

- A - *Ilex opaca* (American Holly), 8' o.c.
 B - *Vaccinium corymbosum* (Highbush Blueberry), 3' o.c.
 C - *Rhododendron viscosum* (Swamp Azalea), or *Cornus sericea* (Redosier Dogwood),
 or *Ilex glabra nana* (Dwarf Inkberry)
 D - *Hemerocallis hybrids* (Hybrid daylilies e.g. 'Happy Returns'), 12" o.c. or *Phlox subulata* (Thrift), 12" o.c.
 E - Wildflower Mix, 85 SF; sample mix:
 50% *Rudbeckia hirta* (Black-Eyed Susan)
 20% *Echinacea purpurea* (Purple Coneflower),
 20% *Liatrus spicata* (Blazing-Star),
 10% *Asclepias tuberosa* (Butterfly Weed)

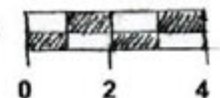
If using plants (vs. seed) for wildflowers, space 18" o.c. (19 -*Rudbeckia*,
 8 - *Echinacea*, 8- *Liatrus*, 4 - *Asclepias*) <seeding is lower cost but higher
 maintenance option due to need for nurturing seedlings>
 note: o.c. = on center

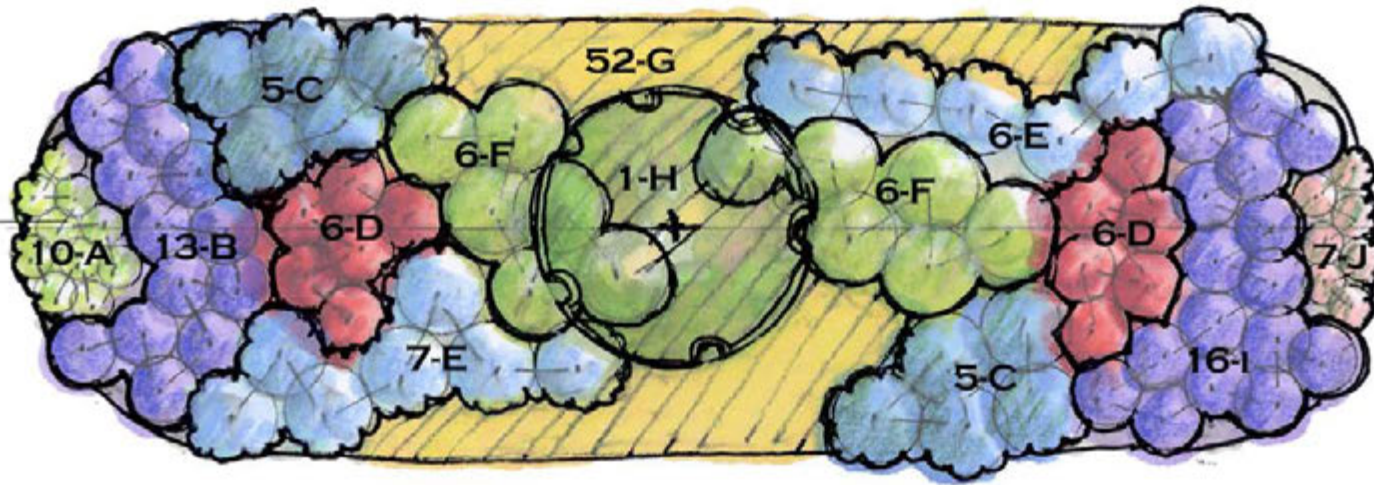


FOR THE BIRDS RAINGARDEN
450 SF

Full Sun-Pt. Shade
 All zones

Scale: 1/4"=1'





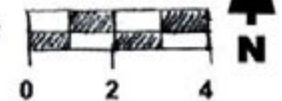
- A - *Chelone glabra* (White Turtlehead), 12" o.c.
- B - *Physostegia virginiana* (Obedient Plant), 18" o.c.
- C - *Lobelia siphilitica* (Great Blue Lobelia), 2' o.c.
- D - *Lobelia cardinalis* (Cardinal Flower), 18" o.c.
- E - *Tradescantia virginiana* (Spiderwort), 2' o.c.
- F - *Veronicastrum virginicum* (Culver's Root), 2' o.c.
- G - *Oenothera fruticosa* (Narrow-leaved Sundrops), 12" o.c.
- H - *Alnus serrulata* (Smooth Alder)
- I - *Aster novae-angliae* 'Purple Dome' (New England Aster), 18" o.c.
- J - *Aquilegia canadensis* (Columbine), 12" o.c.

