

**MOTION:**

**February 11, 2014  
Regular Meeting  
Ord. No. 14-**

**SECOND:**

**RE: ADOPT AMENDMENTS TO THE DESIGN AND CONSTRUCTION  
STANDARDS MANUAL #PLN2014-00091, SECTION 800 LANDSCAPE  
AMENDMENTS – COUNTYWIDE**

**ACTION:**

**WHEREAS**, the Prince William County Design and Construction Standards Manual was adopted to assist the public in knowing the policies, regulations, and standards that apply to land development in the County; and

**WHEREAS**, the Design and Construction Standards Manual contains provisions related to requirements applicable to the review and approval of site development plans and plats and construction in accordance with those plans; and

**WHEREAS**, the Board of County Supervisors directed staff to develop and propose improvements to the County's landscaping requirements; and

**WHEREAS**, on August 6, 2013, the Board of County Supervisors initiated a Design and Construction Standards Manual amendment to improve landscape standards in Section 800 through Res. No. 13-491; and

**WHEREAS**, amendments to the Design and Construction Standards Manual initiated by the Board of County Supervisors included a provision that required planting area for interior landscaping for shopping centers and shopping malls be established at 19% of the total site impervious area; and

**WHEREAS**, the Zoning Ordinance/Design and Construction Standards Advisory Committee recommended that planting area for interior landscaping for shopping centers and shopping malls be reduced to 17% of the total site impervious area; and

**WHEREAS**, the Prince William County Planning Commission duly ordered, advertised, and held a public hearing on November 6, 2013 and recommend approval as recommended by staff with the exception that the planting area for interior landscaping for shopping centers and shopping malls be increased to 19% of the total site impervious area as initiated by the Board of County Supervisors; and

**WHEREAS**, staff recommends amending Section 800 Landscape Amendments to incorporate landscape standards to shopping centers, shopping malls, perimeter parking lot landscaping and stormwater management facilities. The new standards will include a provision that requires planting area for interior landscaping for shopping centers and shopping malls be reduced to 17% of the total site impervious area; and

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**WHEREAS**, the Prince William Board of County Supervisors duly ordered, advertised, and held a public hearing on February 11, 2014, at which time public testimony was received and the merits of the above-reference Design and Construction Standards Manual amendment were considered; and

**WHEREAS**, the Prince William Board of County Supervisors believes that public general welfare, as well as, good planning practices are served by the adoption of this Design and Construction Standards Manual Amendment;

**NOW, THEREFORE, BE IT ORDAINED** that the Prince William Board of County Supervisors does hereby adopts amendments to the Design and Construction Standards Manual #PLN2014-00091, Section 800 Landscape Amendments as proposed in the attachment.

ATTACHMENT: Text Amendment

**Votes:**

**Ayes:**

**Nays:**

**Absent from Vote:**

**Absent from Meeting:**

**For Information:**

Development Services Director  
Planning Director  
Public Works Director

**ATTEST:** \_\_\_\_\_  
**Clerk to the Board**

**Design and Construction Standards Manual**  
**Section 800**  
**Buffer Areas, Landscaping, and Tree Cover Requirements**

**802.43 Perimeter Parking Lot Landscaping:**

A. For parking lots of nonresidential developments, which contain twenty (20) spaces or more, and for all townhouse and multi-family developments, any of which abut a property line, and which do not abut buffer areas or other required screening/landscaping, a ten (10) foot landscape strip along the perimeter of the property line shall be required. For the purposes of this section, a parking lot is considered abutting a property line where any part of it is within thirty (30) feet of the property line.

B. ~~Fifty (50)~~ Eighty (80) plant units per 100 linear feet are required within this landscape strip. A maximum of thirty (30) plant units per 100 linear feet may be large deciduous trees. The plant types unit credits shall be in accordance with Table 8-3. A maximum of forty (40) plant units per 100 linear feet may be large evergreen trees. If large deciduous and large evergreen trees are used in combination, then a maximum of 40 plant units per 100 linear feet of large deciduous and large evergreen trees combined may be used. A maximum of 25% of the plant units required may be ornamental grasses and/or perennials. Given these limits on quantities of certain plant types, a mixture of plant types should be utilized.

C. Utility easements shall not be located in the landscape strips, unless planting in the easement is specifically approved by the ~~agency~~ entity controlling such easement.

D. Low Impact Development (LID) features designed to control and infiltrate storm water runoff and that employ landscaping in accordance with this section, are encouraged within landscape strips and planting areas described in this section, subject to the approval of the Director of Public Works or designee.

**802.44 Interior Parking Lot Landscaping:**

A. Any surface parking lot containing twenty (20) or more spaces (except for shopping centers and shopping malls) shall be provided with interior landscaping area covering not less than five percent (5%) of the total area of the parking lot. The total area of a parking lot shall include the parking spaces, planting islands, curbed areas, loading spaces, interior driveways, travelways, and aisles, exclusive of the parking and loading areas for tractor trailer trucks. For shopping centers and shopping malls, see paragraph L, below.

[ Parts B through H remain unchanged ]

I. The interior width, soil volume and soil quality of any planting area shall be sufficient to protect the plants and allow for mature growth of the species. Accordingly, the following minimum standards and guidelines are established:

1. A minimum planting area of one hundred ~~twenty~~ fifty (1250) square feet of continuous pervious area shall be provided for each tree. No tree planting area shall be less than eight (8) feet wide in any direction with the exception that, if parking spaces are located on only one (1) side of a planting island perpendicular to the parking spaces, then the island may be reduced to a minimum of six (6) feet wide.

[ Parts 1.2, 1.3, J and K remain unchanged ]

L. For all shopping centers and shopping malls (as defined in the Zoning Ordinance), exclusive of any freestanding retail use of eighty thousand (80,000) square feet or greater, interior planting areas and landscaping shall be provided in addition to and outside of any planting areas and landscaping required by the Zoning Ordinance or Design and Construction Standards Manual for buffers, landscape strips along rights-of-way, perimeter parking lot landscaping and storm water management facilities (per Section 802.45) as follows:

1. Planting areas equal to or greater than 17% of the total site impervious area for the shopping center shall be provided. These planting areas may be contiguous to perimeter planting areas listed in Paragraph L, however the emphasis shall be on planting areas reasonably dispersed throughout the interior of the site with, as described in Paragraph B, for the purpose of shading the parking lot. Area within any Chesapeake Bay Resource Protection Area or within a 100 year floodplain shall not be credited toward meeting the 17%.

2. All areas credited toward the 17% shall be landscaped with ornamental grasses, perennials, shrubs and/or trees. Landscaping shall be provided at a rate of 50 plant units per 1000sf of the planting area determined under L.1, above. Plant unit credits shall be in accordance with Table 8-3. A minimum of 40% of the plant units required shall be large or medium deciduous trees.

3. The minimum width (i.e., the narrowest dimension) and surface area of all planting areas shall be in accordance with Table I-5.

