

A New Vision for the Florida Capitol Complex, Tallahassee, FL**Hannah Rubottom****Publication Date**

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APPENDIX I: GLOSSARY

Capital³⁴ (noun) the city or town that is the official seat of government in a country, state, etc.

Capitol³⁵ (noun)

a: a building in which a state legislative body meets

// the dome of the state capitol

b: a group of buildings in which the functions of state government are carried out

Florida Historic Capitol (Museum)

The building initially constructed in 1845 to house Florida's government and which has undergone numerous changes over time leading to its current condition as a reconstruction of the 1902 version of the building and which currently functions primarily as a museum.

(Existing) Florida Capitol Complex

The Florida capitol as it exists today consisting of five buildings: the Florida Historic Capitol, three buildings added in the 1970s which house the state's current governmental functions, and the Knott Building which is an annex building housing committee rooms and Senate staff offices.

Proposed Capitol Complex

The capitol complex proposed by this thesis and intended as one concept for consideration should need ever arise to replace the 1970s buildings of the Existing Florida Capitol Complex.

³⁴ "Capital", Merriam-Webster, April 5, 2021, <https://www.merriam-webster.com/dictionary/capital>.

³⁵ "Capitol", Dictionary.com, April 5, 2021, <https://www.dictionary.com/browse/capitol>.

APPENDIX II: TECHNICAL DRAWINGS

Hannah Rubottom

Integrative Design
May 11, 2021

Thesis Project: A New Vision for the Florida Capitol
Project Location: Tallahassee, Florida

Faculty Advisor: Richard Economakis

CODE ANALYSIS, IBC 2015

PROJECT DESCRIPTION

Site

The project is located in Tallahassee, Florida. The site is that of the existing Florida Capitol Complex, situated at the top of a hill where today two major roads on the U.S. Highway 27 route meet in a "T" intersection at the east side of the site. Florida's Supreme Court Building is directly across the street to the west of the site. To the north are businesses and retail, as well as Tallahassee's City Hall and the Leon County Courthouse. To the south are State office buildings.

The project is designed with the assumption that the 1970s buildings of the existing complex will at some future date require replacement. On the basis of this assumption, the project reconfigures the site to accommodate five new buildings arranged around a central plaza. The Florida Historic Capitol building on the east side as well as Knott Building on the southwest corner of the complex are assumed to remain. The site has a ~24-foot elevation change, sloping up from Duval Street on the west to grade level of the Historic Capitol Building.

Building

The project includes the design of one building of the proposed new complex. The building is the Executive Building and is to be located on the west end of the site, on axis with both the Florida Historic Capitol building and the Florida Supreme Court. The building will serve as the public gateway to the Capitol and feature large entrance lobbies and a central rotunda. The building will house the formal office of the Governor, the Governor's Cabinet Room, the Capitol Branch of the State Library, a Gallery/Event Space, and Press Lobbies which link by arched bridges to the House Chamber Building and the Senate Chamber Building to the north and south of the Executive Building. Secure parking and service access for the building are located in a parking garage beneath the central plaza.

CODE ANALYSIS

Gross Square Feet:

Occupancy Classification: **Mixed-Use: A-3 Assembly with Accessory; Business**

Special Use and Occupancy: **Atrium**

Construction Classification: **Type IIIA, Sprinklered**

Building Heights & Areas:

Building Height: **78'-7"**

✓ 85 feet allowable for sprinklered IIIA per Table 504.3

Stories: **4 stories, 3 above grade plane**

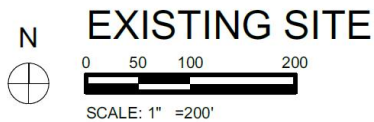
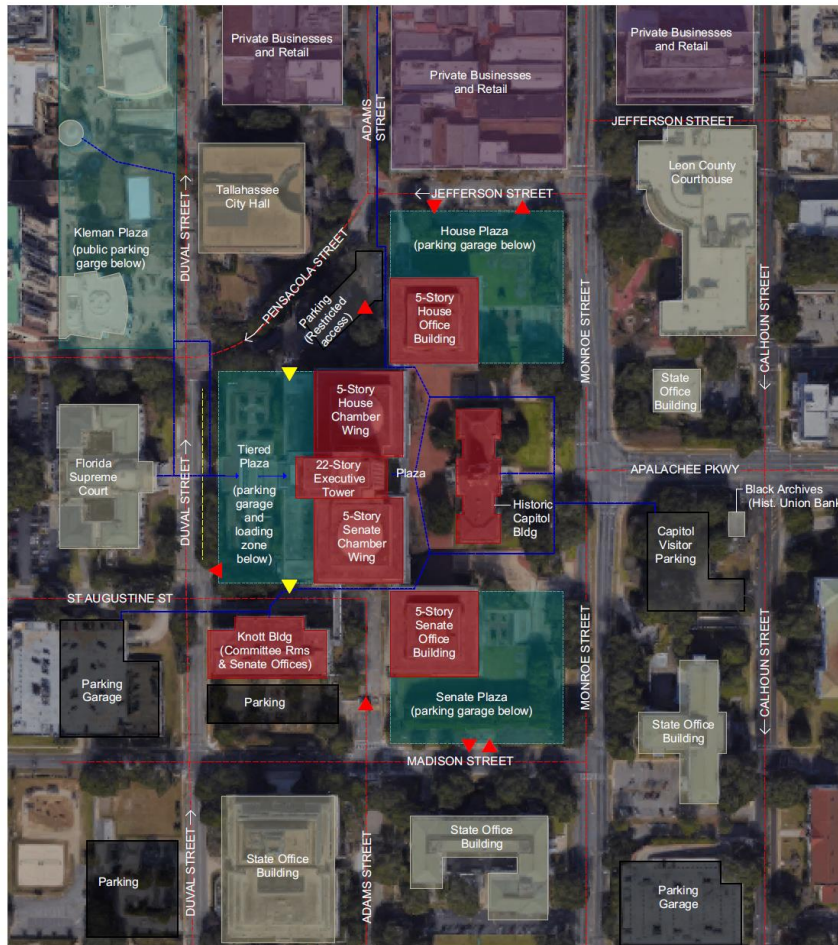
✓ 4 stories allowable for sprinklered IIIA per Table 504.4

Note: grade plane is midway between Duval St. and Plaza levels

Building Area: **52,597**

Occupancy Separation: **1 Hr Separation**

➤ required between Assembly and Business for a Sprinklered building per Table 508.4



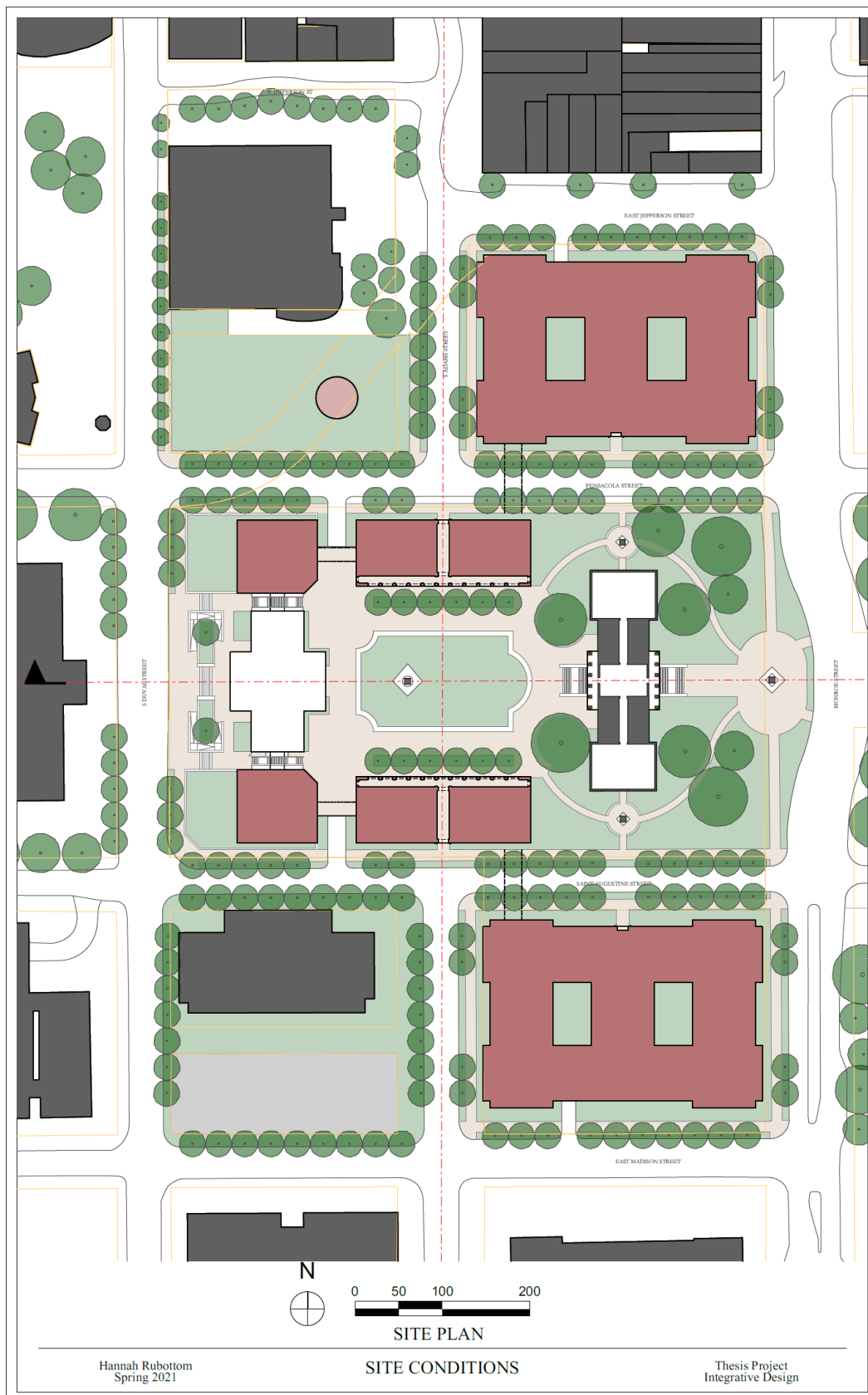
LEGEND

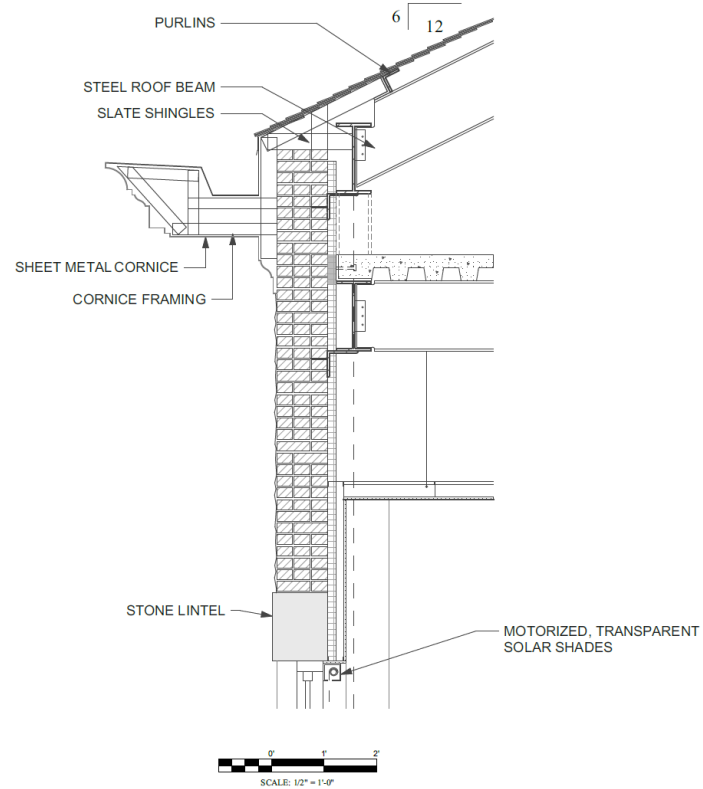
- | | | | | | |
|--|----------------------|--|---------------------------------|--|------------------------------|
| | PUBLIC ACCESS STAIR | | VEHICLE ROADWAY | | GARAGE ENTRANCE / EXIT |
| | KEY PEDESTRIAN ROUTE | | VEHICLE PICK-UP / DROP-OFF ZONE | | LOADING ZONE ENTRANCE / EXIT |

