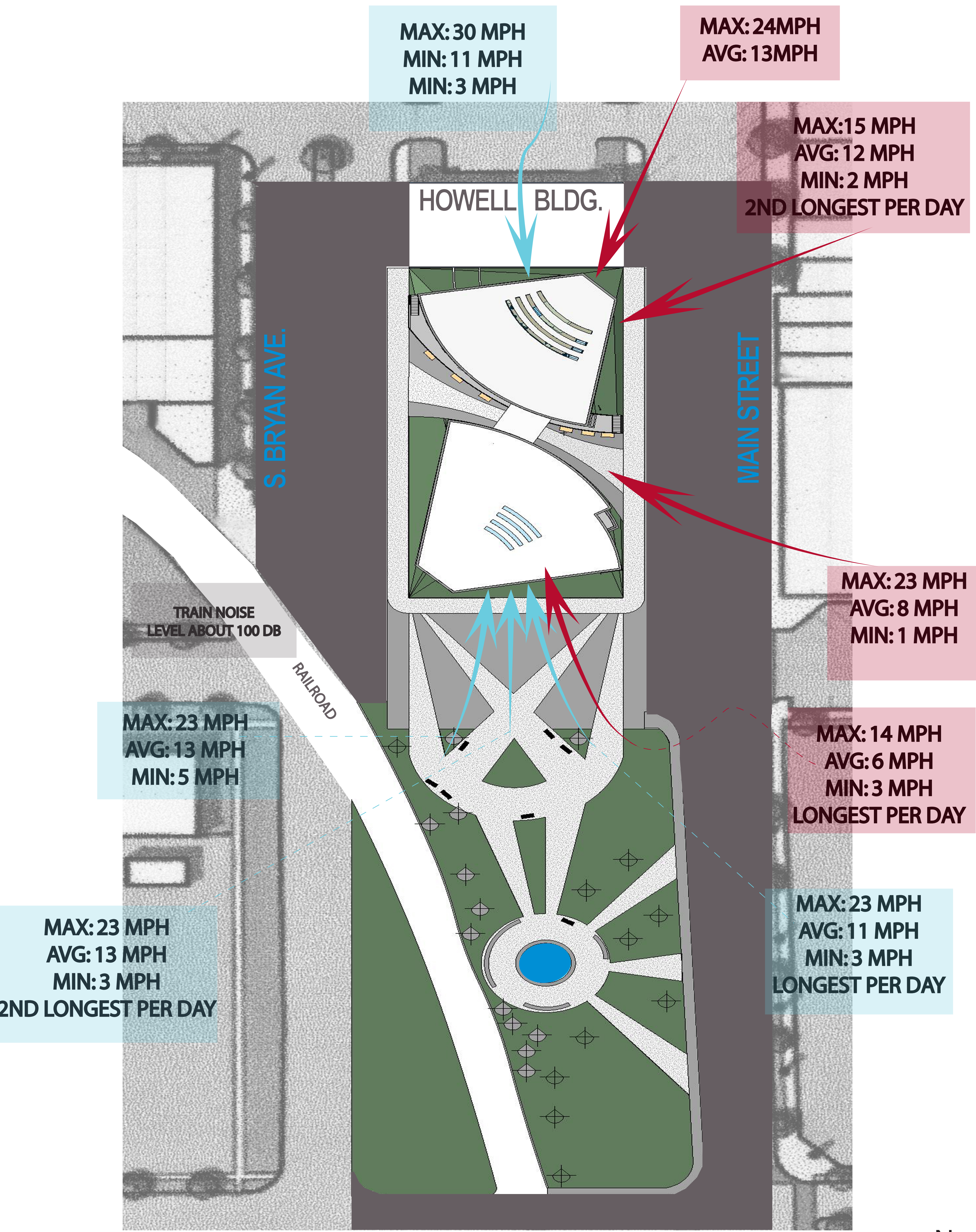


LIBRARY FOR DOWNTOWN BRYAN, TX

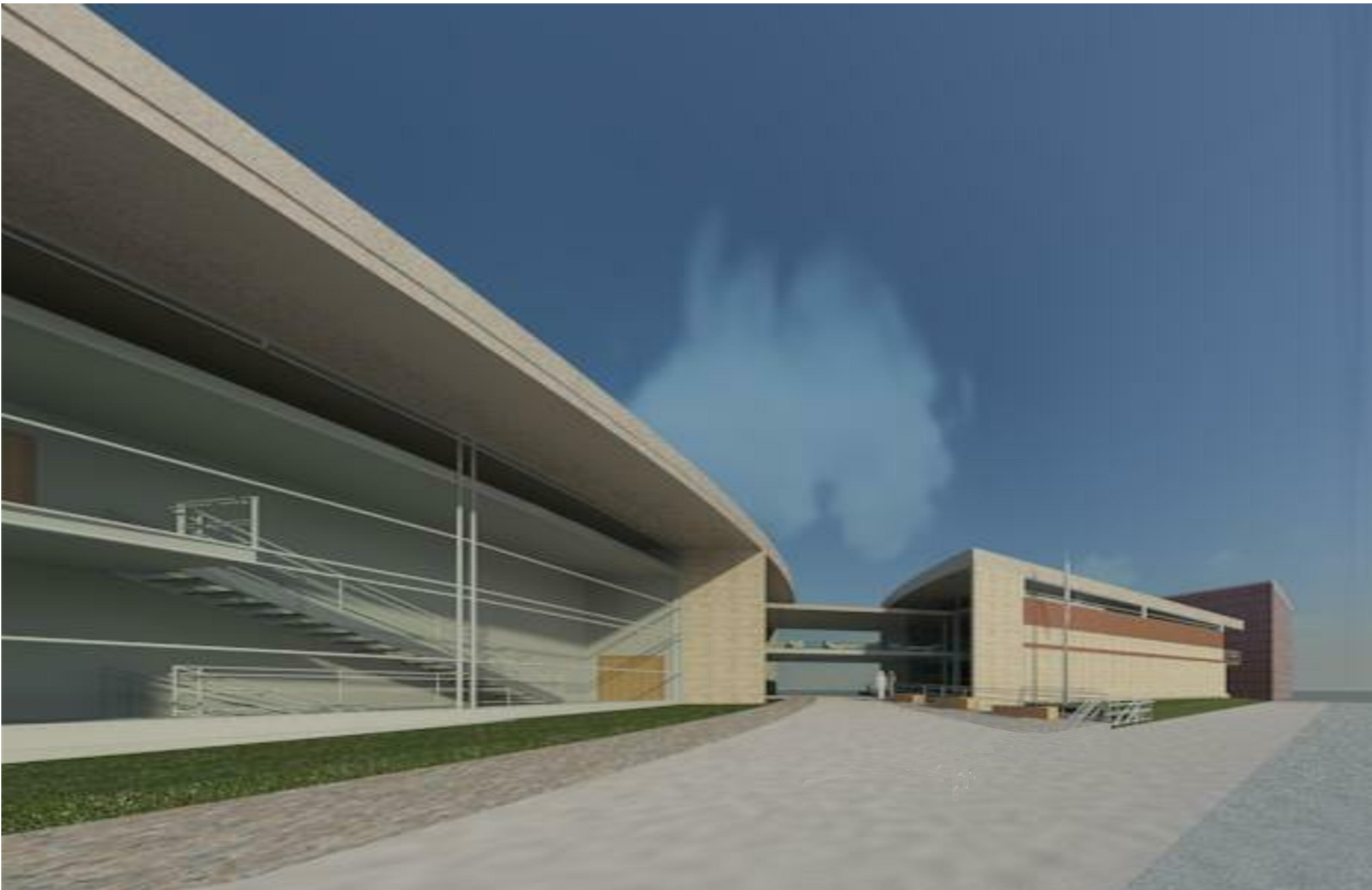
ENDS 405- MICHAEL O'BRIEN
JULIETTE THOMPSON JONATHAN ZUNIGA



LIBRARY FOR DOWNTOWN BRYAN, TX

ENDS 405- MICHAEL O'BRIEN
JULIETTE THOMPSON JONATHAN ZUNIGA

CLIMATIC ADVANTAGES



LEED CHECKLIST

- DEVELOPMENT DENSITY AND COMMUNITY CONNECTIVITY
- ACCESS FOR PUBLIC TRANSPORTATION
- BICYCLE STORAGE
- MAXIMIZE OPEN SPACE
- STORMWATER DESIGN: QUALITY CONTROL
- STORMWATER: QUANTITY CONTROL
- HEAT ISLAND EFFECT: NONROOF
- HEAT ISLAND EFFECT: ROOF
- WATER EFFICIENT LANDSCAPE
- CONSTRUCTION ACTIVITY POLLUTION PREVENTION
- WATER USE REDUCTION
- FUNDAMENTAL COMMISSIONING OF BUILDING ENERGY SYSTEMS
- MINIMUM ENERGY PERFORMANCE
- FUNDAMENTAL REFRIGERANT MANAGEMENT
- OPTIMIZE ENERGY PERFORMANCE
- STORAGE AND COLLECTION OF RECYCLABLES
- CONSTRUCTION WASTE MANAGEMENT
- OPTIMIZE ENERGY PERFORMANCE
- STORAGE AND COLLECTION OF RECYCLABLES
- CONSTRUCTION WASTE MANAGEMENT
- MATERIALS REUSE
- RECYCLED CONTENT
- MINIMUM INDOOR QUALITY PERFORMANCE
- ENVIRONMENTAL TOBACCO SMOKE CONTROL
- I-NCREASED VENTILATION
- LOW EMITTING MATERIALS: ADHESIVES AND SEALANTS
- LOW EMITTING MATERIALS: PAINTS AND COATINGS
- LOW EMITTING MATERIALS: FLOORING SYSTEMS
- LOW EMITTING MATERIALS: COMPOSITE WOOD AND AGRIFIBER PRODUCTS
- CONTROLABILITY OF SYSTEMS: LIGHTING
- CONTROLABILITY OF SYSTEMS:THERMAL COMFORT

CLIMATIC ADVANTAGES

ROOF: R VALUE 3.1 PER INCH
BLOCK CYLINDER: 1.1
TOTAL R VALUE WITH BATT INSULATION 46

LIMESTONE: R VALUE AT 1” THICKNESS: 0.153

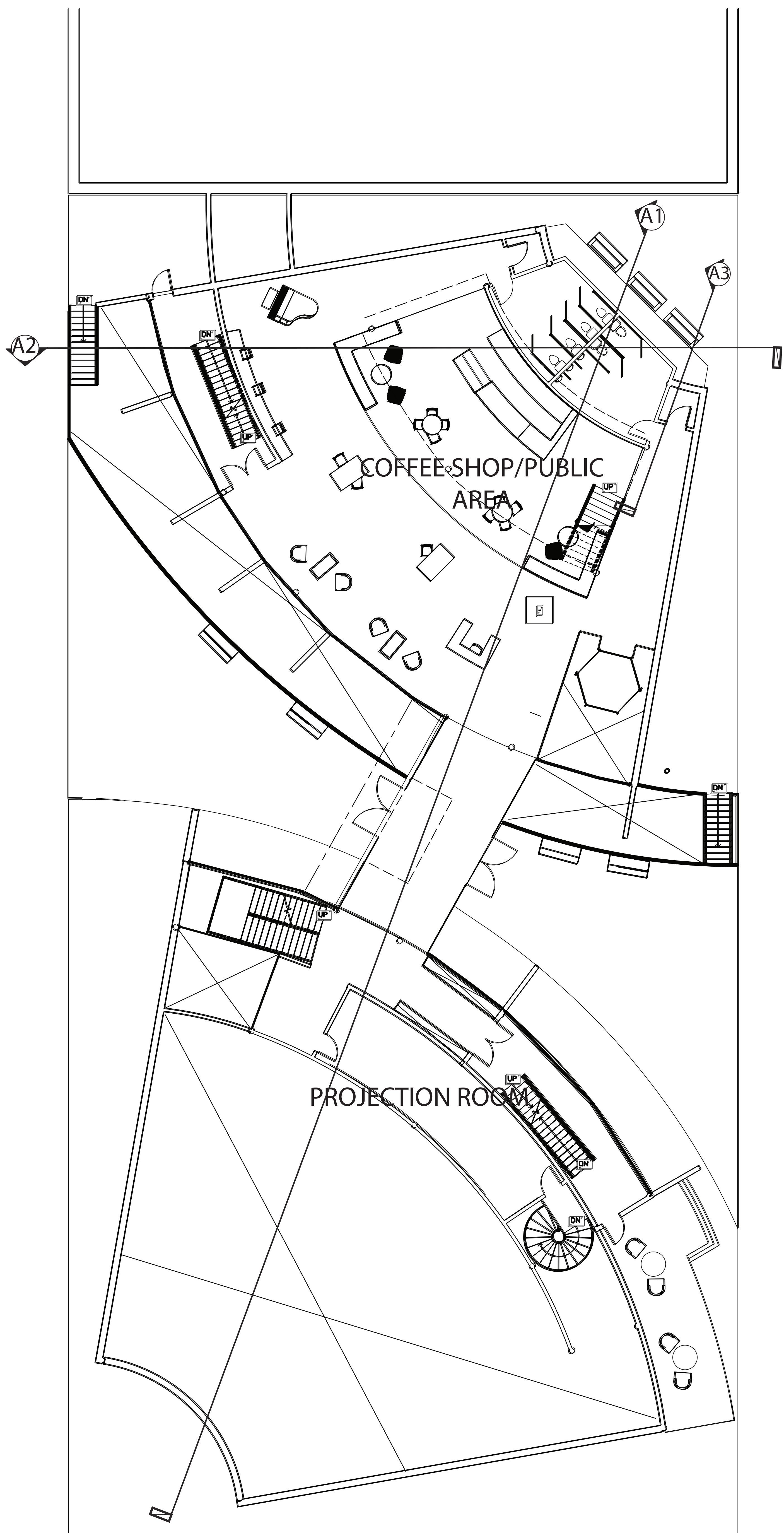
SUNTECH SEE THRU PHOTOVOLATIC GLASS: HEAT CUT: 89.8%,
VISIBLE LIGHT TRANSMIT TANCE: 10.6%, UV CUT 99.9%
R VALUE: 4.16 to 3.45
THERMAL DATA: SOLAR HEAT GAIN COEFFICIENT AT 45 DEGREES: 0.25,
VERTICAL:0.24
SHADING COEFFICIENT: HORIZONTAL: 0.25
U VALUE VERTICAL:4.8 W/m^K to 6.0 W/m^3

LIBRARY FOR DOWNTOWN BRYAN, TX

FLOOR PLAN: MAIN LEVEL

SCALE: 1/8"=1'

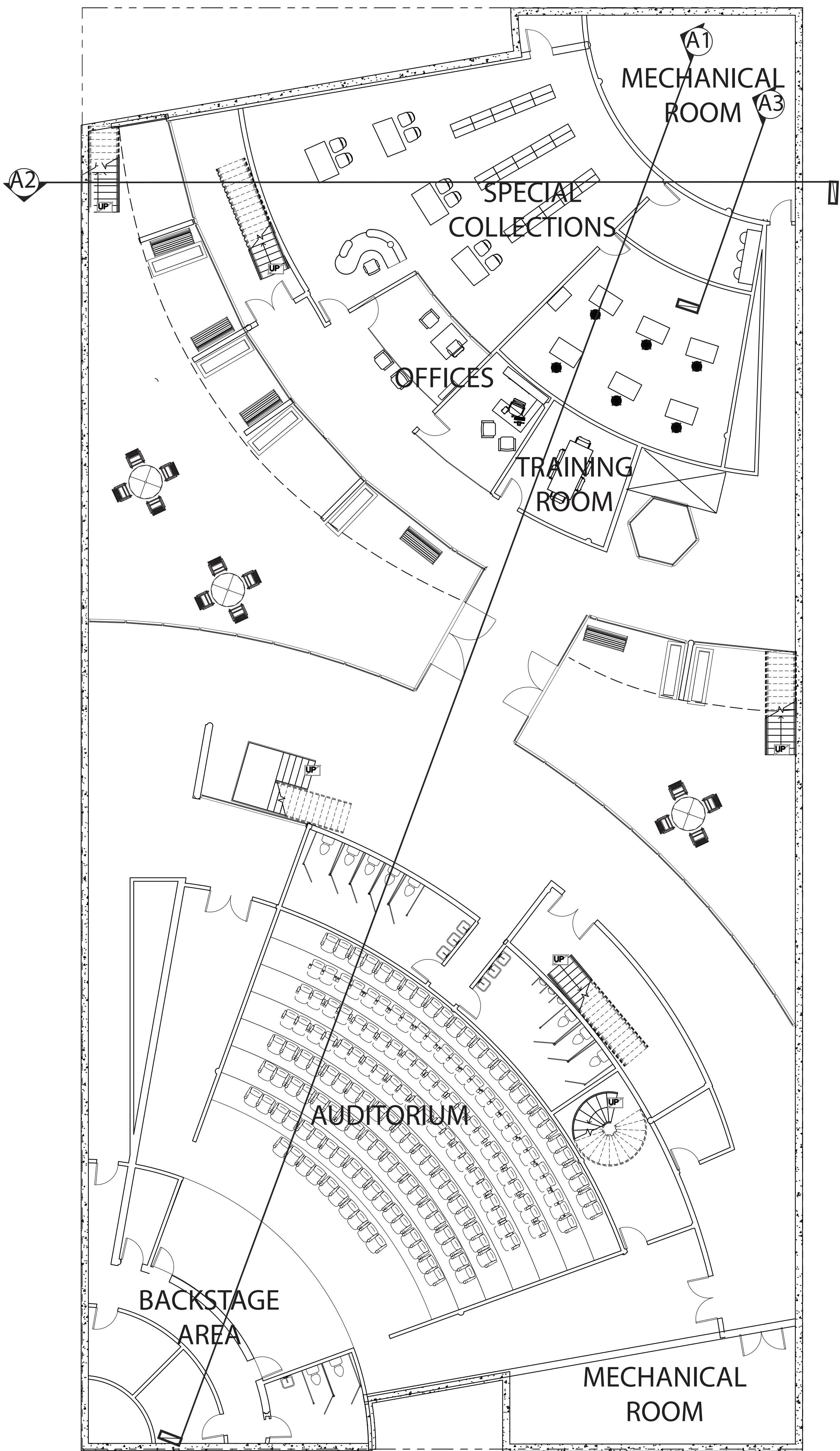
ENDS 405- MICHAEL O'BRIEN
JULIETTE THOMPSON JONATHAN ZUNIGA



LIBRARY FOR DOWNTOWN BRYAN, TX

FLOOR PLAN: UNDERGROUND
SCALE: 1/8"=1'

