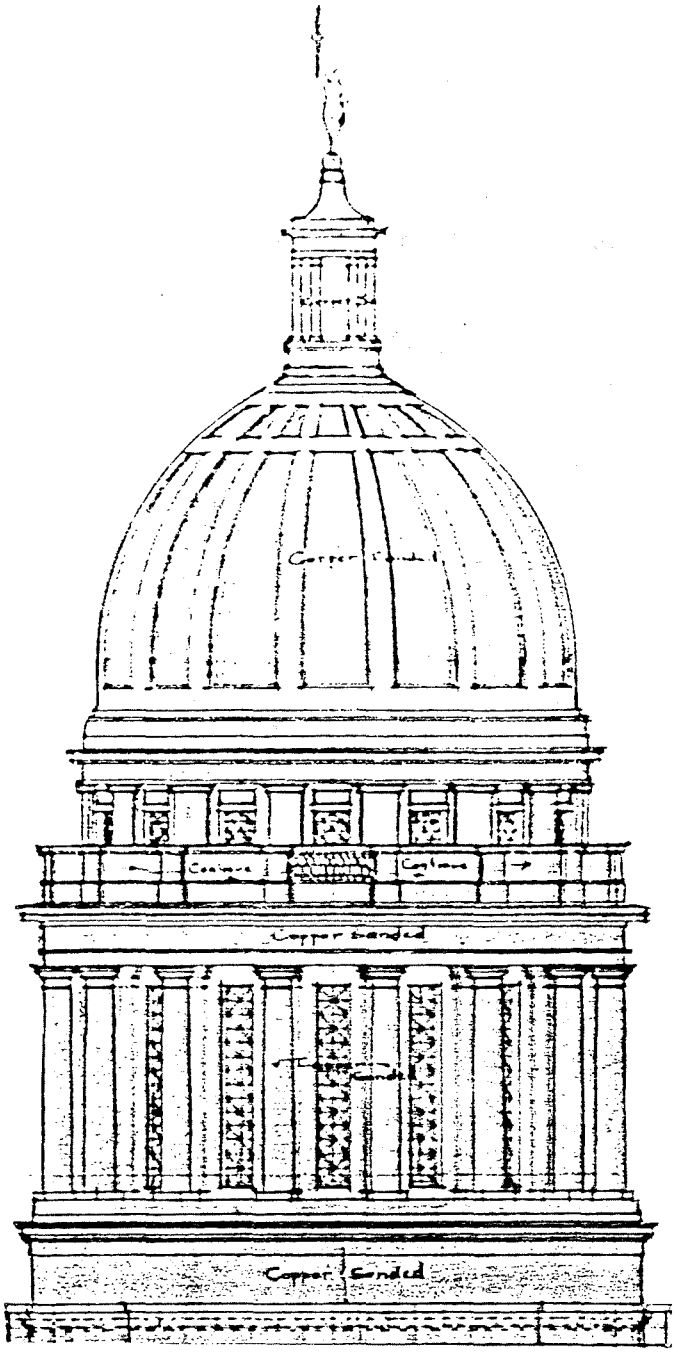
STATE CAPITOL BUILDING

PLANNING STUDY PHASE I



MOORE/WEINRICH & WOODWARD ARCHITECTS

STATE CAPITOL BUILDING
PLANNING STUDY, PHASE 1

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INTRODUCTION

We are pleased to submit for your review the State Capitol Building Planning Study, Phase 1.

The purpose of this Study is threefold:

One, to document existing conditions; two, analyze patterns of present use and space use efficiencies; and three, propose patterns of use more functionally appropriate and spatially efficient yet respectful of the building's architectural heritage and traditional spatial organization around the separation of governmental authority.

Existing conditions are described in general terms under the headings of Historical Character, Handicapped Accessibility, Building Systems, and Life Safety Code Compliance. In addition to these general summaries, we have developed a complete set of "As built" drawings including floor plans and cross sections for the entire building. Forming the basis of this Study, these drawings represent the first accurate record of existing building layout compiled in recent memory.

Present space utilization is documented in the enclosed Area Analysis and Space Allocation tables. Categories of space use are defined, summarized on a floor by floor and total building basis, and resultant space use efficiencies determined.

Finally, a plan for partial space reorganization and suggestions for future growth within the Capitol Building is presented.

In developing this Study, it has become apparent that, while the building's facilities are already heavily utilized and in some cases over utilized, there remain yet additional outstanding demands for more functional space. Many work areas presently in place today would benefit from architectural layout studies with the goal of more efficient layout and organization. This process could be carried out with minimal building impact or interruption. However, in order to satisfy present and future demands for increased space, larger construction/renovation projects must necessarily be carried out. It remains our task as planners for the building's future to develop and execute these plans in such a way as to satisfy program needs while respecting the building's unique architectural heritage and conceptual governmental organization.

It is a difficult task to develop effective long-range plans for the Capitol Building, subject as it is to the constant changes of democratic governmental authority. There is a need for continuity in the conception, authorization and implementation of a long-range planning study.

We look forward to working with you as we plan together for the future of our State Capitol Building.

HISTORICAL CHARACTER

The Capitol Building exists as one of the State's most significant architectural monuments, providing its users and visitors with a delightful variety of architectural experiences enhanced by its sweeping multi-floor vistas and open spaces.

