

4. Requirements in Replacing the Infrastructure of the Capitol

In creating a new infrastructure for the Capitol, the following requirements should be in place to ensure that proper and adequate support is in place:

- a. The Capitol will be supplied by chilled and hot water in the quantity and temperature required to operate the mechanical equipment.
- b. There will be adequate electrical capacity to support the projected loads of the rehabilitated and restored Capitol.
- c. Emergency Power will be supplied to the building to avoid interruption of operations – especially when the Legislature is in session – as well as allow for the safe evacuation of the building during an alarm mode.
- d. There will be sufficient water supply at high enough pressure to feed the standpipes and the automatic sprinkler system.
- e. A new storm and sanitary system will be installed to support the needs of the rehabilitated and restored Capitol.

5. Locating Areas for Equipment, Pathways for Building Systems and Restrooms

After careful consideration, the Design Team concluded that the most appropriate locations for creating space for mechanical equipment is to locate the restrooms in the Phase II [1890] section, north of the East – West axis of the building.

This location provides the following advantages:

- a. There are no significant spaces and historic finishes that will be impacted.
- b. There is direct access to existing pathways that connect all levels of the building, from the Basement to the Attic.
- c. The space is sufficient to create restrooms that meet all code and ADA requirements of the project.
- d. It can lead to symmetrical designs east / west, servicing all levels of the building and both the House and the Senate equally.
- e. There is direct access to the attic, and;
- f. The spaces can be fed with chilled and hot water, power and domestic water directly from the exterior of the building below grade;
- g. All levels of the building can be accessed.

In addition to the above significant benefits, these locations allow for two new passenger elevators to be included. The new elevators can be of sufficient size to not only be fully ADA compliant but also accommodate a gurney in case of emergency. This specific location has two additional advantages:

- The existing elevators can be removed allowing the East – West Monumental Corridor to be opened up, providing functional and visual connections between the Chambers and the Rotunda.
- The existing elevation differences can be fully negotiated without the need of an additional lift.

This preliminary design also ensures that all vast majority of mechanical rooms, utilities and systems are clustered in one location, without the risk of impacting any significant historic spaces.

On the following pages, 7.17-7.25, the proposed layout of the restrooms, elevator, electrical / lighting closets and vertical distribution pathways are presented.

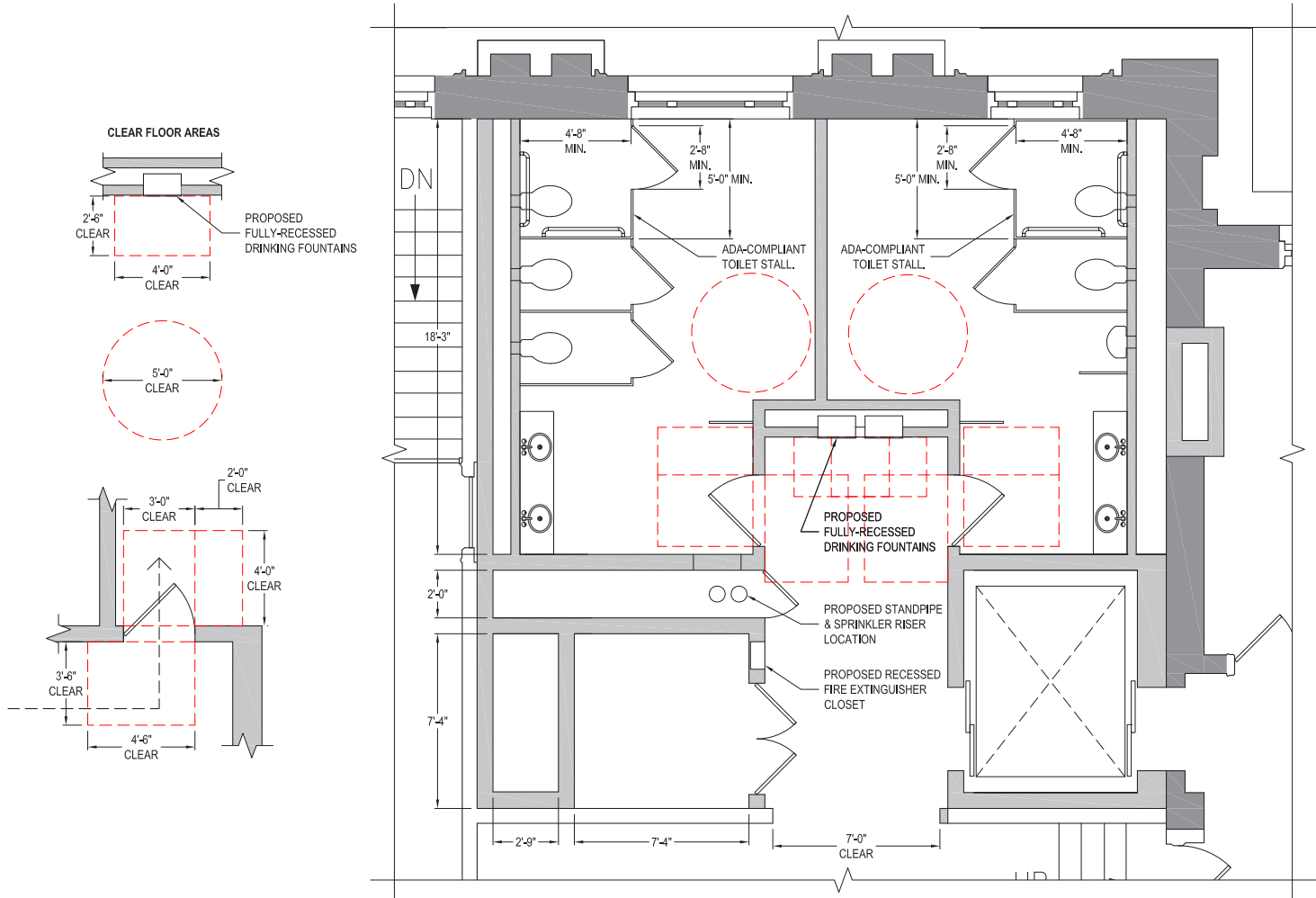


Figure 7.5.1: This Layout Illustrates a Typical Concept Plan for the Service Core Areas. Pages 7.18 - 7.25 present the specific variations for each floor and side of the building [East / West].



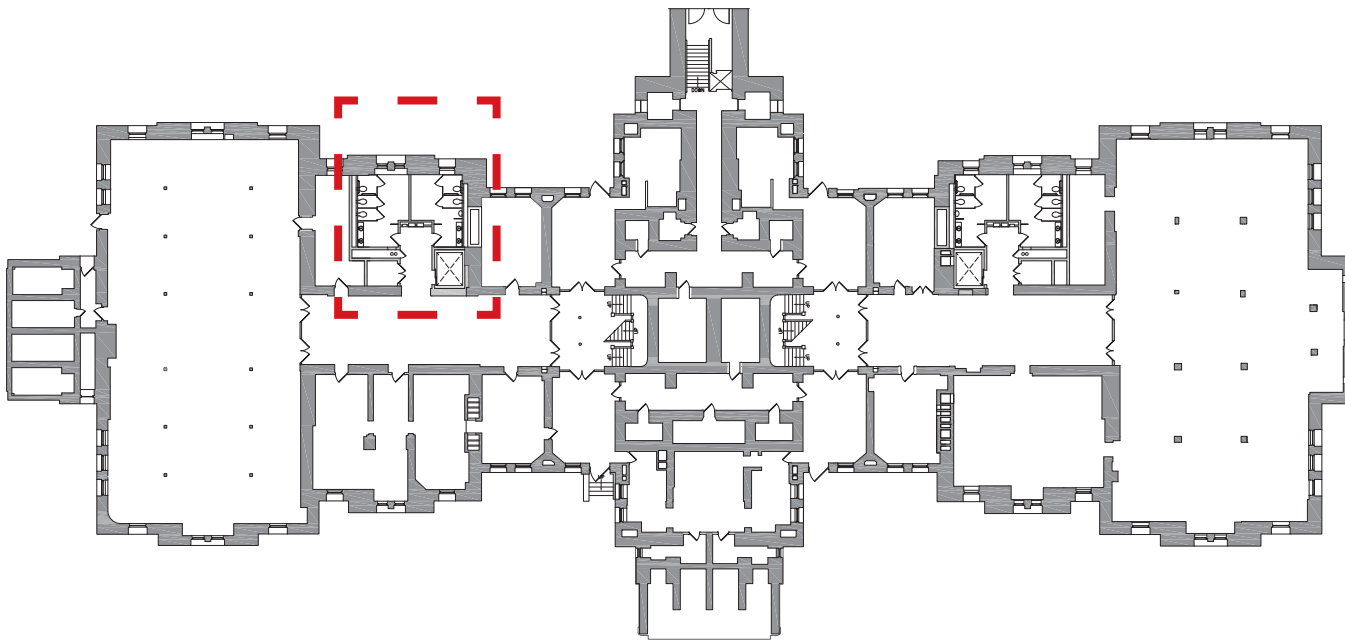


Figure 7.5.2: Potential Basement Level Plan Layout.

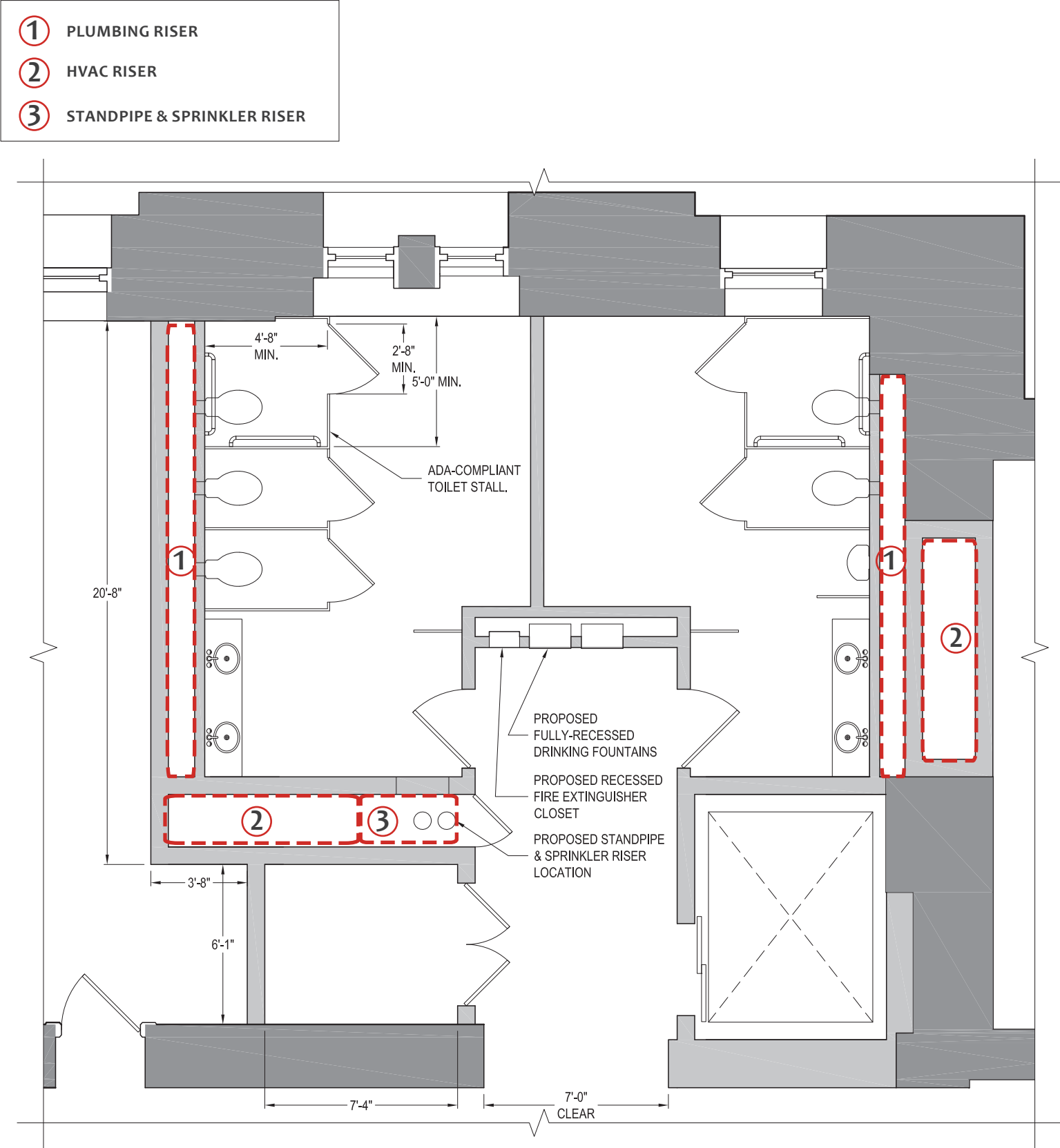


Figure 7.5.3: Basement Floor Level [West] Proposed Service Core.



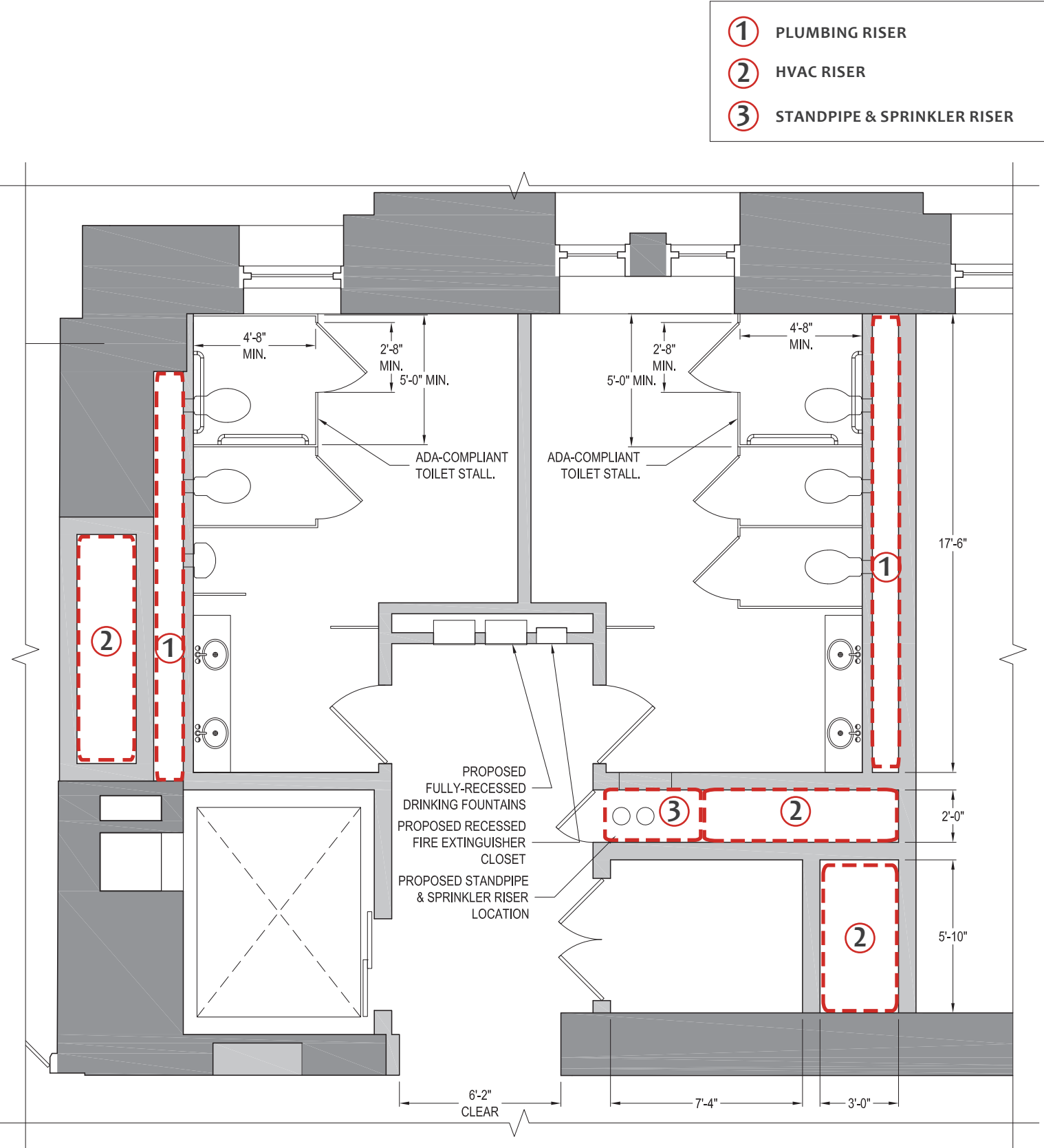


Figure 7.5.4: Basement Level [East] Proposed Service Core.

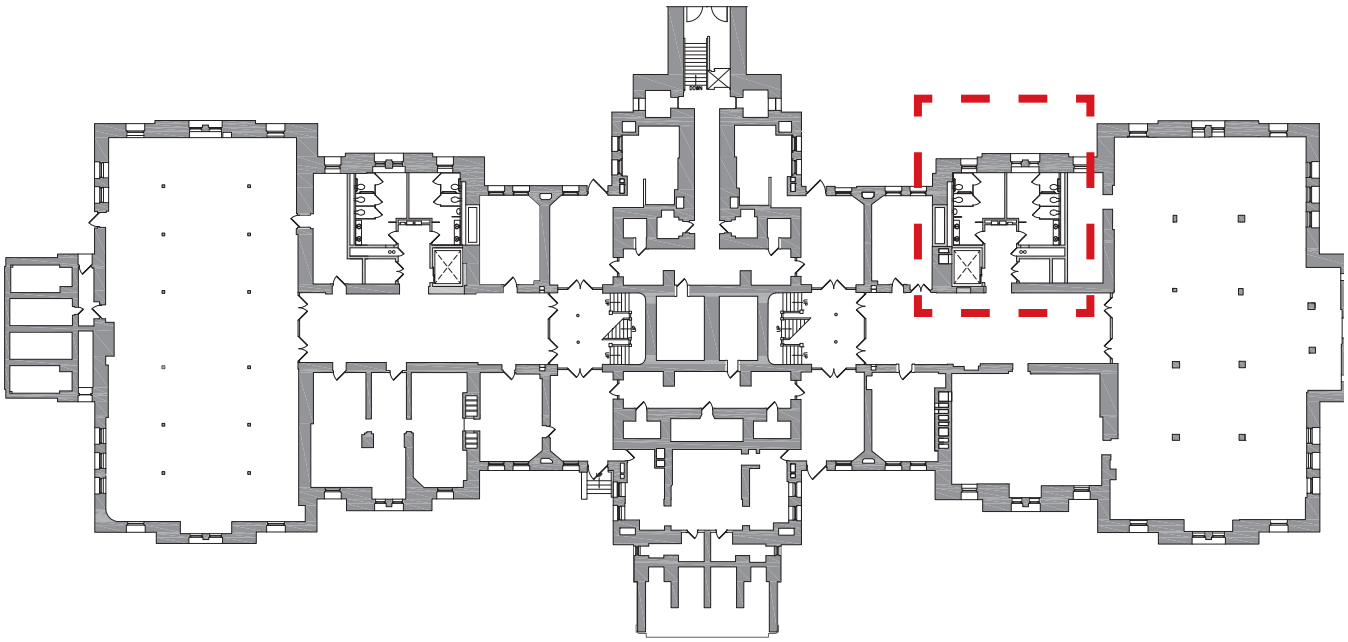


Figure 7.5.5: Proposed Basement Level Plan.

