

VICINITY MAP



# MESA COUNTY SHERIFF'S OFFICE

## BOOKING AREA RENOVATION

215 RICE STREET, GRAND JUNCTION, CO 81501

BG+co. PROJECT # 23028

06/05/2023 SCHEMATIC DESIGN  
 07/12/2023 DESIGN DEVELOPMENT  
 01/15/2024 CONSTRUCTION DOCUMENTS

## CONSTRUCTION DOCUMENTS

ARCHITECTURAL / STRUCTURAL / MECHANICAL / PLUMBING / ELECTRICAL

### PROJECT DESIGN TEAM

ARCHITECTURE / INTERIOR DESIGN:



STRUCTURAL ENGINEERING:



MECHANICAL, PLUMBING, AND ELECTRICAL ENGINEERING:



Architecture  
 Interior Design  
 Project Management  
 622 Rood Avenue  
 Grand Junction, CO 81501  
 970-242-1058 office  
 BLYTHE GROUP + co.

MESA COUNTY SHERIFF'S  
 OFFICE - BOOKING AREA  
 RENOVATION

215 RICE STREET  
 GRAND JUNCTION, CO  
 81501

### MATERIALS LEGEND

	EXISTING CONSTRUCTION
	ASPHALT PAVING (SECTION)
	EARTH (PLAN & SECTION)
	GRANULAR FILL (SECTION)
	STRUCTURAL FILL (SECTION)
	SAND (SECTION)
	CONCRETE (PLAN & SECTION)
	BRICK VENEER (SECTION)
	CONCRETE MASONRY UNITS (CMU) (PLAN & SECTION)
	PRECAST CONCRETE (SECTION)
	MORTAR NET (SECTION)
	STEEL (SECTION)
	WOOD BLOCKING (CONTINUOUS) (SECTION)
	WOOD BLOCKING (INTERMITTENT) (SECTION)
	WOOD SHEATHING
	WOOD (FINISH) (SECTION & ELEVATION)
	INSULATION (FIBROUS) (PLAN & SECTION)
	INSULATION (RIGID) (PLAN & SECTION)
	STUCCO (SECTION)
	STUCCO (ELEVATION)
	GYPSUM WALL BOARD (GWB) (REFLECTED CEILING PLAN)

NOTE: SOME MATERIALS SHOWN MAY NOT BE USED ON THIS PROJECT.

### SYMBOLS LEGEND

ROOM TAG	ROOM NAME
	A202A
DOOR TAG	D220A
ASSEMBLY TAG	27
NEW COLUMN GRID LINE	0
EXISTING COLUMN GRIDLINE	0
KEY NOTE	?
WINDOW / FRAME TYPE	#
DRAWING REFERENCE	VIEW NAME
	1 A1-1 1/8" = 1'-0"
BUILDING SECTION INDICATOR	
WALL SECTION INDICATOR	
SIGN TAG	ID Type
ELEVATION INDICATOR	Name Elevation
DIMENSION LINES	1"
NEW CONTOUR	####
EXISTING CONTOUR	####
HIDDEN LINE	---
OVERHEAD OBJECT	---
CENTER LINE	---
MATCH LINE	---
LIMITS OF CONSTRUCTION	---
DEMOLISHED ITEMS	---

### ABBREVIATIONS

ADD-X	ADDENDUM NO. X	HORIZ	HORIZONTAL	UNO	UNLESS NOTED OTHERWISE
AFF	ABOVE FINISH FLOOR	HVAC	HEATING VENTILATING & AIR CONDITIONING	VCT	VINYL COMPOSITION TILE
AHU	AIR HANDLING UNIT	IBC	INTERNATIONAL BUILDING CODE	VERT	VERTICAL
AL	ALUMINUM	ID	INSIDE DIAMETER	VFY	VERIFY
ALT	ALTERNATE	INCL	INCLUDED	VIF	VERIFY IN FIELD
ALT-X	ALTERNATE NO. X	INSUL	INSULATION	VWC	VINYL WALL COVERING
AM	ACOUSTIC MATERIAL	INT	INTERIOR	W	WIDE / WIDTH
AM-X	ACOUSTIC MATERIAL TYPE X	JT	JOINT	W/	WITH
ARCH	ARCHITECT / ARCHITECTURAL	L	LONG / LENGTH	W/O	WITHOUT
ATTEN	ATTENUATION	LAV	LAVATORY	WD	WOOD
AVE	AVENUE	LLV	LONG LEG VERTICAL	WOM	WALK OFF MAT
AVG	AVERAGE	LLH	LONG LEG HORIZONTAL		
B.O.	BOTTOM OF	MAS	MASONRY		
BIT	BITUMINOUS	MATL	MATERIAL		
BLDG	BUILDING	MAX	MAXIMUM		
BLKG	BLOCKING	MECH	MECHANICAL		
CL	CENTER LINE	MFR	MANUFACTURER		
CEM	CEMENT / CEMENTITIOUS	MIN	MINIMUM		
CJ	CONTROL JOINT	MISC	MISCELLANEOUS		
CLG	CEILING	MO	MASONRY OPENING		
CLR	CLEAR	MTD	MOUNTED		
CMU	CONCRETE MASONRY UNIT(S)	MTL	METAL		
CONC	CONCRETE	NA	NOT APPLICABLE		
CONT	CONTINUOUS	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION		
CPT	CARPET	NIC	NOT IN CONTRACT		
CT	CERAMIC TILE	NO.	NUMBER		
CTR	CENTER	NRC	NOISE REDUCTION COEFFICIENT		
D	DEEP / DEPTH	NTS	NOT TO SCALE		
DBL	DOUBLE	OC	ON CENTER		
DEMO	DEMOLISH / DEMOLITION	OD	OUTSIDE DIAMETER		
DEPT	DEPARTMENT	OPNG	OPENING		
DF	DRINKING FOUNTAIN	OPF	OPPOSITE		
DIA / Ø	DIAMETER	PERF	PERFORATED		
DIM(S)	DIMENSION(S)	PLAM	PLASTIC LAMINATE		
DN	DOWN	PLBG	PLUMBING		
DTL	DETAIL	PLYWD	PLYWOOD		
DW	DISHWASHER	PNT	PAIN		
DWG	DRAWING	PREFAB	PREFABRICATED		
EA	EACH	PREFIN	PREFINISHED		
EJ	EXPANSION JOINT	PT	PORCELAIN TILE		
EL	ELEVATION	QT	QUARRY TILE		
ELEC	ELECTRICAL	QTY	QUANTITY		
EQ	EQUAL	R	RADIUS		
EQUIP	EQUIPMENT	RB	RUBBER BASE		
EWC	ELECTRIC WATER COOLER	RCP	REFLECTED CEILING PLAN		
EXIST	EXISTING	REF	REFERENCE / REFER TO		
EXT	EXTERIOR	REFR	REFRIGERATOR		
F.O.	FACE OF	REINF	REINFORCE (D) (ING)		
FAAB	FLUID APPLIED AIR BARRIER	REQD	REQUIRED		
FAAP	FIRE ALARM ANNUNCIATOR PANEL	RES	RESILIENT		
FACP	FIRE ALARM CONTROL PANEL	RO	ROUGH OPENING		
FBO	FURNISHED BY OWNER	ROW	RIGHT OF WAY		
FD	FLOOR DRAIN	RTU	ROOF TOP UNIT		
FDN	FOUNDATION	SC	SEALED CONCRETE		
FE	FIRE EXTINGUISHER	SCHED	SCHEDULE (D)		
FEC	FIRE EXTINGUISHER CABINET	SECT	SECTION		
FF	FINISHED FLOOR	SF	SQUARE FEET		
FFIN	FACTORY FINISH	SFT	STORE FRONT		
FRP	FIBERGLASS REINFORCED PLASTIC	SIM	SIMILAR		
FTG	FOOTING	SPEC	SPECIFICATION		
FURN	FURNISHING / FURNITURE	SQ	SQUARE		
GA	GAGE	SS	STAINLESS STEEL		
GALV	GALVANIZED	SSM	SOLID SURFACE MATERIAL		
GL	GLAZING	STL	STEEL		
GL-X	GLAZING TYPE X	STN	STAIN		
GWB	GYPSUM WALL BOARD	STRUCT	STRUCTURAL		
H	HIGH / HEIGHT	SV	SHEET VINYL		
HC	HANDICAPPED	T&G	TONGUE & GROOVE		
HDW	HARDWARE	T.O.	TOP OF		
HDWD	HARDWOOD	TEMP	TEMPORARY		
HM	HOLLOW METAL	TV	TELEVISION		
		TYP	TYPICAL		

### DRAWING INDEX

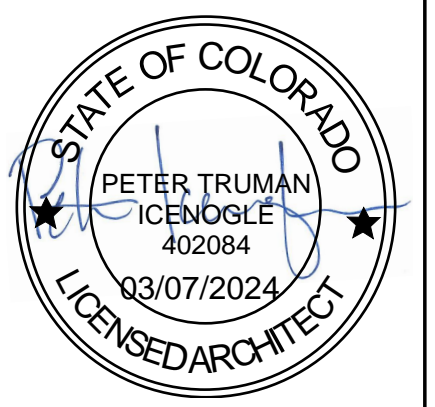
GENERAL INFORMATION SHEETS	
G0-1	TITLE SHEET
ARCHITECTURAL SHEETS	
AD1-1	DEMOLITION FLOOR PLAN
A1-1	FLOOR PLAN
AA-1	INTERIOR DETAILS
STRUCTURAL SHEETS	
S0-1	GENERAL NOTES
S1-1	FIRST FLOOR PLAN
MECHANICAL SHEETS	
M0-1	MECHANICAL COVER SHEET
M1-1	MECHANICAL PLANS
PLUMBING SHEETS	
P0-1	PLUMBING COVER SHEET
P1-1	PLUMBING PLANS
ELECTRICAL SHEETS	
E0-1	ELECTRICAL COVER SHEET
E2-1	POWER DEMOLITION PLANS
E1-1	LIGHTING PLANS
E1-3	LIGHTING - DETAILS
E2-1	POWER PLANS

### BUILDING CODE ANALYSIS

<b>PROJECT DESCRIPTION:</b>	
MINOR RENOVATION TO EXISTING JAIL BOOKING AREA -	
1. DEMOLISH SINGLE USER TOILET ROOM AND REPLACE WITH NEW HOLDING CELL WITH TOILET FIXTURE	
2. CONVERT HOLDING CELL INTO PADDED CELL	
3. OCCUPANCY REMAINS THE SAME	
<b>CODE JURISDICTION:</b>	
2018 IBC, IEBC	
<b>ALTERATIONS:</b>	
LEVEL 2	
<b>OCCUPANCY:</b>	
GROUP I-3, INSTITUTIONAL	
<b>CONSTRUCTION TYPE:</b>	
CONSTRUCTION TYPICAL OF TYPE I-A FIRE RATED	
<b>AUTOMATIC SPRINKLER SYSTEM:</b>	
EXISTING TO BE MODIFIED TO FIT NEW HOLDING CELLS	
<b>BUILDING AREA:</b>	
FIRST FLOOR	113284 GSF
ACTUAL TOTAL BUILDING:	127560 GSF
ALLOWED [IBC 506.1]	UNLIMITED
<b>EXIT TRAVEL DISTANCE:</b>	
FOR I-3 OCCUPANCY:	
COMMON PATH OF EGRESS TRAVEL: 100 FT WITH SPRINKLER SYSTEM [IBC TABLE 1006.2.1]	
EXIT ACCESS TRAVEL DISTANCE: 200 FT WITH SPRINKLER SYSTEM [IBC TABLE 1017.2]	

### TITLE SHEET

### FOR CONSTRUCTION



REV. DESC. DATE:

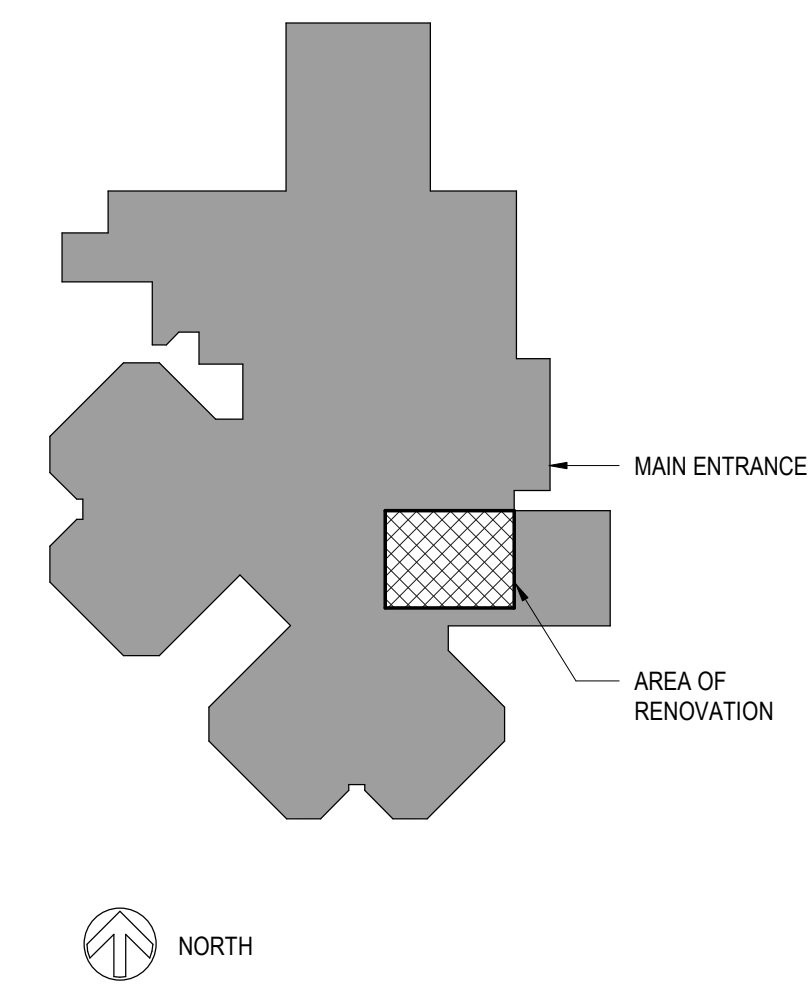
DATE: 1/15/2024

PROJECT #: 23028

SHEET #:

G0-1

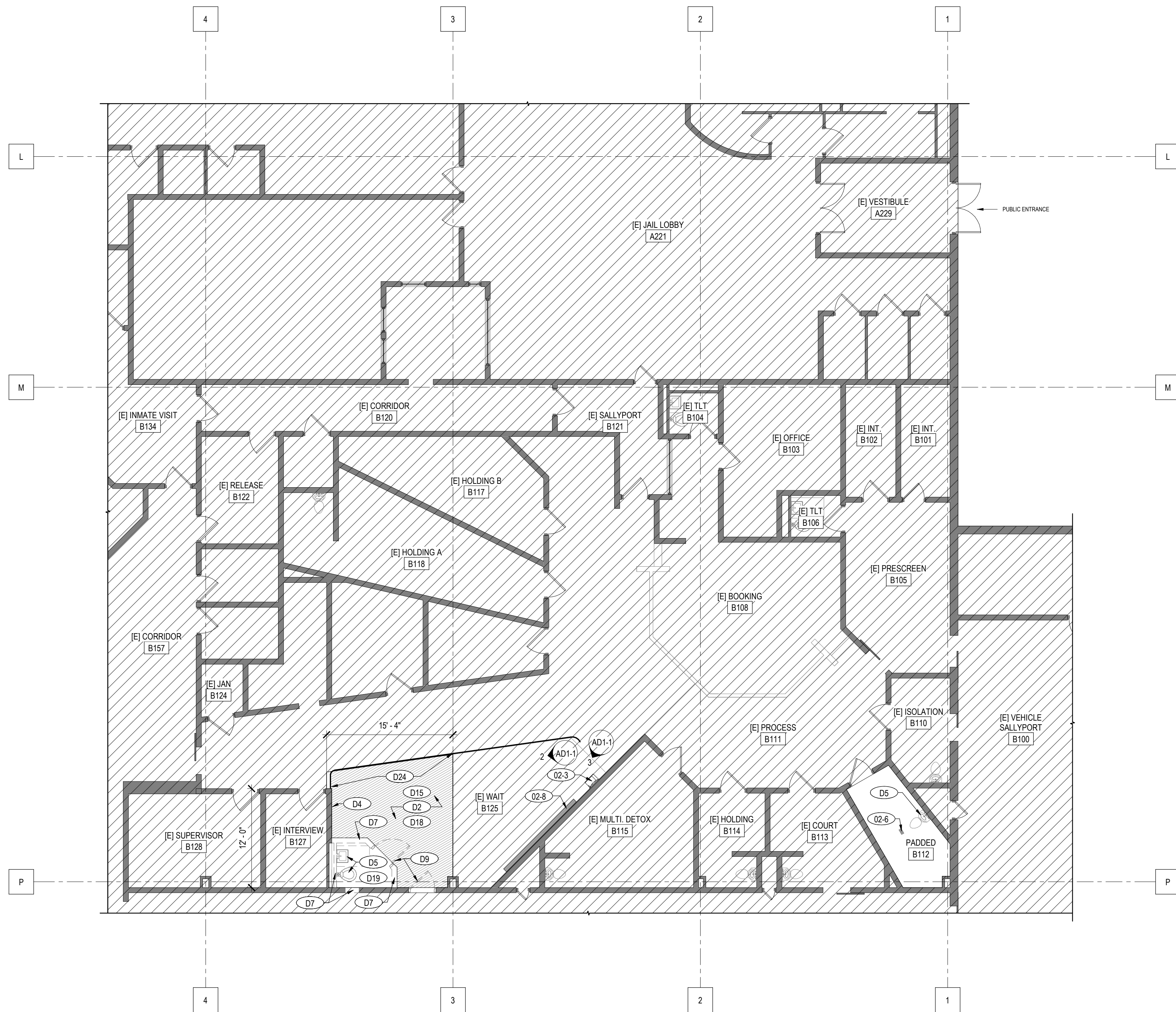
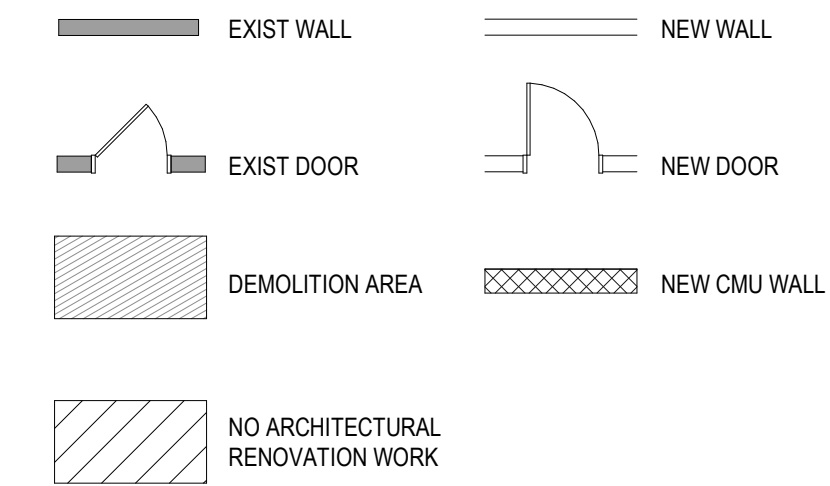
**KEYPLAN**



**GENERAL NOTES**

1. ALL NEW INTERIOR PARTITIONS ARE TYPE 1, UNO. REFERENCE ASSEMBLIES DRAWING FOR ADDITIONAL WALL TYPES & CONSTRUCTION.
2. WALLS LOCATED ON GRID LINES ARE CENTERED ON THE GRID LINE UNO.
3. INTERIOR DIMENSIONS ARE TO F.O. CMU, UNO.
4. DIMENSIONS TO EXISTING WALLS ARE TO FINISH FACE, UNO.
5. ALL ITEMS ARE NEW UNLESS NOTED AS EXISTING.
6. CONTRACTOR TO COORDINATE SECURE ACCESS W/ OWNER.
7. PAINT COLORS TO MATCH TYPICAL EXISTING FINISHES IN BOOKING AREA.
8. DETENTION GRADE SEALANT TO BE APPLIED TO ALL EXPOSED JOINTS.

**LEGEND**



**DEMOLITION FLOOR PLAN**  
1/AD1-1 1/8" = 1'-0"  
NORTH

**KEYNOTE LEGEND**

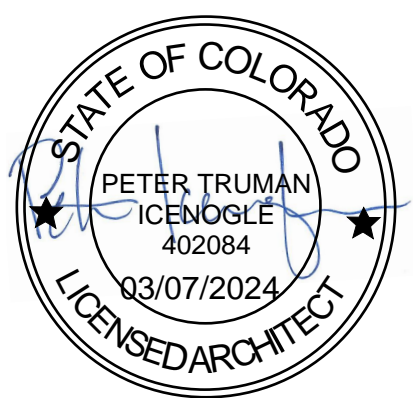
02-3	EXISTING DRINKING FOUNTAIN TO REMAIN
02-6	EXISTING FLUSHING FLOOR DRAIN TO REMAIN
02-8	EXISTING WALL MOUNTED ITEMS TO REMAIN - PROTECT DURING CONSTRUCTION ACTIVITIES
D2	REMOVE PORTION OF CONCRETE SLAB TO EXTENTS SHOWN (REF STRUCT), COORDINATE EXTENTS W/ ARCH RECONSTRUCTION DWGS
D4	REMOVE AND SALVAGE TV, RETURN TO OWNER
D5	REMOVE PLUMBING FIXTURE, SALVAGE FOR REINSTALLATION IN NEW HOLDING B125 CELL (REF PLUMBING)
D7	REMOVE PORTION OF MASONRY WALL AS INDICATED
D9	REMOVE DOOR AND FRAME
D15	REMOVE VCT FLOORING AND RUBBER BASE
D18	REMOVE SUSPENDED CEILING TILES AND GRID
D19	REMOVE GWB CLG IN THIS AREA
D24	REMOVE PORTION OF FLOOR-MOUNTED STEEL HANDRAIL AS INDICATED, COORDINATE W/ RECONSTRUCTION DWGS

**MESA COUNTY SHERIFF'S OFFICE - BOOKING AREA RENOVATION**

215 RICE STREET  
GRAND JUNCTION, CO  
81501

**DEMOLITION FLOOR PLAN**

**FOR CONSTRUCTION**



REV. DESC. DATE:

DATE: 1/15/2024

PROJECT #: 23028

SHEET #:

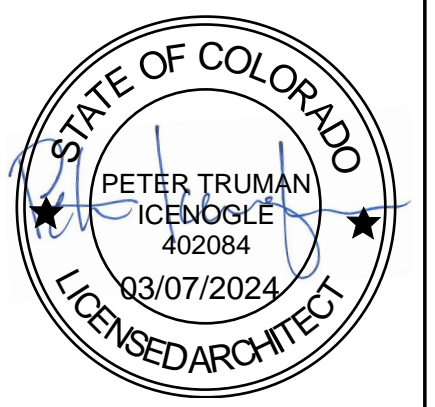
**AD1-1**



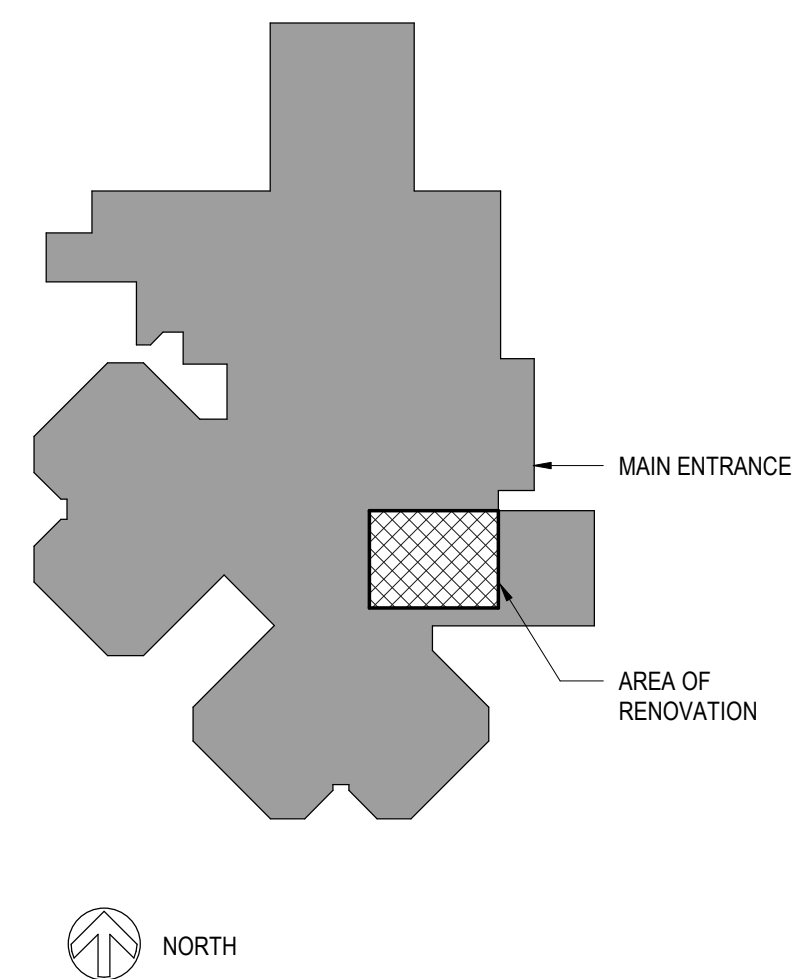
2 EXISTING CONDITIONS  
AD1-1



3 EXISTING CONDITIONS  
AD1-1



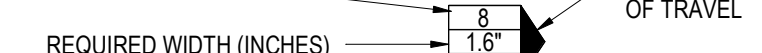
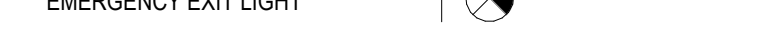
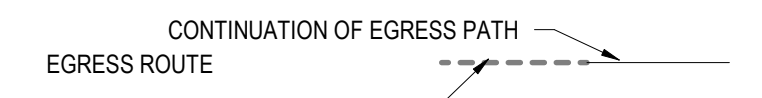
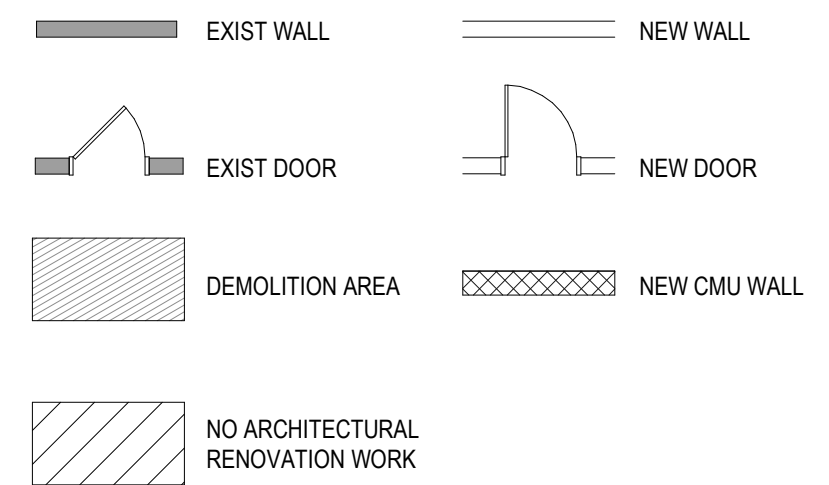
KEYPLAN



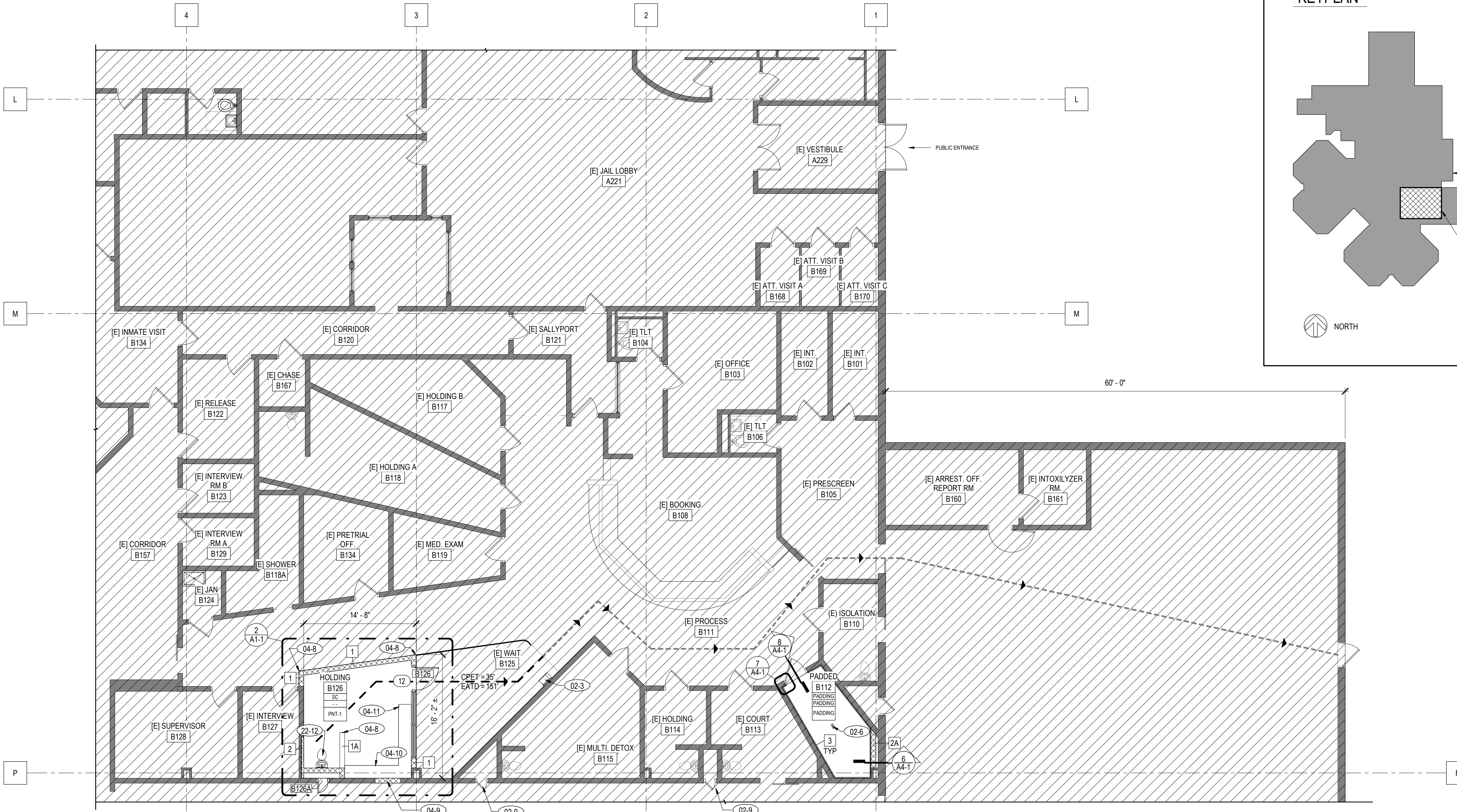
GENERAL NOTES

1. ALL NEW INTERIOR PARTITIONS ARE TYPE 1, UNO. REFERENCE ASSEMBLY'S DRAWING FOR ADDITIONAL WALL TYPES & CONSTRUCTION.
2. WALLS LOCATED ON GRID LINES ARE CENTERED ON THE GRID LINE UNO.
3. INTERIOR DIMENSIONS ARE TO F.O. CMU UNO.
4. DIMENSIONS TO EXISTING WALLS ARE TO FINISH FACE, UNO.
5. ALL ITEMS ARE NEW UNLESS NOTED AS EXISTING.
6. CONTRACTOR TO COORDINATE SECURE ACCESS W/ OWNER.
7. PAINT COLORS TO MATCH TYPICAL EXISTING FINISHES IN BOOKING AREA.
8. DETENTION GRADE SEALANT TO BE APPLIED TO ALL EXPOSED JOINTS.

