

WISCONSIN MILITARY ACADEMY
DEPARTMENT OF MILITARY AFFAIRS
FORT McCOY, WISCONSIN
DFD PROJECT NO. 22L2Q
MAY 15, 2025
BID DOCUMENTS

Sheet
Number

T001

REMOVALS:

1. COMPLETELY REMOVE ENTIRE ALUMINUM ASSEMBLIES INCLUDING BUT NOT LIMITED TO: FRAMES, DOORS, GLASS, ANCHORS, BRACKETS, SHEET METAL SILLS, HARDWARE ETC AS REQUIRED FOR CLEAN OPENING AND AS INDICATED IN DETAILS.
2. UNLESS NOTED OTHERWISE IT IS THE INTENT TO RETAIN AND RESTORE ALL INTERIOR FINISHES.
3. IT IS THE GENERAL CONTRACTOR'S RESPONSIBILITY TO SECURE AND MAKE WATER TIGHT ALL OPENINGS FOLLOWING WINDOW REMOVAL PRIOR TO DAYS END. SEE GENERAL REQUIREMENTS.
4. THE GENERAL CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS TO CONTAIN DUST AND PROTECT EXISTING SURFACES. SEE GENERAL REQUIREMENTS AND COMMON WORK RESULTS FOR EXISTING CONDITIONS.

INSTALLATION:

1. IT IS THE INTENT OF THE WORK TO LIMIT THE INSTALL OF NEW ROUGH CARPENTRY AND MAXIMIZE THE SIZE OF THE REPLACEMENT WINDOW UNITS.
2. THE CONTRACTOR SHALL ASSUME THAT REPLACEMENT UNITS ARE VARY IN SIZE AND EACH OPENING WILL REQUIRED VERIFICATION.
3. INSTALL WINDOW ASSEMBLY (INCLUDING HARDWARE) IN STRICT ACCORDANCE TO APPROVED SHOP DRAWINGS.
4. THE WORK INCLUDES APPLICATION OF SEALANTS BOTH INBOARD AND OUTBOARD.
5. SEE TYPICAL DETAILS ON SHEETS A500-501.
6. ALL DETAILS SHALL BE CONSIDERED A BASIS OF DESIGN AND APPLIED TO ASSUMED FIELD CONDITIONS WHICH WILL NEED TO BE VERIFIED BY THE CONTRACTOR IN THE FIELD. THESE VERIFICATIONS SHALL BE IMPLEMENTED INTO THE SHOP DRAWING SUBMITTALS FOR REVIEW AND APPROVAL BY THE ARCHITECT.

EXISTING FURNISHINGS AND EQUIPMENT

THE REMOVAL OF EXISTING FURNISHINGS AND EQUIPMENT WILL BE COMPLETED BY THE STATE.

International Building Code & IEBC 2021 with Wisconsin DSPS
360-365 modifications.

Project is a Level 2 Alteration includes embellishments to mechanical systems and fenestration replacement.

CHAPTER 3: USE and OCCUPANCY CLASSIFICATION

Existing Building is Mixed Use with A Assembly, R-1 Residential and B. Business.

CHAPTER 5: GENERAL BUILDING HEIGHT and AREA - EXISTING

Table 503: Type IIB protected, 3-Story above grade, 110,000 SF first floor area. 25,600 SF will be altered, less than 25% of the total building.

CHAPTER 6: TYPES OF CONSTRUCTION

Table 601: Type IIB noncombustible sprinklered

CHAPTER 7: FIRE AND SMOKE PROTECTION FEATURES

Penetration between at sleeping units and corridors require 30min fire rating and smoke protection.

CHAPTER 9: FIRE PROTECTION SYSTEMS

CHAPTER 9. FIRE PROTECTION SYSTEMS

Fire Protection systems not impacted work

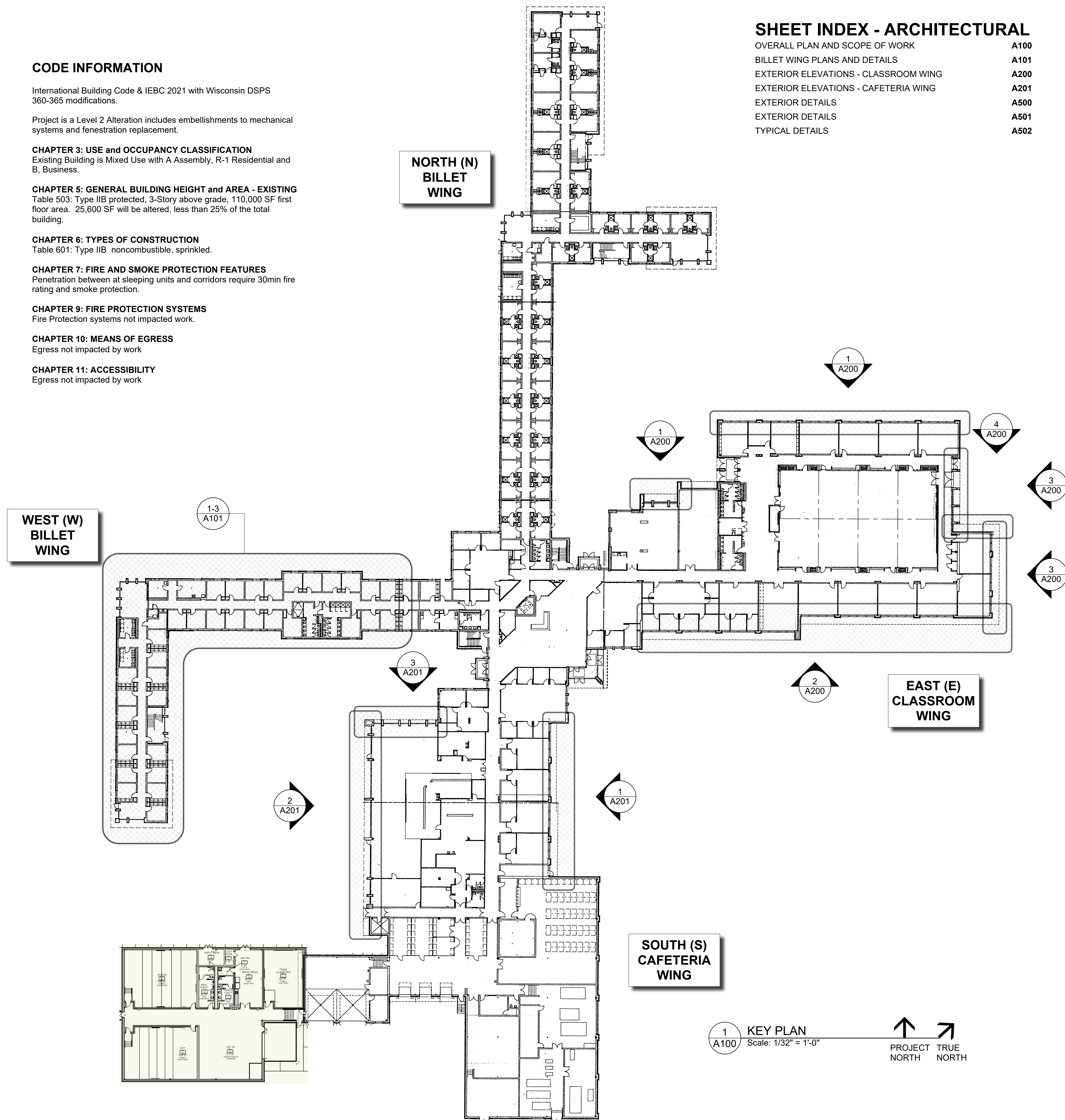
CHAPTER 10: MEANS OF EGRESS

CHAPTER 10. MEANS OF EGRESS

Egress not impacted by work

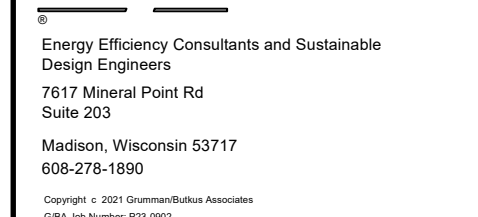
CHAPTER 11: ACCESSIBILITY

CHAPTER 11: ACCESSIBILITY



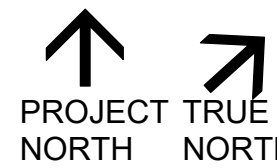
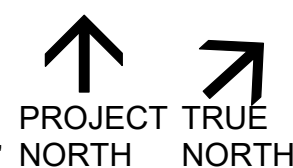
SHEET INDEX - ARCHITECTURAL

OVERALL PLAN AND SCOPE OF WORK	A100
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EXTERIOR ELEVATIONS - CLASSROOM WING	A200
EXTERIOR ELEVATIONS - CAFETERIA WING	A201
EXTERIOR DETAILS	A500
EXTERIOR DETAILS	A501
TYPICAL DETAILS	A502



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GENERAL NOTES:
REFER TO SHEET M201-M203 FOR LOUVER TAGGED LOCATIONS

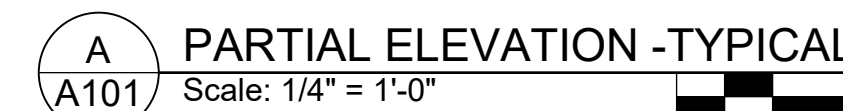
(A) WORK BY GENERAL CONTRACTOR
PROVIDE SUPPORTING GENERAL CONSTRUCTION FOR THE INSTALLATION AND
EXHAUST SYSTEM BY THE MECHANICAL CONTRACTOR AS FOLLOWS:

MECHANICAL EQUIPMENT AND DUCTWORK BY MECHANICAL
CONTRACTOR ON SHEETS M201-M203

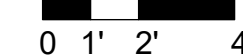
PROVIDE AND INSTALL ARCHITECTURAL LOUVER PER LOUVER SCHEDULE
SEE SHEET M201-M203 FOR LOUVER DESIGNATION.

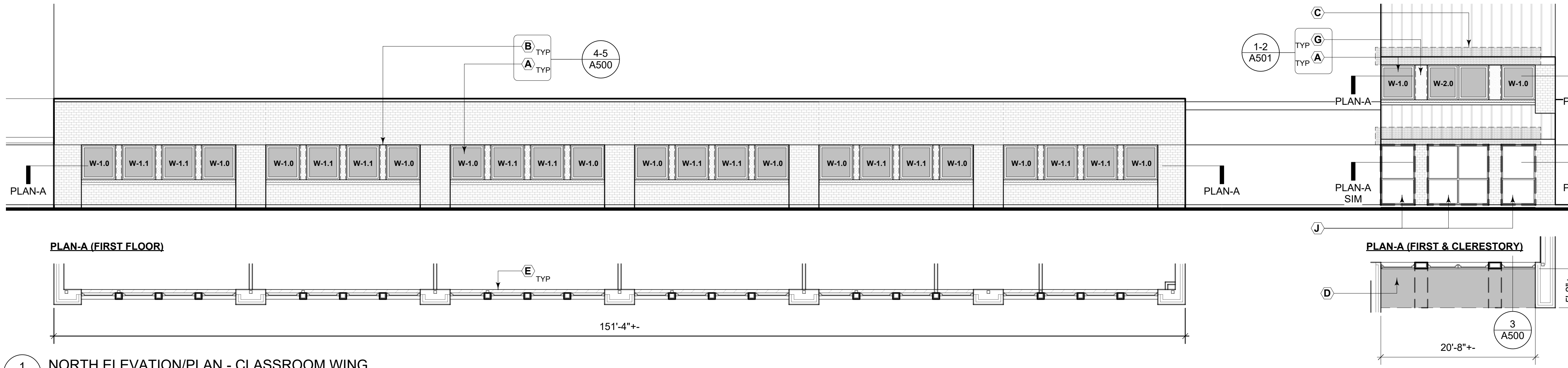
CONSTRUCT EQUIPMENT CONCEALLING SOFFIT PER DETAIL 3/A502
INSTALL ACCESS PANEL PROVIDED BY MECHANICAL CONTRACTOR.

B WORK BY MECHANICAL CONTRACTOR
CUT IN NEW OPENING FOR CIRCULAR DUCT WORK - SEE SHEETS M201-M203
PROVIDE 30MIN FIRE RATED AND SMOKE PROTECTED PENETRATIONS.
IT IS NOT THE INTENT TO PAINT EXISTING SURFACES. HOWEVER, DAMAGE
TO EXISTING SURFACES WILL REQUIRE RESTORATION. IF PAINTING IS
REQUIRED, IT SHALL BE COMPLETED EDGE TO EDGE, CORNER TO CORNER.
.1 - METAL STUD WALL WITH GYPSUM BOARD FINISHES
.2 - 8" CONCRETE MASONRY WALL

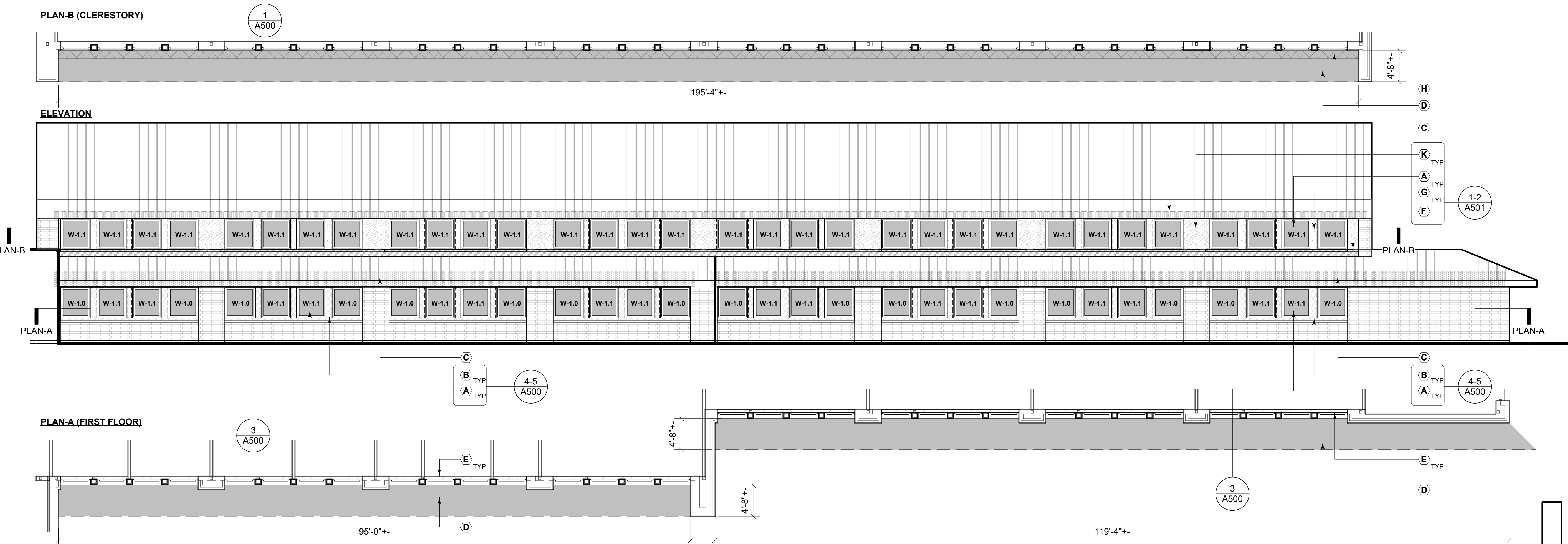


11 AS SHOWN
8 OPPOSITE

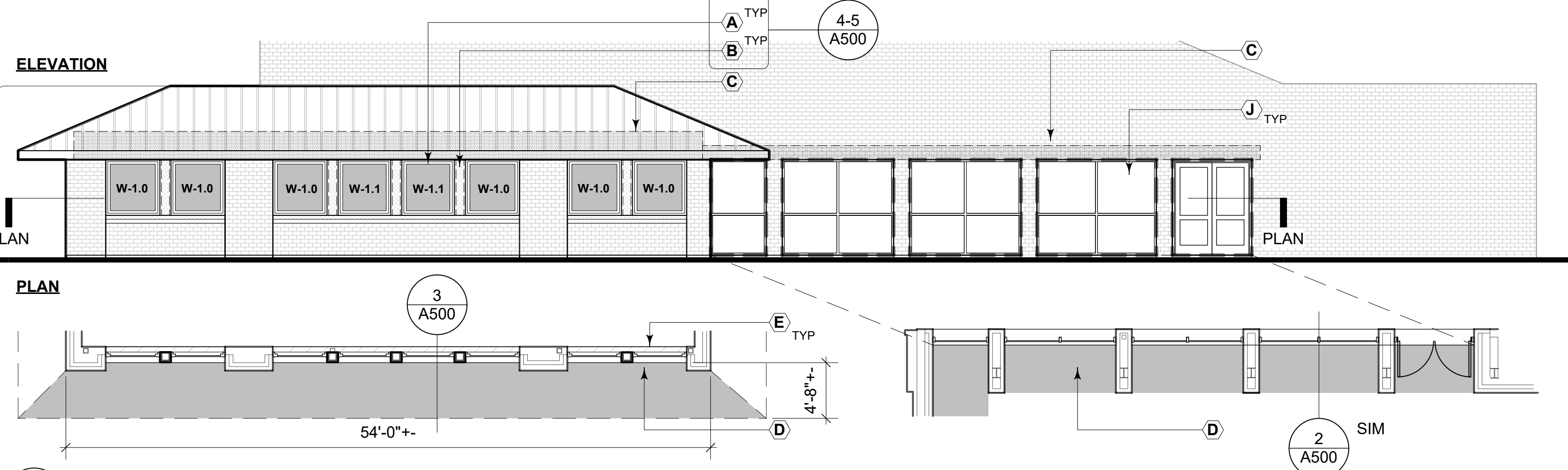




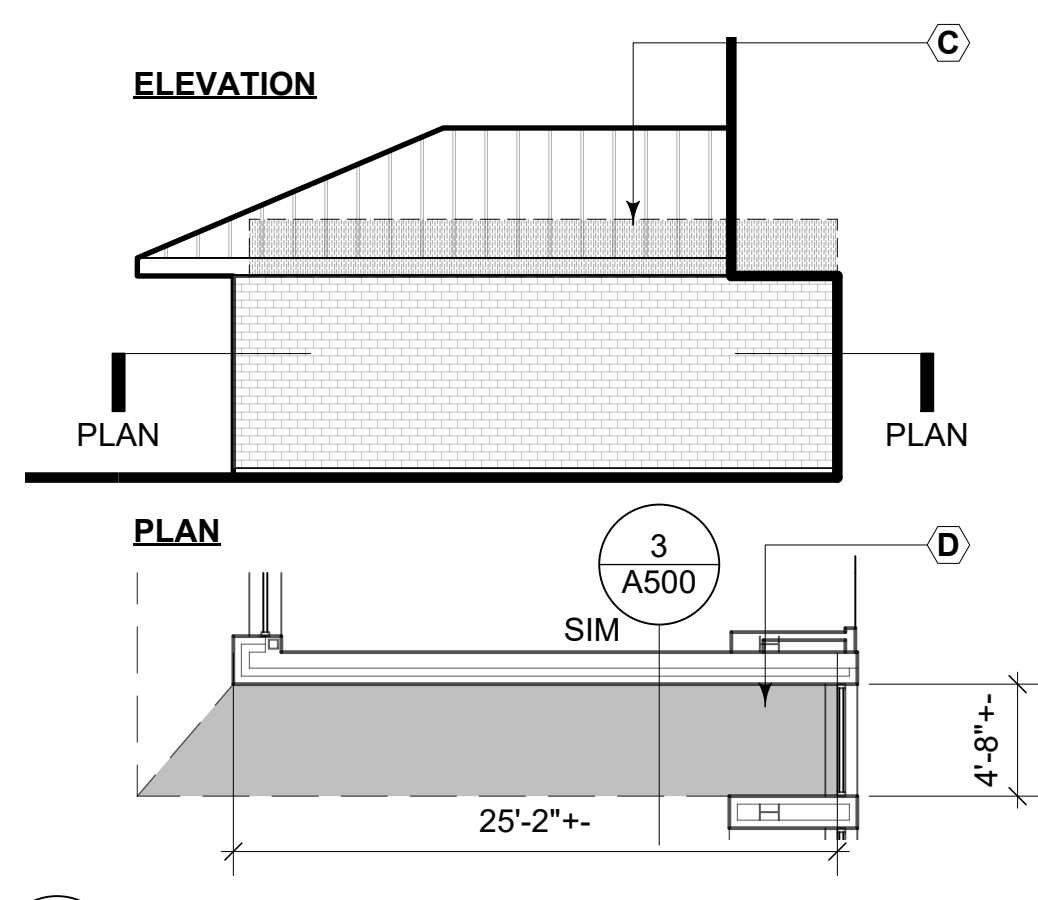
1 NORTH ELEVATION/PLAN - CLASSROOM WING
Scale: 1/8" = 1'-0"



