

- A - *Ilex opaca* (American Holly), 8' o.c.
- B - *Viburnum acerifolium* (Mapleleaf viburnum), 3' o.c.
- C - *Chionanthus virginicus* (Fringetree)
- D - *Cimicifuga racemosa* (Black Snakeroot), 12" o.c.
- E - Wildflower Mix, 85 SF;

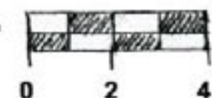
sample mix: 50% *Tradescantia virginiana* (Spiderwort)
 20% *Aquilegia canadensis* (Columbine),
 20% *Scenecio aureus* (Sneezeweed),
 10% *Lilium superbum* (Turk's Cap Lily)

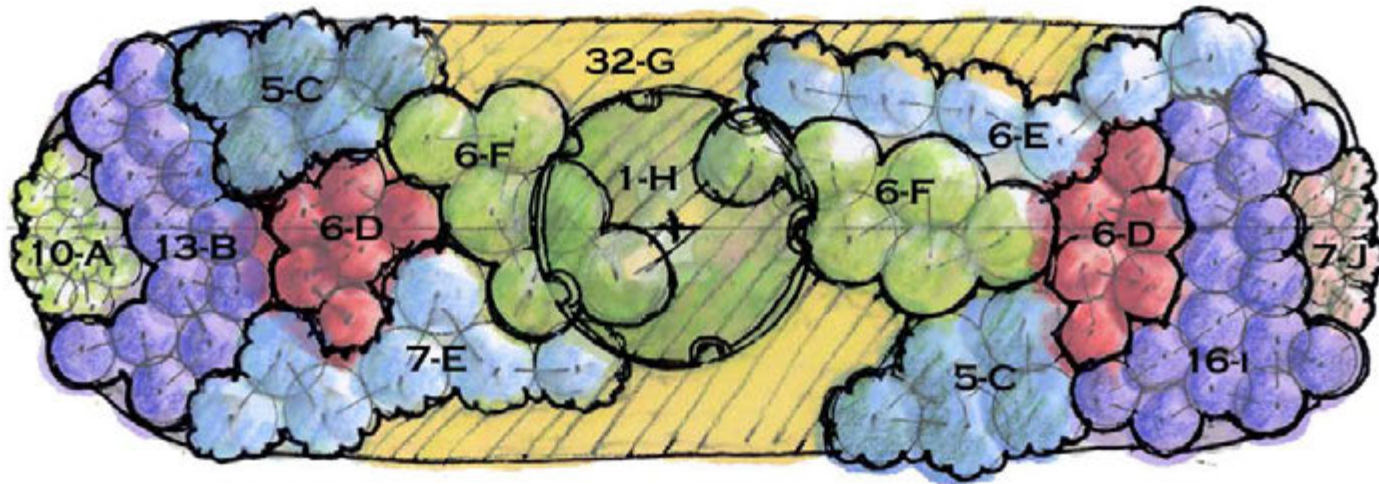
If using plants (vs. seed) for wildflowers, space 18" o.c.
 (19 - *Tradescantia*, 8-*Aquilegia*, 8-*Scenecio*, 4-*Lilium*)
 <seeding is higher maintenance option due to need to
 nurture seedlings>



FOR THE BIRDS RAINGARDEN
450 SF
 Coastal Plain
 Pt. Shade-Shade
 All zones

Scale: 1/4" = 1'





- A - *Myosotis scorpioides* (Forget-me-not) or *Mertensia virginiana* (Virginia bluebell), 12" o.c.
- B - *Gentiana andrewsii* (Bottle Gentian) or *Aster cordifolius* (Blue Wood Aster), 18" o.c. or
- C - *Amsonia tabernaemontana* (Blue-star flower)*, 2' o.c.
- D - *Lobelia siphilitica* (Great Blue Lobelia), 18" o.c.
- E - *Phlox divaricata* (Woodland Phlox), 2' o.c.
- F - *Aruncus dioicus* (Goatsbeard), 2' o.c.
- G - *Elymus hystrix* (Bottlebrush Grass), 15" o.c. or (52) *Ajuga reptans* (Carpetbugle) 12" o.c.
- H - *Aesculus parviflora* (Bottlebrush buckeye)
- I - *Aster cordifolius* (Blue Wood Aster) or *Tradescantia virginiana* (Spiderwort), 18" o.c.
- J - *Viola papilionacea* (Common Blue Violet), 12" o.c.
or *Dicentra eximia* (Hardy Bleeding Heart)

