

PLANNING STAFF REPORT
Master Development Plan: The Villages at Olde Point

SUMMARY:

Hearing Date: July 1, 2014
Case Number: 11105 – Master Development Plan Revision
Applicant: OPV Development, LLC
Property Owner: OPV Development, LLC

Development Proposal: The applicant is requesting the approval of a revision to the previously submitted and approved Master Development for a two (2) phased Mixed Use Subdivision.

Property Record Number, Acreage, and Location: There are two (2) tracts associated with this request, totaling ± 45.87 acres. The proposed project will access directly on to Country Club Drive (NC SR 1565) approximately one (1) mile from the intersection of US Highway 17 and Country Club Drive in Hampstead. The subject property is directly north of Captain Beam Boulevard, bordered by Emerald Ridge residential subdivision to the west, the Hampstead Town Center to the northwest, to the northeast by Vista Point residential subdivision and bordered to the direct east by undeveloped land.

Zoning: These parcels are zoned PD, Planned Development zoning district and may be further identified by Pender County PIN numbers 4203-14-3306-0000 and 4203-05-8711-0000.

RECOMMENDATION:

Planning Staff recommends approval of the submitted Master Development Plan revision based on the provisions of the Pender County Unified Development Ordinance § 3.5.4; as well as the Master Development Plan (MDP) contents as outlined in in § 6.1.4. This request is consistent with five (5) goals in the 2010 Pender County Comprehensive Land Use Plan, conflicting with none.

Staff also recommended in February 2014 that the Planning Board waive the Preliminary Plat public hearing as outlined in the Unified Development Ordinance § 2.11, Summary of Review Authority; given that all conditions are met as prescribed in § 6.1.4; this recommendation remains for the current submission.

HISTORY:

In 2007, former applicant Withers & Ravenel submitted for Preliminary Plat approval for the project titled Olde Point Village subdivision; this development proposal was initially denied by both the Planning Board and the Board of Commissioners. In September 2008 following necessary revisions the development plan was subsequently approved by the Planning Board. As the project has since expired (expired on January 1, 2014) and both the applicant and owner have changed; OPV Development, LLC is submitting a new Master Development Plan for complete review under the current Pender County Unified Development Ordinance. The Master Development Plan for consideration includes minor significant changes since approved at the February 2014 Planning Board Hearing.

PROJECT DESCRIPTION:

OPV Development, LLC, applicant and owner, is requesting a revision to the previously approved a Master Development Plan for a two (2) phased Mixed Use Subdivision (Attachment 1). The Master Development Plan was conditionally approved by the Pender County Planning Board on February 4, 2014.

The Master Development Plan approved in February 2014 included up to ninety-eight (98) single family residential lots and approximately 15,078 of commercial square footage, to be located on ±45.87 acres. The current revision includes ninety-six (96) single family residential lots with the same amount of commercial square footage.

The subdivision is to be developed in two (2) phases. The first phase will include the development of fifty-four (54) homes on the eastern portion of the property as well as the proposed commercial development; the second phase to complete the project is development of the remaining forty-two (42) homes on the northern portion of the property.

The proposed project will access directly on Country Club Drive (NC SR 1565) approximately one (1) mile from the intersection of US Highway 17 and Country Club Drive in Hampstead. The subject property is directly north of Captain Beam Boulevard, bordered by Emerald Ridge residential subdivision to the west, the Hampstead Town Center to the northwest, to the northeast by Vista Point residential subdivision and bordered to the direct east by undeveloped land. The proposal shows the majority of the development near County Club Drive (NC SR 1565), with the land closest to US Highway 17 proposed as open space. The applicant mentions the commercial portion of the property as a potential farmers market, but has not proposed a specific use at this time according to the submitted narrative.

Other proposed changes in the Master Development Plan revision include:

- 1) Name change from Olde Point Village to proposed as The Villages at Olde Point in light of previous addressing and emergency concerns;
- 2) Setback reduction, according to the applicant's narrative only Phase II setbacks would change "front reduced from 20' to 15', Side reduced from 8' to 5' (or "0 lot lines"/10' minimum between structures), Rear reduced from 15' to 10' ";
- 3) Clarification of phasing for development, where the number of lots for Phase II has decreased and Phase I increased; and
- 4) Roadway shifted west ten (10) feet for Phase II.

