



SAINT CLOUD TECH HIGH SCHOOL

Landscape Review Presentation 10.11.2017



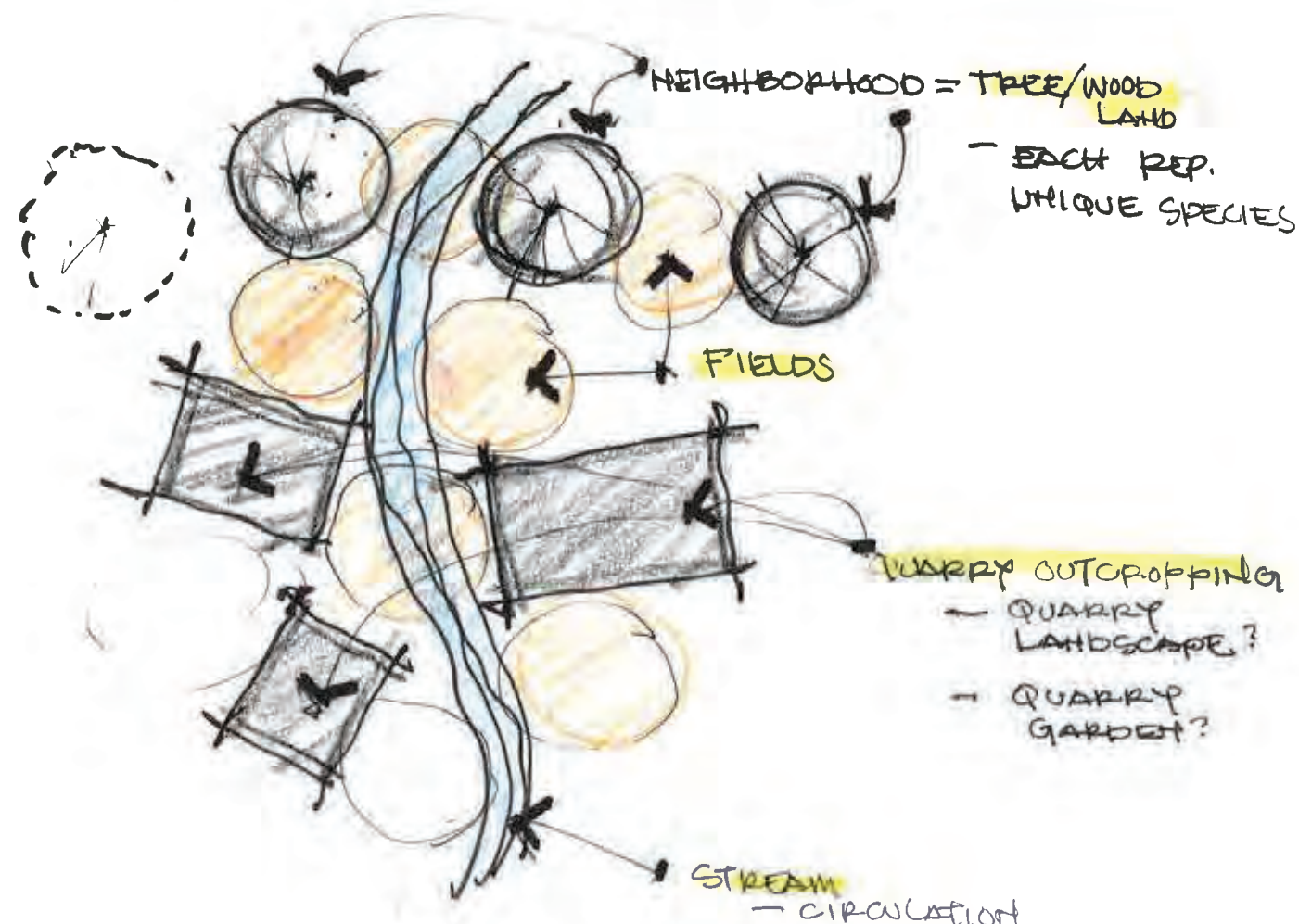
- Educational / ecological advantages involve both teaching kids about these benefits, as well as having the school walk the talk about them.
- Reduced maintenance: man-hours and \$\$
- Use of native species that are drought and salt tolerant
- Minimizing irrigation costs (due to irrigation being provided by city water)
- Raingardens and Native Prairies:
 - Slow down, soak up, and filter polluted runoff from downspouts, driveways, and other hard surfaces.
 - Recharge local groundwater
 - Conserve water
 - Improve water quality
 - Protect rivers and streams
 - Reduce mosquito breeding
 - Increase beneficial insects that eliminate pest insects
 - Reduce potential of flooding
 - Create habitat for birds & butterflies
 - Survive drought seasons
 - Reduce maintenance