4. Schedule J, Shopping Center & Shopping Mall Interior Planting, shall be provided.

5. Any building within a shopping center that has a building footprint less than fifteen thousand (15,000) square feet shall provide a minimum of one (1) plant unit for each three (3) linear feet of building foundation perimeter. Planting shall be provided interior to the site and within eighty (80) feet of the building foundation, although not necessarily contiguous to the foundation. These planting areas may be credited toward the 17% requirement of paragraph L.1. The remaining planting areas required to meet the 17% shall be reasonably dispersed throughout the interior of the site. Schedule K shall be provided.

6. Areas credited toward these requirements shall be clearly identified on the landscape plan.

7. Combining planting areas within the parking lot is encouraged so that they are larger than the minimum set forth in Table I-5 and more suited to the long-term health of the plant material and to LID practices.

8. Any new building not previously shown on an approved site plan shall meet the requirements of this section. The total site impervious area shall be based on the area occupied by the proposed building, proposed or required parking (whichever is greater) and all other impervious areas proposed or required as part of the proposed development.

#### **802.45 Storm Water Management (SWM) Facilities:**

A. Landscaping of storm water management facilities is intended to insure that these important urban open spaces are developed in a manner that will yield the greatest environmental and amenity benefit to the community. The plant unit credits shall be in accordance with Table 8-3. Consideration of the landscape elements of the SWM facility should begin at the concept stage with the formulation of design objectives.

B. For dry ponds, no trees shall be planted on or within twenty (20) feet of the dam embankment, on the emergency spillway, below the 2-year water surface elevation, or on the access road. However, at a minimum:

1. Landscaping shall surround the basin within the storm water management easement.
2. ~~Fifty (50)~~ Eighty (80) plant units per 100 linear feet of the 100-year water surface elevation, exclusive of the dam embankment and spillway, shall be provided. A maximum of fifty (50) plant units per 100 linear feet may be large deciduous or large evergreen trees. If large deciduous and large evergreen trees are used in combination, then a maximum of fifty (50) plant units per 100 linear feet of large deciduous and large evergreen trees combined may be used. A maximum of 25% of the plant units required may be ornamental grasses and/or perennials. Given these limits on quantities of certain plant types, a mixture of plant types should be utilized.
3. A combination of shade ~~trees~~, ornamental and/or evergreen trees, and shrubs shall be used. Perennials and ornamental grasses may be used.
4. If plantings are approved within the two (2) year water surface elevation they shall be specified as wet-cultivated on the plant schedule.

C. For wet ponds, no trees shall be planted on or within twenty (20) feet of the dam embankment, on the access road, or the emergency spillway. However, at a minimum:

1. Landscaping shall surround the basin within the storm water management easement area.
2. ~~Fifty (50)~~ Eighty (80) plant units per one hundred (100) linear feet of the 100-year water surface elevation, exclusive of the dam embankment and spillway, shall be provided above the 10-year water surface elevation. A maximum of fifty (50) plant units per 100 linear feet

may be large deciduous or large evergreen trees. If large deciduous and large evergreen trees are used in combination, then a maximum of fifty (50) plant units per 100 linear feet of large deciduous and large evergreen trees combined may be used. A maximum of 25% of the plant units required may be ornamental grasses and/or perennials. Given these limits on quantities of certain plant types, a mixture of plant types should be utilized.

3. A combination of shade, ornamental trees and/or evergreen trees and shrubs shall be used. Perennials and ornamental grasses may also be used.

~~4. In addition to the 50 plant units in (2), above, native emergent wetland plants shall be provided within the ten (10) foot aquatic bench for at least 50% of its length. Spacing for 2" plugs shall be between six (6) inches and ten (10) inches on center across the entire width of the wetland bench. For guidance on appropriate native species, refer to the most recent edition of the Virginia Stormwater Management Handbook, Volume I, Chapter 3, Section 3.05, "Landscaping", produced by the Department of Conservation and Recreation.~~

54. Where possible, shade trees ~~shall~~ should be planted near the water's edge to moderate thermal impact on the pool, ~~and some open areas are necessary provided~~ for access to dredge the facility.

5. Where a wet pond is provided as a golf course feature and does not abut adjacent properties, the landscaping requirements of this Paragraph C.1 through C.7, above do not apply; however the buffer requirement of DCSM 802.11.B.4 shall be met.

6. Where an amenity that is a hard structure (for example, a deck or patio) or where a building is proposed to the water's edge, the length of the 100-year water surface elevation abutting the hard structure or building may be deducted from the linear feet of the 100-year water surface elevation used to calculate the plant units required. This concept of a hard structure shall not include retaining walls, trails/sidewalks, parking lots or features where landscape planting is possible.

7. If plantings are approved below the ten (10) year water surface elevation they shall be specified as wet-cultivated on the plant schedule.

E. To allow flexibility in the planning of landscapes for SWM facilities and to encourage creative and innovative approaches to design, the following criteria shall apply to ensure the safety of the public and the functionality of the facility:

[ Parts E.1 through E.7 remain unchanged ]

~~8. If plantings are approved within the two (2) year water surface elevation they shall be specified as wet-cultivated on the plant schedule.~~

98. Opportunities for passive recreation should be provided whenever possible. Fishing, hiking, birding, picnicking, and nature study are among the activities appropriate on many SWM facility sites.

**TABLE 1-5**  
**Minimum Planting Area**

Tree Category	<u>Minimum Width</u>	Minimum Planting square-foot surface area
Large deciduous or evergreen tree	<u>8 ft</u>	<del>130</del> <u>150</u> sf
Medium deciduous or evergreen tree	<u>8 ft</u>	<del>90</del> <u>150</u> sf
Small deciduous or evergreen tree	<u>6 ft</u>	<del>50</del> <u>60</u> sf
Compact deciduous or evergreen tree	<u>6ft</u>	<del>30</del> <u>40</u> sf
<u>Shrub</u>	<u>4 ft</u>	<u>20</u> sf

**SCHEDULE 1**  
**STORM WATER MANAGEMENT POND LANDSCAPING**

For Wet and Dry Ponds:

1) Linear feet of the 100-year water surface elevation: \_\_\_\_\_

2) Linear feet of the 100-year water surface  
elevation deducted for hardscape: \_\_\_\_\_

23) Total number of plant units required at 580pu/100lf: \_\_\_\_\_

34) Number of plants provided \*:

\_\_\_\_\_ shade trees  
\_\_\_\_\_ ornamental trees  
\_\_\_\_\_ evergreen trees  
\_\_\_\_\_ shrubs

Number of large deciduous tree provided: \_\_\_\_\_ x 10 p.u. = \_\_\_\_\_ p.u.

Number of large evergreen trees: \_\_\_\_\_ x 10 p.u. = \_\_\_\_\_ p.u.