2 SOUTH ELEVATION/PLAN - CLASSROOM WING
Scale: 1/8" = 1'-0"

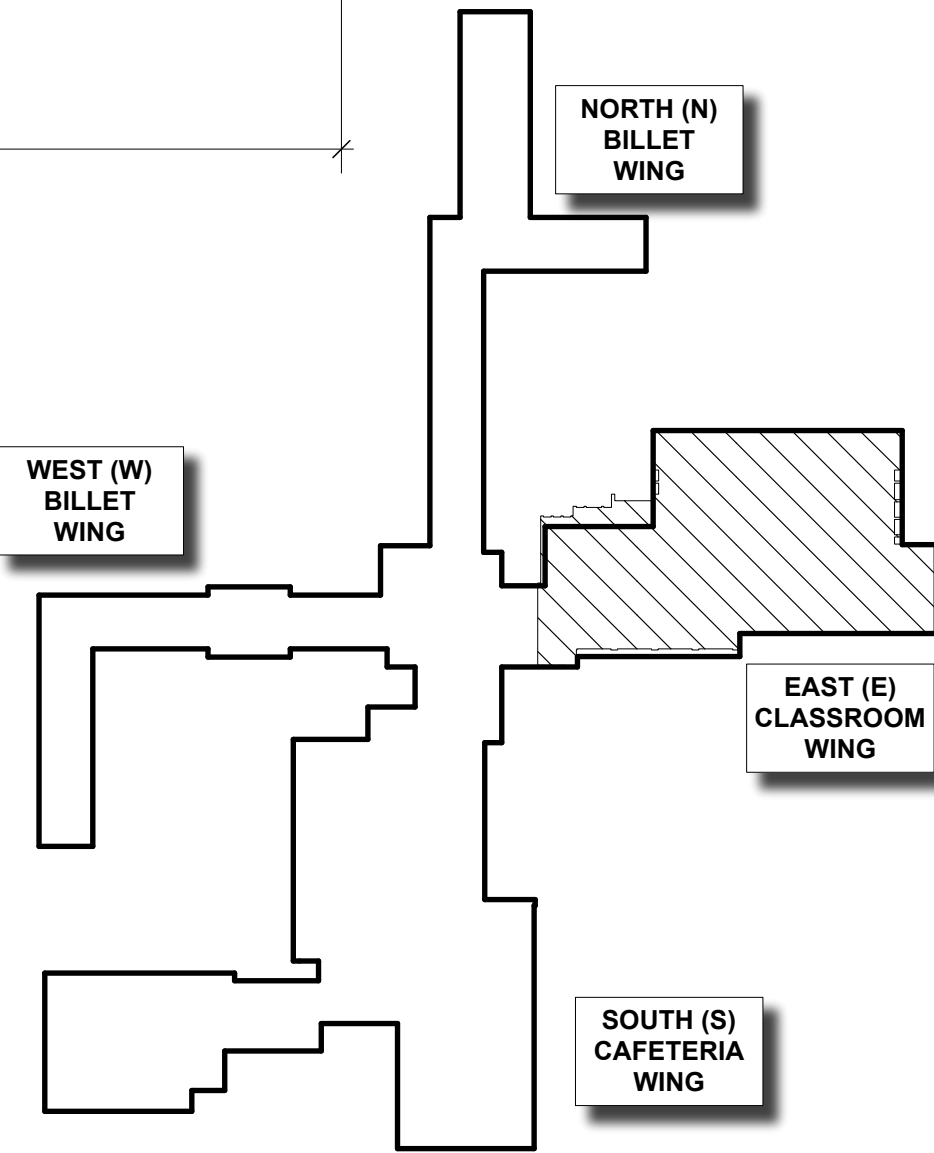


3 EAST ELEVATION/PLAN - CLASSROOM WING
Scale: 1/8" = 1'-0"



4 PARTIAL NORTH ELEVATION - CLASSROOM WING
Scale: 1/8" = 1'-0"

- ### WORK NOTES
- A REPLACE WINDOW SYSTEM - SEE #4/A201 FOR SIZE
 - B INSULATE AND REPLACE CLADDING WITH SHEET METAL
 - C INSULATE HEAD WALL - ENTIRE LEGNTH
 - D REPLACE SOFFIT
 - E REPLACE WINDOW SILL
 - F INSULATE WALL; REPLACE BASE FLASHING COUNTERFLASHING
 - G REPLACE METAL CLADDING WITH EIFS
 - H REPLACE EPDM MEMBRANE FLASHING, RECIEVER AND COUNTERFLASHING
 - J REPLACE STOREFRONT PERIMETER SEALANTS. FILL VOIDS WITH MINIMAL EXPANDING SPRAY FOAM.
 - K REPLACE EIFS CLADDING SYSTEM INCLUDING WEATHER BARRIER



KEY PLAN
Scale: NOT TO SCALE

GRUMMAN
BUTKUS
ASSOCIATES

Energy Efficiency Consultants and Sustainable
Design Engineers
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Suite 203
Madison, Wisconsin 53717
608-278-1890
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Kontext
architects

building relationships
603 W. Main St. Sun Prairie, WI

State of Wisconsin
Department of Administration
Division of Facilities Development

S 10th Avenue (Bldg 90)
Fort McCoy, WI 54656-5168

VARIOUS ENERGY UPGRADES
WISCONSIN MILITARY ACADEMY
DEPARTMENT OF MILITARY AFFAIRS
FORT MCCOY, WISCONSIN

Sheet Title:
EXTERIOR ELEVATIONS - CLASSROOM WING

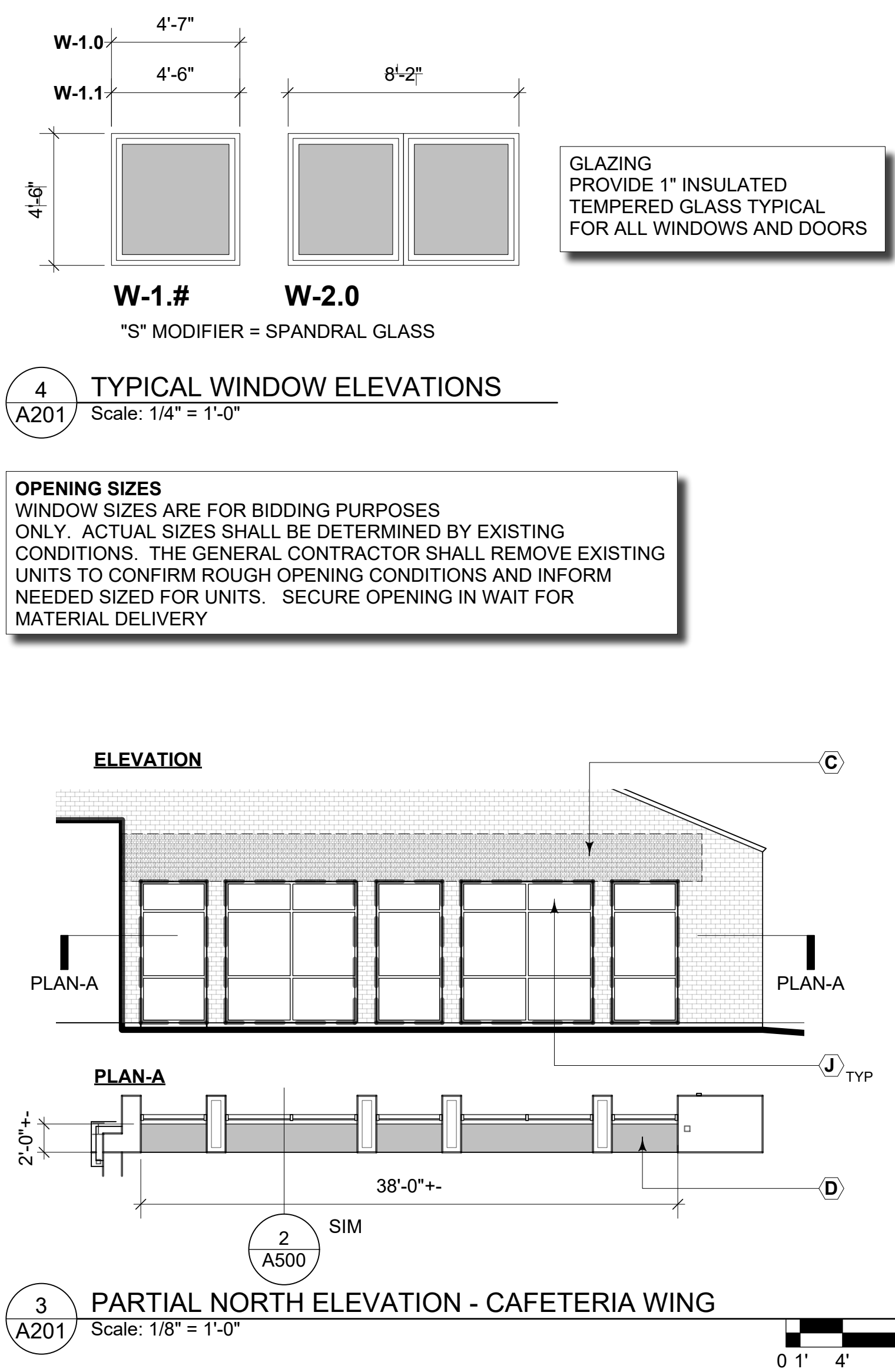
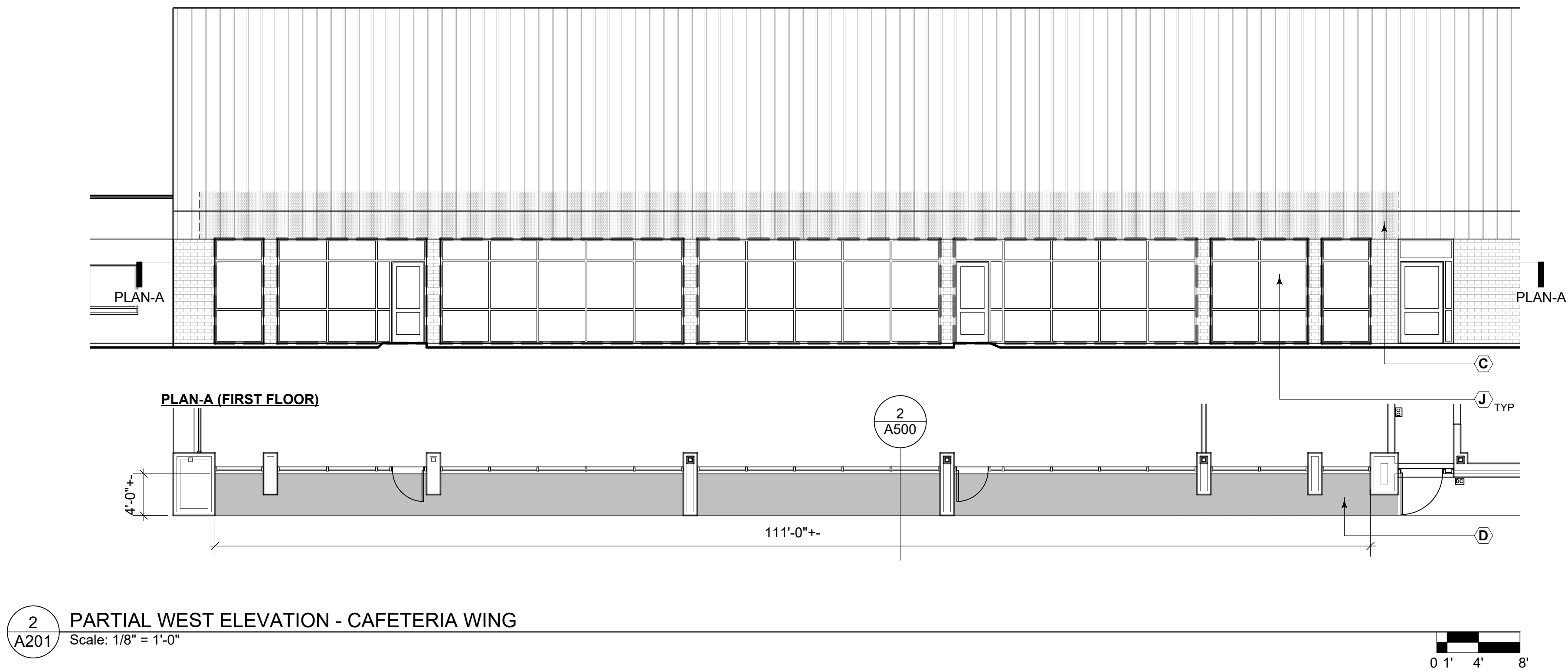
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No.	Date:	Description:
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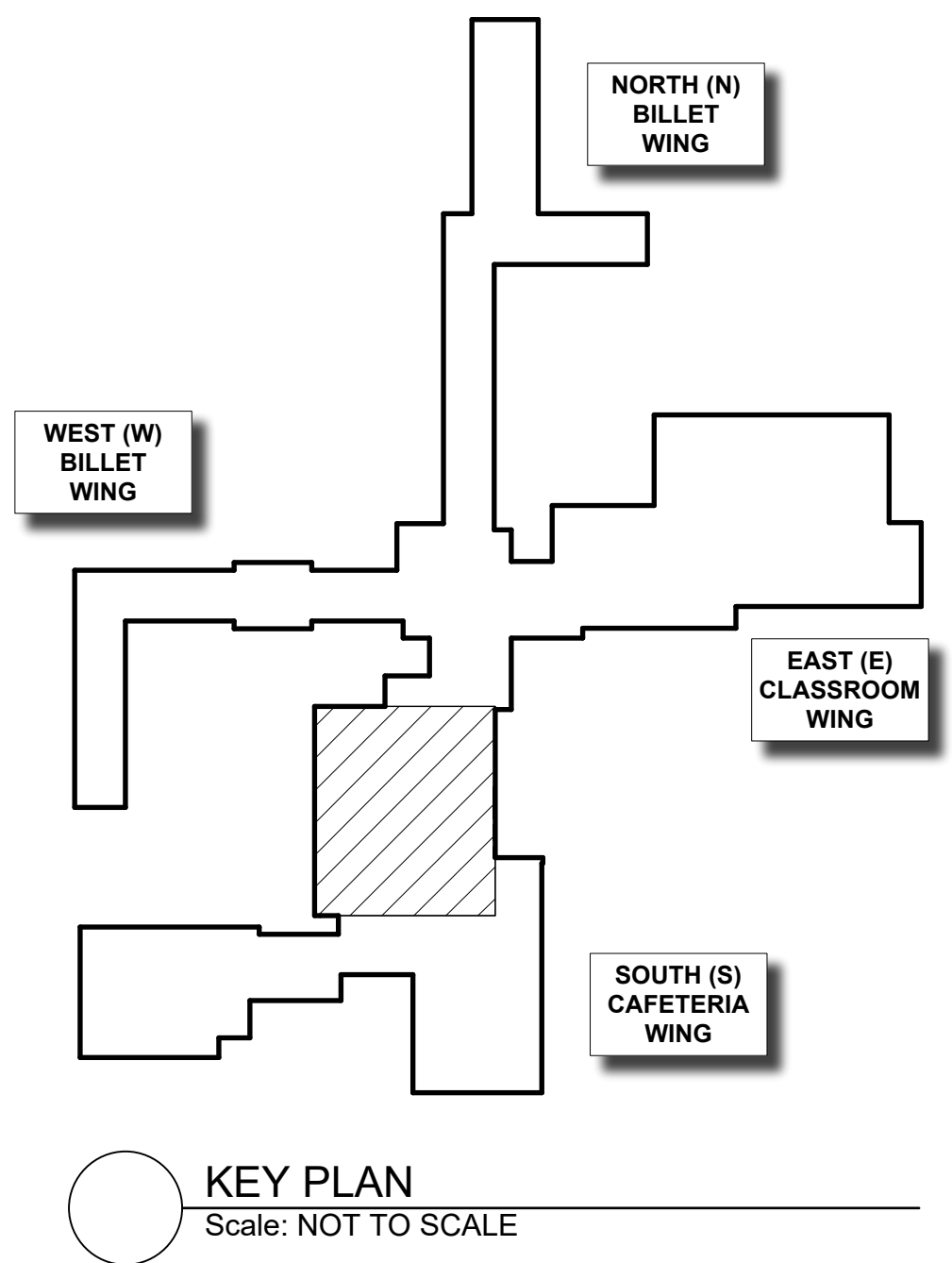
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2" 8" 16" 24"

