

**CHAPTER XIV-A**  
**"OSN-PUD" - OPEN SPACE NEIGHBORHOOD**  
**PLANNED UNIT DEVELOPMENT DISTRICT**

(Ord. No. 02-03; 08/01/02)

(Ord. No. 06-01; 02/26/06)

(Ord. No. 09-01; 3/31/09)

**SECTION 14A.01 PURPOSE**

It is the intent of this Chapter to offer an alternative means of developing residential property through the use of an Open Space Neighborhood Planned Unit Development (OSN-PUD). The OSN-PUD is a zoning district for master planned residential communities in which the most important design feature is the identification and inclusion of land that is to be preserved or created as open space. Most dwellings would abut this permanently preserved open space in order to provide views and access for residents.

It is understood that this Chapter sets forth requirements pertaining to the design of an Open Space Neighborhood via the Planned Unit Development process. As with any land use planning endeavor, proper yet visionary community design is essential. However, it is also understood that the property being planned for an OSN-PUD must still be legally divided into lots, either via the platting, condominium, or site condominium process. As such, certain engineering realities should be expected during the OSN-PUD design process, particularly when addressing mandatory public utility extensions, stormwater management, and onsite grading work.

Some degree of flexibility is permitted in the use, height, bulk and placement requirements for OSN-PUD developments, but it is also intended that each OSN-PUD district will complement uses that are near and adjacent to the OSN-PUD district. The OSN-PUD District is intended for the following purposes:

- (1) Implementing the goals and objectives of the Township's Master Plan relating to preservation of open space, rural character, and natural resources while subsequently creating well-planned residential neighborhoods.
- (2) Encouraging the use of Township land in accordance with its character and adaptability;
- (3) Assuring the —preservation of open space and other natural resources and allowing for the continuation of viable farming activities.
- (4) Providing active and passive recreational areas within a reasonable distance of all residents of the OSN-PUD Development;
- (5) Encouraging the provision of open space of a useable size and design;

- (6) Allowing innovation and greater flexibility in the design of master planned residential developments;
- (7) Facilitating the construction and maintenance of streets, public utilities, and public services in a more economical and efficient manner;
- (8) Ensuring compatibility of design and use between neighboring properties and a density substantially consistent with that permitted in the OSN-PUD zoning district or as recommended by the current Master Plan;
- (9) Encouraging a more compact form of development, thus preserving open space as undeveloped land or as maintained recreational space;
- (10) Providing a road design that provides connections throughout the development, rather than utilizing numerous cul-de-sacs, and that provides traffic calming devices such as shorter street segments, 90° turns, irregular street patterns, narrower streets, and access to lots by shared drives and alleys.
- (11) Providing for neighborhood design which has a definable center and edges, and which provides pedestrian links throughout the site.
- (12) Preserving and restoring wildlife habitat and native biological diversity.
- (13) Utilizing the “toolbox” methodology quantified within this ordinance to thoroughly plan and design all onsite open space and built environment features, based in large part on the pre-existing strengths and weaknesses of a particular site.

This district is intended to both preserve and create the character of the Township through the design of master planned residential neighborhoods with significant and supporting open space. It is the intent of these regulations to produce a development substantially consistent with generally accepted Alpine Township Zoning Ordinance standards, yet to allow for modifications from the general standards to meet the overall design intent of this Ordinance.

Zoning decisions made pursuant to this chapter shall give due consideration to the maintenance of reasonable conditions for OSN-PUD's with regard to density of land uses, general appearance and character of the OSN-PUD, reasonable compatibility with nearby land uses, effects on values of surrounding lands, water supply and sanitary sewage disposal, stormwater management, ease of police and fire protection, traffic congestion, pedestrian safety, snow removal, blighting influences and other considerations pertaining to the possible effects of an OSN-PUD.

## **SECTION 14A.02 AUTHORIZATION AND PROCEDURE.**

An OSN-PUD zoning district and project may be approved by the Planning Commission and Township Board in accordance with the procedures of Chapter 22 of this Ordinance in any location which is recommended for Rural Agricultural or Low Density Residential uses by the Alpine Township Master Plan or is currently zoned for such uses.

