SIBLEY MEMORIAL HOSPITAL

GRAND OAKS ASSISTED LIVING FACILITY

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Lighting/Electrical Option
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Building Overview

- Location: Loughboro Road, Washington, D.C.
- Size: 123,000 square feet + 67,000 sq. ft. addition
- Owner: Sibley Memorial Hospital
- Occupancy type: Older Adults – 80+ years of age

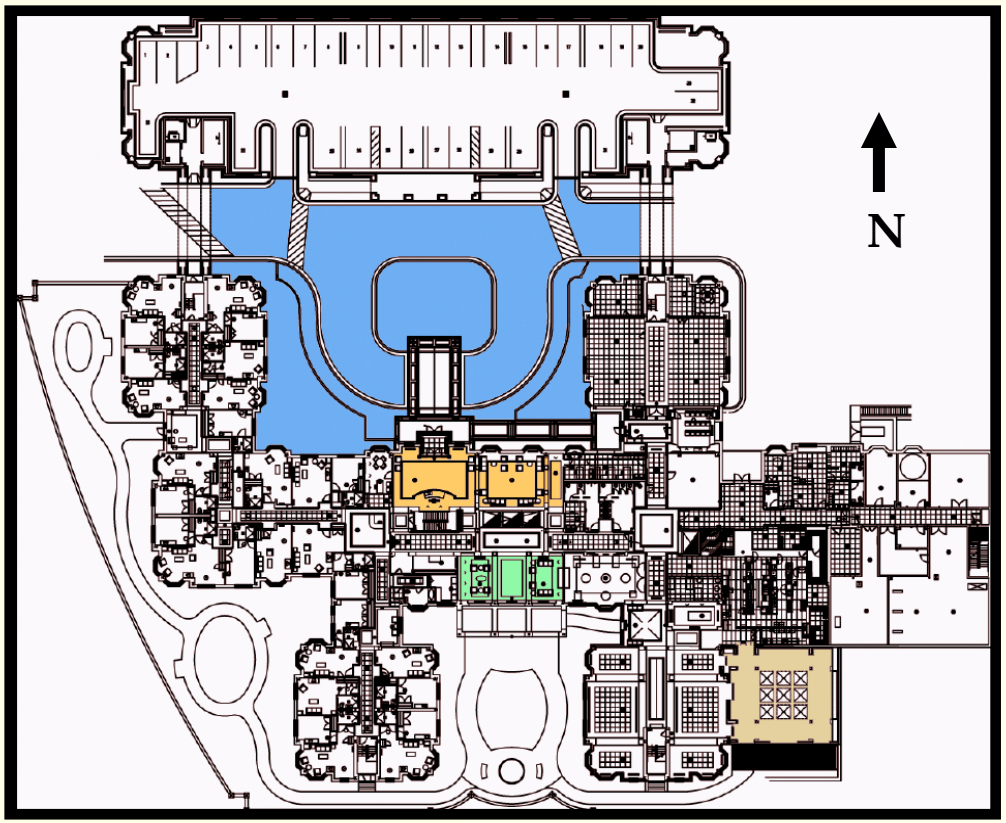
Visibility Issue with Older Adults

- pupils become smaller – 33% less light reaches retina after age 65
- require higher illuminance levels
- floaters – scattering of light within eye
- increased sensitivity to glare
- decreased contrast sensitivity
- decrease in adaptation time
- altered color perception

Design Goals for all spaces

- provide comfortable home like atmosphere
- avoid glare – direct and reflected
- uniformity in general lighting
- balance of daylight and interior ambient light
- avoid strong contrast ratios