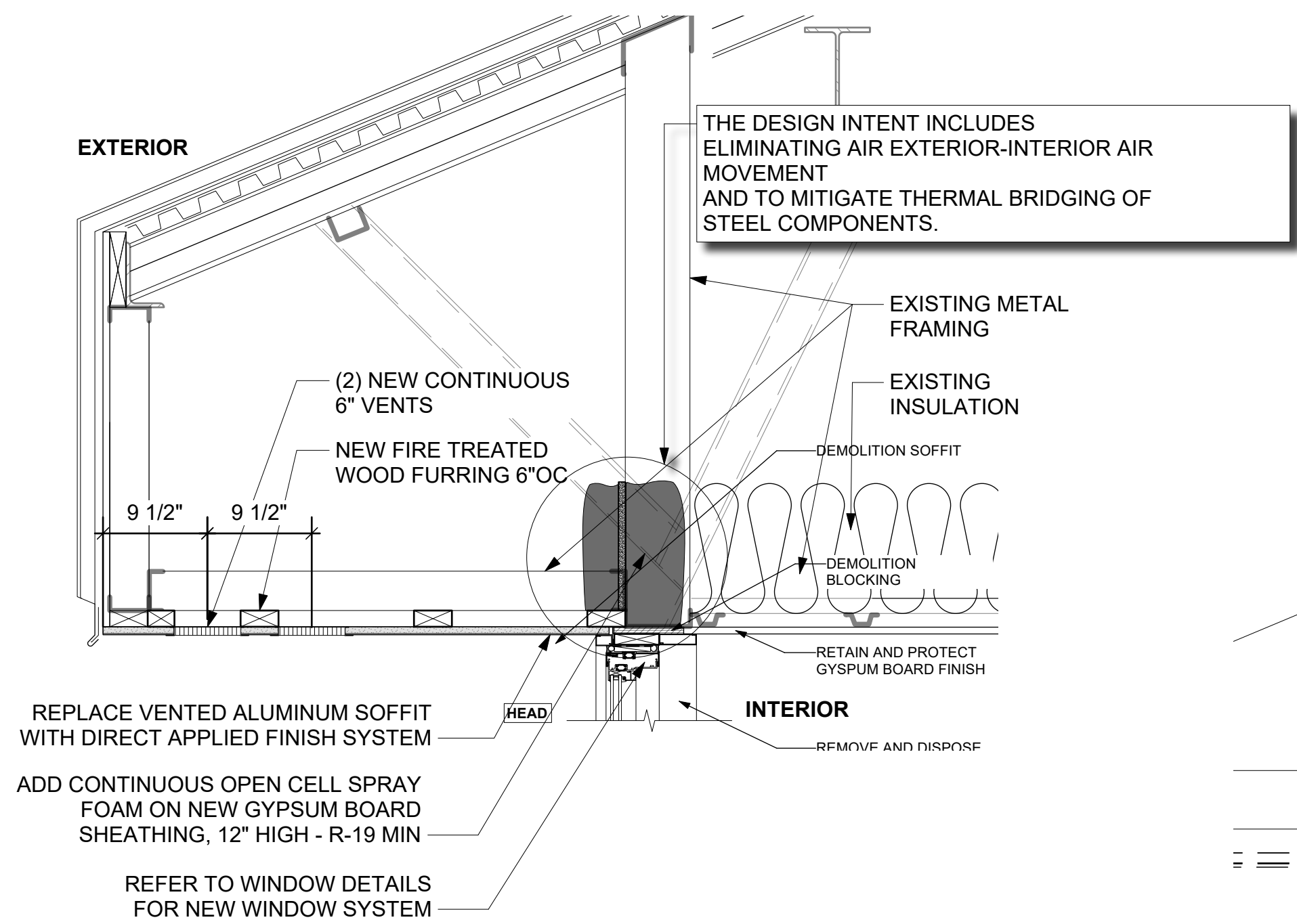
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Set Type: BD
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Sheet Number: A200

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Set Type			BD		
Date Issued			05/15/2025		
Sheet Number			A201		

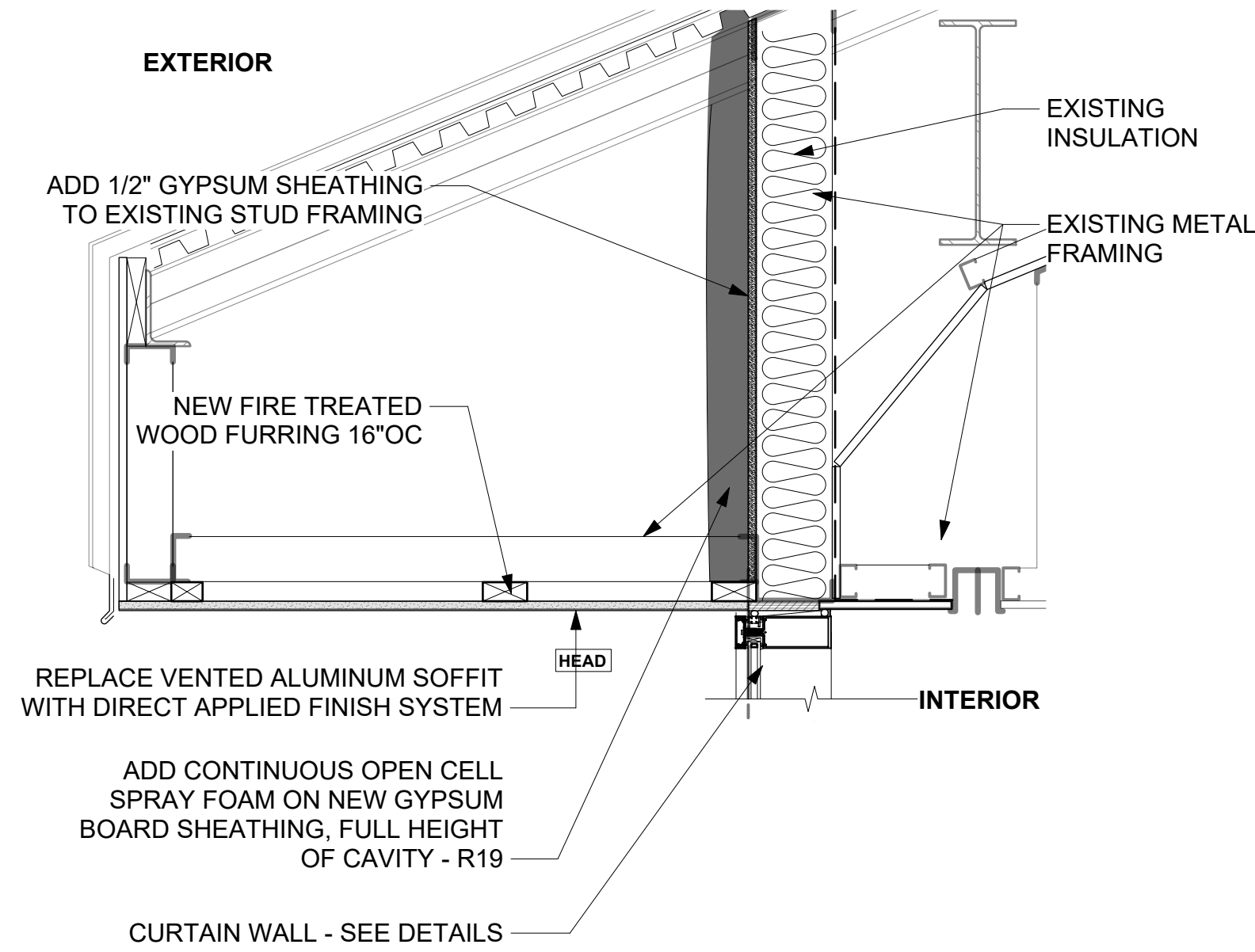


- ☐ A REPLACE WINDOW SYSTEM - SEE #4/A201 FOR SIZE
- ☐ B INSULATE AND REPLACE CLADDING WITH SHEET METAL
- ☐ C INSULATE HEAD WALL - ENTIRE LENGTH
- ☐ D REPLACE SOFFIT
- ☐ E REPLACE WINDOW SILL
- ☐ F INSULATE WALL; REPLACE BASE FLASHING COUNTERFLASHING
- ☐ G REPLACE METAL CLADDING WITH EIFS
- ☐ H REPLACE EPDM MEMBRANE FLASHING, RECEIVER AND COUNTERFLASHING
- ☐ J REPLACE STOREFRONT PERIMETER SEALANTS. FILL VOIDS WITH MINIMAL EXPANDING SPRAY FOAM.
- ☐ K REPLACE EIFS CLADDING SYSTEM INCLUDING WEATHER BARRIER

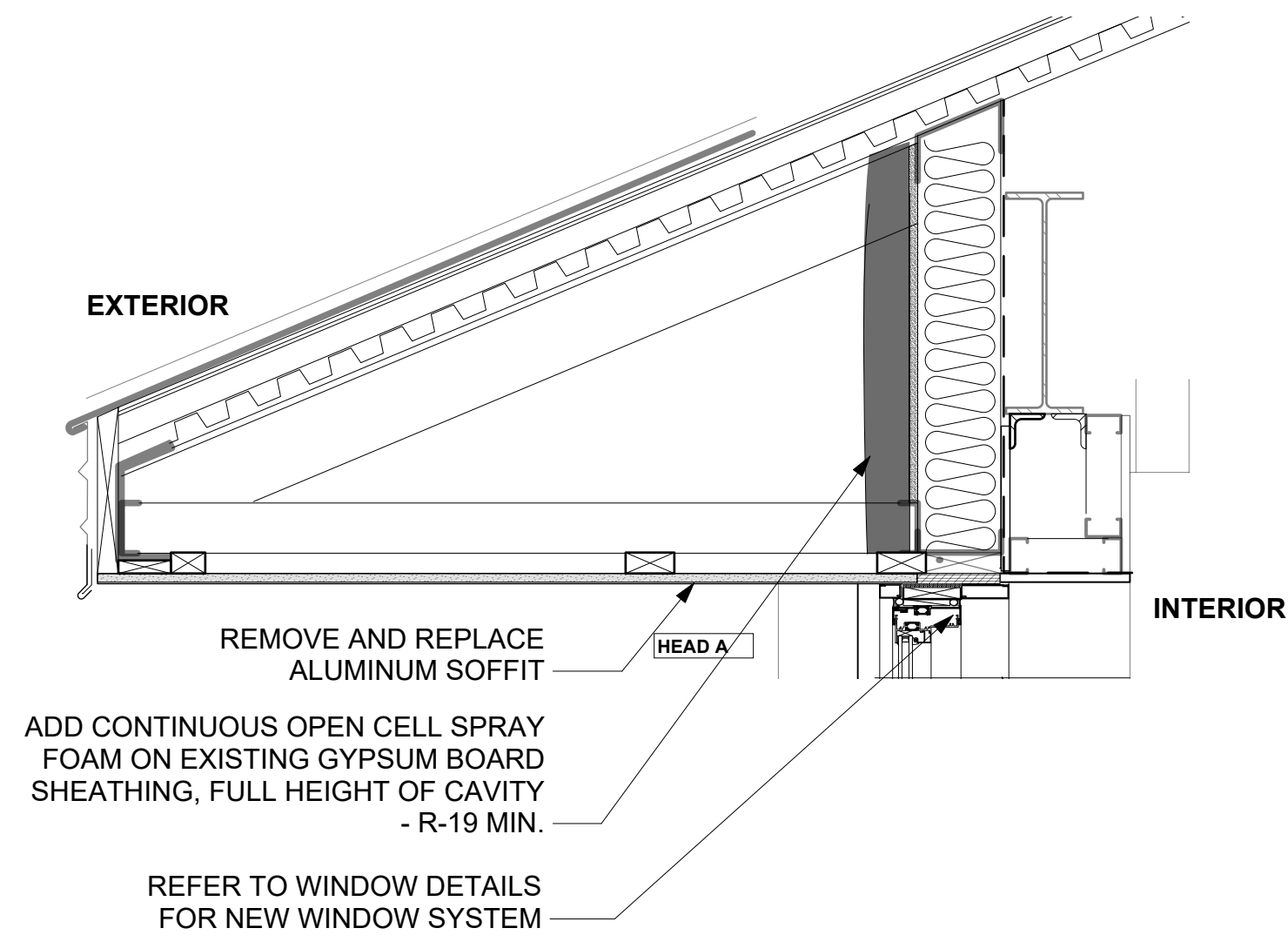




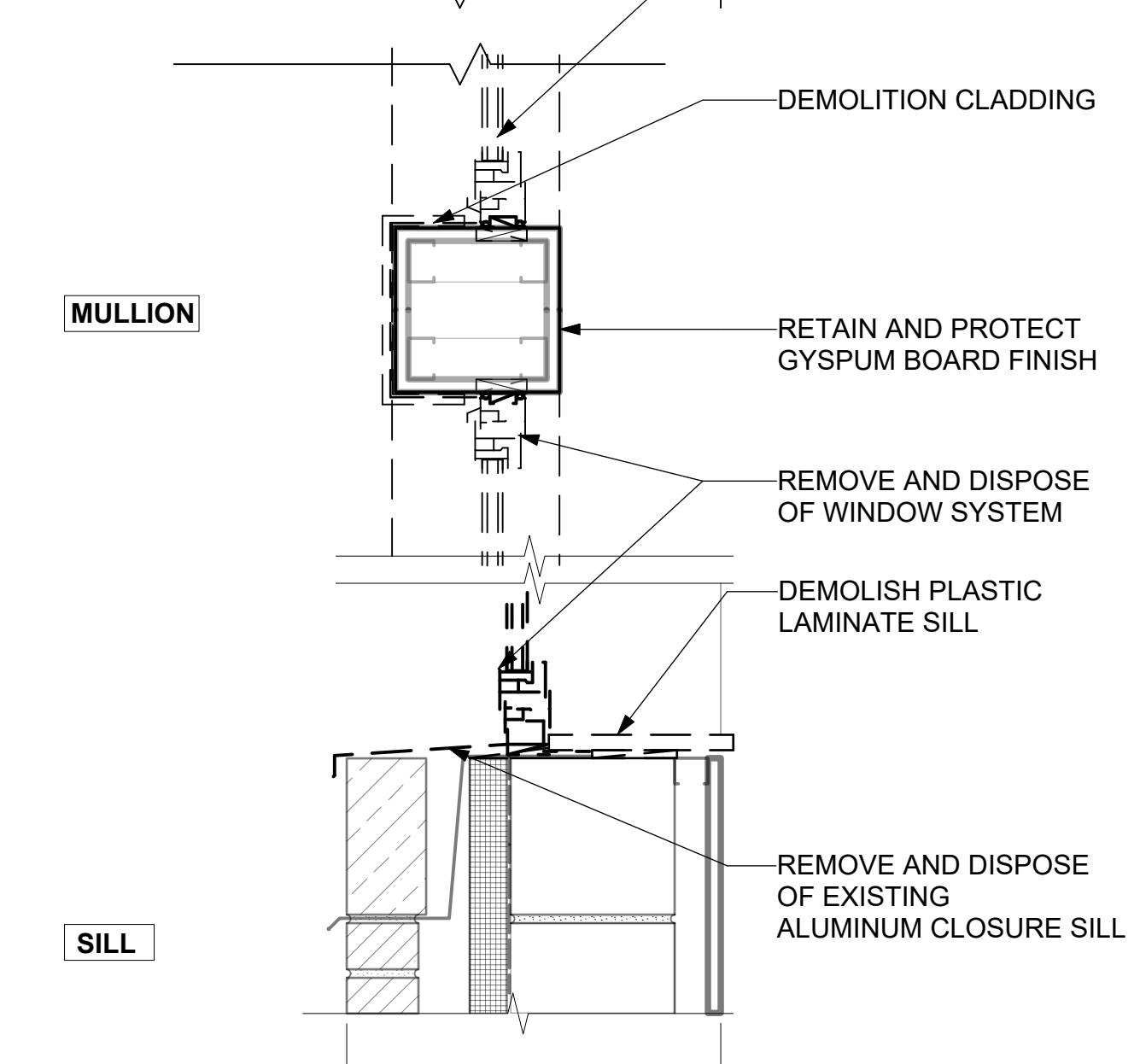
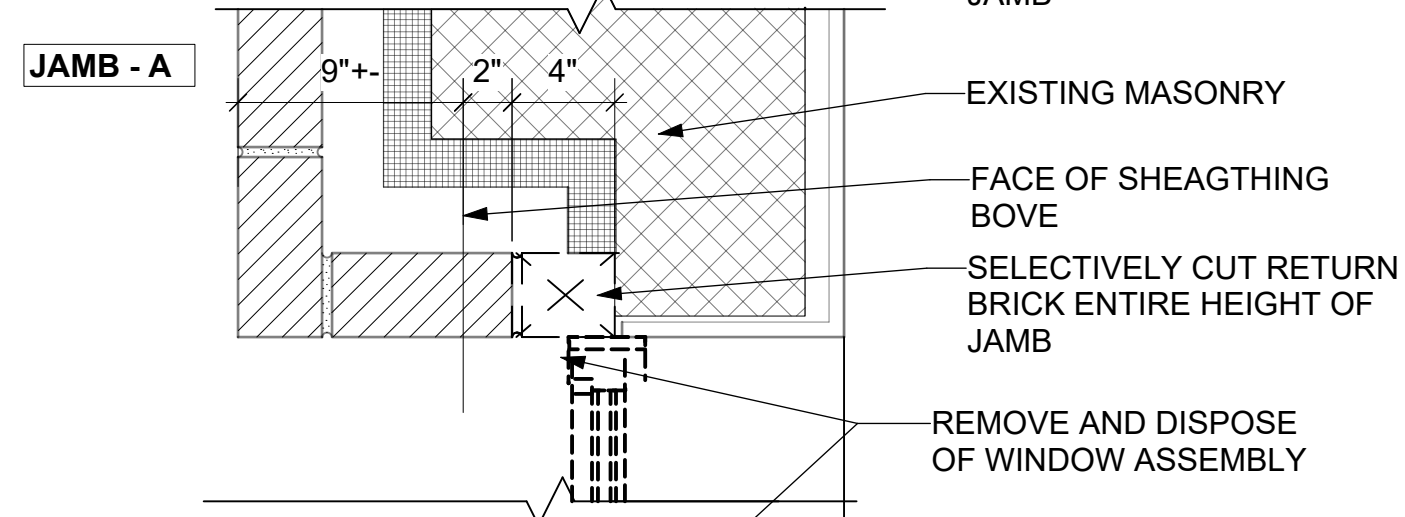
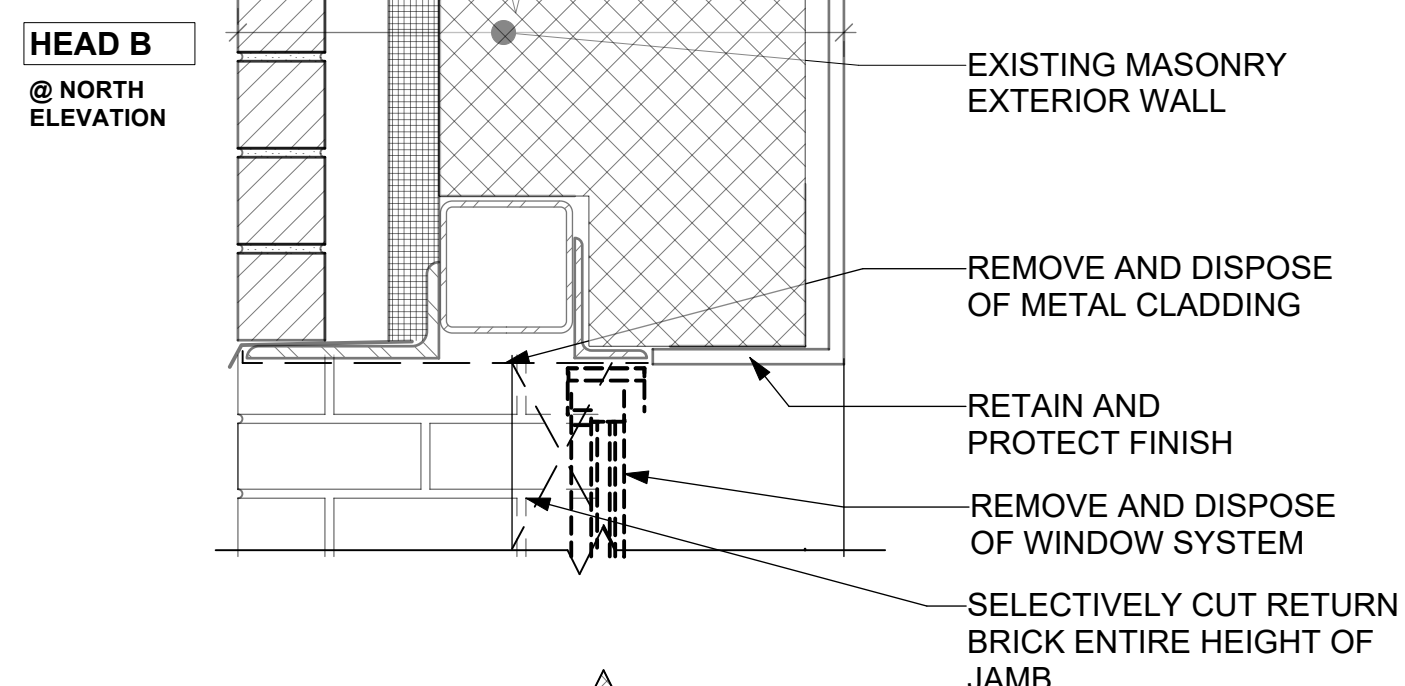
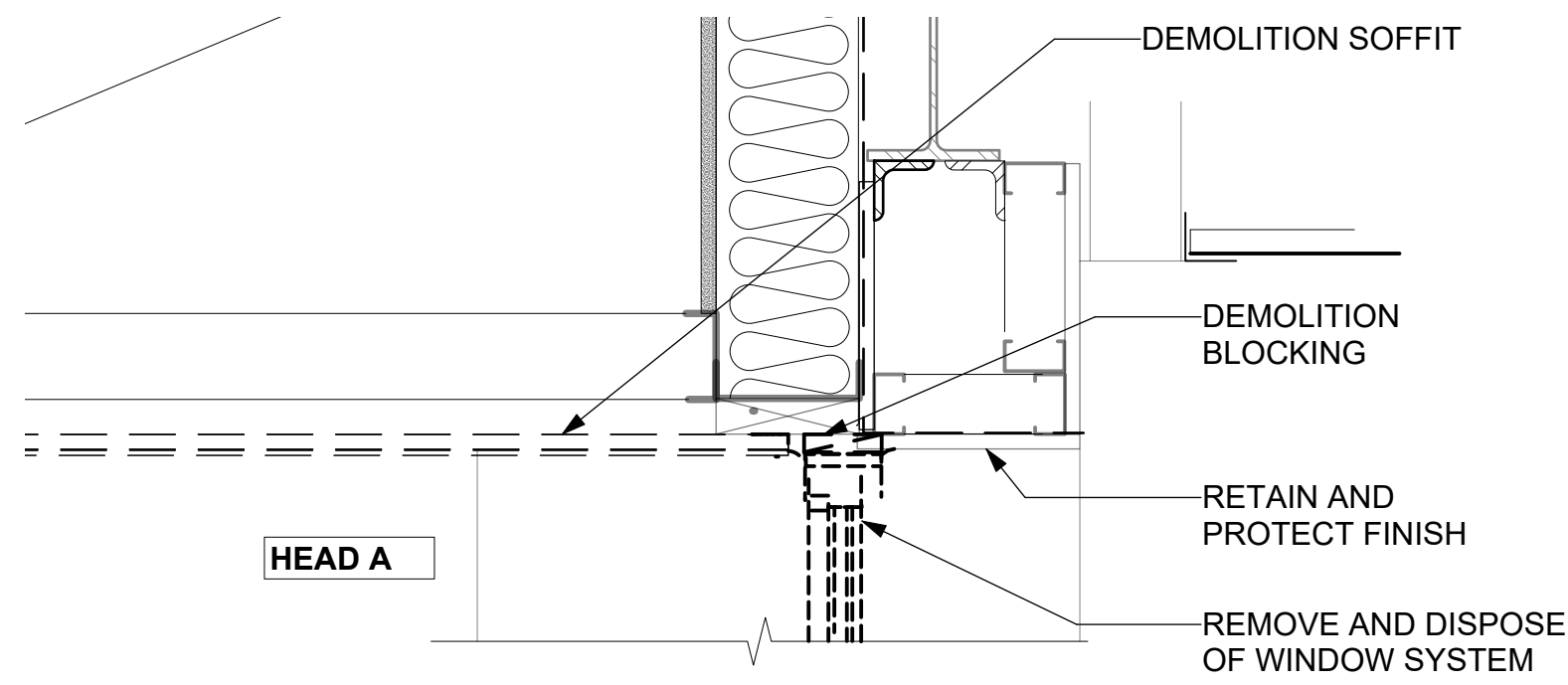
1 TYPICAL CLERESTORY SOFFIT - VENTED CAVITY
A500 Scale: 1" = 1'-0"