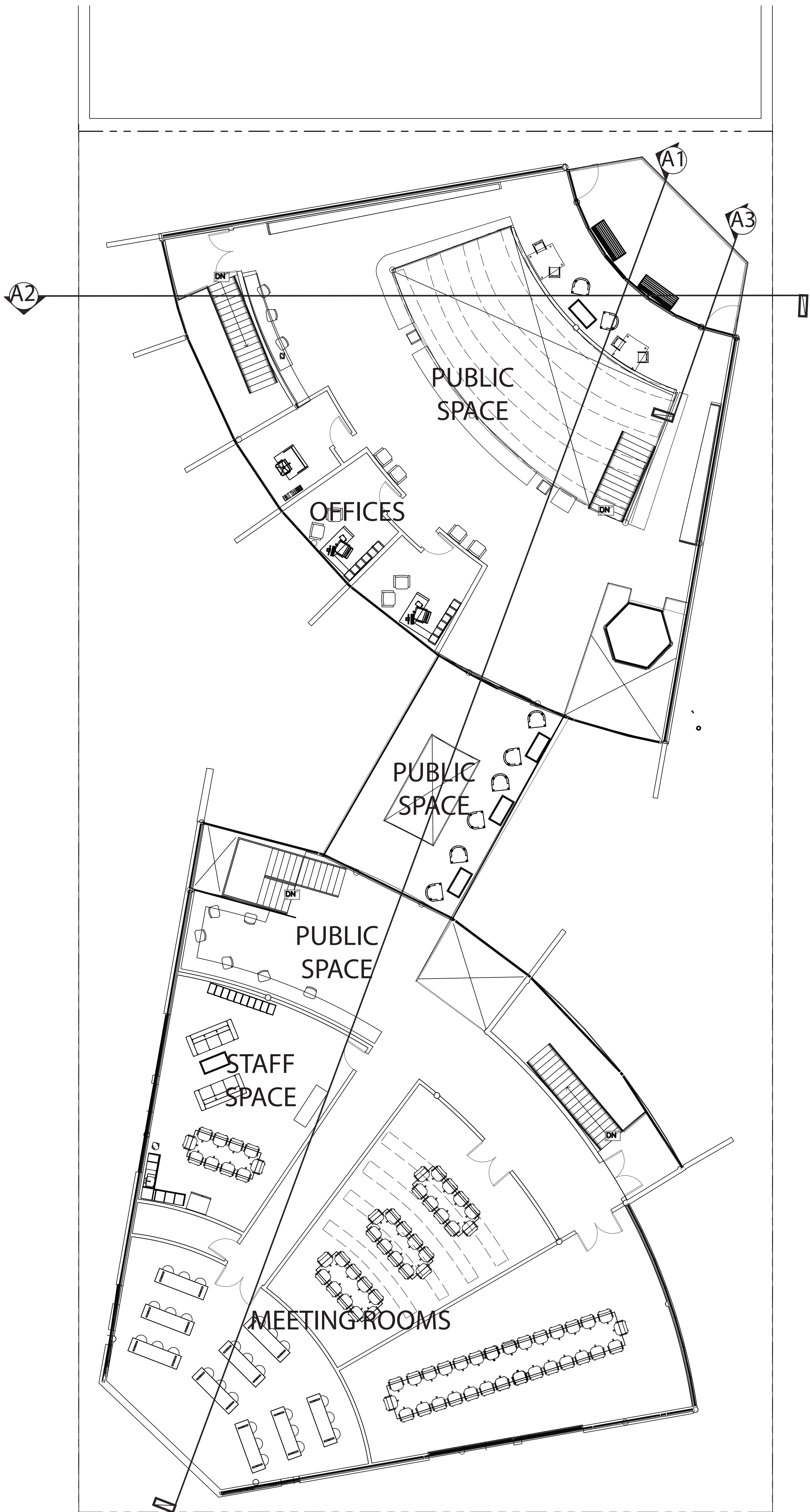
ENDS 405- MICHAEL O'BRIEN
JULIETTE THOMPSON JONATHAN ZUNIGA



LIBRARY FOR DOWNTOWN BRYAN, TX

FLOOR PLAN: SECOND FLOOR
SCALE: 1/8"=1'

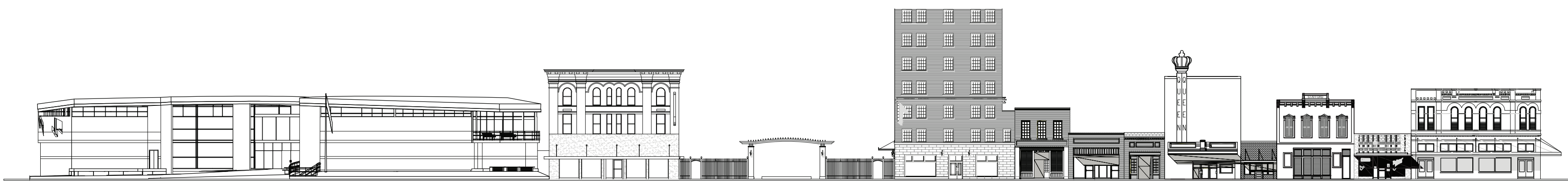
ENDS 405- MICHAEL O'BRIEN
JULIETTE THOMPSON JONATHAN ZUNIGA



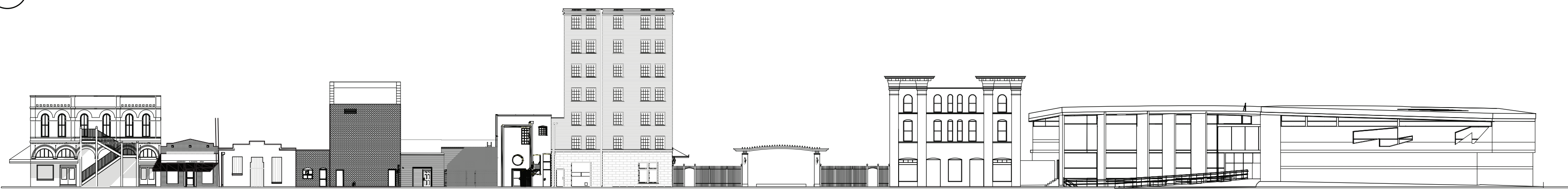
LIBRARY FOR DOWNTOWN BRYAN, TX

ENDS 405- MICHAEL O'BRIEN
JULIETTE THOMPSON JONATHAN ZUNIGA

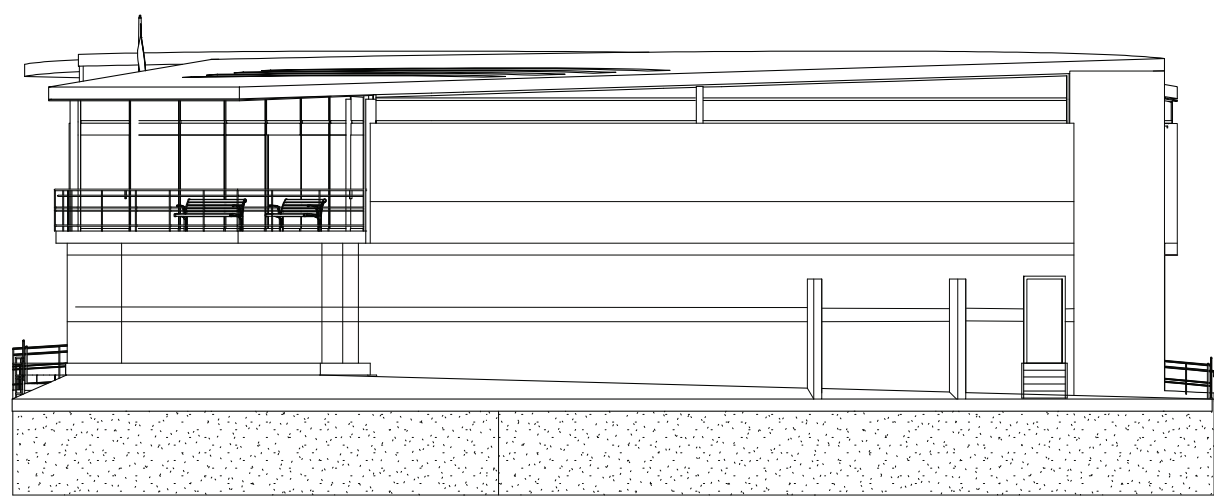
ELEVATIONS



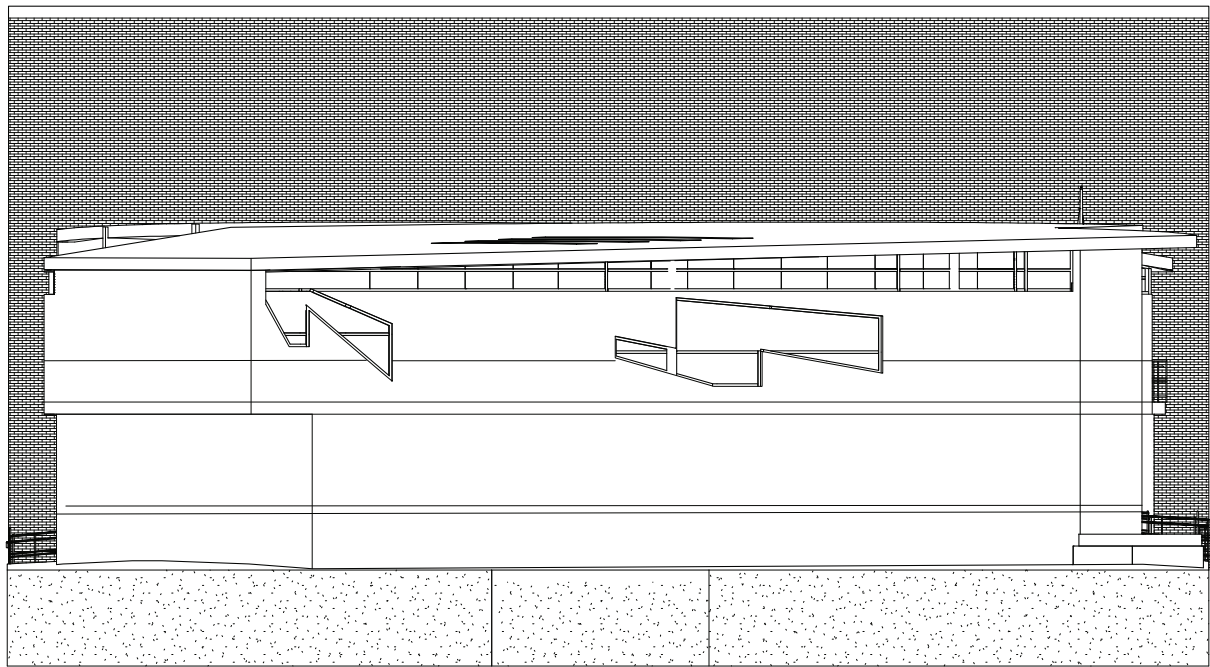
EAST STREET ELEVATION



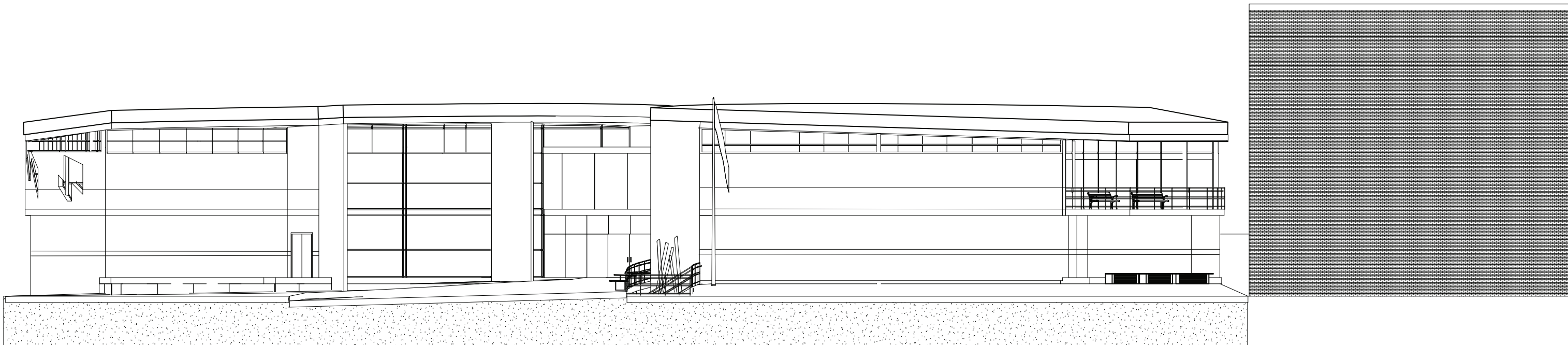
WEST STREET ELEVATION



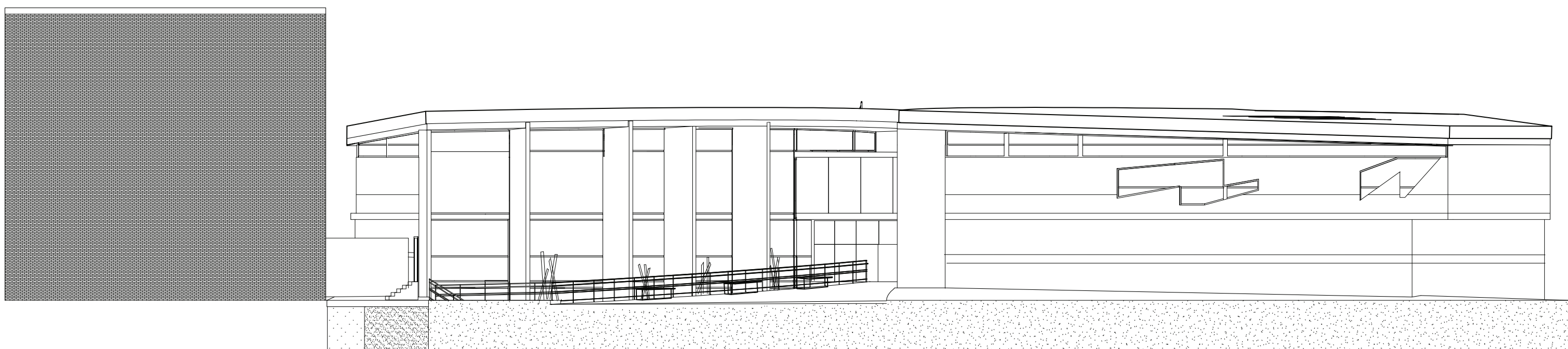
NORTH ELEVATION



SOUTH ELEVATION



EAST ELEVATION

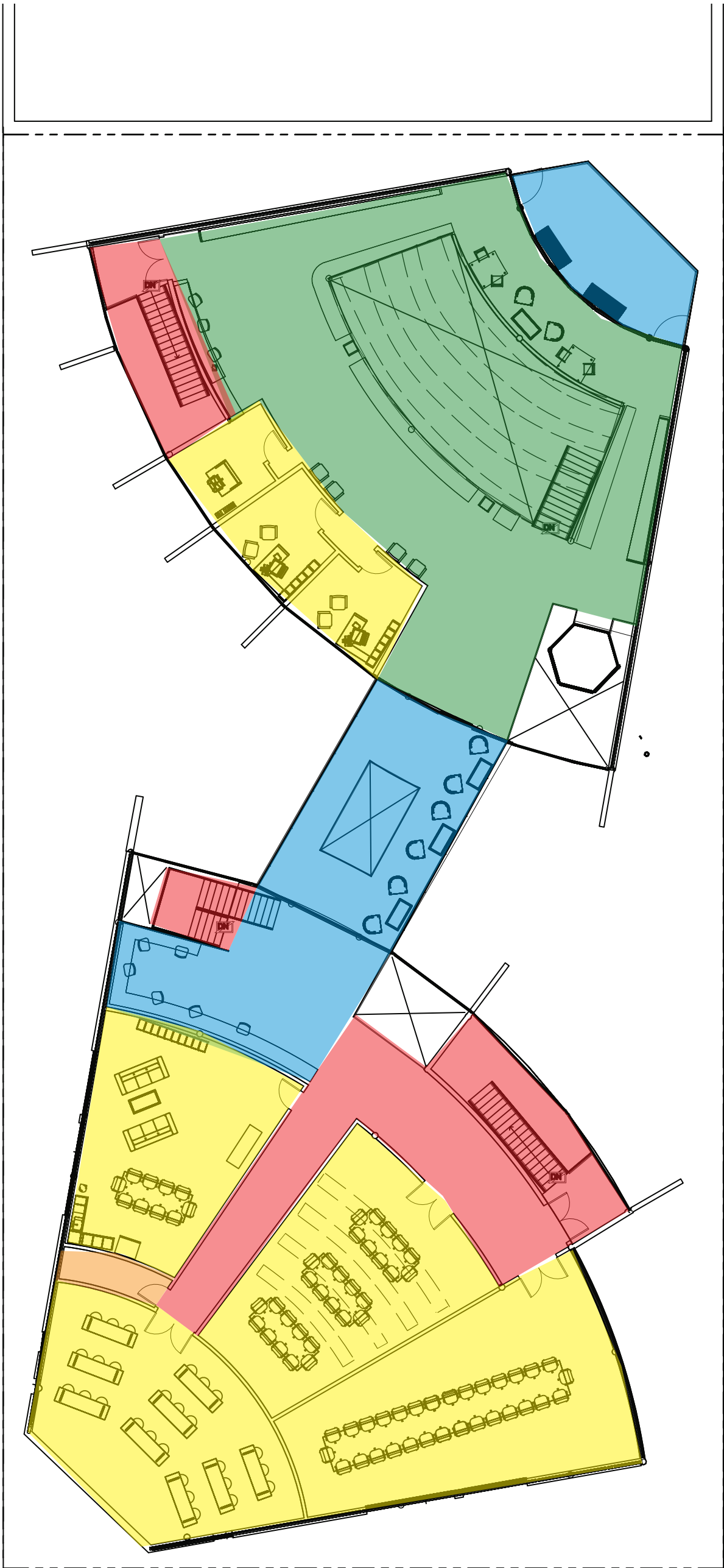
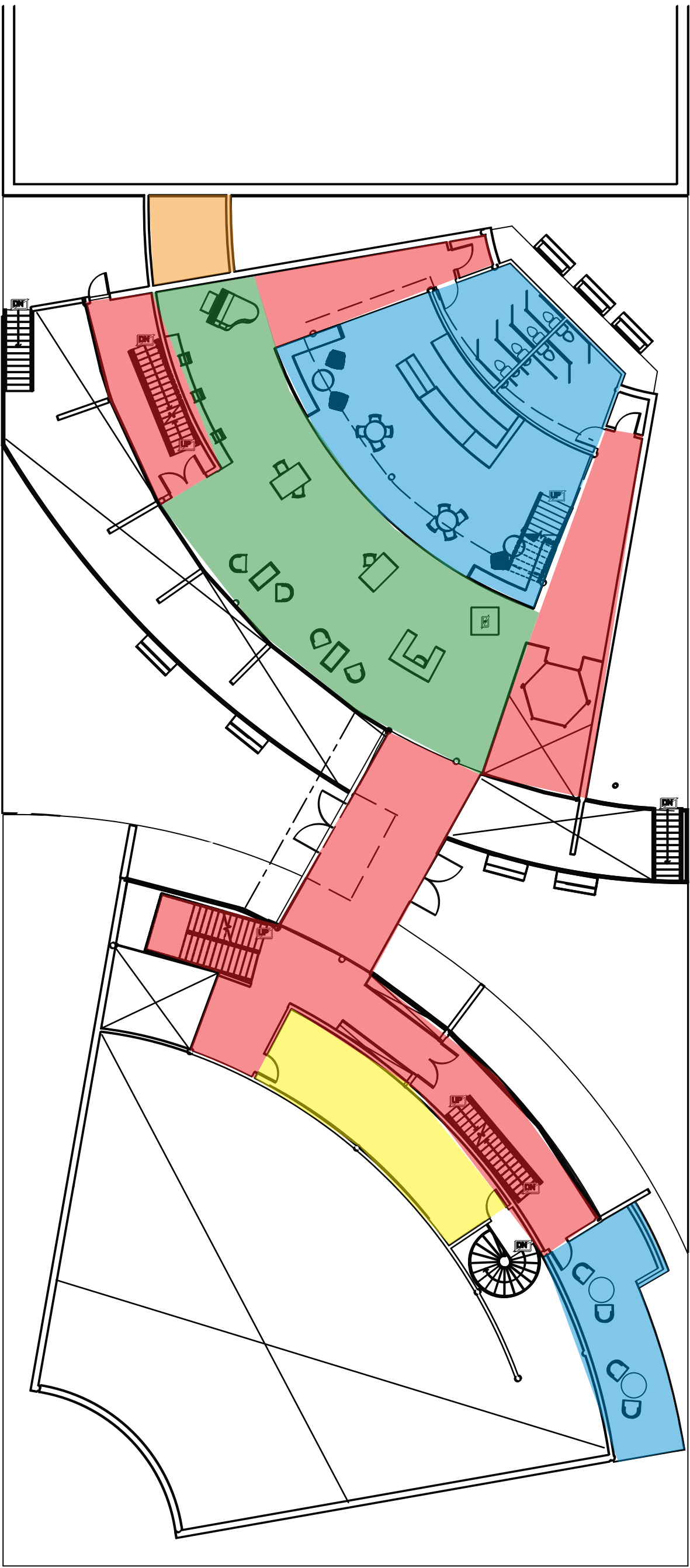
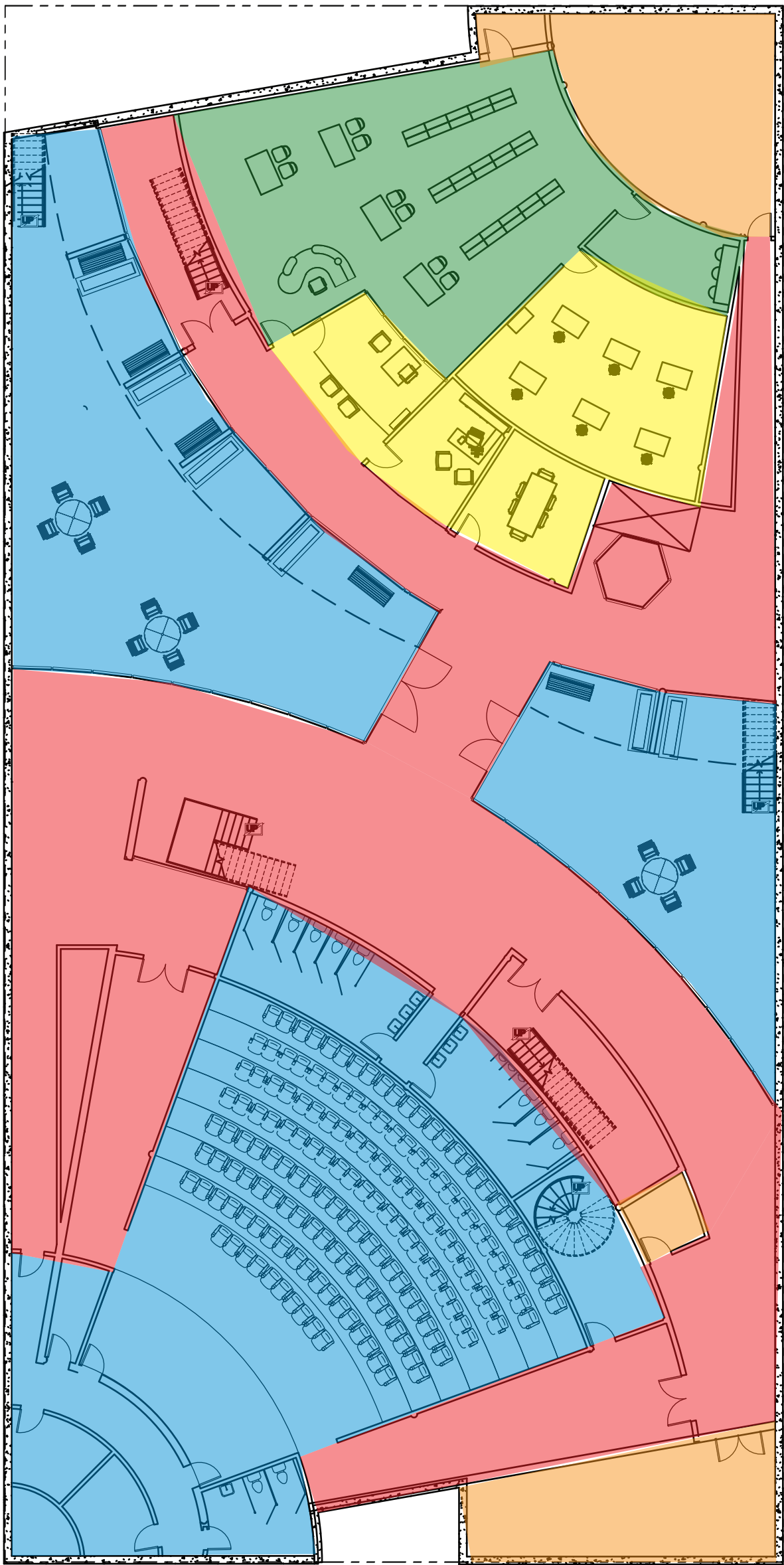


