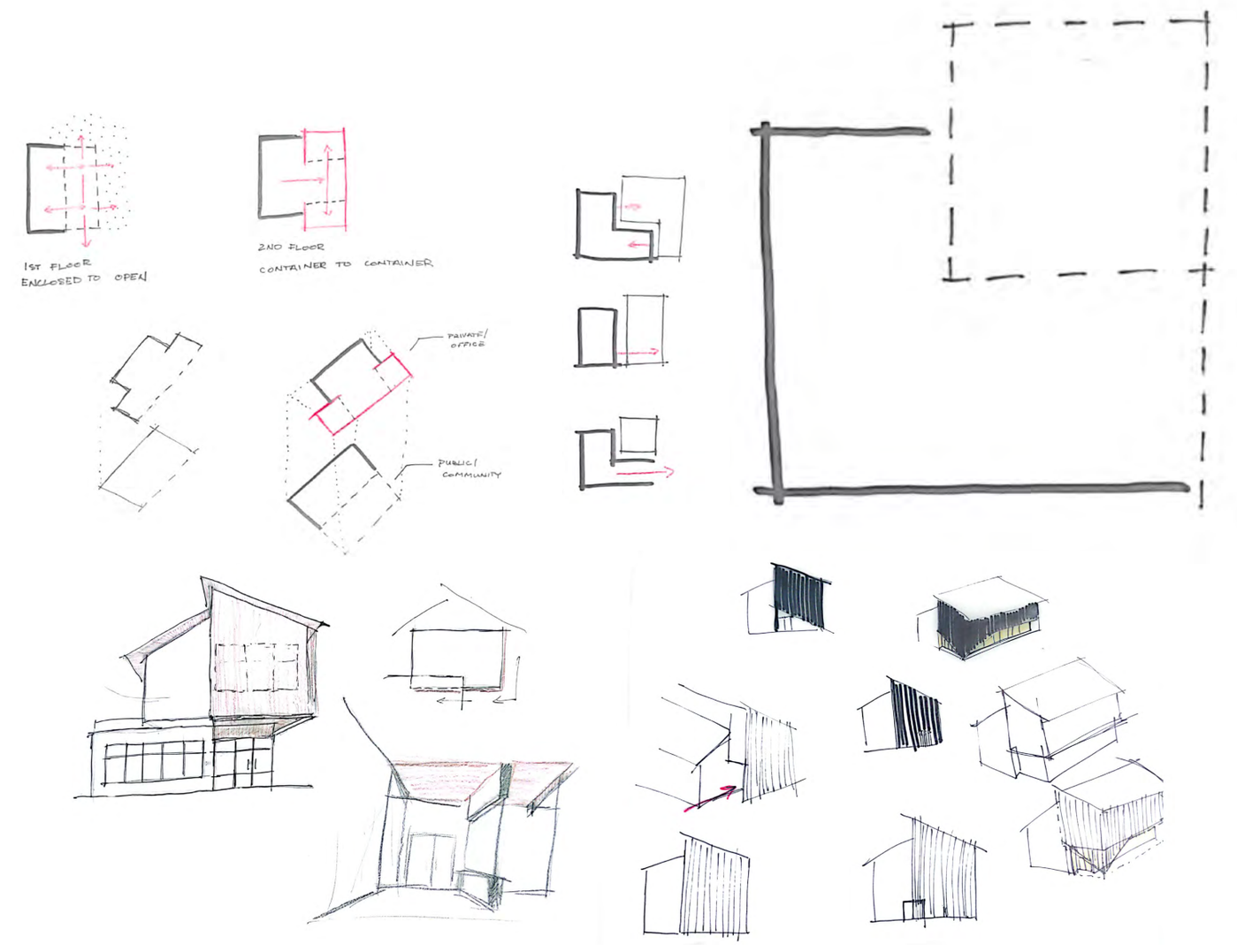
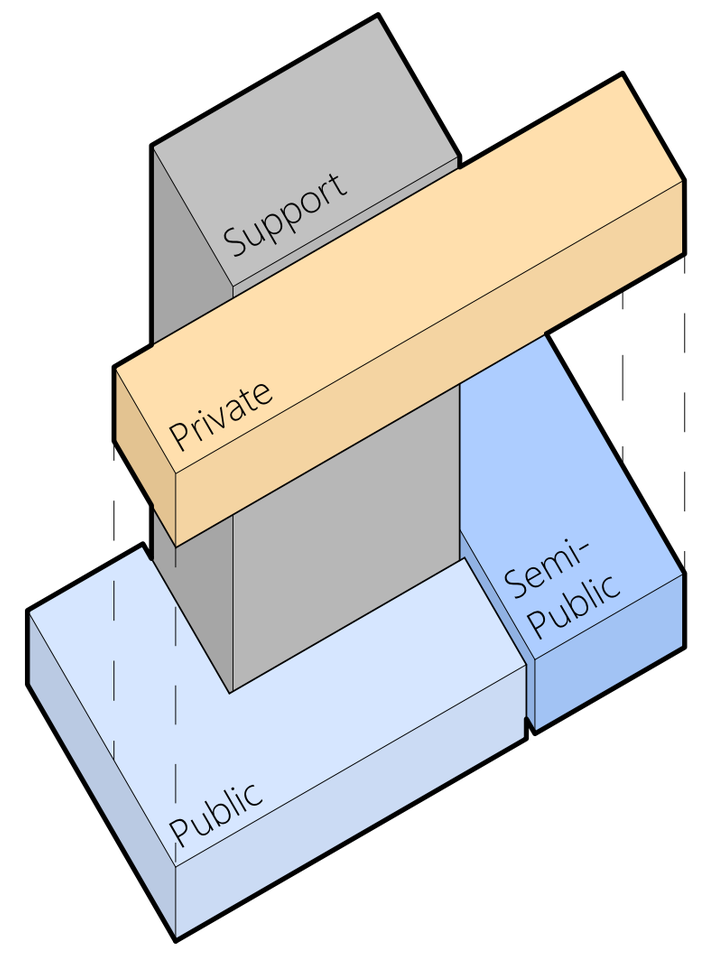
The Reveal

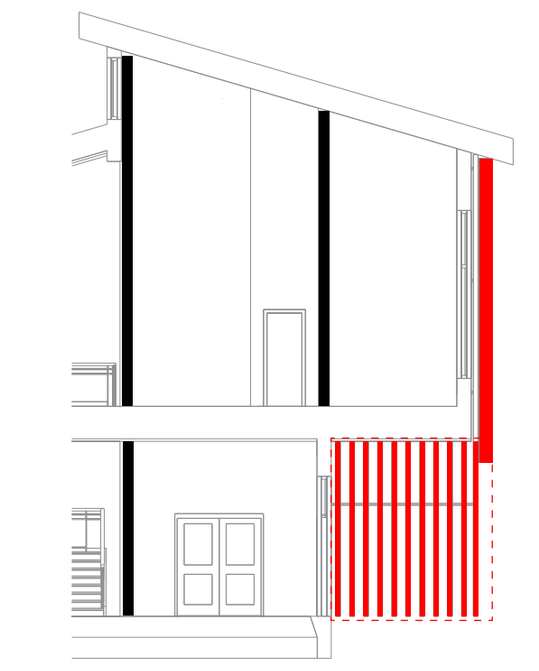
NBI East Coast Headquarters

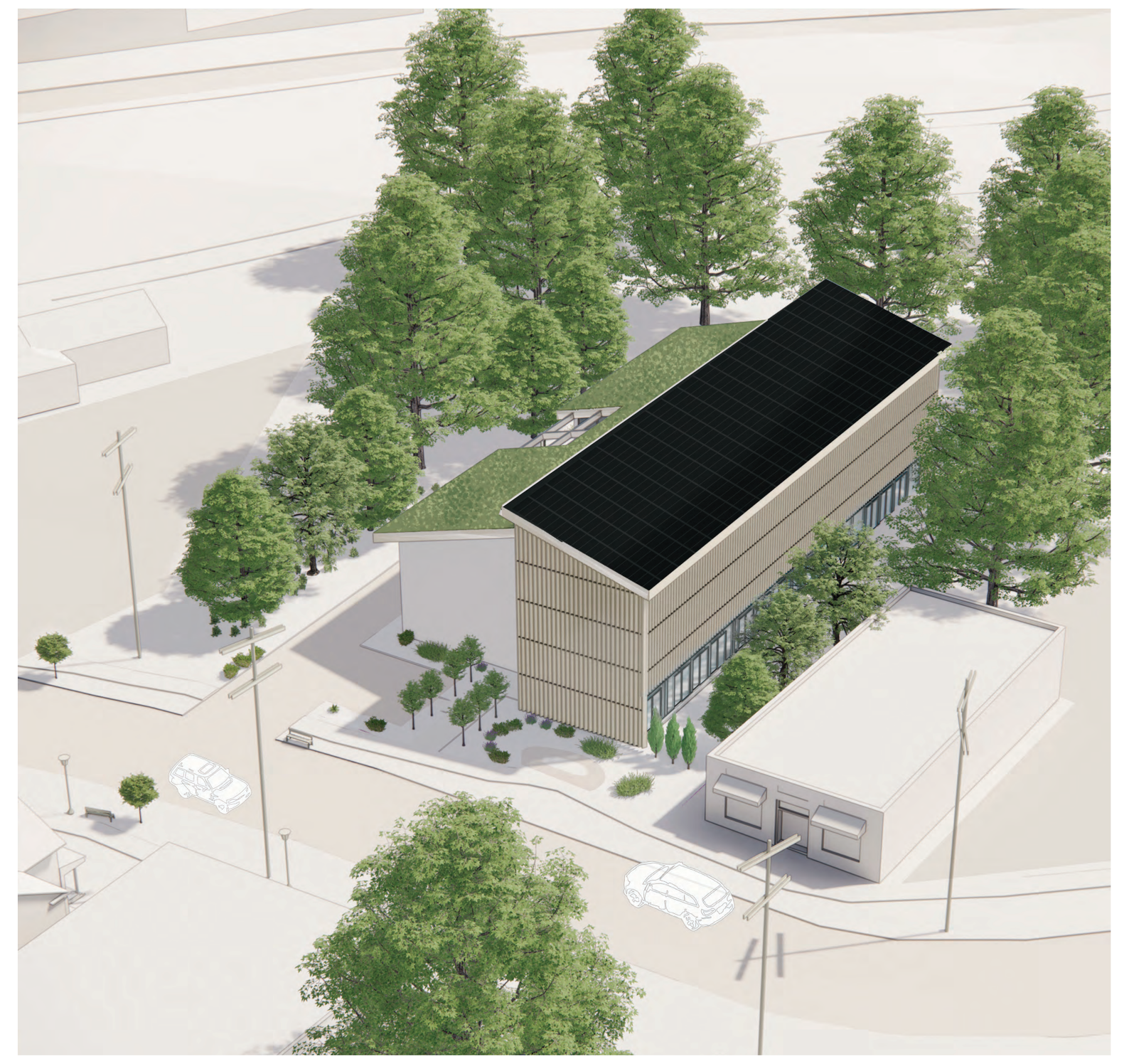
Sarah Jane Graven and Rylie Schoch

Nestled at the intersection of architectural innovation and ecological consciousness, the envisioned structure serves as the future East Coast headquarters for the New Buildings Institute. This design stands as a testament to the transformative power of cutting-edge technological advances in both design and building sciences. The motivation underlying the project revolves around dismantling the traditional barriers that separate the architectural process from the public eye. Through a combination of passive and active design strategies, the building aspires to achieve net-zero energy consumption. By opening its doors to the public, the project invites visitors to witness, engage, and be inspired by the seamless integration of sustainable practices. It encourages individuals to reimagine and implement these forward-thinking strategies on a broader scale. This design exemplifies the potential of transparency in design to inspire a brighter, more sustainable future for communities worldwide.

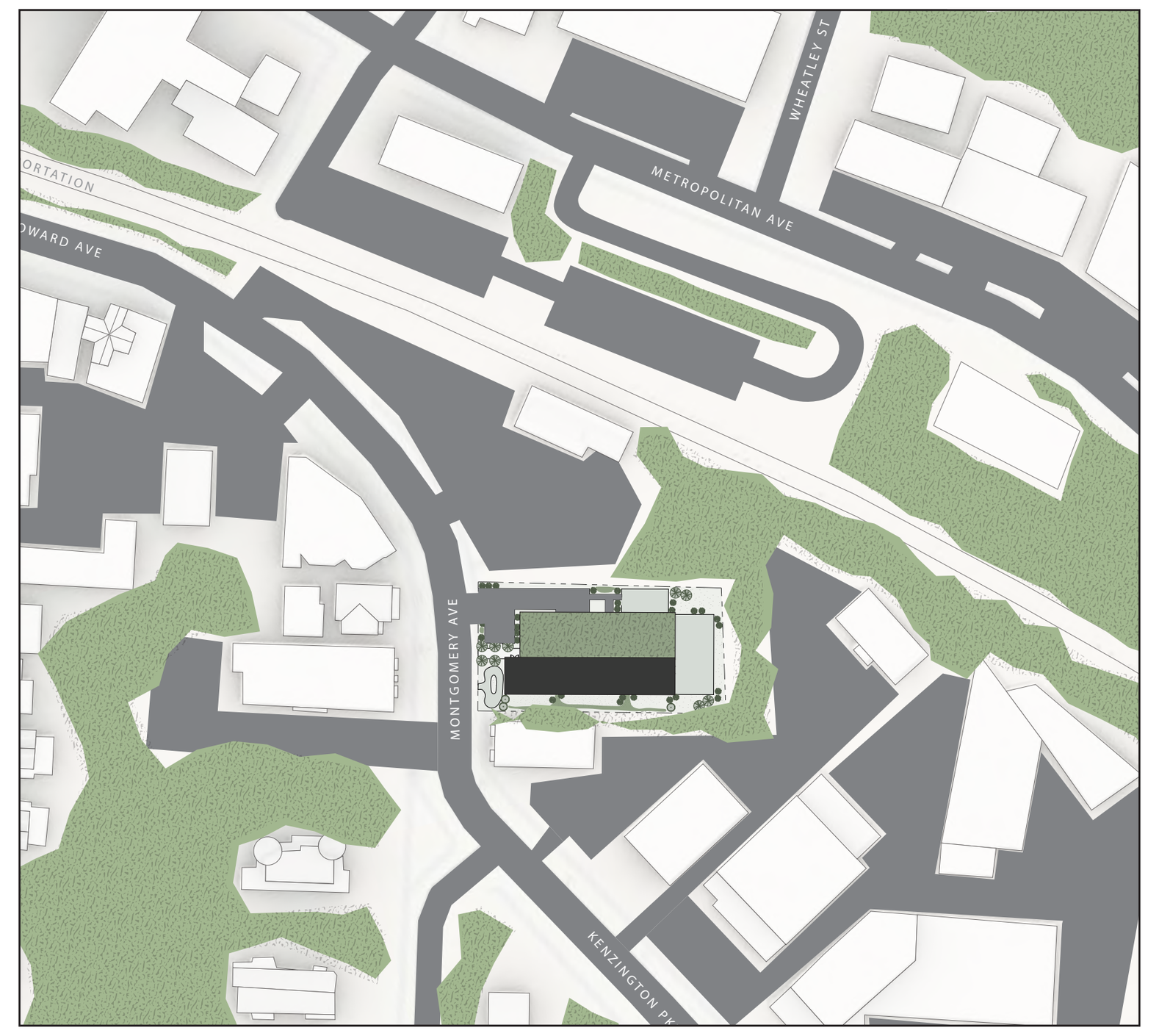

1st floor
enclosed to open
2nd floor
container to contained
public community


Support
Private
Semi-Public
Public





AERIAL VIGNETTE


WHEATLEY ST
METROPOLITAN AVE
ORTATION
OWARD AVE
MONTGOMERY AVE
KENZINGTON PK

CONTEXT SITE
SCALE: 1:50

ZONE: CRT-1.5

REQUIRED
SETBACKS:
FRONT: 0'
SITE: 0'

BTA:
FRONT: 20'
SIDE: 15'

COVERAGE: 20%

FAR: 1.0

HEIGHT: 45'

PROVIDED
SETBACKS:
FRONT: 22'-6"
SIDES: min 15'-0; max 22'-6"