Service Core: First Floor Level - West

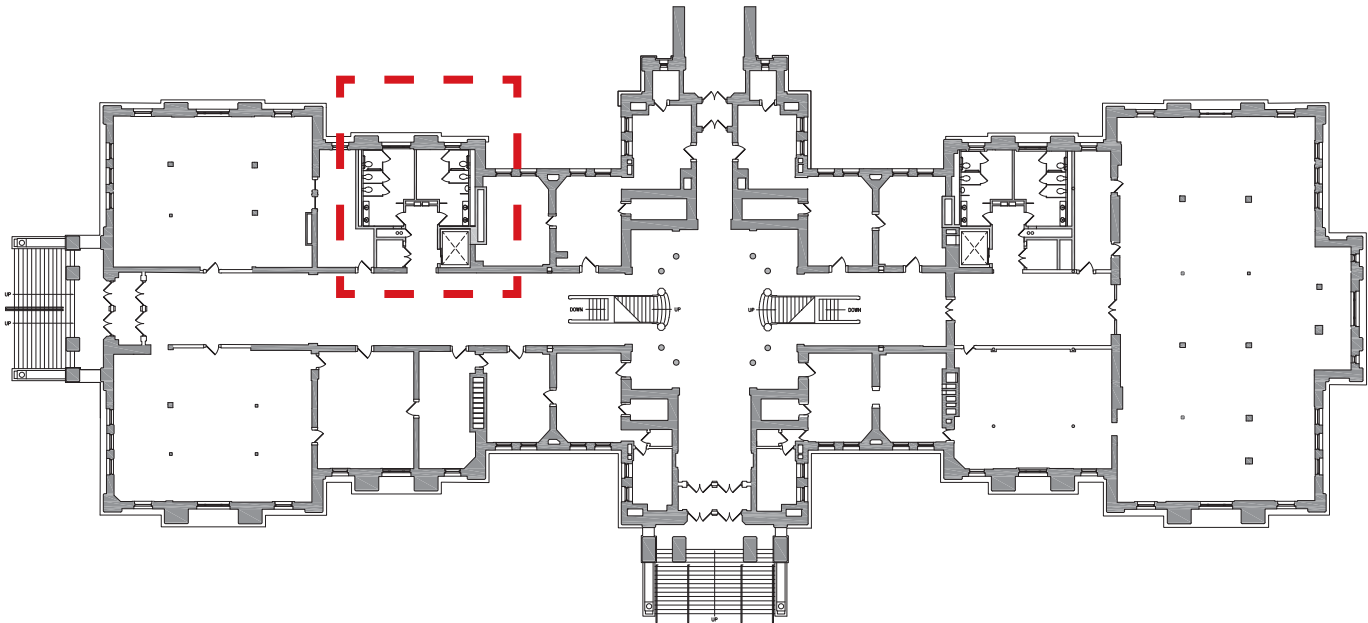


Figure 7.5.6: Potential First Floor Level Plan Layout.

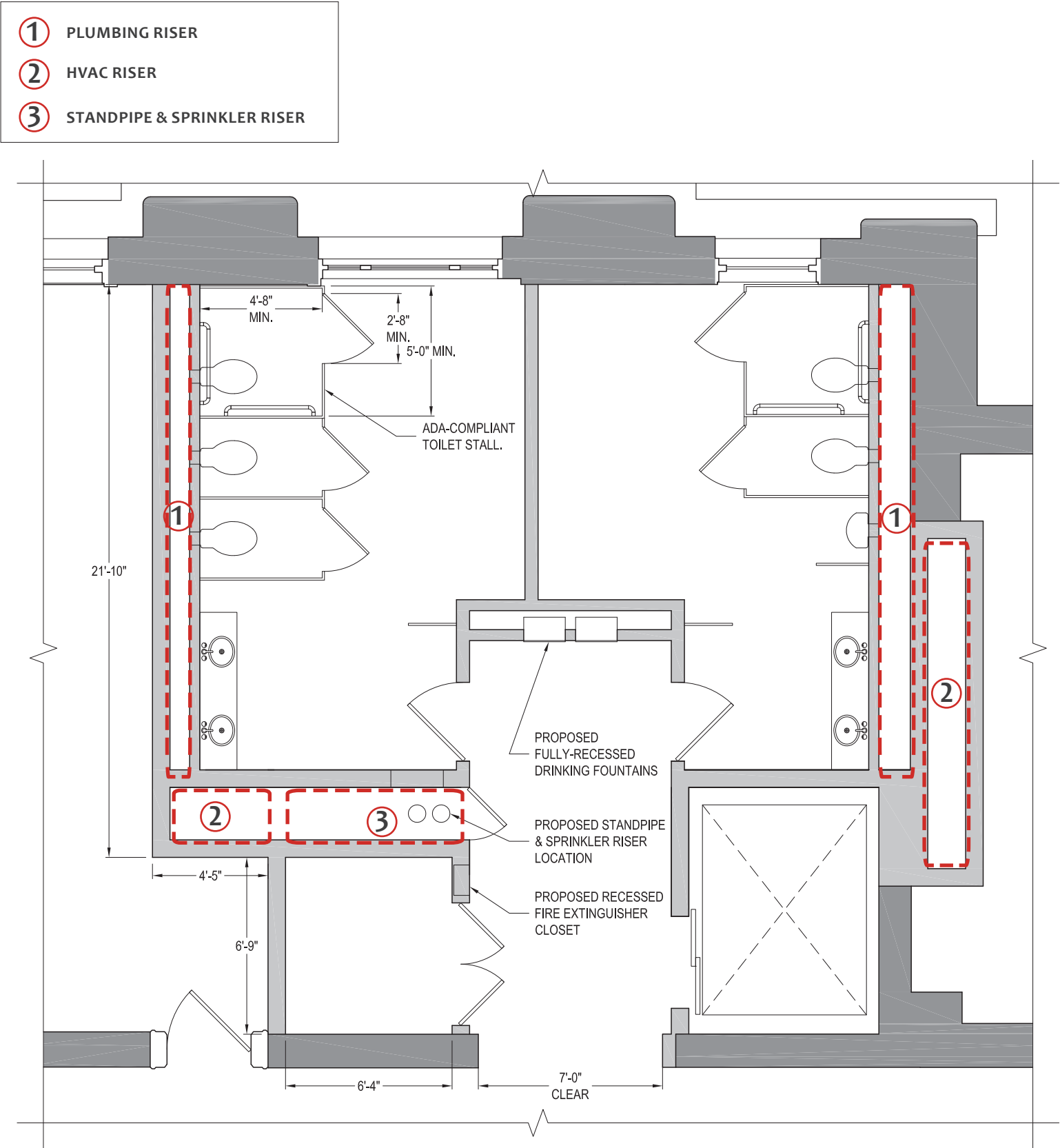


Figure 7.5.7: First Floor Level [West] Proposed Service Core.



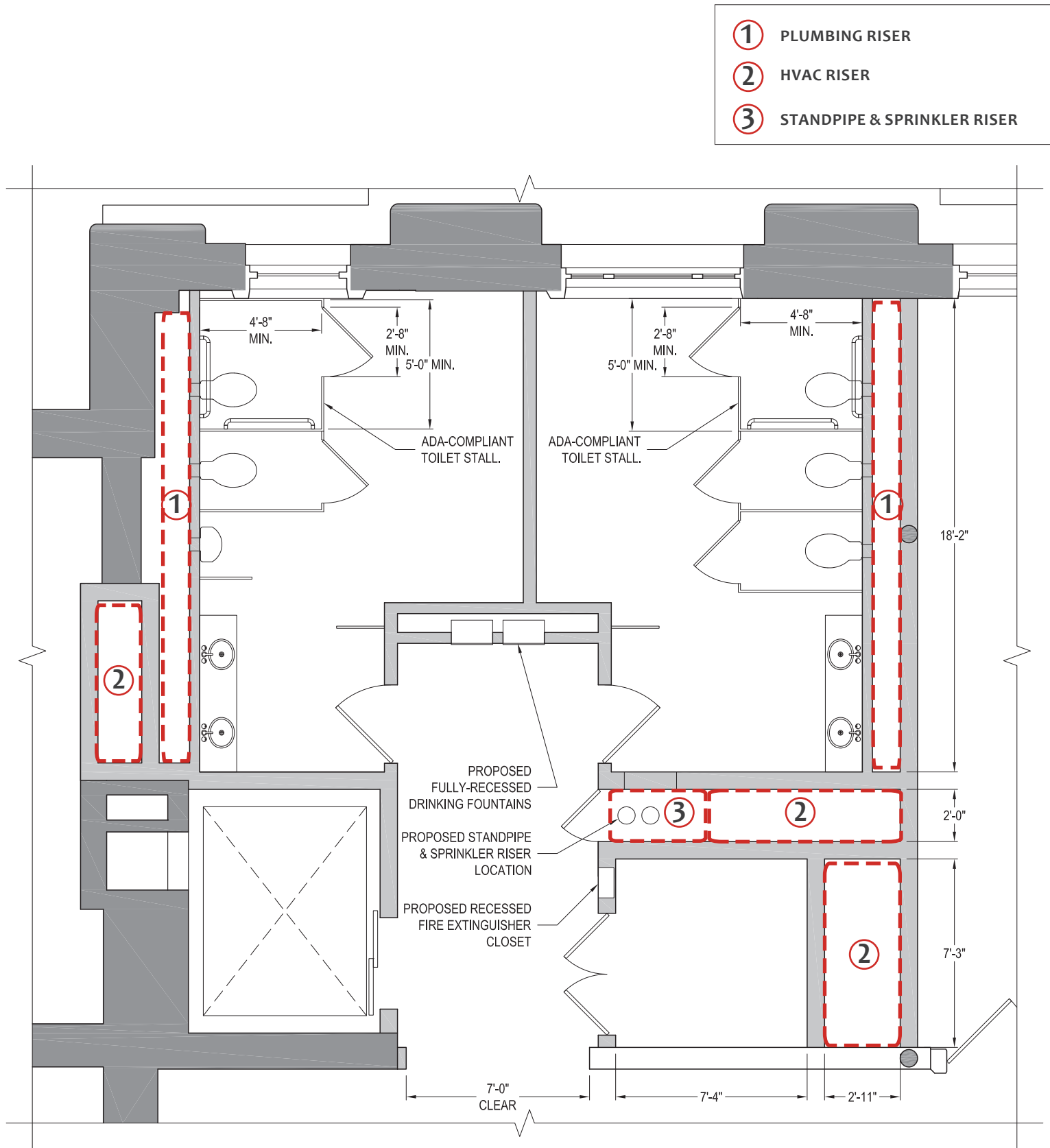


Figure 7.5.8: First Floor Level [East] Proposed Service Core.

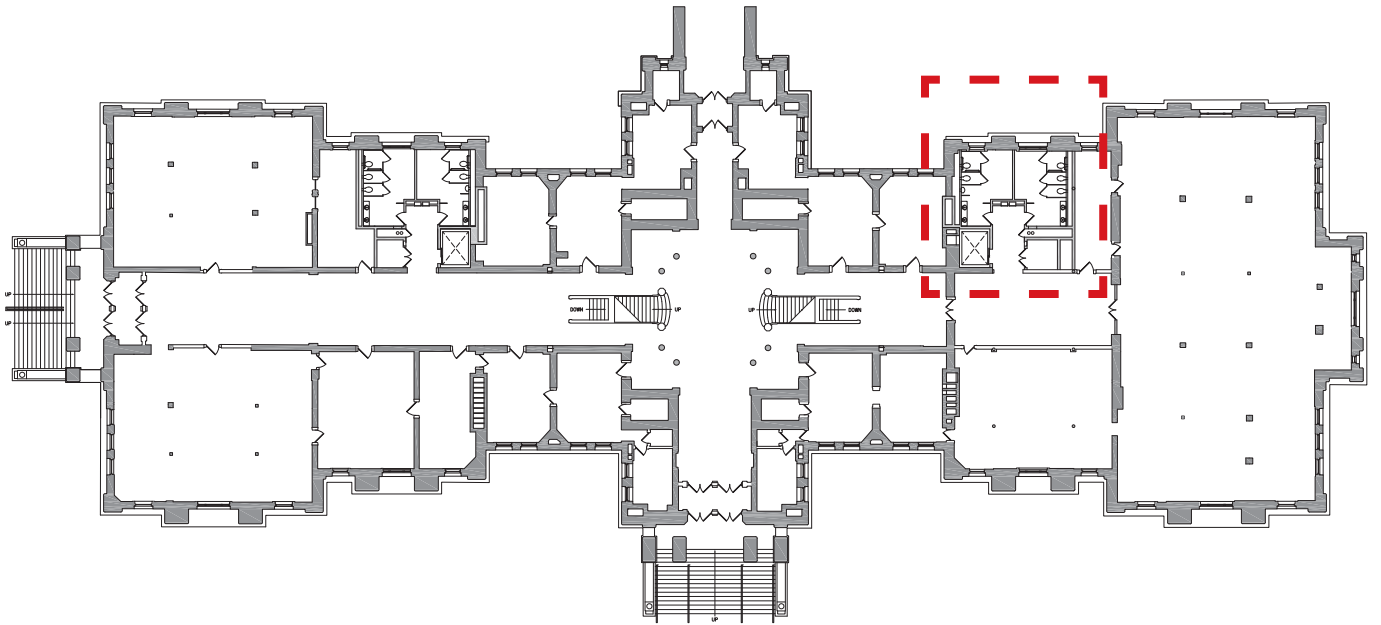


Figure 7.5.9: Proposed First Floor Level Plan.

Service Core: Second Floor Level - West

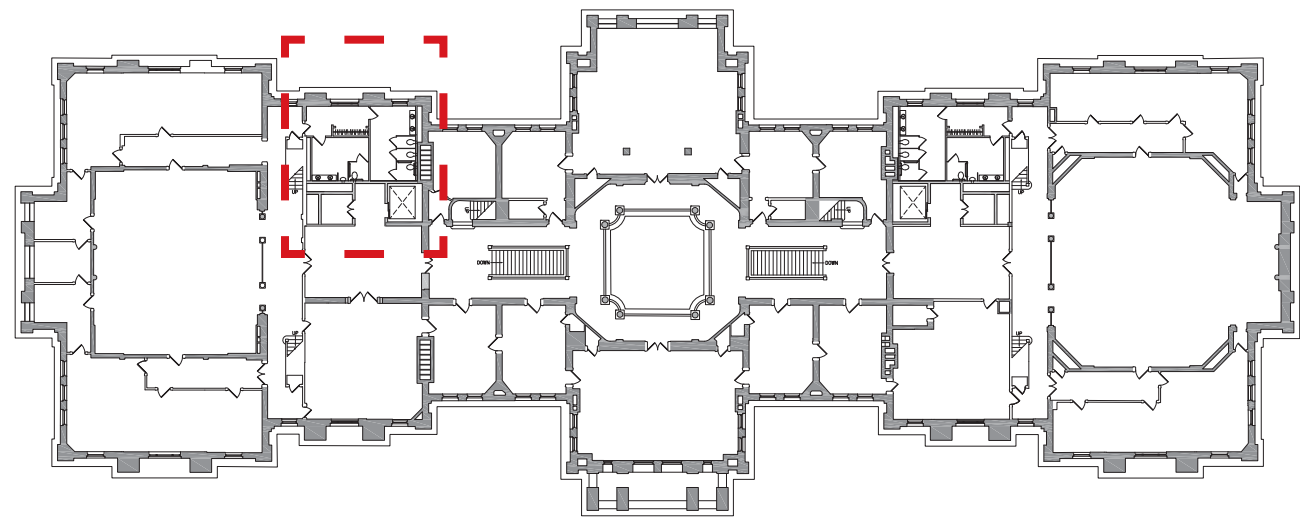


Figure 7.5.10: Potential Second Floor Level Plan Layout.

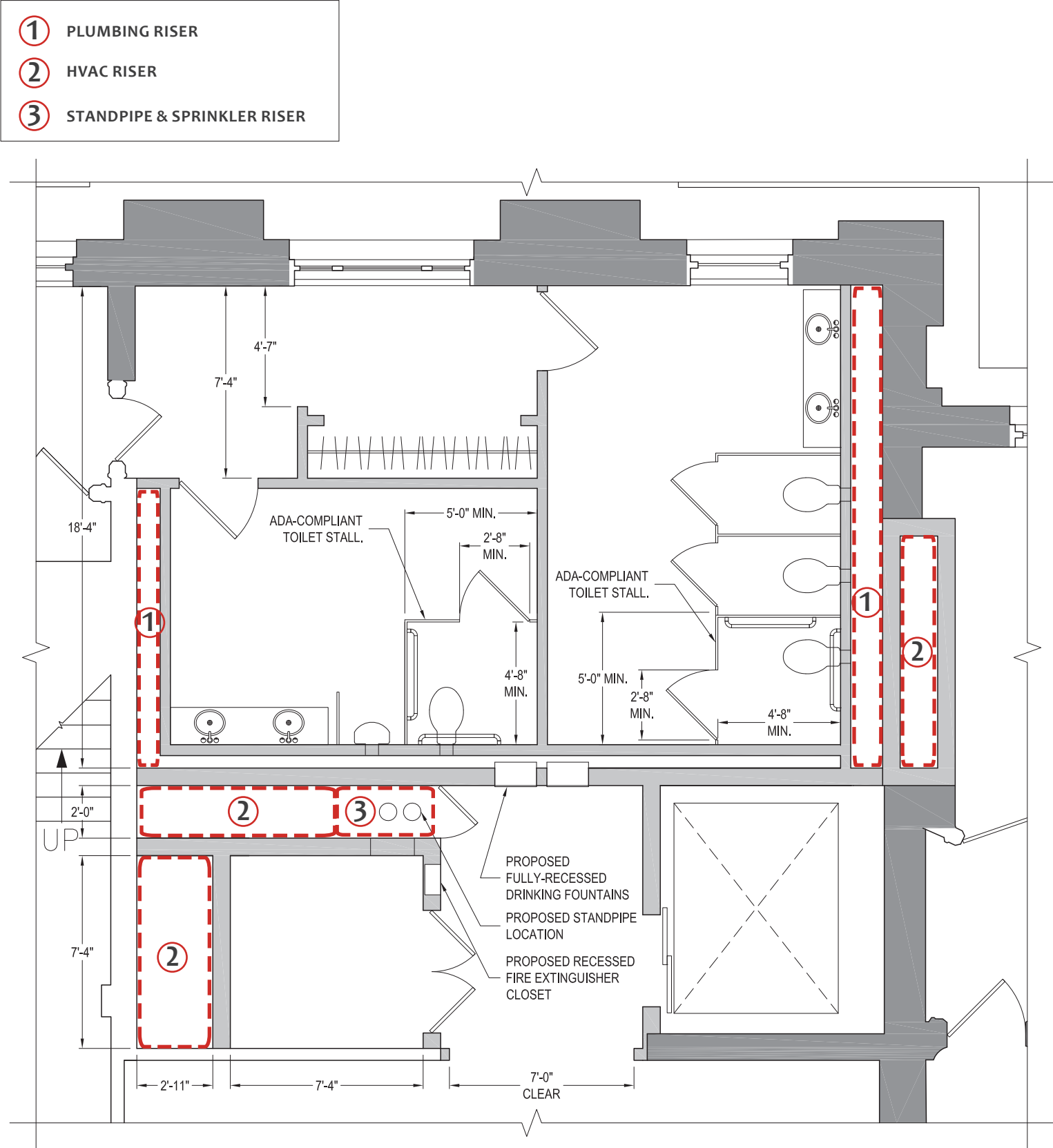


Figure 7.5.11: Second Floor Level [West] Proposed Service Core.



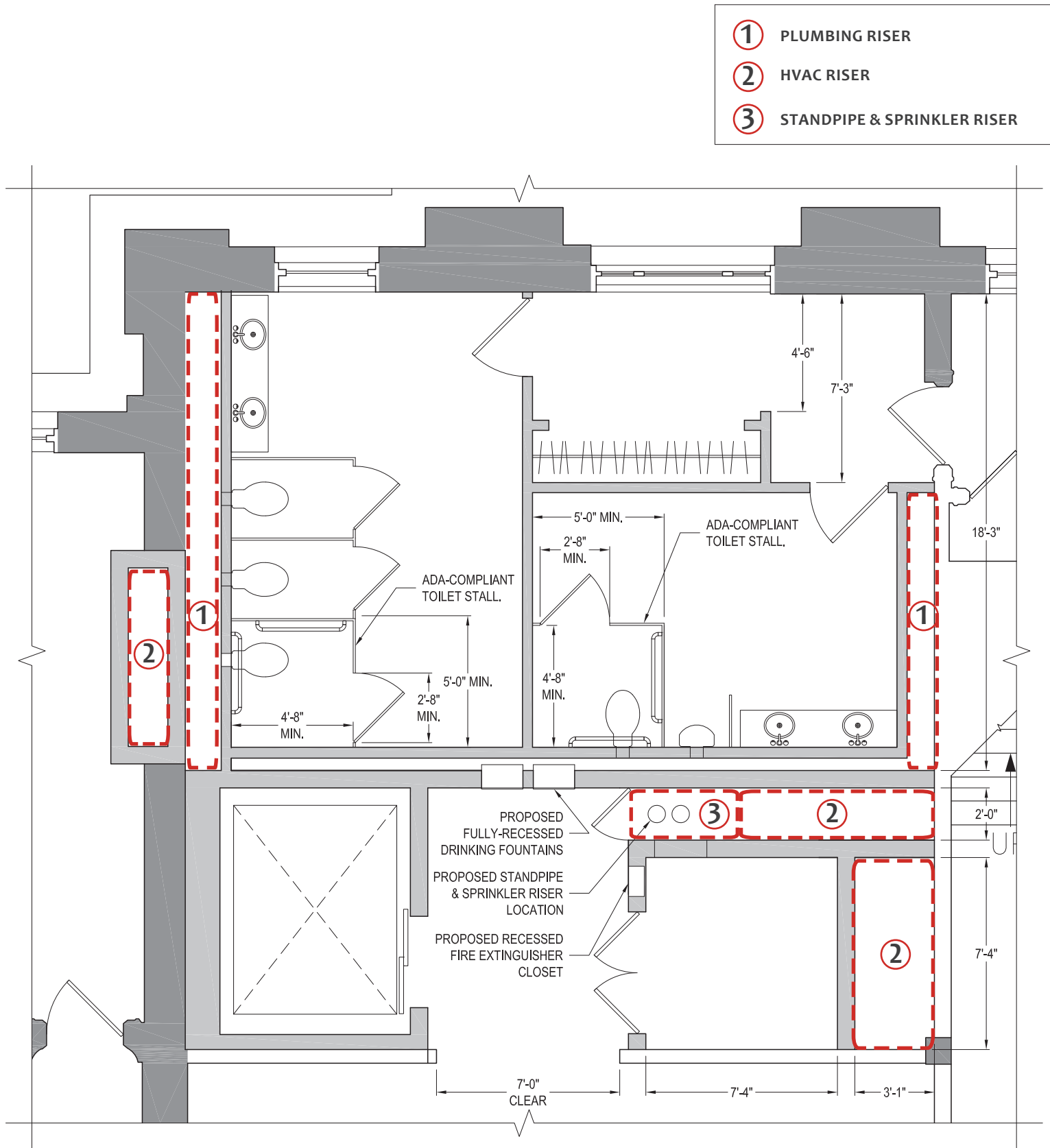


Figure 7.5.12: Second Floor Level [East] Proposed Service Core.