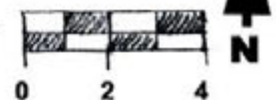
note: o.c. = on center

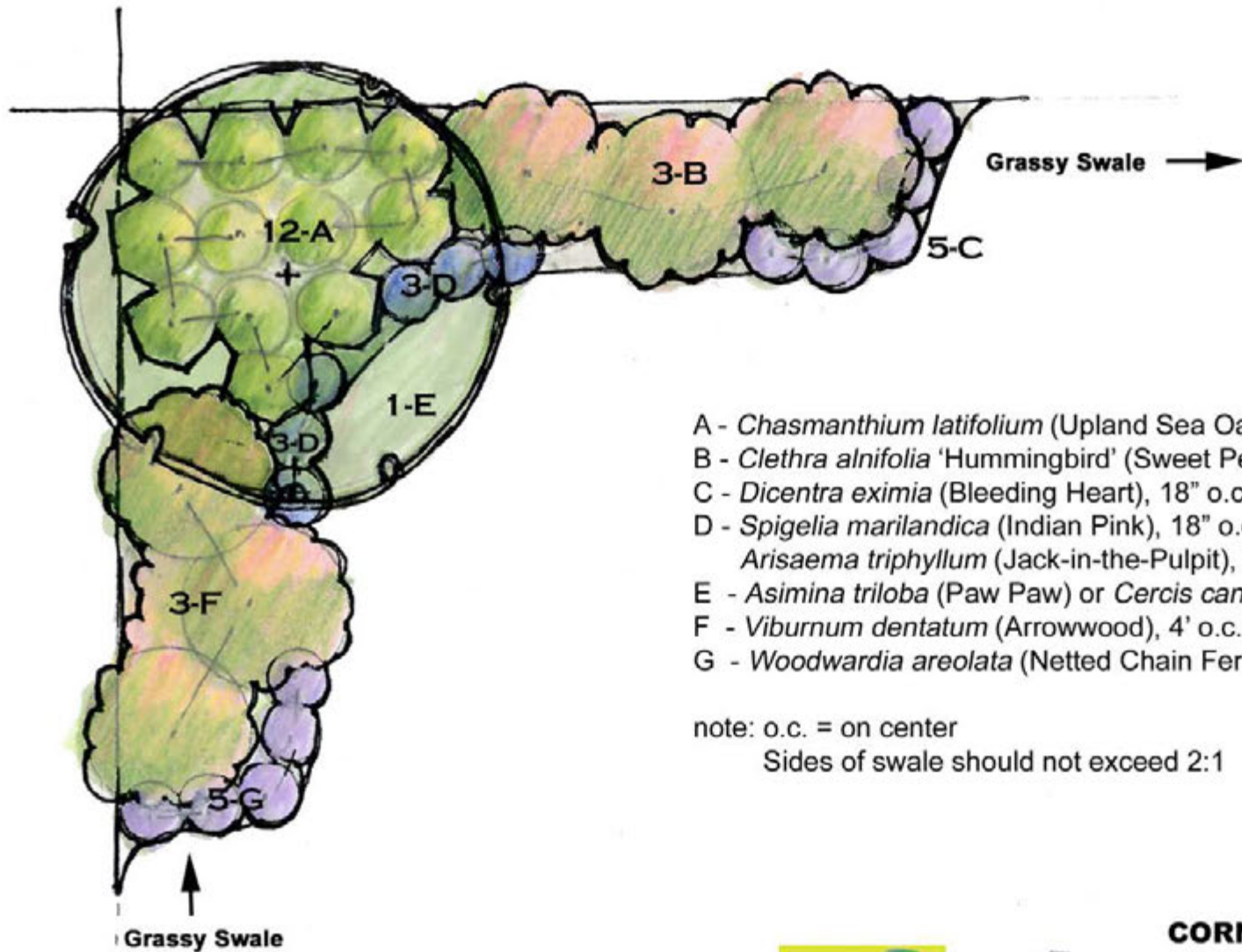
* needs half day of sun for best flowering; if deep shade, substitute a fern
e.g. *Polystichum acrostichoides* (Christmas Fern)



**BUTTERFLIES SWALE LOW
MAINTENANCE RAINGARDEN**
250 SF
Pt Shade/Shade
Coastal Plain

Scale: 1/4" = 1'





- A - *Chasmanthium latifolium* (Upland Sea Oats), 2' o.c.
- B - *Clethra alnifolia* 'Hummingbird' (Sweet Pepperbush), 4' o.c.
- C - *Dicentra eximia* (Bleeding Heart), 18" o.c.
- D - *Spigelia marilandica* (Indian Pink), 18" o.c. or
Arisaema triphyllum (Jack-in-the-Pulpit), 18" o.c.
- E - *Asimina triloba* (Paw Paw) or *Cercis canadensis* 'Forest Pansy'
- F - *Viburnum dentatum* (Arrowwood), 4' o.c.
- G - *Woodwardia areolata* (Netted Chain Fern), 18" o.c.

note: o.c. = on center
Sides of swale should not exceed 2:1

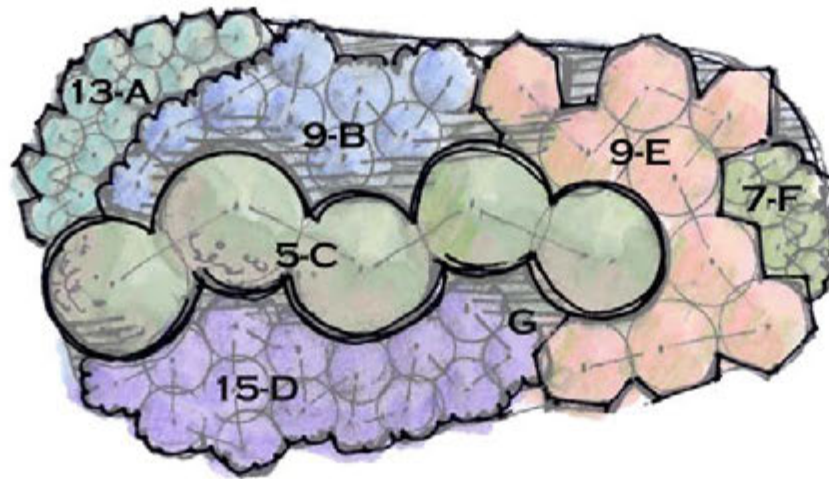


CORNER RAINGARDEN

150 SF
Pt Shade - Shade
All zones,
Coastal Plain

Scale: 1/4"=1'





- A - *Tiarella cordifolia* (Foamflower), 12" o.c
- B - *Cimicifuga racemosa* (Black Cohosh), 18" o.c.
- C - *Rhododendron atlanticum* (Coastal azalea), 3' o.c.
- D - *Tradescantia virginiana* (Spiderwort), 18" o.c.
- E - *Polygonatum biflorum* (Solomon's Seal), 2' o.c.
- F - *Viola labridorica* (Labrador violet), 12" o.c.
- G - *Narcissus* naturalizing type (Daffodils), 4" o.c.