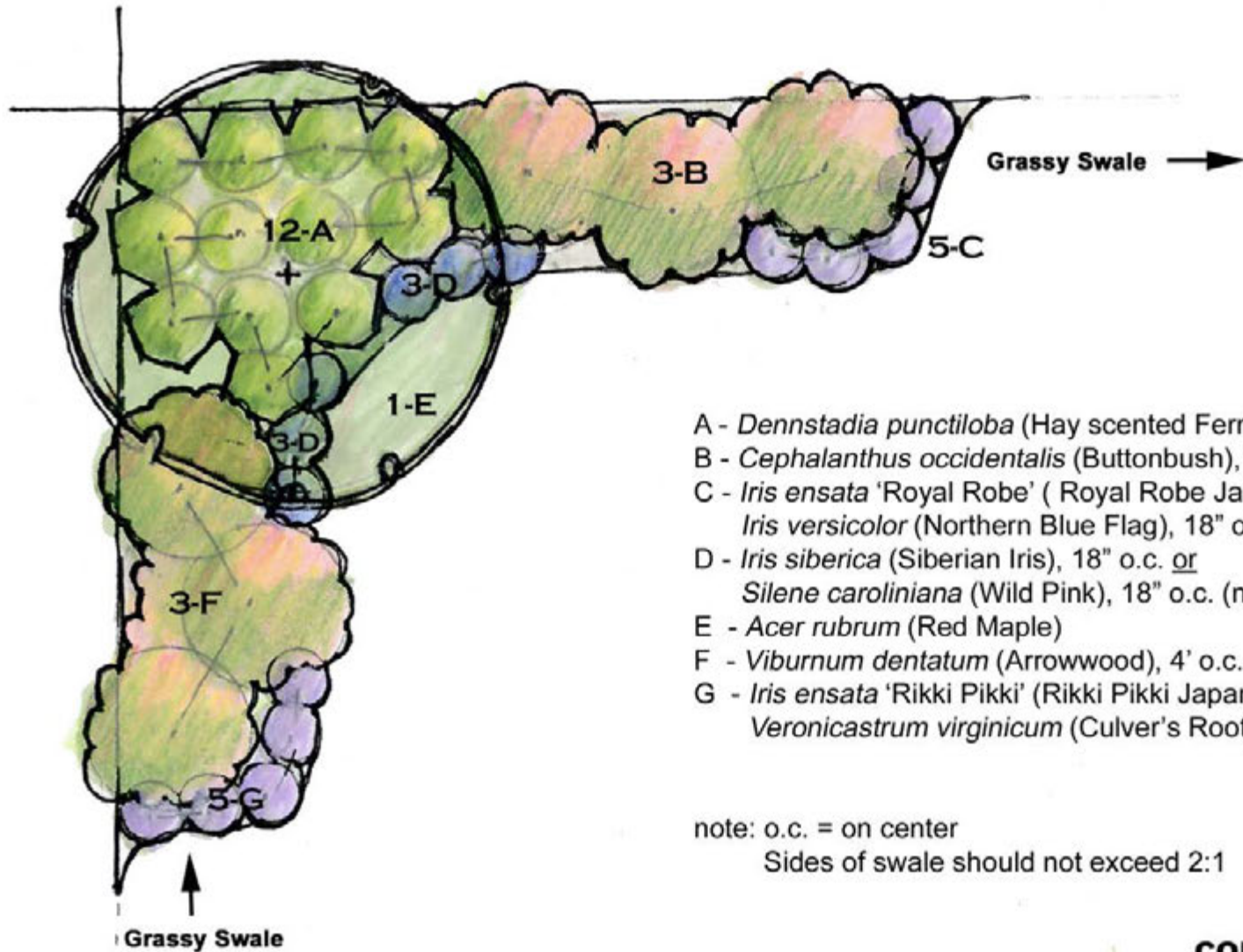
note: o.c. = on center



BUTTERFLIES SWALE RAINGARDEN
250 SF
Full Sun
Mountain

Scale: 1/4" = 1'





- A - *Dennstedia punctiloba* (Hay scented Fern), 2' o.c.
- B - *Cephalanthus occidentalis* (Buttonbush), 4' o.c.
- C - *Iris ensata* 'Royal Robe' (Royal Robe Japanese Iris), 18" o.c. or
Iris versicolor (Northern Blue Flag), 18" o.c. (native)
- D - *Iris siberica* (Siberian Iris), 18" o.c. or
Silene caroliniana (Wild Pink), 18" o.c. (native)
- E - *Acer rubrum* (Red Maple)
- F - *Viburnum dentatum* (Arrowwood), 4' o.c.
- G - *Iris ensata* 'Rikki Pikki' (Rikki Pikki Japanese Iris), 18" o.c. or
Veronicastrum virginicum (Culver's Root), 18" o.c. (native)

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

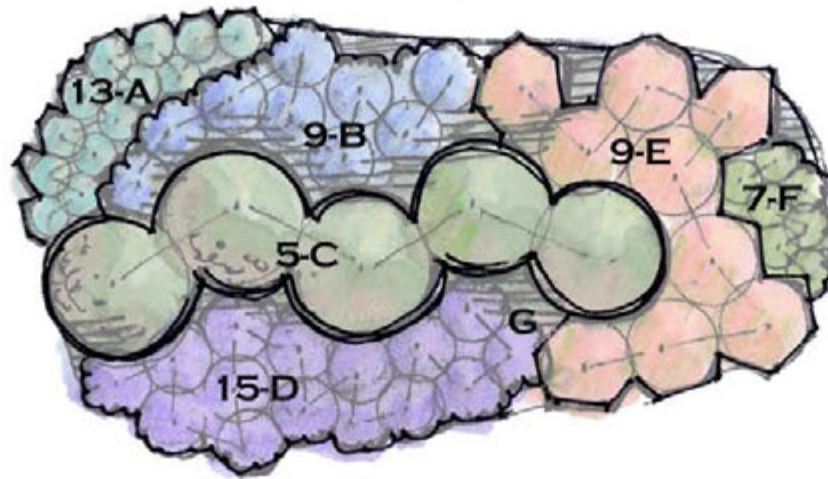


CORNER RAINGARDEN

150 SF
Full Sun
All zones,
Mountain

Scale: 1/4"=1'





- A - *Hemerocallis* 'Happy Returns' (Dwarf hybrid daylily),* 12" o.c
- B - *Rudbeckia fulgida* (Black Eyed Susan), 18" o.c.
- C - *Itea virginiana* 'Little Henry' (Dwarf Virginia Sweetspire), 3' o.c.
- D - *Tradescantia virginiana* (Spiderwort), 18" o.c.
- E - *Echinacea purpurea* 'Magnus' (Magnus Purple Coneflower), 2' o.c.
- F - *Phlox subulata* 'Emerald Cushion Blue' or 'Emerald Cushion Pink'
(Creeping Phlox, aka Thrift), 12" o.c.
- G - *Narcissus* naturalizing type (Daffodils), 4" o.c.

