

GENERAL NOTES

- ALL WORK SHALL BE IN COMPLIANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL BUILDING CODES, REGULATIONS, ORDINANCES AND STANDARDS INCLUDING ADA AND OR OTHER HANDICAP ACCESSIBILITY CODES.
- GENERAL CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE OWNER'S VENDORS REGARDING SCHEDULING ON SITE DURING CONSTRUCTION AND SEQUENCING OF THE WORK.
- THE CONSTRUCTION NOTES AND DRAWINGS ARE SUPPLIED TO ILLUSTRATE THE DESIGN INTENT AND GENERAL TYPE OF CONSTRUCTION DESIRED AND ARE INTENDED TO IMPLY THE FINEST QUALITY OF CONSTRUCTION, MATERIAL AND WORKMANSHIP THROUGHOUT.
- THE DRAWINGS ARE NOT TO BE SCALED. FOR INFORMATION CONCERNING EXISTING CONDITIONS, ETC., VERIFICATION MUST BE DONE IN THE FIELD. LARGE SCALE DRAWINGS HAVE PRECEDENCE OVER SMALL SCALE DRAWINGS.
- PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION, CONTRACTOR SHALL VERIFY EXISTENCE AND LOCATION OF ALL EXISTING ABOVE AND BELOW GRADE, UTILITIES, INCLUDING SANITARY SEWER, STORM SEWER, WATER, GAS, ELECTRICAL, TELEPHONE, ETC. ANY DISCREPANCIES IN UTILITY LOCATIONS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ARCHITECT.
- GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL BUILDING DIMENSIONS PRIOR TO BEGINNING CONSTRUCTION AND SHALL IMMEDIATELY NOTIFY THE ARCHITECT OF ANY VARIANCE OR DISCREPANCY AFFECTING NEW CONSTRUCTION PRIOR TO PROCEEDING WITH WORK.
- CONTRACTOR SHALL PROVIDE ALL NECESSARY BLOCKING IN WALLS FOR SUPPORT OF ALL EQUIPMENT, SHELVING, ACCESSORIES, SIGNAGE, AND OTHER DEVICES REQUIRED.
- ALL PENETRATIONS SHALL RECEIVE CAULKING TO SEAL ANY TYPE OF ENERGY LOSS.
- THE CONTRACTOR SHALL VERIFY AND COORDINATE ALL APPLICABLE DIMENSIONS OF FIXTURES AND EQUIPMENT SUPPLIED AND/OR INSTALLED BY OTHERS.
- UPON COMPLETION OF PROJECT, G.C. TO OBTAIN ALL FINAL INSPECTIONS AS REQUIRED BY LOCAL JURISDICTIONS AND FURNISH OWNER WITH EVIDENCE OF ALL SUCH INSPECTIONS AND CERTIFICATES OF OCCUPANCY.
- SIGNS, UNLESS NOTED OTHERWISE, ARE PROVIDED BY OWNER'S SIGN CONTRACTOR. OWNER'S SIGN VENDOR WILL PROVIDE MONUMENT SIGN BASE (CONCRETE, STONE, BRICK, ETC.) IF PROJECT REQUIRES DECORATIVE BASE. SEE SHEET L-1 TO VERIFY IF REQUIRED. GENERAL CONTRACTOR TO PROVIDE ROUGH-IN & FINAL CONNECTION AND BRAILLE EXIT SIGN.
- GENERAL CONTRACTOR TO PROVIDE FOUR (4) 30 YARD DUMPSTERS DURING McDONALD RETAIL MOVE-IN.
- GENERAL CONTRACTOR SHALL PROVIDE ONE SKILLED LABORER FOR ONE WEEK DURING McDONALD RETAIL MOVE-IN. (40 HOURS)
- GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR SET-UP AND COORDINATION OF ALL THE UTILITY SERVICES FOR THE PROJECT.
- ALL EXTERIOR FLOOR PLAN DIMENSIONS ARE TO EXTERIOR FACE OF MASONRY UNLESS OTHERWISE NOTED. ALL INTERIOR FLOOR PLAN DIMENSIONS ARE TO FACE OF FINISH UNLESS OTHERWISE NOTED.
- FINAL KEYING TO BE COORDINATED WITH McDONALD FACILITY MANAGER AND PAID FOR BY McDONALD.
- REFER TO "PROJECT MANUAL" FOR ALL OTHER INSTRUCTIONS & DIRECTIVES NOT SHOWN IN DRAWINGS.



PREPARED BY:
Robert Kempkes
 ARCHITECT
 3100 W. STATE ST. #200
 ST. LOUIS, MO 63103
 TEL: 314.433.1111
 FAX: 314.433.1111

ABBREVIATIONS

GENERAL ABBREVIATIONS

A	ANNEALED	INSUL	INSULATION
AC	AIR CONDITIONING	MAX	MAXIMUM
ACT	ACOUSTIC CEILING TILE	MECH	MECHANICAL
AFF	ABOVE FINISH FLOOR	MFR	MANUFACTURER
AHU	AIR HANDLING UNIT	MIN	MINIMUM
AL	ALUMINUM	MO	MASONRY OPENING
ASPH	ASPHALT	MR	MOISTURE RESISTANT
CJ	CONTROL JOINT	MTL	METAL
CLNG	CEILING	NA	NOT APPLICABLE
CMU	CONCRETE MASONRY UNIT	NIC	NOT IN CONTRACT
COL	COLUMN	NOM	NOMINAL
CONC	CONCRETE	NTS	NOT TO SCALE
CONT	CONTINUOUS	OC	ON CENTER
CP	CONCRETE PAD	OPP	OPPOSITE
CT	CERAMIC TILE	OPT	OPTIONAL
CL	CENTERLINE	PF	PRE-FABRICATED
DBL	DOUBLE	PSF	POUNDS PER SQUARE FOOT
DF	DRINKING FOUNTAIN	PT	PRESSURE TREATED
DIA	DIAMETER	PTD	PAINTED
DIM	DIMENSION	QT	QUARRY TILE
DN	DOWN	R	RADIUS
DS	DOWNSPOUT	REBAR	REINFORCING BAR
EA	EACH	REF	REFERENCE
EJ	EXPANSION JOINT	REQD.	REQUIRED
ELEC	ELECTRICAL	RO	ROUGH OPENING
ELEV	ELEVATION	SB	SPLASHBLOCK
EQ	EQUAL	SIM	SIMILAR
EXIST	EXISTING	SPEC	SPECIFICATION
FD	FLOOR DRAIN	SS	STAINLESS STEEL
FE	FIRE EXTINGUISHER	STL	STEEL
FEC	FIRE EXTINGUISHER CABINET	STOR	STORAGE
FF	FINISH FLOOR	SUSP	SUSPENDED
FR	FIRE RATED	T	TEMPERED
FRP	FIBERGLASS REINFORCED PLASTIC	TYP	TYPICAL
GALV	GALVANIZED	UNO	UNLESS NOTED OTHERWISE
GYP BD	GYP SUM BOARD	VCT	VINYL COMPOSITION TILE
HC	HANDICAP	VERT	VERTICAL
HDW	HARDWARE	WD	WOOD
HM	HOLLOW METAL	WP	WATERPROOF
HT	HEIGHT	WWF	WELDED WIRE FABRIC
HVAC	HEATING, VENTILATION, AIR CONDITIONING		

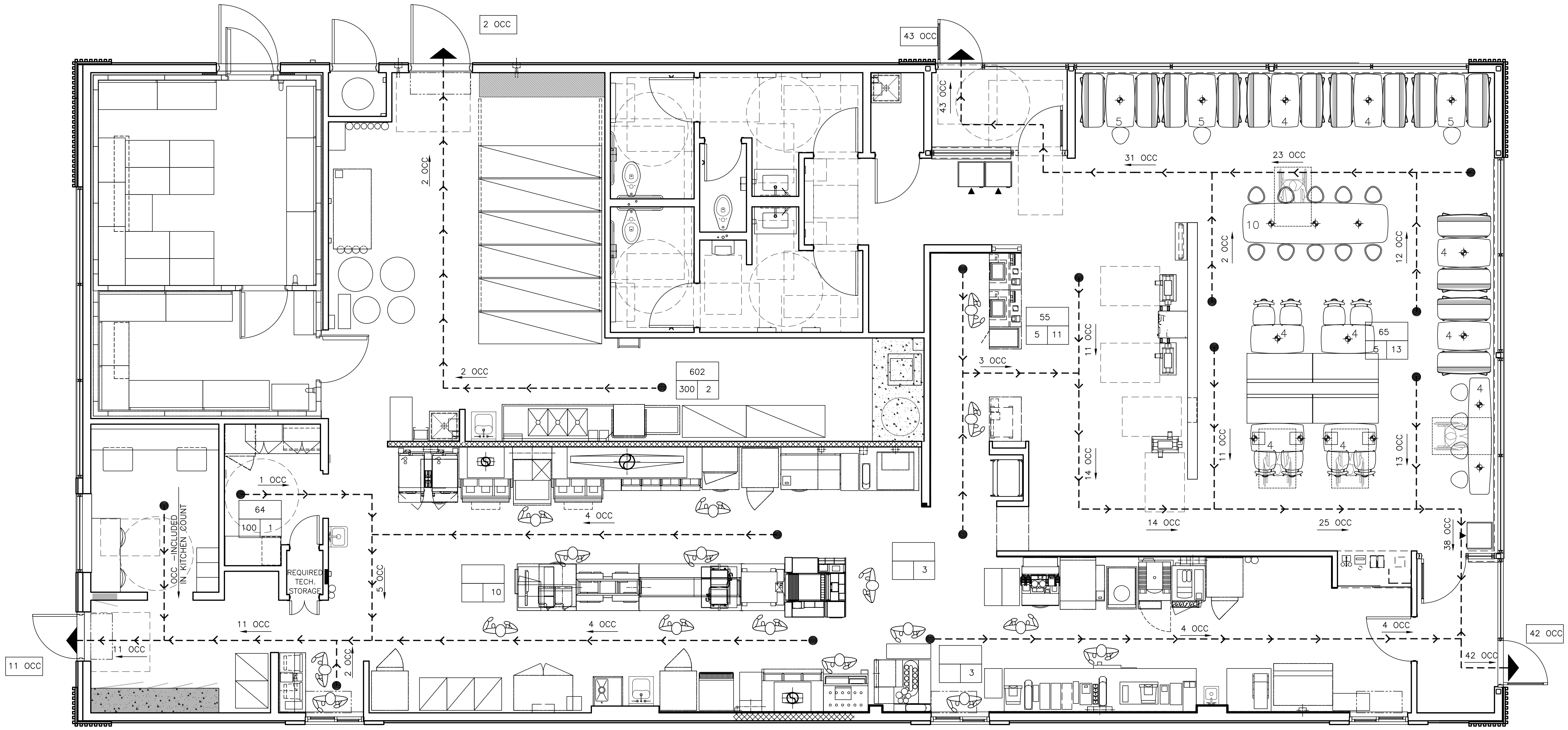
McDONALD'S ABBREVIATIONS

AP	APOLIC MENTAL PANEL	LAM	LAMINATE
BM	BRAKE METAL	LE	ACCENT LIGHTING
C	ALUMINUM CANOPY	LP	LOW POINT
CG	CORNER GUARD	LL	LEVEL LANDING
CT	WALL TILE	MACHINE	MACHINE
DE	DECOR ELEMENT	MANAGER	MANAGER
DEVICE		MF	METAL FASCIA
DMB	DIGITAL MENU BOARD	MS	MOP SINK
DS	DROP SOFFIT	PB	PIPE BILLARD
D/T	DRIVE-THRU	PT	RMHC COIN COLLECTOR
FB	FILL BOX	RL	ROOF LADDER
F/C	FREEZER/COOLER	ROOM	ROOM
GC	GENERAL CONTRACTOR	S	McDONALD'S SIGNAGE
HP	HIGH POINT	SCH	SHLUTER
KIOSK		SSBB	SELF SERVE BEVERAGE BAR
L	LIGHT FIXTURE	UN	ALUMINUM CANOPY UNDERSCORE

PREPARED FOR:
McDonald's USA, LLC
 These drawings and specifications are the confidential and proprietary property of McDonald's USA, LLC and shall not be copied or reproduced without written authorization. The contract documents were prepared in accordance with the contract documents for use on a different site or at a later time. Use of these drawings for reference or example on another project requires the approval of McDonald's USA, LLC. The contract documents for reuse on another project is not authorized.

TITLE	2022 STANDARD BUILDING - BB20
DESCRIPTION	4597 - WOOD/WOOD
DESCRIPTION	WOOD BEARING WALLS W/HARDBOARD SIDING
DESCRIPTION	WOOD ROOF TRUSS FRAMING
DESCRIPTION	E.L.F.S./BATTEN/HARDBOARD SIDING EXTERIOR FINISH
SHEET NO.	GN1.0
GENERAL NOTES	

© 2022 McDonald's USA, LLC
 3720 W. Sunshine
 Springfield, MO 65802
 TEL: 417.875.1111
 FAX: 417.875.1111



1 LIFE SAFETY AND EXITING PLAN
R1.2 1/4"=1'-0"

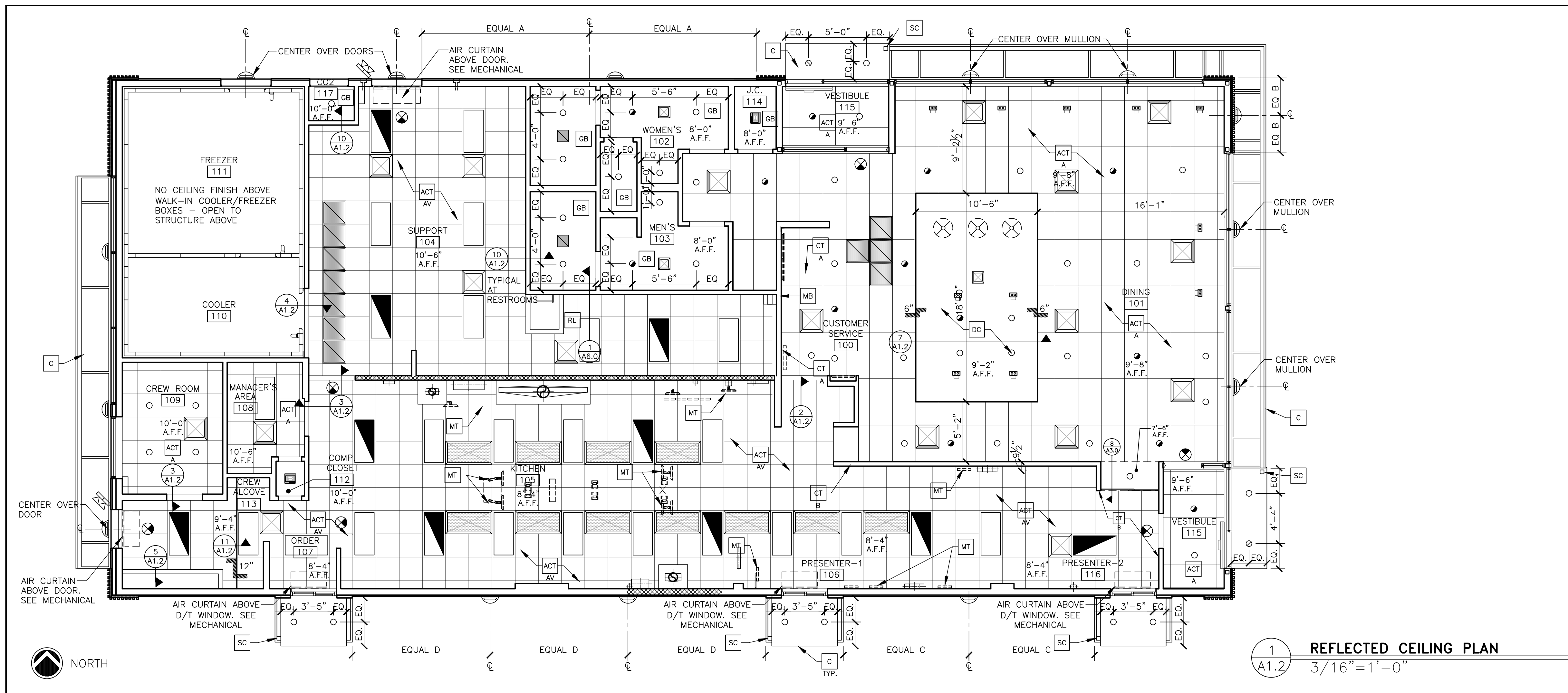
OCCUPANCY ALLOWANCE:

INTERNATIONAL BUILDING CODE 2018

TABLE 1004.1.2
MAXIMUM FLOOR AREA ALLOWANCES PER OCCUPANT

FUNCTION OF SPACE	ALLOWANCE	AREA	OCCUPANTS
ACCESSORY STORAGE AREAS, MECHANICAL EQUIPMENT ROOM	300 GROSS	575 SF	2
ASSEMBLY WITH FIXED SEATS	SEE PLAN	-	64
ASSEMBLY W/OUT FIXED SEATS, STANDING SPACE	5 NET	35 SF	7
BUSINESS AREAS	100 GROSS	60 SF	1
KITCHENS, COMMERCIAL	200 GROSS	2,442	12
TOTAL OCCUPANCY ALLOWANCE			86

STATE OF MISSOURI ROBERT D. KEMPKE ARCHITECT NUMBER A-2206012350 11.10.2022	REV	DATE	DESCRIPTION
PREPARED BY: Robert Kempkes ARCHITECT 210 CENTRAL AVENUE, SUITE 200 SPRINGFIELD, MISSOURI 65702 FAX: 537.438.1000			
PREPARED FOR: © 2022 McDonald's USA, LLC McDonald's USA, LLC These drawings and specifications are the confidential and proprietary property of McDonald's USA, LLC and shall not be copied or reproduced without written authorization. The contract documents were prepared by McDonald's USA, LLC and shall not be used for any other project. Use of these drawings for reference or example on another project requires the approval of McDonald's USA, LLC. The contract documents for reuse on another project is not authorized.			
DRAWN BY: SO	DATE: 2022-10	REVIEWED BY: RH	DATE ISSUED: 10-04-2022
TITLE: 2022 STANDARD BUILDING - BB20 1597 - WOOD/WOOD	DESCRIPTION: WOOD BEARING WALLS W/HARDIE BOARD SIDING WOOD ROOF TRUSS FRAMING E.L.F.S./BATEN/HARDIE BOARD SIDING EXTERIOR FINISH	SITE ADDRESS: 3720 W Sunshine	Springfield, MO
SHEET NO. 024-1290.00.0 R1.2 LIFE SAFETY PLAN			



1 REFLECTED CEILING PLAN
 1/16" = 1'-0"

KEY NOTES

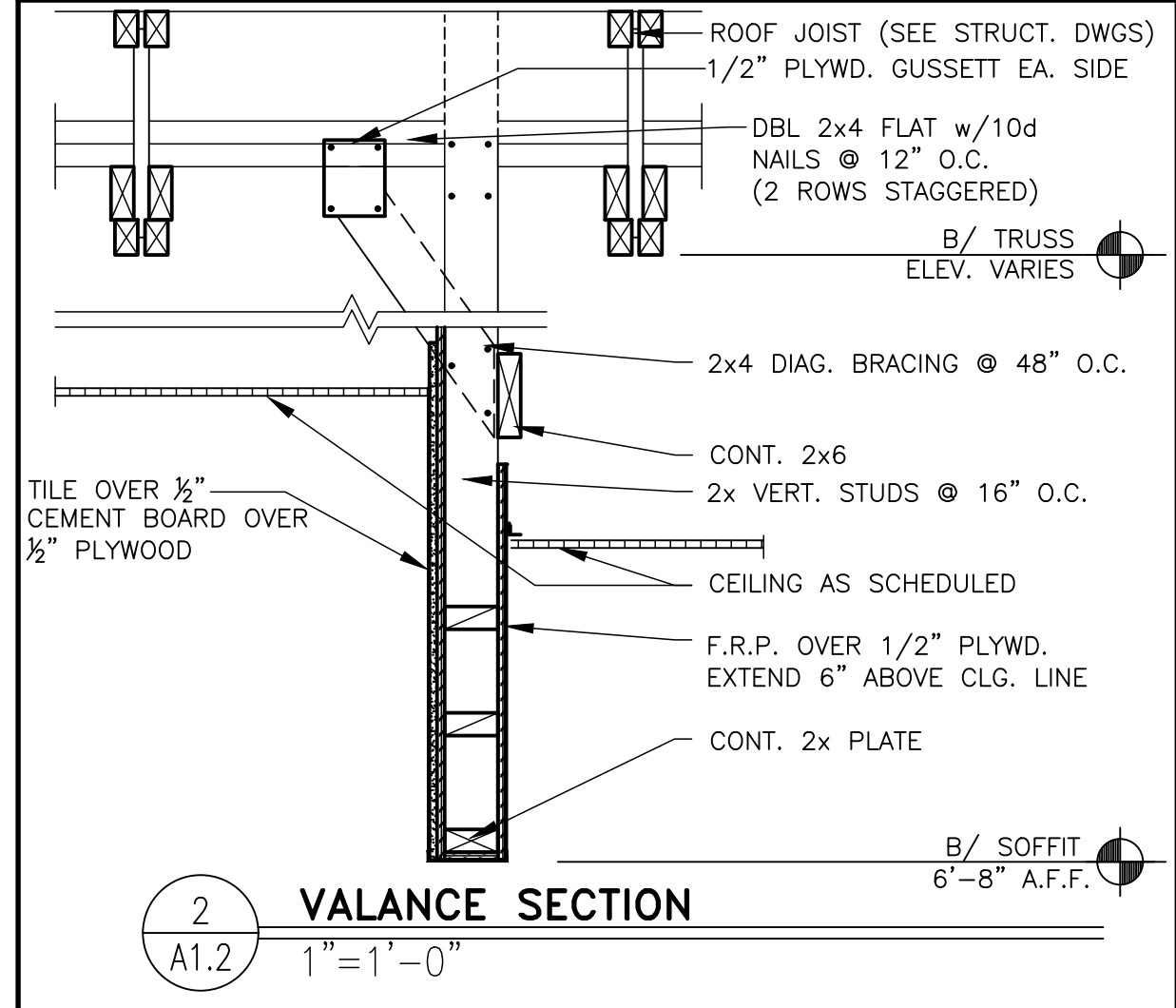
- ACT ACoustical CEILING TILE - 24"x48". VERIFY FINISHES WITH DECOR COMPANY
- ACT AV ACoustical CEILING TILE: VINYL FACED USG 24"x24" CLEAN ROOM CLIMA-PLUS. UNPERFORATED. SMOOTH TEXTURE. COLOR: WHITE. GRID: USG 15/16" DX/DXL COLOR: WHITE
- ACT B ACoustical CEILING TILE: USG 24"x48" PREMIER HI-LITE CLIMAPLUS KAPOK PANELS. COLOR: FLAT BLACK 205. GRID: USG 15/16" DX/DXL COLOR: BLACK
- C ALUMINUM CANOPY WITH INTEGRAL GUTTER AND SCUPPER - SEE 4/AS.0 FOR NOTES - SEE ROOF PLAN FOR DIMENSIONS - SEE ELEVATION FOR COLOR AND FASCIA LOCATIONS
- CT WALL TILE: CERAMIC WALL TILE. SIZE: 4"x12", PATTERN: STACK BOND. GROUT: MAPEI ULTRACOLOR PLUS - JOINT TO BE 1/8" MAX. SEE DECOR DRAWINGS FOR TILE AND GROUT COLOR SPEC
- CT B WALL TILE: CERAMIC WALL TILE. SIZE: 4"x12", PATTERN: STACK BOND. GROUT: MAPEI ULTRACOLOR PLUS - JOINT TO BE 1/8" MAX. SEE DECOR DRAWINGS FOR TILE AND GROUT COLOR SPEC
- DC SUSPENDED DECORATIVE CEILING TREATMENT - SEE DECOR DRAWINGS FOR ADDITIONAL INFORMATION
- GB GYPSUM BOARD CEILING
- MB MENU BOARD WITH BEZELS BY OTHERS UNDER SEPARATE PERMIT - SEE ELEC PLANS
- MT CEILING MOUNTED MONITOR: A) VERIFY MONITOR LOCATIONS WITH MCDONALD'S PROJECT MANAGER PRIOR TO INSTALLATION. B) SEE DETAIL 6/A1.2 FOR INSTALLATION METHOD
- RL ROOF LADDER OPENING
- SC INTEGRAL GUTTER SCUPPER

GENERAL NOTES

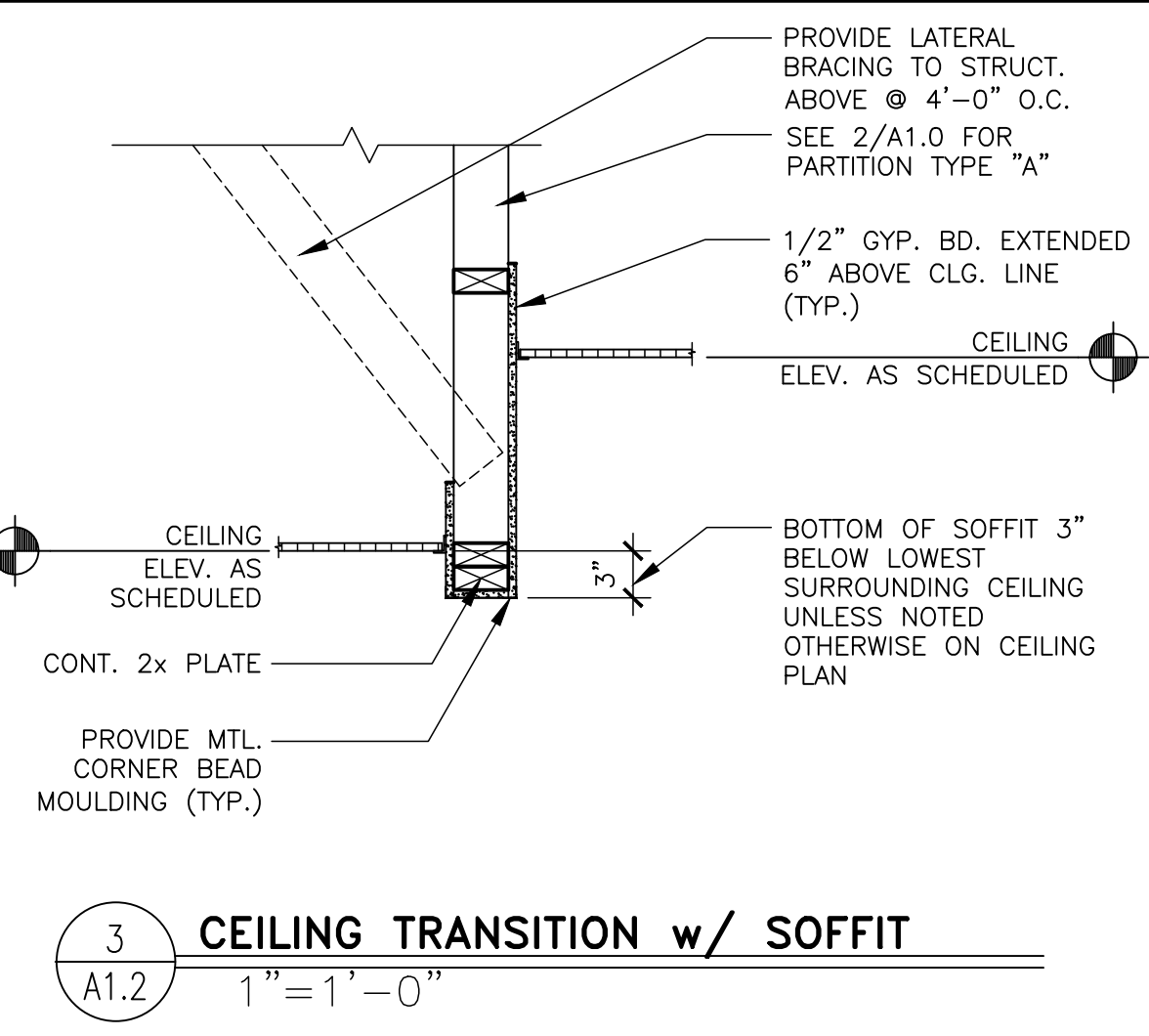
1. SEE SHT A6.1 FOR CEILING FINISHES.
2. SEE SHT A1.0 FOR MENU BOARD DROPPED SOFFIT LOCATION DIMENSIONS
3. GENERAL CONTRACTOR SHALL COORDINATE HVAC DIFFUSER LOCATION WITH DECOR & MECHANICAL PLANS AND REPORT ANY DISCREPANCIES TO ARCHITECT.
4. REFERENCE MECHANICAL AND ELECTRICAL DRAWINGS FOR DIFFUSER AND LIGHTING INFORMATION.
5. PROVIDE USG V15 CEILING TILE RETENTION CLIPS IN ALL VESTIBULE AREAS

STATE OF MISSOURI
 ARCHITECT
 ROBERT KEMPLEX
 ARCHITECT
 NUMBER
 A-2008012350
 11.10.2022

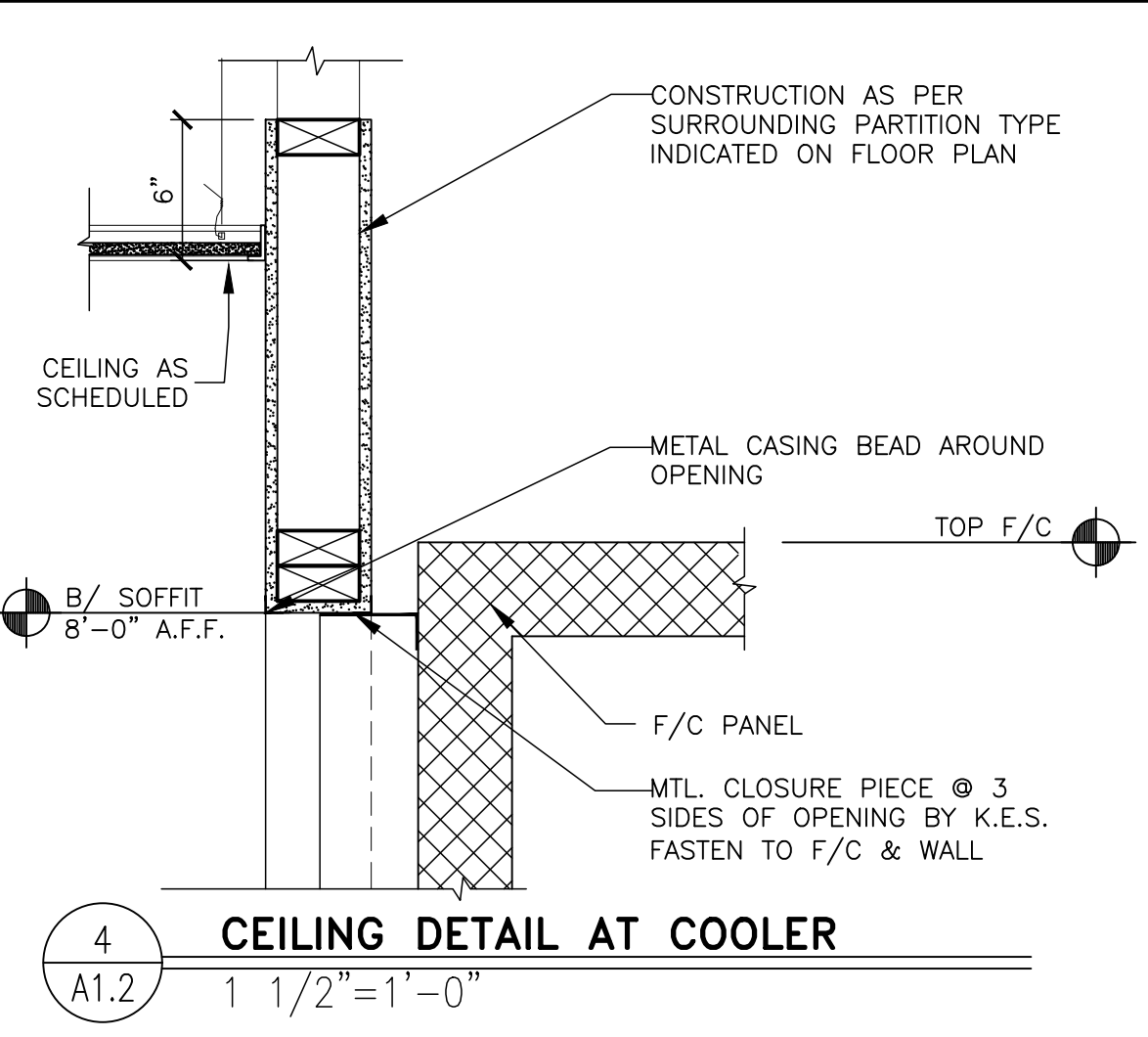
PREPARED BY: Robert Kempkes
 ARCHITECT
 3100 W. STATE ST.
 ST. LOUIS, MO 63103
 TEL: 314.433.1111
 FAX: 314.433.1112



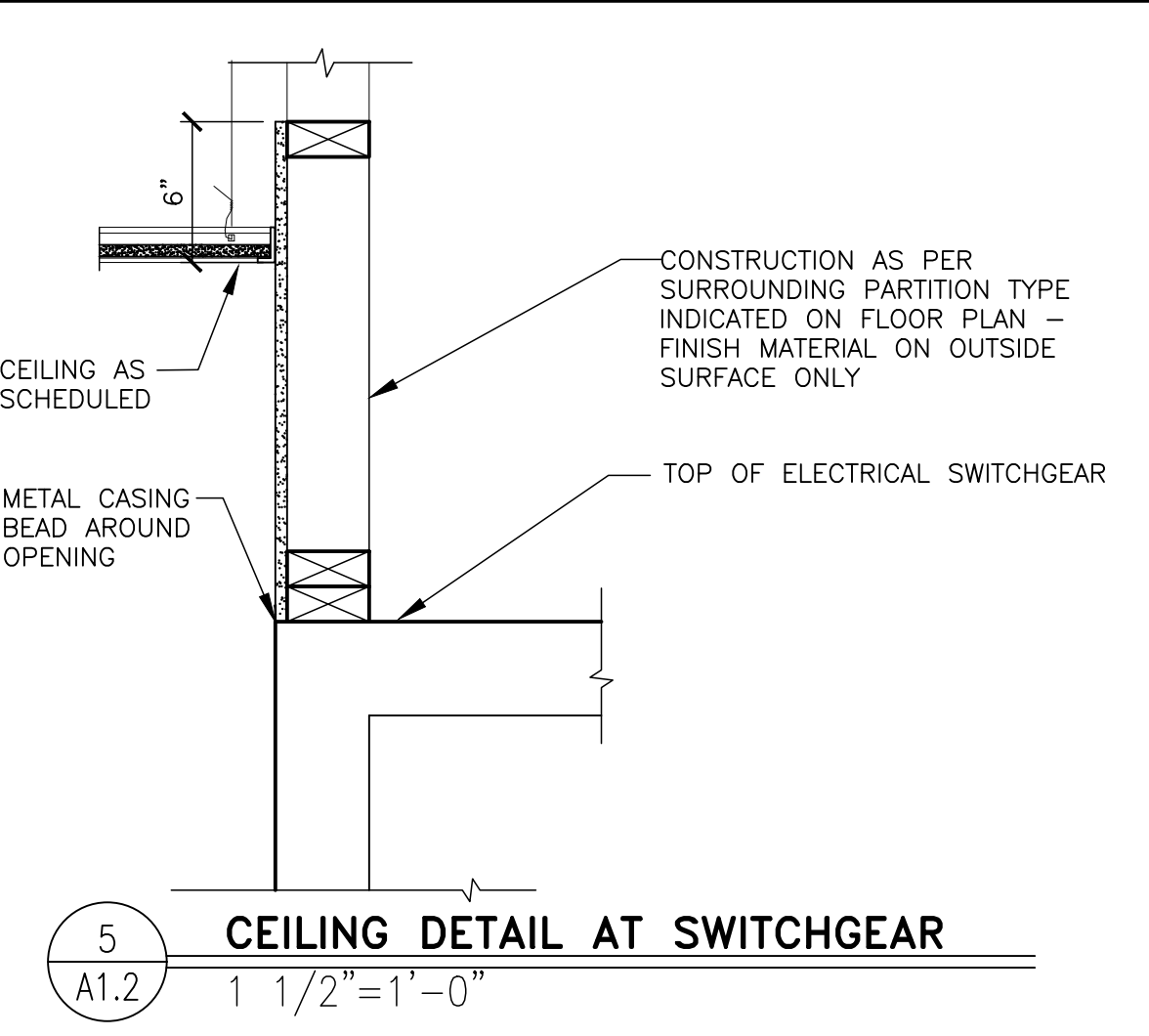
2 VALANCE SECTION
 1" = 1'-0"