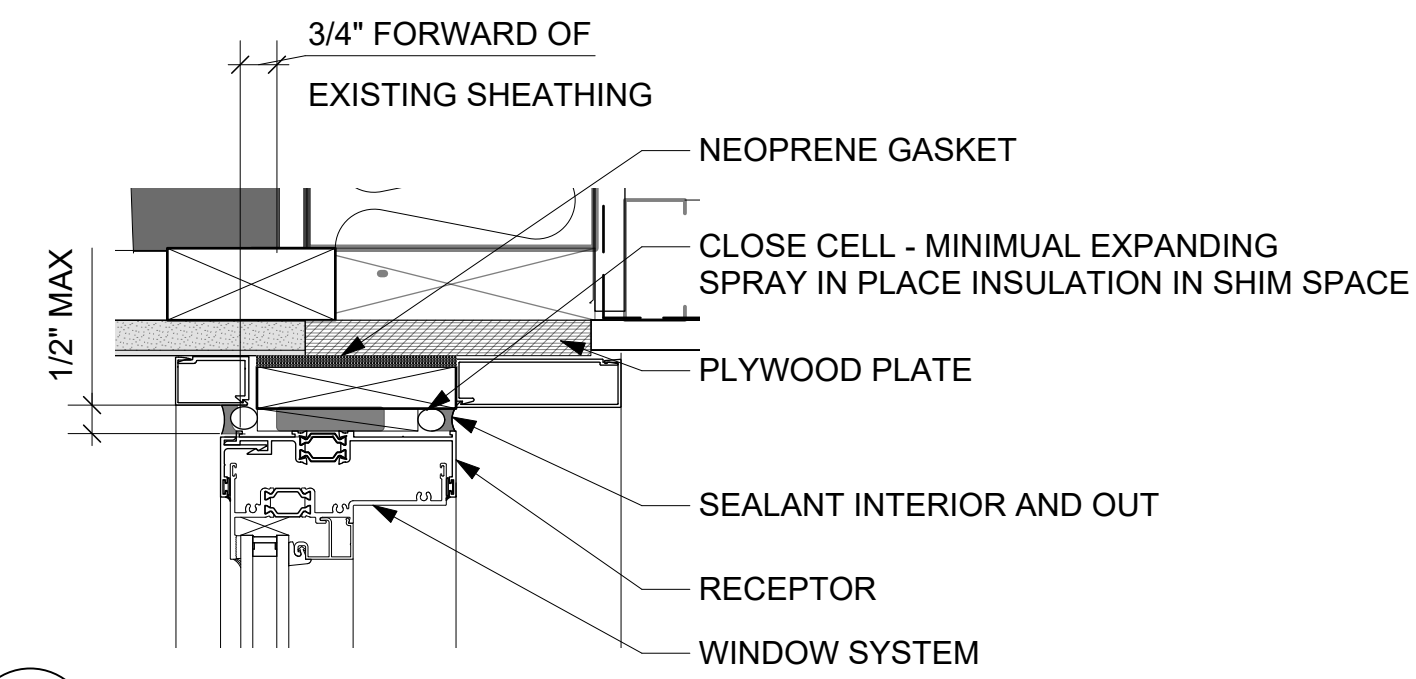
2 TYPICAL CAFETERIA SOFFIT - CLOSED CAVITY
A500 Scale: 1" = 1'-0"



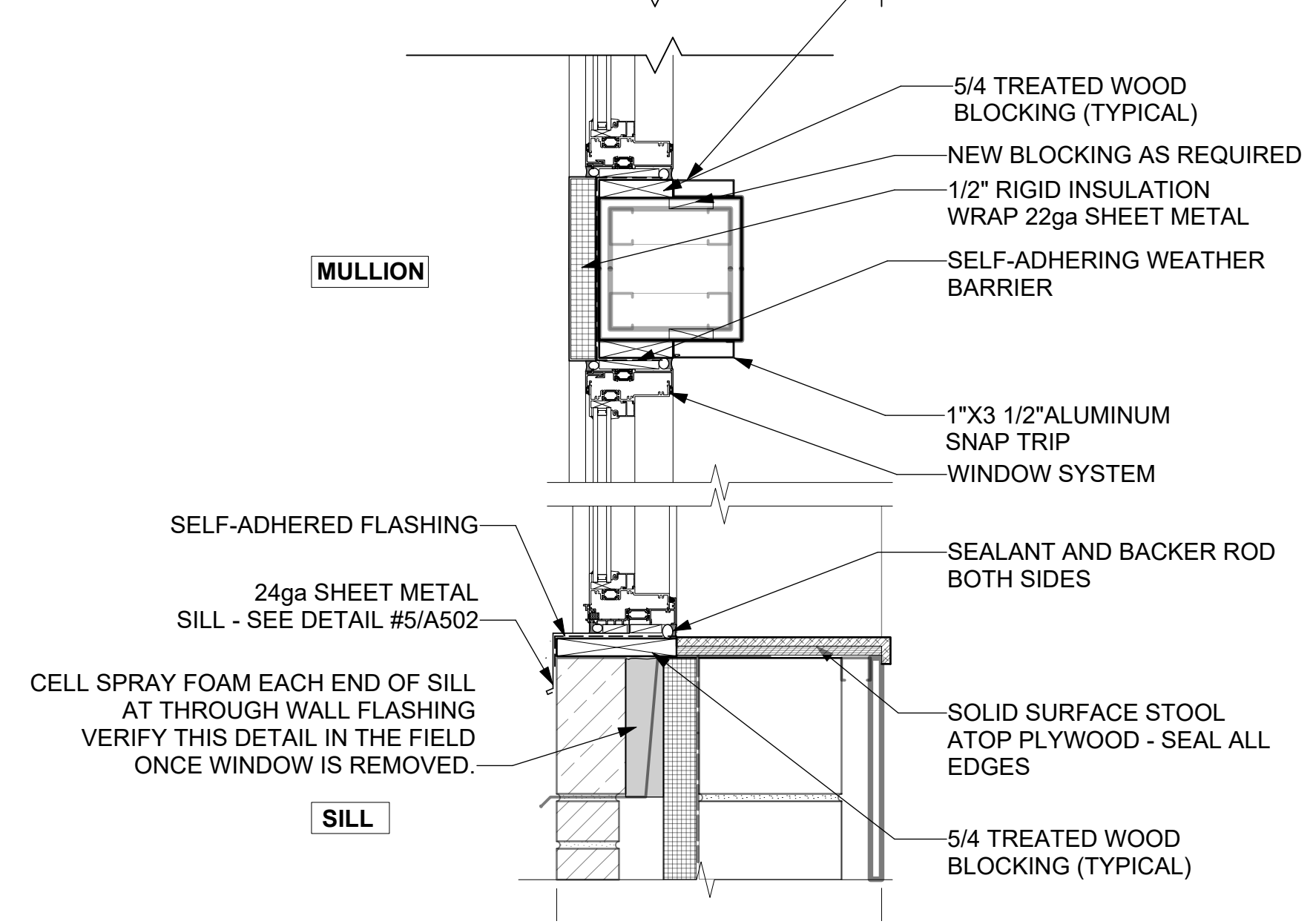
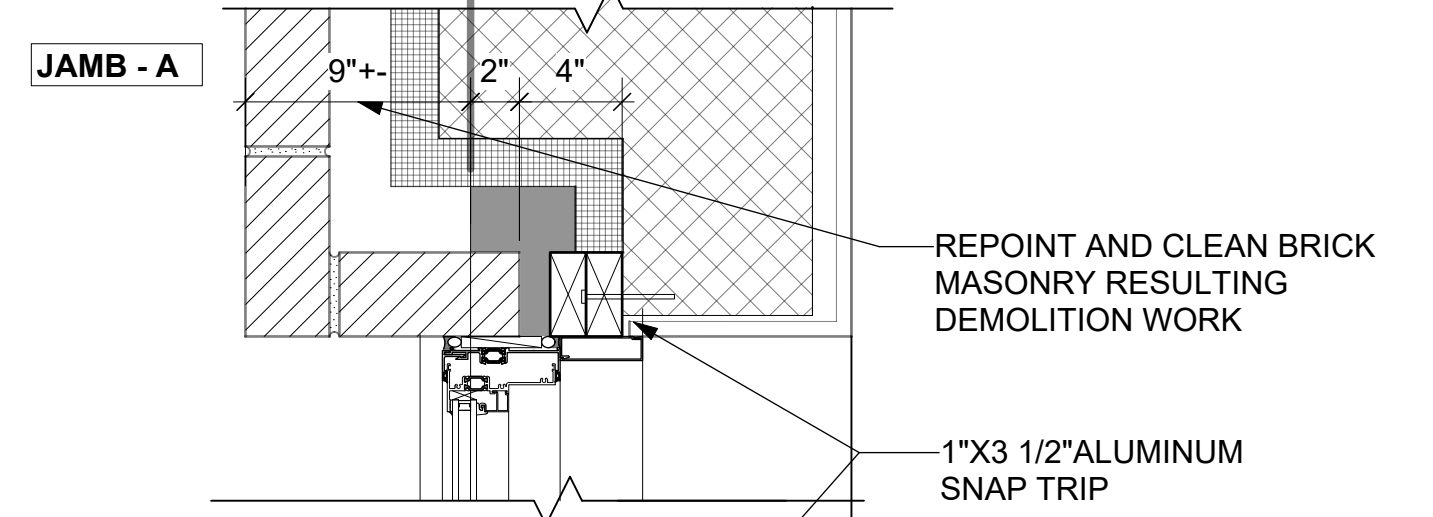
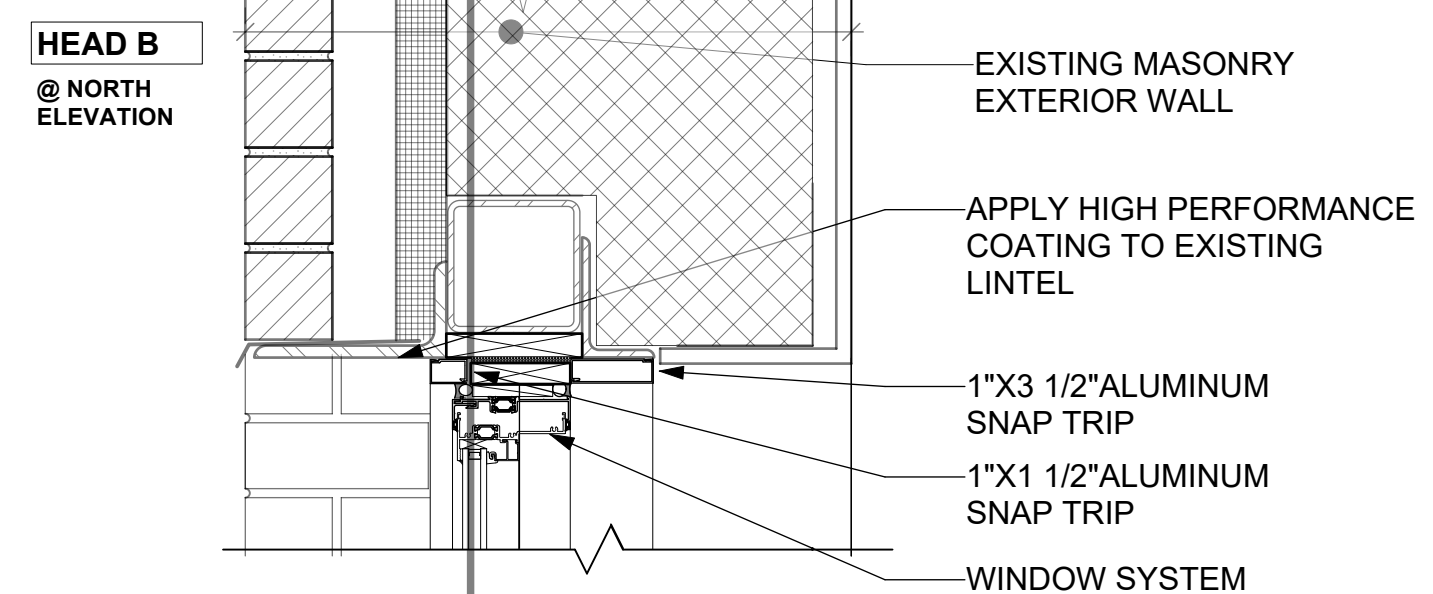
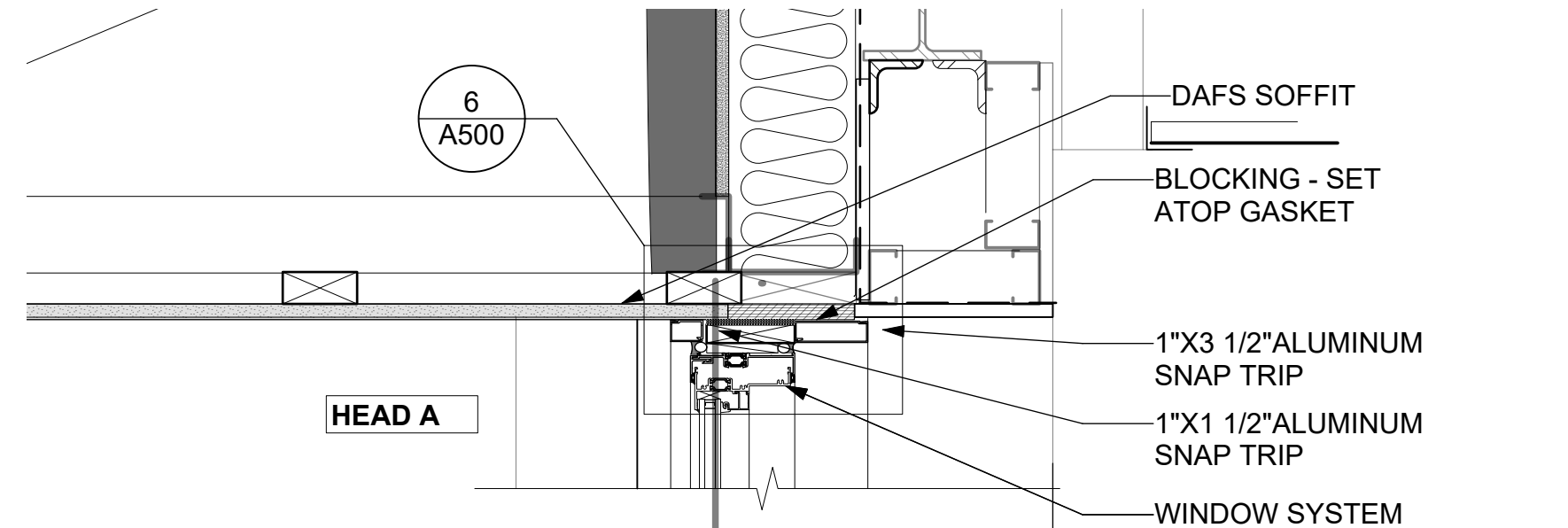
3 TYPICAL CLASS ROOM SOFFIT - CLOSED CAVITY
A500 Scale: 1" = 1'-0"



