

MOUND ROAD AESTHETIC DESIGN GUIDE

SEPTEMBER 10, 2020

Prepared for Macomb County Department of Roads by MKSK



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INTRODUCTION

The Innovate Mound corridor is located between I-696 and M-59 and is over 9 miles in length. The project will modernize and renew infrastructure including pavement, bridges, signals, signage, storm sewers, lighting and landscape enhancements. Innovate Mound focuses on a multi-modal solution while addressing condition, safety and congestion.

Aesthetic features will include new landscape and unified placemaking that will beautify Mound Road, positively impact the surrounding cities of Warren and Sterling Heights, and improve the overall user experience.

Landscaping improves the overall visual impact of the corridor by adding texture and interest at the street level. It is also performative, providing pervious surfaces, reducing heat island effect, reducing noise pollution, and improving environments for wildlife. Landscaping along the corridor should be cohesive to enhance the streetscape and be low maintenance.

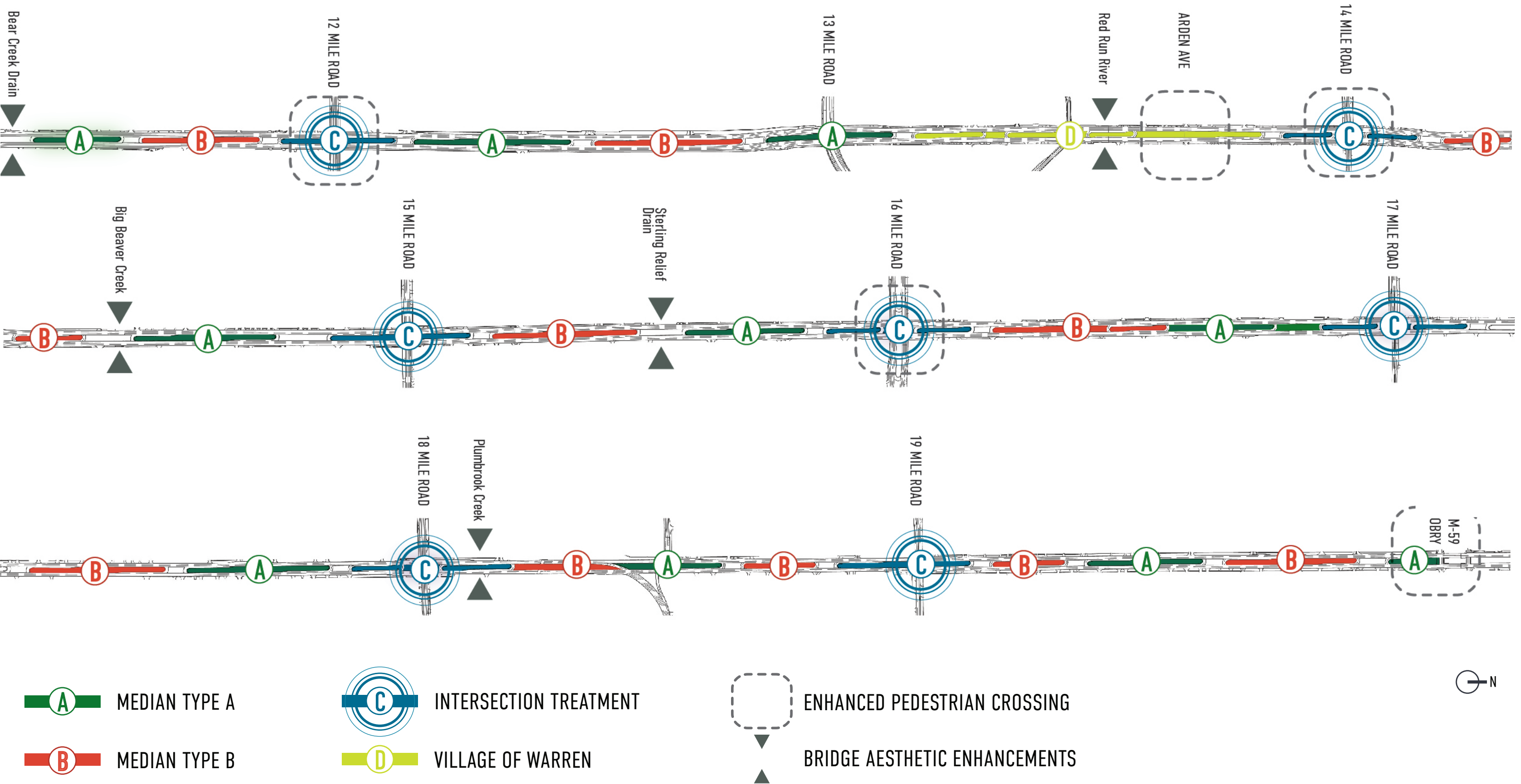
How to use these guidelines

The following plant species recommendations are provided for landscaping along the corridor. The use of these trees, evergreens, shrubs, grasses, and perennials should enhance the streetscape and be low maintenance. The list includes species well-adapted for the area and conditions found along an urban corridor. It is intended to be used as a guide. Availability, time of planting, and other factors may affect the specimens chosen at the time of construction. Plants selected should complement the intentions of this guide and any substitutions from the list of recommended plants require engineer approval.

LANDSCAPE REQUIREMENTS

PLANTING REQUIREMENTS
Deciduous trees: Minimum 2.5 in. caliper, B&B
Evergreen trees: Minimum 6 ft. height, B&B
Ornamental trees: Minimum 2 in. caliper, or 7 ft. height
Deciduous & evergreen shrubs: Minimum #3 container size, or equivalent B&B size
Perennials: Minimum #1 container size
Ornamental grasses: Minimum #1 container size
Seeded lawn: See specifications
SOILS REQUIREMENTS
Turf: Strip and stockpile topsoil, Section 815.03 of the 2012 Standard Specifications of Construction.amend and install per specifications, section 205.03.A.1 of the 2012 Standard Specifications of Construction. Utilize seeding mixture THM for slope restoration. All topsoil shall be screened.
Plant bed: 8 in. depth amended topsoil, Section 815.03 of the 2012 Standard Specifications of Construction.
MAINTENANCE REQUIREMENTS
Duration: 2 years
Maintenance needed: Watering and cultivating in accordance with Section 815.03.J of the 2012 Standard Specifications for Construction <ul style="list-style-type: none">TreesPerennialsOrnamental Grasses

ABBREVIATIONS
B&B: Balled and burlap
Cal.: Caliper



COLOR PALETTE

This palette complements the natural tones of the featured intersection treatments. Red Twig Dogwoods, autumn leaves, and Cor-ten steel light features inspire the burnt red shades. Ornamental and prairie grasses provoke the greens.



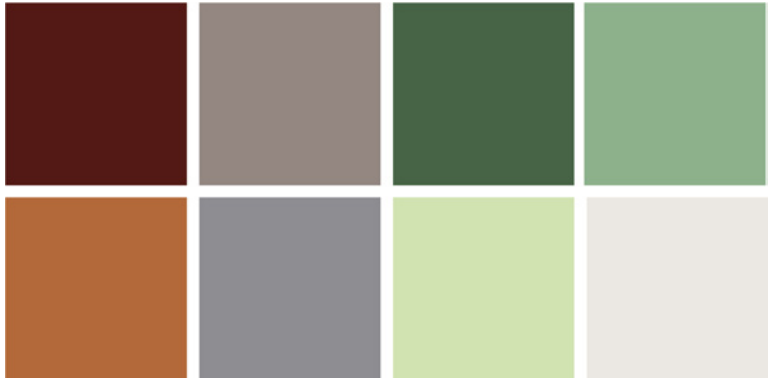
COLOR SWATCHES

Defined color palette should be coordinated with Macomb County, Warren, and Sterling Heights. The corridor should have consistent colors throughout the limits of the project in order to have a cohesive look and feel. Colors may be applied to lighting fixtures, signage, structures, wayfinding, fencing, and other applications, as appropriate.

Bridge Coating applications:

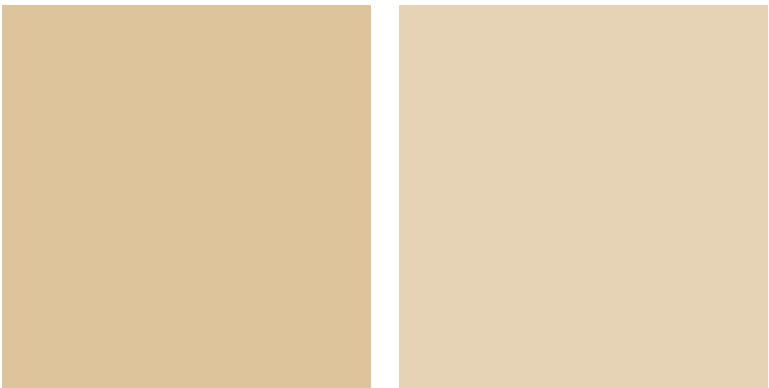
- **NB and SB Plumbrook:**
Abutments, wingwalls, bridge railing and fascia beam
- **Sterling Relief Drain:**
Wingwalls and Headwalls
- **Big Beaver Creek:**
Bridge Railing, Wingwalls and Headwalls
- **Red Run Drain:**
Abutments, wingwalls, bridge railing and fascia beam
- **Bear Creek:**
Wingwalls and Headwalls