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SITE CONDITIONS

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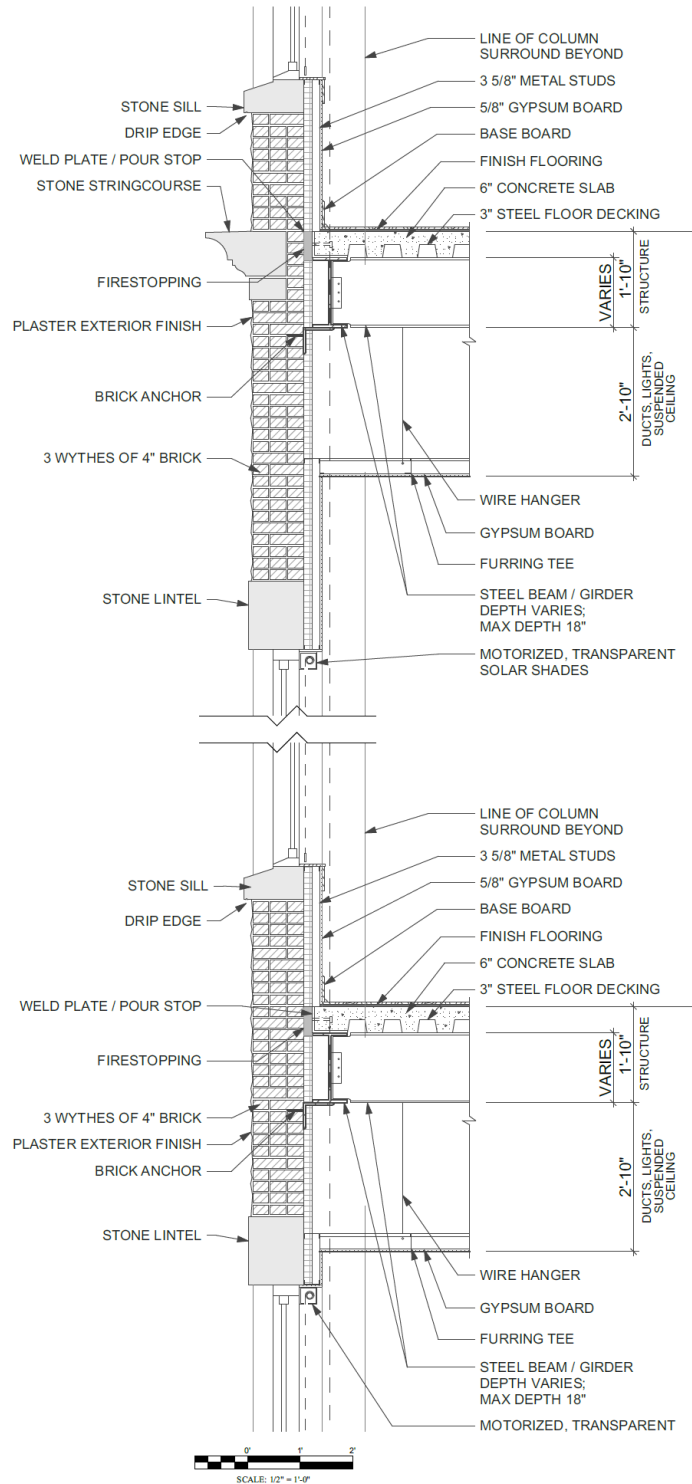


WALL SECTION

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BUILDING ENVELOPE, SYSTEMS & ASSEMBLIES

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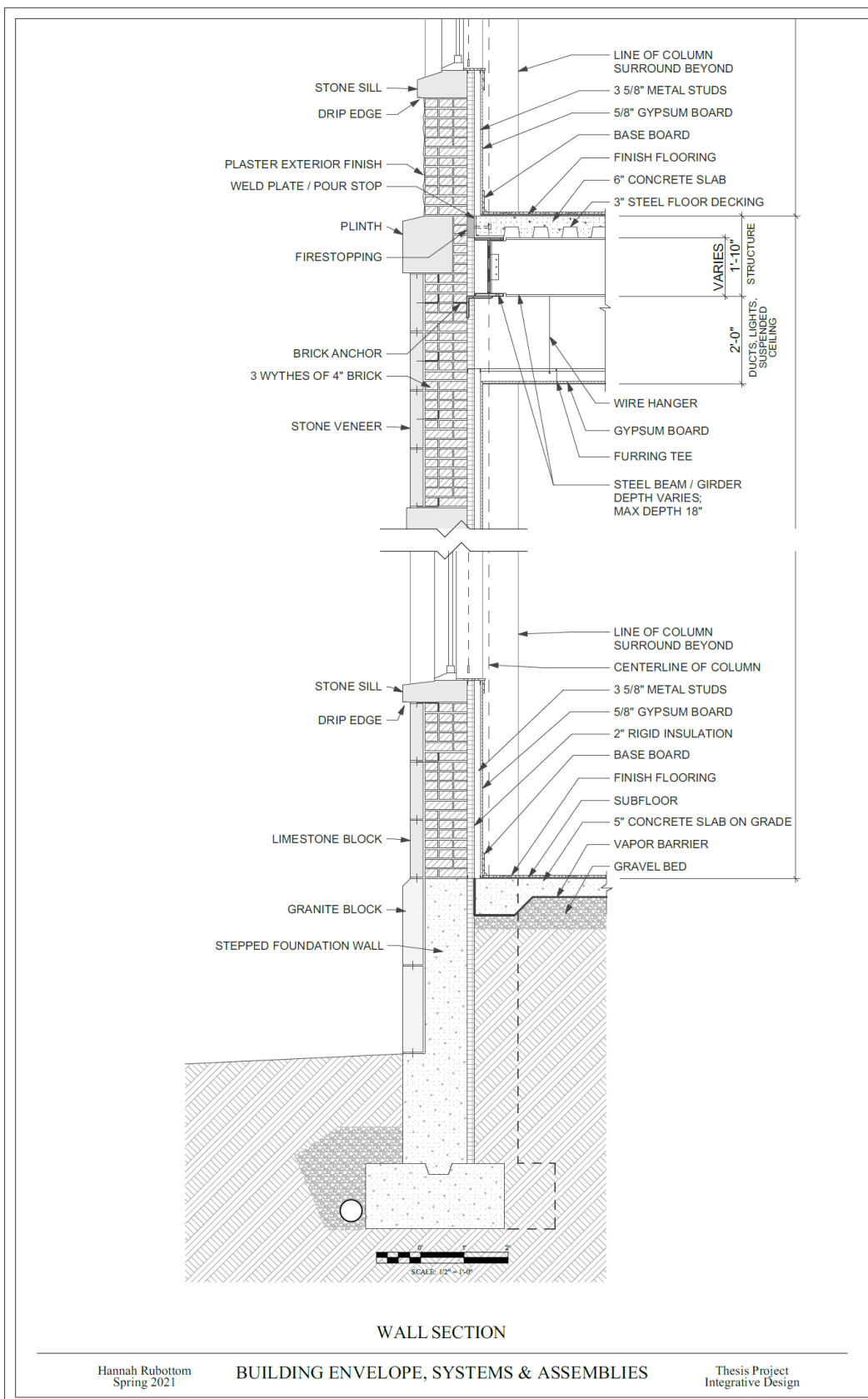