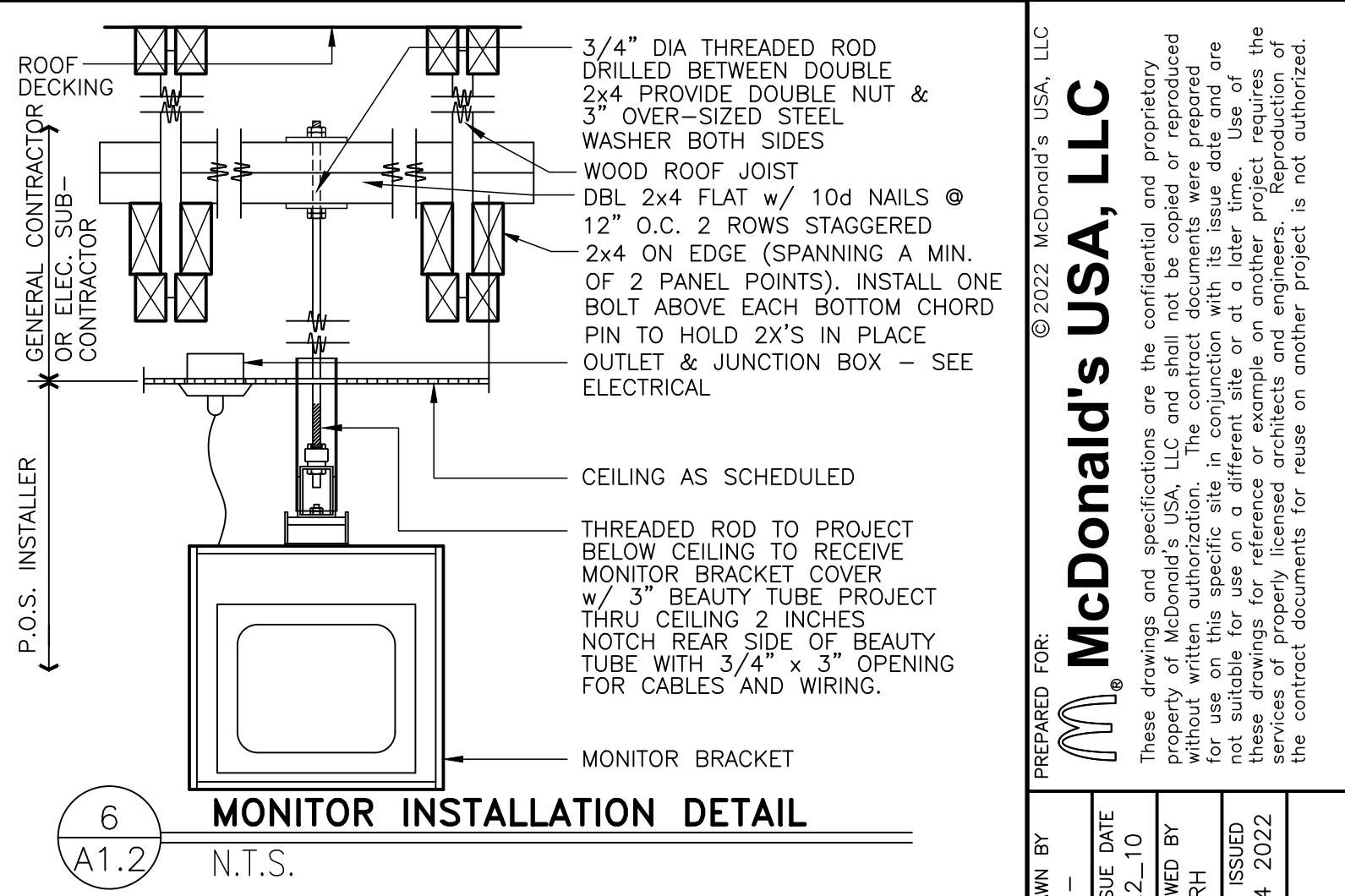
3 CEILING TRANSITION w/ SOFFIT
 1" = 1'-0"



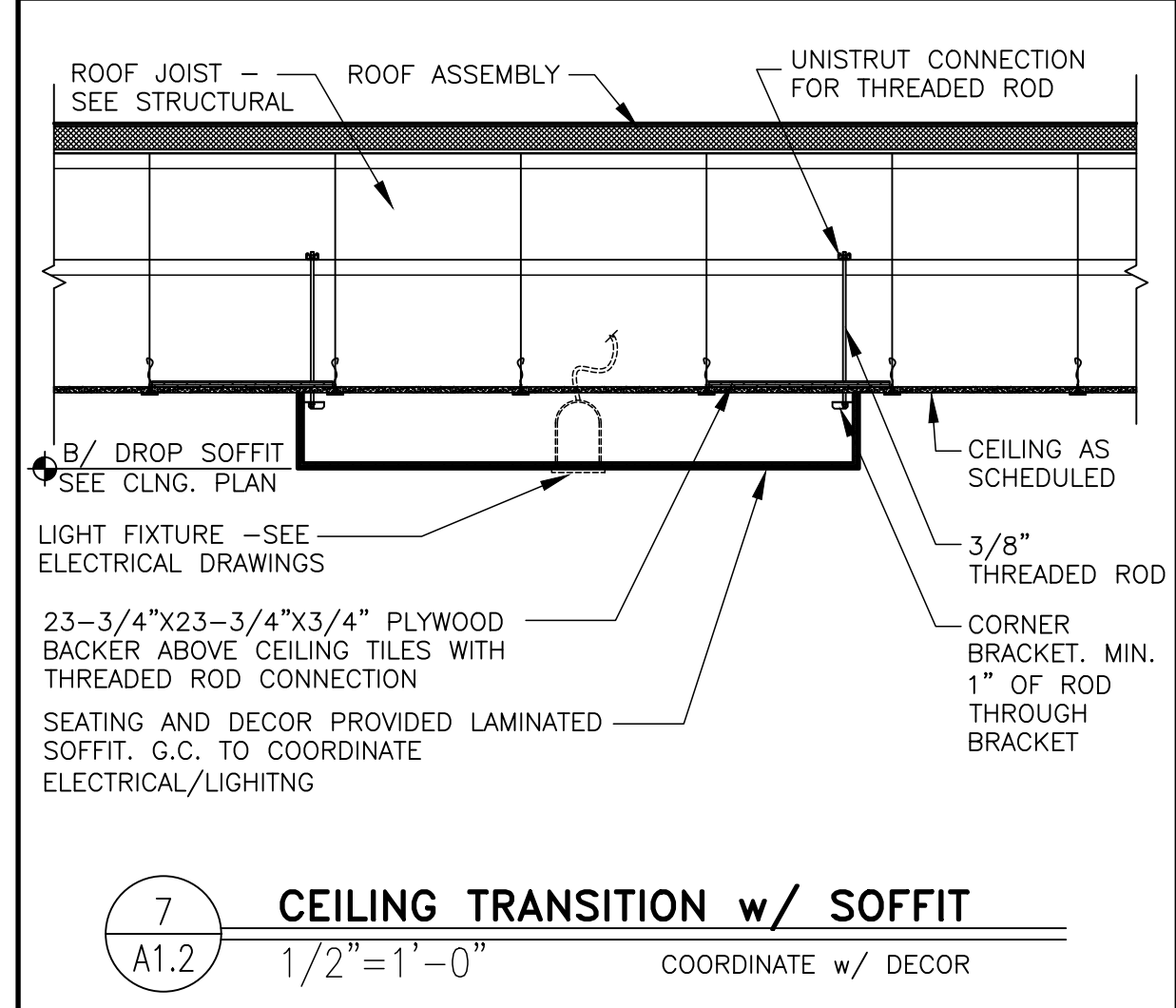
4 CEILING DETAIL AT COOLER
 1 1/2" = 1'-0"



5 CEILING DETAIL AT SWITCHGEAR
 1 1/2" = 1'-0"

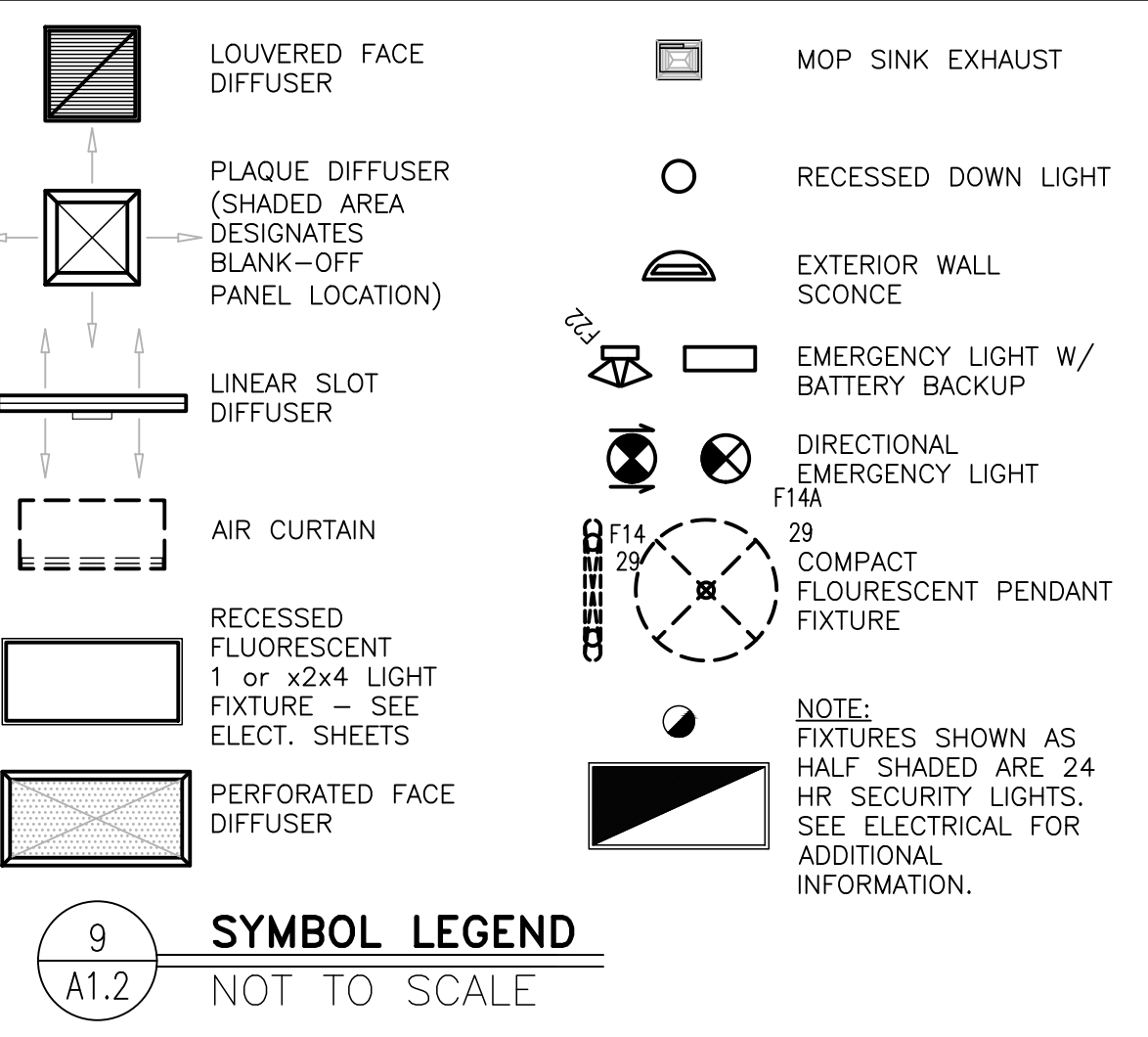


6 MONITOR INSTALLATION DETAIL
 N.T.S.

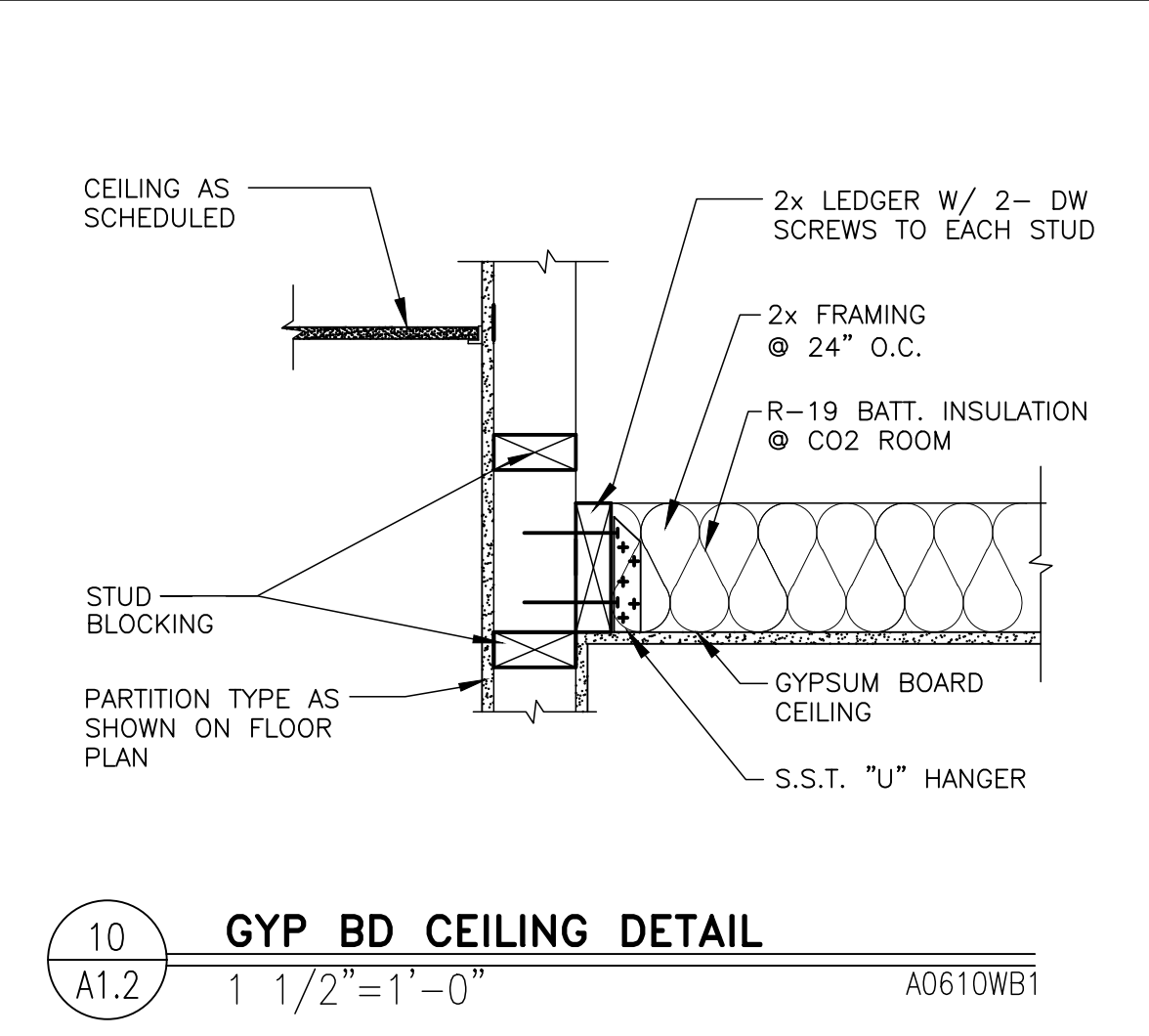


7 CEILING TRANSITION w/ SOFFIT
 1/2" = 1'-0" COORDINATE w/ DECOR

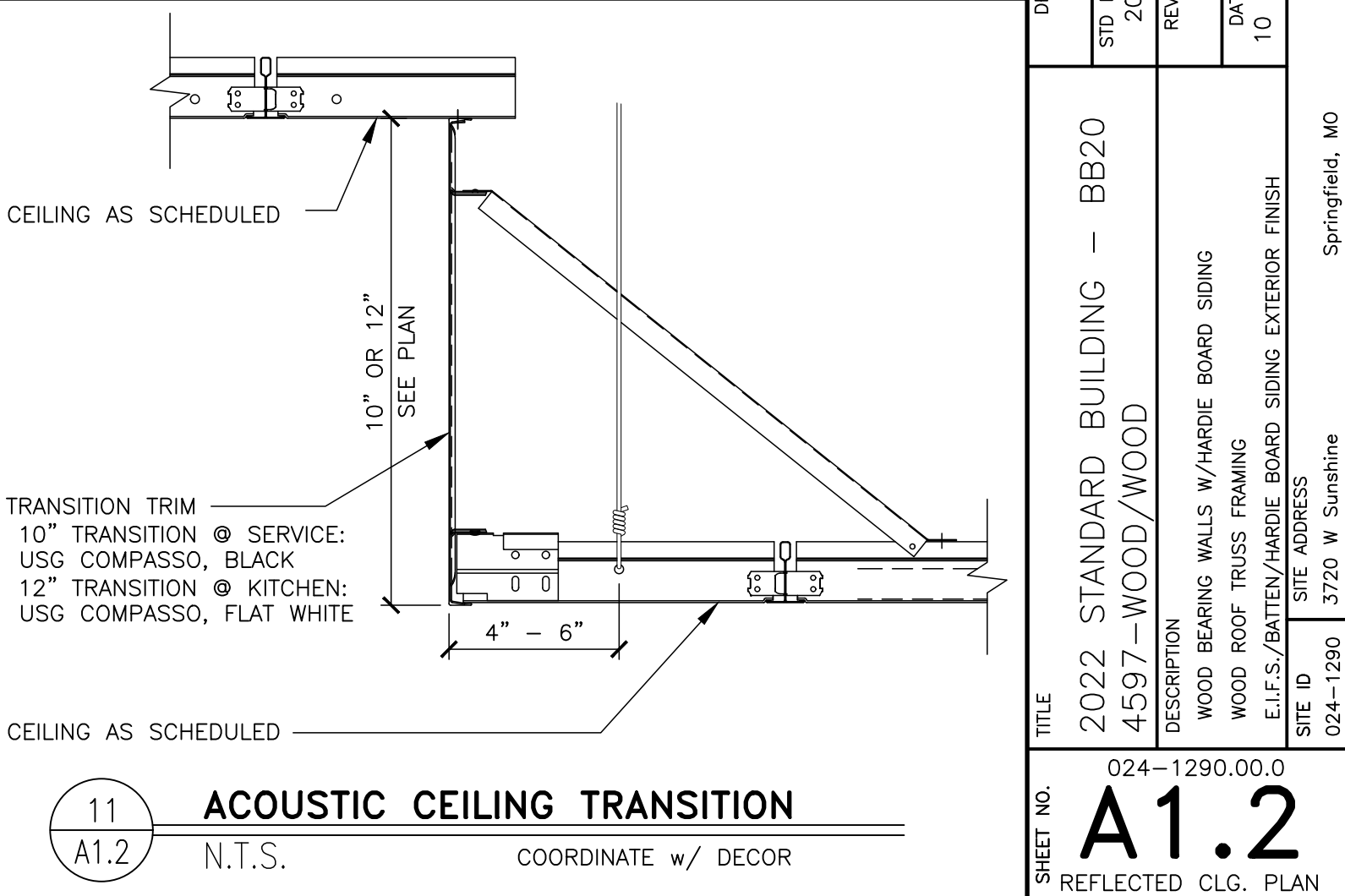
8 NOT USED
 A1.2 -



9 SYMBOL LEGEND
 NOT TO SCALE



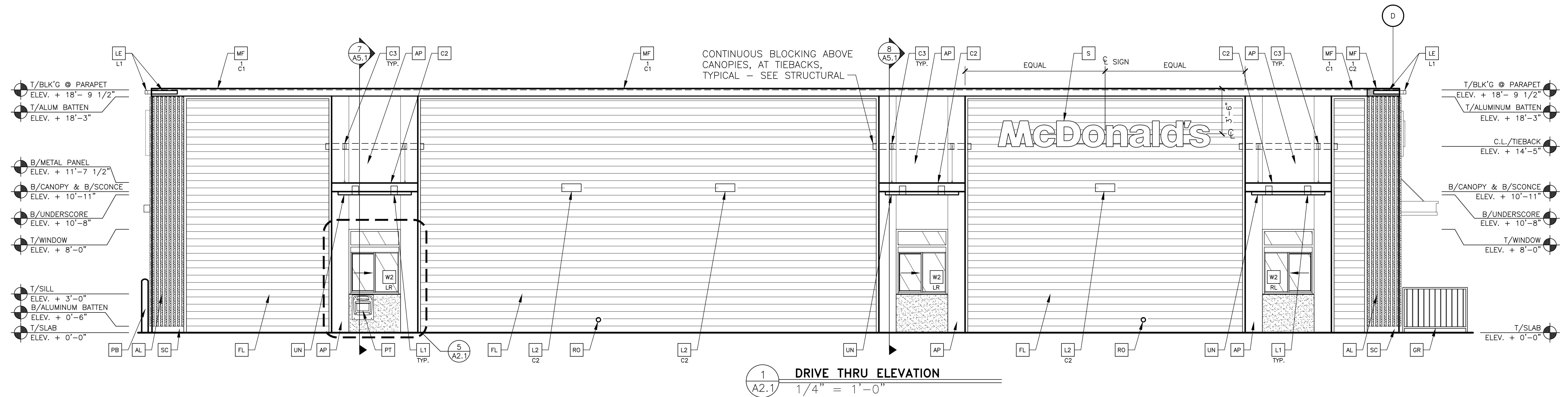
10 GYP BD CEILING DETAIL
 1 1/2" = 1'-0" A0610WB1



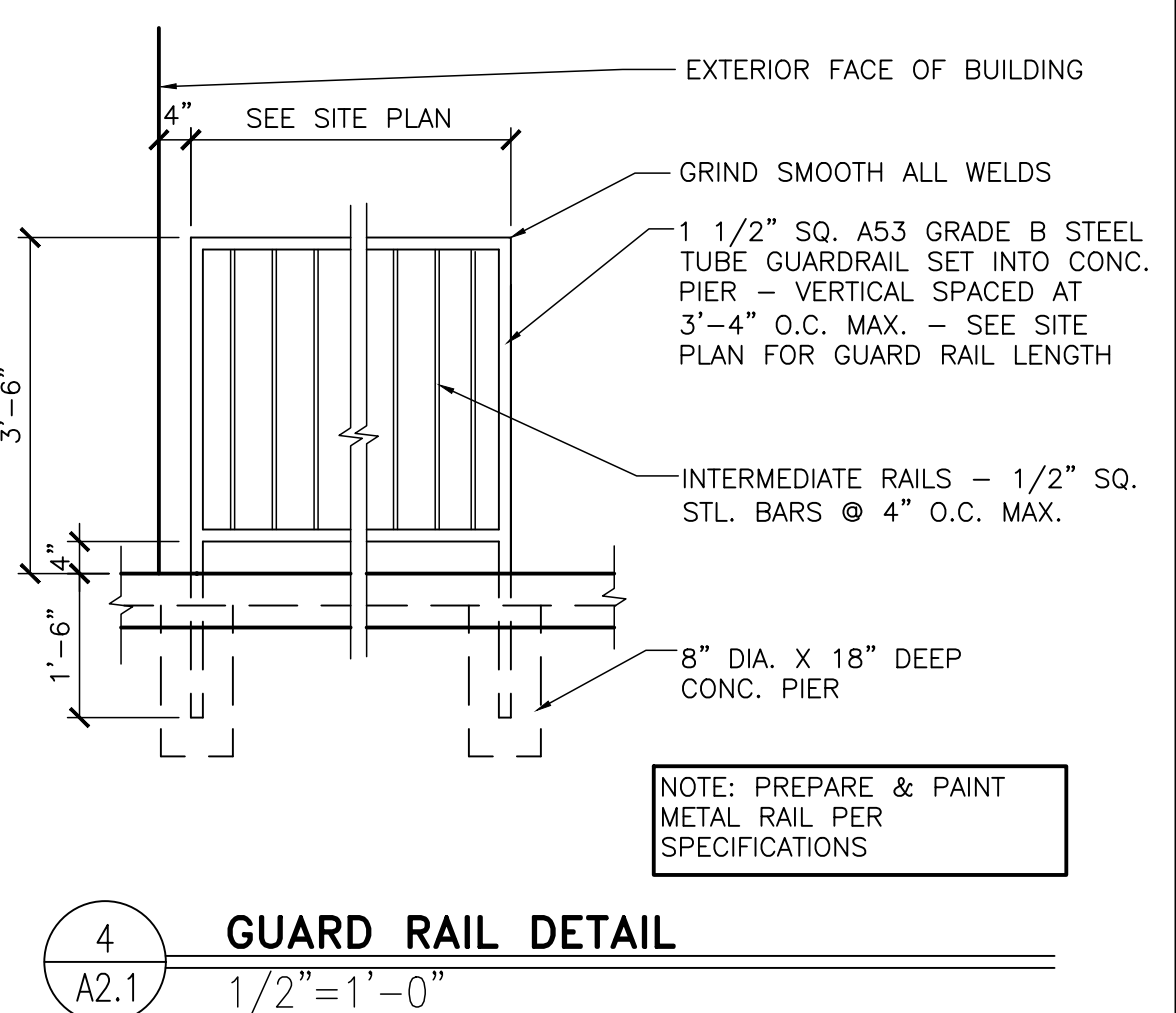
11 ACOUSTIC CEILING TRANSITION
 N.T.S. COORDINATE w/ DECOR

McDonald's USA, LLC
 2022 STANDARD BUILDING - BB20
 4597 - WOOD/WOOD
 DESCRIPTION: WOOD BEARING WALLS W/HARDBOARD SIDING, WOOD ROOF TRUSS FRAMING, E.L.F.S./BATTEN/HARDBOARD SIDING EXTERIOR FINISH
 SITE ID: 024-1290.00.0
 SITE ADDRESS: 3720 W. Sunshine Springfield, MO
 DRAWN BY: [blank]
 STD ISSUE DATE: 2022-10-10
 REVIEWED BY: RH
 DATE ISSUED: 10.04.2022

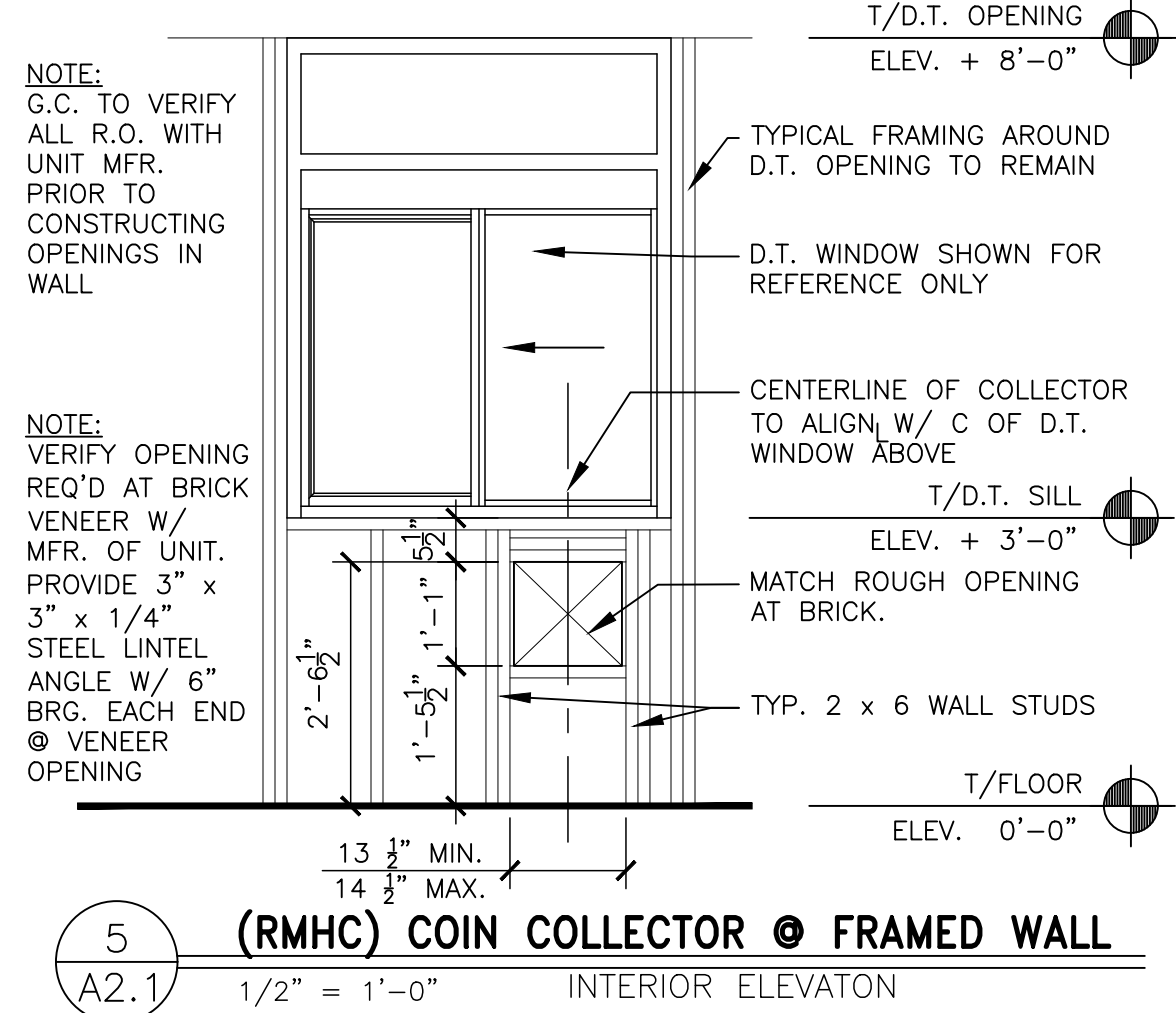
924-1290.00.0
A1.2
 REFLECTED CLG. PLAN



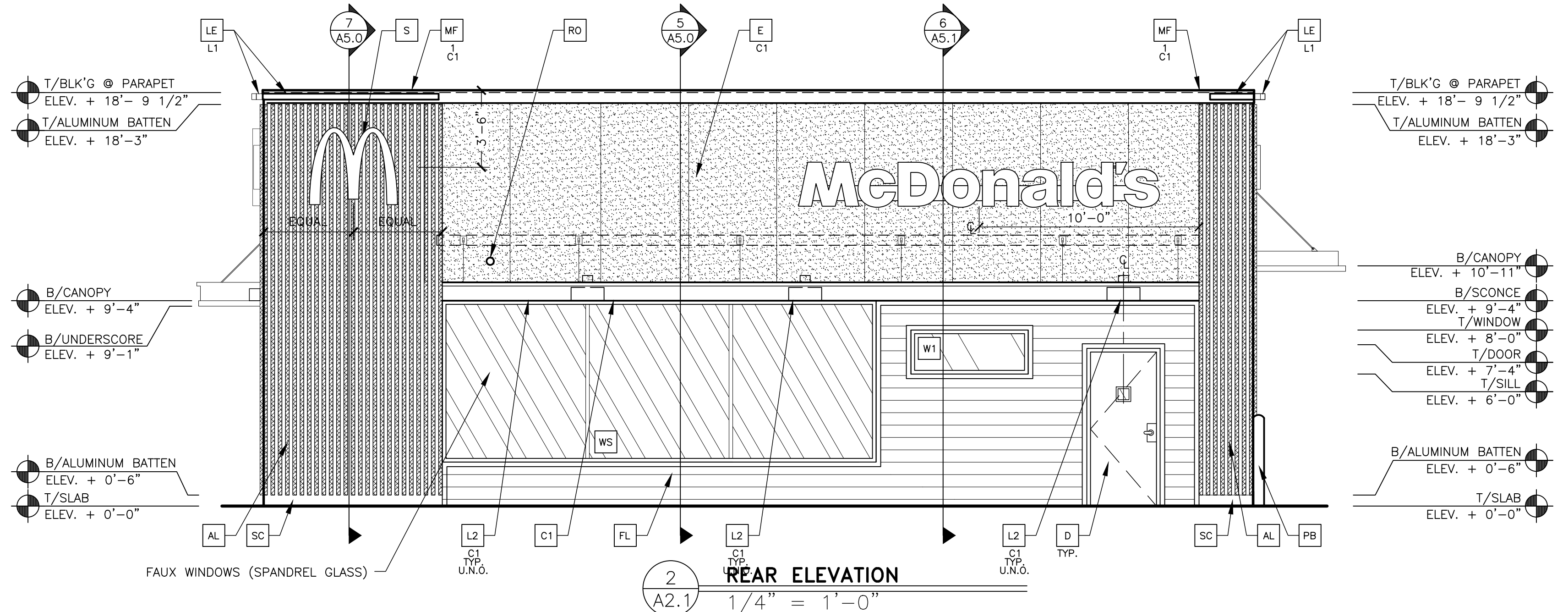
1 DRIVE THRU ELEVATION
1/4" = 1'-0"



4 GUARD RAIL DETAIL
1/2" = 1'-0"



5 (RMHC) COIN COLLECTOR @ FRAMED WALL
1/2" = 1'-0"



2 REAR ELEVATION
1/4" = 1'-0"

KEY NOTES (DESERT COLOR SCHEME):

