twenty-five percent (25%) of its circumference.

OPEN SPACE, UDA OR UDA OPEN SPACE - Land reserved, dedicated or conserved in perpetuity for passive recreation, active recreation, multi-use trails and rear access farm lanes used for trails, private open space, common open space and natural areas and / or outdoor civic spaces.

OPEN SPACE, USEABLE OR USABLE OPEN SPACE - The unenclosed portion of the ground of a lot which is not devoted to driveways or parking spaces, which is free of structures of any kind, of which not more than 25% is roofed for shelter purposes only, and which is available and accessible to all occupants of the building or buildings on the said lot for purposes of active or passive outdoor recreation.

WATERCOURSE – A channel or conveyance of surface water, such as a stream creek, or run, having a defined bed and banks, whether natural or artificial, with perennial or

intermittent flow. For the purposes of the Ordinance, a watercourse shall not include manmade swales constructed expressly for the purpose of stormwater management.

WATERCOURSE, EPHEMERAL – A stream or portion of a stream that flows only in direct response to precipitation. It receives little or no water from springs and no long-continued supply from melting snow or other sources. Its channel is at all times above the water table. The term may be arbitrarily restricted to streams which do not flow continuously during periods of the month.

WATERCOURSE, INTERMITTENT – A defined channel in which surface water is absent during a portion of the year, as ground water levels drop below the channel bottom.

WATERCOURSE, PERENNIAL - A defined channel containing surface water throughout the year.

2. The following words and terms and their definitions contained in Section 2.03 are hereby deleted: “PaDER”, “Planned Residential Development” and “Plat”.

B. Article III, Establishment of Zoning Districts and Map, is hereby amended as follows:

1. Section 3.01 is amended to add new Section 3.01.I as follows:

I. RT – Residential Towne Districts

2. Section 3.02 is hereby amended in its entirety to provide as follows:

SECTION 3.02 - ZONING MAP. The boundaries of the above zoning districts are delineated on a map entitled "Middlesex Township Zoning Map" which accompanies and, with all explanatory matter thereon, is hereby made a part of this Ordinance.

A. Change of Zoning Districts

1. The RF-Residential Farm Zoning District as shown on the Middlesex Township Zoning Map is hereby decreased by deleting therefrom all that certain land more fully described in paragraph 3 below, said land hereby being designated, reclassified and rezoned to be included in and added to the RT-Residential Towne District, as more fully set forth hereinbelow.

2. The RT-Residential Towne District is hereby added, designated, zoned and classified as such with respect to all that certain land more fully described in Paragraph 3 hereinbelow.
3. The following described land situated in the Township of Middlesex is hereby reclassified, rezoned and designated from RF-Residential Farm to RT-Residential Towne:

BEGINNING at the intersection of Claremont Road (S.R. 21066) and South Middlesex Road (T-590); thence proceeding in a clockwise direction as follows: from said intersection the boundary follows South Middlesex Road to the intersection with Horners Road (T-576); thence the boundary line follows the centerline of Horners Road for a distance of 1,000+- feet southwest; thence the boundary line proceeds approximately North 20 degrees West for a distance of 300+- feet; thence turning approximately due west, the boundary extends a distance of 4,000+- feet towards Interstate I-81; thence turning North 32 degrees West, the boundary extends a distance of 2,000+- feet to its intersection with the Conrail Railroad; thence the boundary follows the Railroad west to its intersection with Interstate I-81; and thence North along I-81 to its intersection with Claremont Road; thence the boundary proceeds east along Claremont Road to the point of origin at the intersection of Claremont Road and South Middlesex Road. Excluding and excepting therefrom the area bordered by Claremont Road to the north which is currently designated VC-Village Center, which area designated VC-Village Center is not changed from such current designation.

4. The RS-Residential Suburban Zoning District as shown on the Middlesex Township Zoning Map is hereby decreased by deleting therefrom all that certain land more fully described in Paragraph 5. below, said land hereby being designated and rezoned to be included in and added to the VC-Village Center District, as more fully set forth hereinbelow.
5. The following described land situate in the Township of Middlesex is hereby reclassified, rezoned and designated from RS-Residential Suburban to VC-Village Center:

BEGINNING at an iron pipe, the corner of lands now or formerly of Eugene Sutton; thence by the Eastern side of a 20-foot private driveway or right-of-way, South Twenty-eight (28) degrees Thirty (30) minutes East, a distance of One Hundred Ninety-nine and Six tenths (199.6) feet to a stake; thence along lands now or formerly of the Harry D. Keiser Estate, North sixty-six (66) degrees East, a distance of Four Hundred Thirty (430) feet, more or less, to a point in the center of Letort Run; thence by the center of Letort Run by the various courses and distances, to-wit: North Seventy-Five (75) degrees Thirty (30) minutes West, a distance of One

Hundred Four and Nine tenths (104.9) feet to a point; thence South Sixty-five (65) degrees West, a distance of One Hundred Twenty-two and Four-tenths (122.4) feet to a point; thence North Fifty (50) degrees Forty-five (45) minutes West, a distance of Ninety-eight and Nine tenths (98.9) feet to a point; thence along lands now or formerly of Eugene Sutton, South Seventy-seven (77) degrees Forty-five (45) minutes West, a distance of Two Hundred Twenty-four (224) feet, more or less, to an iron pipe, the Place of BEGINNING.

CONTAINING 1.8 acres, more or less.

6. The RF-Residential Farm Zoning District as shown on the Middlesex Township Zoning Map is hereby decreased by deleting therefrom all that certain land more fully described in Paragraph 7, below, said land hereby being designated and rezoned to be included in and added to the VC-Village Center District, as more fully set forth hereinbelow.
7. The following described land situate in the Township of Middlesex is hereby reclassified, rezoned and designated from RF-Residential Farm to VC-Village Center:

BEGINNING at a point in the center of Wolfs Bridge Road, which point is on the northern boundary line of the right-of-way of the Pennsylvania Turnpike, thence proceeding in a clockwise direction as follows: from the aforementioned point, South 71 degrees 37 minutes West a distance of 575.71 feet (along the northern boundary line of the right-of-way of the Pennsylvania Turnpike) to a point; thence North 6 degrees, 33 minutes, 45 seconds West a distance of 613 feet to a point; thence North 86 degrees, 15 minutes East a distance of 569.15 feet to a point; thence North 11 degrees, 52 minutes, 49 seconds West a distance of 180.84 feet to a point; thence North 84 degrees, 8 minutes, 28 seconds East 267.33 feet to a point in the center of Wolfs Bridge Road; thence South 16 degrees, 58 minutes, 26 seconds East a distance of 194.00 feet to a point in the center of Wolfs Bridge Road; thence South 17 degrees, 30 minutes East a distance of 389 feet to a point in the center of Wolfs Bridge Road, the place of BEGINNING. Containing approximately 11.4 acres.

BEGINNING at a point in the center of Wolfs Bridge Road, which point is approximately 415.4 feet from the point of Beginning of the above described tract or area; thence North from the aforementioned point along the center line of Wolfs Bridge Road a distance of 355 feet to a point on the center line of Wolfs Bridge Road; thence North 85 degrees, 27 minutes, 14 seconds East a distance of 280.74 feet to a point; thence South 5 degrees, 55 minutes, 40 seconds East a distance of 340 feet to a point; thence South 84 degrees West 235.65 feet to a point on the center line of

Wolfs Bridge Road, the place of the BEGINNING. Containing approximately 2 acres.

BEGINNING at a point in the center of Wolfs Bridge Road, which point is on the northern boundary line of the right-of-way of the Pennsylvania Turnpike, thence North along the center line of Wolfs Bridge Road a distance of 325 feet to a point; thence in a easterly direction along the southern boundary line of a sixty foot right-of-way or street commonly known as Gasoline Alley a distance of 1,176 feet to a point; thence in a southerly direction along the Western line of lands now or formerly of Carl Anderson a distance of 325 feet to a point on the northern boundary line of the right of way of the Pennsylvania Turnpike; thence in a westerly direction along the northern boundary line of said right-of-way a distance of 1,134 feet to a point in the center line of Wolfs Bridge Road, the place of BEGINNING. Containing approximately 7.6 acres.

8. The CH – Commercial Highway Zoning District as shown on the Middlesex Township Zoning Map is hereby decreased by deleting therefrom all that certain land more fully described as follows, said land being hereby designated, reclassified and rezoned to be included the VC – Village Center Zoning District:

BEGINNING at a point on the Western property line of said lands now or formerly owned by Russel & Doris Morrison, at the intersection of the centerline of MacArthur Drive located a distance of 587.34', Northeasterly along the centerline of MacArthur Drive from the intersection of centerline with West Pointe Drive; thence along said centerline N 54°33'19" E, a distance of 613.23 feet to a point on the Eastern boundary line of the Carlisle Campground & Motel property; thence along said boundary line S 35°35'09" E, a distance of 33.81 feet to a point on said boundary line; thence S 54°51'24" W, departing said boundary line, a distance of 388.91 feet to a point on the Eastern boundary line of said lands now or formerly owned by Russel & Doris Morrison; thence along said Eastern boundary line S 28°48'07" E a distance of 123.71 feet to the Southeasterly corner of said property; thence along the Southerly boundary line of said lands S 54°10'51" W, departing said Eastern boundary line, a distance of 228.42 feet, thence along Western boundary line of said lands N 28°45'20" W, departing said Southerly boundary line a distance of 157.21 feet to the point of **BEGINNING**.

CONTAINING 48,148.76 square feet (1.105 Acres)

9. The VC - Village Center Zoning District as shown on the Middlesex Township Zoning Map is hereby decreased by deleting therefrom all that certain land more fully described as follows, said land being hereby

designated, reclassified and rezoned to be included the CH – Commercial Highway Zoning District:

BEGINNING at a point on the Township Boundary of Middlesex Township and North Middleton Township it is intersected by the centerline of MacArthur Drive located a distance of 399.28', Southwesterly along the centerline of MacArthur Drive from the intersection of centerline with West Pointe Drive; thence along said township line N 17°33'30" W, a distance of 292.62 feet to a point on the centerline of said SR 0011 Harrisburg Pike; thence along said centerline N 54°35'44" E, a distance of 52.56 feet, thence continuing along said centerline N 54°33'19" E, a distance of 876.84 feet to the northeast property corner of said land; thence along the Eastern boundary line of said land S 28°45'20" E, departing said centerline, a distance of 280.35 feet to a point of intersection of said boundary line with said centerline of MacArthur Drive; thence along said centerline S 54°33'19" W, departing said Eastern boundary line, a distance of 986.62 feet to the point of **BEGINNING**.