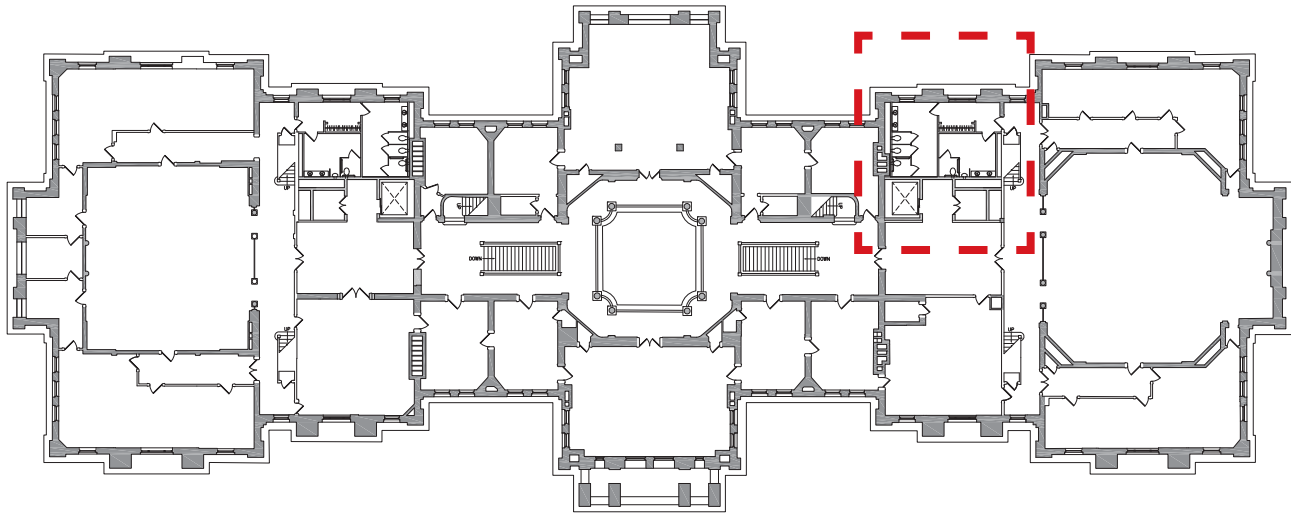


Figure 7.5.13: Proposed Second Floor Level Plan.



Service Core: Third Floor Level - West

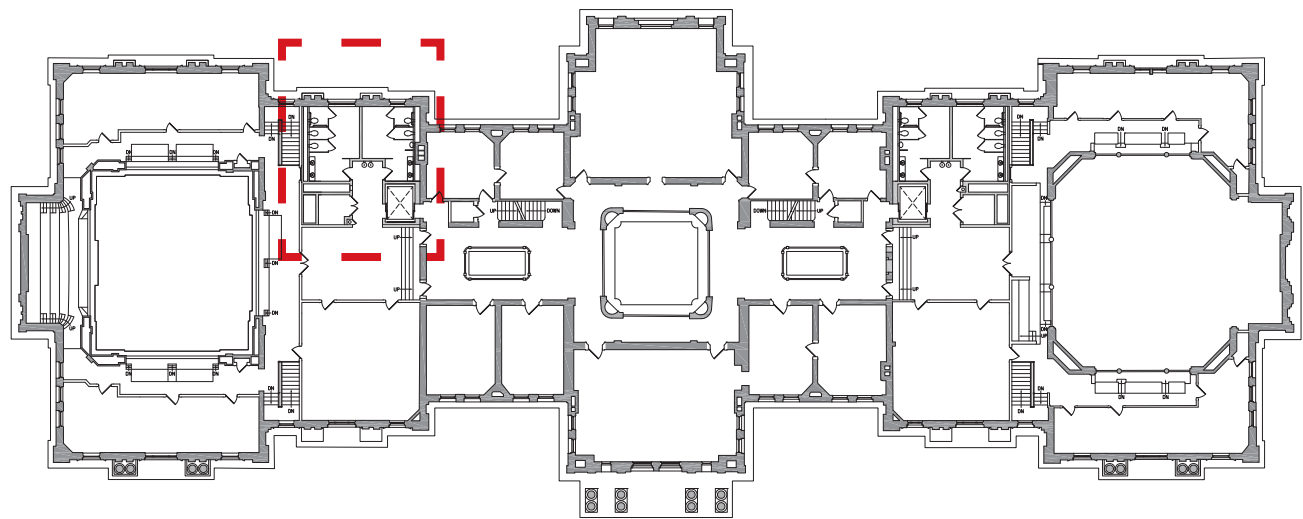


Figure 7.5.14: Potential Third Floor Level Plan Layout.

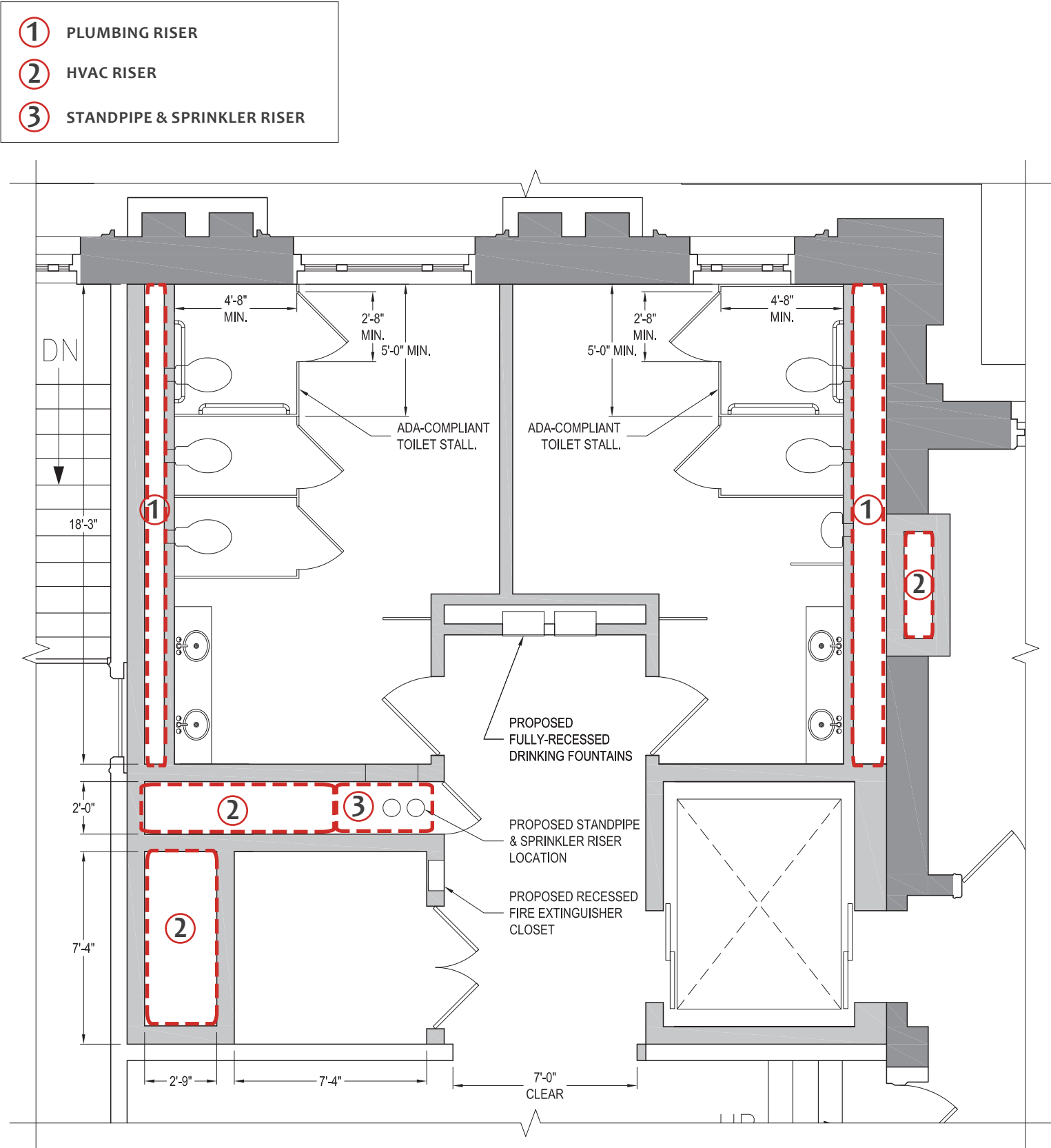


Figure 7.5.15: Third Floor Level [West] Proposed Service Core.



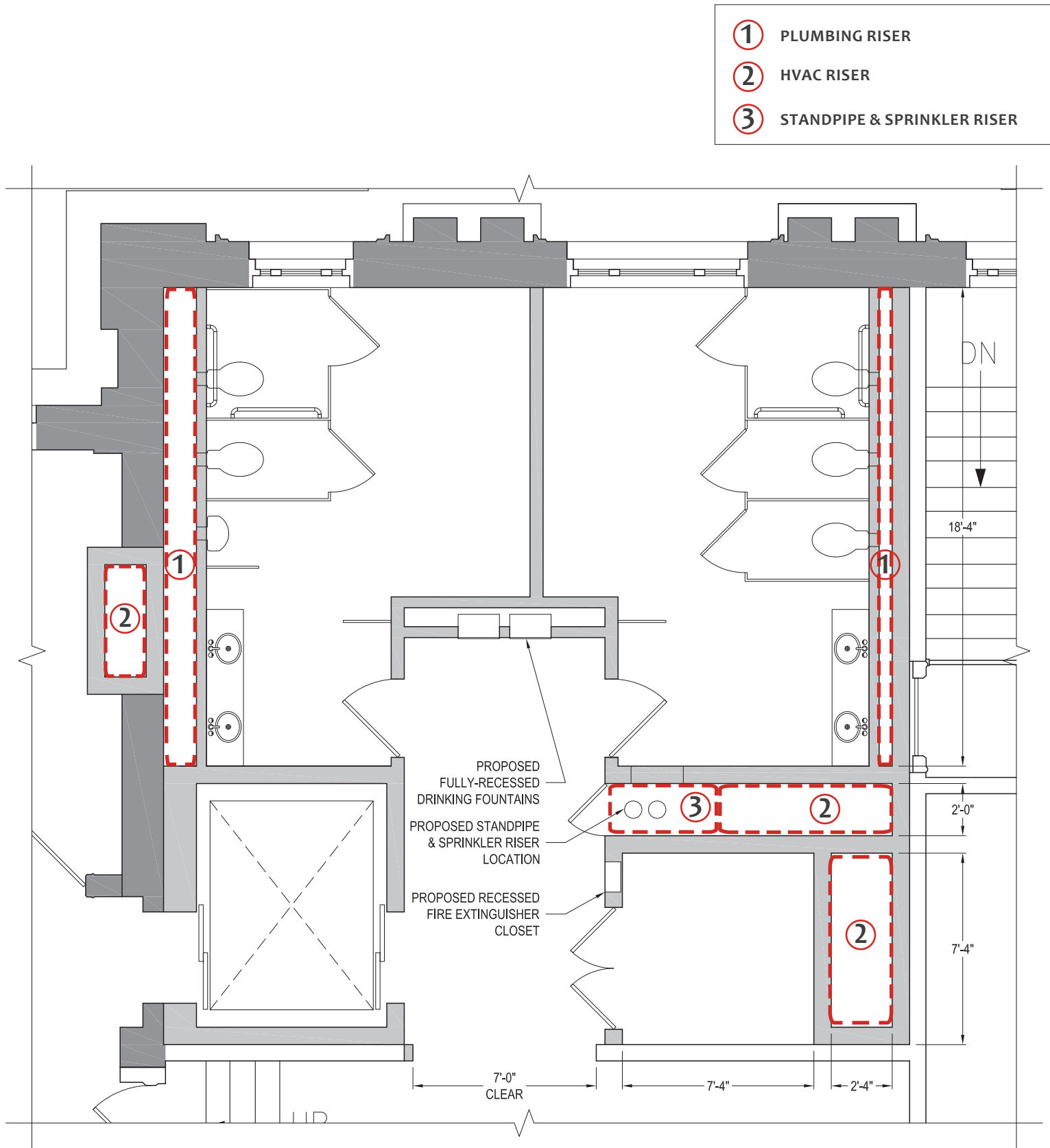


Figure 7.5.16: Third Floor Level [East] Proposed Service Core.

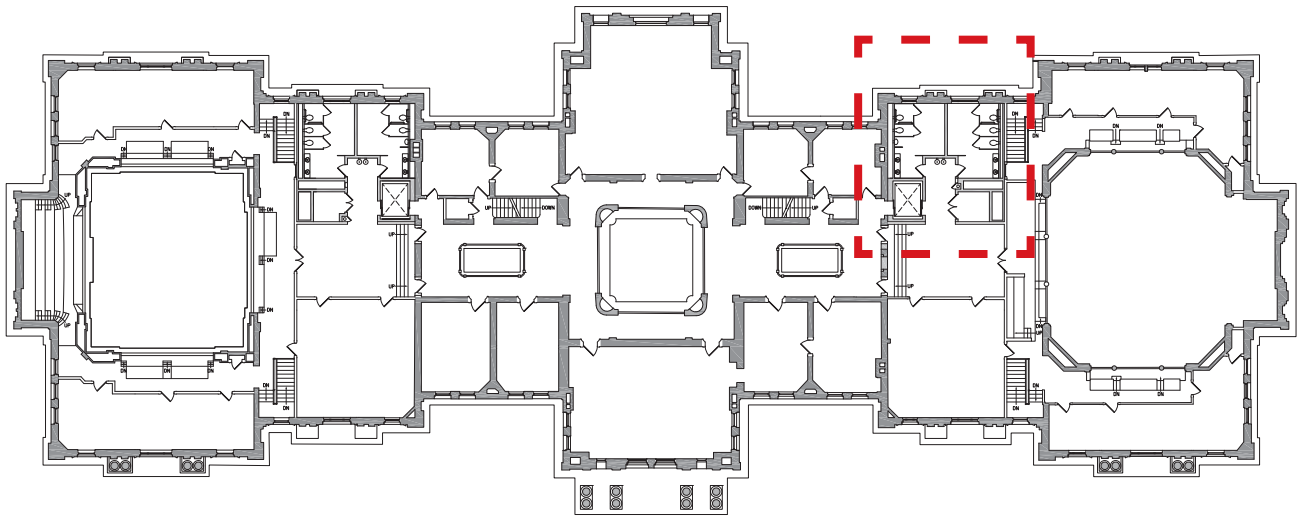


Figure 7.5.17: Proposed Third Floor Level Plan.