GOALS OF LANDSCAPE PROGRAM



Design Concept

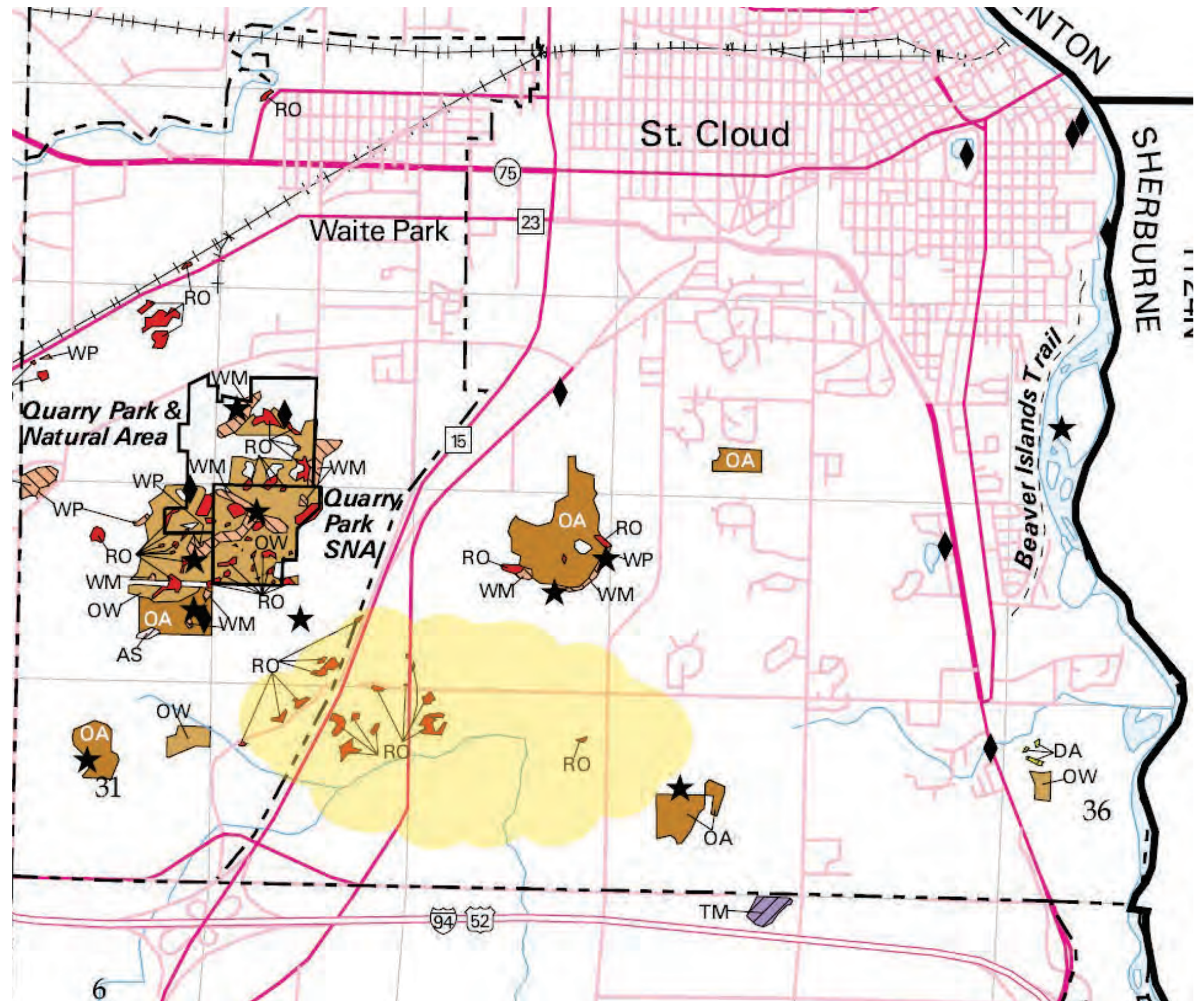
The design of St. Cloud Tech High School celebrates **Opportunity**. Opportunity for students, staff and the community to actively engage learning differently. To explore beyond the footprint of the building within an ever changing landscape. Using the landscape as inspiration, the new High School represents a journey through nature, both literal and figuratively. The experience begins at the entrance to the site, progressing through the woodland quarry landscape and across the creek before the High School becomes exposed. As students and visitors move through the school, the journey evokes a sense of discovery. Exposing students to different hands on and innovative experiences while always being connected to nature and the outdoors, extending the learning beyond the footprint of the building.



Woodland Quarry



GEOLOGICAL STONE DIKES - MN



NATIVE PLANT COMMUNITIES STEARNS COUNTY

RO

Rock Outcrop - Dry, rather sparsely vegetated communities on exposures of granitic bedrock concentrated along the Sauk River corridor between St. Cloud and Cold Spring, with scattered examples in the vicinity of Sartell. Vegetation typically occurs as a complex **growing on bare rock surfaces, in rock crevices, and in shallow soils** less than a couple of feet deep between and around exposures. Lichen-encrusted rock surfaces and rock crevices subject to frequent, extreme drought. **Dry-mesic prairie and oak savanna vegetation predominate in the shallow soils between the rock exposures.** Scattered, stunted, open-grown **bur oak and northern pin oak trees** occur on many of the larger outcrops. Shrub cover patchy; common taller shrubs include **American hazelnut, Juneberry (*Amelanchier* sp.), gray dogwood, and large-thorned hawthorn (*Crataegus macracantha*).** Low, often prostrate, shrubs rooted along margins of exposed rock and in crevices include **sand cherry (*Prunus pumila*) and several blackberry species (*Rubus multiflorus*, *R. frondosus*, and *R. recurvans*).** Specialized vascular plants of crevices and rock margins include **small-flowered fameflower (*Talinum parviflorum*), rusty woodsia (*Woodsia ilvensis*), brittle prickly pear (*Opuntia fragilis*), pale corydalis (*Corydalis sempervirens*), rock spikemoss (*Selaginella rupestris*), and rarely, bearberry (*Arctostaphylos uva-ursi*), lowbush blueberry (*Vaccinium angustifolium*), and false pennyroyal (*Isanthus brachiatus*).** Prairie species in shallow soil areas include **big bluestem, Indian grass, prairie dropseed, prairie wild onion (*Allium stellatum*), round-headed bush clover, arrow-leaved violet (*Viola sagittata*), blood milkwort (*Polygala sanguinea*), and leadplant.** Small exposures under heavy shade of surrounding woodland canopy are often moister and moss-covered. Approximate area mapped: 120 acres.

DECIDUOUS WOODLANDS

OW

Oak Woodland-Brushland - Dry woodlands on well-drained soils in glacial till or on glacial outwash, often on south- to west-facing slopes in northern and eastern Stearns County. Patchy to interrupted canopy (50-70% cover) **dominated by open-grown northern pin oak or bur oak, with lesser amounts of paper birch and quaking aspen (*Populus tremuloides*).** Shrub layer often dense and dominated by **American hazelnut, prickly gooseberry, chokecherry (*Prunus virginiana*), prickly ash (*Zanthoxylum americanum*), and gray dogwood (*Cornus foemina* ssp. *racemosa*).** Ground layer composed of summer-blooming species adapted to moderate shade, including **hog-peanut (*Amphicarpaea bracteata*), woodland sunflower (*Helianthus hirsutus*), and Pennsylvania sedge (*Carex pensylvanica*).** Prairie species often present in scattered small openings. Most stands have succeeded from oak savanna or brush prairie following fire suppression since European-American settlement. Approximate area mapped:

