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COOPER ACADEMY

ADDITIONS AND RENOVATIONS

849 NORTH MIAL STREET, CLAYTON, NC 27520

JOHNSTON COUNTY BOARD OF EDUCATION

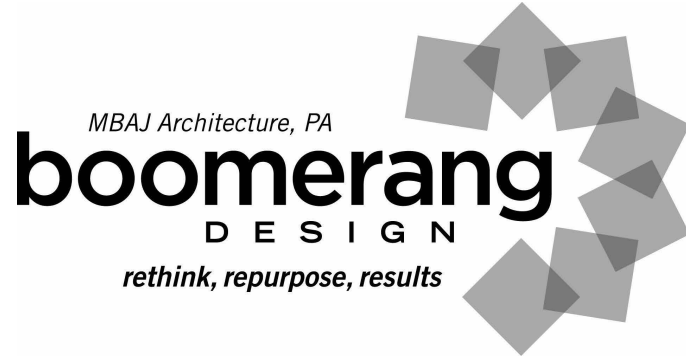
2320 US 70 BUSINESS HWY EAST,

SMITHFIELD, NC 27577

LOCATION MAP



ARCHITECTURAL



6131 FALLS OF NEUSE ROAD
SUITE 204
RALEIGH, NC 27609
P: (919) 573-6400

CIVIL/LANDSCAPE



CLH DESIGN, P.A.
400 REGENCY FOREST DR., SUITE 105
CARY, NC 27518
P: (919) 319-6716

STRUCTURAL



LYNCH MYKINS STRUCTURAL ENGINEERS, PC
302 N. WEST ST., SUITE 105
RALEIGH, NC 27603
P: (919) 782-1833

PLUMBING, MECHANICAL
& ELECTRICAL



PROGRESSIVE COLLABORATIVE DESIGN
3101 POPLARWOOD CT.,
RALEIGH, NC 27604
P: (919) 790-9989

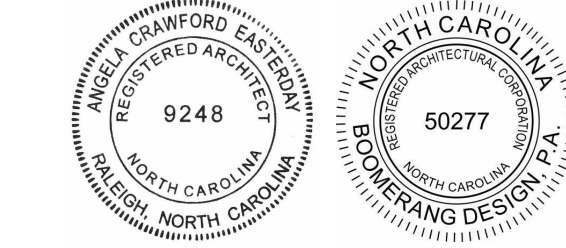


SHLEBY
207 S. Trade Street
Shelby, NC 28150
704/731-7000

CHARLOTTE
1230 W. Morehead St., Suite 214
Charlotte, NC 28208
704/731-7000

RALEIGH
6131 Falls of Neuse Rd., Suite 204
Raleigh, NC 27609
919/573-6400

LEWINGTON
1070 S. Lake Dr., Suite 1
Lewington, NC 28758
803/956-0507



COOPER ACADEMY
A & R
PROJECT TITLE

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3. DO NOT SCALE OFF DIMENSIONS.

REVISIONS		
NO.	DATE	DESCRIPTION
1	02/27/2024	ADDENDUM 2

BID SET
BID SET
2307
BOOMERANG DESIGN PROJECT NUMBER
02.07.2024
DRAWING RELEASE DATE

COVER SHEET
SHEET TITLE

G100
SHEET

2018 APPENDIX B
BUILDING CODE SUMMARY
FOR ALL COMMERCIAL PROJECTS
(BLDG#4 – CONNECTOR ADDITION)
(EXCEPT 1 AND 2-FAMILY DWELLINGS AND TOWNHOUSES)
(Reproduce the following data on the building plans sheet 1 of 2)

Name of Project: __Cooper Academy – Additions & Renovations – Building #4 (Connector) __

Address: __ 849 Mial St., Clayton, NC __ Zip Code 27520

Owner/Authorized Agent: __Brooks Moore _Phone # (919) 934-2021 __ E-Mail: brooksmore@johnston.k12.nc.us __

Owned By: ☒ City/County ☐ Private ☐ State

Code Enforcement Jurisdiction: ☒ City_Clayton NC__ ☐ County_____ ☐ State _____

CONTACT: Boomerang Design Duane Hutchins (919) 573-6400 dhutchins@thinkboomerang.com

DESIGNER FIRM NAME LICENSE # TELEPHONE # E-MAIL

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Fire Alarm PDC Engineers, PA Tom Butkovich 024651 (919) 790-9989 tbutkovich@pdcengineers.com

Plumbing PDC Engineers, PA Steve Campbell 025020 (919) 790-9989 scampbell@pdcengineers.com

Mechanical PDC Engineers, PA Steve Campbell 025020 (919) 790-9989 scampbell@pdcengineers.com

Sprinkler-Standpipe PDC Engineers, PA Steve Campbell 025020 (919) 790-9989 scampbell@pdcengineers.com

Structural Lynch Mykims, PC Stephen N Sparks 053114 (919) 782-1833 nsparks@lynchmykims.com

Retaining Walls >5' High Lynch Mykims, PC Stephen N Sparks 053114 (919) 782-1833 nsparks@lynchmykims.com

Other _____

Others* should include firms and individuals such as, truss, precast, pre-engineered, interior designers, etc.)

2018 NC CODE FOR: ☐ New Construction ☒ Addition ☐ Renovation

Alteration: ☐ Level I ☐ Level II ☐ Level III

☐ 1st Time Interior Completion

☐ Shell/Core

☐ Phased Construction – Shell/Core

☐ Renovation

2018 NC EXISTING BUILDING CODE: ☐ Prescriptive ☐ Repair ☐ Chapter 14

Alteration: ☐ Level I ☐ Level II ☐ Level III

☐ Historic Property

☐ Change of Use

CONSTRUCTED:(date) _1999 __ORIGINAL OCCUPANCY(S) (Ch. 3):_Educational (E) __

RENOVATED: (date) _____CURRENT OCCUPANCY(S) (Ch. 3):_Educational (E) __

RISK CATEGORY (table 1604.5) Current: ☐ I ☐ II ☒ III ☐ IV

Proposed: ☐ I ☐ II ☒ III ☐ IV

BASIC BUILDING DATA

Construction Type: ☐ I-A ☐ III-A ☐ IV ☐ V-A

(check all that apply) ☐ I-B ☐ II-B ☐ III-B ☐ V-B

Sprinklers: ☒ No ☐ Partial ☐ Yes ☐ NFPA 13 ☐ NFPA 13R ☐ NFPA 13D

Standpipes: ☐ No ☐ Yes Class ☐ I ☐ II ☐ III ☐ Wet ☐ Dry

Fire District: ☐ No ☒ Yes (Primary) Flood Hazard Area: ☒ No ☐ Yes

Special Inspections Required: ☐ No ☒ Yes

2018 NC Administrative Code and Policies					Appendix B for Building	
Gross Building Area:						
FLOOR	EXISTING (SQ FT)	NEW (SQ FT)	RENO/ALTER (SQ FT)	SUB-TOTAL		
6 th Floor	N/A	N/A	N/A	N/A		
5 th Floor	N/A	N/A	N/A	N/A		
4 th Floor	N/A	N/A	N/A	N/A		
3 rd Floor	N/A	N/A	N/A	N/A		
2 nd Floor	N/A	N/A	N/A	N/A		
Mezzanine	N/A	N/A	N/A	N/A		
First Flr	17,006	465	N/A	17,471		
Ground Flr			N/A	N/A		
TOTAL	17,006	465 SQ FT		17,471 SQ FT		

ALLOWABLE AREA

Primary Occupancy Classification: **SELECT ONE**

Assembly ☐ A-1 ☐ A-2 ☐ A-3 ☐ A-4 ☐ A-5

Business ☐

Educational ☒

Factory ☐ F-1 Moderate ☐ F-2 Low

Hazardous ☐ H-1 Detonate ☐ H-2 Deflagrate ☐ H-3 Combust ☐ H-4 Health ☐ H-5 HPM

Institutional ☐

1-1 Condition ☐ 1 ☐ 2

1-2 Condition ☐ 1 ☐ 2

1-3 Condition ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

1-4 Condition ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

Mercantile ☐

Residential ☐ R-1 ☐ R-2 ☐ R-3 ☐ R-4

Storage ☐ S-1 Moderate ☐ S-2 Low ☐ High-piled

☐ Parking Garage ☐ Open ☐ Enclosed ☐ Repair Garage

Utility and Miscellaneous ☐

Accessory Occupancy Classification(s): __None __

Incidental Uses (Table 509): __None __

Special Uses (Chapter 4 – List Code Sections): NC Section 430 (NC Public School)

Special Provisions: (Chapter 5 – List Code Sections): __N/A __

Mixed Occupancy: ☒ No ☐ Yes Separation: __N/A __ Hr. Exception: _____

☐ Non-Separated Use (508.3)

The required type of construction for the building shall be determined by applying the height and area limitations for each of the applicable occupancies to the entire building. The most restrictive type of construction, so determined, shall apply to the entire building.

☐ Separated Use (508.4) -

See below for area calculations for each story, the area of the occupancy shall be such that the sum of the ratios of the actual floor area of each use divided by the allowable floor area for each use shall not exceed 1.

Actual Area of Occupancy A + Actual Area of Occupancy B

Allowable Area of Occupancy A Allowable Area of Occupancy B

≤ 1

+ + ≤ 1.00

2018 NC Administrative Code and Policies Appendix B for Building

STORY NO.	DESCRIPTION AND USE	(A) BLDG AREA PER STORY (ACTUAL)	(B) TABLE 506.2.4 AREA	(C) AREA FOR FRONTAGE INCREASE ^{1,2}	(D) ALLOWABLE AREA PER STORY OR UNLIMITED ^{2,3}
First Floor	Group E	17,471 SF	12,000 SF (per 1996 existing NC force)	9,388 (per 1996 existing NC code)	21,388 sf

1 Frontage area increases from Section 506.3 are computed thus:

- Perimeter which fronts a public way or open space having 20 feet minimum width = not calculated
- Total Building Perimeter = not calculated (P)
- Ratio (F/P) = not calculated (F/P)
- W = Minimum width of public way = not calculated (W)
- Percent of frontage increase $I_f = 100 [F/P - 0.25] \times W/30$ = not calculated (%)

2 Unlimited area applicable under conditions of Section 507.

3 Maximum Building Area = total number of stories in the building x D (maximum 3 stories) (506.2).

4 The maximum area of open parking garages must comply with Table 406.5.4.

5 Frontage increase is based on the unsprinklered area value in Table 506.2.

ALLOWABLE HEIGHT			
	ALLOWABLE (TABLE 503)	SHOWN ON PLANS	CODE REFERENCE
Building Height in Feet (Table 504.3)	55 ft	22 ft	504.3
Building Height in Stories (Table 504.4)	2	1	504.4

1 Provide code reference if the "Show on Plans" quantity is not based on Table 504.3 or 504.4.

2 The maximum height of air traffic control towers must comply with Table 412.3.1

3 The maximum height of open parking garages must comply with Table 406.5.4

FIRE PROTECTION REQUIREMENTS						
BUILDING ELEMENT	FIRE SEPARATION (FEET)	RATING PROVIDED (W/ REDUCTION)	DETAIL # AND SHEET #	DESIGN # FOR RATED ASSEMBLY	DESIGN # FOR PENETRATION	DESIGN # FOR RATED JOINTS
Structural Frame, including columns, girders, trusses	>30FT	0 HR	N/A	N/A	N/A	N/A
Bearing Walls	>30FT	0 HR	N/A	N/A	N/A	N/A
Exterior	>30FT	0 HR	N/A	N/A	N/A	N/A
North	>30FT	0 HR	N/A	N/A	N/A	N/A
East	>30FT	0 HR	N/A	N/A	N/A	N/A
West	>30FT	0 HR	N/A	N/A	N/A	N/A
South	>30FT	0 HR	N/A	N/A	N/A	N/A
Interior	>30FT	0 HR	N/A	N/A	N/A	N/A
Nonbearing Walls and Partitions	>30FT	0 HR	N/A	N/A	N/A	N/A
Exterior walls	>30FT	0 HR	N/A	N/A	N/A	N/A
North	>30FT	0 HR	N/A	N/A	N/A	N/A
East	>30FT	0 HR	N/A	N/A	N/A	N/A
West	>30FT	0 HR	N/A	N/A	N/A	N/A
South	>30FT	0 HR	N/A	N/A	N/A	N/A
Interior walls and partitions	>30FT	0 HR	N/A	N/A	N/A	N/A
Floor Construction	---	0 HR	N/A	N/A	N/A	N/A
Including supporting beams and joists	---	0 HR	N/A	N/A	N/A	N/A
Floor Ceiling Assembly	---	0 HR	N/A	N/A	N/A	N/A
Column Supporting Floors	---	0 HR	N/A	N/A	N/A	N/A
Roof Construction, including supporting beams and joists	---	0 HR	N/A	N/A	N/A	N/A
Roof Ceiling Assembly	---	0 HR	N/A	N/A	N/A	N/A
Column Supporting Roof	---	0 HR	N/A	N/A	N/A	N/A
Shall Enclosures - Exit	---	0 HR	N/A	N/A	N/A	N/A
Shall Enclosures - Other	---	0 HR	N/A	N/A	N/A	N/A
Corridor Separation	---	0 HR	N/A	N/A	N/A	N/A
Occupancy Fire Barrier Separation	---	N/A	N/A	N/A	N/A	N/A
Pan/Fire Wall Separation	SEE PLANS	1A2 HR	RW.02	See G103	1905	Short G103
Smoke Barrier Separation	---	N/A	N/A	N/A	N/A	N/A
Smoke Partition	---	N/A	N/A	N/A	N/A	N/A
Tenant Dwelling Unit	---	N/A	N/A	N/A	N/A	N/A
Sleeping Unit Separation	---	N/A	N/A	N/A	N/A	N/A
Incidental Use Separation	---	N/A	N/A	N/A	N/A	N/A

* Indicate section number permitting reduction

PERCENTAGE OF WALL OPENING CALCULATIONS			
FIRE SEPARATION DISTANCE (FEET FROM PROPERTY LINES)	DEGREES OF OPENINGS PROTECTION (TABLE 705.3)	ALLOWABLE AREA (%)	ACTUAL SHOWN ON PLANS (%)
N/A	N/A	N/A	N/A

LIFE SAFETY SYSTEM REQUIREMENTS

Emergency Lighting: ☐ No ☒ Yes

Exit Signs: ☐ No ☒ Yes

Fire Alarm: ☐ No ☒ Yes ☐ Partial _____

Smoke Detection Systems: ☐ No ☒ Yes ☐ Partial _____

Carbon Monoxide Detection: ☐ No ☒ Yes

LIFE SAFETY PLAN REQUIREMENTS

Life Safety Plan Sheet # _____ Sheet G103A

☒ The method of smoke based with automatic Chapter 7)

☒ Assumed and real property line locations (if not on the site plan)

☒ Exterior wall opening area with respect to distance to assumed property lines (705.8)

☒ Occupancy types for each area as it relates to occupant load calculation (Table 1004.1.2)

☒ Occupant loads for each area

☒ Exit access travel distances (1017)

☒ Common path of travel distances (1006.2.1 & 2006.3.2(1))

☐ Dead end lengths (1020.4)

☒ Clear exit widths for each exit door

☒ Maximum calculated occupant load capacity each exit door can accommodate based on egress width (1005.3)

☒ Actual occupant load for each exit door

☐ A separate schematic plan indicating where fire rated floor/ceiling and/or roof structure is provided for purposes of occupancy separation and supporting construction for a fire barrier/fire partition/smoke barrier.

☒ Location of doors with panic hardware (1010.1.10)

☐ Location of doors with delayed egress locks and the amount of delay (1010.1.9.7)

☐ Location of doors with electromagnetic egress locks (1010.1.9.9)

☒ Location of doors equipped with hold-open devices

☐ Location of emergency escape windows (1030)

☐ The square footage of each fire area (202)

☐ The square footage of each smoke compartment for Occupancy Classification I-2 (407.5)

☐ Note any code exceptions or table notes that may have been utilized regarding the items above

Section/Table/Note	Title

ACCESSIBLE DWELLING UNITS (SECTION 1107)					
TOTAL UNITS	ACCESSIBLE UNITS REQUIRED	ACCESSIBLE UNITS PROVIDED	TYP A UNITS REQUIRED	TYP A UNITS PROVIDED	TOTAL ACCESSIBLE UNITS PROVIDED
N/A	--	--	--	--	--

2018 NC Administrative Code and Policies Appendix B for Building

ACCESSIBLE PARKING (SECTION 1106)							
LOT OR PARKING AREA	TOTAL # OF PARKING SPACES		# OF ACCESSIBLE SPACES PROVIDED			TOTAL # ACCESSIBLE PROVIDED	
	REQUIRED	PROVIDED	REGULAR WITH 5' ACCESS AISLE	VAN SPACES WITH			
				132" ACCESS AISLE	8' ACCESS AISLE		
See Civil Sheet C000 (Table)	--	--	--	--	--	--	
For Calculations & UDO req' m/s	--	--	--	--	--	--	
TOTAL							

PLUMBING FIXTURE REQUIREMENTS (TABLE 290.1)

NOTE TO REVIEWER: THIS CONNECTOR ADDITION DOES NOT ADD CLASSROOM, LAB, OR OFFICE OCCUPANT LOAD (CIRCA 1996 NCBC); SO EXISTING PLUMBING LOADS AND COUNTS TO REMAIN

USE	WATER CLOSETS		URINALS	LAVATORIES		SHOWERS / TUBS	DRINKING FOUNTAINS	
	MALE	FEMALE		MALE	FEMALE		REGULAR	ACCESSIBLE
SPACE	EXIST'G	6	2	--	6	2	--	--
NEW	--	--	--	--	--	--	--	--
REQ'D	--	--	--	--	--	--	--	--

SPECIAL APPROVALS

Special approval: (Local Jurisdiction, Department of Insurance, SCO, DPI, DHHS, ICC, etc., describe below)

NCDOI, DPI, Johnston County Inspections and The Town of Clayton

ENERGY SUMMARY

ENERGY REQUIREMENTS: The following data shall be considered minimum and any special attribute required to meet the North Carolina Energy Conservation Code shall also be provided. Each Designer shall furnish the required portions of the project information for the plan data sheet. If performance method, state the annual energy cost for the standard reference design vs annual energy cost for the proposed design.

Existing building envelope complies with code: ☐ No ☒ Yes (Existing, 1996 NCBC; Addition, 2018 NCBC)

Exempt Building: ☒ No ☐ Yes (Provide code or Statutory reference) _____

Climate Zone: ☒ 3A ☐ 4A ☐ 5A

Method of Compliance: Energy Code ☐ Performance ☒ Prescriptive

ASHRAE 90.1 ☐ Performance ☒ Prescriptive

(If "Other" specify source here) _____

THERMAL ENVELOPE (Prescriptive method only) SEE SHEET G103 FOR TYPICAL ASSEMBLIES

Roof/Ceiling Assembly (each assembly)

Description of assembly: __RA 1; PVC Membrane Roof over c.i. insulation__

U-Value of total assembly: __0.0388__

R-Value of insulation: __R-25 c.i.__

Skylights in each assembly: __N/A__

U-Value of skylight: __N/A__

Total square footage of skylights in each assembly: __N/A__

Exterior Walls (each assembly)

Description of assembly: __EW 01 AND EW.01A; Brick over 8" CMU w/ c.i. insulation__

U-Value of total assembly: __0.00999__

R-Value of insulation: __7.6 c.i.__

Openings (windows or doors with glazing)

U-Value of assembly: __.27 SUM & .29 WIN__

Solar heat gain coefficient: __.25__

Projection factor: __N/A__

Door R-Values: __1.42__

Description of assembly: __EW 02 AND EW.02A; Brick over 12" CMU w/ c.i. insulation__

U-Value of total assembly: __0.009992__

R-Value of insulation: __7.6 c.i.__

Openings (windows or doors with glazing)

U-Value of assembly: __N/A__

Solar heat gain coefficient: __N/A__

Projection factor: __N/A__

Door R-Values: __N/A__

Walls below grade (each assembly)

Description of assembly: __EW.05 (Grouted CMU or Concrete w/ foundation c.i. insulation)__

U-Value of total assembly: __0.106__

R-Value of insulation: __7.6 c.i.__

Floors over unconditioned space (each assembly)

Description of assembly: __N/A__

U-Value of total assembly: __N/A__

R-Value of insulation: __N/A__

Floors slab on grade

Description of assembly: __4" concrete slab on grade__

U-Value of total assembly: __N/A__

R-Value of insulation: __Not Required in Zone 3A__

Horizontal/Vertical requirement: __N/A__

Slab Heated: __No__

2018 APPENDIX B BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS STRUCTURAL DESIGN (PROVIDE ON THE STRUCTURAL SHEETS IF APPLICABLE)

DESIGN LOADS:

Importance Factors: Snow (I_s) 1.1 Seismic (I_e) 1.25

Live Loads: Roof 20 psf Mezzanine 150 psf Floor 40 psf (Reference General Notes for Other Loading)

Ground Snow Load: 15 psf

Wind Load: Ultimate Wind Speed 115 mph (ASCE-7) Exposure Category B

SEISMIC DESIGN CATEGORY: ☐ A ☒ B ☐ C ☐ D

Provide the following Seismic Design Parameters:

Occupancy Category (Table 1604.5) ☐ I ☐ II ☒ III ☐ IV

Spectral Response Acceleration S_s 0.165 %g S₁ 0.076 %g

Site Classification (ASCE 7) ☐ A ☐ B ☐ C ☒ D ☐ E ☐ F

Data Source: ☐ Field Test ☒ Prescriptive ☐ Historical Data

Basic structural system ☒ Bearing Wall ☐ Dual w/Special Moment Frame ☐ Building Frame ☐ Dual w/Intermediate R/C or Special Steel ☐ Moment Frame ☐ Inverted Pendulum ☐ Simplified ☒ Equivalent Lateral Force ☐ Dynamic

Analysis Procedure: ☒ Yes ☐ No

Architectural, Mechanical, Components anchored? ☐ Yes ☒ No

LATERAL DESIGN CONTROL: Earthquake ☐ Wind ☒

SOIL BEARING CAPACITIES: (Per the geotechnical engineer's report) PROVIDED IN PROJECT MANUAL

Bearing capacity: 3000 psi

N/A

2018 NC Administrative Code and Policies Appendix B for Building

2018 APPENDIX B BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS MECHANICAL DESIGN (PROVIDE ON THE MECHANICAL SHEETS IF APPLICABLE)

MECHANICAL SUMMARY

MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT

Thermal Zone

winter dry bulb 10 DEGREES

summer dry bulb 94.1 DEGREES

Interior design conditions

winter dry bulb 68 DEGREES

summer dry bulb 74 DEGREES

relative humidity 50%

Building heating load: 1,500,000 BTU/h

Building cooling load: 100 tons

Mechanical Spacing Conditioning System

Unitary

description of unit: REFER TO SCHEDULES

heating efficiency: REFER TO SCHEDULES

cooling efficiency: REFER TO SCHEDULES

size category of unit: REFER TO SCHEDULES

Boiler

Size category: If oversized, state reason.: N/A

Chiller

Size category: If oversized, state reason.: N/A

List equipment efficiencies: REFER TO SCHEDULES

2018 APPENDIX B BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS ELECTRICAL DESIGN (PROVIDE ON THE ELECTRICAL SHEETS IF APPLICABLE)

ELECTRICAL SUMMARY

ELECTRICAL SYSTEM AND EQUIPMENT

Method of Compliance: Energy Code: ☒ Prescriptive ☐ Performance

ASHRAE 90.1: ☐ Prescriptive ☐ Performance

Lighting schedule (each fixture type)

lamp type required in fixture ALL LEDs – SEE FIXTURE SCHEDULE ON SHEET E801

number of lamps in fixture ALL LEDs – SEE FIXTURE SCHEDULE ON SHEET E801

ballast type used in the fixture ALL LEDs – SEE FIXTURE SCHEDULE ON SHEET E801

number of ballasts in fixture ALL LEDs – SEE FIXTURE SCHEDULE ON SHEET E801

total wattage per fixture SEE FIXTURE SCHEDULE ON SHEET E801

total interior wattage specified vs. allowed (whole building or by space)

total exterior wattage specified vs. allowed SEE ELECTRICAL DWGS

Additional Efficiency Package Options

(When using the 2018 NCECC; not required for ASHRAE 90.1)

☐ C406.2 More Efficient Mechanical Equipment

☒ C406.3 Reduced Lighting Power Density

☐ C406.4 Enhanced Digital Lighting Controls

☐ C406.5 On-Site Renewable Energy

☐ C406.6 Dedicated Outdoor Air System

☐ C406.7 Reduced Energy Use in Service Water Heating

2018 NC Administrative Code and Policies Appendix B for Building

9451BY
207 S. Trade Street
Shelby, NC 28150
704/731-7000

CHARLOTTE
1230 W. Morehead St., Suite 214
Charlotte, NC 28208
704/731-7000

RALEIGH
6131 Falls of Neuse Rd., Suite 204
Raleigh, NC 27609
919/975-6400

LEWINGTON
1070 S. Lake Dr., Suite 1
Lewington, NC 28753
903/554-0507

COOPER ACADEMY A & R PROJECT TITLE

1. THIS DRAWING IS THE PROPERTY AND ©BOOMERANG DESIGN P.A. AND IS NOT TO BE REPRODUCED OR COPIED IN WHOLE OR IN PART. IT IS NOT TO BE USED ON ANY OTHER PROJECT AND IS TO BE RETURNED ON REQUEST.

2. MATERIALS, DIMENSIONS AND ALL OTHER CONDITIONS WHICH ARE NOT OTHERWISE DEFINED ON THIS DRAWING SHALL BE CONSTRUED AS HAVING THE SAME MEANING AS SIMILARLY INDICATED CONDITIONS WHICH ARE MORE FULLY DEFINED ELSEWHERE ON THIS PROJECT OR OTHER DRAW

2018 APPENDIX B
BUILDING CODE SUMMARY
FOR ALL COMMERCIAL PROJECTS
(BLDG#1 – LEVEL II INTERIOR ALTERATION)
(EXCEPT I AND 2-FAMILY DWELLINGS AND TOWNHOUSES)
(Reproduce the following data on the building plans sheet 1 or 2)

Name of Project: Cooper Academy – Additions & Renovations – Building #1 (Interior Alteration)
Address: 849 Mial St., Clayton, NC Zip Code 27520
Owner/Authorized Agent: Brooks Moore Phone # (919) 934-2021 E-Mail: brooksmoore@johnston.k12.nc.us
Owned By: ☒ City/County ☐ Private ☐ State
Code Enforcement Jurisdiction: ☒ City ☐ County ☐ State

CONTACT: Boomerang Design Duane Hutchins (919) 573-6400 dhutchins@thinkboomerang.com
DESIGNER FIRM NAME LICENSE # TELEPHONE # E-MAIL
Architectural Boomerang Design, PA Angela Easterdy 9248 (919) 573-6400 info@thinkboomerang.com
Civil CLDT Design, PA Keith Downing 1047 (919) 319-6716 kdowning@cltdesign.com
Electrical PDC Engineers, PA Tom Butkovich 024651 (919) 790-9989 tbutkovich@pdcengineers.com
Fire Alarm PDC Engineers, PA Tom Butkovich 024651 (919) 790-9989 tbutkovich@pdcengineers.com
Plumbing PDC Engineers, PA Steve Campbell 025020 (919) 790-9989 scampbell@pdcengineers.com
Mechanical PDC Engineers, PA Steve Campbell 025020 (919) 790-9989 scampbell@pdcengineers.com
Sprinkler-Standpipe PDC Engineers, PA Steve Campbell 025020 (919) 790-9989 scampbell@pdcengineers.com
Structural Lynch Mykins, PC Stephen N Sparks 053114 (919) 782-1833 nsparks@lynchmykins.com
Retaining Walls >5' Lynch Mykins, PC Stephen N Sparks 053114 (919) 782-1833 nsparks@lynchmykins.com
Other _____
(*Others* should include firms and individuals such as truss, precast, pre-engineered, interior designers, etc.)

2018 NC CODE FOR: ☐ New Construction ☐ Addition ☒ Renovation
☐ 1" Time Interior Completion
☐ Shell/Core
☐ Phased Construction – Shell/Core
☐ Renovation

2018 NC EXISTING BUILDING CODE: ☐ Prescriptive ☐ Repair ☐ Chapter 14
Alteration: ☐ Level I ☐ Level II ☐ Level III
☐ Historic Property ☐ Change of Use
CONSTRUCTED:(date) 1954 ORIGINAL OCCUPANCY(S) (Ch. 3): Educational (E) _____
RENOVATED: (date) 2006 CURRENT OCCUPANCY(S) (Ch. 3): Educational (E) _____
RISK CATEGORY (table 1604.5) Current: ☐ I ☐ II ☒ III ☐ IV
Proposed: ☐ I ☐ II ☒ III ☐ IV

BASIC BUILDING DATA
Construction Type: ☐ I-A ☐ II-A ☐ III-A ☐ IV ☐ V-A
(check all that apply) ☐ I-B ☒ II-B ☐ III-B
Sprinklers: ☒ No ☐ Partial ☐ Yes NFPA 13 ☐ NFPA 13R ☐ NFPA 13D
Standpipes: ☐ No ☐ Yes Class ☐ I ☐ II ☐ III ☐ Wet ☐ Dry
Fire District: ☐ No ☐ Yes (Primary) Flood Hazard Area: ☒ No ☐ Yes
Special Inspections Required: ☒ No (Interior work only Bldg #1) ☐ Yes

2018 NC Administrative Code and Policies					Appendix B for Building				
Gross Building Area:									
FLOOR	EXISTING (SQ FT)	NEW (SQ FT)	RENO/ALTER (SQ FT)	SUB-TOTAL					
6 th Floor	N/A	N/A	N/A	N/A					
5 th Floor	N/A	N/A	N/A	N/A					
4 th Floor	N/A	N/A	N/A	N/A					
3 rd Floor	N/A	N/A	N/A	N/A					
2 nd Floor	N/A	N/A	N/A	N/A					
Mezzanine	880	N/A	N/A	880					
First Flr	26,481	N/A	2,795	29,276					
Ground Flr	N/A	N/A	N/A	N/A					
TOTAL	27,361 SQ FT	--	2,795 SQ FT	30,156 SQ FT					

ALLOWABLE AREA
Primary Occupancy Classification: SELECT ONE
Assembly ☐ A-1 ☐ A-2 ☐ A-3 ☐ A-4 ☐ A-5
Business ☐
Educational ☒
Factory ☐ F-1 Moderate ☐ F-2 Low
Hazardous ☐ H-1 Detonate ☐ H-2 Deflagrate ☐ H-3 Combust ☐ H-4 Health ☐ H-5 HPM
Institutional ☐ I-1 Condition ☐ I-2 Condition ☐ I-3 Condition ☐ I-4
Mercantile ☐
Residential ☐ R-1 ☐ R-2 ☐ R-3 ☐ R-4
Storage ☐ S-1 Moderate ☐ S-2 Low ☐ High-piled
☐ Parking Garage ☐ Open ☐ Enclosed ☐ Repair Garage
Utility and Miscellaneous ☐

Accessory Occupancy Classification(s): Business (B) & Storage (S-2)
Incidental Uses (Table 509): Boiler Room (existing 2-hr separation)
Special Uses (Chapter 4 – List Code Sections): NC Section 430 (NC Public School)
Special Provisions: (Chapter 5 – List Code Sections): N/A
Mixed Occupancy: ☒ No ☐ Yes Separation: N/A Hr. Exception: _____
☐ Non-Separated Use (508.3)
The required type of construction for the building shall be determined by applying the height and area limitations for each of the applicable occupancies to the entire building. The most restrictive type of construction, so determined, shall apply to the entire building.
☐ Separated Use (508.4)
See below for area calculations for each story, the area of the occupancy shall be such that the sum of the ratios of the actual floor area of each use divided by the allowable floor area for each use shall not exceed 1.

$$\frac{\text{Actual Area of Occupancy A}}{\text{Allowable Area of Occupancy A}} + \frac{\text{Actual Area of Occupancy B}}{\text{Allowable Area of Occupancy B}} \leq 1$$
$$+ \dots = \dots \leq 1.00$$

2018 NC Administrative Code and Policies Appendix B for Building

STORY NO.	DESCRIPTION AND USE	(A) BUILDING AREA PER STORY (ACTUAL)	(B) TABLE 506.2 AREA	(C) AREA FOR FRONTAGE INCREASE ^{1,2}	(D) ALLOWABLE AREA PER STORY OR UNLIMITED ^{2,3}
First Floor	Group E	30,156 SF (Existing no change)	Existing (no change)	Existing (no change)	Existing (no change)
		** Interior	Level II	Alteration Only**	

- ¹ Frontage area increases from Section 506.3 are computed thus:
a. Perimeter which fronts a public way or open space having 20 feet minimum width = Existing (not calc'd)
b. Total Building Perimeter = Existing (not calc'd) (P)
c. Ratio (F/P) = Existing (not calc'd) (F/P)
d. W = Minimum width of public way = Existing (not calc'd) (W)
e. Percent of frontage increase $I = 100 \{ F/P - 0.25 \} \times W/30 =$ Existing (not calc'd) (%)
² Unlimited area applicable under conditions of Section 507.
³ Maximum Building Area = total number of stories in the building x D (maximum 3 stories) (506.2).
The maximum area of open parking garages must comply with Table 406.5.4
⁴ Frontage increase is based on the unspinklered area value in Table 506.2

ALLOWABLE HEIGHT			
	ALLOWABLE (TABLE 503)	SHOWN ON PLANS	CODE REFERENCE
Building Height in Feet (Table 504.3)	55 ft.	30 ft. (existing hgt)	504.3
Building Height in Stories (Table 504.4)	2	1 (existing)	504.4

- ¹ Provide code reference if the "Show on Plans" quantity is not based on Table 504.3 or 504.4.
² The maximum height of air traffic control towers must comply with Table 412.3.1
³ The maximum height of open parking garages must comply with Table 406.5.4

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (FEET)	RATING		DETAIL # AND SHEET #	DESIGN # FOR RATED ASSEMBLY	DESIGN # FOR RATED PENETRATION	DESIGN # FOR RATED JOINTS
		REQ'D	PROVIDED (N/A = REDUCTION X CHANGE)				
Structural Frame, including columns, girders, mases	>50FT	0 HR (essn)	N/A	N/A	N/A	N/A	N/A
Roofing Walls	>50FT	0 HR (essn)	N/A	N/A	N/A	N/A	N/A
Exterior	>50FT	0 HR (essn)	N/A	N/A	N/A	N/A	N/A
North	>50FT	0 HR (essn)	N/A	N/A	N/A	N/A	N/A
East	>50FT	0 HR (essn)	N/A	N/A	N/A	N/A	N/A
West	SEE PLANS	0 HR (essn)	N/A	N/A	N/A	N/A	N/A
South	>50FT	0 HR (essn)	N/A	N/A	N/A	N/A	N/A
Interior	>50FT	0 HR (essn)	N/A	N/A	N/A	N/A	N/A
Nonbearing Walls and Partitions	>50FT	0 HR (essn)	N/A	N/A	N/A	N/A	N/A
Exterior walls	>50FT	0 HR (essn)	N/A	N/A	N/A	N/A	N/A
North	>50FT	0 HR (essn)	N/A	N/A	N/A	N/A	N/A
East	>50FT	0 HR (essn)	N/A	N/A	N/A	N/A	N/A
West	>50FT	0 HR (essn)	N/A	N/A	N/A	N/A	N/A
South	>50FT	0 HR (essn)	N/A	N/A	N/A	N/A	N/A
Interior walls and partitions	>50FT	0 HR (essn)	N/A	N/A	N/A	N/A	N/A
Floor Construction including supporting beams and joists	--	0 HR (essn)	N/A	N/A	N/A	N/A	N/A
Floor Ceiling Assembly	--	0 HR (essn)	N/A	N/A	N/A	N/A	N/A
Column Supporting Floors	--	0 HR (essn)	N/A	N/A	N/A	N/A	N/A
Roof Construction, including supporting beams and joists	--	0 HR (essn)	N/A	N/A	N/A	N/A	N/A
Roof Ceiling Assembly	--	0 HR (essn)	N/A	N/A	N/A	N/A	N/A
Column Supporting Roof	--	0 HR (essn)	N/A	N/A	N/A	N/A	N/A
Shaft Enclosures - East	--	0 HR (essn)	N/A	N/A	N/A	N/A	N/A
Shaft Enclosures - Other	--	0 HR (essn)	N/A	N/A	N/A	N/A	N/A
Corridor Separation	--	0 HR (essn)	N/A	N/A	N/A	N/A	N/A
Occupancy/Fire Barrier Separation	--	N/A	N/A	N/A	N/A	N/A	N/A
Party/Fire Wall Separation	SEE PLANS	1&2 HR.	RW-02	See G103	U905	Sheet G103	N/A
Smoke Barrier Separation	--	N/A	N/A	N/A	N/A	N/A	N/A
Smoke Partition	--	N/A	N/A	N/A	N/A	N/A	N/A
Tenant Dwelling Unit/ Sleeping Unit Separation	--	N/A	N/A	N/A	N/A	N/A	N/A
Incidental Use Separation	--	0 HR (essn)	N/A	N/A	N/A	N/A	N/A

* Indicate section number permitting reduction

PERCENTAGE OF WALL OPENING CALCULATIONS			
FIRE SEPARATION DISTANCE (FEET FROM WALL)	DEGREES OF OPENINGS PROTECTION	ALLOWABLE AREA (%)	ACTUAL SHOWN ON PLANS (%)
N/A	N/A	N/A	N/A

LIFE SAFETY SYSTEM REQUIREMENTS
Emergency Lighting: ☐ No ☒ Yes
Exit Signs: ☐ No ☒ Yes
Fire Alarms: ☐ No ☒ Yes
Smoke Detection Systems: ☐ No ☒ Yes ☐ Partial
Carbon Monoxide Detection: ☐ No ☒ Yes

LIFE SAFETY PLAN REQUIREMENTS
Life Safety Plan Sheet #: Sheet G106 and G110
☒ Fire and/or smoke rated wall locations (Chapter 7)
☒ Assumed and real property line locations (if not on the site plan)
☒ Exterior wall opening area with respect to distance to assumed property lines (705.8)
☒ Occupancy types for each area as it relates to occupant load calculation (Table 1004.1.2)
☒ Occupant loads for each area
☒ Exit access travel distances (1017)
☒ Common paths of travel distances (1006.2.1 & 2006.3.2(1))
☐ Dead end lengths (1020.4)
☐ Clear exit widths for each exit door
☐ Maximum calculated occupant load capacity each exit door can accommodate based on egress width (1005.3)
☒ Actual occupant load for each exit door
☐ A separate schematic plan indicating where fire rated floor/ceiling and/or roof structure is provided for purposes of occupancy separation and supporting construction for a fire barrier/fire partition/smoke barrier.
☐ Location of doors with panic hardware (1010.1.10)
☐ Location of doors with delayed egress locks and the amount of delay (1010.1.9.7)
☐ Location of doors with electromagnetic egress locks (1010.1.9.9)
☒ Location of doors equipped with hold-open devices
☐ Location of emergency escape windows (1030)
☐ The square footage of each fire area (202)
☐ The square footage of each smoke compartment for Occupancy Classification I-2 (407.5)
☐ Note any code exceptions or table notes that may have been utilized regarding the items above

Section/Table/Note	Title

ACCESSIBLE DWELLING UNITS (SECTION 1107)							
TOTAL UNITS	ACCESSIBLE UNITS REQUIRED	ACCESSIBLE UNITS PROVIDED	TYPE A UNITS REQUIRED	TYPE A UNITS PROVIDED	TYPE B UNITS REQUIRED	TYPE B UNITS PROVIDED	TOTAL ACCESSIBLE UNITS PROVIDED
N/A	--	--	--	--	--	--	--

2018 NC Administrative Code and Policies Appendix B for Building

(SECTION 1106)						
LOT OR PARKING AREA	TOTAL # OF PARKING SPACES		# OF ACCESSIBLE SPACES PROVIDED			TOTAL # ACCESSIBLE SPACES PROVIDED
	REQUIRED	PROVIDED	REGULAR WITH 5' ACCESS AISLE	VAN SPACES WITH 132" ACCESS AISLE	8' ACCESS AISLE	
	See Civil Sheet C000 (Table) For Calculations & LUDO req'ts	--	--	--	--	--
TOTAL	--	--	--	--	--	--

PLUMBING FIXTURE REQUIREMENTS (TABLE 2902.1)

NOTE TO PLAN REVIEWER: PER 2018 NC EXISTING BUILDING CODE SECTION 810: OCCUPANT LOAD IS NOT INCREASED BY 20%; SO EXISTING FIXTURE COUNT IS WITHSTANDING. ADDITIONAL FIXTURES ARE ADDED TO MEET OWNER PROGRAM REQUIREMENTS.

USE		WATERCLOSETS			URINALS	LAVATORIES			SHOWERS / TUBS	DRINKING FOUNTAINS	
		MALE	FEMALE	UNISEX		MALE	FEMALE	UNISEX		REGULAR	ACCESSIBLE
SPACE	EXIST'G	5	5		3	5	6		--	1	1
	NEW	1	3	1	2	2	2	1	N/A		
	REQ'D	5	5		3	5	6		N/A	1	1

SPECIAL APPROVALS

Special approval: (Local Jurisdiction, Department of Insurance, SCO, DPI, DHHS, ICC, etc., describe below)

NCDOI, DPI, Johnston County Inspections and The Town of Clayton

ENERGY SUMMARY						
ENERGY REQUIREMENTS: The following data shall be considered minimum and any special attribute required to meet the North Carolina Energy Conservation Code shall also be provided. Each Designer shall furnish the required portions of the project information for the plan data sheet. If performance method, state the annual energy cost for the standard reference design vs annual energy cost for the proposed design.						
Existing building envelope complies with code: <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes (The remainder of this section is not applicable)						
Exempt Building: <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (Provide Code or Statutory reference).						
Climate Zone: <input checked="" type="checkbox"/> 3A <input type="checkbox"/> 4A <input type="checkbox"/> 5A						
Method of Compliance: Energy Code <input type="checkbox"/> Performance <input checked="" type="checkbox"/> Prescriptive ASHRAE 90.1 <input type="checkbox"/> Performance <input type="checkbox"/> Prescriptive (If "Other" specify source here)						

THERMAL ENVELOPE (Prescriptive method only) SEE SHEET G103 FOR TYPICAL ASSEMBLIES

Roof/ceiling Assembly (each assembly)
Description of assembly: Existing Roof to Remain (per Section C503 of NC Energy Code) _____
U-Value of total assembly: Existing _____
R-Value of insulation: N/A
Skylights in each assembly: N/A
U-Value of skylight: N/A
Total square footage of skylights in each assembly: ____ N/A

Exterior Walls (each assembly)
Description of assembly: Existing Exterior Walls to Remain (per Section C503 of NC Energy Code) _____
U-Value of total assembly: Existing _____
R-Value of insulation: N/A
Openings (windows or doors with glazing)
U-Value of assembly: N/A
Solar heat gain coefficient: N/A
Projection factor: N/A
Door R-Values: N/A

Walls below grade (each assembly)
Description of assembly: Existing Walls to Remain (per Section C503 of NC Energy Code) _____
U-Value of total assembly: N/A
R-Value of insulation: N/A

Floors over unconditioned space (each assembly)
Description of assembly: N/A
U-Value of total assembly: N/A
R-Value of insulation: N/A

Floors slab on grade
Description of assembly: Existing concrete slab on grade
U-Value of total assembly: N/A
R-Value of insulation: Not Required in Zone 3A
Horizontal/Vertical requirement: N/A
Slab Heated: No

2018 APPENDIX B
BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS
(PROVIDE ON THE STRUCTURAL SHEETS IF APPLICABLE)

DESIGN LOADS:
Importance Factors: Snow (Is) 1.1
Seismic (Is) 1.25
Live Loads: Roof 20 psf
Mezzanine 150 psf
Floor 40 psf (Reference General Notes for Other Loading)
Ground Snow Load: 15 psf
Wind Load: Ultimate Wind Speed 115 mph (ASCE-7)
Exposure Category B

SEISMIC DESIGN CATEGORY: ☐ A ☒ B ☐ C ☐ D
Provide the following Seismic Design Parameters:
Occupancy Category (Table 1604.5) ☐ I ☐ II ☒ III ☐ IV
Spectral Response Acceleration S_s 0.165 %g S_1 0.076 %g
Site Classification (ASCE 7) ☐ A ☐ B ☐ C ☒ D ☐ E ☐ F
Data Source: ☐ Field Test ☒ Presumptive ☐ Historical Data
Basic structural system ☒ Bearing Wall ☐ Dual w/Special Moment Frame
☐ Building Frame ☐ Dual w/Intermediate R/C or Special Steel
☐ Moment Frame ☐ Inverted Pendulum
Analysis Procedure: ☐ Simplified ☒ Equivalent Lateral Force ☐ Dynamic
Architectural, Mechanical, Components anchored? ☐ Yes ☒ No

LATERAL DESIGN CONTROL: Earthquake ☐ Wind ☒

SOIL BEARING CAPACITIES:
Field Test (provide some test report) PROVIDED IN PROJECT MANUAL
Bearing capacity: 2000 psf
The size, type, and capacity N/A

2018 NC Administrative Code and Policies Appendix B for Building

2018 APPENDIX B
BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS
MECHANICAL DESIGN
(PROVIDE ON THE MECHANICAL SHEETS IF APPLICABLE)

MECHANICAL SUMMARY
MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT

Thermal Zone
winter dry bulb 10 degrees
summer dry bulb 94.1 degrees
Interior design conditions
winter dry bulb 68 degrees
summer dry bulb 74 degrees
relative humidity 55%
Building heating load: 1,500,000 BTU/h
Building cooling load: 100 tons
Mechanical Spacing Conditioning System
Unitary
description of unit: REFER TO SCHEDULES
heating efficiency: REFER TO SCHEDULES
cooling efficiency: REFER TO SCHEDULES
size category of unit: REFER TO SCHEDULES
Boiler
Size category: If oversized, state reason: N/A
Chiller
Size category: If oversized, state reason: N/A
List equipment efficiencies: REFER TO SCHEDULES

2018 APPENDIX B
BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS
ELECTRICAL DESIGN
(PROVIDE ON THE ELECTRICAL SHEETS IF APPLICABLE)

ELECTRICAL SUMMARY
ELECTRICAL SYSTEM AND EQUIPMENT

Method of Compliance: Energy Code: ☒ Prescriptive ☐ Performance
ASHRAE 90.1: ☐ Prescriptive ☐ Performance
Lighting schedule (each fixture type)
lamp type required in fixture ALL LEDs – SEE FIXTURE SCHEDULE ON SHEET E801
number of lamps in fixture ALL LEDs – SEE FIXTURE SCHEDULE ON SHEET E801
ballast type used in the fixture ALL LEDs – SEE FIXTURE SCHEDULE ON SHEET E801
number of ballasts in fixture ALL LEDs – SEE FIXTURE SCHEDULE ON SHEET E801
total wattage per fixture SEE FIXTURE SCHEDULE ON SHEET E801
total interior wattage specified vs. allowed (whole building or by space) SEE ELECTRICAL DWGS
total exterior wattage specified vs. allowed SEE ELECTRICAL DWGS
Additional Efficiency Package Options
(When using the 2018 NCECC; not required for ASHRAE 90.1)
☐ C406.2 More Efficient Mechanical Equipment
☐ C406.3 Reduced Lighting Power Density
☐ C406.4 Enhanced Digital Lighting Controls
☐ C406.5 On-Site Renewable Energy
☐ C406.6 Dedicated Outdoor Air System
☐ C406.7 Reduced Energy Use in Service Water Heating

2018 NC Administrative Code and Policies Appendix B for Building



945107
207 S. Trade Street
Shelby, NC 28150
704/751-7000
CHARLOTTE
1230 W. Morehead St., Suite 214
Charlotte, NC 28208
704/751-7000
RALEIGH
6131 Falls of Neuse Rd., Suite 204
Raleigh, NC 27609
919/751-6400
LEWINGTON
1070 S. Lake Dr., Suite 1
Lewington, NC 28753
919/751-6507



COOPER ACADEMY
A & R
PROJECT TITLE

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3. DO NOT SCALE OFF DIMENSIONS.

REVISIONS		
NO.	DATE	DESCRIPTION
1	02/27/2024	ADDENDUM 2

BID SET
BID SET
2307
BOOMERANG DESIGN PROJECT NUMBER
02.07.2024
DRAWING RELEASE DATE

2018 APPENDIX B
BUILDING CODE SUMMARY
FOR ALL COMMERCIAL PROJECTS
(BLDG#6 - NEW CONNECTOR BUILDING)
(EXCEPT 1 AND 2-FAMILY DWELLINGS AND TOWNHOUSES)
(Reproduce the following data on the building plans sheet 1 or 2)

Name of Project: __Cooper Academy – Additions & Renovations – Building #6 (Connector) __
Address: __849 Mial St., Clayton, NC __ Zip Code __27520__
Owner/Authorized Agent: __Brooks Moore _Phone # (919) 934-2021 __ E-Mail: brooksmore@johnston.k12.nc.us __
Owned By: ☐ City/County ☐ Private ☐ State ☐ County _____
Code Enforcement Jurisdiction: ☒ City, Clayton NC _____☐ County _____☐ State _____

CONTACT: Boomerang Design Duane Hutchins (919) 573-6400 dhutchins@thinkboomerang.com
DESIGNER FIRM NAME LICENSE # TELEPHONE # E-MAIL
Architectural Boomerang Design, PA Angela Easterday 9248 (919) 573-6400 info@thinkboomerang.com
Civil CLH Design, PA Keith Downing 1047 (919) 519-6716 kdowning@chdesignpa.com
Electrical PDC Engineers, PA Tom Rutkovich 024651 (919) 790-9989 trutkovich@pdcengineers.com
Fire Alarm PDC Engineers, PA Tom Rutkovich 024651 (919) 790-9989 trutkovich@pdcengineers.com
Plumbing PDC Engineers, PA Steve Campbell 025020 (919) 790-9989 scampbell@pdcengineers.com
Mechanical PDC Engineers, PA Steve Campbell 025020 (919) 790-9989 scampbell@pdcengineers.com
Sprinkler-Standpipe PDC Engineers, PA Steve Campbell 025020 (919) 790-9989 scampbell@pdcengineers.com
Structural Lynch Mykins, PC Stephen N Sparks 053114 (919) 782-1833 nsparks@lynchmykins.com
Retaining Walls >5' High Lynch Mykins, PC Stephen N Sparks 053114 (919) 782-1833 nsparks@lynchmykins.com
Other _____
(*Others* should include firms and individuals such as trust, precast, pre-engineered, interior designers, etc.)

2018 NC CODE FOR: ☒ New Construction ☐ Addition ☐ Renovation
☐ 1st Time Interior Completion
☐ Shell/Core
☐ Phased Construction – Shell/Core
☐ Renovation
2018 NC EXISTING BUILDING CODE: ☐ Prescriptive ☐ Repair ☐ Chapter 14
☐ Level I ☐ Level II ☐ Level III
☐ Historic Property ☐ Change of Use
CONSTRUCTED:(date) _____ ORIGINAL OCCUPANCY(S) (Ch. 3): _____
RENOVATED: (date) _____ CURRENT OCCUPANCY(S) (Ch. 3): _____
RISK CATEGORY (table 1604.5) Current: ☐ I ☐ II ☐ III ☐ IV ☐ IV
Proposed: ☒ I ☒ II ☐ III ☐ IV

BASIC BUILDING DATA
Construction Type: ☐ I-A ☐ I-B ☐ II-A ☐ II-B ☐ III-A ☐ III-B ☐ IV ☐ V-A ☐ V-B
(check all that apply)
Sprinklers: ☒ No ☐ Partial ☐ Yes ☐ NFPA 13 ☐ NFPA 13R ☐ NFPA 13D
Standpipes: ☐ No ☐ Yes ☐ Class ☐ I ☐ II ☐ III ☐ Wet ☐ Dry
Fire District: ☐ No ☒ Yes (Primary) Flood Hazard Area: ☒ No ☐ Yes
Special Inspections Required: ☐ No ☒ Yes

Gross Building Area:
FLOOR EXISTING (SQ FT) NEW (SQ FT) RENO/ALTER (SQ FT) SUB-TOTAL
6th Floor N/A N/A N/A N/A
5th Floor N/A N/A N/A N/A
4th Floor N/A N/A N/A N/A
3rd Floor N/A N/A N/A N/A
2nd Floor N/A N/A N/A N/A
Mezzanine N/A N/A N/A N/A
First Flr N/A 3,391 N/A 3,391
Ground Flr N/A N/A N/A N/A
TOTAL 3,391 SQ FT 3,391 SQ FT

ALLOWABLE AREA
Primary Occupancy Classification: SELECT ONE
Assembly ☐ A-1 ☐ A-2 ☐ A-3 ☐ A-4 ☐ A-5
Business ☐ F-1 Moderate ☐ F-2 Low
Educational ☒ H-1 Detonate ☐ H-2 Deflagrate ☐ H-3 Combust ☐ H-4 Health ☐ H-5 HPM
Institutional ☐ 1-1 Condition ☐ 1 ☐ 2
☐ 1-2 Condition ☐ 1 ☐ 2
☐ 1-3 Condition ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
☐ 1-4
Mercantile ☐ R-1 ☐ R-2 ☐ R-3 ☐ R-4
Residential ☐ S-1 Moderate ☐ S-2 Low ☐ High-piled
Storage ☐ Parking Garage ☐ Open ☐ Enclosed ☐ Repair Garage
Utility and Miscellaneous ☐
Accessory Occupancy Classification(s): None
Incidental Uses (Table 509): None
Special Uses (Chapter 4 – List Code Sections): NC Section 430 (NC Public School)
Special Provisions: (Chapter 5 – List Code Sections): N/A
Mixed Occupancy: ☒ No ☐ Yes Separation: N/A ____ Hr. Exception: _____
The required type of construction for the building shall be determined by applying the height and area limitations for each of the applicable occupancies to the entire building. The most restrictive type of construction, so determined, shall apply to the entire building.
☐ Separated Use (508.4) -
See below for area calculations for each story, the area of the occupancy shall be such that the sum of the ratios of the actual floor area of each use divided by the allowable floor area for each use shall not exceed 1.

Actual Area of Occupancy A + Actual Area of Occupancy B
Allowable Area of Occupancy A Allowable Area of Occupancy B ≤ 1
____ + _____ + = _____ ≤ 1.00

2018 NC Administrative Code and Policies

Appendix B for Building

STORY NO.	DESCRIPTION AND USE	(A) BUILDING AREA PER STORY (ACTUAL)	(B) TABLE 506.2 ¹ AREA	(C) AREA FOR FRONTAGE INCREASE ^{2,3}	(D) ALLOWABLE AREA PER STORY OR UNLIMITED ^{2,3}
First Floor	Group E (NS)	3,391 SF	23,000 SF	Not Required	23,000 sf

1. Frontage area increases from Section 506.3 are computed thus:
a. Perimeter which fronts a public way or open space having 20 feet minimum width = not calculated (F)
b. Total Building Perimeter = not calculated. (P)
c. Ratio (F/P) = not calculated. (F/P)
d. W = Minimum width of public way = not calculated. (W)
e. Percent of frontage increase $I = 100 (F/P - 0.25) \times W/30$ = not calculated. (%)
Unlimited area applicable under conditions of Section 507.
2. Maximum Building Area = total number of stories in the building x D (maximum 3 stories) (506.2).
3. The maximum area of open parking garages must comply with Table 406.5.4
4. Frontage increase is based on the unsprinklered area value in Table 506.2.

	ALLOWABLE (TABLE 503)	SHOWN ON PLANS	CODE REFERENCE
Building Height in Feet (Table 504.3)	55 ft.	23 ft	504.3
Building Height in Stories (Table 504.4)	2	1	504.4

1. Provide code reference if the "Show on Plans" quantity is not based on Table 504.3 or 504.4.
2. The maximum height of air traffic control towers must comply with Table 412.3.1
3. The maximum height of open parking garages must comply with Table 406.5.4

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (FEET)	RATING REQ'D	RATING PROVIDED (W/REDUCTION)	DETAIL # AND SHEET #	DESIGN # FOR RATED ASSEMBLY	DESIGN # FOR RATED PENETRATION	DESIGN # FOR RATED JOINTS
Structural Frame, including columns, girders, trusses	>30FT	0 HR	N/A	N/A	N/A	N/A	N/A
Bearing Walls	>30FT	0 HR	N/A	N/A	N/A	N/A	N/A
Exterior North	>30FT	0 HR	N/A	N/A	N/A	N/A	N/A
East	>30FT	0 HR	N/A	N/A	N/A	N/A	N/A
West	>30FT	0 HR	N/A	N/A	N/A	N/A	N/A
South	>30FT	0 HR	N/A	N/A	N/A	N/A	N/A
Interior	>30FT	0 HR	N/A	N/A	N/A	N/A	N/A
Nonbearing Walls and Partitions	>30FT	0 HR	N/A	N/A	N/A	N/A	N/A
Exterior North	>30FT	0 HR	N/A	N/A	N/A	N/A	N/A
East	>30FT	0 HR	N/A	N/A	N/A	N/A	N/A
West	>30FT	0 HR	N/A	N/A	N/A	N/A	N/A
South	>30FT	0 HR	N/A	N/A	N/A	N/A	N/A
Interior walls and partitions	>30FT	0 HR	N/A	N/A	N/A	N/A	N/A
Floor Construction	--	0 HR	N/A	N/A	N/A	N/A	N/A
Including supporting beams and joints	--	0 HR	N/A	N/A	N/A	N/A	N/A
Floor Ceiling Assembly	--	0 HR	N/A	N/A	N/A	N/A	N/A
Column Supporting Floor	--	0 HR	N/A	N/A	N/A	N/A	N/A
Roof Construction, including supporting beams and joists	--	0 HR	N/A	N/A	N/A	N/A	N/A
Roof Ceiling Assembly	--	0 HR	N/A	Sheet G103	P728	Sheet G103	N/A
Column Supporting Roof	--	0 HR	N/A	N/A	N/A	N/A	N/A
Shaft Enclosures - Exit	--	0 HR	N/A	N/A	N/A	N/A	N/A
Shaft Enclosures - Other	--	0 HR	N/A	N/A	N/A	N/A	N/A
Corridor Separation	--	N/A	N/A	N/A	N/A	N/A	N/A
Occupancy Fire Barrier Separation	--	N/A	N/A	N/A	N/A	N/A	N/A
Party/Fire Wall Separation	SEE PLANS	1&2 HR	RW-02	See G103	U065	Sheet G103	N/A
Smoke Barrier Separation	--	N/A	N/A	N/A	N/A	N/A	N/A
Smoke Partition	--	N/A	N/A	N/A	N/A	N/A	N/A
Tenant-Dwelling Unit	--	N/A	N/A	N/A	N/A	N/A	N/A
Sleeping Unit Separation	--	N/A	N/A	N/A	N/A	N/A	N/A
Incidental Use Separation	--	N/A	N/A	N/A	N/A	N/A	N/A

* Indicate section number permitting reduction

FIRE SEPARATION DISTANCE (FEET) (TABLE 705.4)	DEGREES OF OPENINGS (TABLE 705.4)	ALLOWABLE AREA (TABLE 705.4)	ACTUAL SHOWN ON PLANS (%)
See Sht. G106 for dim's	See sheet A109 for calc's	See sheet A109 for calc's	See sheet G109 for calc's

LIFE SAFETY SYSTEM REQUIREMENTS

Emergency Lighting: ☐ No ☒ Yes
Exit Signs: ☐ No ☒ Yes
Fire Alarm: ☐ No ☒ Yes
Smoke Detection Systems: ☐ No ☒ Yes ☐ Partial _____
Carbon Monoxide Detection: ☐ No ☒ Yes

LIFE SAFETY PLAN REQUIREMENTS

Life Safety Plan Sheet #: Sheet G106, G109, G109A & G110
☒ Fire and/or smoke rated wall locations (Chapter 7)
☒ Assumed and real property line locations (if not on the site plan)
☒ Exterior wall opening area with respect to distance to assumed property lines (705.8)
☒ Occupancy types for each area as it relates to occupant load calculation (Table 1004.1.2)
☒ Occupant loads for each area
☒ Exit access travel distances (1017)
☐ Common path of travel distances (1006.2.1 & 2006.3.2(1))
☐ Dead end lengths (1020.4)
☐ Clear exit widths for each exit door
☐ Maximum calculated occupant load capacity each exit door can accommodate based on egress width (1005.3)
☒ Actual occupant load for each exit door
☐ A separate schematic plan indicating where fire rated floor/ceiling and/or roof structure is provided for purposes of occupancy separation and supporting construction for a fire barrier/fire partition/smoke barrier.
☒ Location of doors with panic hardware (1010.1.10)
☐ Location of doors with delayed egress locks and the amount of delay (1010.1.9.7)
☐ Location of doors with electromagnetic egress locks (1010.1.9.9)
☒ Location of doors equipped with hold-open devices
☐ Location of emergency escape windows (1030)
☐ The square footage of each fire area (202)
☐ The square footage of each smoke compartment for Occupancy Classification 1-2 (407.5)
☐ Note any code exceptions or table notes that may have been utilized regarding the items above

Section/Table/Note	Title

ACCESSIBLE DWELLING UNITS (SECTION 1107)						
TOTAL UNITS	ACCESSIBLE UNITS PROVIDED	ACCESSIBLE UNITS REQUIRED	TYPE A UNITS PROVIDED	TYPE B UNITS PROVIDED	TYPE B UNITS REQUIRED	TOTAL ACCESSIBLE UNITS PROVIDED
N/A	--	--	--	--	--	--

2018 NC Administrative Code and Policies

Appendix B for Building

LOT OR PARKING AREA	TOTAL # OF PARKING SPACES		# OF ACCESSIBLE SPACES PROVIDED				TOTAL # ACCESSIBLE PROVIDED	
	REQUIRED	PROVIDED	REGULAR WITH 5' ACCESS AISLE	VAN SPACES WITH 132" ACCESS AISLE		8' ACCESS AISLE		
				132" ACCESS AISLE	8' ACCESS AISLE			
See Civil Sheet C000 (Table)	--	--	--	--	--	--	--	
For Calculations & UDO req'ts	--	--	--	--	--	--	--	
TOTAL								

PLUMBING FIXTURE REQUIREMENTS (TABLE 2902.1)

NOTE TO REVIEWER: NO CLASSROOMS OR LABS, OR OFFICE SPACE IN THIS BUILDING. PLUMBING LOADS ARE COVERED BY RESTROOMS IN OTHER BUILDINGS ON CAMPUS (PER PROVISIONS OF NCSCB 2018 SECTION 2902.9)

USE	EXIST'G	WATERCLOSETS			URINALS			LAVATORIES			SHOWERS / TUBS	DRINKING FOUNTAINS	
		MALE	FEMALE	UNISEX	MALE	FEMALE	UNISEX	MALE	FEMALE	UNISEX		REGULAR	ACCESSIBLE
SPACE	EXIST'G	--	--	--	--	--	--	--	--	--	--	--	--
	NEW	--	--	--	--	--	--	--	--	--	--	--	--
	REQ'D	--	--	--	--	--	--	--	--	--	--	--	--

SPECIAL APPROVALS

Special approval: (Local Jurisdiction, Department of Insurance, SCO, DPI, DHHS, ICC, etc., describe below)
NCDOL, DPI, Johnston County Inspections and The Town of Clayton

ENERGY REQUIREMENTS:

The following data shall be considered minimum and any special attribute required to meet the North Carolina Energy Conservation Code shall also be provided. Each Designer shall furnish the required portions of the project information for the plan data sheet. If performance method, state the annual energy cost for the standard reference design vs annual energy cost for the proposed design.

Existing building envelope complies with code: ☐ No ☐ Yes (The remainder of this section is not applicable)

Exempt Building: ☐ No ☐ Yes (Provide Code or Statutory reference): _____

Climate Zone: ☒ 3A ☐ 4A ☐ 5A

Method of Compliance: Energy Code ☐ Performance ☒ Prescriptive
ASHRAE 90.1 ☐ Performance ☐ Prescriptive
(*Other* specify source here) _____

THERMAL ENVELOPE (Prescriptive method only) SEE SHEET G103 FOR TYPICAL ASSEMBLIES

Roof/ceiling Assembly (each assembly)

Description of assembly: RA.31; PVC Membrane Roof over c.i. insulation ____
U-Value of total assembly: 0.0388 ____
R-Value of insulation: R-25 c.i ____
Skylights in each assembly: N/A ____
U-Value of skylight: N/A ____
Total square footage of skylights in each assembly: N/A ____

Exterior Walls (each assembly)

Description of assembly: EW.01 AND EW.01A; Brick over 8" CMU w/ c.i. insulation ____
U-Value of total assembly: 0.09099 ____
R-Value of insulation: 7.6 c.i ____
Openings (windows or doors with glazing) U-Value of assembly: 27 SUM & 29 WIN ____
Solar heat gain coefficient: .25 ____
Projection factor: N/A ____
Door R-Values: 1.42 ____

Description of assembly: EW.02 AND EW.02A; Brick over 12" CMU w/ c.i. insulation ____
U-Value of total assembly: 0.090992 ____
R-Value of insulation: 7.6 c.i ____
Openings (windows or doors with glazing) U-Value of assembly: N/A ____
Solar heat gain coefficient: N/A ____
Projection factor: N/A ____
Door R-Values: N/A ____

Walls below grade (each assembly)

Description of assembly: EW.05 (Grouted CMU or Concrete w/ foundation c.i. insulation
U-Value of total assembly: 0.106 ____
R-Value of insulation: 7.6 c.i ____

Floors over unconditioned space (each assembly)

Description of assembly: N/A
U-Value of total assembly: N/A
R-Value of insulation: N/A

Floors slab on grade

Description of assembly: 4" concrete slab on grade
U-Value of total assembly: N/A
R-Value of insulation: Not Required in Zone 3A
Horizontal/Vertical requirement: N/A
Slab Heated: No

2018 APPENDIX B BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS STRUCTURAL DESIGN (PROVIDE ON THE STRUCTURAL SHEETS IF APPLICABLE)

DESIGN LOADS:

Importance Factors: Snow (Is) 1.1
Seismic (Ie) 1.25

Live Loads: Roof 20 psf
Mezzanine 150 psf
Floor 40 psf (Reference General Notes for Other Loading)

Ground Snow Load: 15 psf

Wind Load: Ultimate Wind Speed 115 mph (ASCE-7)
Exposure Category B

SEISMIC DESIGN CATEGORY: ☐ A ☒ B ☐ C ☐ D
Provide the following Seismic Design Parameters:
Occupancy Category (Table 1604.5) ☐ I ☐ II ☐ III ☐ IV
Spectral Response Acceleration Ss 0.165 %g S1 0.076 %g
Site Classification (ASCE 7) ☐ A ☐ B ☐ C ☒ D ☐ E ☐ F
Data Source: ☐ Field Test ☒ Presumptive ☐ Historical Data
Basic structural system ☒ Bearing Wall ☐ Dual w/Special Moment Frame
☐ Building Frame ☐ Dual w/Intermediate R/C or Special Steel
☐ Moment Frame ☐ Inverted Pendulum
Analysis Procedure: ☒ Simplified ☒ Equivalent Lateral Force ☐ Dynamic
Architectural, Mechanical, Components anchored? ☐ Yes ☒ No

LATERAL DESIGN CONTROL: Earthquake ☐ Wind ☒

SOIL BEARING CAPACITIES:
Field Test (provide type of test report) PROVIDED IN PROJECT MANUAL
Bearing capacity 2000 psf
Soil type and capacity N/A

2018 NC Administrative Code and Policies

Appendix B for Building

2018 APPENDIX B BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS MECHANICAL DESIGN (PROVIDE ON THE MECHANICAL SHEETS IF APPLICABLE)

MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT

Thermal Zone
winter dry bulb 10 degrees
summer dry bulb 94.1 degrees
Interior design conditions
winter dry bulb 68 degrees
summer dry bulb 74 degrees
relative humidity 55%
Building heating load: 1,500,000 BTU/h
Building cooling load: 60 tons
Mechanical Spacing Conditioning System
Unitary description of unit: REFER TO SCHEDULES
heating efficiency: REFER TO SCHEDULES
cooling efficiency: REFER TO SCHEDULES
size category of unit: REFER TO SCHEDULES
Boiler Size category: If oversized, state reason.: N/A
Chiller Size category: If oversized, state reason.: N/A
List equipment efficiencies: REFER TO SCHEDULES

2018 APPENDIX B BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS ELECTRICAL DESIGN (PROVIDE ON THE ELECTRICAL SHEETS IF APPLICABLE)

ELECTRICAL SYSTEM AND EQUIPMENT

Method of Compliance: Energy Code ☒ Prescriptive ☐ Performance
ASHRAE 90.1: ☐ Prescriptive ☐ Performance
Lighting schedule (each fixture type)
lamp type required in fixture ALL LEDS – SEE FIXTURE SCHEDULE ON SHEET E801
number of lamps in fixture ALL LEDS – SEE FIXTURE SCHEDULE ON SHEET E801
ballast type used in the fixture ALL LEDS – SEE FIXTURE SCHEDULE ON SHEET E801
number of ballasts in fixture ALL LEDS – SEE FIXTURE SCHEDULE ON SHEET E801
total wattage per fixture SEE FIXTURE SCHEDULE ON SHEET E801
total interior wattage specified vs. allowed (whole building or by space) SEE ELECTRICAL DWGs
total exterior wattage specified vs. allowed SEE ELECTRICAL DWGs
Additional Efficiency Package Options
(When using the 2018 NCCES, not required for ASHRAE 90.1)
☐ C406.2 More Efficient Mechanical Equipment
☒ C406.3 Reduced Lighting Power Density
☐ C406.4 Enhanced Digital Lighting Controls
☐ C406.5 On-Site Renewable Energy
☐ C406.6 Dedicated Outdoor Air System
☐ C406.7 Reduced Energy Use in Service Water Heating

2018 NC Administrative Code and Policies

Appendix B for Building

945/671
207 S. Trade Street
Shelby, NC 28150
704/731-7000
CHARLOTTE
1230 W. Morehead St., Suite 214
Charlotte, NC 28208
704/731-7000
RALEIGH
6131 Falls of Neuse Rd., Suite 204
Raleigh, NC 27609
919/775-6400
LEWISTON
1070 S. Lake Dr., Suite 1
Lewiston, NC 28073
903/754-0507

COOPER ACADEMY A & R PROJECT TITLE

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3. DO NOT SCALE OFF DIMENSIONS.

