

Lighting Proposal Memo

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Lighting/Electrical Option

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National Intrepid Center of Excellence | Bethesda, MD



After careful consideration and research, the following are the proposed spaces of study for Tech 1 / Lighting portion of Senior Thesis:

- **Large Workspace – Physical Therapy Room/Occupational Therapy Room/Therapy Waiting Room**

- **Description**

The large workspace is centrally located on the second floor of the northern portion of the building. It is a total of 4100 square feet, and is an irregular shape with mostly curved walls.

The Therapy Waiting Room is entered from the General Therapy Info space and consists of seating for patients. It is adjacent to and accessible by the office and exam spaces located in the "bar" section of the building.

The Physical Therapy space extends along the northern facade curtainwall. Exercise equipment is located along the exterior wall for excellent outside views. Evaluation rooms, the Art/Music space, and Central Park can be accessed from this area.

The circular shaped Occupational Therapy room contains no north wall, creating a large, open transition space to the PT room. The area includes many pieces of furniture, equipment, and kitchen space. Large glass windows are located on the southern wall area, looking down onto the first floor Interior Lobby.

- **Surface Materials**

- Therapy Waiting

Floor - The floor consists of two types of rubber sport floor (RF-2,3).

Base - A mdf painted wood base (WDB-2) is utilized along with a 4" linoleum rubber base (RB-2) in some areas.

Walls - Most of the interior wall surfaces consist of a wood veneer wall covering (WC-1) with painted (P-1) aluminum at the raised ceiling along the perimeter wall. A 6.5 foot east-facing clerestory is located at the top of the east wall. The upper section is spandrel glass and the lower is composed of clear vision glass. Double aluminum doors with vision lites and a surrounding storefront wall act as a partition between the General Therapy Info space.

Ceiling - The center of the space consists of 24"x96" acoustic ceiling tile (ACT-3) while the raised ceiling along the perimeter wall is painted gypsum wall board (GWB-1).

- PT

Floor - The floor consists of three types of rubber sport floor (RF-1,2,3). A narrow horizontal strip through the center of the space presents a unique pattern on the ground.

Base - A mdf painted wood base (WDB-2) lines the perimeter of the lower wall.

Walls - Most of the interior wall surfaces consist of a wood veneer wall covering (WC-1) with painted (P-1) aluminum at the raised ceiling along the perimeter wall. Painted accents are also present (P-15). The exterior wall is comprised of a curtainwall system with aluminum framing. The glass is vision glass with ceramic frit with small sections of spandrel and clear vision glass lining the top portion. Double stainless steel clad aluminum doors lead into the Art/Music space. Stained solid core double doors with a painted hollow metal frame provide access into Central Park. A stained solid core door with a narrow lite and a painted hollow metal frame provides entrance into the PT/EVAL room.

Ceiling - The center of the space consists of 24"x96" acoustic ceiling tile (ACT-3) while the raised ceiling along the perimeter wall is painted gypsum wall board (GWB-1).

OT

Floor - The floor consists of three types of rubber sport floor (RF-2,3,4).

Base - A mdf painted wood base (WDB-2) is continued around the perimeter.

Walls - The walls are painted (P-1) with alternate color accents (P-15). Cabinetry is also present in this space. The southern wall curve contains a clear vision glass window overlooking the first floor Interior Lobby. Stained solid core doors with a narrow lite and a painted hollow metal frame provide entrance into smaller adjacent rooms.

Ceiling - The center of the space consists of 24"x24" acoustic ceiling tile (ACT-2) while the raised ceiling along the perimeter wall is painted gypsum wall board (GWB-1).

o **Furnishings**

Chairs and end tables are located throughout the Therapy Waiting Room. Numerous pieces of exercise equipment occupy the PT area. The OT space contains several tables/desks and various types of therapy equipment.

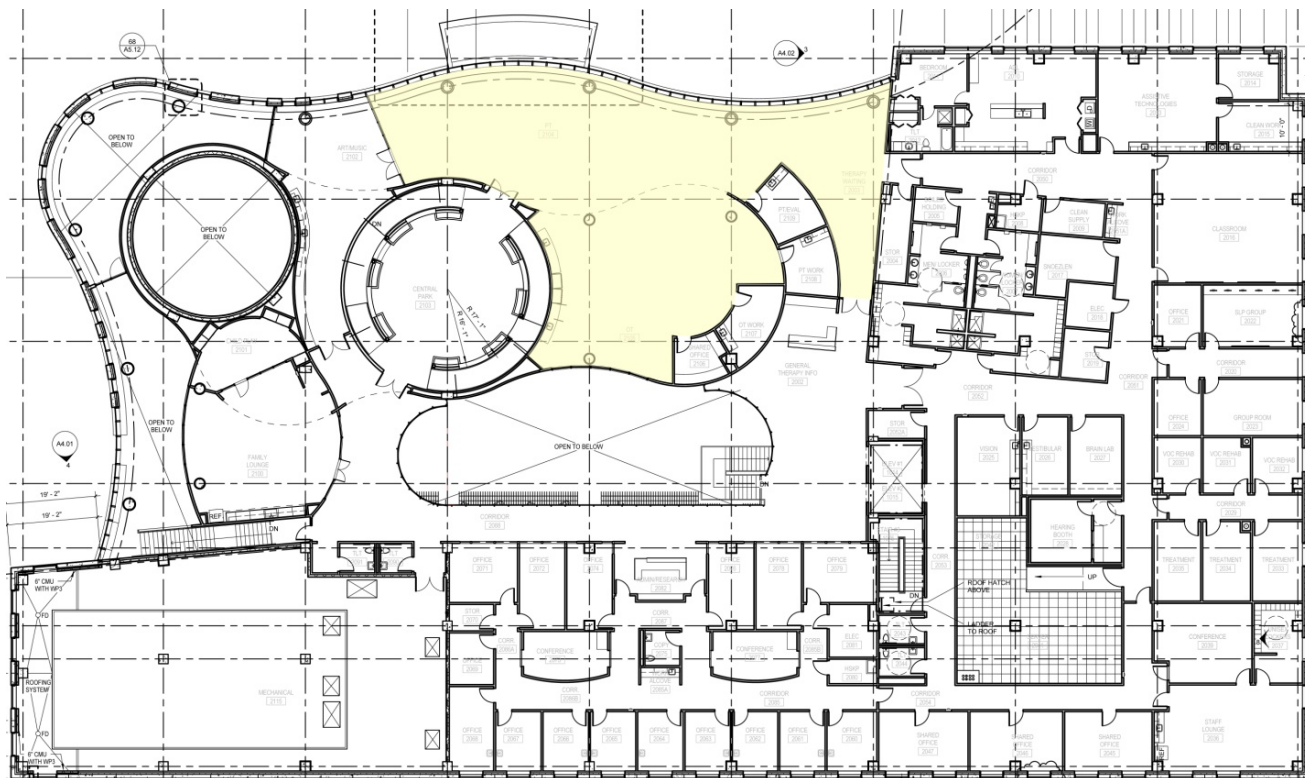
o **Activities/Tasks**

The PT space provides an area for large movement activities and requisite equipment. Exercises and activities will take place throughout the area. Patients will be evaluated on their abilities and progress completing various movements. People will be moving around the space from one machine to another, conversing, and possibly reading forms or directions.

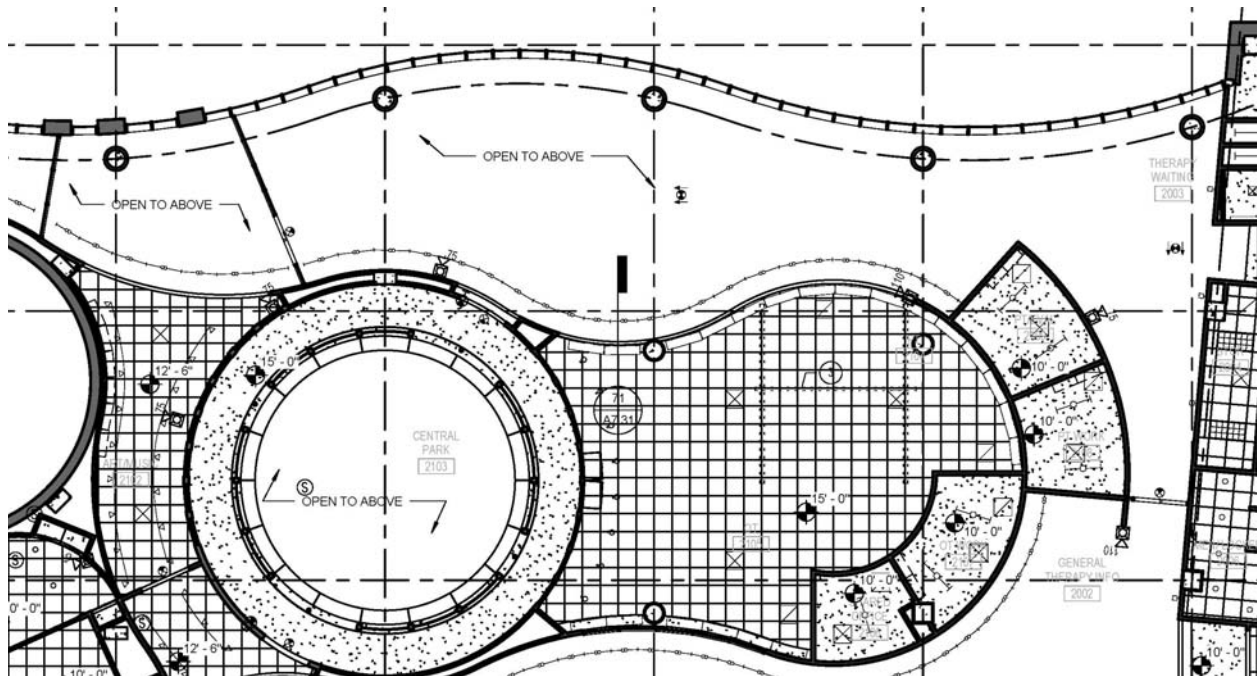
The OT space is used to evaluate a patient's cognitive abilities. Tasks such as screening patients, which includes an interview and a basic evaluation of functional abilities will take place.