Approval was contingent upon the applicant meeting all provisions of the Pender County Unified Development Ordinance § 3.5.4; as well as the Master Development Plan contents as outlined in in § 6.1.4. At the time of submittal for the revision to the approved Master Development Plan the following items were outstanding to meet the conditional approval from February 2014;

- 1) The appropriate buffers on the Master Development Plan shall be shown (§ 8.2.8)
The applicant must provide sufficient evidence detailing sections of the subject property which require a Buffer C (along the tracts required along all boundaries adjacent to single family residential uses or residential lots with a parcel size of less than one (1)

acre and when a single family structure is within fifty (50) feet of the boundary of the development); and

- 2) A significant tree survey shall be conducted (§ 8.1.3).

Staff is working with the applicant to be sure all necessary requirements are met including those outlined in the Pender County Unified Development Ordinance § 3.5.4; as well as the Master Development Plan contents as outlined in in § 6.1.4.

Project Density

The current submission includes ninety-six (96) lots calculated at a net density equal to 4.78. As the Planned Development, PD, zoning district requires density fewer than five (5) units per acre net density the current submission for Master Development Plan meets Pender County Ordinance standards.

Lot Requirements

As outlined in the Pender County Unified Development Ordinance §4.8.1.D, the Master Development Plan outlines lot size, setbacks and building height. The applicant is proposing a minimum lot size of 5,844 sq. ft. For this PD, Planned Development zoning district dimensional standards are proposed as follows;

Setback Type	Previous Approval: Remain for Phase I	Current Request: for Phase II Only
Front	20 feet	15 feet
Side	8 feet	5 feet OR “0 lot lines” with 10 feet minimum between structures
Rear	15 feet	10 feet
Corner	10 feet	10 feet
Height	40 feet	40 feet

Services (Water/Wastewater)

The water service connection for the proposed Master Development Plan will be through Pender County Utilities. As the project is within Utilities Inc. service district according to the NC Utilities Commission, the water service may be provided by Utilities Inc. However in a letter dated January 27, 2014 Utilities Inc. indicated they are unable to service the proposed Master Development Plan the Villages at Olde Point. All water connections are subject to review and approval by Pender County Utilities when the applicant submits materials.

The applicant has also provided a “Letter of Intent” from Pluris Hampstead, LLC (Attachment 2), which affirms the company’s intent to serve wastewater to the Villages at Olde Point Development. The force main is proposed to run through the existing Hampstead Town Center property to service this property. Any and all landscaping changes to the existing Hampstead Town Center will require Pender County Staff evaluation for compliance with the existing Hampstead Town Center Site Plan prior to any phase of approval of Final Plat for this residential subdivision. If any changes regarding water or wastewater treatment are made, reevaluation from the Planning Board would be required for the development.

Open Space

This Master Development Plan meets and exceeds the open space requirements set forth in the Pender County Unified Development Ordinance § 7.6.1 C, Open Space Requirements. Per the Pender County Unified Development Ordinance, all proposed residential subdivisions shall provide open space in the amount of 0.03 acres per dwelling unit within the subdivision; half of which must be designated active open space. In this case 2.88 acres of open space are required; 1.44 acres of which must be active. The Master Development Plan provides 18.79 acres of open space, with 9.95 acres of passive areas, and 8.84 acres of active open space.

Recreation Units

With a proposed lot number of ninety-six (96), \$10,000 or 1 recreational unit is required by Pender County Unified Development Ordinance § 7.6.2. The applicant is proposing a walking trail to traverse the open space on the western portion of the property which will provide residents access to Lowes Food/Hampstead Town Center on the adjacent property.

Final Preliminary Plat approval will require a note stating the walking trail will be included as an intentional use of the approved open space is required alongside a certified cost estimate for the project. Prior to Final Plat certification of any phase of the project, these improvements must be made in the open space and sealed by appropriate parties that such improvements are of \$10,000 value.

Road Layout and Construction

Street layout and access conform to the Pender County Unified Development Ordinance (§7.4 Access and §7.5 Street Design). The applicant specified all roads be dedicated public, designed and constructed in compliance with current NCDOT Subdivision Roads Minimum Construction Standards (§7.5.2). The applicant must submit plans to NCDOT and all roadway approvals are contingent upon final review by the NCDOT.

The main access to the development is proposed at the intersection of Country Club Drive (NC SR 1565) and Captain Beam Boulevard approximately one (1) mile from the US Highway 17 intersection. All new development will align with Captain Beam Boulevard. A public connection is proposed to existing Shandy Way in Emerald Ridge subdivision on the south of the subject parcel. Additionally, proposed is a stub for future connectivity from the existing Shandy Way through the subject parcel to stub on the north side of the property for future development. At this time it is not known whether NCDOT will require modifications to Country Club Drive (NC SR 1565) at the project entrance, however by the developer anticipates that a deceleration and turn lane may be required.