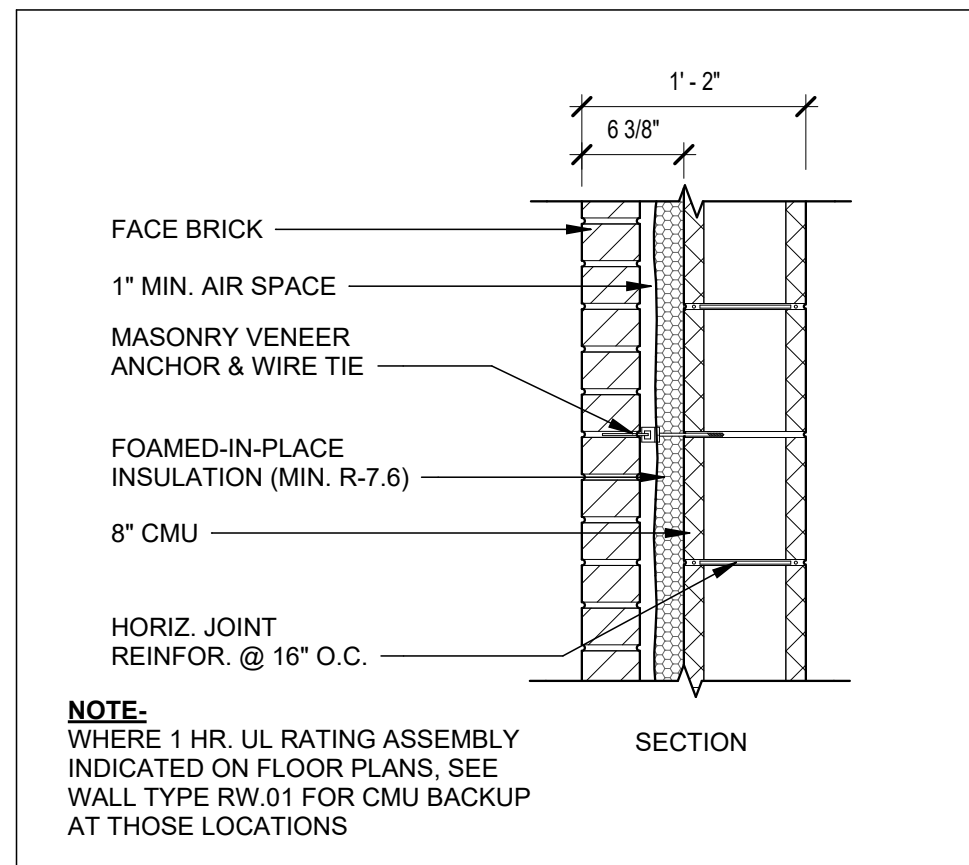
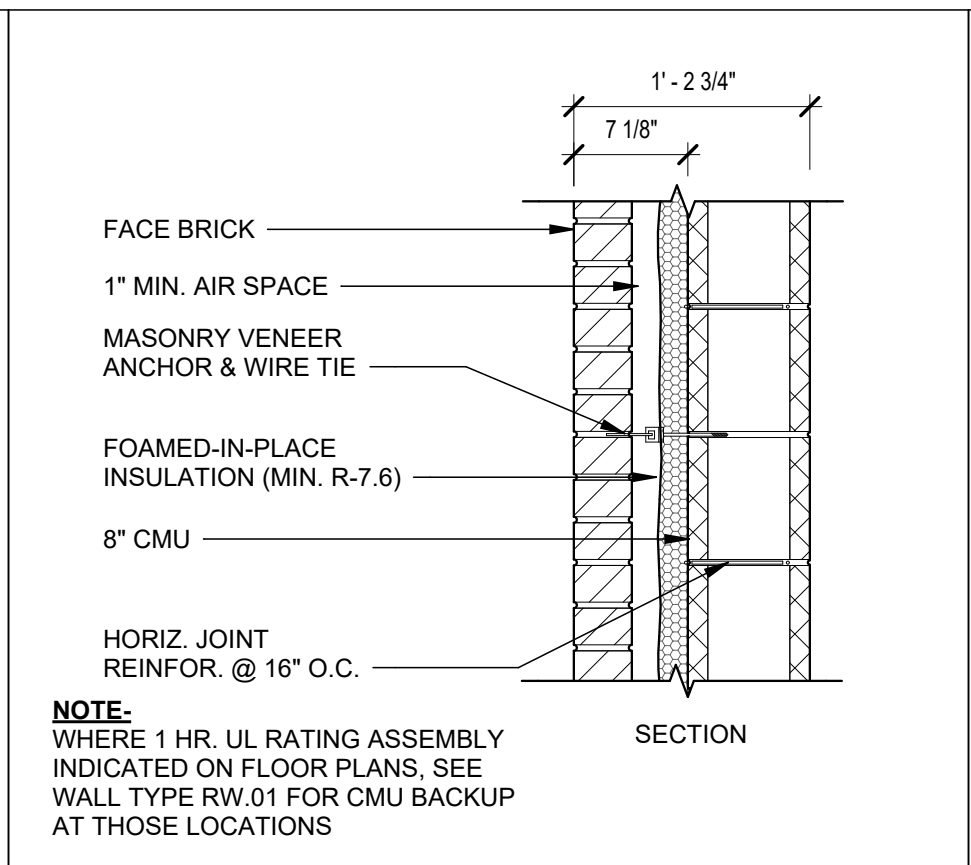
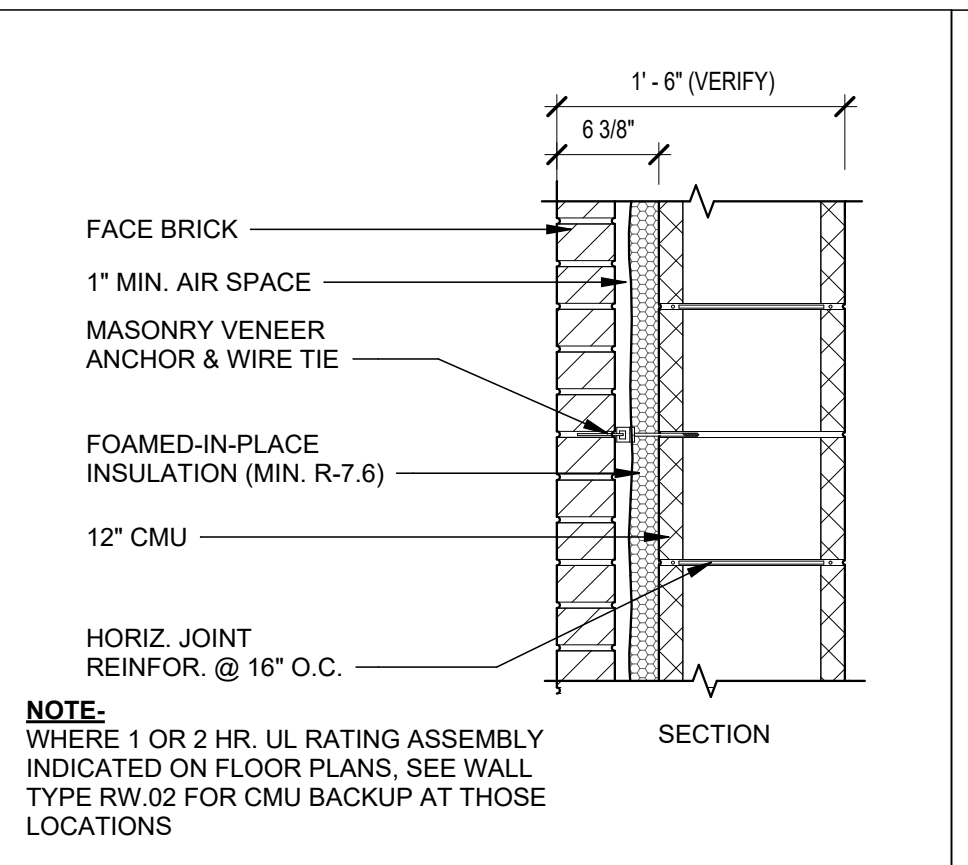
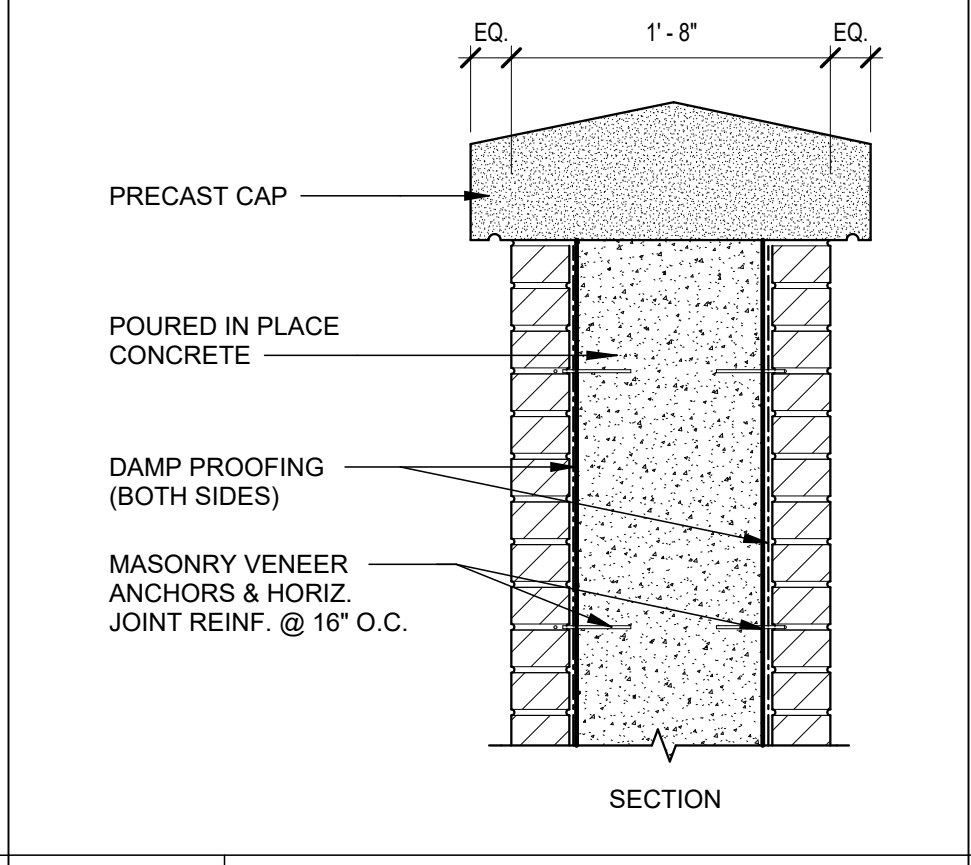
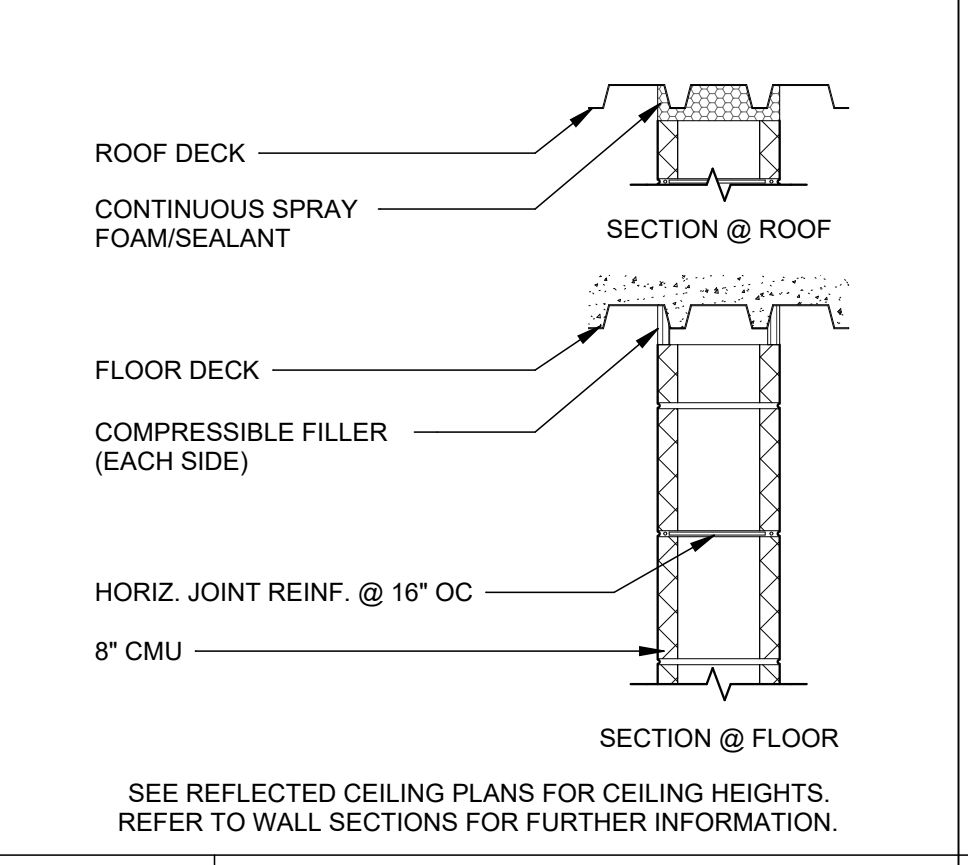
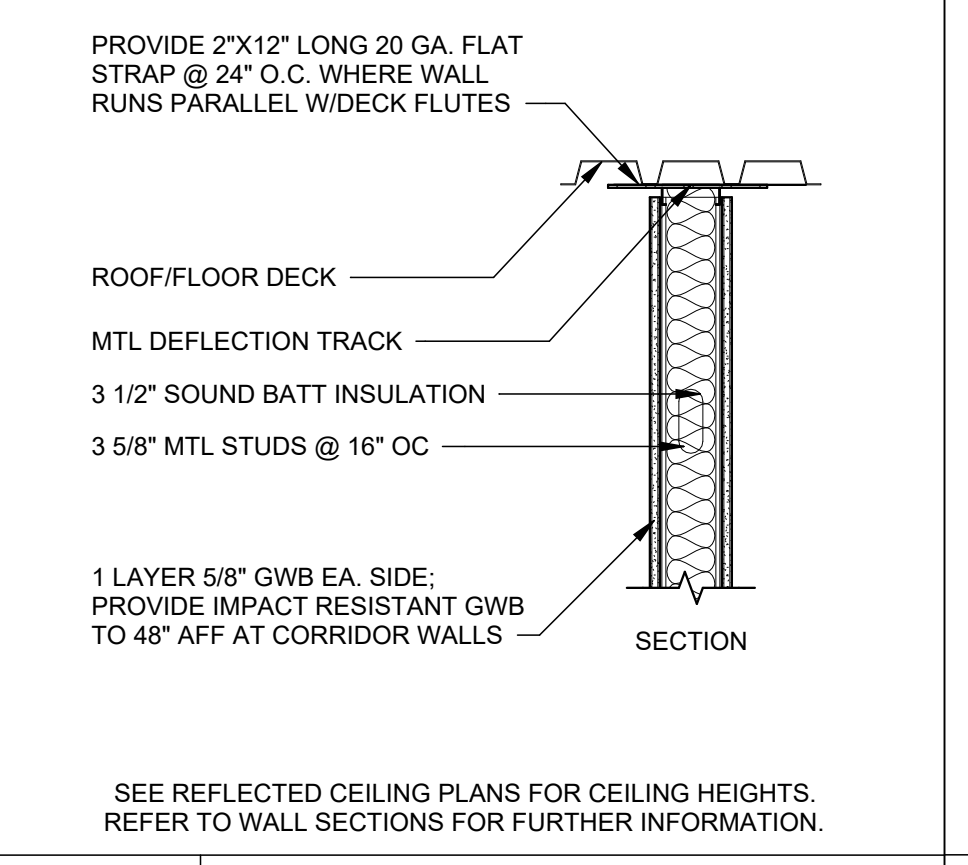
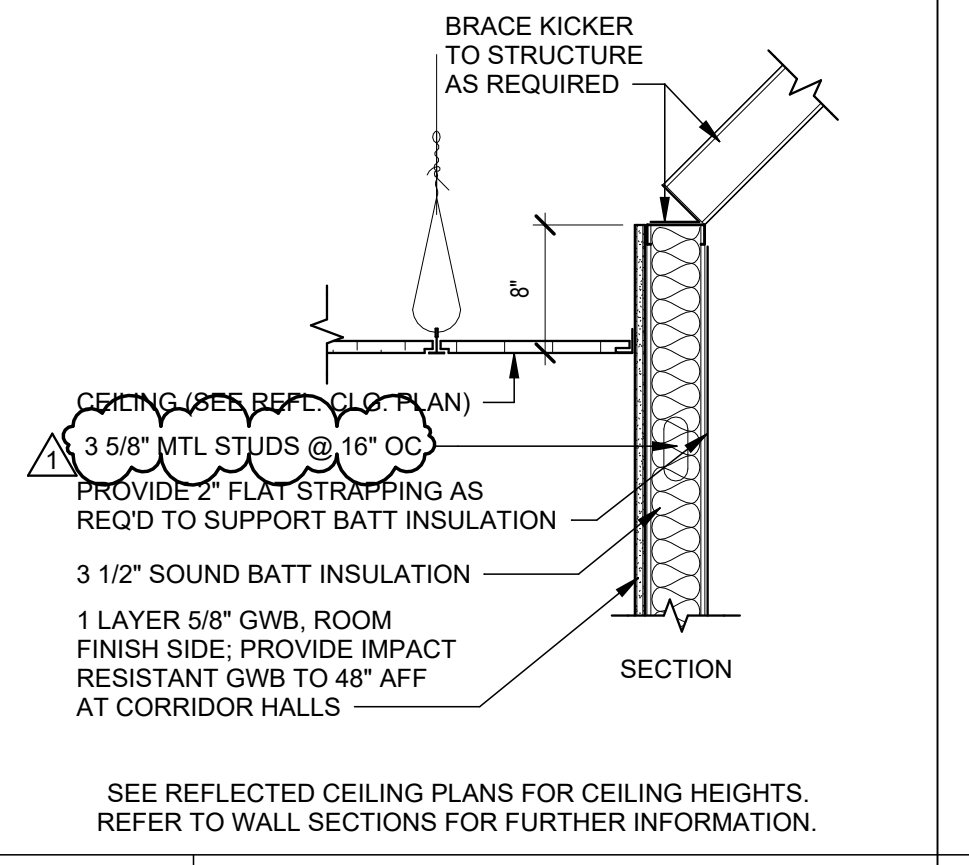
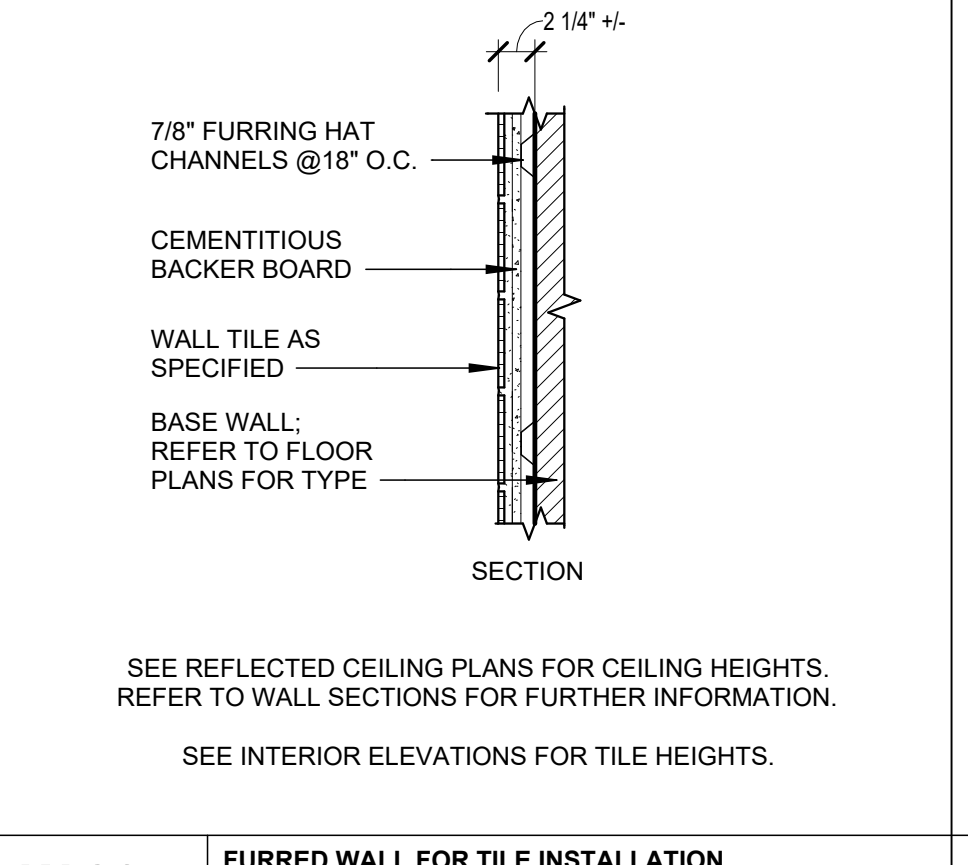
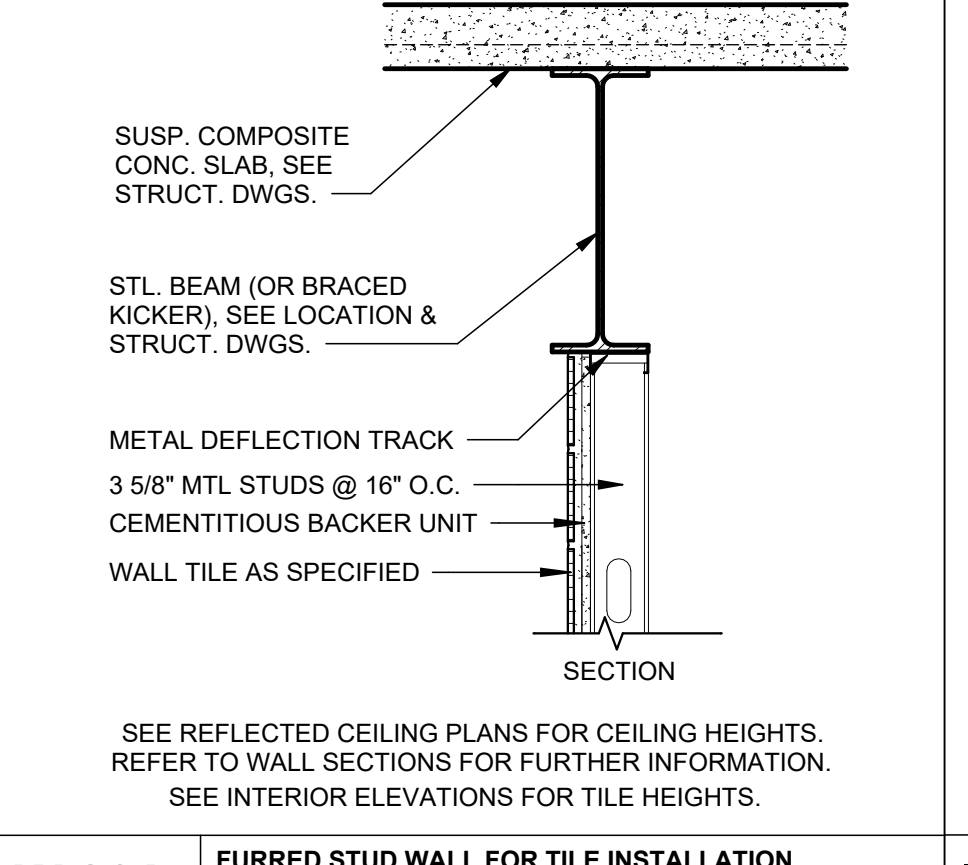
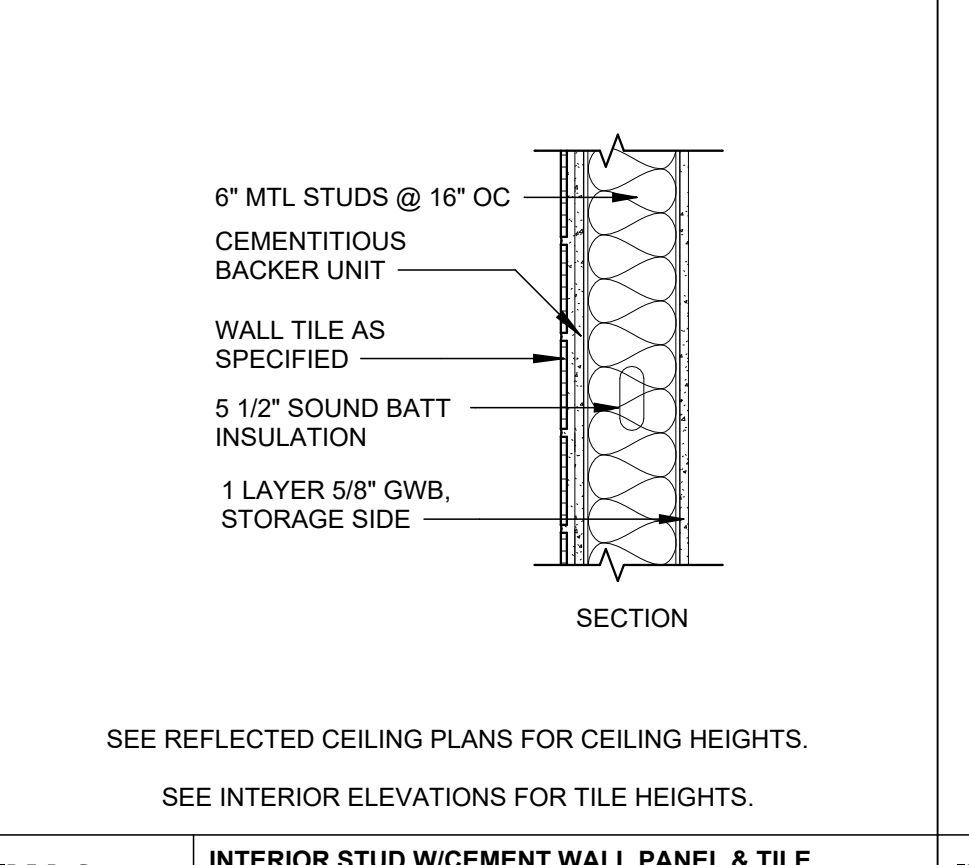
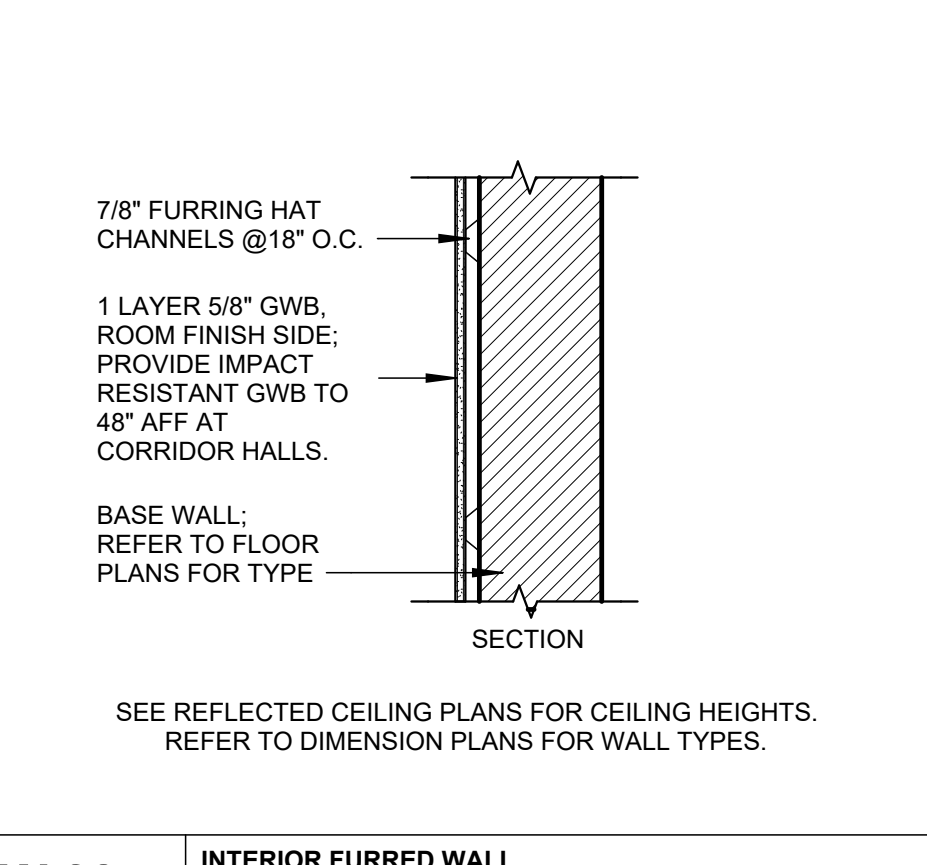
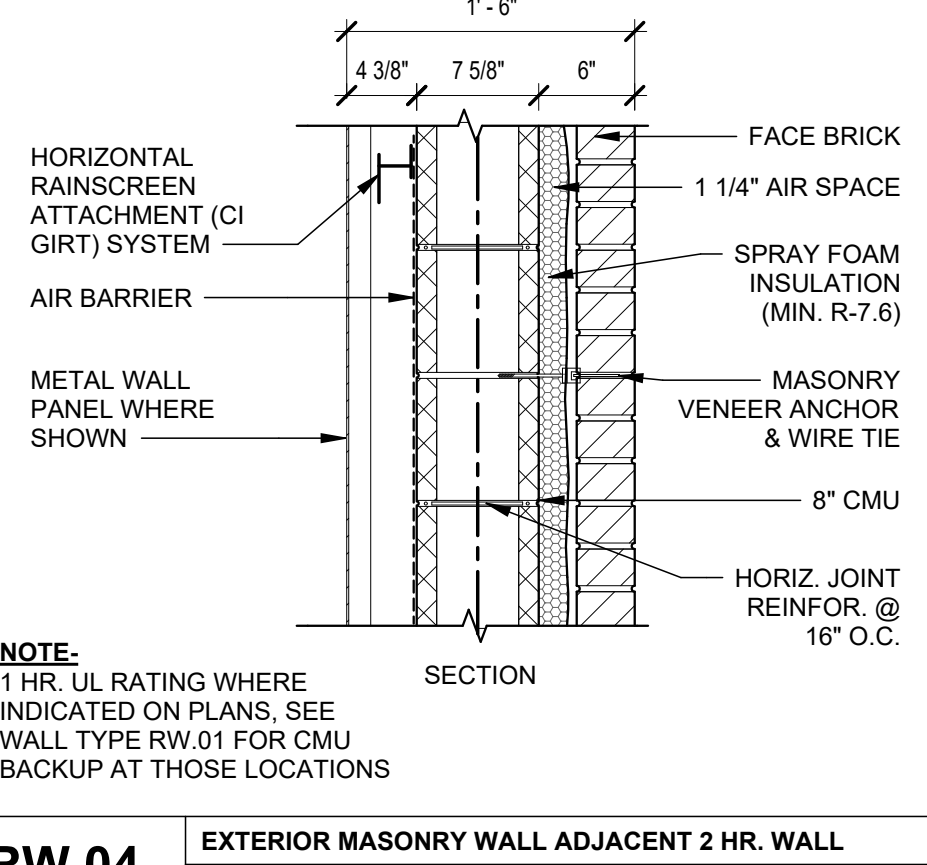

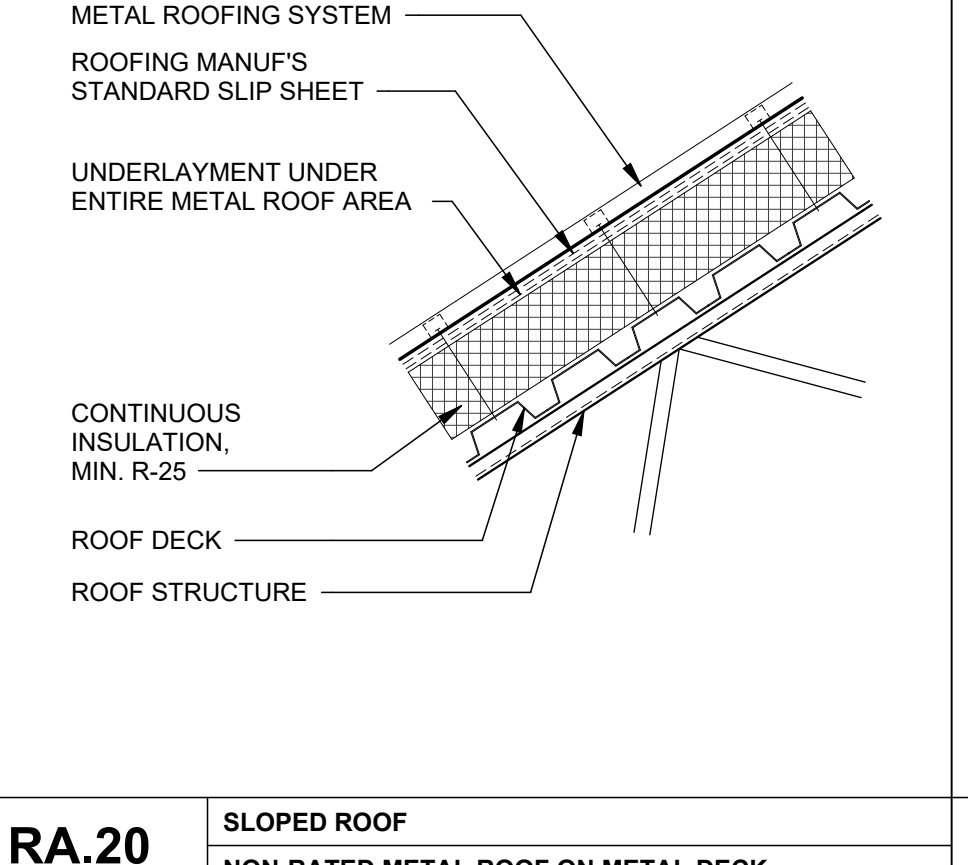
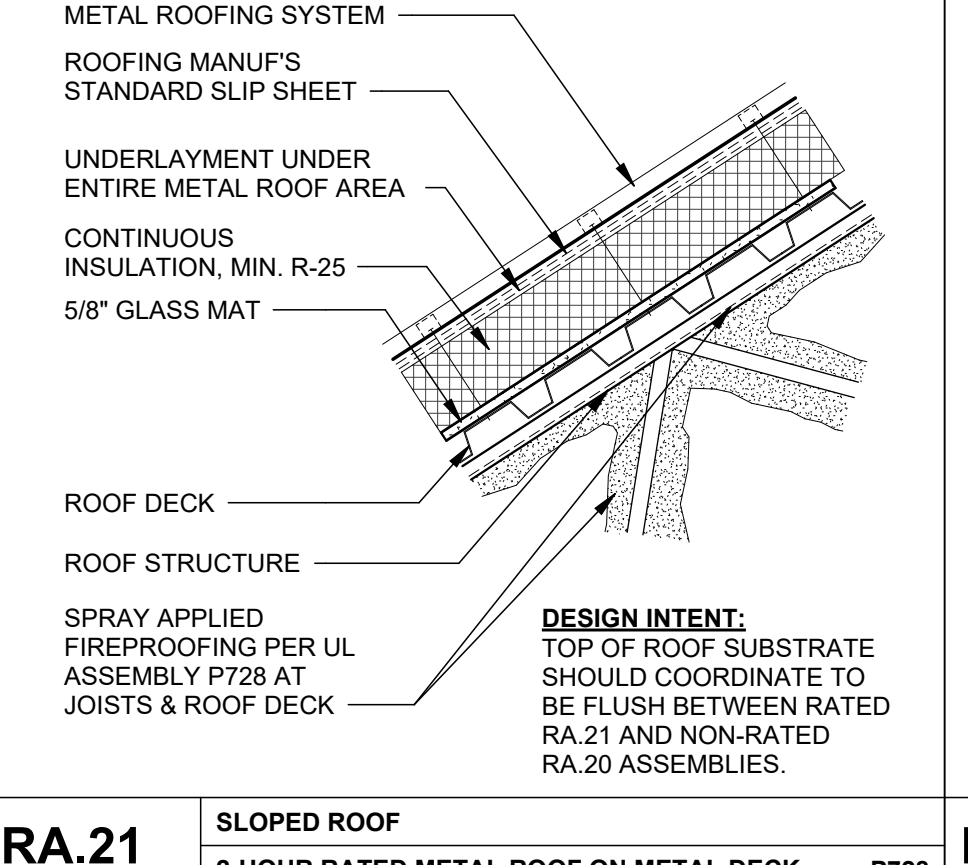
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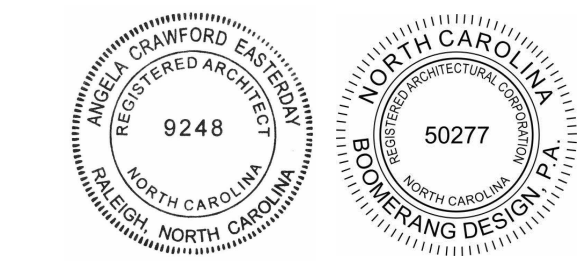
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2307
BOOMERANG DESIGN PROJECT NUMBER
02.07.2024
DRAWING RELEASE DATE

CODE DATA &
SUMMARY SHEET -
BLDG#6
SHEET TITLE

G102.4

SHEET

 <p>SECTION</p>		 <p>SECTION</p>		 <p>SECTION</p>		 <p>SECTION</p>		 <p>SECTION</p>		 <p>SECTION</p>		 <p>SECTION @ BELOW GRADE</p>	
EW.01 EXTERIOR MASONRY WALL BRICK VENEER - 8" CMU - FOAMED-IN-PLACE INSULATION		EW.01A EXTERIOR MASONRY WALL BRICK VENEER - 8" CMU - FOAMED-IN-PLACE INSULATION		EW.01B EXTERIOR MASONRY WALL (INFILL @ EXISTING) BRICK VENEER - 8" CMU - RIGID INSULATION		EW.02 EXTERIOR MASONRY WALL BRICK VENEER - 12" CMU - FOAMED-IN-PLACE INSULATION		EW.02A EXTERIOR MASONRY WALL BRICK VENEER - 12" CMU - FOAMED-IN-PLACE INSULATION		EW.03 EXTERIOR MASONRY WALL METAL PANEL RAINSCREEN SYSTEM		EW.04 POURED-IN-PLACE CONC. (GROUND FLR. BELOW GRADE) NOT RATED	
 <p>SECTION @ BELOW GRADE</p>		 <p>SECTION</p>		 <p>SECTION @ ROOF SECTION @ FLOOR</p>		 <p>SECTION @ FLOOR</p>		 <p>SECTION</p>		 <p>SECTION</p>		 <p>SECTION</p>	
EW.52 EXTERIOR MASONRY WALL (RETAINING WALL) SINGLE WYTHE - NON-INSULATED		EW.53 EXTERIOR MASONRY WALL (RETAINING WALL) SINGLE WYTHE - NON-INSULATED		IW.03 INTERIOR CMU WALL NON RATED		IW.04 INTERIOR CMU INFILL WALL NON RATED		IW.21 INTERIOR STUD & GWB WALL NON RATED		IW.21A INTERIOR STUD & GWB (ONE-SIDE ONLY) WALL NON RATED		IW.21B INTERIOR STUD & GWB (ONE-SIDE ONLY) WALL NON RATED	
 <p>SECTION</p>		 <p>SECTION</p>		 <p>SECTION @ ELEVATOR PIT</p>		 <p>SECTION</p>		 <p>SECTION</p>		 <p>SECTION</p>		 <p>SECTION</p>	
IW.22 INTERIOR STUD & GWB PARTITION NON RATED		IW.22A INTERIOR STUD & GWB (ONE-SIDE ONLY) PARTITION NON RATED		IW.24 POURED-IN-PLACE CONCRETE (AT ELEV. PIT) 1 HR. RATED		IW.26 FURRED WALL FOR TILE INSTALLATION NOT RATED		IW.26A FURRED STUD WALL FOR TILE INSTALLATION NON RATED PARTITION		IW.27 INTERIOR STUD W/CEMENT WALL PANEL & TILE NON RATED		IW.28 INTERIOR FURRED WALL NOT RATED	
 <p>SECTION</p>		 <p>SECTION</p>		 <p>SECTION</p>		 <p>SECTION</p>		 <p>SECTION</p>		 <p>SECTION</p>		 <p>SECTION</p>	
IW.29 INTERIOR INFILL WALL BRICK VENEER - 4" BRICK/ 4" CMU/ GWB		IW.29 INTERIOR INFILL WALL BRICK VENEER - 4" BRICK/ 4" CMU/ GWB		RW.01 INTERIOR CMU WALL 1-HOUR RATED U905		RW.02 INTERIOR CMU WALL 2-HOUR RATED U905		RW.03 EXTERIOR MASONRY WALL ADJACENT 2 HR. WALL BRICK VENEER - 1 HR. RATED U905		RW.04 EXTERIOR MASONRY WALL ADJACENT 2 HR. WALL BRICK VENEER - 1 HR. RATED U905			
 <p>SECTION</p>		 <p>SECTION</p>		 <p>SECTION</p>		 <p>SECTION</p>		 <p>SECTION</p>					
RA.20 SLOPED ROOF NON-RATED METAL ROOF ON METAL DECK		RA.21 SLOPED ROOF 2-HOUR RATED METAL ROOF ON METAL DECK P728		RA.31 LOW SLOPE NON RATED SINGLE-PLY ROOF									



COOPER ACADEMY
A & R
PROJECT TITLE

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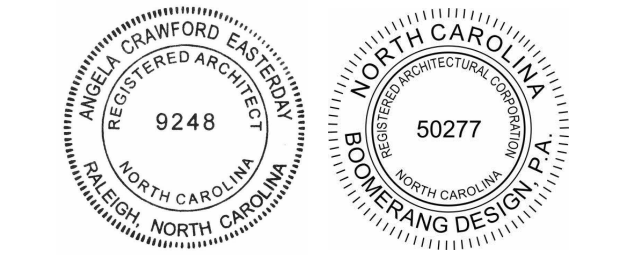
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BOOMERANG DESIGN PROJECT NUMBER
02.07.2024
DRAWING RELEASE DATE

TYP. WALL & ROOF
ASSEMBLIES AND
RATED U.L. ASSEMBLY
DETAILS
SHEET TITLE

G103

SHEET



COOPER ACADEMY A & R PROJECT TITLE

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REVISIONS		
NO.	DATE	DESCRIPTION
1	02/27/2024	ADDENDUM 2

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2307
BOOMERANG DESIGN PROJECT NUMBER
02.07.2024
DRAWING RELEASE DATE

U.L. RATED
ASSEMBLIES
SHEET TITLE
G104
SHEET

Design No. U905
November 09, 2020

Bearing Wall Rating — 2 HR.
Nonbearing Wall Rating — 2 HR

This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as Canada, a load restriction factor shall be used — See Guide BXUV or BXUV7

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

1. **Concrete Blocks*** — Various designs. Classification D-2 (2 hr). See **Concrete Blocks** category for list of eligible manufacturers.

2. **Mortar** — Blocks laid in full bed of mortar, nom. 3/8 in. thick, of not less than 2-1/4 and not more than 3-1/2 parts of clean sharp sand to 1 part Portland cement (proportioned by volume) and not more than 50 percent hydrated lime (by cement volume). Vertical joints staggered.

3. **Portland Cement Stucco or Gypsum Plaster** — Add 1/2 hr to classification if used. Where combustible members are framed in wall, plaster or stucco must be applied on the face opposite framing to achieve a max. Classification of 1-1/2 hr. Attached to concrete blocks (Item 1).

4. **Loose Masonry Fill** — If all core spaces are filled with loose dry expanded slag, expanded clay or shale (Rotkin Pin Process), water repellent vermiculite masonry fill insulation, or silicone treated perlite loose fill insulation add 2 hr to classification.

5. **Foamed Plastic*** — (Optional-Not Shown) — 1-1/2 in. thick max. 4 ft wide sheathing attached to concrete blocks (Item 1).

ATLAS ROOFING CORP — "EnergyShield Pro Wall Insulation", "EnergyShield Pro 2 Wall Insulation", "EnergyShield CGF Pro and EnergyShield Ply Pro

CARLISLE COATINGS & WATERPROOFING INC — Type R2+ SHEATHÉ

DUPONT DE NEMOURS, INC. — Types Thermax Sheathing, Thermax Light Duty Insulation, Thermax Heavy Duty Insulation, Thermax Metal Building Board, Thermax White Finish Insulation, Thermax c Exterior Insulation, Thermax XARMOR c Exterior Insulation, Thermax IH Insulation, Thermax Plus Liner Panel, Thermax Heavy Duty Plus (HDP), TUFF-R™ c Insulation, Thermax Butler Stylwall Insulation Board and Thermax Morton Heavy Duty Insulation Board

FIRESTONE BUILDING PRODUCTS CO L L C — "Enverge" CI Foil Exterior Wall Insulation" and "Enverge" CI Glass Exterior Wall Insulation"

HUNTER PANELS, A DIVISION OF CARLISLE CONSTRUCTION MATERIALS, LLC — Types "Xci-Class A", "Xci Foil (Class A)", "Xci 286"

RMAX, A BUSINESS UNIT OF SIKA CORPORATION — Types "TSX-8500", "ECOMAX® FR", "TSX-8510", "ECOMAX xi FR White", "ECOMAX®", "ECOMAX® FR Air Barrier", "Thermasheath-XP", "Thermasheath", "Durasheath", "Thermasheath-S", "Durasheath-3".

JOHNS MANVILLE — Type "AP Foil-Faced Foam Sheathing"

5A. **Building Units*** — As an alternate to Items 5, min. 1-in. thick polyisocyanurate composite foamed plastic insulation boards, nom. 48 by 48 or 96 in.

HUNTER PANELS, A DIVISION OF CARLISLE CONSTRUCTION MATERIALS, LLC — "Xci NB", "Xci Ply"

RMAX, A BUSINESS UNIT OF SIKA CORPORATION — "Thermasheath-Si", "ECOBASE®", "ThermaBase-CI", "ECOMAX® FR Ply", "ECOMAX® Ply".

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

Design No. P728
Restrained Assembly Rating — 1-1/2 or 2 Hr (See Item 4)
Unrestrained Assembly Rating — 1-1/2 Hr (See Item 4)
Unrestrained Beam Rating — 2 Hr (See Item 4)

This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as Canada, a load restriction factor shall be used — See Guide BXUV or BXUV7

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

SEE ITEM # 8 FOR SPRAY-APPLIED FIRE RESISTIVE MATERIAL THICKS

1. **Steel Supports** — W6x16 steel beam min size, or 10K1 steel joist min size with a max allowable tensile stress of 30,000 psi. As alternate to steel beam or steel joists, **joist girders** (Not Shown) — 20 in. min depth and 13 lb/lin ft min weight.

2. **Roof Covering** — Consisting of hot mopped or cold application bituminous materials compatible with the insulation(s) described herein which provide Class A, B or C coverings. See Building Materials Directory **Roof Covering Materials** (TEVT).

thickness of any roofing system described herein, as long as the roofing system states that there is no limit on maximum thickness. Joints offset in both directions from layer below.

RMAX, A BUSINESS UNIT OF SIKA CORPORATION — "Ultra-Max HD"

SIKA SARNAFIL INC — Sarnatherm Roof Board-R

4A. **Foamed Plastic*** — Optional — (Not Shown) — Maximum 1/2 inch thick polyisocyanurate foamed plastic insulation boards, nom 48 by 48 or 96 in. Boards may be applied as the top layer in addition to the specified minimum thickness of any roofing system described herein, as long as the roofing system states that there is no limit on maximum thickness. Joints offset in both directions from layer below.

CARLISLE SYNTec SYSTEMS, A DIVISION OF CARLISLE CONSTRUCTION MATERIALS, LLC — SecurShield HD, SecurShield HD Plus, SecurShield HD NH, SecurShield HD Plus NH, SecurShield HD RL

HUNTER PANELS, A DIVISION OF CARLISLE CONSTRUCTION MATERIALS, LLC — H-Shield HD, H-Shield HD90, H-Shield HD RL, H-Shield HD NH, H-Shield HD90 NH

POLYGLASS USA INC — Polytherm HD

VERSICO INC — SecurShield HD, WeatherBond XFP HD Cover Board, SecurShield HD Plus, WeatherBond XFP HD Plus Cover Board, SecurShield HD NH, WeatherBond XFP HD NH Cover Board, SecurShield HD Plus NH, WeatherBond XFP HD Plus NH Cover Board, SecurShield HD RL

4A. **Foamed Plastic*** — Optional — (Not Shown) — Maximum 1 inch thick polyisocyanurate foamed plastic insulation boards, nom 48 by 48 or 96 in. Boards may be applied as the top layer in addition to the specified minimum thickness of any roofing system described herein, as long as the roofing system states that there is no limit on maximum thickness. Joints offset in both directions from layer below.

ATLAS ROOFING CORP — ACFoam HD CoverBoard and ACFoam CoverBoard FR

4F. **Foamed Plastic*** — (Optional — Not Shown) — Maximum 1 in. thick polyisocyanurate foamed plastic insulation boards, nom 48 by 48 or 96 in. Boards may be applied as the top layer in addition to the specified minimum thickness of any roofing system described herein, as long as the roofing system states that there is no limit on maximum thickness. Joints offset in both directions from layer below.

JOHNS MANVILLE — Types ProtectoR HD, SeparatorR CGF, Invinis

4G. **Building Units*** — As an alternate to Item 4, polyisocyanurate foamed plastic insulation boards, nom 48 by 48 or 96 in., faced on the top surface with wood fiber board. Min thickness of polyisocyanurate core is 1 in. for 1-1/2 hr Restrained Assembly Rating and 4 in. for the 2 hr Restrained Assembly Rating. No limit on max overall thickness. Boards to be installed with end joints staggered a min of 6 in. in adjacent rows.

CARLISLE SYNTec SYSTEMS, A DIVISION OF CARLISLE CONSTRUCTION MATERIALS, LLC — Polyiso HP-H Composite NH

HUNTER PANELS, A DIVISION OF CARLISLE CONSTRUCTION MATERIALS, LLC — H-Shield-WF, H-Shield-WF NH

VERSICO INC — MP-HWF NH, WeatherBond XP-WF NH

4H. **Building Units*** — As an alternate to Item 4, polyisocyanurate foamed plastic insulation boards, nom 48 by 48 or 96 in., faced on the top surface with perlite composite board. Min thickness of polyisocyanurate core is 1 in. for 1-1/2 hr Restrained Assembly Rating and 4 in. for the 2 hr Restrained Assembly Rating. No limit on max overall thickness. Boards to be installed with end joints staggered a min of 6 in. in adjacent rows.

HUNTER PANELS, A DIVISION OF CARLISLE CONSTRUCTION MATERIALS, LLC — H-Shield-P, H-Shield-RP, H-Shield-P NH, H-Shield-RP NH

4I. **Building Units*** — As an alternate to Items 4, polyisocyanurate foamed plastic insulation boards, nom 48 by 48 or 96 in., faced on the top surface with glass mat faced gypsum panel. Min thickness of polyisocyanurate core is 1 in. for 1-1/2 hr Restrained Assembly Rating and 4 in. for the 2 hr Restrained Assembly Rating. No limit on max overall thickness. Boards to be installed with end joints staggered a min of 6 in. in adjacent rows.

2A. In lieu of Item 2, roof covering consisting of single-ply Roofing Membranes* — that is either ballasted, adhered or mechanically attached as permitted under the respective manufacturer's Classification. See **Roofing Membranes** (CHC) category for names of manufacturers.

3. **Gypsum Board** — (Classified or Unclassified) — Supplied in sheets from nom 2 by 4 ft to a 4 by 12 ft, by nom 5/8 in. thick. Min weight 2.2 psl applied perpendicular to steel roof deck direction with adhesive (Item 5), hot asphalt (Item 5A) or laid loosely. End joints to occur over crests of steel roof and to be staggered 2 ft in adjacent rows.

CABOT MANUFACTURING ULC (View Classification) — CKNX.R25370

4. **Foamed Plastic*** — 36 by 48 in. (min size) polyisocyanurate foamed plastic insulation boards applied in one or more layers. Min thickness is 1 in. with no limit on max overall thickness for the 1-1/2 hr Restrained Assembly Rating. Thickness shall be 4 in. for the 2 hr Restrained Assembly Rating. Boards to be installed with end joints staggered a min of 6 in. in adjacent rows. When applied in more than one layer, each layer to be offset in both directions from layer below (and from gypsum wallboard joints) a min of 6 in. in order to lap all joints.

ATLAS ROOFING CORP — ACFoam II, Tapered ACFoam II, ACFoam II NH, Tapered ACFoam II NH, ACFoam III, ACFoam III NH, Tapered ACFoam III NH, ACFoam IV, ACFoam Supreme, ACFoam Supreme NH, AC Foam Recover Board, ACFoam Recover Board NH

MULE-HIDE PRODUCTS CO INC — POLY ISO 2

CARLISLE SYNTec SYSTEMS, A DIVISION OF CARLISLE CONSTRUCTION MATERIALS, LLC — Types HP, HP-H, HP-NH, HP-W, SecurShield CD, InsulBase NH, SecurShield NH, SecurShield HD Composite NH, Polyiso HP-F NH, InsulBase RL, SecurShield RL, Polyiso HP-F, SecurShield HD Composite RL

DOW ROOFING SYSTEMS L L C — "Dow Termico Polyisocyanurate Insulation", "Dow Termico ISO 3000 Insulation", "Dow Termico ISO HP-FR"

FIRESTONE BUILDING PRODUCTS CO L L C — "ISO 95+ GL", "ISO 95+ FK", "ISO 95+ CAN", "ISO 95+ GL NH", "ISOGARD HD Composite Board", "RESISTA", "ISOGARD GL", "ISOGARD CG"

GAF — EnergyGuard™, EnergyGuard™ RA, EnergyGuard™ NH. When EnergyGuard™ or EnergyGuard™ NH are used, all ratings are reduced by 1/2 hr.

HUNTER PANELS, A DIVISION OF CARLISLE CONSTRUCTION MATERIALS, LLC — H-Shield, H-Shield-F, H-Shield-CG, H-Shield-C, H-Shield Premier, H-Shield HD Composite, H-Shield HD Composite CG, H-Shield RL, H-Shield CG RL, H-Shield HD Composite CG RL, H-Shield NH, H-Shield-F NH, H-Shield-CG NH, H-Shield-C NH, H-Shield Premier NH, H-Shield HD Composite CG NH

MULE-HIDE PRODUCTS CO INC — Poly Iso 1, Tapered Poly ISO 1, Poly ISO 1-DWD, Tapered Poly ISO 1-DWD, Poly ISO 1-HD, Poly ISO 1-HD90, Poly ISO 1-HD-Composite

JOHNS MANVILLE — ENRGY 3 25 psi, ENRGY 3, Tapered ENRGY 3, Tapered ENRGY 3 25 psi, ENRGY 3 AGF, Tapered ENRGY 3 AGF, ENRGY 3 25 psi AGF, Tapered ENRGY 3 25 psi AGF, ENRGY 3 CGF, Tapered ENRGY 3 CGF, ENRGY 3 25 psi CGF, Tapered ENRGY 3 25 psi CGF, ISO-3, Tapered ISO-3, ValuTherm, Tapered ValuTherm, ValuTherm 25 psi, Tapered ValuTherm 25 psi, ValuTherm AGF, Tapered ValuTherm AGF, ValuTherm 25 psi AGF, Tapered ValuTherm 25 psi AGF, ValuTherm CGF, Tapered ValuTherm CGF, ValuTherm 25 psi CGF, Tapered ValuTherm 25 psi CGF

MARTIN FIREPROOFING CORP — "Perform-A-Deck I"

POLYGLASS USA INC — Polytherm H, Polytherm CG, Polytherm HD Composite CG

RMAX, A BUSINESS UNIT OF SIKA CORPORATION — Multi-Max-3, Multi-Max FA-3, Ultra-Max, Ultra-Max Plus, Tapered Ultra-Max Plus, Tapered Thermarool-3, Tapered Thermarool FA-3, Tapered Ultra-Max

SIKA SARNAFIL INC — Sarnatherm-R Insulation, Sarnatherm-R CG Insulation, Sarnatherm-R Tapered Insulation, Sarnatherm-R CG Tapered Insulation

SIPLAST INC — Paratherm G

CARLISLE SYNTec SYSTEMS, A DIVISION OF CARLISLE CONSTRUCTION MATERIALS, LLC — Polyiso HP-HDD, Polyiso HP-HDD NH

HUNTER PANELS, A DIVISION OF CARLISLE CONSTRUCTION MATERIALS, LLC — H-Shield-DD, H-Shield-DD NH

VERSICO INC — MP-HDD, MP-HDD NH

4J. **Foamed Plastic*** — As an alternate to Items 4 through 4E — Polyurethane foamed plastic roof insulation. Formed by the simultaneous spraying of two liquid components applied over the gypsum board (Item 3) in accordance with the manufacturer's instructions. Min thickness is 1 in. with no limit on max overall thickness for the 1-1/2 hr Restrained Assembly Rating. Thickness shall be min 4 in. for the 2 hr Restrained Assembly Rating.

BASF CORP — Types FE348-2.5, FE348-2.8, FE348-3.0, ELASTOSPRAY 81255, ELASTOSPRAY 81285, ELASTOSPRAY 81305, SKYITE C1

BASF CORP — Elastospray 5100-2.0, Elastospray 5100-2.5, Elastospray 81302, Elastospray 81272, Elastospray Alpha System, Elastospray 81252

5. **Adhesive*** — (Optional) — May be applied between crests of steel roof deck and vapor retarder, between vapor retarder and first layer of insulation, and between layers of insulation. Applied in 1/2 in. wide ribbons 6 in. OC at 0.4 gal/100 sq ft. See **Adhesives** (BYWR) category for names of manufacturers.

5A. **Asphalt Or Coal Tar Pitch*** — (Optional — Not Shown) — In lieu of Item 5, used to attach the first layer of insulation to vapor retarder and each additional layer of roof insulation. Applied at a max rate of 25 lb/100 sq ft.

5B. **Mechanical Fasteners** — (Optional — Not Shown) — Mechanical screw-type fastener with metal washer designed for the purpose may be used to attach one or more layers of insulation to steel roof deck.

5C. **Adhesive*** — (Optional) — (Bearing the UL Classification Marking for Roof Systems (TGFU)) — The vapor retarder, the gypsum wallboard or the first layer of roof insulation may be secured with adhesive to the steel crest surfaces. Also used to attach the vapor retarder to gypsum wallboard, the first layer of insulation to vapor retarder or gypsum wallboard and each additional layer of insulation. Applied at a max rate of 19.8 g/ft. When FAST 100 adhesive is used, additional **Spray-Applied Fire Resistance Materials*** (CHPX) is required on the deck for the 1-1/2 hr Unrestrained Assembly Ratings. The thickness specified for the deck shall be increased by 1/16 in. for 1-1/2 hr Unrestrained Assembly Rating.

CARLISLE SYNTec SYSTEMS, A DIVISION OF CARLISLE CONSTRUCTION MATERIALS, LLC — FAST 100

6. **Vapor Retarder — Sheathing Material*** — (Optional) — Vinyl film or paper scrim vapor barrier, applied to steel roof deck with adhesive (Item 5), asphalt (Item 5A) or laid loosely, overlapped approximately 2 in. on adjacent sheets. See **Sheathing Material** (CHIZ) category for names of manufacturers.

7. **Steel Roof Deck** — (Unclassified) — Min 1-1/2 in. deep and 30 in. wide galv fluted steel deck. Flutes 6 in. OC with crest width ranging from 3-5/8 to 5-1/16 in. Min gauge is 22 MSG. Ends overlapped at supports min 1-1/2 in. and welded to supports at deck laps and a max of 12 in. OC between sides of units. Side laps of adjacent units welded, button-punched or secured together with No. 12 by 3/4 in. long self-drilling, self-tapping steel screws spaced a max of 36 in. OC. **Classified Steel Floor and Form Units*** Noncomposite. 1-1/2 in. deep, galv units, min gauge is 22 MSG. Welded to supports with welding washers 12 in. OC. Side lap joints of adjacent units welded or secured together with No. 12 by 1/2 in. Self-drilling, Self-tapping steel screws midway between steel joists.

CANAM GROUP INC — Type P-3606 or P-3615; 36 in. wide Types 1.5B, 1.5B1

8. **Spray-Applied Fire Resistive Materials*** — Applied by mixing with water and spraying in more than one coat to the thicknesses shown below, to steel surfaces which are clean and free of dirt, loose scale and oil. Min avg and min ind density of 17 and 16 pcf, respectively. For method of density determination, see Design Information Section, Sprayed

Restrained Assembly Rating	Unrestrained Assembly Rating	One Deck	Spray Applied Fire Resistive Min		
			Thick In. Deck	Thick In. Beam	Thick In. Joist
1-1/2 hr	1-1/2 hr	2	1-7/16	15/16	1-7/16
2 hr	1-1/2 hr	2	1-1/2 in.	15/16	1-1/2 in.