COVERAGE: 38%

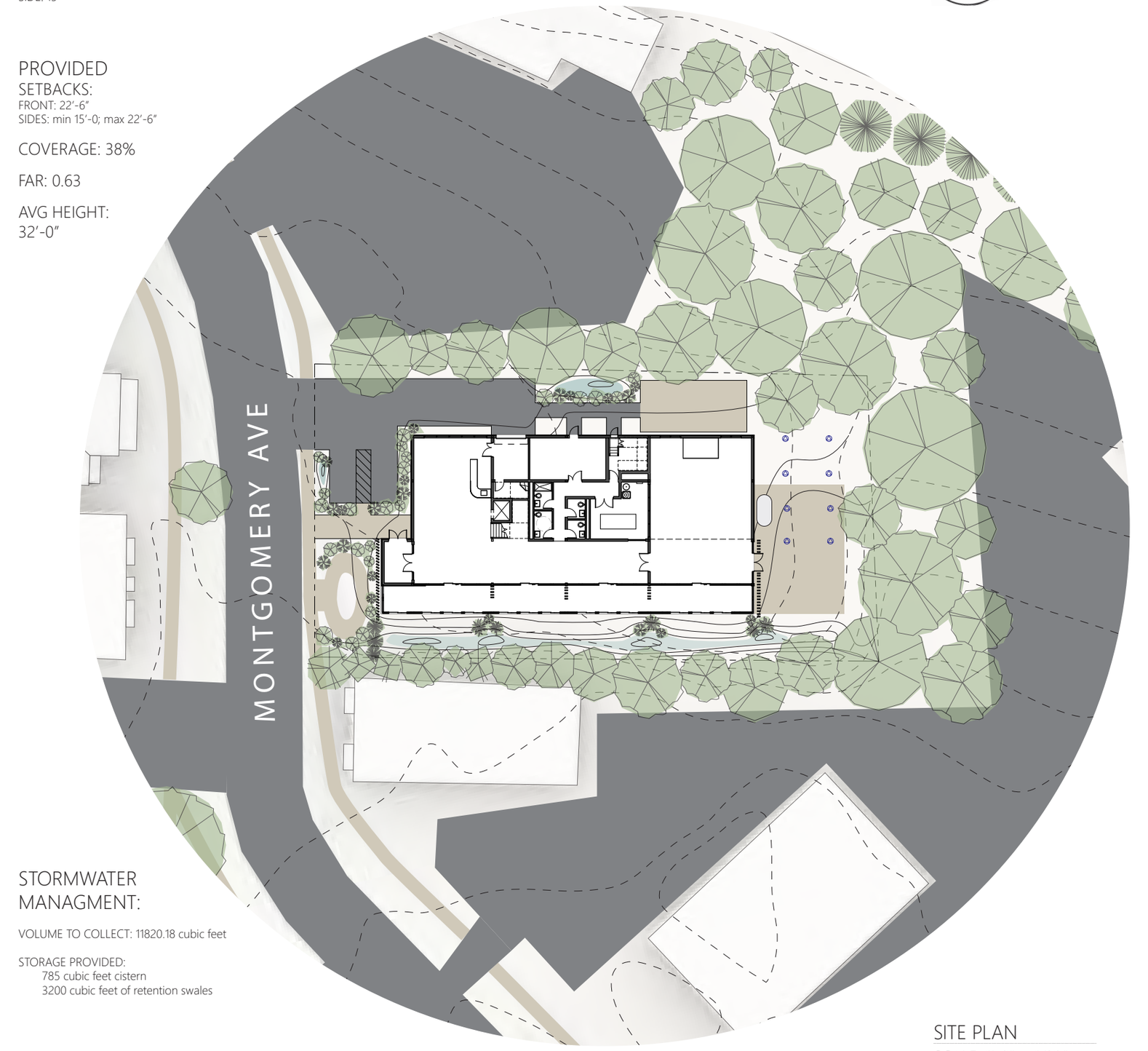
FAR: 0.63

AVG HEIGHT:
32'-0"

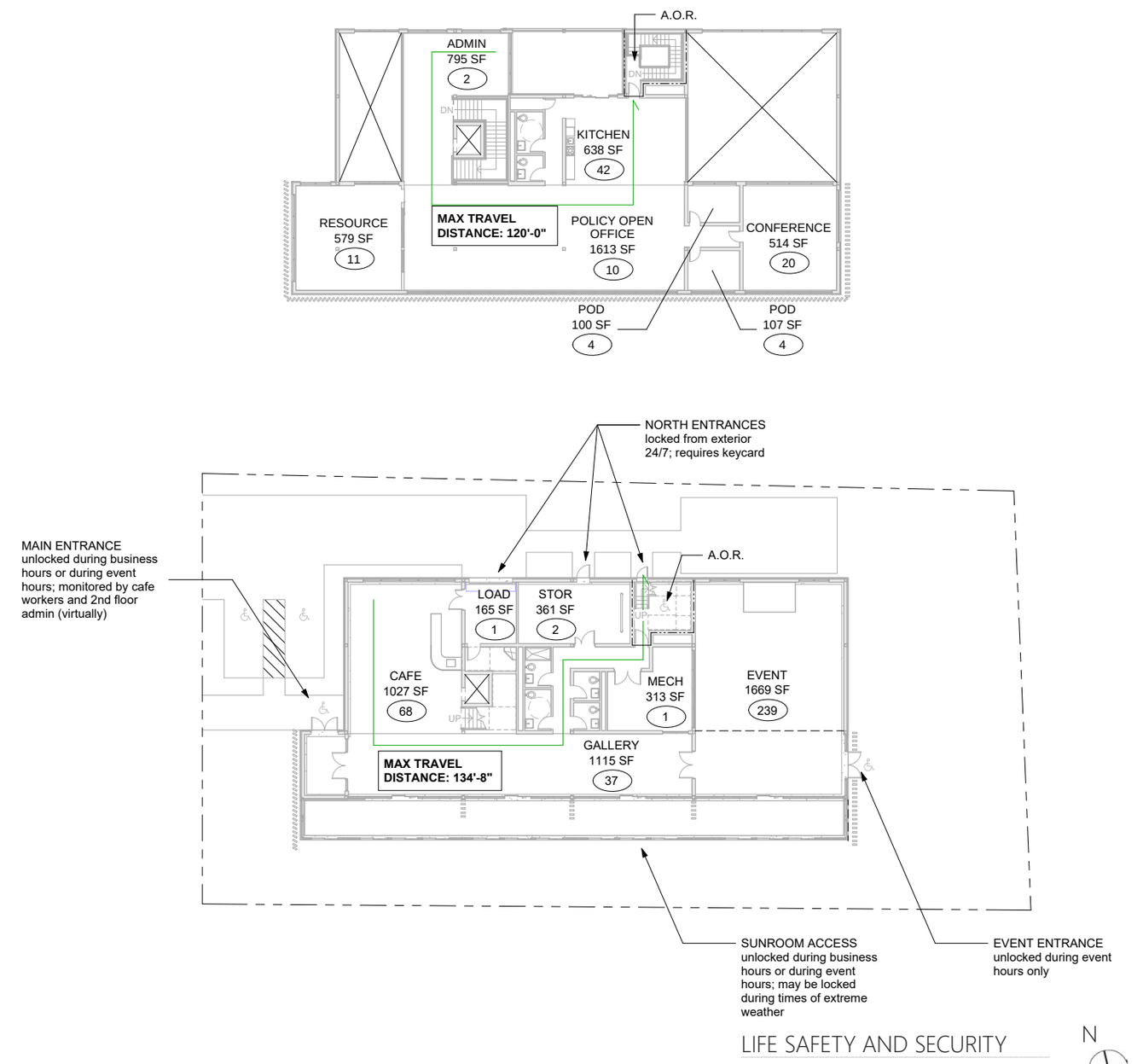
STORMWATER
MANAGMENT:

VOLUME TO COLLECT: 11820.18 cubic feet

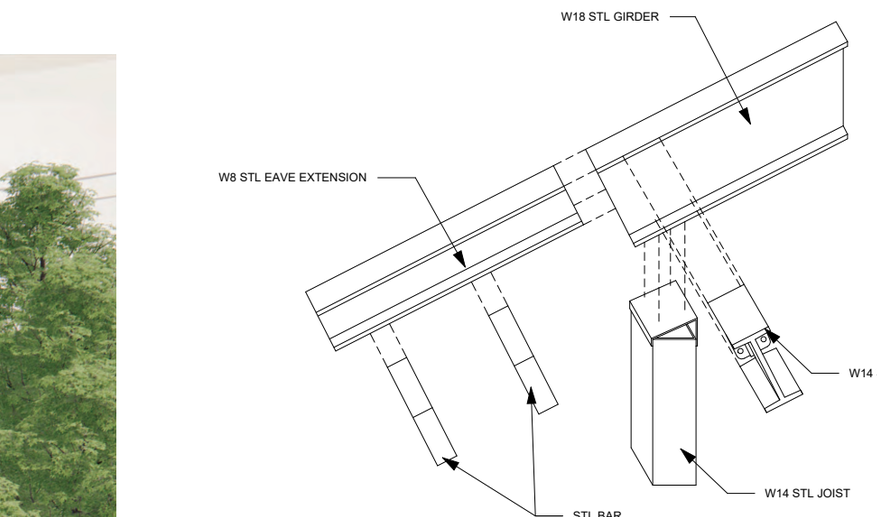
STORAGE PROVIDED:
785 cubic feet cistern
3200 cubic feet of retention swales


N
MONTGOMERY AVE

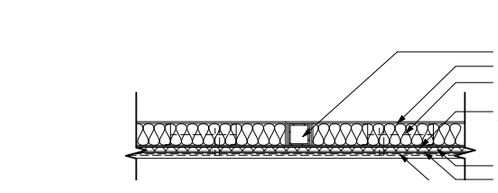
SITE PLAN
SCALE: 1'-0" = 1/32"


A.O.R.
ADMIN 795 SF 2
KITCHEN 638 SF 42
RESOURCE 579 SF 11
MAX TRAVEL DISTANCE: 120'-0"
POLICY OPEN OFFICE 1613 SF 10
CONFERENCE 514 SF 20
POD 100 SF 4
POD 107 SF 4
NORTH ENTRANCES locked from exterior 24/7; requires keycard
MAIN ENTRANCE unlocked during business hours or during event hours; monitored by cafe workers and 2nd floor admin (virtually)
LOAD 165 SF 1
STOR 361 SF 2
CAFE 1027 SF 68
MECH 313 SF 1
EVENT 1669 SF 239
GALLERY 1115 SF 37
MAX TRAVEL DISTANCE: 134'-8"
SUNROOM ACCESS unlocked during business hours or during event hours; may be locked during times of extreme weather
EVENT ENTRANCE unlocked during event hours only

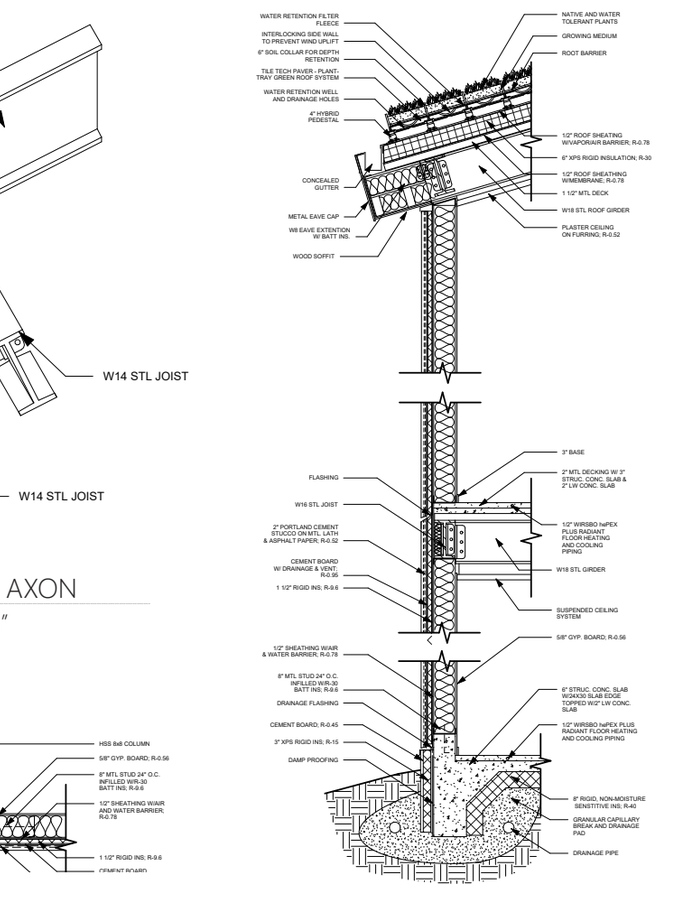
LIFE SAFETY AND SECURITY
N.T.S.


W18 STL GIRDER
W8 STL EAVE EXTENSION
W14 STL JOIST
STL BAR
W14 STL JOIST

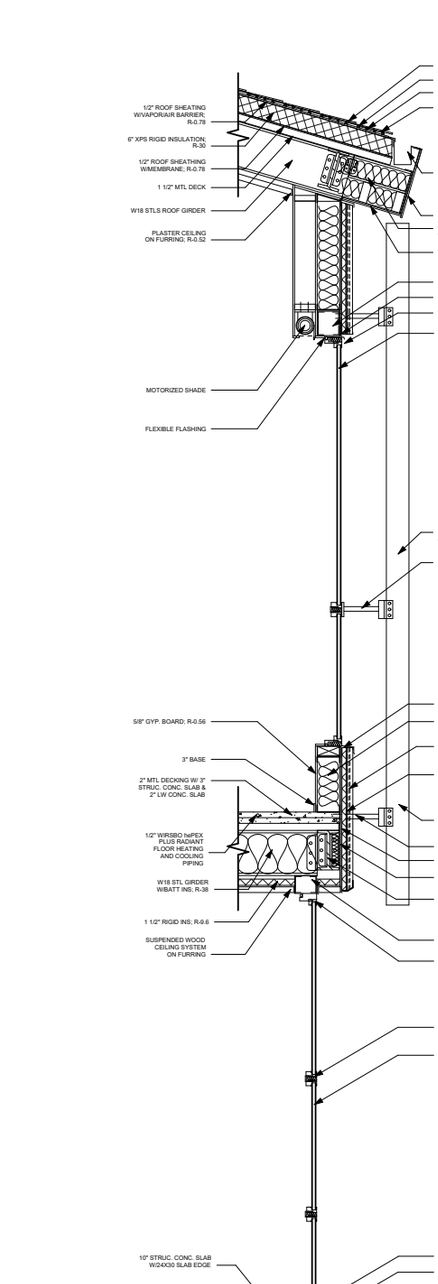
EAVE DETAIL AXON
SCALE: 1'-0" = 1"

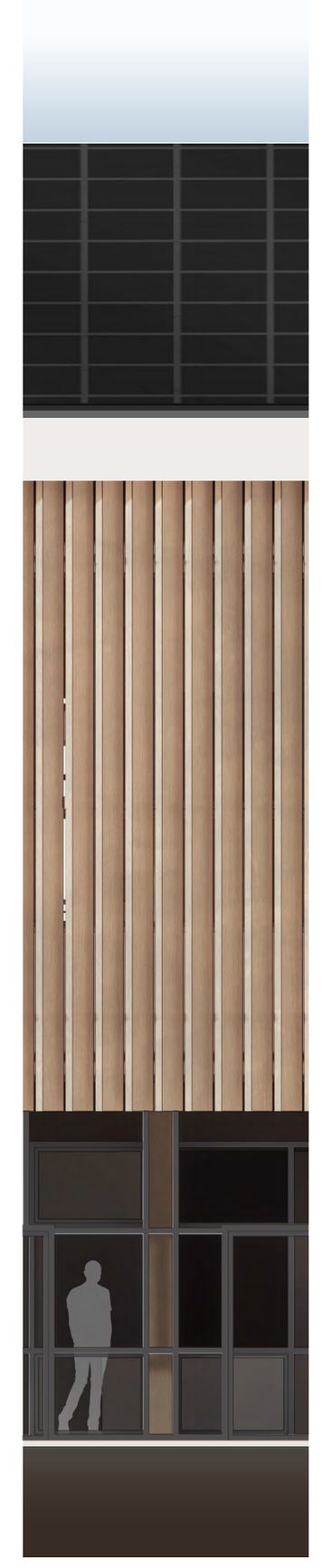


TYPICAL WALL PLAN
SCALE: 1'-0" = 1/2"