LEGEND



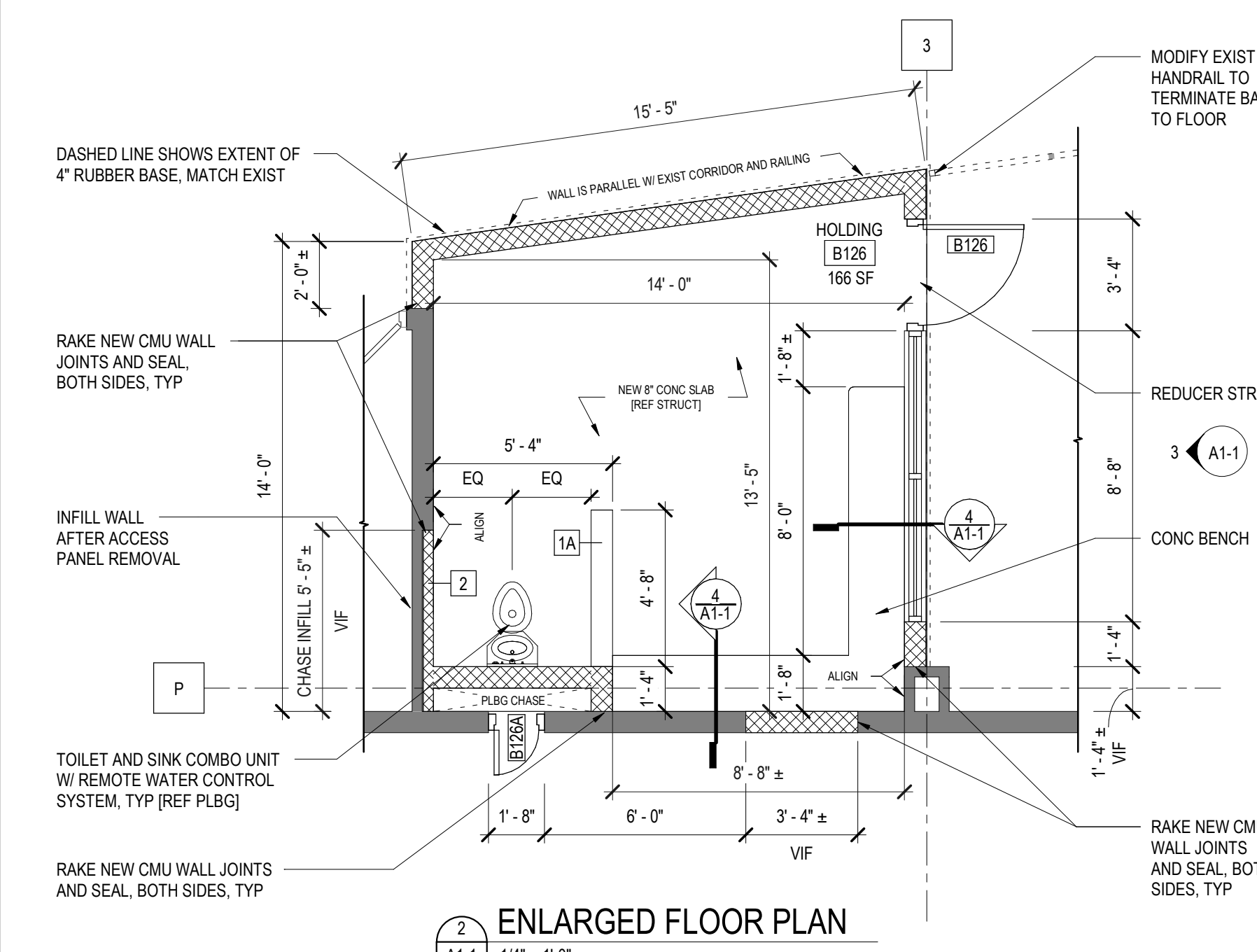
NOTE: SOME SYMBOLS SHOWN MAY NOT BE USED ON THIS PROJECT.



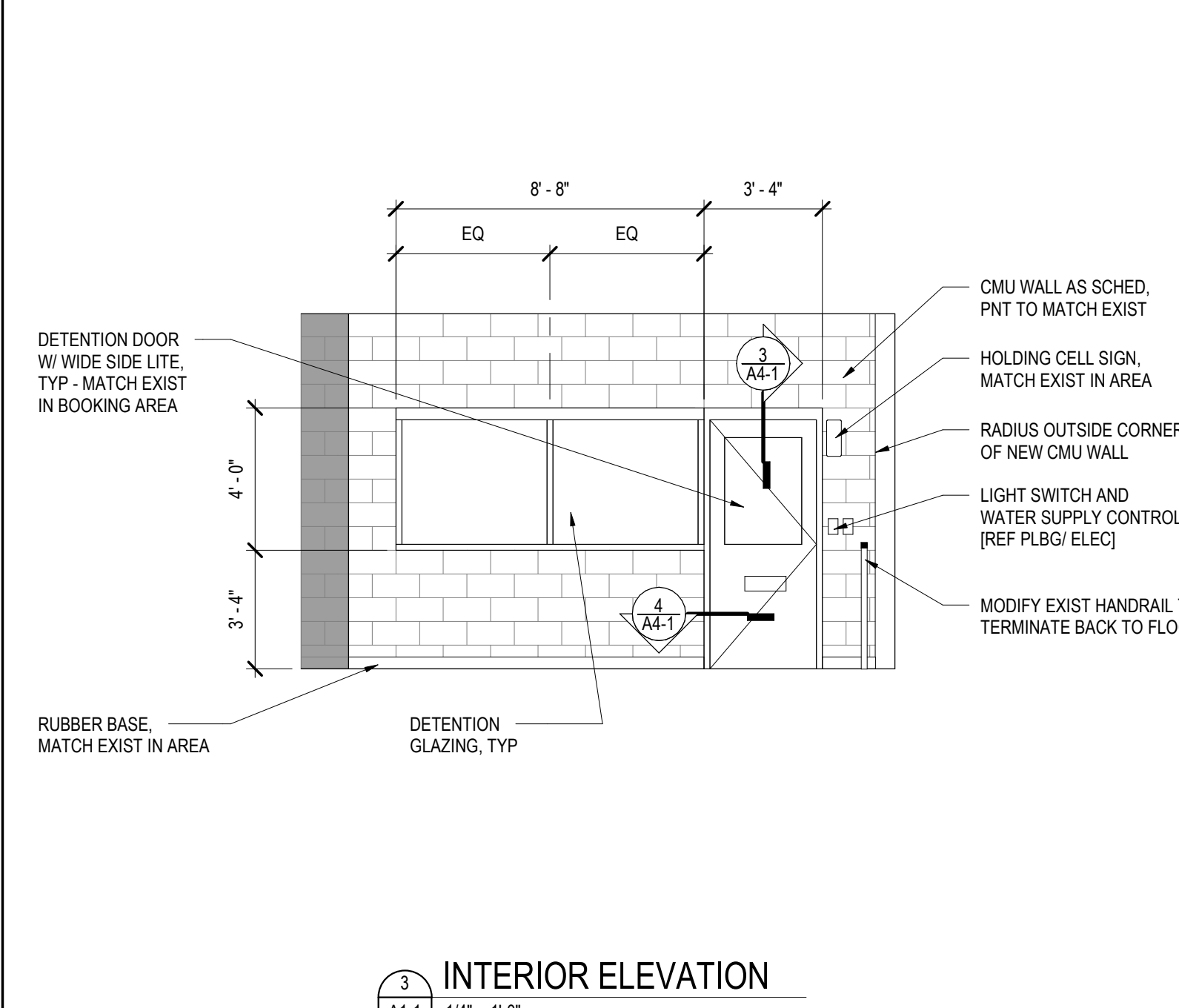
FLOOR PLAN  
 A1-1 1/8" = 1'-0"

KEYNOTE LEGEND

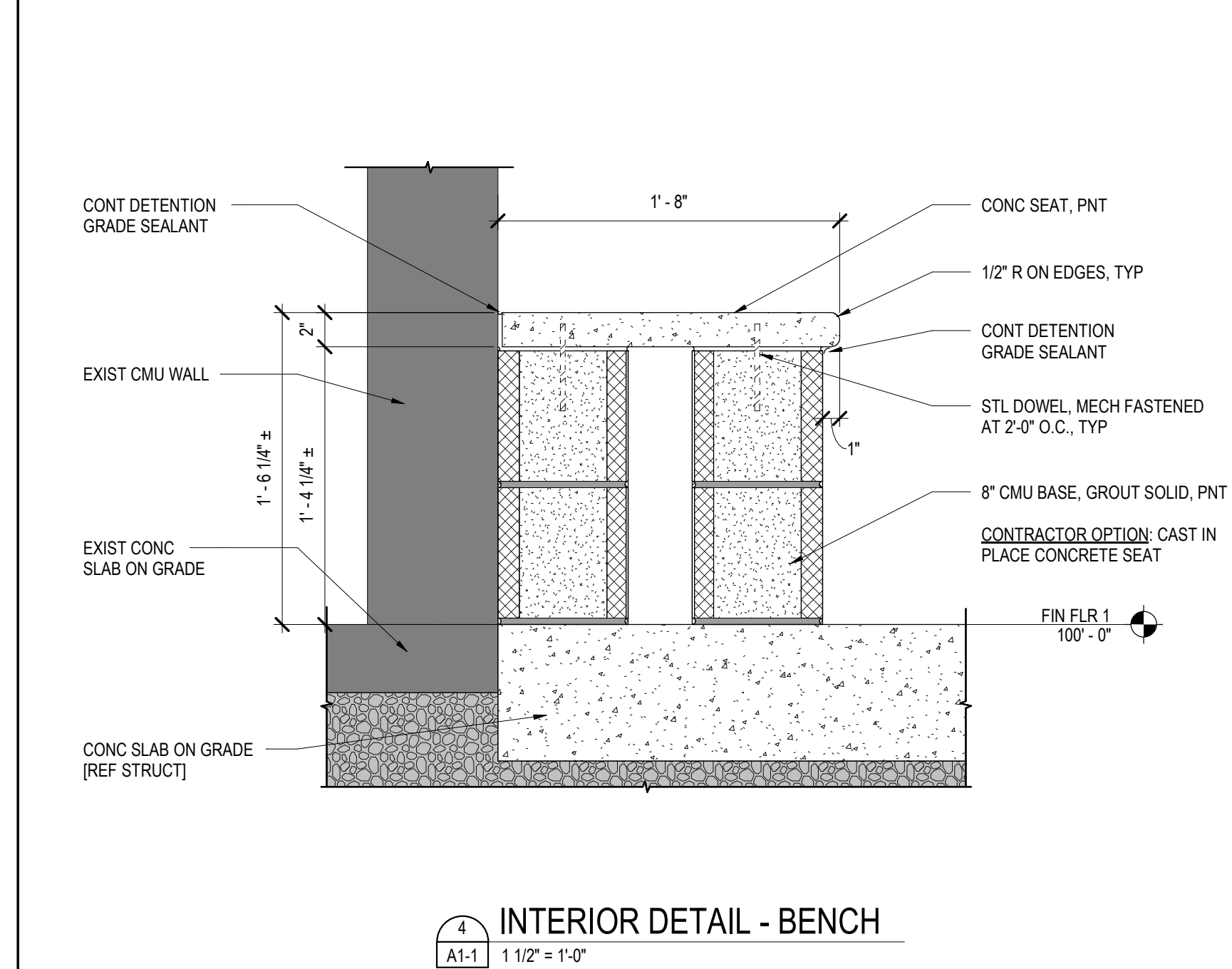
02-3	EXISTING DRINKING FOUNTAIN TO REMAIN
02-6	EXISTING FLUSHING FLOOR DRAIN TO REMAIN
02-9	EXISTING PLUMBING CHASE ACCESS PANEL - MATCH NEW DOOR B126A TO EXISTING SIZE AND FINISH
04-8	ROUND OUTSIDE EDGE OF CMU WALL
04-9	INFILL CMU WALL, REMOVE STEEL LINTEL AT DEMO'D DOOR HEAD, PNT TO MATCH EXISTING
04-10	CONCRETE BENCH [REF DETAIL]
04-11	ROUND OUTSIDE EDGE OF BENCH BASE AND BENCH SEAT. 2" RADIUS MINIMUM
22-12	INSTALL SALVAGED STAINLESS STEEL TOILET AND SINK COMBINATION UNIT [REF PLBG]



ENLARGED FLOOR PLAN  
 A1-1 1/4" = 1'-0"

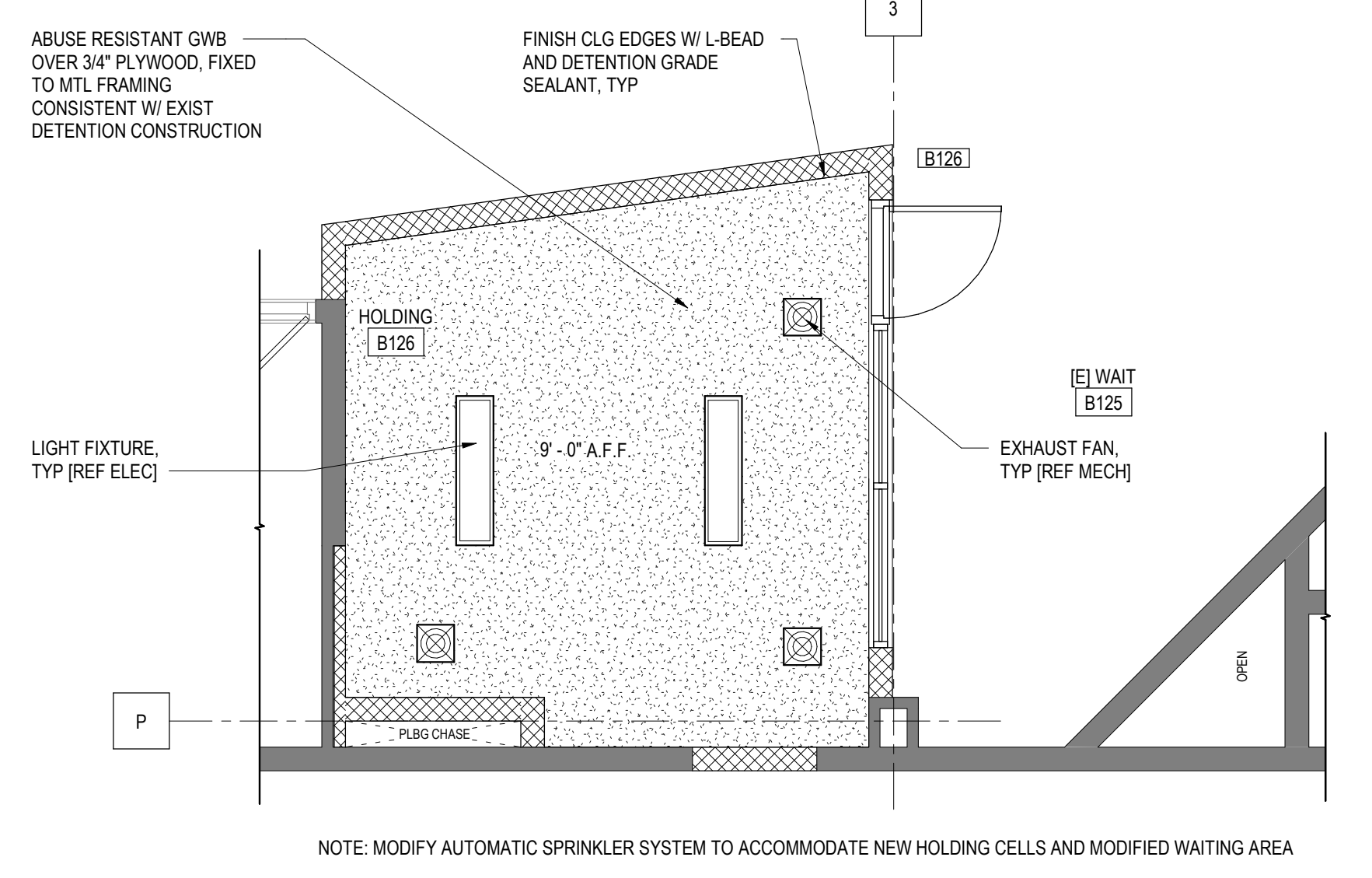
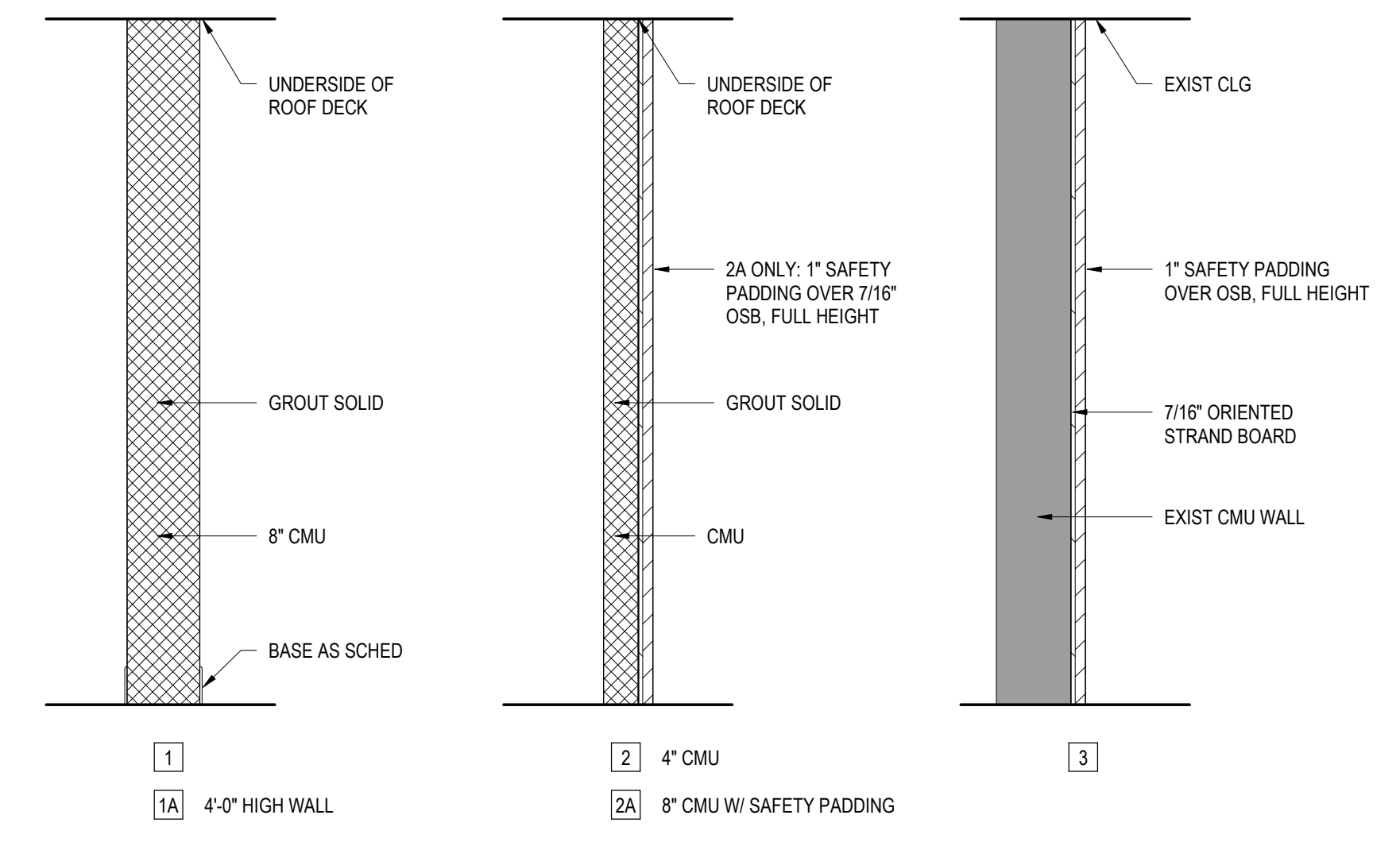


INTERIOR ELEVATION  
 A1-1 1/4" = 1'-0"

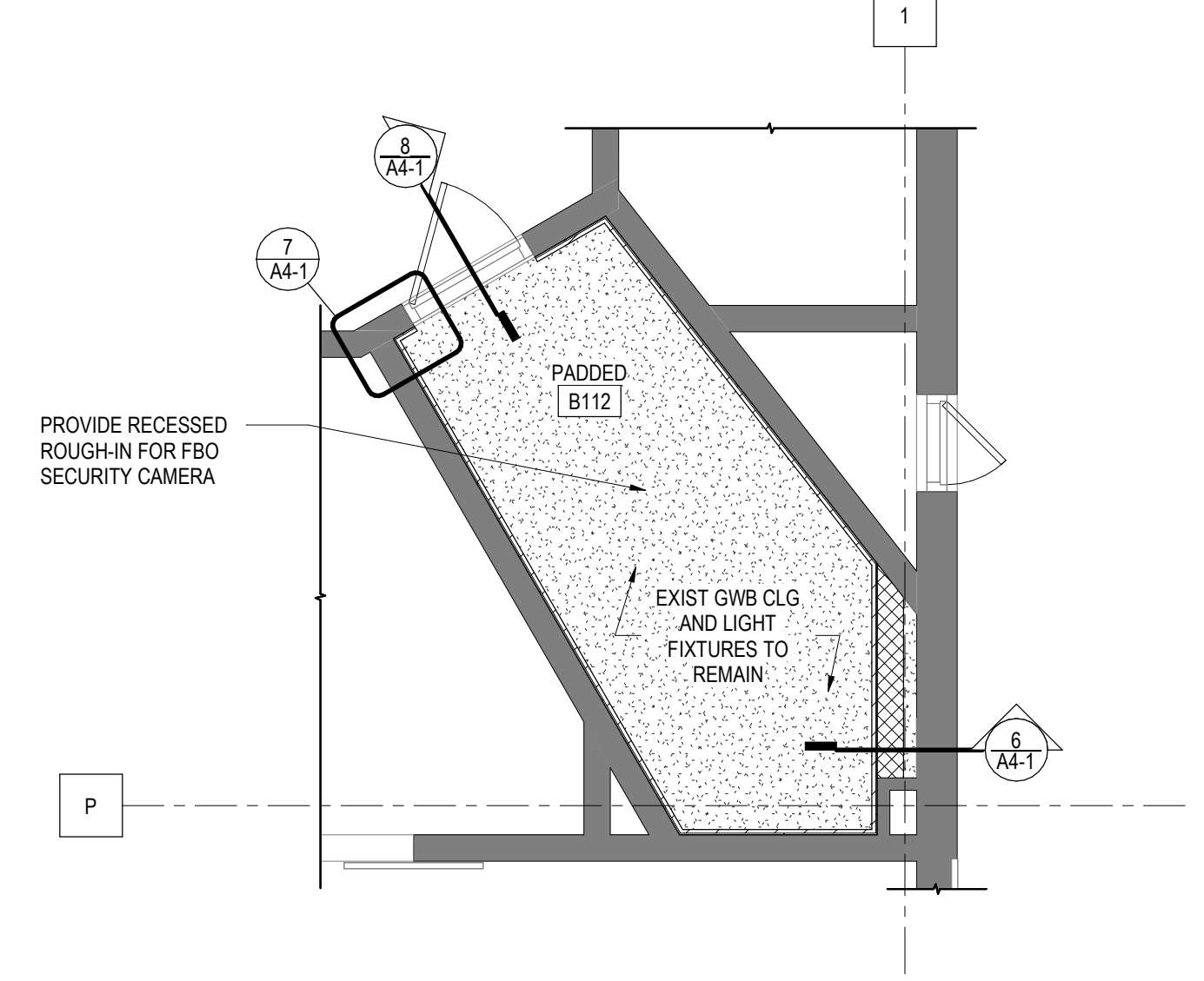


INTERIOR DETAIL - BENCH  
 A1-1 1 1/2" = 1'-0"

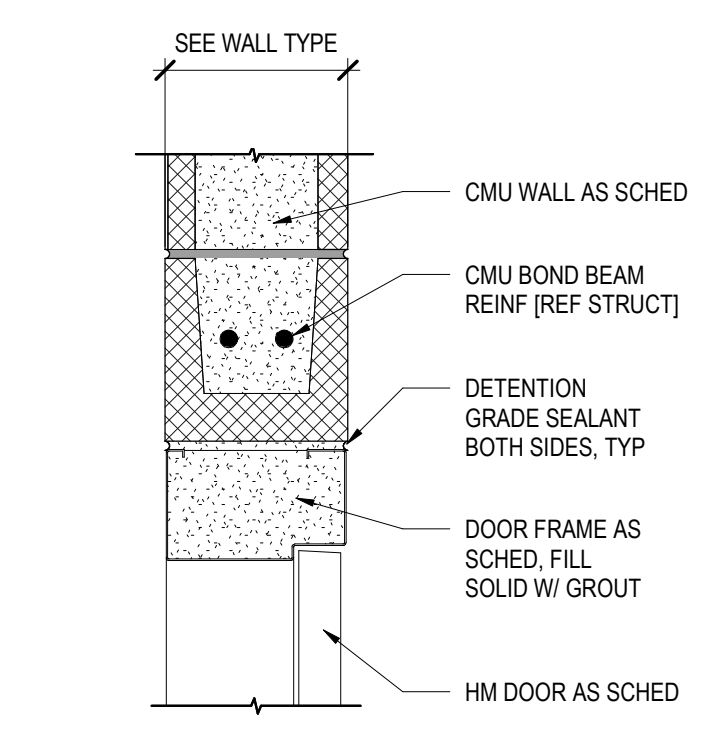
**WALL TYPES**



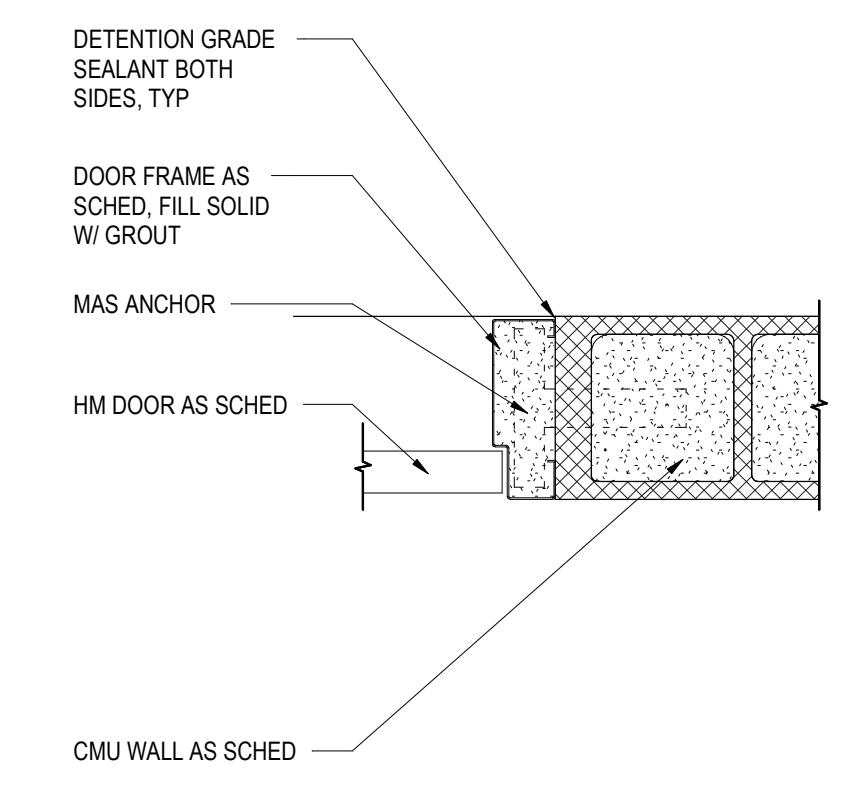
**REFLECTED CEILING PLAN - HOLDING CELLS**  
1  
A4-1 1/4" = 1'-0"



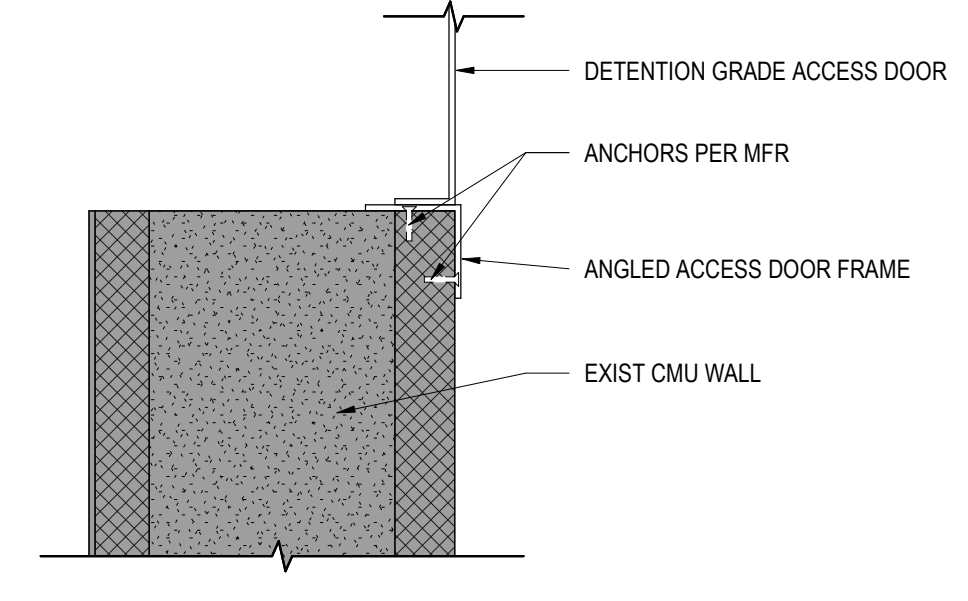
**REFLECTED CEILING PLAN - PADDED CELLS**  
2  
A4-1 1/4" = 1'-0"