OCCUPANCY SCHEDULE - GROUND FLOOR						
NO.	NAME	FUNCTION OF SPACE (per Table 1004.1.2)	AREA	FLOOR AREA PER OCCUPANT	NET/ GROSS	OCCUPANT COUNT
604	ELEV. MACH.	MECHANICAL / STORAGE	50 SF	300	GROSS	1
606	ELECTRICAL	MECHANICAL / STORAGE	183 SF	300	GROSS	1
607	DATA	MECHANICAL / STORAGE	112 SF	300	GROSS	1
608	STORAGE	MECHANICAL / STORAGE	314 SF	300	GROSS	2
610	TEACHER WORKROOM	BUSINESS	375 SF	100	GROSS	4
612	OFFICE	BUSINESS	133 SF	100	GROSS	2
613	THIRD GRADE	EDUCATIONAL - CLASSROOM	904 SF	20	NET	46
615	RESOURCE RM.	EDUCATIONAL - CLASSROOM	396 SF	20	NET	20
617	THIRD GRADE	EDUCATIONAL - CLASSROOM	907 SF	20	NET	46
618	THIRD GRADE	EDUCATIONAL - CLASSROOM	905 SF	20	NET	46
619	THIRD GRADE	EDUCATIONAL - CLASSROOM	908 SF	20	NET	46
620	THIRD GRADE	EDUCATIONAL - CLASSROOM	954 SF	20	NET	48
621	THIRD GRADE	EDUCATIONAL - CLASSROOM	909 SF	20	NET	46

TOTAL OCCUPANTS FOR GROUND FLOOR BUILDING #5 = 310

LIFE SAFETY SYMBOL LEGEND	
(P)	DOOR TO RECEIVE PANIC HARDWARE
(H)	DOOR TO RECEIVE HOLD OPEN DEVICE
(X)	EMERGENCY EXIT SIGN
(KB)	KNOX BOX
(CR)	CARD READER
[]	FIRE EXTINGUISHER CABINET
[]	FIRE EXTINGUISHER
---	1-HR RATED
---	2-HR RATED
----->	EGRESS PATH TO EXIT
-----MTD----->	MAX TRAVEL DISTANCE TO EXIT
-----DF----->	MAX TRAVEL DISTANCE TO DRINKING FOUNTAIN
[]	EDUCATION OCCUPANCY (E)
[]	BUSINESS OCCUPANCY (B)
[]	MECHANICAL/STORAGE OCCUPANCY (S)
[]	ASSEMBLY W/O FIXED SEATING OCCUPANCY (A)

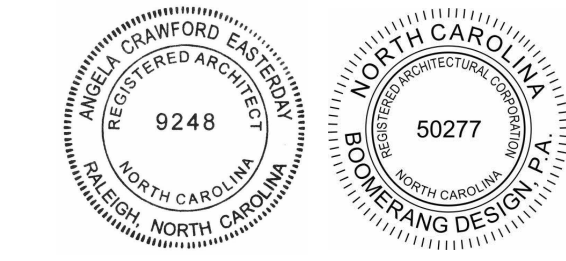
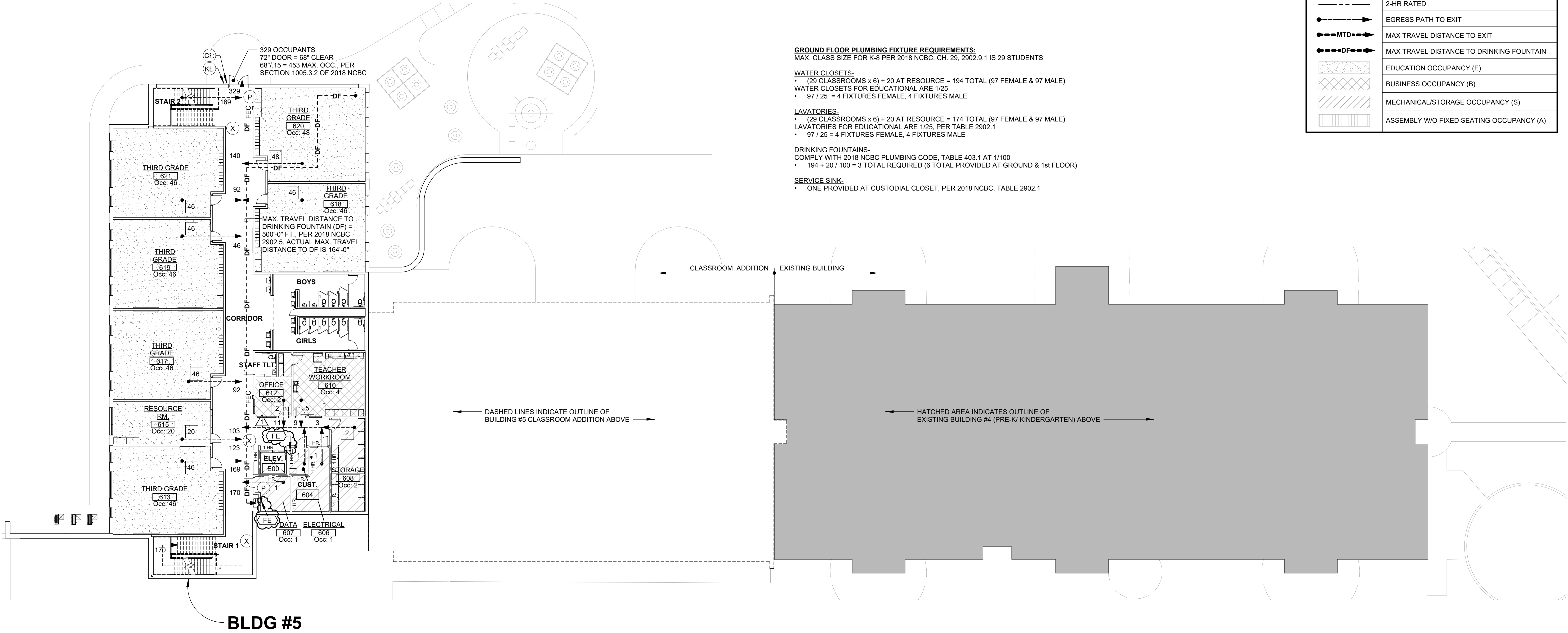
GROUND FLOOR PLUMBING FIXTURE REQUIREMENTS:
MAX. CLASS SIZE FOR K-8 PER 2018 NCBC, CH. 29, 2902.9.1 IS 29 STUDENTS

WATER CLOSETS:
• (29 CLASSROOMS x 6) + 20 AT RESOURCE = 194 TOTAL (97 FEMALE & 97 MALE)
WATER CLOSETS FOR EDUCATIONAL ARE 1/25
• 97 / 25 = 4 FIXTURES FEMALE, 4 FIXTURES MALE

LAVATORIES:
• (29 CLASSROOMS x 6) + 20 AT RESOURCE = 174 TOTAL (97 FEMALE & 97 MALE)
LAVATORIES FOR EDUCATIONAL ARE 1/25, PER TABLE 2902.1
• 97 / 25 = 4 FIXTURES FEMALE, 4 FIXTURES MALE

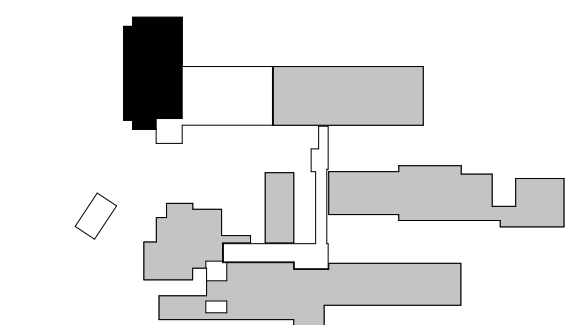
DRINKING FOUNTAINS:
COMPLY WITH 2018 NCBC PLUMBING CODE, TABLE 403.1 AT 1/100
• 194 + 20 / 100 = 3 TOTAL REQUIRED (6 TOTAL PROVIDED AT GROUND & 1st FLOOR)

SERVICE SINK:
• ONE PROVIDED AT CUSTODIAL CLOSET, PER 2018 NCBC, TABLE 2902.1



COOPER ACADEMY A & R

PROJECT TITLE



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NO.	DATE	DESCRIPTION
1	02/27/2024	ADDENDUM 2

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2307
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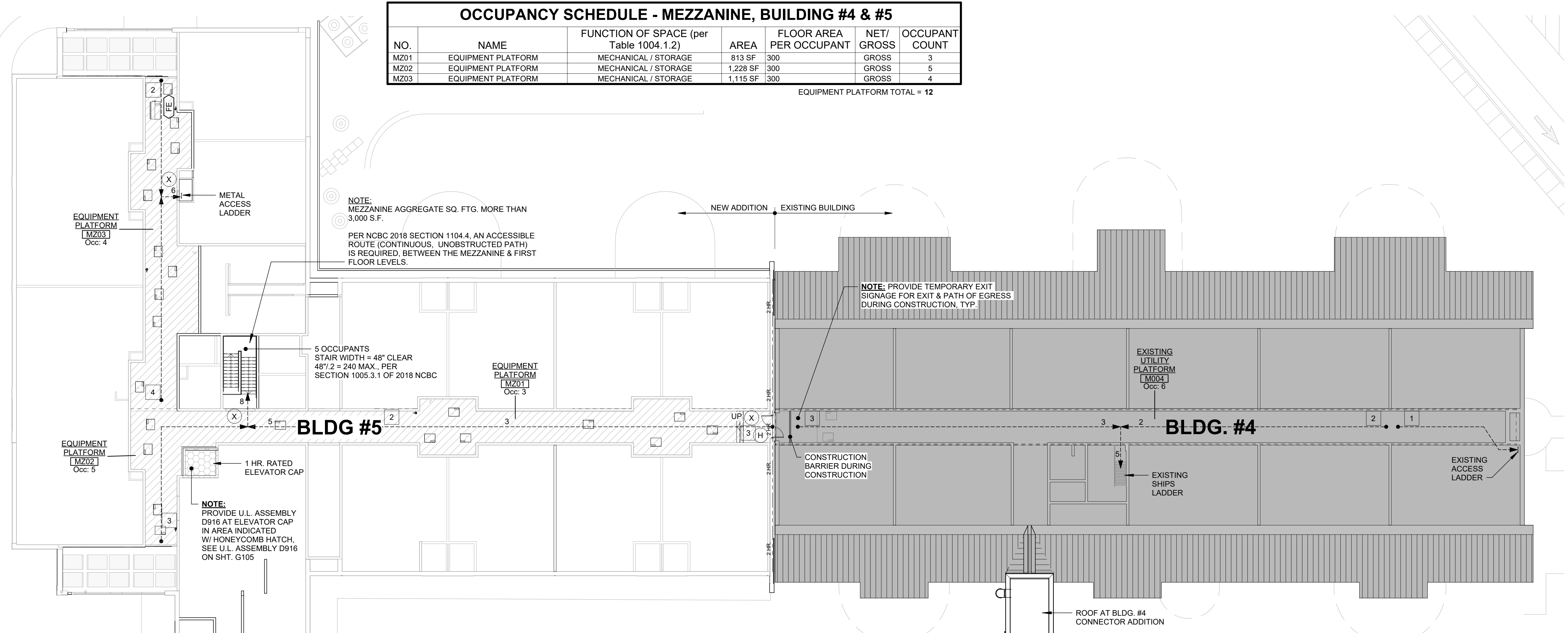
**LIFE SAFETY PLANS -
BLDG. #5 GROUND
FLOOR, POST
CONSTRUCTION**
SHEET TITLE

G107

SHEET

OCCUPANCY SCHEDULE - MEZZANINE, BUILDING #4 & #5						
NO.	NAME	FUNCTION OF SPACE (per Table 1004.1.2)	AREA	FLOOR AREA PER OCCUPANT	NET/ GROSS	OCCUPANT COUNT
MZ01	EQUIPMENT PLATFORM	MECHANICAL / STORAGE	813 SF	300	GROSS	3
MZ02	EQUIPMENT PLATFORM	MECHANICAL / STORAGE	1,228 SF	300	GROSS	5
MZ03	EQUIPMENT PLATFORM	MECHANICAL / STORAGE	1,115 SF	300	GROSS	4

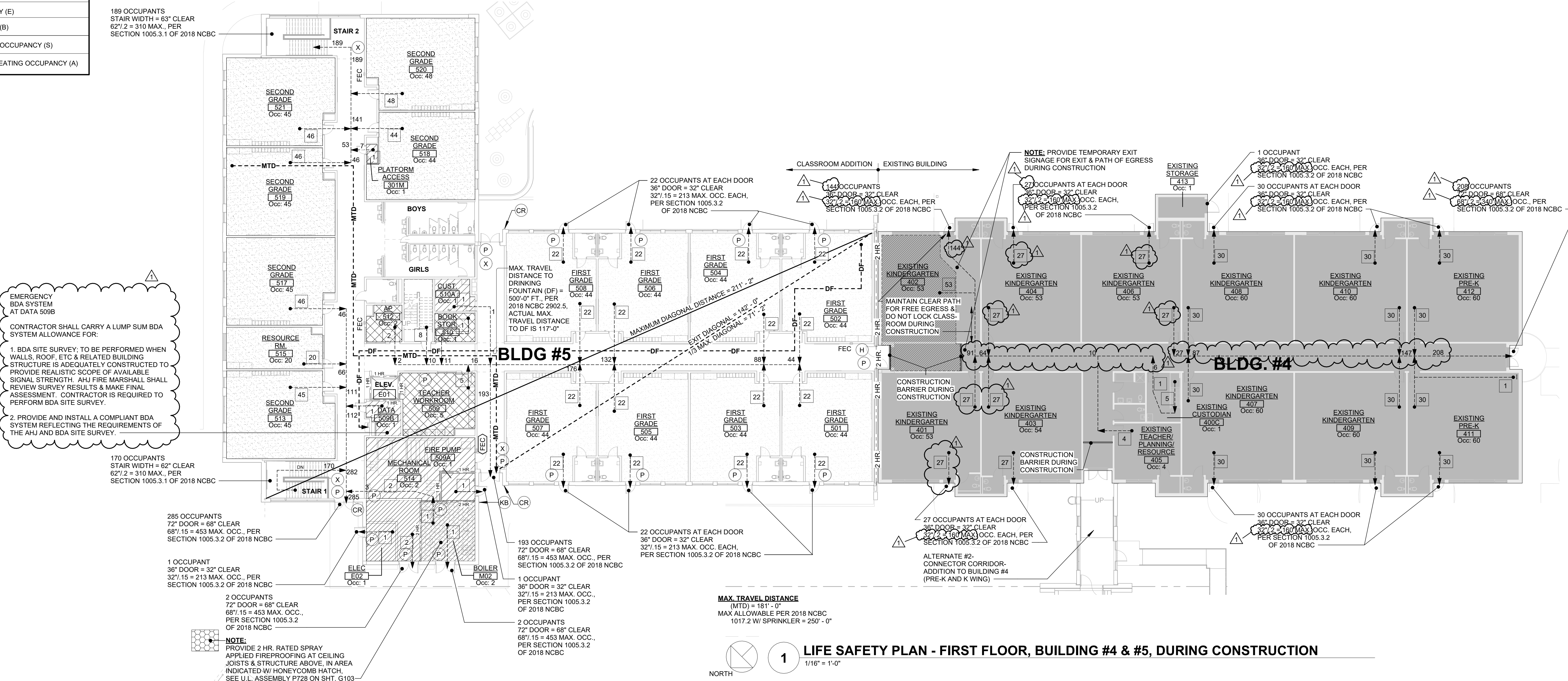
EQUIPMENT PLATFORM TOTAL = 12



2 LIFE SAFETY PLAN - EQUIPMENT PLATFORM BUILDING #4 & #5, DURING CONSTRUCTION

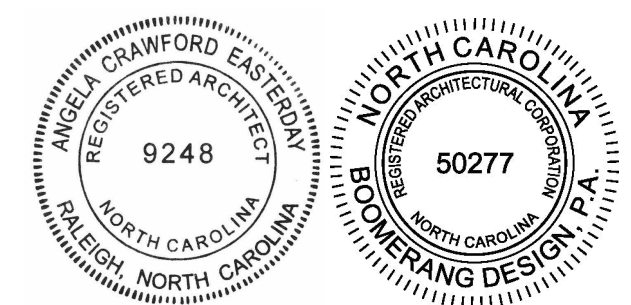
1/16" = 1'-0"

LIFE SAFETY SYMBOL LEGEND	
(P)	DOOR TO RECEIVE PANIC HARDWARE
(H)	DOOR TO RECEIVE HOLD OPEN DEVICE
(X)	EMERGENCY EXIT SIGN
(KB)	KNOX BOX
(CR)	CARD READER
[Fire Extinguisher Cabinet]	FIRE EXTINGUISHER CABINET
[Fire Extinguisher]	FIRE EXTINGUISHER
---	1-HR RATED
---	2-HR RATED
→	EGRESS PATH TO EXIT
→ MTD	MAX TRAVEL DISTANCE TO EXIT
→ DF	MAX TRAVEL DISTANCE TO DRINKING FOUNTAIN
[Hatched Box]	EDUCATION OCCUPANCY (E)
[Cross-hatched Box]	BUSINESS OCCUPANCY (B)
[Diagonal Hatched Box]	MECHANICAL/STORAGE OCCUPANCY (S)
[Vertical Hatched Box]	ASSEMBLY W/O FIXED SEATING OCCUPANCY (A)



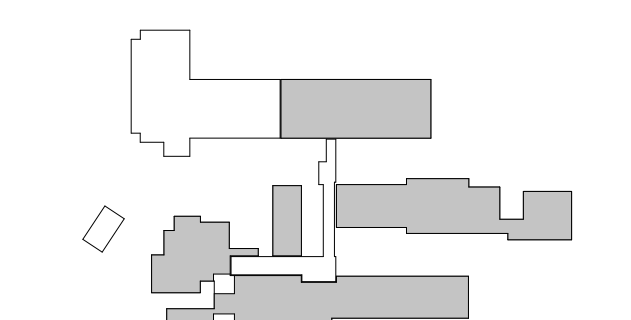
1 LIFE SAFETY PLAN - FIRST FLOOR, BUILDING #4 & #5, DURING CONSTRUCTION

1/16" = 1'-0"



COOPER ACADEMY A & R PROJECT TITLE

"CLIENT'S PROJECT" # - XXX



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2307
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02.07.2024
DRAWING RELEASE DATE

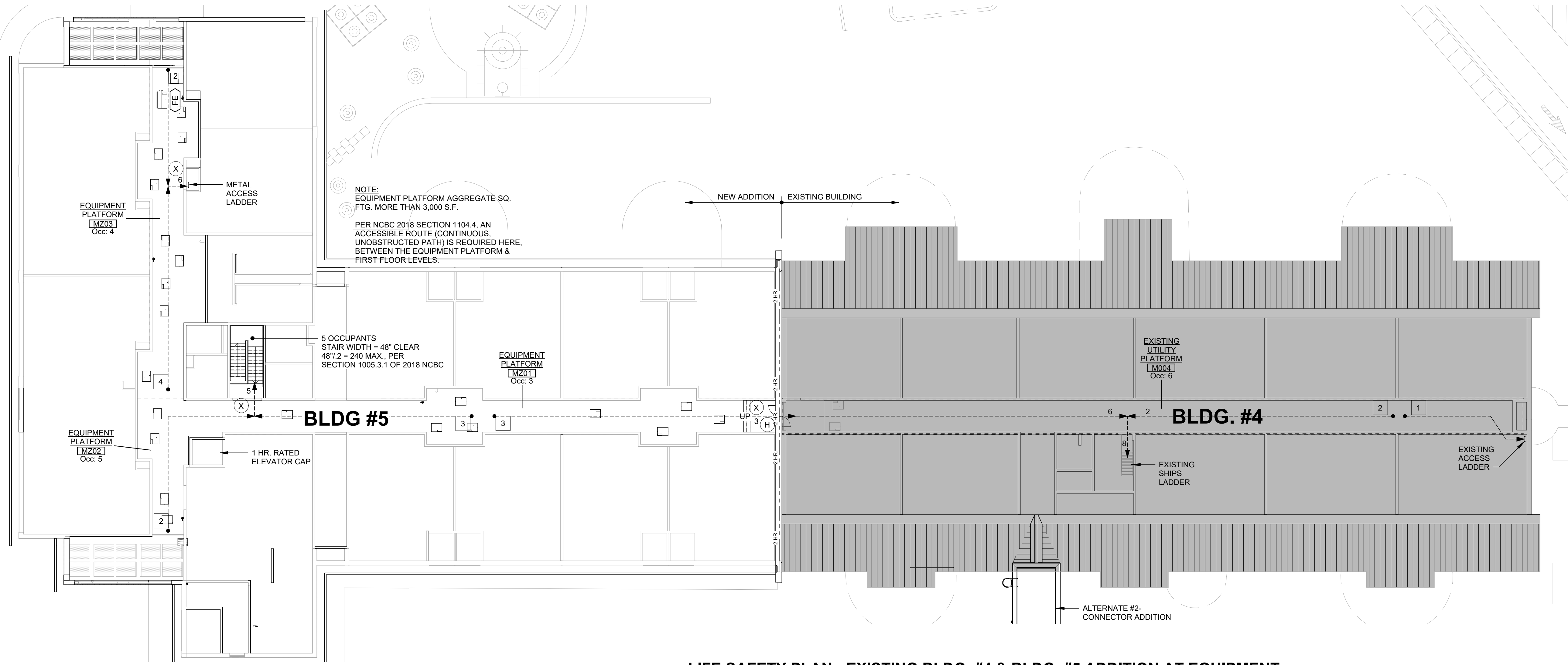
**LIFE SAFETY PLAN - BLDG.
#4 & #5, DURING
CONSTRUCTION**
SHEET TITLE

G108

SHEET

LIFE SAFETY SYMBOL LEGEND

(P)	DOOR TO RECEIVE PANIC HARDWARE
(H)	DOOR TO RECEIVE HOLD OPEN DEVICE
(X)	EMERGENCY EXIT SIGN
(KB)	KNOX BOX
(CR)	CARD READER
[FIRE EXTINGUISHER]	FIRE EXTINGUISHER CABINET
[FIRE EXTINGUISHER]	FIRE EXTINGUISHER
---	1-HR RATED
---	2-HR RATED
---	EGRESS PATH TO EXIT
---	MAX TRAVEL DISTANCE TO EXIT
---	MAX TRAVEL DISTANCE TO DRINKING FOUNTAIN
[HATCH]	EDUCATION OCCUPANCY (E)
[HATCH]	BUSINESS OCCUPANCY (B)
[HATCH]	MECHANICAL/STORAGE OCCUPANCY (S)
[HATCH]	ASSEMBLY W/O FIXED SEATING OCCUPANCY (A)



LIFE SAFETY PLAN - EXISTING BLDG. #4 & BLDG. #5 ADDITION AT EQUIPMENT PLATFORMS, POST-CONSTRUCTION

1/16" = 1'-0"

OCCUPANCY SCHEDULE - BUILDING #5, FIRST FLOOR

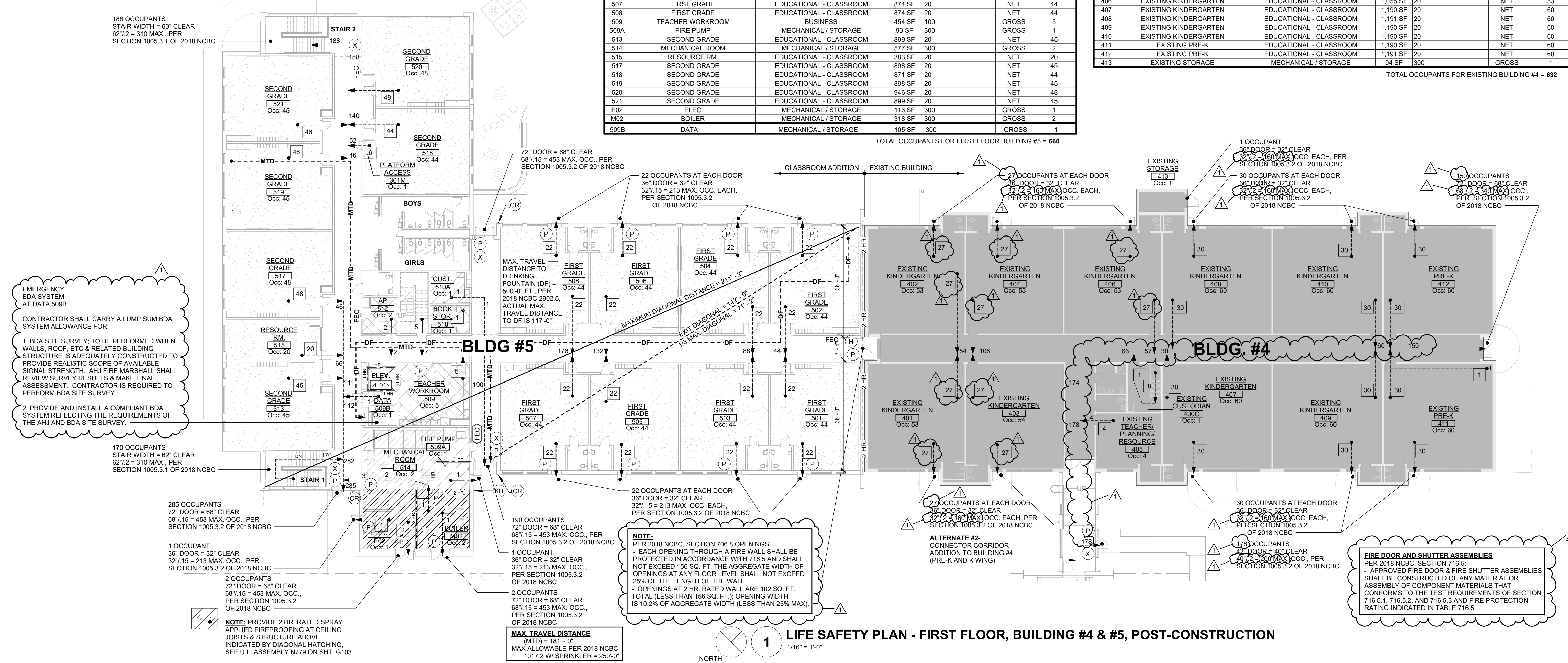
NO.	NAME	FUNCTION OF SPACE (per Table 1004.1.2)	AREA	FLOOR AREA PER OCCUPANT	NET/ GROSS	OCCUPANT COUNT
501	FIRST GRADE	EDUCATIONAL - CLASSROOM	877 SF	20	NET	44
502	FIRST GRADE	EDUCATIONAL - CLASSROOM	877 SF	20	NET	44
503	FIRST GRADE	EDUCATIONAL - CLASSROOM	871 SF	20	NET	44
504	FIRST GRADE	EDUCATIONAL - CLASSROOM	874 SF	20	NET	44
505	FIRST GRADE	EDUCATIONAL - CLASSROOM	876 SF	20	NET	44
506	FIRST GRADE	EDUCATIONAL - CLASSROOM	874 SF	20	NET	44
507	FIRST GRADE	EDUCATIONAL - CLASSROOM	874 SF	20	NET	44
508	FIRST GRADE	EDUCATIONAL - CLASSROOM	874 SF	20	NET	44
509	TEACHER WORKROOM	BUSINESS	454 SF	100	GROSS	5
509A	FIRE PUMP	MECHANICAL / STORAGE	93 SF	300	GROSS	1
513	SECOND GRADE	EDUCATIONAL - CLASSROOM	899 SF	20	NET	45
514	MECHANICAL ROOM	MECHANICAL / STORAGE	577 SF	300	GROSS	2
515	RESOURCE RM.	EDUCATIONAL - CLASSROOM	383 SF	20	NET	20
517	SECOND GRADE	EDUCATIONAL - CLASSROOM	898 SF	20	NET	45
518	SECOND GRADE	EDUCATIONAL - CLASSROOM	871 SF	20	NET	44
519	SECOND GRADE	EDUCATIONAL - CLASSROOM	898 SF	20	NET	45
520	SECOND GRADE	EDUCATIONAL - CLASSROOM	946 SF	20	NET	48
521	SECOND GRADE	EDUCATIONAL - CLASSROOM	899 SF	20	NET	45
E02	ELEC	MECHANICAL / STORAGE	113 SF	300	GROSS	1
M02	BOILER	MECHANICAL / STORAGE	318 SF	300	GROSS	2
509B	DATA	MECHANICAL / STORAGE	105 SF	300	GROSS	1

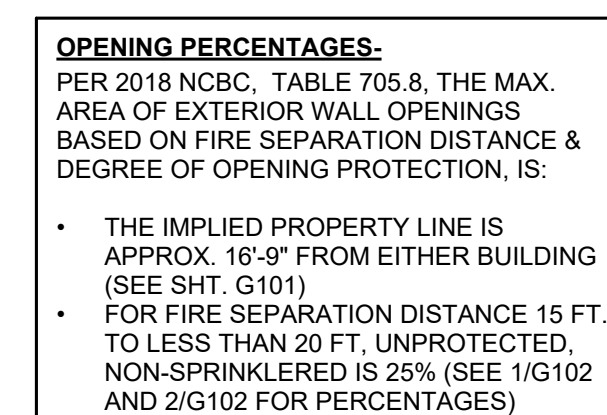
TOTAL OCCUPANTS FOR FIRST FLOOR BUILDING #5 = 660

OCCUPANCY SCHEDULE - BUILDING #4



NO.	NAME	FUNCTION OF SPACE (per Table 1004.1.2)	AREA	FLOOR AREA PER OCCUPANT	NET/ GROSS	OCCUPANT COUNT
400C	EXISTING CUSTODIAN	MECHANICAL / STORAGE	165 SF	300	GROSS	1
401	EXISTING KINDERGARTEN	EDUCATIONAL - CLASSROOM	1,047 SF	20	NET	53
402	EXISTING KINDERGARTEN	EDUCATIONAL - CLASSROOM	1,055 SF	20	NET	53
403	EXISTING KINDERGARTEN	EDUCATIONAL - CLASSROOM	1,066 SF	20	NET	54
404	EXISTING KINDERGARTEN	EDUCATIONAL - CLASSROOM	1,055 SF	20	NET	53
405	EXISTING TEACHER/PLANNING/ RESOURCE	BUSINESS	363 SF	100	GROSS	4
406	EXISTING KINDERGARTEN	EDUCATIONAL - CLASSROOM	1,055 SF	20	NET	53
407	EXISTING KINDERGARTEN	EDUCATIONAL - CLASSROOM	1,190 SF	20	NET	60
408	EXISTING KINDERGARTEN	EDUCATIONAL - CLASSROOM	1,191 SF	20	NET	60
409	EXISTING KINDERGARTEN	EDUCATIONAL - CLASSROOM	1,190 SF	20	NET	60
410	EXISTING KINDERGARTEN	EDUCATIONAL - CLASSROOM	1,190 SF	20	NET	60
411	EXISTING PRE-K	EDUCATIONAL - CLASSROOM	1,190 SF	20	NET	60
412	EXISTING PRE-K	EDUCATIONAL - CLASSROOM	1,191 SF	20	NET	60
413	EXISTING STORAGE	MECHANICAL / STORAGE	94 SF	300	GROSS	1

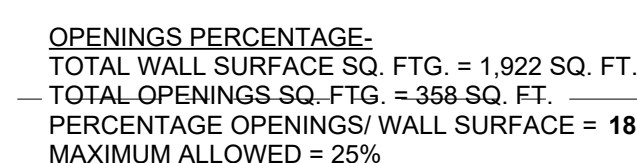
TOTAL OCCUPANTS FOR EXISTING BUILDING #4 = 632



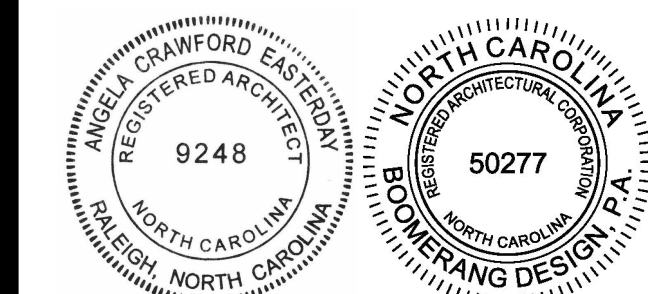


OPENINGS PERCENTAGE LEGEND

WALL SURFACE SQ. FT.	
OPENINGS SQ. FT.	

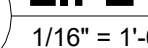
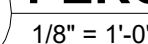


Admin/Upper T.O.S. 22' - 5"
Entrance LW 19' - 9"
TOM Floor 15' - 4"
Existing dnt rmv L11
dnt r 12' - 3"
Admin/Upper 10' - 6"
4th GR 8' - 6"
8' - 6"



PROJECT TITLE

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NO.	DATE	DESCRIPTION
1	02/27/2024	ADDENDUM 2

2307

2307

BOOMERANG DESIGN PROJECT NUMBER
 00-000-0000

02.07.2024

02.07.2024

DRAWING RELEASE DATE

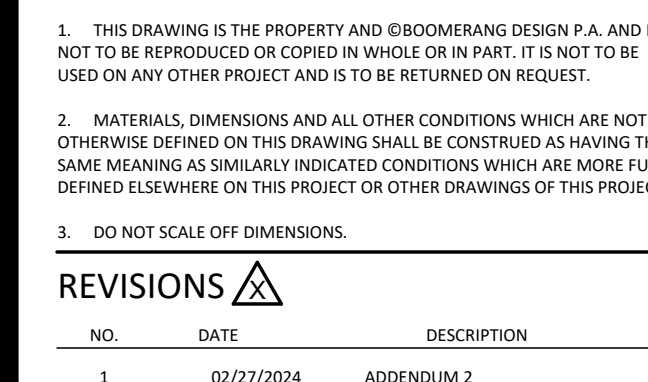
SHEET TITLE

SHEET



NOTE:
PER 2018 NBC, SECTION 706.8 OPENINGS:
- EACH OPENING THROUGH A FIRE WALL SHALL BE PROTECTED IN ACCORDANCE WITH 716.5 AND SHALL NOT EXCEED 150 SQ. FT. THE AGGREGATE WIDTH OF OPENINGS AT ANY FLOOR LEVEL SHALL EXCEED 25% OF THE LENGTH OF THE WALL.
- OPENING AT 2 HR. RATED WALL IS 39.1 SQ. FT. TOTAL (LESS THAN 156 SQ. FT.); OPENING WIDTH IS 8.2% OF AGGREGATE WIDTH (LESS THAN 25% MAX.).

FIRE DOOR AND SHUTTER ASSEMBLIES
PER 2018 NBC, SECTION 716.5.5:
- APPROVED FIRE DOOR & SHUTTER ASSEMBLIES SHALL BE CONSTRUCTED OF ANY MATERIAL OR COMBINATION OF MATERIALS THAT MEET THE REQUIREMENTS OF THE STANDARD THAT CONFORMS TO THE TEST REQUIREMENTS OF SECTION 716.5.1, 716.5.2, AND 716.5.3 AND FIRE PROTECTION RATING INDICATED IN TABLE 716.5.



REVISIONS 		
NO.	DATE	DESCRIPTION
1	02/27/2024	ADDENDUM 2

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BOOMERANG DESIGN PROJECT NUMBER

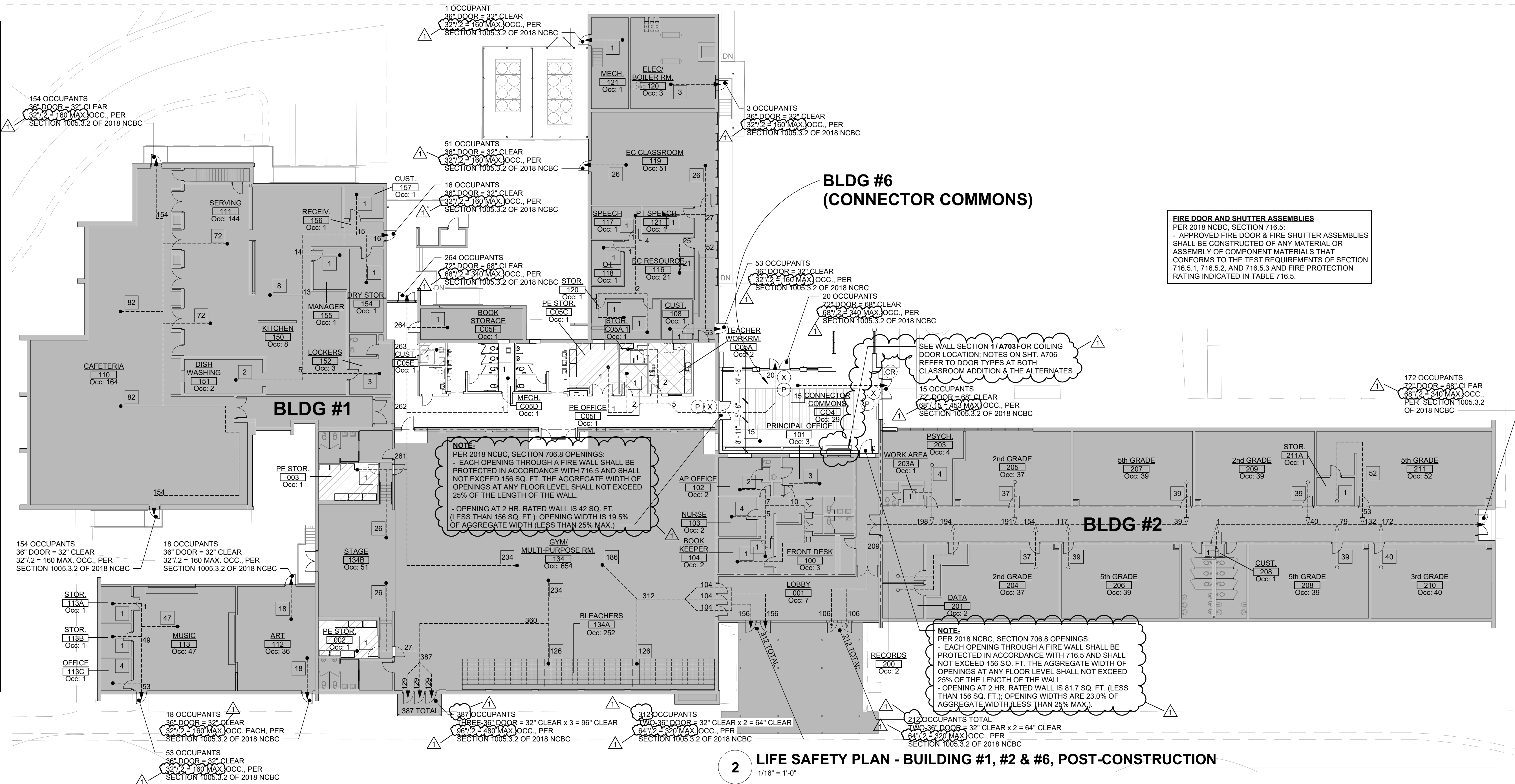
02.07.2024
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**LIFE SAFETY PLAN- BLDG
#3 & #6 CONNECTOR,
POST-CONSTRUCTION**

G109A

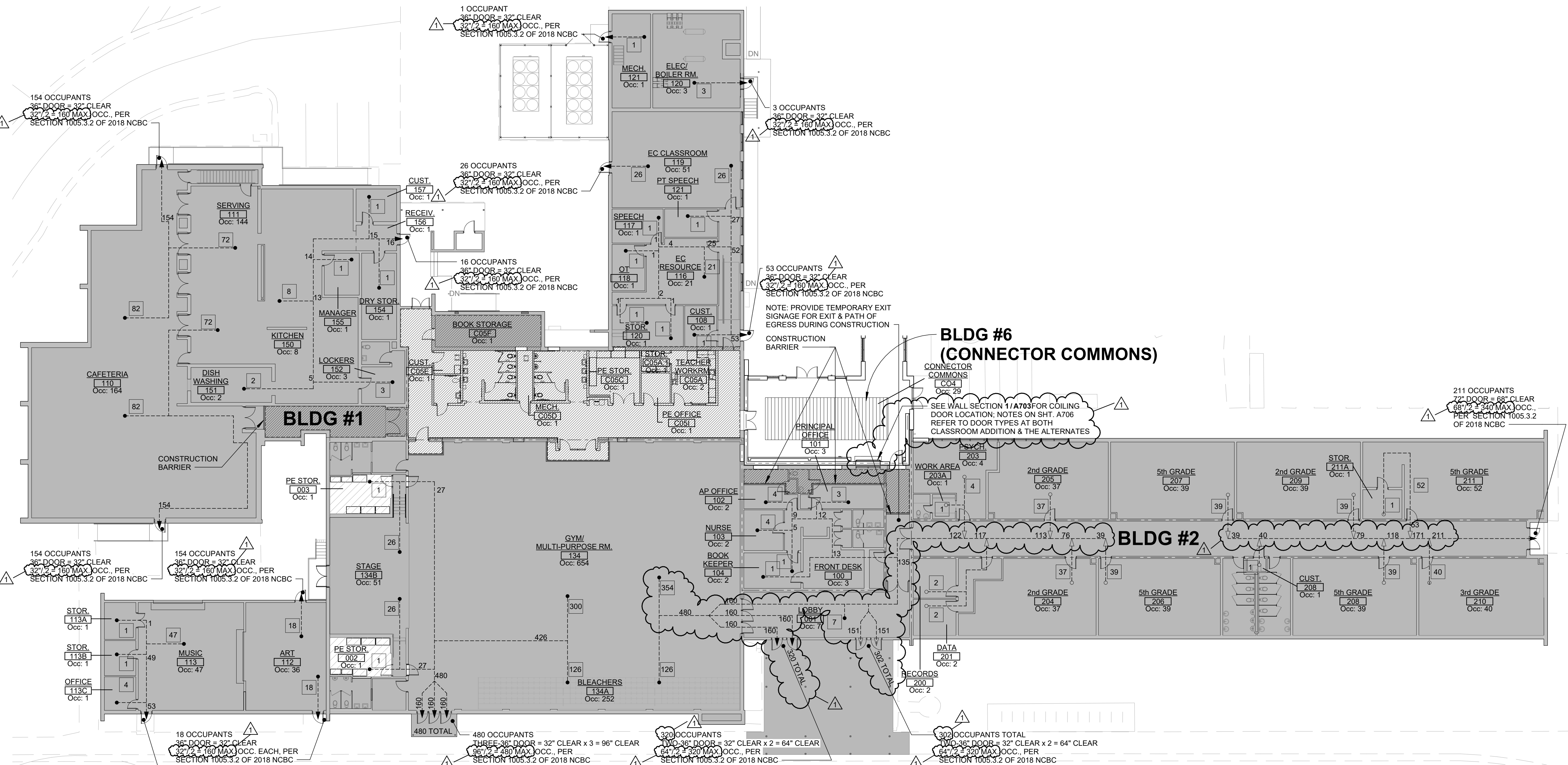
OCCUPANCY SCHEDULE - BUILDING #1, #2 & #6						
NO.	NAME	FUNCTION OF SPACE (per Table 1004.1.2)	AREA	FLOOR AREA PER OCCUPAN T	NET/ GROSS	OCCUPANT COUNT
001	LOBBY	BUSINESS	634 SF	100	GROSS	7
002	PE STOR.	MECHANICAL / STORAGE	192 SF	300	GROSS	1
003	PE STOR.	MECHANICAL / STORAGE	193 SF	300	GROSS	1
100	FRONT DESK	BUSINESS	289 SF	100	GROSS	3
101	PRINCIPAL OFFICE	BUSINESS	240 SF	100	GROSS	3
102	AP OFFICE	BUSINESS	154 SF	100	GROSS	2
103	NURSE	BUSINESS	131 SF	100	GROSS	2
104	BOOK KEEPER	BUSINESS	165 SF	100	GROSS	2
110	CAFETERIA	ASSEMBLY - w/o FIXED SEATING- UNCONCENTRATED (TABLE & CHAIRS)	2,458 SF	15	NET	164
111	SERVING	ASSEMBLY - w/o FIXED SEATING- STANDING SPACE	716 SF	5	NET	144
112	ART	EDUCATIONAL - CLASSROOM	707 SF	20	NET	36
113	MUSIC	EDUCATIONAL - CLASSROOM	928 SF	20	NET	47
113A	STOR.	MECHANICAL / STORAGE	98 SF	300	GROSS	1
113B	STOR.	MECHANICAL / STORAGE	90 SF	300	GROSS	1
113C	OFFICE	BUSINESS	86 SF	100	GROSS	1
116	EC RESOURCE	EDUCATIONAL - CLASSROOM	408 SF	20	NET	21
117	SPEECH	MECHANICAL / STORAGE	142 SF	300	GROSS	1
118	OT	MECHANICAL / STORAGE	125 SF	300	GROSS	1
119	EC CLASSROOM	EDUCATIONAL - CLASSROOM	1,003 SF	20	NET	51
120	ELEC/ BOILER RM.	MECHANICAL / STORAGE	644 SF	300	GROSS	3
120	STOR.	MECHANICAL / STORAGE	240 SF	300	GROSS	1
121	MECH.	MECHANICAL / STORAGE	297 SF	300	GROSS	1
121	PT SPEECH	MECHANICAL / STORAGE	122 SF	300	GROSS	1
134	GYM/ MULTI-PURPOSE RM.	ASSEMBLY - w/o FIXED SEATING- CONCENTRATED (CHAIRS ONLY)	4,573 SF	7	NET	654
134A	BLEACHERS	ASSEMBLY - FIXED SEATING	672 SF		(1) SEE SECTION 1004.4	252
134B	STAGE	STAGES & PLATFORMS	751 SF	15	NET	51
150	KITCHEN	KITCHENS - COMMERCIAL	1,473 SF	200	GROSS	8
151	DISH WASHING	KITCHENS - COMMERCIAL	231 SF	200	GROSS	2
152	LOCKERS	LOCKER ROOMS	147 SF	50	GROSS	3
154	DRY STOR.	MECHANICAL / STORAGE	247 SF	300	GROSS	1
155	MANAGER	MECHANICAL / STORAGE	120 SF	300	GROSS	1
156	RECEIV.	KITCHENS - COMMERCIAL	85 SF	200	GROSS	1
157	CUST.	MECHANICAL / STORAGE	108 SF	300	GROSS	1
200	RECORDS	BUSINESS	139 SF	100	GROSS	2
201	DATA	BUSINESS	126 SF	100	GROSS	2
203	PSYCH.	BUSINESS	392 SF	100	GROSS	4
203A	WORK AREA	BUSINESS	46 SF	100	GROSS	1
204	2nd GRADE	EDUCATIONAL - CLASSROOM	735 SF	20	NET	37
205	2nd GRADE	EDUCATIONAL - CLASSROOM	721 SF	20	NET	37
206	5th GRADE	EDUCATIONAL - CLASSROOM	762 SF	20	NET	39
207	5th GRADE	EDUCATIONAL - CLASSROOM	773 SF	20	NET	39
208	5th GRADE	EDUCATIONAL - CLASSROOM	773 SF	20	NET	39
208	CUST.	MECHANICAL / STORAGE	20 SF	300	GROSS	1
209	2nd GRADE	EDUCATIONAL - CLASSROOM	773 SF	20	NET	39
210	3rd GRADE	EDUCATIONAL - CLASSROOM	781 SF	20	NET	40
211	5th GRADE	EDUCATIONAL - CLASSROOM	1,020 SF	20	NET	52
211A	STOR.	MECHANICAL / STORAGE	93 SF	300	GROSS	1
C05A	TEACHER WORKRM.	BUSINESS	190 SF	100	GROSS	2
C05A.1	STOR.	MECHANICAL / STORAGE	49 SF	300	GROSS	1
C05C	PE STOR.	MECHANICAL / STORAGE	204 SF	300	GROSS	1
C05D	MECH.	MECHANICAL / STORAGE	62 SF	300	GROSS	1
C05E	CUST.	MECHANICAL / STORAGE	51 SF	300	GROSS	1
C05F	BOOK STORAGE	MECHANICAL / STORAGE	277 SF	300	GROSS	1
C05I	PE OFFICE	BUSINESS	71 SF	100	GROSS	1
C04	CONNECTOR COMMONS	ASSEMBLY - w/o FIXED SEATING- UNCONCENTRATED (TABLE & CHAIRS)	422 SF	15	NET	29

TOTAL OCCUPANTS FOR EXISTING BUILDINGS #1 & #2 AND BUILDING #6 = 1,877



LIFE SAFETY PLAN - BUILDING #1, #2 & #6, POST-CONSTRUCTION

2
1/16" = 1'-0"



LIFE SAFETY PLAN - BUILDING #1, #2 & #6, DURING CONSTRUCTION

1
1/16" = 1'-0"

boomerang
DESIGN
rethink, repurpose, results

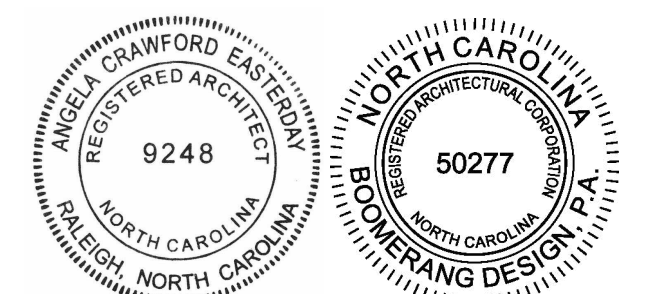
SHELBY
201 S. Washington St., Suite 200
Shelby, NC 27888
704/460-4000

CHARLOTTE
1230 W. Morehead St., Suite 214
Charlotte, NC 28208
704/731-7000

RALEIGH
6131 Falls of Neuse Rd., Suite 204
Raleigh, NC 27609
919/775-6600

LEXINGTON
1070 S. Lake Dr., Suite J
Lexington, NC 27293
901/556-0007

FIRE DOOR AND SHUTTER ASSEMBLIES
PER 2018 NCBC, SECTION 716.5:
- APPROVED FIRE DOOR & FIRE SHUTTER ASSEMBLIES
SHALL BE CONSTRUCTED OF ANY MATERIAL OR
ASSEMBLY OF COMPONENT MATERIALS THAT
CONFORMS TO THE TEST REQUIREMENTS OF SECTION
716.5.1, 716.5.2, AND 716.5.3 AND FIRE PROTECTION
RATING INDICATED IN TABLE 716.5.



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A & R
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"CLIENT'S PROJECT" # - XXX

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1	02/27/2024	ADDENDUM 2

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2307
BOOMERANG DESIGN PROJECT NUMBER
02.07.2024
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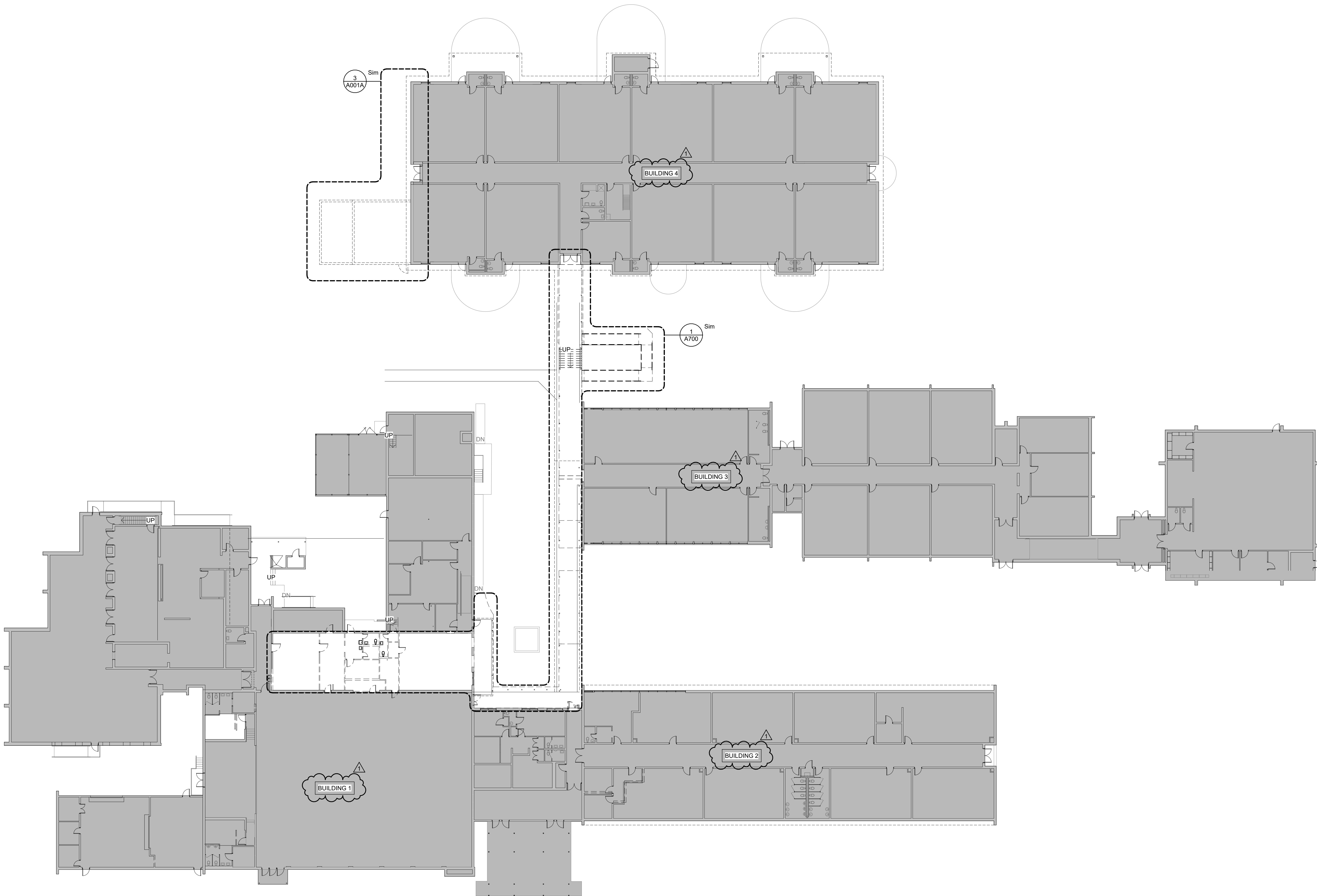
**LIFE SAFETY PLAN - BLDG.
#1, #2 & #6, DURING AND
POST-CONSTRUCTION**
SHEET TITLE

G110

SHEET

2/27/2024 11:48:23 AM

2/27/2024 11:19:06 AM



1 FIRST FLOOR - OVERALL DEMO PLAN
1" = 20'-0"



**COOPER ACADEMY
A & R**
PROJECT TITLE

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**OVERALL DEMOLITION
PLAN**
SHEET TITLE
A000
SHEET

DEMOLITION KEYNOTES

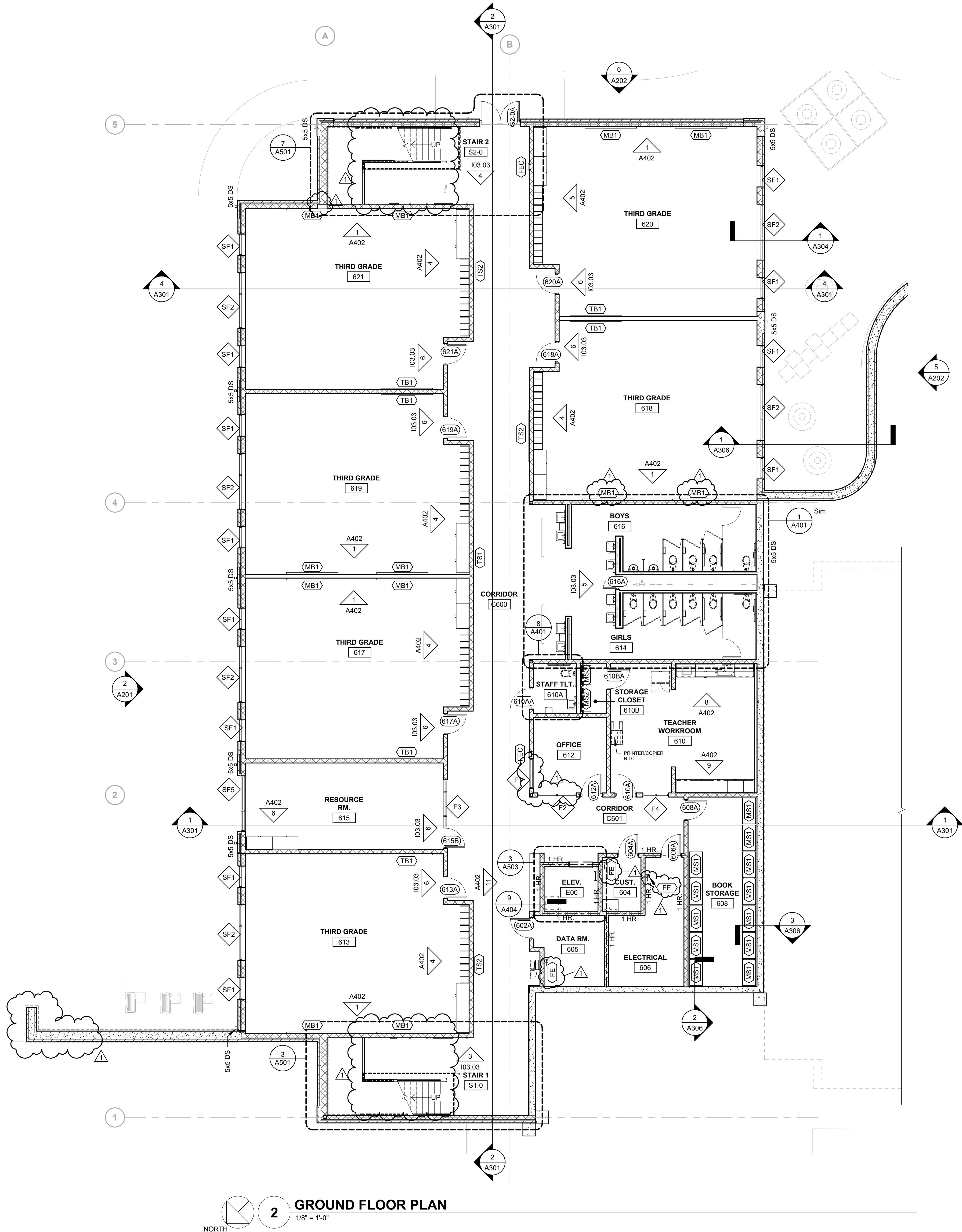
Diagram illustrating the exterior wall of the existing building and the proposed additions. The diagram shows the existing structure with dimensions and labels for the proposed additions.

- Existing structure dimensions: 7'-8" Hx 4'-6" W (top section), 12'-2" Hx 4'-6" W (left section).
- Existing structure labels: 07, 04, 02.
- Proposed additions: DEMO LIGHT FIXTURE AND CAP ELECTRICAL BOX, DEMO ELECTRICAL BOX AND CONDUIT ON EXIST. EXTERIOR WALL, DEMO EXISTING SOFFIT IN ITS ENTIRETY.

The diagram illustrates a building layout with a 'NEW ADDITION' on the left and an 'EXISTING BUILDING' on the right. The existing building features an 'EXISTING FIRST GRADE' with rooms 401 and 402, and an 'EXISTING CORRIDOR' with room 400. A central cloud-shaped area contains a room labeled '4 A001A' with a right-pointing arrow. Various numbered callouts (01, 02, 03, 05) and dashed lines indicate spatial relationships and boundaries.

[illegible]

SHEET



2 GROUND FLOOR PLAN

1/8" = 1'-0"

1 MECHANICAL YARD FLOOR PLAN

1/8" = 1'-0"

GENERAL PLAN NOTES

1. SEE SHEET G103 FOR DETAILED WALL TYPE ASSEMBLIES.
2. SEE REFLECTED CEILING PLANS FOR CEILING HEIGHTS AND MATERIALS.
3. UNLESS NOTED OTHERWISE, ALL FURNITURE & EQUIPMENT SHOWN DASHED/GRAYED-OUT ARE FOR INFORMATIONAL PURPOSES ONLY. THEY ARE NOT TO BE BID AS PART OF THIS PROJECT.
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6. SEE THE DOOR SCHEDULE ON SHEET A601 FOR DOOR HARDWARE INFORMATION.
7. PROVIDE CORNER GUARDS (CG) AT LOCATIONS NOTED ON WALL FINISH PLANS. SEE 8/A605 FOR CORNER GUARD DETAIL.
8. ALL ITEMS INDICATED TO BE O.P.C.I. OR O.P.O.I., CONTRACTOR SHALL PROVIDE AND INSTALL ALL BLOCKING REQUIRED TO INSTALL ITEMS PER MANUFACTURERS RECOMMENDATIONS.
9. MOUNT ADA FLUSH VALVES ON OPEN-SIDE OF WATER CLOSET TO COMPLY WITH 604.4 OF ICC A117.1-2009.
10. CONCRETE SLOPE AT EXTERIOR DOORS, EXIT-SIDE, SHALL BE MAX. 1/4" PER FOOT, PER ICC A117, SECTION 404.2.3.1.

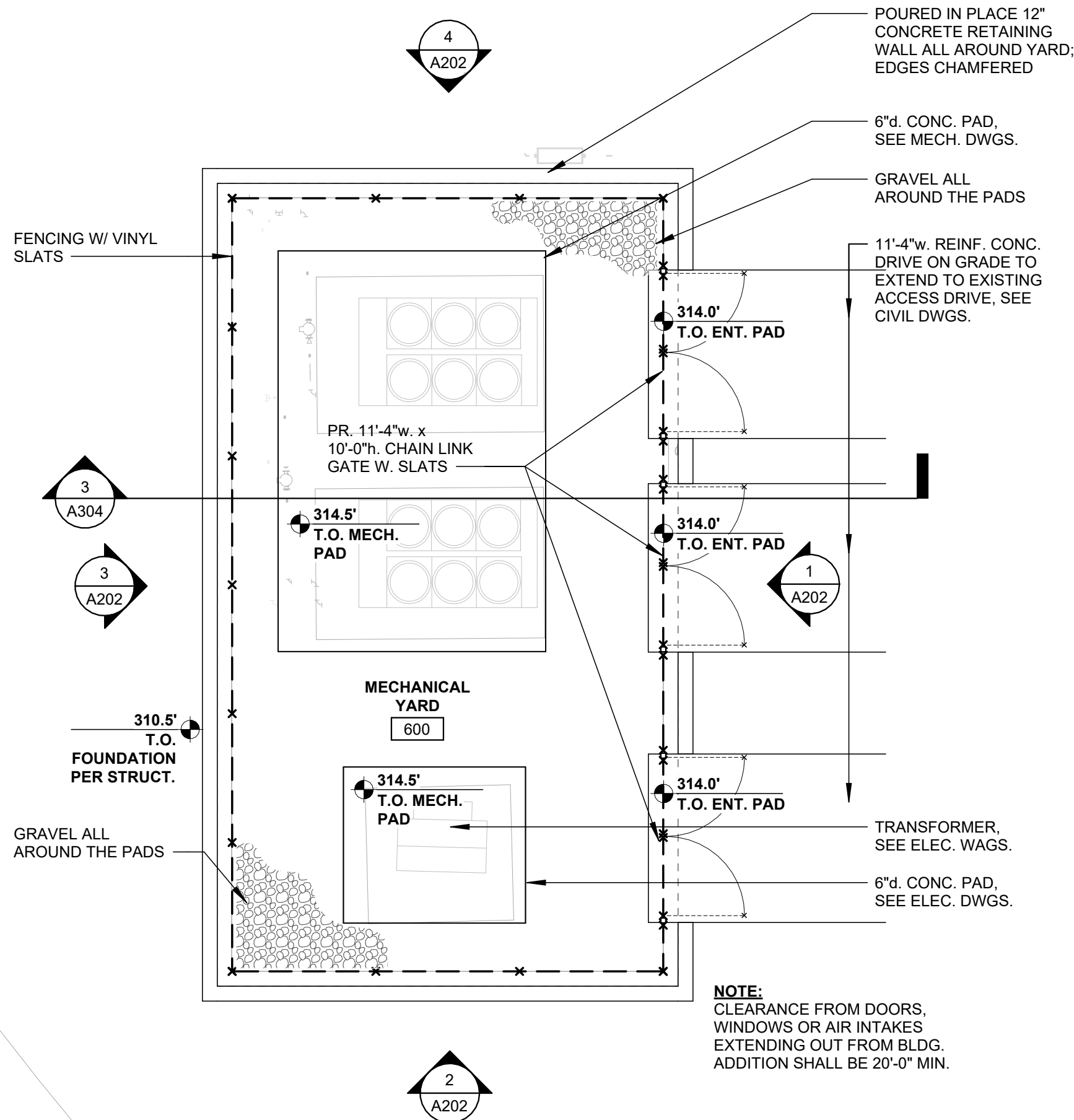
WALL RATINGS LEGEND

- 1 HOUR RATED
----- 2 HOUR RATED
----- 4 HOUR RATED

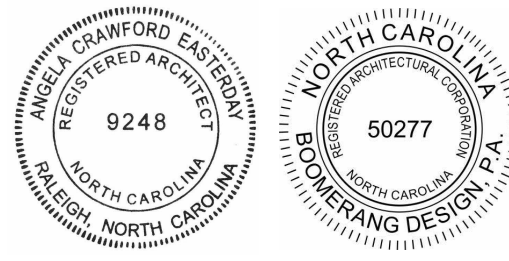
EQUIPMENT SCHEDULE

SEE ENLARGED FLOOR PLANS FOR ADDITIONAL EQUIPMENT INFORMATION

TYPE	DESCRIPTION	PROVD BY	NOTES
FE	FIRE EXTINGUISHER	C.P.C.I.	
FEC	FIRE EXTINGUISHER CABINET	C.P.C.I.	
MB1	8" MARKERBOARD WITH INTEGRATED TACKSTRIP	C.P.C.I.	
MS1	METAL SHELVING 24" x 48"	C.P.C.I.	
MS2	METAL SHELVING 18" x 48"	C.P.C.I.	
MS3	METAL SHELVING 18" x 36"	C.P.C.I.	
TB1	4" X 8" TACKBOARD	C.P.C.I.	MOUNT @ 2'-2" A.F.F. (U.O.N.I) IN TEACHING AREAS

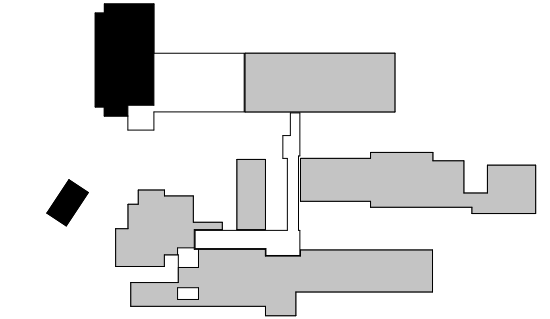


NOTE:
CLEARANCE FROM DOORS,
WINDOWS OR AIR INTAKES
EXTENDING OUT FROM BLDG.
ADDITION SHALL BE 20'-0" MIN.



COOPER ACADEMY A & R

PROJECT TITLE



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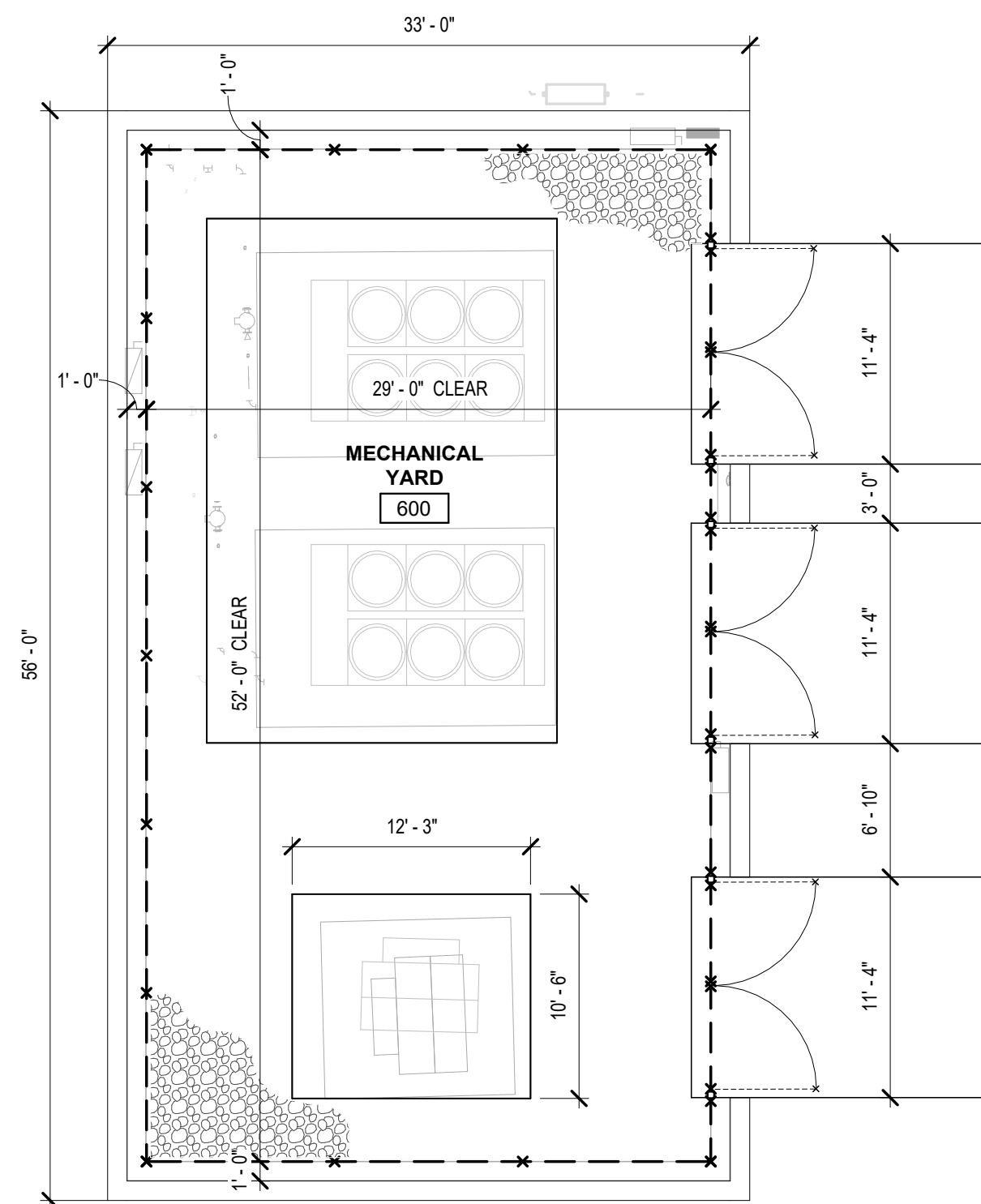
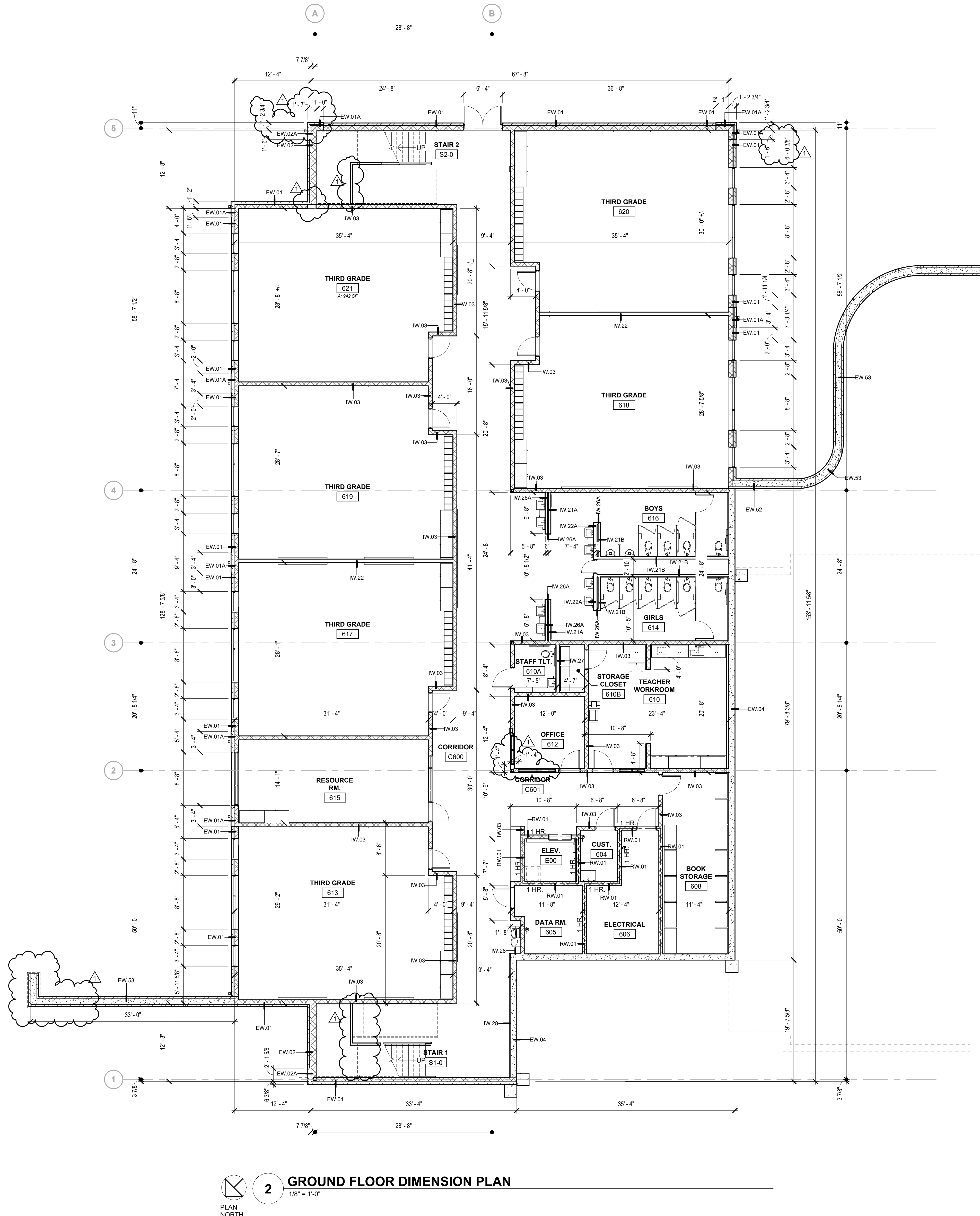
DRAWING RELEASE DATE

GROUND FLOOR & MECHANICAL YARD PLANS

SHEET TITLE

A101

SHEET



WALL SCHEDULE			
SEE WALL ASSEMBLIES SHEET FOR ADDITIONAL WALL INFORMATION			
TYPE	DESCRIPTION	RATING	UL #
EW.01	4" BRICK ON 8" CMU		
EW.01A	4" BRICK ON 8" CMU, 3/4" PROJECTED		
EW.01B	4" BRICK ON 8" CMU INFILL @ EXISTING		
EW.02	4" BRICK ON 12" CMU		
EW.02A	4" BRICK ON 12" CMU, 3/4" PROJECTED		
EW.03	MTL PANEL ON 8" CMU		
EW.04	12" CMU, (INTERIOR RETAINING WALL)		
EW.52	4" BRICK / RIGID INSULATION ON TWO SIDES OF 12" CMU (RETAINING WALL)		
EW.53	4" BRICK BOTH SIDES ON 12" CMU (RETAINING WALL)		
IW.03	8" CMU TO DECK		
IW.04	12" CMU INFILL		
IW.21	3 5/8" MTL STUD TO DECK		
IW.21A	5/8" GYP BD ONE SIDE ON 3 5/8" MTL STUD TO DECK		
IW.21B	1/2" CEMENT BD-TILE ONE SIDE ON 3 5/8" MTL STUD TO DECK		
IW.22	5/8" GYP BD BOTH SIDES ON 6" MTL STUD TO DECK		
IW.22A	5/8" GYP BD ONE SIDES ON 6" MTL STUD TO DECK		
IW.24	8" CONC. AT ELEV. PIT		
IW.26	1/2" CEMENT BD-TILE ONE SIDE ON 7/8" FURRED WALL, STUD TO DEC		
IW.26A	1/2" CEMENT BD-TILE ONE SIDE ON 3 5/8" MTL STUD TO DECK		
IW.27	1/2" CEMENT BD-TILE ONE SIDE ON 6" MTL STUD TO DECK		
IW.28	INTERIOR FURRED WALL		
IW.29	INTERIOR BRICK INFILL ONE SIDE, GYP. ONE SIDE		
RW.01	8" CMU TO DECK, 1HR RATED	1 HR	UL-905
RW.02	12" CMU TO DECK, 2HR RATED	2 HR	UL-906
RW.03	4" BRICK BOTH SIDES ON 12" CMU, 1 HR RATED	1 HR	UL-905

NOTE:
• TRANSFORMER TO BE 20'-0" FROM ANY BUILDING.
• SEE ARCHITECTURAL & CIVIL DWGS FOR LOCATION AND ORIENTATION TO DRIVE.