The Therapy Waiting area will be used for patients and their families to sit and wait for treatment. They will most likely be reading or conversing among one another.

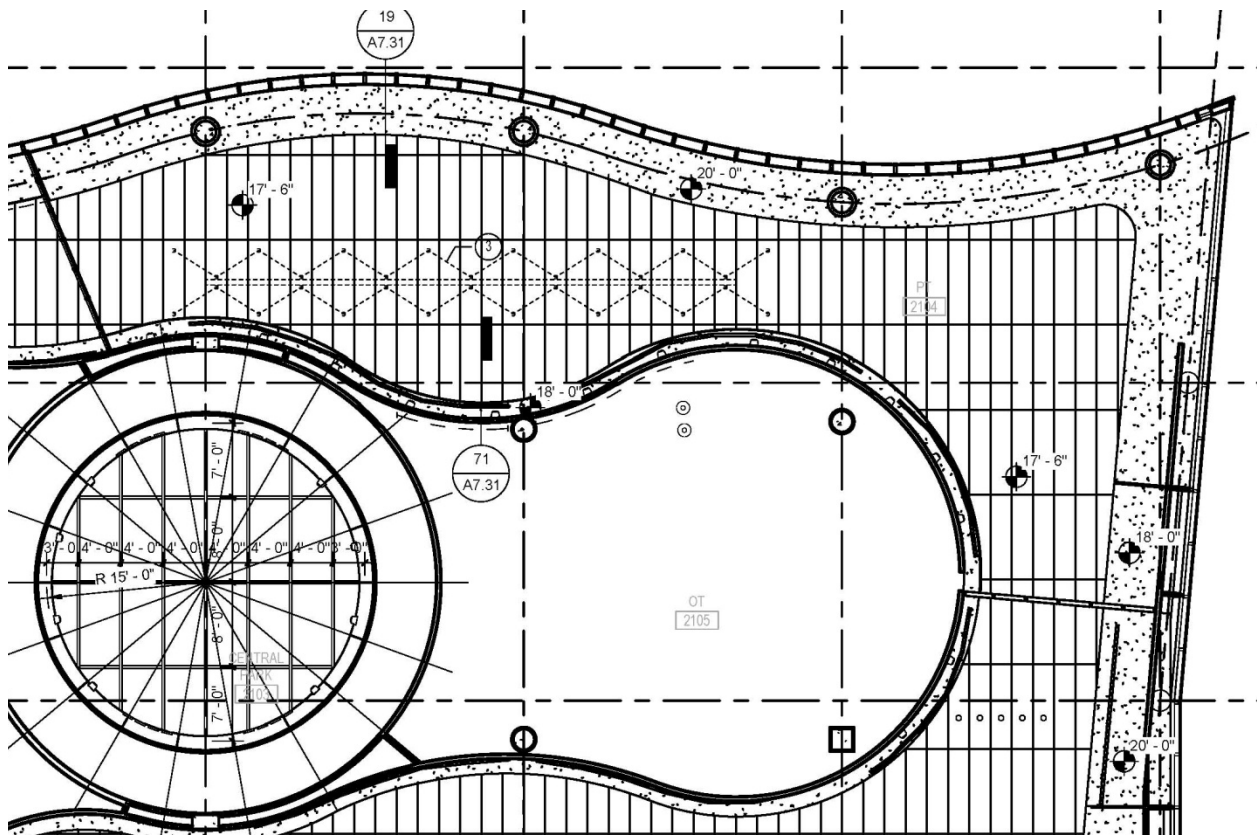
o Drawings



PT/OT Location (NTS)



PT/OT Reflected Ceiling Plan - Second Floor (NTS)



PT/OT Reflected Ceiling Plan - Low Roof (NTS)

- **Special Purpose Space - Auditorium**

- **Description**

The auditorium is centrally located on the first floor of the amorphous section of the building. It is a total of 1460 square feet and can be divided into two smaller rooms (about 730 square feet each) using moveable partitions that run north to south.

The space can be entered from one of four sets of double doors. Two of these entrances are located on the north end of the room, connecting the auditorium to the Entry/Lobby. The other two sets of doors are positioned on the south end of the space, and open onto the Interior Lobby. This allows for entering and exiting through both ends of the room from either side of the partition. Two partition pocket doors are located at the north and south ends of the space between each of the sets of entrance/exit doors for partition storage.

A Storage Room is located in the northeast corner for furniture placement.

- **Surface Materials**

Floor - The floor is composed of wall to wall carpet tile (CPT-1).

Base - A wood base (WDB-1, 2) is located at the bottom of the wall around the perimeter of the room. It is either mdf painted or has a satined finish to match the adjacent surface materials.

West Wall - The upper portion of the west wall is acoustic wall panel (AWP-1) while the lower part consists of wood wall paneling (WD-1).

East Wall - The upper portion of the west wall is acoustic wall panel (AWP-1) while the lower part consists of wood wall paneling (WD-1). A stained solid core wood door with a painted hollow metal frame is positioned on the north end of the wall.

North Wall - The upper portion of the west wall is acoustic wall panel (AWP-1) while the lower part consists of wood wall paneling (WD-1). Full height solid wood double doors with a painted hollow metal frame conceal the moveable partition in the center of the wall. A set of stained solid core wood double doors with vision lites and a painted hollow metal frame are located on each side of the partition doors.

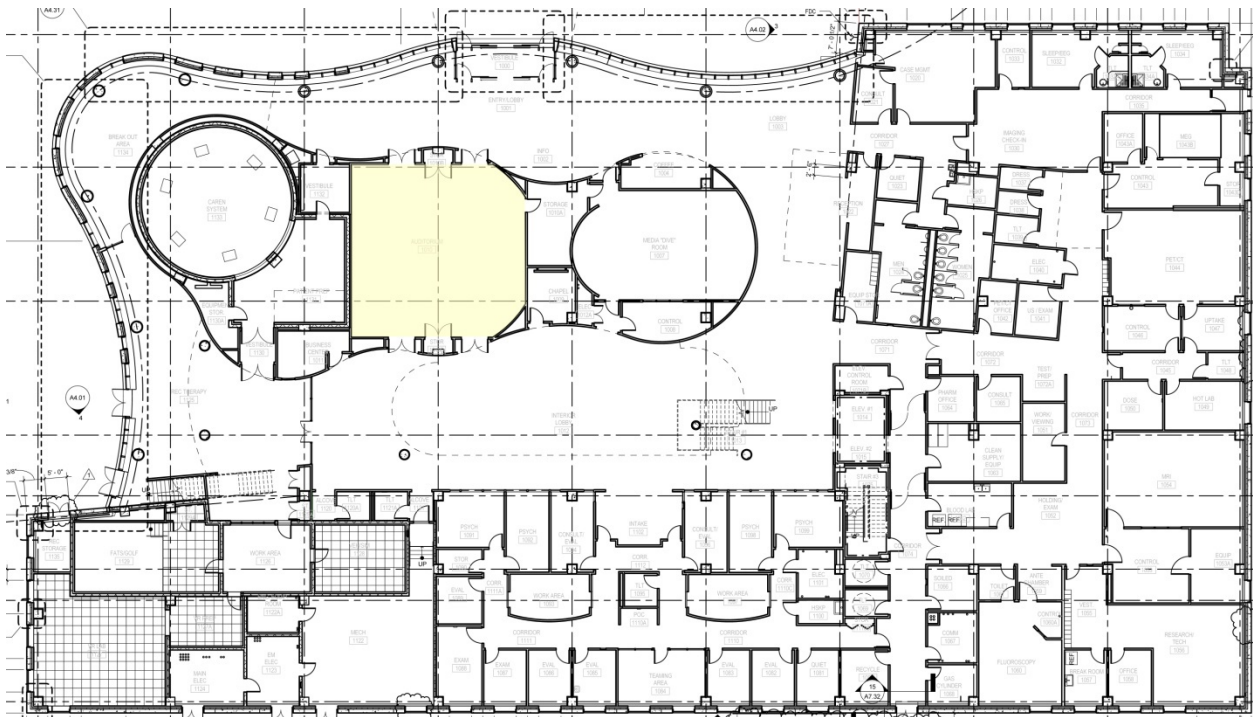
South Wall - The upper portion of the west wall is acoustic wall panel (AWP-1) while the lower part consists of wood wall paneling (WD-1). Full height solid wood double doors with a painted hollow metal frame conceal the moveable partition in the center of the wall. A set of stained solid core wood double doors with vision lites and a painted hollow metal frame are located on each side of the partition doors.