OA

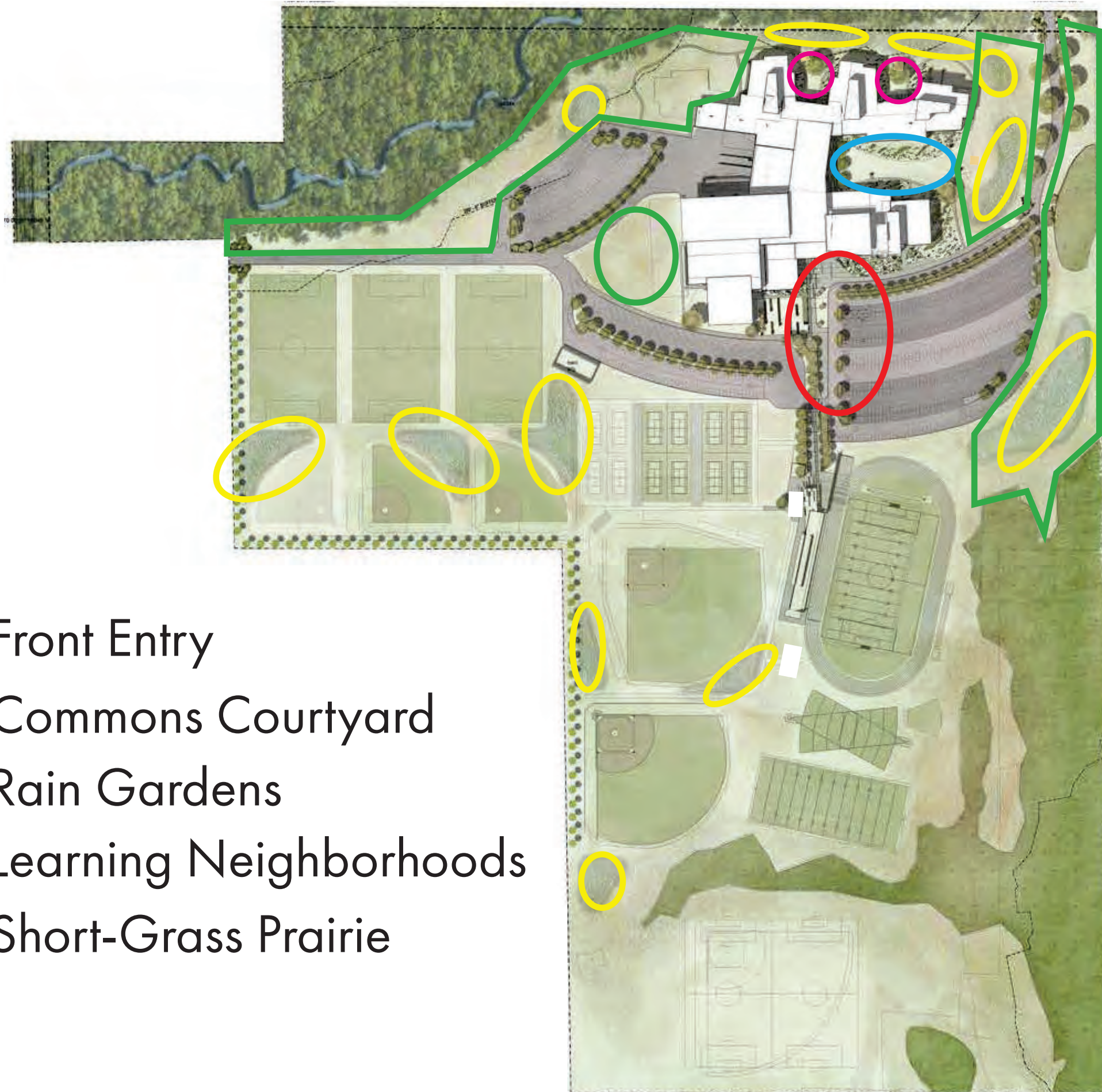
Oak Forest (subtype not differentiated) - Dry-mesic forests, either intermediate between mesic oak forest and oak woodland-brushland or composed of patches of both types in rugged terrain in northern and eastern Stearns County. Primarily on well-drained glacial till. Canopy is co-dominated by **red oak, northern pin oak, bur oak, and paper birch.** Species diversity in the shrub and herbaceous layers is typically lower than in mesic oak forests, though mesic and dry-mesic stands share many species. Sugar maple is rare in these forests.