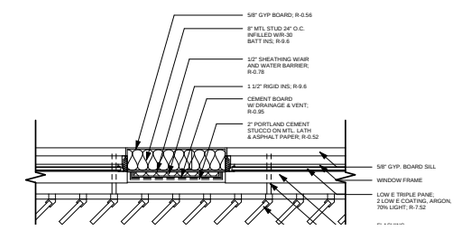


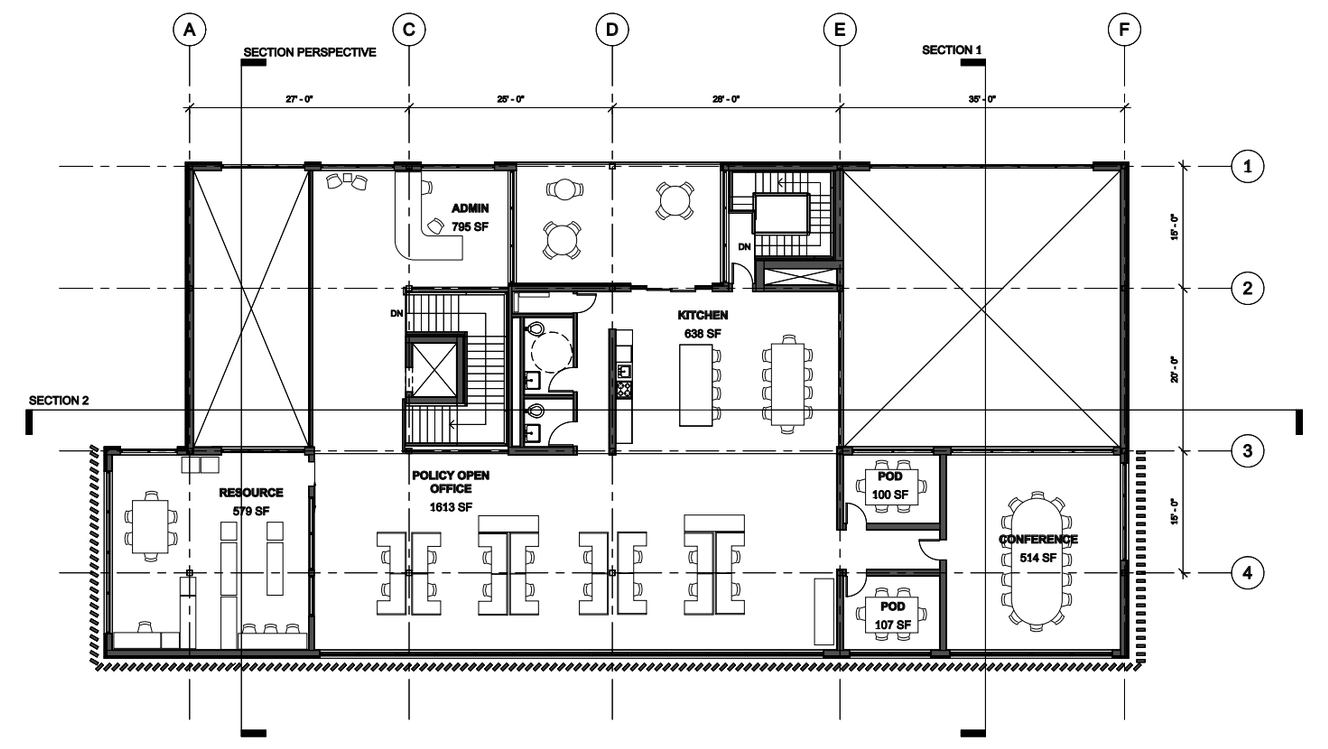
TYPICAL WALL SECTION
SCALE: 1'-0" = 1/2"



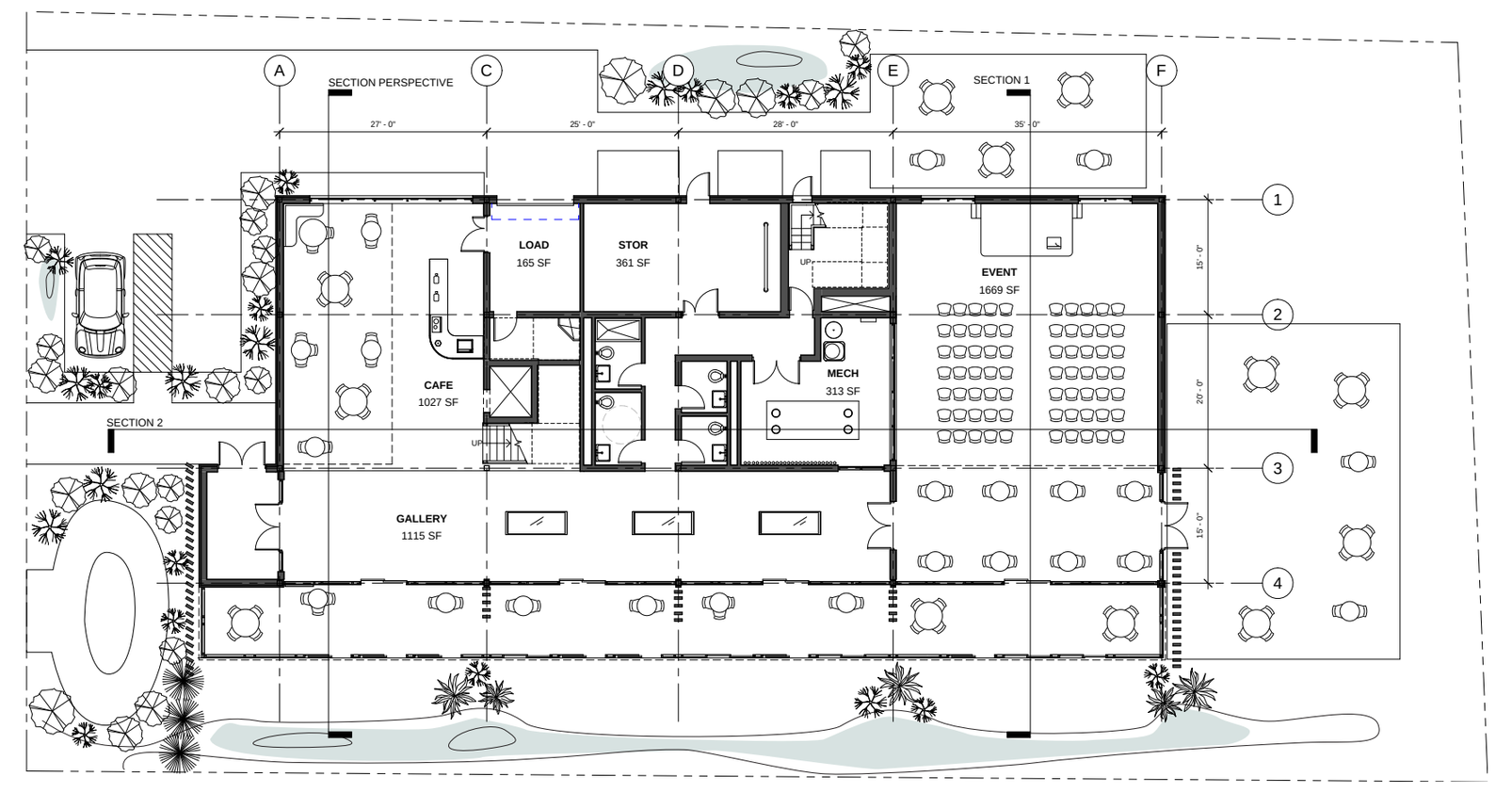


FACADE DETAIL
SCALE: 1'-0" = 1/2"

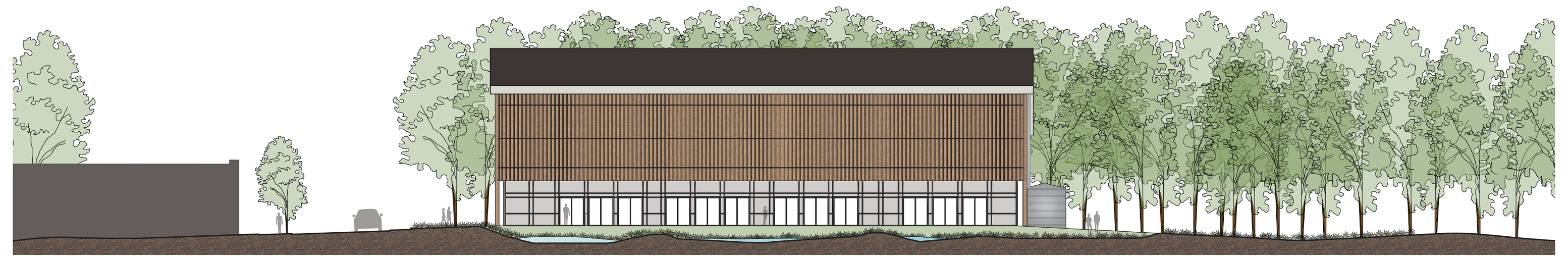



SECTION PERSPECTIVE
SECTION 1
SECTION 2
ADMIN 795 SF
KITCHEN 638 SF
RESOURCE 579 SF
POLICY OPEN OFFICE 1613 SF
POD 100 SF
POD 107 SF
CONFERENCE 514 SF

FLOOR 2 PLAN
SCALE: 1'-0" = 1/8"

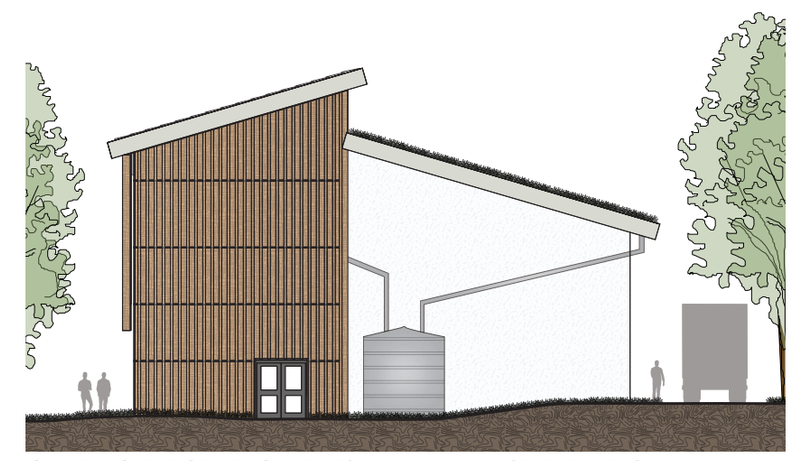

SECTION PERSPECTIVE
SECTION 1
SECTION 2
LOAD 165 SF
STOR 361 SF
CAFE 1027 SF
MECH 313 SF
EVENT 1669 SF
GALLERY 1115 SF

FLOOR 1 PLAN
SCALE: 1'-0" = 1/8"



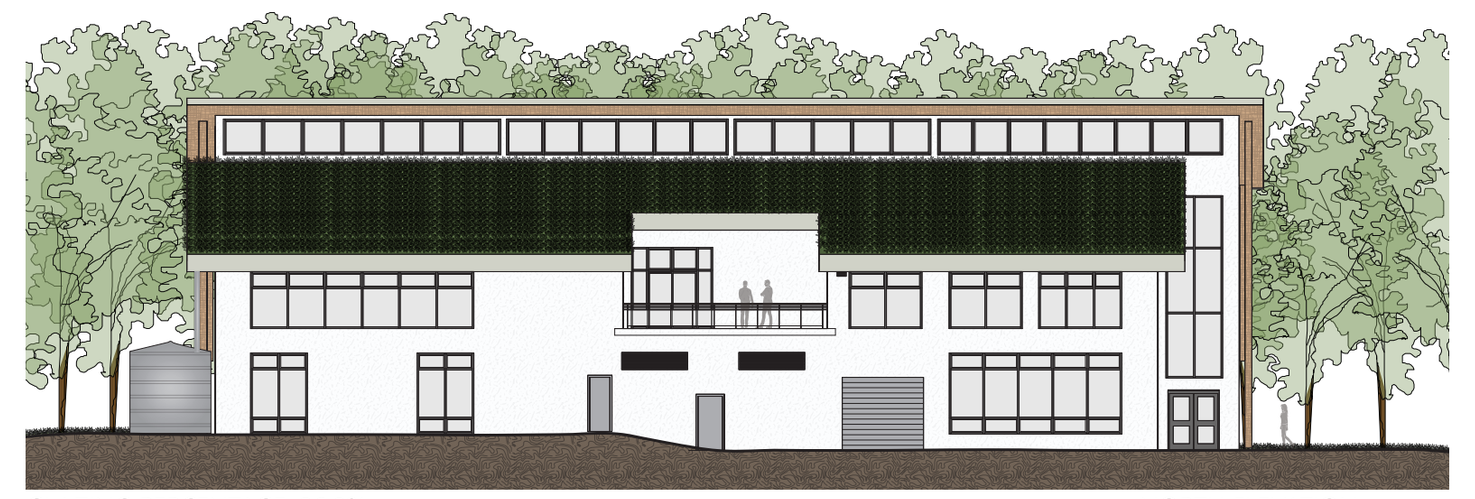
GLAZING PERCENTAGE: 63.0%

SOUTH ELEVATION
SCALE: 1'-0=1/8"



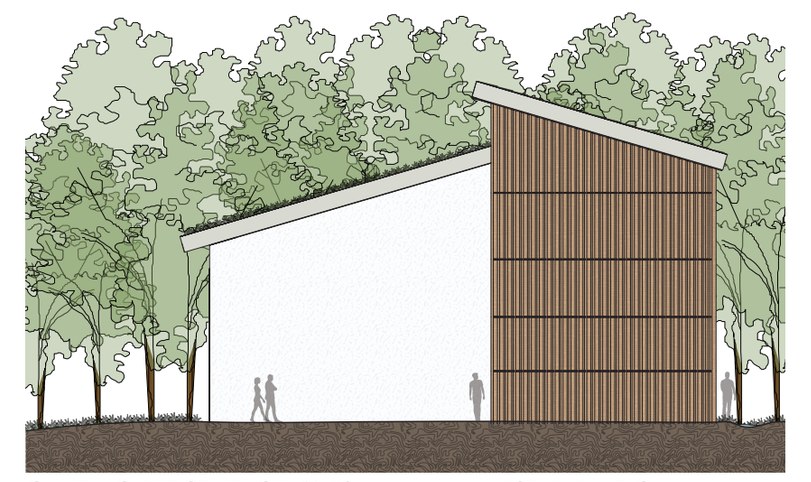
GLAZING PERCENTAGE: 20.7%

EAST ELEVATION
SCALE: 1'-0=1/8"



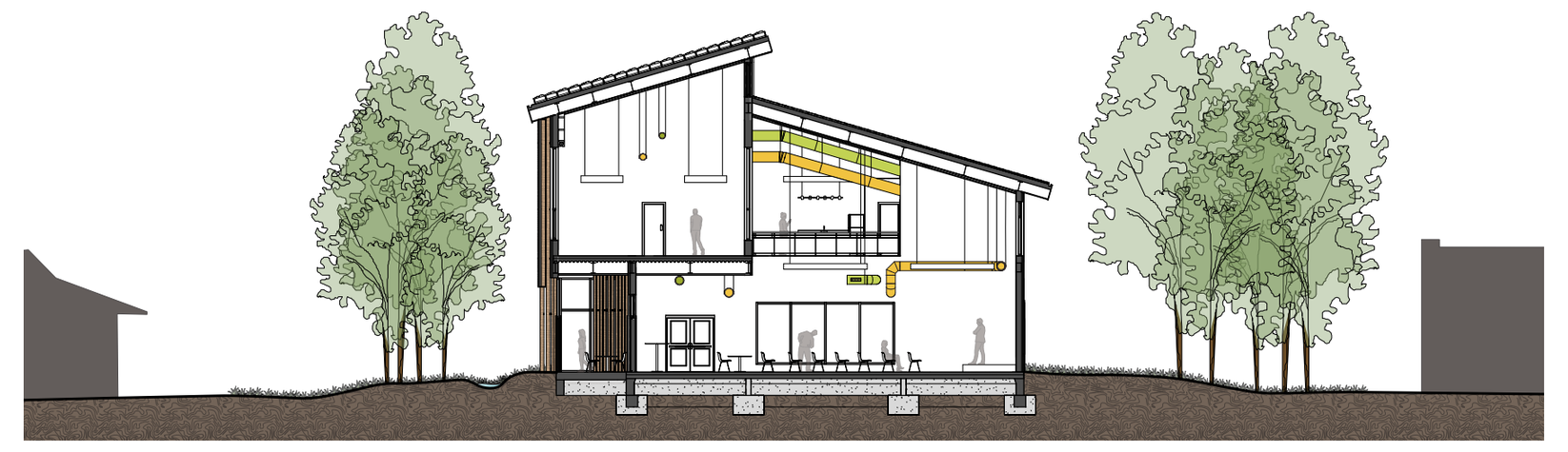
GLAZING PERCENTAGE: 36.8%

NORTH ELEVATION
SCALE: 1'-0=1/8"