WEST ELEVATION

LIBRARY FOR DOWNTOWN BRYAN, TX

ENDS 405- MICHAEL O'BRIEN
JULIETTE THOMPSON JONATHAN ZUNIGA

LIVE LOADS

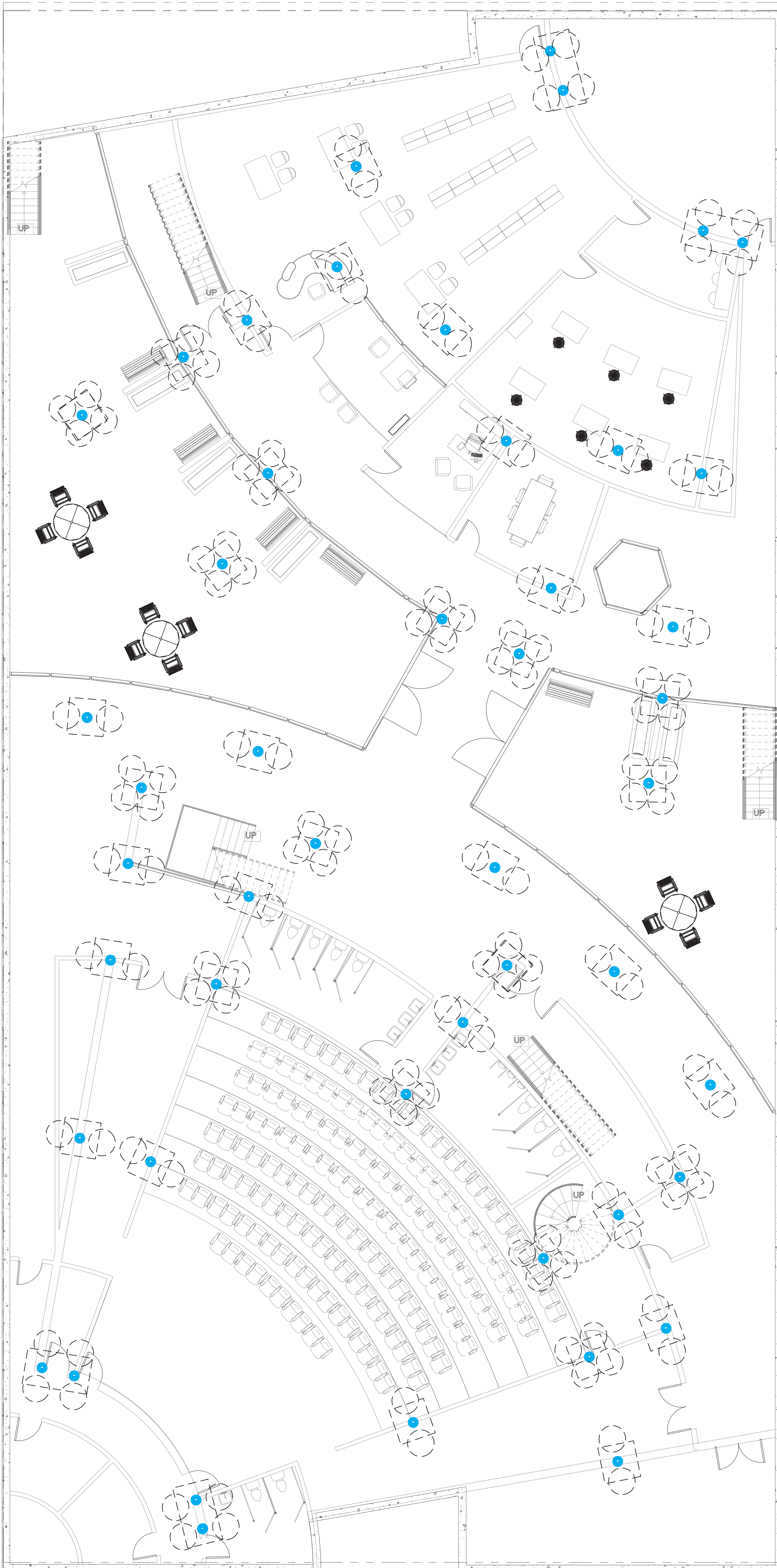


- ASSEMBLY AREA-100 LBS PER SQUARE FOOT
- CORRIDORS-100 LBS PER SQUARE FOOT
- LIBRARY AREAS-150 LBS PER SQUARE FOOT
- STORAGE/SERVICE-250 LBS PER SQUARE FOOT
- OFFICE AREAS-40 LBS PER SQUARE FOOT

LIBRARY FOR DOWNTOWN BRYAN, TX

ENDS 405- MICHAEL O'BRIEN
JULIETTE THOMPSON JONATHAN ZUNIGA

FRAMING PLANS



STRUCTURAL SYSTEM

CHOSEN: STEEL

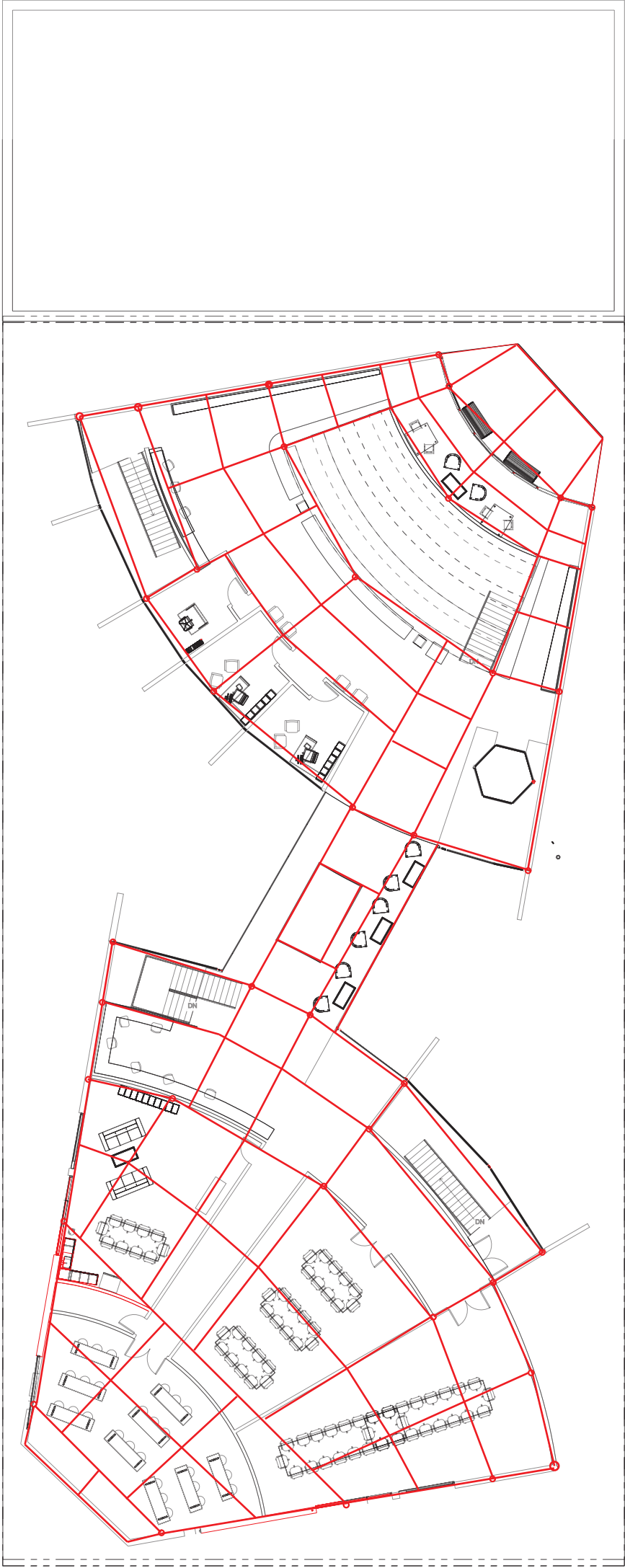
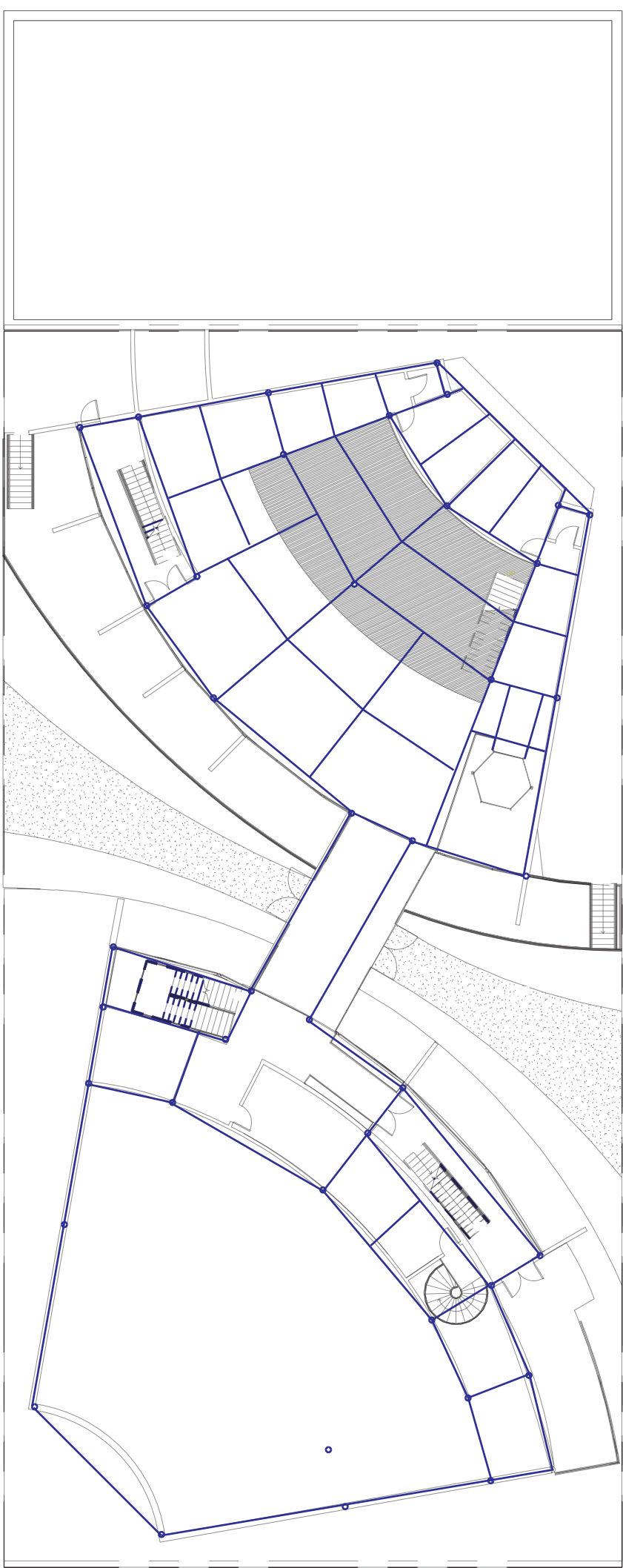
- LIGHTWEIGHT
- AESTHETIC REASONS
- QUICKLY ERECTED

- 10" STEEL AND COMPOSITE COL-UMNS
- 12" BEAMS AND GIRDERS; TYPICAL SPAN 15'-25'
- STEEL DECKING TYPICAL SPAN 10'-20'
- ROOF BEAMS UP TO 20" AND SPANS OF 35'

