



Atwater Ave

200' Riverfront
+ 100' Wetland
Buffer
combined

Monoliths Trails

Existing
Woodland

100' Wetland
Buffer

Property Line

Trailhead Parking

Meadow

Stormwater
Detention Basin

Berm screening

Stormwater
Detention Basin

Rain Garden

Quarry Garden

Service

Garage

Ph 2
Garage

Main Entry

Trees to
remain

Existing vegetation
to remain

Upper Quad

Ph 2
Building

Lobby

Ph 1
Building

Meadow

Berm screening

Existing
Woodland

Property Line

Route 128

Manchester
Athletic Club

100' Wetland Buffer

Existing vegetation
to remain



SITE PLAN



SITE PLAN - LANDSCAPE PHASE 1

SECTION 4.6: PRESERVATION OF EXISTING VEGETATION



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PER SPECIFICATIONS SECTION 015639:

- o Tree protection fencing shall be galvanized chain link fencing, 6 ft. high. Located minimally at the outer edge of the canopy drip line or further as will be developed in Construction Documents.
- o All tree work shall be performed by a professional Certified Arborist

SECTION 4.10: TOPSOIL



- Seed
 - 4" soil depth
- Grassland habitat
 - 6" soil depth
- Perennials and shrubs
 - 18" soil depth
- Shrub Buffer
 - 24" soil depth
- Trees
 - 36" soil depth
- Detention basin/ rain garden
 - Soil profile per Civil

SITE PLAN - PROPOSED SOIL DEPTHS

SECTION 4.10: TOPSOIL

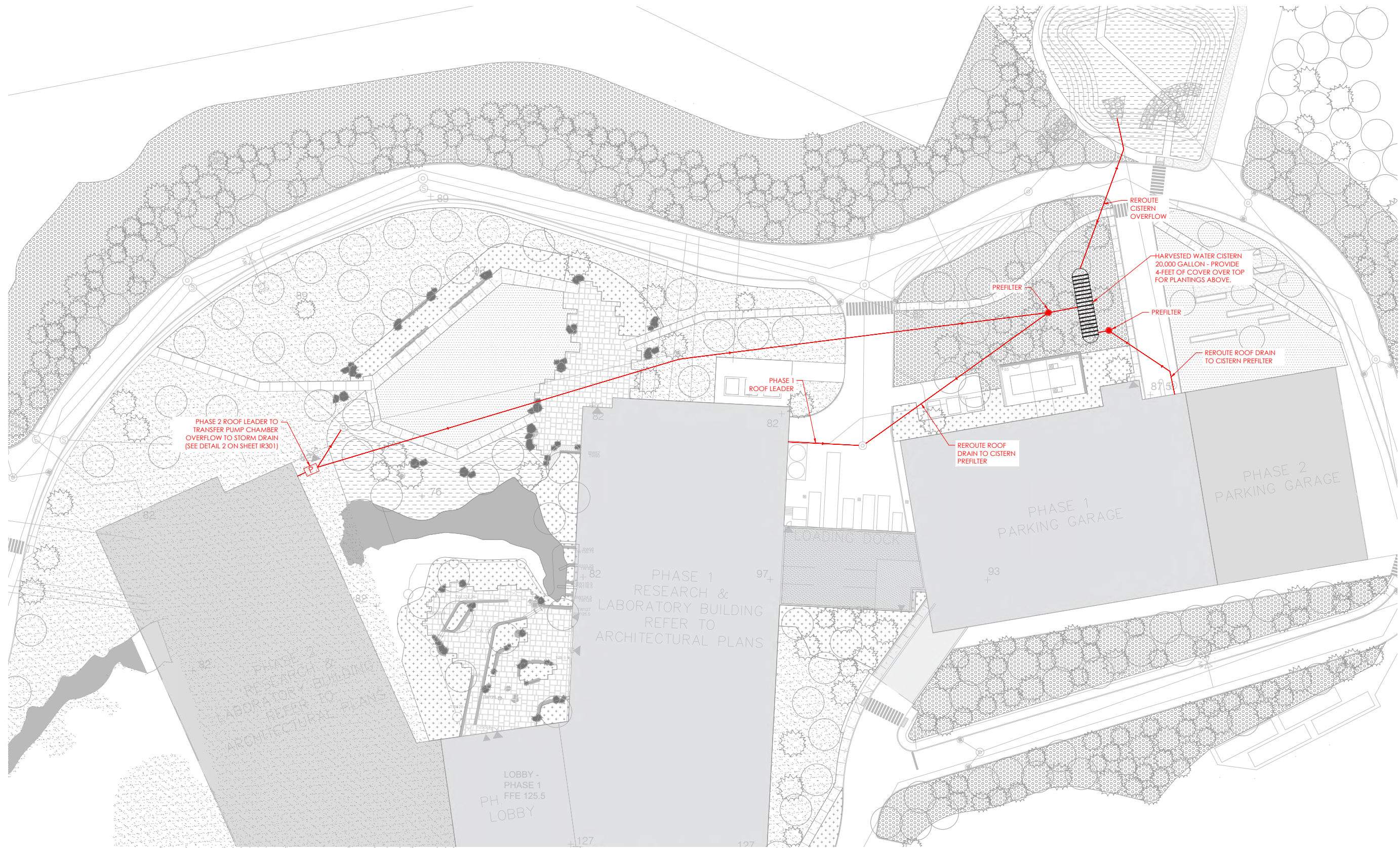
ADDRESSING THE 4” SOIL DEPTH IN SEEDING AREAS TO THE NORTHEAST

S2112 Response:

Where planting is meant to be permanently established, in close proximity to the building and an integral part of the campus a minimum 6” of soil is provided for long term enhancement of the landscape.