## **SECTION 14A.03 OPEN SPACE CRITERIA.**

To be eligible for Open Space Neighborhood PUD consideration, the applicant must present a proposal for residential development that meets the following:

- A. Recognizable Benefits: An OSN-PUD shall result in recognizable and substantial benefits both to the residents of the project and to the overall quality of life in the Township. The benefits can be provided through site design elements in compliance with the requirements of this Ordinance, such as a combination of innovative architectural design and quality housing stock, distribution of lots which would not result in as desirable a development if developed separately, creative use of landscaping, sensitivity to adjacent residential land uses, unique site design features, preservation and restoration of natural features, preservation of viable farm land and the reasonable maintenance of rural appearance.
- B. Minimum Size: Qualifying parcels must be a minimum of five contiguous acres.
- C. Unified Control: The proposed development shall be under unified ownership or control, so that one person or entity has proprietary responsibility and the ability to provide for the full development of the project. The applicant shall provide sufficient documentation of ownership or control in the form of agreements, contracts, covenants, and/or deed restrictions indicating that the development will be completed in its entirety as proposed.
- D. Guarantee of Dedicated Open Space: Prior to any final rezoning approvals, the applicant shall provide an open space preservation and maintenance agreement, in a form acceptable to the Township, providing that all Dedicated Open Space (as referenced herein) portions of the development shall be permanently retired from future development and maintained in the manner approved by the Planning Commission and Township Board.

Documentation shall be in a form satisfactory to the Township Board and recorded so as to bind all successors and future owners in title to commitments made as part of the accepted project proposal. This provision shall not prohibit a transfer of ownership or control, provided notice of such transfer is provided to the Township and the Dedicated Open Space land uses continue as approved in the OSN-PUD plan, unless the Township Board approves an amendment.

The preservation and maintenance agreement must be approved by the Township

Board and may consist of covenants, conditions and restrictions that run with the land, a conservation easement established according to the Michigan Conservation and Historic Preservation Act, Public Act 197 of 1980, as amended, or another comparable substitute as determined by the Township Board.

The preservation and maintenance agreement shall:

- (1) Indicate the proposed uses and maximum intensity of use(s) within the Dedicated Open Space.
- (2) Require that the Dedicated Open Space be maintained by parties or entities that have an ownership interest in the open space.
- (3) Provide standards for scheduled maintenance of the Dedicated Open Space including necessary mowing, trash removal, irrigation, pruning of trees and new plantings to replace withered or dead materials.
- (4) Provide an administrative mechanism for maintenance to be undertaken by Alpine Township in the event that the Dedicated Open Space is inadequately maintained, as determined by the Township, and becomes a public nuisance. Provisions shall be made to ensure that any costs incurred by the Township to maintain shall be assessed or apportioned to the owners of the property within the OSN-PUD.
- (5) Provide a legal instrument to permanently retire all Dedicated Open Space areas from future development.

#### **SECTION 14A.04 PERMITTED USES.**

Land and buildings in an Open Space Neighborhood PUD may only be used for the following uses or combination of such uses:

- A Single family detached dwelling units.
- B. Duplexes: A building used or designed for two (2) dwelling units in which the dwelling units are occupied on a permanent basis for residential purposes by not more than two (2) families.
- C. Multi-family dwelling units up to four units per building and one story in height. Multi-family dwelling units shall not constitute more than 15% of the total dwelling units in an OSN-PUD.
- D. Other uses as may be allowed by the future land use category recommended in the Township Master Plan and the equivalent zoning district listed in Section 14A.08.
- E. Limited farming activities if conducted upon the Dedicated Open Space within the OSN-PUD. For purposes of this Section farming activities shall be limited to the

growth and sale of crops, fruits, and vegetables and the raising and keeping of farm animals.