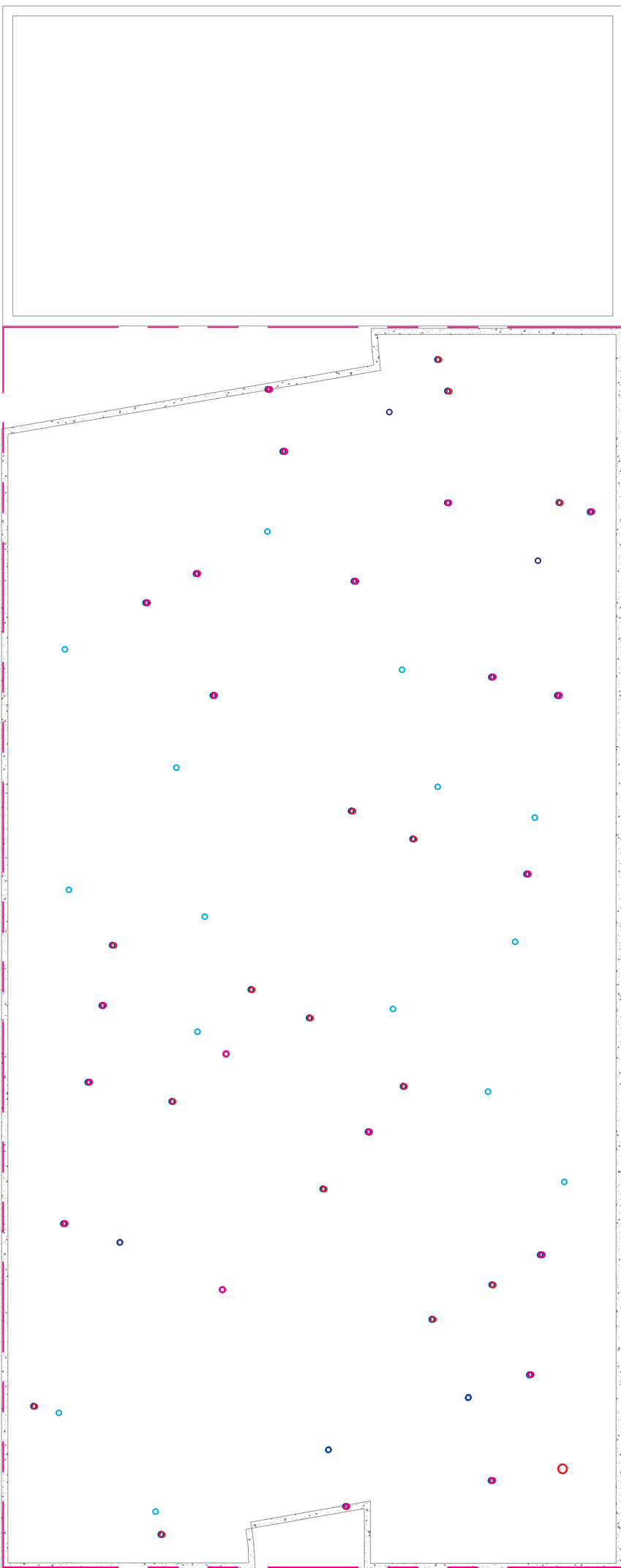
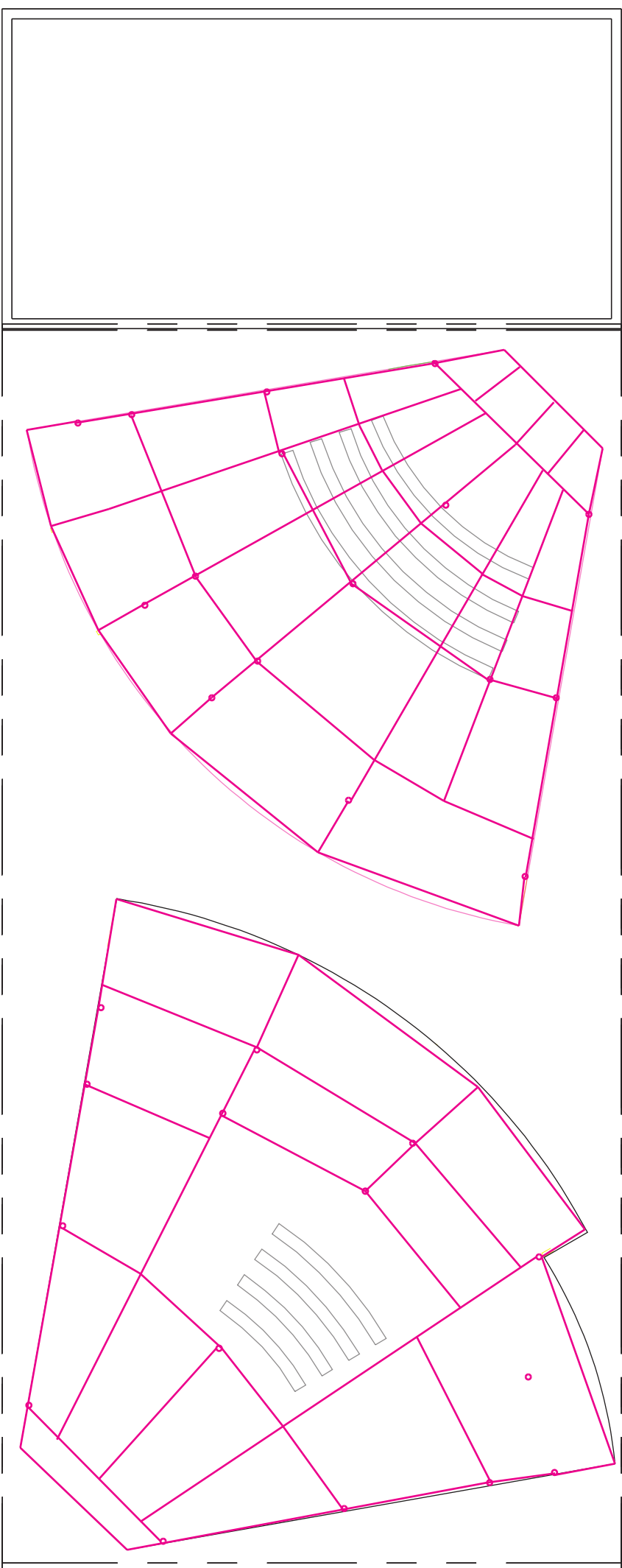
LIBRARY FOR DOWNTOWN BRYAN, TX

ENDS 405- MICHAEL O'BRIEN
JULIETTE THOMPSON JONATHAN ZUNIGA

FRAMING PLANS



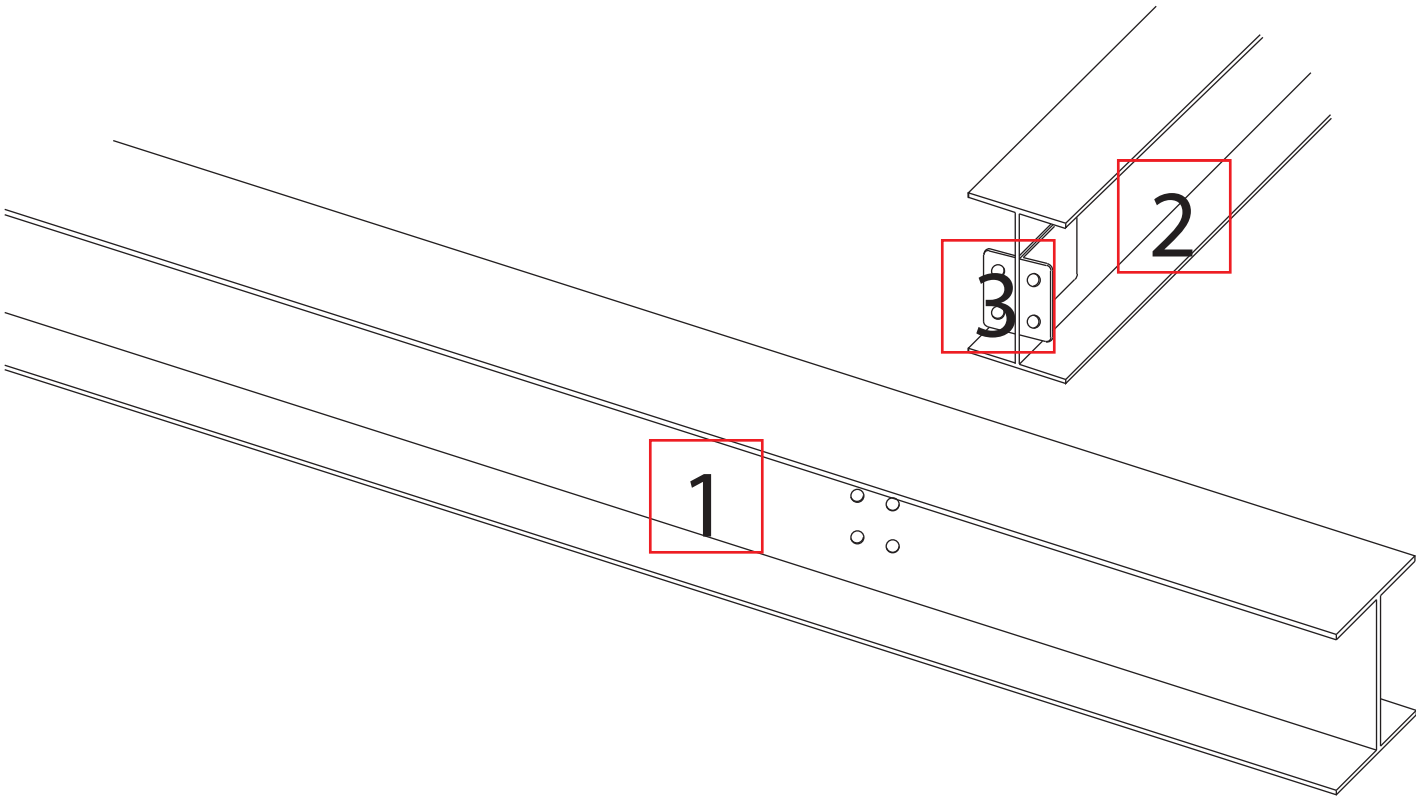
- UNDERGROUND
- FIRST LEVEL
- SECOND LEVEL
- ROOF



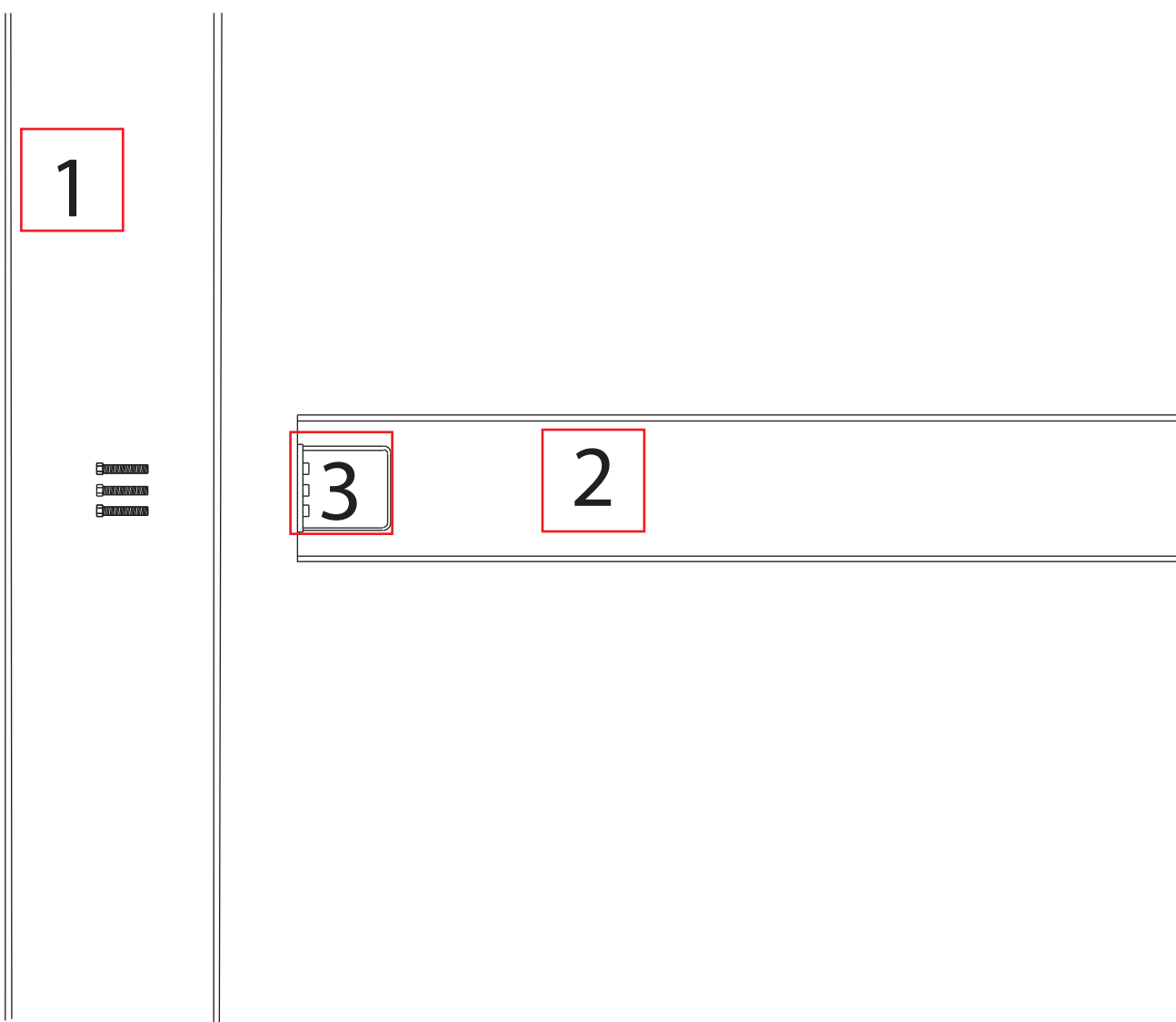
LIBRARY FOR DOWNTOWN BRYAN, TX

ENDS 405- MICHAEL O'BRIEN
JULIETTE THOMPSON JONATHAN ZUNIGA

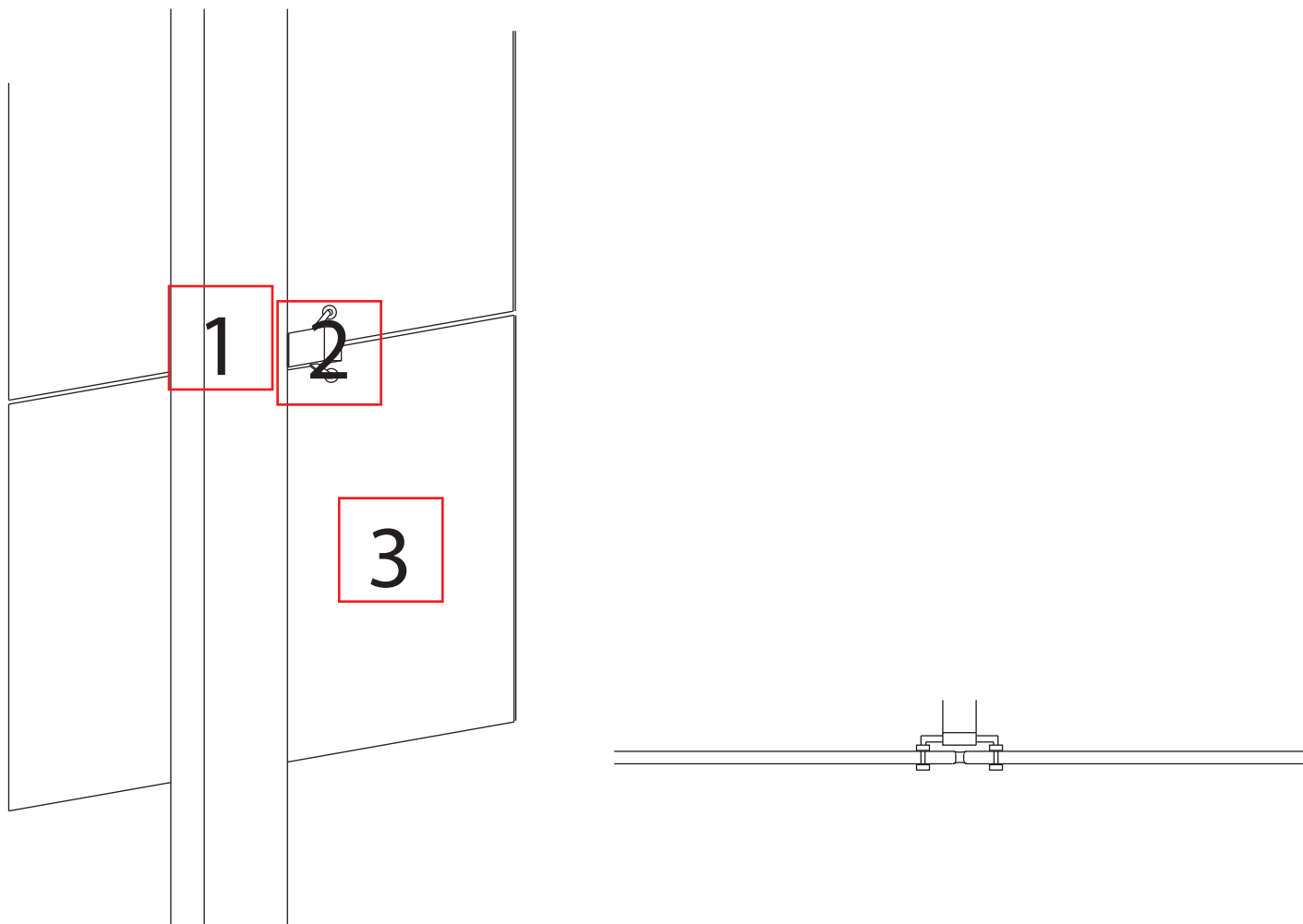
CONNECTION DETAILS



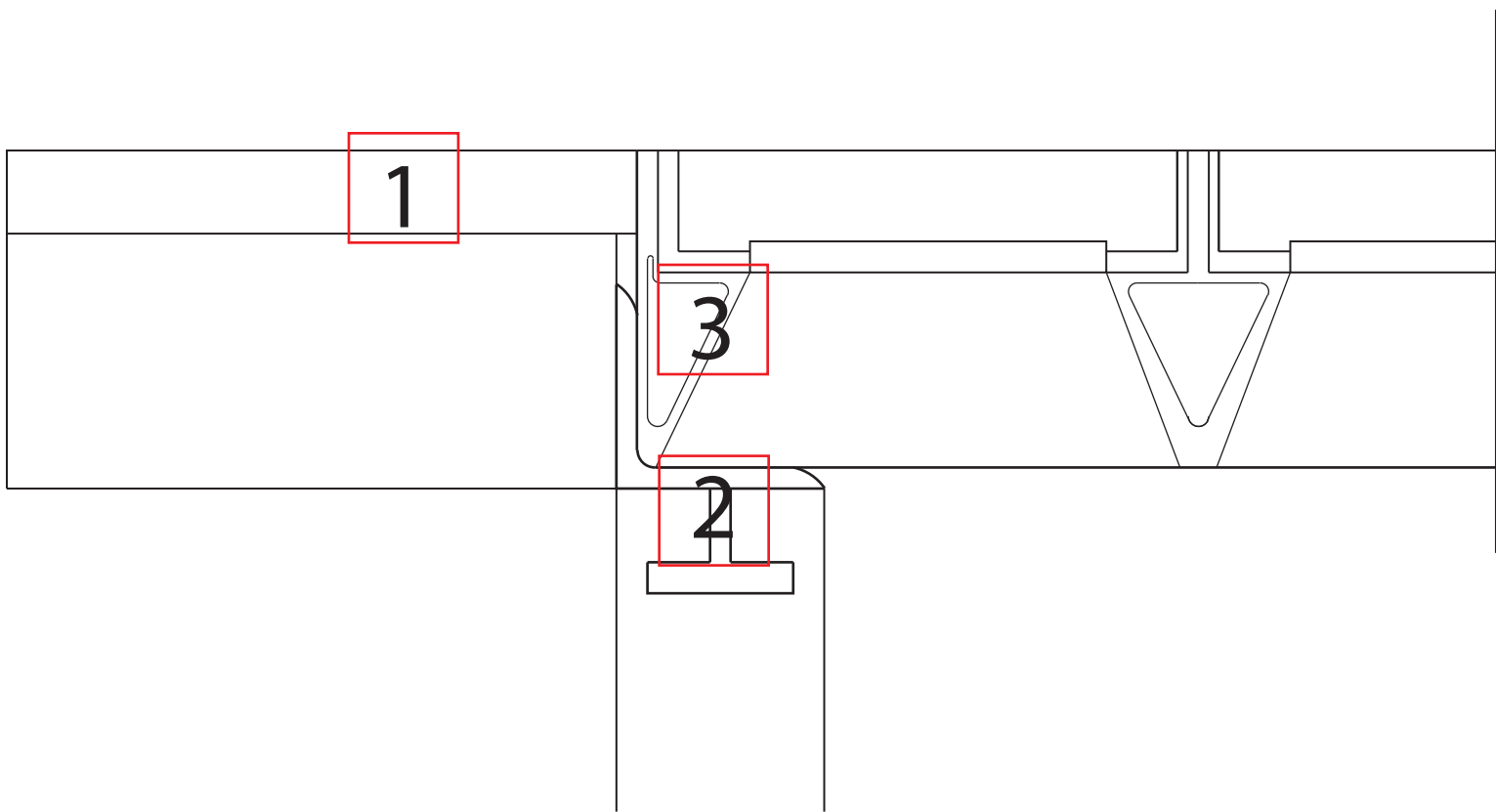
- 1
- W-SECTION GIRDER
- 2
- STEEL BEAM BOLTED TO GIRDER AT ANGLE PLATE
- 3
- ANGLE PLATE WELDED TO BEAM