Ceiling - 12"x48" acoustic wood ceiling tile (ACWP-1) covers the ceiling in strips that run north to south. 24"x48" black acoustic ceiling tile (ACT-6) is placed in between the wood tiles.

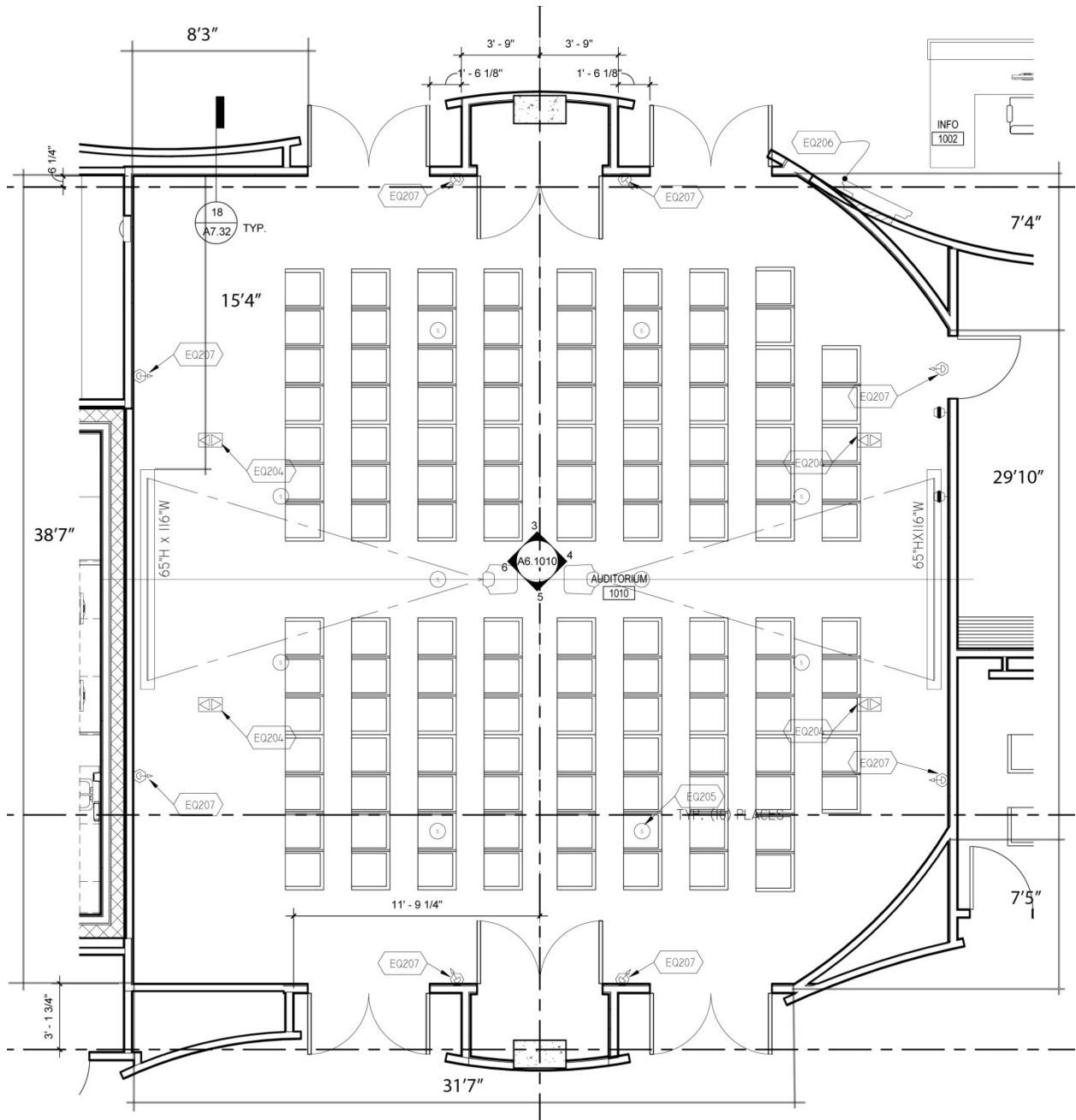
- **Furnishings**

The space contains a moveable stage platform for use during presentations. It has two possible seating layouts. Chairs can be placed in the center of the space facing east or west, depending on the stage location, and room division. Round tables surrounded by chairs make up the second seating configuration available in the space (see drawings).
- **Activities/Tasks**

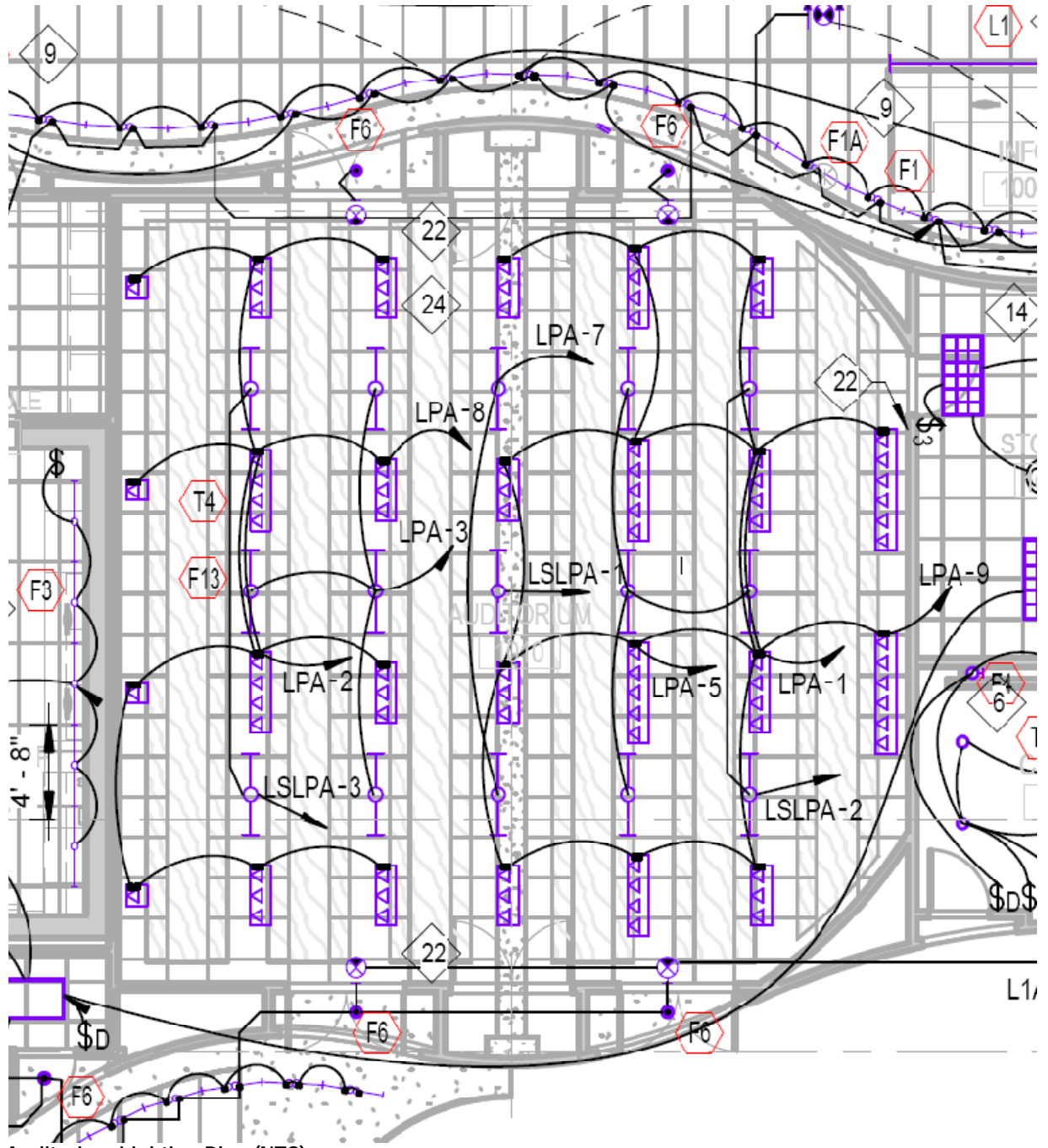
Projection screens are located along the east and west walls for presentations in either or both partitioned areas. Research, clinical, and training sessions, conferences and seminars will be held in this space. The space will be occupied frequently for meetings and discussions. Internet access will be available, so computer usage is probable. Distance learning lectures/seminars will be distributed widely by media or web conference (VTC capabilities).
- **Drawings**