note: o.c. = on center

*substitute *Iris fulva* for *Hemerocallis* if native is desired

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

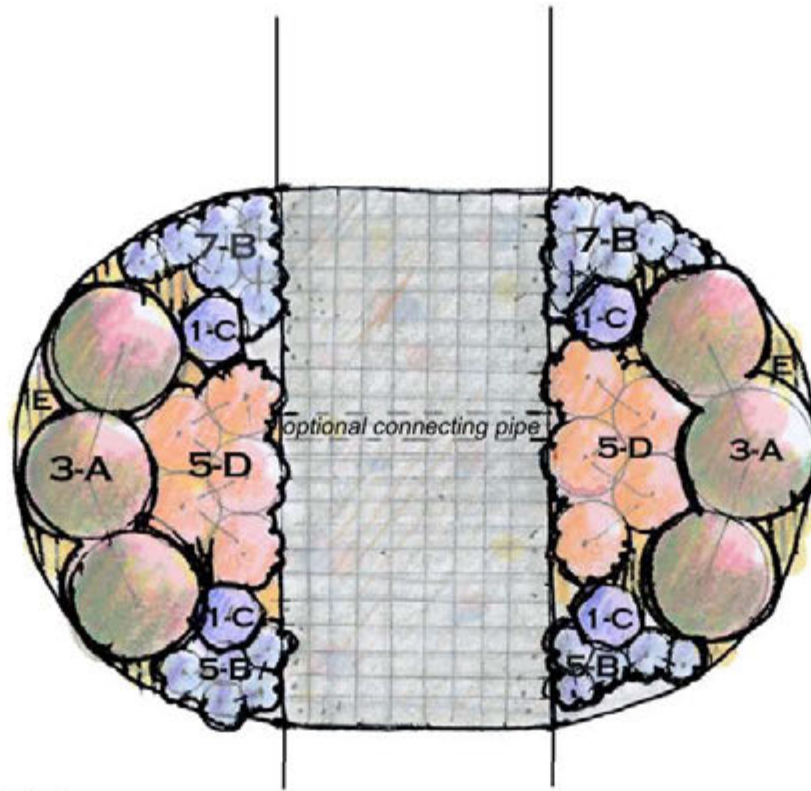


**DIVIDER RAINGARDEN
130 SF**

Full Sun,
Zone 5a-8a

Scale: 1/4" = 1'





Choose one kind of plant for each letter

- A - *Itea virginiana* 'Little Henry', 3' o.c. (Dwarf Virginia sweetspire) or *Ilex glabra nana* (dwarf inkberry, keep clipped) or *Tripsacum dactyloides* (Gamma Grass)
 - B - *Phlox subulata* 'Emerald Cushion Blue', 12" o.c. (Creeping phlox) or *Iris cristata* (dwarf crested iris)
 - C - *Liatrus spicata* 'Kobold' (Gayfeather) or *Echinacea purpurea* 'Razzmatazz' (Purple coneflower)
 - D - *Aster novae-angliae* 'Purple Dome', 2' o.c. (Purple Dome New England Aster) or *Asclepias tuberosa* (Butterfly Weed) or *Hemerocallis* 'Happy Returns' (Dwarf Hybrid Daylily, yellow, reblooming)
 - 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.

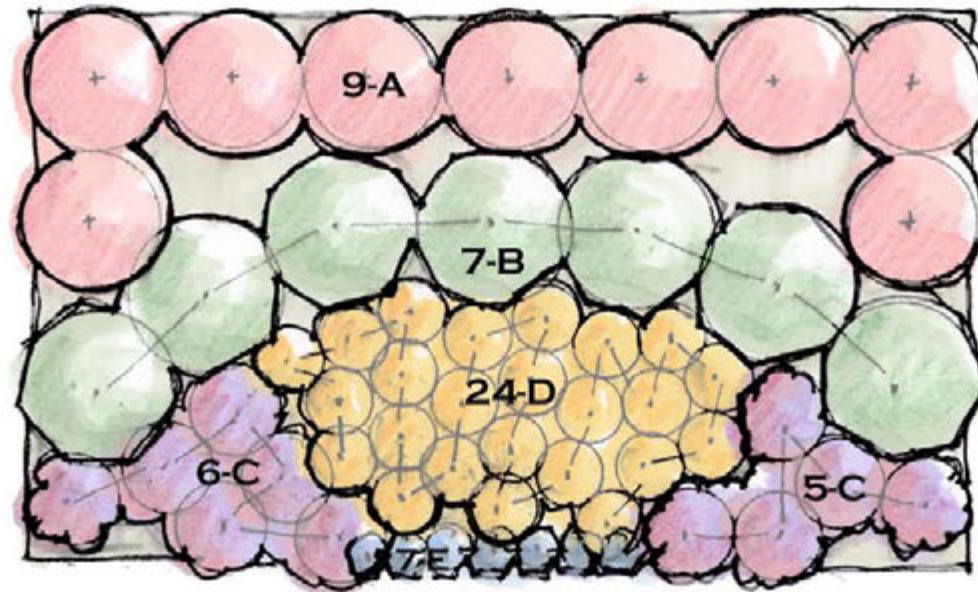


**ENTRY RAINGARDEN
FLANKING WALK WITH
PERMEABLE PAVERS
113 SF GARDEN, 72 SF PAVERS**

Mountains
Full Sun
Zones: All

Scale: 1/4" = 1'





- A - *Rosa Knock-Out*, 'Radrazz' (Knock-Out Rose)*, 3' o.c.
- B - *Clethra alnifolia* 'Sixteen Candles', 3 1/2' o.c.
- C - *Echinacea purpurea* 'Kim's Knee-Hi' (Purple Coneflower), 2' o.c.
- D - *Iris virginica* (Southern Blue Flag)** or *Phlox paniculata* 'David' (White Garden Phlox), 15" o.c.
- E - *Phlox subulata* 'Emerald Cushion Blue' or 'Candy Stripe'**, 12" o.c.

note: o.c.= on center

Could substitute *Liatrus spicata* or *Cheleone glabra* for *Echinacea* (or peonies)
 * Knock-out Roses and Peonies in rain gardens are not suited to the lowest areas but are very successful on the very well drained but frequently wet edges and upper slope sections
 **Southern Blue Flag is hardy in zones 5-9 but is better in the Piedmont and Coastal Plain provinces