- 1
- W-SECTION COLUMN
- 2
- STEEL BEAM BOLTED TO COLUMN AT ANGLE PLATE
- 3
- ANGLE PLATE WELDED TO BEAM



- 1
- ALUMINUM FRAMINGMEMBER
- 2
- PIN CONNECTION WELDED TO FRAMING MEMBER
- 3
- STRUCTURAL GLASS PANEL

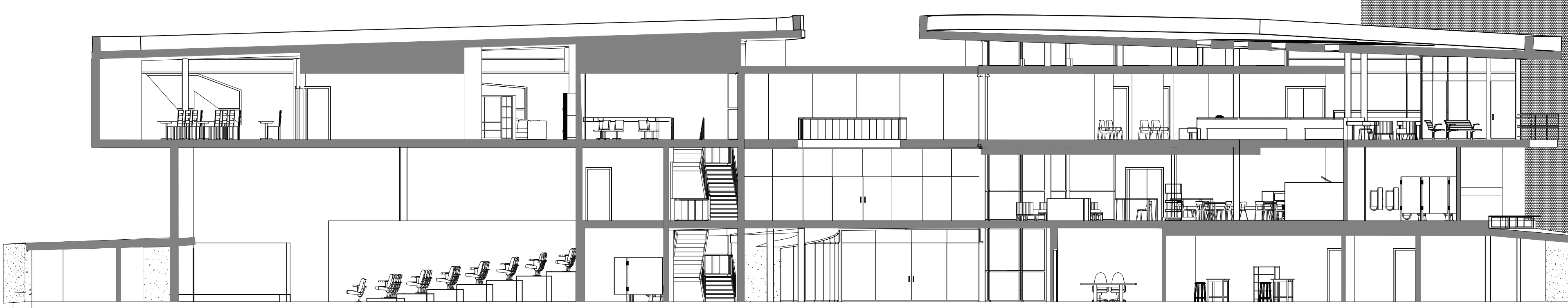


- 1
- OTHER FINISHED FLOOR
- 2
- STEEL ANGLE PLATE WELDED TO STUD
- 3
- 6" GLASS PAVER ON SEALANT AND PAVER BOOT SITTING ON SPACING MEMBERS

LIBRARY FOR DOWNTOWN BRYAN, TX

ENDS 405- MICHAEL O'BRIEN
JULIETTE THOMPSON JONATHAN ZUNIGA

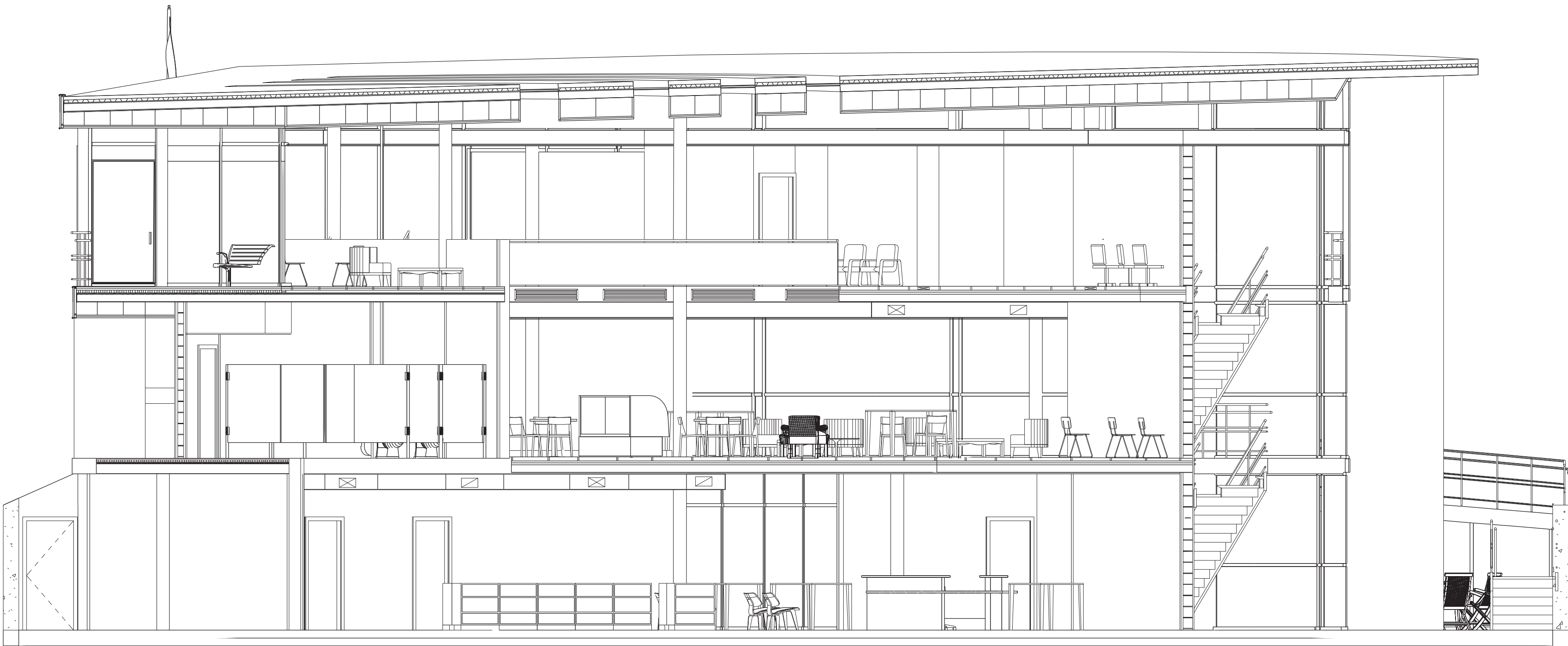
SECTIONS



A2

FULL BUILDING

3/32"=1'



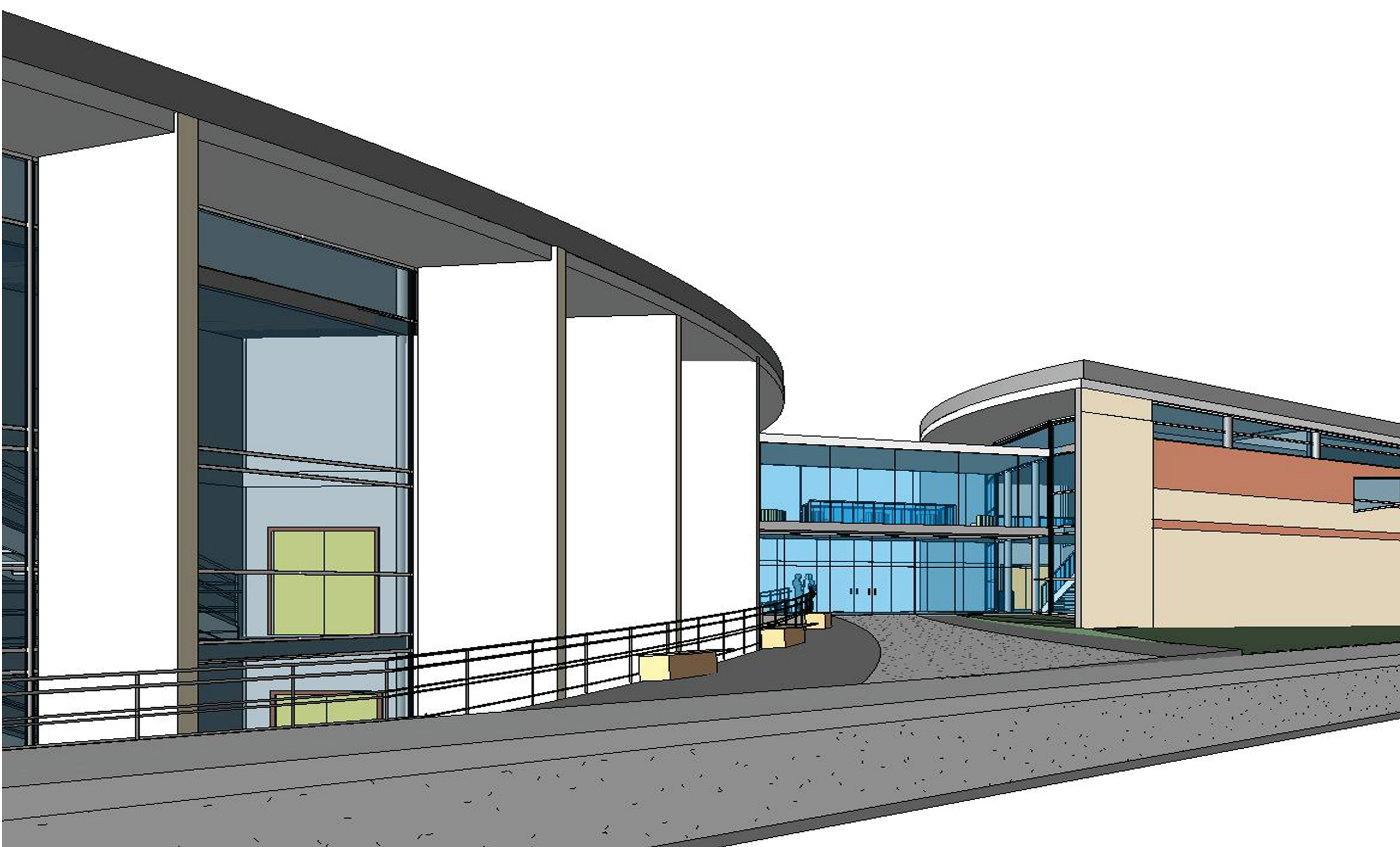
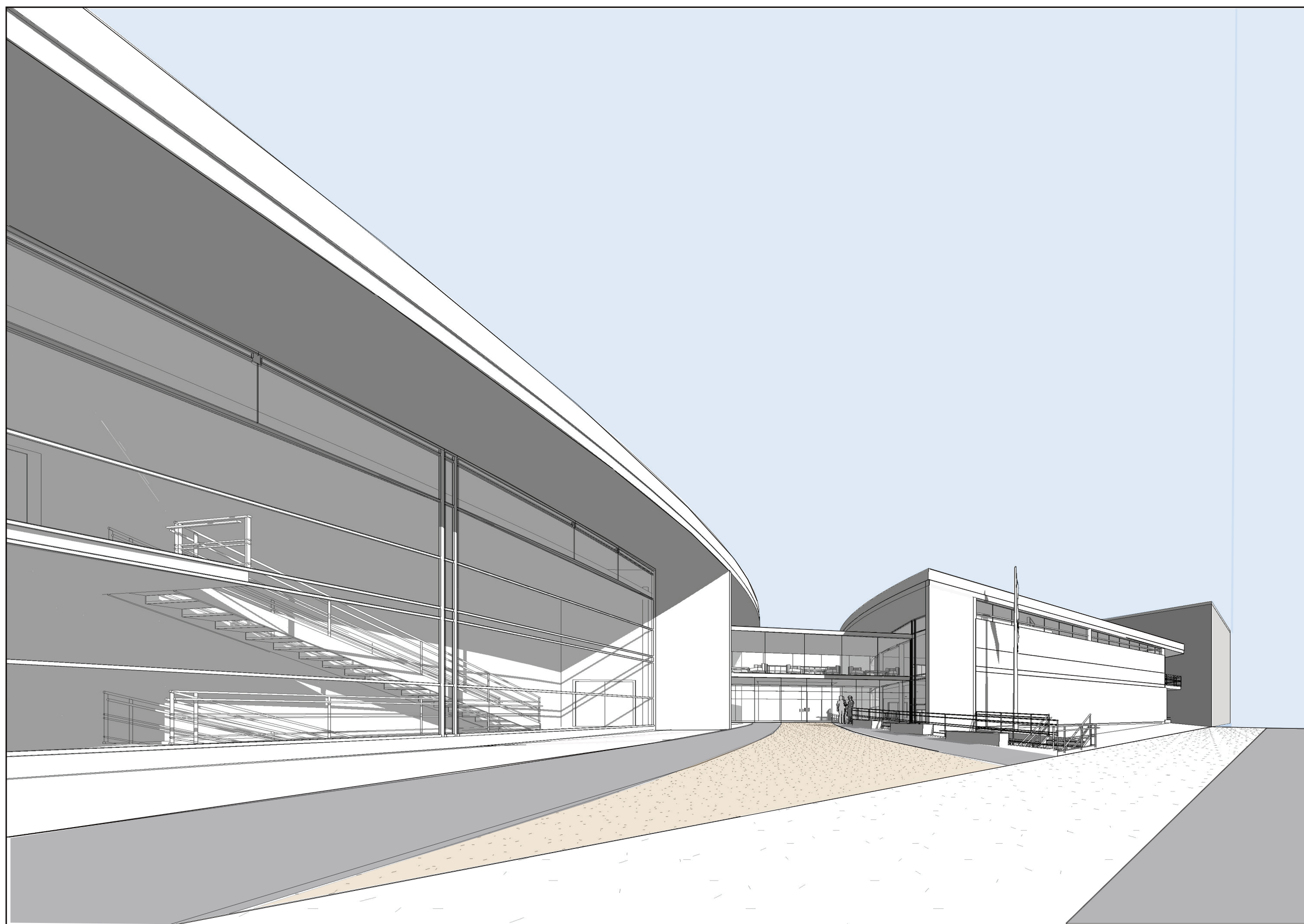
A2

SHORT AXIS

3/16"=1'

LIBRARY FOR DOWNTOWN BRYAN, TX

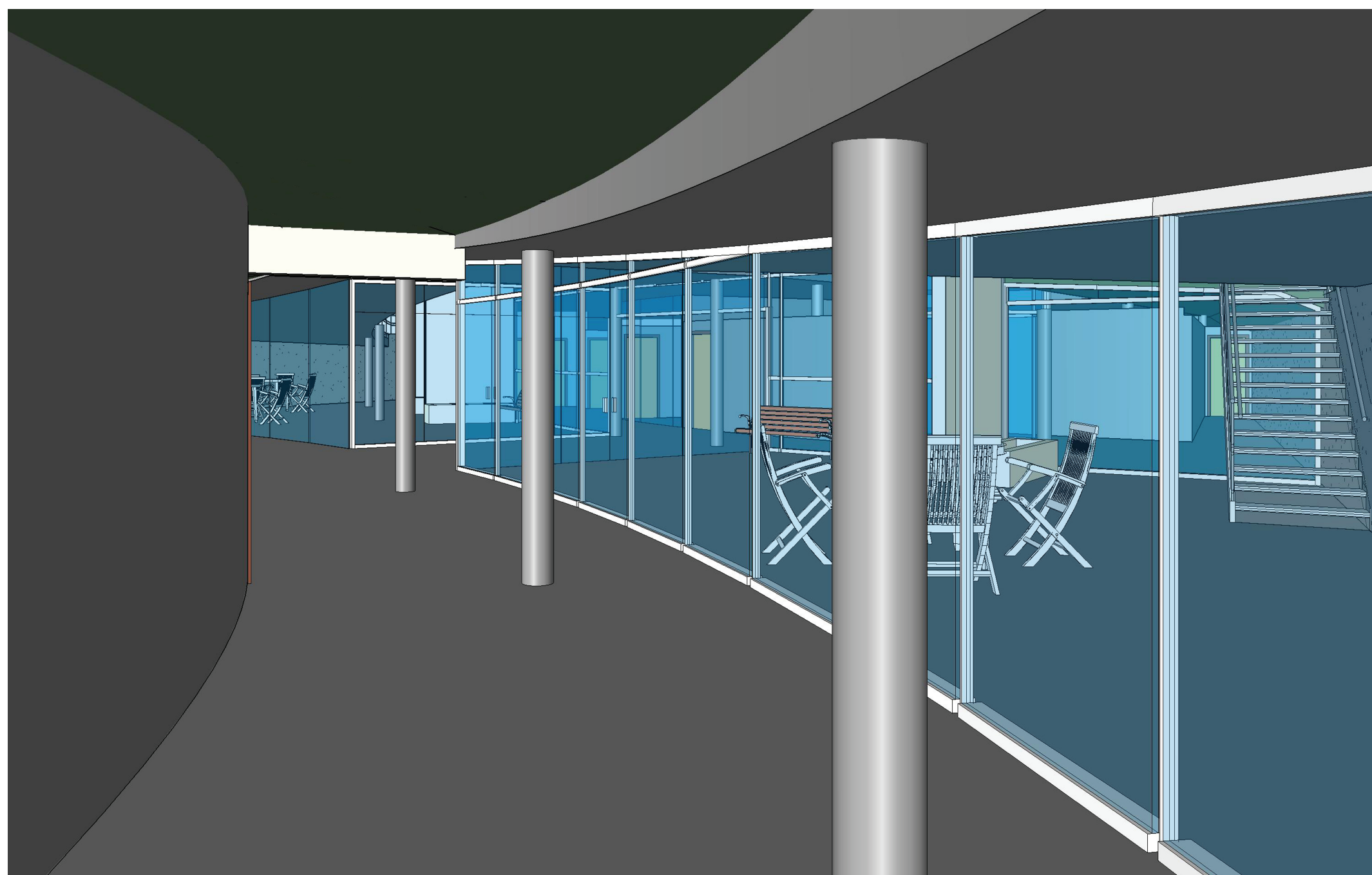
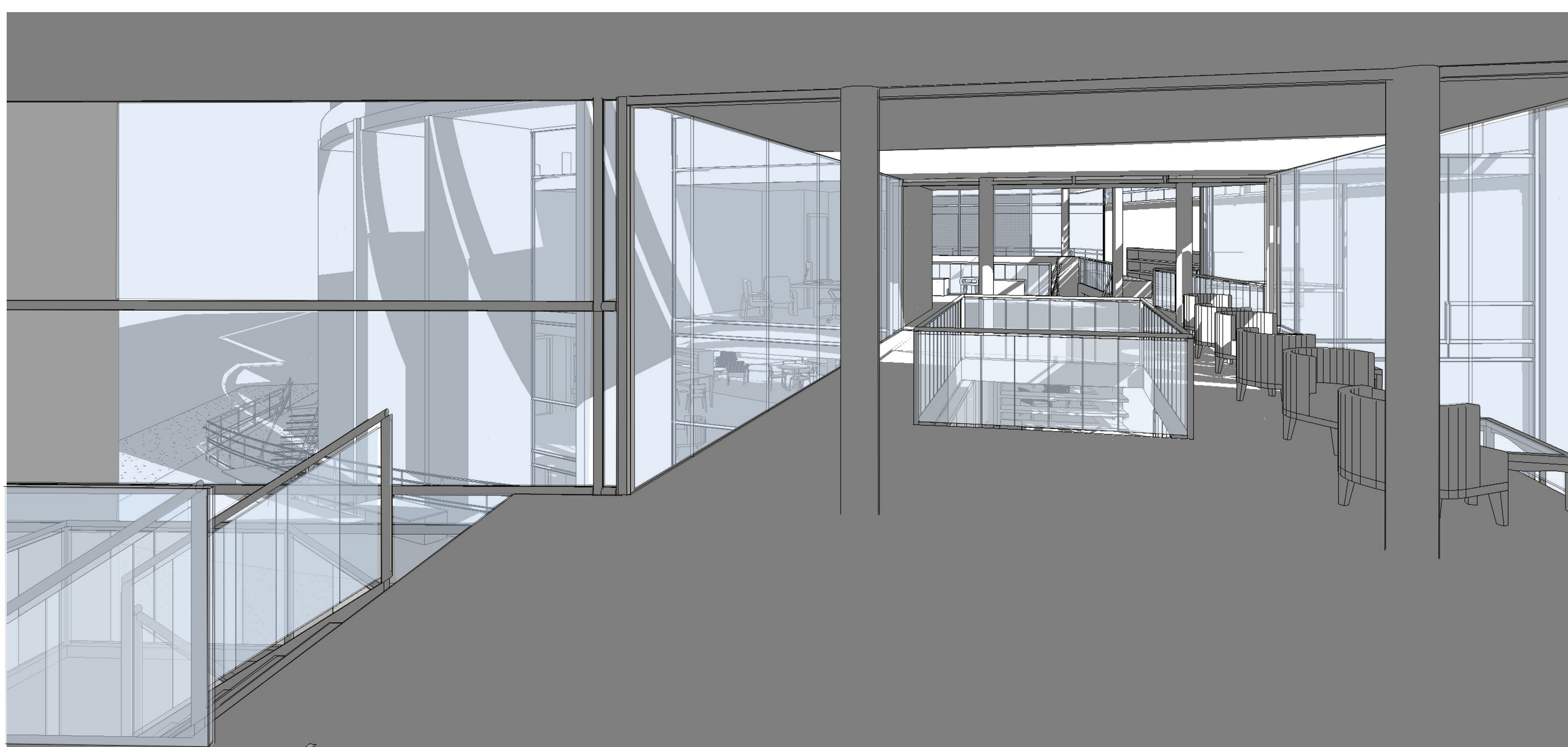
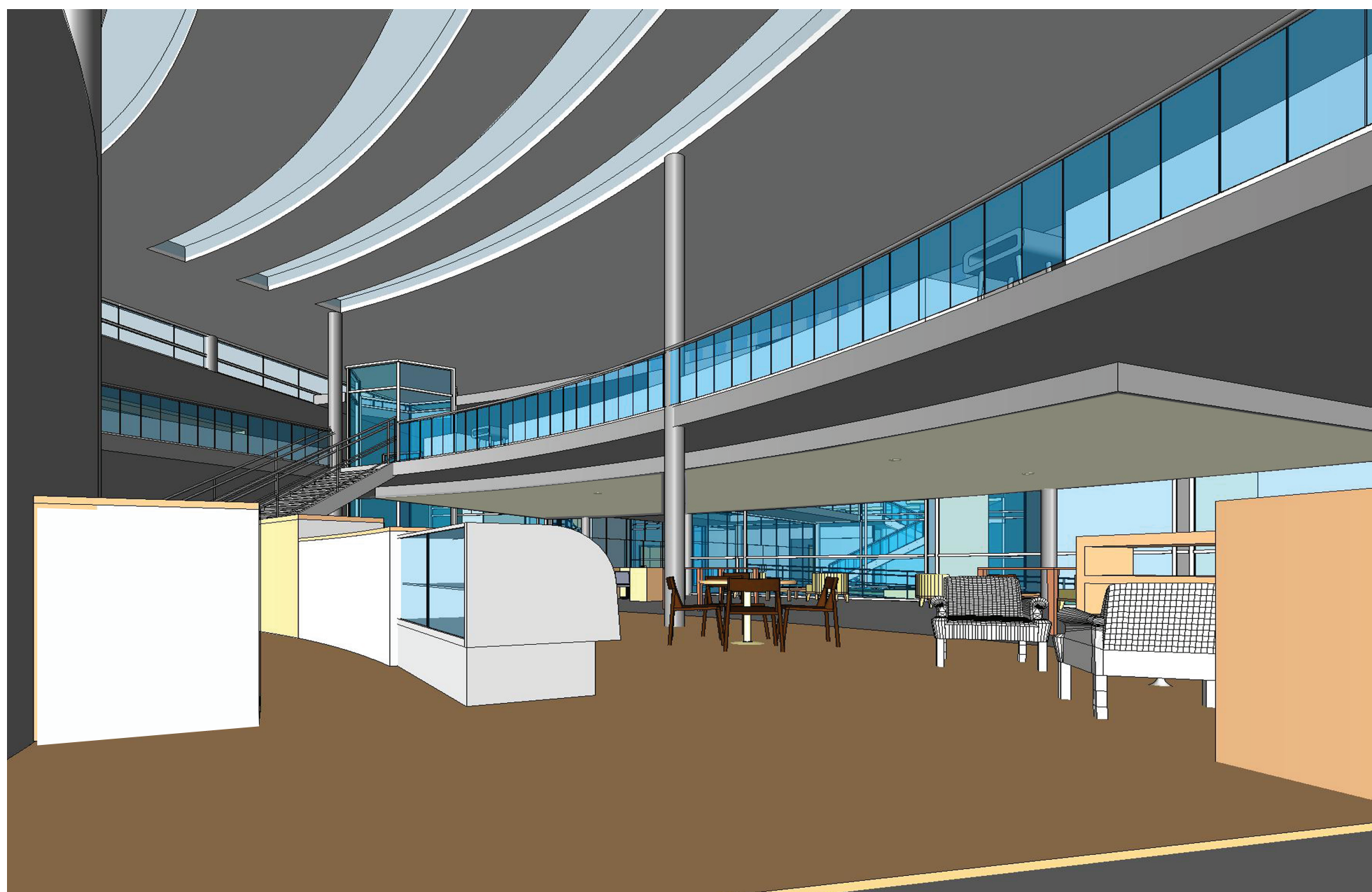
ENDS 405- MICHAEL O'BRIEN
JULIETTE THOMPSON JONATHAN ZUNIGA