- | | | | | | |
|---|---|---|---|---|--|
| <p>AL ALUMINUM BATTEN SYSTEM
SIZE: 2"x2" PROFILE
COLOR: WOOD GRAIN, BACKRAIL UNFINISHED, ENDCAP PAINTED TO MATCH SUBSTRATE: 1/2" EXTERIOR HIGH DENSITY OVERLAY (HDO) PLYWOOD, BB, GROUP 1, HDO BOTH FACES, APA TRADEMARKED, COURSE GRIT SAND SURFACES PRIOR TO PRIMING, PRIME AND PAINT BOTH SIDES AND ALL EDGES PRIOR TO INSTALLATION.
SUBSTRATE COLOR: "IRON ORE" 7069 BY SHERWIN WILLIAMS</p> <p>AP ALPOLIC METAL PANEL (COLOR: RAL 7022)</p> <p>C1 ALUMINUM CANOPY SYSTEM W/FASCIA
COLOR: WHITE</p> <p>C2 ALUMINUM CANOPY SYSTEM
COLOR: RAL 7022</p> <p>C3 ALUMINUM CANOPY TIEBACK
COLOR: RAL 7022
GC TO PROVIDE CONTINUOUS BLOCKING ON WALL BEHIND TIEBACKS, WHEN TIEBACKS ARE INSTALLED ON METAL PANELING.
SEE DETAIL 3/A5.0</p> | <p>CJ CONTROL JOINT
1-TYPE: 1 = EIFS</p> <p>D HOLLOW METAL DOOR
PAINT: "FAIRVIEW TAUPE" HC-85 BY BENJAMIN MOORE</p> <p>DE DECAL BY GRAPHICS SUPPLIER
SURFACE APPLIED, FIELD INSTALLED, PRE CUT, PRE SPACED.
SUPPLIERS:
VOMELA (865) 330-7337, ann.bowen@vomela.com
GFX INTERNATIONAL (847) 543-4600, mcdonaldsdecor@gfxi.com</p> <p>E EXTERIOR INSULATION FINISH SYSTEM (E.I.F.S.)
C1-COLOR:
C1 = "IRON ORE" 7069 BY SHERWIN WILLIAMS
C2 = "FAIRVIEW TAUPE" HC-85 BY BENJAMIN MOORE</p> <p>EJ EXPANSION JOINT, SEE DETAIL 7/A4.1</p> | <p>FB CO2 = BULK CO2 FILL BOX (EQPM SCHEDULE ITEM 49.00)
BO = BULK OIL FILL BOX (EQPM SCHEDULE ITEM 700.18)</p> <p>FL FIBER CEMENT LAP SIDING: HARDIEPLANK LAP SIDING, BEADED SMOOTH, 8 1/4" WIDTH, 7" EXPOSURE, H2S, COLOR: AGED PEWTER</p> <p>FT FIBER CEMENT TRIM: HARDIETRIM BOARDS, 4/4 SMOOTH, 1 5/8" & 3 1/2" WIDTH, 3/4" THICK, H2S, COLOR: AGED PEWTER (CHECK 1 5/8" PRE-PAINT AVAILABILITY)</p> <p>GR GUARD RAIL-SEE SITE PLAN FOR EXACT LOCATION AND LENGTH
PAINT: "IRON ORE" 7069 BY SHERWIN WILLIAMS</p> <p>L1 RECESSED DOWN LIGHT FIXTURE - SEE ELECTRICAL
COLOR: GOLD</p> | <p>L2 RADIAL SCONCE LIGHT FIXTURE - SEE ELECTRICAL
C1-COLOR:
C1 = WHITE
C2 = PLATINUM SILVER</p> <p>LE ACCENT LIGHTING - SEE ELECTRICAL
L1-LED LIGHT:
L1 = SLIM LED (DOWN ONLY)
L2 = INTEGRAL CANOPY FIXTURE
L3 = UP ONLY FLOOD FIXTURE</p> <p>MF METAL FASCIA
1-TYPE:
1 = PRE-FAB ANCHOR-TITE FASCIA
2 = BOTTOM TRIM AT METAL REVEAL PANEL
3 = VERTICAL TRIM AT METAL REVEAL PANEL CORNERS, CLOSURES
COLOR:
C1 = WEATHERED ZINC
C2 = RAL 7022</p> | <p>PB PIPE BOLLARD - PAINTED YELLOW</p> <p>PT (RMHC) COIN COLLECTOR
MODEL: #WPT STD
CALL 1-888-743-7435 TO ORDER</p> <p>RO ROOF DRAIN OVERFLOW PIPE PAINT TO MATCH SURROUNDING MATERIAL</p> <p>KB SERIES 3200 RECESSED KNOX BOX W/ HINGED DOOR MOUNT @ 72# TO TOP OFF RMK SHELL</p> <p>S McDONALD'S SIGNAGE BY OTHERS - UNDER SEPARATE PERMIT.
C1-COLOR:
C1 = WEATHERED ZINC RACEWAY
C2 = RAL 7022 RACEWAY</p> | <p>ST CO2 STROBE/ALARM. SEE MECHANICAL DRAWINGS FOR SPECIFICATION.</p> <p>SC STUCCO
C1-COLOR:
C1 = "IRON ORE" 7069 BY SHERWIN WILLIAMS</p> <p>UN METAL UNDERSCORE
COLOR: GOLD</p> <p>W1 EXTERIOR WINDOW ASSEMBLY - TEMPERED GLASS
COLOR: DARK BRONZE</p> <p>W2 DRIVE-THRU WINDOW BY READY ACCESS
MODEL: 600 SERIES, 36" SERVICE HEIGHT WITH TRANSM, MANUAL OPEN, ELECTRONIC RELEASE
COLOR: DEEP BRONZE
SLIDE DIRECTION: RL = RIGHT TO LEFT
LR = LEFT TO RIGHT</p> |
|---|---|---|---|---|--|

STATE OF MISSOURI
ROBERT KEMPLEK
REGISTERED ARCHITECT
NUMBER A-2008012350
11-10-2022

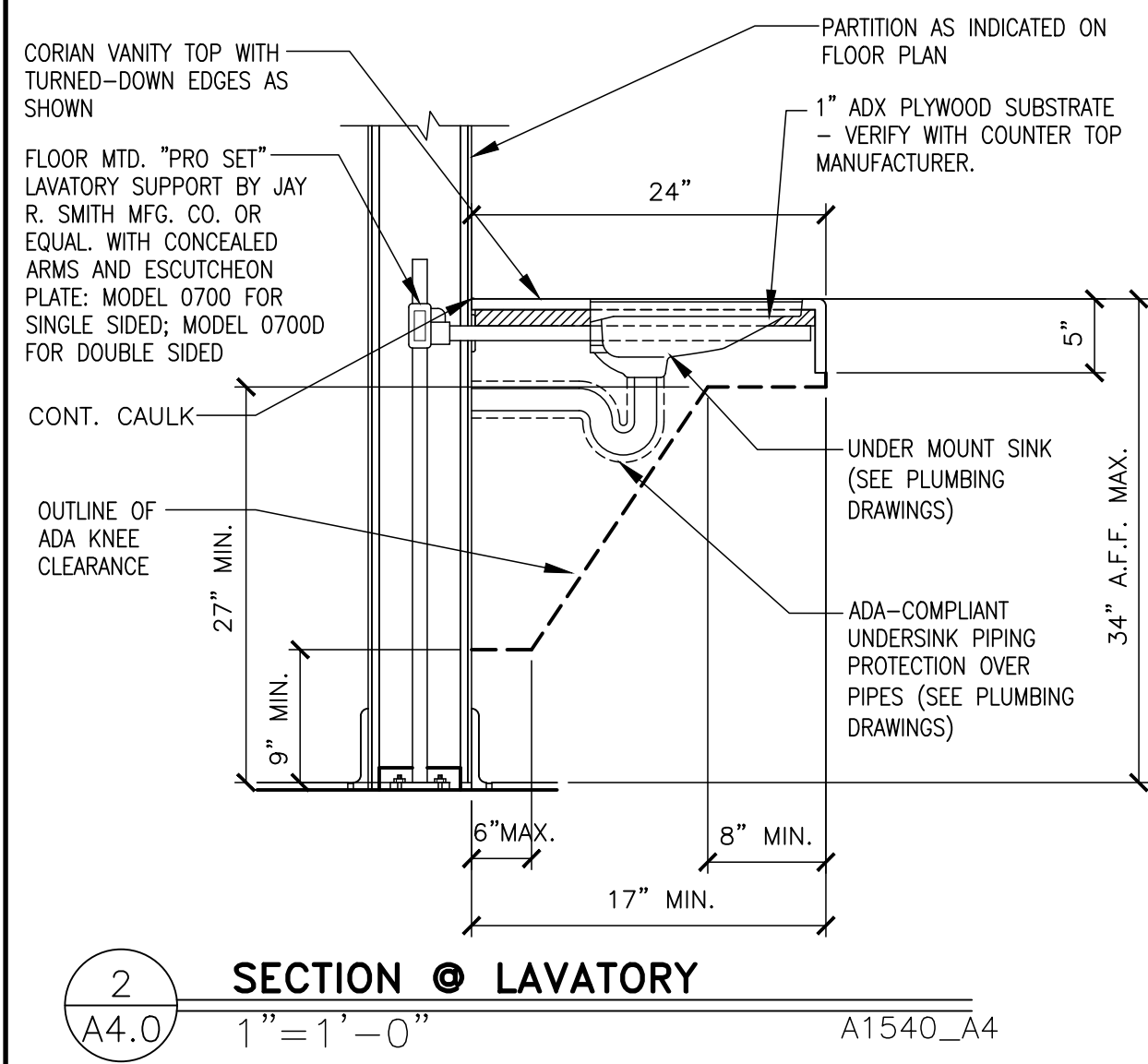
PREPARED BY: Robert Kemples
ARCHITECT
3001 W. STATE ST.
ST. LOUIS, MO 63103
TEL: 314.241.1111 FAX: 314.241.1111

© 2022 McDonald's USA, LLC
McDonald's USA, LLC
These drawings and specifications are the confidential and proprietary property of McDonald's USA, LLC and shall not be copied or reproduced without written authorization. The contract documents were prepared not suitable for use on a different site or at a later time. Use of these drawings for reference or example on another project requires the contract documents for reuse on another project is not authorized.

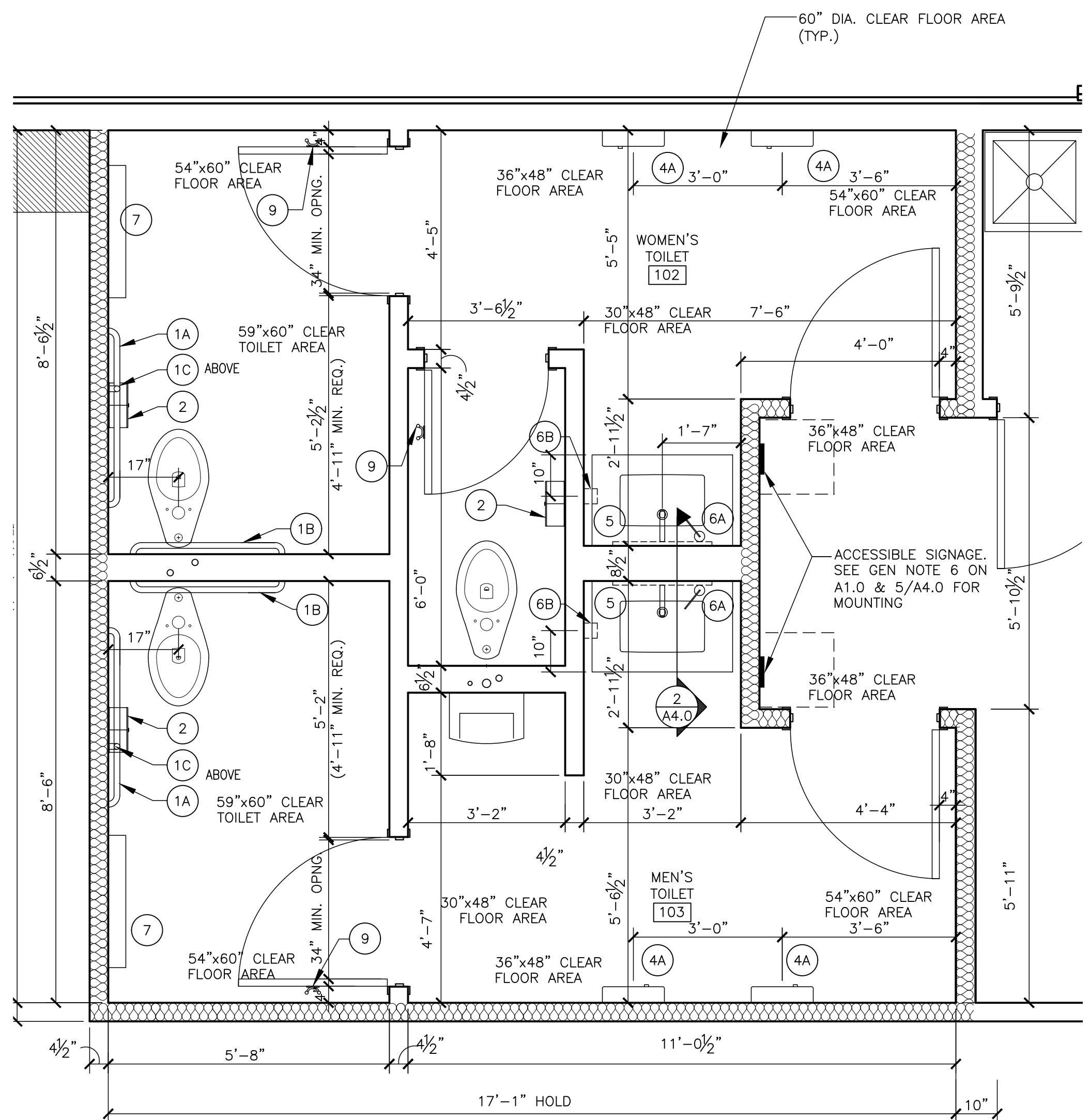
DATE	BY	DESCRIPTION
10/04/2022	RH	DATE ISSUED
10/04/2022	RH	REVIEWED BY
2022-10	SO	STD ISSUE DATE
2022-10	SO	DRAWN BY

TITLE: 2022 STANDARD BUILDING - BB20
DESCRIPTION: 4597 - WOOD/WOOD
WOOD BEARING WALLS W/HARDBOARD SIDING
WOOD ROOF TRUSS FRAMING
E.L.F.S./BATTEN/HARDBOARD SIDING EXTERIOR FINISH
SITE ADDRESS: 3720 W. Sunshine
Springfield, MO 65704-1990

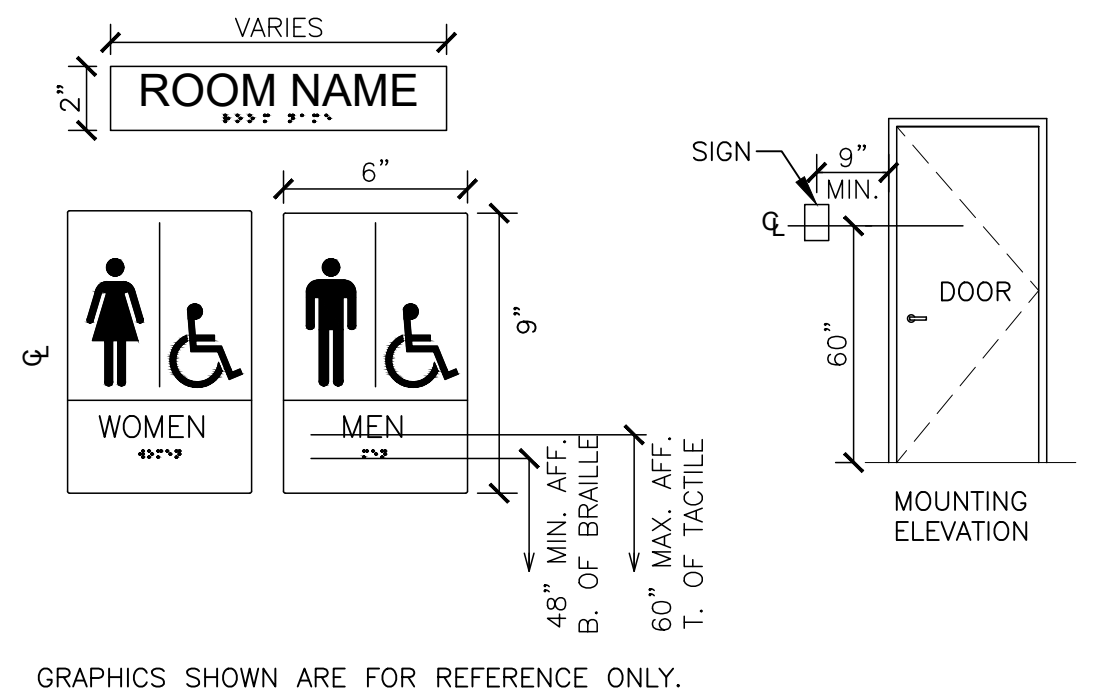
024-1290.00.0
A2.1
ELEVATIONS



2 SECTION LAVATORY
 1" = 1'-0"
 A1540_A4



1 ENLARGED RESTROOM PLAN
 1/2" = 1'-0"



GRAPHICS SHOWN ARE FOR REFERENCE ONLY.

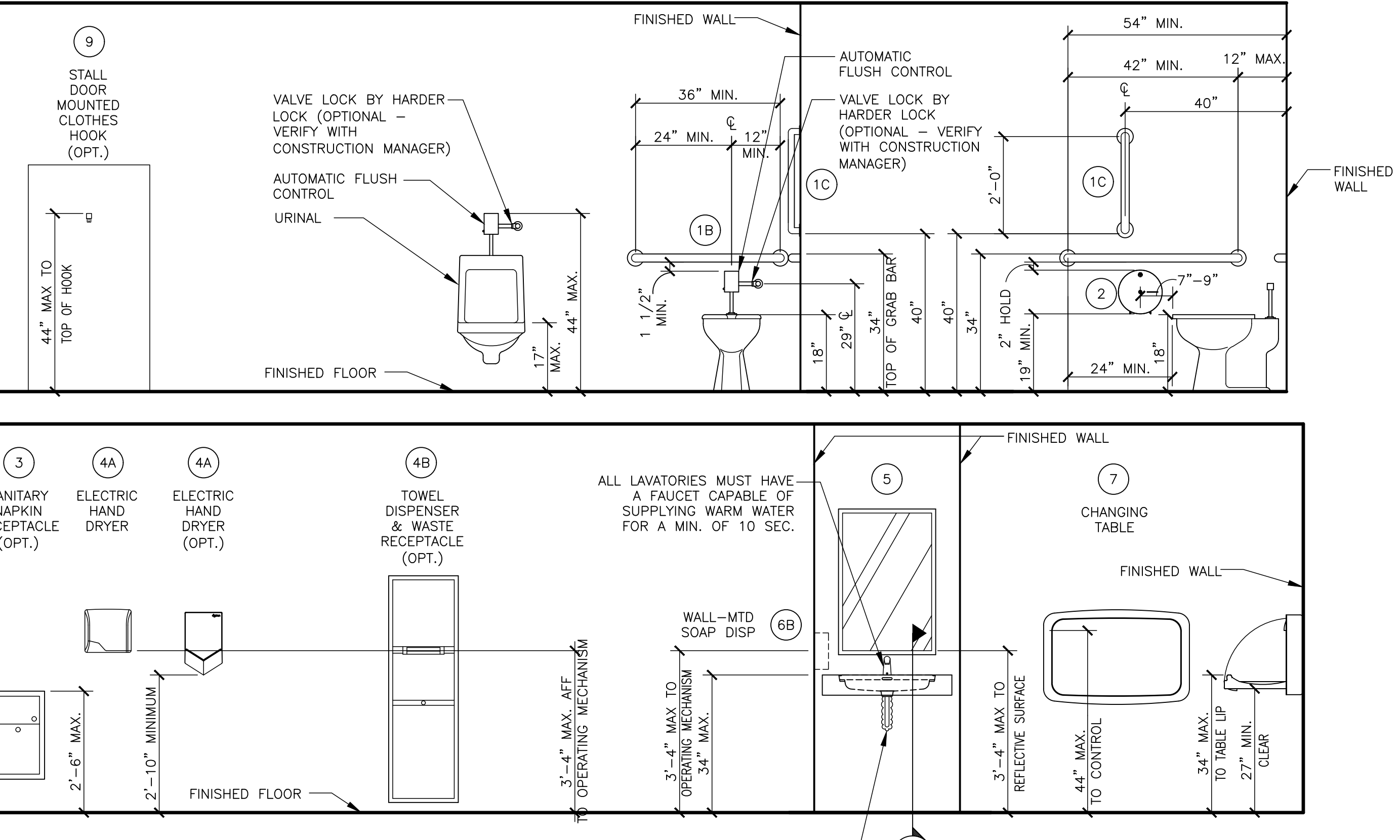
GC TO PROVIDE ADA SIGNAGE PACKAGE AND INSTALL SIGNS AT LOCATIONS AND POSITIONS INDICATED IN PACKAGE OR AS REQUIRED BY LOCAL CODES. SIGNAGE PACKAGE SUPPLIED BY:

FORREST PERMA-SIGN
 9292 1ST ST., BOX 588
 NEW ROCHELLE, NY 10802
 www.forrestpermasigns.com
 1-800-214-8765

SIGNAGE NOTES:

- EACH EXIT DOOR SHALL HAVE A TACTILE SIGN, INCLUDING RAISED LETTERS AND BRAILLE, STATING 'EXIT' AND SHALL COMPLY WITH CHAPTER 7. ALL SIGNAGE SHALL CONFORM WITH ACCESSIBILITY GUIDELINES AND LOCAL GUIDELINES INCLUDING BUT NOT LIMITED TO PROPORTION, COLOR CONTRAST AND RELIEF AND GRADE 2 BRAILLE REQUIREMENTS.
- WHEN PERMANENT IDENTIFICATION IS PROVIDED FOR ROOMS AND SPACES, RAISED LETTERS SHALL BE PROVIDED AND SHALL BE ACCOMPANIED BY BRAILLE IN CONFORMANCE WITH CHAPTER 7. SIGNS SHALL BE INSTALLED ON THE WALL ADJACENT TO THE LATCH SIDE OF THE DOOR. WHERE THERE IS NO WALL SPACE ON THE LATCH SIDE, INCLUDING AT DOUBLE LEAF DOORS, SIGNS SHALL BE PLACED ON THE NEAREST ADJACENT WALL, PREFERABLY ON THE RIGHT. MOUNTING HEIGHT SHALL BE 60" ABOVE THE FINISHED FLOOR TO THE CENTERLINE OF THE SIGN. MOUNTING LOCATION SHALL BE DETERMINED SO THAT A PERSON MAY APPROACH WITHIN 3" OF SIGNAGE WITHOUT ENCOUNTERING PROTRUDING OBJECTS OR STANDING WITHIN THE SWING OF A DOOR.

5 ACCESSIBLE SIGNAGE
 N.T.S.



4 RESTROOM FIXTURE AND ACCESSORY ELEVATIONS
 1/2" = 1'-0"

NOTES

- ALL DIMENSIONS SHOWN ARE TAKEN TO CEMENT BD.
- SEE SHEET A1.0 FOR PARTITION TYPES
- SEE SHEETS A6.0 & A6.1 FOR DOOR AND FINISH SCHEDULES.
- SEE 4/A4.0 FOR FIXTURE MOUNTING HEIGHTS

(X) = RESTROOM ACCESSORY - SEE 3/A4.0

ITEM (SEE NOTE 2)	MFR MODEL #	SUPPLIER	BACKUP SUPPORT (SEE NOTE 3)
1A	GRAB BAR 42"	BOBRICK B-6806X42	HUGHES SUPPLY (866) 310-3576
1B	GRAB BAR 36"	B-6806X36	MCDCOORD@HAJOCA.COM
1C	GRAB BAR 24"	B-6806X24	
2	TOILET TISSUE DISPENSER, JUMBO, SURFACE MOUNTED	BRADLEY 5424	HUGHES SUPPLY (866) 310-3576
3	SANITARY NAPKIN RECEPTACLE, RECESSED (OPTIONAL)	BOBRICK B-354	HUGHES SUPPLY (866) 310-3576
4A	HAND DRYER, ENERGY EFFICIENT MODEL, ADA, ALUMINUM BRUSHED	WORLD DRYER L-971 SlimDri	HUGHES SUPPLY (866) 310-3576
4A OPTION	HAND DRYER, ENERGY EFFICIENT MODEL ADA, SPRAYED NICKEL	DYSON AIRBLADE V	HUGHES SUPPLY (866) 310-3576
4B OPTION	TOWEL DISPENSER & WASTE RECEPTACLE, COMBINATION, RECESSED (OPTIONAL)	BOBRICK B-3974	HUGHES SUPPLY (866) 310-3576
5	MIRROR, CHANNEL FRAME	BOBRICK B-165 2436	HUGHES SUPPLY (866) 310-3576
6A	SOAP DISPENSER, COUNTER MOUNTED, 6" SPOUT (OPTIONAL)	BOBRICK B-82216	HUGHES SUPPLY (866) 310-3576
6B	SOAP DISPENSER, WALL-MOUNTED	BOBRICK B-2112	HUGHES SUPPLY (866) 310-3576
7	BABY CHANGING TABLE, HORIZONTAL, SURFACE MOUNT, ADA COMPLIANT, ALL PLASTIC	KOALA KARE KB200-01	HUGHES SUPPLY (866) 310-3576
7 OPTION	BABY CHANGING TABLE, HORIZONTAL, SURFACE MOUNT, ADA COMPLIANT, PLASTIC W/ S/S VENEER	KOALA KARE KB110-SSWM	HUGHES SUPPLY (866) 310-3576
8	DIAPER CONTAINER (OPTIONAL)	-	BY OWNER
9	CLOTHES HOOK	BRADLEY 917	HUGHES SUPPLY (866) 310-3576

NOTES:

- SEE 4/A4.0 FOR ACCESSORY MOUNTING HEIGHTS
- SELECT ONE ITEM FROM ITEM GROUPS 4 & 6, VERIFY WITH AREA CONSTRUCTION MANAGER.
- CUT BACK-UP SUPPORTS BETWEEN STUDS SO FACE OF SUPPORT IS FLUSH W/ WALL STUD