- F. Golf courses, tennis courts, ball fields, bike paths, walking paths, playground, community buildings, and similar active and passive recreational facilities as well as day care facilities, provided such uses are accessory to the residential uses in the OSN-PUD and designed to be used primarily by residents of the OSN-PUD.
- G. Accessory uses, structures and buildings, which are customarily associated with the uses specified above, shall be permitted in accordance with Section 2.01 of this Ordinance unless specifically modified by the Planning Commission.
- H. Any On-Site Use Wind Energy System, including Structure-Mounted Wind Energy Systems, which is 65 feet or less in total height subject to Section 2.46 herein. (Ord. No. 09-01; 3/31/09)

#### **SECTION 14A.05 USES PERMITTED SUBJECT TO SPECIFIC AUTHORIZATION OF THE TOWNSHIP BOARD**

The following uses are also permitted within the OSN-PUD zone when specifically authorized by the Township Board upon the recommendation of the Planning Commission. The uses shall be developed in accordance with standards provided for PUDs and the specific standards applicable to each use as set forth elsewhere in this Ordinance, except that the Township Board in its discretion may vary those specific standards in order to achieve the intent and purpose of the PUD: (Ord. 06-01; 2/26/06) (Ord. No. 09-01; 3/31/09)

- (a) Housing for seniors or retired persons per Chapter 21 herein.
- (b) Any Wind Energy System, including Structure-Mounted Wind Energy Systems, which is greater than 65 feet in total height and Anemometer (MET) Towers subject to Section 21.09 herein. (Ord. No. 09-01; 3/31/09)

#### **SECTION 14A.06 DEVELOPMENT REQUIREMENTS**

The lot area, building setback, yard requirements, street frontage, and street widths applicable within an OSN-PUD shall be determined by the Planning Commission and Township Board in order to achieve the objectives of this section. However, each individual lot must be at least 65 feet in width from the front building setback throughout the remaining depth of an individual parcel. In addition, a diversity of lot sizes may be required in order to encourage variability in housing types and to avoid the monotonous repetition of static lot sizes often found in standard subdivisions.

When determining the development requirements noted in this section, the Planning Commission and Township Board shall act to carry out the site design principles found in Section 14A.06 through 14A.10. Other criteria that shall be used in making these determinations shall include the degree to which the proposed development addresses the following issues:

- A. The total number and type of dwelling units.
- B. Impact of the OSN-PUD on adjacent existing and future land uses.
- C. Preservation or restoration of existing vegetation or other natural features on site.
- D. Topography of the site.
- E. Provisions for public water, sanitary sewer and storm sewer services.
- F. Access for emergency vehicles to all dwellings.
- G. Preservation or creation of rural or village character of the Township.

#### **SECTION 14A.07 MINIMUM OPEN SPACE REQUIREMENTS.**

- A. An Open Space Neighborhood PUD shall provide and maintain a minimum of 35 percent of the gross parcel area of the application site as Dedicated Open Space. All areas identified as Primary Conservation Areas per Section 14A.09 shall be permanently preserved as passive recreational open space. The Planning Commission shall determine the actual amount of open space required, and may require more than the 35 percent minimum open space standard based on Geographic Information System analysis, biological surveys, topographical surveying data, the nature and intensity of the proposed development, and compliance with the purposes of this section.

The specific types of Dedicated Open Space planned within an OSN-PUD must be identifiable on the "OSN-PUD Toolbox," displayed on Figure 1. In the spirit of the Planned Unit Development process, the strengths and weaknesses of an individual site will in large part determine which types of Dedicated Open Space will be planned within an OSN-PUD.

On properties where there are few pre-existing natural features, the majority of Dedicated Open Space must be created and restored. In cases where a property has many pre-existing natural features, the Dedicated Open Space might consist of mostly natural areas.

The inter-connection of Dedicated Open Space on adjacent OSN-PUD lots is a high design priority. In certain situations, a large common area of Dedicated Open Space might be warranted where adjacent properties meet, as shown on Figure 1, Type 5.

- B. At least one area of Dedicated Open Space shall be centrally located within the development, and shall be maintained as an active recreational area, such as a village green, playground, or ball field park. It is the intent of this section that the centrally located open space be maintained in a more formal sense, so as to promote community, visibility, monitoring, usability, and safety of the area.

This central open space should be of a square or round shape and should clearly define the center of the proposed development. Long, narrow, and rectilinear open spaces shall not be used as the proposed community's central open space. In certain situations, more than one central open space may be warranted, based on the size of the overall development and the presence of onsite natural features.

