

STRATFORD MIDDLE SCHOOL RENOVATION AND ADDITION

ARLINGTON PUBLIC SCHOOLS

PFRC/BLPC
JULY 21, 2016



QUINN EVANS
ARCHITECTS

PROJECT UPDATE AND SCHEDULE | 1

PROJECT UPDATES

- **Arlington County heard discussions regarding the driveway and indicated support of the driveway (4-1)**
- **APS School Board approved Schematic Design on June 2, 2016**
- **Arlington County Board and School Board approved local historic district designation**
- **Arlington County and VDOT approved the TIA for the proposed signal at intersection of Stratford driveway and Old Dominion Drive**

APPROVED SCHEMATIC DESIGN ESTIMATE

PROJECT COST (\$ MILLIONS) ¹	
SITE WORK	\$ 8.15
ADDITION	\$ 20.14
RENOVATION	\$ 7.12
APS STAFF	\$ 0.55
EXPAND SCOPE OF LIGHTING REPLACEMENT ²	\$ 0.34
SUBTOTAL PROJECT COST³	\$ 36.30
HISTORIC COMMEMORATION ALLOWANCE	\$ 0.25
TOTAL PROJECT COST	\$ 36.55

NOTES:

1. Based on two independent professional cost estimates.
2. Recommended to enhance Universal Design, improve the quality of the instructional environment, and reduce energy.
3. Matches maximum approved by the School Board at Concept Design.

PROJECT SCHEDULE

	2016	2017				2018				2019			
USE PERMIT	1/2017												
CERT. OF APPROP.	1/2017												
DESIGN DEV.													
CONST. DOCS.													
BUILDING PERMIT			9/2017										
CONSTRUCTION									TBD				
SCHOOL OPEN													

USE PERMIT

- **1st Submission: 9/1/2016**
- **2nd Submission: 10/2016**
- **Presenting to Commissions: (Fall/Winter 2016)**
 - **E2C2**
 - **HALRB**
 - **Parks and Recreation**
 - **Planning**
 - **Transportation**
 - **Urban Forestry**
- **County Board: 1/2017**

BUILDING DESIGN UPDATE | 2

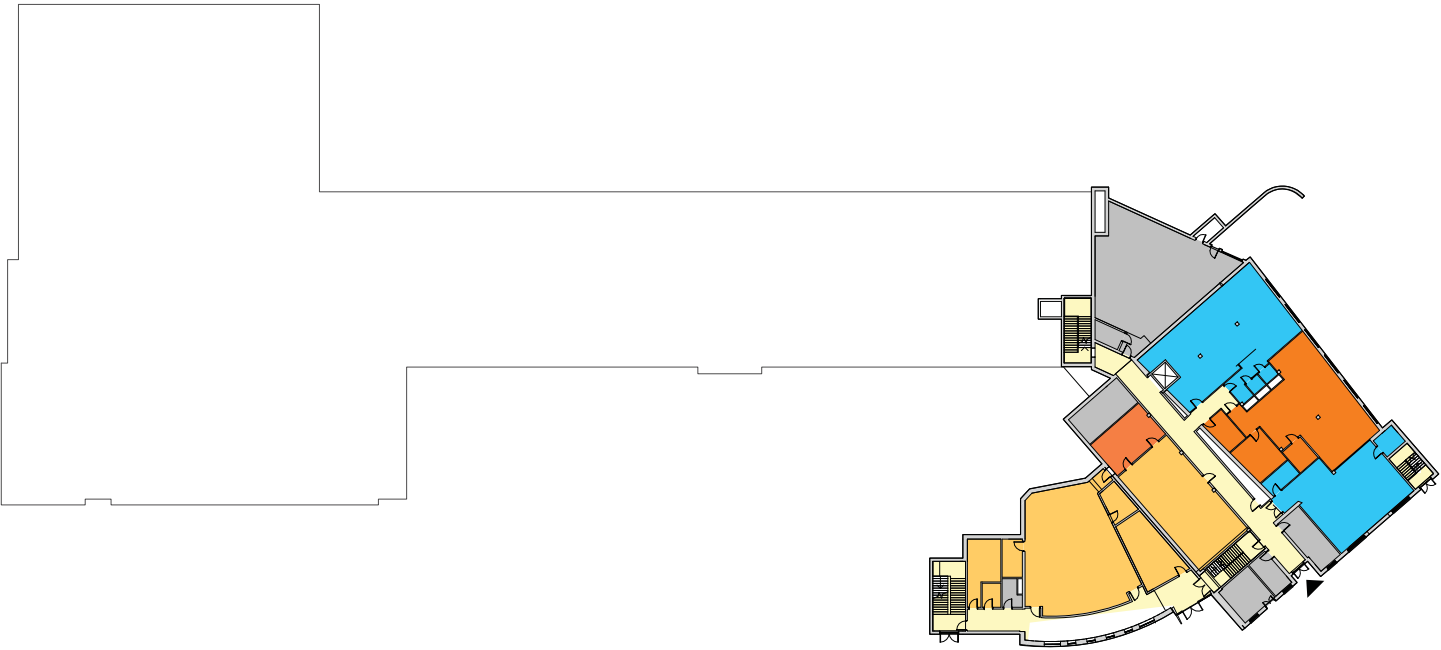
VIEW FROM OLD DOMINION



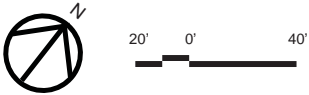
VIEW FROM EAST



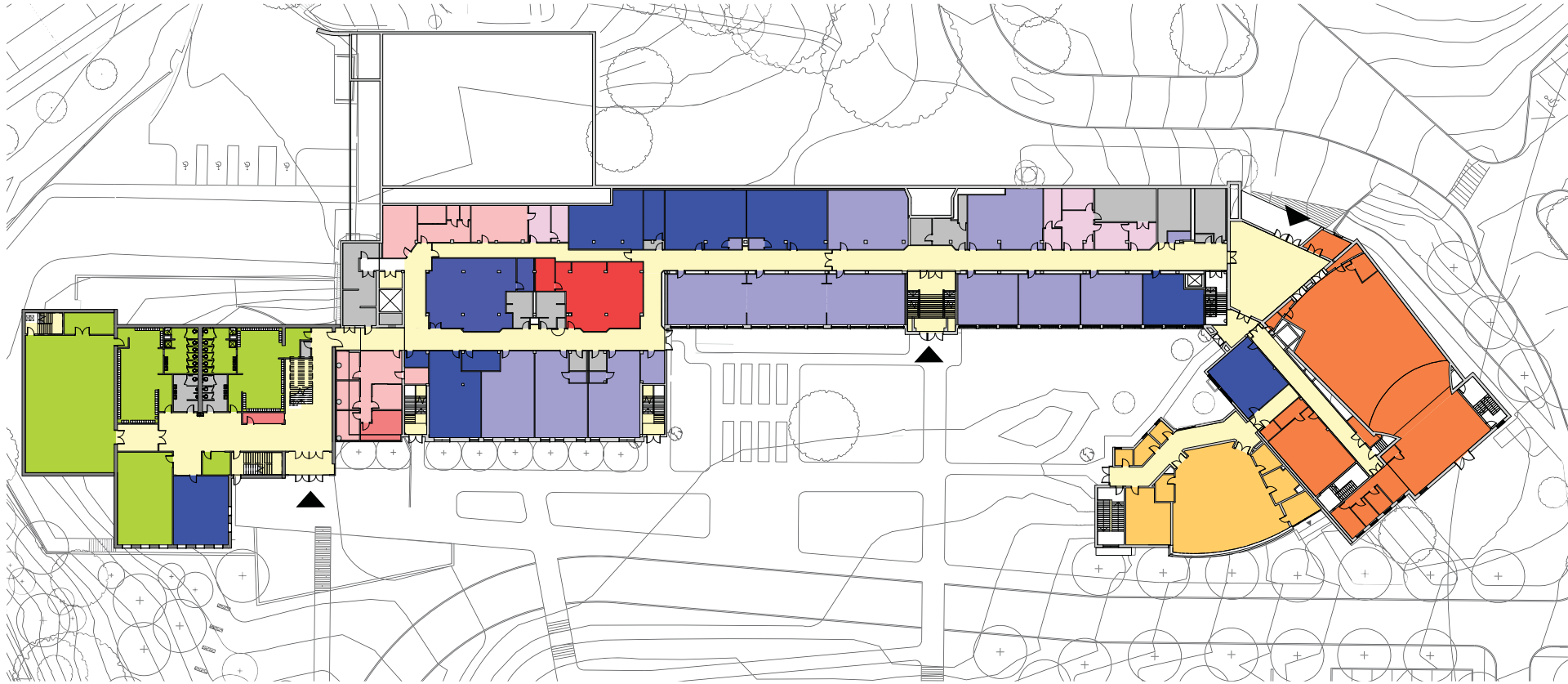
BASEMENT PLAN



















- LIBRARY
- FOOD SERVICE
- PHYSICAL EDUCATION
- THEATER/ARTS
- MUSIC
- TECHNOLOGY
- WORK & FAMILY STUDY
- BUILDING SUPPORT
- TEACHER & STORAGE
- ADMIN
- COUNSELING/CLINIC
- CORE CLASSROOMS
- SPECIAL EDUCATION
- ELECTIVE CLASSROOMS
- CIRCULATION
- ENTRANCE

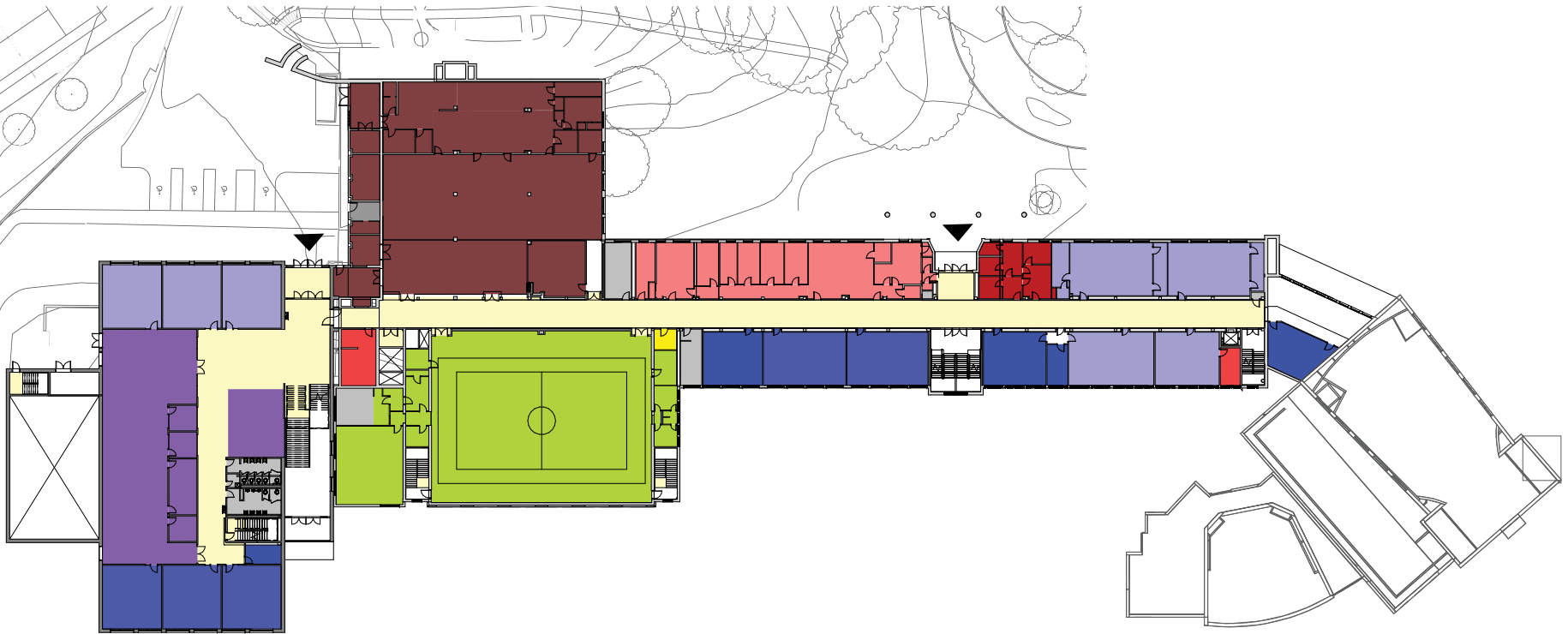


FIRST FLOOR PLAN



- | | | | |
|---|---------------------|---|---------------------|
|  | LIBRARY |  | TEACHER & STORAGE |
|  | FOOD SERVICE |  | ADMIN |
|  | PHYSICAL EDUCATION |  | COUNSELING/CLINIC |
|  | THEATER/ARTS |  | CORE CLASSROOMS |
|  | MUSIC |  | SPECIAL EDUCATION |
|  | TECHNOLOGY |  | ELECTIVE CLASSROOMS |
|  | WORK & FAMILY STUDY |  | CIRCULATION |
|  | BUILDING SUPPORT |  | ENTRANCE |