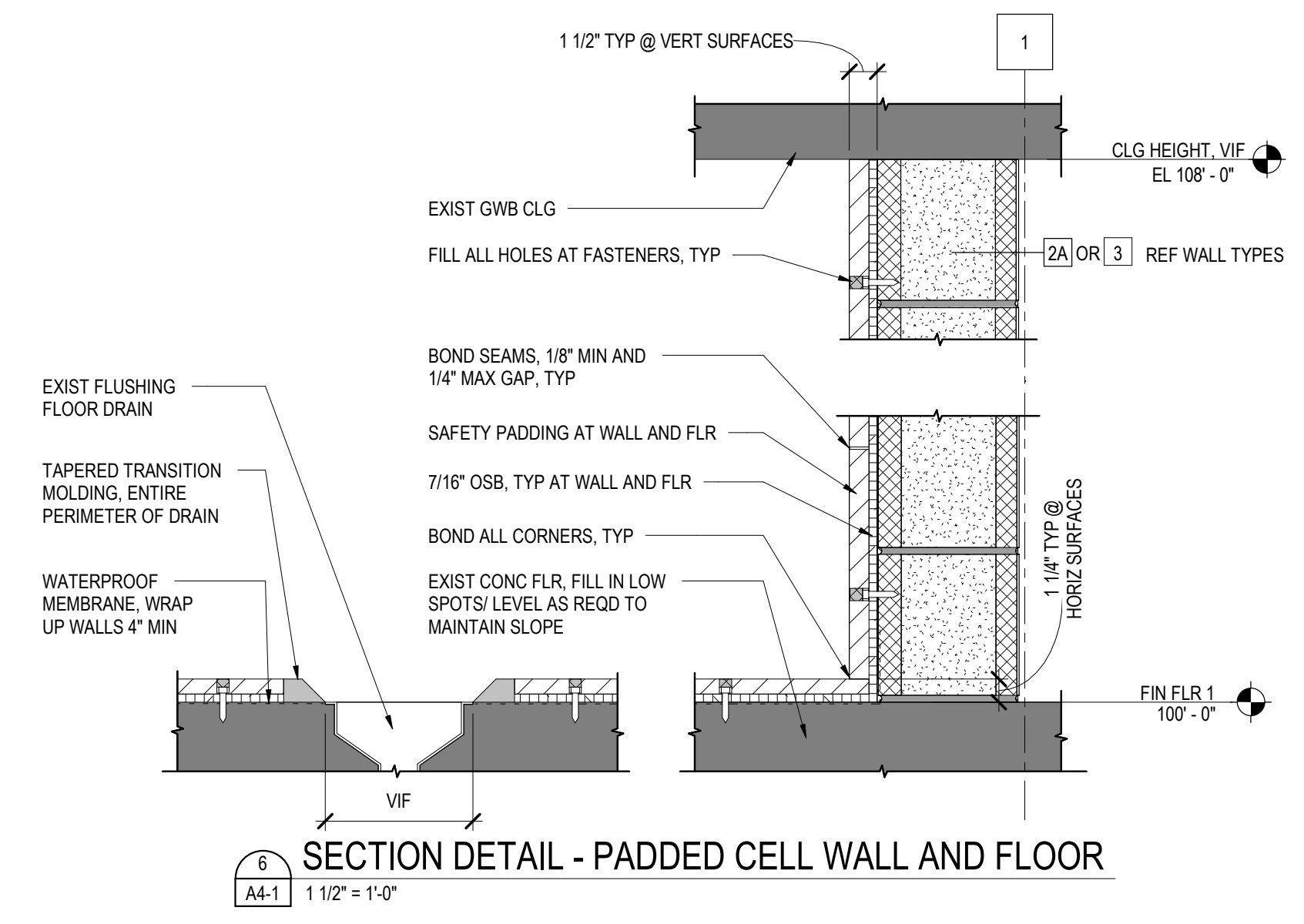
**SECTION DETAIL - DOOR HEAD**  
3  
A4-1 1 1/2" = 1'-0"



**PLAN DETAIL - DOOR JAMB**  
4  
A4-1 1 1/2" = 1'-0"



**ACCESS DOOR SILL/ HEAD/ JAMB**  
5  
A4-1 3" = 1'-0"



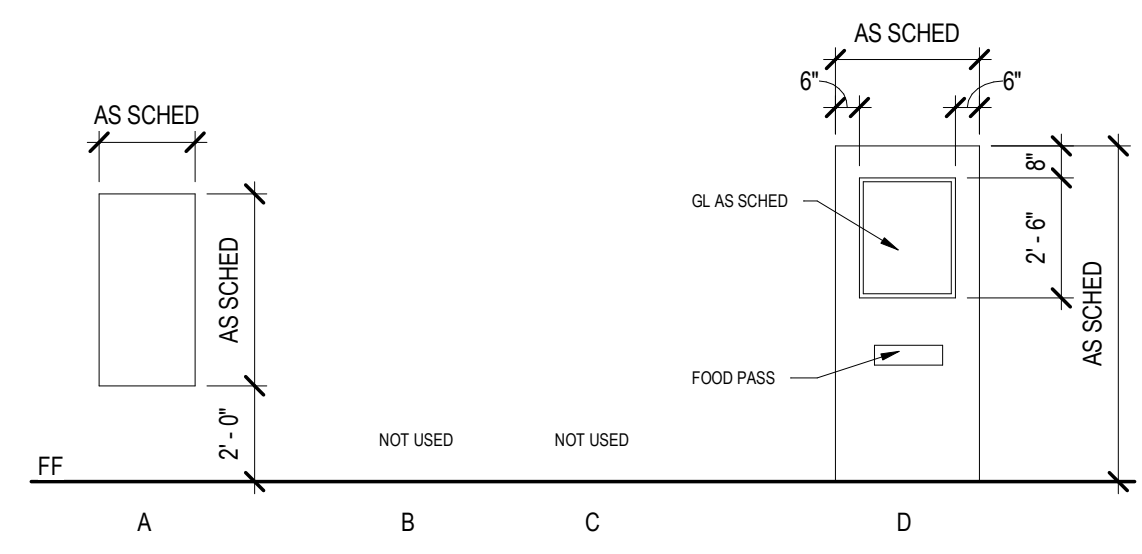
**SECTION DETAIL - PADDED CELL WALL AND FLOOR**  
6  
A4-1 1 1/2" = 1'-0"

DOOR SCHEDULE															
DOOR NUMBER	DOOR SIZE		DOOR TYPE				RATING	HDW GROUP	FRAME TYPE					COMMENTS	
	WIDTH	HEIGHT	TYPE	MATL	GLAZING	FINISH			TYPE	MATL	FINISH	JAMB DETAIL	HEAD DETAIL		SILL / THRESHOLD
B126	3'-0"	7'-0"	D	HM	SECURITY	PNT-2	--	1	REF ELEVATION	HM	PNT-2	4/A4-1	3/A4-1	REDUCER	1, 2, 3
B126A	1'-4"	5'-4"	A	HM	--	PNT-1	--	2	PER MFR	MTL	PNT-1	5/A4-1	5/A4-1	5/A4-1	4

**DOOR SCHEDULE GENERAL NOTES**

- FRAME ELEVATIONS INDICATED ARE BASED UPON NOMINAL DIMENSIONS. FIELD VERIFY DIMENSIONS OF ACTUAL ROUGH OPENINGS.
- ALL INTERIOR EXPOSED STEEL LINTELS ARE TO BE PAINTED TO MATCH ADJACENT WALL FINISH.
- ALL INTERIOR HOLLOW METAL DOORS & FRAMES ARE TO BE PAINTED TO MATCH TYPICAL FINISH IN THE AREA OF RENOVATION (PAINT ON ALL SIDES); REF ASSUMED PAINT SCHEDULE IN PROJECT MANUAL - SELECTIONS BASED ON EXISTING DRAWINGS PROVIDED.
- ALL DOOR FRAMES AND TYPES ARE TO BE DETENTION GRADE.
- PROVIDE KEYING TO MATCH EXISTING DETENTION DOORS.

**DOOR TYPES**



**DOOR HARDWARE SETS**

- NOTES:**
- COORDINATE CYLINDER AND CORE TYPE W/ OWNER
  - ALL HARDWARE TO BE DETENTION GRADE
  - INTENT IS TO MATCH EXIST HARDWARE PRESENT IN BOOKING AREA

**HARDWARE GROUP NO. 1**  
FOR USE ON DOOR #(S):  
B126, HOLDING CELL DOOR

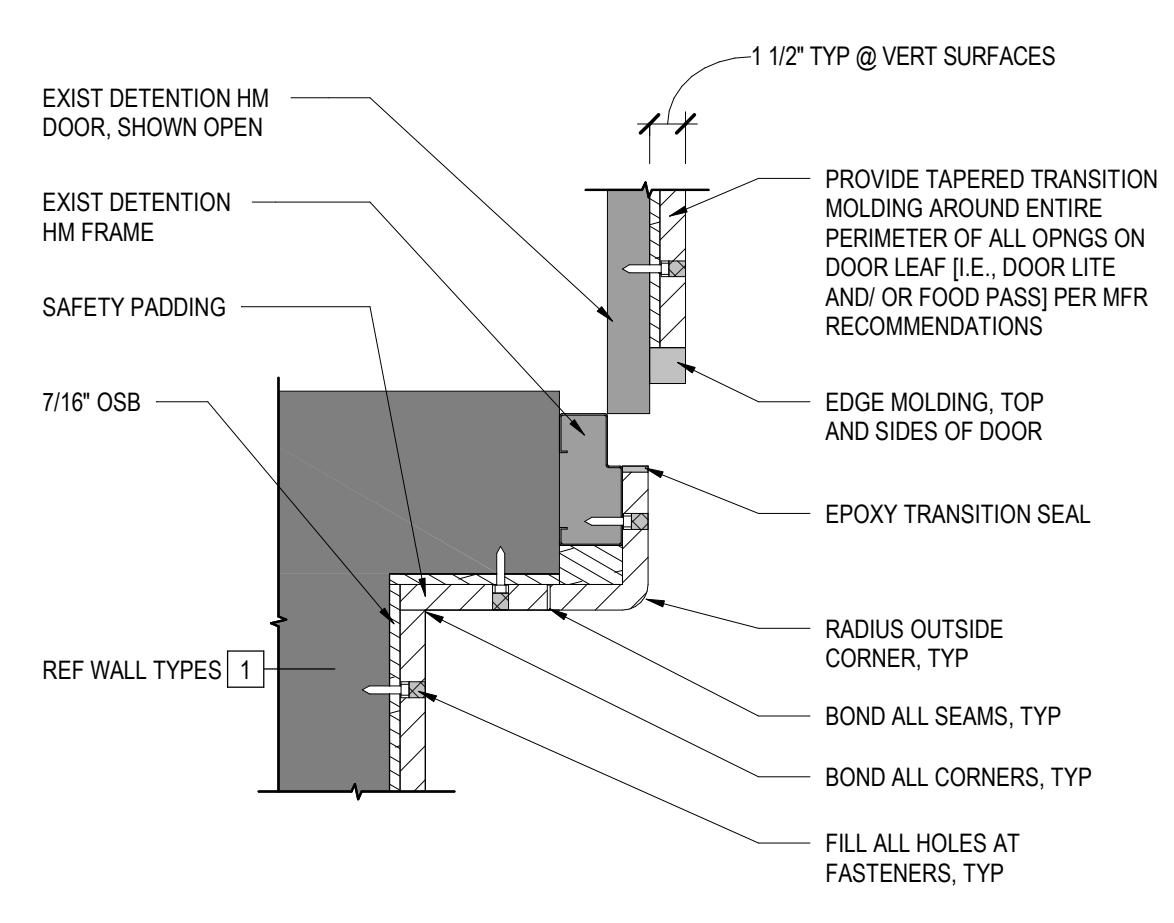
Provide each single door with the following:

[qty/unit]	[part#]	[finish code]	[mfr]
1 EA	LOCK	10120ER-1	GALV SOUTHERN FOLGER
3 EA	HINGE	204FMSS	US32D SOUTHERN FOLGER
1 EA	DPS	200MRS-DPS	AL LCN SOUTHERN FOLGER
1 EA	RAISED PULL	212C	US26D SOUTHERN FOLGER
3 EA	SILENCERS	GJ64	GALV GLYNN JOHNSON
1 EA	FOOD PASS	262	GALV SOUTHERN FOLGER

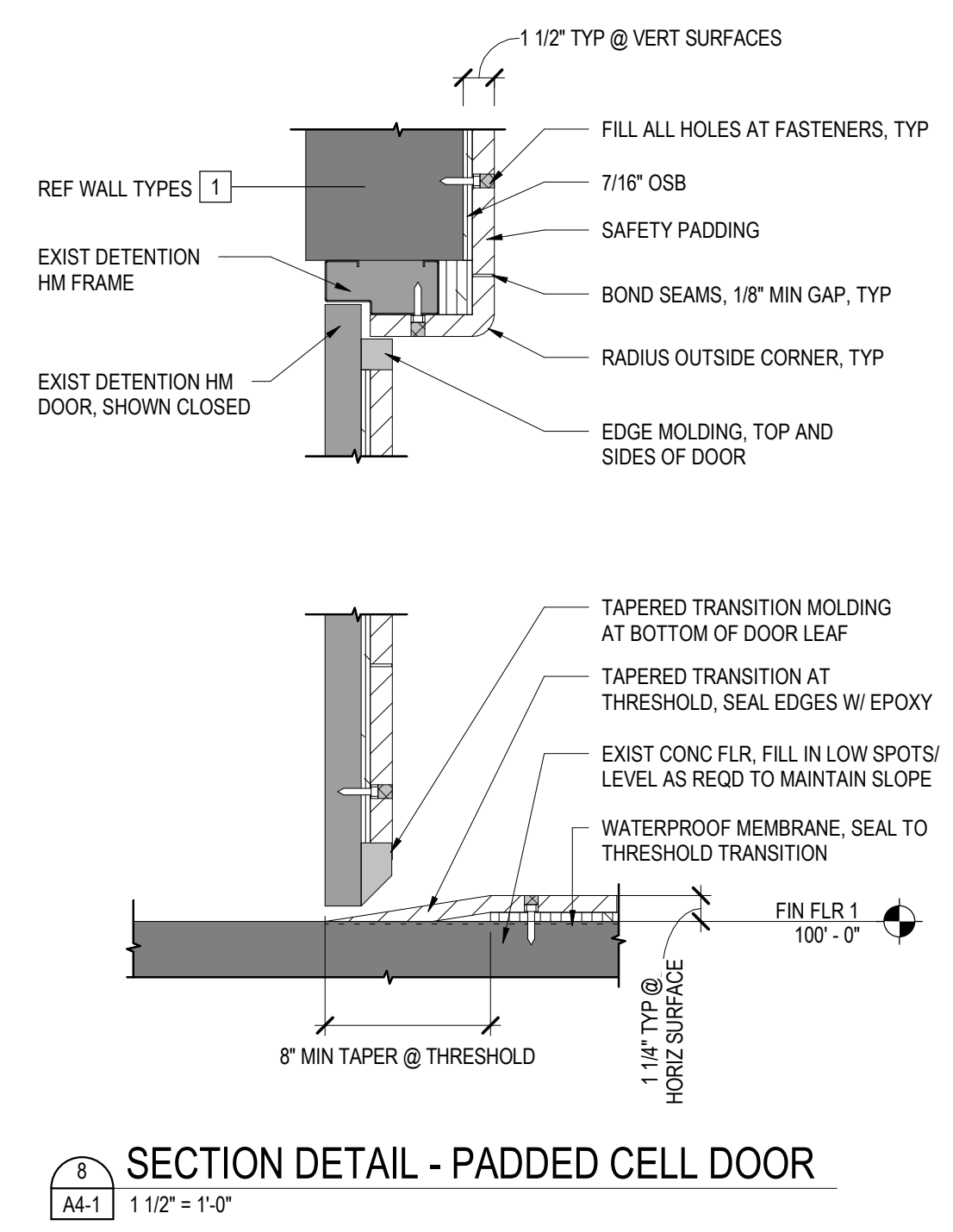
**HARDWARE GROUP NO. 2**  
FOR USE ON DOOR #(S):  
B126A, ACCESS DOOR

Provide each single door with the following:

[qty/unit]	[part#]	[finish code]	[mfr]
1 EA	LOCK	1010AM-1	US32D SOUTHERN FOLGER
3 EA	HINGE	204FMSS	US32D SOUTHERN FOLGER
3 EA	SILENCERS	GJ64	GALV GLYNN JOHNSON



**PLAN DETAIL - PADDED CELL DOOR**  
7  
A4-1 1 1/2" = 1'-0"



**SECTION DETAIL - PADDED CELL DOOR**  
8  
A4-1 1 1/2" = 1'-0"

# SCHEDULE OF SPECIAL INSPECTIONS-STRUCTURAL

## NOTES/DEFINITIONS:

- SPECIAL INSPECTION:**  
INSPECTION OF CONSTRUCTION REQUIRING THE EXPERTISE OF AN APPROVED SPECIAL INSPECTOR IN ORDER TO ENSURE COMPLIANCE WITH THIS CODE AND THE APPROVED CONSTRUCTION DOCUMENTS.
- CONTINUOUS SPECIAL INSPECTION:**  
SPECIAL INSPECTION BY THE SPECIAL INSPECTOR WHO IS PRESENT WHEN AND WHERE THE WORK TO BE INSPECTED IS BEING PERFORMED.
- PERIODIC SPECIAL INSPECTION:**  
SPECIAL INSPECTION BY THE SPECIAL INSPECTOR WHO IS INTERMITTENTLY PRESENT WHERE THE WORK TO BE INSPECTED HAS BEEN OR IS BEING PERFORMED.
- SPECIAL INSPECTOR:**  
A QUALIFIED PERSON EMPLOYED OR RETAINED BY AN APPROVED AGENCY AND APPROVED BY THE BUILDING OFFICIAL AS HAVING THE COMPETENCE NECESSARY TO INSPECT A PARTICULAR TYPE OF CONSTRUCTION REQUIRING SPECIAL INSPECTION.

## REQUIRED SPECIAL INSPECTIONS AND TESTS OF SOILS

MINIMUM INSPECTION				
VERIFICATION AND INSPECTION	FREQUENCY		REFERENCE FOR CRITERIA	IBC REFERENCE
	CONT.	PERIODIC		
1. VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY	----	X		1705.6
2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL	----	X		1705.6
3. PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS.	----	X		1705.6
4. VERIFY USE OF PROPER MATERIAL, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL	X	----		1705.6
5. PRIOR TO PLACEMENT OF COMPACTED FILL, INSPECT SUBGRADE AND VERIFY THAT SITE HAS BEEN PROPERLY PREPARED.	----	X		1705.6

## REQUIRED SPECIAL INSPECTIONS AND TESTS OF CONCRETE CONSTRUCTION

MINIMUM INSPECTION				
VERIFICATION AND INSPECTION	FREQUENCY		REFERENCE FOR CRITERIA	IBC REFERENCE
	CONT.	PERIODIC		
1. INSPECT REINFORCEMENT, AND VERIFY PLACEMENT	----	X	ACI 318 CH. 20, 25.2, 25.3, 26.5.1-26.5.3	1908.4
2. REINFORCING BAR WELDING IF USED DUE TO FIELD FIXES: A. VERIFY WELDABILITY OF REINFORCING BARS OTHER THAN ASTM A706; B. INSPECT SINGLE-PASS FILLET WELDS, MAXIMUM 5/16"; C. INSPECT ALL OTHER WELDS.	----	X	AWS D1.4 ACI 311/ 26.5.4	----
3. INSPECT ANCHORS CAST IN CONCRETE	----	X	ACI 318: 17.8.2	----
4. INSPECT ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS. A. ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY OR UPWARDLY INCLINED ORIENTATIONS TO RESIST SUSTAINED TENSION LOADS. B. MECHANICAL ANCHORS AND ADHESIVE ANCHORS NOT DEFINED IN 4A.	X		ACI 318: 17.8.2.4 ACI 318: 17.8.2	----
5. VERIFY USE OF REQUIRED DESIGN MIX.	----	X	ACI 318: Ch. 19, 26.4.3, 26.4.4	1904.1, 1904.2, 1908.2, 1908.3
6. PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE.	X	----	ASTM C 172 ASTM C 31 ACI 318: 26.4.5, 26.12	1908.10
7. INSPECT CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES.	X	----	ACI 318: 26.4.5	1908.6, 1908.7, 1908.8
8. VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.	----	X	ACI 318: 26.4.7-26.4.9	1908.9
9. INSPECT FORMWORK FOR SHAPE, LOCATION, AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.	----	X	ACI 318: 26.10.1(b)	----

## REQUIRED SPECIAL INSPECTIONS AND TESTS OF MASONRY CONSTRUCTION

MINIMUM INSPECTION - LEVEL 2 QUALITY ASSURANCE				
VERIFICATION AND INSPECTION	FREQUENCY		REFERENCE FOR CRITERIA	IBC REFERENCE
	CONT.	PERIODIC		
1. VERIFY COMPLIANCE WITH THE APPROVED SUBMITTALS.	----	X	TMS 602-16 Art. 1.5	1705.4
2. AS MASONRY CONSTRUCTION BEGINS, VERIFY THE COMPLIANCE OF THE FOLLOWING: A. PROPORTIONS OF ON-SITE PREPARED MORTAR; B. CONSTRUCTION OF MORTAR JOINTS; C. LOCATIONS FOR REINFORCEMENT, CONNECTORS, AND ANCHORAGES.	----	X	TMS 602-16 Art. 2.1, 2.6A Art. 3.3B Art. 3.4, 3.6A	1705.4
3. PRIOR TO GROUTING, VERIFY THE COMPLIANCE OF THE FOLLOWING: A. GROUT SPACE; B. GRADE, TYPE, AND SIZE OF REINFORCEMENT AND ANCHOR BOLTS AND ANCHORAGES; C. PLACEMENT OF REINFORCEMENT, CONNECTORS, AND ANCHORAGES; D. PROPORTIONS OF SITE PREPARED GROUT; E. CONSTRUCTION OF MORTAR JOINTS.	----	X	TMS 602-16 Art. 3.2D, 3.2F Art. 2.4, 3.4 Art. 3.2E, 3.4, 3.6A Art. 2.6B, 2.4 G.1.b Art. 3.3B	1705.4
4. VERIFY DURING CONSTRUCTION: A. SIZE AND LOCATION OF STRUCTURAL ELEMENTS; B. TYPE, SIZE, AND LOCATIONS OF ANCHORS, INCLUDING OTHER DETAILS OF ANCHORAGE OF MASONRY TO STRUCTURAL MEMBERS, FRAMES, OR OTHER CONSTRUCTION; C. WELDING OF REINFORCEMENT; D. PREPARATION, CONSTRUCTION, AND PROTECTION OF MASONRY DURING COLD WEATHER (TEMPERATURE BELOW 40 DEGREES F) OR HOT WEATHER (TEMPERATURE ABOVE 90 DEGREES F); E. PLACEMENT OF GROUT IS IN COMPLIANCE.	----	X	TMS 602-16 Art. 3.3F TMS402-16 Sec. 1.21. (e), 6.1.4.3, 6.2.1 TMS402-16 Sec. 8.1.6.7.2, 9.3.3.4 (c), 11.3.3.4 (b) TMS 602-16 Art. 1.8C, 1.8D TMS 602-16 Art. 3.5, 3.6C	1705.4
5. OBSERVE PREPARATION OF GROUT SPECIMENS, MORTAR SPECIMENS, AND/OR PRISMS.	----	X	TMS 602-16 Art. 1.4 B.2.a.3, 1.4 B.2.b.3, 1.4 B.2.c.3, 1.4 B.3.m 1.4 B.4	1705.4

## REQUIRED VERIFICATION AND INSPECTION OF POST-INSTALLED CONCRETE AND MASONRY ANCHORS

MINIMUM INSPECTION				
VERIFICATION AND INSPECTION	FREQUENCY		REFERENCE FOR CRITERIA	IBC REFERENCE
	CONT.	PERIODIC		
1. ADHESIVE ANCHOR SYSTEMS A. PREPARATION OF PRE-DRILLED HOLES AND INSTALLATION OF ANCHORS.	----	X	MANUFACTURER'S REQUIREMENTS	1704.13(3)
2. INSPECTION OF WELDING: A. PREPARATION OF PRE-DRILLED HOLES AND INSTALLATION OF ANCHORS.	----	X	MANUFACTURER'S REQUIREMENTS	1704.13(3)

C.M.U. REINFORCING SCHEDULE	
1.	PROVIDE #5 @ 8 VERTICAL REINFORCING AT 8" C.M.U. GROUT ALL CELLS SOLID. VERTICAL REINFORCEMENT SHALL EXTEND THROUGH BOND BEAMS TO 2" CLR. BELOW TOP OF C.M.U.
2.	PROVIDE HORIZONTAL JOINT REINFORCEMENT @ 16" O.C. IN ALL C.M.U. WALLS CONSISTING OF STANDARD LADDER TYPE REINFORCEMENT WITH MINIMUM #9 SIDE RODS AND #9 CROSS RODS AT EACH LADDER. a. PROVIDE HORIZONTAL WALL REINFORCEMENT IN 8" C.M.U. WALLS CONSISTING OF A MINIMUM OF (2) CONTINUOUS BOND BEAMS WITH (2) #5 CONTINUOUS IN EACH BOND BEAM, ONE BOND BEAM AT THE TOPS OF WALLS AND ONE ABOVE DOOR OPENINGS. b. DO NOT EMBED CONDUITS, PIPES, OR ANY ITEMS OTHER THAN REINFORCEMENT IN C.M.U. BOND BEAMS.
3.	PROVIDE (2) #5 CONT. VERTICAL EACH SIDE OF ALL OPENINGS AND IN CORNERS. EXTEND 2'-0" MINIMUM EACH SIDE OF OPENING. GROUT SOLID.
4.	LAP ALL VERTICAL REINFORCING AS FOLLOWS: #4 - MINIMUM OF 2'-0" #5 - MINIMUM OF 2'-4"

GENERAL NOTES

- GOVERNING CODES USED FOR DESIGN:  
2018 INTERNATIONAL BUILDING CODE  
ASCE/SEI 7-16
- LIVE LOADS USED IN DESIGN:  
A. MAIN FLOOR----- 100 PSF  
2,000 lb. CONCENTRATED
- CONCRETE:  
A. CONCRETE MIX TABLE (NORMAL WEIGHT CONCRETE):

INTENDED USE	28 DAY STRENGTH FC (KSI)	MAX W.C. (INCLUDING FLY ASH)	MAX AGGR. (IN) (+1/2, 1")	SLUMP LIMITS (IN)	TOTAL AIR LIMITS (%) (2)	CEMENT TYPE	CONCRETE TYPE (BY WEIGHT)	RECD ADMIXTURES (3)	OTHER REQUIREMENTS (4)
INTERIOR SLABS ON GRADE	3.5	0.63	1 1/2	4	N	II	NW	--	SOG

NOTES:  
(1) FOR THE MAXIMUM COARSE AGGREGATE SIZE INDICATED, USE THE FOLLOWING AGGREGATE SIZE NUMBERS PER ASTM C33:  
3/4" - #67 AGGREGATE  
1" - #57 AGGREGATE  
(2) TOTAL AIR CONTENT LIMITS INCLUDE BOTH ENTRAINED AND ENTRAPPED AIR - 1 1/2%. 'N' IN COLUMN INDICATES ADDITION OF ENTRAINED AIR IS NOT PERMITTED.  
(3) ABBREVIATIONS FOR REQUIRED ADMIXTURES AS FOLLOWS:  
AE = AIR-ENTRAINING ADMIXTURE. DO NOT USE ENTRAINED AIR FOR STEEL TROWELED FINISHED FLOORS.  
WRA = WATER REDUCING ADMIXTURE.  
(4) ABBREVIATIONS FOR OTHER REQUIREMENTS AS FOLLOWS:  
FAR = 20% CLASS F FLY ASH REQUIRED.  
SOG = CONTRACTOR TO VERIFY ALKALINITY OF CONCRETE SURFACE, SLAB VAPOR TRANSMISSION, AND SLAB FLATNESS/LEVELNESS ARE COMPATIBLE WITH FLOORING SYSTEM AND ADHESIVES PRIOR TO INSTALLING FLOORING. AMOUNT OF CEMENTITIOUS MATERIALS LISTED SHALL BE PROVIDED, DO NOT USE LESS AND DO NOT SUPPLY OVER 5% MORE.  
(5) FOR CONCRETE PLACED BY PUMPING, PROVIDE CONCRETE MIX FLOWABILITY TO FACILITY PUMPING.  
B. ALL REINFORCING SHALL CONFORM TO ASTM A615, GRADE 60, EXCEPT COLUMN TIES, BEAM STIRRUPS, AND DOWELS TO SLAB ON GRADE WHICH MAY BE GRADE 40.  
C. NO SPLICES OF REINFORCEMENT SHALL BE MADE EXCEPT AS DETAIL OR AUTHORIZED BY THE STRUCTURAL ENGINEER. LAP SPLICES, WHERE PERMITTED, SHALL BE A MINIMUM OF 40 BAR DIAMETERS UNLESS OTHERWISE SHOWN OR NOTED. MAKE ALL BARS CONTINUOUS AROUND CORNERS.  
D. STAGGER SPLICES A MINIMUM OF 4'-0" FOR TOP AND BOTTOM CONTINUOUS BARS IN FOUNDATIONS, UNLESS OTHERWISE SHOWN OR NOTED.  
E. DETAIL BARS IN ACCORDANCE WITH A.C.I. DETAILING MANUAL AND A.C.I. BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE, LATEST EDITIONS.  
F. PROVIDE ALL ACCESSORIES NECESSARY TO SUPPORT REINFORCING (INCLUDING W.W.F.) AT POSITIONS SHOWN ON THE DRAWINGS. DO NOT ATTEMPT TO POSITION ANY REINFORCEMENT BY LIFTING DURING CONCRETE PLACEMENT.  
G. REINFORCEMENT PROTECTION SHALL BE AS FOLLOWS:  
(1) CONCRETE POURED AGAINST EARTH-----3"  
(2) FORMED CONCRETE EXPOSED TO EARTH OR WEATHER-----2"  
(3) FORMED STAIRS OR WALLS NOT EXPOSED TO WEATHER-----3/4"  
H. SLABS SHALL NOT HAVE JOINTS IN A HORIZONTAL PLANE.