PROPOSED CORRIDOR COLOR PALETTE



BRIDGE COATING

Colors: Federal colors 13531, 13522



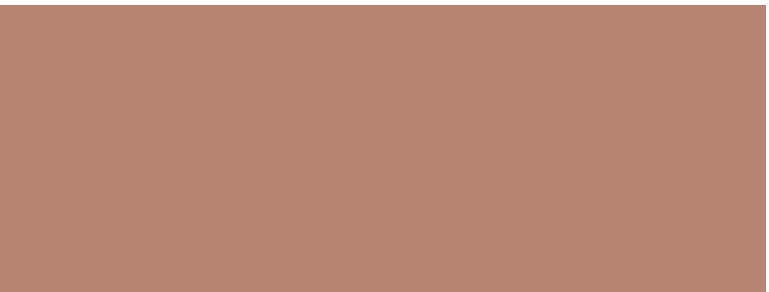
DECORATIVE PAVEMENT MARKING CROSSWALKS

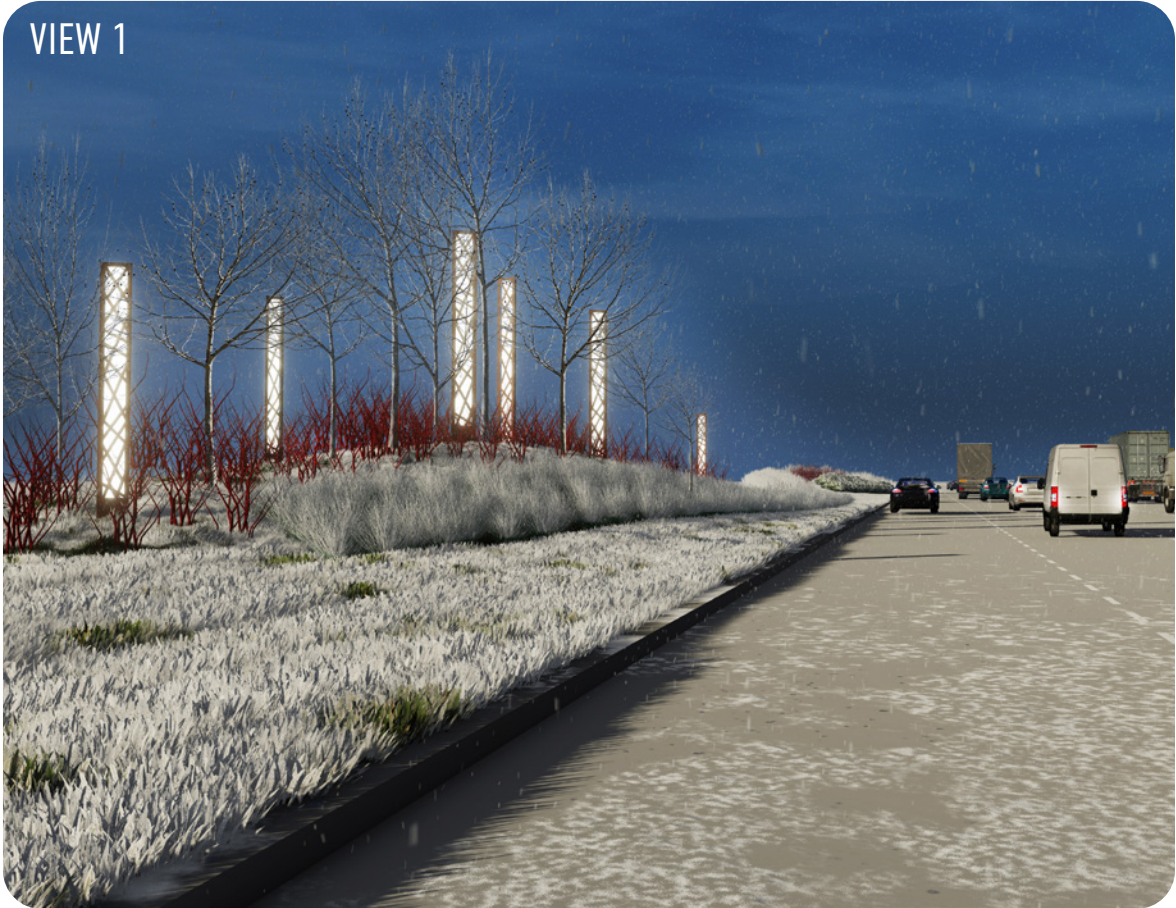
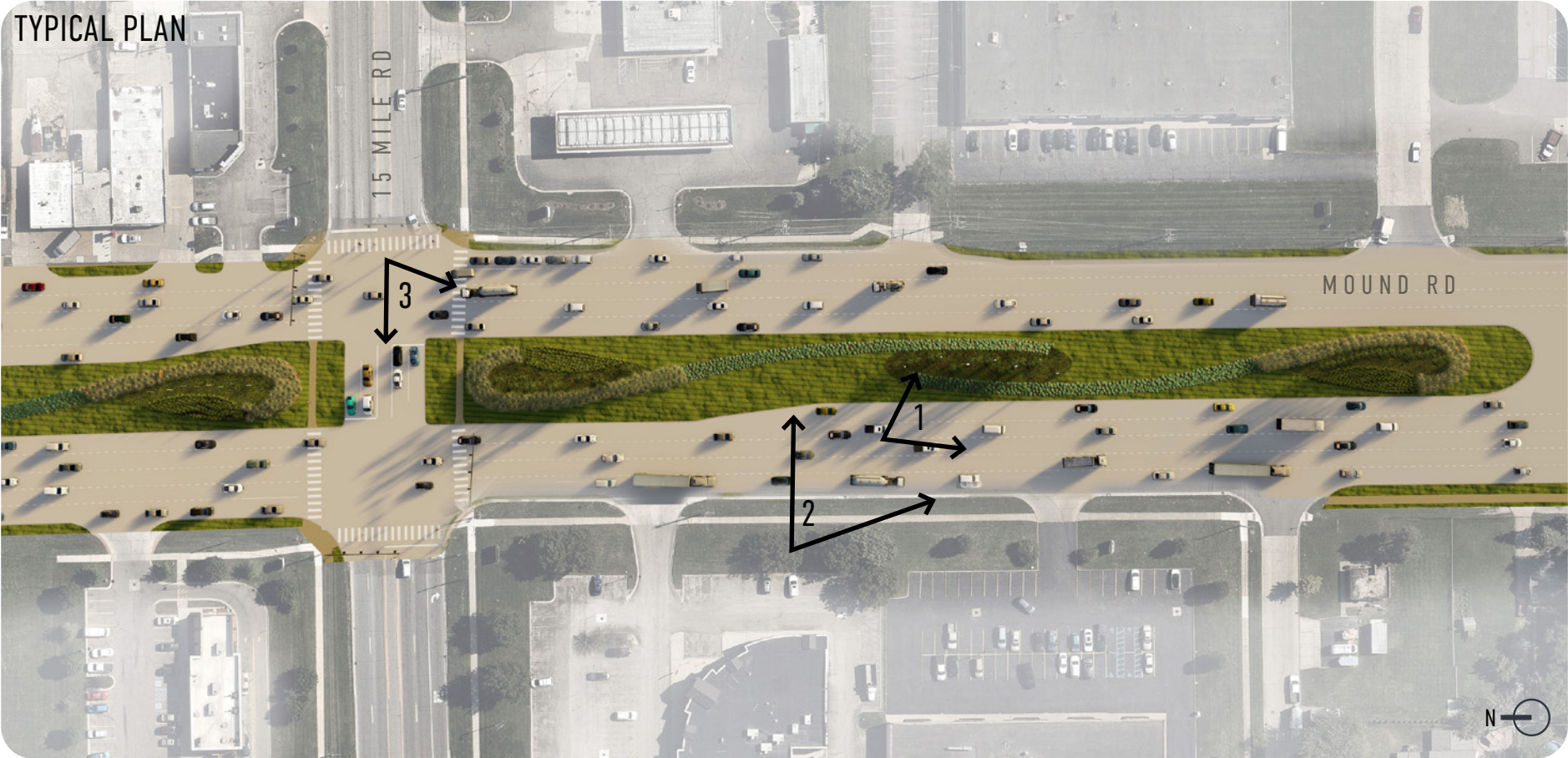
Colors: PMS 1807 Insignia Red