Spaces to be redesigned

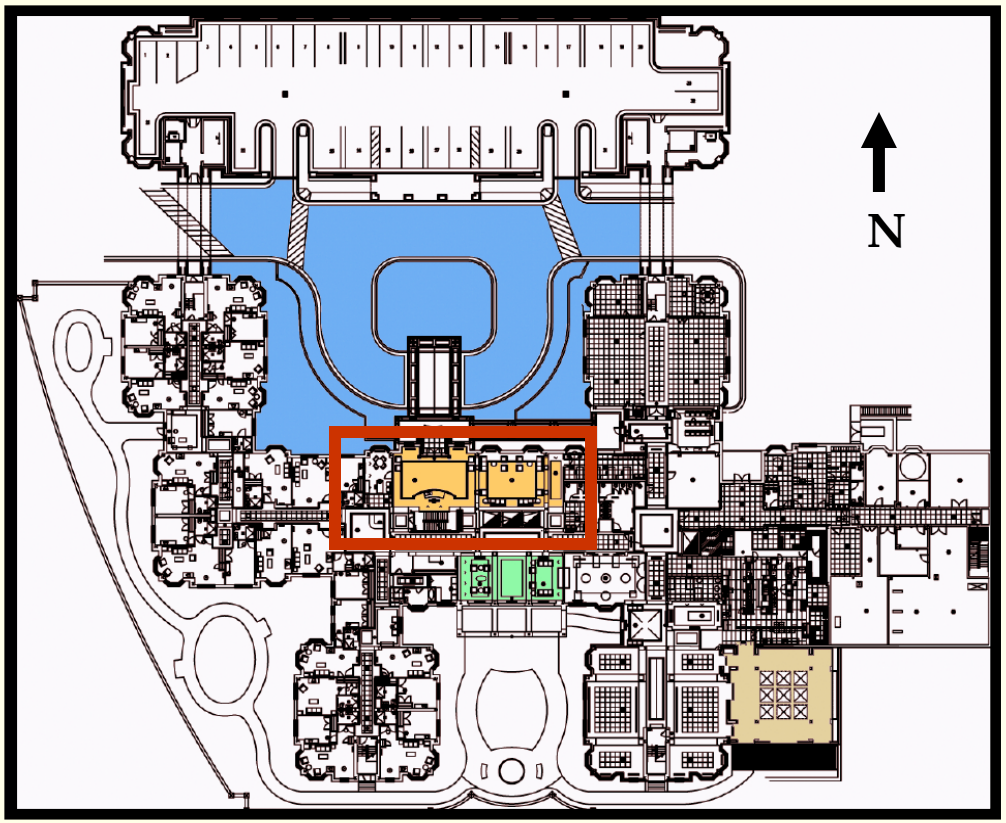


- Outdoor Entry and Walkway
- Lobby
- Living Room/Library
- Dining Room

Design Space

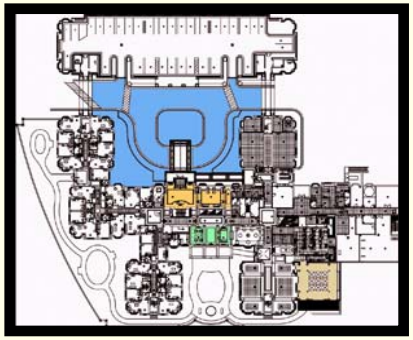
Lobby

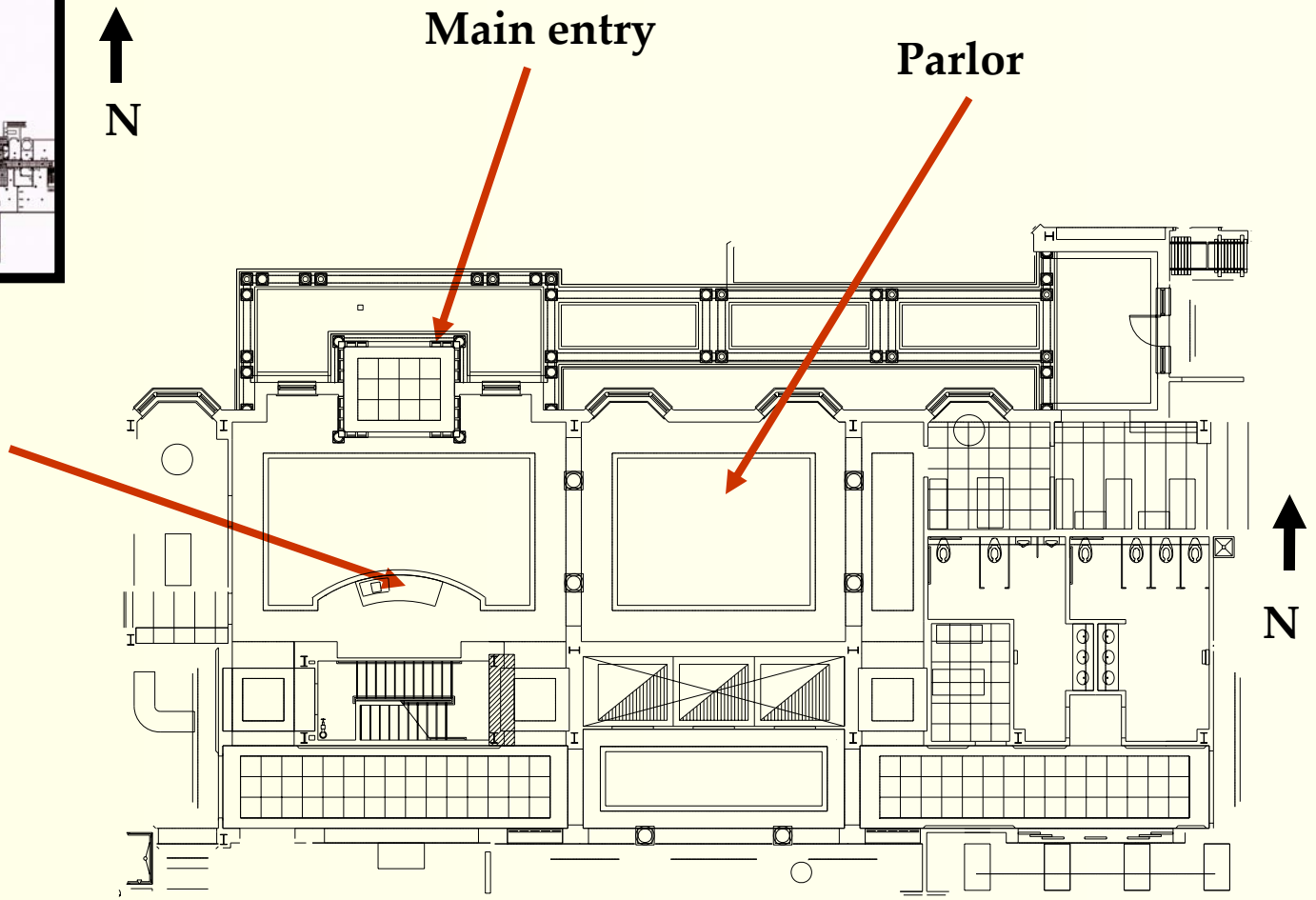
Lobby



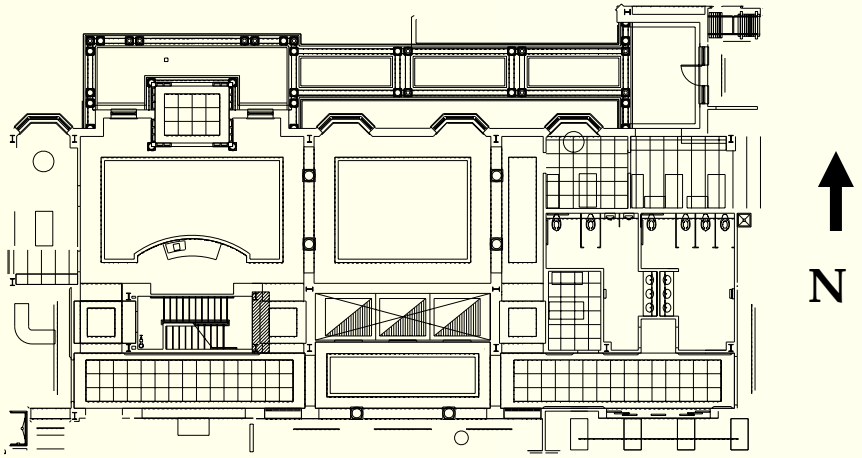
- Outdoor Entry and Walkway
- **Lobby**
- Living Room/Library
- Lunch Café

