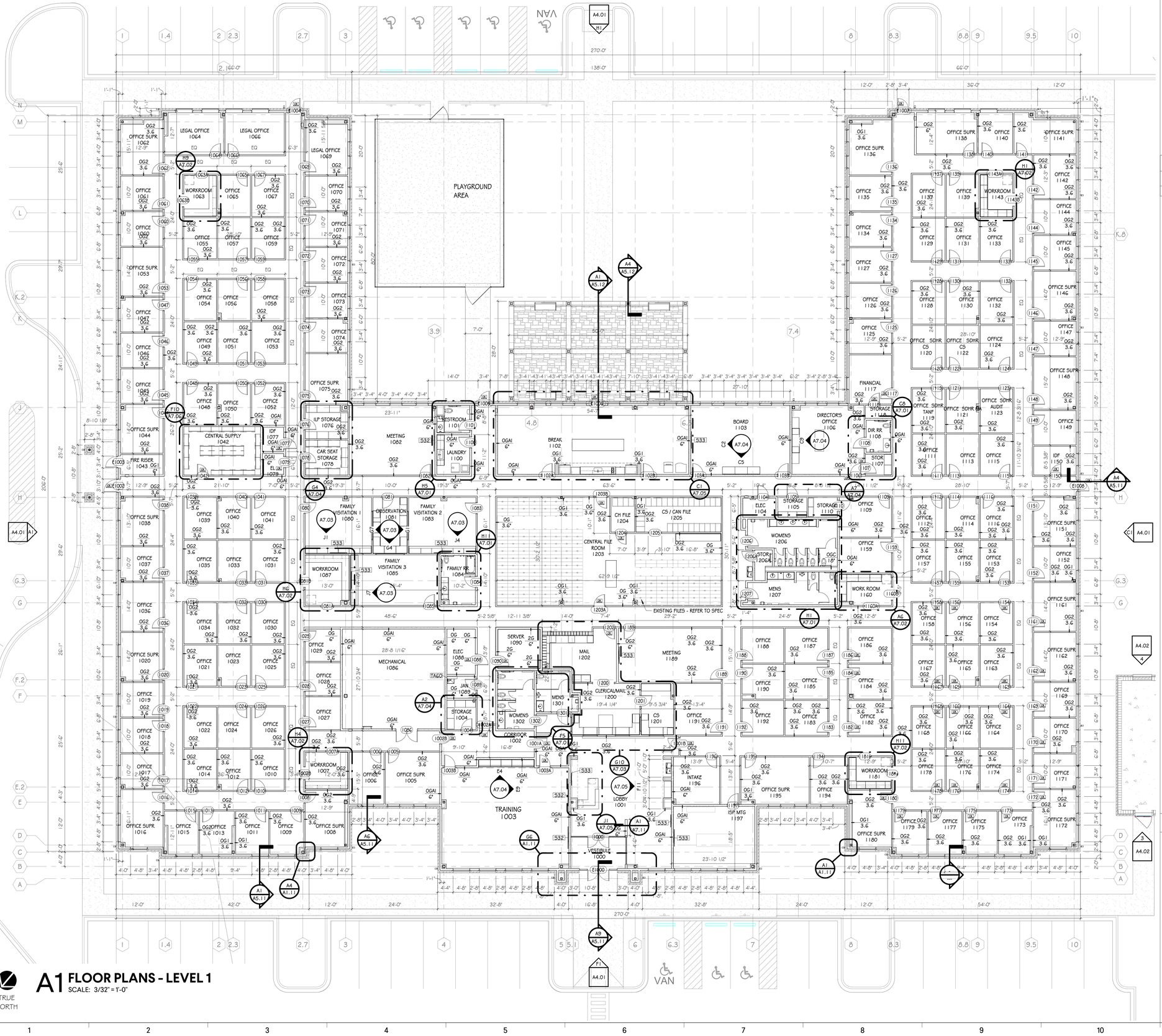


A1 FLOOR PLANS - LEVEL 1

SCALE: 3/32" = 1'-0"

SPECIALTY EQUIPMENT SCHEDULE

ID	DESCRIPTION	OFCI / CFCI
51	RESIDENTIAL WASHER	CFCI
52	RESIDENTIAL DRYER	CFCI
53	COFFEE MAKER - BY OWNER	OFCI
54	MICROWAVE	CFCI
58	REFRIGERATOR/FREEZER - SIDE BY SIDE	CFCI
59	ICE MAKER - COORDINATE PLUMBING & ELEC	CFCI
510	VENDING MACHINE - COORDINATE ELEC	CFCI
532	TV - WALL MOUNTED - OWNER FURNISHED - GC TO COORDINATE POWER, DATA, WALL BLOCKING	OFCI
533	TV - WALL MOUNTED - OWNER FURNISHED - GC TO COORDINATE POWER, DATA, WALL BLOCKING	OFCI
WB-1	WINDOW COVERINGS - MANUAL 2" FAUX WOOD BLIND	CFCI

KEY NOTES - GENERAL CONSTRUCTION

KEY	KEYNOTE
G1	[ENTER INSTRUCTIONS]

Starter Note

G1

Copy/paste to plan if needed
Delete if not needed

GENERAL NOTES

FURNITURE SHOWN FOR REFERENCE ONLY. NOT IN CONTRACT.

REFER TO FINISH LEGEND FOR PAINT COLORS CALLED OUT ON REFLECTED CEILING PLANS AND FINISH PLANS.

UNLESS OTHERWISE NOTED, ALL FLOOR TILE SHALL BE CENTERED IN ROOM.

UNLESS OTHERWISE NOTED, ALL CEILING GRID AND LIGHT FIXTURES SHALL BE CENTERED IN ROOM/OPENING.

CONTRACTOR TO REVIEW WITH ARCHITECT, ON SITE, AREAS WITH MULTIPLE CEILING, WALL, AND FLOOR FINISHES BEFORE FINISH WORK BEGINS.

REFER TO RCP LEGEND ON OVERALL REFLECTED CEILING PLANS FOR RCP ABBREVIATIONS AND FINISHES.

WALL TILE AND BASE GROUT LINES SHALL ALIGN WITH FLOOR TILE.

PROVIDE BLOCKING FOR GRAB BARS AND TOILET ACCESSORIES IN RESTROOMS.

GMC
2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM

ISSUE DATE
BID SET 09/09/2024

DRAWN BY: Author
CHECKED BY: Checker

TUSCALOOSA COUNTY DHR
PROJECT ADDRESS PENDING

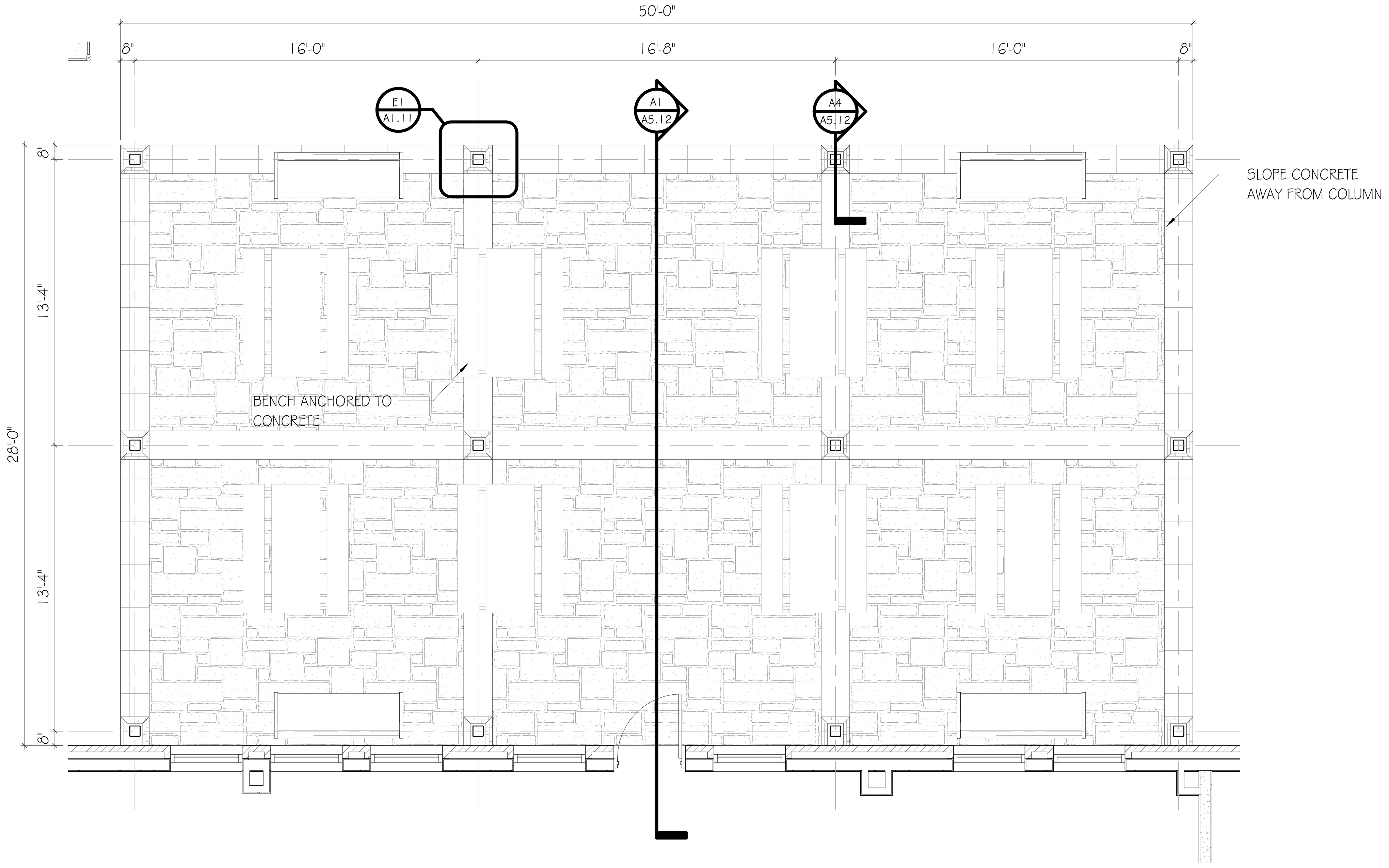
GMC # ABHM220021
SBC # [ENTER VALUE]

STATE OF ALABAMA · JACQUELYN D. HART · 6544 · REGISTERED ARCHITECT

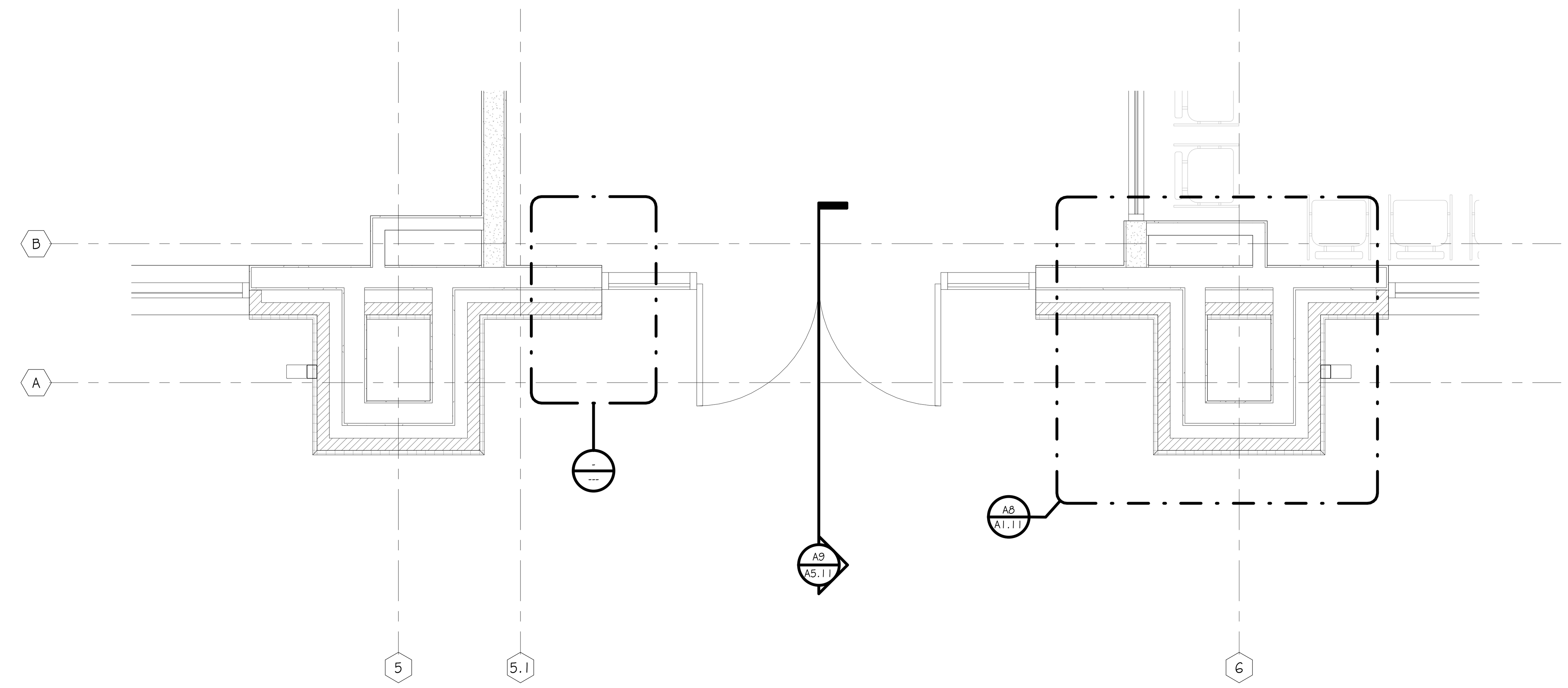
FLOOR PLAN

A1.01
sheet of

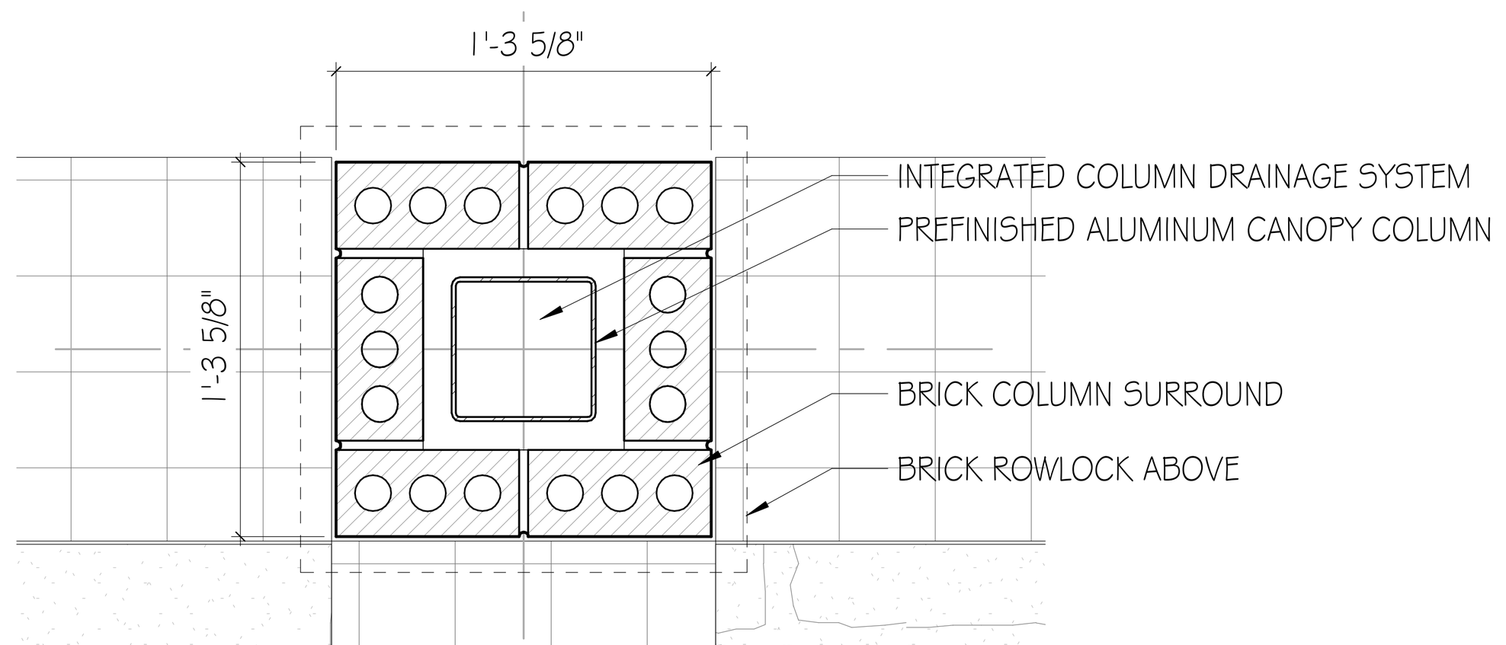
9/11/2024 7:55:24 AM TEMPLATE VERSION: 2021.1



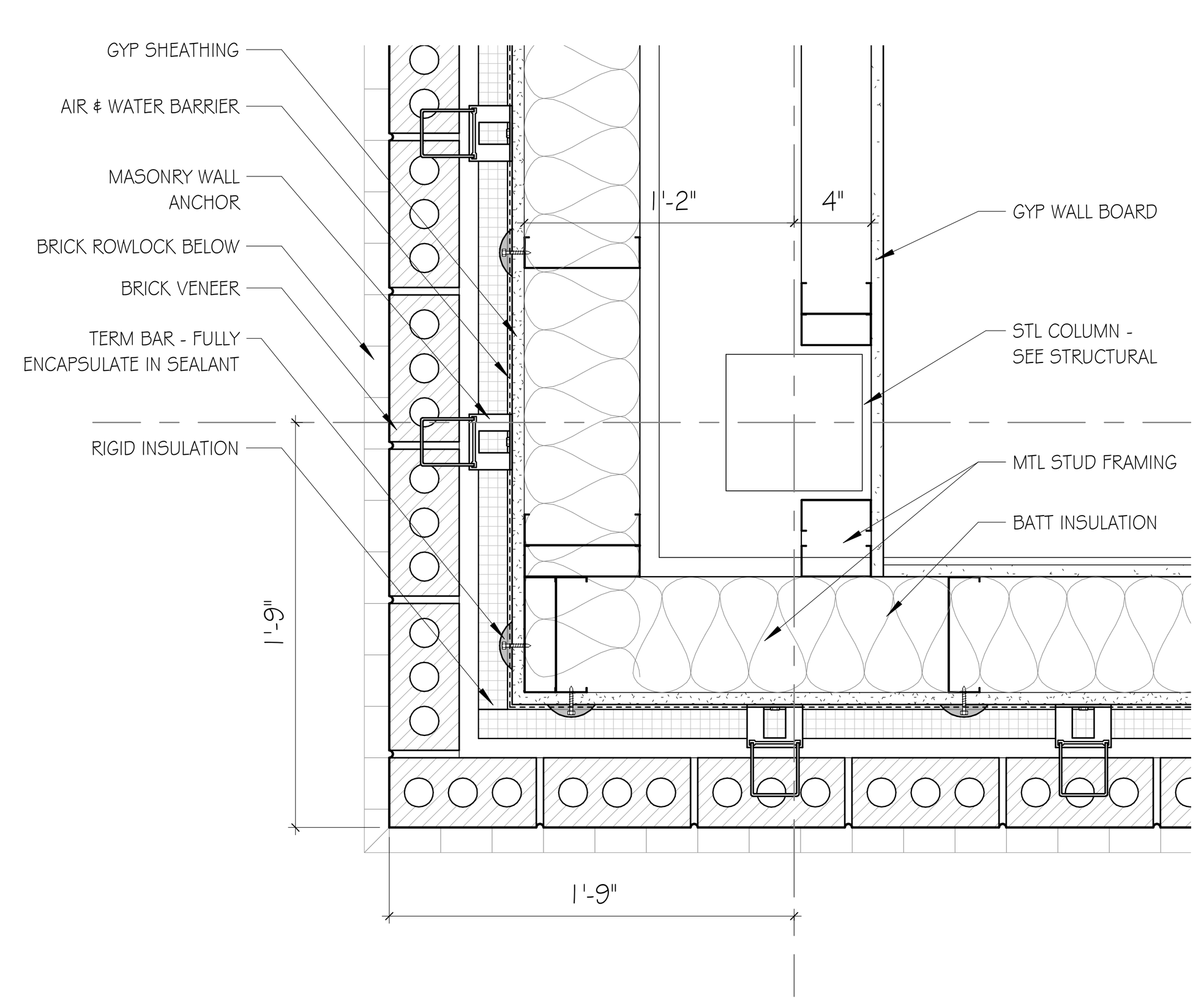
G1 ENLARGED PLAN - OUTDOOR SEATING
SCALE: 1/4" = 1'-0"



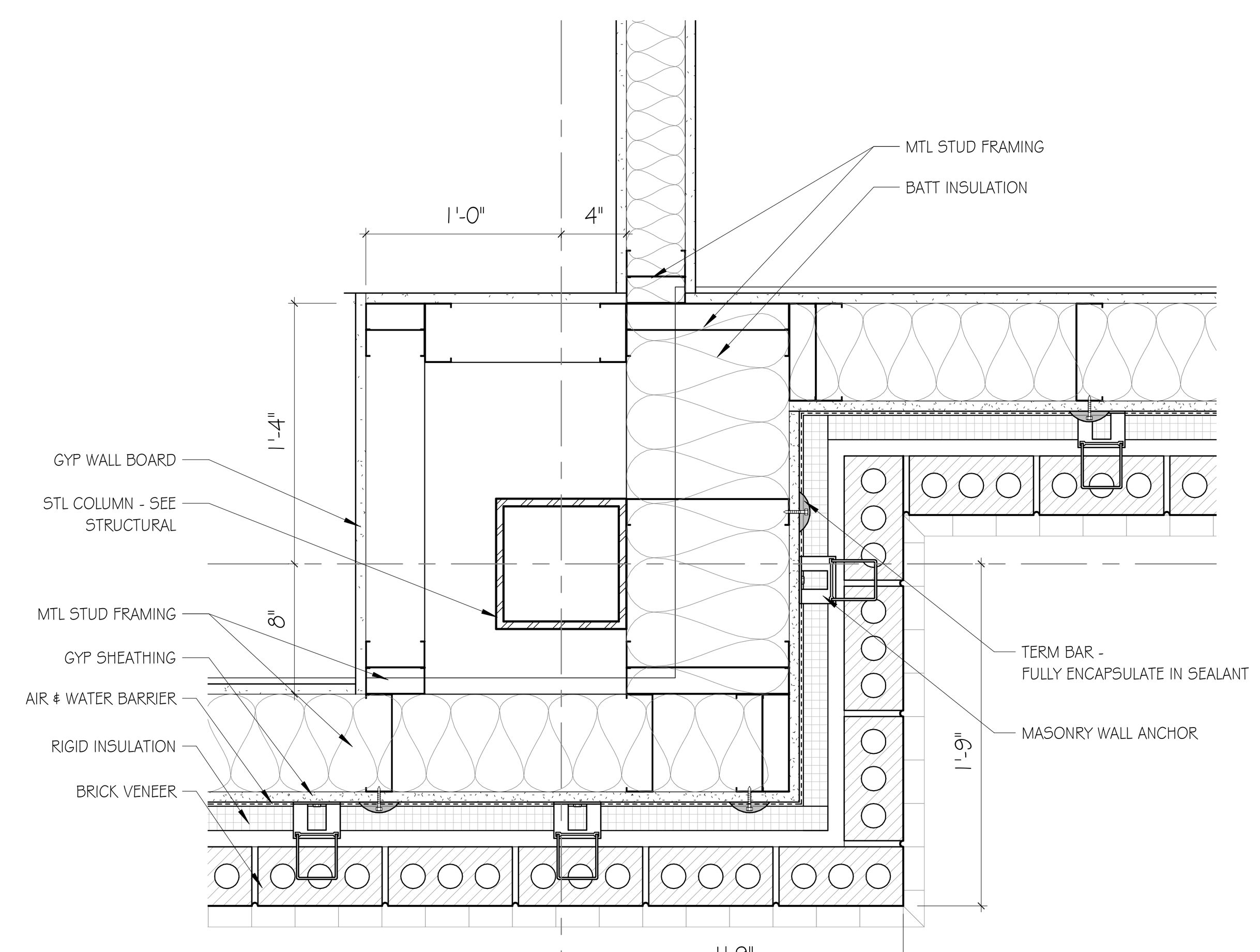
G6 ENTRY VESTIBULE
SCALE: 1/2" = 1'-0"



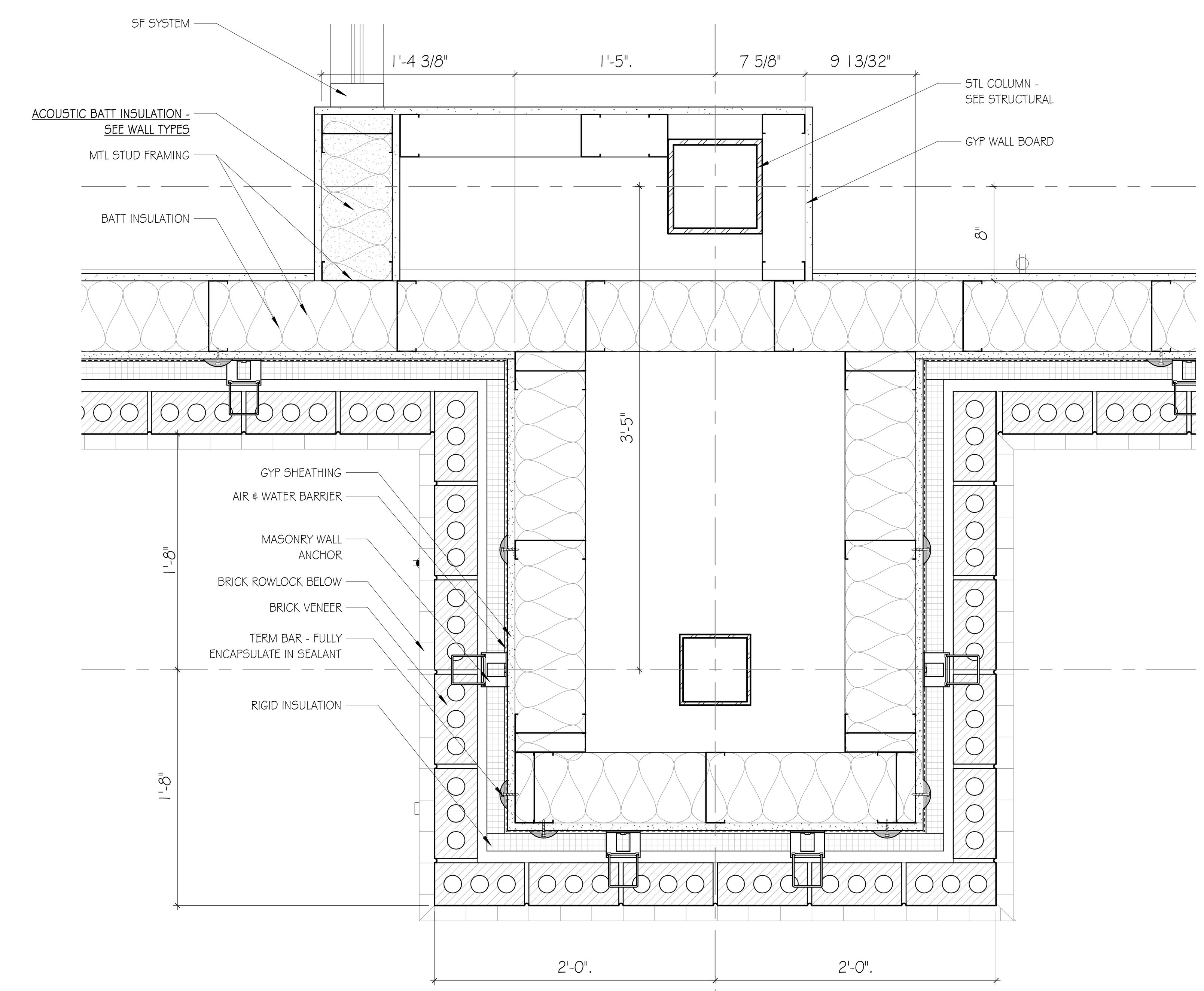
E1 ALUMINUM CANOPY COLUMN
SCALE: 1 1/2" = 1'-0"



A1 PLAN DETAIL
SCALE: 1 1/2" = 1'-0"



A4 PLAN DETAIL
SCALE: 1 1/2" = 1'-0"



A8 PLAN DETAIL
SCALE: 1 1/2" = 1'-0"

GMC

2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM

ISSUE	DATE
BID SET	09/09/2024

DRAWN BY: Author
CHECKED BY: Checker

TUSCALOOSA COUNTY DHR
PROJECT ADDRESS PENDING

GMC # ABHM220021
SBC # [ENTER VALUE]

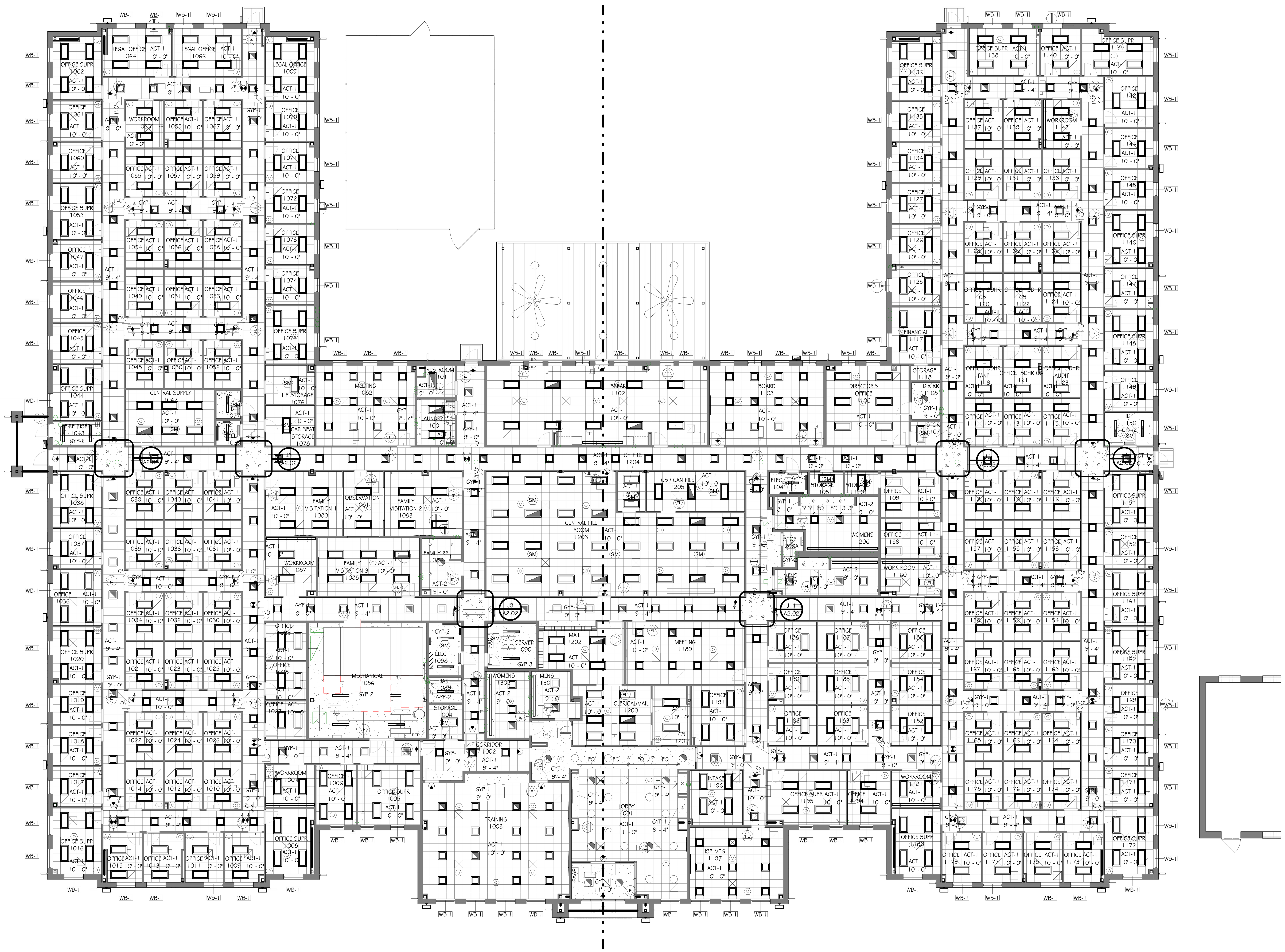
STATE OF ALABAMA REGISTERED ARCHITECT 6544

ENLARGED PLANS & DETAILS

A1.11

sheet of

TEMPLATE VERSION: 2021.1
9/11/2024 7:55:30 AM



REFLECTED CEILING PLAN LEGEND

CEILING FINISHES:

- LAY-IN ACOUSTICAL CEILING SYSTEM - 2'X2'
- LAY-IN ACOUSTICAL CEILING SYSTEM - 2'X4'
- GYP BOARD - INTERIOR EIFS SOFFIT - EXTERIOR
- EXPOSED STRUCTURE
- 2X2 LAY-IN METAL CEILING SYSTEM
- 2X2 LAY-IN WOOD CEILING SYSTEM
- RECESSED LIGHT POCKET

MECHANICAL:

- SUPPLY DIFFUSER
- RETURN AIR GRILLE
- EXHAUST FAN

LIGHTING:

- 2X2 LAY-IN FIXTURE
- 2X4 LAY-IN FIXTURE
- LINEAR SUSPENDED FIXTURE
- LINEAR RECESSED FIXTURE
- LINEAR WALL MT. FIXTURE
- CIRCULAR SURF. MT. FIXTURE
- CIRCULAR PENDANT FIXTURE
- CIRCULAR RECESSED FIXTURE
- CIRCULAR WALL MT.FIXTURE
- EXIT LIGHT
- NC NURSE CALL LIGHT

REFLECTED CEILING PLAN NOTES

1. CEILING HEIGHTS SHALL BE AS NOTED ON REFLECTED CEILING PLANS.
2. WHEREVER POSSIBLE NO CEILING TILE SHOULD BE LESS THAN 6" IN ANY DIRECTION.
3. SEE ELECTRICAL FOR ALL LIGHT FIXTURE TYPES AND SIZES.
4. SEE MECHANICAL FOR ALL DIFFUSER TYPES AND SIZES.
5. SEE INTERIOR ELEVATIONS FOR WALL MOUNTED LIGHT FIXTURE HEIGHT AND LOCATIONS.
6. COORDINATE LOCATIONS OF ALL LIGHTS, DIFFUSERS, AND DEVICES BETWEEN THIS RCP AND MECHANICAL, FIRE PROTECTION, AND ELECTRICAL. NOTIFY ARCHITECT OF ANY DISCREPANCIES FOUND BEFORE PROCEEDING.
7. WHERE EXIT SIGNS ARE LOCATED ABOVE DOORWAYS, CENTER FIXTURE OVER DOOR BUT MAINTAIN MINIMUM OVERHEAD CLEARANCE.
8. ALL SPRINKLER HEADS IN ACOUSTIC CEILINGS SHALL BE CENTERED IN CEILING TILE.
9. ALL BULKHEADS TO BE 4" BELOW ADJACENT ACT CEILING UNLESS NOTED OTHERWISE.

CEILING FINISH LEGEND

NUMBER	TYPE	DETAIL DESCRIPTION
ACT-1	ACOUSTICAL CEILING TILE SYSTEM	MANUFACTURER: ARMSTRONG CEILINGS STYLE: 1717 SCHOOL ZONE FINE FISSURED - ANGLED TEGULAR COLOR: WHITE SIZE: 24" X 24" X 3/4" SUSPENSION SYSTEM: 15/16" PRELUDE XL - COLOR: WHITE
ACT-2	ACOUSTICAL CEILING TILE SYSTEM	MANUFACTURER: ARMSTRONG CEILINGS STYLE: 1715 CLEAN ROOM FL - SQUARE LAY-IN COLOR: WHITE SIZE: 24" X 24" X 3/4" SUSPENSION SYSTEM: 15/16" PRELUDE - COLOR: WHITE
GYP-1	GYP BOARD CEILING	PAINTED GYP BOARD CEILING COLOR: PNT-3
GYP-2	GYP BOARD CEILING	PAINTED GYP BOARD CEILING AT UNDERSIDE OF TRUSS COLOR: PNT-3
GYP-3	FIRE RATED GYP BOARD CEILING	PAINTED GYP BOARD CEILING AT UNDERSIDE OF TRUSS 2 HOUR FIRE RATED COLOR: PNT-3

GMC
2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM

ISSUE	DATE
BID SET	09/09/2024

DRAWN BY: Author
CHECKED BY: Checker

TUSCALOOSA COUNTY DHR
PROJECT ADDRESS PENDING

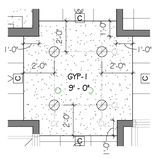
GMC # ABHM220021
SBC # [ENTER VALUE]

STATE OF ALABAMA · GOODWYN MILLS & CAWOOD, INC. · 6544 · by JACQUELYN D. HART · BIRMINGHAM, ALABAMA · REGISTERED ARCHITECT

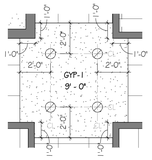
REFLECTED CEILING PLAN

A2.01

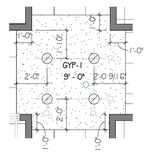
sheet ___ of ___



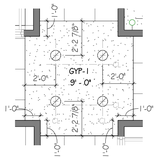
J1 CORRIDOR SOFFIT A
SCALE: 1/4" = 1'-0"



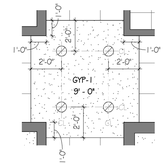
J3 CORRIDOR SOFFIT B
SCALE: 1/4" = 1'-0"



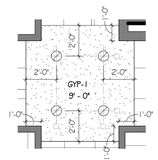
J5 CORRIDOR SOFFIT C
SCALE: 1/4" = 1'-0"



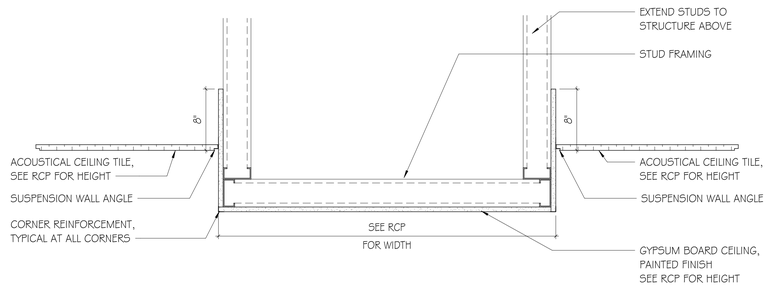
J7 CORRIDOR SOFFIT D
SCALE: 1/4" = 1'-0"



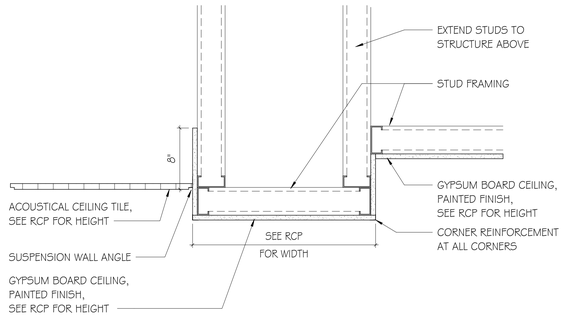
J9 CORRIDOR SOFFIT E
SCALE: 1/4" = 1'-0"



J11 CORRIDOR SOFFIT F
SCALE: 1/4" = 1'-0"



F1 ACT/GYP/ACT
SCALE: 11/2" = 1'-0"



F6 ACT/GYP/GYP
SCALE: 11/2" = 1'-0"

GMC
2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM

ISSUE DATE
BID SET 09/09/2024

DRAWN BY: Author
CHECKED BY: Checker

TUSCALOOSA COUNTY DHR
PROJECT ADDRESS PENDING

GMC # ABHM220021
SBC # [ENTER VALUE]

STATE OF ALABAMA
JACQUELYN D. HART
6544
REGISTERED ARCHITECT
BIRMINGHAM, ALABAMA

ENLARGED RCP'S AND DETAILS

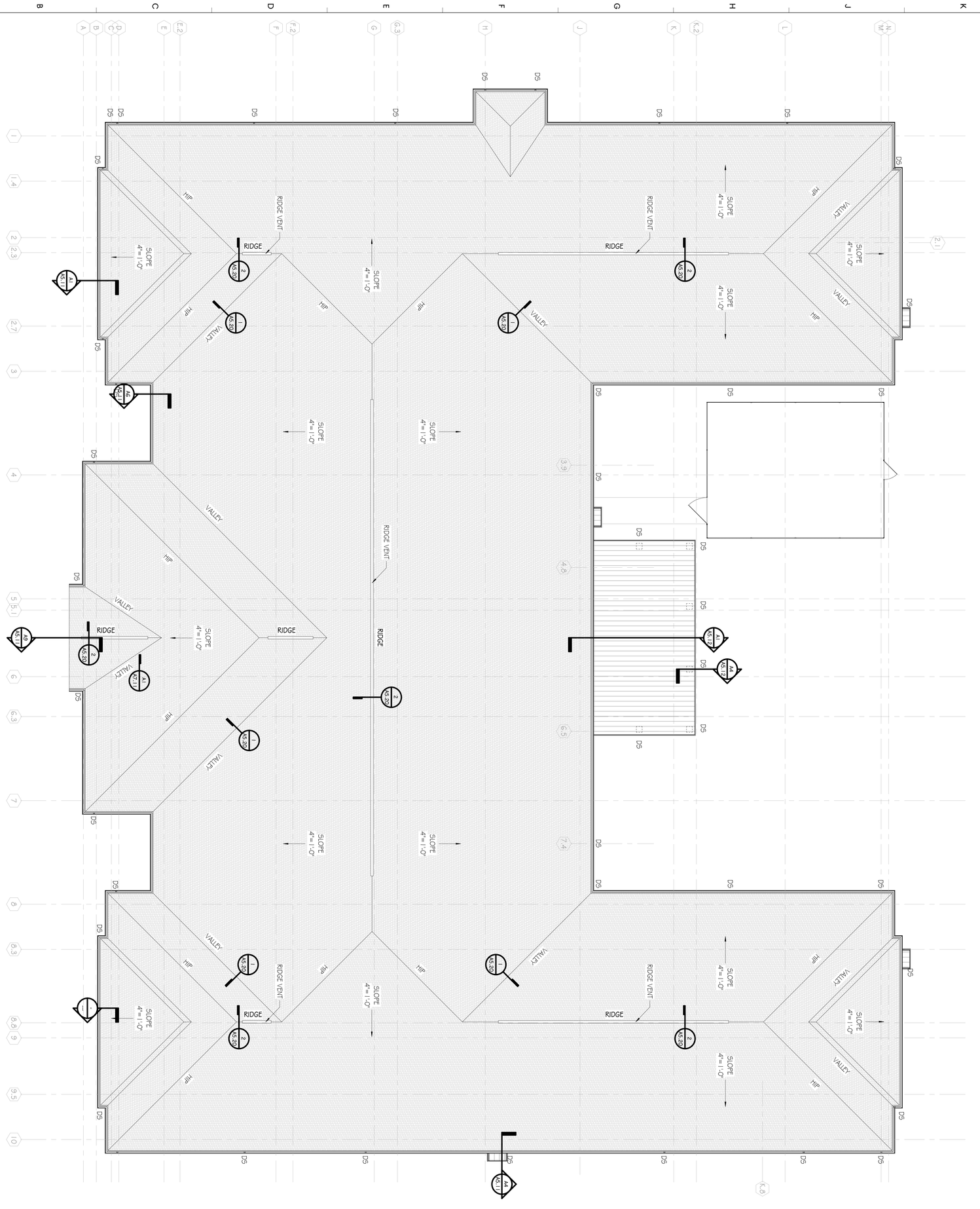
A2.02

sheet ___ of ___

9/11/2024 7:55:52 AM TEMPLATE VERSION: 2021.1

A1 ROOF PLAN - OVERALL

SCALE: 3/32" = 1'-0"



KEY NOTES - ROOF PLAN

KEY	KEYNOTE
R1	[ENTER INSTRUCTIONS]

Starter Note
R1
Copy/paste to plan if needed
Delete if not needed

ROOF PLAN

A3.01
sheet of

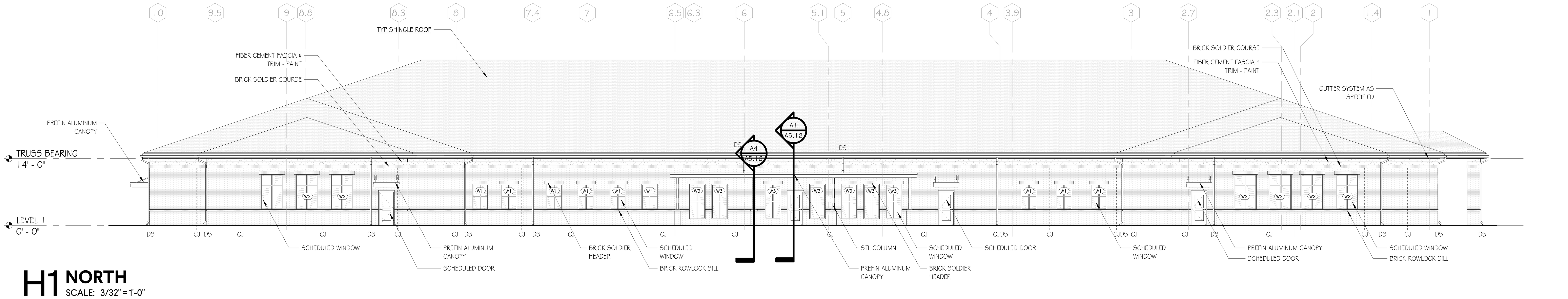
TUSCALOOSA COUNTY DHR
PROJECT ADDRESS PENDING

GMC # ABHM220021
SBC # [ENTER VALUE]

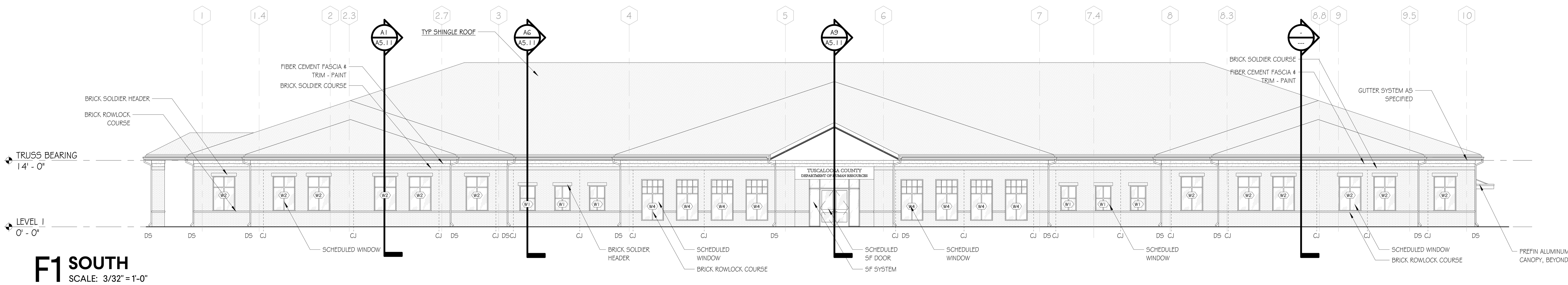
ISSUE	DATE
BID SET	09/09/2024
DRAWN BY:	Author
CHECKED BY:	Checker

2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM

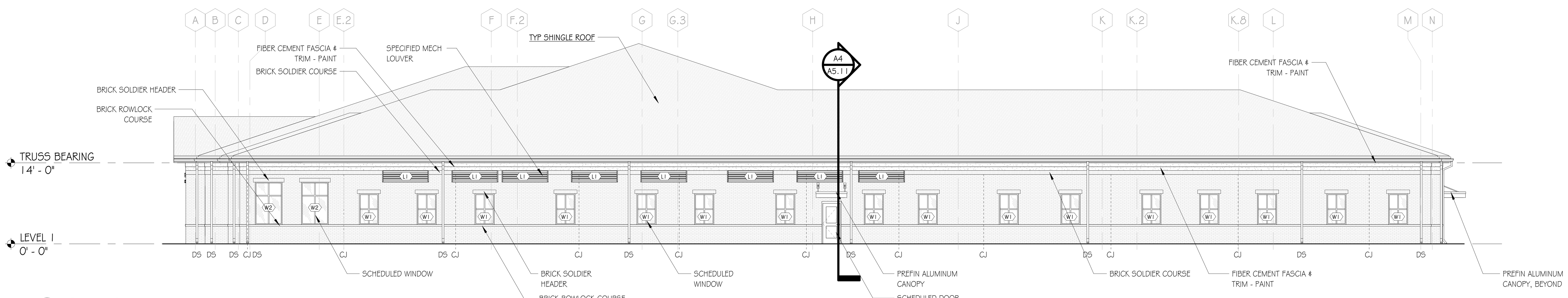
GMC



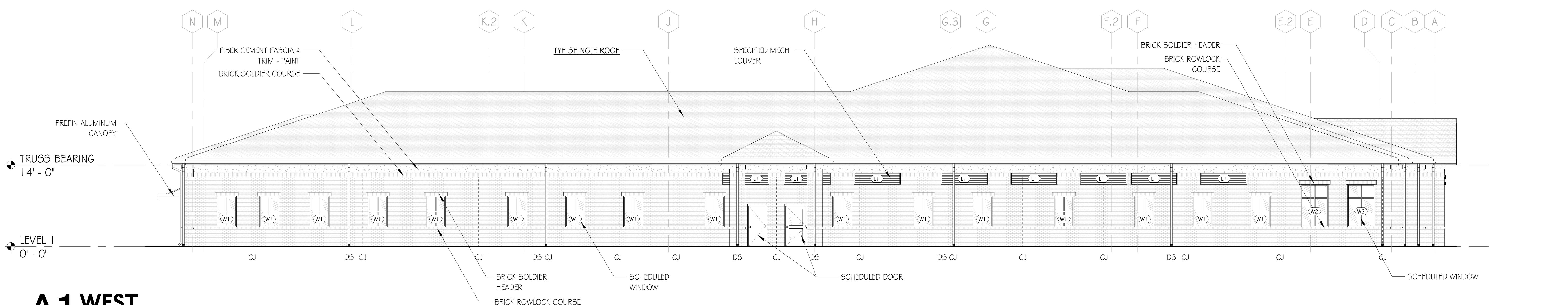
H1 NORTH
SCALE: 3/32" = 1'-0"



F1 SOUTH
SCALE: 3/32" = 1'-0"

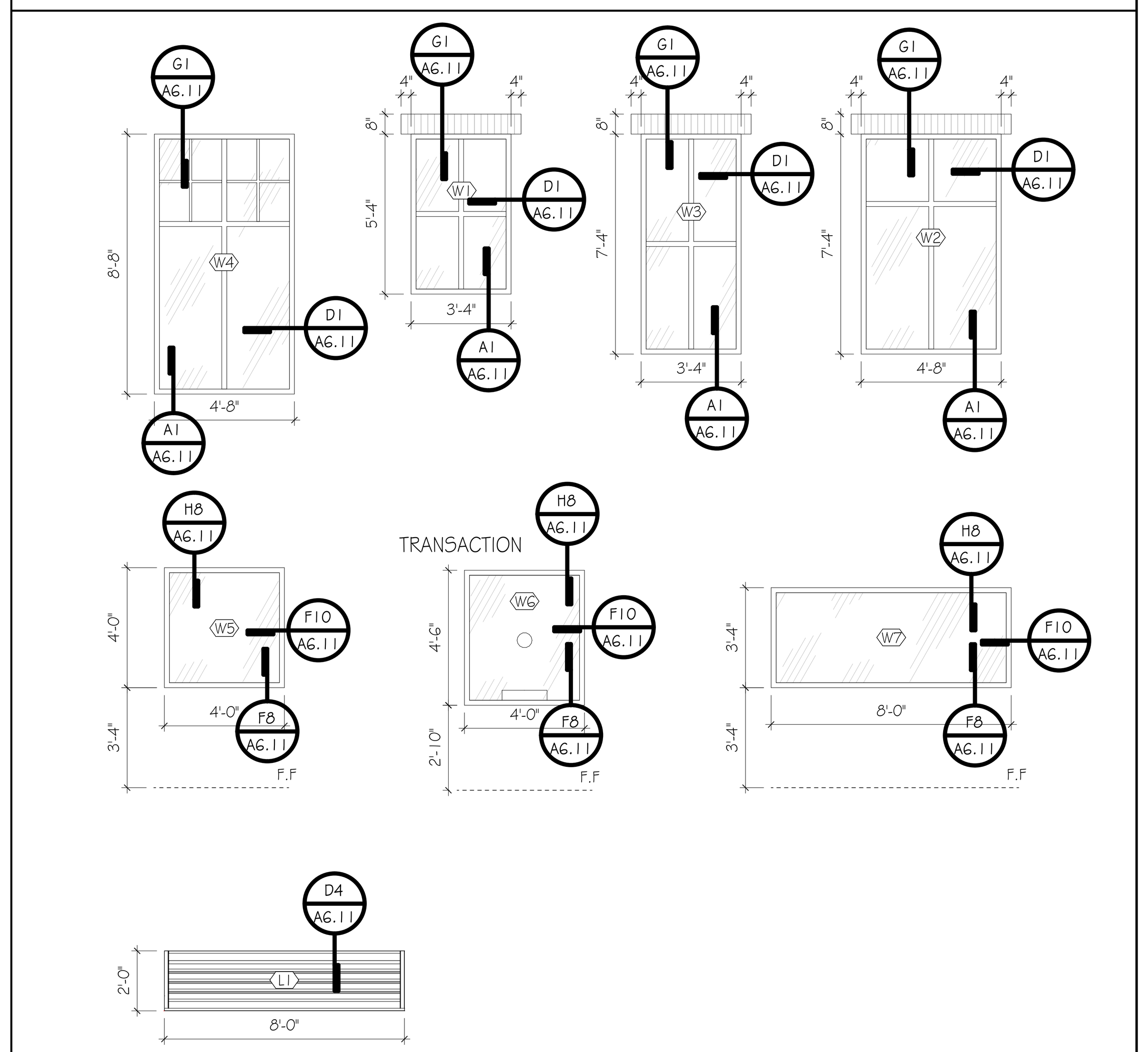


C1 EAST
SCALE: 3/32" = 1'-0"



A1 WEST
SCALE: 3/32" = 1'-0"

WINDOW LEGEND



GMC
2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM

ISSUE	DATE
BID SET	09/09/2024

DRAWN BY: Author
CHECKED BY: Checker

TUSCALOOSA COUNTY DHR
PROJECT ADDRESS PENDING

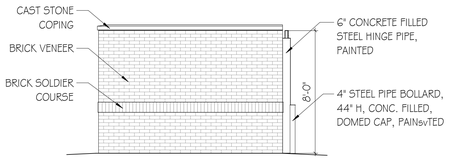
GMC # ABHM220021
SBC # [ENTER VALUE]

STATE OF ALABAMA — REGISTERED ARCHITECT — 6544

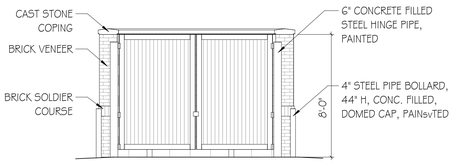
EXTERIOR ELEVATIONS

A4.01
sheet of

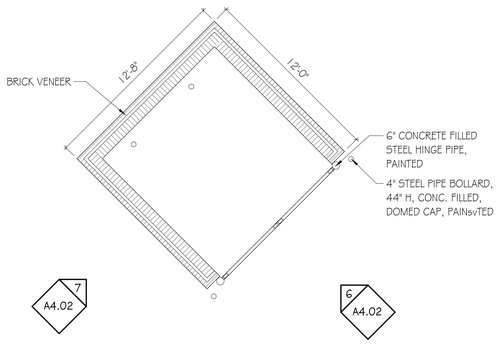
9/11/2024 7:56:09 AM TEMPLATE VERSION: 2021.1



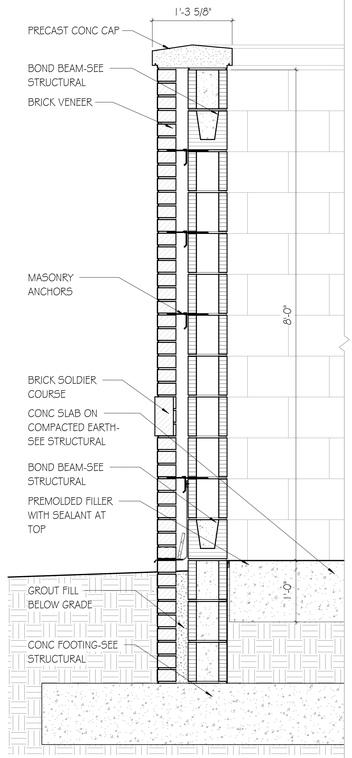
7 DUMPSTER - NORTH
SCALE: 1/4" = 1'-0"



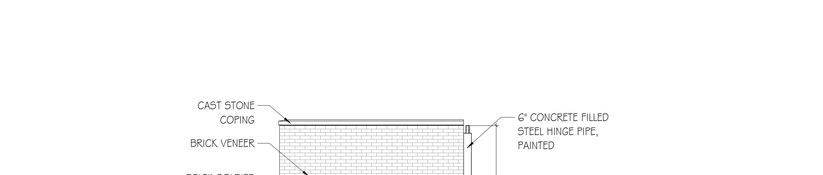
6 DUMPSTER - WEST
SCALE: 1/4" = 1'-0"



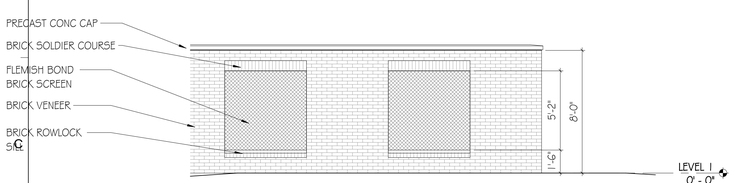
8 DUMPSTER ENCLOSURE
SCALE: 1/4" = 1'-0"



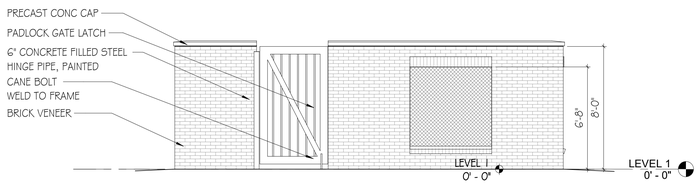
1 DUMPSTER ENCLOSURE SECTION
SCALE: 1" = 1'-0"



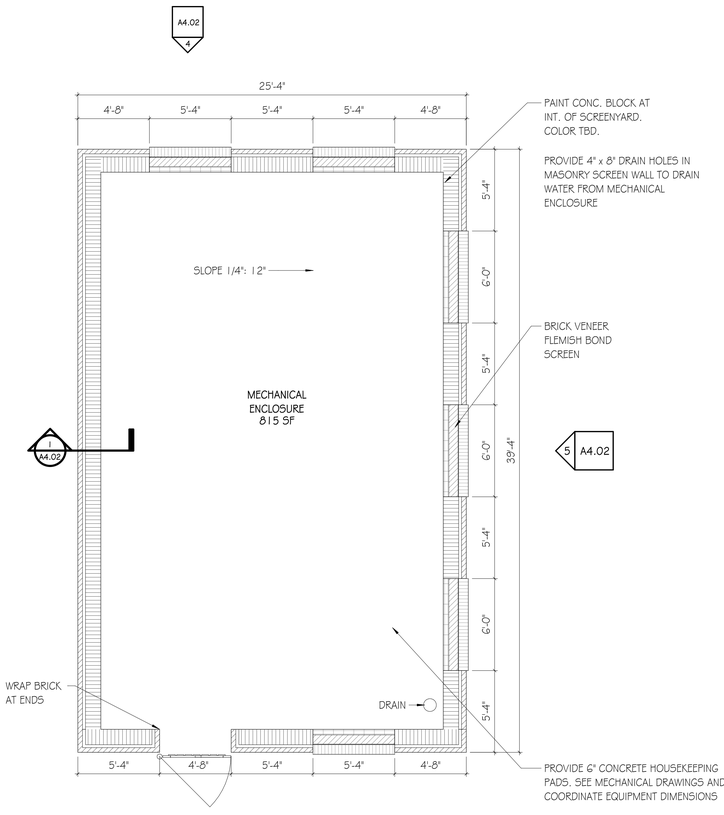
5 MECH ENCLOSURE - EAST
SCALE: 1/4" = 1'-0"



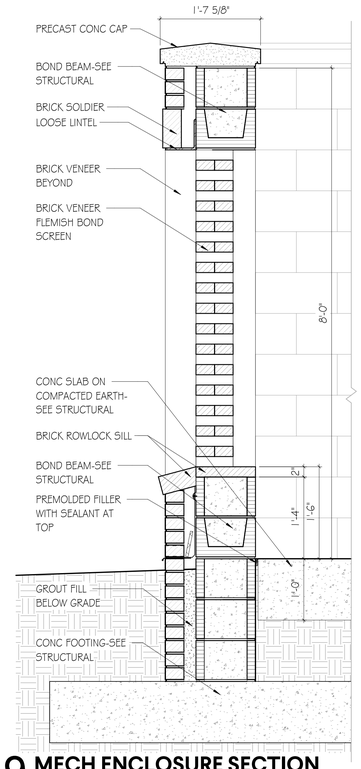
4 MECH ENCLOSURE - NORTH
SCALE: 1/4" = 1'-0"



3 MECH ENCLOSURE - SOUTH
SCALE: 1/4" = 1'-0"



2 MECHANICAL ENCLOSURE
SCALE: 1/4" = 1'-0"



9 MECH ENCLOSURE SECTION
SCALE: 1" = 1'-0"

GMC
2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM

ISSUE | DATE
BID SET | 09/09/2024

DRAWN BY: Author
CHECKED BY: Checker

TUSCALOOSA COUNTY DHR
PROJECT ADDRESS PENDING

GMC # ABHM220021
SBC # [ENTER VALUE]

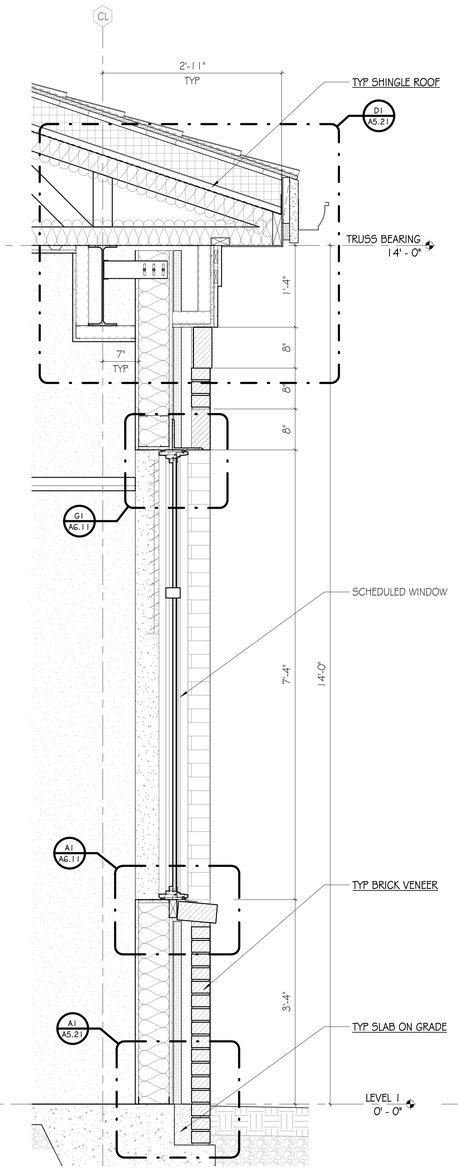
STATE OF ALABAMA
REGISTERED ARCHITECT
6544
JACQUELYN D. HART

MECH & DUMPSTER ENCLOSURE

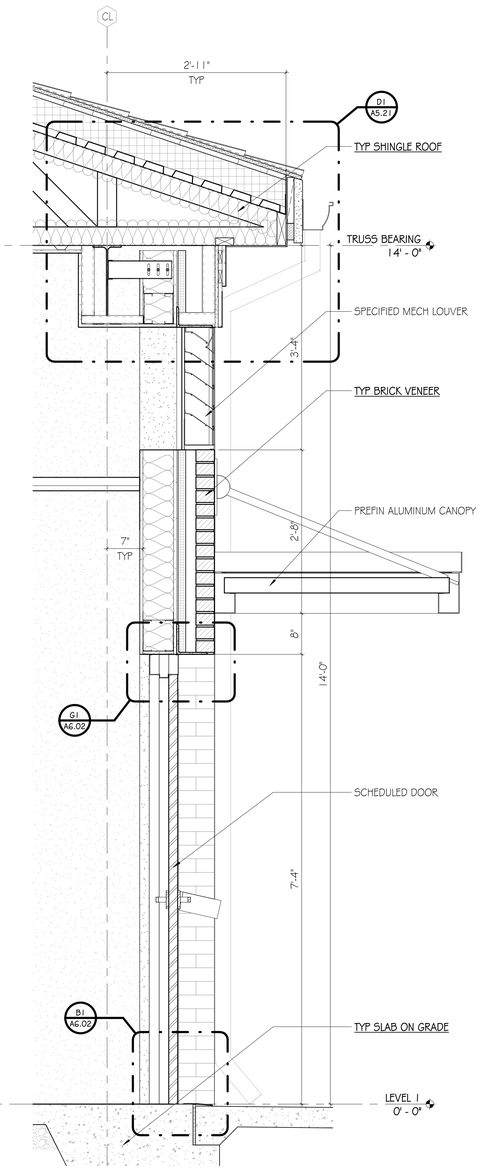
A4.02
sheet of

TEMPLATE VERSION: 2021.1
9/11/2024 7:56:14 AM

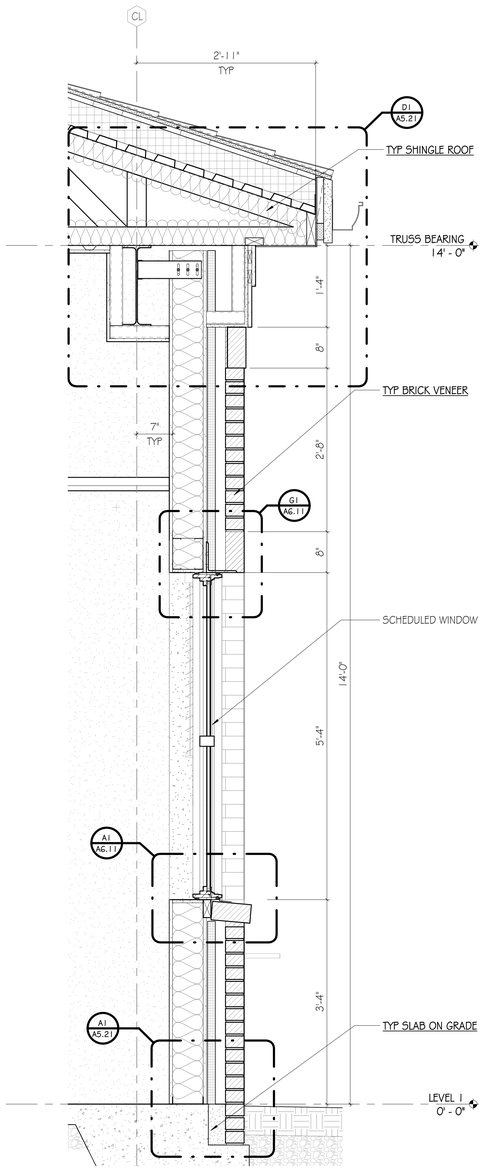
WALL SECTIONS



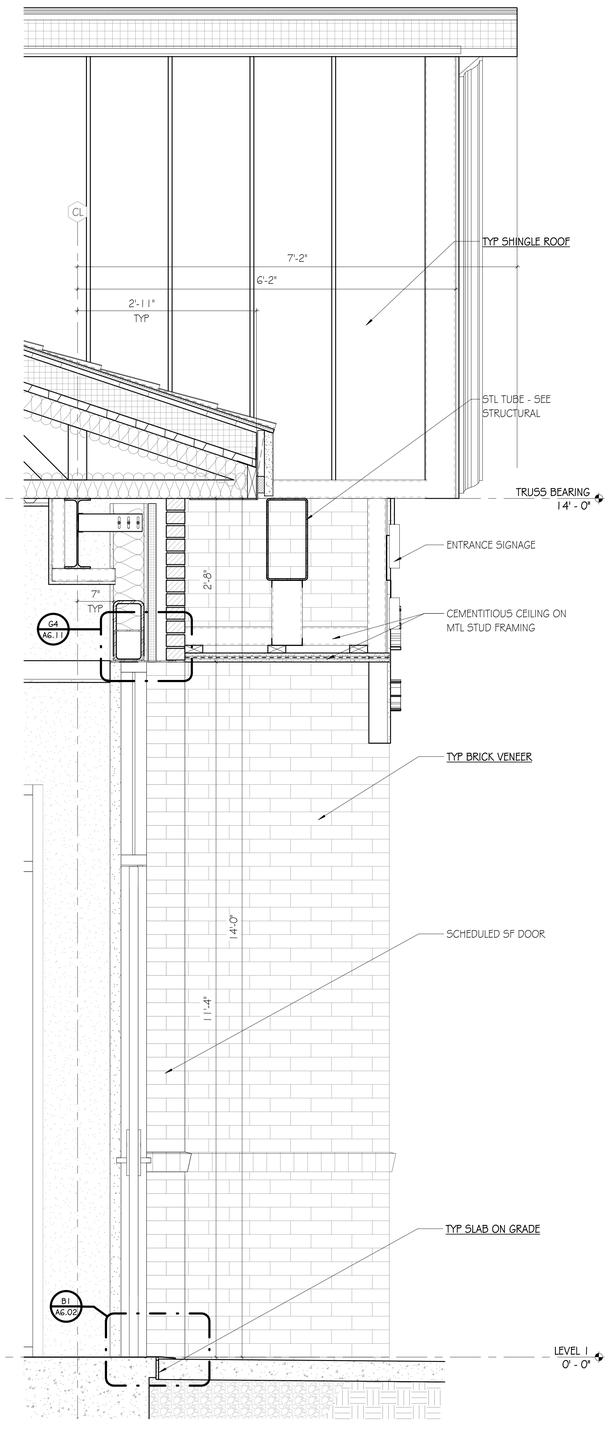
A1 WALL SECTION
SCALE: 1" = 1'-0"



A4 WALL SECTION
SCALE: 1" = 1'-0"



A6 WALL SECTION
SCALE: 1" = 1'-0"



A9 ENTRANCE VESTIBULE
SCALE: 1" = 1'-0"

GMC
2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM

ISSUE | DATE
BID SET | 09/09/2024

DRAWN BY: Author
CHECKED BY: Checker

TUSCALOOSA COUNTY DHR
PROJECT ADDRESS PENDING

GMC # ABHM220021
SBC # [ENTER VALUE]

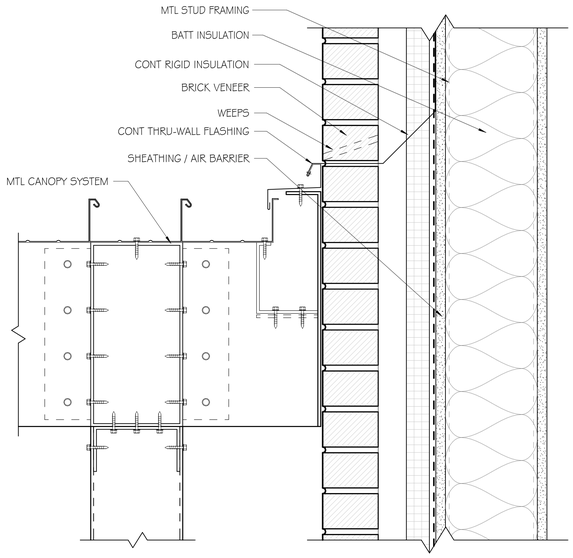
STATE OF ALABAMA
6544
JACQUELYN D. HART
REGISTERED ARCHITECT

WALL SECTIONS

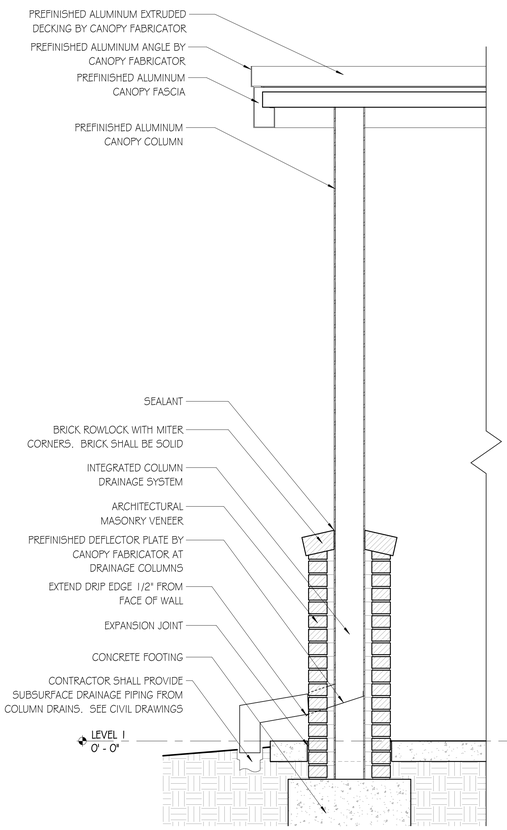
A5.11
sheet of

9/11/2024 7:56:18 AM TEMPLATE VERSION: 2021.1

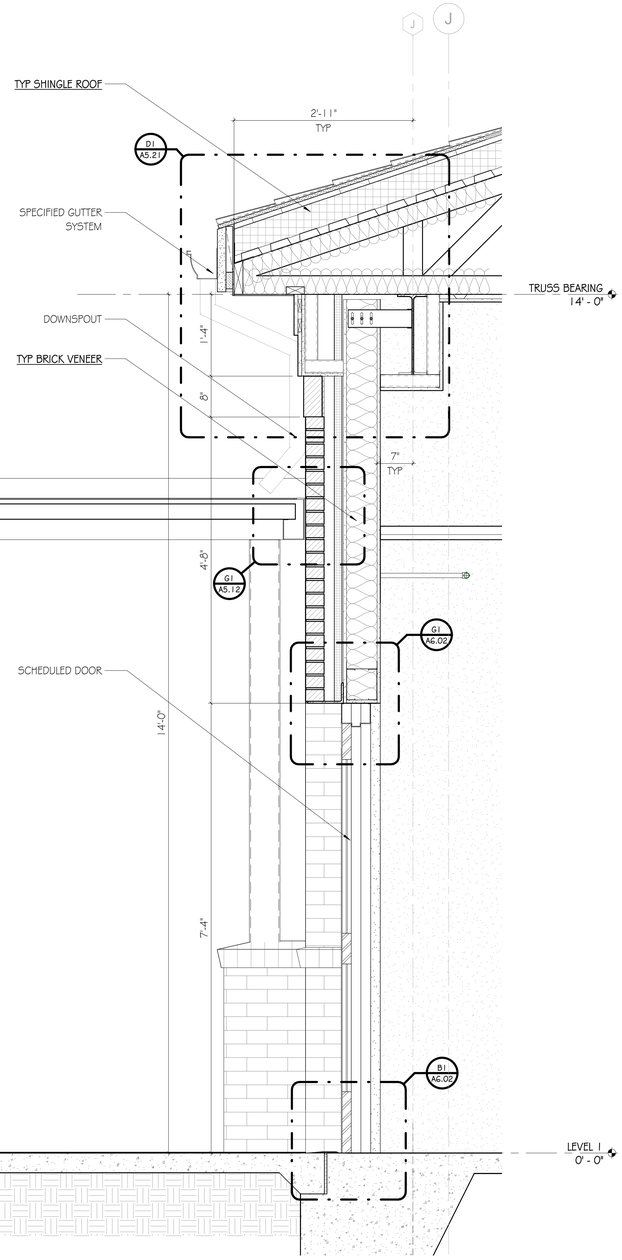
WALL SECTIONS



G1 CANOPY FLASHING
SCALE: 3" = 1'-0"



A1 CANOPY COLUMN SECTION
SCALE: 1" = 1'-0"



A4 WALL SECTION
SCALE: 1" = 1'-0"

GMC
2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM

ISSUE | DATE
BID SET | 09/09/2024

DRAWN BY: Author
CHECKED BY: Checker

TUSCALOOSA COUNTY DHR
PROJECT ADDRESS PENDING

GMC # ABHM220021
SBC # [ENTER VALUE]

STATE OF ALABAMA · LICENSED · 6544 · JACQUELYN D. HART · REGISTERED ARCHITECT

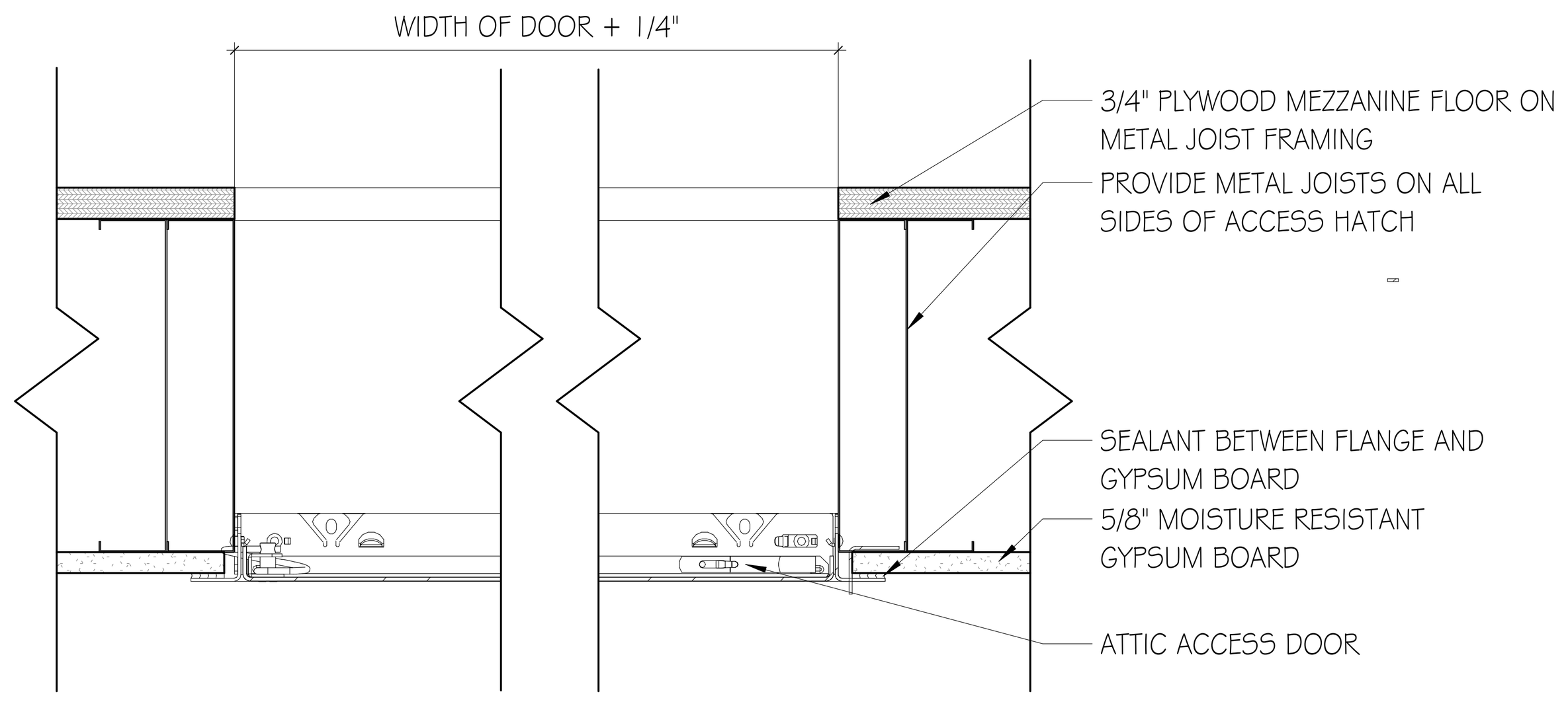
WALL SECTIONS

A5.12
sheet of

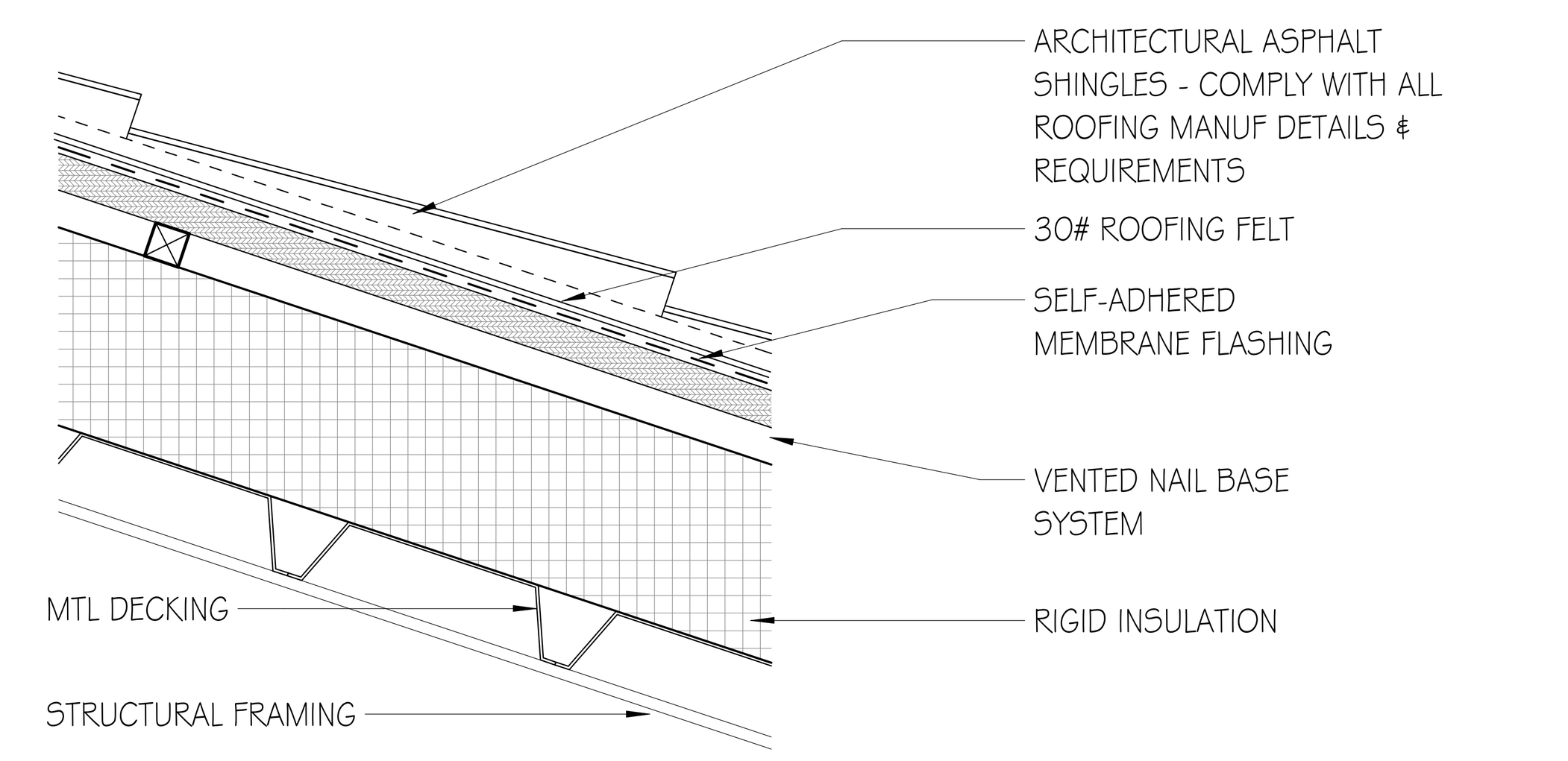
9/11/2024 7:56:20 AM TEMPLATE VERSION: 2021.1

TYPICAL ROOF CONSTRUCTION DETAILS

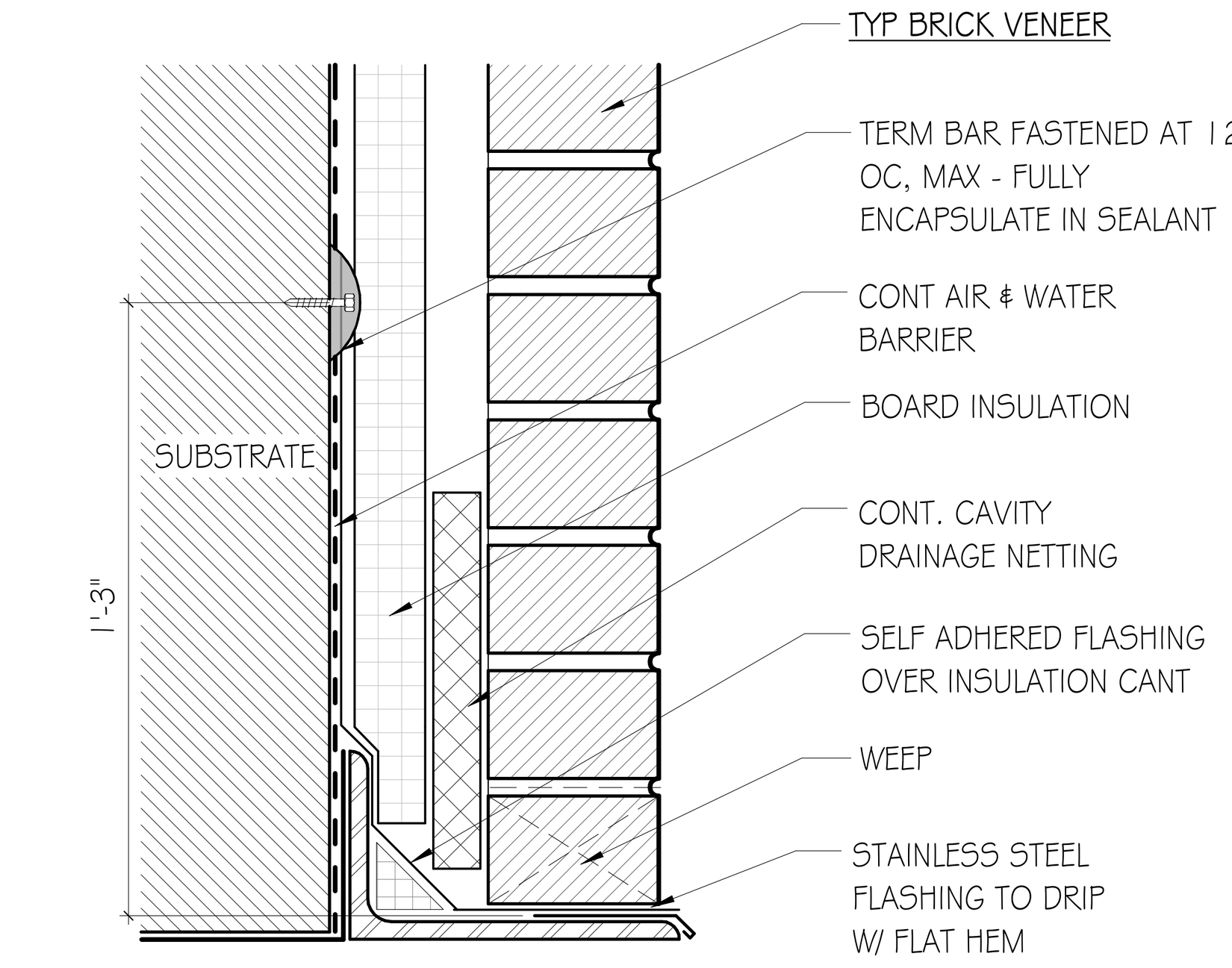
TYPICAL WALL CONSTRUCTION DETAILS



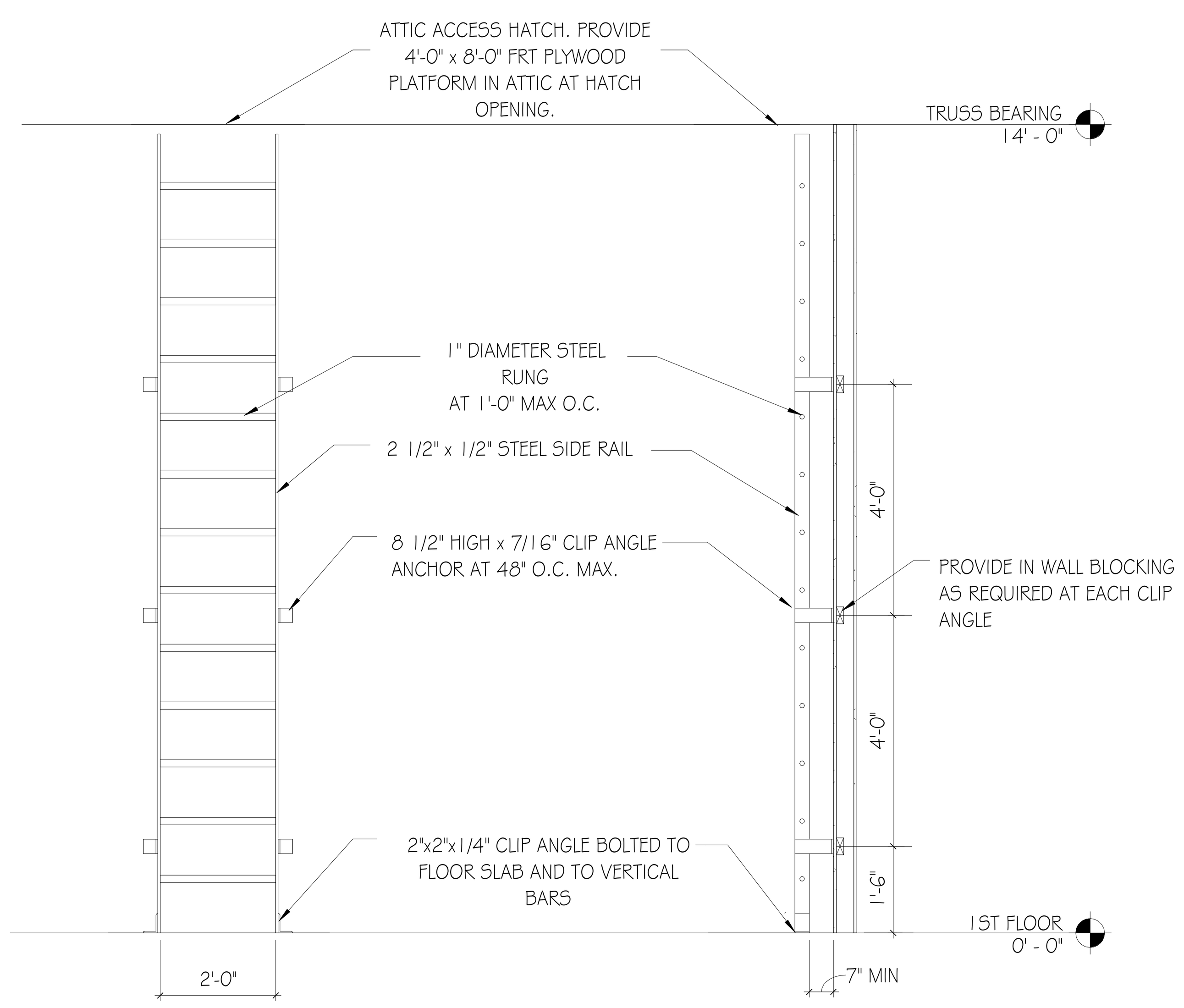
4 ATTIC ACCESS HATCH SECTION
SCALE: 3" = 1'-0"



6 TYP SHINGLE ROOF
SCALE: 3" = 1'-0"



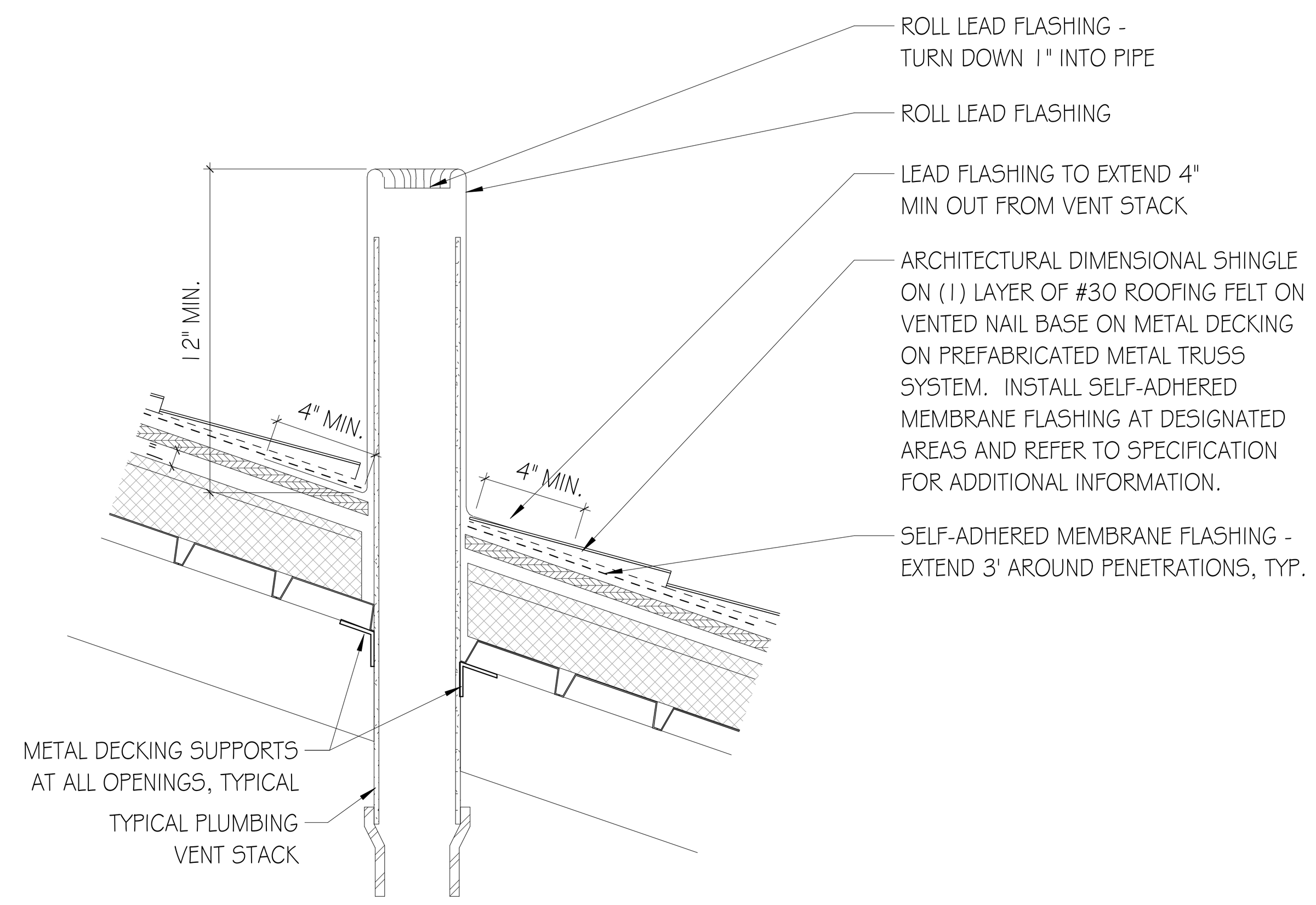
7 TYP BRICK HEADER
SCALE: 3" = 1'-0"



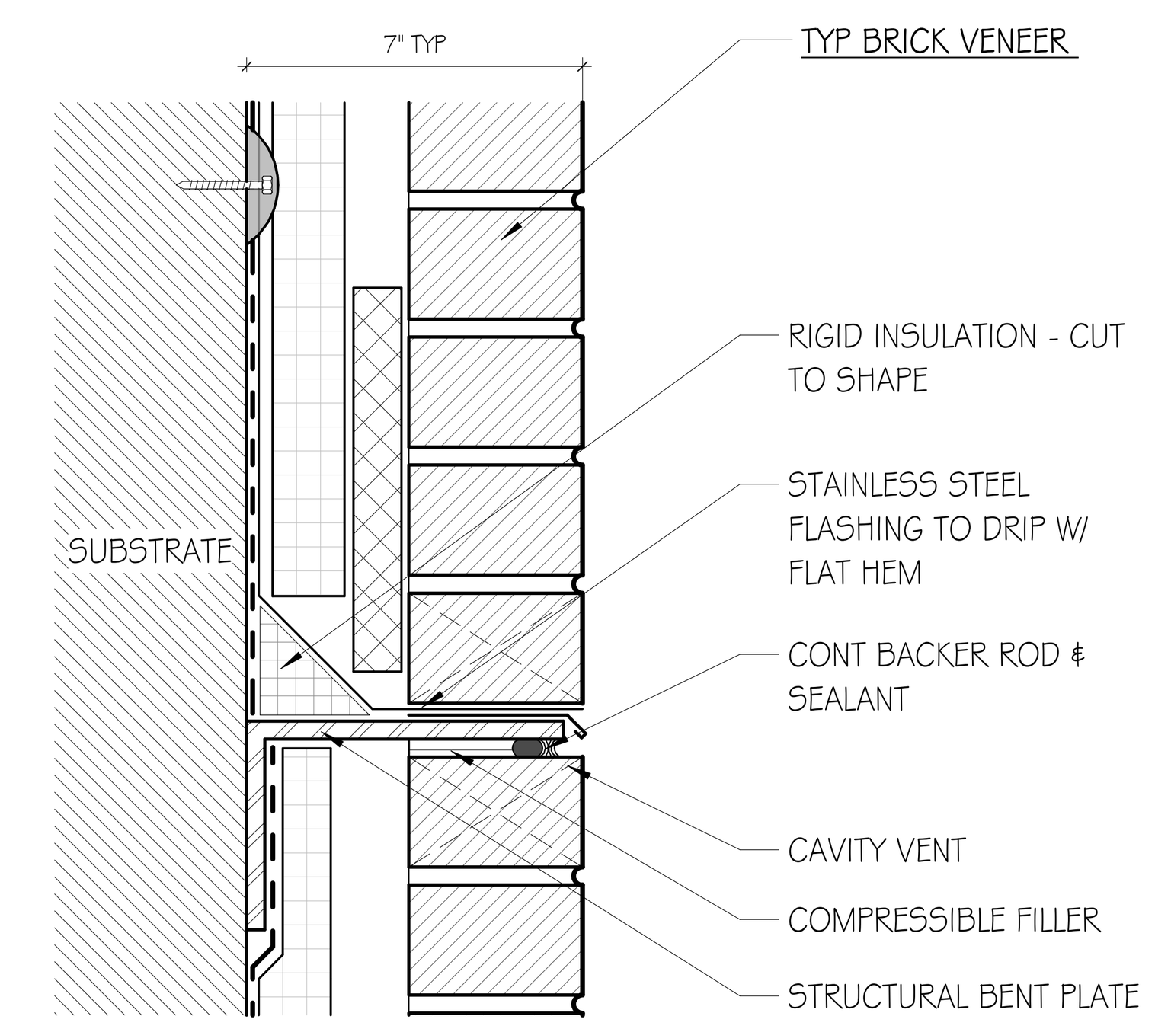
NOTES:

1. LADDER SHALL COMPLY WITH ALL REQUIREMENTS OF OSHA REGULATIONS (STANDARDS - 29 CFR) LADDERS- 1926.1053 AND ASME A17.1, SECTIONS 2.2.4 & 3.2.4.
2. LADDER SHALL BE 1'-6" WIDE WITH 1'-4" MINIMUM CLEAR BETWEEN VERTICAL BARS UNLESS LADDER IS REQUIRED TO BE WIDER BY CODES ENFORCED BY AUTHORITIES HAVING JURISDICTION.
3. THE LADDER AND ITS ATTACHMENTS SHALL BE DESIGNED AND INSTALLED TO BE CAPABLE OF SUSTAINING A MINIMUM LIVE LOAD OF 500 POUNDS, AND IT SHALL COMPLY WITH OSHA 1926.1053(a)(1)(iii).