- CONCRETE MASONRY FOR STRUCTURAL WALLS:  
A. ALL REINFORCING IN MASONRY WALLS SHALL CONFORM TO ASTM A615, GRADE 60 AND SHALL BE FULLY ENCLOSED WITH GROUT. USE PEA GRAVEL GROUT WITH MIN. fc = 3,000 PSI.  
B. CONCRETE MASONRY SHALL CONSIST OF LIGHTWEIGHT CONCRETE BLOCK WITH A COMPRESSIVE STRENGTH OF 2,000 PSI.  
C. CONCRETE MASONRY ASSEMBLY SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH fm' = 2,000 PSI.  
D. FILL ALL VOIDS AND BLOCK CELLS SOLID WITH MORTAR FOR A DISTANCE OF 24" BENEATH AND 12" EACH SIDE OF ALL BEAM REACTIONS OR OTHER CONCENTRATED LOADS, UNLESS OTHERWISE SHOWN OR NOTED.  
E. STRUCTURAL MASONRY IS TO BE LAID IN TYPE "SM" MORTAR IN ACCORDANCE WITH SECTION 2103 OF THE INTERNATIONAL BUILDING CODE. TYPE "N" MASONRY CEMENT MORTAR IS NOT ACCEPTABLE FOR C.M.U. WALLS.  
F. MASONRY WALLS MUST BE ADEQUATELY BRACED DURING CONSTRUCTION TO WITHSTAND WIND AND SEISMIC LOADS. BRACING MUST REMAIN IN PLACE UNTIL ROOF (AND FLOOR) DIAPHRAGMS ARE FULLY CAPABLE OF PROVIDING LATERAL SUPPORT.
- SPECIAL INSPECTIONS:  
A. THIRD-PARTY SPECIAL INSPECTIONS SHALL BE PERFORMED IN ACCORDANCE WITH THE SCHEDULE ON THIS SHEET.
- ALL DIMENSIONS ON STRUCTURAL DRAWINGS TO BE CHECKED AGAINST ARCHITECTURAL AND AGAINST EXISTING CONDITIONS. NOTIFY ARCHITECT AND STRUCTURAL ENGINEER OF ANY DISCREPANCIES BEFORE PROCEEDING WITH CONSTRUCTION.

Sheet List	
Sheet Number	Sheet Name
50-1	GENERAL NOTES
51-1	FIRST FLOOR PLAN



Architecture  
Interior Design  
Project Management

622 Rood Avenue  
Grand Junction, CO 81501  
970-242-1058 office

BLYTHE GROUP + co.

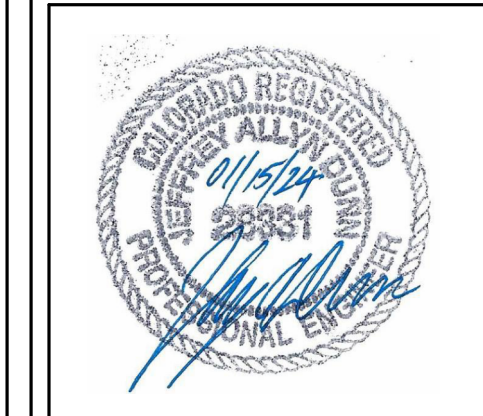


MESA COUNTY SHERIFF'S  
OFFICE - BOOKING AREA  
RENOVATION

215 RICE STREET  
GRAND JUNCTION, CO  
81501

## GENERAL NOTES

## FOR CONSTRUCTION



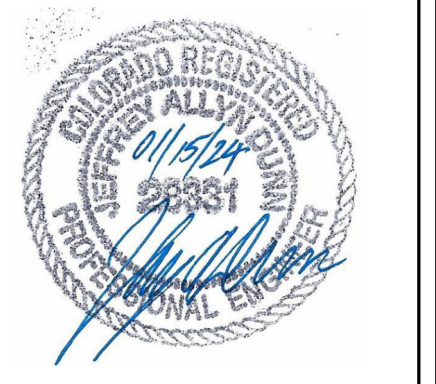
REV. DESC. DATE:

DATE: 01/15/2024

PROJECT #: 23028

SHEET #:

S0-1



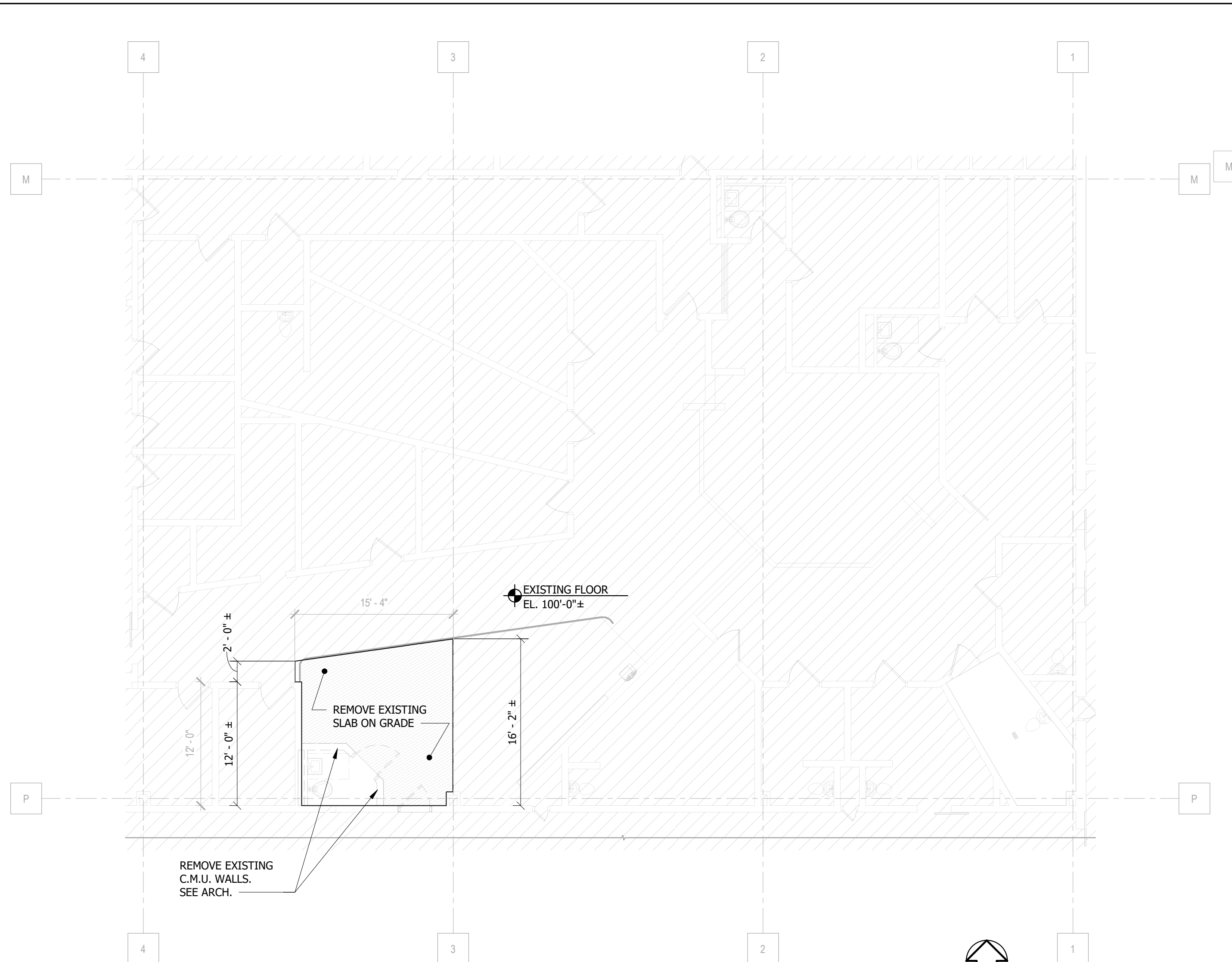
REV. DESC. DATE:

DATE: 01/15/2024

PROJECT #: 23028

SHEET #:

**S1-1**

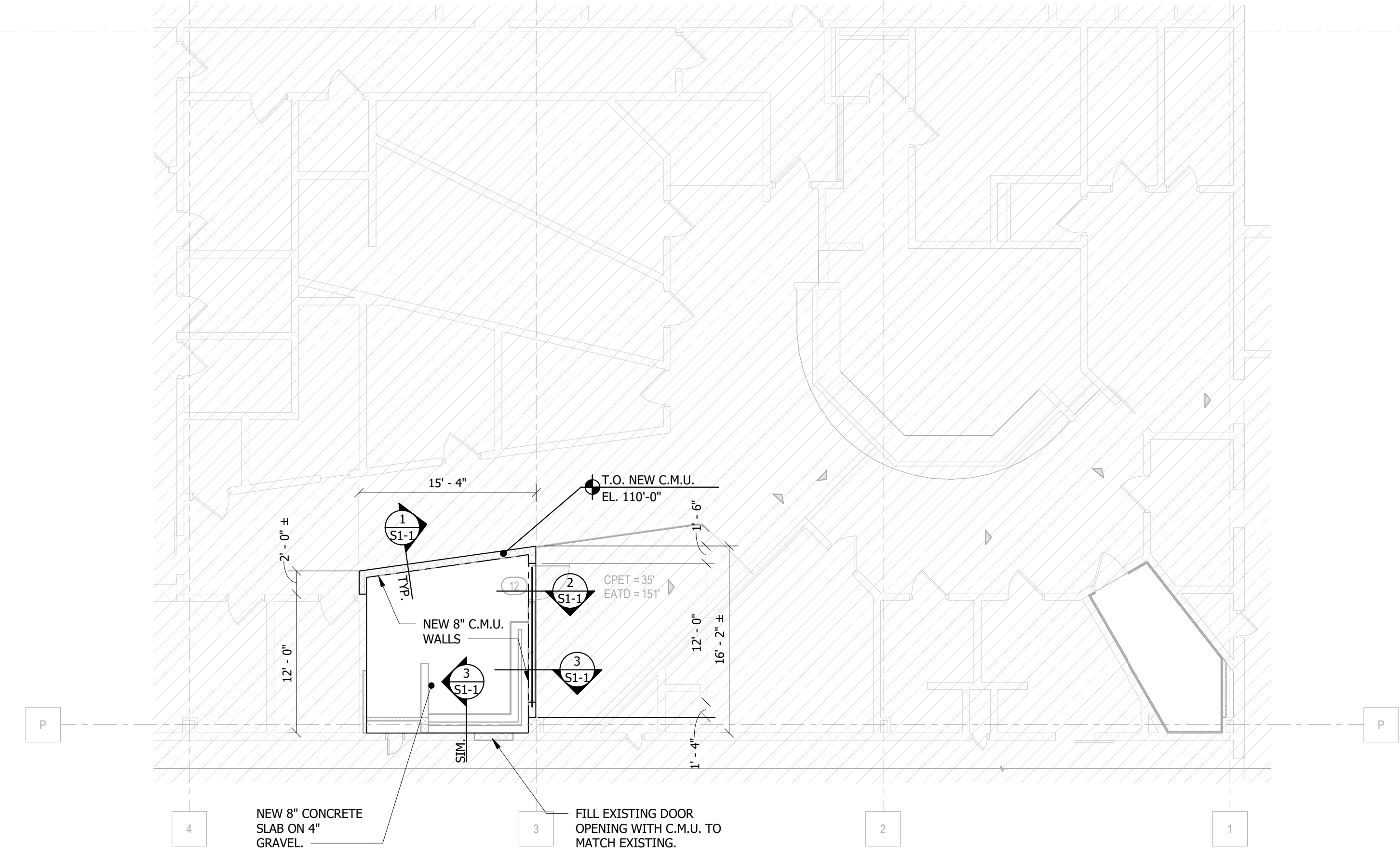


**1ST FLOOR DEMOLITION PLAN**

1/8" = 1'-0"



1. VERIFY DIMENSIONS, ELEVATIONS, AND STRUCTURAL ELEMENTS IN THE FIELD PRIOR TO CONSTRUCTION.

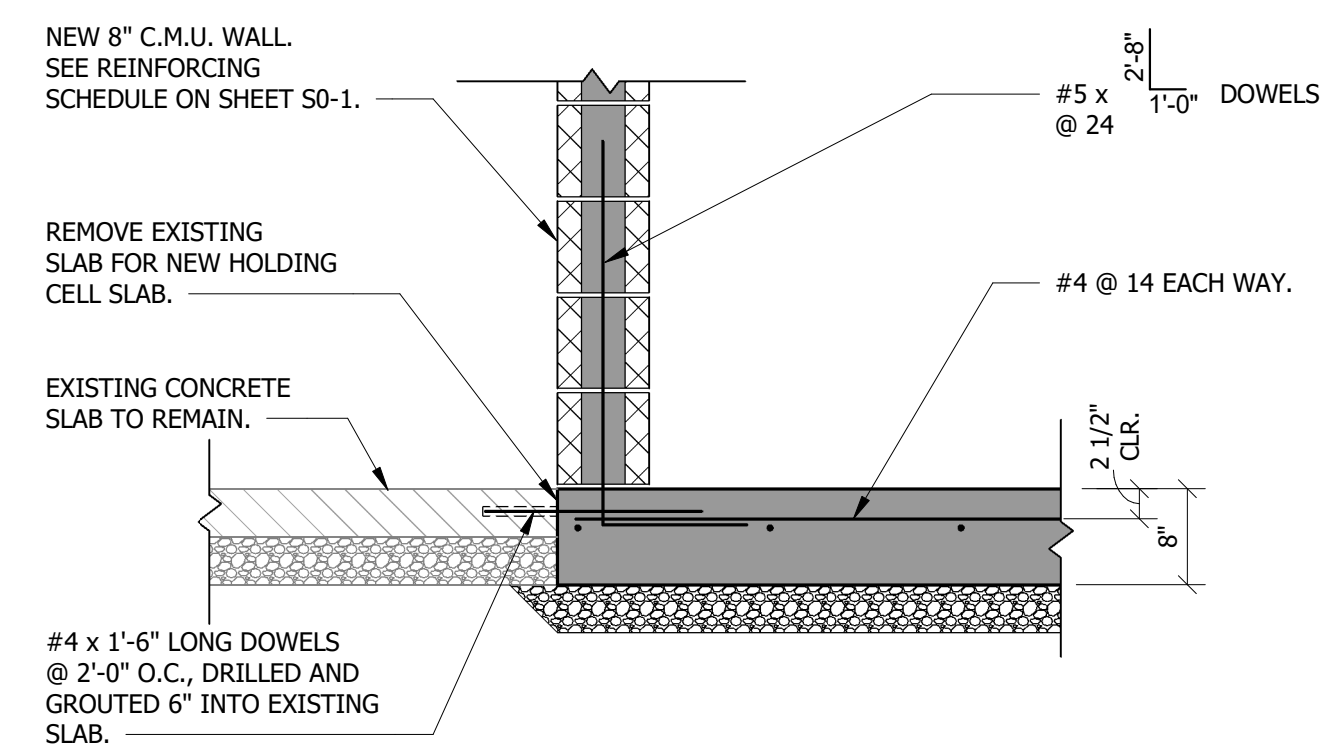


**PARTIAL 1ST FLOOR PLAN**

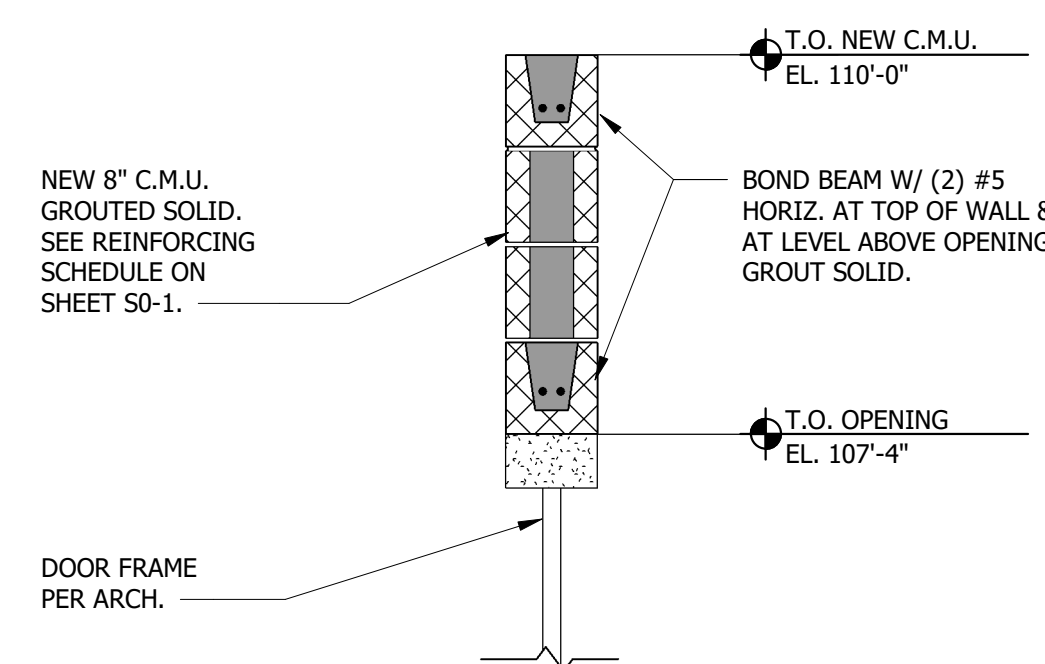
1/8" = 1'-0"



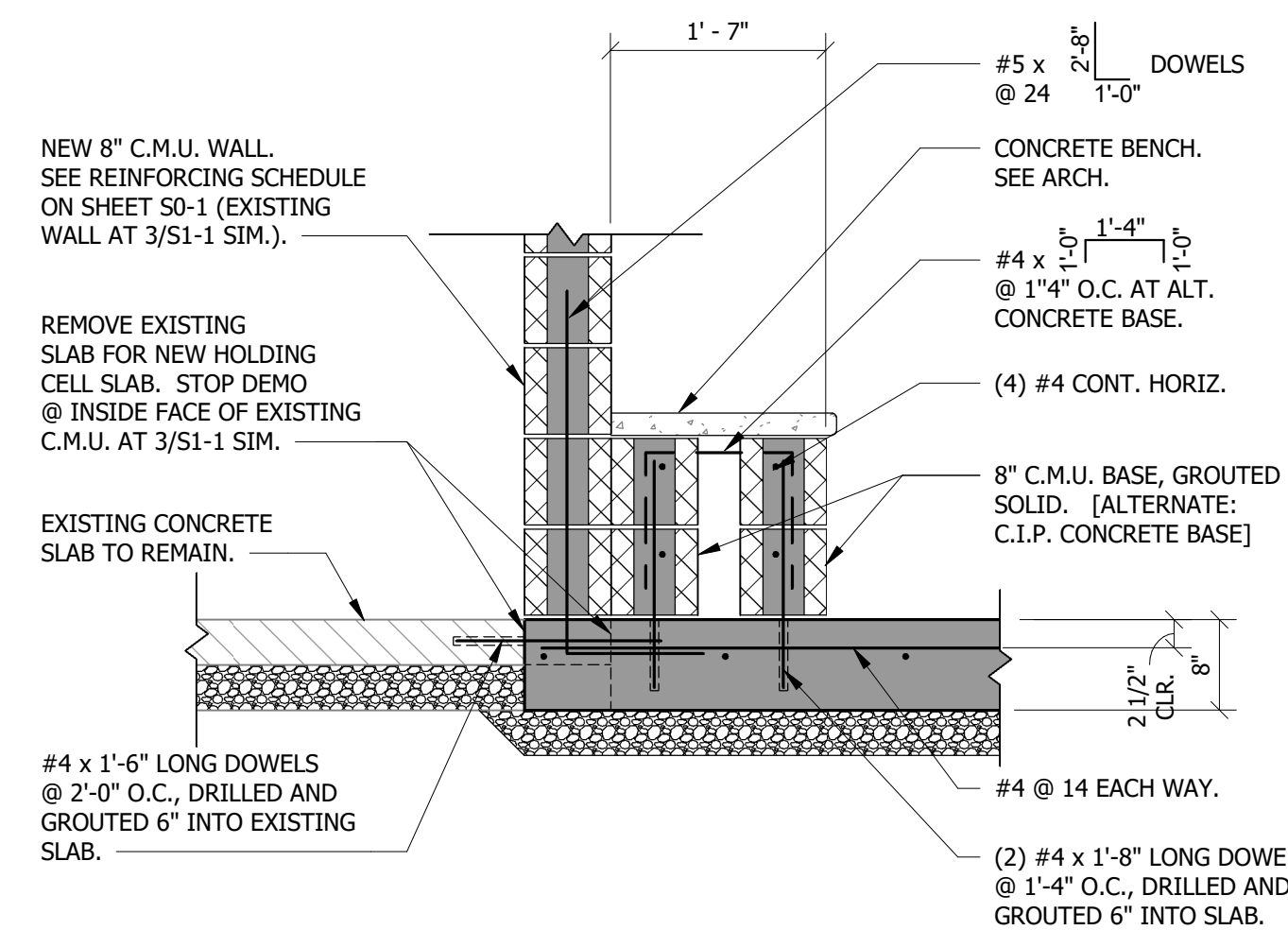
1. VERIFY DIMENSIONS, ELEVATIONS, AND STRUCTURAL ELEMENTS IN THE FIELD PRIOR TO CONSTRUCTION.  
2. REINFORCE NEW 8" SLAB ON GRADE W/ #4 @ 14 EACH WAY. PLACE IN THE TOP HALF OF THE SLAB ON CHAIRS.  
3. PROVIDE #4 x 1'-6" LONG HORIZONTAL DOWELS FROM NEW C.M.U. WALLS INTO EXISTING @ 16" O.C. VERTICAL SPACING. DRILL AND EPOXY 5/8" MIN. INTO EXISTING W/ HILTI HIT HY 270 OR EQUIVALENT ADHESIVE.



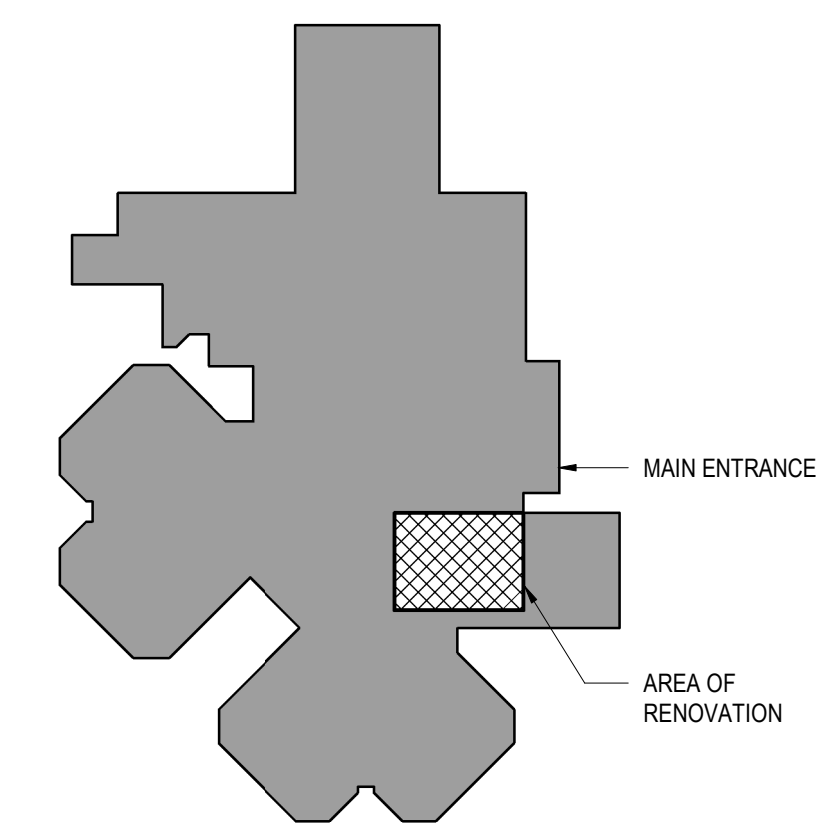
**SECTION 1 S1-1** 3/4" = 1'-0"



**SECTION 2 S1-1** 3/4" = 1'-0"



**SECTION 3 S1-1** 3/4" = 1'-0"



**KEY PLAN**





**Bighorn Consulting Engineers, Inc.**  
Mechanical & Electrical Engineers  
386 Indian Road  
Grand Junction, CO 81501  
Phone: (970) 241-8709

**SUBSTITUTIONS:**

A. SUBSTITUTIONS: SUBSTITUTION OF SPECIFIED EQUIPMENT WILL BE ALLOWED THROUGH A PRIOR APPROVAL PROCESS INITIATED BY THE CONTRACTOR. CONTRACTOR SHALL SUBMIT INTENDED SUBSTITUTION AT LEAST FIVE DAYS PRIOR TO BID FOR APPROVAL FROM ENGINEER. SUBMITTAL SHALL INCLUDE CAPACITIES, DIMENSIONS AND OPERATING INSTRUCTIONS FOR EACH PIECE OF EQUIPMENT. SUBSTITUTION SHALL OCCUR AT NO COST TO THE OWNER. CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF APPROVED SUBSTITUTION AND SHALL INCLUDE ALL COSTS ASSOCIATED WITH THE SUBSTITUTION INCLUDING STRUCTURAL MODIFICATIONS, SPACE LAYOUT AND REDESIGN COSTS. SEE ALSO DIVISION I GENERAL REQUIREMENTS.