CONTAINING 266,753.84 square feet (6.124 Acres)

3. New Section 3.07 is hereby added as follows:

Section 3.07 – Conformance Required

- A. **APPLICATION OF DISTRICT REGULATIONS.** The regulations established by this ordinance within each zoning district shall be minimum regulations and apply uniformly to each class or kind of structure or land, except as hereinafter provided.
1. No building, structure or land shall hereafter be used or occupied and no building or structure or part thereof shall hereafter be erected, constructed, reconstructed, moved or structurally altered unless in conformity with all the regulations herein specified for the zoning district in which it is located.
 2. No building or other structure shall hereafter be erected or Altered:
 - (a) To exceed the height;
 - (b) To accommodate or house a greater number of families;
 - (c) To occupy a greater percentage of lot area; or

- (d) To have narrower or smaller rear yards, front yards, side yards or other open spaces than herein required or in any other manner contrary to the provisions of this ordinance applicable to the relevant zoning district or applicable overlay thereto.
- 3. No part of a yard or other open space or off-street parking or loading space required in connection with any building for the purpose of complying with this ordinance shall be included as part of a yard, open space or off-street parking or loading space similarly required for any other building.
- 4. No yard or lot existing at the time of passage of this ordinance shall be reduced in dimension or area below the minimum requirements set forth herein. Yards or lots created after the effective date of this ordinance shall meet at least the minimum requirements established by this Ordinance.
- 5. No residential lot shall have erected upon it more than one Principal Building.
- 6. Any use not permitted by this Ordinance shall be deemed to be prohibited. Any list of prohibited uses contained in any section of this Ordinance, shall not be deemed to be an exhaustive list but is included for the purposes of clarity and emphasis and to illustrate by example some of the uses frequently proposed that are deemed undesirable and incompatible and thus prohibited.

B. EXCEPTION TO APPLICATION OF DISTRICT REGULATIONS.

- 1. The Board of Township Supervisors hereby recognizes the need to use and develop lands within this Township to accommodate and implement governmental functions and responsibilities of this Township and its governmental entities.
- 2. Notwithstanding anything to the contrary appearing elsewhere in this Zoning Ordinance, land, buildings or premises in all zoning districts may be used by right for the performance of any municipal function of this township or any of its governmental entities without regard to specific limitations or regulations pertaining to the zoning district in which such use may be located.
- 3. Any municipal entity proposing action which would otherwise be governed by the Zoning Ordinance shall submit such proposed action to the Planning Commission for review and comment.
- 4. The municipal entity using the subject property shall provide and maintain a visual barrier or vegetative buffer between such municipal use and any contiguous

residential zoning district, except where a natural or man-made barrier or other buffer may already exist. The type and extent of barrier buffer shall be determined by the Board of Township Supervisors.

(Sections 3.08 thru 3.10 - RESERVED FOR FUTURE USE)

4. New Sections 3.11 and 3.12 are hereby added as follows:

SECTION 3.11 - Establishment of Unified Development Area Overlay District.

- A. Overlay Concept. The UDA - Unified Development Area Overlay District shall be an overlay to portions of existing underlying zoning districts as shown on the official Middlesex Township Zoning Map.
- B. The UDA-Unified Development Area Overlay District shall consist of that land area zoned, as of the effective date of this Ordinance, as RF-Residential Farm and RC-Residential Country which is located: north of the CH-Commercial Highway zoning district along U.S. Route 11 and north of Interstate 81, west of Bernheisel Bridge Road, south and east of the Conodoguinet Creek, east of Country Club Road and north of the OS-Open Space zoning district which adjoins Country Club Road to the west.
- C. The provisions of the Middlesex Township Zoning Ordinance and the Middlesex Township Subdivision and Land Development Ordinance shall apply to all UDA Development except to the extent specifically provided for in Article XVI, UDA - Unified Development Area Overlay District, of the Middlesex Township Zoning Ordinance. In the event of a conflict between the provisions of Article XVI and either the Middlesex Township Zoning Ordinance or the Middlesex Township Subdivision and Land Development Ordinance, the provisions of Article XVI shall prevail and apply.

Section 3.12 – Establishment of Conservation Design Overlay Districts

- A. Overlay Concept. The CD - Conservation Design Overlay Districts shall be an overlay to portions of existing underlying zoning districts as shown on the official Middlesex Township Zoning Map.
- B. The CD - Conservation Design Overlay Districts shall consist of all that land area zoned, as of the effective date of this Ordinance, as OS – Conservation / Open Space and RF - Residential Farm, except those portions of the RF – Residential Farm Districts which are overlain by the UDA – Unified Development Area Overlay District.
- C. The provisions of the Middlesex Township Zoning Ordinance and the Middlesex Township Subdivision and Land Development Ordinance shall apply to all Conservation Subdivision Development in the Conservation Design Overlay

District except to the extent specifically provided for in Article IV, CD – Conservation Design Overlay District, of the Middlesex Township Zoning Ordinance. In the event of a conflict between the provisions of Article IV and either the Middlesex Township Zoning Ordinance or the Middlesex Township Subdivision and Land Development Ordinance, the provisions of Article IV shall prevail and apply.

C. The Official Zoning Map of the Township of Middlesex is hereby amended to reflect the CD-Conservation Design Overlay District consistent with area thereof set forth in Section 3.12.B as described in Section 2.B.4 of this Ordinance. The Township Engineer is hereby directed to note such overlay zoning district on the Official Zoning Map of the Township of Middlesex.

D. Article IV is hereby amended in its entirety to provide as follows:

ARTICLE IV

CD - CONSERVATION DESIGN OVERLAY DISTRICTS

SECTION 4.01 PURPOSE AND APPLICABILITY.

A. Purpose.

This Article provides standards for Open Space, density, building size, site layout and lot layout for each of the underlying zoning districts in the Conservation Design Overlay District established by Article III, Section 3.12 of This Ordinance. The purpose of these regulations is to achieve a balance between well-designed residential development, meaningful conservation of Open Space, and natural resource protection in the Township's rural countryside by using Conservation Design to create subdivisions. These regulations apply to all properties within the OS and RF districts, which encompass most of the area described in the Middlesex Township Comprehensive Plan as the "Rural Area" and "Low-Density Residential". The use of Conservation Design is intended to preserve tracts of environmentally and scenically significant undeveloped land in the "rural" part of Middlesex Township, including road corridors and riparian buffer areas, in order to implement the Comprehensive Plan's goal of "providing for reasonable amounts and distribution of residential and nonresidential land uses in attractive and well-located settings and protecting sensitive natural, scenic and cultural resources". Using Conservation Design to create subdivisions results in preservation of contiguous Open Spaces and important scenic and environmental

resources, while allowing compact design with more design flexibility than conventional subdivisions.

B. Specific Intent.

In addition to the objectives established in Article I herein and in conformance with the Pennsylvania Municipalities Planning Code (Act of 1968, P.L.K. 805, No. 247 as reenacted and amended), it is the specific intent of the Conservation Design Overlay District to:

- 1 . Conserve Open Space, including those areas containing unique and sensitive natural features such as woodlands, steep slopes, watercourses, floodplains and wetlands, by setting them aside from development.
- 2 . Allow innovation and greater flexibility in design of residential developments;
- 3 . Encourage a compact form of development, thus preserving Open Space as undeveloped land;
- 4 . Reduce erosion and sedimentation by the retention of existing vegetation, and the minimization of development on steep slopes;
- 5 . Increase public safety and welfare through street design that results in slower driver speeds and reduced accidents;
- 6 . Create residential communities with direct visual access to Open Space.
- 7 . Provide for the conservation and maintenance of Open Space within the municipality to achieve the above-mentioned goals and for active or passive recreational use by residents.
- 8 . Conserve scenic views and elements of the Township's rural character, and to minimize perceived density, by minimizing views of new development from existing roads.
- 9 . Encourage efficient use and expansion of infrastructure for public sewer and water services.
10. To assure that the provisions of the Middlesex Township Zoning Ordinance, which are concerned in part with the uniform treatment of dwelling type, bulk, density, intensity, and permanent Open Space required within each zoning district, shall not be applied in a manner that would distort the objectives of said zoning ordinance.

C. Overview of Design Options.

Combining the Design Options. The various layout and density options described in this Article may be combined at the discretion of the Board of Supervisors upon recommendation of the Planning Commission, based upon demonstration by the applicant that such a combination would better fulfill the intent of the Township Comprehensive Plan and this Ordinance, in particular the stated purposes of this Article, as compared with applying a single option to the property.

In order to achieve these purposes, this Article provides for design flexibility in residential subdivisions by allowing the following residential design options in the OS Conservation / Open Space Districts and the RF Residential Farm Districts.

1. OS – Conservation / Open Space District

- (a) Option OS-1: Basic Conservation Design providing for residential uses with at least 60 percent Open Space.
- (b) Option OS-2: Conservation Lots providing for lower densities than Option OS-1 with no common open space required. This option is appropriate to rural areas with environmentally sensitive resources.

2. RF Residential Farm District

- (a) Option RF-1: Basic Conservation Design providing for residential uses with at least 50 percent Open Space.
- (b) Option RF-2: Residential Farm Estate Lots providing for lower densities than Option RF-1 with no common open space required. This option is consistent with the rural farming and low density residential character of these areas of the Township.

SECTION 4.02 GENERAL REGULATIONS.

The design of new subdivisions created under this Article shall be governed by the following minimum standards:

A. Ownership.

The property or land may be held in single and separate ownership or in multiple party ownership. However, when parcels are held in multiple party ownership, it shall be planned as a single entity with common authority and common responsibility.

B. Primary Conservation Area and Secondary Conservation Area Protection.

1. The proposed design shall strictly avoid development and disturbance of all Primary Conservation Areas, shall minimize development and disturbance of Secondary Conservation Areas so some are preserved and others may be developed, and shall be in compliance with the requirements of the Middlesex Township Subdivision and Land Development Ordinance Article XIII Improvement and Construction Assurances.
2. Demonstration by the developer, using the design process as regulated by Section 720 of the Middlesex Township Subdivision and Land Development Ordinance, that all Primary Conservation Areas will be protected by the proposed application shall be prerequisite to any approval of preliminary and/or final plan approvals.
3. Primary Conservation Areas.