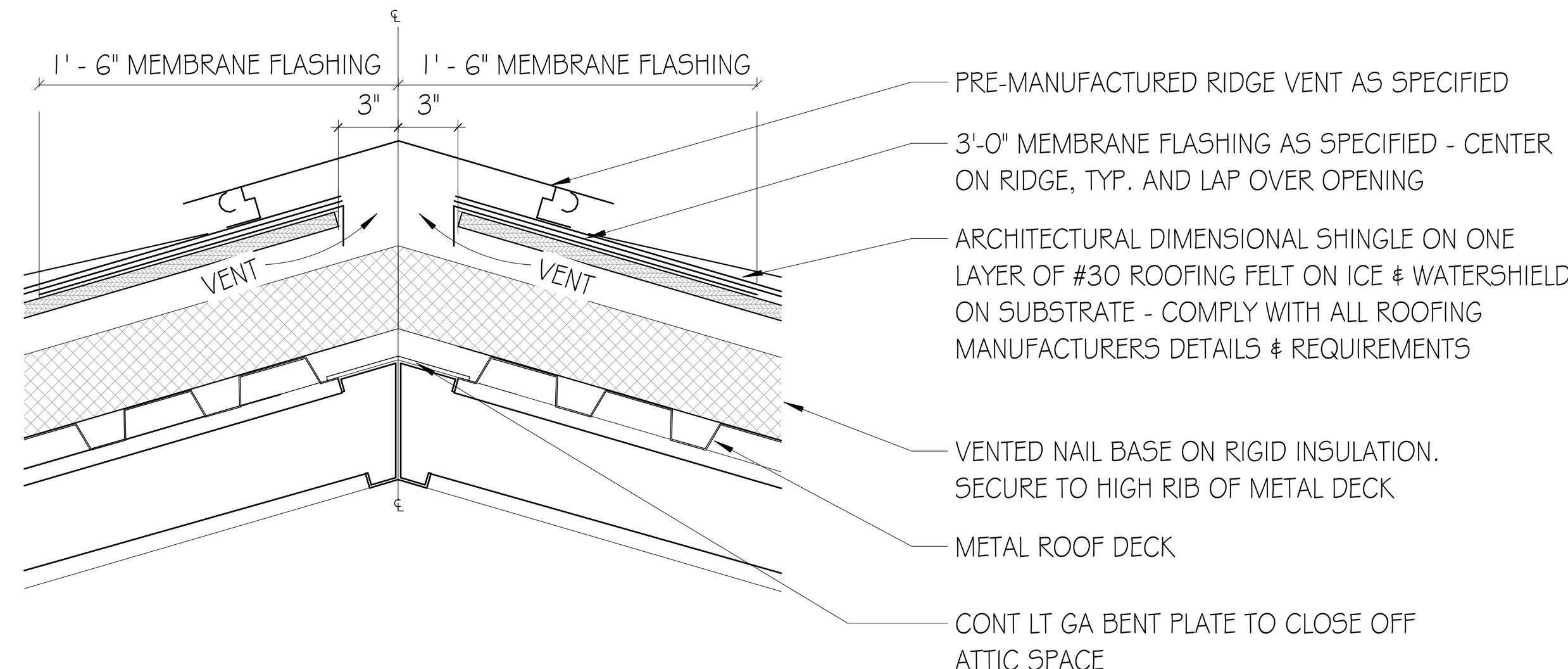
5 LADDER DETAILS
SCALE: 1/2" = 1'-0"



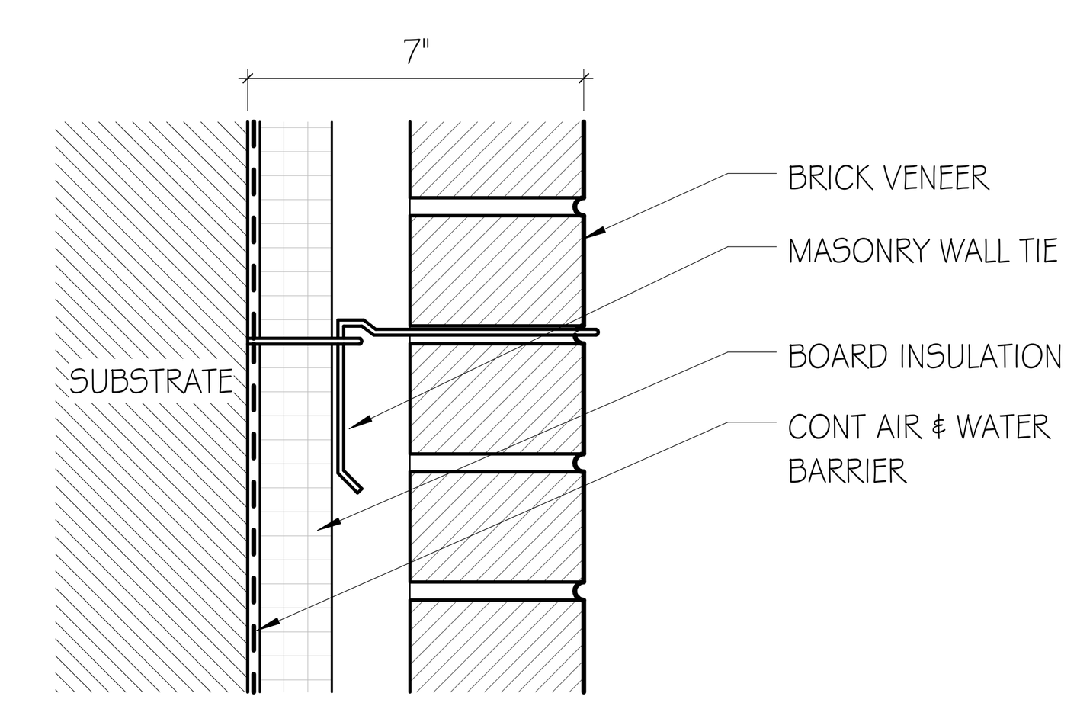
3 TYPICAL ROOF PENETRATION DETAIL
SCALE: 1 1/2" = 1'-0"



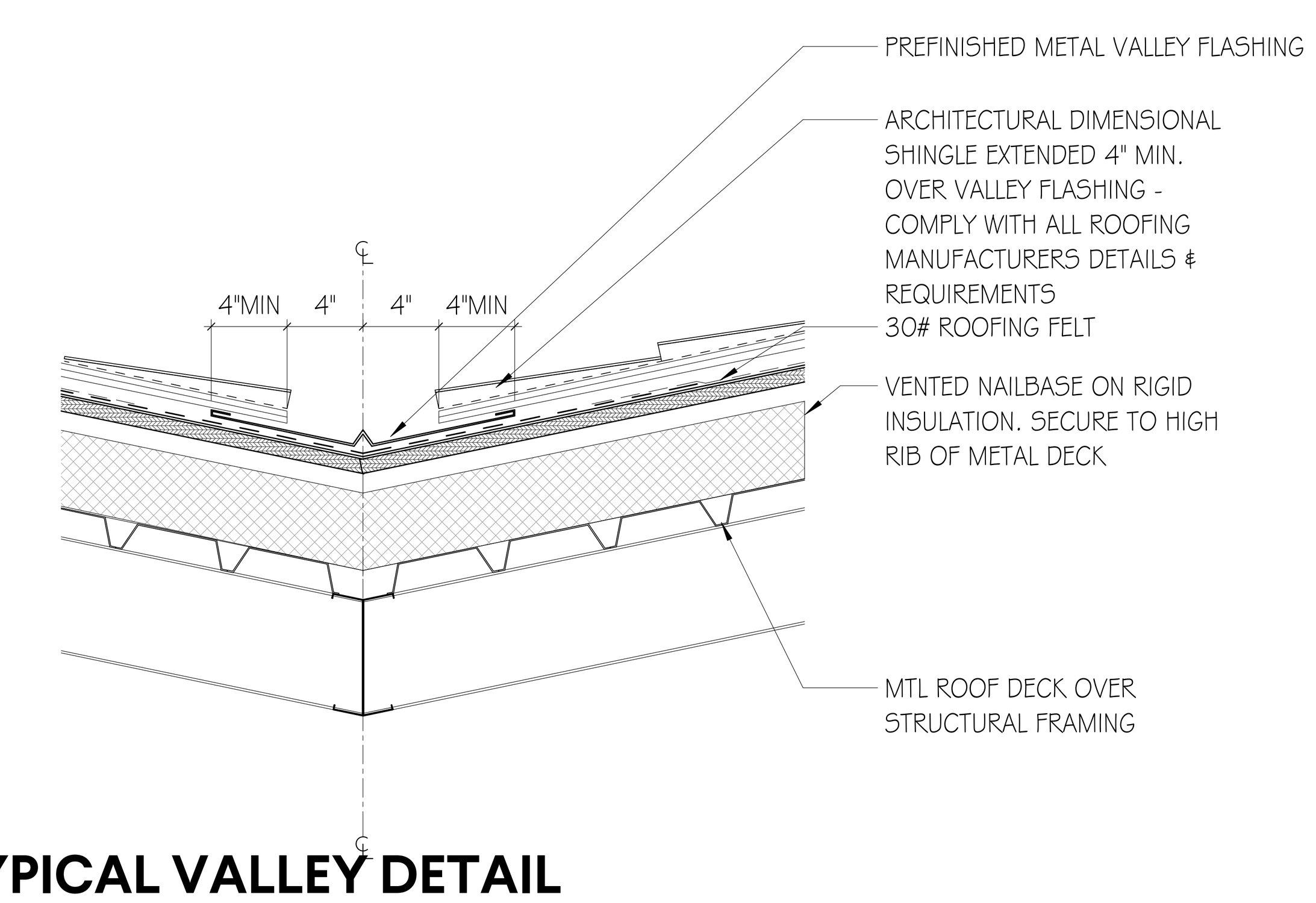
8 TYP BRICK RELIEF ANGLE
SCALE: 3" = 1'-0"



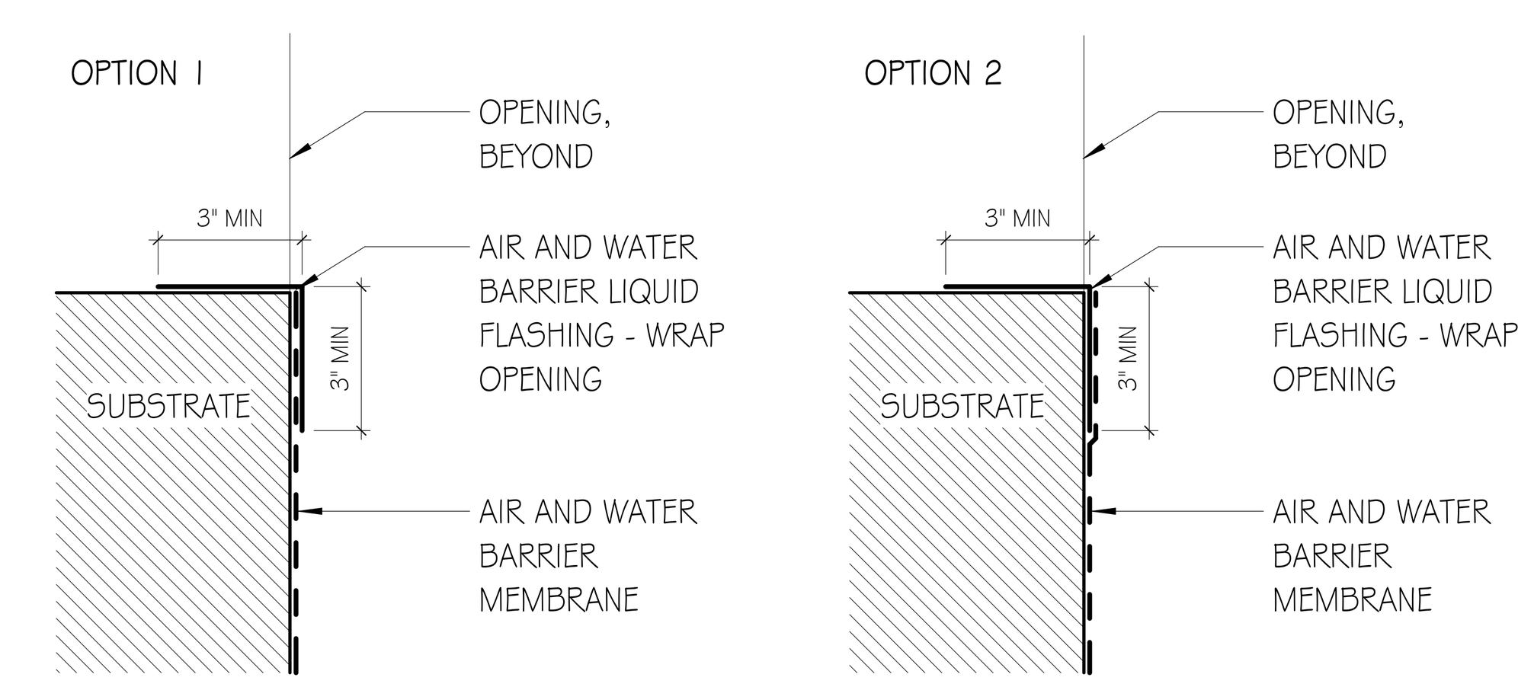
2 TYPICAL ROOF RIDGE VENT DETAIL
SCALE: 1 1/2" = 1'-0"



9 TYP BRICK VENEER
SCALE: 3" = 1'-0"



1 TYPICAL VALLEY DETAIL
SCALE: 1 1/2" = 1'-0"



10 TYP JAMB BARRIER
SCALE: 3" = 1'-0"

GMC
2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM

ISSUE	DATE
BID SET	09/09/2024

DRAWN BY: Author
CHECKED BY: Checker

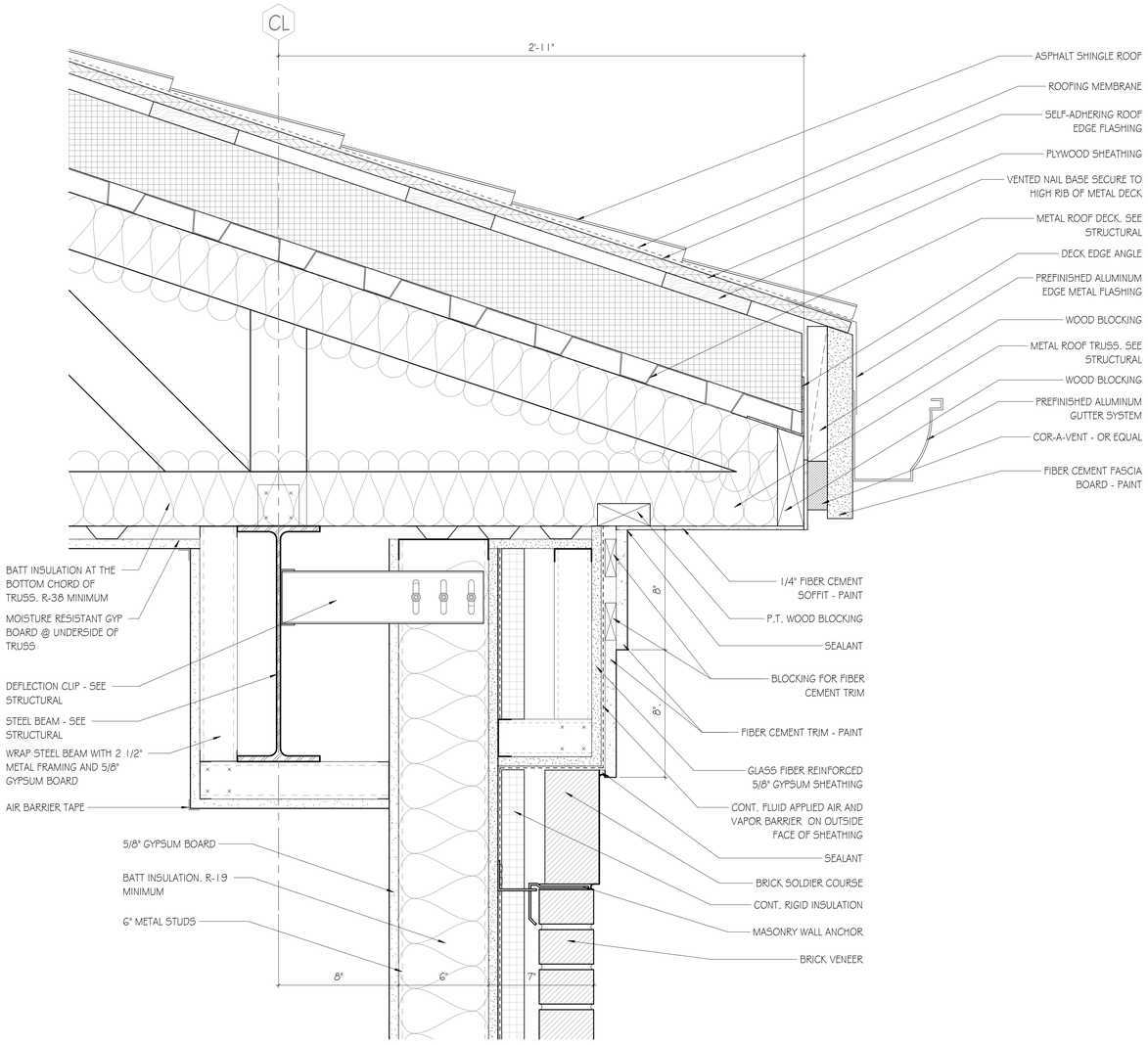
TUSCALOOSA COUNTY DHR
PROJECT ADDRESS PENDING

GMC # ABHM220021
SBC # [ENTER VALUE]

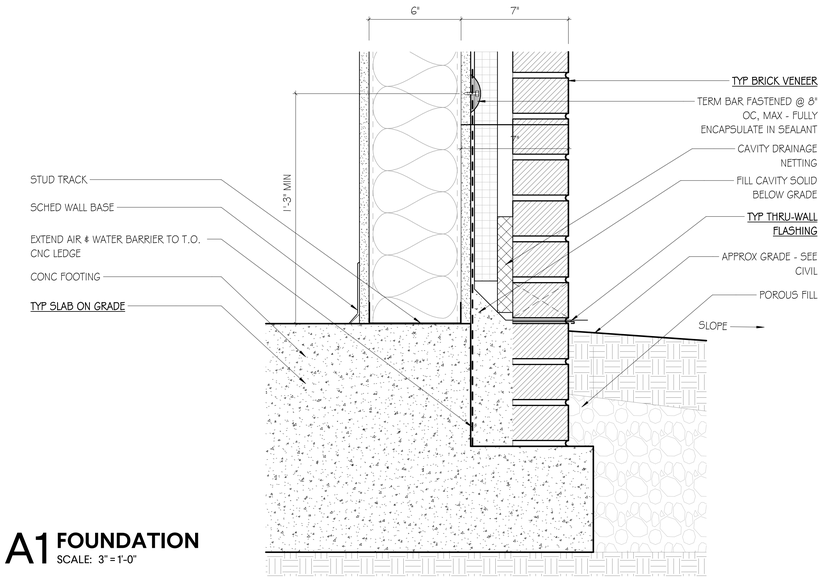
STATE OF ALABAMA · REGISTERED ARCHITECT · 6544

TYP CONSTRUCTION DETAILS

A5.20
sheet of



D1 ROOF EAVE
SCALE: 3" = 1'-0"



A1 FOUNDATION
SCALE: 3" = 1'-0"

GMC
2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM

ISSUE | DATE
BID SET | 09/09/2024

DRAWN BY: Author
CHECKED BY: Checker

TUSCALOOSA COUNTY DHR
PROJECT ADDRESS PENDING

GMC # ABHM220021
SBC # [ENTER VALUE]

STATE OF ALABAMA · BOARD OF EXAMINERS FOR ARCHITECTS · 6544 · JACQUELYN D. HART · BIRMINGHAM, ALABAMA · REGISTERED ARCHITECT

SECTION DETAILS

A5.21

sheet ___ of ___

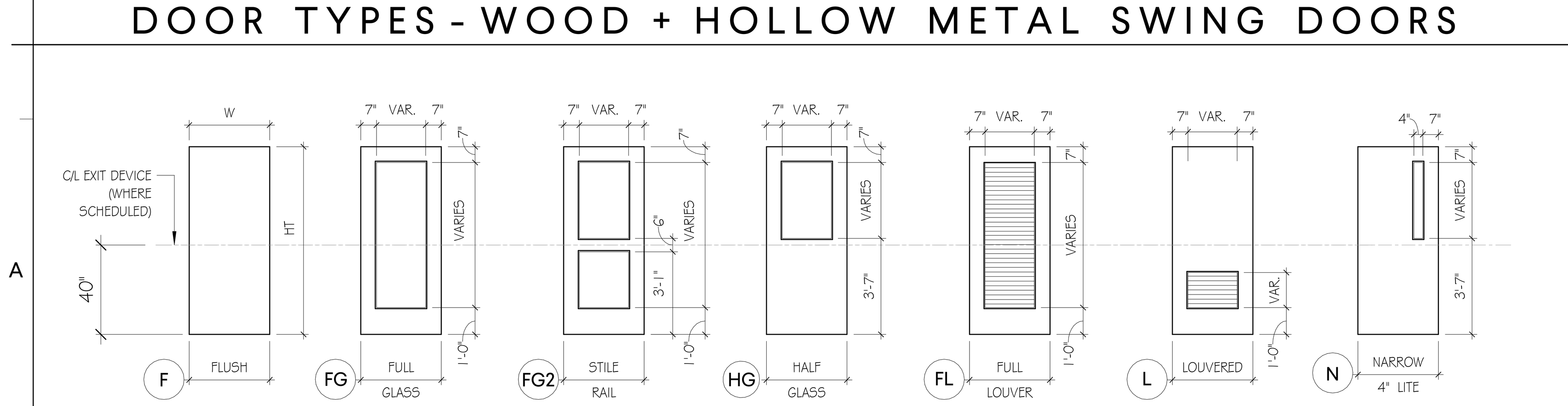
9/11/2024 7:56:23 AM TEMPLATE VERSION: 2021.1

DOOR SCHEDULE

LOCATION		SIZE			DOOR			FRAME			HARDWARE		DETAILS				
DOOR NUMBER	ROOM NAME	WIDTH	HEIGHT	THICKNESS	DOOR TYPE	MATERIAL	GLASS / LOUVER	FRAME TYPE	MATERIAL	GLASS TYPE	HOLD OPEN	ACCESS CONTROL	HEAD	JAMB	SILL	FIRE RATING	NUMBERED NOTES
1000	LOBBY	6' - 0"	7' - 9"	1 3/4"	FG2	SF		SF	HM								
1001A	CORRIDOR	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM			CR	G4 / A6.02	D4 / A6.02			
1001B	LOBBY	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM			CR	G4 / A6.02	D4 / A6.02			
1002A	CORRIDOR	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM			CR	G4 / A6.02	D4 / A6.02			
1002B	CORRIDORS	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM			CR	G4 / A6.02	D4 / A6.02			
1003A	LOBBY	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM			CR	G4 / A6.02	D4 / A6.02			
1003B	CORRIDOR	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM				G4 / A6.02	D4 / A6.02			
1004	STORAGE	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM				G4 / A6.02	D4 / A6.02			
1005	OFFICE SUPR	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM				G4 / A6.02	D4 / A6.02			
1006	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1007A	WORKROOM	3' - 6"	7' - 0"	0"	-	-		F5	WD				G4 / A6.02	D4 / A6.02			
1007B	WORKROOM	3' - 6"	7' - 0"	0"	-	-		F5	WD				G4 / A6.02	D4 / A6.02			
1008	CORRIDORS	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM				G4 / A6.02	D4 / A6.02			
1009	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1010	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1011	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1012	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1013	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1014	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1015	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1016	OFFICE SUPR	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM				G4 / A6.02	D4 / A6.02			
1017	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1018	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1019	CORRIDORS	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1020	OFFICE SUPR	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM				G4 / A6.02	D4 / A6.02			
1021	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1022	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1023	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1024	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1025	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1026	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1027	CORRIDORS	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1028	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1029	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1030	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1031	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1032	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1033	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1034	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1035	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1036	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1037	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1038	OFFICE SUPR	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM				G4 / A6.02	D4 / A6.02			
1039	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1040	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1041	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1042	CENTRAL SUPPLY	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM			CR	G4 / A6.02	D4 / A6.02			
1044	OFFICE SUPR	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM				G4 / A6.02	D4 / A6.02			
1045	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1046	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1047	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1048	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1049	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1050	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1051	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1052	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1053	OFFICE SUPR	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM				G4 / A6.02	D4 / A6.02			
1053	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1054	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1055	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1056	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1057	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1058	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1059	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1060	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1061	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1062	OFFICE SUPR	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM				G4 / A6.02	D4 / A6.02			
1063A	WORKROOM	3' - 6"	7' - 0"	0"	-	-		F5	WD				G4 / A6.02	D4 / A6.02			
1063B	WORKROOM	3' - 6"	7' - 0"	0"	-	-		F5	WD				G4 / A6.02	D4 / A6.02			
1064	LEGAL OFFICE	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM				G4 / A6.02	D4 / A6.02			
1065	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1066	LEGAL OFFICE	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM				G4 / A6.02	D4 / A6.02			
1067	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1069	LEGAL OFFICE	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM				G4 / A6.02	D4 / A6.02			
1070	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1071	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1072	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1073	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1074	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1075	OFFICE SUPR	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM				G4 / A6.02	D4 / A6.02			
1076	ILP STORAGE	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM				G4 / A6.02	D4 / A6.02			
1077	IDF	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM			CR	G4 / A6.02	D4 / A6.02			
1078	CAR SEAT STORAGE	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM				G4 / A6.02	D4 / A6.02			
1079	CORRIDORS	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM			CR	G4 / A6.02	D4 / A6.02			
1080	FAMILY VISITATION 1	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM				G4 / A6.02	D4 / A6.02			
1081	OBSERVATION	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM				G4 / A6.02	D4 / A6.02			
1081A	WORKROOM	3' - 6"	7' - 0"	0"	-	-		F5	WD				G4 / A6.02	D4 / A6.02			
1081B	WORKROOM	3' - 6"	7' - 0"	0"	-	-		F5	WD				G4 / A6.02	D4 / A6.02			
1082	MEETING	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM				G4 / A6.02	D4 / A6.02			
1083	FAMILY VISITATION 2	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM				G4 / A6.02	D4 / A6.02			
1084	FAMILY RR	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM				G4 / A6.02	D4 / A6.02			
1085	FAMILY VISITATION 3	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM				G4 / A6.02	D4 / A6.02			
1086	CORRIDORS	6' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM				G4 / A6.02	D4 / A6.02			
1088	ELEC	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM			CR	G4 / A6.02	D4 / A6.02			
1089	JAN	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM				G4 / A6.02	D4 / A6.02			
1090	SERVER	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM			CR	G4 / A6.02	D4 / A6.02		90 MIN	
1100	LAUNDRY	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM				G4 / A6.02	D4 / A6.02			
1101	RESTROOM	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM				G4 / A6.02	D4 / A6.02			
1102A	BREAK	3' - 0"	7' - 0"	1 3/4"	FG2	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1102B	BREAK	3' - 0"	7' - 0"	1 3/4"	FG2	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1103A	BOARD	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM				G4 / A6.02	D4 / A6.02			
1103B	BOARD	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM				G4 / A6.02	D4 / A6.02			
1104	ELEC	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM				G4 / A6.02	D4 / A6.02			
1105	STORAGE	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM				G4 / A6.02	D4 / A6.02			
1106	DIRECTOR'S OFFICE	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM			CR	G4 / A6.02	D4 / A6.02			
1107	STOR	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM			CR	G4 / A6.02	D4 / A6.02			
1108	DIR RR	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM				G4 / A6.02	D4 / A6.02			
1109	CORRIDORS	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM				G4 / A6.02	D4 / A6.02			
1110	STORAGE	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM				G4 / A6.02	D4 / A6.02			
1111	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			

LOCATION		SIZE			DOOR			FRAME			HARDWARE		DETAILS				
DOOR NUMBER	ROOM NAME	WIDTH	HEIGHT	THICKNESS	DOOR TYPE	MATERIAL	GLASS / LOUVER	FRAME TYPE	MATERIAL	GLASS TYPE	HOLD OPEN	ACCESS CONTROL	HEAD	JAMB	SILL	FIRE RATING	NUMBERED NOTES
1112	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1113	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1114	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1115	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1116	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1117	FINANCIAL	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM			CR	G4 / A6.02	D4 / A6.02			
1118	FINANCIAL	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM			CR	G4 / A6.02	D4 / A6.02			
1119	OFFICE SDHR TANF	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1120	OFFICE SDHR CS	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1121	OFFICE SDHR QA	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1122	OFFICE SDHR CS	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1123	OFFICE SDHR AUDIT	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1124	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1125	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1126	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1127	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1128	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1129	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1130	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1131	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1132	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1133	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1134	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1135	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1136	OFFICE SUPR	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM				G4 / A6.02	D4 / A6.02			
1137	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1138	OFFICE SUPR	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM				G4 / A6.02	D4 / A6.02			
1139	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1140	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1141	OFFICE SUPR	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM				G4 / A6.02	D4 / A6.02			
1142	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1143A	WORKROOM	3' - 6"	7' - 0"	0"	-	-		F5	WD				G4 / A6.02	D4 / A6.02			
1143B	WORKROOM	3' - 6"	7' - 0"	0"	-	-		F5	WD				G4 / A6.02	D4 / A6.02			
1144	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1145	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1146	OFFICE SUPR	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM				G4 / A6.02	D4 / A6.02			
1147	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1148	OFFICE SUPR	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM				G4 / A6.02	D4 / A6.02			
1149	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1150	IDF	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM			CR	G4 / A6.02	D4 / A6.02			
1151	CORRIDORS	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM				G4 / A6.02	D4 / A6.02			
1152	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1153	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1154	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM			CR	G4 / A6.02	D4 / A6.02			
1155	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1156	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM			CR	G4 / A6.02	D4 / A6.02			
1157	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1158	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM			CR	G4 / A6.02	D4 / A6.02			
1159	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1160A	CORRIDORS	3' - 6"	7' - 0"	0"	-	-		F5	WD				G4 / A6.02	D4 / A6.02			
1160B	WORK ROOM	3' - 6"	7' - 0"	0"	-	-		F5	WD				G4 / A6.02	D4 / A6.02			
1161	OFFICE SUPR	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM			CR	G4 / A6.02	D4 / A6.02			
1162	OFFICE SUPR	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM			CR	G4 / A6.02	D4 / A6.02			
1163	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM			CR	G4 / A6.02	D4 / A6.02			
1164	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM			CR	G4 / A6.02	D4 / A6.02			
1165	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM			CR	G4 / A6.02	D4 / A6.02			
1166	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM			CR	G4 / A6.02	D4 / A6.02			
1167	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM			CR	G4 / A6.02	D4 / A6.02			
1168	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM			CR	G4 / A6.02	D4 / A6.02			
1169	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM			CR	G4 / A6.02	D4 / A6.02			
1170	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM			CR	G4 / A6.02	D4 / A6.02			
1171	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM			CR	G4 / A6.02	D4 / A6.02			
1172	OFFICE SUPR	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM			CR	G4 / A6.02	D4 / A6.02			
1173	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM			CR	G4 / A6.02	D4 / A6.02			
1174	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM			CR	G4 / A6.02	D4 / A6.02			
1175	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM			CR	G4 / A6.02	D4 / A6.02			
1176	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM			CR	G4 / A6.02	D4 / A6.02			
1177	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM			CR	G4 / A6.02	D4 / A6.02			
1178	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM			CR	G4 / A6.02	D4 / A6.02			
1179	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM			CR	G4 / A6.02	D4 / A6.02			
1180	OFFICE SUPR	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM			CR	G4 / A6.02	D4 / A6.02			
1181a	CORRIDORS	3' - 6"	7' - 0"	0"	-	-		F5	WD				G4 / A6.02	D4 / A6.02			
1181b	WORKROOM	3' - 6"	7' - 0"	0"	-	-		F5	WD				G4 / A6.02	D4 / A6.02			
1182	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM			CR	G4 / A6.02	D4 / A6.02			
1183	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1184	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM			CR	G4 / A6.02	D4 / A6.02			
1185	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1186	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM			CR	G4 / A6.02	D4 / A6.02			
1187	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1188	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1189	MEETING	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM				G4 / A6.02	D4 / A6.02			
1189	MEETING	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM				G4 / A6.02	D4 / A6.02			
1190	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1191	OFFICE	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM				G4 / A6.02	D4 / A6.02			
1192	OFFICE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1194	OFFICE	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM				G4 / A6.02	D4 / A6.02			
1195	OFFICE SUPR	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM				G4 / A6.02	D4 / A6.02			
1196	INTAKE	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1197	ISP MTG	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM				G4 / A6.02	D4 / A6.02			
1200	MAIL	6' - 0"	7' - 0"	0"				F5	WD				G4 / A6.02	D4 / A6.02			
1201	CS	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM				G4 / A6.02	D4 / A6.02			
1202	MAIL	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM			CR	G4 / A6.02	D4 / A6.02			
1203A	CENTRAL FILE ROOM	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM			CR	G4 / A6.02	D4 / A6.02			
1203B	CENTRAL FILE ROOM	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM			CR	G4 / A6.02	D4 / A6.02			
1204	CH FILE	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM			CR	G4 / A6.02	D4 / A6.02			
1205	CS / CAN FILE	3' - 6"	7' - 0"	0"	-	-		F5	WD				G4 / A6.02	D4 / A6.02			
1206	WOMENS	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM				G4 / A6.02	D4 / A6.02			
1206A	CORRIDORS	3' - 0"	7' - 0"	1 3/4"	N	WD	G1	F1	HM				G4 / A6.02	D4 / A6.02			
1207	MENS	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM				G4 / A6.02	D4 / A6.02			
1301	MENS	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM				G4 / A6.02	D4 / A6.02			
1302	WOMENS	3' - 0"	7' - 0"	1 3/4"	F	WD		F1	HM				G4 / A6.02	D4 / A6.02			
E1000		6' - 0"	8' - 0"	1 3/4"	FG2	SF		SF	HM						A2		
E1002	CORRIDORS	3' - 6"	7' - 0"	1 3/4"	FG2	HM	G1	F1	HM			CR	G1 / A6.02	D1 / A6.02	B1 / A6.02		
E1003	FIRE RISER	3' - 0"	7' - 0"	1 3/4"	F	HM			HM				G1 / A6.02	D1 / A6.02	B1 / A6.02		
E1004		3' - 0"	7' - 0"	1 3/4"	FG2	HM	G1	F1	HM			CR	G1 / A6.02	D1 / A6.02	B1 / A6.02		
E1005		3' - 0"	7' - 0"	1 3/4"	FG2	HM	G1	F1	HM			CR	G1 / A6.02	D1 / A6.02	B1 / A6.02		
E1006		3' - 0"	7' - 0"	1 3/4"	FG2	HM	G1	F1	HM			CR	G1 / A6.02	D1 / A6.02	B1 / A6.02		
E1007	CORRIDORS	3' - 0"	7' - 0"	1 3/4"	FG2	HM	G1	F1	HM			CR	G1 / A6.02	D1 / A6.02	B1 / A6.02		
E1008		3' - 0"	7' - 0"	1 3/4"	FG2	HM	G1	F1	HM			CR	G1 / A6.02	D1 / A6.02	B1 / A6.02		

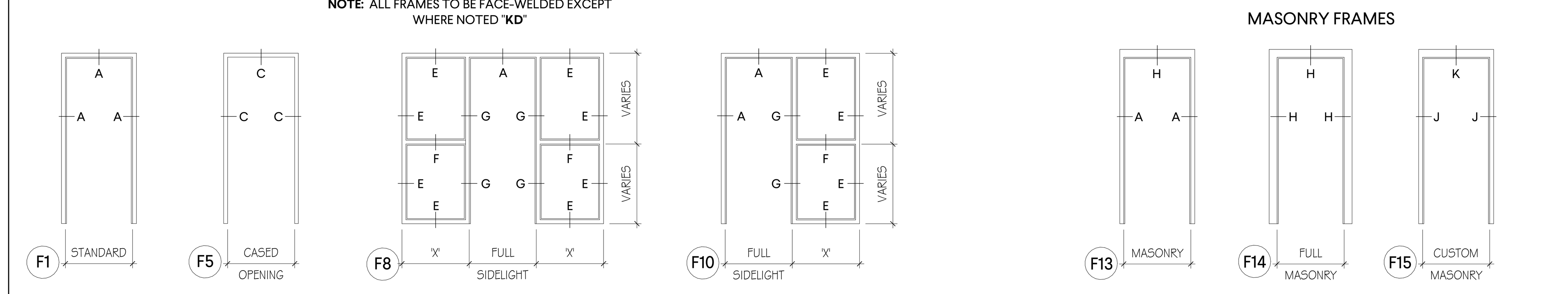
DOOR TYPES - WOOD + HOLLOW METAL SWING DOORS



FRAME TYPES - HOLLOW METAL

NOTE: ALL FRAMES TO BE FACE-WELDED EXCEPT WHERE NOTED "**KD**"

MASONRY FRAMES



DOOR COMMENTS LEGEND

01 MAGNETIC HOLD-OPEN DEVICES
02 AUTOMATIC DOOR OPERATOR, SEE SPECIFICATIONS
03 AUTOMATIC ENTRANCE DOORS, SEE GLAZING SCHEDULE FOR CONFIGURATION
04 ALUMINUM-FRAME ENTRANCE DOORS, SEE GLAZING SCHEDULE FOR CONFIG.
05 ALL-GLASS ENTRANCE DOORS, SEE GLAZING SCHEDULE FOR CONFIGURATION
06 ALUMINUM-FRAME ICU/CCU DOOR, SEE GLAZING SCHEDULE FOR CONFIGURATION
07 SLIDING ICU/CCU DOOR, SEE SPECIFICATIONS
08 OVERHEAD COILING DOOR, SEE SPECIFICATIONS
09 OVERHEAD COILING GRILLE, SEE SPECIFICATIONS
10 SOUND CONTROL DOOR, SEE SPECIFICATIONS
11 POCKET DOOR AND FRAME, SEE SPECIFICATIONS
12 LEAD-LINED DOOR AND FRAME, SEE SPECIFICATIONS: RADIATION PROTECTION
13 SOUND RATED ASSEMBLY. MATCH RATING OF PARTITION IN WHICH LOCATED
14 THERMAL RATED [INSULATED] ASSEMBLY
15 DOOR EDGE CONSTRUCTION: SEAMLESS
16 LEVEL 3 AND PHYSICAL PERFORMANCE LEVEL A [EXTRA HEAVY-DUTY]
17 EGRESS - EXIT ONLY DOOR
18 EXISTING DOOR AND FRAME TO REMAIN
19 EXISTING FRAME TO REMAIN
20 INSTALL NEW DOOR HARDWARE AS SCHED. MODIFY EXIST. DOOR/FRAME AS REQ'D
21 MECHANICAL KEYPAD LOCK. SEE SPECIFICATIONS
22 STORM SHELTER DOOR

DOOR GENERAL NOTES

1) GENERAL:
A. DOOR AND/OR FRAME CONSTRUCTION SHALL BE AS SPECIFIED UNLESS NOTED OTHERWISE.

B. ALL TYPES OF DOORS ARE REPRESENTED IN THIS SCHEDULE FOR CONVENIENCE. WHERE MORE DESCRIPTIVE INFORMATION MAY BE LOCATED ELSEWHERE, NOTATION IS MADE IN THE NUMBERED NOTES COLUMN. (E.G. ALUMINUM FRAMED ENTRANCE DOORS. SEE GLAZING SCHEDULE FOR CONFIGURATION.)

2) MATERIAL AND FINISH:
A. MATERIALS AND FINISHES INDICATED ON THE SCHEDULE ARE AS FOLLOWS:
HM HOLLOW METAL
ST STEEL
ST/S STEEL / STAINLESS OR STAINLESS CLAD
WD SOLID CORE WOOD
WD/PL WOOD / PLASTIC LAMINATE FACED
WD/IR WOOD / IMPACT-RESISTANT VINYL-FACED
AL ALUMINUM
GL GLAZING/GLASS
PREFIN PREFINISHED (OR FACTORY FINISHED)
PNT PAINTED
STN STAINED

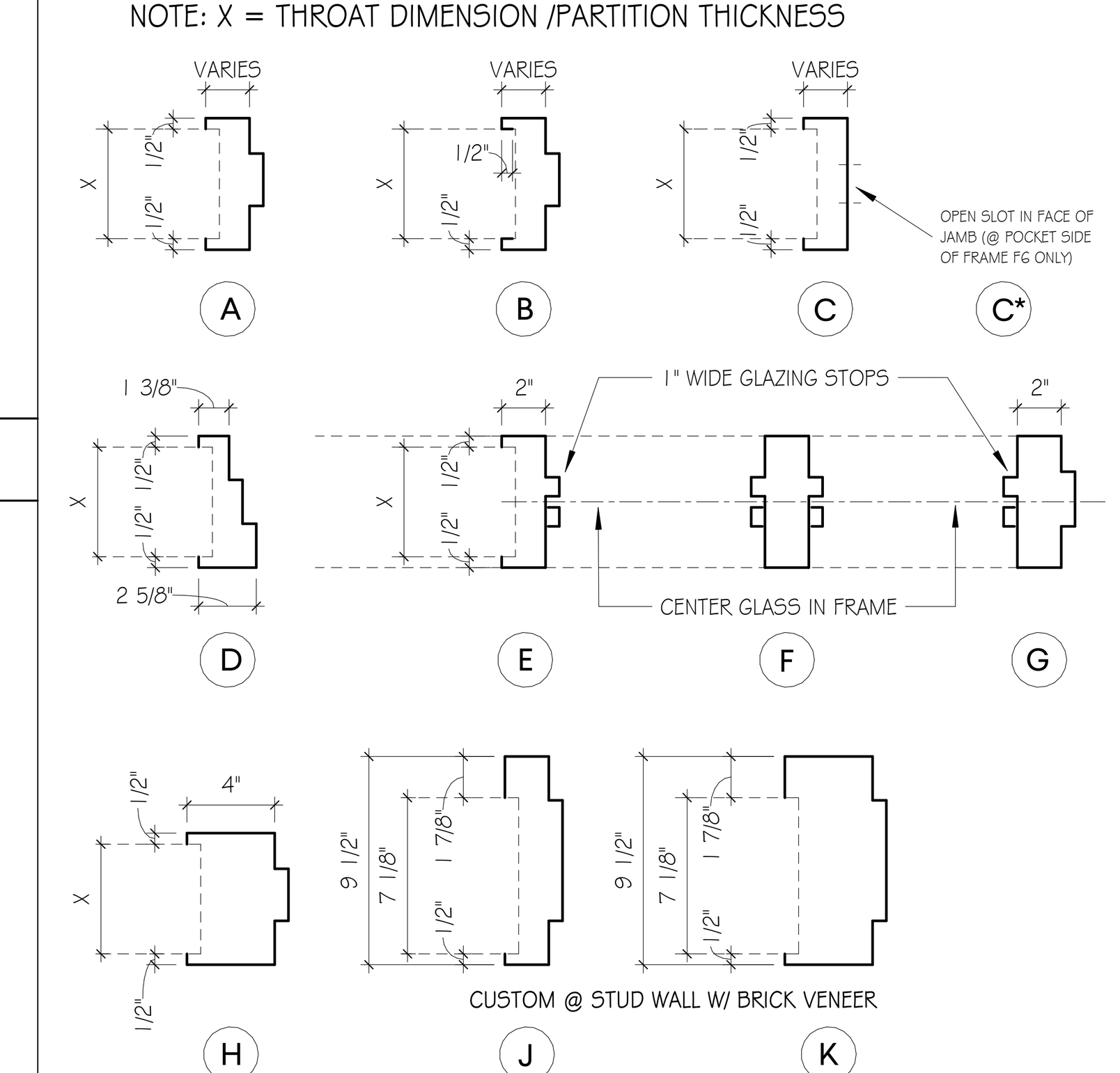
3) GLASS:
A. GLASS TYPES INDICATED ON THE SCHEDULE ARE AS FOLLOWS (SEE SPECIFICATION SECTIONS 088000 "GLAZING" & 134900 "RADIATION PROTECTION"):
MONOLITHIC:
G1 6.0mm CLEAR, TEMPERED
G2 7.5mm CLEAR, LAMINATED, INTERLAYER COLOR: CLEAR
G3 7.5mm CLEAR, LAMINATED, INTERLAYER COLOR: ARCTIC SNOW
G4 8.0mm CLEAR, FIRE-RATED CERAMIC GLAZING, MATCH RATING OF OPNG.
G5 4.0mm(x2) ULTRACLEAR, TEMPERED, 2 LITES + INTEGRAL BLINDS
G6 12.5mm SAFETY, LEAD BORATE GLASS, SEE SPECIFICATIONS
G7 12.5mm SAFETY, LASER RATED, SEE SPECIFICATIONS
INSULATING:
IG1 1 INCH INSULATING, VISION LITE
IG2 1 INCH INSULATING, SPANDREL LITE

4) LOUVERS:
A. DOOR LOUVER TYPES INDICATION ON THE SCHEDULE ARE AS FOLLOWS:
L1 A" W X B" H, SIGHT PROOF, WEATHER RESISTANT, WITH INSECT SCREEN
L2 A" W X B" H, LIGHT PROOF

5) DOOR HARDWARE:
A. "HARDWARE SET NUMBER" REFERS TO HARDWARE SETS SPECIFIED IN SPECIFICATION SECTION 087100 "DOOR HARDWARE".

FRAME PROFILES

NOTE: X = THROAT DIMENSION /PARTITION THICKNESS



GMC
2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM

ISSUE	DATE
BID SET	09/09/2024

DRAWN BY: Author
CHECKED BY: Checker

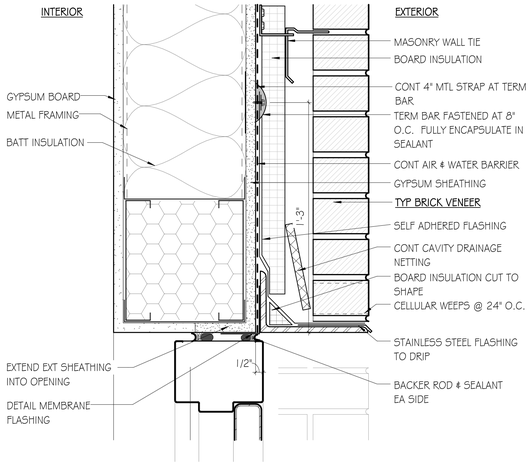
TUSCALOOSA COUNTY DHR
PROJECT ADDRESS PENDING

GMC # ABHM220021
SBC # [ENTER VALUE]

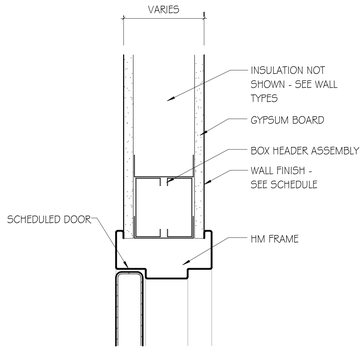
DOOR SCHEDULE

A6.01
sheet of

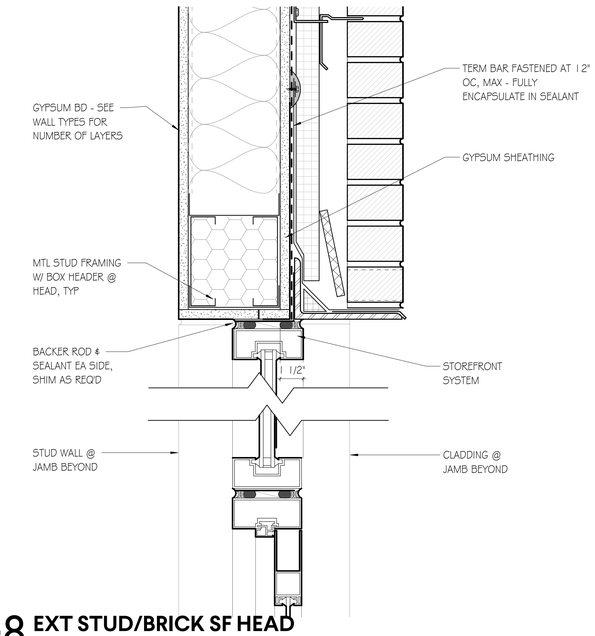
TEMPLATE VERSION: 2021.1
9/11/2024 7:56:28 AM



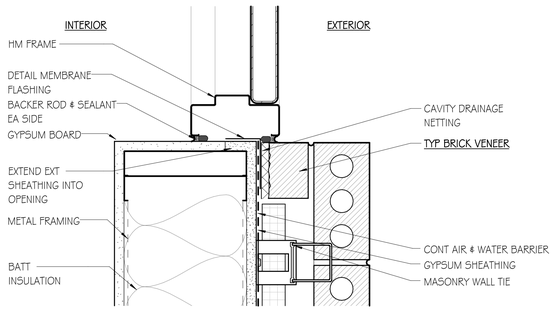
G1 EXT STUD/BRICK DOOR HEAD
SCALE: 3" = 1'-0"



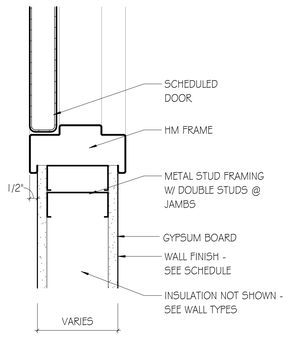
G4 INT HM DOOR HEAD - STUD
SCALE: 3" = 1'-0"



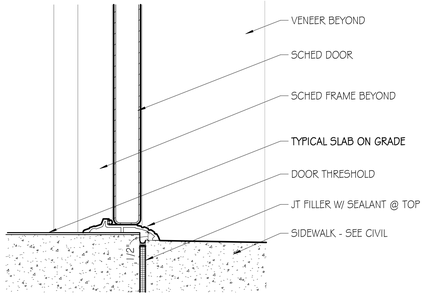
G8 EXT STUD/BRICK SF HEAD
SCALE: 3" = 1'-0"



D1 EXT STUD/BRICK DOOR JAMB
SCALE: 3" = 1'-0"



D4 INT HM DOOR JAMB - STUD
SCALE: 3" = 1'-0"



B1 EXT HM DOOR THRESHOLD
SCALE: 3" = 1'-0"

GMC
2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM

ISSUE | DATE
BID SET | 09/09/2024

DRAWN BY: Author
CHECKED BY: Checker

TUSCALOOSA COUNTY DHR
PROJECT ADDRESS PENDING

GMC # ABHM220021
SBC # [ENTER VALUE]

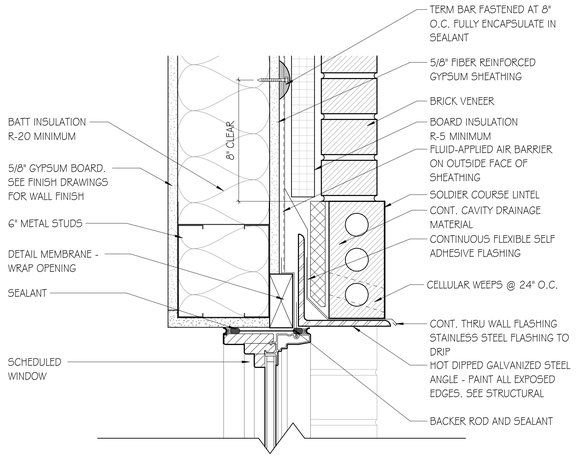
STATE OF ALABAMA · LICENSED · REGISTERED ARCHITECT · 6544 · JACQUELYN D. HART · BIRMINGHAM, ALABAMA

DOOR DETAILS

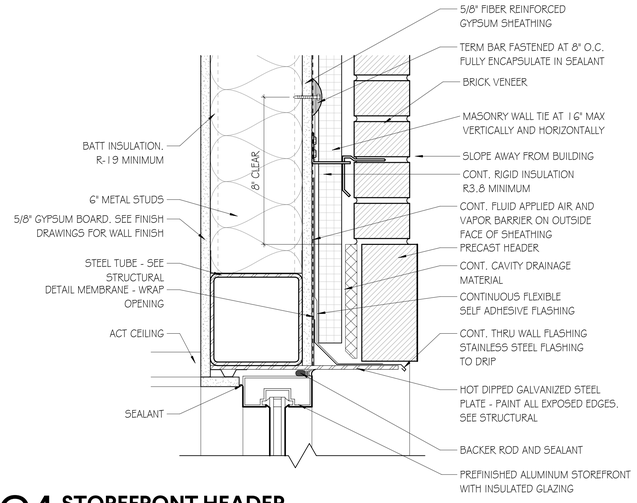
A6.02

sheet of

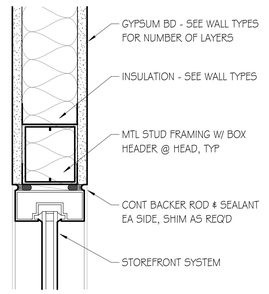
9/11/2024 7:56:31 AM TEMPLATE VERSION: 2021.1



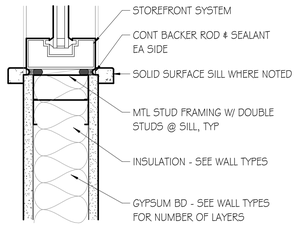
G1 EXT WINDOW HEAD
SCALE: 3" = 1'-0"



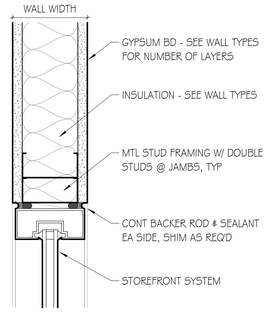
G4 STOREFRONT HEADER
SCALE: 3" = 1'-0"



H8 INT WIN HEAD - STUD
SCALE: 3" = 1'-0"



F8 INT WIN SILL - STUD
SCALE: 3" = 1'-0"



F10 INT WIN JAMB - STUD
SCALE: 3" = 1'-0"

GLASS SCHEDULE

GLASS TYPES INDICATED ON THE SCHEDULE ARE AS FOLLOWS (SEE SPECIFICATION SECTIONS 088000 "GLAZING" & 134900 "RADIATION PROTECTION"):

MONOLITHIC:

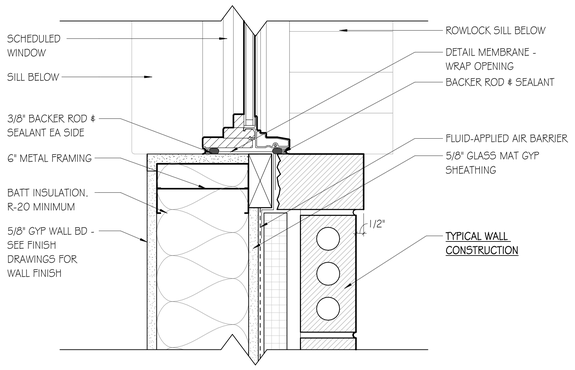
G1	6.0mm	CLEAR, TEMPERED
G2	7.5mm	CLEAR, LAMINATED, INTERLAYER COLOR: CLEAR
G3	7.5mm	CLEAR, LAMINATED, INTERLAYER COLOR: ARCTIC SNOW
G4	8.0mm	CLEAR, FIRE-RATED CERAMIC GLAZING, MATCH RATING OF OPNG.
G5	4.0mm(x2)	ULTRACLEAR, TEMPERED, 2 LITES + INTEGRAL BLINDS
G6	12.5mm	SAFETY, LEAD BORATE GLASS, SEE SPECIFICATIONS
G7	12.5mm	SAFETY, LASER RATED, SEE SPECIFICATIONS

INSULATING:

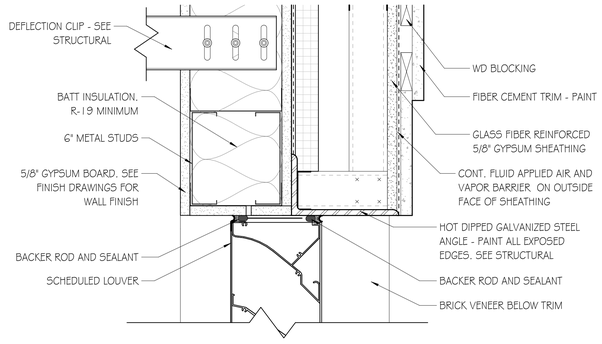
IG1	1 INCH	INSULATING, VISION LITE
IG2	1 INCH	INSULATING, SPANDREL LITE

SPECIALTY GLASS:

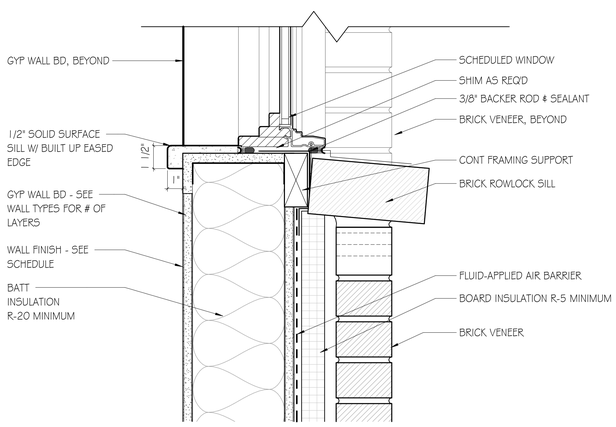
RG1	RF-SHIELDED GLASS AT MRI ROOM TO BE PROVIDED UNDER RF-SHIELDED ENCLOSURE PACKAGE



D1 EXT WINDOW JAMB
SCALE: 3" = 1'-0"

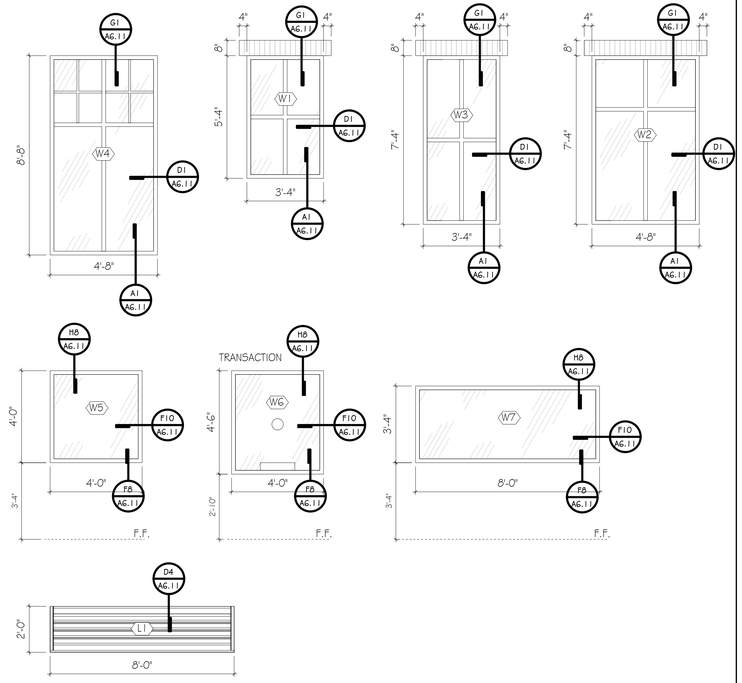


D4 LOUVER HEAD @ FIBER CEMENT TRIM
SCALE: 3" = 1'-0"



A1 EXT WINDOW SILL
SCALE: 3" = 1'-0"

WINDOW LEGEND



GMC
2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM

ISSUE DATE
BID SET 09/09/2024

DRAWN BY: Author
CHECKED BY: Checker

TUSCALOOSA COUNTY DHR
PROJECT ADDRESS PENDING

GMC # ABHM220021
SBC # [ENTER VALUE]

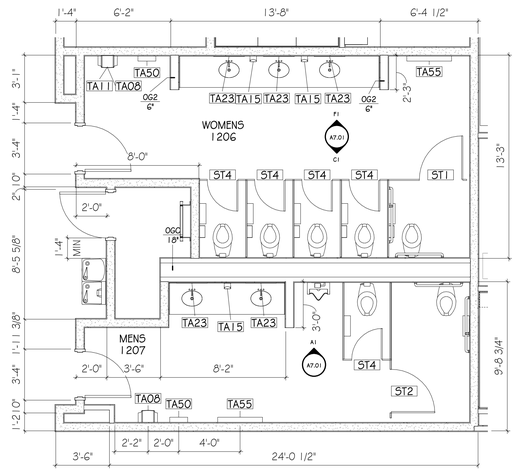
STATE OF ALABAMA BOARD OF EXAMINERS FOR ARCHITECTS REGISTERED ARCHITECT 6544 JACQUELYN D. HART

WINDOW DETAILS

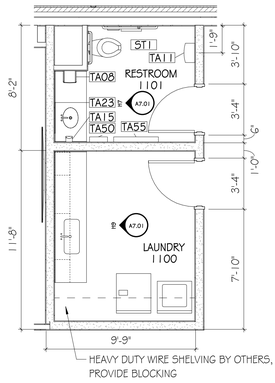
A6.11

sheet of

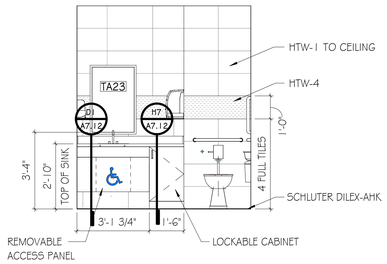
9/11/2024 7:56:31 AM TEMPLATE VERSION: 2021.1



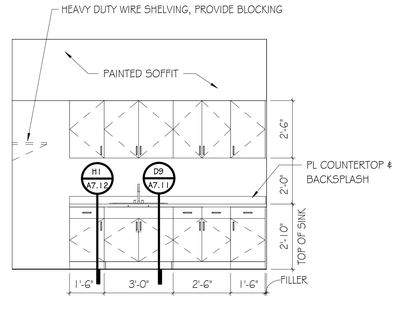
H1 WOMEN 1206 / MEN 1207
SCALE: 1/4" = 1'-0"



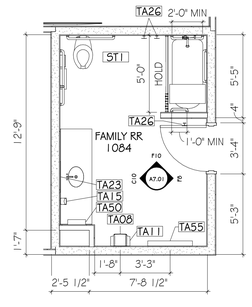
H5 RESTROOM 1101 / LAUNDRY 1100
SCALE: 1/4" = 1'-0"



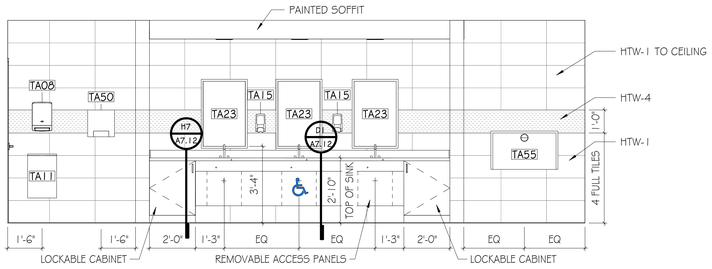
H7 RESTROOM 1101 - 1
SCALE: 3/8" = 1'-0"



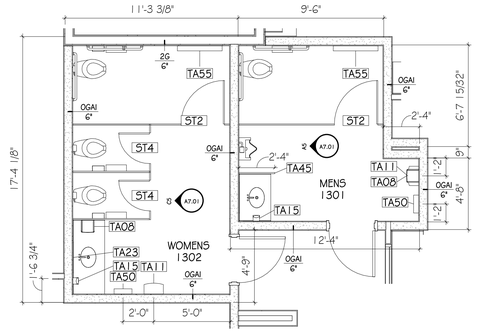
H9 LAUNDRY 1100
SCALE: 3/8" = 1'-0"



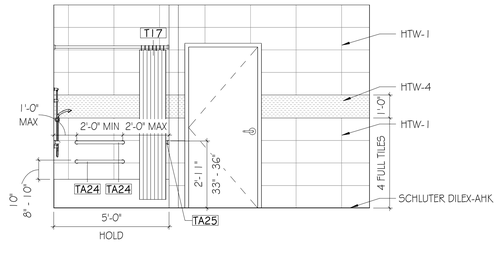
H11 FAMILY RESTROOM 1084
SCALE: 1/4" = 1'-0"



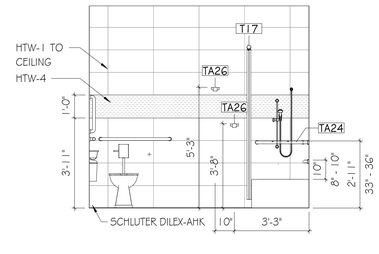
F1 WOMEN 1206 - 1
SCALE: 3/8" = 1'-0"



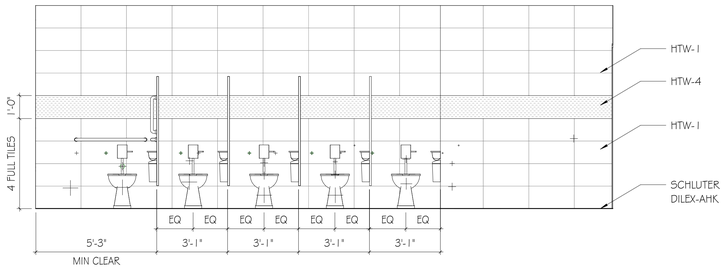
F5 MEN 1301 / WOMEN 1302
SCALE: 1/4" = 1'-0"



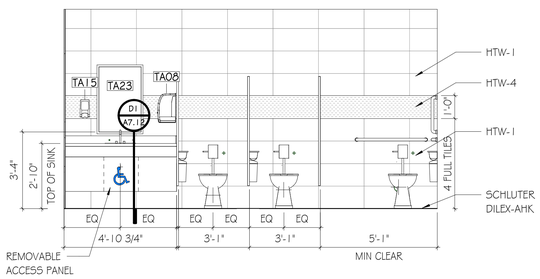
F8 FAMILY RESTROOM 1084 - 1
SCALE: 3/8" = 1'-0"



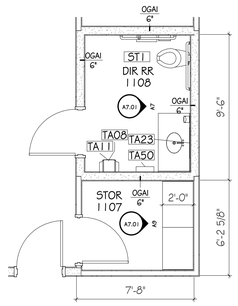
F10 FAMILY RESTROOM 1084 - 2
SCALE: 3/8" = 1'-0"



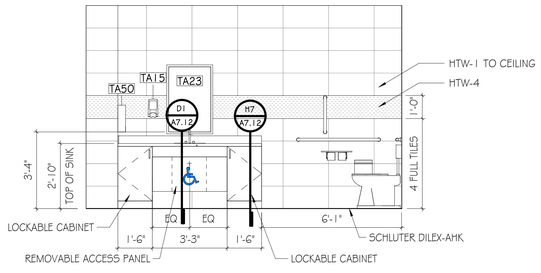
C1 WOMEN 1206 - 2
SCALE: 3/8" = 1'-0"



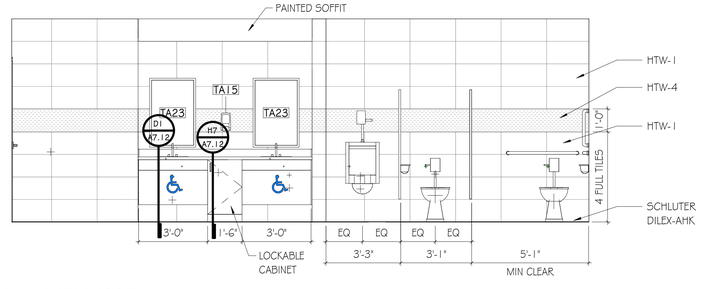
C5 WOMEN 1302
SCALE: 3/8" = 1'-0"



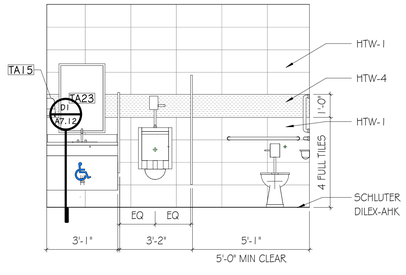
C8 DIRECTORS RR 1108 / STORAGE 1107
SCALE: 1/4" = 1'-0"



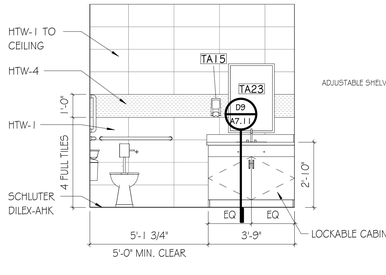
C10 FAMILY RESTROOM 1084 - 3
SCALE: 3/8" = 1'-0"



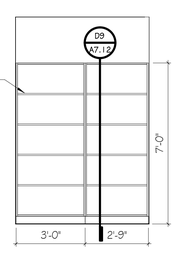
A1 MEN 1207
SCALE: 3/8" = 1'-0"



A5 MEN 1301
SCALE: 3/8" = 1'-0"



A7 DIRECTORS RR 1108
SCALE: 3/8" = 1'-0"



A9 STORAGE 1107
SCALE: 3/8" = 1'-0"

TOILET ACCESSORIES SCHEDULE

ID	DESCRIPTION	OFCI / CFCI
TA01	DOUBLE TOILET TISSUE DISPENSER	CFCI
TA08	PAPER TOWEL DISP	OFCI
TA11	WASTE RECEPTACLE, SURFACE MOUNT, LARGE	CFCI
TA15	SOAP DISPENSER, SURFACE-MOUNT	OFCI
TA20	18" VERTICAL GRAB BAR	CFCI
TA21	36" HORIZONTAL GRAB BAR	CFCI
TA22	42" HORIZONTAL GRAB BAR	CFCI
TA23	FRAMED MIRROR	CFCI
TA24	24" HORIZONTAL GRAB BAR	CFCI
TA25	12" HORIZONTAL GRAB BAR	CFCI
TA26	ROBE HOOK	CFCI
TA29	SANITARY NAPKIN RECEPTACLE	CFCI
TA45	URINAL PARTITION SCREEN	HIDE
TA50	ADA COMPLIANT HAND DRYER	CFCI
TA55	DIAPER CHANGING STATION, SURFACE-MOUNT	CFCI
TA56	UNDERLAVATORY GUARD	CFCI
TA60	MOP & BROOM HOLDER WITH UTILITY SHELF	CFCI

GMC
2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM

ISSUE DATE
BID SET 09/09/2024

DRAWN BY: Author
CHECKED BY: Checker

STATE OF ALABAMA
6544
JACQUELYN D. HART
REGISTERED ARCHITECT

TUSCALOOSA COUNTY DHR
PROJECT ADDRESS PENDING

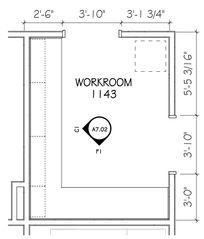
GMC # ABHM220021
SBC # [ENTER VALUE]

INTERIOR ELEVATIONS

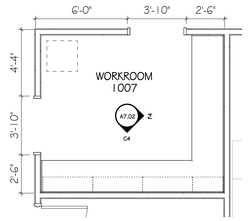
A7.01

sheet of

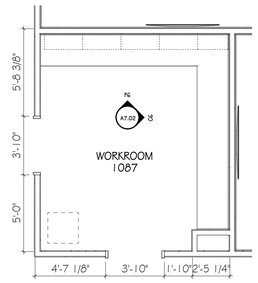
9/11/2024 7:56:43 AM TEMPLATE VERSION: 2021.1



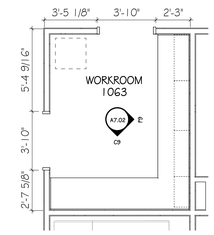
H1 WORKROOM 1143
SCALE: 1/4" = 1'-0"



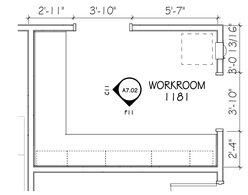
H4 WORKROOM 1007
SCALE: 1/4" = 1'-0"



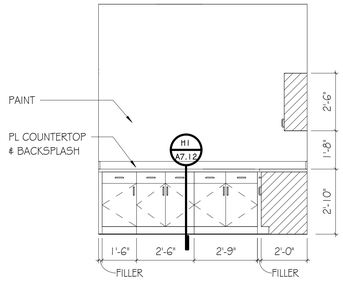
H6 WORKROOM 1081
SCALE: 1/4" = 1'-0"



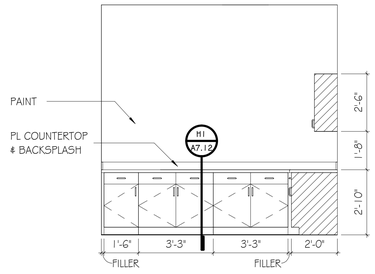
H9 WORKROOM 1063
SCALE: 1/4" = 1'-0"



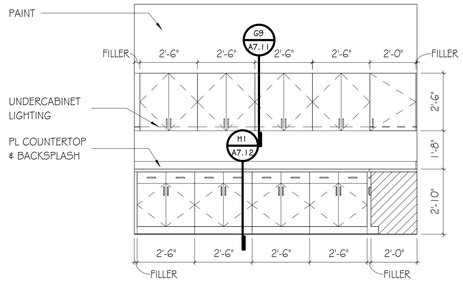
H11 WORKROOM 1181
SCALE: 1/4" = 1'-0"



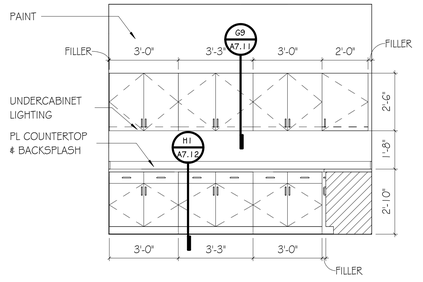
F1 WORKROOM 1143 - 1
SCALE: 3/8" = 1'-0"



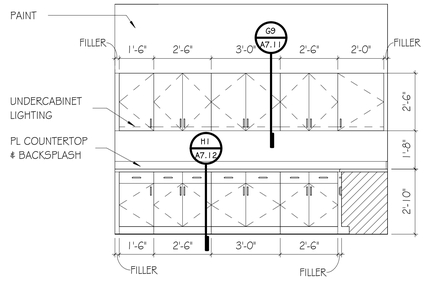
F4 WORKROOM 1007 - 1
SCALE: 3/8" = 1'-0"



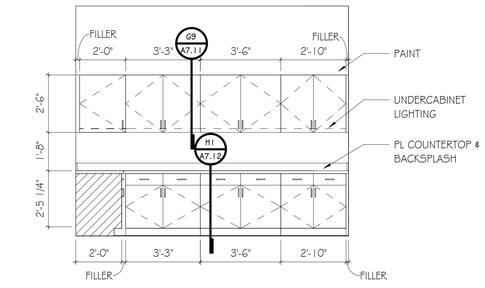
F6 WORKROOM 1081 - 1
SCALE: 3/8" = 1'-0"



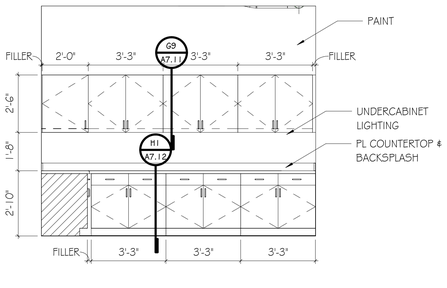
F9 WORKROOM 1063 - 1
SCALE: 3/8" = 1'-0"



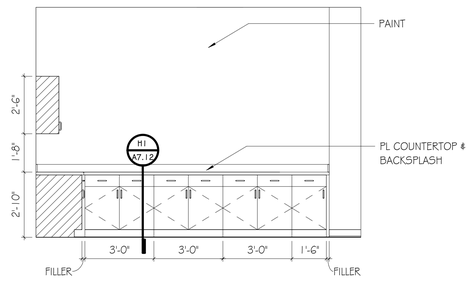
F11 WORKROOM 1181 - 1
SCALE: 3/8" = 1'-0"



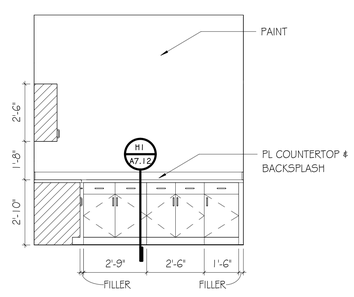
C1 WORKROOM 1143 - 2
SCALE: 3/8" = 1'-0"



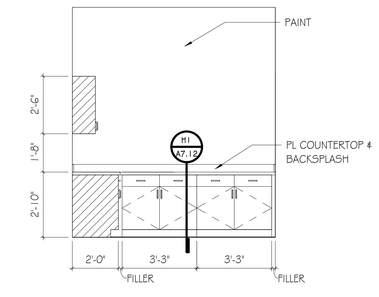
C4 WORKROOM 1007 - 2
SCALE: 3/8" = 1'-0"



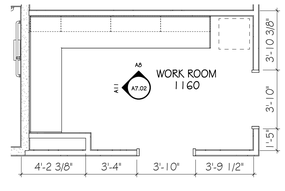
C6 WORKROOM 1081 - 2
SCALE: 3/8" = 1'-0"



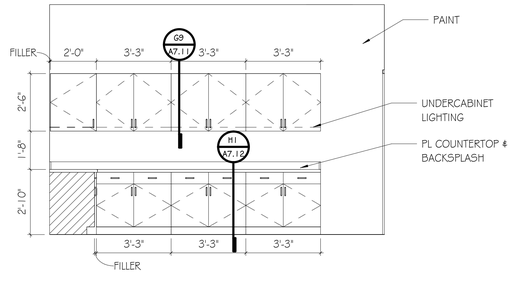
C9 WORKROOM 1063 - 2
SCALE: 3/8" = 1'-0"



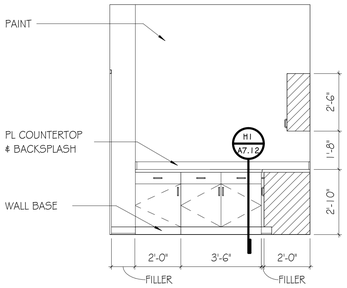
C11 WORKROOM 1181 - 2
SCALE: 3/8" = 1'-0"



A6 WORKROOM 1160
SCALE: 1/4" = 1'-0"



A8 WORKROOM 1160 - 1
SCALE: 3/8" = 1'-0"



A11 WORKROOM 1160 - 2
SCALE: 3/8" = 1'-0"

GMC
2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM

ISSUE DATE
BID SET 09/09/2024

DRAWN BY: Author
CHECKED BY: Checker

TUSCALOOSA COUNTY DHR
PROJECT ADDRESS PENDING

GMC # ABHM220021
SBC # [ENTER VALUE]

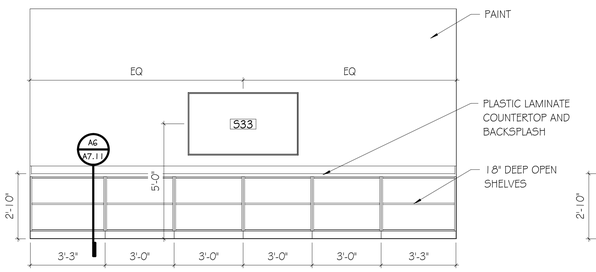
STATE OF ALABAMA
6544
JACQUELYN D. HART
REGISTERED ARCHITECT

INTERIOR ELEVATIONS

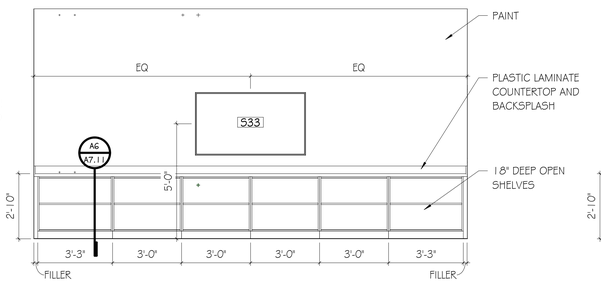
A7.02

sheet of

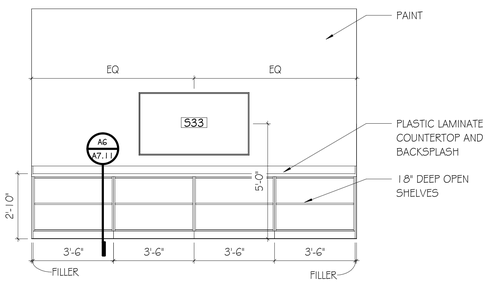
9/11/2024 7:56:50 AM TEMPLATE VERSION: 2021.1



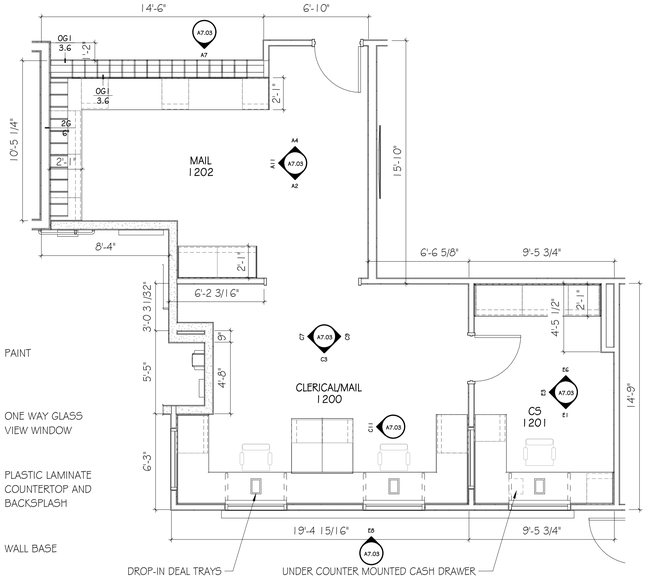
J1 FAMILY VISITIATION 1 1080
SCALE: 3/8" = 1'-0"



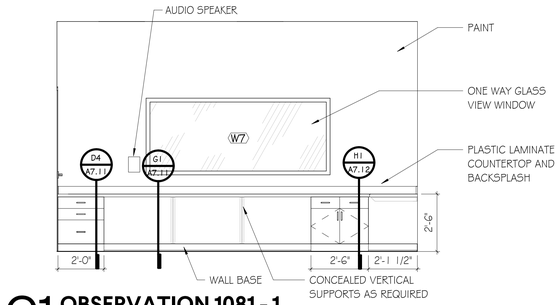
J4 FAMILY VISITATION 2 1083
SCALE: 3/8" = 1'-0"



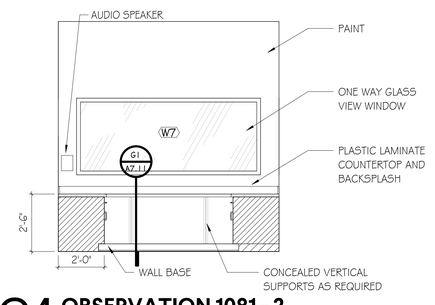
J7 FAMILY VISITATION 3 1085
SCALE: 3/8" = 1'-0"



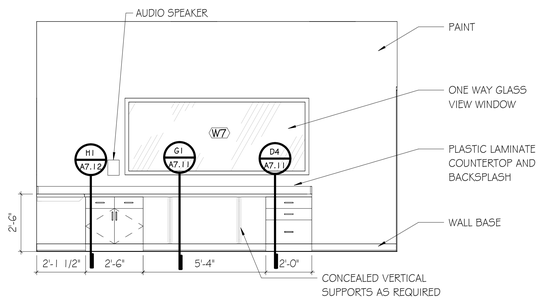
G10 MAIL / CLERICAL / CS
SCALE: 1/4" = 1'-0"



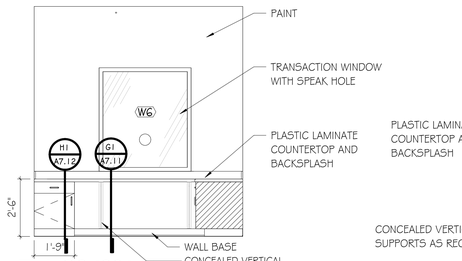
G1 OBSERVATION 1081 - 1
SCALE: 3/8" = 1'-0"



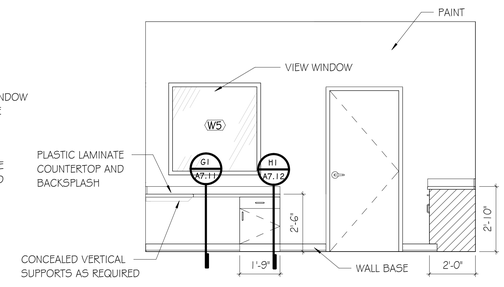
G4 OBSERVATION 1081 - 2
SCALE: 3/8" = 1'-0"



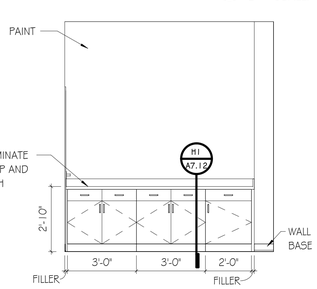
G7 OBSERVATION 1081 - 3
SCALE: 3/8" = 1'-0"



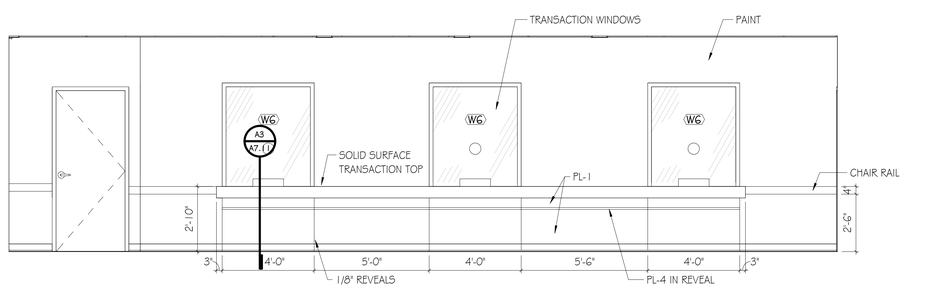
E1 CS 1201 - 1
SCALE: 3/8" = 1'-0"



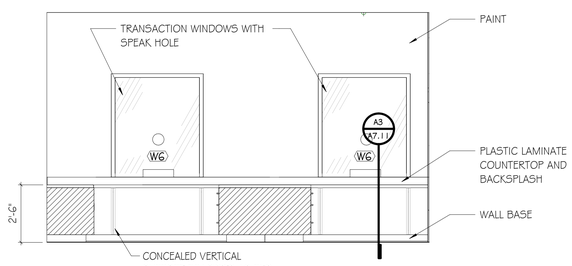
E3 CS 1201 - 2
SCALE: 3/8" = 1'-0"



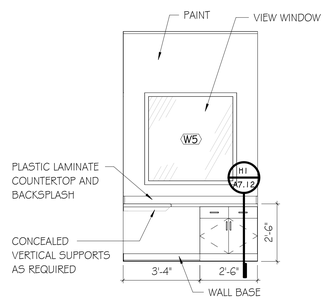
E6 CS 1201 - 3
SCALE: 3/8" = 1'-0"



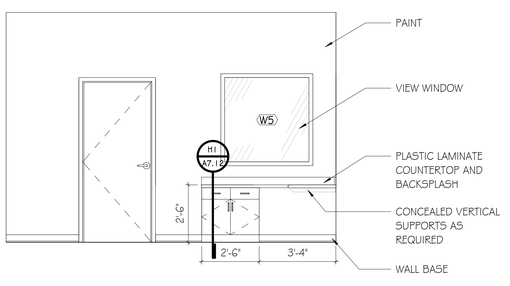
E8 CLERICAL AT LOBBY
SCALE: 3/8" = 1'-0"



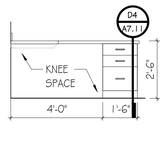
C3 CLERICAL/MAIL 1200 - 1
SCALE: 3/8" = 1'-0"



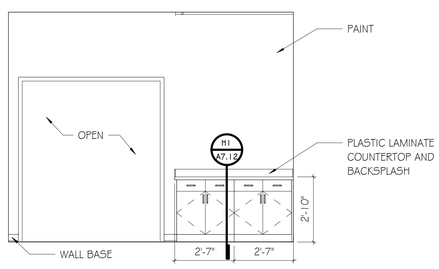
C7 CLERICAL/MAIL 1200 - 2
SCALE: 3/8" = 1'-0"



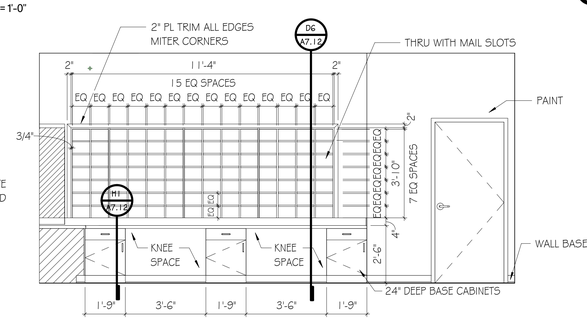
C9 CLERICAL/MAIL - 3
SCALE: 3/8" = 1'-0"



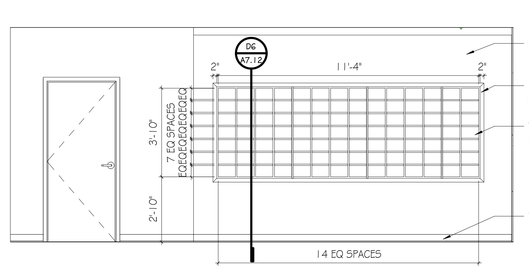
C11 CLERICAL/MAIL - 4
SCALE: 3/8" = 1'-0"



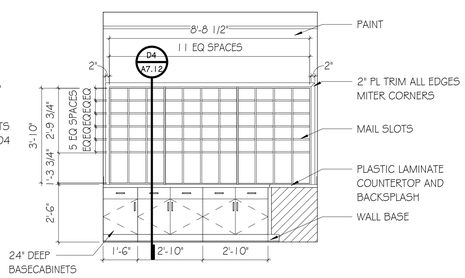
A2 MAIL 1202 - 1
SCALE: 3/8" = 1'-0"



A4 MAIL 1202 - BACK
SCALE: 3/8" = 1'-0"



A7 MAIL 1202 - FRONT
SCALE: 3/8" = 1'-0"



A11 MAIL 1202 - 4
SCALE: 3/8" = 1'-0"

GMC
2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM

ISSUE DATE
BID SET 09/09/2024

DRAWN BY: Author
CHECKED BY: Checker

TUSCALOOSA COUNTY DHR
PROJECT ADDRESS PENDING

GMC # ABHM220021
SBC # [ENTER VALUE]

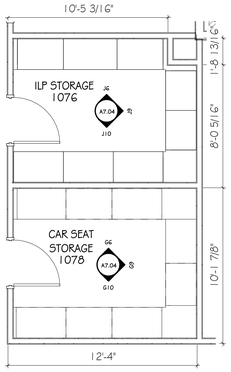
STATE OF ALABAMA
JACQUELYN D. HART
6544
REGISTERED ARCHITECT

INTERIOR ELEVATIONS

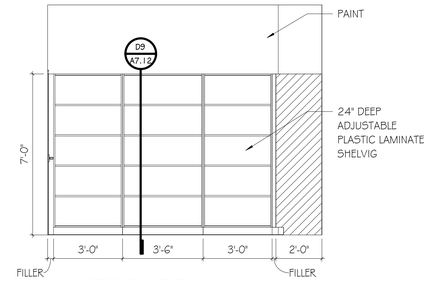
A7.03

sheet of

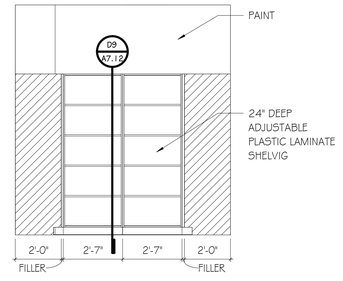
9/11/2024 7:56:58 AM TEMPLATE VERSION: 2021.1



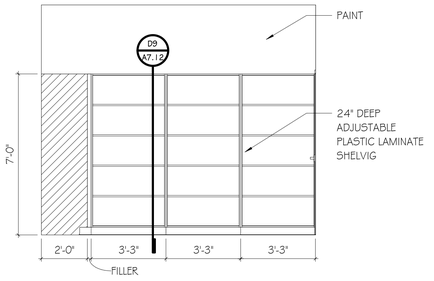
G4 ILP STORAGE / CAR SEAT STORAGE
SCALE: 1/4" = 1'-0"



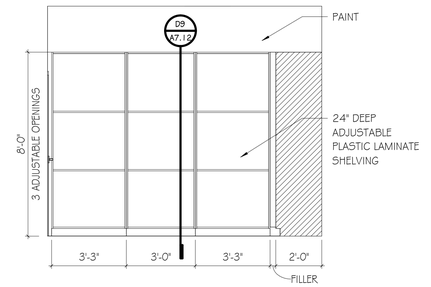
J6 ILP STORAGE - 1
SCALE: 3/8" = 1'-0"



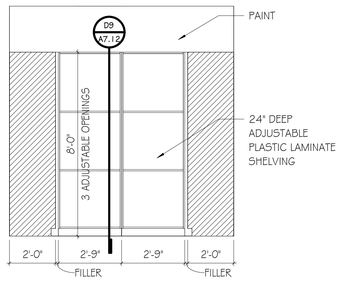
J9 ILP STORAGE - 2
SCALE: 3/8" = 1'-0"



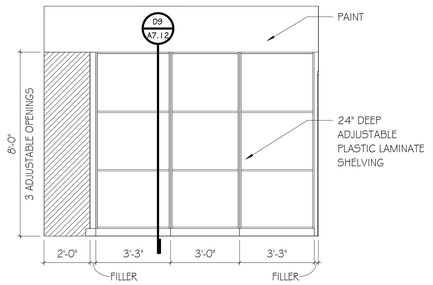
J10 ILP STORAGE - 3
SCALE: 3/8" = 1'-0"



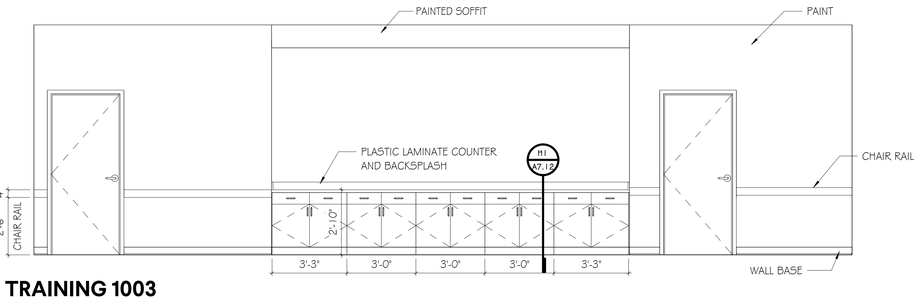
G6 CAR SEAT STORAGE 1079 - 1
SCALE: 3/8" = 1'-0"



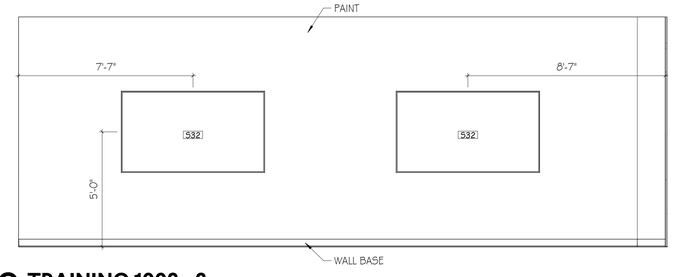
G9 CAR SEAT STORAGE 1079 - 2
SCALE: 3/8" = 1'-0"



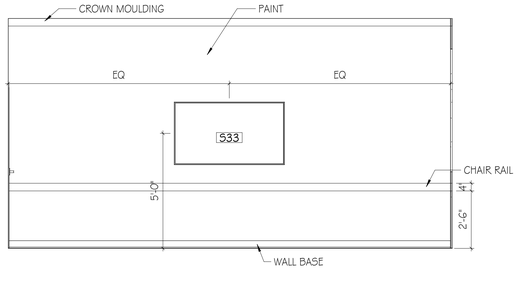
G10 CAR SEAT STORAGE 1079 - 3
SCALE: 3/8" = 1'-0"



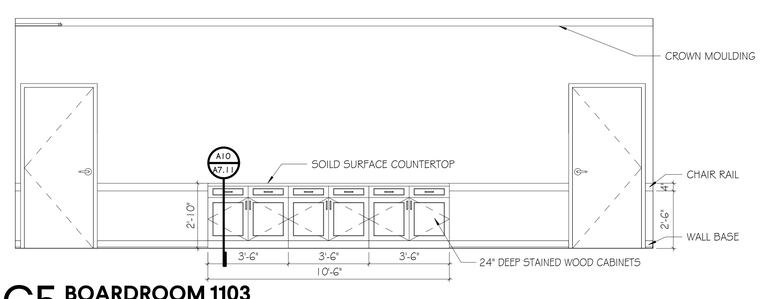
E4 TRAINING 1003
SCALE: 3/8" = 1'-0"



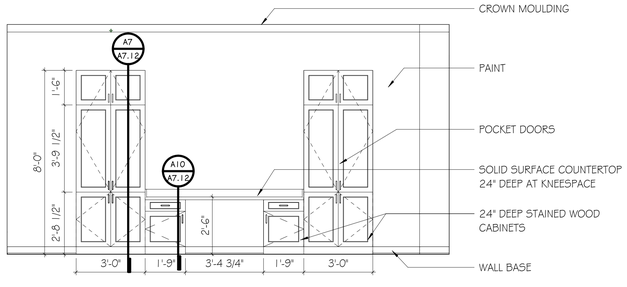
E9 TRAINING 1003 - 2
SCALE: 3/8" = 1'-0"



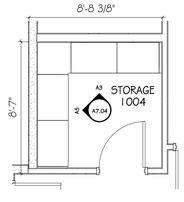
C2 BOARD 1103 - B
SCALE: 3/8" = 1'-0"



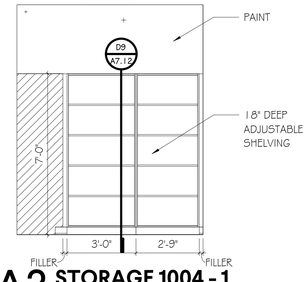
C5 BOARDROOM 1103
SCALE: 3/8" = 1'-0"



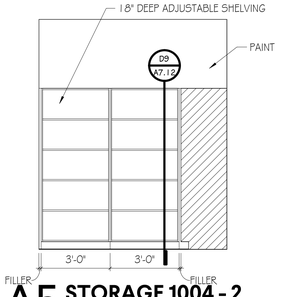
C9 DIRECTORS OFFICE 1106
SCALE: 3/8" = 1'-0"



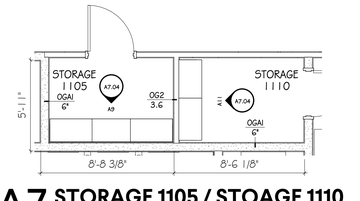
A2 STORAGE 1004
SCALE: 1/4" = 1'-0"



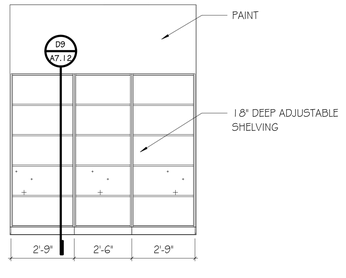
A3 STORAGE 1004 - 1
SCALE: 3/8" = 1'-0"



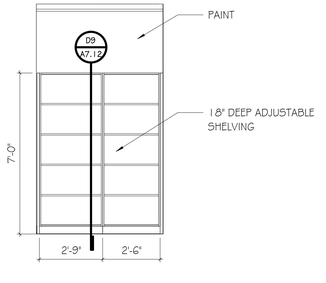
A5 STORAGE 1004 - 2
SCALE: 3/8" = 1'-0"



A7 STORAGE 1105 / STOAGE 1110
SCALE: 1/4" = 1'-0"



A9 STORAGE 1105 - 1
SCALE: 3/8" = 1'-0"



A11 STORAGE 1110 - 1
SCALE: 3/8" = 1'-0"

GMC
2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM

ISSUE DATE
BID SET 09/09/2024

DRAWN BY: Author
CHECKED BY: Checker

TUSCALOOSA COUNTY DHR
PROJECT ADDRESS PENDING

GMC # ABHM220021
SBC # [ENTER VALUE]

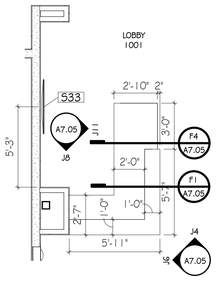
STATE OF ALABAMA
6544
JACQUELYN D. HART
REGISTERED ARCHITECT

INTERIOR ELEVATIONS

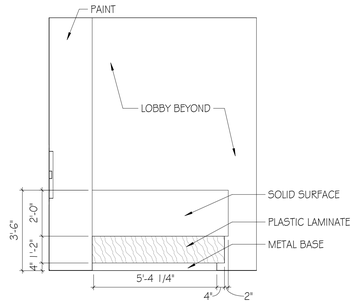
A7.04

sheet of

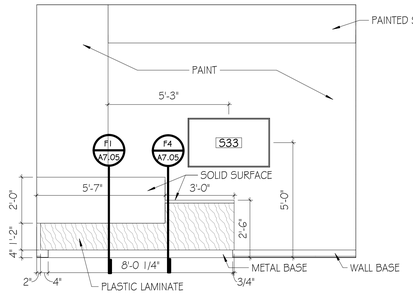
TEMPLATE VERSION: 2021.1
9/11/2024 7:57:05 AM



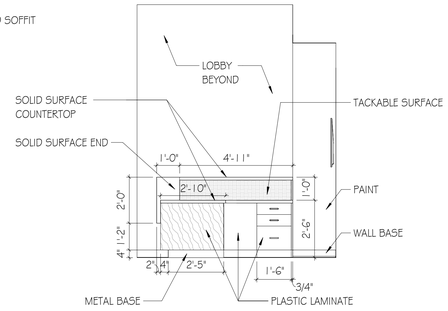
J1 RECEPTION DESK ENLARGED PLAN
SCALE: 1/4" = 1'-0"



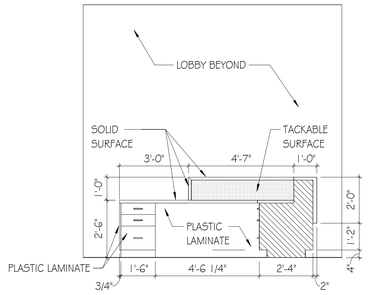
J4 RECEPTION DESK - 1
SCALE: 3/8" = 1'-0"



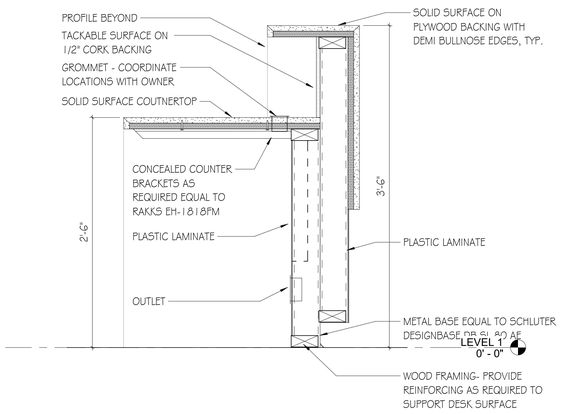
J6 RECEPTION DESK - 2
SCALE: 3/8" = 1'-0"



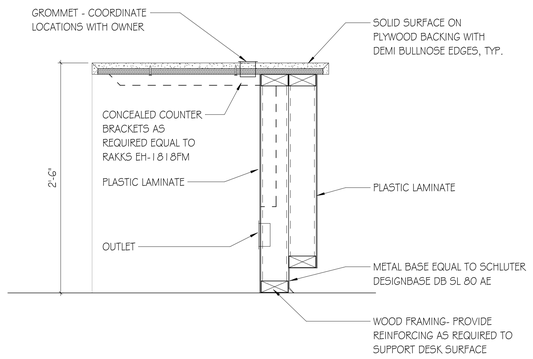
J8 RECEPTION DESK - 3
SCALE: 3/8" = 1'-0"



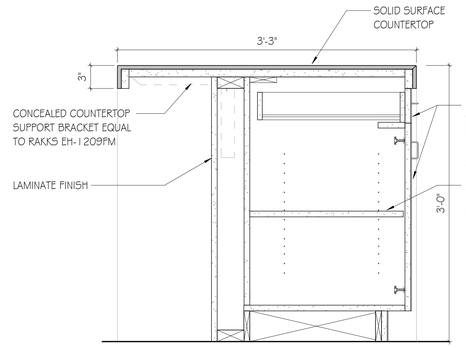
J11 RECEPTION DESK - 4
SCALE: 3/8" = 1'-0"



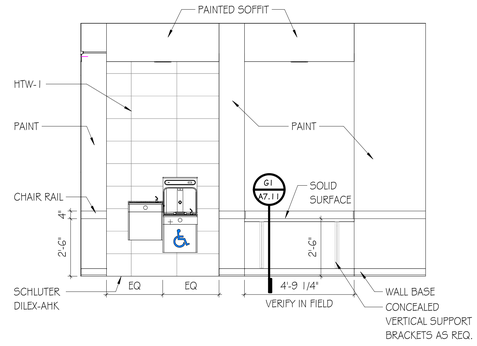
F1 RECEPTION DESK - TRANSACTION
SCALE: 11/2" = 1'-0"



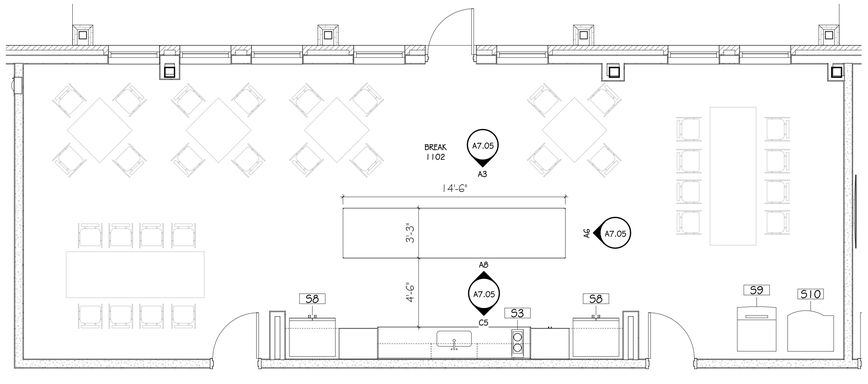
F4 RECEPTION DESK - ADA HEIGHT
SCALE: 11/2" = 1'-0"



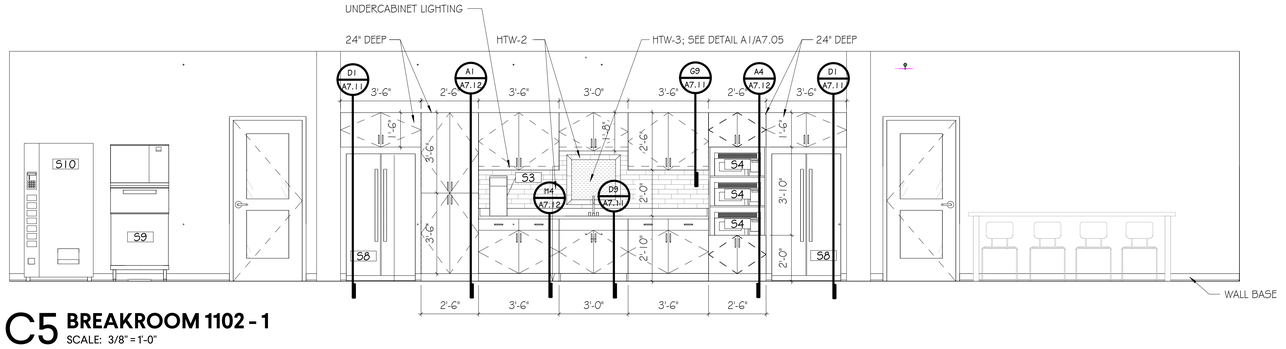
F7 ISLAND SECTION
SCALE: 11/2" = 1'-0"



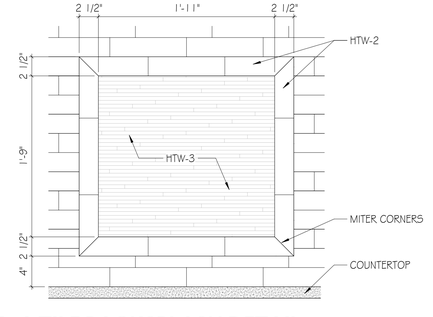
F11 LOBBY
SCALE: 3/8" = 1'-0"



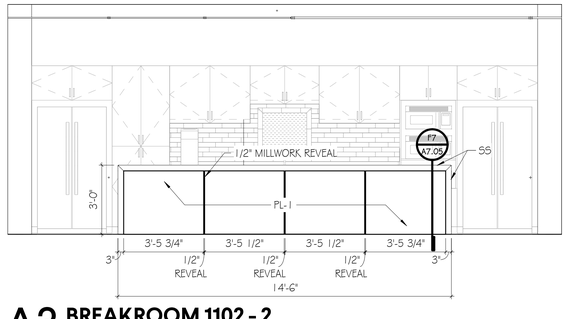
C1 FLOOR PLANS - LEVEL 1 - Callout 1
SCALE: 1/4" = 1'-0"



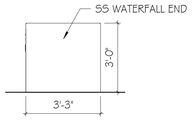
C5 BREAKROOM 1102 - 1
SCALE: 3/8" = 1'-0"



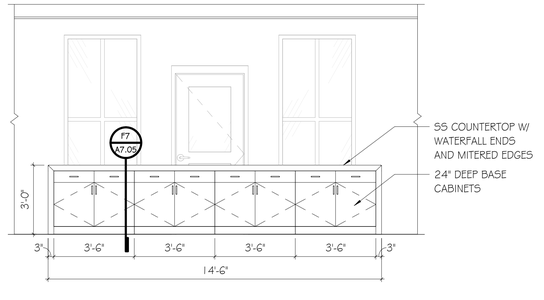
A1 TILE BACKSPLASH DETAIL
SCALE: 11/2" = 1'-0"



A3 BREAKROOM 1102 - 2
SCALE: 3/8" = 1'-0"



A6 BREAKROOM 1102 - 3
SCALE: 3/8" = 1'-0"



A8 BREAKROOM 1102 - 4
SCALE: 3/8" = 1'-0"

SPECIALTY EQUIPMENT SCHEDULE

ID	DESCRIPTION	OFCI / CFCI
S1	RESIDENTIAL WASHER	CFCI
S2	RESIDENTIAL DRYER	CFCI
S3	COFFEE MAKER - BY OWNER	OFCI
S4	MICROWAVE	CFCI
S8	REFRIGERATOR/FREEZER - SIDE BY SIDE	CFCI
S9	ICE MAKER - COORDINATE PLUMBING & ELEC	CFCI
S10	VENDING MACHINE - COORDINATE ELEC	CFCI
S32	TV - WALL MOUNTED - OWNER FURNISHED - GC TO COORDINATE POWER, DATA, WALL BLOCKING	OFCI
S33	TV - WALL MOUNTED - OWNER FURNISHED - GC TO COORDINATE POWER, DATA, WALL BLOCKING	OFCI
WB-1	WINDOW COVERINGS - MANUAL 2" FAUX WOOD BLIND	CFCI

GMC
2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM

ISSUE DATE
BID SET 09/09/2024

DRAWN BY: Author
CHECKED BY: Checker

TUSCALOOSA COUNTY DHR
PROJECT ADDRESS PENDING

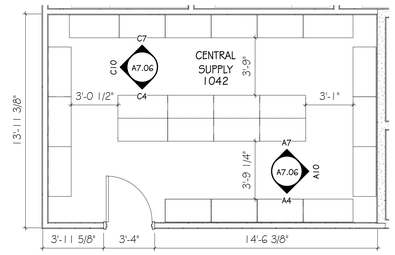
GMC # ABHM220021
SBC # [ENTER VALUE]

STATE OF ALABAMA · REGISTERED ARCHITECT · 6544 · JACQUELYN D. HART

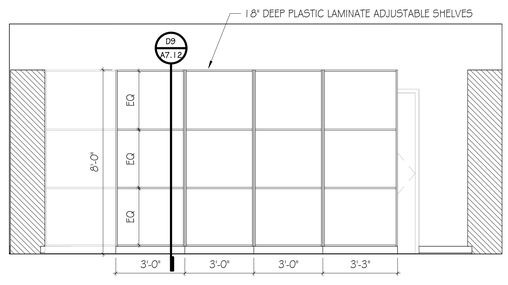
INTERIOR ELEVATIONS

A7.05
sheet of

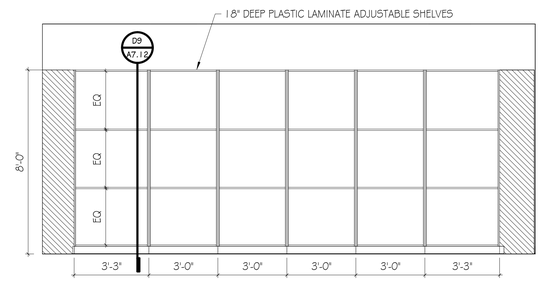
9/11/2024 7:57:12 AM TEMPLATE VERSION: 2021.1



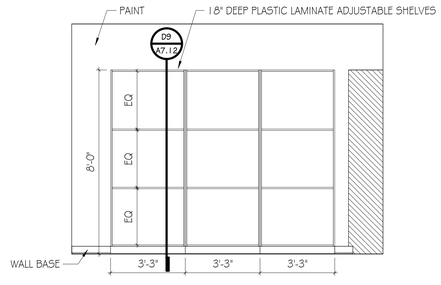
F10 CENTRAL SUPPLY 1042
SCALE: 1/4" = 1'-0"



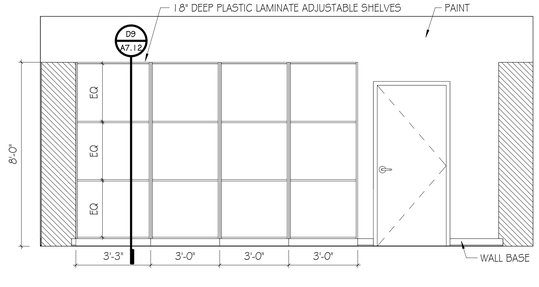
C4 CENTRAL SUPPLY - 1
SCALE: 3/8" = 1'-0"



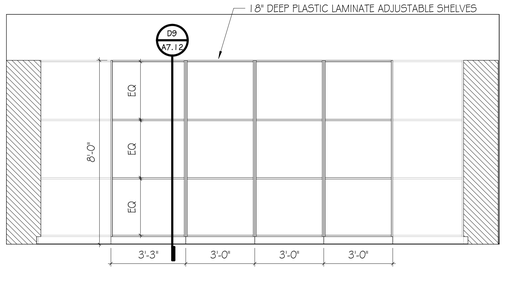
C7 CENTRAL SUPPLY - 2
SCALE: 3/8" = 1'-0"



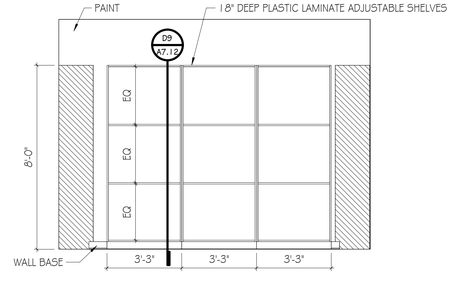
C10 CENTRAL SUPPLY - 3
SCALE: 3/8" = 1'-0"



A4 CENTRAL SUPPLY - 4
SCALE: 3/8" = 1'-0"



A7 CENTRAL SUPPLY - 5
SCALE: 3/8" = 1'-0"



A10 CENTRAL SUPPLY - 6
SCALE: 3/8" = 1'-0"

GMC
2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM

ISSUE | DATE
BID SET | 09/09/2024

DRAWN BY: Author
CHECKED BY: Checker

TUSCALOOSA COUNTY DHR
PROJECT ADDRESS PENDING

GMC # ABHM220021
SBC # [ENTER VALUE]

STATE OF ALABAMA
6544
JACQUELYN D. HART
REGISTERED ARCHITECT

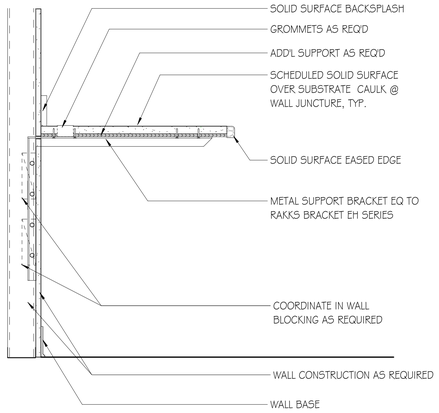
INTERIOR ELEVATIONS

A7.06

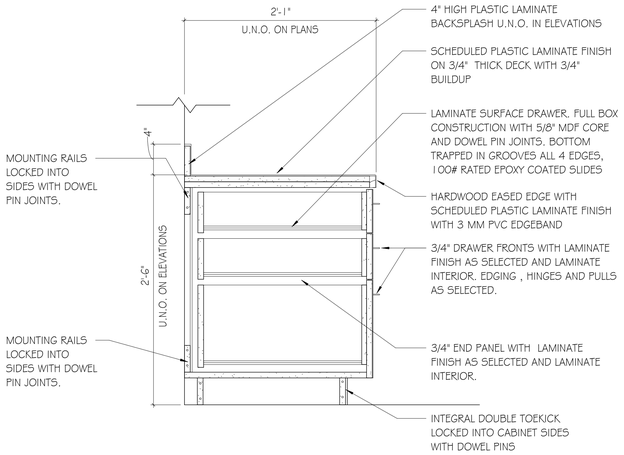
sheet of

9/11/2024 7:57:15 AM TEMPLATE VERSION: 2021.1

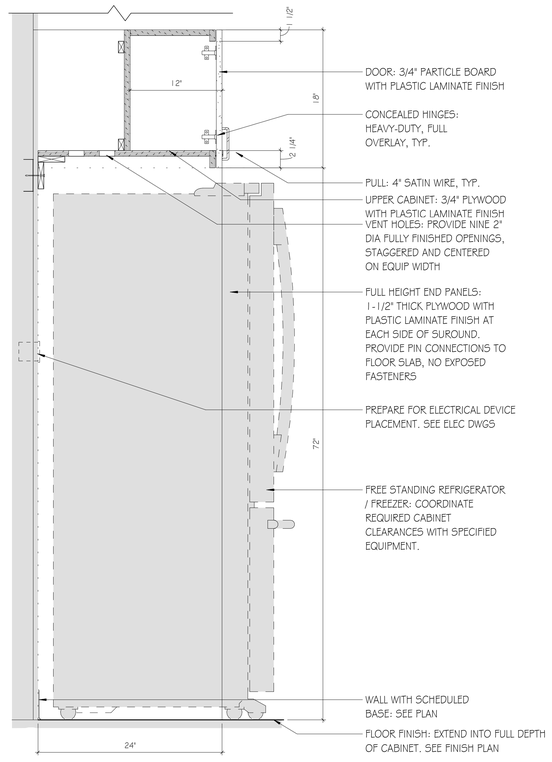
NOTES:
1. COUNTERTOP COMPOSITION TYPICAL FOR ALL SOLID SURFACE COUNTERTOPS IN PROJECT.
2. BRACKETS TO BE CONCEALED IN GYP WALL LOCATIONS AND SURFACE MOUNTED AT CMU WALLS - TYP.



