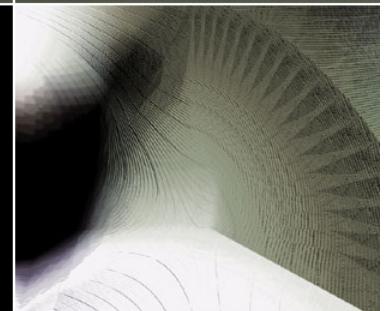


Dorrance H. Hamilton Building



Josh Kreuzberger

Penn State Architectural Engineering

Technical Report 3

Advisor: Dr. Mistrick

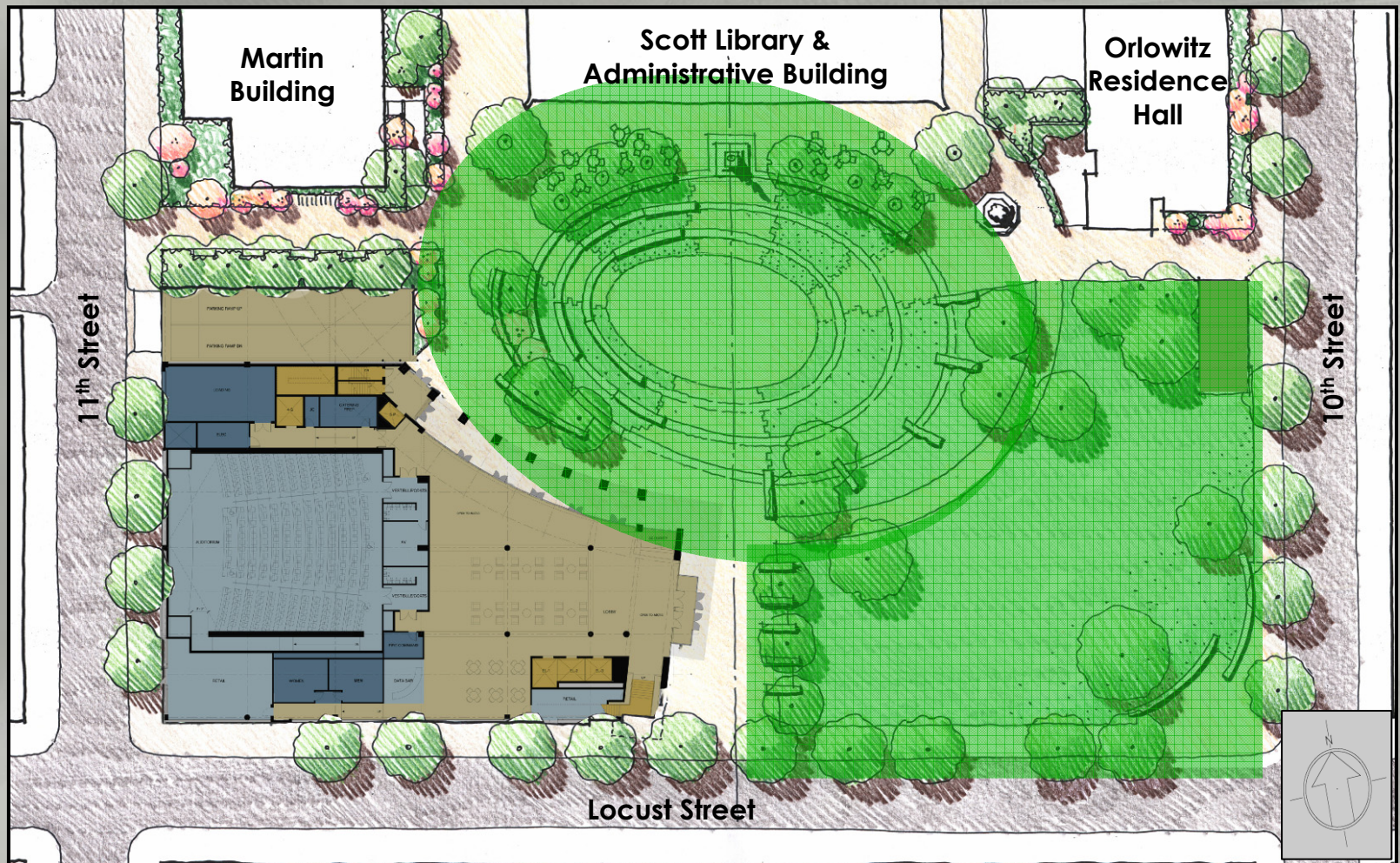
Building Overview



- Thomas Jefferson University (TJU)
 - Philadelphia, PA
- Medical Education
- Architect: Burt Hill
- 129,000 ft² with an additional 60,000 ft² plaza area
- 6 stories above grade with 2 story underground parking garage

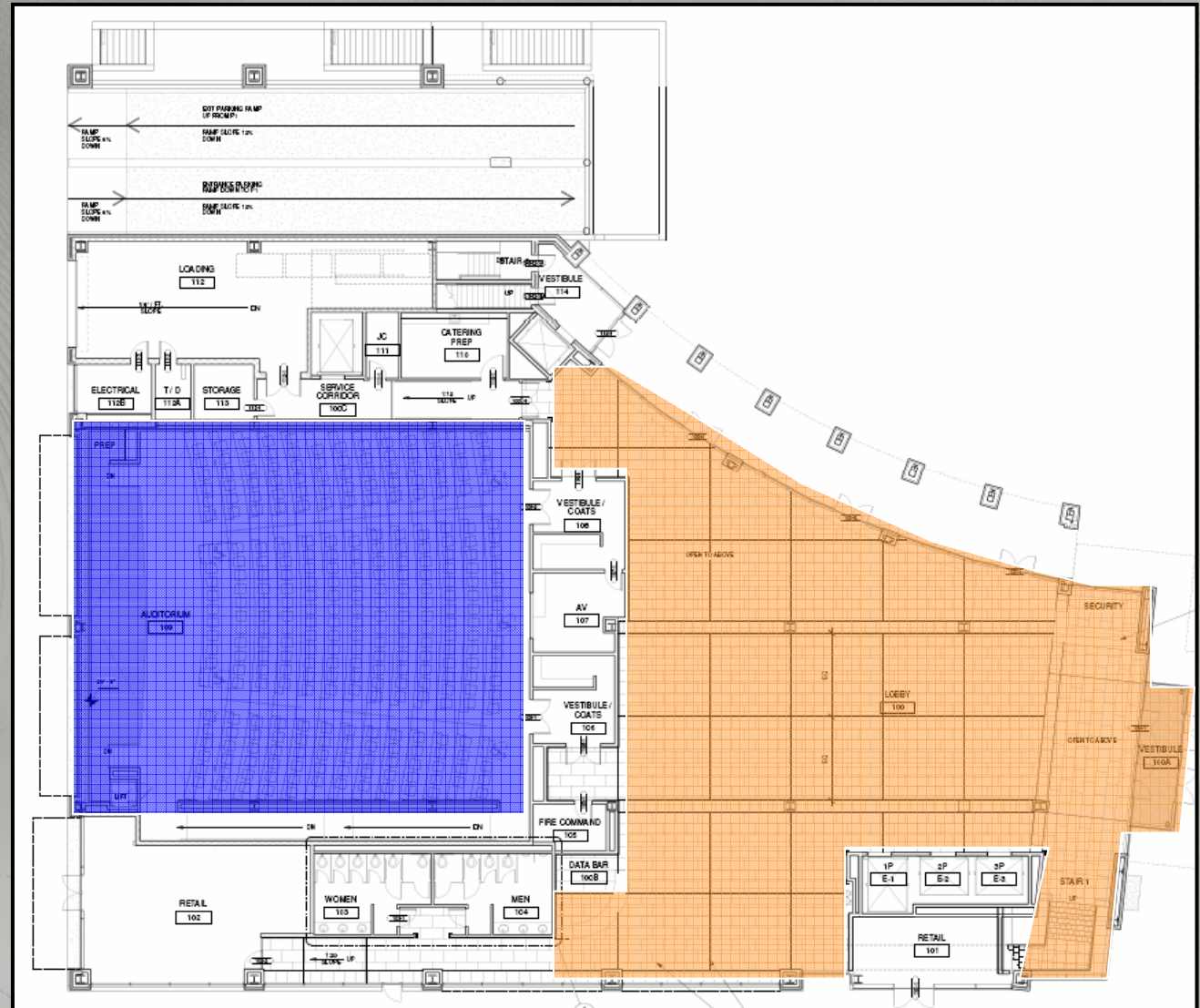
Redesign Spaces (Exterior)