- C. All land within a development not devoted to a residential unit, an accessory structure or use, vehicle access, vehicle parking, a roadway, or an approved land improvement, shall be set aside as open space for recreation, conservation, or preservation. Connections with adjacent open space and bike paths shall be required. Future connections to adjacent but as yet undeveloped properties shall also be required.
- D. Areas Not Considered Dedicated Open Space. The following land areas shall not be classified as Dedicated Open Space:
- (1) The area within any public street right-of-way.
  - (2) The area within private road easements.
  - (3) The area within any easement for overhead utility lines.
  - (4) The area within a platted lot or site condominium lot.
  - (5) Parking areas.
- E. Standards for Dedicated Open Space. The following standards shall apply to the Dedicated Open Space areas required in the OSN-PUD development:
- (1) Dedicated Open Space shall be available for use by all residents of the OSN-PUD.
  - (2) The Dedicated Open Space must be either centrally located, along the road frontage of the development, located to preserve significant natural features, or located to connect open spaces throughout the development and to open spaces on adjacent OSN-PUD properties.
  - (3) If the pre-development site contains a lake, stream or other body of water, a significant portion of the required Dedicated Open Space shall abut the body of water. Greenways along watercourses are high design priorities.
  - (4) Narrows bands of open space around the perimeters of sites will generally not qualify towards the required amount of overall Dedicated Open Space. Rather, only those areas that provide useful amounts of active recreational area or preserve significant natural features will qualify as Dedicated Open Space.

However, in certain circumstances a band of peripheral open space may be of great benefit to a development by serving as a landscaped and bermed visual buffer between land uses. In these circumstances, such peripheral open spaces can be counted towards the overall amount of Dedicated Open Space, but only at 50% of the gross acreage of this open space area. See Figure I, Type 4 for examples of useful peripheral bermed areas.

The design goal of such perimeter berms is to provide a definite edge to the OSN-PUD while creating a more rural appearance to the overall site from public roadways. As such, each peripheral open space must be at least 30' wide, bermed to a height of 6'–10', have at least 4' of flat area across the top, be significantly landscaped and have a side slope that supports lawn mowing equipment.

- (5) An active recreational Dedicated Open Space area shall be configured such that the open space is reasonably sized and useable by residents of an OSN-PUD. The minimum size of active recreational areas, such as maintained village greens, playgrounds, or ball fields shall be 62,500 square feet in area and at least 250 feet in length and width. The Planning Commission may approve limited active recreational Dedicated Open Space areas of less than 62,500 square feet in area and 250 feet in length and width if such areas are designed and established as pedestrian or bicycle paths for residents of the OSN-PUD.
- (6) Dedicated Open Space areas are required to be linked with any and all adjacent open spaces, public parks, sidewalks, bicycle paths or pedestrian paths, and to provide future links to any adjacent properties.
- (7) Dedicated Open Space areas shall be located so as to be reasonably accessible to the residents using them. Pedestrian access points to the Dedicated Open Space areas shall be provided and shall be clearly identified by signs and an improved path for safe and convenient access. In most cases, paths shall be paved. Exceptions may include boardwalks or gravel trails through natural areas.
- (8) Grading in Dedicated Open Spaces containing Primary Conservation Areas shall be minimal, with the intent to preserve existing topography and limit soil erosion. In areas where open space is being created for active recreational uses, it is understood that significant grading may occur. Each Dedicated Open Space that is planned for use as an active recreational area shall be graded as flat as possible while still providing adequate stormwater management and drainage controls.
- (9) Dedicated Open Space may consist of active recreational areas, including village greens, playgrounds, ball fields, tennis courts, swimming pools and related buildings, community buildings and golf courses, created lakes and similar recreational facilities. These active uses however shall not utilize more

than 60% of the overall 35% required Dedicated Open Space area unless specifically approved by the Planning Commission. The overall intent of the Dedicated Open Space is to provide both active and passive recreational uses within one development.

- (10) On parcels of land that contain little or no pre-development natural features, the following design provisions shall apply when planning Dedicated Open Space areas:
- a. A site shall provide for both active and passive recreational areas in the percentages and amounts provided for in this ordinance.
  - b. Most passive recreational areas shall be designed to revert to native forms of Michigan vegetation, in order to restore biological diversity, preserve more rural appearances and to allow for exploration of natural areas by OSN-PUD residents. In the case of landscaped peripheral berms, more active maintenance may be prudent to improve aesthetics and visual appeal. However, native Michigan species should be utilized wherever possible in these landscaped areas.
  - c. On certain parcels, all Dedicated Open Space areas must be created via the OSN-PUD development process. This situation often arises when a site has been actively farmed for many years and has had all pre-existing natural features removed or altered prior to development. In these cases, both active and passive recreational areas must be designed and constructed.