Supplemental Stair

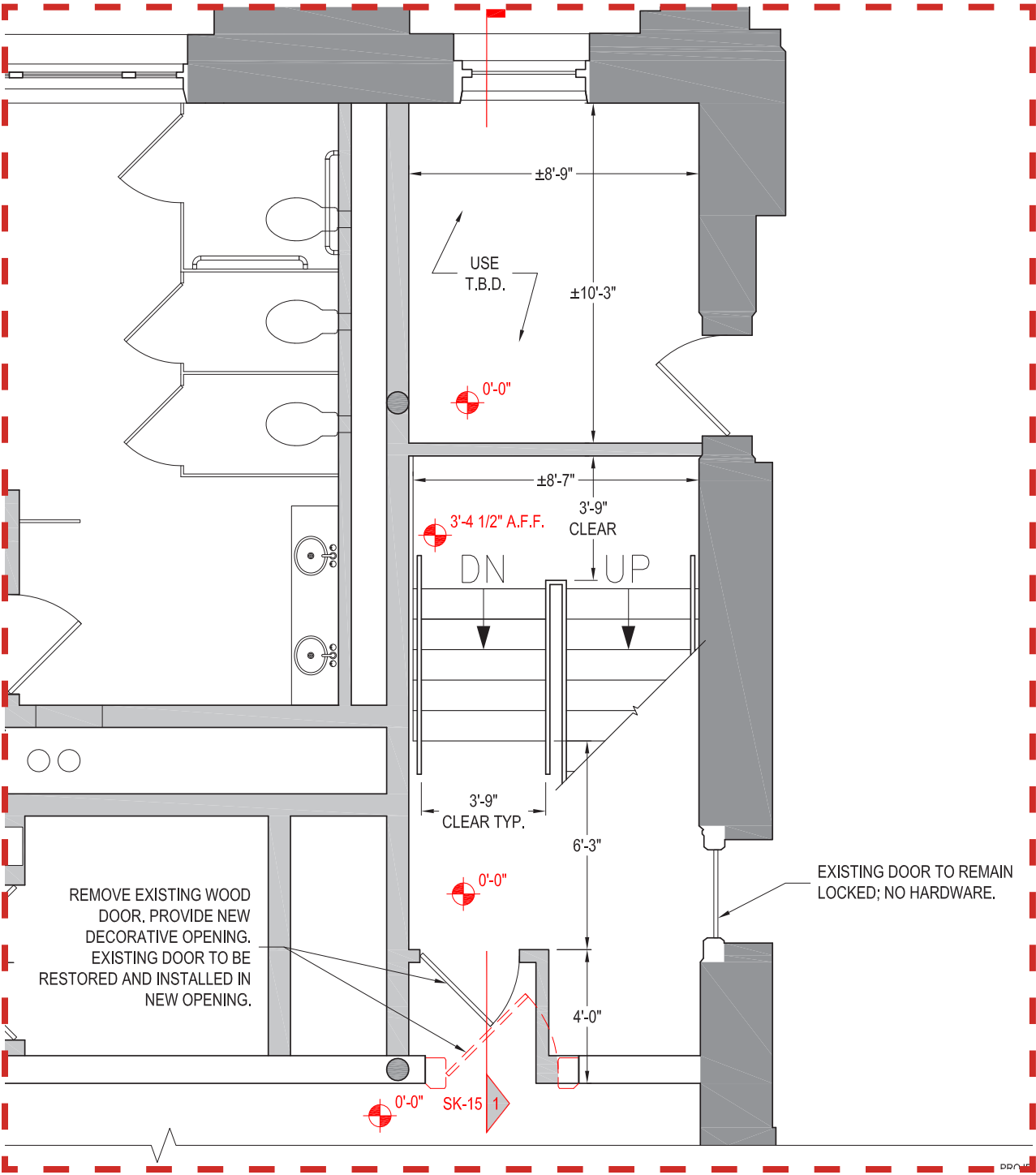


Figure 7.5.6: Proposed First Floor Northeast Egress Stair

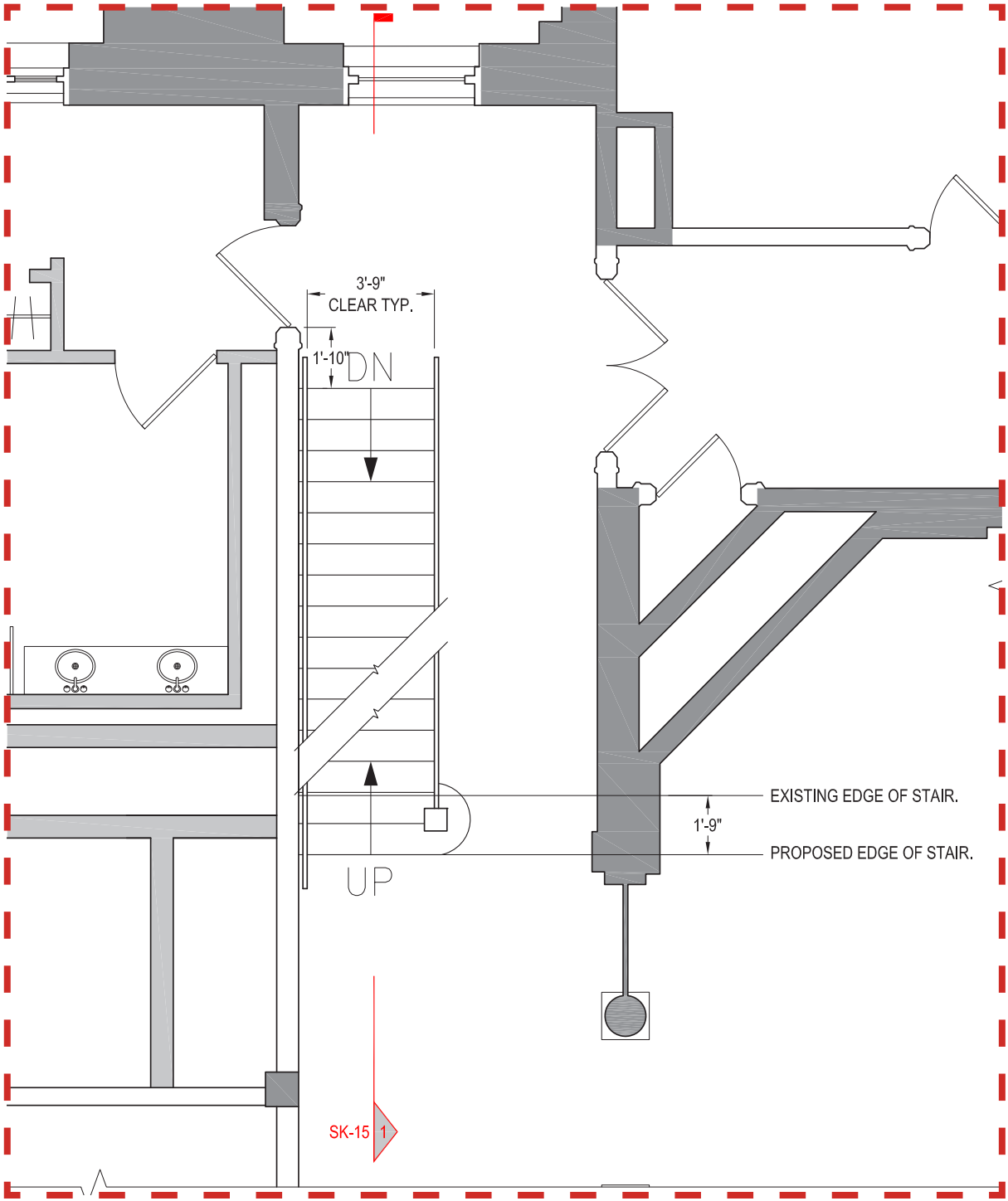


Figure 7.5.7: Proposed Second Floor Northeast Egress Stair



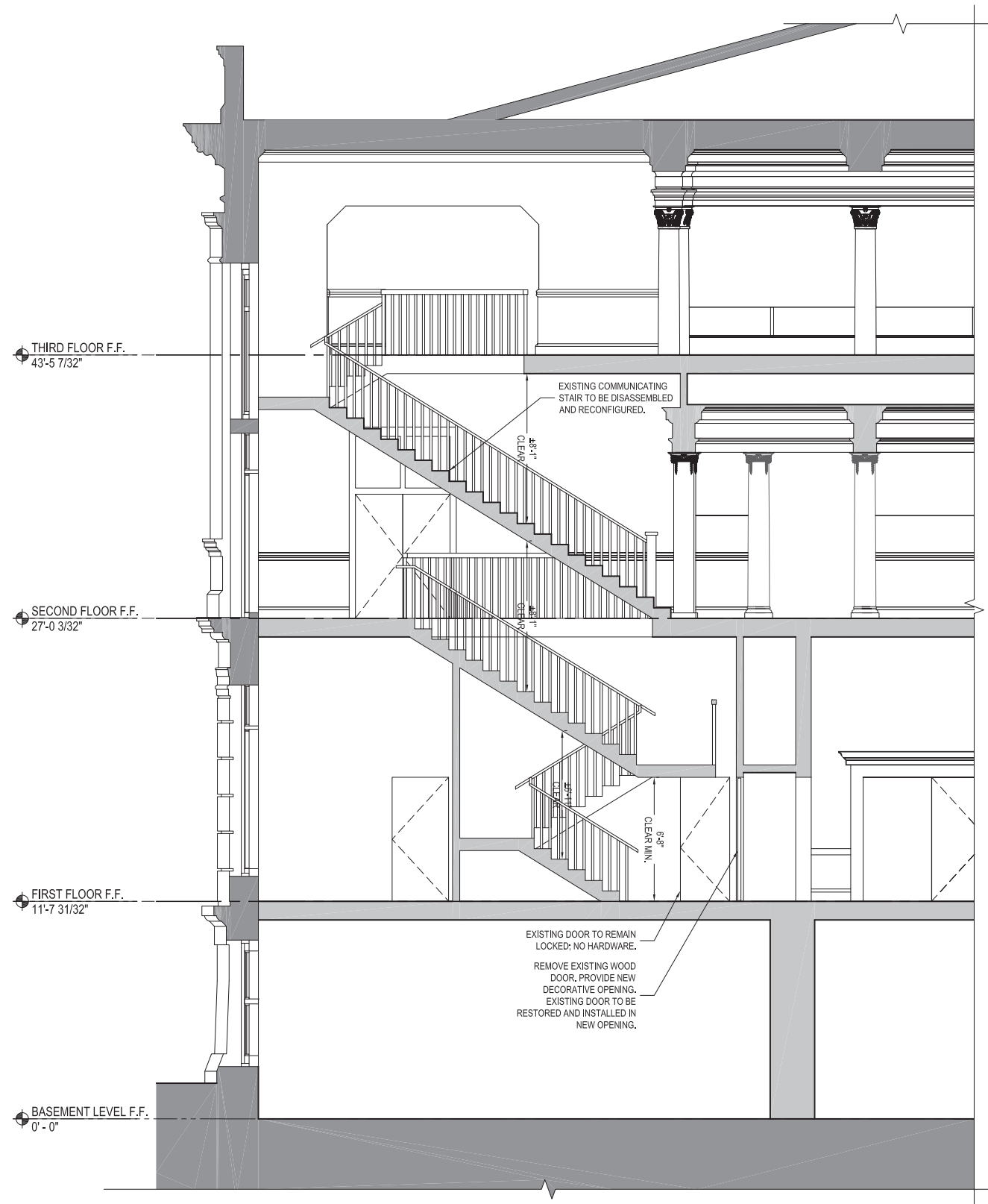


Figure 7.5.8: Proposed Northeast Stair Section

Following reviews of the project with the City of Cheyenne's Authority Having Jurisdiction [AHJ], an agreement was reached for the overall code compliance approach.

An important element of this agreement is the introduction of a supplemental stair as an additional means of egress for each Chamber.

The proposed concept plan is based on the following:

- It was understood and agreed that the existing exterior egress stairs have significant deficiencies and may be more of a potential liability than an asset.
- Each Chamber has two communicating stairs [north and south] that connect the balconies to the main floor of the Chamber, i.e. from the Third to the Second Floor.
- On the Second Floor, the stairs terminate and under the stairs are storage closets.
- The proposed concept plan calls for the following:
  - The North Stairs in each Chamber are to be reconfigured meeting current code requirements [*Volume III Appendix M : Life Safety & Fire Protection Assessment*]
  - The existing detailing and railing are to be reused maintaining the historic design intent;
  - The areas where the closets currently are located will be reconfigured to create a new stair that would terminate on the First Floor;
  - The proposed concept, though it requires reframing slabs, does not impact any area where significant historic building fabric exists , nor does it compromise the historic design intent of the Chambers

The proposed stairs will be used only as egress stairs, will be alarmed and will not be used as communicating or convenience stairs connecting the First, Second and Third floors. In addition, the stairs will be only used in the event of an evacuation of the Chambers.

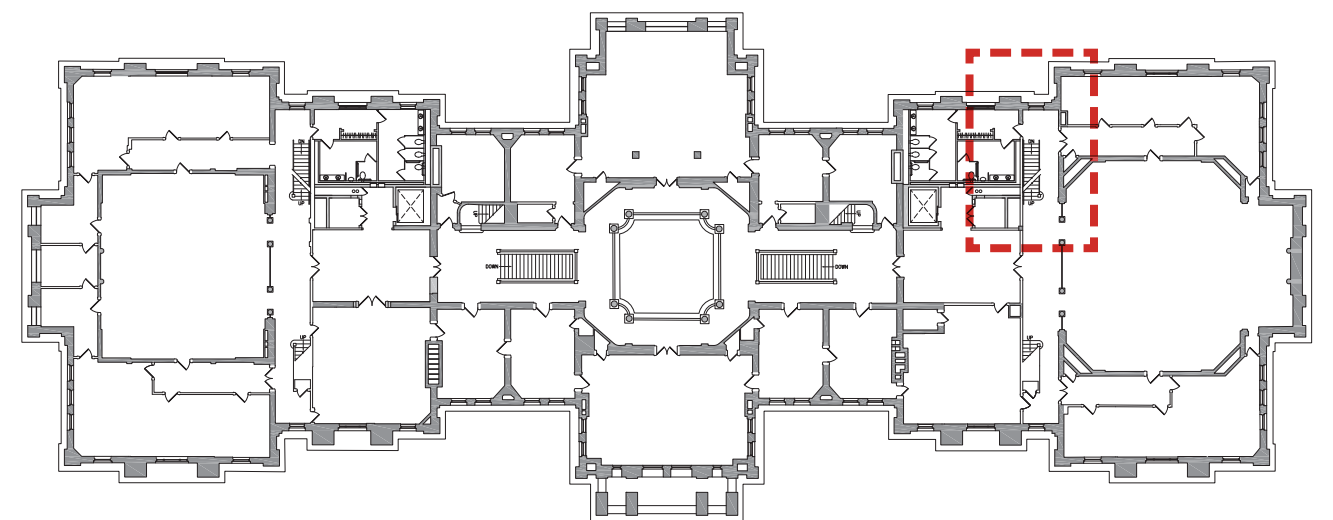


Figure 7.5.9: Second Floor Plan.



THIS PAGE INTENTIONALLY LEFT BLANK



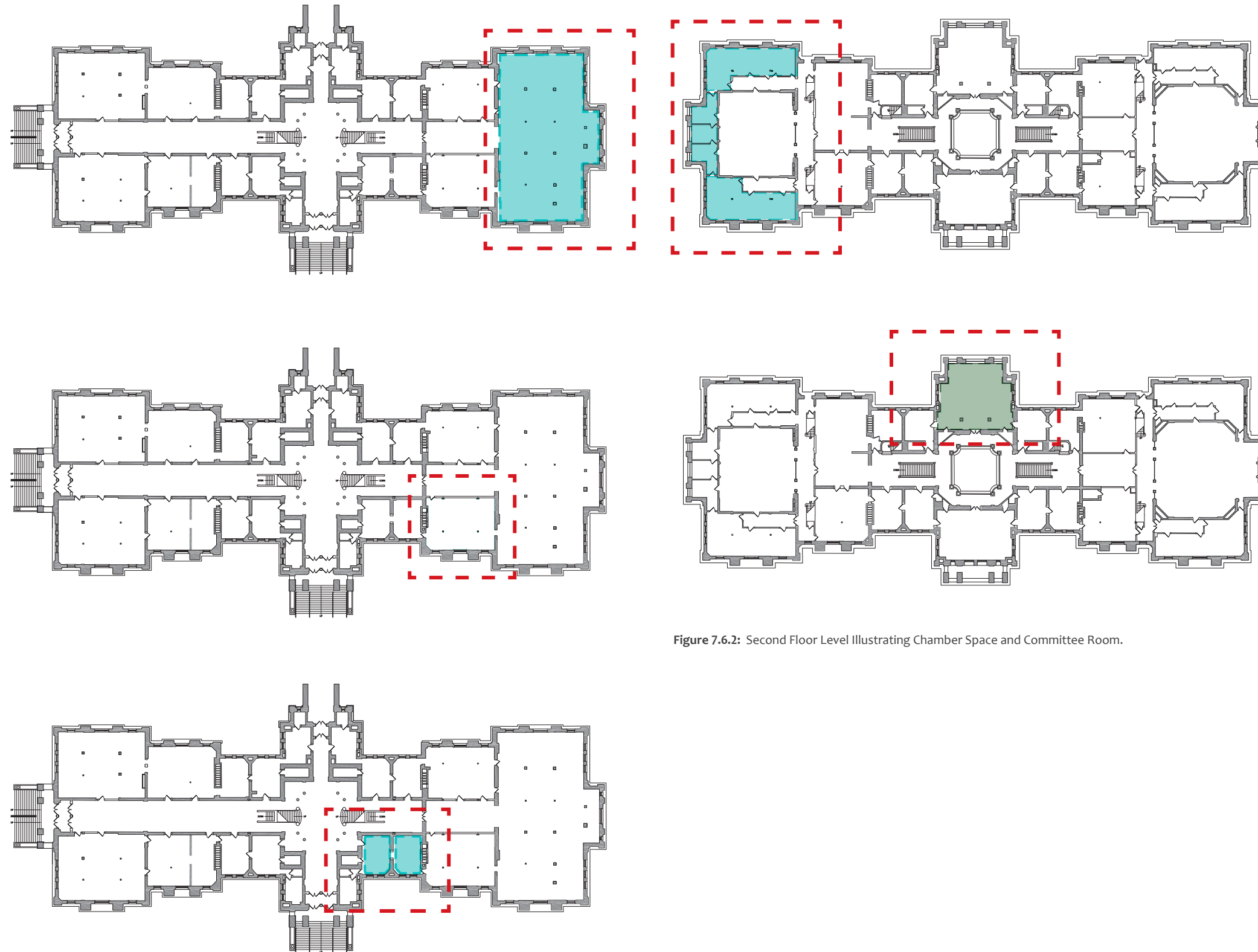


Figure 7.6.2: Second Floor Level Illustrating Chamber Space and Committee Room.

Figure 7.6.1: First Floor Level illustrating “Bookends” and Office Spaces.

On the following pages, conceptual use plans are presented, illustrating the potential use of space types throughout the Capitol. The spaces are organized in the following categories:

- Chambers

New infrastructure will be installed for both Chambers and the spaces will be refinished, following installation of smoke detection, sprinklers, fire alarms, etc.

The office areas along the edges of both levels of the Chambers will be reconfigured to meet the use needs of each Chamber. The placement of the doors leading to the office areas will not be changed, since they are part of the historic layout and design of each Chamber. The interior partitions will be removed and the spaces will be reconfigured, based on the final program needs of the House and the Senate for each of their spaces.

An audio visual control room will be created to allow for A/V equipment to be monitored and operated for all sessions, from regular legislative sessions to the State of the State Address.

- Committee Rooms

There are four [4] spaces in the Capitol that have a suitable footprint large enough for Committee Rooms. These are rooms 204 and 213 on the Second Floor, and rooms 302 and the area north of the Rotunda [presently subdivided into multiple small spaces] on the Third Floor. They are perfectly stacked in pairs north and south of the Rotunda.

These are flexible spaces that can be used for Committee Rooms, large meeting rooms or office areas.

Using them as Committee Rooms has distinct advantages, since:

- They are at the center of the building, and easily and equally accessible;
- They can be supported by HVAC equipment located in the Attic;
- They meet the preferable size of a Committee Room based on the Programming Analysis
- They are flanked by offices that can be used by Committee Chairs and their support staff.

- Large “bookends”

There are three such spaces, all in the Phase III [1917] section of the building. Two [2] “bookends” are stacked on the Basement and First Floor of the East Wing. These spaces housed the State Library from the completion of the Phase III [1917] construction to 1937. Over the course of the years, these spaces were heavily modified and do not contain significant spaces or historic finishes. They are ideal areas to create office suites in an efficient and well organized way.

Generations of ceilings can be removed, allowing the space to reclaim its full height to create elegant and dignified offices on both levels.

The same is the case for the West bookend at the Basement level.

- Office Spaces

There are three [3] sizes of office areas: 2 spaces at the Phase I [1988] First Floor, 2 spaces at the Phase II [1890] First Floor, and 2 spaces at the Phase III [1917] First Floor West. The use options are several, from individual / small office areas to small conference rooms and / or small departmental clusters.

The following pages delineate the above options.

These options were used in creating the Cost Model of the construction estimate.

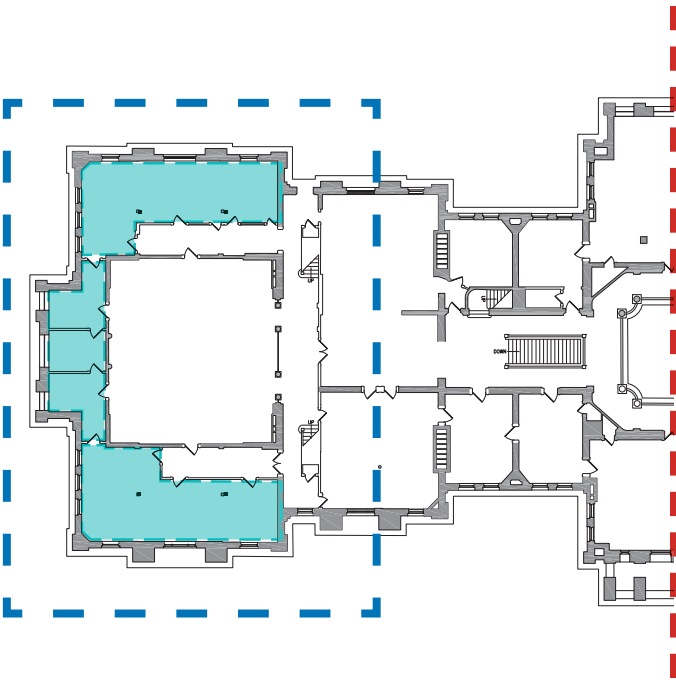


Figure 7.6.3: Second Floor Level Selective Removals Plan.

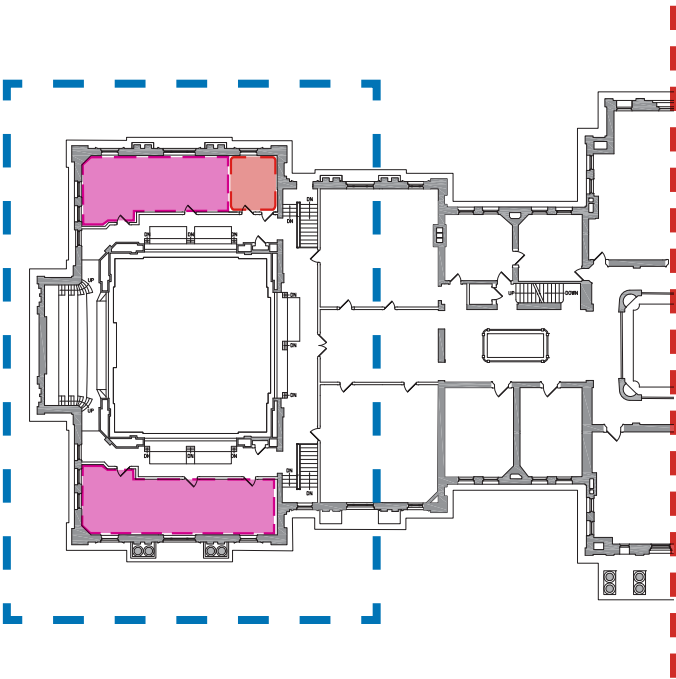


Figure 7.6.4: Third Floor Level Selective Removals Plan.