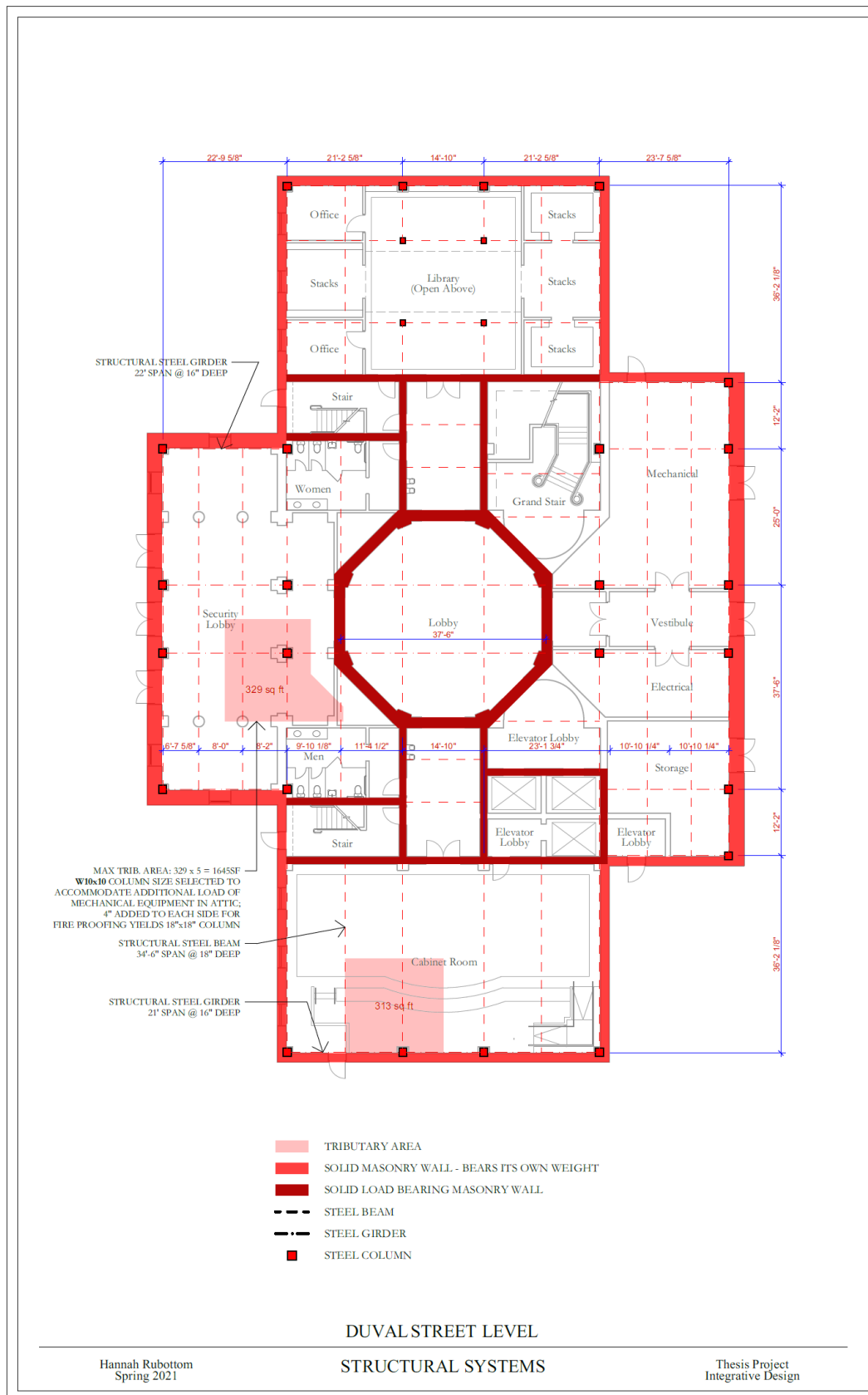
WALL SECTION

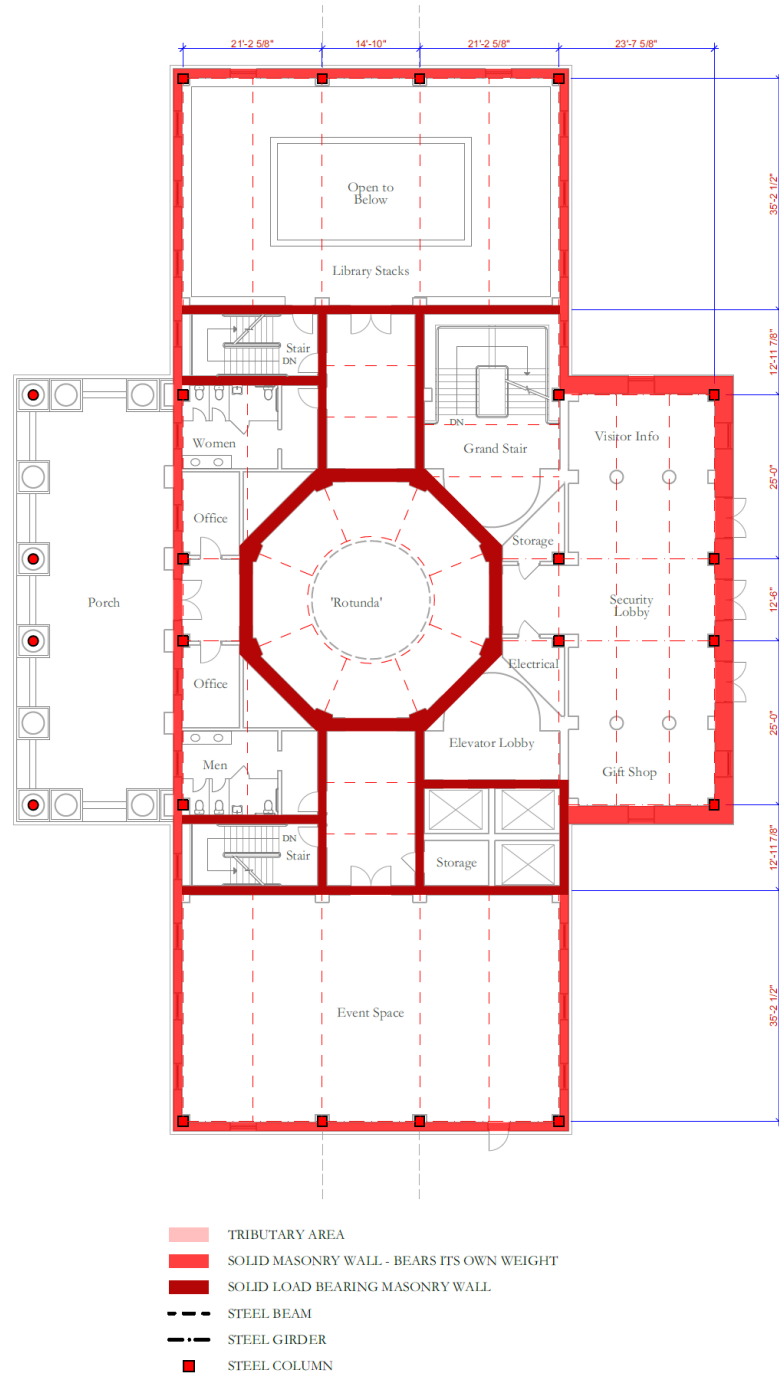
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BUILDING ENVELOPE, SYSTEMS & ASSEMBLIES

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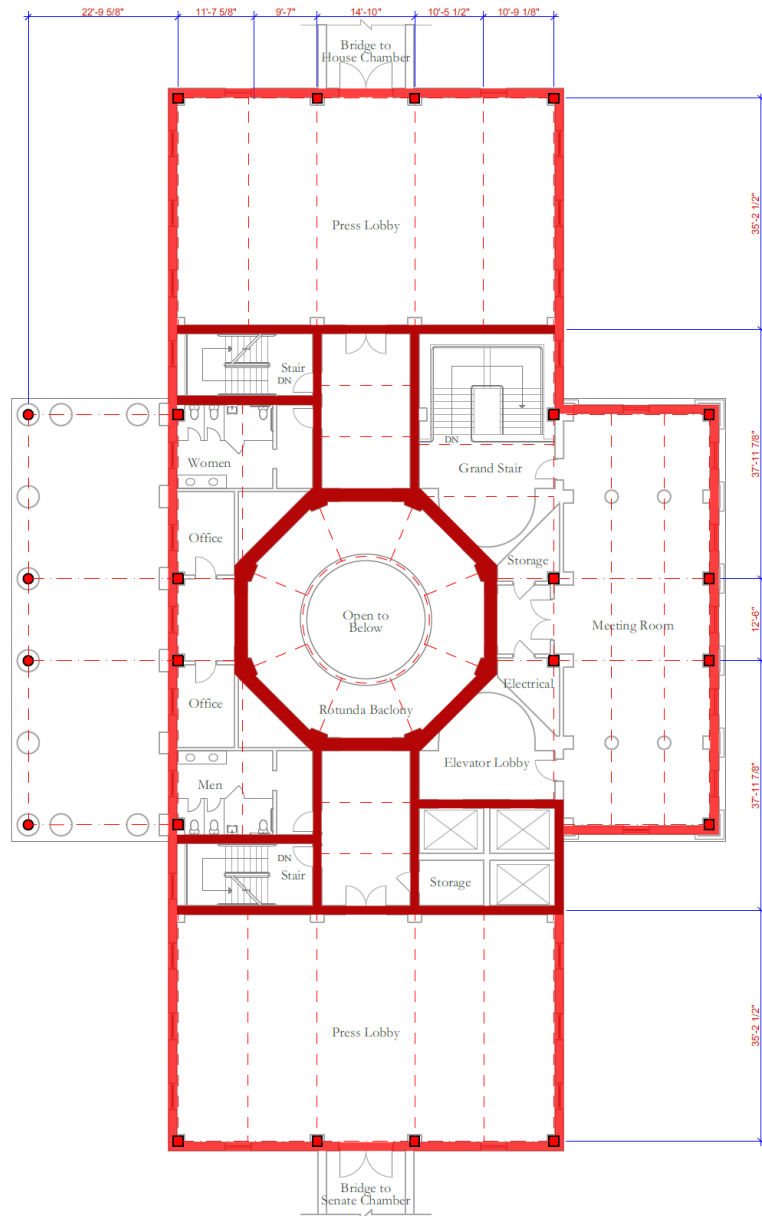


PLAZA LEVEL

STRUCTURAL SYSTEMS

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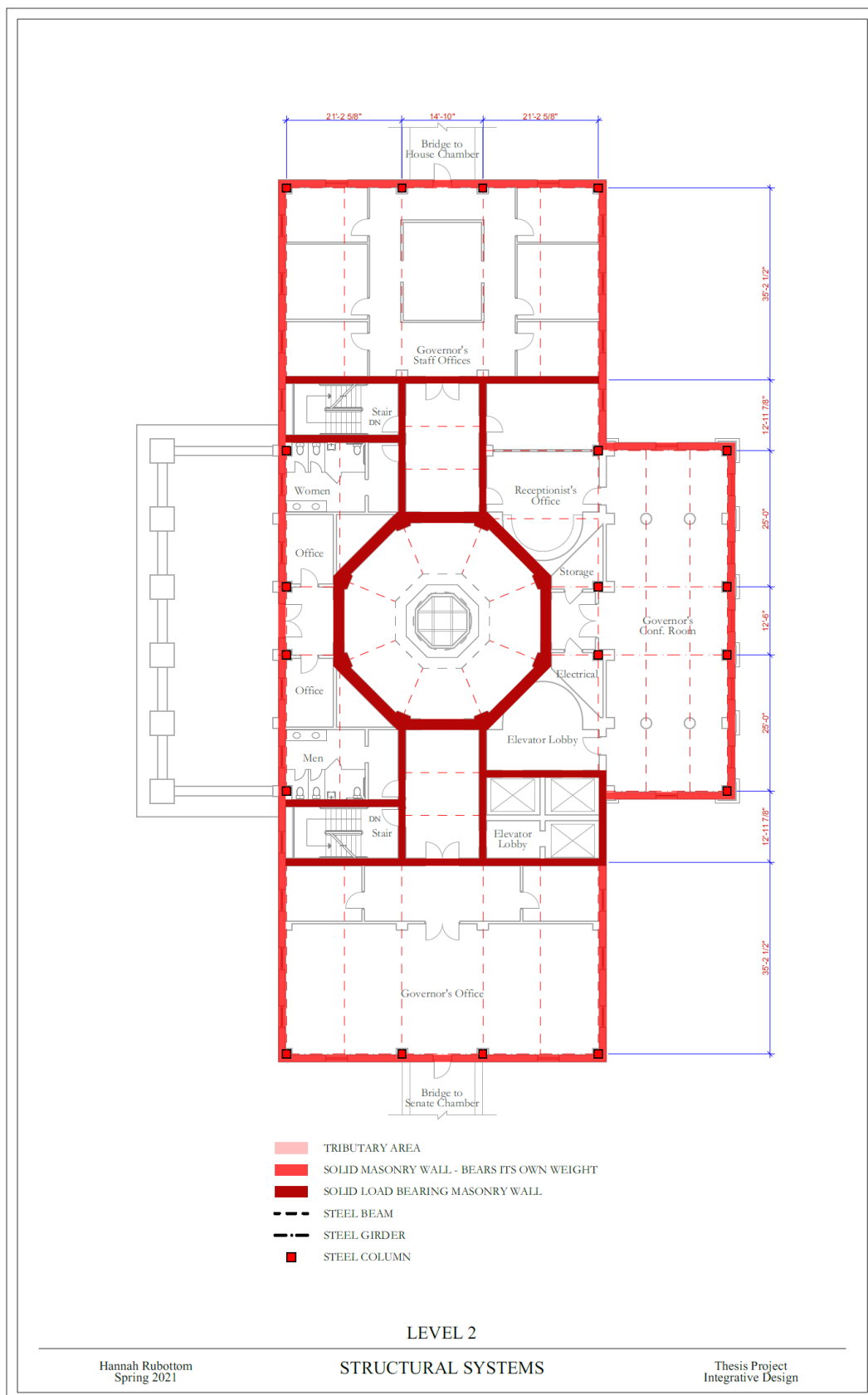