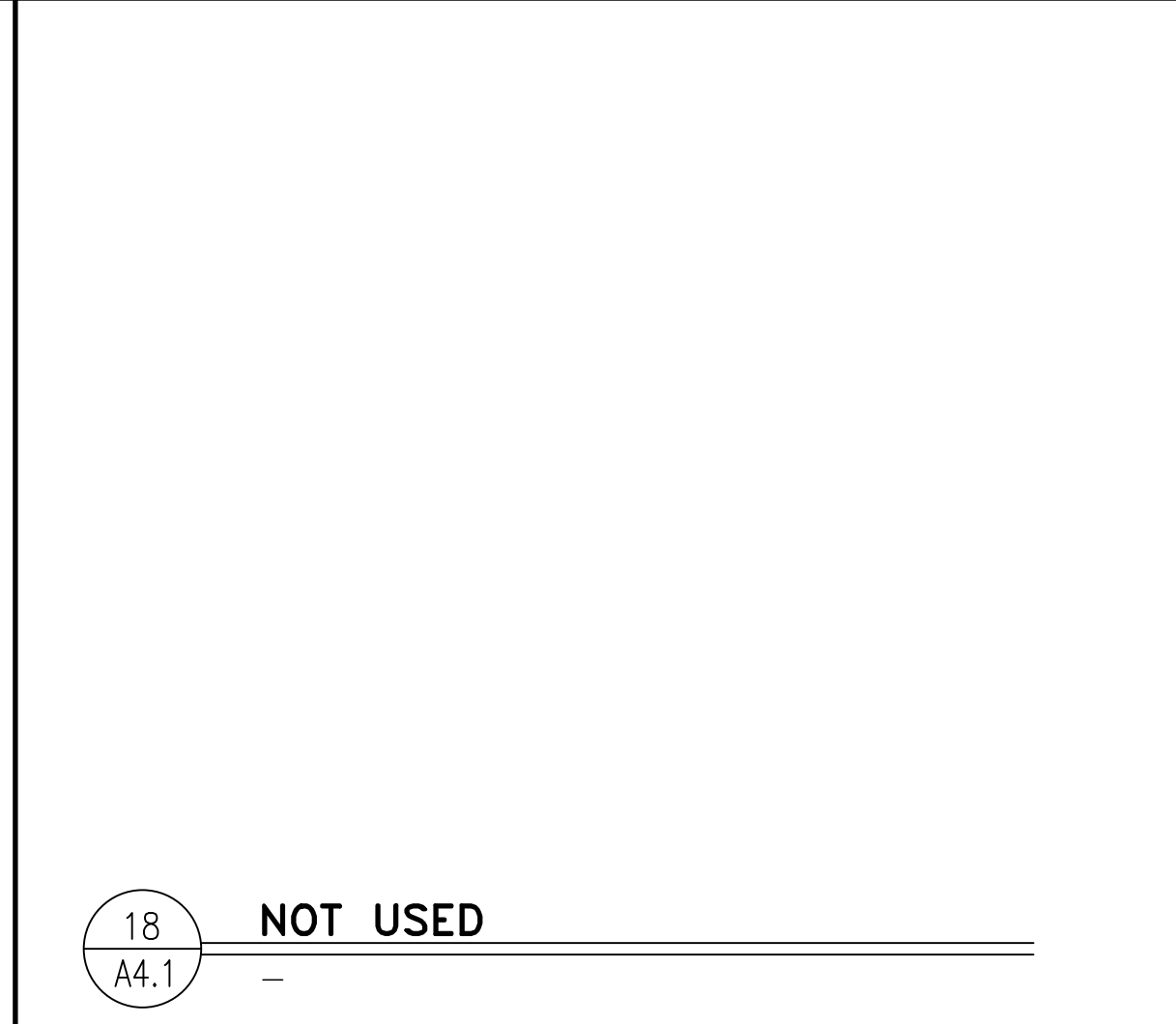
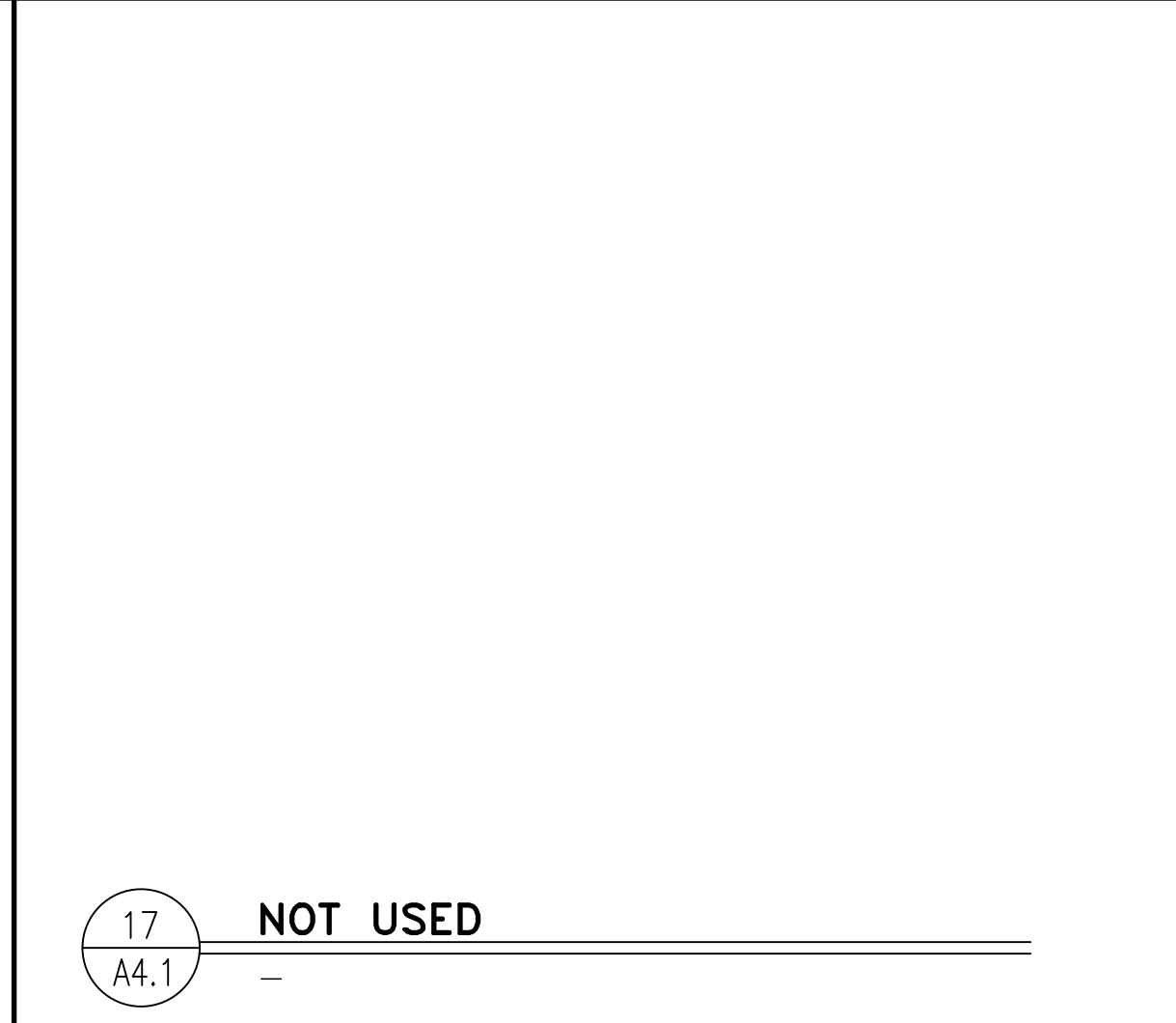
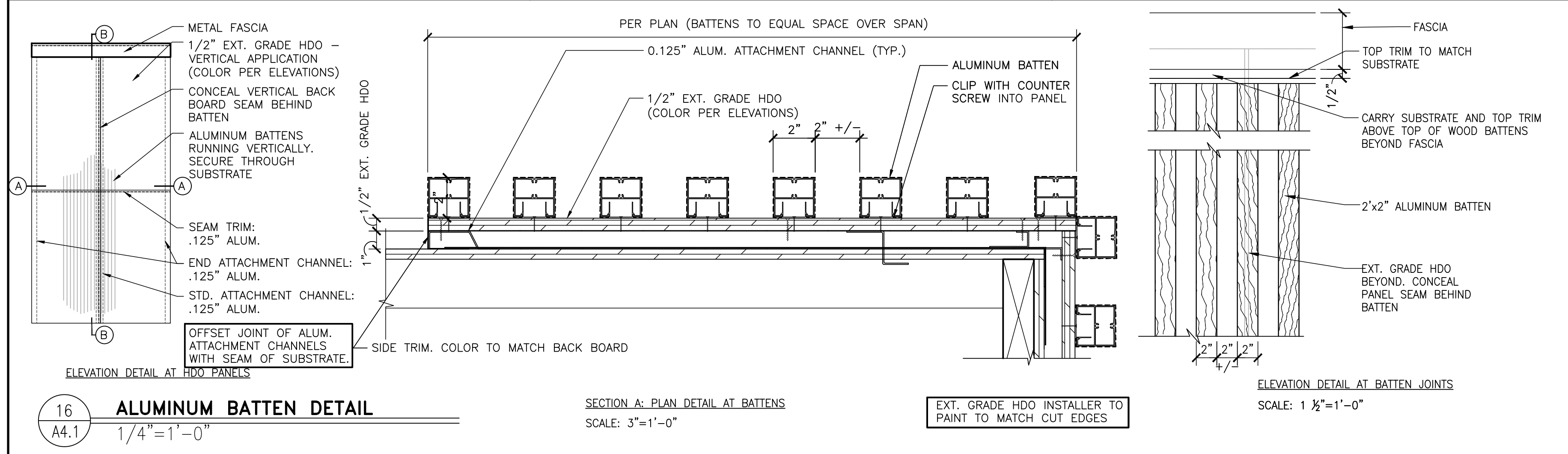
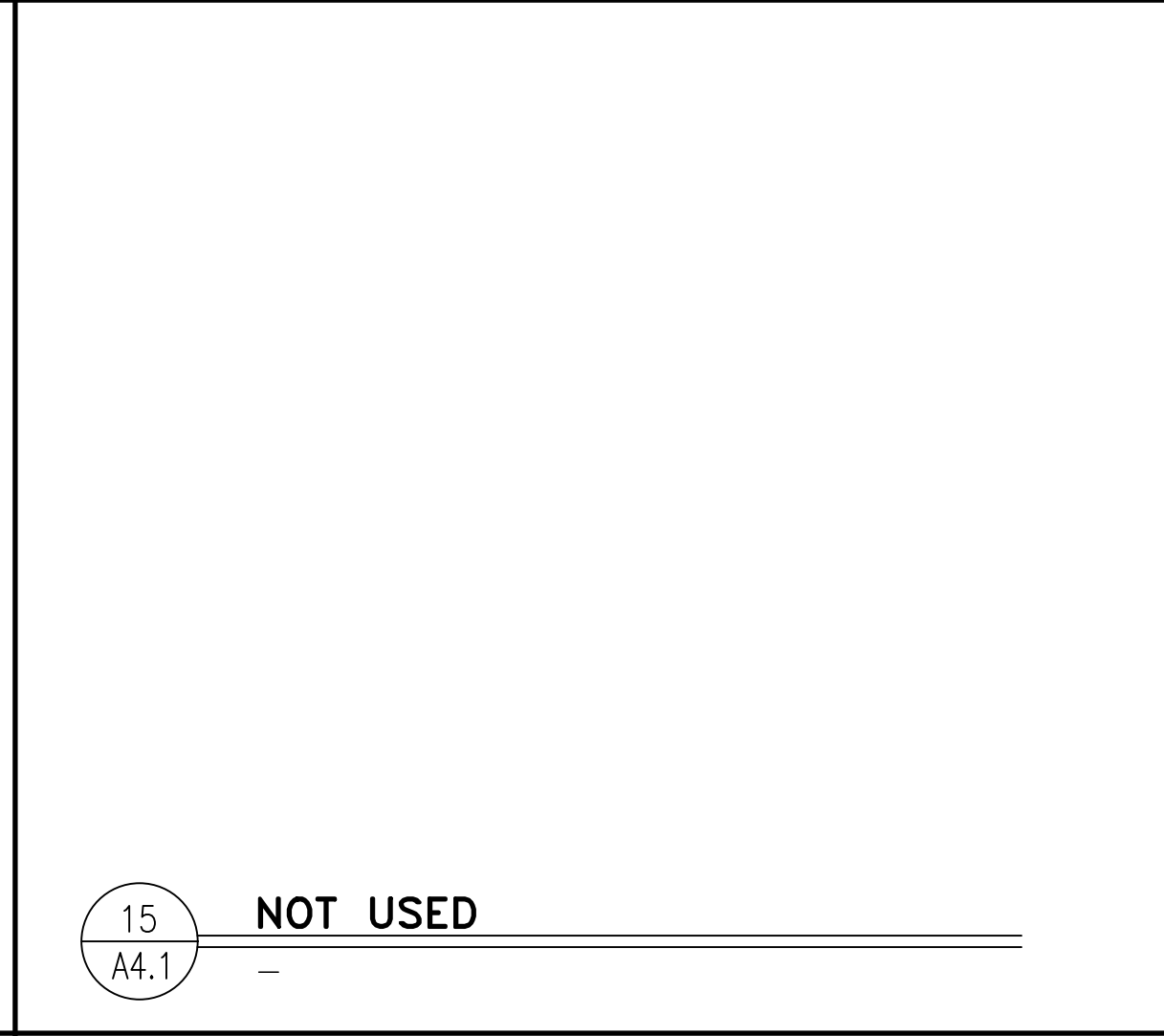
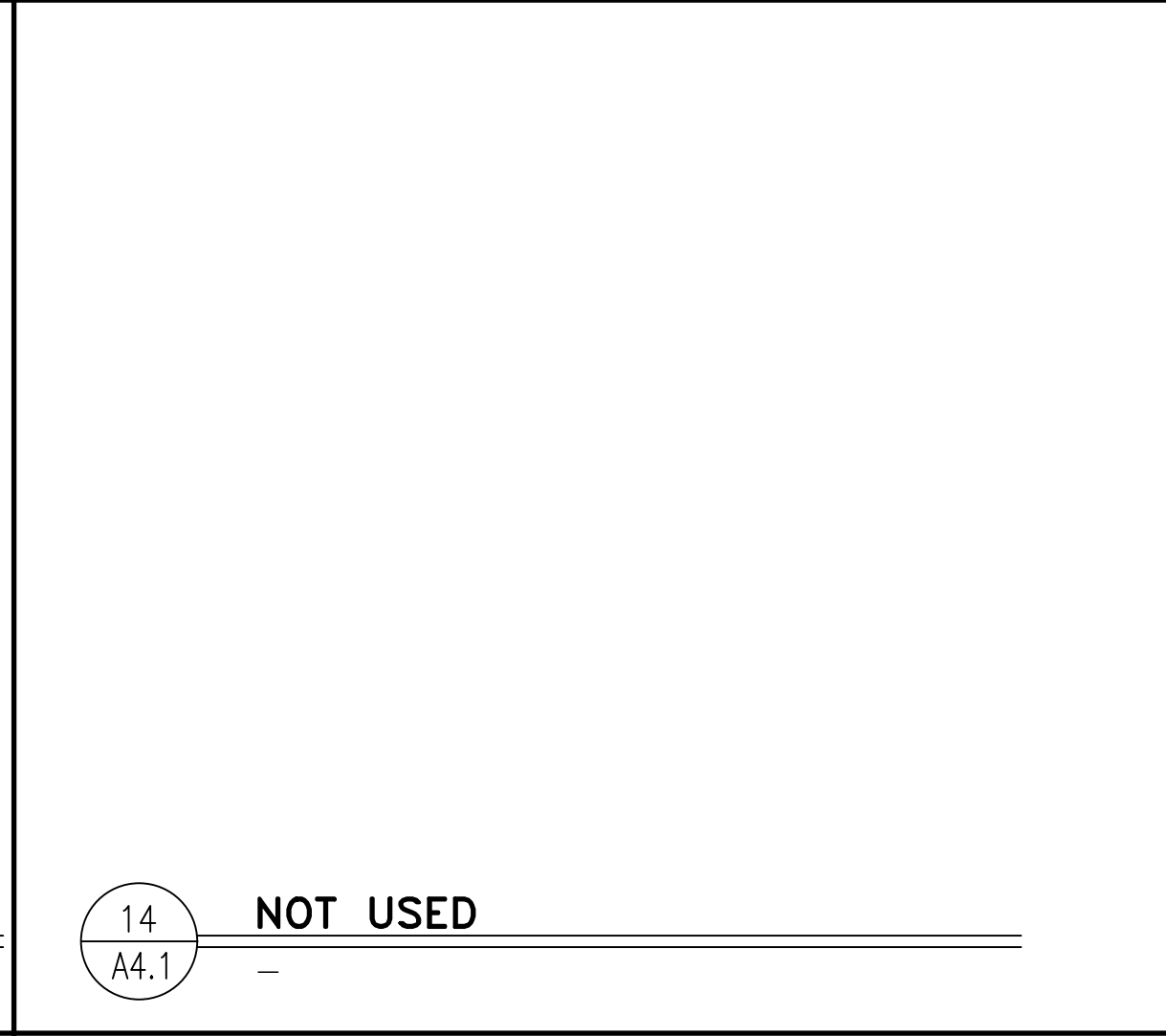
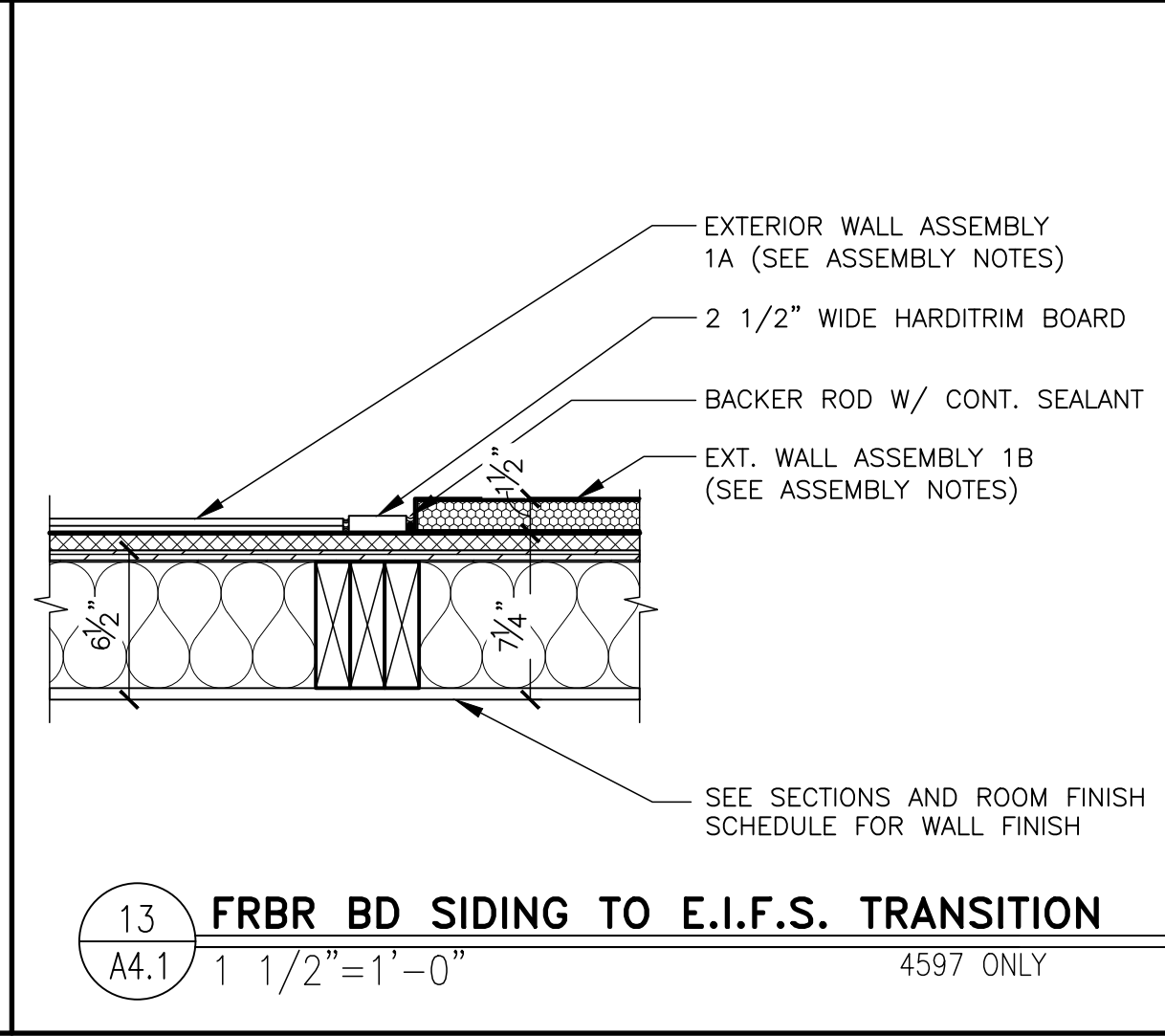
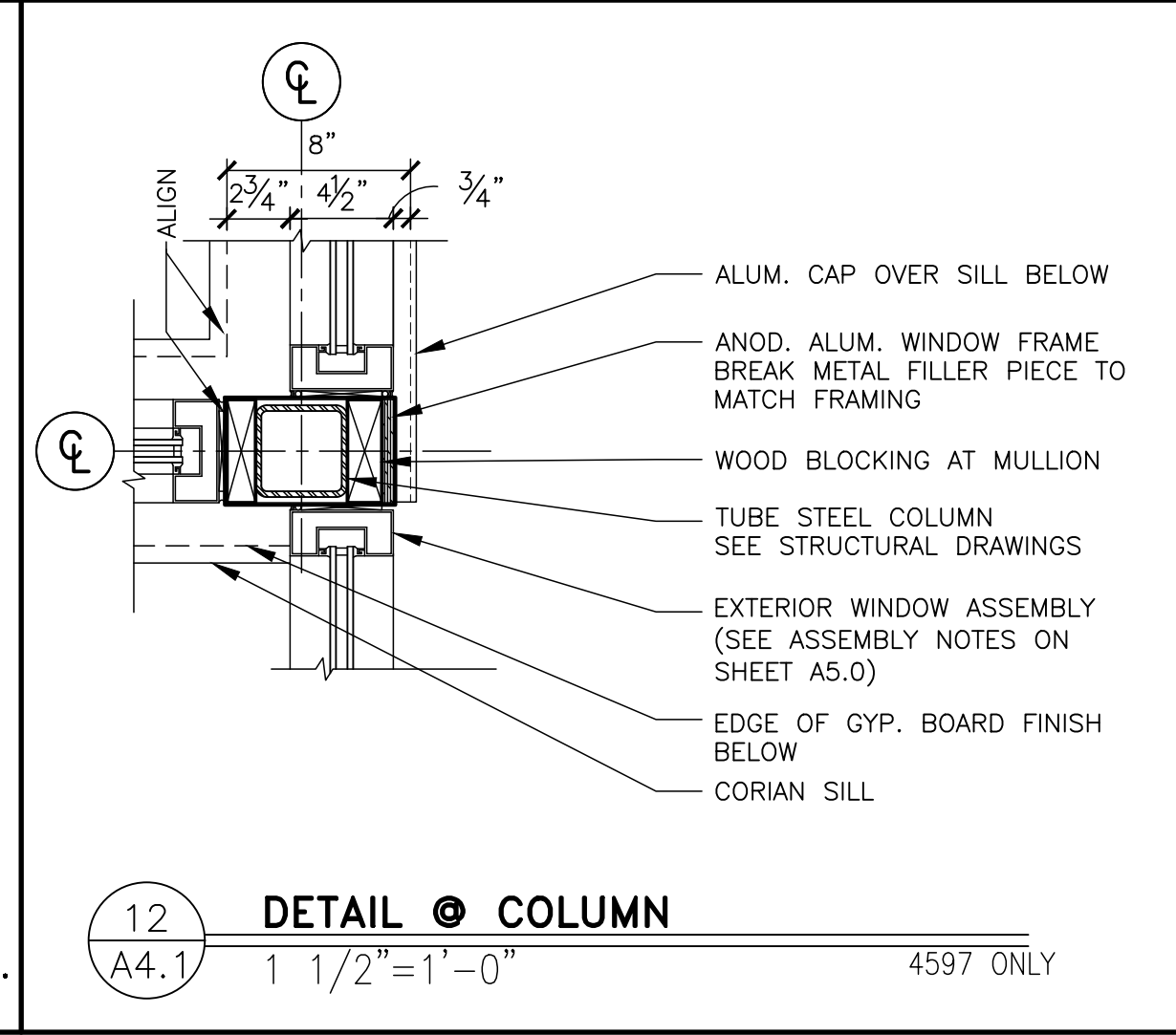
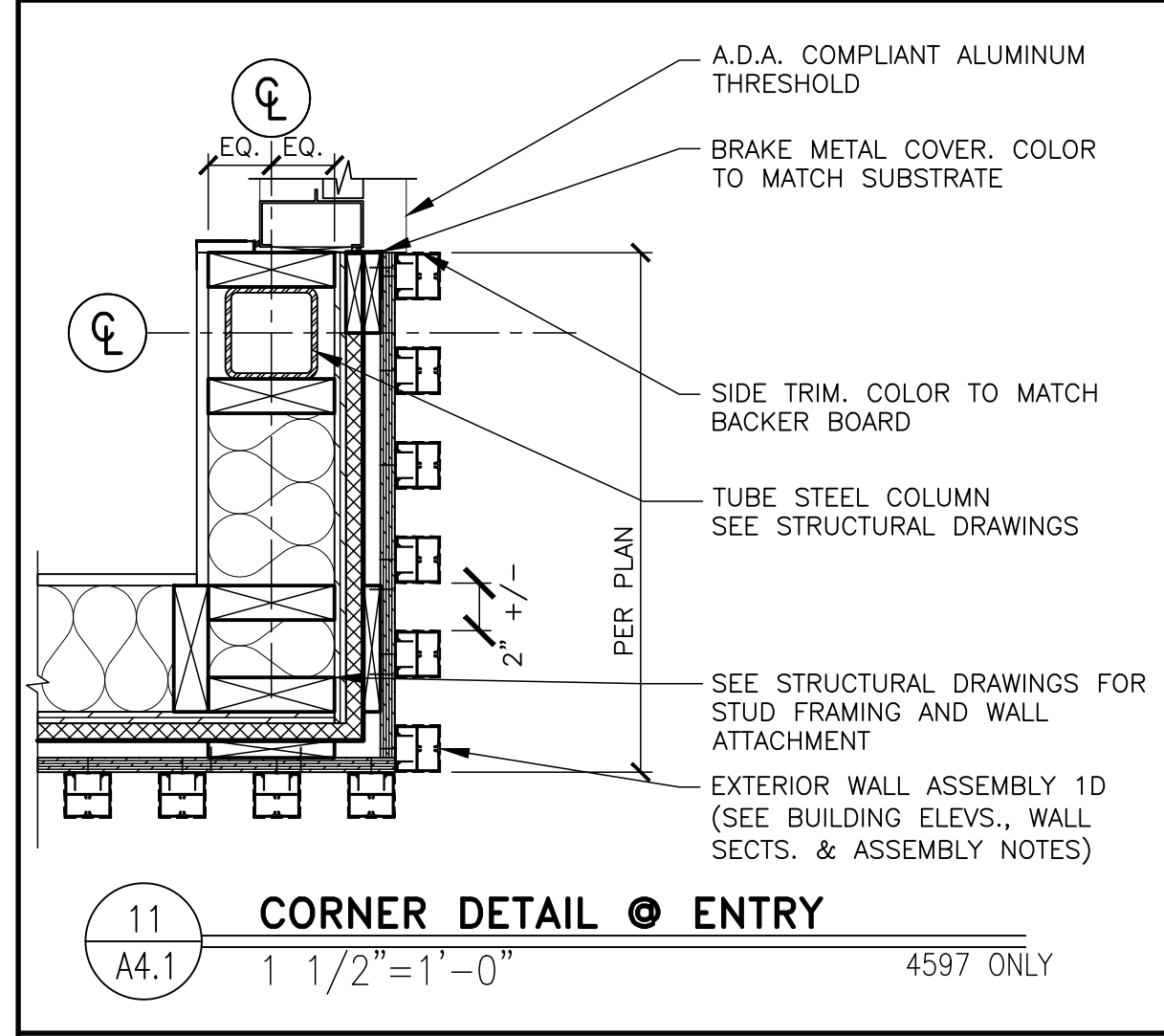
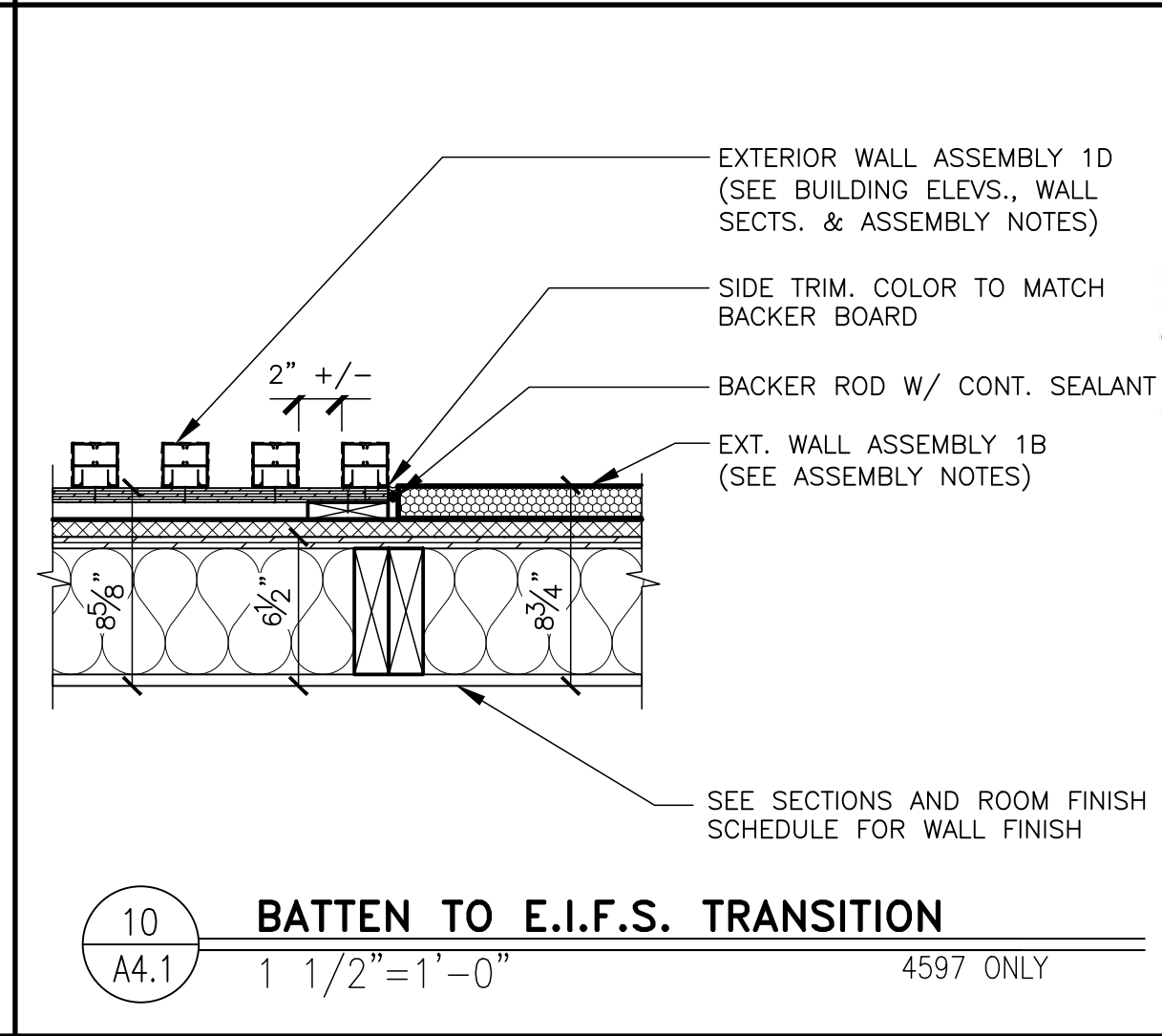
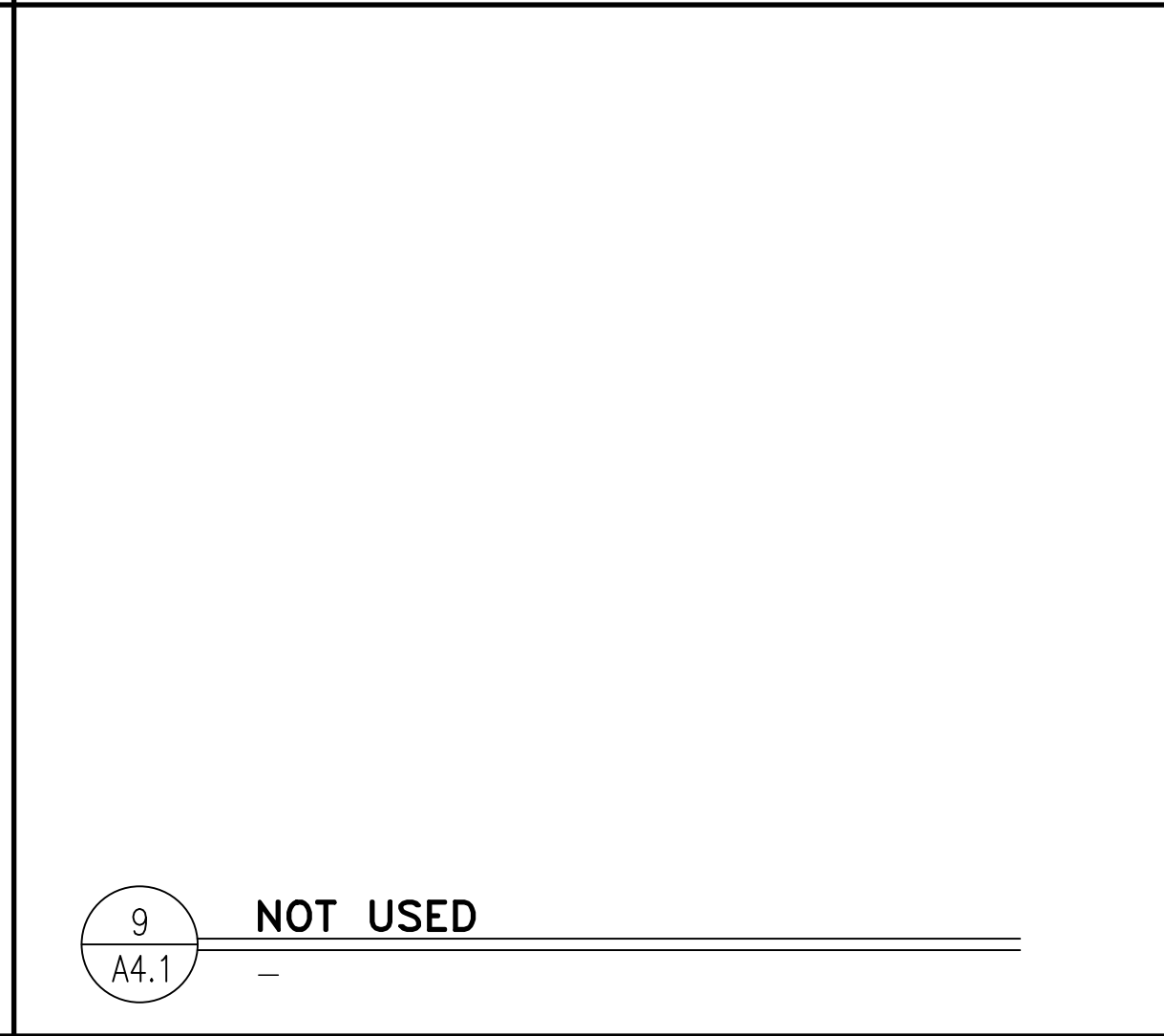
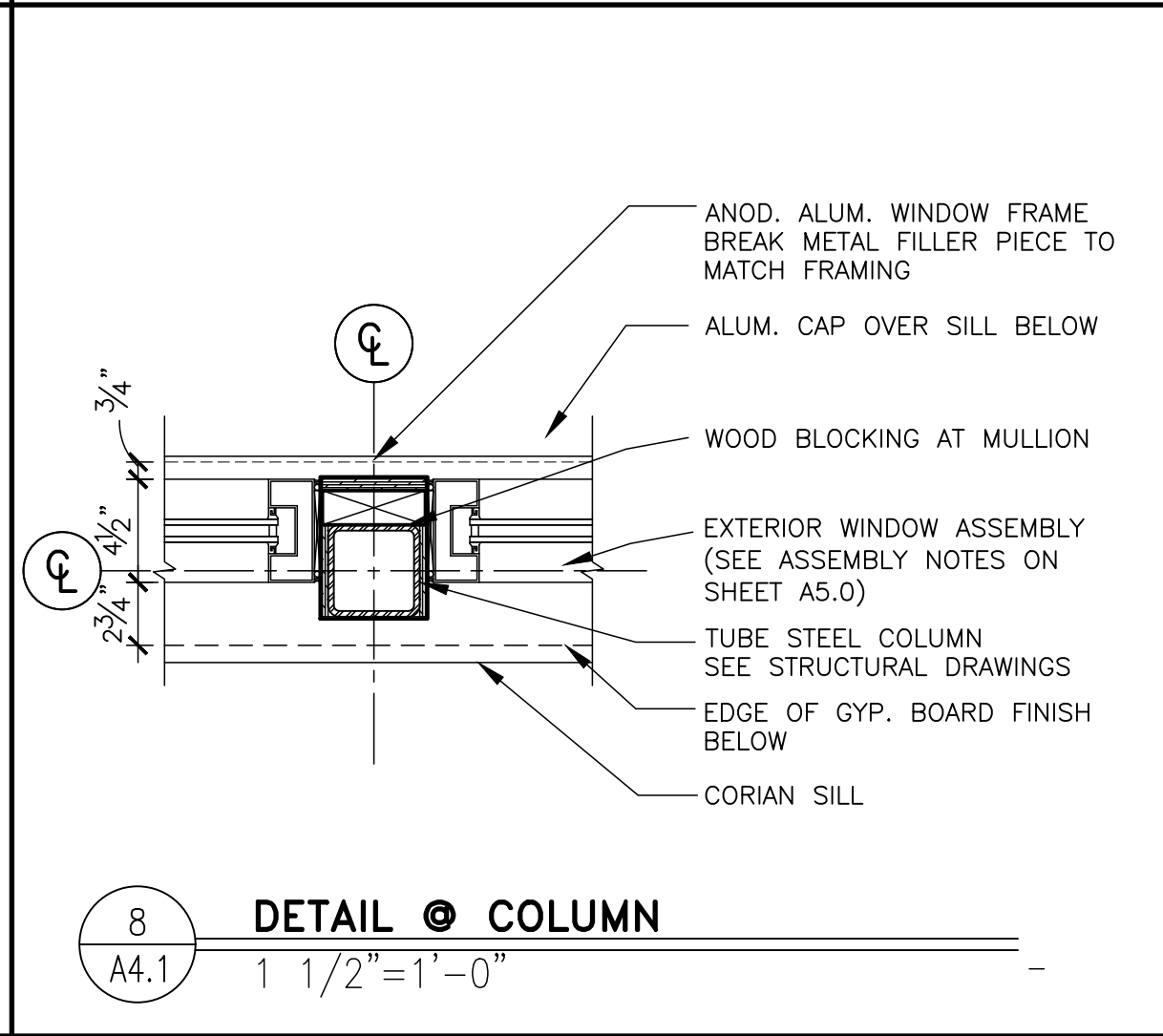
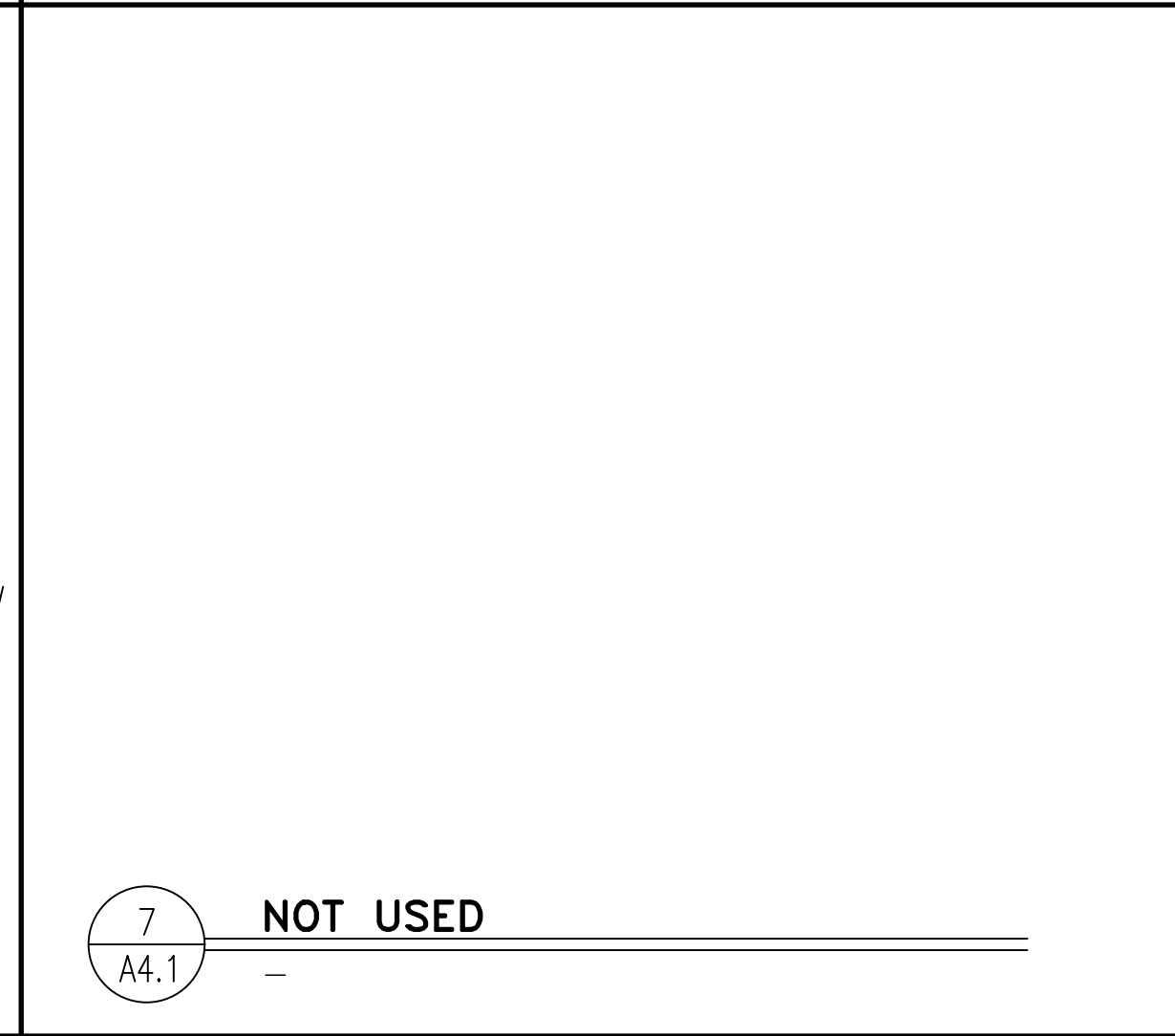
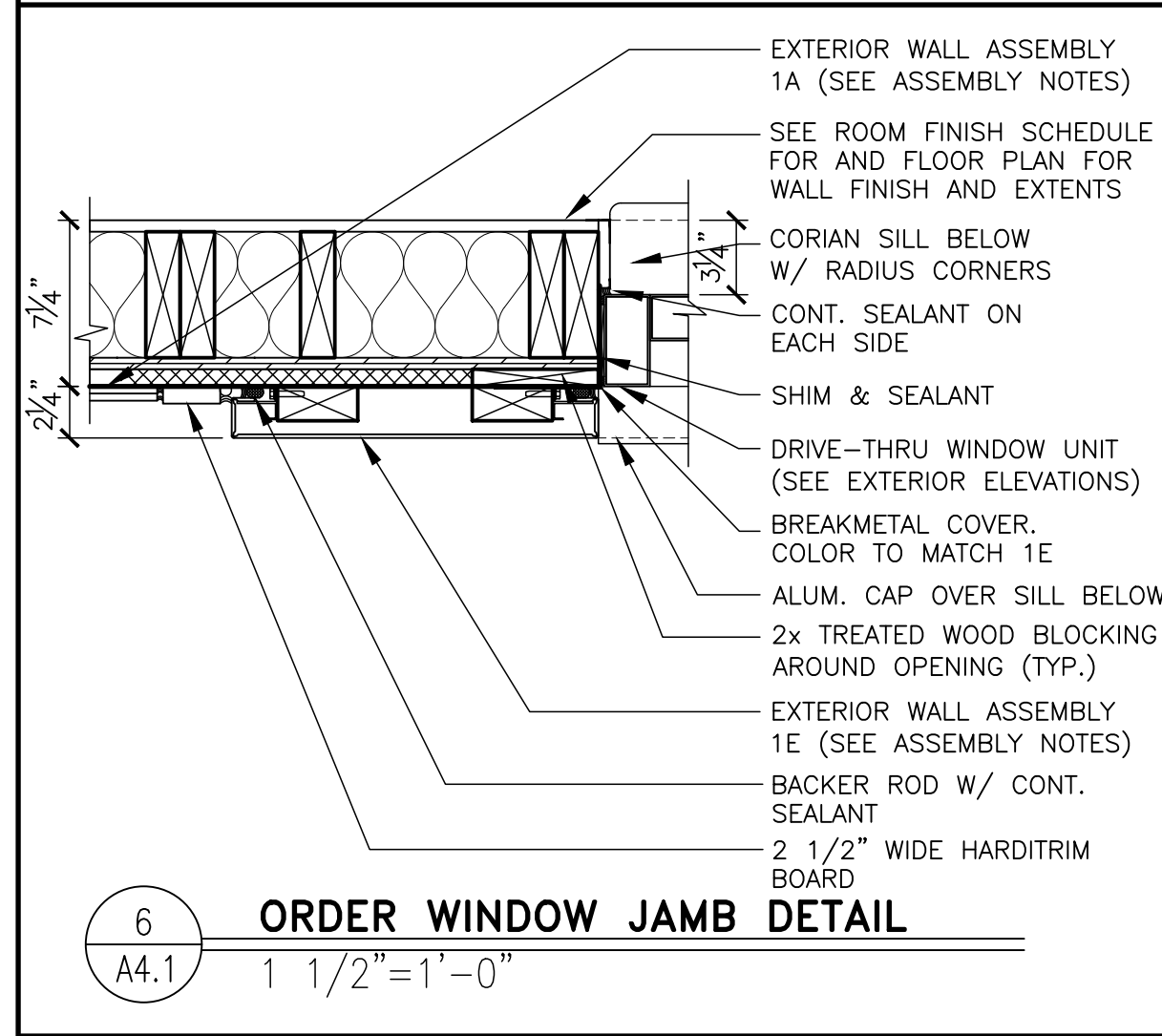
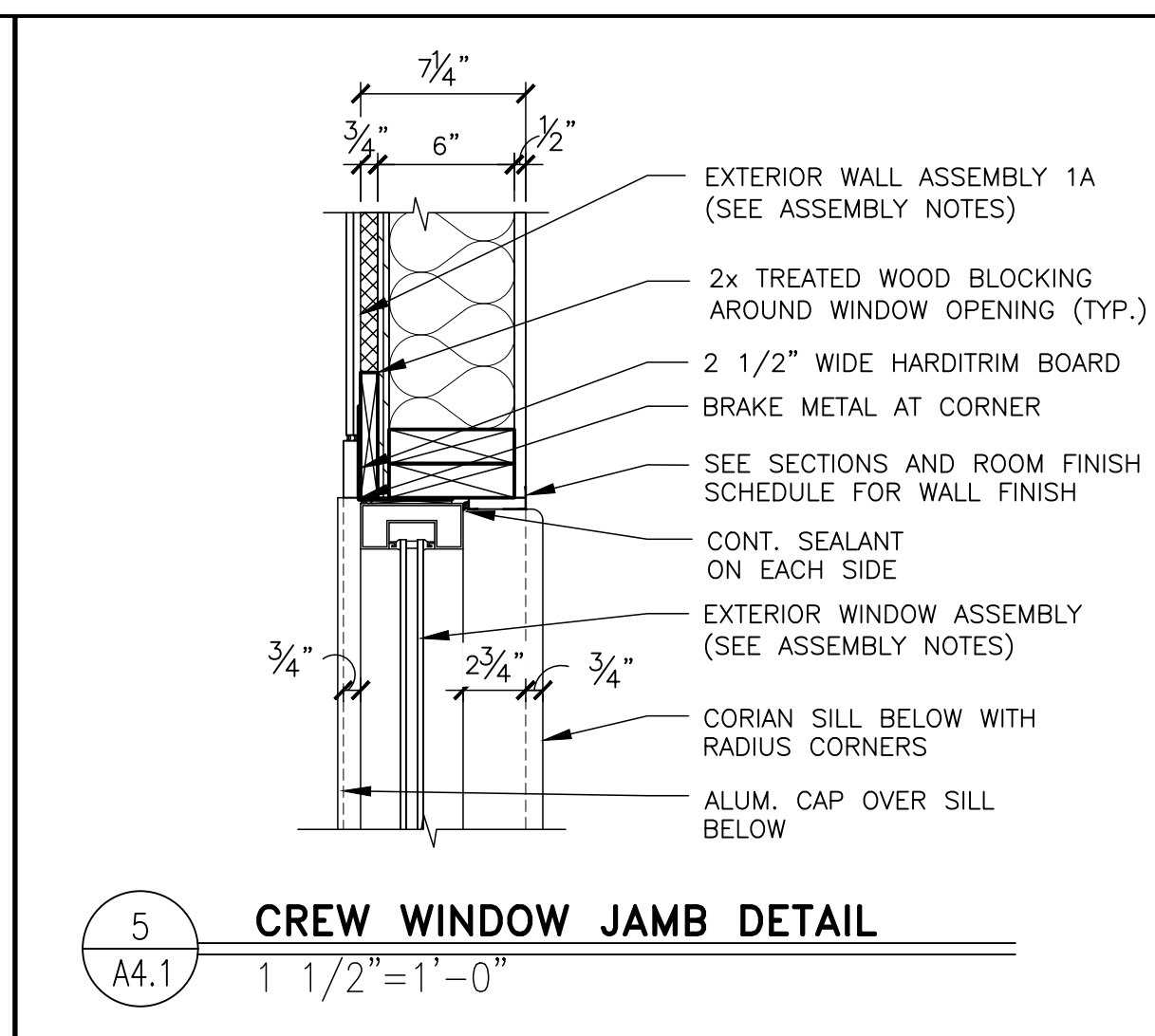
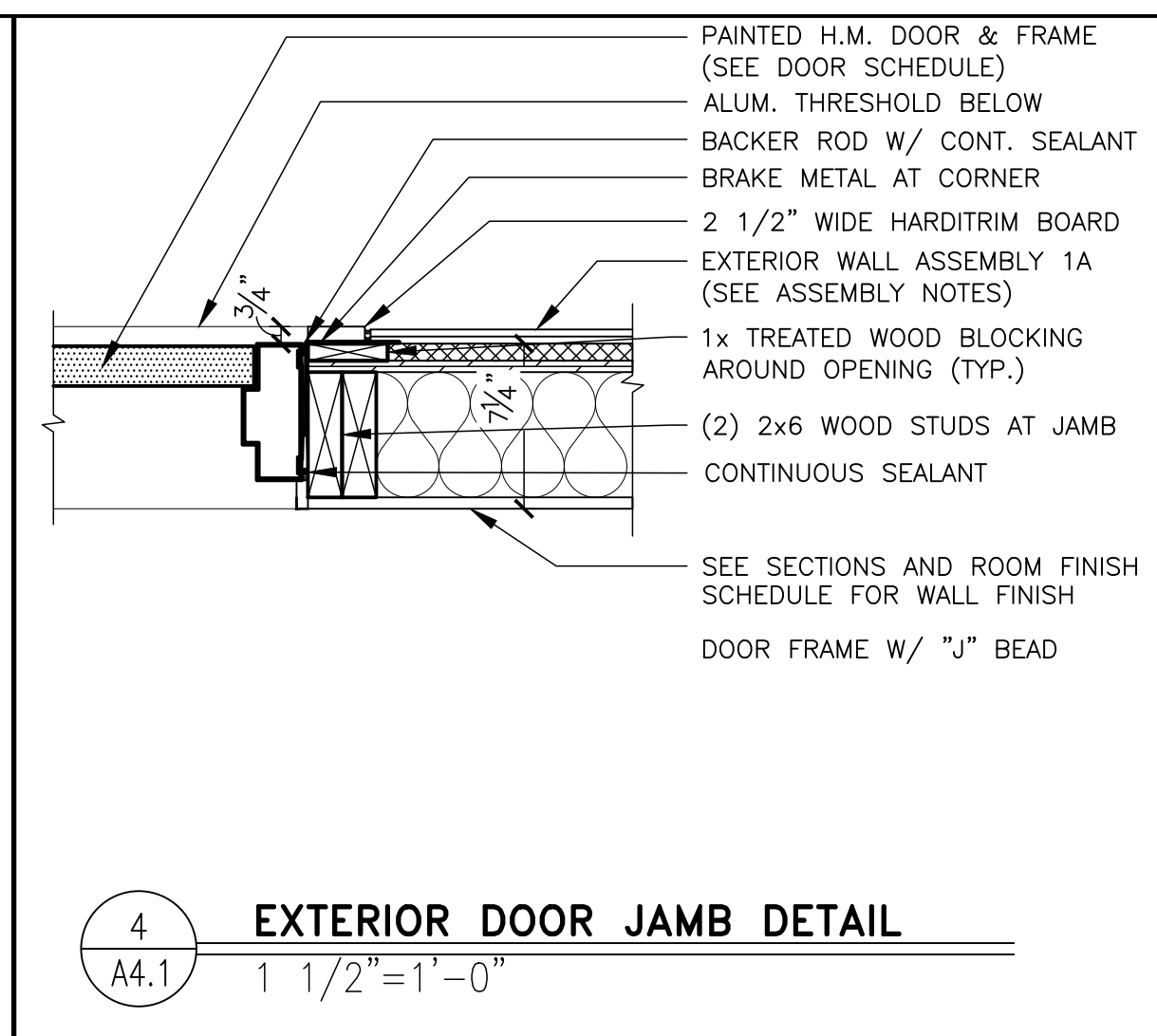
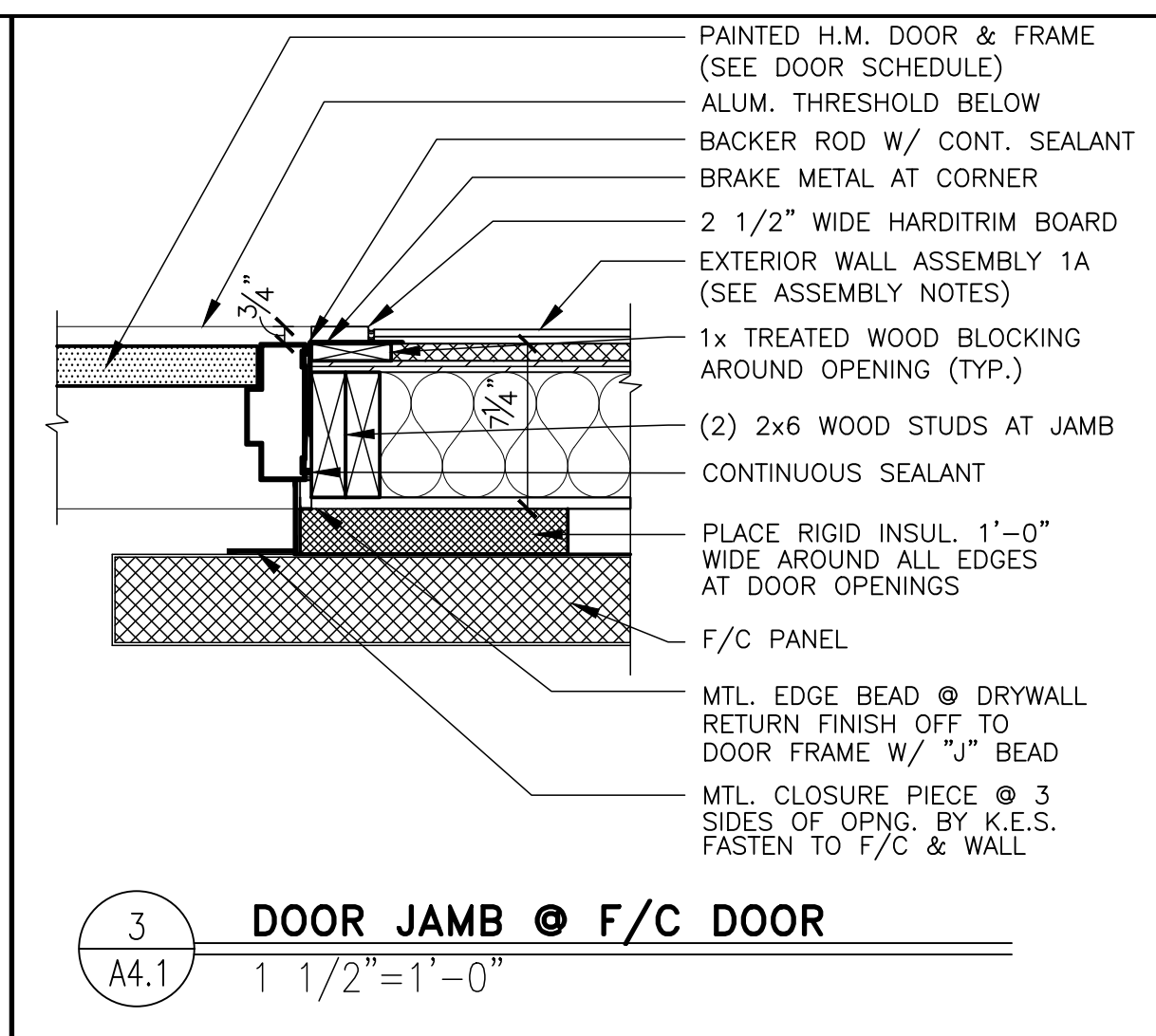
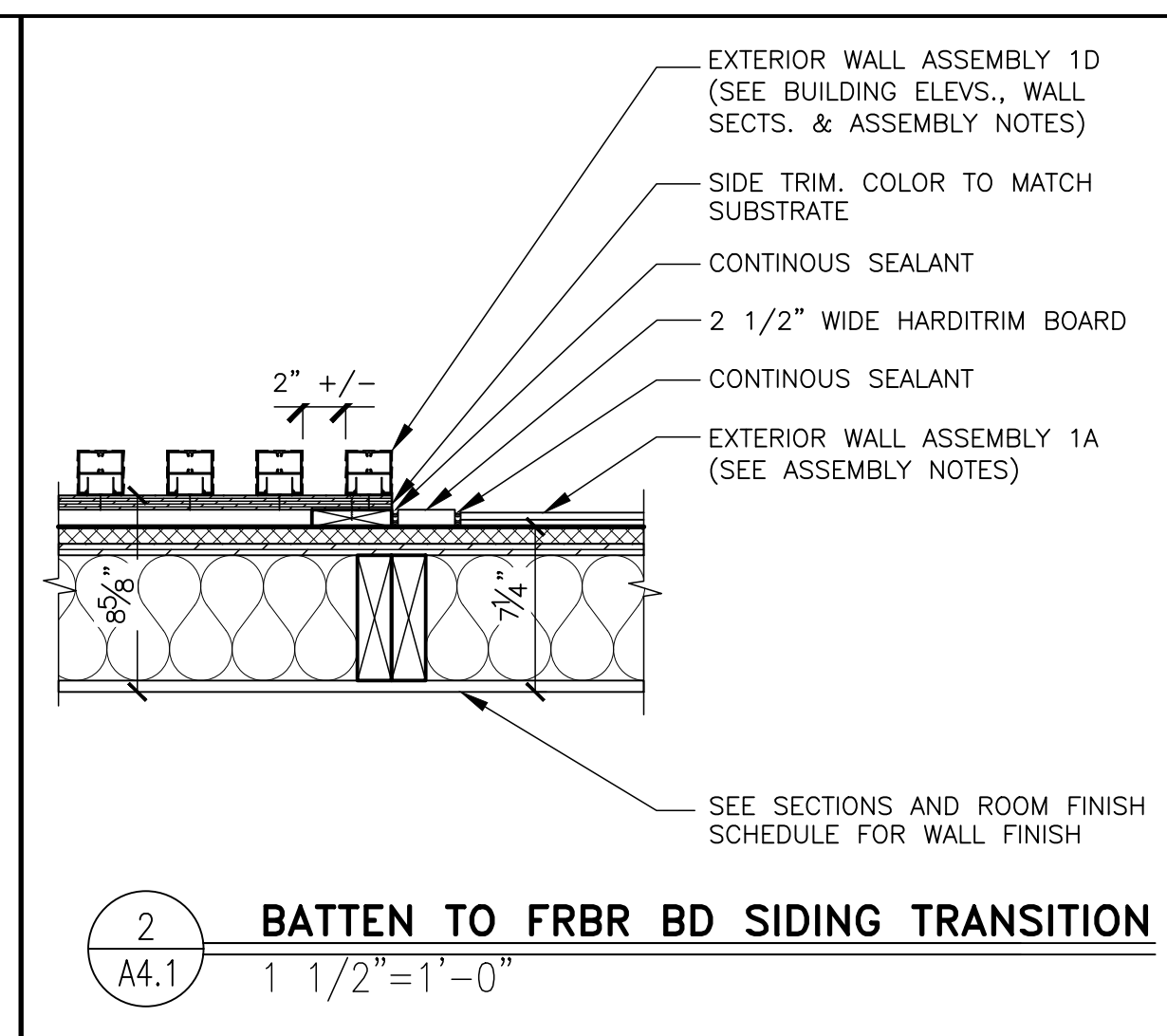
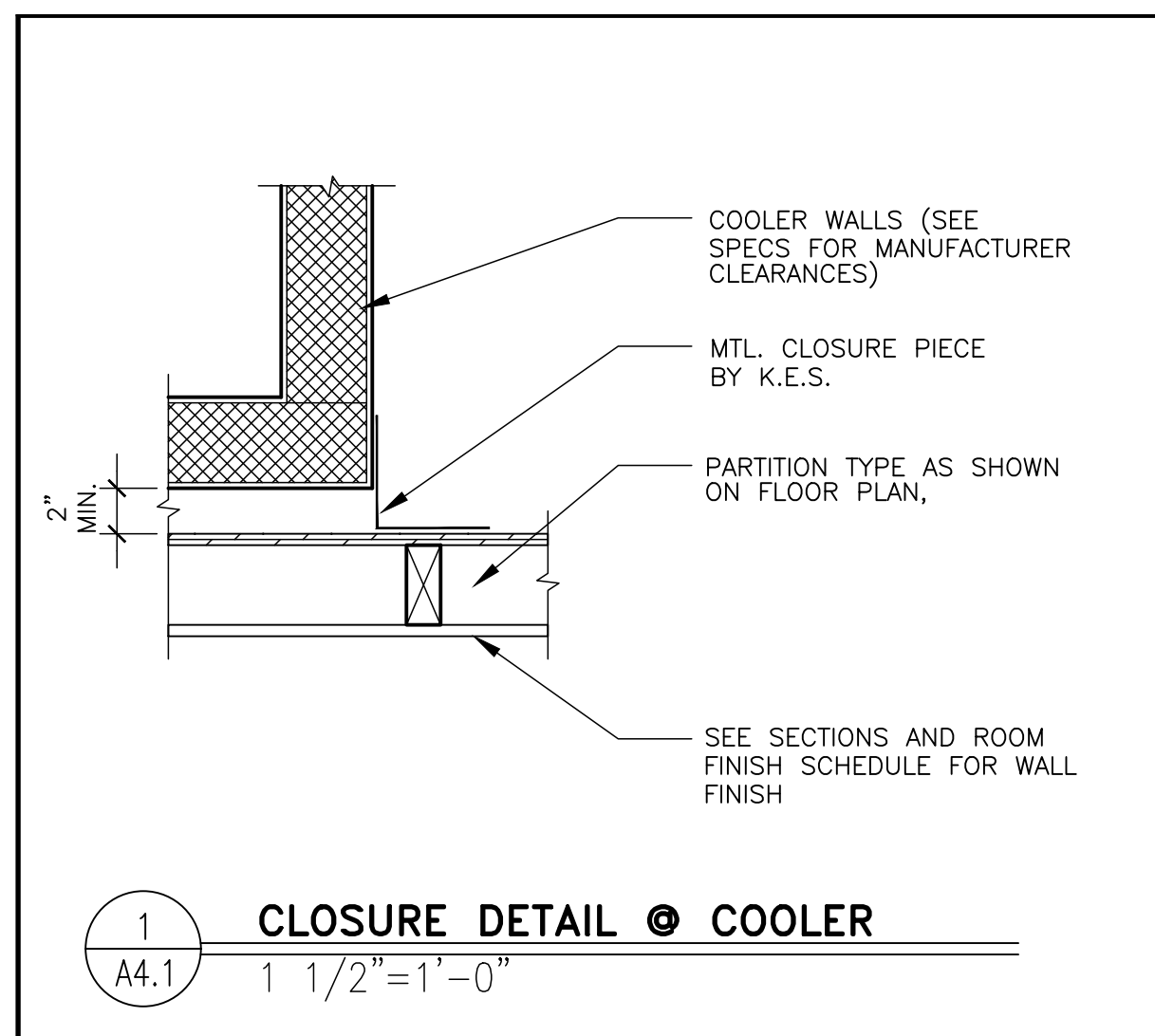
3 RESTROOM ACCESSORY SCHEDULE
 A4.0