note: o.c. = on center

**note: G indicates daffodils
4" o.c., total 200 bulbs**



DIVIDER RAINGARDEN

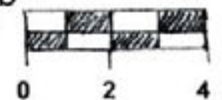
130 SF

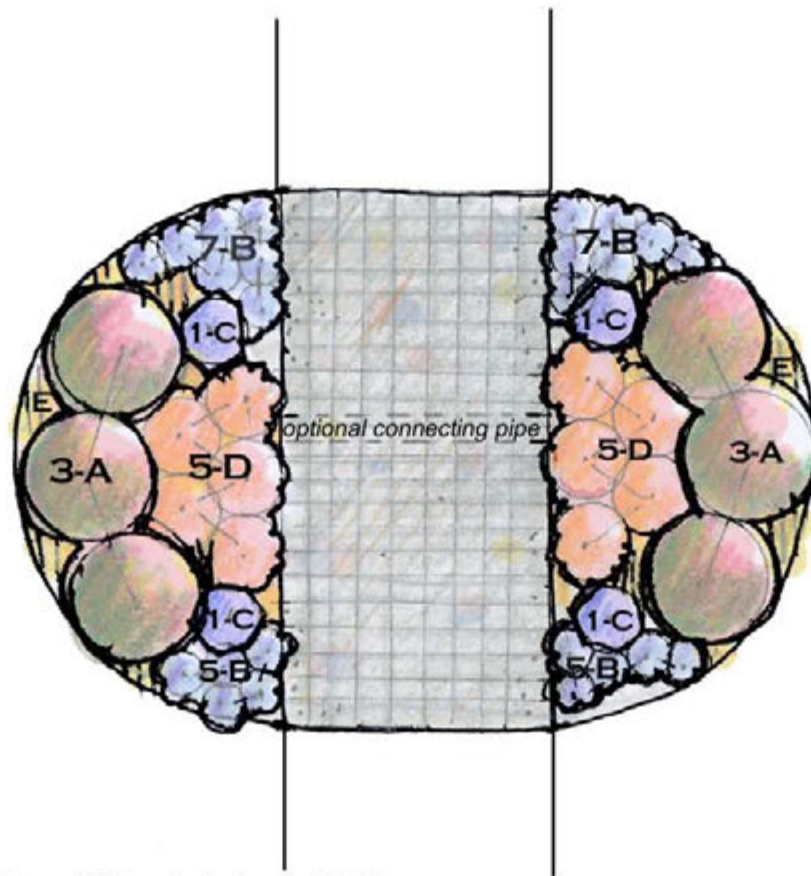
Coastal Plain

Pt Shade - Shade

Zone 5a-7b

Scale: 1/4" = 1'





- A - *Kalmia latifolia* 'Elf' or 'Tiddlywinks' (Dwarf Mountain Laurel), 3' o.c.
- B - *Asarum canadense* (Wild Ginger) or *Tiarella cordifolia* (Foamflower), 12" o.c.
- C - *Osmunda regalis* (Royal Fern)
- D - *Hosta sieboldiana* 'Elegans' (Elegans Hosta), 2' o.c. or *Heuchera americana* (Alumroot; many cultivars)
- E - *Narcissus* 'Thalia' or 'Ice Follies', 4" o.c, total 30 bulbs (White Daffodils)

Note: o.c. = on center

Direct water into the garden from adjacent turf and downspouts
 Excavate the walk and garden areas at the same time and install all soil improvements for treating the runoff in both the pavement and planting areas at the same time.

The paver area will be underlain with open graded stone and should be vertically separated from the rain gardens with a curb.

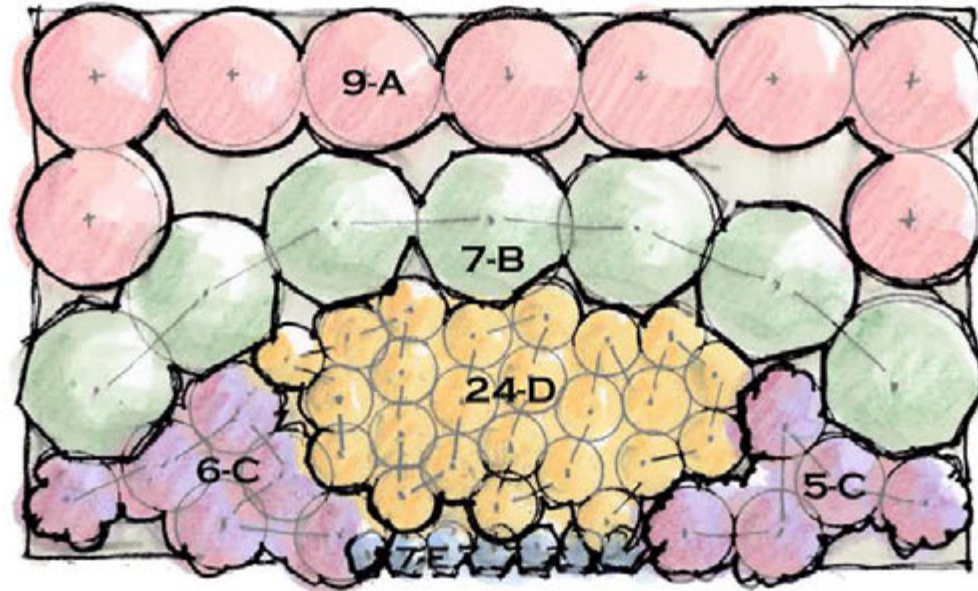


**ENTRY RAINGARDEN
 FLANKING WALK WITH
 PERMEABLE PAVERS
 113 SF GARDEN, 72 SF PAVERS**

Coastal Plain
 Pt Shade-Shade
 Zones: All

Scale: 1/4" = 1'





- A - *Rhododendron* 'Herbert', 3' o.c. or *Calycanthus floridus* (Sweetshrub)
- B - *Clethra alnifolia* 'Sixteen Candles', 3 1/2' o.c.
- C - *Aster divaricatus* (White Wood Aster)***, 2' o.c.
- D - *Spiranthes cernua* var. *odorata* (Fragrant Lady's Tresses)**, 15' o.c.
- E - *Phlox stolonifera* (Creeping Phlox) or *Phlox divaricata* (Woodland Phlox)*, 12' o.c.

note: o.c.= on center

* *Viola odorata* (Sweet Violet) may be used but they do spread rapidly or *Galium odoratum* (Sweet woodruff)