The applicant addressed the estimated average daily number of trips at build out based on the ITE Trip Generation Manual 8th Edition, with 919-938 trips per day for a subdivision of this size. According to the applicant's narrative the AM Peak Hour trips are not identified within the aforementioned study but an older edition does outline that 76-78.4 peak AM trips. Peak PM trips were identified to be 97-99 in the ITE Trip Generation Manual.

According to the applicant's narrative, a significant tree survey may change road design slightly based on identified significant trees and the intent to preserve. Additionally, this Master Development Plan revision includes a change to the road network by shifting the alignment ten (10) feet to the west to accommodate design changes and larger lots in Phase II.

Landscaping and Buffers

All landscape and buffers will be approved in accordance with §8.2.8, Project Boundary Buffer of the Pender County Unified Development Ordinance. In multi-family and Planned Developments the

following buffers are required; a Buffer A is required along all boundaries adjacent to a street, a Buffer B is required along all other project boundaries, and a Buffer C is required along all boundaries adjacent to single family residential uses or residential lots with a parcel size of less than one (1) acre and when a single family structure is within fifty (50) feet of the boundary of the development. Specific buffer requirements from §8.2.8 can be viewed in the Appendix.

The applicant must provide specific evidence detailing which lots adjacent to Emerald Ridge Section 2 (Map Book 36 Page 99, Attachment 3) are within fifty (50) feet of the boundary of development; which would necessitate a Buffer C. All buffers are determined at the Master Development Plan approval therefore any approvals of the Master Development Plan would be contingent upon this evidence, which can be seen in Attachment 4.

Environmental Concerns

A portion of the subject property may be potentially located within the Special Flood Hazard Area (SFHA) Zone X, areas outside of the 0.2 percent annual chance floodplain; according to the 2007 Flood Insurance Rate Maps (FIRMs), Map Number 3720420300J, Panel Number 4203. Any development located within the SFHAs will be required to meet the meeting the prescribed standards as outlined in the Pender County Unified Development Flood Damage Prevention Ordinance.

The Master Development Plan submittal indicates that there may be wetlands on the subject property; all wetlands must be delineated by the Army Corps of Engineers prior to development. These areas are likely to be dedicated as permanent conservation areas according to the submitted Master Development Plan (Attachment 5).

All applicable state and federal agency permits including a Stormwater Management Permit, Sediment and Erosion Control Plan, wetlands impact permits, and NCDOT Driveway Permit will be required prior to the approval of the Preliminary Plat.

TECHNICAL REVIEW COMMITTEE (TRC) RESPONSES:

Comments collected during the first Master Development Plan TRC comment period from February 2014 are still relevant and can be seen in italics. On Monday June 9, 2014 the Pender County Technical Review Committee was sent the application, narrative and Master Development Plan revision for the Villages at Olde Point. The comments written in regular font are from the most recent comment period on June 9, 2014. The following responses were collected:

Cape Fear Council of Governments RPO

The Cape Fear RPO has no comment.

NCDENR Division of Energy, Mineral, and Land Resources

Mark Walton's narrative indicates that a stormwater management permit will be applied for. I have not seen the permit application, but based on reading the narrative, it is clear that a SW permit is required.

NCDENR Division of Energy, Mineral, and Land Resources -

As stated in Walton Engineering narrative this project will need an Erosion and Sedimentation Control plan.

NC DOT Division of Highways

Doug has had contact with Walton Engineering concerning this development. No request for driveway permit or subdivision plan approval has been submitted.

I have been working with Allen Thornton from Walton Engineering on this project. They have not submitted a driveway permit as of today. We are working out the details on the roadway improvements for the driveway. Also I think they are going to want to get plan approval, but they have not submitted plans for review.

NC Office of State Archaeology

The applicant should be aware that they may need to perform an archaeological survey over all lots northwest of Lot 32 and Lot 22. These lots are in an area where there is a high probability for encountering prehistoric archaeological sites. The work should be performed prior to construction of the roads and storm-water infrastructure. For a review of the project the applicant should go to the SHPO website and follow the directions for submitting a project for review: http://www.hpo.ncdcr.gov/er/er_email_submittal.html.

Pender County Addressing Coordinator

Please encourage the developers to change the subdivision name due to the fact that Olde Point Villa's is one parcel away from the proposed Olde Point Village. My concern is emergency response. The names are so similar.

Also, please have them submit at least three road names for each proposed roadway.