○ Plaza



Redesign Spaces (1st Floor)

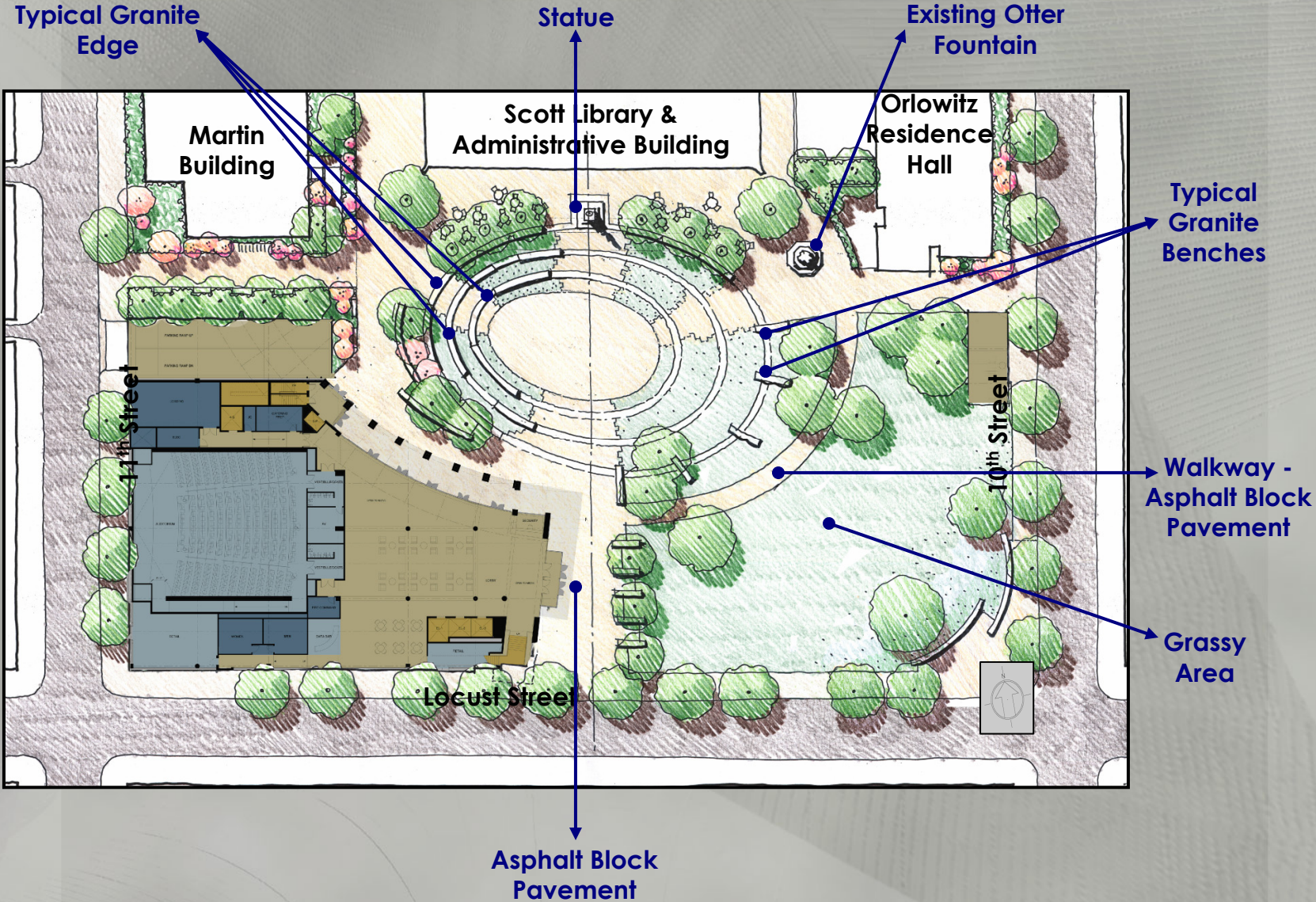
- Lobby
- Auditorium



General Design Goals

- “NEW HEART OF CAMPUS”
 - TJU Pres. Robert L. Barchi, M.D., PhD
- Smooth Transition between the Plaza – Lobby – Auditorium
- Learning Environment
 - Friendly
 - Exciting
 - Comfortable
 - Innovative
 - Welcoming

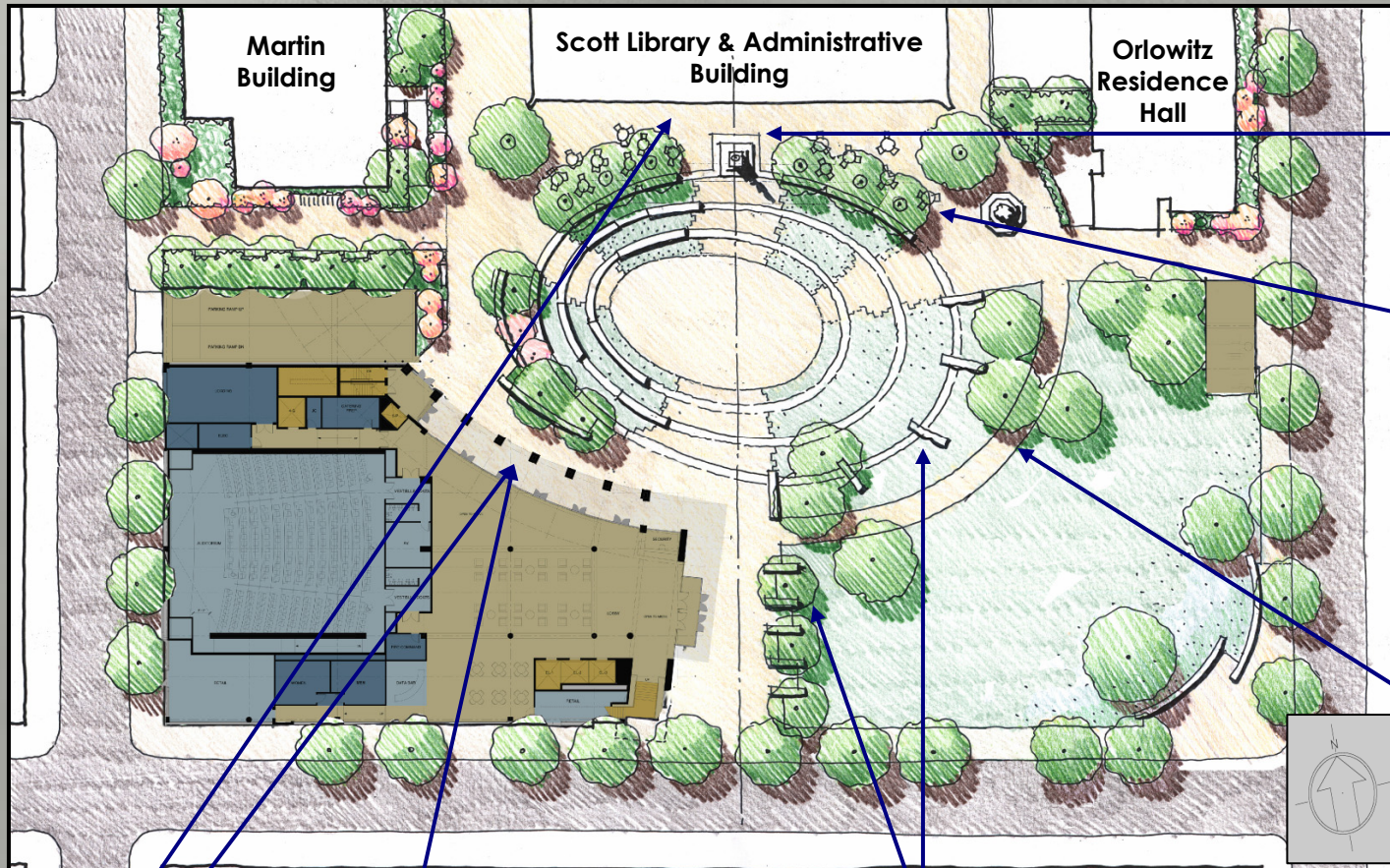
Plaza (Exterior)