SECOND FLOOR PLAN



- | | |
|--|--|
| ■ LIBRARY | ■ TEACHER & STORAGE |
| ■ FOOD SERVICE | ■ ADMIN |
| ■ PHYSICAL EDUCATION | ■ COUNSELING/CLINIC |
| ■ THEATER/ARTS | ■ CORE CLASSROOMS |
| ■ MUSIC | ■ SPECIAL EDUCATION |
| ■ TECHNOLOGY | ■ ELECTIVE CLASSROOMS |
| ■ WORK & FAMILY STUDY | ■ CIRCULATION |
| ■ BUILDING SUPPORT | ▲ ENTRANCE |



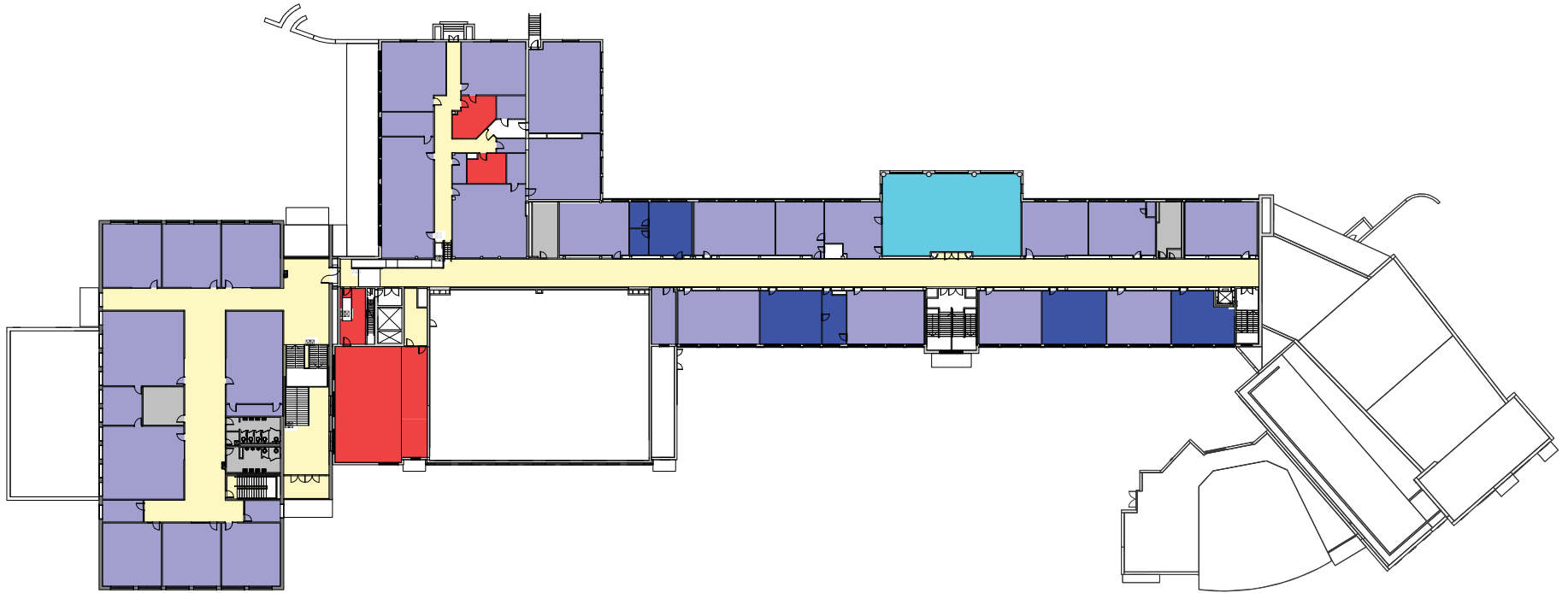
20' 0' 40'



QUINN EVANS ARCHITECTS

Arlington Public Schools
Stratford Middle School - 12

THIRD FLOOR PLAN



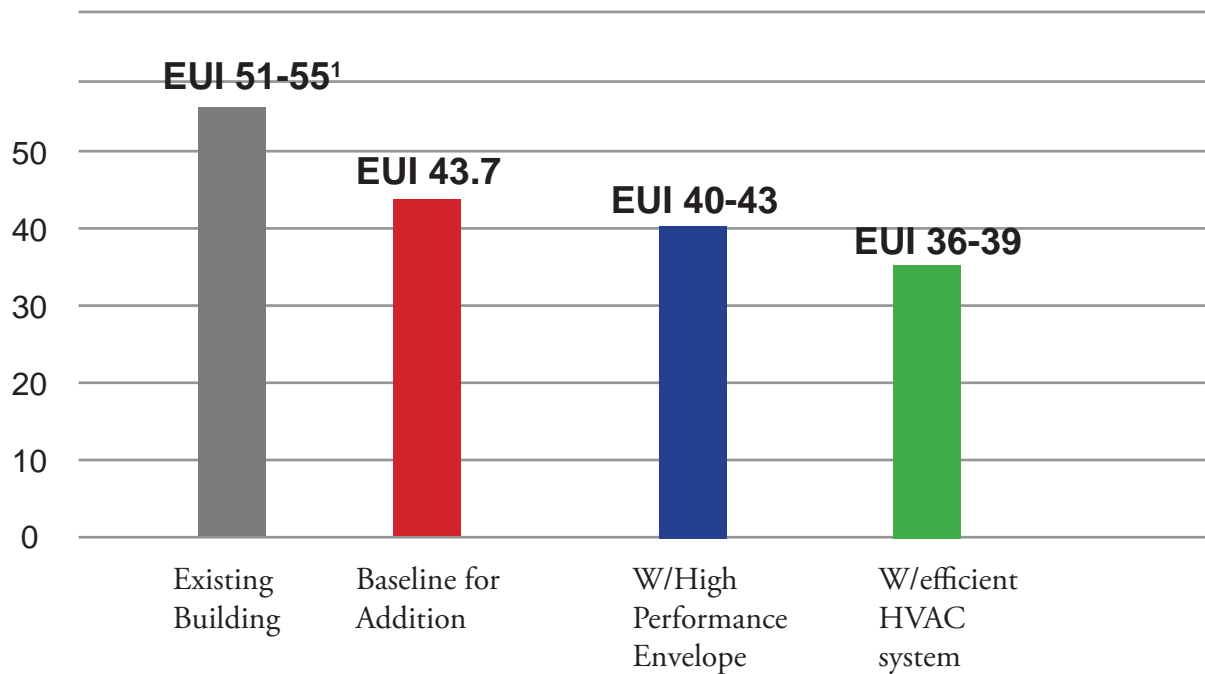
- | | |
|--|--|
| ■ LIBRARY | ■ TEACHER & STORAGE |
| ■ FOOD SERVICE | ■ ADMIN |
| ■ PHYSICAL EDUCATION | ■ COUNSELING/CLINIC |
| ■ THEATER/ARTS | ■ CORE CLASSROOMS |
| ■ MUSIC | ■ SPECIAL EDUCATION |
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20' 0' 40'

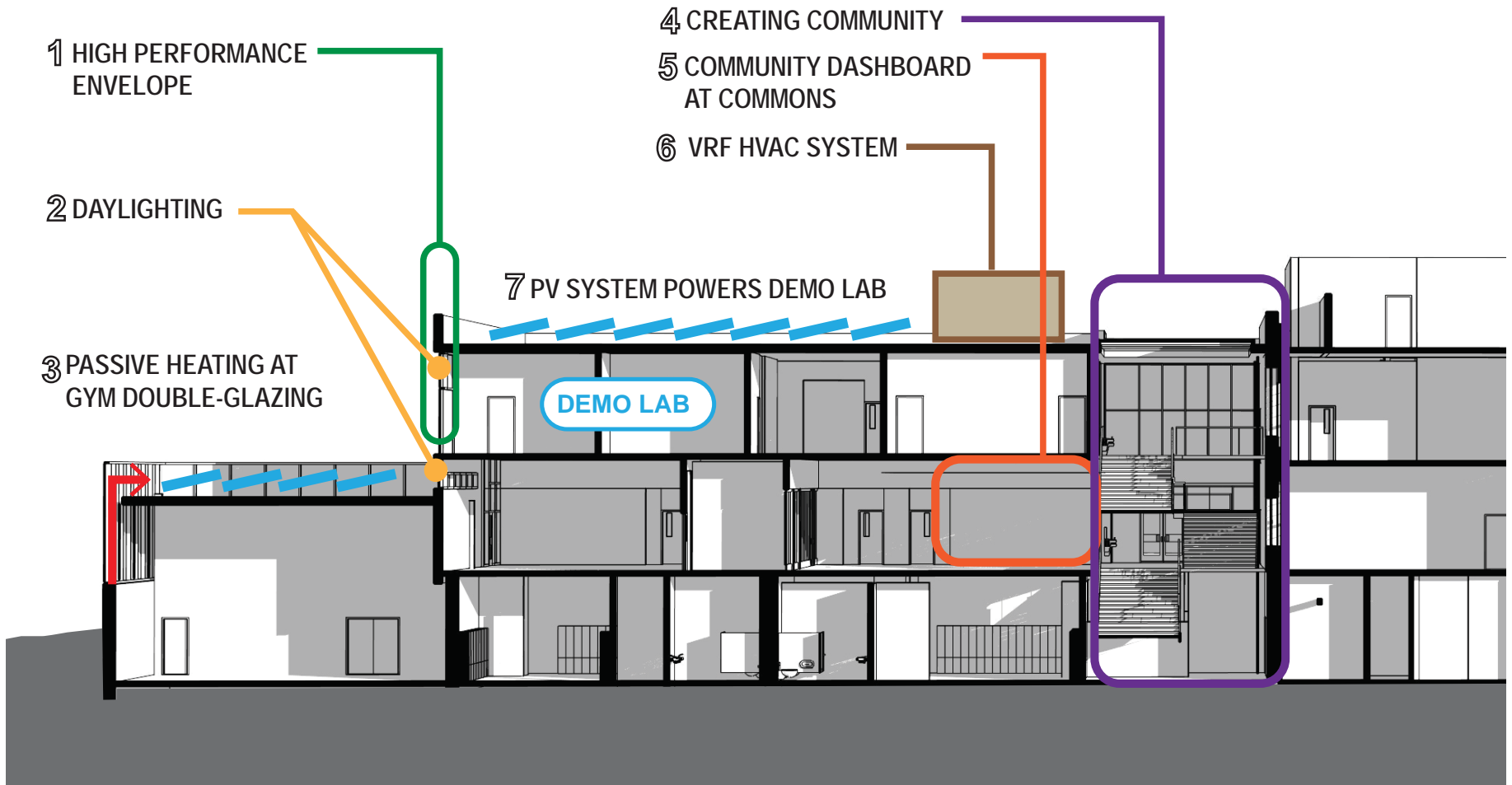
ENERGY TARGETS

- EUI (energy use intensity) = total energy consumed / total gross square footage
- Metric that expresses a building's energy use a function of size and other characteristics