> As the single most public building in Maine, it serves two distinct, but interrelated functions. First, the building is the center of State Government. Within its walls, the day to day business of government is carried out.
>
> Secondly, the State House stands as a tangible symbol of the achievements of the past, the vitality of the present and the aspirations of the future. In its symbolic role, the architecture, both exterior and interior, eloquently reflect the purpose for which the building was designed. From the day of its opening in 1832 through subsequent structural and cosmetic changes, the State House has been a "living museum" whose function might be termed "the fashioning of history."
>
> This is a building for all the people of Maine, which also welcomes visitors to the State who wish to share in this expression of our heritage.[1]

As planners for the future of this building, contemplating a variety of modifications and renovations, it remains our charge to respect this building's heritage and integrity in all tasks we undertake.

1. The Maine State House, A Brief History and Guide, by Earle G. Shettleworth, Jr., and Frank A. Beard, Maine Historic Preservation Commission, 1981.

HANDICAPPED ACCESSIBILITY

Although accessibility for the handicapped is provided into the building from the present northwest public entry, the building falls short of complete handicapped accessibility in a number of significant ways.

State law mandates that any renovation in excess of $100,000.00 in construction cost simultaneously bring the building up to ANSI A117.1 1986 handicapped code compliance in the following areas as a minimum:

- Parking
- Accessible route
- Doors
- Toilet Stalls
- Tactile warning of Hazards

A phased program of code compliance is a recommended long-range planning goal.

BUILDING SYSTEMS:

STRUCTURAL SYSTEMS

While complete documentation of structural systems does not exist, the following general statements can be made based on on-site investigations completed to date.

Major framing consists of steel beams bearing on interior steel columns and perimeter masonry bearing walls.

Floor systems consist of a light concrete deck protected from below by terra cotta block, and with wood floor decking immediately above. Structural calculations completed to date on areas under renovation have determined that capacities are adequate for their use. Structural investigations will be completed for individual renovation projects on a case-by-case basis to insure structural integrity is maintained.

MECHANICAL SYSTEMS

A. Existing Conditions

Heating and Ventilating

The basic heating system is a reset hot water hydronic system using radiators and convectors with Johnson pneumatic temperature control.

Steam from the new office building is piped by tunnel and converted to hot water.

The Governor's office has an air conditioning system using chilled water. The chiller is in the mechanical room adjacent to the old boiler room and the air cooled condenser is located outside at the rear of the building adjacent to the old boiler room.

The heating piping feeding the terminal units throughout the building is exposed in the spaces.

Some select offices have "window" type air conditioners with the condensing portion projecting into hallways leading to the House and Senate chambers; at best a temporary solution both functionally and aesthetically inappropriate.

The House of Representatives chambers has a heating and ventilation system consisting of finned radiation/convectors at the outside walls and an air handling unit in the short dome over the ceiling. The air distribution system is contained in dropped beams at the ceiling of the room with returns low at the rear wall. Indications are that this system does not operate effectively at certain times of the year.

The Senate chambers have convector/radiation at the perimeter with an "original equipment" gravity ventilation system.

In general, the systems are serviceable and well maintained, but may not provide adequate environmental control.

B. Future Considerations

Air Conditioning

We propose that a 4-pipe console terminal system be considered when building air conditioning is provided. Existing wall mounted heater cabinets would be replaced by terminals with both a heating and cooling capacity.

New chilled water supply and return piping runs would be required throughout the building, augmenting the existing hot water loop system. Such a system would eliminate the need for the much larger duct runs associated with an air cooling system, an issue of paramount concern when considering present space limitations and the desirability of minimal architectural intrusion.

FIRE PROTECTION

A. Existing Conditions

The fire protection system consists of hose stations in corridors and a sprinkler system at the base of the dome and in limited unfinished areas.

The building is protected by a manual alarm system with non-coded pull stations at each elevator and exit. Alarm bells are located at each floor, and are interconnected to an automatic alarm control panel in Room 115 (telephone room).

This system is connected to the city system via a supervised master box at the west entry to the building.

There are no smoke or heat detectors in the building or ventilation ductwork.

B. Future Considerations

Fire Suppression System

The Maine State Fire Marshal's office strongly recommends that a complete fire suppression (sprinkler) system be provided throughout the building.

Such a system, perhaps more than any other combination of architectural modifications, would go furthest toward addressing the safety of all building users, the protection of property, and the preservation of the building itself.

It must be understood, however, that providing a complete system throughout the building would be a costly and relatively complex undertaking. Existing space limitations and "hard" finish surfaces dictate that much of the installed system piping would necessarily be visible to building users. A thoughtful design and careful execution is required to minimize its visual impact.

ELECTRICAL SYSTEMS

A. Existing Conditions

Power System

The power source enters the building underground via an electrical manhole at 4160 volt primary power.

There is an electrical vault inside the building containing 3 single phase transformers each 167 KVA 4160 volt to 240 volt. They are connected delta to wye so that the secondary power source is 120/208 volt 3 phase 4 wire.

From the electrical vault to an electric room (just through the wall) there is a 4000 ampere busway to a 4000 ampere 120/208, 3 phase, 4 wire Westinghouse distribution panel with a 400 ampere main breaker.

The distribution panel contains 3 sub sections each with a 1200 amp breaker. Sections are basically divided according to building wings; north wing, south wing and west wing.

At each floor and on each wing there is at least one circuit breaker panel with a special panel for both house and senate areas. There are at least 10 panels that have been added as the electrical load has grown (typical are the beaver display, moose display, computer room and "No. 47", existing computer room feeder).

The 5th floor area has (2) panels that are sub panels from the west wing panel L4W4, located on the 4th floor.

There is a motor control center Westinghouse 120/208 volt, 3 phase, 4 wire with (3) sections primarily for refrigeration Power feed is 400 ampere from west wing section of distribution panel.

The power available is more than adequate for any normal growth for many years.