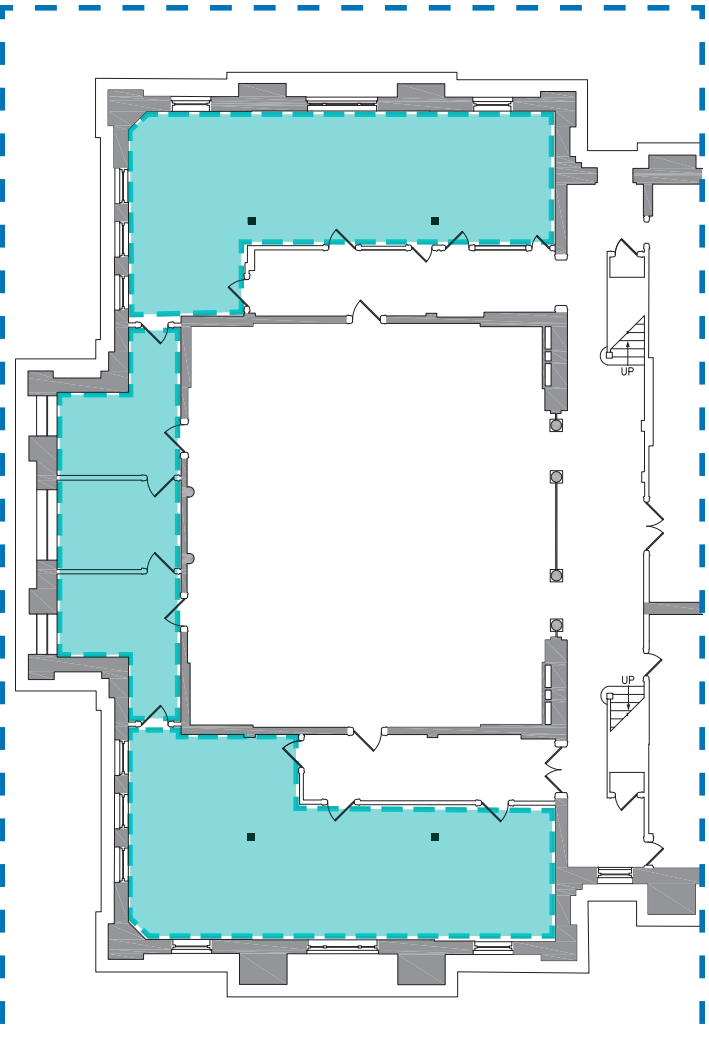


Figure 7.6.5: Second Floor Level Senate Chamber Private Office Spaces [Phase III - 1917].

**SECOND FLOOR OPTIONS**

**TOTAL SQUARE FOOTAGE: 2225 SQ. FT.**

**Potential Uses :**

1. Private Offices with Support Areas
2. Open Office Arrangement
3. Combination Private Offices and Open Office Arrangement with Support Areas

**Potential Occupancy :** 6 - 15 Occupants, depending on layout.

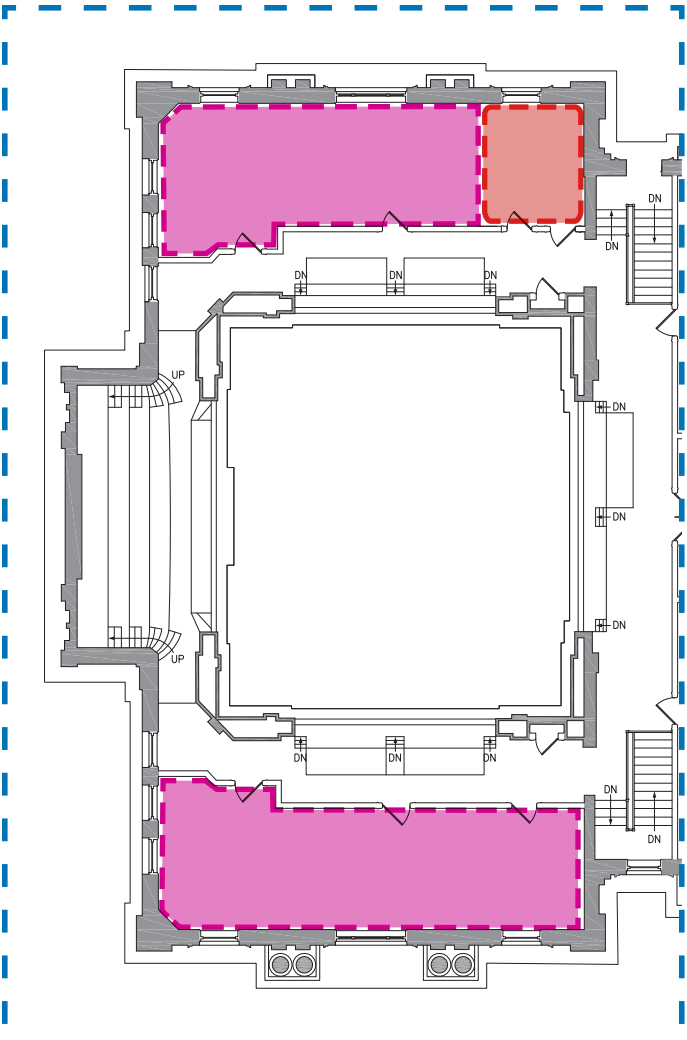


Figure 7.6.6: Third Floor Level Senate Chamber Support Spaces and A/V Room (Right) [Phase III - 1917].

**THIRD FLOOR OPTIONS**

**TOTAL SQUARE FOOTAGE: 1620 SQ. FT.**

**Potential Uses :**

1. Private Offices with Support Areas
2. Open Office Arrangement
3. Combination Private Offices and Open Office Arrangement with Support Areas

**Potential Occupancy :** 4 - 8 Occupants, depending on layout.

**PRIMARY WORK AREAS**  
PRIVATE OFFICES AND  
WORK STATIONS

**OPEN WORK AREA**

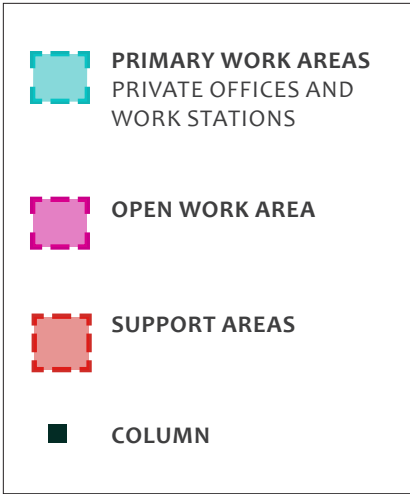
**SUPPORT AREAS**

**COLUMN**

**NOTE:** COLUMN GRID TO BE  
VERIFIED WITH PROBES /  
DISRUPTIVE EXAMINATION.







**NOTE:** COLUMN GRID TO BE  
VERIFIED WITH PROBES /  
DISRUPTIVE EXAMINATION.

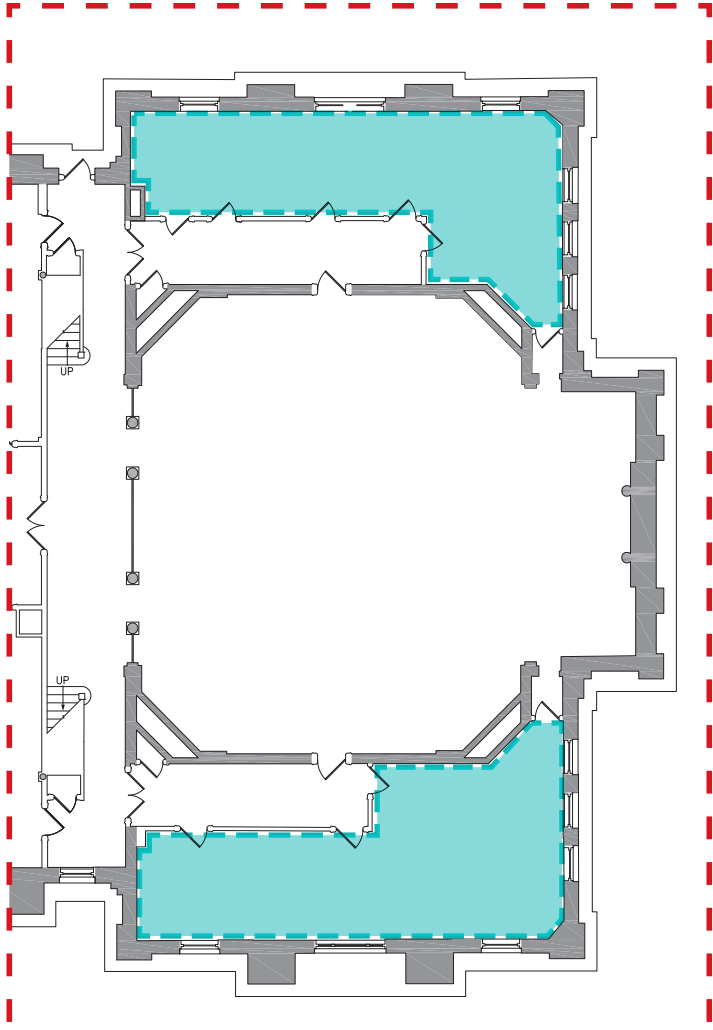


Figure 7.6.7: Second Floor Level House Chamber Support Space, North [Phase III - 1917].

**SECOND FLOOR OPTIONS**  
**TOTAL SQUARE FOOTAGE: 1500 SQ. FT.**  
**Potential Uses :**

- 1. Private Offices with Support Areas
- 2. Open Office Arrangement
- 3. Combination Private Offices and Open Office Arrangement with Support Areas

**Potential Occupancy :** 4 - 8 Occupants, depending on layout.

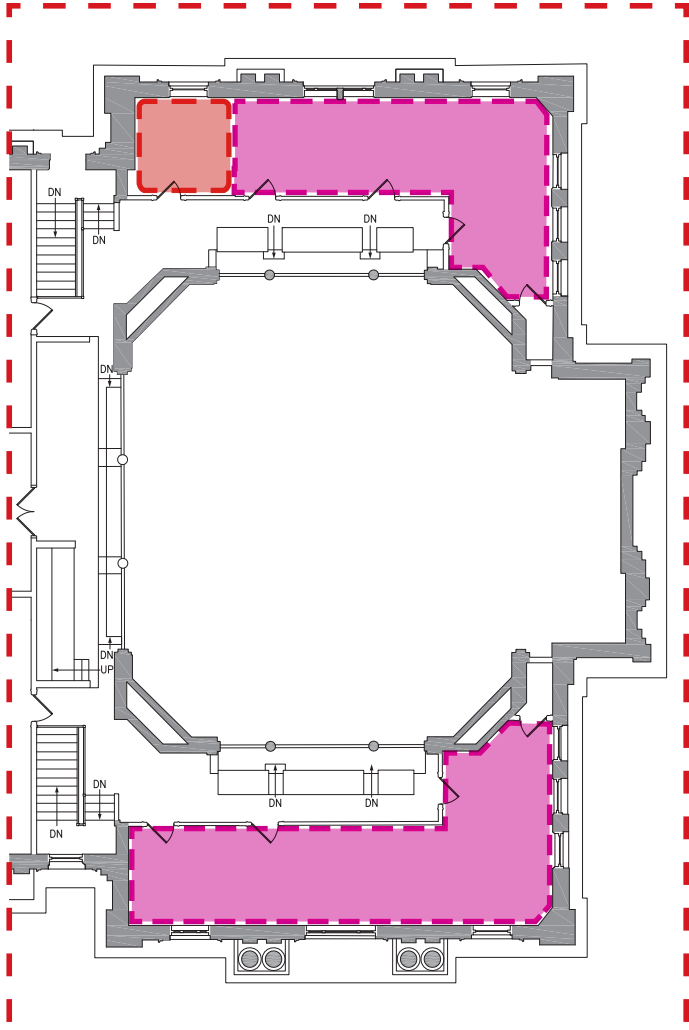


Figure 7.6.8: Third Floor Level House Chamber Private Office Spaces and A/V Room (Left), North [Phase III - 1917].

**THIRD FLOOR OPTIONS**  
**TOTAL SQUARE FOOTAGE: 1500 SQ. FT.**  
**Potential Uses :**

- 1. Private Offices with Support Areas
- 2. Open Office Arrangement
- 3. Combination Private Offices and Open Office Arrangement with Support Areas

**Potential Occupancy :** 4 - 8 Occupants, depending on layout.

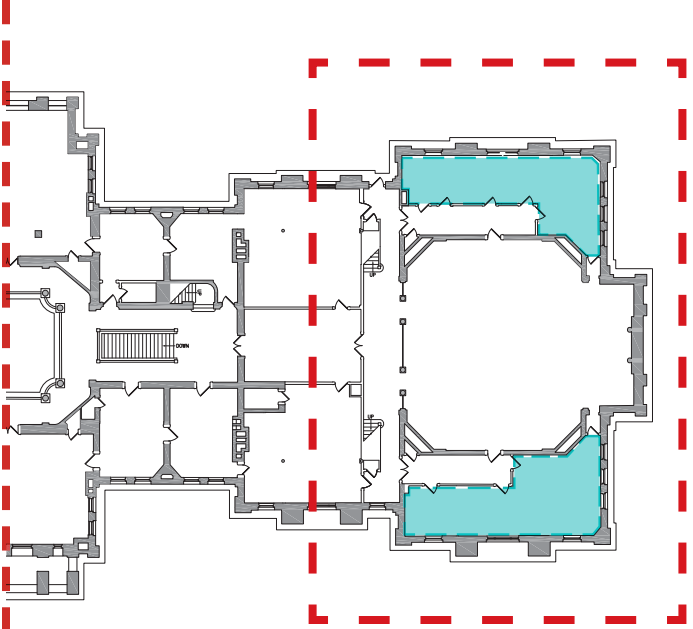


Figure 7.6.9: Second Floor Level Selective Removals Plan.

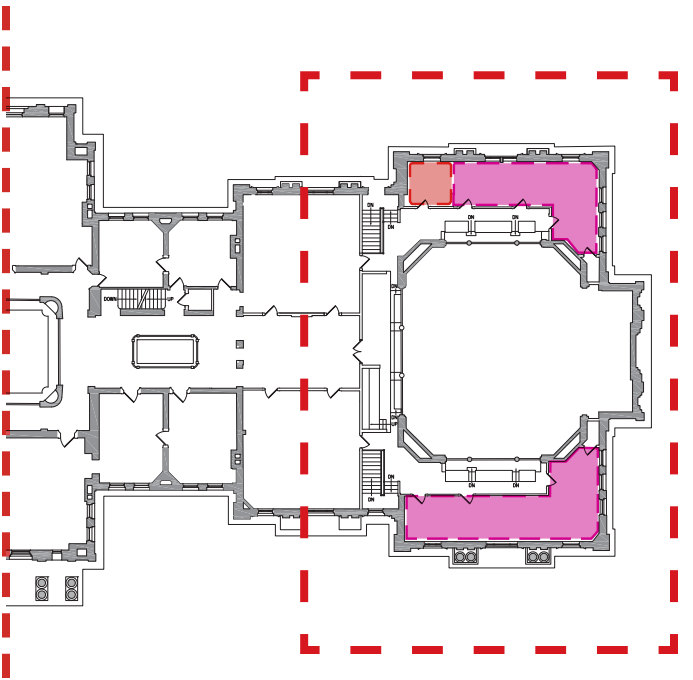


Figure 7.6.10: Third Floor Level Selective Removals Plan.





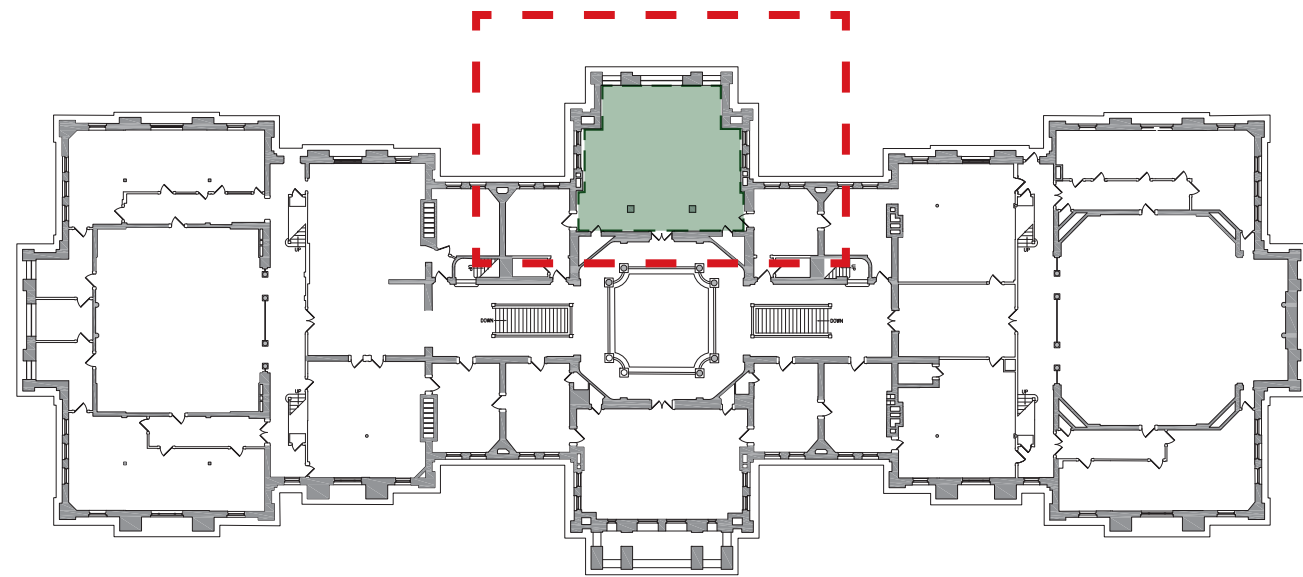


Figure 7.6.11: Second Floor Level Selective Removals Plan.

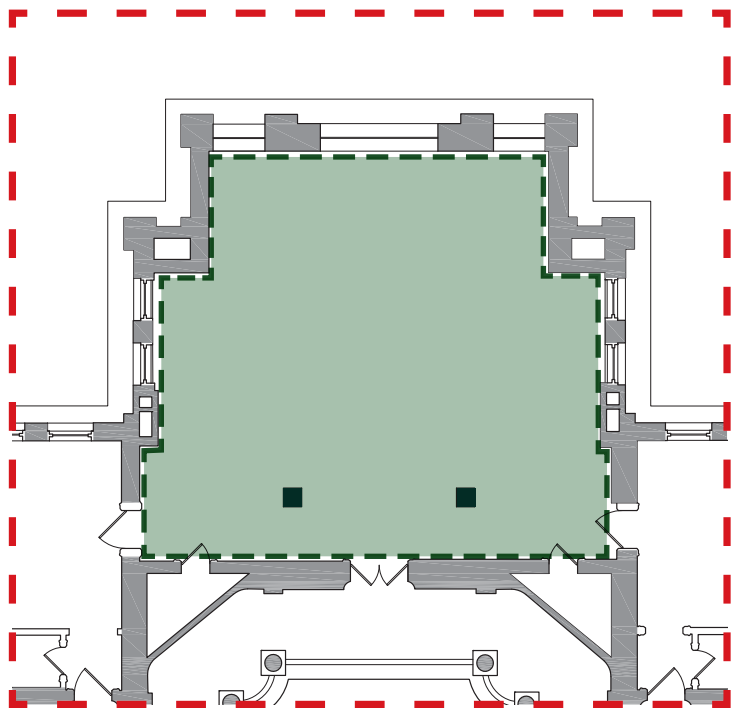


Figure 7.6.13: Second Floor Level Senate Chamber Support Space, South [Phase III - 1917].

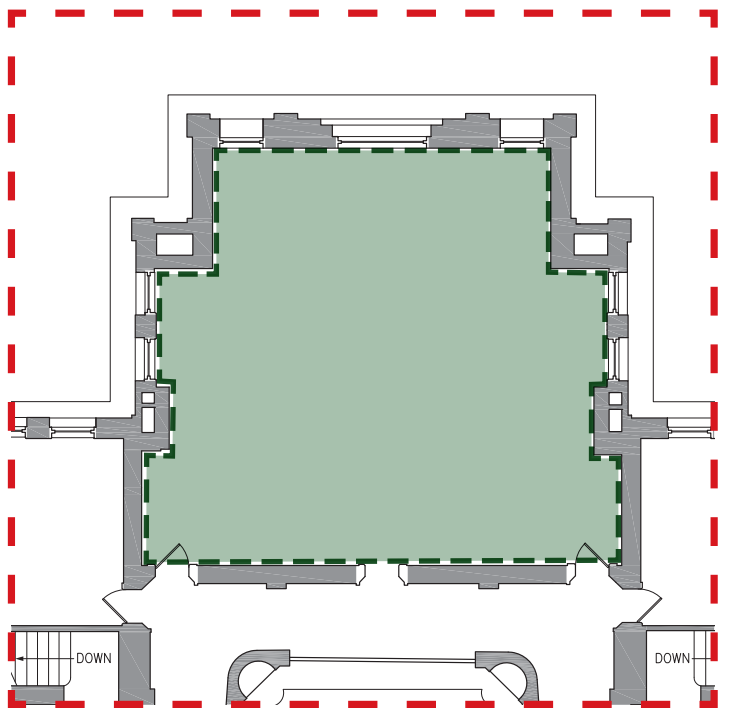


Figure 7.6.14: Third Floor Level Senate Chamber Support Space, South [Phase III - 1917].