4 TYPICAL CLASS ROOM WINDOW - DEMOLITION
A500 Scale: 1 1/2" = 1'-0"



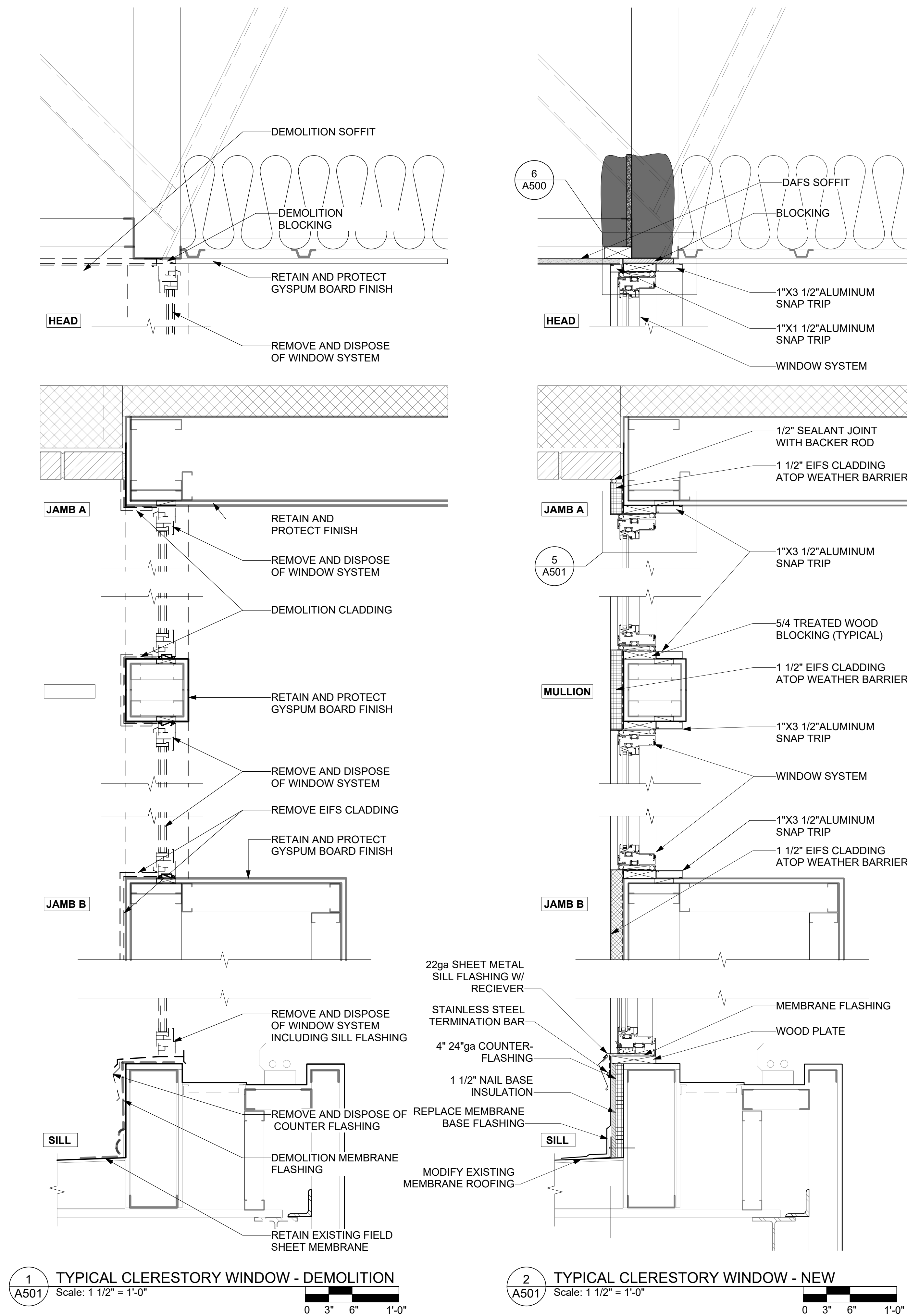
6 TYPICAL WINDOW DETAIL
A500 Scale: 3" = 1'-0"



5 TYPICAL CLASS ROOM WINDOW - NEW
A500 Scale: 1 1/2" = 1'-0"

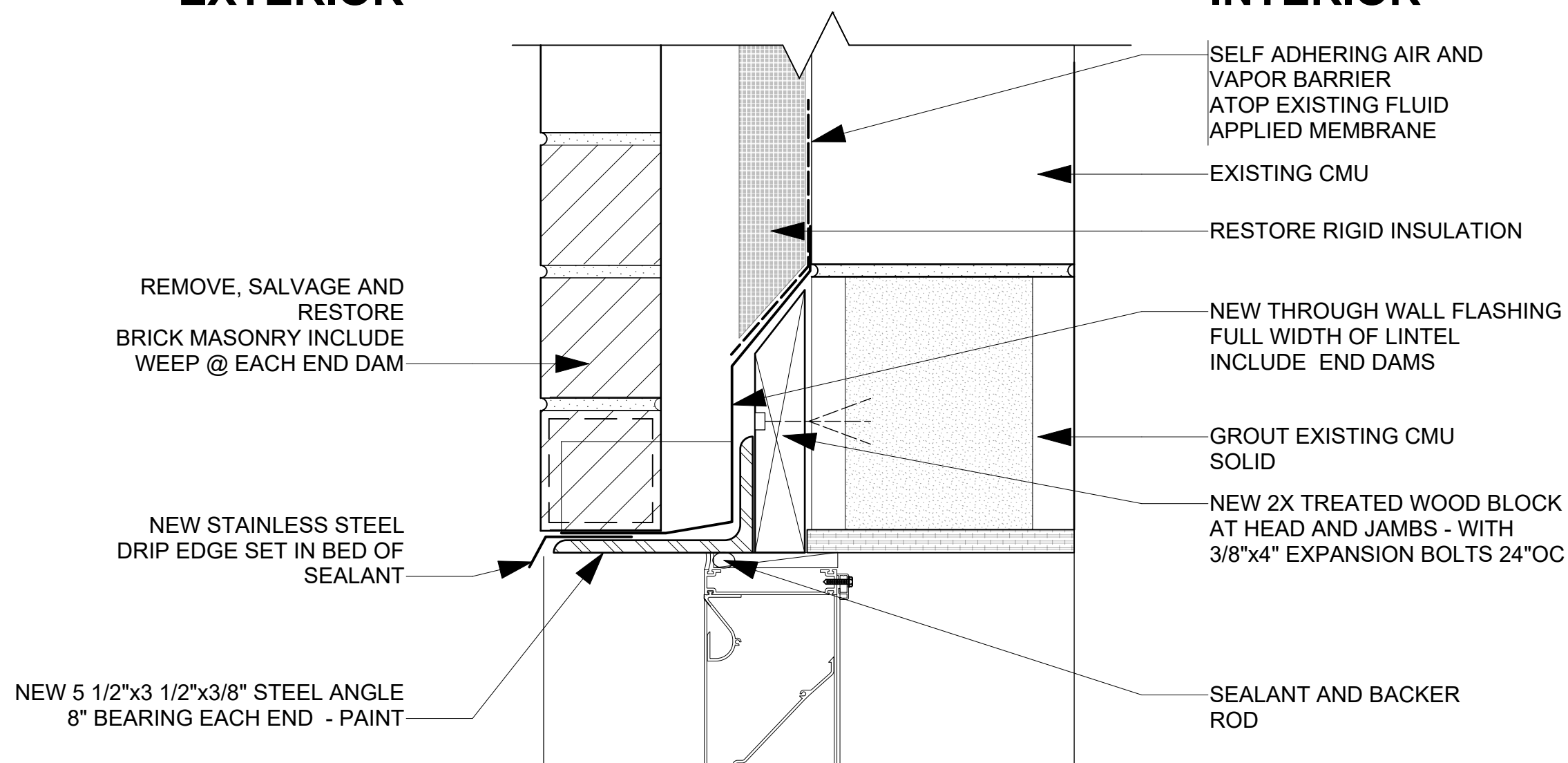
Revisions:		
No.	Date:	Description:
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Graphic Scale	VARIES
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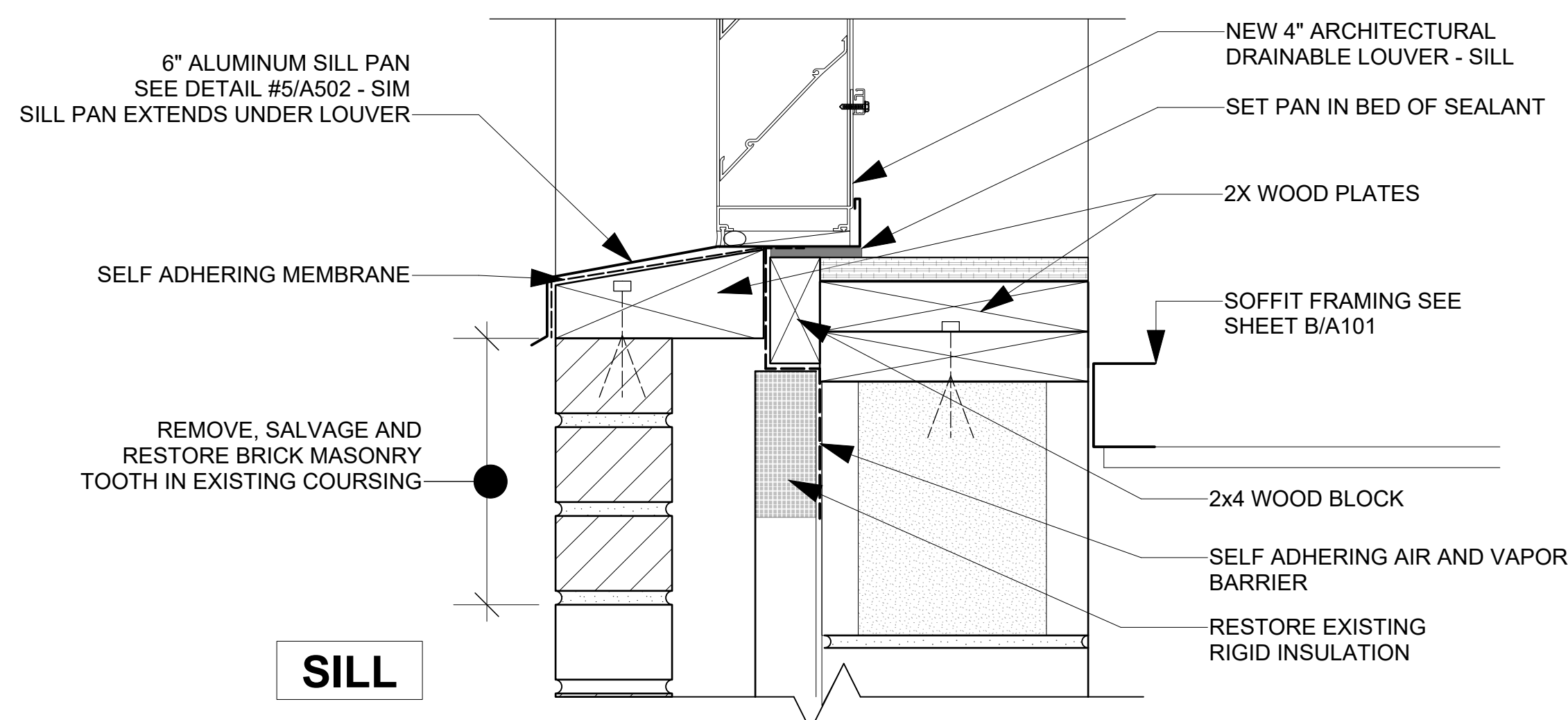
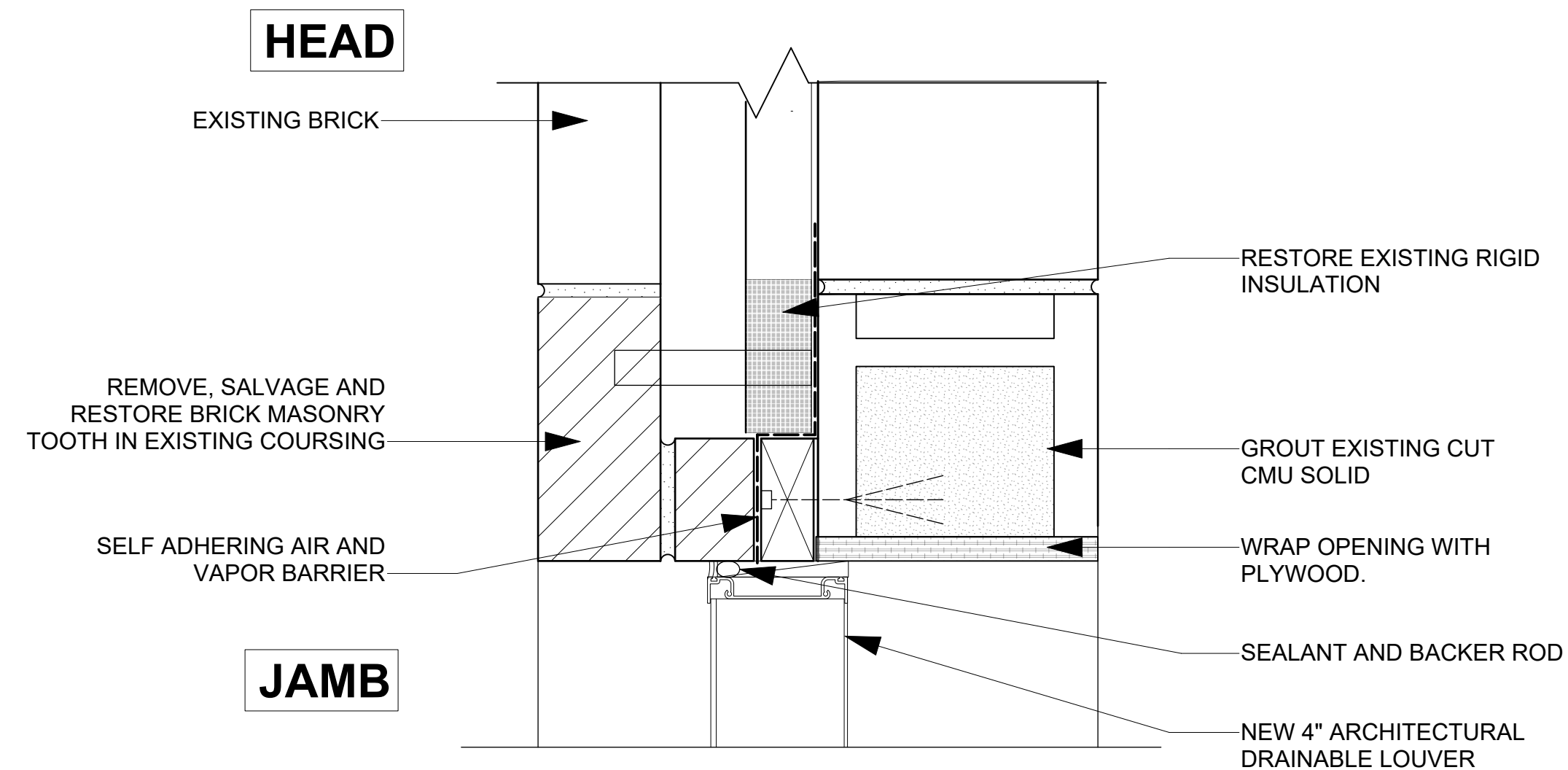
[illegible]

ROOF MODIFICATION:
EXISTING ROOF ASSEMBLY IS UNDER WARRANTY. ALL MODIFICATIONS SHALL
BE COMPLETED PER THE MANUFACTURER'S REQUIREMENTS IN ORDER
TO MAINTAIN THIS WARRANTY - PROTECT EXISTING ROOFING

EXTERIOR



INTERIOR

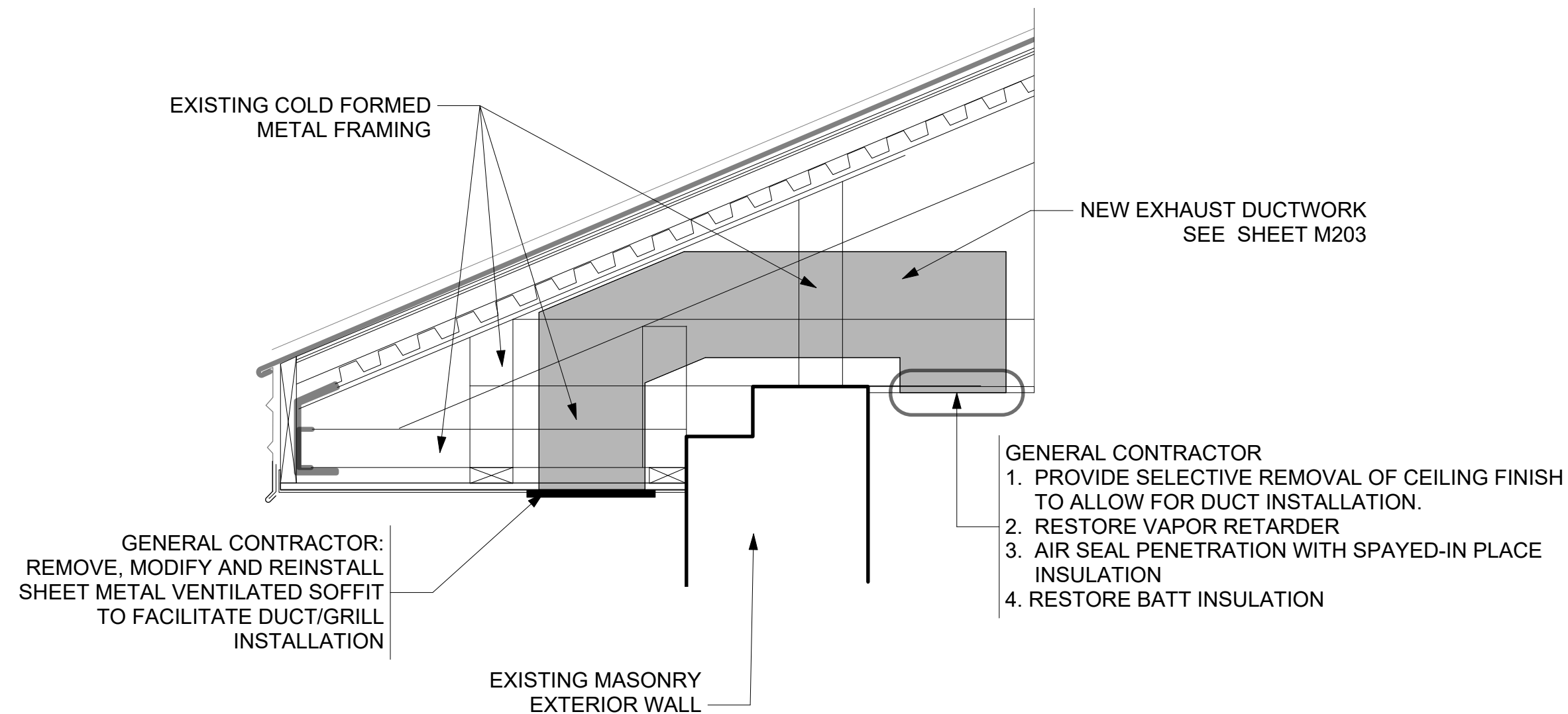


SILL

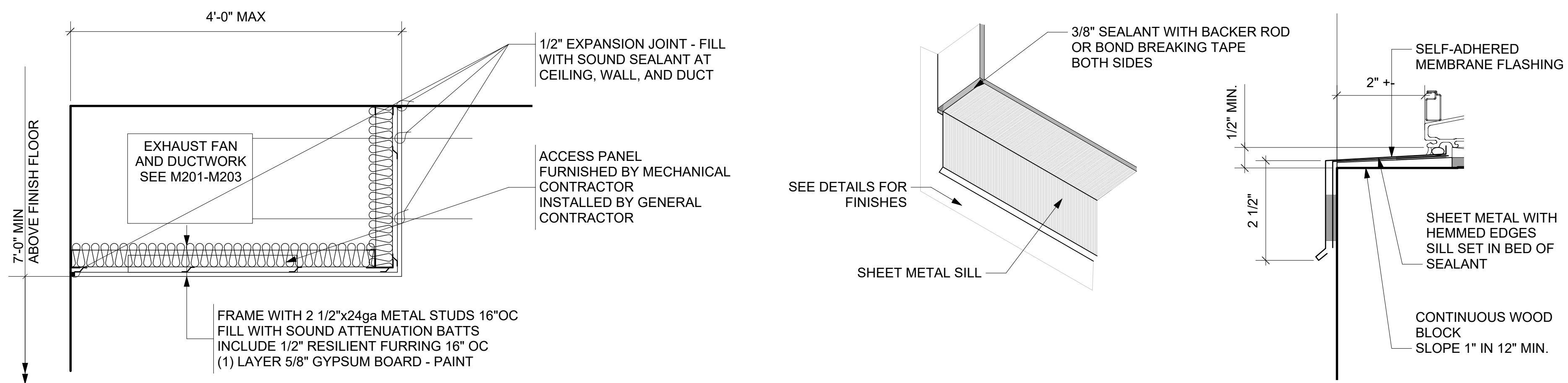
1
A502

TYPICAL LOUVER OPENING

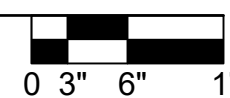
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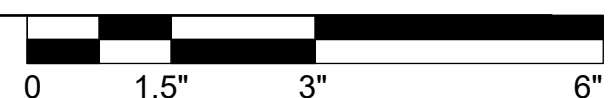
2 SOFFIT SECTION @ BILLET
A502 Scale: 1" = 1'-0"