Lobby - Description



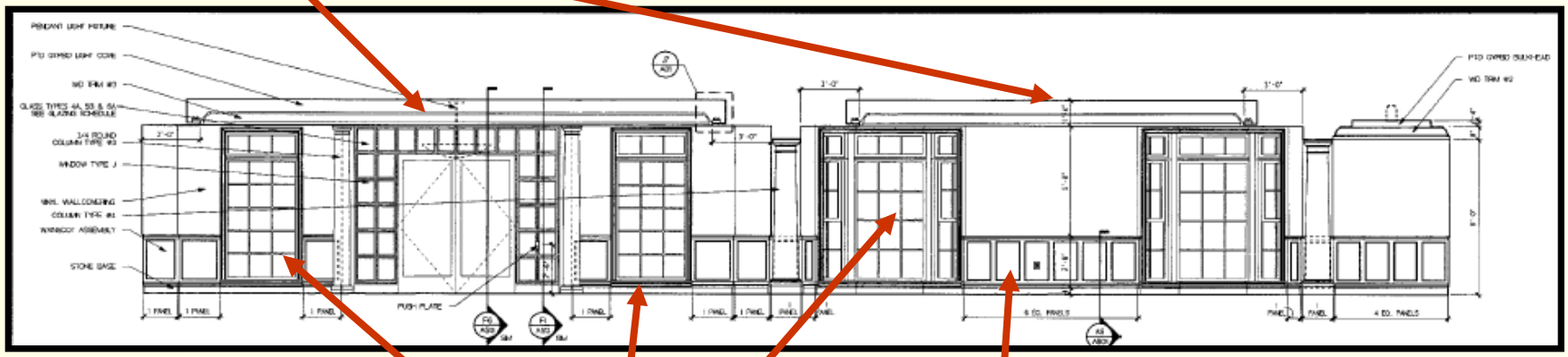


Lobby – Key Features



North Elevation

Decorative Cove



Large Expanse of Windows

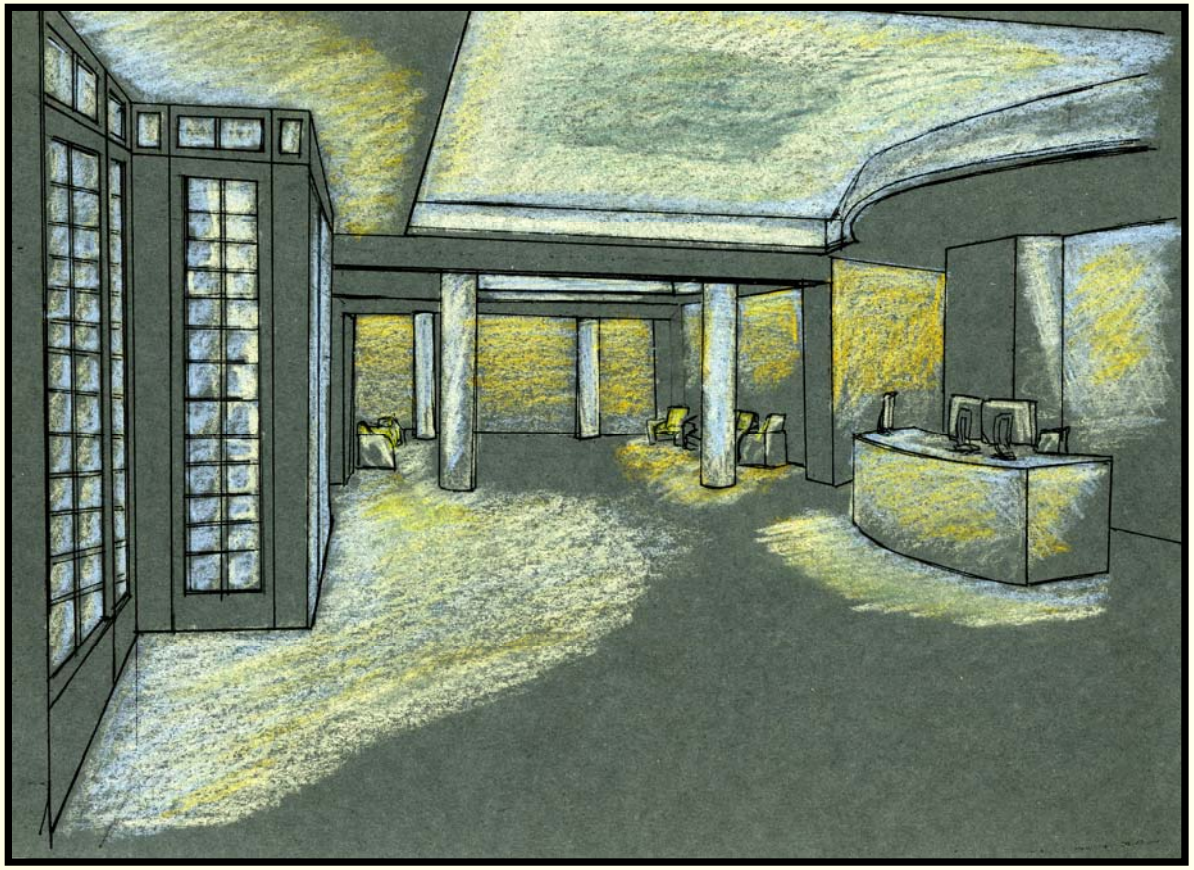
Decorative Wainscot

Lobby - Schematic Design Goals

- Make use of daylight into space
- Address adaptation time
  - higher illuminance levels during the day
  - lower illuminance levels during the night
- Even illumination – avoid spots of light
- Warm and inviting atmosphere

Lobby – Schematic Design Examples

Lobby – Schematic Design

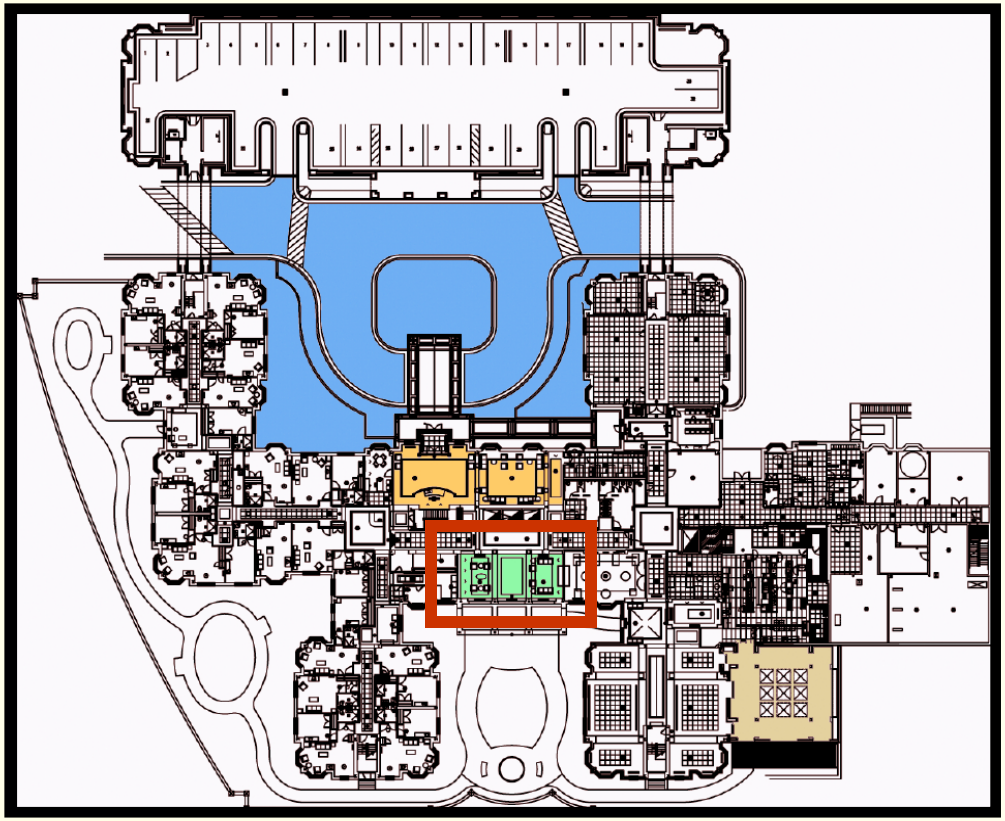


- Ceiling – cove lighting for diffuse ambient light
- Walls – washed with light to provide even illumination in the visual field
- Floor – shadows kept to minimum with indirect lighting
- Reception – highlighted for visual recognition
- Furniture – down light to create more intimate area