DECORATIVE STAMPED CONCRETE, IN ACCORDANCE WITH THE SPECIAL PROVISION FOR DECORATIVE CONCRETE SURFACE

Colors: 242 Nutmeg

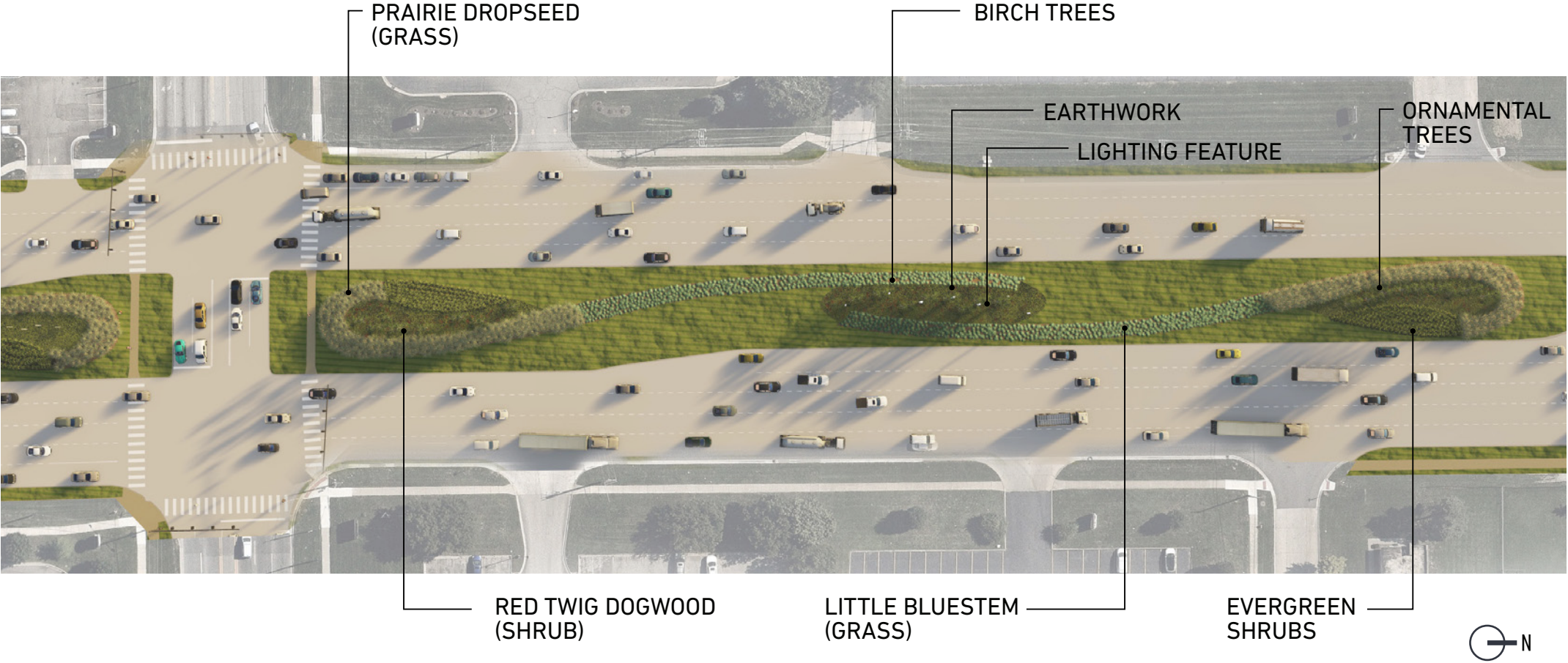




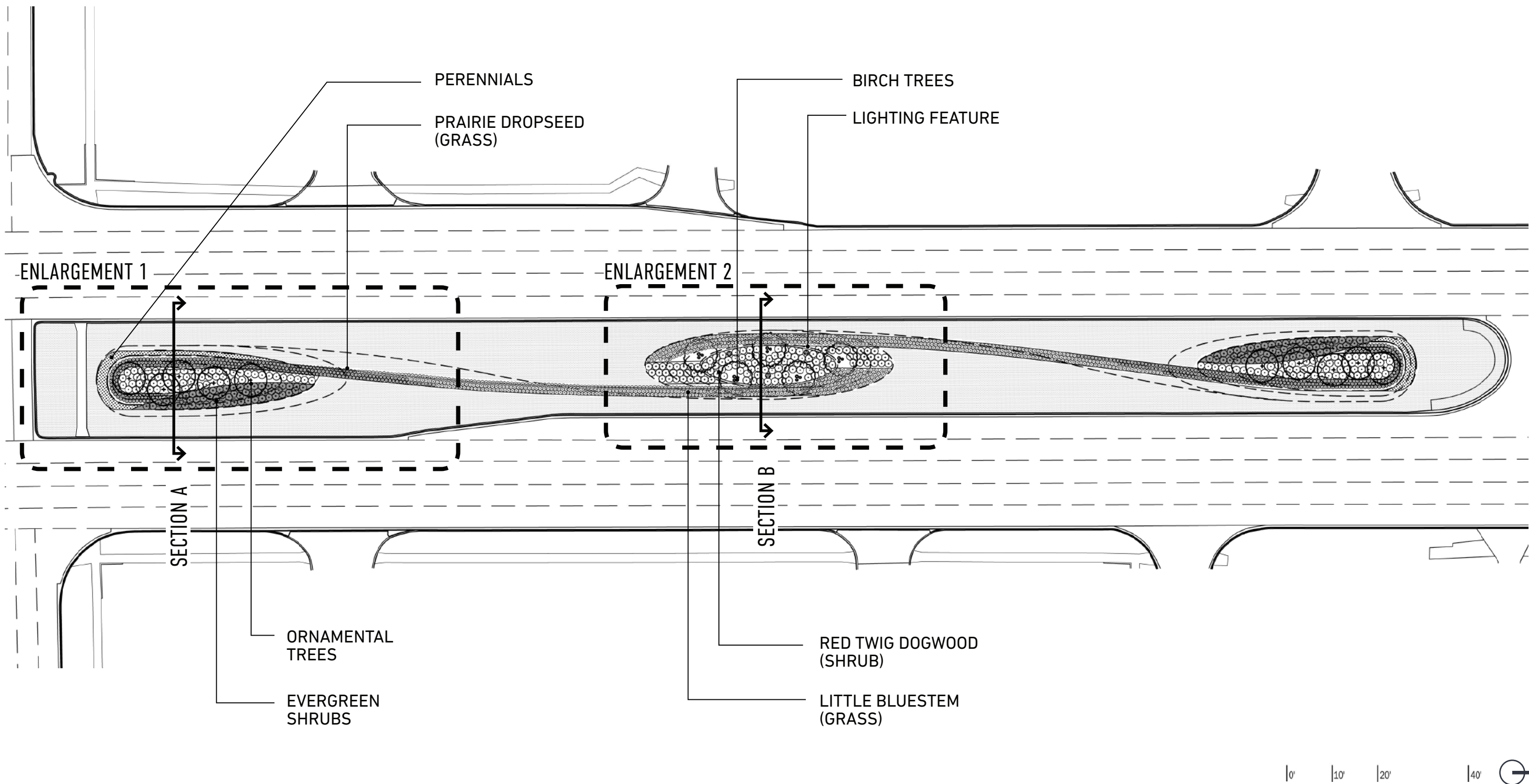
LANDSCAPE REQUIREMENTS

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Duration: 2 years
Maintenance needed: Watering and cultivating in accordance with Section 815.03.J of the 2012 Standard Specifications for Construction
<ul style="list-style-type: none">• Trees• Perennials• Ornamental Grasses