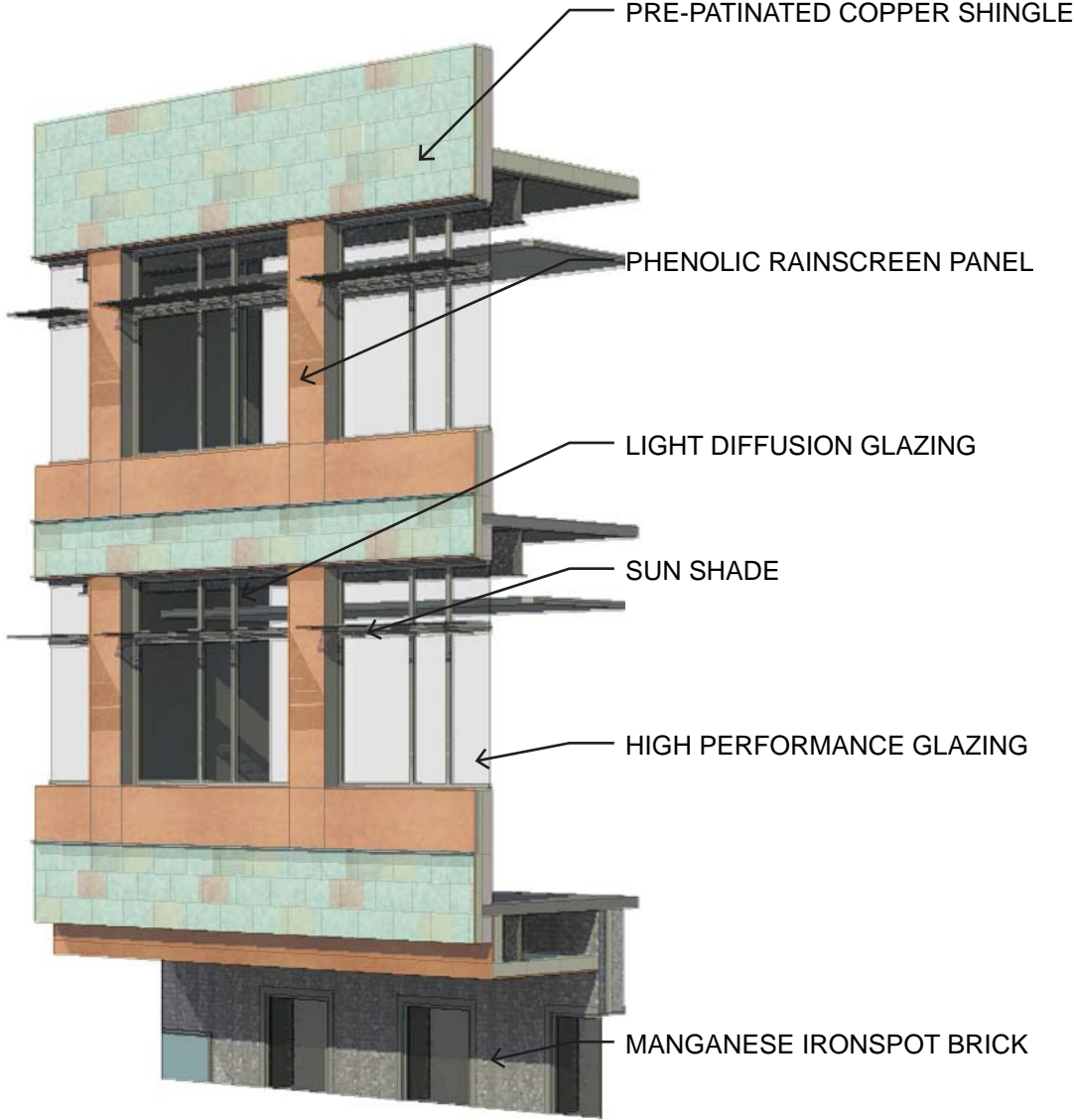


¹Existing metrics from APS Energy Report Cards 2013/2014/2015

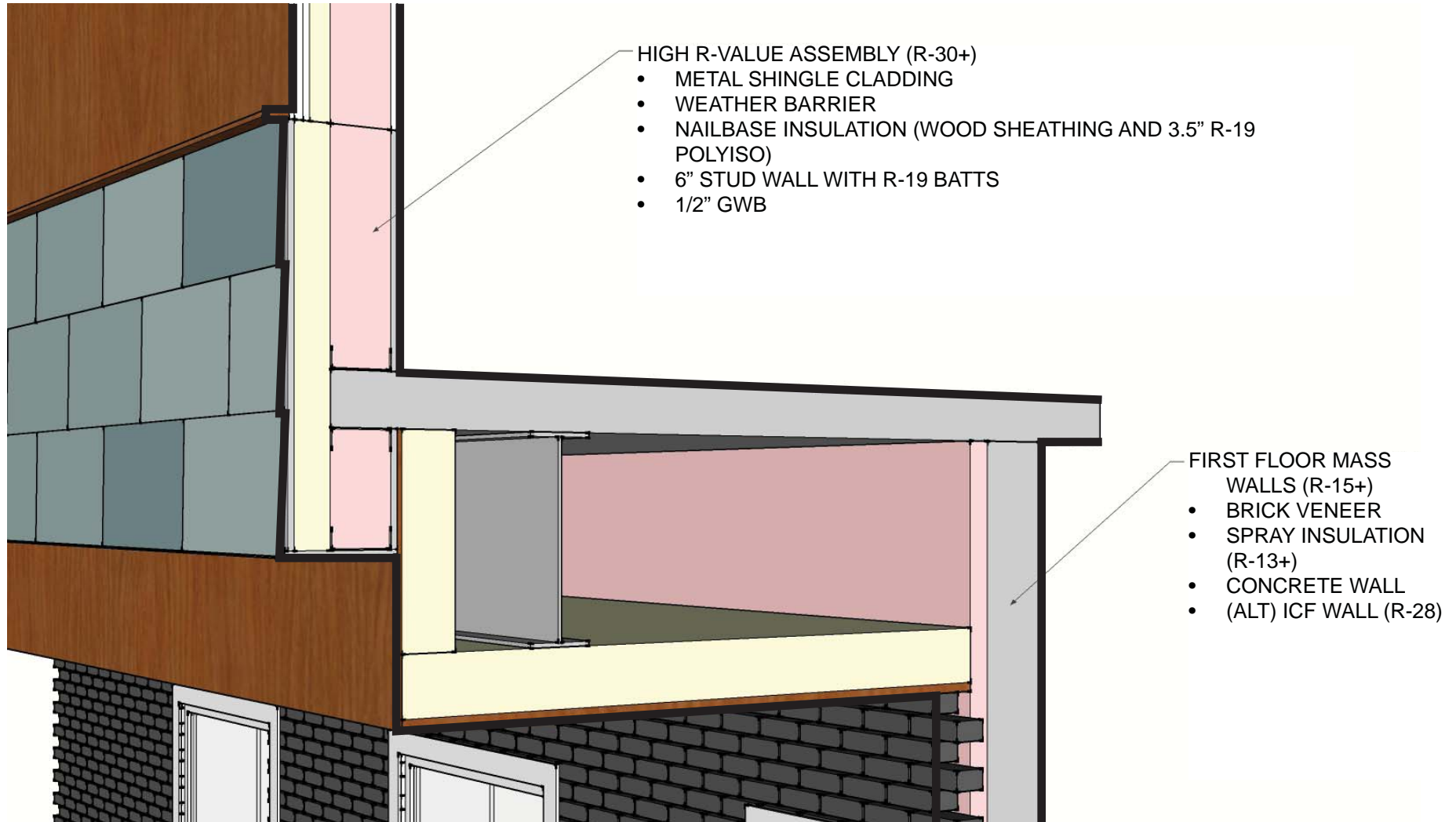
SUSTAINABLE OPPORTUNITIES



BUILDING ENVELOPE



BUILDING ENVELOPE



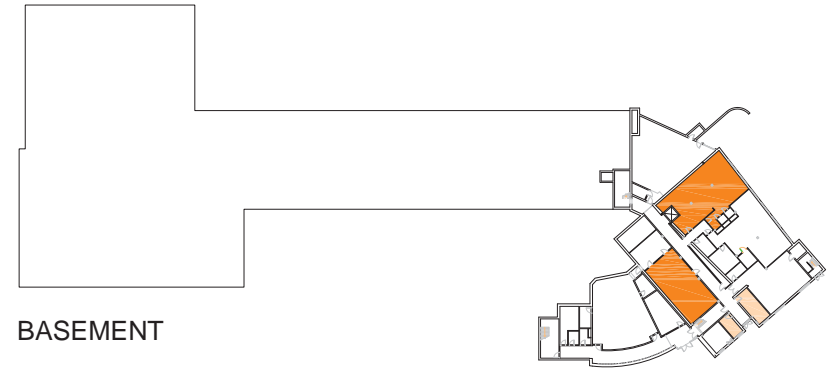
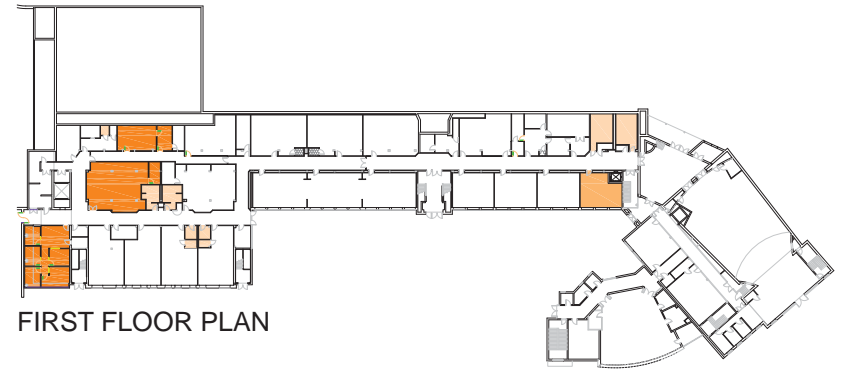
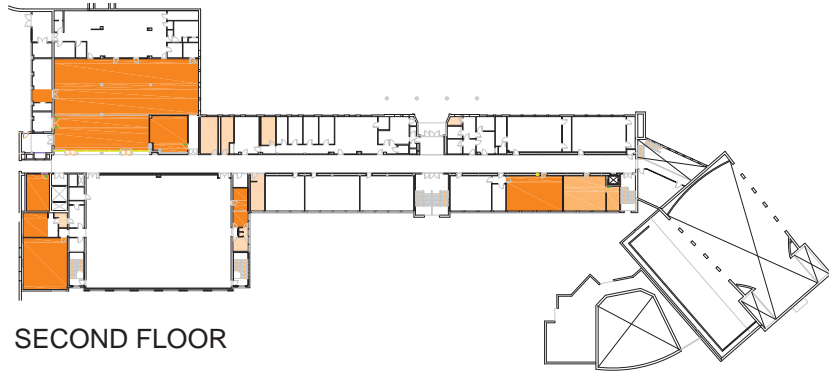
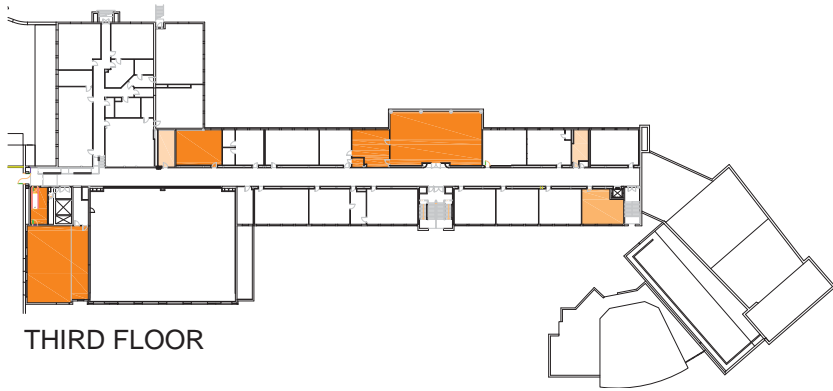
SOUTH ELEVATION