Design Space

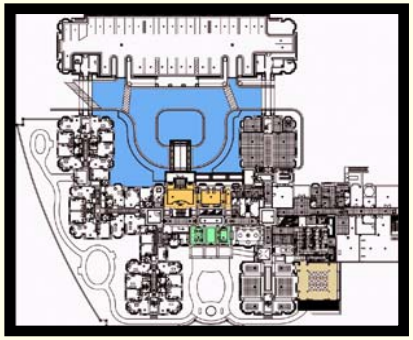
Living Room/Library

Living Room/Library



- Outdoor Entry and Walkway
- Lobby
- **Living Room/Library**
- Dining Room

Living Room/Library – Space Details



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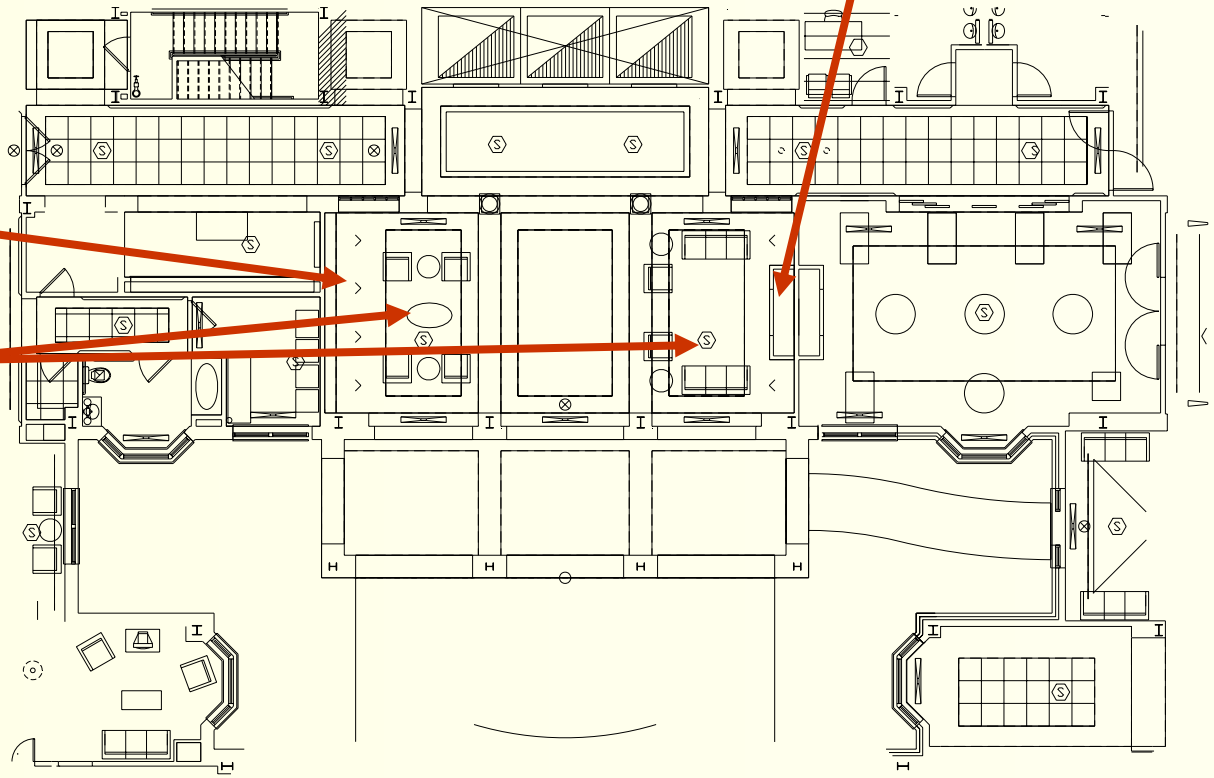
Fire Place

Bookshelves

Reading/Relaxing



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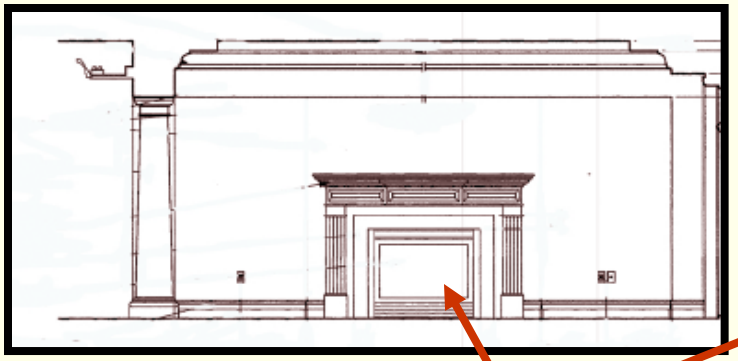
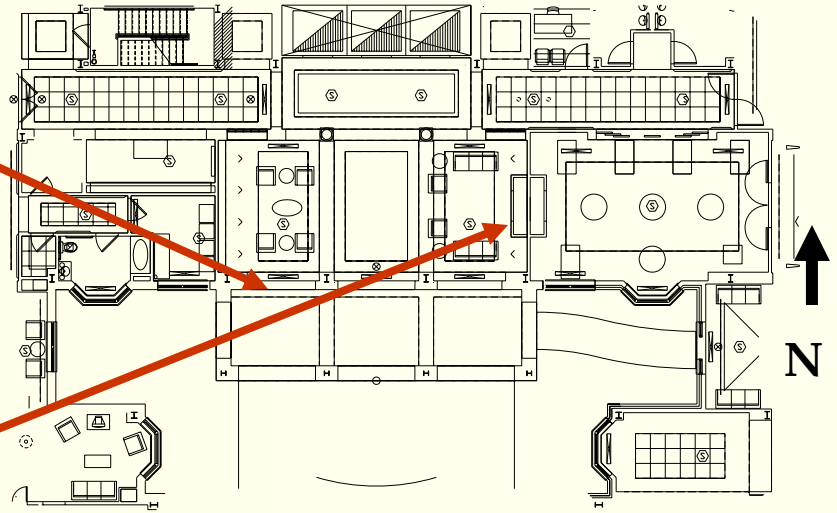
Living Room/Library – Key Features

South Elevation

Large Expanse of South Facing Glass – Overhang reduces direct glare



East Elevation



Fire Place

Living Room/Library- Schematic Design Goals

- Make use of daylight into space
- Even illumination – avoid spots of light
- Warm and inviting atmosphere
- Low Glare
- Avoid Veiling Reflection – (reading)