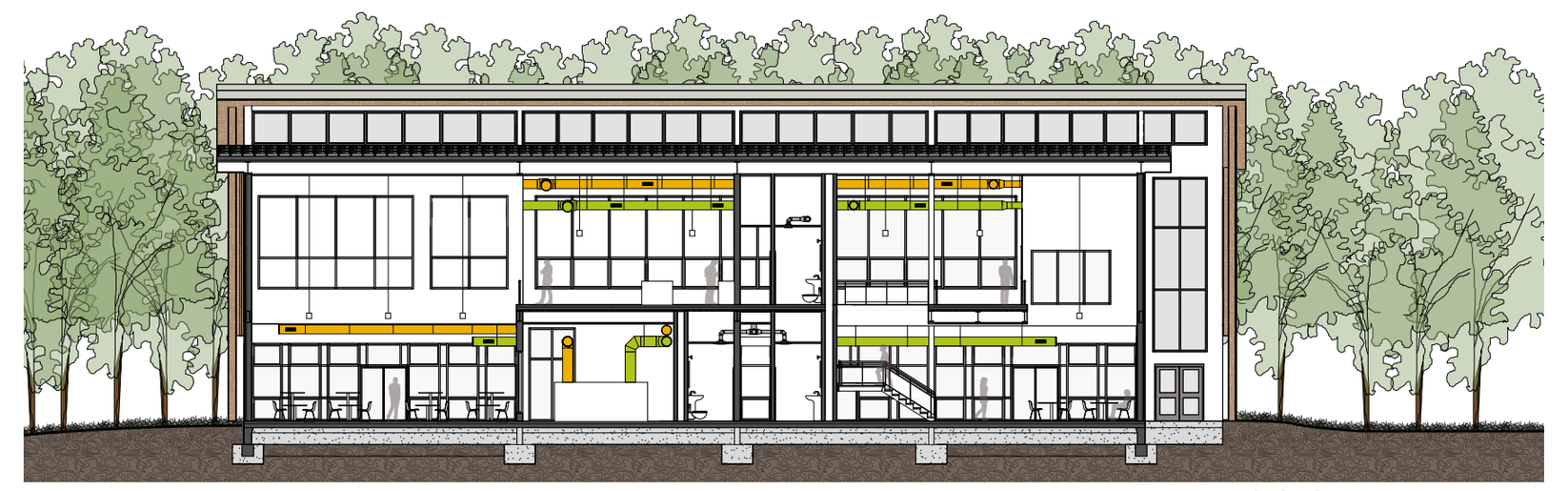


GLAZING PERCENTAGE: 18.8%

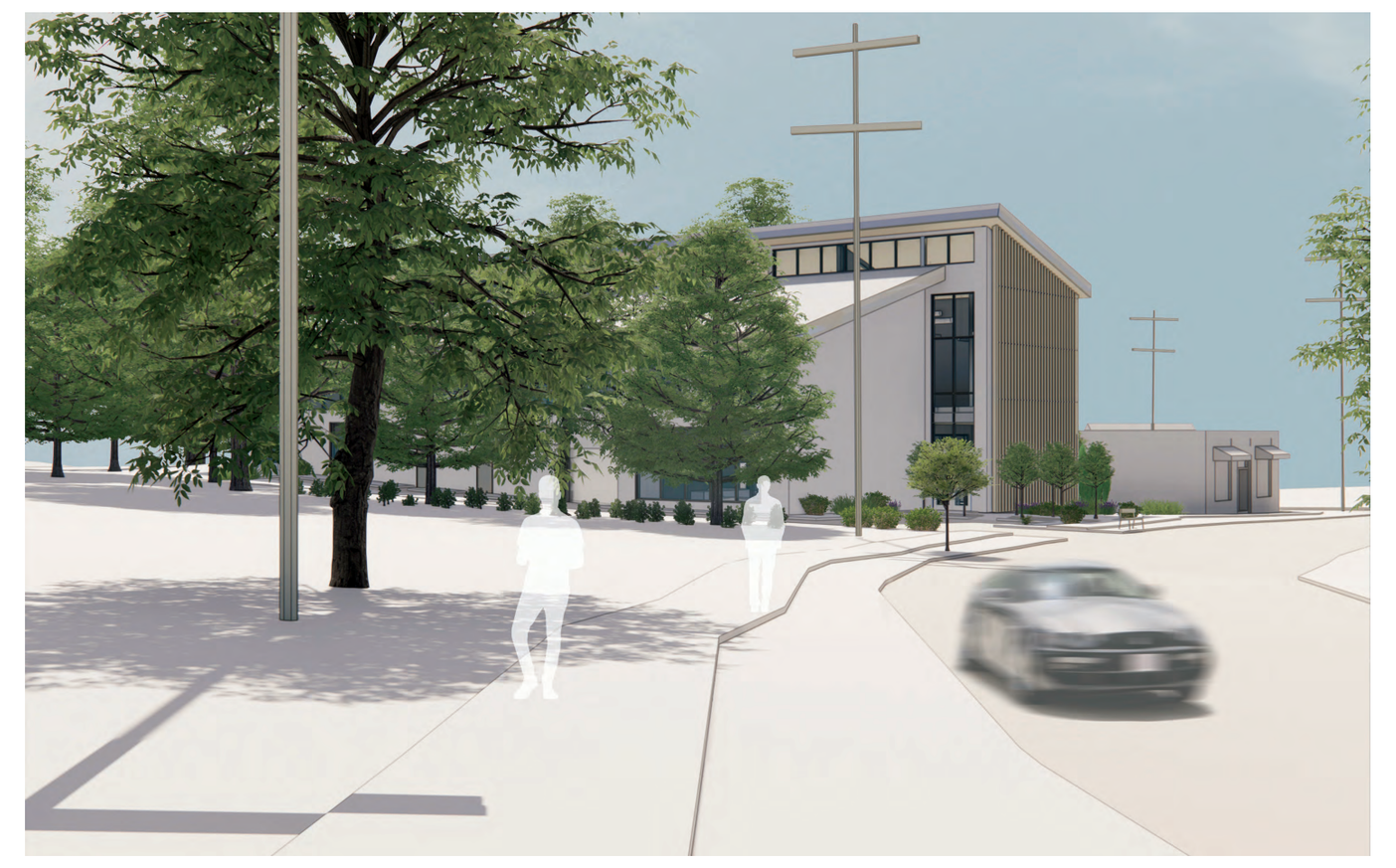
WEST ELEVATION
SCALE: 1'-0=1/8"



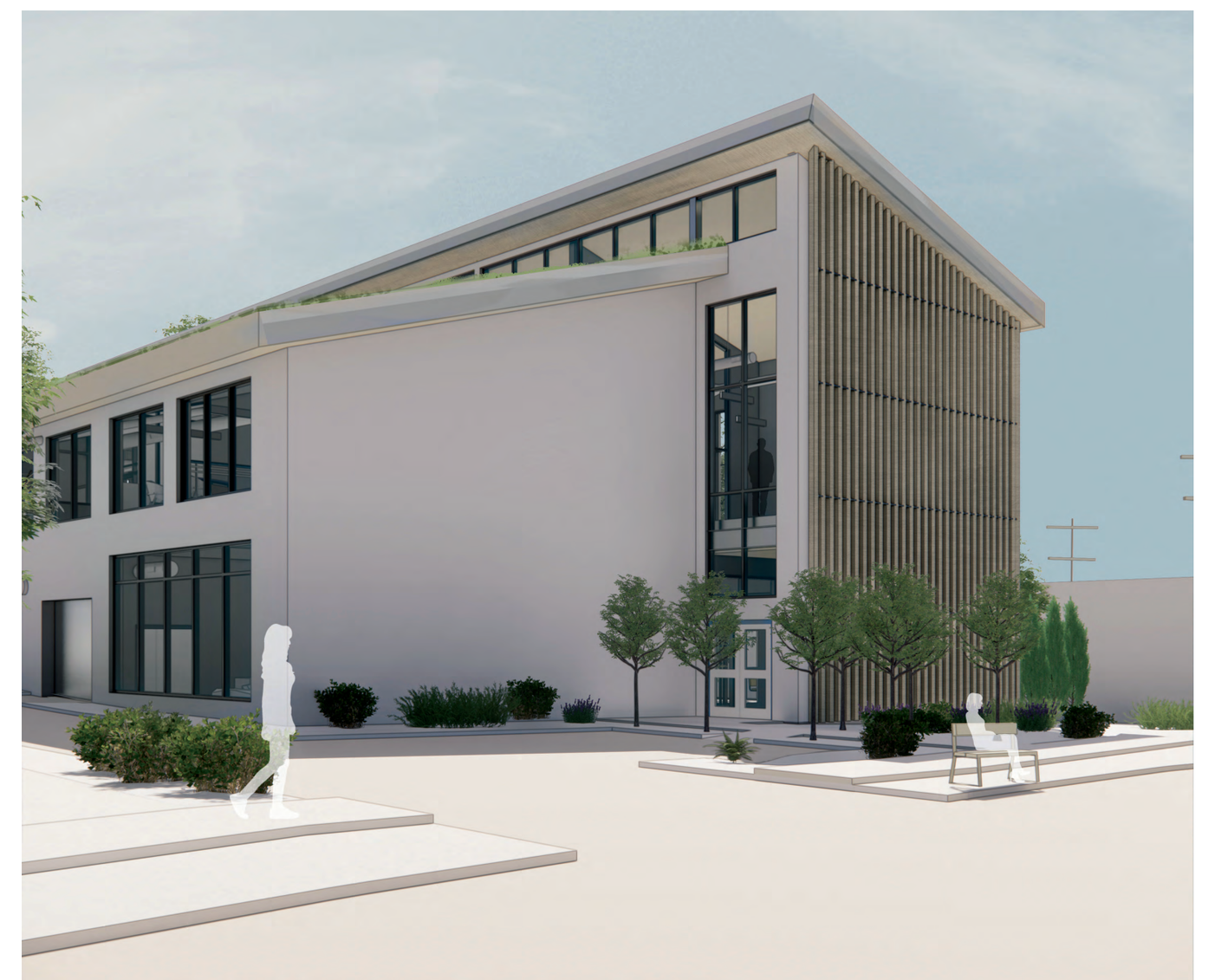
SECTION 1
SCALE: 1'-0=1/8"



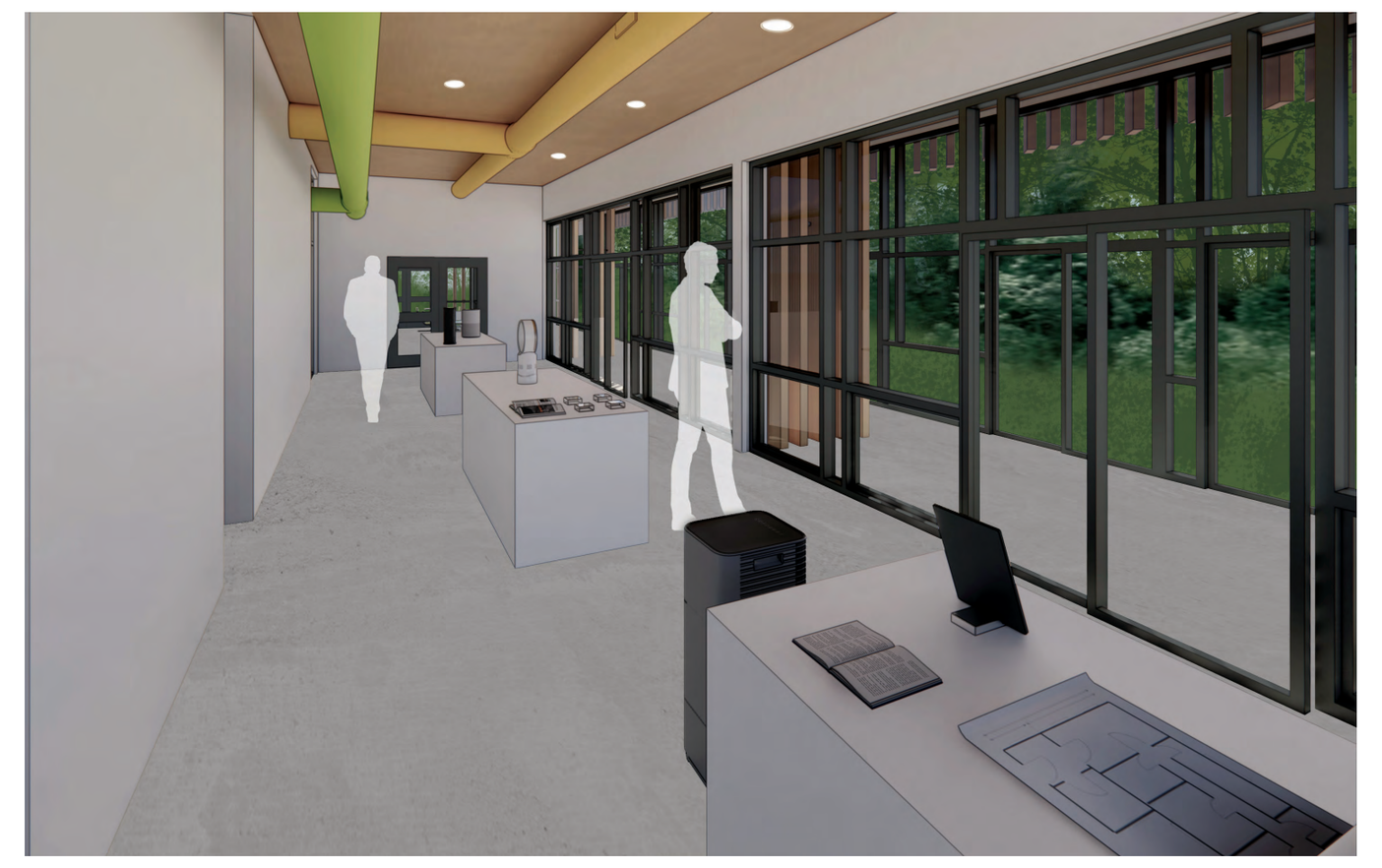
SECTION 2
SCALE: 1'-0=1/8"



