Rio Hondo Library and Learning Resource Center Schematic Lighting Design

Jennifer Mers
The Pennsylvania State University
Architectural Engineering
Lighting/Electrical Option
Faculty Advisor: Dr. Martin Moeck



Rio Hondo Library and Learning Resource Center

- Location: Whittier, CA
- Size: 93,740 s.f. 2 Stories
- Setting: Community College
- Function Type:
 - Floor 1: Writing and Reading Program Facilities
 - Floor 2: Library Facilities

Concept Development

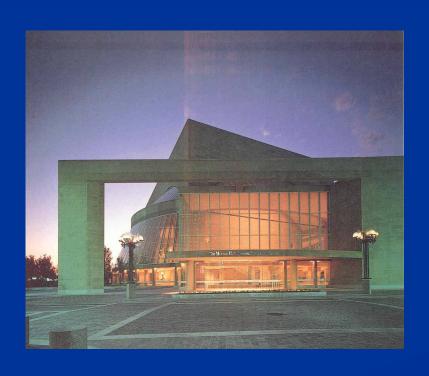
Function: Education

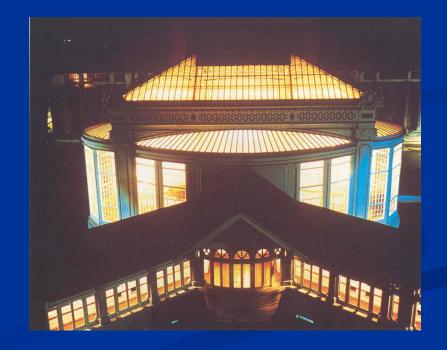
Atmosphere:

Comfortable Inviting Quiet Relaxed Warm

Concept Development

Education becomes a beacon, a lantern for the community





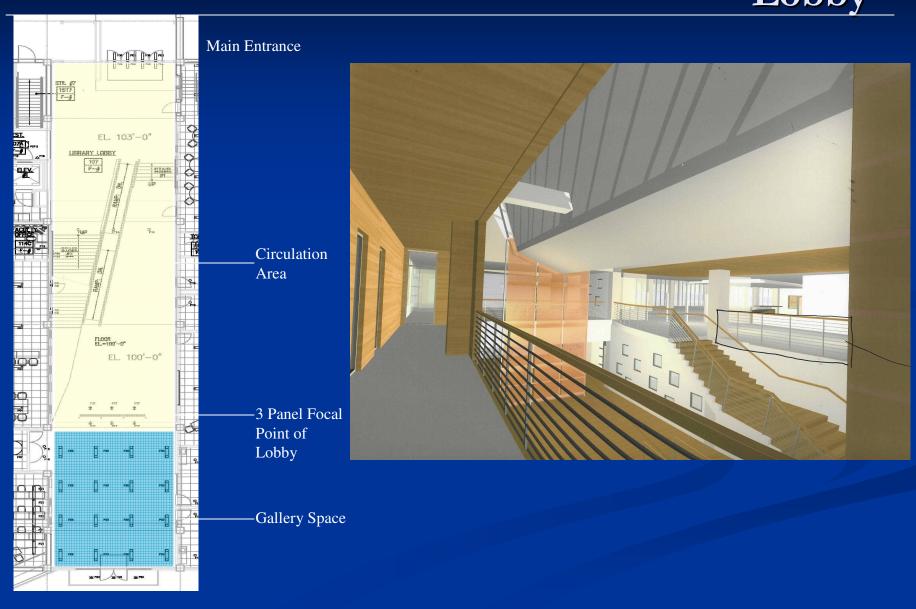
Evaluation Spaces

- Lobby
- Microfilm and Reading Area (Second Floor)
- Stack Area (Second Floor)
- Exterior

Architectural Features



- Main Entrance to Library
- First Impression
- Highest part of the ceiling is 39'
- Contains skylight across the length of the lobby
- Floating wooden ceiling located above main stairwell
- Large circulation space
- Allow for gallery space located behind the three panels
- Bridge runs across connecting the east and the west parts of the lobby



Lighting Goals

- Spaciousness
- Pleasantness
- Provide a warm, inviting atmosphere
- Accent focal points

Design Schematic

Daylight pours into space lighting the ceiling, floor, and wall

Recessed adjustable fixtures on a daylight sensor to provide light on the ceiling plane

Cove lighting above the floating ceiling – throws light on the ceiling and emphasizes the height of the space