Plaza - Design Objectives

- Aesthetically Appealing
- Egress Path Lighting
 - Target 1 fc (Horizontal)
- Accent Statue and Fountain
- Highlight Columns of Curved Glass Façade (Hamilton Building)
 - Also included in Lobby Redesign
- Uplight Plaza Trees in Front of Scott Building
- Emphasize Oval Granite Edge
 - CCT of 4100K

Plaza – Schematic Design



Small Spotlights will uplight trees and light statue

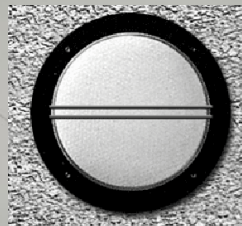


Either bollards or pole mounted fixtures for pathway and area lighting of plaza

Outdoor wall sconces to accent columns



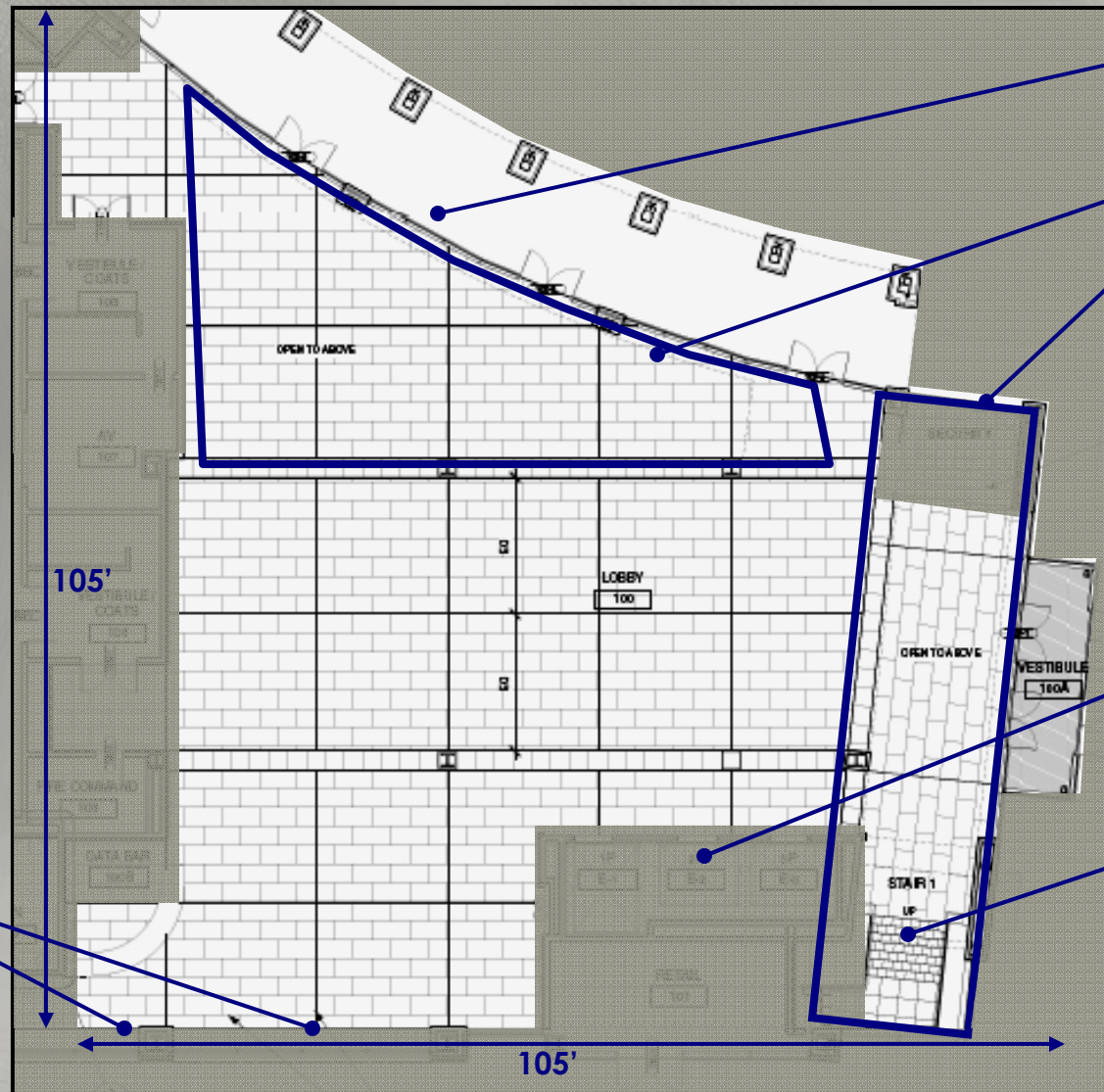
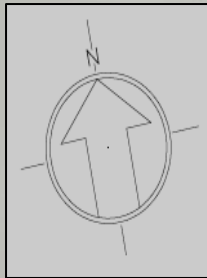
Application Image



Granite benches to have "step light" on each end of the benches



Lobby (1st Floor)



Curved Glass Facade

Open to Above (30' High Ceiling)