LIBRARY FOR DOWNTOWN BRYAN, TX

ENDS 405- MICHAEL O'BRIEN
JULIETTE THOMPSON JONATHAN ZUNIGA

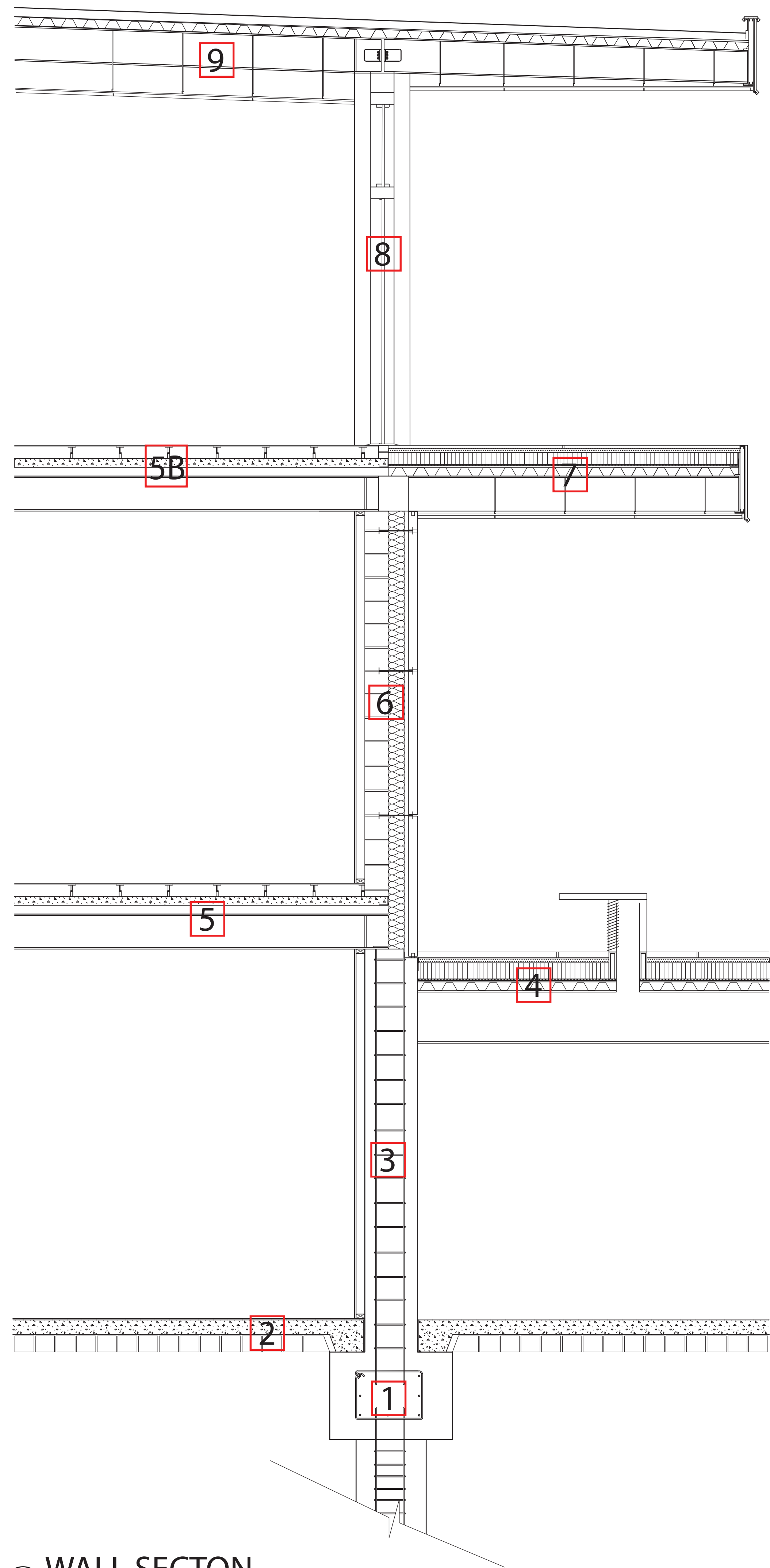
INTERIOR VIEWS



LIBRARY FOR DOWNTOWN BRYAN, TX

ENDS 405- MICHAEL O'BRIEN
JULIETTE THOMPSON JONATHAN ZUNIGA

WALL SECTION



- 1
- 30" CONCRETE PIER WITH RE BAR

-24" CONCRETE PILE JOINED TO PIER WITH REBAR WITH LATERAL TIES
- 2
- 6" CARTON FORM UNDERNEATH POURED SLAB

-5" POURED CONCRETE SLAB WITH FOOTING

-FINISHED FLOOR ON SLAB

-1/2" FOAM SEALANT BETWEEN SLAB AND WALL
- 3
- 18" REINFORCED CONCRETE WALL WITH LATERAL TIES

-3" METAL STUD WALL

-WALL FINISHING ON METAL STUD WALL
- 4
- 18" COLUMN ATTACHED TO CONCRETE WALL ON PIN

-3" METAL DECKING ON BEAM

-1/2" BACKER BOARD

-1/2" THERMAL MEMBRANE

-5 1/2" INSULATION

-2" SAND LAYER

-2" PAVER

-BENCH WITH LOUVERS SITTING ON METAL STUD WALLS (USED FOR MECHANICAL ROOM FRESH AIR)
- 5
- 12" STEEL GIRDER CONNECTED TO COLUMN

-3 1/2" METAL DECKING ON GIRDER

-3" SLAB ON METAL DECKING

-RAISED FLOOR FINISHING SUPPORTED BY 4" PINS
- 6
- 8" REINFORCED CMU

-5 1/2" INSULATION

-THERMAL WALL CAVITY

-3" LIMESTONE EXTERIOR WALL FINISHING ATTACHED TO PINS AT BASE AND IN CMU WALL

-3" METAL STUD WALL ON INTERIOR

-WALL FINISHING ON METAL STUD WALL
- 7
- 12" STEEL GIRDER CONNECTED TO COLUMN

-18" COLUMN ATTACHED TO CONCRETE WALL ON PIN

-3" METAL DECKING ON BEAM

-1/2" BACKER BOARD

-1/2" THERMAL MEMBRANE

-5 1/2" INSULATION

-2" SAND LAYER

-2" PAVER

-CAP PLAT AT END OF BEAM

-METAL STUD WALL SITTING ON PLATE WELDED TO END CAP

-1/2" BOARD ATTACHED TO METAL STUD WALL

-COPPER EXTERIOR FINISHING ATTACHED TO 1/2" BOARD WITH CLIPS

-DROPPED EXTERIOR STUCCO CEILING ATTACHED TO CLIPS CONNECTED TO BEAM WITH RODS
- 8
- GLASS WALL WITH 8" MULLIONS ATTACHED AT COLUMNS

-FLOOR SILL PLATE AT GLASS DOOR
- 9
- 12" PERIMETER BEAM ATTACHED TO COLUMNS

- 12" BEAM ATTACHED TO PERIMETER BEAM

-3 1/2" METAL DECKING

-1/4" VAPOR CONTROL LAYER

-3" INSULATION

-1/4" WEATHERPROOF MEMBRANE

--CAP PLAT AT END OF BEAM

-METAL STUD WALL SITTING ON PLATE WELDED TO END CAP

-1/2" BOARD ATTACHED TO METAL STUD WALL

-COPPER EXTERIOR FINISHING ATTACHED TO 1/2" BOARD WITH CLIPS

-DROPPED CEILING FNISHING ATTACHED TO CLIPS CONNECTED TO BEAM WITH RODS

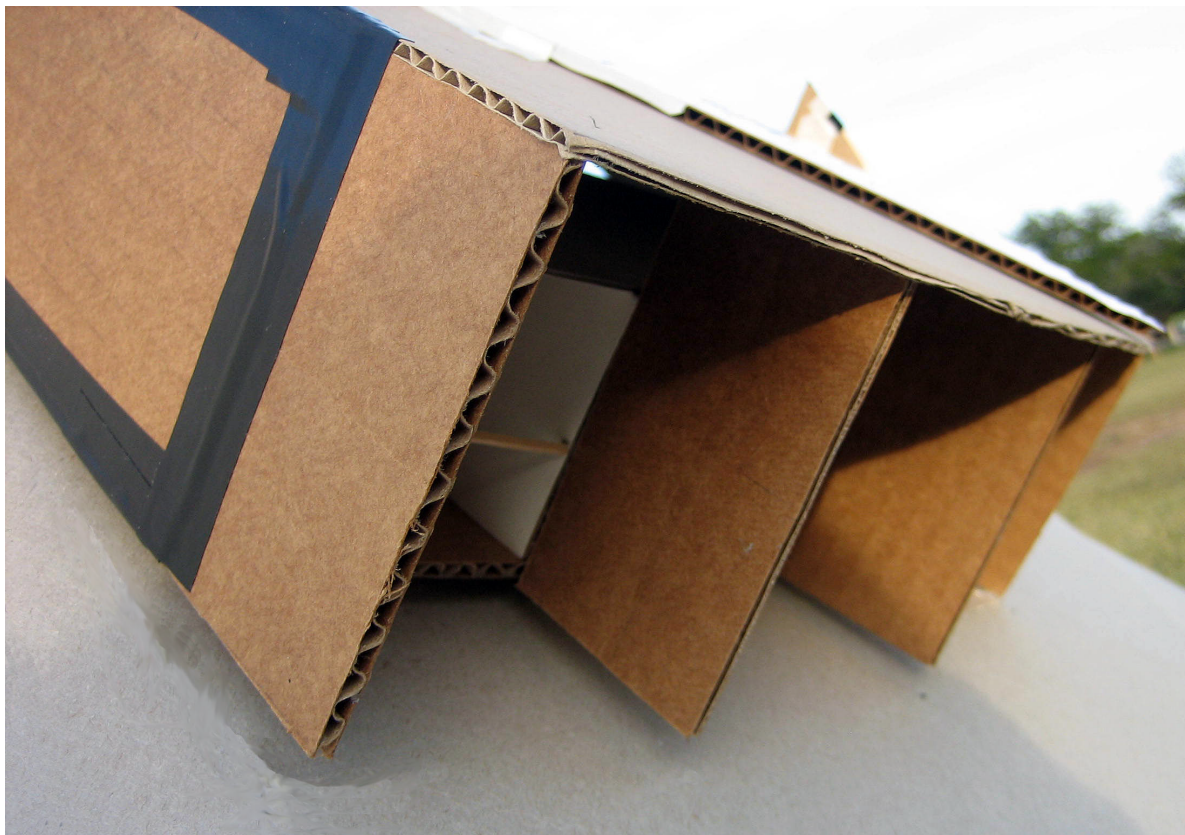
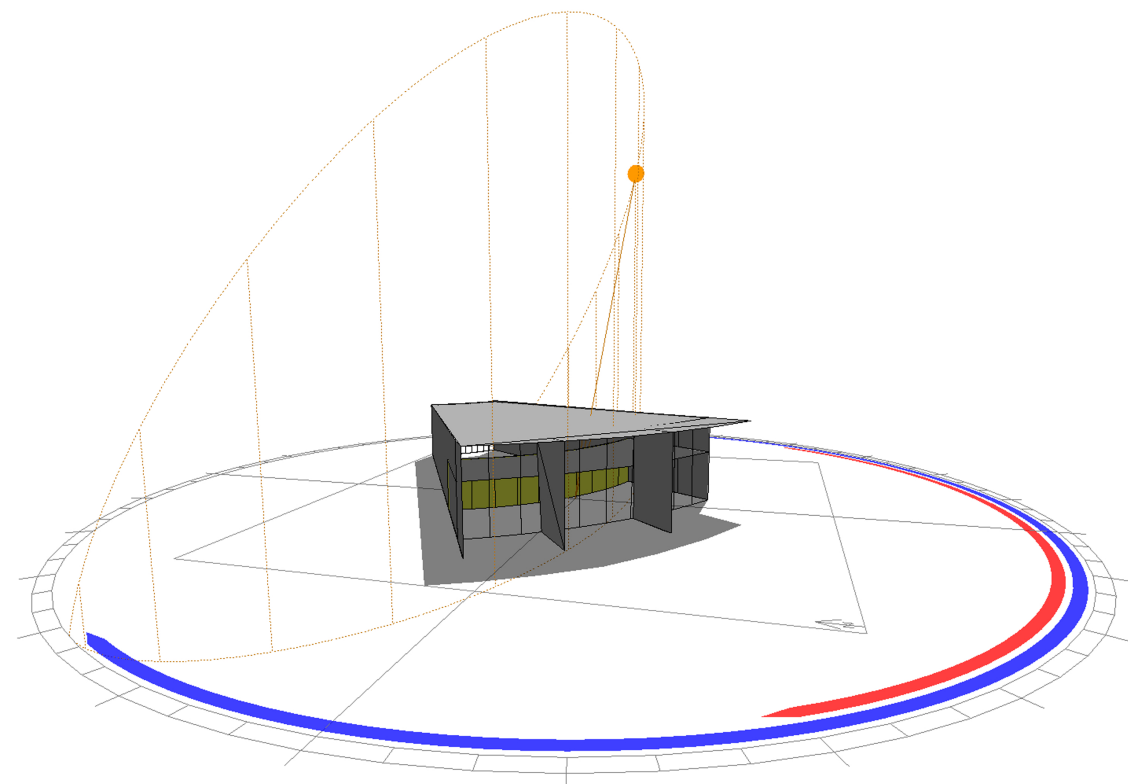
-END FINISHINGS FORM PARAPET