F. Allowable Accessory Structures and Uses in the Dedicated Open Space. A structure or building accessory to a recreation or conservation use may be erected within the Dedicated Open Space, in accordance with an approved open space plan.

## **SECTION 14A.08 LANDSCAPING PLAN COMPONENT**

A landscaping plan prepared by a registered landscape architect shall be submitted with each OSN-PUD application. The plan shall identify proposed trees, shrubs, ground covers and other landscaping elements. The plan shall identify where plantings will be located as well as planting/construction/phasing details. Where existing natural growth will be preserved, the plan must detail methods to protect existing vegetation during and after construction.

Street Trees. Street trees shall be installed on both sides of all streets (public and private) in accordance with the approved landscaping plan. Trees shall either be massed at critical points, spaced evenly along the street parkway, or both. A 40-foot minimum spacing interval shall be utilized when placing street trees. Street trees species should be chosen for their ability to withstand roadside environmental conditions. Tree type may vary depending on the overall effect desired, but as a general rule, trees should be the same kind on a particular street. The installation of street trees shall be the applicant's responsibility and

seasonal mass plantings are encouraged to promote cost efficiency and improved survival of trees.

All street and canopy trees shall be at least of 2” caliper size. All evergreen trees shall be at least 6 feet in height. Understory and flowering trees shall be at least 1.5” caliper in size.

**SECTION 14A.09 DENSITY BASED ON CURRENT ZONING OR FUTURE LAND USE DESIGNATION.**

A. An area that is requested for rezoning to OSN-PUD shall only be developed in accordance with the density and land uses allowed by this Chapter and the current Township Master Plan/Future Land Use Plan. The permitted number of dwellings per acre (density) for the proposed OSN-PUD site shall be consistent with the density requirements of the underlying zoning district proposed by the Master Plan. The comparable zoning district for the Master Plan future land use category and the density permitted are contained in the following Density Table.

Density Table

<u>Master Plan Category</u>	<u>Comparable Zoning District</u>	<u>OSN-PUD Density</u>	<u>Maximum</u>
Rural Agricultural	= Rural Agricultural	.66 units/ac. (1.5 acres/unit)	(1.5)
Low Density Residential	= R1, Low Density Residential	3.0 units/ac.	

To determine the maximum number of dwelling units which may be constructed within an OSN-PUD site, the permitted density from the Density Table shall be multiplied by the total acreage of the site, excluding those areas identified as Primary Conservation Areas in Section 14A.09 and acreage within pre-development public road rights-of-way.

However, this maximum density may not be feasible when the 65’ lot width minimum noted in Section 14A.05 and the required 35% of gross acreage Dedicated Open Space noted in Section 14A.06 (A) are applied to the actual PUD lot layout plan. As such, the actual lot yield plan may be less than the permitted maximum number of dwelling units.

The Planning Commission and the Township Board may, based on the criteria contained in this chapter, require fewer dwelling units than would otherwise be permitted by the maximum density calculation noted in this Section. Factors that the Planning Commission or Township Board shall consider in determining whether to require fewer dwellings units than would otherwise be permitted include the following:

- 1) Whether adverse environmental impacts will result from the proposed development.

- 2) Whether adverse impacts on public infrastructure will result from the proposed development.
- 3) Whether adverse public health, safety, and welfare impacts will result from the proposed development.
- 4) Whether adverse effects on adjacent properties will result from the proposed development.

## **SECTION 14A.10 OSN-PUD SITE PLANNING PROCEDURES**

- A. "Toolbox" Design Process. In addition to the administrative PUD procedures required by Chapter 22 of this Ordinance, the applicant, in conjunction with the Alpine Township Planning Commission, shall prepare a site plan packet using the four-step design process described below.

The first plan shall be referred to as the Natural Features Map and shall be prepared according to Steps 1 and 2 below.

The second plan shall be referred to as the Preliminary Site Plan and shall be prepared according to Steps 3 and 4 and shall also contain the information required by Chapter 18 for Preliminary Site Plans. The third plan shall be identified as the Landscaping Plan, as noted in Section 14A.07.