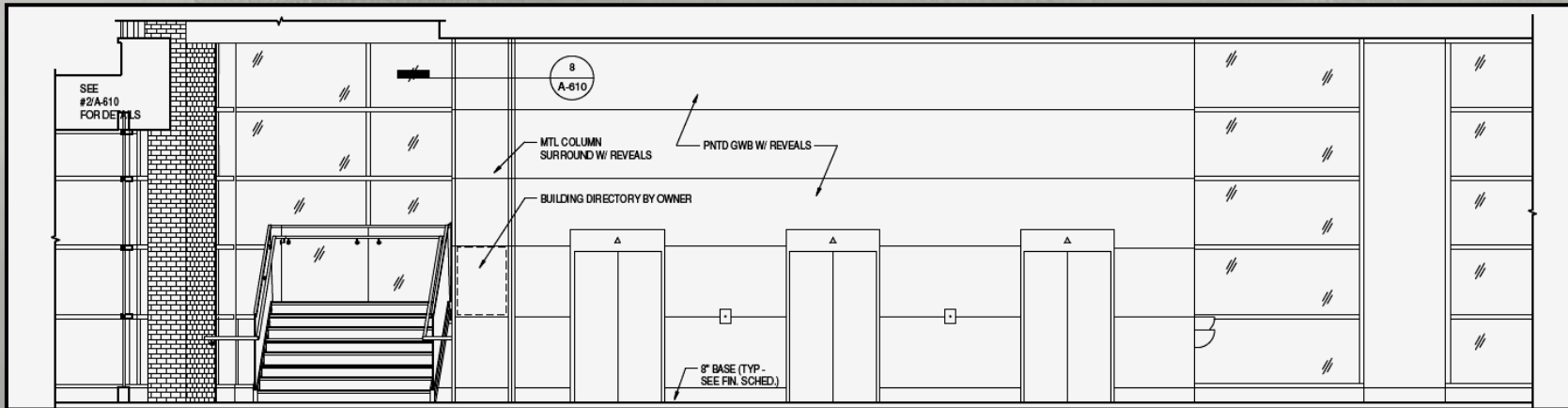
Elevators

Stair to Second Floor

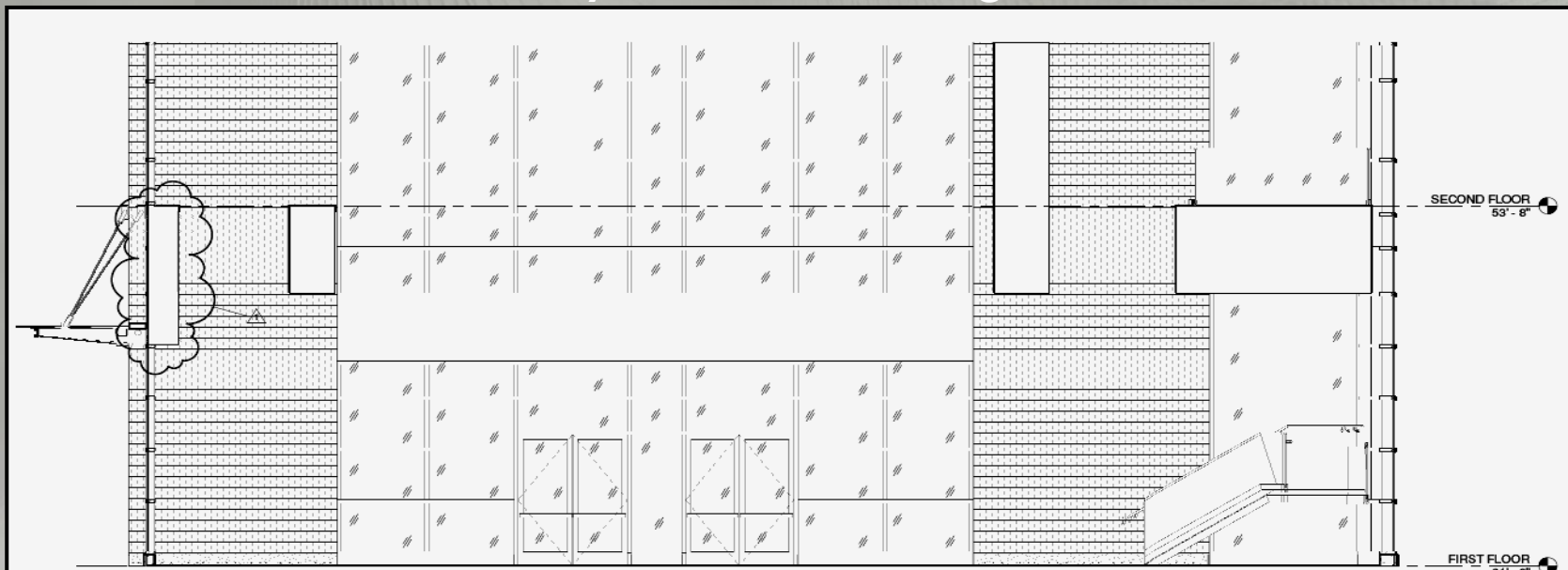
(2) Plasma Screens

Lobby (1st Floor)