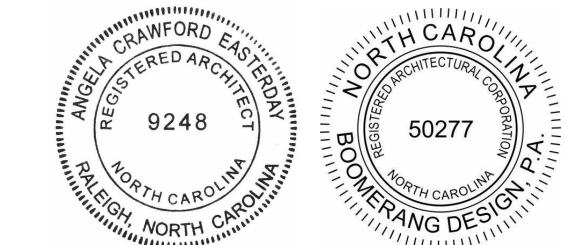


945/671
207 S. Trade Street
Shelby, NC 28150
704/731-7000

CHARLOTTE
1230 W. Morehead St., Suite 214
Charlotte, NC 28208
704/731-7000

RALEIGH
6131 Falls of Neuse Rd., Suite 204
Raleigh, NC 27609
919/775-6400

LEWINGTON
1070 S. Lake Dr., Suite J
Lewington, NC 28135
919/754-0507



COOPER ACADEMY A & R

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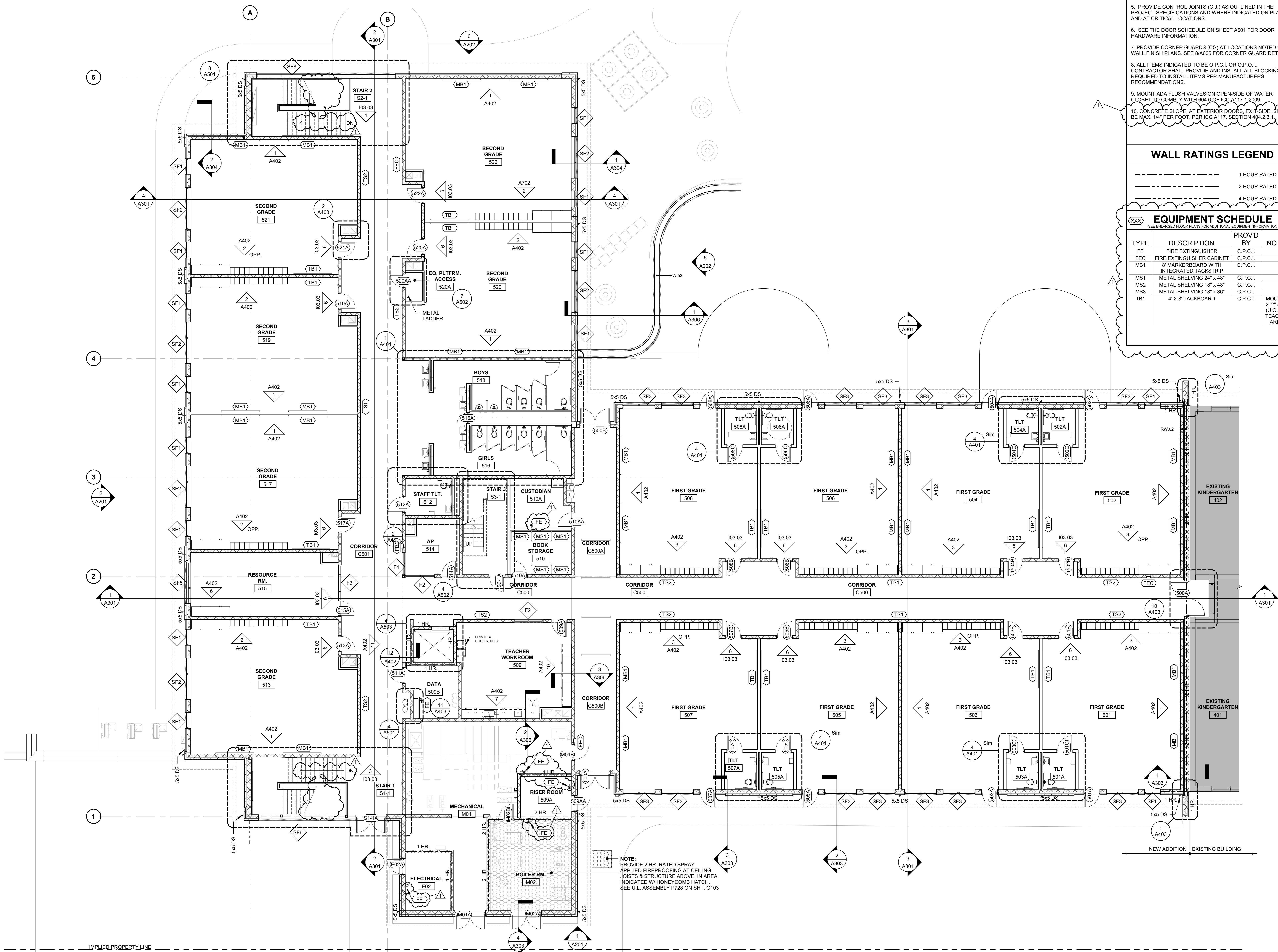
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GROUND FLOOR AND
MECHANICAL YARD
DIMENSION PLAN
SHEET TITLE

A101A



1 FIRST FLOOR PLAN
1/8" = 1'-0"

GENERAL PLAN NOTES

- SEE SHEET G103 FOR DETAILED WALL TYPE ASSEMBLIES.
- SEE REFLECTED CEILING PLANS FOR CEILING HEIGHTS AND MATERIALS.
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- CONCRETE SLOPE AT EXTERIOR DOORS, EXIT-SIDE, SHALL BE MAX. 1/4" PER FOOT, PER ICC A117, SECTION 404.2.3.1.

WALL RATINGS LEGEND

- 1 HOUR RATED
2 HOUR RATED
4 HOUR RATED

EQUIPMENT SCHEDULE

TYPE	DESCRIPTION	PROV'D BY	NOTES
FE	FIRE EXTINGUISHER	C.P.C.I.	
FEC	FIRE EXTINGUISHER CABINET	C.P.C.I.	
MB1	3' MARKERBOARD WITH INTEGRATED TACKSTRIP	C.P.C.I.	
MS1	METAL SHELVING 24" x 48"	C.P.C.I.	
MS2	METAL SHELVING 18" x 48"	C.P.C.I.	
MS3	METAL SHELVING 18" x 36"	C.P.C.I.	
TB1	4' x 8' TACKBOARD	C.P.C.I.	MOUNT @ 2'-2" A.F.F. (U.O.N.) IN TEACHING AREAS

COOPER ACADEMY A & R PROJECT TITLE

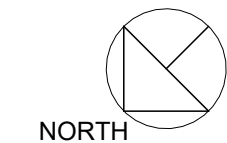
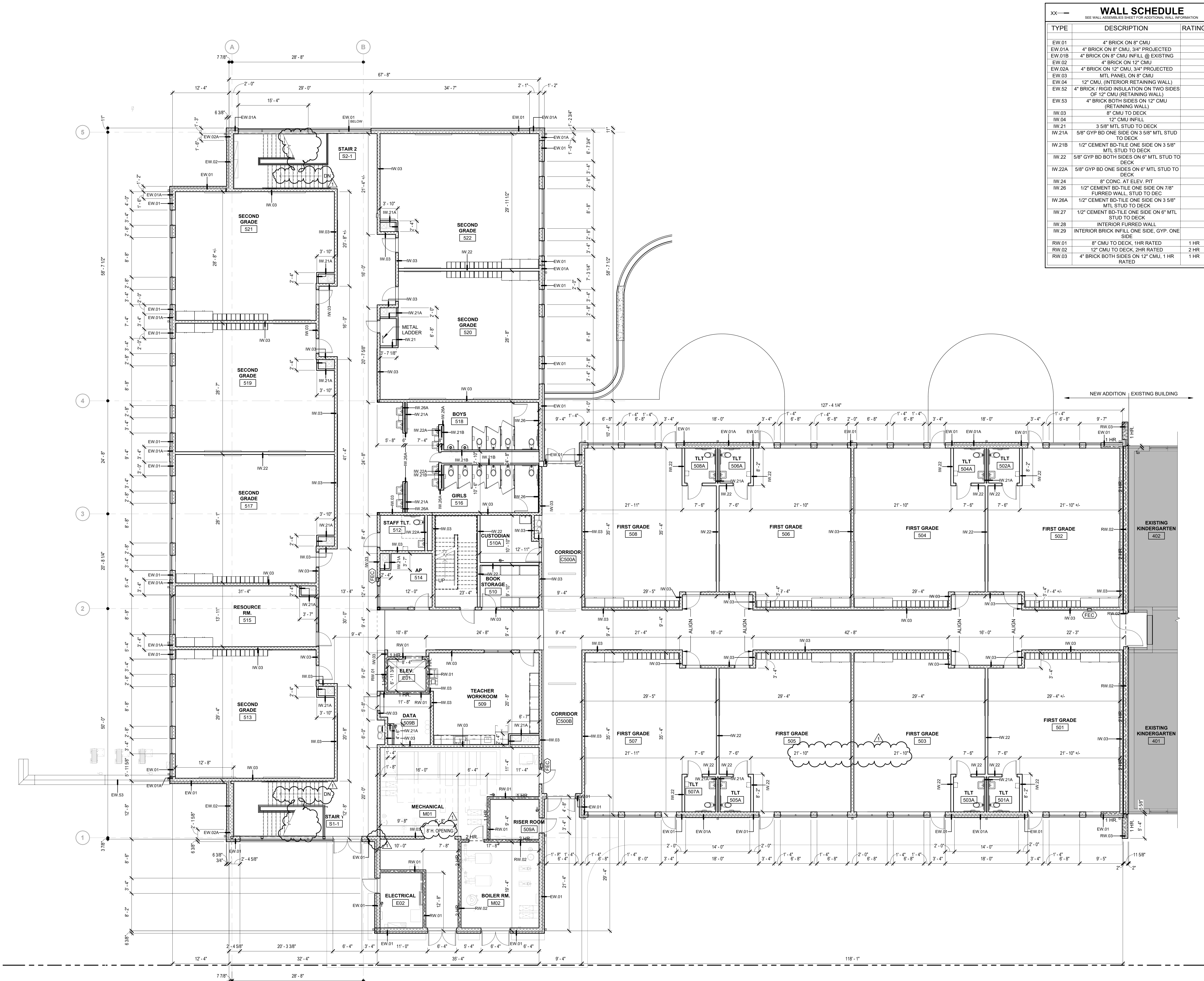
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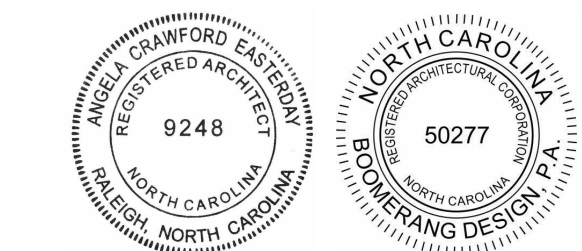
FIRST FLOOR PLAN
SHEET TITLE

A102
SHEET

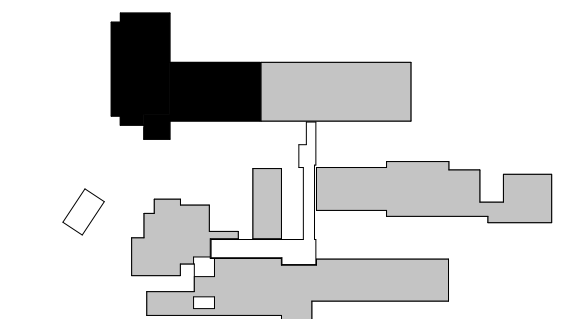


1 FIRST FLOOR DIMENSION PLAN
1/8" = 1'-0"

WALL SCHEDULE			
SEE WALL ASSEMBLIES SHEET FOR ADDITIONAL WALL INFORMATION			
TYPE	DESCRIPTION	RATING	UL #
EW.01	4" BRICK ON 8" CMU		
EW.01A	4" BRICK ON 8" CMU, 3/4" PROJECTED		
EW.01B	4" BRICK ON 8" CMU INFILL @ EXISTING		
EW.02	4" BRICK ON 12" CMU		
EW.02A	4" BRICK ON 12" CMU, 3/4" PROJECTED		
EW.03	MTL PANEL ON 8" CMU		
EW.04	12" CMU, (INTERIOR RETAINING WALL)		
EW.52	4" BRICK / RIGID INSULATION ON TWO SIDES OF 12" CMU (RETAINING WALL)		
EW.53	4" BRICK BOTH SIDES ON 12" CMU (RETAINING WALL)		
IW.03	8" CMU TO DECK		
IW.04	12" CMU INFILL		
IW.21	3 5/8" MTL STUD TO DECK		
IW.21A	5/8" GYP BD ONE SIDE ON 3 5/8" MTL STUD TO DECK		
IW.21B	1/2" CEMENT BD-TILE ONE SIDE ON 3 5/8" MTL STUD TO DECK		
IW.22	5/8" GYP BD BOTH SIDES ON 6" MTL STUD TO DECK		
IW.22A	5/8" GYP BD ONE SIDES ON 6" MTL STUD TO DECK		
IW.24	8" CONC. AT ELEV. PIT		
IW.26	1/2" CEMENT BD-TILE ONE SIDE ON 7/8" FURRED WALL, STUD TO DEC		
IW.26A	1/2" CEMENT BD-TILE ONE SIDE ON 3 5/8" MTL STUD TO DECK		
IW.27	1/2" CEMENT BD-TILE ONE SIDE ON 6" MTL STUD TO DECK		
IW.28	INTERIOR FURRED WALL		
IW.29	INTERIOR BRICK INFILL ONE SIDE, GYP. ONE SIDE		
RW.01	8" CMU TO DECK, 1HR RATED	1 HR	UL-905
RW.02	12" CMU TO DECK, 2HR RATED	2 HR	UL-906
RW.03	4" BRICK BOTH SIDES ON 12" CMU, 1 HR RATED	1 HR	UL-905



**COOPER ACADEMY
A & R**
PROJECT TITLE

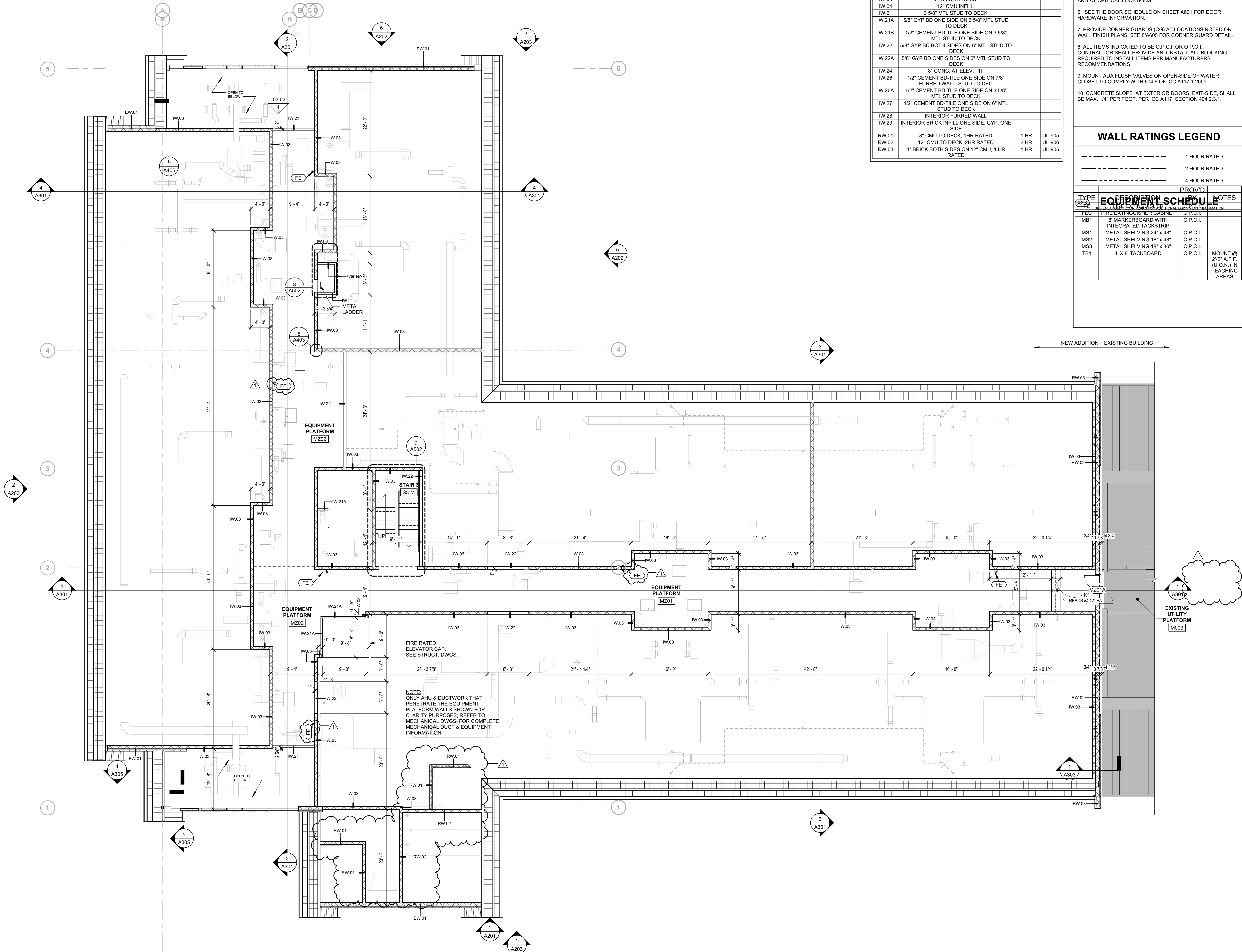


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**FIRST FLOOR
DIMENSION PLAN**
SHEET TITLE
A102A
SHEET



1 EQUIPEMENT PLATFORM FLOOR PLAN
1/8" = 1'-0"

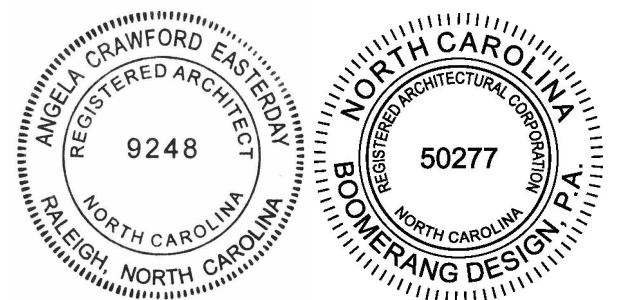
WALL SCHEDULE		
SEE WALL ASSEMBLY SHEET FOR ADDITIONAL WALL INFORMATION		
TYPE	DESCRIPTION	RATING UL #
EW.01	4" BRICK ON 8" CMU	
EW.01A	4" BRICK ON 8" CMU, 3/4" PROJECTED	
EW.01B	4" BRICK ON 8" CMU INFILL @ EXISTING	
EW.02	4" BRICK ON 12" CMU	
EW.02A	4" BRICK ON 12" CMU, 3/4" PROJECTED	
EW.03	MTL PANEL ON 8" CMU	
EW.04	12" CMU, (INTERIOR RETAINING WALL)	
EW.52	4" BRICK / RIGID INSULATION ON TWO SIDES OF 12" CMU (RETAINING WALL)	
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IW.21B	1/2" CEMENT BD-TILE ONE SIDE ON 3 5/8" MTL STUD TO DECK	
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IW.26A	1/2" CEMENT BD-TILE ONE SIDE ON 3 5/8" MTL STUD TO DECK	
IW.27	1/2" CEMENT BD-TILE ONE SIDE ON 6" MTL STUD TO DECK	
IW.28	INTERIOR FURRED WALL	
IW.29	INTERIOR BRICK INFILL ONE SIDE, GYP. ONE	
RW.01	8" CMU TO DECK, 1HR RATED	1 HR UL-905
RW.02	12" CMU TO DECK, 2HR RATED	2 HR UL-906
RW.03	4" BRICK BOTH SIDES ON 12" CMU, 1 HR RATED	1 HR UL-905

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WALL RATINGS LEGEND			
---	1 HOUR RATED		
---	2 HOUR RATED		
---	4 HOUR RATED		
EQUIPMENT SCHEDULE			
TYPE	DESCRIPTION	PROVIDE	NOTES
FE	SEE ENLARGED PLAN FOR ADDITIONAL INFORMATION		
FE	FIRE EXTINGUISHER CABINET	C.P.C.I.	
MB1	8" MARKERBOARD WITH INTEGRATED TACKSTRIP	C.P.C.I.	
MS1	METAL SHELVEING 24" x 48"	C.P.C.I.	
MS2	METAL SHELVEING 18" x 48"	C.P.C.I.	
MS3	METAL SHELVEING 18" x 36"	C.P.C.I.	
TB1	4' X 8' TACKBOARD	C.P.C.I.	MOUNT @ 2'-2" A.F.F. (U.O.N.) IN TEACHING AREAS



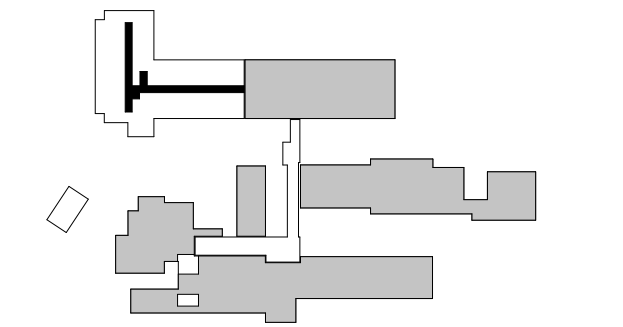
SHELBY 201 S. Washington St., Suite 200 Shelby, NC 28150 704/460-6000	CHARLOTTE 1230 W. Morehead St., Suite 214 Charlotte, NC 28208 704/731-7000
RALEIGH 6131 Falls of Neuse Rd., Suite 204 Raleigh, NC 27609 919/975-6400	LEXINGTON 1070 S. Lake Dr., Suite J Lexington, NC 27293 904/556-0507



COOPER ACADEMY A & R

PROJECT TITLE

"CLIENT'S PROJECT" # - XXX



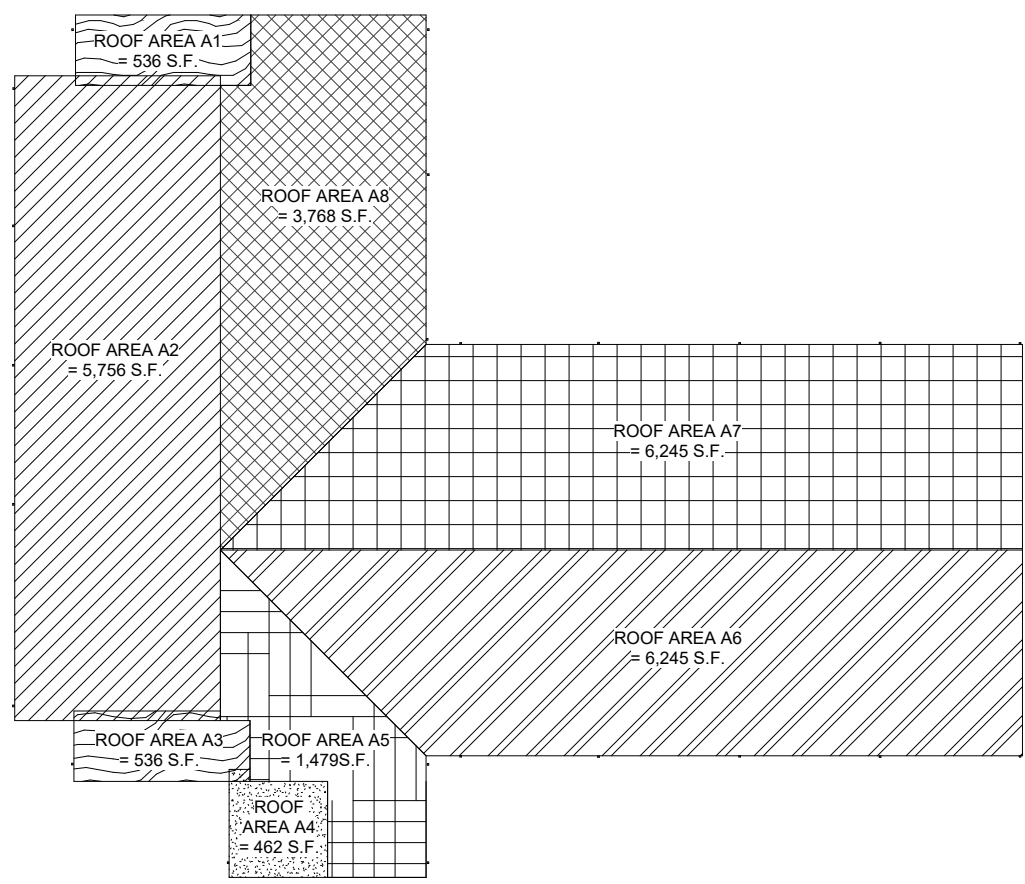
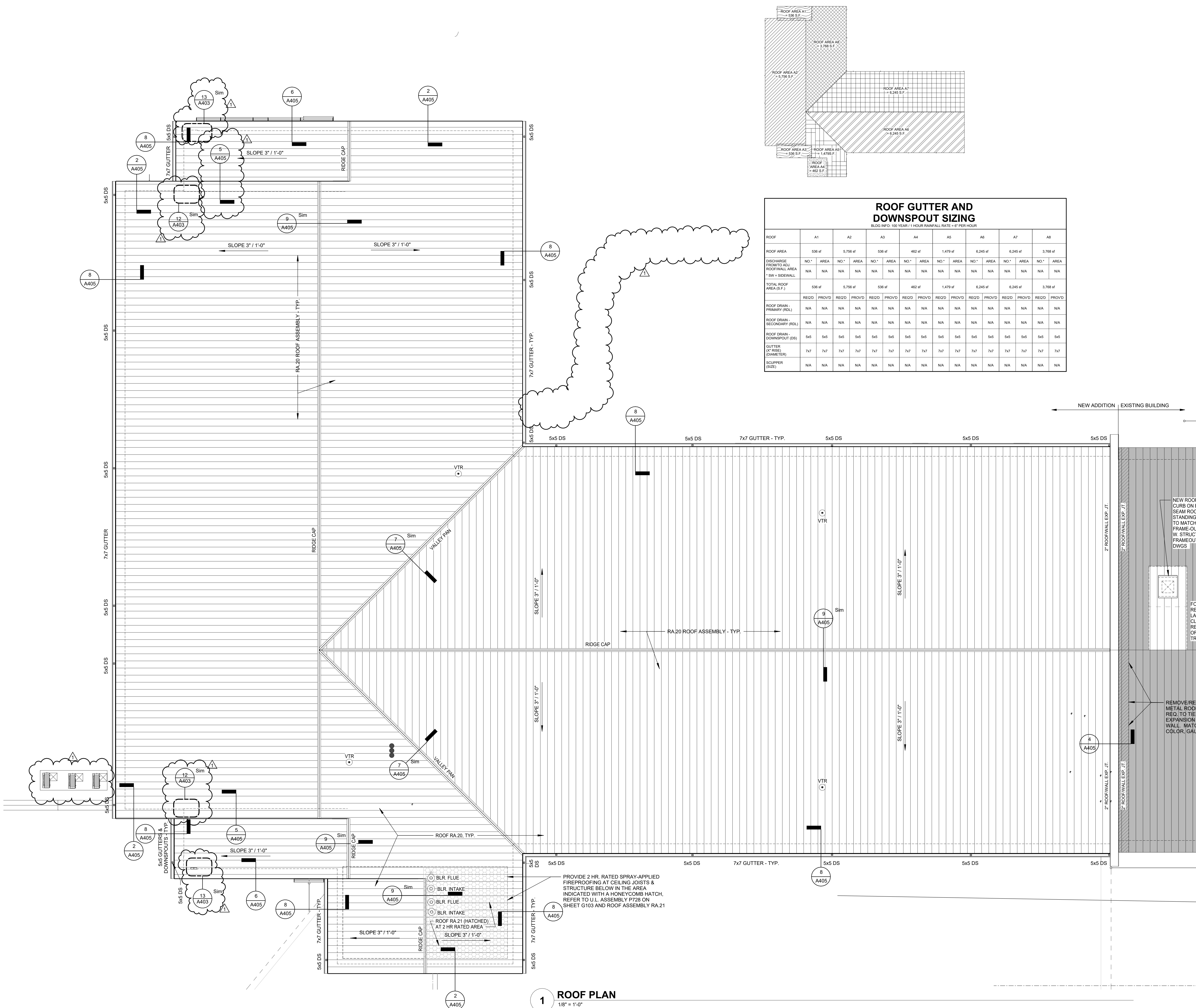
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**EQUIPMENT PLATFORM
FLOOR PLAN**
SHEET TITLE

A103



ROOF GUTTER AND DOWNSPOUT SIZING																
BLDG INFO: 100 YEAR 1 HOUR RAINFALL RATE = 6" PER HOUR																
ROOF	A1		A2		A3		A4		A5		A6		A7		A8	
ROOF AREA	536 sf		5,756 sf		536 sf		462 sf		1,479 sf		6,245 sf		6,245 sf		3,768 sf	
DOWNSPOUTS FROM TO ADJ. ROOF/WALL AREA * SW = SIDEWALL	NO.*	AREA	NO.*	AREA	NO.*	AREA	NO.*	AREA	NO.*	AREA	NO.*	AREA	NO.*	AREA	NO.*	AREA
	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL ROOF AREA (S.F.)	536 sf		5,756 sf		536 sf		462 sf		1,479 sf		6,245 sf		6,245 sf		3,768 sf	
ROOF DRAIN - PRIMARY (RDL)	REQD	PROVD	REQD	PROVD	REQD	PROVD	REQD	PROVD	REQD	PROVD	REQD	PROVD	REQD	PROVD	REQD	PROVD
ROOF DRAIN - SECONDARY (RDL)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ROOF DRAIN - DOWNSPOUT (DS)	5x5	5x5	5x5	5x5	5x5	5x5	5x5	5x5	5x5	5x5	5x5	5x5	5x5	5x5	5x5	5x5
GUTTER (6" RISE) (DIAMETER)	7x7	7x7	7x7	7x7	7x7	7x7	7x7	7x7	7x7	7x7	7x7	7x7	7x7	7x7	7x7	7x7
SCUPPER (SIZE)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

GENERAL ROOF PLAN NOTES

1. THE GENERAL CONTRACTOR SHALL FURNISH, INSTALL, AND FLASH ALL ROOF CURBS FOR MECHANICAL EQUIPMENT, PLUMBING VENTS, ETC. SEE PLUMBING DRAWINGS FOR LOCATIONS OF VENTS. SEE MECHANICAL DRAWINGS FOR SIZES AND LOCATIONS OF FANS, INTAKES, ETC.

2. SEE PM&E DRAWINGS FOR ADDITIONAL PENETRATIONS NOT SHOWN ON ROOF PLANS.

3. THE CONTRACTOR IS RESPONSIBLE TO BECOME FAMILIAR WITH WALL CONSTRUCTIONS REPRESENTED ON OTHER DRAWINGS AND TO CONSTRUCT IN ACCORDANCE WITH THE APPROPRIATE DETAIL.

4. ARROWS INDICATE DIRECTION OF ROOF SLOPE AS SPECIFIED. PROVIDE MINIMUM 1/4" PER 1'-0" SLOPE. SEE STRUCTURAL DRAWINGS FOR SLOPING STRUCTURE.

5. CUT FLAGS AND THE RELATED DETAILS DO NOT NECESSARILY REPRESENT ALL CONDITIONS FOR A PARTICULAR WALL OR EDGE.

6. LOCATE ALL ROOFTOP EQUIPMENT A MINIMUM OF 10'-0" FROM THE BUILDING EDGE.

7. ALL DOWNSPOUTS (D.S.) SHALL BE SIZED AS INDICATED ON PLANS.

8. SEE 12/M501 FOR TYPICAL VENT THRU ROOF FLASHING DETAIL.

ROOF SYMBOL LEGEND

VTR

VENT THRU ROOF
PROVIDE CRICKET AS REQUIRED

ODL

ROOF DRAIN/OVERFLOW DRAIN
(SEE D.S. CALCULATIONS FOR DRAIN SIZING. SEE DTL. 5/A709 FOR DRAIN FLASHING DETAILS

RDL

ROOF DRAIN/OVERFLOW DRAIN
(SEE D.S. CALCULATIONS FOR DRAIN SIZING. SEE DTL. 5/A709 FOR DRAIN FLASHING DETAILS

DS

DOWNSPOUT

TWS

THRU-WALL SCUPPER, SEE DTL. 8/A709

OFS

OVERFLOW SCUPPER, SEE DTL. 7/A709

MECH EXHAUST FAN
PROVIDE CRICKET AS REQUIRED

AREA TO RECEIVE WATERPROOFING UNDERLAYMENT (36" MIN.)

AREA TO RECEIVE TAPERED INSULATION FOR COMPLETE ROOF DRAINAGE (FIELD MODIFIED AS REQUIRED)

BUILDING EXPANSION JOINT

boomerang
DESIGN

rethink, repurpose, results

945/BJ
207 S. Trade Street
Shelby, NC 28150
704/731-7000

CHARLOTTE
1230 W. Morehead St., Suite 214
Charlotte, NC 28208
704/731-7000

RALEIGH
6131 Falls of Neuse Rd., Suite 204
Raleigh, NC 27609
919/775-6400

LEWINGTON
1070 S. Lake Dr., Suite 1
Lewington, NC 28753
803/754-0507

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A & R
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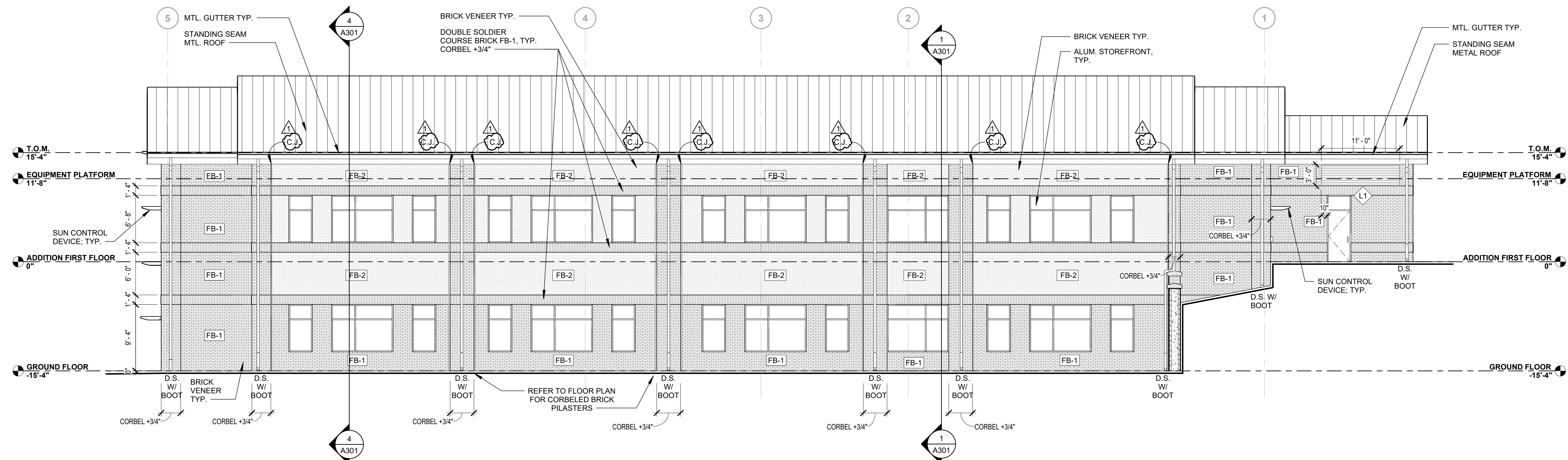
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BID SET
2307
BOOMERANG DESIGN PROJECT NUMBER
02.07.2024
DRAWING RELEASE DATE

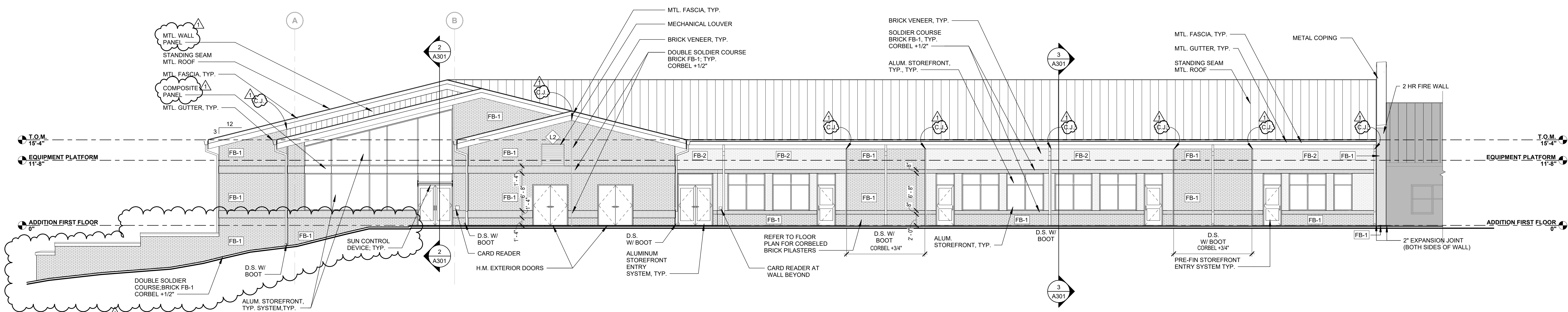
ROOF PLAN
SHEET TITLE
A107
SHEET

MATERIAL LEGEND

BRICK VENEER FB-1
BRICK VENEER FB-2



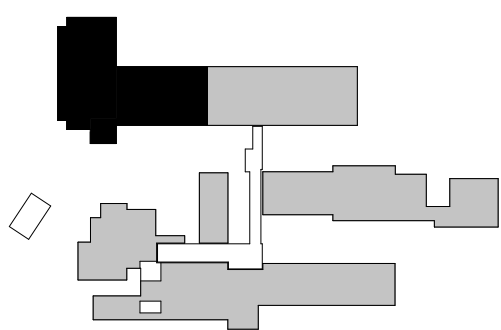
2 EAST ELEVATION
1/8" = 1'-0"



1 NORTH ELEVATION
1/8" = 1'-0"



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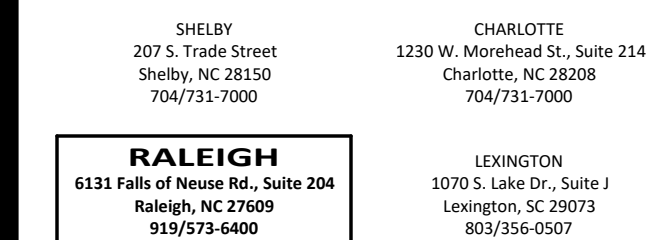
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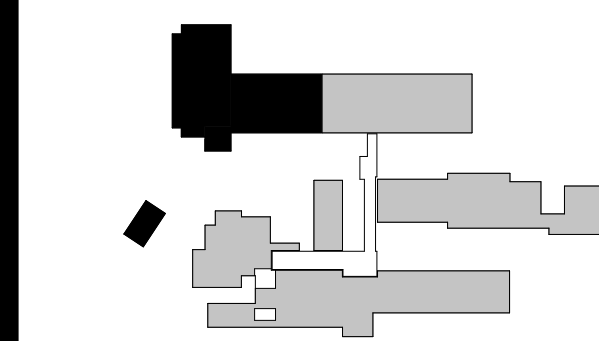
BUILDING ELEVATIONS
SHEET TITLE

A201

SHEET



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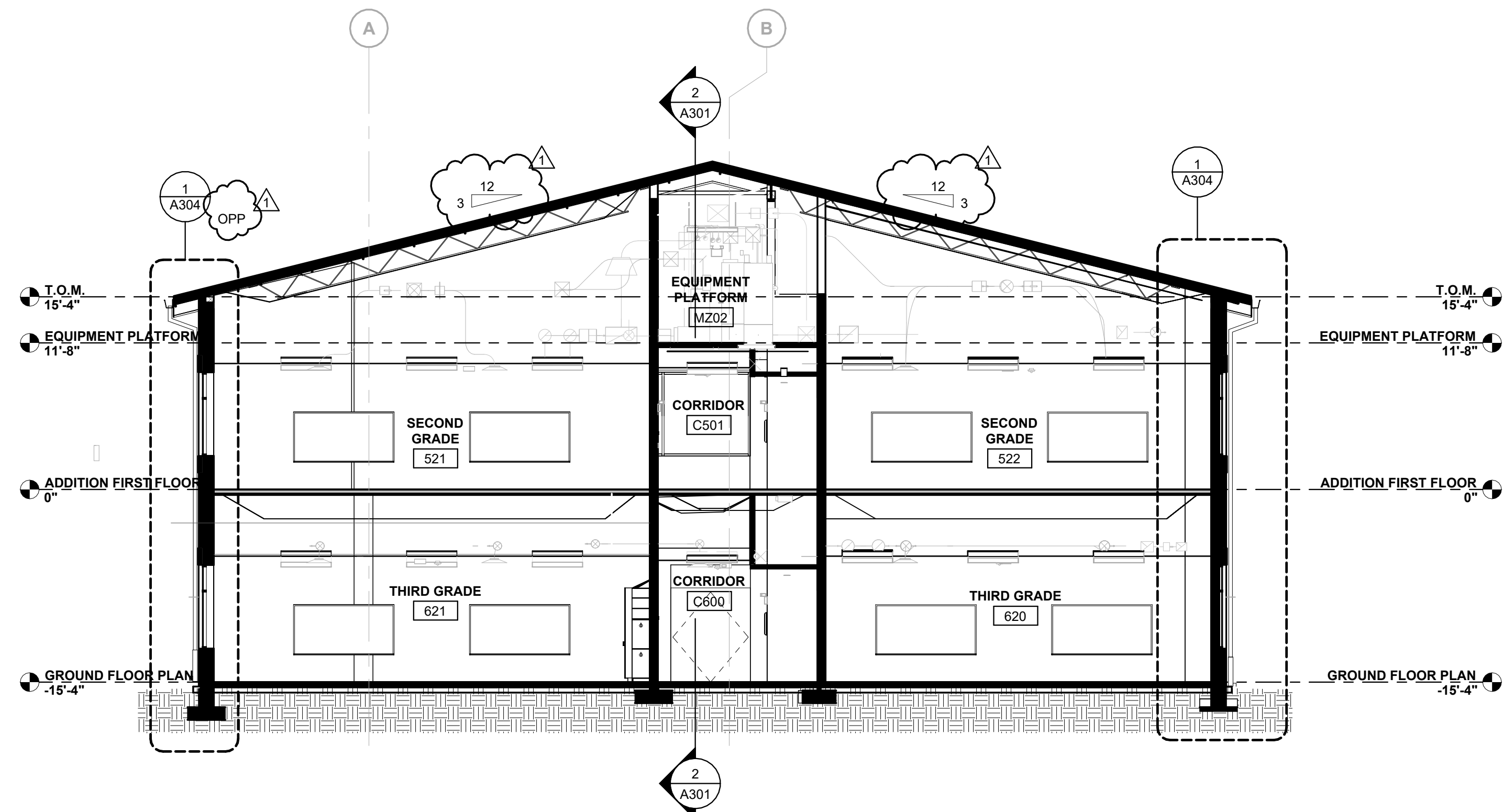
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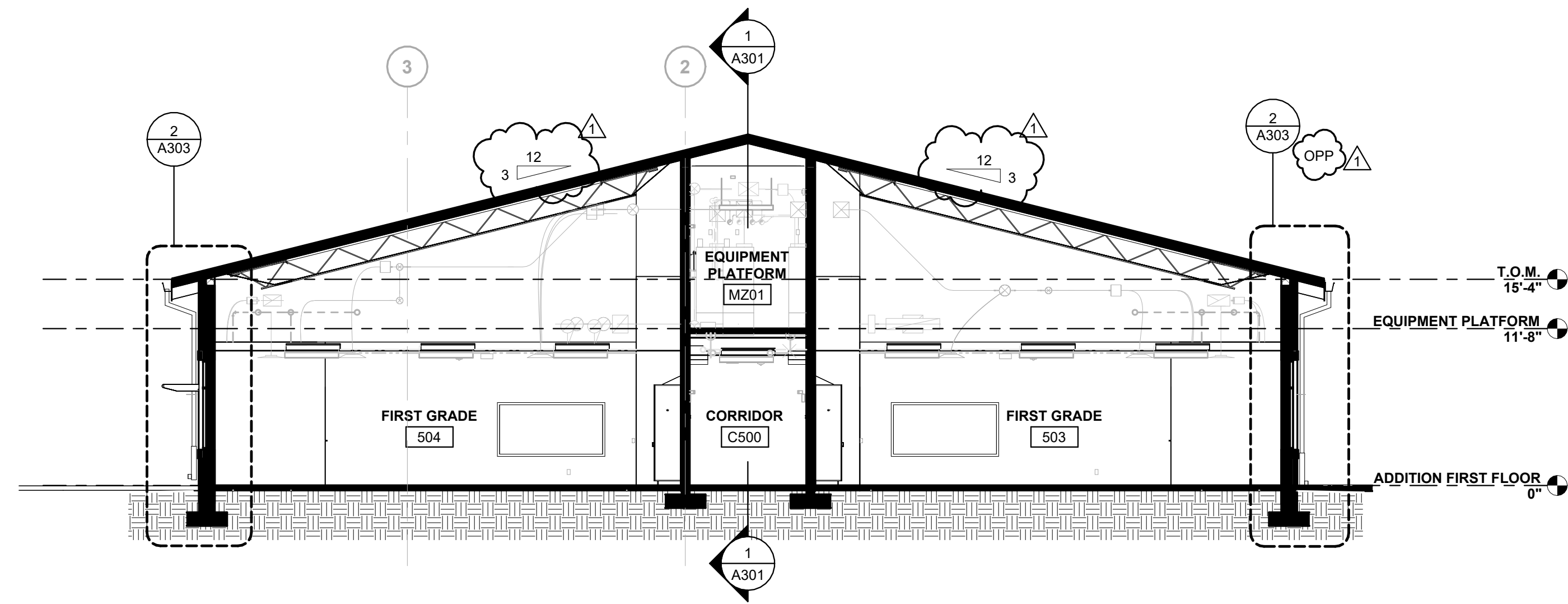
A202

SHEET

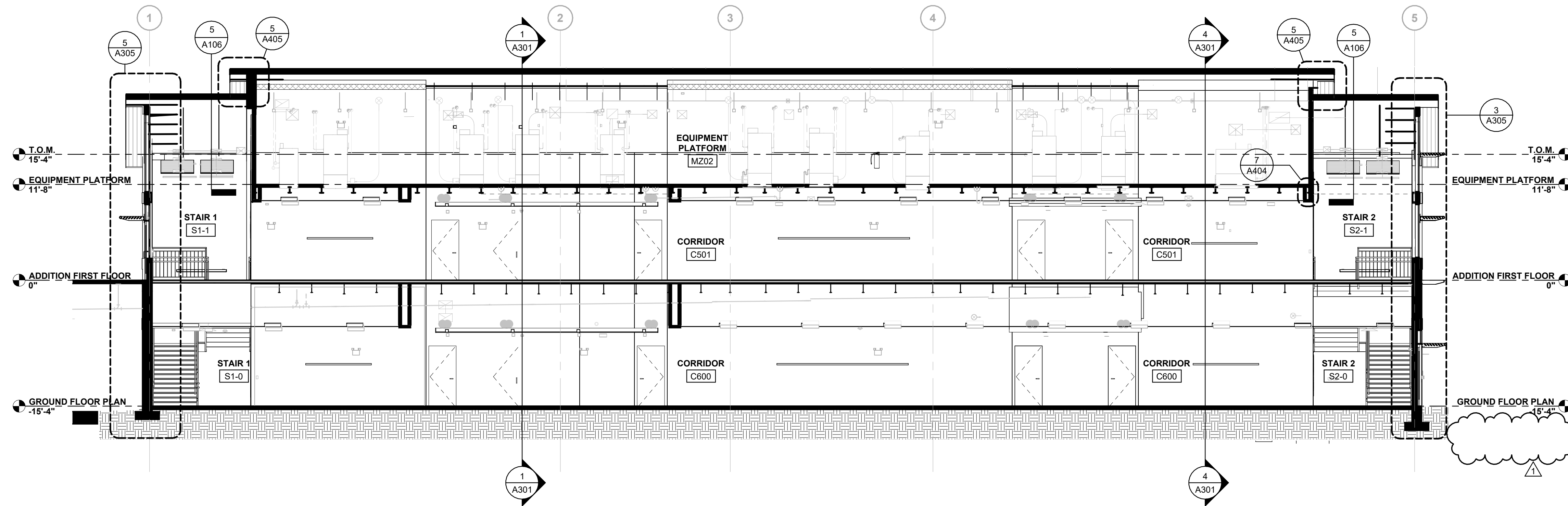
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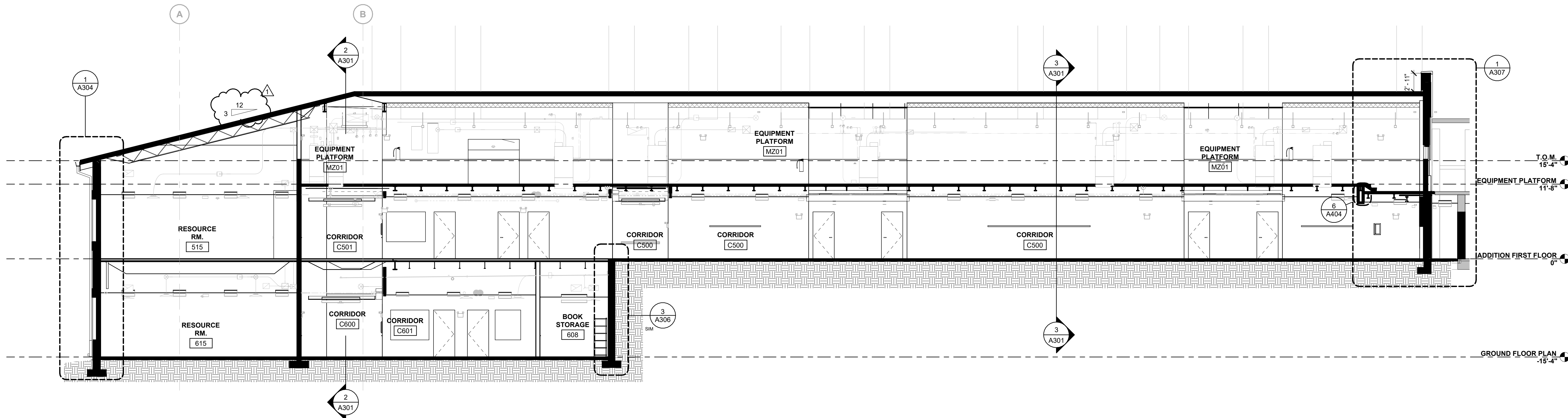
4 BUILDING SECTION
1/8" = 1'-0"



3 BUILDING SECTION
1/8" = 1'-0"



2 BUILDING SECTION
1/8" = 1'-0"



1 BUILDING SECTION
1/8" = 1'-0"

COOPER ACADEMY A & R

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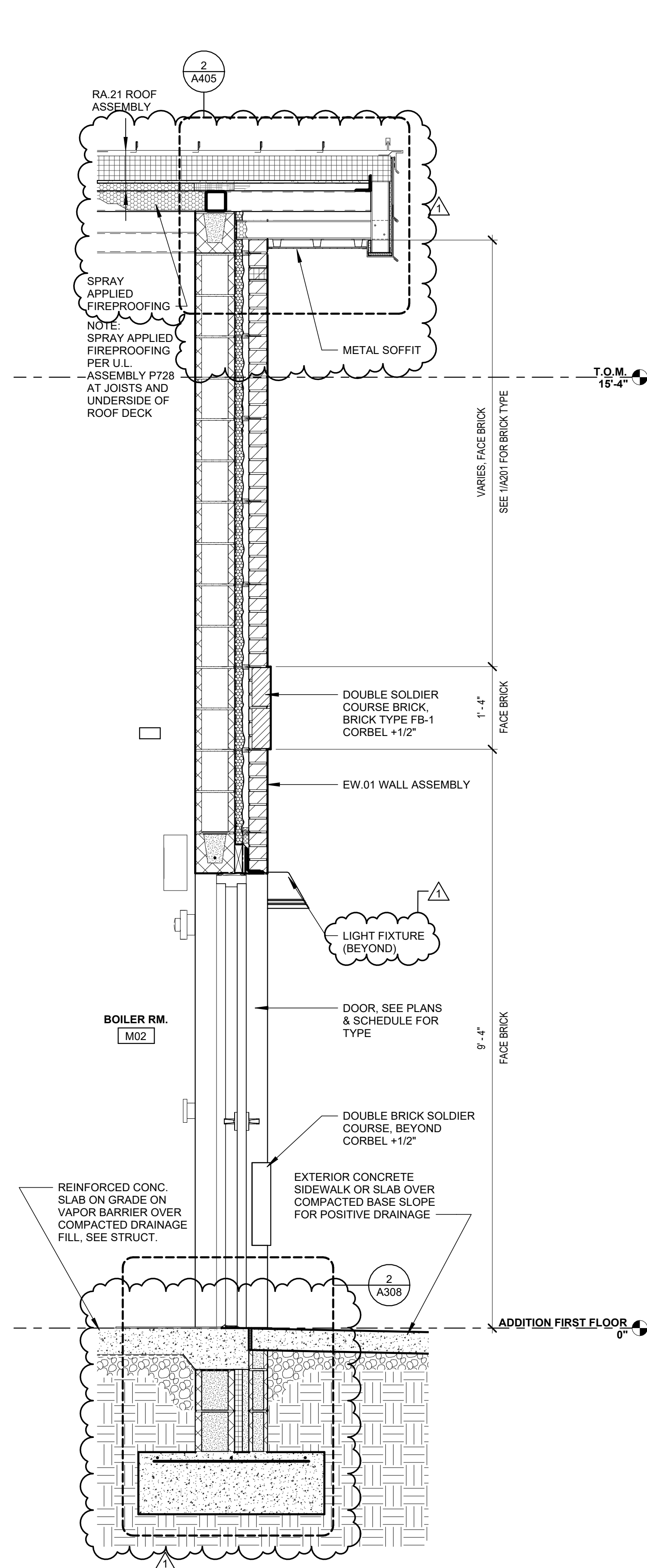
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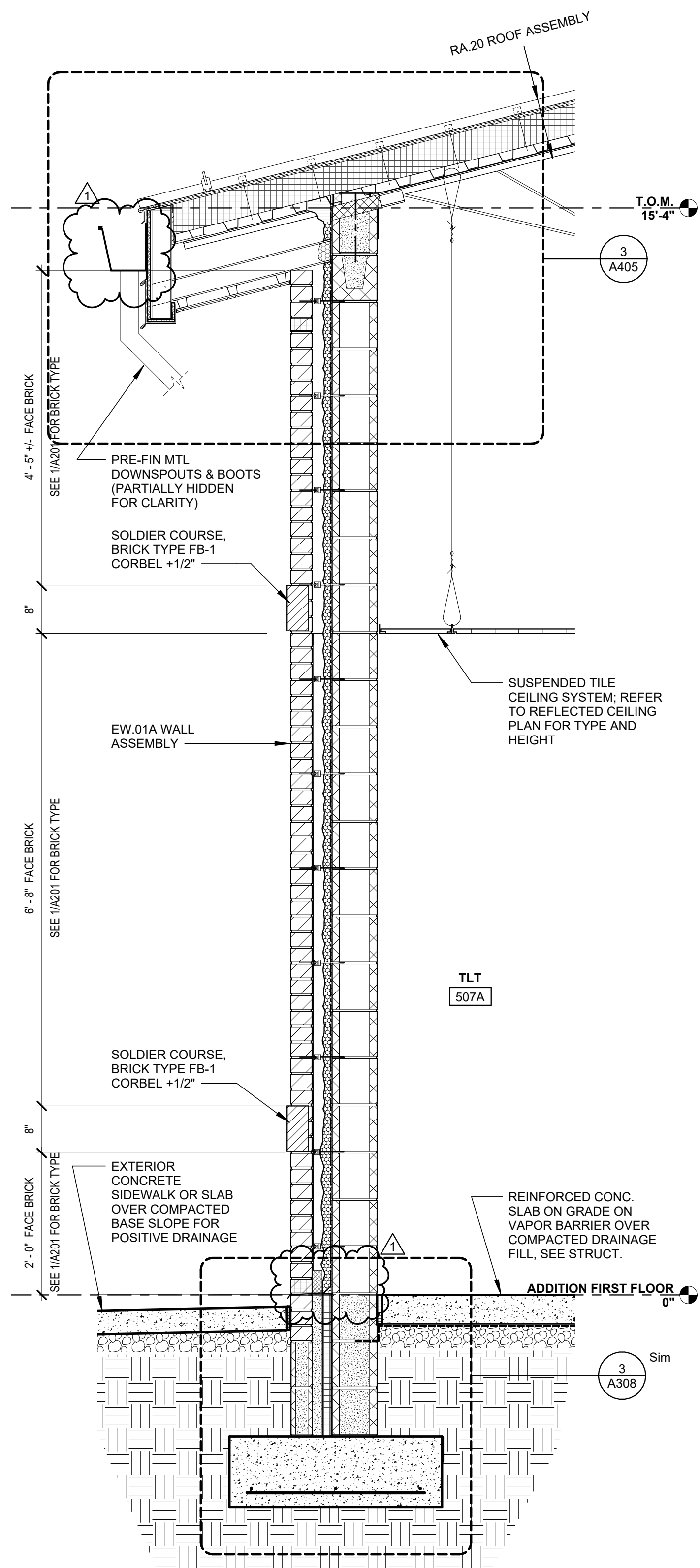
BUILDING SECTIONS
SHEET TITLE

A301

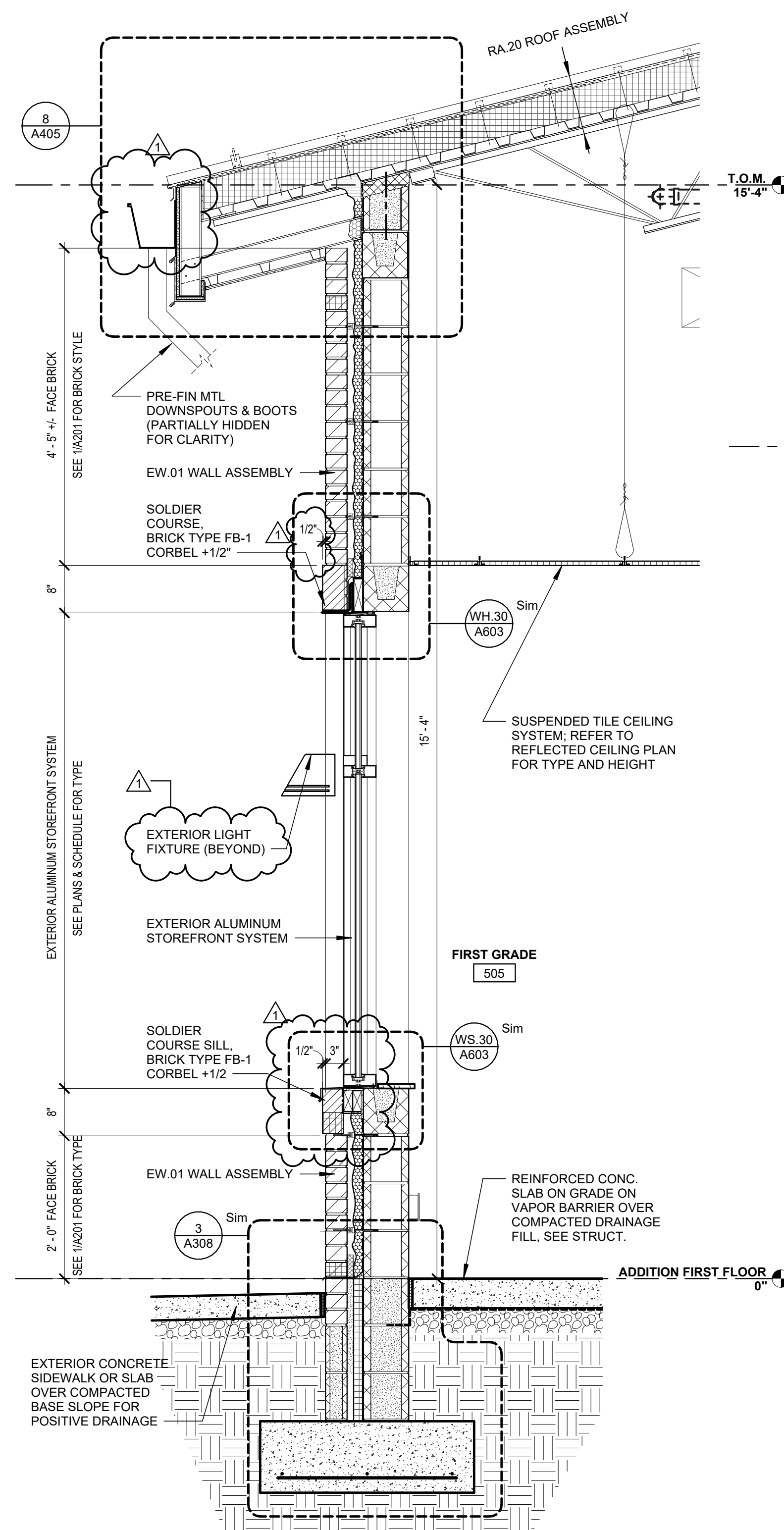
SHEET



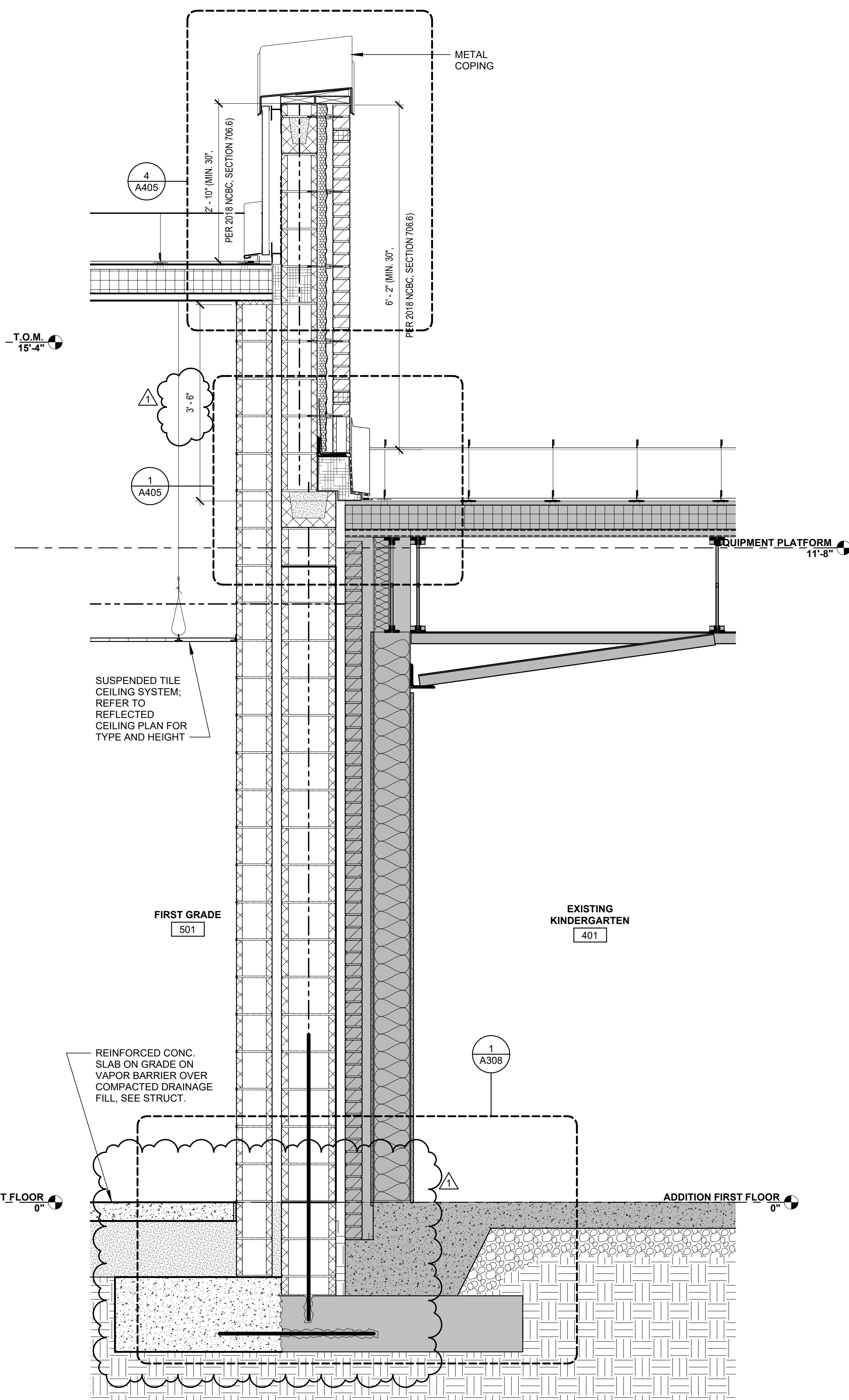
4 WALL SECTION @ BOILER ROOM ENTRANCE
3/4" = 1'-0"



3 WALL SECTION - TYP. @ NORTH
3/4" = 1'-0"




2 WALL SECTION - TYP.
3/4" = 1'-0"



1 WALL SECTION @ 2HR FIREWALL
3/4" = 1'-0"



REVISIONS 		
NO.	DATE	DESCRIPTION
1	02/27/2024	ADDENDUM 2


WALL SECTIONS

SHEET TITLE

A304

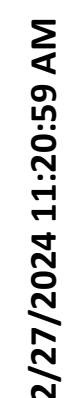
SHEET



REVISIONS 		
NO.	DATE	DESCRIPTION
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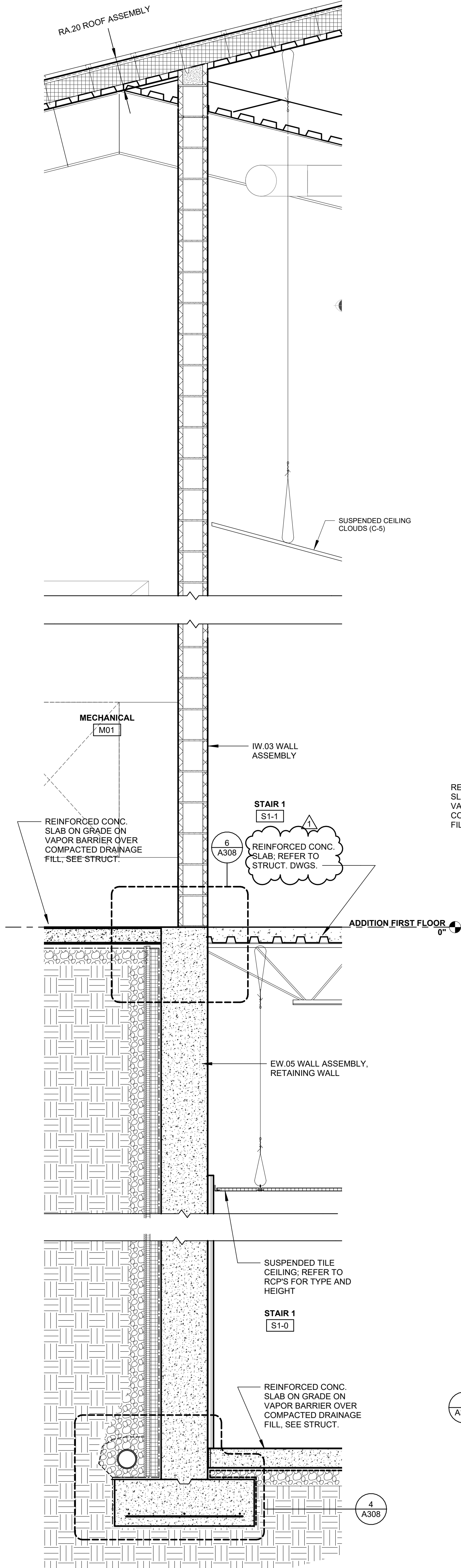
WALL SECTIONS