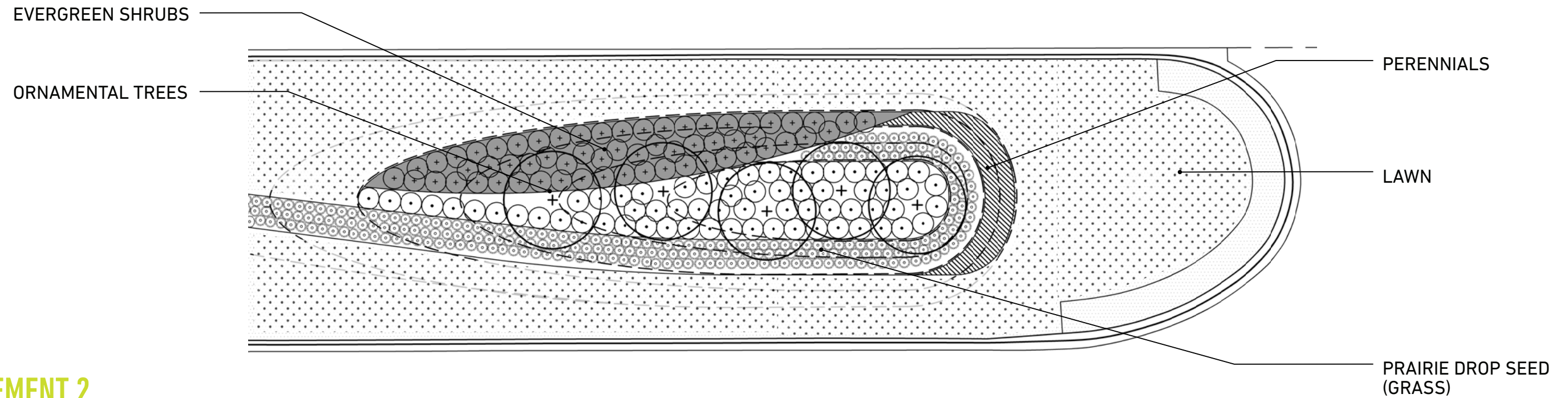
INTERSECTION LANDSCAPE PLAN



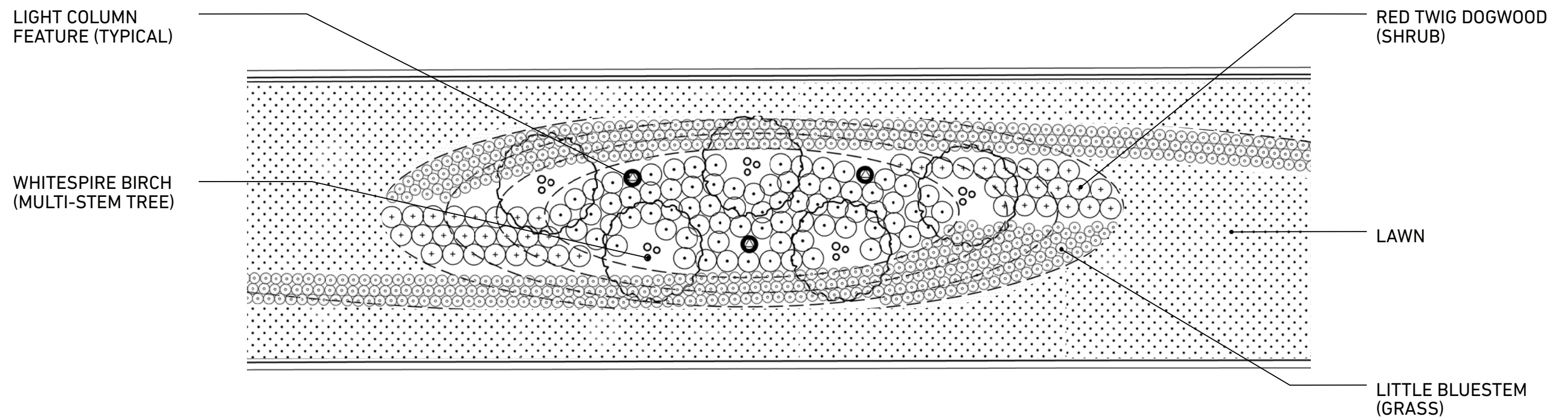
OVERALL PLAN



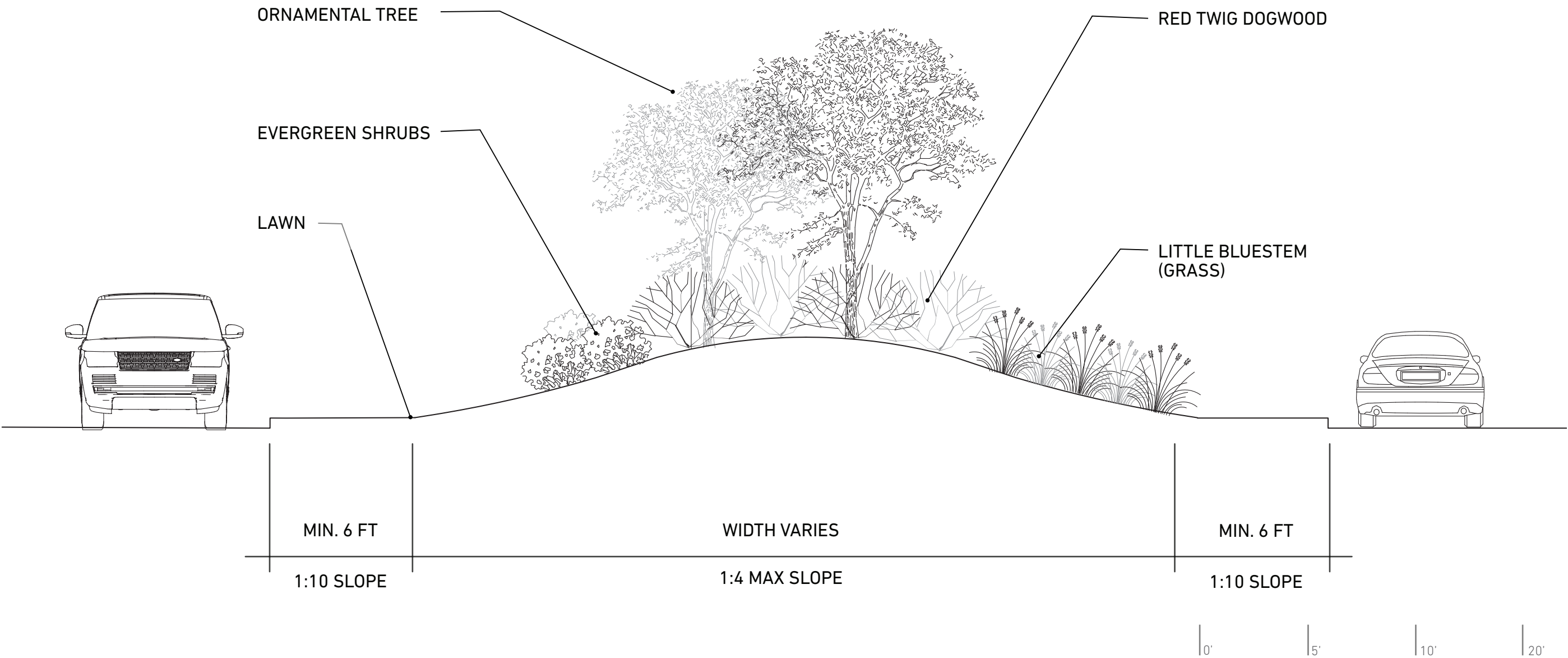
ENLARGEMENT 1



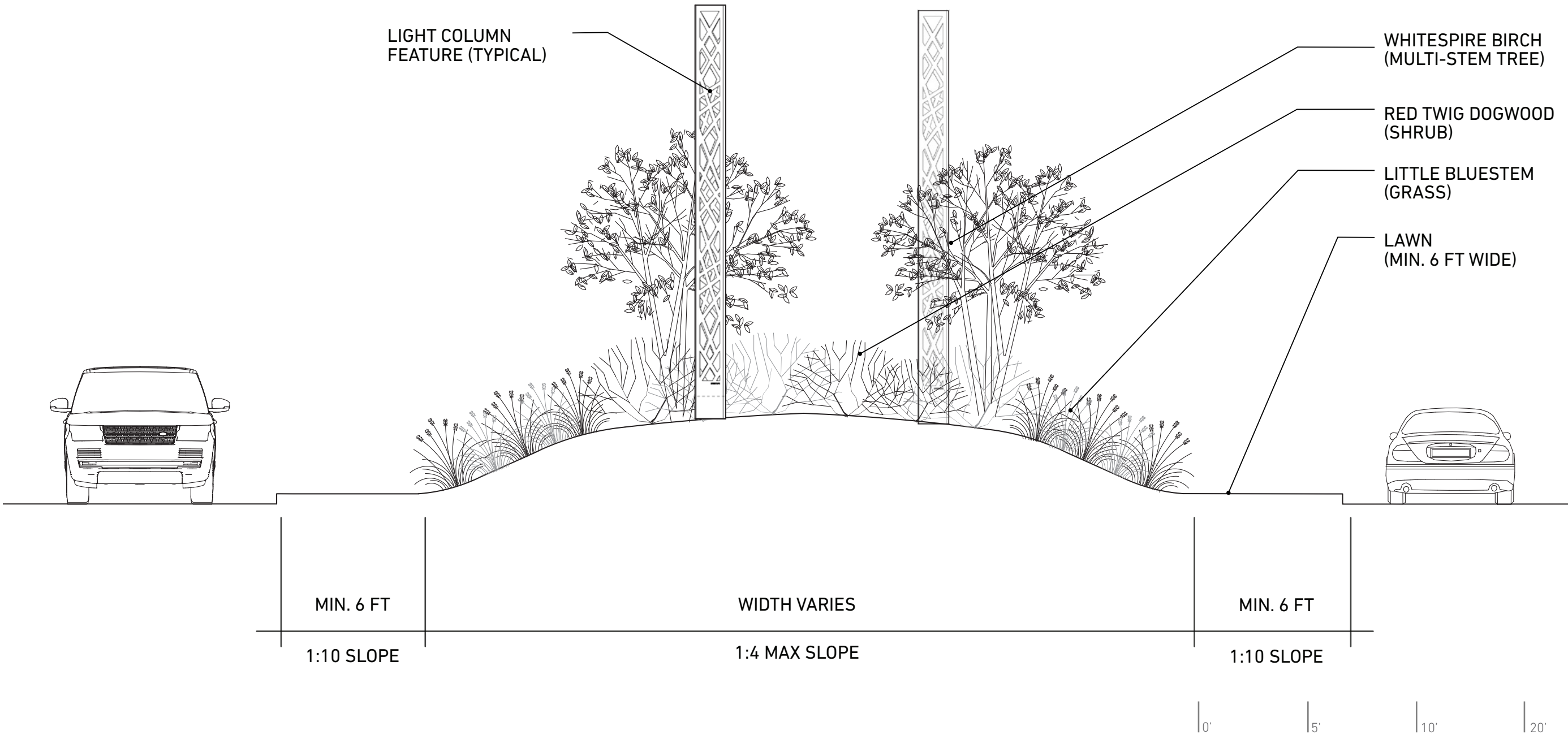
ENLARGEMENT 2



SECTION A



SECTION B



PLANT LIST

TREES
<i>Betula populifolia</i> 'Whitespire' Whitespire Birch
<i>Cornus Alternifolia</i> Pagoda Dogwood
<i>Crataegus</i> Hawthorne
<i>Malus</i> 'Harvest Gold' Harvest Gold Crabapple
<i>Malus</i> 'Madonna' Madonna Crabapple
SHRUBS
<i>Cornus sericea</i> Red Twig Dogwood
<i>Cornus sericea</i> 'Flaviramea' Yellow Tig Dogwood
<i>Juniperus virginiana</i> 'Grey Owl' Grey Owl Juniper
<i>Pinus mugo</i> Dwarf Mugo Pine
<i>Taxus × media</i> 'Everlow' Everlow Yew
GRASSES
<i>Bouteloua curtipendula</i> Blonde Ambition Sideoats Grama
<i>Sporobolus heterolepis</i> Prairie Dropseed
<i>Schizachyrium scoparium</i> Little Bluestem
PERENNIALS
<i>Hemerocallis</i> 'Little Business' Little Business Reblooming Daylily
<i>Leucanthemum × superbum</i> Shasta Daisy
<i>Perovskia atriplicifolia</i> Dwarf Russian Sage
<i>Salvia sylvestris</i> 'May Night' May Night Salvia
<i>Veronica</i> Speedwells