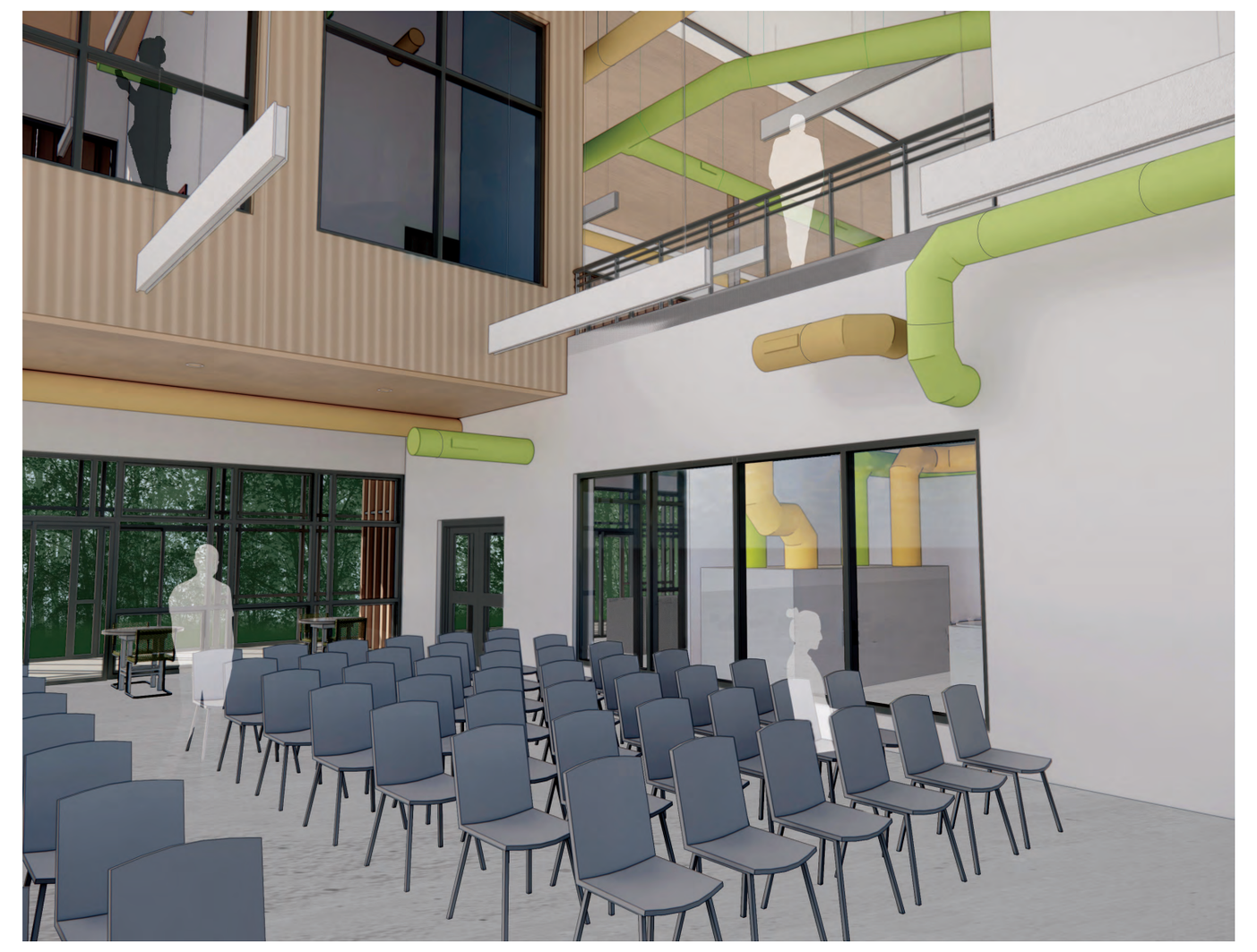
STREET



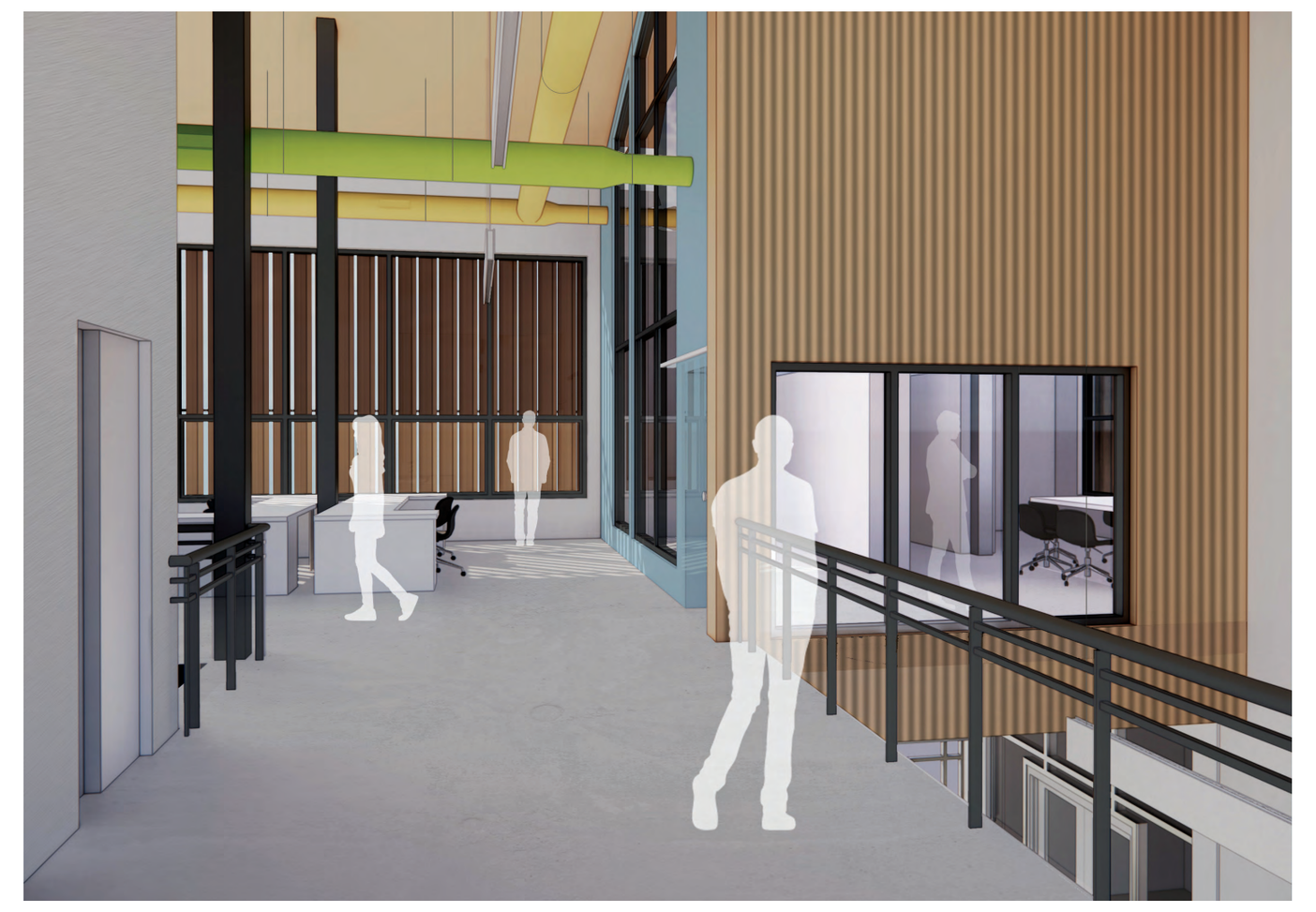
ARRIVAL



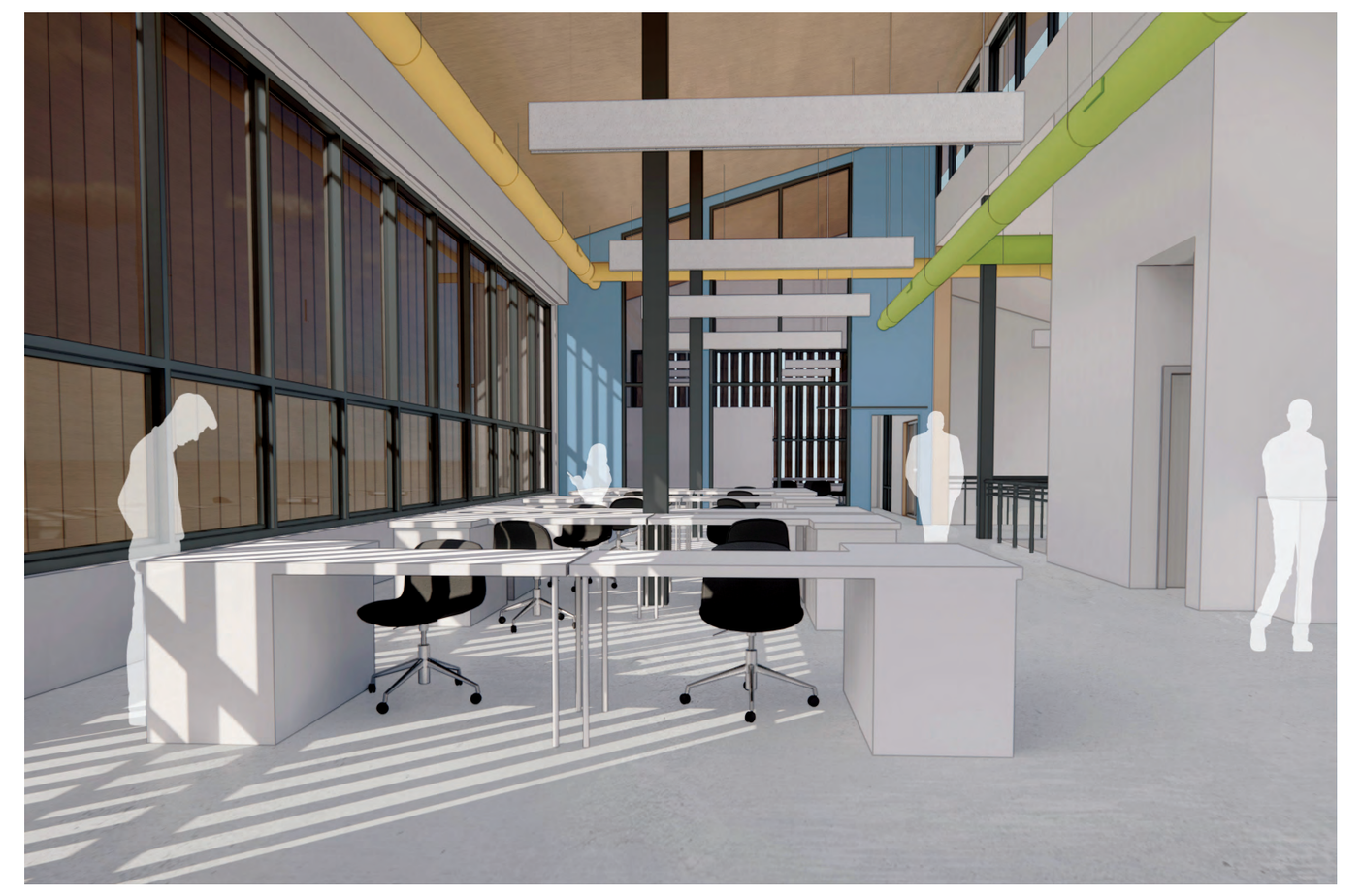
GALLERY



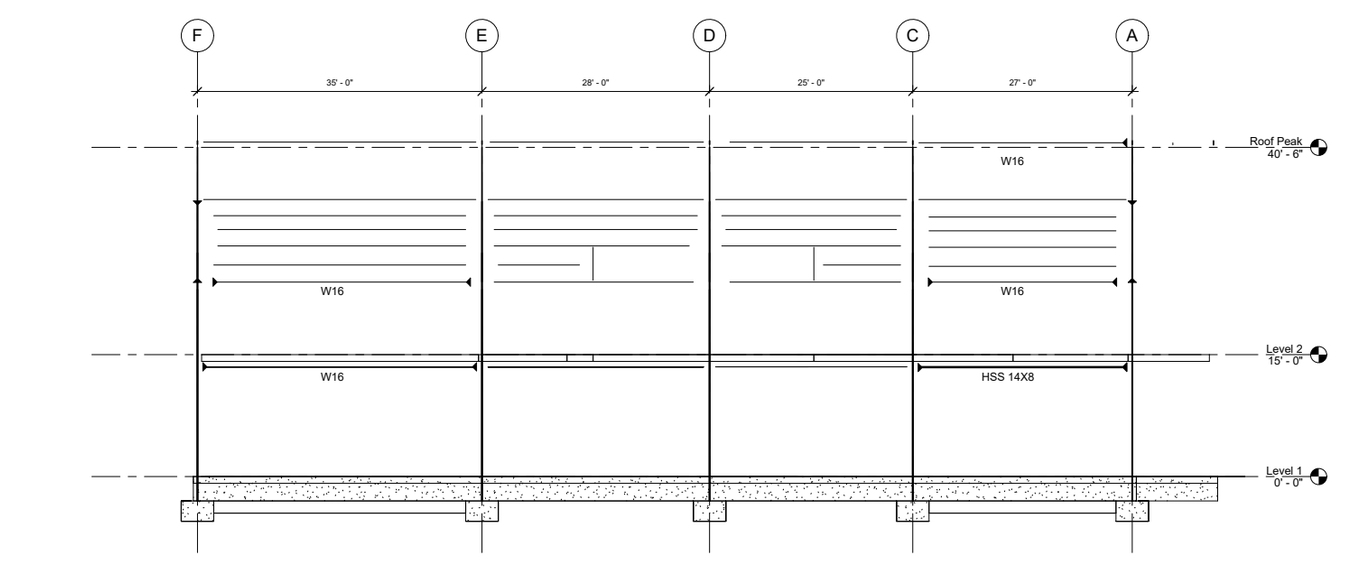
EVENT



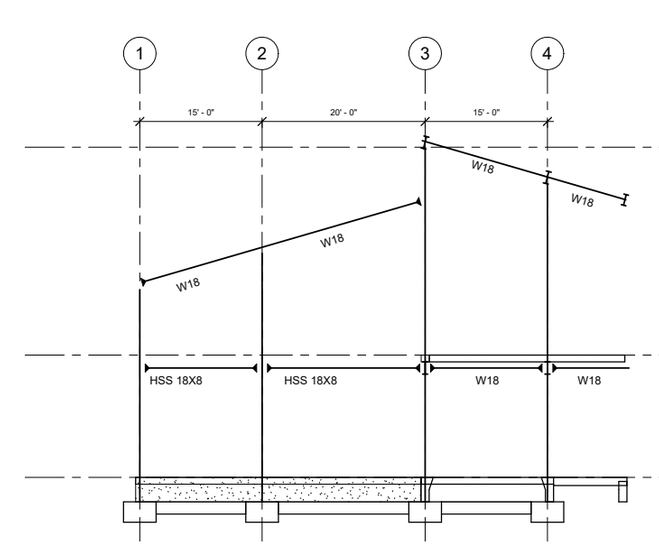
ADMIN



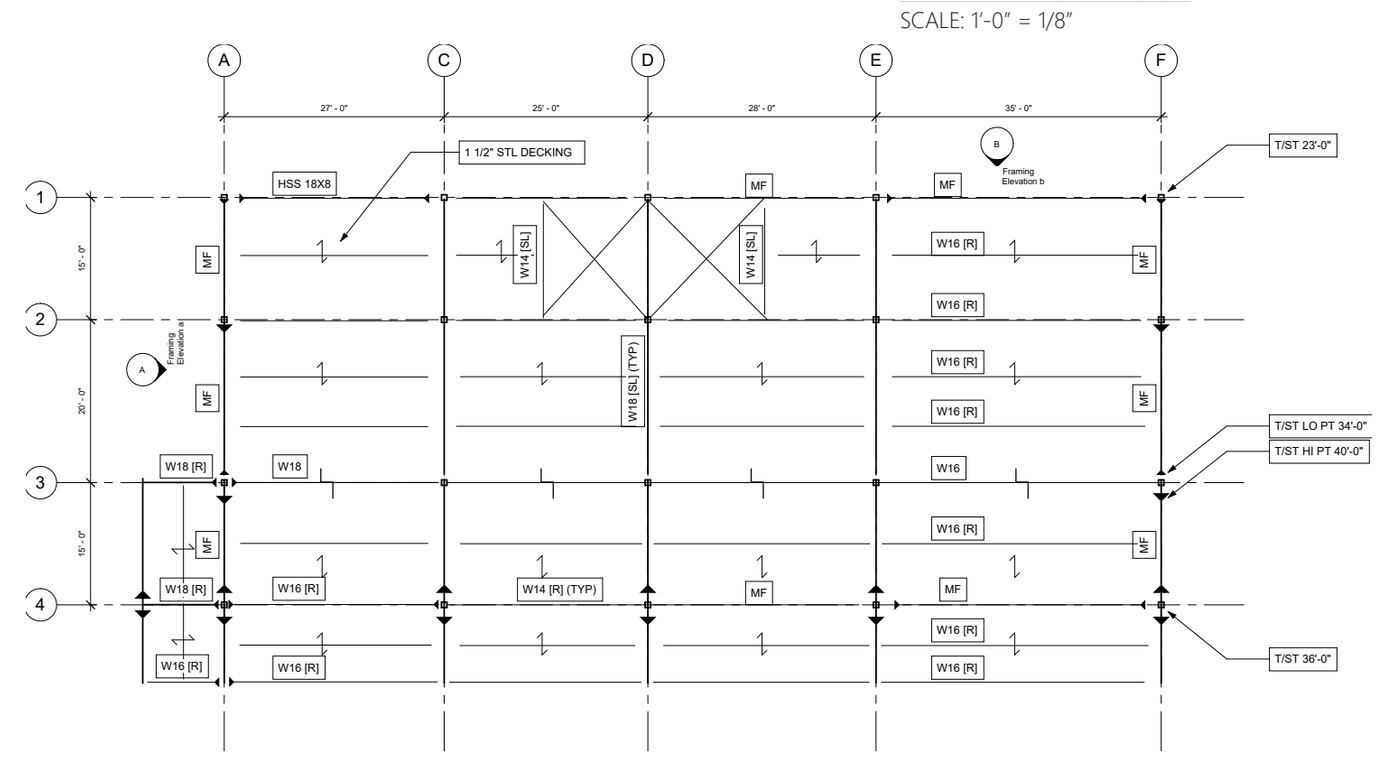
OPEN OFFICE


F
E
D
C
A
W16
W16
W16
HSS 14X8
Roof Peak 40' - 0"
Level 2 15' - 0"
Level 1 0' - 0"

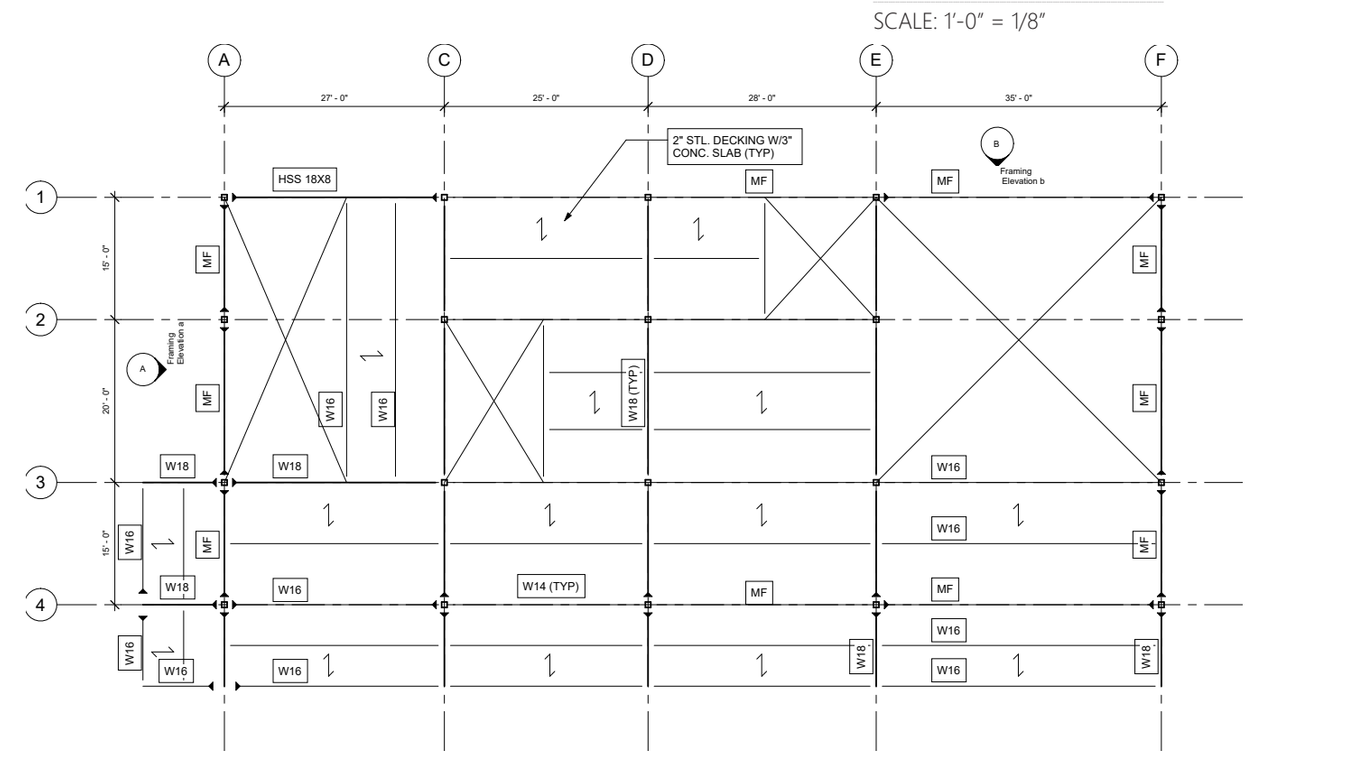
STRUCTURAL SECTION A
SCALE: 1'-0" = 1/8"