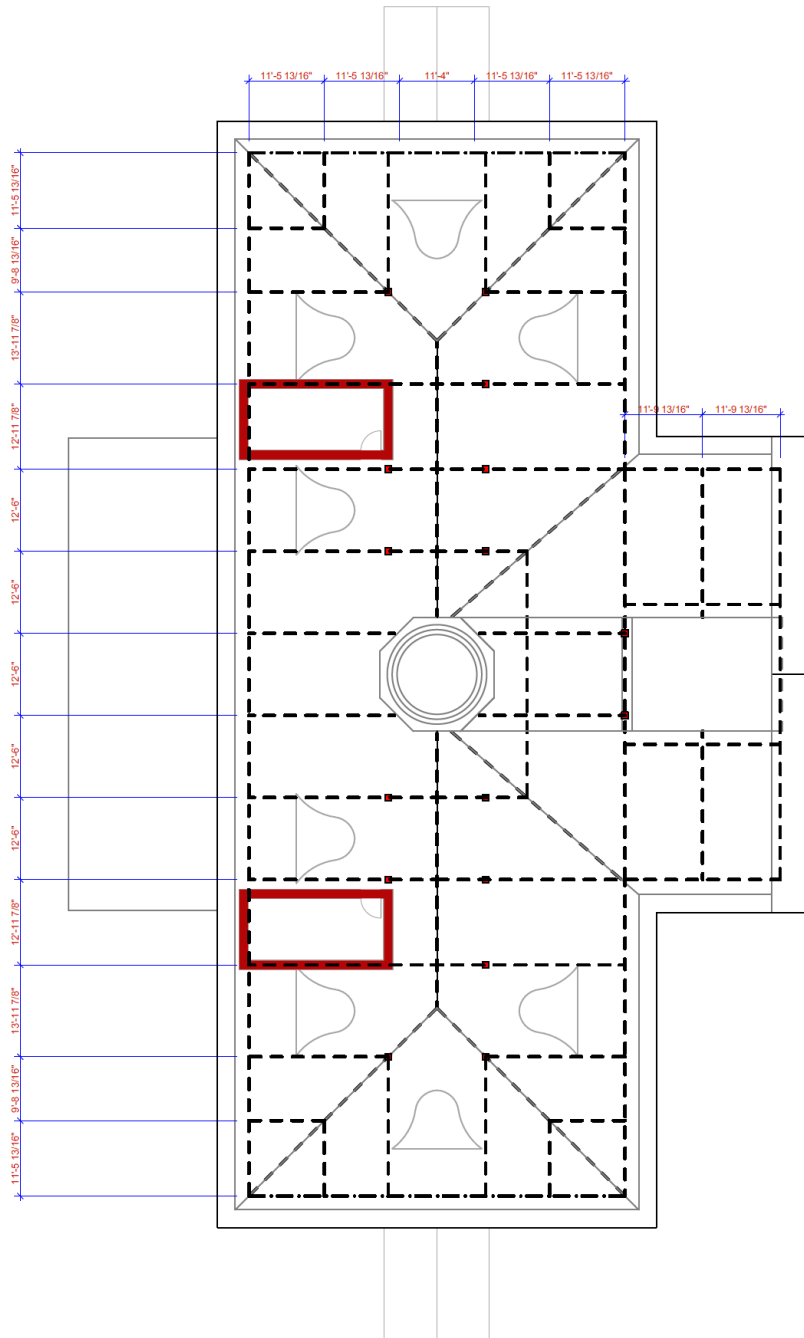
LEVEL 1

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STRUCTURAL SYSTEMS

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ROOF

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STRUCTURAL SYSTEMS

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Thesis Project: A New Vision for the Florida Capitol
Project Location: Tallahassee, Florida

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ENVIRONMENTAL CONTROL SYSTEMS

HVAC

System:

- Central All-Air System: Single Duct, VAV
 - Floor Area Served:

| Floor Level | NSF |
|------------------|-------------------|
| LL – Duval St. | 9,016 |
| PL – Plaza | 7,515 |
| 1 – First Floor | 8,174 |
| 2 – Second Floor | 8,753 |
| Total | 33,458 NSF |

- Cooling capacity: **150 tons**
- Total space for boiler room and chilled water plant: **900 SF**
- Space for cooling towers: **175 SF**
- Cooling Air Volume: **55,000 CFM**
- Area of Main Supply or Return Ducts: **30 SF**
- Area of Branch Supply or Return Ducts: **50 SF**
- Area of Fan Rooms: **1400 SF**
- Area of Fresh Air Louvers: **150 SF**
- Area of Exhaust Louvers: **100 SF**

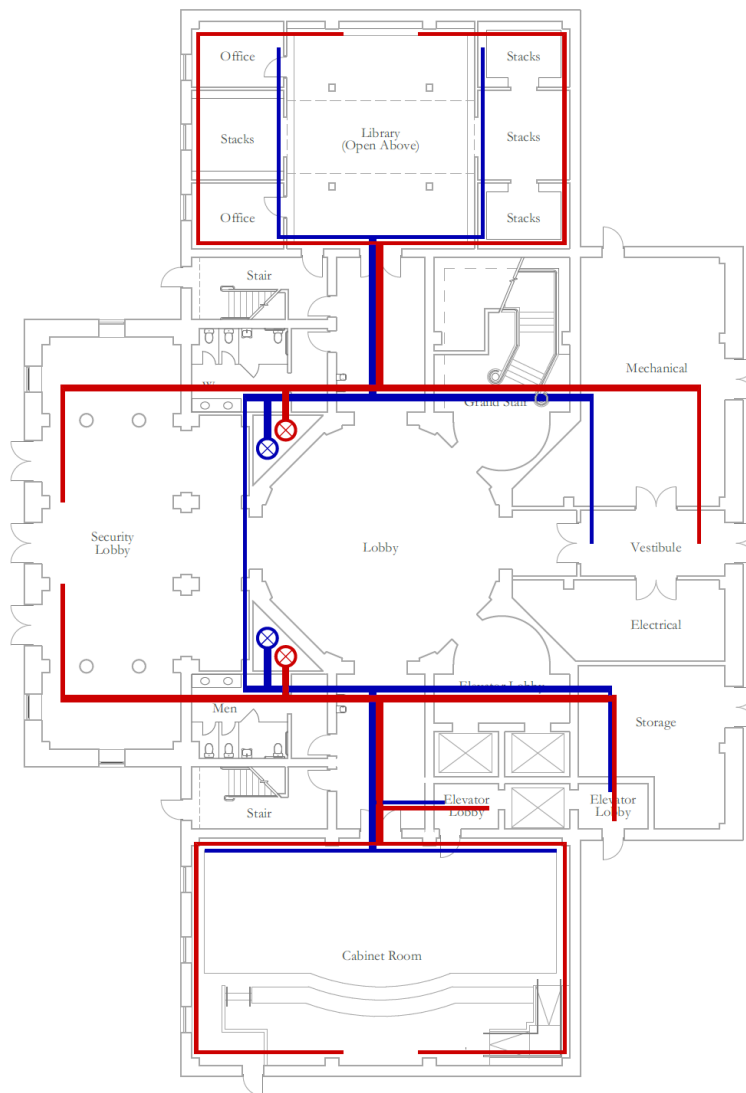
LIGHTING

Daylighting

- Large windows provide natural light to the primary spaces of the building
- Shade devices required due to E-W orientation of large windows

Electric Lighting

- Electric lighting is also supplied to the primary spaces for use when sunlight is lacking / insufficient to meet lighting needs