STEP 1
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- (1) Prepare a separate Natural Features Map of the proposed OSN-PUD development that identifies and labels the elements of the pre-existing Primary Conservation and Secondary Conservation Areas:

### Primary Conservation Areas

- All wetlands and wet meadows (whether regulated or not)
- All floodplains and drainageways (whether regulated or not)
- Creeks, streams, ponds or lakes
- Steep slopes (20% or over)
- Habitats of unique or endangered species
- Soils that will not sustain buildings
- Woodlands wherein which at least 30% of the trees measure at least 10 inches in diameter

The determination of the existence of all wetlands and floodplain areas on a parcel shall be demonstrated to the satisfaction of the Planning Commission through a written determination by the Michigan Department of Environmental Quality or by an analysis performed by a professional biologist, professional wetland consultant, or

similar professional person deemed acceptable to the Planning Commission and Township Board.

### Secondary Conservation Areas

- Woodlands which are not part of the primary conservation area
  - Farm land
  - Meadows and hedgerows
  - Farm buildings and fences
  - Historic, cultural, and archeological features
  - Scenic views into and out of the site
  - Any other area which, due to significant natural or cultural features, is determined to be worthy of preservation
- (2) Next, identify and label on the Natural Features Map those Secondary Conservation areas that will be preserved as Dedicated Open Space. Special emphasis should be given to preserving scenic views along public roadways. All of the Primary Conservation Areas must be preserved as Dedicated Open Space.
- (3) Next, identify and label on the Natural Features Map potential development areas where houses might be located.
- (4) Next, determine the number of houses permitted for the site in accordance with Sections 14A.05, 14A.06 and 14A.08.

STEP 2
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- (1) On the same Natural Features Map, illustrate the tentative location of house sites and the tentative location of streets and trails. House sites shall be identified before determining the final location of lot lines and streets. The location of house sites shall be based upon the following criteria:
- House sites shall be located within the potential development areas (Step 1 (3)) and beyond the boundaries of those areas identified as Primary Conservation Areas identified as Dedicated Open Space in Step 1 (1) and (2).
  - Where practical, houses should be placed so that the predominant view from the house is of open space and not of dwellings on the opposite side of the street.
  - Where practical, houses should be placed so that scenic views are left open or uninterrupted, particularly as seen from the public road right-of-way.

STEP 3
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(For Steps 3 and 4, the Preliminary Site Plan shall also contain the information required by Chapter 18.)

- (1) On the Preliminary Site Plan, illustrate the location of lots, streets, trails, stormwater facilities, the more formal elements of open space such as village greens, ball fields, squares and playgrounds combined with the natural areas to be preserved. The following criteria shall apply when locating and designing streets, trails, and greens:
- ❖ Streets shall be designed to minimize the area devoted to vehicle travel. The use of alleys for access to rears of lots, as well as the use of shared drives, may be required. Any alley shall meet the operation and maintenance requirements set forth for private roads in Section 2.34 of the Alpine Township Zoning Ordinance.
  - ❖ Streets shall be designed to preserve existing tree lines and hedgerows.
  - ❖ Streets shall be designed to avoid crossing wetlands, wildlife habitat, or other sensitive natural areas with streets except if no other alternative route exists. Travel lanes may be split into a boulevard-style street with natural areas between the travel lanes.
  - ❖ Streets shall be designed to avoid long street segments. Shorter straight segments at 90 degrees to each other are preferable, as well as irregular street patterns which combine straight, angled, and curving street segments that increase visual appeal and help calm traffic. The use of "T" intersections is encouraged.
  - ❖ Street systems should be designed to produce terminal vistas (views) of open spaces, village greens, water features, meadows or playing fields.
  - ❖ Where practical, streets should allow single loading of house sites, which allows all homes views of open spaces within the development.
  - ❖ Every effort should be made to connect each street with another so that dead ends are minimized, to provide safe and efficient access for emergency and public service vehicles, and to avoid conditions where certain residential streets become collectors that carry the majority of neighborhood traffic.
  - ❖ Mid-block walkways shall be provided where a block is at least 800 feet long on at least one side of the street. The Planning Commission shall determine the feasibility of such walkways based upon the practicality of connections within and outside of the OSN-PUD.
  - ❖ Where cul-de-sacs are unavoidable, they should be provided with pedestrian and bike linkages to nearby streets or adjoining neighborhoods. These cul-de-sacs should be designed with a central island where existing trees can be preserved or native species can be planted, in accordance with the Kent County Road

Commission.

