

Perimeter Buffers Update Outline

I. Definitions

- Clearing or Cleared: any type of clearing or cutting of woodland areas that is regulated under the Sediment and Stormwater Management rules of the Delaware Department of Natural Resources and Environmental Control.
- Forest Assessment: a method or process, to include a tree survey, for determining the area or areas within a parcel that contain high habitat value and individual trees to be preserved.
- Perimeter Buffer: a managed area of planted or existing trees and shrubs and associated landscaping, not less than 30 feet in width measured from the property boundary located along the entire outer perimeter of any portion of a major subdivision. No lots or stormwater management facilities (with the exception of outfalls) shall exist within the Perimeter Buffer. *See illustration below.*
- Perimeter Buffer Landscape Plan: a Plan prepared by a developer depicting compliance with the Perimeter Buffer and Perimeter Buffer Protection Area, including, but not limited to, planting schedules, types of vegetation (existing and to be planted); fencing, signage and other marking. The Perimeter Buffer Landscape Plan shall be prepared and certified by a licensed landscape architect, certified arborist, certified nursery professional, or licensed forester or forester designated by the Society of American Foresters as a “certified forester.”
- Perimeter Buffer Protection Area: an area adjacent to a Perimeter Buffer that contains Woodlands that is not less than 20 feet in width measured from the edge of the Perimeter Buffer to be retained and protected to ensure that existing Woodlands in a Perimeter Buffer are not disturbed. No lots or stormwater management facilities (with the exception of outfalls) shall be permitted in the Perimeter Buffer Protection Area. *See illustration below.*

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- Woodlands: an area of contiguous wooded vegetation of at least 10,000 square feet in an area where trees exist at a density of at least one tree with diameter at breast height of six inches or greater per 400 square feet of land and where the tree branches form a contiguous canopy. Active tree nurseries and orchards shall not be considered Woodlands.

45 **II. Perimeter Buffer General Standards**

46 There shall be a Perimeter Buffer established along the boundary of every major
47 subdivision or residential planned community. A Perimeter Buffer shall not be
48 required along internal boundaries within a subdivision or residential planned
49 community, such as internal phasing lines.

50 The Perimeter Buffer shall be planted with a variety of trees and shrubs so as to create
51 a visual landscaped screening. All trees and shrubs shall be local and native species.
52 All planting activities shall adhere to ANSI A300, Planting Standards.

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54 The Perimeter Buffer shall include a mix of 70% deciduous shade trees and 30%
55 evergreen trees. The Perimeter Buffer shall include at least fifteen trees within every
56 one-hundred linear feet of the Buffer. All deciduous and evergreen trees that are
57 planted shall have a minimum height of six feet above ground when planted, obtain a
58 minimum height of ten feet, and arranged in a staggered natural manner to effectively
59 achieve a visual landscaped screening which will filter views from and into the
60 subdivision. The Perimeter Buffer may include existing Woodlands and planted trees
61 to achieve these planting standards.

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63 In the event that a Resource Buffer (Section 115-193) is required in the location of a
64 Perimeter Buffer or Perimeter Buffer Protection Area, the Resource Buffer standards
65 shall take precedence over, and shall not be in addition to, the Perimeter Buffer and/or
66 Perimeter Buffer Protection Area requirements for that same location.

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68 The Perimeter Buffer shall be marked with permanent, in-ground signage located at
69 100-foot intervals along the edge of the Perimeter Buffer to confirm the existence and
70 non-disturbance of the Perimeter Buffer. This signage shall be at least five inches by
71 seven inches in size and shall identify the existence of the Buffer, the fact that it is a
72 non-disturbance Area and a reference to penalties and/or remediation required if
73 unauthorized disturbance occurs.

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75 **Perimeter Buffer Standards – Woodlands Requirements**

76 **Where a Perimeter Buffer contains existing Woodlands at the time of application,**
77 **the following requirements shall apply:**

78 Any major subdivision or residential planned community where Woodlands exist at the
79 time of application shall require a Forest Assessment prepared and certified by a
80 licensed landscape architect, certified arborist, certified nursery professional, or
81 licensed forester or forester designated by the Society of American Foresters as a
82 “certified forester.” The Forest Assessment must be submitted as part of the
83 application.

84 The Woodlands retained within the Perimeter Buffer shall be depicted generally on the
85 Preliminary Site Plan and with detail on the Perimeter Buffer Landscape Plan.