SHEET

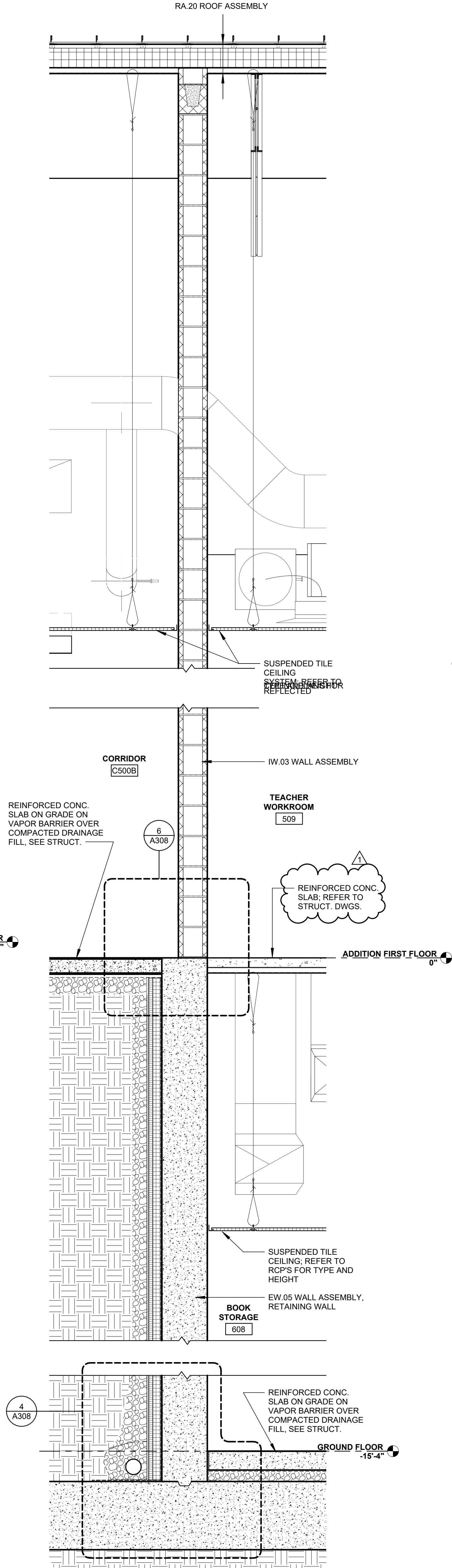


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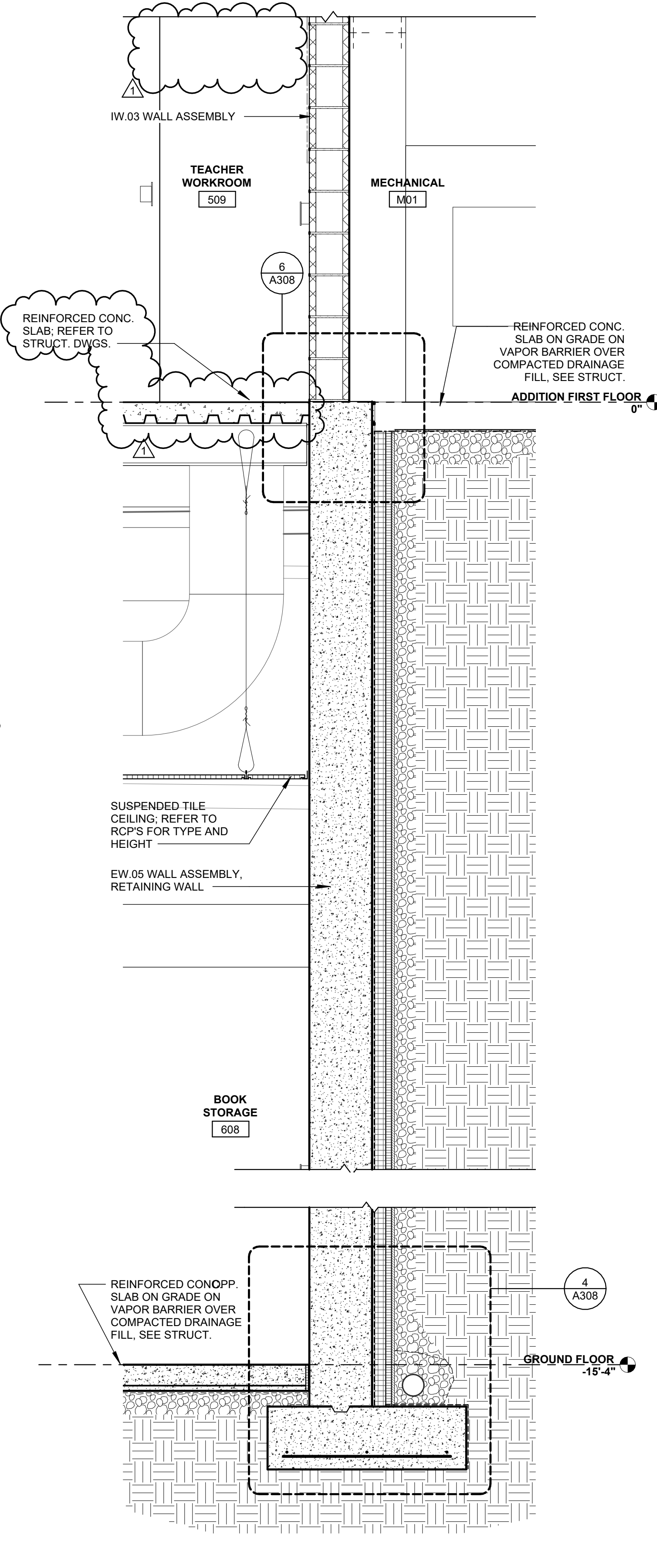
4 WALL SECTION @ INT. RETAINING WALL
3/4" = 1'-0"



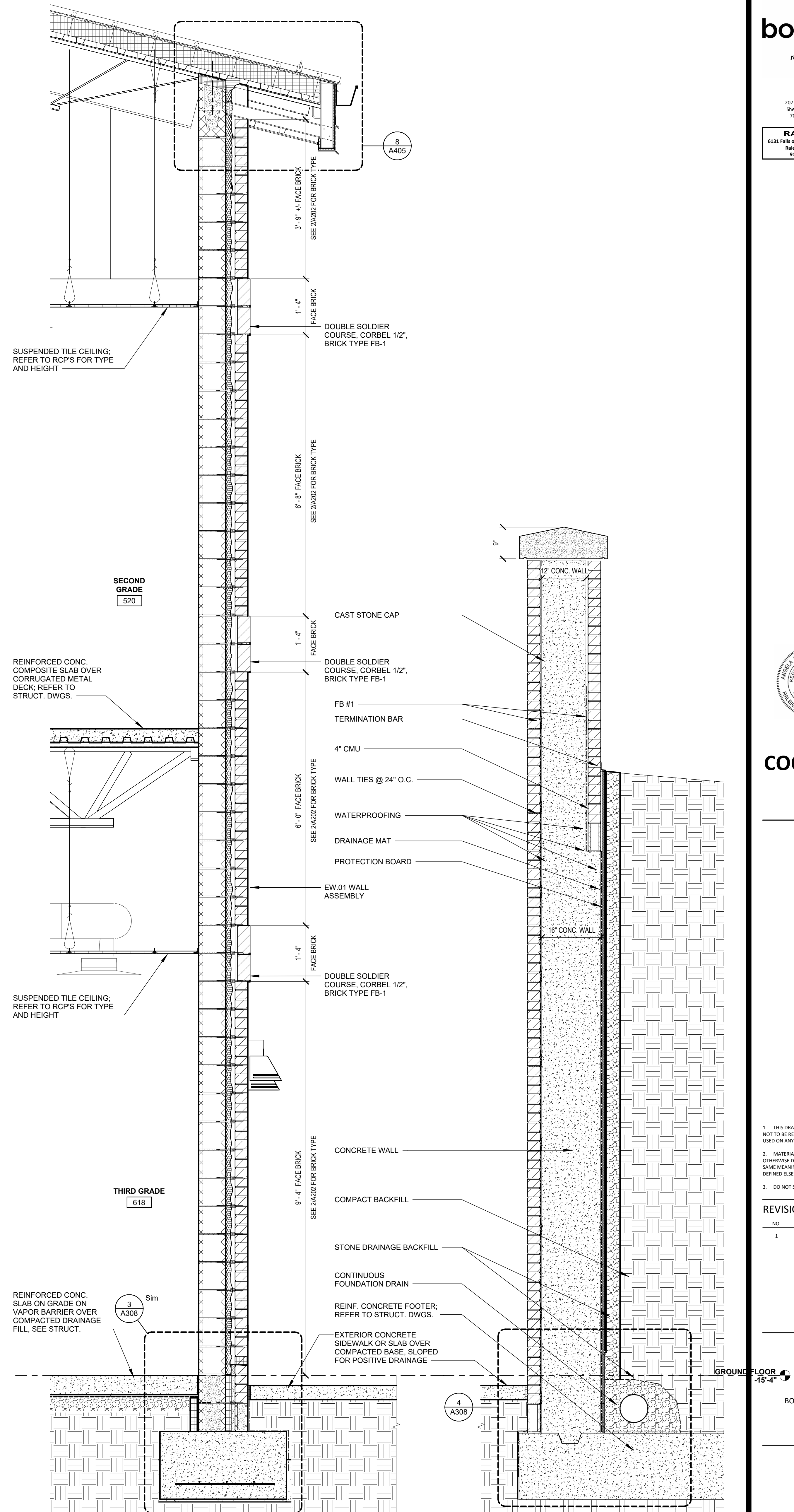
3 WALL SECTION @ INT. RETAINING WALL
3/4" = 1'-0"



2 WALL SECTION @ INT. RETAINING WALL
3/4" = 1'-0"




1 WALL SECTION @ WEST PATIO
3/4" = 1'-0"



COOPER ACADEMY
A & R
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"CLIENT'S PROJECT" # - XXX

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PROJECT PHASE

2307

BOOMERANG DESIGN PROJECT NUMBER

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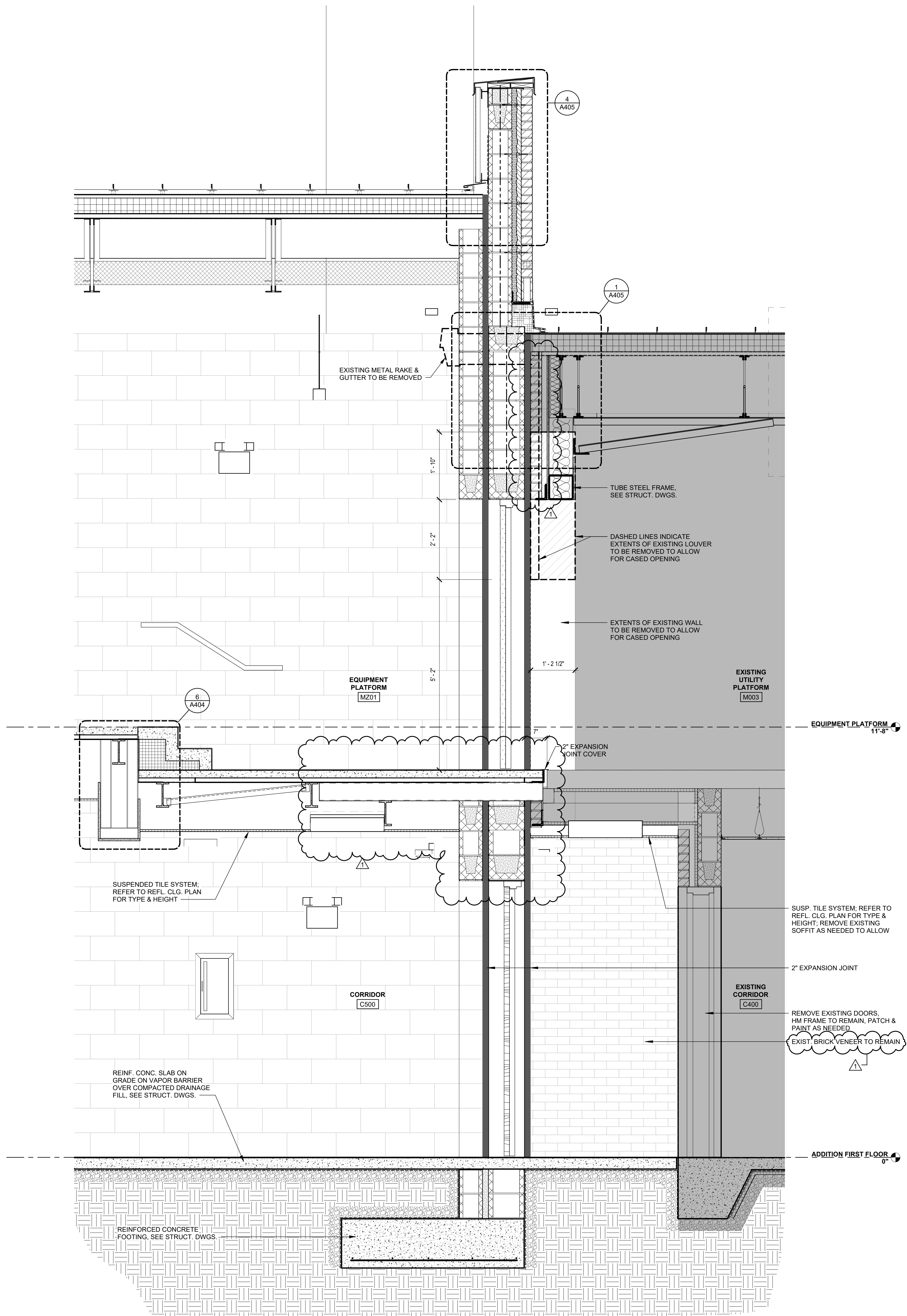
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WALL SECTIONS

SHEET TITLE

A307

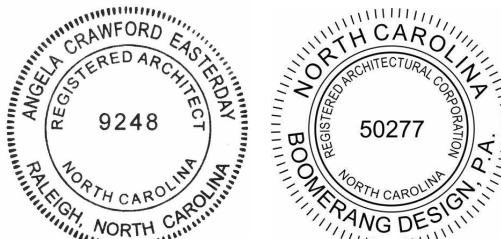
SHEET



1 WALL SECTION
3/4" = 1'-0"



2/27/2024 11:21:22 AM



COOPER ACADEMY

A & R

PROJECT TITLE

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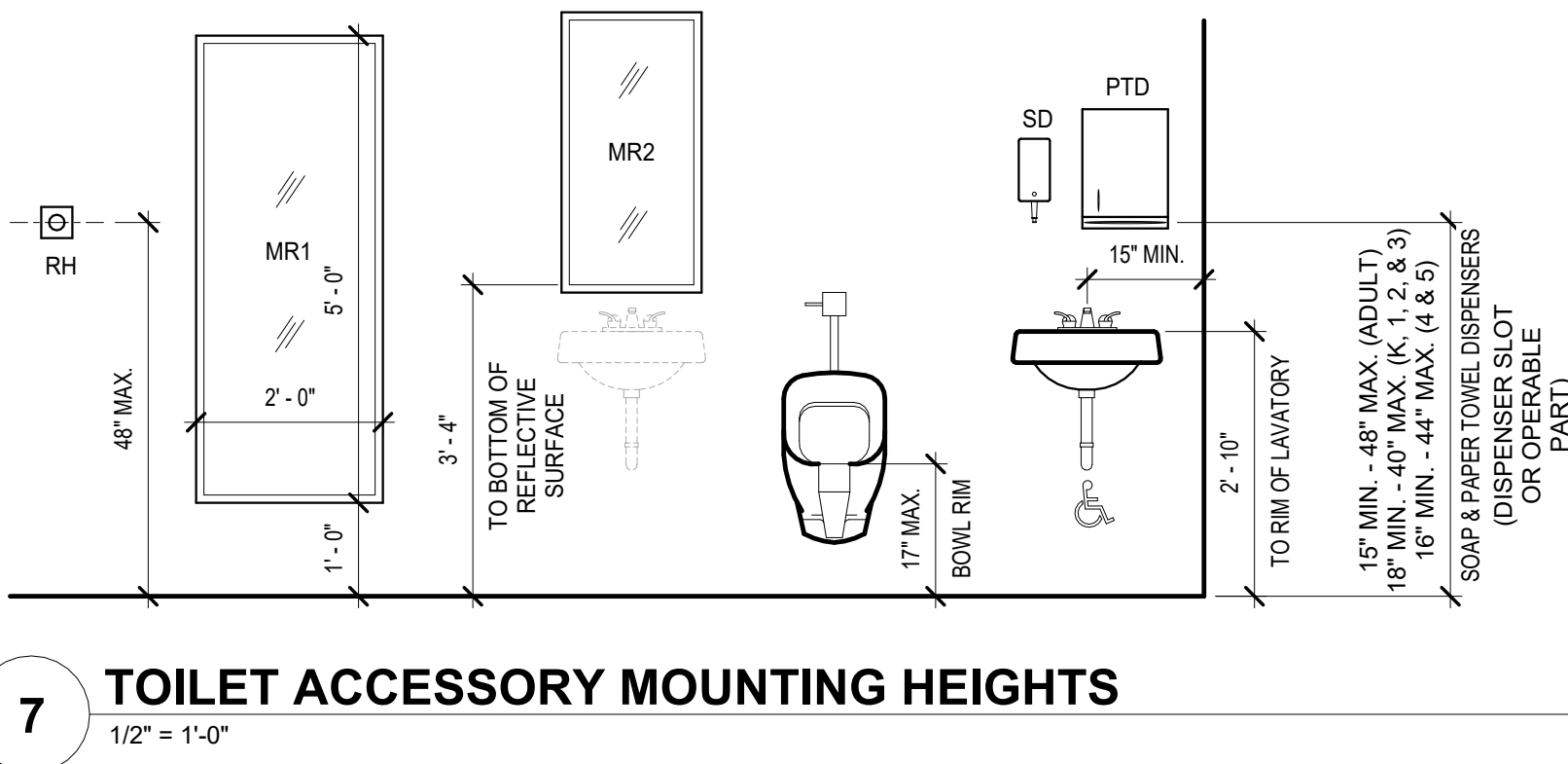
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ENLARGED TOILET
PLANS, SECTIONS, &
DETAILS

SHEET TITLE

A401

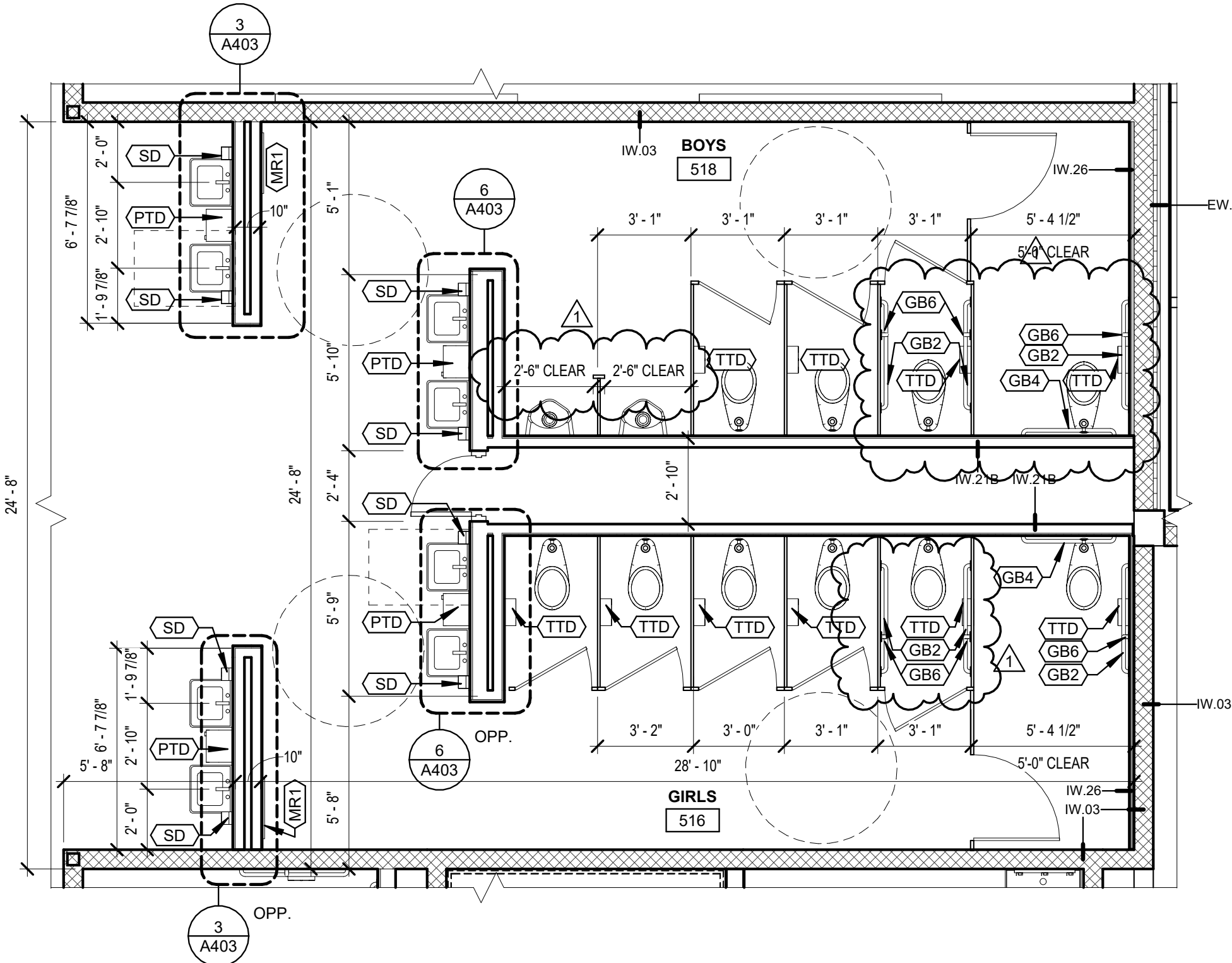
SHEET



7 TOILET ACCESSORY MOUNTING HEIGHTS

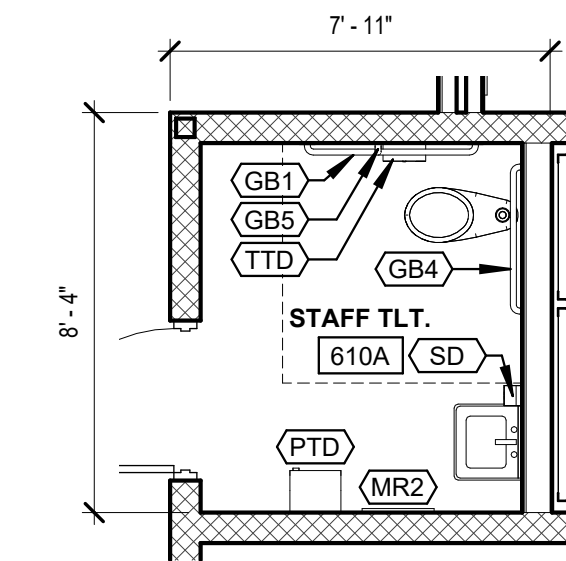
1/2" = 1'-0"

TOILET ACCESSORIES SCHEDULE			
TYPE	DESCRIPTION	PROVD BY	NOTES
GB1	GRAB BAR 42" - ADULT	C.P.C.I.	
GB2	GRAB BAR 42" - CHILD	C.P.C.I.	
GB3	GRAB BAR 36" - ADULT	C.P.C.I.	
GB4	GRAB BAR 36" - CHILD	C.P.C.I.	
GB5	VERTICAL GRAB BAR 18" - ADULT	C.P.C.I.	
GB6	VERTICAL GRAB BAR 18" - CHILD	C.P.C.I.	
MBH	MOP BROOM HOLDER	C.P.C.I.	
MR1	24" X 36" FRAMED MIRROR	C.P.C.I.	
MR2	18" X 36" FRAMED MIRROR	C.P.C.I.	
PTD2	PAPER TOWEL DISPENSER	O.P.C.I.	
PTD	CENTER PULL TOWEL DISPENSER	O.P.C.I.	
SD	AUTOMATIC FOAM SOAP DISPENSER	O.P.C.I.	
TTD	TOILET TISSUE DISPENSER	O.P.C.I.	



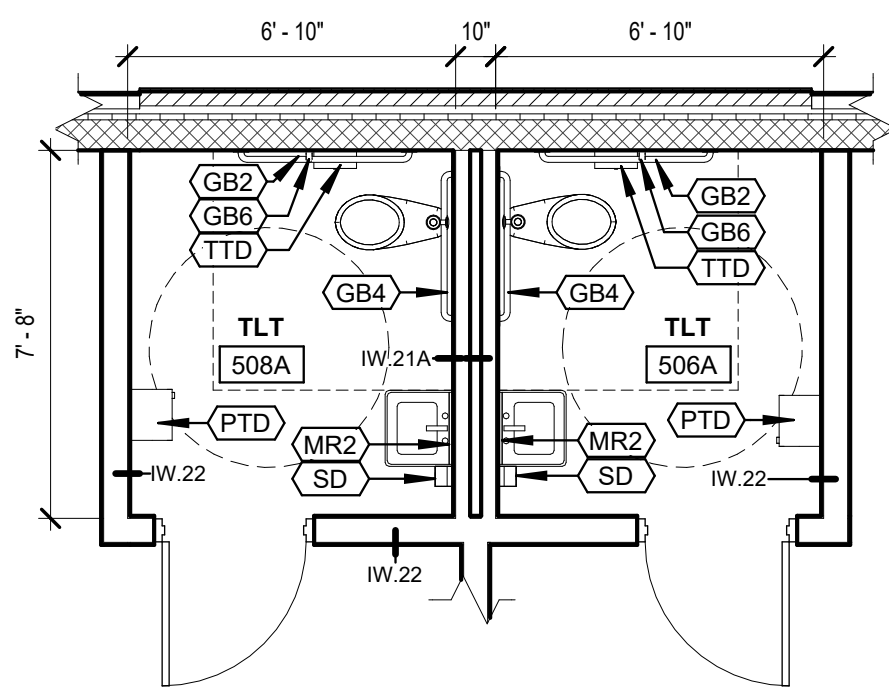
1 ENLARGED PLAN - GROUP TLT

1/4" = 1'-0"



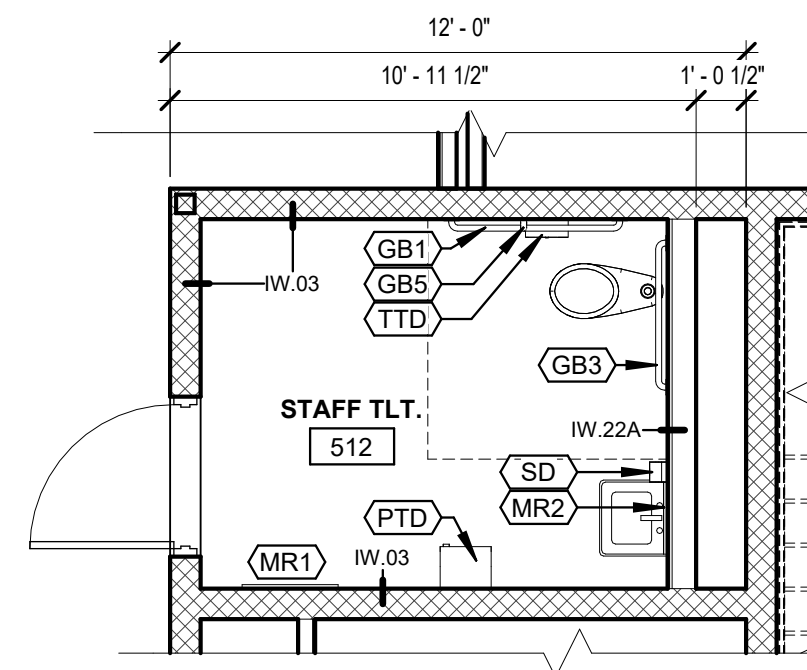
8 ENLARGED PLAN

1/4" = 1'-0"



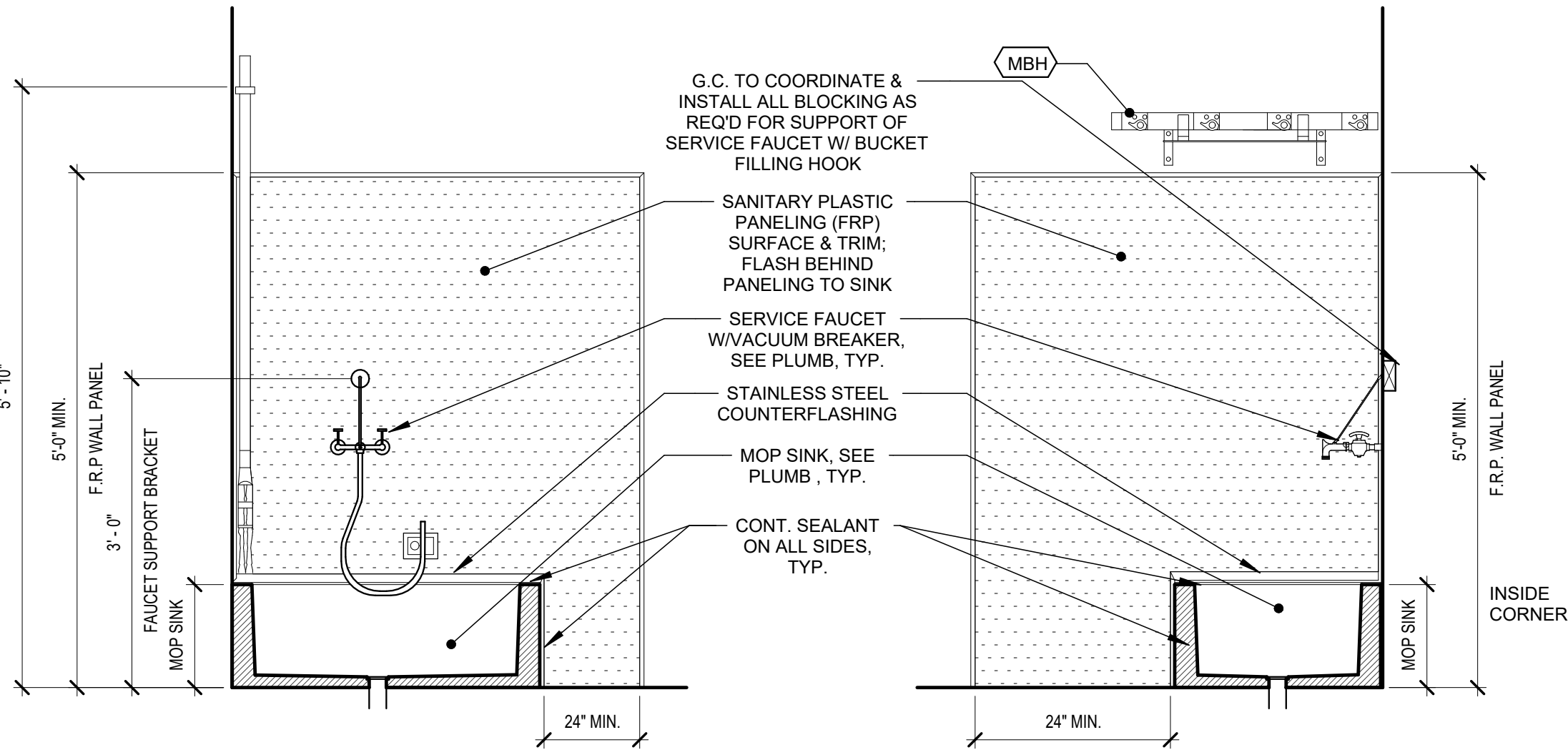
4 ENLARGED PLAN - 1ST GRD. TLT

1/4" = 1'-0"



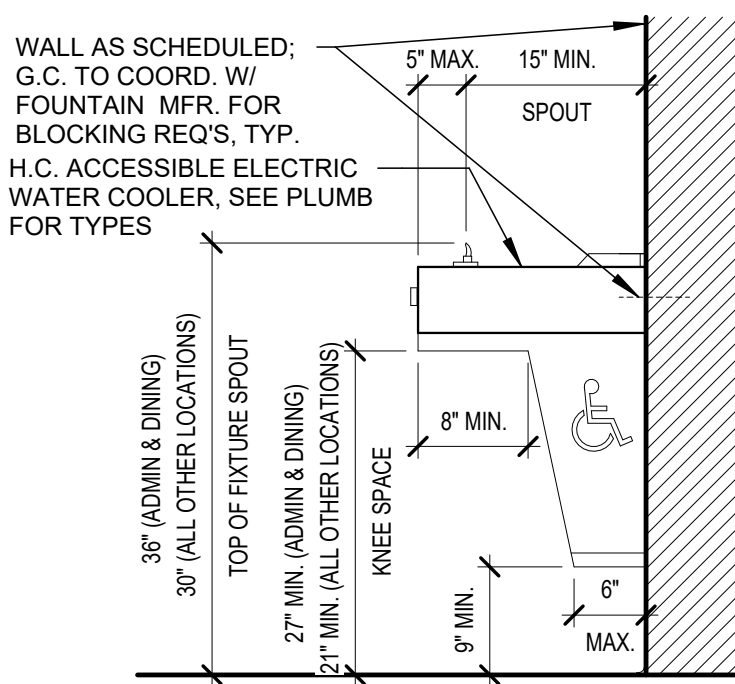
2 ENLARGED PLAN - STAFF TLT

1/4" = 1'-0"



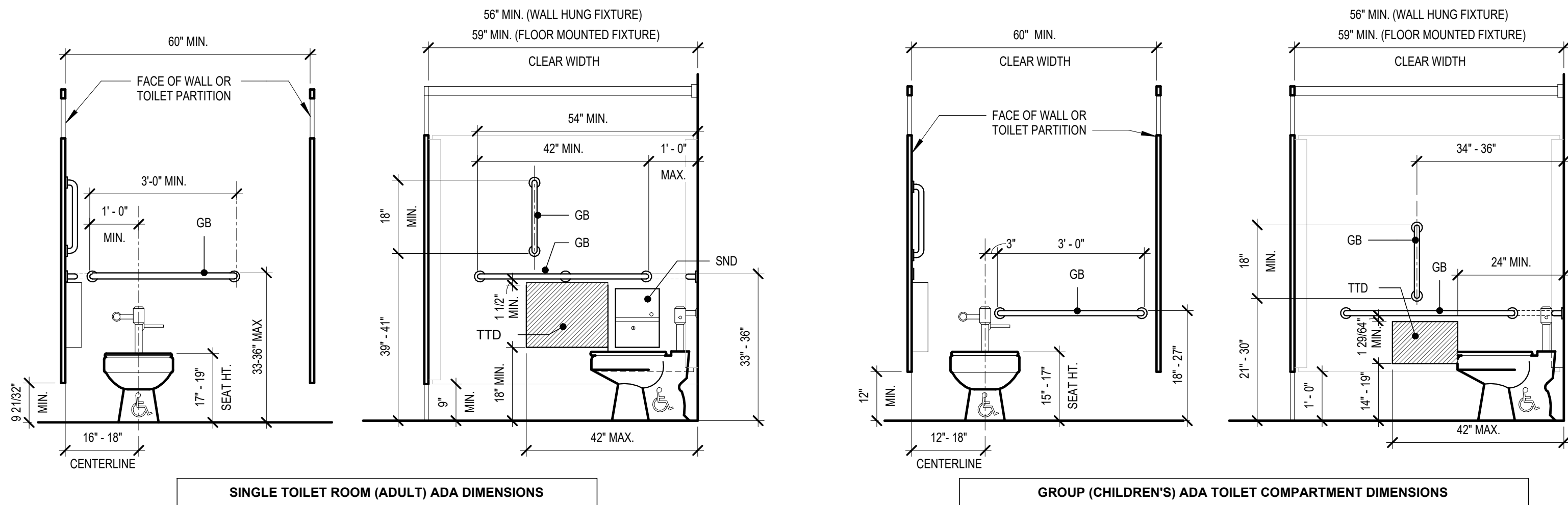
5 SECTION - MOP SINK DETAILS (FRP PANEL)

3/4" = 1'-0"



6 ADA - E.W.C SECTION DETAIL

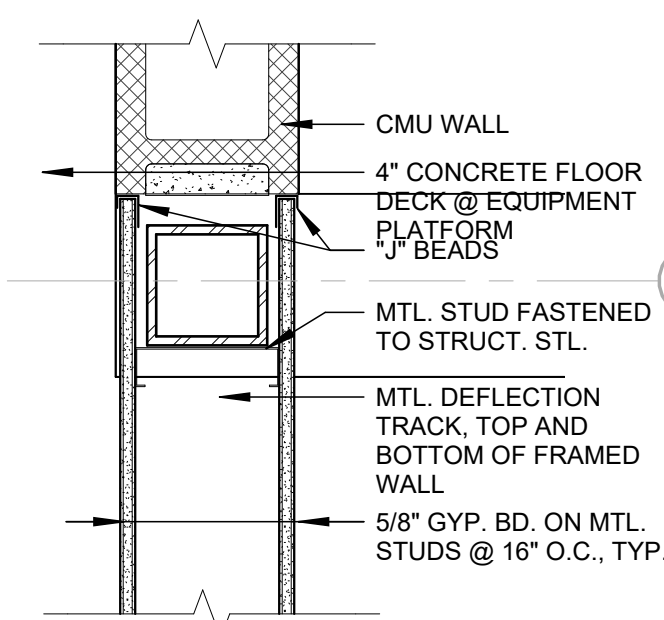
3/4" = 1'-0"



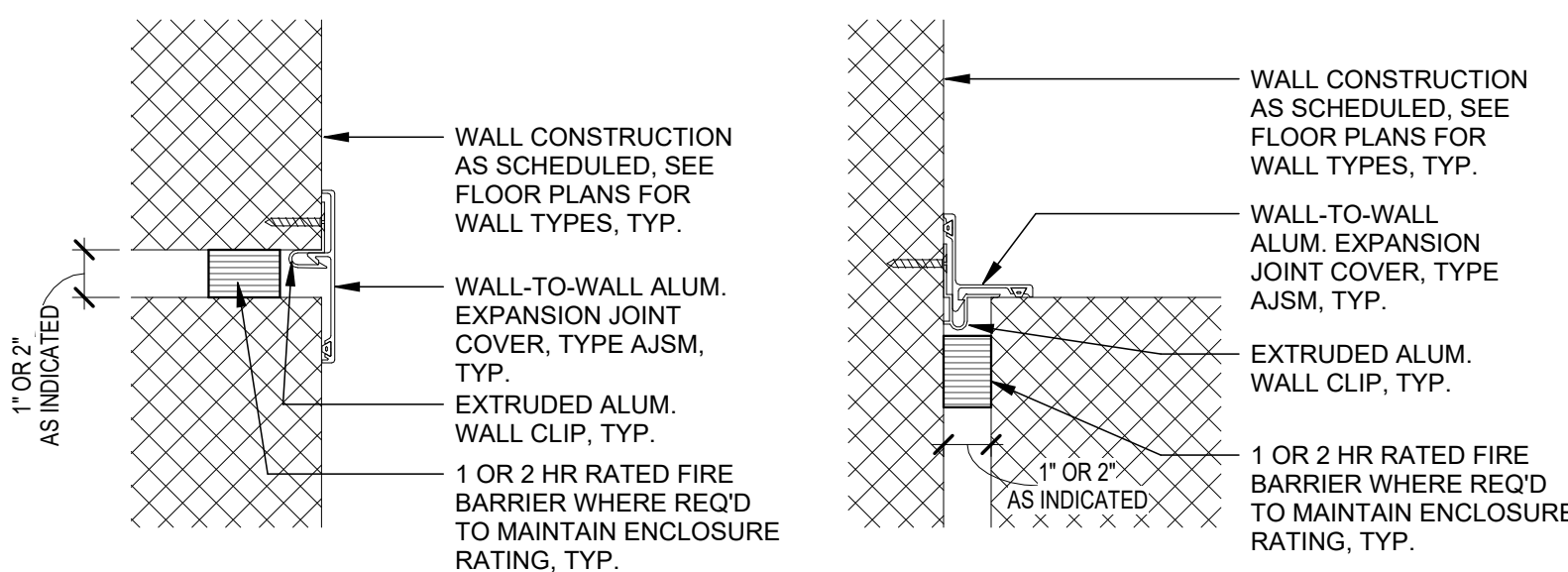
3 ADA (ADULT & CHILDRENS) TOILET COMPARTMENT EQUIPMENT MOUNTING HEIGHTS

1/2" = 1'-0"

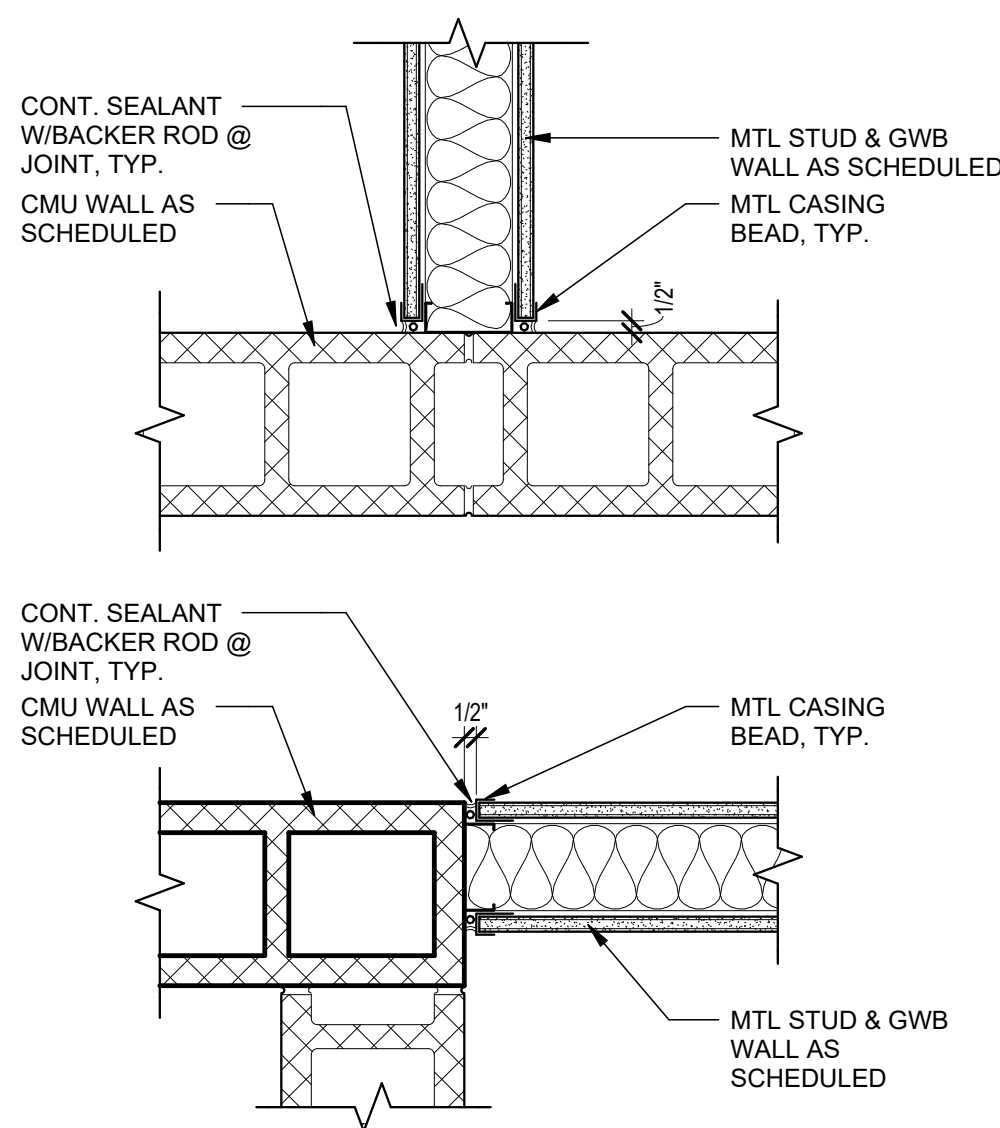
5 PLAN DETAIL -
1 1/2" = 1'-0"



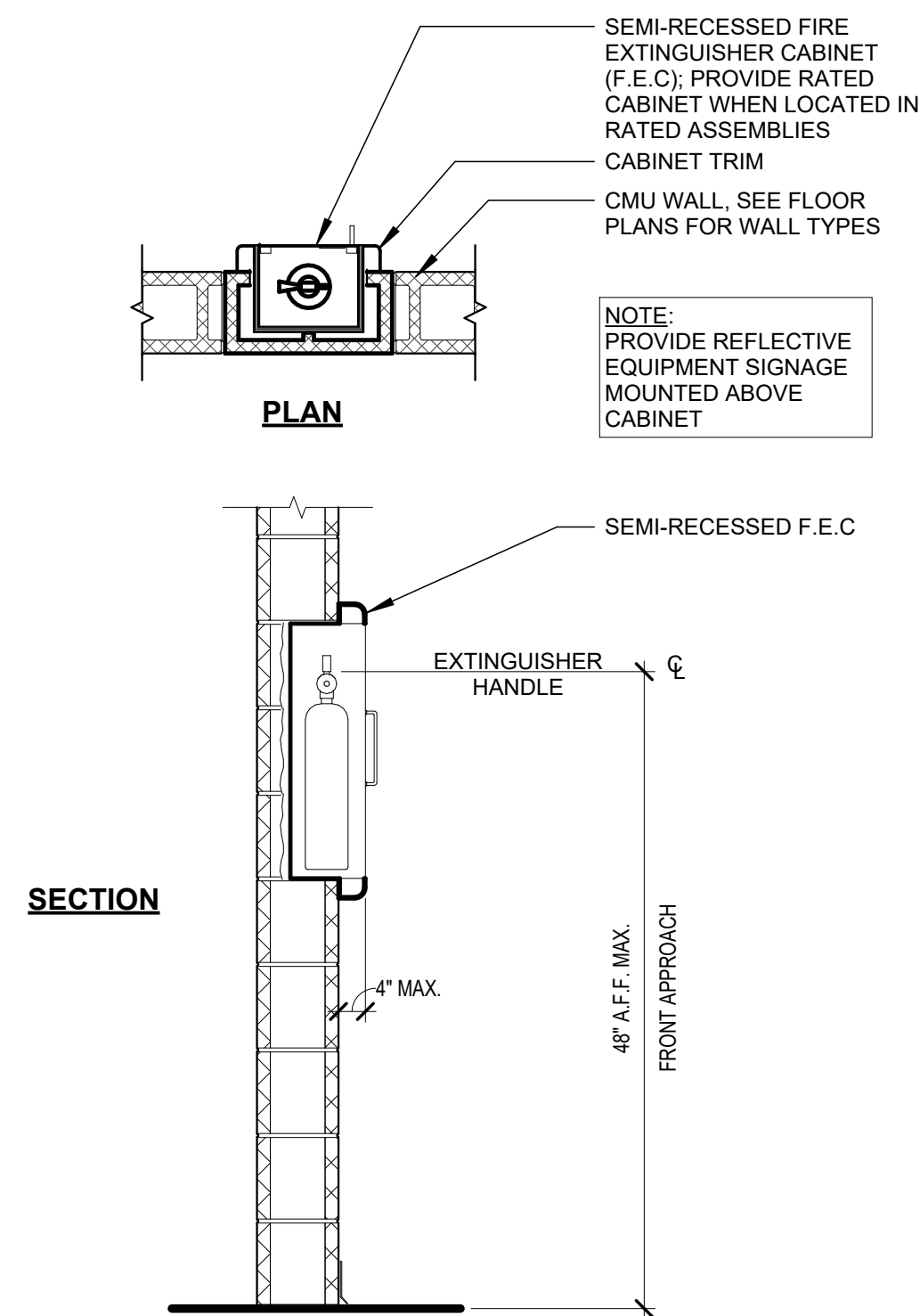
4 EXPANSION JOINT WALL TO WALL
3\"/>



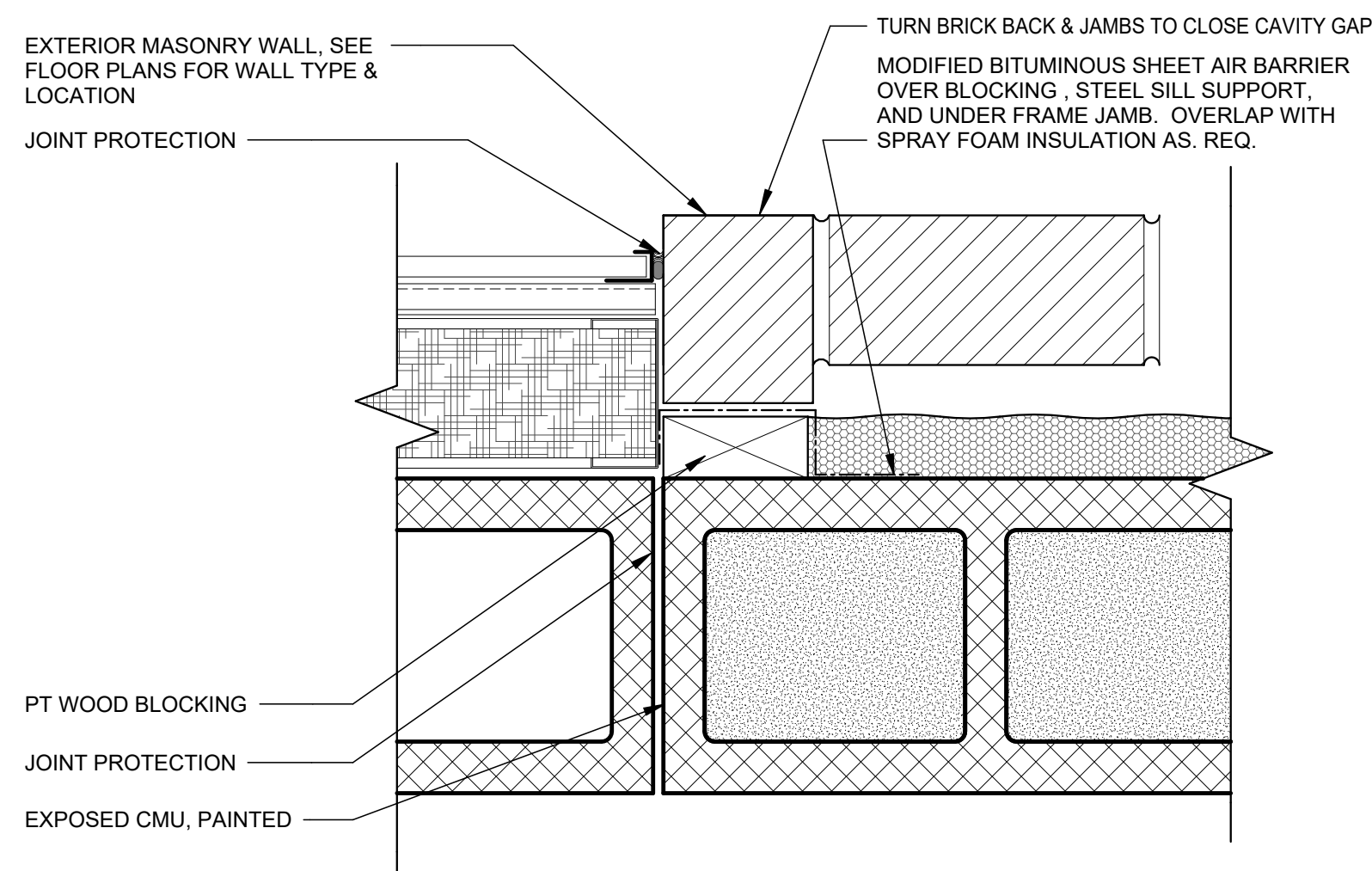
8 INTERIOR DETAIL - GWB TO CMU JOINT
1 1/2" = 1'-0"



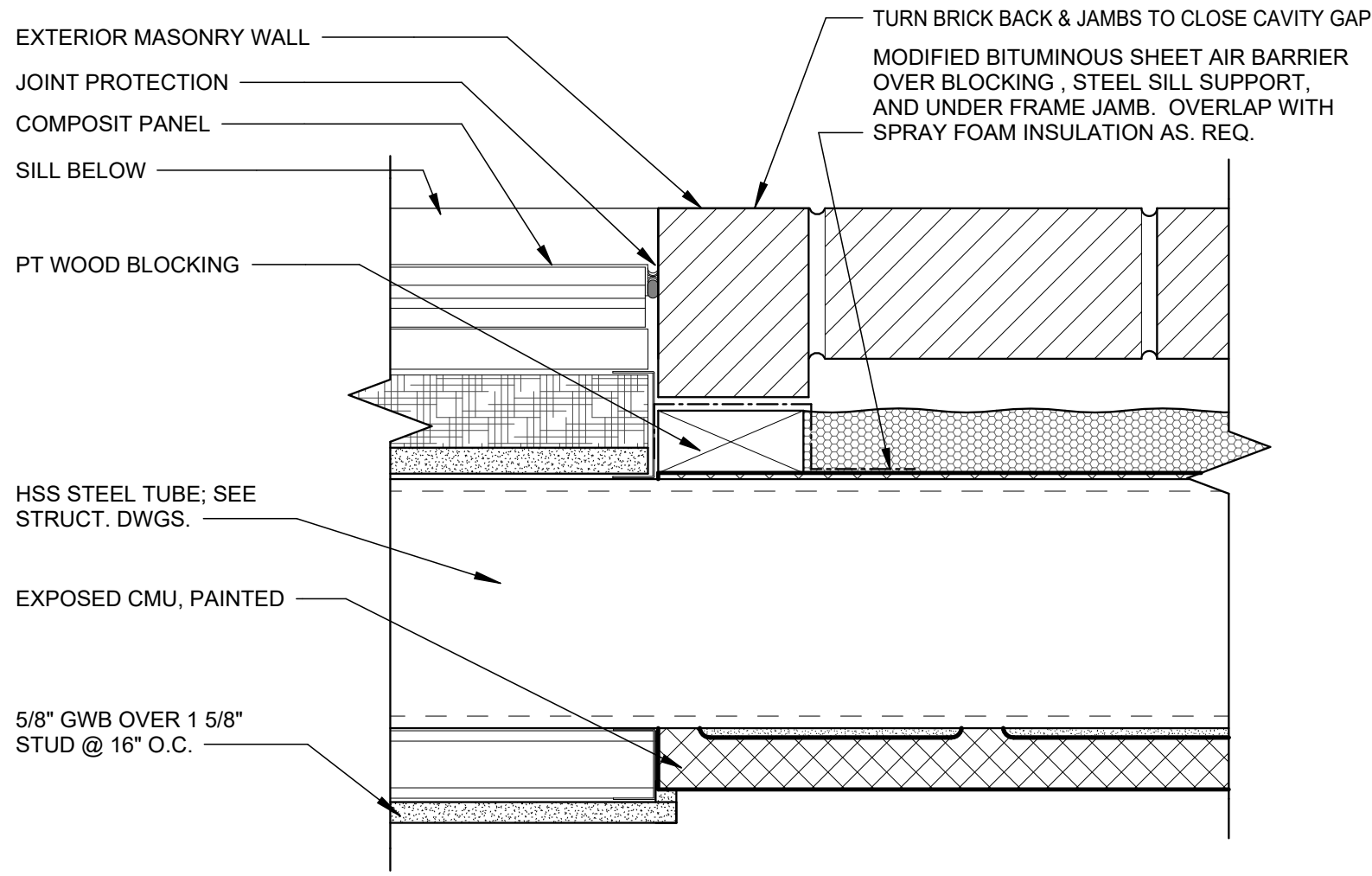
9 SECTION - PLAN - TYPICAL F.E.C. IN CMU WALL
3/4\"/>



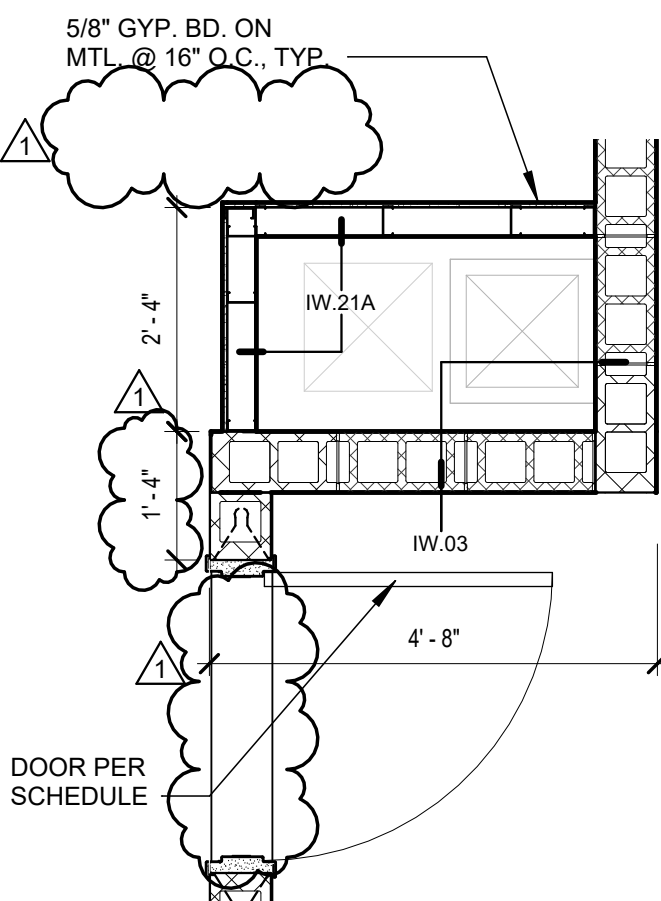
12 TRANSITION FROM BRICK TO METAL WALL PANEL (PLAN DETAIL)
3\"/>



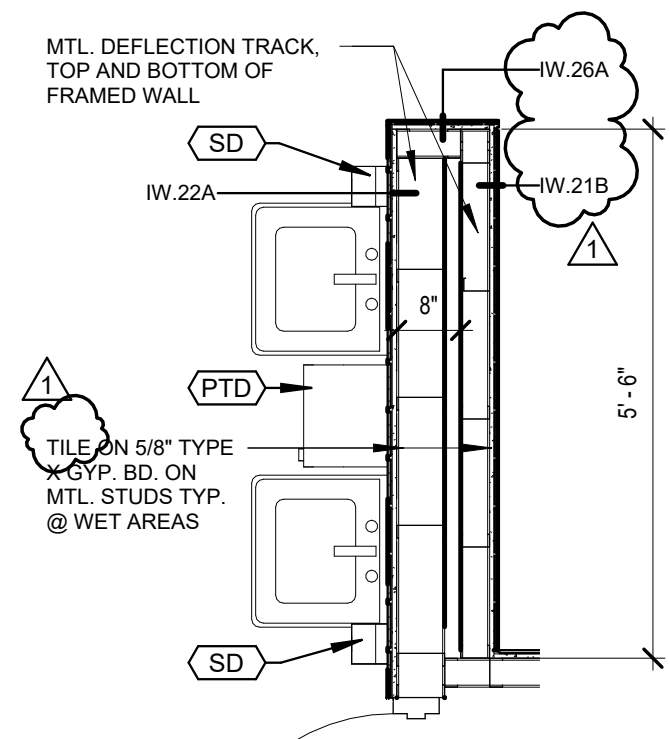
13 TRANSITION FROM BRICK TO COMPOSIT PANEL (PLAN DETAIL)
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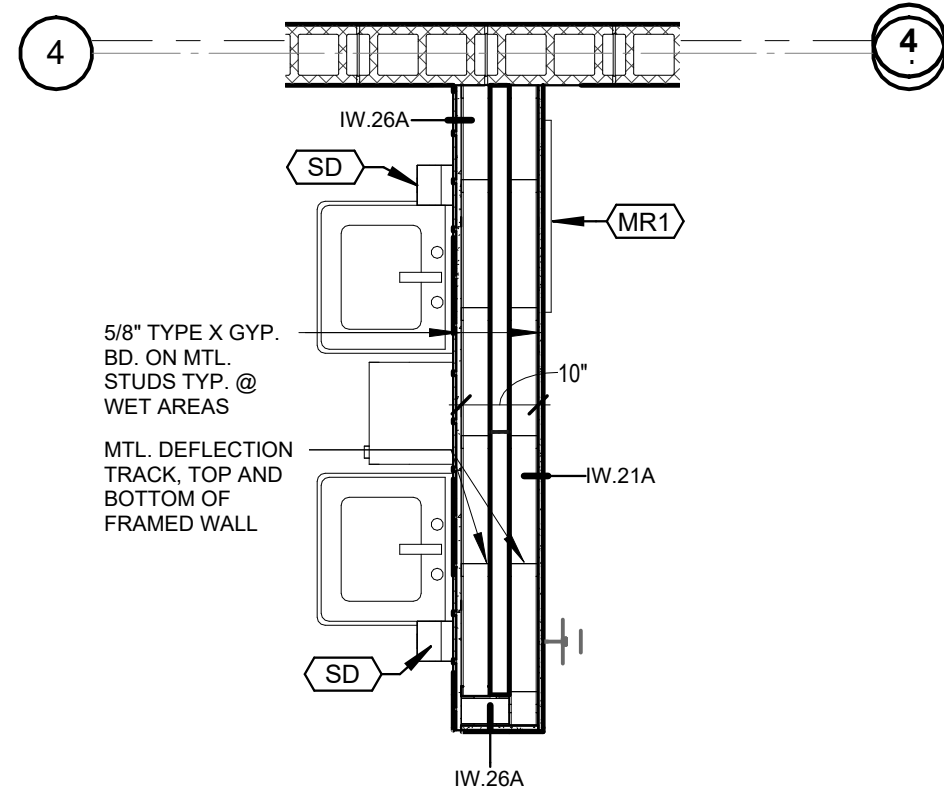
2 ENLARGED PLAN DETAIL
1/2\"/>



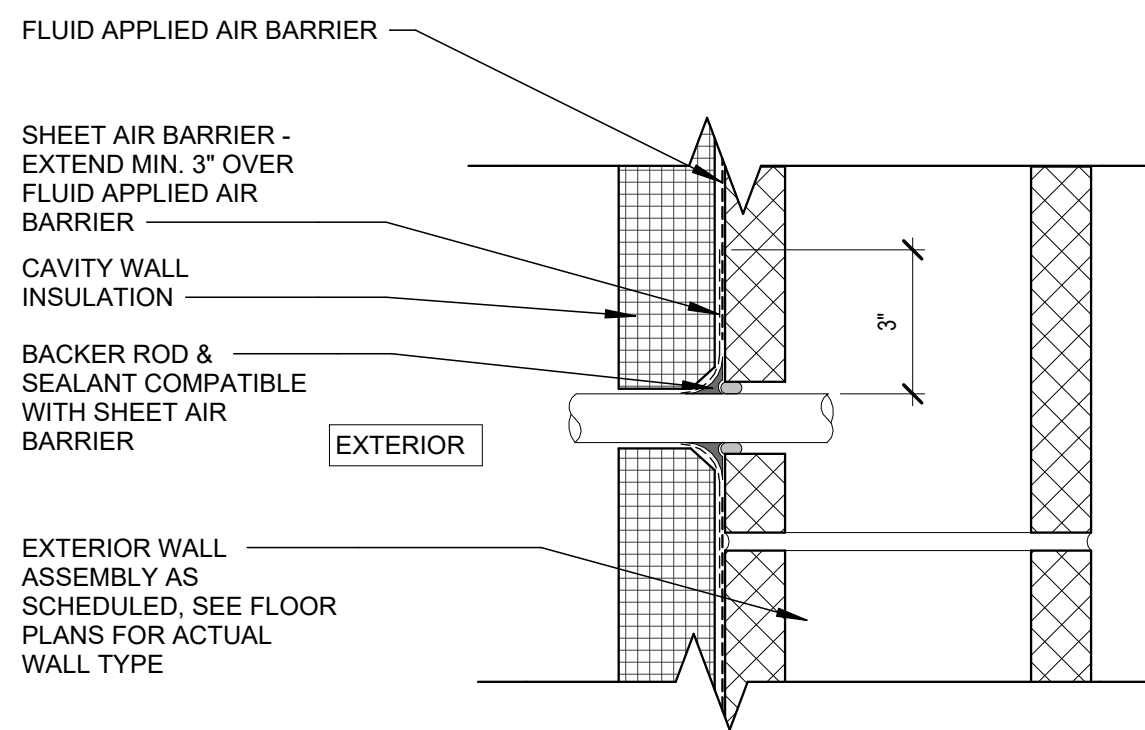
6 ENLARGED PLAN DETAIL
1/2\"/>



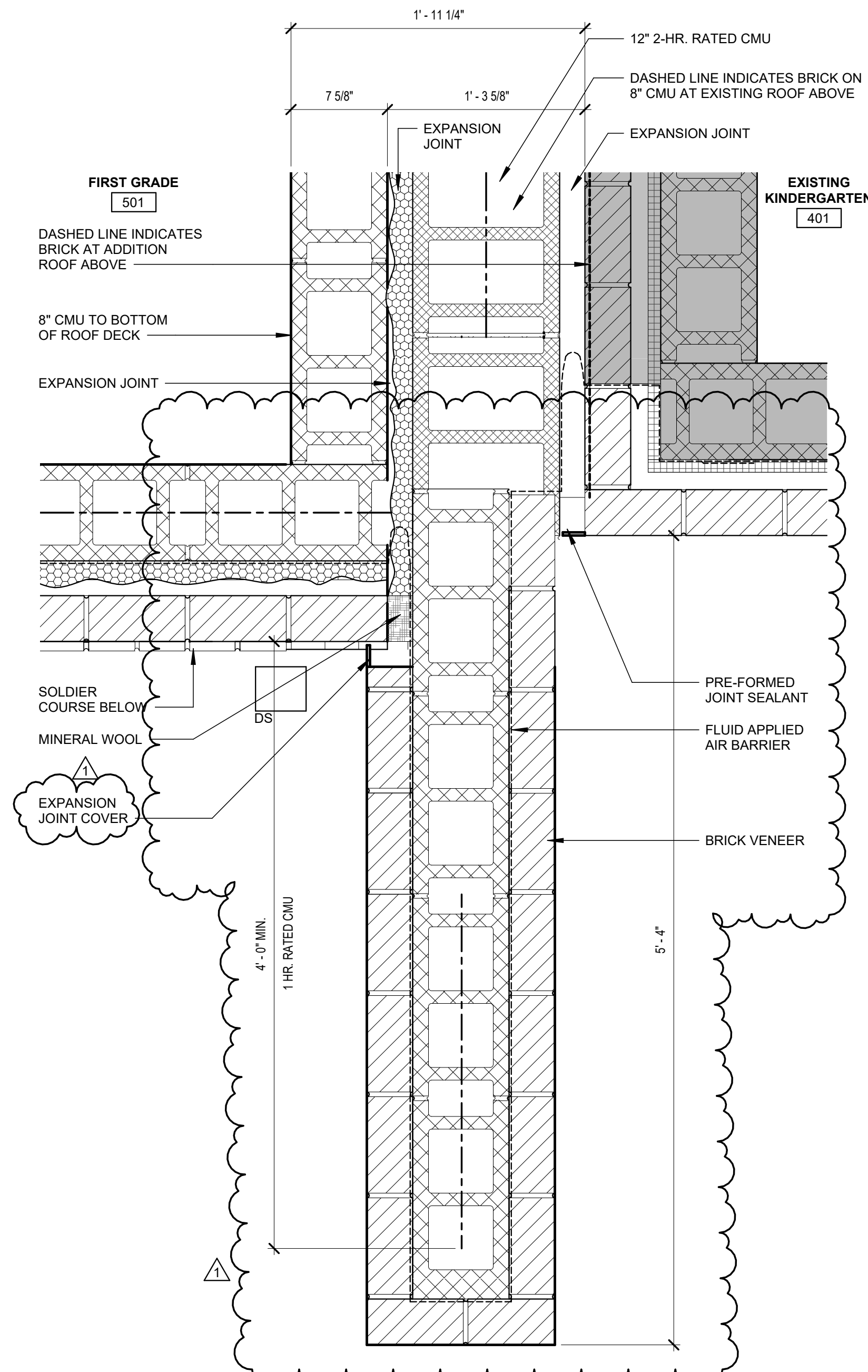
3 ENLARGED PLAN DETAIL
1/2\"/>



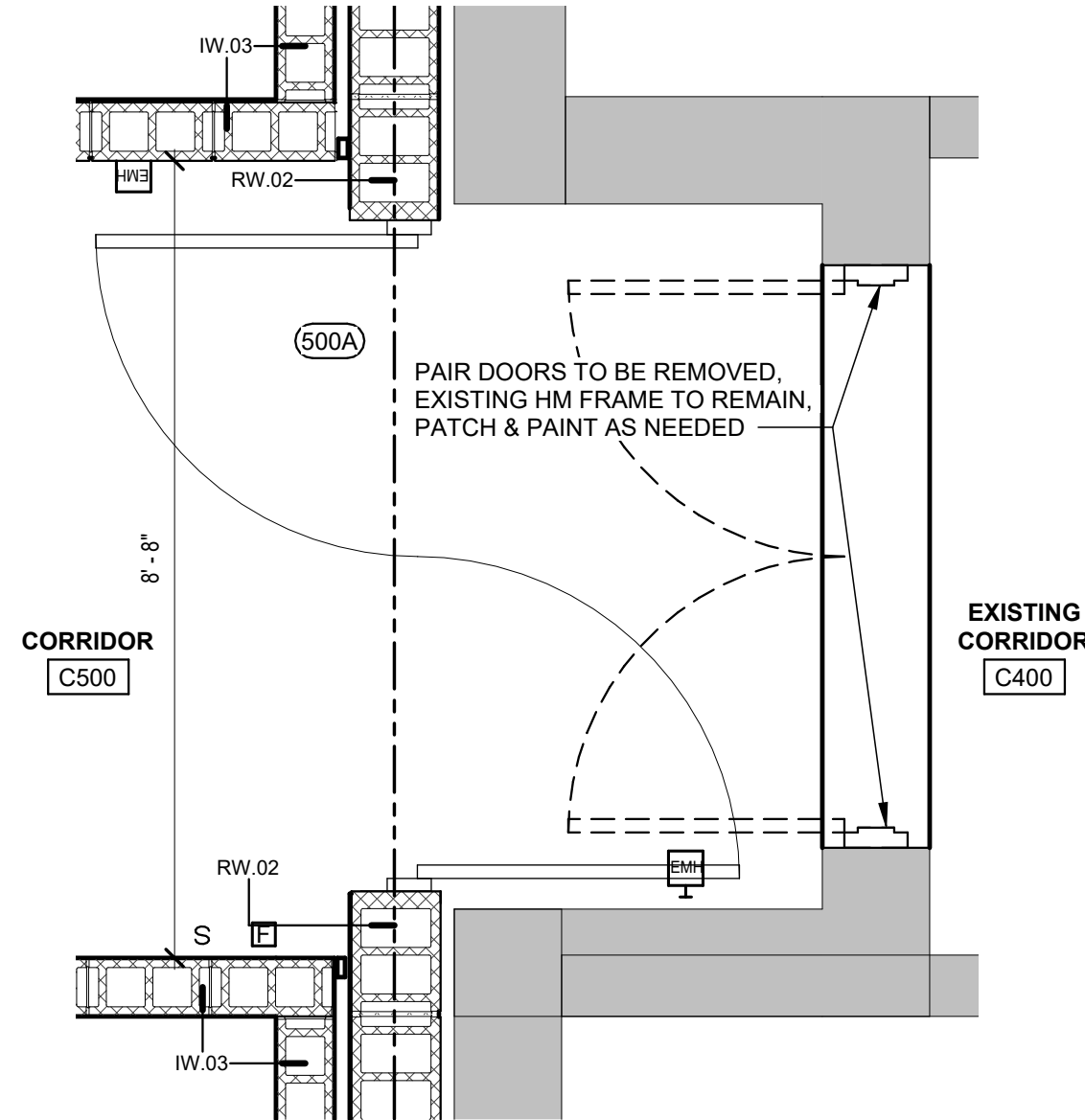
7 AIR BARRIER AND PENETRATION DETAIL
3\"/>