Lobby Elevation Looking South

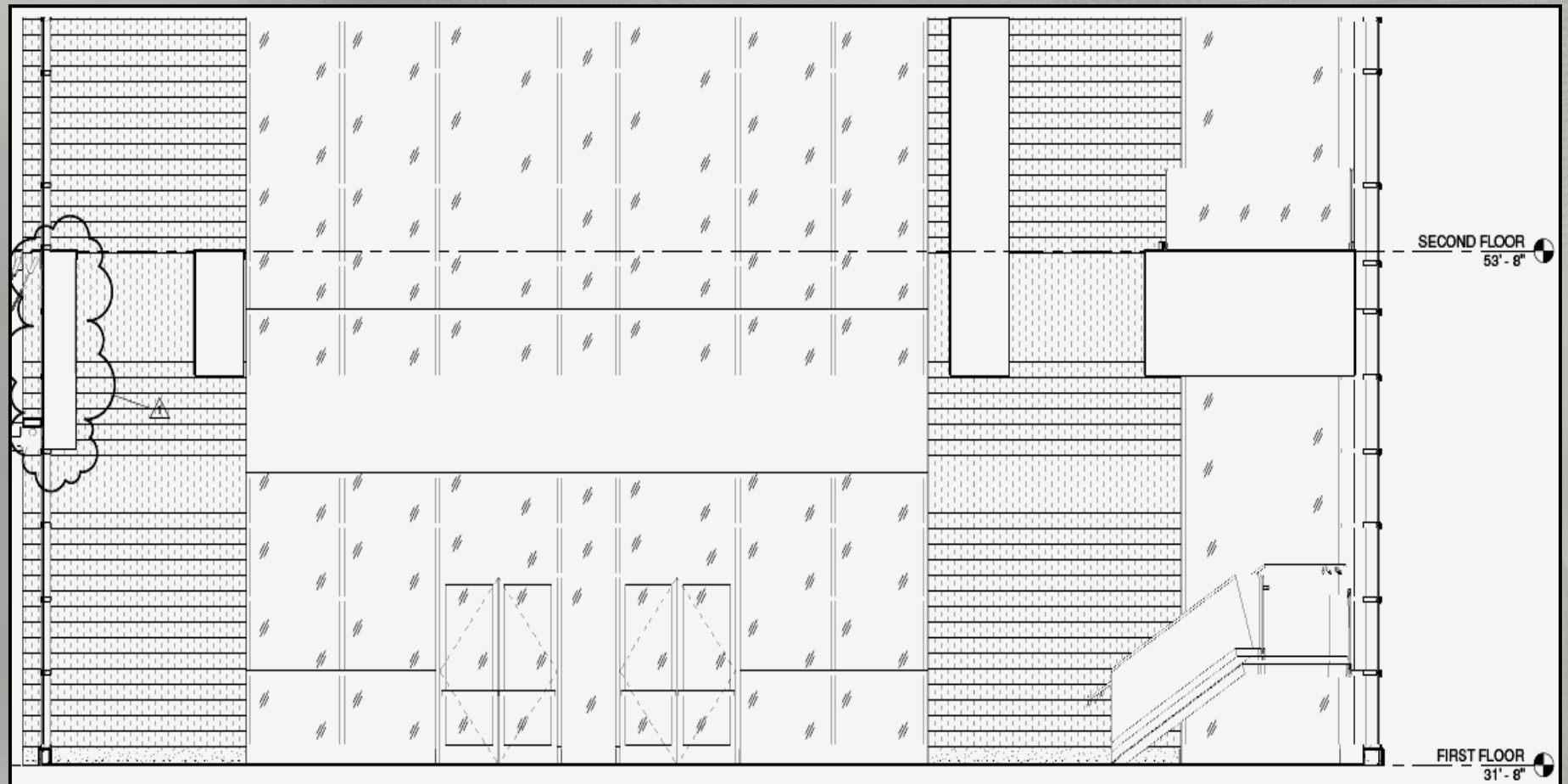


Lobby Elevation Looking East



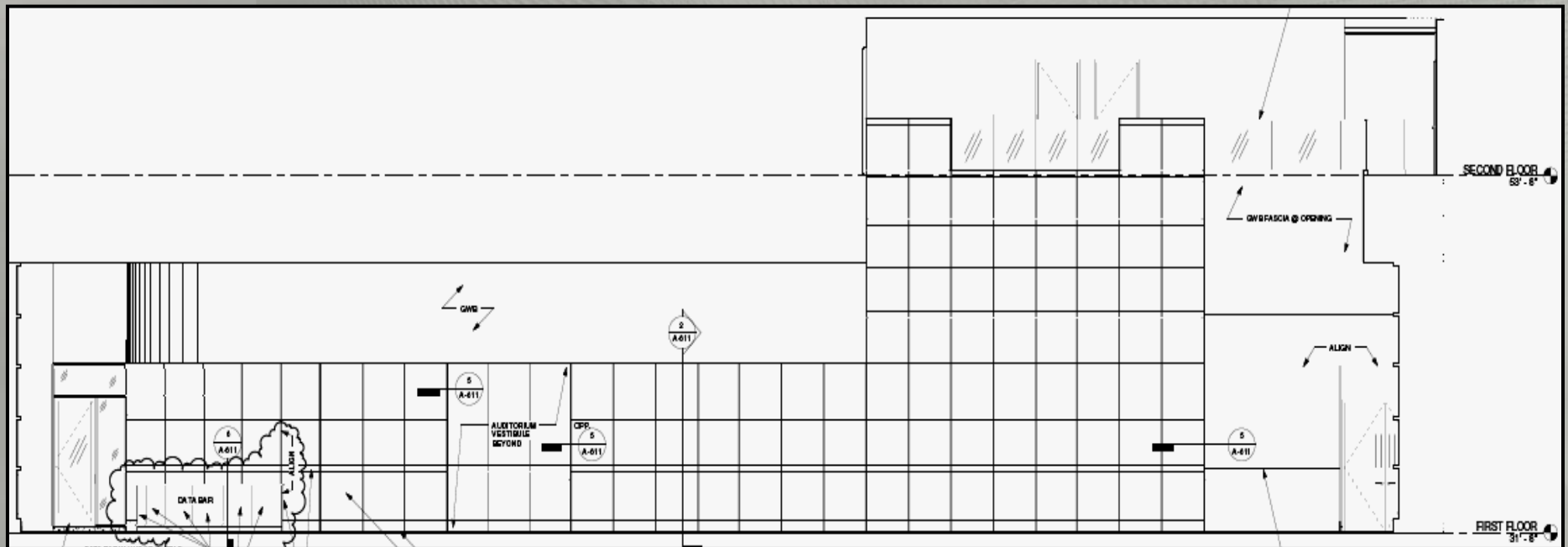
Lobby (1st Floor)

Lobby Elevation Looking North



Lobby (1st Floor)

Lobby Elevation Looking West



Lobby - Design Objectives

- Aesthetically Appealing
- Sparkle
- Circulation = Task
 - Target = 5 fc Horizontal & 3 fc Vertical
- Incorporate Daylighting
 - Photosensors, Dimming, Controls
- Smooth Transition from Outside
- Accent Architecture
- Highlight Elevators & Doorways
- Design for Plasma Screens
- Warm CCT for Wood Panels