1
2
3
4
W18
W18
W18
W18
HSS 18X8
HSS 18X8
W18
W18
Roof Peak 40' - 0"
Level 2 15' - 0"
Level 1 0' - 0"

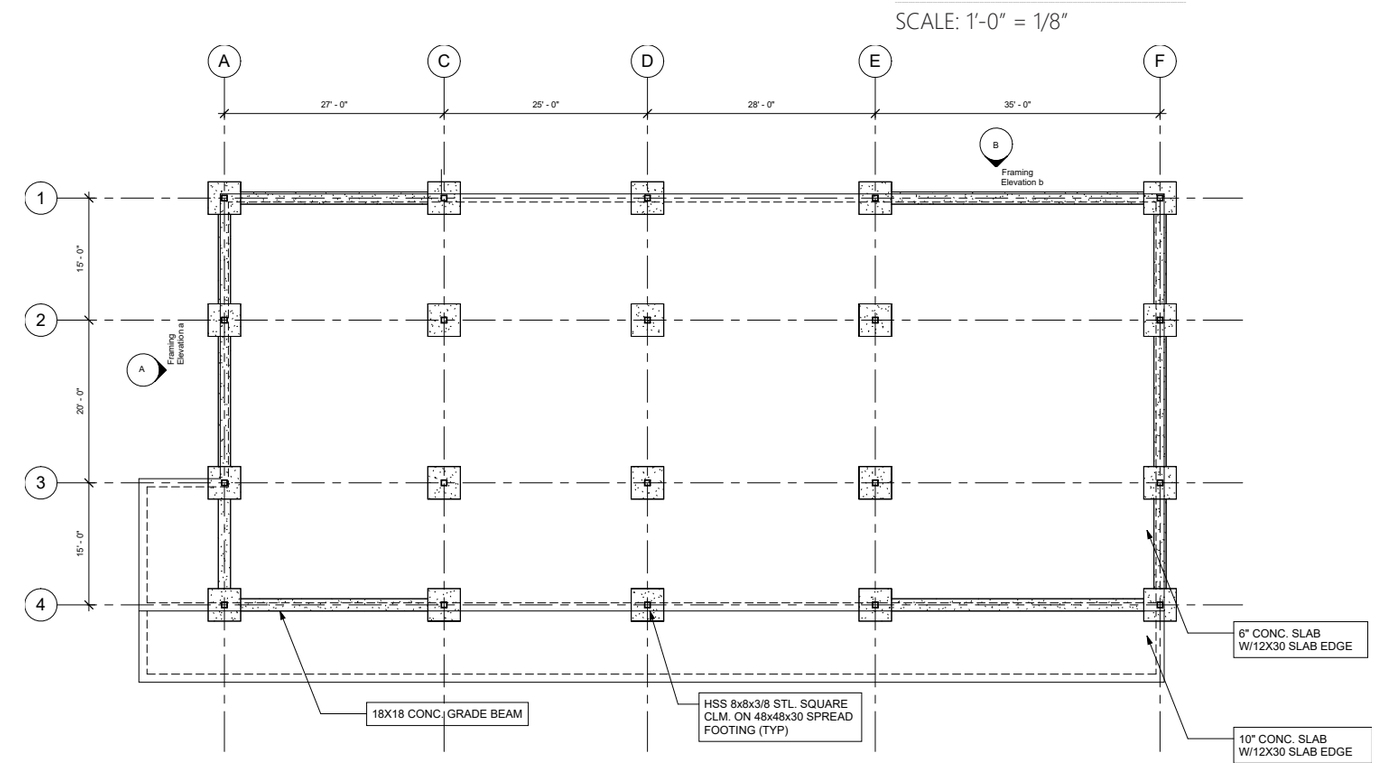
STRUCTURAL SECTION B
SCALE: 1'-0" = 1/8"


1 1/2" STL DECKING
HSS 18X8
MF
W14 [R]
W18 [R] (TYP)
W16 [R]
W14 [R] (TYP)
T/ST 23'-0"
T/ST LO PT 34'-0"
T/ST HI PT 40'-0"
T/ST 36'-0"

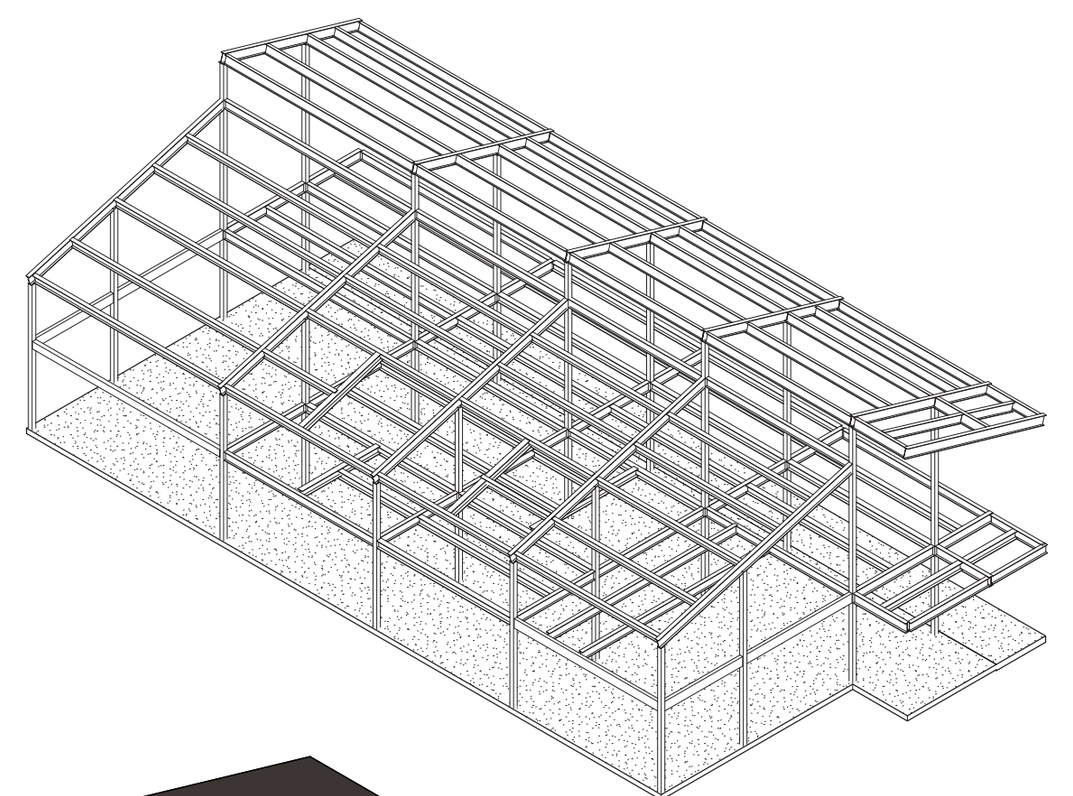
ROOF FRAMING PLAN
SCALE: 1'-0" = 1/8"


2" STL. DECKING W/3" CONC. SLAB (TYP)
HSS 18X8
MF
W18
W16
W18 (TYP)
W14 (TYP)

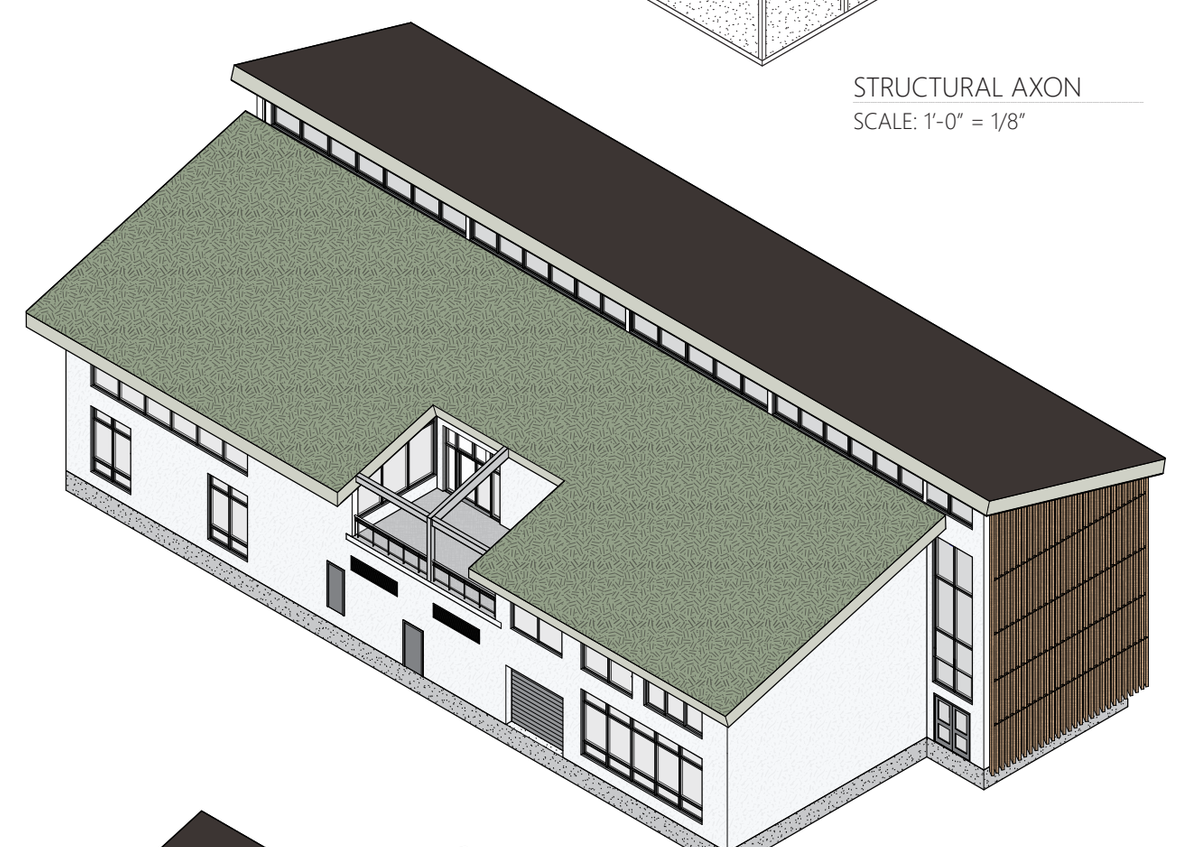
FLOOR 2 FRAMING PLAN
SCALE: 1'-0" = 1/8"


6" CONC. SLAB W/12X30 SLAB EDGE
18X18 CONC. GRADE BEAM
HSS 8x8x3/8 STL. SQUARE CLM. ON 48x48x30 SPREAD FOOTING (TYP)
10" CONC. SLAB W/12X30 SLAB EDGE

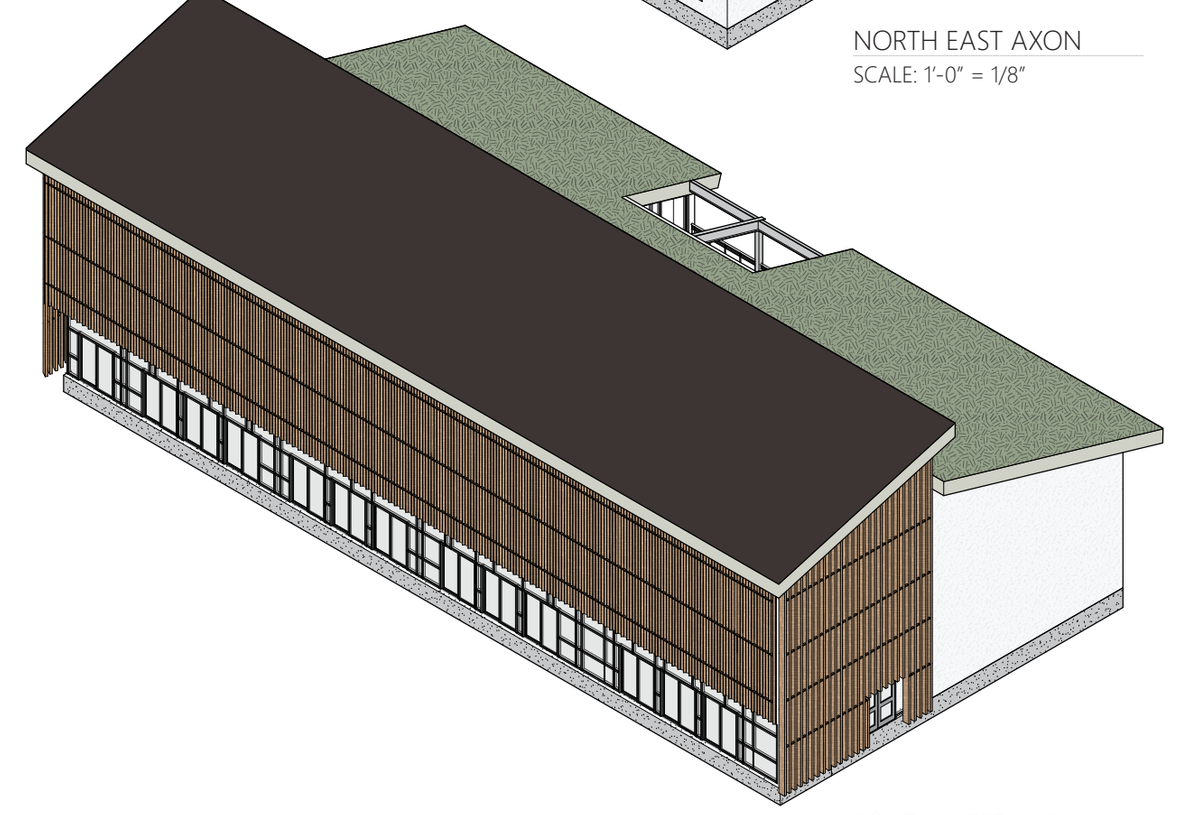
FOUNDATION PLAN
SCALE: 1'-0" = 1/8"



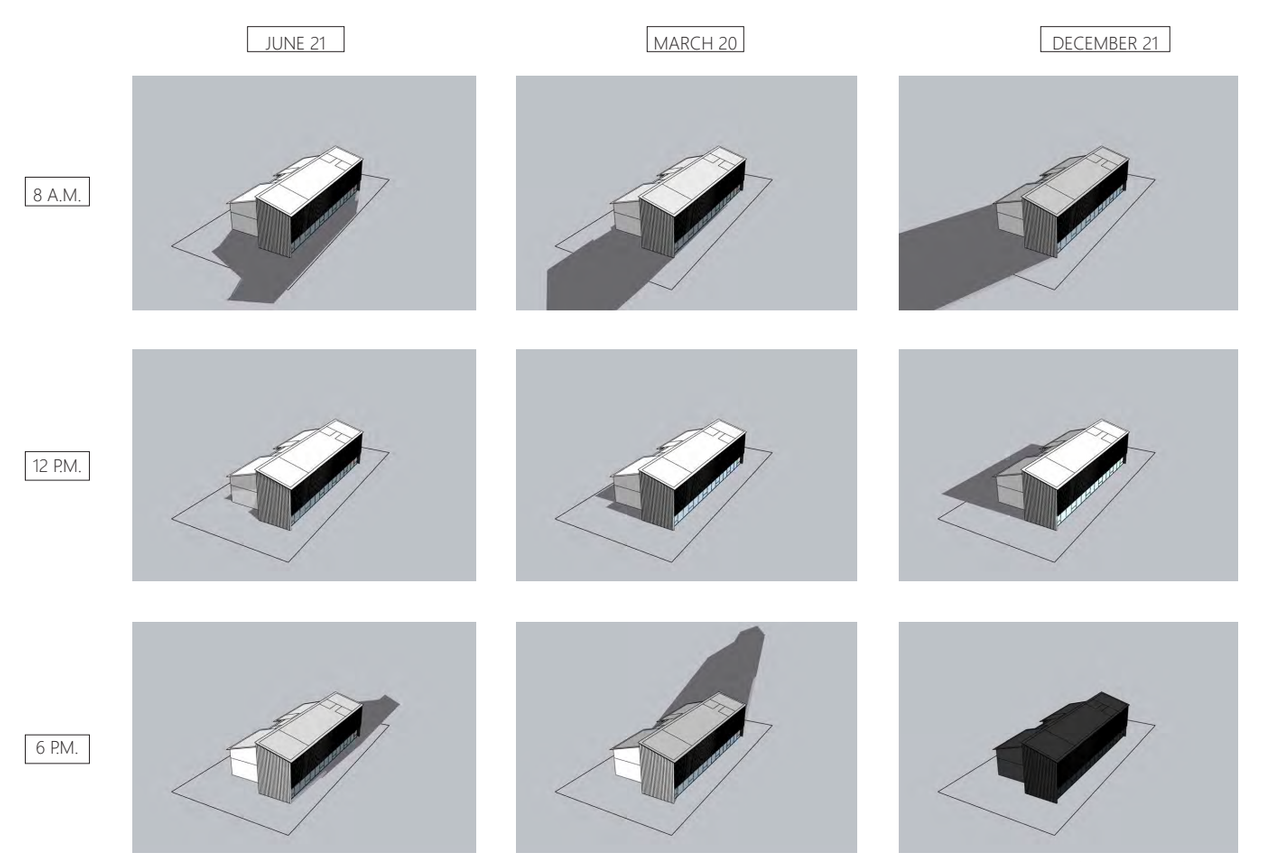
STRUCTURAL AXON
SCALE: 1'-0" = 1/8"