Betula populifolia 'Whitespire'
Whitespire Birch



Crataegus
Hawthorne



Malus 'Madonna'
Madonna Crabapple



Cornus sericea
Red Twig Dogwood



Pinus mugo
Dwarf Mugo Pine



Juniperus virginiana 'Grey Owl'
Grey Owl Juniper



Sporobolus heterolepis
Prairie Dropseed



Schizachyrium scoparium
Little Bluestem



Hemerocallis 'Little Business'
Reblooming Daylily



Leucanthemum × superbum
Shasta Daisy

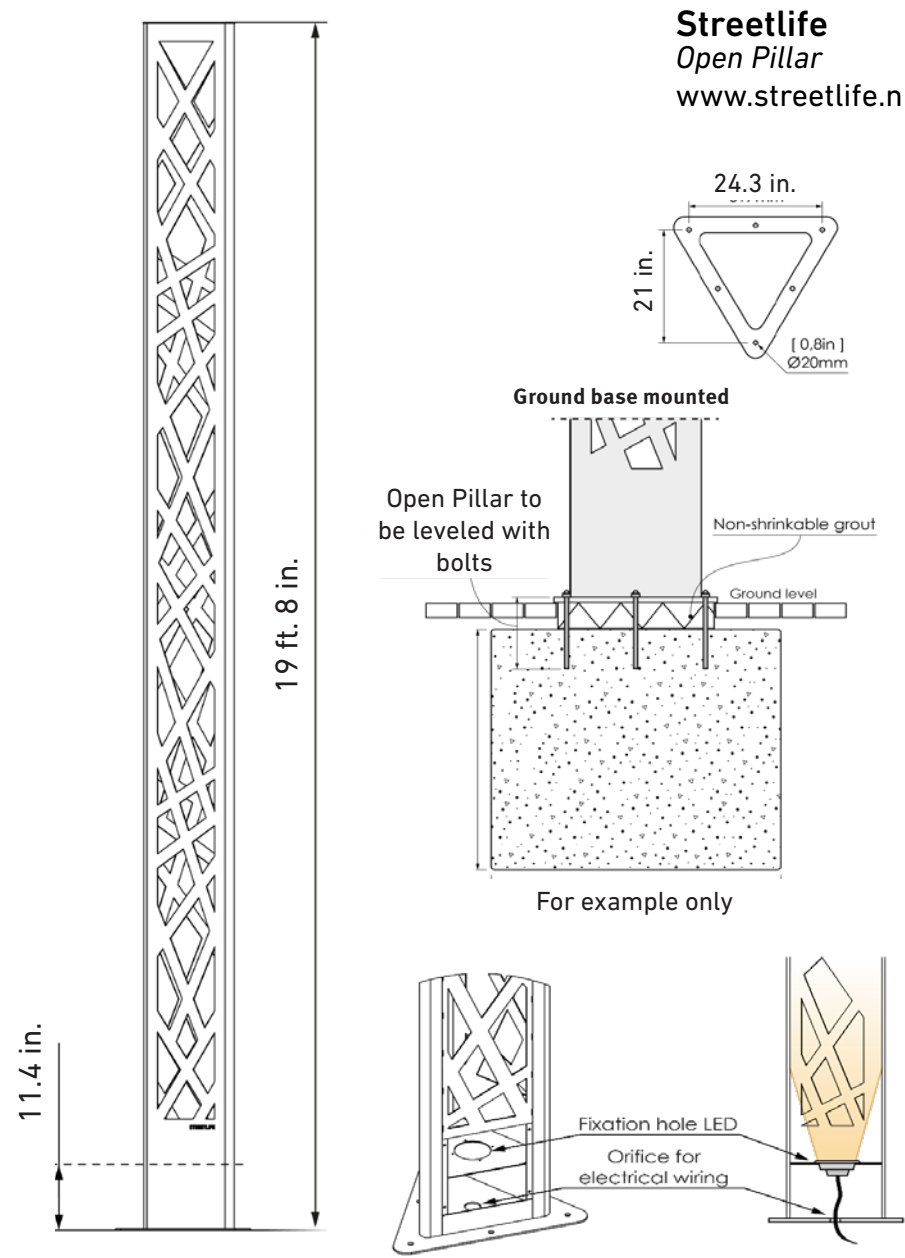


Salvia sylvestris 'May Night'
May Night Salvia



Veronica
Speedwells

LIGHTING FEATURE GUIDELINES



ALTERNATIVE MANUFACTURERS

Hess*
Mosaic
Illuminated aluminum column
www.hessamerica.com

Technilum*
Trielle
Fretted aluminum structure
www.technilum.com

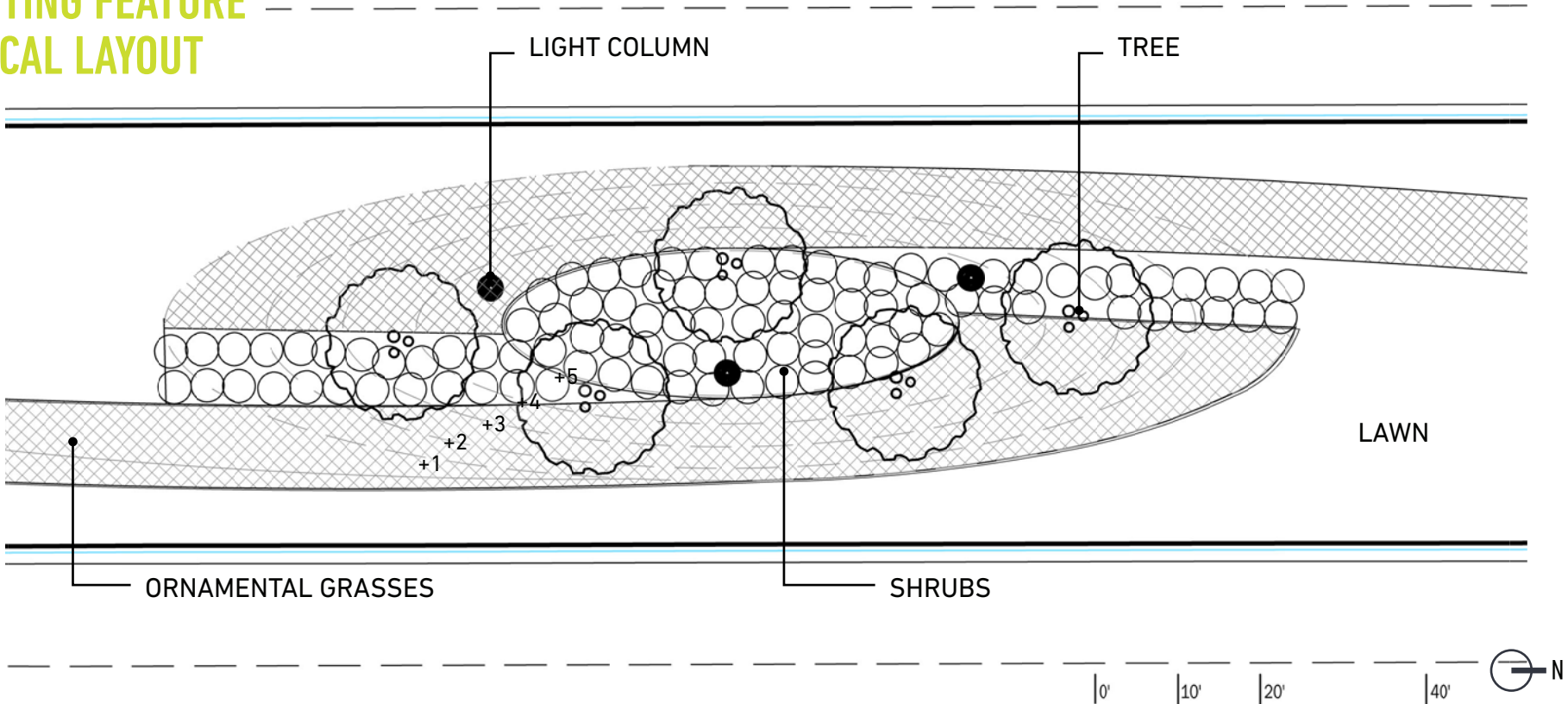
*These Manufacturers currently do not offer product to be considered an equal. Any alternative product needs to be approved by MDOT.

LOCATIONS

12 MILE ROAD
<i>Quantity:</i> 6 total
14 MILE ROAD
<i>Quantity:</i> 6 total
15 MILE ROAD
<i>Quantity:</i> 6 total
16 MILE ROAD
<i>Quantity:</i> 6 total
17 MILE ROAD
<i>Quantity:</i> 6 total
18 MILE ROAD
<i>Quantity:</i> 6 total
19 MILE ROAD
<i>Quantity:</i> 6 total
TOTAL: 42



LIGHTING FEATURE
TYPICAL LAYOUT



KEY



LANDSCAPE REQUIREMENTS (FUTURE CONTRACT)

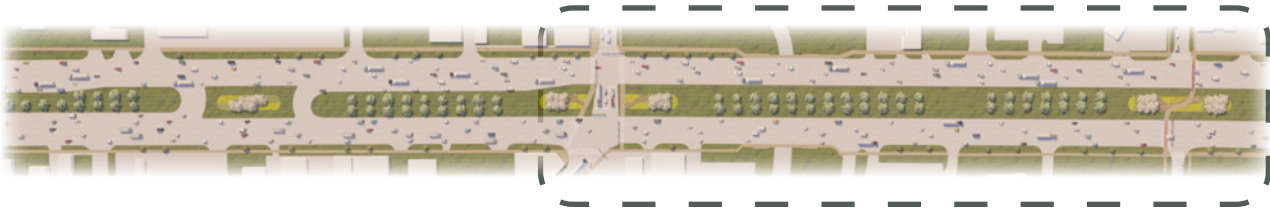
PLANTING REQUIREMENTS
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Evergreen trees: Minimum 6 ft. height, B&B
Ornamental trees: Minimum 2 in. caliper, or 7 ft. height
Deciduous & evergreen shrubs: Minimum #3 container size, or equivalent B&B size
Perennials: Minimum #1 container size
Ornamental grasses: Minimum #1 container size
Seeded lawn: See specifications