STATE OF MISSOURI
 ROBERT D. KEMPLES
 ARCHITECT
 NUMBER A-2008012350
 11-10-2022

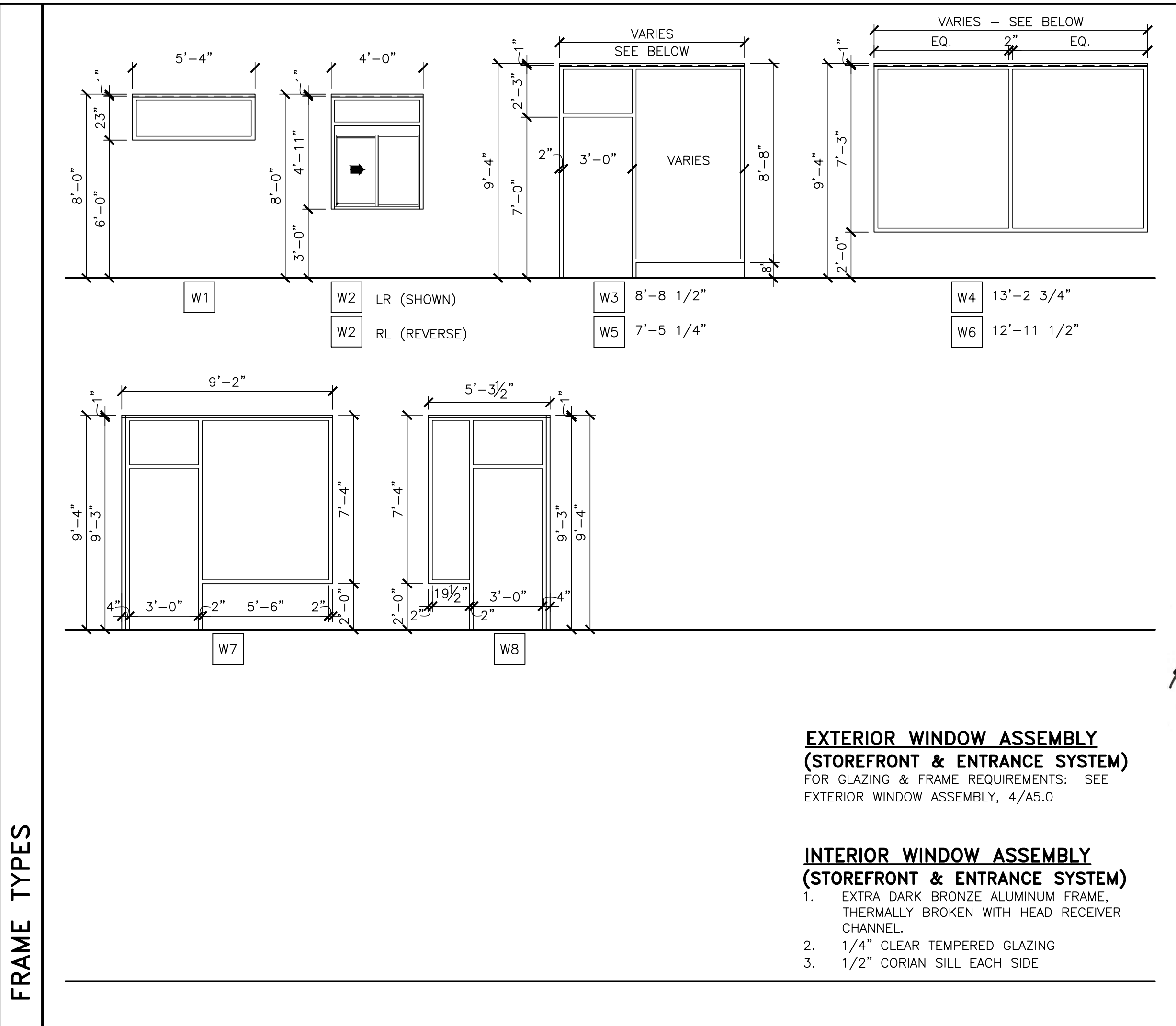
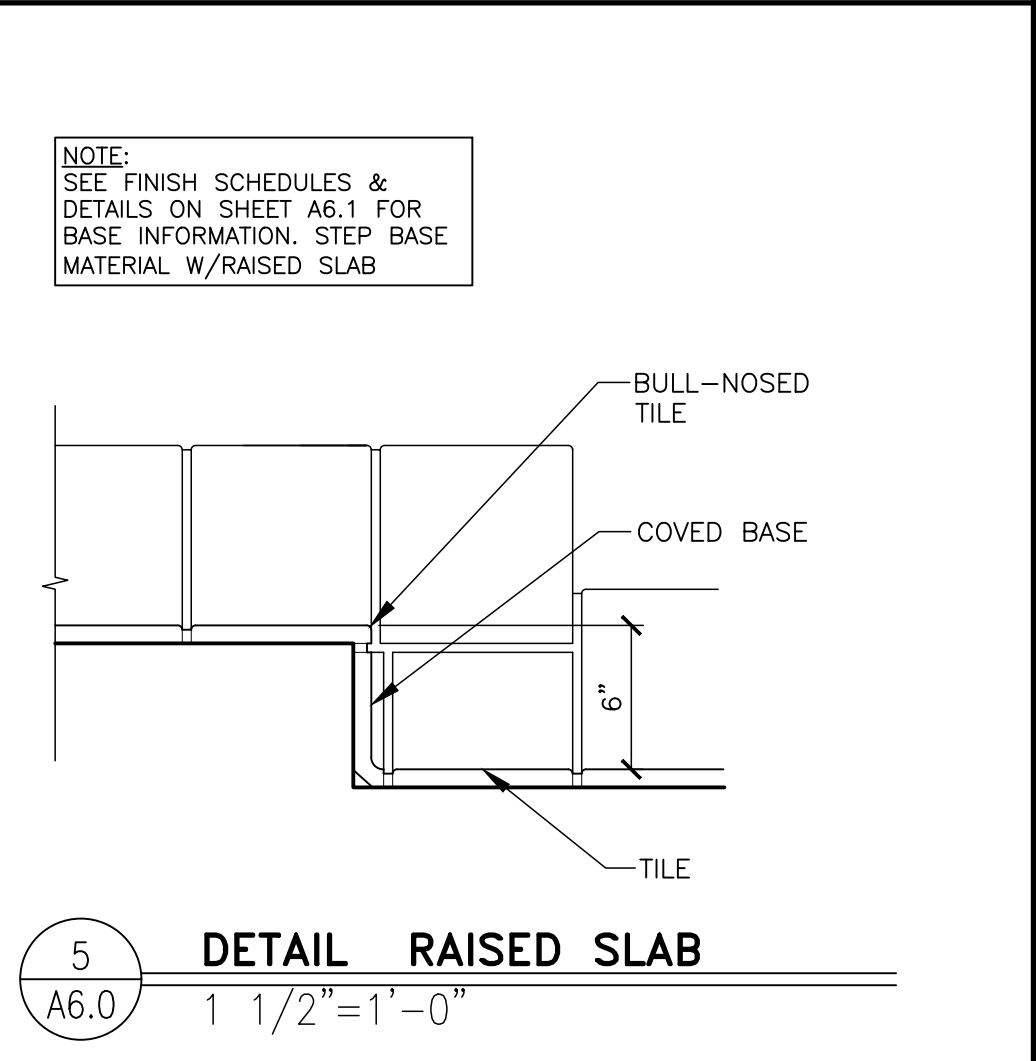
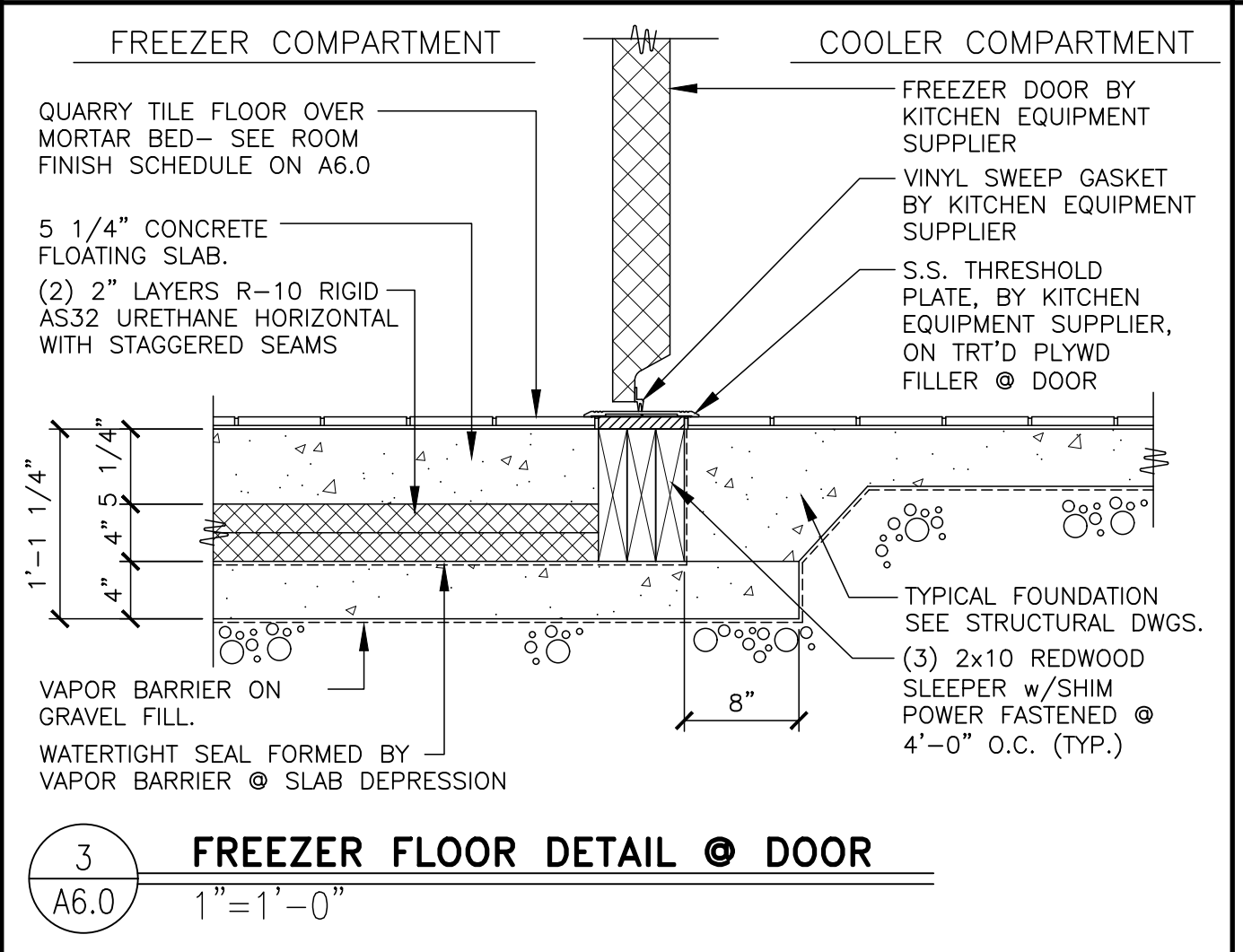
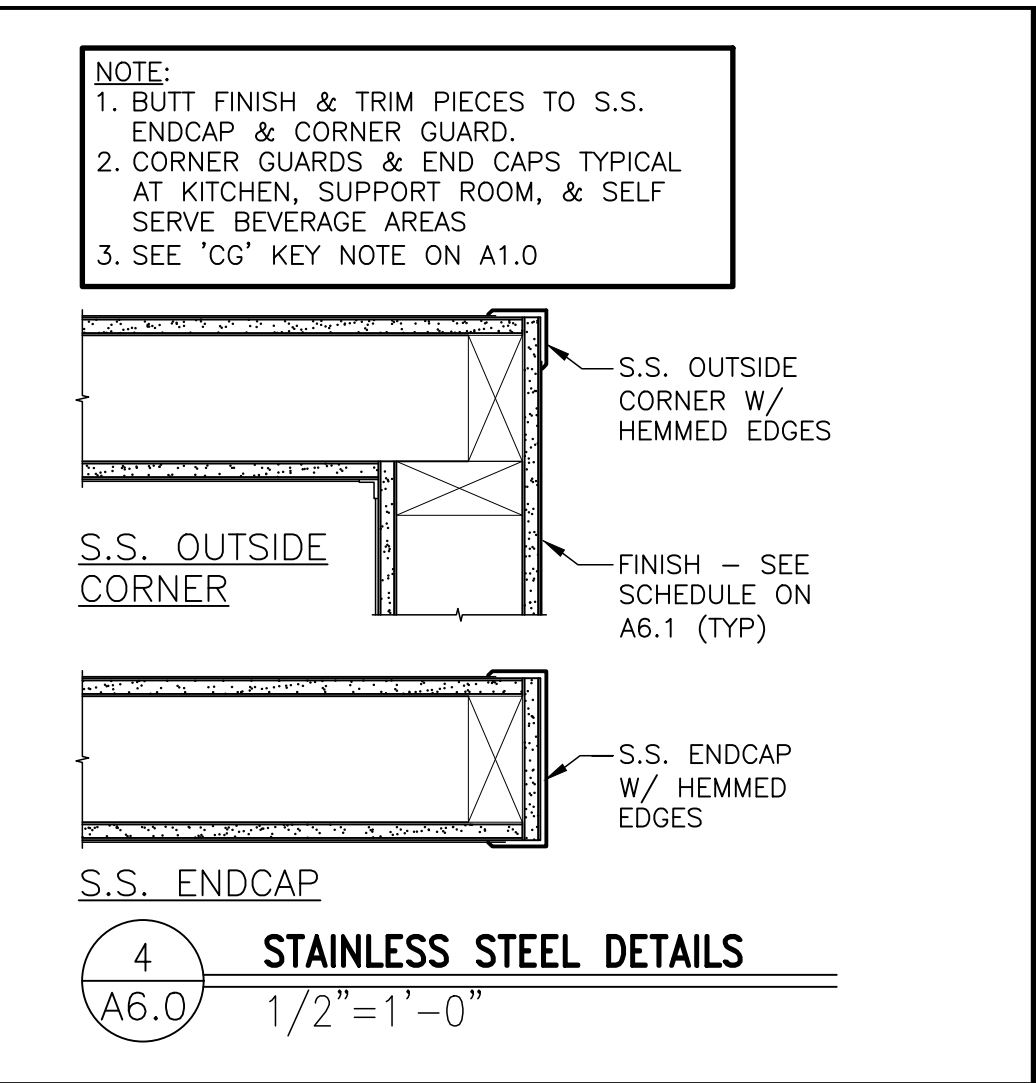
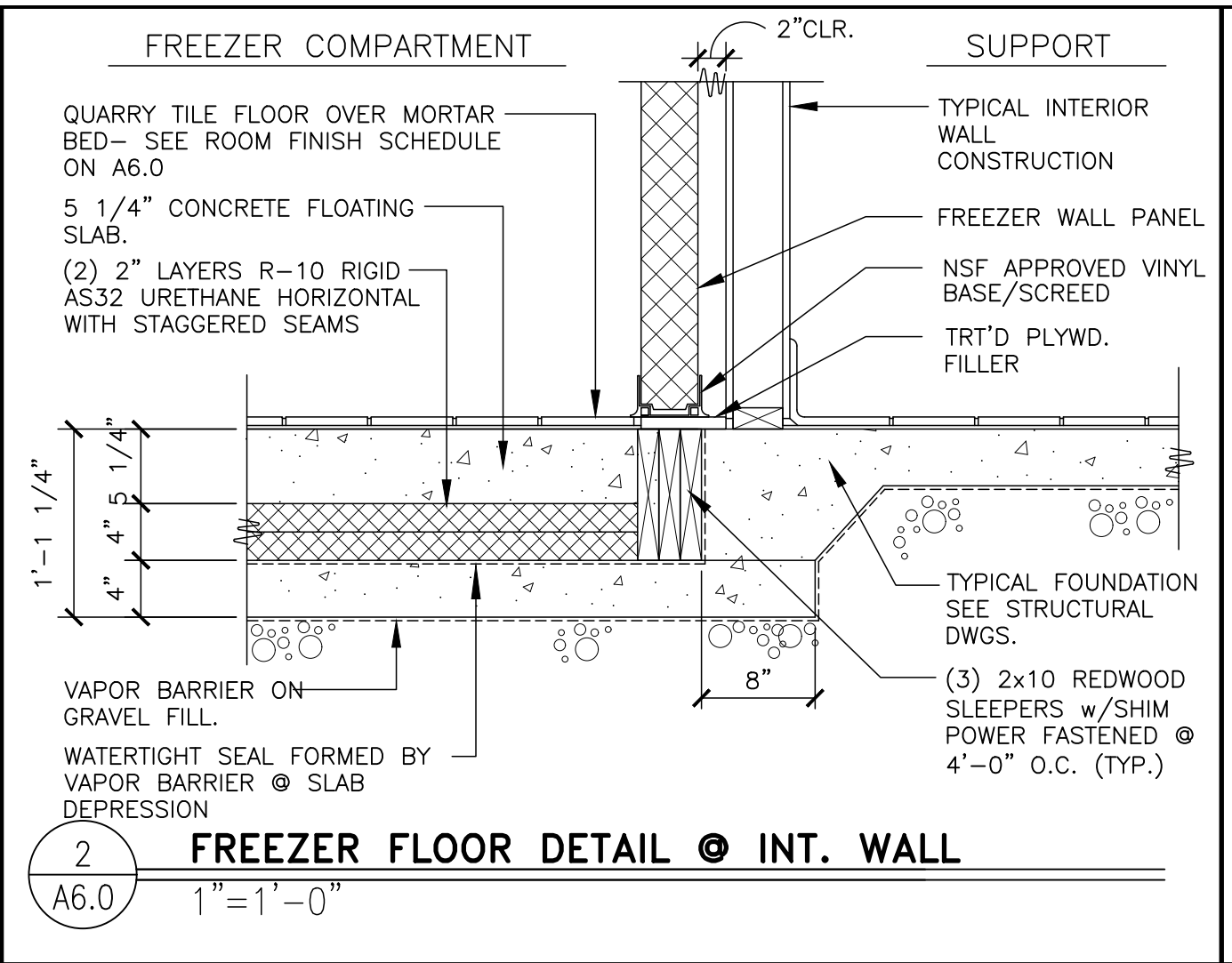
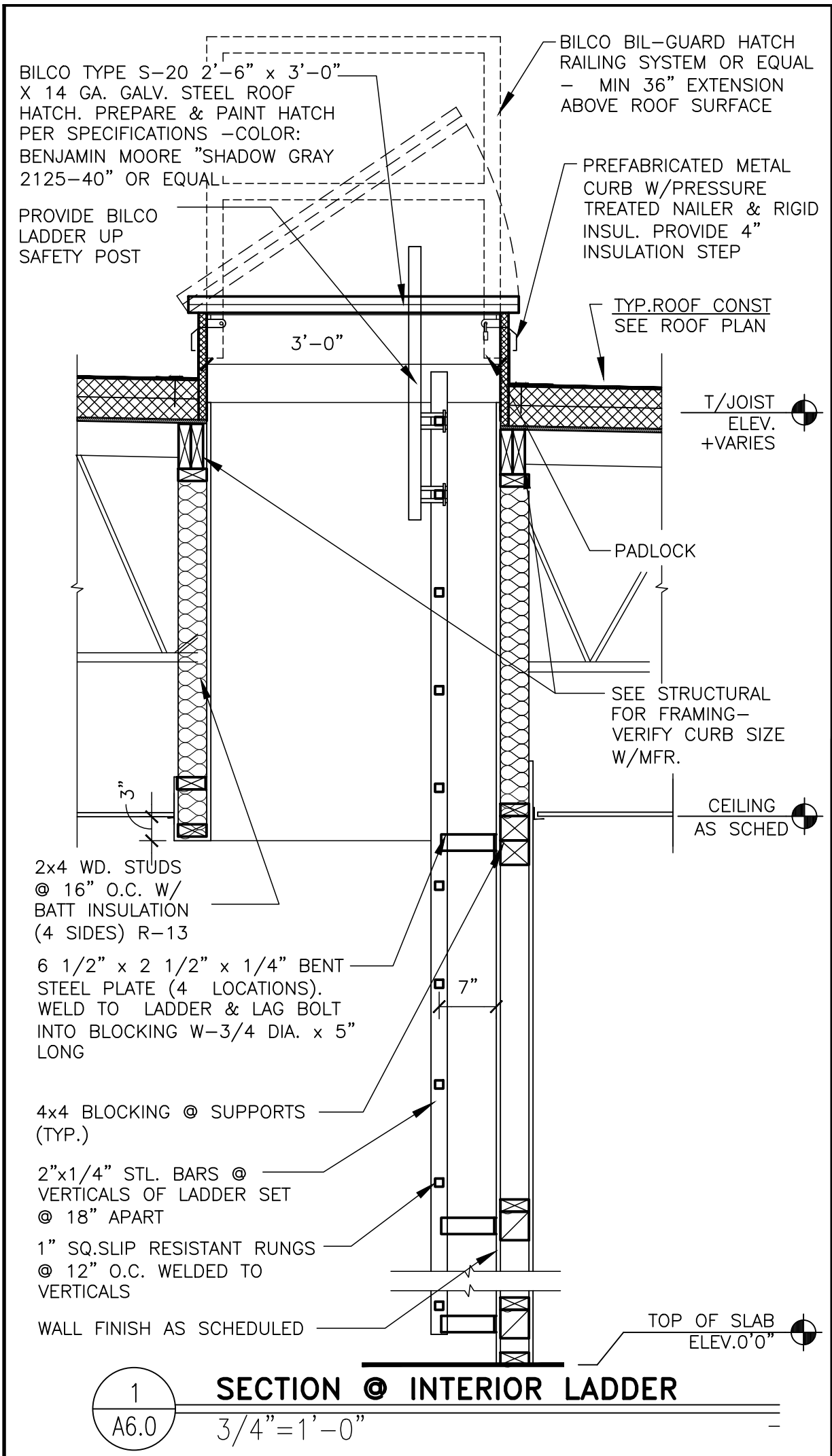
PREPARED BY: Robert Kemples
 ARCHITECT
 3100 W. SUNSHINE BLVD.
 SPRINGFIELD, MO 65764
 TEL: 417-875-1111
 FAX: 417-875-1112

© 2022 McDonald's USA, LLC
McDonald's USA, LLC
 These drawings and specifications are the confidential and proprietary property of McDonald's USA, LLC and shall not be copied or reproduced without written authorization. The contract documents were prepared not suitable for use on a different site or at a later time. Use of these drawings for reference or example on another project requires the contract documents for reuse on another project is not authorized.