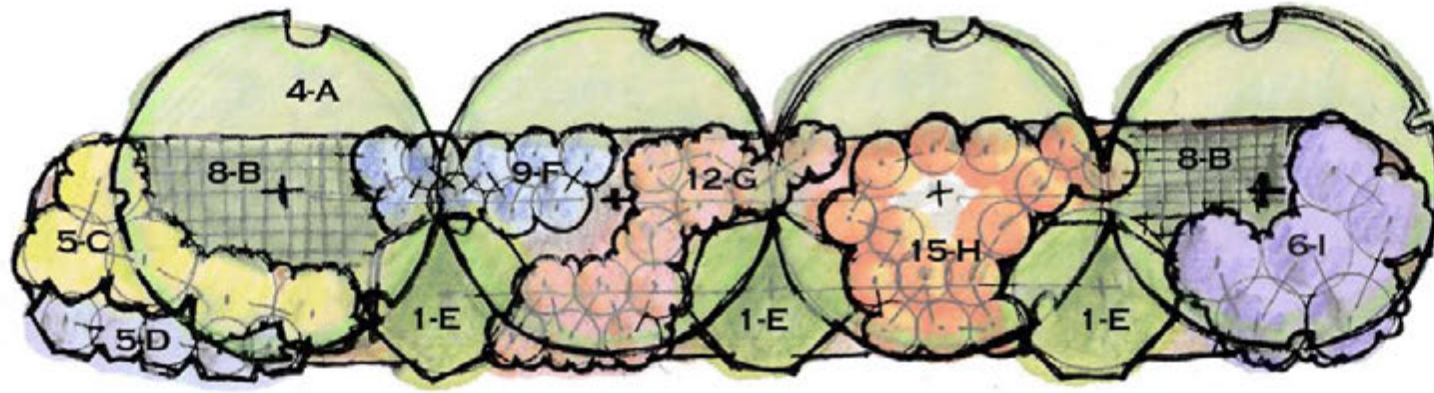
** *Hosta* 'Fragrant Blue' may be subst. (space 12" o.c. and use 36 plants) or if there is a half day of sun, *Monarda* X 'Marshall's Delight', 15" o.c.

***Underplant with *Convallaria majalis* for spring fragrance (use about 120 pips)



FRAGRANT RAINGARDEN
FORMAL 21'x12' = 252 SF
 Coastal Plain
 Pt Shade-Shade
 Zones 5b-7a
 Scale: 1/4"=1'





- A - *Acer rubrum* (Red Maple), 18' o.c.
- B - *Elymus hystrix* (Bottlebrush Grass) or *Osmunda regalis* (Royal Fern), 2' o.c.
- C - *Viburnum acerfolium* (Mapleleaf viburnum), 3' o.c.*, 5' o.c.
- D - *Gaylussacia baccata* (Black Huckleberry), 3' o.c.
- E - *Amelanchier canadensis* (Shadblow) or *Cornus alternifolia* (Alternate-leaf dogwood), 18' o.c.
- F - *Pieris floribunda* (Mountain Pieris), 5' o.c.
- G - *Clethra alnifolia* 'Ruby Spice', 3' o.c.
- H - *Calycanthus floridus* (Sweetshrub), 4' o.c.
- I - *Leucothoe racemosa* (Fetterbush) or *Lindera benzoin* (Spicebush)***, 5' o.c.

note: o.c. = on center

* *Viburnum trilobum* (American Cranberrybush) OK if half day of sun

** *Kalmia angustifolia* (Sheep Laurel) OK if half day of sun

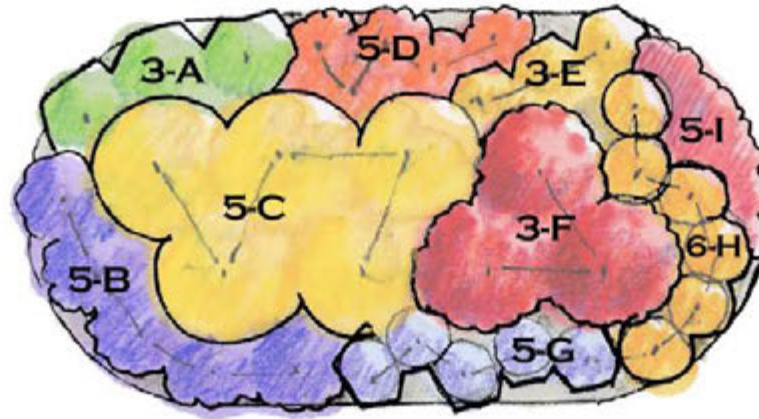
*** *Ilex glabra nana* (Dwarf Inkberry) or
Myrica pensylvanica (Northern Bayberry) OK if half day of sun



HEDGEROW RAINGARDEN
903 SF

Scale: 1"=10'
 Coastal Plain
 Pt Shade-Shade
 All zones





- A - *Polygonatum biflorum* (Solomon's Seal), 2' o.c.
- B - *Penstemon laevigatus* (Eastern Smooth Beardtongue), 2' o.c.
- C - *Cimicifuga racemosa* (Black Snakeroot) , 3' o.c.
- D - *Scenecio aureus* (Golden ragwort)*, 18" o.c.
- E - *Tradescantia virginiana* (Spiderwort), 18" o.c.
- F - *Helenium autumnale* (Yellow Sneezeweed)* or *Thalictrum polygamum* (Tall Meadowrue)
or *Hosta* 'Sum and Substance', 3' o.c.
- G - *Arisaema triphyllum* (Jack-in-the-Pulpit), 18" o.c.
- H - *Lilium superbum*, (Turk's Cap Lily), 18" o.c.
- I - *Aquilegia canadensis* (Wild columbine), 18" o.c.

note: o.c. = on center

* *Asclepias tuberosa* (Butterfly weed) OK if half day of sun)