In comparison 4” of soil is only suggested in a large area to the north east of the building and loop road – this is not part of the current Phase 1+2 project but is currently stripped land used for quarry activities. Soil and seeding is proposed to prevent erosion and provide a temporary cost effective solution as that area may be developed in future phases. Due to the large square footage of the area increasing soil depth is cost-prohibitive and the design team is confident that with 4” of soil and a native, erosion control seeding that the area will be improved.

SECTION 4.11: IRRIGATION



IRRIGATION - RAINWATER HARVESTING

SECTION 4.11: IRRIGATION

ADDRESSING THE COMMENT ABOUT MUNICIPAL WATER CONNECTION

S2112 Response: Irrigation will **not** be provided from municipal water lines during regular operation, only during drought and potentially for plant establishment during the first year. Irrigation will be served by a cistern fed by stormwater roof capture, condensate and RO reject water collected on site.

The tank has been sized to meet the irrigation requirements of the proposed plant material and all irrigation use is in compliance with LEED certification.



- 1 Disturbed dry meadow
- 2 Disturbed wet meadow
- 3 Early succession/ Scrub-shrub
- 4 Hemlock-Beech mixed oak forest complex
- 5 Mixed forest pockets & highway edge
- 6 Sawmill Brook riparian forest

0 | 100 | 200 | 400

LANDSCAPE TYPOLOGIES DIAGRAM

SECTION 7.0 LANDSCAPING, WALLS AND FENCES



- 1 Naturalized berm/wooded hillside
- 2 Woodland restoration
- 3 Successional woodland
- 4 Undisturbed mixed forest
- 5 Successional field at existing disturbed dry meadow
- 6 Successional field at open soil areas
- 7 Restoration nursery
- 8 New England grassland habitat
- 9 Wet meadow/detention basin
- 10 Rain garden
- 11 Rain garden buffer zone
- 12 Recreational eco-lawn with micro clover



1 Naturalized berm



2 Successional woodland



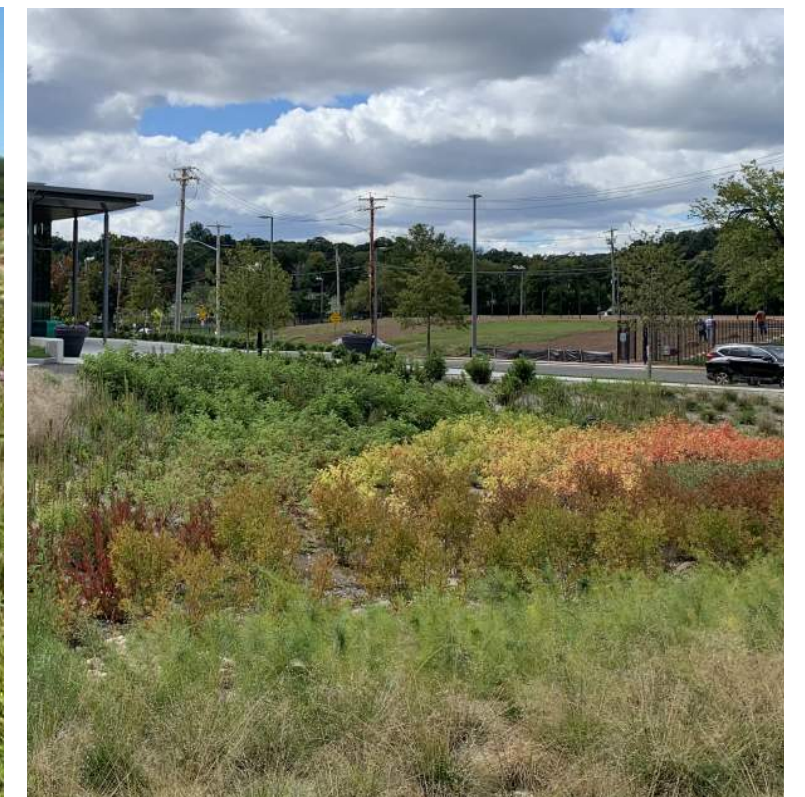
3 Successional field



4 New England grassland habitat



5 Wet meadow



6 Rain garden

LANDSCAPE TYPOLOGY CHARACTER



AREAS OF PRIORITY SCREENING - NORTH

35' MEDIAN SIZE AT MATURITY

22' PLANTING RANGE FOR SCREENING PRIORITIES
16'
12'