**EXAMINATION OF SITE, DRAWINGS, SPECIFICATIONS:**

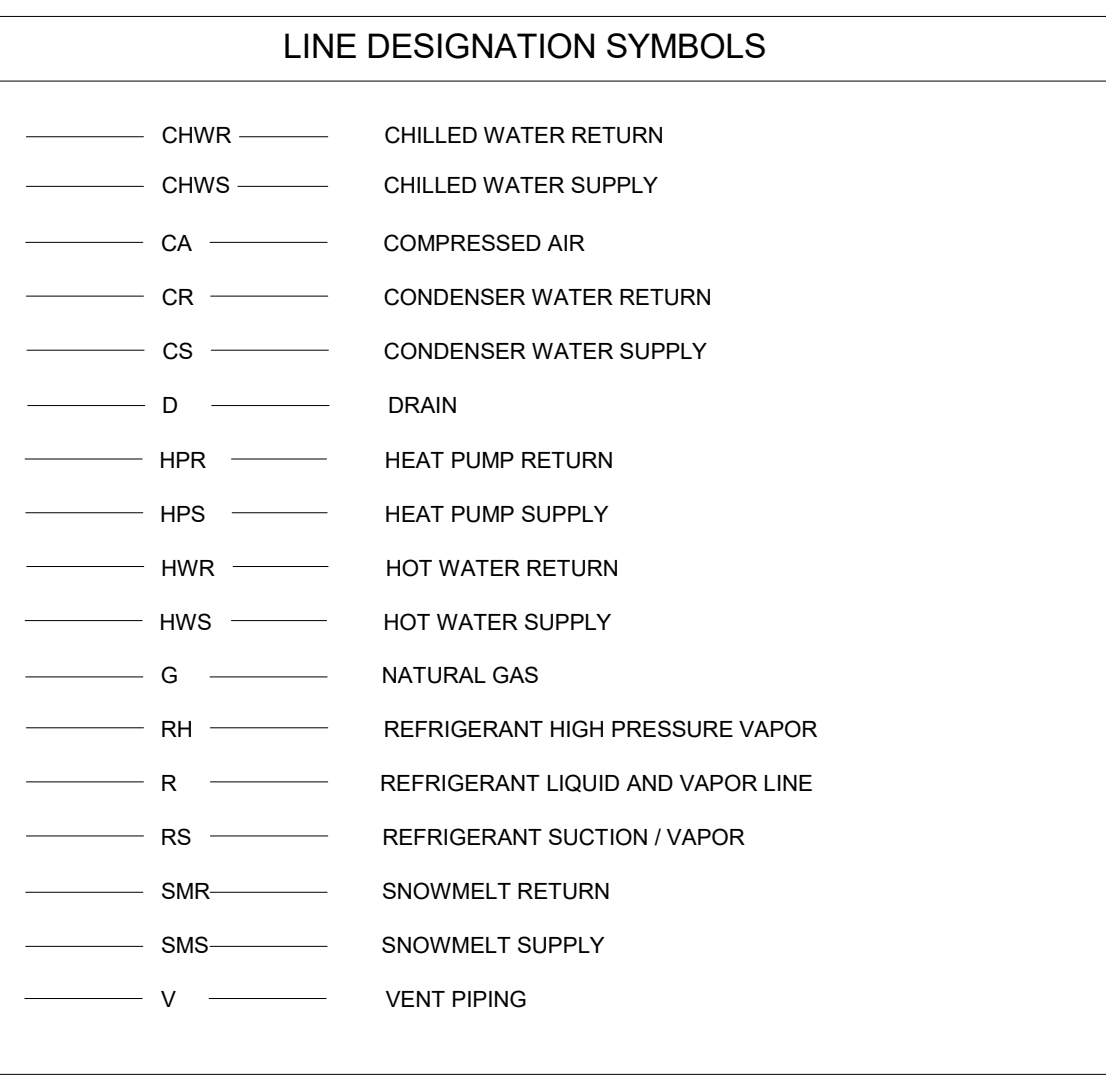
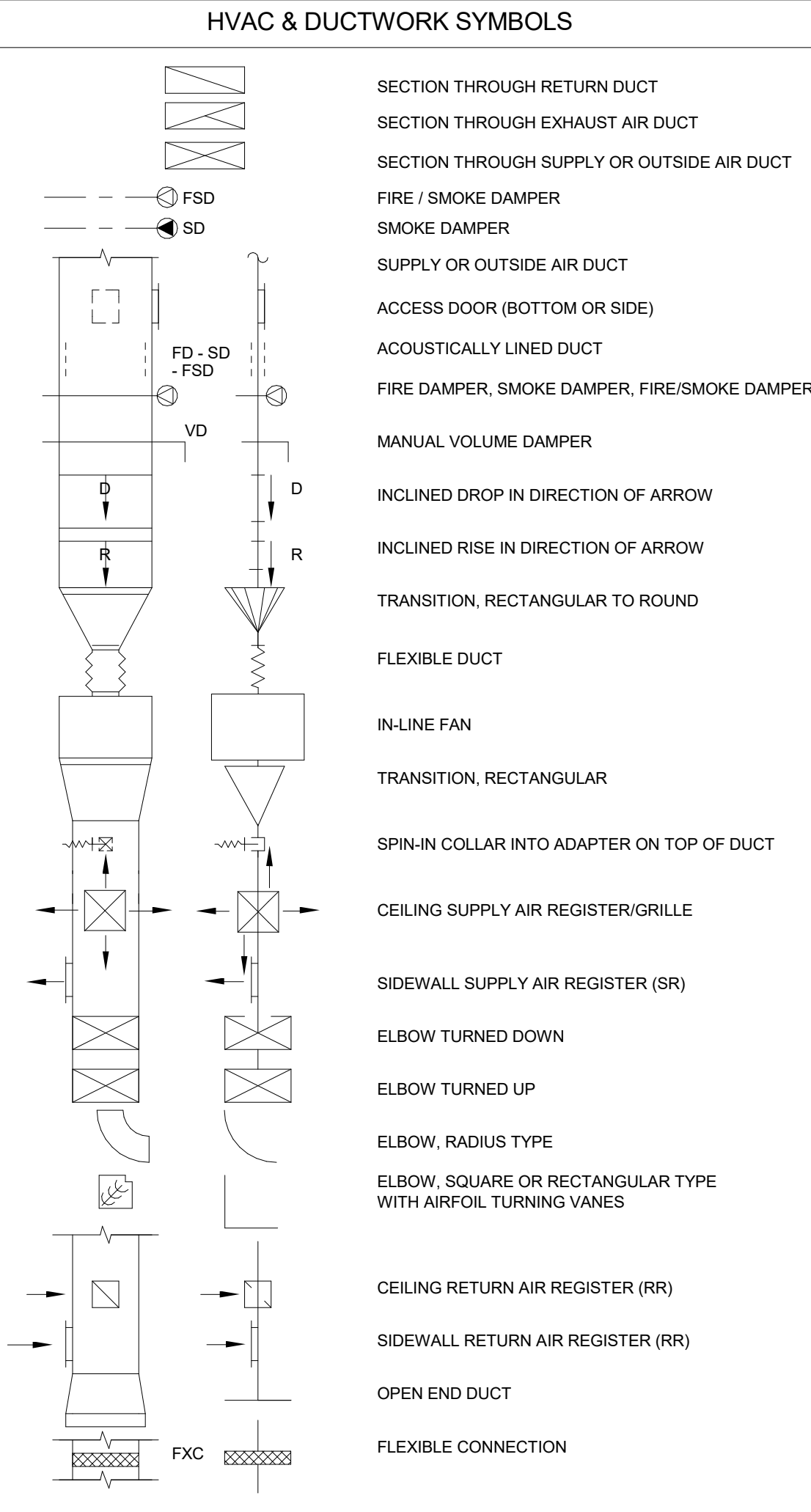
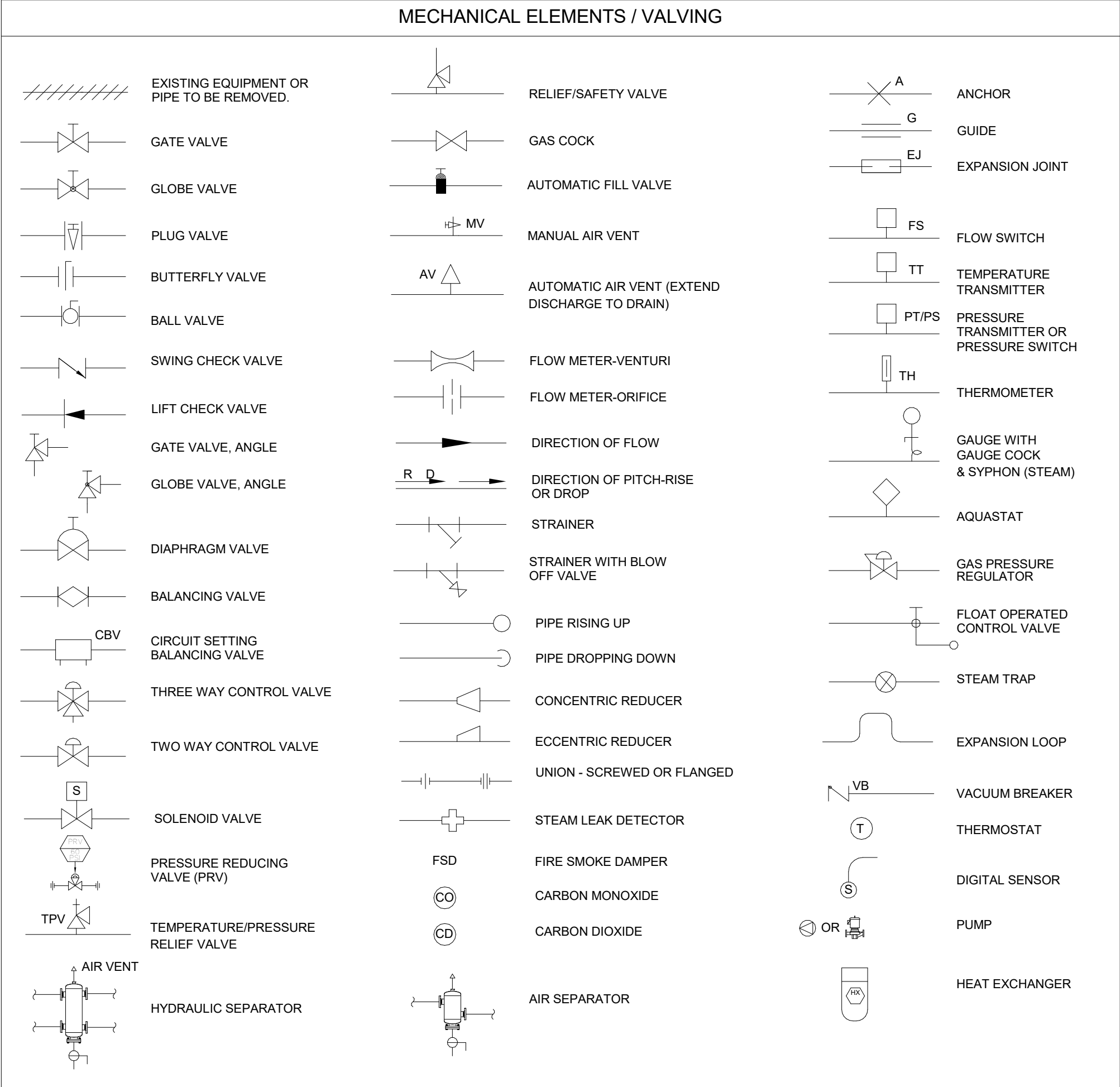
A. EXAMINE CAREFULLY THE SITE AND CONDITIONS OF THE SITE. PROVIDE ALL NECESSARY EQUIPMENT AND LABOR TO INSTALL A COMPLETE WORKING SYSTEM WITHIN THE SITE CONDITIONS.

B. EXAMINE THE DRAWINGS AND SPECIFICATIONS AND 5 DAYS PRIOR TO BIDDING REPORT ANY ERRORS, OMISSIONS, INCONSISTENCIES, AND CONFLICTS TO THE ENGINEER TO BE REMEDIATED IN AN ADDENDUM TO THE PROJECT PRIOR TO BID TIME.

C. DRAWINGS ARE DIAGRAMMATIC AND CATALOG NUMBERS GIVEN ARE FOR REFERENCE ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE CAPACITY OF THE EQUIPMENT MEETS THE DRAWING REQUIREMENTS AND SHALL NOT DIMENSION FROM THE MECHANICAL, PLUMBING, OR PIPING DRAWINGS.

D. THE LATEST ADOPTED VERSIONS OF THE INTERNATIONAL BUILDING CODES SHALL BE USED AS REQUIRED. THIS WILL ALSO INCLUDE THE LATEST ADOPTED VERSIONS OF THE MECHANICAL, PLUMBING AND ENERGY CONSERVATION CODES. ALL METHODS AND MATERIALS REQUIRED BY THESE CODES SHALL BE REQUIRED BY THESE SPECIFICATIONS UNLESS INDICATED OTHERWISE. OTHER APPLICABLE LOCAL CODES AND ORDINANCES SHALL BE AS REQUIRED AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO BE KNOWLEDGEABLE OF THESE REQUIREMENTS.

E. WHERE INSTALLATION PROCEDURES OR ANY PART THEREOF ARE REQUIRED TO BE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE MANUFACTURER OF THE MATERIAL BEING INSTALLED, PRINTED COPIES OF THESE RECOMMENDATIONS SHALL BE FURNISHED TO THE ENGINEER PRIOR TO INSTALLATION. INSTALLATION OF THE ITEM WILL NOT BE ALLOWED TO PROCEED UNTIL THE RECOMMENDATIONS ARE RECEIVED. FAILURE TO FURNISH THESE RECOMMENDATIONS CAN BE CAUSE FOR REJECTION OF THE MATERIAL.



**RESPONSIBLE DIVISION:**

UNLESS OTHERWISE INDICATED ALL HEATING, VENTILATING, AIR CONDITIONING, PLUMBING, AND OTHER MECHANICAL EQUIPMENT, MOTORS, AND CONTROLS SHALL BE FURNISHED, SET IN PLACE AND WIRED AS FOLLOWS:

EQUIPMENT	FURNISHED	SET	POWER WIRED	CONTROL WIRED
COMBINATION MAGNETIC MOTOR STARTERS, MAGNETIC MOTOR STARTERS, VFD'S AND CONTACTORS	23(1)	26	26(2)	23
FUSED AND UNFUSED DISCONNECT SWITCHES, THERMAL OVERLOAD SWITCHES AND HEATERS, MANUAL MOTOR STARTERS	26	26	26	--
MANUAL-OPERATING AND MULTI-SPEED SWITCHES	23	26	26	26
CONTROLS, RELAYS, TRANSFORMERS	23	23	26	23
THERMOSTATS (LOW VOLTAGE) AND TIME SWITCHES	23	23	26	23
THERMOSTATS (LINE VOLTAGE)	23	23	26	26
TEMPERATURE CONTROL PANELS	23	23	26	23
MOTOR AND SOLENOID VALVES, DAMPER MOTORS, PE & EP SWITCHES	23	23(2)	--	23(2)
PUSH-BUTTON STATIONS AND PILOT LIGHTS	23	23(2)	--	23(2)
HEATING, COOLING, VENTILATION AND AIR CONDITIONING CONTROLS	23	23	26	23
EXHAUST FAN SWITCHES	23	26	26	23(2)

**SUBSCRIPT FOOTNOTES:**  
1. MOTOR STARTER TO INCLUDE CONTROL TRANSFORMER, HOA SWITCH, (1) NO AND (1) NC AUXILIARY CONTACT, AND "ON" AND "OFF" PILOT LIGHTS.  
2. IF ITEM IS FOR LINE VOLTAGE, SET IN PLACE AND CONNECT UNDER DIVISION 26. WHERE FACTORY MOUNTED ON EQUIPMENT OR ATTACHED TO PIPING OR DUCTS AND USING LINE VOLTAGE FURNISH AND SET UNDER DIVISION 23, CONNECT UNDER DIVISION 26.

**ABBREVIATIONS:**

44'	MOUNTING HEIGHT ABOVE FINISHED FLOOR TO CENTER OF DEVICE	DIFF	DIFFERENTIAL DISCHARGE	HR	HOUR	PTAC	PACKAGED TERMINAL AIR CONDITIONER
A	AMPS	DISC	DISCHARGE	HT	HEIGHT	PV	PLUG VALVE
A.D	ACCESS DOOR	DIV	DIVISION	HTR	HEATER	PVC	POLYVINYL CHLORIDE
AAV	AIR ADMITTANCE VALVE	DN	DOWN	HWR	HEATING WATER RETURN	QTY	QUANTITY
ABV	ABOVE	DS	DUCT SILENCER	HW	HEATING WATER SUPPLY	RA	RETURN AIR GRILLE / REGISTER
AC	AIR CONDITIONING UNIT	DWG	DRAWING	HX	HEAT EXCHANGER	RCP	REFLECTED CEILING PLAN
AC	ABOVE COUNTER	DX	DIRECT EXPANSION	HZ	HERTZ	RD	ROOF DRAIN
AD	AREA DRAIN (SEE SYMBOLS)	EX	EXISTING	ID	INSIDE DIAMETER	REL	RELIEF
A.F.C.	ABOVE FINISHED CEILING	EA	EXHAUST AIR GRILLE/REGISTER	IN	INCHES	REQD	REQUIRED
A.F.G.	ABOVE FINISHED GRADE	EAT	ENTERING AIR TEMPERATURE	INV	INVERT	RF	RETURN FAN
AIC	AMPS INTERRUPTING CAPACITY	EC	ELECTRICAL CONTRACTOR	JBOX	JUNCTION BOX	RH	RELATIVE HUMIDITY
A.F.F.	ABOVE FINISHED FLOOR	ECC	ECCENTRIC	K	KELVIN	RHC	REHEAT COIL
AJU	AIR HANDLING UNIT	EFF	EFFICIENCY	KW	KILOWATT	RLA	RATED LOAD AMPS
ALUM	ALUMINUM	EQ	EQUAL	KVA	KILO VOLT - AMPS	RM	ROOM
AP	ACCESS PANEL OR DOOR	ELEC	ELECTRIC	L	LENGTH	RPM	REVOLUTIONS PER MINUTE
ATS	AUTOMATIC TRANSFER SWITCH	ELEV	ELEVATOR	LAT	LEAVING AIR TEMPERATURE	SA	SUPPLY AIR GRILLE / REGISTER
AV	AUDIO / VIDEO	EM	EMERGENCY FUNCTION	LV	LAVATORY	SC	SHORT CIRCUIT
AVG	AVERAGE	ENT	ENTERING	LB	POUND	SCA	SHORT CIRCUIT AVAILABLE
AWG	AMERICAN WIRE GAGE	ENT	ELECTRIC METALLIC TUBE	LD	LINEAR DIFFUSER	SCR	SHORT CIRCUIT CURRENT
BAS	BUILDING AUTOMATION SYSTEM BASEBOARD	EQ	EQUAL	LF	LINEAR FEET	RATING	RATING
BB	BACK DRAFT DAMPER	EQUIP	EQUIPMENT	LIN	LINEAR	SCHEDULE	SCHEDULE
BFP	BACK FLOW PREVENTOR	EQUIV	EQUIVALENT	LM	LUMEN	LIQ	LIQUID
BL	BOILER	ES	END SWITCH	LMT	LOCKED ROTOR AMPS	SEF	SMOKE EXHAUST FAN
BLDG	BUILDING	ESP	EXTERNAL STATIC PRESSURE	LVA	LEAVING WATER TEMPERATURE	SEF	SUPPLY FAN
BLW	BELOW	ET	EXPANSION TANK	LV	LOUVER	SH	SENSIBLE HEAT
BLW	BOTTOM OF BEAM	EW	ELECTRIC WATER COOLER	LWG	LEAVING	SH	SHOWER
BOB	BOTTOM OF DUCT	EWT	ENTERING WATER TEMPERATURE	LWT	LEAVING WATER TEMPERATURE	SP	STATIC PRESSURE
BOP	BOTTOM OF PIPE	EX	EXHAUST	MBH	THOUSANDS OF BTU PER HOUR	SPD	SURGE PROTECTION DEVICE
BSTMT	BASEMENT	EXPAN	EXPANSION	MC	MECHANICAL CONTRACTOR	SPEC	SPECIFICATION
BTU	BRITISH THERMAL UNIT	EXT	EXTERNAL	MCA	MINIMUM CIRCUIT	SQ	SQUARE
C	CHILLER	F	DEGREES FAHRENHEIT	MCB	MAIN CIRCUIT BREAKER	SS	STAINLESS STEEL
CAP	CAPACITY	FA	FREE AREA	MD	MOTORIZED DAMPER	SS	SAFETY SHOWER
CB	CIRCUIT BREAKER	FC	FAN COIL UNIT	MOP	MAIN DISTRIBUTION PANEL	STD	STANDARD
CBV	CIRCUIT BALANCING VALVE	FC	FOOTCANDLE	MED	MEDIUM	STL	STEEL
CCT	CORRELATED COLOR TEMPERATURE	FCV	FLOW CONTROL VALVE	MFR	MANUFACTURER	SYS	SYSTEM
CKT	CIRCUIT	FD	FIRE DAMPER	MIN	MINIMUM	TEMP	TEMPERATURE
CFH	CUBIC FEET PER HOUR	FD	FLOOR DRAIN	MISC	MISCELLANEOUS	TR	TRANSFER GRILLE / REGISTER
CFM	CUBIC FEET PER MINUTE	FIN	FINISHED	MLO	MAIN LUG ONLY	TR	TAMPER RESISTANT
CHWR	CHILLED WATER RETURN	FLA	FULL LOAD AMPS	MOCOP	MAXIMUM OVERCURRENT PROTECTION	TT	TELECOMMUNICATIONS
CHWS	CHILLED WATER SUPPLY	FLEX	FLEXIBLE	MTD	MOUNTED	TTB	TELECOMMUNICATIONS TERMINAL BACKBOARD
CI	CAST IRON	FLR	FLOOR	MTD	MOUNTED	TYP	TYPICAL
CL	CENTER LINE	FOB	FLAT ON BOTTOM	MJA	MAKE-UP AIR UNIT	TX	TRANSFORMER
CLG	CEILING	FOT	FLAT ON TOP	N	NEUTRAL	UC	UNDERCUT DOOR
CMU	CONCRETE MASONRY UNIT	FP	FIRE PROTECTION	NC	NORMALLY CLOSED	UH	UNIT HEATER
CO	CLEAN OUT	FP	FIRE PUMP	NEG	NEGATIVE	UNO	UNLESS NOTED OTHERWISE
COL	COLUMN	FPM	FEET PER MINUTE	NIC	NOT IN CONTRACT	UNOCC	UNOCCUPIED
COMP	COMPRESSOR	FPS	FEET PER SECOND	NL	NIGHT / SECURITY LIGHT - DO NOT SWITCH	UR	URNAL
CONC	CONCRETE	FS	FLOW SWITCH	NO	NORMALLY OPEN	V	VOLTS
COND	CONDENSATE	FSD	FIRE/SMOKE DAMPER	NOM	NOMINAL	VA	VOLT AMPERE
CONN	CONNECTION	FT	FEET	NTS	NOT TO SCALE	VA	VALVE
CONT	CONTINUATION	GND	GROUND	OA	OUTSIDE AIR	VAV	VARIABLE AIR VOLUME UNIT
CONTR	CONTRACTOR	GA	GAUGE	OBD	OPPOSED BLADE DAMPER	VFD	VARIABLE FREQUENCY DRIVE
CR	COLOR RENDERING INDEX	GAL	GALLON	OC	ON CENTER	VRF	VARIABLE REFRIGERANT FLOW
CT	COOLING TOWER	GALV	GALVANIZED	OCC	OCCUPIED	VOLT	VOLTAGE
CT	CURRENT TRANSFORMER	GEC	GROUND ELECTRODE CONDUCTOR	OCP	OVER CURRENT PROTECTION	VTR	VENT THROUGH ROOF
CJ	CONDENSING UNIT	GFCI / GF	GROUND FAULT CIRCUIT INTERRUPTER	OL	OVERLOAD	W	WIDTH
CJ	COPPER	GC	GENERAL CONTRACTOR	ORD	OVERFLOW ROOF DRAIN	W	WATT
CUH	CABINET UNIT HEATER	GPH	GALLONS PER HOUR	PBD	PARALLEL BLADE DAMPER	W	WITH
CVB	CONSTANT VOLUME BOX	GPM	GALLONS PER MINUTE	PD	PRESSURE DROP	WO	WITHOUT
CWR	CONDENSER WATER RETURN	GRSLB	GRAINS PER POUND	PH	PHASE	WB	WET BULB
CWS	CONDENSER WATER SUPPLY	H2O	WATER	POS	POSITIVE PRESSURE	WC	WATER COLUMN
DB	DRY BULB	HB	HOSE BIBB	POS	POINT OF SALES	WC	WATER CLOSET
DEPT	DEPARTMENT	HD	HEAD (SEE SCHEDULES)	PRV	PRESSURE REDUCING VALVE	WG	WATER GAUGE
DF	DRINKING FOUNTAIN	HP	HORSEPOWER	PS	PRESSURE SWITCH	WP	WEATHERPROOF
DIA	DIAMETER			PSI	POUNDS PER SQUARE INCH	WPIU	WEATHERPROOF IN-HOUSE
DIAG	DIAGRAM			PT	PRESSURE TRANSMITTER	WSR	WITHSTAND RATING

**MECHANICAL SHEET LIST**

Sheet Number	Sheet Name
M0-1	MECHANICAL COVER SHEET
M1-1	MECHANICAL PLANS

MESA COUNTY SHERIFF'S  
OFFICE - BOOKING AREA  
RENOVATION

215 RICE STREET  
GRAND JUNCTION, CO  
81501

MECHANICAL COVER  
SHEET

**CONSTRUCTION DRAWINGS**



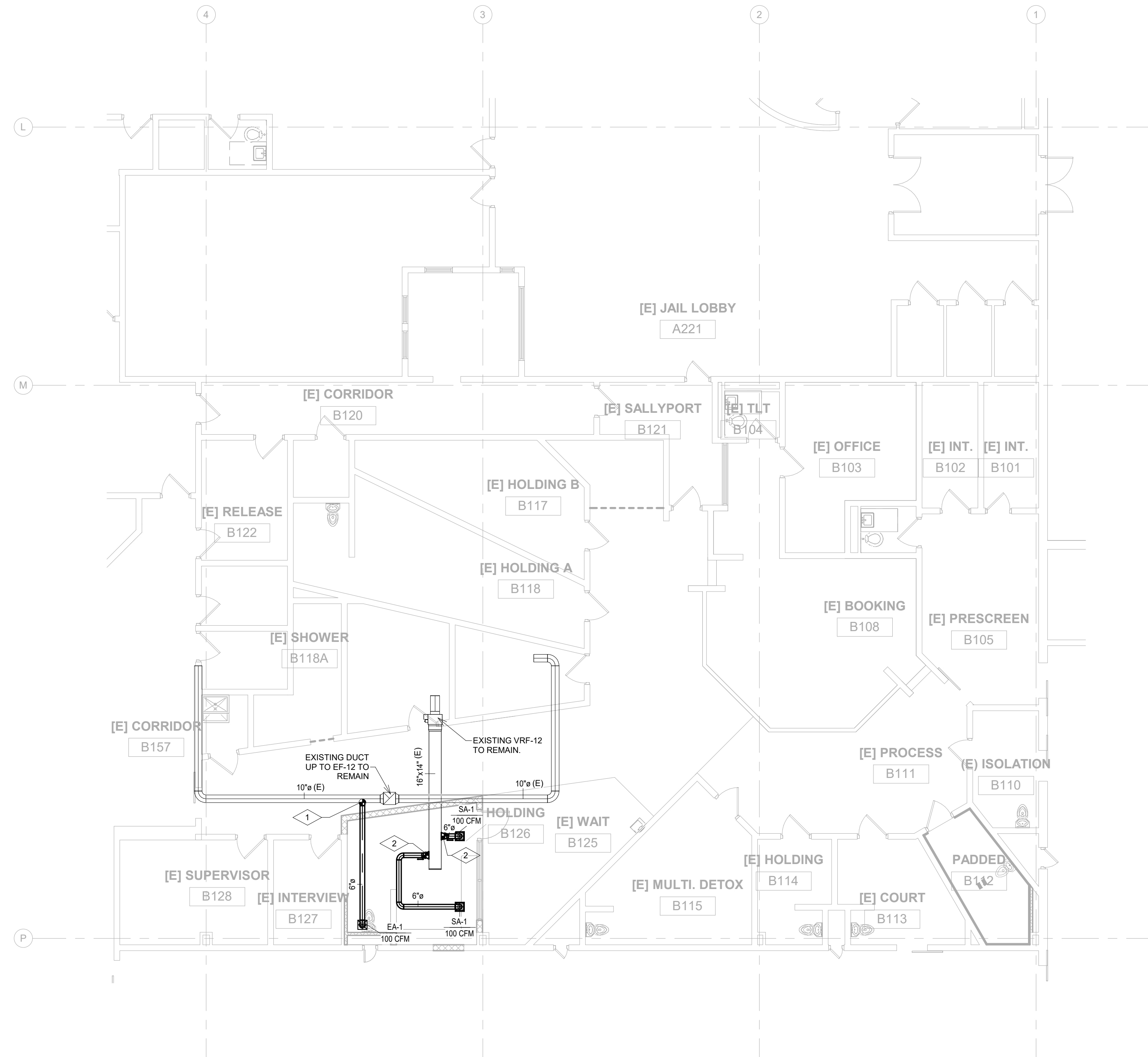
REV. DESC. DATE:

DATE: 01/16/2024

PROJECT #: 23185

SHEET #:

**M0-1**



GRILLE-REGISTER-DIFFUSER SCHEDULE						
TYPE MARK	MOUNTING TYPE	DIFFUSER SIZE	FINISH	MANUFACTURER	MODEL #	NOTES
EA-1	CEILING	12"X12"	PER ARCH	KRUGER	13SD	NOTE-1
SA-1	CEILING	12"X12"	PER ARCH	KRUGER	13SD	NOTE-2

NOTES:  
1. GRILLE TO BE OF CONSTRUCTED OF WELDED STEEL. PROVIDE WITH DUCT SLEEVE, ANCHOR BARS, AND STEEL BAR FACE FRAME.  
2. GRILLE TO BE OF CONSTRUCTED OF WELDED STEEL. PROVIDE WITH OBD, DUCT SLEEVE, ANCHOR BARS, AND STEEL BAR FACE FRAME.

MECHANICAL KEYNOTES	
Note Number	Note Text
1	TIE NEW EXHAUST DUCT FROM HOLDING CELLS TO EXISTING EF-12. CONTRACTOR SHALL FIELD VERIFY LOCATION OF EXISTING AND RE-BALANCE AIRFLOWS.
2	TIE NEW SUPPLY DUCT OFF EXISTING MAIN FROM VRF-12. FIELD VERIFY LOCATION OF EXISTING AND COORDINATE CONNECTION LOCATIONS. CONTRACTOR SHALL RE-BALANCE THE SYSTEM AFTER NEW GRILLES ARE INSTALLED.

**MECHANICAL GENERAL NOTES:**

- DRAWING IS DIAGRAMMATIC IN NATURE. LOCATIONS AND SIZES MAY VARY DURING FIELD COORDINATION & INSTALLATION OF MECHANICAL, PLUMBING, & ELECTRICAL. DRAWINGS DO NOT NECESSARILY INDICATE EVERY REQUIRED OFFSET, FITTING, ETC. DRAWINGS ARE NOT TO BE SCALED FOR DIMENSIONS. TAKE ALL DIMENSIONS FROM ARCHITECTURAL DRAWINGS. CERTIFIED EQUIPMENT DRAWINGS AND FROM THE STRUCTURE ITSELF BEFORE FABRICATING ANY WORK. VERIFY ALL SPACE REQUIREMENTS COORDINATING WITH OTHER TRADES, AND INSTALL THE SYSTEMS IN THE SPACE PROVIDED WITHOUT EXTRA CHARGES TO THE OWNER.
- DUCT DIMENSIONS DO NOT REFLECT ADDITIONAL DIMENSIONS FOR INSULATION. ALL DUCTING SHALL BE INSULATED PER 2018 IECC CODE REQUIREMENTS. (SUPPLY AND RETURN AIR DUCTS AND PLENUMS SHALL BE INSULATED WITH NOT LESS THAN R-6 INSULATION WHERE LOCATED IN UNCONDITIONED SPACES AND WHERE LOCATED OUTSIDE THE BUILDING WITH NOT LESS THAN R-9 INSULATION IN CLIMATE ZONES 1 THROUGH 4 AND NOT LESS THAN R-12 INSULATION IN CLIMATE ZONES 5 THROUGH 8. WHERE LOCATED WITHIN A BUILDING ENVELOPE ASSEMBLY, THE DUCT OR PLENUM SHALL BE SEPARATED FROM THE BUILDING EXTERIOR OR UNCONDITIONED OR EXEMPT SPACES BY NOT LESS THAN R-8 INSULATION IN CLIMATE ZONES 1 THROUGH 4 AND NOT LESS THAN R-12 INSULATION IN CLIMATE ZONES 5 THROUGH 8. MESA COUNTY IS CLIMATE ZONE 5B).
- COORDINATE FINAL LOCATION OF THERMOSTAT WITH OWNER PRIOR TO INSTALLATION. IF THERMOSTAT IS LOCATED ON EXTERIOR WALL PROVIDE THERMOSTAT WITH INSULATED BACKING.
- MECHANICAL CONTRACTOR SHALL FIELD LOCATE EXISTING DUCTWORK PRIOR TO CONSTRUCTION. MECHANICAL CONTRACTOR SHALL COORDINATE TIE IN CONNECTION POINTS OF NEW SUPPLY DIFFUSERS WITH EXISTING DUCTWORK AS NECESSARY.
- CONTRACTOR SHALL CLEAN AND SERVICE ALL EXISTING EQUIPMENT TO REMAIN. CONTRACTOR SHALL VERIFY ALL EQUIPMENT TO REMAIN IS PROPERLY FUNCTIONING PRIOR TO RE-USING EQUIPMENT. CONTRACTOR TO INSURE THAT FINAL MECHANICAL SYSTEM WILL OPERATE AS INTENDED ON PROVIDED DRAWINGS.
- MECHANICAL EQUIPMENT MANUFACTURERS AS SCHEDULED ON MECHANICAL DRAWINGS ARE SUGGESTED MANUFACTURERS. UNLESS NOTED OTHERWISE DUE TO OWNER/CLIENT REQUIREMENTS AND PREFERENCES. MECHANICAL CONTRACTOR CAN SUBMIT EQUIVALENT EQUIPMENT FROM MANUFACTURERS THAT DIFFER FROM SCHEDULED MECHANICAL EQUIPMENT. ALTERNATE MANUFACTURERS OF MECHANICAL EQUIPMENT WILL BE REVIEWED FOR EQUIVALENCE OF PERFORMANCE AND FUNCTIONALITY BY ENGINEER.

**MECHANICAL FLOOR PLAN**  
M1-1 1/8" = 1'-0"  
NORTH

MESA COUNTY SHERIFF'S  
OFFICE - BOOKING AREA  
RENOVATION

215 RICE STREET  
GRAND JUNCTION, CO  
81501

MECHANICAL PLANS

CONSTRUCTION DRAWINGS



REV. DESC. DATE:

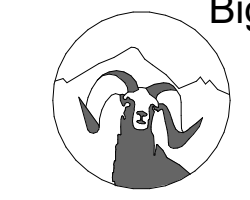
DATE: 01/16/2024

PROJECT #: 23185

SHEET #:

**M1-1**





Bighorn Consulting Engineers, Inc.  
Mechanical & Electrical Engineers

386 Indian Road  
Grand Junction, CO 81501  
Phone: (970) 241-8709

**SUBSTITUTIONS:**

A. SUBSTITUTIONS: SUBSTITUTION OF SPECIFIED EQUIPMENT WILL BE ALLOWED THROUGH A PRIOR APPROVAL PROCESS INITIATED BY THE CONTRACTOR. CONTRACTOR SHALL SUBMIT INTENDED SUBSTITUTION AT LEAST FIVE DAYS PRIOR TO BID FOR APPROVAL FROM ENGINEER. SUBMITTAL SHALL INCLUDE CAPACITIES, DIMENSIONS AND OPERATING INSTRUCTIONS FOR EACH PIECE OF EQUIPMENT. SUBSTITUTION SHALL OCCUR AT NO COST TO THE OWNER. CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF APPROVED SUBSTITUTION AND SHALL INCUR ALL COSTS ASSOCIATED WITH THE SUBSTITUTION INCLUDING STRUCTURAL MODIFICATIONS, SPACE LAYOUT AND REDESIGN COSTS. SEE ALSO DIVISION 1 GENERAL REQUIREMENTS.