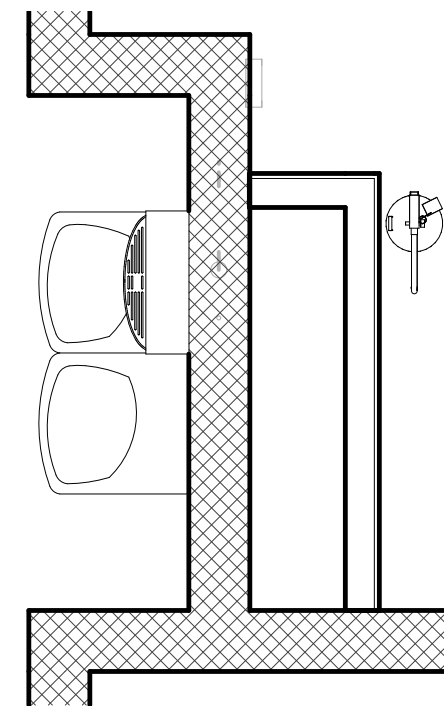
1 ENLARGED PLAN DETAIL
1 1/2\"/>



10 ENLARGED PLAN DETAIL
1/2\"/>



11 ENL. PLAN DETAIL
1/2\"/>



ENLARGED PLAN &
INTERIOR WALL
DETAILS
SHEET TITLE

A403

SHEET

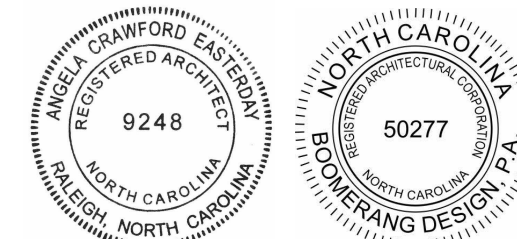
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A & R
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boomerang
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rethink, repurpose, results

SHLEBY
207 S. Trade Street
Shelby, NC 28150
704/731-7000

CHARLOTTE
1230 W. Morehead St., Suite 214
Charlotte, NC 28208
704/731-7000

RALEIGH
6131 Falls of Neuse Rd., Suite 204
Raleigh, NC 27609
919/775-6400

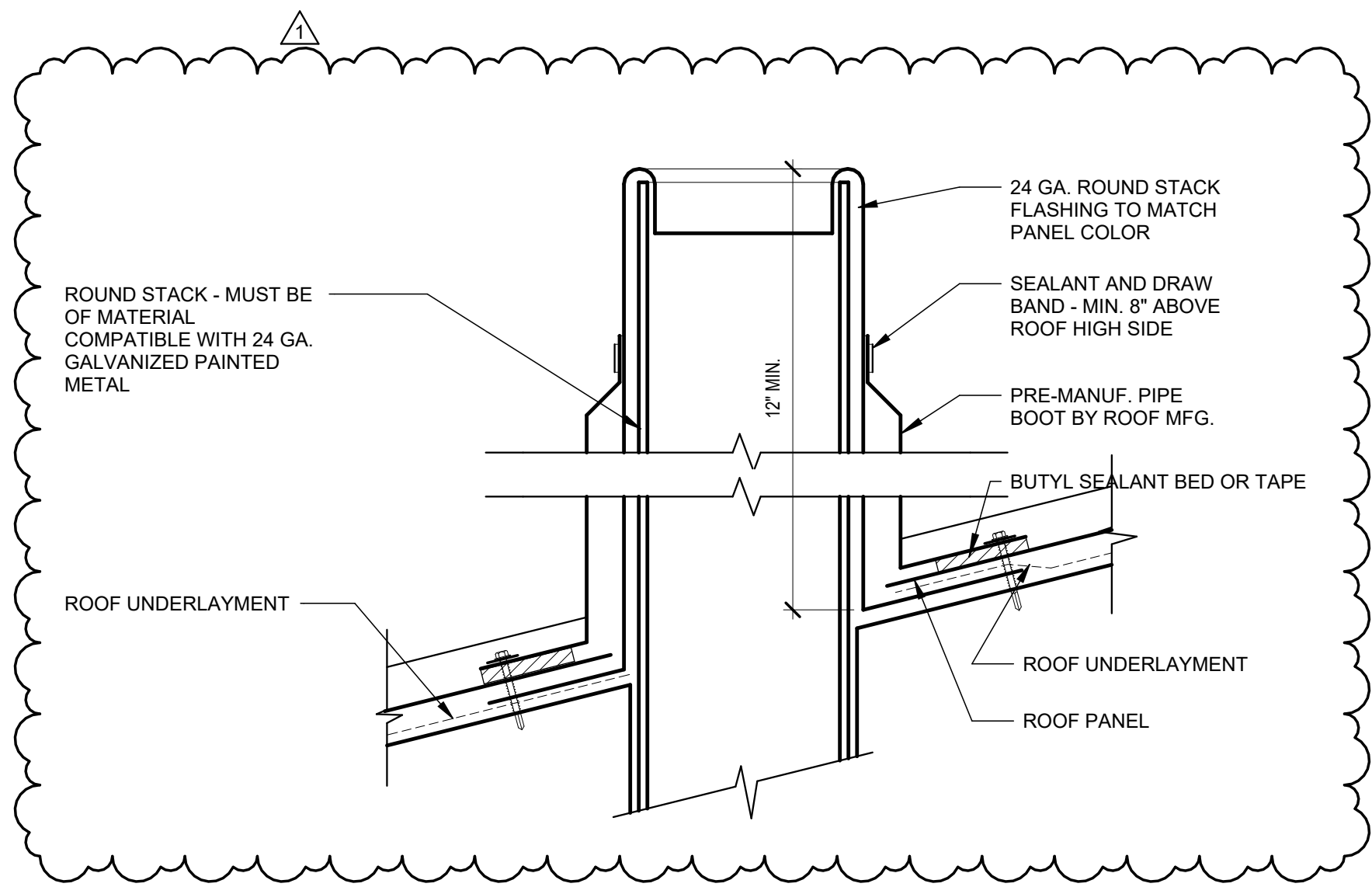
LEWINGTON
1070 S. Lake Dr., Suite J
Lewington, NC 28073
919/775-6507



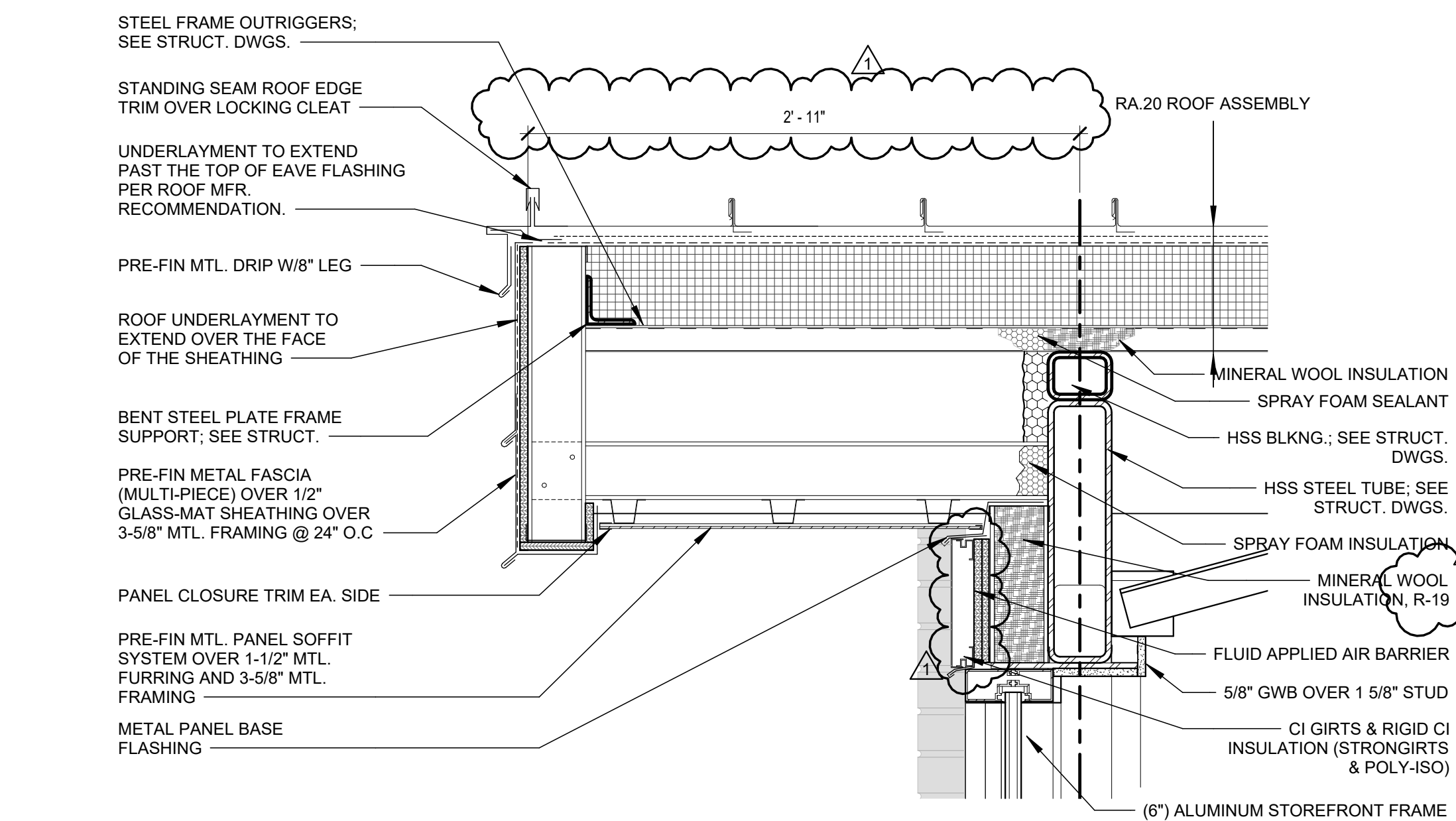
REVISIONS 		
NO.	DATE	DESCRIPTION
1	02/27/2024	ADDENDUM 2

CEILING DETAILS

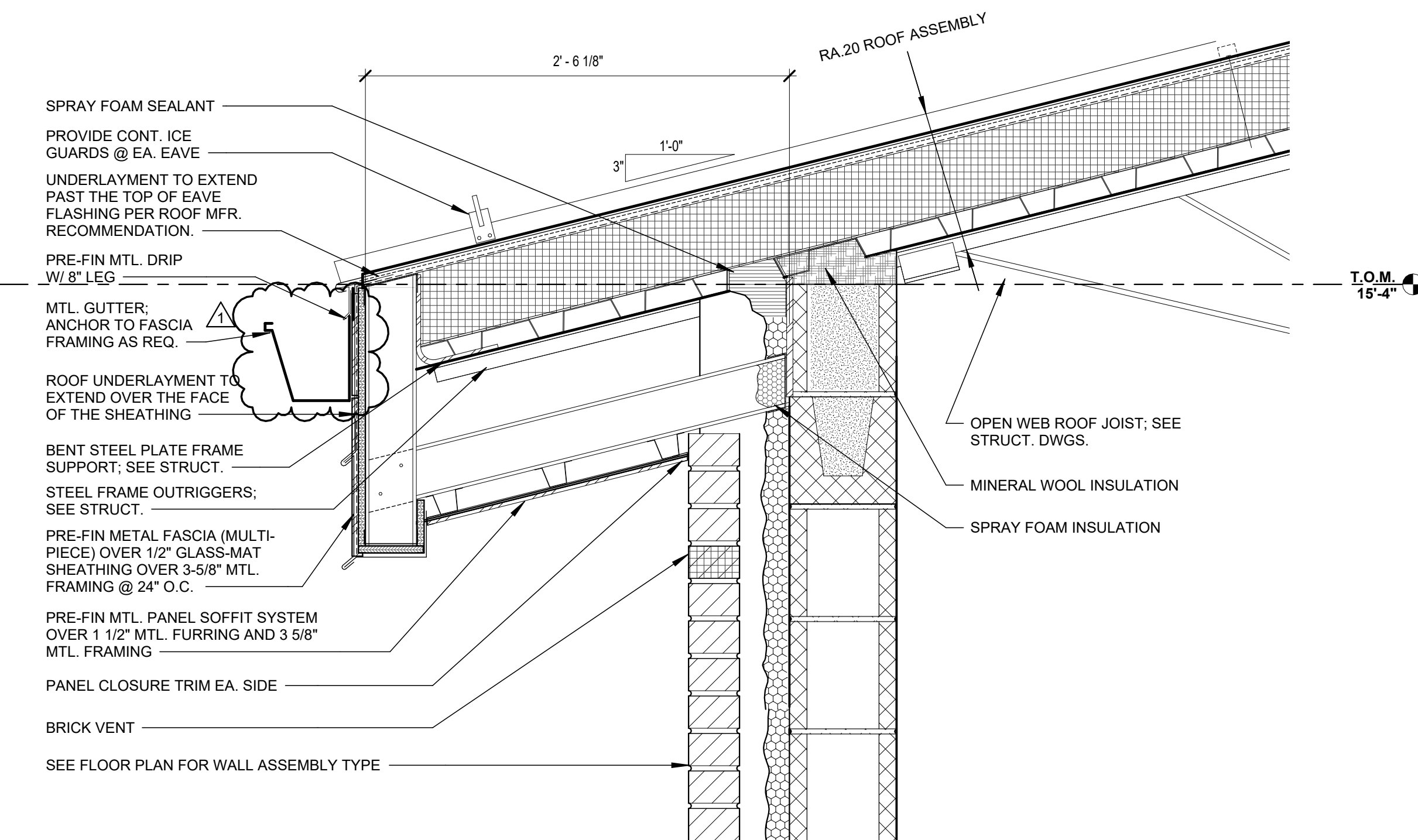
SHEET



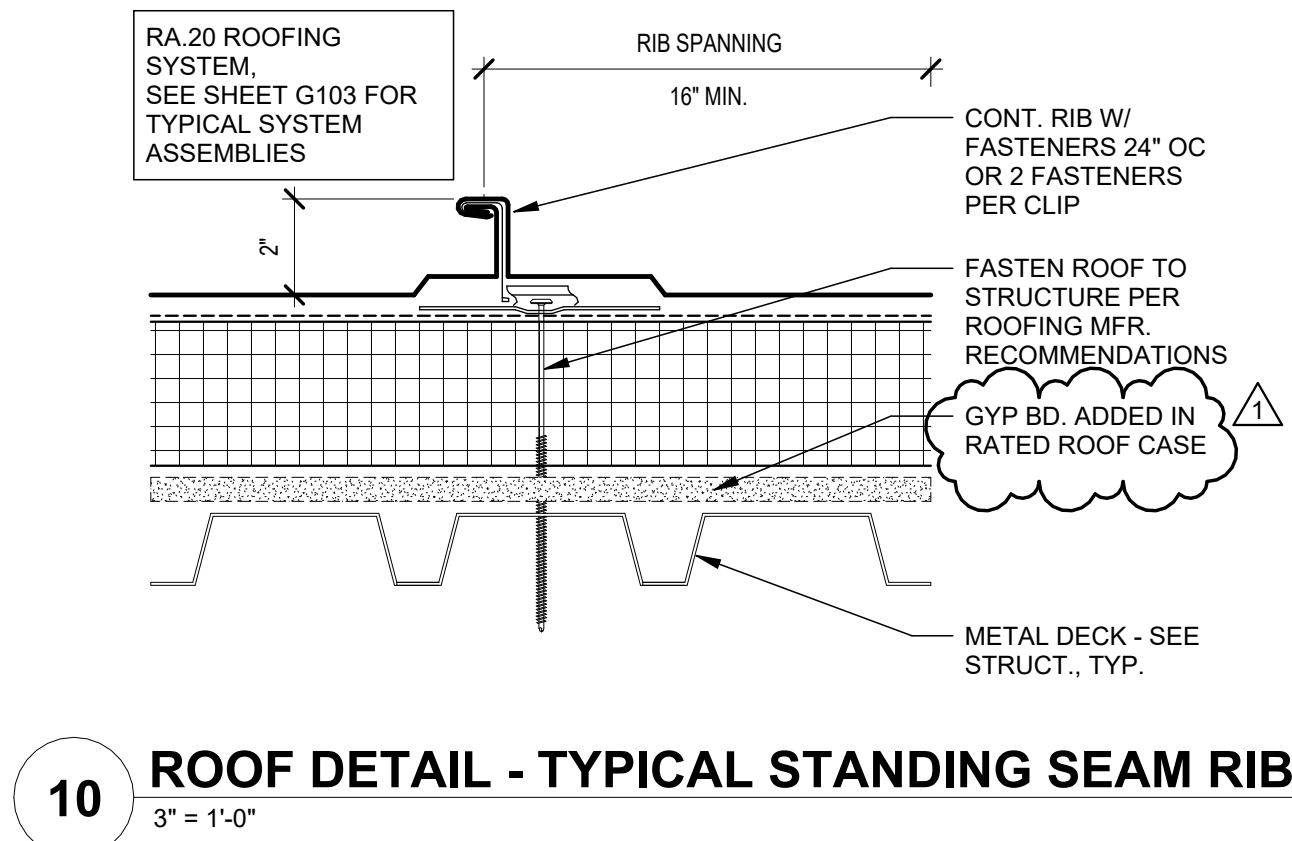
11 ROOF DETAIL - TYPICAL STANDING SEAM VENT
3" = 1'-0"



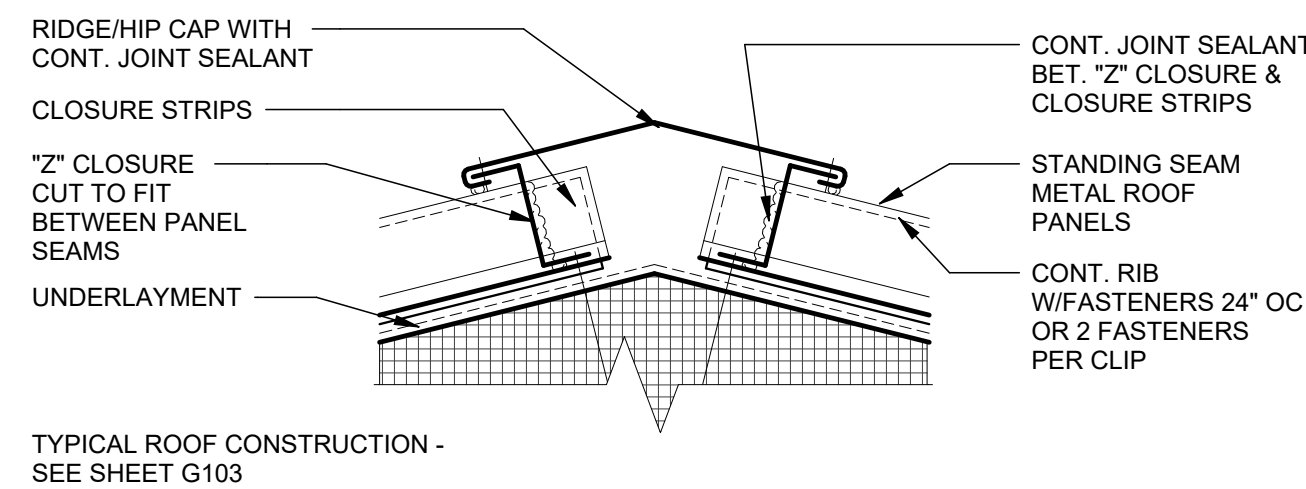
6 RAKE DETAIL
1 1/2" = 1'-0"



3 TYPICAL EAVE DETAIL
1 1/2" = 1'-0"

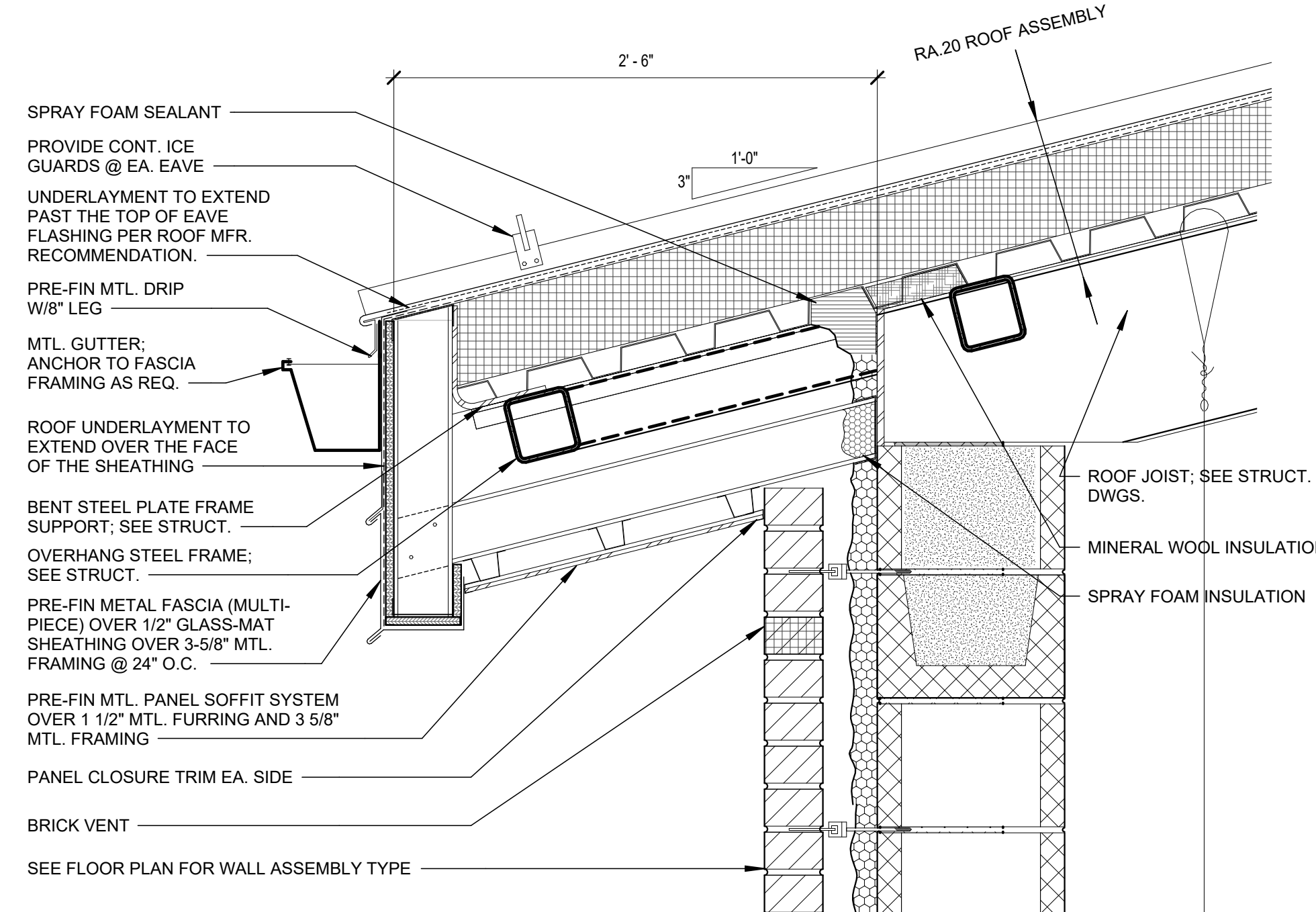


10 ROOF DETAIL - TYPICAL STANDING SEAM RIB
3" = 1'-0"

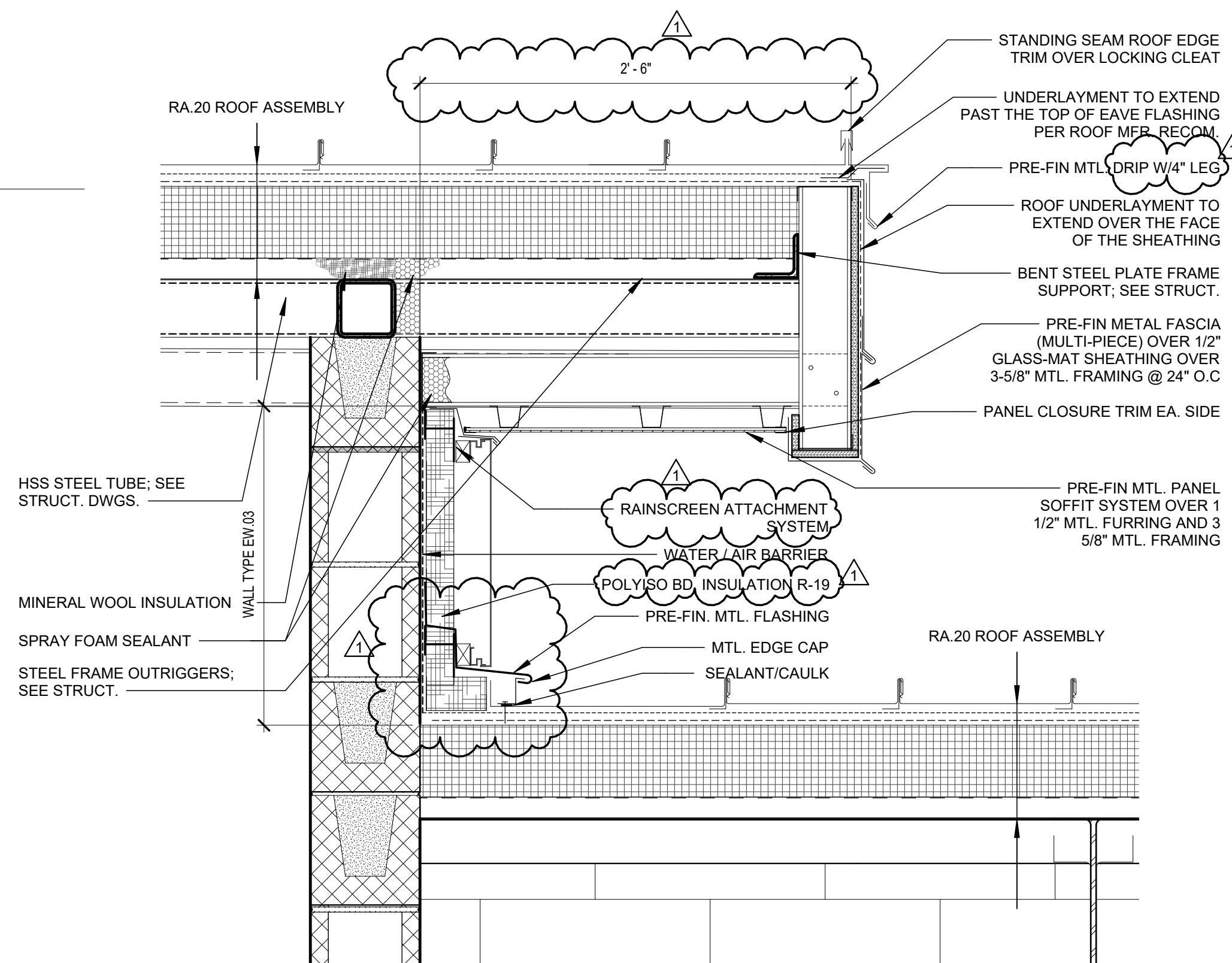


TYPICAL ROOF CONSTRUCTION - SEE SHEET G103

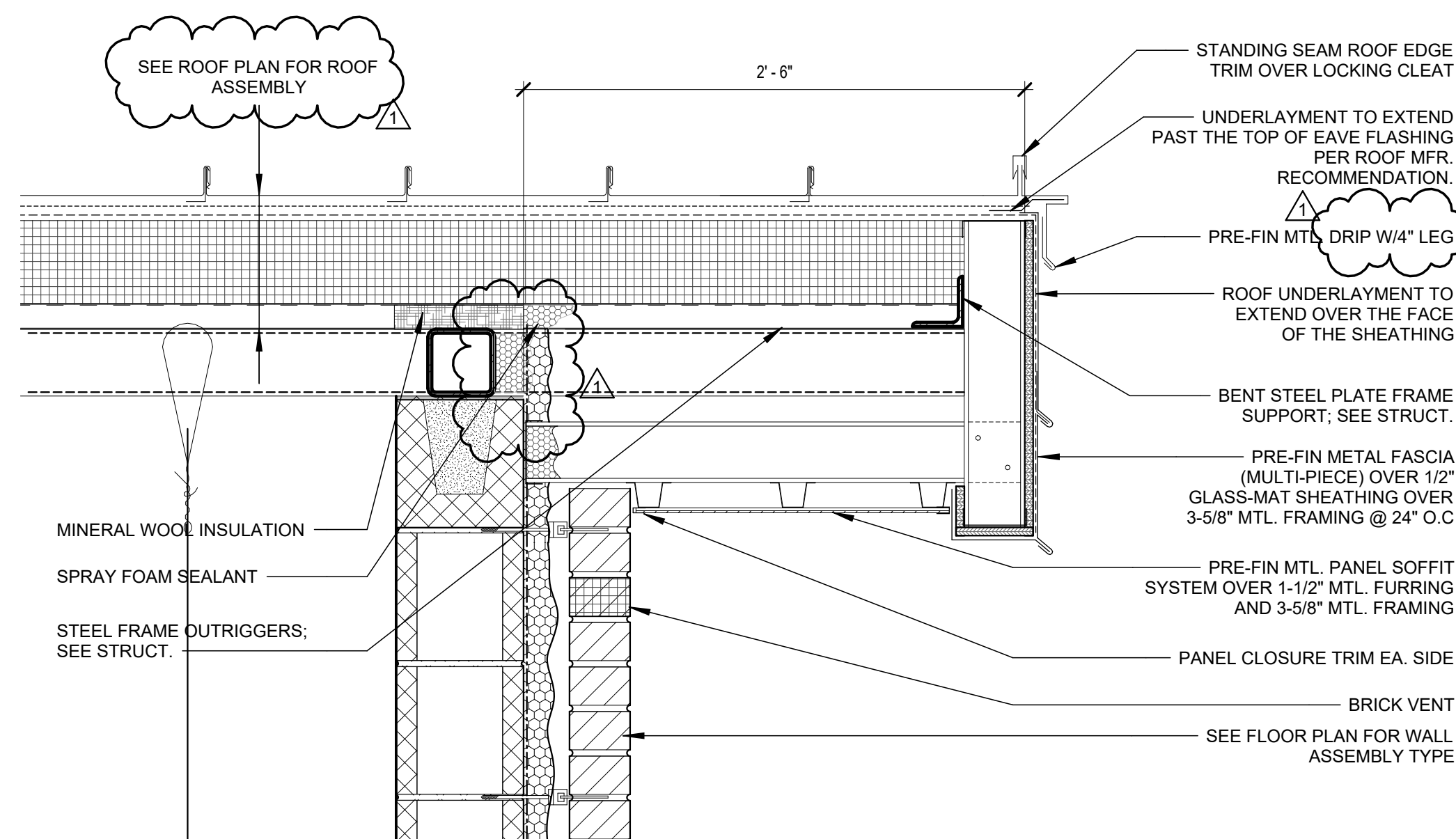
9 ROOF DETAIL - STANDING SEAM RIDGE
3" = 1'-0"



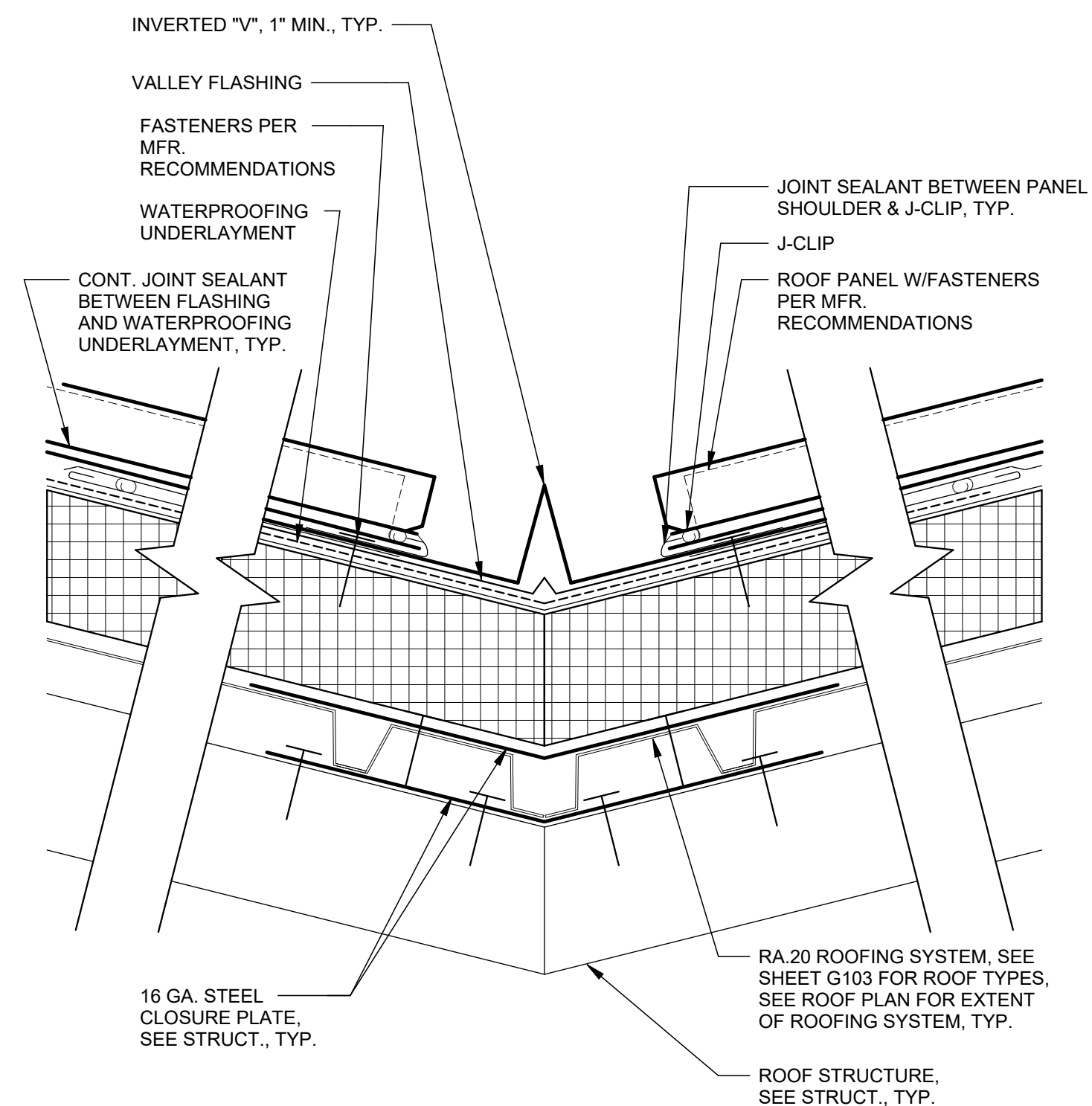
8 TYPICAL EAVE DETAIL @ STAIR 1,2 EAST WALL
1 1/2" = 1'-0"



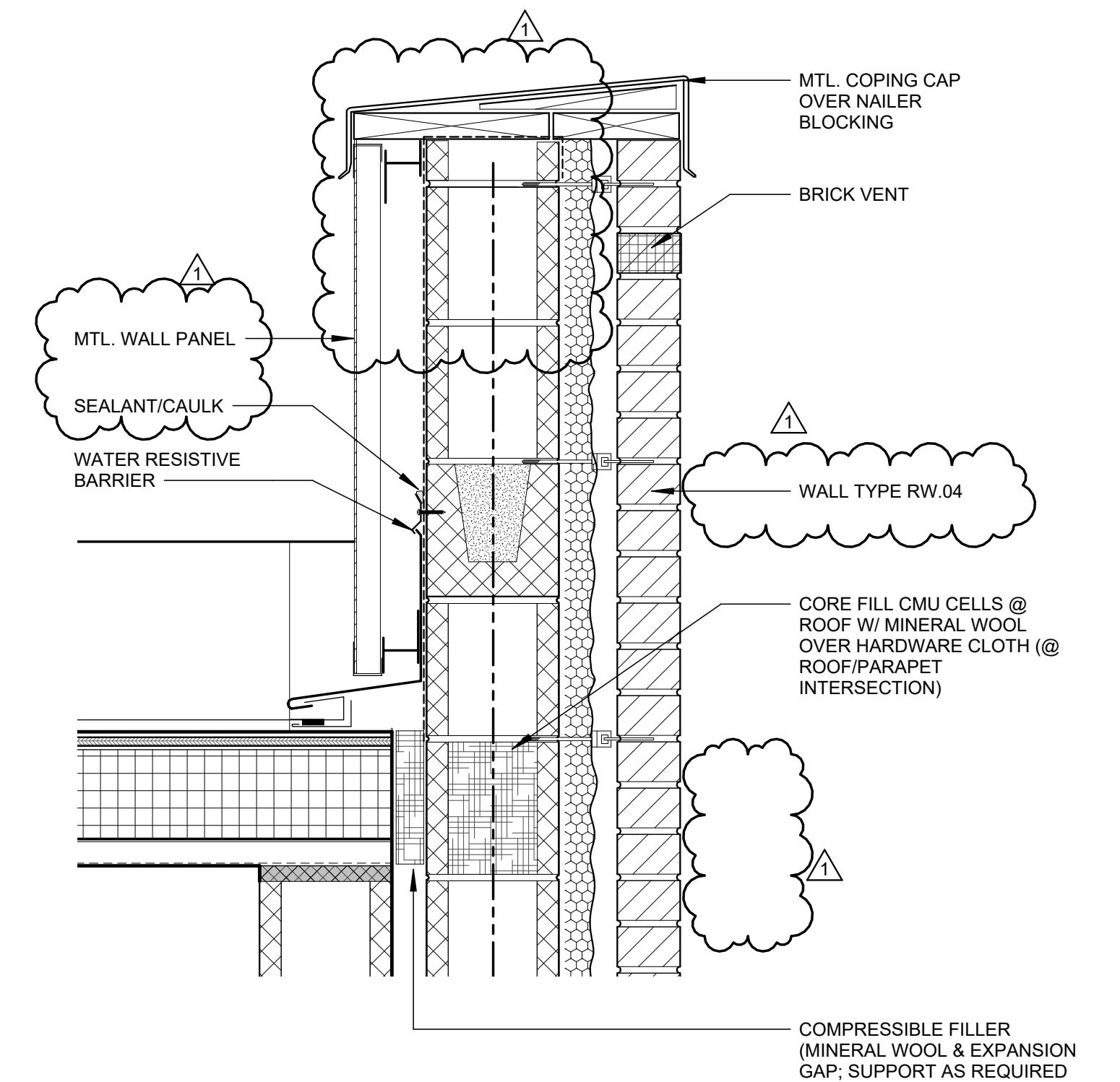
5 RAKE DETAIL
1 1/2" = 1'-0"



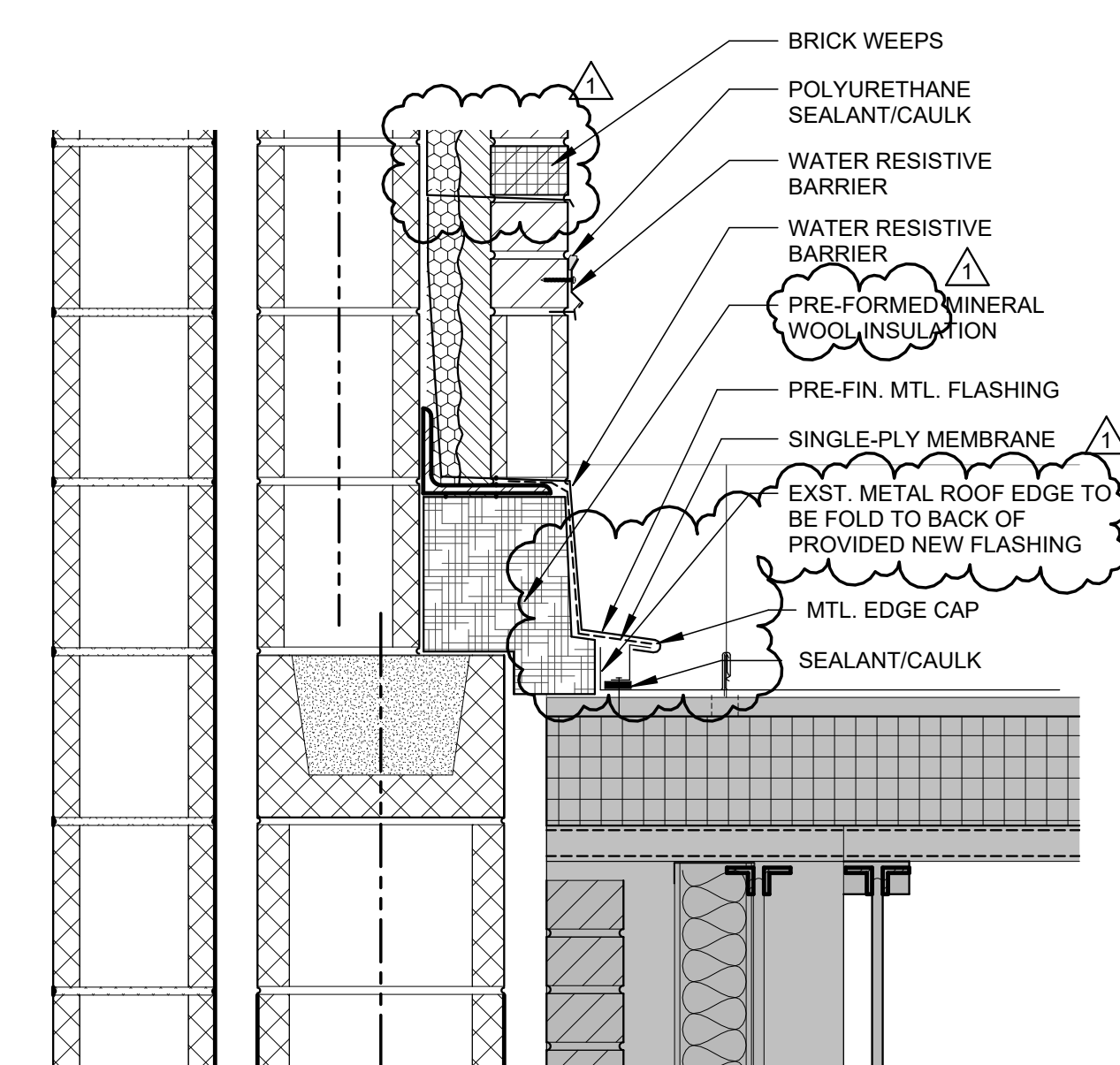
2 TYPICAL RAKE DETAIL
1 1/2" = 1'-0"



7 ROOF DETAIL - TYPICAL STANDING SEAM VALLEY
3" = 1'-0"

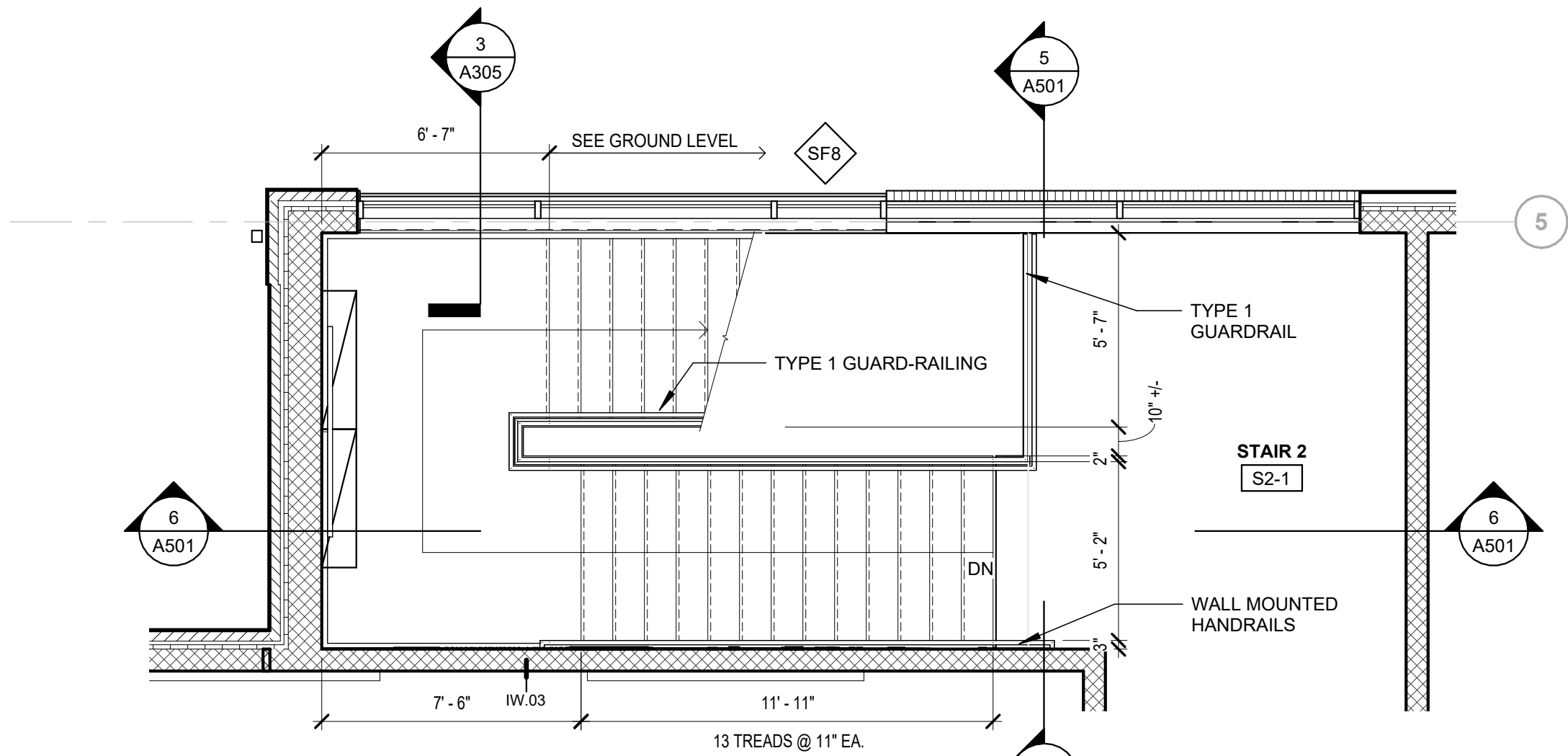


4 ROOF DETAIL
1 1/2" = 1'-0"

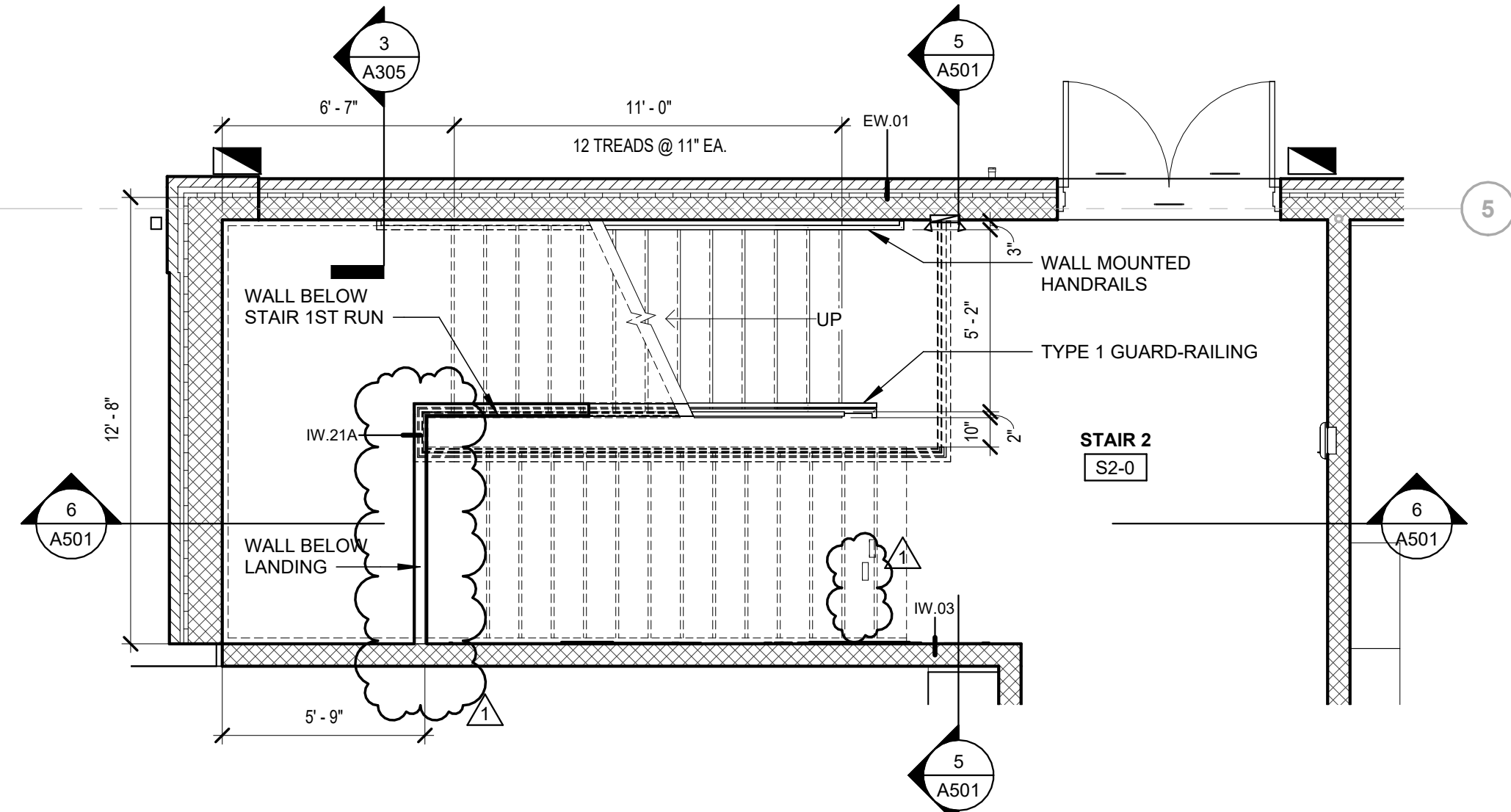


1 ROOF DETAIL
1 1/2" = 1'-0"

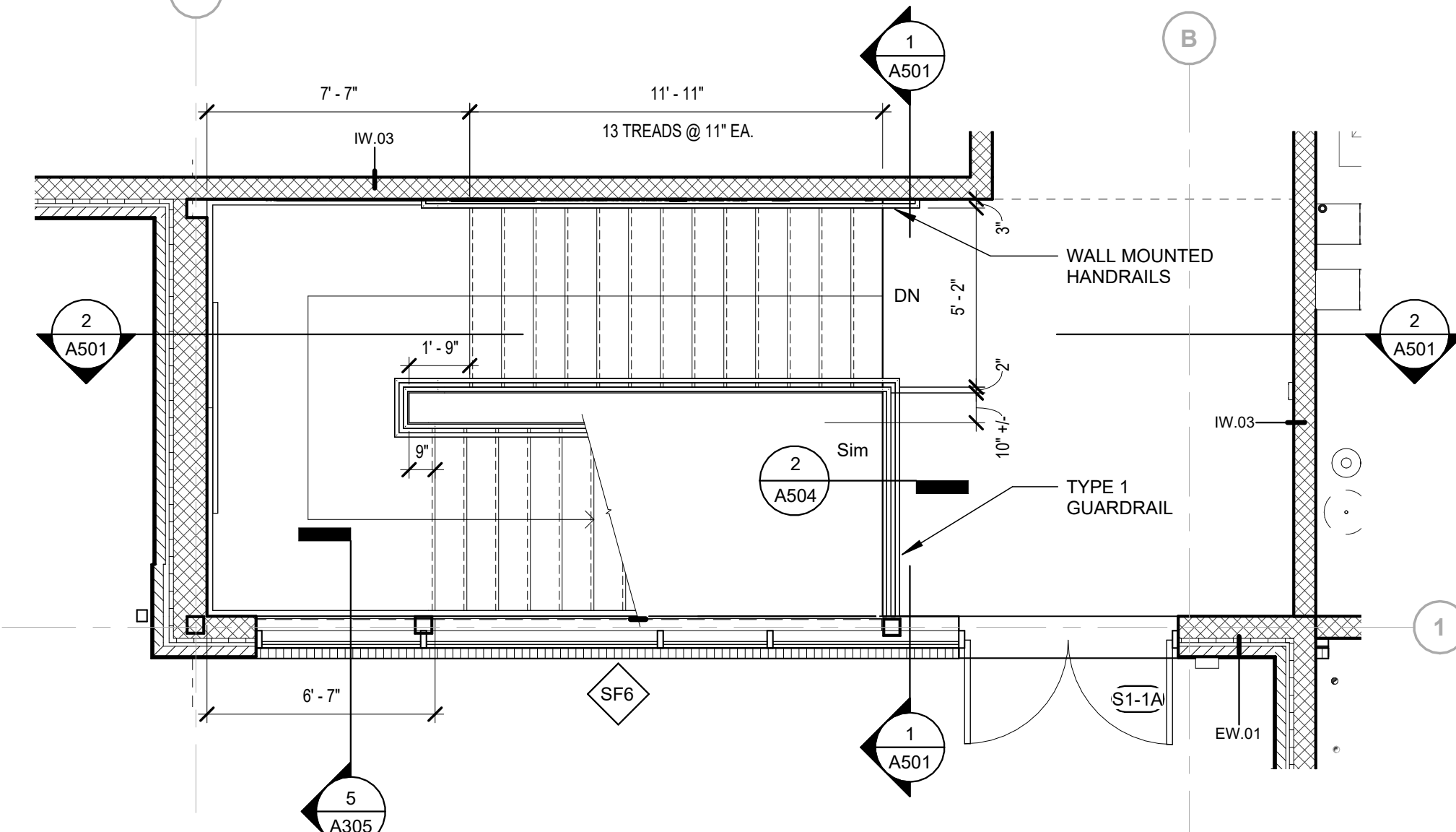
2/27/2024 11:21:50 AM



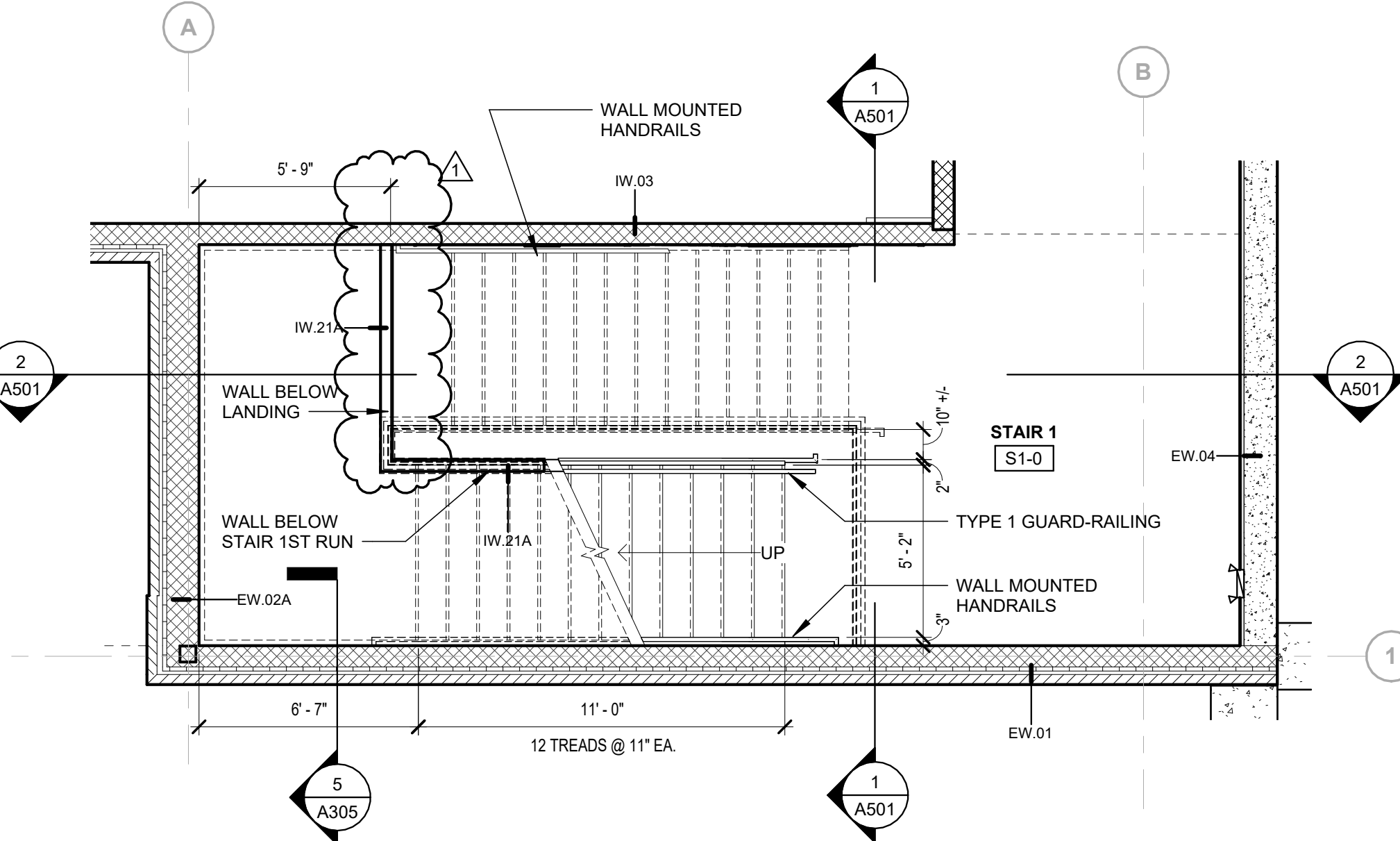
8 ENLARGED PLAN STAIR 2 - FIRST FLOOR
1/4" = 1'-0"



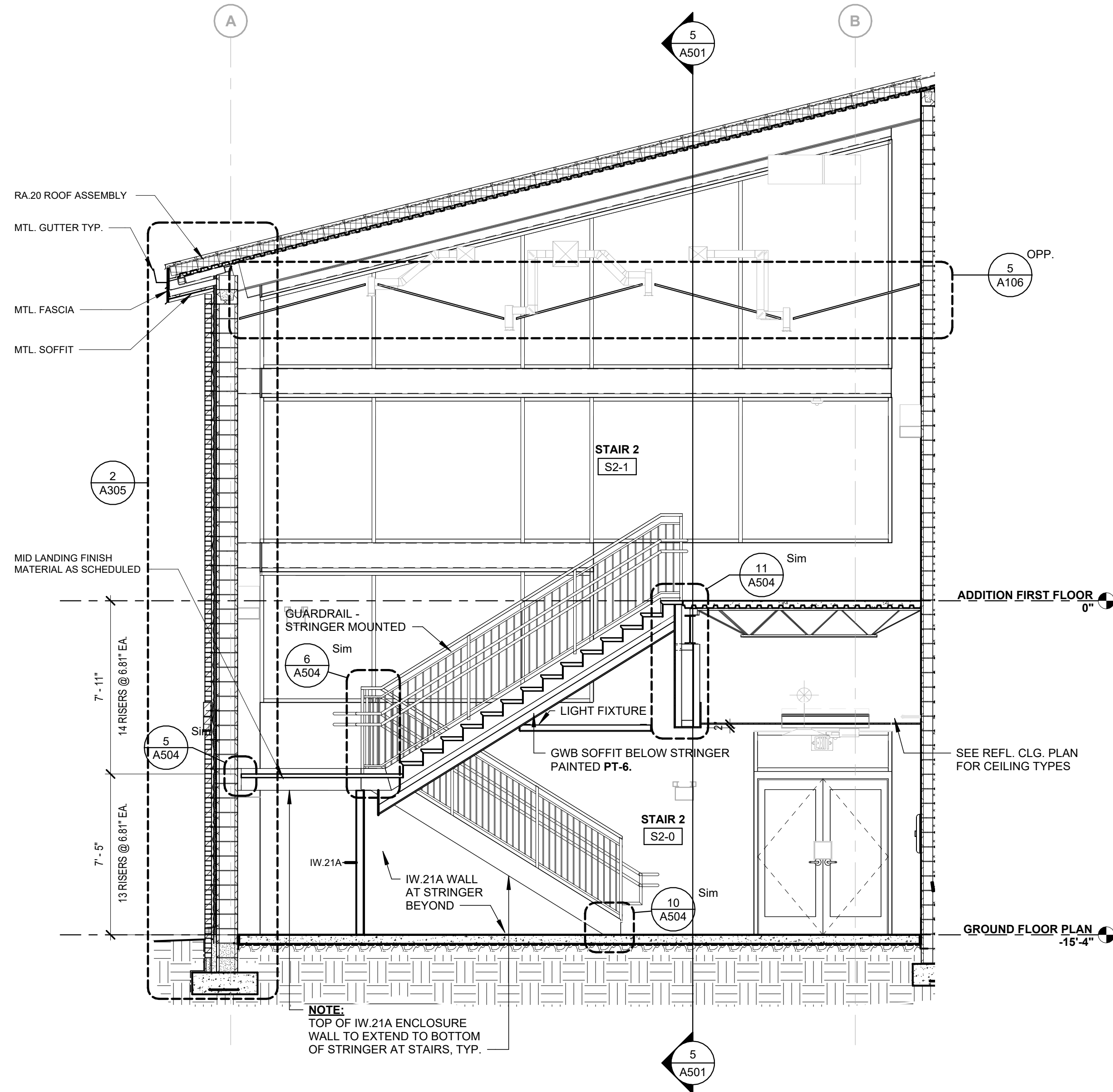
7 ENLARGED PLAN STAIR 2 - GROUND FLOOR
1/4" = 1'-0"



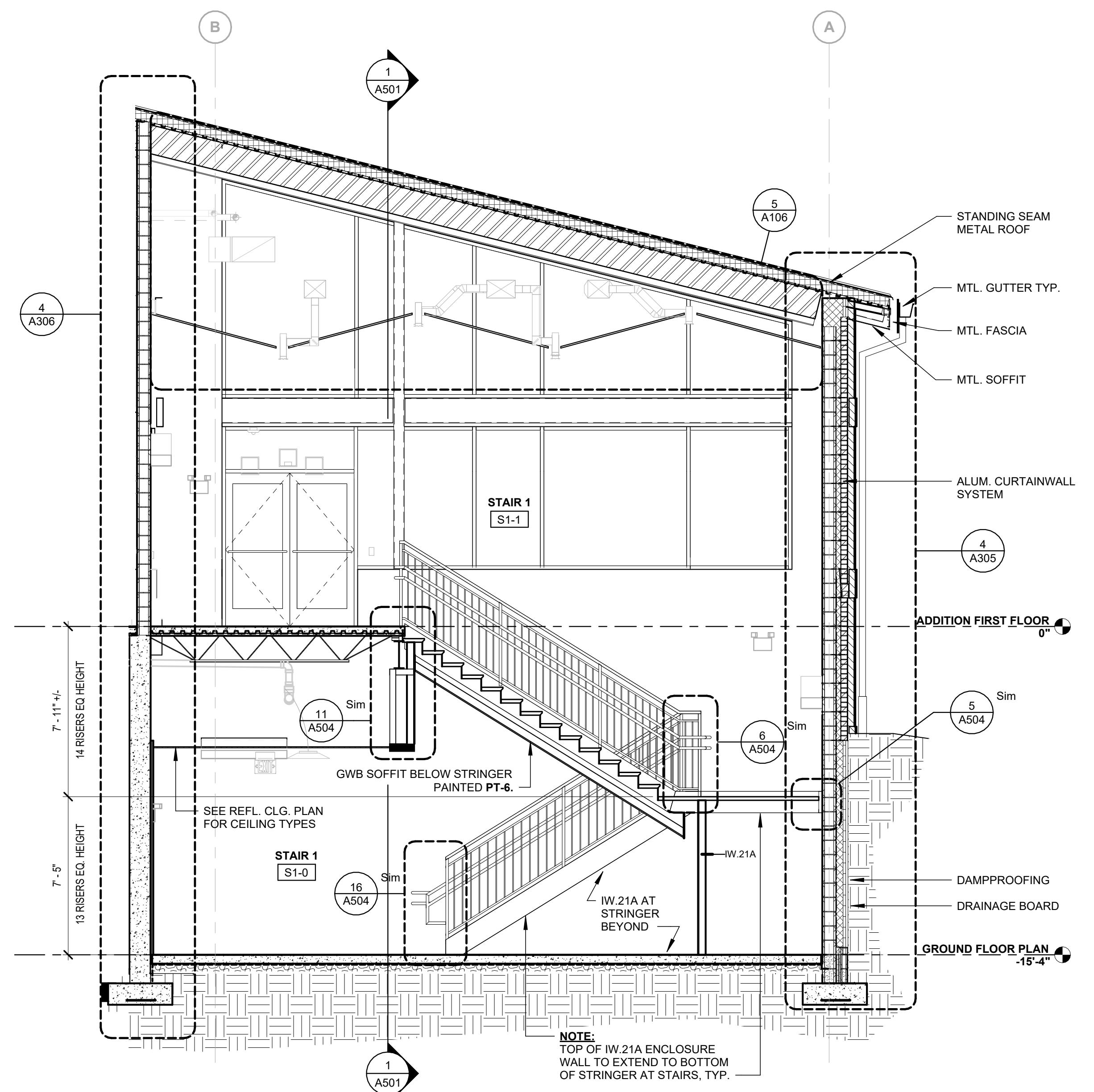
4 ENLARGED PLAN STAIR 1 - FIRST FLOOR
1/4" = 1'-0"