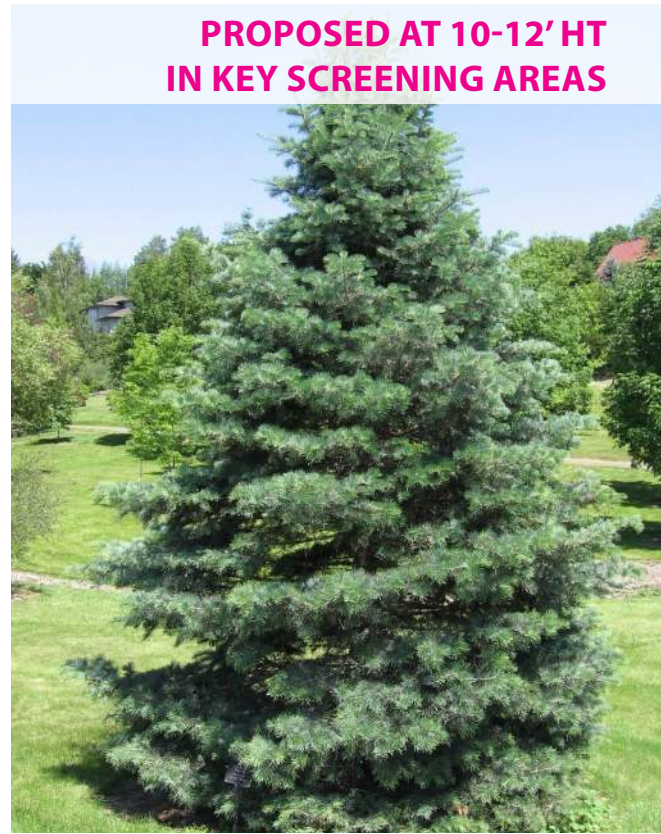
8'
6'



RELATIVE TREE SIZE COMPARISON



ABIES CONCOLOR
WHITE FIR
HEIGHT: 40' - 70'
SPREAD: 20' - 30'
BLOOM TIME: N/A
EVERGREEN



PROPOSED AT 10-12' HT
IN KEY SCREENING AREAS



ABIES FRASERI
FRASER FIR
HEIGHT: 30' - 50'
SPREAD: 10' - 25'
BLOOM TIME: N/A
EVERGREEN, FRAGRANT



PROPOSED AT 10-12' HT
IN KEY SCREENING AREAS



ACER SACCHARUM
SUGAR MAPLE
HEIGHT: 60' - 80'
SPREAD: 30' - 60'
BLOOM TIME: APRIL
FALL COLOR



BETULA LENTA
SWEET BIRCH
HEIGHT: 40' - 75'
SPREAD: 35 - 40'
BLOOM TIME: APRIL - MAY
SHOWY BARK, FALL COLOR



NATURALIZED BERM/ WOODED HILLSIDE



CARPINUS CAROLINIANA
AMERICAN HORNBEAM
HEIGHT: 20' - 35'
SPREAD: 20' - 35'
BLOOM TIME: FEBRUARY
FALL COLOR, ATTRACTS BIRDS



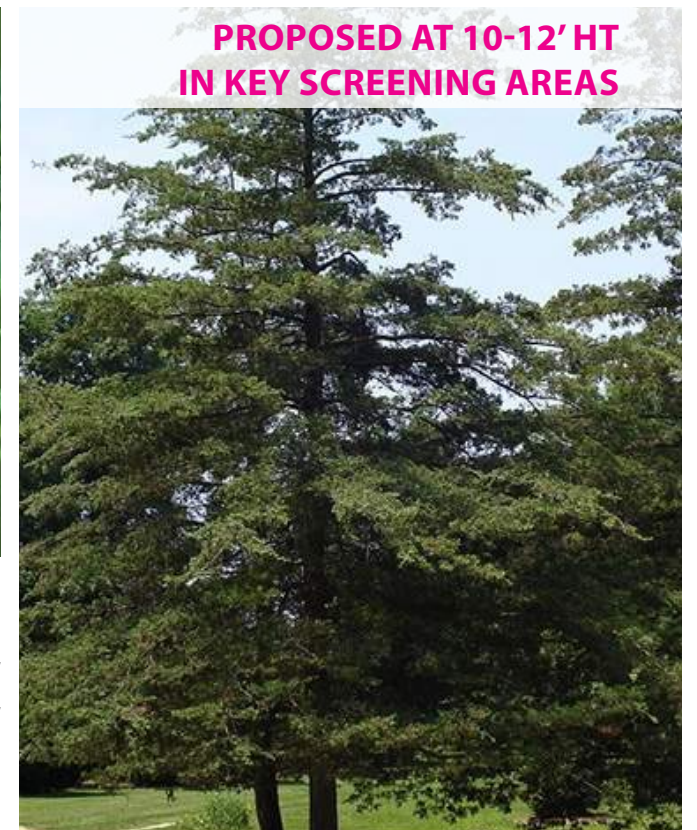
CERCIS CANADENSIS 'MINNESOTA STRAIN'
COLD HARDY REDBUD
HEIGHT: 20' - 30'
SPREAD: 25' - 35'
BLOOM TIME: APRIL - MAY
SPRING COLOR