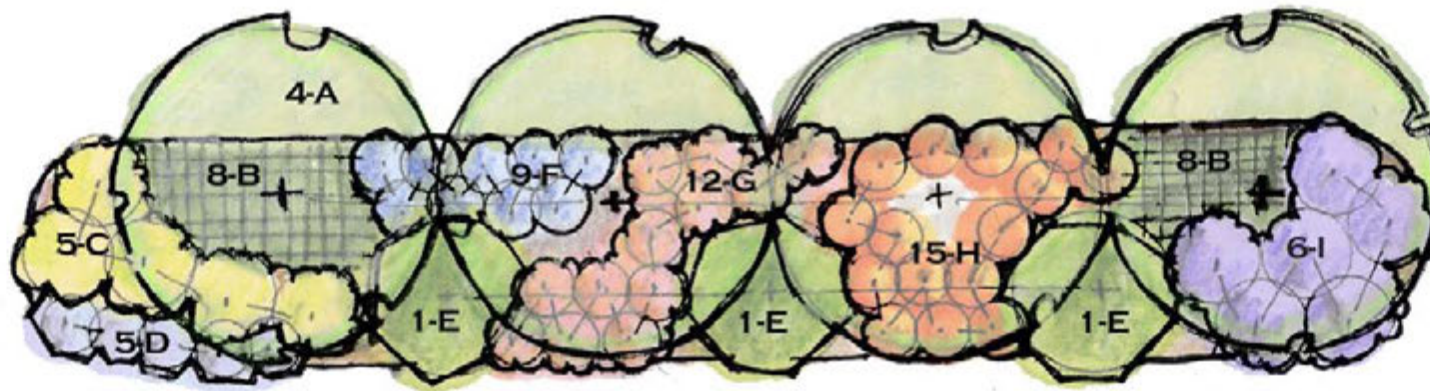


FRAGRANT RAINGARDEN
FORMAL 21'x12' = 252 SF

Full Sun
 Zones 5b-7b

Scale: 1/4"=1'





- A - *Acer rubrum* (Red Maple), 18' o.c.
- B - *Carex stricta* (Tussock Sedge) or *Chasmanthium latifolium* (Upland Sea Oats), 2' o.c.
- C - *Viburnum trilobum* (American Cranberrybush), 5' o.c.
- D - *Itea virginiana* 'Henry's Garnet', 3' o.c.
- E - *Amelanchier laevis* (Serviceberry), 18' o.c.
- F - *Zenobia pulverulenta* (Dusty Zenobia), 3' o.c. or
Viburnum acerfolium (Mapleleaf viburnum), 3' o.c.
- G - *Ilex glabra nana* (Dwarf Inkberry), 3' o.c.
- H - *Calycanthus floridus* (Sweetshrub), 4' o.c.
- I - *Vaccinium corymbosum* (Highbush blueberry), 5' o.c.

note: o.c. = on center

in higher elevations (and zones 5 and 6), *Alnus incana* (Specked Alder) may be substituted for *Acer rubrum* and *Pieris floribunda* (Mountain Pieris) may be substituted for *Viburnum acerfolium* / *Zenobia pulverulenta*



HEDGEROW RAINGARDEN

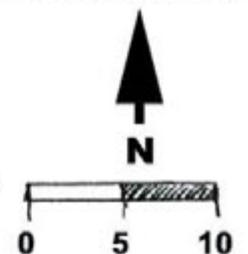
903 SF

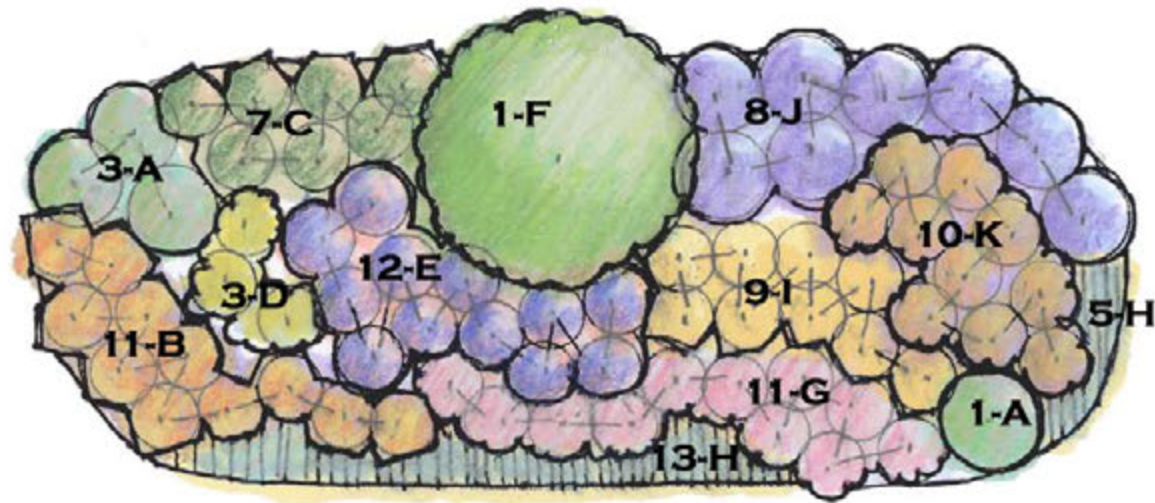
Full Sun

All zones

Mountains

Scale: 1"=10'





- A - *Deschampsia cespitosa* (Tufted Hair Grass), 2' o.c.*
- B - *Hemerocallis* 'Happy Returns' (Happy Returns Daylily), 18" o.c.
- C - *Juncus effusus* (Soft Rush), 18" o.c.
- D - *Solidago* 'Firecracker' (Firecracker Goldenrod), 2' o.c.
- E - *Iris Louisiana Hybrid* (Louisiana Iris), 18" o.c.
- F - *Panicum virgatum* 'Prairie Skies' (Switch Grass)
- G - *Echinacea purpurea* 'Kim's Knee-Hi' (Dwarf Purple Coneflower), 18" o.c.
- H - *Phlox subulata* 'Emerald Cushion Blue' (Thrift), 12" o.c.
- I - *Iris siberica* 'Caesar's Brother' or *Iris versicolor* (native), 18" o.c.
- J - *Aster novae-angliae* 'Purple Dome' (Dwarf New England Aster), 2' o.c.
- K - *Rudbeckia fulgida* 'Goldsturm' (Black-eyed Susan), 18" o.c.