- ❖ Streets shall be designed to connect with adjoining properties.
- ❖ A trail system must be provided for pedestrian and bicycle linkage throughout the development. The applicant shall provide linkage of the trail system to future neighborhoods and developments that may occur adjacent to the development.

<b>STEP</b> <b>4</b>
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- (1) On the Preliminary Site Plan as prepared for Step 3, draw lot lines within the development.
  - Lots shall be of a size and width necessary to obtain approval from the Kent County Department of Public Works and in accordance with the requirements of Section 14A.05.
  - If the applicant is also seeking approval for a private road, information and approval required by Section 2.34 herein shall also be submitted. Special land use permit approval is required for a private road.
- (2) In no case may house lots extend into the Primary Conservation Area. As determined by the Planning Commission on a case-by-case basis, house lots may extend into Secondary Conservation Areas.
- (3) The Natural Features Map plan prepared according to Steps 1 and 2 above along with the Preliminary Site Plan and Landscaping Plan prepared according to Steps 3 and 4 shall be submitted to the Planning Commission for preliminary site plan review according to the procedures of Section 22.03 of this Ordinance.

#### **SECTION 14A.11 OTHER DESIGN STANDARDS FOR THE BUILT ENVIRONMENT OF OPEN SPACE NEIGHBORHOODS**

- A. Lots within an OSN-PUD are not required to have frontage on public streets or private roadways. Rather, lots within an OSN-PUD may face onto the walkways surrounding greens or squares rather than directly onto streets. Such lots may take their vehicle access from alleys or shared drives that serve the rears of these lots.
- B. Lanes or alleys serving lots shall have a pavement width of 14 feet; shared driveways shall have a pavement width of 10 feet.
- C. Several smaller village greens located throughout the neighborhood may in some cases be preferable to one larger village green.
- D. "Zero" lot lines on the sides of narrow lots are allowable; side porches facing the

greater side yard of these lots are also encouraged.

E. All lots shall be accessible by emergency and public service vehicles.

F. In certain OSN-PUD designs, it is advisable to limit the ability to extend garages beyond the faces of houses served by the garage. Garages located at the rears of lots may be accessed by alleys or drives serving the lot. However, this design detail must be balanced against the width of lots and the housing market demand.

G. House Facades. As most OSN-PUD projects will be developed as platted subdivisions or site condominiums, the streetscape will include numerous house facades in a row. In order to enhance the aesthetics of the OSN-PUD and add to the overall community design, the applicant shall provide the Planning Commission and Township Board with a "non-repeat" plan for housing facades. The overall goal of this plan should be to avoid the adjacent placement of identical home facades.

H. Stormwater and Drainage Facilities. All OSN-PUD projects must provide for adequate onsite stormwater and drainage facilities, in compliance with Ordinance #01-06.

Based on their design, stormwater and drainage facilities will be classified and reviewed in accordance with the following designations:

- (1) Functional: This facility is designed only for engineering functionality and may be necessary in certain situations. Functional detention basins, headwalls, outlet structures, concrete flow channels, rip rap channels and other drainage improvements must be screened with plant material and berms.
- (2) Functional and Created Wetlands: These types of facilities combine functional designs with wetland creation techniques. These types of facilities must be carefully designed to ensure long-term functionality and maintenance provisions. The detention basin embankment and the basin itself must be extensively planted with wet tolerant plant materials with the intention of re-creating a seasonal and high water wet ecosystem.
- (3) Functional and Aesthetic: These types of facilities combine functional design with landscape architecture and active/passive recreation potential. These facilities are detailed in Figure 1, Type 8. These ponds must be developed both as functional utilities and neighborhood amenities. Aeration of wet ponds and created lakes is required. Such facilities cannot be allowed to become a visual nuisance. As such, ongoing maintenance of these facilities is essential, either by the public drain district process or as noted in the required OSN-PUD operation and maintenance agreement noted in Section 14A.03 (D).