CORNUS FLORIDA 'APPALACHIAN BLUSH'
APPALACHIAN BLUSH DOGWOOD
HEIGHT: 15' - 20'
SPREAD: 15' - 20'
BLOOM TIME: APRIL - MAY
SHOWY FLOWER, ATTRACTS BIRDS



CHAMAECYPARIS THYOIDES
ATLANTIC WHITE CEDAR
HEIGHT: 20' - 40'
SPREAD: 6' - 15'
BLOOM TIME: N/A
EVERGREEN

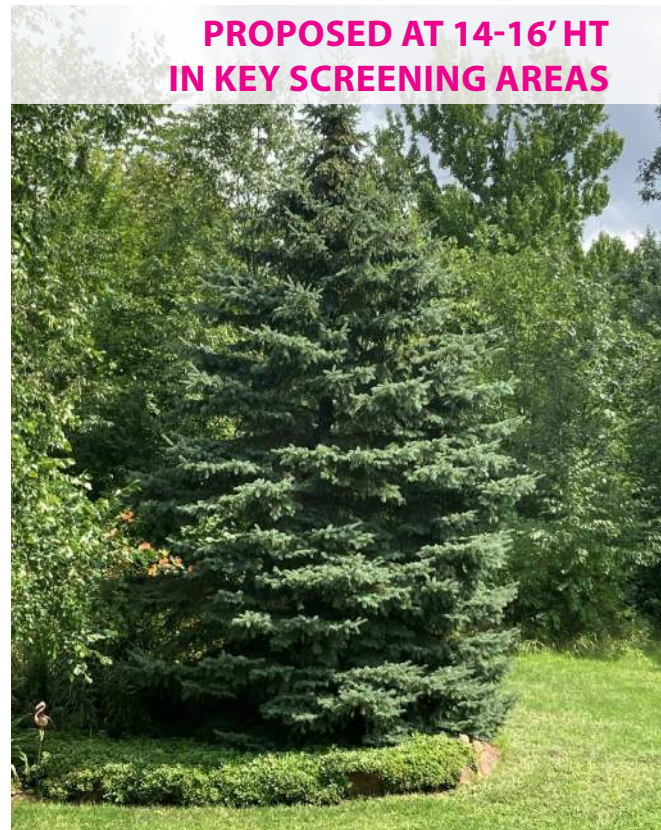


**PROPOSED AT 10-12' HT
IN KEY SCREENING AREAS**

NATURALIZED BERM/ WOODED HILLSIDE



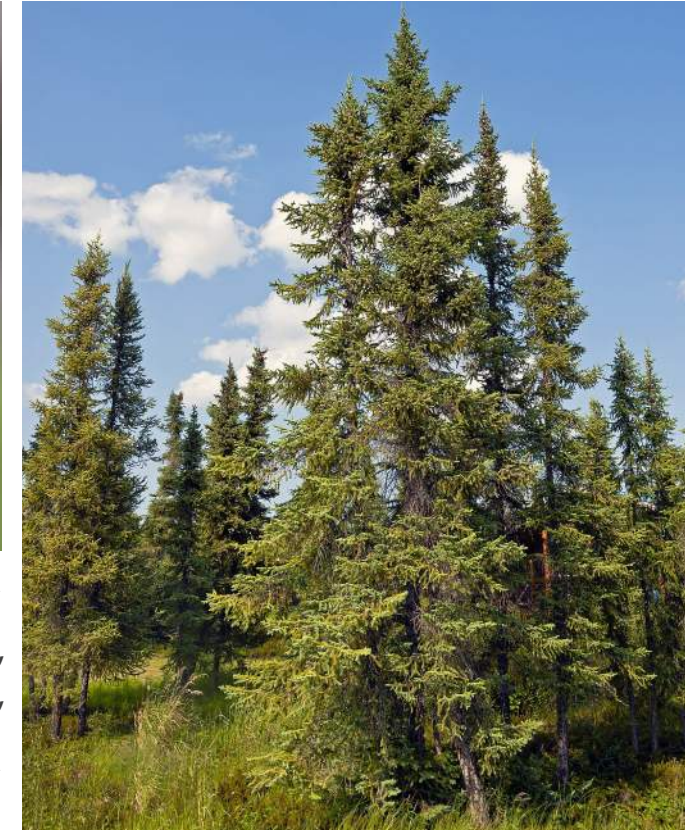
PICEA GLAUCA
WHITE SPRUCE
HEIGHT: 40' - 60'
SPREAD: 10' - 20'
BLOOM TIME: N/A
EVERGREEN