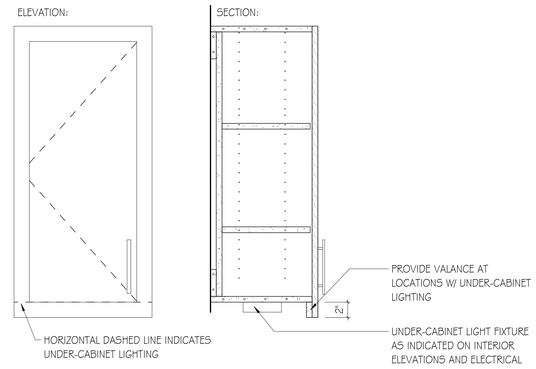
G1 CONCEALED COUNTERTOP
SCALE: 1 1/2" = 1'-0"



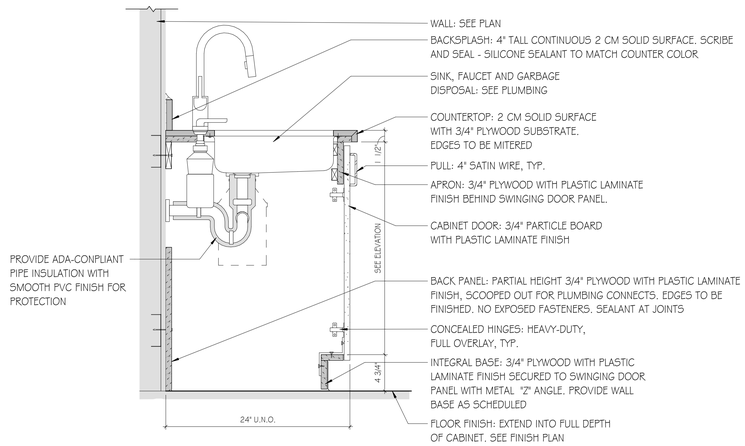
D4 TYP CABINET BASE W / DRAWERS - PL
SCALE: 1 1/2" = 1'-0"



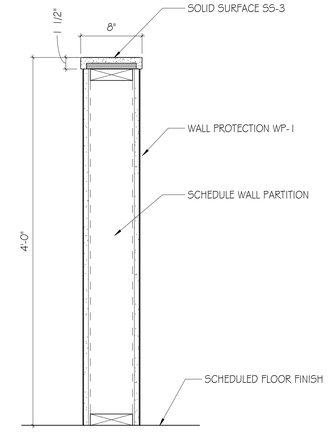
D1 REFRIGERATOR SURROUND - 24" DEEP
SCALE: 1 1/2" = 1'-0"



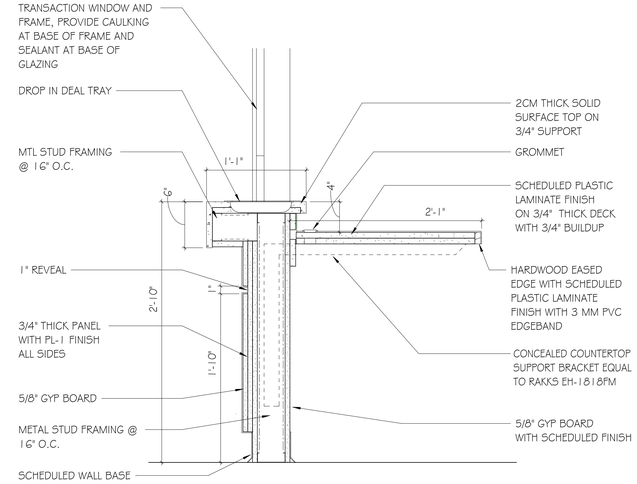
G9 UNDER-CABINET LIGHTING
SCALE: 1 1/2" = 1'-0"



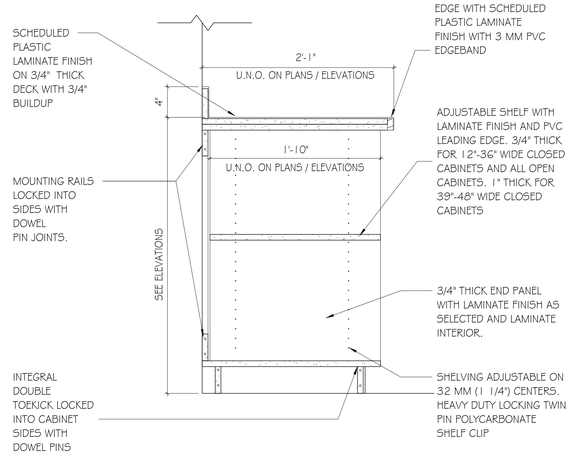
D9 INTEGRAL BASE CABINET
SCALE: 1 1/2" = 1'-0"



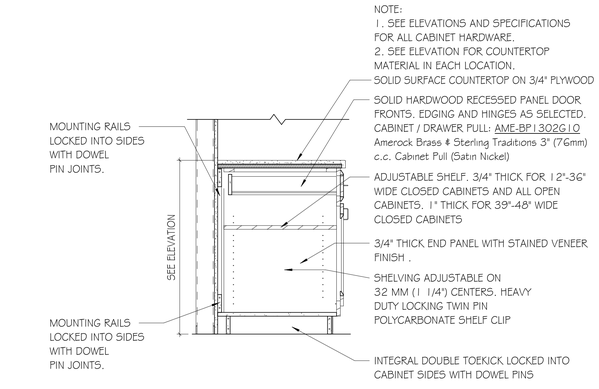
A1 LOBBY WALL SECTION
SCALE: 1 1/2" = 1'-0"



A3 TRANSACTION COUNTER
SCALE: 1 1/2" = 1'-0"



A6 TYP CABINET BASE W/ OPEN SHELVES - PL
SCALE: 1 1/2" = 1'-0"



A10 BOARDROOM CABINET
SCALE: 1" = 1'-0"

GMC
2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM

ISSUE | DATE
BID SET | 09/09/2024

DRAWN BY: Author
CHECKED BY: Checker

TUSCALOOSA COUNTY DHR
PROJECT ADDRESS PENDING

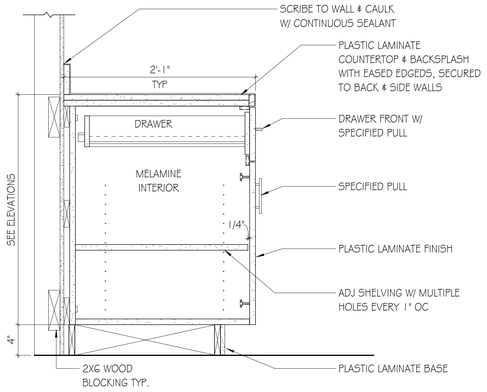
GMC # ABHM220021
SBC # [ENTER VALUE]

STATE OF ALABAMA
REGISTERED ARCHITECT
6544
JACQUELYN D. HART
BIRMINGHAM, ALABAMA

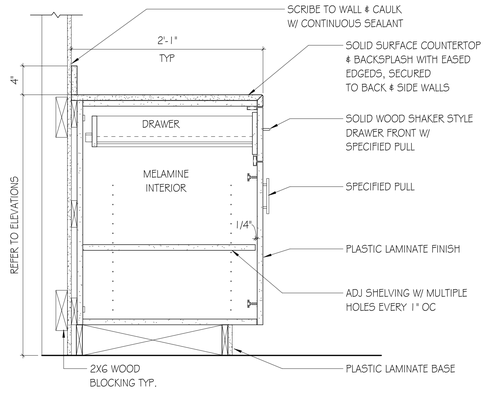
MILLWORK DETAILS

A7.11
sheet of

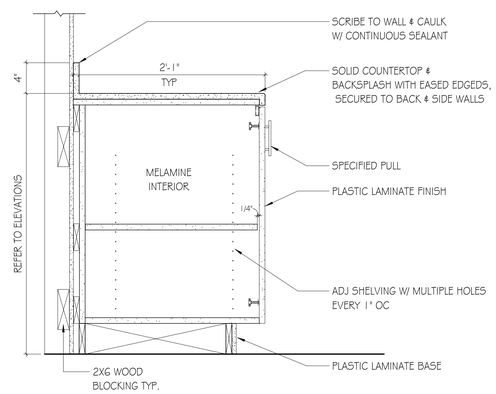
TEMPLATE VERSION: 2021.1
9/11/2024 7:57:18 AM



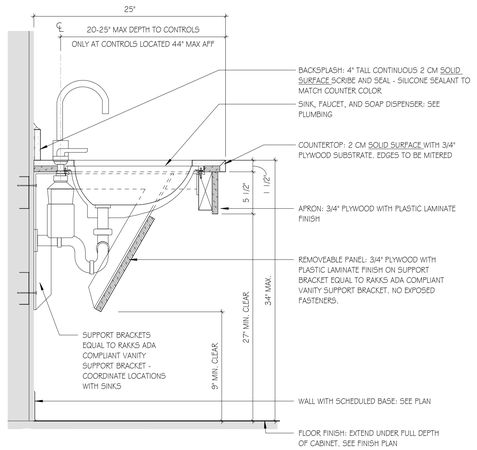
H1 BASE CABINET - DOOR & DRAWER - PL
SCALE: 11/2" = 1'-0"



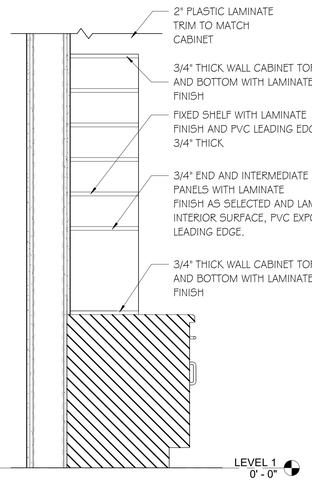
H4 BASE CABINET - DOOR & DRAWER - SS
SCALE: 11/2" = 1'-0"



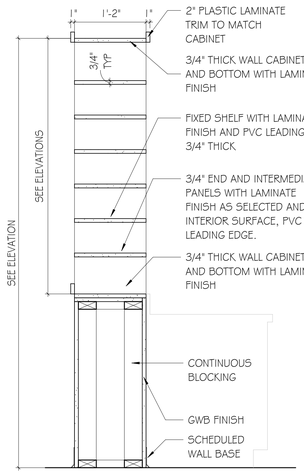
H7 BASE CABINET - DOOR ONLY - SS
SCALE: 11/2" = 1'-0"



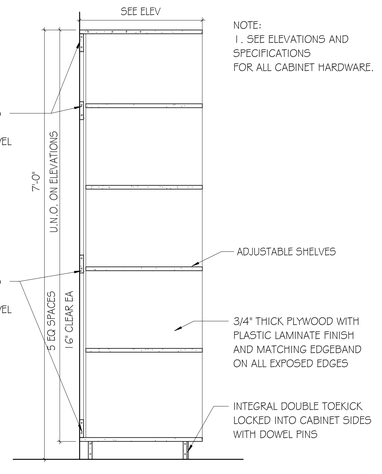
D1 ADA SINKBASE - TYPE VC-U-SSQ-B-25
SCALE: 11/2" = 1'-0"



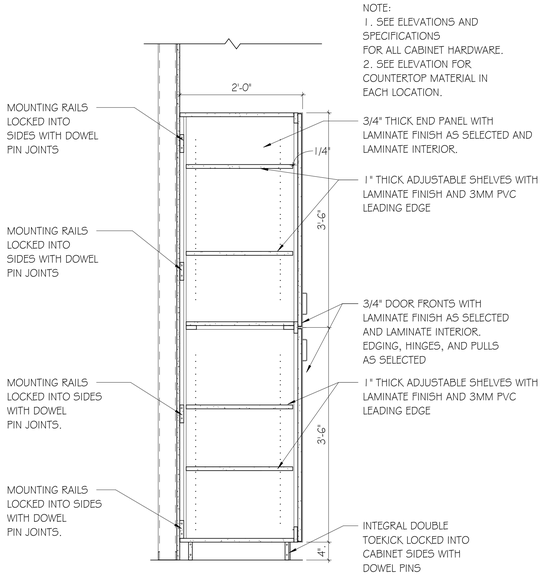
D4 MAIL CAB WITH CAB
SCALE: 1" = 1'-0"



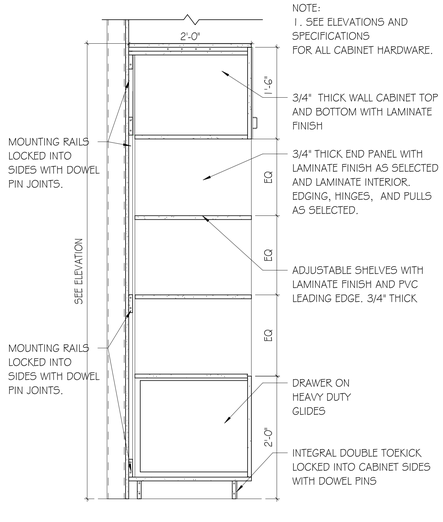
D6 TYP MAIL SLOTS
SCALE: 1" = 1'-0"



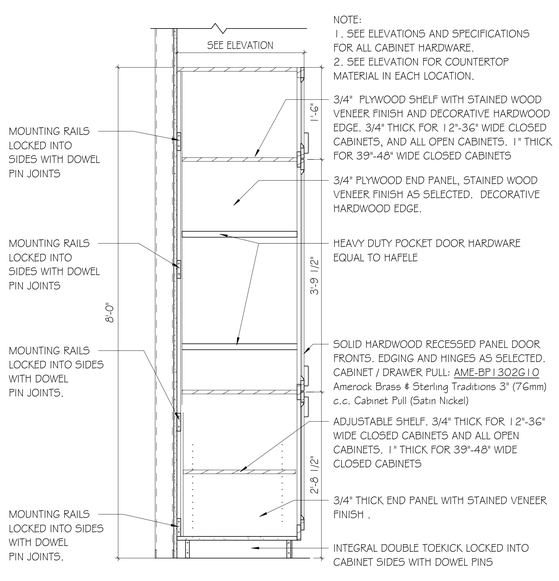
D9 STORAGE SHELVING
SCALE: 1" = 1'-0"



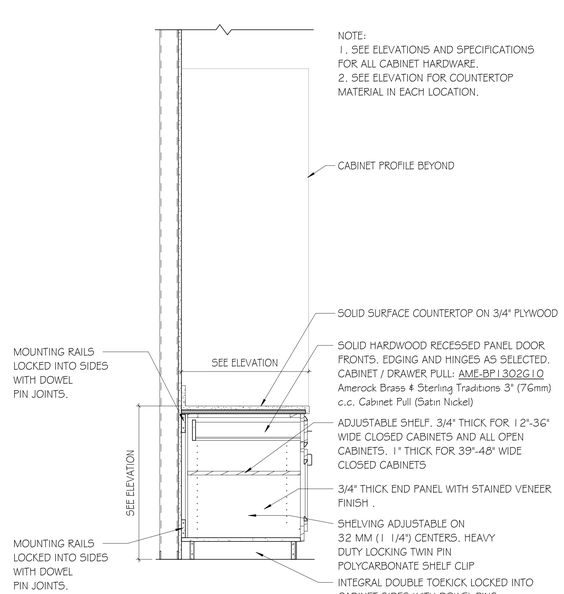
A1 TALL CABINET
SCALE: 1" = 1'-0"



A4 MICROWAVE CABINET
SCALE: 1" = 1'-0"



A7 DIRECTOR CABINET - TALL
SCALE: 1" = 1'-0"



A10 DIRECTOR CABINET
SCALE: 1" = 1'-0"

GMC
2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM

ISSUE | DATE
BID SET | 09/09/2024

DRAWN BY: Author
CHECKED BY: Checker

TUSCALOOSA COUNTY DHR
PROJECT ADDRESS PENDING

GMC # ABHM220021
SBC # [ENTER VALUE]

STATE OF ALABAMA
REGISTERED ARCHITECT
6544
JACQUELYN D. HART
BIRMINGHAM, ALABAMA

MILLWORK DETAILS

A7.12
sheet of

9/11/2024 7:57:21 AM TEMPLATE VERSION: 2021.1

FINISH NOTES

FLOORS:

- REFER TO FLOOR FINISH PLANS FOR FLOOR PATTERN. CONTRACTOR TO NOTIFY INTERIOR DESIGNER BEFORE INSTALLATION OF FLOORING TO REVIEW DESIGN INTENT OF FLOOR PATTERN PLAN

- ALL FLOORING TRANSITIONS INCLUDING TRANSITIONS TO SIMILAR MATERIAL OR REDUCER STRIPS AND OTHER THRESHOLDS TO DISSIMILAR MATERIAL SHALL BE LOCATED AT THE CENTERLINE OF DOOR WHEN IN CLOSED POSITION. COLORS SHALL BE SELECTED IN CA. REFER TO DETAILS FOR TRANSITIONS BETWEEN FLOORING MATERIAL. CONTRACTOR TO PROVIDE TRANSITION SIZES APPROPRIATE FOR THICKNESS

- FLOORING MATERIALS ARE TO BE INSTALLED IN MANNER TO AVOID ALL SLIVER CUTS LESS THAN 4" WIDE @ WALL PERIMETERS & MATERIAL TRANSITIONS. CONTACT DESIGNER IF JOBSITE CONDITIONS DIFFER.

- INSTALL FLOORING UNDER ALL CASEWORK, MILLWORK, EQUIPMENT, & FURNITURE

- ALIGN VERTICAL GROUT LINES OF TILE BASE TO THOSE IN THE FLOOR TILE UNLESS NOTED OTHERWISE

WALLS:

- REFER TO FINISH PLANS & ELEVATIONS FOR LOCATION OF ACCENT PAINT COLORS

- ALL HOLLOW METAL DOOR & WINDOW FRAMES TO BE PAINTED (PNT-2) UNLESS OTHERWISE NOTED

- ALL ACCESS PANELS AND MISCELLANEOUS METAL (RETURN AND AIR SUPPLY GRILLES, EXPANSION JOINTS, ETC.) LOCATED ON WALL SURFACES OR CEILING SURFACES TO BE PAINTED WALL OR CEILING COLOR U.N.O.

- WALL BASE TO BE INSTALLED ON ALL WALLS, U.N.O.

- WALL TILE TO BE INSTALLED ON ALL WALLS IN RESTROOMS U.N.O.

- INSTALL FINISH STRIP EQUAL TO SCHLUTER "JOLLY" AT ALL EXPOSED TILE EDGES & SCHLUTER "QUADEC" AT CORNERS.

- INSTALL COVE TRANSITION EQUAL TO SCHLUTER DILEX-AHK AT ALL TILE FLOOR TO TILE BASE/WALL CONDITIONS

MILLWORK:

- INSTALL 3MM EDGEBAND ON ALL PLASTIC LAMINATE COUNTERTOPS AND CABINETS.

- ALL WINDOWS TO HAVE SOLID SURFACE (SS-X) SILL U.N.O.

- GROMMET LOCATIONS TO BE COORDINATED WITH OWNER

- FIELD VERIFY ALL DIMENSIONS FOR MILLWORK PRIOR TO FABRICATION & INSTALLATION

- ALL EXPOSED ENDS AND EXPOSED INTERIORS OF MILLWORK TO RECEIVE MATCHING LAMINATES

- ALL CABINETS IN RESTROOMS TO BE LOCKABLE

MISC:

- DOOR LABELS ON RATED DOORS ARE TO REMAIN UNPAINTED

- PROVIDE BLOCKING AS REQUIRED AT ALL TELEVISION LOCATIONS - COORDINATE WITH OWNER'S EQUIPMENT

- PROVIDE BLOCKING FOR GRAB BARS AND TOILET ACCESSORIES IN RESTROOMS

- REFER TO RCP FOR ACCENT PAINT COLOR LOCATIONS IN CEILING - WHERE CEILINGS ARE CALLED OUT TO BE PAINTED, BOTH CEILING AND SOFFIT/BULKHEAD WALLS ARE TO BE PAINTED ACCENT COLOR

- BLINDS ARE TAGGED ON THE RCP

- NON ADA TOILET FIXTURES TO BE CENTERED IN STALL

- WALL TILE TO BE INSTALLED TO CEILING ON ALL WALLS

- CAULK ALL DOOR FRAMES, MILLWORK, AND VIEW WINDOW FRAMES AFTER WALLCOVERING INSTALLATION IS COMPLETE. COLOR OF CAULK TO MATCH ADJACENT FINISH.

- ALL PARTIES RESPONSIBLE FOR DELIVERING FINISHES TO THE SITE SHALL CHECK AVAILABILITY OF QUANTITIES AND DELIVERY DATES AS SOON AS BID IS AWARDED

RCP NOTES:

- ALL SPRINKLER HEADS IN FINISHED CEILINGS ALL SHALL BE CENTERED IN CEILING TILE. SPRINKLER HEADS SHALL NOT BE PAINTED.

- INTERIOR CEILING HEIGHTS AS INDICATED ON THE REFLECTED CEILING PLANS.

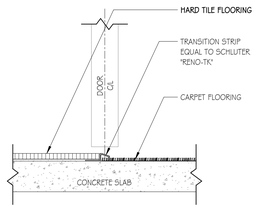
- WHERE EXIT SIGNS ARE LOCATED ABOVE DOORWAYS, CENTER ABOUT DOOR, BUT MAINTAIN MINIMUM OVERHEAD CLEARANCE.

- IN EXPOSED CEILINGS (EXP-2) ALL EXPOSED ELEMENTS NOT LIMITED TO TRUSS SYSTEM, ACOUSTICAL DECK, DUCTWORK, CONDUIT, AND PIPING TO BE PAINTED

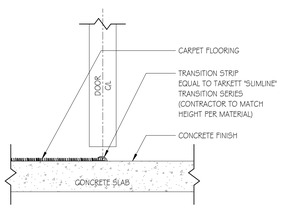
- ALL GYP CEILINGS TO BE PAINTED (PNT-3) UNLESS OTHERWISE NOTED IN RCP

- DO NOT INSTALL CEILING TILE LESS THAN 6" IN ANY DIRECTION - WHEN POSSIBLE CENTER TILE IN ROOM.

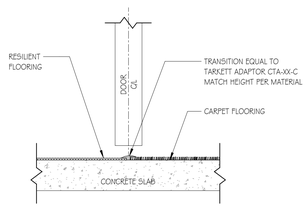
- PROVIDE 6% IN 2' X 4' SIZE FOR EACH TYPE OF CEILING TILE TO REMOVE SLIVER TILES FROM CEILINGS WHERE NECESSARY



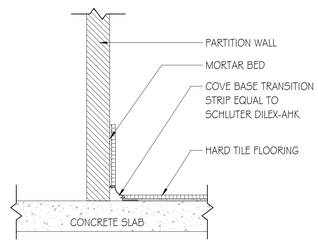
E1 HARD TILE TO CARPET
SCALE: 3" = 1'-0"



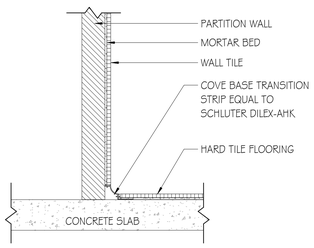
E2 CARPET TO CONCRETE
SCALE: 3" = 1'-0"



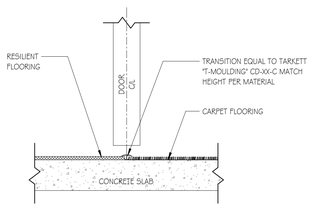
E5 4.5 MM LVT TO CARPET
SCALE: 3" = 1'-0"



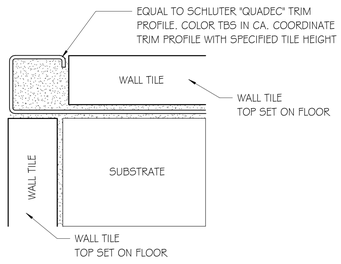
C1 HTF to HTB
SCALE: 3" = 1'-0"



C2 METAL COVE - HTW TO HTF
SCALE: 3" = 1'-0"



C5 5 MM LVT TO CARPET
SCALE: 3" = 1'-0"



A1 SCHLUTER QUADEC TRIM AT EXPOSED HTW CORNERS
SCALE: 12" = 1'-0"

FINISH LEGEND

FLOOR

NUMBER	TYPE	DETAIL DESCRIPTION
CPT-1	CARPET	MANUFACTURER: TARKETT STYLE NAME: FALLOW GROUND - 11598 COLOR: 62902 TOASTED TAUPE SIZE: 24" x 24" INSTALLATION: VERTICAL ASHLAR LOCATION: OFFICES & CORRIDORS
CPT-2	CARPET	MANUFACTURER: EF CONTRACT STYLE NAME: VEIL COLOR: VLT57 - OVERCAST SIZE: 12" x 48" INSTALLATION: ASHLAR LOCATION: CONFERENCE ROOMS
LVT-1	LUXURY VINYL TILE	MANUFACTURER: INTERFACE STYLE NAME: STUDIO SET COLOR: A00706 MUSHROOM SIZE: 25CM x 1M INSTALLATION: 1/3 LAP LOCATION: FAMILY VISITATION
LVT-2	LUXURY VINYL TILE	MANUFACTURER: BENTLEY STYLE NAME: COLONNADE COLOR: BRUTALIST SIZE: 18" x 36" INSTALLATION: 1/3 LAP LOCATION: SEE SCHEDULE
HTF-1	HARD FLOOR TILE	MANUFACTURER: DALTILE STYLE NAME: CONSULATE COLOR: PREMIER GREY SIZE: 12" x 24" INSTALLATION: BRICK GROUT: TBD LOCATION: RESTROOMS
HTF-2	HARD FLOOR TILE	MANUFACTURER: ATLAS CONCORDE STYLE NAME: PATH COLOR: SILVER PEARL SIZE: 12" x 24" INSTALLATION: BRICK GROUT: TBD LOCATION: LOBBY & BREAK ROOM
SC-1	SEALED CONCRETE	CLEAR SEALED ON CLEANED CONCRETE PROVIDED BY CONCRETE SUB-CONTRACTOR TYP.
WOC-1	WALK OFF CARPET TILE	MANUFACTURER: MANNINGTON STYLE: RUFFIAN II COLOR: BROWN BRANCHES SIZE: 24" X 24" LOCATION: VESTIBULE

BASE

NUMBER	TYPE	DETAIL DESCRIPTION
RB-1	RUBBER BASE	MANUFACTURER: TARKETT STYLE NAME: BASEWORKS THERMOSET COLOR: 29 MOON ROCK SIZE: 4" W/ COVE LOCATION: WHERE SCHEDULED
HTB-1	HARD TILE BASE	MANUFACTURER: ATLAS CONCORDE STYLE NAME: PATH COLOR: SILVER PEARL SIZE: 4" H WITH METAL SCHLUTER COVE TRANSITION PIECE GROUT: TBD LOCATION: LOBBY & BREAK ROOM
MB-1	METAL BASE	MANUFACTURER: SCHLUTER STYLE NAME: DESIGNBASE-SL COLOR: SATIN ANODIZED ALUMINUM SIZE: 3 1/8" H LOCATION: RECEPTION DESK

WALL

NUMBER	TYPE	DETAIL DESCRIPTION
PNT-1	[GENERAL/MAIN PAINT]	MANUFACTURER: SHERWIN WILLIAMS COLOR: CRUSHED ICE LOCATION: MAIN
PNT-2	[TRIM PAINT]	MANUFACTURER: SHERWIN WILLIAMS COLOR: PORPOISE LOCATION: TRIM
PNT-3	[MAIN CEILING/SOFFIT PAINT]	MANUFACTURER: SHERWIN WILLIAMS COLOR: PURE WHITE LOCATION: GYP CEILINGS
PNT-4	[PAINT]	MANUFACTURER: SHERWIN WILLIAMS COLOR: AMAZING GRAY LOCATION: CONFERENCE ROOMS
HTW-1	HARD WALL TILE	MANUFACTURER: DALTILE STYLE NAME: PORTFOLIO COLOR: ICE SIZE: 12" x 24" INSTALLATION: MONOLITHIC GROUT: TBD LOCATION: RESTROOMS
HTW-2	HARD WALL TILE	MANUFACTURER: SOUTH CYPRESS STYLE NAME: POWDER COLOR: WOOL CRACKLE SIZE: 2.5" x 10" INSTALLATION: BRICK GROUT: TBD LOCATION: BREAKROOMS
HTW-3	HARD WALL TILE	MANUFACTURER: PORCELANOSA STYLE/COLOR: ELEMENTS PATTERN WIND SIZE: 12" x 12" MOSAIC GROUT: TBD LOCATION: BREAKROOMS
HTW-4	HARD WALL TILE	MANUFACTURER: DALTILE STYLE: MINUTE MOSAIX - NATURAL STONE COLOR: CARRARA WHITE M701 SIZE: RANDOM MOSAIC GROUT: TBD LOCATION: RESTROOM ACCENT
WP-1	WALL PROTECTION	MANUFACTURER: KOROSEAL STYLE: KOROGARD COLOR: RELAXED GRAY (5A) SHEET SIZE: 4' X 8' THICKNESS: 0.040" LOCATION: LOBBY WHERE NOTED ON FINISH PLAN

MISC

NUMBER	TYPE	DETAIL DESCRIPTION
PL-1	PLASTIC LAMINATE [TYP. FACE]	MANUFACTURER: FORMICA COLOR: SMOKEY BROWN PEAR FINISH: OILED WOOD FINISH LOCATION: BREAKROOMS & WORKROOMS
PL-2	PLASTIC LAMINATE [TYP TOP]	MANUFACTURER: WILSONART COLOR: WHITE CYPRESS LOCATION: RESTROOMS
PL-3	PLASTIC LAMINATE [TYP TOP]	MANUFACTURER: WILSONART COLOR: GREY LOCATION: WORKROOMS
SS-1	SOLID SURFACE	MANUFACTURER: WILSONART COLOR: GOLDEN SAIL THICKNESS: 1/2" LOCATION: BREAKROOMS
SS-2	SOLID SURFACE	MANUFACTURER: WILSONART COLOR: YUKON RIVERSTONE THICKNESS: 1/2" LOCATION: RESTROOMS
SS-3	SOLID SURFACE	MANUFACTURER: LX HAUSYS HIMACS SOLID SURFACE COLOR: AURORA GREY M608 THICKNESS: 1/2" LOCATION: RECEPTION DESK
TS-1	TACKABLE SURFACE FABRIC	MANUFACTURER: CARNEGIE STYLE NAME: XOREL - METEOR COLOR: 766 INSTALLATION: ON 1/2" CORK LOCATION: RECEPTION DESK
TP-1	TOILET PARTITIONS	MANUFACTURER EQUAL TO: ASI GLOBAL STYLE NAME: BLACK CORE PHENOLIC TOILET PARTITIONS COLOR: SILVER GRAY 3000 LOCATION: RESTROOMS
CG-1	CORNER GUARDS	MANUFACTURER: INPRO STYLE NAME: TAPE ON CORNER GUARD RIGID VINYL COLOR: SHARKSKIN SIZE: FULL HEIGHT LOCATION: LOBBY AND ALL EXPOSED GYP CORNERS IN CORRIDORS
CR-1	CHAIR RAILS	MANUFACTURER: EQUAL TO EF SAN JUAN STYLE NAME: C4047 COLOR: PNT-1 LOCATION: SEE FINISH SCHEDULE
CRN-1	CROWN MOULDING	MANUFACTURER: EQUAL TO EF SAN JAUN STYLE NAME: CR3001 COLOR: PNT-1 LOCATION: SEE FINISH SCHEDULE
BLINDS	WINDOW BLINDS	PRODUCT EQUAL TO FAUX WOOD HORIZONTAL COLLECTION STYLE: 2" BLINDS COLOR: TBD LOCATION: TAGGED AS WB-1 IN RCP
SCHLUTER	SCHLUTER COVE PROFILE	PRODUCT EQUAL TO: SCHLUTER DILEX-AHK LOCATION: ALL HTF TO HTB/HTW CONDITIONS
SCHLUTER	SCHLUTER EDGE PROFILE	PRODUCT EQUAL TO: SCHLUTER JOLLY LOCATION: ALL EXPOSED TILE EDGES & CORNERS

SPECIALTY EQUIPMENT SCHEDULE

ID	DESCRIPTION	OFCI / CFCI
S1	RESIDENTIAL WASHER	CFCI
S2	RESIDENTIAL DRYER	CFCI
S3	COFFEE MAKER - BY OWNER	OFCI
S4	MICROWAVE	CFCI
S8	REFRIGERATOR/FREEZER - SIDE BY SIDE	CFCI
S9	ICE MAKER - COORDINATE PLUMBING & ELEC	CFCI
S10	VENDING MACHINE - COORDINATE ELEC	CFCI
S32	TV - WALL MOUNTED - OWNER FURNISHED - GC TO COORDINATE POWER, DATA, WALL BLOCKING	OFCI
S33	TV - WALL MOUNTED - OWNER FURNISHED - GC TO COORDINATE POWER, DATA, WALL BLOCKING	OFCI
WB-1	WINDOW COVERINGS - MANUAL 2" FAUX WOOD BLIND	CFCI

TOILET ACCESSORIES SCHEDULE

ID	DESCRIPTION	OFCI / CFCI
TA01	DOUBLE TOILET TISSUE DISPENSER	CFCI
TA06	PAPER TOWEL DISP	OFCI
TA11	WASTE RECEPTACLE, SURFACE MOUNT, LARGE	CFCI
TA15	SOAP DISPENSER, SURFACE-MOUNT	OFCI
TA20	18" VERTICAL GRAB BAR	CFCI
TA21	36" HORIZONTAL GRAB BAR	CFCI
TA22	42" HORIZONTAL GRAB BAR	CFCI
TA23	FRAMED MIRROR	CFCI
TA24	24" HORIZONTAL GRAB BAR	CFCI
TA25	12" HORIZONTAL GRAB BAR	CFCI
TA26	ROBE HOOK	CFCI
TA29	SANITARY NAPKIN RECEPTACLE	CFCI
TA45	URINAL PARTITION SCREEN	HIDE
TA50	ADA COMPLIANT HAND DRYER	CFCI
TA55	DIAPER CHANGING STATION, SURFACE-MOUNT	CFCI
TA58	UNDERLAVATORY GUARD	CFCI
TA60	MOP & BROOM HOLDER WITH UTILITY SHELF	CFCI

GMC
2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM

ISSUE DATE
BID SET 09/09/2024

DRAWN BY: Author
CHECKED BY: Checker

TUSCALOOSA COUNTY DHR
PROJECT ADDRESS PENDING

GMC # ABHM220021
SBC # [ENTER VALUE]

STATE OF ALABAMA · JACQUELYN D. HART · 6544 · REGISTERED ARCHITECT · BIRMINGHAM, ALABAMA

FINISH LEGEND AND DETAILS

A8.01
sheet of

9/11/2024 7:57:24 AM TEMPLATE VERSION: 2021.1

ROOM FINISH SCHEDULE

ROOM #	ROOM NAME	FLOOR	BASE	WALL	CABINET	COUNTERTOP	COMMENTS
1000	VESTIBULE	WOC-1	RB-1	PNT-1	-	-	
1001	LOBBY	HTF-2	HTB-1	PNT-1, WP-1, HTW-1	PL-1	SS-3	CHAIR RAIL ALL WALLS, CORNER GUARDS ALL EXPOSED GYP CORNERS
1002	CORRIDOR	CPT-1	RB-1	PNT-1	-	-	CORNER GUARDS ALL EXPOSED GYP CORNERS
1003	TRAINING	CPT-2	RB-1	PNT-4	PL-1	PL-3	CHAIR RAIL ALL WALLS
1004	STORAGE	LVT-2	RB-1	PNT-1	PL-1		
1005	OFFICE SUPR	CPT-1	RB-1	PNT-1	-	-	
1006	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1007	WORKROOM	LVT-2	RB-1	PNT-1	PL-1	PL-3	
1008	OFFICE SUPR	CPT-1	RB-1	PNT-1	-	-	
1009	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1010	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1011	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1012	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1013	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1014	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1015	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1016	OFFICE SUPR	CPT-1	RB-1	PNT-1	-	-	
1017	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1018	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1019	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1020	OFFICE SUPR	CPT-1	RB-1	PNT-1	-	-	
1021	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1022	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1023	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1024	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1025	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1026	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1027	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1028	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1029	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1030	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1031	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1032	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1033	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1034	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1035	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1036	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1037	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1038	OFFICE SUPR	CPT-1	RB-1	PNT-1	-	-	
1039	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1040	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1041	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1042	CENTRAL SUPPLY	LVT-2	RB-1	PNT-1	PL-1	-	
1043	FIRE RISER	SC-1	RB-1	PNT-1	-	-	
1044	OFFICE SUPR	CPT-1	RB-1	PNT-1	-	-	
1045	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1046	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1047	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1048	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1049	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1050	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1051	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1052	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1053		CPT-1	RB-1	PNT-1	-	-	
1054	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1055	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1056	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1057	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1058	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1059	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1060	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1061	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1062	OFFICE SUPR	CPT-1	RB-1	PNT-1	-	-	
1063	WORKROOM	LVT-2	RB-1	PNT-1	PL-1	PL-3	
1064	LEGAL OFFICE	CPT-1	RB-1	PNT-1	-	-	
1065	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1066	LEGAL OFFICE	CPT-1	RB-1	PNT-1	-	-	
1067	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1069	LEGAL OFFICE	CPT-1	RB-1	PNT-1	-	-	
1070	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1071	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1072	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1073	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1074	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1075	OFFICE SUPR	CPT-1	RB-1	PNT-1	-	-	
1076	ILP STORAGE	LVT-2	RB-1	PNT-1	PL-1	-	
1077	IDF	SC-1	RB-1	PNT-1	-	-	
1078	CAR SEAT STORAGE	LVT-2	RB-1	PNT-1	PL-1	-	
1079	EL	SC-1	RB-1	PNT-1	-	-	
1080	FAMILY VISITATION 1	LVT-1	RB-1	PNT-1	PL-1	PL-3	
1081	OBSERVATION	CPT-1	RB-1	PNT-1	PL-1	PL-3	
1082	MEETING	CPT-2	RB-1	PNT-4	-	-	CHAIR RAIL ALL WALLS
1083	FAMILY VISITATION 2	LVT-1	RB-1	PNT-1	PL-1	PL-3	
1084	FAMILY RR	HTF-1	SCHLUTER COVE	HTW-1, HTW-4 ACCENT	PL-2	SS-2	TILE & ACCENT STRIP ALL WALLS
1085	FAMILY VISITATION 3	LVT-1	RB-1	PNT-1	PL-1	PL-3	
1086	MECHANICAL	SC-1	RB-1	PNT-1	-	-	
1087	WORKROOM	LVT-2	RB-1	PNT-1	PL-1	PL-3	
1088	ELEC	SC-1	RB-1	PNT-1	-	-	
1089	JAN	SC-1	RB-1	PNT-1	-	-	
1090	SERVER	SC-1	RB-1	PNT-1	-	-	
1100	LAUNDRY	HTF-1	HTB-1	PNT-1	PL-2	SS-2	
1101	RESTROOM	HTF-1	SCHLUTER COVE	HTW-1, HTW-4 ACCENT	PL-2	SS-2	TILE & ACCENT STRIP ALL WALLS
1102	BREAK	HTF-2	HTB-1	PNT-1, HTW-2 & HTW-3 BACKSPLASH	PL-1	SS-1	
1103	BOARD	CPT-2	RB-1	PNT-4	PL-1	PL-3	CHAIR RAIL & CROWN MOULDING ALL WALLS
1104	ELEC	SC-1	RB-1	PNT-1	-	-	
1105	STORAGE	LVT-2	RB-1	PNT-1	PL-1	-	
1106	DIRECTOR'S OFFICE	CPT-1	RB-1	PNT-1	PL-1	PL-3	CHAIR RAIL & CROWN MOULDING ALL WALLS
1107	STOR	CPT-1	RB-1	PNT-1	PL-1		

ROOM FINISH SCHEDULE

ROOM #	ROOM NAME	FLOOR	BASE	WALL	CABINET	COUNTERTOP	COMMENTS
1108	DIR RR	HTF-1	SCHLUTER COVE	HTW-1, HTW-4 ACCENT	PL-2	SS-2	TILE & ACCENT STRIP ALL WALLS
1109	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1110	STORAGE	LVT-2	RB-1	PNT-1	PL-1	-	
1111	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1112	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1113	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1114	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1115	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1116	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1117	FINANCIAL	CPT-1	RB-1	PNT-1	-	-	
1118	STORAGE	CPT-1	RB-1	PNT-1	-	-	
1119	OFFICE SDHR TANF	CPT-1	RB-1	PNT-1	-	-	
1120	OFFICE SDHR CS	CPT-1	RB-1	PNT-1	-	-	
1121	OFFICE SDHR QA	CPT-1	RB-1	PNT-1	-	-	
1122	OFFICE SDHR CS	CPT-1	RB-1	PNT-1	-	-	
1123	OFFICE SDHR AUDIT	CPT-1	RB-1	PNT-1	-	-	
1124	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1125	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1126	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1127	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1128	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1129	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1130	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1131	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1132	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1133	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1134	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1135	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1136	OFFICE SUPR	CPT-1	RB-1	PNT-1	-	-	
1137	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1138	OFFICE SUPR	CPT-1	RB-1	PNT-1	-	-	
1139	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1140	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1141	OFFICE SUPR	CPT-1	RB-1	PNT-1	-	-	
1142	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1143	WORKROOM	LVT-2	RB-1	PNT-1	PL-1	PL-3	
1144	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1145	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1146	OFFICE SUPR	CPT-1	RB-1	PNT-1	-	-	
1147	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1148	OFFICE SUPR	CPT-1	RB-1	PNT-1	-	-	
1149	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1150	IDF	LVT-2	RB-1	PNT-1	-	-	
1151	OFFICE SUPR	CPT-1	RB-1	PNT-1	-	-	
1152	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1153	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1154	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1155	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1156	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1157	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1158	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1159	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1160	WORK ROOM	LVT-2	RB-1	PNT-1	PL-1	PL-3	
1161	OFFICE SUPR	CPT-1	RB-1	PNT-1	-	-	
1162	OFFICE SUPR	CPT-1	RB-1	PNT-1	-	-	
1163	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1164	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1165	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1166	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1167	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1168	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1169	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1170	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1171	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1172	OFFICE SUPR	CPT-1	RB-1	PNT-1	-	-	
1173	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1174	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1175	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1176	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1177	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1178	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1179	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1180	OFFICE SUPR	CPT-1	RB-1	PNT-1	-	-	
1181	WORKROOM	LVT-2	RB-1	PNT-1	PL-1	PL-3	
1182	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1183	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1184	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1185	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1186	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1187	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1188	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1189	MEETING	CPT-2	RB-1	PNT-4	-	-	CHAIR RAIL ALL WALLS
1190	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1191	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1192	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1194	OFFICE	CPT-1	RB-1	PNT-1	-	-	
1195	OFFICE SUPR	CPT-1	RB-1	PNT-1	-	-	
1196	INTAKE	CPT-1	RB-1	PNT-1	-	-	
1197	ISP MTG	CPT-2	RB-1	PNT-4	-	-	CHAIR RAIL ALL WALLS
1200	CLERICAL/MAIL	LVT-2	RB-1	PNT-1	PL-1	SS-3	
1201	CS	LVT-2	RB-1	PNT-1	PL-1	SS-3	
1202	MAIL	LVT-2	RB-1	PNT-1	PL-1	PL-3	
1203	CENTRAL FILE ROOM	LVT-2	RB-1	PNT-1	PL-1	PL-3	
1204	CH FILE	LVT-2	RB-1	PNT-1	-	-	
1205	CS / CAN FILE	LVT-2	RB-1	PNT-1	-	-	
1206	WOMENS	HTF-1	SCHLUTER COVE	HTW-1, HTW-4 ACCENT	PL-2	SS-2	TILE & ACCENT STRIP ALL WALLS
1206A	STOR	LVT-2	RB-1	PNT-1	-	-	
1207	MENS	HTF-1	SCHLUTER COVE	HTW-1, HTW-4 ACCENT	PL-2	SS-2	TILE & ACCENT STRIP ALL WALLS
1301	MENS	HTF-1	SCHLUTER COVE	HTW-1, HTW-4 ACCENT	PL-2	SS-2	TILE & ACCENT STRIP ALL WALLS
1302	WOMENS	HTF-1	SCHLUTER COVE	HTW-1, HTW-4 ACCENT	PL-2	SS-2	TILE & ACCENT STRIP ALL WALLS

GMC
2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM

ISSUE | DATE
BID SET | 09/09/2024

DRAWN BY: Author
CHECKED BY: Checker

TUSCALOOSA COUNTY DHR
PROJECT ADDRESS PENDING

GMC # ABHM220021
SBC # [ENTER VALUE]

STATE OF ALABAMA · JACQUELYN D. HART · 6544 · REGISTERED ARCHITECT · BIRMINGHAM, ALABAMA

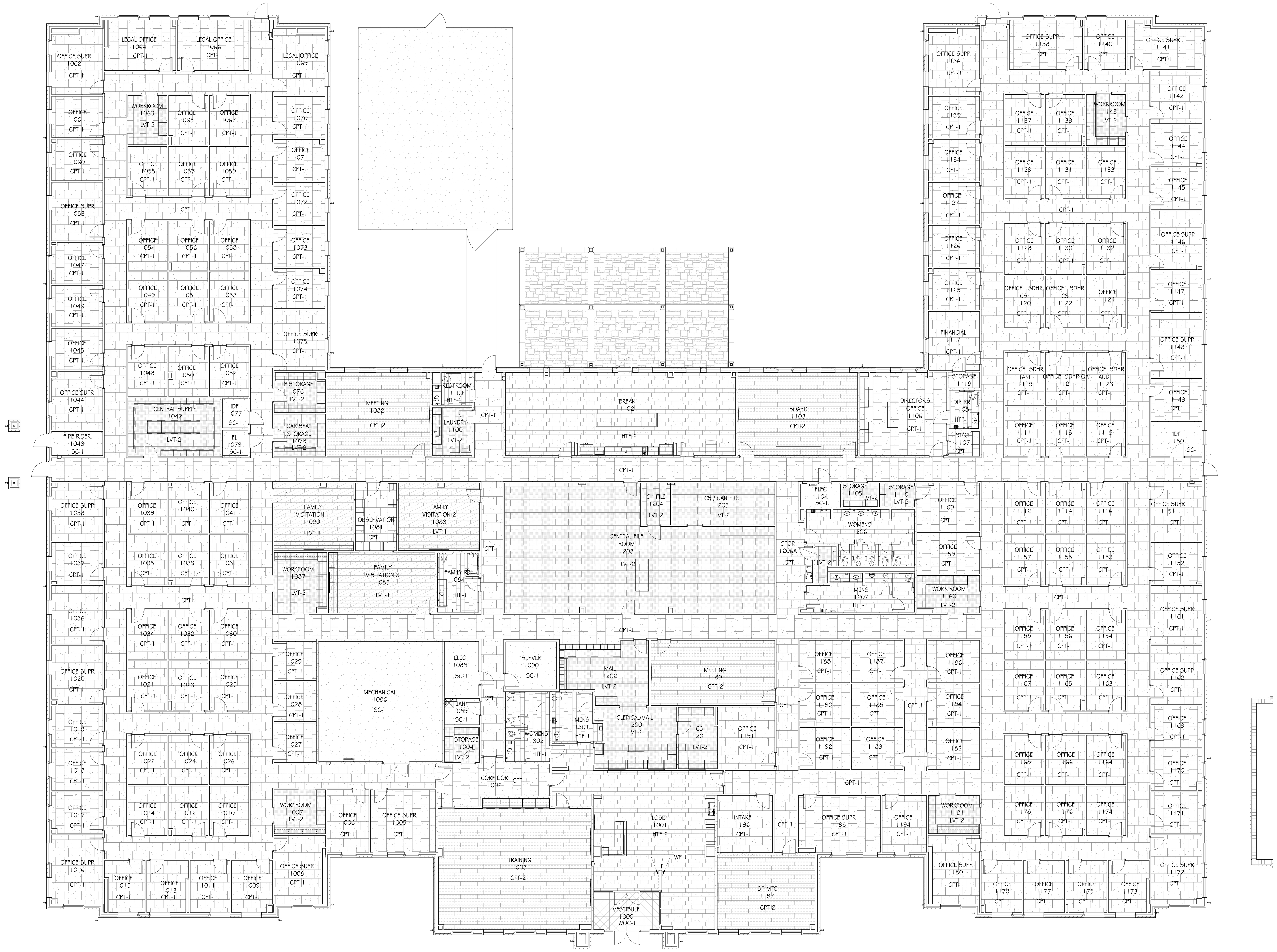
FINISH SCHEDULE

A8.02
sheet of

9/11/2024 7:57:27 AM TEMPLATE VERSION: 2021.1

1 2 3 4 5 6 7 8 9 10 11 12

K J H G F E D C B A



A4 FINISH PLAN
SCALE: 3/32" = 1'-0"

GMC

2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM

ISSUE	DATE
BID SET	09/09/2024

DRAWN BY: Author
CHECKED BY: Checker

TUSCALOOSA COUNTY DHR
PROJECT ADDRESS PENDING

GMC # ABHM220021
SBC # [ENTER VALUE]

STATE OF ALABAMA · GOODWYN MILLS & CAWOOD, INC. · 6544 by JACQUELYN D. HART · BIRMINGHAM, ALABAMA · REGISTERED ARCHITECT

FINISH PLAN

A8.03

sheet ___ of ___

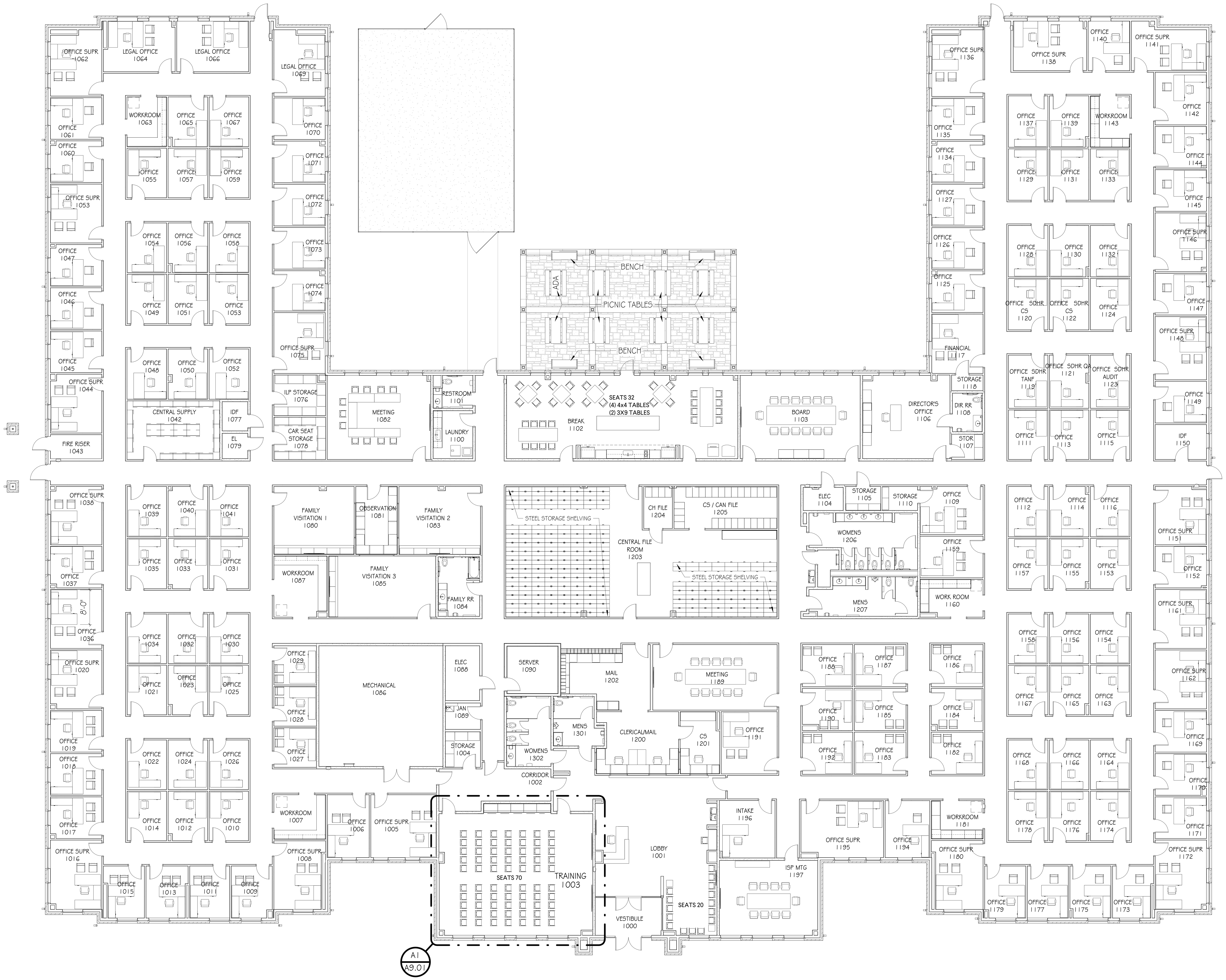
1. MODULAR CASEWORK (BUILT-IN DESKS) AND LOOSE FURNITURE (IE. TABLES AND CHAIRS) ARE SHOWN FOR INFORMATION AND COORDINATION ONLY, AND ARE PROVIDED BY OTHERS.

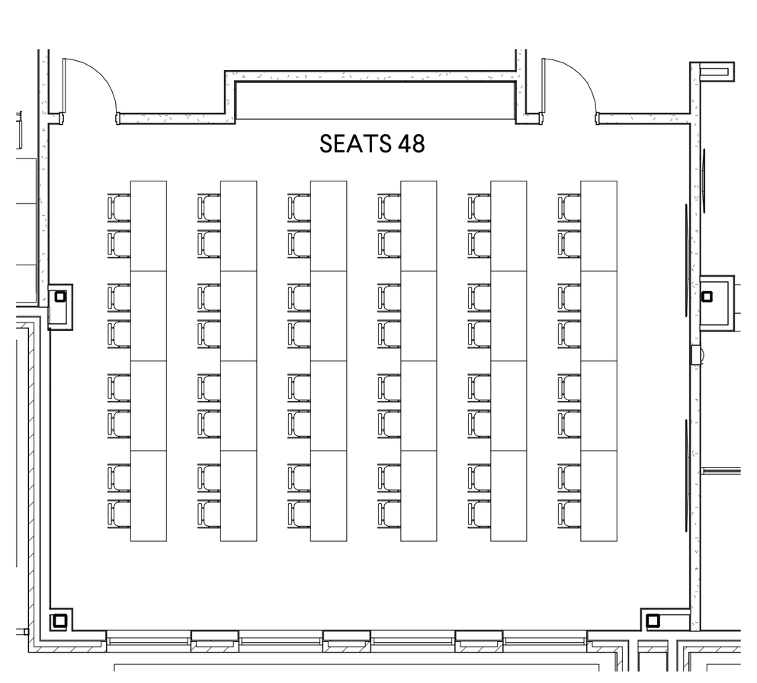
2. GENERAL CONTRACTOR TO PROVIDE AND INSTALL 'STEEL STORAGE SHELVING' PER SPECIFICATION SECTION 10 6741.

3. GENERAL CONTRACTOR TO PROVIDE 'SITE FURNISHINGS' (PICNIC TABLE, BENCH, TRASH CAN) PER SPECIFICATION SECTION 32 3300. ANCHOR TABLES AND BENCHES TO CONCRETE.

4. GENERAL CONTRACTOR TO PROVIDE BLOCKING IN WALLS AT "ABOVE DESK" MODULAR CASEWORK SHELVING LOCATIONS. VERY DIMENSIONS WITH MODULAR CASEWORK MANUFACTURER DRAWINGS PROVIDED BY OTHERS.

5. GENERAL CONTRACTOR TO COORDINATE OUTLET LOCATIONS AS DESKS TO INSURE THEY ARE ACCESSIBLE FROM THE DESK CHAIR AREA.





A1 TRAINING - ALTERNATE LAYOUT
SCALE: 3/32" = 1'-0"

A4 FURNITURE PLAN
SCALE: 3/32" = 1'-0"

GMC

2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM

ISSUE	DATE
BID SET	09/09/2024

DRAWN BY: Author
CHECKED BY: Checker

TUSCALOOSA COUNTY DHR
PROJECT ADDRESS PENDING

GMC # ABHM220021
SBC # [ENTER VALUE]

STATE OF ALABAMA · GOODWYN MILLS & CAWOOD, INC. · 6544 by JACQUELYN D. HART · BIRMINGHAM, ALABAMA · REGISTERED ARCHITECT

FURNITURE PLAN

A9.01
sheet of

TEMPLATE VERSION: 2021.1
9/11/2024 7:57:52 AM

1. GENERAL NOTES:

1.1. CODES AND SPECIFICATIONS:

A. GENERAL BUILDING CODE:

INTERNATIONAL BUILDING CODE, 2021 EDITION.

B. ASCE 7-16: MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES.

C. CONCRETE:

BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE (ACI 318-19)

D. STRUCTURAL STEEL:

SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS, AMERICAN INSTITUTE OF STEEL CONSTRUCTION AISC 360-16. ALLOWABLE STRESS DESIGN (ASD)

E. STEEL DECK:

STEEL DECK INSTITUTE DESIGN STANDARDS FOR NON-COMPOSITE STEEL FLOOR DECK, STEEL ROOF DECK, COMPOSITE STEEL FLOOR DECK-SLABS, AND QUALITY CONTROL AND QUALITY ASSURANCE FOR INSTALLATION OF STEEL DECK ANSI/SDI-17.

F. MASONRY:

1. BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES TMS 402-16.

2. SPECIFICATIONS FOR MASONRY STRUCTURES.

G. COLD-FORMED METAL FRAMING:

NORTH AMERICAN SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS, AMERICAN IRON AND STEEL INSTITUTE AISI S100-16.

1.2. THE GENERAL NOTES ARE NOT A SUBSTITUTE OR A REPLACEMENT FOR THE PROJECT SPECIFICATIONS. THESE NOTES ARE INTENDED AS A GUIDE TO THE DESIGN AND/OR CONSTRUCTION REQUIREMENTS ESTABLISHED FOR THIS PROJECT. NO CONTRACTOR SHOULD ATTEMPT TO DESIGN, BID, OR CONSTRUCT ANY PORTION OF THE WORK HEREIN WITHOUT CONSULTING THE PROJECT SPECIFICATIONS. THE MORE STRINGENT REQUIREMENT SHALL APPLY WHERE CONFLICTS OCCUR BETWEEN THESE NOTES AND THE SPECIFICATIONS, UNLESS A WRITTEN CLARIFICATION IS ISSUED BY THE STRUCTURAL ENGINEER.

1.3. STRUCTURAL DRAWINGS ARE INTENDED TO BE USED IN CONJUNCTION WITH THE DRAWINGS OF OTHER CONSULTANTS AND TRADES. THE CONTRACTOR SHALL COORDINATE THE VARIOUS REQUIREMENTS.

1.4. DO NOT SCALE THESE DRAWINGS.

1.5. ALL DETAILS SHOWN ARE TYPICAL. SIMILAR DETAILS APPLY TO SIMILAR CONDITIONS, UNLESS NOTED.

1.6. CONTRACTOR SHALL REVIEW AND VERIFY ALL DIMENSIONS AND SITE CONDITIONS PRIOR TO FABRICATION/CONSTRUCTION. THE STRUCTURAL ENGINEER AND ARCHITECT SHALL BE NOTIFIED OF ANY DISCREPANCIES PRIOR TO FABRICATION/CONSTRUCTION.

1.7. FIREPROOFING OF STRUCTURAL ELEMENTS IS NOT SHOWN ON THE STRUCTURAL DRAWINGS. REFER TO THE DRAWINGS OF OTHER CONSULTANTS FOR SUCH INFORMATION.

1.8. ALL ARCHITECTURAL AND UTILITY HALFTONE BACKGROUNDS ON PLANS, SECTIONS, AND ELEVATIONS ARE FOR REFERENCE ONLY AND ARE NOT UNDER THE PROFESSIONAL ENGINEERING SEAL RELATED TO THE STRUCTURAL ELEMENTS INDICATED IN THESE DRAWINGS. REFERENCE ARCHITECTURAL AND UTILITY DRAWINGS FOR NON-STRUCTURAL ELEMENTS INDICATED.

2. SPECIAL INSPECTIONS: (BY TESTING AGENCY)

2.1. SPECIAL INSPECTOR (SI) SHALL BE RETAINED AND PAID BY THE OWNER.

2.2. THE SPECIAL INSPECTOR SHALL BE FULLY QUALIFIED, APPROVED BY THE BUILDING OFFICIAL, REGISTERED BY APPLICABLE REGISTRATION BOARD IF REQUIRED AND ACCEPTABLE TO THE ARCHITECT.

2.3. THE DUTIES OF THE SPECIAL INSPECTOR SHALL INCLUDE, BUT ARE NOT LIMITED TO, VERIFICAT ION OF CONSTRUCTION QUALITY CONTROL, TESTING, COMPLIANCE WITH THE CONSTRUCTION DOCUMENTS, BUILDING CODE REQUIREMENTS, AND LOCAL BUILDING DEPARTMENT REQUIREMENTS.

2.4. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE PROPER NOTIFICATION TO THE SPECIAL INSPECTOR AND PROCEED WITH THE CONSTRUCTION ONLY AFTER THE SPECIAL INSPECTOR'S REVIEW AND APPROVAL.

2.5. SPECIAL INSPECTOR'S SHALL KEEP RECORDS OF ALL INSPECTIONS AND TESTING. THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE CODE OFFICIAL, AND TO THE REGISTERED DESIGN PROFESSIONAL OF RECORD. ALL DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION. IF THE DISCREPANCIES ARE NOT CORRECTED, THE DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE CODE OFFICIAL AND THE DESIGN PROFESSIONAL OF RECORD. A FINAL REPORT OF INSPECTIONS DOCUMENTING COMPLETION OF ALL REQUIRED SPECIAL INSPECTION AND CORRECTION OF ANY DISCREPANCIES NOTED IN THE INSPECTIONS SHALL BE SUBMITTED PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY. INTERIM REPORTS SHALL BE SUBMITTED PERIODICALLY WITH MINIMUM FREQUENCY OF TWO WEEKS.

2.6. SPECIAL INSPECTIONS ARE REQUIRED FOR, BUT NOT LIMITED TO, THE ACTIVITIES AS INDICATED ON SHEET S1.02 PER THE 2021 INTERNATIONAL BUILDING CODE.

2.7. FAILURE TO NOTIFY THE SPECIAL INSPECTOR MAY RESULT IN THE CONTRACTOR HAVING TO REMOVE WORK FOR THE PURPOSE OF INSPECTION AT THE CONTRACTOR'S EXPENSE. PREMATURE NOTIFICATION FOR INSPECTIONS WILL RESULT IN AN ADDITIONAL INSPECTION WITH THE EXPENSES AND FEES PAID BY THE CONTRACTOR.

3. CONSTRUCTION AND SAFETY:

3.1. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ALL SAFETY REGULATIONS, PROGRAMS, AND PRECAUTIONS TO ALL WORK, PERSONS, AND PROPERTY ON AND/OR ADJACENT TO THE PROJECT AND SHALL PROTECT AGAINST ANY DAMAGE, INJURY, OR LOSS.

3.2. MEANS AND METHODS OF CONSTRUCTION AND ERECTION OF STRUCTURAL MATERIALS ARE SOLELY THE CONTRACTOR'S RESPONSIBILITY.

3.3. THE CONTRACTOR IS RESPONSIBLE FOR LIMITING THE AMOUNT OF CONSTRUCTION LOAD IMPOSED ON THE STRUCTURE. SUCH LOADS SHALL NOT EXCEED THE DESIGN LOAD OF THE STRUCTURE AT ANY TIME.

3.4. THE STRUCTURE IS DESIGNED TO FUNCTION AS A UNIT UPON COMPLETION, AND ANY TEMPORARY BRACING OR SUPPORT REQUIRED TO ACCOMMODATE THE CONTRACTOR'S MEANS AND METHODS ARE THE RESPONSIBILITY OF THE CONTRACTOR.

4. SUBMITTALS:

4.1. ALL SHOP DRAWINGS MUST BE REVIEWED FOR "APPROVAL" AND STAMPED BY THE GENERAL CONTRACTOR PRIOR TO SUBMITTAL.

4.2. SUBMIT EACH SET OF SHOP DRAWINGS DIGITALLY. THE REVIEWED PDF FILE WILL BE RETURNED TO THE CONTRACTOR

4.3. THE GENERAL CONTRACTOR SHALL SUBMIT, FOR ENGINEER REVIEW, SHOP DRAWINGS FOR THE FOLLOWING ITEMS. ITEMS MARKED (*) SHALL HAVE SHOP DRAWINGS SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE IN WHICH THE PROJECT IS LOCATED. ITEMS MARKED (#) SHALL BE SUBMITTED FOR ENGINEER 'S RECORD ONLY.

A. STRUCTURAL STEEL

B. REINFORCING STEEL

C. STEEL DECK

D. CONCRETE MIX DESIGNS

E. COLD-FORMED METAL FRAMING (*#)

F. SHOP FABRICATED COLD-FORMED METAL TRUSSES (*)

4.4. DESIGN CALCULATIONS: THE GENERAL CONTRACTOR SHALL SUBMIT FOR ENGINEER'S REVIEW TWO SETS OF DESIGN CALCULATIONS SEALED BY A PROFESSIONAL ENGINEER REG ISTERED IN THE STATE IN WHICH THE PROJECT IS LOCATED, FOR THE FOLLOWING ITEMS:

A. STRUCTURAL STEEL CONNECTIONS

B. COLD-FORMED METAL FRAMING

C. SHOP FABRICATED COLD-FORMED METAL TRUSSES

5. DESIGN LOADS:

5.1. DEAD LOADS: ANY CHANGES IN CONSTRUCTION MATERIALS FROM THOSE SHOWN ON THE ARCHITECTURAL OR STRUCTURAL DRAWINGS SHALL BE REPORTED BY THE GENERAL CONTRACTOR TO THE STRUCTURAL ENGINEER FOR VERIFICATION OF LOAD-CARRYING CAPACITY OF THE STRUCTURE.

5.2. LIVE LOADS: LIVE LOAD REDUCTIONS HAVE BEEN APPLIED TO THE STRUCTURAL MEMBERS IN ACCORDANCE WITH THE BUILDING CODE.

ROOF -------------------------- 20

5.3. SNOW LOAD:

A. GROUND SNOW LOAD (Pg.) ---------------- 5 PSF

B. IMPORTANCE FACTOR (I) ---------------- 1.0

C. EXPOSURE FACTOR (Ce) ---------------- 1.0

D. THERMAL FACTOR (Ct) ---------------- 1.0

5.4. WIND LOADS:

A. BASIC WIND SPEED (3-SECOND GUST) ---------------- 108 MPH

B. WIND IMPORTANCE FACTOR (Iw) ---------------- 1.0

C. WIND EXPOSURE ---------------- C

D. INTERNAL PRESSURE COEFFICIENT ---------------- +/- 0.18

E. DESIGN WIND PRESSURE FOR COMPONENTS AND CLADDING ---------------- SEE TABLE ON S1.05

5.5. SEISMIC LOADS:

A. SEISMIC IMPORTANCE FACTOR (Ie)------------ 1.00

B. MAPPED SPECTRAL RESPONSE ACCELERATIONS:

Ss---------------- 0.296

S1---------------- 0.103

SITE CLASS---------------- C

SPECTRAL RESPONSE COEFFICIENTS:

Sds---------------- 0.308

Sd1---------------- 0.164

C. SEISMIC DESIGN CATEGORY---------------- C

BASIC SEISMIC-FORCE RESISTING SYSTEM:

STEEL SYSTEMS NOT SPECIFICALLY DETAILED FOR SEISMIC RESISTANCE, EXCLUDING CANTILEVER COLUMN SYSTEMS

D. DESIGN BASE SHEAR: ---------------- 34 KIPS

E. SEISMIC RESPONSE COEFFICIENT (Cs)------------ 0.088

F. RESPONSE MODIFICATION FACTOR (R)---------- 3

G. ANALYSIS PROCEDURE:

EQUIVALENT LATERAL FORCE METHOD

6. FOUNDATION NOTES:

6.1. GEOTECHNICAL REPORT: FOUNDATION DESIGN IS BASED ON THE GEOTECHNICAL REPORT BY TTL, INC., TITLED "GEOTECHNICAL REPORT, DEPARTMENT OF HUMAN RESOURCE BUILDING, TUSCALOOSA, ALABAMA, TTL PROJECT NO. 000220100284.00". THE GENERAL CONTRACTOR SHALL OBTAIN A COPY OF THE GEOTECHNICAL REPORT FROM THE OWNER AND FOLLOW ALL REQUIREMENTS WITHIN THE RECOMMENDATIONS SECTION.

6.2. MAXIMUM BEARING PRESSURES (PSF):
TYPICAL ---------------- 2500

6.3. ALL FOUNDATION BEARING SURFACES SHALL BE REVIEWED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACING CONCRETE TO ENSURE THEIR COMPLIANCE WITH PRESSURES NOTED. ALL BOTTOM ELEVATIONS ARE ESTIMATED AND MAY BE ADJUSTED IN THE FIELD BY THE GEOTECHNICAL ENGINEER.

6.4. LOW CONSISTENCY SOILS ARE PRESENT AT THE PROJECT SITE AND IS NOTED ACCORDINGLY IN THE GEOTECHNICAL REPORT. CONTRACTOR SHOULD EXPECT UNDERCUTTING OF LOW CONSISTENCY SOILS. THE FINAL EXTENT OF UNDERCUTTING SHOULD BE DETERMINED BY THE GEOTECTNICAL ENGINEER. COMPACTED FILL WILL BE REQUIRED AT UNDERCUT LOCATIONS IN ACCORDANCE WITH GEOTECHNICAL REPORT.

6.5. ALL AREAS TO HAVE SLABS ON GRADE SHALL BE PROOF ROLLED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT UNDER OBSERVATION OF THE GEOTECHNICAL ENGINEER AND APPROVED PRIOR TO PREPARATION FOR CONCRETE PLACEMENT.

6.6. COMPACTED FILL WITHIN THE BUILDING AREA SHALL MEET THE REQUIREMENTS NOTED IN THE GEOTECHNICAL REPORT.

6.7. BACKFILL FOR FOUNDATION AND RETAINING WALLS SHALL BE A FREE DRAINING GRANULAR MATERIAL, SUCH AS SIZE #57 STONE. BACKFILL SHALL BE COMPACTED SUFFICIENTLY TO PREVENT SUBSIDENCE OF SURFACE ADJACENT TO WALL. THE GRANULAR MATERIAL SHALL BE PLACED IN A 45 DEGREE WEDGE EXTENDING FROM THE BASE OF THE WALL (TOP OF FOOTING) TO WITHIN 1'-0" OF FINISHED GRADE.

6.8. EARTH SUPPORTED SLAB:

A. SUBGRADE MODULUS---------------- 100 PCI

7. CONCRETE NOTES:

7.1. CONCRETE COMPRESSIVE STRENGTH AT 28 DAYS:

4000 PSI NORMAL WT. - FOOTINGS, WALLS, SLAB ON GRADE.

7.2. PEDESTAL AND WALL VERTICAL REINFORCING: DOWEL TO FOUNDATION WITH HOOKED BARS OF SAME SIZE AND SPACING AS VERTICAL REINFORCING.

7.3. EARTH SUPPORTED SLABS:

TYPICAL: 4" THICK, REINFORCED WITH 6X6 W2.9/W2.9 WWR (SHEETS) AT TOP THIRD OF SLAB DEPTH, UNLESS NOTED.

FILE ROOM AREA SLAB: 10" THICK, REINFORCED WITH #4@16" EACH WAY, TOP AND BOTTOM. SEE PLAN AND SECTIONS.

MECHANICAL ENCLOSURE AREA: 12" THICK, REINFORCED WITH #5@16" EACH WAY, TOP AND BOTTOM.

7.4. CONCRETING OPERATIONS SHALL COMPLY WITH ACI STANDARDS.

8. CONCRETE REINFORCING STEEL NOTES:

8.1. REINFORCING BARS: ASTM A615 GRADE 60.

8.2. WELDED WIRE REINFORCEMENT (WWR): ASTM A1064. MINIMUM LAP AND EMBEDMENT TO BE THE GREATER OF ONE CROSS WIRE SPACING PLUS 2 INCHES OR 6 INCHES.

8.3. REINFORCING STEEL SHOWN IN SECTIONS IS A SCHEMATIC INDICATION THAT REINFORCING EXISTS. SEE SCHEDULES, SECTION NOTES AND GENERAL NOTES FOR ACTUAL REINFORCING REQUIRED.

8.4. REINFORCING BAR PLACING ACCESSORIES IN ACCORDANCE WITH ACI MANUAL OF STANDARD PRACTICE. WHERE CONCRETE IS EXPOSED IN FINISHED BUILDING, PROVIDE ACCESSORIES WITH RUSTPROOF LEGS. WHERE CONCRETE IS SAND-BLASTED OR BUSH-HAMMERED, PROVIDE ACCESSORIES OF STAINLESS STEEL.

8.5. DETAIL REINFORCEMENT IN ACCORDANCE WITH ACI 315. REINFORCEMENT SHALL NOT BE WELDED UNLESS NOTED OR APPROVED BY THE ENGINEER.

8.6. ALL SPLICES SHALL BE CLASS "B" TENSION LAP SPLICE, UNLESS NOTED.

8.7. ALL REINFORCING MARKED "CONTINUOUS" SHALL BE SPLICED WITH CLASS "B" TENSION LAP SPLICE, UNLESS NOTED.

8.8. PROVIDE CORNER BARS WITH CLASS "B" LAP SPLICE AT ALL FOUNDATION INTERSECTIONS AND CORNERS.

8.9. CONCRETE COVERAGE OF REINFORCEMENT (UNO ON DRAWINGS):

FOOTINGS----------------3" BOTTOM & SIDES, 2" TOP

SLABS NOT EXPOSED TO WEATHER-------3/4" BOTTOM & TOP

SLABS EXPOSED TO WEATHER-#5 OR LESS----------------1 1/2"

#6 OR LARGER----------------2"

8.10. FIELD BENDING OF CONCRETE REINFORCING STEEL IS NOT PERMITTED WITHOUT WRITTEN APPROVAL OF THE STRUCTURAL ENGINEER.

9. STRUCTURAL STEEL NOTES:

9.1. STRUCTURAL STEEL: ASTM A992 FOR WIDE FLANGE SHAPES; ASTM A36 ELSEWHERE.

9.2. HOLLOW STRUCTURAL SECTIONS: ASTM A500, GRADE B.

9.3. WELDED CONNECTIONS: E70XX ELECTRODES, MINIMUM SIZE FILLET WELD 3/16".

9.4. HEADED ANCHOR RODS: ASTM F1554 GRADE 55 AND HEAVY HEX NUT, UNLESS OTHERWISE INDICATED.

9.5. BOLTED CONNECTIONS: ASTM F3125 GRADE A325-N AND SLIP-CRITICAL TYPE A325-SC IN ACCORDANCE WITH AISC "SPECIFICATION FOR STRUCTURAL JOINTS USING HIGH STRENGTH BOLTS." BOLTS THROUGH 4" WIDE BEAM FLANGES SHALL BE 5/8" DIAMETER. OTHER BOLTS SHALL BE 3/4" DIAMETER. USE SLIP-CRITICAL CONNECTIONS FOR WIND FRAMES, MOMENT CONNECTIONS, SKYLIGHT FRAMING AND OTHER CONNECTIONS NOTED AS SLIP-CRITICAL. USE SNUG TIGHT BEARING CONNECTIONS FOR ALL OTHER BOLTED CONNECTIONS.

9.6. BOLTS SHOWN IN SECTIONS AND DETAILS ARE A SCHEMATIC INDICATION THAT BOLTS MAY BE USED. ACTUAL NUMBER, UNLESS SPECIFIED, TO BE IN ACCORDANCE WITH AISC.

9.7. ALL STRUCTURAL STEEL CONNECTIONS NOT SPECIFICALLY DETAILED ON THE DRAWINGS SHALL BE DESIGNED TO RESIST FORCES INDICATED, PROVIDED BY THE CONTRACTOR, UNDER THE DIRECT SUPERVISION OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE IN WHICH THE PROJECT IS LOCATED.

9.8. DESIGN CALCULATIONS FOR THE CONNECTIONS SHALL BE PROVIDED BY THE CONTRACTOR AND DESIGNED BY A PROFESSIONAL ENGINEER. CALCULATIONS SHALL BEAR THE SEAL OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE IN WHICH THE PROJECT IS LOCATED AND SHALL BE SUBMITTED FOR THE FILES OF THE ARCHITECT AND ENGINEER. THE CONNECTION DESIGNER SHALL REVIEW THE CONNECTIONS INDICATED IN THE SHOP DRAWINGS TO ENSURE THE SHOP DRAWINGS CONFORM WITH THE CONNECTION DESIGN CALCULATIONS. SHOP DRAWINGS CONTAINING CONNECTIONS FOR WHICH CALCULATIONS HAVE NOT BEEN RECEIVED WILL BE RETURNED UNCHECKED AS AN INCOMPLETE SUBMITTAL.

9.9. ALL NON-COMPOSITE BEAM CONNECTIONS SHALL BE "SIMPLE SHEAR CONNECTIONS" UNLESS NOTED. WHERE BEAM REACTIONS ARE NOT SHOWN ON THE DRAWINGS, THE CONNECTIONS SHALL BE DESIGNED TO SUPPORT A REACTION EQUAL TO ONE-HALF THE TOTAL UNIFORM LOAD CAPACITY FROM THE MAXIMUM TOTAL UNIFORM LOAD TABLE MULTIPLIED BY A FACTOR OF 1.2 FOR GIVEN SHAPE, SPAN, AND GRADE OF STEEL.

9.10. WHERE BEAM REACTIONS ARE SHOWN ON THE DRAWINGS, THE CONNECTIONS SHALL DEVELOP THE REACTIONS SHOWN. WHERE CONNECTIONS ARE SUBJECT TO ECCENTRICITY, SUCH ECCENTRICITY SHALL BE TAKEN INTO ACCOUNT WHEN DESIGNING AND DETAILING THE CONNECTION.

9.11. FABRICATE AND ERECT ALL STRUCTURAL STEEL IN ACCORDANCE WITH AISC "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES."

9.12. WHERE STEEL BEAMS ARE CONTINUOUS OVER COLUMNS, PROVIDE WEB STIFFENER PLATES ON EACH SIDE OF THE BEAM WEB, OF THICKNESS EQUAL TO THE BEAM FLANGE THICKNESS, LOCATED IN ALIGNMENT WITH COLUMN WEB OR FLANGES OR CENTER LINE OF TUBES AND PIPE COLUMNS.

9.13. ALL COLUMN ANCHOR ROD HOLES TO BE OVERSIZED AS REQUIRED. THE MAXIMUM HOLE SIZE FOR ANCHOR RODS IN BASE PLATES SHALL CONFORM TO THE REQUIREMENTS LISTED IN TABLE 14-2 OF THE AISC STEEL CONSTRUCTION MANUAL. PLATE WASHERS ARE REQUIRED WITH ALL OVERSIZED HOLES AND SHALL MEET THE MINIMUM DIMENSIONS LISTED IN TABLE 14-2.

9.14. THE STEEL FRAME IS "NON-SELF-SUPPORTING". ADEQUATE TEMPORARY SUPPORT MUST BE PROVIDED BY THE CONTRACTOR UNTIL REQUIRED CONNECTIONS OR ELEMENTS ARE IN PLACE.

10. STEEL DECK NOTES:

10.1. DECK PROPERTIES AND ATTACHMENTS SHALL BE IN ACCORDANCE WITH THE STEEL DECK INSTITUTE.

10.2. DECK SHALL BE CONTINUOUS OVER THREE OR MORE SPANS.

10.3. ROOF DECK: WIDE RIB TYPE "WR", STEEL ROOF DECK, 22 GA, 1-1/2" DEEP, GALVANIZED. A TTACH ROOF DECK TO LIGHTGAGE TRUSSES USING #12 TEK SCREWS ON A 36/4 PATTERN WITH 3#10 TEK SCREW SIDELAP FASTENERS PER SPAN.

10.4. LIGHTGAGE METAL FRAMING, SUSPENDED CEILINGS, LIGHT FIXTURES AND DUCTS OR OTHER UTILITIES SHALL NOT BE SUPPORTED BY THE METAL ROOF DECK.

11. MASONRY NOTES:

11.1. MASONRY CONSTRUCTION SHALL CONFORM TO TMS 602 SPECIFICATION.

11.2. COMPRESSIVE STRENGTH OF MASONRY (f'm) SHALL BE 2000 PSI AT 28 DAYS. MASONRY UNIT STRENGTH OF 2000 PSI IS REQUIRED TO ACHIEVE REQUIRED f'm.

11.3. MASONRY GROUT FILL SHALL CONFORM TO ASTM C 476. GROUT EITHER FINE (SAND) OR COURSE (SAND + #76 STONE) AGGREGATE SHALL HAVE A 28 DAY COMPRESSIVE STRENGTH OF 2500 PSI. MASONRY CONCRETE FILL SHALL CONFORM TO THE REQUIREMENTS NOTED UNDER "CONCRETE" IN THE GENERAL NOTES.

11.4. GROUTING

A. ALL BOND BEAMS SHALL BE FILLED WITH GROUT AND REINFORCED AS INDICATED ON THE DRAWINGS (DETAILS OR SCHEDULES). MORTAR FILL IS NOT PERMITTED.

B. ALL MASONRY WALL CELLS OR CAVITIES INDICATED AS REINFORCED SHALL BE GROUTED FOR THE FULL HEIGHT OF THE WALL, UNLESS SPECIFICALLY NOTED OTHERWISE ON THE DRAWINGS. UN-REINFORCED WALLS INDICATED AS GROUTED SHALL BE GROUTED FULL HEIGHT, UNLESS SPECIFICALLY NOTED OTHERWISE. MORTAR FILL IS NOT PERMITTED.

C. ALL MASONRY CELLS OR CAVITIES BELOW GRADE SHALL BE GROUTED SOLID UNLESS SPECIFICALLY NOTED OTHERWISE ON THE DRAWINGS. MORTAR FILL IS NOT PERMITTED.

D. VERTICAL GROUTING SHALL BE LOW LIFT OR HIGH LIFT AS FOLLOWS:

1. LOW LIFT GROUTING SHALL BE USED FOR ALL CAVITY WALLS AND MAY BE USED FOR ALL WALLS AT THE OPTION OF THE CONTRACTOR. LIFTS SHALL NOT EXCEED 4'0" IN HEIGHT.

2. HIGH LIFT GROUTING IS PERMISSIBLE ONLY FOR FILLING OF CELLULAR MASONRY UNITS AND SHALL NOT EXCEED ONE STORY IN HEIGHT. CLEAN OUT HOLES SHALL BE PROVIDED AT THE BASE OF EACH GROUTED CELL.

11.5. MORTAR SHALL CONFORM TO ASTM C 270. MORTAR SHALL BE TYPE "M" FOR BELOW GRADE APPLICATIONS AND TYPE "S" FOR ABOVE GRADE APPLICATIONS AND SHALL HAVE A 28-DAY COMPRESSIVE STRENGTH 1900 PSI.

11.6. ALL MASONRY SHALL BE RUNNING BOND, UNLESS NOTED.

11.7. ALL BLOCK CELLS AND CAVITIES BELOW GRADE SHALL BE FILLED WITH CONCRETE OR GROUT.

11.8. ALL INTERIOR PARTITION WALLS SHALL HAVE A 8" DEEP BOND BEAM WITH 1#5 CONTINUOUS TOP AND BOTTOM AT THE TOP OF THE WALL, UNLESS NOTED OTHERWISE IN DRAWINGS.

11.9. REINFORCING:

A. ALL BARS MARKED "CONTINUOUS" SHALL BE LAPPED PER "MASONRY WALL LAP SPLICE SCHEDULE" IN TYPICAL DETAILS.

B. FOUNDATION DOWELS MAY SLOPE A MAXIMUM OF 1:6 TO ALIGN WITH WALL CAVITIES OR VERTICAL CMU CORES. GREATER SLOPES WILL REQUIRE REPLACEMENT OF THE FOUNDATION DOWELS.

C. SPLICED REINFORCING SHALL BE LAPPED UNDER "REINFORCING" ABOVE OR AS SHOWN ON DRAWINGS, WHICHEVER IS GREATEST. ALL SPLICES SHALL BE WIRED TOGETHER.

D. VERTICAL REINFORCING BARS SHALL HAVE A MINIMUM CLEARANCE OF 3/4" FROM MASONRY AND SHALL BE HELD IN POSITION TOP AND BOTTOM AND AT INTERVALS NOT EXCEEDING 4"-0". ACCESSORIES FOR SUCH SUPPORT SHALL BE USED, PROVIDE "AA WIRE PRODUCTS COMPANY" (OR APPROVED EQUAL) REBAR POSITIONER AA225 OR AA239 FOR VERTICAL BARS AND AA28 FOR HORIZONTAL BARS OR APPROVED EQUAL PRODUCTS FROM OTHER SUPPLIERS.

E. HORIZONTAL JOINT REINFORCING SHALL BE LAPPED NO LESS THAN 6" AT ALL SPLICES, INCLUDING CORNERS AND TEES WHERE NO CONTROL JOINT IS USED.

F. ALL HORIZONTAL JOINT REINFORCING SHALL STOP AT CONTROL JOINTS.

G. HORIZONTAL REINFORCING IN BOND BEAMS SHALL BE CONTINUOUS THROUGH CONTROL JOINTS.

11.10. SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS AND DETAILS OF MASONRY CONTROL JOINTS:

A. PROVIDE MAXIMUM SPACING OF 25'-0" O.C. ALONG CONTINUOUS RUNS OF CONCRETE MASONRY UNITS.

B. CONTROL JOINTS SHALL NOT BE WITHIN 4'-0" FROM ANY CORNER.

11.11. WHEN REINFORCING IS SPECIFIED, PROVIDE AT EACH SIDE OF CONTROL JOINTS, OPENINGS AND WALL ENDS.

11.12. ALL MASONRY WALLS SHOWN ON THE ARCHITECTURAL AND STRUCTURAL DRAWINGS HAVE BEEN DESIGNED TO RESIST THE REQUIRED CODE VERTICAL AND LATERAL FORCES IN THE FINAL CONSTRUCTED CONFIGURATION ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ADEQUATELY BRACE THE WALLS FOR VERTICAL AND LATERAL LOADS THAT COULD POSSIBLY BE APPLIED PRIOR TO COMPLETION OF CONSTRUCTION.

11.13. PROVIDE HORIZONTAL LADDER-TYPE JOINT REINFORCEMENT AT 16" O.C., U.N.O.

12. COLD-FORMED METAL FRAMING NOTES:

12.1. ALL MEMBERS SHALL BE DESIGNED IN ACCORDANCE WITH THE NORTH AMERICAN SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS, AMERICAN IRON AND STEEL INSTITUTE.

12.2. ALL FRAMING MEMBERS SHALL BE FORMED FROM CORROSION-RESISTANT STEEL, CORRESPONDING TO THE REQUIREMENTS OF ASTM A1003, WITH A MINIMUM YIELD STRENGTH OF 33 KSI OR 50 KSI AS INDICATED.

12.3. ALL MEMBERS SHOWN ARE STANDARD DESIGNATIONS OF THE STEEL STUD MANUFACTURERS ASSOCIATION (SSMA).

12.4. DESIGN OF MEMBERS INDICATED IN STRUCTURAL DRAWINGS IS BASED ON MINIMUM PROPERTIES OF PRODUCTS PRODUCED BY "DIETRICH INDUSTRIES, INC." NO SUBSTITUTION OF MATERIALS IS ACCEPTABLE FOR USE WITHOUT PRIOR APPROVAL OF THE STRUCTURAL ENGINEER. SUBSTITUTIONS ARE ACCEPTABLE, SUBJECT TO APPROVAL OF THE STRUCTURAL ENGINEER AND SHALL MEET OR EXCEED ALL PROPERTIES OF PRODUCTS PRODUCED BY THE STEEL STUD MANUFACTURERS ASSOCIATION (SSMA).

12.5. FABRICATOR IS RESPONSIBLE FOR THE DESIGN AND DETAILING OF ALL LIGHTGAGE STEEL FRAMING AND SHALL RETAIN A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED. THE ENGINEER SHALL SEAL AND SIGN BOTH CALCULATIONS AND SHOP DRAWINGS. GENERALLY, CONNECTIONS SHOWN ON THE DRAWINGS ARE SCHEMATIC AND ARE INTENDED ONLY TO SHOW THE RELATIONSHIP OF THE MEMBERS AND INFORMATION FOR PRICING/BIDDING.

12.6. SUBMIT CALCULATIONS AND SHOP DRAWINGS FOR DETAILS, FABRICATION, AND ERECTION OF LIGHTGAGE STEEL FRAMING DRAWINGS SHALL INCLUDE LAYOUT, SPACING, TYPE, MATERIAL/MEMBER PROPERTIES AND ALL DETAILS OF CONNECTIONS FOR ALL LIGHTGAGE STEEL FRAMING INDICATED ON THE STRUCTURAL DRAWINGS.

12.7. SHOP DRAWINGS SHALL BE REVIEWED BY THE CONTRACTOR PRIOR TO SUBMISSION. DRAWINGS SHALL BEAR THE CONTRACTOR'S APPROVAL STAMP ACCEPTING RESPONSIBILITY FOR DIMENSIONS, QUANTITIES AND COORDINATION WITH THE OTHER TRADES.

12.8. ALL FRAMING COMPONENTS SHALL BE CUT SQUARELY FOR ATTACHMENT TO PERPENDICULAR MEMBERS OR AS REQUIRED FOR AN ANGULAR FIT TIGHT AGAINST ABUTTING MEMBERS.

12.9. AXIALLY LOADED STUDS SHALL BE INSTALLED IN A MANNER WHICH WILL ASSURE THAT THEIR ENDS ARE POSITIONED TIGHT AGAINST THE INSIDE OF RUNNER WEBS PRIOR TO FASTENING. PROVIDE WEAK-AXIS HORIZONTAL BRACING AT 36 INCHES MAXIMUM VERTICAL SPACING, BOTH STUD FLANGES. HORIZONTAL BRACING SHALL BE 1-1/2" X 20 GA STRAPS AND CS TYPE RUNNER SOLID BRIDGING AT EACH END OF WALL, ADJACENT TO WALL OPENINGS, AND 8 '-0" O/C MAXIMUM.

12.10. WHERE STUD FRAME TO STRUCTURAL FLOOR OR ROOF MEMBERS SUBJECT TO DEFLECTION FROM OCCUPANT LIVE LOADING, A DEFLECTION CLIP ASSEMBLY SHALL BE PROVIDED AT THE TOP RUNNER TO ACCOMMODATE VERTICAL STRUCTURAL MOVEMENT.

12.11. FASTENING OF COMPONENTS SHALL BE BY SELF-DRILLING SCREWS OR BY WELDING AS DEFINED BELOW U.N.O. ON THE DRAWINGS.

12.12. SCREWED CONNECTIONS:

A. SCREWS SHALL BE TYPE S-12 OR TYPE S-4 FOR ALL FRAMING MEMBERS PER MANUFACTURER'S RECOMMENDATIONS.

B. A MINIMUM OF THREE (3) EXPOSED THREADS SHALL PENETRATE THROUGH ALL JOINED MATERIALS.

C. CORROSION-RESISTANT CADMIUM-PLATED SCREWS SHALL BE USED FOR SCREWS ATTACHING METAL LATH, MASONRY TIES, AND OTHER EXTERIOR MATERIALS.

12.13. CUTTING OF STEEL FRAMING MEMBERS MAY BE DONE WITH A SAW OR CUTTING SHEARS. TORCH CUTTING OF LOAD BEARING MEMBERS IS NOT PERMITTED.

12.14. COMPLETE, UNIFORM, AND LEVEL BEARING SUPPORT SHALL BE PROVIDED FOR THE BOTTOM RUNNER. AT SPLICES WHERE SUPPORT IS NOT COMMON TO BOTH RUNNERS, EITHER BUTT WELD RUNNERS OR USE A STUD SECTION INSERTED IN THE RUNNER AS A SPLICING MEMBER ATTACHED PER MANUFACTURER'S RECOMMENDATIONS. RUNNER INTERSECTIONS SHALL BUTT EVENLY.

12.15. SPACING OF STUDS SHALL HAVE A TOLERANCE OF 1/8" FROM THAT SHOWN ON THE DRAWINGS, PROVIDING THAT THE CUMULATIVE ERROR DOES NOT EXCEED THE REQUIREMENTS OF OTHER MATERIALS OR CONSTRUCTION.

12.16. ALIGNMENT OF STUDS (PLUMBNESS) AND WALLS (STRAIGHTNESS) SHALL BE WITHIN 1/960TH OF THEIR RESPECTIVE HEIGHTS AND LENGTHS.

12.17. STUDS SHALL BE PLUMBED ALIGNED AND SECURELY ATTACHED TO BOTH TOP AND BOTTOM RUNNERS. SPLICES IN STUDS ARE NOT PERMITTED.

12.18. TEMPORARY BRACING WHERE REQUIRED, SHALL BE PROVIDED UNTIL ERECTION IS COMPLETED.

12.19. WHERE MANUFACTURER'S RECOMMENDATIONS FOR ERECTION, ATTACHMENT, ASSEMBLY, BRACING ALIGNMENT OR OTHER REQUIREMENTS ARE MORE STRINGENT THAN INDICATED IN THESE DRAWINGS OR THE PROJECT SPECIFICATIONS, THE MANUFACTURER'S RECOMMENDATIONS SHALL APPLY.

13. PREFABRICATED COLD-FORMED METAL TRUSS NOTES:

13.1. STRUCTURAL PROPERTIES OF TRUSS MEMBERS SHALL BE COMPUTED IN ACCORDANCE WITH AISI "NORTH AMERICAN SPECIFICATION FOR DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS"

13.2. THE TRUSS FABRICATOR IS RESPONSIBLE FOR THE DESIGN AND DETAILING OF ALL PREFABRICATED COLD-FORMED METAL TRUSS FRAMING AND SHALL RETAIN A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED. THE ENGINEER SHALL SEAL AND SIGN BOTH CALCULATIONS AND SHOP DRAWINGS.

13.3. THE TRUSS MANUFACTURER SHALL DESIGN FOR THE FOLLOWING SUPERIMPOSED LOADS (IN ADDITION TO ANY LOADS NOTED ON THE STRUCTURAL DRAWINGS OR OTHER CONSULTANTS/TRADES DRAWINGS):

A. TOP CHORD DEAD LOAD ---------------- 20 PSF

B. BOTTOM CHORD DEAD LOAD ---------------- 10 PSF

C. TOP CHORD LIVE LOAD ---------------- 20 PSF

13.4. DESIGN ROOF TRUSSES TO RESIST THE UPLIFT WIND PRESSURES INDICATED IN THE TABLE ON S1.05. COORDINATE WIND PRESSURES IN TABLE WITH "COMPONENTS AND CLADDING ZONES" DIAGRAM ON S1.05. TRUSSES SHALL BE DESIGNED FOR WIND UPLIFT USING THE FOLLOWING:

A. DEAD LOAD ---------------- 8 PSF

13.5. SUBMIT CALCULATIONS AND SHOP DRAWINGS FOR DETAILS FABRICATION, AND ERECTION OF COLD-FORMED METAL TRUSS FRAMING. DRAWINGS SHALL INCLUDE LAYOUT, SPACING, TYPE, MATERIAL/MEMBER PROPERTIES, TEMPORARY BRACING, PERMANENT BRACING, AND ALL DETAILS OF CONNECTIONS FOR ALL COLD-FORMED METAL TRUSS FRAMING INDICATED ON THE STRUCTURAL DRAWINGS.

13.6. SHOP DRAWINGS SHALL BE REVIEWED BY THE GENERAL CONTRACTOR PRIOR TO SUBMISSION. DRAWINGS SHALL BEAR THE CONTRACTOR'S APPROVAL STAMP ACCEPTING RESPONSIBILITY FOR DIMENSIONS, QUANTITIES, AND COORDINATION WITH THE OTHER TRADES.

13.7. ALL TEMPORARY AND PERMANENT BRACING MEMBERS AND CONNECTIONS REQUIRED FOR PREFABRICATED COLD-FORMED METAL TRUSSES SHALL BE DESIGNED AND DETAILED ON THE TRUSS MANUFACTURER'S ERECTION PLANS. BRACING MEMBERS SHALL BE FURNISHED AND INSTALLED BY THE GENERAL CONTRACTOR.

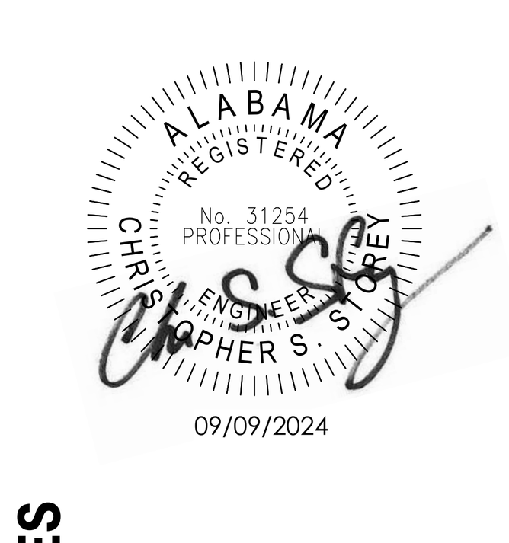
13.8. TEMPORARY BRACING SHALL NOT IMPOSE ANY FORCE ON THE SUPPORTING STRUCTURE. PERMANENT BRACING FORCES SHALL BE TRANSFERRED TO THE ROOF DIAPHRAGM BY THE BRACING DESIGN PROVIDED BY THE TRUSS MANUFACTURER.

TUCKER·JONES
ENGINEERS ASSOCIATED, P.C.
3300 CAHABA ROAD, SUITE 210
BIRMINGHAM, ALABAMA 35223
PHONE: 205.879.5660
FAX: 205.879.5606
PROJECT #22076

GMC
2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM

ISSUE	DATE
BID SET	09/09/2024

DRAWN BY: CSS
CHECKED BY: CSS



TUSCALOOSA COUNTY DHR
Tuscaloosa, Alabama

GMC # ABHM220021

GENERAL NOTES

S1.01

sheet of

9/7/2024 12:36:25 PM

TUCKER·JONES ENGINEERS ASSOCIATED, P.C.
3300 CAHABA ROAD, SUITE 210
BIRMINGHAM, ALABAMA 35223
PHONE: 205.879.5660
FAX: 205.879.5606
PROJECT #22076

2021 IBC - SCHEDULE OF SPECIAL INSPECTIONS

MATERIAL/ACTIVITY	EXTENT	INSTRUCTIONS/FREQUENCY
INSPECTION OF FABRICATORS (IBC 1704.2.5)		
VERIFY FABRICATION/QUALITY CONTROL PROCEDURES	PERIODIC	REVIEW THE QUALITY CONTROL PROCEDURES OF THE FOLLOWING FABRICATORS FOR COMPLETENESS AND ADEQUACY RELATIVE TO THE FABRICATOR'S SCOPE OF WORK: STEEL FABRICATOR, WOOD TRUSS FABRICATOR, REBAR FABRICATOR.
SPECIAL CASES (IBC 1705.1.1)		
WORK UNUSUAL IN NATURE, INCLUDING BUT NOT LIMITED TO ALTERNATIVE MATERIALS AND SYSTEMS, UNUSUAL DESIGN APPLICATIONS, AND/OR MATERIALS AND SYSTEMS WITH SPECIAL MANUFACTURER'S REQUIREMENTS		PERFORM SUBMITTAL REVIEW, SHOP AND/OR FIELD INSPECTION PER DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE OR REPORT FROM AN ACCEPTED ENTITY.
STEEL CONSTRUCTION (IBC 1705.2)		
FABRICATOR AND ERECTOR DOCUMENTS (VERIFY REPORTS AND CERTIFICATES AS LISTED IN AISC 360-16, CHAPTER N, SECTION 3 FOR COMPLIANCE WITH CONSTRUCTION DOCUMENTS)	EACH SUBMITTAL	TO BE COMPLETED IN SUBMITTAL REVIEW PROCESS.
MATERIAL VERIFICATION OF STRUCTURAL STEEL	PERIODIC	PERFORM SHOP AND FIELD INSPECTION.
VERIFY DIAMETER, GRADE, TYPE, LENGTH, AND EMBEDMENT OF ANCHOR RODS FOR CONFORMANCE WITH CONSTRUCTION DOCUMENTS.	CONTINUOUS	
VERIFY MEMBER LOCATIONS, BRACES, STIFFENERS, AND APPLICATION OF JOINT DETAILS AT EACH CONNECTION COMPLY WITH CONSTRUCTION DOCUMENTS.	CONTINUOUS	
STRUCTURAL STEEL (IBC 1705.2.1)		
PRIOR TO WELDING (TABLE N5.4-1, AISC 360-16)		
WELDER QUALIFICATION RECORDS AND CONTINUITY RECORDS	OBSERVE	
WELDING PROCEDURE SPECIFICATIONS (WPS) AVAILABLE	PERFORM	TO BE COMPLETED IN SUBMITTAL REVIEW PROCESS.
MANUFACTURER CERTIFICATIONS FOR WELDING CONSUMABLES AVAILABLE	PERFORM	
MATERIAL IDENTIFICATION	OBSERVE	PERFORM SHOP AND FIELD INSPECTION TO VERIFY TYPE AND GRADE OF MATERIAL.
WELDER IDENTIFICATION	OBSERVE	A SYSTEM SHALL BE MAINTAINED BY WHICH A WELDER WHO HAS WELDED A JOINT OR MEMBER CAN BE IDENTIFIED
FIT-UP GROOVE WELDS	OBSERVE	VERIFY JOINT PREPARATION, DIMENSIONS, CLEANLINESS, TACKING, AND BACKING
FIT-UP OF CJP GROOVE WELDS OF HSS T-, Y-, AND K-JOINTS WITHOUT BACKING	OBSERVE	VERIFY JOINT PREPARATION, DIMENSIONS, CLEANLINESS, AND TACKING
ACCESS HOLES	OBSERVE	VERIFY CONFIGURATION AND FINISH
FIT-UP OF FILLET WELDS	OBSERVE	VERIFY ALIGNMENT, GAPS AT ROOT, CLEANLINESS OF STEEL SURFACES, AND TACK WELD QUALITY AND LOCATION
DURING WELDING (TABLE N5.4-2, AISC 360-16):		
CONTROL AND HANDLING OF WELDING CONSUMABLES	OBSERVE	VERIFY PACKAGING AND EXPOSURE CONTROL.
CRACKED TACK WELDS	OBSERVE	VERIFY THAT WELDING DOES NOT OCCUR OVER CRACKED TACK WELDS.
ENVIRONMENTAL CONDITIONS	OBSERVE	VERIFY WIND SPEED IS WITHIN LIMITS AS WELL AS PRECIPITATION AND TEMPERATURE.
WPS FOLLOWED	OBSERVE	VERIFY ITEMS SUCH AS SETTINGS ON WELDING EQUIPMENT, TRAVEL SPEED, WELDING MATERIALS, SHIELDING GAS TYPE/FLOW RATE, PREHEAT APPLIED, INTERPASS TEMPERATURE MAINTAINED, AND PROPER POSITION.
WELDING TECHNIQUES	OBSERVE	VERIFY INTERPASS AND FINAL CLEANING, EACH PASS IS WITHIN PROFILE LIMITATIONS, AND QUALITY OF EACH PASS.
PLACEMENT AND INSTALLATION OF STEEL HEADED STUD ANCHORS	PERFORM	
AFTER WELDING (TABLE N5.4-3, AISC 360-16):		
WELDS CLEANED	OBSERVE	VERIFY THAT WELDS HAVE BEEN PROPERLY CLEANED.
SIZE, LENGTH, AND LOCATION OF WELDS	PERFORM	
WELDS MEET VISUAL ACCEPTANCE CRITERIA	PERFORM	VERIFY THAT WELDS MEET VISUAL ACCEPTANCE CRITERIA INCLUDING: CRACK PROHIBITION, WELD/BASE-METAL FUSION, CRATER CROSS SECTION, WELD PROFILES, WELD SIZE, UNDERCUT, AND POROSITY.
ARC STRIKES	PERFORM	
K-AREA	PERFORM	WHEN WELDING OF DOUBLER PLATES, CONTINUITY PLATES OR STIFFENERS HAS BEEN PERFORMED IN THE K-AREA, VISUALLY INSPECT THE WEB K-AREA FOR CRACKS WITHIN 3 INCHES OF THE WELD.
WELD ACCESS HOLES IN ROLLED HEAVY SHAPES AND BUILT-UP HEAVY SHAPES	PERFORM	AFTER ROLLED HEAVY SHAPES AND BUILT-UP HEAVY SHAPES ARE WELDED, VISUALLY INSPECT THE WELD ACCESS HOLE FOR CRACKS
BACKING & WELD TABS REMOVED (IF REQUIRED)	PERFORM	
REPAIR ACTIVITIES	PERFORM	
DOCUMENT ACCEPTANCE OR REJECTION OF WELDED JOINT/MEMBER	PERFORM	
NO PROHIBITED WELDS HAVE BEEN ADDED WITHOUT THE APPROVAL OF THE EOR	OBSERVE	
NONDESTRUCTIVE TESTING (SECTION N5.5, AISC 360-16):		
CJP WELDS (RISK CAT. II)	PERFORM	ULTRASONIC TESTING SHALL BE PERFORMED ON 10% OF CJP GROOVE WELDS IN BUTT, T-AND CORNER JOINTS SUBJECT TO TRANSVERSELY APPLIED TENSION LOADING IN MATERIALS 5/16-INCH THICK OR GREATER. TESTING RATE MUST BE INCREASED IF > 5% OF WELDS TESTED HAVE UNACCEPTABLE DEFECTS.
CJP WELDS (RISK CAT. III OR IV)	CONTINUOUS	A REDUCTION IN THE RATE OF 100% ULTRASONIC TESTING IS ALLOWED PER SECTION N5.5E.
WELDED JOINTS SUBJECT TO FATIGUE	PERFORM	WHEN REQUIRED BY APPENDIX 3, TABLE A-3.1, WELDED JOINTS REQUIRING WELD SOUNDNESS TO BE ESTABLISHED BY RADIOGRAPHIC OR ULTRASONIC INSPECTION SHALL BE TESTED AS PRESCRIBED.
PRIOR TO BOLTING (TABLE N5.6-1, AISC 360-16):		
> NOT REQUIRED IF ONLY SNUG-TIGHT JOINTS ARE SPECIFIED [PER SECTION N5.6 OF AISC 360-16].		
CERTIFICATIONS OF FASTENERS	PERFORM	
FASTENERS MARKED	OBSERVE	VERIFY THAT FASTENERS HAVE BEEN MARKED IN ACCORDANCE WITH ASTM REQUIREMENTS. THIS INCLUDES THE REQUIRED PACKAGE MARKING OF THE FASTENERS AND FASTENER COMPONENTS.
CORRECT FASTENERS FOR JOINT	OBSERVE	VERIFY GRADE, TYPE, AND BOLT LENGTH IF THREADS ARE EXCLUDED FROM THE SHEAR PLANE.
CORRECT BOLTING PROCEDURE	OBSERVE	VERIFY CORRECT PROCEDURE IS USED FOR THE JOINT DETAIL.
CONNECTING ELEMENTS	OBSERVE	VERIFY APPROPRIATE FAYING SURFACE CONDITION AND HOLE PREPARATION, IF SPECIFIED, MEET REQUIREMENTS.
PRE-INSTALLATION VERIFICATION TESTING	OBSERVE	OBSERVE AND DOCUMENT VERIFICATION TESTING BY INSTALLATION PERSONNEL FOR FASTENER ASSEMBLIES AND METHODS USED.
PROTECTED STORAGE	OBSERVE	VERIFY PROTECTED STORAGE PROVIDED FOR BOLTS, NUTS, WASHERS, AND OTHER FASTENER COMPONENTS.
DURING BOLTING (TABLE N5.6-2, AISC 360-16):		
> NOT REQUIRED IF ONLY SNUG-TIGHT JOINTS ARE SPECIFIED [PER SECTION N5.6 OF AISC 360-16].		
> NOT REQUIRED FOR PRETENSIONED JOINTS USING TURN-OF-THE-NUT METHOD WITH MATCH-MARKING, DIRECT-TENSION-INDICATORS, OR TWIST-OFF TYPE TENSION CONTROL METHOD [PER SECTION N5.6 OF AISC 360-16].		
FASTENER ASSEMBLIES	OBSERVE	VERIFY THAT FASTENER ASSEMBLIES ARE OF SUITABLE CONDITION, PLACED IN ALL HOLES, AND WASHERS ARE POSITIONED AS REQUIRED.
SNUG-TIGHT PRIOR TO PRETENSIONING	OBSERVE	VERIFY THAT JOINTS ARE BROUGHT TO SNUG-TIGHT CONDITION PRIOR TO PRETENSIONING OPERATION.
FASTENER COMPONENT	OBSERVE	VERIFY THAT FASTENER COMPONENT IS NOT TURNED BY WRENCH PREVENTED FROM ROTATING.
PRETENSIONED FASTENERS	OBSERVE	VERIFY THAT FASTENERS ARE PRETENSIONED IN ACCORDANCE WITH RCSC SPECIFICATION, PROGRESSING SYSTEMATICALLY FROM THE MOST RIGID POINT TOWARD THE FREE EDGES.
AFTER BOLTING (TABLE N5.6-3, AISC 360-16):		
DOCUMENT ACCEPTANCE OR REJECTION OF BOLTED CONNECTIONS	PERFORM	
INSPECTION OF GALVANZIED STRUCTURAL STEEL MAIN MEMBERS (SECTION N5.7, AISC 360-16):		
CRACKS ON CUT SURFACES	PERFORM	EXPOSED CUT SURFACES OF GALVANIZED STRUCTURAL STEEL MAIN MEMBERS AND EXPOSED CORNERS OF HSS SHALL BE VISUALLY INSPECTED FOR CRACKS SUBSEQUENT TO GALVANIZING. CRACKS SHALL BE REPAIRED OR THE MEMBER SHALL BE REJECTED.
OTHER STEEL INSPECTIONS (SECTION N5.8, AISC 360-16; TABLE J8.1, AISC 341-16):		
ANCHOR RODS AND OTHER EMBEDMENTS SUPPORTING STRUCTURAL STEEL	CONTINUOUS	SHALL BE ON THE PREMISES DURING THE PLACEMENT OF ANCHOR RODS AND OTHER EMBEDMENTS SUPPORTING STRUCTURAL STEEL FOR COMPLIANCE WITH CONSTRUCTION DOCUMENTS. VERIFY THE DIAMETER, GRADE, TYPE, AND LENGTH OF THE ANCHOR ROD OR EMBEDDED ITEM, AND THE EXTENT OR DEPTH OF EMBEDMENT PRIOR TO PLACEMENT OF CONCRETE.
FABRICATED STEEL OR ERECTED STEEL FRAME	PERFORM	VERIFY COMPLIANCE WITH THE DETAILS SHOWN ON THE CONSTRUCTION DOCUMENTS (INCLUDES SUCH ITEMS AS BRACES, STIFFENERS, MEMBER LOCATIONS AND THE CORRECT APPLICATION OF JOINT DETAILS AT EACH CONNECTION.