Pender County Parks and Recreation

Parks and Recreation has no issues with this request.

Pender County Schools

We recommend that the cul-de-sacs have a radius of 45 feet for the bus traffic. If not no buses can enter the subdivision. An alternative could be a turn around area on the back end of the subdivision. This could be a lane the bus can back into that will allow the driver to make a safe turn around. We are also recommending that there be student loading areas designated with a covered area for use during inclement weather.

Pender County Soil and Water Conservation District

Soil & Water sees no problem, as long as all state permit requirements are satisfied.

Wilmington Metropolitan Planning Organization

I have reviewed the TRC - Master Development plan for Case # 11105, which is called Olde Point Village. Here are my comments for the plan.

- 1. The project has requested minimum Cul-de-sac radius of 37'. NCDOT requires a minimum Cul-de-sac Radius of 45'.*
- 2. Pender County Schools has asked that the cul-de-sac radius be increase to at least 40' to allow school buses to turn around in the subdivision.*
- 3. Applicant does not show public sidewalk required on NCDOT streets.*
- 4. Subdivision plan does not show curb ramps at intersections within the project.*
- 5. Applicant does not show easements on the plan, please include with site plans for the project.*
- 6. Project does not show the location of the driveway for the commercial portion of the project.*

1. The reduction in homes will help traffic in this area. Phase 1 and 2 would be just below the WMPO limit for a TIA (99 single family homes).
2. The developer should work on getting another entrance to the Subdivision.
3. Right Turn lanes are recommended for County Club Rd, as well as a potential widening of this road.
4. Provide cross sections for each Sub-division street.
5. Maintain 24' pavement width on each street with 40' ROW width.
6. Provide details on drainage, whether it is curb and gutter, swales, etc.
7. I also need sidewalk on at least one side of the street, especially near the active recreation areas.
8. The applicant did no show driveways or parking/ lot configurations for the Commercial portion of the project.
9. Wetlands crossing must have a detail and be approved before it can be built.

No response: Four County Electric Company
 NC DENR Division of Coastal Management
 NC DENR Division of Forestry
 NC DENR Division of Waste Management
 NC DENR Division of Water Quality
 NC DOT Transportation Planning Branch
 NC Wildlife Resources Commission
 Pender County Emergency Management
 Pender County Flood Plain Management
 Pender County Building Inspections
 Pender County Environmental Health
 Pender County Public Library
 Pender County Public Utilities
 Pender County Sheriff's Department
 Progress Energy Corporation
 US Army Corps of Engineers

Previous Technical Review Committee comments and concerns have been addressed since the previous Planning Board meeting in February.

At the February meeting for conditional Master Development Plan approval, the applicant agreed to make the terminus of the cul de sac on the furthest north and west of the project boundary have a forty-five (45) foot radius to accommodate Pender County Schools request for bus turn around. This will also satisfy the Wilmington Metropolitan Planning Organization comments.

The State of Archeology had comment about the property and the potential for an archeological survey of lots northwest of Lot 32 and Lot 22. Please see the attached letter from the applicant addressing such items (Attachment 6). According to this document no historic resources will be impacted by this project.

PROJECT EVALUATION:

- A. **Public Notifications:** Public Notice of the Master Development Plan has been advertised in the *Pender-Topsail Post and Voice*. Adjacent property owners have been given written notice of the request, as well as a sign placed on the subject property.
- B. **Existing Zoning:** The subject property as well as all tracts in the immediate vicinity are zoned PD, Planned Development zoning district. The properties directly to the southeast, across Country Club Road (SR 1565) on Captain Beam Boulevard are zoned RP, Residential Performance.

The intent of the PD, Planned Development Zoning District is to provide an alternative to a conventional development. The PD zoning districts allow projects of innovative design and layout that would not otherwise be permitted under this Ordinance because of the strict application of zoning district or general development standards. The PD District encourages progressive land planning and design concepts. In return for greater flexibility in site design requirements, planned developments are expected to deliver exceptional quality community designs that preserve critical environmental resources, provide above-average open space amenities, incorporate creative design in the layout of buildings, open space and circulation; assure compatibility with surrounding land uses and neighborhood character; and provide greater efficiency in the layout and provision of roads, utilities, and other infrastructure. The PD District shall not be used as a means of circumventing the county's adopted land development regulations for routine developments.

- C. **Existing Land Use:** The subject property is directly north of Captain Beam Boulevard, bordered by Emerald Ridge residential subdivision to the west, the Hampstead Town Center to the northwest, to the northeast by Vista Point residential subdivision and bordered to the direct east by undeveloped land.