PINUS STROBUS
WHITE PINE
HEIGHT: 50' - 80'
SPREAD: 20' - 40'
BLOOM TIME: N/A
EVERGREEN



PICEA MARIANA
BLACK SPRUCE
HEIGHT: 30' - 50'
SPREAD: 20' - 30'
BLOOM TIME: N/A
EVERGREEN



PINUS BANKSIANA
JACK PINE
HEIGHT: 35' - 50'
SPREAD: 20 - 30'
BLOOM TIME: N/A
EVERGREEN



NATURALIZED BERM/ WOODED HILLSIDE



PRUNUS SEROTINA
WILD BLACK CHERRY
HEIGHT: 50' - 80'
SPREAD: 30' - 60'
BLOOM TIME: APRIL - MAY
FALL COLOR, SHOWY FRUIT



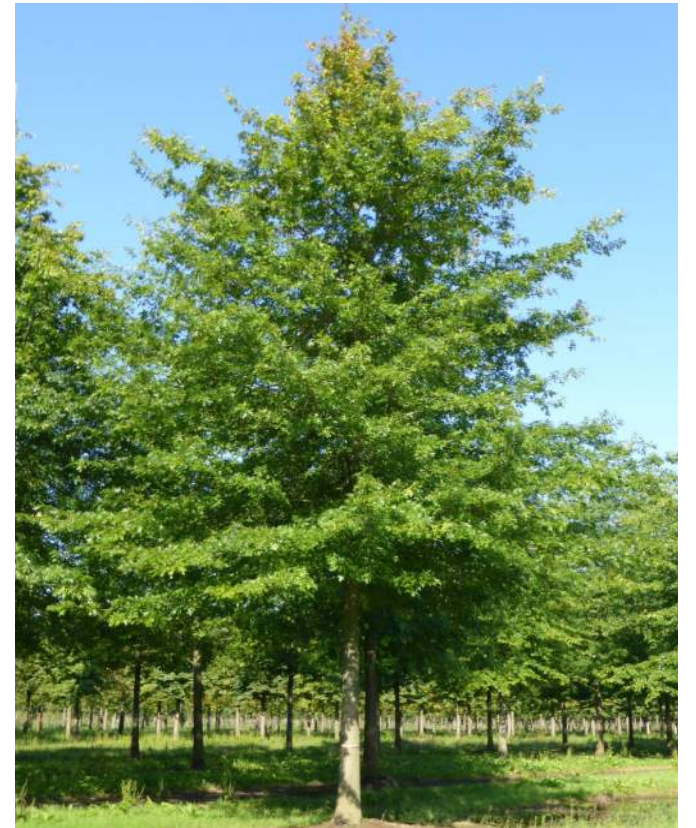
QUERCUS IMBRICARIA
SHINGLE OAK
HEIGHT: 40' - 60'
SPREAD: 40' - 60'
BLOOM TIME: APRIL
FALL COLOR



QUERCUS MACROCARPA
BUR OAK
HEIGHT: 60' - 80'
SPREAD: 60' - 80'
BLOOM TIME: APRIL



QUERCUS PALUSTRIS
PIN OAK
HEIGHT: 20' - 40'
SPREAD: 6' - 15'
BLOOM TIME: N/A
FALL COLOR



NATURALIZED BERM/ WOODED HILLSIDE



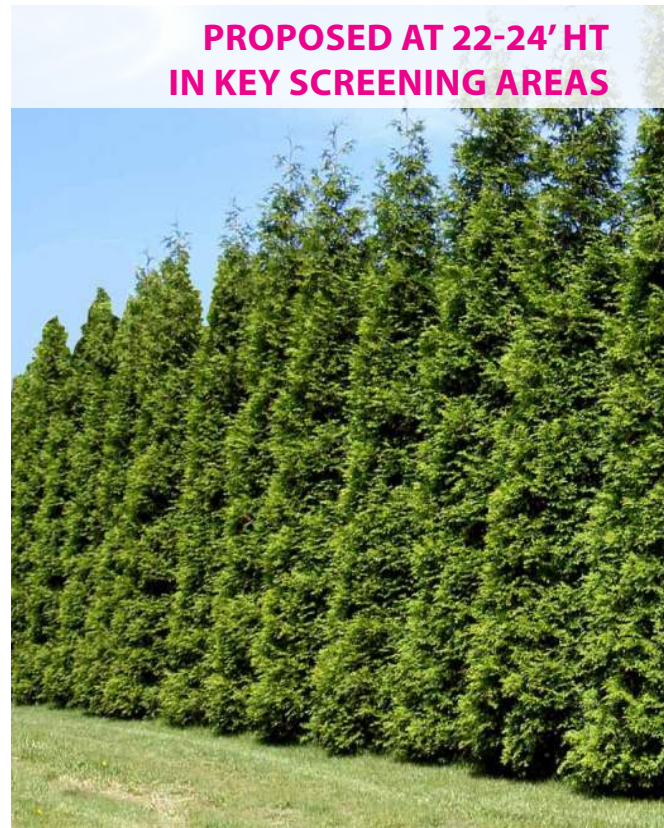
QUERCUS RUBRA
NORTHERN RED OAK
HEIGHT: 50' - 75'
SPREAD: 50' - 75'
BLOOM TIME: MAY
FALL COLOR



RHUS TYPHINA
STAGHORN SUMAC
HEIGHT: 15' - 25'
SPREAD: 20' - 30'
BLOOM TIME: JUNE - JULY
SHOWY FRUIT, FALL COLOR



THUJA STANDISHII X PLICATA 'GREEN GIANT'
GREEN GIANT ARBORVITAE
HEIGHT: 50' - 60'
SPREAD: 12' - 20'
BLOOM TIME: N/A
EVERGREEN, SCREENING