Number of evergreen understory trees  
(medium, small or compact): \_\_\_\_\_ x 5 p.u. = \_\_\_\_\_ p.u.

Number of deciduous understory trees  
(medium, small or compact): \_\_\_\_\_ x 5 p.u. = \_\_\_\_\_ p.u.

Number of shrubs: \_\_\_\_\_ x 2 p.u. = \_\_\_\_\_ p.u.

Number of ornamental grasses: \_\_\_\_\_ x 1 p.u. = \_\_\_\_\_ p.u.

Number of perennials: \_\_\_\_\_ x 0.25 p.u. = \_\_\_\_\_ p.u.

45) Total number of plant units provided \*: \_\_\_\_\_

For Wet Ponds Only:

5) Linear feet of the 10' wide maintenance wetland bench: \_\_\_\_\_

6) Total area (in sf) of maintenance wetland bench to be planted: \_\_\_\_\_  
(50% of total length x 10' bench width)

7) Total number of emergent wetland plants required: \_\_\_\_\_  
(An average of 1 plant for every 0.44 0.70 sf.)

\* Note: Plant units shall not include plantings for the aquatic bench.



**SCHEDULE J**  
**SHOPPING CENTER & SHOPPING MALL INTERIOR PLANTING**

- 1) Total site impervious area: \_\_\_\_\_ (sf)
- 2) Interior planting area required (17%) \_\_\_\_\_ (sf)
- 3) Total number of plant units required: \_\_\_\_\_
- 4) Plant units provided:
 

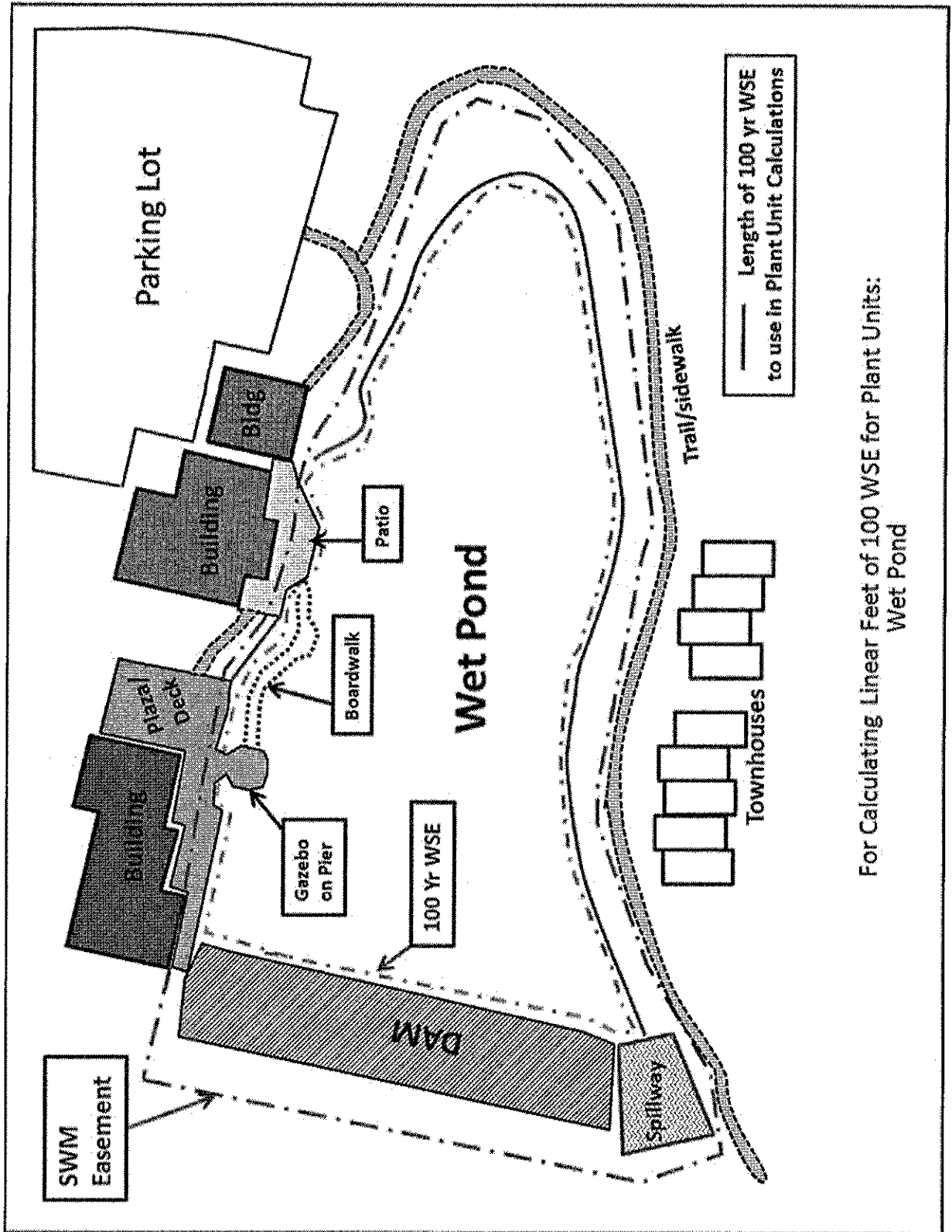
Number of large deciduous trees: _____	x	10 p.u. = _____	p.u.
Number of deciduous understory trees: _____ (medium, small or compact) _____	x	5 p.u. = _____	p.u.
Number of large evergreen trees: _____	x	10 p.u. = _____	p.u.
Number of evergreen understory trees: _____ (medium, small or compact) _____	x	5 p.u. = _____	p.u.
Number of shrubs: _____	x	2 p.u. = _____	p.u.
Number of ornamental grasses: _____	x	1 p.u. = _____	p.u.
Number of perennials: _____	x	0.25 p.u. = _____	p.u.
- 5) Total number of plant units provided: \_\_\_\_\_

**SCHEDULE K**  
**SHOPPING CENTER AND SHOPPING MALL**  
**BUILDING PERIMETER PLANTING AREA**

- 1) Total perimeter of building footprint: \_\_\_\_\_ (lf)
- 2) Total number of plant units required: \_\_\_\_\_
- 4) Plant units provided:
 

Number of large deciduous trees: _____	x	10 p.u. = _____	p.u.
Number of deciduous understory trees: _____ (medium, small or compact) _____	x	5 p.u. = _____	p.u.
Number of large evergreen trees: _____	x	10 p.u. = _____	p.u.
Number of evergreen understory trees: _____ (medium, small or compact) _____	x	5 p.u. = _____	p.u.
Number of shrubs: _____	x	2 p.u. = _____	p.u.
Number of ornamental grasses: _____	x	1 p.u. = _____	p.u.
Number of perennials: _____	x	0.25 p.u. = _____	p.u.
- 5) Total number of plant units provided: \_\_\_\_\_