RENOVATION

- New elevator at east end of building
- Renovated cafeteria
- New teacher collaboration spaces
- Conversion of existing Library to Work and Family Life space
- Renovating select rooms to meet Neighborhood MS program needs
- Replacing ceiling and lighting (to LED) in core classroom as funding allows
- Moderate renovations to existing toilet rooms

RENOVATION



 CHANGE OF PROGRAM

 NEW ELEVATOR

 TOILET RENOVATION

SITE DESIGN UPDATE | 3

PARKING CALCULATIONS

ARLINGTON COUNTY ZONING

Q: *How many spaces are required?*

EMPLOYEES	134	1 staff parking space per 7.5 students
VISITORS	25	1 visitor parking space per 40 students
PARK USERS	10	Agreement with County Staff to use DPR feedback for park users
TOTAL	169	

Q: *Where are the spaces located?*

A: According to zoning, all parking to be provided on-site

PARKING CALCULATIONS

DATA-BASED TDM ASSUMPTIONS

Q: *How many spaces are required?*

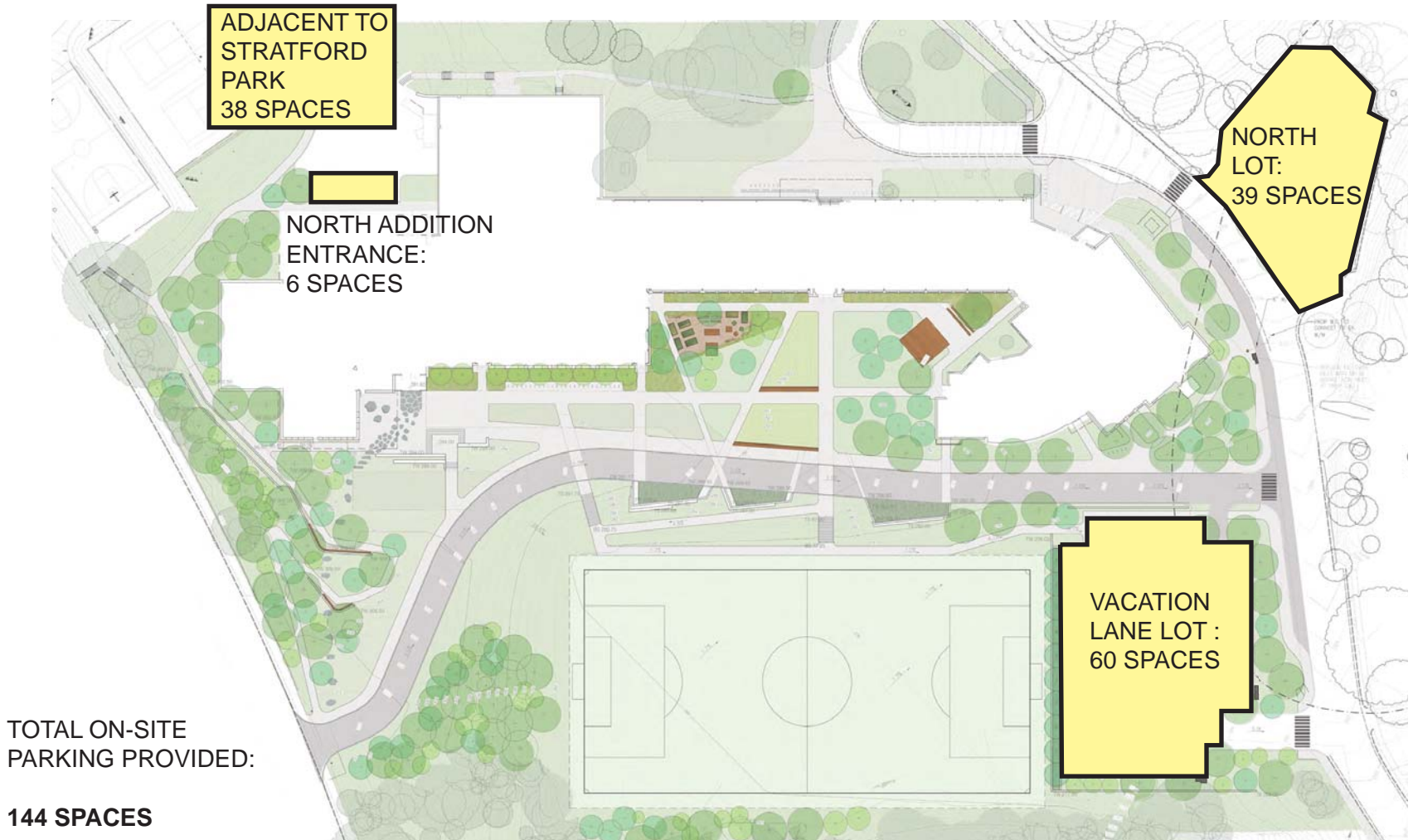
EMPLOYEES	134	Total estimated employees = 153 (124 F/T + 29 P/T based on existing MS staffing levels Average MS staff drive rate from 2013 survey = 92% (141) Additional 5% reduction for TDM = 134
VISITORS	14	Based on maximum number of visitors recorded at Swanson MS at any hour during 2015 APS Neighborhood MS Visitor Survey. Swanson provided most reliable data set of the survey
PARK USERS	10	Based on feedback from DPR.

Q: *Where are the spaces located?*

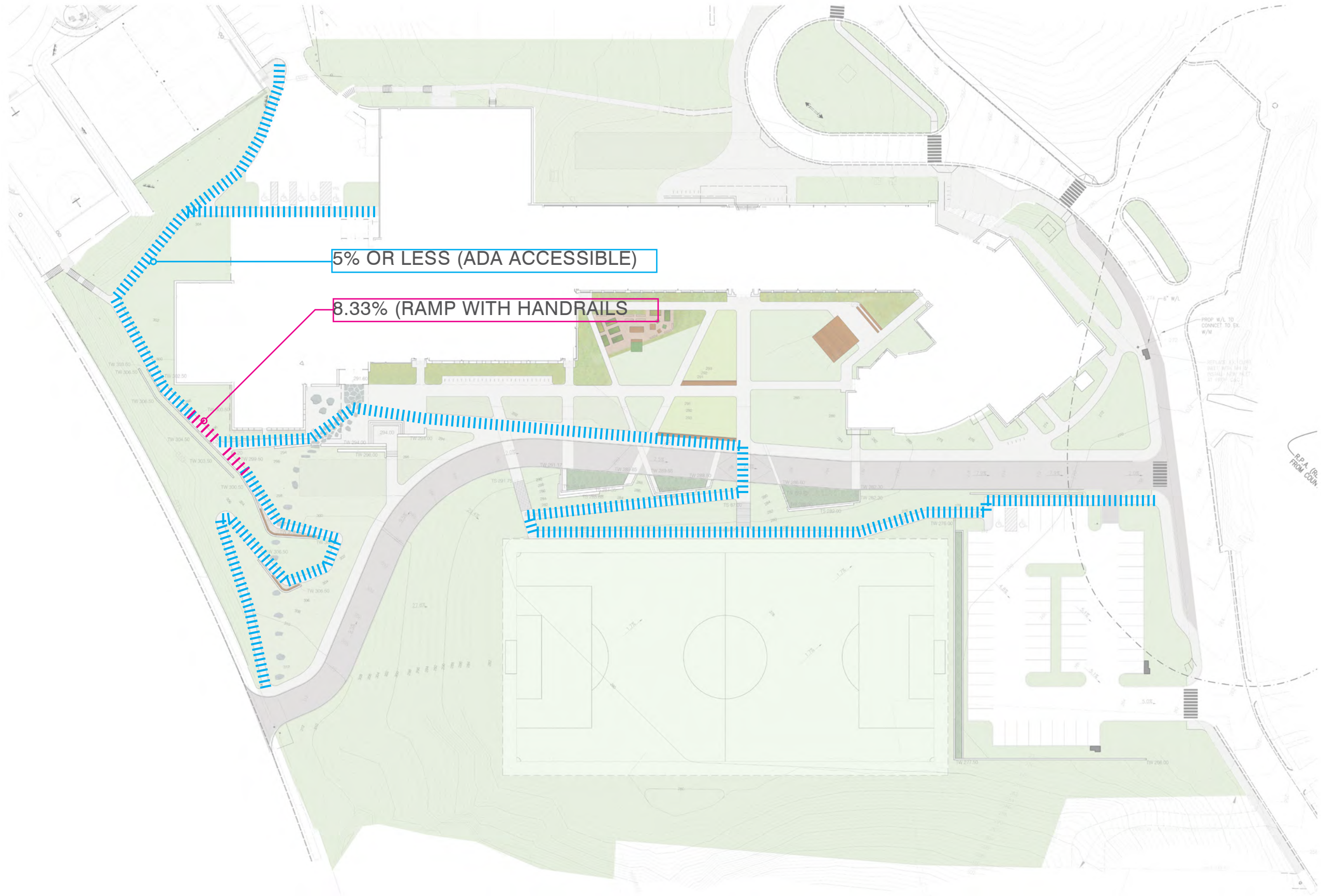
OFF-SITE	14	To reduce parking on-site, TDG surveyed available on-street parking during school hours and recommended that 14 of total required spaces be accommodated through on-street parking on Vacation Lane and 23rd Street.
ON-SITE	144	Total to be provided on-site