Vertical Distribution

⊗ Supply

⊙ Return

Horizontal Distribution

— Supply

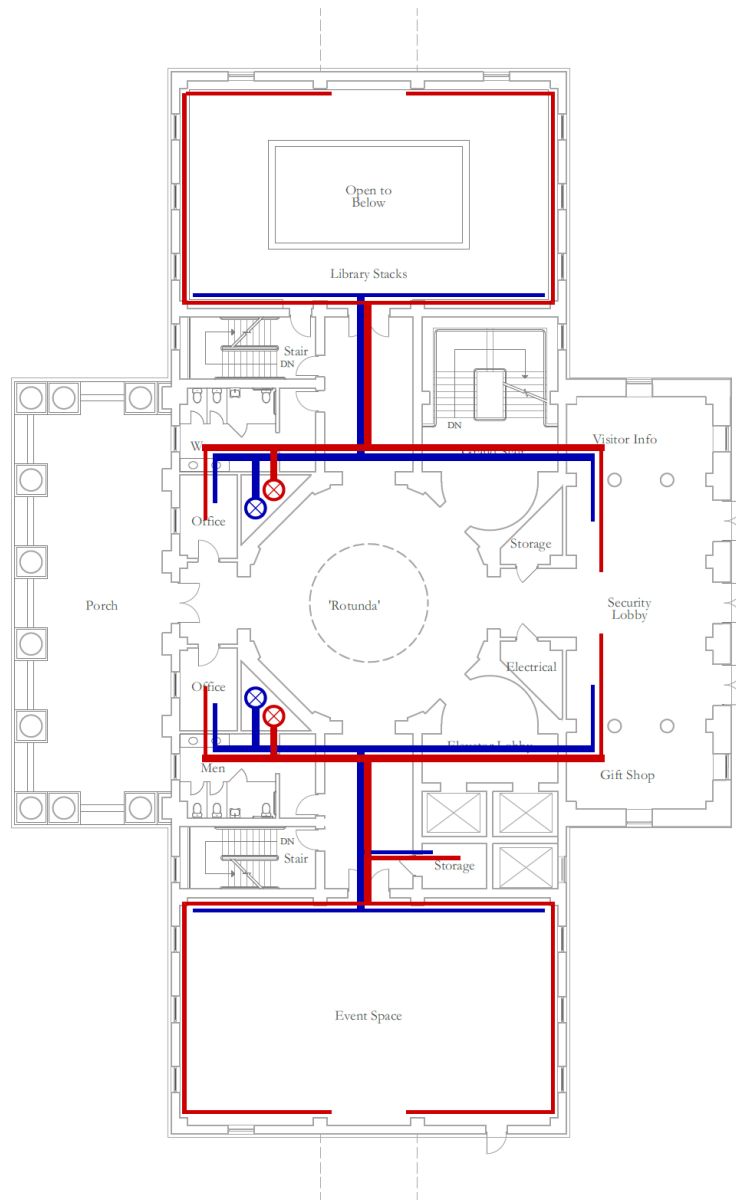
— Return

DUVAL STREET LEVEL

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HVAC DIAGRAMS

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Vertical Distribution



Horizontal Distribution

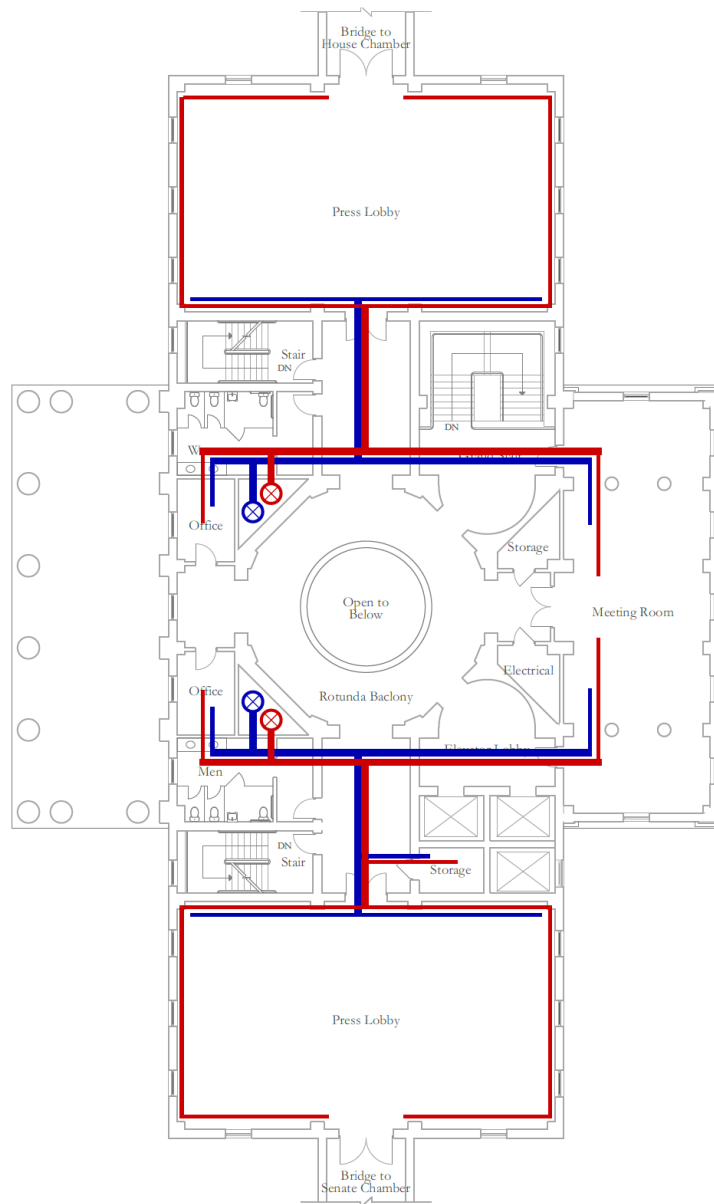


PLAZA LEVEL

HVAC DIAGRAMS

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Vertical Distribution

⊗ Supply
⊙ Return

Horizontal Distribution

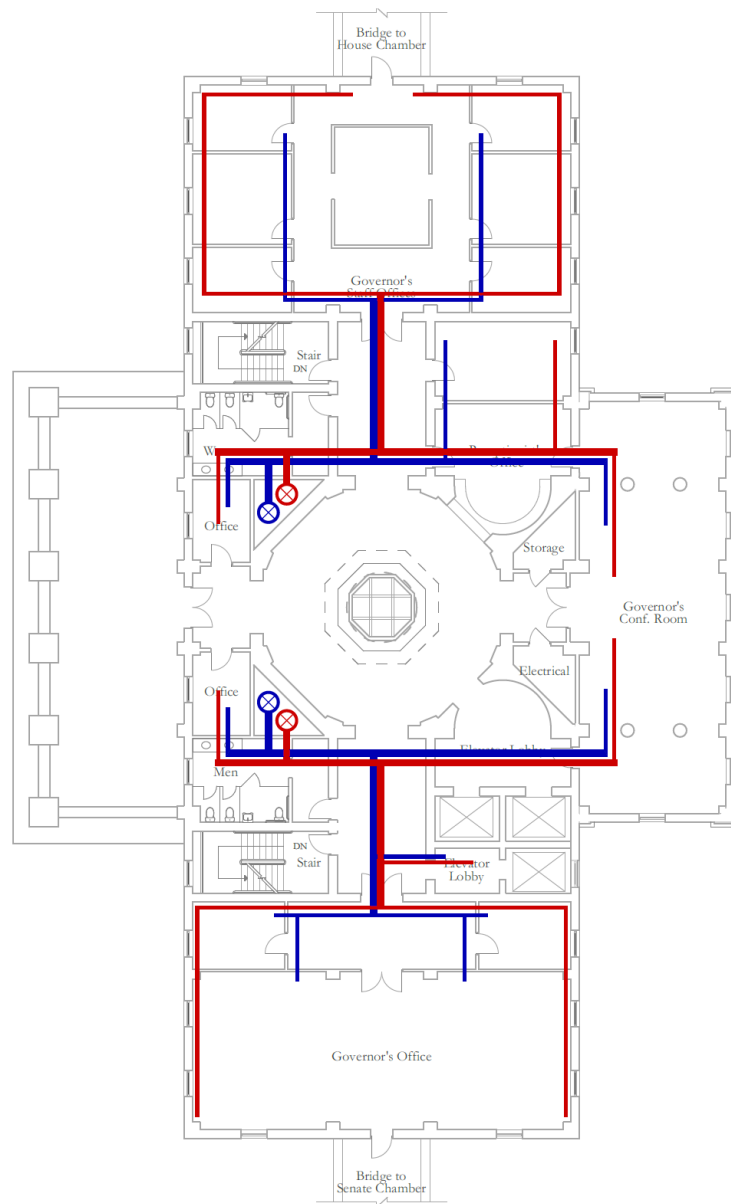
— Supply
— Return

LEVEL 1