NATIVE PLANT COMMUNITIES NEAR NEW TECH SITE



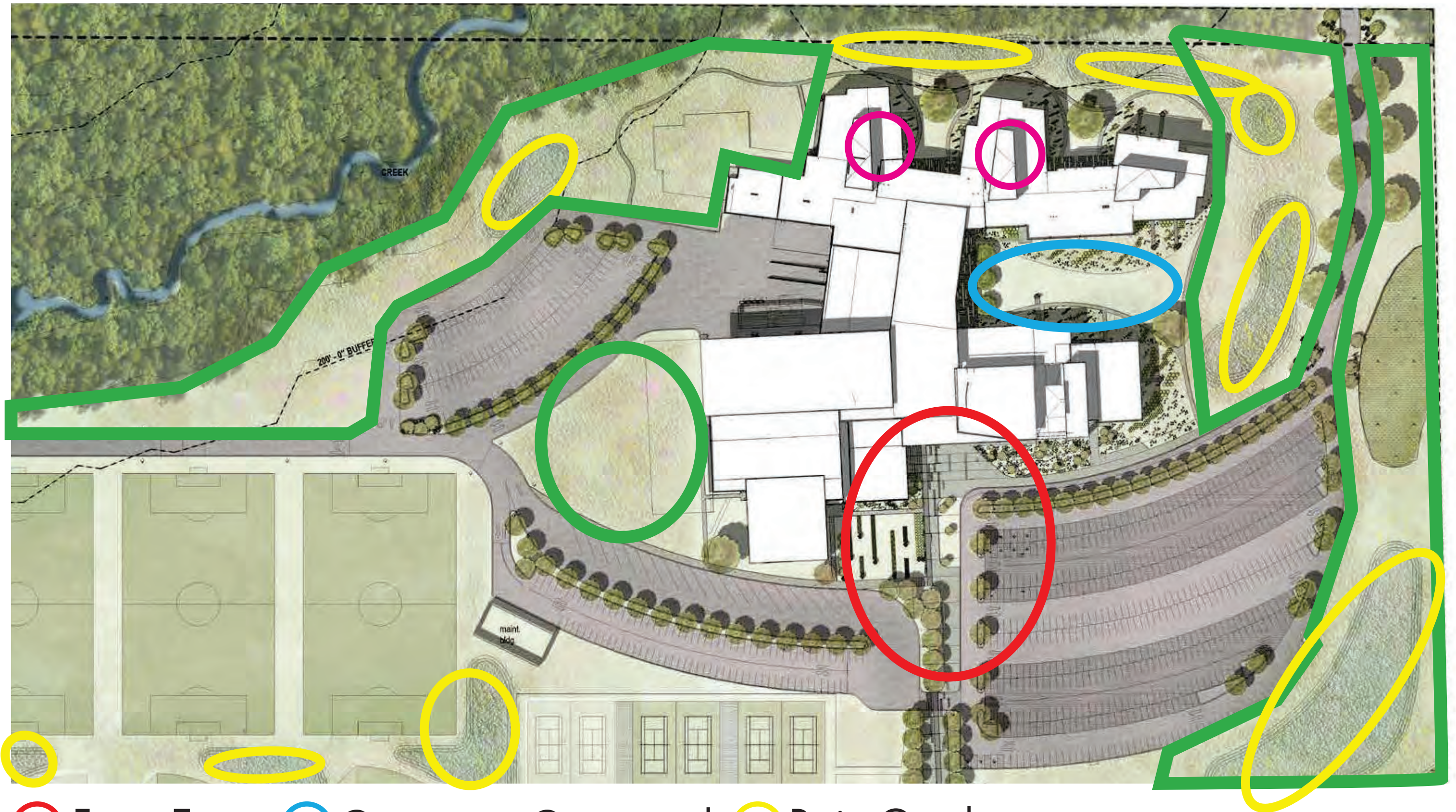
OVERALL SITE PLAN WITH
SURROUNDING CONTEXT





- Front Entry
- Commons Courtyard
- Rain Gardens
- Learning Neighborhoods
- Short-Grass Prairie