note: o.c.= on center

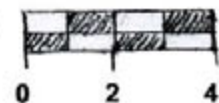
* if not available, substitute *Pennisetum alopecuroides* (Dwarf Fountain Grass) or *Chasmanthium latifolium* (Upland Sea Oats)

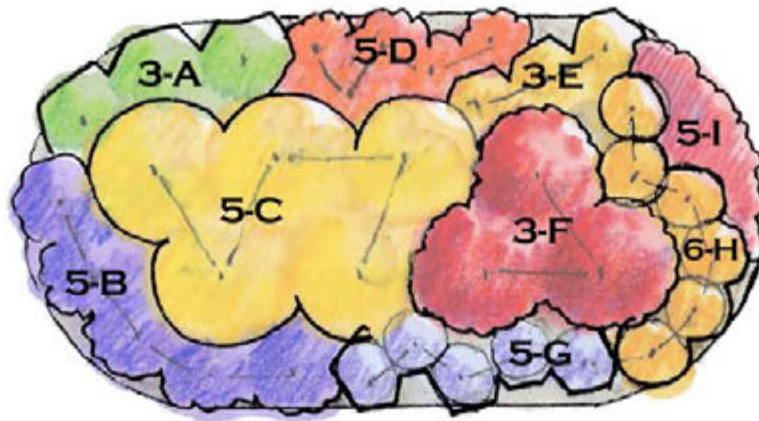


**HERBACEOUS PERENNIALS BORDER
RAINGARDEN 200 SF**

Full Sun, Zones 5a-7a
Mountains

Scale: 1/4"=1'





- A - *Eupatorium rugosum* 'Chocolate' (White Snakeroot), 2' o.c.
- B - *Eupatorium coelestinum* (Hardy Ageratum), 2' o.c.
- C - *Helianthus angustifolius* (Narrow-leaved Sunflower), 3' o.c.
- D - *Asclepias tuberosa* (Butterflyweed), 18" o.c.
- E - *Rudbeckia fulgida* (Black-eyed Susan), 18" o.c. or *Solidago* 'Golden Fleece', 18" o.c.
- F - *Hibiscus moscheutos* (Marsh Mallow), 3' o.c.
- G - *Liatrus spicata* (Blazing-Star), 18" o.c.
- H - *Lilium superbum* (Turk's Cap Lily), 18" o.c.
- I - *Echinacea purpurea* (Purple Coneflower), 18" o.c.

note: o.c. = on center



HERBACEOUS PERENNIALS RAINGARDEN

130 SF

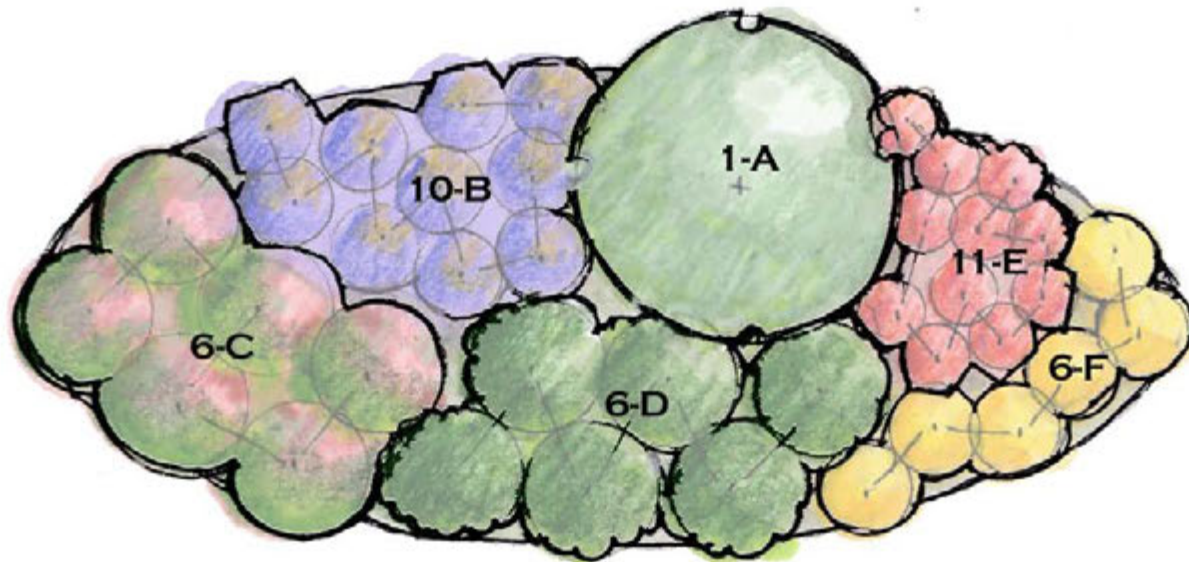
Tall and Bold Summer-Fall Rainbow

Full Sun

All zones

Scale: 1/4"=1'





PLANT CHOICE

- A - *Viburnum prunifolium* (Rusty Blackhaw)*
Viburnum cassinoides (Witherrod)
- B - *Aster novae-angliae* (New England Aster) 2' o.c.**
- C - *Vaccinium angustifolium* (Blueberry), 3' o.c.
- D - *Kalmia latifolia* (Mountain Laurel), 3' o.c.
- E - *Iris versicolor* (Blueflag Iris), 12" o.c.
- F - *Solidago* 'Golden Fleece', 2' o.c.

note: o.c. = on center

* prefers dry soils and is a good choice if excellent drainage is installed; otherwise substitute *Viburnum dentatum* (Southern Arrowwood)

** also listed as *Symphytrochium novae-angliae*

DESIGN VALUE

- Tallest/Structural element in garden (8-12')
- Medium coarse texture, white spring flowers, yellow fall color
- Medium Tall perennial, billowing fall color (lavendar), butterflies
- Medium height (3-5'), year round color interest, fruit
- Year round interest, color mass in spring (white)
- Spring color mass, interesting texture
- Fall yellow mass of color, compliments Aster, butterflies