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HVAC DIAGRAMS

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Vertical Distribution

- ⊗ Supply
- ⊙ Return

Horizontal Distribution

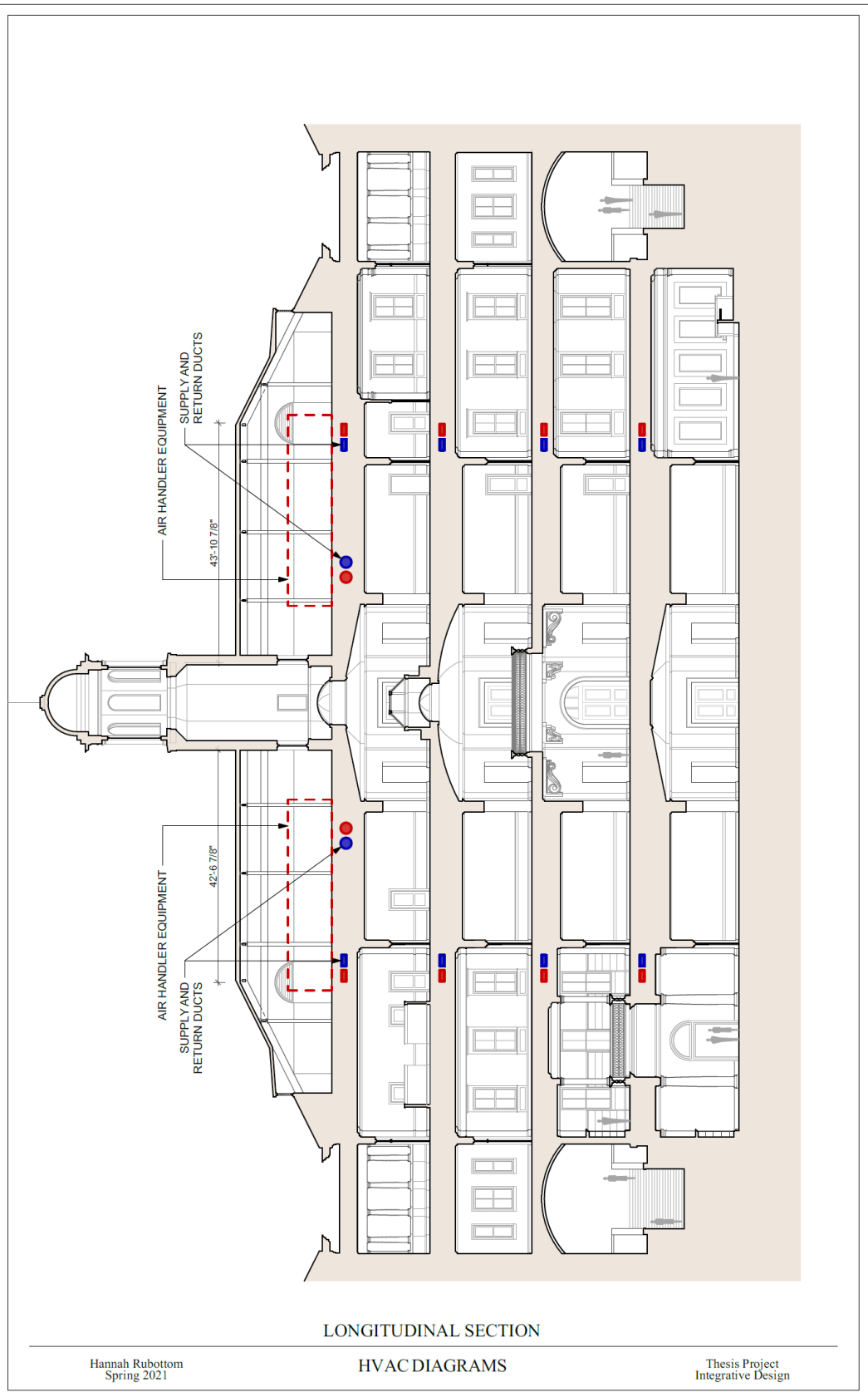
- Supply
- Return

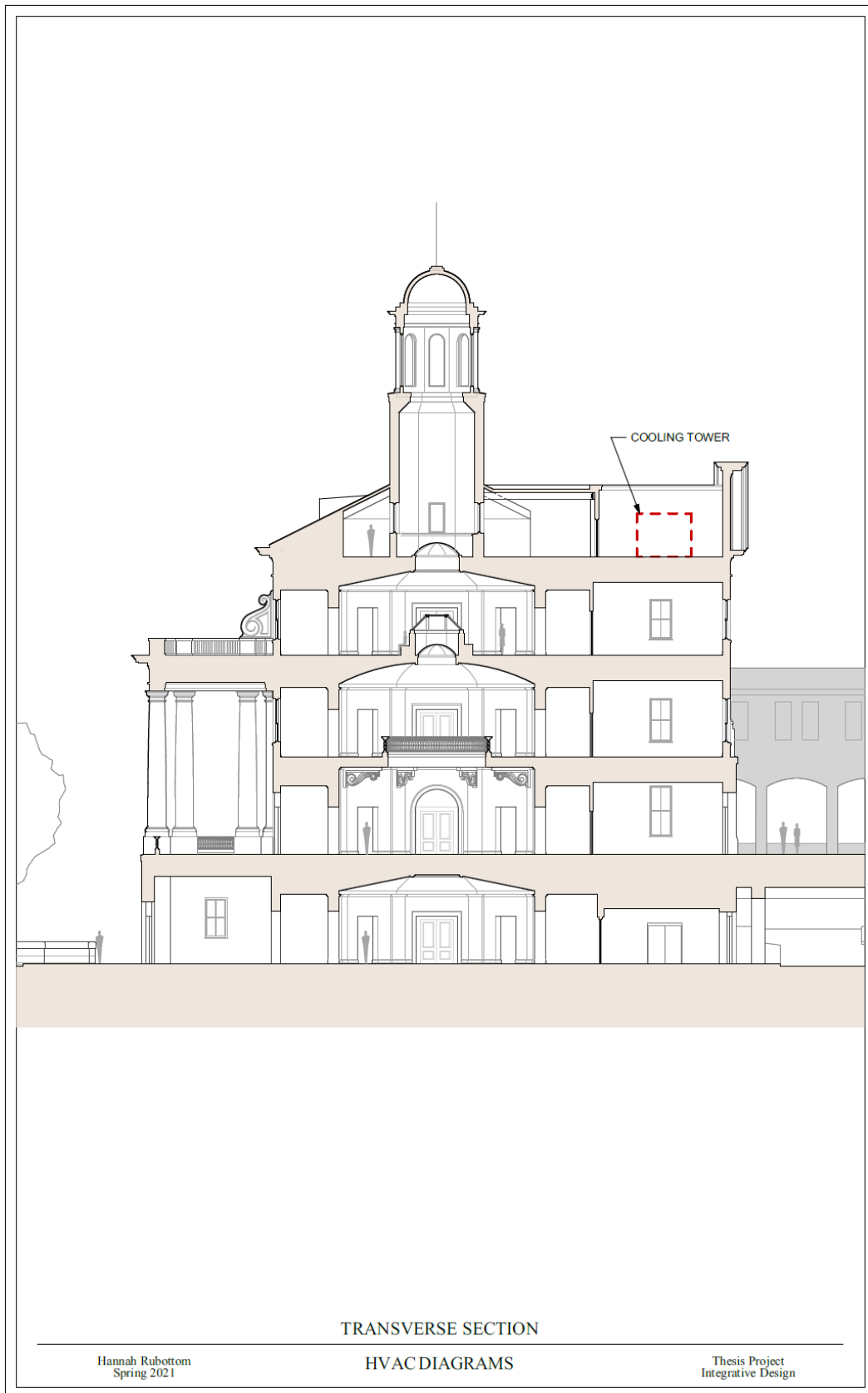
LEVEL 2

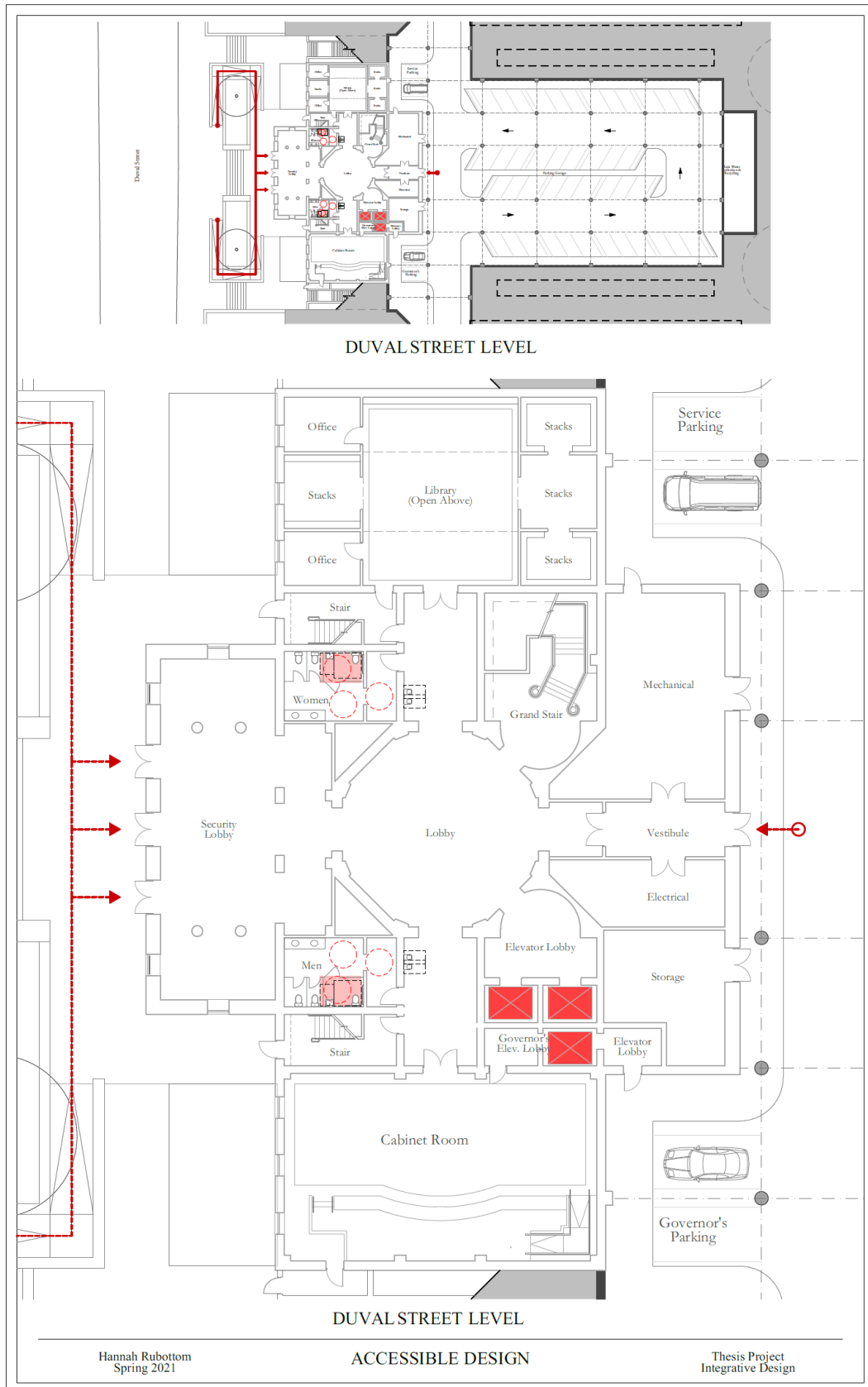
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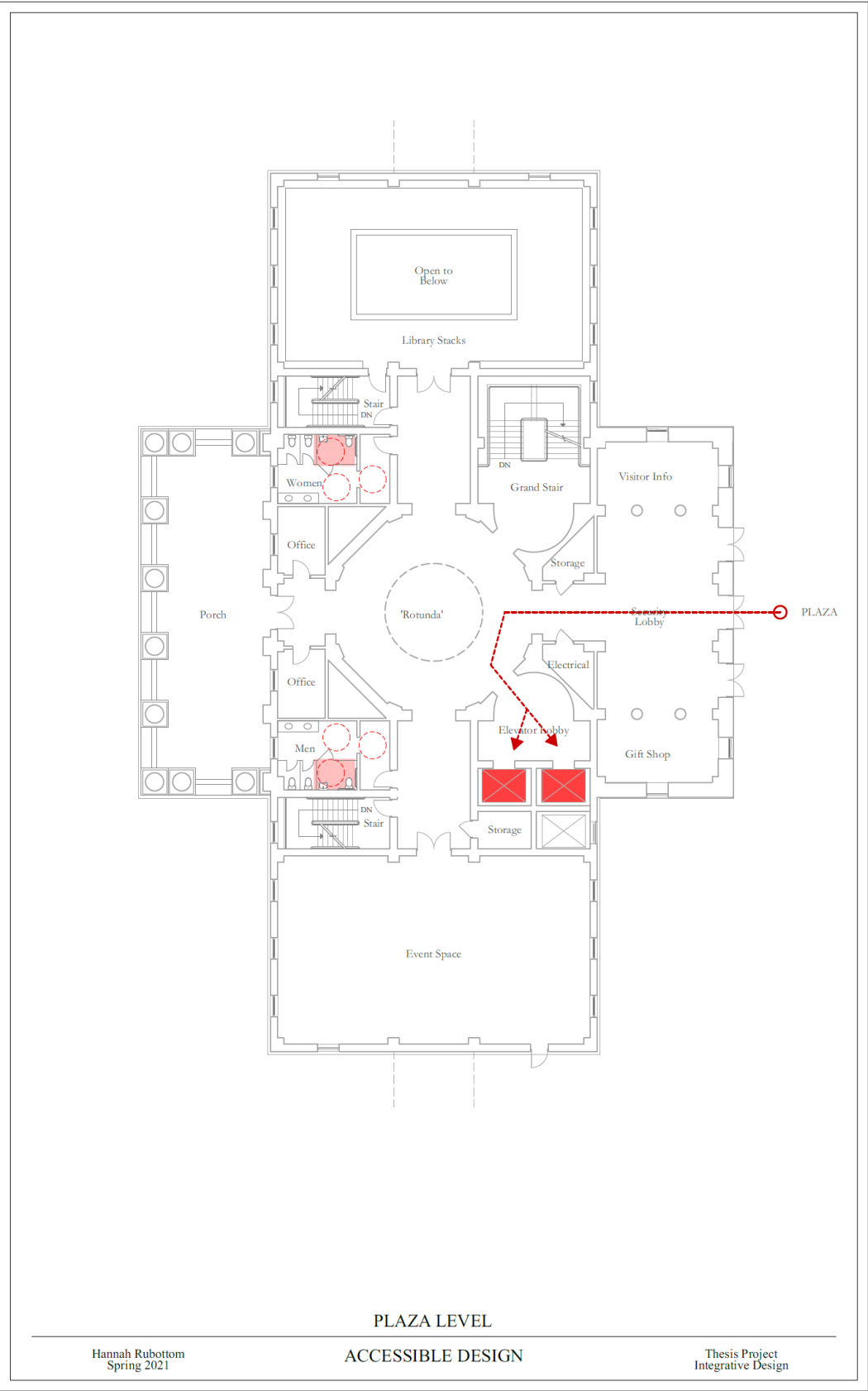
HVAC DIAGRAMS

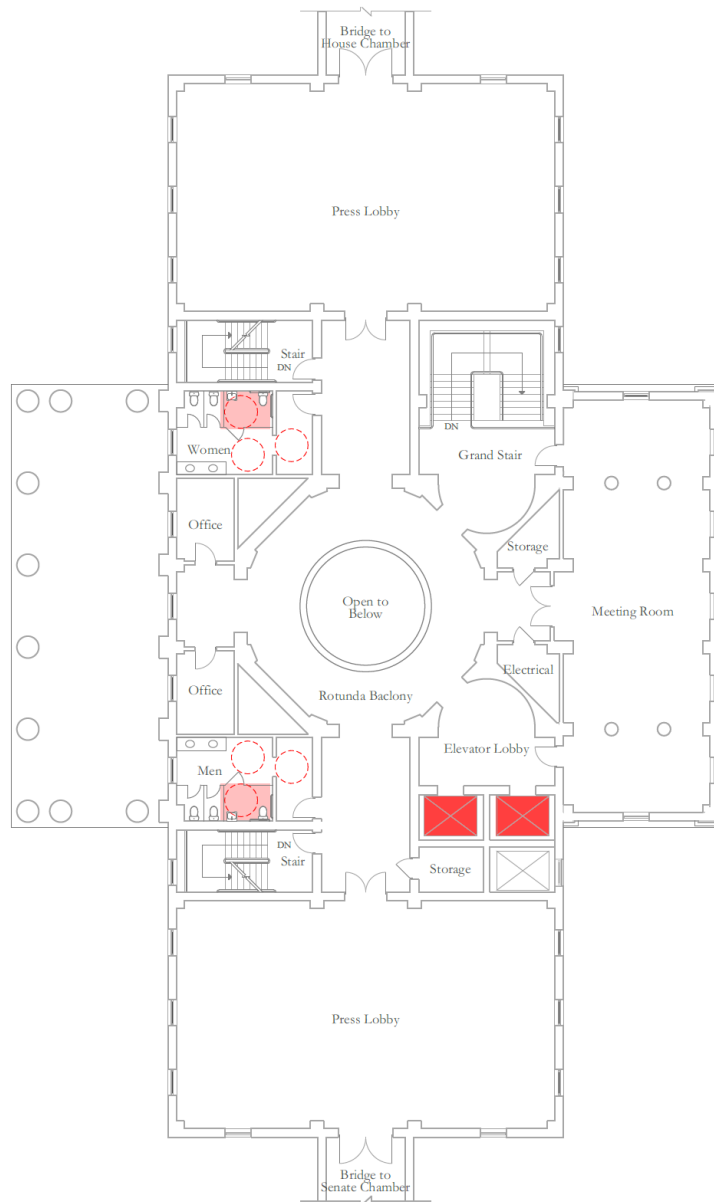
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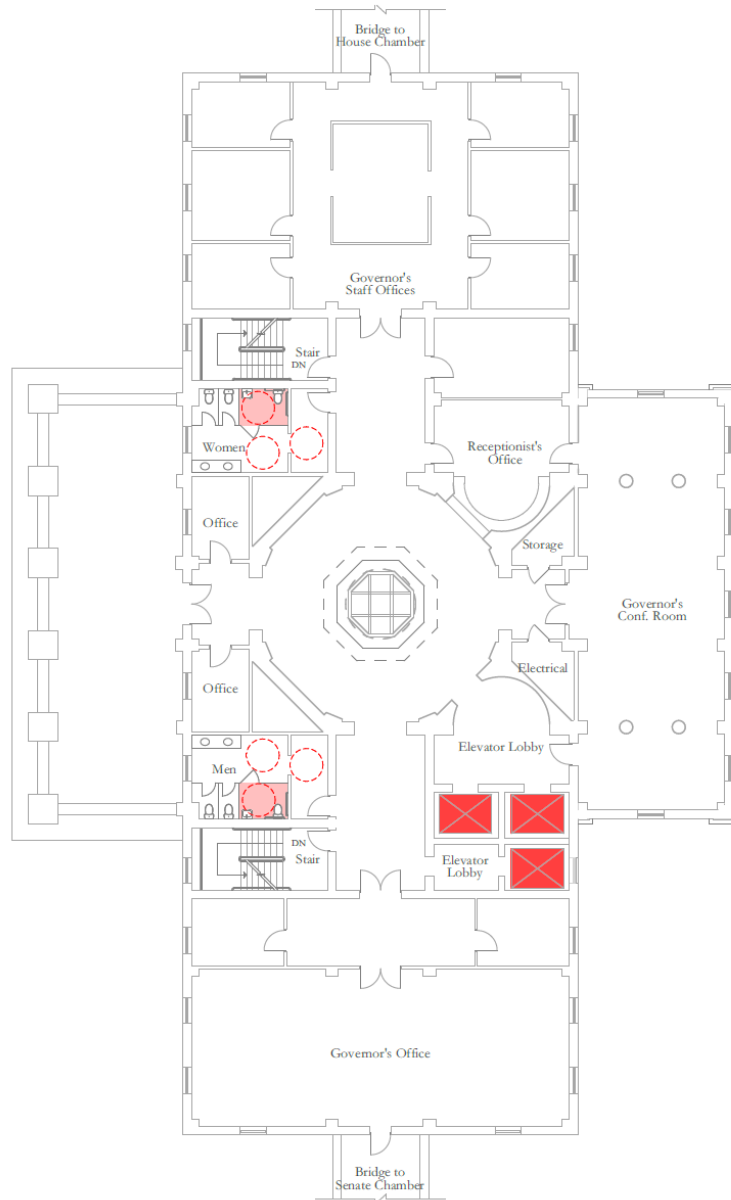