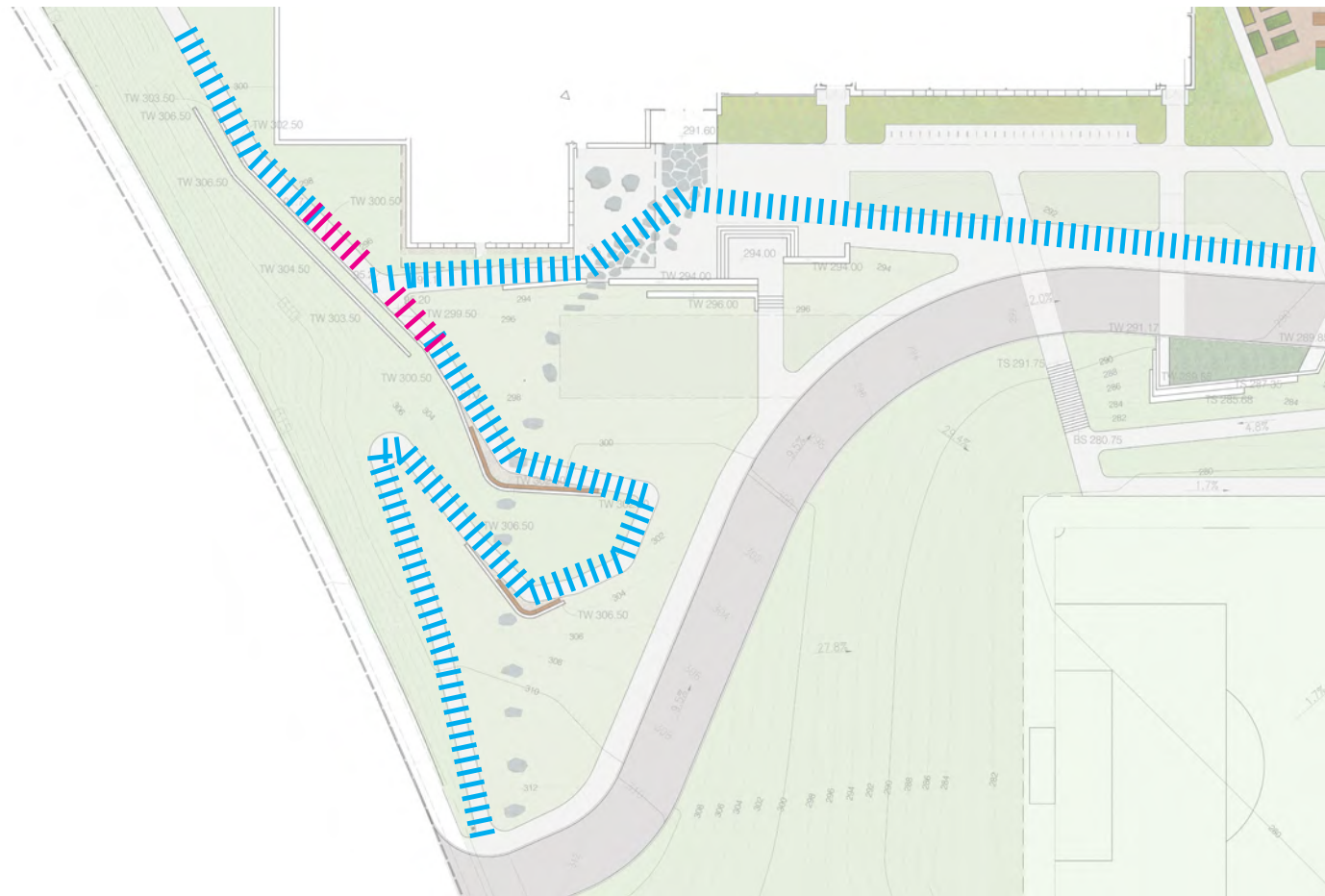
PARKING CALCULATIONS

PARKING LOCATIONS



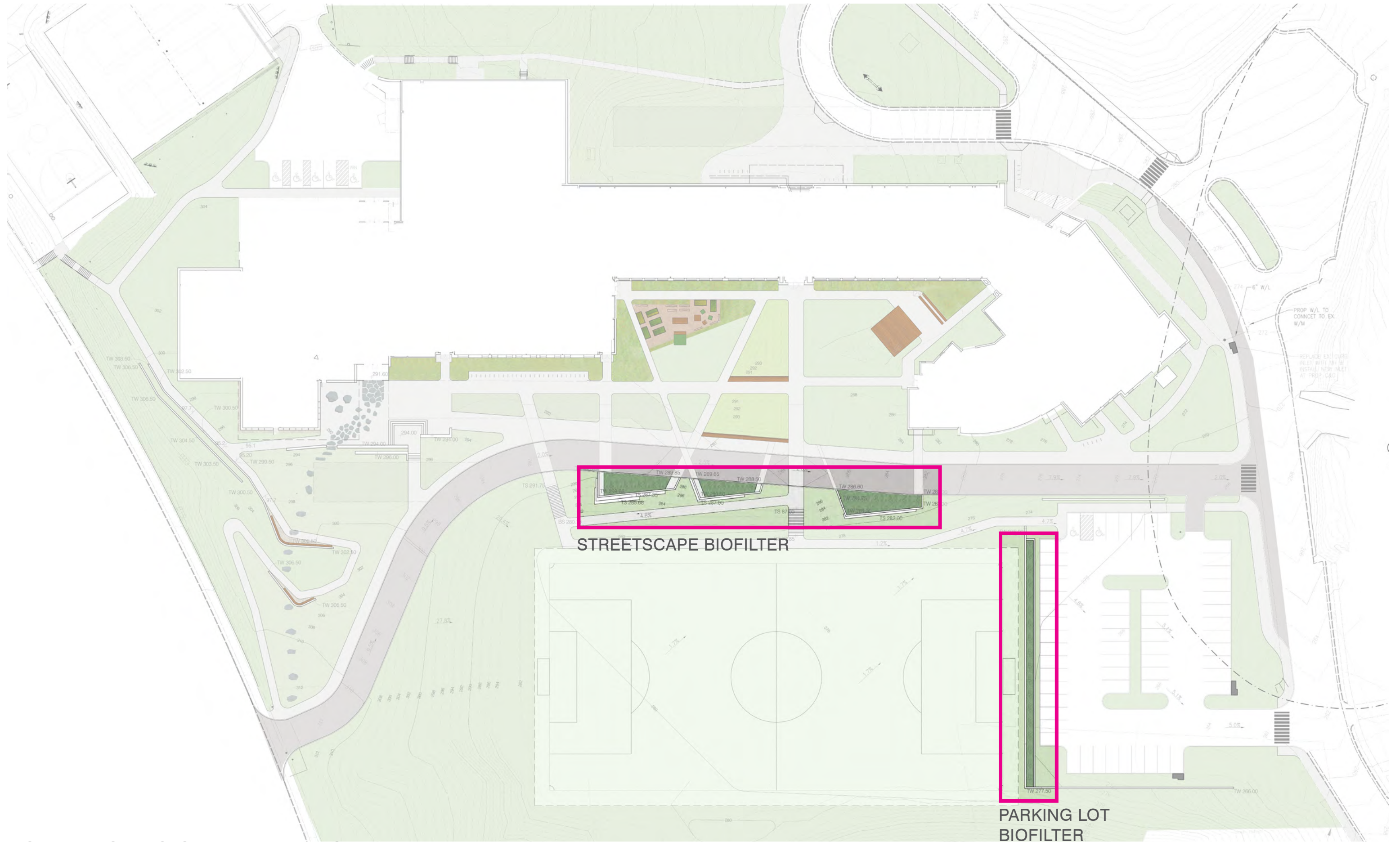






ADA ACCESSIBILITY

OCULUS



STREETSCAPE BIOFILTER

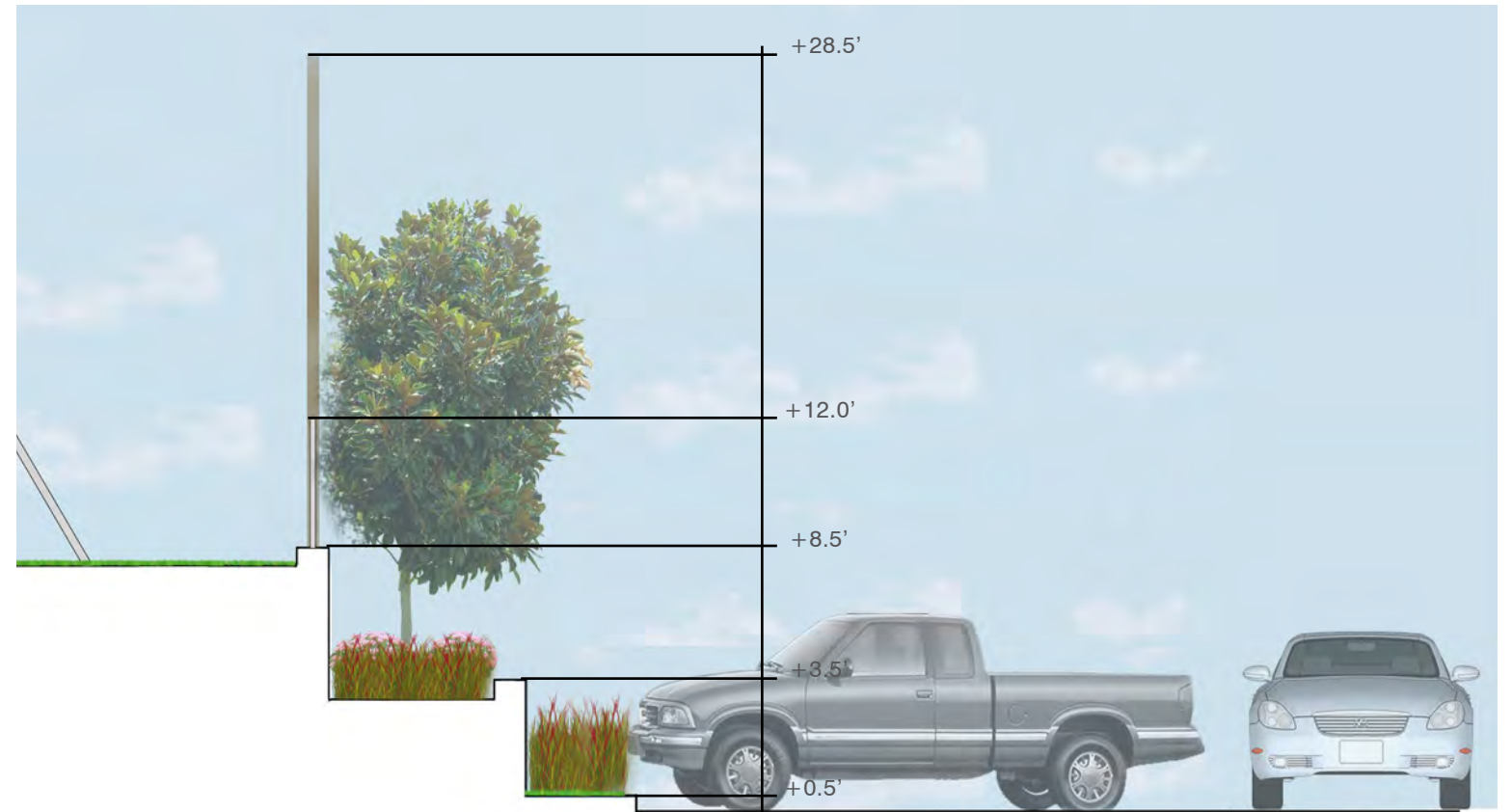
PARKING LOT
BIOFILTER



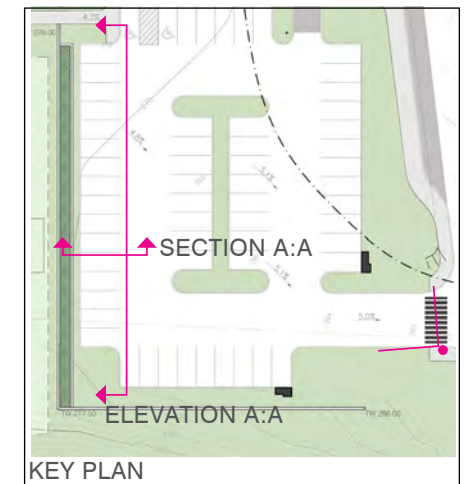
ELEVATION A:A



DISCOVERY SCHOOL BACKSTOP NET



SECTION A:A