SOILS REQUIREMENTS
Turf: Strip and stockpile topsoil, Section 815.03 of the 2012 Standard Specifications of Construction.amend and install per specifications, section 205.03.A.1 of the 2012 Standard Specifications of Construction. Utilize seeding mixture THM for slope restoration. All topsoil shall be screened.
Plant bed: 8 in. depth amended topsoil
Trees: 12 in. depth, 6 ft. diameter per tree, imported planting soil.
MAINTENANCE REQUIREMENTS
Duration: 2 years
Maintenance needed: Watering and cultivating in accordance with Section 815.03.J of the 2012 Standard Specifications for Construction <ul style="list-style-type: none">• Trees• Perennials• Ornamental Grasses

PLAN



KEY

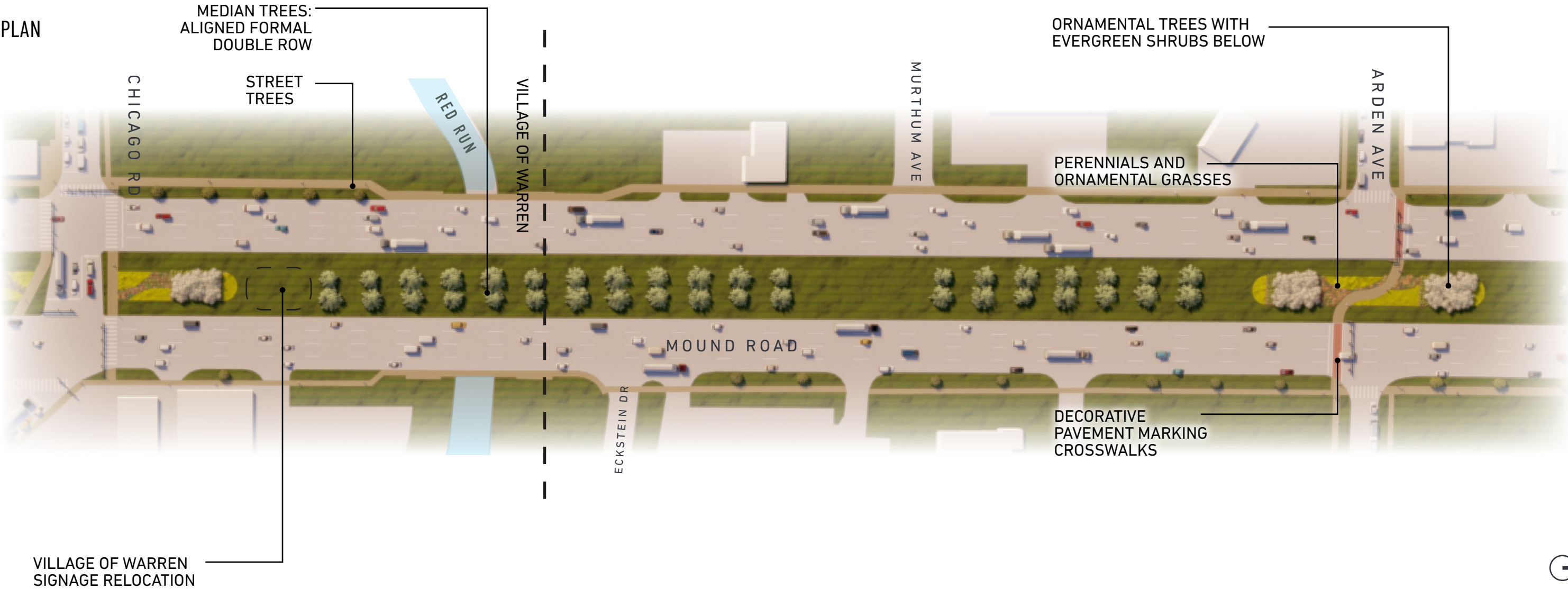


ARDEN AVENUE
PEDESTRIAN CROSSING

The Arden Avenue intersection treatment will be distinct from the enhanced pedestrian crossings throughout the rest of the corridor due to the updated traffic pattern. This location is also an opportunity to create a branded aesthetic for the Warren Village area.



PLAN



PLANT LIST

STREET TREES
<i>Acer buergerianum</i> Trident Maple
<i>Carpinus caroliniana</i> American Hornbeam
<i>Crataegus phaenopyrum</i> Washington Hawthorn
<i>Gleditsia triacanthos 'Impcole'</i> Imperial Honeylocust
<i>Syringa reticulata</i> Japanese Lilac Tree
<i>Zelkova serrata</i> City Sprite Zelkova
MEDIAN TREES
<i>Liquidambar styraciflua 'Rotundaloba'</i> Fruitless Sweetgum
<i>Quercus palustris</i> Pin Oak
<i>Tilia cordata</i> Little Leaf Linden
SHRUBS & ORNAMENTAL TREES
<i>Amelanchier</i> Serviceberry
<i>Cercis canadensis</i> Eastern Redbud
<i>Pinus mugo</i> Mugo Pine
<i>Pinus mugo'</i> Dwarf Mugo Pine
<i>Taxus x media 'Everlow'</i> Everlow Yew
GRASSES
<i>Bouteloua curtipendula</i> Blonde Ambition Sideoats Grama
<i>Pennisetum orientale 'Karley Rose'</i> Karley Rose Fountain Grass
PERENNIALS
<i>Hemerocallis 'Purple de Oro'</i> Purple D'oro Daylily
<i>Narcissus</i> Daffodils
<i>Perovskia atriplicifolia</i> Dwarf Russian Sage
<i>Salvia sylvestris 'May Night'</i> May Night Salvia
<i>Veronica</i> Spike Speedwell