Exhibit 1





Melissa S. Peacor  
County Executive

## COUNTY OF PRINCE WILLIAM

OFFICE OF EXECUTIVE MANAGEMENT

1 County Complex Court, Prince William, Virginia 22192-9201  
(703) 792-6600 Metro 631-1703 FAX: (703) 792-7484

### BOARD OF COUNTY SUPERVISORS

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January 6, 2014

TO: Board of County Supervisors

FROM: *For* Wade A. Hugh *[Signature]*  
Director of Development Services

THRU: Melissa S. Peacor  
County Executive

RE: Adopt Amendments to the Design and Construction Standards Manual  
#PLN2014-00091, Section 800 Landscape Amendments – **Countywide**

**I. Background is as follows:**

- A. Purpose of the Design and Construction Standards Manual – The Design and Construction Standards Manual (DCSM) contains County provisions that relate primarily to the requirements for the review and approval of site development plans, plats, and site construction.
- B. Periodic Amendments to the DCSM – Amendments to the DCSM are generally necessitated by:
  1. Federal or State Laws – Changes in federal or state laws or regulations pertaining to land development.
  2. Zoning Ordinance Updates – Corresponding changes to the DCSM are made to effectuate land use policies in the Zoning Ordinance.
  3. Design and Construction Issues – Revisions necessary to solve and address design and construction issues and/or omissions/errors encountered during the implementation of the County development standards.
  4. Comprehensive Plan Updates – Major updates of the Comprehensive Plan that create or revise land use development policies.
  5. Updates of Procedures and Processes – Changes to plan and permit processing and procedures to improve efficiency and customer service may require amendments.

- C. Purpose of Amendments – These amendments are the second and third phases of a series of changes to the Landscaping, Buffering and Tree Planting chapter of the DCSM that was directed by the Board of County Supervisors. The purpose of these phases is to amend provisions of Section 800 of the DCSM to enhance buffer areas, landscaping, and tree cover requirements in parking lots located within shopping centers, shopping malls, and storm water management facilities. The proposed amendments will upgrade the standards for plantings as well as promote their survivability. The chart below summarizes the proposed changes as well as in Attachment D – Summary of Amendments.

DCSM Section + Use	Current Language	Proposed Language
<b>802.43 Perimeter Parking Lot Landscaping</b>		
Plant Unit	50 pu / 100 linear feet	80 pu / 100 linear feet
Unit Credits		Large Evergreen Trees Large Deciduous Trees Shrubs Ornamental Grasses Perennials
10' wide Landscape Strip	For property lines internal to a development (primarily applied to pad sites)	Per ZO Text Amend. Will no longer apply to office/commercial/industrial sites developed as a single entity*  * Shopping centers/shopping malls will have revised planting requirement under 802.44
Low Impact Development (LID)	Not mentioned	Encouraged
<b>802.44 Interior Parking Lot Landscaping</b>		
5% Interior Planting Area Requirement	All parking lots of 20 spaces or more.	All parking lots 20 spaces or more, except shopping centers/shopping malls
Shopping Centers / Shopping Malls (exclusive of freestanding retail use greater than 80,000sf)	Not specifically addressed	New 17% interior planting area requirement combining old 10' parking lot setback and 5% interior planting areas.
Planting Requirement	1 LD or MD tree per 200sf of planting area	50 plant units / 1000sf of planting area
Unit Credits		Large Evergreen Trees Large Deciduous Trees Shrubs Ornamental Grasses Perennials
Low Impact Development (LID)		Encouraged

Medium / Large Deciduous Trees		Minimum 40%
Shopping Center Building Footprint (less than 15,000sf)	Not specifically addressed	Minimum planting required within 80 lf of the building foundation  1 pu / 3 linear feet of building foundation perimeter
Shopping Center & Shopping Mall Interior Planting Chart		Required worksheet
Shopping Center & Shopping Mall Building Perimeter Planting Area		Required worksheet
New Building added to Approved Site Plan		Required landscaping
<b>802.45 Storm Water Management</b>		
Plant Units	50 pu / 100 linear feet	80 pu / 100 linear feet
Unit Credits	Shade Tree Evergreen Tree Ornamental Tree Shrubs	Shade Tree Evergreen Tree Ornamental Tree Shrubs Perennials Ornamental Grasses
Wet Pond Planting of Aquatic Bench	Required	Not required. To be determined under New Section 700 SWM requirements.
Golf Course Ponds	Required landscaping	Landscaping not required if pond is entirely internal to the golf course property.
Hard structures provided as amenities abutting wet ponds	Not addressed	Where wet ponds are edged by hard structure amenities (e.g., patios/decks) the area may be deducted from the planting requirement.

- D. Application of Current Language -- These Design and Construction Standards Manual amendments are in response to a Board of County Supervisors directive for County staff to propose improvements to the County's landscaping standards which enhance the visual appearance in new developments, road frontages, parking lots, and around stormwater management facilities.
- E. DCSM Amendments Initiated -- On August 6, 2013, the Board of County Supervisors initiated through Res. No. 13-491 an amendment to Section 800 of the Design and Construction Standards Manual to improve the County's landscaping requirements. One of the most significant upgrades to the proposed

standards are the requirements for interior planting areas of shopping centers and shopping malls to be equal to 19% of the total impervious area of the site. See BOCS Initiating Resolution in Attachment B.

**II. Current Situation is as follows:**

- A. Zoning and Development Review Advisory Committee – The committee last reviewed the proposed text amendments on September 27, 2013. The committee proposed that the interior planting area for shopping centers and shopping malls be reduced to 15% of the total site impervious area. The rationale behind the reduction was based on the potentially negative impacts the new standards would have on small shopping centers. After a lengthy discussion, staff and committee members reached a consensus of 17% of the total impervious area of the site.
- B. Planning Commission Recommendation – The Planning Commission held a public hearing on November 6, 2013 and recommended adoption of Design and Construction Standards Manual #PLN2014-00091, Section 800 Landscape Amendments. The Planning Commission, however, recommended that the requirements for the planting areas of interior landscaping in shopping centers and shopping malls to be equal to 19% of the total impervious area of the site as initiated by the BOCS (Alternative B). See Planning Commission Resolution in Attachment C.
- C. Development Services Recommendation – The Department of Development Services recommends adoption of Design and Construction Standards Manual, #PLN2014-00091, Section 800 Landscape Amendments to incorporate landscape standards for perimeter parking lot strips; interior planting areas for shopping centers and shopping malls; and stormwater management facilities, as proposed in Attachment A and as recommended for adoption by the Zoning Ordinance/DCSM Advisory Committee.
- D. Board of County Supervisors Public Hearing – A public hearing before the Board of County Supervisors has been properly advertised for January 21, 2014.
- E. Board Action Requested – Board of County Supervisors' action is requested to adopt amendments to the Design and Construction Standards Manual #PLN2014-00091, Section 800 Landscape Amendments.