Open Space should be delineated to include all Primary Conservation Areas and enough land containing secondary resources, called Secondary Conservation Areas, to equal or exceed the minimum open space requirement.

Primary Conservation Areas have been determined as inappropriate for development because they contain one or more of the following resources and shall be determined by the following criteria:

- a. Floodways as detailed on the most recently published national flood insurance program mapping by the US Federal Emergency Management Agency, as published from time to time.
- b. Floodplains or Special Flood Hazard Areas, as detailed on the most recently published national flood insurance program mapping by the US Federal Emergency Management Agency, as published from time to time.
- c. Wetlands as detailed on the most recently published National Wetlands Inventory mapping by the US Fish and Wildlife Service, as published from time to time; or as located by field wetland survey conducted by a qualified individual and verified by appropriate employees of the Pennsylvania Department of Environmental Protection or the US Army Corps of Engineers.

- d. Areas of steep slopes greater than twenty five percent (25%), as verified on final plan by field survey.

4. Secondary Conservation Areas.

Secondary Conservation Areas allowed as part of the required Open Space have been determined as important for preservation to the maximum extent possible because they contain one or more of the following resources and shall be determined by the following criteria:

- a. Areas of established wellhead protection zones.
- b. Mapped groundwater recharge areas of existing or potential groundwater supplies and surface water bodies as identified on Plate #2 in the addendum to the Groundwater Availability and Well Siting Study (Middlesex Township, Cumberland County, Pennsylvania; September 1999) or as changed based upon hydrogeologic and or other studies adopted by the Board of Supervisors from time to time.
- c. Areas where precipitation is most likely to recharge local groundwater resources because of topographic and soil conditions causing high rates of infiltration and percolation.
- d. Areas of watercourses without studied and defined floodways or floodplains.
- e. Other land subject to flooding (not including identified floodways, floodplains or special flood hazard areas), as detailed on the most recently published national flood insurance program mapping by the US Federal Emergency Management Agency, as published from time to time.
- f. Riparian buffer areas located parallel to and a minimum distance of seventy five (75) feet from each side of the top of banks of all watercourses (measured in a direction away from the watercourse, horizontally on a line parallel to the water surface in the watercourse, beginning at the top of the defined bank, at bankfull flow, with the location of the top of defined bank being reviewed by the Township Engineer and approved by the Board of Supervisors).

- g. Areas having wet soils, swales, springs and other lowland areas, including adjacent buffer areas which may be required to insure their protection.
- h. Areas of prime farmland soil, within capability Class I and Class II, as defined in the Soil Survey of Cumberland and Perry Counties, Pennsylvania, published by the USDA Soil Conservation Service, issued April 1986 and as amended from time to time.
- i. Areas of farmland soil of statewide importance, within capability Class III, as defined in the Soil Survey of Cumberland and Perry Counties, Pennsylvania, published by the USDA Soil Conservation Service, issued April 1986 and as amended from time to time.
- j. Areas of moderate to steep slopes from fifteen percent (15%) to twenty five percent (25%), particularly those adjoining watercourses and ponds, where disturbance and resulting soil erosion and sedimentation could be detrimental to water quality, but including all such areas of moderate to steep slopes.
- k. Areas of forested lands and healthy woodlands, particularly those performing important ecological functions such as soil stabilization and protection of streams, wetlands and wildlife habitats, but including all such areas of forested lands and healthy woodlands.
- l. Areas of hedgerows, groups of trees and large individual trees of botanic significance.
- m. Areas of other significant natural features including topographic or geologic features like rock outcroppings, caves or natural karst features.
- n. Areas of significant natural areas of species listed as endangered, threatened, or of special concern, such as those listed in the Statewide Natural Diversity Inventory.
- o. Areas of existing or potential wildlife habitats.
- p. Areas of park and recreation space designated for public use.
- q. Areas of historic structures and sites.

- r. Areas of greenways identified in Middlesex Township Comprehensive Plan and or other studies agreed upon by the Board of Supervisors from time to time.
- s. Areas of existing scenic views identified in Middlesex Township Comprehensive Plan and or other studies agreed upon by the Board of Supervisors from time to time.
- t. Areas containing or in proximity to existing trails connecting the property to other locations in Middlesex Township.
- u. Areas in proximity to or with logical relationship to other Open Space.

C. Required Permanently Protected Open Space Standards.

In addition to the Open Space Use Standards in Section 4.03 A.3. of this ordinance and the Open Space Design Standards in Section 4.03 A.4. of this ordinance, the following standards shall apply to required permanently protected Open Space areas within the conservation subdivision property.

The required permanently protected Open Space shall consist of a combination of Primary Conservation Areas, Secondary Conservation Areas and other lands within the conservation subdivision property.

The location, nature, configuration, and use of the required permanently protected Open Space shall be determined by Section 4.06 of this ordinance and the Resource Conservation and Open Space Delineation Standards in Article XII of the Middlesex Township Subdivision and Land Development Ordinance.

1. OS-1 Basic Conservation design option:

Under the OS-1 Basic Conservation design option, each property proposed for development as a conservation subdivision shall set aside a total minimum area of land on the conservation subdivision property equal to the sum of the Total Effective Area of Constrained Land, as described in Section 4.03 A. of this ordinance, plus at least 60% of the Adjusted Tract Area (hereafter ATA), as described in Section 4.03 B. of this ordinance, as the minimum required permanently protected Open Space.

Under the OS-1 design option, a minimum of two percent (2%) of the required permanently protected Open Space shall be developed and maintained as Common Greens, as defined in Section 2.03 of this ordinance.

2. OS-2 Conservation Lots design option:

Under the OS-2 Conservation Lots design option, there is no minimum required permanently protected Open Space.

3. RF-1 Basic Conservation design option:

Under the RF-1 Basic Conservation design option, each property proposed for development as a conservation subdivision shall set aside a total minimum area of land on the conservation subdivision property equal to the sum of the Total Effective Area of Constrained Land, as described in Section 4.03 A. of this ordinance, plus at least 50% of the Adjusted Tract Area (hereafter ATA), as described in Section 4.03 B. of this ordinance, as the minimum required permanently protected Open Space.

Under the RF-1 design option, a minimum of three percent (3%) of the required permanently protected Open Space shall be developed and maintained as Common Greens, as defined in Section 2.03 of this ordinance.

4. RF-2 Estate Lots design option:

Under the RF-2 Estate Lots design option, there is no minimum required permanently protected Open Space.

D. Uses Allowed.

Conservation subdivision shall only apply to residential Uses allowed in the underlying OS-Open Space/Conservation Districts and RF-Residential Farm Districts. No Special Exception Uses shall be allowed for conservation subdivision.

1. The Permitted Uses under the OS-1 and OS-2 design options are Residential Single Family Detached Dwellings. The Accessory Uses under the OS-1 and OS-2 design options are those allowed in the underlying OS Districts in Section 5.03 of this ordinance.
2. The Permitted Uses under the RF-1 and RF-2 design options are Single Family Detached Dwellings. The Accessory Uses under the RF-1 and RF-2 design options are those allowed in the underlying RF Districts in Section 6.03 of this ordinance.

E. Location of Community Wells and On-Lot Sewage Disposal Systems to Serve Conservation Subdivision.

In order to permit a conservation subdivision configuration, wells and on-lot sewage disposal systems permitted in accordance with regulations of the Pennsylvania Department of Environmental Protection (PA DEP) may be located in areas of either protected Open Space or other Open Space within the conservation subdivision property, provided that easements are provided for maintenance of these facilities and isolation distances between wells and on-lot sewage disposal systems are maintained in accordance with regulations of the Pennsylvania Department of Environmental Protection and Middlesex Township ordinances.

SECTION 4.03 CONSERVATION DESIGN STANDARDS AND METHODS.

A. Standards and Methods for Applying Density of Residential Dwelling Units.

1. Density: The maximum density of residential dwelling units in the conservation subdivision shall be based on the Adjusted Tract Area (ATA) of the conservation subdivision property. The maximum density, minimum lot area and minimum Open Space requirement for determining the number of permitted dwelling units in the Conservation Design Overlay District shall be as indicated below for each of the underlying districts:

TABLE 4.1 - DESIGN STANDARDS
OS – CONSERVATION / OPEN SPACE DISTRICTS

DESIGN REQUIREMENT	DESIGN OPTION OS-1: Basic Conservation	DESIGN OPTION OS-2: Conservation Lots
Maximum Density (only applied to Adjusted Tract Area)	0.250 dwelling units per acre	0.125 dwelling units per acre
Minimum Lot Area	1 acre	4 acres
Minimum Required Protected Open Space	Total Effective Area of Constrained Land + 60% of Adjusted Tract Area	NONE

TABLE 4.2 – DESIGN STANDARDS
RF – RESIDENTIAL FARM DISTRICTS

DESIGN REQUIREMENT	DESIGN OPTION RF-1: Basic Conservation	DESIGN OPTION RF-2: Estate Lots
Maximum Density (only applied to Adjusted Tract Area)	0.726 dwelling units per acre	0.36 dwelling units per acre
Minimum Lot Area	* 15,000 sq. ft	60,000 sq. ft.

Minimum Required Protected Open Space	Total Effective Area of Constrained Land + 50% of Adjusted Tract Area	NONE
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- * Unless lots can be configured so on-lot sewage disposal systems permitted in accordance with regulations of the Pennsylvania Department of Environmental Protection are located on easements in areas of protected Open Space in accordance with section 4.02 F. of this ordinance, public water & sewer facilities are required for all lots developed under RF-1 design option having areas less than the minimum lot area specified in Article VI, Section 6.05 of this ordinance for the RF Districts.

B. Standards and Methods for Calculating Maximum Possible Number of Dwelling Units Allowed on Conservation Subdivision Property.

Applicants shall use either of the two following methods to determine the maximum possible number of residential dwelling units allowed on the conservation subdivision property.

The actual maximum number of dwelling units on a conservation subdivision property may be less than calculated by using the methods described below, due to limiting factors such as primary conservation areas, required infrastructure improvement area or other limiting factors. At the discretion of the Board of Supervisors, the actual maximum number of dwelling units allowed within a conservation subdivision property may be increased by the application of Design Incentives detailed in Section 4.03. B.3. of this ordinance.

1. Adjusted Tract Area (ATA) Method:

Applicants using this method must understand in general that site constraints (as listed in Table 4.4) are features of the land that constrain or inhibit development. An increased amount of site constraints on the Conservation Design subdivision property will reduce the Adjusted Tract Area (ATA) and consequently may reduce the maximum number of residential dwelling units allowed on the Conservation Design subdivision property.