SITE PLAN



○ Front Entry ○ Commons Courtyard ○ Rain Gardens

○ Learning Neighborhoods ○ Short-Grass Prairie

○ Front Entry





○ Front Entry

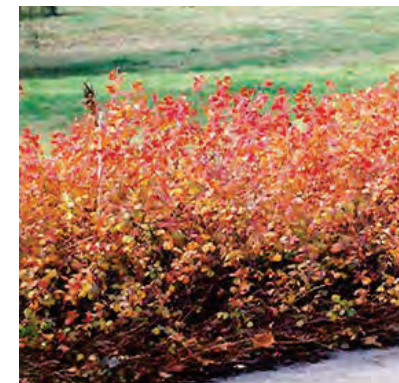




○ Front Entry

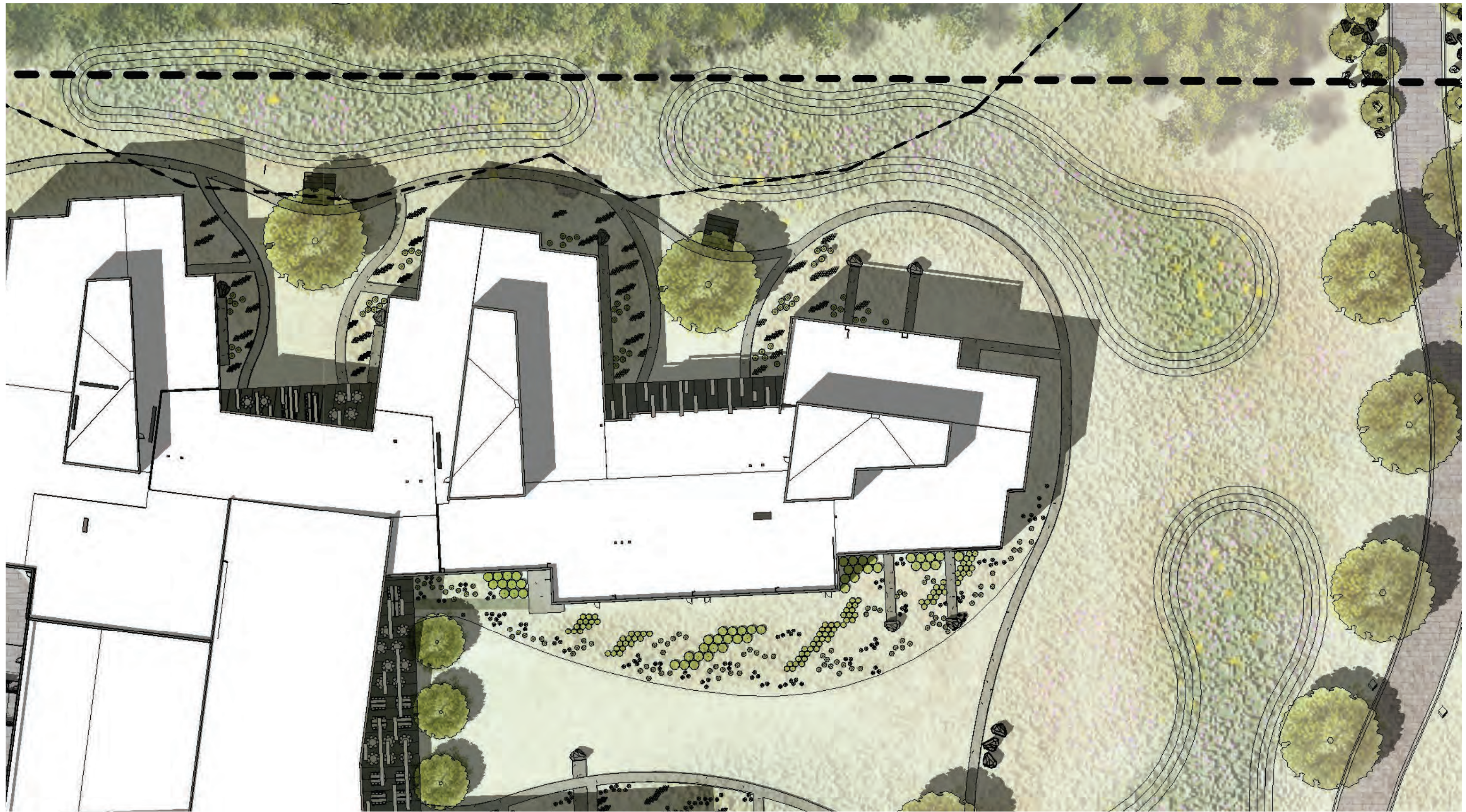


○ Commons Courtyard