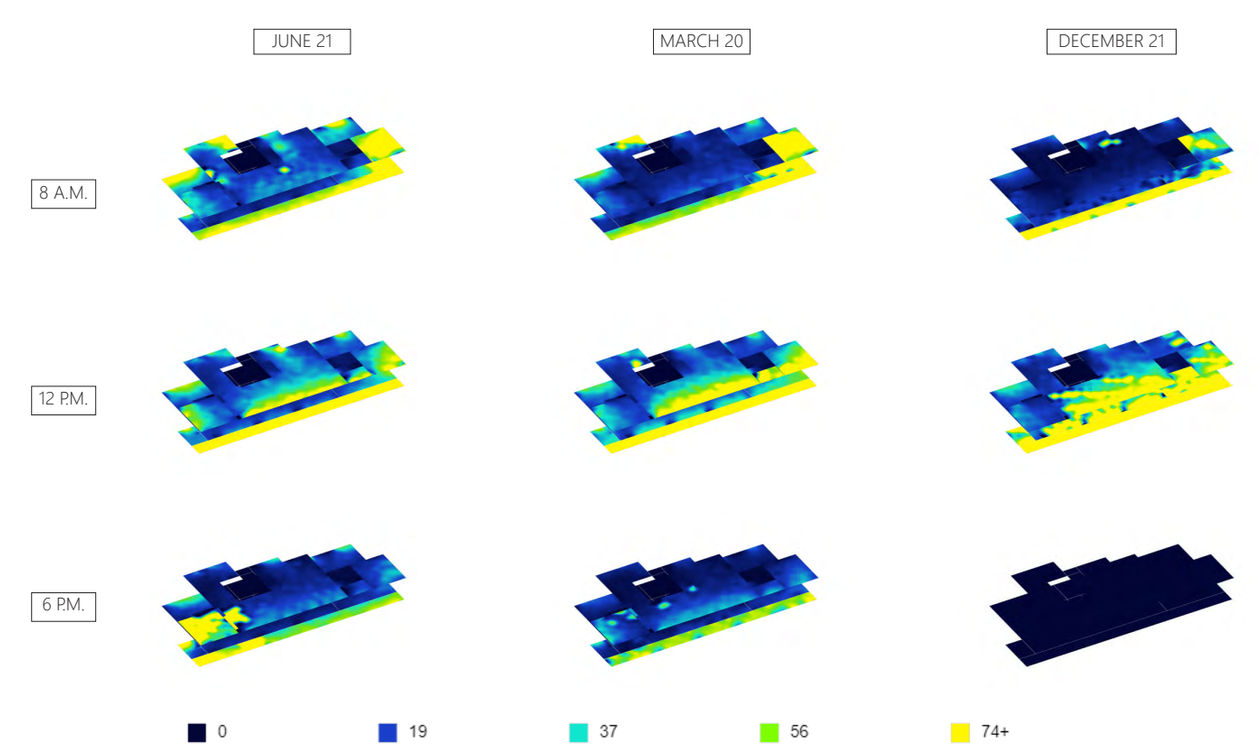
NORTH EAST AXON
SCALE: 1'-0" = 1/8"



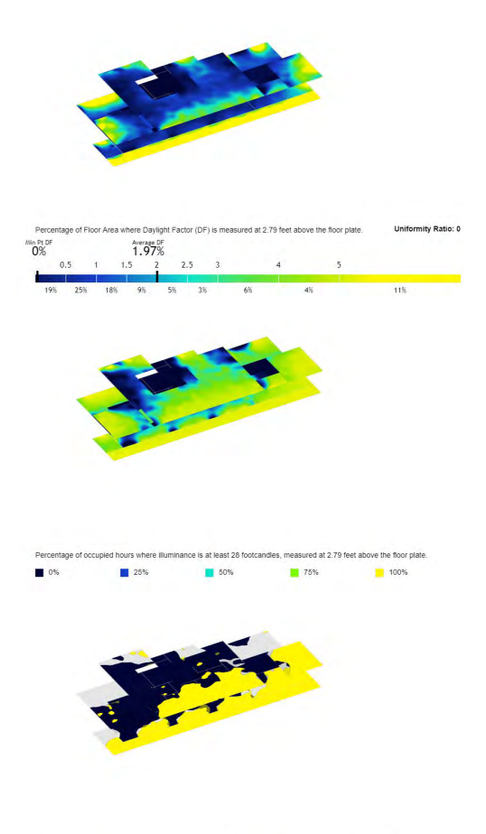
SOUTH WEST AXON
SCALE: 1'-0" = 1/8"

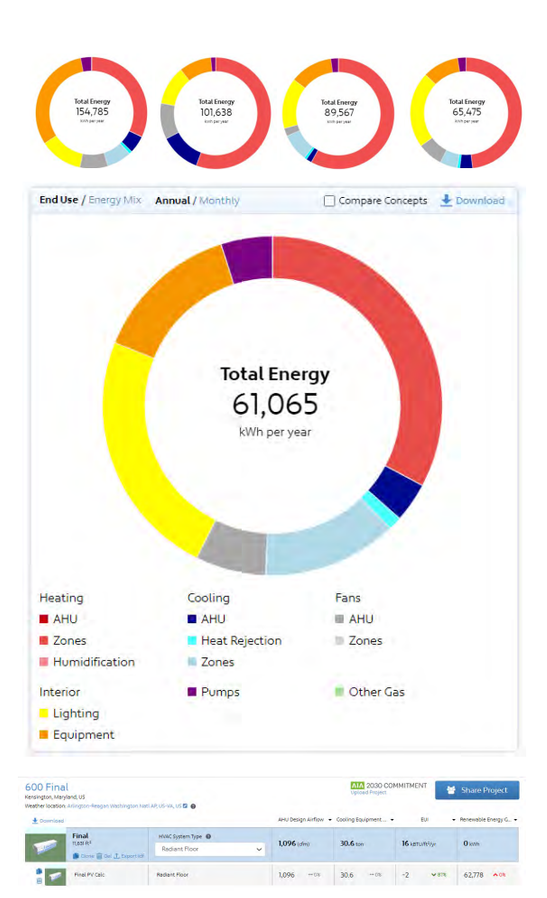

JUNE 21
MARCH 20
DECEMBER 21
8 A.M.
12 PM.
6 PM.

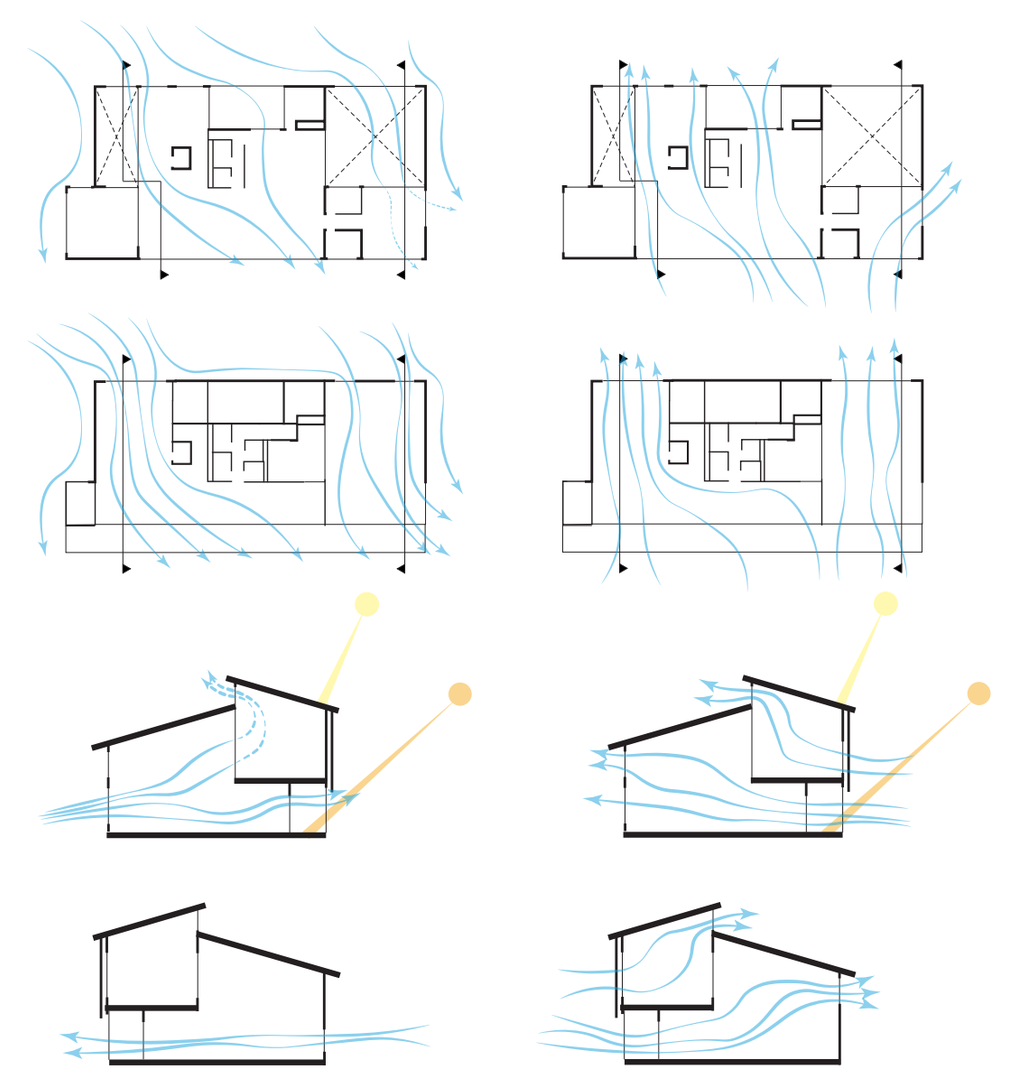
SHADOW STUDY



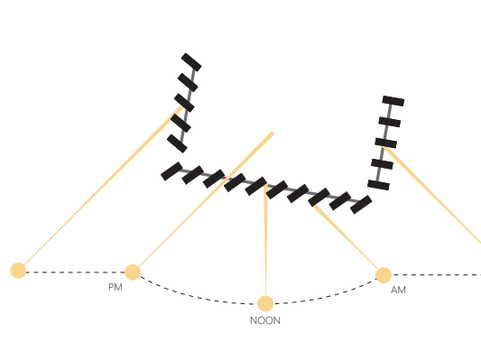
FOOTCANDLES



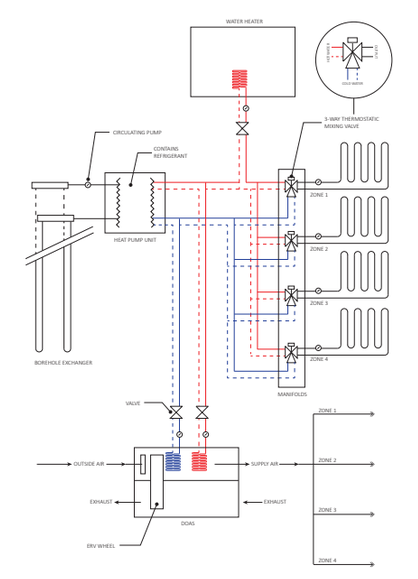


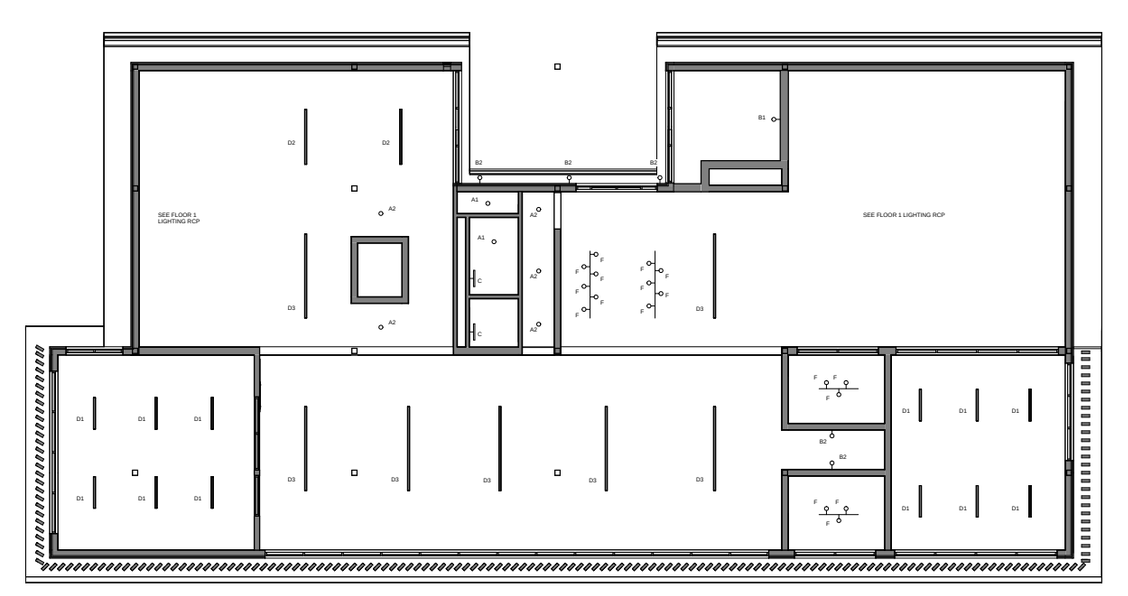


BIOCLIMATIC STRATEGIES
N.T.S.