Lobby – Schematic Design

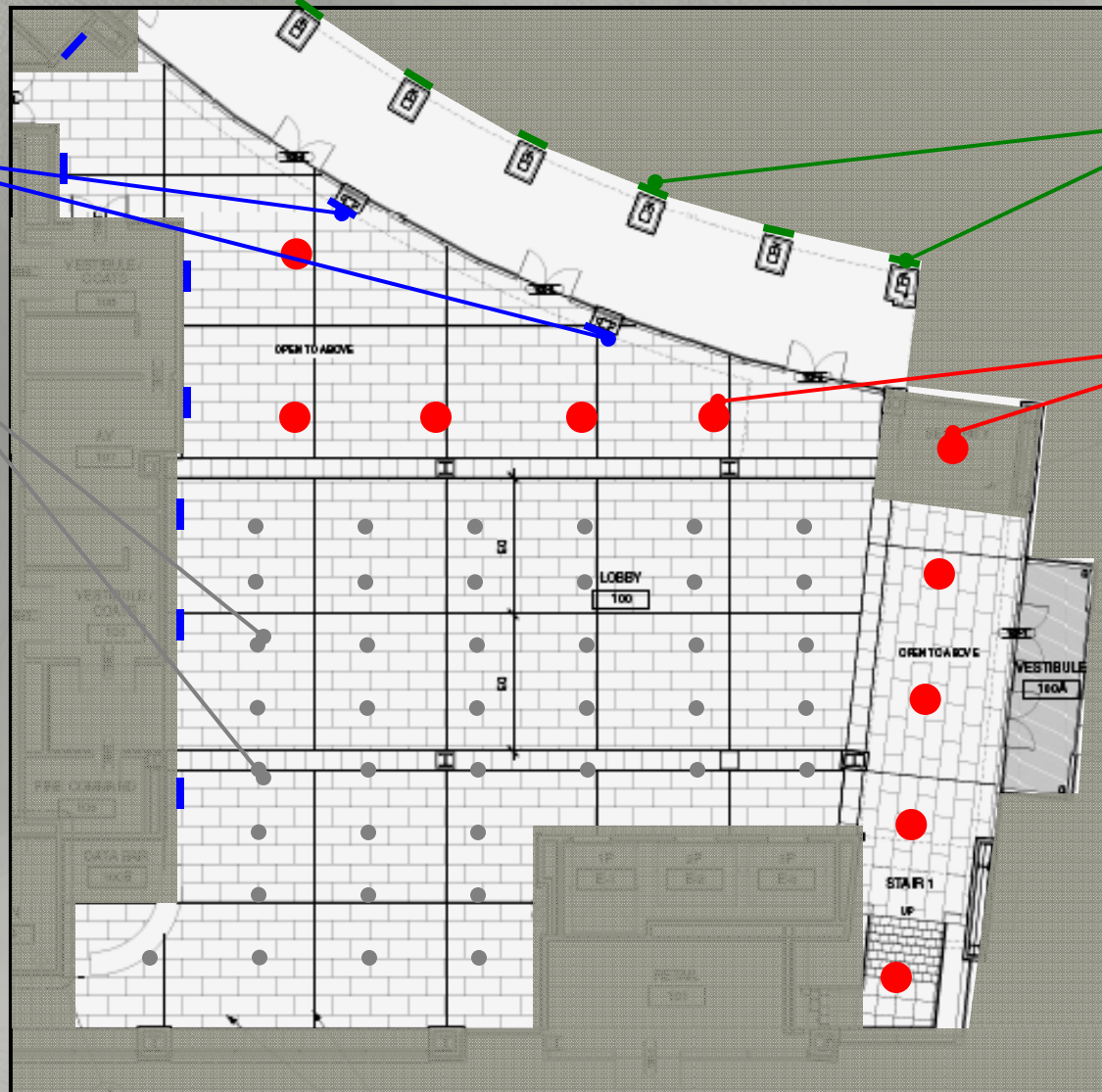
Indoor CFL Wall Sconce

Outdoor CFL Wall Sconce

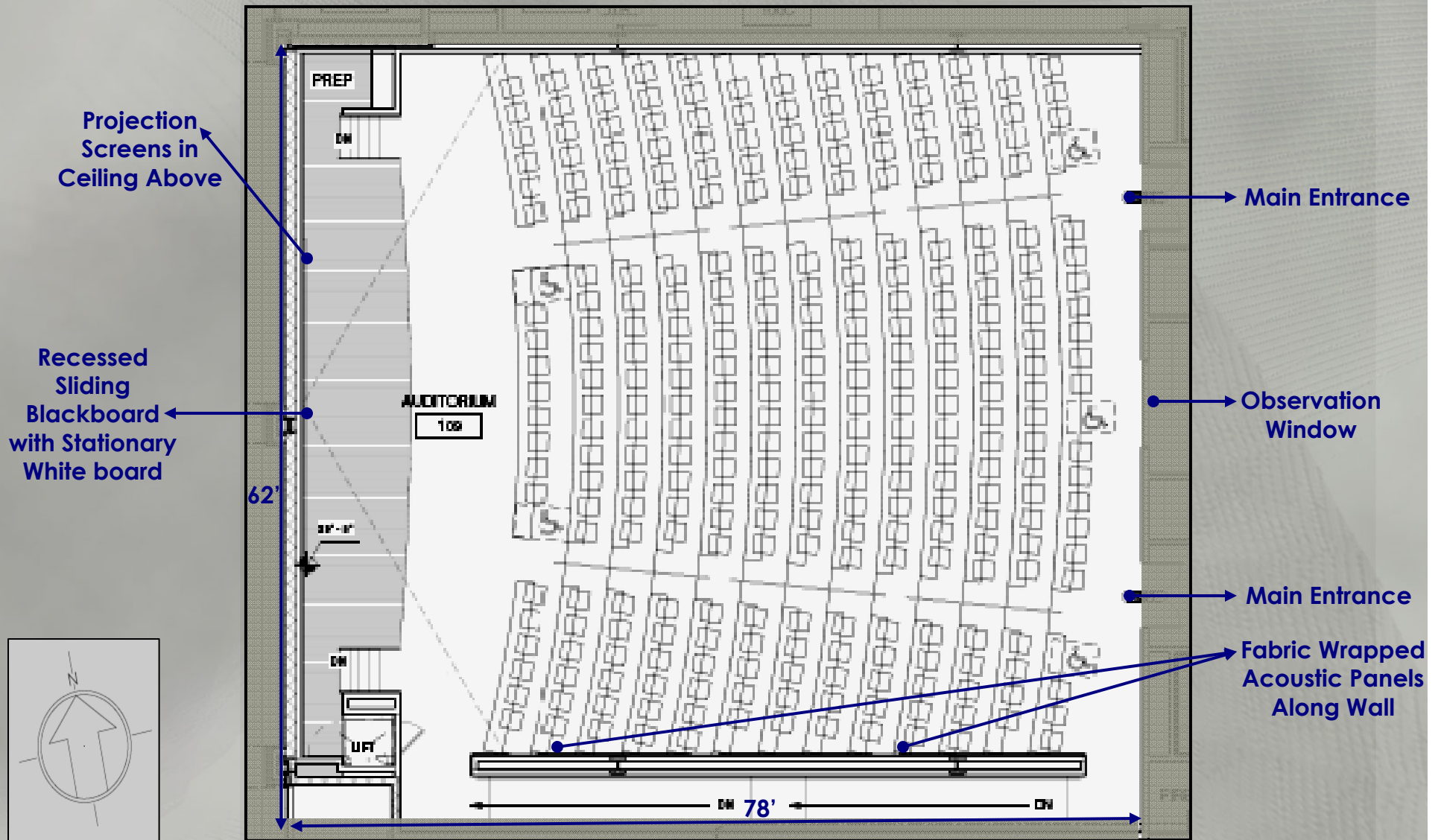
6" - 8" Downlight
– Try CFL, but
may need HID

Decorative
Pendant – HID or
CFL

Option: Since the
ceiling is 15' high,
a nice direct-indirect
fixture may work well
in this space.

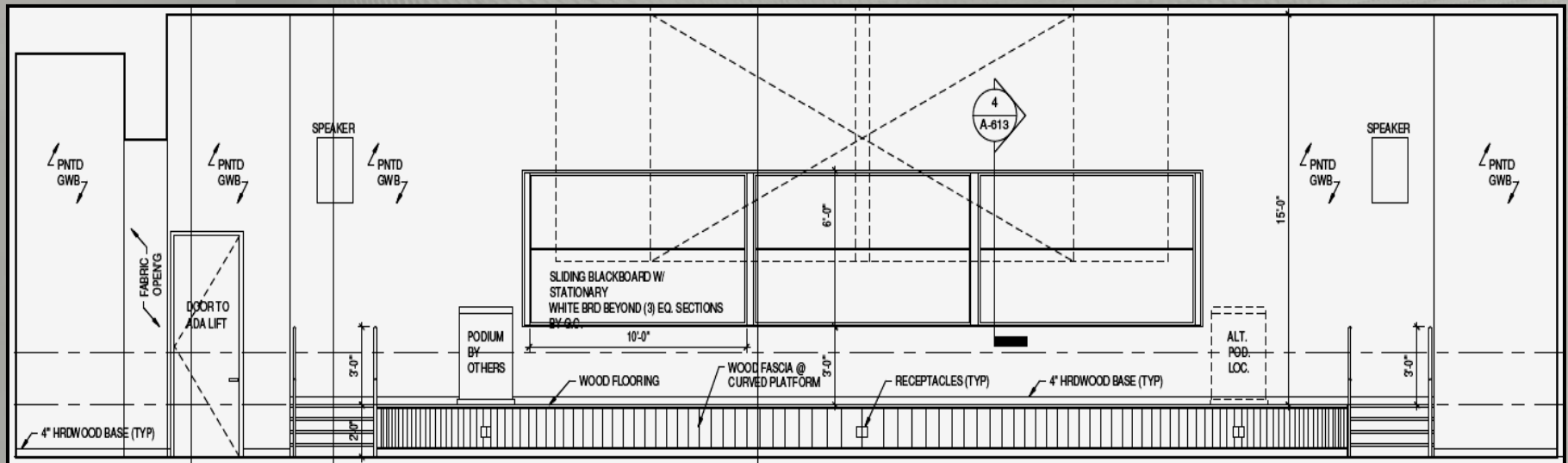


Auditorium (1st Floor)



Auditorium (1st Floor)

Auditorium Elevation Looking West (Front of Space)



Auditorium - Design Objectives

- Scene Selection – Lectures, Film Projections, VDT Use, and Presentations
- Lighting for Reading/Writing Tasks
- Smooth Transition from Lobby
- Target = 50 fc Horizontal
- Accent Blackboard/Whiteboard
- Create Interesting Space
- Highlight Speaker