ENVIRONMENTAL

Asbestos

As with many older structures, asbestos is present in various quantities throughout the building. Recently completed renovation projects have uncovered asbestos, and containment measures have been completed within those immediately affected areas.

While a complete asbestos survey has been completed in the building, the results of this survey are as yet unavailable.

With the aid of this survey, areas of greatest concern can be isolated, and appropriate measures implemented.

Until that time, individual renovation projects will continue to address the presence of asbestos on a case-by-case basis.

LIFE SAFETY CODE COMPLIANCE

Objectives:

- Maximize the life safety of all users of the building
- Respect the building's unique architectural character

Architectural Features that Pose Life Safety Issues:

- Open Rotunda
- Open Stairwells
- Long Corridors

Role of State Fire Marshall

- Only code review authority participating in State House Review will review plans for all projects undertaken in the State House
- Understanding that all projects will result in "code compromises" which balance
  - Life safety needs
  - Integrity of building
  - Economic issues

Specific Technical/Design Issues

- Occupant Exiting
  - Major stairways should be completely enclosed
  - Dead end corridors should not exceed 50 feet
  - Improve 2nd exit from 5th floor
- Fire Suppression System
  - Entire building should be "sprinkled"
- Storage Areas
  - Need to be separate from occupied areas
- "House Cleaning"
  - Storage Areas
  - Wiring
- Need for Joint Long-range Planning
  - Legislative Council
  - Architect
  - State Fire Marshal
  - BPI

SPACE ALLOCATIONS - BUILDING WIDE:

	FIRST	SECOND	THIRD	FOURTH	FIFTH	TOTALS
CUSTOMARY	5,668	12,459	7,262	2,398	0	27,787
DEDICATED	3,143	6,614	7,892	2,330	0	19,979
RENEWABLE	3,652	1,491	3,694	7,276	978	17,091
"FOUND"	4,706	1,562	0	0	2,000	8,268
TOTALS	17,169	22,126	18,848	12,004	2,978	73,125

Total Gross Building Area	89,968 SF
Currently Utilized Net Building Area	64,857 SF
Utilized Building Efficiency	72%

Total Usable Net Building Area (Including Found Space)	73,125 SF
Total Gross Building Area	81%

Defines Terminology

Customary - Space which is defined as being established by custom or continued use, but could be designated as another use.

Dedicated - Space which is devoted to a specific purpose and one which will most likely not change.

Renewable - Space capable of being restored and occupied by other uses and not strongly linked to customary use.

"Found" - New usable space which currently does not exist or is under utilized.

STATE CAPITOL BUILDING

AREA ANALYSIS:

FIRST FLOOR

Customary Space

		Net Area (Square feet)	Area/ Occupant
1.	Office of Revisor of Statutes	3,348	
	Occupants Full-time (28)		120
	Occupants Full-time and Part-time (38)		88
2.	Office Policy & Legal Analysis	2,320	
	Occupants Full-time (19)		122
	Total Net Area	5,668	

Dedicated Space

1.	Museum	767
2.	Mechanical/Electrical	1,350
3.	Toilets	272
4.	Computer	460
5.	Snack Bar	294
	Total Net Area	3,143

Renewable Space			
1.	Committee Offices	1,607	
	Occupants (20)		80
2.	Labor Committee Hearing Room	720	
3.	Legislators Locker Area	898	
4.	Maintenance/Storage	229	
5.	Mail/Shipping	198	
	Total Net Area	3,652	
Found Space			
1.	Museum Area	2,040	
2.	Paint Shop	2,112	
3.	Maintenance/Telephone	554	
	Total Net Area	4,706	
Total Area - All Categories		17,169	

SECOND FLOOR

Customary Space

		Net Area (Square feet)	Area/ Occupant
1.	Appropriations Hearing Room	1,714	
2.	Office of Fiscal & Program Review	1,371	
	Occupants Full-time (14)		98
3.	Taxation Committee Offices & Hearing Rooms	756	
4.	Law Library	8,022	
5.	Information Systems	596	
	Occupants Full-Time (5)		119
	Total Net Area	12,459	

Dedicated Space

1.	Toilets	383	
2.	Executive Offices	6,231	
	Occupants (21)		297
	Total Net Area	6,614	

Renewable Space

1.	Law Library Offices/Work Room	969	
	Occupants Full-time (10)		97
2.	Committee Offices	354	
3.	Fiscal & Program Review Staff (Mezzanine Level)	168	
	Total Net Area	1,491	

Found Space

1.	Law Library-Mezzanine Spaces	1,000
2.	Information Systems/Mezz. Space	562
	Total Net Area	1,562
Total Area - All Categories		22,126

THIRD FLOOR

Customary Space

		Net Area (Square feet)	Area/ Occupant
1.	Legislative Council Chambers	898	
2.	House Minority Offices	1,500	
	Occupants Full-time (9)		166
3.	House Majority Offices	1,524	
	Occupants Full-time (11)		138
4.	Senate Minority Offices	515	
	Occupants Full-time (4)		128
5.	Senate Majority Offices	957	
	Occupants Full-time (5)		191
6.	Clerk of House Offices	1,342	
	Occupants Full-time (9)		149
7.	Speaker's Staff	258	
	Occupants Full-time (2)		129
8.	Senate President Staff	268	
	Occupants Full-time (3)		89
	Total Net Area	7,262	

Dedicated Space

1.	Senate Chambers	2,400
2.	President of Senate	428
3.	House Chambers	4,200
4.	Speaker of House	523
5.	Toilets	341
	Total Net Area	7,892