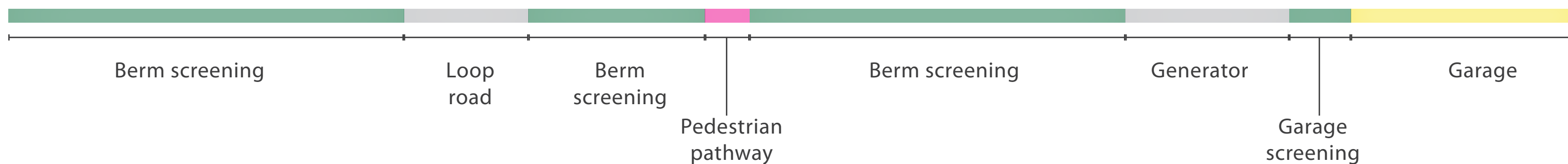


NATURALIZED BERM/ WOODED HILLSIDE



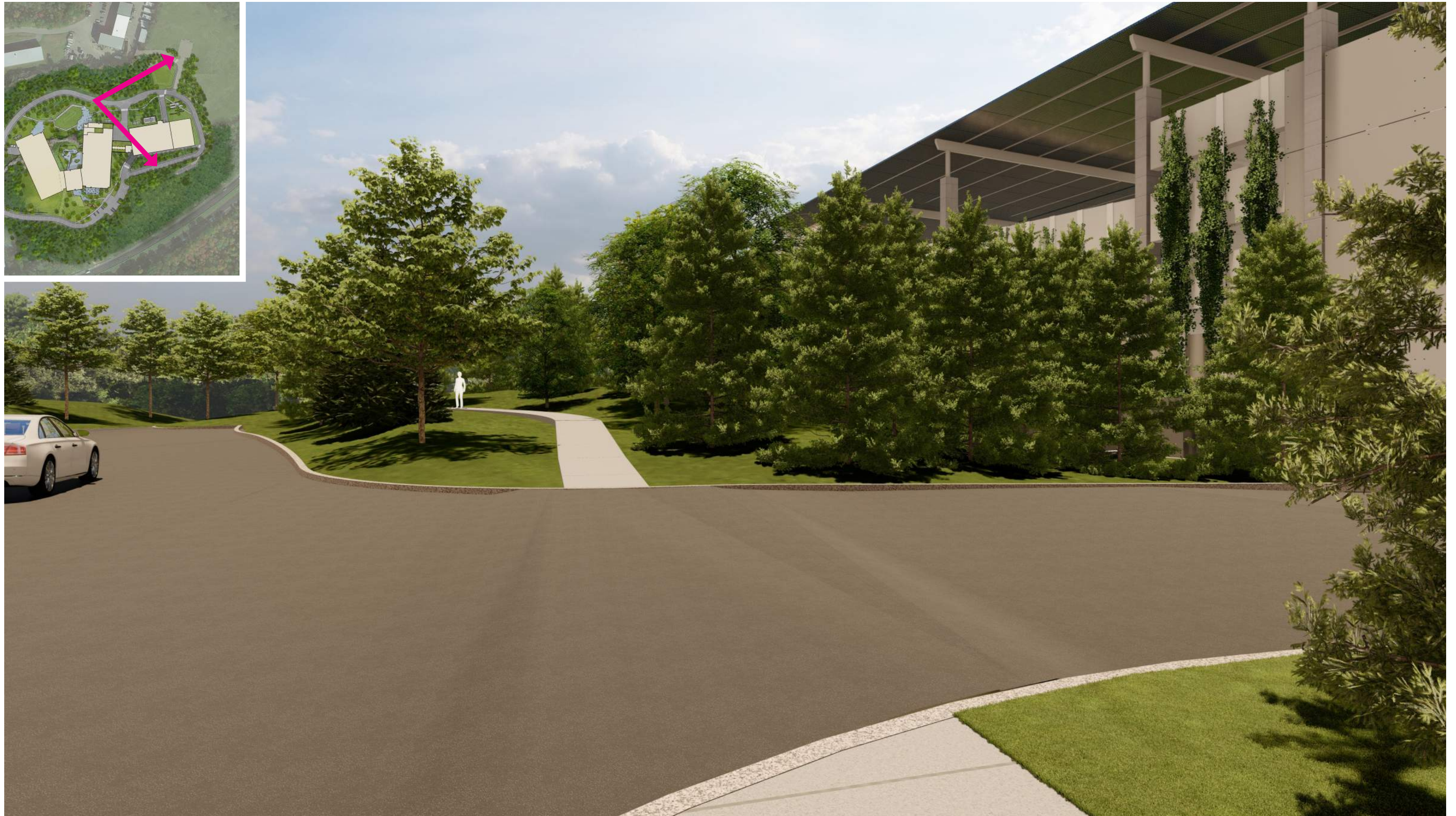
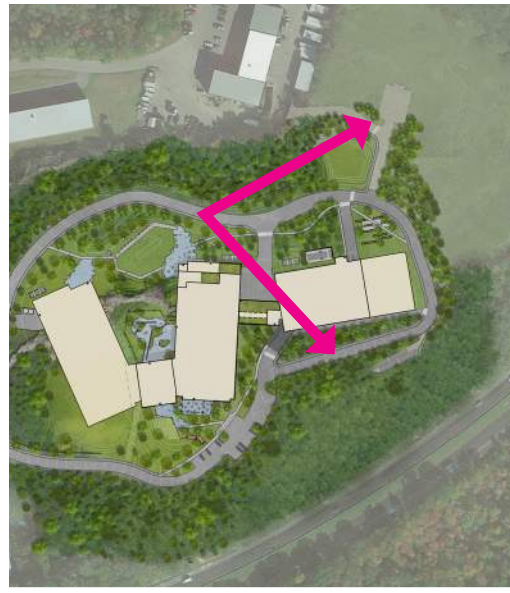
0 | 30 | 60 | 120