Auditorium - Schematic Design

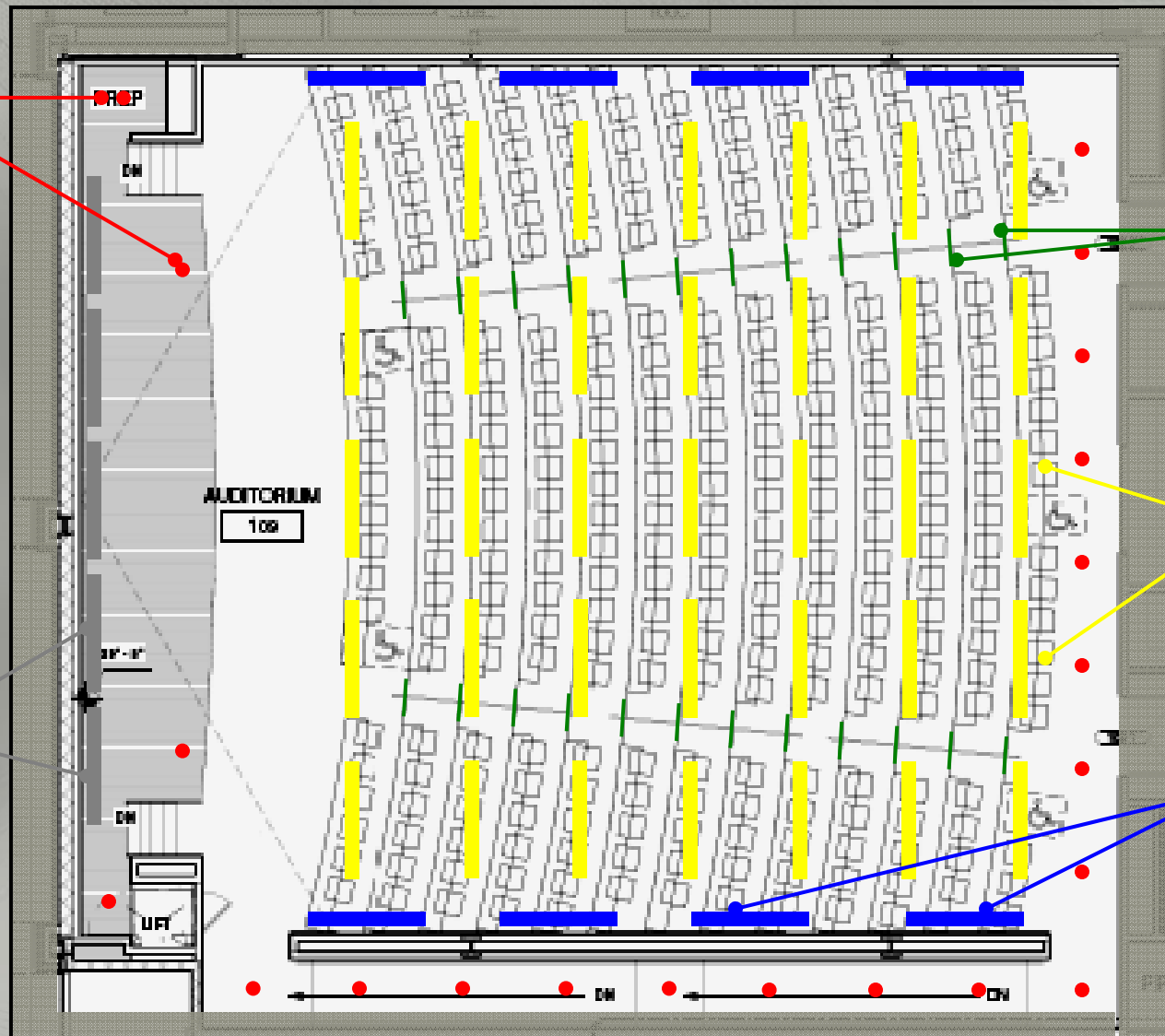
Recessed Compact Fluorescent Downlights

Recessed LED Step Lights

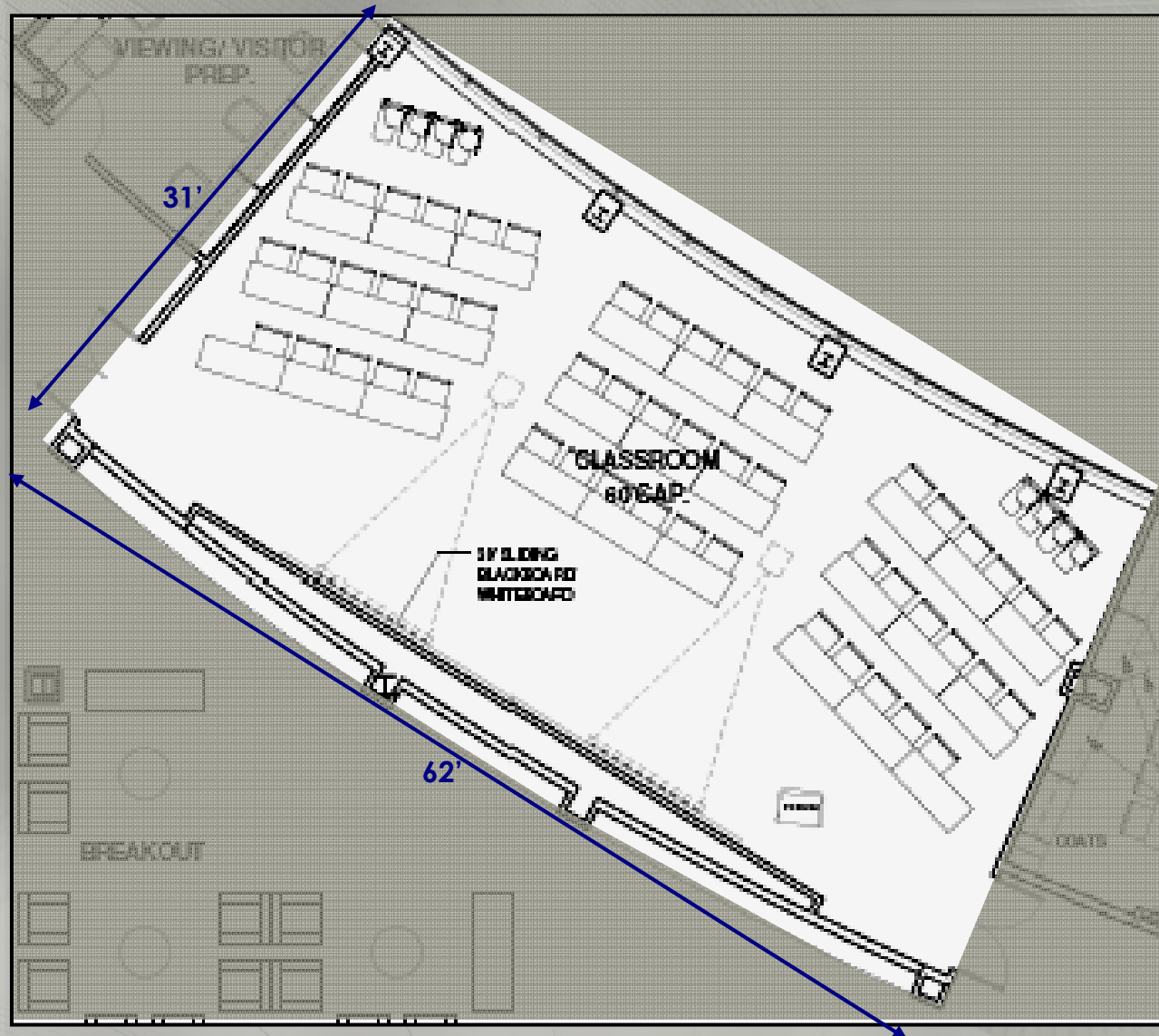
Recessed Fluorescent Luminaire

Linear Fluorescent Wallwashers

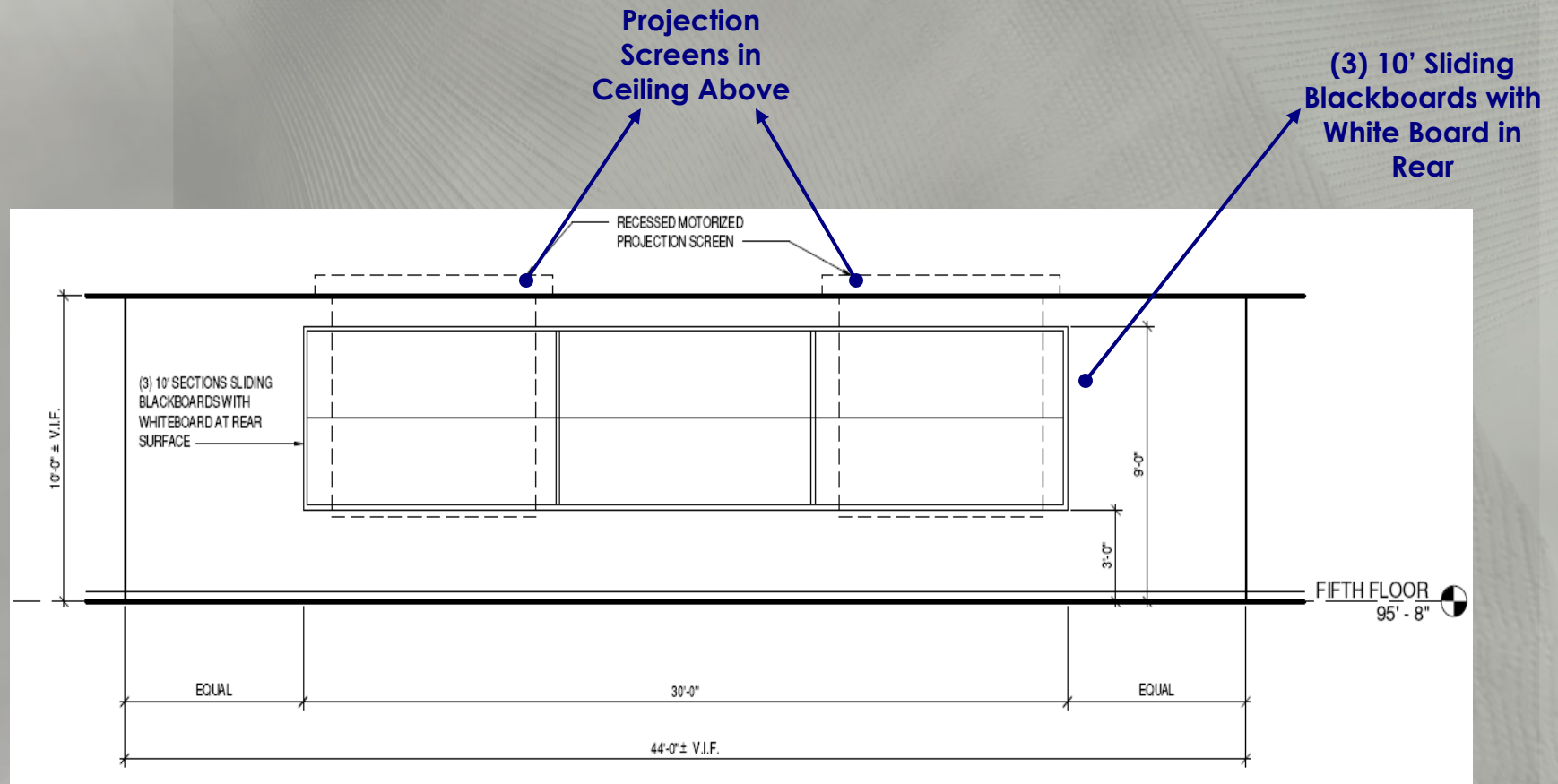
Recessed Linear Fluorescent Wallwashers



Classroom (5th Floor)



Classroom (5th Floor)

