

# LIGHTING PROPOSAL MEMO



## **SMC Campus Center** **Baltimore, MD**

**Submitted: 9/13/2010**

[The following presents descriptions of the four proposed spaces for the lighting analysis of the SMC Campus Center. Within this assignment, the uses of the spaces will be introduced, along with drawings, space dimensions, materials, activities, and visual tasks. One of the spaces will be selected to produce three design concepts and another will be selected to incorporate a psychological impression.]

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After reading the requirements for Technical Report #1: Lighting Existing Conditions and Design Criteria, I am proposing the following four spaces for closer study:

- Large work space: **Classroom**
- Special purpose space: **Ballroom**
- Circulation space: **Lobby**
- Outdoor/Building facade: **Building Facade**

**Large Work Space | Classroom**

The 3rd floor classroom offers a flexible space for student organizations and academic services. Covering 1,142 square feet, this classroom is a viable solution when other meeting rooms are too small to accommodate a larger group of people. The overall dimensions of the space are 31'-6" x 36'-10" with a ceiling height of 12'-0".

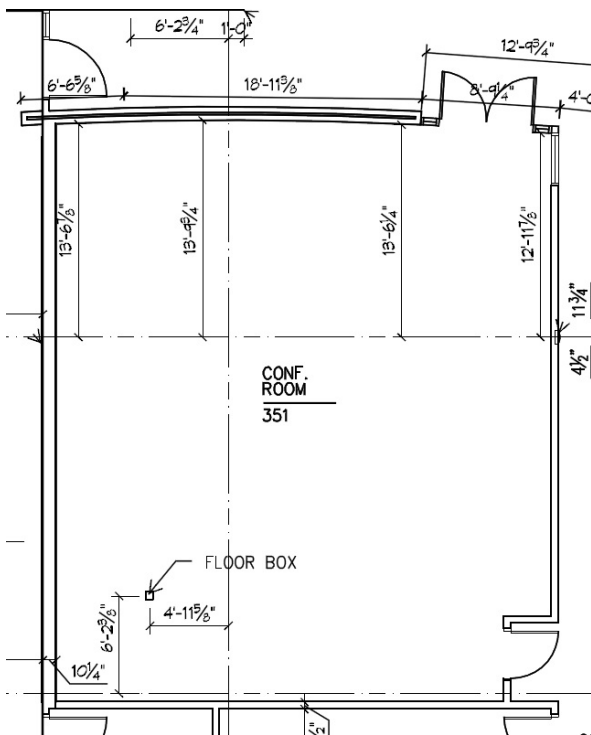


Figure 1: Classroom Floor Plan

The classroom has various configurations depending on the activity that will occur in the space. Rows of desks can be used for a typical layout or U-shaped for meetings and debates. A podium is located near the floor box and a retractable projector (middle of room) and screen are located in the ceiling. The primary critical tasks are reading and writing with key issues of reflectance, luminance ratios, glare, and color. When used more like a conference room, visual tasks can be casual or more intense. Direct glare and modeling of faces are key issues for the lighting design for meetings.

Lighting should have controls to modulate illuminance levels and provide for multiple uses, such as general classroom ambient, presentation, and meetings. This is an interior classroom, so daylighting will not need to be considered.

Table 1: Conference/Classroom Finishes

	Code	Finish Material
Ceiling Finish	AC4	Acoustical Ceiling Panel: Armstrong, Cirrus Open Plan, 2'x4'x7/8", 9/16" grid
Wall Finish (N, E, W)	P-1	Paint: Benjamin Moore 2154-60 Filtered Sunlight
Wall Finish (S)	P-6	Paint: Benjamin Moore 1538 Wildwood Crest
Floor Finish	C-7	Carpet Tile: Mannington Variations Stripes Color: Acorn

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**Special Purpose Space | Ballroom**

The 2nd floor ballroom is a large, multifunctional space with a variety of uses for student and client events. The ballroom is designed to provide flexible configurations for social gatherings, banquets, meetings, fairs, and can also accommodate classroom-style and theatre-style seating arrangements. The space has a retractable partition to divide the ballroom into two smaller areas. Each area of the ballroom has a concealable projector and screen.