- a. Calculate the total effective area of constrained lands by multiplying the area of land in each site constraint type times the constraint factor for each site constraint type (as shown in Table 4.4) and adding up the resulting effective areas of constrained land

for each site constraint type. Where more than one type of constrained land overlaps, the constrained land with the higher constraint factor shall apply (see Exhibit A for calculation worksheet).

- b. Calculate the Adjusted Tract Area by subtracting the total effective area of all constrained lands from the total (gross) tract area of the entire proposed development tract.

TABLE 4.4 LIST OF CONSERVATION DESIGN SITE CONSTRAINT TYPES
AND SITE CONSTRAINT MULTIPLIER FACTORS.

SITE CONSTRAINT TYPE		CONSTRAINT MULTIPLIER FACTOR
1.	Land within rights-of-way of existing public streets or highways, or within the rights-of-way or easements for existing or proposed overhead utility lines.	1.00
2.	Land under existing private streets.	1.00
3.	Wetlands	0.95
4.	Floodway	1.00
5.	100 year Floodplain (non wetland portion)	0.50
6.	Slopes greater than 25%	0.80

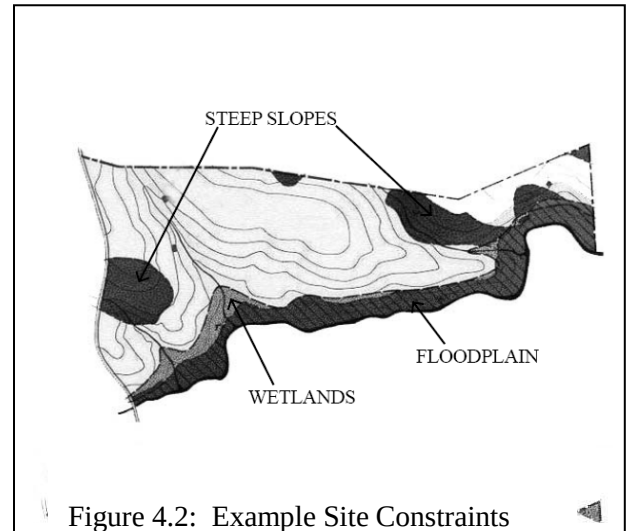
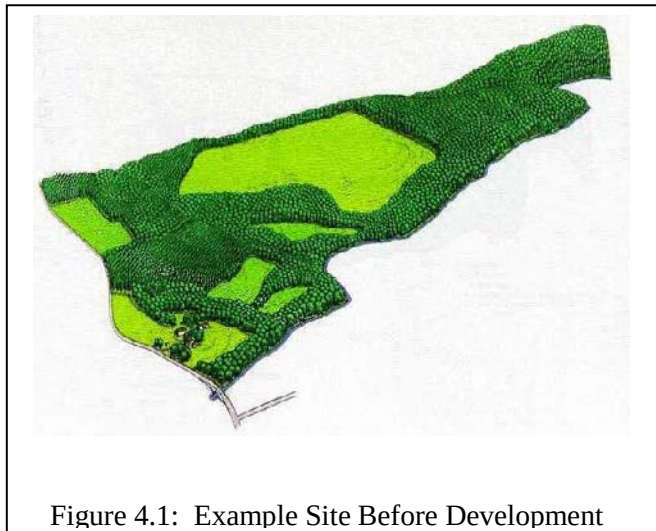
Formula: Adjusted Tract Area (ATA) =
Gross Tract Area – Total Effective Area of Constrained Lands

- c. Calculate the maximum possible number of residential dwelling units allowed on the Conservation Design subdivision property by multiplying the Adjusted Tract Area times the Maximum Density permitted within the Zoning District for the chosen option, as detailed in Section 4.03 of This Ordinance. Round down fractional units of 0.5 or less and round up fractional units greater than 0.5.

Formula: Adjusted Tract Area X Maximum Density (per Section 4.03 A.) =
Maximum Possible Number of Dwellings Units Allowed on Conservation Subdivision Property

EXAMPLE: Calculation of Maximum Possible Number of Dwelling Units allowed using the Adjusted Tract Area (ATA) Method for a Hypothetical Conservation Subdivision of a property containing 100 Acres of Gross Tract Area, under the RF-1 Option.

Figures 4.1 through 4.3 illustrate an example of maximum number of dwelling unit calculations on a hypothetical Conservation Subdivision using the RF-1 option in the RF District



Source: Natural Lands Trust.

Source: Natural Lands Trust.

Figure 4.3: Example Table Showing Calculation of Total Effective Area of Constrained Lands

Site Constraint Type	Area of Site Constraint (acres)	Site Constraint Multiplier Factor	Effective Area of Constrained Land (acres)
Wetlands	5.0	.95	4.75
Steep Slopes greater than 25%	6.0	.80	4.80
Floodway	1.8	1.00	1.8
Floodplains	14.0	.50	7.00
TOTAL EFFECTIVE AREA OF CONSTRAINED LANDS =			18.35 acres

Figure 4.4: FOR USE BY APPLICANTS – BLANK TABLE SHOWING
CALCULATION OF TOTAL EFFECTIVE AREA OF CONSTRIANED
LANDS

Site Constraint Type	Area of Site Constraint (acres)	Site Constraint Multiplier Factor	Effective Area of Constrained Land (acres)
Wetlands		.95	
Steep Slopes greater than 25%		.80	
Floodway		1.00	
Floodplains		.50	
TOTAL EFFECTIVE AREA OF CONSTRAINED LANDS =			acres

Formula: $\text{Total Effective Area of Constrained Lands} =$
 $\text{Sum of (Area of Site Constraint X Constraint Factor for each Site Constraint Type)}$

Example Adjusted Tract Area (ATA) Calculations:

ATA = 100 acres (gross tract area) – 18.35 acres (total effective area of constrained lands) = 81.65 acres

Formula: $\text{ATA} = \text{Gross Tract Area} - \text{Total Effective Area of Constrained Lands}$

Example Calculation of Maximum Possible Number of Dwelling Units:

(ATA) 81.65 acres X (Maximum Density in RF-1) 0.726 dwelling units per acre = 59 dwelling units.

Formula: $\text{Adjusted Tract Area X Maximum Density (per Section 4.03 A.)} =$
 $\text{Maximum Possible Number of Dwellings Units Allowed on Conservation Subdivision Property}$

2. Yield Plan Method.

Determination of the maximum possible number of dwelling units allowed using the Yield Plan method shall require an actual residential lot configuration using the minimum lot size required in the underlying zoning district, as demonstrated by an actual Yield Plan.

a. Yield Plan shall use the Existing Resources and Site Analysis Plan, prepared in accordance with Section 5.01 of the Middlesex Township Subdivision and Land Development Ordinance to identify all Primary Conservation Areas on the property; and shall demonstrate that these Primary Conservation Areas could be permanently preserved and not disturbed during the development process, by incorporating them into the proposed residential lots.

b. Yield Plan shall be drawn to scale and be based on a field survey. Yield Plan shall be a realistic lot configuration reflecting a development pattern that could reasonably be expected to be implemented, taking into account the presence of wetlands, floodplains, steep slopes, existing easements or encumbrances and, if no public sewer facilities are available to serve the property, the suitability of soils for individual on-lot soils-based sewage disposal systems.

c. Yield Plan shall meet the following specific requirements:

(1) Underlying Zoning District Standards:

The dimensional standards of the underlying zoning district shall be used in preparing Yield Plans for conservation subdivisions. The minimum lot areas as required in the underlying zoning district shall not include any areas of wetlands, steep slopes over twenty-five (25) percent, and land under high-tension electrical transmission lines (69kV or greater). In addition, not more than twenty-five (25) percent of the minimum lot areas as required in the underlying zoning districts shall consist of land within the one hundred (100) year floodplain.

(2) Subdivision and Land Development Ordinance Standards:

Yield Plans shall be prepared as conceptual lot configuration plans in accordance with standards in the

Middlesex Township Subdivision and Land Development Ordinance and shall include at least the following elements:

- (a) Proposed lots
- (b) Proposed and existing streets
- (c) Proposed and existing rights-of-way
- (d) Other features pertinent to developing a Yield Plan to show an actual residential lot configuration on the property.

(3) Individual Soils-Based On-Lot Sewage Disposal Systems.

- (a) On sites not served by public sewer facilities or community soil-based on-lot sewage disposal systems, the maximum possible number of dwelling units that could be developed on the property shall be further determined by evaluating the potential for providing individual soils-based on-lot sewage disposal systems permitted in accordance with regulations of the PA DEP; except that such systems proposing the use of sewage holding tanks, small flow treatment facilities, constructed wetland systems, spray irrigation systems or similar evapo-transpiration systems shall be excluded from consideration for the purposes of this evaluation.
- (b) Based on the Existing Resources Inventory Mapping and Site Analysis Report prepared in accordance with Section 5.01 of the Middlesex Township Subdivision and Land Development Ordinance and observations made during an on-site visit of the property, the Middlesex Sewage Enforcement Officer, after consultation with the Township Engineer or other consultants, shall select a ten percent (10%) sample of the lots considered marginal for individual soils-based on-lot sewage disposal systems permitted in accordance with regulations of the PA DEP. The applicant shall provide evidence that each of these lots has been tested in accordance with regulations of the PA DEP meet the standards for an individual soils-based on-lot sewage disposal system. Should any of the lots in a sample fail to meet the standards, those lots shall be eliminated from the Yield Plan. Then, a second ten percent (10%) sample of such lots

determined marginal for individual soils-based on-lot sewage disposal systems shall be selected by the Middlesex Township Sewage Enforcement Officer, after consultation with the Township Engineer or other consultants, and tested for compliance to the standards. This process shall be repeated until all lots in a given sample meet the standards for an individual soils-based on-lot sewage disposal system in accordance with regulations of the PA DEP.

3. Design Incentives that may increase the maximum possible number of dwelling units allowed on the Conservation Subdivision property.

After careful consideration, the Board of Supervisors may, at its sole discretion, allow the maximum possible number of dwelling units allowed on the Conservation Subdivision property to be increased by a maximum of ten percent (10%) above (rounded to the nearest whole dwelling unit) that calculated by the methods described in Section 4.03 B. of this ordinance, if it is demonstrated to the satisfaction of the Board of Supervisors that one or more of the following public benefits are achieved. Use of one of the following design incentives to increase the maximum possible number of dwelling units allowed on the Conservation Subdivision property may be applied only one time on the property and the following design incentive options may not be used in combination with each other.