Acer buergerianum
Trident Maple



Carpinus caroliniana
American Hornbeam



Crataegus phaenopyrum
Washington Hawthorne



Gleditsia triacanthos 'Impcole'
Imperial Honeylocust



Liquidambar styraciflua 'Rotundaloba'
Fruitless Sweetgum



Quercus palustris
Pin Oak



Tilia cordata
Little Leaf Linden



Bouteloua curtipendula
Blonde Ambition Sideoats Grama



Pennisetum orientale 'Karley Rose'
Karley Rose Fountain Grass



Hemerocallis 'Purple de Oro'
Purple D'oro Daylily



Pinus mugo
Dwarf Mugo Pine

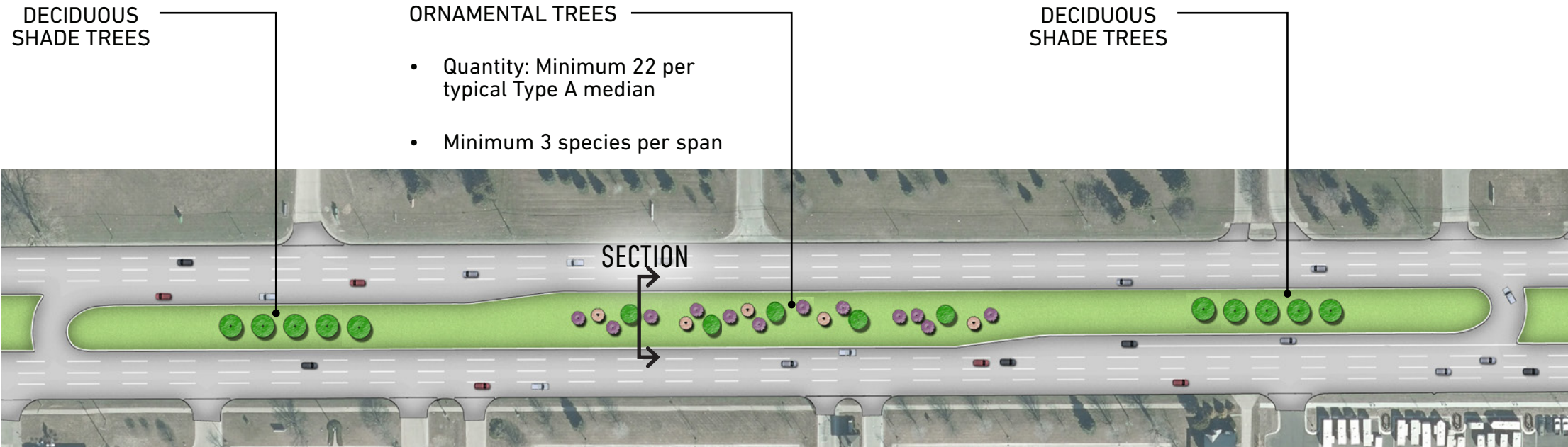


Perovskia atriplicifolia Little Spire
Dwarf Russian sage

LANDSCAPE REQUIREMENTS

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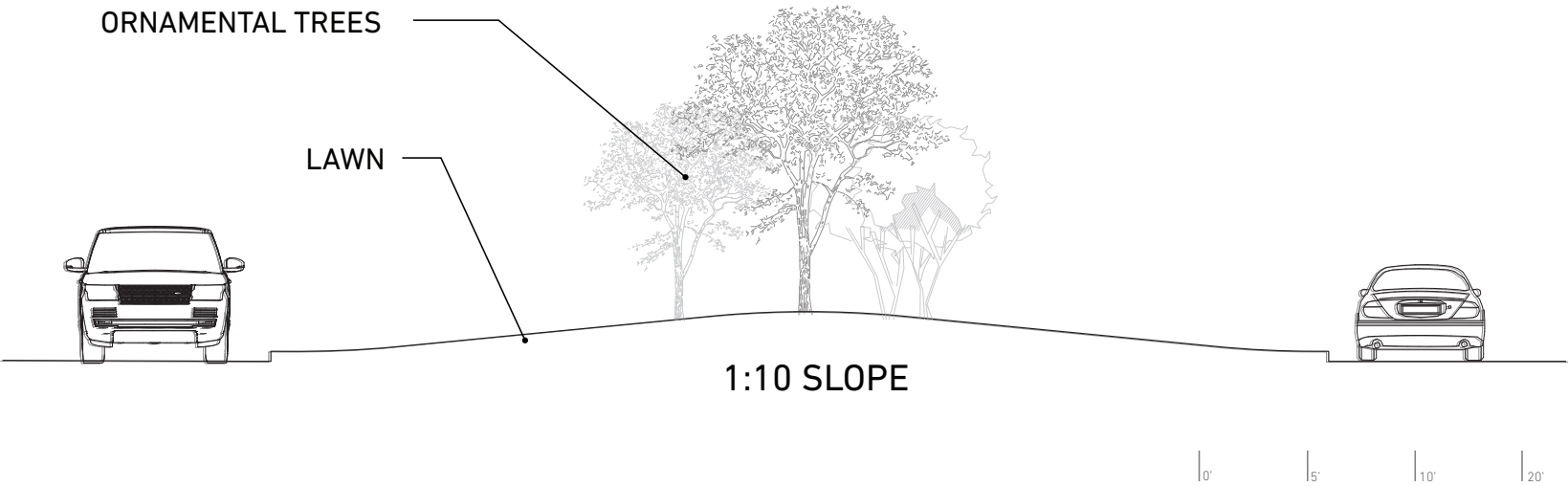
TYPICAL LANDSCAPE PLAN



This median typology emphasizes the blooms and colors of spring. Ornamental trees are arranged in organic masses along the center of the median span. Several large shade trees, with striking autumn color, are set in a row at each end of the stretch.



SECTION





PLANT LIST

TREES
<i>Acer × freemanii</i> Autumn Blaze Maple
<i>Acer rubrum</i> ‘franksred’ Red Sunset Maple
<i>Gleditsia triacanthos form inermis</i> Thornless Honeylocust
<i>Liquidambar styraciflua</i> Fruitless Sweetgum
<i>Quercus rubra</i> Red Oak
SHRUBS & ORNAMENTAL TREES
<i>Amelanchier</i> Serviceberry
<i>Cercis canadensis</i> Eastern Redbud
<i>Cornus alternifolia</i> Alternateleaf Dogwood
<i>Cornus florida</i> Flowering Dogwood
<i>Crataegus</i> Hawthorne
<i>Linnaea amabilis</i> Beauty Bush
<i>Malus Spring Snowii</i> Crab Apple
<i>Prunus cerasifera</i> Pruple Leaf Plum / Wild Plum
<i>Viburnum plicatum</i> Doublefile viburnum
<i>Viburnum prunifolium</i> Blackhaw viburnum



Acer × freemanii
Autumn Blaze Maple



Acer rubrum ‘franksred’
Red Sunset Maple



Gleditsia triacanthos form inermis
Thornless Honey Locust



Liquidambar styraciflua
Sweetgum



Quercus rubra
Red Oak



Amelanchiar
Serviceberry



Cornus alternifolia
Alternateleaf Dogwood /Pagoda Dogwood



Crataegus
Hawthorne



Malus Spring Snowii
Spring Snow Crabapple



Prunus cerasifera *Malus Spring Snowii*
Pruple Leaf Plum / Wild Plum



Viburnum plicatum
Doublefile Viburnum

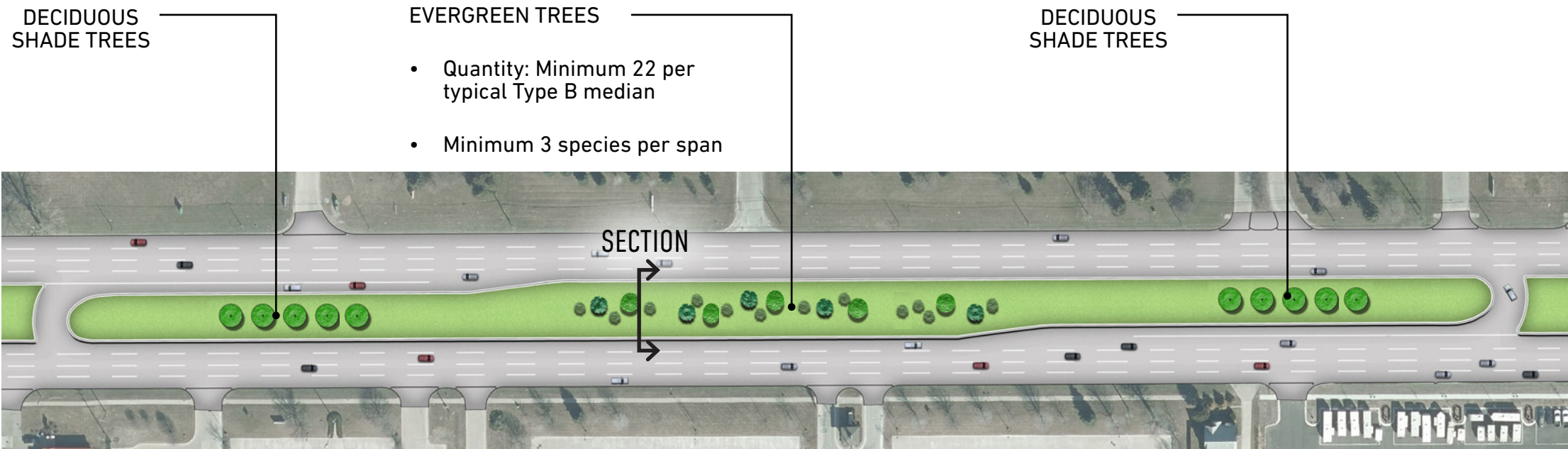


Viburnum prunifolium
Blackhaw Viburnum

LANDSCAPE REQUIREMENTS

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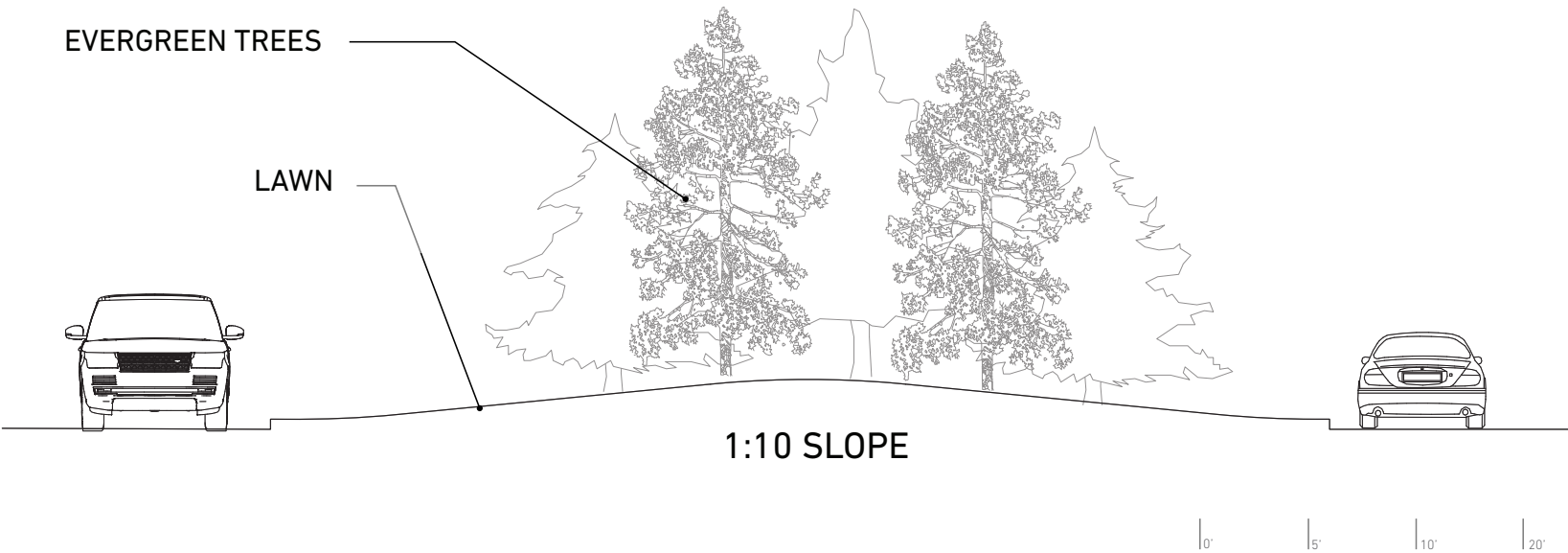
TYPICAL LANDSCAPE PLAN



Evergreens comprise most of this typology. Pines, spruces, and other coniferous species will continue to create interest in winter. Several large shade trees, with striking autumn color, are set in a row at each end of the stretch.