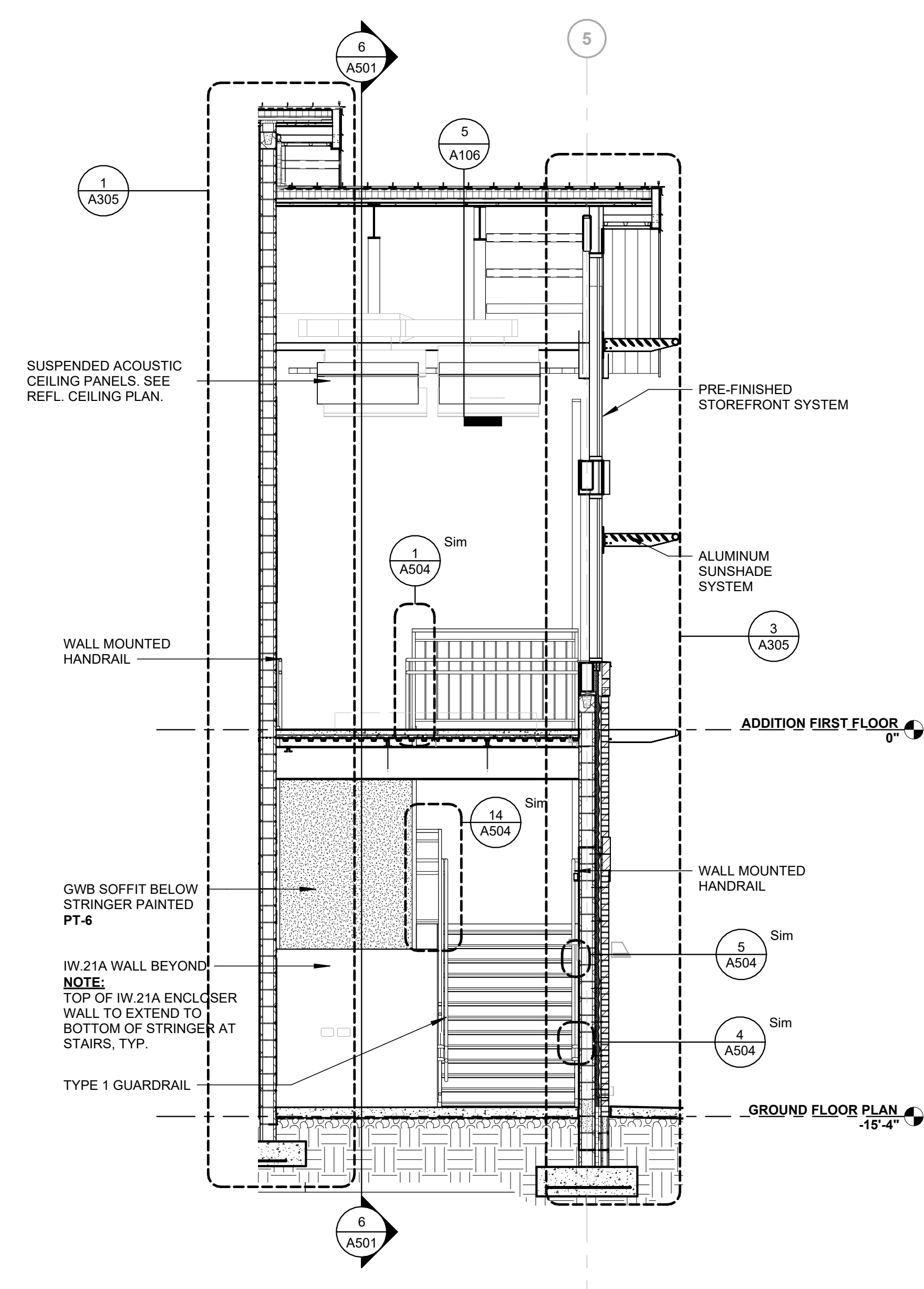
3 ENLARGED PLAN STAIR 1 - GROUND FLOOR
1/4" = 1'-0"



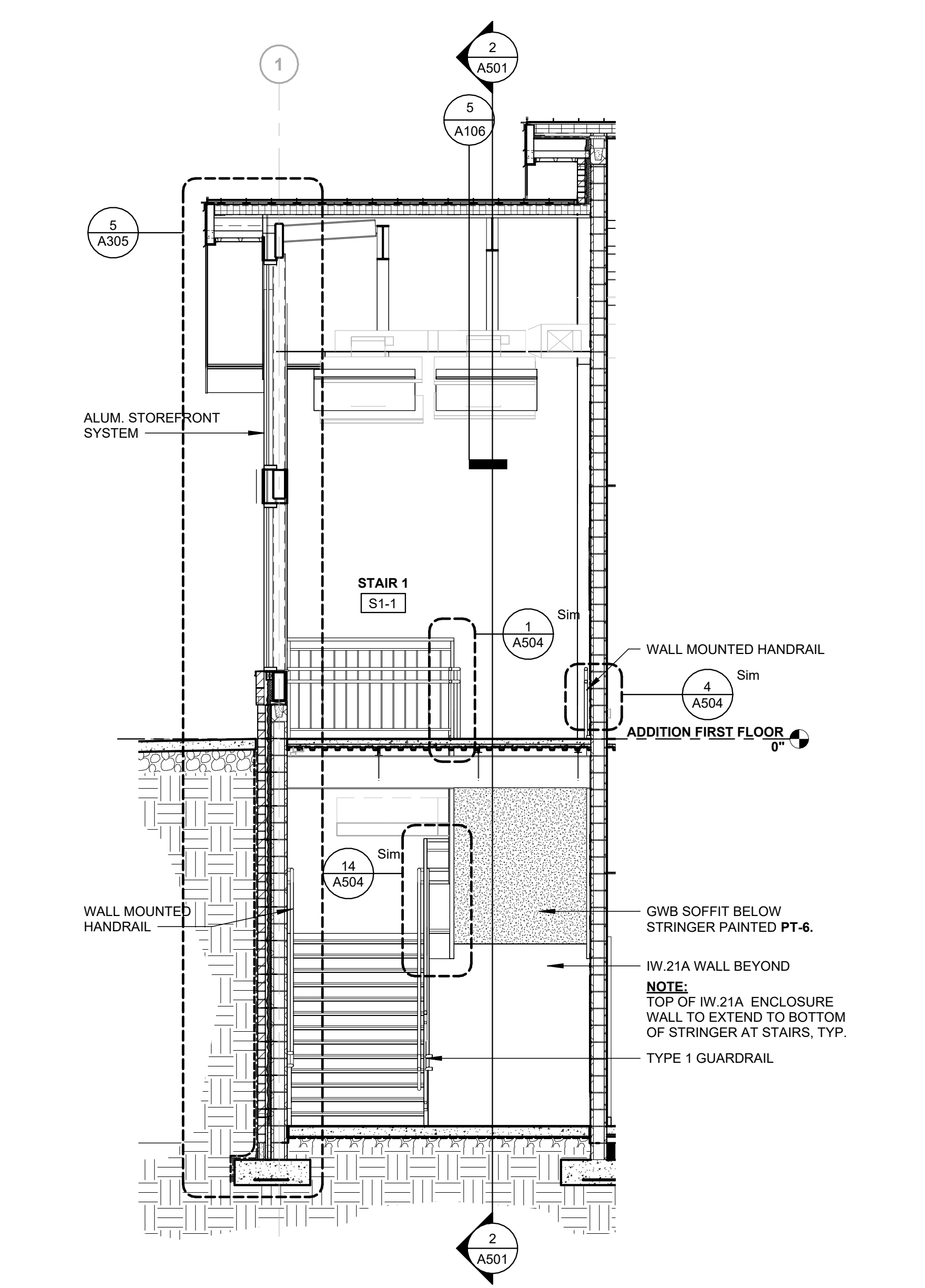
6 STAIR 2 LONGITUDINAL SECTION
1/4" = 1'-0"



2 STAIR 1 LONGITUDINAL SECTION
1/4" = 1'-0"



5 STAIR 2 TRANSVERSE SECTION
1/4" = 1'-0"



1 STAIR 1 TRANSVERSE SECTION
1/4" = 1'-0"

2/27/2024 11:21:59 AM



COOPER ACADEMY
A & R

PROJECT TITLE

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REVISIONS		
NO.	DATE	DESCRIPTION
1	02/27/2024	ADDENDUM 2

BID SET

BID SET

2307

BOOMERANG DESIGN PROJECT NUMBER

02.07.2024

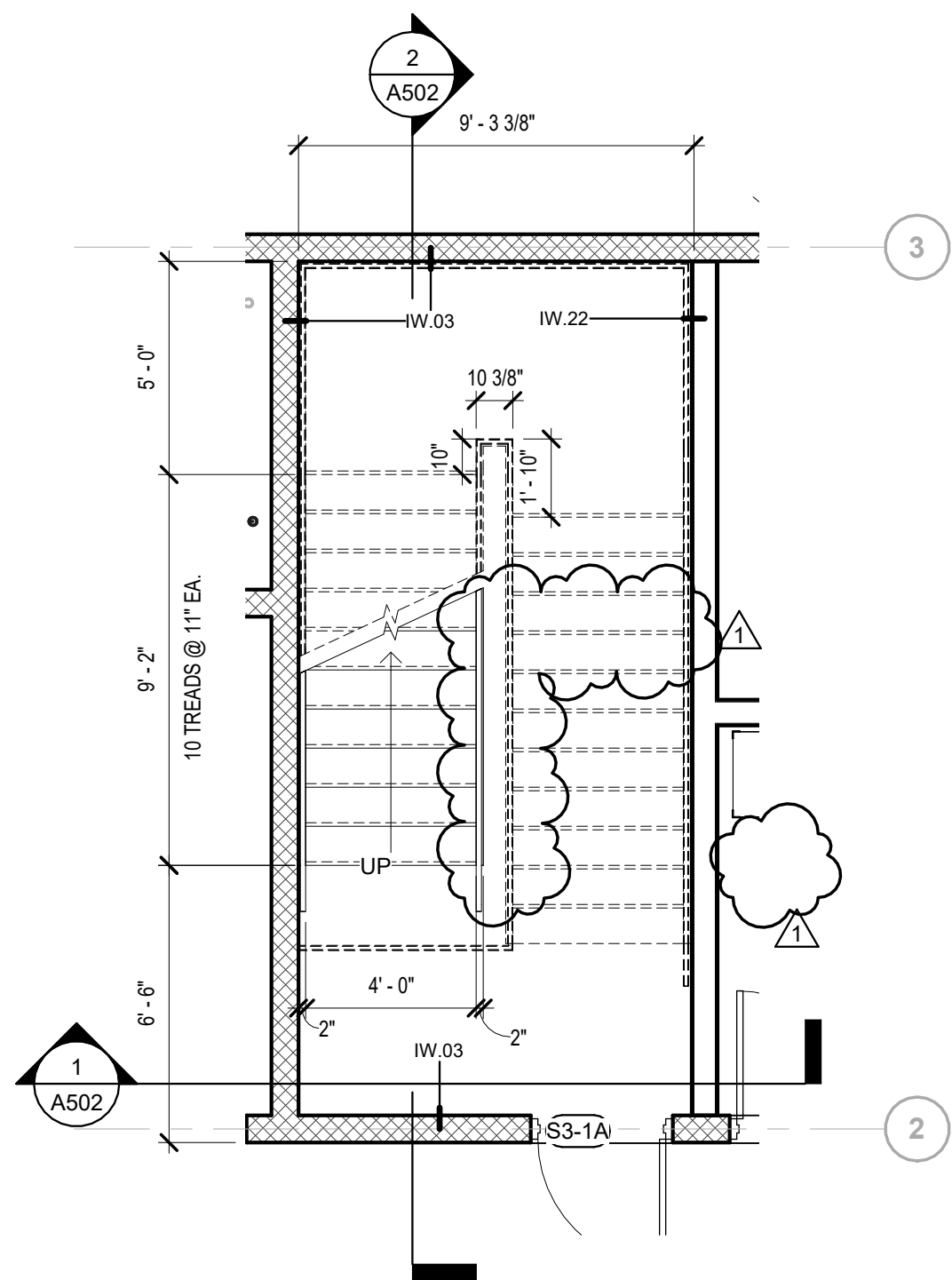
DRAWING RELEASE DATE

ENLARGED STAIR AND
VER. ACCESS PLANS,
SECTIONS, & DETAILS

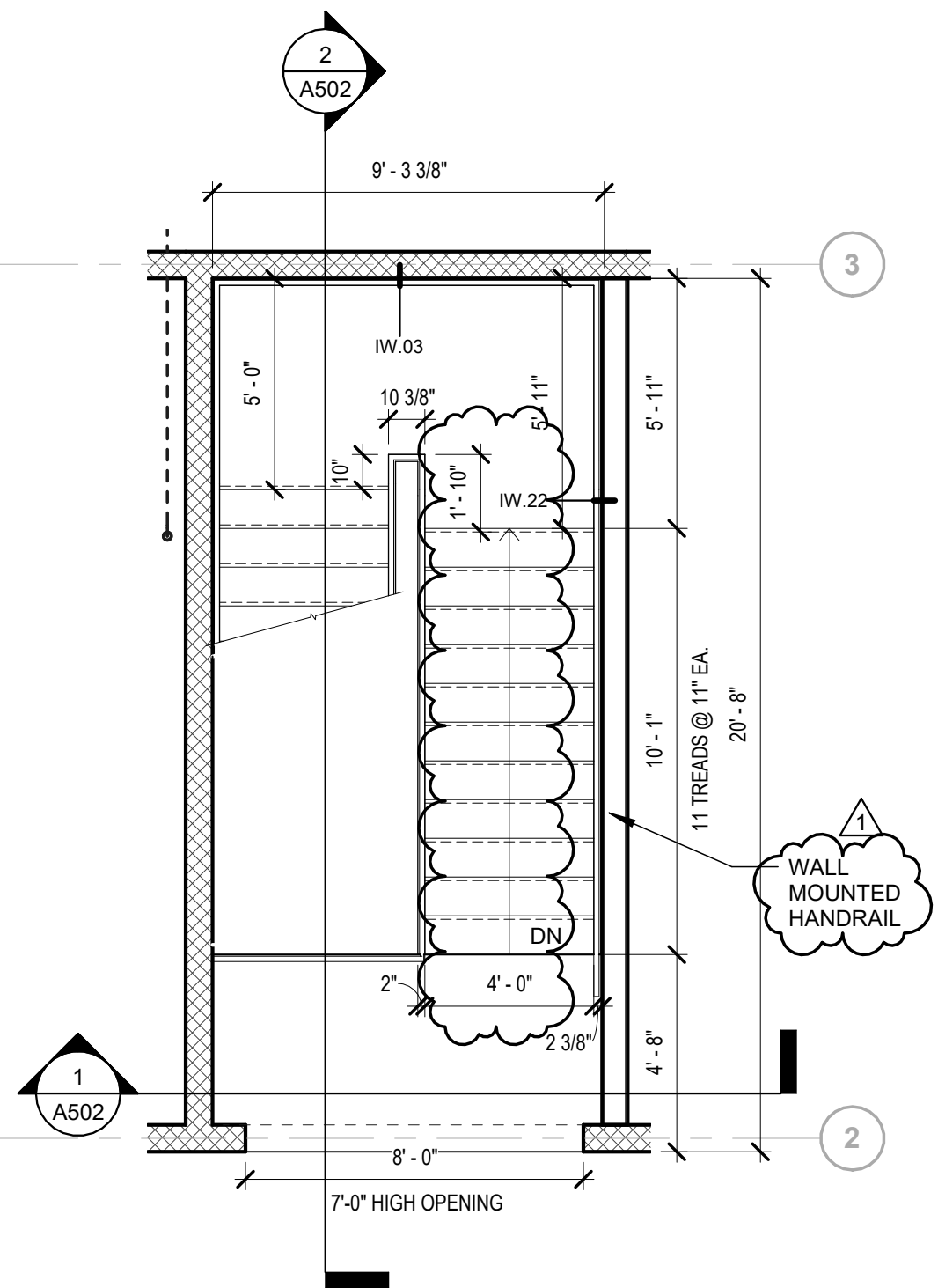
SHEET TITLE

A502

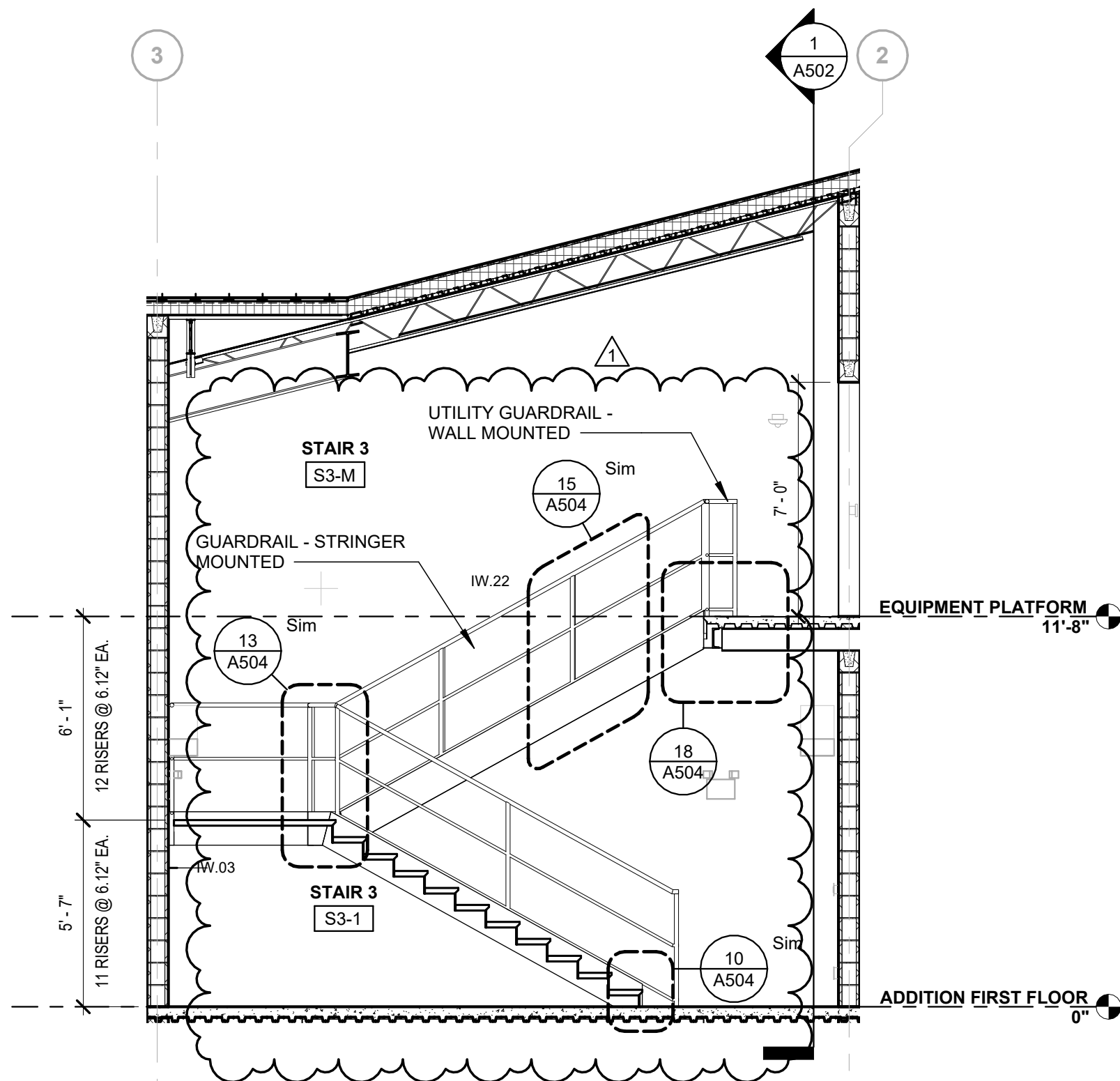
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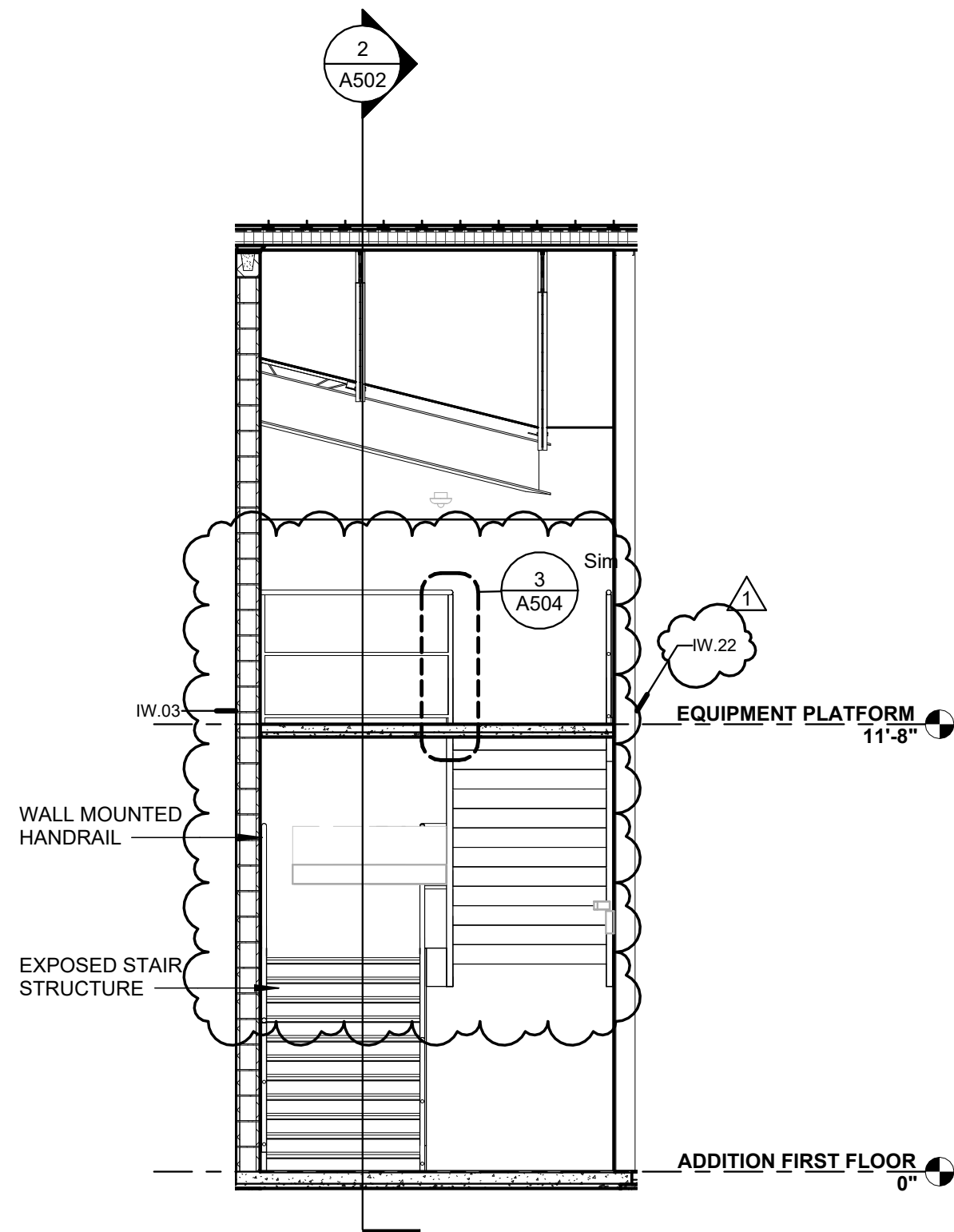
4 ENLARGED PLAN STAIR 3 - FIRST FLOOR
1/4" = 1'-0"



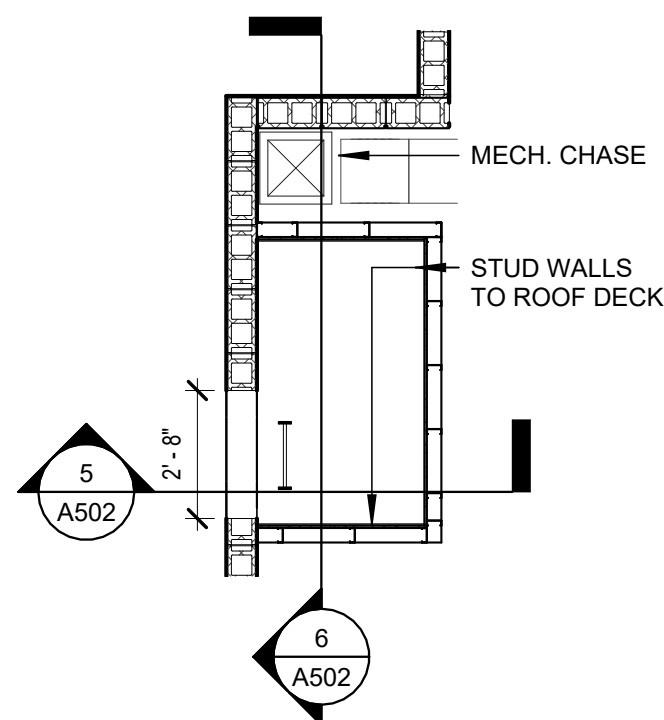
3 ENLARGED PLAN STAIR 3 - EQ. PLTFRM. FLOOR
1/4" = 1'-0"



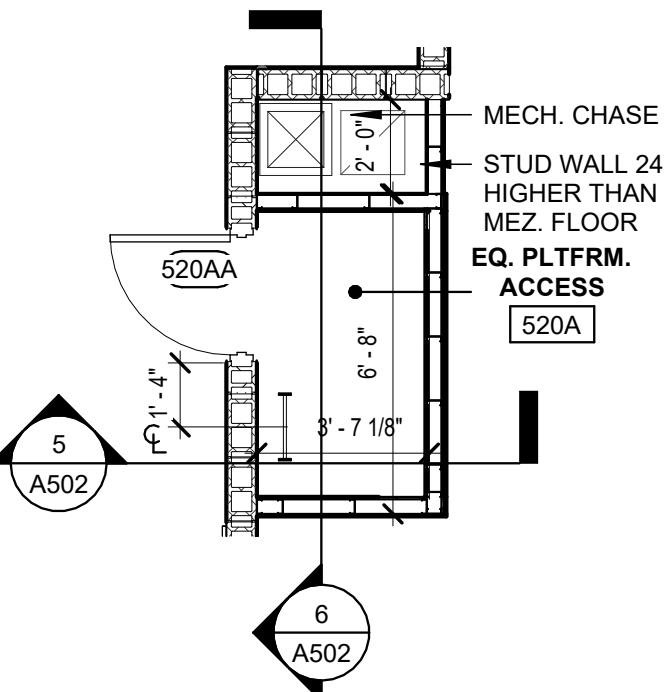
2 STAIR 3 LONGITUDINAL SECTION
1/4" = 1'-0"



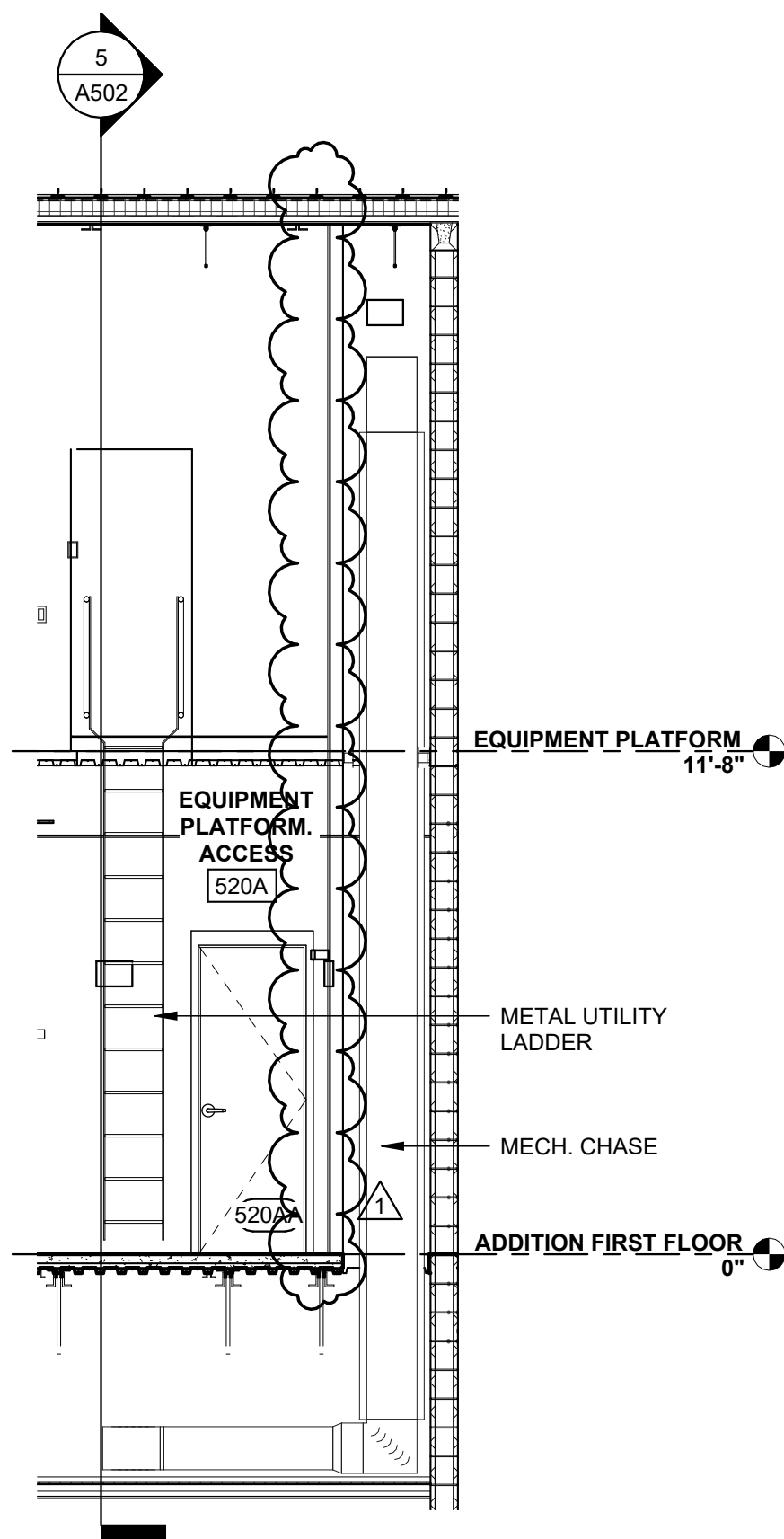
1 STAIR 3 TRANSVERSE SECTION
1/4" = 1'-0"



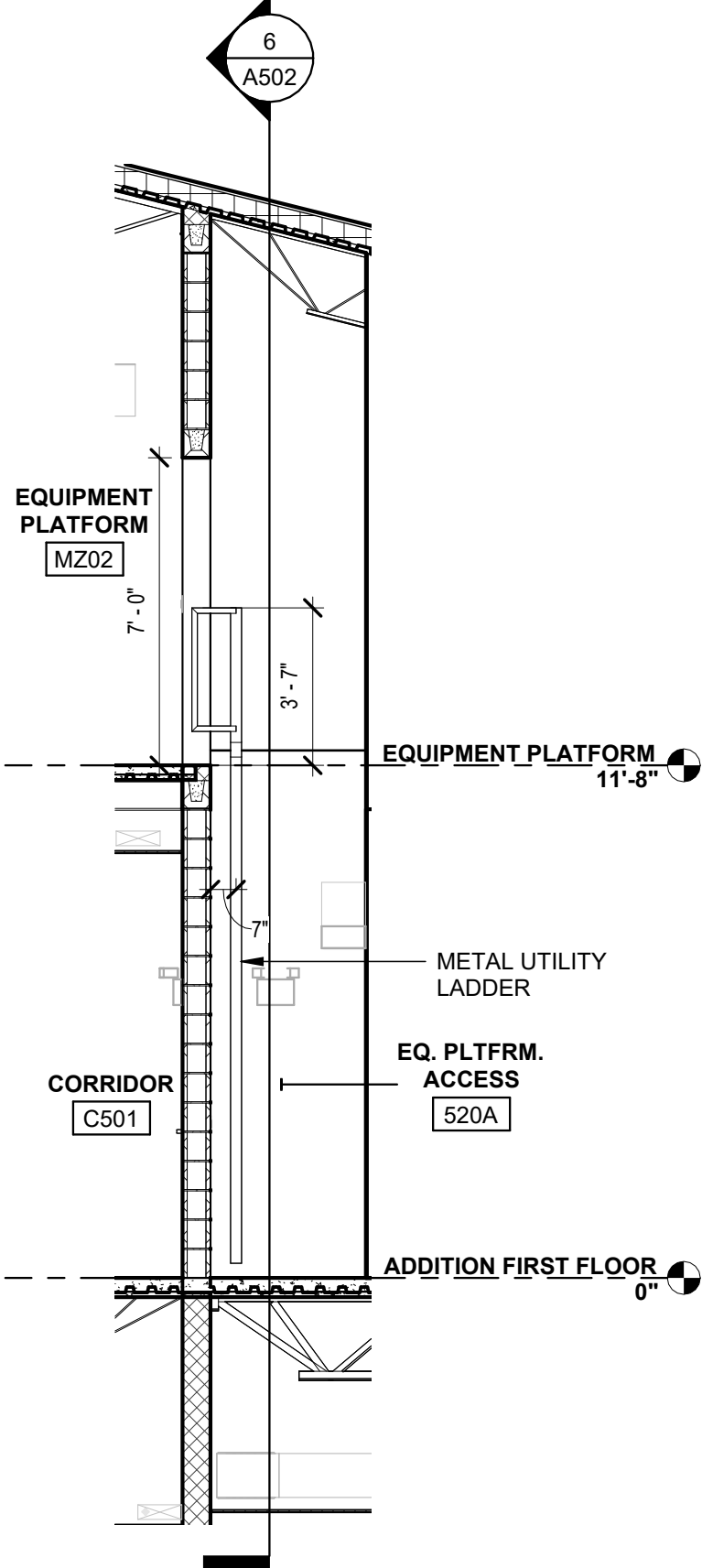
8 ENLARGED PLAN
1/4" = 1'-0"



7 ENLARGED PLAN
1/4" = 1'-0"



6 LADDER DETAIL
1/4" = 1'-0"



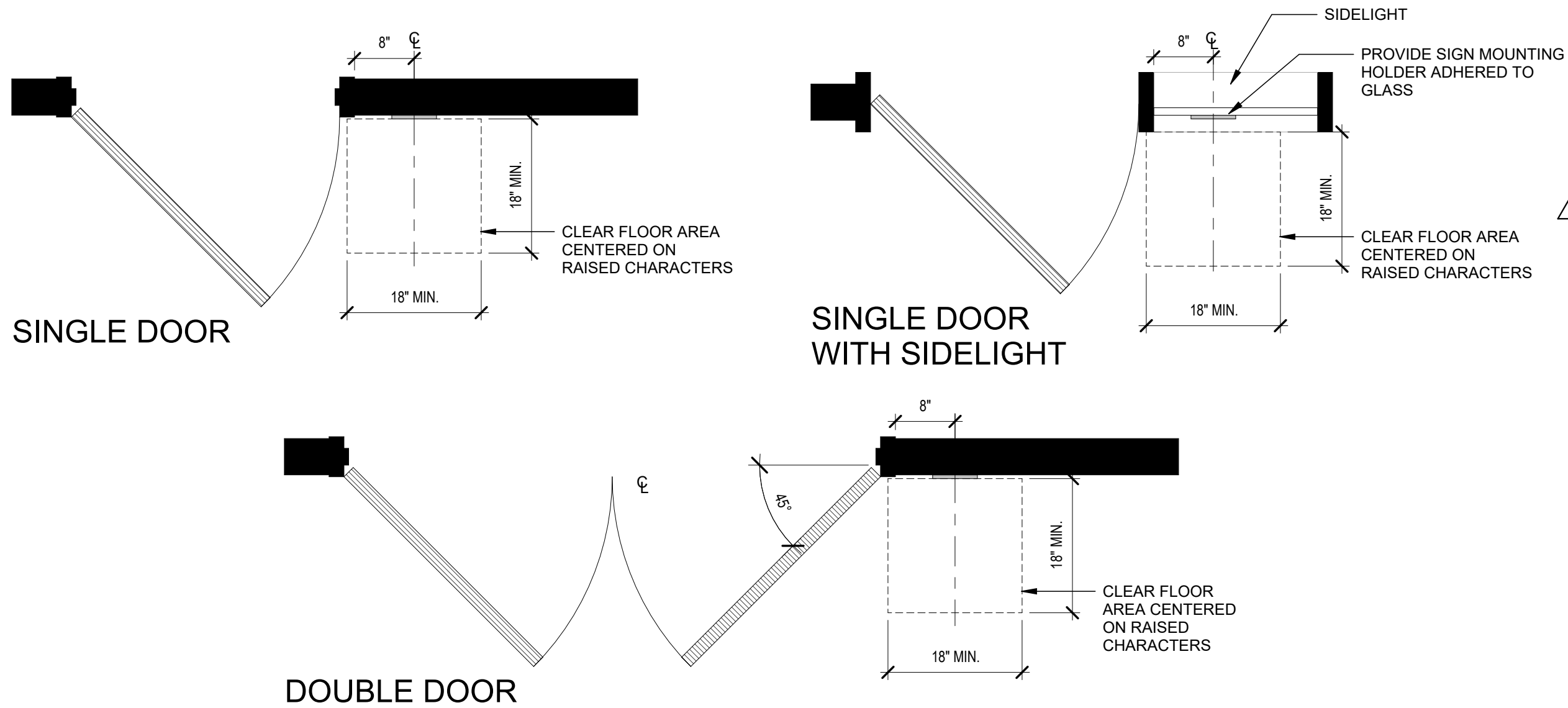
5 LADDER DETAIL
1/4" = 1'-0"



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3. DO NOT SCALE OFF DIMENSIONS.

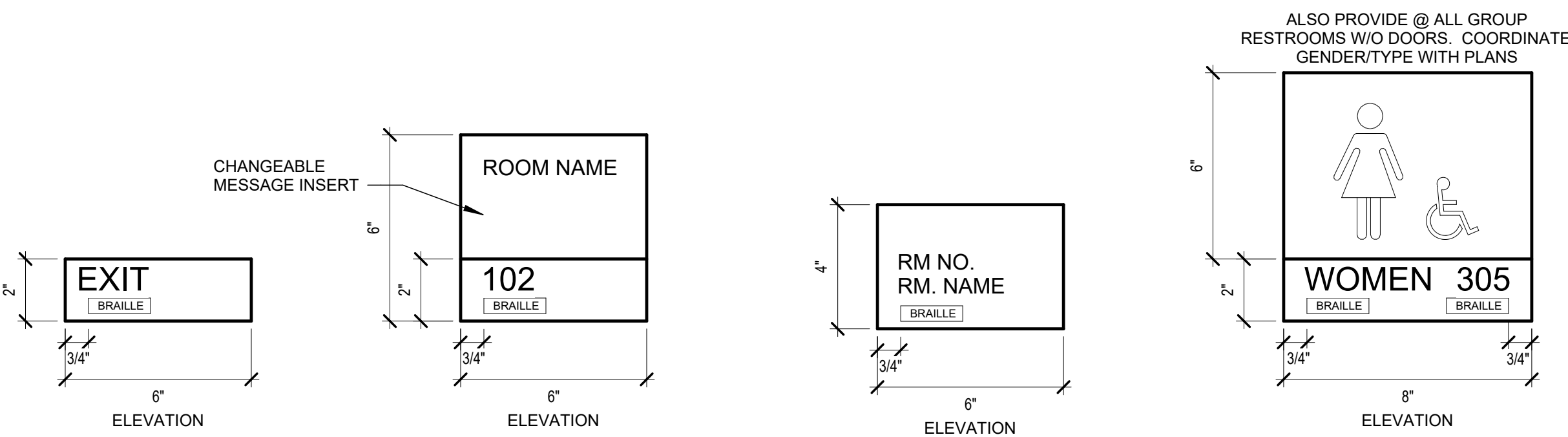
BID SET
BID SET
2307
BOOMERANG DESIGN PROJECT NUMBER
02.07.2024
DRAWING RELEASE DATE

A504



7 SIGNAGE - TYPICAL DOOR SIGNAGE LOCATIONS

3/4" = 1'-0"

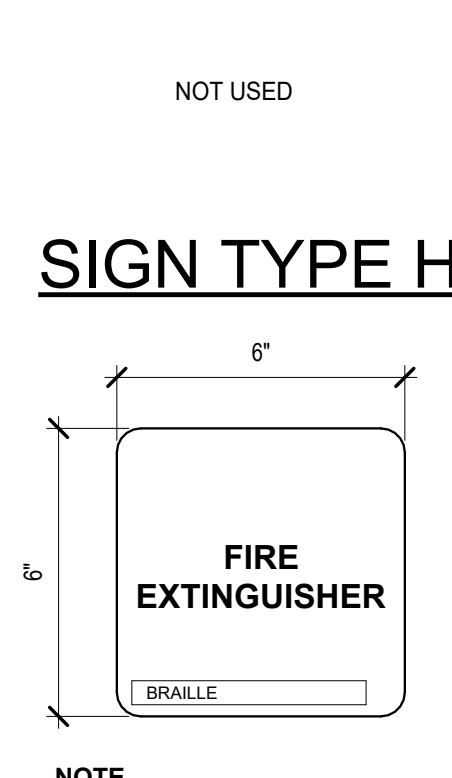
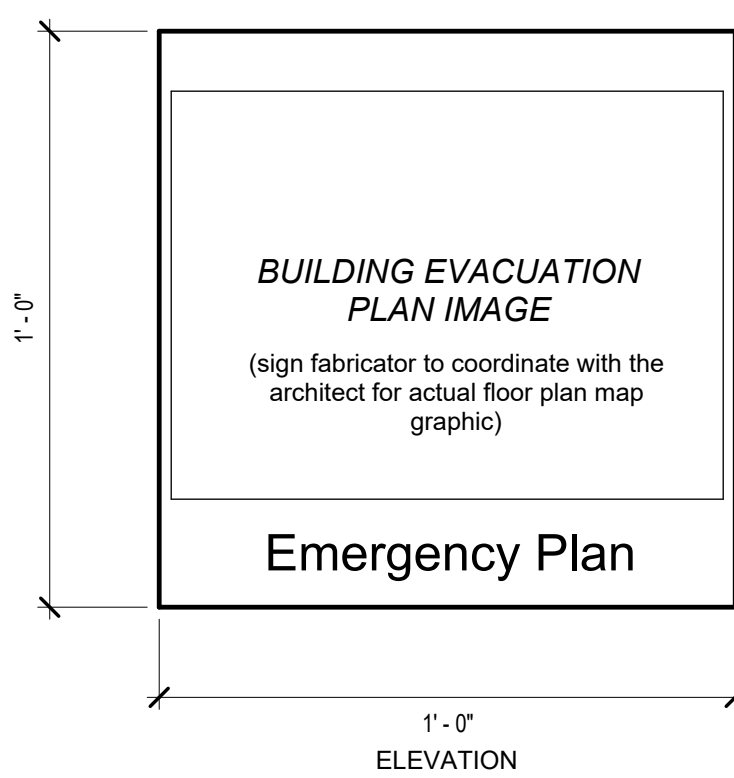
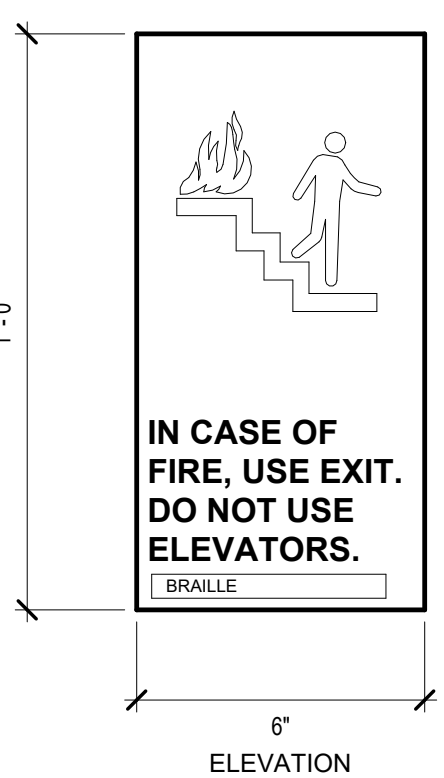
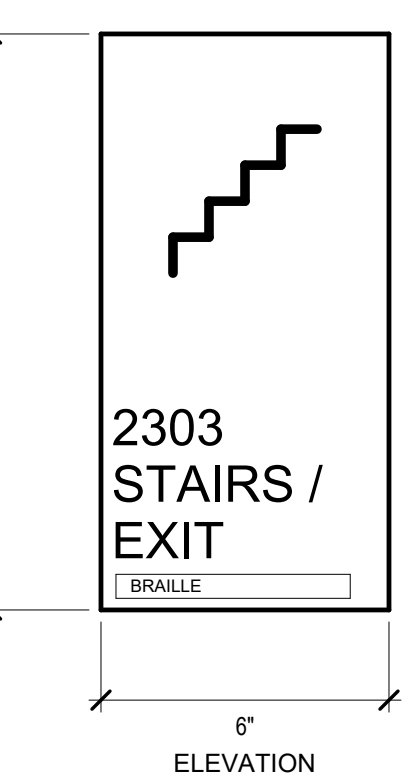


SIGN TYPE A

SIGN TYPE B

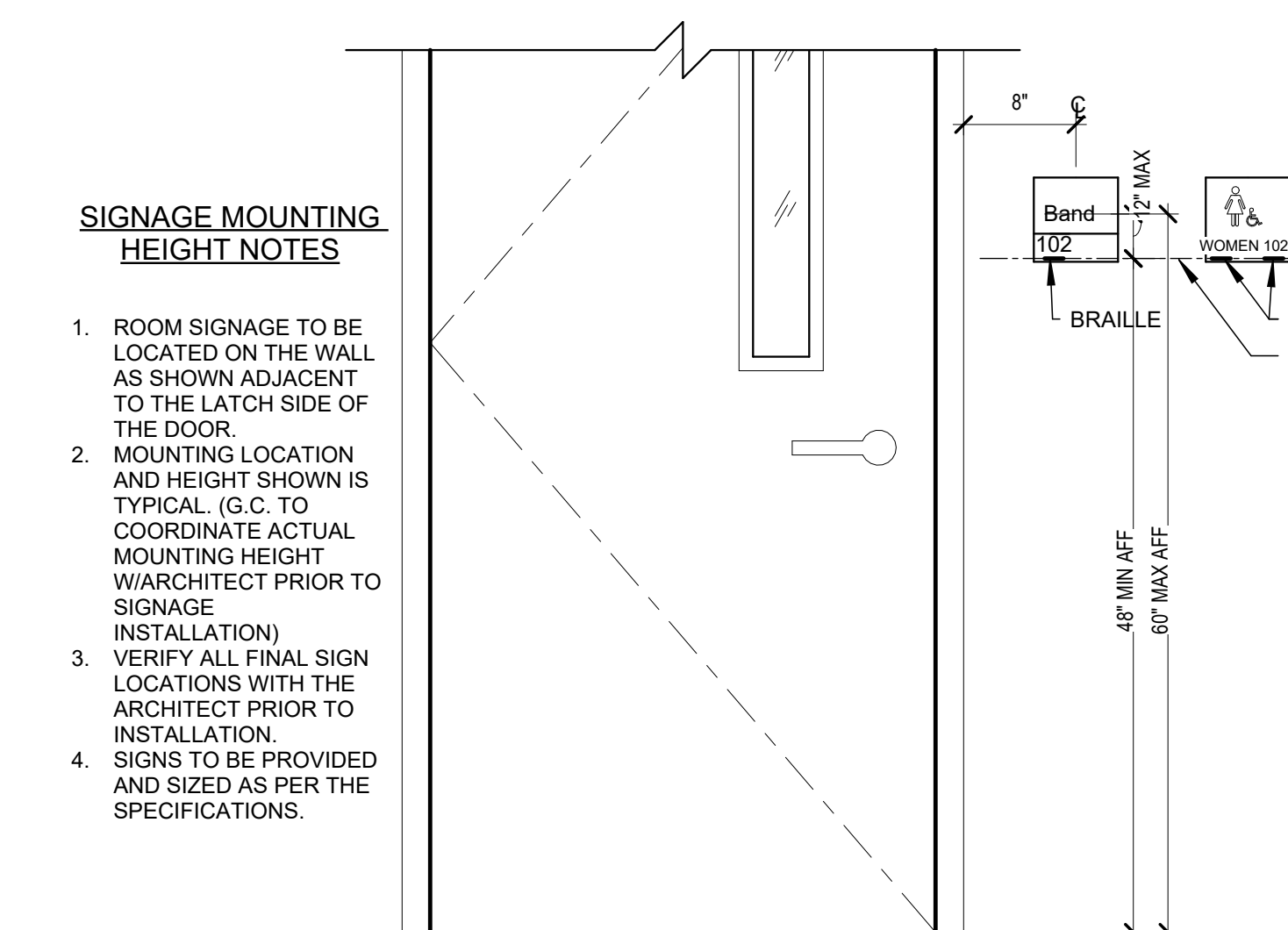
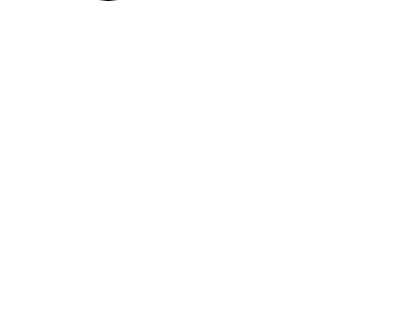
SIGN TYPE C

SIGN TYPE D



9 TYPICAL ROOM SIGNAGE TYPES

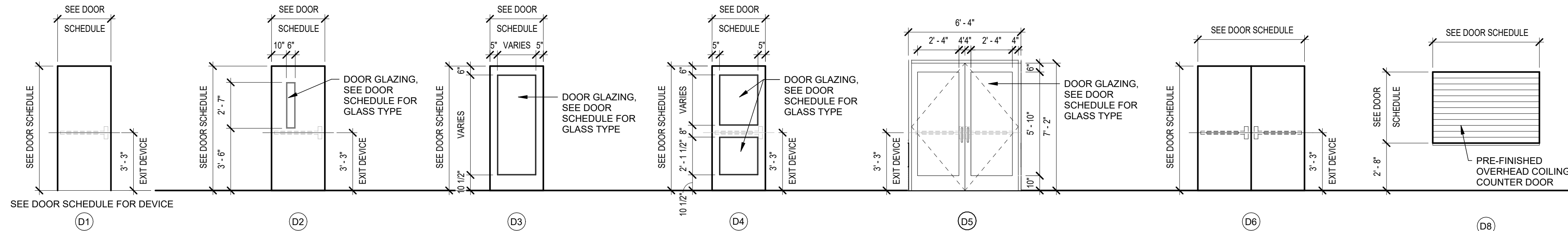
3" = 1'-0"



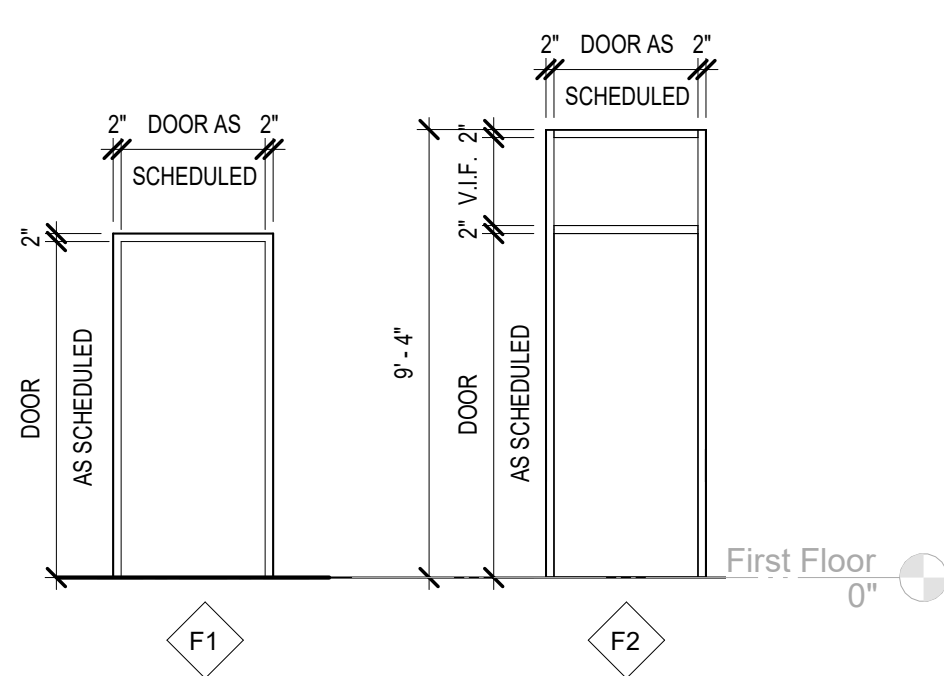
1 ELEVATION - TYPICAL DOOR SIGNAGE MOUNTING HEIGHT DETAIL

1" = 1'-0"

DOOR SCHEDULE- CR WING																			
DOOR										FRAME									
NO.	DESCRIPTION	WIDTH	HEIGHT	TYPE	MAT'L	FINISH	GLASS TYPE	TYPE	MAT'L	FINISH	HEAD	JAMB	THRESHOLD	ASSEMBLY RATING	HARDWARE SET	SIGNAGE TYPE	SIGNAGE NAME	SIGNAGE NUMBER	PANIC HARDWARE
500A	PAIR	7'-0"	7'-2"	D6	FSCW	STAIN	N/A	F1	HM	PAINT	DH.20	DJ.20	T.06	90 MIN.	SEE SPEC	TYPE A (BOTH SIDES)	EXIT	--	Yes
500A	PAIR	6'-0"	7'-2"	D5	ALUM	PRE-FIN	IGTE	F2	ALUM	PRE-FIN	DH.30	DJ.30	T.01	NONE	SEE SPEC	TYPE A	EXIT	--	Yes
500B	PAIR	6'-0"	7'-2"	D5	ALUM	PRE-FIN	IGTE	F2	ALUM	PRE-FIN	DH.30	DJ.30	T.01	NONE	SEE SPEC	TYPE A	EXIT	--	Yes
501A	SINGLE	3'-0"	7'-2"	D2	FSCW	STAIN	MG	F1	HM	PAINT	DH.20	DJ.20	T.03	NONE	SEE SPEC	TYPE B	CLASSROOM	501	Yes
501C	SINGLE	3'-0"	7'-2"	D1	FSCW	STAIN	N/A	F1	HM	PAINT	DH.25	DJ.25	T.03	NONE	SEE SPEC	TYPE D (UNISEX)	TOILET	501A	Yes
502A	SINGLE	3'-0"	7'-2"	D4	ALUM	PRE-FIN	IGTE	F2	ALUM	PRE-FIN	DH.30	DJ.30	T.01	NONE	SEE SPEC	TYPE A	EXIT	--	Yes
502B	SINGLE	3'-0"	7'-2"	D3	FSCW	STAIN	MG	F1	HM	PAINT	DH.20	DJ.20	T.03	NONE	SEE SPEC	TYPE B	CLASSROOM	502	Yes
502C	SINGLE	3'-0"	7'-2"	D1	FSCW	STAIN	N/A	F1	HM	PAINT	DH.25	DJ.25	T.03	NONE	SEE SPEC	TYPE D (UNISEX)	TOILET	502A	Yes
503A	SINGLE	3'-0"	7'-2"	D4	ALUM	PRE-FIN	IGTE	F2	ALUM	PRE-FIN	DH.30	DJ.30	T.01	NONE	SEE SPEC	TYPE A	EXIT	--	Yes
503B	SINGLE	3'-0"	7'-2"	D2	FSCW	STAIN	MG	F1	HM	PAINT	DH.20	DJ.20	T.03	NONE	SEE SPEC	TYPE B	CLASSROOM	503	Yes
503C	SINGLE	3'-0"	7'-2"	D1	FSCW	STAIN	N/A	F1	HM	PAINT	DH.25	DJ.25	T.03	NONE	SEE SPEC	TYPE D (UNISEX)	TOILET	503A	Yes
504A	SINGLE	3'-0"	7'-2"	D4	ALUM	PRE-FIN	IGTE	F2	ALUM	PRE-FIN	DH.30	DJ.30	T.01	NONE	SEE SPEC	TYPE A	EXIT	--	Yes
504B	SINGLE	3'-0"	7'-2"	D2	FSCW	STAIN	MG	F1	HM	PAINT	DH.20	DJ.20	T.03	NONE	SEE SPEC	TYPE B	CLASSROOM	504	Yes
504C	SINGLE	3'-0"	7'-2"	D1	FSCW	STAIN	N/A	F1	HM	PAINT	DH.25	DJ.25	T.03	NONE	SEE SPEC	TYPE D (UNISEX)	TOILET	504A	Yes
505A	SINGLE	3'-0"	7'-2"	D4	ALUM	PRE-FIN	IGTE	F2	ALUM	PRE-FIN	DH.30	DJ.30	T.01	NONE	SEE SPEC	TYPE A	EXIT	--	Yes
505B	SINGLE	3'-0"	7'-2"	D2	FSCW	STAIN	MG	F1	HM	PAINT	DH.20	DJ.20	T.03	NONE	SEE SPEC	TYPE B	CLASSROOM	505	Yes
505C	SINGLE	3'-0"	7'-2"	D1	FSCW	STAIN	N/A	F1	HM	PAINT	DH.25	DJ.25	T.03	NONE	SEE SPEC	TYPE D (UNISEX)	TOILET	505A	Yes
506A	SINGLE	3'-0"	7'-2"	D4	ALUM	PRE-FIN	IGTE	F2	ALUM	PRE-FIN	DH.30	DJ.30	T.01	NONE	SEE SPEC	TYPE A	EXIT	--	Yes
506B	SINGLE	3'-0"	7'-2"	D2	FSCW	STAIN	MG	F1	HM	PAINT	DH.20	DJ.20	T.03	NONE	SEE SPEC	TYPE B	CLASSROOM	506	Yes
506C	SINGLE	3'-0"	7'-2"	D1	FSCW	STAIN	N/A	F1	HM	PAINT	DH.25	DJ.25	T.03	NONE	SEE SPEC	TYPE D (UNISEX)	TOILET	506A	Yes
507A	SINGLE	3'-0"	7'-2"	D4	ALUM	PRE-FIN	IGTE	F2	ALUM	PRE-FIN	DH.30	DJ.30	T.01	NONE	SEE SPEC	TYPE A	EXIT	--	Yes
507B	SINGLE	3'-0"	7'-2"	D2	FSCW	STAIN	MG	F1	HM	PAINT	DH.20	DJ.20	T.03	NONE	SEE SPEC	TYPE B	CLASSROOM	507	Yes
507C	SINGLE	3'-0"	7'-2"	D1	FSCW	STAIN	N/A	F1	HM	PAINT	DH.25	DJ.25	T.03	NONE	SEE SPEC	TYPE D (UNISEX)	TOILET	507A	Yes
508A	SINGLE	3'-0"	7'-2"	D4	ALUM	PRE-FIN	IGTE	F2	ALUM	PRE-FIN	DH.30	DJ.30	T.01	NONE	SEE SPEC	TYPE A	EXIT	--	Yes
508B	SINGLE	3'-0"	7'-2"	D2	FSCW	STAIN	MG	F1	HM	PAINT	DH.20	DJ.20	T.03	NONE	SEE SPEC	TYPE B	CLASSROOM	508	Yes
508C	SINGLE	3'-0"	7'-2"	D1	FSCW	STAIN	N/A	F1	HM	PAINT	DH.25	DJ.25	T.03	NONE	SEE SPEC	TYPE D (UNISEX)	TOILET	508A	Yes
509A	SINGLE	3'-0"	7'-2"	D2	FSCW	STAIN	MG	F1	HM	PAINT	DH.20	DJ.20	T.01	NONE	SEE SPEC	TYPE C	WORKROOM	509	No
509AA	SINGLE	3'-0"	7'-2"	D1	FRP	PRE-FIN	N/A	F1	ALUM	PRE-FIN	DH.30	DJ.30	T.01	NONE	SEE SPEC	TYPE C	SPRINKLER	509A	Yes
510A	SINGLE	3'-0"	7'-2"	D1	FSCW	STAIN	N/A	F1	HM	PAINT	DH.20	DJ.20	T.07	NONE	SEE SPEC	TYPE C	STORAGE	--	No
510AA	SINGLE	3'-0"	7'-2"	D1	FSCW	STAIN	N/A	F1	HM	PAINT	DH.20	DJ.20	T.07	NONE	SEE SPEC	TYPE C	STORAGE	--	No
511A	SINGLE	3'-0"	7'-2"	D1	FSCW	STAIN	N/A	F1	HM	PAINT	DH.20	DJ.20	T.07	NONE	SEE SPEC	TYPE B	DATA	509B	No
512A	SINGLE	3'-0"	7'-2"	D1	FSCW	STAIN	N/A	F1	HM	PAINT	DH.20	DJ.20	T.03	NONE	SEE SPEC	TYPE D (UNISEX)	TOILET	512	Yes
513A	SINGLE	3'-0"	7'-2"	D2	FSCW	STAIN	MG	F1	HM	PAINT	DH.20	DJ.20	T.03	NONE	SEE SPEC	TYPE B	CLASSROOM	513	No
514A	SINGLE	3'-0"	7'-2"	D1	FSCW	STAIN	N/A	F1	HM	PAINT	DH.20	DJ.20	T.03	NONE	SEE SPEC	TYPE B	OFFICE	514	No
515A	SINGLE	3'-0"	7'-2"	D3	FSCW	STAIN	MG	F3	HM	PAINT	DH.20	DJ.20	T.03	NONE	SEE SPEC	TYPE B	RESOURCE	515	Yes
516A	SINGLE	2'-0"	7'-2"	D1	FSCW	STAIN	N/A	F1	HM	PAINT	DH.20	DJ.20	T.07	NONE	SEE SPEC	TYPE A	CHASE	--	No
517A	SINGLE	3'-0"	7'-2"	D2	FSCW	STAIN	MG	F1	HM	PAINT	DH.20	DJ.20	T.03	NONE	SEE SPEC	TYPE B	CLASSROOM	517	No
519A	SINGLE	3'-0"	7'-2"	D2	FSCW	STAIN	MG	F1	HM	PAINT	DH.20	DJ.20	T.03	NONE	SEE SPEC	TYPE B	CLASSROOM	519	No
520A	SINGLE	3'-0"	7'-2"	D2	FSCW	STAIN	MG	F1	HM	PAINT	DH.20	DJ.20	T.03	NONE	SEE SPEC	TYPE B	CLASSROOM	520	No
520AA	SINGLE	2'-6"	7'-2"	D1	FSCW	STAIN	N/A	F2	HM	PAINT	DH.20	DJ.20	T.07	NONE	SEE SPEC	TYPE A	MECHANICAL ACCESS	--	No
521A	SINGLE	3'-0"	7'-2"	D2	FSCW	STAIN	MG	F1	HM	PAINT	DH.20	DJ.20	T.07	NONE	SEE SPEC	TYPE B	CLASSROOM	521	No
522A	SINGLE	3'-0"	7'-2"	D2	FSCW	STAIN	MG	F1	HM	PAINT	DH.20	DJ.20	T.07	NONE	SEE SPEC	TYPE B	CLASSROOM	522	No
522A	SINGLE	3'-0"	7'-2"	D1	FSCW	STAIN	N/A	F1	HM	PAINT	DH.20	DJ.20	T.07	NONE	SEE SPEC	TYPE B	CLASSROOM	522	No
604A	SINGLE	3'-0"	7'-2"	D1	FSCW	STAIN	N/A	F1	HM	PAINT	DH.20	DJ.20	T.07	NONE	SEE SPEC	TYPE C	CUSTODIAL	604	No
606A	SINGLE	3'-0"	7'-2"	D1	HM	PAINT	N/A	F1	HM	PAINT	DH.20	DJ.20	T.07	20 MIN.	SEE SPEC	TYPE C	ELECTRICAL	606	Yes
608A	SINGLE	3'-0"	7'-2"	D1	FSCW	STAIN	N/A	F1	HM	PAINT	DH.20	DJ.20	T.07	NONE	SEE SPEC	TYPE C	STORAGE	608	No
610A	SINGLE	3'-0"	7'-2"	D2	FSCW	STAIN	MG	F1	HM	PAINT	DH.20	DJ.20	T.07	NONE	SEE SPEC	TYPE C	WORKROOM	610	No
610AA	SINGLE	3'-0"	7'-2"	D1	FSCW	STAIN	N/A	F1	HM	PAINT	DH.20	DJ.20	T.07	NONE	SEE SPEC	TYPE D (UNISEX)	TOILET	610A	No
610BA	SINGLE	3'-0"	7'-2"	D1	FSCW	STAIN	N/A	F1	HM	PAINT	DH.20	DJ.20	T.07	NONE	SEE SPEC	TYPE C	STORAGE	610B	No
612A	SINGLE	3'-0"	7'-2"	D2	FSCW	STAIN	MG	F1	HM	PAINT	DH.20	DJ.20	T.07	NONE	SEE SPEC	TYPE B	OFFICE	612	No
613A	SINGLE	3'-0"	7'-2"	D2	FSCW	STAIN	MG	F1	HM	PAINT	DH.20	DJ.20	T.07	NONE	SEE SPEC	TYPE B	CLASSROOM	613	No
615B	SINGLE	3'-0"	7'-2"	D2	FSCW	STAIN	MG	F1	HM	PAINT	DH.20	DJ.20	T.07	NONE	SEE SPEC	TYPE B	RESOURCE	615	No
616A	SINGLE	2'-0"	7'-2"	D1	FSCW	STAIN	N/A	F1	HM	PAINT	DH.20	DJ.20	T.07	NONE	SEE SPEC	TYPE A	CHASE	--	No
617A	SINGLE	3'-0"	7'-2"	D2	FSCW	STAIN	MG	F1	HM	PAINT	DH.20	DJ.20	T.07	NONE	SEE SPEC	TYPE B	CLASSROOM	617	No
618A	SINGLE	3'-0"	7'-2"	D2	FSCW	STAIN	MG	F1	HM	PAINT	DH.20	DJ.20	T.07	NONE	SEE SPEC	TYPE B	CLASSROOM	618	No
619A	SINGLE	3'-0"	7'-2"	D2	FSCW	STAIN	MG	F1	HM	PAINT	DH.20	DJ.20	T.07	NONE	SEE SPEC	TYPE B	CLASSROOM	619	No
620A	SINGLE	3'-0"	7'-2"	D2	FSCW	STAIN	MG	F1	HM	PAINT	DH.20	DJ.20	T.07	NONE	SEE SPEC	TYPE B	CLASSROOM	620	No
621A	SINGLE	3'-0"	7'-2"	D2	FSCW	STAIN	MG	F1	HM	PAINT	DH.20	DJ.20	T.07	NONE	SEE SPEC	TYPE B	CLASSROOM	621	No
E02A	SINGLE	3'-0"	7'-2"	D1	FRP	PRE-FIN	N/A	F1	ALUM	PRE-FIN	DH.30	DJ.30	T.01	NONE	SEE SPEC	TYPE C	ELECTRICAL	E02	Yes
M01A	PAIR	6'-0"	7'-2"	D6	FRP	PRE-FIN	N/A	F1	ALUM	PRE-FIN	DH.30	DJ.30	T.01	NONE	SEE SPEC	TYPE C	MECHANICAL	M01	Yes
M01B	SINGLE	3'-0"	7'-2"	D1	HM	PAINT	N/A	F1	HM	PAINT	DH.20	DJ.20	T.07	NONE	SEE SPEC	TYPE C	MECHANICAL	M01	Yes
M02A	PAIR	6'-0"	7'-2"	D6	FRP	PRE-FIN	N/A	F1	ALUM	PRE-FIN	DH.30	DJ.30	T.01	NONE	SEE SPEC	TYPE C	BOILER RM	M02	Yes
M02B	SINGLE	3'-0"	7'-2"	D1	HM	PAINT	N/A	F1	HM	PAINT	DH.20	DJ.20	T.07	NONE	SEE SPEC	TYPE C	BOILER RM	M02	No
M201A	PAIR	6'-0"	7'-0"	D6	FSCW	STAIN	N/A	F1	HM	PAINT	DH.20	DJ.20	T.07	NONE	SEE SPEC	TYPE A	MECHANICAL ACCESS (2 SIGNS)	--	No
S1-1A	PAIR	6'-0"	7'-2"	D5	ALUM	PRE-FIN	IGTE	SF-6	ALUM	PRE-FIN	DH.30	DJ.30	T.01	NONE	SEE SPEC	TYPE A	EXIT	--	Yes
S2-0A	PAIR	6'-0"	7'-2"	D5	ALUM	PRE-FIN	IGTE	F1	ALUM	PRE-FIN	DH.30	DJ.30	T.01	NONE	SEE SPEC	TYPE A	EXIT	--	Yes
S3-1A	SINGLE	3'-0"	7'-2"	D1	FSCW	STAIN	N/A	F1	HM	PAINT	DH.20	DJ.20	T.07	NONE	SEE SPEC	TYPE A	MECHANICAL ACCESS	--	Yes



DOOR TYPES



LOUVER SCHEDULE								
TYPE	MATERIAL	FINISH	DETAIL			ASSEMBLY RATING	SILL HGT.	NOTES
			HEAD	JAMB	SILL			
L1	ALUM.	PRE-FIN	LH.01A SIM.	LJ.01A SIM.	LS.01A SIM.	N/A	10'-8"	
L2	ALUM.	PRE-FIN	LH.01A SIM.	LJ.01A SIM.	LS.01A SIM.	N/A	10'-8"	
L3	ALUM.	PRE-FIN	LH.01A SIM.	LJ.01A SIM.	LS.01A SIM.	N/A	7'-4"	
L4	ALUM.	PRE-FIN	LH.01A SIM.	LJ.01A SIM.	LS.01A SIM.	N/A	7'-4"	