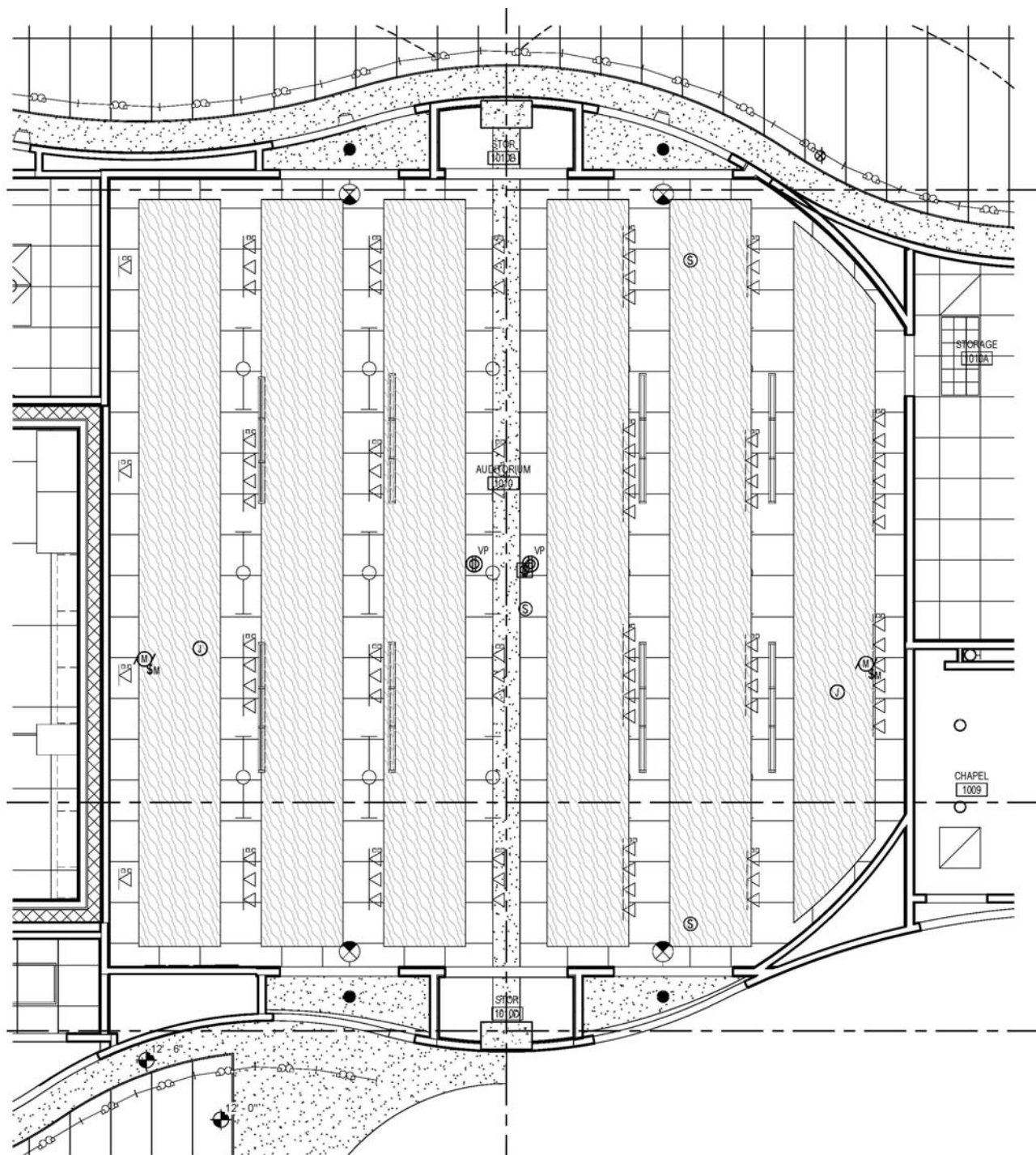
Auditorium Location (NTS)



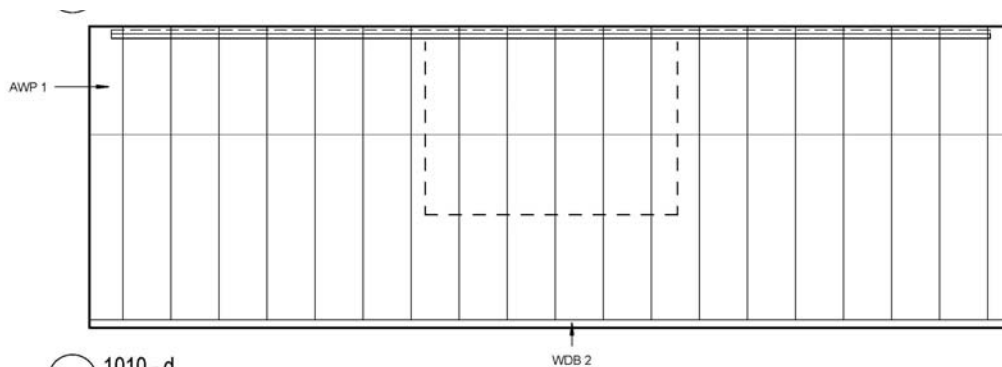
Auditorium Floor Plan (NTS)



Auditorium Lighting Plan (NTS)

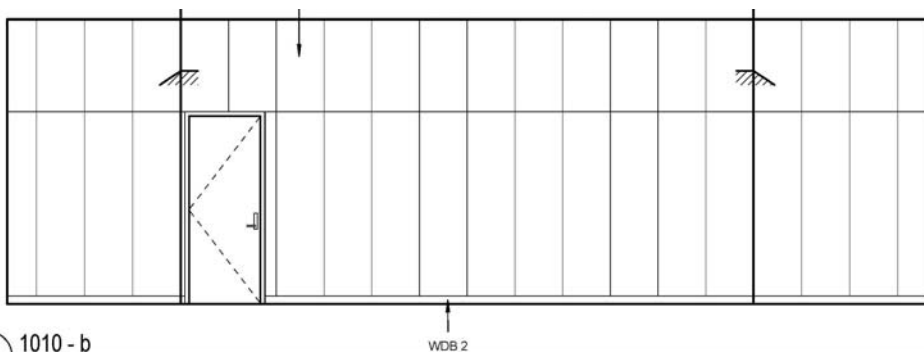


Auditorium Reflected Ceiling Plan (NTS)



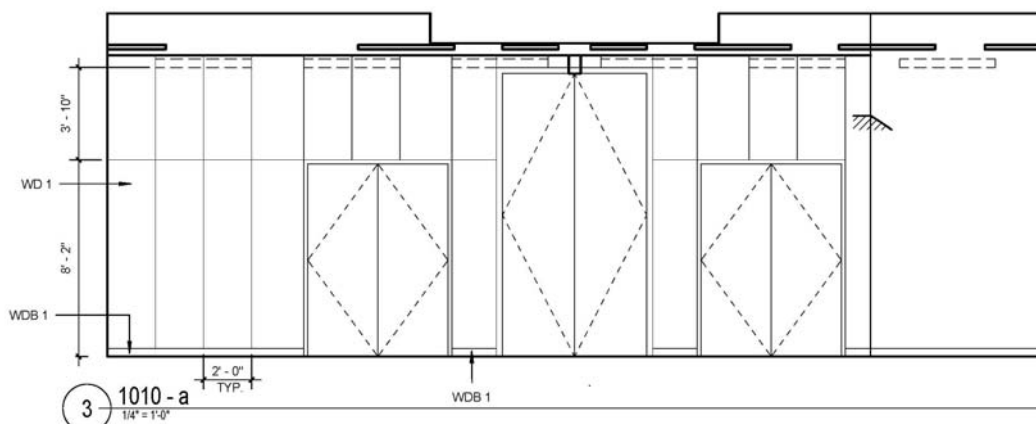
6 1010 - d
1/4" = 1'-0"

Auditorium Interior Elevation - West Wall (NTS)



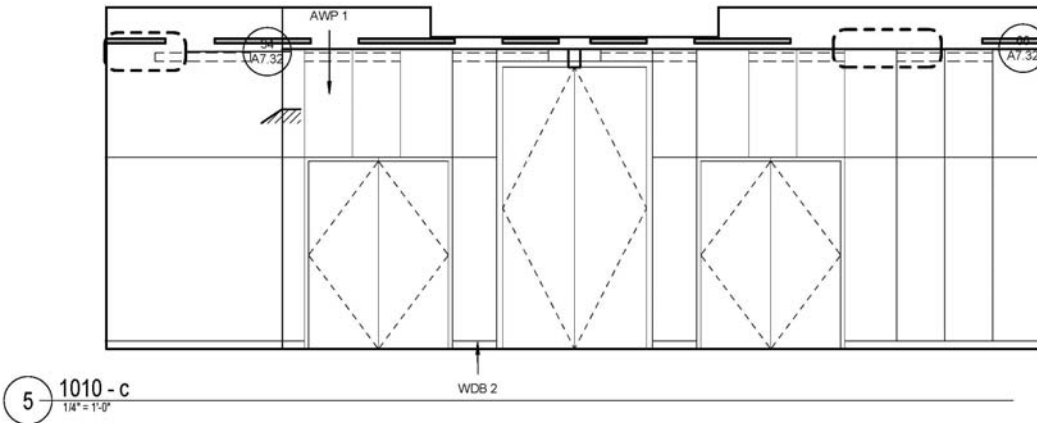
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1/4" = 1'-0"