2021 IBC - SCHEDULE OF SPECIAL INSPECTIONS

MATERIAL/ACTIVITY	EXTENT	INSTRUCTIONS/FREQUENCY
COLD-FORMED STEEL DECK (IBC 1705.2.2)		
PRIOR TO DECK PLACEMENT (SDI QA/QC - 2017, TABLE 1.1):		
VERIFY COMPLIANCE OF MATERIALS (DECK AND ALL DECK ACCESSORIES) WITH CONSTRUCTION DOCUMENTS, INCLUDING PROFILES, MATERIAL PROPERTIES, AND BASE METAL THICKNESS	PERFORM	
DOCUMENT ACCEPTANCE OR REJECTION OF DECK AND DECK ACCESSORIES	PERFORM	
AFTER DECK PLACEMENT (SDI QA/QC - 2017, TABLE 1.2):		
VERIFY COMPLIANCE OF MATERIALS AND ALL DECK ACCESSORIES INSTALLATION WITH CONSTRUCTION DOCUMENTS	PERFORM	
VERIFY DECK MATERIALS ARE REPRESENTED BY THE MILL CERTIFICATIONS THAT COMPLY WITH THE CONSTRUCTION DOCUMENTS	PERFORM	
DOCUMENT ACCEPTANCE OR REJECTION OF INSTALLATION OF DECK AND DECK ACCESSORIES	PERFORM	
PRIOR TO WELDING (SDI QA/QC - 2017, TABLE 1.3):		
WELDING PROCEDURE SPECIFICATIONS (WPS) AVAILABLE	OBSERVE	
MANUFACTURER CERTIFICATIONS FOR WELDING CONSUMABLES AVAILABLE	OBSERVE	
MATERIAL IDENTIFICATION (TYPE/GRADE)	OBSERVE	
CHECK WELDING EQUIPMENT	OBSERVE	
DURING WELDING (SDI QA/QC - 2017, TABLE 1.4):		
USE OF QUALIFIED WELDERS	OBSERVE	
CONTROL AND HANDLING OF WELDING CONSUMABLES	OBSERVE	
ENVIRONMENTAL CONDITIONS (WIND SPEED, MOISTURE, TEMPERATURE)	OBSERVE	
WPS FOLLOWED	OBSERVE	
AFTER WELDING (SDI QA/QC - 2017, TABLE 1.5):		
VERIFY SIZE AND LOCATION OF WELDS, INCLUDING SUPPORT, SIDELAP, AND PERIMETER WELDS	PERFORM	
WELDS MEET VISUAL ACCEPTANCE CRITERIA	PERFORM	
VERIFY REPAIR ACTIVITIES	PERFORM	
DOCUMENT ACCEPTANCE OR REJECTION OF WELDS	PERFORM	
PRIOR TO MECHANCIAL FASTENING (SDI QA/QC - 2017, TABLE 1.6):		
MANUFACTURER INSTALLATION INSTRUCTIONS AVAILABLE FOR MECHANICAL FASTENERS	OBSERVE	
PROPER TOOLS AVAILABLE FOR FASTENER INSTALLATION	OBSERVE	
PROPER STORAGE FOR MECHANICAL FASTENERS	OBSERVE	
DURING MECHANICAL FASTENING (SDI QA/QC - 2017, TABLE 1.7):		
FASTENERS ARE POSITIONED AS REQUIRED	OBSERVE	
FASTENERS ARE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS	OBSERVE	
AFTER MECHANICAL FASTENING (SDI QA/QC - 2017, TABLE 1.8):		
CHECK SPACING, TYPE, AND INSTALLATION OF SUPPORT FASTENERS	PERFORM	
CHECK SPACING, TYPE, AND INSTALLATION OF SIDELAP FASTENERS	PERFORM	
CHECK SPACING, TYPE, AND INSTALLATION OF PERIMETER FASTENERS	PERFORM	
VERIFY REPAIR ACTIVITIES	PERFORM	
DOCUMENT ACCEPTANCE OR REJECTION OF MECHANICAL FASTENERS	PERFORM	
COLD-FORMED STEEL CONSTRUCTION (IBC 1705.2.4):		
COLD-FORMED STEEL TRUSSES SPANNING 60 FEET OR GREATER	PERFORM	VERIFY THAT TEMPORARY INSTALLATION RESTRAINT/BRACING AND THE PERMANENT INDIVIDUAL TRUSS MEMBER RESTRAINT/BRACING ARE INSTALLED IN ACCORDANCE WITH THE APPROVED TRUSS SUBMITTAL PACKAGE.
COLD-FORMED STEEL WIND RESISTANCE (1705.11.2)		REQUIRED IN AREAS OF WIND EXPOSURE CATEGORY B, WHERE V(ASD) = 120MPH OR GREATER OR AREAS OF WIND EXPOSURE CATEGORY C OR D, WHERE V(ASD) IS 110MPH OR GREATER.
WELDING OPERATIONS OF ELEMENTS OF THE MAIN WIND FORCE-RESISTING SYSTEM	PERIODIC	
SCREW ATTACHMENT, BOLTING, ANCHORING AND OTHER FASTENING OF ELEMENTS OF THE MAIN WIND FORCE-RESISTING SYSTEM	PERIODIC	EXCEPTIONS: (1) IF THE SHEATHING IS GYPSUM BOARD OR FIBERBOARD (2) IF THE SHEATHING IS WOOD STRUCTURAL PANEL OR STEEL SHEETS ON ONLY ONE SIDE OF THE SHEAR WALL, SHEAR PANEL OR DIAPHRAGM ASSEMBLY, AND THE FASTENER SPACING >4IN ON CENTER.
CONCRETE CONSTRUCTION (IBC 1705.3 AND IBC TABLE 1705.3):		
INSPECT REINFORCEMENT, INCLUDING PRESTRESSING TENDONS, AND VERIFY PLACEMENT	PERIODIC	REFERENCE ACI 318 CH. 20, 25.2, 25.3, 26.6.1-26.6.3 AND IBC 1908.4
INSPECT ANCHORS CAST IN CONCRETE	PERIODIC	REFERENCE ACI 318: 17.8.2
INSPECT ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS:	CONTINUOUS	SPECIFIC REQUIREMENTS FOR SPECIAL INSPECTION SHALL BE INCLUDED IN THE RESEARCH REPORT FOR THE ANCHOR ISSUED BY AN APPROVED SOURCE IN ACCORDANCE WITH ACI 318: 17.8.2 OR OTHER QUALIFICATION PROCEDURES. WHERE NOT PROVIDED, CONSULT WITH REGISTERED DESIGN PROFESSIONAL FOR REQUIREMENTS TO BE APPROVED BY BUILDING OFFICIAL PRIOR TO PROCEEDING.
ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY OR UPWARDLY INCLINED ORIENTATIONS TO RESIST SUSTAINED TENSION LOADS	CONTINUOUS	REFERENCE ACI 318: 17.8.2.4
MECHANICAL ANCHORS AND ADHESIVE ANCHORS NOT DEFINED ABOVE	PERIODIC	REFERENCE ACI 318: 17.8.2
VERIFY USE OF REQUIRED DESIGN MIX.	PERFORM	REFERENCE ACI 318: CH. 19, 26.4.3, 26.4.4 AND IBC 19104.1-2, 1908.2-3
PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE.	CONTINUOUS	REFERENCE ASTM C172 & C31; ACI 318: 26.4, 26.12; IBC 1908.10
INSPECT CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES.	CONTINUOUS	REFERENCE ACI 318: 26.5 AND IBC 1908.6-8
VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.	PERIODIC	REFERENCE ACI 318: 26.5.3-5 AND IBC 1908.9
INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.	PERIODIC	REFERENCE ACI 318: 26.11.1.2(B)
MASONRY CONSTRUCTION (IBC 1705.4)		
LEVEL 2 QUALITY ASSURANCE (TMS 402-16 TABLE 3.1 & TMS 602-16 TABLES 3&4)		APPLICABLE TO RISK CATEGORIES I, II, III
VERIFY COMPLIANCE WITH THE APPROVED SUBMITTALS PRIOR TO CONSTRUCTION		MINIMUM VERIFICATION - REFERENCE TMS 602, ART. 1.5
VERIFY F'M AND F'AAC PRIOR TO CONSTRUCTION, EXCEPT WHERE SPECIFICALLY EXEMPTED BY THIS CODE		MINIMUM VERIFICATION - REFERENCE TMS 602, ART. 1.4 B
VERIFY SLUMP FLOW AND VISUAL STABILITY INDEX (VSI) WHEN SELF-CONSOLIDATING GROUT IS DELIVERED TO THE PROJECT SITE		MINIMUM VERIFICATION - REFERENCE TMS 602, ART. 1.5 & 1.6.3
AS MASONRY CONSTRUCTION BEGINS, VERIFY THE FOLLOWING ARE IN COMPLIANCE:		
PROPORTIONS OF SITE-PREPARED MORTAR	PERIODIC	REFERENCE TMS 602, ART. 2.1, 2.6 A & 2.6 C
GRADE, TYPE AND SIZE OF REINFORCEMENT, CONNECTORS, ANCHOR BOLTS, AND PRESTRESSING TENDONS AND ANCHORAGES	PERIODIC	REFERENCE TMS 602, ART. 3.4 & 3.6 A
PROPERTIES OF THIN-BED MORTAR FOR AAC MASONRY	CONTINUOUS /PERIODIC	CONTINUOUS IS REQUIRED FOR THE FIRST 5000 SF OF AAC MASONRY; PERIODIC IS REQUIRED AFTER THE FIRST 5000 SF OF AAC MASONRY. REFERENCE TMS 602, ART. 2.1 C
SAMPLE PANEL CONSTRUCTION	PERIODIC	REFERENCE TMS 602, ART. 1.6 D
PRIOR TO GROUTING, VERIFY THE FOLLOWING ARE IN COMPLIANCE:		
GROUT SPACE	PERIODIC	REFERENCE TMS 602, ART. 3.2 D & 3.2 F
PLACEMENT OF REINFORCEMENT, CONNECTORS, AND ANCHOR BOLTS	PERIODIC	REFERENCE TMS 402, SEC. 6.1, 6.3.1, 6.3.6 & 6.3.7 AND TMS 602, ART. 3.2 E & 3.4
PROPORTIONS OF SITE-PREPARED GROUT AND PRESTRESSING GROUT FOR BONDED TENDONS	PERIODIC	REFERENCE TMS 602, ART. 2.6 B & 2.4 G.1.B
VERIFY COMPLIANCE OF THE FOLLOWING DURING CONSTRUCTION:		
MATERIALS AND PROCEDURES WITH THE APPROVED SUBMITTALS	PERIODIC	REFERENCE TMS 602, ART. 1.5
PLACEMENT OF REINFORCEMENT, CONNECTORS, AND ANCHOR BOLTS	PERIODIC	REFERENCE TMS 602, ART. 3.3 B
SIZE AND LOCATION OF STRUCTURAL ELEMENTS	PERIODIC	REFERENCE TMS 602, ART. 3.3 F
TYPE, SIZE, AND LOCATION OF ANCHORS, INCLUDING OTHER DETAILS OF ANCHORAGE OF MASONRY TO STRUCTURAL MEMBERS, FRAMES, OR OTHER CONSTRUCTION	PERIODIC	REFERENCE TMS 402, SEC. 1.2.1 (E), 6.2.1, & 6.3.1
PREPARATION, CONSTRUCTION, AND PROTECTION OF MASONRY DURING COLD WEATHER (<40°F) OR HOT WEATHER (>90°F)	PERIODIC	REFERENCE TMS 602, ART. 1.8 C & 1.8 D
OBSERVE PREPARATION OF GROUT SPECIMENS, MORTAR SPECIMENS, AND/OR PRISMS	PERIODIC	REFERENCE TMS 602, ART. 1.4 B.2.A.3, 1.4 B.2.B.3, 1.4 B.2.C.3, 1.4 B.3, 1.4 B.4

2021 IBC - SCHEDULE OF SPECIAL INSPECTIONS

MATERIAL/ACTIVITY	EXTENT	INSTRUCTIONS/FREQUENCY
SOILS (IBC 1705.6)		
VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.	PERIODIC	
VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.	PERIODIC	
PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS.	PERIODIC	
VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL.	CONTINUOUS	
PRIOR TO PLACEMENT OF COMPACTED FILL, INSPECT SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.	PERIODIC	
SPRAYED FIRE-RESISTANT MATERIALS (IBC 1705.14)		
PHYSICAL AND VISUAL TESTS	CONTINUOUS	INCLUDES CONDITION OF SUBSTRATES, THICKNESS OF APPLICATION, DENSITY IN POUNDS PER CUBIC FOOT, BOND STRENGTH ADHESION/COHESION, AND CONDITION OF FINISHED APPLICATION.
STRUCTURAL MEMBER SURFACE CONDITIONS IN CONFORMANCE WITH APPROVED FIRE-RESISTANCE DESIGN AND MANUFACTURER'S INSTRUCTIONS	CONTINUOUS	THE PREPARED SURFACE OF STRUCTURAL MEMBERS TO BE SPRAYED SHALL BE INSPECTED PRIOR TO FIRE-RESISTANT MATERIAL APPLICATION.
APPLICATION PER MANUFACTURER'S INSTRUCTIONS	CONTINUOUS	VERIFY SUBSTRATE MINIMUM AMBIENT TEMPERATURE BEFORE AND AFTER APPLICATION AND REQUIRED VENTILATION DURING AND AFTER APPLICATION.
THICKNESS IN CONFORMANCE WITH APPLICABLE SUBSECTIONS OF IBC 1705.14.4	CONTINUOUS	NOT MORE THAN 10% OF THE THICKNESS MEASUREMENTS APPLIED TO FLOOR, ROOF AND WALL ASSEMBLIES AND STRUCTURAL MEMBERS SHALL BE LESS THAN THE THICKNESS REQUIRED BY THE APPROVED DESIGN, AND NONE SHALL BE LESS THAN THE MINIMUM THICKNESS PER IBC 1705.14.4.1.
DENSITY MEETS REQUIREMENTS AS DETERMINED IN ACCORDANCE WITH ASTM E 605	PERIODIC	DENSITY TESTS: (1) FROM EACH FLOOR, ROOF AND WALL ASSEMBLY AT THE RATE OF NOT LESS THAN ONE SAMPLE FOR EVERY 2500 SF OR PORTION THEREOF OF THE SPRAYED AREA IN EACH STORY (2) FROM BEAMS, GIRDERS, TRUSSES, AND COLUMNS AT THE RATE OF NOT LESS THAN ONE SAMPLE FOR EACH TYPE OF STRUCTURAL MEMBER FOR EACH 2500 SF OF FLOOR AREA OR PORTION THEREOF IN EACH STORY.
BOND STRENGTH MEETS REQUIREMENTS AS DETERMINED IN ACCORDANCE WITH ASTM E 736 (SHALL NOT BE LESS THAN 150 PSF)	PERIODIC	BOND STRENGTH TESTS: (1) ONE SAMPLE FOR EVERY 2500 SF IN EACH STORY FOR FLOOR, ROOF AND WALL ASSEMBLIES (2) ONE SAMPLE FOR EVERY 2500 SF IN EACH STORY FOR EACH TYPE OF STRUCTURAL MEMBER (3) BOND TESTS TO QUALIFY A PRIMER, PAINT OR ENCAPSULANT SHALL BE CONDUCTED IF APPLICABLE. A BONDING AGENT APPROVED BY THE SFRM MANUFACTURER SHALL BE APPLIED WHERE BOND STRENGTHS DO NOT MEET REQUIRED VALUES.
EXTERIOR INSULATION AND FINISH SYSTEMS (EIFS) (IBC 1705.16)		
EIFS APPLICATIONS	CONTINUOUS	EXCEPTION: NOT REQUIRED WHERE INSTALLED OVER A WATER-RESISTIVE BARRIER WITH A MEANS OF DRAINING MOISTURE TO THE EXTERIOR OR WHERE INSTALLED OVER MASONRY OR CONCRETE WALLS.
WATER-RESISTIVE BARRIER COATING	CONTINUOUS	INSPECTION OF THE WATER-RESISTIVE BARRIER COATING COMPLYING WITH ASTM E 2570 IS REQUIRED WHERE INSTALLED OVER A SHEATHING SUBSTRATE.
FIRE-RESISTANT PENETRATIONS AND JOINTS (IBC 1705.17)		
INSPECTION OF PENETRATION FIRESTOPS SHALL BE CONDUCTED BY AN APPROVED AGENCY IN ACCORDANCE WITH ASTM E 2174.	CONTINUOUS	INSPECTION REQUIRED IN HIGH-RISE BUILDINGS OR IN BUILDINGS ASSIGNED TO RISK CATEGORY III OR IV FOR THROUGH-PENETRATIONS, MEMBRANE PENETRATION FIRESTOPS, FIRE-RESISTANT JOINT SYSTEMS AND PERIMETER FIRE BARRIER SYSTEMS THAT ARE TESTED AND LISTED IN ACCORDANCE WITH SECTIONS 714.4.1.2, 714.5.1.2, 715.3 AND 715.4.
INSPECTION OF FIRE-RESISTANT JOINT SYSTEMS SHALL BE CONDUCTED BY AN APPROVED AGENCY IN ACCORDANCE WITH ASTM E 2393.	CONTINUOUS	INSPECTION REQUIRED IN HIGH-RISE BUILDINGS OR IN BUILDINGS ASSIGNED TO RISK CATEGORY III OR IV FOR THROUGH-PENETRATIONS, MEMBRANE PENETRATION FIRESTOPS, FIRE-RESISTANT JOINT SYSTEMS AND PERIMETER FIRE BARRIER SYSTEMS THAT ARE TESTED AND LISTED IN ACCORDANCE WITH SECTIONS 714.4.1.2, 714.5.1.2, 715.3 AND 715.4.
TESTING FOR SMOKE CONTROL (IBC 1705.18)		
LEAKAGE TESTING AND RECORDING OF DEVICE LOCATION DURING ERECTION OF DUCTWORK	CONTINUOUS	SHALL BE PERFORMED PRIOR TO CONCEALMENT
PRESSURE DIFFERENCE TESTING, FLOW MEASUREMENTS AND DETECTION AND CONTROL VERIFICATION	PERIODIC	SHALL BE PERFORMED PRIOR TO OCCUPANCY AND AFTER SUFFICIENT COMPLETION
APPROVED AGENCY QUALIFICATIONS	AS NOTED	APPROVED AGENCIES MUST HAVE EXPERTISE IN FIRE PROTECTION ENGINEERING, MECHANICAL ENGINEERING AND CERTIFICATION AS AIR BALANCERS.
STRUCTURAL OBSERVATIONS (IBC 1704.6)		
ITEM TO BE OBSERVED:		NAME OF STRUCTURAL OBSERVER
FOOTINGS & PIERS		
MASONRY WALLS		
STEEL MOMENT FRAMES		
STEEL DECK DIAPHRAGMS		

*INSPECTION AGENTS FIRM	ADDRESS	TELEPHONE NO.
1. OWNER'S TESTING AGENCY		
2.		
3.		
4.		

NOTE: THE INSPECTION AND TESTING AGENT(S) SHALL BE ENGAGED BY THE OWNER OR THE OWNER'S AGENT, AND NOT BY THE CONTRACTOR OF SUBCONTRACTOR WHOSE WORK IS TO BE INSPECTED OR TESTED. ANY CONFLICT OF INTEREST MUST BE DISCLOSED TO THE BUILDING OFFICIAL PRIOR TO COMMENCING WORK. THE QUALIFICATIONS OF THE INSPECTION AGENT(S) MAY BE SUBJECT TO THE APPROVAL OF THE BUILDING OFFICIAL.
DATE:

NOTES:

1. STRUCTRUAL STEEL WELDING:
   A. COMPLETE AND PARTIAL PENETRATION GROOVE WELDS - CONTINUOUS.
   B. MULTIPLE - PASS FILLET WELDS - CONTINUOUS.
   C. PLUG AND SLOT WELDS - CONTINUOUS.
   D. SINGLE - PASS FILLET WELDS < 5/16" - PERIODIC.
   E. DECK WELDS - PERIODIC.

2. REINFORCING STEEL WELDING:
   A. VERIFICATION OF WELDABILITY - PERIODIC.
   B. REINFORCING STEEL RESISTING FLEXURAL AND AXIAL IN INTERMEDIATE AND SPECIAL MOMENT FRAMES AND BOUNDARY ELEMENTS IN SPECIAL WALLS OR SHEAR REINF - CONTINUOUS.
   C. SHEAR REINFORCEMENT - CONTINUOUS.
   D. OTHER REINFORCING - PERIODIC.

3. EXCEPTIONS: SPECIAL INSPECTIONS SHALL NOT BE REQUIRED FOR:
   A. ISOLATED SPREAD CONCRETE FOOTINGS OF BUILDINGS THREE STORIES OR LESS ABOVE GRADE PLANE THAT ARE FULLY SUPPORTED ON EARTH OR ROCK.
   B. CONTINUOUS CONCRETE FOOTINGS SUPPORTING WALLS OF BUILDINGS THREE STORIES OR LESS ABOVE GRADE PLANE THAT ARE FULLY SUPPORTED ON EARTH OR ROCK WHERE:
      1. FOOTINGS SUPPORT WALLS OF LIGHT-FRAME CONSTRUCTION.
      2. FOOTINGS ARE DESIGNED IN ACCORDANCE WITH TABLE 1809.7.
      3. THE STRUCTURAL DESIGN OF THE FOOTING IS BASED ON A SPECIFIED COMPRESSIVE STRENGTH, F'c, NO GREATER THAN 2500 POUNDS PER SQUARE INCH (PSI), REGARDLESS OF THE COMPRESSIVE STRENGTH SPECIFIED IN THE CONSTRUCTION DOCUMENTS OR USED IN THE FOOTING CONSTRUCTION.
   C. NONSTRUCTURAL CONCRETE SLABS SUPPORTED DIRECTLY ON THE GROUND, INCLUDING PRESTRESSED SLABS ON GRADE, WHERE THE EFFECTIVE PRESTRESS IN THE CONCRETE IS LESS THAN 150 PSI.
   D. CONCRETE FOUNDATION WALLS CONSTRUCTED IN ACCORDANCE WITH TABLE 1807.1.6.2.
   E. CONCRETE PATIOS, DRIVEWAYS AND SIDEWALKS ON GRADE.

DEFINITIONS:
PERIODIC - PART-TIME OR INTERMITTENT OBSERVATION OF WORK THAT HAS BEEN/IS BEING PERFORMED AND AT THE COMPLETION OF THE WORK.
CONTINUOUS - FULL-TIME OBSERVATION OF WORK. INSPECTOR IS PRESENT IN THE AREA WHERE THE WORK IS BEING PERFORMED.
OBSERVE - INSPECT THESE ITEMS ON A RANDOM/INTERMITTENT BASIS. OPERATIONS NEED NOT BE DELAYED PENDING THESE INSPECTIONS.
PERFORM - PERFORM THESE TASKS FOR EACH WELDED JOINT OR MEMBER, BOLTED CONNECTION, OR STEEL ELEMENT PRIOR TO FINAL ACCEPTANCE.

GMC
2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM

ISSUE	DATE
BID SET	09/09/2024

DRAWN BY: CSS
CHECKED BY: CSS

TUSCALOOSA COUNTY DHR
Tuscaloosa, Alabama

GMC # ABHM220021

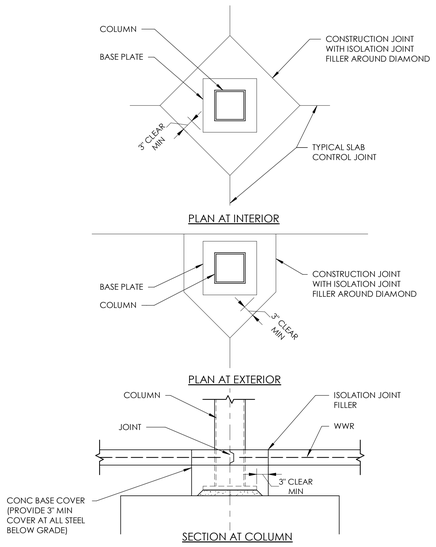
ALABAMA REGISTERED No. 31254 PROFESSIONAL ENGINEER CHRISTOPHER S. STOREY
09/09/2024

2021 SCHEDULE OF SPECIAL INSPECTIONS

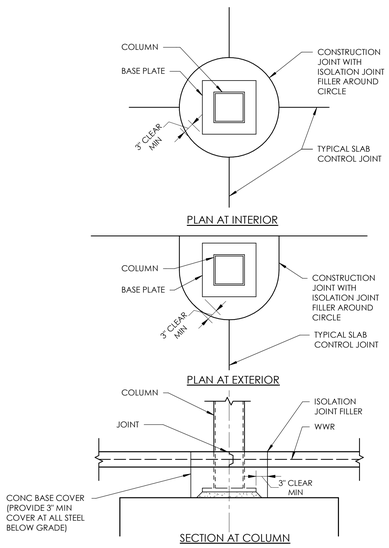
S1.02

sheet ___ of ___

TUCKER-JONES
3300 CAHABA ROAD, SUITE 210
BIRMINGHAM, ALABAMA 35223
PHONE: 205.879.5660
FAX: 205.879.5606
PROJECT #22076

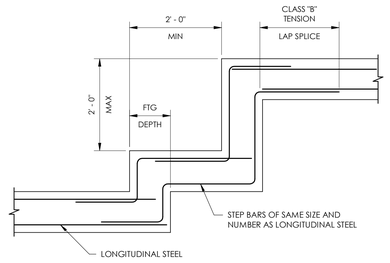


TYPICAL ISOLATION JOINT

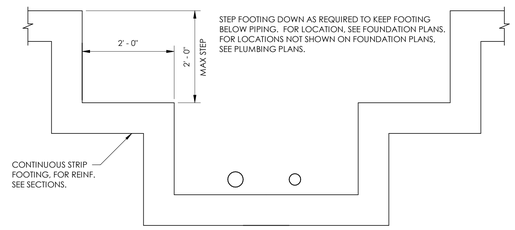


TYPICAL ISOLATION JOINT

COORDINATE JOINT TYPE WITH PLANS



TYPICAL FOOTING STEP



TYPICAL FOUNDATION WALL AT PIPING

BEAM/FOOTING TENSION LAP SPLICE LENGTH

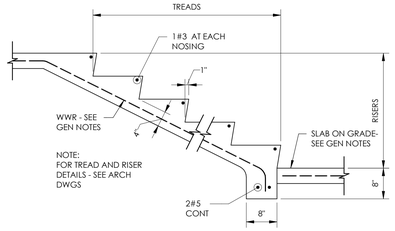
BAR SIZE	f'c = 4000 PSI	
	TOP BARS	OTHER BARS
#3	24"	19"
#4	32"	25"
#5	40"	31"
#6	48"	37"
#7	70"	54"
#8	80"	62"
#9	91"	70"
#10	102"	79"
#11	113"	87"

TOP BARS ARE HORIZONTAL REINFORCEMENT WITH MORE THAN 12" OF CONCRETE CAST BELOW THE REINF.

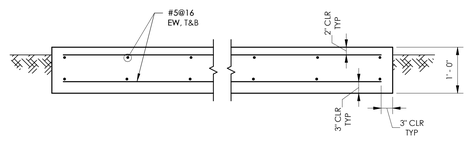
SLAB/WALL TENSION LAP SPLICE LENGTH

BAR SIZE	f'c = 4000 PSI	
	TOP BARS	OTHER BARS
#3	15"	12"
#4	24"	19"
#5	36"	28"
#6	48"	37"
#7	78"	60"
#8	96"	74"
#9	117"	90"
#10	140"	108"
#11	165"	127"

TOP BARS ARE HORIZONTAL REINFORCEMENT WITH MORE THAN 12" OF CONCRETE CAST BELOW THE REINF.

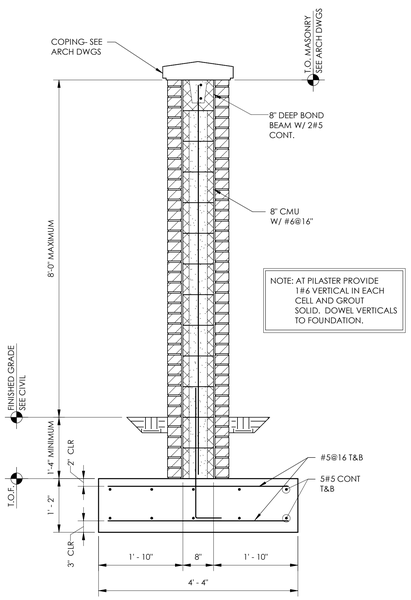


TYPICAL STAIR ON GRADE

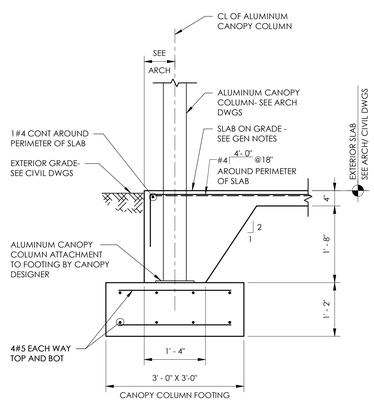


FOR EQUIPMENT LOCATIONS, SEE CIVIL AND MEP DWGS

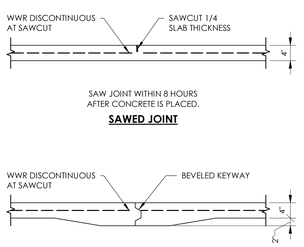
MECHANICAL EQUIPMENT PAD DETAIL



MONUMENT SIGN TYPICAL DETAIL

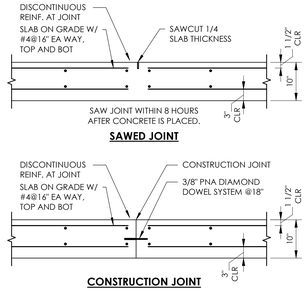


TYPICAL ALUMINUM CANOPY COLUMN FOOTING DETAIL



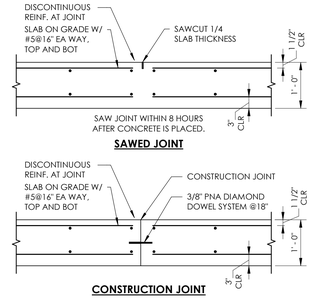
TYPICAL 4" SLAB CONTROL JOINT

JOINT TYPE IS OPTIONAL



TYPICAL 10" SLAB CONTROL JOINT

JOINT TYPE IS OPTIONAL



TYPICAL 12" SLAB CONTROL JOINT

JOINT TYPE IS OPTIONAL

GMC
2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM

ISSUE | DATE
BID SET | 09/09/2024

DRAWN BY: CSS
CHECKED BY: CSS

TUSCALOOSA COUNTY DHR
Tuscaloosa, Alabama

GMC # ABHM220021

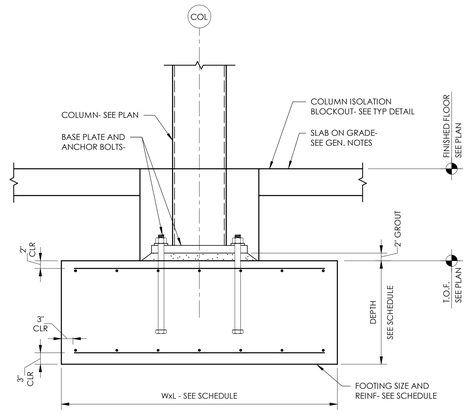
ALABAMA REGISTERED No. 31254 PROFESSIONAL ENGINEER CHRISTOPHER S. SHELL
09/09/2024

TYPICAL DETAILS

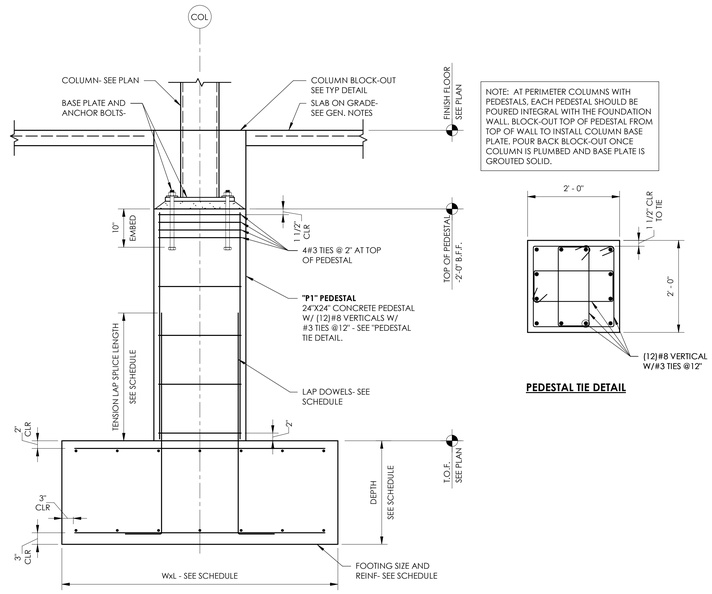
S1.03
sheet of

9/7/2024 12:36:26 PM

TUCKER-JONES
3300 CAHABA ROAD, SUITE 210
BIRMINGHAM, ALABAMA 35223
PHONE: 205.879.5660
FAX: 205.879.5606
PROJECT #22076



TYPICAL COLUMN BASE PLATE AND FOOTING DETAIL

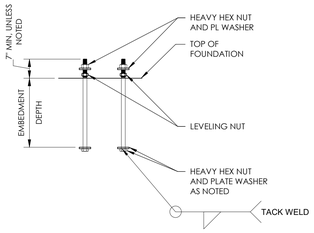


TYPICAL COLUMN BASE PLATE, PEDESTAL AND FOOTING DETAIL

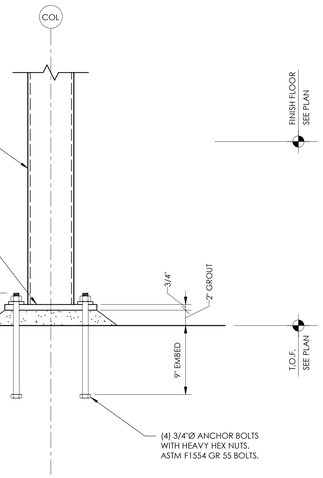
NOTE: AT PERIMETER COLUMNS WITH PEDESTALS, EACH PEDESTAL SHOULD BE POURED INTEGRAL WITH THE FOUNDATION WALL. BLOCK-OUT TOP OF PEDESTAL FROM TOP OF WALL TO INSTALL COLUMN BASE PLATE. POUR BACK BLOCK-OUT ONCE COLUMN IS PLUMBED AND BASE PLATE IS GROUTED SOLID.

PEDESTAL TIE DETAIL

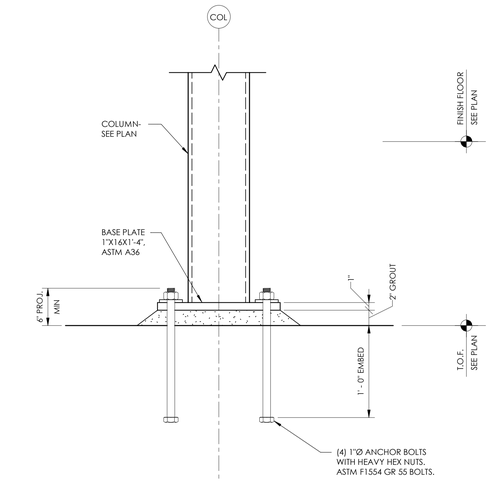
BOLT Ø	HOLE Ø	PLATE WASHER
3/4"	1-5/16"	1/4x2x2
1"	1-13/16"	3/8x3x3
1 1/4"	2-1/16"	1/2x3x3
1 1/2"	2-5/16"	1/2x3-1/2x3-1/2



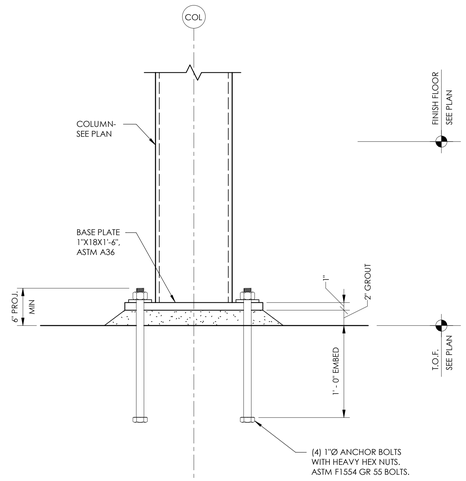
ANCHOR BOLT DETAILS



BP1 - TYPICAL BASE PLATE



BP2 - MOMENT FRAME COLUMN



BP2 - MOMENT FRAME COLUMN

TYPICAL BASE PLATE AND ANCHOR BOLT DETAILS

NOTES:
1. EDGE DISTANCES INDICATED ARE FOR ROLLED OR THERMALLY CUT BASE PLATES. VALUES SHALL BE ADJUSTED FOR SHEARED EDGES.
2. PROVIDE MAXIMUM ANCHOR-BOLT HOLE DIAMETER AND MINIMUM RECOMMENDED PLATE WASHERS INDICATED IN "ANCHOR BOLT DETAILS" ON THIS SHEET.
3. STEEL TEMPLATES SHALL BE USED FOR SETTING ALL COLUMN ANCHOR BOLTS.

FOOTING SCHEDULE

FOOTING DESIGNATION	DEPTH	REINF EW.	LENGTH	WIDTH	NOTES
F4.0	1' - 2"	4#5	4' - 0"	4' - 0"	1
F5.0	1' - 2"	6#5	5' - 0"	5' - 0"	1
F6.0	1' - 4"	7#6	6' - 0"	6' - 0"	1
F7.0	1' - 4"	8#6	7' - 0"	7' - 0"	1
F8.0	1' - 6"	9#6	8' - 0"	8' - 0"	1

FOOTING SCHEDULE NOTES:
1. PROVIDE TOP AND BOTTOM REINFORCEMENT.

COLUMN SCHEDULE

COLUMN DESIGNATION		C1	C2	C3
COLUMN	SIZE	HSS6X6X5/16	HSS8X8X1/2	HSS10x10x1/2
	BASE PLATE	BP1	BP2	BP3
	HEADED ANCHOR BOLTS AND EMBEDMENT DEPTH	(4) 3/4"Ø - BP1	(4) 1"Ø - BP2	(4) 1"Ø - BP3
	NOTES	1	1	1

COLUMN SCHEDULE NOTES:
1. SEE "TYPICAL BASE PLATE AND ANCHOR BOLT DETAILS" ON THIS SHEET FOR BASE PLATE SIZE, ANCHOR BOLT EMBEDMENT, ETC.

GMC

2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM

ISSUE | DATE
BID SET | 09/09/2024

DRAWN BY: CSS
CHECKED BY: CSS

TUSCALOOSA COUNTY DHR
Tuscaloosa, Alabama

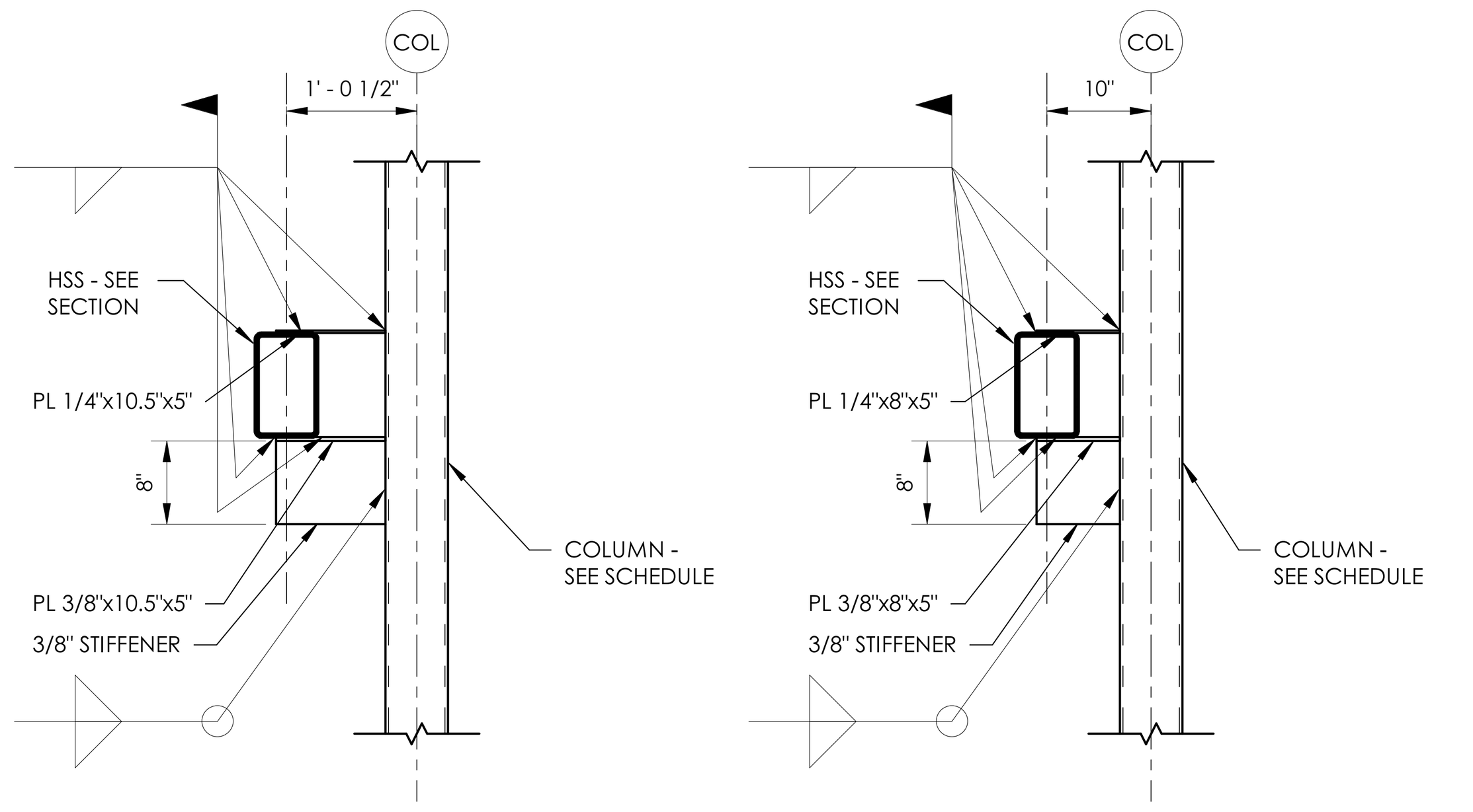
GMC # ABHM220021

ALABAMA REGISTERED No. 31254 PROFESSIONAL ENGINEER CHRISTOPHER S. SIMS
09/09/2024

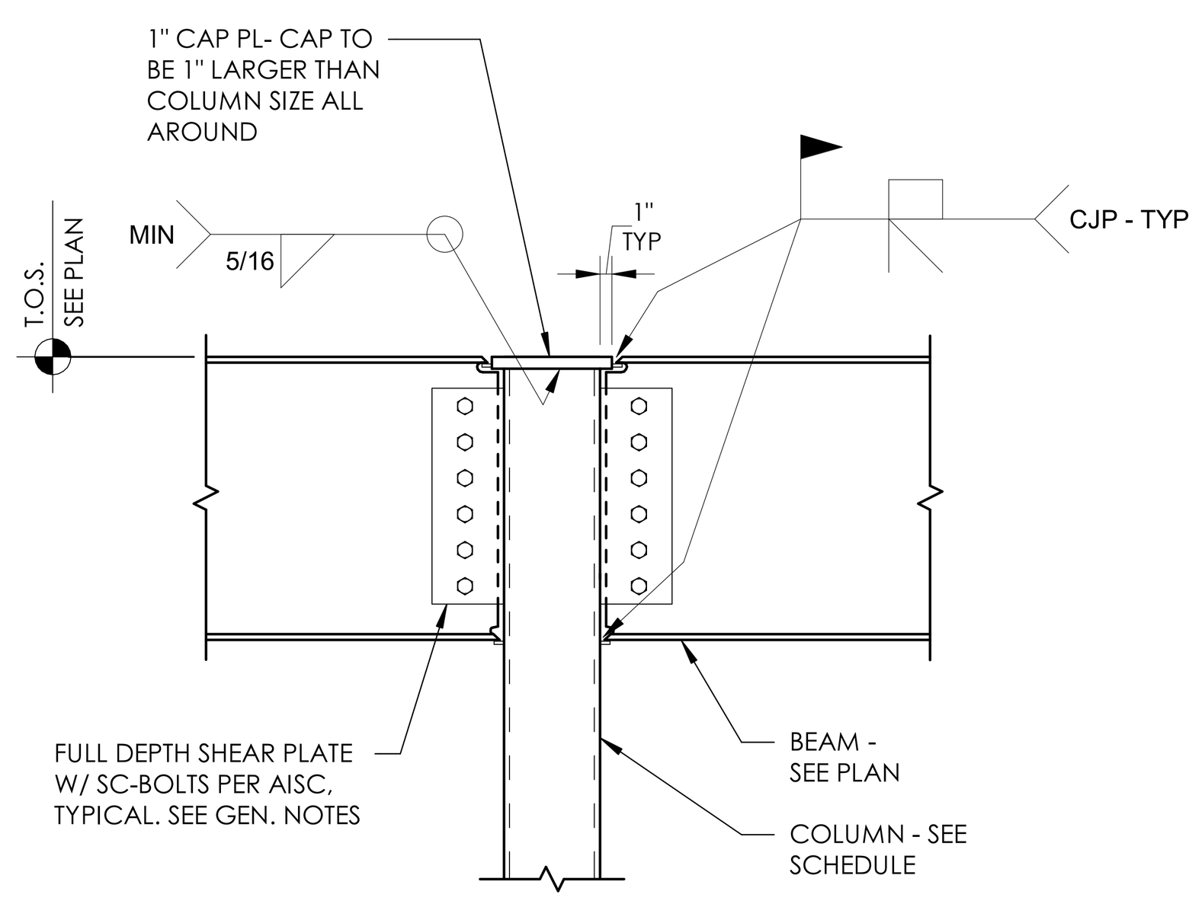
TYPICAL DETAILS

S1.04
sheet of

9/7/2024 12:36:27 PM



TYPICAL HSS TO COLUMN CONNECTION



TYPICAL MOMENT CONNECTION DETAIL

Design Components and Cladding...

	Effective Wind Area	Zone 5 GCp+		Zone 5 GCp-	
Wall Pressures for Zone 5, distance "a" from the corner of the building. Calculate "a" in accordance with ASCE7 - Figure 30.3-1	< 10 sq. ft.	11.26 psf	16.21 psf	-21.70 psf	-16.76 psf
	20 sq. ft.	10.58 psf	15.52 psf	-20.33 psf	-15.38 psf
	50 sq. ft.	9.20 psf	14.15 psf	-18.27 psf	-13.32 psf
	100 sq. ft.	8.52 psf	13.46 psf	-16.89 psf	-11.95 psf
	200 sq. ft.	7.83 psf	12.77 psf	-15.52 psf	-10.58 psf
	> 500 sq. ft.	7.14 psf	12.09 psf	-13.46 psf	-8.52 psf

	Effective Wind Area	Zone 4 GCp+		Zone 4 GCp-	
Wall Pressures for Zone 4, the interior portion of the building. Refer to ASCE7 - Figure 30.3-1	< 10 sq. ft.	11.26 psf	16.21 psf	-17.58 psf	-12.64 psf
	20 sq. ft.	10.58 psf	15.52 psf	-16.89 psf	-11.95 psf
	50 sq. ft.	9.20 psf	14.15 psf	-16.21 psf	-11.26 psf
	100 sq. ft.	8.52 psf	13.46 psf	-14.83 psf	-9.89 psf
	200 sq. ft.	7.83 psf	12.77 psf	-14.15 psf	-9.20 psf
	> 500 sq. ft.	7.14 psf	12.09 psf	-13.46 psf	-8.52 psf

IMPORTANT: A reduction factor of 0.6 has been included in the ASD Wind Load Calculations. Do not reapply the factor when considering load combinations.

Design Components and Cladding...

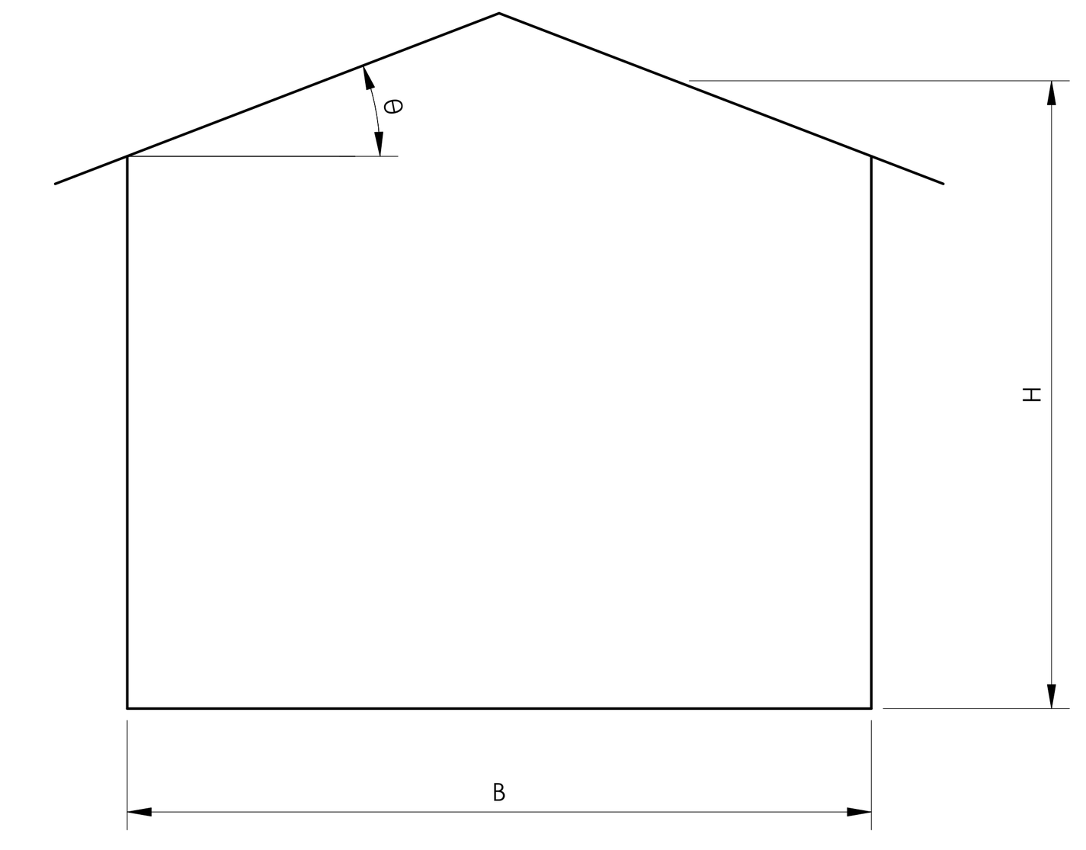
	Effective Wind Area	Zone 3 GCp+		Zone 3 GCp-	
Hip Roof Pressures for Zone 3, the corner portion of the roof. Refer to ASCE7 - Figure 30.3-2E through Figure 30.3-2I	< 10 sq. ft.	7.14 psf	12.09 psf	-27.19 psf	-22.25 psf
	20 sq. ft.	5.77 psf	10.71 psf	-27.19 psf	-22.25 psf
	50 sq. ft.	3.02 psf	7.97 psf	-20.33 psf	-15.38 psf
	100 sq. ft.	1.65 psf	6.59 psf	-16.21 psf	-11.26 psf
	200 sq. ft.	1.65 psf	6.59 psf	-16.21 psf	-11.26 psf
	> 500 sq. ft.	1.65 psf	6.59 psf	-16.21 psf	-11.26 psf

	Effective Wind Area	Zone 2e GCp+		Zone 2e GCp-	
Hip Roof Pressures for Zone 2e, the edge portion of the roof. Refer to ASCE7 - Figure 30.3-2E through Figure 30.3-2I	< 10 sq. ft.	7.14 psf	12.09 psf	-27.19 psf	-22.25 psf
	20 sq. ft.	5.77 psf	10.71 psf	-27.19 psf	-22.25 psf
	50 sq. ft.	3.02 psf	7.97 psf	-20.33 psf	-15.38 psf
	100 sq. ft.	1.65 psf	6.59 psf	-16.21 psf	-11.26 psf
	200 sq. ft.	1.65 psf	6.59 psf	-16.21 psf	-11.26 psf
	> 500 sq. ft.	1.65 psf	6.59 psf	-16.21 psf	-11.26 psf

	Effective Wind Area	Zone 2r GCp+		Zone 2r GCp-	
Hip Roof Pressures for Zone 2r, the interior portion about the ridge. Refer to ASCE7 - Figure 30.3-2E through Figure 30.3-2I	< 10 sq. ft.	7.14 psf	12.09 psf	-35.43 psf	-30.49 psf
	20 sq. ft.	5.77 psf	10.71 psf	-32.00 psf	-27.06 psf
	50 sq. ft.	3.02 psf	7.97 psf	-27.19 psf	-22.25 psf
	100 sq. ft.	1.65 psf	6.59 psf	-26.51 psf	-21.56 psf
	200 sq. ft.	1.65 psf	6.59 psf	-20.33 psf	-15.38 psf
	> 500 sq. ft.	1.65 psf	6.59 psf	-20.33 psf	-15.38 psf

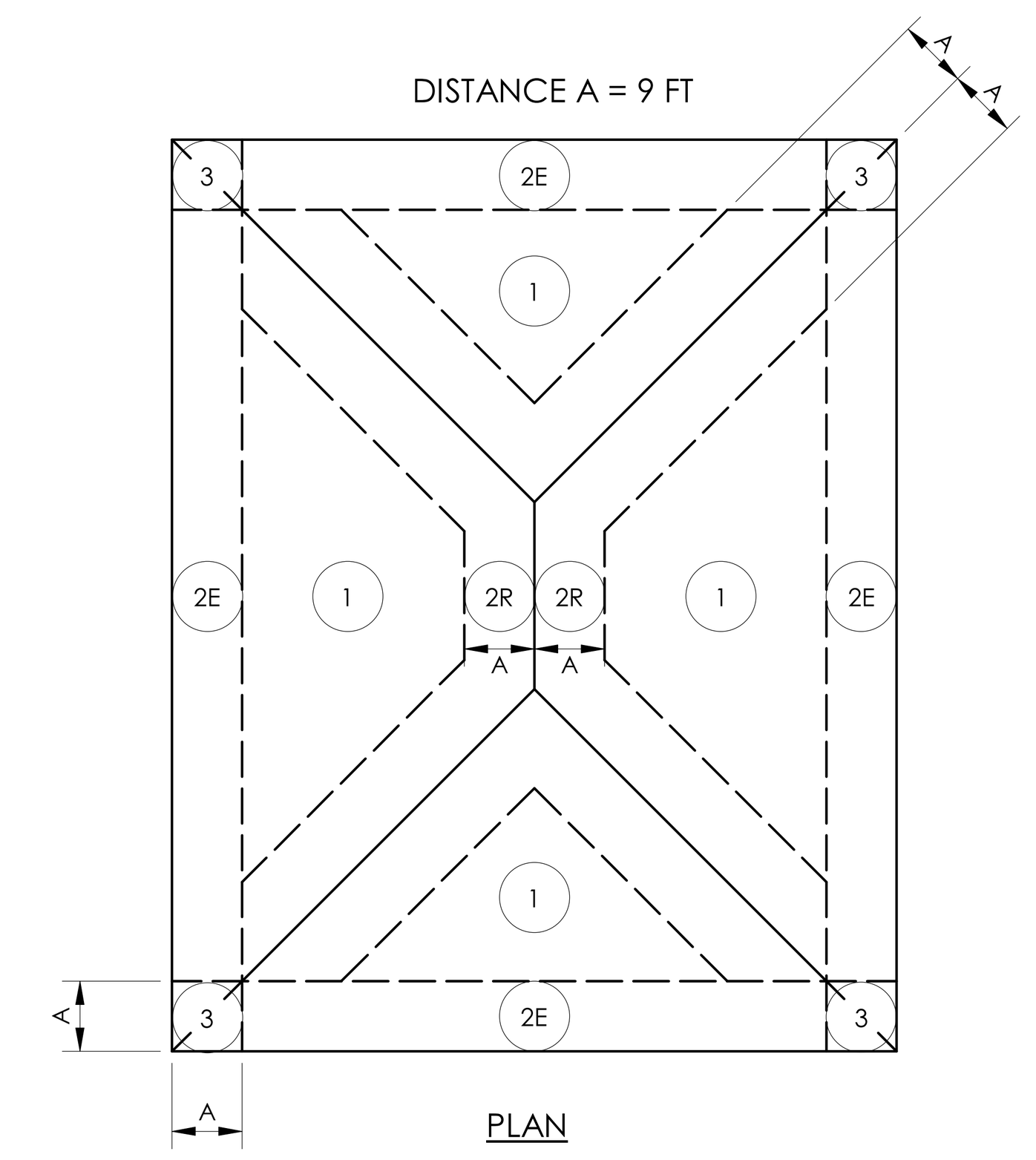
	Effective Wind Area	Zone 1 GCp+		Zone 1 GCp-	
Hip Roof Pressures for Zone 1, the interior portion of the roof. Refer to ASCE7 - Figure 30.3-2E through Figure 30.3-2I	< 10 sq. ft.	7.14 psf	12.09 psf	-20.33 psf	-15.38 psf
	20 sq. ft.	5.77 psf	10.71 psf	-20.33 psf	-15.38 psf
	50 sq. ft.	3.02 psf	7.97 psf	-17.58 psf	-12.64 psf
	100 sq. ft.	1.65 psf	6.59 psf	-16.21 psf	-11.26 psf
	200 sq. ft.	1.65 psf	6.59 psf	-16.21 psf	-11.26 psf
	> 500 sq. ft.	1.65 psf	6.59 psf	-16.21 psf	-11.26 psf

IMPORTANT: A reduction factor of 0.6 has been included in the ASD Wind Load Calculations. Do not reapply the factor when considering load combinations.



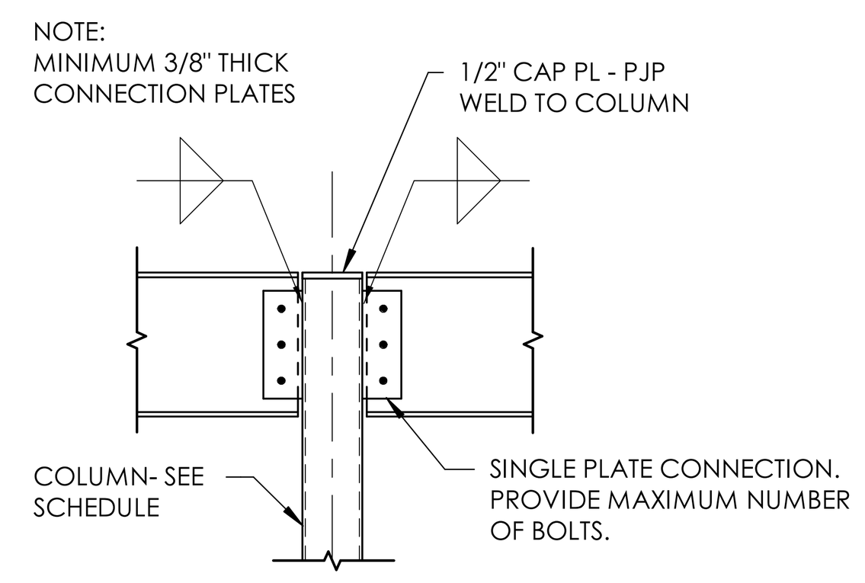
ELEVATION

DISTANCE A = 9 FT



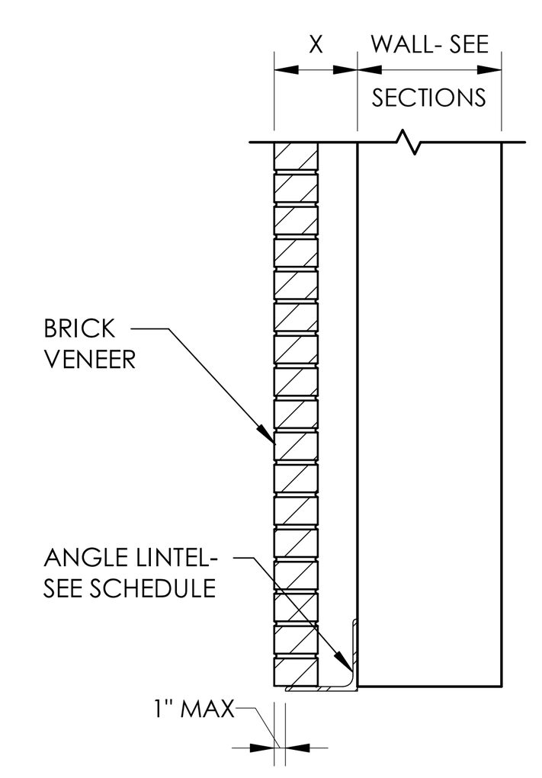
PLAN

COMPONENT AND CLADDING ZONES HIP ROOFS, 7°<θ<45°



TYPICAL BEAM TO COLUMN CONNECTION

MASONRY WALL LAP SPLICE SCHEDULE				
BAR Ø	8" WIDE WALLS		12" WIDE WALLS	
	f'm = 2000psi	f'm = 2500psi	f'm = 2000psi	f'm = 2500psi
#4	15"	12"	12"	12"
#5	24"	18"	15"	12"
#6	44"	34"	28"	21"
#7	61"	47"	38"	29"
#8	91"	71"	57"	44"
#9	115"	89"	72"	56"

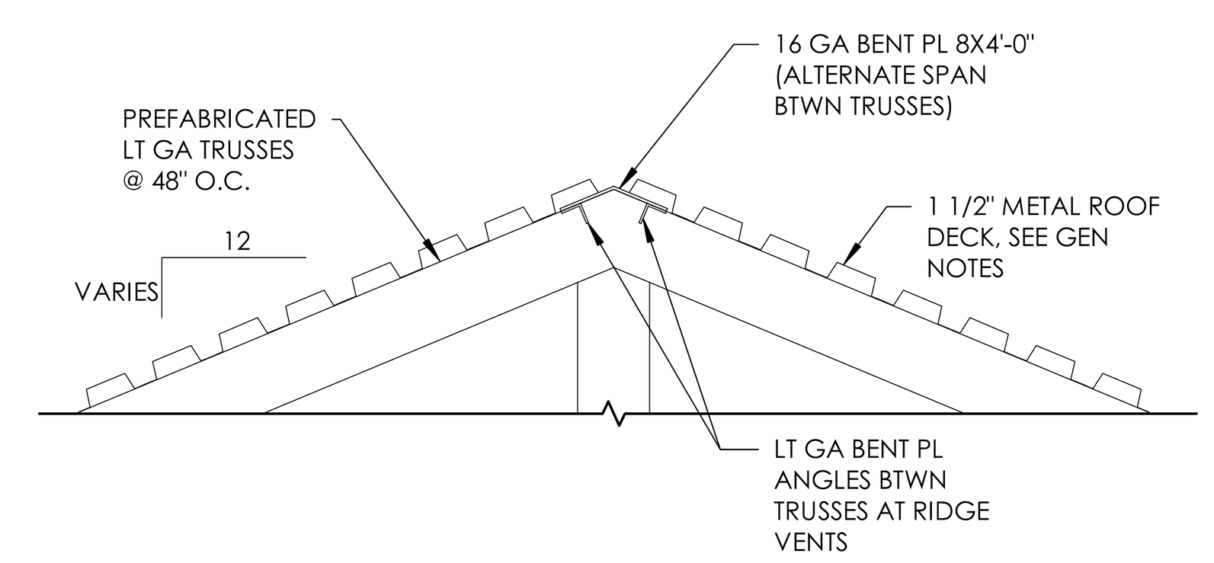


MASONRY LINTEL SCHEDULE			
MAXIMUM OPENING WIDTH	LINTEL DIMENSIONS & REINFORCING		
	DEPTH	8" WALL	12" WALL
2'-0"	8	1#4 BOT	1#4 BOT
4'-0"	8	1#4 BOT	2#4 BOT
6'-0"	8	1#4 BOT & 1#4 TOP	2#5 BOT & 2#4 TOP
8'-0"	16	1#4 BOT & 1#4 TOP	2#5 BOT & 2#5 TOP
10'-0"	16	1#4 BOT & 1#4 TOP	2#6 BOT & 2#5 TOP

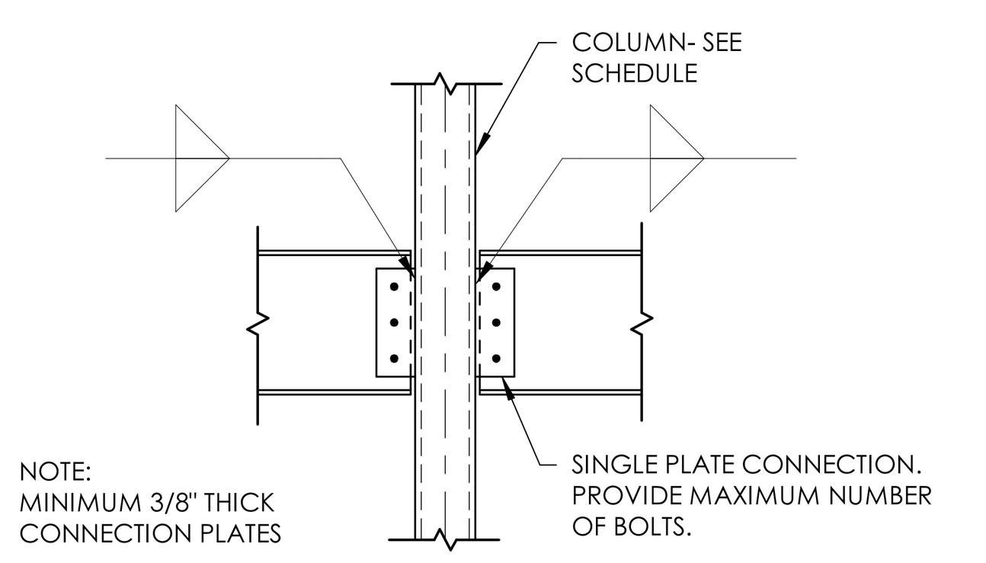
1. DO NOT USE THIS SCHEDULE IF CONCENTRATED LOAD IS APPLIED TO THE LINTEL AT A HEIGHT LESS THAN HALF THE SPAN ABOVE THE LINTEL, IF STACK BOND IS SPECIFIED, OR IF THERE ARE CONTROL JOINTS OR WALL CORNERS WITHIN CLEAR SPAN/2 OF EITHER SIDE.
2. PROVIDE 8" MINIMUM BEARING FOR ALL LINTELS

BRICK LOOSE LINTEL SCHEDULE					
CLEAR SPAN	X = 6"	X = 6 1/2"	X = 7"	X = 7 1/2"	X = 8"
UP TO 6'-0"	L5X3 1/2X3/8 LLH	L6X6X3/8	L6X6X3/8	L5X5X3/8	L5X5X3/8
6'-0" TO 8'-0"	L5X5X3/8	L6X6X3/8	L6X6X3/8	L5X5X3/8	L5X5X3/8
8'-0" TO 10'-0"	BENT PL 8X5 1/2X3/8 LLV	BENT PL 8X6X3/8 LLV	BENT PL 8X5X3/8 LLV	BENT PL 8X5X3/8 LLV	BENT PL 8X5X3/8 LLV

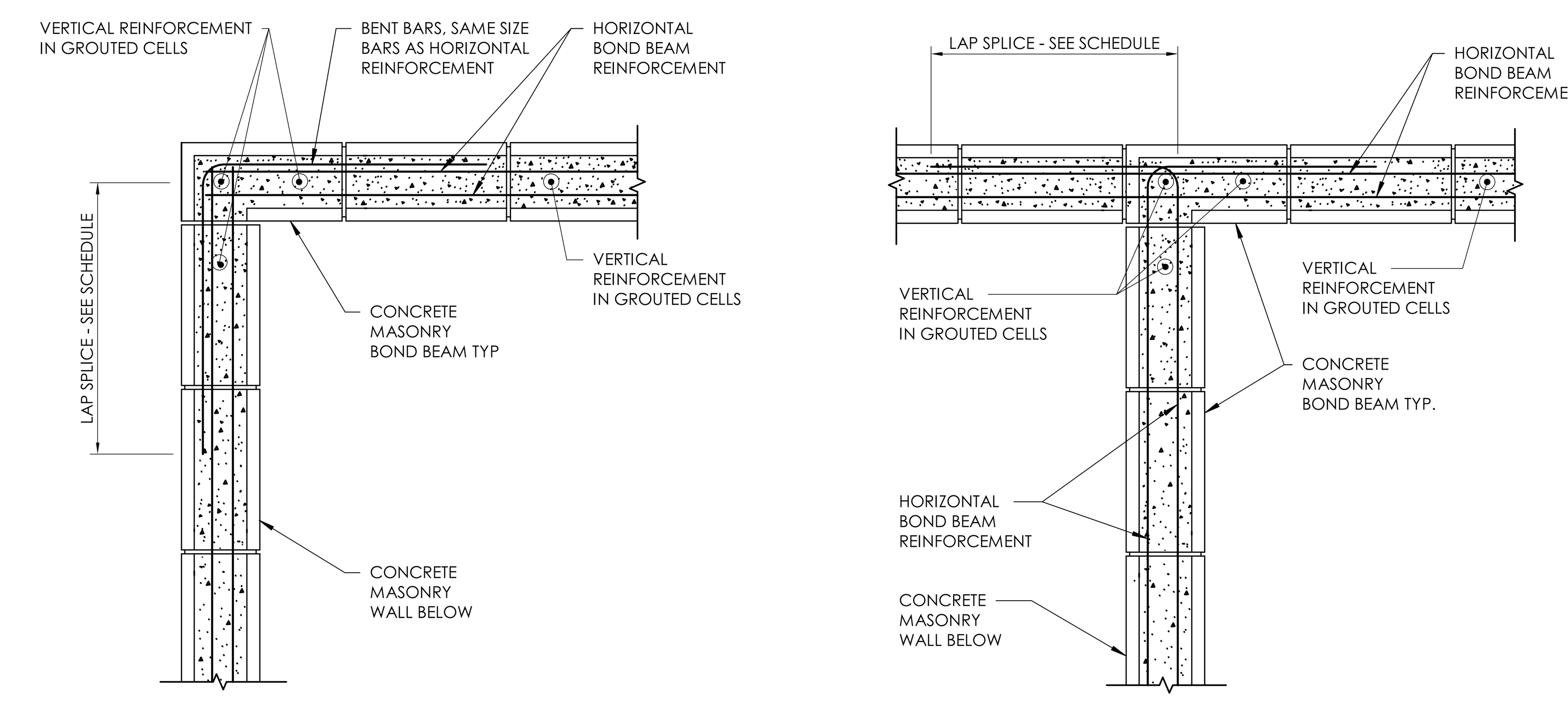
NOTES:
1. DO NOT USE THIS SCHEDULE IF A CONCENTRATED LOAD IS APPLIED TO THE LINTEL AT A HEIGHT LESS THAN HALF THE SPAN ABOVE THE LINTEL.
2. PROVIDE 8" MINIMUM BEARING FOR ALL LINTELS.
3. ALL EXPOSED LINTELS SHALL BE GALVANIZED.
4. VERTICAL CONTROL JOINTS IN THE BRICK WITHIN DISTANCE OF CLEAR SPAN/2 FROM THE ROUGH OPENING ARE NOT ALLOWED.



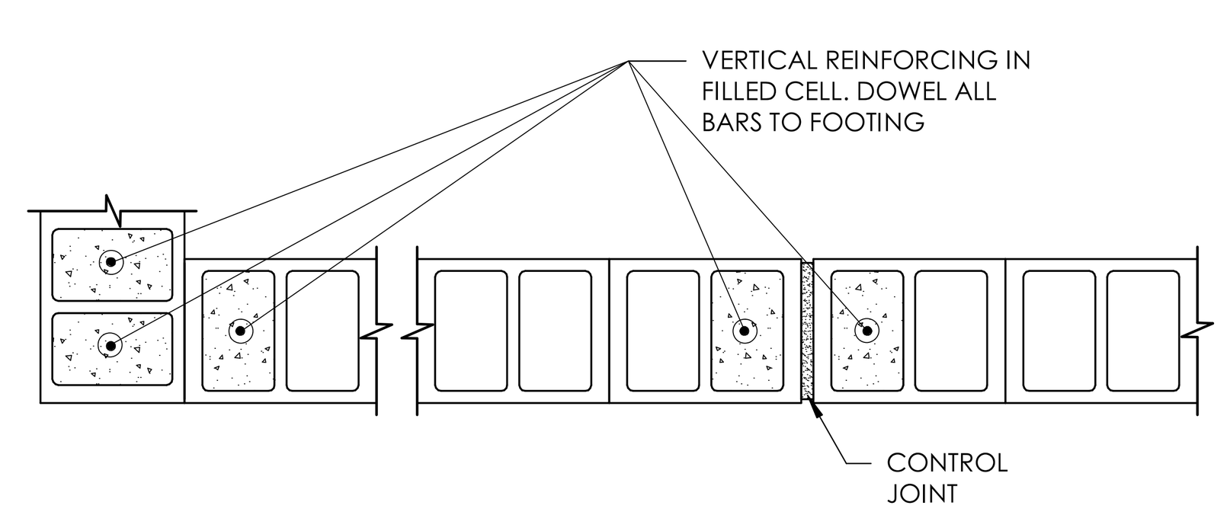
TYPICAL ROOF RIDGE DETAIL



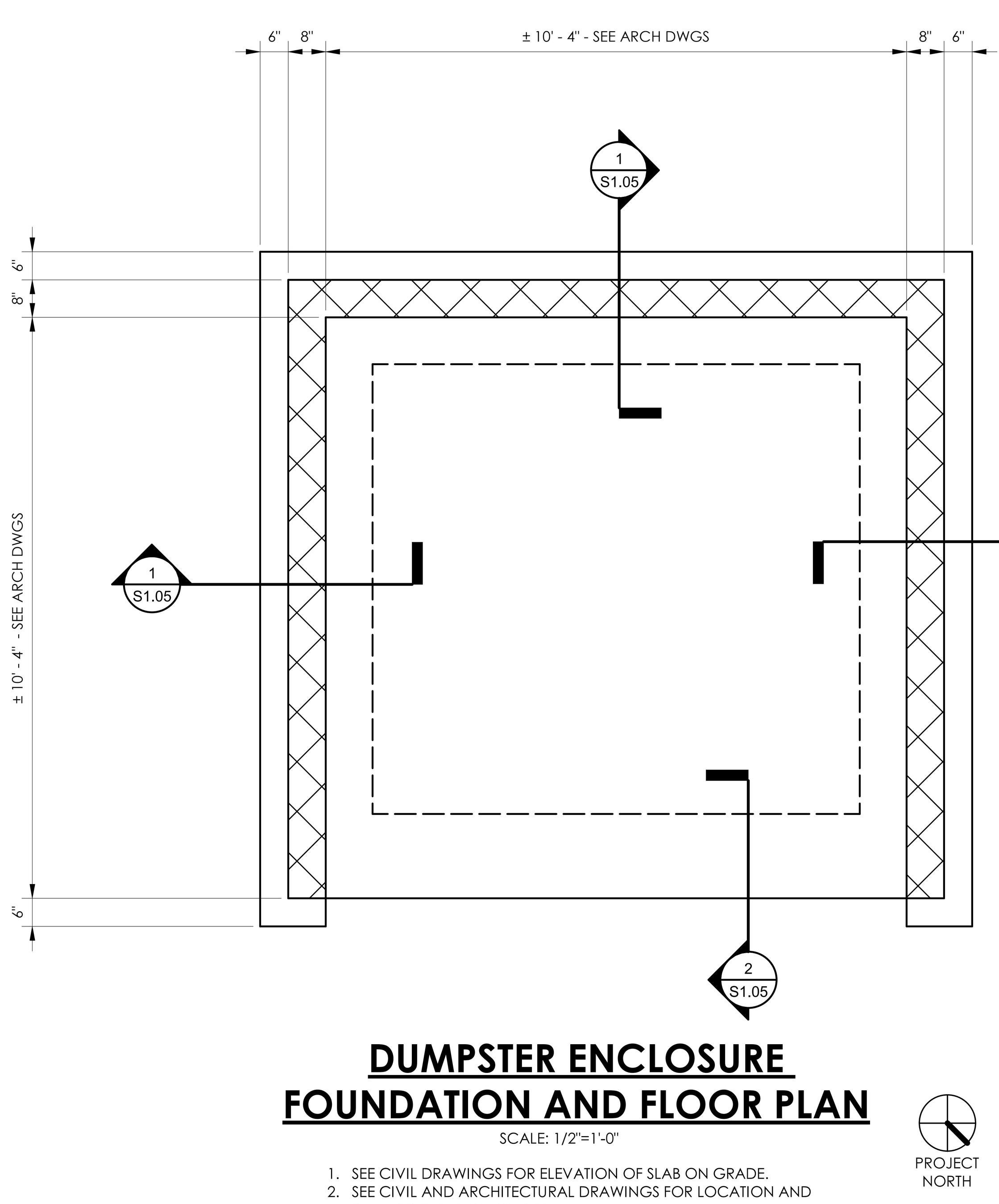
TYPICAL BEAM TO COLUMN CONNECTION



TYPICAL BOND BEAM CORNER REINFORCING DETAILS



TYPICAL MASONRY REINFORCING AT CONTROL JOINTS AND CORNERS

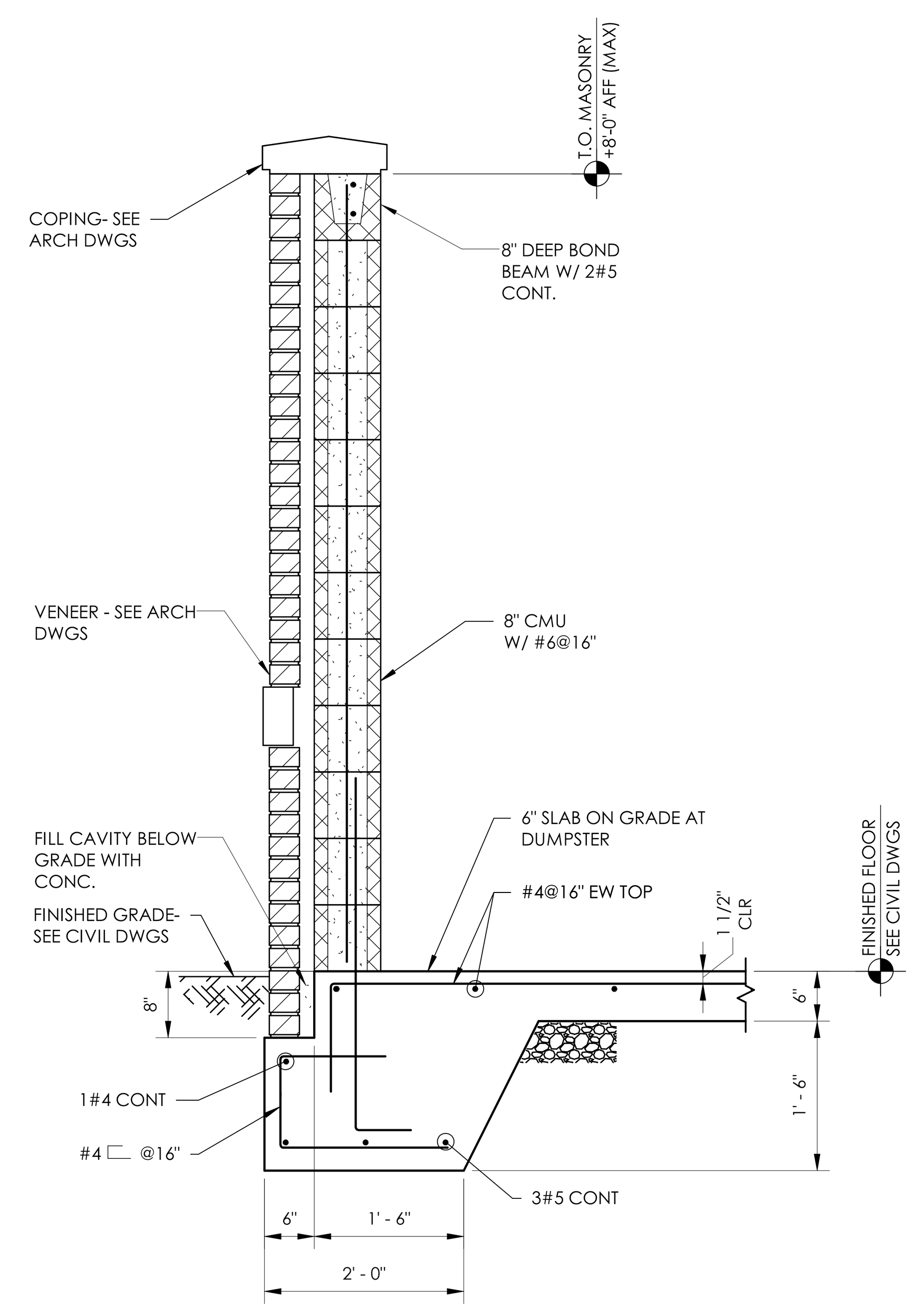


DUMPSTER ENCLOSURE FOUNDATION AND FLOOR PLAN

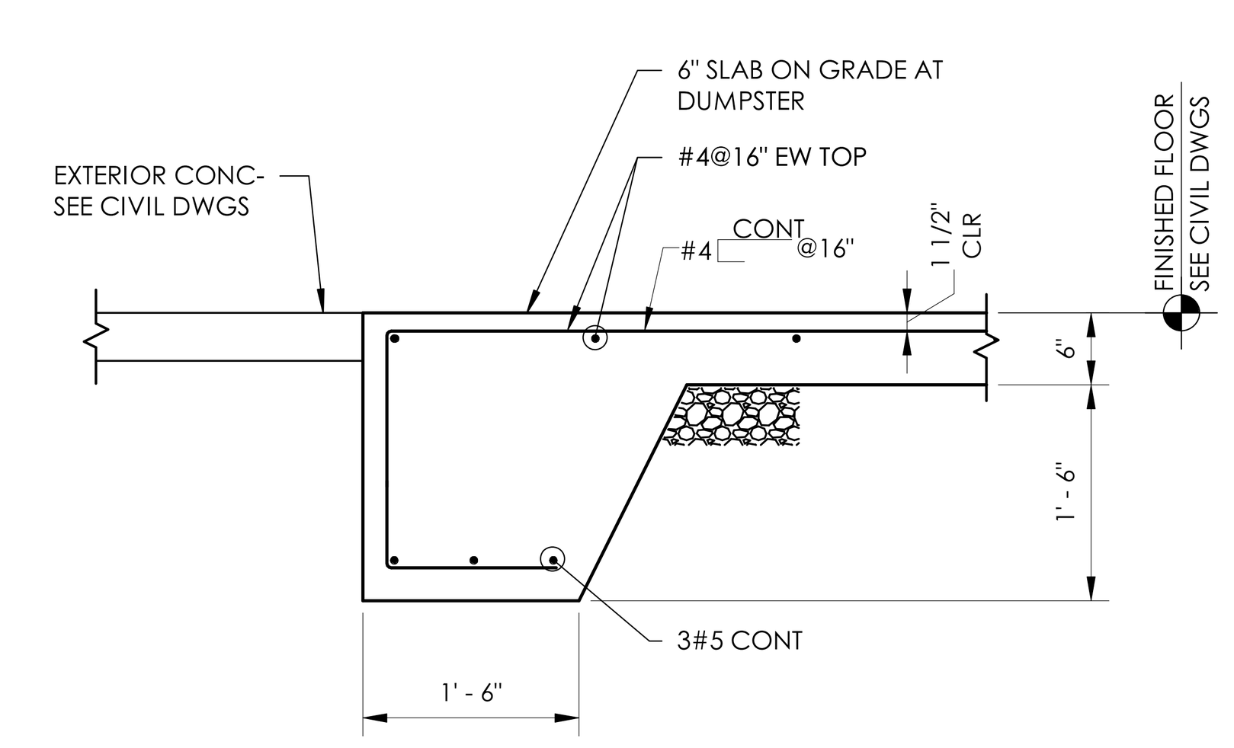
SCALE: 1/2"=1'-0"

PROJECT NORTH

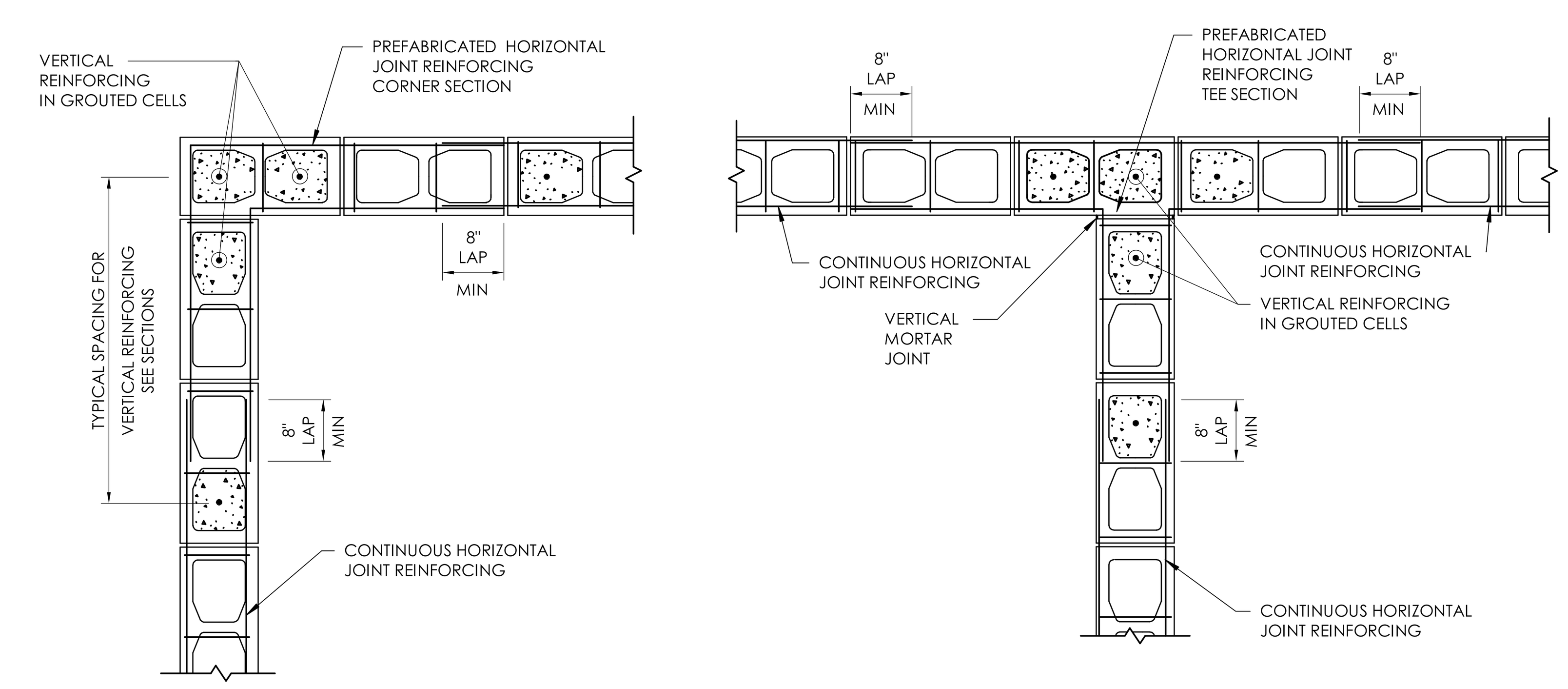
1. SEE CIVIL DRAWINGS FOR ELEVATION OF SLAB ON GRADE.
2. SEE CIVIL AND ARCHITECTURAL DRAWINGS FOR LOCATION AND PLAN ORIENTATION ON SITE.
3. SEE SECTIONS FOR TOP OF MASONRY ABOVE SLAB ON GRADE.
4. PROVIDE 6" SLAB ON GRADE AT DUMPSTER ENCLOSURE WITH #4@16" EACH WAY. PLACE REINFORCING IN TOP THIRD OF SLAB.



1 SECTION S1.05 3/4" = 1'-0"



2 SECTION S1.05 3/4" = 1'-0"



TYPICAL WALL CORNER REINFORCING DETAILS

TUCKER·JONES ENGINEERS ASSOCIATED, P.C.
3300 CAHABA ROAD, SUITE 210
BIRMINGHAM, ALABAMA 35223
PHONE: 205.879.5660
FAX: 205.879.5606
PROJECT #22076

GMC
2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM

ISSUE	DATE
BID SET	09/09/2024

DRAWN BY: CSS
CHECKED BY: CSS

TUSCALOOSA COUNTY DHR
Tuscaloosa, Alabama

GMC # ABHM220021

09/09/2024

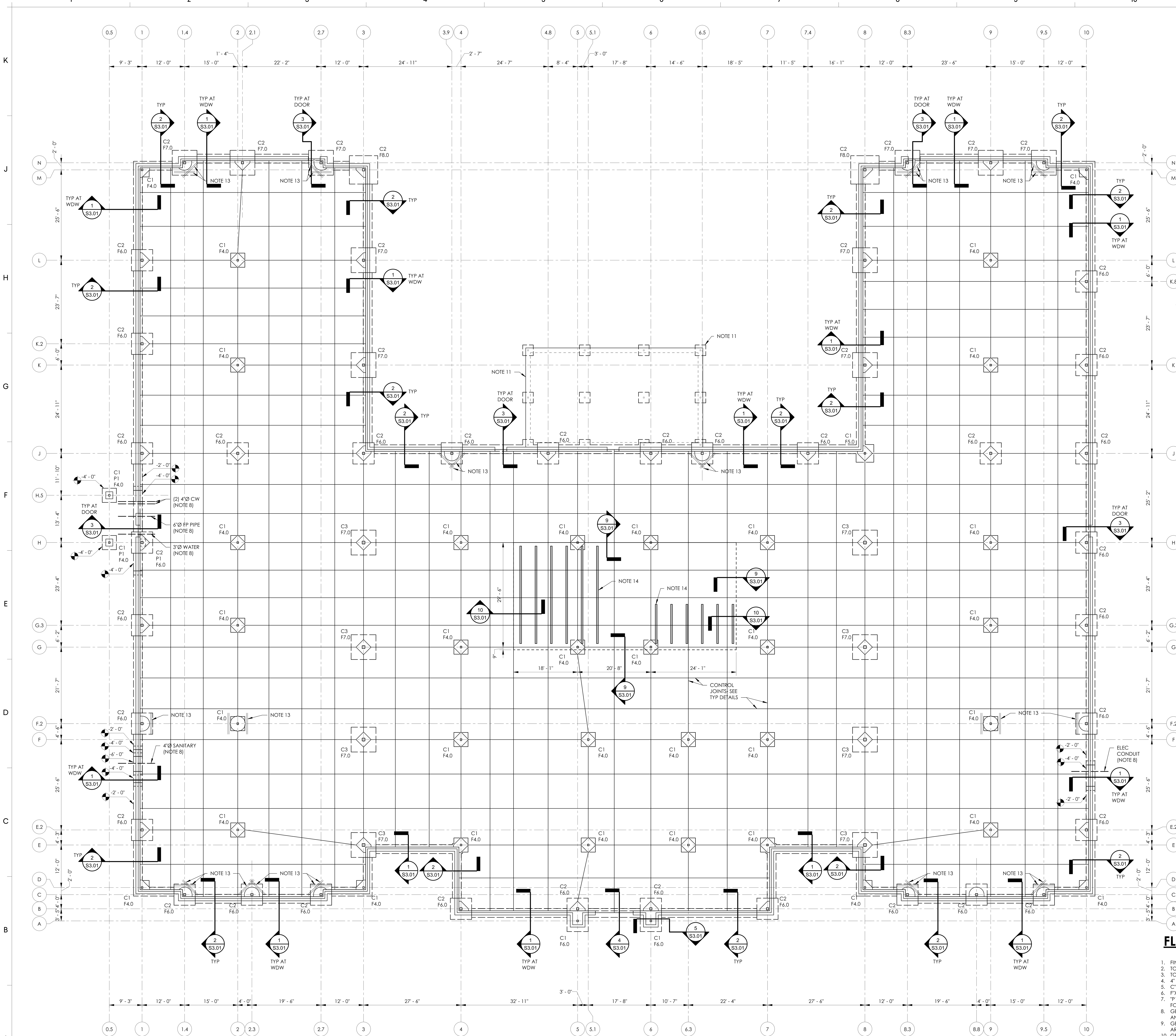
TYPICAL DETAILS

S1.05

sheet of

9/7/2024 12:36:28 PM

TUCKER-JONES
3500 CAHABA ROAD, SUITE 210
BIRMINGHAM, ALABAMA 35223
PHONE: 205.879.5660
FAX: 205.879.5606
PROJECT #22076

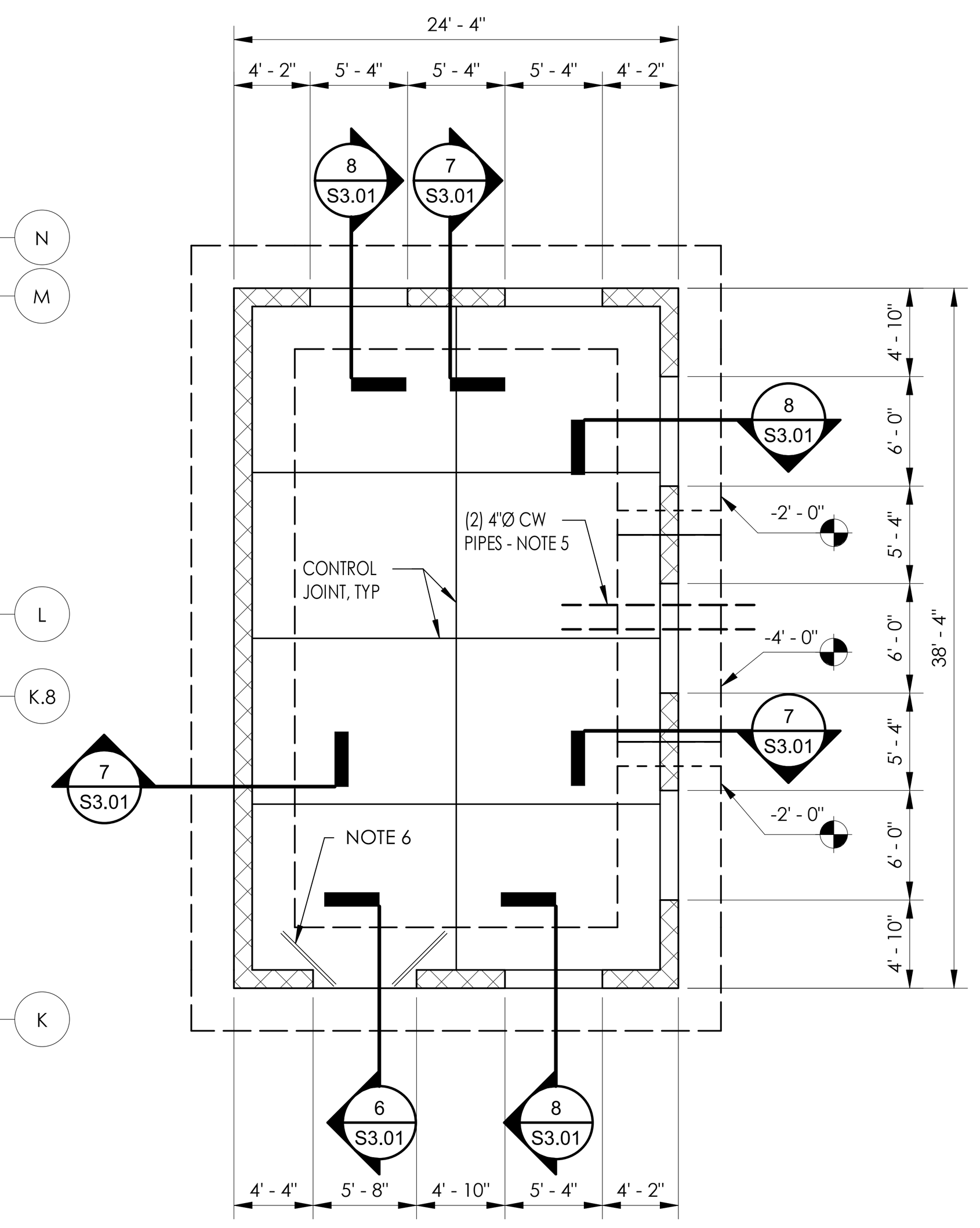


FLOOR AND FOUNDATION PLAN

SCALE: 3/32" = 1'-0"

PROJECT NORTH

1. FINISH FLOOR (TOP OF SLAB) ELEVATION 0'-0", UNLESS NOTED.
2. TOP OF INTERIOR FOOTING ELEVATION -2'-0" BELOW FINISH FLOOR, UNLESS NOTED.
3. TOP OF EXTERIOR FOOTING ELEVATION -2'-0" BELOW FINISH FLOOR, UNLESS NOTED.
4. 4" SLAB ON GRADE, UNLESS NOTED. SEE GENERAL NOTES AND TYPICAL DETAILS.
5. C"X" DENOTES COLUMN. SEE COLUMN SCHEDULE ON SHEET S1.04.
6. F"X.X" DENOTES COLUMN FOOTING. SEE FOOTING SCHEDULE ON SHEET S1.04.
7. "P1" DENOTES COLUMN PEDESTAL. SEE "TYPICAL COLUMN BASE PLATE, PEDESTAL AND FOOTING DETAIL ON SHEET S1.04.
8. GENERAL CONTRACTOR COORDINATE LOCATION OF ALL FOOTING STEPS WITH CIVIL, UTILITY AND PLUMBING DRAWINGS.
9. GENERAL CONTRACTOR COORDINATE FLOOR DEPRESSION DEPTH, SIZE AND LOCATION WITH ARCHITECTURAL DRAWINGS.
10. GENERAL CONTRACTOR COORDINATE LOCATION OF TILE JOINTS WITH CONTROL JOINTS.
11. INDICATES METAL CANOPY COLUMN AT PATIO AREA, SEE ARCHITECTURAL DRAWINGS FOR LOCATION OF PRE-FABRICATED METAL CANOPY COLUMNS. SEE "TYPICAL ALUMINIUM CANOPY COLUMN FOOTING DETAIL" ON SHEET S1.03 FOR FOOTING AND SLAB REINFORCING.
12. PROVIDE SLAB CONTROL JOINTS AT 12'-0" MAX SPACING IN EACH DIRECTION.
13. PROVIDE 2#4 X6'-0" LONG RE-ENTRANT REINFORCEMENT IN TOP OF SLAB. PROVIDE 2" CLEAR FROM TOP OF SLAB.
14. INDICATES RECESSED TRACK FOR HIGH DENSITY FILING SYSTEM IN SLAB ON GRADE. COORDINATE LOCATION OF TRACKS WITH FINAL SELECTED FILING SYSTEM MANUFACTURER.



MECHANICAL ENCLOSURE FLOOR AND FOUNDATION PLAN

SCALE: 1/8" = 1'-0"

PROJECT NORTH

1. FINISH FLOOR (TOP OF SLAB) ELEVATION 0'-0", COORDINATE ACTUAL ELEVATION LEVEL WITH CIVIL DRAWINGS.
2. TOP OF FOOTING ELEVATION -2'-0" BELOW FINISH FLOOR, UNLESS NOTED.
3. SEE CIVIL, ARCHITECTURAL, AND MECHANICAL DRAWINGS FOR LOCATION AND PLAN ORIENTATION ON SITE.
4. PROVIDE 12" THICK SLAB ON GRADE REINFORCED WITH #5@16" EACH WAY, TOP AND BOTTOM. SEE PLAN FOR SLAB CONTROL JOINTS (10'-0" MAXIMUM SPACING FOR CONTROL JOINTS). SEE GENERAL NOTES AND TYPICAL DETAILS.
5. GENERAL CONTRACTOR COORDINATE LOCATION OF ALL FOOTING STEPS WITH CIVIL, UTILITY AND PLUMBING DRAWINGS.
6. PROVIDE 2#5 X 4'-0" LONG AT CORNER OF DOOR OPENING. PLACE IN TOP THIRD OF SLAB DEPTH.

GMC
2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM

ISSUE	DATE
BID SET	09/09/2024

DRAWN BY: CSS
CHECKED BY: CSS

TUSCALOOSA COUNTY DHR
Tuscaloosa, Alabama

GMC # ABHM220021

09/09/2024

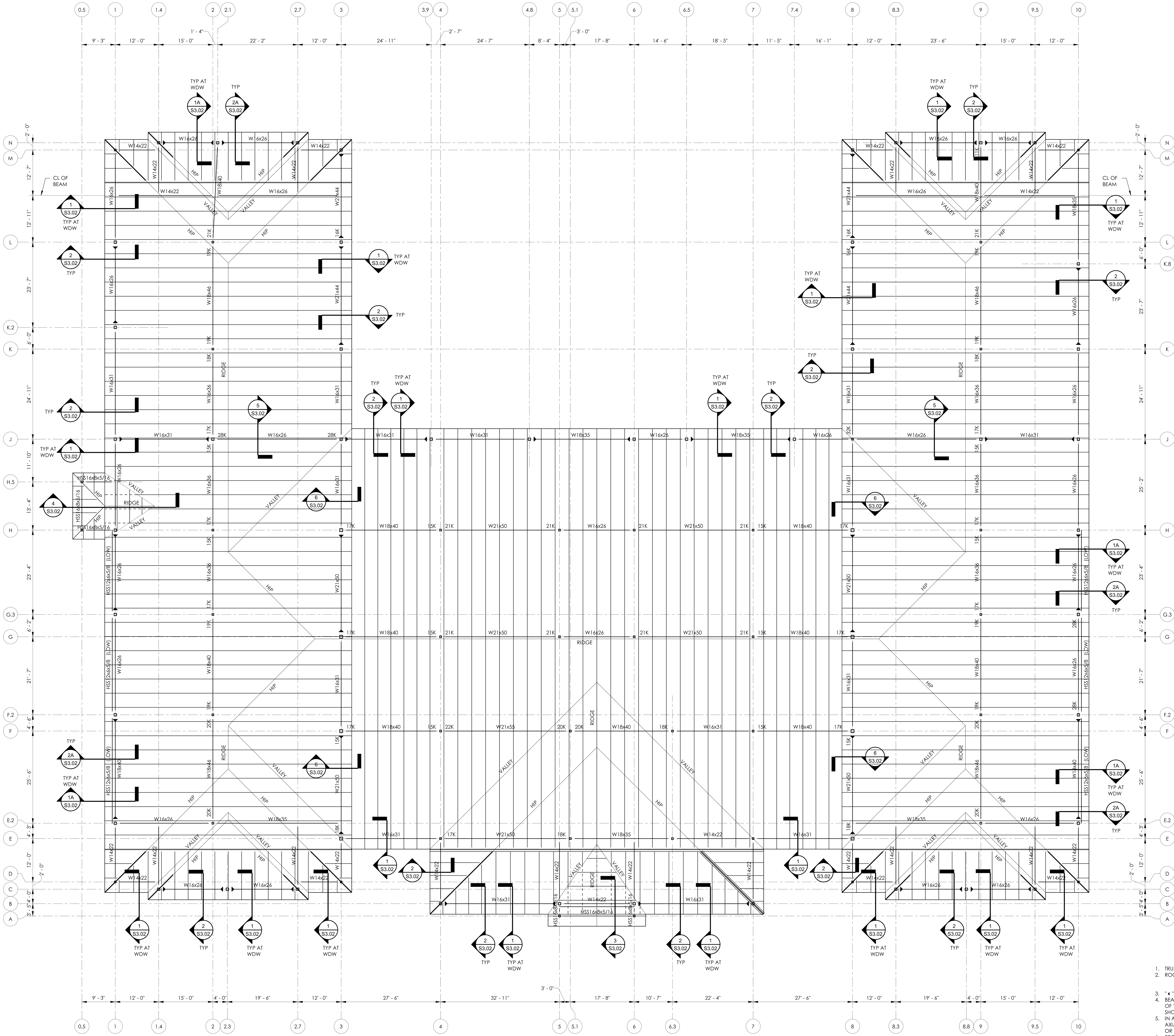
FLOOR AND FOUNDATION PLAN

S2.01

sheet of

9/7/2024 12:36:29 PM

TUCKER·JONES
ENGINEERS ASSOCIATED, P.C.
3300 CAHABA ROAD, SUITE 210
BIRMINGHAM, ALABAMA 35223
PHONE: 205.879.5660
FAX: 205.879.5606
PROJECT #22076



ROOF FRAMING PLAN

SCALE: 3/32" = 1'-0"

PROJECT NORTH

1. TRUSS BEARING (TOP OF STEEL BEAMS) ELEVATION +14'-0" AFF, UNLESS NOTED.
2. ROOF SYSTEM: 1 1/2" STEEL ROOF DECK ON LGT GA METAL TRUSSES AT 4'-0" OC, BEARING ON STEEL BEAMS, UNLESS NOTED. SEE GENERAL NOTES FOR ROOF DECK ATTACHMENT PATTERN.
3. "◀" INDICATES MOMENT CONNECTION. SEE TYPICAL DETAIL ON SHEET S1.04.
4. BEAM REACTIONS ARE INDICATED AT ENDS OF BEAMS AS "XK" WHERE "X" IS THE MAGNITUDE OF THE ALLOWABLE LOAD (ASD) SHEAR REACTION IN KIPS. WHERE BEAM REACTION IS NOT SHOWN ON PLAN, DESIGN CONNECTION FOR SHEAR REACTION OF 15 KIPS.
5. IN ADDITION TO SHEAR REACTIONS, DESIGN CONNECTIONS TO COLUMNS WITH BEAM AXIAL FORCE OF 8 KIPS ALONG GRIDS 1, 3, 8, 10, B, C, J, AND N. PROVIDE DOUBLE ANGLE OR END PLATE CONNECTION TO COLUMNS.
6. PROVIDE LGT GA BENT PLATE 16GAX6"X6" AT ALL HIPS AND VALLEYS. ATTACH TO EACH TRUSS SUPPORT USING 2#10 TEK SCREWS.
7. TRUSS LAYOUT SHOWN FOR GENERAL INTENT. EXACT LAYOUT OF LIGHTGAUGE STEEL TRUSSES TO BE DETERMINED BY THE TRUSS MANUFACTURER AND SUBMITTED TO THE STRUCTURAL ENGINEER.
8. PROVIDE HSS10X6X5/16 LOW, SEE SECTIONS FOR LOCATION.