D. 2010 Comprehensive Land Use Compliance:

- 1. **Mixed Use:** The Mixed Use land use classification designates locations where a mixture of higher density/intensity uses is to be encouraged. Mixed Use areas should be characterized by physically and aesthetically unified developments containing a mixture of commercial, office, institutional, and high- and medium-density residential uses, arranged in a walkable, compact, pedestrian and transit friendly manner.
- 2. **Supporting Comprehensive Plan Policies and Goals:**
 - a. **Growth Management Goal 1A.1** Manage the physical growth and development of Pender County by promoting more intensive land uses in key locations identified for such growth while preserving and protecting the unique physical character and social assets of the predominant rural lifestyle and coastal environment that makes the County a unique place to live.
 - i. **Policy 1A.1.2**
Encourage development in areas where the necessary infrastructure – roads, water, sewer, and schools - are available, planned or can be most cost effectively provided and extended to serve existing and future development
 - b. **Transportation Goal 2B.1** Manage the timing, location and intensity of growth by coordinating transportation improvements in accordance with the Comprehensive Land Use Plan and the Coastal Pender Collector Street Plan.
 - i. **Policy 2B.1.4** Adopt regulations that require new developments and individual sites throughout the County to provide vehicular and pedestrian

interconnectivity to existing or planned adjacent sites and adjoining developments.

- ii. **Policy 2B.1.9** As recommended in the Coastal Pender Collector Street Plan, all new streets that have the potential to connect to adjacent developments should be constructed to NCDOT secondary road standards and accepted for public maintenance to ensure future connectivity.

SUMMARY & STAFF RECOMMENDATION

The request is consistent with the Pender County Unified Development Ordinance and five goals and policies in the 2010 Pender County Comprehensive Land Use Plan; therefore, staff respectfully recommends conditional approval of Master Development Plan revision as submitted with consideration of the Planning Staff, Technical Review Committee and Planning Board comments and conditions. Staff notes the following outstanding Pender County Unified Development Ordinance requirements which must be met in accordance with Planning Board recommendations:

Staff also recommends, as consistent with the first Master Development Plan hearing that the Planning Board waive the Preliminary Plat public hearing as outlined in the Unified Development Ordinance § 2.11, Summary of Review Authority; given that all conditions are met as prescribed in § 6.1.4 and noted above.

VOTING AND RESOLUTION:

Motion: _____ **Seconded:** _____

Approved: _____ **Denied:** _____ **Unanimous** _____

Williams: ___ **McClammy:** ___ **Boney:** ___ **Baker:** ___ **Edens:** ___ **Marshburn:** ___ **Nalee:** ___

APPENDIX:

4.8.1 PD: Planned Development District

Intent - The intent of the Planned Development (PD) District is to provide an alternative to a conventional development. The PD zoning districts allow projects of innovative design and layout that would not otherwise be permitted under this Ordinance because of the strict application of zoning district or general development standards. The PD District encourages progressive land planning and design concepts. Some of these techniques and concepts include but are not limited to:

- 1) To preserve in perpetuity unique or sensitive natural resources such as groundwater, floodplains, wetlands, streams, steep slopes, woodlands and wildlife habitat.
- 2) To protect prime agricultural land and preserve farming as an economic activity.
- 3) To permit clustering of houses and structures in a manner that will reduce the amount of infrastructure, including paved surfaces and utility easements, necessary for residential development.
- 4) To reduce erosion and sedimentation by minimizing land disturbance and removal of vegetation in residential development.
- 5) To protect scenic views.
- 6) To promote interconnected greenways and corridors throughout the County.
- 7) To create contiguous green space within and adjoining the development site.
- 8) To preserve important historic and archaeological sites.

A. General Intent/Purposes of the PD District

- 1) Allowing greater freedom in providing a mix of land uses in the same development, including a mix of housing types, housing prices, lot sizes, densities, and non-residential uses in a planned development;
- 2) Promoting quality urban design and environmentally sensitive development by allowing development to take advantage of special site characteristics, locations, and land uses;
- 3) Encouraging quality urban design and environmentally sensitive development by allowing increases in base densities when such increases can be justified by superior design or the provision of additional amenities such as public and/or private open space.
- 4) In return for greater flexibility in site design requirements, planned developments are expected to deliver exceptional quality community designs that preserve critical environmental resources, provide above-average open space amenities, incorporate creative design in the layout of buildings, open space and circulation; assure compatibility with surrounding land uses and neighborhood character; and provide greater efficiency in the layout and provision of roads, utilities, and other infrastructure.
- 5) The PD District shall not be used as a means of circumventing the county's adopted land development regulations for routine developments.

