MICHAEL ANTHONY LOMBARDI
LIGHTING / ELECTRICAL OPTION
DR. RICHARD MISTRICK, ADVISOR
THE HARRY RANSOM CENTER

46,360 Square Feet (Renovated First and Second Floors)
Seven Above-Grade Floors and Basement

Originally Constricted 1972
Renovated 15 May 2001 - April 2003
$9 Million Project Cost

Building Functions

Cultural Center
Gallery
Historic Archives
Artifact Preservation
Performance Center

Harry Ransom Center Renovation  MICHAEL ANTHONY LOMBARDI  Schematic Lighting Design
THE ARCHIVES

The Ransom Center is home to one of the world’s largest cultural archives, including:

36 Million Literary Manuscripts
1 Million Rare Books
5 Million Photographs
Over 100,000 Works of Art

The Gutenberg Bible (c. 1455)
The World's First Photograph
Artwork by Frida Kahlo and Diego Rivera
Manuscript collections of Ernest Hemmingway, T.S. Elliot, James Joyce and more
THE RENOVATION

Renovation scope includes entire first and second floor

Includes gallery, theatre, and archive library / reading spaces

Exterior covered overhangs were converted to interior circulation and lobby spaces with glass curtain walls
DESIGN OBJECTIVE

The Ransom Center archives are not only a valuable resource for scholars around the world; they are one of the world’s most complete set of artifacts. Use light to reinforce the story told by these documents, journals, sketches, photographs and paintings. From the artists’ first childhood strokes to their final pen marks, light should be used to reveal the cultural history of humanity and reinforce the architecture that protects its, from the moment they enter to their last step out the door...
DESIGN SCOPE

Exterior
- Façade/Canopy

Lobby
- Entrance Lobby
- Corridors
- Stair Hall
- Theatre Lobby

Gallery

Theatre

Reading Room
ENTRANCE LOBBY

- Entrance Vestibule and Signature Wall
- Open to Above
- Security Desk
- Gutenberg Bible
- First Photograph Display
- To Gallery
ENTRANCE LOBBY

Design Goals

Create warm comfortable space that functions well for social gatherings

Highlight rich wood walls

Create a visually open space

Highlight the Gutenberg Bible Display case

Provide adequate illumination for security desk

Provide simple/logical building lighting control system at security desk

Reduce power density from 8.55 W/sq.ft to 1.3 W/sq.ft per ASHRAE/IESNA 90.1-2004
ENTRANCE LOBBY

Addressing Issues

Incandescent perimeter lights consume energy, burn out quickly, and produce reflections on wood walls

Glass donor plaque should be redesigned

Carefully select downlight locations
ENTRANCE LOBBY

Schematic Design

- Ambient lighting from second floor lobby
- Linear fluorescent cove system to highlight wood walls
- Consider specialty lighting for glass donor plaque
- Provide soft illumination on Gutenberg Bible display wall with ceiling recessed adjustable accent lighting
- Small ceiling recessed halogen downlights to highlight security counter surface
- Linear fluorescent undercabinet lighting for task work
ENTRANCE LOBBY

Schematic Design

Wall Grazing

Provide linear cove system with optics to evenly light wall from ceiling to floor.

Ceiling Reference

Wall Reference

Harry Ransom Center Renovation

MICHAEL ANTHONY LOMBARDI

Schematic Lighting Design
ENTRANCE LOBBY

Gutenberg Bible Display

BIBLE EXHIBIT - PLAN
SCALE: 1/4" = 1'-0"
ENTRANCE LOBBY

Gutenberg Bible Display
Ceiling recessed adjustable accents to highlight feature text.

General ambient illumination to provide soft illumination on Bible text. Consider ceiling recessed adjustable accent lighting to highlight display.
ENTRANCE LOBBY

First Photograph Display
Improving the Display Lighting

Maintain extremely low light levels to preserve the artifact
0.10 fc vertical on photograph
0.05 fc ambient

Consider alternative lighting systems

Low wattage halogen track fixtures with UV shields located above case window; will allow flexible on-site aiming

Fiber optic system to provide non-directional, glare-free ambient lighting in display case

LED system to provide glare free diffuse ambient light from multiple locations within case
NORTH CORRIDOR / THEATRE LOBBY

Improving the Design

Replace incandescent perimeter lighting

Highlight sculptures

Hide accent light and soften scallop pattern
NORTH CORRIDOR / THEATRE LOBBY

Design Goals

Create simple lighting system that compliments the building’s architecture

Highlight display artwork and sculpture

Create a relaxing environment for social gathering

Illuminate the etched glass curtain wall

Reduce power density from 7.93 W/sq.ft. to 1.2 W/sq.ft per ASHRAE/IESNA 90.1-2004
NORTH CORRIDOR / THEATRE LOBBY

Schematic Design

- Ceiling recessed downlights for general hallway lighting
- Highlight sculptures with recessed accent lights or track system
- Provide valance for incandescent strip lights with halogen accent light to highlight artwork
- Theatre lobby beyond
- Etched Glass Curtain Wall
  - Highlight etched glass windows with dynamic white LED lighting (refer to exterior renderings)
- Linear fluorescent track system to highlight wood walls in theatre lobby (refer to main lobby cove system)
NORTH CORRIDOR / THEATRE LOBBY