PREPARED FOR: McDonald's USA, LLC
 DRAWN BY: S.O.
 STD ISSUE DATE: 2022-10
 REVIEWED BY: RH
 DATE ISSUED: 10-04-2022
 TITLE: 2022 STANDARD BUILDING - BB20
 DESCRIPTION: WOOD BEARING WALLS W/HARDBOARD SIDING WOOD ROOF TRUSS FRAMING E.L.F.S./BATEN/HARDBOARD SIDING EXTERIOR FINISH
 SITE ADDRESS: 3720 W. Sunshine Springfield, MO
 SHEET NO: 024-1290.00.0
A4.0
 RESTROOM PLAN



BY	
REV	
DATE	
DESCRIPTION	
PREPARED BY: Robert Kempkes ARCHITECT 3101 W. STATE ST. SUITE 200 ST. LOUIS, MO 63103 FAX: 314.241.3166 WWW.RKARCH.COM	
DRAWN BY: S.O. STD. ISSUE DATE: 2022-10-10 REVIEWED BY: RH DATE ISSUED: 10-04-2022	TITLE: 2022 STANDARD BUILDING - BB20 4597 - WOOD/WOOD DESCRIPTION: WOOD BEARING WALLS W/HARDBOARD SIDING WOOD ROOF TRUSS FRAMING E.I.F.S./BATTEN/HARDBOARD SIDING EXTERIOR FINISH SITE ID: 024-1290.00.0 SITE ADDRESS: 3720 W. Sunshine Springfield, MO
SHEET NO.	A4.1 PLAN DETAILS



STATE OF MISSOURI
ROBERT D. KEMPLEX
ARCHITECT
A-2008012300
11-10-2022

Robert Kemples
ARCHITECT
3100 WILSON AVENUE
ST. LOUIS, MO 63103
TEL: 314.433.1111
FAX: 314.433.1112

PREPARED BY: Robert Kemples

REV. DATE DESCRIPTION

- GENERAL NOTES:**
- ALL EXIT DOORS SHALL BE KEYLESS IN THE DIRECTION OF EGRESS.
 - THE OPENING FORCE OF ALL EXT. PUSH/PULL DOORS SHALL NOT EXCEED 8 1/2 LBS.
 - THE OPENING FORCE OF ALL INTERIOR PUSH/PULL DOORS SHALL NOT EXCEED 5 LBS.
 - PROVIDE PANIC HARDWARE FOR ALL EXTERIOR DOORS AS NOTED ON THE DOOR SCHEDULE.
 - ALL DOOR HARDWARE SHALL NOT REQUIRE TIGHT GRASPING, TIGHT PINCHING OR TWISTING OF THE WRIST TO OPERATE.
- DOOR #1 - ENTRY DOOR**
- 1 EA CLOSER LCN 4021 x 18
 - 3 EA HINGES OFFSET PIVOT ANSI -A-156.4 GRADE 1; PROVIDE EXPOSED PARTS OF CAST ALUMINUM ALLOY, AS SUPPLIED BY DOOR MANUFACTURER.
 - 1 EA PULL HANDLE ROCKWOOD MFG. MODEL: RM3301. SIZE: 1-1/4" DIA. CTC: 5"-10". FINISH: TO MATCH STOREFRONT DOOR. OFFSET MOUNTING: TYPE 1XHD - THRU BOLT HEAVY DUTY
 - 1 EA PANIC HARDWARE ADAMS RITE MFG. CO. 8800 SERIES WITH OUTSIDE CYLINDER (FINISH TO MATCH STOREFRONT DOOR)
 - 1 EA THRESHOLD NATIONAL GUARD PRODUCTS, INC. SADDLE TYPE THRESHOLD 325, 36" WIDE x 1/2" RISE (ADA ACCESSIBLE).
 - 1 EA WEATHER STRIPPING: PROVIDE COMPRESSION WEATHER STRIPPING AGAINST FIXED STOPS. AT OTHER EDGES PROVIDE SLIDING WEATHER STRIPPING RETAINED IN ADJUSTABLE STRIP MORTISED INTO DOOR EDGE. PROVIDE EPDM OR VINYL GASKET WEATHER STRIPPING IN BOTTOM DOOR RAIL ADJUSTABLE FOR CONTACT W/ THRESHOLD.
 - 1 EA SIGN MOUNT ON DOOR, TO READ "THIS DOOR MUST REMAIN UNLOCKED WHENEVER THE BUILDING IS OCCUPIED/DURING BUSINESS HOURS."
- DOOR #1A - (NOT USED) EMERGENCY EXIT**
- 1 EA CLOSER LCN 4021 x 18
 - 3 EA HINGES OFFSET PIVOT ANSI -A-156.4 GRADE 1; PROVIDE EXPOSED PARTS OF CAST ALUMINUM ALLOY, AS SUPPLIED BY DOOR MANUFACTURER.
 - 1 EA PANIC HARDWARE ADAMS RITE MFG. CO. 8800 SERIES WITH OUTSIDE CYLINDER (FINISH TO MATCH STOREFRONT DOOR)
 - 1 EA THRESHOLD NATIONAL GUARD PRODUCTS, INC. SADDLE TYPE THRESHOLD 325, 36" WIDE x 1/2" RISE (ADA ACCESSIBLE).
 - 1 EA WEATHER STRIPPING: PROVIDE COMPRESSION WEATHER STRIPPING AGAINST FIXED STOPS. AT OTHER EDGES PROVIDE SLIDING WEATHER STRIPPING RETAINED IN ADJUSTABLE STRIP MORTISED INTO DOOR EDGE. PROVIDE EPDM OR VINYL GASKET WEATHER STRIPPING IN BOTTOM DOOR RAIL ADJUSTABLE FOR CONTACT W/ THRESHOLD.
 - 1 EA SIGN MOUNT ON DOOR, TO READ "THIS DOOR MUST REMAIN UNLOCKED WHENEVER THE BUILDING IS OCCUPIED/DURING BUSINESS HOURS."
- DOOR #2 - VESTIBULE**
- 1 EA CLOSER LCN 4041 x 18
 - 3 EA HINGES OFFSET PIVOT ANSI -A-156.4 GRADE 1; BY DOOR MANUFACTURER.
 - 1 EA PUSH/PULL HANDLE HAGER PUSH/PULL SET 164D/V/B.
- DOOR #3 - STORAGE DELIVERY**
- 1 EA HINGE 780-112HD 83" ALUM HAGER
 - 1 EA CLOSER 4111 H-CUSH ALUM LCN
 - 1 EA PANIC 9975EO-LD 48" SP28 V.DUPRIN
 - 1 EA TRIM 990DT US26D V.DUPRIN
 - 1 EA EXIT ALARM EAX2500 FLUSH DETEX
 - 1 EA LOCKGUARD CLP110 US32D DON-JO
 - 1 EA TREADPLATE 24 X 46 UMCO
 - 1 EA WTH/STP160V 48 X 84 N.GUARD
 - 1 EA THRESHOLD 325HD 48" N.GUARD
 - 1 EA SWEEP 101VA 48" N.GUARD
 - 1 EA VIEW FRAME LVGLFMD 9 X 9 DKB W/FLAP ON INSIDE N.GUARD
- DOOR #3A - FREEZER DELIVERY**
- 1 EA HINGE 780-112HD 83" ALUM HAGER
 - 1 EA DEADBOLT B661P 626 SCHLAGE
 - 1 EA PULL H3E US28 HAGER
 - 1 EA LOCKGUARD CLP110 US32D DON-JO
 - 1 EA TREADPLATE 24 X 46 UMCO
 - 1 EA WTH/STP 160V 48 X 84 N.GUARD
 - 1 EA THRESHOLD 325HD 48" N.GUARD
 - 1 EA SWEEP 101VA 48" N.GUARD

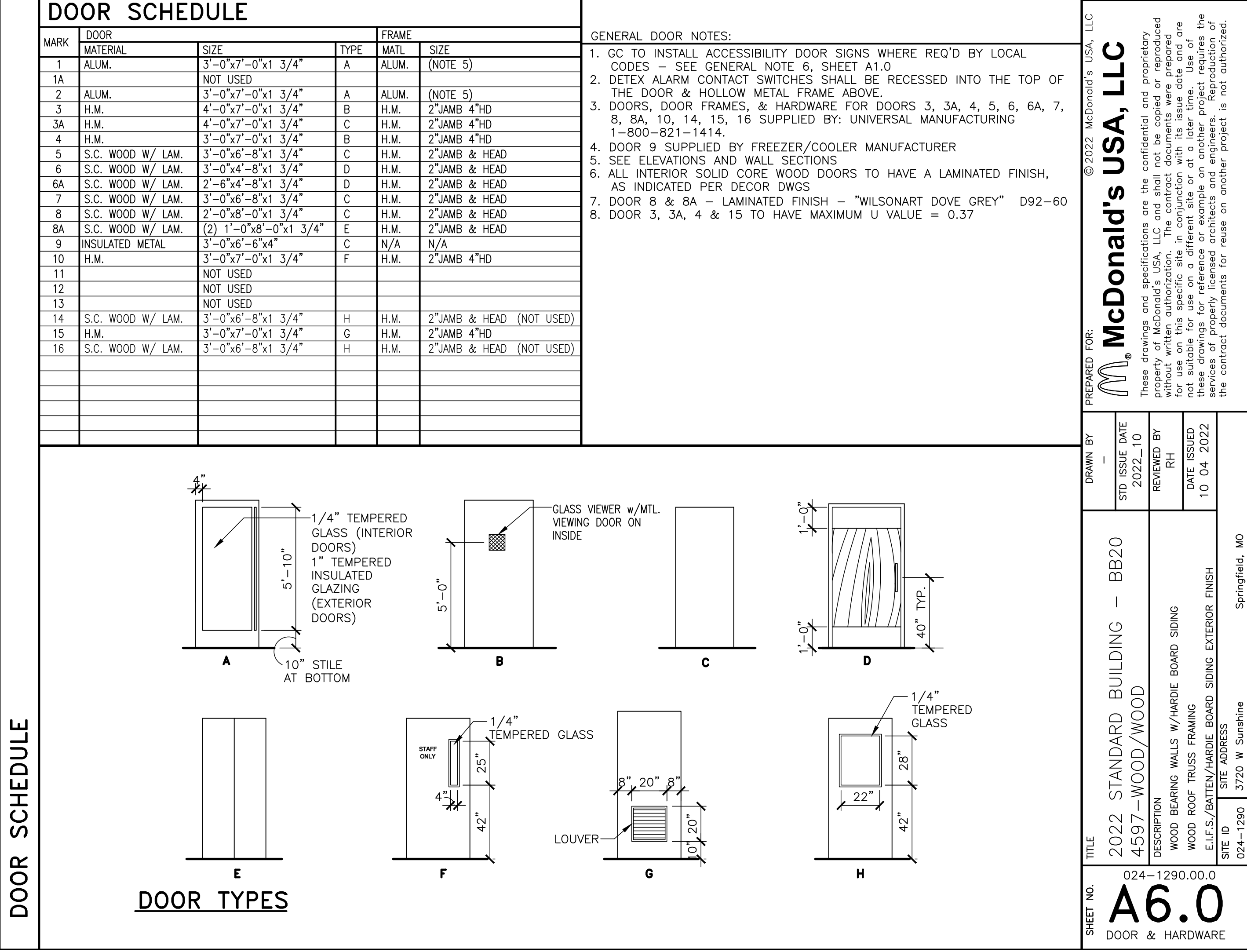
- DOOR #4 - REAR EXIT**
- 1 EA HINGE 780-112HD 83" ALUM HAGER
 - 1 EA CLOSER 4111 H-CUSH ALUM LCN
 - 1 EA PANIC 9975EO-LD 48" SP28 V.DUPRIN
 - 1 EA TRIM 990DT US26D V.DUPRIN
 - 1 EA EXIT ALARM EAX2500 FLUSH DETEX
 - 1 EA LOCKGUARD CLP110 US32D DON-JO
 - 1 EA TREADPLATE 24 X 34 UMCO
 - 1 EA WTH/STP160V 36 X 84 N.GUARD
 - 1 EA THRESHOLD 325HD 48" N.GUARD
 - 1 EA SWEEP 101VA 36" N.GUARD
 - 1 EA VIEW FRAME LVGLFMD 9 X 9 DKB W/FLAP ON INSIDE N.GUARD
- DOOR #5 - RESTROOM ENTRY**
- 3 EA HINGE BB1279 4 1/2 X 4 1/2 US26D HAGER
 - 1 EA CLOSER LDP4031 SNB ALUM LCN
 - 1 EA PUSH PLATE 305 4 X 32 US32D 40" AFF MOUNTED TO CENTER OF PLATE
 - 1 EA PULL PLATE LADDER PULL HANDLE WITH DECORATIVE FINING, 32" L DIA #S-32-1000 - UMCO 32D. 40" AFF MOUNTED CENTER OF PULL. ALT. OPTION: 1 EA PULLPLATE SANITGRASP
 - 2 EA KICKPLATE 190S 8 X 34 US32D HAGER
 - 1 EA DOOR STOP 236W US32D HAGER
 - 1 EA FINGER GRD MKIA PUSH SIDE BRN F.SAFE
 - 1 EA FINGER GRD MKIB PULL SIDE BRN F.SAFE
 - 1 EA STEP/PULL PULL SIDE (OPTIONAL)
- DOOR #6 - ADA STALL**
- 2 EA HINGE 1250 4 1/2 X 4 1/2 US26D HAGER
 - 1 EA HINGE BB1279 4 1/2 X 4 1/2 US26D HAGER
 - 1 EA DEADBOLT B571 X 10-087 214EE X 12 X 291 X 626
 - 2 EA BACK TO BACK LADDER PULL HANDLE, 16" L, 1" DIA #S-16-1000 BTB-UMCO 32D MOUNTED 6" FROM EDGE OF DOOR TO CENTER OF SCREWS - 28 1/2" MOUNTED 28 1/2" FROM TOP OF DOOR TO C/L OF PULL
 - 1 EA ROBE HOOK 917 BRADLEY
 - 1 EA DOOR STOP 236W US32D HAGER
- DOOR #6A - STANDARD STALL**
- 2 EA HINGE 1250 4 1/2 X 4 1/2 US26D HAGER
 - 1 EA HINGE BB1279 4 1/2 X 4 1/2 US26D HAGER
 - 1 EA DEADBOLT B571 X 10-087 214EE X 12 X 291 X 626
 - 2 EA BACK TO BACK LADDER PULL HANDLE, 16" L, 1" DIA #S-16-1000 BTB-UMCO 32D MOUNTED 6" FROM EDGE OF DOOR TO CENTER OF SCREWS - 28 1/2" MOUNTED 28 1/2" FROM TOP OF DOOR TO C/L OF PULL
 - 1 EA ROBE HOOK 917 BRADLEY
 - 1 EA DOOR STOP 236W US32D HAGER
- DOOR #7 - DINING ROOM JANITORS CLOSET**
- 3 EA HINGE BB1279 4 1/2 X 4 1/2 US26D HAGER
 - 1 EA LOCK NDBOPD RHO 626 SCHLAGE
 - 1 EA LOCK GUARD CLP110 US32D DON JO
- DOOR #8 - COMPUTER CLOSET**
- 3 EA HINGE BB1279 4 1/2 X 4 1/2 US26D HAGER
 - 1 EA LOCK NDBOPD RHO 626 SCHLAGE
 - 1 EA LOUVER L700RX DKB 12 X 18 N.GUARD
- DOOR #8A - COMPUTER CLOSET**
- 8 EA HINGE BB1279 4 1/2 X 4 1/2 US26D HAGER
 - 1 EA LOCK NDBOPD RHO 626 SCHLAGE
 - 2 EA FLUSH BOLT 283D US26D HAGER
- DOOR #9 - COOLER**
1. ALL DOOR HARDWARE FOR THE REFRIGERATED COOLER / FREEZER SHALL BE PROVIDED BY THE MANUFACTURER.
MANUFACTURER: KOLPAK @ HY 641 N. MCCORKLE PARK ROAD, PARSONS, TN 38363. PHONE: 800-344-4675
- HARDWARE PROVIDED:
- MAGNETIC PERIMETER DOOR GASKET
 - THRESHOLD REINFORCED PLASTIC (FRP)
 - POSI-SEAL DOOR CLOSURE
 - STATIONARY CHROME DOOR PULL HANDLE
 - INTERIOR SAFETY RELEASE HANDLE
 - HINGES - BRUSHED CHROME CAST ALLOY
- DOOR #10 CREW**
- 1 EA HINGE 780-112HD 83" ALUM HAGER
 - 1 EA CLOSER 1461 RW/PA ALUM LCN
 - 1 EA LOCK NDBOPD RHO 626 SCHLAGE
 - 1 EA ELEC STRIKE 6211 24V DC FSE US32D SCHLAGE
 - 1 EA PWR SUPPLY P9302 SCHLAGE
 - 1 EA DOOR BELL B5V-24P SURFACE MOUNTED
 - 3 EA PUSH BUTTON 621-RD-DA HDP 626 SCHLAGE
 - 1 EA TREADPLATE 24 X 34 UMCO
 - 1 EA VIEW FRAME LFR100 6 X 27 DKB N.GUARD
 - 1 EA GLASS 5 X 28 W 1/4 UMCO
- DOOR #11 - RESTROOM ENTRY**
- 3 EA HINGE BB1279 4 1/2 X 4 1/2 US26D HAGER
 - 1 EA CLOSER LDP4031 SNB ALUM LCN
 - 1 EA PUSH PLATE 305 4 X 32 US32D 40" AFF MOUNTED TO CENTER OF PLATE
 - 1 EA PULL PLATE LADDER PULL HANDLE WITH DECORATIVE FINING, 32" L DIA #S-32-1000 - UMCO 32D. 40" AFF MOUNTED CENTER OF PULL. ALT. OPTION: 1 EA PULLPLATE SANITGRASP
 - 2 EA KICKPLATE 190S 8 X 34 US32D HAGER
 - 1 EA DOOR STOP 236W US32D HAGER
 - 1 EA FINGER GRD MKIA PUSH SIDE BRN F.SAFE
 - 1 EA FINGER GRD MKIB PULL SIDE BRN F.SAFE
 - 1 EA STEP/PULL PULL SIDE (OPTIONAL)
- DOOR #12 - (NOT USED)**
- 1 EA HINGE 780-112HD 83" ALUM HAGER
 - 1 EA CLOSER 4111 H-CUSH ALUM LCN
 - 1 EA PANIC 9975EO-LD 48" SP28 V.DUPRIN
 - 1 EA TRIM 990DT US26D V.DUPRIN
 - 1 EA EXIT ALARM EAX2500 FLUSH DETEX
 - 1 EA LOCKGUARD CLP110 US32D DON-JO
 - 1 EA TREADPLATE 24 X 46 UMCO
 - 1 EA WTH/STP160V 48 X 84 N.GUARD
 - 1 EA THRESHOLD 325HD 48" N.GUARD
 - 1 EA SWEEP 101VA 48" N.GUARD
 - 1 EA VIEW FRAME LVGLFMD 9 X 9 DKB W/FLAP ON INSIDE N.GUARD
- DOOR #13 - (NOT USED)**
- 1 EA HINGE 780-112HD 83" ALUM HAGER
 - 1 EA CLOSER 4111 H-CUSH ALUM LCN
 - 1 EA PANIC 9975EO-LD 48" SP28 V.DUPRIN
 - 1 EA TRIM 990DT US26D V.DUPRIN
 - 1 EA EXIT ALARM EAX2500 FLUSH DETEX
 - 1 EA LOCKGUARD CLP110 US32D DON-JO
 - 1 EA TREADPLATE 24 X 46 UMCO
 - 1 EA WTH/STP160V 48 X 84 N.GUARD
 - 1 EA THRESHOLD 325HD 48" N.GUARD
 - 1 EA SWEEP 101VA 48" N.GUARD
 - 1 EA VIEW FRAME LVGLFMD 9 X 9 DKB W/FLAP ON INSIDE N.GUARD
- DOOR #14 (NOT USED) MANAGERS OFFICE**
- 3 EA HINGE BB1279 4 1/2 X 4 1/2 US26D HAGER
 - 1 EA LOCK NDBOPD RHO 626 SCHLAGE
 - 1 EA VIEW FRAME LFR100 24 X 30 DKB N.GUARD
 - 1 EA GLASS 23 X 29 X 1/4 CLEAR UMCO
- DOOR #15 CO2**
- 1 EA HINGE 780-112HD 83" ALUM HAGER
 - 1 EA LOCK NDBOPD RHO 626 SCHLAGE
 - 1 EA LOCK GUARD CLP110 US32D DON JO
 - 1 EA WTH/STP 160V 36 X 84 N.GUARD
 - 1 EA THRESHOLD 425E 36" N.GUARD
 - 1 EA SWEEP 101VA 36" N.GUARD
 - 1 EA SEC. LOUVER LVRSG-3 DKB 18 X 18 N.GUARD
- DOOR #16 (NOT USED) CREW ROOM**
- 3 EA HINGE BB1279 4 1/2 X 4 1/2 US26D HAGER
 - 1 EA LOCK NDBOPD RHO 626 SCHLAGE
 - 1 EA VIEW FRAME LFR100 24 X 30 DKB N.GUARD
 - 1 EA GLASS 23 X 29 X 1/4 CLEAR UMCO

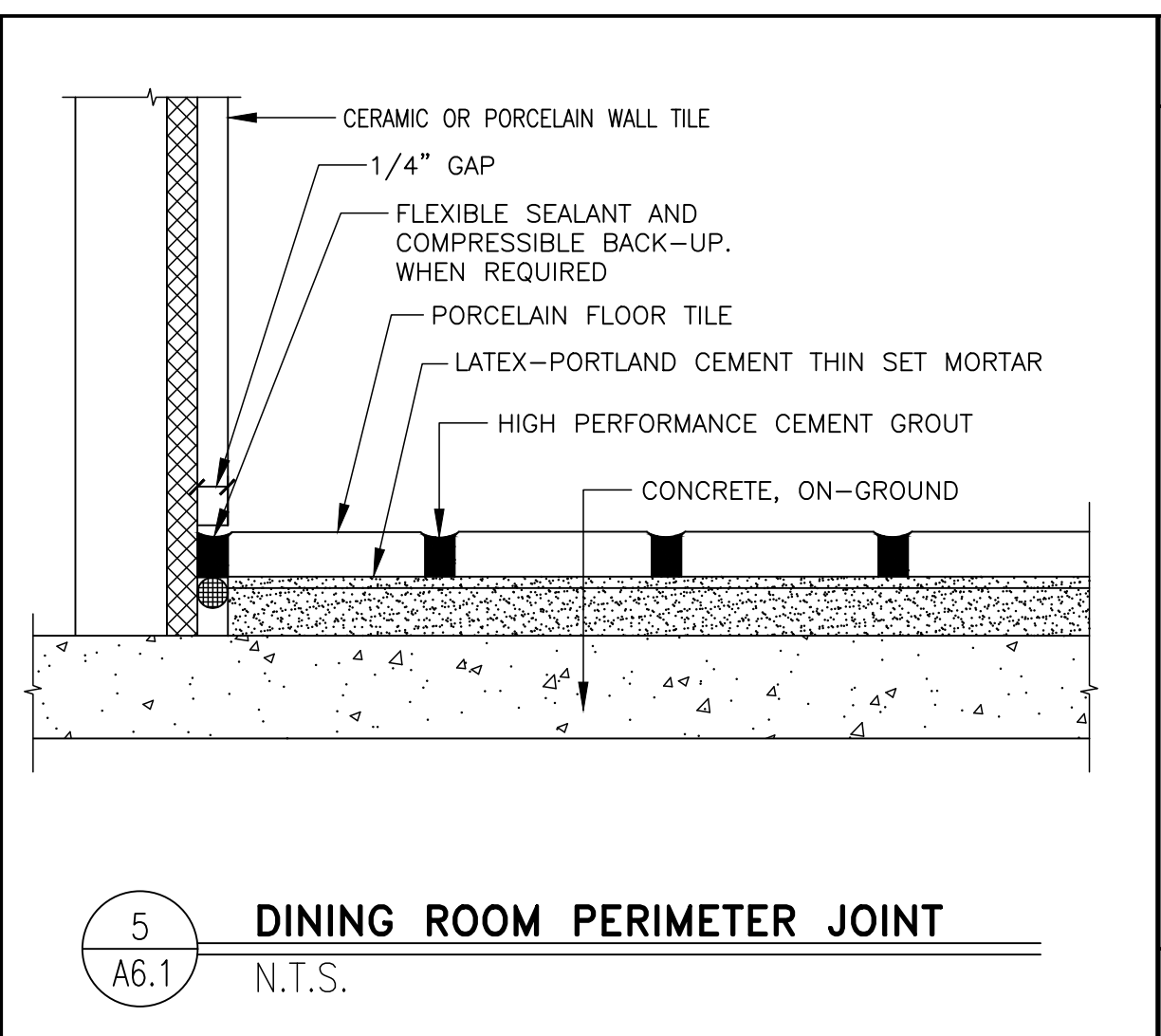
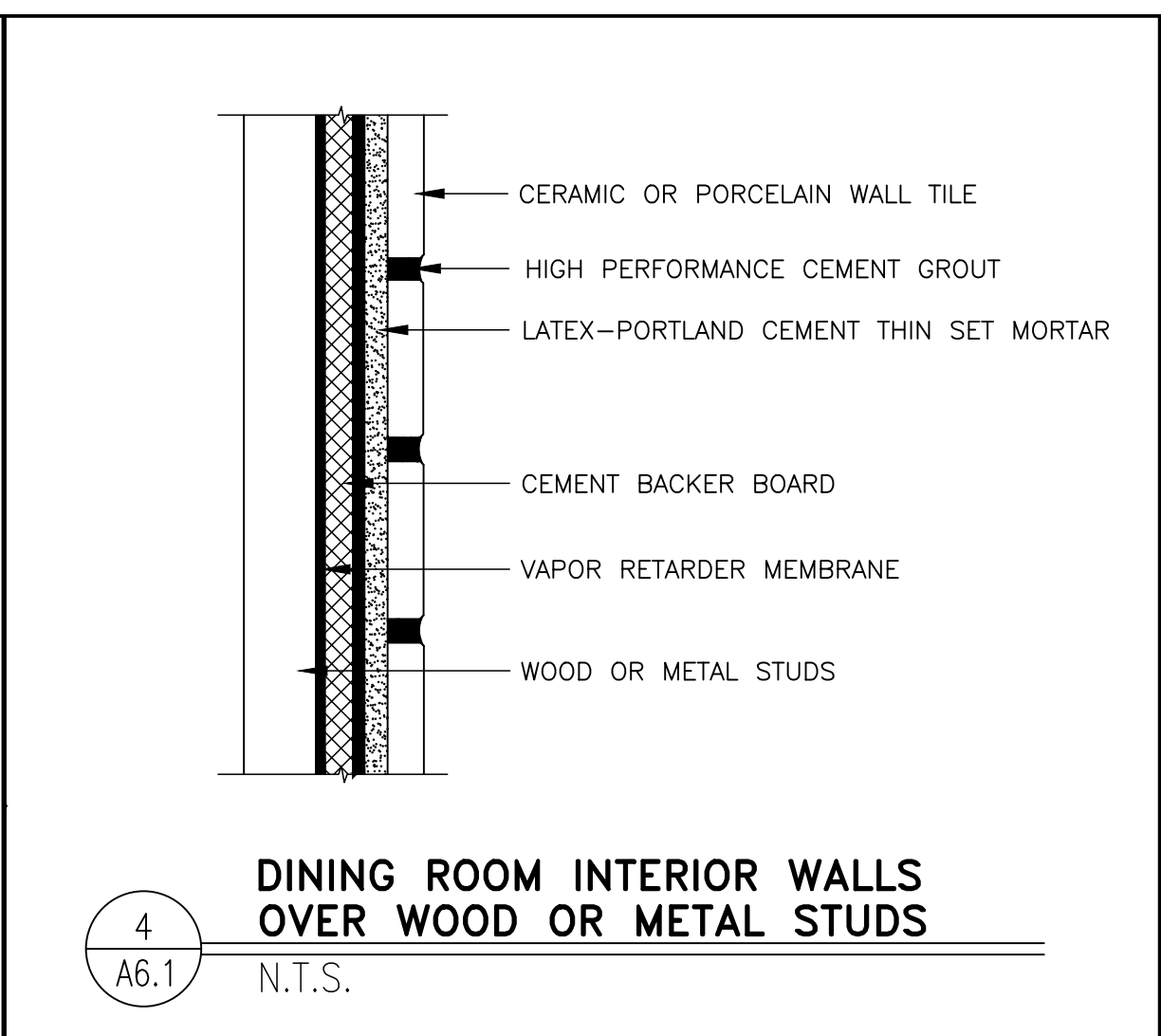
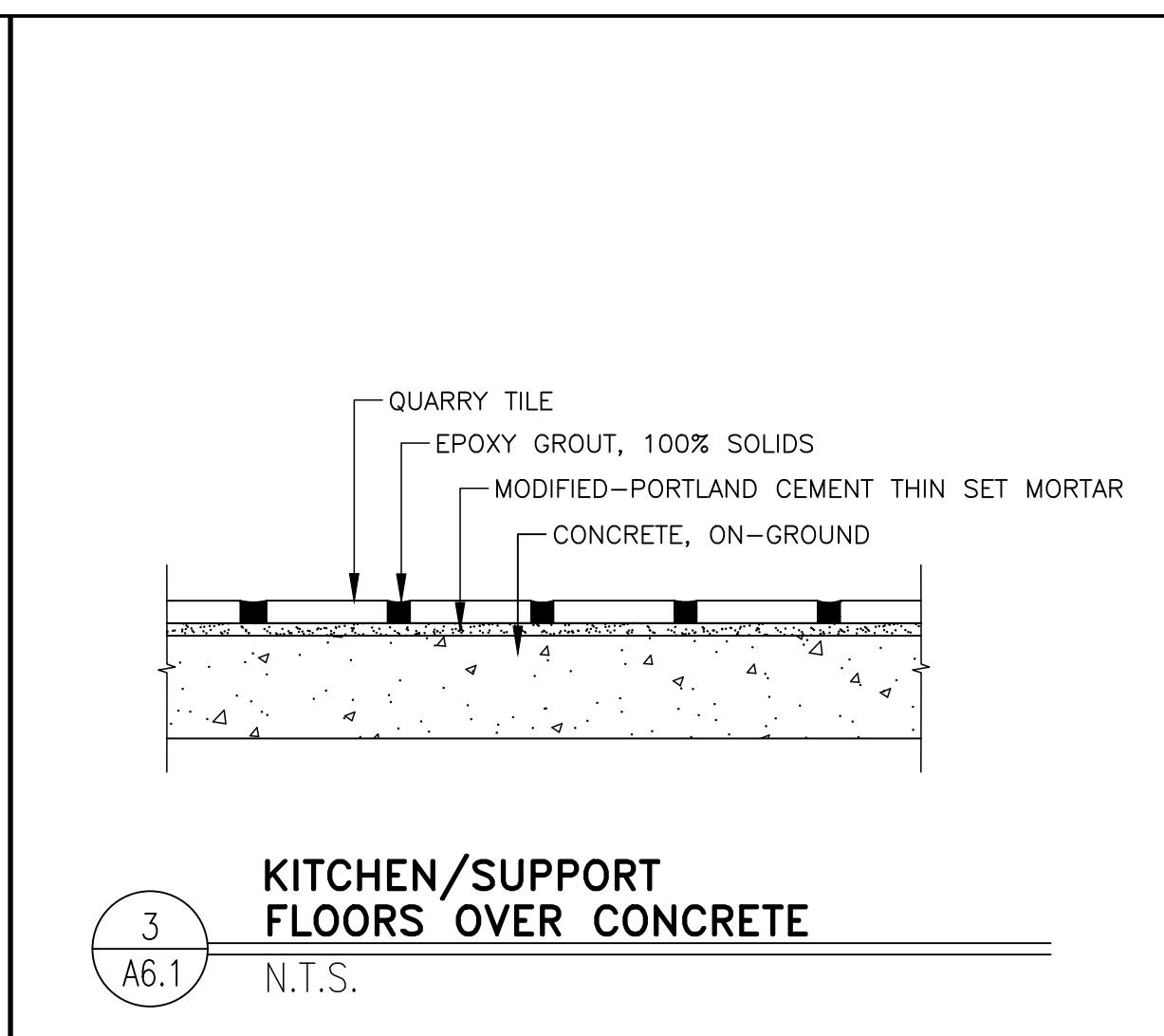
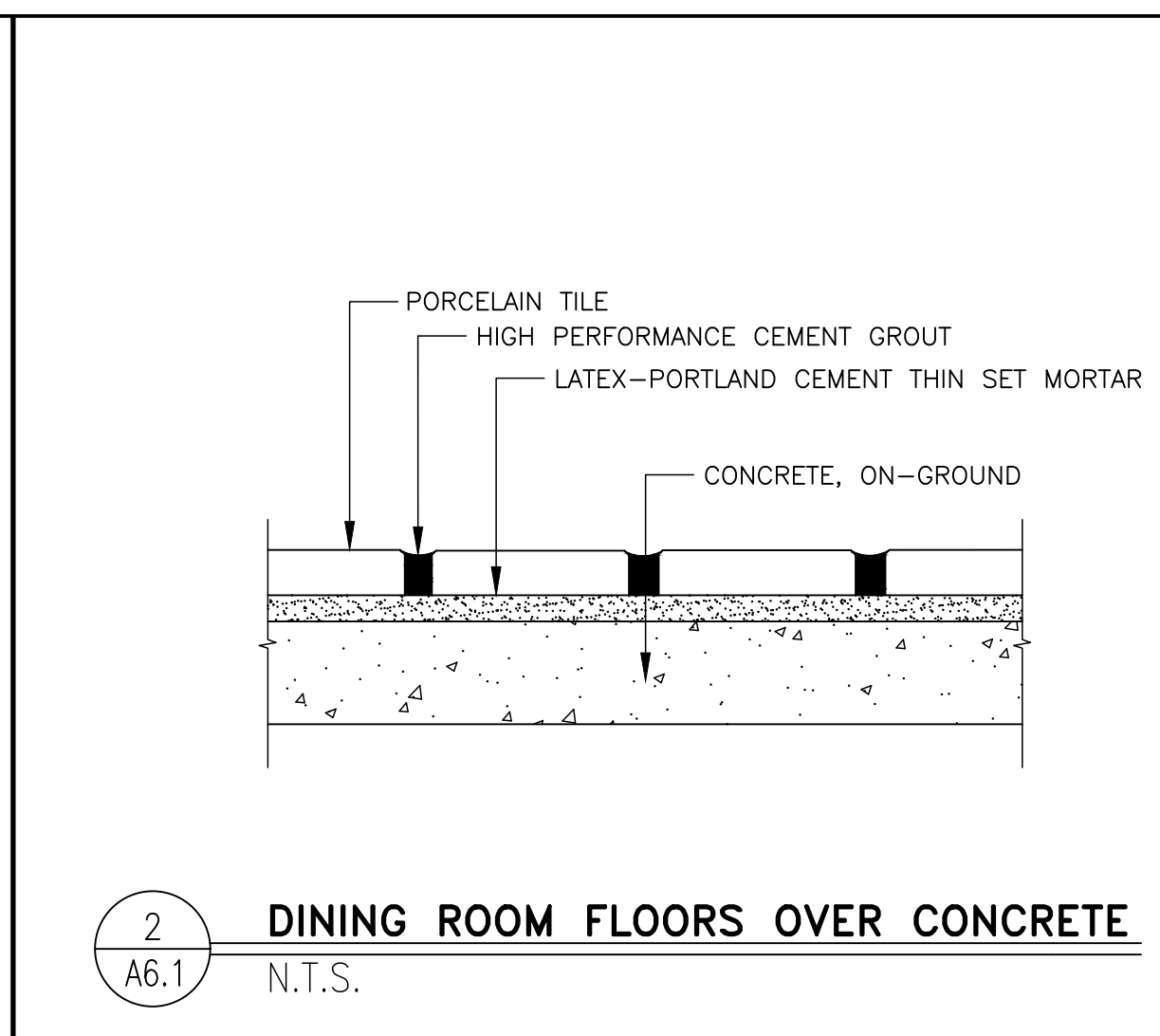
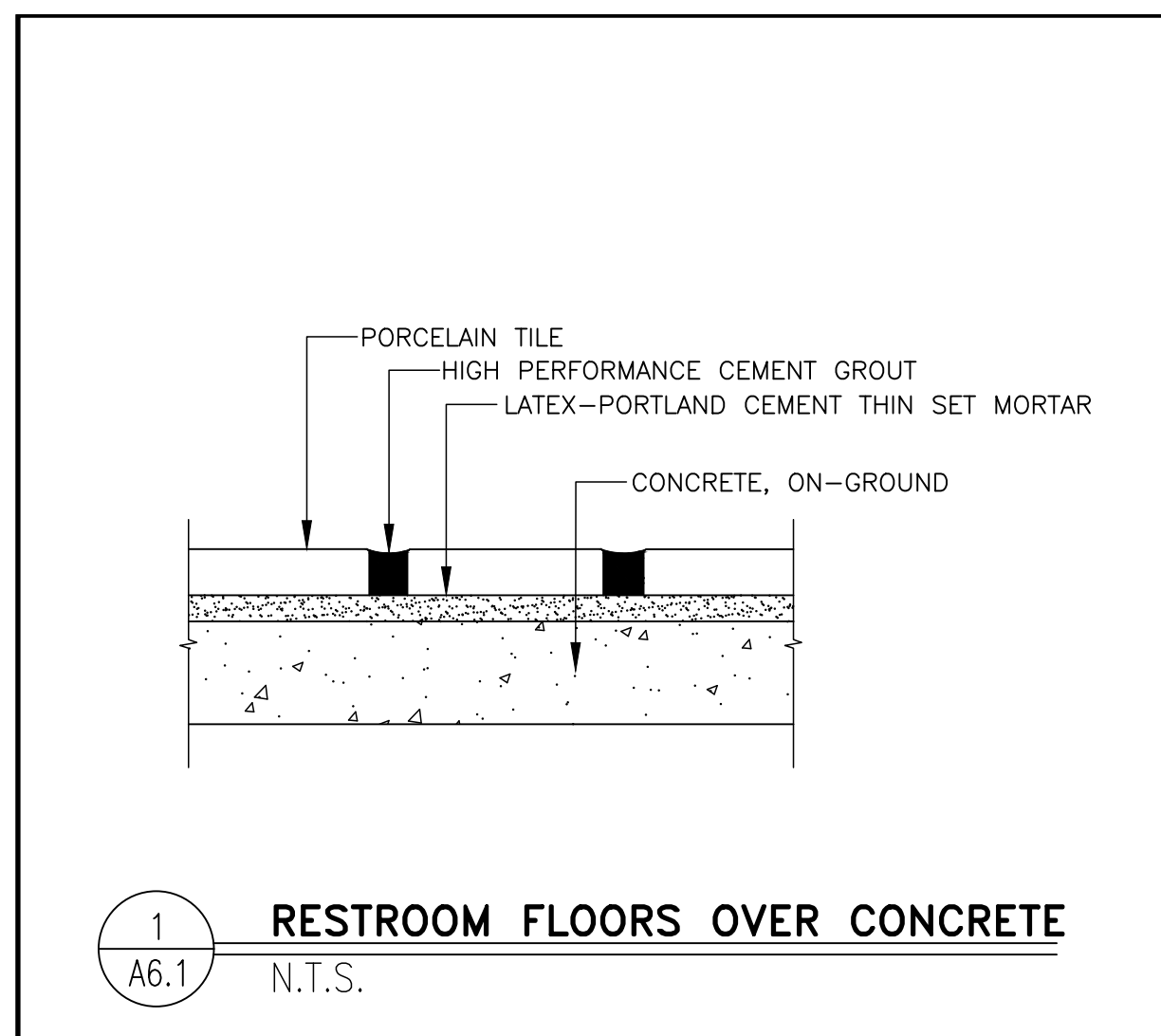
DOOR SCHEDULE