The ballroom is specially located between a pre-function lounge to the west and its own food preparation room to the east. The windows on the south wall provide an excellent view to Camden Yards and M&T Bank Stadium. The 4,292 square foot ballroom measures 83'-2" x 51'-7" with a 15'-0" ceiling height and 1'-4" architectural bulkheads throughout.

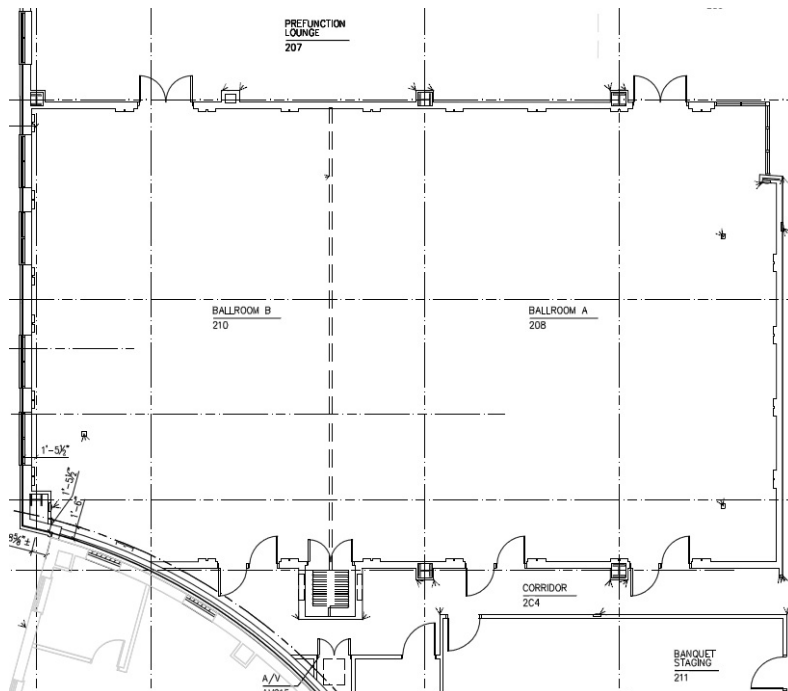


Figure 2: Ballroom Floor Plan



Figure 3: Ballroom Images

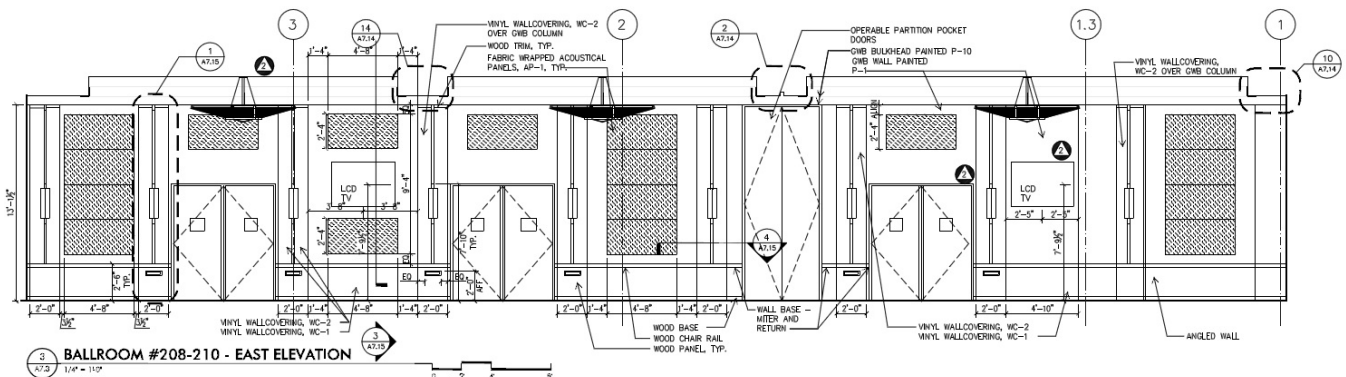


Figure 4: Ballroom East Elevation

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Table 2: Ballroom Finishes

	Code	Finish Material
Ceiling Finish	AC5	Acoustical Ceiling Panel: Armstrong Ballroom Field – White, 2’x2’x3/4”
	AC6	Acoustical Ceiling Panel: Armstrong Ballroom Accent – White, 2’x2’x3/4”
	P-1	Paint: Benjamin Moore 2154-60 Filtered Sunlight (bulkheads)
Wall Finish (N, E, W)	WC-1	Wallcovering: JM Lynne Davino J324-107 Sicilian Umber
	WC-2	Wallcovering: JM Lynne Davino Leaf J327-207 Sicilian Umber
	AP	Acoustical Panel: Panel Fabric-Maharam Tek-Wall Rya 395940
Wall Finish (S)	WC-1	Wallcovering: JM Lynne Davino J324-107 Sicilian Umber
	WC-2	Wallcovering: JM Lynne Davino Leaf J327-207 Sicilian Umber
Floor Finish	C-2	Carpet Broadloom: Less Thought Pattern Custom Sample Style #P1039, Sample #50011 07901

There are a variety of activities that occur in the ballroom:

	<u>Activities</u>
Banquets:	Dancing, eating, award presentations
Classroom/Meeting:	Reading, writing, presentations
Theatre:	Presentations, movies
Fairs:	Displays, presentations