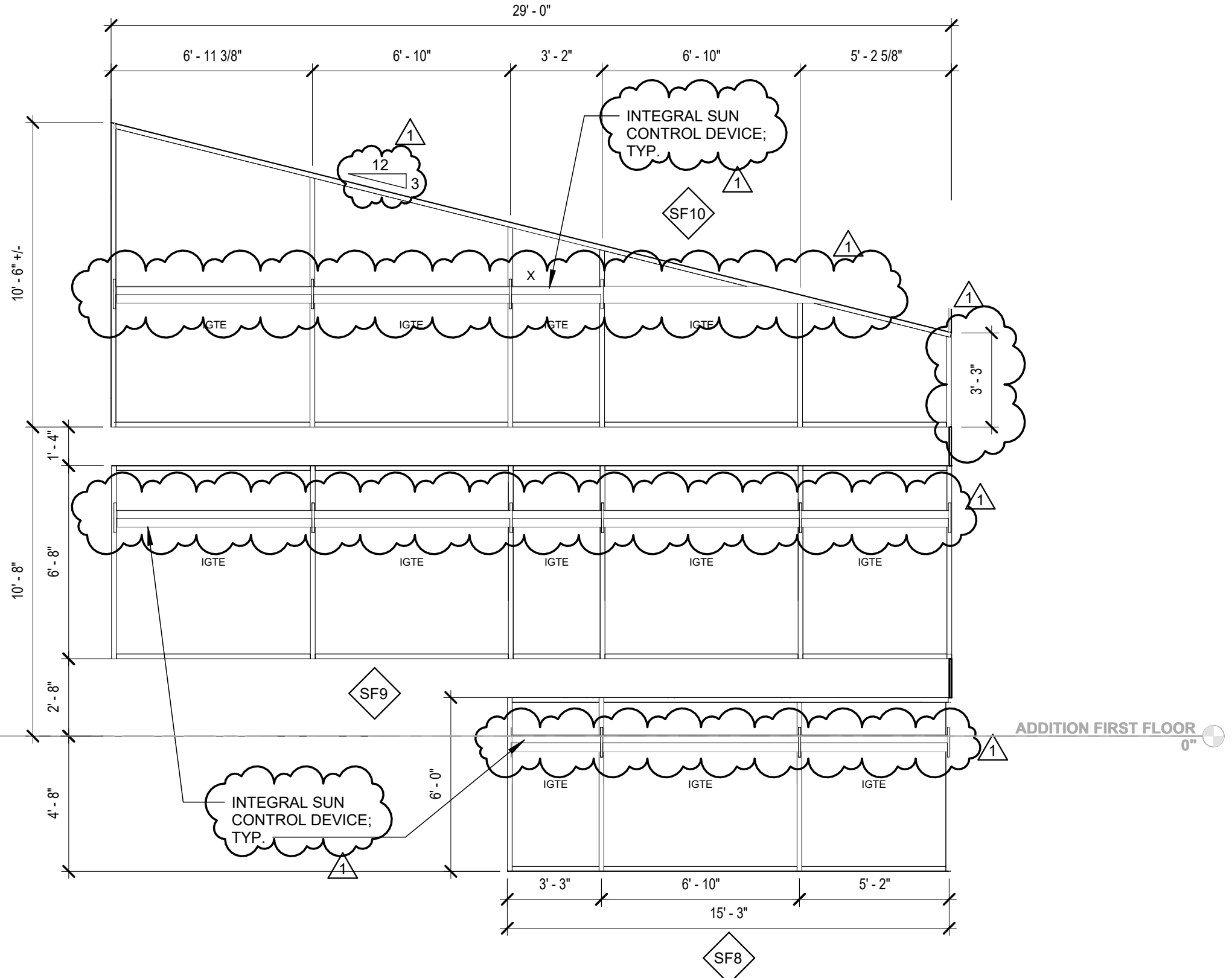
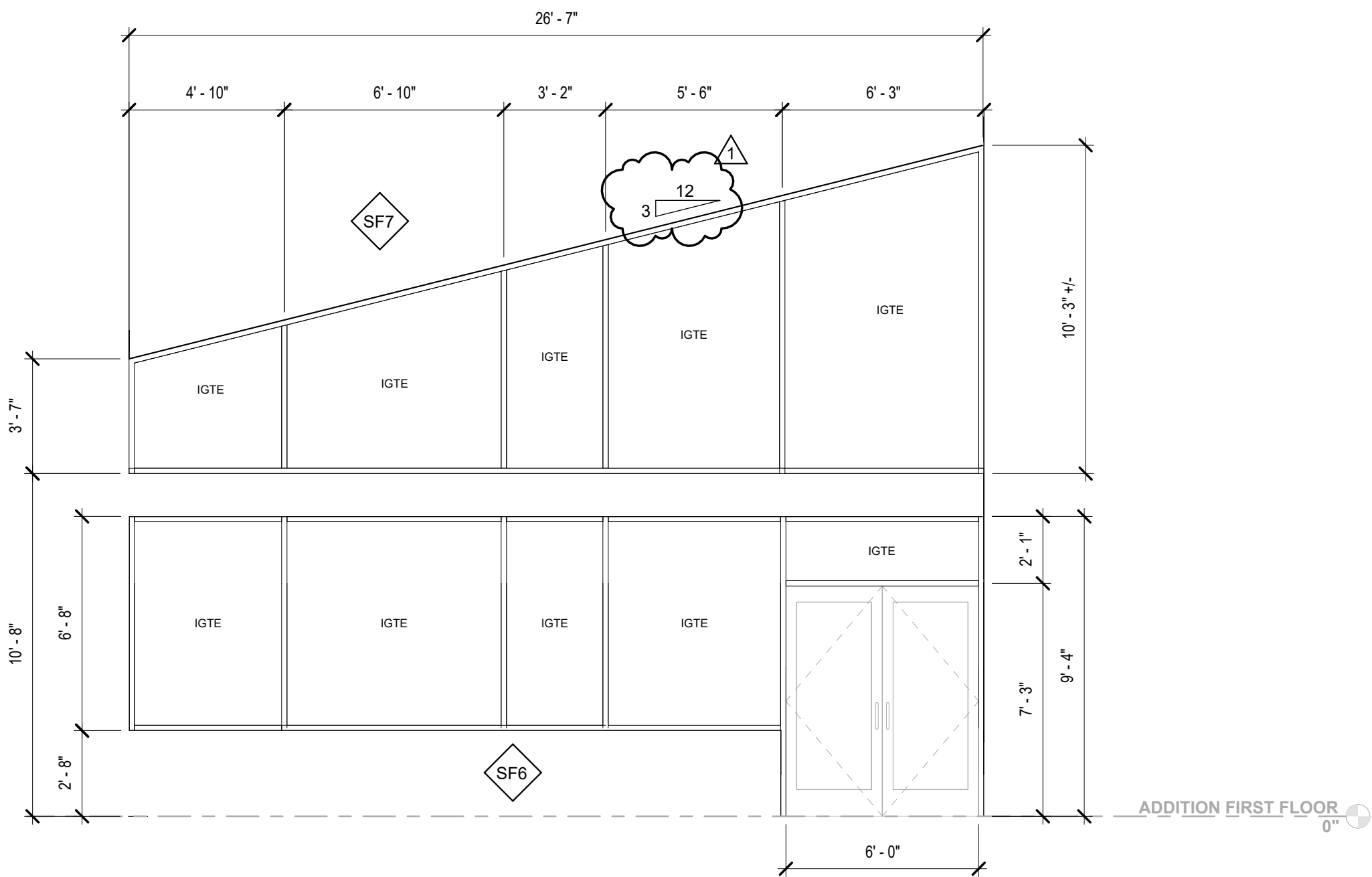
HOLLOW METAL / STOREFRONT / CURTAINWALL FRAME SCHEDULE								
TYPE	MATERIAL	FINISH	DETAIL			ASSEMBLY RATING	GLASS TYPE	NOTES
			HEAD	JAMB	SILL			
F1	HM	PAINT	WH20	WJ20	WS20		MGT	NONE
F2	HM	PAINT	WH20	WJ20	WS20		MGT	NONE
F3	HM	PAINT	WH20	WJ20	WS20		MGT	NONE
F4	HM	PAINT	WH20	WJ20	WS20		MGT	NONE
SF1	ALUM	PRE-FIN	WH30	WJ30	WS30		IGTE	NONE
SF2	ALUM	PRE-FIN	WH30	WJ30	WS30		IGTE	NONE
SF3	ALUM	PRE-FIN	WH30	WJ30	WS30		IGTE	NONE
SF5	ALUM	PRE-FIN	WH30	WJ30	WS30		IGTE	NONE
SF6	ALUM	PRE-FIN	WH30	WJ30	WS30		IGTE	NONE
SF7	ALUM	PRE-FIN	WH30	WJ30	WS30		IGTE	NONE
SF8	ALUM	PRE-FIN	WH30	WJ30	WS30		IGTE	NONE
SF9	ALUM	PRE-FIN	WH30	WJ30	WS30		IGTE	NONE
SF10	ALUM	PRE-FIN	WH30	WJ30	WS30		IGTE	NONE

NOTES:
PROVIDE ROLLER WINDOW SHADES AT THE FOLLOWING LOCATIONS:
ROOMS 501, 502, 503, 504, 505, 506, 507, 508 AT SF-3 AND SF-3 (2 LOCATIONS)
ROOMS 513, 517, 519, 520, 521, 522, 613, 617, 618, 619, 620, 621 AT SF-1 AND SF-1 AND SF-2
ROOM 615 AT SF-6
ROOM 615 AT SF-4 (EXCEPT FOR DOOR)

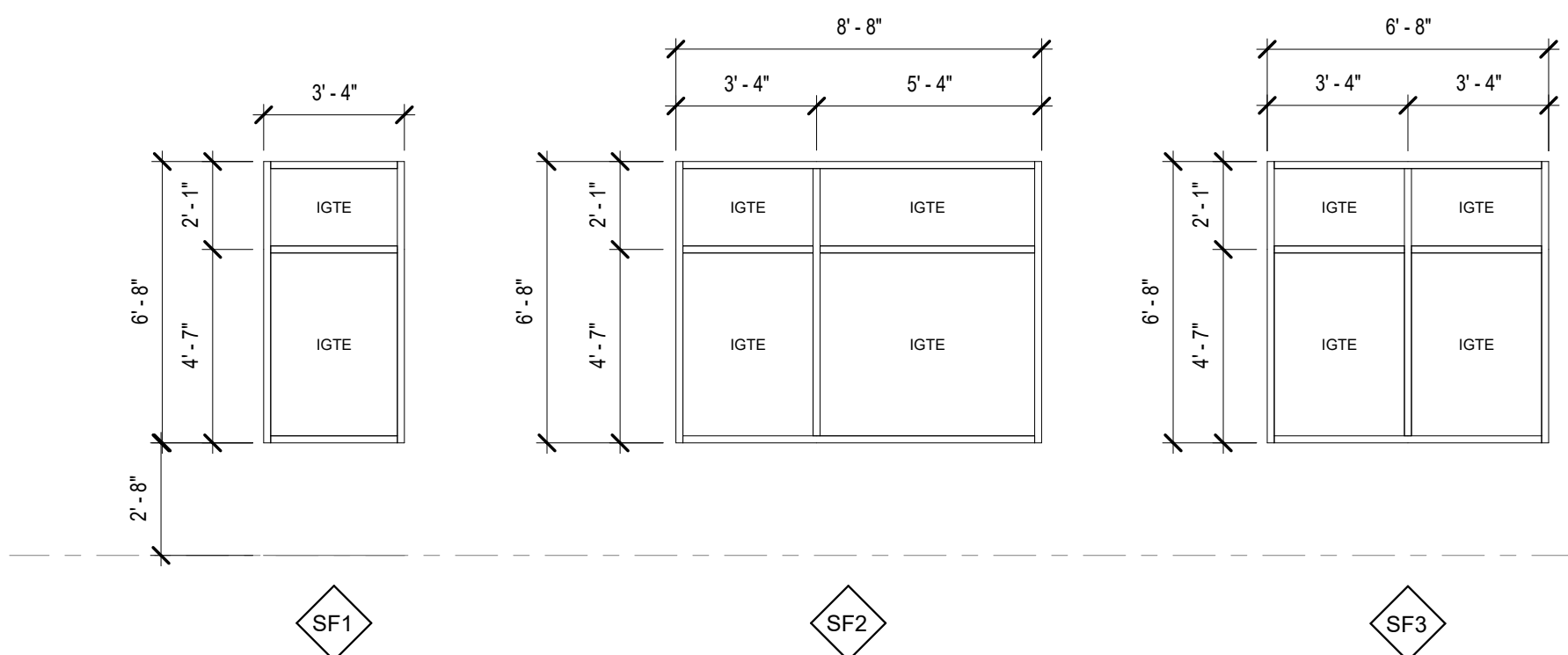
GLAZING SCHEDULE		
GLASS TYPE	DESCRIPTION	NOTES
IGTE	INSULATED GLAZING, TEMPERED, LOW-E	
MGT	MONOLITHIC GLAZING, TEMPERED	SEE SPECIFICATION FOR RATED GLAZING IN RATED OPENING ASSEMBLIES

- GENERAL GLAZING SCHEDULE NOTES:
- THIS SCHEDULE IS FOR GENERAL INFORMATION ONLY. SEE THE PROJECT MANUAL, SECTION 08 80 00 FOR EXACT DESCRIPTION OF EACH GLASS TYPE LISTED.
 - ALL EXTERIOR DOOR, WINDOW, STOREFRONT, & CURTAINWALL ELEVATIONS ARE SHOWN AS SEEN FROM THE EXTERIOR OF THE BUILDING.
 - ALL INTERIOR STOREFRONT FRAME ELEVATIONS ARE SHOWN AS SEEN FROM THE PUBLIC APPROACH SIDE OF FRAME.

LOUVER SCHEDULE								
TYPE	MATERIAL	FINISH	DETAIL			ASSEMBLY RATING	SILL HGT.	NOTES
			HEAD	JAMB	SILL			
L1	ALUM.	PRE-FIN	LH.01A SIM.	LJ.01A SIM.	LS.01A SIM.	N/A	10'-8"	
L2	ALUM.	PRE-FIN	LH.01A SIM.	LJ.01A SIM.	LS.01A SIM.	N/A	10'-8"	
L3	ALUM.	PRE-FIN	LH.01A SIM.	LJ.01A SIM.	LS.01A SIM.	N/A	7'-4"	
L4	ALUM.	PRE-FIN	LH.01A SIM.	LJ.01A SIM.	LS.01A SIM.	N/A	7'-4"	

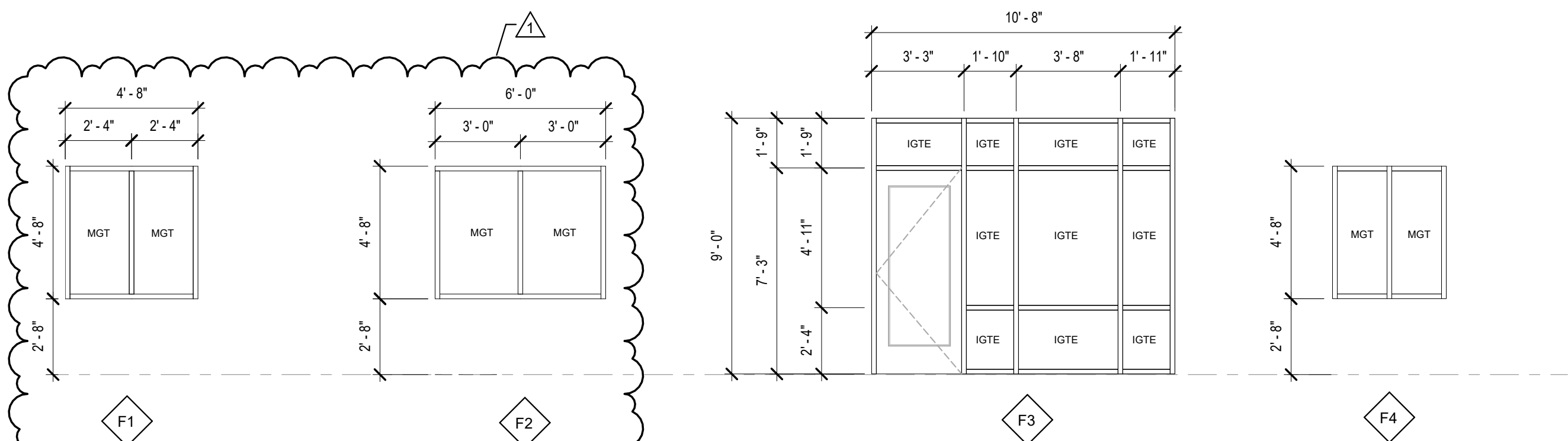
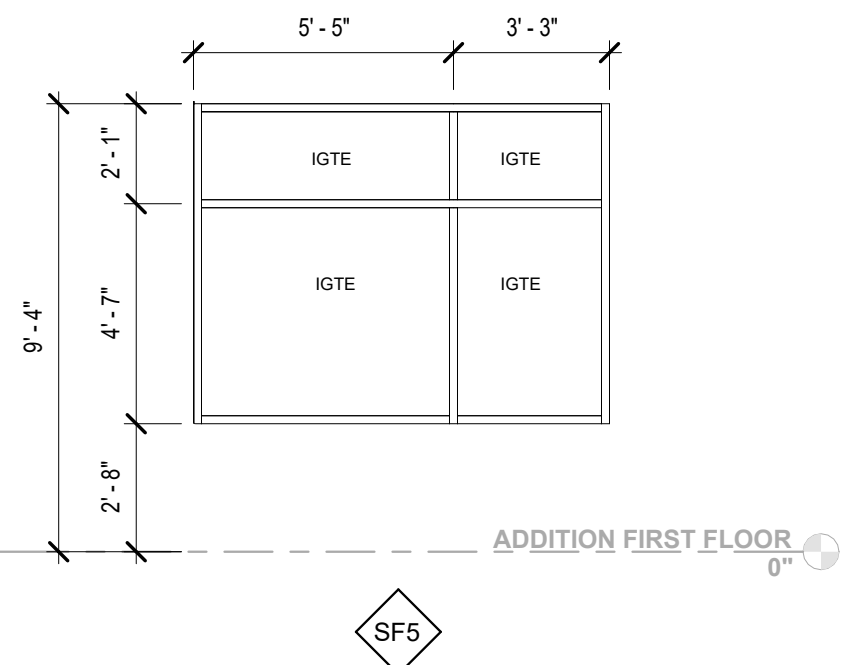


LOUVERS

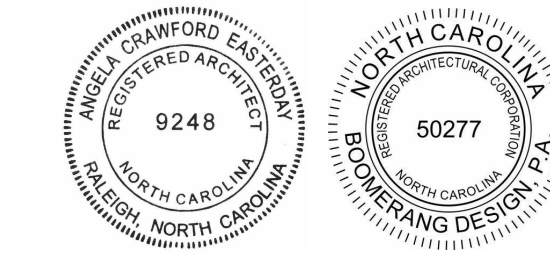


STOREFRONT FRAMES

SF4 - NOT USED



HOLLOW METAL FRAMES



COOPER ACADEMY A & R PROJECT TITLE

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REVISIONS		
NO.	DATE	DESCRIPTION
1	02/27/2024	ADDENDUM 2

BID SET
BID SET
2307
BOOMERANG DESIGN PROJECT NUMBER
02.07.2024
DRAWING RELEASE DATE

STOREFRONT
ELEVATIONS AND
SCHEDULES
SHEET TITLE

A602

SHEET



WH.20	CMU
	HOLLOW METAL FRAME WINDOW HEAD



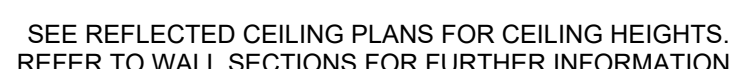
WH.25	METAL STUD WALL
	ALUMINUM FRAME WINDOW HEAD



WJ.20	CMU
	HOLLOW METAL FRAME WINDOW JAMB



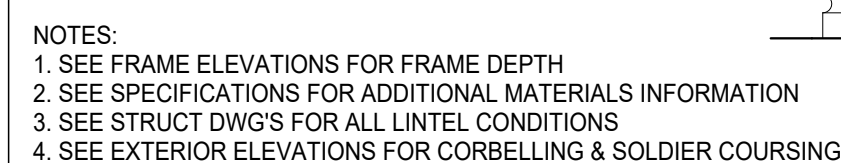
WJ.25	METAL STUD WALL
	ALUMINUM WINDOW JAMB



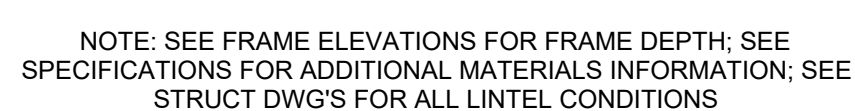
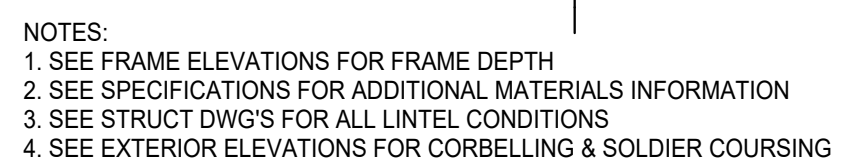
WS.20	CMU
	HOLLOW METAL FRAME WINDOW SILL



WS.25	METAL STUD WALL
	ALUMINUM FRAME WINDOW SILL



WH.30	BRICK VENEER ON CMU WALL
	ALUMINUM STOREFRONT FRAME HEAD



WS.30	BRICK VENEER ON CMU WALL
	ALUMINUM STOREFRONT FRAME SILL



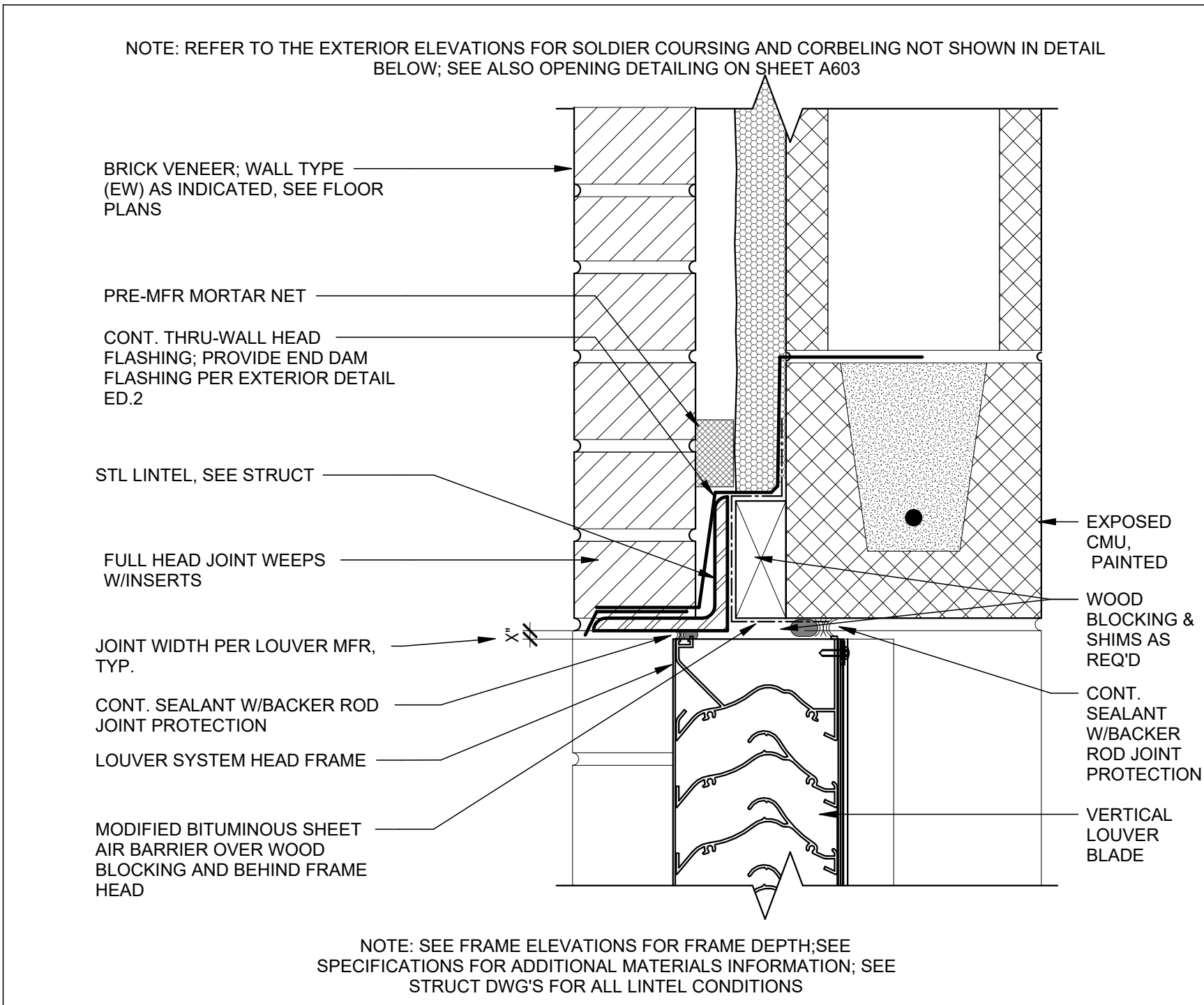
WS.10



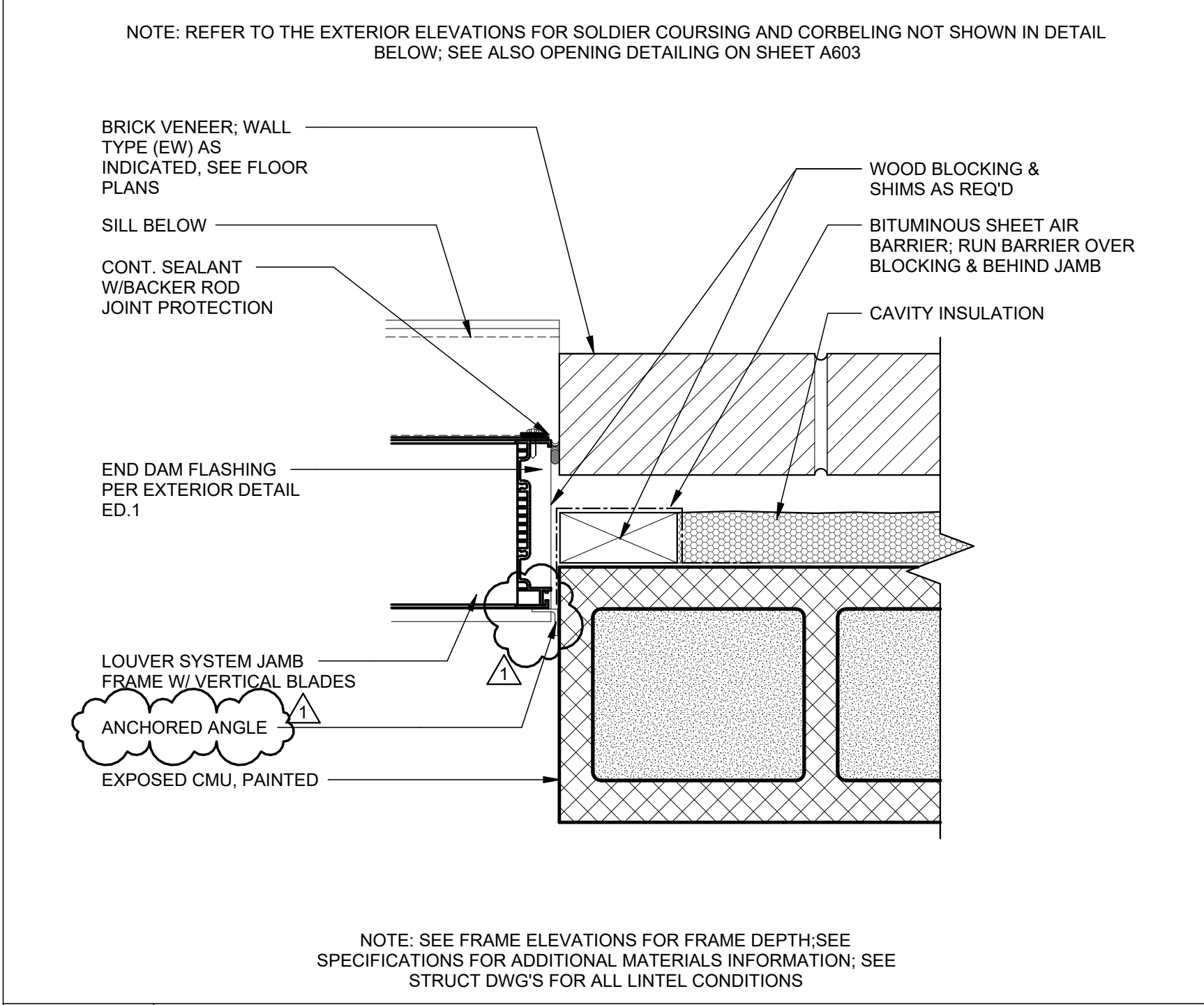
WS.11	BRICK VENEER ON CMU WALL @ STAIR
	ALUMINUM STOREFRONT FRAME SILL

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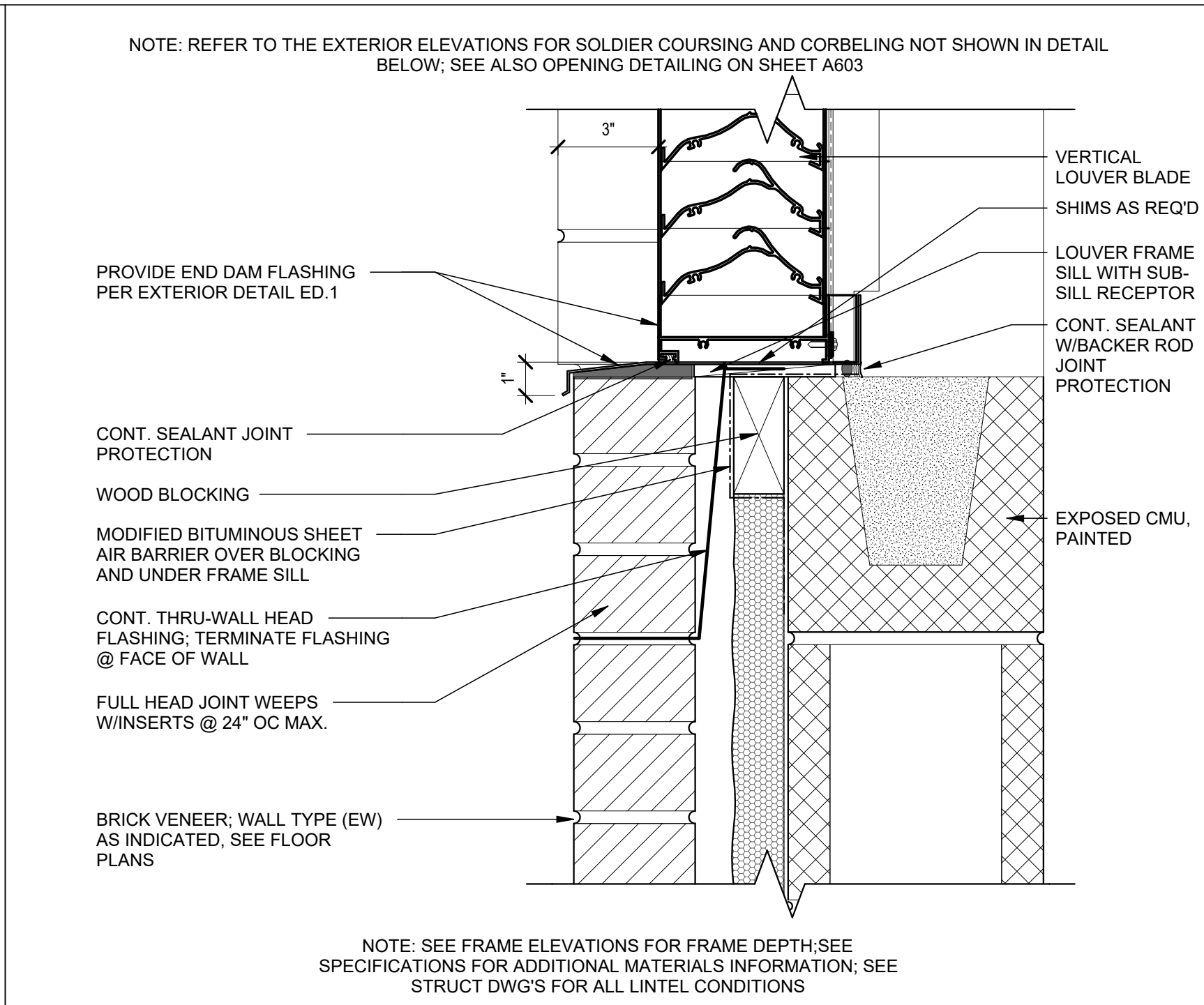
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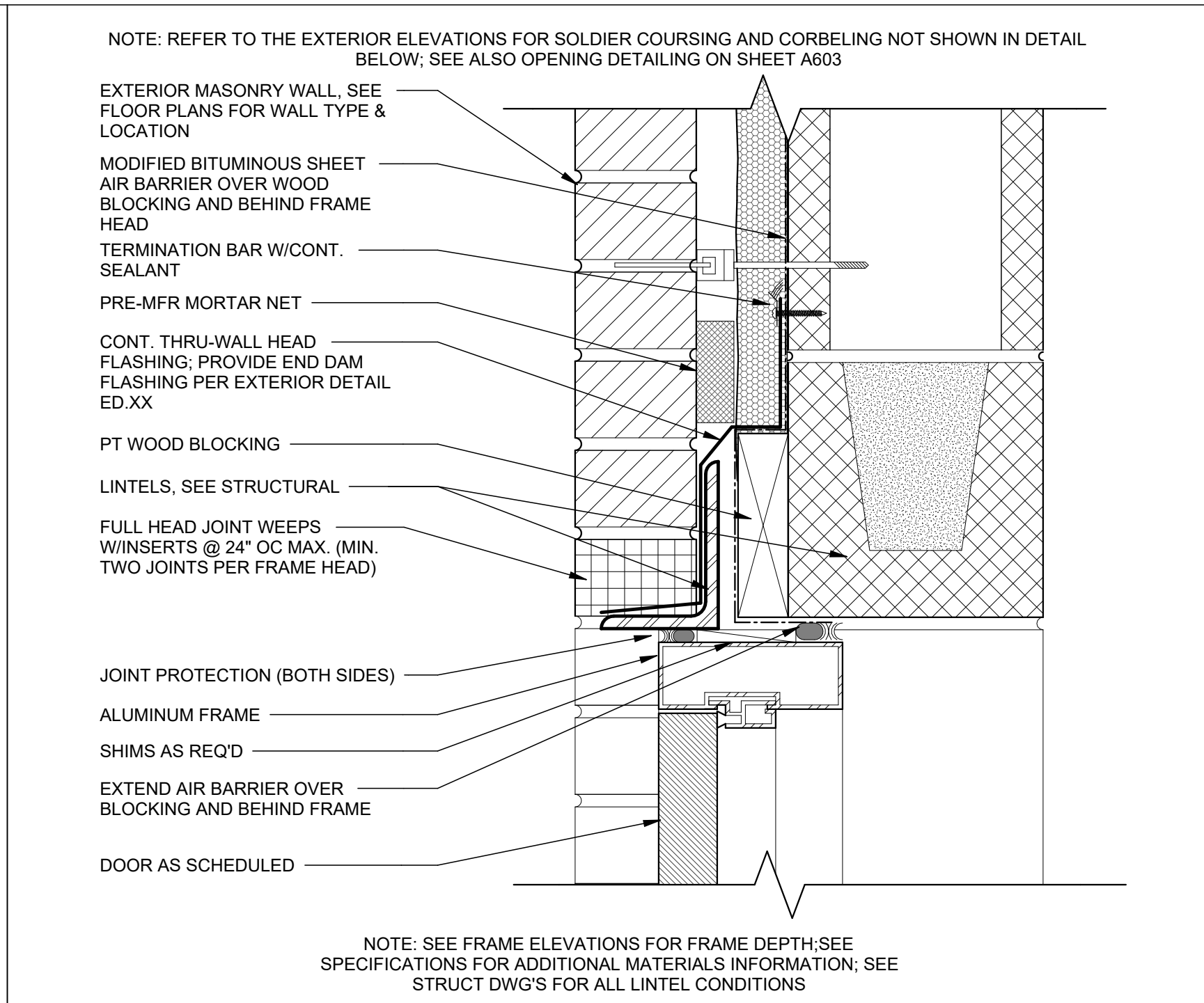
LH.01A BRICK VENEER ON CMU WALL
LOUVER FRAME HEAD



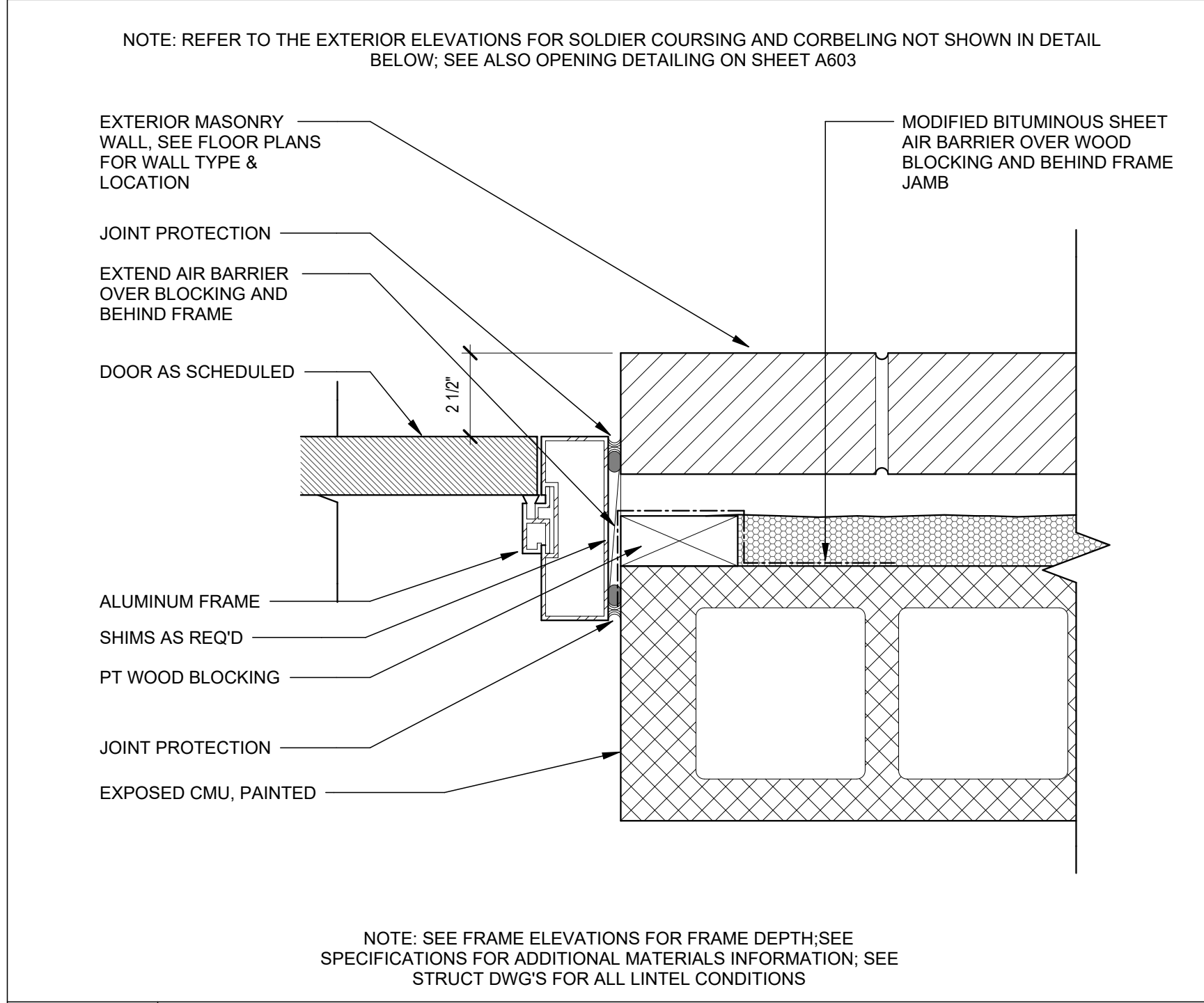
LJ.01A BRICK VENEER ON CMU WALL
LOUVER FRAME JAMB



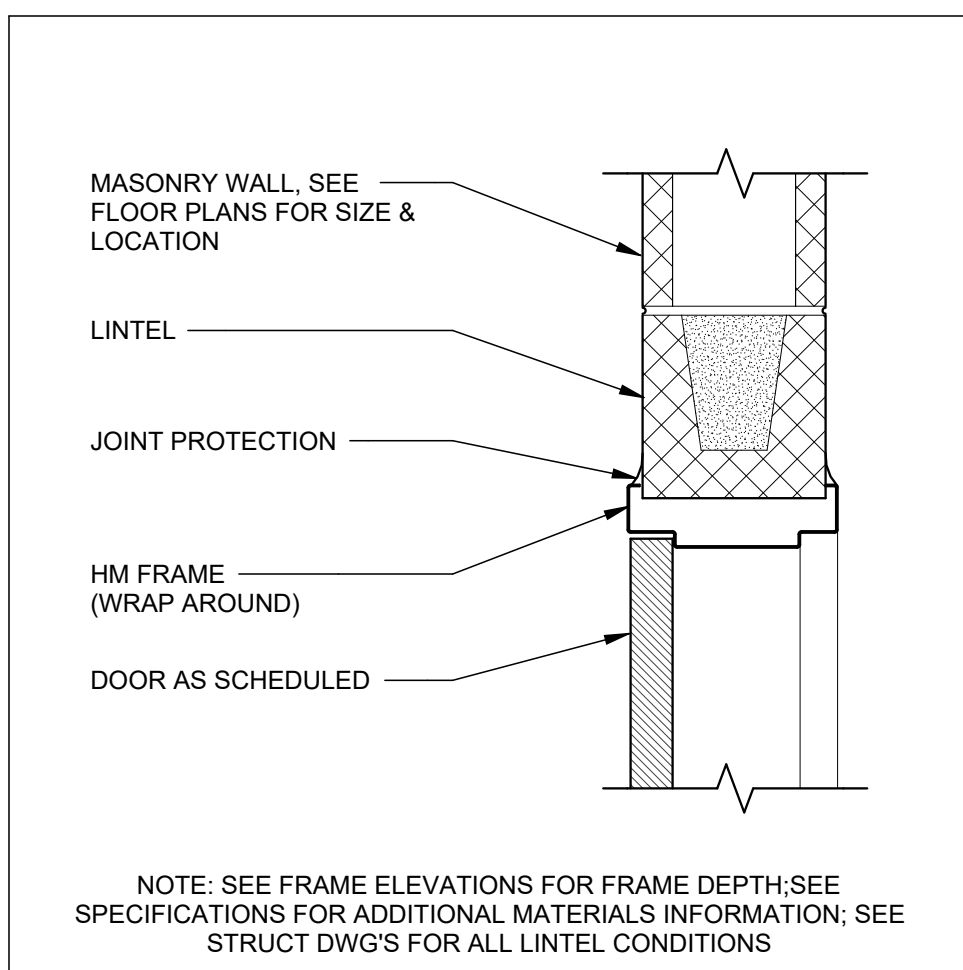
LS.01A BRICK VENEER ON CMU WALL
LOUVER FRAME SILL



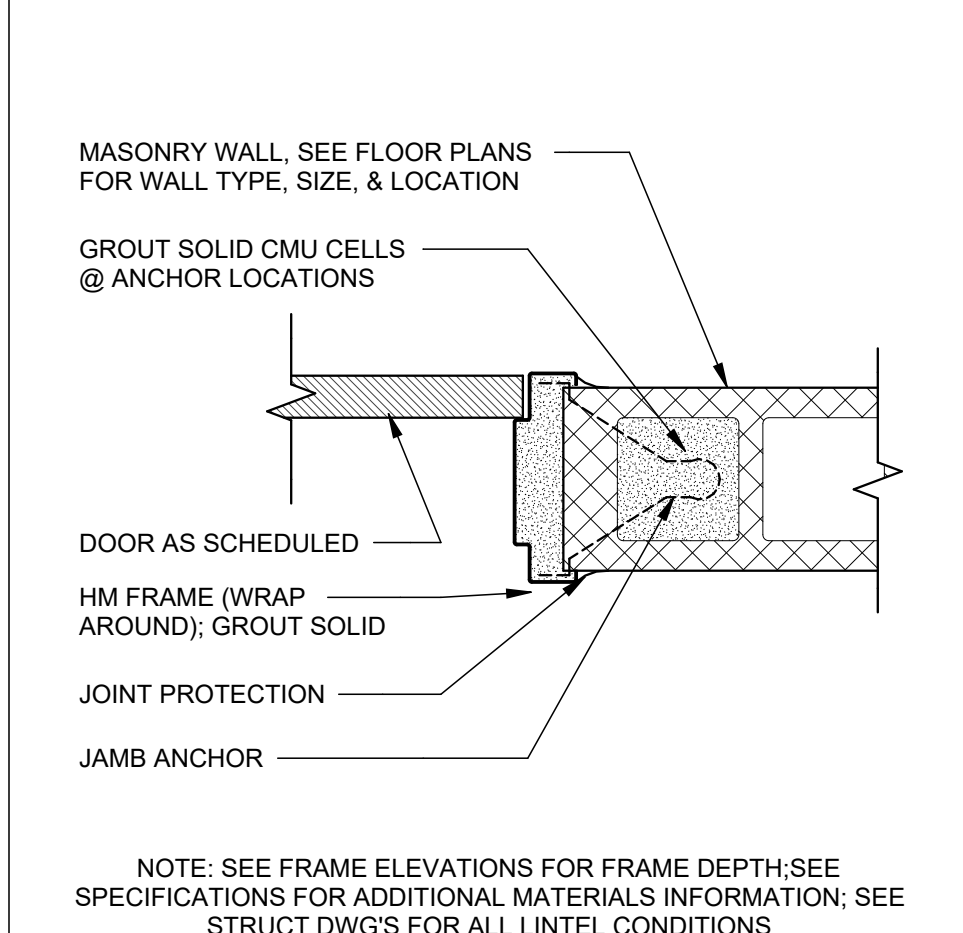
DH.30 CMU W/ BRICK VENEER
ALUMINUM FRAME DOOR HEAD



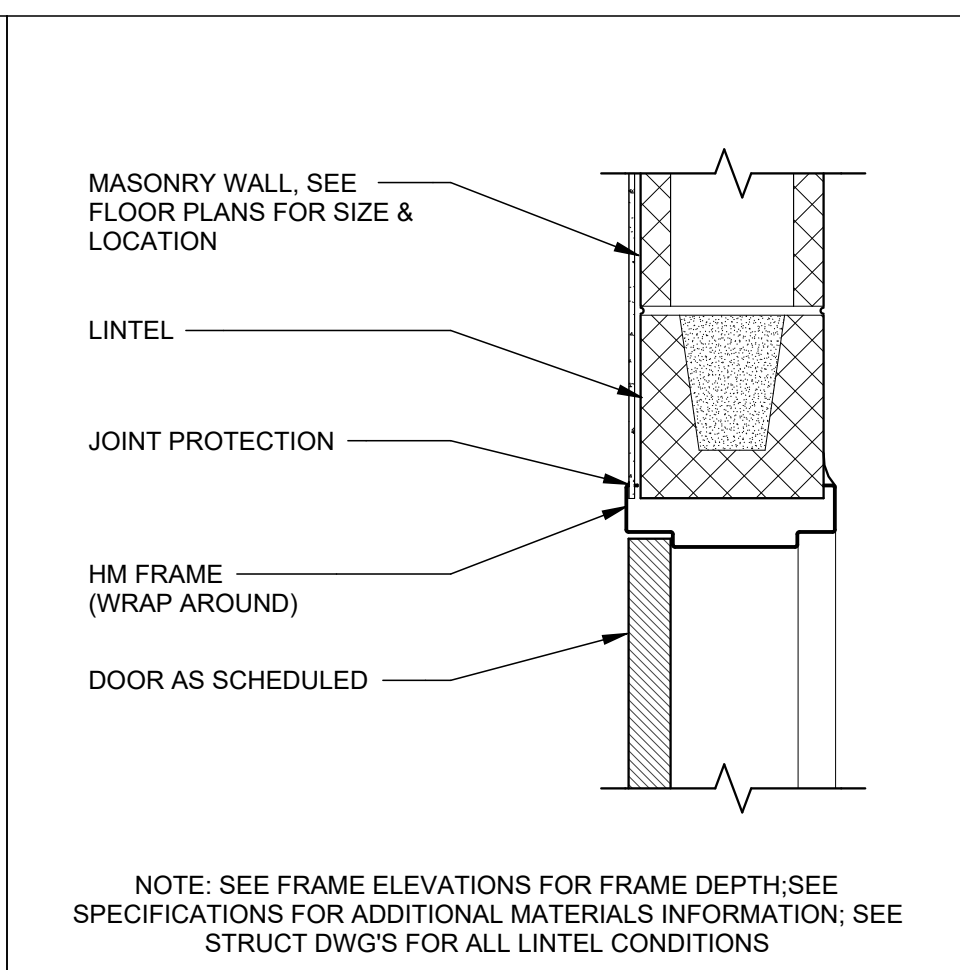
DJ.30 CMU W/BRICK VENEER
ALUMINUM FRAME DOOR JAMB



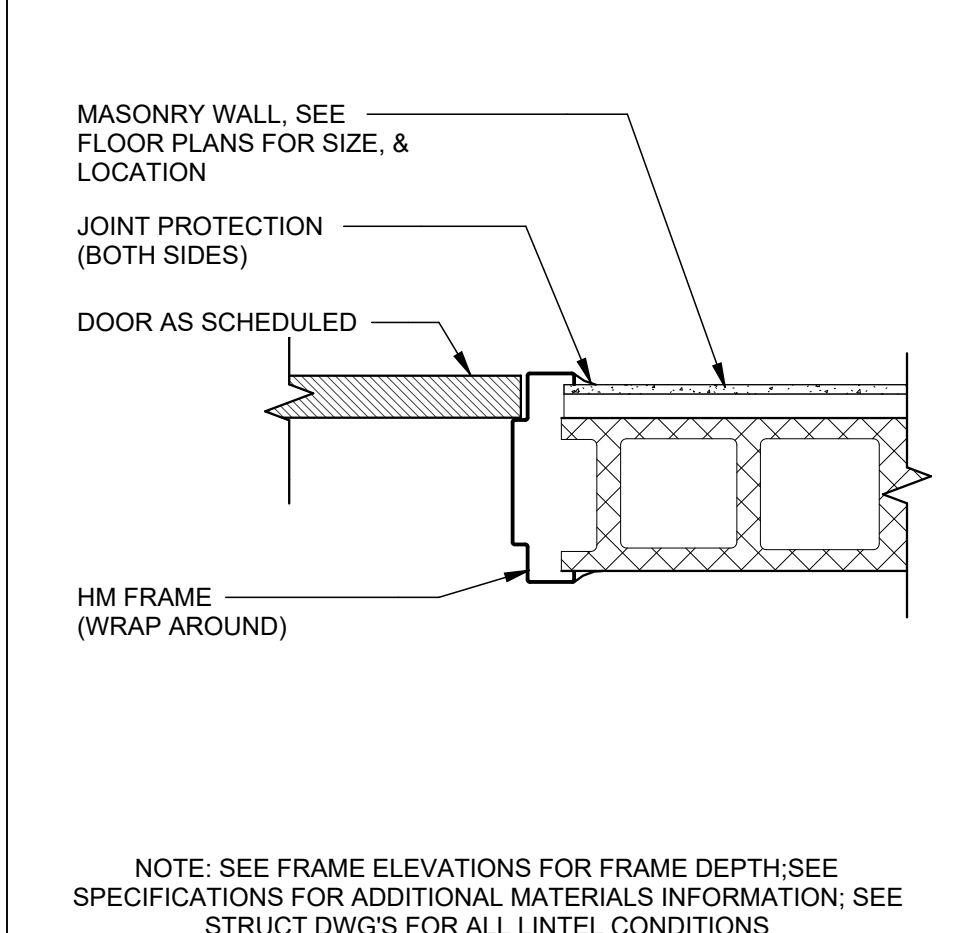
DH.20 CMU
HOLLOW METAL FRAME DOOR HEAD



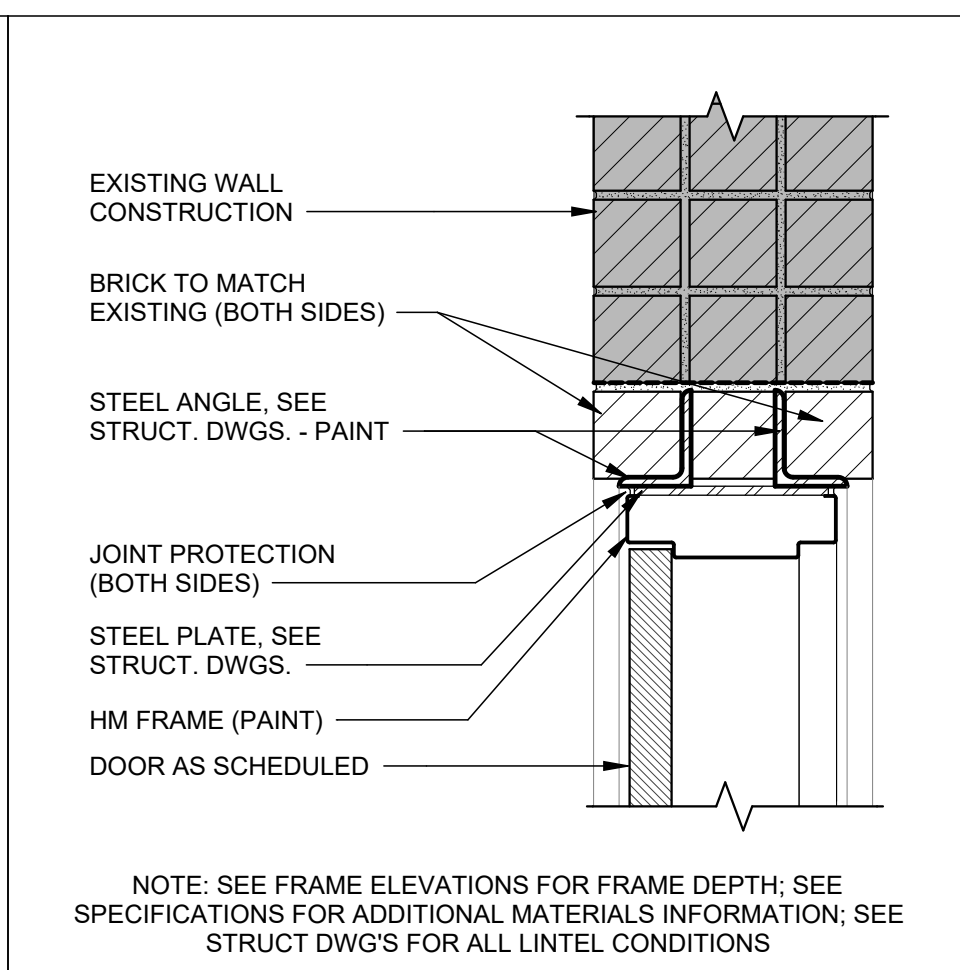
DJ.20 CMU
HOLLOW METAL FRAME DOOR JAMB



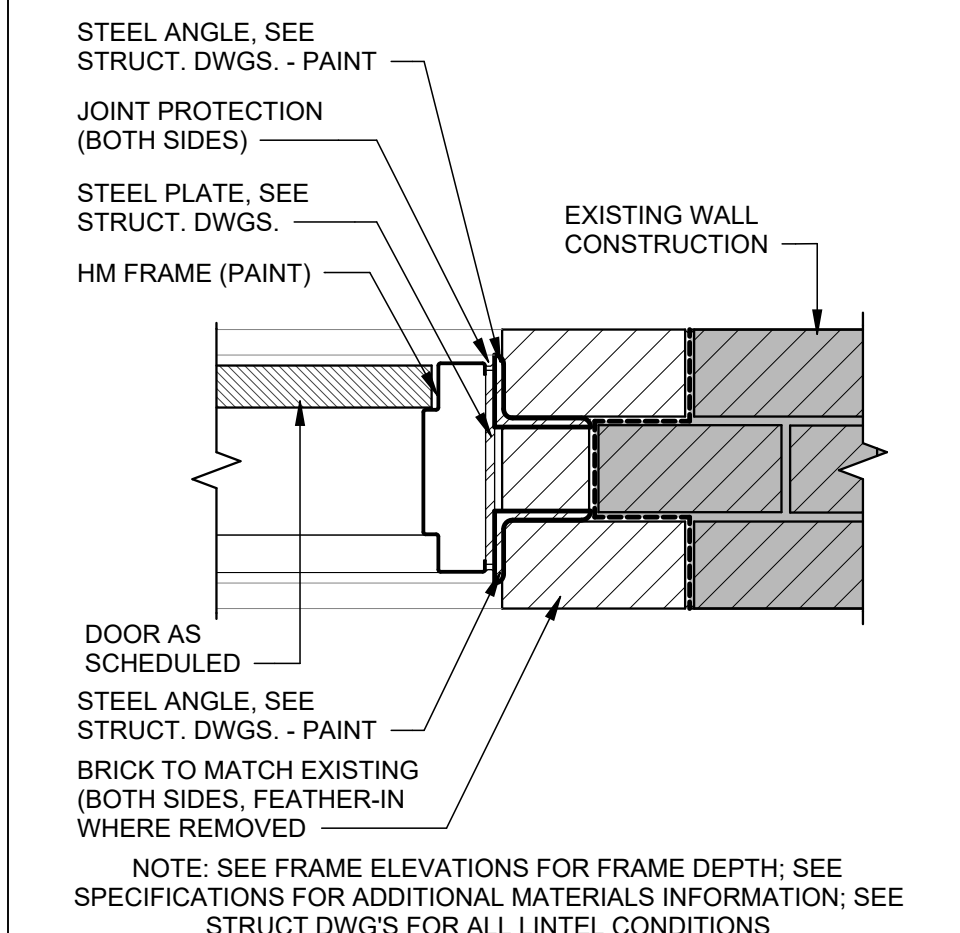
DH.20A CMU WITH FURRED WALL
HOLLOW METAL FRAME DOOR HEAD



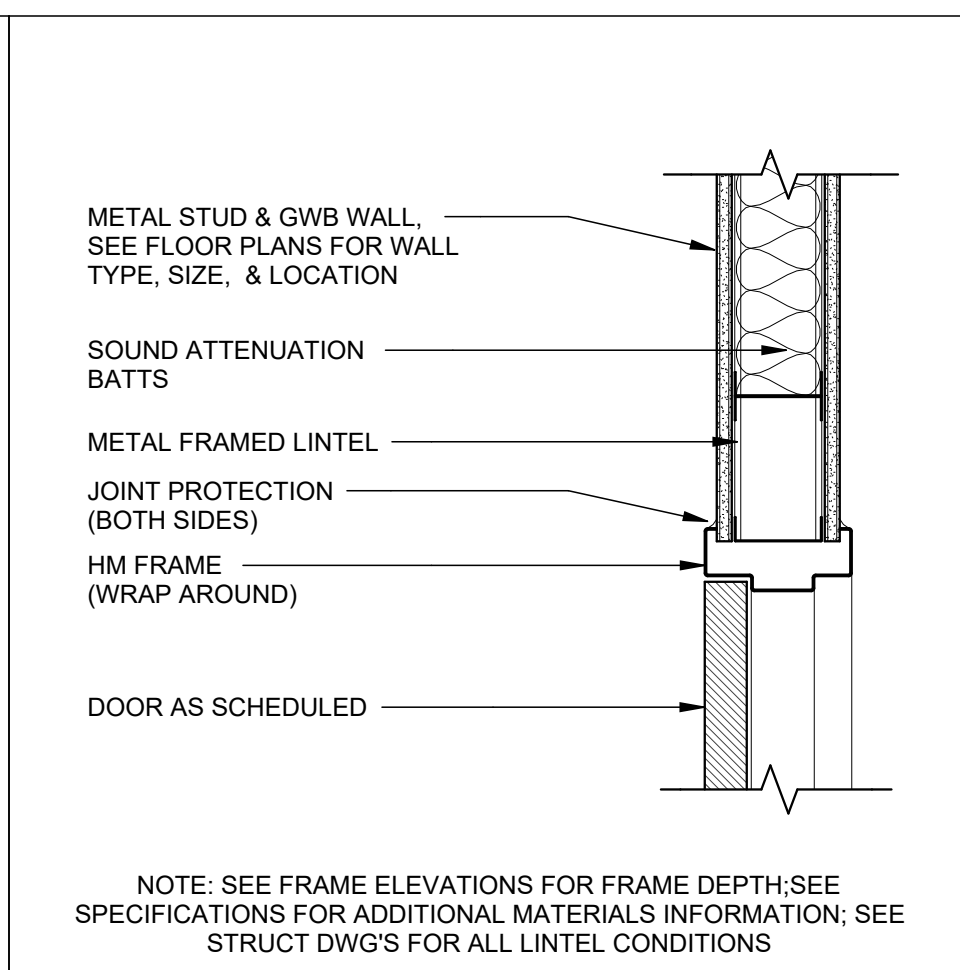
DJ.20A CMU WITH FURRED WALL
HOLLOW METAL FRAME DOOR JAMB



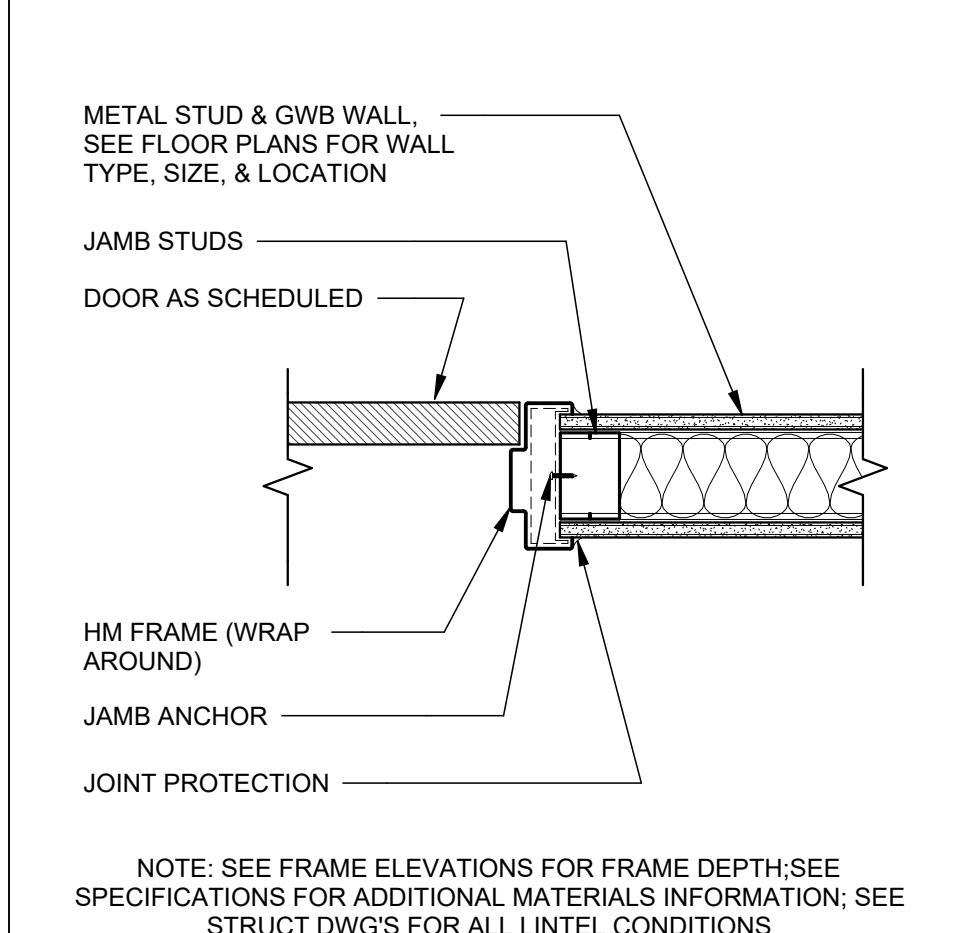
DH.24 EXISTING INTERIOR BRICK MASONRY WALL
HM FRAME DOOR HEAD



DJ.24 EXISTING INTERIOR BRICK MASONRY WALL
HM FRAME DOOR JAMB



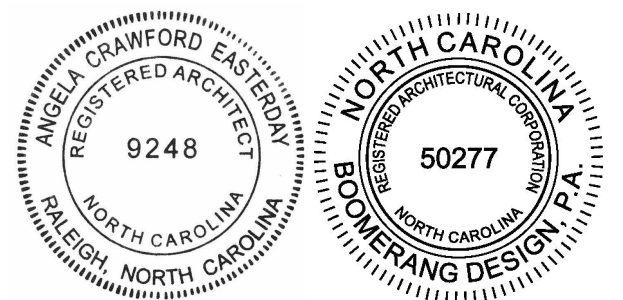
DH.25 METAL STUD WALL W/GWB
HOLLOW METAL FRAME DOOR HEAD



DJ.25 METAL STUD WALL W/GWB
HOLLOW METAL FRAME DOOR JAMB

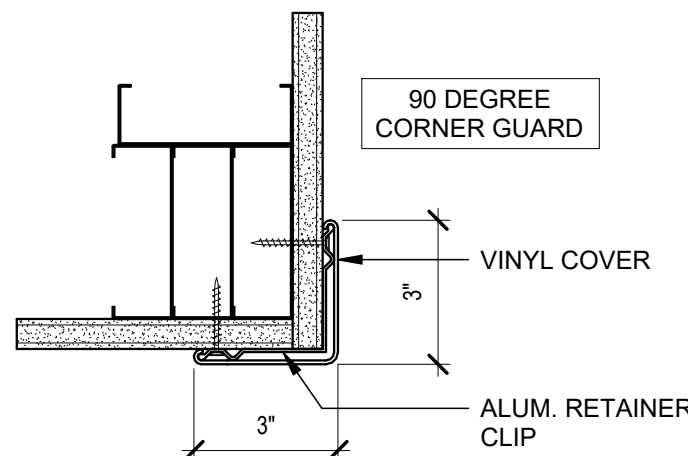
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SHELBY 201 S. Washington St., Suite 200 Shelby, NC 28150 704/460-6000	CHARLOTTE 1230 W. Morehead St., Suite 214 Charlotte, NC 28208 704/731-7000
RALEIGH 6131 Falls of Neuse Rd., Suite 204 Raleigh, NC 27609 919/775-6400	LEXINGTON 1070 S. Lake Dr., Suite J Lexington, NC 28753 904/756-0507



COOPER ACADEMY
A & R
PROJECT TITLE

"CLIENT'S PROJECT" # - XXX



NOTE:
BOTTOM OF CORNER GUARD TO BE MOUNTED AT
4" ABOVE TOP OF WALL BASE, TYP.

8 TYPICAL CORNER GUARD DETAIL
3" = 1'-0"

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NO.	DATE	DESCRIPTION
1	02/27/2024	ADDENDUM 2

BID SET
PROJECT PHASE

2307

BOOMERANG DESIGN PROJECT NUMBER

02.07.2024

DRAWING RELEASE DATE

INTERIOR MISC. &
THRESHOLD DETAILS

SHEET TITLE

A605

SHEET

<p>NOTE: MAXIMUM HEIGHT FOR ANY TRANSITION STRIP ABOVE ANY FINISHED FLOOR SHALL NOT EXCEED 1/2". SEE SPECIFICATIONS FOR ADDITIONAL MATERIALS INFORMATION</p>	T.05	THRESHOLD CONDITION RESILIENT ATHLETIC FLOORING TO FINISHED FLOORING	<p>NOTE: MAXIMUM HEIGHT FOR ANY TRANSITION STRIP ABOVE ANY FINISHED FLOOR SHALL NOT EXCEED 1/2". SEE SPECIFICATIONS FOR ADDITIONAL MATERIALS INFORMATION</p>	T.04	THRESHOLD CONDITION TILE FLOORING TO FINISHED FLOORING
<p>NOTE: MAXIMUM HEIGHT FOR ANY TRANSITION STRIP ABOVE ANY FINISHED FLOOR SHALL NOT EXCEED 1/2". SEE SPECIFICATIONS FOR ADDITIONAL MATERIALS INFORMATION</p>	T.03	THRESHOLD CONDITION PORCELAIN TILE TO INTERIOR FLOORING	<p>NOTE: MAXIMUM HEIGHT FOR ANY TRANSITION STRIP ABOVE ANY FINISHED FLOOR SHALL NOT EXCEED 1/2". SEE SPECIFICATIONS FOR ADDITIONAL MATERIALS INFORMATION</p>	T.07	THRESHOLD CONDITION CONCRETE TO INTERIOR FLOORING
<p>NOTE: MAXIMUM HEIGHT FOR ANY TRANSITION STRIP ABOVE ANY FINISHED FLOOR SHALL NOT EXCEED 1/2". SEE SPECIFICATIONS FOR ADDITIONAL MATERIALS INFORMATION</p>	T.01	THRESHOLD CONDITION EXTERIOR TO INTERIOR FLOORING	<p>NOTE: MAXIMUM HEIGHT FOR ANY TRANSITION STRIP ABOVE ANY FINISHED FLOOR SHALL NOT EXCEED 1/2". SEE SPECIFICATIONS FOR ADDITIONAL MATERIALS INFORMATION</p>	T.06	THRESHOLD CONDITION EXISTING FLOORING TO INTERIOR FLOORING