- a. Conservation of large tracts of Open Space areas suitable for agricultural uses.
In order to allow and encourage both initial and continued agricultural uses of Open Space areas suitable for production of crops or livestock according to the following standards.
 - (1) The Open Space area proposed for agricultural use shall be contained entirely within the Conservation Subdivision property.
 - (2) All soils in all portions of the Open Space area proposed for agricultural use shall be in Cumberland County Soil Survey capability Class I, Class II or Class III.
 - (3) All portions of the Open Space area proposed for agricultural use shall be contiguous have a minimum area of at least forty (40) acres.

- (4) All portions of the Open Space area proposed for agricultural use shall be configured so that they are at least one hundred (100) feet in length when measured in any direction.
- (5) The decision whether to accept an applicant's offer to conserve large tracts of Open Space areas suitable for agricultural uses within a proposed conservation subdivision so the maximum possible number of dwelling units allowed on the Conservation Subdivision property can be increased by a maximum of ten percent (10%) shall be at the discretion of the Board of Supervisors, which shall be guided by the recommendations contained in the Middlesex Township Comprehensive Plan, other studies adopted by the Board of Supervisors from time to time, or recommendations of planning agencies including Federal, State or local agricultural agencies.

b. Open Space Land Made Available for Use by the General Public.

In order to encourage the dedication by easement or conveyance of Open Space areas to governmental bodies or private, public or semi-public organizations for use by the general public for active and passive recreation use according to the following standards.

- (1) The Open Space area proposed for recreation use shall be contained entirely within the Conservation Subdivision property.
- (2) Up to ten percent (10%) additional dwelling units may be allowed at the rate of one dwelling unit for each five acres of Open Space above the minimum amount of Open Space required in This Ordinance
- (3) Up to ten percent (10%) additional dwelling units may be allowed at the rate of one dwelling unit for each fifteen hundred (1500) feet unit length of recreational trail that is improved in a manner approved by the Board of Supervisors and made available for use by the general public.
- (4) The decision whether to accept an applicant's offer to dedicate additional Open Space land for recreation use or improve recreational trails for use by the general public

within a proposed subdivision in order to allow the maximum possible number of dwelling units allowed on the Conservation Subdivision property to be increased by a maximum of ten percent (10%) shall be at the discretion of the Board of Supervisors, which shall be guided by the recommendations contained in the Middlesex Township Recreation and Open Space Plan, recreation planning information in the Middlesex Township Comprehensive Plan or other recreation planning documents or studies, as adopted or accepted by the Board of Supervisors from time to time; particularly those sections dealing with active recreational facilities and passive trail networks.

C. Standards for Lot and Building Planning (Area and Bulk).

This section provides basic standards for lot layout and building size for residential lots in the conservation design overlay district. The standards for the location, required size and allowable uses of setbacks are addressed.

1. Design Process for Delineation of Open Space and Development Areas for all Conservation Design Overlay Districts. Conservation Subdivisions shall follow the four-step design process as described in Section 720 of the Subdivision and Land Development Ordinance. Applicants shall be required to document in sufficient detail compliance with the design process as described in the Subdivision and Land Development Ordinance.
2. Standards for Design Option OS-1 and Design Option RF-1:

DESIGN STANDARDS FOR LOT, BUILDING AND
YARD AREA AND BULK
OS-1 (BASIC CONSERVATION) AND RF-1 (BASIC
CONSERVATION)

LOT AND BUILDING DESIGN STANDARDS					
DESIGN OPTION	MINIMUM LOT AREA	MINIMUM LOT WIDTH (FEET)	MAXIMUM LOT COVERAGE (%)	MAX IMPERVIOUS AREA (%)	MAXIMUM BLDG. HEIGHT (FEET)
OS-1	1 ACRE *	150'	15%	25%	35'
RF-1	15,000 SQ. FT.	80'	25%	40%	35'

MINIMUM YARD DESIGN STANDARDS				
DESIGN OPTION	FRONT YARD (FEET)	SIDE YARD (FEET) ONE SIDE	SIDE YARD (FEET) TOTAL SIDES	REAR YARD (FEET)
OS-1	40'	20'	40'	45'
RF-1	35'	15'	30'	35'

* Minimum Lot Area subject to PA DEP approval for on-lot sewage disposal systems

- a. Design Option OS-1: In addition to the design standards in this section, all dwelling units and accessory buildings or structures must meet any additional the requirements in Article V pertaining to OS – Conservation / Open Space Districts and elsewhere in this Ordinance.
- b. Design Option RF-1: In addition to the design standards in this section, all dwelling units and accessory buildings or structures must meet any additional requirements in Article VI pertaining to RF – Residential Farm Districts and elsewhere in this Ordinance.

3. Standards for Design Option OS-1 and Design Option RF-1:

DESIGN STANDARDS FOR LOT, BUILDING AND YARD AREA AND BULK OS-2 (CONSERVATION LOTS) AND RF-2 (ESTATE LOTS)

LOT AND BUILDING DESIGN STANDARDS					
DESIGN OPTION	MINIMUM LOT AREA	MINIMUM LOT WIDTH (FEET)	MAXIMUM LOT COVERAGE (%)	MAX IMPERVIOUS AREA (%)	MAXIMUM BLDG. HEIGHT (FEET)
OS-2	4 ACRES *	300'	10%	20%	35'
RF-2	60,000 SQ. FT. *	150'	20%	30%	35'

MINIMUM YARD DESIGN
STANDARDS

DESIGN OPTION	FRONT YARD (FEET)	SIDE YARD (FEET) ONE SIDE	SIDE YARD (FEET) TOTAL SIDES	REAR YARD (FEET)
OS-2	50'	25'	50'	50'
RF-2	40'	20'	40'	45'

* Minimum Lot Area subject to PA DEP approval for on-lot sewage disposal systems

In addition to the design standards for Design Option OS-2 and Design Option RF-2 in this section, the following additional requirements shall apply.

- a. The developed area of the lot shall meet the additional setback standards listed in Section 4.05.E.
 - b. Dwellings and accessory buildings on Design Option OS-2 (conservation lots) and RF-2 (estate lots) shall not encroach upon Primary Conservation lands and should not infringe upon existing scenic views from exterior roads or from existing residential communities.
 - c. Resource Conservation and Open Space Delineation Standards in Article XIII of the Middlesex Township Subdivision and Land Development Ordinance shall be observed in the placement of buildings.
4. Other Lot and Building Planning Standards.
- Other Requirements. In addition to the building setback and yard requirements on individual lots, new structures shall meet the following standards; for minimum setbacks whether the adjacent use is on or off the site.
- a. All new dwellings shall be located not less than the following minimum distances from the following features:
 - (1) Planned rights-of-way for existing streets external to the development - 80 feet

- (2) Conservation subdivision property boundaries - 50 feet
 - (3) Cropland or pasture land in agricultural use - 100 feet
 - (4) Existing Buildings or barnyards capable of housing livestock - 200 feet
 - (5) Active recreation areas such as courts or playing fields (not including tot-lots) - 150 feet
- b. Views of residential lots from existing streets external to the development and for abutting properties shall be minimized by the use of changes in topography, existing vegetation, or additional landscaping which meets the landscaping requirements of the Subdivision and Land Development Ordinance.
- c. For subdivisions of five lots or more, except in the case of Conservancy Lots as detailed in Section 4.03 G.2.f. of this Ordinance, driveways shall be accessed from interior streets, rather than from roads bordering the tract.
- d. A combination of at least forty percent (40%) of all dwelling units shall either directly abut Open Space or the front façades of the dwellings shall directly face towards Open Space.
- e. Standards pertaining to the quantity, quality, configuration, ownership, and maintenance of the Open Space land specified herein and Article XII Section 720 of the Middlesex Township Subdivision and Land Development Ordinance shall apply.

D. Standards for Open Space Uses.

Open Space in a Conservation Subdivision shall meet the following standards:

1. Permitted Uses.

The following uses are permitted in required Open Space area(s):

- a. Conservation of open land in its natural state (for example, woodland, fallow field, or managed meadow), with routine maintenance by trimming and removal of nuisance grass, weeds or vegetation which are detrimental to the public health and welfare, as required in accordance with applicable township ordinances.

- b. Agricultural and horticultural uses, including raising crops or livestock, wholesale nurseries, and associated agricultural buildings and structures, that are specifically needed to support an active, viable agricultural or horticultural operation. Specifically excluded are residential dwellings, prohibited uses detailed in Section 14.17 of This Ordinance, uses which violate performance standards detailed in Section 14.18 of This Ordinance and commercial livestock operations involving swine, poultry, mink, and other animals in concentrations likely to produce highly offensive odors.
- c. Use as pastureland for horses. Equestrian facilities shall be permitted but may not consume more than eighty (80) percent of the minimum required Open Space.
- d. Forestry uses, in keeping with established best management practices for selective harvesting and sustained yield forestry.
- e. Low impact passive recreational uses of Open Space that benefit the conservation subdivision residents, such as village greens, commons, picnic areas, community gardens, trails, and similar low-impact passive recreational uses. Active Recreational uses of Open Space that have significant potential impacts to the conservation subdivision residents and the Open Space natural environment, such as use by motorized recreational vehicles, use for rifle or paintball ranges, and other uses similar in character and potential impact are specifically excluded unless approved by the Zoning Hearing Board.
- f. Active non-commercial recreation area uses, such as playing fields, playgrounds, courts, and bikeways, provided such areas do not consume more than half of the minimum required Open Space. Playing fields, playgrounds, and courts shall not be located within 100 feet of abutting properties. Parking facilities for the same shall also be permitted, and they shall generally be gravel-surfaced, unlighted, properly drained, provide safe ingress and egress, and meet all other parking space requirements in accordance with the Middlesex Township Subdivision and Land Development Ordinance.
- g. Golf course uses, may comprise up to 80 percent of the minimum required Open Space, but shall not include miniature golf.

Clubhouse facilities and parking areas shall not count toward the minimum required open space.

- h. Use for water supply, sewage disposal systems, and stormwater management areas, if designed, landscaped, and available for use as an integral part of the Open Space; subject to approval of the Board of Supervisors. No more than fifty percent (50%) of the minimum amount of Open Space required in Section 4.02 D. of this ordinance may be used for water supply, sewage disposal systems and stormwater management areas.
- i. Easements for drainage, access, sewer or water lines, or other public purposes.
- j. Underground utility rights-of-way shall be permitted in Open Space. Above ground utility and street rights-of-way may traverse Open Space, but the area of these easements and rights of way shall not count toward the minimum required Open Space.