LIBRARY FOR DOWNTOWN BRYAN, TX

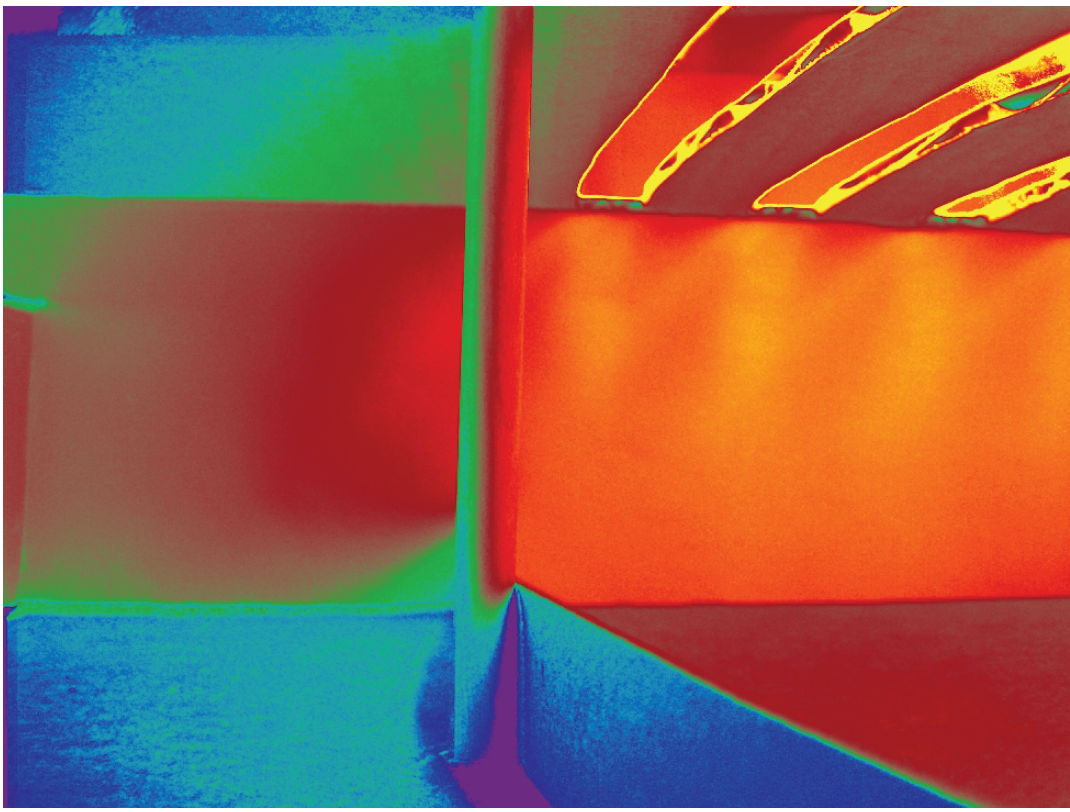
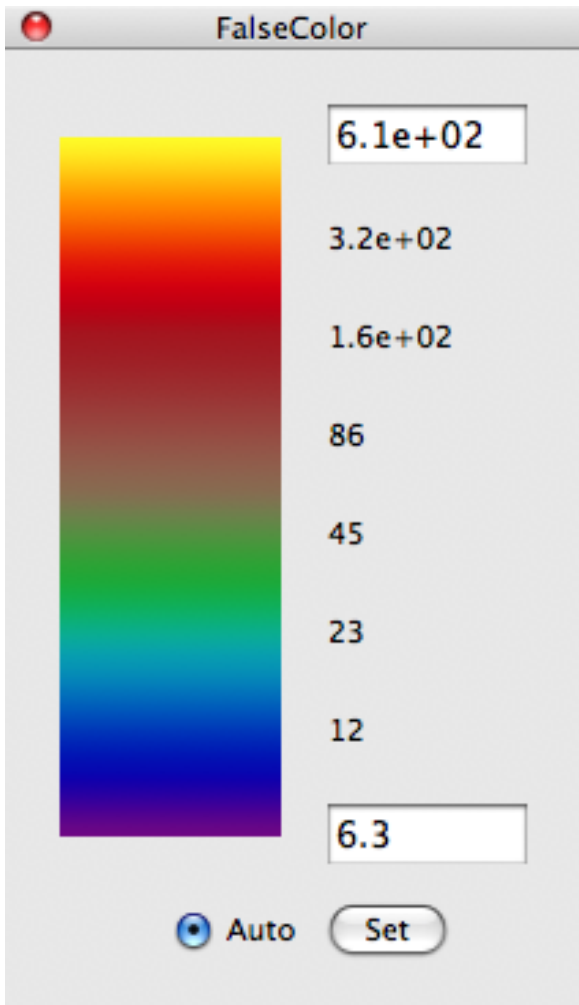
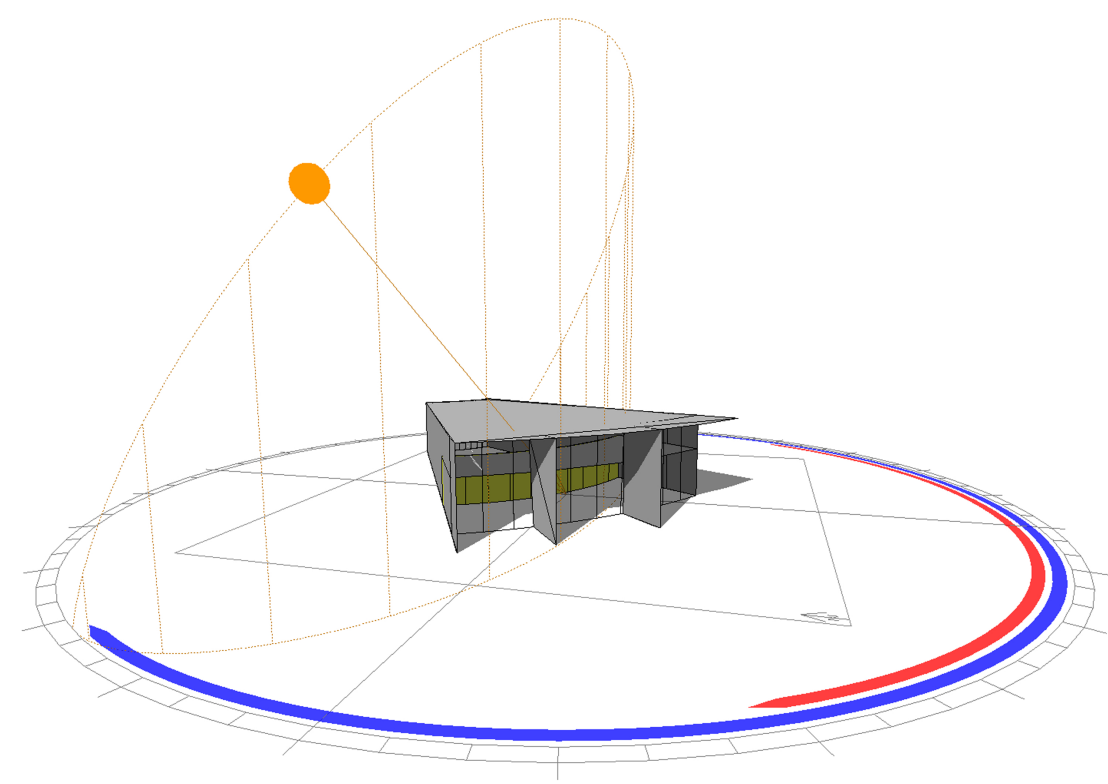
ENDS 405- MICHAEL O'BRIEN
JULIETTE THOMPSON JONATHAN ZUNIGA

MODEL ANALYSIS

JUNE 21ST: 10.A.M.



JUNE 21ST: 5P.M.

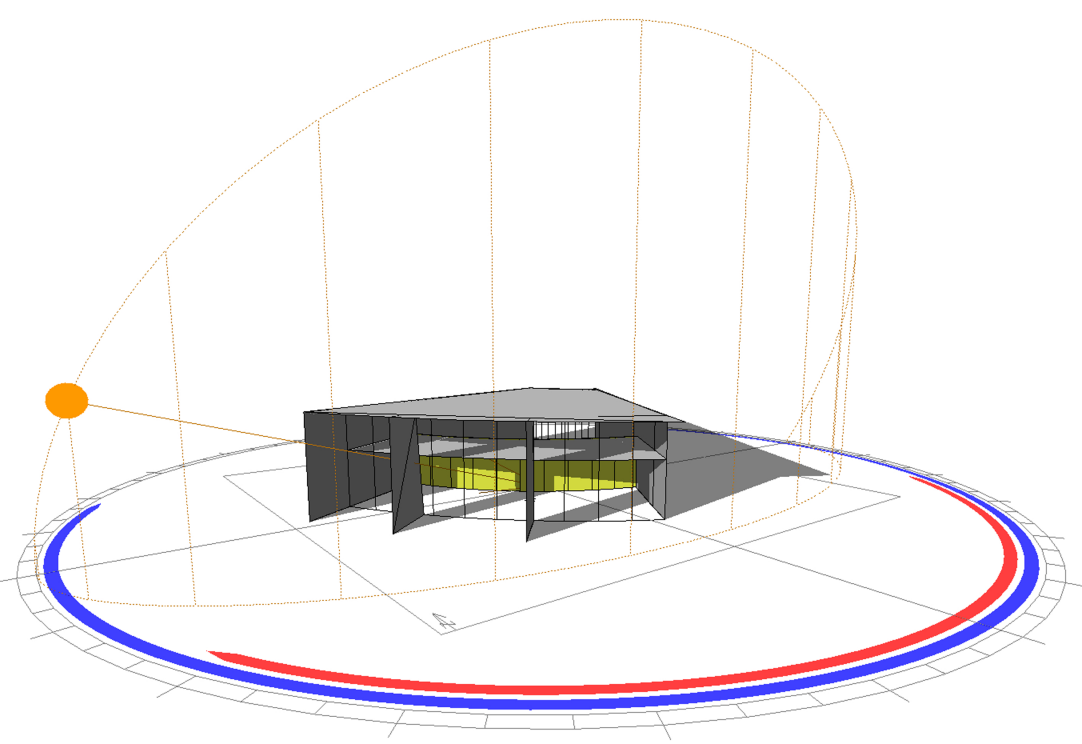


FALSE COLOR TIME

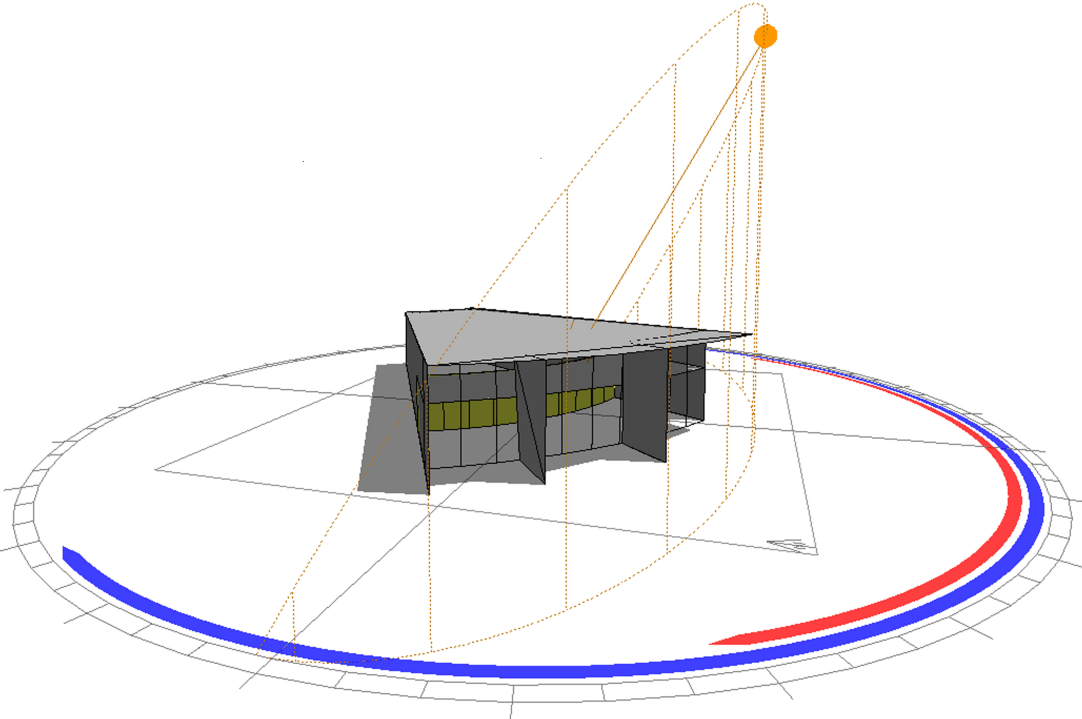


HDR TIME

SEPTEMBER 21ST: 10 A.M.



SEPTEMBER 21ST: 5P.M.