86 Unless otherwise provided for herein, the Woodlands within the Perimeter Buffer shall
87 remain in its natural state.

88 The Area of the Perimeter Buffer containing Woodlands shall be bordered by a
89 Perimeter Buffer Protection Area.

90 There shall be protective tree fencing, staking, or continuous ribbon installed along the
91 entire edge of the Perimeter Buffer Protection Area adjacent to the interior of the
92 development to protect the integrity of existing trees within the Perimeter Buffer.

93 Selective clearing of the Woodlands retained for the use of the Perimeter Buffer may
94 be permitted but at no time shall trees of six-inch diameter at breast height be damaged,
95 removed, or otherwise adversely affected. Dead, dying or unstable live trees that
96 present an imminent danger to persons or property may be removed. Removal of any
97 invasive species from the Woodlands is permitted.

98 Walking trails within the Woodlands for the purpose of providing access to the
99 Perimeter Buffer may be permitted and shall be depicted on the Perimeter Buffer
100 Landscape Plan.

101 Access points to the Woodlands for the purpose of Perimeter Buffer maintenance may
102 be permitted and shall be depicted on the Perimeter Buffer Landscape Plan.

103 Any removal or damage of trees within the Woodlands, the Perimeter Buffer or the
104 Perimeter Buffer Protection Area shall be subject to the mitigation requirements as well
105 as the violations and penalties located in this Chapter.

106 At no time shall the ground within Woodlands area of a Perimeter Buffer be cleared,
107 graded, regraded, or grubbed.

108 If Woodlands on the land where the Perimeter Buffer is to be located has been cleared
109 for a timber harvest within five years prior to the date of application, the following
110 additional planting requirements shall apply:

- 111 • The area harvested making up the Perimeter Buffer shall be measured and known
112 as the “Cleared Area”.
- 113 • The Perimeter Buffer shall be planted back with at least fifteen trees every fifty
114 linear feet of the Buffer.
- 115 • In addition to the Perimeter Buffer, a new Woodlands shall be planted that is 2.0
116 times the size of the Cleared Area and a rate of at least 50 trees per acre.
- 117 • The new Woodlands may border the area of the Perimeter Buffer or be in a
118 separate area, but at no time shall the Perimeter Buffer be less than 30’ in width
119 measured from the property boundary.
- 120 • The planted Perimeter Buffer and new Woodlands shall meet the tree and shrub
121 requirements of Section II of this Chapter.
- 122 • If the applicant chooses to provide replacement plantings on any property other
123 than the one on which the timber harvest occurred or protect an off-site
124 Woodlands area, the mitigation plan must be reviewed and approved by the
125 Planning and Zoning Commission.
 - 126 ○ The replacement plantings or off-site Woodlands area must be located
127 within the same twelve-digit hydrologic unit code as defined by the United
128 States Geological Survey as the proposed development.
 - 129 ○ The replacement plantings or Woodlands area located off-site must be
130 protected under a perpetual conservation easement for the benefit of a
131 conservation organization approved by Sussex County.
 - 132 ○ At no time shall the area of the replacement plantings be less than 2.0
133 times the area of Woodlands to be the Perimeter Buffer that was cleared
134 and a rate of at least 50 trees per acre and shall meet the tree and shrub
135 requirements of Section II of this Chapter.

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144 **Perimeter Buffer Standards – Non-Woodlands Requirements**

145 **Where a Perimeter Buffer does not contain existing Woodlands at the time of**
146 **application, the following requirements shall apply:**

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148 Any major subdivision or residential planned community where Woodlands do not
149 exist within the Perimeter Buffer shall comply with the planting requirements of the
150 Perimeter Buffer Standards and Perimeter Buffer Landscape Plan.

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152 There shall be protective fencing, staking, or continuous ribbon installed along the
153 entire edge of the Perimeter Buffer adjacent to the interior of the development to
154 protect the integrity of the Perimeter Buffer.

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156 There shall be a final grade that contains a minimum of four inches of topsoil and a
157 suitable grass mix planted as sacrificial cover between the buffer trees for soil
158 stabilization until the newly planted trees become larger. Woodchips may substitute
159 for planted grass between the buffer trees in respect to both newly planted and
160 existing trees.

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162 Walking trails within Perimeter Buffer may be permitted and shall be depicted on the
163 Perimeter Buffer Landscape Plan.

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165 Access points to the Woodlands for the purpose of Perimeter Buffer maintenance may
166 be permitted and shall be depicted on the Perimeter Buffer Landscape Plan.

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168 The Perimeter Buffer shall have a two-year guarantee secured by bonding from the
169 date that substantial completion is issued for the phase where the Perimeter Buffer is
170 located.