GMC
2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM

ISSUE	DATE
BID SET	09/09/2024

DRAWN BY: CSS
CHECKED BY: CSS

TUSCALOOSA COUNTY DHR
Tuscaloosa, Alabama

GMC # ABHM220021

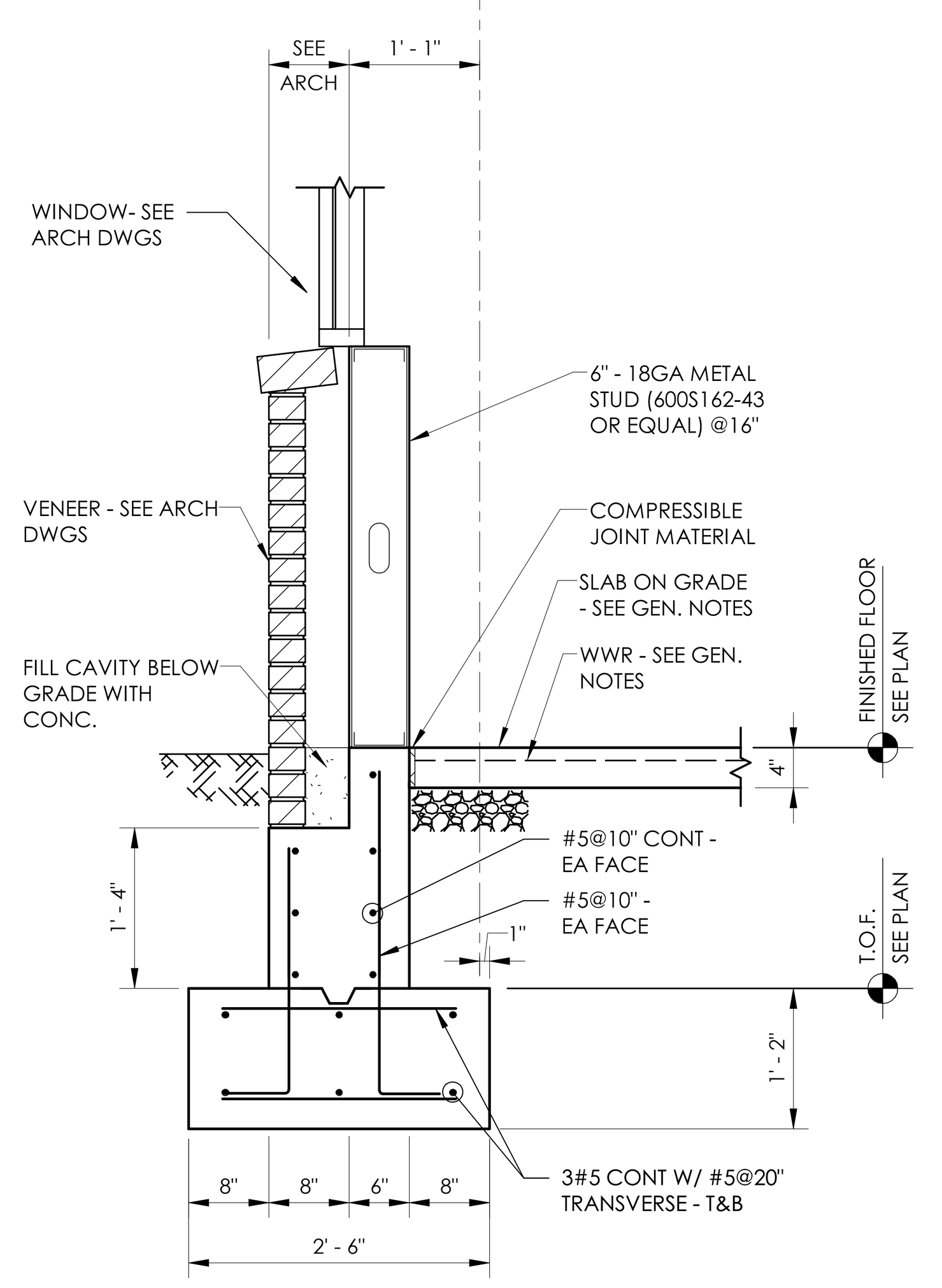
ALABAMA REGISTERED PROFESSIONAL ENGINEER No. 31254
09/09/2024

ROOF FRAMING PLAN

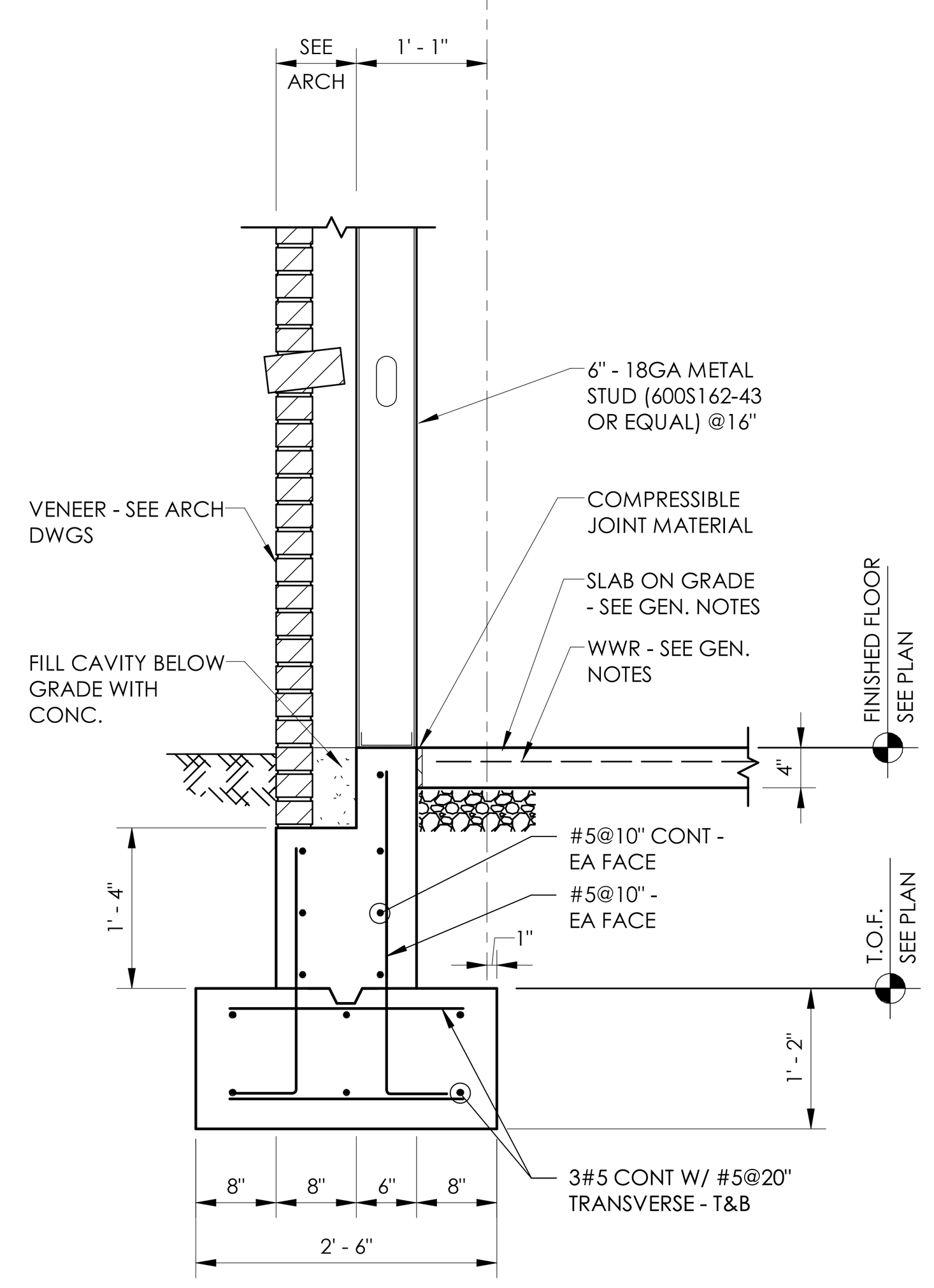
S2.02

sheet ___ of ___

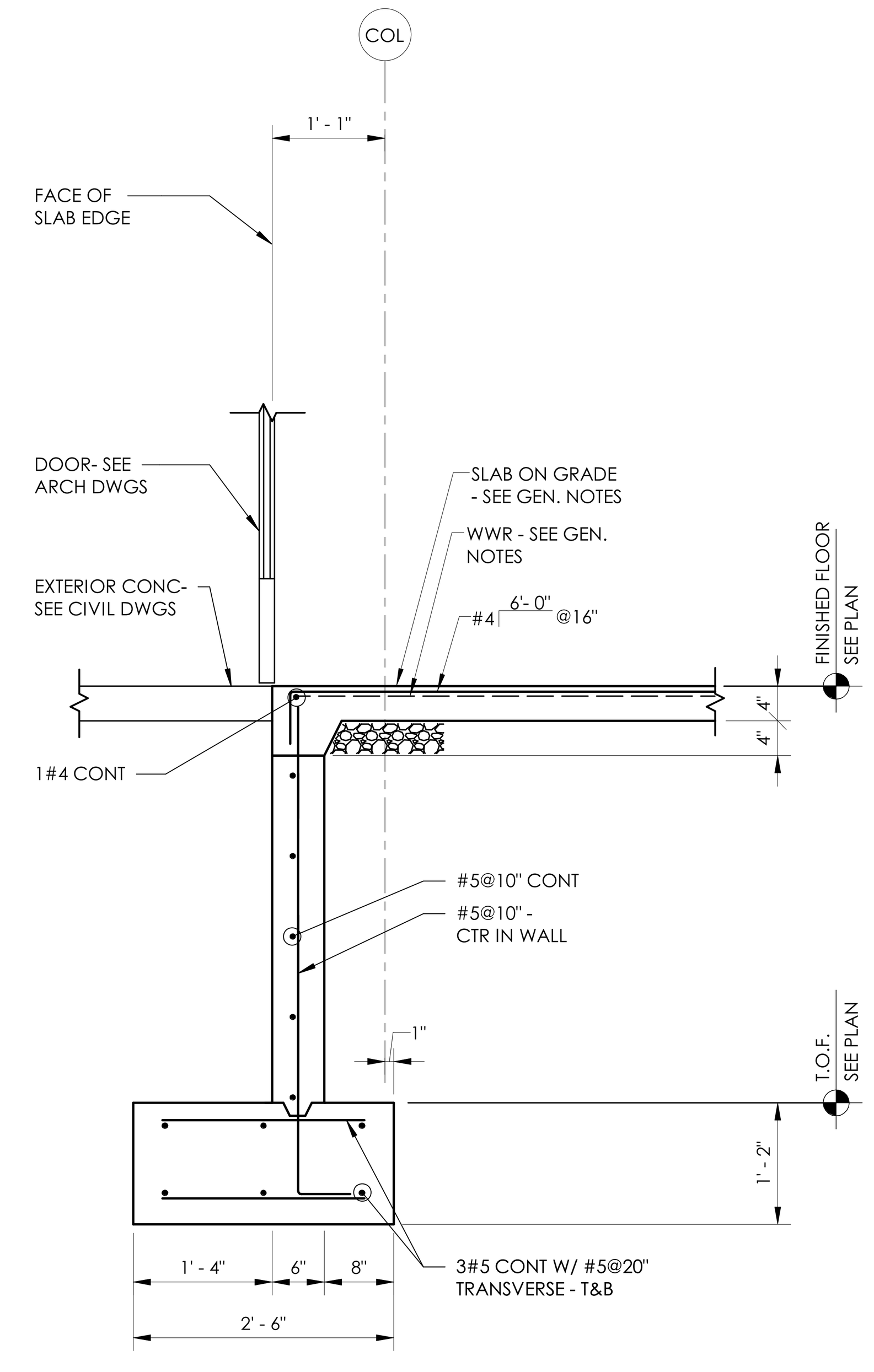
9/7/2024 12:36:30 PM



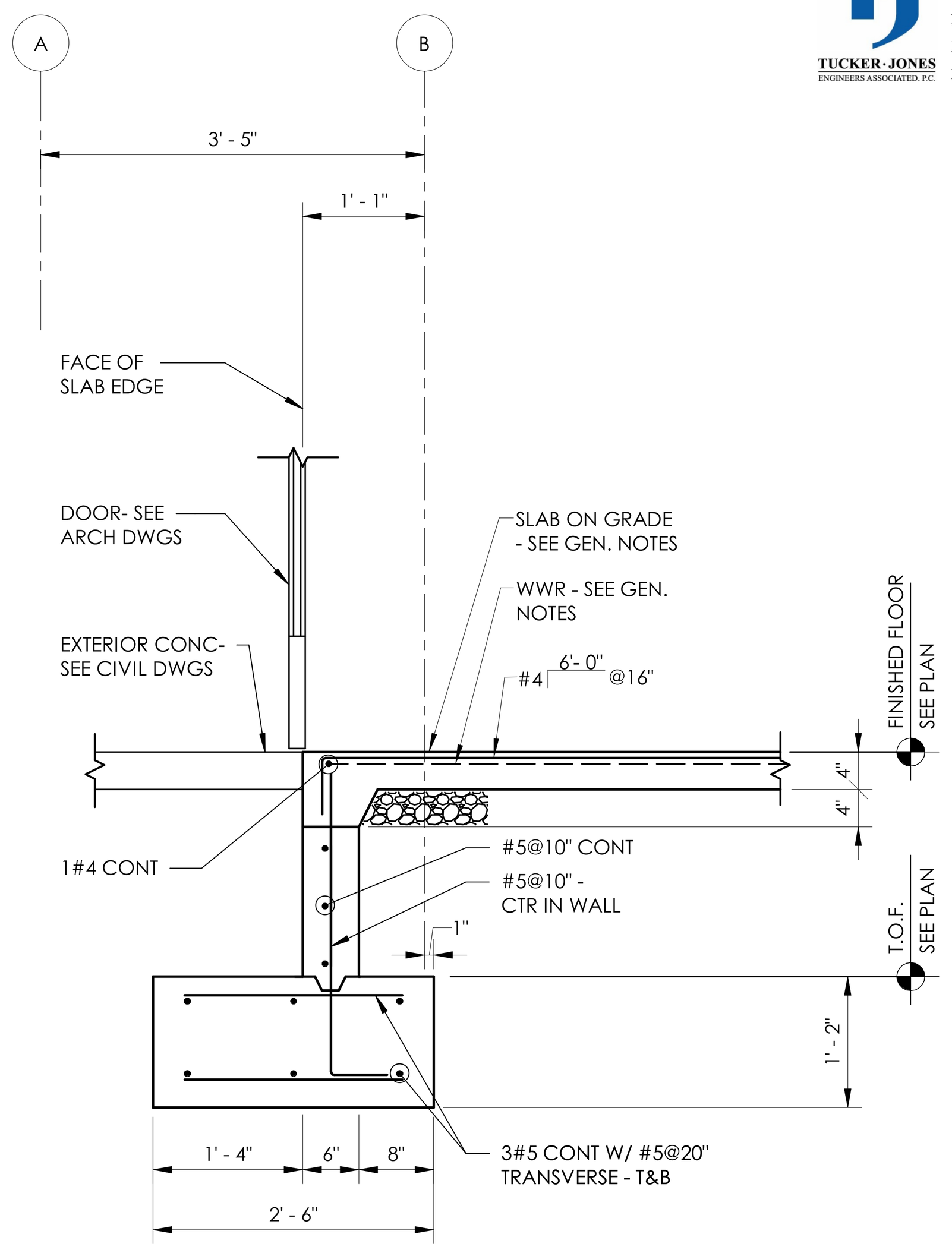
1 SECTION S3.01 3/4" = 1'-0"



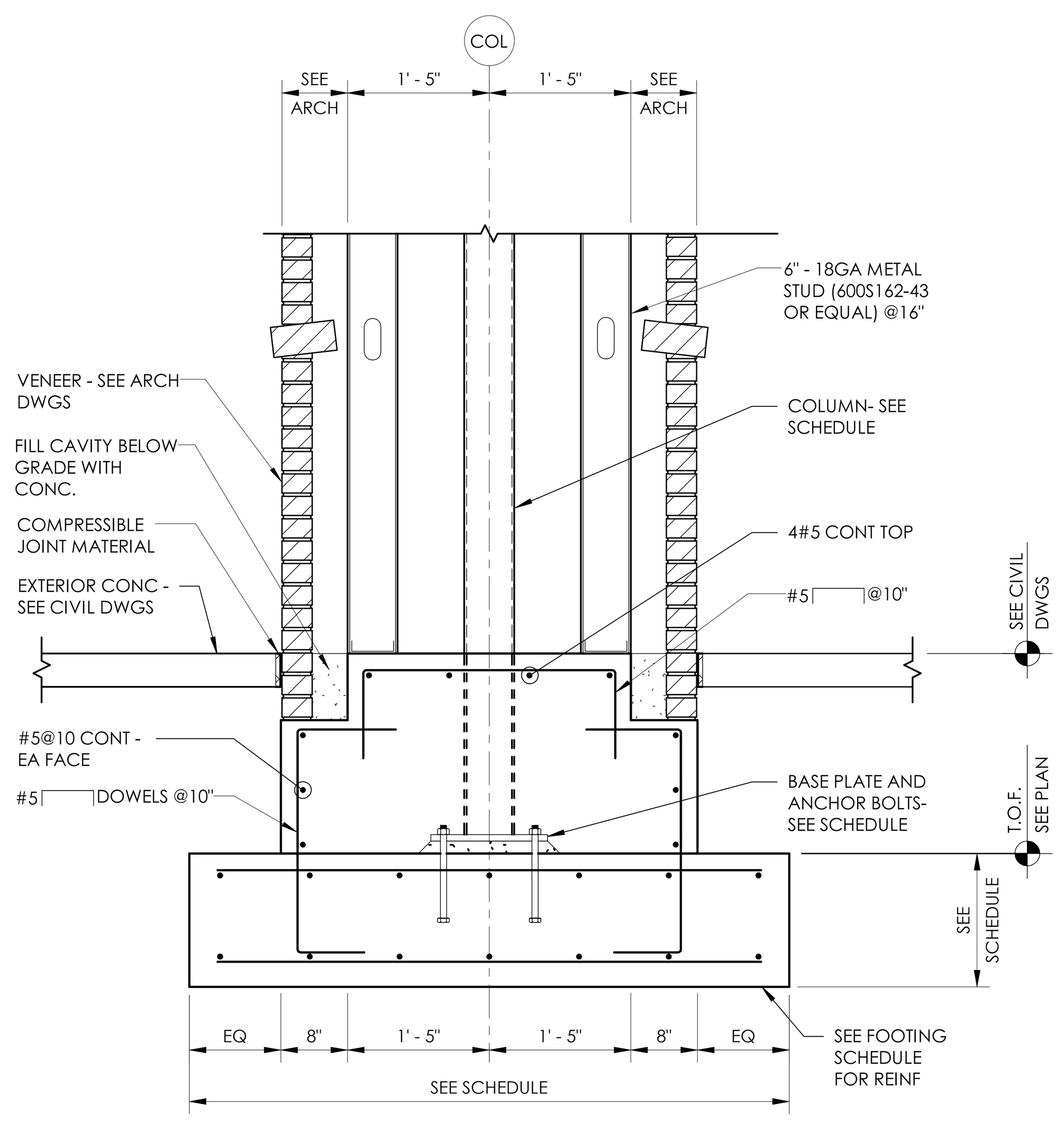
2 SECTION S3.01 3/4" = 1'-0"



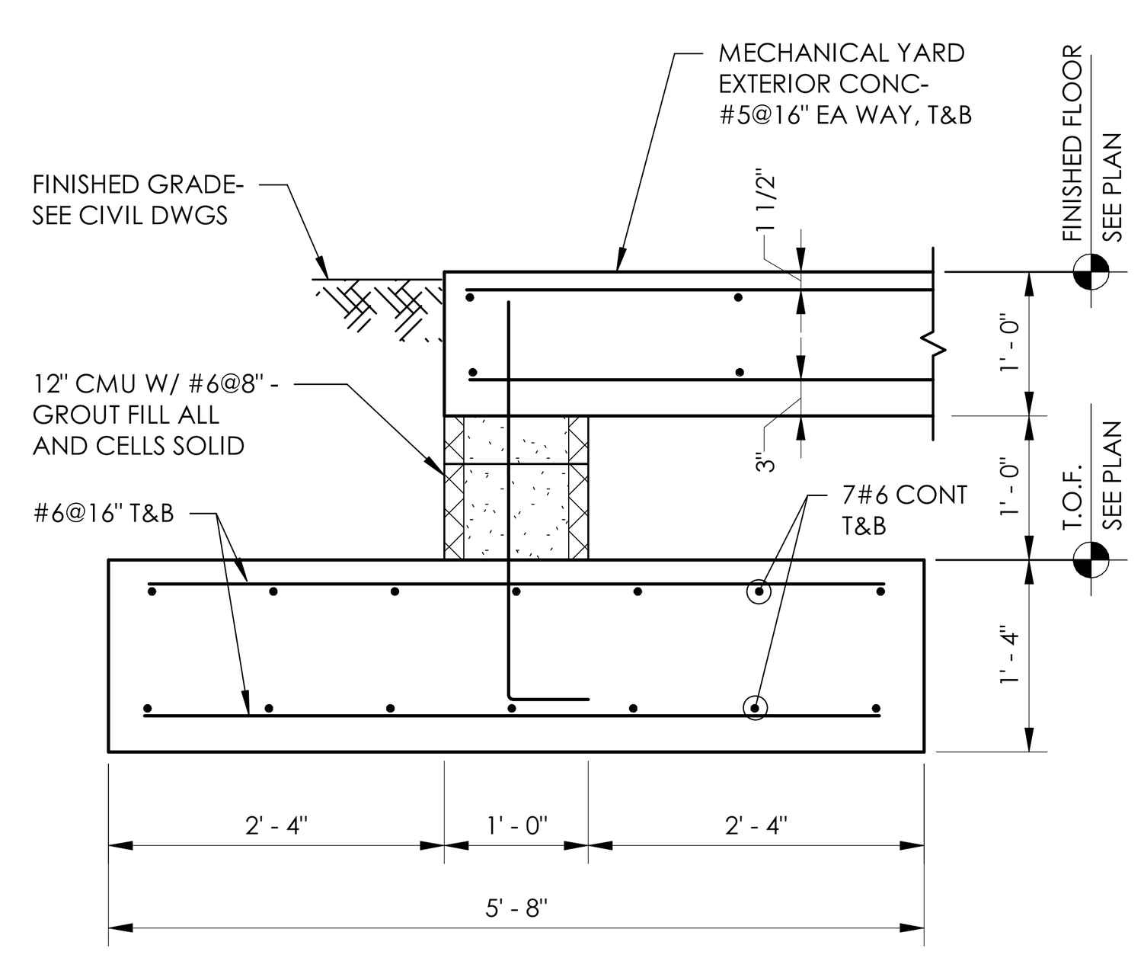
3 SECTION S3.01 3/4" = 1'-0"



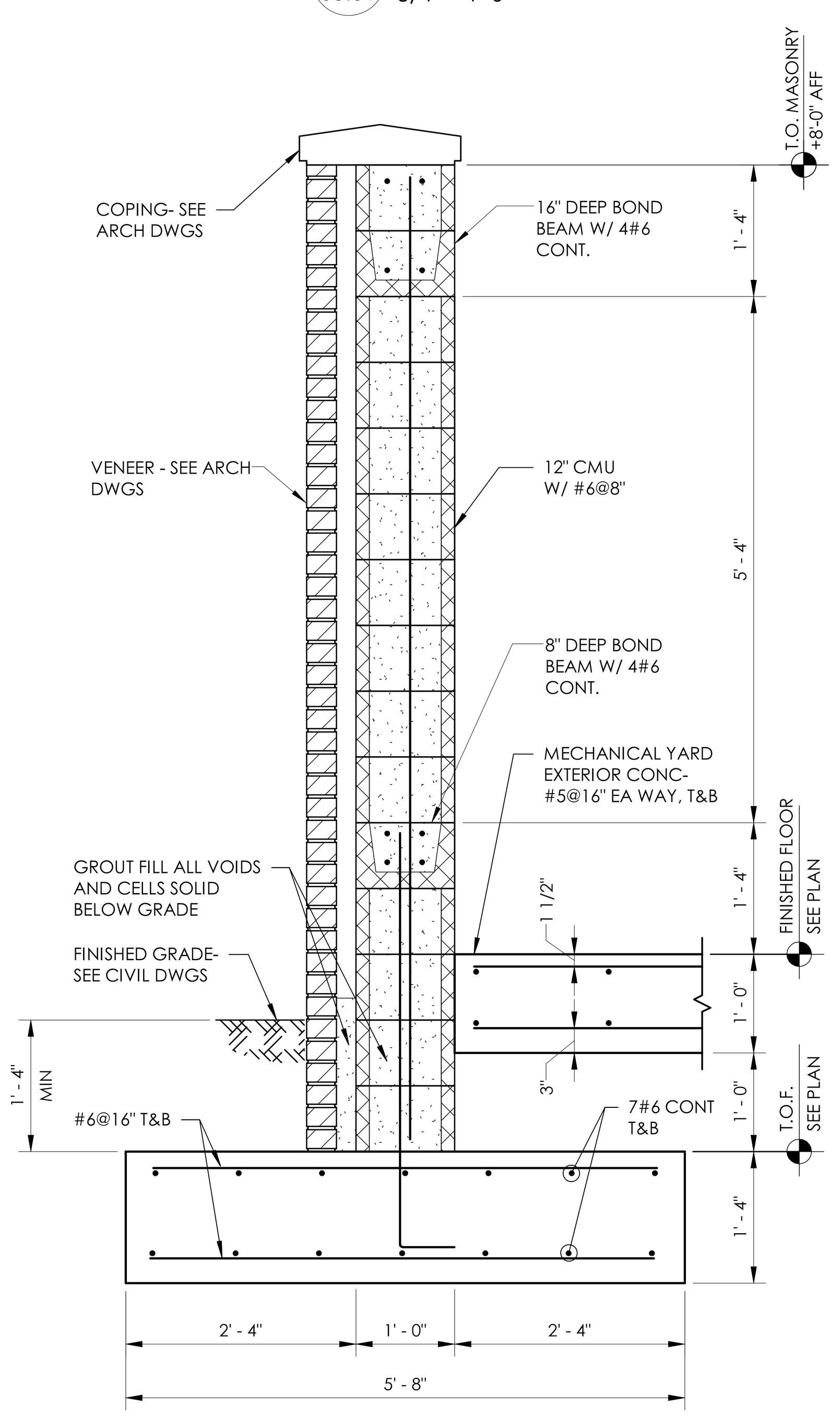
4 SECTION S3.01 3/4" = 1'-0"



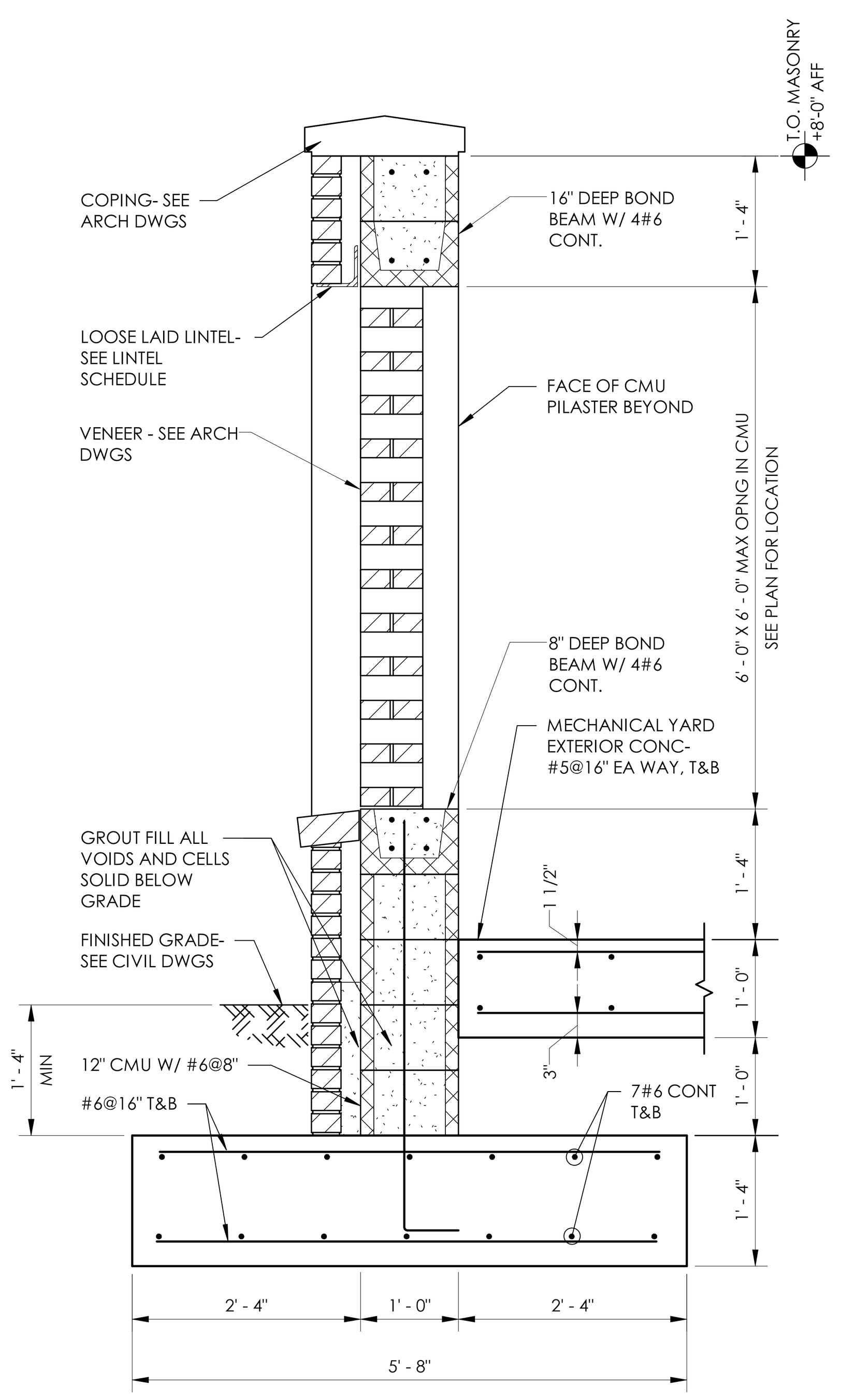
5 SECTION S3.01 3/4" = 1'-0"



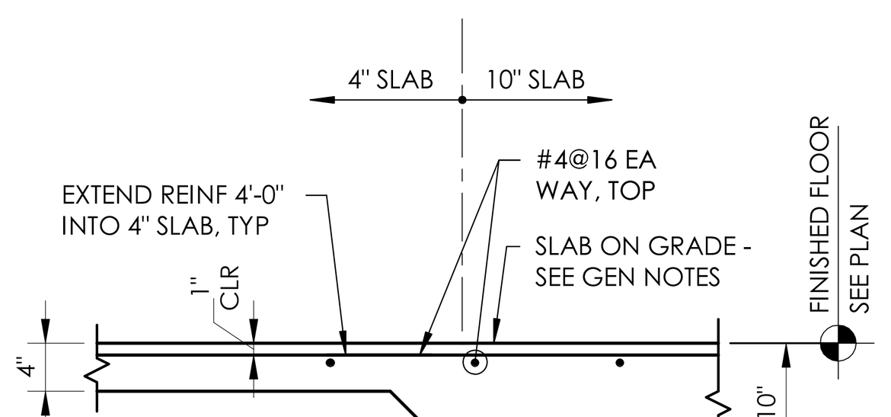
6 SECTION S3.01 3/4" = 1'-0"



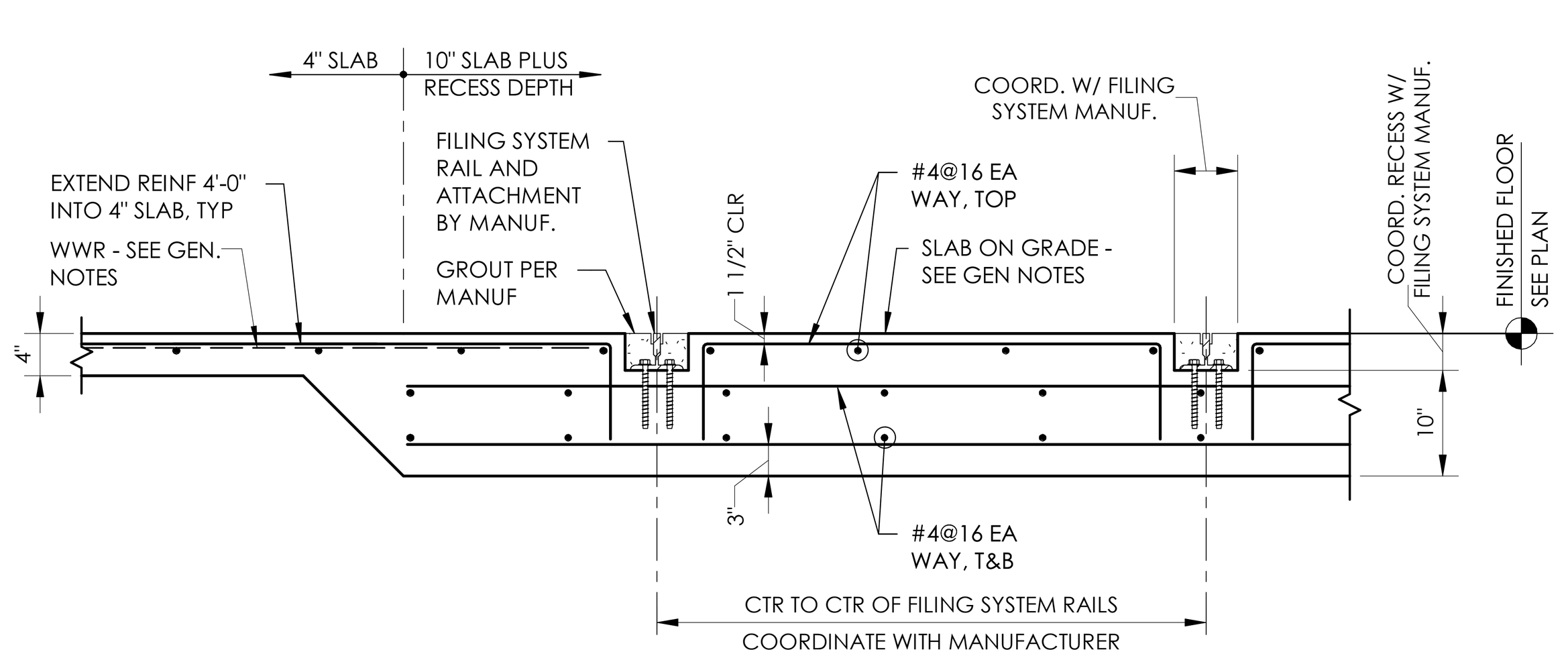
7 SECTION S3.01 3/4" = 1'-0"



8 SECTION S3.01 3/4" = 1'-0"



9 SECTION S3.01 3/4" = 1'-0"



10 SECTION S3.01 3/4" = 1'-0"

TJ TUCKER-JONES
3500 CAHABA ROAD, SUITE 210
BIRMINGHAM, ALABAMA 35223
PHONE: 205.879.5660
FAX: 205.879.5606
PROJECT #22076

GMC
2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM

ISSUE	DATE
BID SET	09/09/2024

DRAWN BY: CSS
CHECKED BY: CSS

TUSCALOOSA COUNTY DHR
Tuscaloosa, Alabama

GMC # ABHM220021

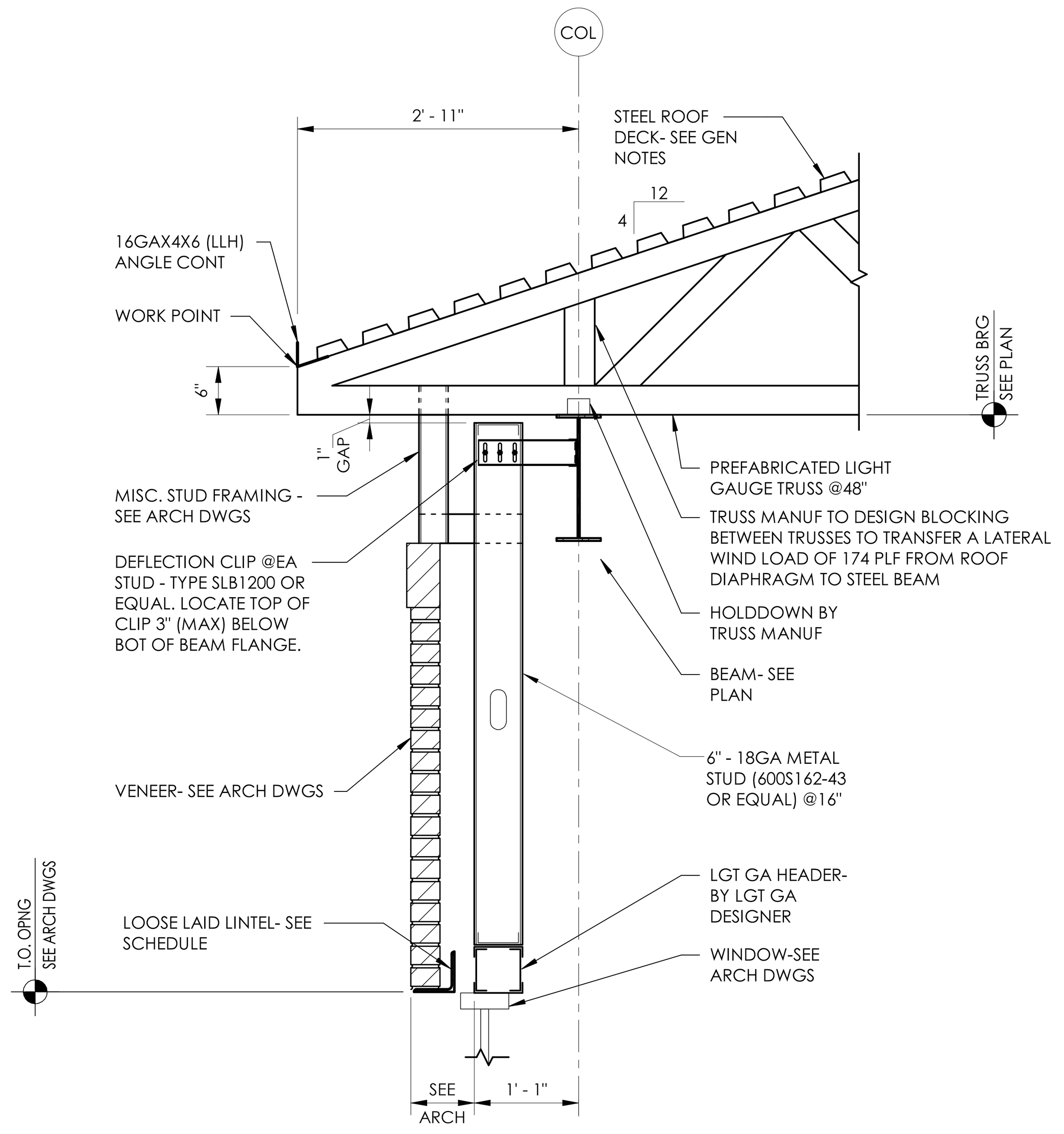
ALABAMA REGISTERED PROFESSIONAL ENGINEER No. 31254 CHRISTOPHER S. SMITH
09/09/2024

SECTIONS

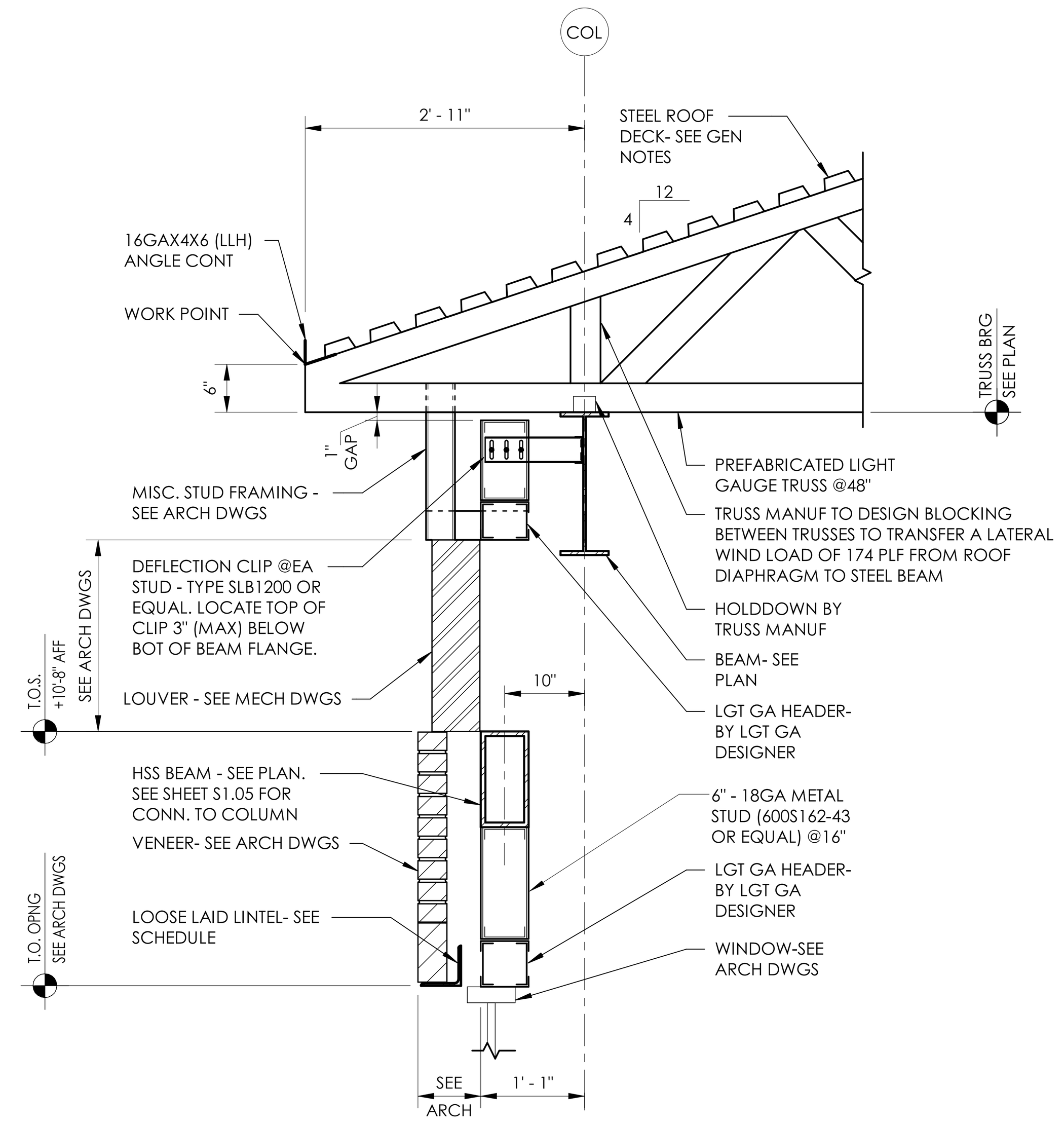
S3.01

sheet of

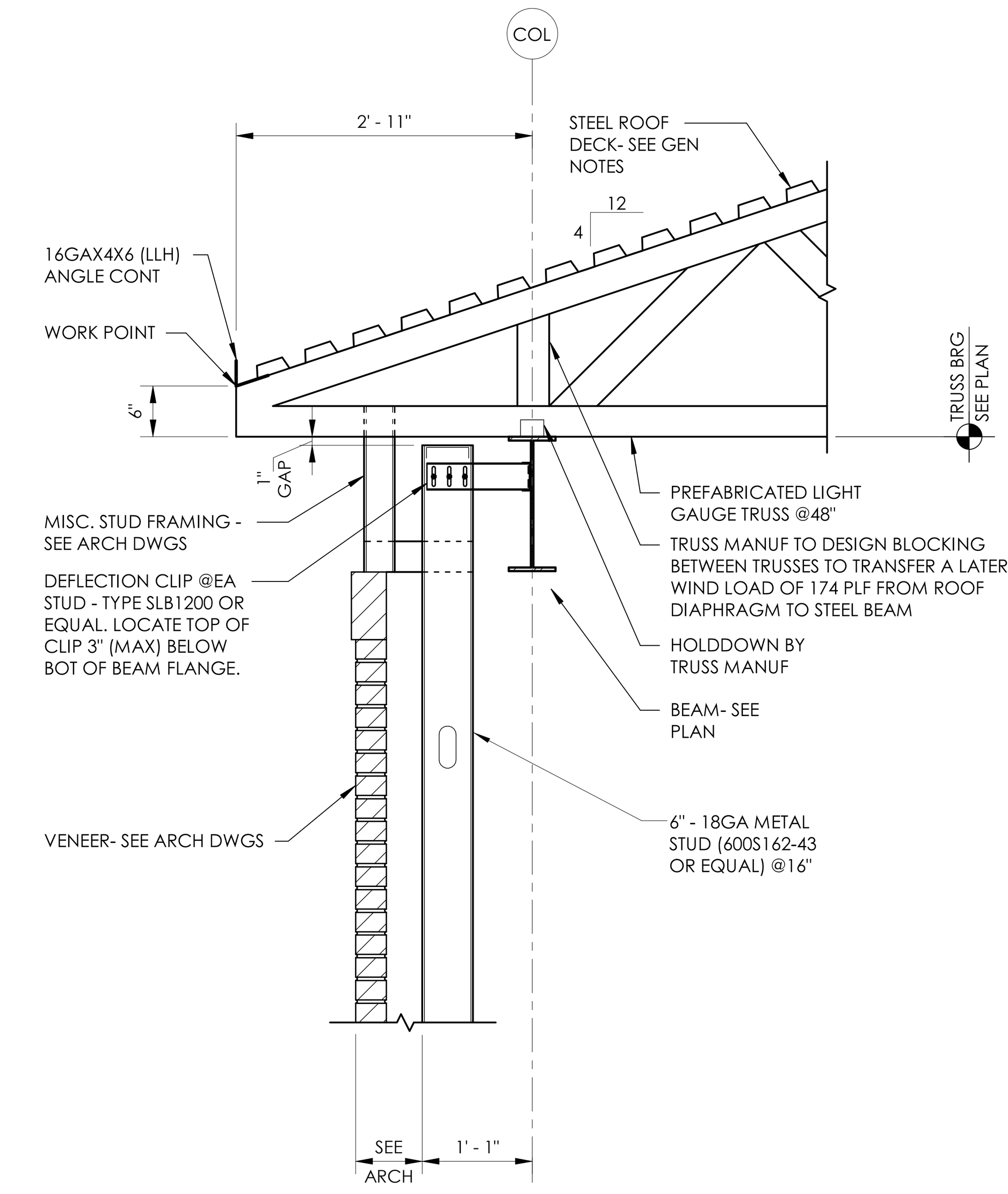
9/7/2024 12:36:30 PM



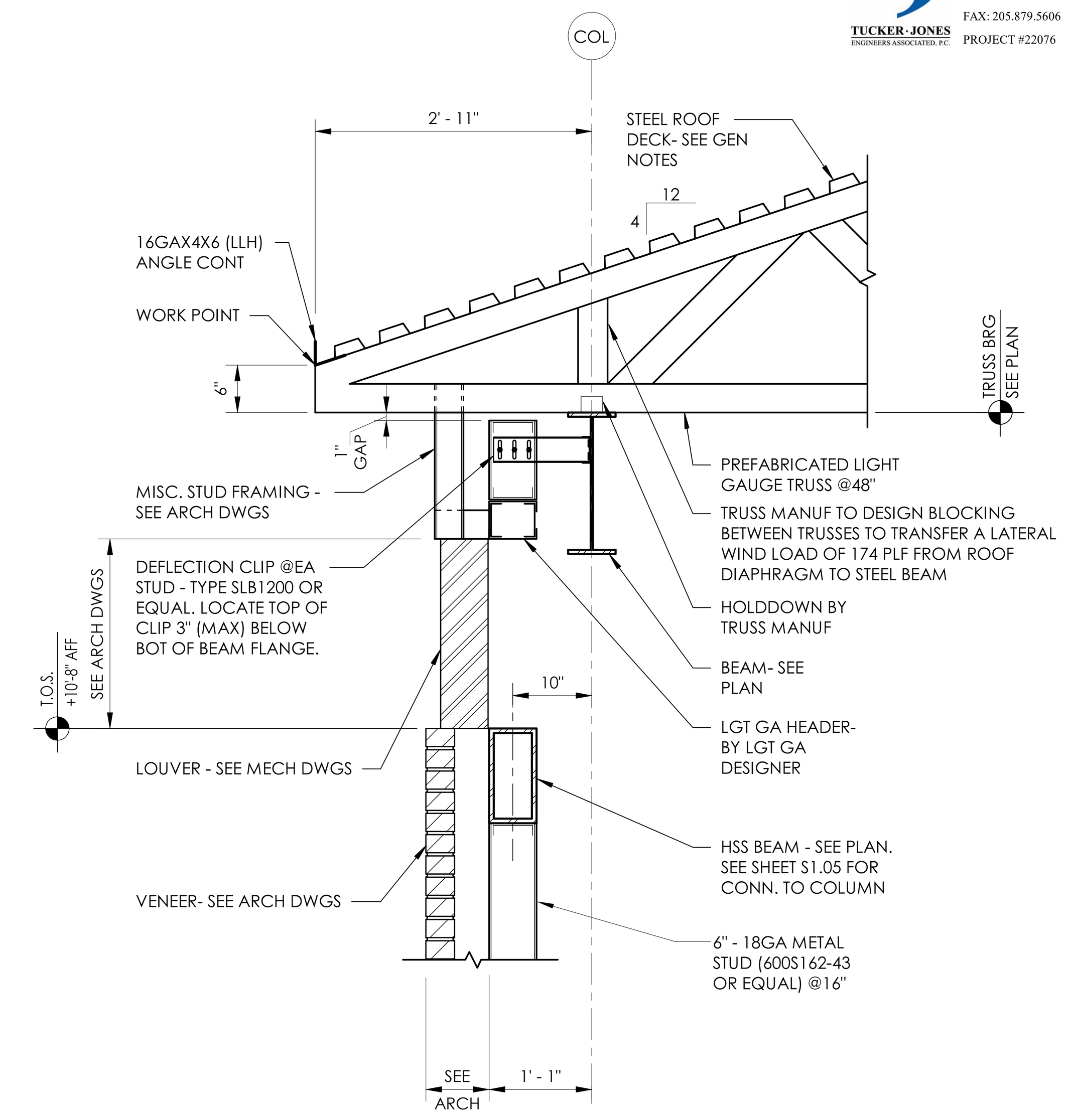
1 SECTION
S3.02 3/4" = 1'-0"



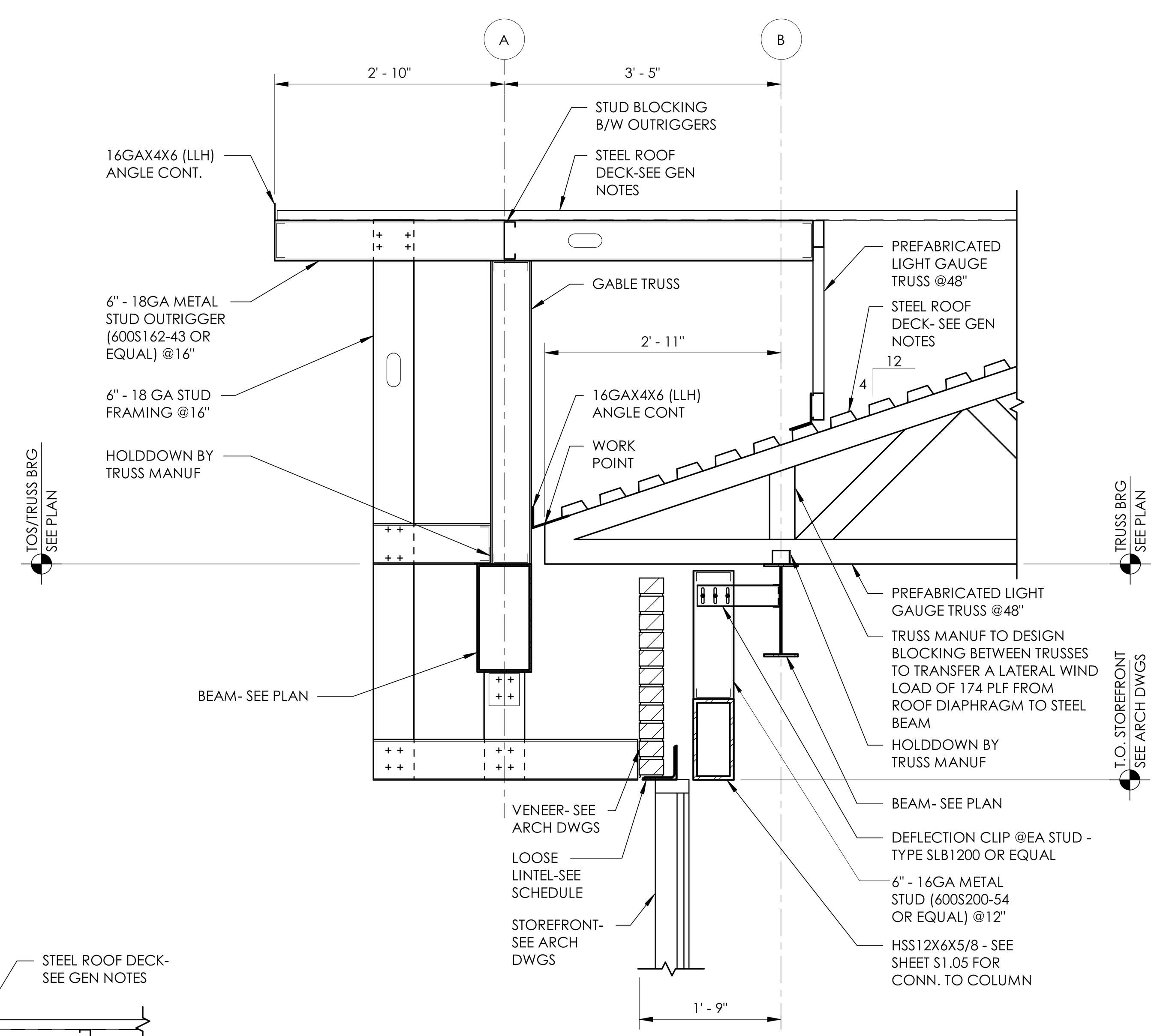
1A SECTION
S3.02 3/4" = 1'-0"



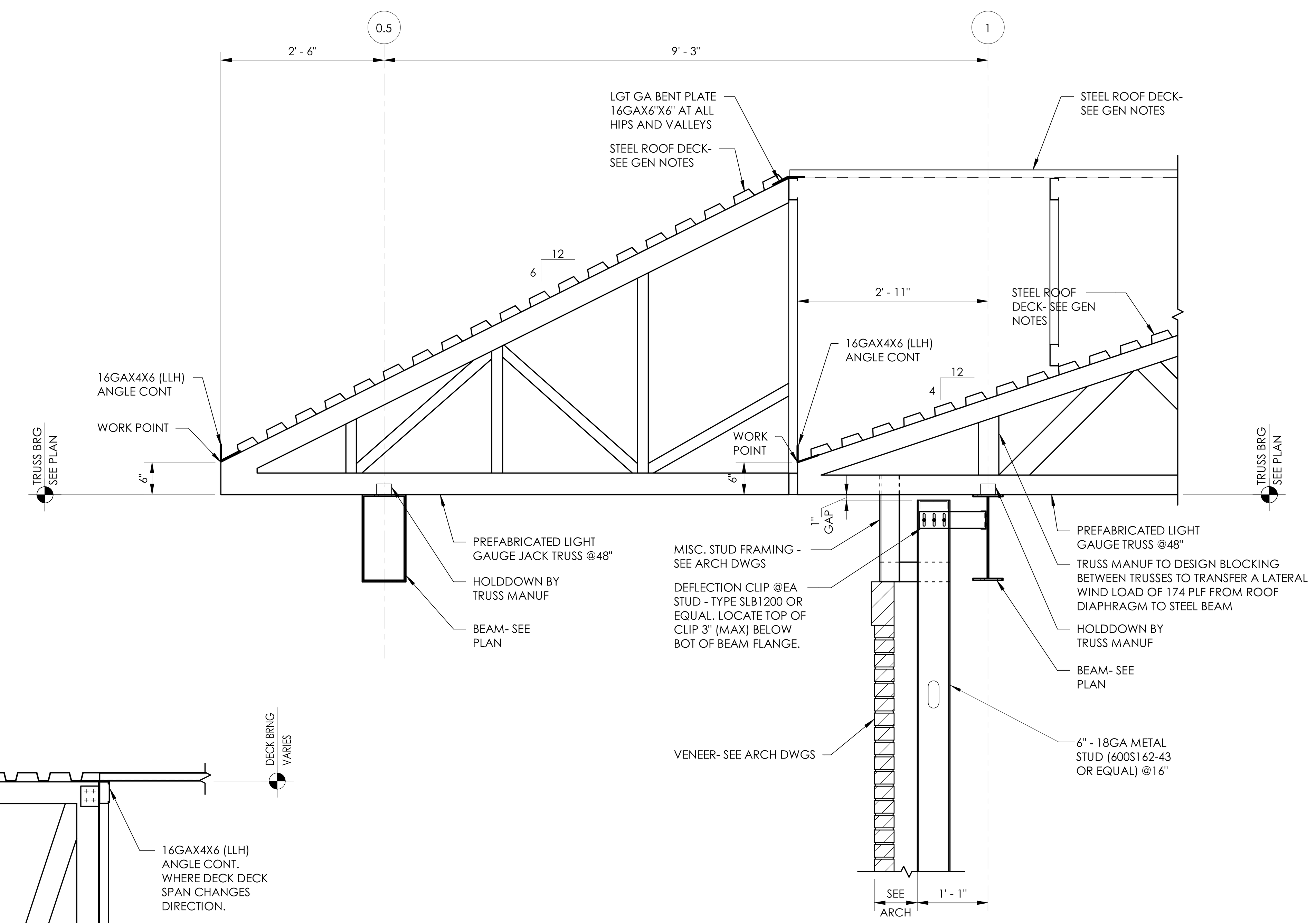
2 SECTION
S3.02 3/4" = 1'-0"



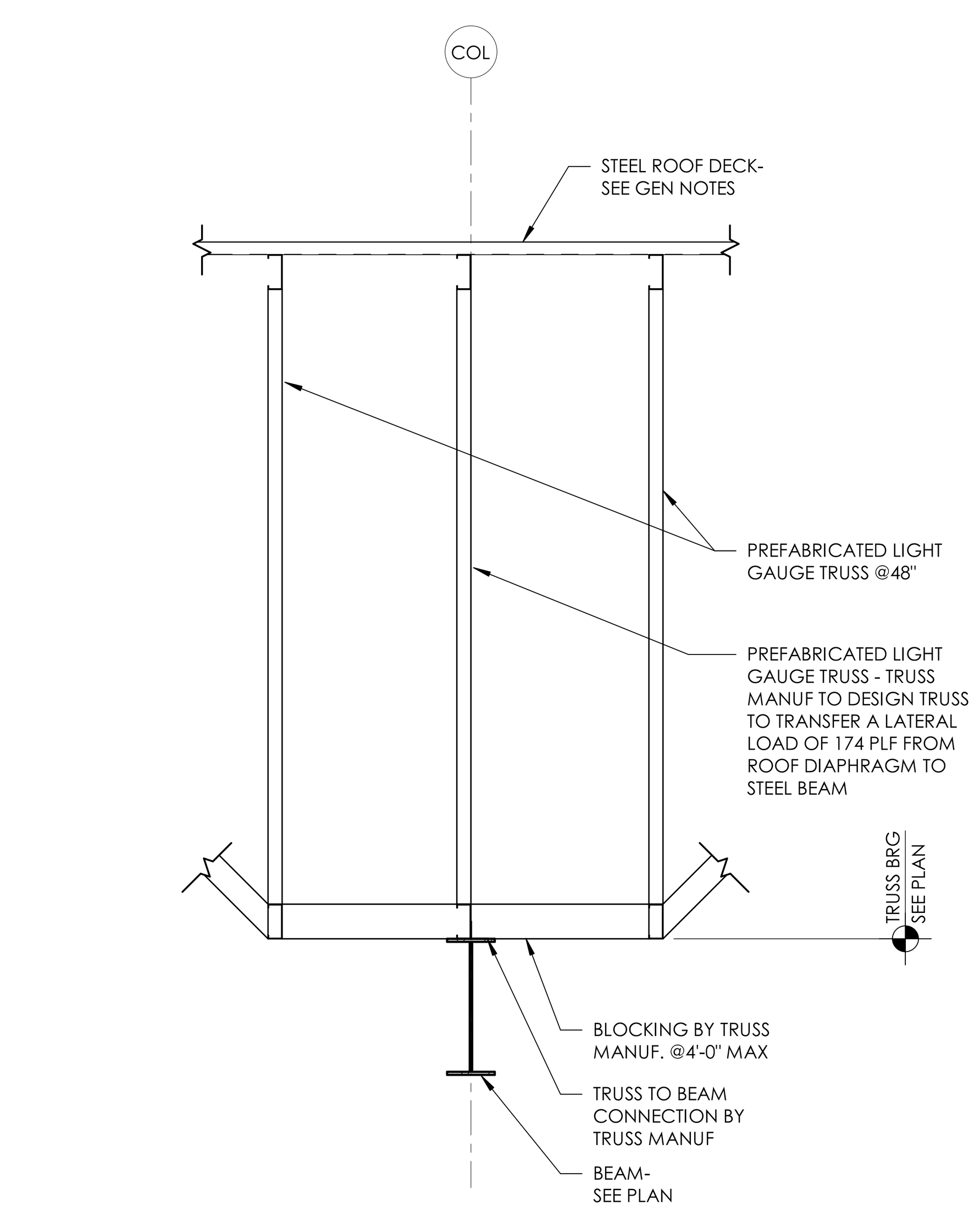
2A SECTION
S3.02 3/4" = 1'-0"



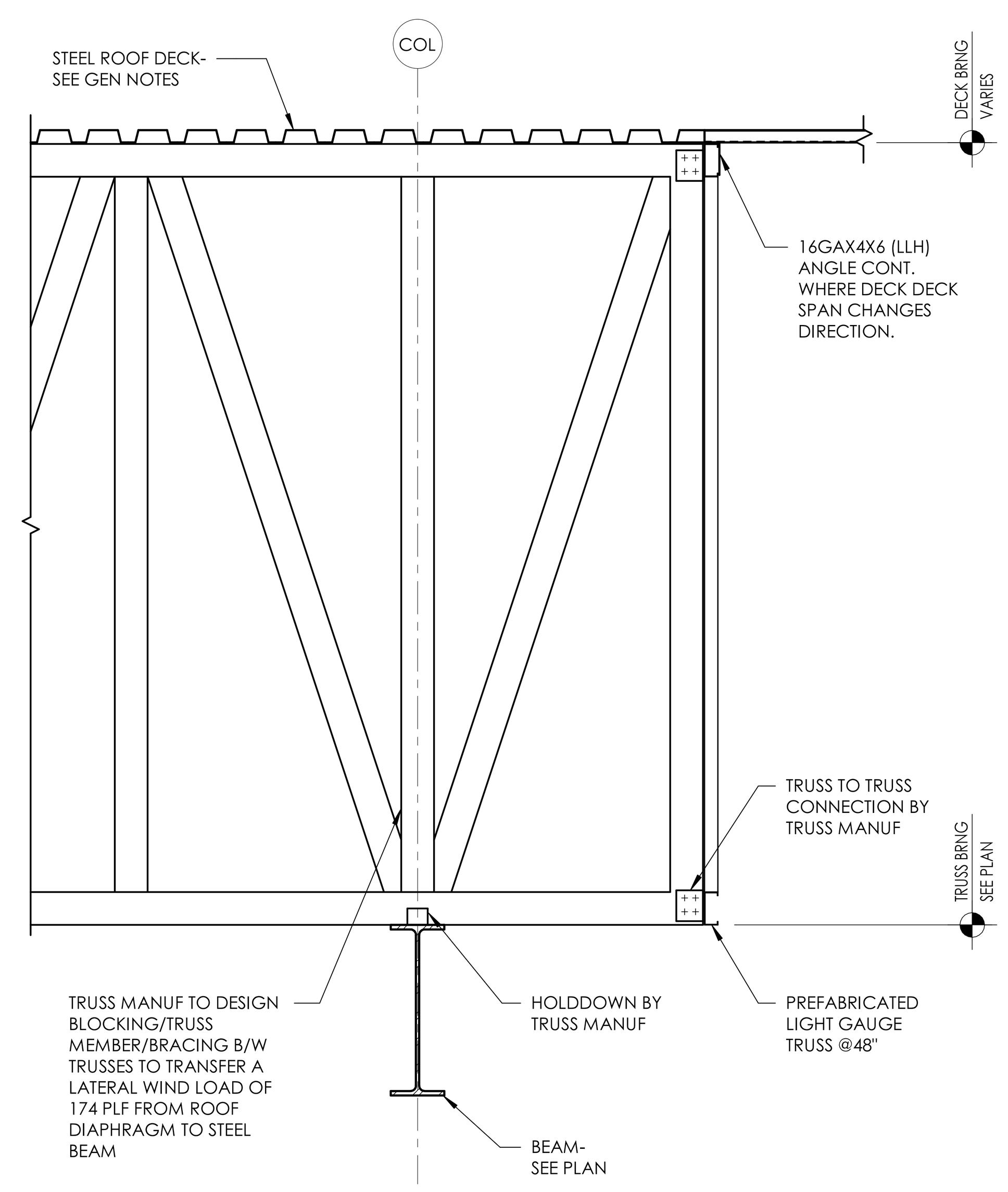
3 SECTION
S3.02 3/4" = 1'-0"



4 SECTION
S3.02 3/4" = 1'-0"



5 SECTION
S3.02 3/4" = 1'-0"



6 SECTION
S3.02 3/4" = 1'-0"

TUCKER-JONES
3500 CAHABA ROAD, SUITE 210
BIRMINGHAM, ALABAMA 35223
PHONE: 205.879.5660
FAX: 205.879.5606
PROJECT #22076

GMC

2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM

ISSUE	DATE
BID SET	09/09/2024

DRAWN BY: CSS
CHECKED BY: CSS

TUSCALOOSA COUNTY DHR
Tuscaloosa, Alabama

GMC # ABHM220021

ALABAMA REGISTERED No. 31254 PROFESSIONAL ENGINEER CHRISTOPHER S. SMITH
09/09/2024

SECTIONS

S3.02

sheet of

9/7/2024 12:36:31 PM

AIR DIRT SEPARATOR SCHEDULE

MARK	SYSTEM	TYPE	MAX FLOW (GPM)	MAX PRESSURE DROP (PSIG)	MAX VELOCITY (FPS)	MINIMUM FLANGE SIZE	ACCESSORIES	BASIS OF DESIGN (ARMSTRONG)
ADS-CH	CHILLED WATER SYSTEM	[A]	191	1.0 PSIG	6 FPS	4"	[1] [2] [3] [4] [5]	DAS-4-R

TYPE:

[A] STANDARD VELOCITY UNIT

NOTE:

1. UNIT SHALL BE ASME RATED (125 PSI)
2. REMOVE 99% DISOLVED OXYGEN AND 100% OF ENTRAINED AIR AFTER 10 PASSES

ACCESSORIES:

[1] BLOW DOWN WITH BRONZE BALL VALVE (STAINLESS STEEL BALL)

[2] SKIM VALVE WITH BRONZE BALL VALVE (STAINLESS STEEL BALL)

[3] STAINLESS STEEL COALESCING MEDIA

[4] HIGH CAPACITY AUTOMATIC AIR VENT

[5] REMOVABLE BOTTOM HEAD

FAN SCHEDULE

MARK	SERVES	LOCATION	TYPE	CFM	E.S.P. IN. W.G.	LIMIT	MOTOR HP	MOTOR V/Ø	ACCESSORIES	INTERLOCK	BASIS OF DESIGN (GREENHECK)
EF-1	SEE PLANS	CORRIDOR	A	2850	0.8	13.9 SONES	1.0	115/1	[1] [2] [3] [4] [5] [6] [7] [8] [9]	AHU-1/BAS	SQ-160-VG

FAN TYPES:

[A] INLINE CENTRIFUGAL EXHAUST FAN, DIRECT DRIVE

FAN ACCESSORIES:

[1] BACKDRAFT DAMPER

[2] FLEXIBLE CONNECTORS

[3] SPRING ISOLATORS

[4] MOTOR SIDE GUARD

[5] BEARING WITH GREASE FITTING

[6] THERMAL OVERLOAD PROTECTION

[7] PREWIRED DISCONNECT SWITCH

[8] ECM MOTOR WITH UNIT MOUNTED CONTROLLER (VARI-GREEN)

[9] ACOUSTICAL HOUSING

FAN SCHEDULE NOTES:

1. LIMIT = DESIGN CRITERIA: MAX. SONES

AHU SCHEDULE

MARK	SERVES	TYPE	SUPPLY FAN CFM	SUPPLY FAN E.S.P. IN. W.G.	SUPPLY FAN MIN. OSA CFM	SUPPLY FAN MOTOR HP	SUPPLY FAN MOTOR V/Ø	SUPPLY FAN MOTOR MCA	SUPPLY FAN MOTOR MOCP	COOLING COIL CFM	COOLING COIL AIR ENT. °Fdb	COOLING COIL AIR ENT. °Fwb	COOLING COIL AIR LVG. °Fdb	COOLING COIL AIR LVG. °Fwb	COOLING COIL GPM	COOLING COIL EWT (°F)	COOLING COIL MAX FACE VEL. (FPM)	COOLING COIL # OF COILS	HEATING COIL CFM	HEATING COIL KW	HEATING COIL MAX FACE VEL. (FPM)	HEATING COIL EAT (°F)	HEATING COIL LAT (°F)	HEATING COIL ELEC. HEATER MCA	HEATING COIL ELEC. HEATER MOCP	FILTERS	ACCESSORIES	BASIS OF DESIGN
AHU-1	OFFICES	I	38000	2.5	6100	(4) @ 15 HP EACH	460/3	89.9	110	38000	78.6	62.8	52.0	51.9	200.0	45.0	580	2	38000	180	607	25	40	226	250	[A]	[1] [2] [3] [4] [5] [6] [7] [8] [9] [10] [11] [12] [13] [14] [15] [16] [17]	CSAA066

TYPES:

I: MODULAR VARIABLE VOLUME, HORIZONTAL DRAW THROUGH WITH INTERNAL FAN ISOLATION. DIRECT DRIVE PLENUM FANWALL.

NOTES:

A. SCHEDULED SUPPLY FAN EXTERNAL PRESSURE DOES NOT INCLUDE THE FOLLOWING AIR PRESSURE DROPS IN, "WG":
PRE FILTER: ALL UNITS = 1.00" (CHANGEOUT)
FINAL FILTERS: ALL UNITS = 1.50" (CHANGEOUT)

B. MAXIMUM COOLING COIL WATER PRESSURE DROP = 15 FT.

C. MAX COIL FACE VELOCITY = 500FPM

D. COILS TO BE A MAX FPF = 120, UNLESS REQUIRED NUMBER OF ROWS EXCEEDS 8.

E. EXTERNAL STATIC PRESSURE DOES NOT INCLUDE COILS

F. COOLING CAPACITY BASED ON 45°F ENT. WATER W/ ΔT=15°F

FILTER TYPES: (SEE SPECS.)

[A] 2" THICK PLEATED MERV 8 (100%) FILTERS - ANGLE FRAME & SIDE ACCESS

GENERAL NOTES:

1. MAX DISCHARGE AIR TEMP. (LEAVING UNIT) = 54.5°F.

ACCESSORIES:

[1] VARIABLE FREQUENCY DRIVE (SUPPLY FAN) - UNIT MOUNTED

[2] 2" DOUBLE WALL CONSTRUCTION W/ R-13 INSULATION

[3] FLEX CONNECTIONS AT SUPPLY AND RETURN W/ COPPER JUMPERS

[4] DIRECT DRIVE SUPPLY FANWALL

[5] FAN WALL (EACH FAN CUBE TO HAVE INDEPENDENT BACKDRAFT DAMPER)

[6] COOLING COIL SECTION WITH TYPE 304 S.S. COIL CASING AND S.S. DOUBLE WALL DRAIN PAN

[7] HINGED ACCESS DOORS IN ALL SECTIONS

[8] EACH FAN SECTION TO BE SINGLE POINT WIRING CONNECTION.

[9] PIEZOMETER FAN INLET AFM WITH TRANSMITTER & LCD READOUT (SA)

[10] SERVICE LIGHTS IN ALL ACCESS SECTIONS SHOWN WIRED TO COMMON SWITCH WITH PILOT LIGHT AT FAN ACCESS DOOR.

[11] ALUMINUM TREAD PLATE FLOORING IN ALL ACCESS SECTIONS

[12] COOLING COIL SECTION TO BE PROVIDED WITH UV LIGHT (BY UNIT MFR.)

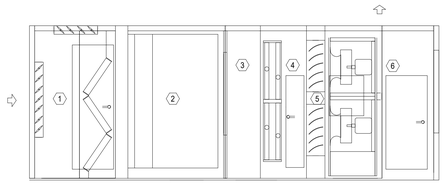
[13] FAN SECTION ACCESS DOOR SAFETY SWITCH

[14] FAN WALL MOTOR SAFETY SCREEN

[15] 6" HIGH BASE RAIL (MIN.)

[16] UNIT MOUNTED RETURN AIR CONTROL DAMPER

[17] UNIT SHIPPED FOR BREAKDOWN CONSTRUCTION. UNIT TO BE RE-ASSEMBLED ON SITE BY MANUFACTURER REPRESENTATIVE



AHU SECTION DESIGNATION

SECTION	REMARK
1	MIXING SECTION W/ FILTER AND ACCESS DOOR
2	PRE-HEAT COIL SECTION
3	MIXING SECTION
4	CHILLED WATER COOLING COIL SECTION AND ACCESS DOOR
5	STACKING SPACER
6	DIRECT DRIVE FAN SECTION WITH ACCESS DOOR

NOTE: FACTORY PROVIDED & INSTALLED MARINE LIGHT IN ALL ACCESS SECTIONS.

AIR DEVICE LEGEND

MARK	TYPE	LEGEND	RUNOUT	REMARKS	MFG / MODEL
ACD(X) CFM	ARCHITECTURAL SQUARE PLAQUE DIFFUSER	X = ROUND NECK SIZE 4-WAY THROW	ROUND RUNOUT = NECK SIZE		TITUS / OMNI LAY-IN BORDER
E(X) CFM/FD	ALUMINUM CUBE CORE REGISTER (1/2"X1/2"X1/2")	E = EXHAUST R = RETURN T = TRANSFER X = SQUARE NECK SIZE	SEE PLANS	OBD OMIT OBD ON T'S AND UNDUCTED R'S	TITUS / 50F, ALUMINUM BORDER

AIR DEVICE SCHEDULE NOTES

1. CFM = AIR FLOW (TYPICAL ALL AIR DEVICES).
2. COORDINATE BORDER/FRAME TYPE WITH ARCH REFLECTED CEILING PLAN.
3. DIRECTION ARROWS ON DRAWINGS SHOW FLOW PATTERN.
4. USE SUPPLY DIFFUSERS WITH O.B.D. IN DRYWALL OR INACCESSIBLE CEILINGS.
5. USE SUPPLY DIFFUSERS WITHOUT O.B.D. IN LAY-IN OR ACCESSIBLE CEILINGS.

ONE LINE PIPE SYMBOLS

CHS	CHILLED WATER SUPPLY
CHR	CHILLED WATER RETURN
D	CONDENSATE DRAIN
	BALL VALVE
	BUTTERFLY VALVE (LEVER HANDLE)
	BUTTERFLY VALVE (GEAR OPERATOR)
	GLOBE VALVE
	CHECK VALVE (SWING CHECK)
	CHECK VALVE (BUTTERFLY CHECK)
	CALIBRATED BALANCING VALVE
	VALVE AT RISER
	STRAINER W/ DRAIN VALVE
	UNION
	AIR TERMINAL / FAN COIL UNIT/HOT WATER RETURN CONTROL VALVE (2-WAY) ELECTRIC OR ELECTRONIC
	AIR TERMINAL / FAN COIL UNIT CONTROL VALVE (3-WAY) ELECTRIC OR ELECTRONIC
	CONTROL VALVE (2-WAY) ELECTRIC OR ELECTRONIC
	CONTROL VALVE (3-WAY) ELECTRIC OR ELECTRONIC

ONE LINE PIPE SYMBOLS

	CONTROL VALVE (3-WAY) ELECTRIC OR ELECTRONIC
	EMERGENCY SHUT-OFF VALVE WITH FUSIBLE LINK
	FLEXIBLE PIPE CONNECTOR
	METAL BELLOWS PUMP CONNECTOR
H	AIR VENT (A - AUTO, H - HAND)
	PRESSURE AND TEMPERATURE TAP
	PRESSURE GAUGE
	PRESSURE GAUGE W/ SIPHON
	THERMOMETER W/ INSERTION WELL
	ANCHOR
	PIPE GUIDE
	FLANGE
	ELBOW, TURNED UP
	ELBOW, TURNED DOWN
	RISE OR DROP IN PIPE
	ELBOW
	TEE, SIDE CONNECTION
	TEE, OUTLET UP
	TEE, OUTLET DOWN
	CAPPED OUTLET
	CAPPED PIPE
	CONCENTRIC REDUCER
	ECCENTRIC REDUCER
	DIRECTION OF PITCH
TFD	PIPE TO FLOOR DRAIN
EMS	EMERGENCY MANAGEMENT SYSTEM INSERTION WELL

TWO LINE PIPE SYMBOLS

	ELBOW - FLANGED LONG RADIUS 45°
	ELBOW - FLANGED LONG RADIUS 90°
	ELBOW - WELDED LONG RADIUS 45°
	ELBOW - WELDED LONG RADIUS 90°
	END CAP
	FLANGES - SLIP ON
	FLANGES - WELD NECK
	REDUCERS - FLANGED CONCENTRIC
	REDUCERS - FLANGED ECCENTRIC
	REDUCERS - WELDED CONCENTRIC
	REDUCERS - WELDED ECCENTRIC
	TEE - FLANGED
	TEE - WELDED
	BUTTERFLY VALVE - LEVER OPERATOR
	BUTTERFLY VALVE - WORM GEAR OPERATOR
	BUTTERFLY VALVE - ACTUATOR
	CHECK VALVE - SWING CHECK
	CHECK VALVE - SILENT OR WAFER
	GLOBE VALVE
	STRAINER - Y
	FLEXIBLE CONNECTORS

DUCTWORK SYMBOLS

T	THERMOSTAT
	THERMOSTAT WIRING
H	HUMIDISTAT
TS	TEMPERATURE SENSOR
FM	GPM FLUID FLOW METER
SA	SUPPLY AIR DUCT
RA	RETURN AIR DUCT
EA	EXHAUST AIR DUCT
CFM	CUBIC FEET PER MINUTE
EMS	ENERGY MANAGEMENT SYSTEM
ATC	AUTOMATIC TEMP CONTROLS
CO2	CARBON DIOXIDE
PPM	PARTS PER MILLION
Ø	ROUND DIAMETER
	SHORT (1x) RADIUS ELL (RECTANGULAR OR ROUND) CENTERLINE RADIUS = 1d
	LONG (1.5x) RADIUS ELL (ROUND OR OVAL) CENTERLINE RADIUS = 1.5d
	SQUARE ELL
	ELL WITH TURNING VANES
	STREAMLINE TAP (RECTANGULAR)
Ø	STREAMLINE TAP (ROUND)
Ø	CONICAL TAP
	STRAIGHT TAP
	LATERAL TAP
	MANUAL VOLUME DAMPER
M	MOTORIZED VOLUME DAMPER
FD	FIRE DAMPER (FD)
FD	VERTICAL FIRE DAMPER (FD)
S	SMOKE DAMPER
S FD/S	COMBINATION FIRE / SMOKE DAMPER (FD/S)
20/12	RECTANGULAR DUCT (WIDTH/DEPTH)
	ROUND DUCT OFFSET
RISE	CHANGE IN ELEVATION ("R"-RISE, "F"-FALL)
	FLEXIBLE DUCT
	SUPPLY DUCT UP
	RETURN DUCT UP
	EXHAUST DUCT UP
	SUPPLY DUCT DOWN
	RETURN DUCT DOWN
	EXHAUST DUCT DOWN
	CEILING DIFFUSER
	RETURN AIR GRILLE
	EXHAUST AIR GRILLE
AP	ACCESS PANEL
AP	ACCESS PANEL IN ROUND OR OVAL DUCT

GMC
2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM
Bernhard TME Engineering

ISSUE DATE 2024.09.09
100% CD
DRAWN BY: CBO
CHECKED BY: JDD

TUSCALOOSA COUNTY DHR
PROJECT ADDRESS

GMC # ABHM220021

ALABAMA LICENSED No. 34357 PROFESSIONAL ENGINEER HAROLD D. DEERMAN
09/09/24

SCHEDULES AND LEGEND - HVAC

M0.01
sheet of

9/25/2024 11:06:56 AM TEMPLATE VERSION: 2021.1

AIR COOLED CHILLER SCHEDULE

MARK	TYPE	REFRIGERANT TYPE	TONS	COOLER					AMBIENT (°F)	EFFICIENCY		ACCESSORIES	ELECTRICAL			BASIS OF DESIGN (TRANE)
				DESIGN GPM	MIN GPM	LVG °F	MAX. DP (FT)	FOULING		IPLV	EER		V/Ø	MCA	RECOMMENDED FUSE	
CH-1	[A]	R-454B	130	201.8	176	45	9.5	0.0001	95	16.66	10.59	[1] [2] [3] [4] [5] [6] [7] [8] [9] [10] [11] [12] [13] [14] [15] [16] [17] [18]	460/3	280	350	CGAM130

TYPES:

[A] SCROLL COMPRESSOR

NOTES:

1. MINIMUM EFFICIENCY AT AHRI 550/590 CONDITIONS
2. FLUID IS WATER
3. PROVIDE MINIMUM OF 4 STEPS UNLOADING
4. PROVIDE INLET STRAINER WITH GROOVED FITTING FOR CHILLERS WITH PLATE AND FRAME EVAPORATORS
5. COOLING CAPACITY BASED ON ΔT = 15˚F.
6. MAX ΔP INCLUDES STRAINER

ACCESSORIES:

[1] UNIT MOUNTED HIGH FAULT CIRCUIT BREAKER WITH SCCR OF 65,000 (UL RATED)

[2] CONDENSER COIL GUARD

[3] ARCHITECTURAL LOUVERED PANELS

[4] CONTROL POWER TRANSFORMER

[5] LOW AMBIENT CONTROL TO 0°F

[6] EVAPORATOR AND HYDRONIC PACKAGE FREEZE PROTECTION WITH SEPARATE 20 AMP, 115V/1 PH POWER CONNECTION.

[7] ACROSS THE LINE STARTER

[8] SINGLE POINT POWER CONNECTION

[9] SUCTION AND DISCHARGE SERVICE VALVES

[10] FACTORY INSTALLED FLOW SWITCH

[11] MAX SCHEDULED SOUND VALUES (MAX SOUND POWER = 92 dBA; MAX SOUND PRESSURE = 65 dBA) AT 30 FEET IN FREE FIELD.

[12] ELASTOMERIC ISOLATORS

[13] SOUND PACKAGE: COMPRESSOR BLANKETS & LOW SOUND CONDENSER FANS.

[14] PHASE REVERSAL PROTECTION

[15] WARRANTY: 5 YEAR ENTIRE UNITS; PARTS, LABOR & REFRIGERANT.

[16] BACNET COMMUNICATIONS CARD - COORDINATE REQUIREMENT W/ BAS CONTRACTOR.

[17] FACTORY MOUNTED VARIABLE SPEED DUAL PUMP PACKAGE. PACKAGE INCLUDES DUAL HIGH HEAD 15.0 hp PUMPS, STRAINER, EXPANSION TANK AND VARIABLE SPEED DRIVE WITH CONTROL PANEL; ALL FACTORY WIRED. SEE PUMP SCHEDULE FOR ADDITIONAL PUMP INFORMATION.

[18] BUFFER TANK. 195 GALLONS.

MINI SPLIT SYSTEM UNIT SCHEDULE - HEAT PUMP

INDOOR UNIT MARK	OUTDOOR UNIT MARK	SERVES	TYPE	SUPPLY FAN CFM	COOLING CAPACITY				HEATING CAPACITY		ACCESSORIES	NOMINAL TONS	MAXIMUM REFRIGERANT PIPING LENGTH (FT)	ELECTRICAL					BASIS OF DESIGN (MITSUBISHI) (INDOOR/OUTDOOR)
					SENSIBLE MBH	TOTAL MBH	ENT. AIR		MBH	ENT. AIR °F				INDOOR UNIT		OUTDOOR UNIT			
							°Fdb	°Fwb						FLA	VOLT V/Ø	MCA	MOCP	VOLT V/Ø	
DS-1	DSHP-1	IDF 151B	[A]	385	12	12	80.0	67.0	13.6	70	[1] [3] [4] [5] [6]	1.0	70	0.19	208/1	11	28	208/1	PKA-A12LA / PUZ-A12NKA7
DS-2	DSHP-2	ELEC 151A	[A]	385	12	12	80.0	67.0	13.6	70	[1] [3] [4] [5] [6]	1.0	65	0.19	208/1	11	28	208/1	PKA-A12LA / PUZ-A12NKA7
DS-3	DSHP-3	ELEC 305	[A]	455	13.1	18.0	80.0	67.0	13.6	70	[1] [3] [4] [5] [6]	1.5	140	0.19	208/1	11	15	208/1	PKA-A18LA / PUZ-A18NKA7
DS-4	DSHP-4	SERVER 306	[D]	775	18.5	24	80.0	67.0	13.6	70	[1] [3] [4] [5] [6]	2.0	140	0.19	208/1	17	25	208/1	PKA-A24KA7 / PUZ-HA24NHA1
DS-5	DSHP-5	ELEC 314	[D]	455	13.1	18.0	80.0	67.0	13.6	70	[1] [3] [4] [5] [6]	1.5	85	0.19	208/1	11	15	208/1	PKA-A18LA / PUZ-A18NKA7
DS-6	DSHP-6	IDF 245	[D]	455	13.1	18.0	80.0	67.0	13.6	70	[1] [3] [4] [5] [6]	1.5	105	0.19	208/1	11	15	208/1	PKA-A18LA / PUZ-A18NKA7

TYPE:

[A] WALL MOUNTED (PKA TYPE)

NOTES:

A. CAPACITIES ARE MINIMUM NET CAPACITIES

B. COOLING: CAPACITY RATED AT 95°F AMBIENT.

C. HEATING CAPACITY RATED AT 17°F AMBIENT.

D. INDOOR UNITS RECEIVE POWER FROM OUTDOOR UNITS THROUGH FIELD SUPPLIED INTERCONNECTING WIRING.

E. MINIMUM SEER = 14.0 AT AHRI 210/240 CONDITIONS

ACCESSORIES:

[1] MICROPROCESSOR BASED CONTROLS W/ HARDWIRED REMOTE CONTROLLER

[2] 4-WAY AIRFLOW CONTROL

[3] CONDENSATE PUMP TO RAISE DRAIN WATER 20 INCHES ABOVE CEILING WITH SAFETY SWITCH TO SHUTDOWN UNIT ON HIGH LEVEL.

[4] WASHABLE FILTER

[5] WIND BAFFLE FOR LOW AMBIENT COOLING TO 10 DEGREE F.

[6] EMERGENCY POWER

EXPANSION TANK SCHEDULE

MARK	SYSTEM	TYPE	FILL PRESSURE (PSIG)	MINIMUM ACCEPTANCE VOL. (GALLONS)	MINIMUM TANK VOL. (GALLONS)	ACCESSORIES	BASIS OF DESIGN (TACO)
ET-CH	CHILLED WATER	[A]	15	12	22	[1]	CBX84-125

TYPES:

[A] VERTICAL, BLADDER

ACCESSORIES:

[1] REMOVABLE BLADDER

ELECTRIC HEATER SCHEDULE

MARK	SERVES	TYPE	CAPACITY	ELECTRICAL V/Ø	ACCESSORIES	REMARKS	BASIS OF DESIGN (MARKEL)
EWH-1	FR 1043	A	2.0 kW	208/1	[1] [3] [5] [6]	SURFACE MOUNTED	3400
ECH-1	VESTIBULE 1000	B	3.0 kW	208/1	[2] [3] [4]	CEILING RECESSED	3480

TYPES:

A. EWH - ELECTRIC WALL HEATER

B. ECH - ELECTRIC CEILING HEATER

ACCESSORIES:

[1] UNIT MOUNTED THERMOSTAT (EXPOSED KNOB)

[2] WALL MOUNTED LOW VOLTAGE THERMOSTAT IN METAL LOCKING COVER

[3] UNIT MOUNTED DISCONNECT SWITCH

[4] STANDARD RADIAL DIFFUSER

[5] WALL BRACKET

[6] ADJUSTABLE OUTLET LOUVERS

LOUVER SCHEDULE

MARK	TYPE	WIDTH	HEIGHT	DEPTH	ACCESSORIES	FINISH	BASIS OF DESIGN (GREENHECK)
L-1	A	96"	24"	24"	[1] [2] [3]	A	ESD-603
L-2	A	96"	24"	24"	[1] [2] [3]	A	ESD-603
L-3	A	96"	24"	24"	[1] [2] [3]	A	ESD-603
L-4	A	96"	24"	24"	[1] [2] [3]	A	ESD-603
L-5	A	96"	24"	24"	[1] [2] [3]	A	ESD-603
L-6	A	96"	24"	24"	[1] [2] [3]	A	ESD-603
L-7	A	96"	24"	24"	[1] [2] [3]	A	ESD-603
L-8	A	96"	24"	24"	[1] [2] [3]	A	ESD-603
L-9	A	96"	24"	24"	[1] [2] [3]	A	ESD-603
L-10	A	96"	24"	24"	[1] [2] [3]	A	ESD-603
L-11	A	96"	24"	24"	[1] [2] [3]	A	ESD-603
L-12	A	96"	24"	24"	[1] [2] [3]	A	ESD-603
L-13	A	96"	24"	24"	[1] [2] [3]	A	ESD-603
L-14	A	96"	24"	24"	[1] [2] [3]	A	ESD-603

TYPES:

[A] FIXED BLADE LOUVER (ESD-603)

FINISH:

A. KYNAR 500-3 COAT

ACCESSORIES:

[1] FORMED ALUMINUM EXTENDED SILL

[2] CHANNEL FRAME

[3] BIRDSCREEN, ALUMINUM

NOTES:

1. ALUMINUM ALL WELDED CONSTRUCTION.
2. COLOR SELECTED BY ARCHITECT FROM FACTORY STANDARD/CUSTOM COLORS.
3. OTHER ACCEPTABLE MANUFACTURERS: RUSKIN, AIROLITE.

AIR TERMINAL UNIT SCHEDULE - ELECTRIC HEAT

MARK	TYPE	ROUND INLET	AIR FLOW (CFM)			ELECTRIC HEAT		
			COOL MAX.	BOX MIN.	HTG. MAX CFM	KW	STAGES	ELECTRICAL V/Ø
TU1-1	VVR	12	1130	395	565	4	SCR	277/1
TU1-2	VVR	10	910	320	685	9	SCR	460/3
TU1-3	VVR	10	660	230	495	6	SCR	277/1
TU1-4	VVR	10	850	300	425	3	SCR	277/1
TU1-5	VVR	10	910	320	685	9	SCR	460/3
TU1-6	VVR	8	380	145	190	2	SCR	277/1
TU1-7	VVR	10	680	230	340	3	SCR	277/1
TU1-8	VVR	12	1105	385	555	4	SCR	277/1
TU1-9	VVR	12	1200	420	600	5	SCR	277/1
TU1-10	VVR	10	650	230	325	3	SCR	277/1
TU1-11	VVR	10	810	285	610	8	SCR	460/3
TU1-12	VVR	10	820	285	615	8	SCR	460/3
TU1-13	VVR	10	760	230	570	7	SCR	460/3
TU1-14	VVR	10	910	320	685	9	SCR	460/3
TU1-15	VVR	10	910	400	685	9	SCR	460/3
TU1-16	VVR	10	800	280	400	3	SCR	277/1
TU1-17	VVR	10	810	285	610	8	SCR	460/3
TU1-18	VVR	8	500	175	375	5	SCR	277/1
TU1-19	VVR	14	1900	800	1425	18	SCR	460/3
TU1-20	VVR	12	1440	505	1080	14	SCR	460/3
TU1-21	VVR	12	1300	455	975	12	SCR	460/3
TU1-22	VVR	8	500	175	375	5	SCR	277/1
TU1-23	VVR	12	1200	420	900	11	SCR	460/3
TU1-24	VVR	10	925	325	695	9	SCR	460/3
TU1-25	VVR	10	680	230	510	6	SCR	277/1
TU1-26	VVR	10	945	330	710	9	SCR	460/3
TU1-27	VVR	8	550	225	415	5	SCR	277/1
TU1-28	VVR	8	600	210	450	6	SCR	277/1
TU1-29	VVR	10	840	295	630	8	SCR	460/3
TU1-30	VVR	10	960	335	720	9	SCR	460/3
TU1-31	VVR	8	430	145	325	4	SCR	277/1
TU1-32	VVR	10	800	280	600	8	SCR	460/3
TU1-33	VVR	10	960	335	720	9	SCR	460/3
TU1-34	VVR	10	910	320	685	9	SCR	460/3
TU1-35	VVR	10	720	230	540	7	SCR	460/3
TU1-36	VVR	10	780	275	585	7	SCR	460/3
TU1-37	VVR	10	610	230	460	6	SCR	277/1
TU1-38	VVR	10	1010	355	760	10	SCR	460/3
TU1-39	VVR	10	910	320	685	9	SCR	460/3
TU1-40	VVR	8	540	190	405	5	SCR	277/1
TU1-41	VVR	8	570	200	430	5	SCR	277/1
TU1-42	VVR	10	920	320	690	9	SCR	460/3
TU1-43	VVR	10	680	230	510	6	SCR	277/1
TU1-44	VVR	10	780	275	585	7	SCR	460/3
TU1-45	VVR	10	910	320	685	9	SCR	460/3
TU1-46	VVR	10	1060	370	795	10	SCR	460/3
TU1-47	VVR	12	1200	350	900	11	SCR	460/3
TU1-48	VVR	12	1200	350	900	11	SCR	460/3
TU1-49	VVR	12	1200	350	900	11	SCR	460/3
TU1-50	VVR	12	1200	350	900	11	SCR	460/3

LEGEND:

SINGLE DUCT TERMINAL UNITS:

VV = VARIABLE VOLUME - NO COIL

VVR = VARIABLE VOLUME REHEAT

N/A = NOT APPLICABLE

NOTES:

1. ENTERING AIR = 55°F
2. ALL BOXES CLOSED CELL (FIBER FREE) LINING.
3. PROVIDE ACCESS DOOR FOR MAINTENANCE.
4. ROUND RUNOUT EQUALS NECK SIZE U.N.O. ON PLANS.
5. HEATING KW IS AT MAXIMUM HEATING AIR FLOW.
6. BASIS OF DESIGN: TITUS ESV FOR SINGLE DUCT UNITS.
7. ALL BOXES SHALL BE UL LISTED AND LABELED.
8. MAXIMUM AIR PRESSURE DROP (INCLUDING COIL) = 0.4" W.C.

GMC

2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM

Bernhard TME Engineering

ISSUE | DATE
100% CD | 2024.09.09

DRAWN BY: CBO
CHECKED BY: JDD

TUSCALOOSA COUNTY DHR
PROJECT ADDRESS

GMC # ABHM220021

ALABAMA LICENSED No. 34357 PROFESSIONAL ENGINEER HAROLD D. DEERMAN
09/24

SCHEDULES - HVAC

M0.02

sheet of

OSA CALCULATIONS PER IMC 2021 & ASHRAE 62.1- 2016 (AHU-1)

ZONE IDENTIFICATION			ASHRAE STANDARD 62.1-2007 VENTILATION RATE PROCEDURE								DESIGN CASE				
TERMINAL UNIT	ROOM NAME/ NUMBER	OCCUPANCY CATEGORY	AREA [ft2]	PEOPLE OUTDOOR RATE Rp [CFM/Person]	AREA OUTDOOR RATE Ra [CFM/ft2]	# OCCUPANTS	Rp* OCCUPANTS [CFM]	AREA*Ra [CFM]	BREATHING ZONE OUTDOOR AIRFLOW Vbz [CFM]	Table 6-2 Zone Air Distribution Effectiveness Ez	ZONE EFFECTIVENESS Ez	ZONE OUTDOOR AIRFLOW Voz [CFM]	MAXIMIUM PRIMARY AIRFLOW [CFM]	MIN. ZONE PRIMARY AIRFLOW Vpz [CFM]	ZONE PRIMARY OUTDOOR AIR FRACTION Zp
TU1-1	OFFICE 1064	Office space	186	5	0.06	1	4.5	11	16	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	20	350	122	0.16
	OFFICE 1066	Office space	194	5	0.06	1	5	12	17	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	21	350	122	0.17
	OFFICE 1069	Office space	173	5	0.06	1	4.5	10	15	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	19	330	115	0.16
	CORRIDOR	Corridors	267	0	0.06	0	0	16	16	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	20	100	35	0.57
TU1-2	WORKROOM 1063	Office space	104	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	110	39	0.28
	OFFICE 1065	Office space	102	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	110	39	0.28
	OFFICE 1067	Office space	104	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	110	39	0.28
	OFFICE 1055	Office space	104	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	110	39	0.28
	OFFICE 1057	Office space	104	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	110	39	0.28
	OFFICE 1059	Office space	104	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	110	39	0.28
	CORRIDOR	Corridors	166	0	0.06	0	0	10	10	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	12	125	44	0.28
	CORRIDOR	Corridors	130	0	0.06	0	0	8	8	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	10	125	44	0.22
TU1-3	OFFICE 1070	Office space	114	5	0.06	1	3	7	10	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	12	165	58	0.21
	OFFICE 1071	Office space	112	5	0.06	1	3	7	10	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	12	165	58	0.21
	OFFICE 1072	Office space	114	5	0.06	1	3	7	10	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	12	165	58	0.21
	OFFICE 1073	Office space	114	5	0.06	1	3	7	10	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	12	165	58	0.21
TU1-4	OFFICE 1062	Office space	173	5	0.06	1	4.5	10	15	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	19	330	116	0.16
	OFFICE 1061	Office space	114	5	0.06	1	3	7	10	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	12	160	56	0.22
	OFFICE 1060	Office space	112	5	0.06	1	3	7	10	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	12	160	56	0.22
	OFFICE 1053	Office space	161	5	0.06	1	4	10	14	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	17	200	71	0.24
TU1-5	OFFICE 1054	Office space	104	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	110	39	0.28
	OFFICE 1056	Office space	102	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	110	39	0.28
	OFFICE 1058	Office space	104	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	110	39	0.28
	OFFICE 1049	Office space	104	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	110	39	0.28
	OFFICE 1051	Office space	104	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	110	39	0.28
	OFFICE 1053	Office space	104	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	110	39	0.28
	CORRIDOR	Corridors	130	0	0.06	0	0	8	8	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	10	125	44	0.22
	CORRIDOR	Corridors	201	0	0.06	0	0	12	12	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	15	125	44	0.34
TU1-6	OFFICE 1074	Office space	109	5	0.06	1	2.5	7	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	165	63	0.18
	OFFICE 1075	Office space	166	5	0.06	1	4	10	14	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	17	215	82	0.21
TU1-7	OFFICE 1047	Office space	113	5	0.06	1	3	7	10	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	12	160	54	0.23
	OFFICE 1046	Office space	114	5	0.06	1	3	7	10	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	12	160	54	0.23
	OFFICE 1045	Office space	117	5	0.06	1	3	7	10	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	13	160	54	0.23
	OFFICE 1044	Office space	159	5	0.06	1	4	10	14	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	17	200	68	0.25
TU1-8	OFFICE 1048	Office space	106	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	110	38	0.29
	OFFICE 1050	Office space	103	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	110	38	0.28
	OFFICE 1052	Office space	106	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	110	38	0.29
	CENTRAL SUPPLY 1042	Storage Rooms	290	0	0.12	0	0	35	35	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	44	250	87	0.50
	CORRIDOR	Corridors	256	0	0.06	0	0	15	15	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	19	125	44	0.44
	CORRIDOR	Corridors	221	0	0.06	0	0	13	13	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	17	125	44	0.38
	CORRIDOR	Corridors	264	0	0.06	0	0	16	16	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	20	125	44	0.45
	ILP STORAGE 1076	Storage Rooms	108	0	0.12	0	0	13	13	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	16	75	26	0.62
	CAR SEAT STORAGE 1078	Storage Rooms	116	0	0.12	0	0	14	14	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	17	75	26	0.67
TU1-9	FAMILY VISITATION 1080	Office space	289	5	0.06	1	7	17	24	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	30	250	88	0.35
	OBSERVATION 1081	Office space	150	5	0.06	1	4	9	13	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	16	140	49	0.33
	FAMILY VISITATION 1083	Office space	294	5	0.06	2	7.5	18	25	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	31	250	88	0.36
	WORKROOM 1087	Office space	170	5	0.06	1	4.5	10	15	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	18	130	46	0.40
	FAMILY VISITATION 1085	Office space	349	5	0.06	2	8.5	21	29	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	37	280	98	0.38
	CORRIDOR	Corridors	250	0	0.06	0	0	15	15	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	19	100	35	0.54
TU1-10	MEETING 1082	Conference / meeting	650	5	0.06	11	55	39	94	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	118	650	230	0.51
TU1-11	OFFICE 1019	Office space	114	5	0.06	1	3	7	10	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	12	160	56	0.22
	OFFICE 1018	Office space	114	5	0.06	1	3	7	10	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	12	160	56	0.22
	OFFICE 1017	Office space	112	5	0.06	1	3	7	10	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	12	160	56	0.22
	OFFICE 1016	Office space	188	5	0.06	1	4.5	11	16	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	20	330	116	0.17
TU1-12	OFFICE 1038	Office space	158	5	0.06	1	4	9	13	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	17	200	70	0.24
	OFFICE 1037	Office space	112	5	0.06	1	3	7	10	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	12	160	56	0.22
	OFFICE 1036	Office space	161	5	0.06	1	4	10	14	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	17	160	56	0.31
	OFFICE 1020	Office space	160	5	0.06	1	4	10	14	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	17	200	70	0.24
	CORRIDOR	Corridors	275	0	0.06	0	0	17	17	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	21	100	35	0.59

GMC
2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM

Bernhard TME Engineering

ISSUE	DATE
100% CD	2024.09.09

DRAWN BY: Author
CHECKED BY: Checker

TUSCALOOSA COUNTY DHR
PROJECT ADDRESS

GMC # ABHM220021

ALABAMA LICENSED No. 34357 PROFESSIONAL ENGINEER JARED D. DEERMAN
09/09/24

OSA SCHEDULES - HVAC

M0.03

sheet of

9/25/2024 11:07:00 AM TEMPLATE VERSION: 2021.1

TU1-13	OFFICE 1022	Office space	104	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	110	33	0.33
	OFFICE 1024	Office space	104	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	110	33	0.33
	OFFICE 1026	Office space	104	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	110	33	0.33
	OFFICE 1014	Office space	104	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	110	33	0.33
	OFFICE 1012	Office space	102	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	110	33	0.32
	OFFICE 1010	Office space	104	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	110	33	0.33
	CORRIDOR	Corridors	200	0	0.06	0	0	12	12	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	15	100	30	0.50
TU1-14	OFFICE 1034	Office space	104	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	110	39	0.28
	OFFICE 1032	Office space	104	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	110	39	0.28
	OFFICE 1030	Office space	104	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	110	39	0.28
	OFFICE 1021	Office space	104	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	110	39	0.28
	OFFICE 1023	Office space	102	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	110	39	0.28
	OFFICE 1025	Office space	104	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	110	39	0.28
	CORRIDOR	Corridors	130	0	0.06	0	0	8	8	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	10	125	44	0.22
	CORRIDOR	Corridors	200	0	0.06	0	0	12	12	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	15	125	44	0.34
TU1-15	OFFICE 1039	Office space	105	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	110	48	0.23
	OFFICE 1040	Office space	104	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	110	48	0.23
	OFFICE 1041	Office space	105	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	110	48	0.23
	OFFICE 1035	Office space	105	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	110	48	0.23
	OFFICE 1033	Office space	104	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	110	48	0.23
	OFFICE 1031	Office space	105	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	110	48	0.23
	CORRIDOR	Corridors	130	0	0.06	0	0	8	8	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	10	125	55	0.18
	CORRIDOR	Corridors	200	0	0.06	0	0	12	12	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	15	125	55	0.27
TU1-16	OFFICE 1015	Office space	105	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	200	70	0.16
	OFFICE 1013	Office space	111	5	0.06	1	3	7	10	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	12	200	70	0.17
	OFFICE 1011	Office space	111	5	0.06	1	3	7	10	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	12	200	70	0.17
	OFFICE 1009	Office space	111	5	0.06	1	3	7	10	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	12	200	70	0.17
TU1-17	OFFICE 1008	Office space	176	5	0.06	1	4.5	11	15	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	19	330	116	0.16
	OFFICE 1006	Office space	141	5	0.06	1	3.5	8	12	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	15	180	63	0.24
	OFFICE 1005	Office space	220	5	0.06	1	5.5	13	19	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	23	300	106	0.22
TU1-18	OFFICE 1029	Office space	89	5	0.06	0	2	5	7	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	9	100	35	0.26
	OFFICE 1028	Office space	90	5	0.06	1	2.5	5	8	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	10	100	35	0.28
	OFFICE 1027	Office space	90	5	0.06	1	2.5	5	8	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	10	100	35	0.28
	WORKROOM 1007	Office space	122	5	0.06	1	3	7	10	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	13	100	35	0.37
	CORRIDOR	Corridors	212	0	0.06	0	0	13	13	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	16	100	35	0.45
TU1-19	TRAINING 1003	Auditorium seating area	1028	5	0.06	70	350	62	412	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	515	1900	800	0.64
TU1-20	BREAK 1102	Office space	1018	5	0.06	30	150	61	211	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	264	1300	456	0.58
TU1-21	CENTRAL FILE 1203	Storage Rooms	1577	0	0.12	0	0	189	189	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	237	1100	385	0.61
	CH FILE 1204	Storage Rooms	64	0	0.12	0	0	8	8	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	10	50	18	0.55
	CS/CAN FILE 1205	Storage Rooms	231	0	0.12	0	0	28	28	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	35	150	53	0.66
TU1-22	STORAGE 1004	Storage Rooms	66	0	0.12	0	0	8	8	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	10	75	26	0.38
	CORRIDOR 1002	Corridors	222	0	0.06	0	0	13	13	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	17	100	35	0.48
	CORRIDOR	Corridors	161	0	0.06	0	0	10	10	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	12	100	35	0.35
TU1-23	LOBBY 1001	Office space	1015	5	0.06	15	75	61	136	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	170	900	315	0.54
	VESTIBULE 1000	Corridors	134	0	0.06	0	0	8	8	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	10	300	105	0.10
TU1-24	MAIL 1202	Storage Rooms	252	0	0.12	0	0	30	30	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	38	200	70	0.54
	CLERICAL/MAIL 1200	Office space	258	5	0.06	1	6.5	15	22	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	27	200	70	0.39
	CS 1201	Office space	126	5	0.06	1	3	8	11	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	13	100	35	0.38
	OFFICE 1191	Office space	185	5	0.06	1	4.5	11	16	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	20	175	61	0.32
	INTAKE 1196	Office space	169	5	0.06	1	4	10	14	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	18	150	53	0.34
TU1-25	BOARD 1103	Conference / meeting	533	5	0.06	14	70	32	102	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	127	680	230	0.55
TU1-26	STORAGE 1105	Storage Rooms	45	0	0.12	0	0	5	5	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	7	30	10	0.64
	STORAGE 1110	Storage Rooms	45	0	0.12	0	0	5	5	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	7	30	10	0.64
	STORAGE 1206A	Storage Rooms	34	0	0.12	0	0	4	4	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	5	30	10	0.49
	OFFICE 1109	Office space	161	5	0.06	1	4	10	14	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	17	140	49	0.35
	OFFICE 1159	Office space	140	5	0.06	1	3.5	8	12	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	15	120	42	0.35
	WORKROOM 1160	Office space	122	5	0.06	1	3	7	10	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	13	120	42	0.31
	CORRIDOR	Corridors	156	0	0.06	0	0	9	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	12	100	35	0.34
	CORRIDOR	Corridors	265	0	0.06	0	0	16	16	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	20	100	35	0.57
TU1-27	MEETING 1189	Conference / meeting	435	5	0.06	12	60	26	86	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	108	450	184	0.58
	CORRIDOR	Corridors	156	0	0.06	0	0	9	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	12	100	41	0.29
TU1-28	ISP MTG 1197	Conference / meeting	392	5	0.06	10	50	24	74	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	92	600	210	0.44

GMC

2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM

Bernhard TME Engineering

ISSUE | DATE
100% CD | 2024.09.09

DRAWN BY: Author
CHECKED BY: Checker

TUSCALOOSA COUNTY DHR
PROJECT ADDRESS

GMC # ABHM220021

ALABAMA LICENSED PROFESSIONAL ENGINEER No. 34357 HAROLD D. DEERMAN
09/09/24

OSA SCHEDULES - HVAC

M0.04

sheet of

9/25/2024 11:07:01 AM TEMPLATE VERSION: 2021.1

TU1-29	OFFICE 1195	Office space	246	5	0.06	1	6	15	21	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	26	350	123	0.21
	OFFICE 1194	Office space	135	5	0.06	1	3.5	8	12	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	15	175	61	0.24
	OFFICE 1180	Office space	177	5	0.06	1	4.5	11	15	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	19	315	111	0.17
TU1-30	OFFICE 1188	Office space	113	5	0.06	1	3	7	10	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	12	110	38	0.32
	OFFICE 1187	Office space	116	5	0.06	1	3	7	10	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	12	110	38	0.32
	OFFICE 1190	Office space	108	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	110	38	0.29
	OFFICE 1185	Office space	116	5	0.06	1	3	7	10	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	12	110	38	0.32
	OFFICE 1192	Office space	113	5	0.06	1	3	7	10	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	12	110	38	0.32
	OFFICE 1183	Office space	116	5	0.06	1	3	7	10	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	12	110	38	0.32
	CORRIDOR	Corridors	185	0	0.06	0	0	11	11	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	14	100	35	0.40
	CORRIDOR	Corridors	220	0	0.06	0	0	13	13	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	17	100	35	0.47
	CORRIDOR	Corridors	133	0	0.06	0	0	8	8	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	10	100	35	0.29
TU1-31	WORKROOM 1181	Office space	105	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	100	34	0.33
	OFFICE 1182	Office space	116	5	0.06	1	3	7	10	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	12	110	37	0.34
	OFFICE 1184	Office space	114	5	0.06	1	3	7	10	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	12	110	37	0.33
	OFFICE 1186	Office space	116	5	0.06	1	3	7	10	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	12	110	37	0.34
TU1-32	OFFICE 1179	Office space	112	5	0.06	1	3	7	10	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	12	200	70	0.17
	OFFICE 1177	Office space	114	5	0.06	1	3	7	10	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	12	200	70	0.18
	OFFICE 1175	Office space	112	5	0.06	1	3	7	10	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	12	200	70	0.17
	OFFICE 1173	Office space	108	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	200	70	0.16
TU1-33	OFFICE 1168	Office space	104	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	110	38	0.28
	OFFICE 1166	Office space	104	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	110	38	0.28
	OFFICE 1164	Office space	104	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	110	38	0.28
	OFFICE 1178	Office space	104	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	110	38	0.28
	OFFICE 1176	Office space	103	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	110	38	0.28
	OFFICE 1174	Office space	104	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	110	38	0.28
	CORRIDOR	Corridors	201	0	0.06	0	0	12	12	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	15	100	35	0.43
	CORRIDOR	Corridors	247	0	0.06	0	0	15	15	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	19	100	35	0.53
	CORRIDOR	Corridors	178	0	0.06	0	0	11	11	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	13	100	35	0.38
TU1-34	OFFICE 1158	Office space	104	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	110	39	0.28
	OFFICE 1156	Office space	104	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	110	39	0.28
	OFFICE 1154	Office space	104	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	110	39	0.28
	OFFICE 1167	Office space	104	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	110	39	0.28
	OFFICE 1165	Office space	101	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	110	39	0.28
	OFFICE 1163	Office space	104	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	110	39	0.28
	CORRIDOR	Corridors	129	0	0.06	0	0	8	8	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	10	125	44	0.22
	CORRIDOR	Corridors	200	0	0.06	0	0	12	12	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	15	125	44	0.34
TU1-35	OFFICE 1151	Office space	157	5	0.06	1	4	9	13	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	17	200	64	0.26
	OFFICE 1152	Office space	113	5	0.06	1	3	7	10	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	12	160	51	0.24
	OFFICE 1161	Office space	161	5	0.06	1	4	10	14	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	17	160	51	0.33
	OFFICE 1162	Office space	161	5	0.06	1	4	10	14	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	17	200	64	0.27
TU1-36	OFFICE 1169	Office space	114	5	0.06	1	3	7	10	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	12	160	56	0.22
	OFFICE 1170	Office space	114	5	0.06	1	3	7	10	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	12	160	56	0.22
	OFFICE 1171	Office space	114	5	0.06	1	3	7	10	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	12	160	56	0.22
	OFFICE 1172	Office space	189	5	0.06	1	4.5	11	16	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	20	300	106	0.19
TU1-37	DIRECTOR'S OFFICE 1106	Office space	383	5	0.06	2	9.5	23	32	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	41	550	207	0.20
	STORAGE 1107	Office space	42	5	0.06	0	1	3	4	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	4	30	11	0.39
TU1-38	OFFICE 1112	Office space	106	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	110	39	0.29
	OFFICE 1114	Office space	104	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	110	39	0.28
	OFFICE 1116	Office space	106	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	110	39	0.29
	OFFICE 1157	Office space	106	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	110	39	0.29
	OFFICE 1155	Office space	104	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	110	39	0.28
	OFFICE 1153	Office space	106	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	110	39	0.29
	CORRIDOR	Corridors	130	0	0.06	0	0	8	8	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	10	100	35	0.28
	CORRIDOR	Corridors	150	0	0.06	0	0	9	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	125	44	0.26
	CORRIDOR	Corridors	150	0	0.06	0	0	9	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	125	44	0.26
TU1-39	OFFICE 1119	Office space	111	5	0.06	1	3	7	10	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	12	110	39	0.31
	OFFICE 1121	Office space	110	5	0.06	1	3	7	10	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	12	110	39	0.31
	OFFICE 1123	Office space	111	5	0.06	1	3	7	10	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	12	110	39	0.31
	OFFICE 1111	Office space	104	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	110	39	0.28
	OFFICE 1113	Office space	104	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	110	39	0.28
	OFFICE 1115	Office space	104	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	110	39	0.28
	CORRIDOR	Corridors	260	0	0.06	0	0	16	16	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	20	125	44	0.44
	CORRIDOR	Corridors	201	0	0.06	0	0	12	12	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	15	125	44	0.34
TU1-40	OFFICE 1126	Office space	114	5	0.06	1	3	7	10	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	12	160	56	0.22
	OFFICE 1125	Office space	112	5	0.06	1	3	7	10	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	12	160	56	0.22
	FINANCIAL 1117	Office space	162	5	0.06	1	4	10	14	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	17	220	77	0.22
TU1-41	OFFICE 1147	Office space	114	5	0.06	1	3	7	10	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	12	185	65	0.19
	OFFICE 1148	Office space	173	5	0.06	1	4.5	10	15	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	19	200	70	0.27
	OFFICE 1149	Office space	114	5	0.06	1	3	7	10	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	12	185	65	0.19

GMC
2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM

Bernhard TME Engineering

ISSUE | DATE
100% CD | 2024.09.09

DRAWN BY: Author
CHECKED BY: Checker

TUSCALOOSA COUNTY DHR
PROJECT ADDRESS

GMC # ABHM220021

ALABAMA LICENSED No. 34357 PROFESSIONAL ENGINEER JARED D. DEERMAN
09/09/24

OSA SCHEDULES - HVAC

M0.05
sheet of

9/25/2024 11:07:03 AM TEMPLATE VERSION: 2021.1

TU1-42	OFFICE 1128	Office space	108	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	110	38	0.29
	OFFICE 1130	Office space	106	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	110	38	0.29
	OFFICE 1132	Office space	108	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	110	38	0.29
	OFFICE 1120	Office space	108	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	110	38	0.29
	OFFICE 1122	Office space	108	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	110	38	0.29
	OFFICE 1124	Office space	108	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	110	38	0.29
	CORRIDOR	Corridors	267	0	0.06	0	0	16	16	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	20	125	43	0.46
	CORRIDOR	Corridors	130	0	0.06	0	0	8	8	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	10	125	43	0.22
TU1-43	OFFICE 1142	Office space	144	5	0.06	1	3.5	9	12	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	15	160	54	0.28
	OFFICE 1144	Office space	113	5	0.06	1	3	7	10	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	12	160	54	0.23
	OFFICE 1145	Office space	114	5	0.06	1	3	7	10	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	12	160	54	0.23
	OFFICE 1146	Office space	160	5	0.06	1	4	10	14	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	17	200	68	0.25
TU1-44	OFFICE 1136	Office space	174	5	0.06	1	4.5	10	15	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	19	300	106	0.18
	OFFICE 1135	Office space	114	5	0.06	1	3	7	10	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	12	160	56	0.22
	OFFICE 1134	Office space	113	5	0.06	1	3	7	10	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	12	160	56	0.22
	OFFICE 1127	Office space	114	5	0.06	1	3	7	10	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	12	160	56	0.22
TU1-45	OFFICE 1137	Office space	108	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	110	39	0.29
	OFFICE 1139	Office space	106	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	110	39	0.29
	WORKROOM 1143	Office space	108	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	110	39	0.29
	OFFICE 1129	Office space	108	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	110	39	0.29
	OFFICE 1131	Office space	108	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	110	39	0.29
	OFFICE 1133	Office space	108	5	0.06	1	2.5	6	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	110	39	0.29
	CORRIDOR	Corridors	130	0	0.06	0	0	8	8	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	10	125	44	0.22
	CORRIDOR	Corridors	143	0	0.06	0	0	9	9	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	11	125	44	0.24
TU1-46	OFFICE 1138	Office space	192	5	0.06	1	5	12	17	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	21	330	115	0.18
	OFFICE 1140	Office space	110	5	0.06	1	3	7	10	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	12	270	94	0.13
	OFFICE 1141	Office space	173	5	0.06	1	4.5	10	15	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	19	360	126	0.15
	CORRIDOR	Corridors	179	0	0.06	0	0	11	11	Ceiling Supply of Warm Air 15°F or more above space temperature and Ceiling Return	0.8	13	100	35	0.38

Total Population ∑Pz	264
System Population Ps	264
Diversity Ps/∑Pz	1

UNCORRECTED OUTDOOR AIR INTAKE Vou	3647
MAXIMUM Zp	0.67

TOTAL OSA REQUIRED Vot	***6064***
TOTAL S/A BY UNIT AT CONDITION ANALYZED	13644

OSA DESIGN CONDITION	**HEATING**
TOTAL OSA REQUIRED	**6064**
TOTAL OSA PROVIDED BY UNIT	**6100**

GMC

2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM

Bernhard TME Engineering

ISSUE | DATE
100% CD | 2024.09.09

DRAWN BY: Author
CHECKED BY: Checker

TUSCALOOSA COUNTY DHR
PROJECT ADDRESS

GMC # ABHM220021

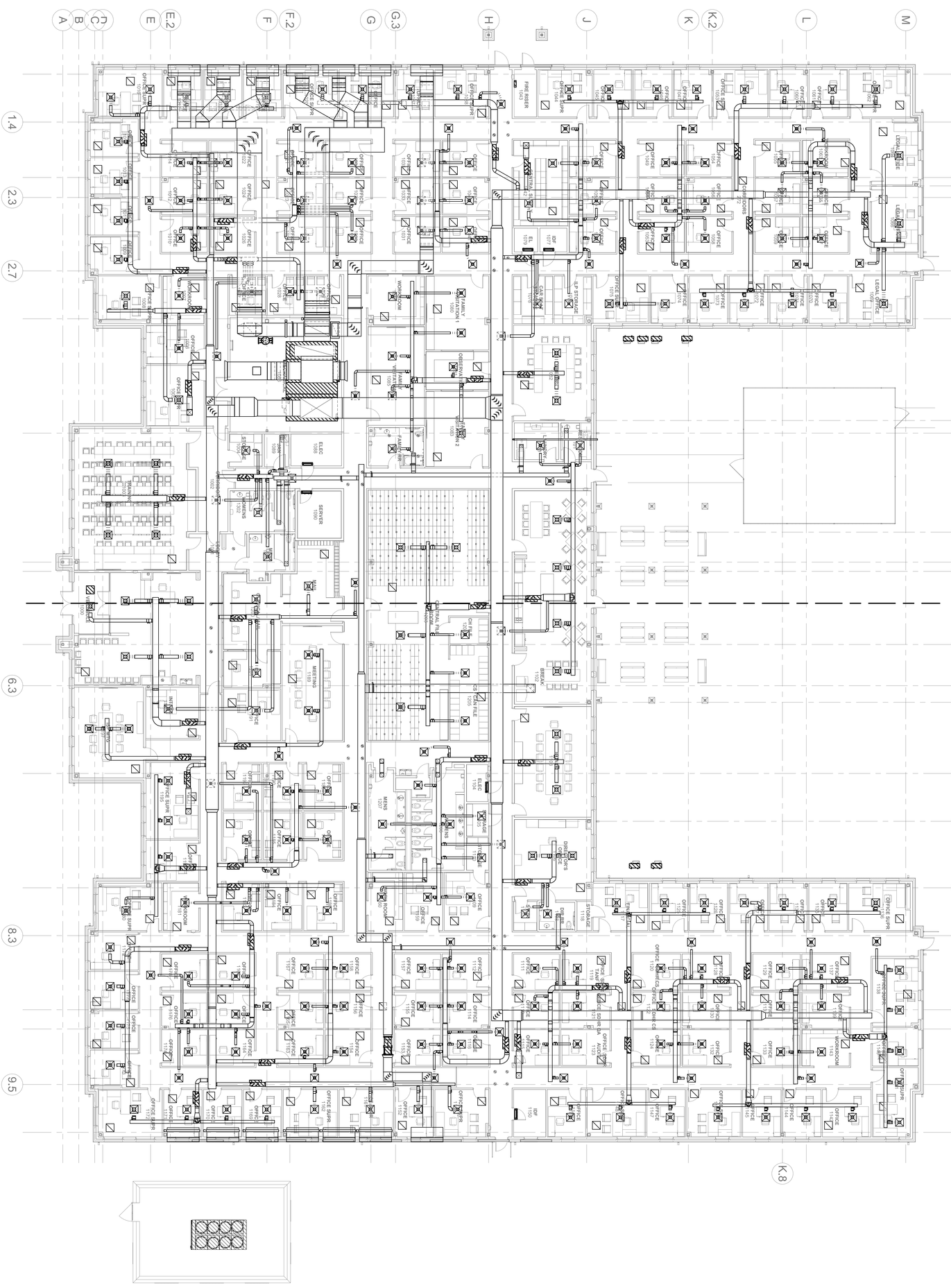
ALABAMA LICENSED No. 34357 PROFESSIONAL ENGINEER HAROLD D. DEERMAN
09/09/24

OSA SCHEDULES - HVAC

M0.06

sheet ___ of ___

9/25/2024 11:07:03 AM TEMPLATE VERSION: 2021.1



TRUE NORTH

1 OVERALL FLOOR PLAN - LEVEL 1 - HVAC DUCTWORK

SCALE: 3/32" = 1'-0"

OVERALL FLOOR PLAN LEVEL 1 - HVAC DUCTWORK

M1.00

sheet of

09/09/24

ALABAMA LICENSED PROFESSIONAL ENGINEER No. 34357 CHRISTOPHER B. OWENS

TUSCALOOSA COUNTY DHR

PROJECT ADDRESS

GMC # ABHM220021

ISSUE	DATE
100% CD	2024.09.09

DRAWN BY: CBO

CHECKED BY: JDD

Bernhard TME Engineering

2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM

GMC

1 TRUE NORTH

PARTIAL FLOOR PLAN A LEVEL 1 - HVAC DUCTWORK

SCALE: 1/8" = 1'-0"

KEYED NOTES:

1. PROVIDE A MINIMUM CLEARANCE OF 3'-0" FOR MAINTENANCE ACCESSIBILITY AND ELECTRICAL CLEARANCE PER THE NATIONAL ELECTRIC CODE.
2. 24"/24" UP TO ATTIC WITH FD.
3. INDOOR BUILDING PRESSURE PICKUP LOCATION.