Auditorium Interior Elevation - East Wall (NTS)

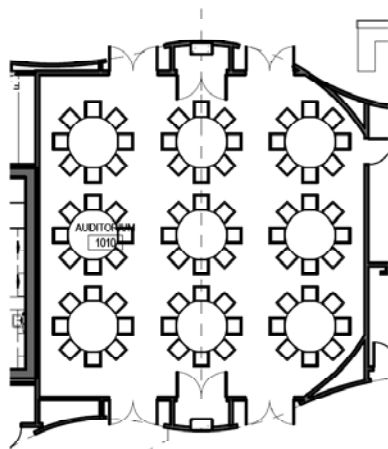


3 1010 - a
1/4" = 1'-0"

Auditorium Interior Elevation - North Wall (NTS)



Auditorium Interior Elevation – South Wall (NTS)



Auditorium Alternate Furniture Layout (NTS)

- **Circulation Space – Lobby (includes Entry/Lobby, Vestibule, Info Desk, Coffee Shop, and Reception Desk)**

- **Description**

As the main circulation space of the building, the lobby is occupied by all who enter. It is located on the first floor of the amorphous section of the building along the north facade facing Palmer Road South. All of the walls, except for that to the east, are curved in shape.

Upon entering this irregularly shaped space, one first passes through the vestibule, as the main transition space between the exterior and interior. Two single doors on either side of the vestibule allow access to the main entryway. The Break Out Area is located to the west of this space, and

entrances to the Auditorium and Media "Dive" Room are south. An information desk, coffee shop (includes kitchen area and countertop), and reception desk (includes cabinetry) are also located within the area. Other spaces, including corridors and the Interior Lobby branch off of the space to the east and south.

- **Surface Materials**

- Entry/Lobby

- *Floor* - The floor consists of slat defend and ESD control static dissipative tile (ST-1,2) in the area of the lobby surrounding the vestibule and extends to the eastern edge of the coffee shop. From this point throughout the rest of the space carpet tile (CPT-1) is used.

- *Base* - A solid wood base satined to match the adjacent surfaces (WDB-1) is utilized.

- *Walls* - Most of the interior wall surfaces consist of a wood veneer wall covering (WC-1) with painted (P-1) aluminum at the raised ceiling along the perimeter wall. The exterior wall is comprised of a curtainwall system with an aluminum framing system. The glass is vision glass with ceramic frit with a small section of spandrel glass lining the top portion. A water feature is present along the 12 foot span of wall adjacent to the reception desk. At a height of 10 feet from the floor, a trellis spans the length of the wall behind the reception desk and water feature.

- *Ceiling* - The center of the space consists of 24"x96" acoustic ceiling tile (ACT-1) while the raised ceiling along the perimeter wall is painted gypsum wall board.

- Vestibule

- *Floor* - The floor consists of a stainless steel entrance mat (EM-1).

- *Base* - A metal base (MB-1) lines the perimeter of the lower wall.

- *Walls* - Two aluminum doors with medium stile glass on each side of the north and south walls. Double automatic sliding glass doors are also present on the north and south walls.

- *Ceiling* - The ceiling is gypsum wall board (GWB-1).

- Coffee Shop

- *Floor* - The floor is composed of slat defend static dissipative tile (ST-1).

- *Base* - A static wood base stained to match the adjacent surface (WDB-1) is continued around the perimeter.

- *Walls* - The walls match that of the rest of the lobby space with a wood veneer wall covering (WC-1) and painted (P-1) aluminum at the raised ceiling along the perimeter wall. Kitchen cabinets cover most of the wall space in this area. Plastic laminate (PL-1) is located above the cabinets.

Ceiling - The ceiling is covered with painted gypsum wall board (GWB-1).

Reception

Floor - The floor is covered with carpet tile (CPT-3), as a continuation from the other lobby area.

Base - The base is wood that is mdf painted to match the adjacent wall surfaces (WDB-2).

Walls - The walls are painted a color yet to be determined (P-1).

Ceiling - The ceiling is covered with painted gypsum wall board (GWB-1).

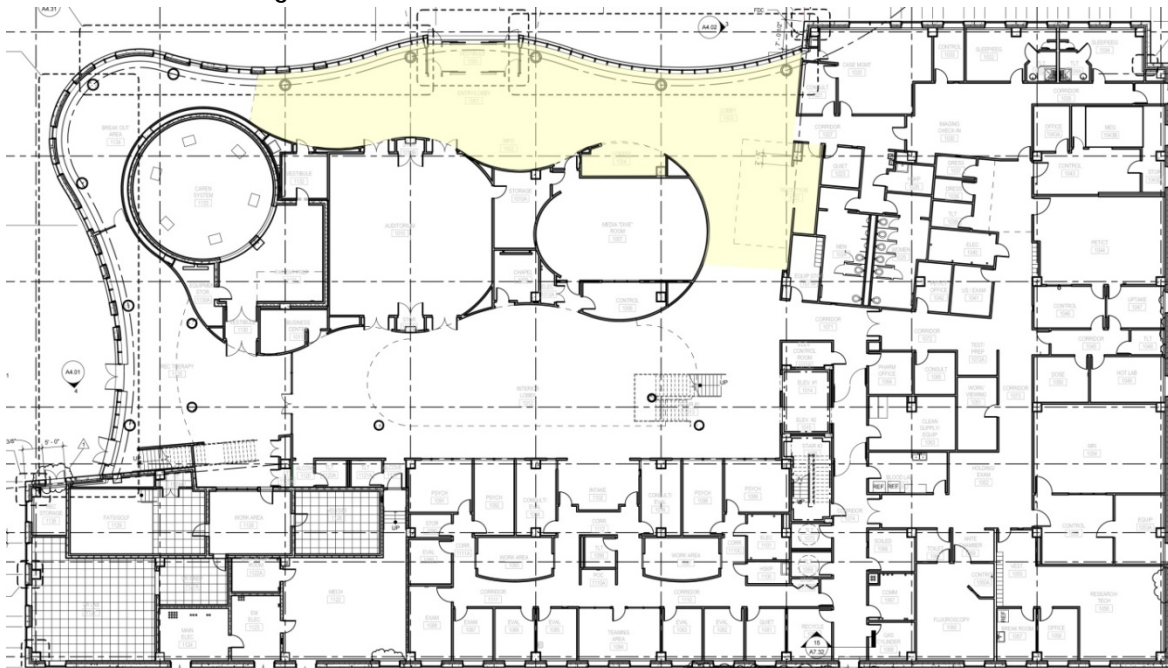
○ **Furnishings**

Benches line the exterior curtainwall on each side of the vestibule. In the northeast corner of the space, small tables and chairs provide additional lobby seating as well as a workspace. The Info and Reception desks are both furnished with chairs and computers. The Coffee area includes basic kitchen necessities.