UTILITY SCREENING AT GARAGE



| 0 | 16 | 32 | 64

UTILITY SCREENING AT GARAGE - SECTION



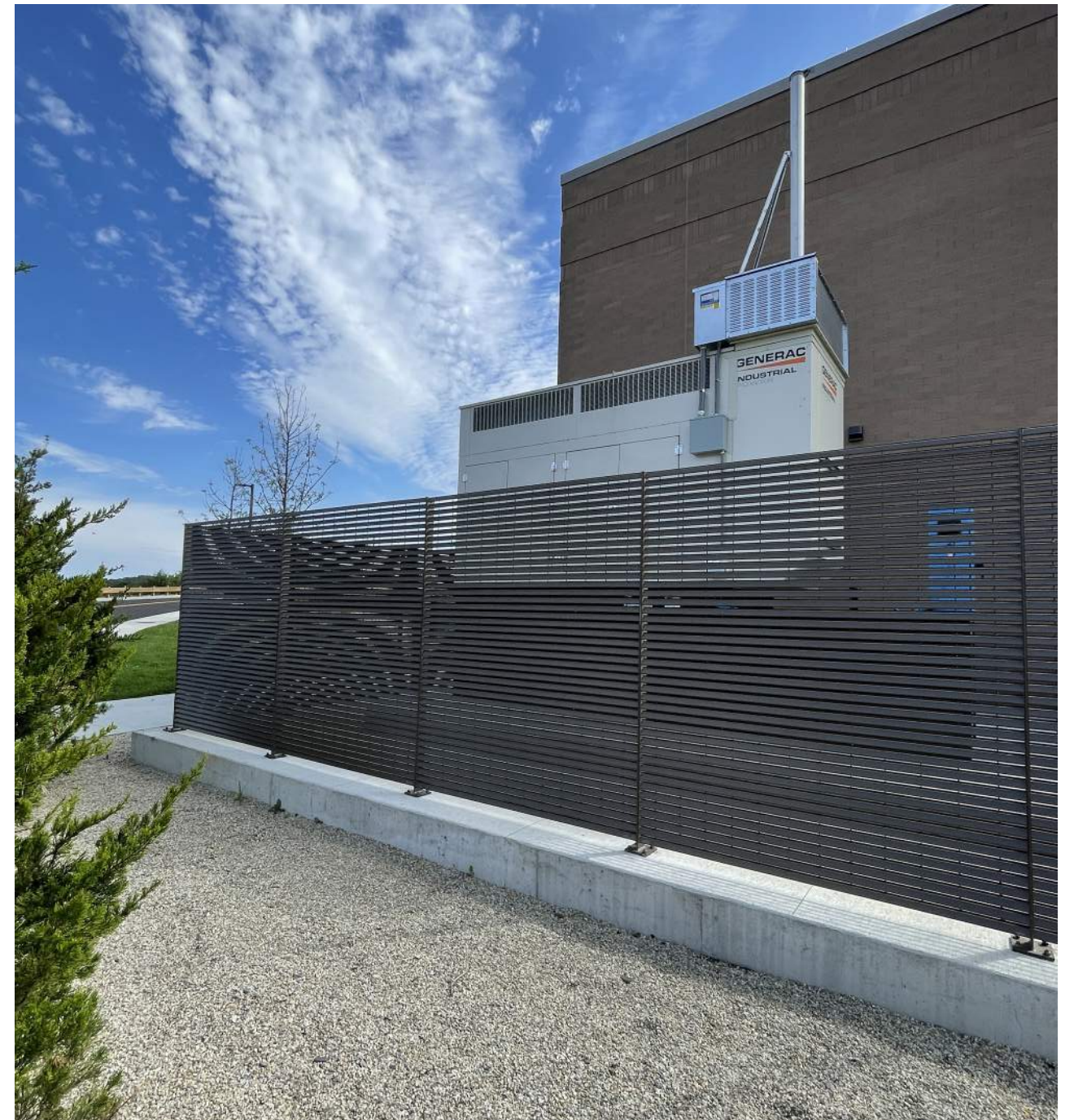
UTILITY SCREENING - VIEW EAST TO GARAGE

SECTION 7.3 FENCING

FENCING FOR GENERATOR SCREENING:

S2112 Response: Proposed 8' tall louvered fencing on top of retaining wall at generator and garage to provide safety and screening in addition to plant material as previously shown.