**III. Issues in order of importance are:**

- A. Policy – Do the amendments further the purposes of the Design and Construction Standards Manual?
- B. Legal – Are there any legal implications associated with these amendments?

- C. Fiscal Impact – Are there any budget of financial impacts associated with these amendments?
- D. Timing – What are the timing considerations?

IV. Alternatives beginning with the staff recommendation are as follows:

- A. Adopt Amendments to the Design and Construction Standards Manual #PLN2014-00091, Section 800 Landscape Amendments to the Prince William County Design and Construction Standards Manual on proposed in Attachment A.
  - 1. Policy – Approval of the proposed amendments will allow the adoption of regulations that will give staff the authority to implement improved and consistent landscaping standards and fulfill the Board’s mandate. These standards will also further the Comprehensive Plan policies of good quality community design to ensure a high quality of life for County residents and revitalization of older commercial areas.
  - 2. Legal – The adoption of the amendments will incorporate the proposed landscape standards into the Design and Construction Standards Manual which is enforceable by the County.
  - 3. Fiscal Impact – There are no direct fiscal impacts associated with these amendments.
  - 4. Timing – There is no time requirement for the Board of County Supervisors to take action on amendments to the Design and Construction Standards Manual.
- B. Adopt Amendments to the Design and Construction Standards Manual #PLN2014-00091, Section 800 Landscape Amendments to the Prince William County Design and Construction Standards Manual as proposed in Attachment A with the exception that the planting areas required for shopping centers and shopping malls specified in Section 802.44(L)(1) shall not exceed 19% of the impervious surface area. This is the Planning Commission’s recommendation.
  - 1. Policy – Approval of the proposed amendments will allow the adoption of regulations that will give staff the authority to implement improved and consistent landscaping standards and fulfill the Board’s mandate. These standards will also further the Comprehensive Plan policies of good quality community design to ensure a high quality of life for County residents and revitalization of older commercial areas.

There is a concern with the 19% interior parking lot landscaping requirement and the potential for negative impacts on small commercial

shopping centers. The landscaping requirement may be too restrictive to enable small shopping centers to develop.

2. Legal – The adoption of the amendments will incorporate the proposed landscape standards into the Design and Construction Standards Manual which is enforceable by the County.
3. Fiscal Impact – There is no direct fiscal impact associated with these amendments.
4. Timing – There is no time requirement for the Board of County Supervisors to take action on amendments to the Design and Construction Standards Manual.

C. Take No Action –

1. Policy – Staff will not have the authority to implement improved and consistent landscaping standards and will not be able to fulfill the Board's mandate. Existing policy conditions will remain unchanged.
2. Legal – The amendments would not take effect without action by the Board of County Supervisors.
3. Fiscal Impact – No impacts.
4. Timing – There is no time requirement for the Board of County Supervisors to take action on amendments to the Design and Construction Standards Manual.

V. **Recommendation** is that the Board of County Supervisors concur with Alternative A and adopts the attached Ordinance.

**Staff:** Wade A. Hugh 703-792-7346  
Oscar F. Guzman, 703-792-7071

**Attachments:**

- A. Proposed Text Amendment
- B. BOCS Initiating Resolution
- C. Planning Commission Resolution
- D. Summary of Amendments for DCSM Section 800



**Design and Construction Standards Manual**  
**Section 800**  
**Buffer Areas, Landscaping, and Tree Cover Requirements**

**802.43 Perimeter Parking Lot Landscaping:**

A. For parking lots of nonresidential developments, which contain twenty (20) spaces or more, and for all townhouse and multi-family developments, any of which abut a property line, and which do not abut buffer areas or other required screening/landscaping, a ten (10) foot landscape strip along the perimeter of the property line shall be required. For the purposes of this section, a parking lot is considered abutting a property line where any part of it is within thirty (30) feet of the property line.

B. ~~Fifty (50)~~ Eighty (80) plant units per 100 linear feet are required within this landscape strip. A maximum of thirty (30) plant units per 100 linear feet may be large deciduous trees. The plant ~~types~~ unit credits shall be in accordance with Table 8-3. A maximum of forty (40) plant units per 100 linear feet may be large evergreen trees. If large deciduous and large evergreen trees are used in combination, then a maximum of 40 plant units per 100 linear feet of large deciduous and large evergreen trees combined may be used. A maximum of 25% of the plant units required may be ornamental grasses and/or perennials. Given these limits on quantities of certain plant types, a mixture of plant types should be utilized.

C. Utility easements shall not be located in the landscape strips, unless planting in the easement is specifically approved by the ~~agency~~ entity controlling such easement.

D. Low Impact Development (LID) features designed to control and infiltrate storm water runoff and that employ landscaping in accordance with this section, are encouraged within landscape strips and planting areas described in this section, subject to the approval of the Director of Public Works or designee.

**802.44 Interior Parking Lot Landscaping:**

A. Any surface parking lot containing twenty (20) or more spaces (except for shopping centers and shopping malls) shall be provided with interior landscaping area covering not less than five percent (5%) of the total area of the parking lot. The total area of a parking lot shall include the parking spaces, planting islands, curbed areas, loading spaces, interior driveways, travelways, and aisles, exclusive of the parking and loading areas for tractor trailer trucks. For shopping centers and shopping malls, see paragraph L, below.

[ Parts B through H remain unchanged ]

I. The interior width, soil volume and soil quality of any planting area shall be sufficient to protect the plants and allow for mature growth of the species. Accordingly, the following minimum standards and guidelines are established:

## Attachment A – Proposed Text Amendment

1. A minimum planting area of one hundred ~~twenty~~ fifty (1250) square feet of continuous pervious area shall be provided for each tree. No tree planting area shall be less than eight (8) feet wide in any direction with the exception that, if parking spaces are located on only one (1) side of a planting island perpendicular to the parking spaces, then the island may be reduced to a minimum of six (6) feet wide.

[ Parts 1.2, 1.3, J and K remain unchanged ]

L. For all shopping centers and shopping malls (as defined in the Zoning Ordinance), exclusive of any freestanding retail use of eighty thousand (80,000) square feet or greater, interior planting areas and landscaping shall be provided in addition to and outside of any planting areas and landscaping required by the Zoning Ordinance or Design and Construction Standards Manual for buffers, landscape strips along rights-of-way, perimeter parking lot landscaping and storm water management facilities (per Section 802.45) as follows:

1. Planting areas equal to or greater than 17% of the total site impervious area for the shopping center shall be provided. These planting areas may be contiguous to perimeter planting areas listed in Paragraph L, however the emphasis shall be on planting areas reasonably dispersed throughout the interior of the site with, as described in Paragraph B, for the purpose of shading the parking lot. Area within any Chesapeake Bay Resource Protection Area or within a 100 year floodplain shall not be credited toward meeting the 17%.