E. Standards for Open Space Design.

- 1. Open Space should be delineated to include all Primary Conservation Areas and enough land containing secondary resources, called Secondary Conservation Areas, to equal or exceed the minimum open space requirement. Proposed Open Space above the minimum amount of Open Space required in This Ordinance need not include Secondary Conservation Areas. Proposed Open Space above the minimum amount of Open Space required in This Ordinance need not include Secondary Conservation Areas.
- 2. The Open Space shall be made up of either one contiguous area, or several non-contiguous areas within the conservation subdivision property. Open Spaces shall generally remain undivided and contiguous to the extent possible. To the extent possible, Open Spaces shall be a minimum of fifty (50) feet in any dimension.
- 3. Except for development under the OS-2 or RF-2 design options, in no case shall an area of land less than twenty five percent (25%) of the total area of Open Space required in Section 4.03 A. of this ordinance, be available for the common use and passive enjoyment of residents dwelling within the Conservation Subdivision property.

4. Under design options OS-2 and RF-2, wherein common Open Space is permitted, but not required, up to eighty percent (80%) of the Open Space may be set aside as undivided common Open Space for use by the residents of the subdivision or the public, if the developer so chooses.
5. At the sole discretion of the Board of Supervisors, the required Open Space created under design options OS-1 and RF-1 may be used to either partially or wholly satisfy the requirements of Section 705 of the Middlesex Township Subdivision and Land Development Ordinance pertaining to the Dedication of Park and Recreation areas and fees in lieu thereof.
6. Buffers for Adjacent Public Parkland: Where the proposed development adjoins public parkland, a natural Open Space buffer at least one-hundred-fifty (150) feet deep shall be provided within the development along its common boundary with the parkland, within which no new structures shall be constructed, nor shall any clearing of trees or understory growth be permitted, except as may be necessary for trail construction. Where this buffer is unwooded, the Board of Supervisors will require a vegetative screening to be planted, or that it be managed to encourage natural forest succession through "no-mow" policies and the periodic removal of invasive alien plant and tree species.
7. Open space greens, commons and squares shall have a minimum area of 0.1 acre and a maximum area of 1.0 acre. A village green shall preferably be surrounded by roads, or at a minimum, abut a road on at least one side for a length equal to 25 percent of its circumference.
8. No portion of any building lot may be used for meeting the minimum required Open Space, except in the case of Conservancy Lots as detailed in Section 4.03 G.2.f. of this Ordinance. However, active agricultural land with farm buildings, excluding areas used for residences, may be used to meet the minimum required Open Space.
9. Pedestrian and maintenance access, excluding those lands used for agricultural or horticultural purposes, shall be provided to Open Space land in accordance with the following requirements:
 - a. Whenever possible, dwelling units shall be located and sited so as to promote and maximize convenient pedestrian and visual access to Open Space.

- b. Access corridors between lots connecting Open Space areas to each other or to streets shall be a minimum of fifty feet (50') in width.
- c. Access to Open Space land used for agriculture may be appropriately restricted for public safety and to prevent interference with agricultural operations.

F. Permanent Open Space Protection Through Conservation Easements.

- 1. In Options OS-1 and RF-1, the required Open Space shall be subject to permanent conservation easements prohibiting future development and defining the range of permitted activities. Permitted uses of Open Spaces shall be in accordance with Section 4.07A herein. All permanent conservation easements shall be shown on plan.
- 2. In Options OS-2 and RF-2 where applicants opt to develop their properties at lower densities conforming to density standards as specified in Section 4.03, applicants shall place a restrictive conservation easement preventing future subdivision of the newly created parcel
- 3. Whenever the landowner is providing Conservation Design Overlay Districts Open Space land as part of the development, a conservation easement restricting such Conservation Design Overlay Districts Open Space land in perpetuity against further subdivision or development shall either, at the sole discretion of the Township, be executed between the landowner and the Township or between the landowner and a qualified land conservancy acceptable to the Township. Deed restrictions may also be used in limited applications as determined by the Board of Supervisors.

A. Conservation Easements. Conservation easements are required to protect Conservation Design Overlay Districts Open Space lands from further subdivision and development and to conserve the natural characteristics of such lands. Conservation easements shall conform to the following minimum requirements:

- 1. When easements are granted to a land conservancy, the grantee shall have the rights of reasonable entry and enforcement.

2. The property to be eased shall be described by metes and bounds, by an exhibit containing the subdivision plan and designating the property, and photographs which illustrate the nature and character of the property and any special environmental features identified by the Planning Commission during the subdivision process.
 3. Grantors shall declare that the terms of the easement shall run with the land and bind the property in perpetuity for the benefit of the grantee.
 4. The uses of eased property shall be limited by the uses only specifically permitted by this Ordinance. The following use restrictions shall also apply:
 - a. The property shall not be further subdivided.
 - b. Construction shall be permitted only in areas specifically designated in the property description and approved by the Board of Supervisors. The determination of the need for any additional disturbance shall lie with the Board of Supervisors.
 - c. Cutting and removing of vegetation including trees shall be permitted only to maintain the original characteristics of the land as defined in the property description and for compliance with the Management Plan, as well as for permitted construction activities.
 - d. Signs, fencing and dumping shall be restricted consistent with the permitted uses and natural characteristics of the property.
 5. In addition to the minimum requirements defined above, conservation easements shall contain whatever terms and restrictions are deemed appropriate by the Board of Supervisors given the particular conditions presented by each property. The Board of Supervisors shall be guided by the objectives set forth in the Municipal Comprehensive Plan and Open Space Plan.
 6. Provisions pertaining to remedies, liability, indemnification and other relevant subjects, shall be approved by the grantor, the Board of Supervisor and the authorized representative of the grantee before final approval of the development plan by the Board of Supervisors Body.
- B. Deed Restrictions. Deed restrictions may be used in the place of conservation easements only under the following circumstances and in accordance with the following standards:
1. When Conservation Design Overlay Districts Open Space land totals less than 5 acres, a deed restriction may be used.
 2. When applicable, where primary and secondary resources are located on individual residential lots, and if no entity is available or willing to

hold a conservation easement on such lots, a deed restriction may be used.

3. Restrictions, meeting approval of the Board of Supervisors, shall be placed in the deed for each lot with Conservation Design Overlay Districts Open Space land. The deed restriction shall ensure the permanent protection and continuance of the Conservation Design Overlay Districts Open Space land and shall define permitted uses.
4. It shall be clearly stated in the individual deeds that maintenance responsibility for the Conservation Design Overlay Districts Open Space land lies with the property owner.

G. Ownership of Open Space and Associated Common Facilities.

1. Development Restrictions. All Open Space shall be permanently restricted from future subdivision and development. Under no circumstances shall any development be permitted in the Open Space at any time, except for those uses listed in Section 4.05 A.
2. Ownership Options. The following methods may be used, either individually or in combination, to own Open Space and associated common facilities. Common facilities shall not be transferred to another entity except for transfer to another method of ownership permitted under this section, and then only when there is no decrease in the common facilities or in the Open Space ratio of the overall development. Ownership methods shall conform to the following:
 - a. Fee Simple Dedication to Middlesex Township. Middlesex Township may, but shall not be required to, accept any portion of the common facilities, provided that all the following apply:
 - (1) There is no cost of acquisition to Middlesex Township.
 - (2) Middlesex Township agrees to and has access to maintain such facilities.
 - b. Condominium Association. Open Space and associated common facilities may be controlled through the use of condominium agreements. Such agreements shall be in accordance with relevant state law. All open land and common facilities shall be held as "common elements" under condominium agreements.

- c. Homeowners' Association. Open Space and associated common facilities may be held in common ownership by a homeowners' association, subject to all of the provisions for homeowners' associations set forth in federal, state or local regulations, statutes and ordinances. In addition, the following regulations shall apply:
- (1) The applicant shall provide Middlesex Township a description of the organization of the proposed association, including its by-laws, and all documents governing ownership, maintenance, and use restrictions for common facilities.
 - (2) The proposed association shall be established by the owner or applicant and shall be operating (with financial subsidization by the owner or applicant, if necessary) before the sale of any dwelling units in the development.
 - (3) Membership in the association shall be automatic and mandatory for all purchasers of dwelling units in the conservation subdivision and their successors in title.
 - (4) The association shall be responsible for maintenance and insurance of Open Space and associated common facilities.
 - (5) The by-laws shall confer legal authority on the association to place a lien on the real property of any member who falls delinquent in his dues. Such dues shall be paid with the accrued interest before the lien may be lifted.
 - (6) Written notice of any proposed transfer of Open Space and associated common facilities by the association; or the assumption of maintenance for Open Space and associated common facilities, must be given to all members of the association and to Middlesex Township no less than thirty (30) days prior to such event.
 - (7) The association shall have adequate staff to administer, maintain, and operate such Open Space and associated common facilities.

- d. Private Conservation Organization. With permission of Middlesex Township, an owner may transfer either fee simple title of the Open Space, or easements on the Open Space, to a private non-profit conservation organization provided that:
- (1) The conservation organization is acceptable to Middlesex Township and is a bona fide conservation organization intended to exist indefinitely.
 - (2) The conveyance contains appropriate provisions for proper reverter or retransfer in the event that the organization becomes unwilling or unable to continue carrying out its functions;
 - (3) The Open Space is permanently restricted from future development through a conservation easement and Middlesex Township is given the ability to enforce these restrictions.
 - (4) A maintenance agreement acceptable to Middlesex Township is established between the owner and the organization.
- e. Dedication of Easements to Middlesex Township. Middlesex Township or an Authority as it's designee may, but shall not be required to, accept easements for public use of any portion of the common land or facilities. In such cases, the facility remains in the ownership of the condominium association, homeowners' association, or private conservation organization while the easements are held by Middlesex Township. In addition, the following regulations shall apply:
- (1) There shall be no cost of acquisition to Middlesex Township.
 - (2) Any such easements for public use shall be accessible to the residents of Middlesex Township.
 - (3) A satisfactory maintenance agreement shall be reached between the owner and Middlesex Township.

f. Conservancy Lots.

After careful consideration, the Board of Supervisors may, at its sole discretion, allow up to eighty percent (80%) of the required Open Space on a Conservation Subdivision property to be included within one or more large non-building lots that are not designed or approved for construction of any residential dwellings, according to the following standards.