Visual tasks will vary depending on the activity. Appearance of space and color appearance are important for banquets, while glare and reflectance are key issues for classroom and theatre-style settings. Modeling of objects and light distribution are significant for a display fair layout. In order to take all of the visual tasks into consideration, system control and flexibility will be very important to suit the needs and lighting levels of the different events.

For this space, I will produce a lighting solution that creates the psychological impressions of public vs. private. Each of these impressions is applicable to the ballroom for its variety of functions.

**Circulation Space | Lobby**

The two-story lobby serves as the central hub for the Campus Center. Located at the north entrance of the building, the lobby ties into the grab-and-go dining facility, student lounges, and elevator lobby and also adjoins to the adjacent School of Nursing building. The stair leads to the pre-function lobby and ballroom, while the curved concourse guides occupants to a hot dining facility. The lobby encompasses roughly 1,680 square feet and measures 49'-10" x 33'-6" with a 31'-10" ceiling height.

Visual tasks will vary and will be tailored to individual areas within the lobby such as the help desk (reading and writing with local task lighting) and elevator lobby (orient people to elevators and read signage). A lobby can establish the main design theme for a building. The curved ceiling and concourse are important design elements in which the lighting should accentuate. The large square pendants make the curvy space more linear. I will use this space to develop three schematic design concepts to try and utilize the curve as a design feature. More details will be supplied in the next Technical Report.

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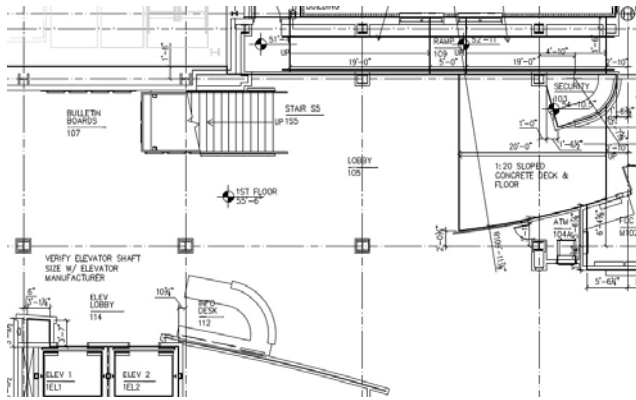