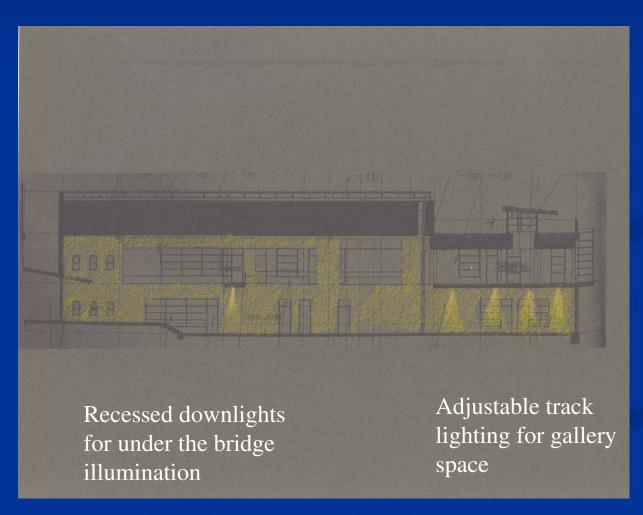
Downlights to provide appropriate light level for safety while walking

Uniform wall washing throughout space

Three panels uplit to provide focal point of lobby

Uniform wall washing provides spaciousness

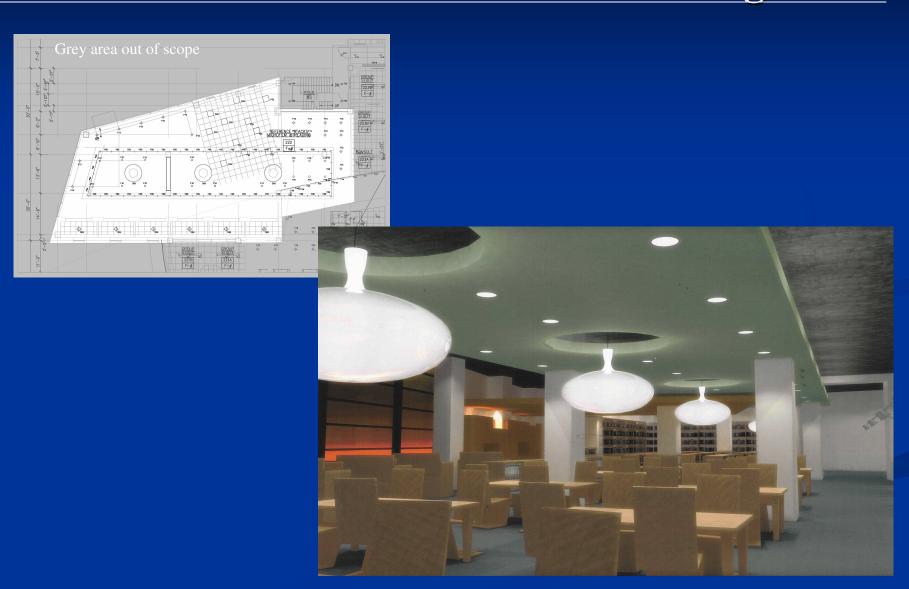
Design Schematic



Architectural Features

- Multilevel Ceiling Planes
- Open Area where tables are not permanently set
- The perimeter area is smaller more intimate spaces





Lighting Goals

- Spaciousness
- Clean
- Warm
- Inviting
- Relaxed
- Avoid reflected glare

Design Schematic

Losing the globular fixtures, no fixtures will be visible creating a clean environment

Recessed downlights for task lighting Uniform wall washing throughout space provides spaciousness

Design Schematic

Cove lighting lights the ceiling plane

Globular fixtures are replaced with an indirect cove system cutting down on direct glare

Wall washing for uniformity

Architectural Features

- South facing SolarBan 60 curtain wall
- Ceiling slopes from 18'-15'
- Roof is made of single ply membrane
- Function: stack reading, group study, individual study