- (1) The Open Space areas proposed for non-common private ownership shall be contained entirely within the Conservation Subdivision property.
- (2) All portions of the Open Space areas proposed for non-common private ownership shall be contiguous.
- (3) The Open Space areas proposed for non-common private ownership shall have a combined minimum area of at least ten (10) acres.
- (4) Any of the uses listed in Section 4.06 A. of this ordinance shall be allowed on the Open Space areas proposed for non-common private ownership.
- (5) Open Space areas configured in large lots proposed for non-common private ownership shall be permanently restricted from future construction of residential dwellings or other development or use, except those specifically allowed by Section 4.06 A. of this ordinance through a conservation easement. In addition to other parties, Middlesex Township Board of Supervisors shall be specifically granted the legal right to enforce these restrictions.
- (6) The decision whether to accept an applicant's offer to use Open Space areas configured in large lots proposed for non-common private ownership to meet the minimum amount of required Open Space on a Conservation Subdivision property, and the percentage of such large lots allowed to meet up to 80 % of the minimum amount of required Open Space on a Conservation Subdivision property, shall be at the sole discretion of the Board of Supervisors.

H. Maintenance of Open Space and Associated Common Facilities.

1. Unless otherwise agreed to by the Board of Supervisors, the cost and responsibility of maintaining common facilities and Open Space shall be borne by the property owner, condominium association, homeowners' association, or conservation organization.
2. The applicant shall, at the time of preliminary plan submission and at the time of final plan submission, provide a plan for maintenance of Open Space and operation of associated common facilities in accordance with the following requirements:
 - a. The Plan shall define ownership.
 - b. The Plan shall establish necessary regular and periodic operation and maintenance responsibilities for the various kinds of Open Spaces (i.e. lawns, playing fields, meadow, pasture, cropland, woodlands, etc).
 - c. The Plan shall estimate staffing needs, insurance requirements, and associated costs, and define the means for funding the maintenance of the Open Space and operation of any common facilities on an on-going basis. Such funding plan shall include the means for funding long-term capital improvements as well as regular yearly operating and maintenance costs. At Middlesex Township's discretion, the applicant may be required to escrow sufficient funds for the maintenance and operation costs of common facilities for a one year period.
 - d. Any changes to the maintenance plan shall be approved by the Board of Supervisors.
 - e. The plan shall, when including stormwater management facilities as an integrated part of the Open Space, include any applicable Township or PA DEP requirements for proper maintenance and operation of stormwater management facilities.
 - f. In the event that the organization established to maintain the Open Spaces and the common facilities, or any successor organization thereto, fails to maintain all or any portion thereof in reasonable order and condition, Middlesex Township may assume

responsibility for maintenance, in which case any escrow funds may be forfeited and any permits may be revoked or suspended.

- g. Middlesex Township may enter the premises and take corrective action, including extended maintenance. The costs of such corrective action may be charged to the property owner, condominium association, homeowner's association, conservation organization, or individual property owners who make up a condominium or homeowners' association and may include administrative costs and penalties. Such costs shall become a lien on said properties. Notice of such lien shall be filed by Middlesex Township in the office of the Prothonotary of Cumberland County.

E. Article V, OS-Conservation/Open Space District, is hereby amended as follows:

- 1. Sections 5.01 and 5.02 are hereby amended in their entirety to provide as follows:

SECTION 5.01 - INTENDED PURPOSE. The regulations of this zoning district are designed to protect areas in the Township for the preservation and conservation of the natural environment and to permit and encourage the retention of Open Space land including floodplain areas of watercourses, riparian buffers, the scenic views of the ridge top of the north mountain and Open Space land uses located to constitute a harmonious and appropriate part of the physical development of the Township.

The boundary of the riparian buffer conservation areas within the OS Districts shall be all those areas located parallel to and a minimum distance of seventy five (75) feet from each side of the top of banks of all perennial watercourses within the Township; measured in a direction away from the perennial watercourse, horizontally on a line parallel to the water surface in the perennial watercourse, beginning at the top of the defined bank at bankfull flow, with the location of the top of defined bank being reviewed by the Township Engineer and approved by the Board of Supervisors; is deemed to be the established boundary of such riparian buffer conservation areas within the OS district, unless shown otherwise on the Zoning Map by location or dimension thereof. No buildings shall be constructed, or impervious areas shall be created within the riparian buffer conservation area and no land disturbance or woodland disturbance, except regulated activities permitted by the State (i.e. permitted stream or wetland crossing), provision for unpaved trail access, selective removal of a safety hazard, removal of diseased trees, invasive or noxious plant species, vegetation management in accordance with a Township approved landscaping plan or open space management plan

or a soil or stream conservation project, including reforestation and stream bank stabilization approved by the Township, County, State or Federal governments. When a subdivision or land development is proposed and there is no established vegetated or wooded riparian buffer, forested and unforest vegetation shall be established through natural succession, by selective planting or vegetation to stimulate growth of native species and discourage invasive species. Planting selection and planting in the riparian buffer conservation area shall be in accordance with riparian forested buffer guidance published by the Township, County, State or Federal governments.

The boundary of the North Mountain Conservation Area within the OS District shall be all those areas located partially or completely on the North Mountain, as designated on the Middlesex Township Zoning Map. Permitted structures, including accessory structures, shall have the highest elevation of their roofs sited entirely below the lowest point on the nearest ridge top or high ground, that is included in an arc defined by an angle with its apex at the structure and its two sides on lines extending 15 degrees west of north and 15 degrees east of north as shown in Figure 5.1.

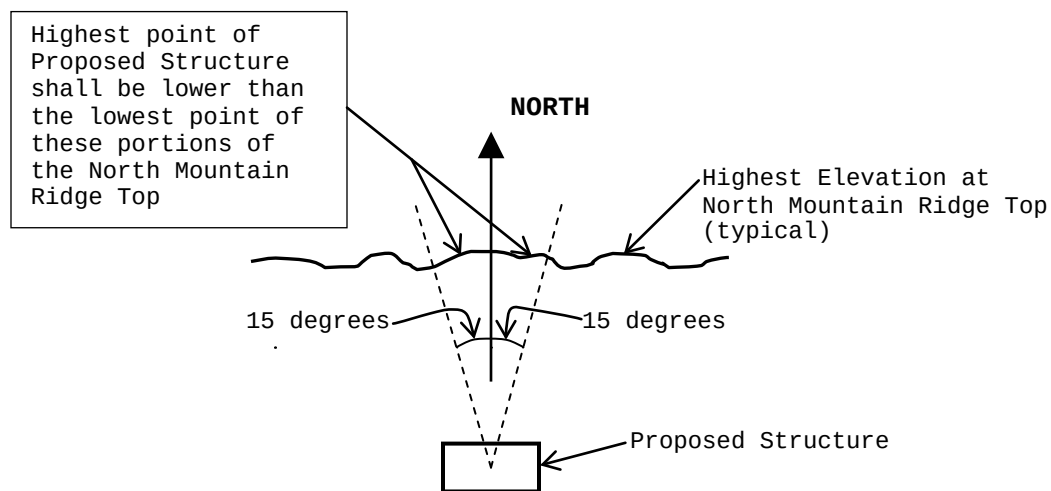


Figure 5.1

Similarly, no expansion, alteration, modification, or reconstruction of any existing use or structure shall be permitted where such expansion, alteration, modification, or reconstruction results in an increase in the elevation of any portion of the roof of the structure above the elevation measured as described above. Where the applicant contends that the siting of structures entirely below the lowest point on the nearest ridge top or high ground, as provided for above, is not feasible, the applicant shall include with submitted plans one or more of the following mitigative design techniques as deemed appropriate by the Township Board of Supervisors:

- a. Demonstration that existing vegetation to remain on nearby high ground forms an effective backdrop behind the proposed construction and that the height of the backdrop vegetation is higher than any proposed rooftop elevation.
- b. Siting of buildings so as to minimize prominence from the perspective of public views (for example, short side/end facing toward prominent view).
- c. Submission of landscaping plans demonstrating an effective buffer or visual screen of views from public roads. Introduced landscape buffer or visual screen shall be comprised primarily of native plant material designed to be compatible with the existing landscape.

Alteration of natural ridge tops within the North Mountain Conservation Area through grading or earthmoving shall be avoided. Where the applicant can demonstrate to the satisfaction of the Township Board of Supervisors that such grading cannot be avoided, it shall be minimized to the greatest extent possible. In all cases, grading or disturbance of the site shall be in conformance with the steep slope protection and other applicable standards of this ordinance or other applicable Township Ordinances. No woodlands shall be cleared, altered, or disturbed within thirty-five (35) vertical feet of the elevation of the highest ground point of the ridge top except for the following:

- a) Trees expressly grown for or by commercial nurseries, fruit orchards, and Christmas tree farms.
- b) Trees removed in conjunction with farmland greater than five (5) acres in size that will be actively devoted primarily to agricultural uses and that yield a minimum annual gross income of five hundred (500) dollars from said farming activities,
- c) Any tree which is located within a cemetery.
- d) Trees directed to be removed by Township, County, State, or Federal authority pursuant to law.
- e) Removal of trees which are dead or dying, diseased trees, trees which have suffered damage, or any tree whose angle of growth makes them a hazard to structures, roads, or human life.
- f) Removal of trees which appear to cause structural damage to buildings or foundations.
- g) Pruning or removal of trees within the right-of-way by utility companies for maintenance of utility wires or pipelines and the pruning of trees within sight easements.
- h) Non-native and invasive species.
- i) Removal of trees less than one (1) year in age.

Unless undertaken as a Township Board of Supervisors approved timber harvesting operation, no more than twenty-five (25) percent of woodlands and hedgerows shall be regraded, cleared, built upon or otherwise altered or disturbed for residential uses and/or shall be cleared, altered, or disturbed on a site located partially or completely within the North Mountain Conservation Area. Selective forestry cutting (not clear cutting) with minimal impacts consistent with the minimum forest practices (Section 6) of the Pennsylvania Model Forestry Regulations published by the Penn State School of Forest Resources, as amended from time to time, (copy available at the township building), clearings for public utility crossings, provision for unpaved trail access, selective removal

of a safety hazard, removal of diseased trees, invasive or noxious plant species, vegetation management in accordance with a Township Board of Supervisors approved landscaping plan, open space management plan or a soil or forestry conservation project, including reforestation approved by the Township, County, State or Federal government are permitted. When a subdivision, land development, building or structure construction or alteration to existing buildings or structures is proposed, to the extent possible as determined prior to construction by required plan review by the Township Zoning Officer or designated Township staff and after construction by inspection of the Township Zoning Officer or designated Township staff prior to issuance of use and occupancy permit for the buildings or structure, exterior features of all residential and non-residential buildings and structures including roofs, shall be of natural colored wood or stone or materials that are permanently colored in dark neutral and /or natural earth colors to blend into the existing character of the North Mountain Conservation Area surrounding the buildings or structures. Plant selection and planting shall be in accordance with the most recent forestry management guidance published by the Township, County, State or Federal governments. Native plant species compatible with the existing landscape shall be given preference when replanting disturbed vegetated and/or forested areas within the North Mountain Conservation Area.