MARK	DOOR	MATERIAL	SIZE	TYPE	FRAME	MATL	SIZE
1	ALUM.	3'-0"x7'-0"x1 3/4"	A	ALUM.	(NOTE 5)		
1A		NOT USED					
2	ALUM.	3'-0"x7'-0"x1 3/4"	A	ALUM.	(NOTE 5)		
3	H.M.	4'-0"x7'-0"x1 3/4"	B	H.M.	2"JAMB 4"HD		
3A	H.M.	4'-0"x7'-0"x1 3/4"	C	H.M.	2"JAMB 4"HD		
4	H.M.	3'-0"x7'-0"x1 3/4"	B	H.M.	2"JAMB 4"HD		
5	S.C. WOOD W/ LAM.	3'-0"x6'-8"x1 3/4"	C	H.M.	2"JAMB & HEAD		
6	S.C. WOOD W/ LAM.	3'-0"x4'-8"x1 3/4"	D	H.M.	2"JAMB & HEAD		
6A	S.C. WOOD W/ LAM.	2'-6"x4'-8"x1 3/4"	D	H.M.	2"JAMB & HEAD		
7	S.C. WOOD W/ LAM.	3'-0"x6'-8"x1 3/4"	C	H.M.	2"JAMB & HEAD		
8	S.C. WOOD W/ LAM.	2'-0"x8'-8"x1 3/4"	C	H.M.	2"JAMB & HEAD		
8A	S.C. WOOD W/ LAM.	(2) 1'-0"x8'-0"x1 3/4"	E	H.M.	2"JAMB & HEAD		
9	INSULATED METAL	3'-0"x6'-6"x4"	C	N/A	N/A		
10	H.M.	3'-0"x7'-0"x1 3/4"	F	H.M.	2"JAMB 4"HD		
11		NOT USED					
12		NOT USED					
13		NOT USED					
14	S.C. WOOD W/ LAM.	3'-0"x6'-8"x1 3/4"	H	H.M.	2"JAMB & HEAD (NOT USED)		
15	H.M.	3'-0"x7'-0"x1 3/4"	G	H.M.	2"JAMB 4"HD		
16	S.C. WOOD W/ LAM.	3'-0"x6'-8"x1 3/4"	H	H.M.	2"JAMB & HEAD (NOT USED)		

GENERAL DOOR NOTES:

- GC TO INSTALL ACCESSIBILITY DOOR SIGNS WHERE REQ'D BY LOCAL CODES - SEE GENERAL NOTE 6, SHEET A1.0
- DETEX ALARM CONTACT SWITCHES SHALL BE RECESSED INTO THE TOP OF THE DOOR & HOLLOW METAL FRAME ABOVE
- DOORS, DOOR FRAMES, & HARDWARE FOR DOORS 3, 3A, 4, 5, 6, 6A, 7, 8, 8A, 10, 14, 15, 16 SUPPLIED BY: UNIVERSAL MANUFACTURING 1-800-821-1414.
- DOOR 9 SUPPLIED BY FREEZER/COOLER MANUFACTURER
- SEE ELEVATIONS AND WALL SECTIONS
- ALL INTERIOR SOLID CORE WOOD DOORS TO HAVE A LAMINATED FINISH, AS INDICATED PER DECOR DWGS
- DOOR 8 & 8A - LAMINATED FINISH - "WILSONART DOVE GREY" D92-60
- DOOR 3, 3A, 4 & 15 TO HAVE MAXIMUM U VALUE = 0.37





WALL TILE SCHEDULE

MARK	ROOM NAME	WALL		MORTAR SETTING BED	GROUT
100	CUSTOMER SERVICE	CERAMIC OR PORCELAIN WALL TILE	(NOTE 4C)	LATEX-PORTLAND CEMENT THIN SET (MEDIUM BED)	HIGH PERFORMANCE CEMENT GROUT
101	DINING	CERAMIC OR PORCELAIN WALL TILE	(NOTE 4B & 4C)	LATEX-PORTLAND CEMENT THIN SET (MEDIUM BED)	HIGH PERFORMANCE CEMENT GROUT
102	WOMEN'S TOILET	CERAMIC OR PORCELAIN WALL TILE	(NOTE 4B)	LATEX-PORTLAND CEMENT THIN SET (MEDIUM BED)	HIGH PERFORMANCE CEMENT GROUT
103	MEN'S TOILET	CERAMIC OR PORCELAIN WALL TILE	(NOTE 4B)	LATEX-PORTLAND CEMENT THIN SET (MEDIUM BED)	HIGH PERFORMANCE CEMENT GROUT
104	SUPPORT	N/A - SEE ROOM FINISH SCHEDULE		----	----
105	KITCHEN	N/A - SEE ROOM FINISH SCHEDULE		----	----
106	PRESENTER-1	CERAMIC WALL TILE		LATEX-PORTLAND CEMENT THIN SET (MEDIUM BED)	HIGH PERFORMANCE CEMENT GROUT
107	ORDER	N/A - SEE ROOM FINISH SCHEDULE		----	----
108	MANAGER'S AREA	N/A - SEE ROOM FINISH SCHEDULE		----	----
109	CREW ROOM	CERAMIC WALL TILE	(NOTE 4B)	LATEX-PORTLAND CEMENT THIN SET (MEDIUM BED)	HIGH PERFORMANCE CEMENT GROUT
110	COOLER	N/A - SEE ROOM FINISH SCHEDULE		----	----
111	FREEZER	N/A - SEE ROOM FINISH SCHEDULE		----	----
112	COMPUTER CLOSET	N/A - SEE ROOM FINISH SCHEDULE		----	----
113	CREW ALCOVE	N/A - SEE ROOM FINISH SCHEDULE		----	----
114	JANITOR'S CLOSET	N/A - SEE ROOM FINISH SCHEDULE		----	----
115	VESTIBULE	CERAMIC WALL TILE		LATEX-PORTLAND CEMENT THIN SET (MEDIUM BED)	HIGH PERFORMANCE CEMENT GROUT
116	PRESENTER-2	CERAMIC WALL TILE		LATEX-PORTLAND CEMENT THIN SET (MEDIUM BED)	HIGH PERFORMANCE CEMENT GROUT
117	CO2	N/A - SEE ROOM FINISH SCHEDULE		----	----

FLOOR TILE SCHEDULE

MARK	ROOM NAME	FLOOR	BASE	MORTAR SETTING BED	GROUT
100	CUSTOMER SERVICE	PORCELAIN FLOOR TILE (NOTE 3)	NONE - WALL TILE	LATEX-PORTLAND CEMENT THIN SET (MEDIUM BED)	HIGH PERFORMANCE CEMENT GROUT
101	DINING	PORCELAIN FLOOR TILE (NOTE 3)	NONE - WALL TILE	LATEX-PORTLAND CEMENT THIN SET (MEDIUM BED)	HIGH PERFORMANCE CEMENT GROUT
102	WOMEN'S TOILET	PORCELAIN FLOOR TILE (NOTE 3)	NONE - WALL TILE (NOTE 4A)	LATEX-PORTLAND CEMENT THIN SET (MEDIUM BED)	HIGH PERFORMANCE CEMENT GROUT
103	MEN'S TOILET	PORCELAIN FLOOR TILE (NOTE 3)	NONE - WALL TILE (NOTE 4A)	LATEX-PORTLAND CEMENT THIN SET (MEDIUM BED)	HIGH PERFORMANCE CEMENT GROUT
104	SUPPORT	QUARRY TILE (NOTE 2)	COVED QUARRY TILE	MODIFIED-PORTLAND CEMENT THIN SET MORTAR (MEDIUM BED)	CHEMICAL RESISTANT, WATER-CLEANABLE, TILE-SETTING EPOXY - 100% SOLIDS, INDUSTRIAL-GRADE
105	KITCHEN	QUARRY TILE (NOTE 2)	COVED QUARRY TILE	MODIFIED-PORTLAND CEMENT THIN SET MORTAR (MEDIUM BED)	CHEMICAL RESISTANT, WATER-CLEANABLE, TILE-SETTING EPOXY - 100% SOLIDS, INDUSTRIAL-GRADE
106	PRESENTER-1	QUARRY TILE (NOTE 2)	COVED QUARRY TILE	MODIFIED-PORTLAND CEMENT THIN SET MORTAR (MEDIUM BED)	CHEMICAL RESISTANT, WATER-CLEANABLE, TILE-SETTING EPOXY - 100% SOLIDS, INDUSTRIAL-GRADE
107	ORDER	QUARRY TILE (NOTE 2)	COVED QUARRY TILE	MODIFIED-PORTLAND CEMENT THIN SET MORTAR (MEDIUM BED)	CHEMICAL RESISTANT, WATER-CLEANABLE, TILE-SETTING EPOXY - 100% SOLIDS, INDUSTRIAL-GRADE
108	MANAGER'S AREA	QUARRY TILE (NOTE 2)	COVED QUARRY TILE	MODIFIED-PORTLAND CEMENT THIN SET MORTAR (MEDIUM BED)	CHEMICAL RESISTANT, WATER-CLEANABLE, TILE-SETTING EPOXY - 100% SOLIDS, INDUSTRIAL-GRADE
109	CREW ROOM	QUARRY TILE (NOTE 2)	COVED QUARRY TILE	MODIFIED-PORTLAND CEMENT THIN SET MORTAR (MEDIUM BED)	CHEMICAL RESISTANT, WATER-CLEANABLE, TILE-SETTING EPOXY - 100% SOLIDS, INDUSTRIAL-GRADE
110	COOLER	QUARRY TILE (NOTE 2)	4" ALUM. COVED BASE	MODIFIED-PORTLAND CEMENT THIN SET MORTAR (MEDIUM BED)	CHEMICAL RESISTANT, WATER-CLEANABLE, TILE-SETTING EPOXY - 100% SOLIDS, INDUSTRIAL-GRADE
111	FREEZER	QUARRY TILE (NOTE 2)	4" ALUM. COVED BASE	MODIFIED-PORTLAND CEMENT THIN SET MORTAR (MEDIUM BED)	CHEMICAL RESISTANT, WATER-CLEANABLE, TILE-SETTING EPOXY - 100% SOLIDS, INDUSTRIAL-GRADE
112	COMPUTER CLOSET	QUARRY TILE (NOTE 2)	COVED QUARRY TILE	MODIFIED-PORTLAND CEMENT THIN SET MORTAR (MEDIUM BED)	CHEMICAL RESISTANT, WATER-CLEANABLE, TILE-SETTING EPOXY - 100% SOLIDS, INDUSTRIAL-GRADE
113	CREW ALCOVE	QUARRY TILE (NOTE 2)	COVED QUARRY TILE	MODIFIED-PORTLAND CEMENT THIN SET MORTAR (MEDIUM BED)	CHEMICAL RESISTANT, WATER-CLEANABLE, TILE-SETTING EPOXY - 100% SOLIDS, INDUSTRIAL-GRADE
114	JANITOR'S CLOSET	PORCELAIN FLOOR TILE (NOTE 3)	COVED QUARRY TILE	LATEX-PORTLAND CEMENT THIN SET (MEDIUM BED)	HIGH PERFORMANCE CEMENT GROUT
115	VESTIBULE	PORCELAIN FLOOR TILE (NOTE 3)	NONE - WALL TILE	LATEX-PORTLAND CEMENT THIN SET (MEDIUM BED)	HIGH PERFORMANCE CEMENT GROUT
116	PRESENTER-2	QUARRY TILE (NOTE 2)	COVED QUARRY TILE	MODIFIED-PORTLAND CEMENT THIN SET MORTAR (MEDIUM BED)	CHEMICAL RESISTANT, WATER-CLEANABLE, TILE-SETTING EPOXY - 100% SOLIDS, INDUSTRIAL-GRADE
117	CO2	N/A - SEE ROOM FINISH SCHEDULE	----	----	----

ROOM FINISH SCHEDULE

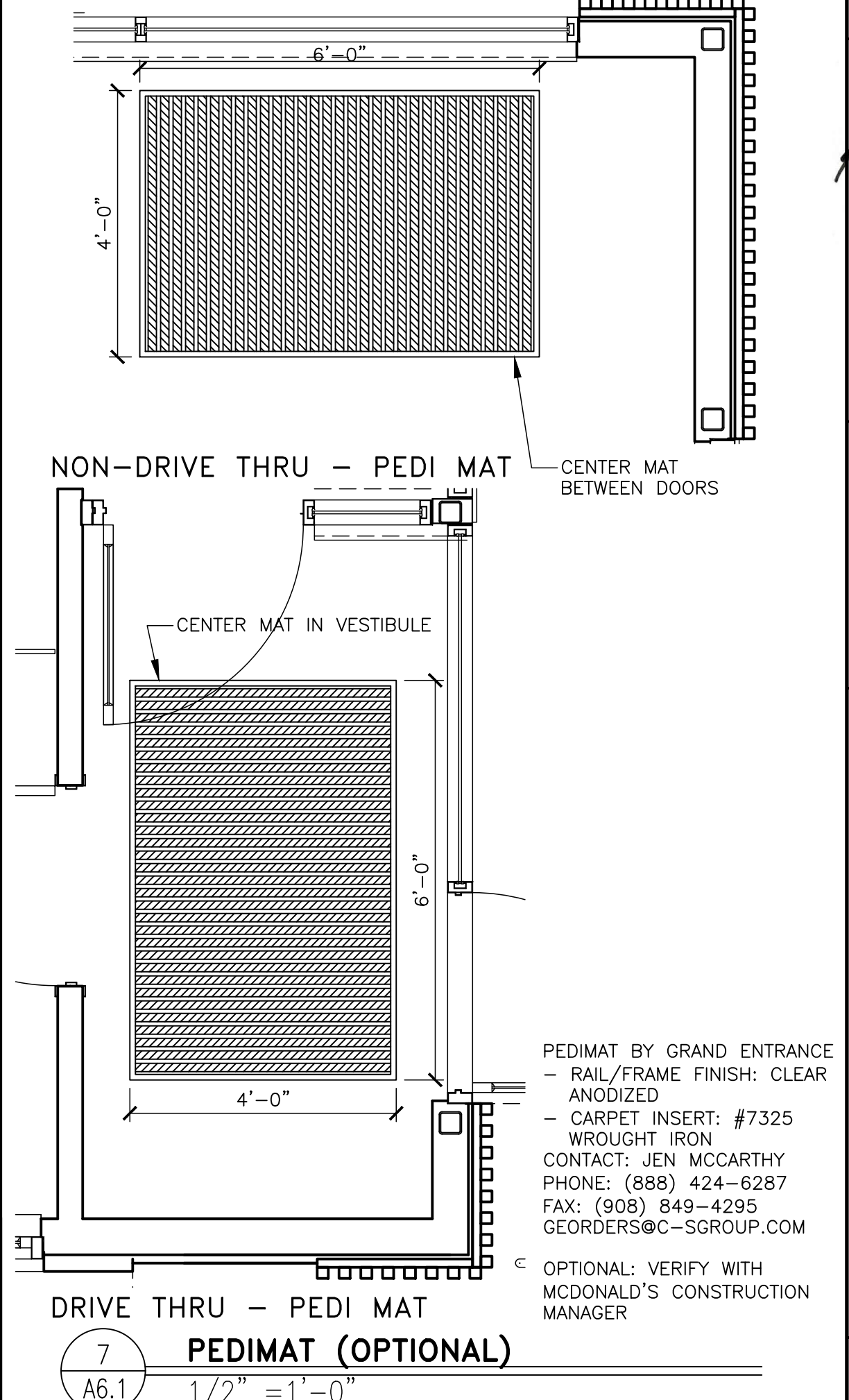
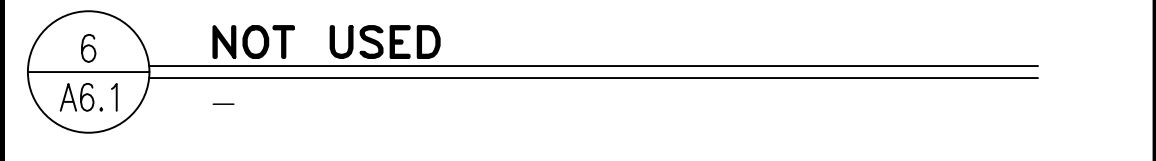
MARK	ROOM NAME	SUBSTRATE	FINISH	WALLS	CEILING *	REMARKS
100	CUSTOMER SERVICE	CEMENT BOARD	TILE	**	SEE DECOR DRAWINGS, TILE AS NOTED ON A1.0	2"x2' ACOUST., PAINTED GYP. BD
101	DINING	CEM BD/GYP BD	TILE/V.W.C.	**	SEE DECOR DRAWINGS FOR EXTENT	2"x2' ACOUST., PAINTED GYP. BD
102	WOMEN'S TOILET	CEMENT BOARD	TILE	**	SEE DECOR DRAWINGS FOR EXTENT	PAINTED GYP. BD
103	MEN'S TOILET	CEMENT BOARD	TILE	**	SEE DECOR DRAWINGS FOR EXTENT	PAINTED GYP. BD
104	SUPPORT	1/2" PLYWD (NOTE 4)	FRP	**	SEE DECOR DRAWINGS FOR EXTENT	2'x2' VINYL-FACED LAY-IN
105	KITCHEN	1/2" PLYWD (NOTE 4)	FRP	**	SEE DECOR DRAWINGS FOR EXTENT	2'x2' VINYL-FACED LAY-IN
106	PRESENTER-1	CEM BD, 1/2" PLYWD (NOTE 4)	TILE	**	SEE DECOR DRAWINGS FOR EXTENT	2'x2' VINYL-FACED LAY-IN
107	ORDER	1/2" PLYWD (NOTE 4)	FRP	**	SEE DECOR DRAWINGS FOR EXTENT	2'x2' VINYL-FACED LAY-IN
108	MANAGER'S AREA	1/2" PLYWD (NOTE 4)	FRP	**	SEE DECOR DRAWINGS FOR EXTENT	2'x2' VINYL-FACED LAY-IN
109	CREW ROOM	CEM BD/GYP BD	TILE/V.W.C.	**	SEE DECOR DRAWINGS FOR EXTENT	2'x2' ACOUST. LAY-IN
110	COOLER	N/A	PRE-FAB METAL SKIN PANEL	**	SEE DECOR DRAWINGS FOR EXTENT	PRE-FAB METAL SKIN PANEL
111	FREEZER	N/A	PRE-FAB METAL SKIN PANEL	**	SEE DECOR DRAWINGS FOR EXTENT	PRE-FAB METAL SKIN PANEL
112	COMPUTER CLOSET	1/2" PLYWD (NOTE 4)	FRP	**	SEE DECOR DRAWINGS FOR EXTENT	PAINTED GYP. BD
113	CREW ALCOVE	1/2" PLYWD (NOTE 4)	FRP	**	SEE DECOR DRAWINGS FOR EXTENT	2'x2' VINYL-FACED LAY-IN
114	JANITOR'S CLOSET	1/2" PLYWD (NOTE 4)	FRP	**	SEE DECOR DRAWINGS FOR EXTENT	PAINTED GYP. BD
115	VESTIBULE	CEM BD/GYP BD	TILE/V.W.C.	**	SEE DECOR DRAWINGS FOR EXTENT	2'x2' ACOUST. LAY-IN WITH HOLD DOWN CLIPS
116	PRESENTER-2	CEM BD, 1/2" PLYWD (NOTE 4)	TILE	**	SEE DECOR DRAWINGS FOR EXTENT	2'x2' VINYL-FACED LAY-IN
117	CO2	1/2" PLYWD (NOTE 4)	FRP	**	SEE DECOR DRAWINGS FOR EXTENT	PAINTED GYP. BD

GENERAL TILE NOTES:

- REFERENCE: 2017 McDONALD'S PROJECT MANUAL - SECTION 093000
- KITCHEN FLOOR TILE:**
TILE: CROSSVILLE 6"x6" METROPOLITAN QUARRY BASICS ABRASIVE
GROUT: CHARCOAL #47 BY MAPEI
KERAPOXY IEG BLACK #10 BY MAPEI (FOR OPTIONAL GREY TILE)
COLOR: PURITAN GRAY EXTRA ABRASIVE 57XA (STANDARD)
MAYFLOWER RED 31XA (OPTIONAL) - VERIFY W/ MCDONALD'S ACM
- DINING ROOM FLOOR TILE:**
MAIN & ACCENT: USE ONLY APPROVED TILE SERIES AND COLORS BY CROSSVILLE AND EUROWEST. VERIFY COLOR AND PATTERN PER INTERIOR DECOR DRAWINGS.
A) MUST BE PER McDONALD'S USA, LLC: STANDARDS FOR INTERIOR FLOOR TILE AND APPROVED TILE LIST.
B) MUST MEET THE FOLLOWING:
STATIC COEFFICIENT OF FRICTION (PER ASTM F1667-96)
LEVEL SURFACES: MINIMUM 0.50 DRY AND WET (MCDONALD'S STANDARD)
DYNAMIC COEFFICIENT OF FRICTION (PER ANSI A137.1 2012)
LEVEL SURFACES: MINIMUM 0.5 DRY AND WET (MCDONALD'S STANDARD)
- TILE TRANSITION AND EDGE PROTECTION:**
A) TILE BASE (RESTROOM ONLY): SCHLUTER DILEX-AHK SERIES, BRUSHED STAINLESS STEEL.
B) TILE EDGE PROTECTION (WALL TRANSITION): SCHLUTER-RONDEC-DB, SATIN ANODIZED ALUMINUM.
C) TILE CORNER PROTECTION (OUTSIDE CORNER): SCHLUTER-RONDEC-AE, SATIN ANODIZED ALUMINUM.
D) SEE INTERIOR DECOR DRAWINGS FOR ALL LOCATIONS.

BEFORE FINAL INSPECTION, REMOVE PROTECTIVE COVERINGS AND PERFORM FINAL CLEANING.

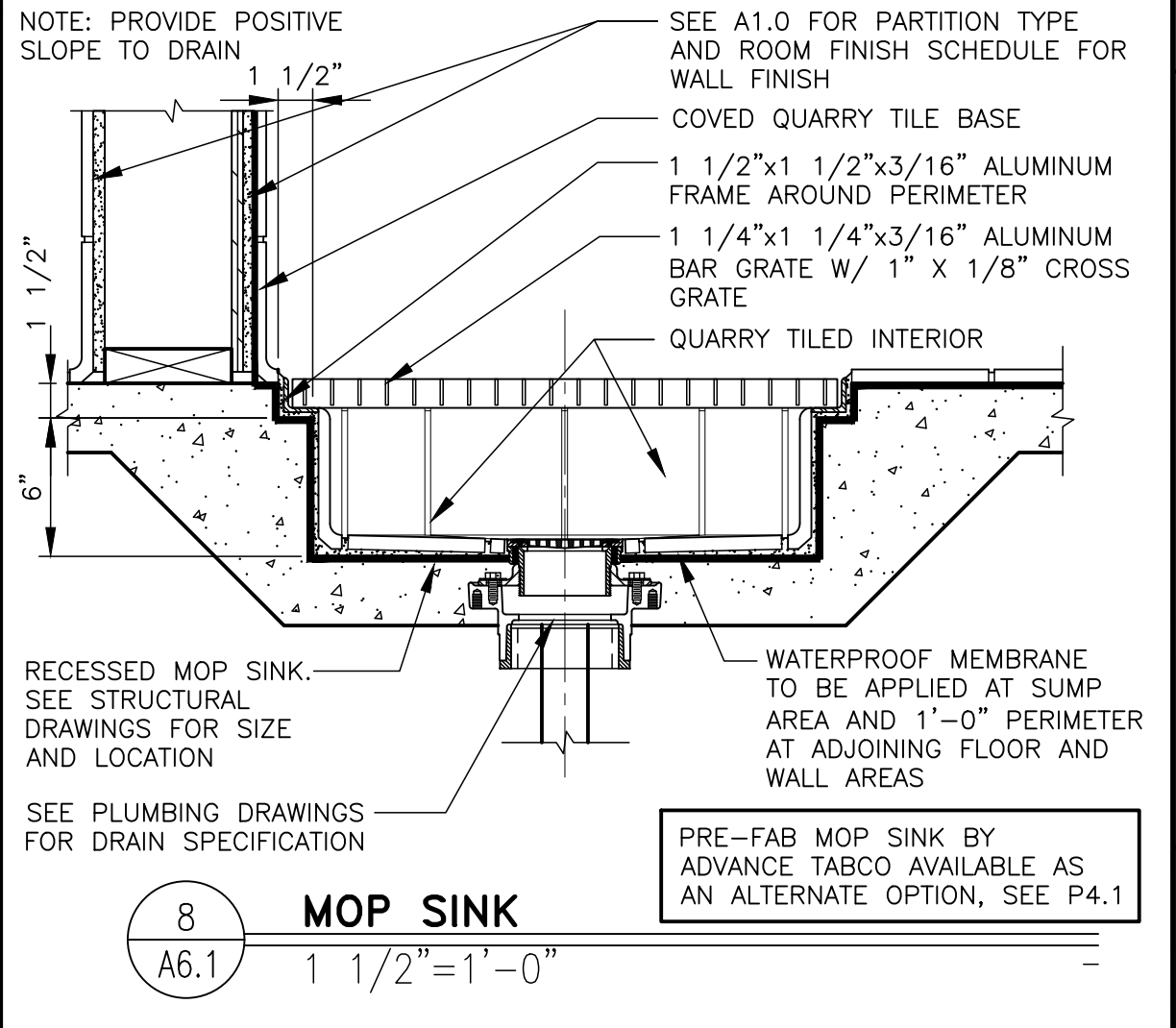
- TILE CLEANER:** DETERDEK, BY FILA SURFACE CARE PRODUCTS - NO SUBSTITUTIONS ALLOWED
CAN BE ORDERED BY EUROWEST, CROSSVILLE, OR DIRECT FROM MANUFACTURER: FILA/DETEREK
POST INSTALLATION CLEANING REQUIRED ON ALL FLOOR TILE INSTALLATIONS PRIOR TO RESTAURANT TURN OVER.
APPLY CLEANER PER MANUFACTURER'S WRITTEN INSTRUCTIONS.
REFERENCE: MCDONALD'S PROJECT MANUAL - SECTION 09300 TILING INTERIOR.
- GROUT COLOR AND MANUFACTURER AS INDICATED ON SHEET A1.0 AND INTERIOR DECOR DRAWINGS.**



GENERAL FINISH NOTES:

- ALL FINISH SURFACES OF WALL AND CEILING MATERIALS SHALL BE CLASS B AND SHALL HAVE A FLAME SPREAD RATING OF 26 TO 75 AND A SMOKE DENSITY OF 450 MAX. (PER IBC TABLE 803.9).
- DECORATIVE MATERIALS SHALL BE FLAME RETARDANT AND MEET THE CRITERIA OF NFPA 701.
- DECORATIVE MATERIAL SHALL NOT CONCEAL EXITS, EXIT LIGHTS, ALARM STATIONS, HOSE CABINETS, AND EXTINGUISHER LOCATIONS
- WHEN BUILDING TYPE IS A NON-COMBUSTIBLE CATEGORY, ALL PLYWOOD SHALL BE FIRE RETARDANT TREATED.
- FRP OVER CEMENT BD BEHIND 3-COMP SINK TO HGT OF BACK SPLASH
- TILE WAINSCOT TO 6" A.F.F. OVER CEMENT BD. OVER EXT GRADE PLYWOOD (NOTE 4) AT MOP SINKS
- PROVIDE CEMENT BOARD BACKER OR EQUIVALENT AT ALL TILE LOCATIONS.
- PROVIDE VAPOR BARRIER BEHIND PLYWOOD AT WALLS AND BEHIND GYP. AT CEILING

** SEE CEILING PLAN FOR HEIGHTS & LAYOUTS
** VWC ON EXTERIOR WALL ASSEMBLIES TO BE PERFORMED



STATE OF MISSOURI
ROBERT D. KEMPKE
ARCHITECT
A-2008012300
11-10-2022

Robert Kempke
ARCHITECT
3102 WILSON BLVD. STE. 200
ST. LOUIS, MO 63103
TEL: (314) 433-1111
FAX: (314) 433-1111

PREPARED FOR: McDonald's USA, LLC
2022 STANDARD BUILDING - BB20
4597 - WOOD/WOOD

DESCRIPTION: WOOD BEARING WALLS W/HARDBOARD SIDING
WOOD ROOF TRUSS FRAMING
E.L.F.'S/BATTEN/HARDBOARD SIDING EXTERIOR FINISH

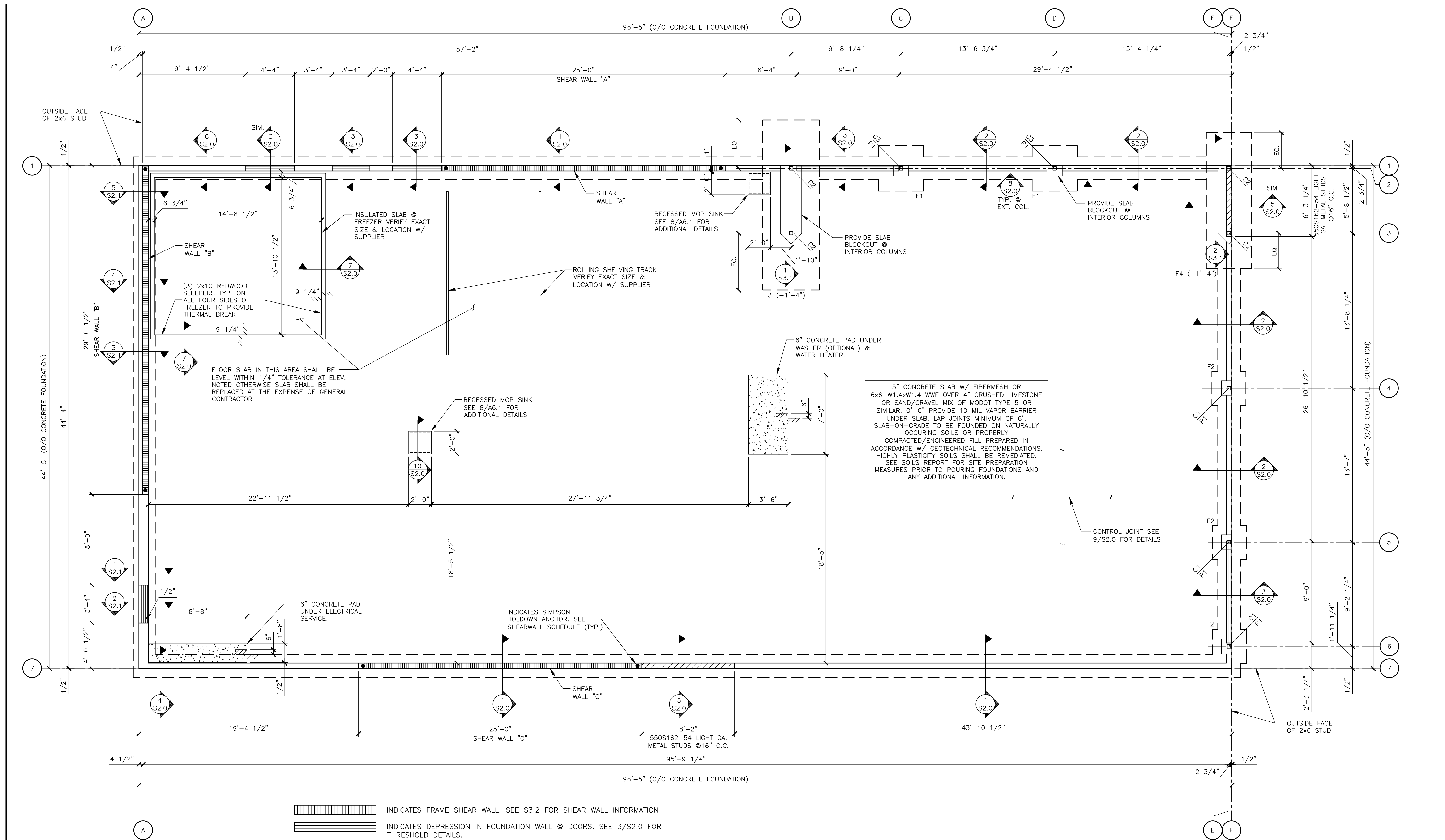
DATE ISSUED: 10-04-2022

PREPARED BY: Robert Kempke
DRAWN BY: [Blank]
STD ISSUE DATE: 2022-10-04
REVIEWED BY: RH

2022 STANDARD BUILDING - BB20
4597 - WOOD/WOOD

024-1290.00.0
A6.1
FINISH SCHEDULES

024-1290 3720 W Sunshine Springfield, MO



1 FOUNDATION PLAN
1/4"=1'-0"

- NOTES:**
- TOP OF FOOTING @ EL. (-2'-0") UNLESS NOTED OTHERWISE.
 - TOP OF PIER @ EL. (-0'-8") UNLESS NOTED OTHERWISE.
 - SEE SHEET S4.0 FOR GENERAL STRUCTURAL NOTES.
 - PROVIDE POSITIVE DRAINAGE TO ALL FLOOR DRAINS/SINKS (MIN 6") BEYOND DRAIN) SEE PLUMBING DRAWINGS FOR EXACT LOCATIONS
 - SEE SHEET S2.0 FOR TYPICAL CORNER BAR DETAILS.
 - MINIMUM REQUIREMENTS FOR SILL PLATE CONNECTION TO FOUNDATION:
MINIMUM # OF BOLTS = 2 PER PIECE OF SILL
MAXIMUM DISTANCE FROM END OF SILL TO ANCHOR = 12"
MINIMUM DISTANCE FROM END OF SILL TO ANCHOR = 4"
 - WHERE SILL PLATES ARE NOT CONTINUOUS AT ALL LOCATIONS EXCEPT SHEAR WALLS, USE SIMPSON "RPS222" TIE FOR NOTCH < 5 1/2", USE SIMPSON "RPS282" FOR NOTCH < 12", W/ 16d NAILS INTO SILL PLATE ENDS. (MAX. SPACING BETWEEN STUDS = 16" O.C.)
 - WHERE SILL PLATES ARE NOT CONTINUOUS AT SHEAR WALLS, CONTACT ENGINEER OF RECORD FOR RESPONSE.