**EXAMINATION OF SITE, DRAWINGS, SPECIFICATIONS:**

A. EXAMINE CAREFULLY THE SITE AND CONDITIONS OF THE SITE. PROVIDE ALL NECESSARY EQUIPMENT AND LABOR TO INSTALL A COMPLETE WORKING SYSTEM WITHIN THE SITE CONDITIONS.

B. EXAMINE THE DRAWINGS AND SPECIFICATIONS AND 5 DAYS PRIOR TO BIDDING REPORT ANY ERRORS, OMISSIONS, INCONSISTENCIES, AND CONFLICTS TO THE ENGINEER TO BE REMEDIATED IN AN ADDENDUM TO THE PROJECT PRIOR TO BID TIME.

C. DRAWINGS ARE DIAGRAMMATIC AND CATALOG NUMBERS GIVEN ARE FOR REFERENCE ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE CAPACITY OF THE EQUIPMENT MEETS THE DRAWING REQUIREMENTS AND SHALL NOT DIMENSION FROM THE MECHANICAL, PLUMBING, OR PIPING DRAWINGS.

D. THE LATEST ADOPTED VERSIONS OF THE INTERNATIONAL BUILDING CODES SHALL BE USED AS REQUIRED. THIS WILL ALSO INCLUDE THE LATEST ADOPTED VERSIONS OF THE MECHANICAL, PLUMBING AND ENERGY CONSERVATION CODES. ALL METHODS AND MATERIALS REQUIRED BY THESE CODES SHALL BE REQUIRED BY THESE SPECIFICATIONS UNLESS INDICATED OTHERWISE. OTHER APPLICABLE LOCAL CODES AND ORDINANCES SHALL BE AS REQUIRED AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO BE KNOWLEDGEABLE OF THESE REQUIREMENTS.

E. WHERE INSTALLATION PROCEDURES OR ANY PART THEREOF ARE REQUIRED TO BE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE MANUFACTURER OF THE MATERIAL BEING INSTALLED, PRINTED COPIES OF THESE RECOMMENDATIONS SHALL BE FURNISHED TO THE ENGINEER PRIOR TO INSTALLATION. INSTALLATION OF THE ITEM WILL NOT BE ALLOWED TO PROCEED UNTIL THE RECOMMENDATIONS ARE RECEIVED. FAILURE TO FURNISH THESE RECOMMENDATIONS CAN BE CAUSE FOR REJECTION OF THE MATERIAL.

**RESPONSIBLE DIVISION:**

UNLESS OTHERWISE INDICATED ALL HEATING, VENTILATING, AIR CONDITIONING, PLUMBING, AND OTHER MECHANICAL EQUIPMENT, MOTORS, AND CONTROLS SHALL BE FURNISHED, SET IN PLACE AND WIRED AS FOLLOWS:

ITEM	FURNISHED	SET	POWER WIRED	CONTROL WIRED
EQUIPMENT	23	23	26	--
COMBINATION MAGNETIC MOTOR STARTERS, MAGNETIC MOTOR STARTERS, VFD'S AND CONTACTORS	23(1)	26	26(2)	23
FUSED AND UNFUSED DISCONNECT SWITCHES, THERMAL OVERLOAD SWITCHES AND HEATERS, MANUAL MOTOR STARTERS	26	26	26	--
MANUAL-OPERATING AND MULTI-SPEED SWITCHES	23	26	26	26
CONTROLS, RELAYS, TRANSFORMERS	23	23	26	23
THERMOSTATS (LOW VOLTAGE) AND TIME SWITCHES	23	23	26	23
THERMOSTATS (LINE VOLTAGE)	23	23	26	26
TEMPERATURE CONTROL PANELS	23	23	26	23
MOTOR AND SOLENOID VALVES, DAMPER MOTORS, PE & EP SWITCHES	23	23(2)	--	23(2)
PUSH-BUTTON STATIONS AND PILOT LIGHTS	23	23(2)	--	23(2)
HEATING, COOLING, VENTILATION AND AIR CONDITIONING CONTROLS	23	23	26	23
EXHAUST FAN SWITCHES	23	26	26	23(2)

**SUBSCRIPT FOOTNOTES:**

- 1. MOTOR STARTER TO INCLUDE CONTROL TRANSFORMER, HOA SWITCH, (1) NO AND (1) NC AUXILIARY CONTACT, AND "ON" AND "OFF" PILOT LIGHTS.
- 2. IF ITEM IS FOR LINE VOLTAGE, SET IN PLACE AND CONNECT UNDER DIVISION 26. WHERE FACTORY MOUNTED ON EQUIPMENT OR ATTACHED TO PIPING OR DUCTS AND USING LINE VOLTAGE FURNISH AND SET UNDER DIVISION 23, CONNECT UNDER DIVISION 26.

**ABBREVIATIONS:**

44" FINISHED FLOOR TO CENTER OF DEVICE	AMPS	A.D. ACCESS DOOR	AAV AIR ADMITTANCE VALVE	ABV ABOVE	AC AIR CONDITIONING UNIT	AC ABOVE COUNTER	AD AREA DRAIN (SEE SYMBOLS)	A.F.C. ABOVE FINISHED CEILING	A.F.G. ABOVE FINISHED GRADE	AIC AMPS INTERRUPTING CAPACITY	A.F. ABOVE FINISHED FLOOR	AHU AIR HANDLING UNIT	ALUM ALUMINUM	AP ACCESS PANEL OR DOOR	ATS AUTOMATIC TRANSFER SWITCH	AV AUDIO / VIDEO	AVG AVERAGE	AWG AMERICAN WIRE GAGE	BAS BUILDING AUTOMATION SYSTEM	BB BASEBOARD	BD BACK DRAFT DAMPER	BFP BACK FLOW PREVENTOR	BL BOILER	BLDG BUILDING	BLW BELOW	BOB BOTTOM OF BEAM	BOD BOTTOM OF DUCT	BOP BOTTOM OF PIPE	BSMT BASEMENT	BTU BRITISH THERMAL UNIT	C CHILLER	C CAPACITY	CB CIRCUIT BREAKER	CBV CIRCUIT BALANCING VALVE	CCT CORRELATED COLOR TEMPERATURE	CKT CIRCUIT	CFH CUBIC FEET PER HOUR	CFM CUBIC FEET PER MINUTE	CHWR CHILLED WATER RETURN	CHWS CHILLED WATER SUPPLY	CI CAST IRON	CL CENTER LINE	CLS CEILING	CMU CONCRETE MASONRY UNIT	CO CLEAN OUT	COL COLUMN	COMP COMPRESSOR	CONC CONCRETE	COND CONDENSATE	CONN CONNECTION	CONT CONTINUATION	CONTR CONTRACTOR	CRI COLOR RENDERING INDEX	CT COOLING TOWER	CT CURRENT TRANSFORMER	CJ CONDENSING UNIT	CJ COPPER	CUH CABINET UNIT HEATER	CVB CONSTANT VOLUME BOX	CWR CONDENSER WATER RETURN	CWS CONDENSER WATER SUPPLY	DB DRY BULB	DEPT DEPARTMENT	DF DRINKING FOUNTAIN	DIA DIAMETER	DIAG DIAGRAM	DIFF DIFFERENTIAL	DISCH DISCHARGE	DIV DIVISION	DN DOWN	DS DUCT SILENCER	DWG DRAWING	DX DIRECT EXPANSION	(E) EXISTING	EA EXHAUST AIR GRILLE/REGISTER	EAT ENTERING AIR TEMPERATURE	EC ELECTRICAL CONTRACTOR	ECC ECCENTRIC	EF EXHAUST FAN	EFF EFFICIENCY	EL ELEVATION	ELEC ELECTRIC	ELEV ELEVATOR	EM EMERGENCY FUNCTION	ENT ENTERING	EMT ELECTRIC METALLIC TUBE	EO EQUAL	EQUIP EQUIPMENT	EQUIV EQUIVALENT	ES END SWITCH	ESP EXTERNAL STATIC PRESSURE	ET EXPANSION TANK	EWC ELECTRIC WATER COOLER	EWT ENTERING WATER TEMPERATURE	EX EXHAUST	EXPAN EXPANSION	EXT EXTERNAL	F FAHRENHEIT	FA FREE AREA	FD FAN COIL UNIT	FC FOOTCANDLE	FCV FLOW CONTROL VALVE	FD FIRE DAMPER	FD FLOOR DRAIN	FIN FINISHED	FLA FULL LOAD AMPS	FLEX FLEXIBLE	FLR FLOOR	FOB FLAT ON BOTTOM	FOT FLAT ON TOP	FP FIRE PROTECTION	FP FIRE PUMP	FPM FEET PER MINUTE	FPS FEET PER SECOND	FS FLOW SWITCH	NOT SWITCH	FSD FIRE/SMOKE DAMPER	FT FEET	FXC FLEXIBLE CONNECTION	GND GROUND	GA GAUGE	GAL GALLON	GALV GALVANIZED	GEC GROUND ELECTRODE CONDUCTOR	GFCI GFI GROUND FAULT CIRCUIT INTERRUPTER	GC GENERAL CONTRACTOR	GPH GALLONS PER HOUR	GPM GALLONS PER MINUTE	GRSLB GRAINS PER POUND	H2O WATER	HB HOSE BIBB	HD HEAD (SEE SCHEDULES)	HP HEAT PUMP	HP HORSEPOWER	HR HOUR	HT HEIGHT	HTR HEATER	HWR HEATING WATER RETURN	HWS HEATING WATER SUPPLY	HX HEAT EXCHANGER	HZ HERTZ	ID INSIDE DIAMETER	IG ISOLATED GROUND	IN INCHES	INV INVERT	JBOX JUNCTION BOX	JWB JUNCTION WIRE BOX	K KELVIN	KW KILOWATT	KVA KILO VOLT - AMPS	L LENGTH	LAT LEAVING AIR TEMPERATURE	LV LAVATORY	LB LEAD	LD LINEAR DIFFUSER	LF LINEAR FEET	LIN LINEAR	LQ LIQUID	LM LUMEN	LRA LOCKED ROTOR AMPS	LW LOUVER	LWG LEAVING	LWT LEAVING WATER TEMPERATURE	MBH THOUSANDS OF BTU PER HOUR	MC MECHANICAL CONTRACTOR	MCA MINIMUM CIRCUIT AMPACITY	MCB MAIN CIRCUIT BREAKER	MD MOTORIZED DAMPER	MOP MAIN DISTRIBUTION PANEL	MEB MEDIUM	MFR MANUFACTURER	MIN MINIMUM	MISC MISCELLANEOUS	MLO MAIN LUG ONLY	MOPP MAXIMUM OVERCURRENT PROTECTION	MTD MOUNTED	MUA MAKE-UP AIR UNIT	N NEUTRAL	NC NORMALLY CLOSED	NEG NEGATIVE	NIC NOT IN CONTRACT	NL NIGHT / SECURITY LIGHT - DO NOT SWITCH	NO NORMALLY OPEN	NOM NOMINAL	NTS NOT TO SCALE	OA OUTSIDE AIR	OBD OPPOSED BLADE DAMPER	OC ON CENTER	OCC OCCUPIED	OCP OVER CURRENT PROTECTION	OD OUTSIDE DIAMETER	OL OVERLOAD	ORD OVERFLOW ROOF DRAIN	OZ OUNCE	PBD PARALLEL BLADE DAMPER	PD PRESSURE DROP	PH PHASE	POS POSITIVE PRESSURE	POS POINT OF SALES	PRV PRESSURE REDUCING VALVE	PS PRESSURE SWITCH	PSI POUNDS PER SQUARE INCH	PT PRESSURE TRANSMITTER	PTAC PACKAGED TERMINAL AIR CONDITIONER	PV PLUG VALVE	PVC POLYVINYL CHLORIDE	QTY QUANTITY	RA RETURN AIR GRILLE / REGISTER	RCP REFLECTED CEILING PLAN	RD ROOF DRAIN	REL RELIEF	REQD REQUIRED	RF RETURN FAN	RH RELATIVE HUMIDITY	RHC REHEAT COIL	RLA RATED LOAD AMPS	RM ROOM	RPM REVOLUTIONS PER MINUTE	SA SUPPLY AIR GRILLE / REGISTER	SC SHORT CIRCUIT	SCA SHORT CIRCUIT AVAILABLE	SCCR SHORT CIRCUIT CURRENT RATING	SCH SCHEDULE	SD SMOKE DAMPER	SEF SMOKE EXHAUST FAN	SF SUPPLY FAN	SH SENSIBLE HEAT	SH SHOWER	SP STATIC PRESSURE	SPD SURGE PROTECTION DEVICE	SPEC SPECIFICATION	SQ SQUARE	SS STAINLESS STEEL	SS SAFETY SHOWER	STD STANDARD	STL STEEL	SYS SYSTEM	TEMP TEMPERATURE	TR TRANSFER GRILLE / REGISTER	TR TAMPER RESISTANT	TT TEMPERATURE TRANSMITTER	TTB TELECOMMUNICATIONS TERMINAL BACKBOARD	TYP TYPICAL	TX TRANSFORMER	UC UNDERCUT DOOR	UH UNIT HEATER	UNO UNLESS NOTED OTHERWISE	UNOCC UNOCCUPIED	UR URINAL	V VOLTS	VA VOLT AMPERE	VA VALVE	VAV VARIABLE AIR VOLUME UNIT	VFD VARIABLE FREQUENCY DRIVE	VRF VARIABLE REFRIGERANT FLOW	VOLT VOLTAGE	VTR VENT THROUGH ROOF	W WIDTH	W WATTS	W WITH	W/O WITHOUT	WB WET BULB	WC WATER COLUMN	WC WATER CLOSET	WG WATER GAUGE	WP WEATHERPROOF	WPU WEATHERPROOF IN-JSE	WSR WITHSTAND RATING	XFMR TRANSFORMER
--	------	------------------	--------------------------	-----------	--------------------------	------------------	-----------------------------	-------------------------------	-----------------------------	--------------------------------	---------------------------	-----------------------	---------------	-------------------------	-------------------------------	------------------	-------------	------------------------	--------------------------------	--------------	----------------------	-------------------------	-----------	---------------	-----------	--------------------	--------------------	--------------------	---------------	--------------------------	-----------	------------	--------------------	-----------------------------	----------------------------------	-------------	-------------------------	---------------------------	---------------------------	---------------------------	--------------	----------------	-------------	---------------------------	--------------	------------	-----------------	---------------	-----------------	-----------------	-------------------	------------------	---------------------------	------------------	------------------------	--------------------	-----------	-------------------------	-------------------------	----------------------------	----------------------------	-------------	-----------------	----------------------	--------------	--------------	-------------------	-----------------	--------------	---------	------------------	-------------	---------------------	--------------	--------------------------------	------------------------------	--------------------------	---------------	----------------	----------------	--------------	---------------	---------------	-----------------------	--------------	----------------------------	----------	-----------------	------------------	---------------	------------------------------	-------------------	---------------------------	--------------------------------	------------	-----------------	--------------	--------------	--------------	------------------	---------------	------------------------	----------------	----------------	--------------	--------------------	---------------	-----------	--------------------	-----------------	--------------------	--------------	---------------------	---------------------	----------------	------------	-----------------------	---------	-------------------------	------------	----------	------------	-----------------	--------------------------------	---	-----------------------	----------------------	------------------------	------------------------	-----------	--------------	-------------------------	--------------	---------------	---------	-----------	------------	--------------------------	--------------------------	-------------------	----------	--------------------	--------------------	-----------	------------	-------------------	-----------------------	----------	-------------	----------------------	----------	-----------------------------	-------------	---------	--------------------	----------------	------------	-----------	----------	-----------------------	-----------	-------------	-------------------------------	-------------------------------	--------------------------	------------------------------	--------------------------	---------------------	-----------------------------	------------	------------------	-------------	--------------------	-------------------	-------------------------------------	-------------	----------------------	-----------	--------------------	--------------	---------------------	---	------------------	-------------	------------------	----------------	--------------------------	--------------	--------------	-----------------------------	---------------------	-------------	-------------------------	----------	---------------------------	------------------	----------	-----------------------	--------------------	-----------------------------	--------------------	----------------------------	-------------------------	--	---------------	------------------------	--------------	---------------------------------	----------------------------	---------------	------------	---------------	---------------	----------------------	-----------------	---------------------	---------	----------------------------	---------------------------------	------------------	-----------------------------	-----------------------------------	--------------	-----------------	-----------------------	---------------	------------------	-----------	--------------------	-----------------------------	--------------------	-----------	--------------------	------------------	--------------	-----------	------------	------------------	-------------------------------	---------------------	----------------------------	---	-------------	----------------	------------------	----------------	----------------------------	------------------	-----------	---------	----------------	----------	------------------------------	------------------------------	-------------------------------	--------------	-----------------------	---------	---------	--------	-------------	-------------	-----------------	-----------------	----------------	-----------------	-------------------------	----------------------	------------------

**PLUMBING PIPE DESIGNATIONS**

LINE TYPE	DESCRIPTION
140	HIGH TEMPERATURE (140") WATER PIPE
---	COLD WATER PIPE (CW)
CA	COMPRESSED AIR
DC	DECONTAMINATION PIPING
DER	DEIONIZED WATER RETURN
DES	DEIONIZED WATER SUPPLY
DIS	DISTILLED WATER SUPPLY
DIR	DISTILLED WATER RETURN
CD	EQUIPMENT CONDENSATE DRAIN
FP	FIRE MAIN
GW	GREASE WASTE PIPE
HE	HELIUM
HPS	HIGH PRESSURE STEAM
HPC	HIGH PRESSURE CONDENSATE
---	HOT WATER RECIRCULATION (HWR)
---	HOT WATER PIPE (HW)
H2	HYDROGEN
LPC	LOW PRESSURE CONDENSATE
LPS	LOW PRESSURE STEAM
MA	MEDICAL AIR
G	NATURAL GAS PIPE
N2	NITROGEN
N2O	NITROUS OXIDE
ORD	OVERFLOW STORM WATER PIPE
O2	OXYGEN
PG	PROPANE GAS
RD	ROOF DRAIN PIPE
---	SOIL OR WASTE PIPE
S/O	SOIL / OIL WASTE PIPE
TWR	TOWER WATER RETURN
TWS	TOWER WATER SUPPLY
VAC	VACUUM
---	VENT PIPE (V)

**PLUMBING ELEMENTS / VALVING**

LINE TYPE	DESCRIPTION	LINE TYPE	DESCRIPTION
	PRESSURE REDUCING VALVE (PRV)		PIPE RISING UP
	GATE VALVE		PIPE DROPPING DOWN
	GLOBE VALVE		UNION - SCREWED OR FLANGED
	PLUG VALVE		PRESSURE TRANSMITTER OR PRESSURE SWITCH
	BUTTERFLY VALVE		THERMOMETER/TEMPERATURE INDICATOR
	BALL VALVE		GAUGE WITH GAUGE COCK/ PRESSURE INDICATOR
	SWING CHECK VALVE		BACKFLOW PREVENTOR (REDUCED ZONE)
	LIFT CHECK VALVE		BACKFLOW PREVENTOR (DOUBLE CHECK VALVE ASSEMBLY)
	GATE VALVE, ANGLE		WATER HAMMER ARRESTER
	GLOBE VALVE, ANGLE		CIRCUIT SETTING
	TEMPERATURE AND PRESSURE RELIEF VALVE		HOSE BIBB
	RELIEF/SAFETY VALVE		ROOF DRAIN
	GAS COCK		FLOOR DRAIN
	GAS PRESSURE REGULATOR		AREA DRAIN
	STRAINER		FLOOR CLEAN OUT
	STRAINER WITH BLOW OFF VALVE		FLOOR SINK
	WATER HEATER		CLEAN OUT TO GRADE
	WATER METER		WALL CLEAN OUT
	PRESSURE GAGE		FLEXIBLE-CONNECTION
	TEMPERATURE GAGE		CHECK VALVE
			VACUUM BREAKER

**PLUMBING SHEET LIST**

Sheet Number	Sheet Name
P0-1	PLUMBING COVER SHEET
P1-1	PLUMBING PLANS

MESA COUNTY SHERIFF'S  
OFFICE - BOOKING AREA  
RENOVATION

215 RICE STREET  
GRAND JUNCTION, CO  
81501

PLUMBING COVER SHEET

CONSTRUCTION DRAWINGS



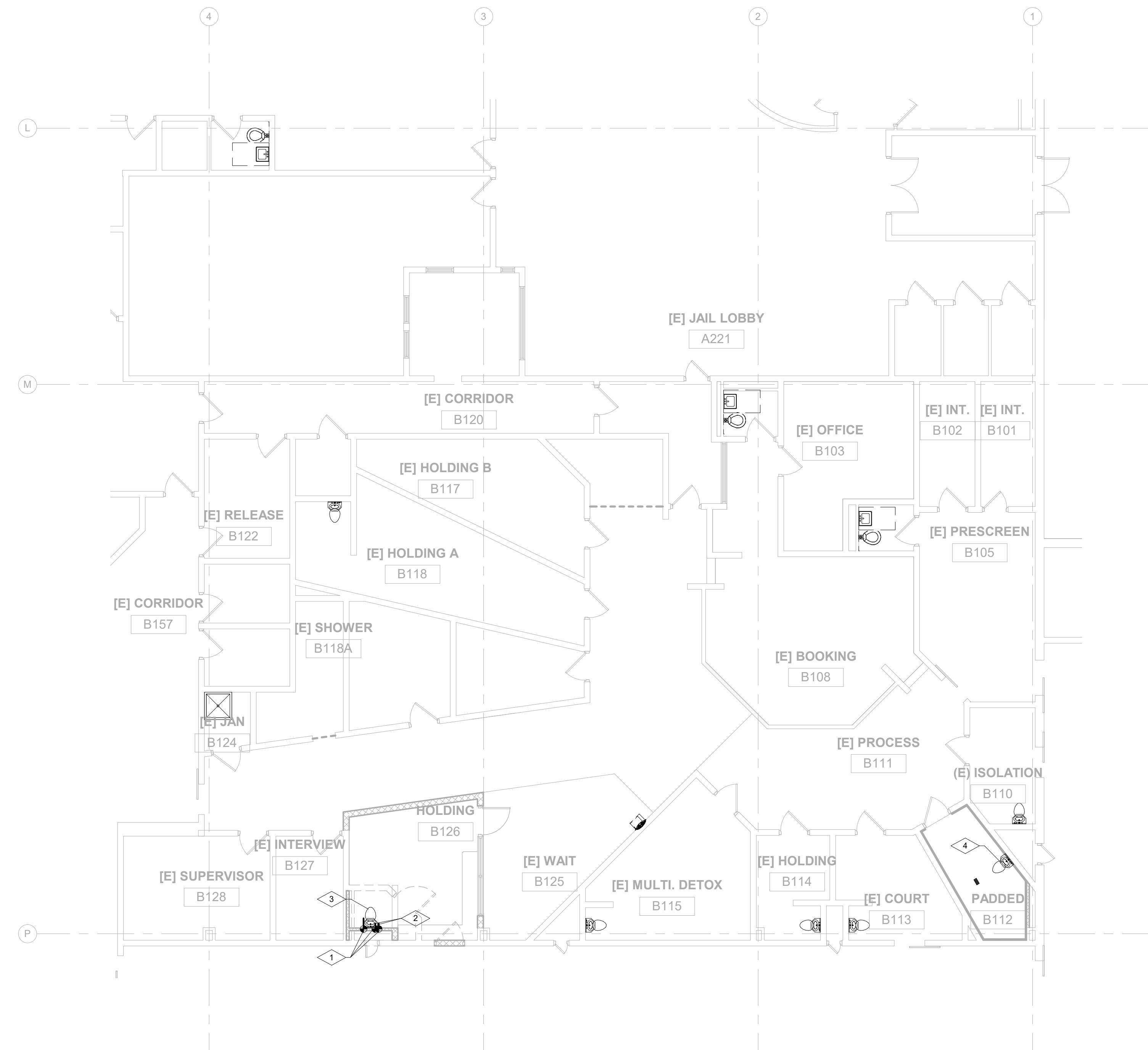
REV. DESC. DATE:

DATE: 01/16/2024

PROJECT #: 23185

SHEET #:

P0-1



**PLUMBING FLOOR PLAN**  
1  
P1-1  
1/8" = 1'-0"  
NORTH

PLUMBING KEYNOTES	
Note Number	Note Text
1	CONNECT TO EXISTING SANITARY WASTE, DOMESTIC COLD WATER, AND DOMESTIC HOT WATER IN AREA.
2	PROVIDE REMOTE WATER CONTROL SYSTEM ON DOMESTIC WATER SUPPLY. REUSE FROM PADDED (B112) IF POSSIBLE. PROVIDE NEW IF EXISTING IS NOT ABLE TO BE REUSED. CONTROLS TO BE WIRED AND PLUMBED.
3	REUSE EXISTING SECURITY COMBO FIXTURE FROM PADDED (B112). CONTRACTOR TO VERIFY GOOD WORKING CONDITION OF EXISTING FIXTURE. IF UNIT IS NOT ABLE TO BE REUSED, PROVIDE WITH ACORN PENAL-WARE 1415, 15" LAV-TOILET COMBY UNIT WITH OPTIONAL VALVE, CENTERED TOILET, FLOOR MOUNT WITH WALL OUTLET, AND 1.28 GPF FLUSH VALVE.
4	EXISTING COMBINATION UNIT TO BE REMOVED. UNIT IS TO BE RELOCATED TO NEW HOLDING ROOM. CAP EXISTING PIPES.

**PLUMBING GENERAL NOTES:**

- DRAWING IS DIAGRAMMATIC IN NATURE. LOCATIONS AND SIZES MAY VARY DURING FIELD COORDINATION & INSTALLATION OF MECHANICAL, PLUMBING, & ELECTRICAL. DRAWINGS DO NOT NECESSARILY INDICATE EVERY REQUIRED OFFSET, FITTING, ETC. DRAWINGS ARE NOT TO BE SCALED FOR DIMENSIONS. TAKE ALL DIMENSIONS FROM ARCHITECTURAL DRAWINGS. CERTIFIED EQUIPMENT DRAWINGS AND FROM THE STRUCTURE ITSELF BEFORE FABRICATING ANY WORK. VERIFY ALL SPACE REQUIREMENTS COORDINATING WITH OTHER TRADES, AND INSTALL THE SYSTEMS IN THE SPACE PROVIDED WITHOUT EXTRA CHARGES TO THE OWNER.
- PIPE DIMENSIONS DO NOT REFLECT ADDITIONAL DIMENSIONS FOR INSULATION. ALL PIPING SHALL BE INSULATED PER 2018 IECC CODE REQUIREMENTS.
- ALL PLUMBING FIXTURES WITH QUICK CLOSING VALVES ON DOMESTIC COLD/HOT WATER SHALL BE PROVIDED WITH WATER HAMMER ARRESTOR.
- PROVIDE ISOLATION VALVES AT GROUP RESTROOMS TO ALLOW FOR TOTAL ISOLATION OF THE ENTIRE RESTROOM GROUP FROM THE REST OF THE DOMESTIC COLD, HOT AND HOT RE-CIRCULATION SYSTEMS.
- ALL PLUMBING FIXTURES SHALL BE VENTED BY PLUMBING CONTRACTOR PER IPC REQUIREMENTS.
- CONTRACTOR SHALL CLEAN AND SERVICE ALL EXISTING EQUIPMENT/PLUMBING FIXTURES TO REMAIN. CONTRACTOR SHALL VERIFY ALL EQUIPMENT/PLUMBING FIXTURES ARE PROPERLY FUNCTIONING PRIOR TO RE-USING EQUIPMENT/FIXTURES. CONTRACTOR TO INSURE THAT FINAL PLUMBING SYSTEM WILL OPERATE AS INTENDED ON PROVIDED DRAWINGS.
- PLUMBING FIXTURE MANUFACTURERS AS SCHEDULED ON PLUMBING DRAWINGS ARE SUGGESTED MANUFACTURERS AND MODELS. UNLESS NOTED OTHERWISE DUE TO OWNER/CLIENT REQUIREMENTS AND PREFERENCES, PLUMBING CONTRACTOR CAN SUBMIT EQUIVALENT FIXTURES FROM MANUFACTURERS THAT DIFFER FROM SCHEDULED PLUMBING FIXTURES. ALTERNATE MANUFACTURERS OF PLUMBING FIXTURES WILL BE REVIEWED FOR EQUIVALENCE OF PERFORMANCE AND FUNCTIONALITY BY ENGINEER.

**MESA COUNTY SHERIFF'S OFFICE - BOOKING AREA RENOVATION**

215 RICE STREET  
GRAND JUNCTION, CO  
81501

**PLUMBING PLANS**

**CONSTRUCTION DRAWINGS**



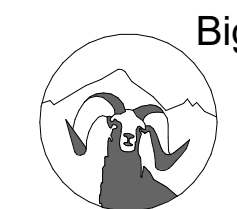
REV. DESC. DATE:

DATE: 01/16/2024

PROJECT #: 23185

SHEET #:

**P1-1**



Bighorn Consulting Engineers, Inc.

Mechanical & Electrical Engineers

386 Indian Road  
Grand Junction, CO 81501  
Phone: (970) 241-8709

**SUBSTITUTIONS:**

A. SUBSTITUTIONS: SUBSTITUTION OF SPECIFIED EQUIPMENT WILL BE ALLOWED THROUGH A PRIOR APPROVAL PROCESS INITIATED BY THE CONTRACTOR. CONTRACTOR SHALL SUBMIT INTENDED SUBSTITUTION AT LEAST FIVE DAYS PRIOR TO BID FOR APPROVAL FROM ENGINEER. SUBMITTAL SHALL INCLUDE CAPACITIES, DIMENSIONS AND OPERATING INSTRUCTIONS FOR EACH PIECE OF EQUIPMENT. SUBSTITUTION SHALL OCCUR AT NO COST TO THE OWNER. CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF APPROVED SUBSTITUTION AND SHALL INCUR ALL COSTS ASSOCIATED WITH THE SUBSTITUTION INCLUDING STRUCTURAL MODIFICATIONS, SPACE LAYOUT AND REDESIGN COSTS. SEE ALSO DIVISION I GENERAL REQUIREMENTS.

**EXAMINATION OF SITE DRAWINGS, SPECIFICATIONS:**

A. EXAMINE CAREFULLY THE SITE AND CONDITIONS OF THE SITE. PROVIDE ALL NECESSARY EQUIPMENT AND LABOR TO INSTALL A COMPLETE WORKING SYSTEM WITHIN THE SITE CONDITIONS.