All uses within the OS District shall be subject to the regulations set forth below.

SECTION 5.02 - PERMITTED USES. Within the OS District shown on the Zoning Map, the following uses shall be permitted as a matter of right:

- A. Single family detached dwellings, developed in accordance with the requirements of Article V for the OS Districts except as follows:
 - 1. This use shall be developed on tracts of land containing twelve (12) acres or more of gross land area, on the effective date of this ordinance, as a conservation subdivision in accordance with the requirements of Article IV – Conservation Design Overlay Districts and applicable standards including Section 720 and Article XII of the Middlesex Township Subdivision and Land Development Ordinance
 - 2. This use may be developed on tracts of land containing less than twelve (12) acres of gross land area, on the effective date of this ordinance, in accordance with the regulations established in Section 5.05 herein, or may be developed as a conservation subdivision in accordance with the regulations in Article IV – Conservation Design Overlay Districts and applicable standards including Section 720 and Article XII of the Middlesex Township Subdivision and Land Development Ordinance
 - 3. This use may be developed on tracts of land containing more than thirty (30) acres of gross land area, on the effective date of this ordinance, in

accordance with the regulations established in Section 6.05 herein for a one time or cumulative subdivision of up to four (4) lots after the effective date of this ordinance, intended to be conveyed to the property owner or a member of the property owner's immediate family (brother, sister, son, daughter, stepson, stepdaughter, grandson, granddaughter, father, or mother of the property owner) for construction of a residential dwelling to be occupied by the property owner or the property owner's immediate family, or may be developed as a conservation subdivision in accordance with the regulations in Article IV – Conservation Design Overlay Districts and applicable standards including Section 720 and Article XII of the Middlesex Township Subdivision and Land Development Ordinance

- B. Public or privately owned Open Space comprising a portion of a residential conservation subdivision development as specified in Section 5.02.A. above and in accordance with the requirements of Article IV – Conservation Design Overlay Districts.
- C. Public conservation areas and structures for the conservation of open space, water, soil and wildlife resources.
- D. Public park and recreation areas, game refuges and similar non-intensive public uses.
- E. Agriculture, horticulture, truck gardening and nurseries.
- F. Municipal and public utility buildings and structures where operational requirements necessitate locating within the district.
- G. Forestry (See Section 14.53)
- H. Keeping of horses, providing that not less than thirty thousand (30,000) square feet of Open Space land area is provided for each horse kept, that horse stables are located at least one hundred (100) feet from any lot line or principal building and that no storage of manure or of odor or dust-producing substances or materials shall be permitted within one hundred (100) feet of any principal building or adjoining lot line.

2. The Table of lot requirements contained as part of Section 5.05.A is hereby amended to provide for all uses a maximum lot coverage of 10%, a minimum front yard requirement of 50 feet, a minimum side yard requirement of 25 feet, minimum required total side yards of 50 feet and a minimum rear yard requirement of 50 feet.

3. Section 5.05.B is hereby amended to provide as follows:

- B. Impervious Area. The maximum impervious area permitted on any lot is twenty percent (20%) of the total lot area.

F. Article VI, RF-Residential Farm Districts, Section 6.02, is hereby amended in its entirety as follows:

SECTION 6.02 - PERMITTED USES.

Within the RF District shown on the Zoning Map, the following uses shall be permitted as a matter of right:

- A. Single family detached dwellings, developed in accordance with the requirements of Article VI for the RF Districts except as follows:
 - 1. This use shall be developed on tracts of land containing eight (8) acres or more of gross land area, on the effective date of this ordinance, as a conservation subdivision in accordance with the requirements of Article IV – Conservation Design Overlay Districts and applicable standards including Section 720 and Article XII of the Middlesex Township Subdivision and Land Development Ordinance
 - 2. This use may be developed on tracts of land containing less than eight (8) acres of gross land area, on the effective date of this ordinance, in accordance with the regulations established in Section 6.05 herein, or may be developed as a conservation subdivision in accordance with the regulations in Article IV – Conservation Design Overlay Districts and applicable standards including Section 720 and Article XII of the Middlesex Township Subdivision and Land Development Ordinance
 - 3. This use may be developed on tracts of land containing more than thirty (30) acres of gross land area, on the effective date of this ordinance, in accordance with the regulations established in Section 6.05 herein for a one time or cumulative subdivision of up to four (4) lots after the effective date of this ordinance, intended to be conveyed to the property owner or a member of the property owner’s immediate family (brother, sister, son, daughter, stepson, stepdaughter, grandson, granddaughter, father, or mother of the property owner) for construction of a residential dwelling to be occupied by the property owner or the property owner’s immediate family, or may be developed as a conservation subdivision in accordance with the regulations in Article IV – Conservation Design Overlay Districts

and applicable standards including Section 720 and Article XII of the Middlesex Township Subdivision and Land Development Ordinance

- B. Public or privately owned Open Space comprising a portion of a residential conservation subdivision development as specified in Section 6.02.A. above and in accordance with the requirements of Article IV – Conservation Design Overlay Districts.
- C. Crop and tree farming, pasturing, truck gardening, horticulture, greenhouses, nurseries, aviaries, hatcheries, apiaries and similar enterprises.
- D. Raising and keeping of poultry, rabbits, goats and similar animals.
- E. General and specialized farms, including the raising, keeping and breeding of livestock for gain (including cattle, hogs, horses, ponies, cows, sheep and similar livestock) upon a parcel of land having an area of not less than five (5) acres, subject to the following regulations:
 - 1. No building in which farm animals are kept shall be closer than one hundred (100) feet to any adjoining lot line.
 - 2. No storage of manure or of odor or dust-producing substances or materials shall be permitted within one hundred (100) feet of any adjoining lot line.
- F. Public conservation areas and structures for the conservation of open space, water, soil, forest and wildlife resources.
- G. Public park and recreation areas, forest reserves, camps, game refuges and similar non-intensive public uses.
- H. Public schools and municipal buildings. (See Section 14.29)
- I. Municipal and public utility buildings and structures where operational requirements necessitate locating within the district.
- J. Forestry (See Section 14.53)
- K. Keeping of horses, providing that not less than thirty thousand (30,000) square feet of Open Space land area is provided for each horse kept, that horse stables are located at least one hundred (100) feet from any lot line or principal building and that no storage of manure or of odor or dust-producing substances or materials shall be permitted within one hundred (100) feet of any principal building or adjoining lot line.

G. Article XIV, Supplementary Regulations, Section 14.01, is hereby amended in its entirety as follows:

SECTION 14.01 – ACCESSORY BUILDINGS AND STRUCTURES.

- A. An accessory building or structure not attached to the principal structure may be located in any required side or rear yard provided:
 - 1. Such buildings or structures shall not exceed one story or be more than fifteen feet (15') in height.
 - 2. All such buildings or structures taken together shall not occupy more than thirty percent (30%) of the area of the required rear or side yard where so located.
 - 3. Such buildings or structures shall not exceed 384 square feet (16' x 24') in floor area.
 - 4. Accessory buildings or structures in residential districts shall be located no closer than ten feet (10') from any side or rear lot line. Accessory buildings or structures for principal uses other than residential shall be located no closer than fifteen feet (15') to any side or rear property line abutting a residential district or lot used for residential purposes.
- B. When an accessory building or structure is attached to the principal building it shall comply in all respects with the requirements of this Ordinance applicable to the principal building.
- C. An accessory building or structure on that portion of a lot not included in any required yard shall conform to the height regulations for principal buildings or structures.
- D. No accessory building or structure shall project nearer to the street on which the principal building fronts than the minimum building setback distance for the principal building.
- E. All accessory buildings or structures in excess of 384 square feet must comply with the building setbacks for the zoning district in which it is located as well as the Township Building Code.
- F. Buildings or structures originally designed for transportation after fabrication on streets and highways on their own wheels and arriving at the site where they are to be utilized complete and ready for use except for minor and incidental unpacking and assembly operations, location on jacks or permanent foundations,

connection to utilities and the like, including but not limited to buildings or structures originally designed as mobile homes, as vans, as trailers, or as busses, are not permitted as accessory buildings or structures.

SECTION 3: The Tables of Contents for both the Subdivision and Land Development Ordinance and the Zoning Ordinance are hereby amended to include reference thereto to the Sections and titles thereof amended and established by this Ordinance with all page citations being amended accordingly.

SECTION 4: Except only as amended, modified and changed herein the Middlesex Township Subdivision and Land Development Ordinance and the Middlesex Township Zoning Ordinance as originally enacted and as previously amended shall remain in all other respects in full force and effect.

SECTION 5: If any section, sub-section, provision, regulation, limitation, restriction, sentence, clause, phrase or word in this Ordinance is declared by any reason to be illegal, unconstitutional, or invalid by any court of competent jurisdiction, such decision shall not effect or impair the validity of this or the Middlesex Township Subdivision and Land Development Ordinance or the Middlesex Township Zoning Ordinance as a whole, or any other section, sub-section, provision, regulation, limitation, restriction, sentence, clause, phrase, word or remaining portion of this Ordinance or the Middlesex Subdivision and Land Development Ordinance or the Middlesex Township Zoning Ordinance.

SECTION 6: This Ordinance shall become effective in accordance with applicable law.

ORDAINED AND ENACTED this 26th day of September, 2008.

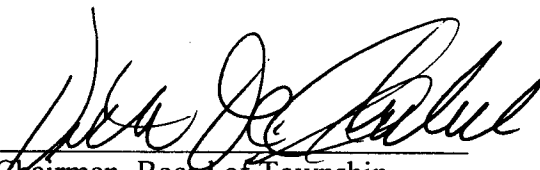
ATTEST:

TOWNSHIP OF MIDDLESEX


Township Secretary

(Township Seal)

By:


Chairman, Board of Township
Supervisors