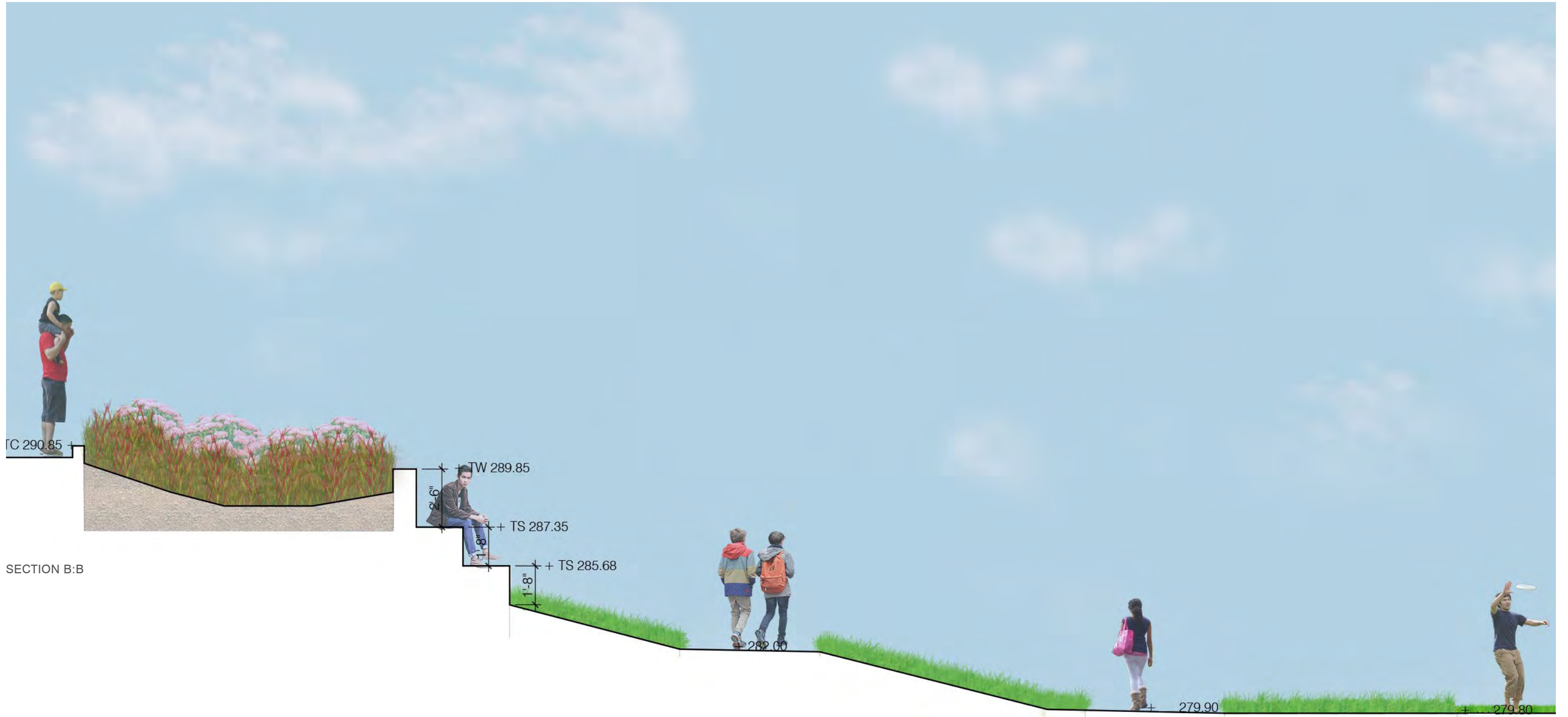
PARKING LOT BIOFILTER - DETAILS

OCULUS

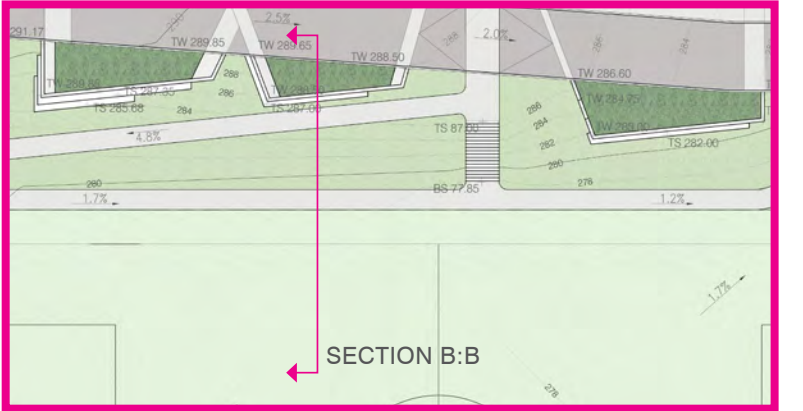


PARKING LOT BIOFILTER - PERSPECTIVES

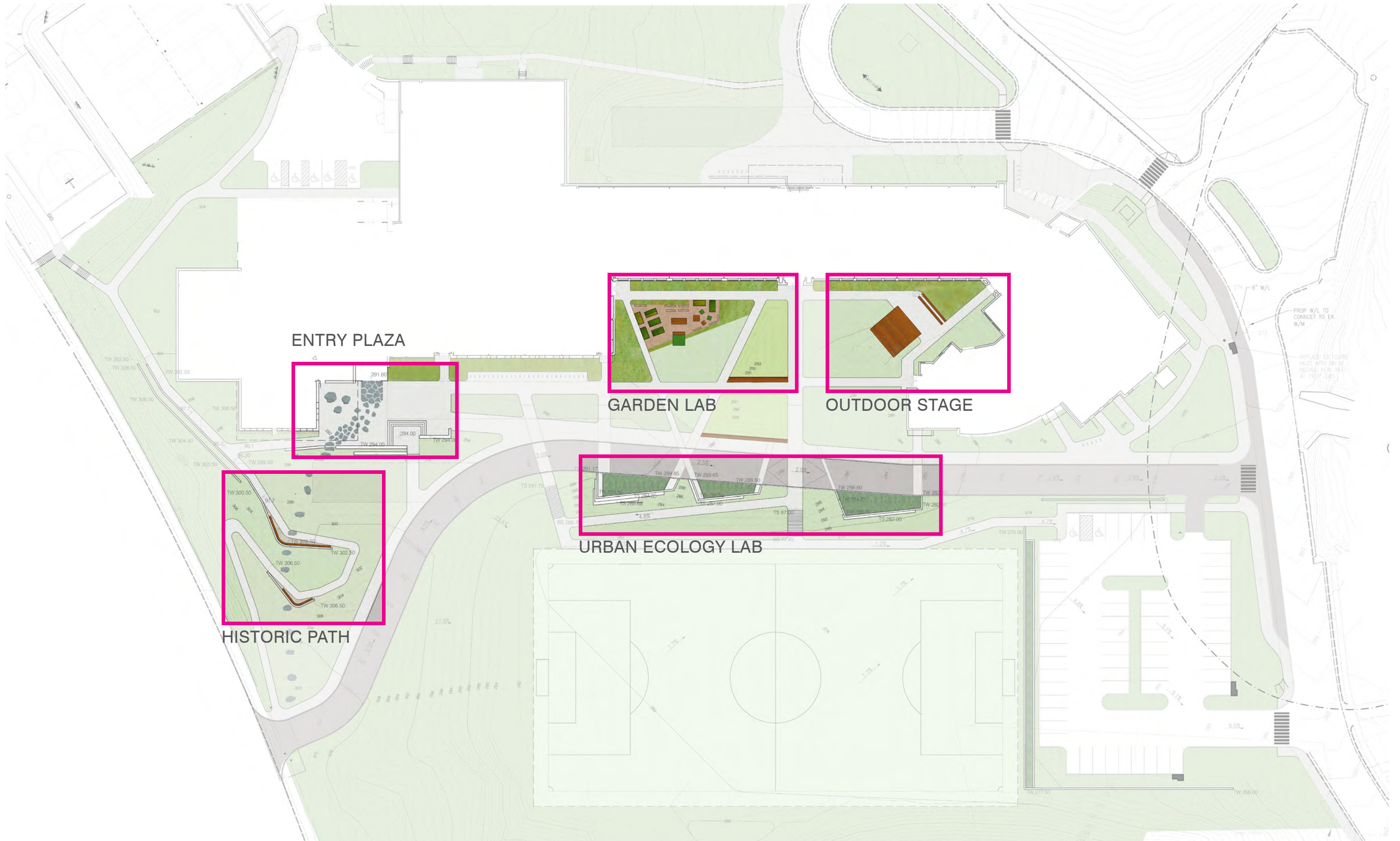
OCULUS



SECTION B:B



KEY PLAN



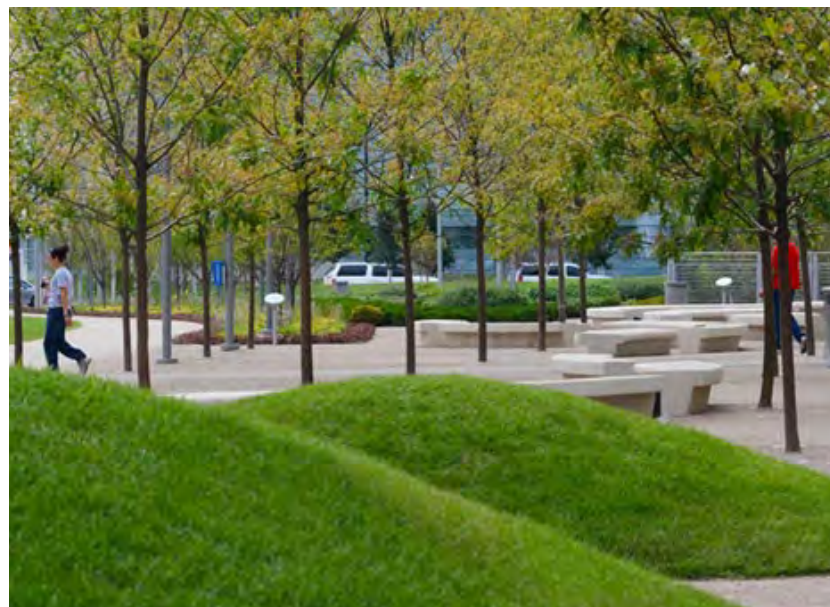
ENTRY PLAZA

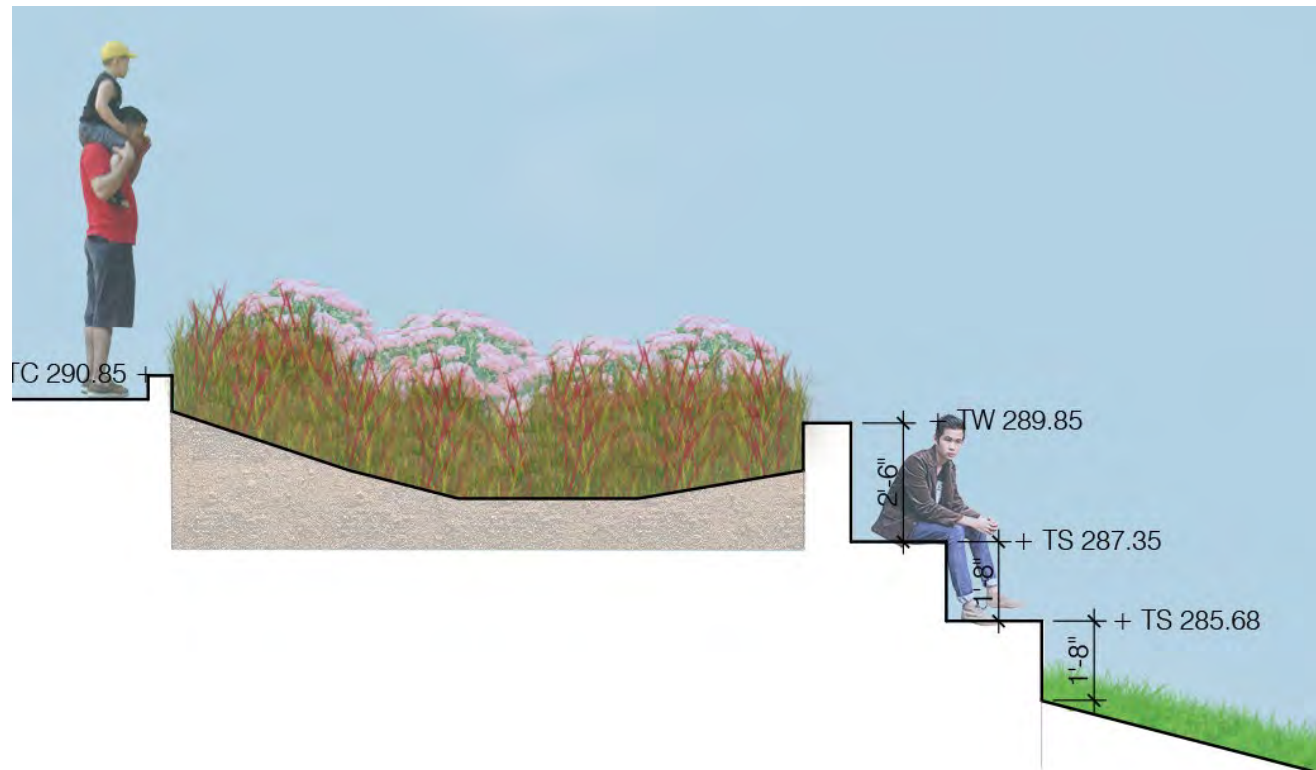
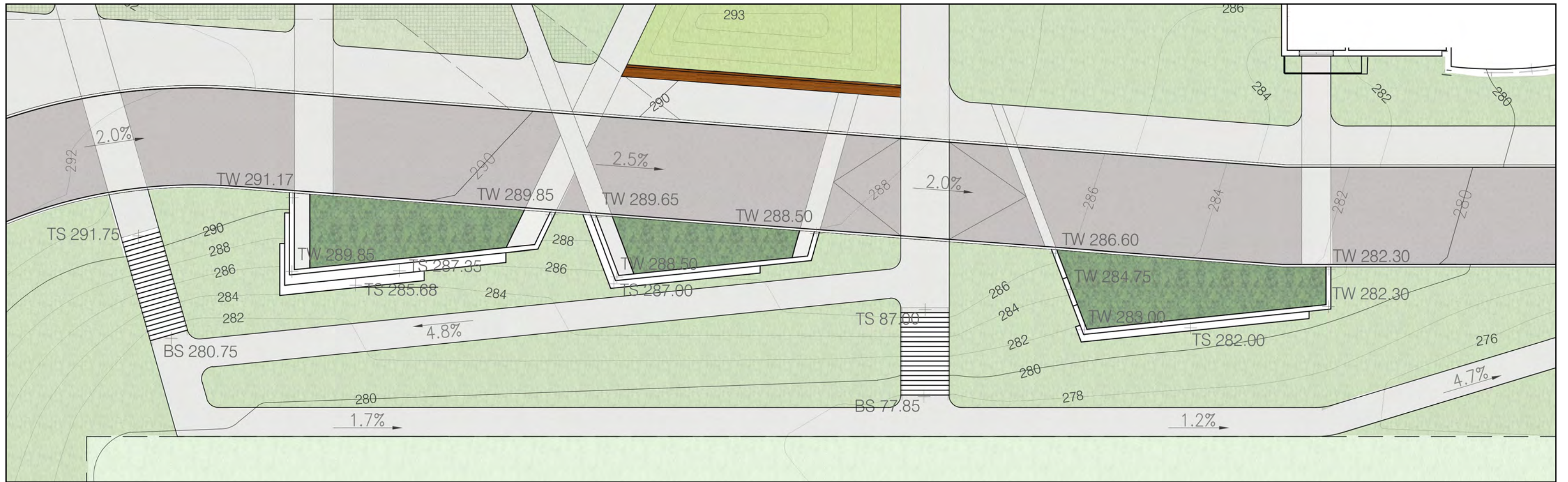
GARDEN LAB