PARTIAL FLOOR PLAN A LEVEL 1 - HVAC DUCTWORK

M1.01

sheet of

09/09/24

TUSCALOOSA COUNTY DHR

PROJECT ADDRESS

GMC # ABHM220021

ISSUE	DATE
100% CD	2024.09.09

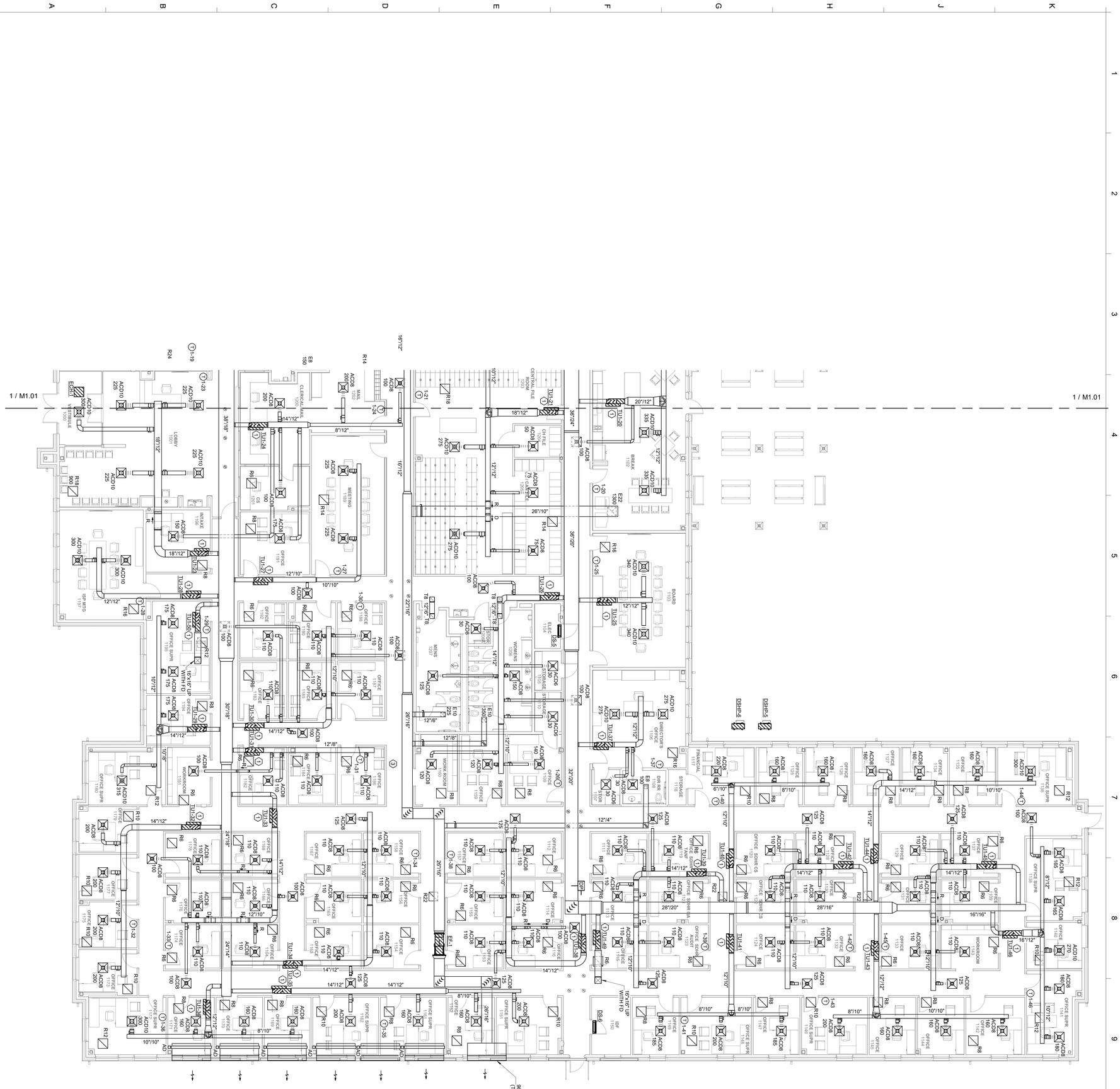
DRAWN BY: CBO

CHECKED BY: JDD

Bernhard TME Engineering

2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM

GMC



KEYED NOTES:

1. PROVIDE A MINIMUM CLEARANCE OF 3'-0" FOR MAINTENANCE ACCESSIBILITY AND ELECTRICAL CLEARANCE PER THE NATIONAL ELECTRIC CODE.
2. MAINTAIN A MINIMUM CLEARANCE OF 4'-0" IN FRONT OF CHILLER CONTROL PANEL
3. INDOOR BUILDING PRESSURE PICKUP LOCATION.

1 PARTIAL FLOOR PLAN B LEVEL 1 - HVAC DUCTWORK

SCALE: 1/8" = 1'-0"

TRUE NORTH

PARTIAL FLOOR PLAN B LEVEL 1 - HVAC DUCTWORK

M1.02

sheet of

09/09/24

ALABAMA LICENSED PROFESSIONAL ENGINEER No. 34057 CHRISTOPHER B. DEERMAN

TUSCALOOSA COUNTY DHR

PROJECT ADDRESS

GMC # ABHM220021

ISSUE	DATE
100% CD	2024.09.09

DRAWN BY: CBO

CHECKED BY: JDD

Bernhard TME Engineering

2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM

GMC

1 OVERALL FLOOR PLAN - LEVEL 1 - HVAC PIPING
SCALE: 3/32" = 1'-0"

TRUE NORTH

OVERALL FLOOR PLAN LEVEL 1 - HVAC PIPING

M2.00
sheet of

09/09/24

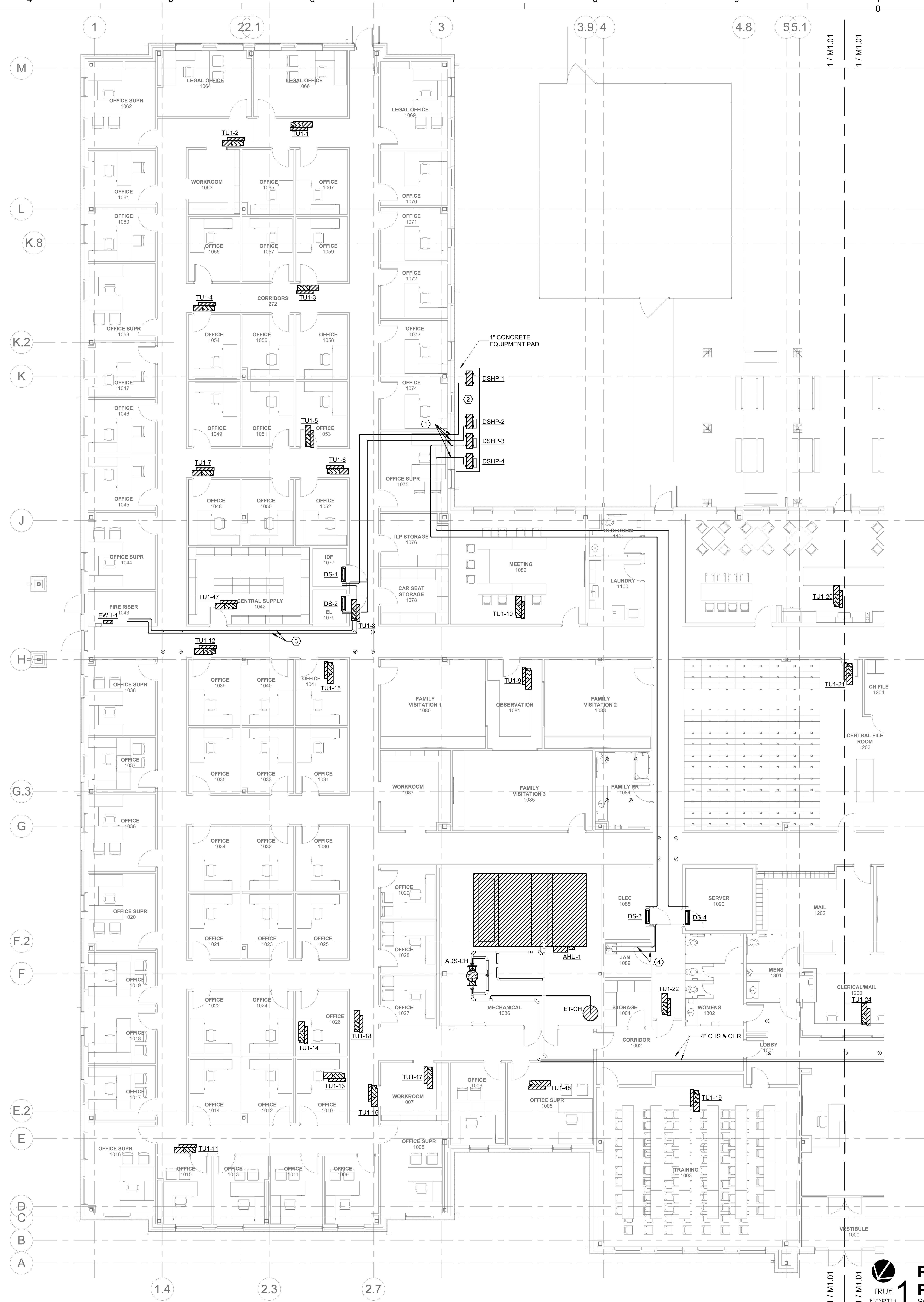
TUSCALOOSA COUNTY DHR
PROJECT ADDRESS

GMC # ABHM220021

ISSUE	DATE
100% CD	2024.09.09

DRAWN BY: CBO
CHECKED BY: JDD

Bernhard TME Engineering
2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM
GMC



KEYED NOTES:

1. ROUTE REFRIGERANT LINESETS DOWN IN WALL. SEAL EXTERIOR PENETRATION WEATHER TIGHT.
2. COVER ALL EXTERIOR REFRIGERANT PIPING WITH INSULATION AND ALUMINUM JACKETING. SEE SPECIFICATIONS.
3. ROUTE 3/4" CONDENSATE DRAIN TO HUB DRAIN. SEE PLUMBING DRAWINGS FOR DRAIN LOCATION.
4. ROUTE 3/4" CONDENSATE DRAIN TO JANITOR'S SINK. MAINTAIN AIR GAP AT SINK.

1 PARTIAL FLOOR PLAN A LEVEL 1 - HVAC PIPING

SCALE: 1/8" = 1'-0"

GMC

2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM

Bernhard TME Engineering

ISSUE	DATE
100% CD	2024.09.09

DRAWN BY: CBO
CHECKED BY: JDD

TUSCALOOSA COUNTY DHR
PROJECT ADDRESS
GMC # ABHM220021

ALABAMA LICENSED No. 34357 PROFESSIONAL ENGINEER JARED D. DEERMAN 09/09/24

PARTIAL FLOOR PLAN A LEVEL 1 - HVAC PIPING

M2.01

sheet of

9/25/2024 11:07:32 AM TEMPLATE VERSION: 2021.1

1 PARTIAL FLOOR PLAN B LEVEL 1 - HVAC PIPING

SCALE: 1/8" = 1'-0"

TRUE NORTH

KEYED NOTES:

1. ROUTE REFRIGERANT LINESETS DOWN IN WALL. SEAL EXTERIOR PENETRATION WEATHER TIGHT.
2. COVER ALL EXTERIOR REFRIGERANT PIPING WITH INSULATION AND ALUMINUM JACKETING. SEE SPECIFICATIONS.
3. ROUTE 3/4" CONDENSATE DRAIN TO HUB DRAIN. SEE PLUMBING DRAWINGS FOR DRAIN LOCATION.
4. ROUTE 3/4" CONDENSATE DRAIN TO JANITOR'S SINK. MAINTAIN AIR GAP AT SINK.
5. ROUTE 4" CH & CHR LINE DOWN IN CHASE AND BELOW BUILDING FOOTER. COORDINATE ELEVATION WITH STRUCTUAL.
6. INSTALL CHILLER ON 6" HIGH CONCRETE PAD.
7. MAINTAIN A MINIMUM CLEARANCE OF 6'-0" ON ALL 4 SIDES OF CHILLER FOR AIRFLOW AND SERVICE CLEARANCES.

GMC

2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM

Bernhard TME Engineering

ISSUE	DATE
100% CD	2024.09.09

DRAWN BY: CBO
CHECKED BY: JDD

TUSCALOOSA COUNTY DHR
PROJECT ADDRESS

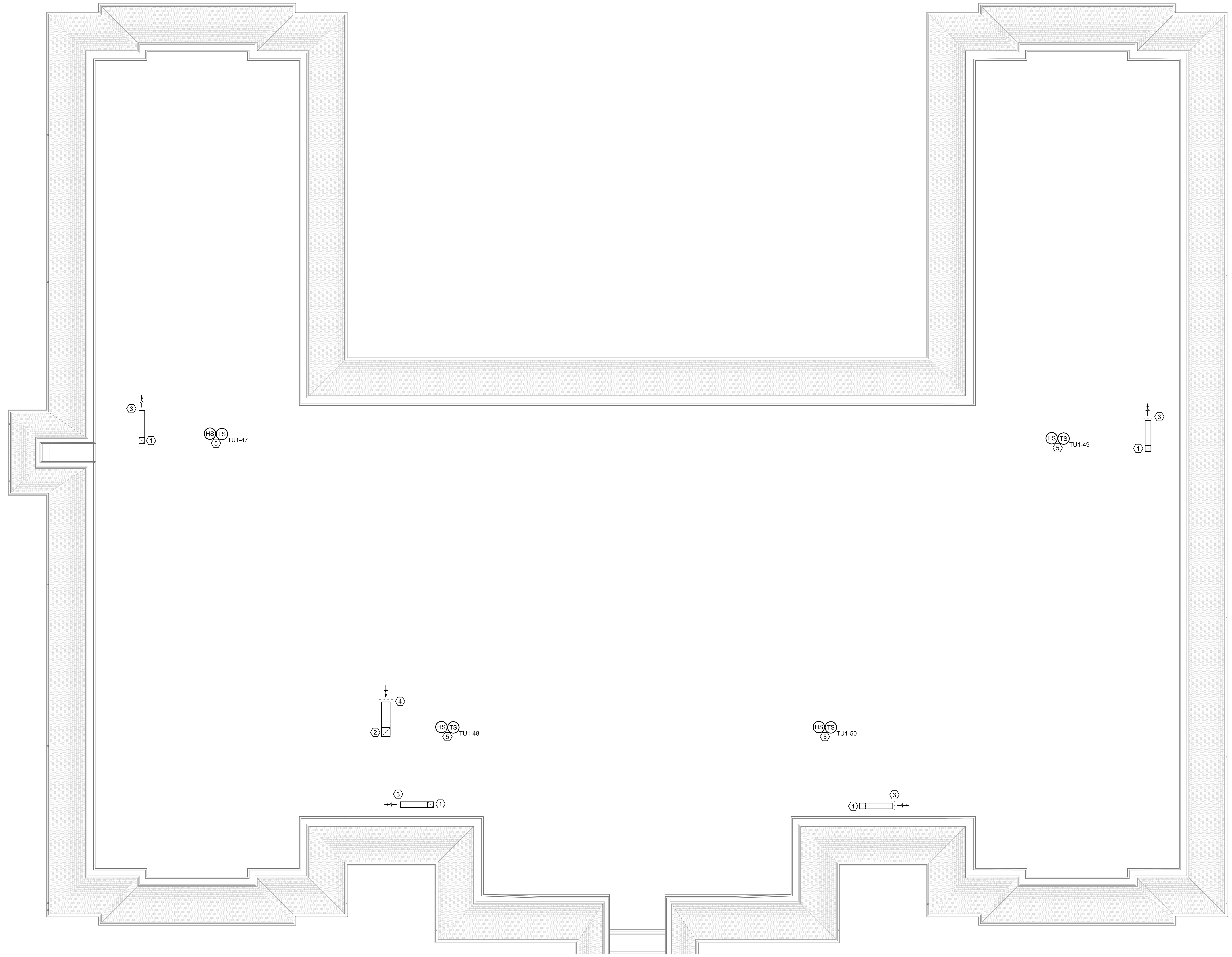
GMC # ABHM220021

State of Alabama Licensed Professional Engineer No. 34357 Jared D. Deerman 09/09/24

PARTIAL FLOOR PLAN B LEVEL 1 - HVAC PIPING

sheet **M2.02** of

9/25/2024 11:07:35 AM TEMPLATE VERSION: 2021.1



1 **OVERALL ATTIC PLAN - HVAC**
SCALE: 3/32" = 1'-0"
TRUE NORTH

KEYED NOTES:

1. 16"/16' SA DOWN WITH FD
2. 24"/24" RA DOWN WITH FD
3. 16"/16" OPENING. COVER WITH BIRDSCREEN.
4. 36"/24" OPENING. COVER WITH BIRDSCREEN.
5. MOUNT REMOTE TEMPERATURE SENSOR TO ROOF TRUSS. LOCATE THERMOSTAT IN MECHANICAL ROOM 1086.

GMC
2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM
Bernhard TME
Engineering

ISSUE	DATE
100% CD	2024.09.09

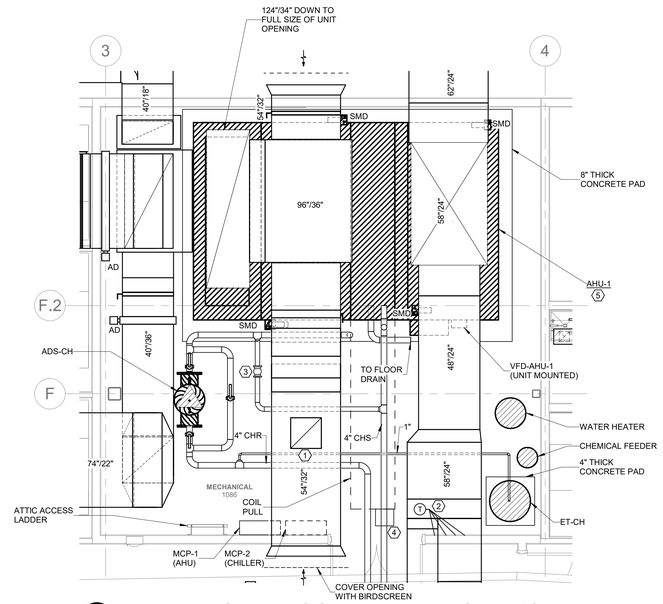
DRAWN BY: CBO
CHECKED BY: JDD

TUSCALOOSA COUNTY DHR
PROJECT ADDRESS
GMC # ABHM220021

ALABAMA LICENSED PROFESSIONAL ENGINEER No. 34357 JARED D. DEERMAN
09/09/24

OVERALL ATTIC PLAN - HVAC

M3.00
sheet of



TRUE NORTH

1 ENLARGED FLOOR PLAN - MECHANICAL ROOM - HVAC

SCALE: 1/4" = 1'-0"

KEYED NOTES:

1. 24"/24" RA UP WITH FD
2. THERMOSTATS WITH SETPOINT ADJUSTMENT (TEMPERATURE AND HUMIDITY) SERVING TU1-47, TU1-48, TU1-49, AND TU1-50. REMOTE TEMPERATURE SENSORS LOCATED IN ATTIC. SEE ATTIC PLAN FOR LOCATIONS.
3. 3" BYPASS LINE WITH AUTOMATIC CONTROL VALVE.
4. CHILLED WATER FLOW METER.
5. UNIT TO BE SHIPPED FOR BREAKDOWN CONSTRUCTION AND RE-ASSEMBLED ON SITE BY MANUFACTURER'S REPRESENTATIVE.

GMC

2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM

Bernhard TME Engineering

ISSUE	DATE
100% CD	2024.09.09

DRAWN BY: CBO
CHECKED BY: JDD

TUSCALOOSA COUNTY DHR
PROJECT ADDRESS

GMC # ABHM220021

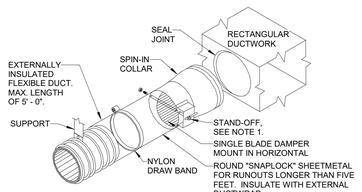
ALABAMA LICENSED No. 34357 PROFESSIONAL ENGINEER HAMED D. DEERMAN
09/09/24

ENLARGED FLOOR PLANS - HVAC

M4.01

sheet of

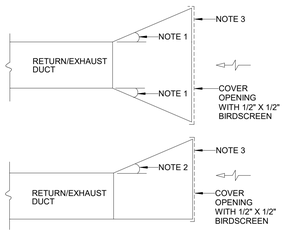
9/25/2024 11:07:38 AM TEMPLATE VERSION: 2021.1



NOTES:

1. PROVIDE STAND-OFF AND EXTENSION ROD TO ACCOMODATE INSULATION.
2. INSULATE SPIN-IN WITH EXTERNAL DUCT WRAP. SLIT INSULATION AT DAMPER RODS. SEAL JOINTS VAPOR TIGHT WITH MASTIC.
3. SEAL ALL JOINTS TO PREVENT LEAKAGE.
4. ALLOWABLE FOR SUPPLY BRANCH DUCTWORK ONLY.

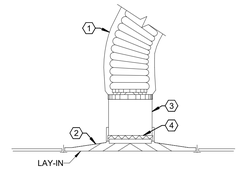
1 LOW PRESSURE ROUND BRANCH DUCT CONNECTOR DETAIL
SCALE:NOT TO SCALE:



NOTES:

1. MAXIMUM ANGLE OF 15 DEGREES.
2. MAXIMUM ANGLE OF 30 DEGREES.
3. MAXIMUM FACE VELOCITY OF 700 PER MINUTE. FREE AREA OF OPENING SHALL BE DETERMINED BY REQUIRED CFM DIVIDED BY 700.

2 RETURN/EXHAUST DUCT OPENING DETAIL
SCALE:NOT TO SCALE:

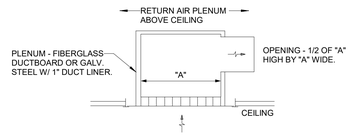


NOTES:

1. PRE-INSULATED FLEX DUCT AS REQUIRED. INSTALLED PERMANENTLY SEALED AND SUPPORTED TO PREVENT KINKING AND SHARP TURNS. MAXIMUM LENGTH 5'-0", 1 - 45° TURN ALLOWED.
2. LAY-IN OR SURFACE-MOUNT CEILING DIFFUSER WITH ROUND NECK. SEE ARCHITECT'S REFLECTED CEILING PLAN FOR CEILING TYPE.
3. HARD ROUND 45° OR 90° ELBOW- INSULATED WITH EXTERNAL DUCTWRAP.
4. WHERE SCHEDULED, PROVIDE OBD W/SCREWDRIVER ADJUSTMENT ACCESSIBLE FROM FACE OF DIFFUSER.

FOR 8"Ø RUNOUTS AND SMALLER; ROUND NECK

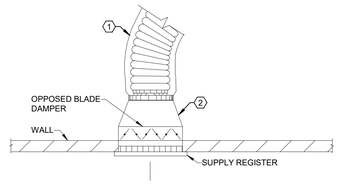
3 CEILING DIFFUSER DUCT DETAIL
SCALE:NOT TO SCALE:



NOTES:

1. LOCATE OPENINGS IN ADJACENT ROOMS AT RIGHT ANGLES TO EACH OTHER.
2. PAINT DUCTBOARD LINER BLACK.

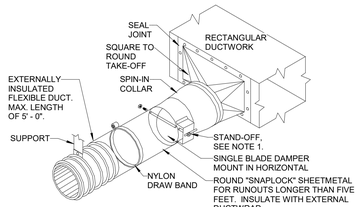
4 SOUND ATTENUATING RETURN AIR BOOT DETAIL
SCALE:NOT TO SCALE:



NOTES:

1. PRE-INSULATED FLEX DUCT AS REQUIRED. INSTALLED, PERMANENTLY SEALED AND SUPPORTED TO PREVENT KINKING AND SHARP TURNS. MAXIMUM LENGTH 5'-0", 1-45° TURN ALLOWED.
2. ROUND TO SQUARE ADAPTOR AS REQUIRED.

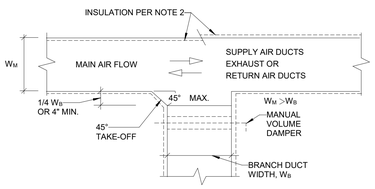
5 SIDEWALL SUPPLY REGISTER DETAIL
SCALE:NOT TO SCALE:



NOTES:

1. PROVIDE STAND-OFF AND EXTENSION ROD TO ACCOMODATE INSULATION.
2. INSULATE SPIN-IN WITH EXTERNAL DUCT WRAP. SLIT INSULATION AT DAMPER RODS. SEAL JOINTS VAPOR TIGHT WITH MASTIC.
3. SEAL ALL JOINTS TO PREVENT LEAKAGE.
4. ALLOWABLE FOR SUPPLY BRANCH DUCTWORK ONLY.

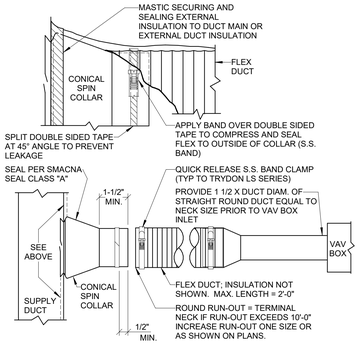
6 LOW PRESSURE ROUND BRANCH DUCT CONNECTOR DETAIL
SCALE:NOT TO SCALE:



NOTES:

1. FABRICATE PER SMACNA DUCT CONSTRUCTION STANDARDS FIGURE #2-8.
2. SEE SPECIFICATIONS FOR INSULATION REQUIREMENTS. FABRICATE LINED DUCT CONNECTIONS SO THAT THERE ARE NO EXPOSED LINER EDGES.

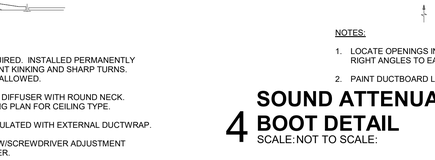
7 DUCT BRANCH TAKE-OFF DETAIL
SCALE:NOT TO SCALE:



NOTES:

1. DOUBLE SIDED 1" WIDE, 1/8" THICK TAPE AND S.S. CLAMP. OR
2. DUCT SEALER (BENJAMIN FOSTER #3202) AND S.S. CLAMP (TAPE SHOWN).

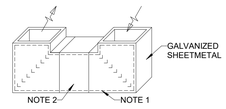
8 MEDIUM PRESSURE FLEX CONNECTION TO AIR TERMINAL UNIT DETAIL
SCALE:NOT TO SCALE:



NOTES:

1. MINIMUM 26 GAUGE GALVANIZED STEEL DUCT WITH JOINTS RUNNING IN DIRECTION OF FLOW AND SMOOTH INTERIOR WITH NO PROTRUSIONS.

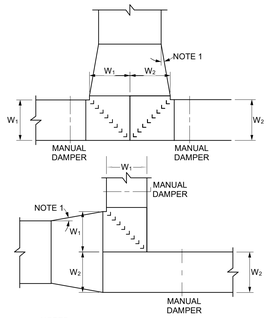
9 DOMESTTIC DRYER EXHAUST DETAIL
SCALE:NOT TO SCALE:



NOTES:

1. ONE INCH THICK ACOUSTICAL DUCT LINER.
2. WIDTH AND DEPTH AS SHOWN ON PLANS.

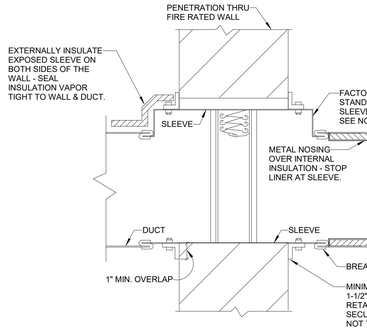
10 TRANSFER DUCT DETAIL
SCALE:NOT TO SCALE:



NOTES:

1. MAXIMUM 15 DEGREE ANGLE FOR ECCENTRIC FITTING. MAXIMUM 30 DEGREE ANGLE FOR CONCENTRIC FITTING.
2. OMIT MANUAL DAMPERS ON MEDIUM PRESSURE SYSTEM.

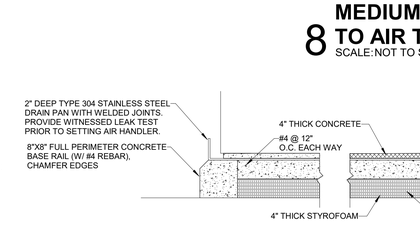
14 EQUAL AREA SPLITTER DETAIL
SCALE:NOT TO SCALE:



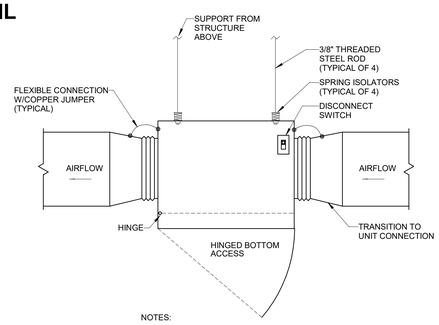
NOTES:

1. BASIS OF DESIGN : RUSKIN IBD20
2. SLEEVE LENGTH TO BE MIN. OF 7" LONGER THAN DEPTH OF WALL.
3. PROVIDE TYPE B FRAME ON RECTANGULAR DUCT AND TYPE C FRAME ON ROUND & FLAT OVAL DUCT.
4. INSTALL DAMPER AND SLEEVE PER MANUFACTURER'S INSTRUCTIONS FOR U.L. LISTING.
5. PROVIDE ACCESS DOOR FOR DAMPER RESET. LABEL ACCESS DOOR "FIRE DAMPER." SEE SPECIFICATIONS FOR ACCESS DOOR SIZES, TYPES & LABELING REQUIREMENTS.

11 CURTAIN TYPE FIRE DAMPER DETAIL
SCALE:NOT TO SCALE:



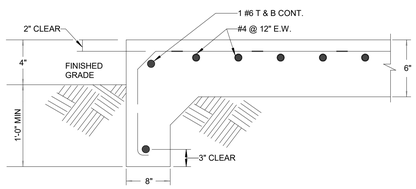
12 AHU BASE SUPPORT PAD DETAIL
SCALE:NOT TO SCALE:



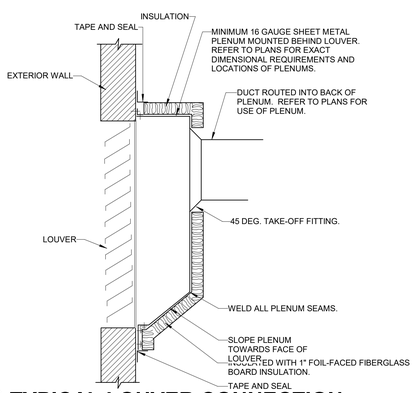
NOTES:

1. DO NOT MOUNT OVER LIGHTS OR OTHER ITEMS THAT WILL BLOCK BOTTOM ACCESS.

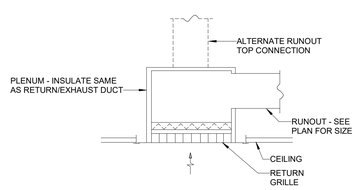
13 CABINET INLINE FAN DETAIL
SCALE:NOT TO SCALE:



15 SLAB ON GRADE DETAIL
SCALE:NOT TO SCALE:



16 TYPICAL LOUVER CONNECTION
SCALE:NOT TO SCALE:



NOTES:

WHERE SCHEDULED, PROVIDE OBD.

17 RETURN/ EXHAUST AIR PLENUM DETAIL
SCALE:NOT TO SCALE:

GMC
2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM
Bernhard TME Engineering

ISSUE	DATE
100% CD	2024.09.09

DRAWN BY: CBO
CHECKED BY: JDD

TUSCALOOSA COUNTY DHR
PROJECT ADDRESS
GMC # ABHM220021

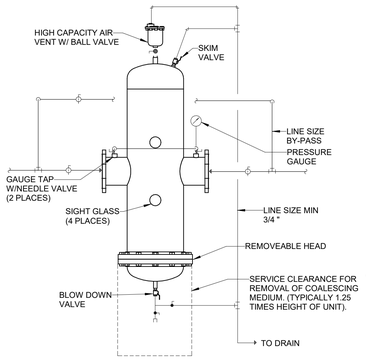
ALABAMA LICENSED No. 34357 PROFESSIONAL ENGINEER JARED D. DEERMAN
09/09/24

DETAILS - HVAC

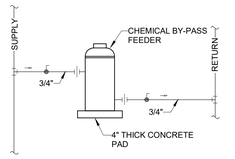
M6.01

sheet of

9/25/2024 11:07:39 AM TEMPLATE VERSION: 2021.1



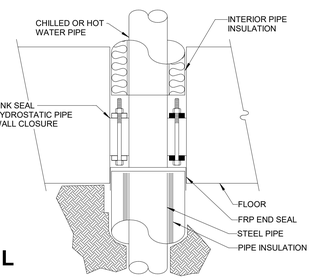
1 AIR / DIRT SEPARATOR PIPING DETAIL
SCALE:NOT TO SCALE:



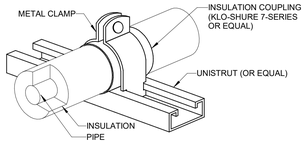
NOTE:

1. CONNECT FEEDER BETWEEN PUMP SUCTION AND DISCHARGE LINES.

2 CHEMICAL SHOT FEEDER PIPING DETAIL
SCALE:NOT TO SCALE:



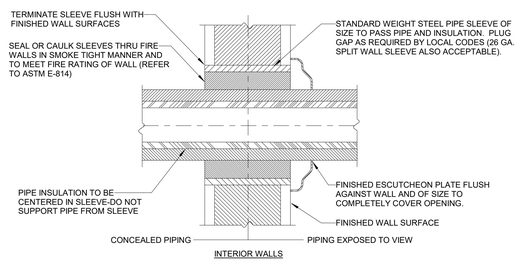
3 LINK SEAL DETAIL
SCALE:NOT TO SCALE:

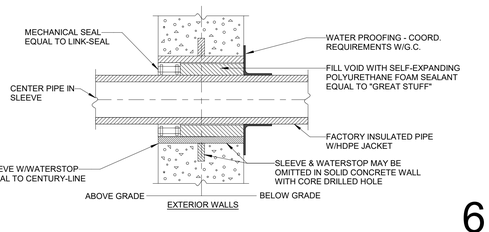


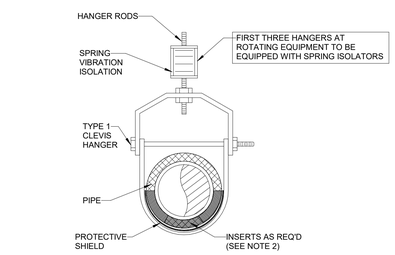
NOTES:

1. APPLICATION: FOR STRUT-MOUNTED, 4-INCH AND SMALLER, COPPER PIPE WITH FOAMED PLASTIC (ARMAFLEX) OR FIBERGLASS INSULATION.
2. ALLOWED FOR HORIZONTAL OR VERTICAL INSTALLATION.
3. FOR COLD PIPE APPLICATION, APPLY ADHESIVE TO END OF COUPLING.
4. UNISTRUT FINISH:
   A. INDOOR: ELECTROPLATED ZINC COATING.
   B. OUTDOOR & OTHER WET OR HUMID APPLICATIONS: ELECTRO-DEPOSITED ACRYLIC COATING EQUAL TO PERMA-GREEN III.

4 STRUT-MOUNTED PIPING SUPPORT INSULATION COUPLING DETAIL
SCALE:NOT TO SCALE:





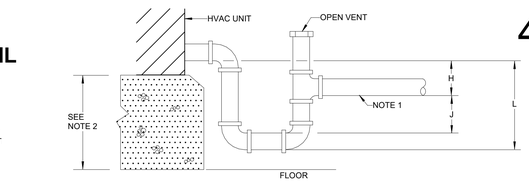


NOTES:

1. INSTALL PLUMB.
2. PROVIDE INSERTS FOR PIPING 2-1/2" DIA. AND LARGER.
3. LOCATE ADDITIONAL HANGERS AT VALVES AND AT CHANGES IN DIRECTION.
4. LOCATE HANGER AT SHORTER SPACING WHERE NOTED ON MECHANICAL OR STRUCTURAL PLANS.

HANGER ROD SIZES AND MAXIMUM HANGER SPACING											
PIPE SIZE	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"	5"	6"
ROD DIA.	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	1/2"	1/2"	5/8"	5/8"	3/4"
MAXIMUM SPACING	6'	8'	8'	8'	10'	10'	10'	12'	14'	14'	14'

6 SINGLE PIPE TYPE 1 CLEVIS HANGER
SCALE:NOT TO SCALE:



DRAIN PAN TRAPPING FOR SECTION UNDER NEGATIVE PRESSURE:

L = H + J + PIPE DIAMETER WHERE:

H= 1" FOR EACH INCH OF NEGATIVE PRESSURE PLUS 1".

J = H (PREFERRED) OR 1/2H (MINIMUM)

DRAIN PAN TRAPPING FOR SECTION UNDER POSITIVE PRESSURE:

L = H + J + PIPE DIAMETER WHERE:

H= 1" (PREFERRED) OR 1/2" (MINIMUM)

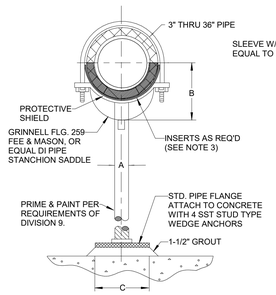
J = 1/2" PLUS THE UNIT POSITIVE STATIC PRESSURE AT COIL DISCHARGE (WITH LOADED FILTERS)

NOTES:

1. DRAIN PIPE SIZE: EQUAL TO AHU CONNECTION SIZE, 1" MINIMUM, OR AS NOTED ON PLANS - WHICHEVER IS LARGEST.
2. HEIGHT OF CONCRETE PAD TO BE INCREASED AS REQUIRED TO INSTALL TRAP WITH SPECIFIED DIMENSIONS AND ALLOW FOR PIPE INSULATION AND 1% SLOPE TO POINT OF DISCHARGE.

8 CONDENSATE DRAIN TRAP DETAIL
SCALE:NOT TO SCALE:

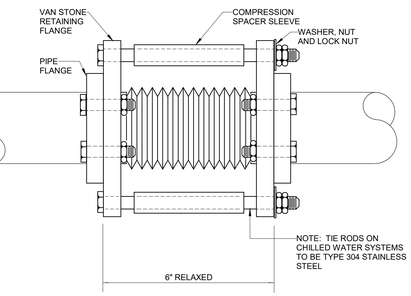
DIMENSION TABLE			
PIPE SIZE	A	B	C
3"	3"	4 3/16"	9"
4"	3"	4 3/16"	9"
5"	3"	4 13/16"	9"
6"	3"	5 7/16"	9"
8"	3"	6 15/16"	9"
10"	3"	8 7/16"	9"
12"	3"	9 15/16"	9"
14"	4"	10 15/16"	11"
16"	4"	12 3/8"	11"
18"	4"	13 7/8"	11"
20"	6"	15 3/8"	13 1/2"
22"	6"	16 5/8"	13 1/2"
24"	6"	17 15/16"	13 1/2"
26"	6"	19 1/8"	13 1/2"
30"	6"	21 5/16"	13 1/2"
32"	6"	22 1/2"	13 1/2"
36"	8"	24 1/2"	16"



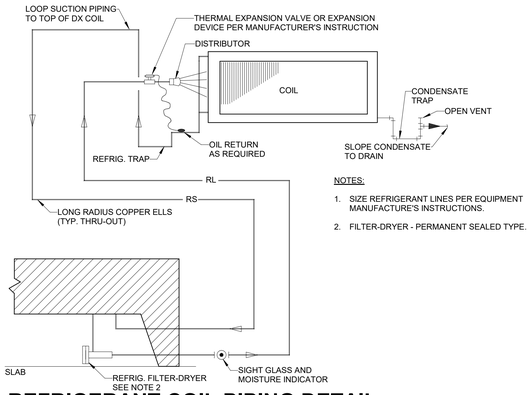
NOTES:

1. FOR BASE, HEIGHT AND FLANGE DIMENSIONS, SEE TABLE
2. FOR 3" SIZE PIPE, U-BOLT MUST HAVE EXTRA 1" OF THREAD TO TIGHTEN SECURELY.
3. PROVIDE INSERTS FOR PIPING 2-1/2" DIA. AND LARGER

5 PIPE SLEEVE THRU WALL DETAIL
SCALE:NOT TO SCALE:



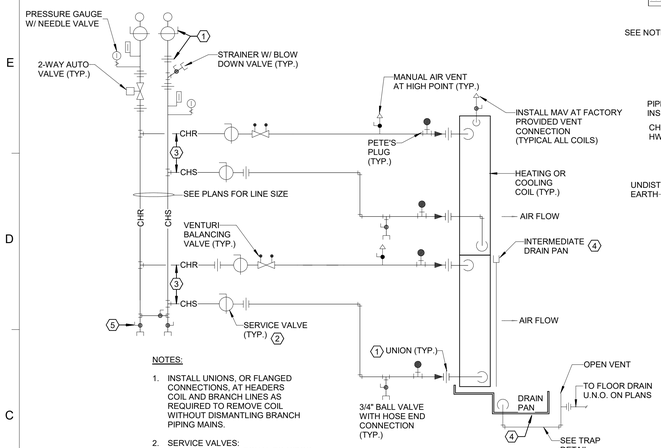
7 FLEXIBLE PIPE CONNECTOR DETAIL
SCALE:NOT TO SCALE:



NOTES:

1. SIZE REFRIGERANT LINES PER EQUIPMENT MANUFACTURE'S INSTRUCTIONS.
2. FILTER-DRYER - PERMANENT SEALED TYPE.

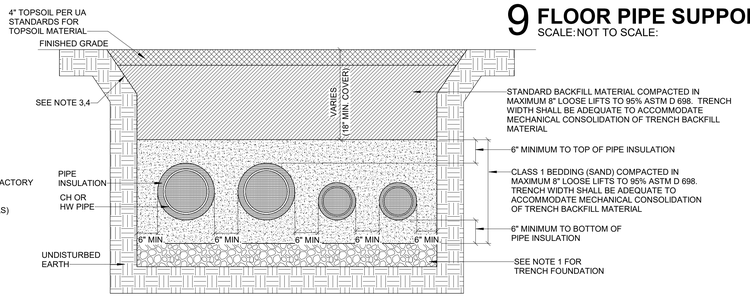
10 REFRIGERANT COIL PIPING DETAIL
SCALE:NOT TO SCALE:



NOTES:

1. INSTALL UNIONS, OR FLANGED CONNECTIONS, AT HEADERS COIL AND BRANCH LINES AS REQUIRED TO REMOVE COIL WITHOUT DISMANTLING BRANCH PIPING MAINS.
2. SERVICE VALVES:
   <2" - BALL VALVES EQUAL TO NIBCO T585-70-NS NIB SEAL
   >2" - BUTTERFLY VALVES.
3. SIZE BRANCH LINES AT A MAX. DP OF 4' PER 100'.
4. DRAIN PANS NOT REQUIRED FOR HOT WATER COILS.
5. CLOSE COIL SERVICE VALVES AND OPEN BY-PASS VALVE DURIN PIPE FLUSHING. PRIOR TO WATER TREATMENT, OPEN SERVICE VALVES & CLOSE BY-PASS VALVE. REMOVE BY-PASS VALVE HANDLE & PROVIDE ENGRAVED LABEL TO READ "NORMALLY CLOSED VALVE. NOTIFY MAINTENANCE PRIOR TO OPENING." BY-PASS LINE TO BE ONE LINE SIZE SMALLER THAN HEADER (MIN. 2").

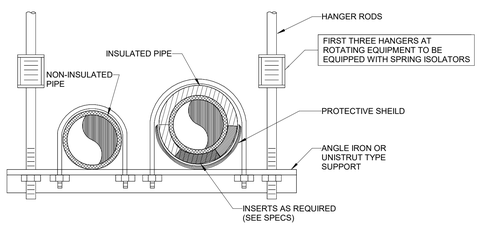
11 MULTIPLE STACKED CHILLED WATER COIL 2-WAY VALVE PIPING DETAIL
SCALE:NOT TO SCALE:



NOTES:

1. TRENCH FOUNDATION REQUIRED ONLY AS DIRECTED BY OWNER'S REPRESENTATIVE. ALL TRENCH BACKFILL OPERATIONS SHALL BE OBSERVED BY THE OWNER'S REPRESENTATIVE ON THE PROJECT. HOWEVER, THE PRESENCE OF THE OWNER'S REPRESENTATIVE SHALL NOT RELIEVE THE CONTRACTOR OF ANY REQUIREMENTS OR OBLIGATIONS ASSOCIATED WITH ALL UTILITY TRENCHES.
2. ALL SLOPES SHALL CONFORM TO OSHA REQUIREMENTS. ADDITIONAL PROTECTIVE MEASURES MAY BE REQUIRED ABOVE AND BEYOND OSHA DEPENDING ON SPECIFIC TRENCH CONDITIONS. CONTRACTOR IS SOLELY RESPONSIBLE FOR THE SAFETY OF WORKERS, THE GENERAL PUBLIC, AND OTHERS INVOLVED IN THE PROJECT AND SHALL PROVIDE SHEETING, BRACING, OR WHATEVER ACTION NECESSARY TO INSURE THE SAFETY OF PEOPLE, PROPERTY, AND STRUCTURES.
3. THE LINES AND TRENCHES SHOWN ON THE TRENCH DETAILS ARE ONLY INTENDED TO DEFINE THE BACKFILL REQUIREMENTS AND THE MINIMUM DIMENSIONS FOR THE TRENCH. IT IS THE CONTRACTOR'S RESPONSIBILITY TO "LAY BACK" THE TRENCH WALLS TO WHATEVER FLATNESS OF SLOPE IS NECESSARY TO PROVIDE SAFE WORKING CONDITIONS FOR THE PLACEMENT OF THE PIPE AND BEDDING.
4. ALL UTILITY TRENCH BACKFILL SHALL BE COMPACTED TO A MINIMUM OF 95% SPD ASTM D 698 UNLESS OTHERWISE NOTED BY ABOVE DETAILS.

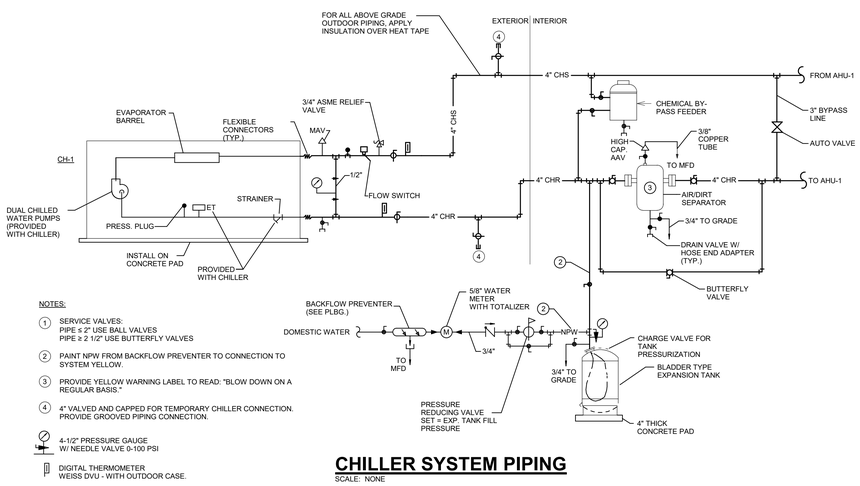
13 BELOW GROUND CHILLED & HOT WATER PIPING DETAIL
SCALE:NOT TO SCALE:



NOTES:

1. SIZE RODS AND HORIZONTAL MEMBER APPROVED TO SATISFY LOAD REQUIREMENT W/SAFETY FACTOR OF 5.
2. PROVIDE INSERTS FOR PIPING 2-1/2" DIA. AND LARGER
3. LOCATE ADDITIONAL HANGERS AT VALVES AND AT CHANGES IN DIRECTION

12 TRAPEZE TYPE PIPE SUPPORT
SCALE:NOT TO SCALE:



NOTES:

1. SERVICE VALVES:
   PIPE ≤ 2" USE BALL VALVES
   PIPE ≥ 2 1/2" USE BUTTERFLY VALVES
2. PAINT NPW FROM BACKFLOW PREVENTER TO CONNECTION TO SYSTEM YELLOW.
3. PROVIDE YELLOW WARNING LABEL TO READ: "BLOW DOWN ON A REGULAR BASIS."
4. 4" VALVED AND CAPPED FOR TEMPORARY CHILLER CONNECTION. PROVIDE GROOVED PIPING CONNECTION.

4-1/2" PRESSURE GAUGE W/ NEEDLE VALVE 0-100 PSI

DIGITAL THERMOMETER WEISS DVJ - WITH OUTDOOR CASE.

CHILLER SYSTEM PIPING
SCALE: NONE

GMC
2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM
Bernhard TME Engineering

ISSUE	DATE
100% CD	2024.09.09

DRAWN BY: Author
CHECKED BY: Checker

TUSCALOOSA COUNTY DHR
PROJECT ADDRESS
GMC # ABHM220021

ALABAMA LICENSED No. 34357 PROFESSIONAL ENGINEER WARD D. DEERMAN
09/09/24

DETAILS - HVAC

M6.02

sheet of

9/25/2024 11:07:40 AM TEMPLATE VERSION: 2021.1

CONTROL LEGEND

SYMBOL	DESCRIPTION
H-O-A V F D	VARIABLE FREQUENCY DRIVE WITH HAND - OFF - AUTO SWITCH
H-O-A	MAGNETIC STARTER WITH HAND - OFF - AUTO SWITCH
	DISCONNECT SWITCH
DSD	SMOKE DETECTOR
	SIGNAL TO FIRE ALARM SYSTEM
	SIGNAL FROM FIRE ALARM SYSTEM
TS	TEMPERATURE SENSOR, REMOTE BULB, SINGLE POINT WITH THERMOWELL AND ANALOG OUTPUT SIGNAL
T	ROOM TEMPERATURE SENSOR WITH SETPOINT ADJUSTMENT AND ANALOG OUTPUT SIGNAL
TS	ROOM TEMPERATURE SENSOR WITH ANALOG OUTPUT SIGNAL
TS	TEMPERATURE SENSOR, REMOTE BULB, AVERAGING WITH ANALOG OUTPUT SIGNAL. SEE CONTROL SPECIFICATION NOTE # 18.
TS	TEMPERATURE SENSOR, REMOTE BULB, SINGLE POINT WITH ANALOG INPUT
T	ROOM THERMOSTAT ELECTRONIC OR ELECTRIC
FRZ	FREEZESTAT WITH AVERAGING BULB, SEE CONTROL SPECIFICATION NOTE # 18.
FRZ	FREEZESTAT WITH AVERAGING BULB AND AUX CONTACTS FOR STATUS INDICATION. SEE CONTROL SPECIFICATION NOTE # 18.
FS	FLOW SWITCH
DI	DIGITAL INPUT
DO	DIGITAL OUTPUT
AI	ANALOG INPUT
AO	ANALOG OUTPUT
H	HUMIDITY SENSOR WITH ANALOG OUTPUT SIGNAL
H	HUMIDISTAT W/ADJ. SETPOINT
	NORMALLY OPEN CONTACTS
	NORMALLY CLOSED CONTACTS
	MOTORIZED CONTROL VALVE - 2 WAY
	MOTORIZED CONTROL VALVE - 3 WAY
	MANUAL DAMPER
	DAMPER (OPPOSED BLADES) WITH END SWITCH
	MOTORIZED DAMPER WITH OPPOSED BLADES
AFM	AIR FLOW MONITOR - PROVIDE ACCESS DOOR UPSTREAM OF DEVICE.
ΔP SPM	DUCT STATIC PRESSURE TRANSMITTER
ΔP	DIFFERENTIAL PRESSURE SWITCH - ON PIPING SYSTEM PROVIDE BALL OR NEEDLE ISOLATION VALVES
S	ADJUSTABLE CURRENT SENSOR

CONTROL SPECIFICATION GENERAL NOTES:

1. SEE SPECIFICATION SECTIONS FOR ADDITIONAL SYSTEM REQUIREMENTS.
2. SUBMIT COMPLETE CONTROL AND POWER WIRING DIAGRAMS FOR APPROVAL BEFORE INSTALLING CONTROLS. CONTROL DIAGRAMS ON DRAWINGS ARE INTENDED TO INDICATE, IN GENERAL, CONTROL ARRANGEMENTS. PROVIDE ALL INSTRUMENTS, RELAYS, OPERATORS, SWITCHES, ETC. REQUIRED TO ACCOMPLISH CONTROL SEQUENCES WHETHER OR NOT SUCH DEVICES ARE ACTUALLY SHOWN ON CONTROL DIAGRAMS.
3. INCLUDE ALL CONTROL AND INTERLOCK WIRING AND POWER WIRING FOR CONTROL PANELS AND CONTROL DEVICES, UNLESS OTHERWISE SHOWN ON THE ELECTRICAL DRAWINGS.
4. INSTALL ALL CONTROL WIRING IN MECH. ROOMS (INCLUDING LOW VOLTAGE WIRING) IN CONDUIT. LABEL CONTROL CONDUIT PER FACILITY STANDARDS.
5. ALL WIRING AND CONDUIT SHALL BE FURNISHED AND INSTALLED IN STRICT ACCORDANCE WITH ELECTRICAL.
6. SMOKE DETECTORS: FURNISHED AND WIRED UNDER DIVISION 26.
7. LOCATIONS OF CONTROL PANELS TO BE FIELD VERIFIED BY THE CONTRACTOR. COORDINATE POWER REQUIREMENTS WITH ELECTRICAL.
8. THE NEW BUILDING AUTOMATION CONTROL SYSTEM (BAS) SHALL BE A WEB-BASED DIRECT DIGITAL CONTROL SYSTEM
9. CONTRACTOR TO PROVIDE GRAPHICAL INTERFACE TO WEB-BASED CONTROL SYSTEM FOR ALL CONTROLS INSTALLED UNDER THIS CONTRACT.
10. CONTROL CONTRACTOR TO PROVIDE 24V TRANSFORMERS AT CONTROL PANEL IN MECHANICAL ROOM AND ROUTE LOW VOLTAGE CONTROL POWER TO ALL AIR TERMINAL UNITS. CONTROL PANELS SHALL BE BACNET IP.
11. OBTAIN BUILDING OPERATING SCHEDULE FROM OWNER IN WRITING AND SET EQUIPMENT OPERATION SCHEDULES ACCORDINGLY. SET THERMOSTAT SOFTWARE PARAMETERS AND SETPOINT LIMITATIONS PER OWNER'S DIRECTION. PROVIDE SIGNED LETTER FROM OWNER THIS HAS BEEN DONE.
12. CONTROL SYSTEM IS TO BE A COMPLETE CONTROL SYSTEM. PROVIDE ALL HARDWARE, SOFTWARE AND PROGRAMMING REQUIRED TO MAKE COMPLETE SYSTEM.
13. DAMPERS AND ACTUATORS: ACTUATORS SHALL BE DIRECT COUPLED, SPRING RETURN AS MANUFACTURED BY BELIMO. ROUND DAMPERS SHALL BE RUSKIN CDRS25 WITH BLADE EDGE SEAL AND MAXIMUM LEAKAGE OF .15 CFM PER INCH BLADE CIRCUMFERENCE AT 4 INCHES W.C. PRESSURE DIFFERENTIAL. RECTANGULAR DAMPERS SHALL BE RUSKIN RCD45 WITH BLADE EDGE SEALS AND MAXIMUM LEAKAGE OF 10 CFM PER SQ. FT. AT 4 INCHES W.C. PRESSURE DIFFERENTIAL.
14. THERMOSTATS FOR FANS AND ELECTRIC HEATERS: JOHNSON CONTROLS MODEL T26. HEATING THERMOSTATS SHALL HAVE LIMITED RANGE OF 40F TO 75F. COOLING THERMOSTATS SHALL HAVE LIMITED RANGE OF 78F TO 90F. THERMOSTATS SHALL BE LABELED "HEATING" OR "VENTILATION" AND INDICATE UNITS SERVED.
15. AVERAGING TEMPERATURE SENSOR SHALL HAVE ONE FOOT OF ELEMENT LENGTH PER THREE SQUARE FEET OF COIL SURFACE EVENLY DISTRIBUTED OVER THE COIL SURFACE. MULTIPLE AVERAGING TEMPERATURE SENSORS MAY BE REQUIRED TO MEET THE ONE FOOT OF ELEMENT PER THREE SQUARE FEET OF COIL SURFACE AND IN THIS EVENT THE MULTIPLE AVERAGING TEMPERATURE SENSORS SHALL BE WIRED TO PROVIDE THE CORRECT AVERAGE TEMPERATURE TO THE DDC SYSTEM. AVERAGING TEMPERATURE SENSORS SHALL BE INSTALLED PER MANUFACTURER RECOMMENDATIONS AT REGULAR INTERVALS TO COVER THE ENTIRE COIL.
16. TEST PORTS - COORDINATE WITH MECHANICAL CONTRACTOR TO INSTALL TEST PORTS FOR HAND-HELD INSTRUMENT READINGS NEAR ALL PIPING PRESSURE AND TEMPERATURE SENSORS. COORDINATE REQUIREMENTS WITH SPECIFICATION, SECTION "METERS AND GAUGES."
17. PROVIDE DUCT ACCESS DOORS UPSTREAM OF ALL DUCT MOUNTED AIR FLOW MONITORING STATIONS.
18. WEB BASED USER INTERFACE (INCLUDING DATA COLLECTION AND TRENDING CAPABILITIES) SHALL BE FULLY OPERATIONAL AND ACCESSIBLE REMOTELY PRIOR TO BUILDING FINAL INSPECTION. REMOTE CHECK-OUT OF BUILDING AUTOMATION SYSTEM SHALL BE PART OF THE FINAL INSPECTION PROCESS.
19. CONTRACTOR TO VERIFY LOCATIONS OF ALL TEMPERATURE/HUMIDITY/PRESSURE SENSORS WITH ENGINEER/OWNER PRIOR TO ROUGH-IN.

CONTROL SEQUENCE - UNOCCUPIED HIGH/LOW LIMITS

1. BAS SHALL COMMAND ON THE UNIT CONTROLS BASED ON A 365 DAY PER YEAR, TIME-OF-DAY SCHEDULE, WHICH IS ADJUSTED BY OPTIMUM START AND SCHEDULED STOP PROGRAM CALCULATIONS. ONCE COMMANDED ON, UNIT CONTROLS SHALL REMAIN ENABLED FOR A MINIMUM OF 30 MINUTES.
2. BAS SHALL COMMAND ON THE BUILDING CONTROLS PRIOR TO OCCUPANCY TIME AS DETERMINED BY THE OPTIMUM START CALCULATION. THE PERIOD BETWEEN UNIT START AND OCCUPANCY TIME IS REFERRED TO AS THE SPACE PRE-CONDITIONING PERIOD. AT THE END OF THIS PERIOD, THE OCCUPIED MODE BEGINS AND CONTINUES UNTIL THE BUILDING CONTROLS ARE DISABLED. THE BAS SHALL STOP THE BUILDING CONTROLS AT THE END OF THE OCCUPANCY TIME AS DETERMINED BY THE TIME OF DAY SCHEDULE.
3. IF OUTDOOR TEMPERATURE IS ABOVE 60F (ADJUSTABLE) THE OPTIMUM START CALCULATIONS ARE BASED ON COOLING CONDITIONS, OTHERWISE THEY ARE BASED ON HEATING CONDITIONS.
4. UNOCCUPIED LIMITS:

   CONTRACTOR TO SELECT 4 TYPICAL TERMINAL UNIT TEMPERATURE SENSORS FOR AHU'S UNOCCUPIED AND OPTIMUM START SEQUENCES.

   LOW TEMPERATURE LIMIT: WHEN THE DDC SCHEDULE IS IN THE UNOCCUPIED MODE AND SPACE TEMPERATURE FALLS BELOW 55F (ADJUSTABLE) THE UNIT CONTROLS SHALL BE ENERGIZED AND STAY ON UNTIL THE SPACE TEMPERATURE RISES BY 5F (ADJUSTABLE)

   HIGH TEMPERATURE LIMIT: WHEN THE DDC SCHEDULE IS IN THE UNOCCUPIED MODE AND SPACE TEMPERATURE RISES ABOVE 85F (ADJUSTABLE) THE UNIT CONTROLS SHALL BE ENERGIZED AND STAY ON UNTIL THE SPACE TEMPERATURE FALLS BY 5F (ADJUSTABLE)

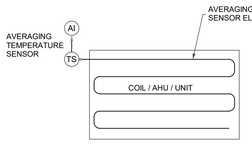
   HIGH HUMIDITY LIMIT: WHEN THE DDC SCHEDULE IS IN THE UNOCCUPIED MODE AND SPACE RELATIVE HUMIDITY RISES ABOVE 60% RH (ADJUSTABLE) THE UNIT CONTROLS SHALL BE ENERGIZED AND STAY ON UNTIL THE SPACE RELATIVE HUMIDITY FALLS BY 5% (ADJUSTABLE).

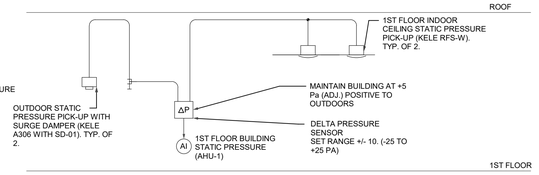
CONTROLS - AS-BUILT DRAWINGS & MANUALS

GENERAL CONTROL NOTES:

THE ELECTRONIC VERSION OF THE AS-BUILT CONTROLS DRAWINGS AND MANUALS SHOULD BE PROVIDED AND INSTALLED ON THE BAS SERVER AND A LINK SHOULD BE PROVIDED ON THE MAIN GRAPHIC PAGE. ALL DUCT STATIC PRESSURE SENSOR LOCATIONS SHALL BE LOCATED ON BOTH THE BAS SERVER AND AS BUILT DRAWINGS.

AN ELECTRONIC VERSION OF THE AS-BUILT PROJECT DRAWINGS SHOULD BE PROVIDED TO MAINTENANCE.





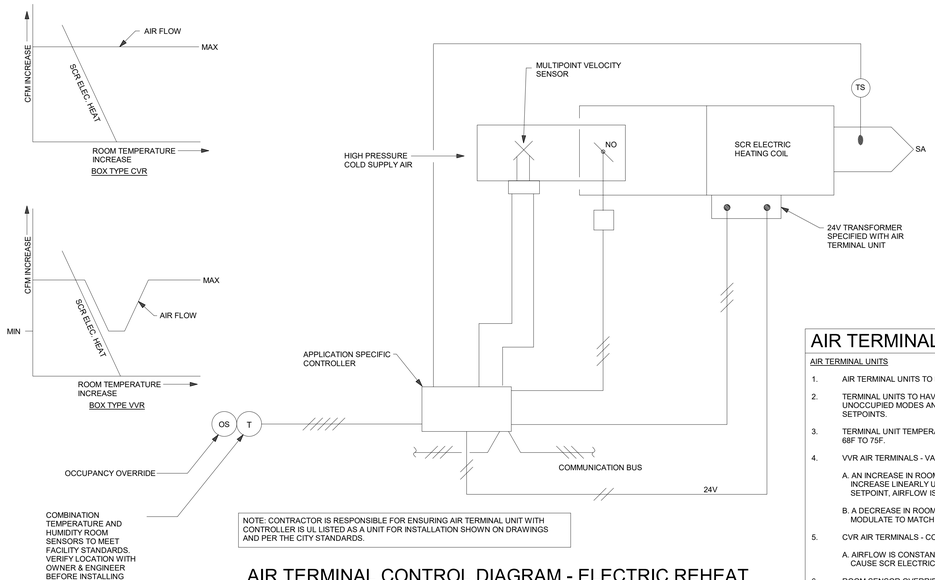
CONTROL DIAGRAM : BUILDING PRESSURIZATION CONTROL

SCALE: NONE

NOTES:
1. AVERAGING TEMPERATURE SENSOR SHALL HAVE ONE FOOT OF ELEMENT LENGTH PER THREE SQUARE FOOT OF COIL / UNIT SURFACE EVENLY DISTRIBUTED OVER THE COIL / UNIT SURFACE AS SHOWN IN DETAIL.
2. MULTIPLE AVERAGING TEMPERATURE SENSORS MAY BE REQUIRED TO MEET THE ONE FOOT OF ELEMENT PER TWO SQUARE FOOT OF COIL / UNIT SURFACE AND IN THIS EVENT THE MULTIPLE AVERAGING TEMPERATURE SENSORS SHALL BE WIRED TO PROVIDE THE CORRECT AVERAGE TEMPERATURE TO THE DDC SYSTEM..
3. AVERAGING TEMPERATURE SENSORS SHALL BE INSTALLED PER MANUFACTURER RECOMMENDATIONS AT REGULAR INTERVALS TO COVER THE ENTIRE COIL / UNIT.
4. AVERAGING TEMPERATURE SENSORS SHALL BE INSTALLED PER MANUFACTURE'S RECOMMENDATIONS IN A MANNER TO PREVENT THE ELEMENT FROM BEING DAMAGED FROM VIBRATION.

AHU DUCT AVERAGING TEMPERATURE SENSOR DETAIL

SCALE: NONE



NOTE: CONTRACTOR IS RESPONSIBLE FOR ENSURING AIR TERMINAL UNIT WITH CONTROLLER IS UL LISTED AS A UNIT FOR INSTALLATION SHOWN ON DRAWINGS AND PER THE CITY STANDARDS.

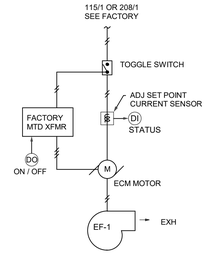
AIR TERMINAL CONTROL DIAGRAM - ELECTRIC REHEAT

SCALE: NONE

AIR TERMINAL UNIT CONTROLS:

AIR TERMINAL UNITS

1. AIR TERMINAL UNITS TO BE CONTROLLED BY THE BAS.
2. TERMINAL UNITS TO HAVE SEPARATE HEATING AND COOLING SETPOINTS FOR OCCUPIED AND UNOCCUPIED MODES AND SEPARATE HEATING AND COOLING MINIMUM AND MAXIMUM AIR FLOW SETPOINTS.
3. TERMINAL UNIT TEMPERATURE SENSOR SETPOINTS SHALL BE SOFTWARE LIMITED TO RANGE FROM 68F TO 75F.
4. VVR AIR TERMINALS - VARIABLE VOLUME REHEAT:
   A. AN INCREASE IN ROOM TEMPERATURE OVER COOLING SETPOINT CAUSES AIRFLOW TO INCREASE LINEARLY UP TO COOLING MAXIMUM. WHEN SPACE TEMPERATURE IS BELOW COOLING SETPOINT, AIRFLOW IS AT BOX MINIMUM.
   B. A DECREASE IN ROOM TEMPERATURE BELOW THE HEATING SETPOINT CAUSES AIRFLOW TO MODULATE TO MATCH SCR ELECTRIC HEAT.
5. CVR AIR TERMINALS - CONSTANT VOLUME REHEAT:
   A. AIRFLOW IS CONSTANT. A DECREASE IN ROOM TEMPERATURE BELOW THE HEATING SETPOINT CAUSE SCR ELECTRIC HEATER TO MODULATE TO MAINTAIN SPACE TEMPERATURE SETPOINT.
6. ROOM SENSOR OVERRIDE BUTTON TO BE SEQUENCE AIR HANDLER INTO OCCUPIED MODE FOR FOUR HOUR (ADJUSTABLE).

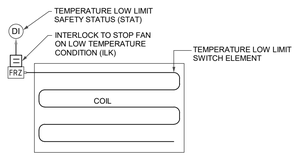


EXHAUST FAN CONTROLS W/ ECM MOTOR

SCALE: NONE

CONTROL SEQUENCE - EXHAUST FAN W/ EC MOTOR

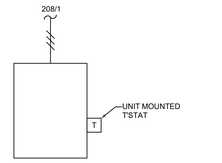
EXHAUST FAN IS ENABLED AND DISABLED BY THE BAS AND INTERLOCKED WITH AHU-1. THE FAN SPEED IS ADJUSTED BY THE TAB AGENCY AT THE MOTOR MOUNTED PILOT.



NOTES:
1. A MANUAL RESET TEMPERATURE LOW LIMIT (TLL) SWITCH WITH DPST OR DPDT CONTACTS FOR HARDWIRE INTERLOCK TO FANS AND DDC MONITORING SHALL BE PROVIDED. CONTACTS SHALL INCLUDE OPEN ON ALARM CONTACT FOR FAN SHUTDOWN AND A CLOSE ON ALARM CONTACT FOR ALARM STATUS.
2. TEMPERATURE LOW LIMIT SHALL HAVE ONE FOOT OF ELEMENT LENGTH PER ONE SQUARE FOOT OF COIL SURFACE EVENLY DISTRIBUTED OVER THE COIL SURFACE AS SHOWN IN DETAIL.
3. MULTIPLE TEMPERATURE LOW LIMIT SWITCHES MAY BE REQUIRED TO MEET THE ONE FOOT OF ELEMENT PER ONE SQUARE FOOT OF COIL SURFACE AND IN THIS EVENT THE MULTIPLE TEMPERATURE LOW LIMIT SWITCHES SHALL BE WIRED IN SERIES FOR FAN SHUTDOWN AND WIRED IN PARALLEL FOR ALARM STATUS.
4. INTERLOCK WIRING FROM THE TEMPERATURE LOW LIMIT SWITCH TO THE FAN CONTROLLER IS BY DIVISION 25.
5. TEMPERATURE LOW LIMIT SWITCH SHALL BE INSTALLED PER MANUFACTURER RECOMMENDATIONS AT REGULAR INTERVALS NOTED TO COVER THE ENTIRE COIL.
6. TEMPERATURE LOW LIMIT (TLL) SWITCHES SHALL HAVE SETPOINT ADJUSTMENT AND MANUAL RESET AT THE SWITCH.
7. TEMPERATURE LOW LIMIT SWITCH SHALL BE INSTALLED PER MANUFACTURE'S RECOMMENDATIONS IN A MANNER TO PREVENT THE ELEMENT FROM BEING DAMAGED FROM VIBRATION.

AHU TEMPERATURE LOW LIMIT SWITCH DETAIL

SCALE: NONE

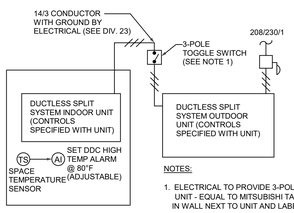


ELECTRIC WALL HEATER

UNIT-MOUNTED THERMOSTAT SPECIFIED WITH EQUIPMENT SHALL CYCLE HEATER OPERATION TO MAINTAIN SPACE TEMPERATURE SETPOINT.

ELECTRIC HEATER CONTROL

SCALE: NONE



NOTES:
1. ELECTRICAL TO PROVIDE 3-POLE AC SWITCH AT INDOOR UNIT - EQUAL TO MITSUBISHI TAZ-MS303. MOUNT IN WALL NEXT TO UNIT AND LABEL "AC UNIT".

CONTROL DIAGRAM - DUCTLESS SPLIT SYSTEM

SCALE: NONE

TAGS: DS-1, DS-2, DS-3, DS-4, DS-5, DS-6

CONTROLS

CONTROL SEQUENCE - DUCTLESS SPLIT SYSTEMS

EACH DUCTLESS SPLIT SYSTEM AC UNIT SHALL HAVE CONTROLS SPECIFIED WITH UNIT. UNIT SHALL CYCLE FAN AND COOLING OPERATION TO MAINTAIN SPACE TEMPERATURE SETPOINT.

THE BAS SHALL MONITOR SPACE TEMPERATURE IN SPACES SERVED BY DUCTLESS SPLIT SYSTEM UNITS. THE BAS SHALL ACTIVATE AN ALARM AT THE USER INTERFACE IF SPACE TEMPERATURE EXCEEDS 80 DEGREES F (ADJUSTABLE).

GMC
2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM
Bernhard TME Engineering

ISSUE	DATE
100% CD	2024.09.09

DRAWN BY: CBO
CHECKED BY: JDD

TUSCALOOSA COUNTY DHR
PROJECT ADDRESS
GMC # ABHM220021

ALABAMA LICENSED No. 34357 PROFESSIONAL ENGINEER JARED D. DEERMAN
09/09/24

CONTROLS - HVAC

M7.01
sheet of

9/25/2024 11:07:41 AM TEMPLATE VERSION: 2021.1

CONTROL SEQUENCES - AHU-1:

AIR HANDLER IS A VARIABLE VOLUME AC UNIT AND CONSISTS OF A UNIT MOUNTED OSA DAMPERS (D-1A, D-1B) INTERNAL RETURN AIR DAMPER (D-2), (6) EXTERNAL RELIEF AIR DAMPERS (D-3), CHILLED WATER COOLING COIL, ELECTRIC PRE-HEAT COIL, SUPPLY AIR FANWALL, AND PRE-FILTER. THE SUPPLY FANS ARE SUPPLIED WITH A VARIABLE FREQUENCY DRIVE. CONTROLS INCLUDE OSA AIRFLOW CONTROL, AIR ENTERING CHILLED WATER COIL LOW LIMIT CONTROL, DISCHARGE AIR TEMPERATURE CONTROL, SUPPLY DUCT STATIC CONTROL, HIGH/LOW LIMIT STATIC PRESSURE CONTROL, ETC. SEE CONTROL DIAGRAM FOR ADDITIONAL UNIT CONTROLS REQUIRED. THE UNIT SHALL BE CONTROLLED THROUGH THE BAS AS FOLLOWS:

1. BUILDING AUTOMATION SYSTEM INTERFACE: THE BUILDING AUTOMATION SYSTEM (BAS) WILL SEND THE CONTROLLER OCCUPIED AND UNOCCUPIED COMMANDS. THE BAS WILL ALSO SEND A DISCHARGE AIR TEMPERATURE SETPOINT AND A DUCT STATIC PRESSURE SETPOINT. IF COMMUNICATION IS LOST WITH THE BAS, THE CONTROLLER WILL OPERATE IN THE OCCUPIED COOLING MODE USING ITS DEFAULT DISCHARGE AND DUCT STATIC PRESSURE SETPOINTS.

2. SUPPLY FAN CONTROL:

   A. THE SUPPLY FAN IS STARTED AND STOPPED FROM THE HAND-OFF-AUTO SWITCH LOCATED ON THE FRONT OF ITS VARIABLE FREQUENCY DRIVE. SUPPLY FAN SUBJECT TO HIGH STATIC PRESSURE CUT-OUT, LOW LIMIT T'STAT IN AIR STREAM ENTERING COOLING COIL AND SIGNAL FROM FIRE ALARM SYSTEM. IN THE HAND MODE, THE FAN SHALL RUN CONTINUOUSLY AND ITS SPEED SHALL BE CONTROLLED MANUALLY AT THE VFD FRONT PANEL. IN THE AUTO MODE, THE FAN START-STOP SHALL BE CONTROLLED BY THE BAS AS FOLLOWS: AIR HANDING UNIT SHALL BE ENABLED BY THE BAS BASED ON A 365 DAY SCHEDULE ADJUSTED BY UNOCCUPIED HIGH/LOW LIMITS.

   B. SUPPLY FAN SPEED CONTROL: SUPPLY FAN SPEED SHALL BE MODULATED BY CONTROLLER TO MAINTAIN SUPPLY DUCT STATIC PRESSURE SETPOINT. STATIC PRESSURE SETPOINT SHALL BE RESET AS FOLLOWS: THE AIR TERMINAL UNIT WITH ITS INLET DAMPER MOST OPEN SHALL DETERMINE THE SUPPLY DUCT STATIC PRESSURE SETPOINT, BASED ON THE FOLLOWING RESET PI CONTROL LOOP: THE STATIC PRESSURE RESET CONTROL LOOP SHALL BE A DIRECT ACTING CONTROL LOOP AND SHALL RESET THE STATIC PRESSURE SETPOINT FROM A MINIMUM OF 0.5" WG TO A MAXIMUM OF 1.5" WG (T&B AGENCY SHALL VERIFY REQUIRED MAXIMUM STATIC PRESSURE SETPOINT) AS REQUIRED TO MAINTAIN THE MOST OPEN TERMINAL UNIT DAMPER 95% (ADJ.) OPEN. THE SETPOINT SHALL BE SENT TO THE FAN CONTROLLER VIA A HARDWIRED ANALOG OUTPUT.

   C. THERE SHALL BE AN AVERAGING, MANUAL RESET, TWO-POSITION, LOW LIMIT THERMOSTAT (FREEZESTAT) PLACED IN THE AIR STREAM ENTERING THE COOLING COIL. THE LOW LIMIT THERMOSTAT SHALL HAVE A MANUAL RESET POINT OF 40 DEGREES F (ADJUSTABLE). WHEN THE ENTERING AIR TEMPERATURE DROPS BELOW THE LOW LIMIT SET POINT, THE THERMOSTAT WILL TRIP AND THE SUPPLY FAN WILL SHUT DOWN. A BAS ALARM IS GENERATED WHENEVER A LOW TEMPERATURE CONDITION IS DETECTED. A MANUAL RESET IS REQUIRED TO RESTART THE FAN. A HARDWIRED, HIGH STATIC PRESSURE CUT-OFF SWITCH IS ELECTRICALLY INTERLOCKED WITH THE VARIABLE SPEED DRIVE. IF THE HIGH STATIC PRESSURE CUT-OFF SWITCH IS TRIPPED, THE FAN WILL STOP, THE OUTSIDE AIR DAMPER WILL CLOSE, ALL HEATING/COOLING WILL BE DISABLED, AND AN ALARM WILL BE ANNUNCIATED. A MANUAL RESET OF THE HIGH STATIC PRESSURE CUT-OFF SWITCH WILL BE REQUIRED TO RESTART THE FAN. **T&B AGENCY TO SET HIGH STATIC PRESSURE SETPOINT.**

   D. IF THE SUPPLY FAN FAILS TO PROVE STATUS FOR 30 SECONDS (ADJ.), THE FAN WILL BE TURNED OFF, THE OUTSIDE AIR DAMPER AND ALL COOLING/HEATING WILL BE DISABLED, AND AN ALARM WILL BE ANNUNCIATED. A MANUAL RESET IS REQUIRED TO RESTART THE FAN.

   E. UNOCCUPIED HIGH/LOW LIMIT FAN OPERATION: FAN IS NORMALLY OFF WHEN THE BAS SCHEDULE IS IN THE UNOCCUPIED MODE. FAN IS ENERGIZED BY THE UNOCCUPIED HIGH/LOW TEMPERATURE PROGRAM AS DESCRIBED ABOVE.

   F. DUCT MOUNTED SMOKE DETECTORS SHALL BE PROVIDED (SEE ELECTRICAL) IN RETURN DUCT PRIOR TO MIXING WITH OUTSIDE AIR AND IN SA DUCT (VERIFY LOCATIONS AND TOTAL NUMBER BASED ON SYSTEM LAYOUT). SUPPLY FAN SHALL BE INTERLOCKED WITH SIGNAL FROM FIRE ALARM SYSTEM FOR FAN SHUTDOWN. INTERLOCK SHALL BE WIRED DIRECTLY TO VARIABLE FREQUENCY DRIVE PANEL FOR SHUTDOWN IF FAN IS IN THE AUTO OR HAND START POSITION.WHEN THE SUPPLY FAN IS STOPPED DUE THE SMOKE DETECTOR INTERLOCK ALL VALVES AND DAMPERS SHALL RETURN TO THEIR NORMAL SPRING RETURN POSITION REGARDLESS OF COMMAND FROM THE BAS.

   G. BAS ALARM SHALL BE GENERATED WHENEVER THE SUPPLY FAN FAILS TO RESPOND TO ON-OFF COMMANDS.

3. DISCHARGE AIR TEMPERATURE CONTROL (TS-SA):

   A. OCCUPIED AND UNOCCUPIED MODES:
      (1) DURING OCCUPIED PERIODS (TEMPERATURE CONTROL) THE SUPPLY FAN WILL RUN CONTINUOUSLY AND THE OUTSIDE AIR DAMPER WILL OPEN FULLY BEFORE THE FAN STARTS. ALL VALVES WILL MODULATE TO MAINTAIN THE DISCHARGE AIR TEMPERATURE COOLING SETPOINT (54°F ADJ.). IF THE DISCHARGE AIR TEMPERATURE SENSOR FAILS DURING NORMAL OPERATION, ALL ASSOCIATED VALVES WILL CLOSE AND AN ALARM WILL BE ANNUNCIATED.
      (2) WHEN ODT IS BELOW 55F, THE AIR TERMINAL UNIT WITH THE HIGHEST PERCENT DEMAND FOR COOLING SHALL DETERMINE DISCHARGE AIR SET POINT, BASED ON THE FOLLOWING RESET SCHEDULE: DEMAND FOR COOLING = 95%, DISCHARGE AIR=54F; DEMAND FOR COOLING = 75%, DISCHARGE AIR=65F.

4. ELECTRIC HEATER CONTROL:

   A. WHEN THE SUPPLY FAN IS ON, THE BAS SHALL MODULATE THE ELECTRIC HEATING COIL TO MAINTAIN MINIMUM 50°F (ADJ) IN THE AIR STREAM ENTERING THE COOLING COIL.

   B. OCCUPIED AND UNOCCUPIED MODES: THE BAS SHALL MODULATE ELECTRIC PRE-HEAT COIL IN SEQUENCE WITH CHILLED WATER VALVE TO MAINTAIN DISCHARGE AIR TEMPERATURE SETPOINT.

   C. IF FREEZESTAT TRIPS, THE BAS SHALL COMMAND ELECTRIC HEATING COIL TO 100% OUTPUT. BAS ALARM SHALL BE GENERATED WHENEVER ELECTRIC HEATING COIL FAILS TO RESPOND.

5. CHILLED WATER VALVE CONTROL (V-1)

   A. WHEN THE SUPPLY FAN IS OFF, THE BAS SHALL COMMAND THE CHILLED WATER VALVE CLOSED.

   B. OCCUPIED AND UNOCCUPIED MODES: THE CHILLED WATER VALVE SHALL BE MODULATED BY THE BAS TO MAINTAIN THE MAX. DISCHARGE AIR TEMPERATURE SETPOINT.

   C. IF THE ODT IS 53F OR LOWER, BAS SHALL COMMAND THE CHILLED WATER VALVE CLOSED, UNLESS THE ECONOMIZER MODE IS LIMITED BY THE RETURN AIR LOW LIMIT HUMIDITY OVERRIDE. SEE ECONOMIZER CONTROL SEQUENCE BELOW.

   D. IF FREEZESTAT TRIPS, THE BAS SHALL COMMAND THE CHILLED WATER VALVE 100% OPEN. BAS ALARM SHALL BE GENERATED WHENEVER CHILLED WATER VALVE FAILS TO RESPOND.

6. OUTSIDE AIR DAMPER CONTROL (D-1A & D-1B):

   A. OCCUPIED MODE: DUCT MOUNTED MIN. OUTSIDE AIR DAMPER (D-1A) SHALL BE COMMANDED OPEN WHEN THE AC UNIT RUNS IN THE OCCUPIED MODE. DAMPER MODULATE TO MAINTAIN CONSTANT OUTSIDE AIR (PER SCHEDULE) AS MEASURED BY AN AIRFLOW MONITOR MOUNTED IN OSA INLET DUCT. WHEN SUPPLY FAN IS OFF, THE BAS SHALL COMMAND OSA DAMPER CLOSED.

   B. DUCT MOUNTED MAX OSA DAMPER (D-1B): SEE ECONOMIZER CONTROL SEQUENCE BELOW.

7. RETURN DAMPER CONTROL (D-2):

   A. OCCUPIED AND UNOCCUPIED MODES: RETURN DAMPER D-2 SHALL NORMALLY BE WIDE OPEN.

   B. IF OSA DAMPER IS 100% OPEN FOR 15 MINUTES AND MINIMUM OSA AIRFLOW IS BELOW SETPOINT, RETURN DAMPER D-2 SHALL BE MODULATED PARTIAL CLOSED UNTIL MINIMUM OSA SETPOINT IS OBTAINED.

   C. WHEN THE SUPPLY FAN STATUS IS OFF, THE BAS SHALL COMMAND RETURN DAMPER D-2 OPEN.

8. ECONOMIZER CONTROL:

   A. THE BAS SHALL MONITOR THE OUTDOOR TEMPERATURE VIA AN OUTDOOR TEMPERATURE SENSOR. WHEN ODT FALLS BELOW THE SET POINT OF 55F (ADJ.), THE BAS SHALL SWITCH THE AHU INTO ECONOMIZER MODE. THE BAS SHALL MODULATE OSA DAMPERS, RETURN DAMPERS, RELIEF DAMPER, AND RETURN AIR FAN TO MAINTAIN DESIRED SUPPLY TEMPERATURE WITHOUT REDUCING THE OUTSIDE AIR BELOW THE MINIMUM SETPOINT. **(CONTROLS CONTRACTOR TO COORDINATE WITH MECHANICAL CONTRACTOR TO SET TERMS FOR ECONOMIZER MODE).**

   B. THE BAS SHALL MODULATE OSA DAMPERS (D-1A & D-1B) AND THE RETURN AIR DAMPER (D-2) TOGETHER (REVERSE ACTION) TO MAINTAIN THE MIXED AIR TEMPERATURE SETPOINT. MIXED AIR TEMPERATURE SETPOINT SHALL BE EQUAL TO THE DISCHARGE AIR TEMPERATURE SETPOINT MINUS 4F (FAN HEAT).

   C. WHEN OSA DAMPERS (D-1A & D-1B) ARE MODULATED FULLY OPEN, RELIEF DAMPERS (D-3) SHALL MODULATE TOWARDS OPEN AND RETURN AIR DAMPER (D-2) MODULATES TOWARDS CLOSED. RELIEF AIR DAMPERS (D-3) SHALL MODULATE TO MAINTAIN THE BUILDING PRESSURE SETPOINT OF 0.02" W.C. T & B AGENCY TO VERIFY SETPOINT.

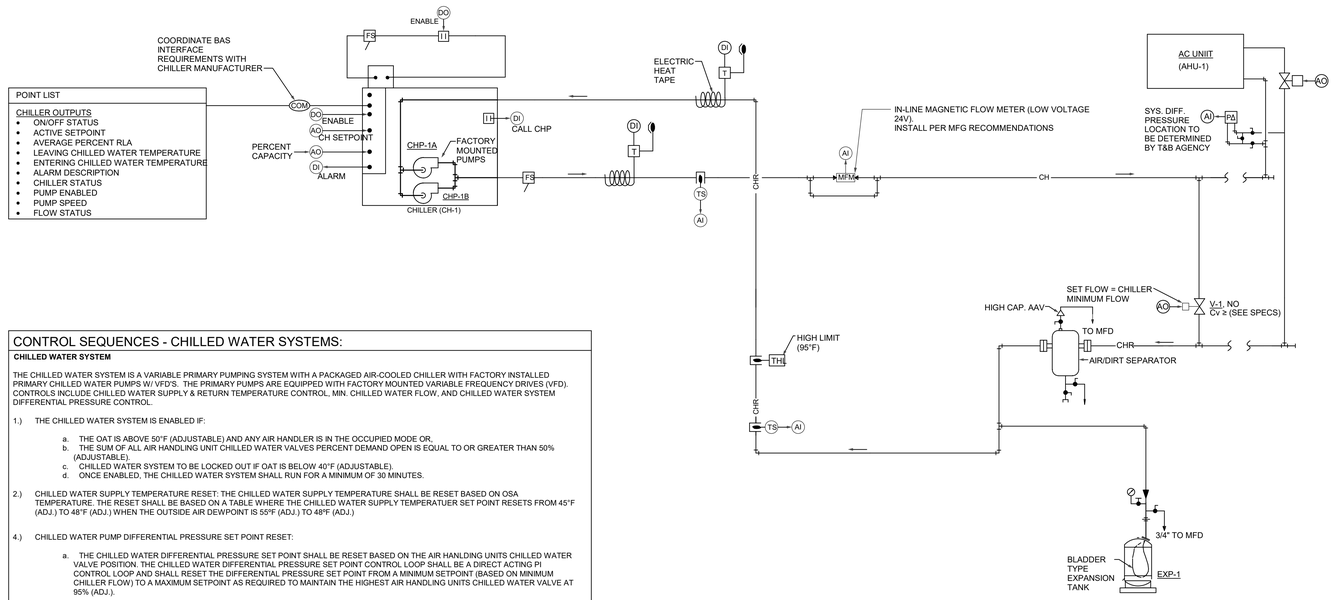
   D. WHEN THE ODT FALLS BELOW THE SETPOINT OF 35F (ADJ.), THE BAS SHALL SWITCH THE AHU OUT OF ECONOMIZER MODE.

   E. UNOCCUPIED LOW LIMIT MODE: ECONOMIZER CYCLE DOES NOT OPERATE.

   F. UNOCCUPIED HIGH LIMIT MODE: SAME AS OCCUPIED MODE.

9. FILTER STATUS

   A. THE BAS SHALL MONITOR THE PRESSURE DROP ACROSS THE PRE FILTERS AND ALARM THE OPERATORS WORK STATION IF THE STATIC PRESSURE DROP EXCEEDS SETPOINT (ADJ.), **T & B AGENCY TO VERIFY REQUIRED MAX STATIC SETPOINT.**



CONTROL SEQUENCES - CHILLED WATER SYSTEMS:

CHILLED WATER SYSTEM

THE CHILLED WATER SYSTEM IS A VARIABLE PRIMARY PUMPING SYSTEM WITH A PACKAGED AIR-COOLED CHILLER WITH FACTORY INSTALLED PRIMARY CHILLED WATER PUMPS W/ VFD'S. THE PRIMARY PUMPS ARE EQUIPPED WITH FACTORY MOUNTED VARIABLE FREQUENCY DRIVES (VFD). CONTROLS INCLUDE CHILLED WATER SUPPLY & RETURN TEMPERATURE CONTROL, MIN. CHILLED WATER FLOW, AND CHILLED WATER SYSTEM DIFFERENTIAL PRESSURE CONTROL.

1.) THE CHILLED WATER SYSTEM IS ENABLED IF:

   a. THE OAT IS ABOVE 50°F (ADJUSTABLE) AND ANY AIR HANDLER IS IN THE OCCUPIED MODE OR,
   b. THE SUM OF ALL AIR HANDLING UNIT CHILLED WATER VALVES PERCENT DEMAND OPEN IS EQUAL TO OR GREATER THAN 50% (ADJUSTABLE).
   c. CHILLED WATER SYSTEM TO BE LOCKED OUT IF OAT IS BELOW 40°F (ADJUSTABLE).
   d. ONCE ENABLED, THE CHILLED WATER SYSTEM SHALL RUN FOR A MINIMUM OF 30 MINUTES.

2.) CHILLED WATER SUPPLY TEMPERATURE RESET: THE CHILLED WATER SUPPLY TEMPERATURE SHALL BE RESET BASED ON OSA TEMPERATURE. THE RESET SHALL BE BASED ON A TABLE WHERE THE CHILLED WATER SUPPLY TEMPERATUER SET POINT RESETS FROM 45°F (ADJ.) TO 48°F (ADJ.) WHEN THE OUTSIDE AIR DEWPOINT IS 55°F (ADJ.) TO 48°F (ADJ.)

4.) CHILLED WATER PUMP DIFFERENTIAL PRESSURE SET POINT RESET:

   a. THE CHILLED WATER DIFFERENTIAL PRESSURE SET POINT SHALL BE RESET BASED ON THE AIR HANLDING UNITS CHILLED WATER VALVE POSITION. THE CHILLED WATER DIFFERENTIAL PRESSURE SET POINT CONTROL LOOP SHALL BE A DIRECT ACTING PI CONTROL LOOP AND SHALL RESET THE DIFFERENTIAL PRESSURE SET POINT FROM A MINIMUM SETPOINT (BASED ON MINIMUM CHILLER FLOW) TO A MAXIMUM SETPOINT AS REQUIRED TO MAINTAIN THE HIGHEST AIR HANDLING UNITS CHILLED WATER VALVE AT 95% (ADJ.).

5.) THE FACTORY MOUNTED CHILLED WATER PUMPS SHALL BE CONTROLLED BY CONTROLS SPECIFIED WITH THE CHILLER. PUMPS OPERATIONAL STATUS SHALL BE VISIBLE THRU THE CENTRAL BUILDING AUTOMATION SYSTEM. CHP-1A SHALL BE LEAD PUMP AND CHP-1B SHALL BE STANDBY.

   a. CHILLER CONTROLS SHALL CYCLE LEAD AND LAG PUMPS ON A WEEKLY BASIS.

6.) THE CHILLER CONTROLS FOR CH-1 IS ENABLED BY THE BAS. WHEN THE CHILLER IS ENABLED, THE CHILLER SHALL ENABLE ITS RESPECTIVE PRIMARY CHILLED WATER PUMP. THE CHILLER CONTROLS SHALL CYCLE COMPRESSORS TO MAINTAIN THE CHILLED WATER DISCHARGE TEMPERATURE SET POINT SUBJECT TO A FLOW SWITCH IN THE CHILLED WATER LINE LEAVING THE CHILLER, AND AUXILIARY CONTACTS IN THE STARTER OF ITS RESPECTIVE PRIMARY PUMP, AND OTHER INTERNAL SAFETIES SPECIFIED WITH THE CHILLERS. ONCE ENABLED, CHILLER SHALL RUN FOR A MINIMUM OF 30 MINUTES.

7.) THE CONTROL SYSTEM SHALL MODULATE BY-PASS VALVE V-1 TO MAINTAIN MINIMUM FLOW THROUGH THE CHILLER AS MEASURED BY FLOW METER IN LINE LEAVING THE CHILLER. THE VALVE COMMAND SHALL BE CONTROLLED BY A REVERSE ACTING PI LOOP PER TABLE 7.A. MINIMUM FLOW EQUALS 176 GPM FOR CHILLER VERIFY MINIMUM FLOW SETTINGS WITH CHILLER START UP TECHNICIAN.

TABLE - 7.A - CHILLED WATER MINIMUM FLOW VALVE CONTROL

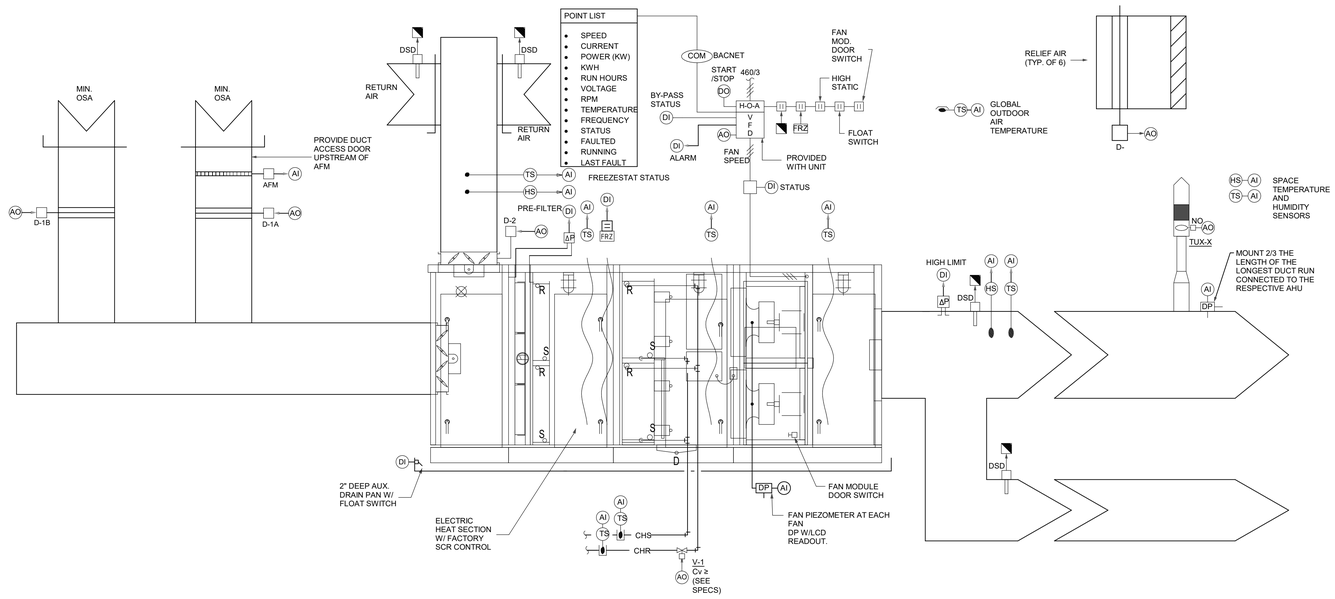
PI LOOP % (REVERSE)	VALVE %
0% (ADJ.)	0%
100% (ADJ.)	100%

10.) THE BAS SHALL MONITOR THE ALARM STATUS OF EACH CHILLER AND THE STATUS OF ALL PUMPS. IF THE LEAD CHILLER OR LEAD PRIMARY PUMP FAILS TO RUN WHEN COMMANDED ON, THE BAS SHALL START THE LAG CHILLER, OR PUMP AND GENERATE AN ALARM AT THE GRAPHICAL USER INTERFACE.

11.) CHILLER SHUTDOWN OR CHILLER FAILURE: THIS CONTRACTOR SHALL COORDINATE WITH THE OWNER REGARDING THE EVENT OF A DOWN CHILLER (MAINTENANCE, FAILURE, ETC.). IN THIS EVENT THE PREVENTION OF CIRCULATING CHILLED WATER TO SOME AIR HANDLING UNITS WILL BE NECESSARY.

CONTROL DIAGRAM - CHILLED WATER SYSTEM

SCALE: NONE



AHU-1 CONTROL DIAGRAM

SCALE : NONE

GMC
2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM

Bernhard TME Engineering

ISSUE	DATE
100% CD	2024.09.09

DRAWN BY: Author
CHECKED BY: Checker

TUSCALOOSA COUNTY DHR
PROJECT ADDRESS

GMC # ABHM220021

ALABAMA LICENSED No. 34357 PROFESSIONAL ENGINEER HAROLD D. DEERMAN
09/09/24

CONTROLS - HVAC

M7.02

sheet of

9/25/2024 11:07:41 AM TEMPLATE VERSION: 2021.1

ADA REQUIREMENTS

THIS APPLIES TO ADA ACCESSIBLE FIXTURES ONLY.

WATER CLOSETS: THE HEIGHT OF WATER CLOSETS SHALL BE 17" TO 19" MEASURED TO THE TOP OF THE TOILET SET. SEATS SHALL NOT BE SPRUNG TO RETURN TO A LIFTED POSITION. THE WATER CLOSET SHALL BE LOCATED 18" FROM THE SIDE WALL TO THE CENTER LINE OF THE BOWL. HAND OPERATED FLUSH CONTROLS SHALL BE MOUNTED ON THE WIDE SIDE OF TOILET AREAS NO MORE THAN 29" ABOVE THE FINISH FLOOR. SEE ARCHITECTURAL DRAWINGS FOR GRAB BAR LOCATIONS.

URINALS: THE URINALS SHALL BE WALL HUNG WITH AN ELONGATED RIM AT A MAXIMUM OF 17" ABOVE THE FINISH FLOOR. HAND OPERATED FLUSH CONTROLS SHALL BE MOUNTED NO MORE THAN 44" ABOVE FINISH FLOOR.

LAVATORIES: LAVATORIES SHALL BE MOUNTED WITH THE RIM OR COUNTER SURFACE NO HIGHER 34" ABOVE THE FINISH FLOOR. PROVIDE A CLEARANCE OF AT LEAST 29" ABOVE THE FINISH FLOOR TO THE BOTTOM OF THE APRON. KNEE SPACE SHALL BE 8" FROM BOTTOM EDGE OF APRON TO THE LEADING EDGE OF THE BOTTOM OF THE BOWL. THE BOTTOM OF THE BOWL SHALL BE A MINIMUM OF 27" ABOVE THE FINISH FLOOR. ALL WATER AND DRAIN PIPING UNDER LAVATORIES SHALL BE INSULATED WITH A FOAM INSERT COVERED WITH A 1/8" VINYL OUTER SHELL. ANGLE STOPS SHALL HAVE A FLIP TOP ACCESS.

FAUCETS - BATHTUB - SHOWER CONTROLS: CONTROLS SHALL BE LEVER HANDLES OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING, OR TWISTING OF THE WRIST. THE FORCE REQUIRED TO ACTIVATE CONTROLS SHALL BE NO GREATER THAN 5 LBF.

BATHTUB: AN IN TUB SEAT OR A SEAT AT THE HEAD END OF THE TUB SHALL BE PROVIDED. SEATS SHALL BE MOUNTED SECURELY AND SHALL NOT SLIP DURING USE. IN ADDITION TO THE FIXED SHOWER HEAD PROVIDE A HAND HELD SHOWER SPRAY UNIT WITH A HOSE AT LEAST 60" LONG THAT CAN BE USED BOTH AS A FIXED SHOWER HEAD AND AS A HAND HELD SHOWER HEAD. SEE ARCHITECTURAL DRAWINGS FOR GRAB BAR LOCATIONS.