Living Room/Library - Schematic Design Examples

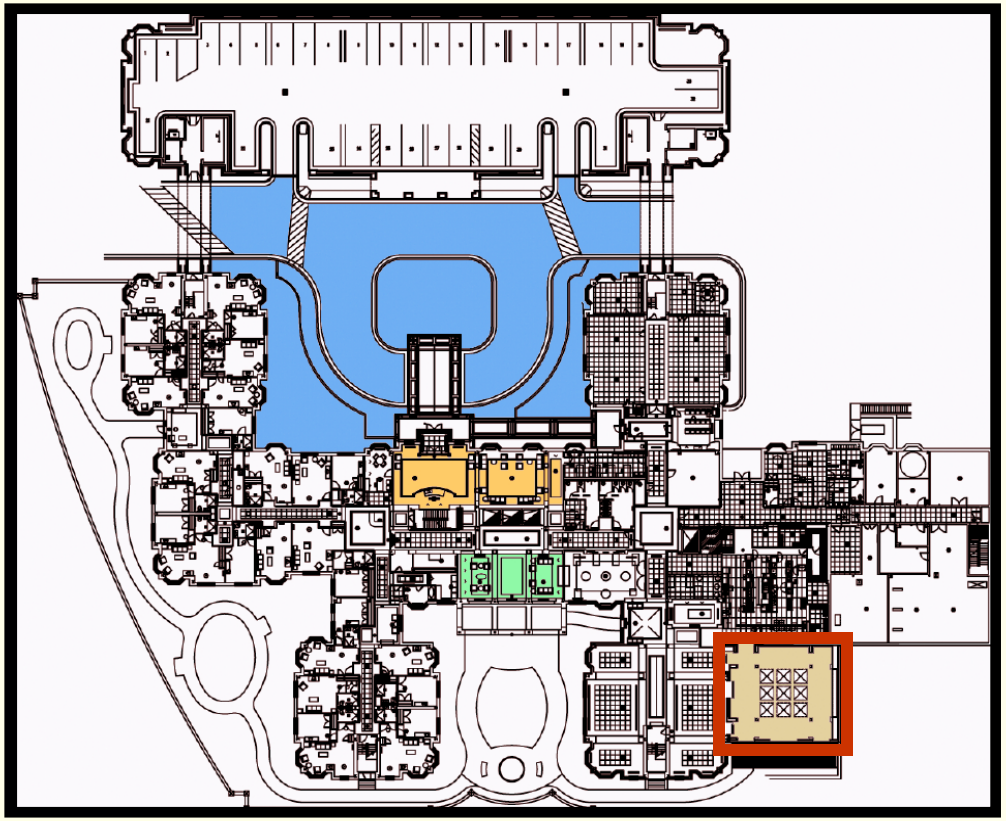
Living Room/Library – Schematic Design

- Ceiling – cove lighting for diffuse ambient light
- Columns – highlighted to give dimension/contrast to space
- Floor – shadows kept to minimum with indirect lighting
- Furniture – showered with diffuse indirect lighting from cove
- Seating Areas – table lamps to make each space more intimate
- Fire Place – mantle highlighted to create a focal point in the space

Design Space

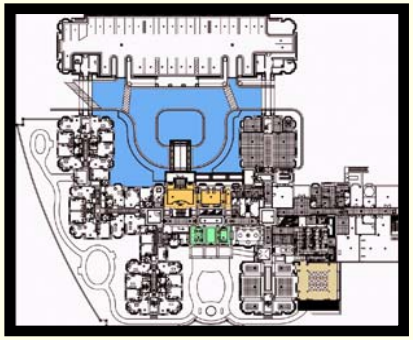
Dining Room

Dining Room



- Outdoor Entry and Walkway
- Lobby
- Living Room/Library
- **Dining Room**

Dining Room – Space Details



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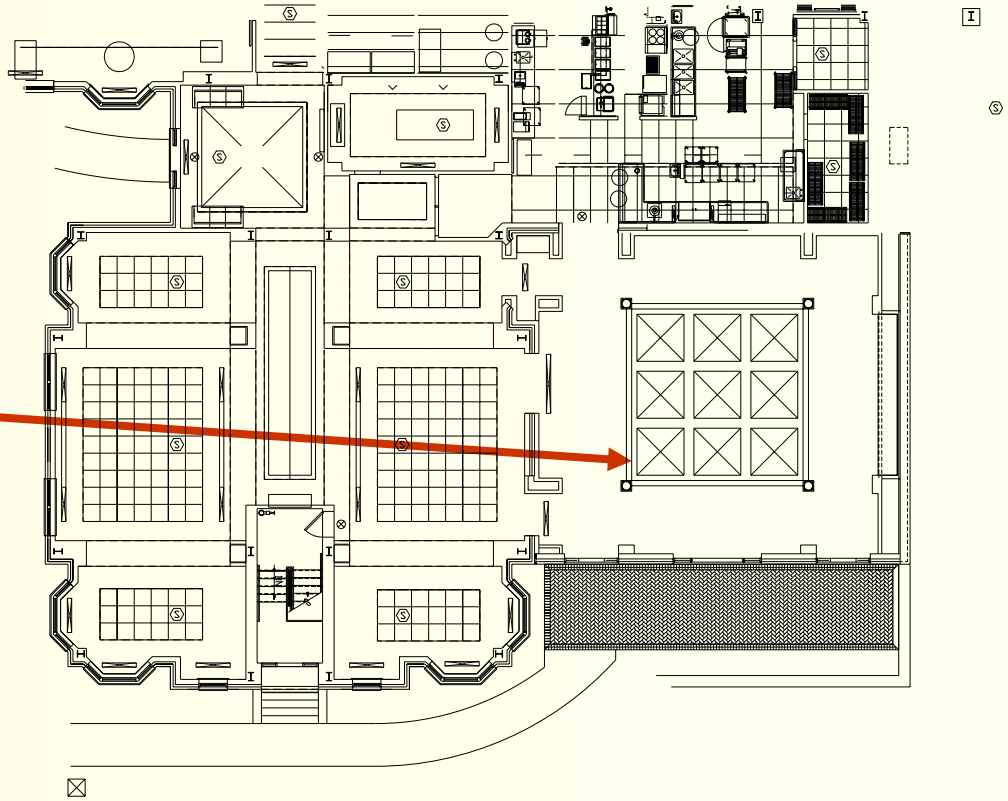
Skylights