**Needs Pt. sun

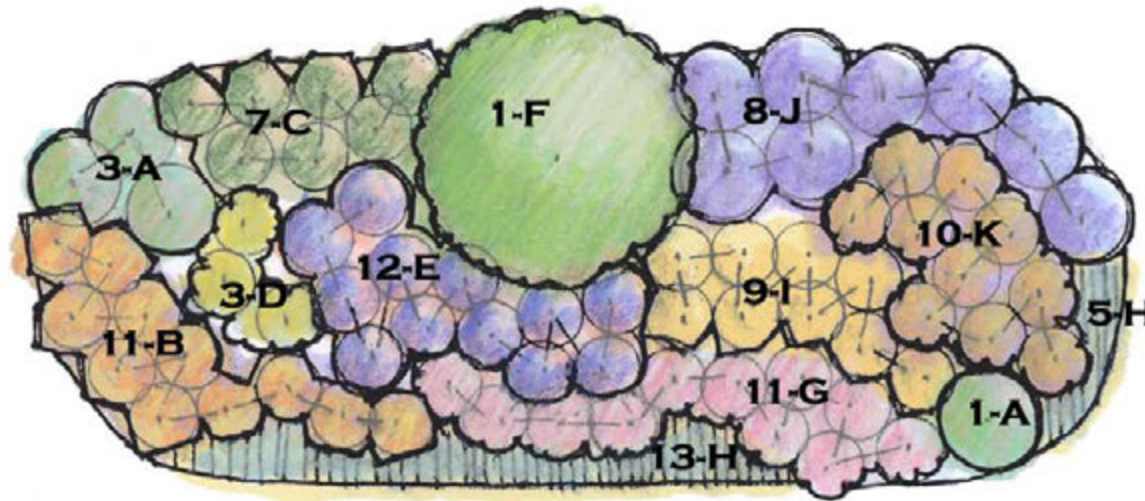


HERBACEOUS PERENNIALS RAINGARDEN
130 SF

Tall and Bold Summer-Fall Rainbow
Coastal Plain
Pt Shade-Shade

All zones
Scale: 1/4"=1'





- A - *Elymus hystrix* (Bottlebrush grass), 2' o.c
- B - *Tradescantia virginiana* (Spiderwort), 18" o.c.
- C - *Juncus effusus* (Soft Rush), 18" o.c.*
- D - *Polygonatum biflorum* (Solomon's Seal) or *Thalictrum aquilegifolium* (Tall Meadowrue), 2' o.c.
- E - *Eupatorium rugosum* (White Snakeroot) , 18" o.c.**
- F - *Aruncus dioicus* (Goat's Beard)
- G - *Aquilegia canadensis* (Columbine), 18" o.c.
- H - *Phlox divaricata* (Woodland Phlox), 12" o.c.
- I - *Rudbeckia hirta* (Black-eyed Susan), 18" o.c.***
- J - *Dryopteris fragrans* (Fragrant Woodfern) or *Dryopteris erythrosora* (Autumn Fern), 2' o.c.
- K - *Polystichum acrostichoides* (Christmas Fern), 18" o.c.

note: o.c.= on center

* if more than half day shade, substitute

Thelypteris noveboracensis (New York Fern)

** in deeper shade substitute *Astilbe 'Deutschland'*

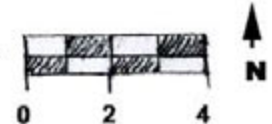
*** in deeper shade substitute *Solidago ulmifolia* (up to 70% shade)

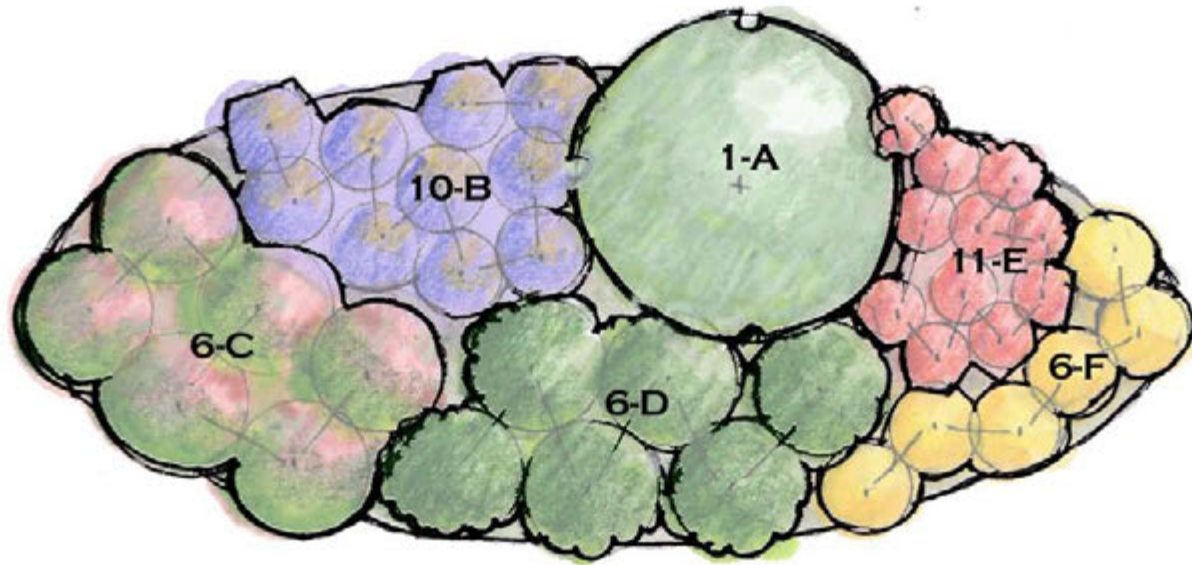


HERBACEOUS PERENNIALS BORDER RAINGARDEN 200 SF

Pt. Shade-Shade
Zones 5a-7a
Coastal Plain

Scale: 1/4" = 1'





PLANT CHOICE

- A - *Lindera benzoin* (Spicebush)
- B - *Dennsteadtia punctilobula* (Hay-scented fern) 2' o.c.*
- C - *Hydrangea arborescens* 'Annabelle', 3' o.c.
- D - *Kalmia latifolia* (Mountain Laurel), 3' o.c.
- E - *Arisaema triphyllum* (Jack-in-the-Pulpit), 12" o.c.**
- F - *Aster divaricatus* (Wood's Aster), 2' o.c.***