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179 **III. Perimeter Buffer Landscape Plan**

180 The Perimeter Buffer shall be depicted generally on the Preliminary Site Plan and in
181 detail on a Perimeter Buffer Landscape Plan that is included within a Final Site Plan.

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183 The Perimeter Buffer Landscape Plan shall provide sufficient information and detail to
184 clearly demonstrate that all applicable requirements and standards for Perimeter
185 Buffers and Perimeter Buffer Protection Areas are satisfied. The Perimeter Buffer
186 Landscape Plan shall contain, at a minimum, the following:

- 187 • Approximate location and description of the protective tree fencing, staking, or
188 continuous ribbon.
- 189 • The location, spacing, height, and species of existing and new trees and shrubs
190 proposed to meet tree planting requirements.
- 191 • The design and location of the required Perimeter Buffer signage.
- 192 • Measures to be taken to avoid sedimentation intrusions and erosion in the
193 Perimeter Buffer.
- 194 • A summary table of the number of new trees to be planted and minimum number
195 of existing trees to be retained (if any) to meet the tree specification and density
196 requirements with calculations confirming that these requirements have been
197 achieved. The summary table may include example groupings of trees to be
198 planted instead of each new tree labeled on the Perimeter Buffer Landscape Plan.
- 199 • A note confirming that the developer guarantees the full cost of replacement for
200 any trees, shrubs or existing Woodlands per Section V. of this Summary.
- 201 • A planting schedule for the Perimeter Buffer. The planting schedule shall
202 demonstrate the installation of the Perimeter Buffer prior to the issuance of the
203 first residential building permits in the phase where it is located. The Perimeter
204 Buffer shall be planted and inspected prior to the issuance of the first residential
205 building permit within the phase where the Buffer is located. Each phase of the
206 development must include the Perimeter Buffer and Perimeter Buffer Protection
207 Area (as applicable) that is adjacent to that Phase.

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- 214 • Notwithstanding any other provisions of this chapter, the Planning and Zoning
215 Commission shall be authorized, as part of the site plan review process, to grant
216 final approval of a Plan for the roadway frontage of a major subdivision which
217 may include Landscape and design features, such as fences, walls, berms,
218 Landscape Plantings of shrubs, ornamental grasses and/or trees, multimodal
219 paths required by DelDOT, or a combination of such features which is designed
220 and certified to by a licensed Landscape architect, licensed Forester or Forester
221 designated by the Society of American Foresters as a "certified Forester", for the
222 purpose of making the subdivision more attractive, more in keeping with the
223 surrounding Area and less visible from the roadway, provided said Plan will not
224 cause the Landscape features contained in the Plan to be placed in an Area
225 adjacent to the entrance in such a manner as to restrict the view of motorists
226 entering or exiting from the subdivision or restricting the sight lines of motorists
227 in such a manner as to create a potential safety or traffic hazard.
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253 **IV. Timing; Bonds and Guarantees.**

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255 The Perimeter Buffer Landscape Plan shall include the planting schedule for the entire
256 Perimeter Buffer. The planting schedule shall demonstrate the installation of the
257 Perimeter Buffer prior to the issuance of any residential building permits within the
258 phase. The Perimeter Buffer shall be planted and inspected prior to the issuance of the
259 first residential building permit within the phase where the Perimeter Buffer is located.
260 Each phase of the development must include the Perimeter Buffer and Perimeter Buffer
261 Protection Area (as applicable) that is adjacent to that phase. The Perimeter Buffer for
262 each phase must be planted and inspected before County approvals or permits will be
263 granted to construct the next phase.

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265 Where Woodlands exist in the Perimeter Buffer, the Perimeter Buffer and Perimeter
266 Buffer Protection Area shall be protected and marked as provided herein for the entire
267 development (subject to inspection and approval by Sussex County) prior to the
268 issuance of any notice to proceed for site work. For subdivisions that are to be
269 constructed in phases, the protection and marking of existing Woodlands shall be
270 maintained and inspected prior to the issuance of any notice to proceed for site work
271 or construction within a subsequent phase.

272 The developer shall be responsible for the removal from the site of all stakes, guy wires,
273 protective tree fencing, staking, or continuous ribbon.

274 The developer shall post a performance bond or other guaranty for the Perimeter Buffer
275 in an amount sufficient to install the Perimeter Buffer and the Perimeter Buffer
276 Protection Area (as applicable) in a form acceptable to the County Attorney. The
277 amount of such bond shall be 125% of the cost of the installation the Perimeter Buffer
278 (including all plantings) and the Perimeter Buffer Protection Area (as applicable) or
279 \$50,000, whichever is greater. The Perimeter Buffer shown on the Perimeter Buffer
280 Landscape Plan may be bonded as a separate phase or phases of the subdivision,
281 provided that all Perimeter Buffers containing Woodlands must be bonded before a
282 Notice to Proceed is issued for any phase of the development.