SECTION





PLANT LIST

TREES
<i>Acer × freemanii</i> Autumn Blaze Maple
<i>Acer rubrum</i> ‘franksred’ Red Sunset Maple
<i>Gleditsia triacanthos form inermis</i> Thornless Honeylocust
<i>Liquidambar styraciflua</i> Fruitless Sweetgum
<i>Quercus rubra</i> Red Oak
EVERGREEN TREES
<i>Abies balsamea</i> Balsam Fir
<i>Abies concolor</i> White Fir
<i>Juniperus communis</i> Common juniper
<i>Juniperus virginiana</i> Eastern Red Cedar
<i>Picea glauca</i> White Spruce
<i>Pinus banksiana</i> Jack Pine
<i>Pinus strobus</i> Eastern White Pine



Acer × freemanii
Autumn Blaze Maple



Acer rubrum ‘franksred’
Red Sunset Maple



Gleditsia triacanthos form inermis
Thornless Honey Locust



Liquidambar styraciflua
Sweetgum



Quercus rubra
Red Oak



Abies balsamea
Balsam fir



Abies concolor
White fir



Juniperus communis
Common Juniper



Juniperus virginiana
Eastern Red Cedar



Picea glauca
White Spruce



Pinus banksiana
Jack Pine

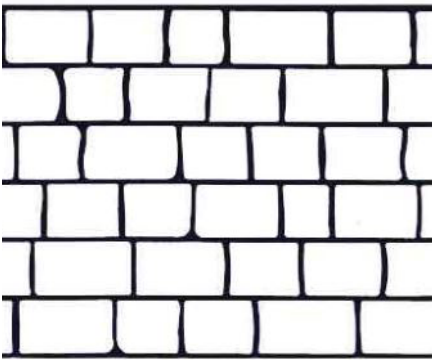


Pinus strobus
Eastern White Pine

TYPICAL ENHANCED PEDESTRIAN CROSSING GUIDELINES

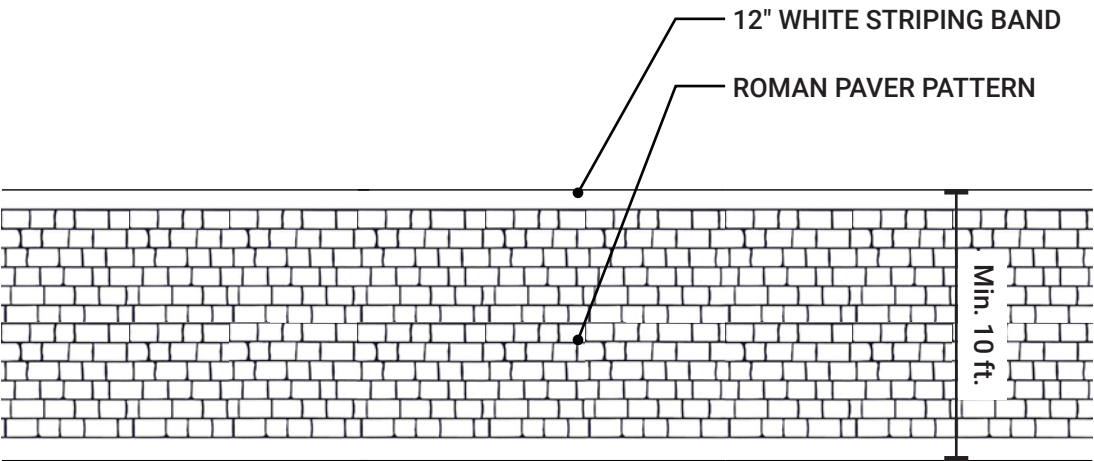
The enhanced pedestrian crossings are to be located at the following intersections on Mound Road:

- 12 Mile Road
- Arden Avenue
- 14 Mile Road
- 16 Mile Road
- Dobry Drive



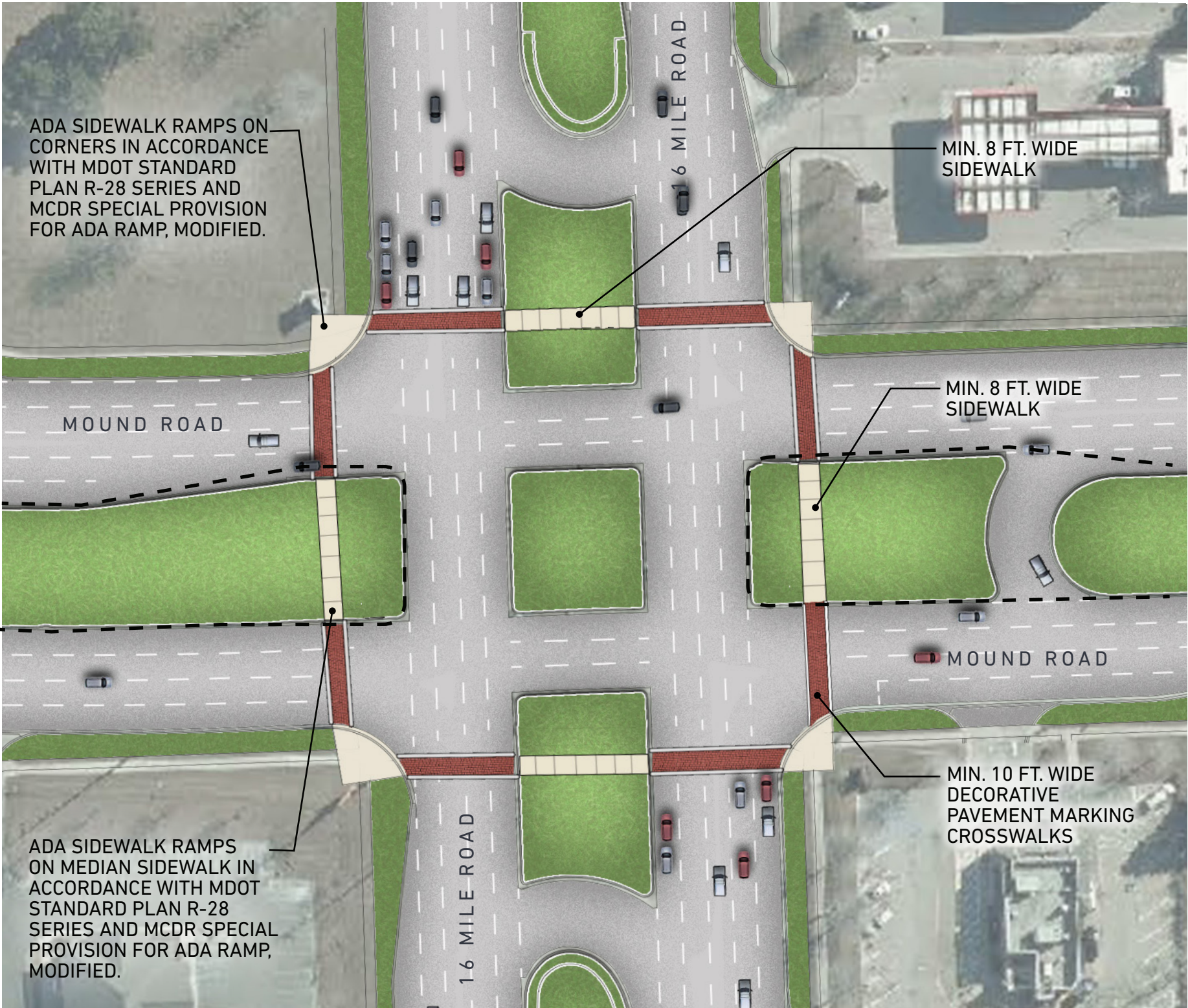
Roman Paver pattern

DECORATIVE PAVEMENT MARKING CROSSWALKS
Color: PMS 1807
Pattern: Roman Paver



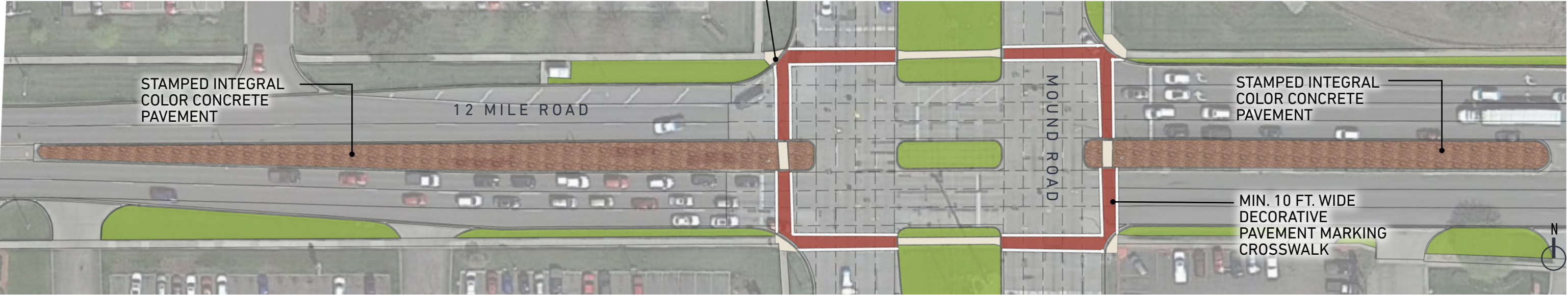
CROSSWALK PLAN

TYPICAL PLAN



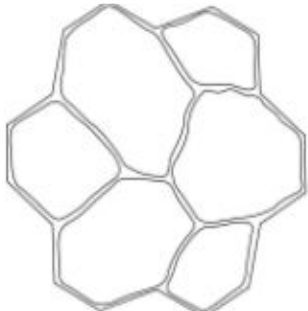
PLAN

ADA SIDEWALK RAMPS ON CORNERS IN ACCORDANCE WITH MDOT STANDARD PLAN R-28 SERIES AND MCDR SPECIAL PROVISION FOR ADA RAMP, MODIFIED.



ENHANCED PAVEMENT

STAMPED INTEGRAL COLOR CONCRETE
Color: 242 Nutmeg
Pattern: FM 725 Beverly Hills Random Stone



FM 725 Beverly Hills Random Stone

DECORATIVE STAMPED CONCRETE, IN ACCORDANCE WITH THE SPECIAL PROVISION FOR DECORATIVE CONCRETE SURFACE
Color: Nutmeg