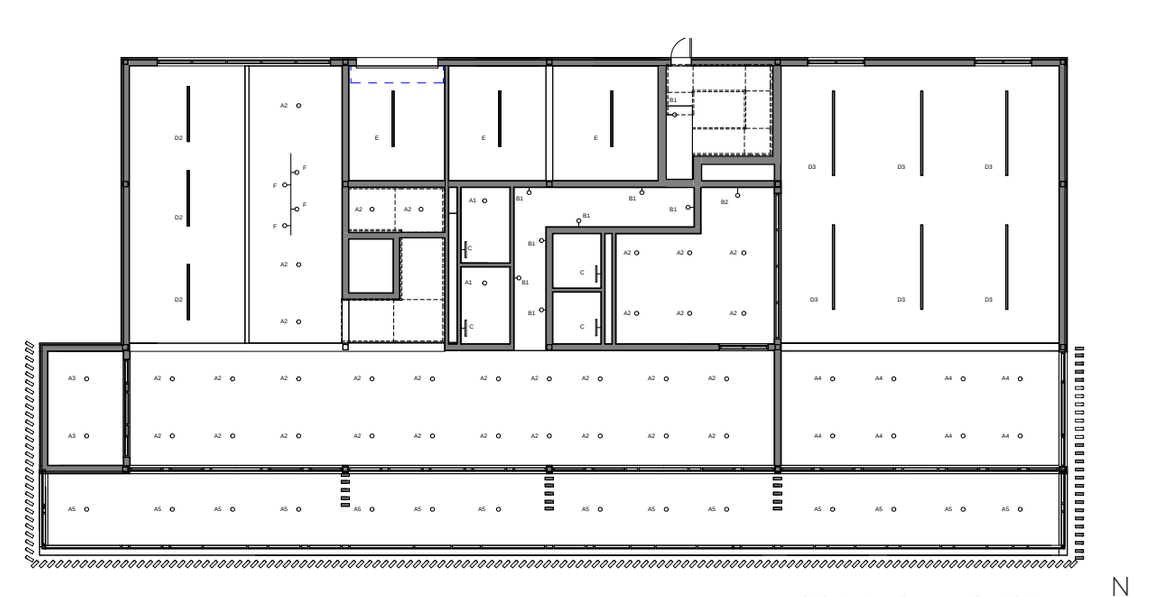


LOUVER ANALYSIS
SUN PATH DIAGRAM

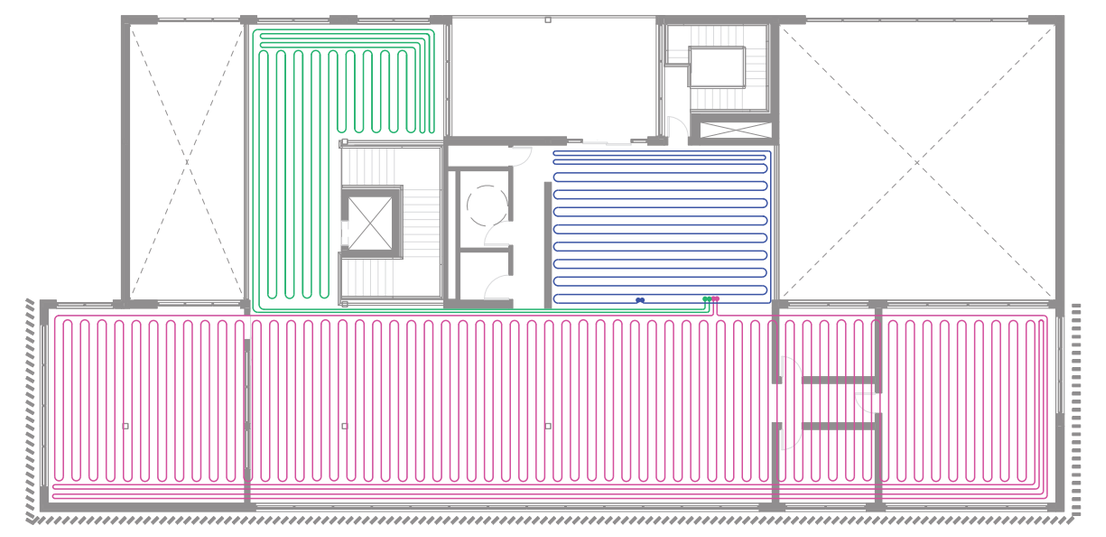




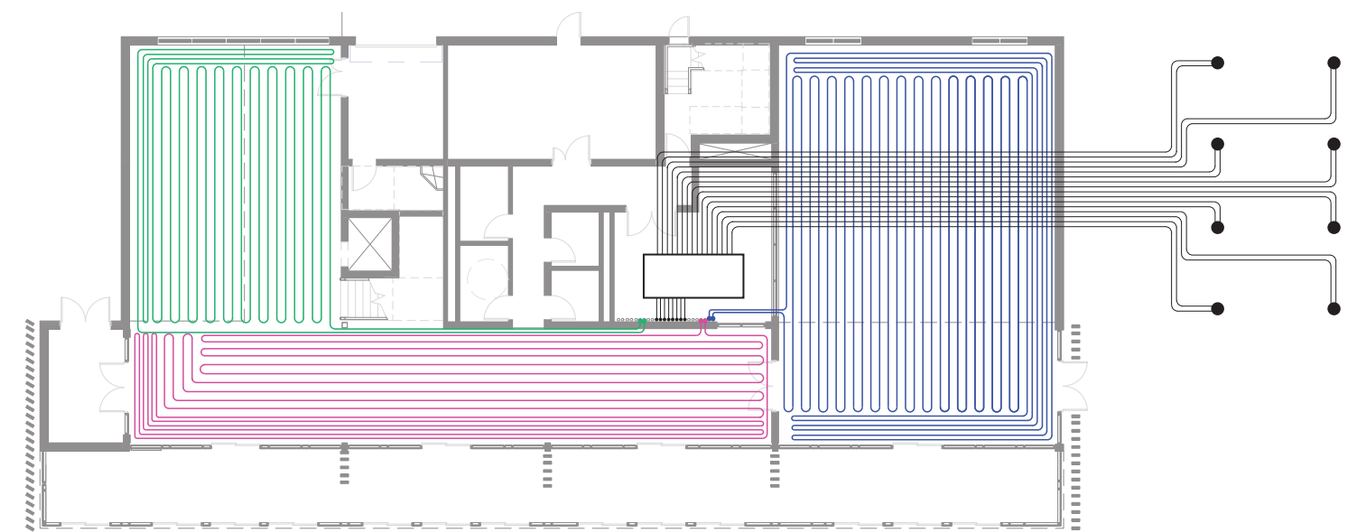
FLOOR 1 LIGHTING RCP
SCALE: 1'-0" = 1/8"



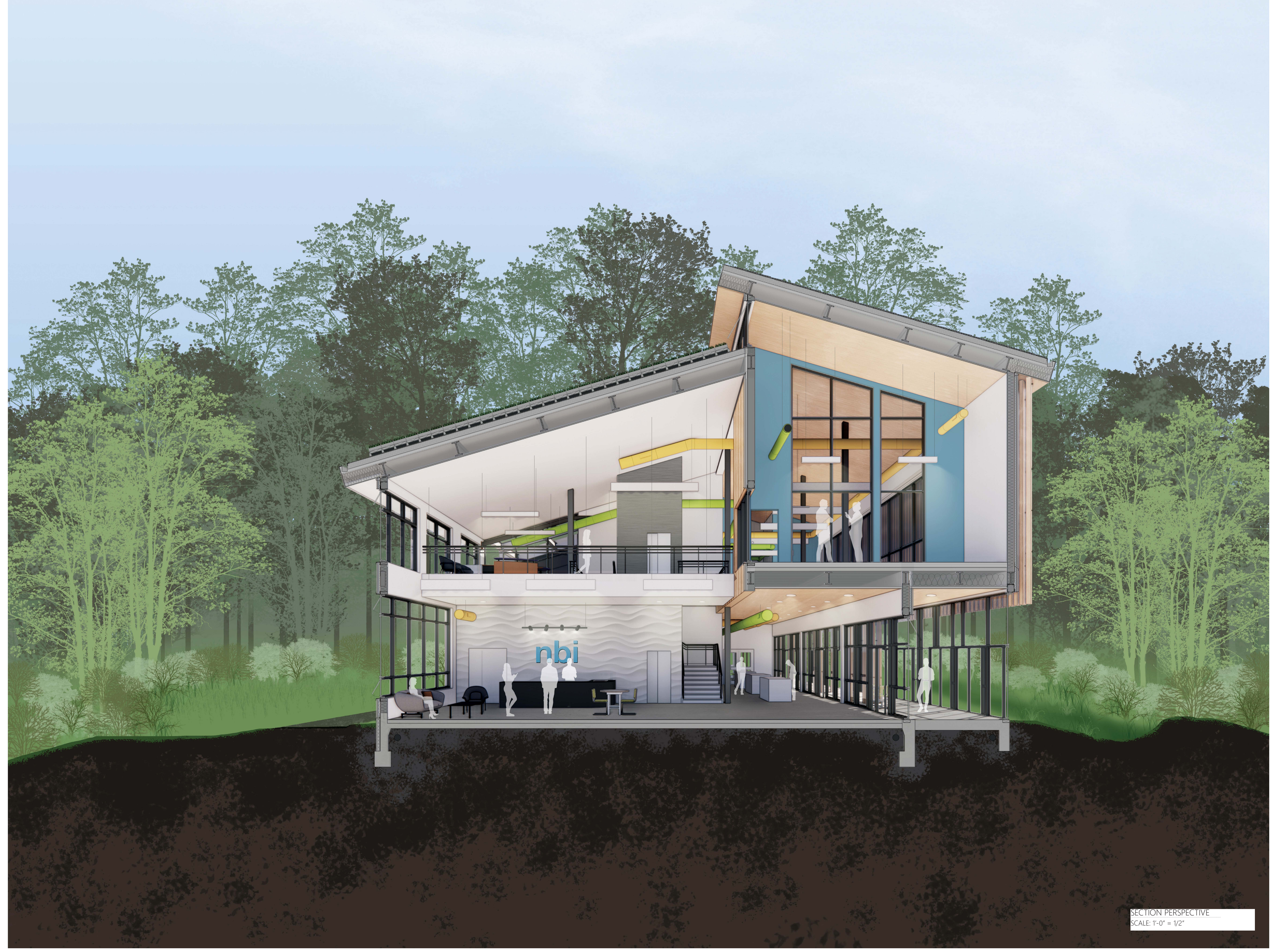
FLOOR 1 LIGHTING RCP
SCALE: 1'-0" = 1/8"



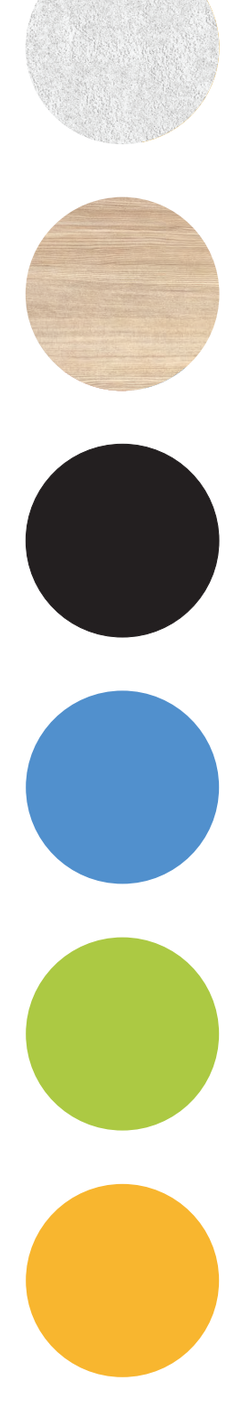
FLOOR 2 RADIANT PLAN
SCALE: 1'-0" = 1/8"

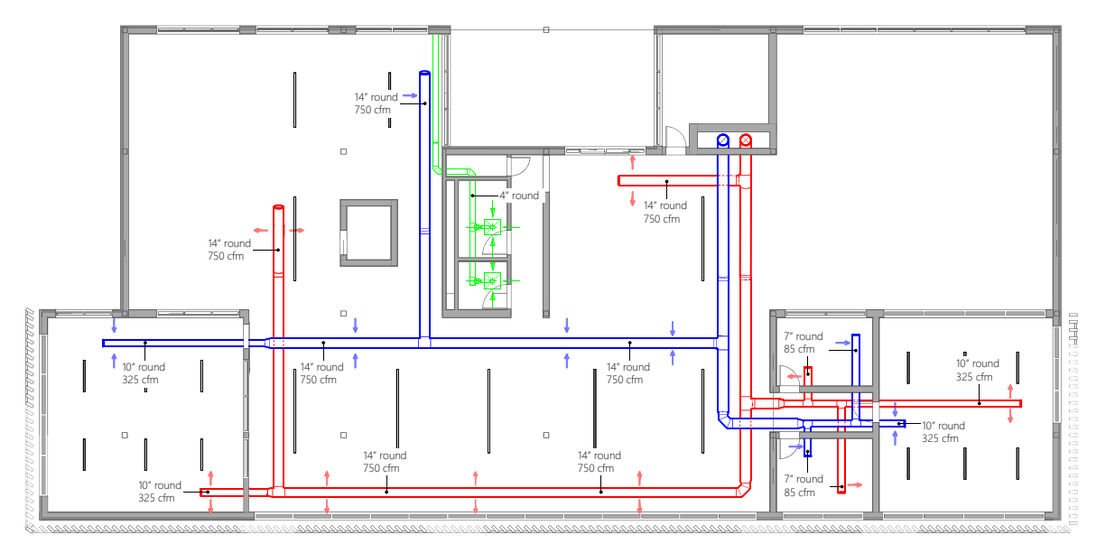


FLOOR 1 RADIANT PLAN
SCALE: 1'-0" = 1/8"

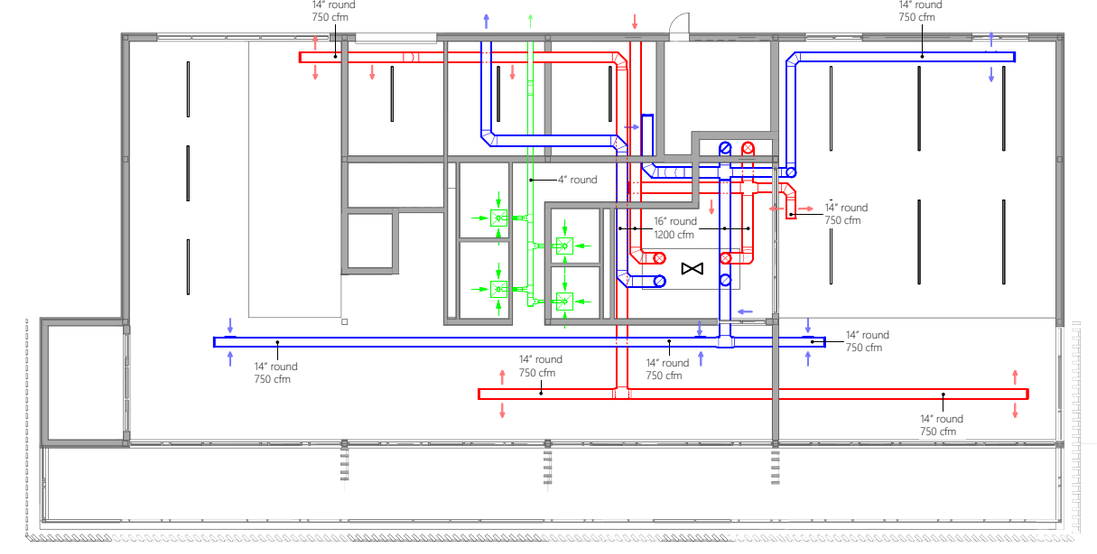


SECTION PERSPECTIVE
SCALE: 1'-0" = 1/2"

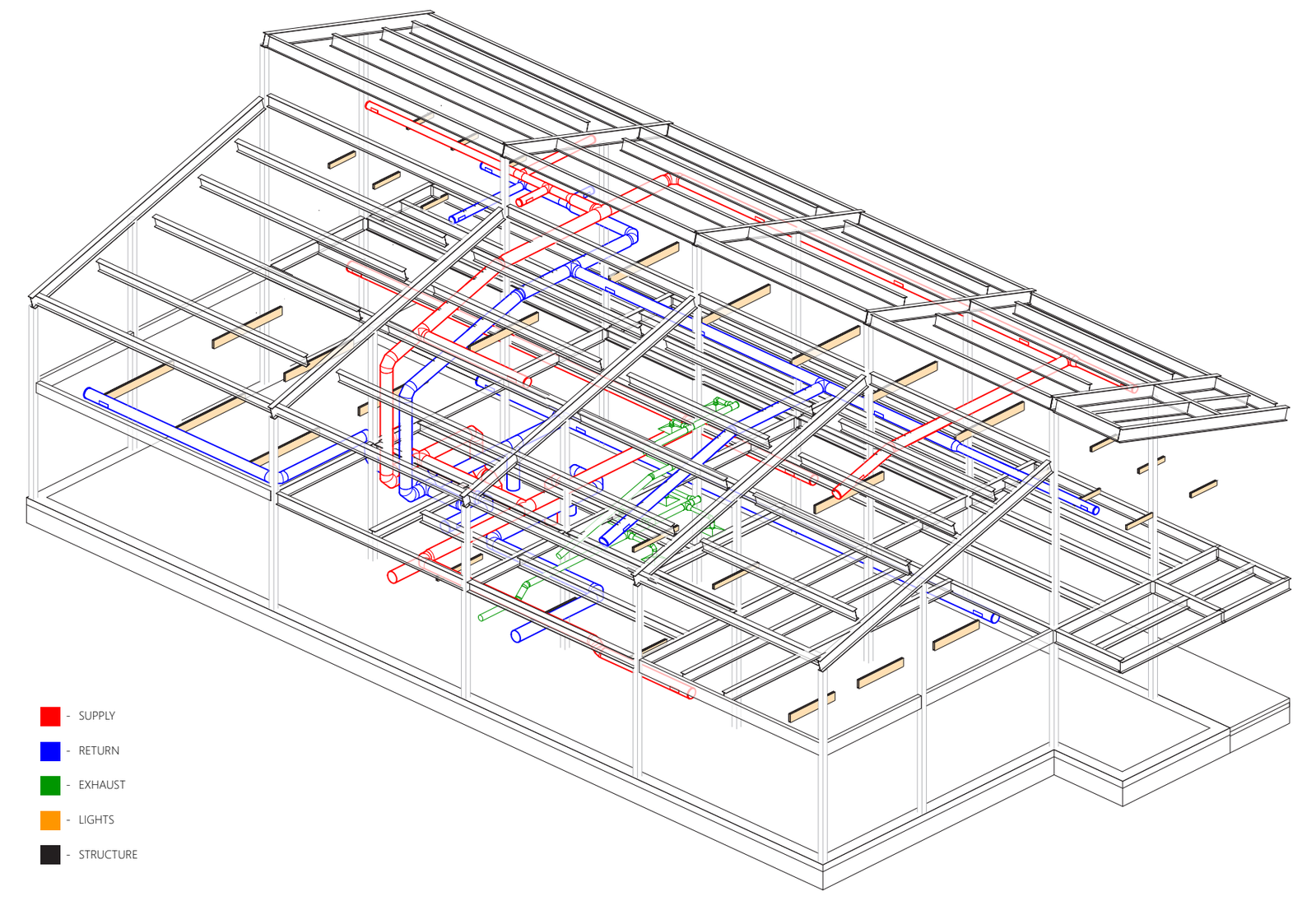




FLOOR 2 DOAS RCP
SCALE: 1'-0" = 1/8"



FLOOR 1 DOAS RCP
SCALE: 1'-0" = 1/8"


SUPPLY
RETURN
EXHAUST
LIGHTS
STRUCTURE

COLLISION DETECTION
N.T.S.