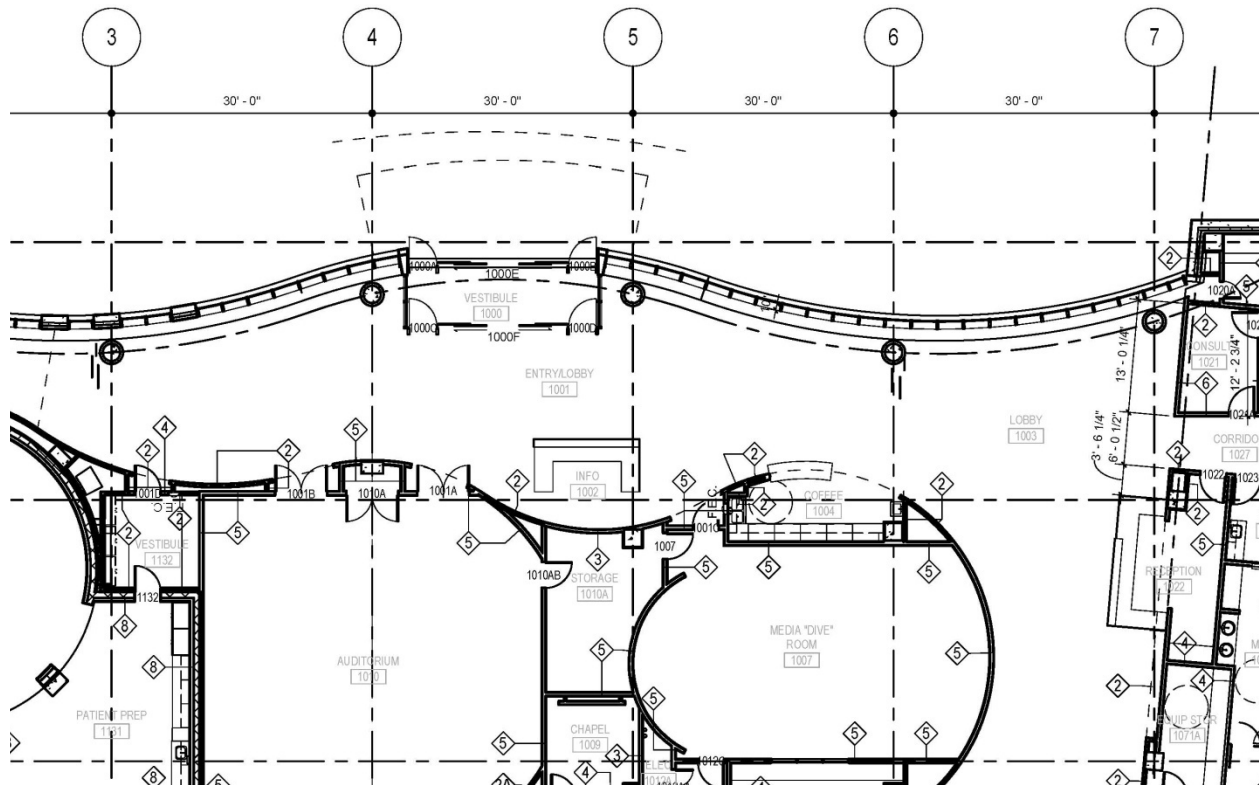
○ **Activities/Tasks**

As the main circulation space in the building, the lobby should help to guide people to their destination. Building users will pass through the space to reach their destination, or sit at the benches or tables to rest. At the Info and Reception desks newcomers will speak with the building employees to gain information. Normal desk activities such as reading, writing, and computer work will be prevalent. The Coffee station will require beverage preparation and service. One may also pass through the space to view and enjoy its unique features.

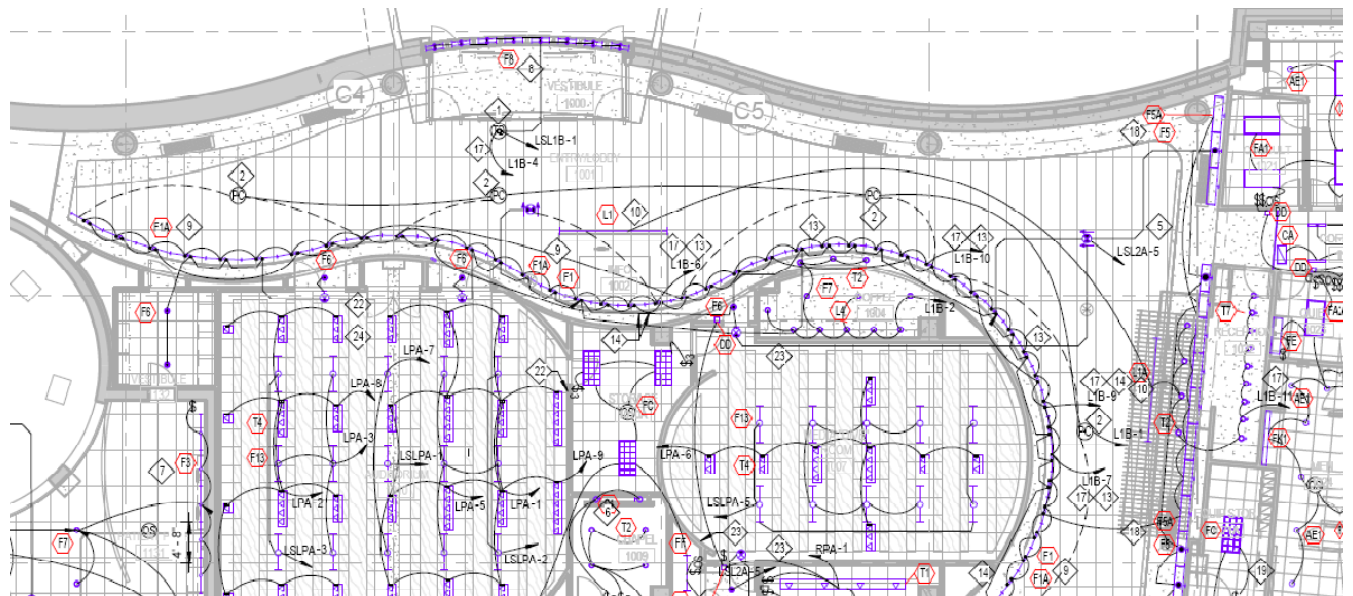
○ **Drawings**



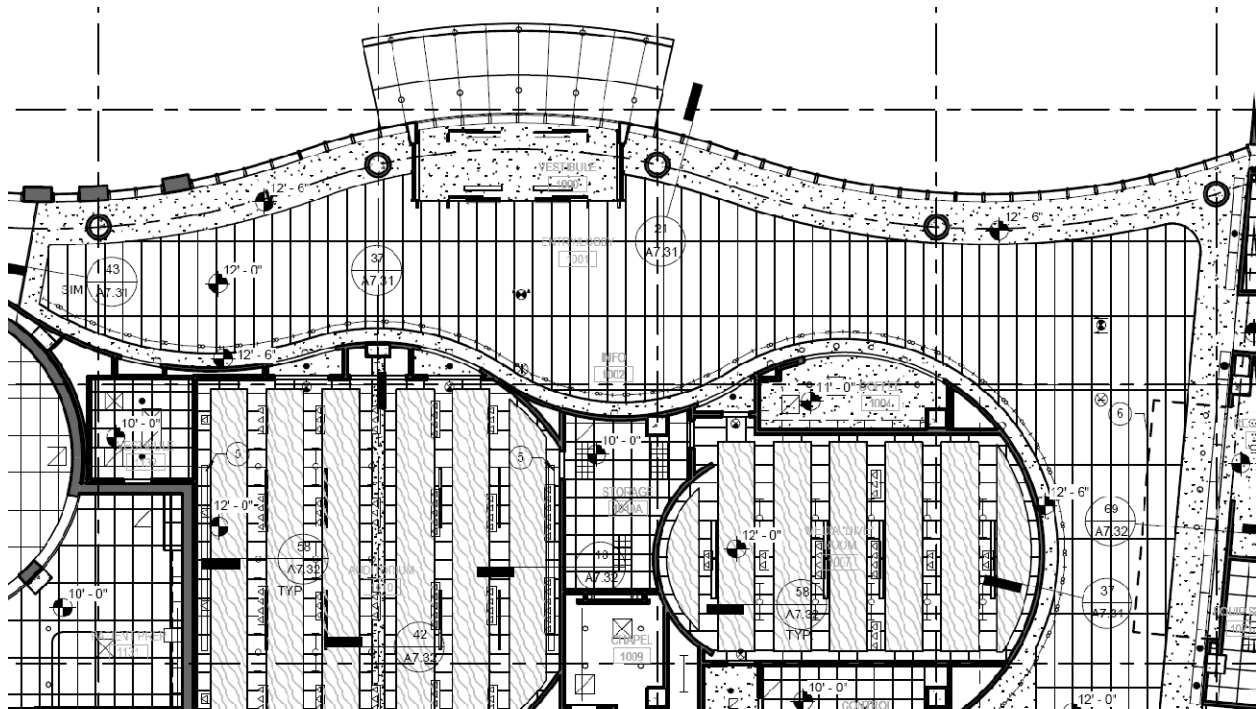
Lobby Location (NTS)



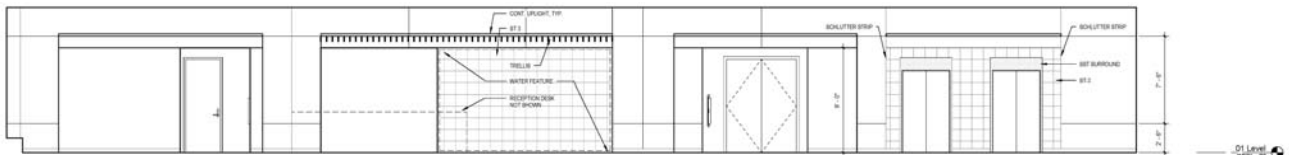
Lobby Floor Plan (NTS)
Geometry Plan at end of report



Lobby Lighting Plan (NTS)



Lobby Reflected Ceiling Plan (NTS)



Lobby Interior South Elevation (NTS)



Lobby Interior East Elevation (NTS)

- **Outdoor Space – Palmer Road South Façade (North-Facing)**

- **Description**

The north-facing facade is situated along Palmer Road South. The eastern portion of the elevation is flat and about 83 feet in length, while the central and western portion of the facade is a large curved wall with a total perimeter of 345 feet. Sidewalks line the road and wrap around the east facade to lead visitors around the campus. A U-shaped driveway directs cars to the building entrance. Here, a 22'x10' canopy extends toward the street protecting the entry doors.

- **Surface Materials**

Facade - The east and west ends of the northern exterior wall system consist of architectural precast concrete punched with two story windows at the openings. On the east end of the facade, the windows consist of spandrel and clear vision glass. On the west end of the facade, these windows consist of spandrel glass at the top section of windows then (from top to bottom) a section of clear vision glass, and five sections of vision glass with ceramic frit. The curtainwall system located in the center of the northern facade provides four sided structural glazing with an aluminum framing system. The windows consist of spandrel glass at the top section of windows then (from top to bottom) a section of clear vision glass, two sections of vision glass with ceramic frit, two sections of spandrel glass, and a section of vision glass with ceramic frit.