Renewable Space

1.	Sect. of Senate & Staff	777	
	Occupants Full-time (6)		130
2.	Ex. Asst. to Pres. Senate	138	
3.	Office of Executive Secretary	639	
	Occupants Full-time (5)		128
4.	House Retiring Room	613	
5.	Page Staff	379	
6.	Legislative Documents	340	
7.	Information Office	296	
	Occupants Full-time (4)		74
8.	Post Office	296	
9.	Miscellaneous	221	
	Total Net Area	3,694	

Found Space

0

Total Area - All Categories 18,848

FOURTH FLOOR

Customary Space

		Net Area (Square feet)	Area/ Occupant
1.	Committee Hearing Rooms		
	Human Resources	750	
	Judiciary	898	
	Legal Affairs	750	
	Total Net Area	2,398	

Dedicated Space

1.	Senate Gallery	420	
2.	House Gallery	1,286	
3.	Handicapped Lift/Copy	186	
4.	Toilets/Janitorial	438	
	Total Net Area	2,330	

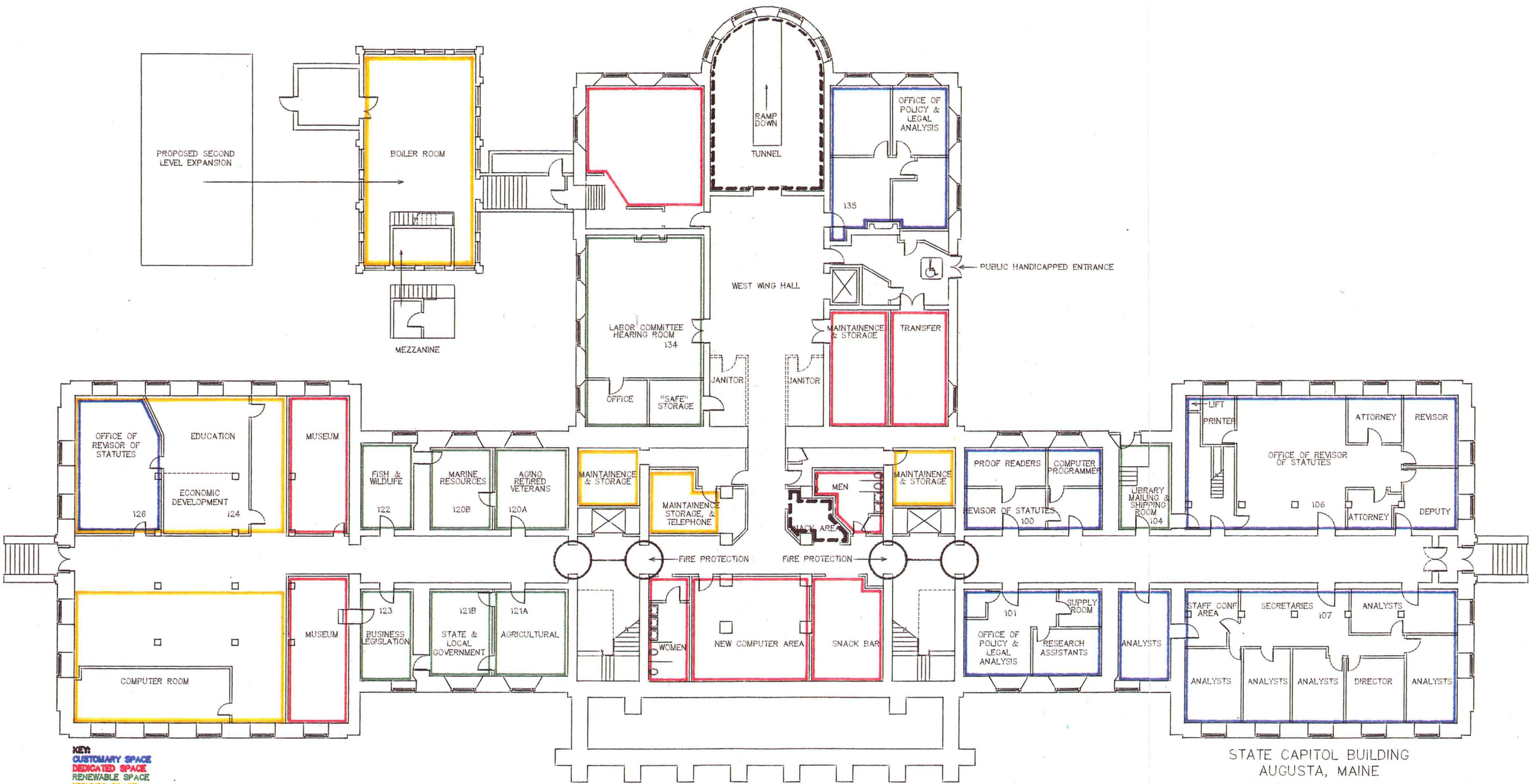
Renewable Space

1.	Banking & Insurance Hearing Room	952	
2.	Audit & Program Review Hearing Room	538	
3.	Legal Council to President	153	
4.	Senate Reporters	227	
	Occupants Full-time (3)		76
5.	Senate Stenographers	323	
	Occupants Full-time (4)		81

6.	Senate Retiring Room	684	
7.	Women's Legislative Lounge	878	
8.	Press	112	
9.	House Reporters	299	
	Occupants Full-time (3)		100
10.	Speaker of House Staff	375	
	Occupants Full-time (5)		75
11.	Maine-Canadian Office	264	
	Occupants Full-time (2)		132
12.	Press Corps	644	
	Occupants (6)		107
13.	Custodians	311	
14.	Senate Storage	311	
15.	Maintenance & Storage	204	
16.	Entrance Roof/Storage	1,001	
	Total Net Area	7,276	
Found Space		0	
Total Area - All Categories		12,004	