B. General Use

- 1) **Uses Allowed and Size** - A planned development may contain any or all of the uses specified in the table of uses and in accordance with a master plan, provided such uses are consistent with the Table of Uses in Section 5.2 and the Comprehensive Plan. In order to develop under the PD District a minimum of two types of uses will be required. This must be a mix of residential and non-residential uses. Mixed use development may occur by having two or more principal uses located in the same building (e.g., retail on ground floor, office space above) or by having two or more principal uses located in different buildings sited on the same lot or parcel (e.g., freestanding child day care center located on the same parcel as an office building).

- C. Number of Dwelling Units (Density)
- 1) Determination - The number of dwelling units in a project utilizing the PD development standards shall be a maximum of 5 units per net density. The density is calculated as total tract acreage subtracting the following:
 - a) Areas reserved as non-residential development
 - b) Total wetland calculations
 - c) Rights of way and parking areas
 - d) Active and Passive open space
 - i) Passive open space may be subtracted out of the total wetland delineation at time of Master Plan if calculated to be less than total wetland area.
- D. Development Standards - Development in a PD District shall be subject to all applicable regulations unless otherwise waived or modified by the County in the terms of the approved master land use plan. In no case shall the decision-making body waive or modify the following standards for a proposed PD District:
- 1) Stream buffers required by the State of NC
 - 2) Ownership requirements for any open space, buffers, or streetscapes unless otherwise permitted within this Ordinance;
 - 3) Preservation of existing vegetation in streetscapes, floodplains, and/or buffers;
 - 4) The minimum lot width and minimum yard requirements are established with the Master Plan may be modified by the Planning Board through the PD process however; the minimum distance between structures shall be as required by NC Building Code.
 - 5) Street connectivity requirements;
 - 6) Sidewalk and greenway requirements;
 - 7) Stormwater control or LID requirements;
 - 8) Transportation and Circulation System. The planned development's master plan shall demonstrate a safe and adequate on-site transportation system that addresses vehicular, bicycle, transit and pedestrian circulation. The on-site transportation system shall be integrated with the off-site transportation circulation system of the County.
 - a) Creative design of circulation routes and traffic ways is encouraged. A base characteristic of a PD is that the internal circulation routes or streets do not follow fixed linear geometric lines as do most streets. Instead, circulation routes are curvilinear and of meandering character, to preserve tree and landscape features. Slower-paced traffic movements and private restrictions for extremely low speed limits.
 - b) Pedestrian-oriented communities also are encouraged to enhance the quantity of pedestrian activity and to improve the quality of the pedestrian experience. Planned subdivisions must adhere to the design standards for drainage and paving in this Ordinance.
 - c) Where the development is bound by two (2) or more NC DOT on-system roads, at minimum access to each road shall be provided.
 - d) Adequately constructed and maintained bike and/or hiking trails shall be counted toward the open space requirement. Bicycle lanes and multi-use pathways that extend the minimum right-of-way width shall be designed in accordance with the North Carolina Bicycle Facilities Planning and Design Guidelines Manual.

2.1.1 Buffer Descriptions and Options

The following descriptions list the specifications of each buffer. The requirements reflect the minimum and the developer may increase the buffer at his/her option. Buffer requirements are stated in terms of width of the buffer and the number of plant units required per one hundred (100) linear feet of buffer. The requirements of a buffer may be satisfied by any of the options under each letter designation or existing equivalent vegetation. All mathematical rounding shall be upward and shall be applied to the total amount of plant material required in the buffer, not to each one hundred (100) foot length. The required canopy and understory trees shall generally be spread uniformly along the buffer. Shrubs may be clustered when a 98% grass cover is provided in all areas of the buffer other than within 4 ft. of the base of any tree or shrub.

Buffer A

Buffer "A" This buffer is designed primarily for road frontage areas and should run parallel to the street to provide a continuous, aesthetically pleasing streetscape. The requirements for buffer "A" shall be met by any one of the following:
A-1) 15 foot wide strip with 3 canopy trees, 2 understory trees and a grass cover of at least 98 % coverage (except within 4 feet of the base of any tree), per 100 linear feet (width may be reduced to 10' for existing developed lots that are subject to new buffer requirements), or
A-2) 20 foot wide strip with 3 canopy trees, 2 understory trees and either a grass cover of at least 98 % coverage (except within 4 feet of the base of any tree or shrub) or 18 shrubs per 100 linear feet, or
A-3) 25 foot wide strip with 1 canopy tree, 2 understory trees and either a grass cover of at least 98 % coverage (except within 4 feet of the base of any tree or shrub) or 21 shrubs per 100 linear feet, or
A-4) 30 foot wide strip with 1 canopy tree, 2 understory trees and either a grass or other approved vegetative ground cover of at least 98 % coverage (except within 4 feet of the base of any tree or shrub) or 32 shrubs per 100 linear feet.