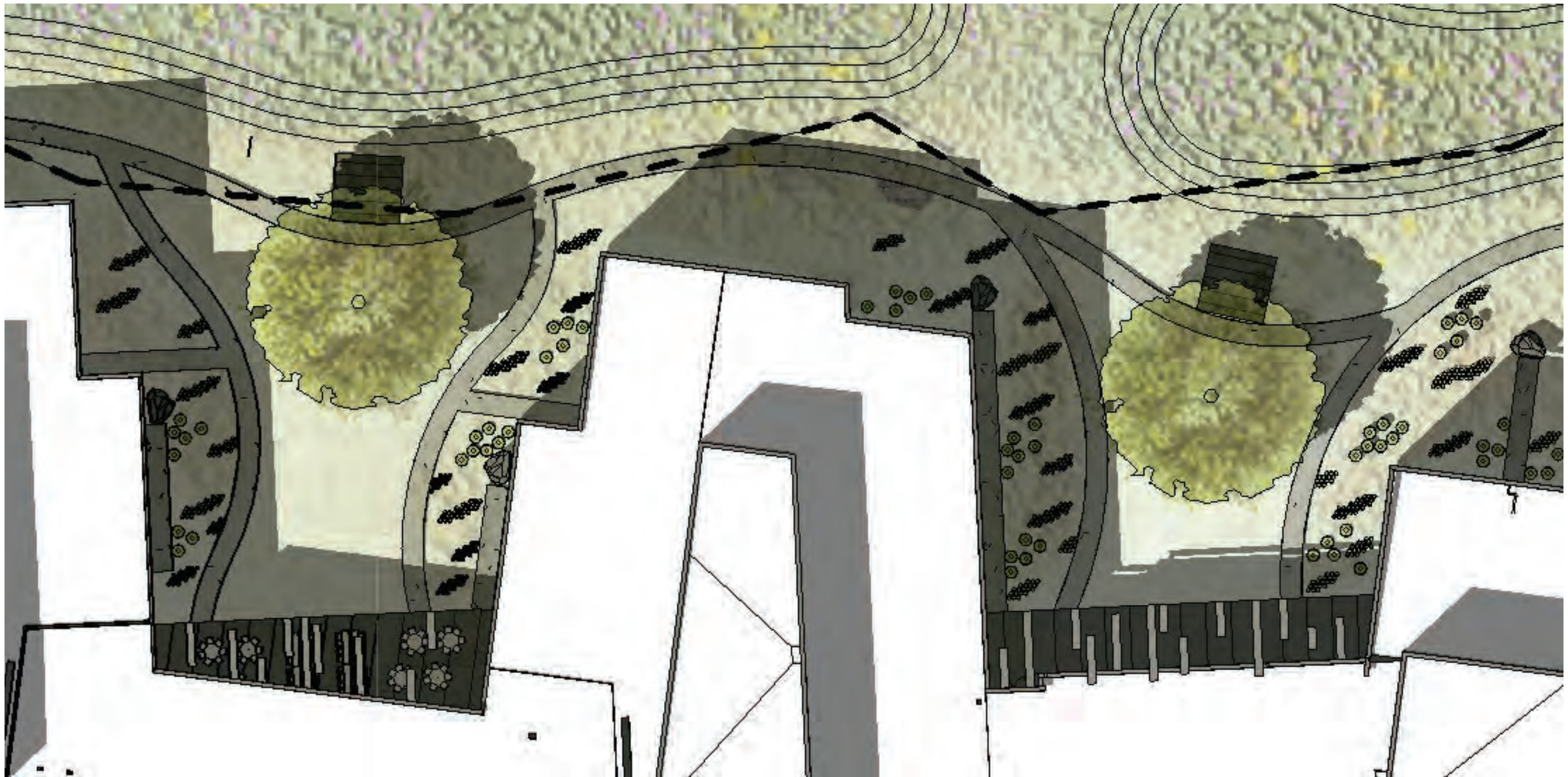


Commons Courtyard





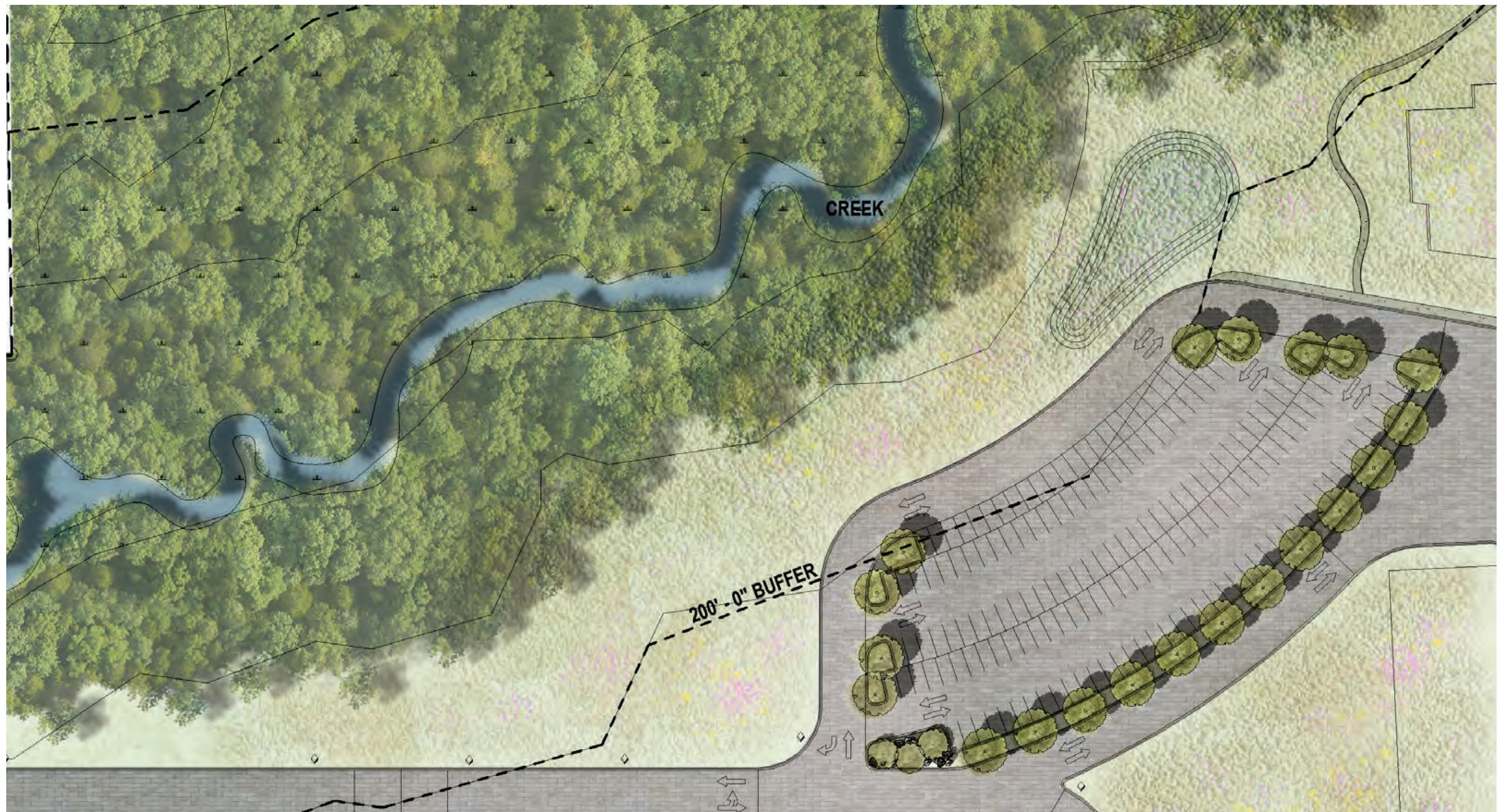
 Rain Gardens



Learning Neighborhoods



Learning Neighborhoods



○ Short-Grass Prairie



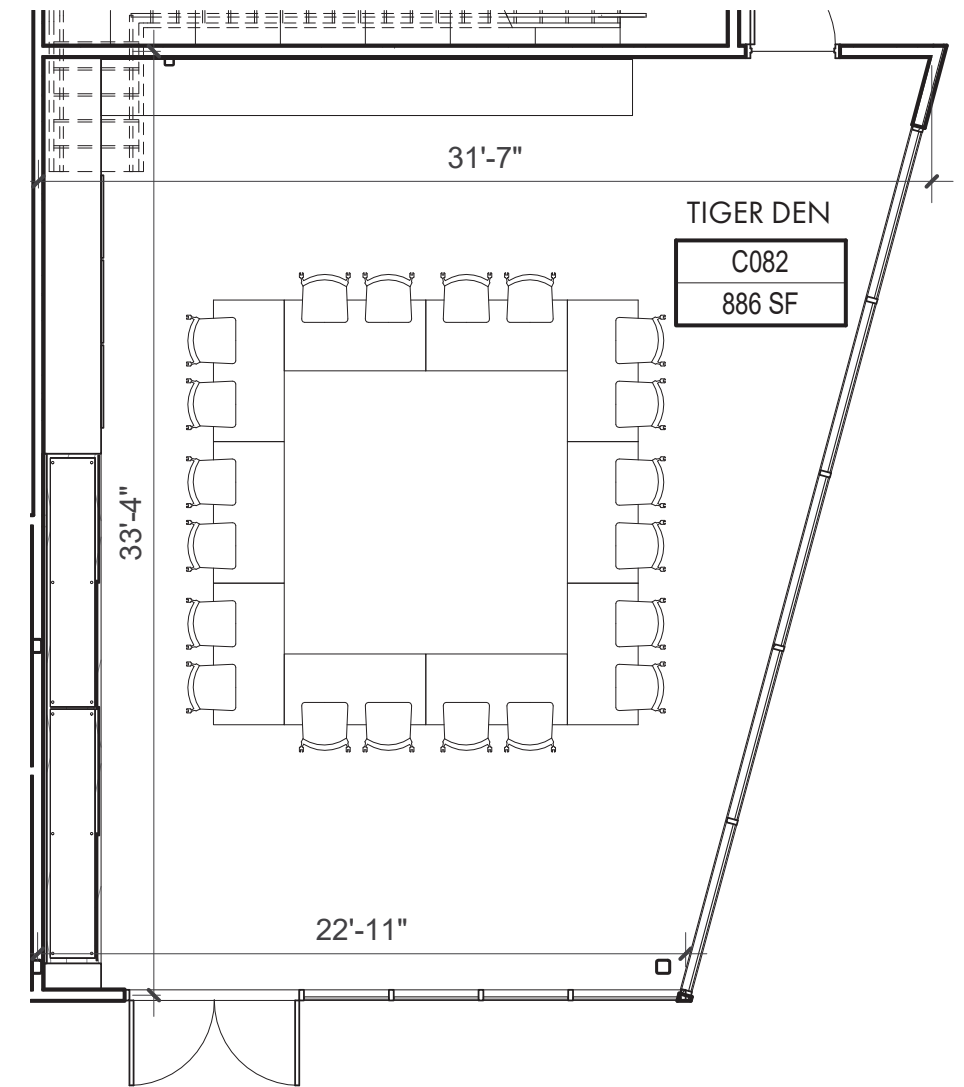
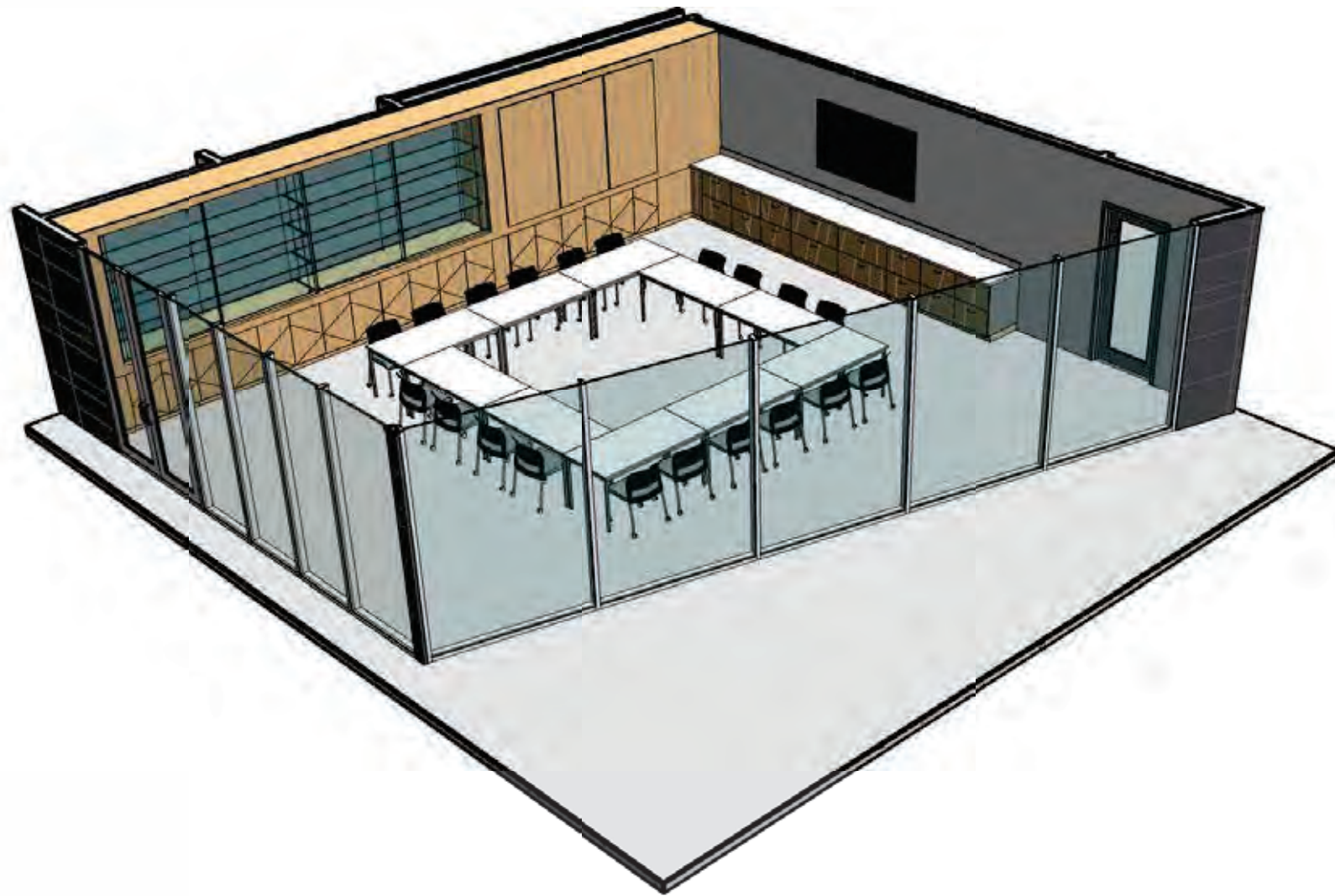
Short-Grass Prairie