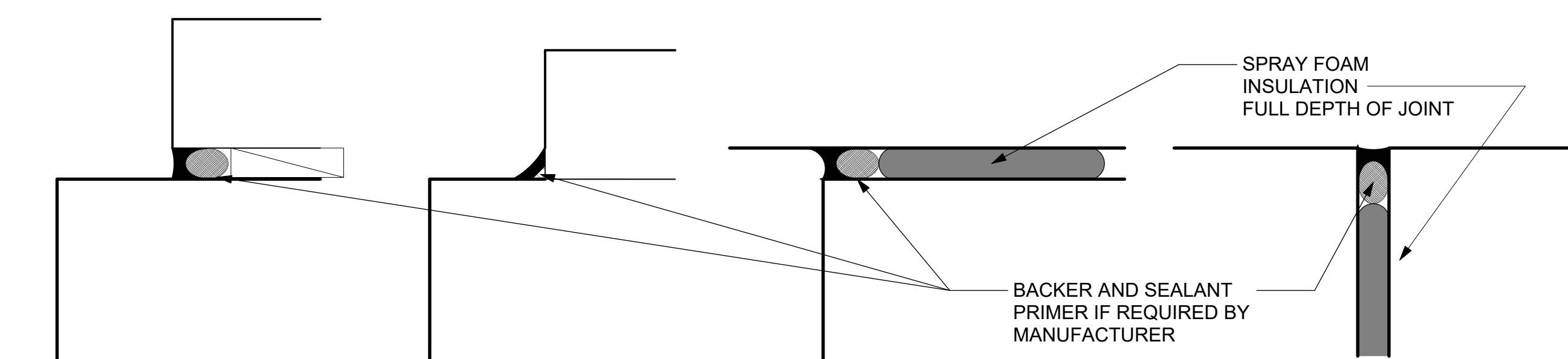
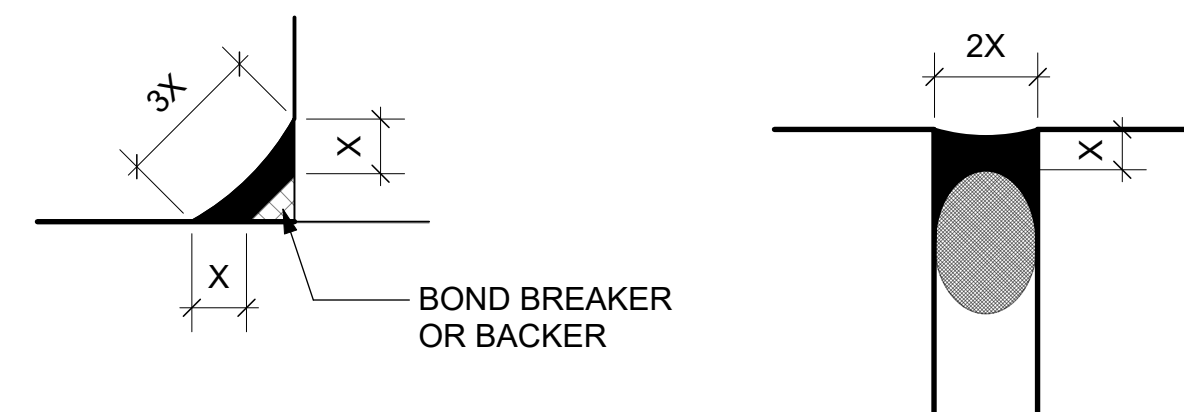
3 INTERIOR SOFFIT SECTION
A502 Scale: 1" = 1'-0"



5 TYPICAL SILL FLASHING DETAIL
A502 Scale: 6" = 1'-0"



NOTE:
THESE ILLUSTRATIONS INDICATE VARIOUS CONDITIONS
THAT MAY BE ENCOUNTERED WITHIN THE SCOPE OF THE WORK.
THEY ARE INGENERAL COMPLIANCE WITH ASTM C1193-16.
THE CONTRACTOR SHALL APPLY AND / OR
COMPLETE ALL WORK IN STRICK ACCORDANCE WITH
ASTM C1193-16, THE MANUFACTURER'S REQUIREMENTS
AND THE SPECIFICATIONS.



CONDITION #1: PUNCHED OPENING

CONDITION #2: PUNCHED OPENING

CONDITION #2: PENETRATION

CONDITION #2: MOVEMENT JOINT

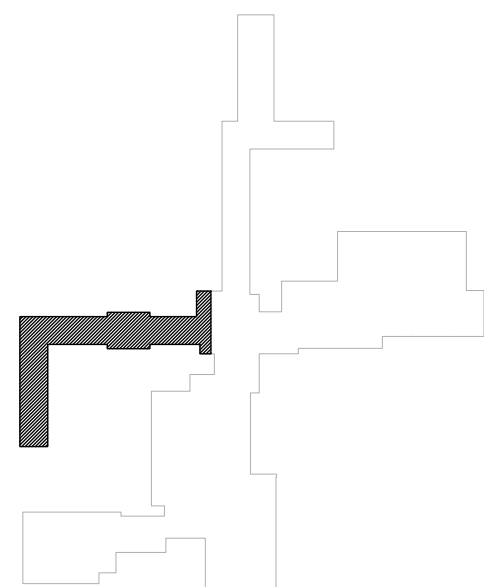
4 TYPICAL SEALANT JOINTS
A502 Scale: 6" = 1'-0"



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ABBREVIATIONS		PIPEWORK SYMBOLS		DUCTWORK SYMBOLS		CONTROL SYMBOLS		CONTROL ABBREVIATIONS	
DESIGNATION	DESCRIPTION	DESIGNATION	DESCRIPTION	DESIGNATION	DESCRIPTION	DESIGNATION	DESCRIPTION	DESIGNATION	DESCRIPTION
ABV	ABOVE		GATE VALVE		ACCESS DOOR OR PANEL, VERTICAL OR HORIZONTAL		CURRENT SENSING SWITCH	S	SPEED
ADJ	ADJUSTABLE		GLOBE VALVE			CONTROL RELAY	S/S	START/STOP	
AFF	ABOVE FINISHED FLOOR		BALL VALVE			TEMPERATURE SENSOR			
AT	AIR TERMINAL		BUTTERFLY VALVE			MOTOR STARTER			
BAS	TEMPERATURE CONTROL & BUILDING AUTOMATION SYSTEM		THREE WAY VALVE			VARIABLE FREQUENCY DRIVE			
BDD	BACKDRAFT DAMPER		ANGLE GATE VALVE			DIGITAL INPUT			
BHP	BRAKE HORSEPOWER		ANGLE GLOBE VALVE			DIGITAL OUTPUT			
BTU	BRITISH THERMAL UNIT		PLUG VALVE (GAS SERVICE)			ANALOG OUTPUT			
CFM	CUBIC FEET PER MINUTE								
CLG	CEILING								
CMU	CONCRETE MASONRY UNIT								
CONC	CONCRETE								
CO2	CARBON DIOXIDE								
CR	CONTROL RELAY								
CS	CURRENT SWITCH								
CSFD	COMBINATION SMOKE/FIRE DAMPER								
DB	DRY BULB								
DDC	DIRECT DIGITAL CONTROL								
DF	DESTRATIFICATION FAN								
DH	DEHUMIDIFIER								
DIA	DIAMETER								
DWG	DRAWING								
EF	EXHAUST FAN								
EL	ELEVATION								
ELEC	ELECTRICAL								
EQ	EQUIPMENT								
EV	EXHAUST VALVE								
EXH	EXHAUST								
FD	FIRE DAMPER								
FLA	FULL LOAD AMPS								
FLR	FLOOR								
FOB	FLAT ON BOTTOM								
FOT	FLAT ON TOP								
FPM	FEET PER MINUTE								
FT	FEET OR FOOT								
G	GAS								
GA	GAUGE								
GAL	GALLONS								
GPM	GALLONS PER MINUTE								
H	HUMIDIFIER								
HC	HEATING COIL								
HP	HORSEPOWER								
HTG	HEATING								
HVAC	HEATING VENTILATING AND AIR CONDITIONING								
ID	INSIDE DIAMETER								
KW	KILOWATT								
L	LOUVER								
LCP	LOCAL CONTROL PANEL								
LE	LAB EXHAUST								
LRA	LOCK ROTOR AMPS								
MAT	MIXED AIR TEMPERATURE								
MAX	MAXIMUM								
MCC	MOTOR CONTROL CENTER								
MD	MOTORIZED DAMPER								
MHP	MOTOR HORSEPOWER								
MIN	MINIMUM								
NC	NORMALLY CLOSED								
NIC	NOT IN CONTRACT								
NO	NORMALLY OPEN								
NTS	NOT TO SCALE								
OA	OUTDOOR AIR								
OD	OUTSIDE DIAMETER								
OED	OPEN ENDED DUCT								
OS	OCCUPANCY SENSOR								
P	PRESSURE								
PSI(G)	POUNDS PER SQUARE INCH (GAUGE)								
RH	RELATIVE HUMIDITY								
RHC	REHEAT COIL								
RPM	REVOLUTIONS PER MINUTE								
SD	SMOKE DAMPER								
SF	SUPPLY FAN								
SQ	SQUARE								
SW	SWITCH								
T	TEMPERATURE								
TOD	TOP OF DUCT								
TCC	TEMPERATURE CONTROLS CONTRACTOR								
TCP	TEMPERATURE CONTROLS PANEL								
TYP	TYPICAL								
UC	UNDER CUT								
UNO	UNLESS NOTED OTHERWISE								
VAV	VARIABLE AIR VOLUME								
VD	VOLUME DAMPER								
VFD	VARIABLE FREQUENCY DRIVE								
VSC	VARIABLE SPEED CONTROLLER								
WB	WET BULB								
W/	WITH								
W/O	WITHOUT								
WG	WATER GAUGE								

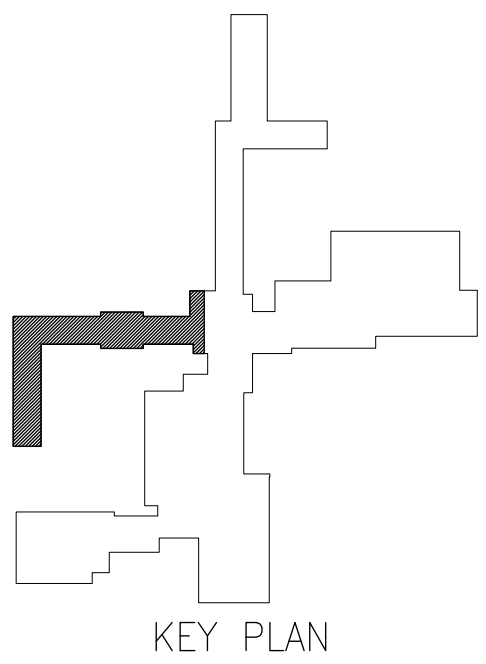
 GRUMMAN BUTKUS ASSOCIATES																																						
Energy Efficiency Consultants and Sustainable Design Engineers 7017 Mineral Point Rd. Suite 203 Madison, Wisconsin 53717 608-278-1880 Email: info@geba.com Website: www.geba.com © 2014 All Rights Reserved																																						
Consultant:																																						
 State of Wisconsin Department of Administration Division of Facilities Development S 10th Avenue (Bldg 90) Fort McCoy, WI 54636-5168																																						
VARIOUS ENERGY UPGRADES WISCONSIN MILITARY ACADEMY DEPARTMENT OF MILITARY AFFAIRS FORT MCCOY, WISCONSIN Sheet Title: MECHANICAL SYMBOLS AND ABBREVIATIONS																																						
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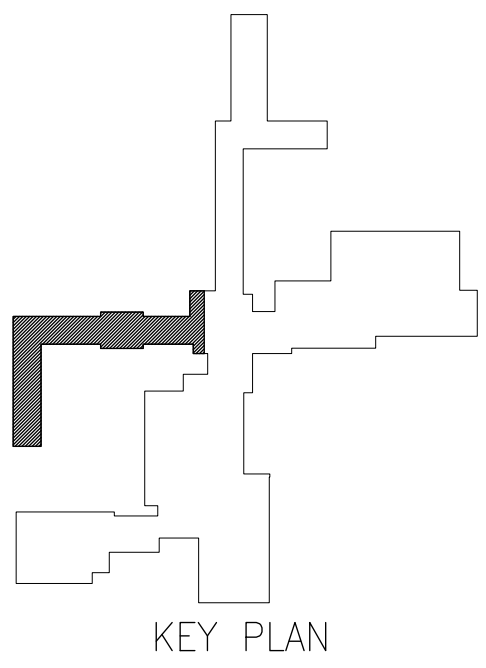


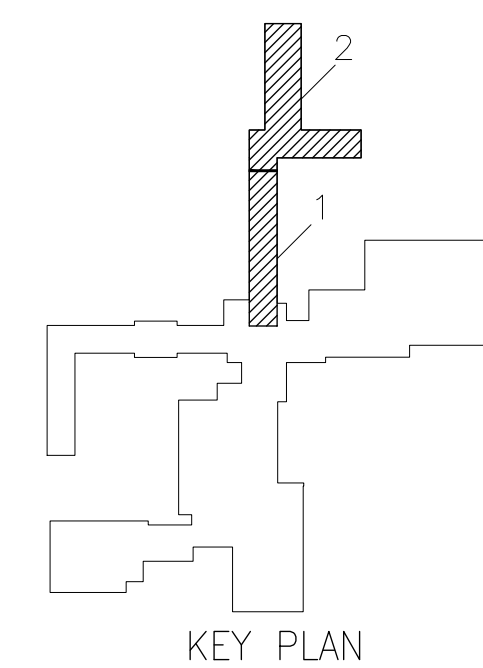
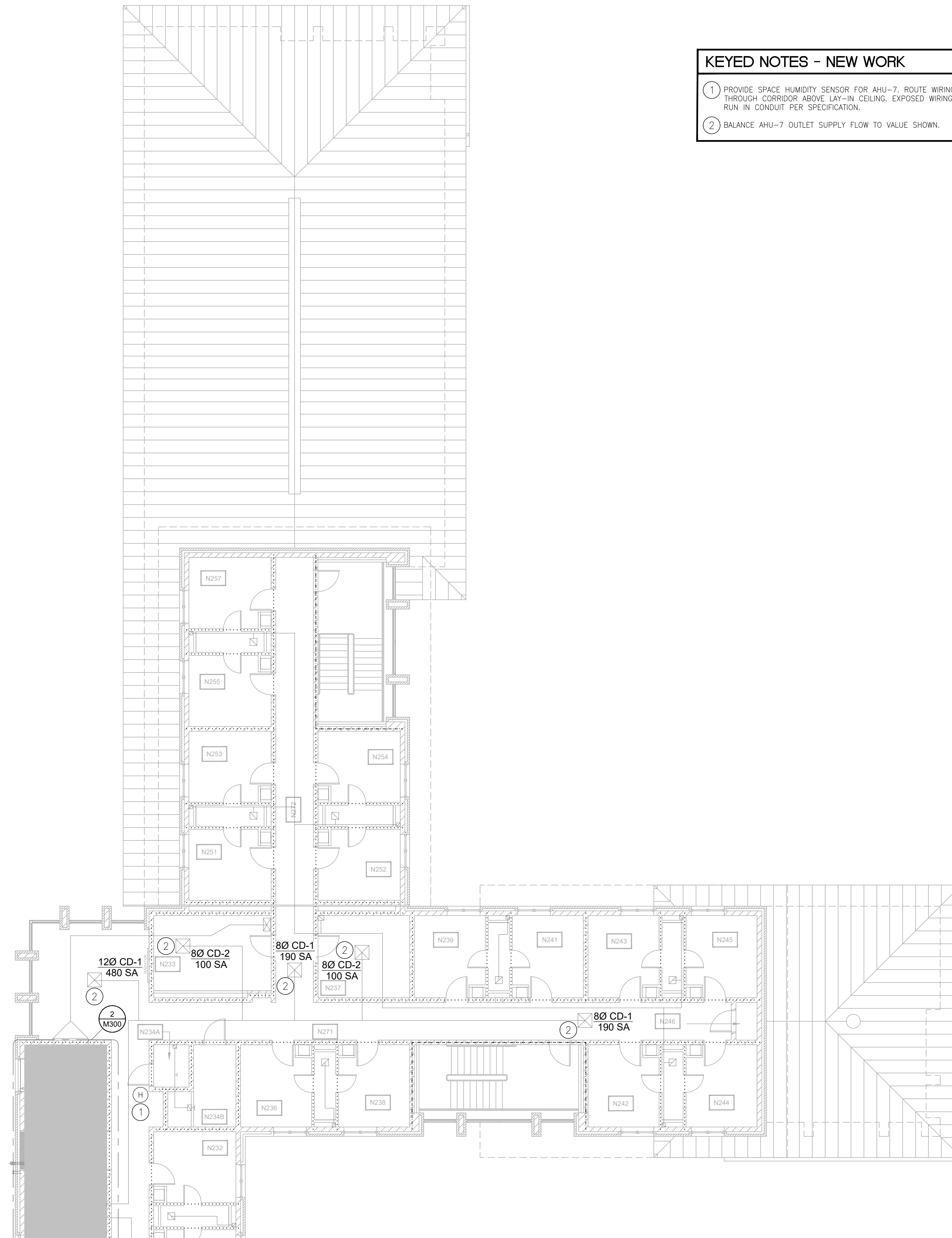
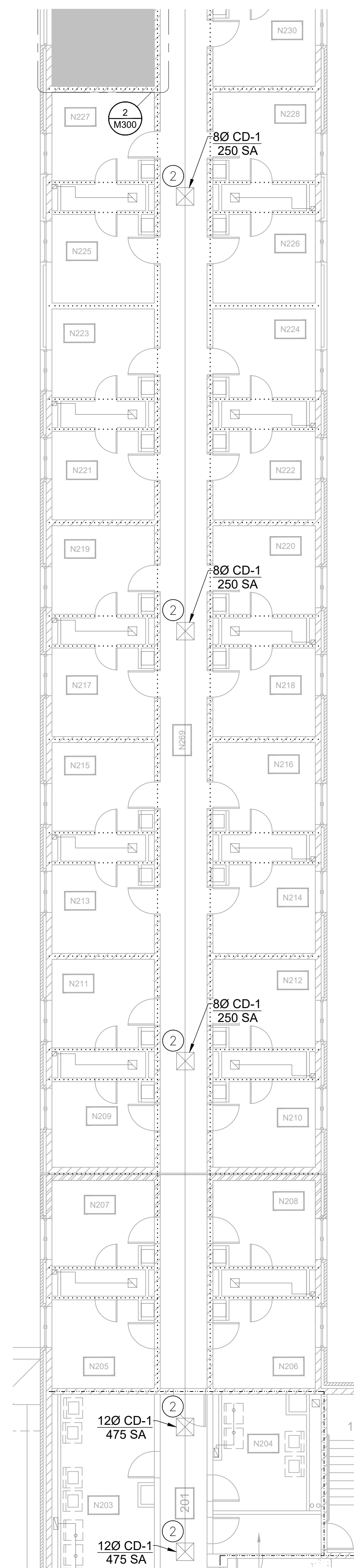
PLAN
NORTH