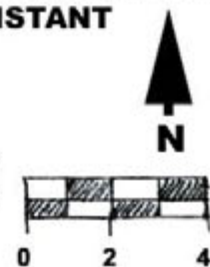
LOW MAINTENANCE RAINGARDEN

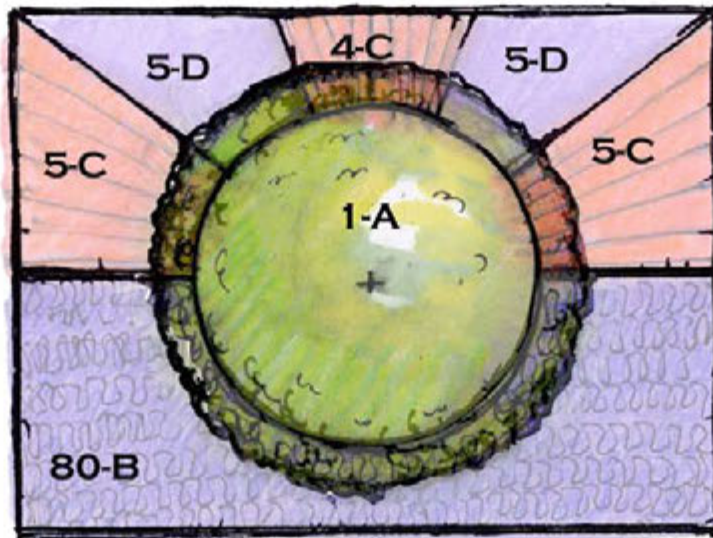
DEER RESISTANT

200 SF

Full Sun
Mountains
Zones 5b-7b

Scale: 1/4"=1'





POSSIBLE PLANTS

- A - *Asimina triloba* (Paw Paw)
Alnus serrualta (Smooth Alder)
Cornus amomum (Silky Dogwood)
Ilex verticillata (Winterberry) (plant 1 male and 1 female in the same hole) (or *Ilex decidua*, (possumhaw) male and female)
- B - *Ajuga reptans* (Carpetbugle), 12" o.c.
Ceratostigma plumbaginoides (Leadwort), 12" o.c.
Oenothera fruticosa (Primrose), 12" o.c.
Liriope spicata (Liriope), 12" o.c.
- C - *Iris versicolor*, 18" o.c. (Blue Flag Iris)
Iris siberica, 18" o.c. (Siberian Iris)
- D - *Iris* La. Hybrid, 2' o.c. (Louisiana Hybrid Iris, many colors)
Amsonia hubrechtii, 2' o.c. (Bluestar)

note: o.c. = on center

DESIGN VALUE

Upright oval form, edible fruit,
 Spring accents, Interesting winter bark
 Interesting form and fall color
 Attractive fruit, wildlife value (zone 5a-7b; *Ilex decidua* OK zone 6 and warmer)
 Groundcover, evergreen, purple flowers
 Groundcover, semi-evergreen, blue flowers
 Native Groundcover (Deciduous), yellow flowers
 Summer color accent - Purple spike flowers
 Early summer color, Native wetland iris, blue flowers
 Mid spring color, white or purple flowers
 Summer color and 3 season linear textural interest
 Fine texture, blue flowers, yellow fall color

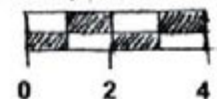


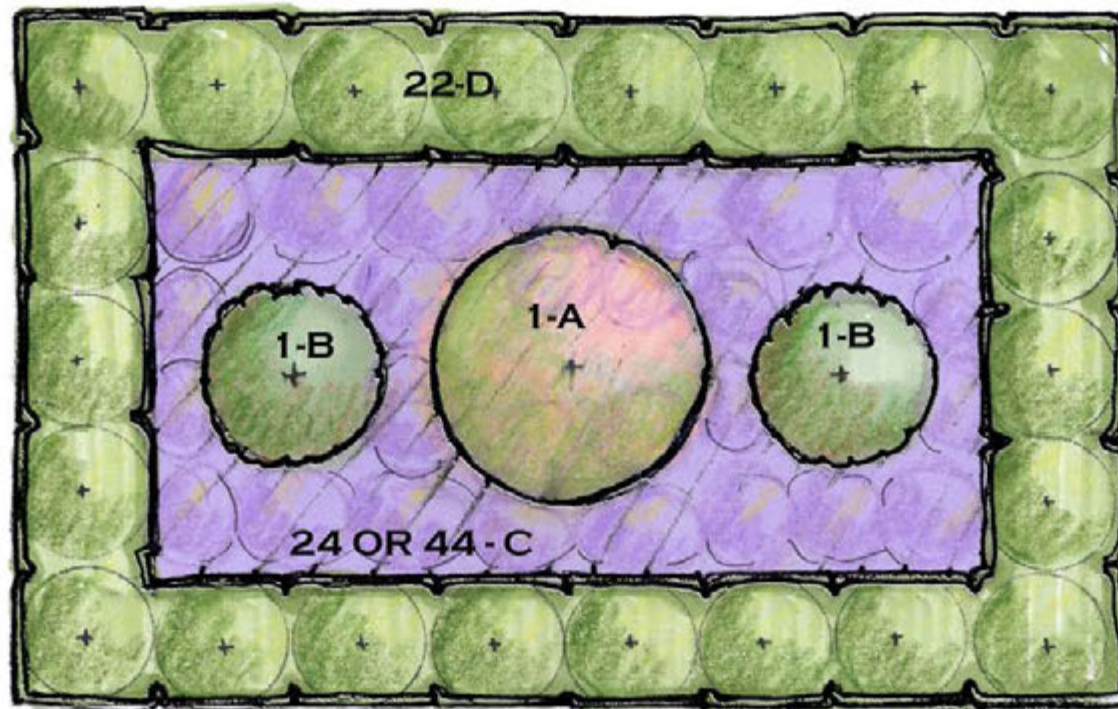
ONE NICE TREE

192 SF 16' X 12'

Full Sun, Mountains, zones 5a-7a

Scale: 1/4" = 1'





PLANT CHOICES (choose 1 of each type)

- A - *Betula lenta* (Sweet Birch) or
Ilex attenuata 'Foster #2' (Foster Holly)
Cornus amomum (Silky Dogwood)
Acer pensylvanicum (Striped Maple)
- B - *Chaemacyparis pisifera* 'Filafera aurea' (Dwarf Sawara False Cypress)
Chaemacyparis lawsonii 'Minnema Aurea' (Dwarf Lawson's False Cypress)*
- C - *Aster novae-angliae* 'Purple Dome' (Purple Dome New England Aster), 2' o.c. (24)
Oenothera fruticosa (Primrose, Sundrops), 18" o.c. (44)
Amsonia X 'Blue Ice' (Bluestar), 18" o.c. (44)
- D - *Ilex glabra* 'Densa' or 'Shamrock' (Inkberry), 3' o.c.
Myrica pensylvanica, (Bayberry), 3' o.c.