Schematic Design

Adjustable halogen accent to highlight painting

Festoon lamps to provide ambient lighting
NORTH CORRIDOR / THEATRE LOBBY

Schematic Design

Adjustable flangeless accent fixtures

or

Adjustable track lighting
SOUTH CORRIDOR / STAIR HALL

Staircase
Second Floor Balcony
Etched Glass Curtain Wall
Sculpture Display Wall
Design Goals

Create simple lighting system that compliments the building’s architecture

Highlight display artwork and sculpture

Create a relaxing environment for social gathering

Illuminate the etched glass curtain wall

Improve upon elevator threshold lighting

Reduce power density to 1.2 W/sq.ft. Per ASHRAE/IESNA 90.1-2004
Incandescent cove system creates lamp reflections on conference room glass opening

Present solution: expired lamps along window are not replaced

Replace cove with fluorescent source

Adjust window dimensions to prevent reflections
SOUTH CORRIDOR / STAIR HALL

Ceiling recessed downlights for general hallway lighting

Highlight sculptures with recessed accent lights or track system

Glowing white LED panel with color shift to signal elevator arrival

Stair Hall beyond

Etched Glass Curtain Wall
Highlight etched glass windows with dynamic white LED lighting (refer to exterior renderings)

Beyond

Recessed floor uplights to highlight underside of feature staircase

Linear fluorescent track system to highlight wood walls in theatre lobby (refer to main lobby cove system)
GALLERY

- Exposed Columns
- Display Case Area
- Lightwell
- Ramp and Stairs
GALLERY

Design Objective

Provide a comprehensive redesign of the gallery ceiling structure

- Reinforce the building’s strong exterior presence
- Reduce ceiling clutter
- Tuck monopoint accent fixtures into ceiling
- Integrate emergency lighting into accent system
Recessed track or monopoint system to provide flexible lighting for artwork.

Indirect daylight from second floor windows

Surface mounted or recessed linear fluorescent fixture with asymmetric distribution to supplement daylight during dark hours. Consider photosensor control.
THEATRE

Seating

Transition Vestibule

Draped Fabric Ceiling

3/4 Height Wall, Red Painted Plaster on Gypsum Board
THEATRE

Design Objective

Provide a low maintenance lighting system

Reduce energy consumption

Create rhythmic visual interest for guests before shows and during intermissions
Fluorescent cove system for ambient light

Supplement cove lighting with recessed downlights

Asymmetric floor recessed uplights to create rhythmic feel on red feature wall
READING ROOM
READING ROOM

- Glass Interior Windows
- Windows face into daylit offices
- Wall Bookshelves
- Circulation Desk
- Reading Tables
- Easel Display Wall
READING ROOM

Schematic Design

- Linear fluorescent cove or surface mount asymmetric fixture to highlight wood ceilings and provide glare-free ambient lighting. Consider implementing dimming controls.

- Daylight penetration from high interior windows facing daylit perimeter offices.

- Consider mounting sconces on columns to provide visual interest.

- Ceiling recessed fluorescent lighting with asymmetric distribution to light perimeter stacks.

- Provide individually controlled table lamps for reading tables.
READING ROOM

Easel Wall Detail

Recessed track system to accent the temporary display of artifacts on easel wall. Allow for dimming.

The easel wall is used to temporarily display artifacts requested in advance from patrons of the Ransom Center Library and Archives.

A user friendly dimming system should be provided for observers to temporarily illuminate the artifacts as well as adjust the cove system lighting.

Linear fluorescent cove to provide general illumination for easel wall and visually open the reading room space. Allow for dimming.
EXTERIOR

- Stone Façade
- Cantilevered Glass Walkway
- Etched Glass Curtain Wall
- Canopy Reference
- Etched Glass Signature Wall
- Covered Pedestrian Passthrough and Grade Reference
- Entrance Vestibule
The Ransom Center entrance features an etched glass “signature wall.” The signature of each artist in the Ransom Center collections is incorporated into the glazing.
Each rectangle represents a piece of the Ransom Center collections. During the day intriguing shadows of the collections are cast onto the interior lobby floors and walls.
EXTERIOR

Design Concept

Bring the Ransom Center archives “outside” the building

Reduce scallop patterns on exterior façade

Draw people to the etched glass walls and building entrance

Create a more comfortable plaza night setting
EXTERIOR

Canopy and Façade

- Recessed exterior grade downlights to provide soft pads of light under building canopy walkway.
- White LED striplights intergraded into curtain wall frame to provide dynamic illumination of the etched glass images.
- Façade illumination - option 1
  - Recessed linear fluorescent cove to graze stone wall.
- Entrance “signature wall” illuminated with color changing LED system to draw visitors to entrance.
EXTERIOR

Canopy and Façade

- Recessed exterior grade downlights to provide soft pads of light under building canopy walkway.

- White LED striplights integrated into curtain wall frame to provide dynamic illumination of the etched glass images.

- Entrance “signature wall” illuminated with color changing LED system to draw visitors to entrance.

- Façade illumination - option 2
  In-grade recessed lighting with asymmetric distribution to provide scallop effect on façade.
Color Changing Signature Wall

Provide color changing LEDs recessed into floor and ceiling
EXTERIOR

Color Changing Signature Wall
Etched glass wall

Graze etched glass windows with light

Redesign framing system to incorporate white LEDs
EXTERIOR

LED Façade Lighting

Questions?