Doorway - Two single aluminum doors with medium stile glass and double automatic sliding glass doors lead into the vestibule and lobby spaces.

Canopy - The canopy consists of a concrete structure covered with an aluminum plate cladding.

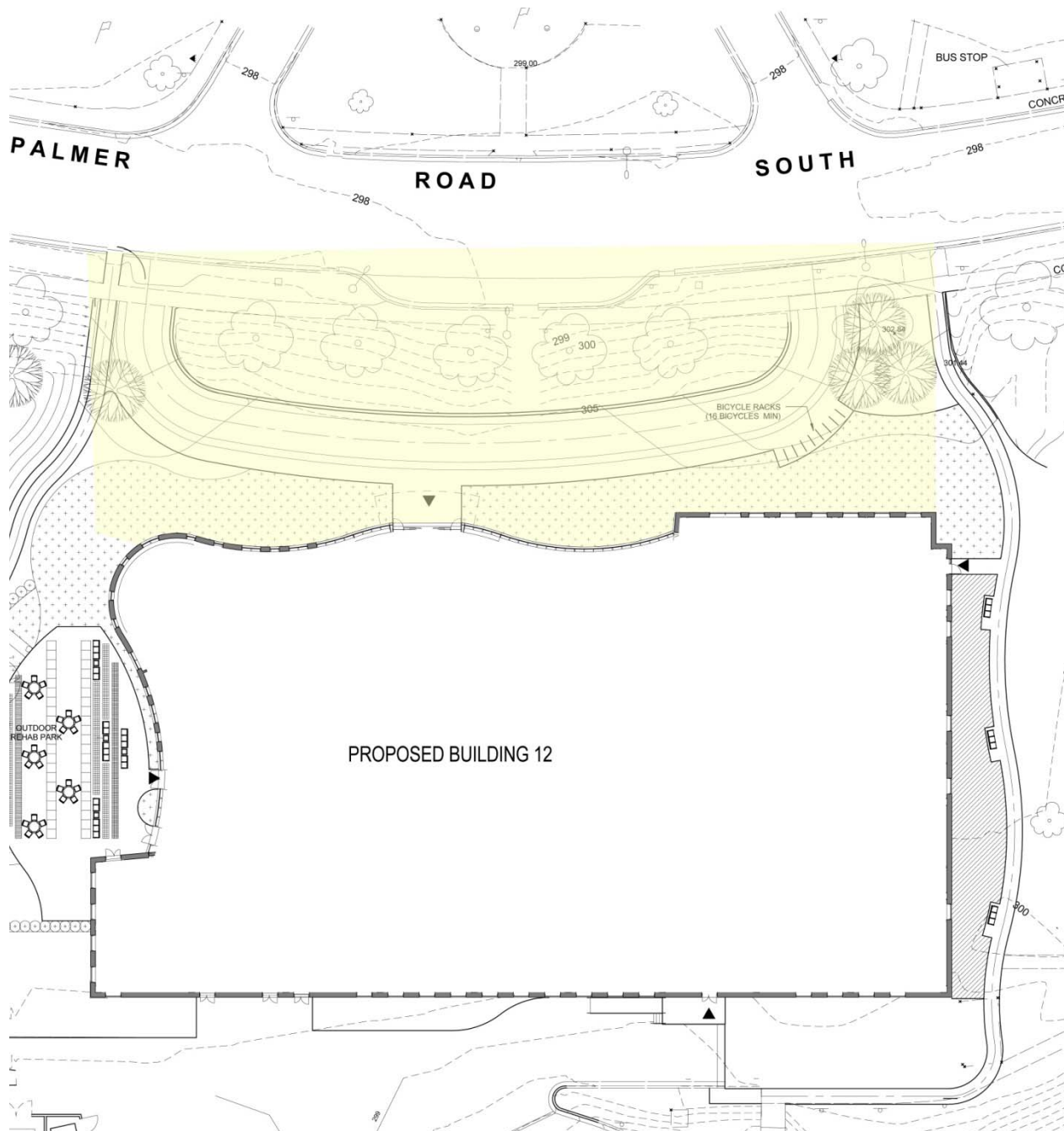
- **Furnishings**

N/A

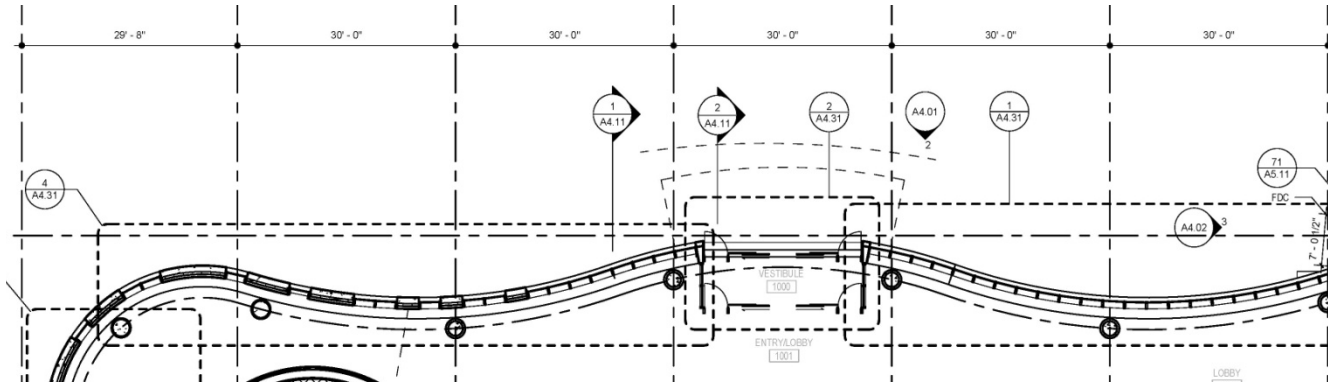
- **Activities/Tasks**

As an outdoor space, the front of the building is an entrance that should be inviting to visitors. People use the drive-through road in front of the entryway as a drop-off or pick-up area. The canopy over the front entrance is used to shield one from harsh weather conditions and sunlight. The sidewalks also provide a leisurely activity for patients.