DESIGN FUNCTION

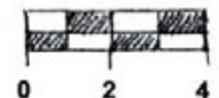
- Center accent
- Year Round Color shrub, fine texture
- Groundcover
- Hedge

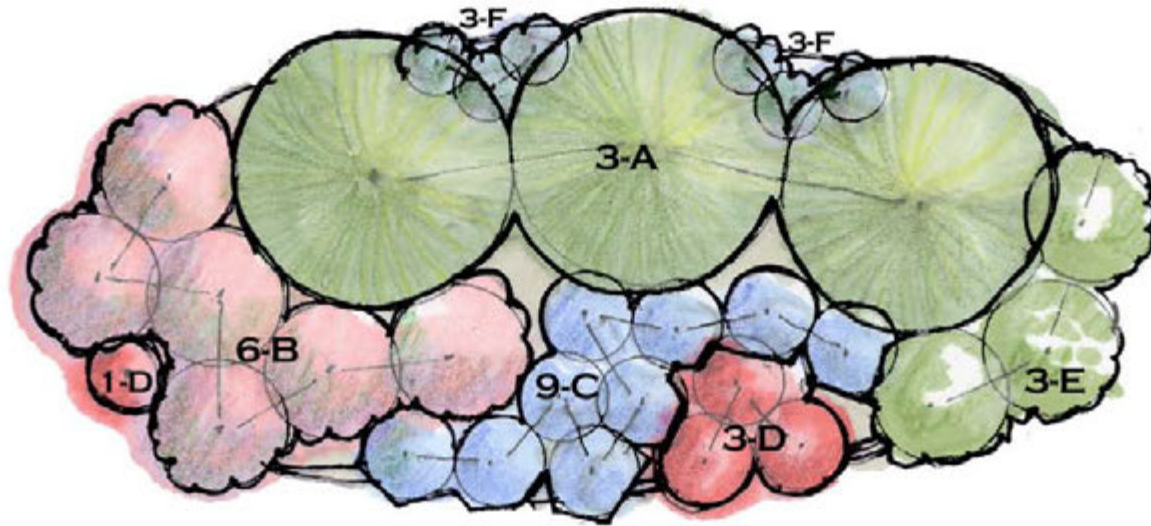
note: o.c.= on center
 Requires excellent drainage and cool summer soil temp.



PARTERRE RAINGARDEN

384 SF
 Full Sun,
 Zones 5b-7
 Mountains
 Scale: 1/4"=1'





- A - *Vaccinium corymbosum* (Highbush blueberry), 6' o.c. or *Cornus sericea* (Redosier dogwood)
- B - *Zenobia pulverulenta* ' (Dusty Zenobia), 3' o.c.
- C - *Amsonia hubrechtii* (Blue-Star Flower), 2' o.c.
- D - *Lobelia cardinalis* (Cardinal Flower), 2' o.c. or *Asclepias tuberosa* (Butterflyweed), 2' o.c.
- E - *Hydrangea quercifolia* 'Pee Wee' (Dwarf Oakleaf Hydrangea), 3' o.c., or *Hydrangea arborescens* (Smooth Hydrangea), 3' o.c., or *Kalmia latifolia* 'Tiddlywink' (Dwarf Mountain Laurel), 3' o.c.
- F - *Iris versicolor* (Northern Blue Flag), 18" o.c.

Red/White
 White/Blue
 Blue
 Red
 White/Red

 Blue

note: o.c. = on center



The Low Impact Development Center, Inc.



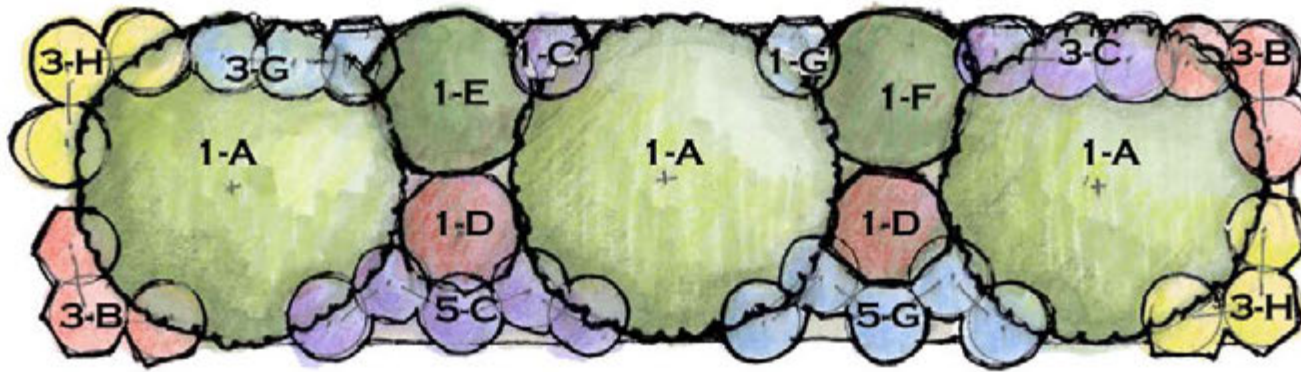
**RED, WHITE AND BLUE
 LOW MAINTENANCE BORDER
 RAINGARDEN**

200 SF

Full Sun-Part Shade
 Mountains

Scale: 1/4"=1'