B. EXAMINE THE DRAWINGS AND SPECIFICATIONS AND 5 DAYS PRIOR TO BIDDING REPORT ANY ERRORS, OMISSIONS, INCONSISTENCIES, AND CONFLICTS TO THE ENGINEER TO BE REMEDIATED IN AN ADDENDUM TO THE PROJECT PRIOR TO BID TIME.

C. DRAWINGS ARE DIAGRAMMATIC AND CATALOG NUMBERS GIVEN ARE FOR REFERENCE ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE CAPACITY OF THE EQUIPMENT MEETS THE DRAWING REQUIREMENTS AND SHALL NOT DIMENSION FROM THE MECHANICAL, PLUMBING, OR PIPING DRAWINGS.

D. THE LATEST ADOPTED VERSIONS OF THE INTERNATIONAL BUILDING CODES SHALL BE USED AS REQUIRED. THIS WILL ALSO INCLUDE THE LATEST ADOPTED VERSIONS OF THE MECHANICAL, PLUMBING AND ENERGY CONSERVATION CODES. ALL METHODS AND MATERIALS REQUIRED BY THESE CODES SHALL BE REQUIRED BY THESE SPECIFICATIONS UNLESS INDICATED OTHERWISE. OTHER APPLICABLE LOCAL CODES AND ORDINANCES SHALL BE AS REQUIRED AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO BE KNOWLEDGEABLE OF THESE REQUIREMENTS.

E. WHERE INSTALLATION PROCEDURES OR ANY PART THEREOF ARE REQUIRED TO BE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE MANUFACTURER OF THE MATERIAL BEING INSTALLED, PRINTED COPIES OF THESE RECOMMENDATIONS SHALL BE FURNISHED TO THE ENGINEER PRIOR TO INSTALLATION. INSTALLATION OF THE ITEM WILL NOT BE ALLOWED TO PROCEED UNTIL THE RECOMMENDATIONS ARE RECEIVED. FAILURE TO FURNISH THESE RECOMMENDATIONS CAN BE CAUSE FOR REJECTION OF THE MATERIAL.

**RESPONSIBLE DIVISION:**

UNLESS OTHERWISE INDICATED ALL HEATING, VENTILATING, AIR CONDITIONING, PLUMBING, AND OTHER MECHANICAL EQUIPMENT, MOTORS, AND CONTROLS SHALL BE FURNISHED, SET IN PLACE AND WIRED AS FOLLOWS:

ITEM	FURNISHED	SET	POWER WIRED	CONTROL WIRED
EQUIPMENT	23	23	26	--
COMBINATION MAGNETIC MOTOR STARTERS, MAGNETIC MOTOR STARTERS, VFD'S AND CONTACTORS	23(1)	26	26(2)	23
FUSED AND UNFUSED DISCONNECT SWITCHES, THERMAL OVERLOAD SWITCHES AND HEATERS, MANUAL MOTOR STARTERS	26	26	26	--
MANUAL-OPERATING AND MULTI-SPEED SWITCHES	23	26	26	26
CONTROLS, RELAYS, TRANSFORMERS	23	23	26	23
THERMOSTATS (LOW VOLTAGE) AND TIME SWITCHES	23	23	26	23
THERMOSTATS (LINE VOLTAGE)	23	23	26	26
TEMPERATURE CONTROL PANELS	23	23	26	23
MOTOR AND SOLENOID VALVES, DAMPER MOTORS, PE & EP SWITCHES	23	23(2)	--	23(2)
PUSH-BUTTON STATIONS AND PILOT LIGHTS	23	23(2)	--	23(2)
HEATING, COOLING, VENTILATION AND AIR CONDITIONING CONTROLS	23	23	26	23
EXHAUST FAN SWITCHES	23	26	26	23(2)

**SUBSCRIPT FOOTNOTES:**

1. MOTOR STARTER TO INCLUDE CONTROL TRANSFORMER, HOA SWITCH, (1) NO AND (1) NC AUXILIARY CONTACT, AND 'ON' AND 'OFF' PILOT LIGHTS.
2. IF ITEM IS FOR LINE VOLTAGE, SET IN PLACE AND CONNECT UNDER DIVISION 26. WHERE FACTORY MOUNTED ON EQUIPMENT OR ATTACHED TO PIPING OR DUCTS AND USING LINE VOLTAGE FURNISH AND SET UNDER DIVISION 23, CONNECT UNDER DIVISION 26.

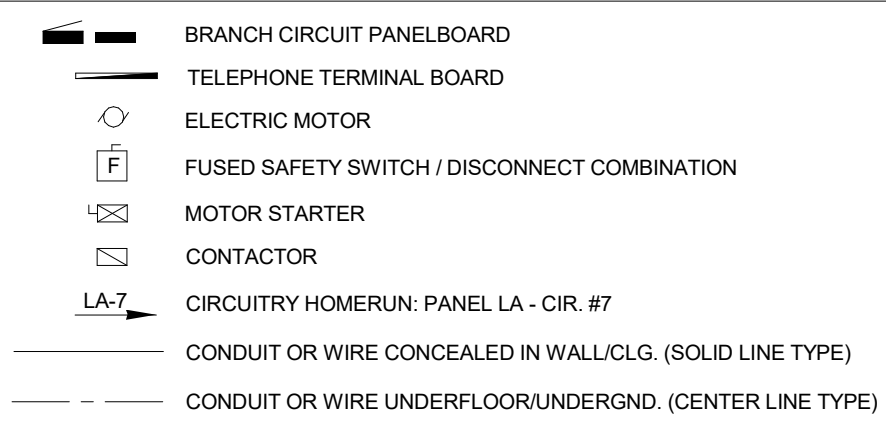
**ABBREVIATIONS:**

44" MOUNTING HEIGHT ABOVE FINISHED FLOOR TO CENTER OF DEVICE	DIFF DIFFERENTIAL DISCH DISCHARGE	HR HOUR HEIGHT	PTAC PACKAGED TERMINAL AIR CONDITIONER
A AMPS	DIV DIVISION	HTR HEATER	PV PLUG VALVE
A.D. ACCESS DOOR	DN DOWN	HWR HEATING WATER RETURN	PVC POLYVINYL CHLORIDE
AAV AIR ADMITTANCE VALVE	DS DUCT SILENCER	HWS HEATING WATER SUPPLY	QTY QUANTITY
ABV ABOVE	DWG DRAWING	HX HEAT EXCHANGER	RA RETURN AIR GRILLE / REGISTER
AC AIR CONDITIONING UNIT	DX DIRECT EXPANSION	HZ HERTZ	RCP REFLECTED CEILING PLAN
AC ABOVE COUNTER	EX EXISTING	ID INSIDE DIAMETER	RD ROOF DRAIN
AD AREA DRAIN (SEE SYMBOLS)	EA EXHAUST AIR GRILLE/REGISTER	IG ISOLATED GROUND	REL RELIEF
A.F.C. ABOVE FINISHED CEILING	EAT ENTERING AIR TEMPERATURE	IN INCHES	REQD REQUIRED
A.F.G. ABOVE FINISHED GRADE	EC ELECTRICAL CONTRACTOR	INV INVERT	R.F. RETURN FAN
AIC AMPS INTERRUPTING CAPACITY	ECC ECCENTRIC	JBOX JUNCTION BOX	RH RELATIVE HUMIDITY
A.F.F. ABOVE FINISHED FLOOR	EF EXHAUST FAN	K KELVIN	RHC REHEAT COIL
A.H.U. AIR HANDLING UNIT	EFF EFFICIENCY	KW KILOWATT	RLA RATED LOAD AMPS
ALUM ALUMINUM	ELEV ELEVATION	RM ROOM	RPM REVOLUTIONS PER MINUTE
AP ACCESS PANEL OR DOOR	ELEC ELECTRIC	L LENGTH	RFA REVOLUTIONS PER MINUTE
ATS AUTOMATIC TRANSFER SWITCH	ELEV ELEVATOR	LAT LEAVING AIR TEMPERATURE	SA SUPPLY AIR GRILLE / REGISTER
AV ABOVE COUNTER	EFT EMERGENCY FUNCTION	LV LEAVING WATER TEMPERATURE	SC SHORT CIRCUIT
AVG AVERAGE	ENT ENTERING	LB POUND	SCA SHORT CIRCUIT AVAILABLE
AWG AMERICAN WIRE GAGE	EMT ELECTRIC METALLIC TUBE	LD LINEAR DIFFUSER	SCCR SHORT CIRCUIT CURRENT RATING
BAS BUILDING AUTOMATION SYSTEM	EQUIP EQUIPMENT	LF LINEAR	SCH SCHEDULE
BB BASEBOARD	EQUIV EQUIVALENT	LIQ LIQUID	SD SMOKE DAMPER
BD BACK DRAFT DAMPER	ES END SWITCH	LM LUMEN	SEF SMOKE EXHAUST FAN
BFP BACK FLOW PREVENTOR	ESP EXTERNAL STATIC PRESSURE	LV LOUVER	SF SUPPLY FAN
BL BOILER	ET EXPANSION TANK	LVG LEAVING	SH SENSIBLE HEAT
BLDG BUILDING	EWC ELECTRIC WATER COOLER	LWT LEAVING WATER TEMPERATURE	SH SHOWER
BLW BELOW	EWT ENTERING WATER TEMPERATURE	MBH THOUSANDS OF BTU PER HOUR	SPD SURGE PROTECTION DEVICE
BOS BOTTOM OF BEAM	EX EXHAUST	MC MECHANICAL CONTRACTOR	SPEC SPECIFICATION
BOD BOTTOM OF DUCT	EXPAN EXPANSION	MD MINIMUM CIRCUIT AMPACITY	SQ SQUARE
BOP BOTTOM OF PIPE	EXT EXTERNAL	MCB MAIN CIRCUIT BREAKER	SS STAINLESS STEEL
BSMT BASEMENT	F F	MD MOTORIZED DAMPER	STD STANDARD
BTU BRITISH THERMAL UNIT	FA FREE AREA	MD MINIMUM DISTRIBUTION PANEL	STL STEEL
C CHILLER	FAN COOL UNIT	MED MEDIUM	SYS SYSTEM
CAP CAPACITY	FC FOOTCANDLE	MFR MANUFACTURER	TEMP TEMPERATURE
CB CIRCUIT BREAKER	FD FLOOR DRAIN	MN MINIMUM	TR TRANSFER GRILLE / REGISTER
CBV CIRCUIT BALANCING VALVE	FCV FLOW CONTROL VALVE	MISC MISCELLANEOUS	TR TAMPER RESISTANT
CCT CORRELATED COLOR TEMPERATURE	FD FLOOR DRAIN	MLO MAIN LUG ONLY	TT TEMPERATURE TRANSMITTER
CKT CIRCUIT	FIN FINISHED	MOCF MAXIMUM OVERCURRENT PROTECTION	TTB TELECOMMUNICATIONS TERMINAL BACKSBOARD
CFM CUBIC FEET PER HOUR	FLA FULL LOAD AMPS	MTD MOUNTED	TYP TYPICAL
CFM CUBIC FEET PER MINUTE	FLEX FLEXIBLE	MUA MAKE-UP AIR UNIT	TX TRANSFORMER
CHWS CHILLED WATER RETURN	FLR FLOOR	N NEUTRAL	UC UNDERCUT DOOR
CHWS CHILLED WATER SUPPLY	FOB FLAT ON BOTTOM	NC NORMALLY CLOSED	UH UNIT HEATER
CI CAST IRON	FOT FLAT ON TOP	NEG NEGATIVE	UNO UNLESS NOTED OTHERWISE
CL CENTER LINE	FP FIRE PROTECTION	NIC NOT IN CONTRACT	UNOC UNOCCUPIED
CLG CEILING	FP FIRE PUMP	NL NIGHT / SECURITY LIGHT - DO NOT SWITCH	UR URINAL
CMU CONCRETE MASONRY UNIT	FPM FEET PER MINUTE	NO NORMALLY OPEN	V VOLTS
CO CLEAN OUT	FT FEET	NOM NOMINAL	VA VOLT AMPERE
COL COLUMN	FT FEET PER SECOND	NTS NOT TO SCALE	VA VALVE
COMP COMPRESSOR	FSD FIRE/SMOKE DAMPER	OA OUTSIDE AIR	VAV VARIABLE AIR VOLUME UNIT
CONC CONCRETE	FT FEET	OC OPPOSED BLADE DAMPER	VFD VARIABLE FREQUENCY DRIVE
COND CONDENSATE	FXC FLEXIBLE CONNECTION	OC ON CENTER	VOLT VOLTAGE
CONN CONNECTION	GND GROUND	OCC OCCUPIED	VTR VENT THROUGH ROOF
CONT CONTINUATION	GA GAUGE	OCF OVER CURRENT PROTECTION	W WIDTH
CONTR CONTRACTOR	GAL GALLON	OD OUTSIDE DIAMETER	W WATTS
COI COLOR RENDERING INDEX	GALV GALVANIZED	OL OVERLOAD	W WITH
CT COOLING TOWER	GEC GROUND ELECTRODE CONDUCTOR	ORD OVERFLOW ROOF DRAIN	W/O WITHOUT
CT CURRENT TRANSFORMER	GFI / GFI GROUND FAULT CIRCUIT INTERRUPTER	OZ OUNCE	WB WET BULB
CJ CONDENSING UNIT	GC GENERAL CONTRACTOR	PBD PARALLEL BLADE DAMPER	WC WATER COLUMN
CU COPPER	GPH GALLONS PER HOUR	PD PRESSURE DROP	WC WATER CLOSET
CUH CABINET UNIT HEATER	GPM GALLONS PER MINUTE	PH PHASE	WG WATER GAUGE
CVB CONSTANT VOLUME BOX	G/GAL GALLONS PER GALLON	POS POSITIVE PRESSURE	WP WEATHERPROOF
CWR CONDENSER WATER RETURN	H <sub>2</sub> O WATER	POS POINT OF SALES	WPU WEATHERPROOF IN-USE
CWS CONDENSER WATER SUPPLY	HB HOSE BIBB	PRV PRESSURE REDUCING VALVE	WSR WITHSTAND RATING
DE DRY BULB	HD HEAD (SEE SCHEDULES)	PS PRESSURE SWITCH	XFMR TRANSFORMER
DEPT DEPARTMENT	HP HEAT PUMP	PT PRESSURE TRANSMITTER	
DF DRINKING FOUNTAIN	HP HORSEPOWER		
DIA DIAMETER			
DIAG DIAGRAM			

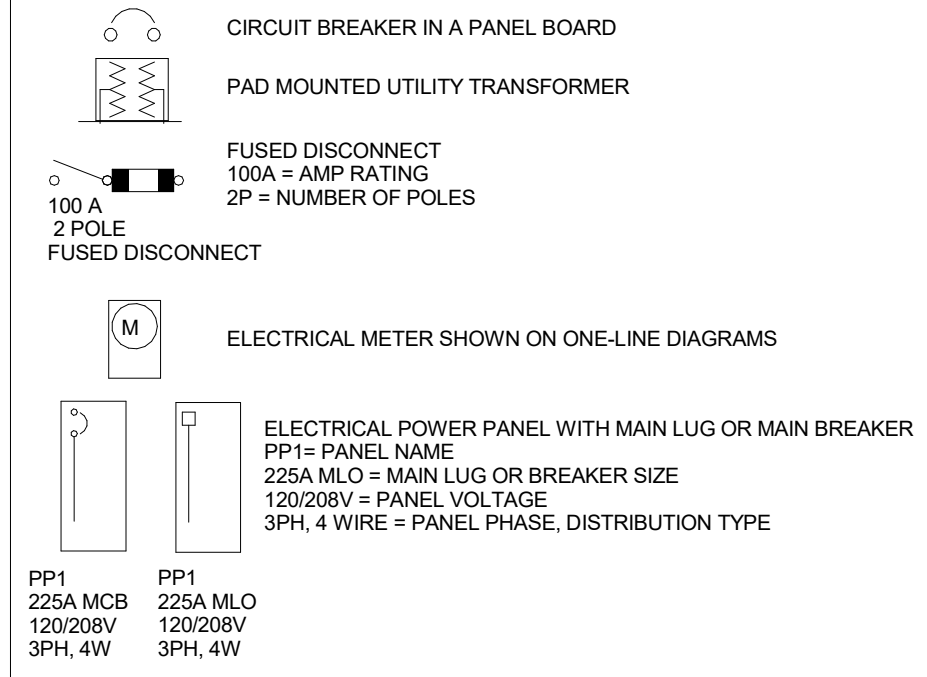
**ELECTRICAL SHEET LIST**

Sheet Number	Sheet Name
E0-1	ELECTRICAL COVER SHEET
E1-1	LIGHTING PLANS
E1-3	LIGHTING - DETAILS
E2-1	POWER PLANS
ED2-1	POWER DEMOLITION PLANS

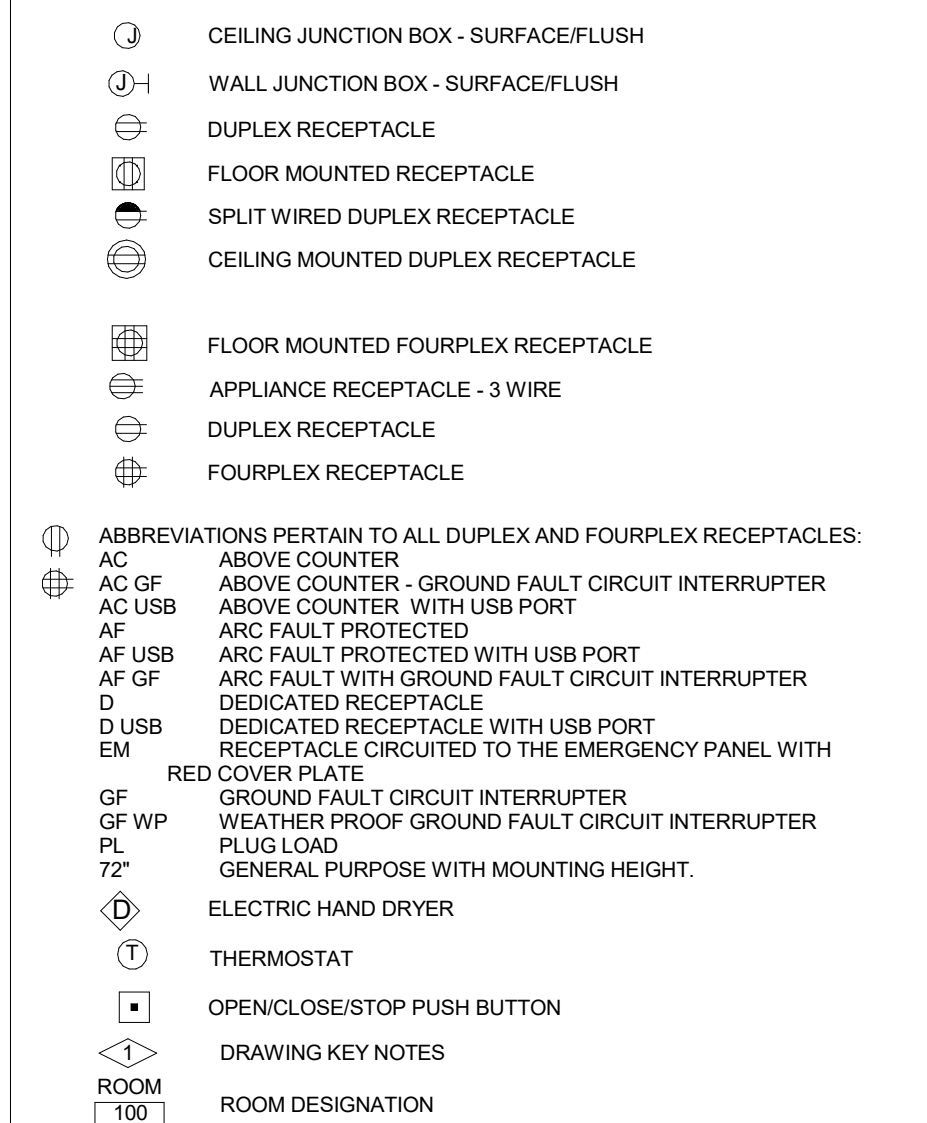
**ELECTRICAL EQUIPMENT LEGEND**



**MAIN DISTRIBUTION GEAR**



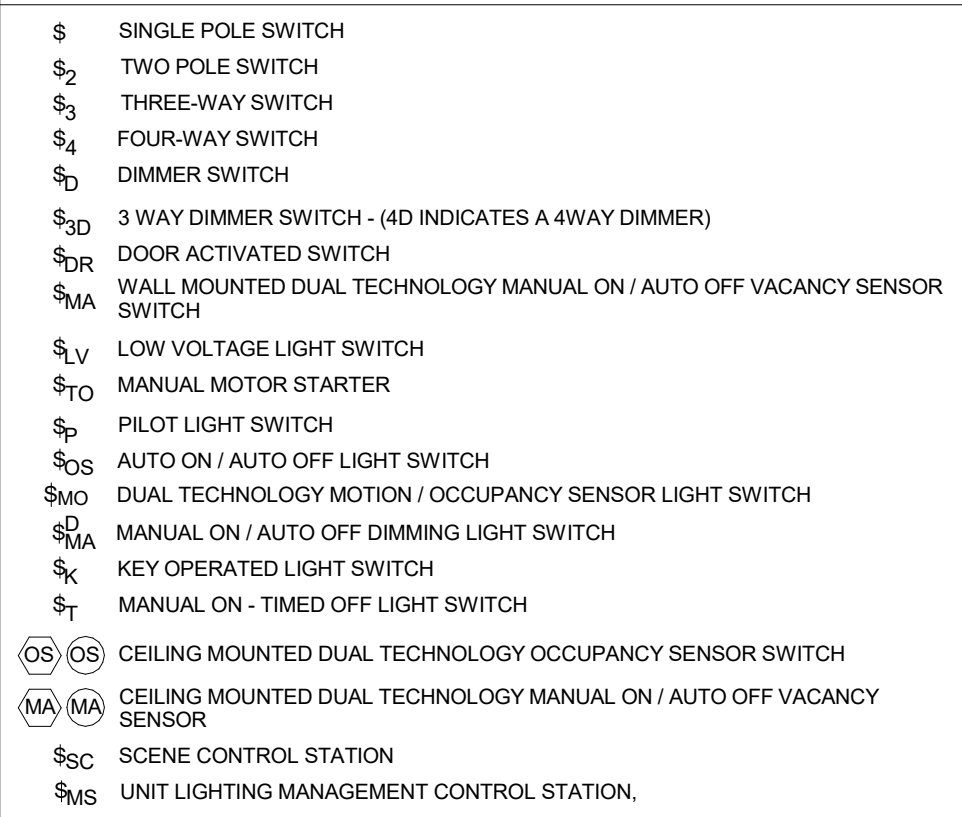
**ELECTRICAL DEVICE LEGEND**



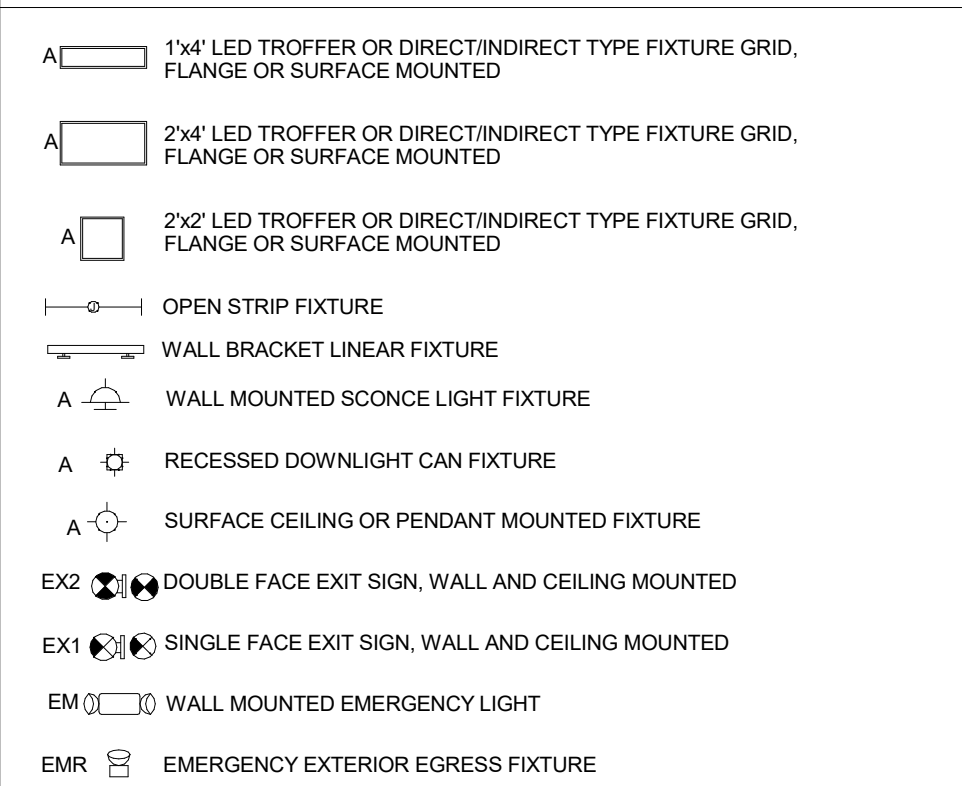
**LIGHTING LEGEND**

**NOTES:**  
SYMBOLS SHOWN ARE STANDARD. VARIATION AND/OR COMBINATIONS MAY BE USED ON THE PLANS. THIS LIST SHOWS STANDARD SYMBOLS AND ALL MAY NOT APPEAR ON THE PROJECT DRAWINGS. HOWEVER, WHEREVER THE SYMBOL ON THE PROJECT DRAWINGS OCCUR, THE ITEM SHALL BE PROVIDED AND INSTALLED.  
VARIATION AND/OR COMBINATION MAY BE USED ON THE PLANS.  
A NUMBER NEXT TO A RECEPTACLE OR DEVICE INDICATES A CIRCUIT NUMBER.  
AN UPPER CASE LETTER NEXT TO A SWITCH INDICATES THE FUNCTION OF THE SWITCH. A LOWER CASE LETTER INDICATES THE SWITCH CIRCUIT.  
AN UPPER CASE LETTER NEXT TO A LIGHT FIXTURE INDICATES THE TYPE OF FIXTURE. REFER TO THE LUMINAIRE SCHEDULE FOR FIXTURE SPECIFICATIONS. A LOWER CASE LETTER NEXT TO A LIGHT CORRESPONDS TO THE SWITCH DESIGNATION.