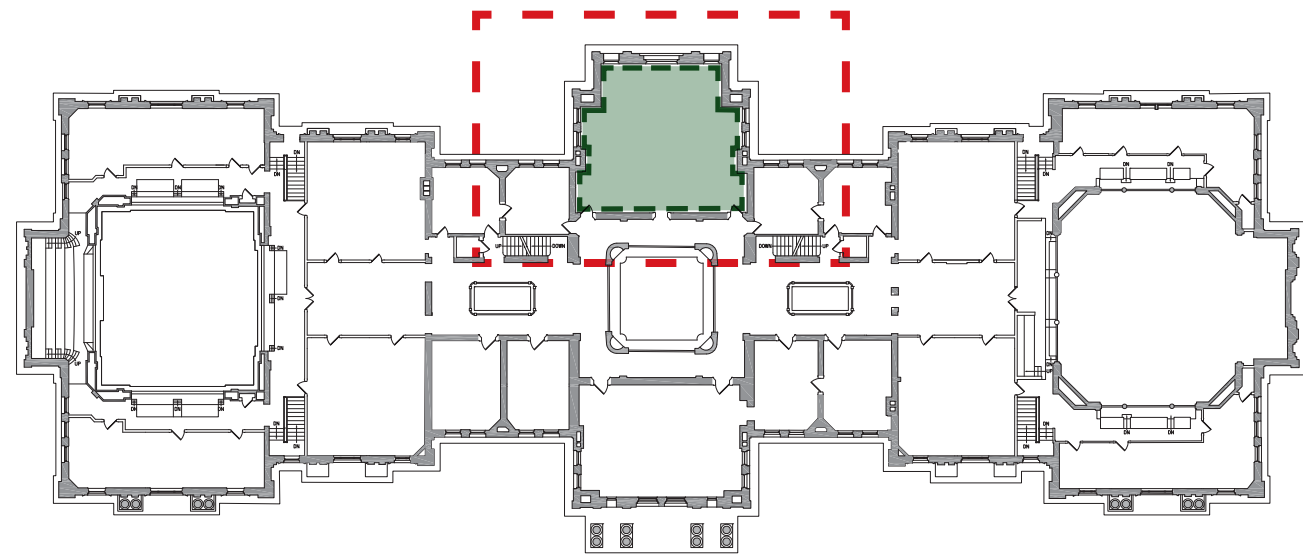


Figure 7.6.12: Third Floor Level Selective Removals Plan.

**SECOND & THIRD FLOOR OPTIONS**

**TOTAL SQUARE FOOTAGE: 1350 SQ. FT.**

**Potential Uses :**

1. Committee Room
2. Flexible Use / Offices
3. Large Meeting Room

**Potential Occupancy : 10 - 49 Occupants / Users, depending on layout.**

COMMITTEE ROOM

COLUMN



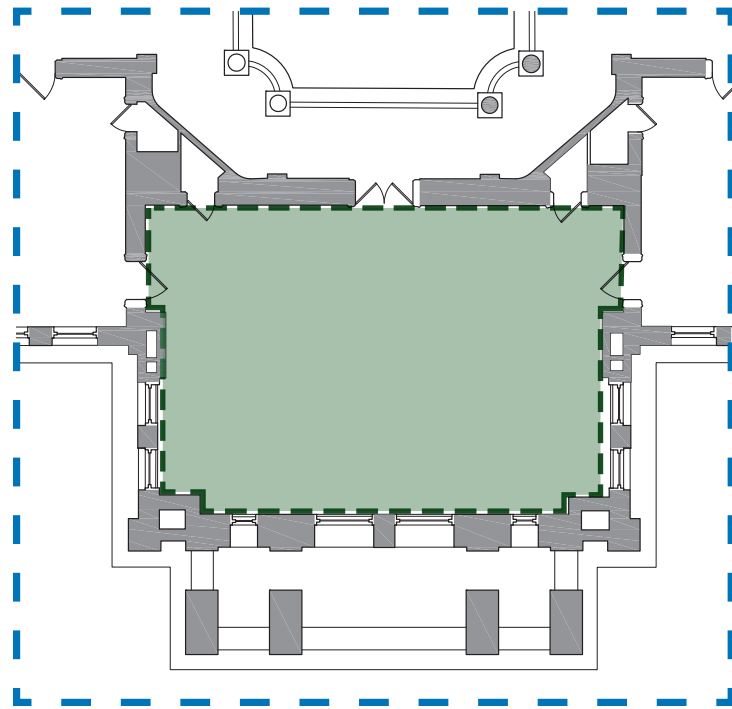


Figure 7.6.15: Second Floor Level Senate Chamber Support Space, South [Phase III - 1917].

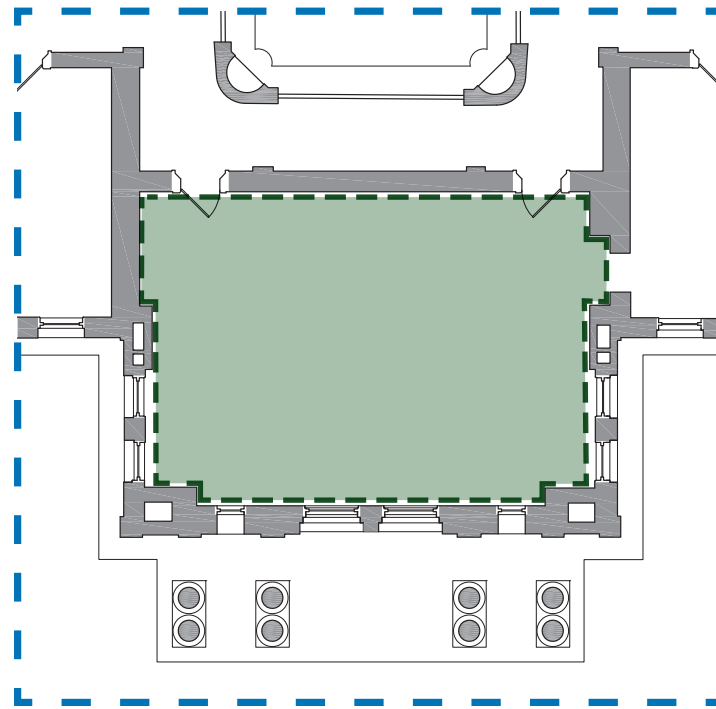


Figure 7.6.16: Third Floor Level Senate Chamber Support Space, South [Phase III - 1917].

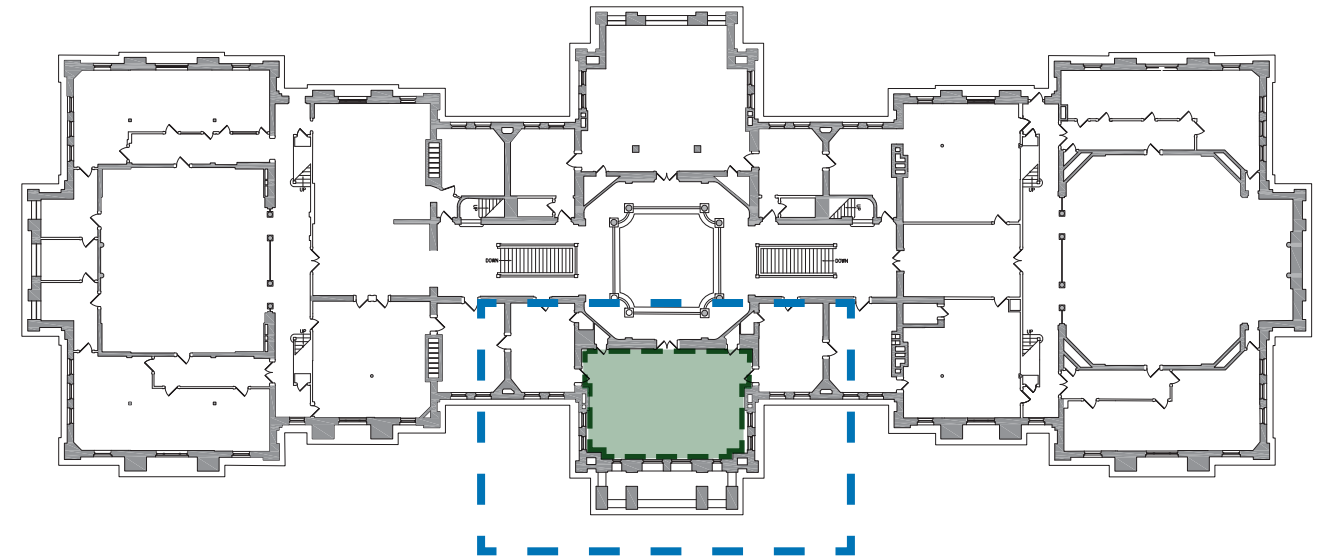
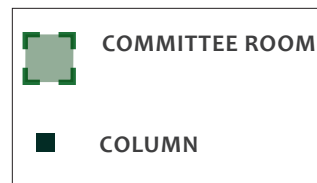


Figure 7.6.17: Second Floor Level Selective Removals Plan.



#### SECOND & THIRD FLOOR OPTIONS

**TOTAL SQUARE FOOTAGE: 1075 SQ. FT.**

#### Potential Uses :

1. Committee Room
2. Flexible Use / Offices
3. Large Meeting Room

**Potential Occupancy :** 8 - 49 Occupants / Users, depending on layout.

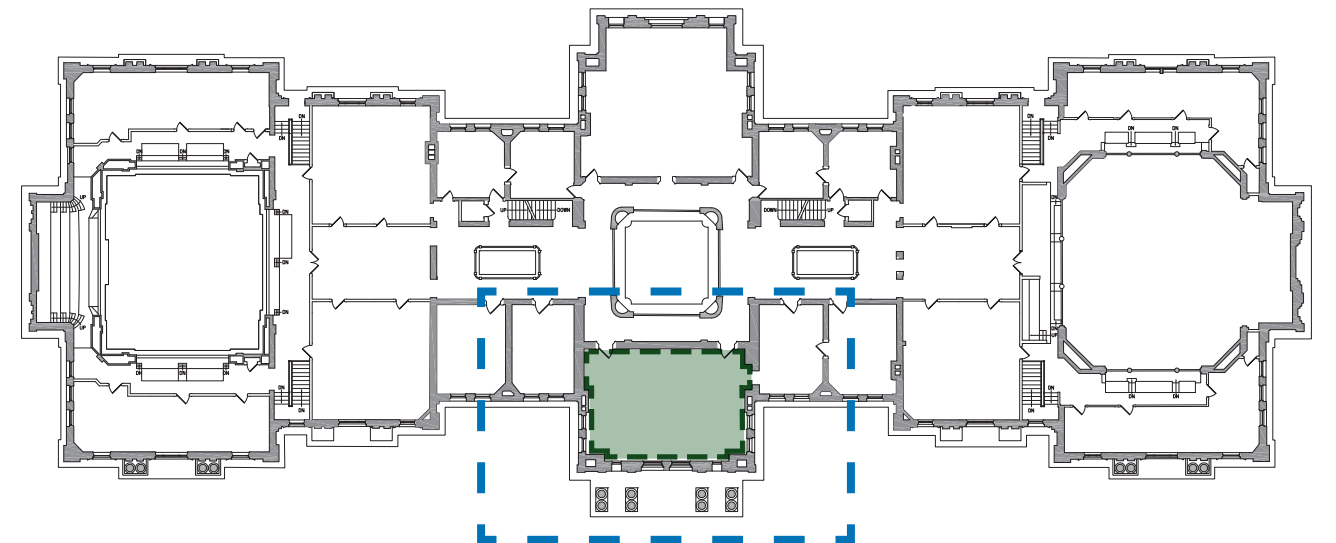


Figure 7.6.18: Third Floor Level Selective Removals Plan.

**OPTIONS**

**TOTAL SQUARE FOOTAGE: 4600 SQ. FT.**

**Potential Uses :**

1. Private Offices with Support Areas
2. Open Office Arrangement
3. Combination Private Offices and Open Office Arrangement with Support Areas

**Potential Occupancy :** 12 - 18 Occupants, depending on layout.

**PRIMARY WORK AREAS**  
PRIVATE OFFICES AND  
WORK STATIONS

**OPEN WORK AREA**

**ENTRY / RECEPTION**

**SUPPORT AREAS**

**ENTRANCE**

**COLUMN**

**NOTE:** COLUMN GRID TO BE  
VERIFIED WITH PROBES /  
DISRUPTIVE EXAMINATION.

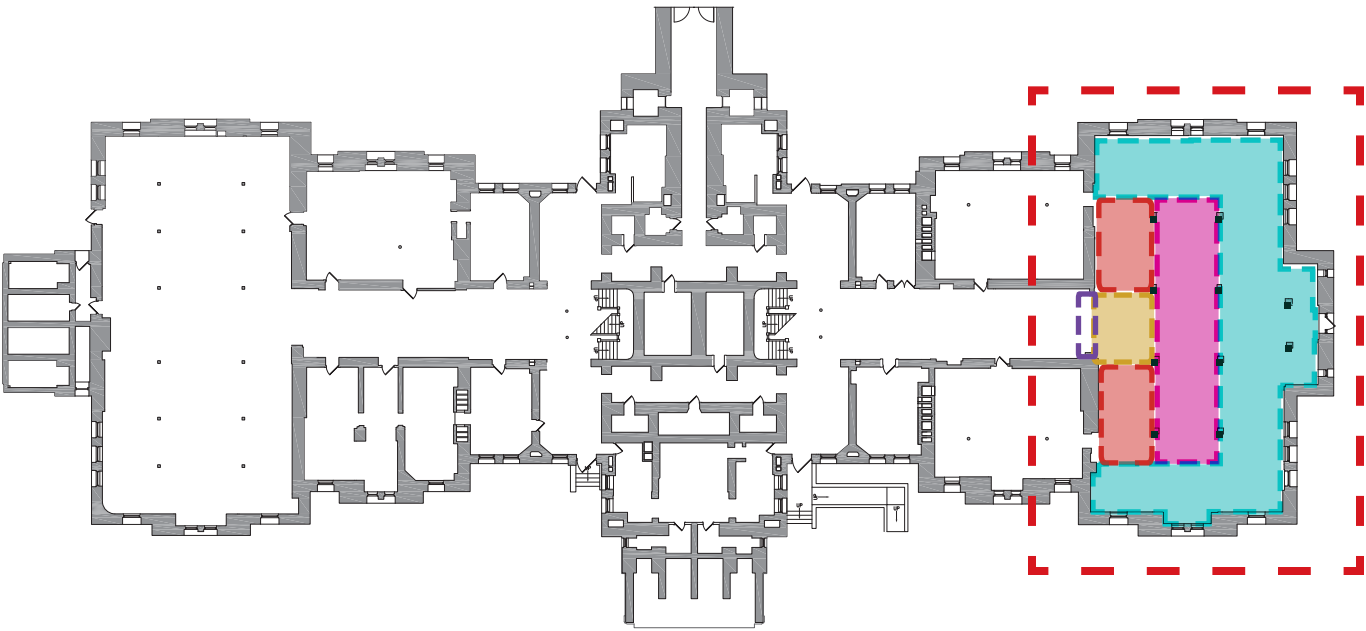


Figure 7.6.19: Basement Level Selective Removals Plan.

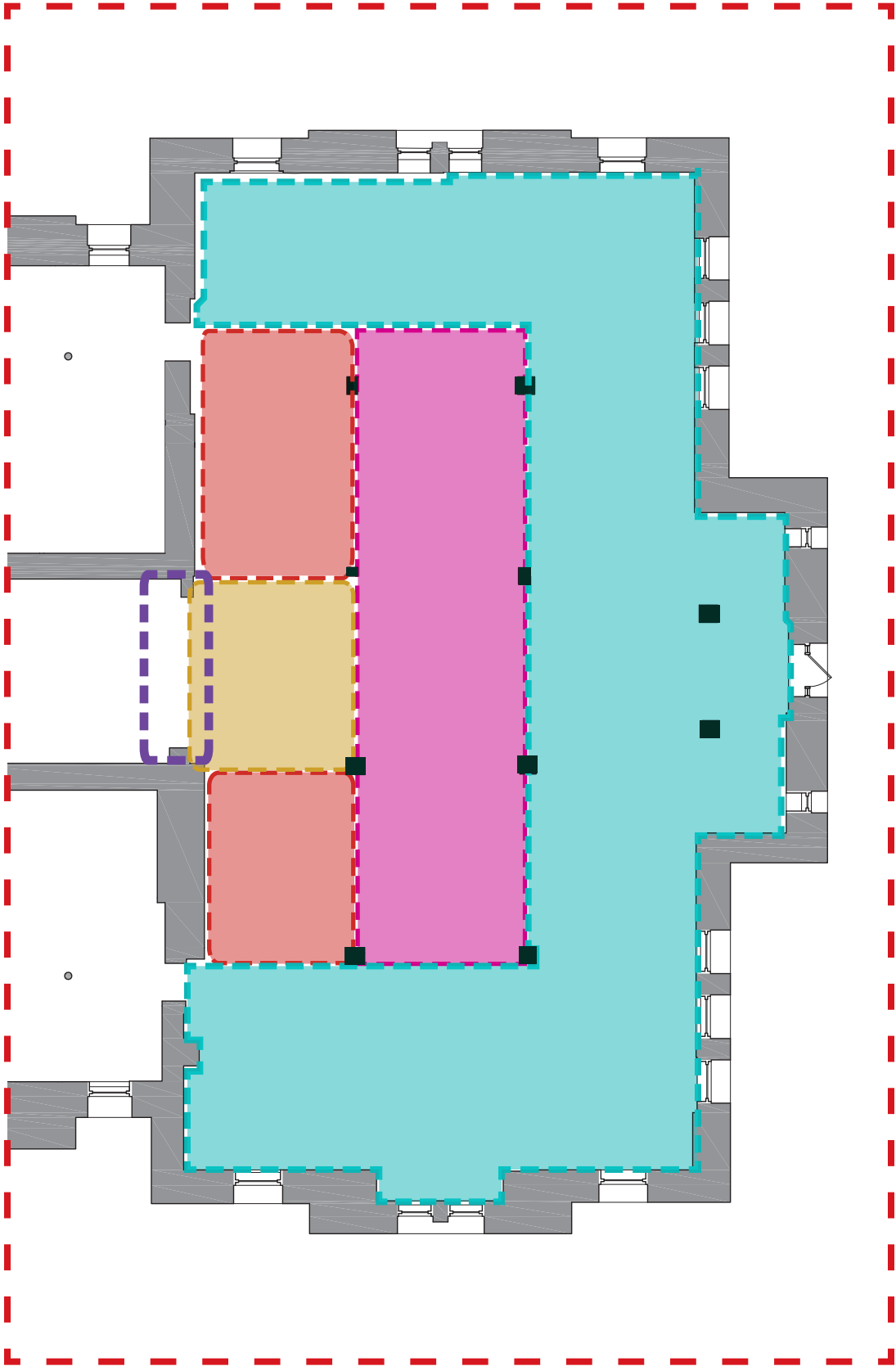
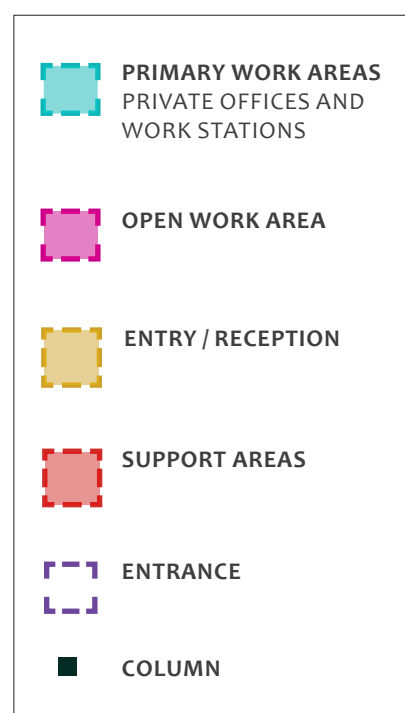
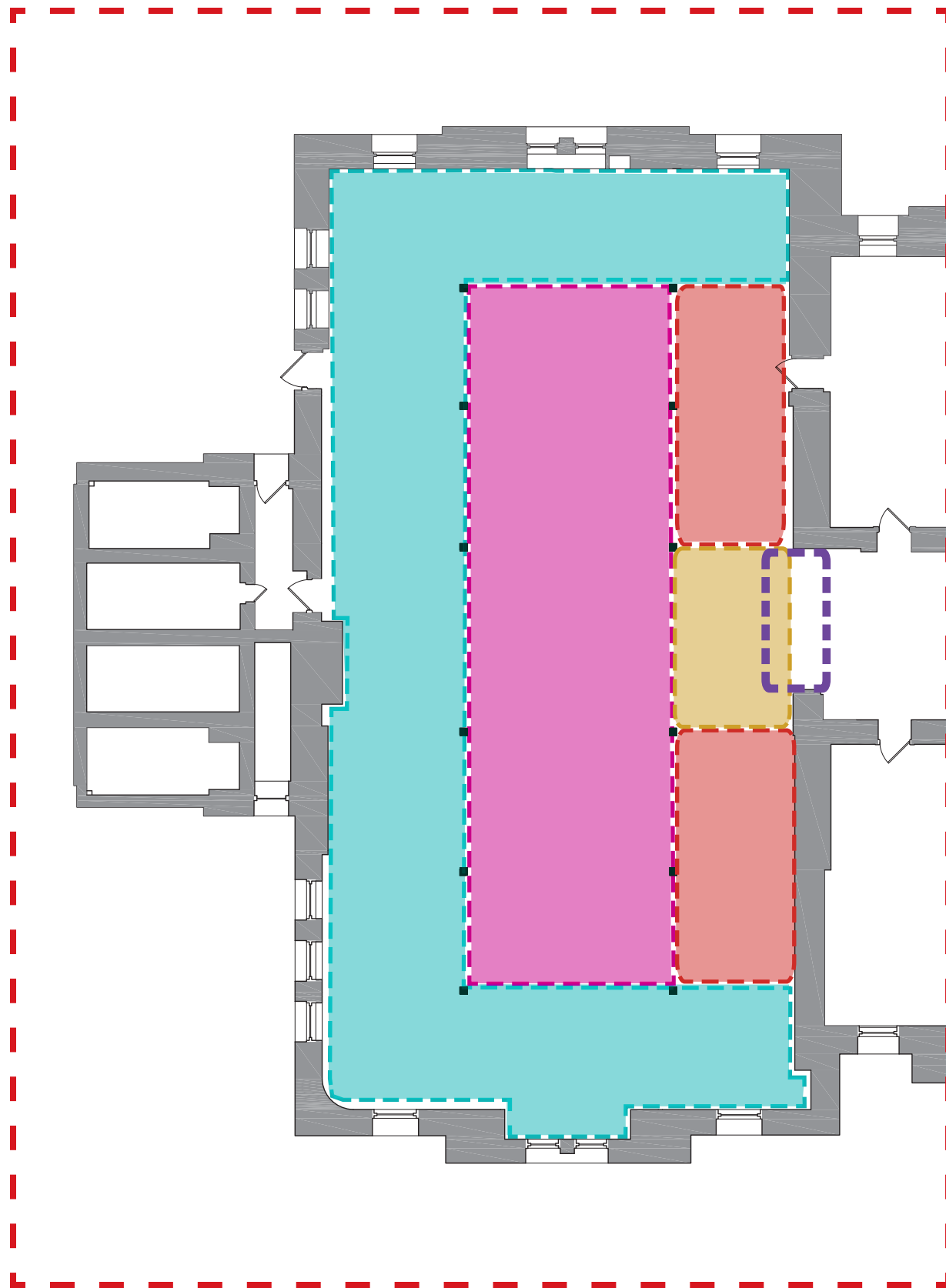