- A - *Ilex opaca* (American Holly, various cultivars), 10' o.c.* or *Abies concolor* 'Candicans' (Candicans White Fir)
- B - *Iris fulva* (Copper Iris), 2' o.c.
- C - *Iris Louisiana Hybrid* (Louisiana Iris, many colors), 2' o.c.
- D - *Ilex verticillata* 'Maryland Beauty' or 'Red Sprite' (Female Winterberry), 3' o.c.*
- E - *Ilex verticillata* 'Jim Dandy' (male pollinator) (Male Winterberry)
- F - *Fothergilla gardenii* 'Mt. Airy' (Fothergilla)
- G - *Iris versicolor* (Blue Flag), 2' o.c.
- H - *Iris ensata* (Japanese Iris, many colors), 2' o.c.

note: o.c. = on center

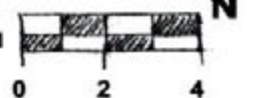
If quicker screening is desired, subst. 5 - *Kalmia angustifolia* (Sheep Laurel) or *Rhododendron maximum* (Rosebay Rhododendron) 6' o.c. and add one more *Ilex verticillata* 'Maryland Beauty' or 'Red Sprite' and group them in the center front of the bed

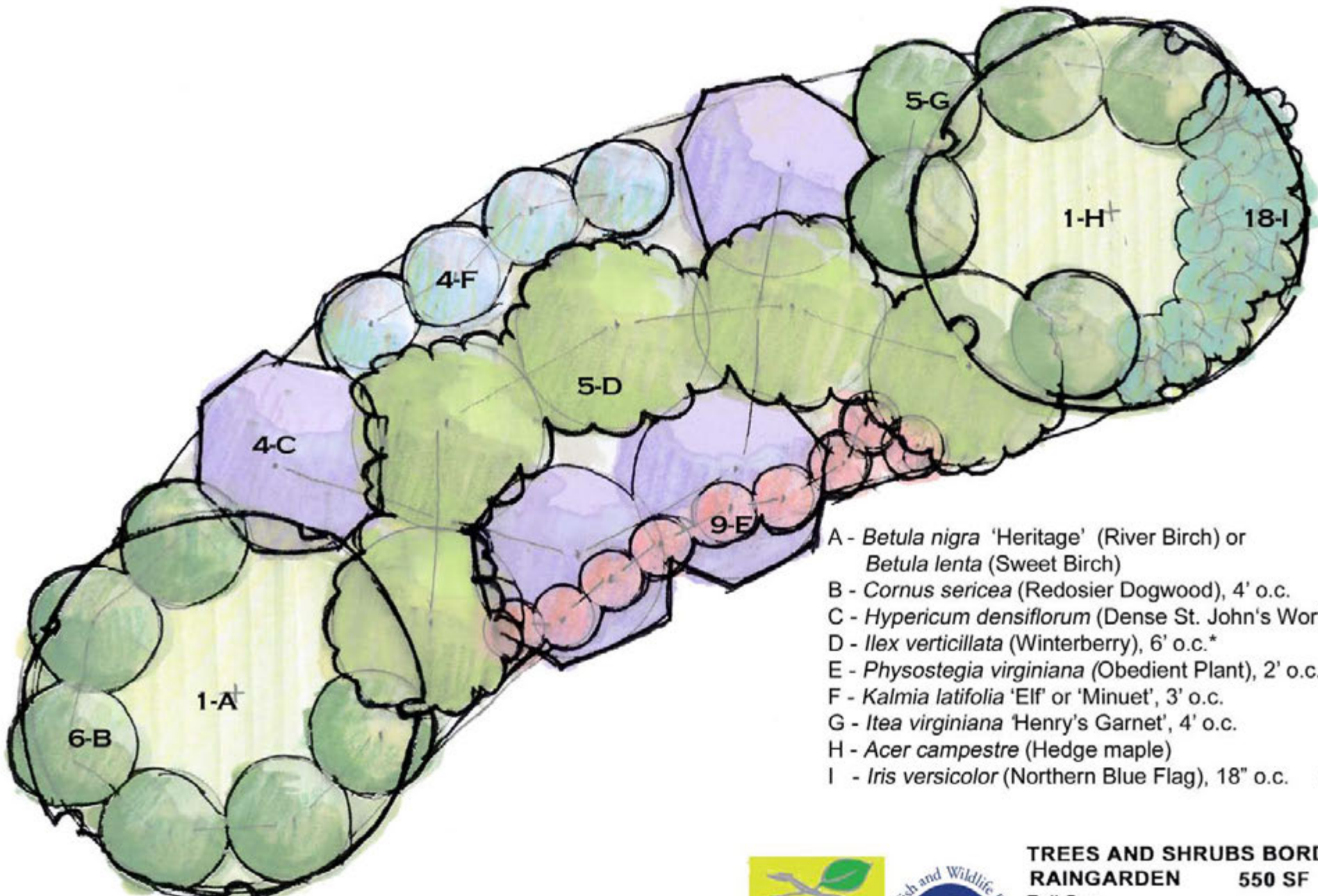


**SCREENING RAINGARDEN
256 SF**

Full Sun /Partial Sun
Zone 5b-8a

Mountains
Scale: 1/4"=1'





- A - *Betula nigra* 'Heritage' (River Birch) or *Betula lenta* (Sweet Birch)
- B - *Cornus sericea* (Redosier Dogwood), 4' o.c.
- C - *Hypericum densiflorum* (Dense St. John's Wort), 6' o.c.
- D - *Ilex verticillata* (Winterberry), 6' o.c.*
- E - *Physostegia virginiana* (Obedient Plant), 2' o.c.
- F - *Kalmia latifolia* 'Elf' or 'Minuet', 3' o.c.
- G - *Itea virginiana* 'Henry's Garnet', 4' o.c.
- H - *Acer campestre* (Hedge maple)
- I - *Iris versicolor* (Northern Blue Flag), 18" o.c.

note: o.c. = on center

* requires 1 male/6 females (female='Afterglow', male= 'Jim Dandy')



**TREES AND SHRUBS BORDER
RAINGARDEN 550 SF**

Full Sun
Zones 5b-7b
Mountains

Scale: 1/4"=1'