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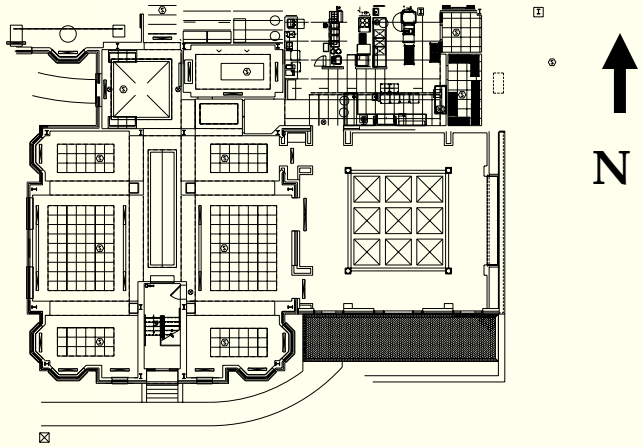
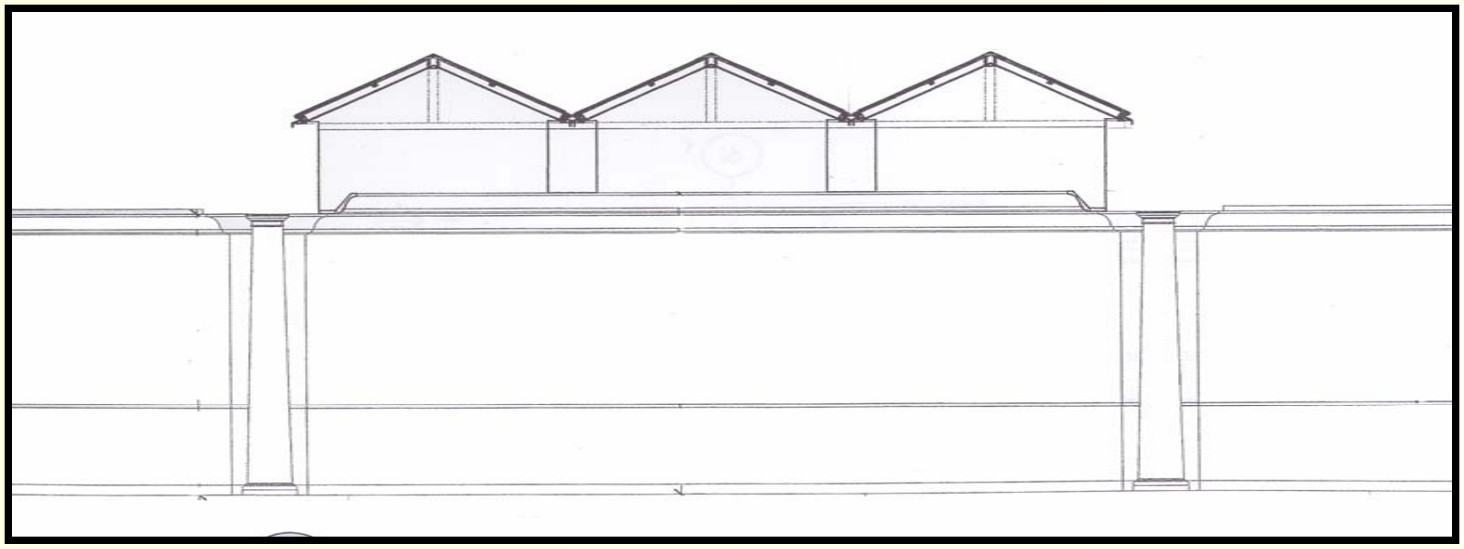
Dining Room – Space Details