LEVEL 1

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ACCESSIBLE DESIGN

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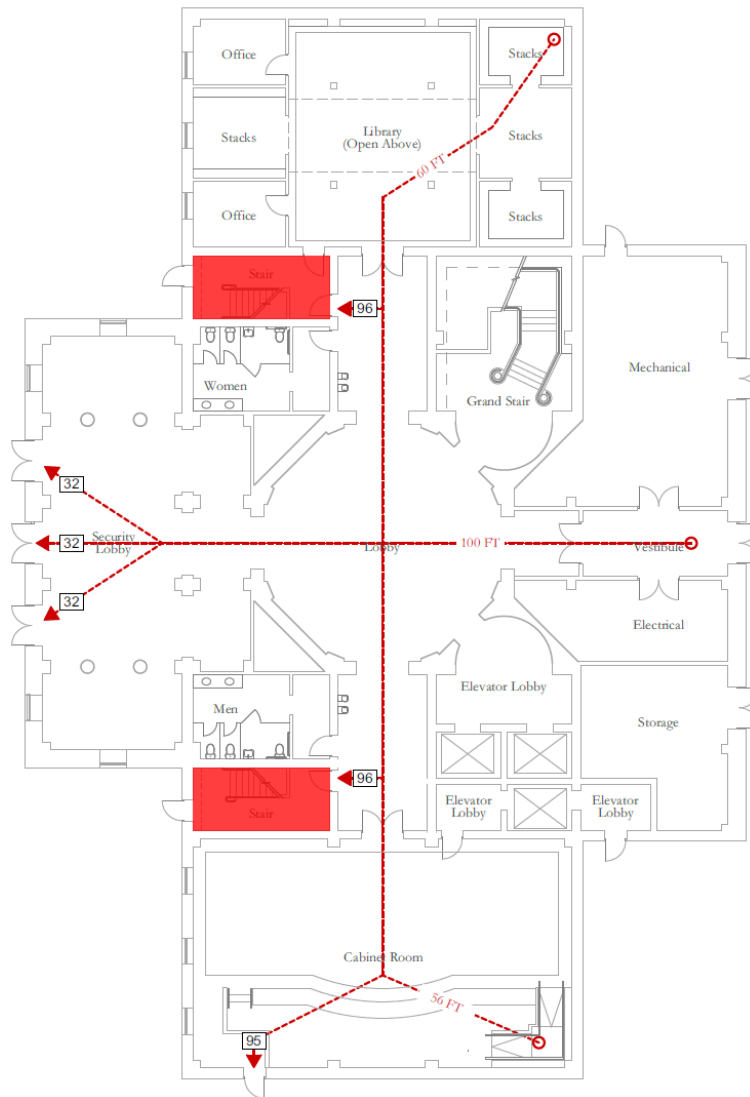


LEVEL 2

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ACCESSIBLE DESIGN

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LEGEND

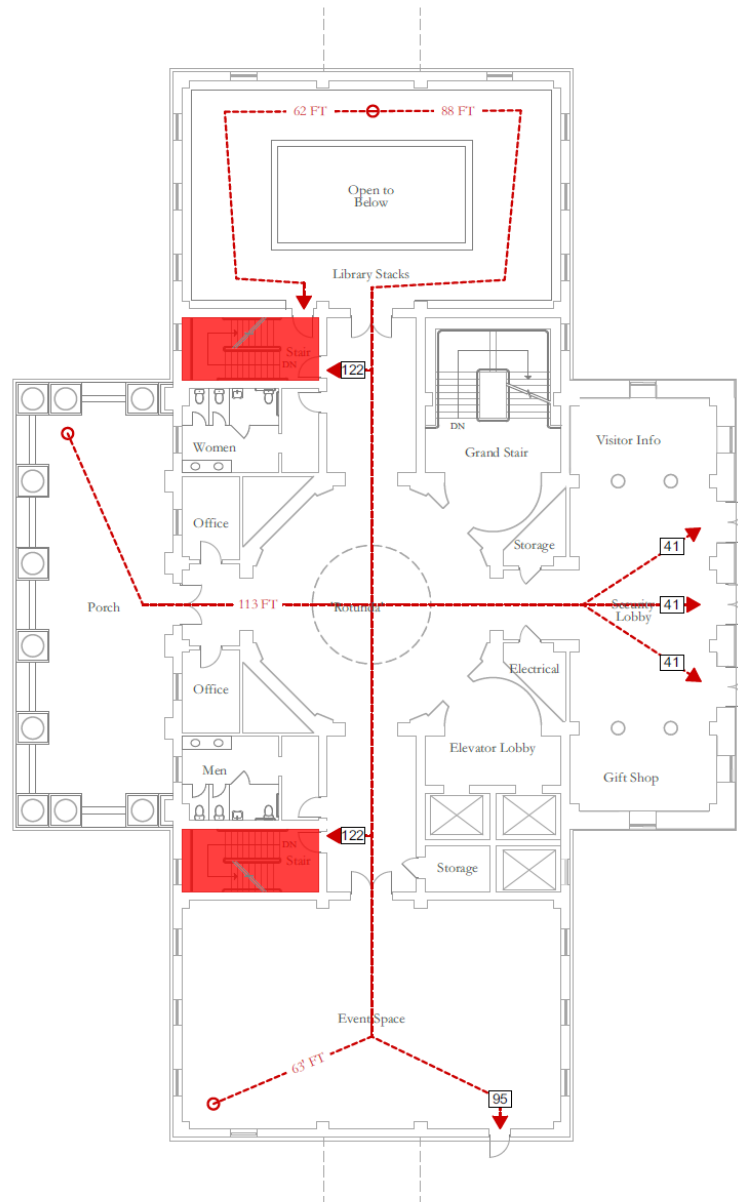
- Travel Distance To Exit Stair Access
- Number of Occupants Per Exit

DUVAL STREET LEVEL

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EGRESS

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LEGEND

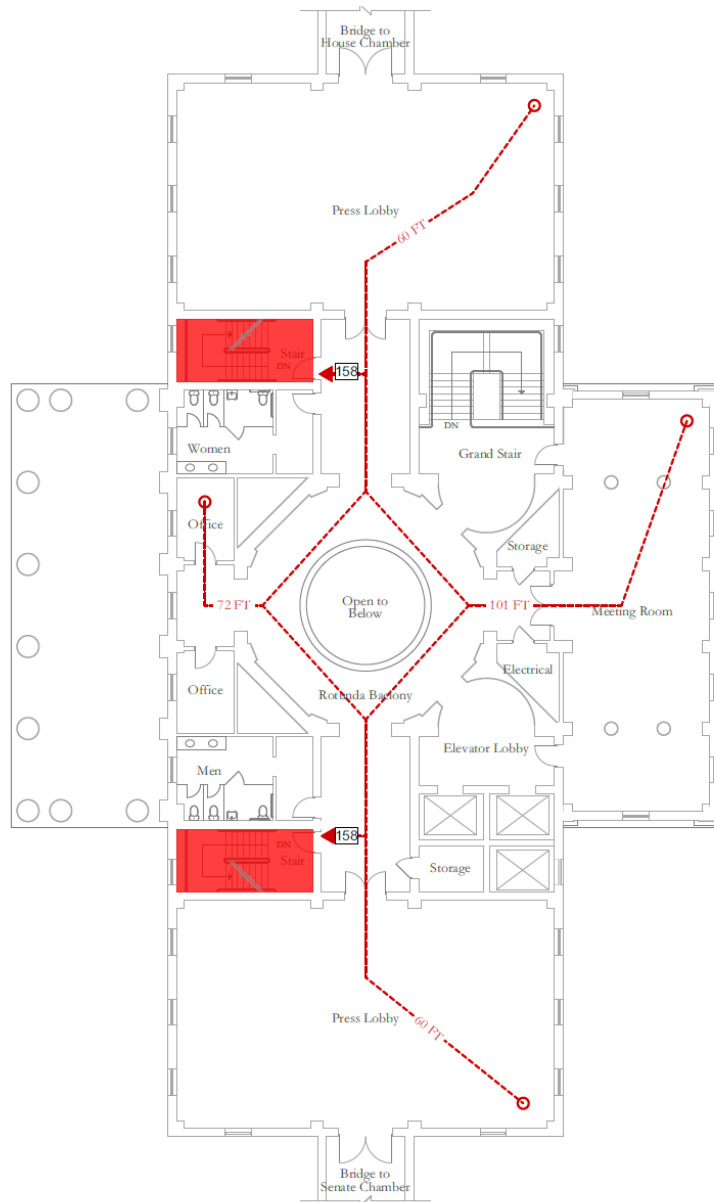
- Travel Distance To Exit Stair Access
- 95 Number of Occupants Per Exit

PLAZA LEVEL

EGRESS

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LEGEND

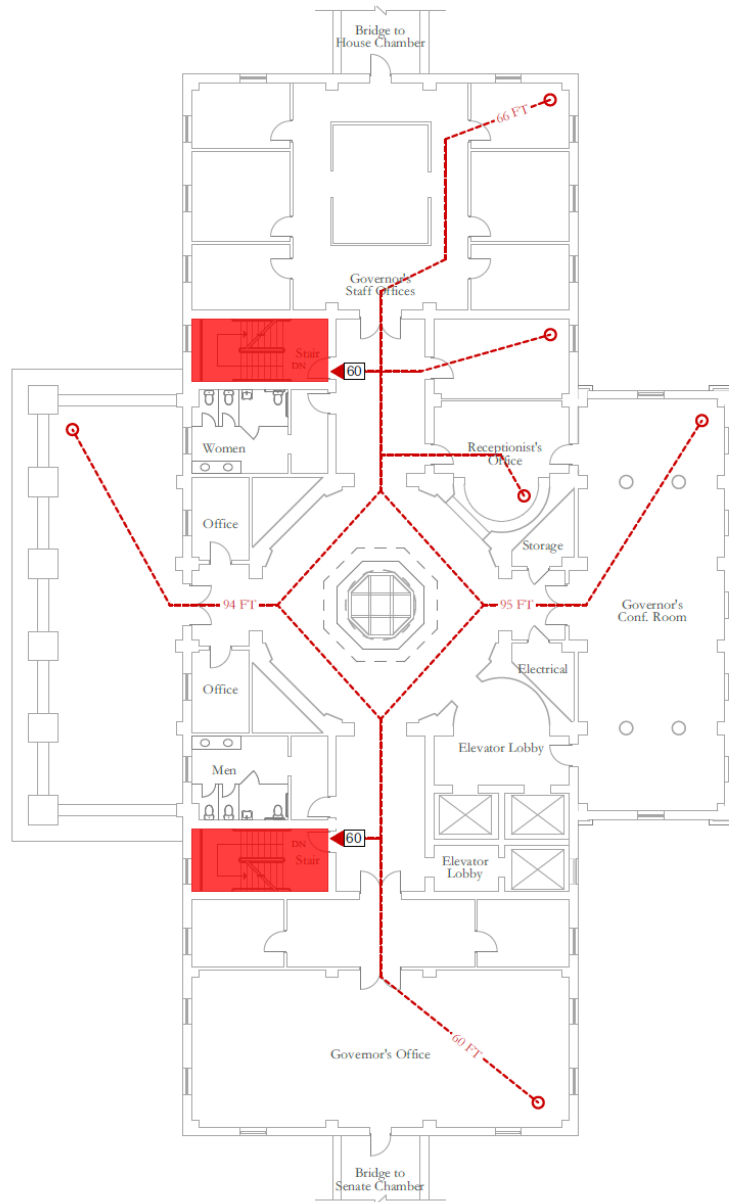
- Travel Distance To Exit Stair Access
- Number of Occupants Per Exit