FIFTH FLOOR

1.	Customary Space	0
2.	Dedicated Space	0
3.	Renewable Space Press Area	978
4.	Found Space	2,000
Total		2,978



KEY:
CUSTOMARY SPACE
DEDICATED SPACE
RENEWABLE SPACE
"FOUND" SPACE

MOORE/WEINRICH ARCHITECTS BRUNSWICK, MAINE

STATE CAPITOL BUILDING
AUGUSTA, MAINE
FIRST FLOOR PLAN

SCALE: 1/20" = 1'-0"

MEZZANINE LEVEL

INFO. SYSTEMS

251 FISCAL & PROGRAM REVIEW

DN

255 INFO. SYSTEMS

DIRECTOR

253 HOUSE CHAIR APPROP.

PROPOSED MEZZANINE EXPANSION

MEZZANINE LEVEL

DN.

OFFICE

OFFICE

GOVERNOR'S OFFICE

GOVERNOR'S OFFICE

GOVERNOR'S OFFICE 254

GOVERNOR'S OFFICE

GOVERNOR'S OFFICE 245

GOV.'S OFFICE

286

GOVERNOR'S OFFICE 237

GOV.'S OFFICE

GOVERNOR'S OFFICE

GOV.'S OFFICE

GOVERNOR'S OFFICE

235

GOVERNOR'S OFFICE

GOVERNOR'S OFFICE

PROPOSED MEZZANINE

PROPOSED MEZZANINE

UP

APPROPRIATIONS HEARING ROOM

228

GOVERNOR'S OFFICE

226

GOV.'S OFFICE

GOVERNOR'S OFFICE