DESIGN VALUE

- Tallest/Structural element in garden (8-12')
- Medium Tall fern fine texture,
- Medium height (3-5'), white cloud of flowers
- Year round interest, color mass in spring (white)
- Spring color mass, interesting texture, red fall fruit
- Fall white mass of color, butterflies

note: o.c. = on center

* if half day of sun, then *Baptisia alba* (Rattlebox) is OK

** or *Polystichum acrostichoides* (Christmas Fern)

*** or, if half day of sun, *Aster novae-angliae* 'Purple Dome' if OK



**LOW MAINTENANCE RAINGARDEN
DEER RESISTANT**

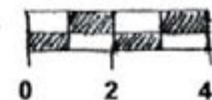
200 SF

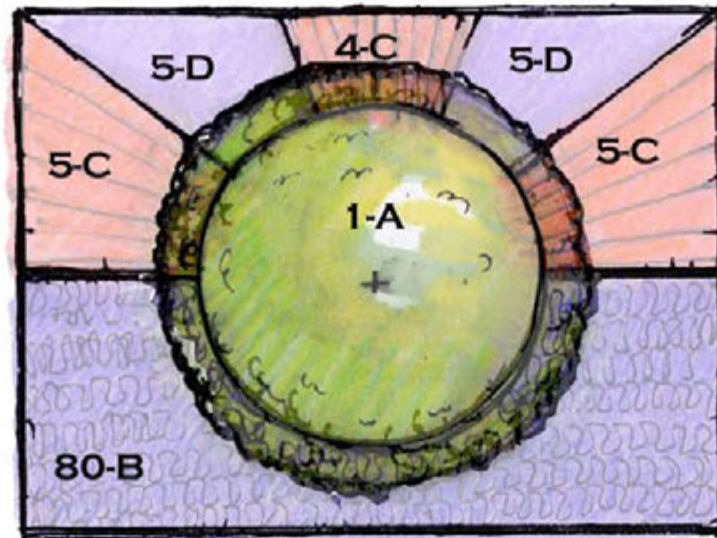
Pt Shade-Shade

Coastal Plain

Zones 5b-7b

Scale: 1/4"=1'





POSSIBLE PLANTS

- A - *Chionanthus virginicus* (Fringetree)
Amelanchier canadensis (Serviceberry)
- B - *Ajuga reptans* (Carpetbugle), 12" o.c.
Carex pensylvanica (Sedge) 12" o.c.*
Liriope spicata (Liriope), 12" o.c.
Asarum canadense (Wild Ginger), 12" o.c.
Geranium maculatum (Spotted Geranium), 12" o.c.
Phlox divaricata (Woodland Phlox), 12" o.c.
- C - *Osmunda cinnamomea* (Cinnamon Fern)
Athyrium felix-femina ssp. asplenoides (Lady Fern)
Cimicifuga racemosa (Black Snakeroot)
- D - *Thelypteris palustris* (Marsh Fern)
Smilacina racemosa (Solomon's Plume)
Arisaema triphyllum (Jack-in-the-Pulpit)

note: o.c. = on center

DESIGN VALUE

- Spring accents, Interesting winter bark, fruit (female)
- Attractive white spring flowers, fruit, wildlife value
- Groundcover, evergreen, purple flowers
- Native Groundcover (Deciduous), yellowish flowers
- Summer color accent - semi-evergreen -Purple spike flowers
- Summer foliage, heart shaped foliage
- Pink spring flowers
- Blue spring flowers, semi-evergreen groundcover
- Dramatic vertical texture plant
- Fine texture vertical texture plant, smaller scale than Ostrich
- Dramatic vertical texture plant with white flowers
- Linear textural interest
- Vertical interest, White spring flowers, red fruit
- Bold texture, interesting spring and fall display

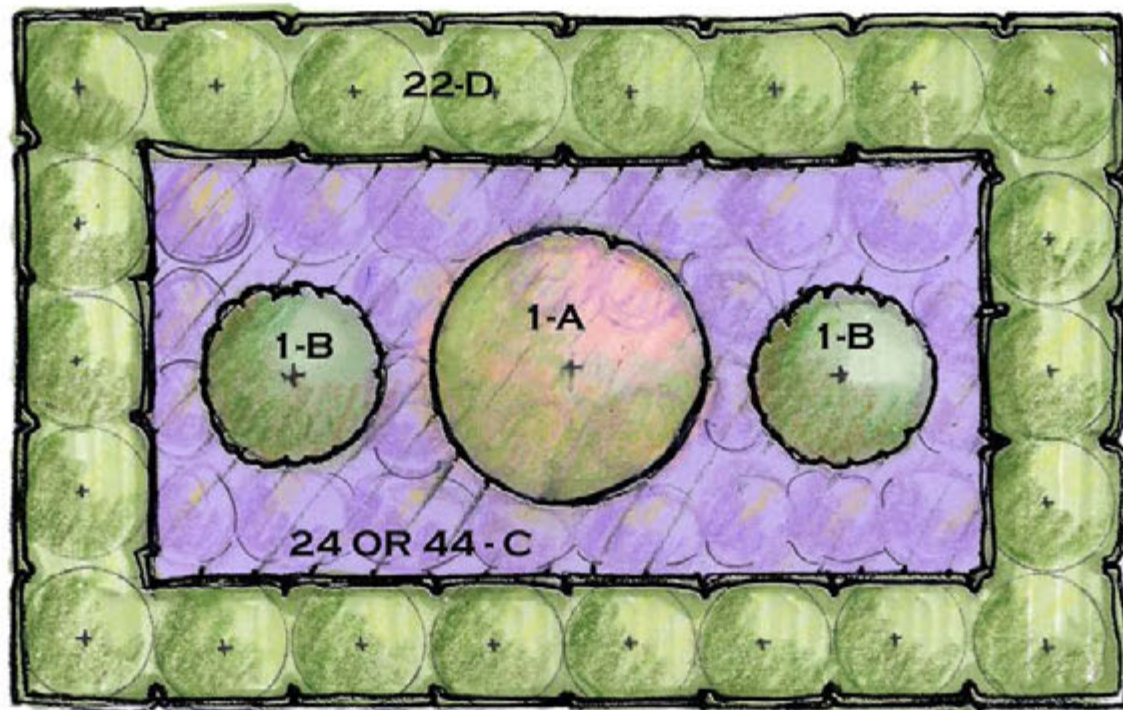


ONE NICE TREE 192 SF 16' X 12'

Pt Shade-Shade,
Coastal Plain, zones 5b-7a

Scale: 1/4"=1'





PLANT CHOICES (choose 1 of each type)

- A - *Alnus serrulata* (Common Alder)
Amelanchier canadensis (Serviceberry)
- B - *Aronia melanocarpa* (Black Chokeberry)
Gaylussacia baccata (Black Huckleberry)
Chaemacyparis obtusa 'Nana Gracilis' (Dwarf Hinoki False Cypress)
- C - *Osmunda cinnamomea* (Cinnamon Fern), 2' o.c. (24)
Polystichum acrostichoides (Christmas Fern), 18" o.c. (44) (evergreen)
Scenecio aureus (Golden Ragwort), 18" o.c. (44)
Liriope spicata (Creeping Liriope)**
- D - *Kalmia angustifolia* (Sheep Laurel)*, 3' o.c.
Ilex glabra 'Densa' (Dwarf Inkberry), 3' o.c.