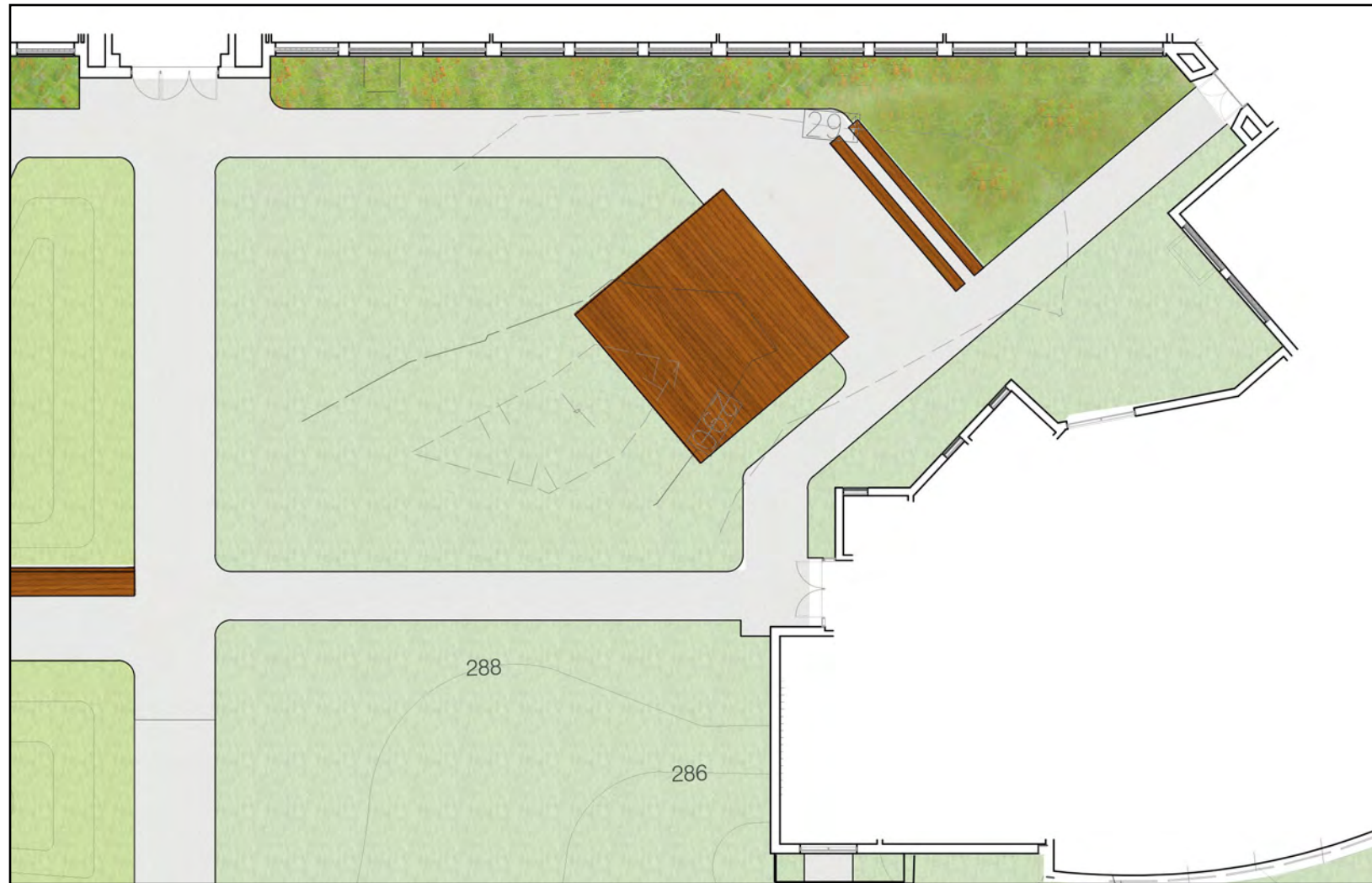
OUTDOOR STAGE

URBAN ECOLOGY LAB

HISTORIC PATH

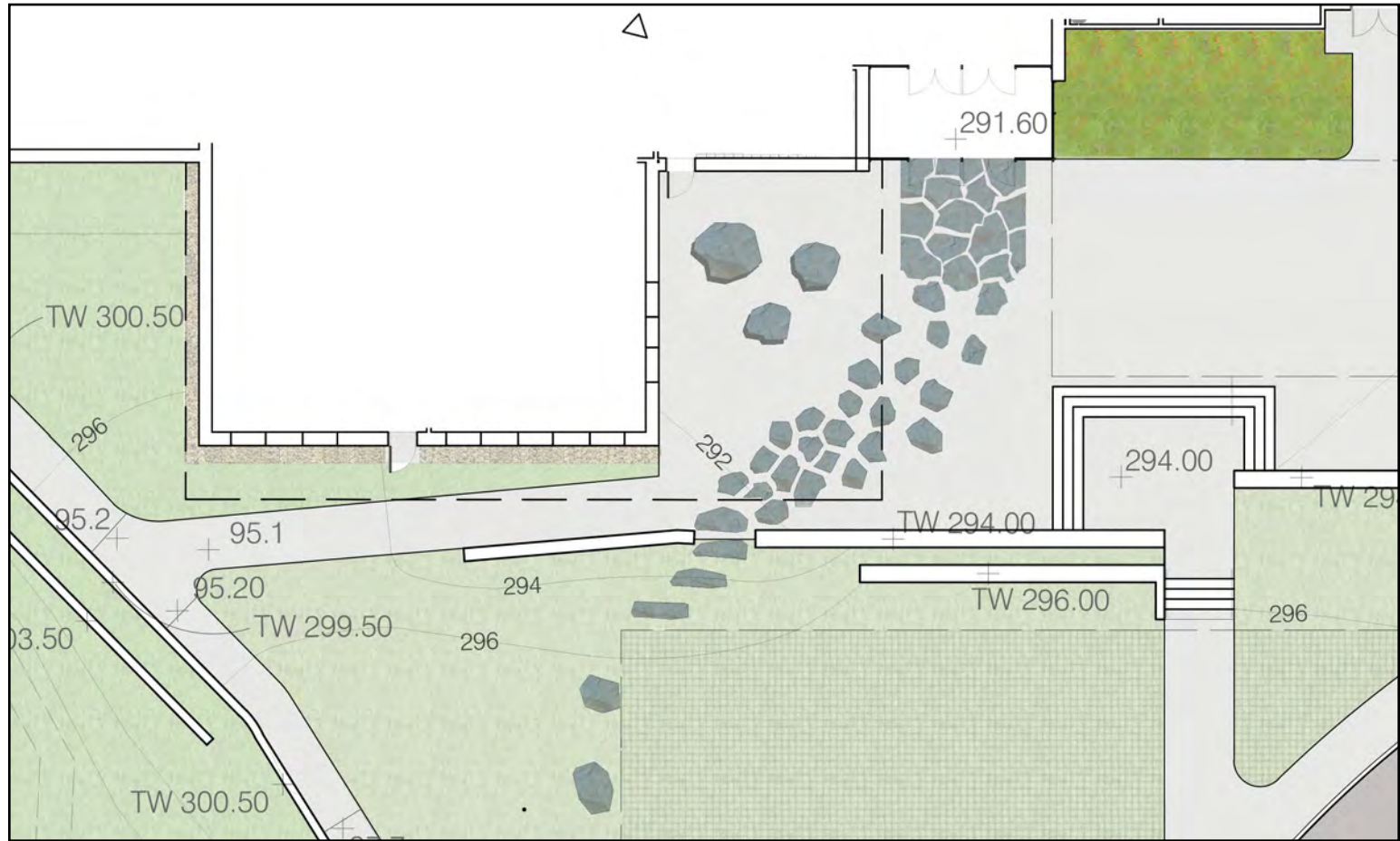




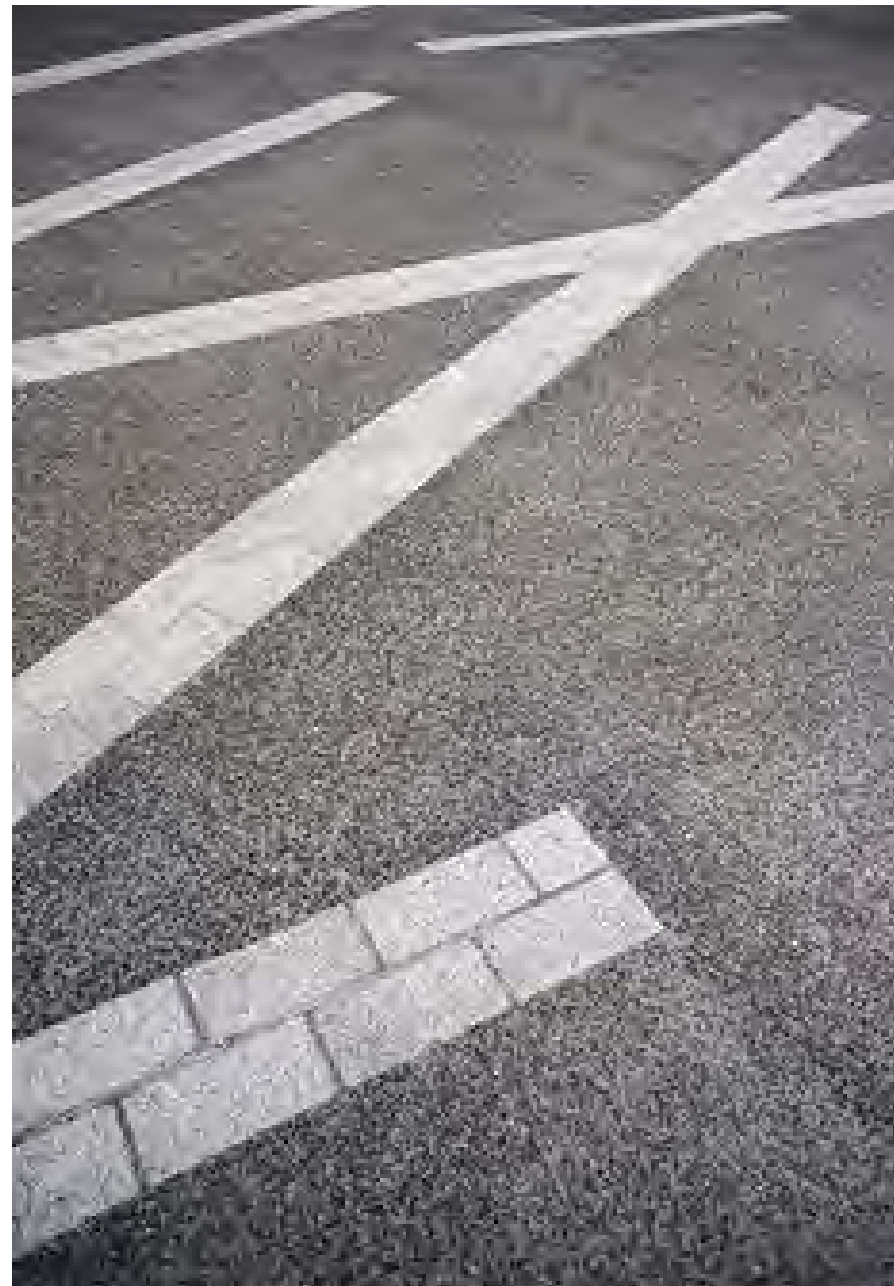
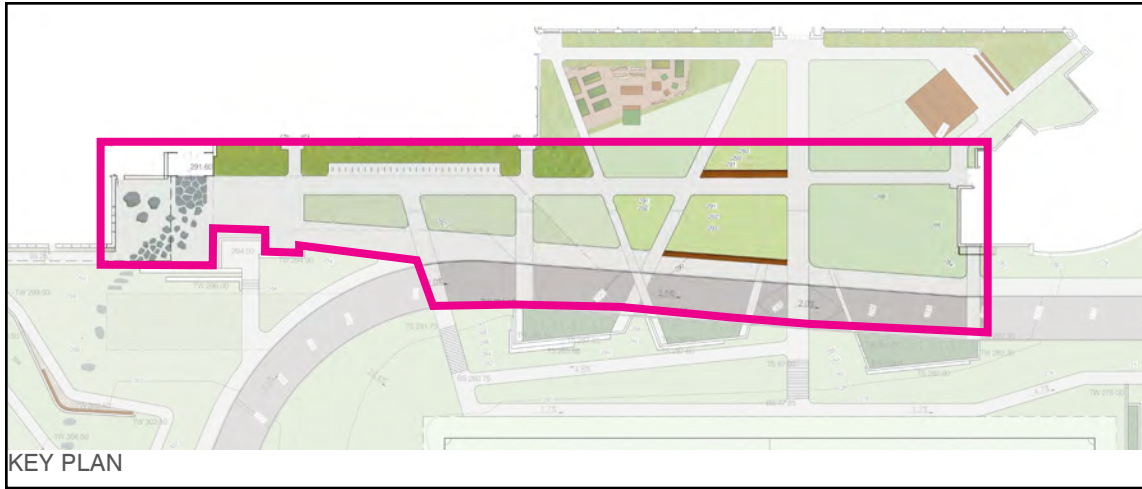




OUTDOOR LEARNING - HISTORIC WALK

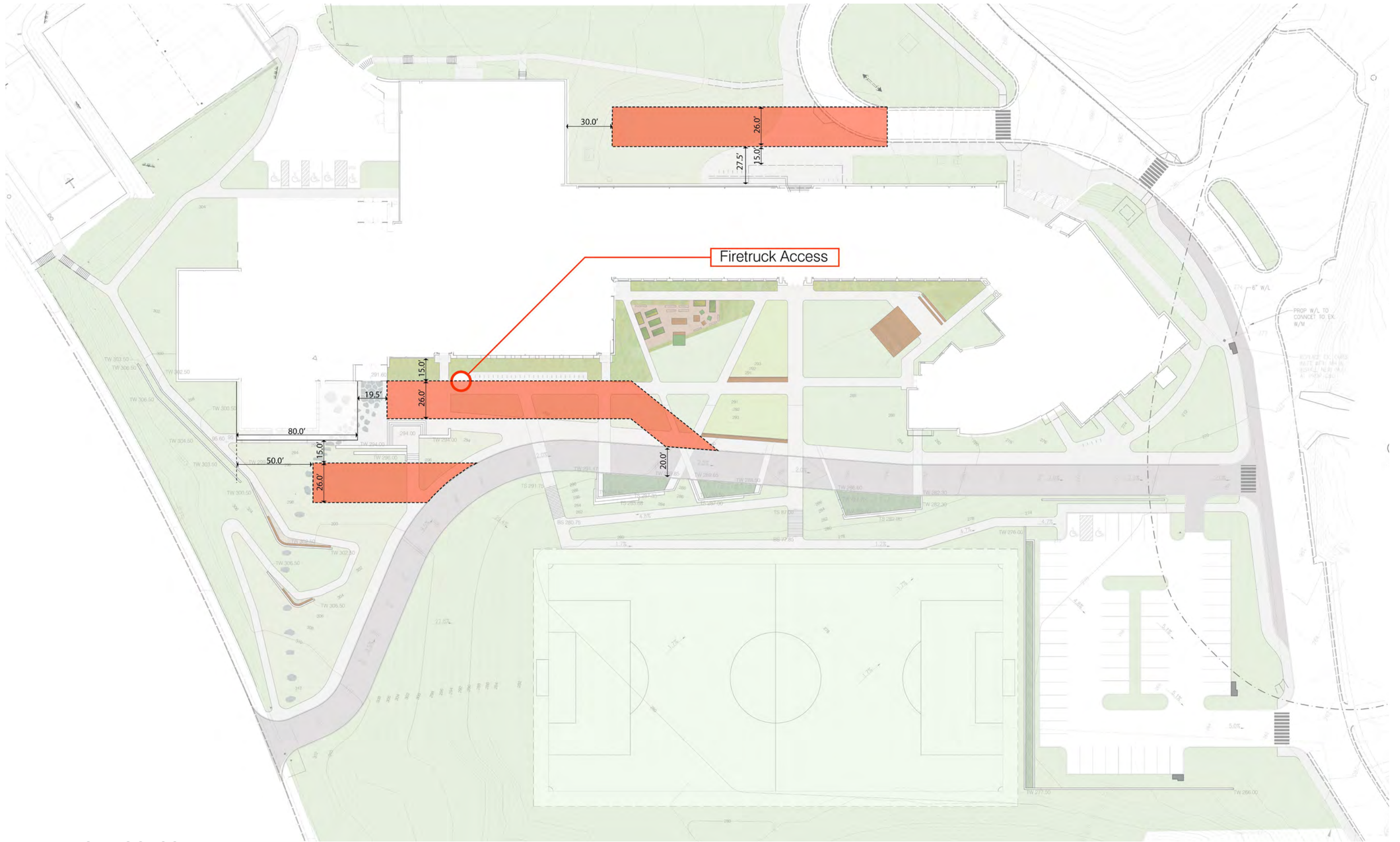


OUTDOOR LEARNING - ENTRY PLAZA/GATHERING AREA



SPECIAL PAVING
OCULUS





FIRE TRUCK ACCESS