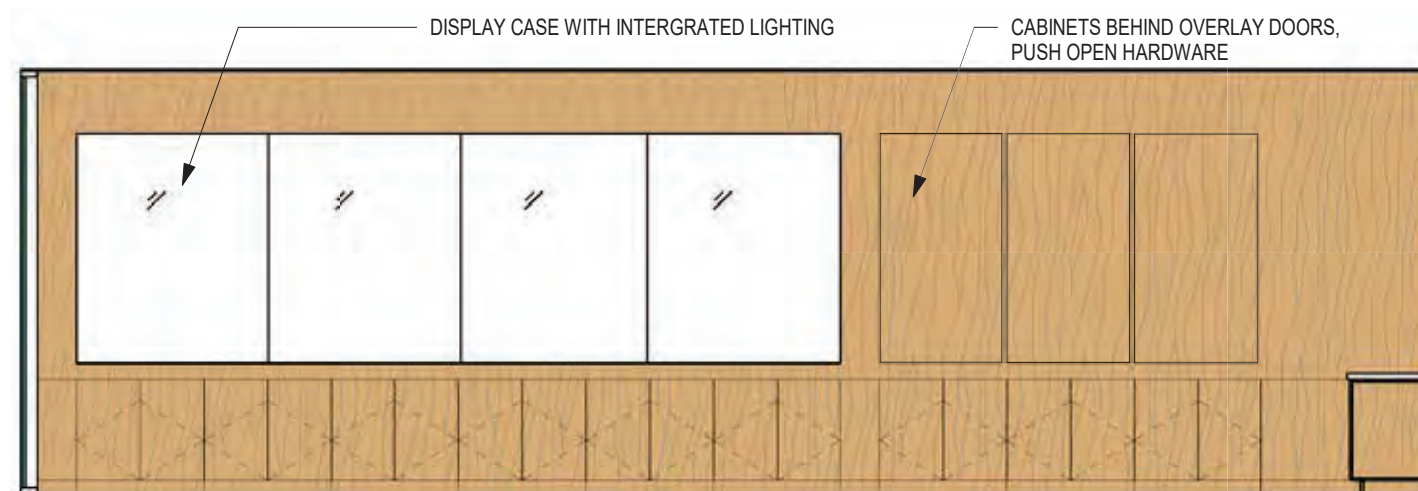
Pick-Up/Drop-Off Lane Rain Garden - Mature Trees



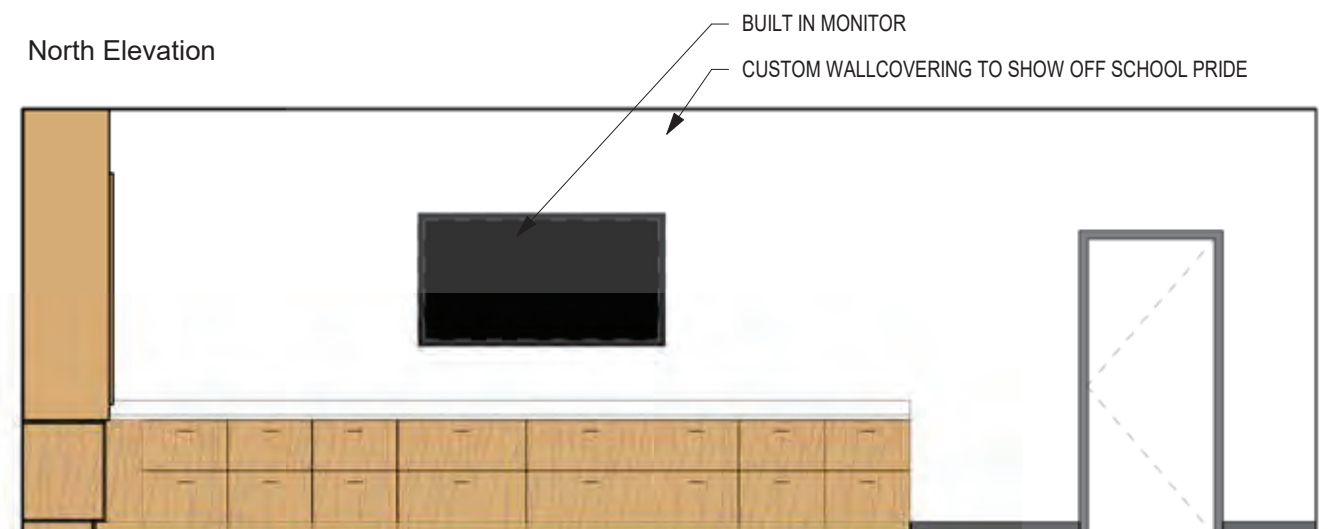
Tiger Den



West Elevation



North Elevation



Tiger Den



Level 1 Floor Plan



Level 2 Floor Plan

SCHEDULE REVIEW





SCHEDULE:

3 Bid Packages

Bid Package #1:

- Issued: August 1st
- Six Separate Work Scopes
- Bids received: August 22nd
- Includes: Site grading, site utilities, fields, footings and foundations, north and west entries, parking lots.