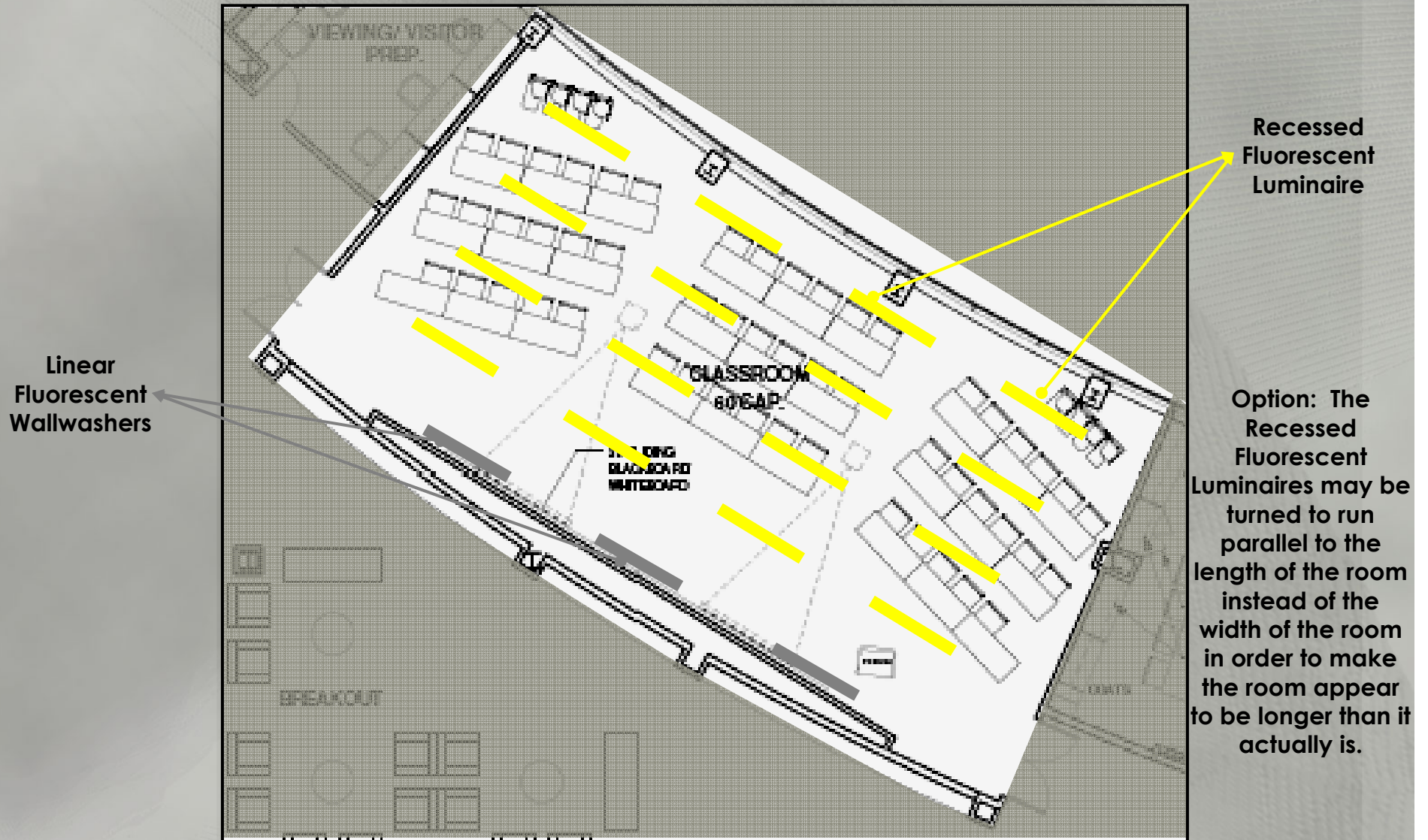


Classroom Elevation Looking Towards Front of Room

Classroom – Design Objectives

- Scene Selection – Lectures, VDT Use, and Presentations
- Lighting for Reading/Writing Tasks
- Target = 50 fc Horizontal
- Accent Blackboard/Whiteboard
- Highlight Speaker
- Easy to Use Controls

Classroom – Schematic Design



Thanks!

Questions?

Comments?