2. All areas credited toward the 17% requirement shall be landscaped with ornamental grasses, perennials, shrubs and/or trees. Landscaping shall be provided at a rate of 50 plant units per 1000sf of the planting area determined under L.1, above. Plant unit credits shall be in accordance with Table 8-3. A minimum of 40% of the plant units required shall be large or medium deciduous trees.

3. The minimum width (i.e., the narrowest dimension) and surface area of all planting areas shall be in accordance with Table I-5.

4. Schedule J, Shopping Center & Shopping Mall Interior Planting, shall be provided.

5. Any building within a shopping center that has a building footprint less than fifteen thousand (15,000) square feet shall provide a minimum of one (1) plant unit for each three (3) linear feet of building foundation perimeter. Planting shall be provided interior to the site and within eighty (80) feet of the building foundation, although not necessarily contiguous to the foundation. These planting areas may be credited toward the 17% requirement of paragraph L.1. The remaining planting areas required to meet the 17% requirement shall be reasonably dispersed throughout the interior of the site. Schedule K shall be provided.

6. Areas credited toward these requirements shall be clearly identified on the landscape plan.

## Attachment A – Proposed Text Amendment

7. Combining planting areas within the parking lot is encouraged so that they are larger than the minimum set forth in Table I-5 and more suited to the long-term health of the plant material and to LID practices.

8. Any new building not previously shown on an approved site plan shall meet the requirements of this section. The total site impervious area shall be based on the area occupied by the proposed building, proposed or required parking (whichever is greater) and all other impervious areas proposed or required as part of the proposed development.

### **802.45 Storm Water Management (SWM) Facilities:**

A. Landscaping of storm water management facilities is intended to insure that these important urban open spaces are developed in a manner that will yield the greatest environmental and amenity benefit to the community. The plant unit credits shall be in accordance with Table 8-3. Consideration of the landscape elements of the SWM facility should begin at the concept stage with the formulation of design objectives.

B. For dry ponds, no trees shall be planted on or within twenty (20) feet of the dam embankment, on the emergency spillway, below the 2-year water surface elevation, or on the access road. However, at a minimum:

1. Landscaping shall surround the basin within the storm water management easement.
2. Fifty (50) Eighty (80) plant units per 100 linear feet of the 100-year water surface elevation, exclusive of the dam embankment and spillway, shall be provided. A maximum of fifty (50) plant units per 100 linear feet may be large deciduous or large evergreen trees. If large deciduous and large evergreen trees are used in combination, then a maximum of fifty (50) plant units per 100 linear feet of large deciduous and large evergreen trees combined may be used. A maximum of 25% of the plant units required may be ornamental grasses and/or perennials. Given these limits on quantities of certain plant types, a mixture of plant types should be utilized.
3. A combination of shade trees, ornamental and/or evergreen trees, and shrubs shall be used. Perennials and ornamental grasses may be used.
4. If plantings are approved within the two (2) year water surface elevation they shall be specified as wet-cultivated on the plant schedule.

C. For wet ponds, no trees shall be planted on or within twenty (20) feet of the dam embankment, on the access road, or the emergency spillway. However, at a minimum:

1. Landscaping shall surround the basin within the storm water management easement area.

## Attachment A – Proposed Text Amendment

2. ~~Fifty (50)~~ Eighty (80) plant units per one hundred (100) linear feet of the 100-year water surface elevation, exclusive of the dam embankment and spillway, shall be provided above the 10-year water surface elevation. A maximum of fifty (50) plant units per 100 linear feet may be large deciduous or large evergreen trees. If large deciduous and large evergreen trees are used in combination, then a maximum of fifty (50) plant units per 100 linear feet of large deciduous and large evergreen trees combined may be used. A maximum of 25% of the plant units required may be ornamental grasses and/or perennials. Given these limits on quantities of certain plant types, a mixture of plant types should be utilized.

3. A combination of shade, ornamental trees and/or evergreen trees and shrubs shall be used. Perennials and ornamental grasses may also be used.

4. ~~In addition to the 50 plant units in (2), above, native emergent wetland plants shall be provided within the ten (10) foot aquatic bench for at least 50% of its length. Spacing for 2" plugs shall be between six (6) inches and ten (10) inches on center across the entire width of the wetland bench. For guidance on appropriate native species, refer to the most recent edition of the Virginia Stormwater Management Handbook, Volume I, Chapter 3, Section 3.05, "Landscaping", produced by the Department of Conservation and Recreation.~~

54. Where possible, shade trees shall should be planted near the water's edge to moderate thermal impact on the pool, and sSome open areas are necessary provided for access to dredge the facility.

5. Where a wet pond is provided as a golf course feature and does not abut adjacent properties, the landscaping requirements of this Paragraph C.1 through C.7, above do not apply; however the buffer requirement of DCSM 802.11.B.4 shall be met.

6. Where an amenity that is a hard structure (for example, a deck or patio) or where a building is proposed to the water's edge, the length of the 100-year water surface elevation abutting the hard structure or building may be deducted from the linear feet of the 100-year water surface elevation used to calculate the plant units required. This concept of a hard structure shall not include retaining walls, trails/sidewalks, parking lots or features where landscape planting is possible.

7. If plantings are approved below the ten (10) year water surface elevation they shall be specified as wet-cultivated on the plant schedule.

E. To allow flexibility in the planning of landscapes for SWM facilities and to encourage creative and innovative approaches to design, the following criteria shall apply to ensure the safety of the public and the functionality of the facility:

[ Parts E.1 through E.7 remain unchanged ]

8. ~~If plantings are approved within the two (2) year water surface elevation they shall be specified as wet-cultivated on the plant schedule.~~

## Attachment A – Proposed Text Amendment

98. Opportunities for passive recreation should be provided whenever possible. Fishing, hiking, birding, picnicking, and nature study are among the activities appropriate on many SWM facility sites.

TABLE I-5 Minimum Planting Area		
Tree Category	Minimum Width	Minimum Planting <del>square feet</del> surface area
Large deciduous or evergreen tree	<u>8 ft</u>	<del>130</del> <u>150</u> sf
Medium deciduous or evergreen tree	<u>8 ft</u>	90 <u>150</u> sf
Small deciduous or evergreen tree	<u>6 ft</u>	<del>50</del> <u>60</u> sf
Compact deciduous or evergreen tree	<u>6ft</u>	<del>30</del> <u>40</u> sf
<u>Shrub</u>	<u>4 ft</u>	<u>20</u> sf