224

GOV.'S OFFICE

220

WOMEN

HALL OF FLAGS

FIRE PROTECTION

FIRE PROTECTION

MEN

JAN

LAW LIBRARY

200

LIFT

LINE OF MEZZANINE ABOVE

LAW LIBRARY

202

DIRECTOR

227 SENATE CHAIR

DEPUTY

ANALYSTS

PRICIPAL ANALYST

ANALYST

PRINCIPAL ANALYST

ANALYSTS

225 OFFICE OF FISCAL & PROGRAM REVIEW

223 TAXATION COMMITTEE OFFICE

222 TAX HEARING ROOM

201 DIRECTOR

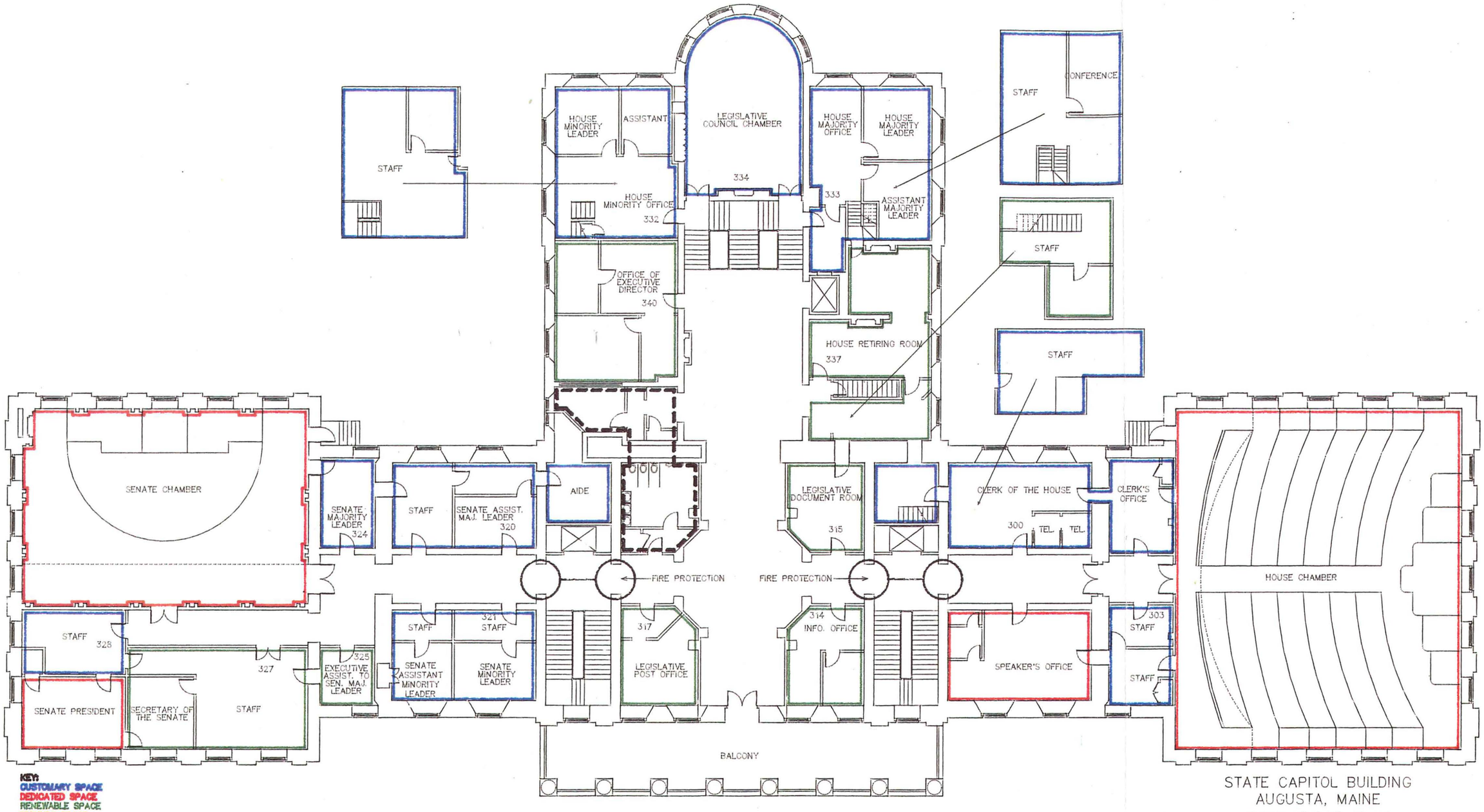
LAW LIBRARY

KEY:
CUSTOMARY SPACE
DEDICATED SPACE
RENEWABLE SPACE
"FOUND" SPACE

MOORE/WEINRICH ARCHITECTS BRUNSWICK, MAINE

STATE CAPITOL BUILDING
AUGUSTA, MAINE
SECOND FLOOR PLAN

SCALE: 1/20" = 1'-0"



KEY:
CUSTOMARY SPACE
DEDICATED SPACE
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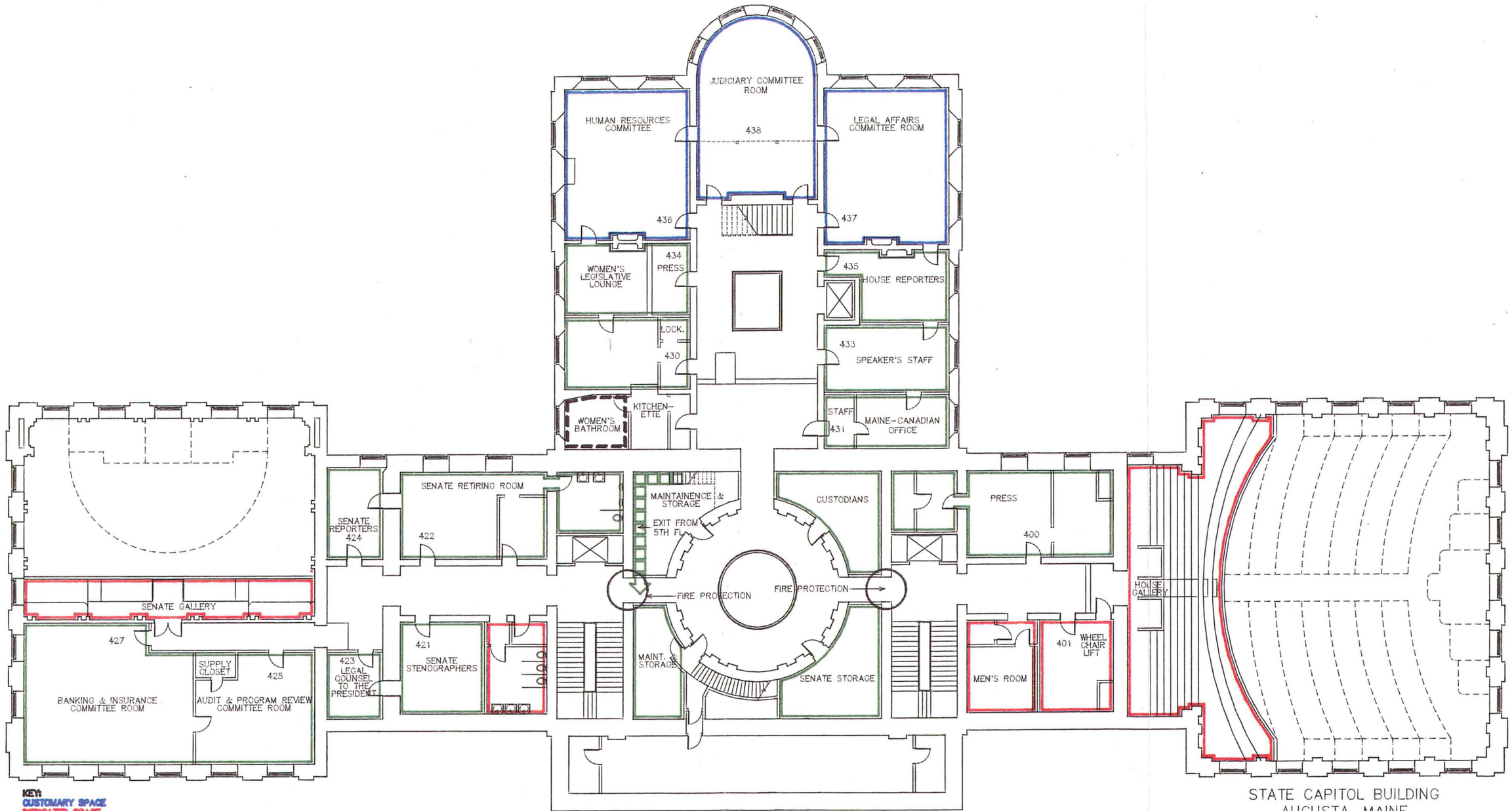
"FOUND" SPACE

MOORE/WEINRICH ARCHITECTS BRUNSWICK, MAINE

STATE CAPITOL BUILDING
AUGUSTA, MAINE
THIRD FLOOR PLAN

SCALE: 1/20" = 1'-0"