Skylight Section

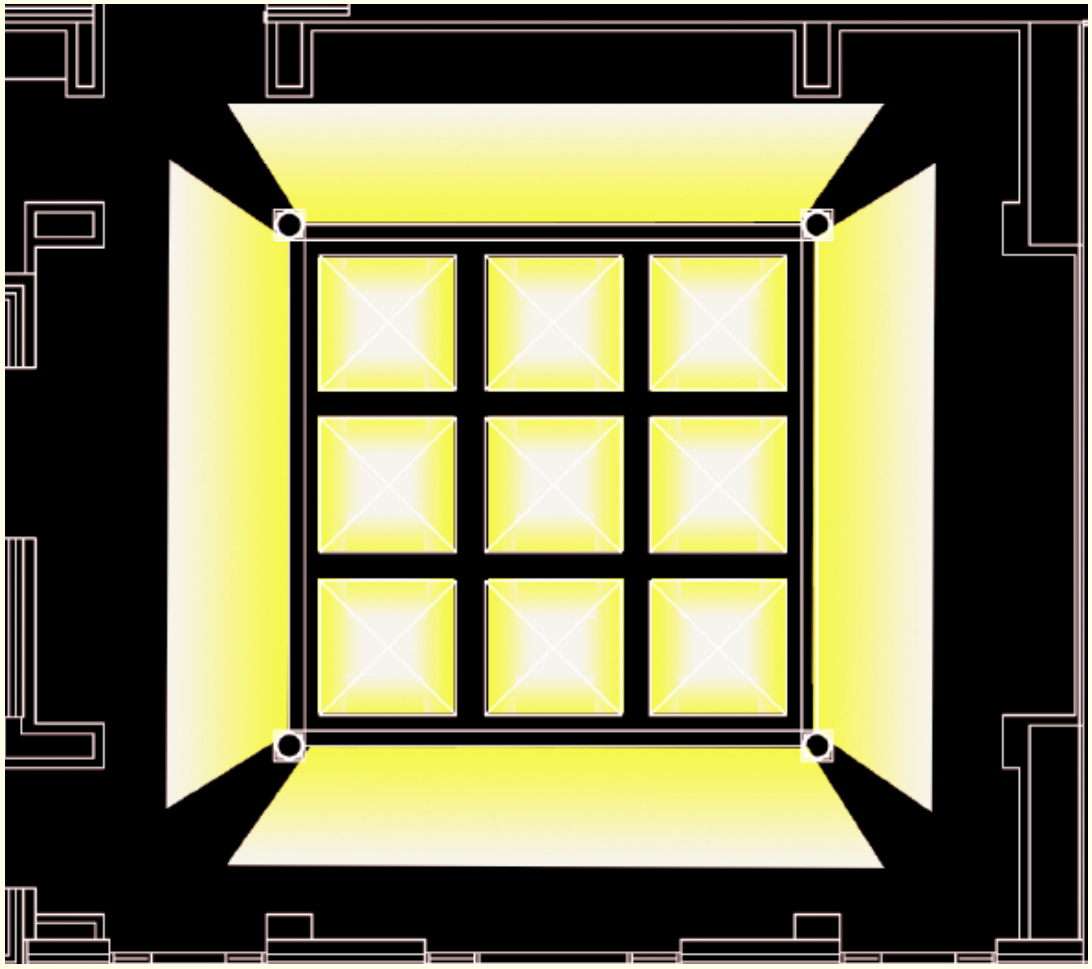


Dining Room - Schematic Design Goals

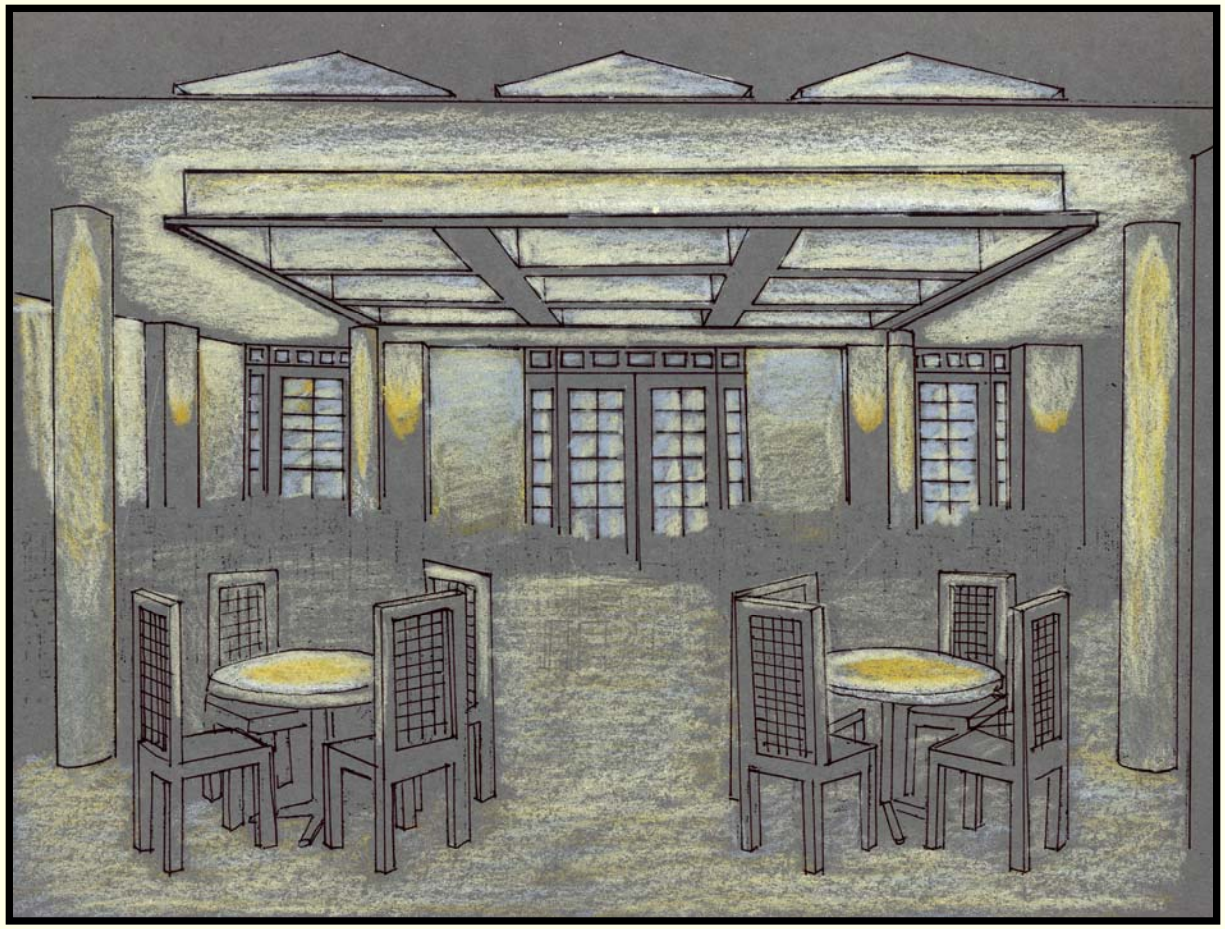
- Make use of daylight into space
- Good facial recognition
- Even illumination – avoid spots of light
- Warm and inviting atmosphere
- Low contrast ratios

Dining Room - Schematic Design Examples

Dining Room – Schematic Design



Schematic Design - Lobby

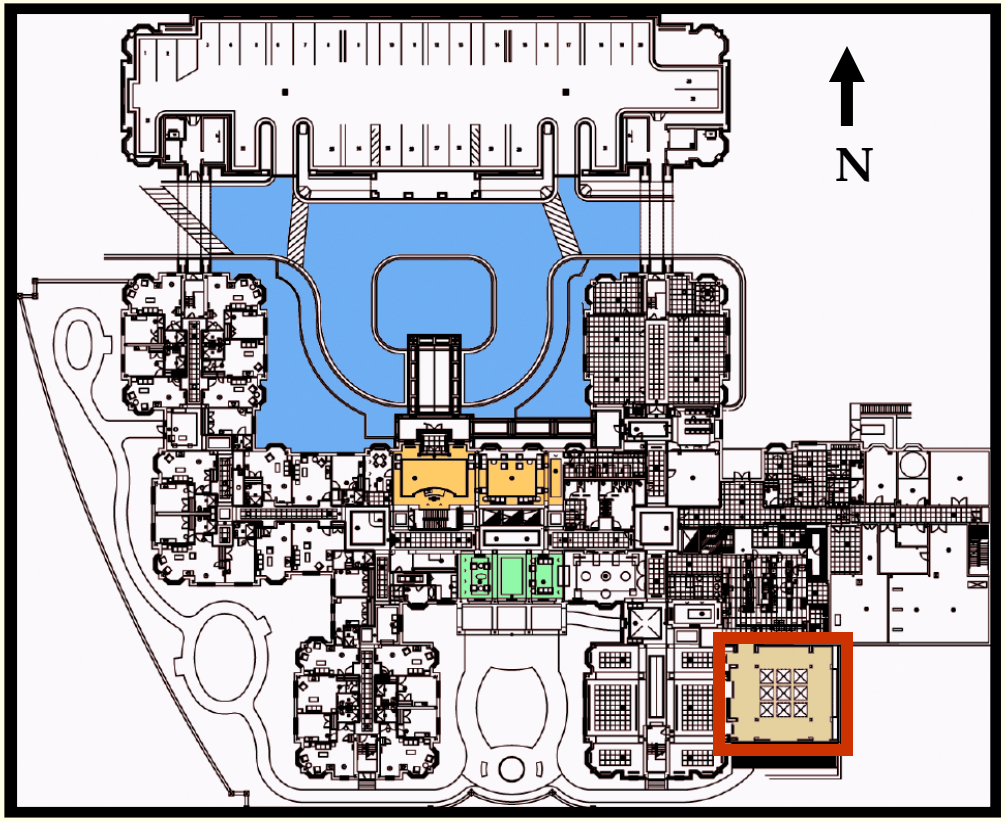


- Ceiling – cove lighting for diffuse ambient light
- Skylights – provide nice daylight – uplit during night time hours
- Table – diffuse general illumination – directional downlight for highlight
- Walls – washed with light to reduce contrast between windows and walls
- Columns - directional downlight

Design Space

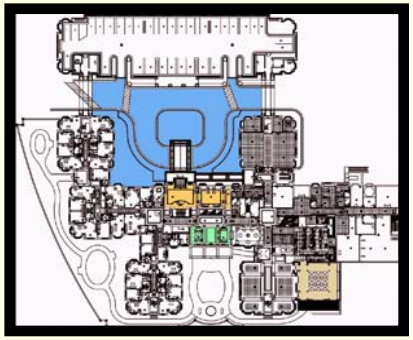
Outdoor Entry and Walkway

Outdoor Entry and Walkway



- **Outdoor Entry and Walkway**
- Lobby
- Living Room/Library
- Dining Room

Building Entry and Walkway – Space Details



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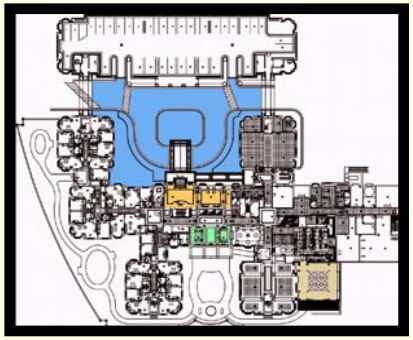
Building Entry and Walkway – Bridge and Addition