Buffer B

Buffer "B" This buffer is a medium density planting area to be used primarily along non street boundary lines to provide spatial separation between similar types of uses. The requirements for buffer "B" shall be met by any one of the following:
B-1) 10 foot wide strip with 3 canopy trees, 4 understory trees and a grass cover of at least 98 % coverage (except within 4 feet of the base of any tree), per 100 linear feet, or
B-2) 15 foot wide strip with 3 canopy tree, 2 understory trees and a grass cover of at least 98 % coverage (except within 4 feet of the base of any tree), per 100 linear feet, or
B-3) 20 foot wide strip with 1 canopy tree, 2 understory tree and either a grass cover of at least 98 % coverage (except within 4 feet of the base of any tree or shrub) or 15 shrubs per 100 linear feet, or
B-4) 25 foot wide strip with 0 canopy trees, 5 understory trees and either a grass cover of at least 98 % coverage (except within 4 feet of the base of any tree or shrub) or 21 shrubs per 100 linear feet.

Buffer C

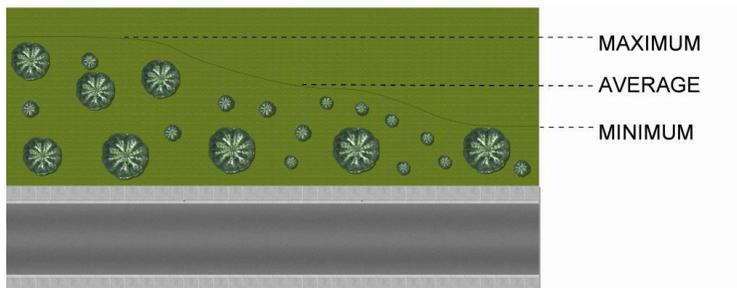
Buffer "C" This buffer is designed to provide a high density screen primarily along non street boundary lines to provide buffer and separation between different categories of uses such as commercial adjacent to residential uses or other non-residential uses adjacent to high density single family residential uses. The requirements for buffer "C" shall be met by any one of the following:
C-1) 10 foot wide strip with a 6 foot high wood stockade, basket weave, or other solid wood fence and 2 canopy trees and a grass cover of at least 98 % coverage (except within 4 feet of the base of any tree), per 100 linear feet, or
C-2) 15 foot wide strip with a 6 foot high wood stockade, basket weave, or other solid wood fence or an evergreen hedge* that will provide a continuous screen at least 6' high within 4 years and 1 canopy tree, 4 understory trees and a grass cover of at least 98 % coverage (except within 4 feet of the base of any tree), per 100 linear feet, or *Reference spacing requirements in plant list for specific species and spacing to achieve evergreen hedge
C-3) 20 foot wide strip with an evergreen hedge that will provide a continuous screen at least 6' high within 4 years and 1 canopy tree or 3 understory trees and a grass cover of at least 98 % coverage (except within 4 feet of the base of any tree), per 100 linear feet, or
C-4) 25 foot wide strip with an evergreen hedge that will provide a continuous screen at least 6' high within 4 years, 2 understory trees and a grass cover of at least 98 % coverage (except within 4 feet of the base of any tree), per 100 linear feet.

Buffer D

Buffer "D" This buffer is a low density planting area to be used along boundary lines in rural areas between large lots or tracts with substantial buffer width and setbacks to provide spatial separation between uses that are developed at very low density. The requirements for buffer "D" shall be met by any one of the following:
D-1) 15 foot wide strip with 3 canopy trees and a grass or other approved vegetative ground cover of at least 98 % coverage (except within 4 feet of the base of any tree) per 100 linear feet, or
D-2) 20 foot wide strip with 2 canopy trees, 2 understory trees and a grass or other approved vegetative ground cover of at least 98 % coverage (except within 4 feet of the base of any tree) per 100 linear feet, or
D-3) 25 foot wide strip with 1 canopy tree, 3 understory trees and a grass or other approved vegetative ground cover of at least 98 % coverage (except within 4 feet of the base of any tree) per 100 linear feet.