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Number





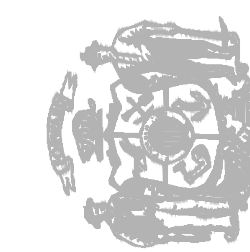


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VARIOUS ENERGY UPGRADES
WISCONSIN MILITARY ACADEMY
DEPARTMENT OF MILITARY AFFAIRS
FORT MCCOY, WISCONSIN

Sheet Title: SECOND FLOOR NORTH - NEW CONSTRUCTION - MECHANICAL

Revisions:		
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BD	05/15/2025	BID DOCUMENT

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Graphic Scale	
Project Number	22L2Q
Set Type	BD
Date Issued	05/15/2025
Sheet Number	M205

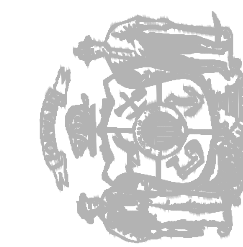


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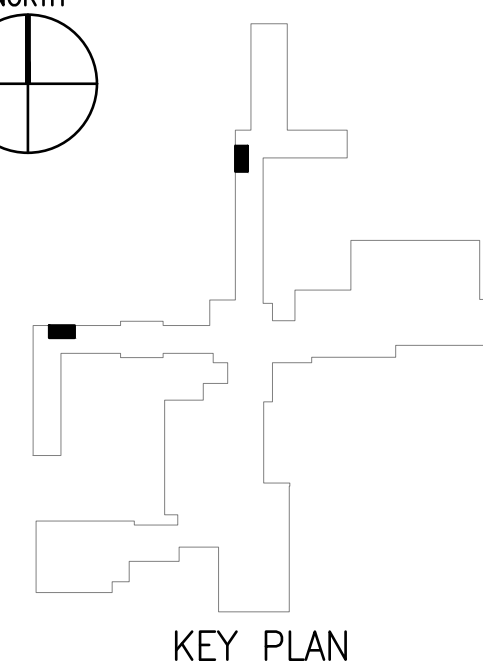
VARIOUS ENERGY UPGRADES
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DEPARTMENT OF MILITARY AFFAIRS
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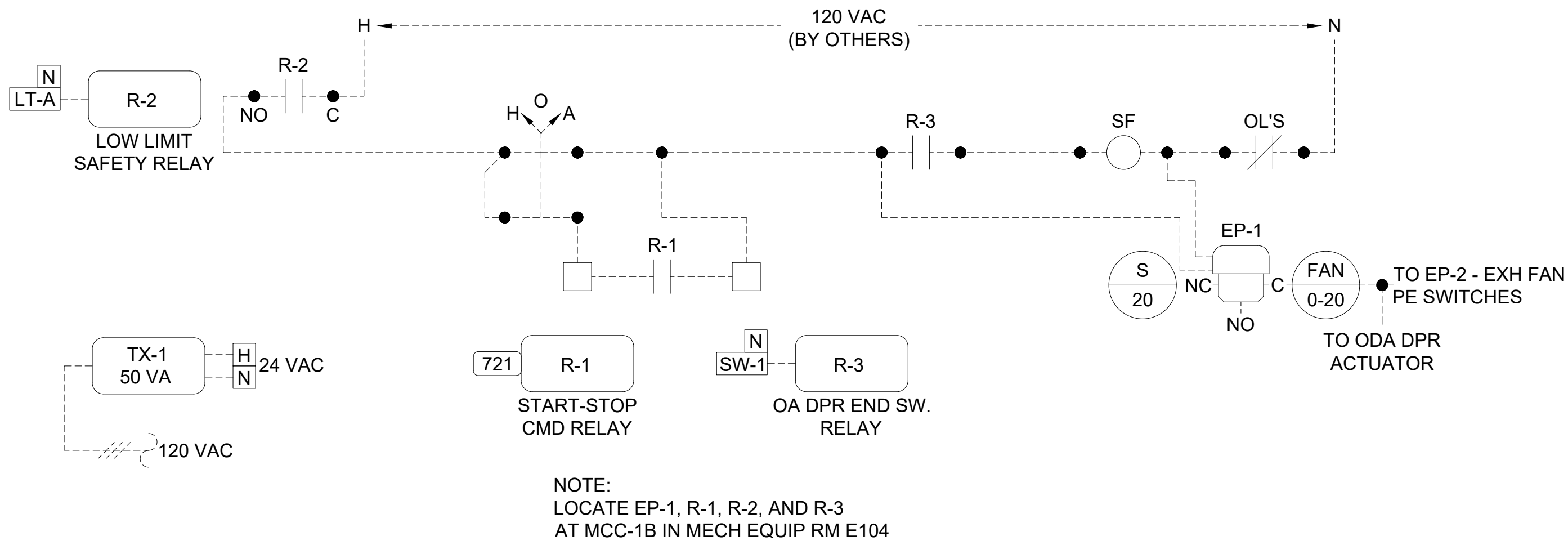
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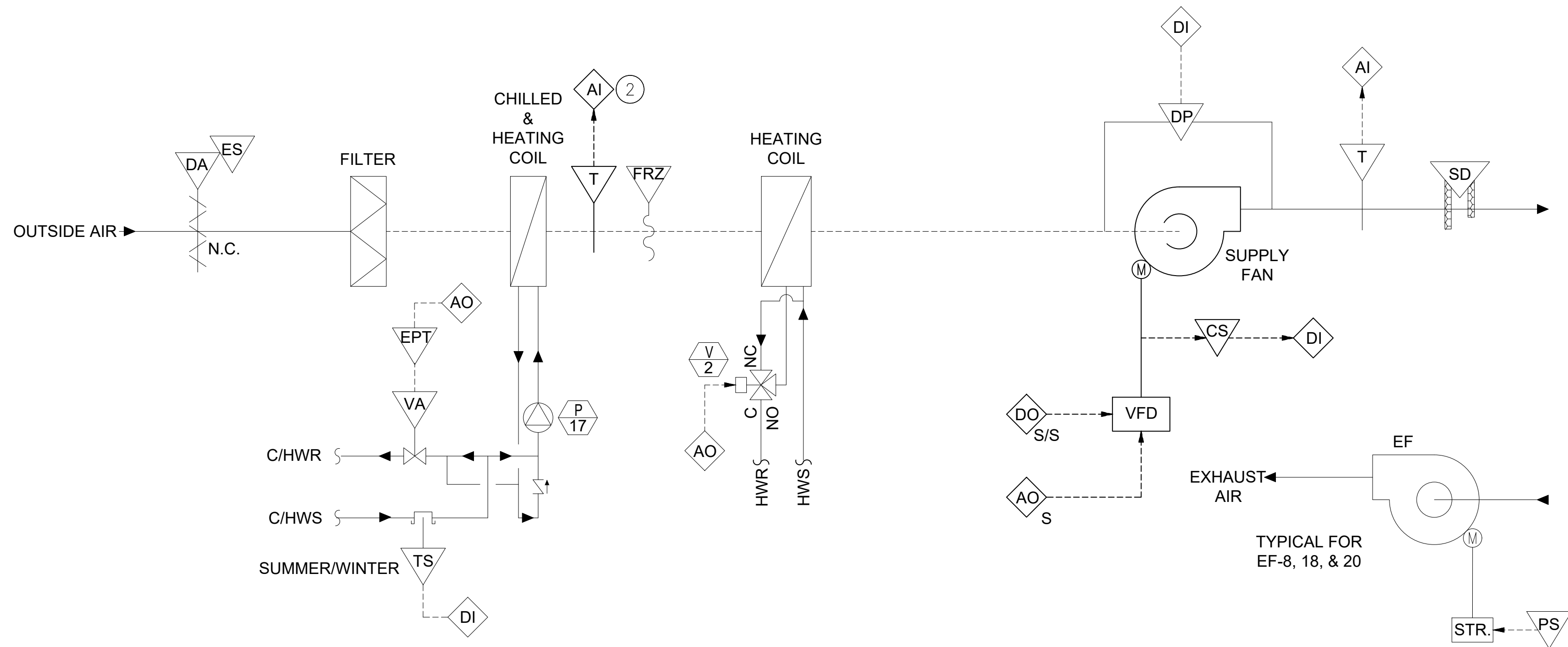


-
- This mechanical layout drawing illustrates the HVAC and piping systems for a building section. Key components and labels include:
- Boilers:** Two large circular units labeled **DHW N2** and **DHW N1**.
 - Boiler B-7:** A rectangular unit with a **B-7 4"Ø OA INTAKE** and **B-7 4"Ø EXHAUST**.
 - Mechanical Room:** A central area labeled **MECHANICAL N231**.
 - Piping:** Various lines for **2" HWS** (Hot Water Supply), **2" HWR** (Hot Water Return), and **1"Ø NGAS TO BOILER B-7**.
 - Electrical Controls:** A control panel labeled **R.P.Z.** with a **3/4"** connection.
 - Other Equipment:** A **TOP** (5), a **P 18** (18), a **SF 7** (2), a **VFD 7** (4), and a **F 7** (7).
 - Room Labels:** **F 7**, **DHW 7**, and **AHU 7** (6) are shown in the lower section.