LEVEL 1

EGRESS

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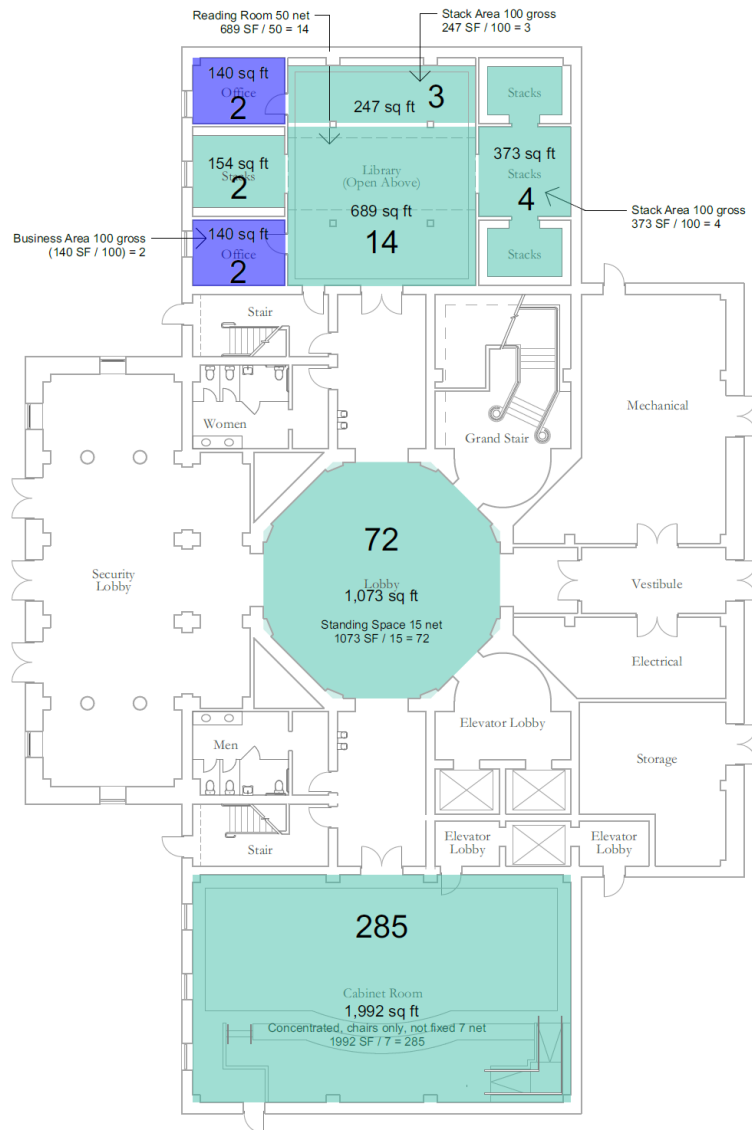
LEGEND
 ○→ Travel Distance To Exit Stair Access
 [95] Number of Occupants Per Exit

LEVEL 2

EGRESS

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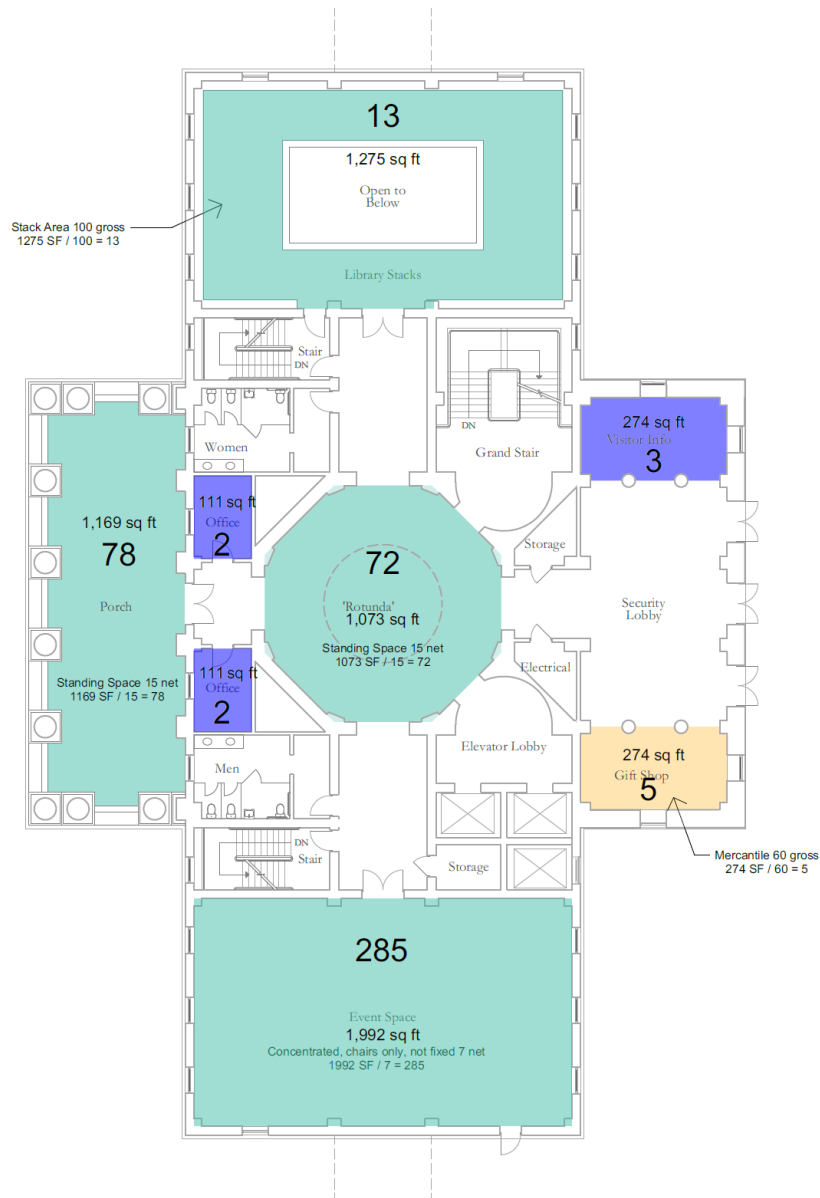
384 Occupants

DUVAL STREET LEVEL

OCCUPANT LOAD

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Integrative Design



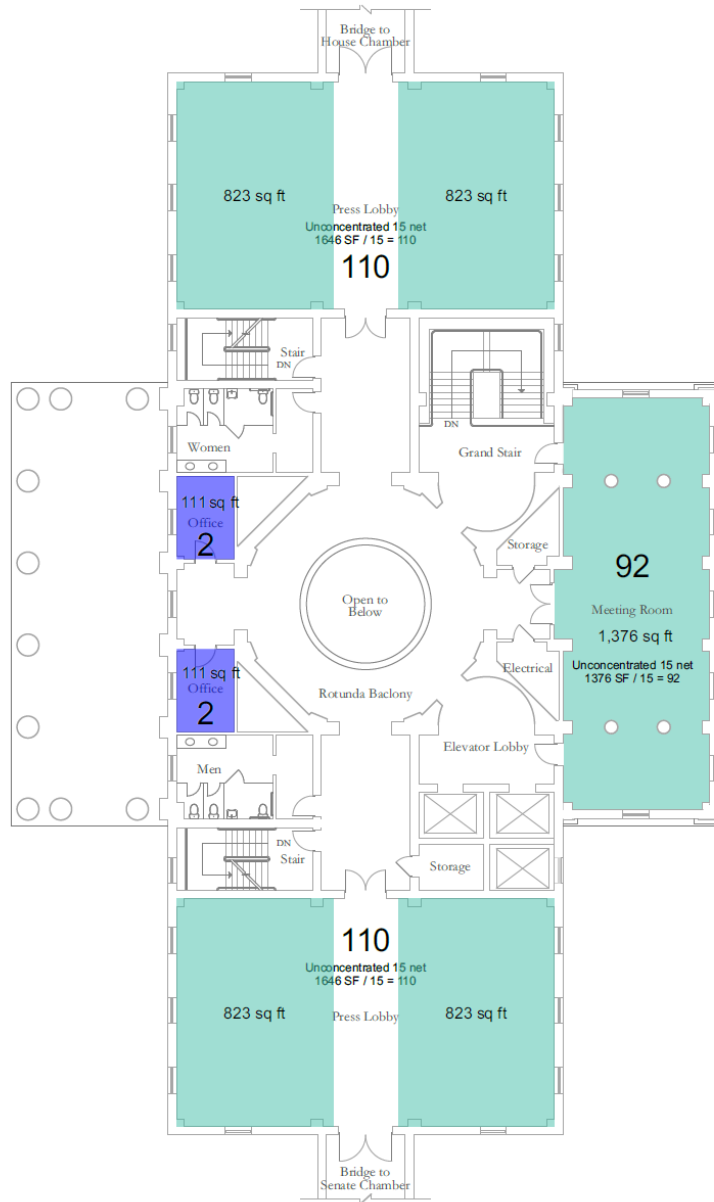
460 Occupants

PLAZA LEVEL

OCCUPANT LOAD

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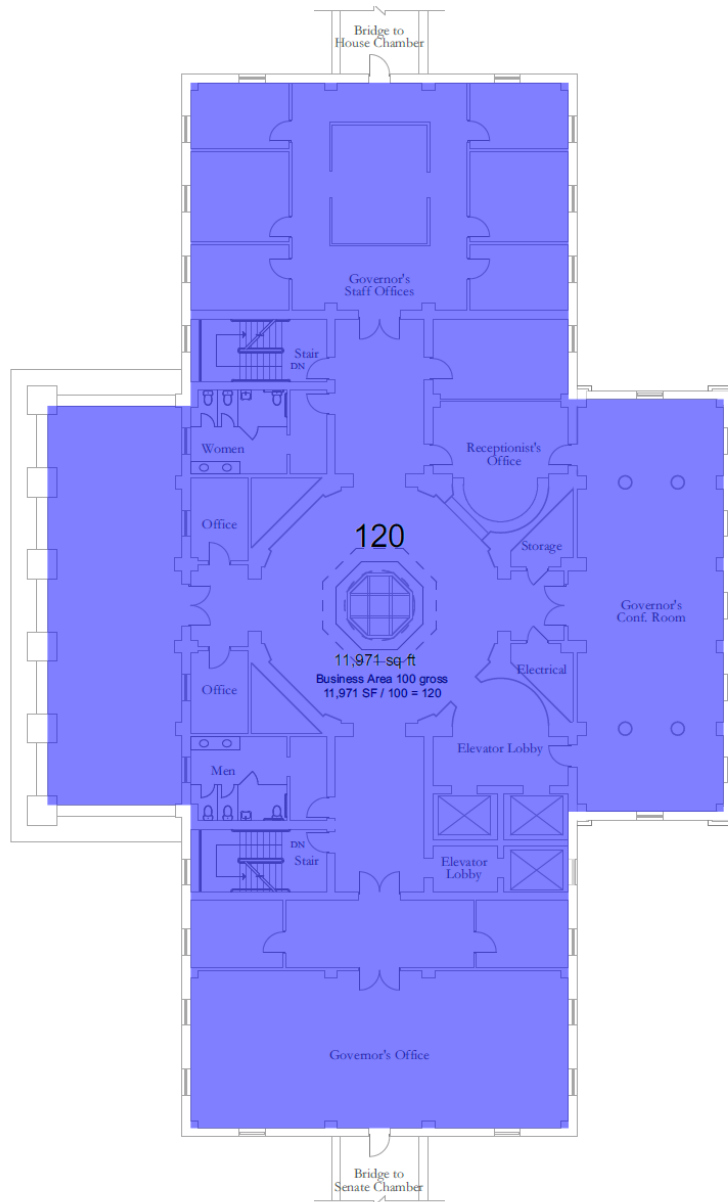
316 Occupants

LEVEL 1

OCCUPANT LOAD

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120 Occupants

LEVEL 2

OCCUPANT LOAD

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