## Attachment A – Proposed Text Amendment

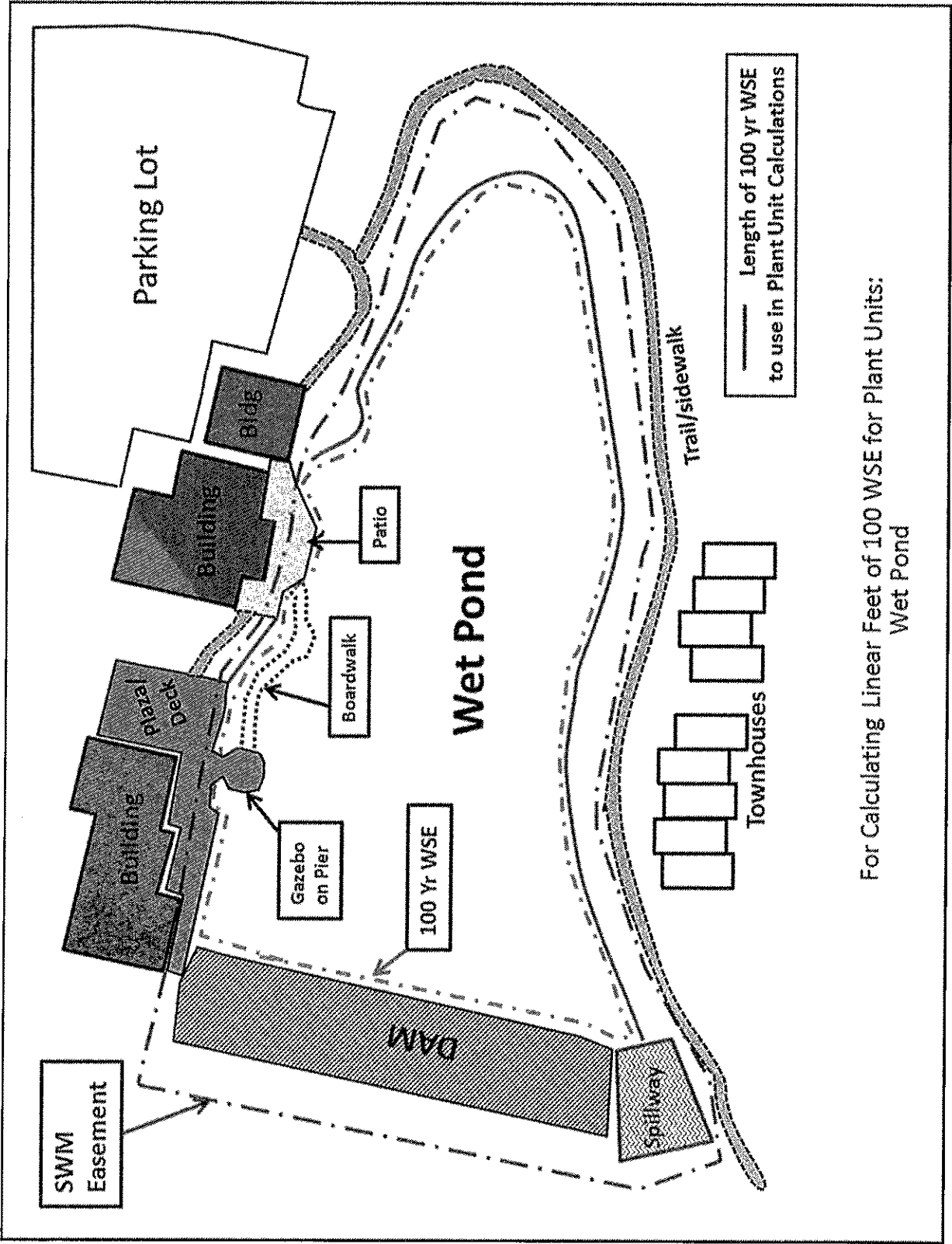
<b>SCHEDULE I</b> <b>STORM WATER MANAGEMENT POND LANDSCAPING</b>	
For Wet and Dry Ponds:	
1) Linear feet of the 100-year water surface elevation:	_____
2) <u>Linear feet of the 100-year water surface elevation deducted for hardscape:</u>	_____
23) Total number of plant units required at 580pu/100lf :	_____
34) Number of plants provided *:	
_____	shade trees
_____	ornamental trees
_____	evergreen trees
_____	shrubs
Number of large deciduous tree provided:	x 10 p.u. = _____ p.u.
Number of large evergreen trees:	x 10 p.u. = _____ p.u.
Number of evergreen understory trees	
(medium, small or compact):	x 5 p.u. = _____ p.u.
Number of deciduous understory trees	
(medium, small or compact):	x 5 p.u. = _____ p.u.
Number of shrubs:	x 2 p.u. = _____ p.u.
Number of ornamental grasses:	x 1 p.u. = _____ p.u.
Number of perennials:	x 0.25 p.u. = _____ p.u.
45) Total number of plant units provided *: _____	
For Wet Ponds Only:	
5) Linear feet of the 10' wide maintenance <u>wetland bench</u> :	_____
6) Total area (in sf) of maintenance <u>wetland bench</u> to be planted: _____	
(50% of total length x 10' <u>bench</u> width )	
7) Total number of emergent wetland plants required: _____	
(An average of 1 plant for every 0.44 <u>0.70</u> sf.)	
* Note: Plant units shall not include plantings for the aquatic bench.	

## Attachment A – Proposed Text Amendment

<b>SCHEDULE J</b> <b>SHOPPING CENTER &amp; SHOPPING MALL INTERIOR PLANTING</b>			
1)	Total site impervious area:	(sf)	
2)	Interior planting area required (17%)	(sf)	
3)	Total number of plant units required:		
4)	Plant units provided:		
	Number of large deciduous trees:	x 10 p.u. =	p.u.
	Number of deciduous understory trees:	x 5 p.u. =	p.u.
	(medium, small or compact)		
	Number of large evergreen trees:	x 10 p.u. =	p.u.
	Number of evergreen understory trees:	x 5 p.u. =	p.u.
	(medium, small or compact)		
	Number of shrubs:	x 2 p.u. =	p.u.
	Number of ornamental grasses:	x 1 p.u. =	p.u.
	Number of perennials:	x 0.25 p.u. =	p.u.
5)	Total number of plant units provided:		

<b>SCHEDULE K</b> <b>SHOPPING CENTER AND SHOPPING MALL</b> <b>BUILDING PERIMETER PLANTING AREA</b>			
1)	Total perimeter of building footprint:	(lf)	
2)	Total number of plant units required:		
4)	Plant units provided:		
	Number of large deciduous trees:	x 10 p.u. =	p.u.
	Number of deciduous understory trees:	x 5 p.u. =	p.u.
	(medium, small or compact)		
	Number of large evergreen trees:	x 10 p.u. =	p.u.
	Number of evergreen understory trees:	x 5 p.u. =	p.u.
	(medium, small or compact)		
	Number of shrubs:	x 2 p.u. =	p.u.
	Number of ornamental grasses:	x 1 p.u. =	p.u.
	Number of perennials:	x 0.25 p.u. =	p.u.
5)	Total number of plant units provided:		

Exhibit 1





## Attachment B –BOCS Initiating Resolution

**MOTION: CADDIGAN**

**August 6, 2013  
Regular Meeting  
Res. No. 13-491**

**SECOND: CANDLAND**

**RE: INITIATE AMENDMENTS TO SECTION 800 OF THE PRINCE  
WILLIAM COUNTY DESIGN & CONSTRUCTION STANDARDS  
MANUAL**

**ACTION: APPROVED**

**WHEREAS**, the Prince William County Design and Construction Standards Manual was adopted to assist the public in knowing the policies, regulations and standards that apply to land development in the County; and

**WHEREAS**, the Design and Construction Standards Manual contains provisions related to requirements applicable to the review and approval of site development plans and plats and construction in accordance with those plans; and

**WHEREAS**, the Board of County Supervisors directed staff to develop and propose improvements to the County's landscaping requirements; and

**WHEREAS**, the public necessity and general welfare will be served by the initiation and consideration of the proposed amendments;

**NOW, THEREFORE, BE IT RESOLVED** that the Prince William Board of County Supervisors does hereby initiate Amendments to Section 800 of the Prince William County Design and Construction Standards Manual.