Bid Package #2:

- Issue: September 25th
- Four Separate Work Scopes
- Bids received: October 19th
- Includes: Structural Steel, load-bearing masonry, precast walls and floors.

Bid Package #3:

- Issue: November 17th
- Estimating 15 Separate Work Scopes
- Bids received: December 19th
- Includes: Exterior envelope, interiors, outbuildings, landscaping, site and field lighting.



PERMIT REVIEW



Governing Body	Permit/App/ Submittal	Submission Date	Anticipated Approval Date	Status
Zoning Board of Appeals	Conditional Use Permit	4/28/2017	5/16/2017	Complete
Stearns Co., DNR, MPCA and others	Technical Evaluation Panel (TEP)	5/26/2017	6/14/2017	Complete
Stearns County	Wetland	5/26/2017	6/27/2017	Complete
Army Corps	Creek Crossing	5/26/2017	8/7/2017	Complete
DNR	Creek Crossing	5/26/2017	1/1/2018	In-Progress
City of St. Cloud and DNR	Stormwater	5/26/2017	9/1/2018	Submitted - 90-120 review process- working to expedite
City of St. Cloud	Land Disturbance	8/1/2017	8/24/2017	
State of Minnesota	Utilities	7/14/2017	8/31/2017	In-Progress
MPCA	SWPPP	7/14/2017	8/14/2017	Complete
City of St. Cloud Planning	Plat	5/22/2017	6/13/2017	Complete
St. Cloud City Council	Plat/Subdivision Agreement	6/13/2017	7/10/2017	Complete

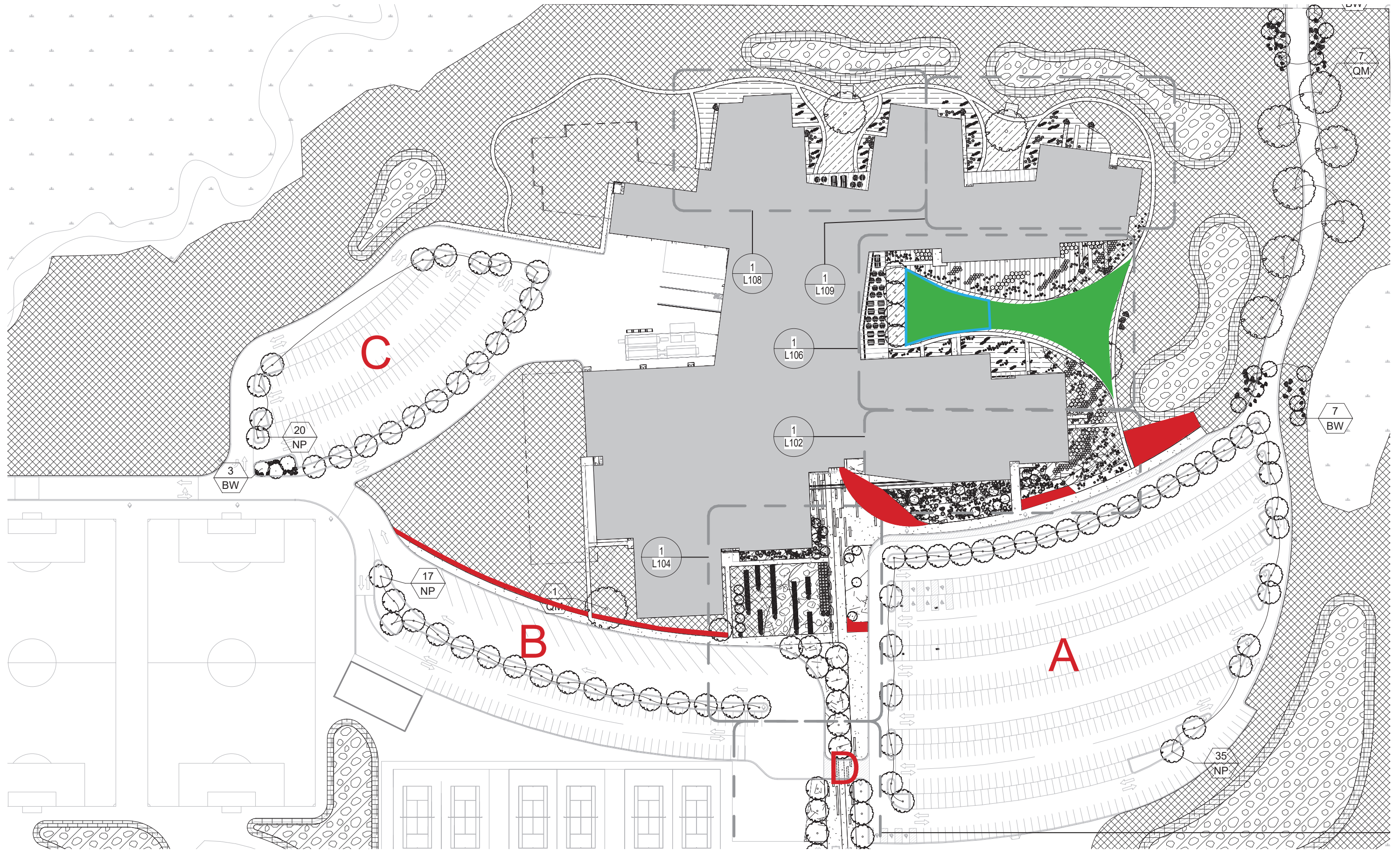
CONSTRUCTION UPDATE





THANK YOU





Discussion Plan



Young trees



Mature trees - every other



Young trees - every other



No trees