Ametco Shadow 80 Louvered Fence Panel, Electro-forged welded steel fencing, powder coat finish with surface mount. Design horizontal 1-31/32" x 1/16" formed main bar, 5/32" round cross bar.



SECTION 7.3 FENCING

FENCING FOR GUARD RAIL UPPER QUAD:

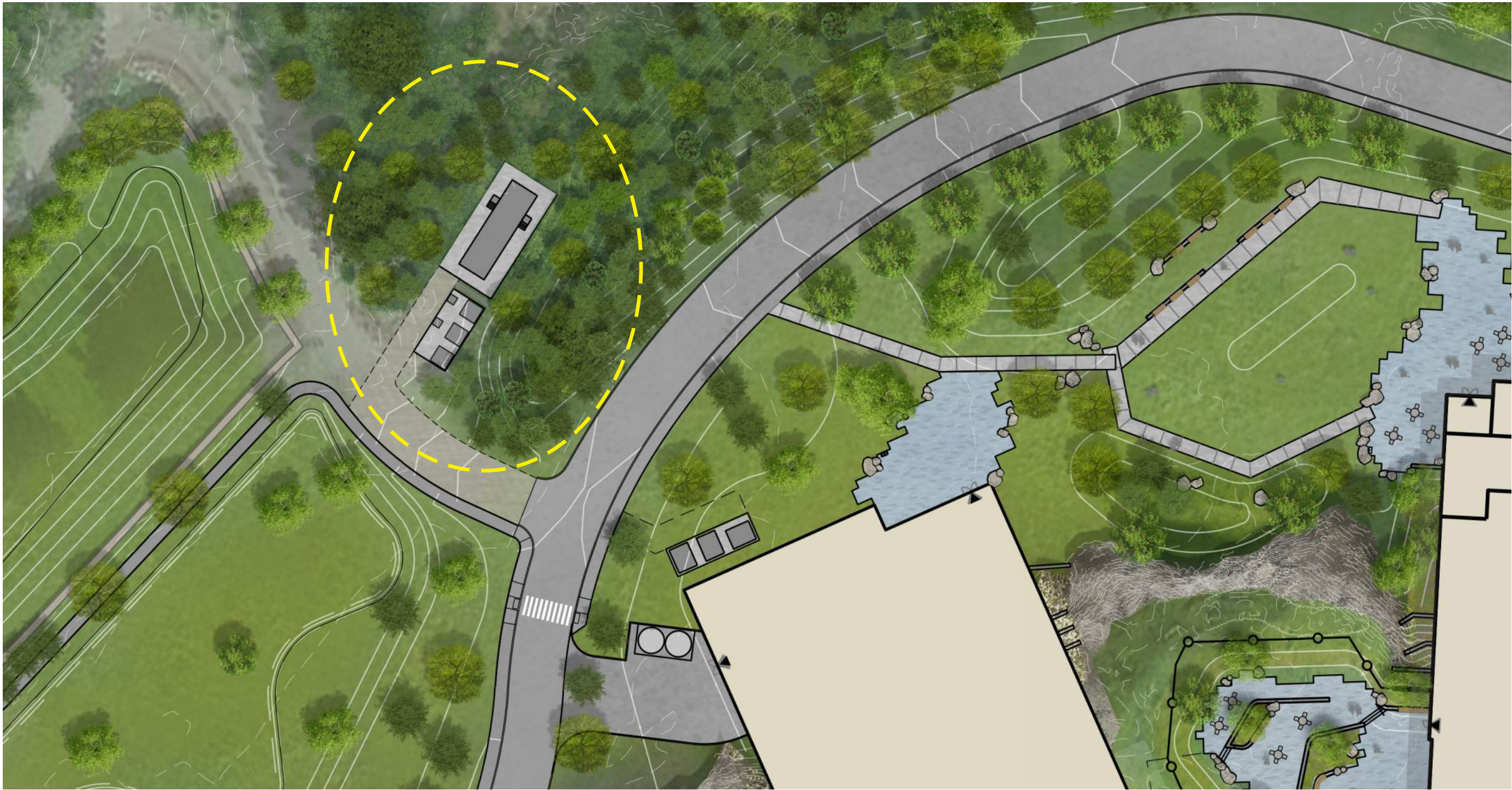
S2112 Response: Fence at the upper pedestrian plaza (upper quad), is labeled as “guardrail to match architectural guardrail”, additional information can be found on architectural drawings (see detail 3/A45). These are currently designed as 42” high cable rails



SECTION 7.6 UNSIGHTLY USES AND AREAS:

FENCING FOR GUARD RAIL UPPER QUAD:

S2112 Response: Existing vegetation will remain north of the phase 2 generator to provide screening in that direction. South-east of the generator the design proposes a heavily planted berm to shield views of the generator and electrical equipment from the building and road. Additional planting will be provided to the north if required.





200' Riverfront
+ 100' Wetland
Buffer
combined

100' Wetland
Buffer

100' Wetland Buffer



SITE PLAN