DESIGN FUNCTION

- Center accent
- Rounded, Fall orange/burgandy/purple color
- Native low shrub, white flowers
- Evergreen, fine texture rounded
- Tall Groundcover, feathery texture
- Med Tall Groundcover, evergreen
- Low Groundcover, yellow spring flower, evergreen
- Evergreen flowering low shrub
- Fine texture, Hedge

note: o.c.= on center

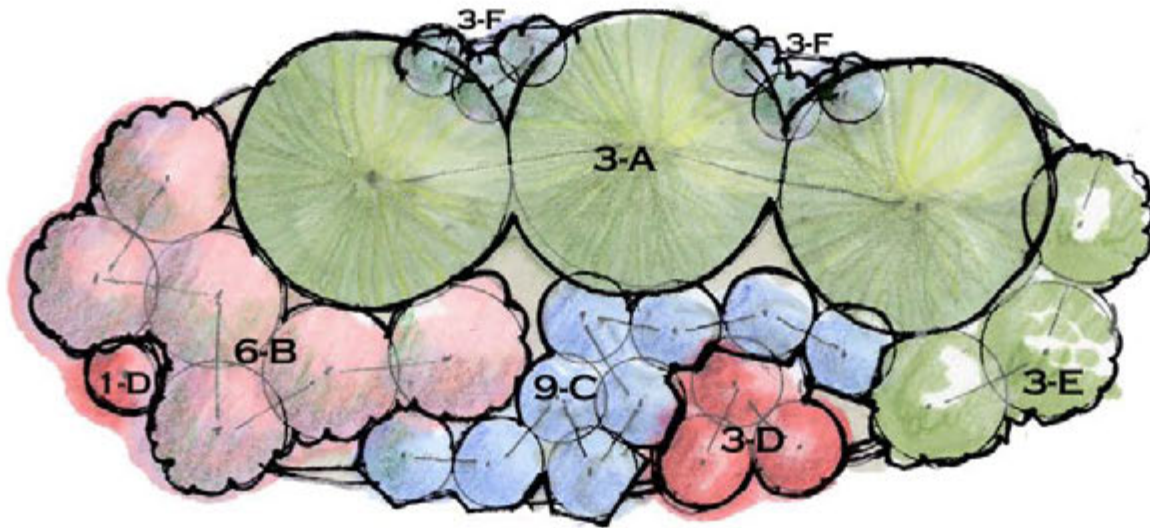
- *Needs sun-partial shade exposure
- ** Plant 12" o.c. and use 100 plants



PARTERRE RAINGARDEN

384 SF
Pt Shade-Shade
Zones 5b-7
Coastal Plain
Scale: 1/4"=1'





- | | |
|---|------------|
| A - <i>Leucothoe racemosa</i> (Fetterbush), 6' o.c. <u>or</u> <i>Cornus amomum</i> (Silky Dogwood)* | White |
| B - <i>Clethra alnifolia</i> 'Sixteen Candles' (Summersweet), 3' o.c. | White/Blue |
| C - <i>Tradescantia virginiana</i> (Spiderwort) , 2' o.c. | Blue |
| D - <i>Lobelia siphilitica</i> (Great Blue Lobelia), 2' o.c. | Blue |
| E - <i>Hydrangea quercifolia</i> 'Pee Wee' (Dwarf Oakleaf Hydrangea), 3' o.c.*,
<i>Hydrangea arborescens</i> (Smooth Hydrangea), 3' o.c., <u>or</u>
<i>Kalmia latifolia</i> 'Tiddlywink' (Dwarf Mountain Laurel), 3' o.c. * | White/Red |
| F - <i>Polygonatum biflorum</i> (Solomon's Seal), 18" o.c. <u>or</u> <i>Thalictrum polygamum</i> (Tall Meadow Rue) | White |
| <i>Phlox divaricata</i> (Woodland Phlox) , 12" o.c. (use 12 plants) | Blue |

note: o.c. = on center

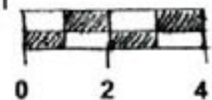
*prefers partial shade or deciduous shade

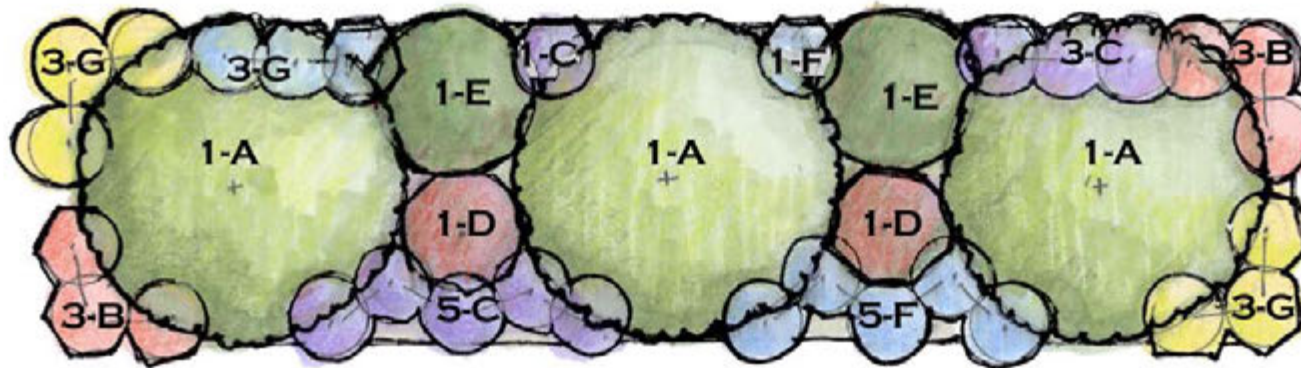


**RED, WHITE AND BLUE
LOW MAINTENANCE BORDER
RAINGARDEN**

200 SF
Part Shade-Shade
Coastal Plain

Scale: 1/4"=1'