SHOWER: A SEAT SHALL BE PROVIDED IN SHOWER STALLS 36"X36". THE SEAT SHALL BE MOUNTED ON THE WALL OPPOSITE OF THE CONTROLS AND 17" TO 19" FROM THE BATHROOM FLOOR AND SHALL EXTEND THE FULL DEPTH OF THE STALL. SHOWER CONTROLS SHALL BE MOUNTED ON THE WALL OPPOSITE OF THE SEAT AND SHALL BE LOCATED ON THE SAME WALL AS THE SHOWER HEAD, AT MINIMUM HEIGHT OF 38" AND A MAXIMUM HEIGHT OF 48". IN ADDITION TO THE FIXED SHOWER HEAD PROVIDE A HAND HELD SHOWER SPRAY UNIT WITH A HOSE AT LEAST 60" LONG THAT CAN BE USED BOTH AS A FIXED SHOWER HEAD AND AS A HAND HELD SHOWER HEAD. IN A 30"X 60" SHOWER UNIT A FIXED SEAT SHALL BE PROVIDED, IT SHALL BE A FOLDING TYPE AND SHALL BE MOUNTED ON THE WALL ADJACENT TO THE CONTROLS. SEE ARCHITECTURAL DRAWINGS FOR GRAB BAR LOCATIONS.

SINKS: SINKS SHALL BE MOUNTED WITH THE RIM OR COUNTER SURFACE NO HIGHER 34" ABOVE THE FINISH FLOOR. PROVIDE A KNEE CLEARANCE OF AT LEAST 27" HIGH, 30" WIDE, AND 19" DEEP. SINKS SHALL BE A MAXIMUM OF 6 1/2" DEEP. ALL WATER AND DRAIN PIPING UNDER LAVATORIES SHALL BE INSULATED WITH A FOAM INSERT COVERED WITH A 1/8" VINYL OUTER SHELL. ANGLE STOPS SHALL HAVE A FLIP TOP ACCESS.

DRINKING FOUNTAINS / WATER COOLERS: WHERE ONLY ONE DRINKING FOUNTAIN IS PROVIDED ON A FLOOR THERE SHALL BE A DRINKING FOUNTAIN WHICH IS ACCESSIBLE TO INDIVIDUALS WHO USE WHEEL CHAIRS AND ONE ACCESSIBLE TO THOSE HAVING DIFFICULTY BENDING OR STOOPING. THIS CAN BE ACCOMPLISHED BY USING A "HI-LO" FOUNTAIN. LOWEST SPOUT SHALL BE NO HIGHER THAN 36" ABOVE FINISHED FLOOR AND HIGHEST SPOUT SHALL BE MOUNTED AT 40" ABOVE FINISH FLOOR. SPOUTS SHALL BE AT FRONT OF THE UNIT AND SHALL DIRECT THE WATER FLOW IN A TRAJECTORY THAT IS PARALLEL OR NEARLY PARALLEL TO THE FRONT OF THE UNIT. THE SPOUT SHALL PROVIDE A FLOW OF WATER AT LEAST 4" HIGH. CONTROLS SHALL BE FRONT MOUNTED OR SIDE MOUNTED NEAR THE FRONT EDGE. CONTROLS SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING, OR TWISTING OF THE WRIST. THE FORCE REQUIRED TO ACTIVATE CONTROLS SHALL BE NO GREATER THAN 5 LBF. WALL MOUNTED UNITS SHALL HAVE A CLEAR KNEE SPACE OF BETWEEN THE BOTTOM OF THE APRON AND THE FINISHED FLOOR AT LEAST 27" HIGH, 30" WIDE, AND 17" TO 19" DEEP. FOUNTAINS SHALL NOT PROTRUDE MORE THAN 4" OUT INTO WALKWAYS.

GENERAL NOTES

1. ALL OUTSIDE CLEANOUTS SHALL BE BROUGHT TO GRADE AND EMBEDDED IN 18"X18"X6" THICK CONCRETE PAD. (J.R. SMITH 4258 OR EQUAL.)
2. WHEREVER DISSIMILAR METALS ARE CONNECTED ON WATER LINES, A DIELECTRIC NIPPLE SHALL BE USED.
3. ALL HORIZONTAL WATER AND VENT PIPING IS RUN ABOVE CEILING ON PLAN UNLESS OTHERWISE NOTED.
4. ALL WATER PIPING BELOW SLAB ON GRADE SHALL BE BENT UP AT ENDS SO THAT NO JOINTS OCCUR BELOW FLOOR.
5. COORDINATE ALL PIPE ROUTING TO AVOID CONFLICTS WITH STRUCTURAL, MECHANICAL, AND ELECTRICAL FEATURES OF BUILDING.
6. PLUMBING DRAWINGS ARE DIAGRAMMATIC AND DO NOT SHOW ALL DETAILS OF THE WORK. OBTAIN DIMENSIONS AND PERTINENT INFORMATION FROM ARCHITECTURAL DRAWINGS.
7. ALL WALL HYDRANTS SHALL BE MOUNTED 24" ABOVE FINISH GRADE OR FINISH FLOOR UNLESS OTHERWISE NOTED.
8. INSTALL ALL OUTSIDE VALVES IN CONCRETE OR CAST IRON VALVE BOXES.
9. ALL HORIZONTAL SANITARY PIPING IS RUN BELOW FLOOR ON PLAN UNLESS OTHERWISE NOTED.
10. ALL WATER PIPING INSTALLED IN EXTERIOR WALLS SHALL BE LOCATED ON THE INTERIOR SIDE OF THE EXTERIOR WALL INSULATION.
11. PAVEMENT CUTS, BACKFILLING, AND PATCHING SHALL MEET ALL LOCAL REQUIREMENTS.
12. INSTALL WATER PIPING TO ASME B31.9. PROVIDE PDI SHOCK ARRESTORS ON WATER SUPPLIES TO ALL FIXTURES.
13. CONTRACTOR TO VERIFY EXACT LOCATION OF ALL MECHANICAL EQUIPMENT PRIOR TO ROUGHING MECHANICAL ROOM FLOOR DRAINS, HOSE BIBBS, ETC.
14. ALL FLOOR SINKS TO BE INSTALLED WITH RIM/GRATE FLUSH WITH FINISH FLOOR.

PLUMBING FIXTURE CONNECTION SCHEDULE

MARK	FIXTURE	WASTE	CW	HW	REMARKS
WC-1	WATER CLOSET	4"	1"	-	WALL HUNG, HARDWIRED FLUSH VALVE
WC-2	WATER CLOSET	4"	1"	-	WALL HUNG, HARDWIRED FLUSH VALVE, ADA
WC-2	WATER CLOSET	3"	1"	-	FLOOR MOUNTED, HARDWIRED, FLUSH VALVE, ADA
UR-1	URINAL	2"	3/4"	-	WALL HUNG, FLUSH VALVE, ADA
LAV-1	LAVATORY	1-1/4"	1/2"	1/2"	UNDERMOUNT, ADA, WITH TMV SET TO 109°F, HARDWIRED
EWC-1	ELEC WATER COOLER	1-1/2"	1/2"	-	BI-LEVEL, ADA, W/ BOTTLE FILLER
BT-1	BATHTUB	2"	1/2"	1/2"	-
SK-1	SINK	1-1/2"	1/2"	1/2"	12"x27"
SK-2	SINK	1-1/2"	1/2"	1/2"	12"x15"
JC-1	JANITOR'S CLOSET	3"	1/2"	1/2"	24"X24" PRE-CAST
WMB-1	WASHING MACHINE BOX	2"	1/2"	1/2"	-
TMV-1	THERMOSTATIC MIXING VALVE	-	1/2"	1/2"	-
REF-1	REFRIGERATOR	-	1/2"	-	WALL SUPPLY BOX
IM-1	ICE MAKER	-	1/2"	-	WALL SUPPLY BOX, PIPE WASTE TO FS
CM-1	COFFEE MAKER	-	1/2"	-	WALL SUPPLY BOX

WATER HAMMER ARRESTOR SCHEDULE

P.D.I. UNITS	A	B	C	D	E	F
FIXTURE UNITS	1-11	12-32	33-60	61-113	114-154	155-330

CLASSIFICATIONS ESTABLISHED BY THE PLUMBING AND DRAINAGE INSTITUTE "STANDARD P.D.I.-WH201". INSTALL WATER PIPING TO ASME B31.9. CLOSED COPPER TUBE CHAMBER WITH PERMANENTLY SEALED 410 kPa (60PSIG) AIR CHARGE ABOVE A DOUBLE O-RING PISTON. TWO HIGH HEAT BUNA-N O-RINGS PRESSURE PACKED AND LUBRICATED WITH FDA APPROVED SILICONE COMPOUND. ALL UNITS SHALL BE DESIGNED IN ACCORDANCE WITH ASSE 1010 FOR SEALED WALL INSTALLATIONS WIHTOUT AN ACCESS PANEL. SIZE AND INSTALL IN ACCORDANCE WITH MANUFACTURERS REQUIREMENTS. UNIT SHALL BE AS MANUFACTURED BY PRECISION PLUMBING PRODUCTS, INC, WATTS, OR SIOUX CHIEF. PROVIDE WATER HAMMERS AT ALL SOLENOID VALVES, ALL GROUPS OR TWO OR MORE FLUSH VALVES, ALL QUICK OPENING OR CLOSING VALVES, AND ALL WASHING EQUIPMENT.

APPROVED MANUFACTURERS:

1. ZURN, WADE, J.R. SMITH, JOSAM, MIFAB

PLUMBING LEGEND

	COLD WATER LINE	FD	FLOOR DRAIN W/ TG
	HOT WATER LINE	MFD	MECHANICAL FLOOR DRAIN W/ TG
	HOT WATER RETURN LINE	A.F.F.	ABOVE FINISH FLOOR
	SOIL OR WASTE LINE BELOW SLAB	CO	CLEAN OUT
	VENT LINE	CW	COLD WATER
	BALL VALVE	EWC	ELECTRIC WATER COOLER
	WATER PRESSURE REGULATOR	FFE	FINISH FLOOR ELEVATION
	CHECK VALVE	GPM	GALLONS PER MINUTE
	UNION	HW	HOT WATER
	PIPE TURNING UP	HWR	HOT WATER RETURN
	PIPE TURNING DOWN	INV	INVERT
	P-TRAP	JC	JANITOR'S CLOSET
CO YCO	CLEANOUT W/ 18" SQUARE CONCRETE PAD	LAV	LAVATORY
HB	HOSE BIBB	NC	NORMALLY CLOSED
WH	WALL HYDRANT	X-#	PLUMBING FIXTURE NUMBER
WCO	WALL CLEANOUT	PSI	POUNDS PER SQUARE INCH
FCO	FLOOR CLEANOUT	PRV	PRESSURE REDUCING VALVE
#	RISER DIAGRAM NUMBER	TG	TRAP GUARD
		UR	URINAL
		VTR	VENT THRU ROOF
		WC	WATER CLOSET

ELECTRIC WATER HEATER SCHEDULE

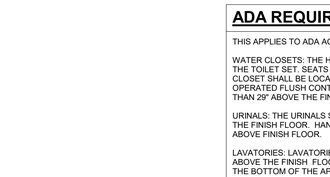
MARK	MANUFACTURER MODEL #	LOCATION	CW	HW	ELECTRICAL KW	ELECTRICAL V/P	GAL.	SET POINT	REMARKS
EWH-1	LET-55 DAK	MECHANICAL 1086	1-1/4"	1-1/4"	4.5	240/1	50	125F	SEE DETAIL 11, THIS SHEET.

PUMP SCHEDULE

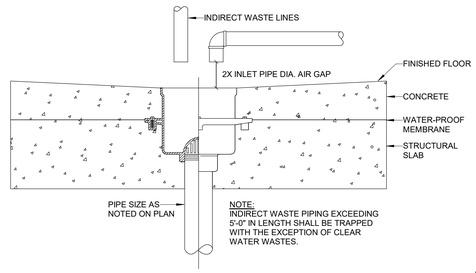
MARK	MODEL NO.	LOCATION	G.P.M.	HEAD (FT.)	ELECTRICAL DATA H.P.	VOLTS	PH	TYPE	REMARKS
RCP-1	GRUNDFOS UPS 15-35 SFC	MECHANICAL 1086	2	8	1/12	115	1	IN-LINE	-

EXPANSION TANK SCHEDULE

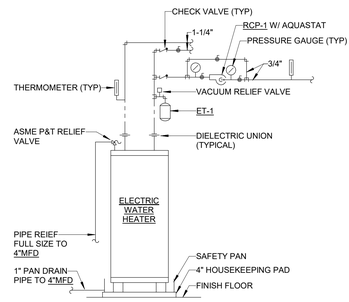
MARK	AMTROL	LOCATION	GALLONS	ACCEPTANCE	REMARKS
ET-1	ST-5C	MECHANICAL 1086	2.1	0.9	-



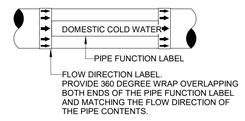
13 DETAIL OF MAKEUP CONNECTION
SCALE:NOT TO SCALE



12 DETAIL OF FLOOR SINK
SCALE:NOT TO SCALE

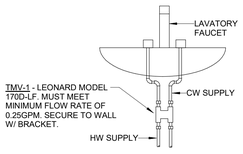


11 DETAIL OF PIPING AT ELECTRIC WATER HEATER
SCALE:NOT TO SCALE

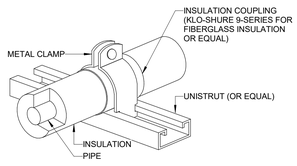


DETAIL NOTES
A. PROVIDE A PIPE LABEL FOR EACH PIPE FUNCTION.
B. PROVIDE AT LEAST ONE LABEL ON EACH PIPE FOR EVERY ROOM THE PIPE PASSES THROUGH.
C. PROVIDE LABELS IN LARGE SPACES ON MAXIMUM 20'-0" CENTERS FOR EVERY PIPE UNLESS OTHERWISE NOTED IN THE SPECIFICATIONS.
D. LABELS TO BE LOCATED IN AN EASILY VISIBLE LOCATION AS THEY WOULD NORMALLY BE SEEN. E.G. ON THE BOTTOM OF PIPES IN THE AIR AND ON THE TOP OR SIDES OF PIPES MOUNTED LOW.
E. LABELS SHALL BE COLOR CODED, PRE-PRINTED, SELF ADHESIVE VINYL FOR MEDICAL GAS PIPING. PRE-TENSIONED LABELS FOR ALL OTHER PIPING.
F. SEE SPECIFICATIONS FOR OTHER REQUIREMENTS AND LIST OF PIPE FUNCTIONS.

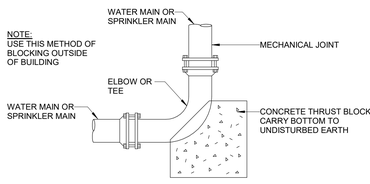
6 DETAIL OF PIPING IDENTIFICATION LABEL
SCALE:NOT TO SCALE



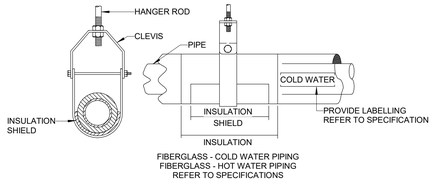
10 DETAIL OF PIPING AT TMV UNDER ADA/PUBLIC LAVATORY
SCALE:NOT TO SCALE



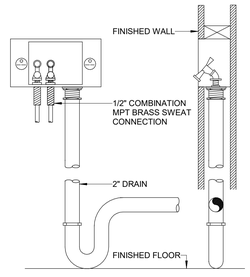
9 STRUT-MOUNTED PIPING SUPPORT INSULATION COUPLING DETAIL
SCALE:NOT TO SCALE



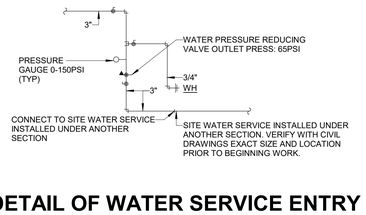
8 DETAIL OF CONCRETE THRUST BLOCK
SCALE:NOT TO SCALE



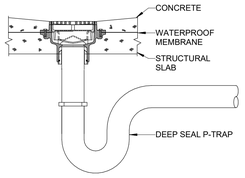
7 DETAIL OF ADJUSTABLE CLEVIS HANGER
SCALE:NOT TO SCALE



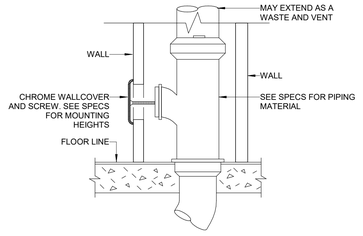
5 DETAIL OF WASHING MACHINE SUPPLY AND DRAIN UNIT
SCALE:NOT TO SCALE



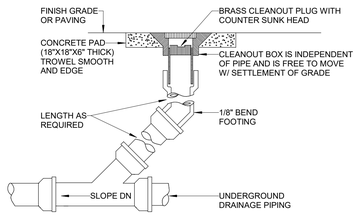
4 DETAIL OF WATER SERVICE ENTRY W/ HB & WH
SCALE:NOT TO SCALE



3 DETAIL OF FLOOR DRAIN
SCALE:NOT TO SCALE



2 DETAIL OF WALL CLEANOUT
SCALE:NOT TO SCALE



1 DETAIL OF CLEANOUT TO GRADE
SCALE:NOT TO SCALE

GMC
2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM
Bernhard TME Engineering

ISSUE DATE
100% CD 2024.09.09

DRAWN BY: NEL
CHECKED BY: JDD

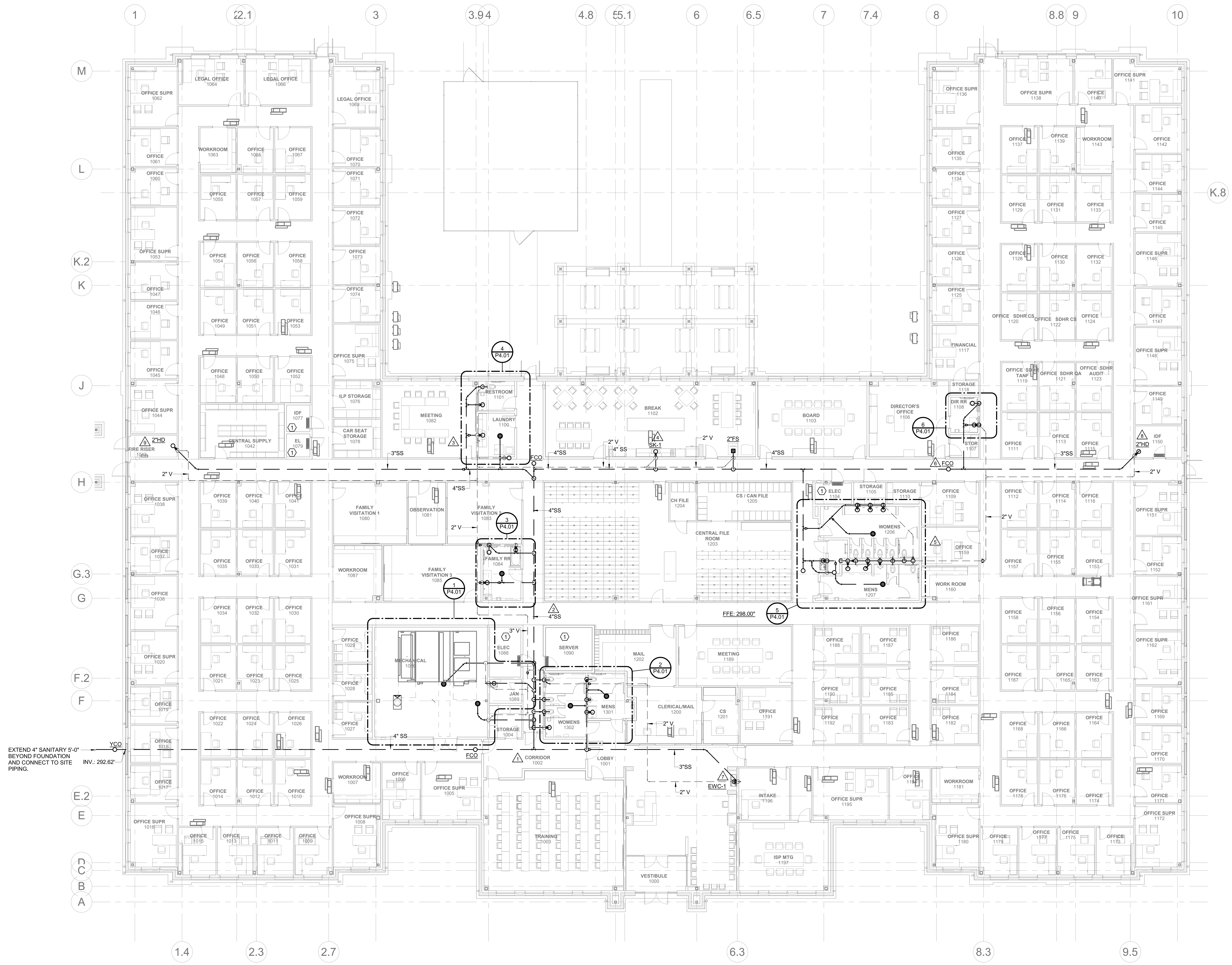
TUSCALOOSA COUNTY DHR
PROJECT ADDRESS
GMC # ABHM220021

ALABAMA LICENSED No. 34357 PROFESSIONAL ENGINEER FRED D. DEERMAN
09/09/24

LEGENDS, NOTES AND SCHEDULES - PLUMBING

P0.01
sheet of

9/24/2024 10:26:50 AM TEMPLATE VERSION: 2021.1



1 FLOOR PLAN - LEVEL 1 - PLUMBING SANITARY

SCALE: 3/32" = 1'-0"

TRUE NORTH

KEYED NOTES:

1. DO NOT ROUTE VENTING OVER ELECTRICAL/SERVER ROOMS

GMC

2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM

Bernhard TME Engineering

ISSUE	DATE
100% CD	2024.09.09

DRAWN BY: NEL
CHECKED BY: JDD

TUSCALOOSA COUNTY DHR
PROJECT ADDRESS

GMC # ABHM220021

ALABAMA LICENSED No. 34357 PROFESSIONAL ENGINEER JARED D. DEERMAN
09/09/24

FLOOR PLAN LEVEL 1 - PLUMBING SANITARY

P1.00

sheet of

9/24/2024 10:26:53 AM TEMPLATE VERSION: 2021.1

FLOOR PLAN - LEVEL 1 - PLUMBING DOMESTIC

TRUE NORTH

1 DOMESTIC
SCALE: 3/32" = 1'-0"

KEYED NOTES:

1. DO NOT ROUTE DOMESTIC WATER PIPING ABOVE ELECTRICAL/SERVER ROOMS
2. DROP 3/4"CW IN WALL AND EXTEND TO WH.

FLOOR PLAN LEVEL 1 - PLUMBING DOMESTIC

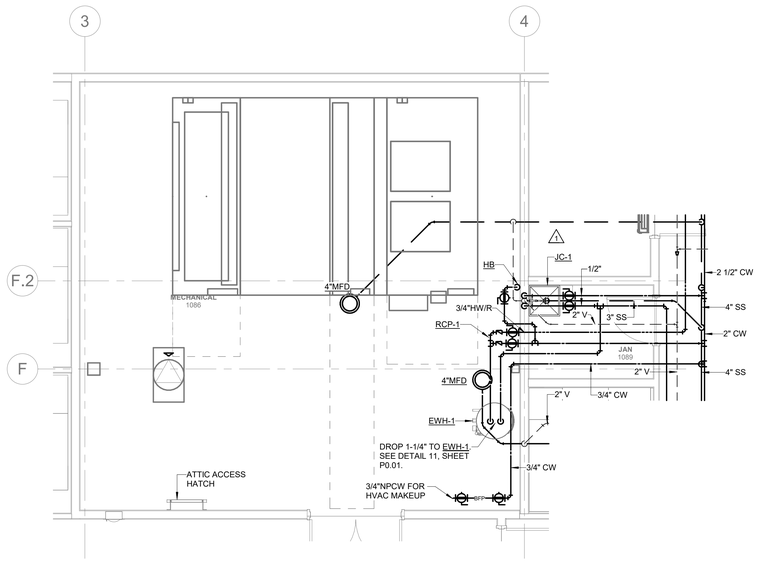
P2.00
sheet of

TUSCALOOSA COUNTY DHR
PROJECT ADDRESS

GMC # ABHM220021

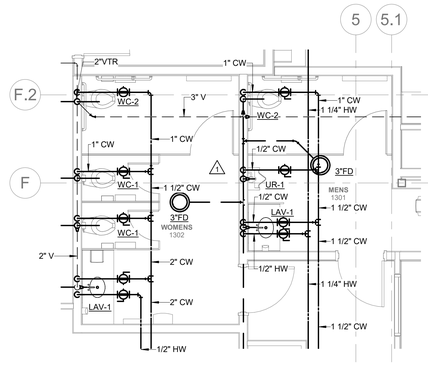
ISSUE	DATE
100% CD	2024.09.09
DRAWN BY:	NEL
CHECKED BY:	JDD

Bernhard TME Engineering
2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM
GMC



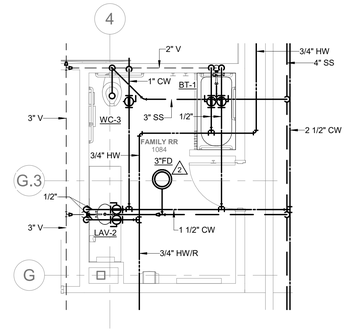
1 ENLARGED PLAN - MECHANICAL ROOM 206 - PLUMBING

SCALE: 1/4" = 1'-0"



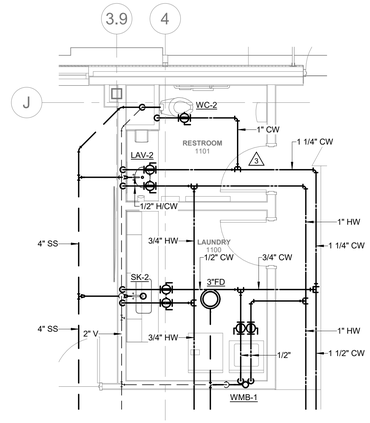
2 ENLARGED PLAN - MAIN RESTROOMS 301/302 - PLUMBING

SCALE: 1/4" = 1'-0"



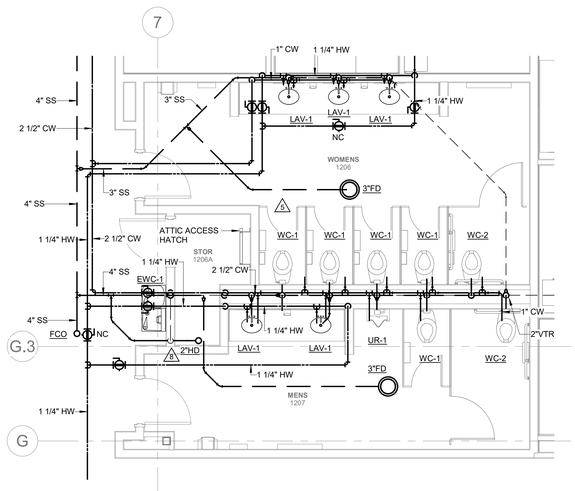
3 ENLARGED PLAN - FAMILY RESTROOM 194 - PLUMBING

SCALE: 1/4" = 1'-0"



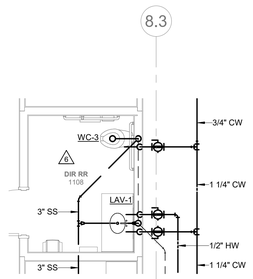
4 ENLARGED PLAN - LAUNDRY/RESTOOM - PLUMBING

SCALE: 1/4" = 1'-0"



5 ENLARGED PLAN - MAIN RESTROOMS 319/320 - PLUMBING

SCALE: 1/4" = 1'-0"



6 ENLARGED PLAN - DIRECTOR RESTOOM - PLUMBING

SCALE: 1/4" = 1'-0"

GMC
2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM

Bernhard TME Engineering

ISSUE	DATE
100% CD	2024.09.09

DRAWN BY: NEL
CHECKED BY: JDD

TUSCALOOSA COUNTY DHR
PROJECT ADDRESS

GMC # ABHM220021

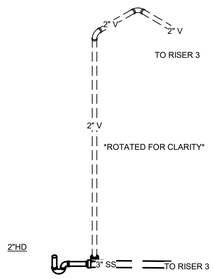
ALABAMA LICENSED No. 34357 PROFESSIONAL ENGINEER JARED D. DEERMAN
09/09/24

PARTIAL FLOOR PLANS - PLUMBING

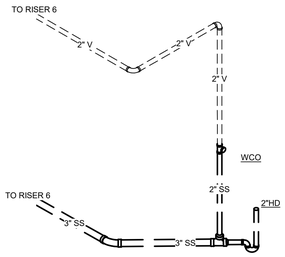
P4.01

sheet of

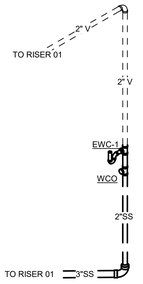
9/24/2024 10:26:56 AM TEMPLATE VERSION: 2021.1



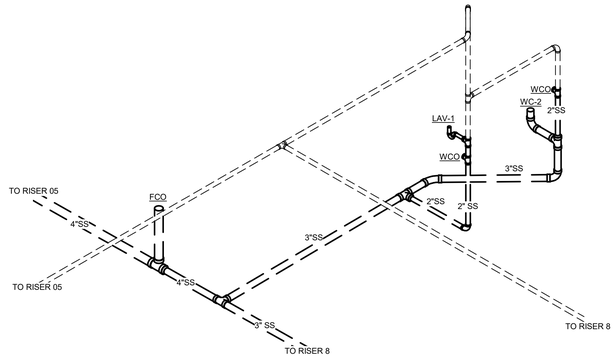
9 RISER 09 - FR 1043
SCALE:



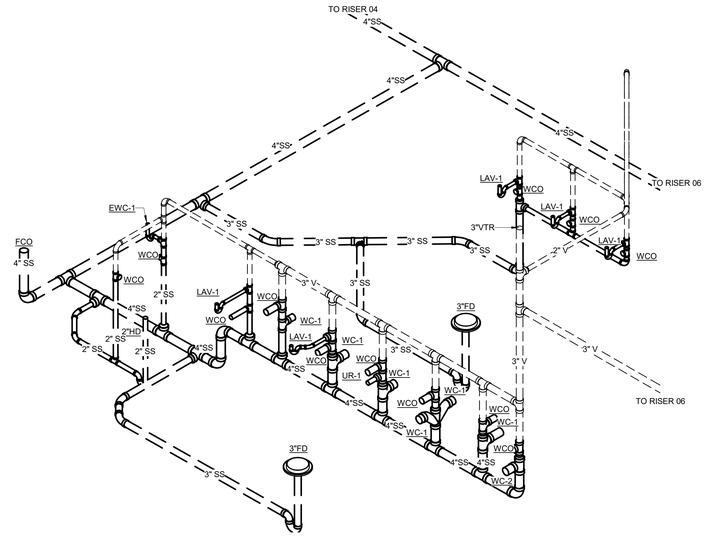
8 RISER 08 - IDF 1150
SCALE:



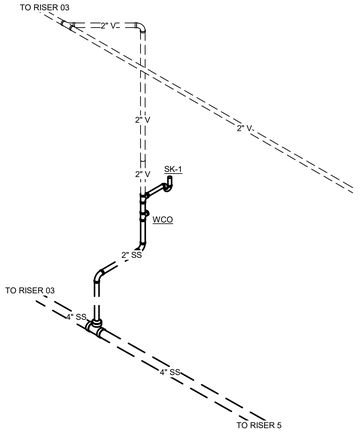
7 RISER 07 - LOBBY 1001 EWC
SCALE:



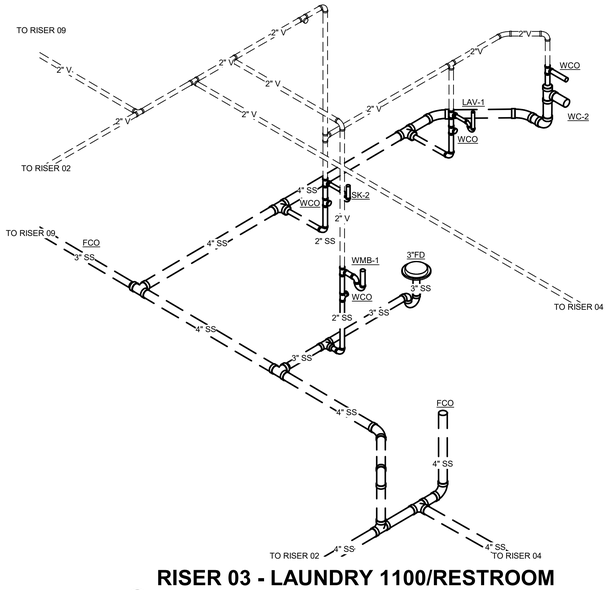
6 RISER 06 - DIR RR 1108
SCALE:



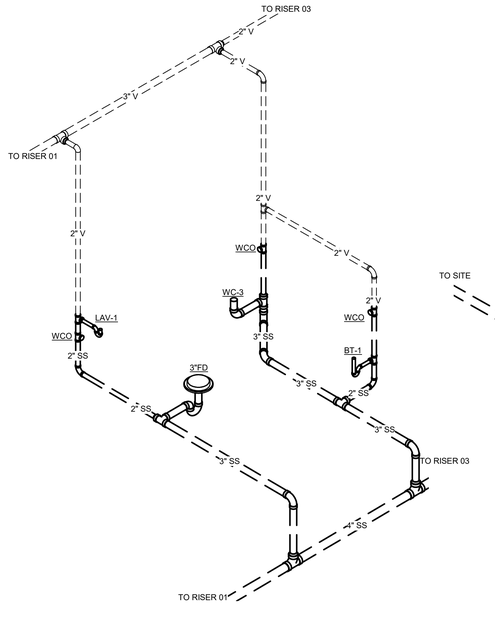
5 RISER 05 - WOMENS 1206/MENS 1207
SCALE:



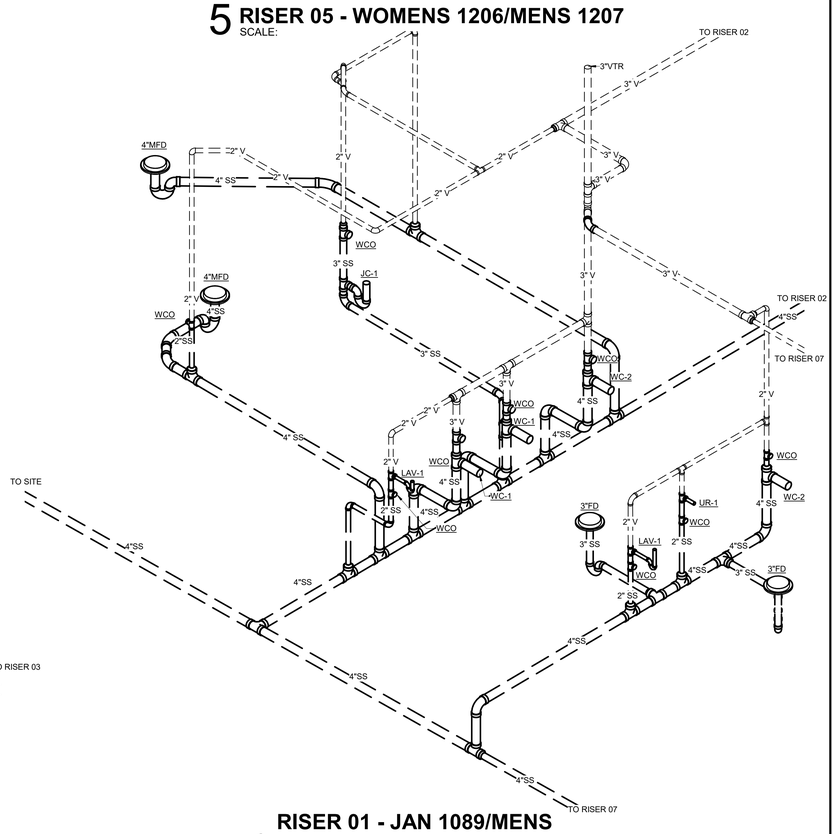
4 RISER 04 - BREAK 1102
SCALE:



3 RISER 03 - LAUNDRY 1100/RESTROOM 1101
SCALE:



2 RISER 02 - FAMILY RR 1084
SCALE:



1 RISER 01 - JAN 1089/MENS 1301/WOMENS 1302
SCALE:

9/24/2024 10:26:57 AM TEMPLATE VERSION: 2021.1

GMC
2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM

Bernhard TME Engineering

ISSUE	DATE
100% CD	2024.09.09

DRAWN BY: NEL
CHECKED BY: JDD

TUSCALOOSA COUNTY DHR
PROJECT ADDRESS

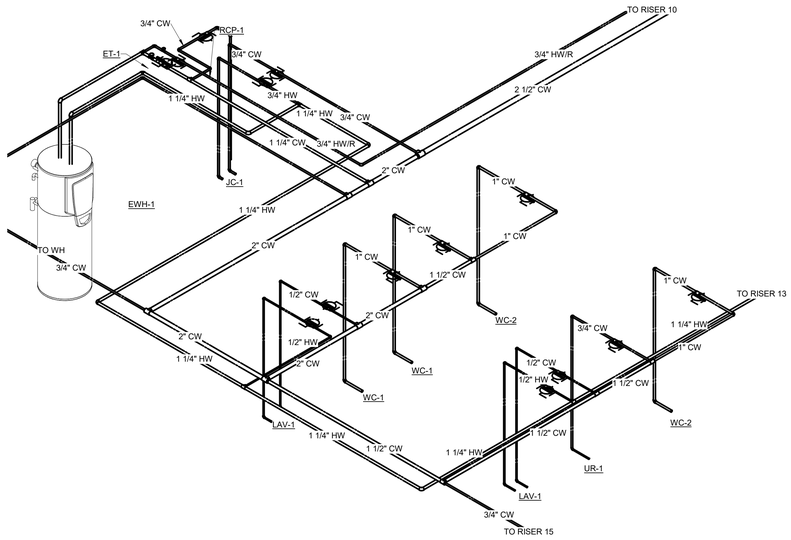
GMC # ABHM220021

ALABAMA LICENSED No. 34357 PROFESSIONAL ENGINEER JARED D. DEERMAN 09/24

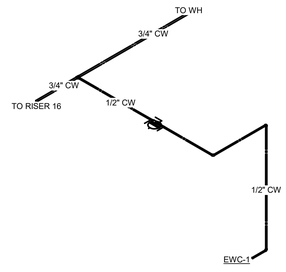
RISERS - PLUMBING

P5.01

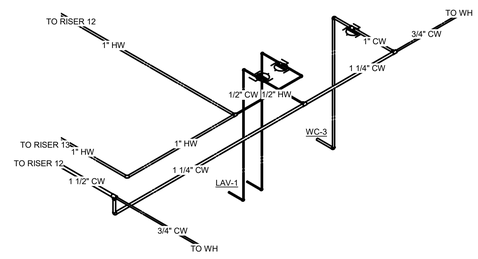
sheet of



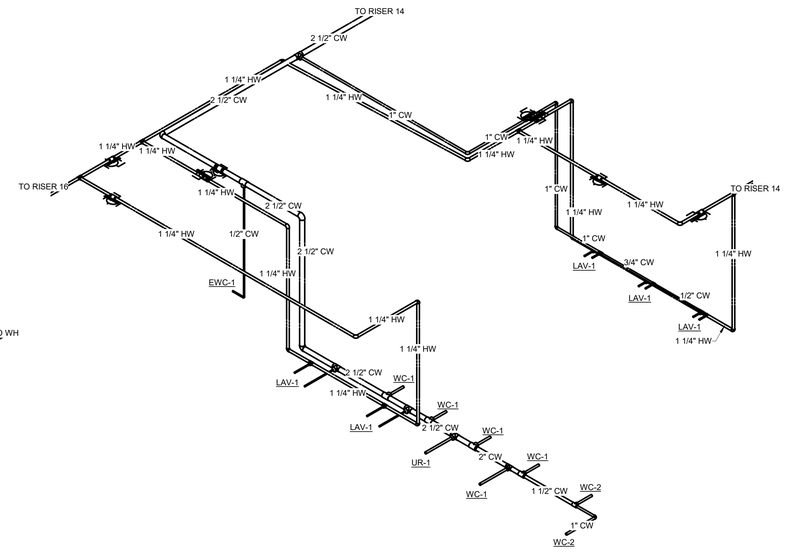
16 **RISER 16 - JAN 1089/MENS 1301/WOMENS 1302**
SCALE:



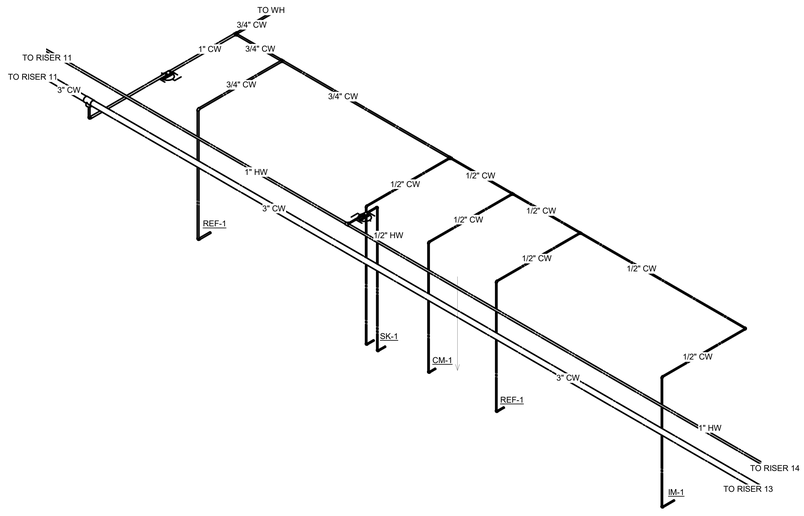
15 **RISER 15 - LOBBY 1001 EWC**
SCALE:



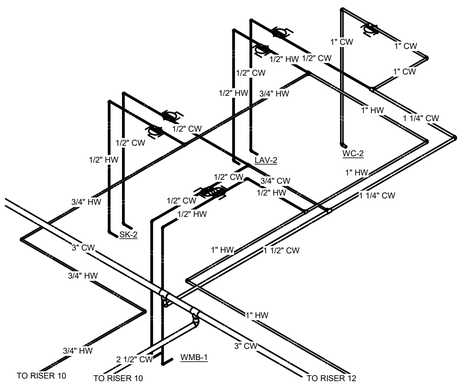
14 **RISER 14 - DIR RR 1108**
SCALE:



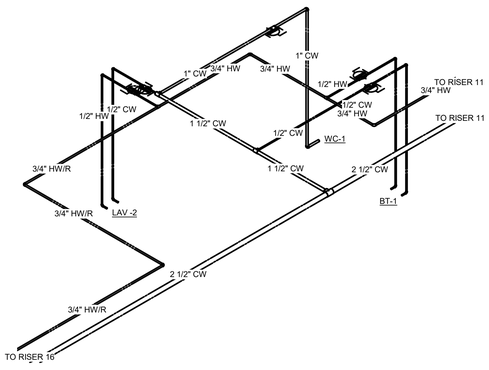
13 **RISER 13 - WOMENS 1206/MENS 1207**
SCALE:



12 **RISER 12 - BREAK 1102**
SCALE:



11 **RISER 11 - LAUNDRY 1100/RESTROOM 1101**
SCALE:



10 **RISER 10 - FAMILY RR 1084**
SCALE:

GMC
2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM

Bernhard TME Engineering

ISSUE	DATE
100% CD	2024.09.09

DRAWN BY: NEL
CHECKED BY: JDD

TUSCALOOSA COUNTY DHR
PROJECT ADDRESS

GMC # ABHM220021

ALABAMA LICENSED No. 34357 PROFESSIONAL ENGINEER JARED D. DEERMAN 09/24

RISERS - PLUMBING

P5.02

sheet of

9/24/2024 10:26:57 AM TEMPLATE VERSION: 2021.1

FIRE PROTECTION CROSS MAINS

FIRE PROTECTION CROSS MAINS HAVE BEEN SHOWN AS A PLACEHOLDER - FOR GENERAL COORDINATION. FINAL SIZES AND ROUTINGS OF THE CROSS MAINS SHALL BE DETERMINED BY THE INSTALLING FIRE SPRINKLER CONTRACTOR, BUT EFFORTS TO USE THE LOCATIONS SHOWN HEREIN SHOULD BE MADE.

IT IS NOT THE INTENT OF THIS PIPE ROUTING TO SUGGEST THAT ONLY TREE SYSTEMS OR GRID SYSTEMS ARE TO BE USED, BUT TO ENSURE THERE ARE ENOUGH CROSS MAINS TO PROVIDE A POINT OF SUPPLY TO ALL AREAS & BRANCH LINES.

THE INSTALLING CONTRACTOR WILL NEED TO COORDINATE WITH ALL OTHER DISCIPLINES AT ALL TIMES, ESPECIALLY THE MECHANICAL CONTRACTOR, AS THERE WILL BE LIMITED SPACE ABOVE CEILINGS IN SOME AREAS.

FIRE PROTECTION SHOP DRAWING NOTES

BEFORE SUBMITTING FIRE PROTECTION SHOP DRAWINGS FOR REVIEW:

1. CONFIRM THAT FIRE PROTECTION SHOP DRAWINGS ARE SEALED AND SIGNED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF ALABAMA.
2. CONFIRM THAT EACH NODE POINT IN THE HYDRAULIC CALCULATIONS APPEARS ON THE FIRE PROTECTION SHOP DRAWINGS AND THAT NOMENCLATURE MATCHES. THIS INCLUDES NODE POINTS ON SITE SUCH AS THE BACKFLOW PREVENTER AND SOURCE.
3. CONFIRM THAT PIPE SIZES, LENGTHS, AND ELEVATIONS NOTED IN HYDRAULIC CALCULATIONS MARCH THE PIPE SIZES, LENGTHS, AND ELEVATIONS INDICATED ON THE FIRE PROTECTION SHOP DRAWINGS.
4. CONFIRM THAT NODE POINTS, PIPE SIZES, LENGTHS, AND ELEVATIONS DO NOT OVERLAP ARCHITECTURAL FEATURES OR OTHER GRAPHIC ELEMENTS SO THEY BECOME DIFFICULT TO READ WHEN PLOTTED.
5. CONFIRM THAT WHEN MULTIPLE NODE POINTS ARE LOCATED IN CLOSE PROXIMITY TO ONE ANOTHER THAT LEADER LINES ARE USED TO IDENTIFY WHERE THE NODE POINT IS LOCATED IN THE DESIGN.
6. CONFIRM THAT HYDRAULIC CALCULATIONS ACCURATELY ACCOUNT FOR PIPE ROUTING (ELBOWS, TEES, ELEVATION OFFSETS, ETC.) INDICATED IN THE FIRE PROTECTION SHOP DRAWINGS.
7. CONFIRM THAT REMOTE AREAS ARE OUTLINED AND IDENTIFIED ON FIRE PROTECTION SHOP DRAWINGS AND THAT NOMENCLATURE MATCHES HYDRAULIC CALCULATIONS.

WATER FLOW TEST:

STATIC PRESSURE:	75PSI
RESIDUAL PRESSURE:	45PSI
MEASURED FLOW:	1,000GPM
PERFORMED BY:	CITY OF TUSCALOOSA
WITNESSED BY:	GLOBAL FIRE PROTECTION
DATE:	08/21/24
TIME:	8:00AM
LOCATION:	CULVER ROAD

NOTE: CONTRACTORS SHALL USE THIS WATER FLOW TEST FOR BID PURPOSES ONLY.

SPRINKLER NOTES:

1. PROVIDE A NFPA 13 COMPLIANT SYSTEM TO PROVIDE TOTAL COVERAGE FOR THE BUILDING.
2. ALL PIPING 1-1/2" AND SMALLER SHALL BE SCHEDULE 40 STEEL WITH THREADED JOINTS AND CAST IRON OR MALLEABLE IRON FITTINGS. PROVIDE HANGERS PER NFPA 13 SPACING.
3. PIPING 2" AND LARGER MAY BE SCHEDULE 10 PIPE WITH ROLL GROOVED JOINTS. HANGER SPACING TO BE PER NFPA 13 REQUIREMENTS.
4. SPRINKLER HEADS SHALL BE QUICK RESPONSE, GLASS BULB EQUAL TO VIKING MODEL M. INSTALL SPRINKLER HEADS IN CENTER OF CEILING TILE.
5. PIPING IS TO BE INSTALLED IN A MANNER AS TO HIDE PIPING AS MUCH AS POSSIBLE.
6. PROVIDE A PIPING PLAN SHOWING COORDINATION OF SPRINKLER PIPING WITH ALL ITEMS ABOVE CEILING.
7. PROVIDE SHOP DRAWINGS INCLUDING A REFLECTED CEILING PLAN INDICATING SPRINKLER HEADS, LIGHTS, AND HVAC CEILING DEVICES.
8. SEE ARCHITECT DRAWINGS FOR CEILING PLAN AND HEIGHTS.
9. PER STATE BUILDING COMMISSION REQUIREMENTS, HYDRAULIC CALCULATIONS AND SPRINKLER SHOP DRAWINGS FOR BUILDING FIRE PROTECTION SYSTEMS MUST BE PREPARED UNDER THE SUPERVISION OF AN ENGINEER LICENSED IN THE STATE OF ALABAMA AND BEAR THEIR LICENSURE SEAL WITH SIGNATURE AND DATE.
10. SPRINKLER CONTRACTOR SHALL BE LICENSED THROUGH THE STATE OF ALABAMA FIRE MARSHALL OFFICE.
11. PROVIDE PROTECTION FOR SPRINKLER HEADS IN AREAS WHERE THE CEILING OR SURROUNDING AREA IS TO BE PAINTED. FIRE PROTECTION CONTRACTOR SHALL BE 100% RESPONSIBLE TO PROVIDE AND REMOVE SPRINKLER PROTECTIONS AFTER PAINTING IS COMPLETE. ANY SPRINKLER HEAD WITH PAINT OR TEXTURE OVERSPRAY SHALL BE REPLACED BY THE FIRE PROTECTION CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER

WET SPRINKLER SYSTEM NOTES:

A. WET SPRINKLER SYSTEM DESIGN AND INSTALLATION. BASE SYSTEM DESIGN HYDRAULIC CALCULATIONS USING THE AREA/DENSITY METHOD ON THE FOLLOWING CRITERIA AND IN ACCORDANCE WITH NFPA 13 LATEST EDITION.
   1. SPRINKLER PROTECTION
      a. ALL OFFICE, WAITING AREAS, EDUCATIONAL AREAS, DINING AREAS, EAVES AND OVERHANGS (WITH NOT COMBUSTIBLE CONSTRUCTION BENEATH), AND CORRIDORS: LIGHT HAZARD, 0.10GPM/SQ.FT. OVER THE HYDRAULICALLY MOST REMOTE 1500 SQ.FT.
      b. MECHANICAL EQUIPMENT ROOMS, ELECTRICAL CLOSETS, AND STORAGE BETWEEN 100 AND 150SQ.FT.: ORDINARY HAZARD GROUP 1, 0.15GPM/SQ.FT. OVER THE HYDRAULICALLY MOST REMOTE 1500SQ.FT.
      c. LAUNDRY, STORAGE ROOMS OVER 250 SQ.FT.: ORDINARY GROUP 2, 0.20GPM/SQ.FT. OVER THE HYDRAULICALLY MOST REMOTE 1,500SQ.FT.
      d. FILE STORAGE AREAS WITH "ROLLING FILES" RACKS: ORDINARY GROUP 2 FOR THE ENTIRE AREA OF SPACE UP TO 1,500SQ.FT. AREA OF SPRINKLER OPERATION.
      e. WHERE AREAS ARE NOT PHYSICALLY SEPARATED BY A BARRIER OR PARTITION CAPABLE OF DELAYING HEAT FROM A FIRE IN ONE AREA FROM FUSING SPRINKLERS IN THE ADJACENT AREA, THE REQUIRED SPRINKLER PROTECTION FOR THE MORE DEMANDINGG DESIGN BASIS SHALL EXTEND 15FT. BEYOND ITS PERIMETER.
   2. ADD WATER ALLOWANCE OF 250 GPM FOR INSIDE AND OUTSIDE HOSE STREAMS TO THE SPRINKLER REQUIREMENTS AT THE CONNECTION TO THE DISTRIBUTION MAIN.
   3. HYDRAULIC CALCULATIONS: THE CALCULATED DEMAND INCLUDING THE HOSE STREAM REQUIREMENTS SHALL FALL NO LESS THAN 10 PERCENT BELOW THE AVAILABLE SUPPLY CURVE.
   4. COMPLY WITH IBC & IFC (2021 EDITION), NFPA 13 (2021 EDITION), NFPA 14, STANDPIPES AND HOSE SYSTEMS, NFPA 24, PRIVATE SERVICE MAINS, NFPA 70, NATIONAL ELECTRIC CODE, NFPA 72, NATIONAL ALARM AND SIGNALING CODE, AND NFPA 101, LIFE SAFETY CODE (2021 EDITION).

GMC
2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM

Bernhard TME Engineering

ISSUE	DATE
100% CD	2024.09.09

DRAWN BY: NEL
CHECKED BY: JDD

TUSCALOOSA COUNTY DHR
PROJECT ADDRESS

GMC # ABHM220021

ALABAMA LICENSED No. 34357 PROFESSIONAL ENGINEER JARED D. DEERMAN
09/09/24

GENERAL NOTES - FIRE PROTECTION

F0.01

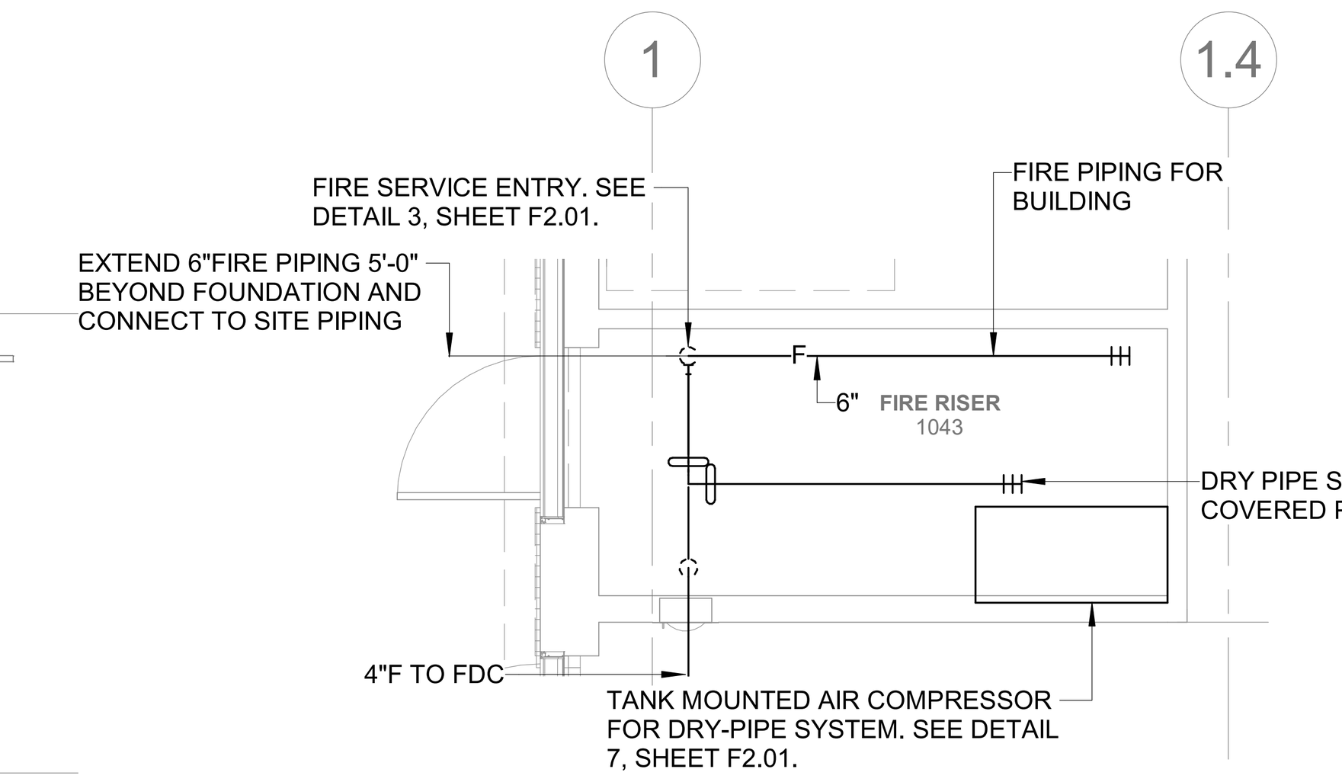
sheet of

9/25/2024 9:18:07 AM TEMPLATE VERSION: 2021.1

1 FLOOR PLAN LEVEL 1 - FIRE PROTECTION

SCALE: 3/32" = 1'-0"

TRUE NORTH



2 ENLARGED PLAN - FR 152 ROOM - FIRE PROTECTION

SCALE: 1/4" = 1'-0"

KEYED NOTES:

1. PROVIDE RECESSED SPRINKLER HEADS IN ROOMS WITH LAY-IN CEILINGS. SEE DETAIL 6, SHEET F2.01.
2. PROVIDE CONCEALED SPRINKLER HEADS IN ROOMS WITH HARD CEILINGS. SEE DETAIL 5, SHEET F2.01.
3. PROVIDE UPRIGHT SPRINKLER HEADS IN ROOMS WITH NO CEILINGS. SEE DETAILS 15/16, SHEET F2.01.
4. PROVIDE DRY SIDEWALL SPRINKLER HEADS FOR OVERHANG. SEE DETAIL 12, SHEET F2.01.

GENERAL NOTE:

THE ATTIC AREA IS NOT AN OCCUPIABLE SPACE AND IS NOT CONSTRUCTED OF COMBUSTIBLE MATERIAL. REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION. SPRINKLERS ARE NOT REQUIRED IN ATTIC.

GMC

2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM

Bernhard TME Engineering

ISSUE	DATE
100% CD	2024.09.09

DRAWN BY: NEL
CHECKED BY: JDD

TUSCALOOSA COUNTY DHR
PROJECT ADDRESS

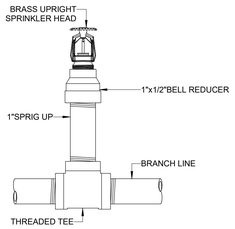
GMC # ABHM220021

ALABAMA LICENSED No. 34357 PROFESSIONAL ENGINEER JARED D. DEERMAN
[illegible]/09/24

FLOOR PLAN LEVEL 1 - FIRE PROTECTION

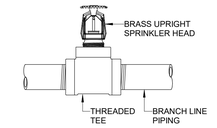
F1.00

sheet of



16 UPRIGHT SPRINKLER HEAD ON 1" SPRIG DETAIL
SCALE:NOT TO SCALE

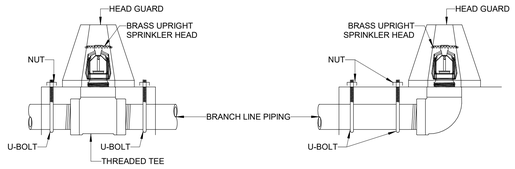
AMBIENT TEMPERATURE EXPOSED TO DISCHARGE END OF SPRINKLER	TEMPERATURES FOR HEATED AREA		
	40°F (4°C)	50°F (10°C)	60°F (16°C)
	MINIMUM EXPOSED BARREL LENGTH, INCHES (mm)		
40°F (4°C)	0	0	0
30°F (-1°C)	0	0	0
20°F (-7°C)	4 (100)	0	0
10°F (-12°C)	8 (200)	1 (25)	0
0°F (-18°C)	12 (305)	3 (75)	0
-10°F (-23°C)	14 (355)	4 (100)	1 (25)
-20°F (-19°C)	14 (355)	6 (150)	3 (75)
-30°F (-34°C)	16 (405)	8 (200)	4 (100)
-40°F (-40°C)	18 (455)	8 (200)	4 (100)
-50°F (-46°C)	20 (510)	10 (255)	6 (150)
-60°F (-51°C)	20 (510)	10 (255)	6 (150)



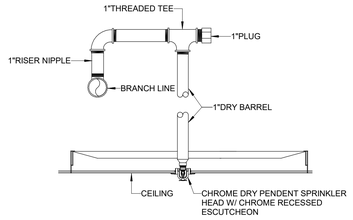
15 UPRIGHT SPRINKLER HEAD DETAIL
SCALE:NOT TO SCALE

AMBIENT TEMPERATURE EXPOSED TO DISCHARGE END OF SPRINKLER	TEMPERATURES FOR HEATED AREA		
	40°F (4°C)	50°F (10°C)	60°F (16°C)
	MINIMUM EXPOSED BARREL LENGTH, INCHES (mm)		
40°F (4°C)	0	0	0
30°F (-1°C)	0	0	0
20°F (-7°C)	4 (100)	0	0
10°F (-12°C)	8 (200)	1 (25)	0
0°F (-18°C)	12 (305)	3 (75)	0
-10°F (-23°C)	14 (355)	4 (100)	1 (25)
-20°F (-19°C)	14 (355)	6 (150)	3 (75)
-30°F (-34°C)	16 (405)	8 (200)	4 (100)
-40°F (-40°C)	18 (455)	8 (200)	4 (100)
-50°F (-46°C)	20 (510)	10 (255)	6 (150)
-60°F (-51°C)	20 (510)	10 (255)	6 (150)

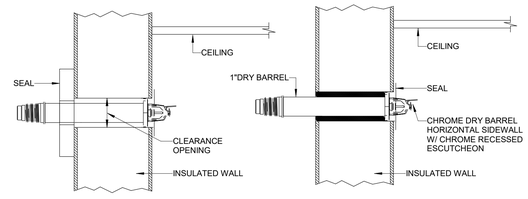
PROVIDE HEAD GUARDS ON ALL SPRINKLER HEADS AT OR BELOW AN ELEVATION OF 7'-6" AFF, OR THAT OTHERWISE MAY BE SUBJECT TO MECHANICAL DAMAGE, SUCH AS THOSE UNDER STAIRS, IN THE MECHANICAL ROOMS, OR ATTIC SPACE



14 SPRINKLER HEAD GUARD DETAIL
SCALE:NOT TO SCALE



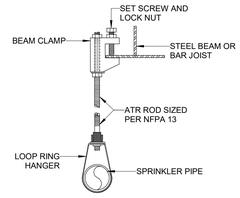
13 DRY BARREL PENDANT SPRINKLER DETAIL
SCALE:NOT TO SCALE



DRY SPRINKLER SEAL ON THE EXTERIOR OF THE WALL

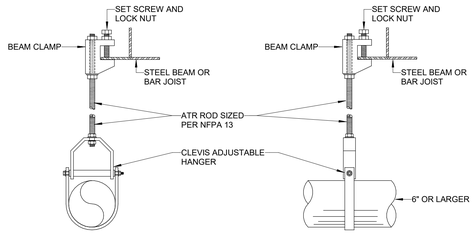
DRY SPRINKLER SEAL WITHIN THE WALL

12 DRY BARREL HORIZONTAL SIDEWALL DETAIL
SCALE:NOT TO SCALE



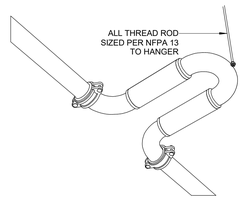
SPRINKLER PIPING OR HANGERS SHALL NOT BE USED TO SUPPORT NON-SYSTEM COMPONENTS

11 BEAM CLAMP HANGER DETAIL
SCALE:NOT TO SCALE

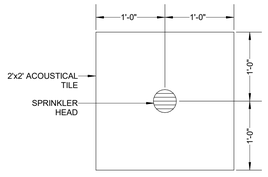


SPRINKLER PIPING OR HANGERS SHALL NOT BE USED TO SUPPORT NON-SYSTEM COMPONENTS

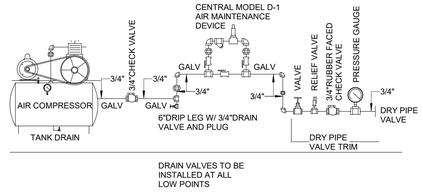
10 CLEVIS RING HANGER DETAIL
SCALE:NOT TO SCALE



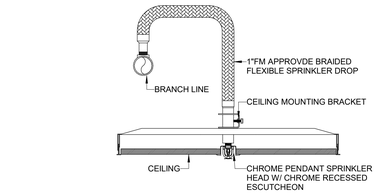
9 FLEX LOOP DETAIL
SCALE:NOT TO SCALE



8 CENTER LINE OF TILE DETAIL
SCALE:NOT TO SCALE



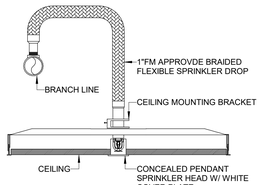
7 FP AIR COMPRESSOR DETAIL
SCALE:NOT TO SCALE



NOTES:
THIS INSTALLATION MAY BE USED IN LIEU OF THE HARD PIPE RETURN BEND INSTALLATION FOR SEISMIC, EASE OF INSTALLATION, TENANT FLEXIBILITY, OWNER, OR SPECIFIC SPRINKLER HEAD LOCATION REQUIREMENTS.

INCLUDE THE EQUIVALENT PIPE LENGTH AS SPECIFIED IN THE MANUFACTURER'S PRODUCT DATA SHEETS IN THE HYDRAULIC CALCULATION REPORTS.

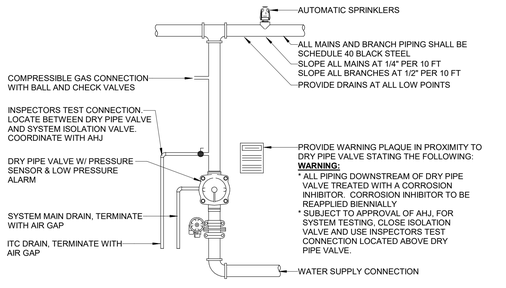
6 1"BRAIDED FLEXIBLE SPRINKLER DROP DETAIL
SCALE:NOT TO SCALE



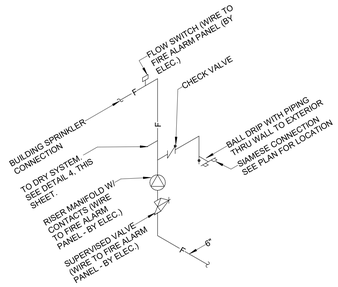
NOTES:
THIS INSTALLATION MAY BE USED IN LIEU OF THE HARD PIPE RETURN BEND INSTALLATION FOR SEISMIC, EASE OF INSTALLATION, TENANT FLEXIBILITY, OWNER, OR SPECIFIC SPRINKLER HEAD LOCATION REQUIREMENTS.

INCLUDE THE EQUIVALENT PIPE LENGTH AS SPECIFIED IN THE MANUFACTURER'S PRODUCT DATA SHEETS IN THE HYDRAULIC CALCULATION REPORTS.

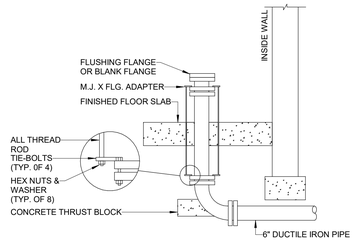
5 1"BRAIDED FLEXIBLE SPRINKLER DROP DETAIL
SCALE:NOT TO SCALE



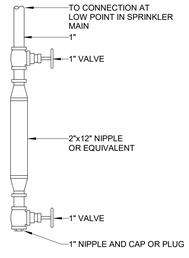
4 DETAIL OF FIRE PROTECTION DRY PIPE SYSTEM
SCALE:NOT TO SCALE



3 DETAIL OF ISOMETRIC FIRE SERVICE ENTRY
SCALE:NOT TO SCALE



2 DETAIL OF FIRE SERVICE ENTRY W/ THRUST BLOCK
SCALE:NOT TO SCALE



1 DETAIL OF DRY SYSTEM AUXILIARY DRAIN
SCALE:NOT TO SCALE

GMC
2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM

Bernhard TME Engineering

ISSUE	DATE
100% CD	2024.09.09

DRAWN BY: NEL
CHECKED BY: JDD

TUSCALOOSA COUNTY DHR
PROJECT ADDRESS

GMC # ABHM220021

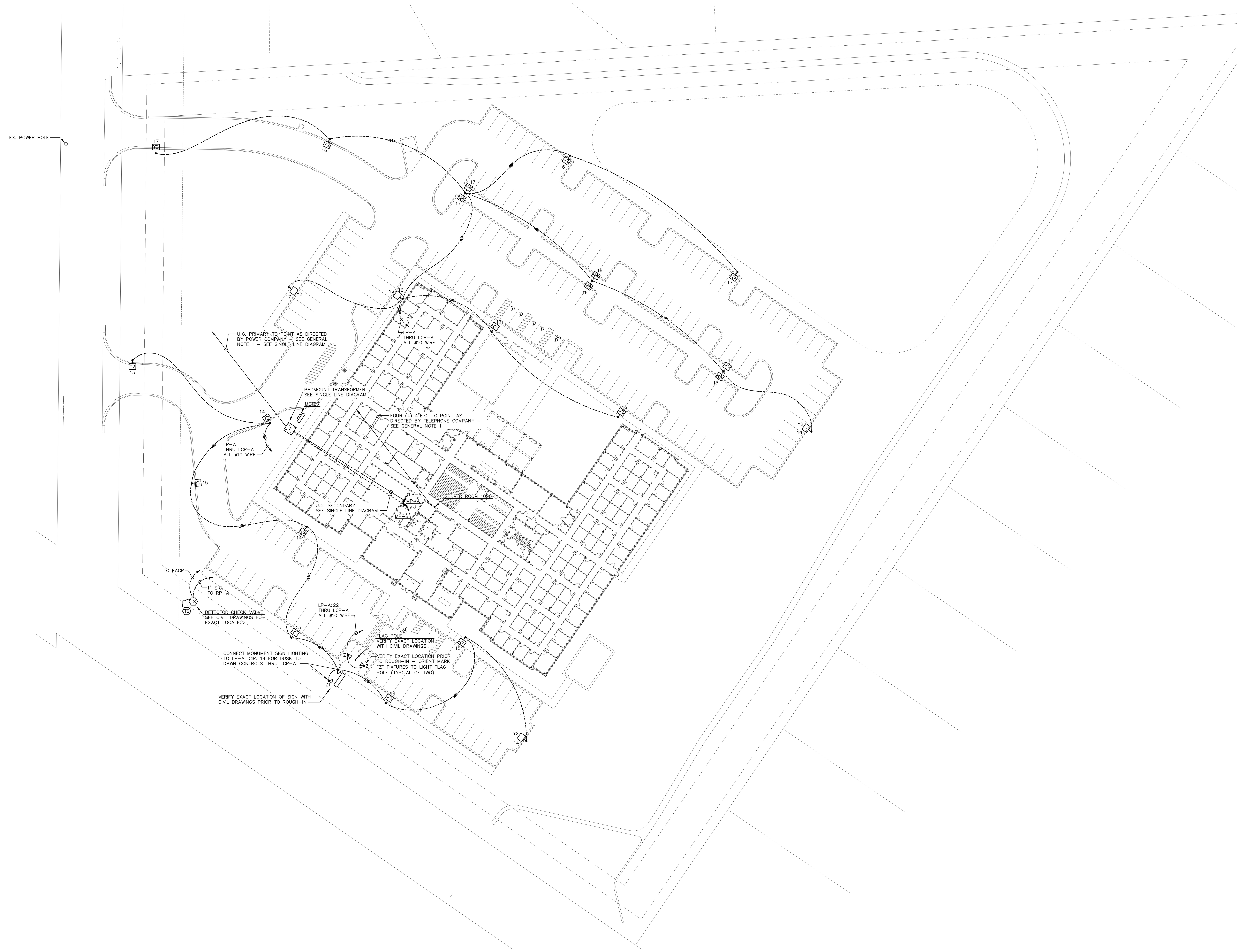
ALABAMA LICENSED No. 34357 PROFESSIONAL ENGINEER JARED D. DEERMAN
09/09/24

DETAILS - FIRE PROTECTION

F2.01

sheet of

9/25/2024 9:18:13 AM TEMPLATE VERSION: 2021.1



NORTH

ELECTRICAL SITE PLAN

SCALE : 1" = 30'-0"

GMC

2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM

ISSUE	DATE
BID SET	09/09/2024

DRAWN BY: SNJ
CHECKED BY: RCR

TUSCALOOSA COUNTY DHR
PROJECT ADDRESS

GMC # ABHM220021
SBC # [ENTER VALUE]

ALABAMA LICENSED PROFESSIONAL ENGINEER No. 24463 ROBERT C. RENFRO 9.9.24

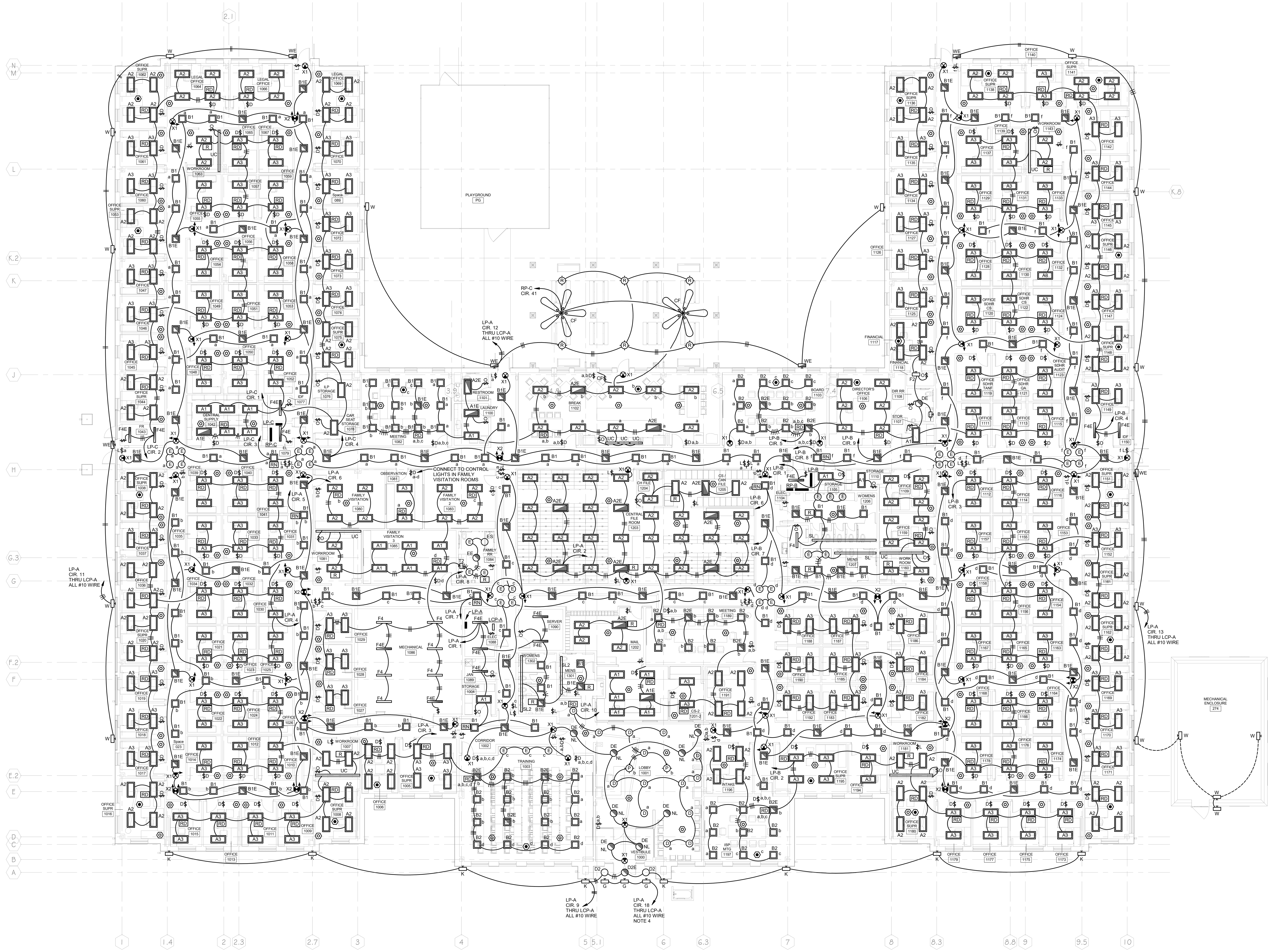
SITE ELECTRICAL PLAN

E0.01

sheet of

JACKSON, RENFRO & ASSOCIATES, Inc.
ELECTRICAL ENGINEERING & DESIGN

7/22/2022 11:40:12 AM TEMPLATE VERSION: 2021.1



LEVEL 1 LIGHTING PLAN

SCALE: 3/32" = 1'-0"

NORTH

NOTES THIS SHEET ONLY

1. INSTALL SIX (6) MARK "F4" AND SIX (6) MARK "F4E" FIXTURES IN ATTIC. CONNECT TO LP-A, CIR 36. INSTALL ONE (1) THREE WAY SWITCH ($3) AT EACH ATTIC ACCESS FOR A TOTAL OF TWO (2) SWITCHES.
2. DO NOT SWITCH EXIT SIGNS, NIGHT LIGHTS OR BATTERY CHARGE CIRCUIT IN EMERGENCY FIXTURES. REFER TO LIGHTING FIXTURE SCHEDULE FOR EMERGENCY FIXTURES.
3. INSTALL NEUTRAL CONDUCTOR TO ALL LINE-VOLTAGE SWITCHES.
4. INSTALL DIMMER SWITCH FOR MARK "G" FIXTURES ADJACENT TO LP-A IN ELECTRICAL ROOM.

JACKSON, RENFRO & ASSOCIATES, INC.
ELECTRICAL ENGINEERING & DESIGN
141 VILLAGE STREET • SUITE 1 • BIRMINGHAM, ALABAMA • 35242
ROBERT RENFRO, PE
bobby@jraee.com
(D) 205.536.7107
(P) 205.995.1078
JRA JOB NO. 222146

GMC
2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM

ISSUE	DATE
BID SET	09/09/2024
DRAWN BY:	SNJ
CHECKED BY:	RCR

TUSCALOOSA COUNTY DHR
PROJECT ADDRESS

GMC # ABHM220021
SBC # [ENTER VALUE]

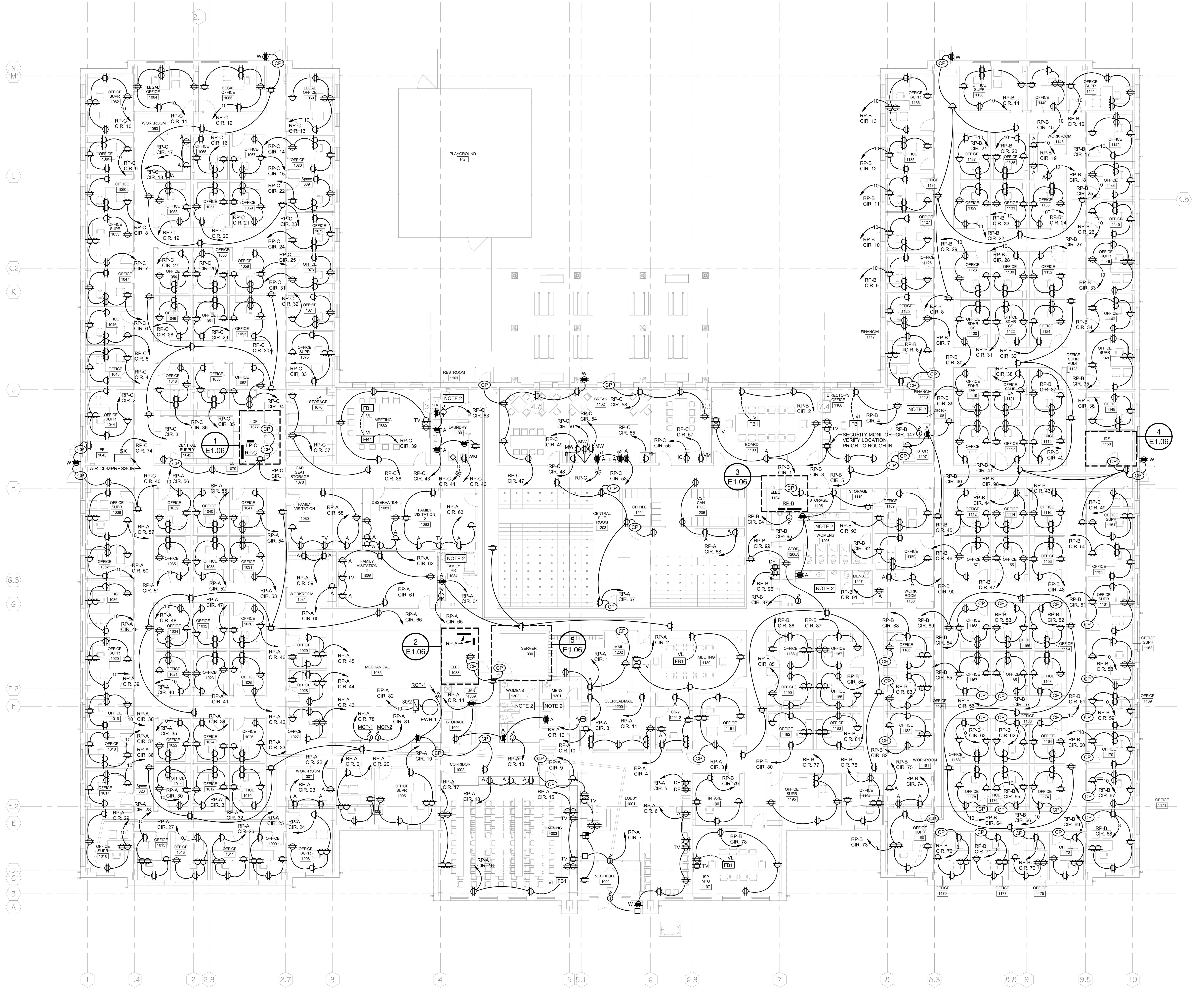
ALABAMA LICENSED No. 24463 PROFESSIONAL ENGINEER ROBERT C. RENFRO
9.9.24

LIGHTING PLAN

E1.01

sheet ___ of ___

9/6/2024 11:56:44 AM
TEMPLATE VERSION: 2021.1



LEVEL 1 POWER PLAN

SCALE: 3/32" = 1'-0"

NOTES THIS SHEET ONLY

1. CONTRACTOR SHALL CONNECT IRRIGATION CONTROLLER TO NEAREST 120V CIRCUIT. SEE LANDSCAPE DRAWINGS FOR EXACT LOCATION.
2. AT EACH RESTROOM, PROVIDE LOW-VOLTAGE TRANSFORMER TO SUPPLY LOW-VOLTAGE POWER TO EACH FAUCET, URINAL AND TOILET. PROVIDE LOW-VOLTAGE WIRING AS REQUIRED FROM TRANSFORMER TO EACH PLUMBING SENSOR.CONNECT TRANSFORMER PRIMARY DOWNSTREAM OF GFCI RECEPTACLE IN EACH RESTROOM.

JACKSON, RENFRO & ASSOCIATES, INC.
ELECTRICAL ENGINEERING & DESIGN
ROBERT RENFRO, PE
bobby@jrae.com

GMC
2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM

ISSUE	DATE
BID SET	09/09/2024

DRAWN BY: SNJ
CHECKED BY: RCR

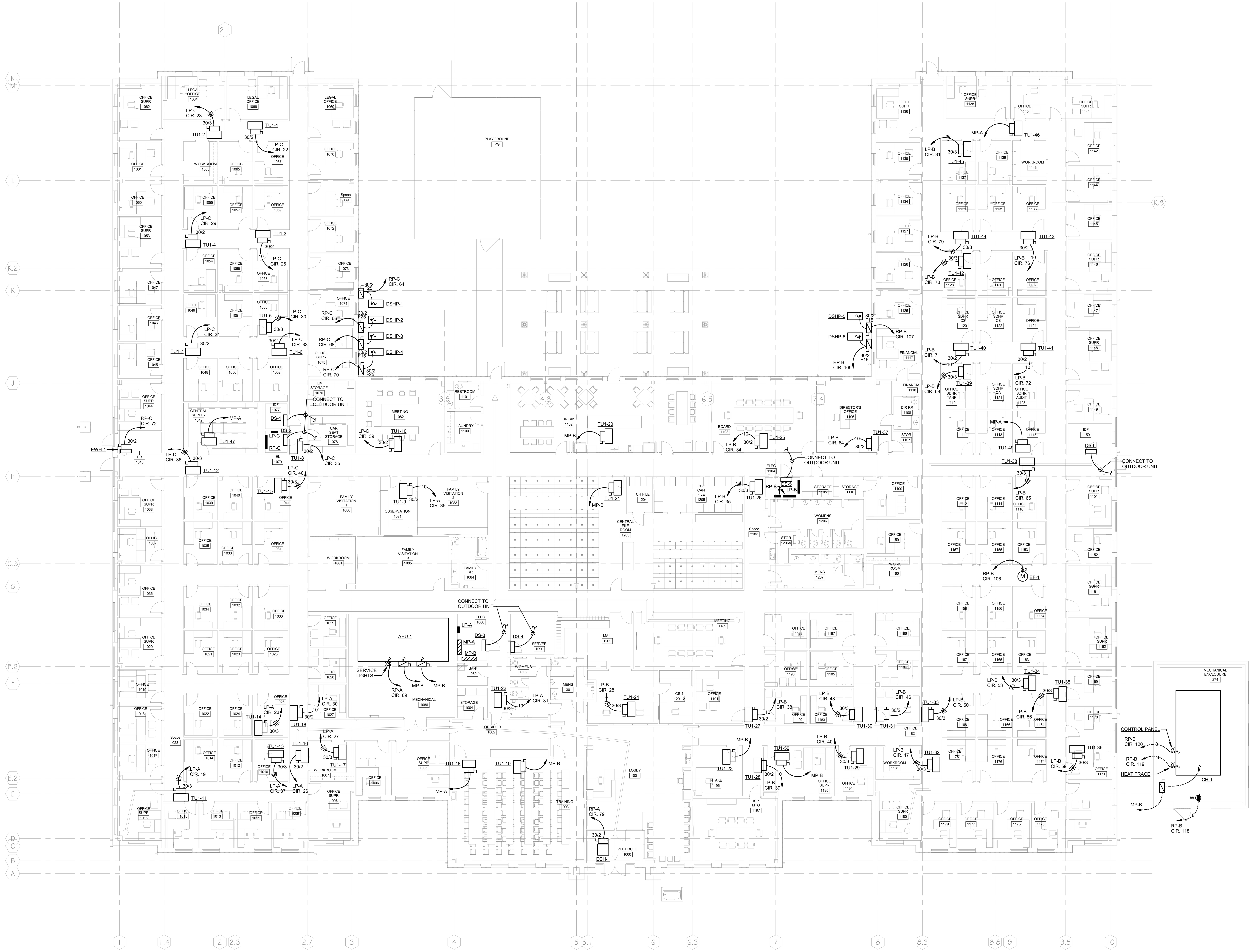
TUSCALOOSA COUNTY DHR
PROJECT ADDRESS

GMC # ABHM220021
SBC # [ENTER VALUE]

ROBERT C. RENFRO, PROFESSIONAL ENGINEER, No. 24463, ALABAMA, LICENSED — 9.9.24

POWER PLAN

E1.02



LEVEL 1 MECHANICAL EQUIPMENT POWER PLAN

SCALE: 3/32" = 1'-0"

NORTH

NOTES THIS SHEET ONLY
1. INSTALL 3-POLE DISCONNECT AT ALL DS UNITS WITH WIRING AS REQUIRED IN 1" CONDUIT TO OUTDOOR UNIT.

JACKSON, RENFRO & ASSOCIATES, INC.
ELECTRICAL ENGINEERING & DESIGN
141 VILLAGE STREET • SUITE 1 • BIRMINGHAM, ALABAMA • 35242
ROBERT RENFRO, PE
bobby@jraee.com
(D) 205.536.7107
(P) 205.995.1078
JRA JOB NO. 222146

GMC
2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM

ISSUE	DATE
BID SET	09/09/2024

DRAWN BY: SNJ
CHECKED BY: RCR

TUSCALOOSA COUNTY DHR
PROJECT ADDRESS

GMC # ABHM220021
SBC # [ENTER VALUE]

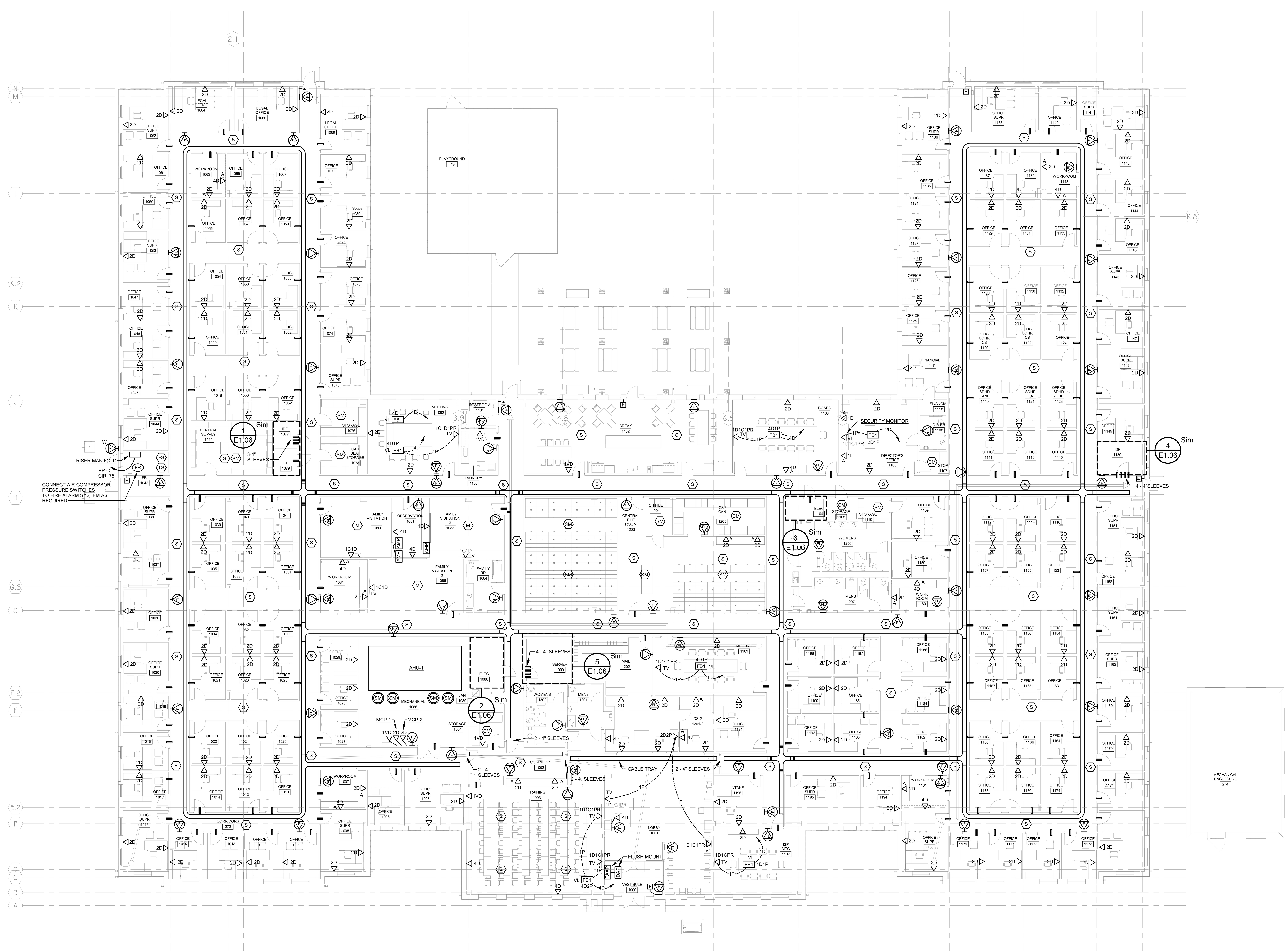
ALABAMA LICENSED No. 24463 PROFESSIONAL ENGINEER ROBERT C. RENFRO 9.9.24

MECHANICAL PLAN

E1.03

sheet ___ of ___

9/6/2024 11:56:48 AM
TEMPLATE VERSION: 2021.1



LEVEL 1 AUXILIARY PLAN

SCALE: 3/32" = 1'-0"

GMC

2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM

ISSUE	DATE
BID SET	09/09/2024

DRAWN BY: SNJ
CHECKED BY: RCR

TUSCALOOSA COUNTY DHR
PROJECT ADDRESS

GMC # ABHM220021
SBC # [ENTER VALUE]

ALABAMA LICENSED PROFESSIONAL ENGINEER No. 24463 ROBERT C. RENFRO 9.9.24

AUXILIARY PLAN

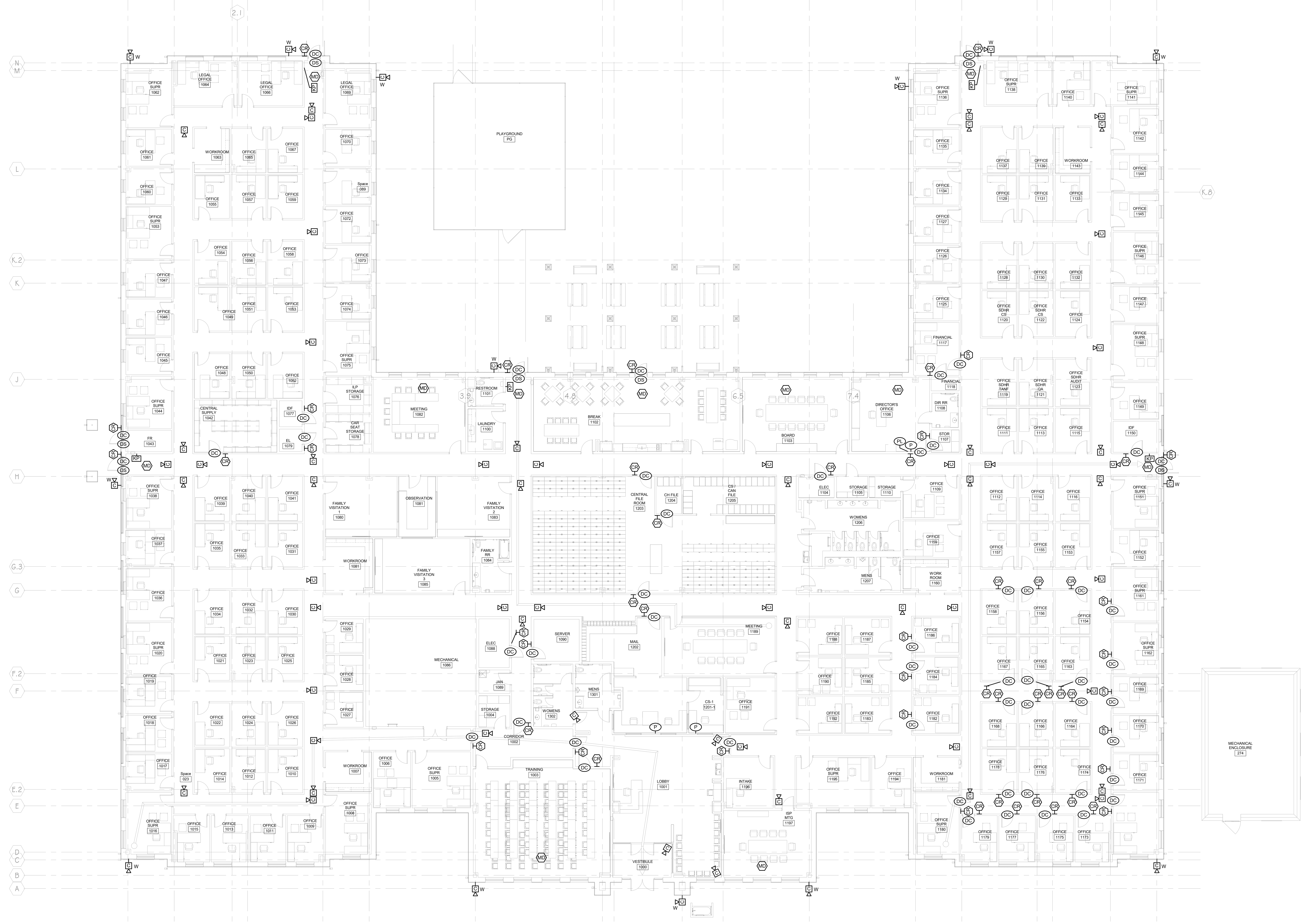
E1.04

sheet ___ of ___

JACKSON, RENFRO & ASSOCIATES, INC. ELECTRICAL ENGINEERING & DESIGN

ROBERT RENFRO, PE
bobby@jraee.com
(D) 205.536.7107
(F) 205.995.1078
JRA JOB NO. 22234

9/6/2024 11:56:49 AM
TEMPLATE VERSION: 2021.1



LEVEL 1 SECURITY PLAN

SCALE: 3/32" = 1'-0"

GMC
2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM

ISSUE	DATE
BID SET	09/09/2024

DRAWN BY: SNJ
CHECKED BY: RCR

TUSCALOOSA COUNTY DHR

PROJECT ADDRESS

GMC # ABHM220021
SBC # [ENTER VALUE]

ALABAMA LICENSED PROFESSIONAL ENGINEER No. 24463 ROBERT C. RENFRO
9.9.24

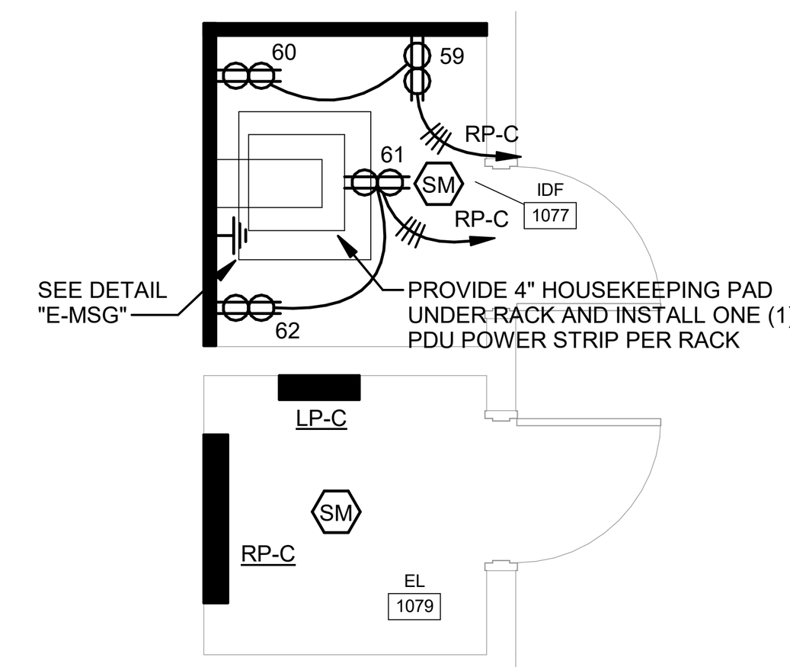
SECURITY PLAN

E1.05

sheet ___ of ___

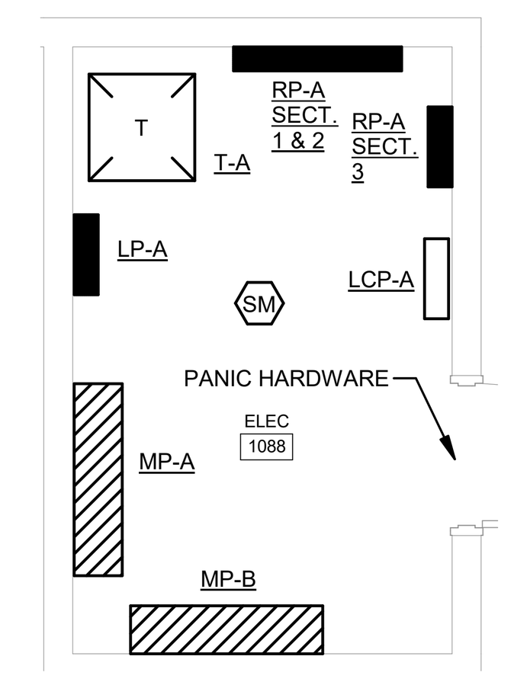
JACKSON, RENFRO & ASSOCIATES, INC.
ELECTRICAL ENGINEERING & DESIGN
141 VILLAGE STREET • SUITE 1 • BIRMINGHAM, ALABAMA • 35242
ROBERT RENFRO, PE
bobby@jraee.com
(D) 205.536.7107
(P) 205.995.1078
JRA JOB NO. 222146

9/6/2024 11:56:53 AM
TEMPLATE VERSION: 2021.1



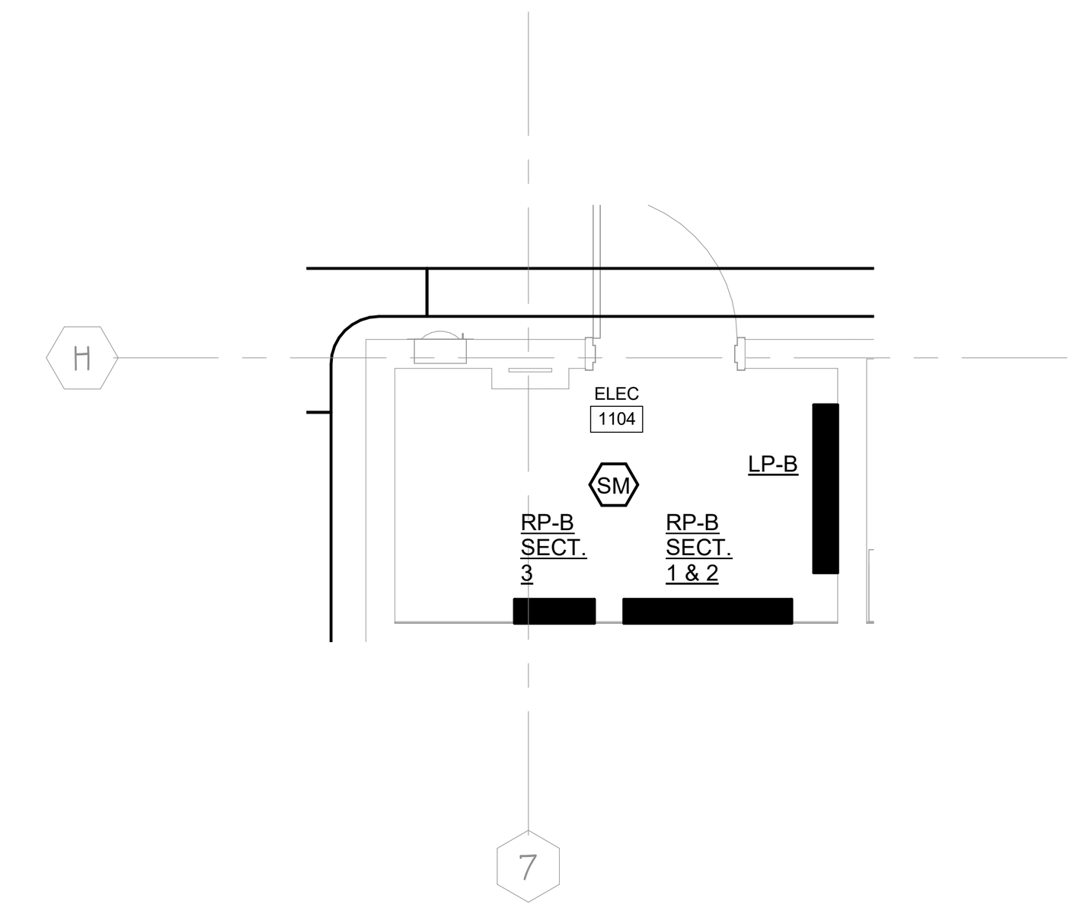
ELEC 1079 AND IDF 1077 LARGE SCALE ELEC PLAN

SCALE: 1/4" = 1'-0"



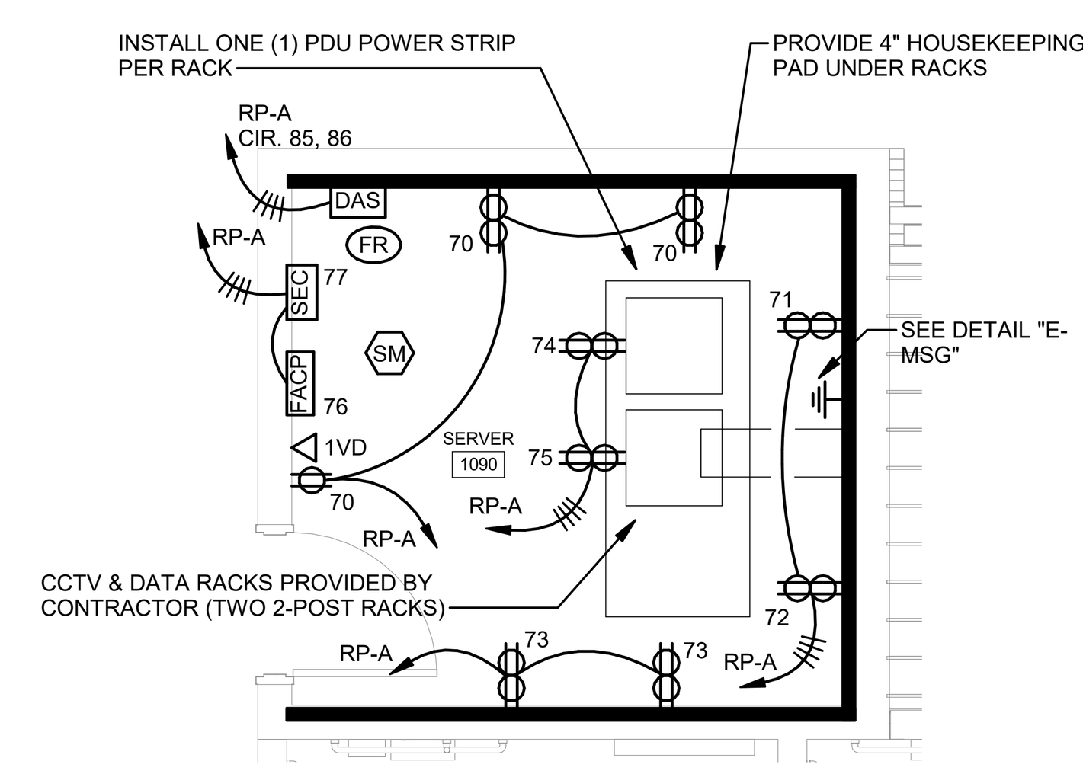
ELEC 1088 LARGE SCALE ELECTRICAL PLAN

SCALE: 1/4" = 1'-0"



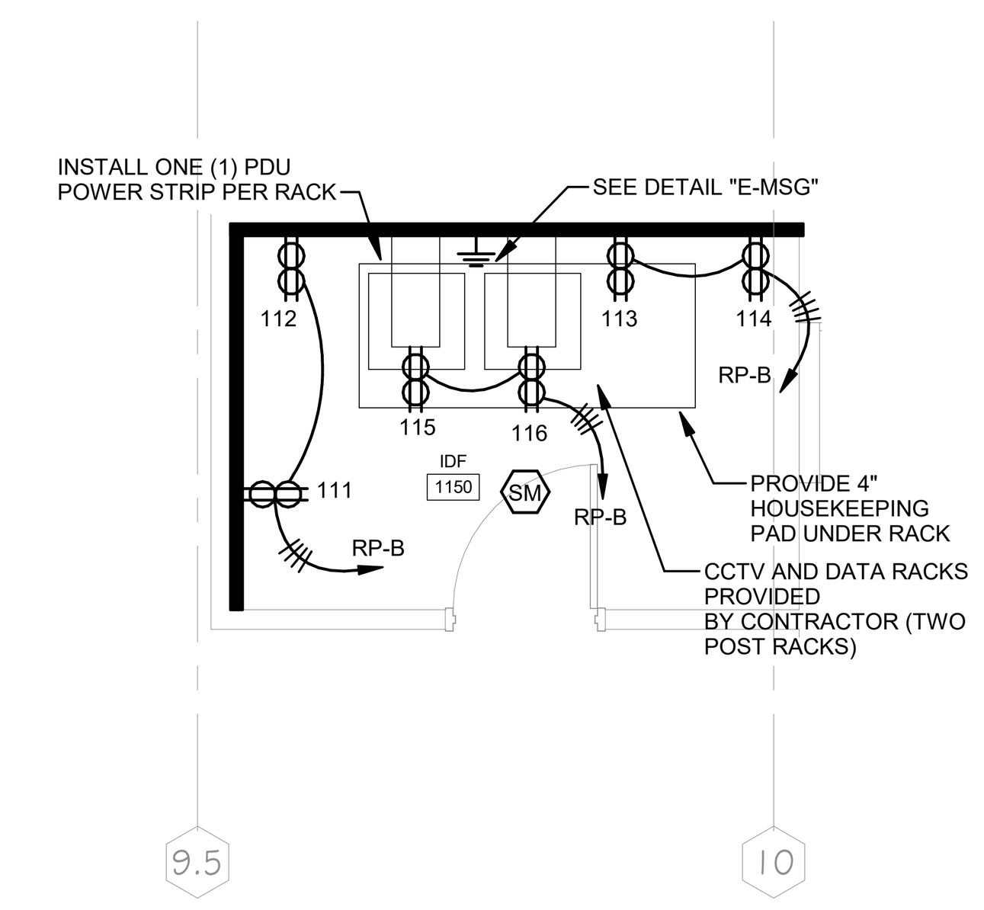
ELEC 1104 LARGE SCALE ELECTRICAL PLAN

SCALE: 1/4" = 1'-0"



SERVER 1090 LARGE SCALE ELECTRICAL PLAN

SCALE: 1/4" = 1'-0"



IDF 1150 LARGE SCALE ELECTRICAL PLAN

SCALE: 1/4" = 1'-0"

GMC

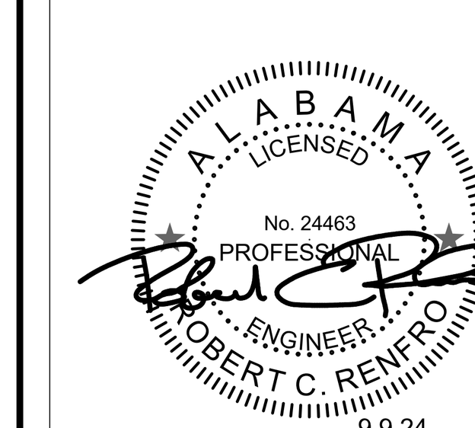
2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM

ISSUE	DATE
BID SET	09/09/2024

DRAWN BY: SNJ
CHECKED BY: RCR

TUSCALOOSA COUNTY DHR
PROJECT ADDRESS

GMC # ABHM220021
SBC # [ENTER VALUE]



LARGE SCALE ELECTRICAL PLANS

E1.06

sheet ___ of ___

JACKSON, RENFRO & ASSOCIATES, INC.
ELECTRICAL ENGINEERING & DESIGN
ROBERT RENFRO, PE
bobby@jraee.com

9/6/2024 11:56:54 AM TEMPLATE VERSION: 2021.1

PANELBOARD SCHEDULE - LP-A

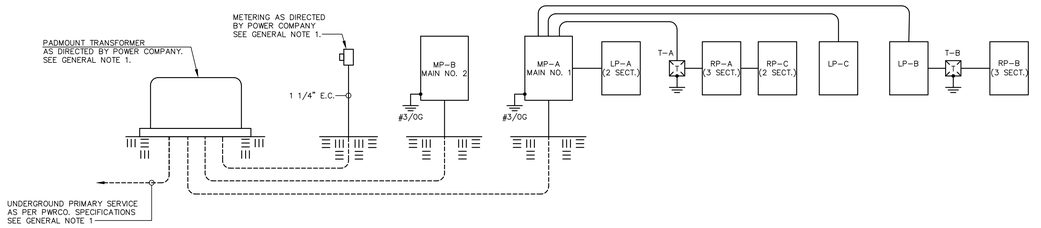
PANEL TYPE:	SQUARE 'D' TYPE NF				AIC RATING:	35KAIC (MINIMUM)					
VOLTAGE	277/480V-3P-4W				MOUNTING:	SURFACE					
AMPS & TYPE:	225 AMP - MLO				LOCATION:	SEE PLANS					
FED FROM	MP-A				FEEDER:	SEE PANELBOARD SCHEDULE - MP-A					
CKT. NO.	NOTES	BKR	DESCRIPTION	WATTS	PHASE	WATTS	DESCRIPTION	BKR	NOTES	CKT NO.	
1	-	20/1	OFFICE LIGHTING	2,700	A	100	FLAG LIGHTING	20/1	LCP	22	
2	-	20/1	OFFICE LIGHTING	2,850	B	3,000	TU1-14	15/3	-	23	
3	-	20/1	OFFICE LIGHTING	2,700	C	3,000	|	|	-	24	
4	-	20/1	OFFICE LIGHTING	2,400	A	3,000	|	|	-	25	
5	-	20/1	CORRIDOR LIGHTING	1,100	B	3,000	TU1-16	20/1	-	26	
6	-	20/1	CORRIDOR EM LIGHTING	650	C	2,667	TU1-17	15/3	-	27	
7	-	20/1	CORRIDOR LIGHTING	800	A	2,667	|	|	-	28	
8	-	20/1	CORRIDOR EM LIGHTING	700	B	2,667	|	|	-	29	
9	LCP	20/1	ENTRY LIGHTING	500	C	5,000	TU1-18	30/1	-	30	
10	-	20/1	LOBBY LIGHTING	650	A	5,000	TU1-22	30/1	-	31	
11	LCP	20/1	EXTERIOR LIGHTING	300	B		SPARE	20/1	-	32	
12	LCP	20/1	EXTERIOR LIGHTING	500	C		SPARE	20/1	-	33	
13	LCP	20/1	EXTERIOR LIGHTING	350	A		SPARE	20/1	-	34	
14	LCP	20/1	PARKING LOT LIGHTING	300	B	5,000	TU1-9	30/1	-	35	
15	LCP	20/1	PARKING LOT LIGHTING	300	C	600	ATTIC LIGHTING	20/1	-	36	
16	LCP	20/1	PARKING LOT LIGHTING	525	A	2,334	TUI-13	15/3	-	37	
17	LCP	20/1	PARKING LOT LIGHTING	750	B	2,334	|	|	-	38	
18	LCP	20/1	ENTRY SIGN LIGHTING	150	C	2,334	|	|	-	39	
19	-	15/3	TU1-11	2,667	A		SPARE	20/1	-	40	
20	-	|	|	2,667	B		SPARE	20/1	-	41	
21	-	|	|	2,667	C		SPARE	20/1	-	42	

NOTES:	PH. A:	PH. B:	PH. C:		
1. PROVIDE INTEGRAL 160KA (PER PHASE) SURGE PROTECTION DEVICE.	23,193	24,668	21,068	TOTAL CONNECTED LOAD:	68.9 KVA
					86.2 AMPS
				TOTAL DEMAND LOAD:	68.9 KVA
					86.2 AMPS
				TOTAL COMPUTED LOAD:	73.7 KVA
					92.1 AMPS

PANELBOARD SCHEDULE - RP-A (SECT. 1)

PANEL TYPE:	SQUARE 'D' TYPE NQ				AIC RATING:	10KAIC (MINIMUM)					
VOLTAGE	120/208V-3P-4W				MOUNTING:	SURFACE					
AMPS & TYPE:	600/3 MAIN BKR				LOCATION:	SEE PLANS					
FED FROM	MP-A				FEEDER:	2 SETS OF 4-350MCM & 1#2/0G - 3 1/2"C					
CKT. NO.	NOTES	BKR	DESCRIPTION	WATTS	PHASE	WATTS	DESCRIPTION	BKR	NOTES	CKT NO.	
1	-	20/1	CONVENIENCE OUTLETS	650	A	1,000	COPIER	20/1	-	22	
2	-	20/1	CONFERENCE ROOM OUTLETS	1,400	B	400	WORKROOM OUTLETS	20/1	-	23	
3	-	20/1	OFFICE OUTLETS	1,000	C	1,000	OFFICE OUTLETS	20/1	-	24	
4	-	20/1	OFFICE OUTLETS	1,200	A	1,000	OFFICE OUTLETS	20/1	-	25	
5	GFCI	20/1	DRINKING FOUNTAINS	1,000	B	1,000	OFFICE OUTLETS	20/1	-	26	
6	-	20/1	LOBBY OUTLETS	1,000	C	1,000	OFFICE OUTLETS	20/1	-	27	
7	-	20/1	DOOR OPERATOR	800	A	1,000	OFFICE OUTLETS	20/1	-	28	
8	-	20/1	COPIER	1,000	B	1,000	OFFICE OUTLETS	20/1	-	29	
9	-	20/1	LOBBY OUTLETS	1,400	C	1,000	OFFICE OUTLETS	20/1	-	30	
10	-	20/1	OFFICE OUTLETS	1,400	A	1,000	OFFICE OUTLETS	20/1	-	31	
11	-	20/1	COPIER	1,000	B	1,000	OFFICE OUTLETS	20/1	-	32	
12	-	20/1	HAND DRYER	1,500	C	1,000	OFFICE OUTLETS	20/1	-	33	
13	-	20/1	HAND DRYER	1,500	A	1,000	OFFICE OUTLETS	20/1	-	34	
14	-	20/1	CONVENIENCE OUTLETS	1,250	B	1,000	OFFICE OUTLETS	20/1	-	35	
15	-	20/1	TRAINING ROOM OUTLETS	1,200	C	1,000	OFFICE OUTLETS	20/1	-	36	
16	-	20/1	TRAINING ROOM OUTLETS	800	A	1,000	OFFICE OUTLETS	20/1	-	37	
17	-	20/1	TRAINING ROOM OUTLETS	800	B	1,000	OFFICE OUTLETS	20/1	-	38	
18	-	20/1	TRAINING ROOM OUTLETS	600	C	1,000	OFFICE OUTLETS	20/1	-	39	
19	-	20/1	OFFICE OUTLETS	1,000	A	1,000	OFFICE OUTLETS	20/1	-	40	
20	-	20/1	OFFICE OUTLETS	1,000	B	1,000	OFFICE OUTLETS	20/1	-	41	
21	-	20/1	CONVENIENCE OUTLETS	1,400	C	1,000	OFFICE OUTLETS	20/1	-	42	
RP-A (SECT. 2)											
43	-	20/1	OFFICE OUTLETS	1,000	A	800	CONVENIENCE OUTLETS	20/1	-	64	
44	-	20/1	OFFICE OUTLETS	1,000	B	1,500	HAND DRYER	20/1	-	65	
45	-	20/1	OFFICE OUTLETS	1,000	C	1,200	CONVENIENCE OUTLETS	20/1	-	66	
46	-	20/1	OFFICE OUTLETS	1,000	A	1,100	CONVENIENCE OUTLETS	20/1	-	67	
47	-	20/1	OFFICE OUTLETS	1,000	B	800	CONVENIENCE OUTLETS	20/1	-	68	
48	-	20/1	OFFICE OUTLETS	1,000	C	300	AHU-1 SERVICE LIGHTS	20/1	-	69	
49	-	20/1	OFFICE OUTLETS	1,000	A	1,000	TBB	20/1	-	70	
50	-	20/1	OFFICE OUTLETS	1,000	B	800	TBB	20/1	-	71	
51	-	20/1	OFFICE OUTLETS	1,000	C	800	TBB	20/1	-	72	
52	-	20/1	OFFICE OUTLETS	1,000	A	800	TBB	20/1	-	73	
53	-	20/1	OFFICE OUTLETS	1,000	B	800	IT	20/1	-	74	
54	-	20/1	OFFICE OUTLETS	1,000	C	800	IT	20/1	-	75	
55	-	20/1	OFFICE OUTLETS	1,000	A	500	FACP	20/1	LO	76	
56	-	20/1	OFFICE OUTLETS	1,000	B	500	SECURITY PANEL	20/1	-	77	
57	-	20/1	OFFICE OUTLETS	1,000	C	500	MCP-1	20/1	-	78	
58	-	20/1	FAMILY VISITATION OUTLETS	1,200	A	1,500	ECH-1	20/2	-	79	
59	-	20/1	WORKROOM OUTLETS	400	B	1,500	|	|	-	80	
60	-	20/1	COPIER	1,000	C	500	MCP-2	20/1	-	81	
61	-	20/1	FAMILY VISITATION OUTLETS	1,200	A	2,250	EWH-1	30/2	-	82	
62	-	20/1	OBSERVATION OUTLETS	800	B	2,250	|	|	-	83	
63	-	20/1	FAMILY VISITATION OUTLETS	1,200	C	150	ENTRY SIGN LIGHTING	20/1	LCP	84	
RP-A (SECT. 3)											
85	LO	20/1	DAS	400	A		-	20/1	-	106	
86	LO	20/1	DAS	400	B		-	20/1	-	107	
87	LCP	20/1	ENTRY SIGN LIGHTING	300	C		-	20/1	-	108	
88	-	20/1	SPARE		A		-	20/1	-	109	
89	-	20/1	SPARE		B		-	20/1	-	110	
90	-	20/1	SPARE		C		-	20/1	-	111	
91	-	20/1	SPARE		A		-	20/1	-	112	
92	-	20/1	-		B		-	20/1	-	113	
93	-	20/1	-		C		-	20/1	-	114	
94	-	20/1	-		A		-	20/1	-	115	
95	-	20/1	-		B		-	20/1	-	116	
96	-	20/1	-		C		-	20/1	-	117	
97	-	20/1	-		A		-	20/1	-	118	
98	-	20/1	-		B		-	20/1	-	119	
99	-	20/1	-		C		-	20/1	-	120	
100	-	20/1	-		A		-	20/1	-	121	
101	-	20/1	-		B		-	20/1	-	122	
102	-	20/1	-		C		-	20/1	-	123	
103	-	20/1	-		A	17,112	RP-C	225/3	-	124	
104	-	20/1	-		B	17,112	4#4/0 & 1#4G - 2 1/2"C	|	-	125	
105	-	20/1	-		C	17,112	|	|	-	126	

NOTES:	PH. A:	PH. B:	PH. C:		
1. PROVIDE INTEGRAL 160KA SPD.	47,212	45,712	43,962	TOTAL CONNECTED LOAD:	162.8 KVA
2. "GFCI" = GROUND-FAULT BREAKER (5mA TRIP).					452.3 AMPS
3. "EGFI" = GROUND-FAULT BREAKER (30mA TRIP).				TOTAL DEMAND LOAD:	99.6 KVA
4. "LO" = LOCK-ON HARDWARE.					276.6 AMPS
				TOTAL COMPUTED LOAD:	99.7 KVA
					277.1 AMPS



SINGLE LINE DIAGRAM

SCALE : NONE

NOTES:

1. REFER TO PANELBOARD SCHEDULES FOR FEEDER SIZES NOT INDICATED ON THIS DIAGRAM.

PANELBOARD SCHEDULE - MP-A

PANEL TYPE:	SQUARE 'D' I-LINE SERIES						AIC RATING:	42KAIC (MINIMUM)			
VOLTAGE:	277/480V-3P-4W						MOUNTING:	SURFACE			
AMPS & TYPE:	1000/3 MAIN BKR						LOCATION:	SEE PLANS			
FED FROM:	UTILITY						FEEDER:	3 SETS OF 4-400MCM - 3 1/2"C			
CIR. NO.	DESCRIPTION	VOLTS	P	HP	KW OR KVA	AMPS	BKR SIZE	LOCAL SAFETY SW. RATING	WIRE AND COND. SIZE	REMARKS	
1	LP-B	277/480	3		312.3		600/3	-	2 SETS OF 4-350MCM & 1#1G - 3"C		
2	LP-A	277/480	3		73.7		225/3	-	4#4/0 & 1#4G - 2 1/2"C		
3	LP-C	277/480	3		70.9		225/3	-	4#4/0 & 1#4G - 2 1/2"C		
4	RP-A (150 KVA X-FORMER)	480	3		99.7		250/3	-	3-250MCM & 1#4G - 2 1/2"C		
5	TU1-46	277/480	3		10.0		20/3	30/3	4#12 & 1#12G - 3/4"C		
6	TU1-47	277/480	3		11.0		20/3	30/3	4#12 & 1#12G - 3/4"C		
7	TU1-48	277/480	3		11.0		20/3	30/3	4#12 & 1#12G - 3/4"C		
8	TU1-49	277/480	3		11.0		20/3	30/3	4#12 & 1#12G - 3/4"C		
9	SPACE		3				-/3	-			
10	SPACE		3				-/3	-			
11	SPACE		3				-/3	-			
12	SPACE		3				-/3	-			

	TOTAL CONNECTED LOAD:	745.6 KVA	NOTES:
		932.0 AMPS	1. PANEL SHALL BE SERVICE-ENTRANCE RATED.
	TOTAL DEMAND LOAD:	582.5 KVA	2. PROVIDE INTEGRAL 240KA (PER PHASE) SURGE PROTECTION DEVICE.
		728.1 AMPS	3. MAIN BREAKER SHALL BE GROUND-FAULT TYPE
	TOTAL COMPUTED LOAD:	594.5 KVA	4. PROVIDE ARC-FLASH ENERGY REDUCTION MAINTENANCE SWITCH (TO ADJUST BREAKER TRIP SETTINGS TO LOWER LEVELS WHEN SWITCH IS IN "MAINTENANCE MODE") PER NEC 2014 ARTICLE 240.87 REQUIREMENTS.
		743.2 AMPS	

PANELBOARD SCHEDULE - MP-B

PANEL TYPE:	SQUARE 'D' I-LINE SERIES						AIC RATING:	50KAIC (MINIMUM)			
VOLTAGE:	277/480V-3P-4W						MOUNTING:	SURFACE			
AMPS & TYPE:	1000/3 MAIN BKR						LOCATION:	SEE PLANS			
FED FROM:	UTILITY						FEEDER:	3 SETS OF 4-400MCM - 3 1/2"C			
CIR. NO.	DESCRIPTION	VOLTS	P	HP	KW OR KVA	AMPS	BKR SIZE	LOCAL SAFETY SW. RATING	WIRE AND COND. SIZE	REMARKS	
1	CH-1	480	3			254.0	350/3	400/3 - F350	3-500MCM & 1#3G - 3"C		
2	AHU-1 CIR.1	480	3			85.0	110/3	200/3 - F110	3#3 & 1#8G - 1 1/4"C		
3	AHU-1 CIR. 2	480	3		180.0		250/3	400/3 - F250	3-250MCM & 1#4G - 2 1/2"C		
4	TU1-19	277/480	3		18.0		30/3	30/3	4#10 & 1#10G - 1"C		
5	TU1-20	277/480	3		14.0		25/3	30/3	4#10 & 1#10G - 1"C		
6	TU1-21	277/480	3		12.0		20/3	30/3	4#12 & 1#12G - 3/4"C		
7	TU1-23	277/480	3		11.0		20/3	30/3	4#12 & 1#12G - 3/4"C		
8	TU1-50	277/480	3		11.0		20/3	30/3	4#12 & 1#12G - 3/4"C		
9	SPACE		3				-/3	-			
10	SPACE		3				-/3	-			
11	SPACE		3				-/3	-			

	TOTAL CONNECTED LOAD:	517.2 KVA	NOTES:
		646.5 AMPS	1. PROVIDE INTEGRAL 240KA (PER PHASE) SURGE PROTECTION DEVICE.
	TOTAL DEMAND LOAD:	517.2 KVA	2. PANEL SHALL BE SERVICE-ENTRANCE RATED.
		646.5 AMPS	3. MAIN BREAKER SHALL BE GROUND-FAULT TYPE
	TOTAL COMPUTED LOAD:	517.2 KVA	4. PROVIDE ARC-FLASH ENERGY REDUCTION MAINTENANCE SWITCH (TO ADJUST BREAKER TRIP SETTINGS TO LOWER LEVELS WHEN SWITCH IS IN "MAINTENANCE MODE") PER NEC 2014 ARTICLE 240.87 REQUIREMENTS.
		646.5 AMPS	

GMC
2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM

ISSUE DATE
BID SET 09/09/2024

DRAWN BY: SNJ
CHECKED BY: RCR

TUSCALOOSA COUNTY DHR
PROJECT ADDRESS

GMC # ABHM220021
SBC # [ENTER VALUE]

ALABAMA LICENSED PROFESSIONAL ENGINEER ROBERT C. RENFRO No. 34483
9.9.24

PANELBOARD SCHEDULES

E2.01
sheet of

JACKSON, RENFRO & ASSOCIATES, INC.
ELECTRICAL ENGINEERING & DESIGN
141 VILLAGE STREET • SUITE 1 • HEMMINGHAM, ALABAMA • 35242
ROBERT RENFRO, PE
bobby@jraee.com
(O) 205.538.7114
(F) 205.995.1078
JRA JOB NO: 222146

7/22/2022 11:40:12 AM TEMPLATE VERSION: 20211

PANELBOARD SCHEDULE - LP-C

PANEL TYPE:	SQUARE 'D' TYPE NF	AIC RATING:	35KAIC (MINIMUM)
VOLTAGE	277/480V-3P-4W	MOUNTING:	SURFACE
AMPS & TYPE:	225 AMP - MLO	LOCATION:	SEE PLANS
FED FROM:	MP-A	FEEDER:	SEE PANELBOARD SCHEDULE - MP-A

CKT. NO.	NOTES	BKR	DESCRIPTION	WATTS	PHASE	WATTS	DESCRIPTION	BKR	NOTES	CKT NO.
1	-	20/1	OFFICE LIGHTING	3,050	A	4,000	TU1-1	20/1	-	22
2	-	20/1	OFFICE LIGHTING	2,800	B	3,000	TU1-2	15/3	-	23
3	-	20/1	CORRIDOR LIGHTING	1,850	C	3,000	|	|	-	24
4	-	20/1	CORRIDOR EM LIGHTING	1,000	A	3,000	|	|	-	25
5	-	20/1	SPARE		B	6,000	TU1-3	30/1	-	26
6	-	20/1	SPARE		C		SPARE	20/1	-	27
7	-	20/1	SPARE		A		SPARE	20/1	-	28
8	-	20/1	SPARE		B	3,000	TU1-4	20/1	-	29
9	-	20/1	SPARE		C	3,000	TU1-5	15/3	-	30
10	-	20/1	SPARE		A	3,000	|	|	-	31
11	-	20/1	SPARE		B	3,000	|	|	-	32
12	-	20/1	SPARE		C	2,000	TU1-6	20/1	-	33
13	-	20/1	SPARE		A	3,000	TU1-7	20/1	-	34
14	-	20/1	-		B	4,000	TU1-8	20/1	-	35
15	-	20/1	-		C	2,667	TU1-12	15/3	-	36
16	-	20/1	-		A	2,667	|	|	-	37
17	-	20/1	-		B	2,667	|	|	-	38
18	-	20/1	-		C	3,000	TU1-10	20/1	-	39
19	-	20/1	-		A	3,000	TU1-15	15/3	-	40
20	-	20/1	-		B	3,000	|	|	-	41
21	-	20/1	-		C	3,000	|	|	-	42

NOTES:	PH. A:	PH. B:	PH. C:		
1. PROVIDE INTEGRAL 160KA (PER PHASE) SURGE PROTECTION DEVICE.	22,717	27,467	18,517	TOTAL CONNECTED LOAD:	68.7 KVA
					85.9 AMPS
				TOTAL DEMAND LOAD:	68.7 KVA
					85.9 AMPS
				TOTAL COMPUTED LOAD:	70.9 KVA
					88.6 AMPS

PANELBOARD SCHEDULE - RP-C (SECT. 1)

PANEL TYPE:	SQUARE 'D' TYPE NQ	AIC RATING:	10KAIC (MINIMUM)
VOLTAGE	120/208V-3P-4W	MOUNTING:	SURFACE
AMPS & TYPE:	225 AMP - MLO	LOCATION:	SEE PLANS
FED FROM:	RP-A	FEEDER:	SEE PANELBOARD SCHEDULE - RP-A (SECT. 1)

CKT. NO.	NOTES	BKR	DESCRIPTION	WATTS	PHASE	WATTS	DESCRIPTION	BKR	NOTES	CKT NO.
1	-	20/1	CONVENIENCE OUTLETS	750	A	1,000	OFFICE OUTLETS	20/1	-	22
2	-	20/1	OFFICE OUTLETS	1,000	B	1,200	CONVENIENCE OUTLETS	20/1	-	23
3	-	20/1	CONVENIENCE OUTLETS	1,000	C	1,000	CONVENIENCE OUTLETS	20/1	-	24
4	-	20/1	OFFICE OUTLETS	1,000	A	1,000	OFFICE OUTLETS	20/1	-	25
5	-	20/1	OFFICE OUTLETS	1,000	B	1,000	OFFICE OUTLETS	20/1	-	26
6	-	20/1	OFFICE OUTLETS	1,000	C	1,000	OFFICE OUTLETS	20/1	-	27
7	-	20/1	OFFICE OUTLETS	1,000	A	1,000	OFFICE OUTLETS	20/1	-	28
8	-	20/1	OFFICE OUTLETS	700	B	1,000	OFFICE OUTLETS	20/1	-	29
9	-	20/1	OFFICE OUTLETS	1,000	C	1,000	OFFICE OUTLETS	20/1	-	30
10	-	20/1	OFFICE OUTLETS	1,000	A	1,000	OFFICE OUTLETS	20/1	-	31
11	-	20/1	OFFICE OUTLETS	1,000	B	1,000	OFFICE OUTLETS	20/1	-	32
12	-	20/1	OFFICE OUTLETS	1,000	C	1,000	OFFICE OUTLETS	20/1	-	33
13	-	20/1	OFFICE OUTLETS	1,000	A	1,000	OFFICE OUTLETS	20/1	-	34
14	-	20/1	OFFICE OUTLETS	1,000	B	1,000	OFFICE OUTLETS	20/1	-	35
15	-	20/1	OFFICE OUTLETS	1,000	C	1,000	OFFICE OUTLETS	20/1	-	36
16	-	20/1	OFFICE OUTLETS	1,000	A	600	CONVENIENCE OUTLETS	20/1	-	37
17	-	20/1	WORKROOM OUTLETS	400	B	1,000	CONFERENCE ROOM OUTELTS	20/1	-	38
18	-	20/1	COPIER	1,000	C	800	FLOOR BOXES	20/1	-	39
19	-	20/1	OFFICE OUTLETS	1,000	A	750	CONVENIENCE OUTLETS	20/1	-	40
20	-	20/1	OFFICE OUTLETS	1,000	B	200	EXTERIOR FANS	20/1	-	41
21	-	20/1	OFFICE OUTLETS	1,000	C		]	20/1	-	42
RP-C (SECT. 2)										
43	-	20/1	CONVENIENCE OUTLETS	1,000	A	973	DSHP-1	25/2	-	64
44	GFCI	30/2	DRYER	2,500	B	973	|	|	-	65
45	GFCI	|	|	2,500	C	973	DSHP-2	25/2	-	66
46	GFCI	20/1	WASHER	1,500	A	973	|	|	-	67
47	-	20/1	BREAKROOM OUTLETS	1,200	B	973	DSHP-3	15/2	-	68
48	GFCI	20/1	REFRIGERATOR	1,500	C	973	|	|	-	69
49	GFCI	20/1	MICROWAVE	1,500	A	1,503	DSHP-4	25/2	-	70
50	GFCI	20/1	MICROWAVE	1,500	B	1,503	|	|	-	71
51	-	20/1	KITCHEN OUTLETS	1,500	C	1,000	EWH-1	20/2	-	72
52	-	20/1	KITCHEN OUTLETS	1,500	A	1,000	|	|	-	73
53		20/1	COFFEE MAKER	1,500	B	1,127	AIR COMPRESSOR	20/1	-	74
54	GFCI	20/1	MICROWAVE	1,500	C	500	FIRE RISE MANIFOLD	20/1	-	75
55	GFCI	20/1	REFRIGERATOR	1,500	A		SPARE	20/1	-	76
56	GFCI	20/1	ICE MACHINE	1,000	B		SPARE	20/1	-	77
57	GFCI	20/1	VENDING MACHINE	1,000	C		SPARE	20/1	-	78
58	-	20/1	BREAKROOM OUTLETS	600	A		SPARE	20/1	-	79
59	-	20/1	TBB	400	B		SPARE	20/1	-	80
60	-	20/1	TBB	400	C		SPARE	20/1	-	81
61	-	20/1	TBB	400	A		SPARE	20/1	-	82
62	-	20/1	TBB	400	B		SPARE	20/1	-	83
63	-	20/1	HAND DRYER	1,500	C		SPARE	20/1	-	84

NOTES:	PH. A:	PH. B:	PH. C:		
1. PROVIDE INTEGRAL 160KA SPD.	25,549	25,576	26,146	TOTAL CONNECTED LOAD:	77.3 KVA
2. "GFCI" = GROUND-FAULT BREAKER (5mA TRIP).					214.6 AMPS
				TOTAL DEMAND LOAD:	51.3 KVA
					142.5 AMPS
				TOTAL COMPUTED LOAD:	51.3 KVA
					142.6 AMPS

TRANSFORMER SCHEDULE

MARK	SIZE (KVA)	DESCRIPTION	PRIMARY VOLTAGE & PHASE	SECONDARY VOLTAGE & PHASE	PANEL FED	MOUNTING	GROUND SIZE	REMARKS
T-A	150	DRY-TYPE	480V-3P-3W	120/208V-3P-4W	RP-A		#2/0	
T-B	112.5	DRY-TYPE	480V-3P-3W	120/208V-3P-4W	RP-B	FLOOR	#2	

TRANSFORMER SCHEDULE NOTES:

1. EXACT TRANSFORMER LOCATIONS SHALL BE FIELD COORDINATED TO PROVIDE CODE-REQUIRED CLEARANCES AND WORKING SPACES AROUND TRANSFORMERS AND ADJACENT EQUIPMENT (SUCH AS PANELBOARDS).
2. ALL TRANSFORMERS SHALL BE MOUNTED ON VIBRATION ISOLATORS PER SPECIFICATION REQUIREMENTS.

PANELBOARD SCHEDULE - RP-B (SECT. 1)

PANEL TYPE:	SQUARE 'D' TYPE NQ	AIC RATING:	10KAIC (MINIMUM)
VOLTAGE	120/208V-3P-4W	MOUNTING:	SURFACE
AMPS & TYPE:	400/3 MAIN BKR	LOCATION:	SEE PLANS
FED FROM:	LP-B	FEEDER:	2 SETS OF 4#3/0 & 1#2G - 2 1/2"C

CKT. NO.	NOTES	BKR	DESCRIPTION	WATTS	PHASE	WATTS	DESCRIPTION	BKR	NOTES	CKT NO.
1	-	20/1	BOARD ROOM OUTLETS	1,000	A	1,000	OFFICE OUTLETS	20/1	-	22
2	-	20/1	BOARD ROOM OUTLETS	800	B	1,000	OFFICE OUTLETS	20/1	-	23
3	-	20/1	OFFICE OUTLETS	1,000	C	1,000	OFFICE OUTLETS	20/1	-	24
4	-	20/1	OFFICE OUTLETS	800	A	1,000	OFFICE OUTLETS	20/1	-	25
5	-	20/1	CONVENIENCE OUTLETS	1,000	B	1,000	OFFICE OUTLETS	20/1	-	26
6	-	20/1	OFFICE OUTLETS	1,000	C	1,000	OFFICE OUTLETS	20/1	-	27
7	-	20/1	OFFICE OUTLETS	1,000	A	1,000	OFFICE OUTLETS	20/1	-	28
8	-	20/1	CONVENIENCE OUTLETS	1,400	B	1,000	OFFICE OUTLETS	20/1	-	29
9	-	20/1	OFFICE OUTLETS	1,000	C	1,000	OFFICE OUTLETS	20/1	-	30
10	-	20/1	OFFICE OUTLETS	1,000	A	1,000	OFFICE OUTLETS	20/1	-	31
11	-	20/1	OFFICE OUTLETS	1,000	B	1,000	OFFICE OUTLETS	20/1	-	32
12	-	20/1	OFFICE OUTLETS	1,000	C	1,000	OFFICE OUTLETS	20/1	-	33
13	-	20/1	OFFICE OUTLETS	1,000	A	1,000	OFFICE OUTLETS	20/1	-	34
14	-	20/1	OFFICE OUTLETS	1,000	B	1,000	OFFICE OUTLETS	20/1	-	35
15	-	20/1	OFFICE OUTLETS	1,000	C	1,000	OFFICE OUTLETS	20/1	-	36
16	-	20/1	OFFICE OUTLETS	1,000	A	1,000	OFFICE OUTLETS	20/1	-	37
17	-	20/1	OFFICE OUTLETS	1,000	B	1,000	OFFICE OUTLETS	20/1	-	38
18	-	20/1	WORKROOM OUTLETS	400	C	1,000	OFFICE OUTLETS	20/1	-	39
19	-	20/1	COPIER	1,000	A	1,000	OFFICE OUTLETS	20/1	-	40
20	-	20/1	OFFICE OUTLETS	1,000	B	1,000	OFFICE OUTLETS	20/1	-	41
21	-	20/1	OFFICE OUTLETS	1,000	C	1,000	OFFICE OUTLETS	20/1	-	42
RP-B (SECT. 2)										
43	-	20/1	OFFICE OUTLETS	1,000	A	1,000	OFFICE OUTLETS	20/1	-	64
44	-	20/1	OFFICE OUTLETS	1,000	B	1,000	OFFICE OUTLETS	20/1	-	65
45	-	20/1	OFFICE OUTLETS	1,000	C	1,000	OFFICE OUTLETS	20/1	-	66
46	-	20/1	OFFICE OUTLETS	1,000	A	1,000	OFFICE OUTLETS	20/1	-	67
47	-	20/1	OFFICE OUTLETS	1,000	B	1,000	OFFICE OUTLETS	20/1	-	68
48	-	20/1	OFFICE OUTLETS	1,000	C	1,000	OFFICE OUTLETS	20/1	-	69
49	-	20/1	OFFICE OUTLETS	1,000	A	1,000	OFFICE OUTLETS	20/1	-	70
50	-	20/1	OFFICE OUTLETS	1,000	B	1,000	OFFICE OUTLETS	20/1	-	71
51	-	20/1	OFFICE OUTLETS	1,000	C	1,000	OFFICE OUTLETS	20/1	-	72
52	-	20/1	OFFICE OUTLETS	1,000	A	1,000	OFFICE OUTLETS	20/1	-	73
53	-	20/1	OFFICE OUTLETS	1,000	B	400	WORKROOM OUTLETS	20/1	-	74
54	-	20/1	OFFICE OUTLETS	1,000	C	1,000	CONVENIENCE OUTLETS	20/1	-	75
55	-	20/1	OFFICE OUTLETS	1,000	A	1,000	OFFICE OUTLETS	20/1	-	76
56	-	20/1	OFFICE OUTLETS	1,000	B	1,000	OFFICE OUTLETS	20/1	-	77
57	-	20/1	OFFICE OUTLETS	1,000	C	1,400	CONFERENCE ROOM OUTLETS	20/1	-	78
58	-	20/1	OFFICE OUTLETS	1,000	A	800	OFFICE OUTLETS	20/1	-	79
59	-	20/1	OFFICE OUTLETS	1,000	B	1,000	OFFICE OUTLETS	20/1	-	80
60	-	20/1	OFFICE OUTLETS	1,000	C	1,000	OFFICE OUTLETS	20/1	-	81
61	-	20/1	OFFICE OUTLETS	1,000	A	1,000	OFFICE OUTLETS	20/1	-	82
62	-	20/1	OFFICE OUTLETS	1,000	B	1,000	OFFICE OUTLETS	20/1	-	83
63	-	20/1	OFFICE OUTLETS	1,000	C	1,000	OFFICE OUTLETS	20/1	-	84
RP-B (SECT. 3)										
85	-	20/1	OFFICE OUTLETS	1,000	A	1,840	EF-1	40/1	-	106
86	-	20/1	OFFICE OUTLETS	1,000	B	973	DSHP-5	15/2	-	107
87	-	20/1	OFFICE OUTLETS	1,000	C	973	|	|	-	108
88	-	20/1	OFFICE OUTLETS	1,000	A	973	DSHP-6	15/2	-	109
89	-	20/1	CONVENIENCE OUTLETS	1,400	B	973	|	|	-	110
90	-	20/1	WORKROOM OUTLETS	400	C	400	TBB	20/1	-	111
91	-	20/1	COPIER	1,000	A	400	TBB	20/1	-	112
92	-	20/1	OFFICE OUTLETS	1,000	B	400	TBB	20/1	-	113
93	-	20/1	OFFICE OUTLETS	1,000	C	400	TBB	20/1	-	114
94	-	20/1	HAND DRYER	1,500	A	400	IT	20/1	-	115
95	-	20/1	CONVENIENCE OUTLETS	1,050	B	400	IT	20/1	-	116
96	GFCI	20/1	DRINKING FOUNTAINS	1,000	C	1,500	HAND DRYER	20/1	-	117
97	-	20/1	HAND DRYER	1,500	A	200	CHILLER CONVENIENCE OUTLET	20/1	-	118
98	-	20/1	CONVENIENCE OUTLETS	1,500	B	1,000	HEAT TRACE	20/1	EGFI	119
99	-	20/1	CONVENIENCE OUTLETS	1,400	C	500	CHILLER CONTROL PANEL	20/1	-	120
100	-	20/1	SPARE		A		SPARE	20/1	-	121
101	-	20/1	SPARE		B		SPARE	20/1	-	122
102	-	20/1	SPARE		C		SPARE	20/1	-	123
103	-	20/1	SPARE		A		SPARE	20/1	-	124
104	-	20/1	SPARE		B		SPARE	20/1	-	125
105	-	20/1	SPARE		C		SPARE	20/1	-	126

NOTES:	PH. A:	PH. B:	PH. C:		
1. PROVIDE INTEGRAL 160KA SPD.	37,413	37,296	36,373	TOTAL CONNECTED LOAD:	111.1 KVA
2. "GFCI" = GROUND-FAULT BREAKER (5mA TRIP).					308.6 AMPS
3. INDICATED BREAKER(S) SHALL BE EQUIPMENT-PROTECTION GFI-TYPE (30mA TRIP).				TOTAL DEMAND LOAD:	66.2 KVA
					183.8 AMPS
				TOTAL COMPUTED LOAD:	66.4 KVA
					184.5 AMPS

LIGHTING CONTROL PANEL SCHEDULE - LCP-A

MARK	DESCRIPTION	PANEL	CIRCUIT	AUTOMATIC CONTROL		OVERRIDE ON		OVERRIDE OFF		REMARKS
				ON	OFF	STATION	BUTTON	STATION	BUTTON	
R1	ENTRY LIGHTING	LP-A	9	OWNER	OWNER					
R2	EXTERIOR LIGHTING	LP-A	11	OWNER	OWNER					
R3	EXTERIOR LIGHTING	LP-A	12	OWNER	OWNER					
R4	EXTERIOR LIGHTING	LP-A	13	OWNER	OWNER					
R5	PARKING LOT LIGHTING	LP-A	14	DUSK	DAWN					
R6	PARKING LOT LIGHTING	LP-A	15	DUSK	MIDNIGHT					
R7	PARKING LOT LIGHTING	LP-A	16	DUSK	DAWN					
R8	PARKING LOT LIGHTING	LP-A	17	DUSK	MIDNIGHT					
R9	ENTRY SIGN LIGHTING	LP-A	18	OWNER	OWNER					
R10	FLAG LIGHTING	LP-A	22	DUSK	DAWN					
R11	SPARE									
R12	SPARE									
R13	SPARE									
R14	SPARE									
R15	SPARE									
R16	SPARE									
R17	SPARE									
R18	SPARE									
R19	SPARE									
R20	SPARE									
R21	SPARE									
R22	SPARE									
R23	SPARE									
R24	SPARE									

NOTES:

1. VERIFY SCHEDULING TIMES WITH OWNER PRIOR TO PROGRAMMING SYSTEM.

PANELBOARD SCHEDULE - LP-B (SECT. 1)

PANEL TYPE:	SQUARE 'D' TYPE NF	AIC RATING:	35KAIC (MINIMUM)
VOLTAGE	277/480V-3P-4W	MOUNTING:	SURFACE
AMPS & TYPE:	600 AMP - MLO	LOCATION:	SEE PLANS
FED FROM:	MP-A	FEEDER:	SEE PANELBOARD SCHEDULE - MP-A

CKT. NO.	NOTES	BKR	DESCRIPTION	WATTS	PHASE	WATTS	DESCRIPTION	BKR	NOTES	CKT NO.
1	-	20/1	OFFICE LIGHTING	2,500	A		-	20/1	-	22
2	-	20/1	OFFICE LIGHTING	2,350	B		-	20/1	-	23
3	-	20/1	OFFICE LIGHTING	2,400	C		-	20/1	-	24
4	-	20/1	OFFICE LIGHTING	2,800	A		-	20/1	-	25
5	-	20/1	OFFICE LIGHTING	2,600	B		-	20/1	-	26
6	-	20/1	CORRIDOR LIGHTING	1,800	C		-	20/1	-	27
7	-	20/1	CORRIDOR EM LIGHTING	1,000	A	3,000	TU1-24	15/3	-	28
8	-	20/1	CORRIDOR LIGHTING	1,650	B	3,000	|	|	-	29
9	-	20/1	CORRIDOR EM LIGHTING	850	C	3,000	|	|	-	30
10	-	20/1	SPARE		A	3,000	TU1-45	15/3	-	31
11	-	20/1	SPARE		B	3,000	|	|	-	32
12	-	20/1	SPARE		C	3,000	|	|	-	33
13	-	20/1	SPARE		A	6,000	TU1-25	30/1	-	34
14	-	20/1	SPARE		B	3,000	TU1-26	15/3	-	35
15	-	20/1	SPARE		C	3,000	|	|	-	36
16	-	20/1	SPARE		A	3,000	|	|	-	37
17	-	20/1	SPARE		B	5,000	TU1-27	30/1	-	38
18	-	20/1	-		C	6,000	TU1-28	30/1	-	39
19	-	20/1	-		A	2,667	TU1-29	15/3	-	40
20	-	20/1	-		B	2,667	|	|	-	41
21	-	20/1	-		C	2,667	|	|	-	42
LP-B (SECT. 2)										
43	-	15/3	TU1-30	3,000	A	6,000	TU1-37	30/1	-	64
44	-	|	|	3,000	B	3,334	TU1-38	20/3	-	65
45	-	|	|	3,000	C	3,334	|	|	-	66
46	-	20/1	TU1-31	4,000	A	3,334	|	|	-	67
47	-	15/3	TU1-32	2,667	B	3,000	TU1-39	15/3	-	68
48	-	|	|	2,667	C	3,000	|	|	-	69
49	-	|	|	2,667	A	3,000	|	|	-	70
50	-	15/3	TU1-33	3,000	B	5,000	TU1-40	30/1	-	71
51	-	|	|	3,000	C	5,000	TU1-41	30/1	-	72
52	-	|	|	3,000	A	3,000	TU1-42	15/3	-	73
53	-	15/3	TU1-34	3,000	B	3,000	|	|	-	74
54	-	|	|	3,000	C	3,000	|	|	-	75
55	-	|	|	3,000	A	6,000	TU1-43	30/1	-	76
56	-	15/3	TU1-35	2,334	B		SPARE	20/1	-	77
57	-	|	|	2,334	C		SPARE	20/1	-	78
58	-	|	|	2,334	A	2,333	TU1-44	15/3	-	79
59	-	15/3	TU1-36	2,334	B	2,333	|	|	-	80
60	-	|	|	2,334	C	2,333	|	|	-	81
61	-	|	|	2,334	A	22,136	RP-B (112.5 KVA X-FORMER)	175/3		82
62	-	20/1	-		B	22,136	3#2/0 & 1#6G - 2"C	|		83
63	-	20/1	-		C	22,136	|	|		84

NOTES:	PH. A:	PH. B:	PH. C:		
1. PROVIDE INTEGRAL 160KA (PER PHASE) SURGE PROTECTION DEVICE.	90,105	78,405	77,855	TOTAL CONNECTED LOAD:	402.1 KVA
					502.7 AMPS
				TOTAL DEMAND LOAD:	307.3 KVA
					384.1 AMPS
				TOTAL COMPUTED LOAD:	312.3 KVA
					390.3 AMPS

GMC
2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM

ISSUE | DATE
BID SET | 09/09/2024

DRAWN BY: SNJ
CHECKED BY: RCR

TUSCALOOSA COUNTY DHR
PROJECT ADDRESS

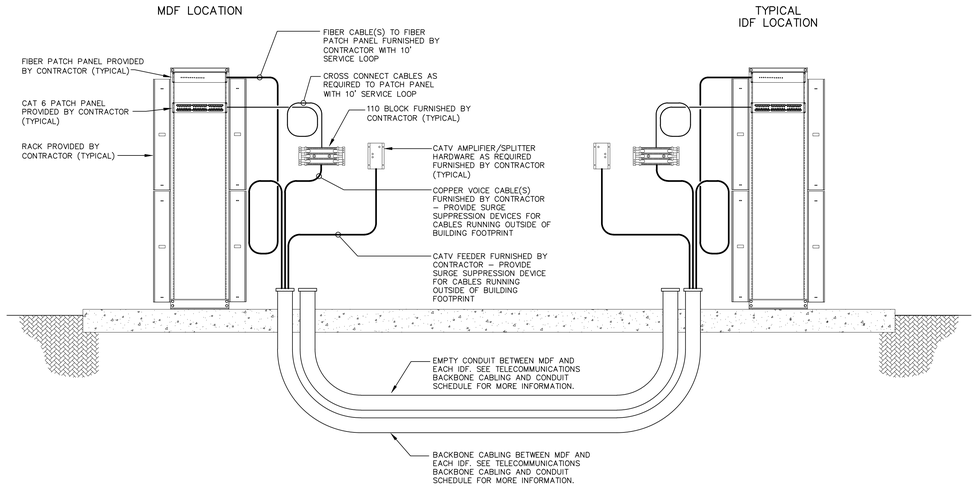
GMC # ABHM220021
SBC # [ENTER VALUE]

ALABAMA LICENSED PROFESSIONAL ENGINEER ROBERT C. RENFRO No. 24463
9.9.24

PANELBOARD SCHEDULES

E2.02
sheet of

JACKSON, RENFRO & ASSOCIATES, INC.
ELECTRICAL ENGINEERING & PLANNING
141 VILLAGE STREET • SUITE 1 • BIRMINGHAM, ALABAMA • 35242
ROBERT RENFRO, PE
bobby@jrae.com
(O) 205.536.7114
(F) 205.995.1078
JRA JOB NO: 222146



DETAIL "E-SCB"
STRUCTURED CABLING BACKBONE TYPICAL WIRING DIAGRAM
SCALE : NONE

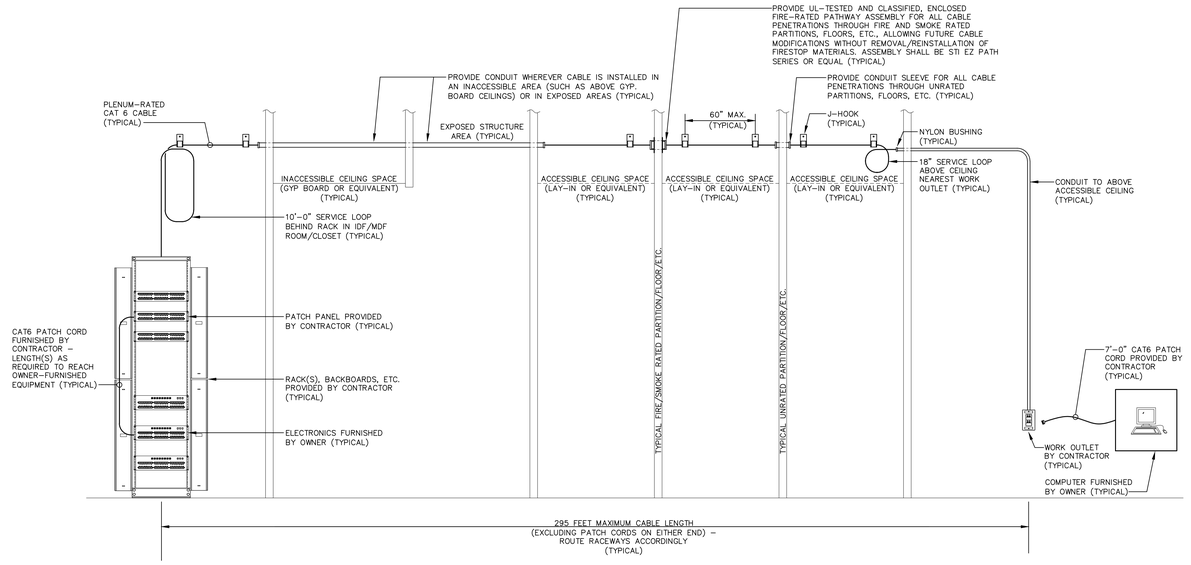
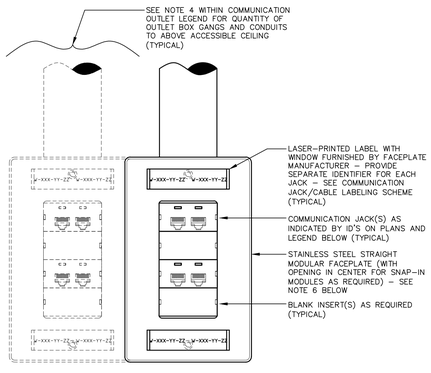
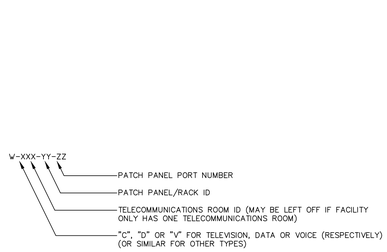


DIAGRAM "E-SCH"
STRUCTURED CABLING HORIZONTAL TYPICAL WIRING DIAGRAM
SCALE : NONE



COMMUNICATION OUTLET ELEVATION



COMMUNICATION JACK/CABLE LABELING SCHEME

DETAIL "E-CO"
COMMUNICATION OUTLET
SCALE : NONE

COMMUNICATION OUTLET LEGEND

JACK ID(S) SHOWN ON PLANS	JACK TYPE(S)	ASSOCIATED HOMERUN CABLING FROM JACK (SEE NOTE 3 BELOW)	HOMERUN CABLING TO (UNLESS SHOWN OTHERWISE ON PLANS)	REMARKS
1A	ONE (1) WHITE RCA JACK	2-CONDUCTOR, 20 GAUGE, UNSHIELDED SPEAKER CABLING	ASSOCIATED SPEAKERS (SEE PLANS FOR LOCATIONS)	
2A	ONE (1) WHITE RCA JACK (LEFT) ONE (1) RED RCA JACK (RIGHT)	2 SETS OF: 2-CONDUCTOR, 20 GAUGE, UNSHIELDED SPEAKER CABLING	ASSOCIATED SPEAKERS (SEE PLANS FOR LOCATIONS)	
*C	"F" CONNECTOR TELEVISION JACK(S)	RG-6/U COAXIAL CABLE(S)	NEAREST CATV SYSTEM DIRECTIONAL COUPLER OR FRONT-END EQUIPMENT AS DIR. BY SUPPLIER	
*D	RJ45 DATA JACK(S)	CAT6 DATA CABLE(S).	NEAREST DATA PATCH PANEL	
*P	ONE (1) C2G RAPIDRUN #42419 HDMI PASSIVE DECORA JACK & ONE (1) C2G RAPIDRUN #60042 TWO-GANG MULTI-FORMAT WALL PLATE WITH VGA, 3.5MM & RCA AUDIO/VIDEO JACKS – IF AT FLOORBOX OR POKE-THU, USE ADAPTER PLATES AS REQUIRED.	SEE "PR" JACK/OUTLET REQUIREMENTS	SEE "PR" JACK/OUTLET REQUIREMENTS	SEE NOTE 8 BELOW
PR	ONE (1) C2G RAPIDRUN HDMI #42419 PASSIVE DECORA JACK (USE ACTIVE DECORA JACK #42422 IF CABLE LENGTH TO #P OUTLET IS MORE THAN 35') & ONE (1) C2G RAPIDRUN #60042 TWO-GANG MULTI-FORMAT WALL PLATE WITH VGA, 3.5MM & RCA AUDIO/VIDEO JACKS	ONE (1) C2G RAPIDRUN #4118* DIGITAL PLENUM RUNNER CABLE & ONE (1) C2G RAPIDRUN #6001* PLENUM MULTI-FORMAT ALL-IN-ONE RUNNER CABLE	ASSOCIATED LOW VOLTAGE "*P" OUTLET AT ALL/FLOOR	SEE NOTES 8 & 9 BELOW
*V	RJ45 VOICE JACK(S)	CAT6 VOICE CABLE(S).	NEAREST TELEPHONE PATCH PANEL/BACKBOARD	
1VD	ONE (1) RJ45 VOICE JACK	ONE (1) CAT6 VOICE CABLE.	NEAREST TELEPHONE PATCH PANEL/BACKBOARD	SEE NOTE 6 BELOW

NOTES:
1. THE ASTERISK "*" WITHIN THE JACK ID SECTION ABOVE REPRESENT THE QUANTITIES OF EACH JACK/CABLE TYPE. FOR EXAMPLE, "3D" REPRESENTS THREE (3) DATA JACKS/CABLES.
2. THE JACK IDENTIFIERS SHOWN ABOVE MAY BE COMBINED TOGETHER ON PLANS. FOR EXAMPLE, THE IDENTIFIER "1V2D1C" REPRESENTS ONE (1) VOICE JACK/CABLE, TWO (2) DATA JACKS/CABLES AND ONE (1) COAXIAL TV JACK/CABLE. OUTLETS MAY CONSIST OF ANY COMBINATION OF THE ABOVE JACK TYPES.
3. ALL LOW VOLTAGE CABLING SHALL BE PLENUM-RATED.
4. THE QUANTITY OF OUTLET BOX GANGS AND CONDUITS FOR EACH COMMUNICATION OUTLET ASSEMBLY SHALL BE AS FOLLOWS:
   1-4 JACKS: ONE GANG WITH ONE 1" CONDUIT TO ABOVE ACCESSIBLE CEILING SPACE (AND IN OTHER INACCESSIBLE OR EXPOSED AREAS).
   5-8 JACKS: TWO GANGS WITH TWO 1" CONDUITS TO ABOVE ACCESSIBLE CEILING SPACE (AND IN OTHER INACCESSIBLE OR EXPOSED AREAS).
   9-12 JACKS: THREE GANGS WITH THREE 1" CONDUITS TO ABOVE ACCESSIBLE CEILING SPACE (AND IN OTHER INACCESSIBLE OR EXPOSED AREAS).
5. PROVIDE A NYLON BUSHING ON EACH END OF EACH CONDUIT (SPECIFIED WITHIN NOTE 4 ABOVE) TO PROTECT CABLES.
6. TYPE "1VW" OUTLETS SHALL BE FURNISHED WITH STAINLESS STEEL WALL-MOUNT TELEPHONE PLATES WITH MOUNTING STUDS AND RECESSED JACKS AND SHALL BE MOUNTED AT 54" A.F.F. UNLESS NOTED OTHERWISE.
7. COMMUNICATION OUTLET SHALL BE LOCATED A MAXIMUM OF 8 INCHES FROM THE ADJACENT POWER OUTLET.
8. ALL AV CABLING TYPES SHALL BE CONFIRMED WITH OWNER PRIOR TO ORDERING MATERIALS.
9. COORDINATE LOCATION OF ALL OUTLETS AT PROJECTOR WITHIN PROJECTOR BASE WHERE POSSIBLE.

DETAIL "E-MSG"
MAIN SERVICE GROUNDING
SCALE : NONE

DETAIL NOTES

1. ALL GROUNDING ELECTRODE CONDUCTORS AND MAIN BONDING JUMPERS SHALL BE INSULATED COPPER, SIZED IN ACCORDANCE WITH NEC TABLE 250.66 UNLESS NOTED OTHERWISE.
2. THE INTERSYSTEM BONDING JUMPER SHALL BE INSULATED COPPER, SIZED TO MATCH THE GROUNDING ELECTRODE CONDUCTOR OR #6AWG, WHICHEVER IS GREATER.
3. ADDITIONAL GROUND RODS SHALL BE INSTALLED A MINIMUM OF SIX (6) FEET APART AND CONNECTED BY GROUNDING ELECTRODE CONDUCTORS UNTIL THE GROUND RESISTANCE DOES NOT EXCEED FIVE (5) OHMS.
4. ALL GROUNDING CONDUCTORS SHALL BE INSTALLED IN CONDUIT (TYPE PER SPECIFICATION REQUIREMENTS) UNLESS SPECIFICALLY NOTED OTHERWISE. METAL CONDUITS SHALL BE GROUNDED PER NEC REQUIREMENTS.
5. REFER TO "GROUNDING" SPECIFICATIONS SECTION FOR ADDITIONAL GROUNDING REQUIREMENTS.
6. THE CONTRACTOR MAY "DAISY-CHAIN" IDF'S TOGETHER WITH A #4/0G. THIS DETAIL IS NOT INTENDED TO REQUIRE A #4/0G FROM EACH IDF TO THE MDF. THE INTENT OF THIS DETAIL TO TO BOND TOGETHER THE SUPPLEMENTAL GROUND BUS IN THE MDF, ALL IDF'S, AND THE MAIN SERVICE GROUND WITH A #4/0G.
7. WHERE AN IDF IS LOCATED IN A SEPARATE BUILDING FROM THE MDF, THE IDF SHALL ALSO BE BONDED TO THE SERVICE GROUND FOR THE SEPARATE BUILDING CONTAINING THE IDF. THIS REQUIREMENT IS IN ADDITION TO THE BOND TO THE MDF.
8. THE EQUIPMENT WITHIN EACH MDF AND IDF SHALL BE BONDED TO THE SUPPLEMENTAL GROUND BUS IN ACCORDANCE WITH THE STRUCTURED CABLING SPECIFICATIONS, EQUIPMENT SUPPLIER'S DIRECTION AND CODE REQUIREMENTS.

GMC
2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM

ISSUE | DATE
BID SET | 09/09/2024

DRAWN BY: SNJ
CHECKED BY: RCR

TUSCALOOSA COUNTY DHR
PROJECT ADDRESS

GMC # ABHM220021
SBC # [ENTER VALUE]

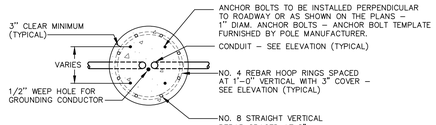
ALABAMA LICENSED PROFESSIONAL ENGINEER ROBERT C RENFRO No. 24482 9.9.24

ELECTRICAL DETAILS

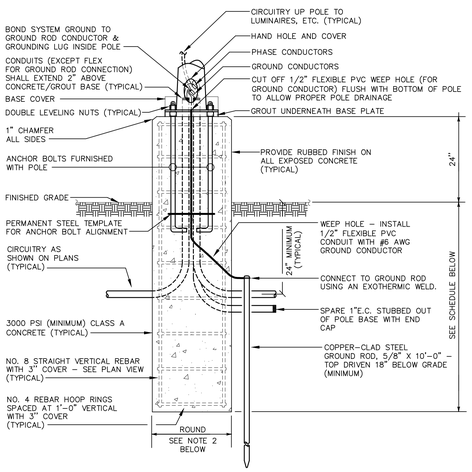
E3.01 sheet of

JACKSON, RENFRO & ASSOCIATES, INC.
ELECTRICAL ENGINEERING & DESIGN
161 VILLAGE STREET • SUITE E • BIRMINGHAM, ALABAMA • 35242
ROBERT RENFRO, PE
bobby@jrase.com
(O) 205.536.7114
(F) 205.995.1078
JRA JOB NO. 221146

7/22/2022 11:40:12 AM TEMPLATE VERSION: 2021.1



PLAN VIEW



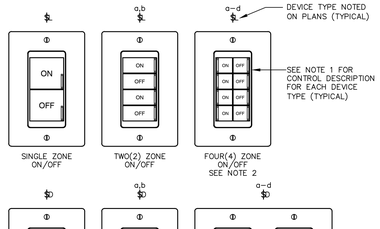
ELEVATION

DETAIL "E–LP1" EXPOSED LIGHT POLE BASE

SCALE : NONE

DETAIL NOTES
1. THIS CONTRACTOR SHALL CONFIRM SOIL CONDITIONS PRIOR TO BID OR INSTALLATION. IF SOIL CONDITIONS/TYPES ARE DIFFERENT THAN THE SPECIFIC TYPES INDICATED BELOW, OR THE POLE HEIGHTS ARE IN EXCESS OF THOSE LISTED BELOW, OR THE BASIC WIND SPEED FOR THE PROPOSED POLE LOCATION (PER ASCE 7 BASIC WIND SPEED MAPS) IS IN EXCESS OF 100MP, OR THE COMBINED E.P.A. OF ALL LUMINAIRES/ARMS/ACCESSORIES INSTALLED ON A POLE IS IN EXCESS OF 5.5 S.F., THE CONTRACTOR SHALL RETAIN A QUALIFIED STRUCTURAL ENGINEER (LICENCED IN THE STATE OF THE PROJECT) TO PROVIDE A PROJECT–SPECIFIC STRUCTURAL DESIGN FOR THE PROPOSED POLE BASE(S), AND SHALL INCLUDE ALL COSTS (FOR THE DESIGN AND THE REQUIRED POLE BASES) IN THE BID. 2. MINIMUM POLE BASE DIAMETER SHALL BE THE GREATER OF THE FOLLOWING; A. ANCHOR BOLT CIRCLE DIAMETER PLUS 8" (TO PROVIDE MINIMUM 4" COVER OVER ALL ANCHOR BOLTS). B. 20" DIAMETER. C. DIAMETER AS REQUIRED BY SOIL CONDITIONS OR BY POLE SUPPLIER. 3. CONTRACTOR SHALL VERIFY LOCATIONS OF ALL UNDERGROUND UTILITIES OR OBSTRUCTIONS TO AVOID CONFLICTS PRIOR TO INSTALLATION OF LIGHT POLE BASE(S). 4. POLE SHALL BE RATED TO WITHSTAND THE WIND SPEED SPECIFIED FOR THE SPECIFIC PROJECT SITE LOCATION PER LATEST VERSION OF ASCE 7 BASIC WIND SPEED MAPS OR APPLICABLE LOCAL BUILDING CODE REQUIREMENTS (WHICHEVER IS MORE STRINGENT), WITH 1.3 GUST FACTOR WITH ALL LUMINAIRES & ACCESSORIES INSTALLED.

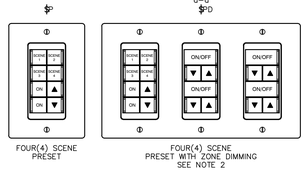
POLE BASE DIMENSIONS				
POLE HEIGHT	MINIMUM BASE DEPTH (BELOW GRADE) (SEE NOTE 1 ABOVE)			BASE DIAMETER
	CLAYEY SOILS (CL, ML, CH, MH)	SANDY SOILS (SW, SP, SM, SC, GM, GC)	GRAVELY SOILS (GW, GP)	
0 – 15 FT.	6'–0"	5'–0"	4'–6"	SEE NOTE 2 ABOVE
16 – 20 FT.	7'–0"	5'–6"	5'–0"	SEE NOTE 2 ABOVE
21 – 25 FT.	8'–0"	6'–0"	5'–6"	SEE NOTE 2 ABOVE
26 – 30 FT.	8'–6"	7'–0"	6'–6"	SEE NOTE 2 ABOVE
31 – 35 FT.	9'–0"	7'–6"	7'–0"	SEE NOTE 2 ABOVE
36 – 40 FT.	10'–0"	8'–0"	7'–6"	SEE NOTE 2 ABOVE
41 – 45 FT.	10'–6"	8'–6"	8'–0"	SEE NOTE 2 ABOVE
46 – 50 FT.	11'–0"	9'–0"	8'–6"	SEE NOTE 2 ABOVE



DETAIL "E–LCS" TYPICAL DIGITAL LIGHTING CONTROL STATION LAYOUT

SCALE : NONE

DIAGRAM NOTES
1. ON/OFF CONTROLS SHALL INCLUDE ON/OFF CONTROL FOR EACH ZONE. DIMMING CONTROLS SHALL INCLUDE ON/OFF AND RAISE/LOWER CONTROLS FOR EACH ZONE. PRESET STATIONS SHALL INCLUDE FOUR(4) SELECTABLE SCENES, MASTER ON/OFF AND MASTER RAISE/LOWER CONTROLS. 2. WHERE MORE THAN FOUR(4) ZONES ARE REQUIRED ON PLANS, FURNISH ADDITIONAL CONTROL STATIONS AS REQUIRED FOR INDEPENDENT CONTROL OF EACH ZONE. ADDITIONAL CONTROL STATIONS SHALL BE GANGED TOGETHER UNDER A SINGLE COVERPLATE. CONTRACTOR SHALL INSTALL OUTLET BOX LARGE ENOUGH TO ACCOMMODATE REQUIRED NUMBER OF CONTROL STATIONS. 3. UNLESS SELECTED OTHERWISE BY THE ARCHITECT DURING THE SUBMITTAL PROCESS, ALL COVERPLATES SHALL MATCH OTHER DEVICE PLATES (TYPICALLY STAINLESS STEEL), AND ALL DEVICES SHALL MATCH OTHER DEVICES (TYPICALLY GRAY). REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION REGARDING FINISHES. 4. REFER TO DETAIL "E–RC" FOR CABLING AND CONNECTION REQUIREMENTS FOR EACH CONTROL STATION. 5. ALL BUTTONS SHALL BE IDENTIFIED AS SHOWN ON THIS DETAIL. GENERIC BUTTONS WITHOUT DESIGNATIONS NOTED ABOVE ARE NOT ALLOWED. SUBMIT LAYOUT FOR EACH PROPOSED CONTROL STATION FOR REVIEW DURING SUBMITTAL PROCESS. SUBMITTALS WITHOUT THIS INFORMATION WILL BE REJECTED WITHOUT REVIEW.



CCTV SYSTEM RISER DIAGRAM

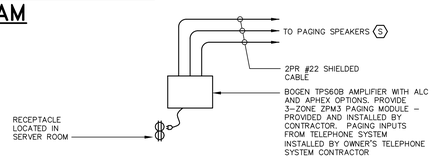
SCALE : NONE

LIGHTING CONTROL PANEL RISER DIAGRAM

SCALE : NONE

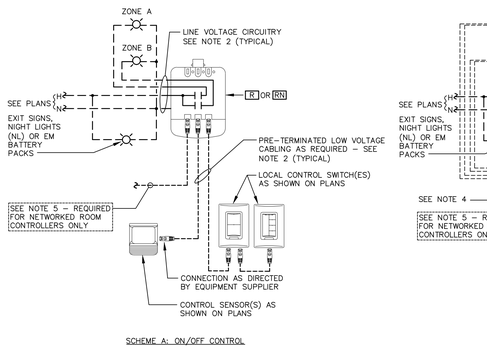
SECURITY SYSTEM RISER DIAGRAM

SCALE : NONE



PAGING SYSTEM RISER DIAGRAM

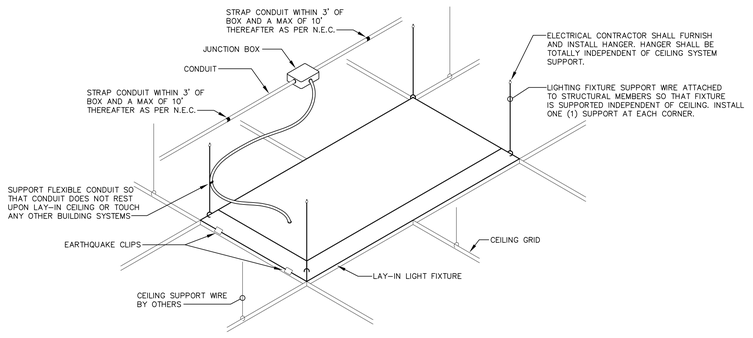
SCALE : NONE



DETAIL "E–RC" TYPICAL ROOM DIGITAL LIGHTING CONTROL WIRING DIAGRAM(S)

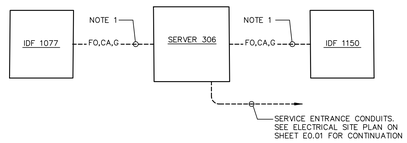
SCALE : NONE

DIAGRAM NOTES
1. DEVICES SHOWN ON THIS DIAGRAM ARE TYPICAL ONLY. EXACT SWITCHING, COMPONENTS, CONNECTIONS, DIMMING TYPE, ETC. WILL VARY. REFER TO PLANS FOR EXACT DEVICES REQUIRED IN EACH SPACE. 2. ALL CIRCUITRY/CABLING SHALL BE CONCEALED. LOW VOLTAGE CABLING MAY BE INSTALLED WITHOUT CONDUIT WHERE ABOVE ACCESSIBLE CEILINGS (IF SUPPORTED EVERY 60" MAXIMUM WITH J–HOOKS). ALL LINE VOLTAGE WIRING SHALL BE INSTALLED IN CONDUIT (UNLESS SPECIFICALLY NOTED OTHERWISE) PER SPECIFICATION REQUIREMENTS. 3. THIS DIAGRAM SHOWS GENERAL WIRING REQUIREMENTS ONLY. CONTRACTOR SHALL PROVIDE ALL LOW VOLTAGE CONNECTIONS, LINE VOLTAGE CONNECTIONS, EQUIPMENT, ETC. AS RECOMMENDED BY THE LIGHTING CONTROL SYSTEM PROVIDER AS REQUIRED FOR A FULLY–FUNCTIONAL DIGITAL LIGHTING CONTROL SYSTEM. 4. CONTRACTOR SHALL FURNISH AND INSTALL ALL LOW VOLTAGE CONTROL CABLING OR ADDITIONAL CONDUCTOR(S) FROM 0–10V DIMMING ROOM CONTROLLER(S) TO ALL 0–10V DIMMED LIGHT FIXTURES AS REQUIRED FOR FULL DIMMING CONTROL OF ALL OVERHEAD LIGHTING THROUGHOUT ASSOCIATED SPACE. EXACT CONTROL CABLING WILL VARY DEPENDING ON FIXTURE DIMMING TYPE. MULTI–CONDUCTOR, PLENUM RATED CABLE SHALL BE USED FOR ALL LOW VOLTAGE CABLING. 5. FOR NETWORKED ROOM CONTROLLERS, CONTRACTOR SHALL FURNISH NETWORK CABLING TO ASSOCIATED MASTER LIGHTING CONTROL SYSTEM AS REQUIRED FOR TIME SWEEP–STYLE AUTOMATIC LIGHTING SHUTOFF – PROVIDE ALL ADDITIONAL COMPONENTS SUCH AS NETWORK BRIDGE(S)/GATEWAY(S) AS REQUIRED.



DETAIL "E–FS" LAY–IN FIXTURE SUPPORT

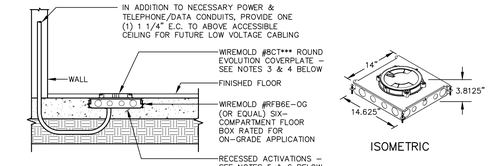
SCALE : NONE



STRUCTURED CABLING RISER DIAGRAM

SCALE : NONE

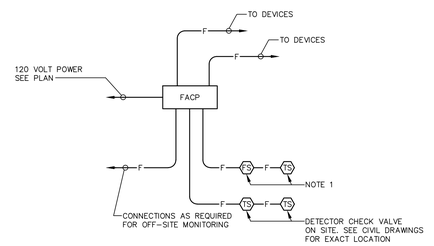
STRUCTURED CABLING SYSTEM NOTES
1. 6–STRAND MULTI–MODE FIBER CABLE, CATV FEEDER CABLE, AND 1#4/0G IN 4" CONDUIT AND FOUR (4) SPARE 4" EMPTY CONDUIT. PROVIDE INNERDUCT IN BOTH CONDUITS.



DETAIL "E–FB1" MULTI–SERVICE FLOOR BOX (MEDIUM SIZE)

SCALE : NONE

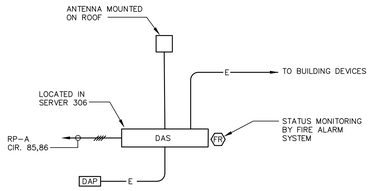
DETAIL NOTES
1. THE EXACT LOCATIONS AND ORIENTATIONS OF ALL FLOOR BOXES SHALL BE VERIFIED BY THE CONTRACTOR WITH THE ARCHITECT PRIOR TO ROUGH–IN. 2. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING PENETRATIONS THROUGH SLABS AND OPENINGS/CONDUITS WITHIN SLABS WITH THE INSTALLER OF THE SLABS PRIOR TO ROUGH–IN. 3. ALL COVERPLATE MATERIALS/FINISHES SHALL BE AS SELECTED BY THE ARCHITECT. CONTRACTOR SHALL PROVIDE CARPET/TILE CUTOUT INSERTS IN COVERPLATE LID (TO MATCH ADJACENT CARPET/TILE) WHERE LID HAS AN INSERT AREA. 4. ALL COVER FLANGE OPTIONS SHALL GENERALLY BE AS FOLLOWS, BUT SHALL BE SUBMITTED TO THE ARCHITECT FOR REVIEW/APPROVAL PRIOR TO ORDERING FLOOR BOXES: a. CARPET AND VCT FLOORING: FLANGED TRIM. b. EXPOSED CONCRETE, WOOD, TILE OR SIMILAR FLOORING (WITH GROUTING): FLANGELESS TRIM. 5. EACH FLOOR BOX SHALL BE PROVIDED WITH TWO (2) 20A–125V–1P, GROUNDING NEMA 5–20R DUPLEX POWER RECEPTACLES CONNECTED TO THE CIRCUITS INDICATED ON THE PLANS, UNLESS NOTED OTHERWISE. 6. EACH FLOOR BOX SHALL BE PROVIDED WITH COMMUNICATION JACKS AND ASSOCIATED LOW VOLTAGE CABLING AS INDICATED BY "1V2D" OR SIMILAR NOTATIONS ON PLANS. CONTRACTOR SHALL REFER TO THE COMMUNICATION OUTLET LEGEND AT DETAIL "E–CO" FOR A DESCRIPTION OF ALL ASSOCIATED JACK & CABLE TYPES.



FIRE ALARM SYSTEM RISER DIAGRAM

SCALE : NONE

FIRE ALARM SYSTEM NOTES
1. THIS CONTRACTOR SHALL REVIEW SPRINKLER SYSTEM SHOP DRAWINGS AND CONNECT ALL DEVICES REQUIRING CONNECTION TO THE FIRE ALARM SYSTEM TO INCLUDE FLOW SWITCHES, TAMPER SWITCHES, PRESSURE SENSORS, ETC. WHETHER SPECIFICALLY SHOWN ON THE ELECTRICAL DRAWINGS OR NOT. 2. ALL FIRE ALARM WIRING SHALL BE INSTALLED IN 3/4 INCH CONDUIT (MINIMUM).



EMERGENCY RESPONDER RADIO SYSTEM RISER DIAGRAM

SCALE : NONE

EMERGENCY RESPONDER RADIO SYSTEM NOTES
1. THIS CONTRACTOR SHALL SURVEY BUILDING ONCE STRUCTURE IS COMPLETE AND IMMEDIATELY PRIOR TO CEILINGS BEING INSTALLED TO DETERMINE RADIO COVERAGE IN ALL AREAS OF THE BUILDING. FURNISH REPORT TO THE ARCHITECT INDICATING SIGNAL AREAS AT ALL AREAS OF THE BUILDING(S). IF IT IS DETERMINED THAT AN EMERGENCY RADIO COVERAGE IS REQUIRED, IT WILL BE INSTALLED UNDER THE DAS SYSTEM ALLOWANCE OF THE SPECIFICATIONS. THE SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 275319 OF THE SPECIFICATIONS. SYSTEM SHALL INCLUDE A COMPLETE OPERATING SYSTEM CONSISTING OF NECESSARY AMPLIFIERS, FILTERS, SURGE SUPPRESSION, CABLING, ANTENNA, ETC.

GMC
2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM

ISSUE	DATE
BID SET	09/09/2024

DRAWN BY: SNJ
CHECKED BY: RCR

TUSCALOOSA COUNTY DHR
PROJECT ADDRESS
GMC # ABHM220021
SBC # [ENTER VALUE]

ALABAMA
No. 24463
PROFESSIONAL ENGINEER
ROBERT C RENFRO
9.9.24

ELECTRICAL DETAILS & RISER DIAGRAMS

E3.02
sheet of

JACKSON, RENFRO & ASSOCIATES, INC
ELECTRICAL ENGINEERING & DESIGN
161 VILLAGE STREET • SUITE 1 • BIRMINGHAM, ALABAMA • 35242
ROBERT RENFRO, PE
bobby@jrae.com
(O) 205.536.7114
(F) 205.995.1078
JRA JOB NO. 222146

7/22/2022 11:40:12 AM TEMPLATE VERSION: 2021.1

LIGHTING FIXTURE SCHEDULE

MARK	MANUFACTURER	CATALOG NUMBER	VOLTAGE	LAMPS WATTS	LAMPS LUMENS	LAMPS TYPE	MOUNTING HEIGHT	MOUNTING TYPE	REMARKS
A1	LITHONIA COLUMBIA DAY-BRITE	2ALL4 CTRF-30L-EZ1	277	25	3,000	LED 3500K	CEILING	RECESSED	
A1E	LITHONIA COLUMBIA DAY-BRITE	2ALL4 CTRF-30L-EZ1-EL	277	25	3,000	LED 3500K	CEILING	RECESSED	EM
A2	LITHONIA COLUMBIA DAY-BRITE	2ALL4 CTRF-40L-EZ1	277	32	4,000	LED 3500K	CEILING	RECESSED	
A2E	LITHONIA COLUMBIA DAY-BRITE	2ALL4 CTRF-40L-EZ1-EL	277	32	4,000	LED 3500K	CEILING	RECESSED	EM
A3	LITHONIA COLUMBIA DAY-BRITE	2ALL4 CTRF-48L-EZ1	277	40	4,800	LED 3500K	CEILING	RECESSED	
B1	LITHONIA COLUMBIA DAY-BRITE	2ALL2-20L-EZ1	277	18	2,000	LED 3500K	CEILING	RECESSED	
B1E	LITHONIA COLUMBIA DAY-BRITE	2ALL2-20L-EZ1	277	18	2,000	LED 3500K	CEILING	RECESSED	EM
B2	LITHONIA COLUMBIA DAY-BRITE	2ALL2-33L-EZ1	277	29	3,300	LED 3500K	CEILING	RECESSED	
B2E	LITHONIA COLUMBIA DAY-BRITE	2ALL2-33L-EZ1-EL	277	29	3,300	LED 3500K	CEILING	RECESSED	EM
CF	BIGASS FANS	HAIKU-60	120	PROVIDED BY MANUFACTURER			AS DIRECTED BY ARCHITECT	PENDANT	FSA
D	GOTHAM PRESCOLITE OMEGA	EVO4-35/15-AR-WD-LSS-MVOLT-EZ1	277	14	1527	LED 3500K	CEILING	RECESSED	FSA
DE	GOTHAM PRESCOLITE OMEGA	EVO4-35/15-AR-WD-LSS-MVOLT-EZ1-EL	277	14	1527	LED 3500K	CEILING	RECESSED	EM, FSA
D2	GOTHAM PRESCOLITE OMEGA	EVO4-40/15-AR-WD-LSS-MVOLT-EZ1	277	14	1527	LED 4000K	CEILING	RECESSED	FSA
D2E	GOTHAM PRESCOLITE OMEGA	EVO4-40/15-AR-WD-LSS-MVOLT-EZ1-EL	277	14	1527	LED 4000K	CEILING	RECESSED	EM, FSA
E	GOTHAM PRESCOLITE OMEGA	EVO4-35/07-AR-WD-LSS-EZ1	277	8	800	LED 3500K	CEILING	RECESSED	FSA
EE	GOTHAM PRESCOLITE OMEGA	EVO4-35/07-AR-WD-LSS-EZ1-EL	277	8	800	LED 3500K	CEILING	RECESSED	EM, FSA
ES	GOTHAM PRESCOLITE OMEGA	EVO4SH-35/20-DFR-SMO	277	20	1,684	LED 3500K	CEILING	RECESSED	NON-CONDUCTIVE
F2	LITHONIA COLUMBIA DAY-BRITE	WL2-22L	277	21	2,200	LED 3500K	CEILING	SURFACE	
F4	LITHONIA COLUMBIA DAY-BRITE	WL4-30L	277	29	3,000L	LED 3500K	CEILING	SURFACE	
F4E	LITHONIA COLUMBIA DAY-BRITE	WL4-30L-EL7L	277	29	3,000L	LED 3500K	CEILING	SURFACE	EM
G	BOCK LIGHTING	POINTER-01 LVMV1-950 GN18J-4R	277	10	950	LED 4000K	ABOVE BUILDING ENTRY SIGN	OUTLET BOX	FSA WET LOCATION
K	VISA LIGHTING	OW1307-L40K(L)-MVOLT	277	25	2,200	LED 4000K	AS DIRECTED BY ARCHITECT	OUTLET BOX	FSA
P	BROWNLEE LIGHTING	2600-48-**-H63-**-35K-DIM TO 1%	277	63	7,428	LED 3500K	AS DIRECTED BY ARCHITECT	PENDANT	FSA
R	LUMINAIRE	APX13-NODIM-25W-4000K-FOP	277	25	2,096	LED 4000K	CEILING	SURFACE	FSA
SL	MARK ARCHITECTURAL LIGHTING	SL4L-LOP-*FT-RLP-TG-35K-600LMF-LENGTH AS INDICATED ON PLANS	277	6W/FT	644 L/FT	LED 3500K	CEILING	RECESSED	MOUNTED IN GRID
SL2	MARK ARCHITECTURAL LIGHTING	SL4L-LOP-*FT-RLP-FL-35K-600LMF-LENGTH AS INDICATED ON PLANS	277	6W/FT	644 L/FT	LED 3500K	CEILING	RECESSED	MOUNTED IN GYPSUM
T	BROWNLEE LIGHTING	5165-24-**-H16-35K	277	16	1,874	LED 3500K	ABOVE MIRROR	OUTLET BOX	FSA
T2	PROVIDE $800 ALLOWANCE		277	50 MAX	TBD	LED 3500K	ABOVE MIRROR	OUTLET BOX	FSA
UC	LED LINEAR	LUMINARIS - LD15 CONTOUR 5560 PROVIDE WITH TRANSFORMER	277	15	485 L/FT	LED 3500K	UNDER CABINET	OUTLET BOX	UC
W	LITHONIA COLUMBIA DAY-BRITE	WST-LED-P1-40K-VF	277	12	1,494	LED 4000K	AS DIRECTED BY ARCHITECT	OUTLET BOX	FSA
WE	LITHONIA COLUMBIA DAY-BRITE	WST-LED-P1-40K-VF-E7WH	277	12	1,494	LED 4000K	AS DIRECTED BY ARCHITECT	OUTLET BOX	EM, FSA
X1	LITHONIA COLUMBIA DAY-BRITE	EDG-1-GMR-EL	277	FURNISHED BY MANUFACTURER			CEILING OR ABOVE DOOR	OUTLET BOX	EMX, FSA
X2	LITHONIA COLUMBIA DAY-BRITE	EDG-2-GMR-EL	277	FURNISHED BY MANUFACTURER			CEILING OR ABOVE DOOR	OUTLET BOX	EMX, FSA
Y2	LITHONIA KIM	DSX1 LED-P3-40K-T2M-MVOLT-SPA-G1	277	102	12,548	LED 4000K	MOUNT ON 28 FOOT SQUARE STEEL POLE. SEE DETAIL "E-LP1"		FSA
Y4	LITHONIA KIM	DSX1 LED-P3-40K-TFTM-MVOLT-SPA-G1	277	102	12,575	LED 4000K	MOUNT ON 28 FOOT SQUARE STEEL POLE. SEE DETAIL "E-LP1"		FSA
Z	VISTA PROFESSIONAL LIGHTING	1045-XX-MF-40-B-MV-ND-HS	277	21	1,807	LED 4000K	GRADE	CONCRETE ANCHOR BASE	FSA
Z1	VISTA PROFESSIONAL LIGHTING	1045-XX-WF-40-A-MV-ND	277	16	1,163	LED 4000K	GRADE	CONCRETE ANCHOR BASE	FSA

LIGHTING FIXTURE SCHEDULE GENERAL NOTES:

1. CONTRACTOR SHALL COORDINATE ALL FIXTURE MOUNTING PROVISIONS WITH THE ASSOCIATED CEILING TYPE(S) PRIOR TO ORDERING FIXTURES.
2. ALL FIXTURES AND BALLASTS/DRIVERS SHALL BE RATED FOR OPERATION IN AMBIENT TEMPERATURES UP TO 55 DEGREES CELSIUS.
3. TO ENSURE PROPER COORDINATION AND LONG TERM SUPPORT FOR THE OWNER, ALL LIGHTING FIXTURES SHALL BE PURCHASED THROUGH MANUFACTURER'S REPRESENTATIVES AND DISTRIBUTORS LOCATED WITHIN SIXTY (60) MILES OF THE PROJECT SITE. SUBMITTALS RECEIVED THAT DO NOT COMPLY WITH THIS REQUIREMENT WILL BE REJECTED WITHOUT REVIEW. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DELAYS CAUSED BY NON-COMPLIANCE WITH THIS REQUIREMENT.

LIGHTING FIXTURE SCHEDULE KEYED NOTES:

EM EMERGENCY FIXTURE. PROVIDE EMERGENCY BATTERY PACK RATED FOR AT LEAST 500 LUMENS.
EMX EMERGENCY FIXTURE. PROVIDE EMERGENCY BATTERY PACK RATED FOR AT LEAST 90 MINUTES OF OPERATION.
FSA PROVIDE FINISH AS SELECTED BY ARCHITECT.
UC FURNISH THE GREATER QUANTITY OF ONE (1) TYPE "UC" FIXTURE PER CABINET SECTION OR ONE PER 24" OF LINEAR CABINET FOR LENGTH OF CABINET INDICATED ON PLANS. FIELD-COORDINATE EXACT LOCATIONS WITH CABINETRY TO COORDINATE WITH UNDERCABINET MOUNTING STRUCTURE AND TO PROVIDE UNIFORM UNDERCABINET LIGHTING LEVELS

GENERAL ELECTRICAL LEGEND

NORMAL EMERGENCY

FIXTURE OUTLET – SURFACE OR PENDANT MOUNTED LIGHT FIXTURE.

FIXTURE OUTLET – RECESSED LIGHT FIXTURE.

FIXTURE OUTLET – LINEAR – SURFACE OR PENDANT MOUNTED LIGHT FIXTURE.

FIXTURE OUTLET – LINEAR – RECESSED LIGHT FIXTURE.

FIXTURE OUTLET – WALL MOUNTED LIGHT FIXTURE.

FIXTURE OUTLET – POLELIGHT – SINGLE FIXTURE.

OR FIXTURE OUTLET – EXIT SIGN – CEILING OR WALL MOUNTED AS INDICATED – QUANTITY AND ORIENTATION OF FACES AND DIRECTIONAL ARROWS AS INDICATED.

FIXTURE OUTLET DESIGNATIONS:

A FIXTURE TYPE "A" – MAY BE USED WITH OTHER TYPES.
b SWITCH LEG TO WHICH FIXTURE IS CONNECTED – MAY BE USED WITH OTHER LOWER-CASE LETTERS.
2 CIRCUIT NUMBER – MAY BE USED WITH OTHER NUMBERS.
DL INDICATES FIXTURE CONTROLLED BY DAYLIGHTING SENSOR.
EM EMERGENCY FIXTURE.
NL NIGHT LIGHT – DO NOT SWITCH.
PC INDICATES FIXTURE CONTROLLED BY PHOTO-CELL.
SL SECURITY LIGHT – DUSK-TO-DAWN OPERATION.

$ SWITCH OUTLET – S.P.S.T. – 20A – 120-277VAC.

$3 SWITCH OUTLET – 3 WAY – 20A – 120-277VAC.

$4 SWITCH OUTLET – 4 WAY – 20A – 120-277VAC.

$a SWITCH OUTLET – CONTROLS OUTLET "a", ETC.

$K SWITCH OUTLET – MANUAL MOTOR STARTER – TOGGLE TYPE – 2 POLE – SQUARE "D" TYPE K01 WITH ENCLOSURE AS REQUIRED BY APPLICATION – PROVIDE LOCK-OFF HARDWARE.

$3K SWITCH OUTLET – MANUAL MOTOR STARTER – TOGGLE TYPE – 3 POLE – SQUARE "D" TYPE K02 WITH ENCLOSURE AS REQUIRED BY APPLICATION – PROVIDE LOCK-OFF HARDWARE.

$O SWITCH OUTLET – OCCUPANCY SENSOR WITH MANUAL OVERRIDE – S.P.S.T. – 120-277VAC – P.I.R. SENSOR – ACUITY N-LIGHT OR EQUAL – RATED 800W AT 120VAC AND 1200W AT 277VAC – GREY WITH STAINLESS STEEL COVERPLATE.

$L LIGHTING CONTROL SYSTEM – SWITCH OUTLET – LOW VOLTAGE – DIGITAL – BUTTONS AS REQUIRED FOR INDEPENDENT ON/OFF CONTROL OF EACH ZONE IN SPACE – CONNECT TO ASSOCIATED ROOM CONTROLLER PER DIAGRAM "E-RC".

$D LIGHTING CONTROL SYSTEM – SWITCH OUTLET – LOW VOLTAGE – DIGITAL – BUTTONS AS REQUIRED FOR INDEPENDENT DIMMING AND ON/OFF CONTROL OF EACH ZONE IN SPACE – CONNECT TO ASSOCIATED ROOM CONTROLLER PER DIAGRAM "E-RC".

$CF SWITCH OUTLET – FAN SPEED CONTROL ARCHITECTURAL PRESET DIMMER – 7.5A – 120VAC – S.P.S.T. – LEVITON RENOIR SERIES – DO NOT REMOVE HEAT-DISSIPATING FINS – VERIFY THAT LOAD DOES NOT EXCEED SWITCH RATING PRIOR TO ORDERING.

PC LV PHOTOELECTRIC CONTROL – LOW VOLTAGE – COMPATIBLE WITH LIGHTING CONTROL PANEL.

LIGHTING CONTROL PANEL.

R LIGHTING CONTROL SYSTEM – ROOM CONTROLLER – LOW VOLTAGE – ACUITY N-LIGHT OR EQUAL – MOUNT AS DIRECTED BY SUPPLIER ABOVE CEILING – PROVIDE WITH POWER PACK – MAKE ALL CONNECTIONS (LOW VOLTAGE AND LINE VOLTAGE) TO CONTROL LOCAL LIGHTING AS DIRECTED BY SUPPLIER – SEE DETAIL "E-RC".

RN LIGHTING CONTROL SYSTEM – NETWORKED ON/OFF ROOM CONTROLLER(S) – LOW VOLTAGE – ACUITY N-LIGHT OR EQUAL – MOUNT AS DIRECTED BY SUPPLIER ABOVE ACCESSIBLE CEILING – PROVIDE ALL INTERCONNECTS (LOW VOLTAGE AND LINE VOLTAGE) TO SENSORS, CONTROL SWITCHES, LIGHT FIXTURES, ETC. TO CONTROL LOCAL LIGHTING AND TO NETWORK TO CENTRAL LIGHTING CONTROL SYSTEM AS DIRECTED BY SUPPLIER – SEE DETAIL "E-RC".

RD LIGHTING CONTROL SYSTEM – DIMMING ROOM CONTROLLER – LOW VOLTAGE – ACUITY N-LIGHT OR EQUAL – MOUNT AS DIRECTED BY SUPPLIER ABOVE CEILING – PROVIDE WITH POWER PACK – MAKE ALL CONNECTIONS (LOW VOLTAGE AND LINE VOLTAGE) TO CONTROL LOCAL LIGHTING AS DIRECTED BY SUPPLIER – SEE DETAIL "E-RCD".

LIGHTING CONTROL SYSTEM – OCCUPANCY SENSOR – LOW VOLTAGE – DUAL TECHNOLOGY (P.I.R. AND ULTRASONIC) – EXACT SENSOR TYPE AND LOCATION SHALL BE CHOSEN BY LIGHTING CONTROL SYSTEM SUPPLIER FOR PROPER COVERAGE – MOUNT AS DIRECTED BY SUPPLIER – PROVIDE WITH POWER PACK(S) (LOCATED ABOVE CEILING IN ACCESSIBLE LOCATION) AS REQUIRED TO CONTROL ALL LOCAL LIGHTING – MAKE ALL CONNECTIONS (LOW VOLTAGE AND LINE VOLTAGE) TO CONTROL LOCAL LIGHTING AS DIRECTED BY SUPPLIER – SEE DETAIL "E-RC" – ACUITY N-LIGHT OR EQUAL.

OR LIGHTING CONTROL SYSTEM – DAYLIGHTING SENSOR – CEILING OR WALL MOUNTED AS INDICATED – EXACT MOUNTING PROVISIONS, SENSOR TYPE AND LOCATION SHALL BE AS DIRECTED BY SUPPLIER FOR PROPER COVERAGE – DIGITAL – DIMMING – WATTSTOPPER LMLS SERIES – CONNECT TO ASSOCIATED ROOM CONTROLLER SIMILAR TO DIAGRAM "E-RC".

WALL OUTLET – DUPLEX RECEPTACLE – 20A – 125V – 2P – 3W – GROUNDING – TAMPER RESISTANT – NEMA 5-20R.

WALL OUTLET – DUPLEX RECEPTACLE – 20A – 125V – 2P – 3W – GROUNDING – TAMPER RESISTANT – NEMA 5-20R – LOCATE ADJACENT TO A/V OUTLET.

WALL OUTLET – DOUBLE DUPLEX RECEPTACLE – 20A – 125V – 2P – 3W – GROUNDING – TAMPER RESISTANT – TWO (2) NEMA 5-20R – SINGLE PLATE.

WALL OUTLET – DUPLEX RECEPTACLE – 20A – 125V – 2P – 3W – GROUNDING – TAMPER RESISTANT – "GFI" TYPE – WEATHER RESISTANT – NEMA 5-20R.

WALL OUTLET – DOUBLE DUPLEX RECEPTACLE – 20A – 125V – 2P – 3W – GROUNDING – TAMPER RESISTANT – "GFI" TYPE – WEATHER RESISTANT – TWO (2) NEMA 5-20R – SINGLE PLATE.

WALL OUTLET – SINGLE RECEPTACLE – 30A – 125/250V – 1ø – 3P – 4W – GROUNDING – NEMA 14-30R.

WALL OUTLET – SINGLE RECEPTACLE – 15A – 125V – 2P – 3W – GROUNDING – CLOCK OUTLET – HUBBELL HBL5235.

*V*D FB1 MULTISERVICE FLOOR BOX – SEE DETAIL "E-FB1" – "*V*D" REPRESENTS REQUIRED COMMUNICATIONS JACK CONFIGURATION – PROVIDE COMMUNICATIONS JACKS, CABLING ETC. PER COMMUNICATION OUTLET LEGEND AT "E-CO".

*V*D COMMUNICATIONS OUTLET – SEE DETAIL "E-CO" – *V*D REPRESENTS REQUIRED COMMUNICATIONS JACK CONFIGURATIONS.

*D WIRELESS ACCESS POINT – ABOVE CEILING – PROVIDE OUTLET BOX ABOVE ACCESSIBLE CEILING FOR OWNER-PROVIDED DATA SYSTEM WIRELESS ACCESS POINT – WITH ONE (1) DATA CABLE TO RACK WITHIN NEAREST TELECOMM EQUIPMENT ROOM – TERMINATE CABLE AT PATCH PANEL WITHIN EQUIPMENT ROOM AND LEAVE 10'-0" SLACK CABLE NEATLY COILED ABOVE CEILING AT LOCATION OF ACCESS POINT.

CONDUIT SLEEVE – SIZE AS INDICATED ON PLAN (2" MINIMUM) WITH NYLON BUSHING ON BOTH ENDS – SEAL FIRE BARRIER PENETRATIONS INSIDE OF SLEEVE IN ACCORDANCE WITH A U.L. LISTED ASSEMBLY.

CABLE TRAY – SEE SPECIFICATIONS.

TELEPHONE BACKBOARD – 8' H x 3/4" THICK x LENGTH AS SHOWN ON PLANS – FINISH WITH TWO (2) COATS FIRE-RETARDANT ENAMEL PAINT – PAINT COLOR TO MATCH SURROUNDING WALLS.

*V*D COMMUNICATIONS CABLING – *V*D REPRESENTS REQUIRED COMMUNICATIONS CABLING (SEE LEGEND AT DETAIL "E-CO") – PROVIDE CONDUIT SIZED PER NEC IN INACCESSIBLE SPACES.

*V*D COMMUNICATIONS CABLING – HOMERUN TO NEAREST COMMUNICATIONS BACKBOARD, RACK OR CABINET AS APPLICABLE – *V*D REPRESENTS REQUIRED COMMUNICATIONS CABLING (SEE LEGEND AT DETAIL "E-CO") – PROVIDE CONDUIT SIZED PER NEC IN INACCESSIBLE SPACES.

OUTLET DESIGNATIONS (APPLY TO ALL OUTLETS, DEVICES & EQUIPMENT):

A ABOVE COUNTER – OUTLET SHALL BE MOUNTED 6 INCHES ABOVE DESK/COUNTERTOP, OR 4 INCHES ABOVE COUNTERTOP BACKSPLASH AS REQUIRED BY CONDITION, OR 48" A.F.F. OR AS NOTED.
C OUTLET MOUNTED FLUSH WITHIN CEILING – VERIFY EXACT LOCATIONS PRIOR TO ROUGH-IN.
CW INSTALL OUTLET WITHIN CASEWORK AND ROUTE CIRCUITRY (IN CONDUIT) WITHIN CASEWORK AS DIRECTED BY CASEWORK PROVIDER.
DF DRINKING FOUNTAIN OUTLET – EXACT MOUNTING HEIGHT AS DIRECTED BY EQUIPMENT SUPPLIER.
E EMERGENCY CIRCUIT – PROVIDE RED DEVICE – MAINTAIN SEPARATION BETWEEN NORMAL AND EMERGENCY CIRCUITRY (WITH SEPARATE CONDUITS AND METAL BARRIERS AS REQUIRED) PER NEC ARTICLE 700.9(B).
NL NIGHT LIGHT – DO NOT SWITCH.
VL VERIFY EXACT OUTLET LOCATION WITH OWNER PRIOR TO ROUGH-IN.
W WEATHER PROOF – OUTLET SHALL BE INSTALLED WITH WEATHERPROOF, IN-USE, CAST COVER.
WG WIREGUARD – EQUIPMENT AND DEVICES SHALL BE PROVIDED WITH FACTORY FURNISHED WIREGUARD.

EQUIPMENT OUTLET DESIGNATIONS (APPLY TO ALL OUTLETS, DEVICES & EQUIPMENT):

COP COPYING MACHINE OUTLET.
DF DRINKING FOUNTAIN OUTLET – EXACT MOUNTING HEIGHT AS DIRECTED BY EQUIPMENT SUPPLIER.
DR DRYER OUTLET – MOUNT AT 36" A.F.F. UNLESS DIRECTED OTHERWISE BY EQUIPMENT SUPPLIER.
DW BELOW COUNTER DISHWASHER OUTLET – VERIFY EXACT LOCATION AND REQUIREMENTS WITH EQUIPMENT SUPPLIER.
GD GARBAGE DISPOSAL OUTLET – VERIFY EXACT LOCATION AND REQUIREMENTS WITH EQUIPMENT SUPPLIER – PROVIDE TOGGLE-TYPE CONTROL SWITCH (IN CAST BOX) IN ACCESSIBLE LOCATION IN BASE CABINET BELOW SINK UNLESS SHOWN OTHERWISE.
HD VENTILATION HOOD OUTLET.
MW MICROWAVE (OR COMBINATION MICROWAVE/VENTILATION HOOD) OUTLET – VERIFY EXACT LOCATION WITH ARCHITECTURAL ELEVATION PRIOR TO ROUGH-IN.
RF REFRIGERATOR/FREEZER OUTLET – MOUNT AT 36" A.F.F. UNLESS DIRECTED OTHERWISE BY EQUIPMENT SUPPLIER.
TV TELEVISION OUTLET – MOUNTING HEIGHT AS DIRECTED BY ARCHITECT.
VD VENDING MACHINE OUTLET – MOUNT AT 36" A.F.F. UNLESS DIRECTED OTHERWISE BY EQUIPMENT SUPPLIER.
WM WASHING MACHINE OUTLET – MOUNT AT 36" A.F.F. UNLESS DIRECTED OTHERWISE BY EQUIPMENT SUPPLIER.

FLOOR OR SURFACE-MOUNTED OUTLET – JUNCTION BOX – CROUSE HINDS CAST TYPE FS/FD BOX.

WALL OUTLET – JUNCTION BOX – FLUSH MOUNTED.

CEILING OUTLET – JUNCTION BOX.

BRANCH/FEEDER CIRCUIT – CONCEALED IN WALLS OR CEILING.

BRANCH/FEEDER CIRCUIT – EXPOSED ON WALLS OR CEILING.

BRANCH/FEEDER CIRCUIT – CONCEALED IN FLOOR SLAB OR DIRT FILL.

BRANCH/FEEDER CIRCUIT – HOMERUN 2 #12 & 1 #12G, 3 #12 & 1 #12G, ETC. UNLESS SHOWN OTHERWISE.

10 BRANCH/FEEDER CIRCUIT – HOMERUN 10 2 #10 & 1 #10G, 10 3 #10 & 1 #10G, ETC. – MAY BE USED WITH OTHER WIRE SIZES.

FLEXIBLE CONNECTION TO EQUIPMENT.

BRANCH CIRCUIT – RISER DOWN OR GENERAL CONDUIT STUB-OUT.

DISTRIBUTION CENTER OR MOTOR CONTROL CENTER.

LIGHTING PANEL – SURFACE MOUNTED.

LIGHTING PANEL – FLUSH MOUNTED.

LIGHTING CONTROL PANEL.

T TRANSFORMER – POWER.

MAGNETIC MOTOR STARTER.

DISCONNECT SWITCH – NONFUSED.

DISCONNECT SWITCH – FUSED.

DISCONNECT SWITCH – FURNISHED BY MECHANICAL WITH EQUIPMENT.

ELEVATOR DISCONNECT SWITCH – FUSED – FURNISH WITH AUXILIARY CONTACTS FOR ELEVATOR CONTROL FUNCTIONS.

VFD VARIABLE FREQUENCY DRIVE – FURNISHED BY MECHANICAL CONTRACTOR AND INSTALLED BY ELECTRICAL CONTRACTOR.

HC HVAC CONTROL POWER – 120V-1ø.

GROUND CONNECTION.

M MOTOR OUTLET – SIZE AS SHOWN.

S PAGING SYSTEM – SPEAKER – CEILING MOUNTED – BOGEN CSD2X2UCA 2X2 SPEAKER WITH BACK CAN – FURNISHED AND INSTALLED BY CONTRACTOR – PROVIDE 2-PR #22 SHIELDED SPEAKER CABLING AS DIRECTED BY TELEPHONE EQUIPMENT SUPPLIER FROM ALL SPEAKERS TO COMMUNICATION ROOM – VERIFY ALL REQUIREMENTS WITH TELEPHONE EQUIPMENT SUPPLIER.

M FAMILY VISITATION SOUND SYSTEM – CEILING MOUNTED MICROPHONE/SPEAKER – AIPHONE SP-20N SPEAKER WITH T-BAR SUPPORTS – CONNECTED TO AMPLIFIER WITH WIRING AS REQUIRED IN 3/4" CONDUIT.

AMP FAMILY VISITATION SOUND SYSTEM – INTERCOM STATION – AIPHONE LEM-1 MASTER STATION – MODIFY TO ADD HEADPHONE JACK – MODIFICATION SHALL BE DONE BY A LICENSED INSTALLER AND SHALL NOT VOID WARRANTY.

PS PROJECTION SCREEN – VERIFY EXACT REQUIREMENTS WITH EQUIPMENT SUPPLIER PRIOR TO ROUGH-IN – INCLUDE ALL CONNECTIONS FOR POWER AND CONTROL..

C CONTROL STATION – FURNISHED BY OTHERS – INSTALLED BY ELECTRICAL CONTRACTOR – FURNISH WIRING AS REQUIRED IN CONDUIT SIZED AS REQUIRED TO CONTROLLED DEVICE – VERIFY REQUIREMENTS WITH EQUIPMENT SUPPLIER PRIOR TO ROUGH-IN.

CCTV SYSTEM – CAMERA.

W CCTV SYSTEM – CAMERA – WEATHERPROOF.

DVR CCTV SYSTEM – DVR.

P PANIC BUTTON – 3/4" CONDUIT TO ABOVE LAY-IN CEILING WITH WIRING AS REQUIRED IN 3/4"C TO MASTER IN SERVER ROOM.

PL PANIC LIGHT – 8'-0" A.F.F. – 3/4" CONDUIT TO ABOVE LAY-IN CEILING WITH WIRING AS REQUIRED IN 3/4"C TO MASTER IN SERVER ROOM.

FAAP FIRE ALARM – ANNUNCIATOR PANEL– FLUSH MOUNTED – UNLESS NOTED OTHERWISE ON PLANS.

FACP FIRE ALARM – CONTROL PANEL.

FIRE ALARM – PULL STATION.

SM FIRE ALARM – SMOKE DETECTOR.

H FIRE ALARM – HEAT DETECTOR.

DM FIRE ALARM – SMOKE DETECTOR – DUCT MOUNTED – LOCATE AS DIRECTED BY MECHANICAL – FURNISH CONTROL RELAY COMPATIBLE WITH FIRE ALARM SYSTEM FOR FAN SHUT DOWN – FURNISH TEST/ALARM INDICATOR STATION(S) LOCATED IN ACCESSIBLE, INCONSPICUOUS LOCATION AS APPROVED BY AUTHORITY HAVING JURISDICTION.

DT FIRE ALARM – SMOKE DETECTORS – DUCT MOUNTED – LOCATE DETECTORS (QUANTITIES AS REQUIRED) IN SUPPLY DUCT(S) AND RETURN DUCT(S) FOR INDICATED UNIT AS DIRECTED BY MECHANICAL PER CODE REQUIREMENTS – FURNISH RELAY COMPATIBLE WITH FIRE ALARM SYSTEM FOR FAN SHUT DOWN – FURNISH REMOTE TEST/ALARM INDICATOR STATION(S) LOCATED IN ACCESSIBLE, INCONSPICUOUS LOCATION AS APPROVED BY AUTHORITY HAVING JURISDICTION.

FIRE ALARM – VISUAL INDICATOR ONLY.

FIRE ALARM – COMBINATION HORN AND VISUAL INDICATOR – WALL MOUNTED.

FIRE ALARM – COMBINATION HORN AND VISUAL INDICATOR – CEILING MOUNTED.

FIRE ALARM – MAGNETIC DOOR HOLDER.

F BRANCH CIRCUIT – FIRE ALARM – WIRING AS REQUIRED IN N.E.C.-SIZED CONDUIT.

FS FIRE ALARM – FLOW SWITCH.

TS FIRE ALARM – TAMPER SWITCH.

FR FIRE ALARM – ADDRESSABLE CONTROL RELAY(S) FOR ELEVATOR, SMOKE CONTROL FUNCTIONS OR OTHER CONTROL FUNCTIONS.

DS SECURITY SYSTEM – DOOR CONTACT SWITCH.

MD SECURITY SYSTEM – MOTION DETECTOR.

KP SECURITY SYSTEM – KEYPAD.

SEC SECURITY SYSTEM – MASTER.

DAS EMERGENCY RESPONDER RADIO SYSTEM – MASTER EQUIPMENT – SEE RISER DIAGRAM.

DAP EMERGENCY RESPONDER RADIO SYSTEM – ANNUNCIATOR.

MD SECURITY SYSTEM – MOTION DETECTOR.

SR SECURITY SYSTEM – SIREN.

CR ACCESS CONTROL SYSTEM – CARD READER – 48" AFF – 3/4" CONDUIT TO ABOVE CEILING IN CORRIDOR – WITH WIRING AS REQUIRED TO MASTER IN SERVER ROOM.

CP CARD READER – POWER SUPPLY – 120V – 1ø.

DC ACCESS CONTROL SYSTEM – WIRING AS REQUIRED IN 3/4" CONDUIT TO DOOR FRAME FOR DEVICES AS REQUIRED – COORDINATE WITH DOOR HARDWARE SUPPLIER FOR EXACT REQUIREMENTS.

A / E-1 DETAIL DESIGNATOR – "A" INDICATED DETAIL MARK – "E-1" INDICATED SHEET NUMBER WHERE DETAIL IS LOCATED (TYPICAL).

ELECTRICAL ABBREVIATIONS:

C CONDUIT.
E.C. EMPTY CONDUIT.
FPN FUSE PER NAMEPLATE.
G GROUND CONDUCTOR.

GENERAL ELECTRICAL NOTES

1. CONTRACTOR SHALL VERIFY ALL REQUIREMENTS FOR TELEPHONE AND POWER SERVICES WITH RESPECTIVE UTILITY COMPANIES PRIOR TO SUBMITTING BID. IF THEIR REQUIREMENTS ARE AT A VARIANCE WITH THOSE SHOWN ON PLANS THE CONTRACTOR SHALL INFORM ARCHITECT IMMEDIATELY. ALL COSTS INCURRED WITH UTILITY COMPANIES FOR SERVICES SHALL BE INCLUDED IN BID PRICE. IF SUCH COSTS ARE NOT AVAILABLE AT BID TIME CONTRACTOR SHALL INCLUDE WITH BID A LETTER FROM A RESPONSIBLE PARTY WITH THE UTILITY COMPANY STATING SUCH, AND COSTS WILL THEN BE EXCLUDED FROM THE BID PRICE.
2. THIS CONTRACTOR SHALL VERIFY EXACT REQUIREMENTS FOR ALL MECHANICAL EQUIPMENT FROM MANUFACTURER'S RECOMMENDATIONS PRIOR TO ROUGHING IN CONDUIT OR ORDERING CIRCUIT PROTECTION DEVICES. CONTRACTOR SHALL ADJUST CONDUIT SIZE, WIRE SIZE AND CIRCUIT PROTECTION SIZE ACCORDINGLY. IF REQUIREMENTS ARE LARGER THAN CALLED FOR ON ELECTRICAL PLANS NOTIFY ARCHITECT IMMEDIATELY.
3. CONTRACTOR SHALL VISIT THE SITE OF THE WORK PRIOR TO SUBMITTING BID TO EXAMINE CAREFULLY LOCAL CONDITIONS AND DIFFICULTIES TO BE ENCOUNTERED. ANY DISCREPANCY BETWEEN PLANS AND EXISTING CONDITIONS SHALL IMMEDIATELY BE CALLED TO THE ATTENTION OF THE ARCHITECT.
4. THIS CONTRACTOR SHALL REVIEW ARCHITECTURAL CASEWORK ELEVATIONS AND CASEWORK SHOP DRAWINGS PRIOR TO ROUGHING-IN OUTLETS AT CASEWORK. ADJUST OUTLET LOCATIONS AS REQUIRED TO ACCOMODATE ACTUAL CASEWORK DESIGN.
5. THIS CONTRACTOR SHALL PROVIDE A COMPLETE U.L. CERTIFIED LIGHTNING PROTECTION SYSTEM IN ACCODANCE WITH SPECIFICATIONS SECTION 264100. PROVIDE A COMPLETE SET OF INSTALLTION DRAWINGS AND DETAILS WITH SHOP DRAWING SUBMITTALS. CONTRACTOR SHALL NOT BEGIN WORK UNTIL SHOP DRAWINGS HAVE BEEN APPROVED. COORDINATE WITH GENERAL CONTRACTOR REGARDING ALL CONDUIT PENETRATIONS, DOWNLEAD LOCATIONS, ETC. ALL DOWNLEADS SHALL BE ROUTED CONCEALED AND IN CONDUIT. REFER TO SPECIFICATION SECTION 264100 FOR ADDITIONAL INFORMATION.

GMC
2400 5th Avenue South, Suite 200
Birmingham, AL 35233
T 205.879.4462
GMCNETWORK.COM

ISSUE DATE
BID SET 09/09/2024

DRAWN BY: SNJ
CHECKED BY: RCR

TUSCALOOSA COUNTY DHR
PROJECT ADDRESS

GMC # ABHM220021
SBC # [ENTER VALUE]

ALABAMA LICENSED No. 26480 PROFESSIONAL ENGINEER ROBERT C. RENFRO 9.9.24

LEGEND, NOTES & SCHEDULES

E3.03 sheet of

JACKSON, RENFRO & ASSOCIATES, INC.
ELECTRICAL ENGINEERING & DESIGN
141 VILLAGE STREET • SUITE 3 • BIRMINGHAM, ALABAMA • 35242
ROBERT RENFRO, PE
bobby@jraee.com
(O) 205.536.7114
(F) 205.995.1078
JRA JOB NO: 222145