OCULUS



TREES TO BE REMOVED: 162

EXISTING TREES TO BE REMOVED
OCULUS



TREE REPLACEMENT REQUIRED: 211

EXISTING TREES TO REMAIN
OCULUS

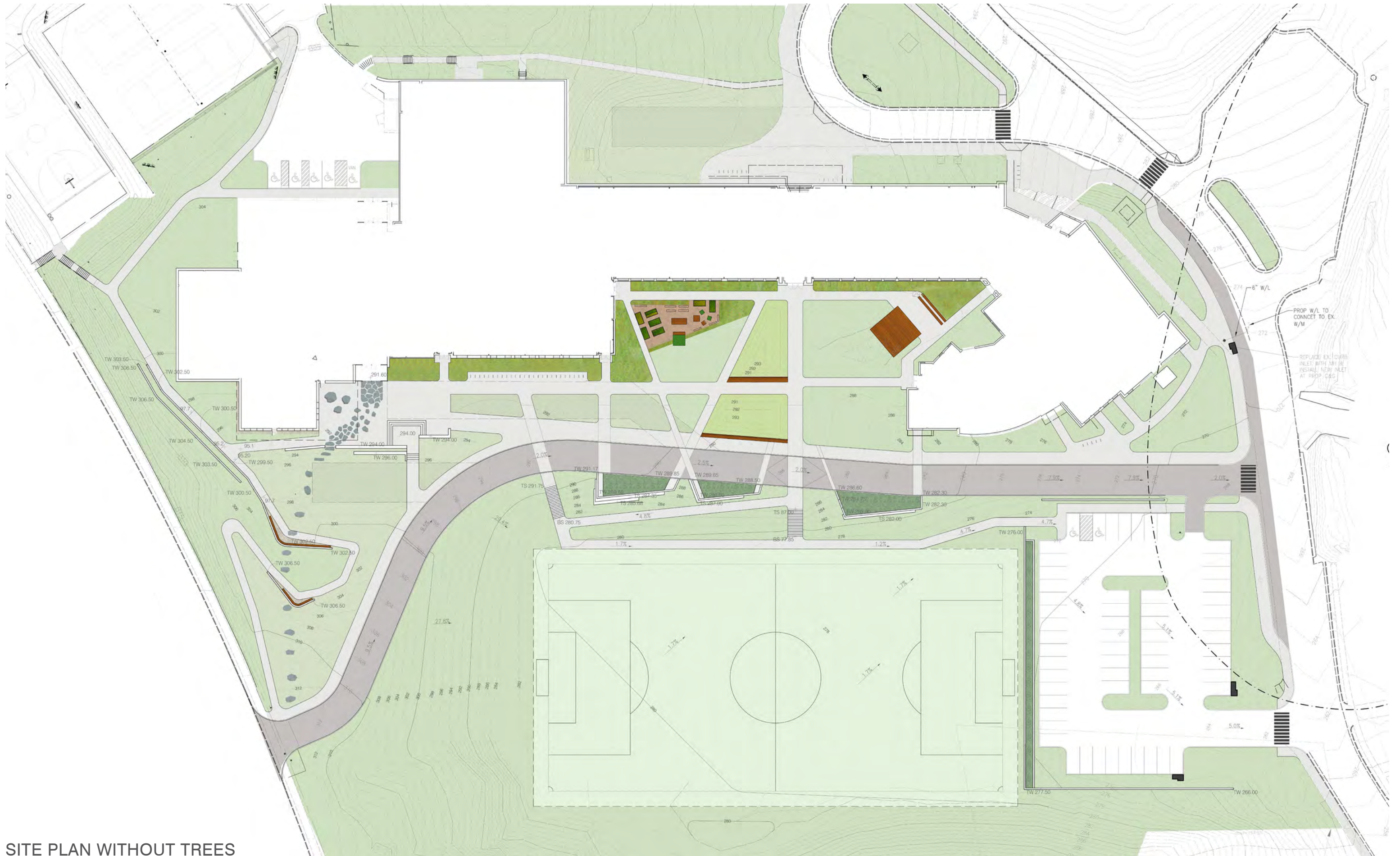


CANOPY TREES PROPOSED: 93 (1:1)
 UNDERSTORY TREES PROPOSED: 126 (3:1)
 ADJUSTED TOTAL: 136
 ADDITIONAL TREES NEEDED: 75

PROPOSED TREES -- **IN-PROGRESS**
 OCULUS



SITE PLAN WITH TREES



SITE PLAN WITHOUT TREES