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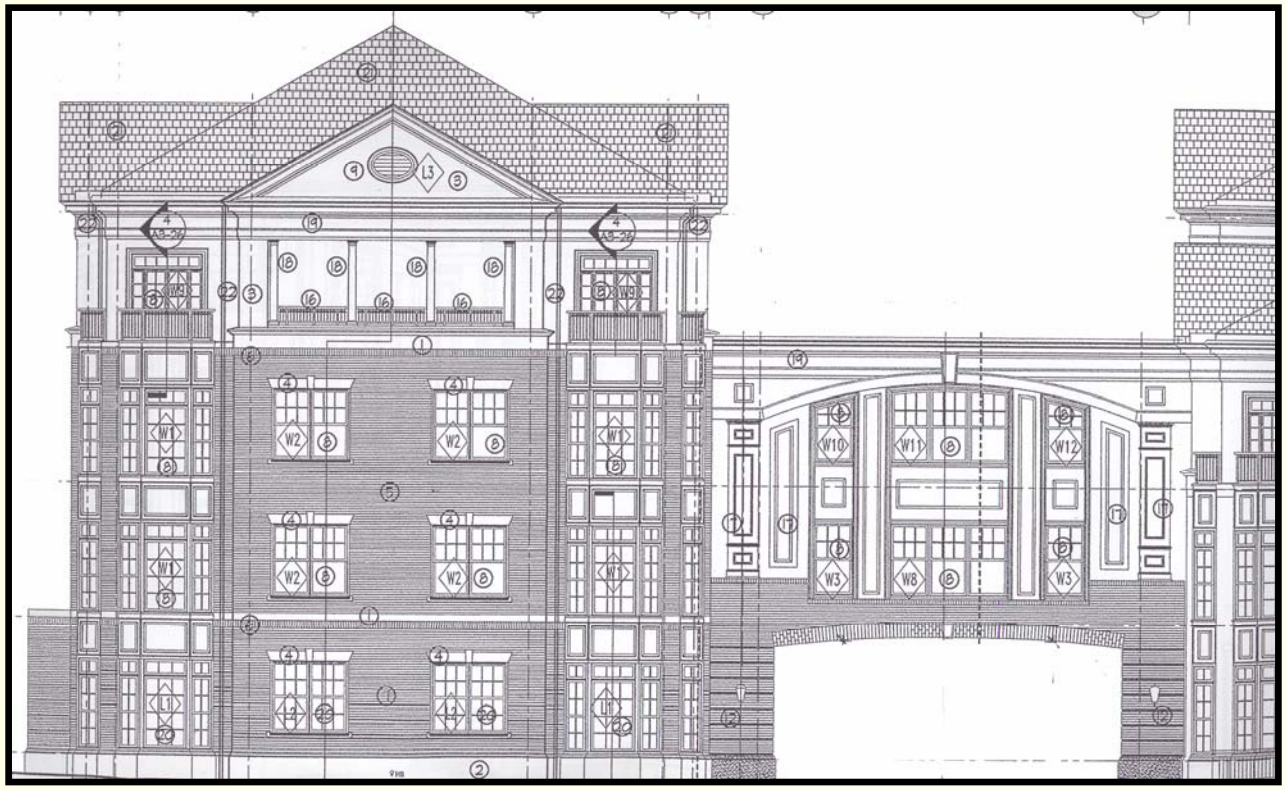


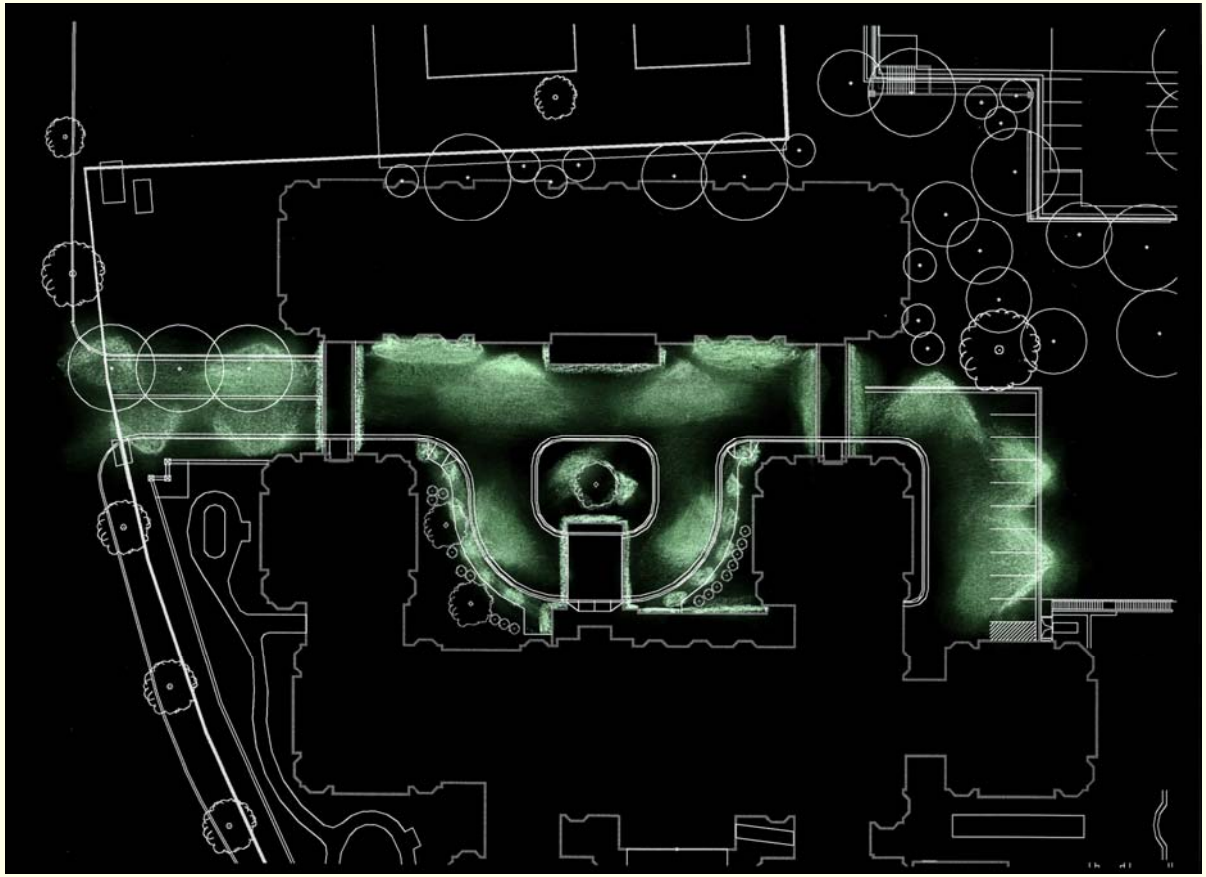
West Elevation

Building Entry and Walkway - Schematic Design Goals

- Hierarchy of luminance to establish building entry
- High luminance at parking garage entry
- High general illuminance values to accommodate slow adaptation time
- Limited Spill light into resident rooms

Building Entry and Walkway - Schematic Design Examples

Building Entry and Walkway – Schematic Design



- Pole Mounted Fixture for general road way illuminations
- Spill light from parking garage entry
- Accent uplight on tree
- Spill light from Porte Cochere and covered walkway
- Bollards for increased walk way illumination

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Questions?