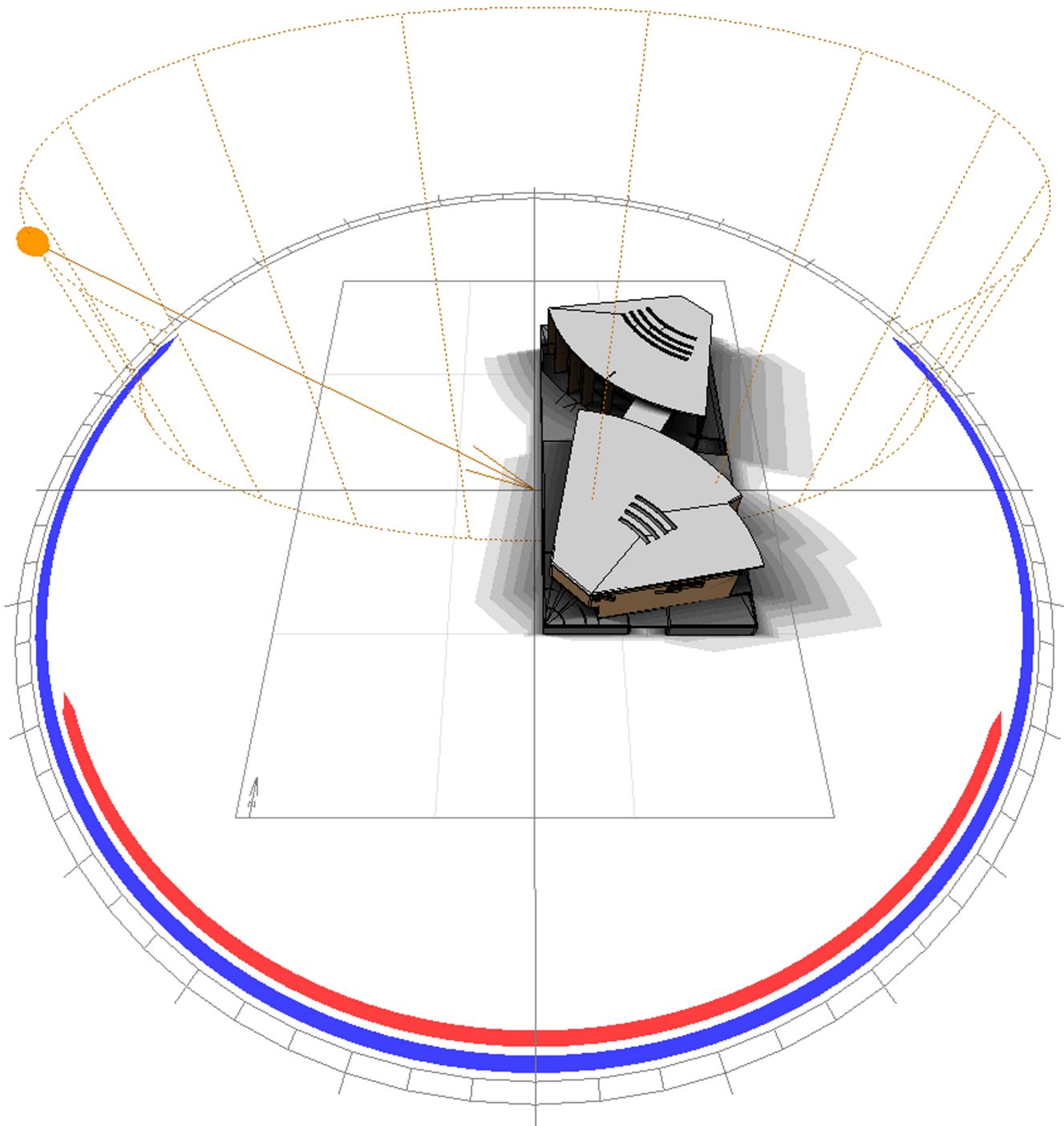


LIBRARY FOR DOWNTOWN BRYAN, TX

ENDS 405- MICHAEL O'BRIEN
JULIETTE THOMPSON JONATHAN ZUNIGA

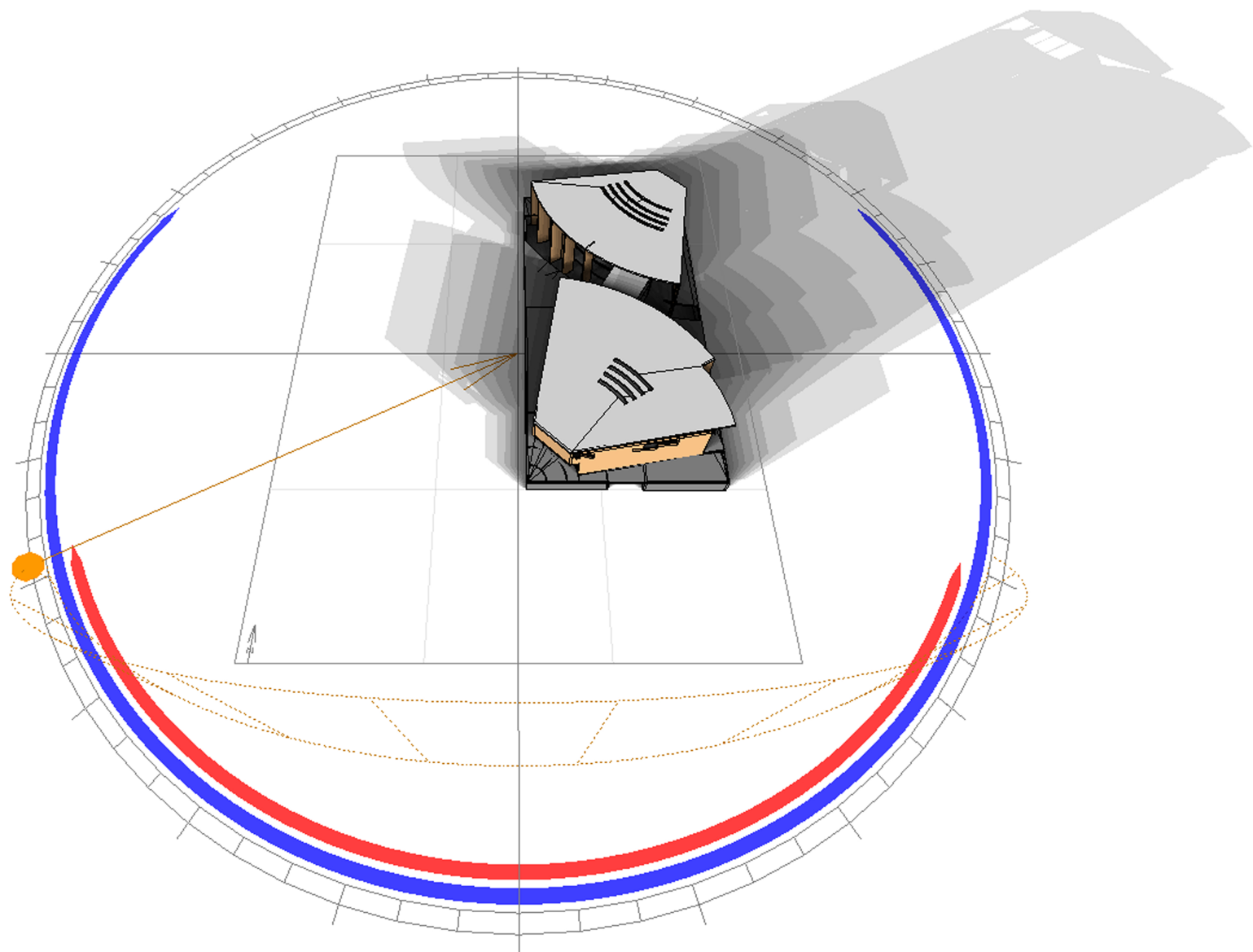
SHADOW ANALYSIS

JUNE 21



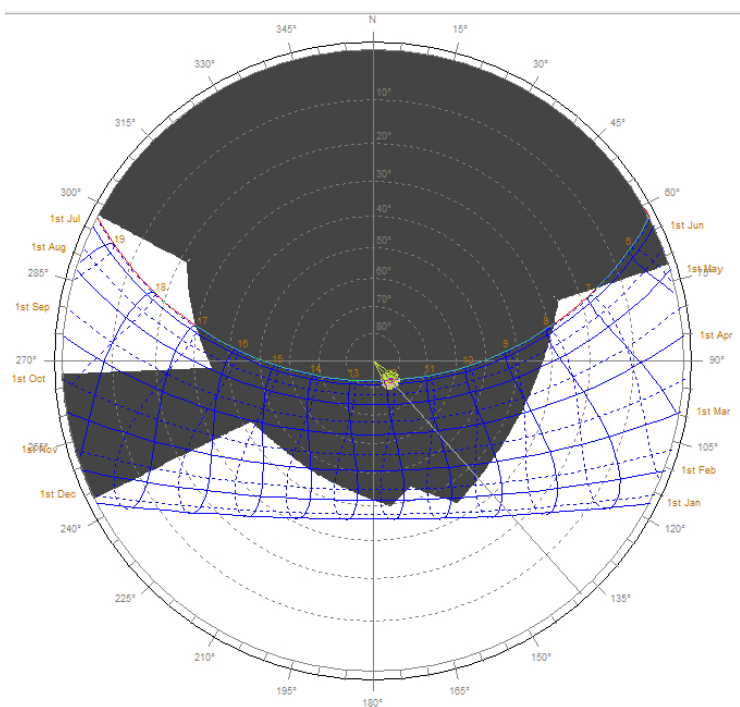
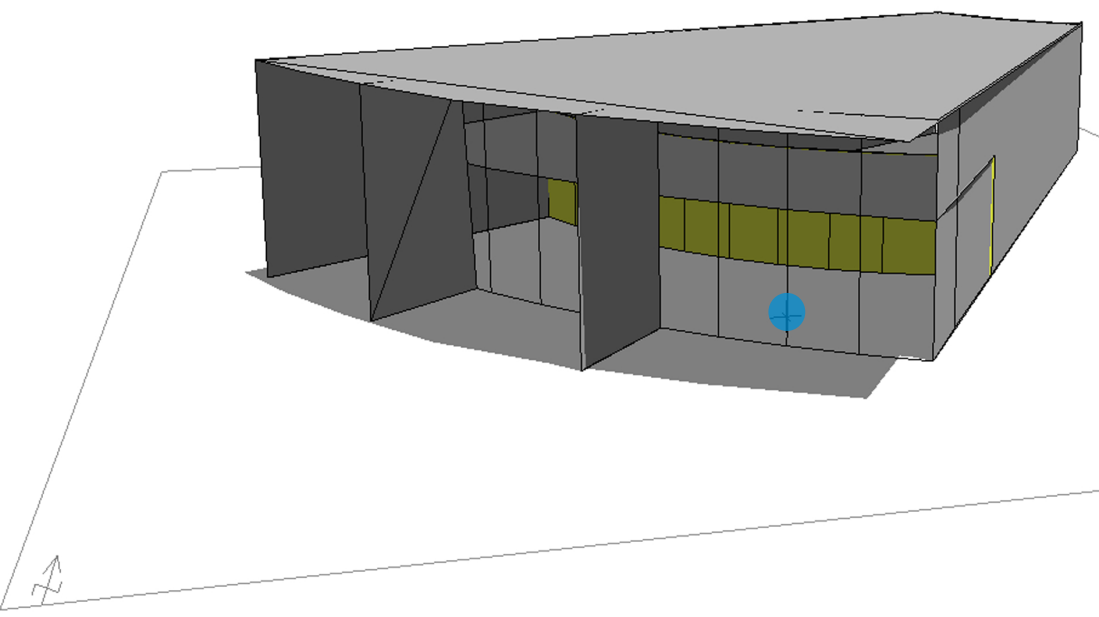
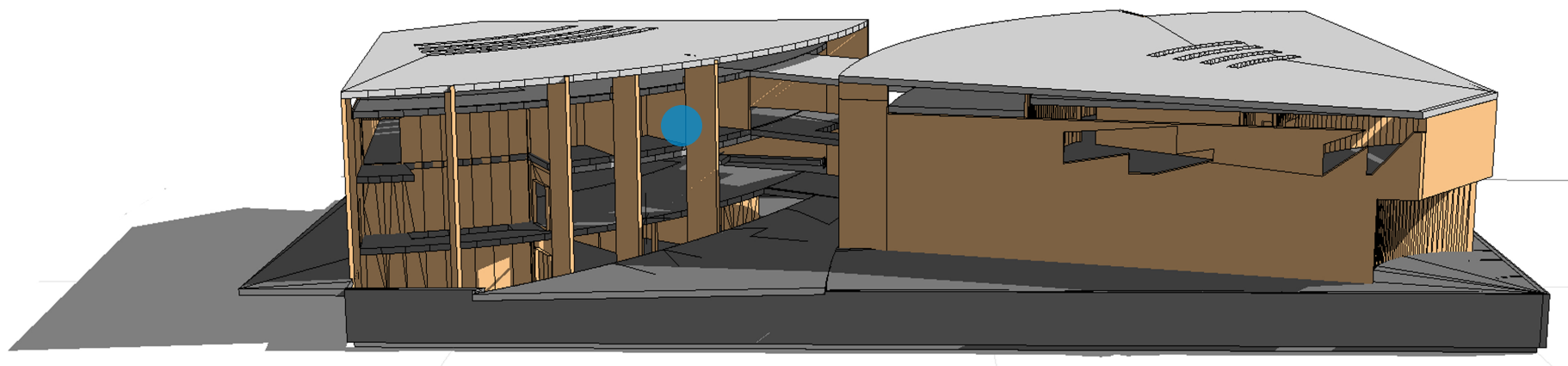
ALL SHADOWS 9 A.M.TO 5.PM.

DECEMBER 21



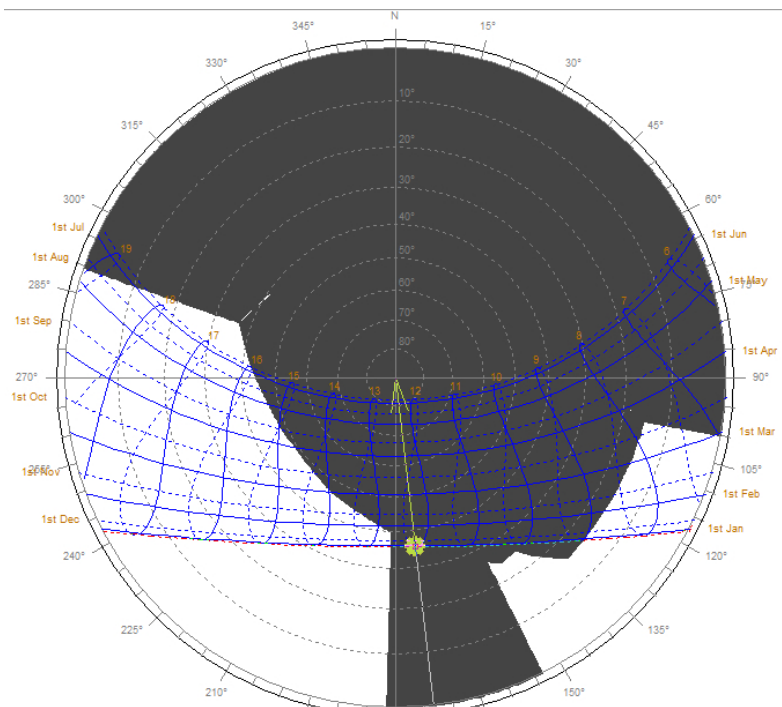
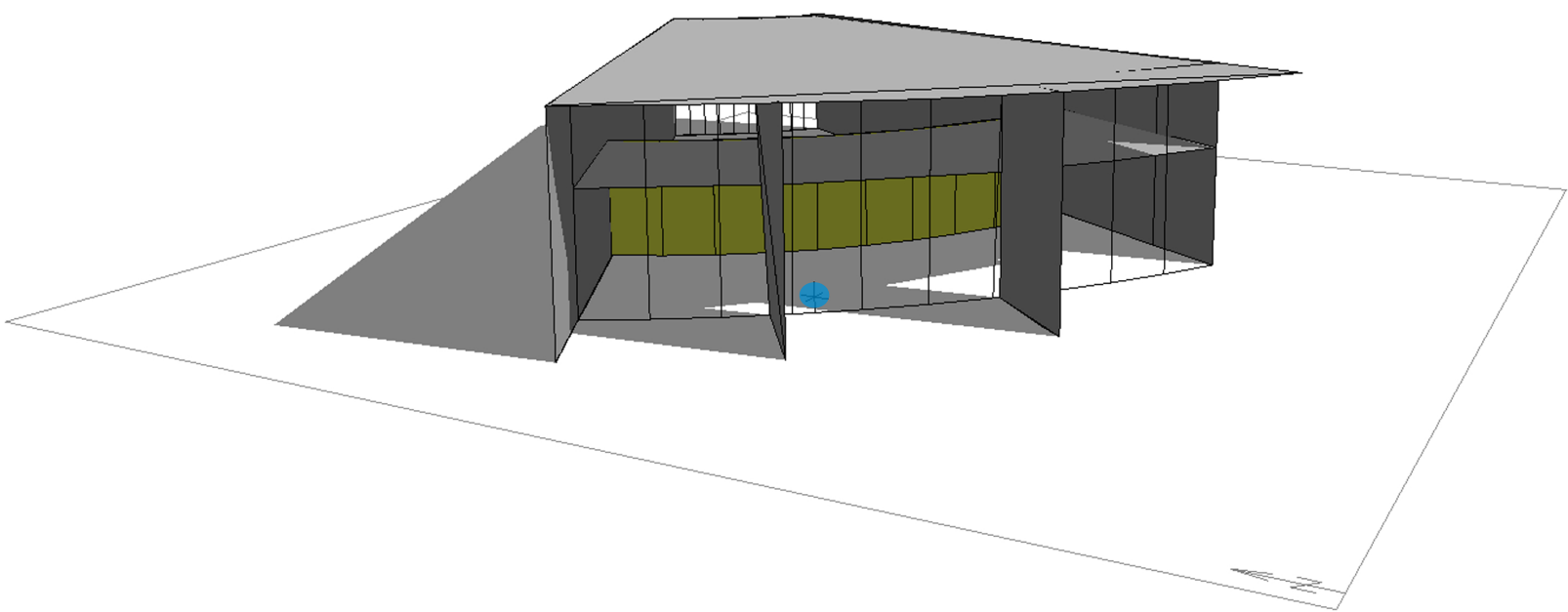
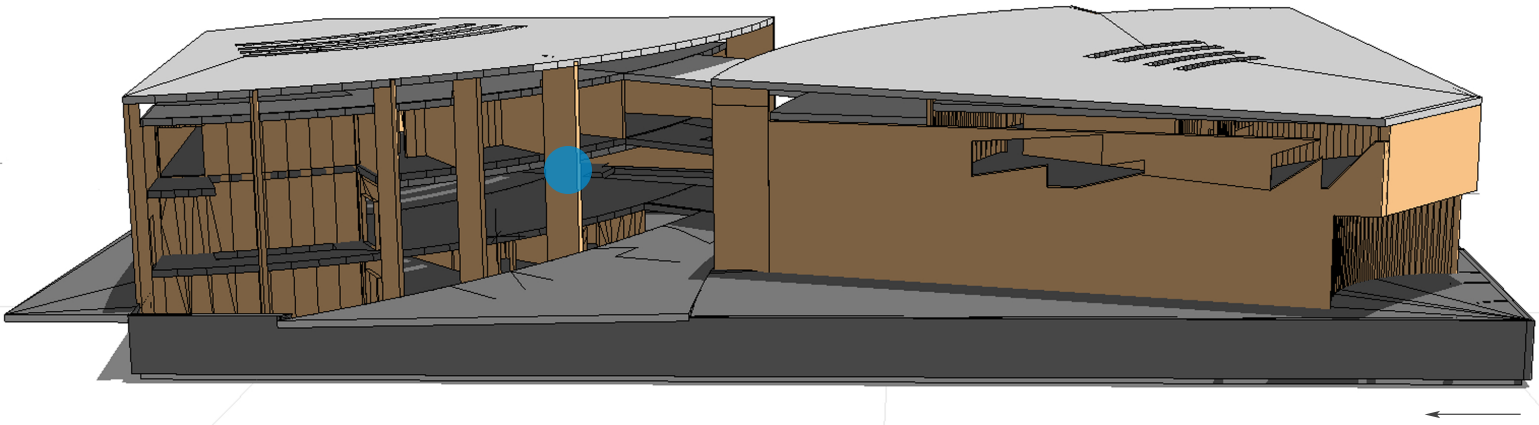
ALL SHADOWS 9 A.M.TO 5.PM.

SHADOWS AT NOON

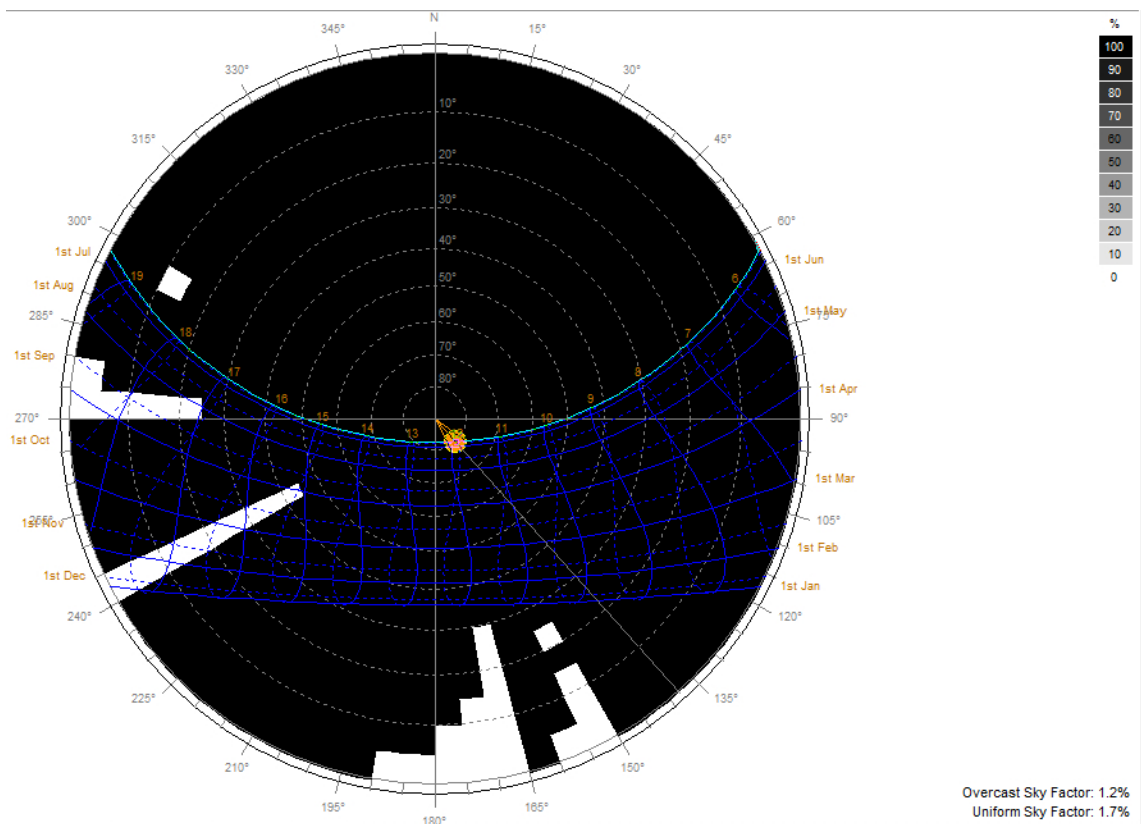


SUN PATH DIAGRAM

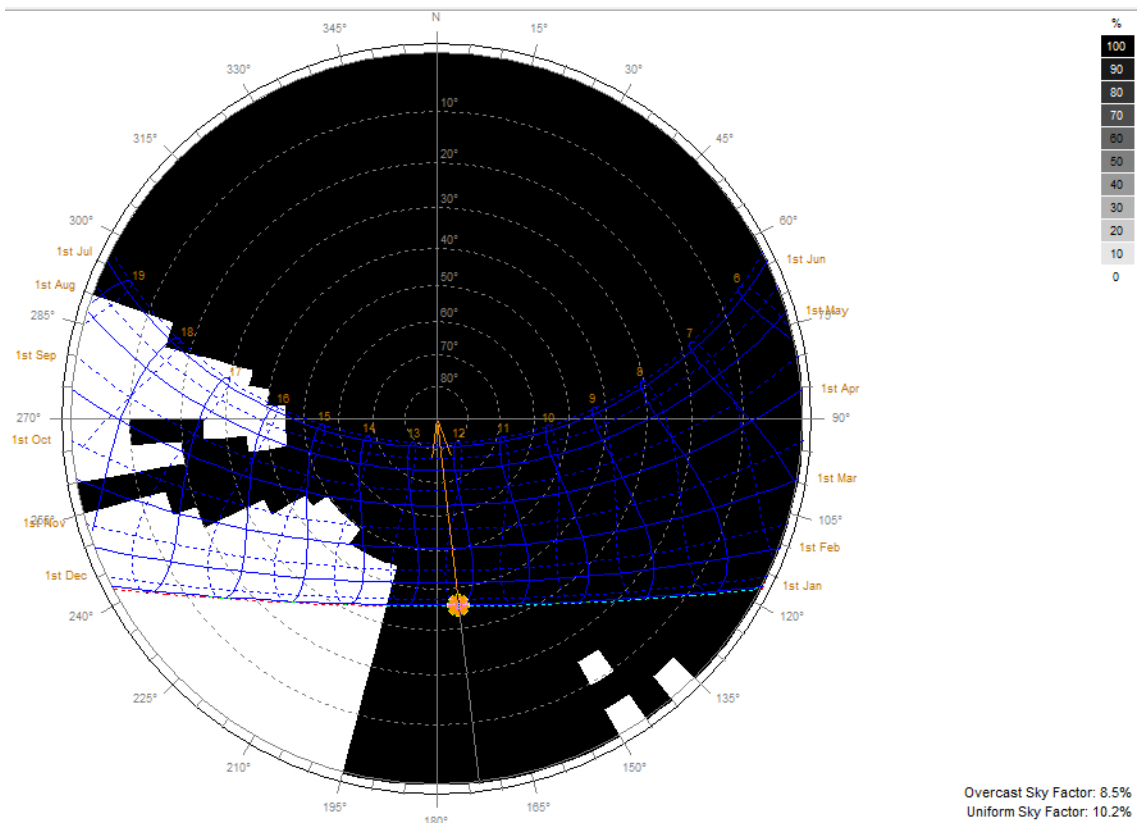
SHADOWS AT NOON



SUN PATH DIAGRAM



SHADING DIAGRAM



SHADING DIAGRAM