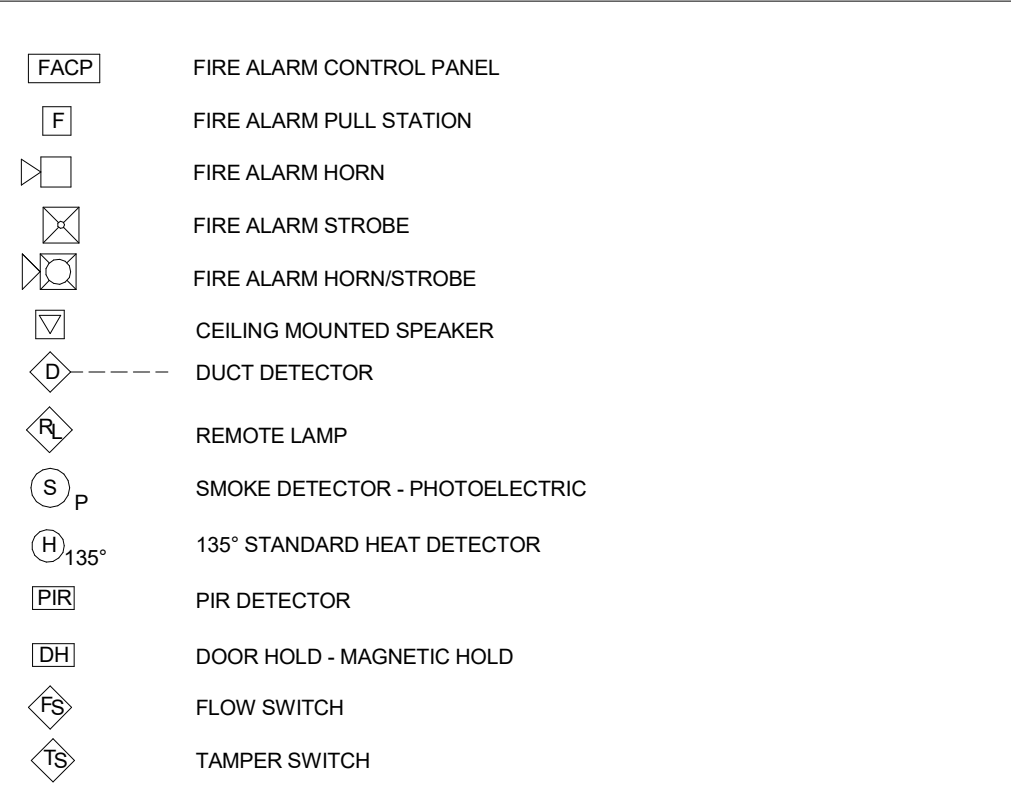
**SWITCHES**



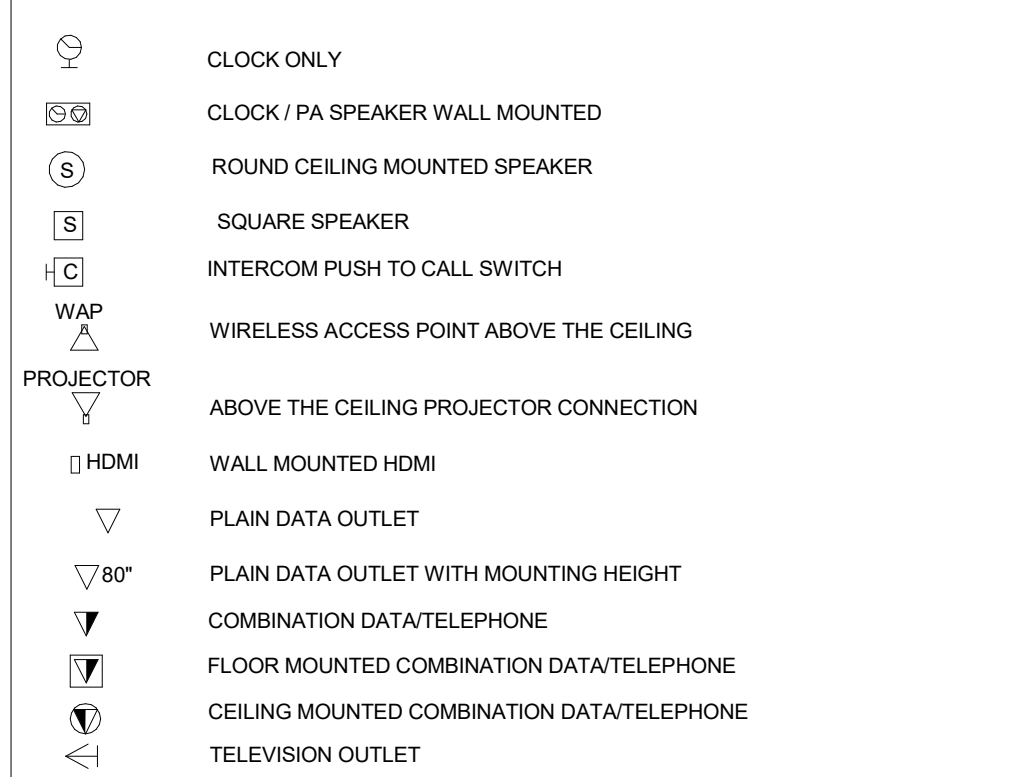
**LIGHT FIXTURES**



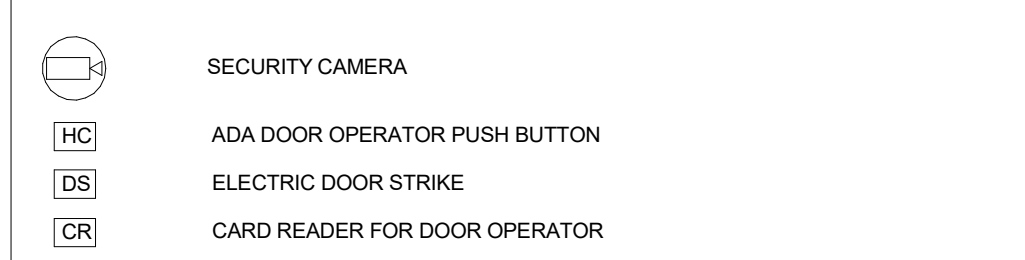
**FIRE ALARM EQUIPMENT LEGEND**



**COMMUNICATION LEGEND**



**SECURITY SYSTEM LEGEND**





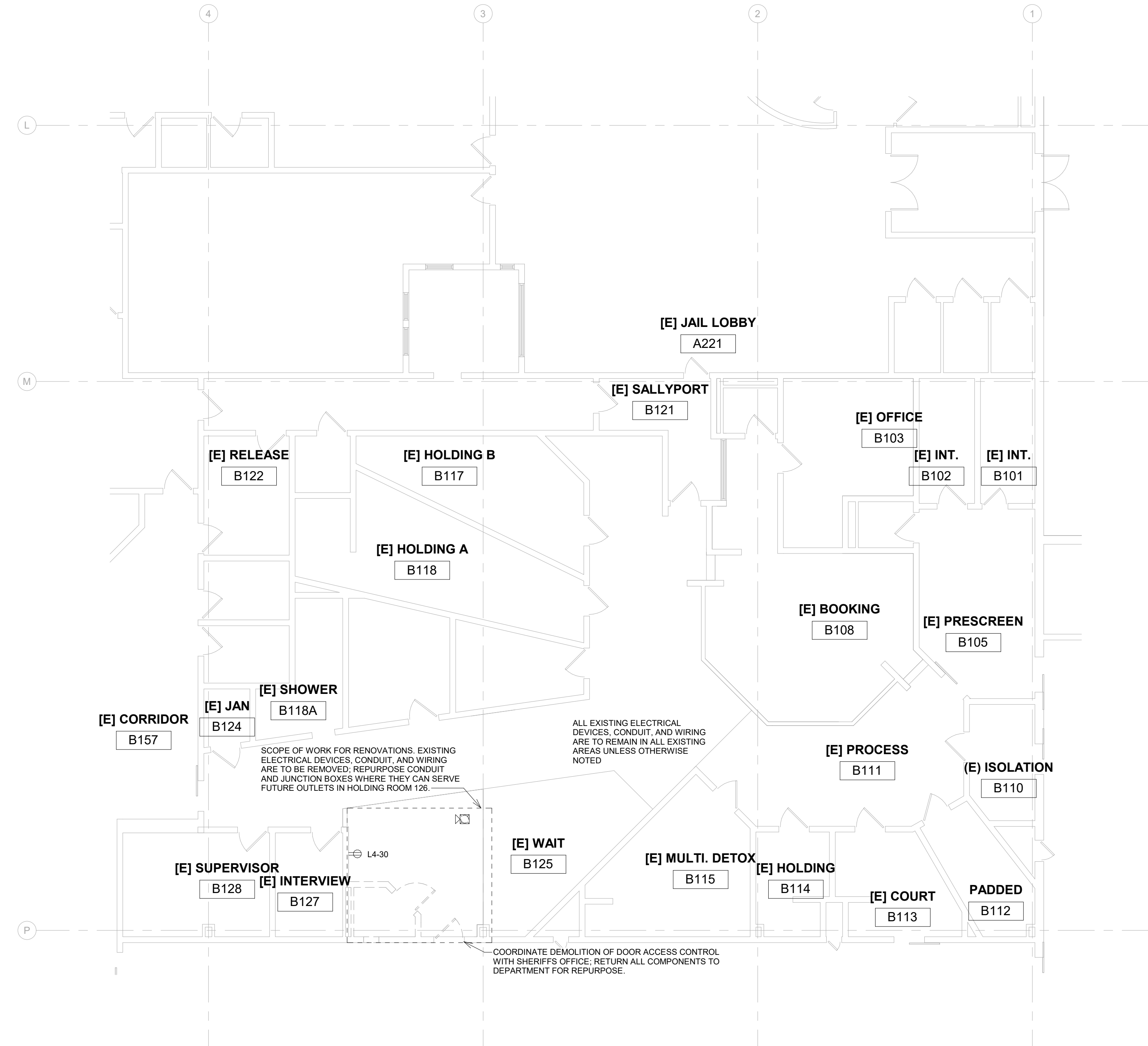
REV. DESC. DATE:

DATE: 01/16/2024

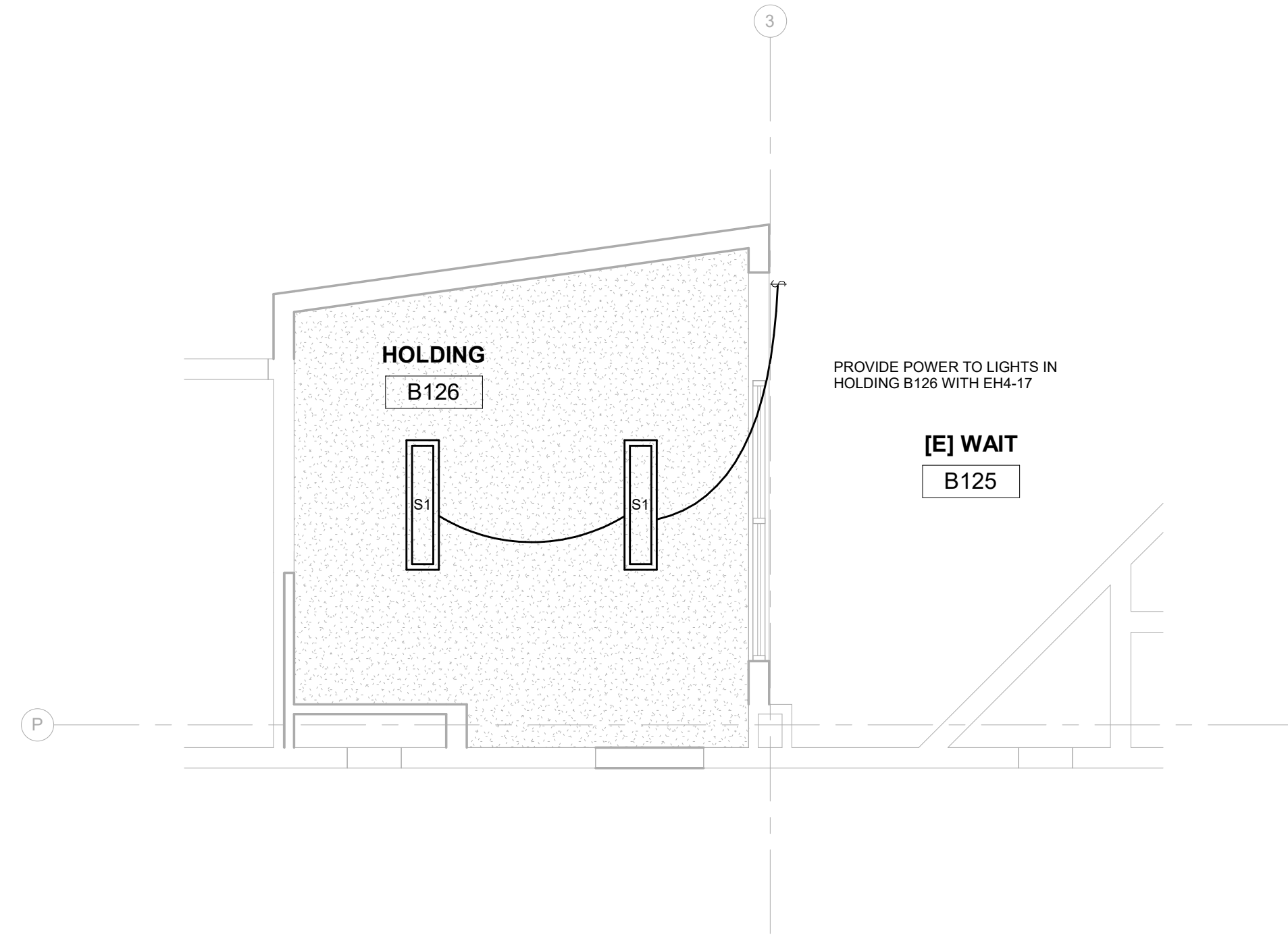
PROJECT #: 23185

SHEET #:

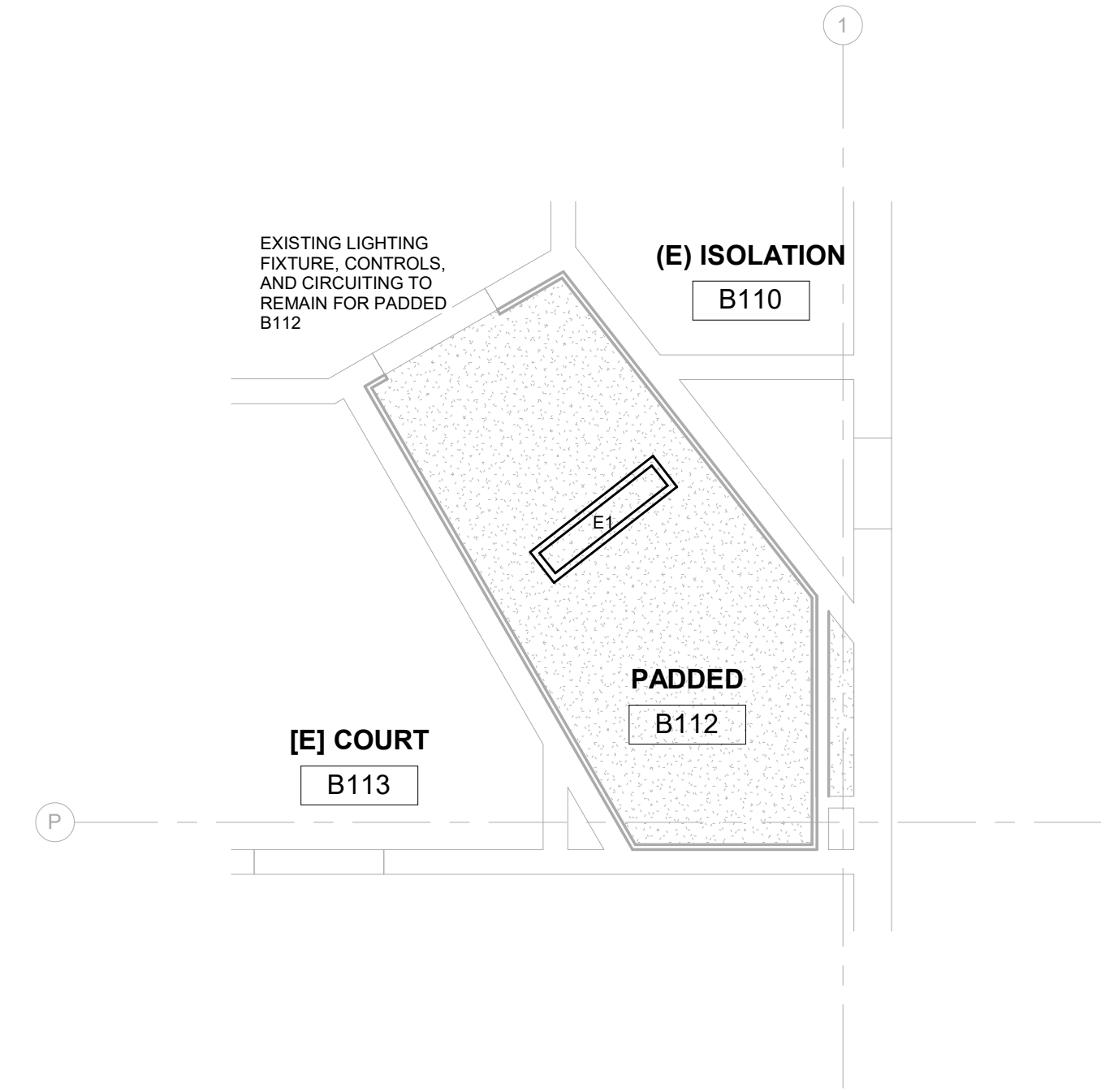
**ED2-1**



= 1'-0\"/>  
**ELECTRICAL DEMOLITION PLAN**



**1 LIGHTING PLAN - HOLDING CELLS**  
E1-1 1/4" = 1'-0"  
NORTH



**2 LIGHTING PLAN - PADDED CELL**  
E1-1 1/4" = 1'-0"  
NORTH

LIGHTING FIXTURE SCHEDULE				
TYPE MARK	MANUFACTURER	MODEL	LAMP	DESCRIPTION
E1	EXISTING TO REMAIN	EXISTING TO REMAIN	EXISTING TO REMAIN	1'X4' CONFINEMENT/CORRECTIONAL LIGHT FIXTURE, VERIFY OPERATION IN FIELD.
S1	FAIL-SAFE	FMS-S12-4-LD4-1S1D-30-277-80(B4-EDC1	3x21LM, 3000K CCT, 80 CRI, 33.3W, NO DIMMING	1'X4' LED CONFINEMENT/CORRECTIONAL SURFACE-MOUNT LED FIXTURE, APPLICATION FOR CONFINEMENT AND INMATE CELLS, 0.125 PRISMATIC ACRYLIC INNER LENS, 0.125 CLEAR POLYCARBONATE OUTER LENS, DIE-FORMED 12-GAUGE CRS BODY CONSTRUCTION, MAXIMUM IMPACT RESISTANCE AND PREVENTION OF UNAUTHORIZED FIXTURE PENETRATION, WHITE POWDER COAT FINISH.

MESA COUNTY SHERIFF'S  
OFFICE - BOOKING AREA  
RENOVATION

215 RICE STREET  
GRAND JUNCTION, CO  
81501

LIGHTING PLANS

CONSTRUCTION DRAWINGS



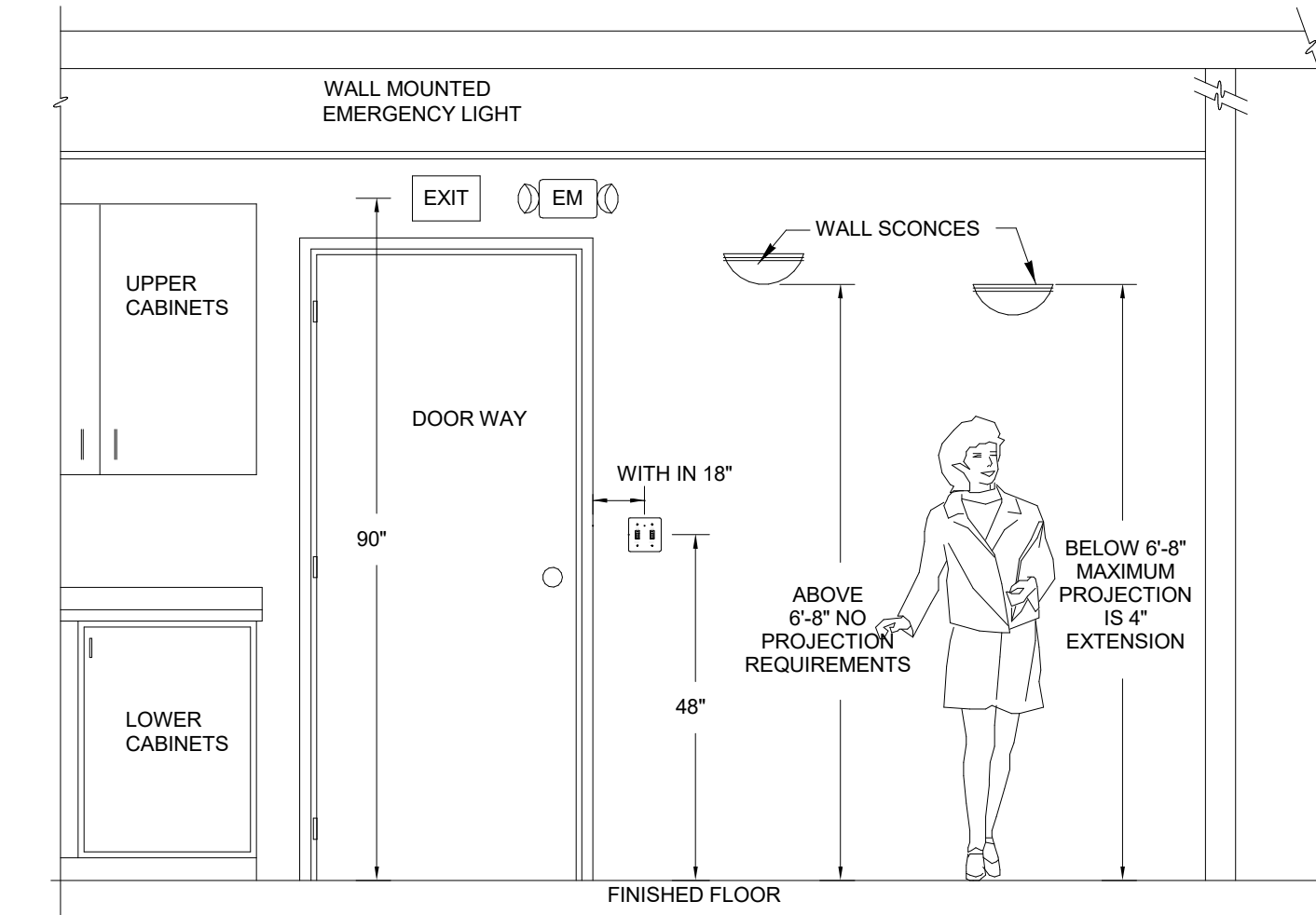
REV. DESC. DATE:

DATE: 01/16/2024

PROJECT #: 23185

SHEET #:

**E1-1**

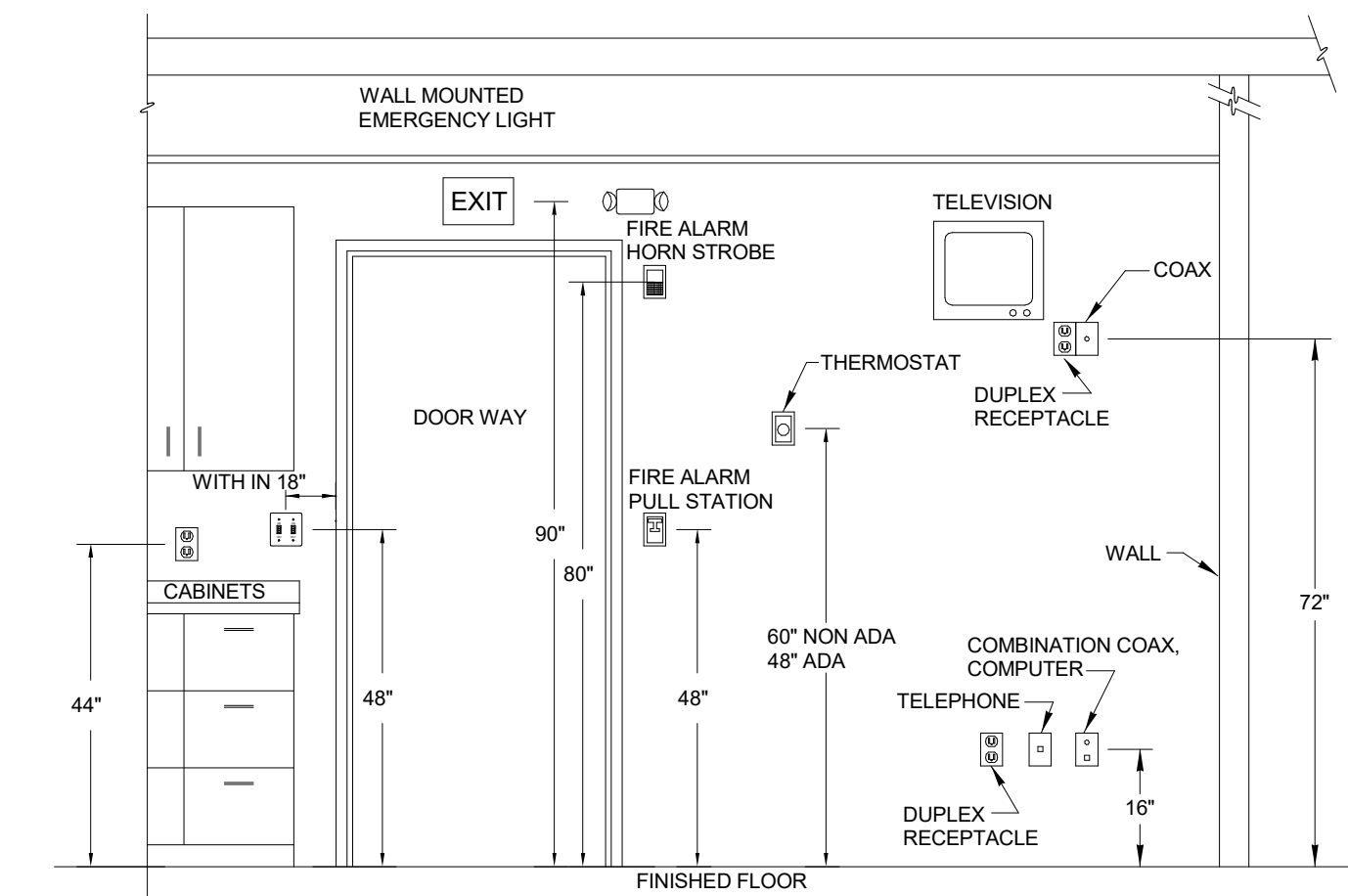


**LIGHTING DEVICE MOUNTING HEIGHT DETAIL**

NOT TO SCALE

**DETAIL NOTES:**

1. ALL DEVICES SHOWN ON THIS DETAIL ARE FOR REFERENCES OF MOUNTING HEIGHTS ONLY. THE ELECTRICAL CONTRACTOR SHALL FIELD ADJUST THE HEIGHTS AND LOCATIONS OF THE DEVICES AS REQUIRED FOR PROPER MOUNTING.
2. ALL DEVICES REQUIRED FOR THIS PROJECT MAY NOT APPEAR ON THIS DETAIL. ALL ITEMS SHOWN ON THIS DETAIL MAY NOT BE REQUIRED FOR THIS PROJECT.
3. THE AMERICANS WITH DISABILITIES ACT, KNOWN AS ADA, AFFECTS LIGHT FIXTURES USED IN CIRCULATION OR EGRESS SPACES. IN PRACTICE THIS MEANS THAT WALL MOUNTED FIXTURES LOCATED BELOW 6'-8" AFF IN HALLS, CORRIDORS, PASSAGEWAYS OR AISLES, MUST BE NO GREATER THAN 4" DEEP. THE ADA AFFECTS CONSTRUCTION FOR BOTH NEW AND EXISTING BUILDINGS.

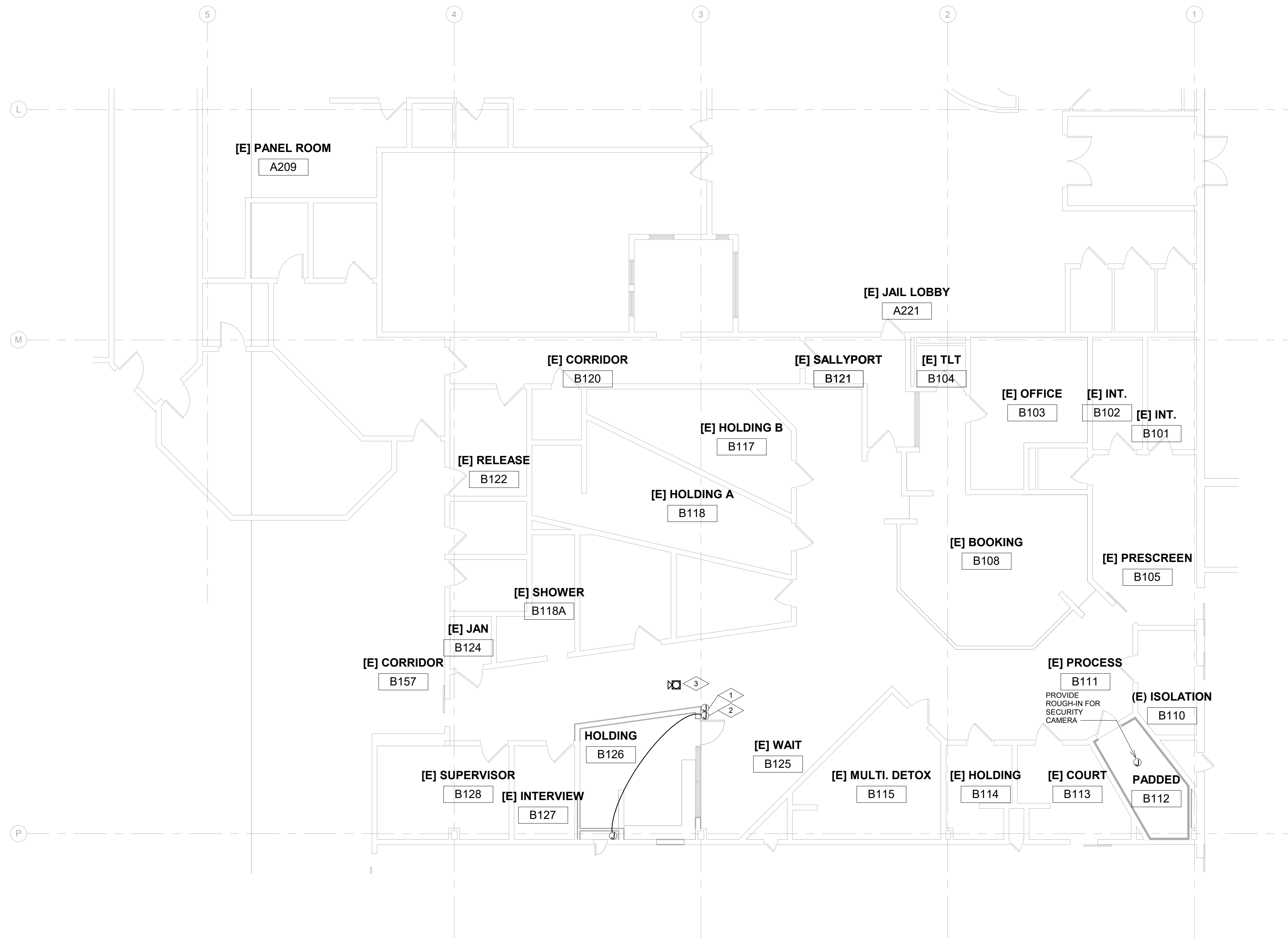


**DEVICE MOUNTING HEIGHT DETAIL**

NOT TO SCALE

**NOTES:**

1. THE ELECTRICAL CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL TELEVISION OUTLETS WITH THE ARCHITECT PRIOR TO INSTALLATION.
2. ALL DEVICES SHOWN ON THIS DETAIL ARE FOR REFERENCES OF MOUNTING HEIGHTS ONLY. THE ELECTRICAL CONTRACTOR SHALL FIELD ADJUST THE HEIGHTS OF THE DEVICES AS REQUIRED FOR PROPER MOUNTING OF THE DEVICES.
3. ALL DEVICES REQUIRED FOR THIS PROJECT MAY NOT APPEAR ON THIS DETAIL. ALL ITEMS SHOWN ON THIS DETAIL MAY NOT BE REQUIRED FOR THIS PROJECT.



**ELECTRICAL FLOOR PLAN**  
1/8" = 1'-0"

**GENERAL ELECTRICAL NOTES:**  
1. ALL WORK INVOLVING REMOVAL OF POWER OR ACCESS CONTROL SHALL BE COORDINATED WITH THE SHERIFFS DEPARTMENT BEFORE WORK IS STARTED.  
2. NO NEW ELECTRICAL SCOPE OF WORK IN PADDED CELL B112. TEMPORARILY REMOVE AND REPLACE EXISTING LIGHTING FIXTURES AND CAMERAS TO FACILITATE NEW SURFACE FINISH.  
3. SEE FLAG NOTES THIS PAGE AND LIGHTING PLANS FOR THE TWO ADDITIONAL LIGHTING FIXTURES, S1, IN HOLDING ROOM 126. SUM OF ADDED LED FIXTURES AT 33.3W EACH IS WITHIN THE WATTAGE OF THE FIXTURES REMOVED DURING 2012 REMODEL - 280W.  
4. PROPOSED CIRCUITS ARE BASED UPON RENOVATION DRAWINGS; FIELD VERIFY ALL CIRCUITS AND LOADS BEFORE MAKING TERMINATIONS.

**E2-1 FLAG NOTES**

NOTE NUMBER	NOTE TEXT
1	ROUGH IN JUNCTION BOX AND EXTEND CONDUIT TO PANEL ROOM A209 WHERE IT IS TO BE TERMINATED AND INTERFACED WITH THE CONSOLE IN BOOKING B108. COORDINATE AND INSTALL CONTROL WIRING WITH EXISTING SYSTEM IN PANEL ROOM A209.
2	ROUGH IN JUNCTION BOX TO ACCOMMODATE FLUSH VALVE CONTROL. EXTEND 20A CIRCUIT FROM NEAREST BOX SUPPLIED BY L4-30. CONTRACTOR TO PROVIDE WIRING TO ENSURE FULL OPERATION AT END OF CONSTRUCTION. SEE PLUMBING DRAWINGS AND COORDINATE WITH DEPARTMENT FOR FURTHER INFORMATION. ELECTRICIAN TO VERIFY LOADING ON L4-30 FOR POWER.
3	RELOCATE EXISTING FIRE ALARM DEVICE TO BE OUTSIDE OF HOLDING 126. COORDINATE FINAL LOCATION IN FIELD WITH OWNER AND ARCHITECT.