Figure 7.6.20: Enlarged Basement Level Selective Removals Plan, East Wing [Phase III - 1917]





**NOTE:** COLUMN GRID TO BE VERIFIED WITH PROBES / DISRUPTIVE EXAMINATION.

#### OPTIONS

**TOTAL SQUARE FOOTAGE: 4280 SQ. FT.**

#### Potential Uses :

1. Private Offices with Support Areas
2. Open Office Arrangement
3. Combination Private Offices and Open Office Arrangement with Support Areas

**Potential Occupancy :** 12 - 18 Occupants, depending on layout.

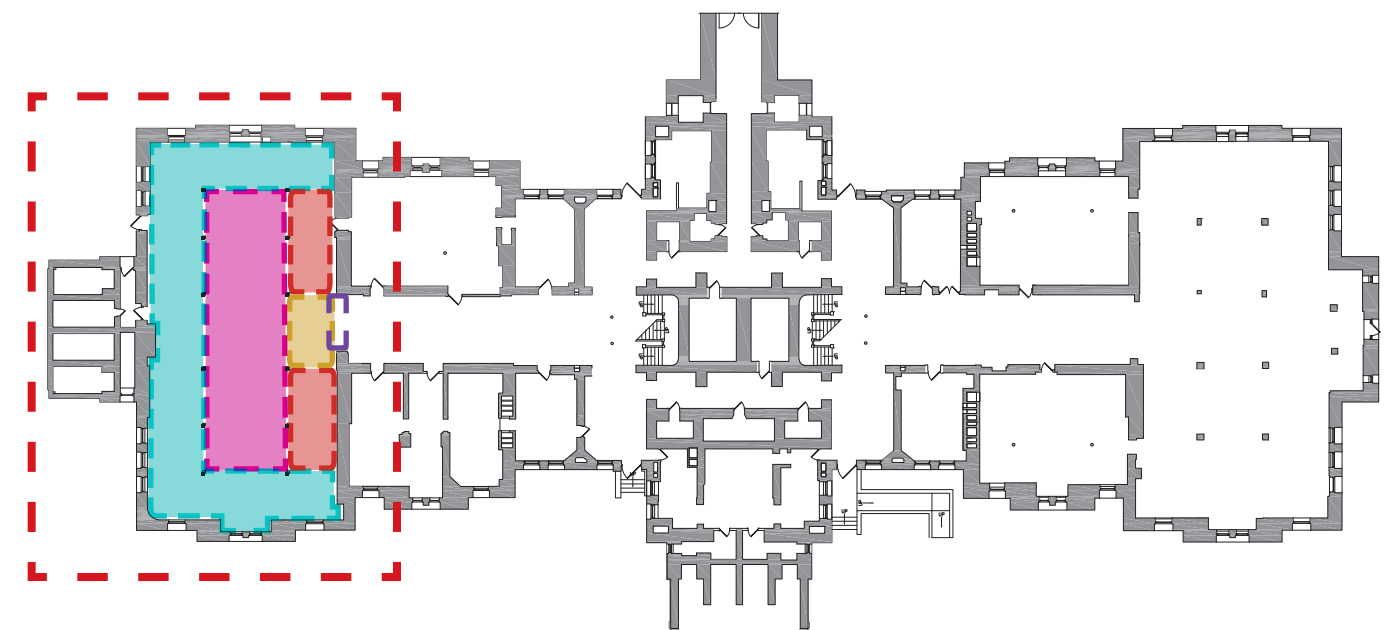


Figure 7.6.22: Basement Level Selective Removals Plan.

Figure 7.6.21: Enlarged Basement Level Selective Removals Plan, West Wing [Phase III - 1917]

**OPTIONS**

**TOTAL SQUARE FOOTAGE: 4650 SQ. FT.**

**Potential Uses :**

1. Private Offices with Support Areas
2. Open Office Arrangement
3. Combination Private Offices and Open Office Arrangement with Support Areas

**Potential Occupancy :** 12 - 18 Occupants, depending on layout.

**PRIMARY WORK AREAS**  
PRIVATE OFFICES AND  
WORK STATIONS

**OPEN WORK AREA**

**ENTRY / RECEPTION**

**SUPPORT AREAS**

**ENTRANCE**

**COLUMN**

**NOTE:** COLUMN GRID TO BE  
VERIFIED WITH PROBES /  
DISRUPTIVE EXAMINATION.

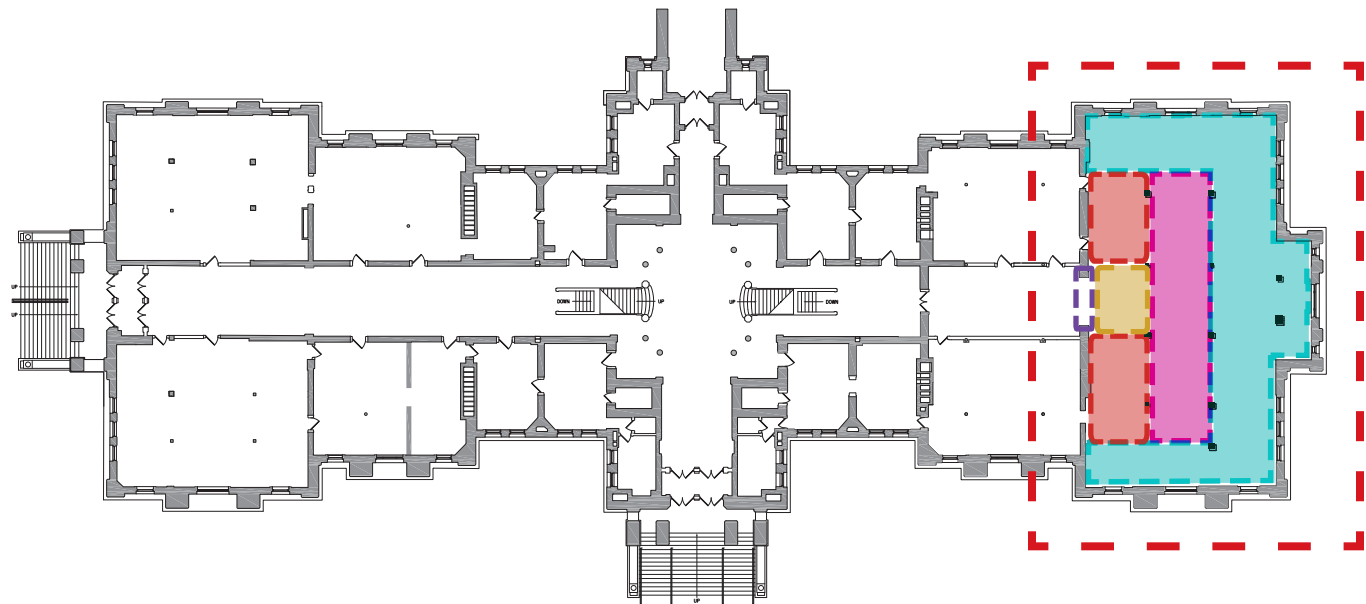


Figure 7.6.23: First Floor Level Selective Removals Plan.

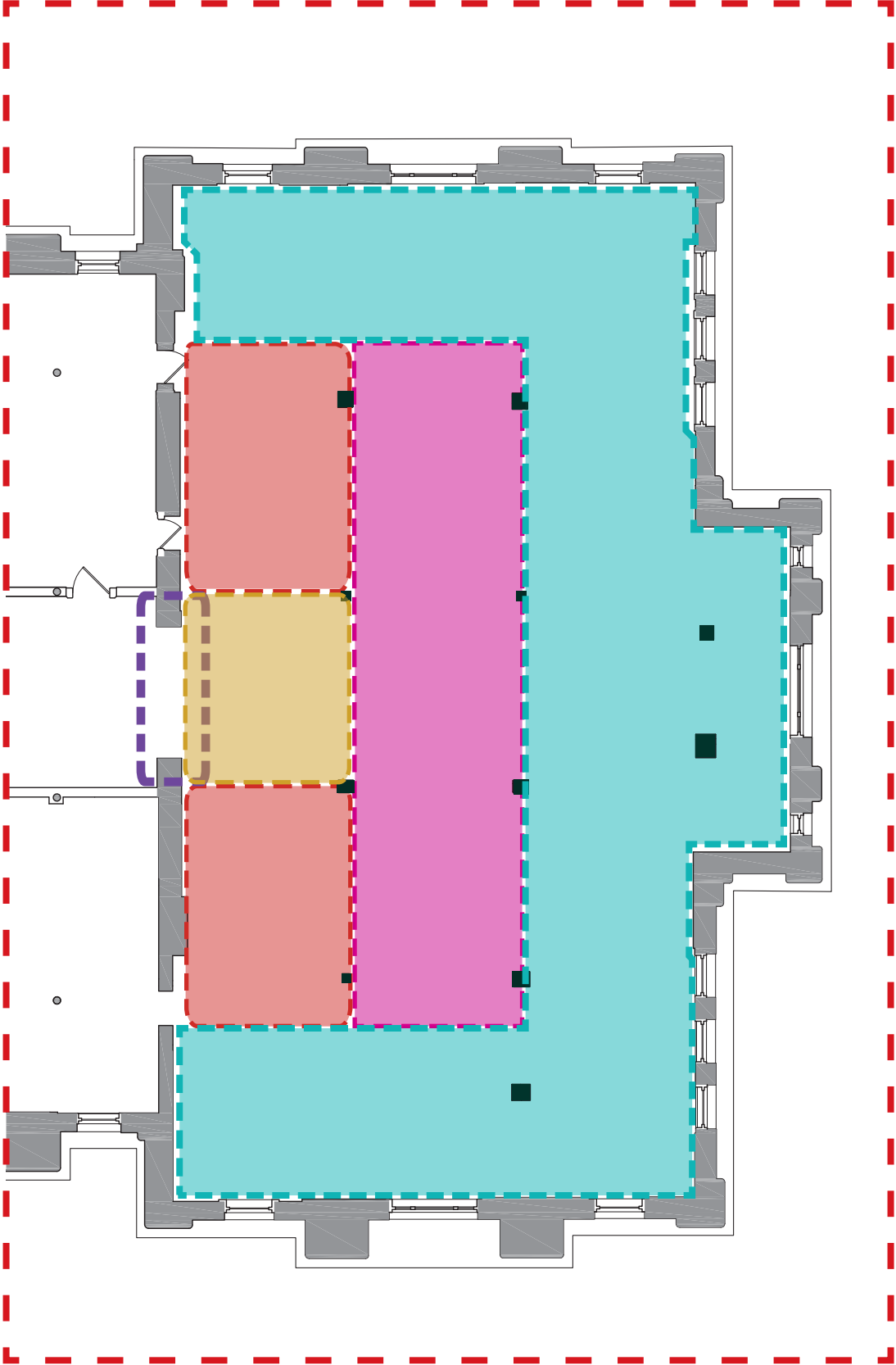


Figure 7.6.24: Enlarged First Floor Level Selective Removals Plan, East Wing [Phase III - 1917]



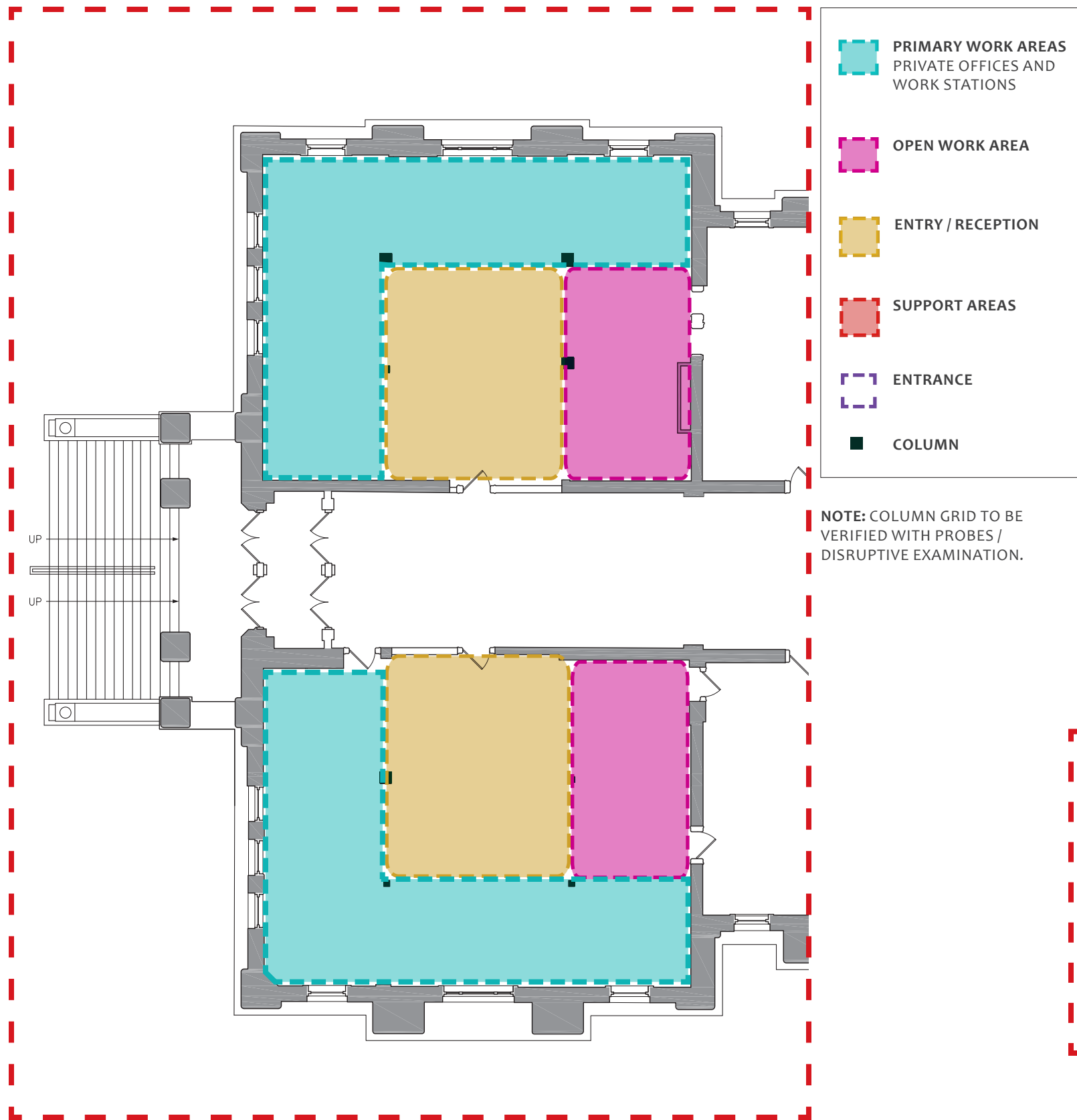


Figure 7.6.25: Enlarged First Floor Level Selective Removals Plan, West Wing, South [Phase III - 1917]

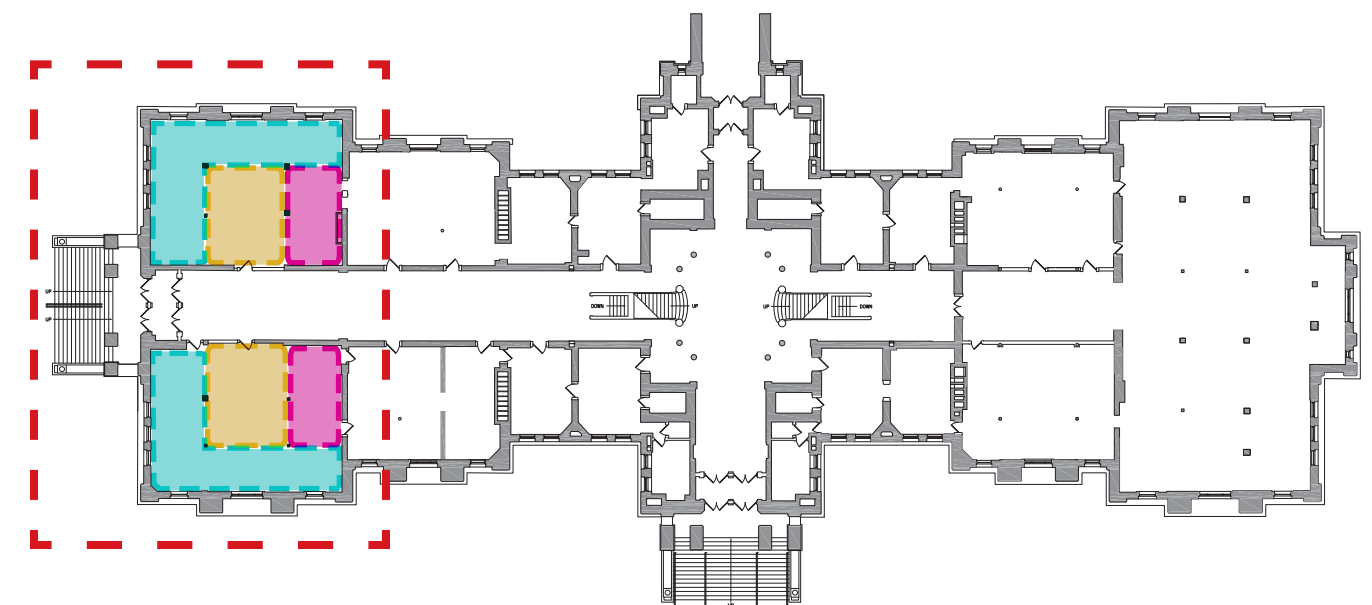


Figure 7.6.26: First Floor Level Selective Removals Plan.