Figure 5: Lobby – First Floor

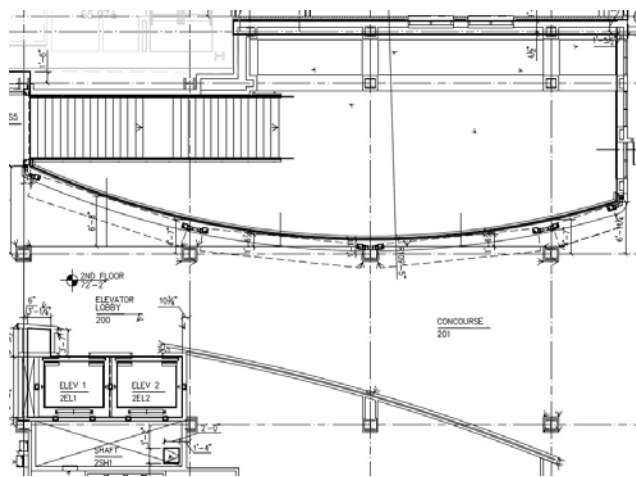


Figure 6: Lobby - Second Floor



Figure 7: Views of the Lobby

Table 3: Lobby Finishes

	Code	Finish Material
Ceiling Finish	MP1	Metal Panel: Armstrong, Effects- Wood Looks, 2' x2' Cherry with Fiberglass 15/16" Infill Panels
	MP2	Metal Panel: Armstrong, Metalworks, extra microperforated, Color: Gun Metal with Fiberglass 15/16" Infill Panels
Wall Finish (N, W)	P-1	Paint: Benjamin Moore 2154-60 Filtered Sunlight
Column Finish	P-4	Paint: Benjamin Moore 2158-30 Delightful Golden
Floor Finish	CFT-1	Ceramic Floor Tile: Daltile Colorbody Forcelan Tile Ardesia #P168 Nero Size: 18"x18"
	GT-1	Granite Floor Tile: Flame Finish Granite Accent Tile, Color: Absolute Black, Available from Universal Marble and Granite

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**Outdoor Space | Building Facade**

The exterior building facade is comprised of two main components to conform to the surrounding campus architecture (synthetic stone and face brick). An additional material, precast concrete, is used on the exterior structure of the natatorium located on the fourth floor and extending to the fifth floor. The mechanical penthouse on the roof is set back almost entirely from view and is made of EIFS. The extensive use of glass on the north facade allows abundant daylight into large common areas of the building, such as dining seating, student organization offices, and the indoor pool. The south facade is rather plain and not a highlight of the Campus Center, but provides excellent views to Oriole Park at Camden Yards and M&T Bank Stadium.



*Figure 8: North Facade Elevation*



*Figure 9: Schematic Rendering*

*Table 4: Building Facade Finishes*

	<b>Finish Material</b>
Low Facade Finish	24”x12”x34” Synthetic Stone Veneer (1 <sup>st</sup> Floor)
Mid Facade Finish	4” Face Brick (2 <sup>nd</sup> and 3 <sup>rd</sup> Floor)
High Facade Finish	Precast Concrete (4 <sup>th</sup> and 5 <sup>th</sup> Floor)
Glazing	1” Insulating Clear, Low-e Glass with 1” Insulating Spandrel Glass to Separate Floors

The Campus Center provides openness to Lombard Street and adjoins the surrounding courtyard and plaza areas of the adjacent buildings. The facade is only lit by a few large wall sconces. The purpose is to provide safe and adequate light levels to guide people into and past the building at night. I think much can be improved to highlight the heart of the University of Maryland, Baltimore campus. My goal for this facade is to draw more attention to the building at night and create a more favorable visual impression for the students. Basically, I want it to feel more like a campus landmark in downtown Baltimore.