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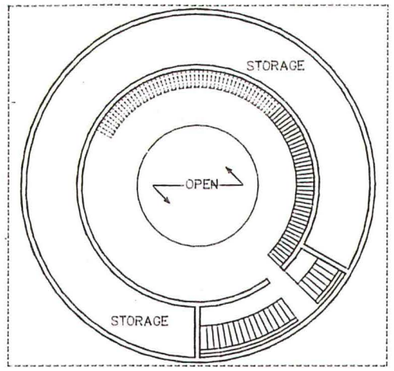
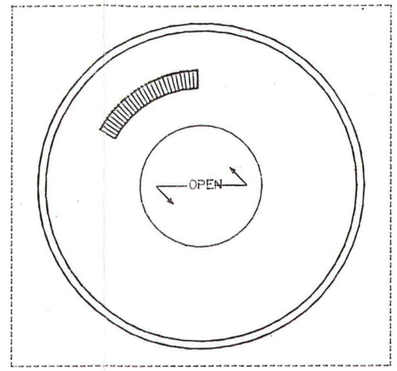
MOORE/WEINRICH ARCHITECTS BRUNSWICK, MAINE

STATE CAPITOL BUILDING
AUGUSTA, MAINE
FOURTH FLOOR PLAN

SCALE: 1/20" = 1'-0"



SIXTH LEVEL DOME



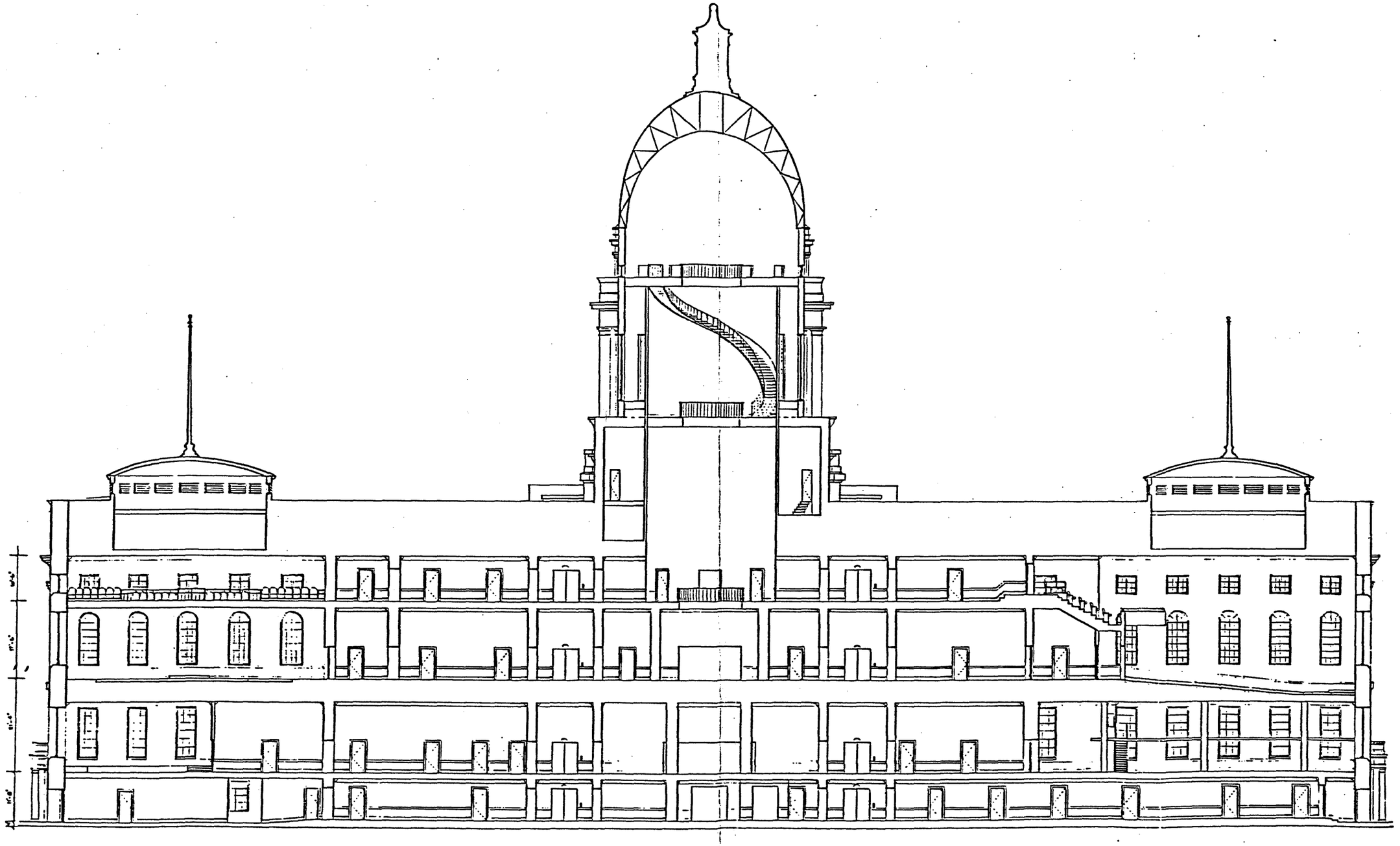
SEVENTH LEVEL DOME

KEY:
CUSTOMARY SPACE
DEDICATED SPACE
RENEWABLE SPACE
"FOUND" SPACE

MOORE/WEINRICH ARCHITECTS BRUNSWICK, MAINE

STATE CAPITOL BUILDING
AUGUSTA, MAINE
FIFTH FLOOR PLAN

SCALE: 1/20" = 1'-0"



BUILDING CROSS SECTION
SCALE: 1/8"=1'-0"