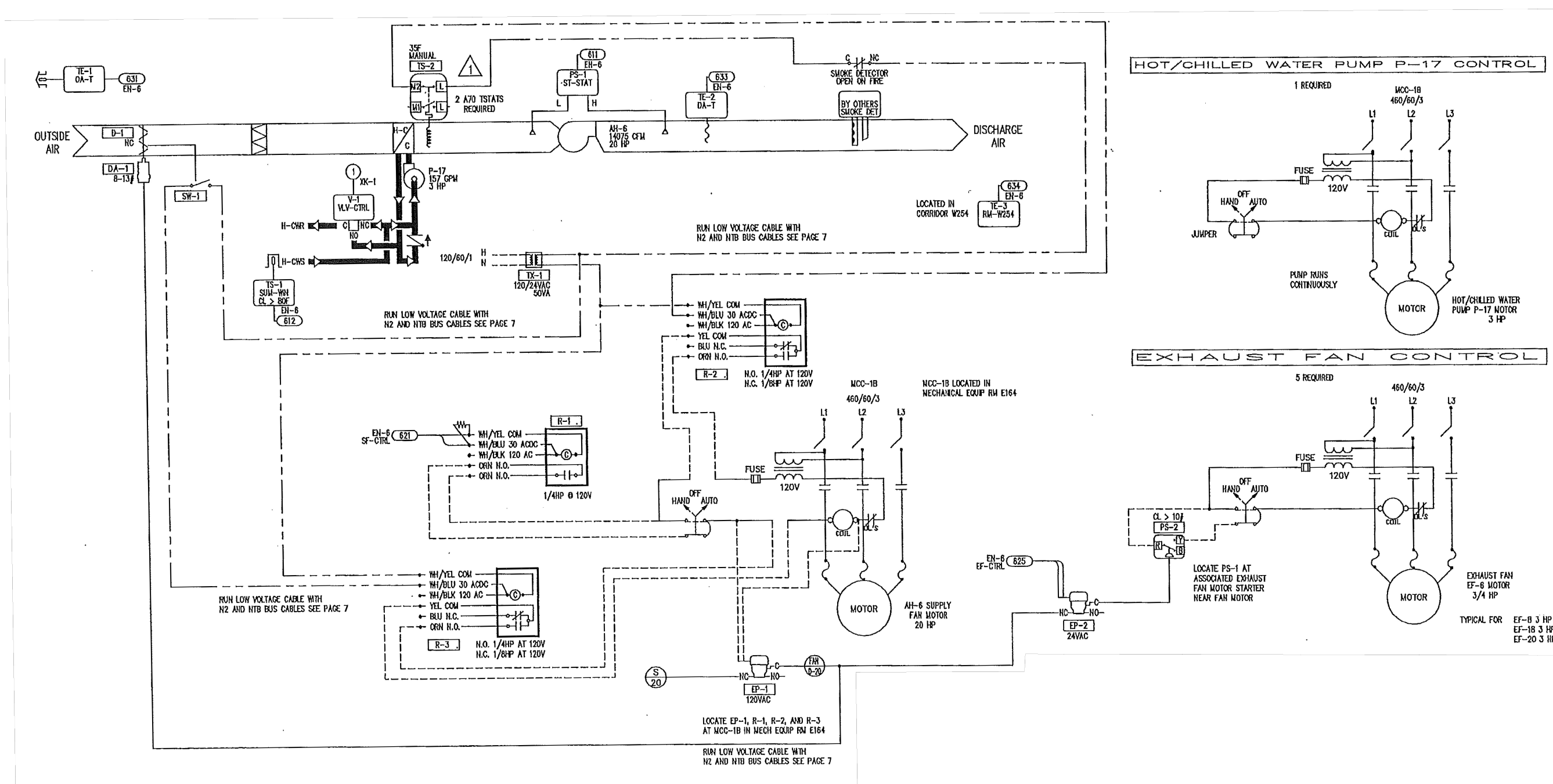




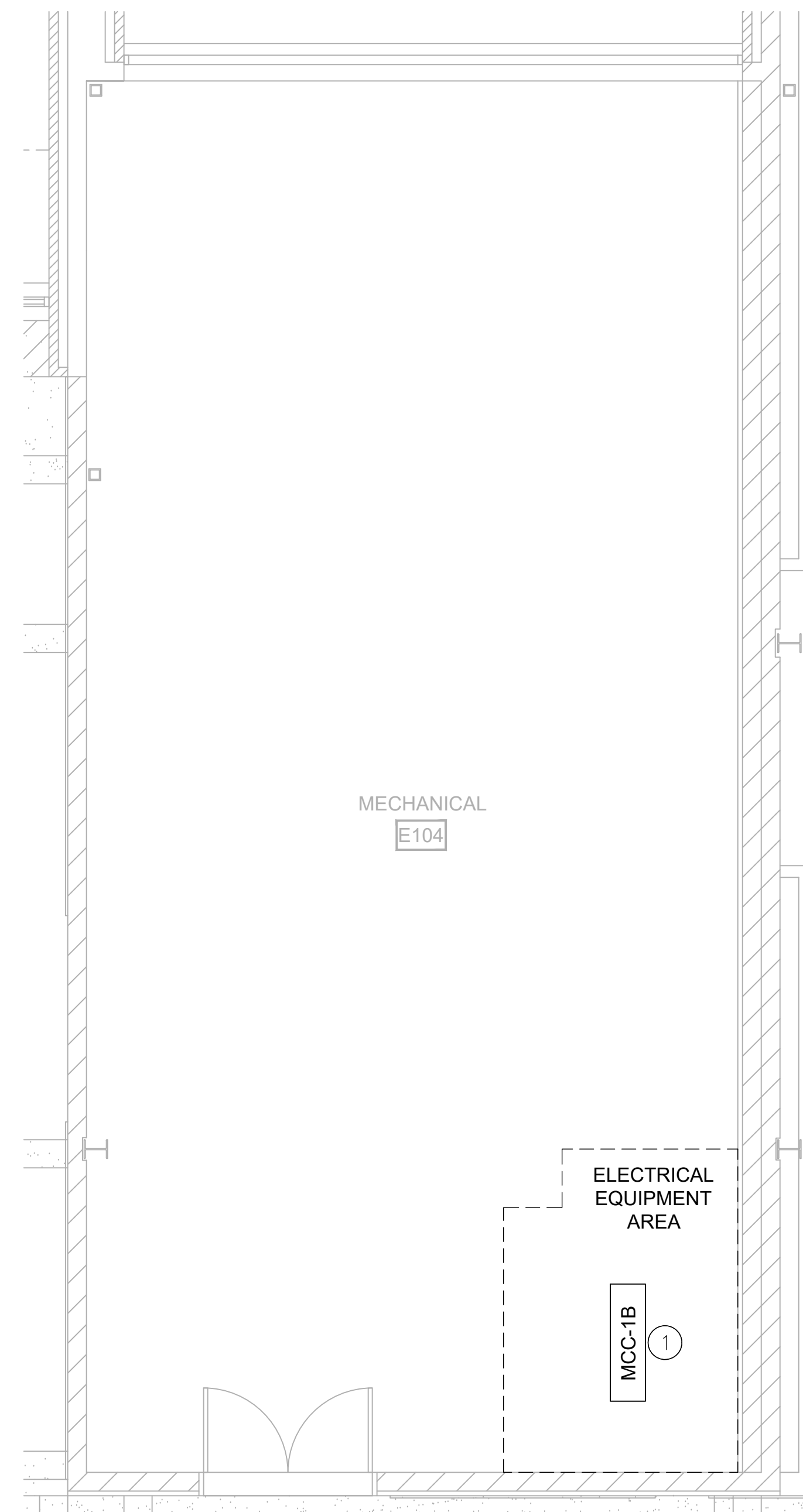
1 AHU-6 EXISTING SUPPLY FAN WIRING DIAGRAM



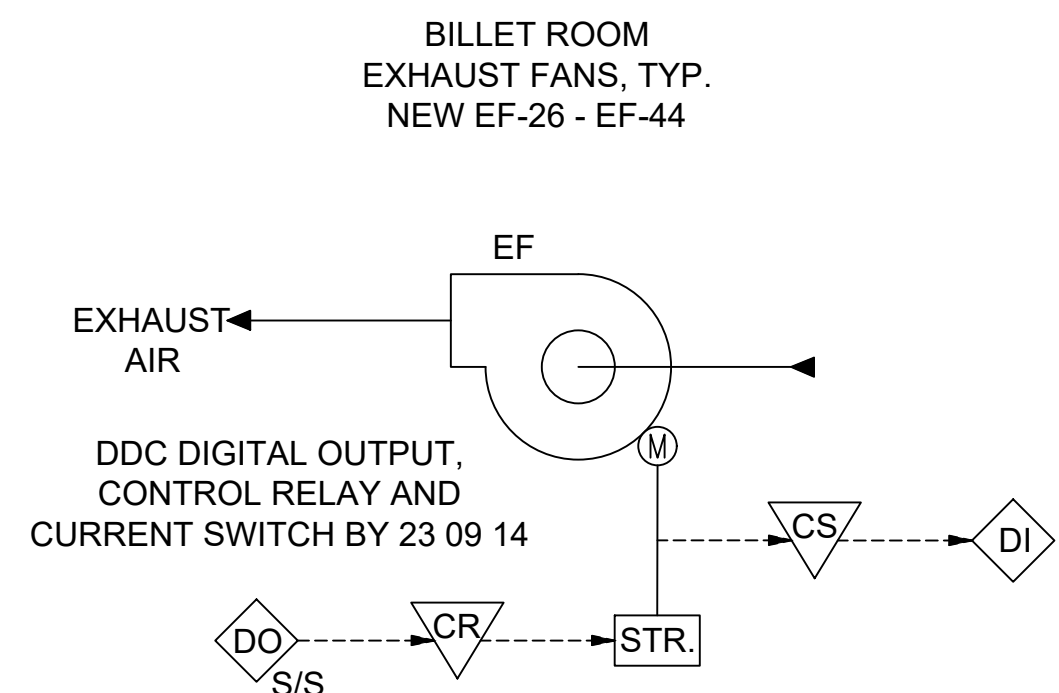
2 AHU-6 NEW AIRFLOW CONTROL SCHEMATIC DIAGRAM



3 AHU-6 EXISTING AIRFLOW CONTROL SCHEMATIC DIAGRAM (FOR REFERENCE)

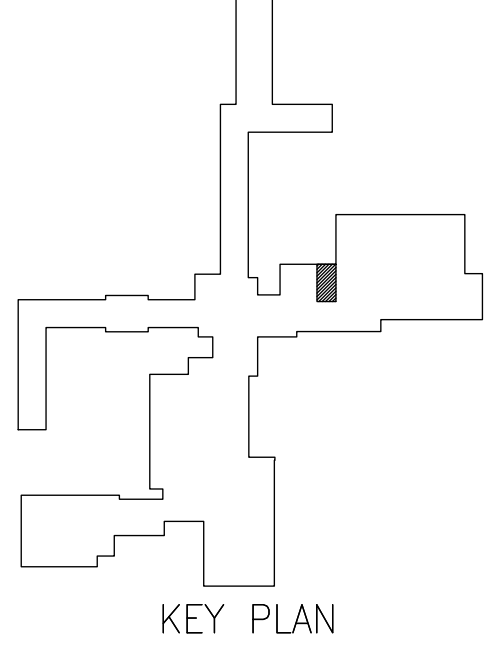


4 MECHANICAL ROOM E-104 - NEW CONSTRUCTION - MECHANICAL



5 BILLET ROOM EXHAUST FAN WIRING DETAIL

- KEYED NOTES - NEW WORK**
- EXISTING SUPPLY FAN MOTOR STARTER 120V CONTROL CIRCUIT IS WIRED THROUGH AHU-6 TEMPERATURE LOW LIMIT SAFETY RELAY. HAND-OFF-AUTO SWITCH ON MOTOR STARTER, START-STOP COMMAND RELAY, ODA DAMPER END SWITCH RELAY, SUPPLY FAN MOTOR STARTER IN MCC-1B, AND EP SWITCH SERVING EXHAUST FANS 8, 18, AND 20. REMOVE EXISTING CONTROL CIRCUIT AND PROVIDE NEW 24V CONTROL CIRCUIT TO NEW VFD. NEW N.O. CONTROL CIRCUIT TO BE WIRED THROUGH EXISTING LOW LIMIT SAFETY RELAY, ODA DAMPER END SWITCH, EP-2 FAN PE SWITCH AND NEW MOTOR VFD LOCATED IN FAN ROOM W233. PROVIDE DDC BINARY OUTPUT TO ENABLE OPERATION.
 - PROVIDE CHILLED AND HEATING COIL LEAVING AIR AVERAGING TEMPERATURE SENSOR DOWNSTREAM OF CHILLED AND HEATING COIL.



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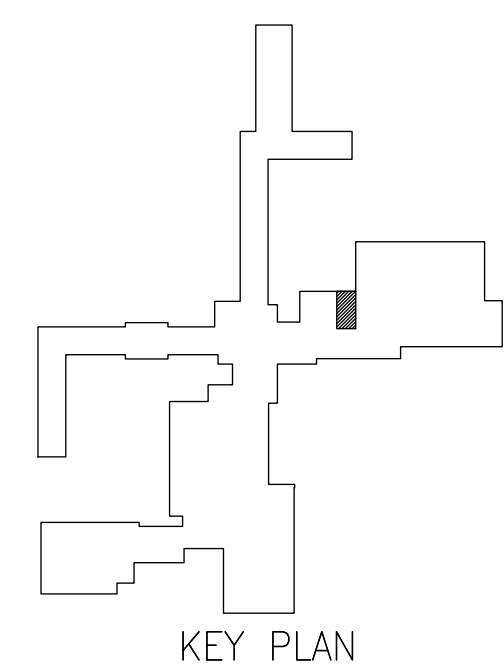
Sheet Title:
AHU-6 SUPPLY FAN MOTOR STARTERS
- NEW CONSTRUCTION - MECHANICAL

Revisions:		
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BD	05/15/2025	BD DOCUMENT

Graphic Scale	SEE SHEET
Project Number	22L2Q
Set Type	BD
Date Issued	05/15/2025
Sheet Number	M301



- 1 EXISTING SUPPLY FAN MOTOR STARTER 120V CONTROL CIRCUIT IS WIRED THROUGH AHU-7 TEMPERATURE LOW LIMIT SAFETY RELAY, HAND-OFF-AUTO SWITCH ON MOTOR STARTER, START-STOP COMMAND RELAY, OA DAMPER AND SWITCH RELAY. SUPPLY FAN MOTOR STARTER IS WIRING 1B, AND 2B AND 2C. REMOVE EXISTING LOW LIMIT SAFETY RELAY, HAND-OFF-AUTO SWITCH, REMOVE EXISTING CONTROL CIRCUIT AND PROVIDE NEW 24V CONTROL CIRCUIT TO NEW VFD. NEW N.O. CONTROL CIRCUIT TO BE WIRED THROUGH EXISTING LOW LIMIT SAFETY RELAY, OA DAMPER AND SWITCH, AND AN FE SWITCH. PROVIDE NEW 24V CONTROL CIRCUIT LOCATED IN ROOM N231. PROVIDE DCB BINARY OUTPUT TO ENABLE OPERATION.
- 2 PROVIDE CHILLED AND HEATING COIL LEAVING AIR AVERAGING TEMPERATURE SENSOR DOWNSTREAM OF CHILLED AND HEATING COIL.





EXHAUST FANS													
TAG	LOCATION	CFM	SP (\"WG)	FAN		DISCHARGE DIRECTION (FROM INLET)	MAXIMUM RPM	MOTOR				VFD	INLET SONES
				TYPE	DRIVE			BHP	HP	PH	VOLT		
EF-26	W148	120	0.4	DIRECT	IN-LINE	RIGHT	1750	0.03	1/15	1	115	NO	5.5
EF-27	W138	120	0.4	DIRECT	IN-LINE	LEFT	1750	0.03	1/15	1	115	NO	5.5
EF-28	W141	210	0.5	DIRECT	IN-LINE	LEFT	1725	0.06	1/10	1	115	NO	7.6
EF-29	W124	180	0.5	DIRECT	IN-LINE	RIGHT	1725	0.05	1/10	1	115	NO	7.3
EF-30	W119	180	0.5	DIRECT	IN-LINE	LEFT	1725	0.05	1/10	1	115	NO	7.3
EF-31	W117	180	0.5	DIRECT	IN-LINE	RIGHT	1725	0.05	1/10	1	115	NO	7.3
EF-32	W116	120	0.4	DIRECT	IN-LINE	LEFT	1750	0.03	1/15	1	115	NO	5.5
EF-33	W241	240	0.5	DIRECT	IN-LINE	RIGHT	1725	0.05	1/10	1	115	NO	6.8
EF-34	W244	120	0.4	DIRECT	IN-LINE	LEFT	1750	0.03	1/15	1	115	NO	5.5
EF-35	W224	180	0.5	DIRECT	IN-LINE	RIGHT	1725	0.05	1/10	1	115	NO	7.3
EF-36	W219	180	0.5	DIRECT	IN-LINE	LEFT	1725	0.05	1/10	1	115	NO	7.3
EF-37	W217	210	0.5	DIRECT	IN-LINE	RIGHT	1725	0.06	1/10	1	115	NO	7.6
EF-38	W216	180	0.5	DIRECT	IN-LINE	LEFT	1725	0.05	1/10	1	115	NO	7.3
EF-39	W341	120	0.4	DIRECT	IN-LINE	RIGHT	1750	0.03	1/15	1	115	NO	5.5
EF-40	W344	120	0.4	DIRECT	IN-LINE	LEFT	1750	0.03	1/15	1	115	NO	5.5
EF-41	W324	180	0.5	DIRECT	IN-LINE	RIGHT	1725	0.05	1/10	1	115	NO	7.3
EF-42	W319	180	0.5	DIRECT	IN-LINE	LEFT	1725	0.05	1/10	1	115	NO	7.3
EF-43	W317	270	0.6	DIRECT	IN-LINE	RIGHT	1550	0.09	1/8	1	115	NO	8.1
EF-44	W316	180	0.5	DIRECT	IN-LINE	LEFT	1725	0.05	1/10	1	115	NO	7.3
GENERAL NOTES:													
1. REFER TO MOTORIZED DAMPER SCHEDULE FOR ASSOCIATED CONTROL DAMPERS.													

FIRE DAMPERS				
TAG	SERVICE	BLADE TYPE	SIZE (IN)	STATIC/DYNAMIC
FD-1	EXHAUST BRANCH	CURTAIN	8	STATIC

NOTES:

1. LISTED SIZE BASED ON TRANSITION TO ROUND DUCT.
2. BOD. GREENHECK FD-150.

CONTROL DAMPERS							
TAG	SERVES	LOCATION	BLADE CONFIGURATION	CONTROL	FAIL POSITION	SIZE (IN)	
						W	H
MD-26	EXHAUST	EF-26	PARALLEL	2-POSITION	CLOSED	8	8
MD-27	EXHAUST	EF-27	PARALLEL	2-POSITION	CLOSED	8	8
MD-28	EXHAUST	EF-28	PARALLEL	2-POSITION	CLOSED	8	8
MD-29	EXHAUST	EF-29	PARALLEL	2-POSITION	CLOSED	8	8
MD-30	EXHAUST	EF-30	PARALLEL	2-POSITION	CLOSED	8	8
MD-31	EXHAUST	EF-31	PARALLEL	2-POSITION	CLOSED	8	8
MD-32	EXHAUST	EF-32	PARALLEL	2-POSITION	CLOSED	8	8
MD-33	EXHAUST	EF-33	PARALLEL	2-POSITION	CLOSED	10	10
MD-34	EXHAUST	EF-34	PARALLEL	2-POSITION	CLOSED	8	8
MD-35	EXHAUST	EF-35	PARALLEL	2-POSITION	CLOSED	8	8
MD-36	EXHAUST	EF-36	PARALLEL	2-POSITION	CLOSED	8	8
MD-37	EXHAUST	EF-37	PARALLEL	2-POSITION	CLOSED	8	8
MD-38	EXHAUST	EF-38	PARALLEL	2-POSITION	CLOSED	8	8
MD-39	EXHAUST	EF-39	PARALLEL	2-POSITION	CLOSED	8	8
MD-40	EXHAUST	EF-40	PARALLEL	2-POSITION	CLOSED	8	8
MD-41	EXHAUST	EF-41	PARALLEL	2-POSITION	CLOSED	8	8
MD-42	EXHAUST	EF-42	PARALLEL	2-POSITION	CLOSED	8	8
MD-43	EXHAUST	EF-43	PARALLEL	2-POSITION	CLOSED	10	10
MD-44	EXHAUST	EF-44	PARALLEL	2-POSITION	CLOSED	8	8

VFD (VARIABLE FREQUENCY DRIVES)						
TAG	SERVICE	LOCATION	VOLTAGE/ PHASE	MOTOR HP	INTEGRAL BYPASS YES/NO	REMARKS
VFD-6	SF-AH-6	MECHANICAL W233	480/3	10	NO	DIVISION 23
VFD-7	SF-AH-7	MECHANICAL N231	480/3	7.5	NO	DIVISION 23

FAN MOTORS									
TAG	LOCATION	SERVICE	CFM	MAXIMUM RPM	MOTOR				VFD
					BHP	HP	PH	VOLT	
SF-6	AHU-6	SA	10305	1725	5.03	10	3	480	YES
SF-7	AHU-7	SA	8815	1725	4.95	7.5	3	480	YES

DIFFUSERS, REGISTERS, AND GRILLES												
TAG	PHASE	SERVICE	CFM RANGE	NECK SIZE		FACE SIZE		FACE TYPE	PATTERN	FINISH	MATERIAL	MOUNTING SURFACE
				W (IN)	H (IN)	W (IN)	H (IN)					
EG-1	NEW	EXHAUST BRANCH	30	4	4	6	6	GRILLE	FIXED BLADE	WHITE	STEEL	DUCT
EG-2	NEW	EXHAUST	120	9	6	11	8	GRILLE	FIXED BLADE	-	AL	EXT. SOFFIT
EG-3	NEW	EXHAUST	180-270	12	6	14	8	GRILLE	FIXED BLADE	-	AL	EXT. SOFFIT



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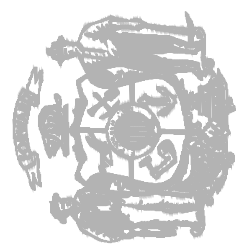
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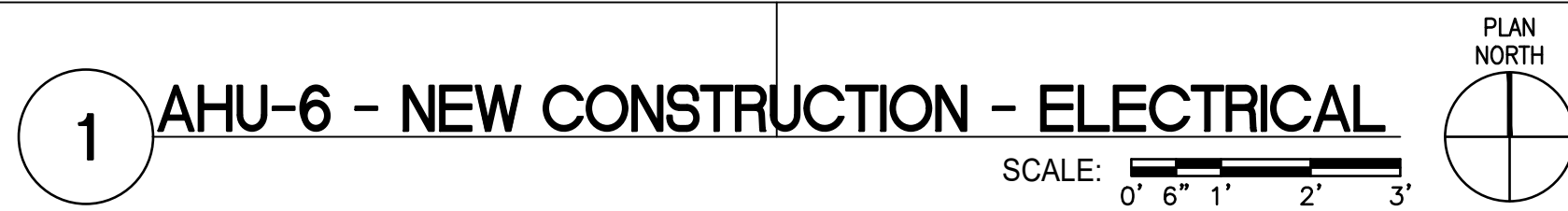


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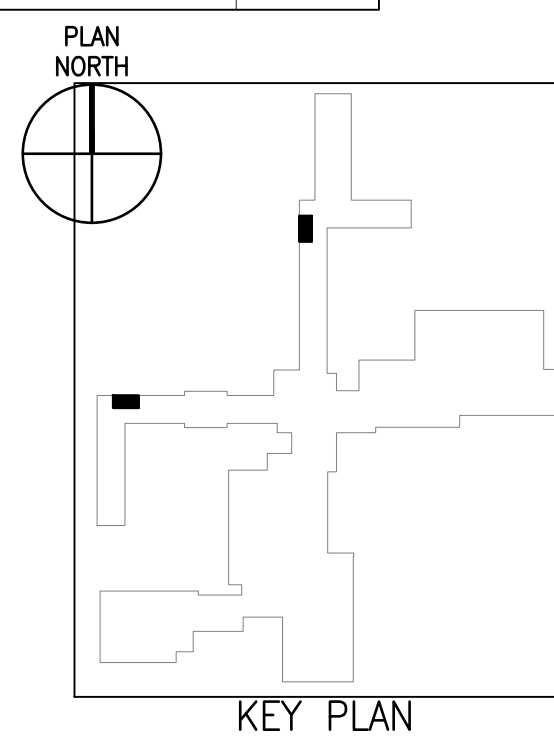
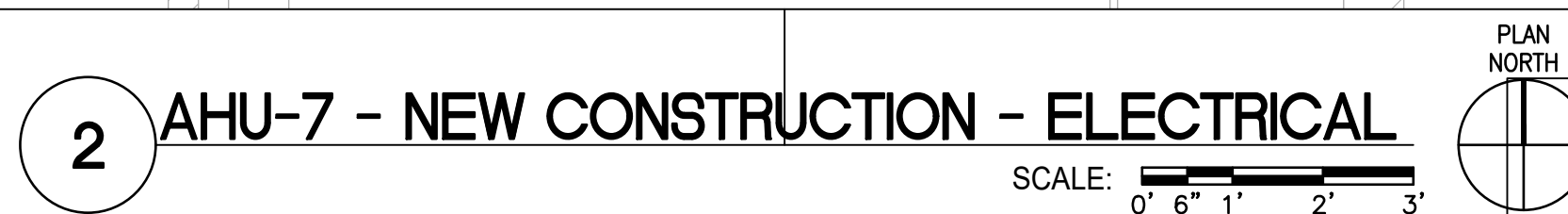
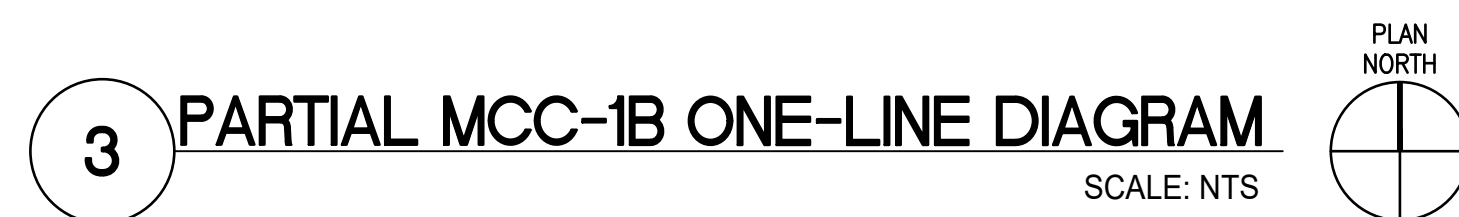
VARIOUS ENERGY UPGRADES
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Sheet Title:
MECHANICAL SCHEDULES

Revisions:		
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Project Number	22L2Q	
Set Type	BD	
Date Issued	05/15/2025	
Sheet Number	M800	



- ① NEW FPD FURNISHED BY DIVISION 23 AND SHALL BE INSTALLED BY REFERENCE TO 26. REFER TO EQUIPMENT SCHEDULE AND SOURCE LOCATION FOR UNITS ON SHEET E400.
- ② EXISTING FIRE ALARM FAN SHUTDOWN DETECTOR AND RELAYS TO REMAIN.
- ③ DEMOLISH EXISTING DISCONNECT AND PROVIDE NEW FUSED, NEMA 1, DISCONNECT IN SAME LOCATION. PROVIDE CIRCUIT FROM NEW FPD TO EXISTING DISCONNECT AND FROM DISCONNECT TO NEW MOTOR. REMOVE AS MUCH EXISTING CONDUIT AS POSSIBLE. PROVIDE AUX CONTACTS FOR DISCONNECT TO DE-ENERGIZE FPD IF DISCONNECT IS OPENED.



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Sheet Title:

Sheet Title:
AHU-6 AND AHU-7 - NEW CONSTRUCTION - ELECTRICAL

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