#### OPTIONS

**TOTAL SQUARE FOOTAGE: 3470 SQ. FT.**

#### Potential Uses :

1. Private Offices with Support Areas
2. Open Office Arrangement
3. Combination Private Offices and Open Office Arrangement with Support Areas

**Potential Occupancy : 8 - 16\*** Occupants, depending on layout.

\* Larger occupant number [16] represents cumulative occupant load of areas north and south of monumental corridor.

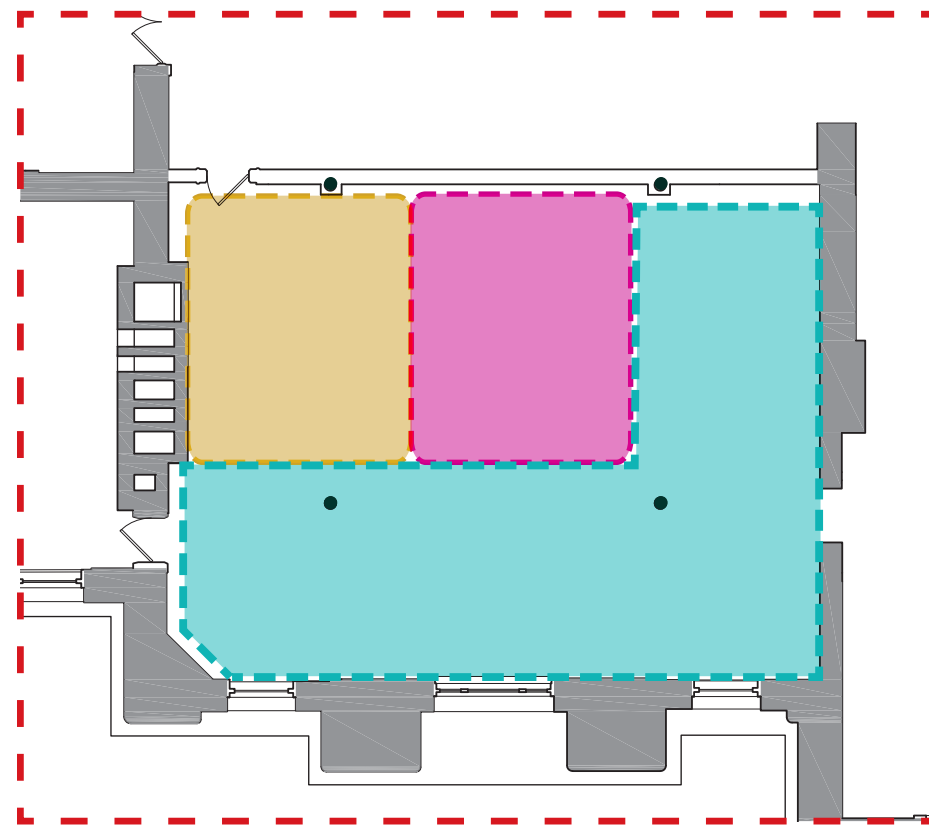


Figure 7.6.27a: Enlarged First Floor Level Selective Removals Plan, Southeast [Phase II - 1890]

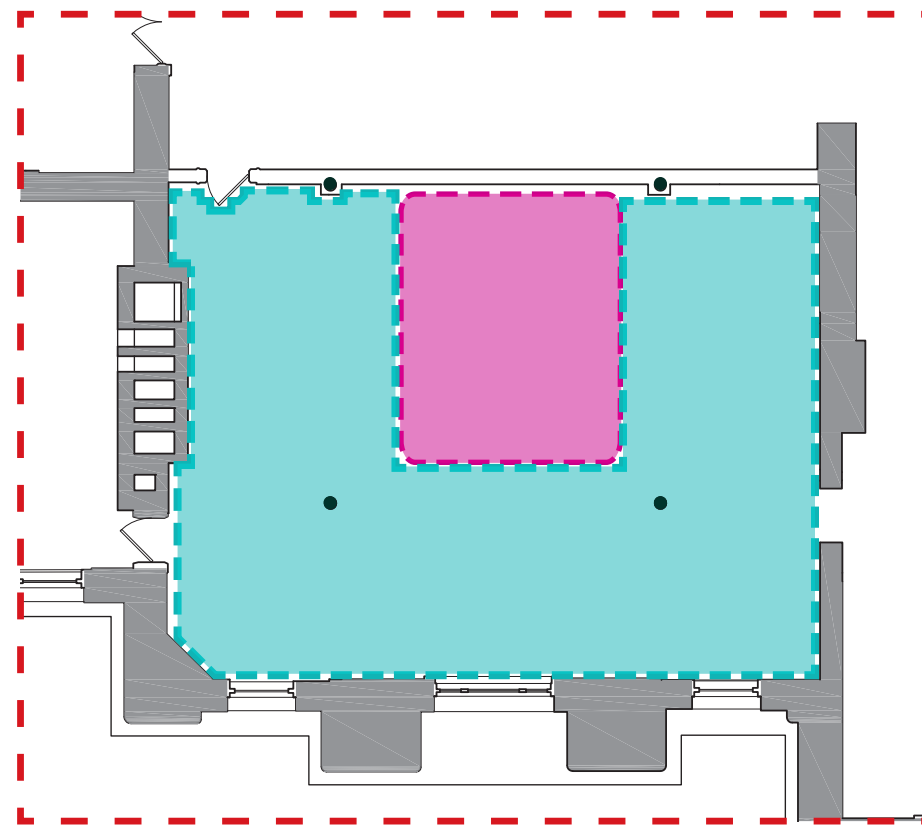


Figure 7.6.27b: Enlarged First Floor Level Selective Removals Plan, Southeast [Phase II - 1890]

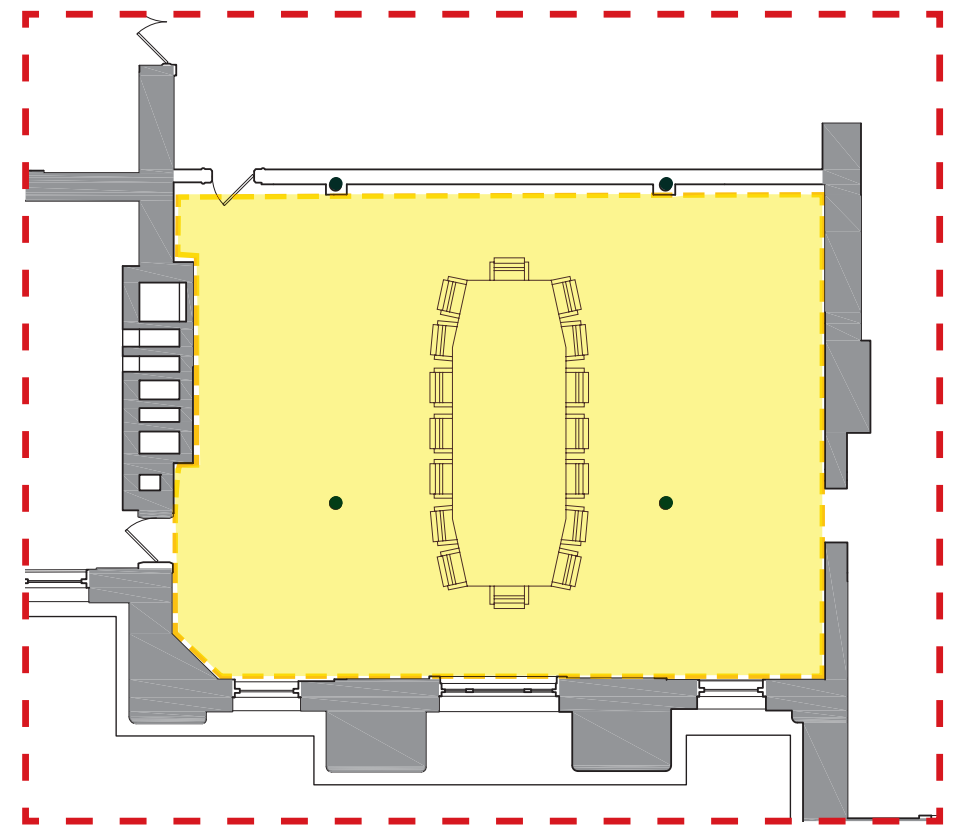


Figure 7.6.27c: Enlarged First Floor Level Selective Removals Plan, Southeast [Phase II - 1890]

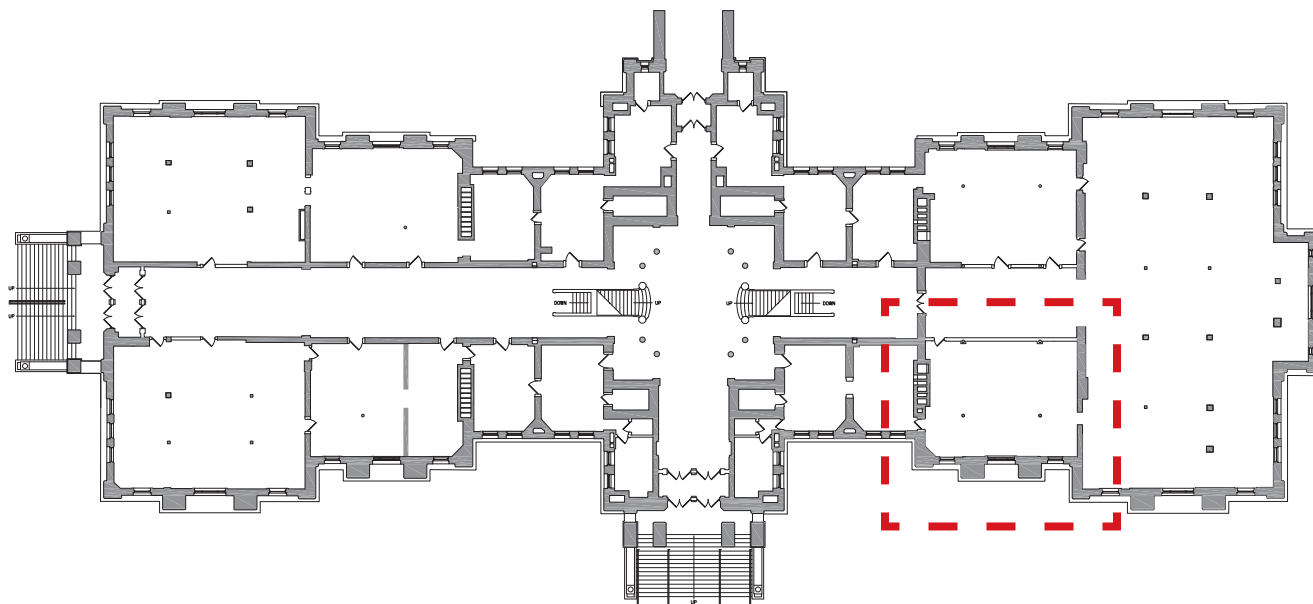


Figure 7.6.28: First Floor Level Selective Removals Plan.

#### OPTIONS

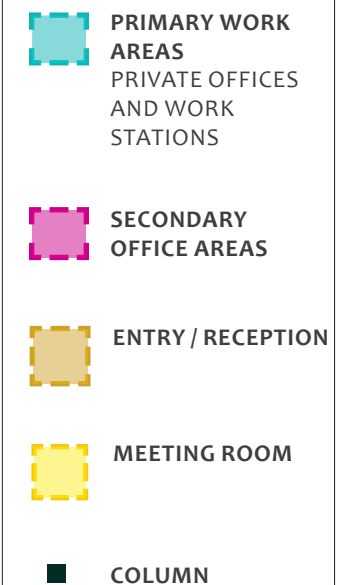
**TOTAL SQUARE FOOTAGE: 1085 SQ. FT.**

#### Potential Uses :

1. Private Offices with Support Areas
2. Open Office Arrangement
3. Combination Private Offices and Open Office Arrangement with Support Areas
4. Large Meeting Room

**Potential Occupancy :** 4 - 30\* Occupants / Users, depending on layout.

\* Larger occupant / user number [30] represents Large Meeting Room space use.



**NOTE:** COLUMN GRID TO BE VERIFIED WITH PROBES / DISRUPTIVE EXAMINATION.





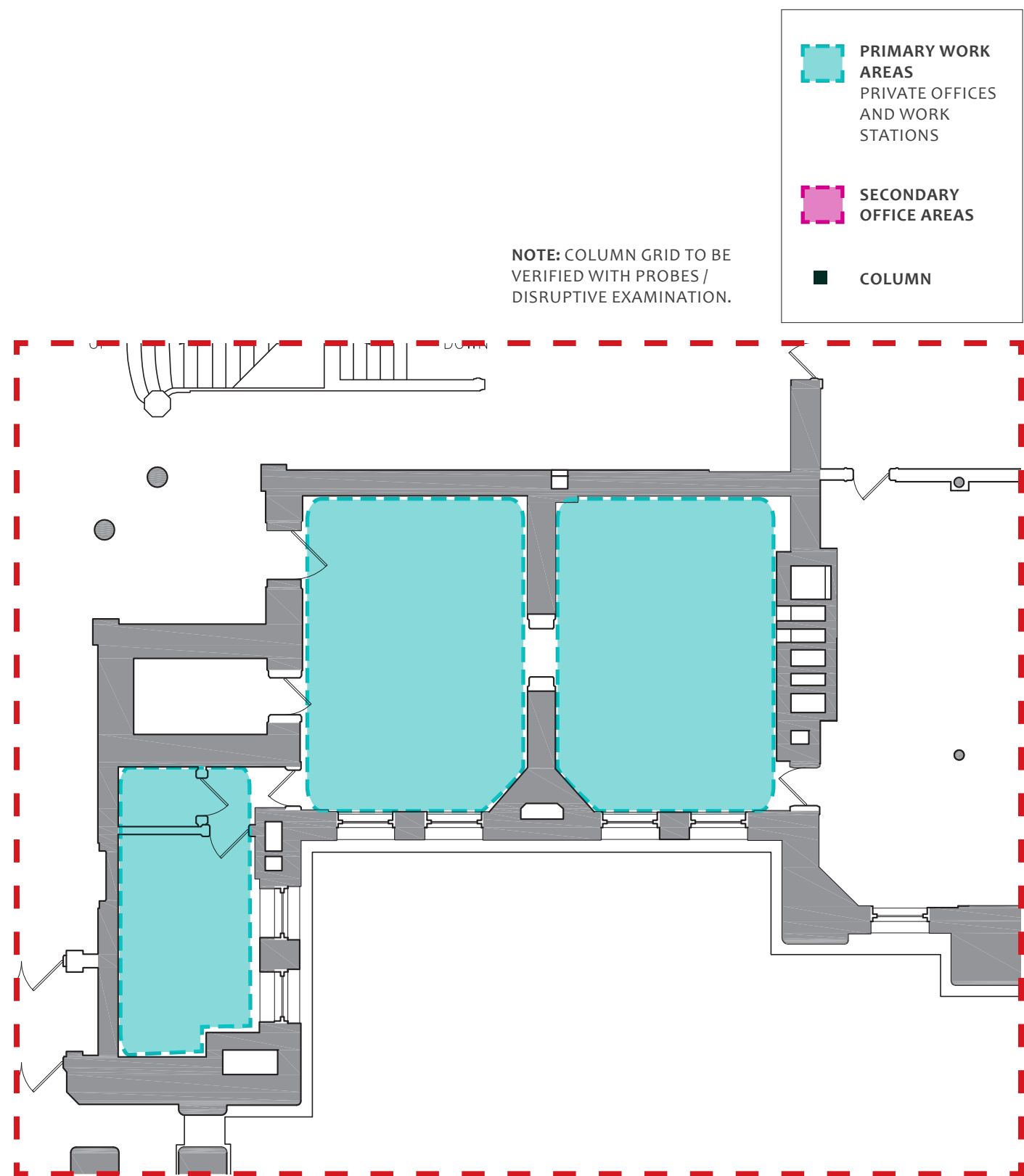


Figure 7.6.29: Enlarged First Floor Level Selective Removals Plan, Southeast [Phase I - 1888]

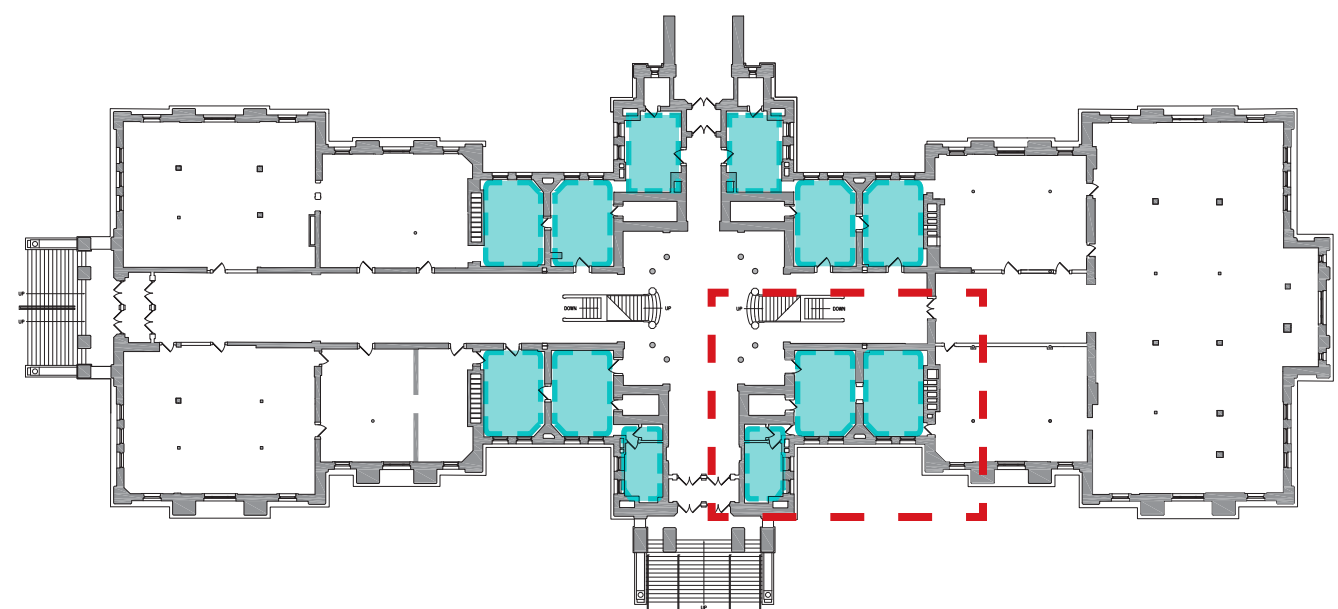


Figure 7.6.30: First Floor Level Selective Removals Plan.

**OPTIONS**

**TOTAL SQUARE FOOTAGE: 840 SQ. FT.**

**Potential Uses :**

1. Private Offices with Support Areas
2. Open Office Arrangement
3. Combination Private Offices and Open Office Arrangement with Support Areas

**Potential Occupancy :** 3 - 6\* Occupants, depending on layout.

\* Larger occupant number [6] represents cumulative occupant load of all three spaces.



The Proposed Scope of Work indicates the following:

- The work will be highly invasive and will impact **every space of the building**, as well as the **entire exterior building envelope**.
- Both exterior and interior scaffold will be needed to perform the work
- Extensive protection will be required to protect important elements of the building during construction, such as the railings, wainscoting, murals, door surrounds and millwork, etc.

In simple terms, it will be a comprehensive rehabilitation and restoration that will impact every space, and every surface in each space.

The State of Wyoming has wisely chosen to vacate the building during construction to ensure that this important undertaking is executed in the most efficient and cost effective way possible.

The **Sequence of Implementation** and the **Project Budget** were prepared using the Scope of Work as delineated in this Section and the assumption that that the building will be vacant during construction.