- A - *Ilex opaca* (American Holly, various cultivars), 10' o.c. or *Illicium parviflorum* (Anisetree)**
- B - *Aquilegia canadensis* (Columbine), 2' o.c.
- C - *Tradescantia virginiana* (Spiderwort), 2' o.c. or
Polemonium reptans (Jacob's ladder), 2' o.c.
- D - *Kalmia angustifolia* (Sheep Laurel) or *Leucothoe fontanesia* 'Compacta' (Compact Drooping Leucothoe) or *Myrica pensylvanica* (Northern Bayberry)*
- E - *Ilex glabra* 'Shamrock' (Inkberry)
- F - *Tiarella cordifolia* (Foamflower), 1' o.c. (use 4 plants for every one shown) or *Astilbe* 'Deutschland' 2' o.c.*
- G - *Polystichum acrostichoides* (Christmas Fern), 2' o.c. or
Woodwardia areolata (Netted Chain Fern), 2' o.c.

note: o.c. = on center

*needs partial sun/shade not full shade

**zone 7 (and sheltered zone 6) and warmer

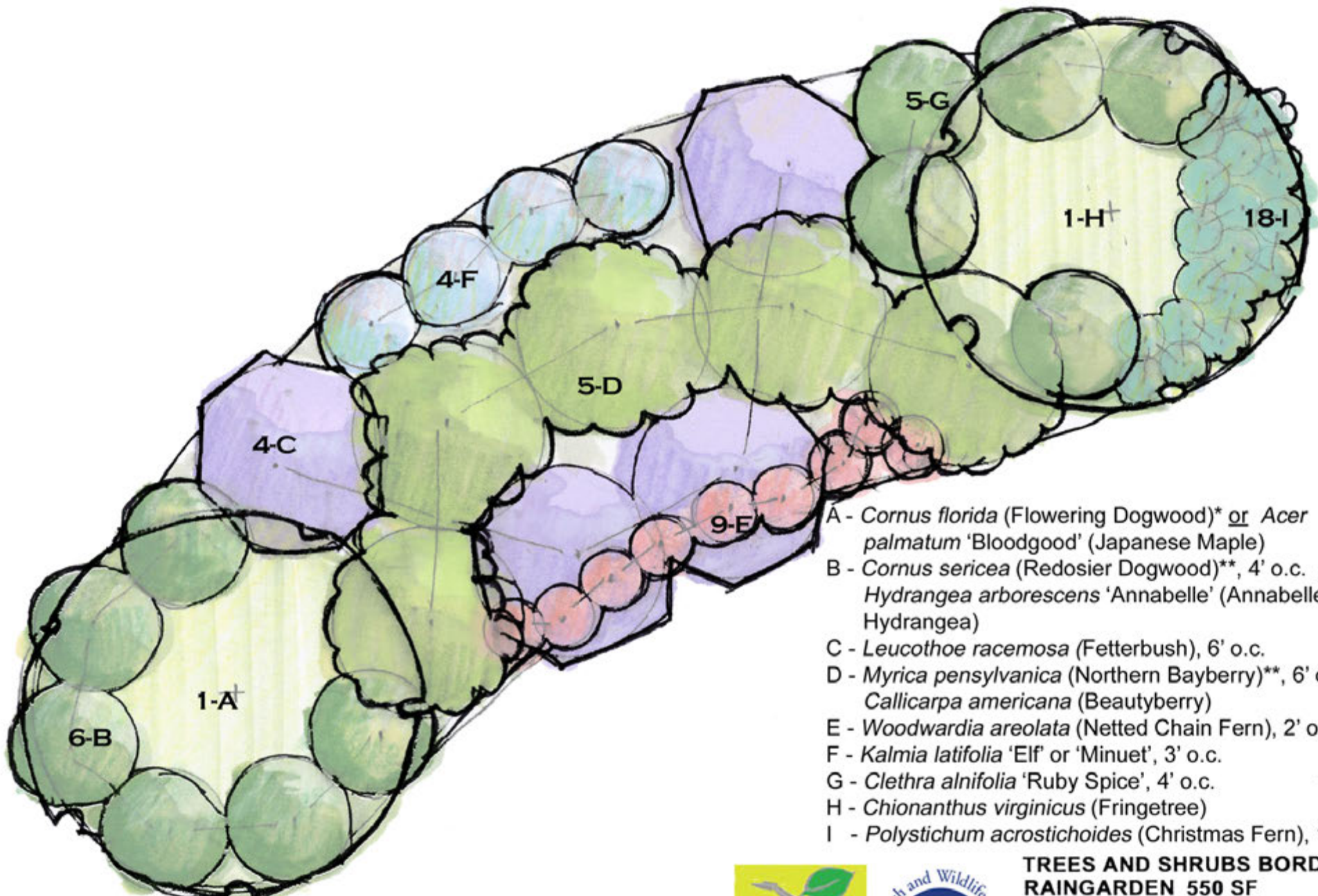


**SCREENING RAINGARDEN
256 SF**

Partial Shade-Shade
Zone 5b-8a

Coastal Plain
Scale: 1/4"=1'





- A - *Cornus florida* (Flowering Dogwood)* or *Acer palmatum* 'Bloodgood' (Japanese Maple)
- B - *Cornus sericea* (Redosier Dogwood)**, 4' o.c. or *Hydrangea arborescens* 'Annabelle' (Annabelle Hydrangea)
- C - *Leucothoe racemosa* (Fetterbush), 6' o.c.
- D - *Myrica pensylvanica* (Northern Bayberry)**, 6' o.c. or *Callicarpa americana* (Beautyberry)
- E - *Woodwardia areolata* (Netted Chain Fern), 2' o.c.
- F - *Kalmia latifolia* 'Elf' or 'Minuet', 3' o.c.
- G - *Clethra alnifolia* 'Ruby Spice', 4' o.c.
- H - *Chionanthus virginicus* (Fringetree)
- I - *Polystichum acrostichoides* (Christmas Fern), 18" o.c.

note: o.c. = on center

*This end of the garden should be slightly higher than the 'H' end so that the dogwood/maple are not sitting in water after a rain event
 **partial shade or deciduous shade OK, not full shade



**TREES AND SHRUBS BORDER
 RAINGARDEN 550 SF**

Pt Shade-Shade
 Zones 5b-7b
 Coastal Plain

Scale: 1/4" = 1'