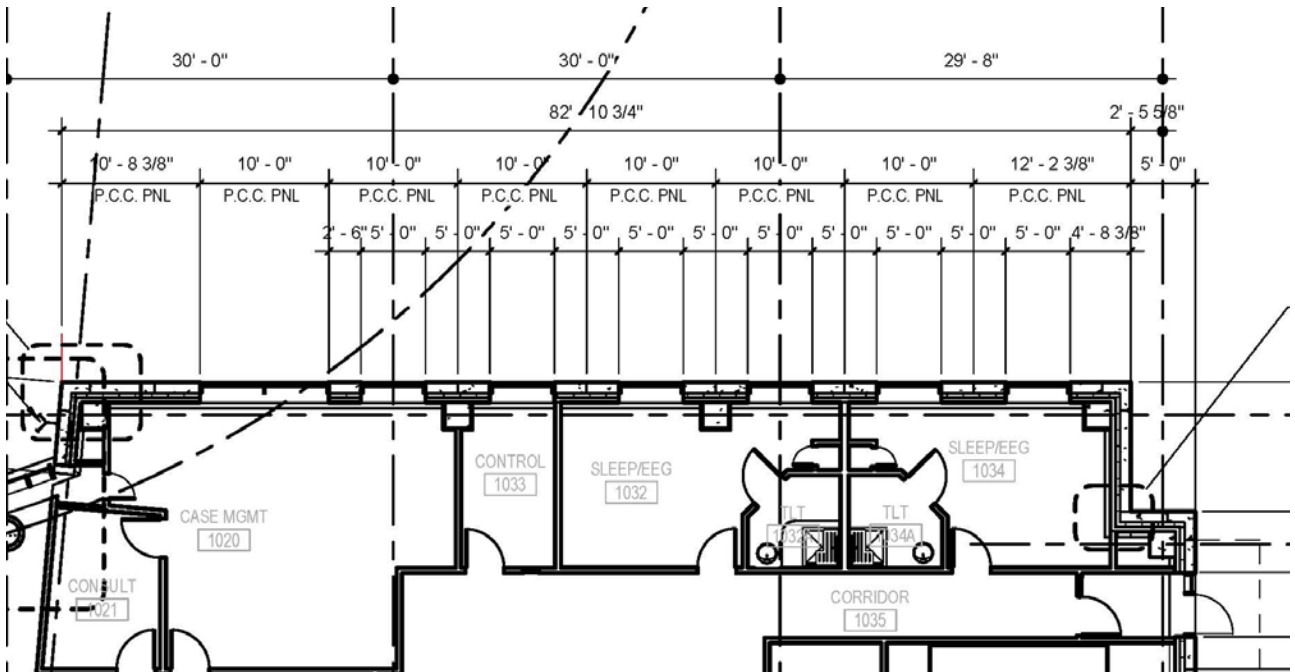
o Drawings



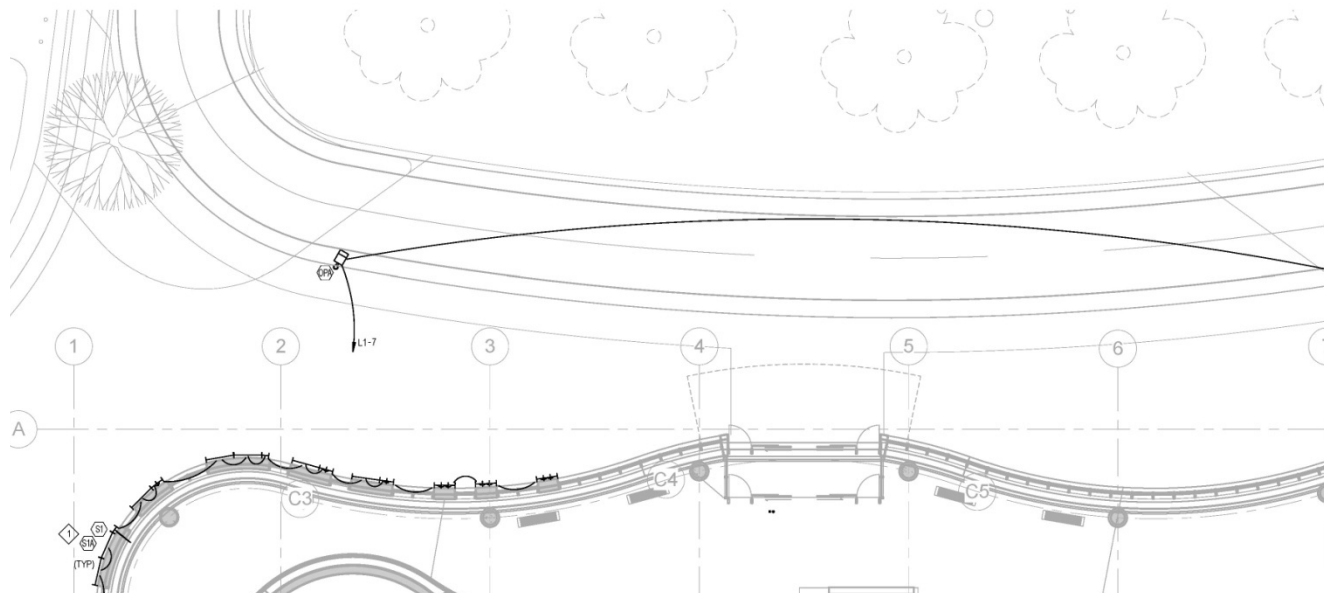
Exterior Location (NTS)



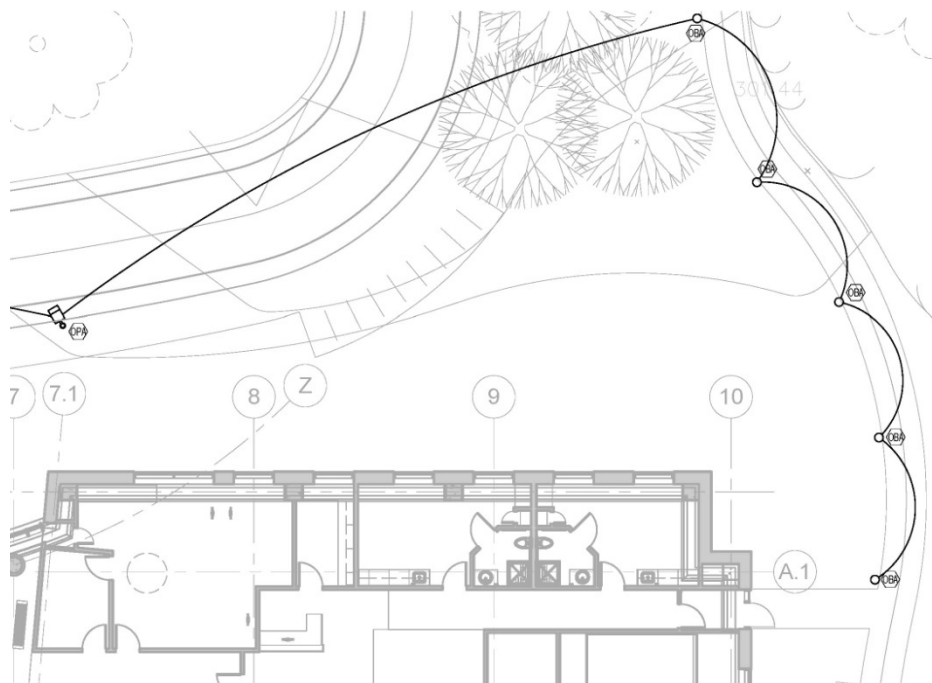
North Façade Dimensions (West Side) (NTS)



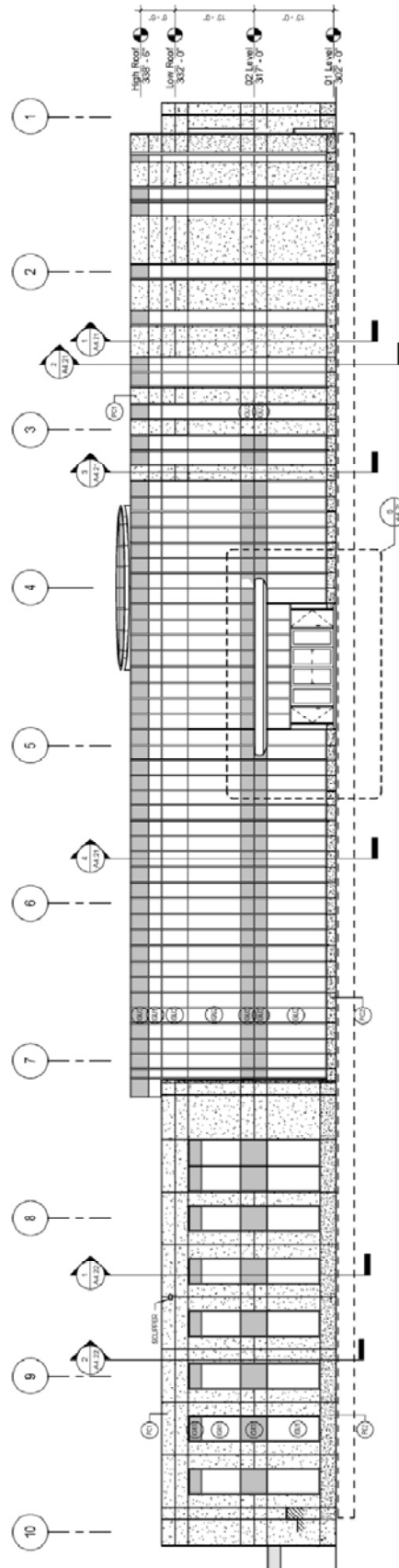
North Façade Dimensions (East Side) (NTS)



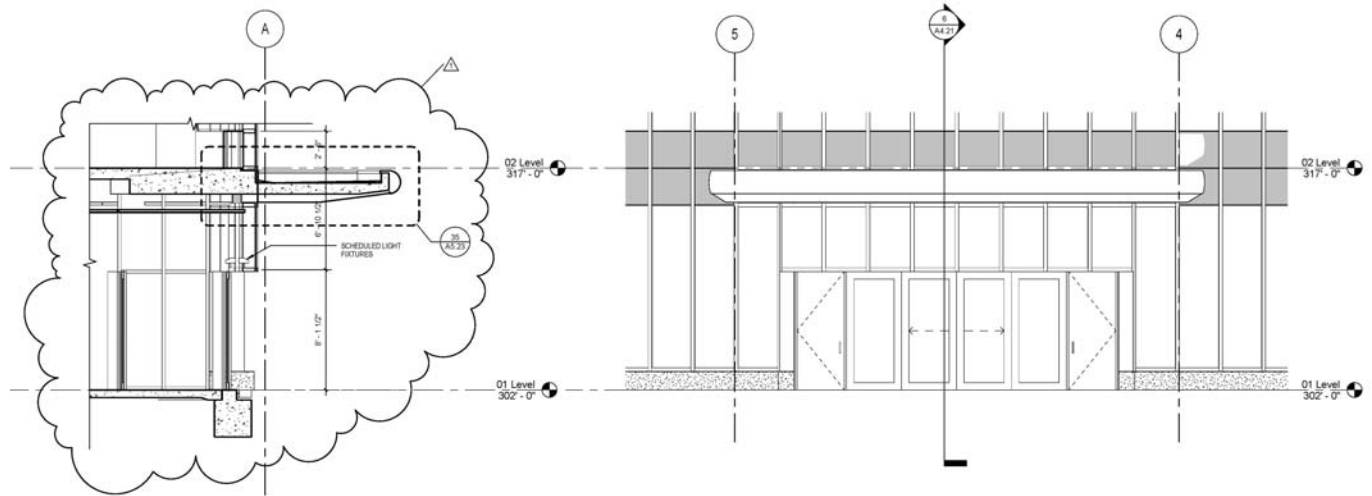
North Façade Lighting Plan (West Side) (NTS)



North Façade Lighting Plan (East Side) (NTS)



North Façade Elevation (NTS)



Canopy Section and Enlarged Elevation (NTS)