MOORE/WEINRICH & WOODWARD ARCHITECTS
83 PLEASANT STREET - BRUNSWICK, MAINE 04011 207-729-1536

STATE CAPITOL BUILDING
Augusta, Maine

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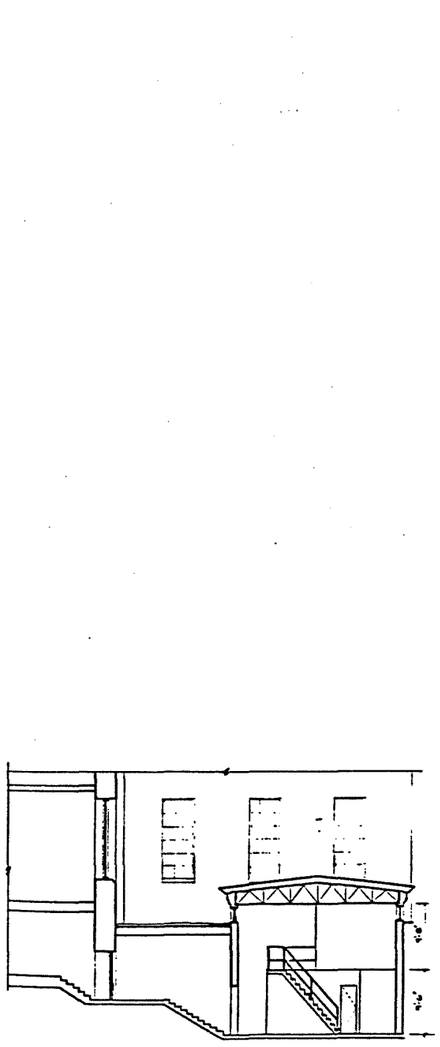

BOILER HOUSE CROSS SECTION

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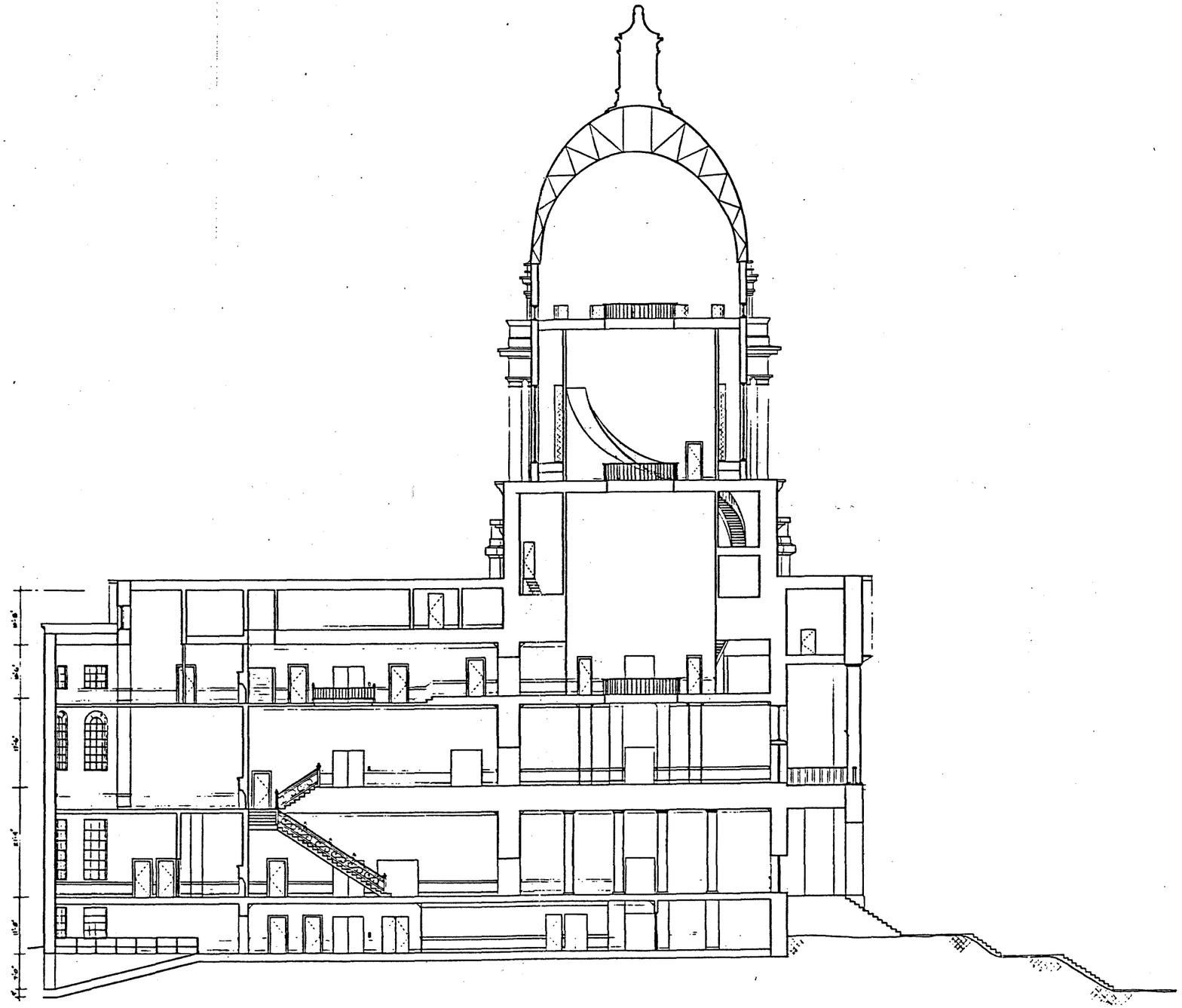

WEST WING CROSS SECTION

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MOORE/WEINRICH & WOODWARD ARCHITECTS
82 PLEASANT STREET • BRUNSWICK, MAINE 04011 207-729-1636

STATE CAPITOL BUILDING

Augusta, Maine

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