**Votes:**

**Ayes:** Caddigan, Candland, Covington, Jenkins, May, Nohe, Principi, Stewart

**Nays:** None

**Absent from Vote:** None

**Absent from Meeting:** None

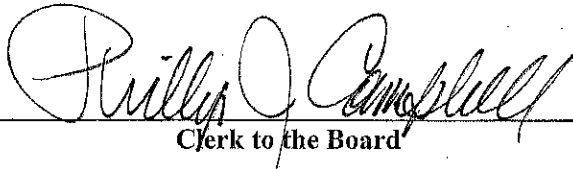
**For Information:**

Development Services Director

Planning Director

Public Works Director

**ATTEST:** \_\_\_\_\_

  
Clerk to the Board

## Attachment C – Planning Resolution

### PLANNING COMMISSION RESOLUTION

**MOTION:** HAYNES

November 6, 2013  
Regular Meeting  
Res. No. 13-086

**SECOND:** FRY

**RE:** DESIGN AND CONSTRUCTION STANDARDS MANUAL #PLN2014-00091, SECTION 800 LANDSCAPE AMENDMENTS – COUNTYWIDE

**ACTION:** RECOMMEND ADOPTION

**WHEREAS**, the Prince William County Design and Construction Standards Manual was adopted to assist the public in knowing the policies, regulations, and standards that apply to land development in the County; and

**WHEREAS**, the Design and Construction Standards Manual contains provisions related to requirements applicable to the review and approval of site development plans and plats and construction in accordance with those plans; and

**WHEREAS**, the Board of County Supervisors directed staff to develop and propose improvements to the County's landscaping requirements; and

**WHEREAS**, on August 6, 2013 the Board of County Supervisors initiated a design and construction standards manual amendment to improve landscape standards in Section 800 through Res. No. 13-491; and

**WHEREAS**, the Prince William County Planning Commission duly ordered, advertised, and held a public hearing on November 6, 2013 at which time public testimony was received and the merits of the above-reference design and construction standards amendment were considered; and

**WHEREAS**, the Prince William County Planning Commission believes that public general welfare, as well as, good planning practices are served by the adoption of this design and construction standards manual amendment;

**NOW, THEREFORE, BE IT RESOLVED**, that the Prince William County Planning Commission does hereby recommend adoption of Design and Construction Standards Manual #PLN2014-00091, Section 800 Landscape Amendments, with the condition that the requirements for the planting areas of interior landscaping shopping centers and shopping malls to be increased from 17 % to 19% of the total impervious area of the site.

**Votes:**

**Ayes:** Arnold, Bryant, Burgess, Fry, Haynes, Holley, Hosen, Vanegas

**Nays:** None

**Absent from Meeting:** None

**Abstained from Vote:** None

**MOTION CARRIED**

Certified Copy:

  
Teresa M. Taylor

Clerk to the Planning Commission

## Attachment D – Summary of Amendments for DCSM Section 800

Section 802.43 (B) – Raised the plant unit requirements within landscape strips of parking areas (**adjacent to property lines**) from fifty (50) plant units per 100 linear feet to eighty (80) plant units per linear feet. Added a requirement limiting the percentage of large evergreen trees and the percentage for the combination of large deciduous and evergreens that can be installed per 100 linear feet. Added a requirement limiting the percentage of plant units for grasses and perennials.

Section 802.43 (D) – Encourages low impact development features to control and infiltrate runoff within landscape strips.

Section 802.44 (A) – Establishes separate interior landscaping requirements for shopping centers and shopping malls.

Section 802.44 (I)(1) – Raised the minimum planting area for a tree from 120 square feet to 150 square feet.

Section 802.44 (L) – New section that establishes interior landscaping requirements for shopping centers and shopping malls.

- (1) Establishes the requirement at 17% of total impervious area.
- (2) Establishes the required plant unit requirements (50/100 sq. ft.)
- (3) Sets minimum width and area of planting areas (Table)
- (4) Requires submission of new Schedule J
- (5) Sets requirement for building foundation perimeter planting
- (6) Sets requirement for the identification of credited areas to be identified on the landscape plan
- (7) Encourages combining planting areas for long-term health of plantings
- (8) Clarifies what impervious areas include

Section 802.45 (A) – Sets requirement for plant unit credits used in storm water management area plantings.

Section 802.45 (B)(2) – Increases planting requirements for **dry** ponds from 50 plants units per 80 linear feet of 100-year water surface elevation to 100 plant units per linear feet. Added a requirement limiting the percentage of plant types that can be installed per 100 linear feet of landscaping.

Section 802.45 (B)(3) – Allows the use of perennials and grasses.

Section 802.45 (B) (1) – Requires the placement of landscaping around the storm water management area.

## **Attachment D – Summary of Amendments for DCSM Section 800**

Section 802.45 (B)(2) – Increases planting requirements for wet ponds from 50 plants units per 80 linear feet of 100-year water surface elevation to 100 plant units per linear feet. Added a requirement limiting the percentage of plant types that can be installed per 100 linear feet of landscaping.

Section 802.45 (B) (3) – Specifies the use of shade, ornamental and/or evergreen trees and shrubs as well as perennials for storm water management area landscaping.

Section 802.45 (B) (4) - Specifies the use of wet-cultivated plants for landscaping installed within the two-year water surface elevation.

Section 802.45 (C) (5) – Exempts wet pond provided as features in a golf course from landscaping requirements.

Section 802.45 (B) (6) – Provides clarification for computing the plant unit requirements by excluding hard structures (decks, patios, etc.) from the linear footage calculation.

Section 802.45 (B) (7) – Specifies wet-cultivated for plantings installed below the ten year water surface elevation.

Table I-5: Increases planting areas required for different tree sizes

Schedule I: Combines the wet and dry pond planting calculation steps.

New Schedule J & K for shopping centers and shopping malls.

Exhibit 1 – Added to clarify how the perimeter length used to calculate the plantings around the water/ponding area of SWM facilities is established.