2.1.2 Buffer Depth Averaging

While the buffer depth is normally calculated as parallel to the property line, design variations are allowed and are calculated on the average depth of the buffer per 100 feet of linear width measured along the property line. Minimum depth of buffer in any case shall not be less than 50% the required depth of the buffer chosen. Maximum depth shall not be more than 150% the required depth of the buffer chosen.



2.1.3 Project Boundary Buffer

The following are the buffering requirements of listed permitted uses in each district and certain special types of development. Special uses may be required to meet additional buffer requirements, but shall in all cases be required to have at a minimum the same buffer as permitted uses. Existing vegetation that meets or exceeds the requirements of the specific buffer is desired and allowed instead of any required new plantings.

Buffers Required for Mobile Home Parks - Mobile home parks shall be required to have the following buffers:	
Location of Buffer for Mobile Home Parks	Type Buffer
Along all boundaries adjacent to a street	Buffer A
Along all boundaries adjacent to single family residential uses or residential lots with a parcel size of less than 1 acre and when a single family structure is within 50' of the boundary of the park	Buffer C
Along all other boundaries	Buffer B

Buffers Required for Multifamily and Planned Developments - Multifamily and Planned Developments shall be required to have the following buffers:	
Location of Buffer for Multi-family & Planned Developments	Type Buffer
Along all boundaries adjacent to a street	Buffer A
Along all boundaries adjacent to single family residential uses or residential lots with a parcel size of less than 1 acre and when a single family structure is within 50' of the boundary of the development	Buffer C
Along all other boundaries	Buffer B

Buffers Required for Shopping Centers - Shopping centers shall be required to have the following buffers:	
Location of Buffer for Shopping Centers	Type Buffer
Along all boundaries adjacent to a street	Buffer A
Along all boundaries adjacent to Residential Districts or uses and adjacent to single family residential uses or residential lots with a parcel size of less than 1 acre and when a single family structure is within 50' of the boundary of the development	Buffer C
Along all other boundaries	Buffer B
Buffers Required for All Non-residential Uses (Excludes Industrial Uses) in All Residential Districts, (RA, RP, RM, MH) - Residential uses in Residential Districts are not required to have buffers, except as required for mobile home parks, Multifamily and Planned Developments. All commercial or uses other than residential uses (excluding industrial uses) in the Residential Districts shall provide the following buffers: Uses in these districts that require a special use permit will in addition, provide other buffers as specified in the special use permit.	
Location of Buffer for Non-residential Uses in the Residential Districts	Type Buffer
Along all street boundaries of the Development	Buffer A
Along all boundaries adjacent to single family residential uses or residential lots with a parcel size of less than 1 acre and when a single family structure is within 50' of the boundary of the development	Buffer C
Along all other non-street boundaries	Buffer B

Buffers Required for the Commercial Districts - All uses in the General Business and Office & Institutional Districts shall be required to have the following buffers:

Location of Buffer for GB and OI Districts	Type Buffer
Along all boundaries adjacent to street right-of-ways	Buffer A
Along all non-street boundaries adjacent to Residential Districts and adjacent to single family residential uses or residential lots with a parcel size of less than 1 acre and when a single family structure is within 50' of the boundary of the development	Buffer C
Along all other boundaries	Buffer B

Buffers Required For The Industrial Districts And Industrial Uses In Any Other Districts

Location of Buffer for Industrial Districts	Type Buffer
Along all street boundaries	Buffer D
Along all non-street boundaries adjacent to Residential Districts when adjacent to single family residential structures within 50' of the project boundary	Buffer C
Along all other boundaries	Buffer D

Buffers Required in the Watershed Overlays (WS-PA & WS-CA).

Type Use	Buffer Requirement Watershed Districts
Bona fide Farms	Bona fide Farms in the Watershed Critical Area District (WSCA) shall maintain a 10 foot permanently vegetated buffer adjacent to all perennial waters as shown on the most recent edition of the USGS 1:24000 (7.5 minute) topographic map. The buffer shall remain vegetated and shall be used only for access and utilities.
Silviculture Activities	Silviculture activities shall maintain buffers (Streamside Management Zones) as described in the Division of Forest Resources Rules and Best Management Practices Manual.
All activities, other than bona fide farms and silviculture activities	All activities, other than bona fide farms and silviculture activities shall maintain a 30 foot vegetated buffer adjacent to all perennial waters as shown on the most recent edition of the USGS 1:24000 (7.5 minute) topographic map. The buffer shall remain vegetated and shall be used only for access and utilities.