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284 Bonds posted to ensure the completion and non-disturbance of the Perimeter Buffers
285 shall be posted with the Director of Planning and Zoning.

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289 The trees and shrubs located within the Perimeter Buffer shall be in good health prior
290 to the issuance of substantial completion in accordance with Section 99-31 of the Code.
291 The Bonds for the Perimeter Buffer shall thereafter remain in place until the latter of
292 two years after the determination of substantial completion in accordance with Section
293 99-31 or two years after such date as the maintenance responsibilities are transferred
294 to a homeowners' association.

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296 A party may not alter the Perimeter Buffer Area of the development (or any phase
297 thereof) unless an amended Perimeter Buffer Landscaping Plan is approved by Sussex
298 County and a new bond or other guaranty is provided for the alteration.
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318 **V. Perimeter Buffer Maintenance**

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320 The developer shall be responsible for the health and survival of the Perimeter Buffer,
321 including regular necessary watering until the determination of substantial completion
322 in accordance with Section 99-31. This shall include the obligation to replace any trees
323 and shrubs within the Perimeter Buffer that do not survive during this time period.

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325 The Perimeter Buffer shall be maintained in perpetuity. The perpetual maintenance of
326 the Perimeter Buffer by a homeowners' association shall be confirmed in the recorded
327 declaration or restrictive covenants for the development with the requirement that any
328 trees or shrubs that do not survive must be replanted with trees or shrubs of the same
329 type and species in accordance with the original Landscape Plan approved by Sussex
330 County. The Perimeter Buffer shall be maintained (and any replacement trees or shrubs
331 planted) according to best management practices in the Forestry industry (ANSI A300).
332 The applicant and/or developer must provide the Commission with satisfactory proof
333 that the declaration or restrictive covenants include a perpetual maintenance plan which
334 shall be binding upon the applicant and/or developer and thereafter by the homeowners'
335 association. The Commission and its attorney shall review and approve the perpetual
336 maintenance plan prior to the restrictive covenants being recorded and prior to granting
337 final site plan approval.

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349 **VI. Perimeter Buffer Tree Mitigation**

350 In the event that trees, shrubs, Woodlands, or the Perimeter Buffer Protection Area are
351 removed or damaged without authorization, tree mitigation shall be required. In
352 addition, violations and penalties may be assessed.

353 If trees within a Perimeter Buffer (whether Woodlands or planted) have been damaged
354 or removed (unless such damage or removal is the result of Act of God or natural causes
355 and are therefore subject to the Perimeter Buffer Maintenance Requirements), tree
356 mitigation must occur in the form of newly created Woodlands as follows:

- 357 • A mitigation plan shall be prepared by a licensed Landscape architect, certified
358 arborist, certified nursery professional, or licensed Forester or Forester
359 designated by the Society of American Foresters as a “certified Forester.”
- 360 • New Woodlands shall be created for the Area of Woodlands in the Perimeter
361 Buffer that was illegally accessed or damaged with at least three replacement
362 trees planted for every tree removed or damaged.
- 363 • The replacement plantings shall meet the tree and shrub requirements of Section
364 II of this Summary.
- 365 • The developer, property owner and/or party who violates this section shall be
366 responsible for the health and survival of the replacement trees per Section V. of
367 this Summary.
- 368 • All tree mitigation plantings must be on the same lot, parcel, or tract on which
369 the illegal activity occurred, except as noted herein.

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382 **VII. Violations and Penalties**

383 [Copied from Resource Buffer Ordinance]

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385 The developer, owner of the land and any person or corporation who shall violate any
386 provisions of this Section shall be subject to the following penalties in addition to other
387 requirements set forth in this Section. Separate violations or a series of violations may
388 be combined to determine the total Area where the violation occurred.

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- 390 • A fine of \$10,000 per quarter acre, pro rata, of disturbance within the Perimeter
391 Buffer and Perimeter Buffer Protection Area, as applicable, shall be imposed;
392 and
- 393 • A tree mitigation plan in accordance with Section VI. of this Summary shall be
394 approved by the Planning and Zoning Commission.

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396 Where the developer is the party who has violated the provisions of this Section, no
397 building or zoning permits shall be issued nor shall any inspections occur within the
398 phase where the violation occurred (including, but not limited to building code and
399 utility inspections) until the tree mitigation plan is complete and approved by the
400 Commission.

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