Grey area out of scope



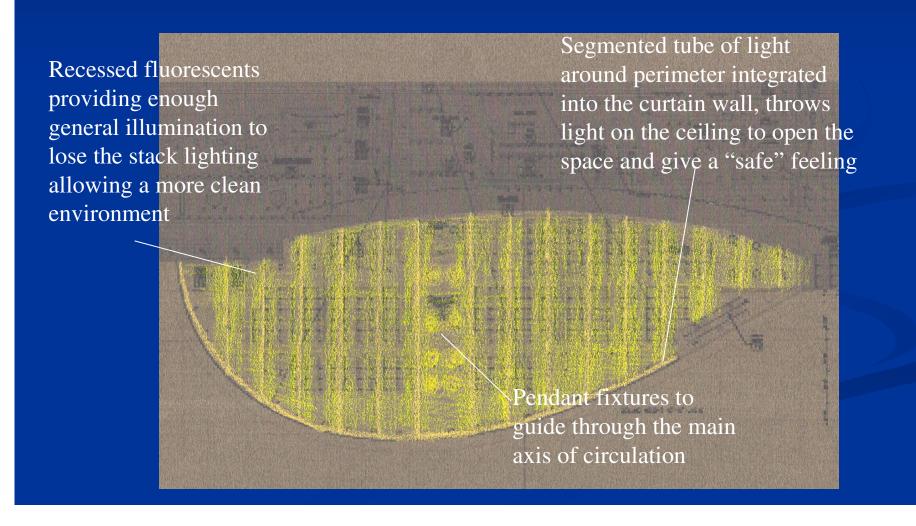
Group Study



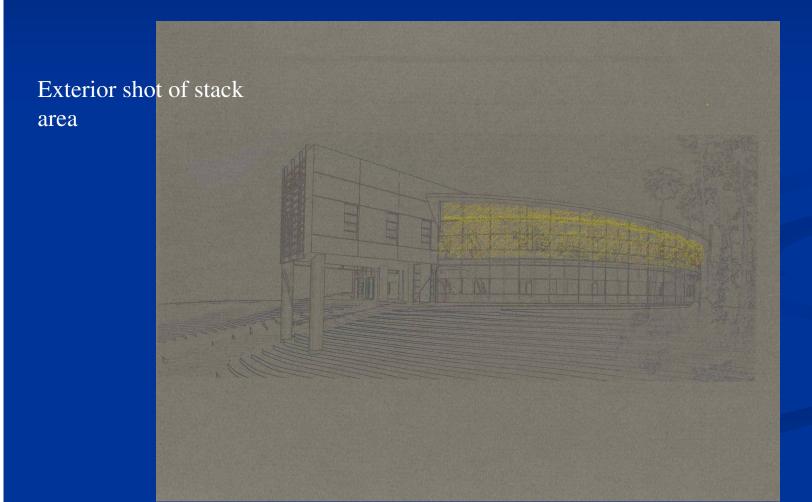
Lighting Goals

- Clean
- SpaciousnessSafety

Design Schematic



Design Schematic



Exterior

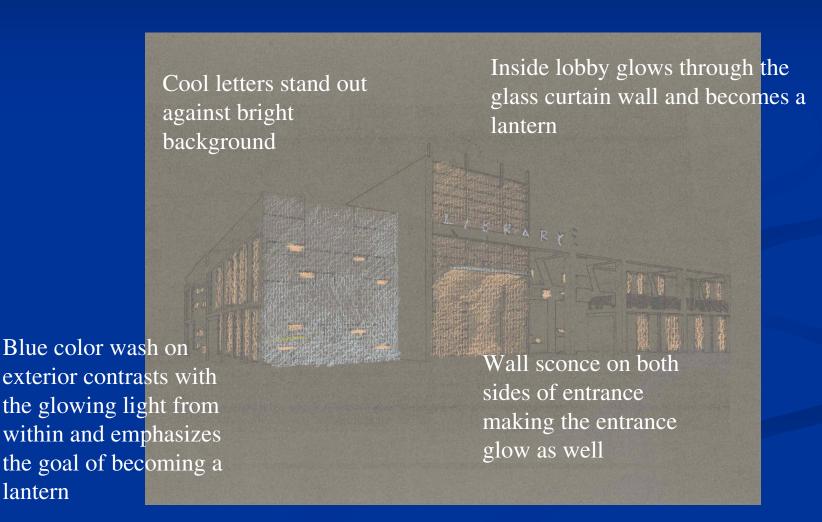
Architectural Features



Exterior Lighting Goals

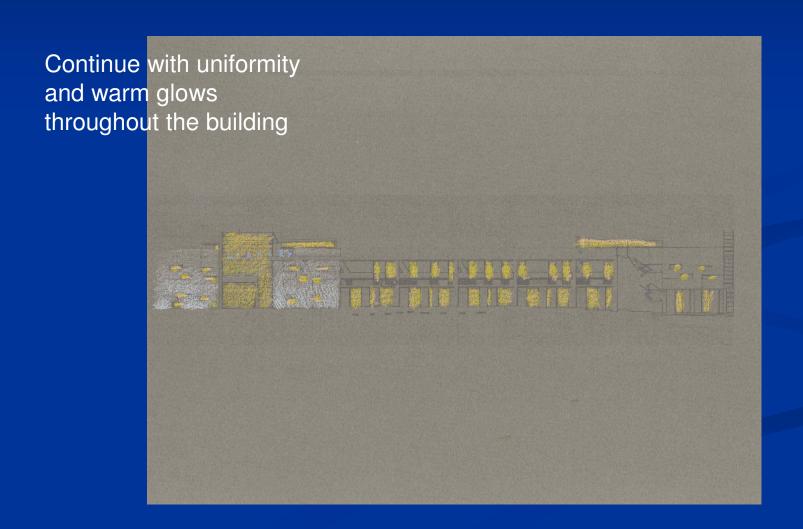
- Lantern
- Beacon

Exterior Design Schematic



lantern

Exterior Design Schematic



Thank You

Comments?