FOOTING SCHEDULE		
MARK	SIZE	REINFORCING
F1	4'-0"x4'-0"x1'-0"	5-#5 E.W.-B.
F2	3'-0"x3'-0"x1'-0"	4-#5 E.W.-B.
F3	5'-0"x15'-0"x3'-0"	11-#7 L.W.-T&B #6 @ 12" O.C. S.W.-T&B
F4	4'-0"x12'-0"x3'-0"	9-#7 L.W.-T&B #6 @ 12" O.C. S.W.-T&B

PIER SCHEDULE			
MARK	SIZE	REINFORCING	REMARKS
P1	1'-4"x1'-4"	4-#6 VERT. #4 TIES @ 12" O.C.	SEE DETAIL 8/S2.0

COLUMN & BASE PLATE SCHEDULE				
MARK	MEMBER	SHAPE	BASE PLATE	REMARKS
C1	HSS4x4x1/4	⊕	A	EXTEND TO ROOF
C2	HSS4x4x5/16	⊕	B	BRACED FRAME
C3	HSS4x4x5/16	⊕	A	EXTEND TO ROOF

NOTE: SEE DETAIL 3/S3.1 FOR BASE PLATE AND ANCHOR ROD DETAILS

STATE OF MISSISSIPPI
DAVID BALMA
NUMBER PE-2015003007
PROFESSIONAL ENGINEER
1/17/2022

CORE STATES GROUP
CONSULTING INC.
301 S. Water Avenue
Amite, LA 70402
www.corestates.com

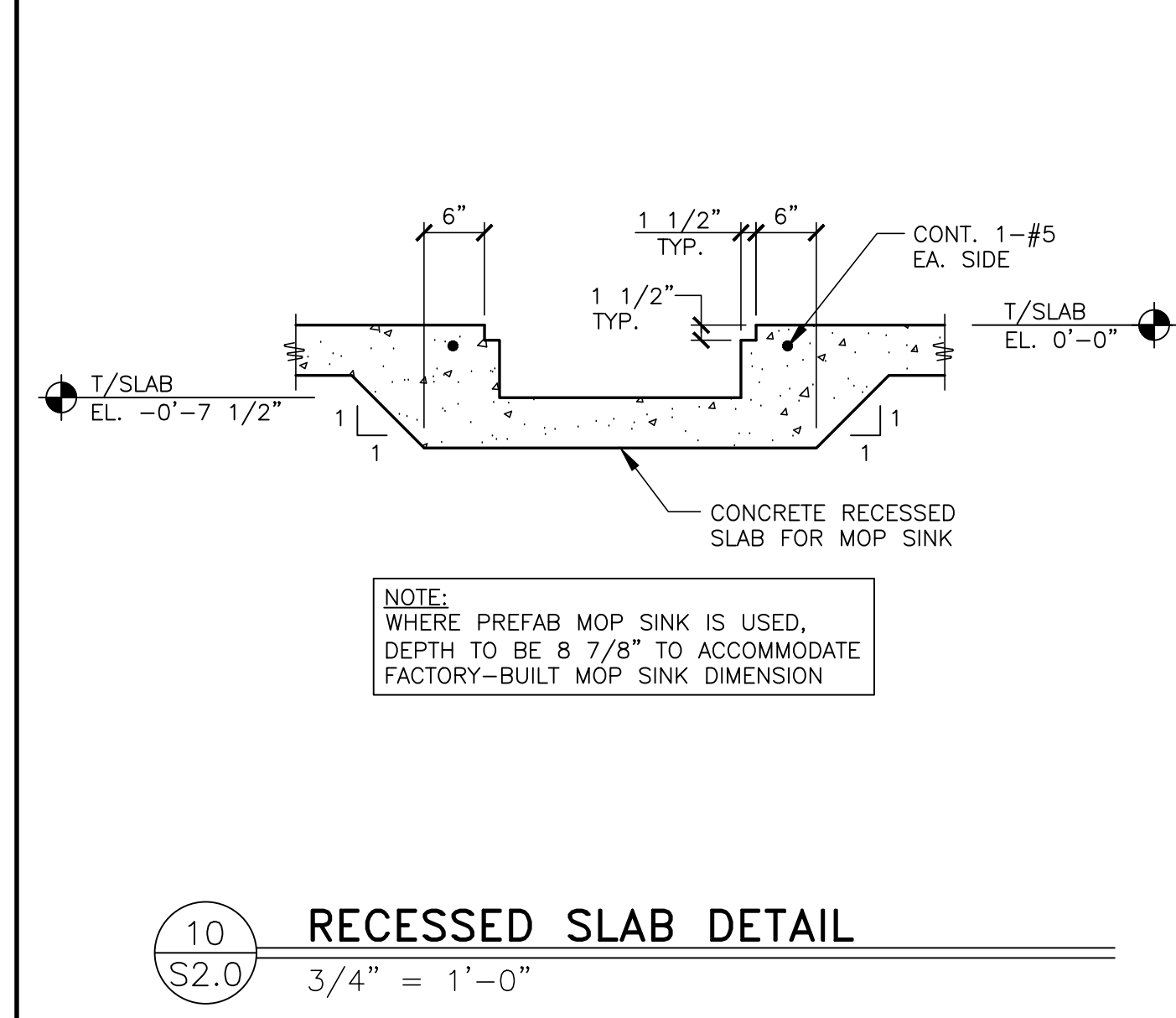
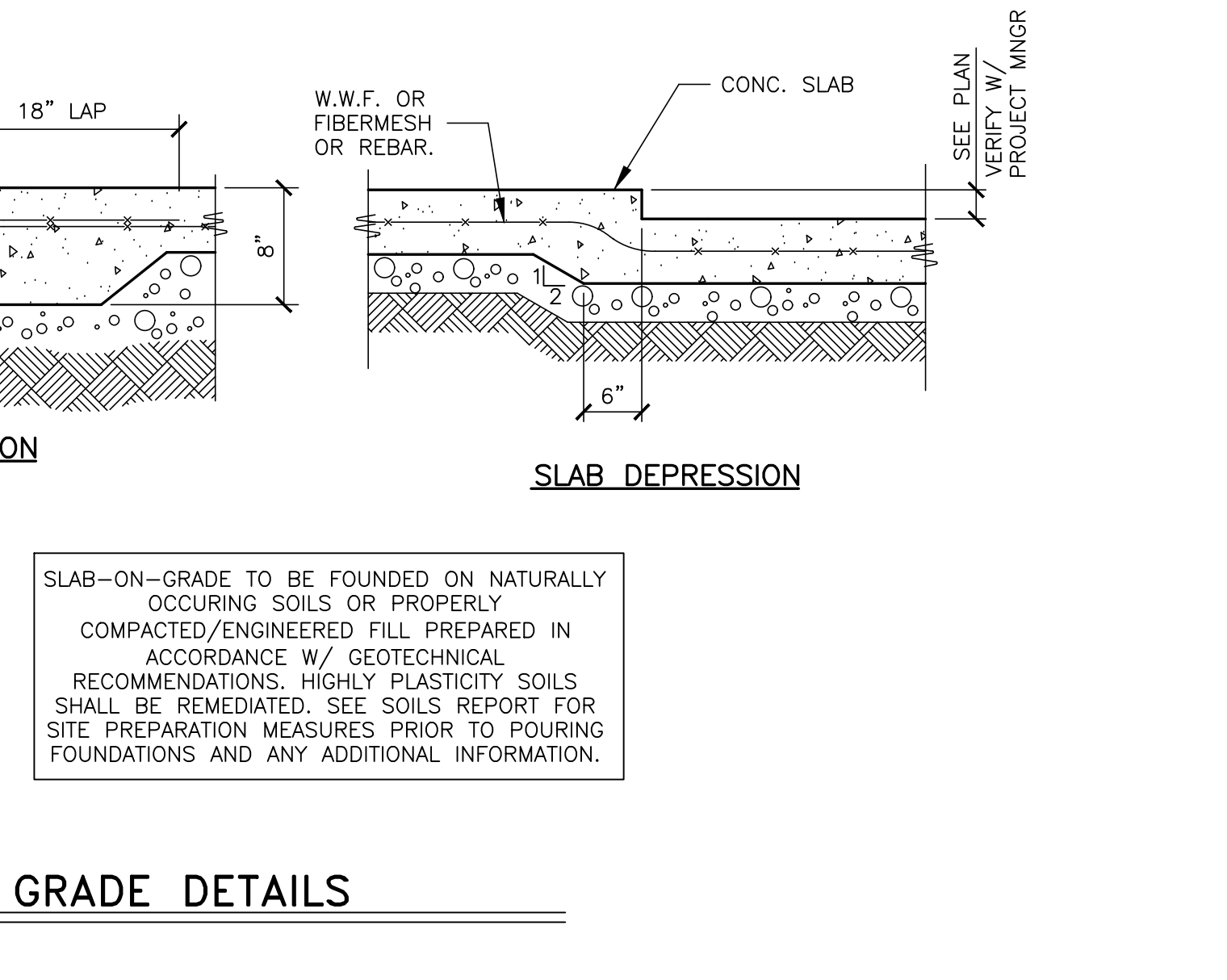
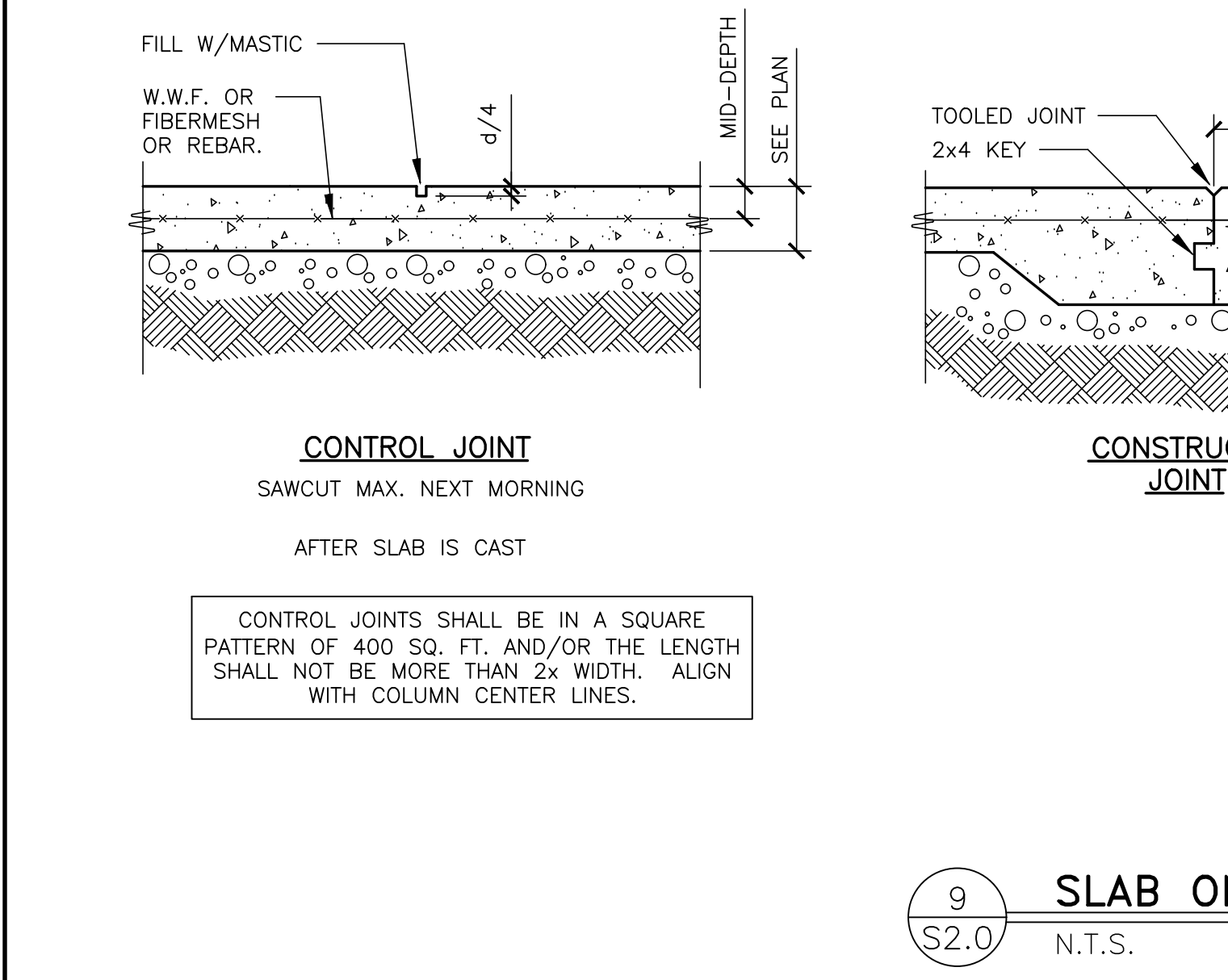
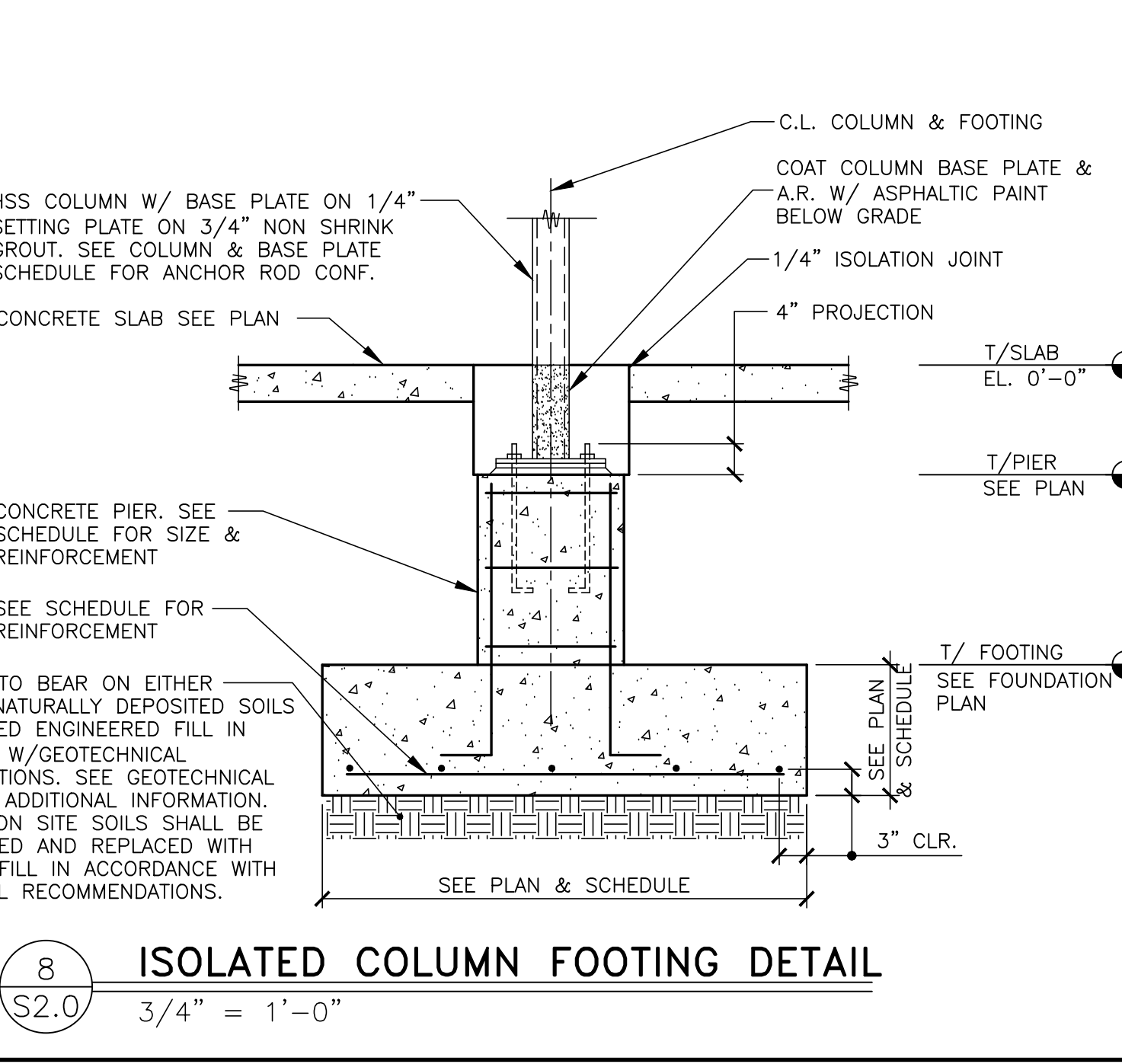
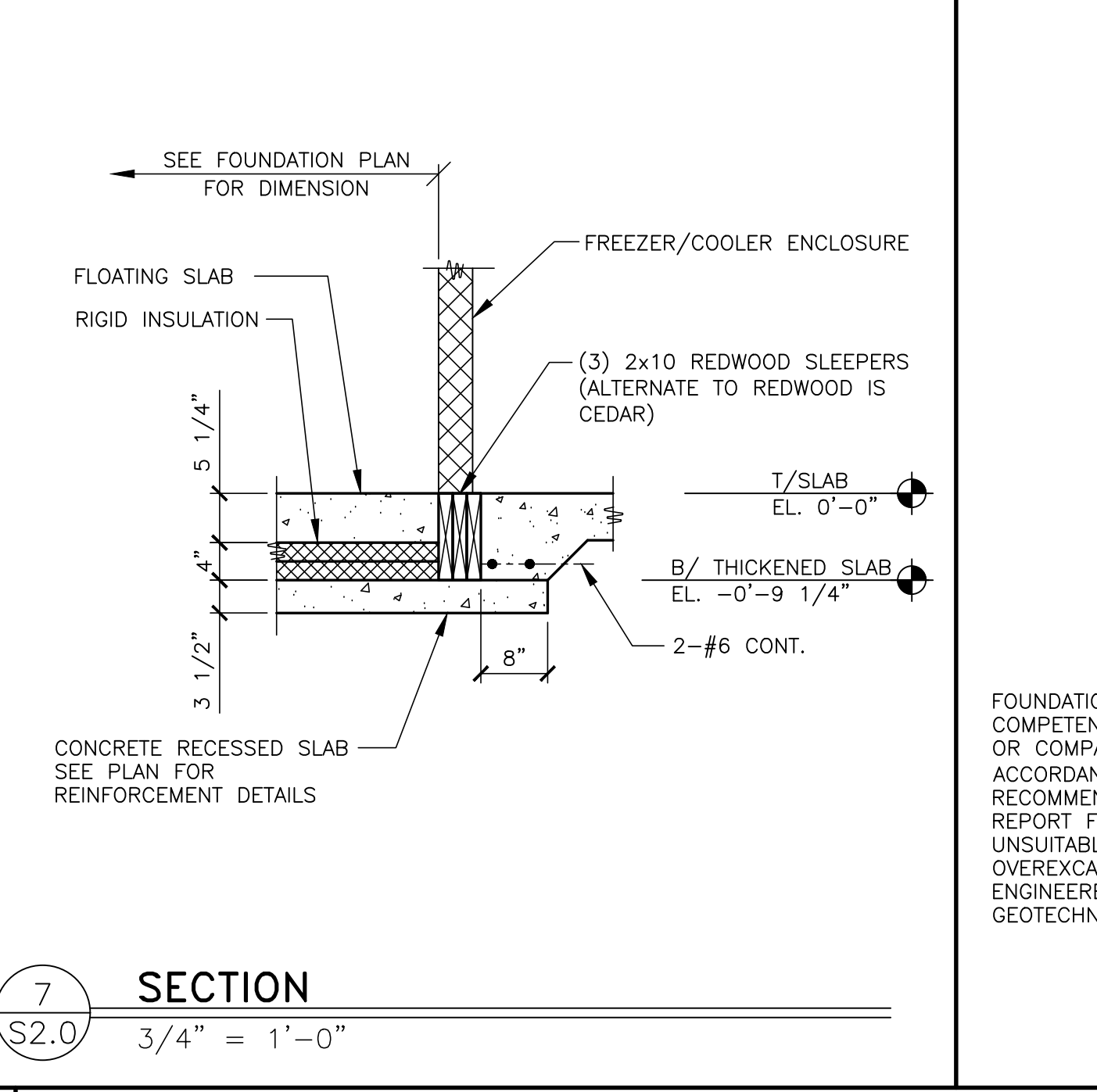
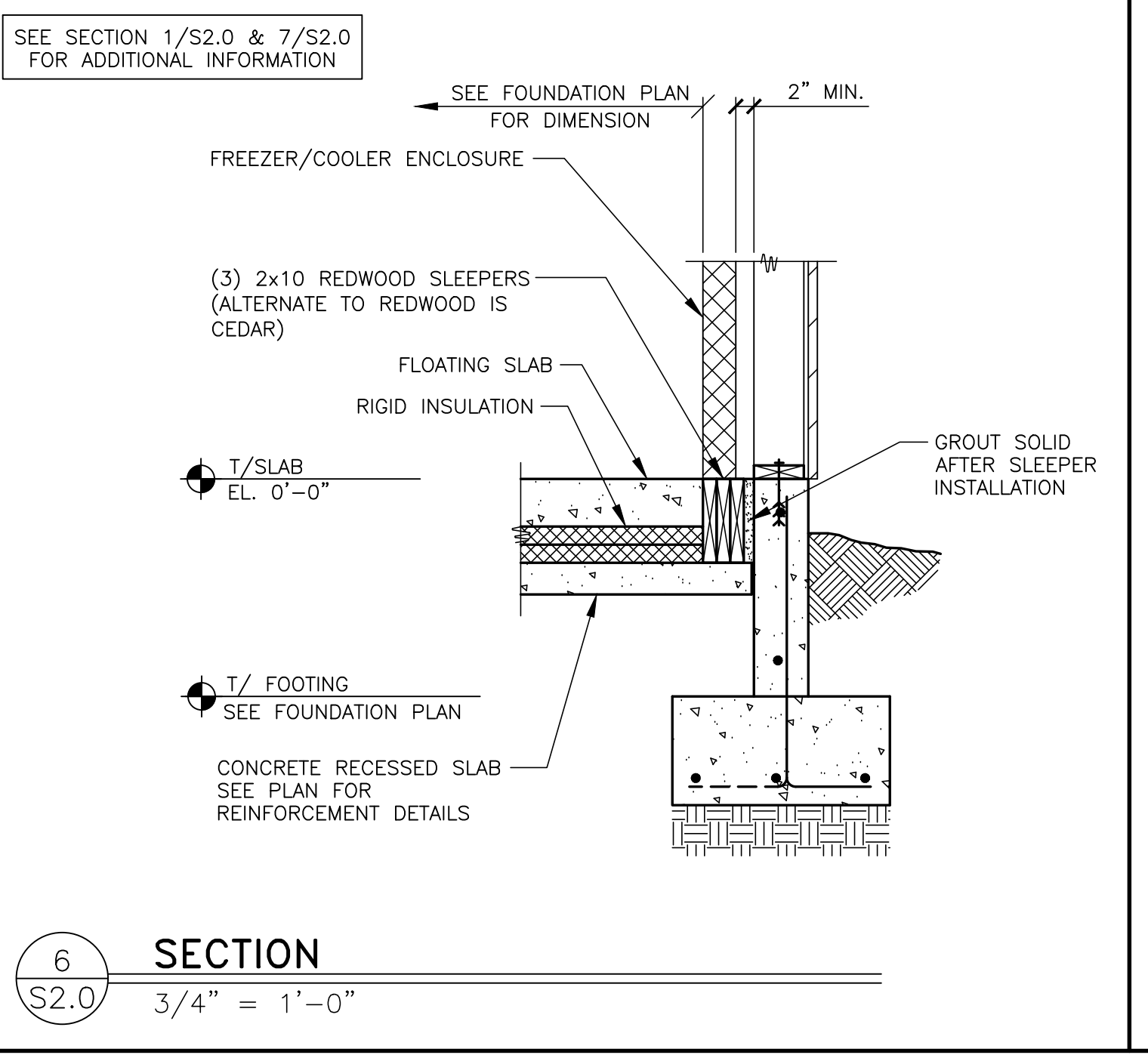
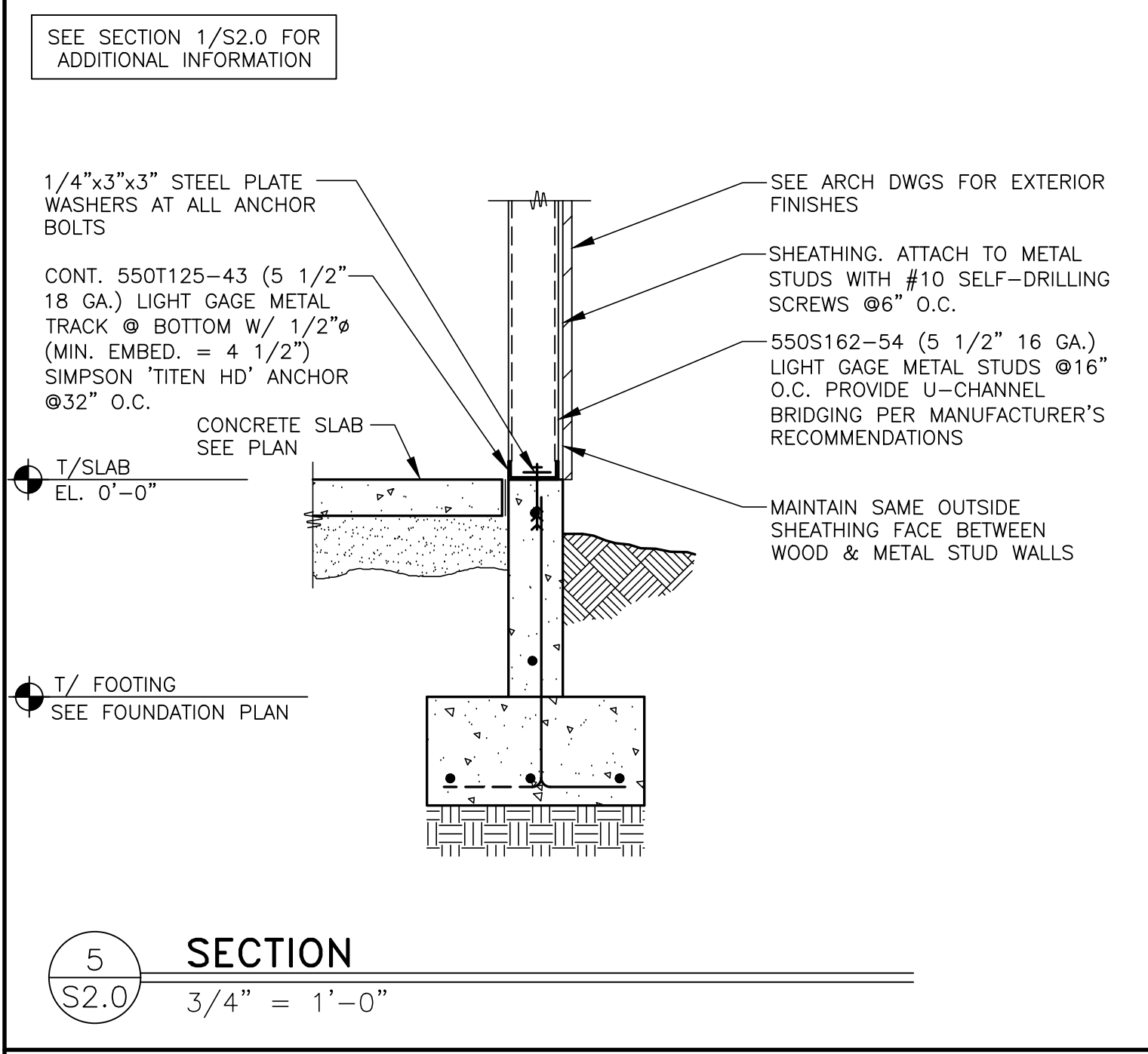
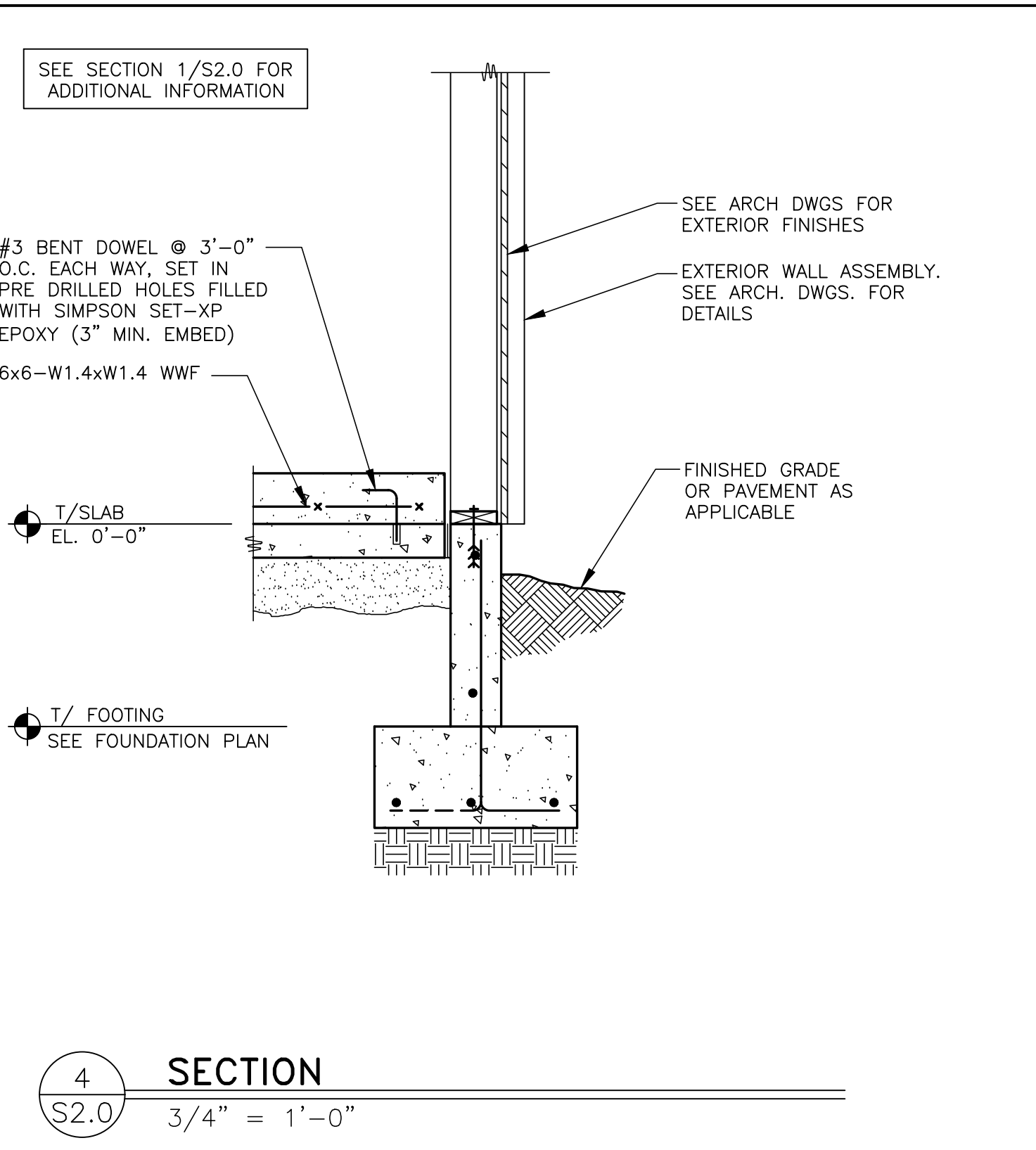
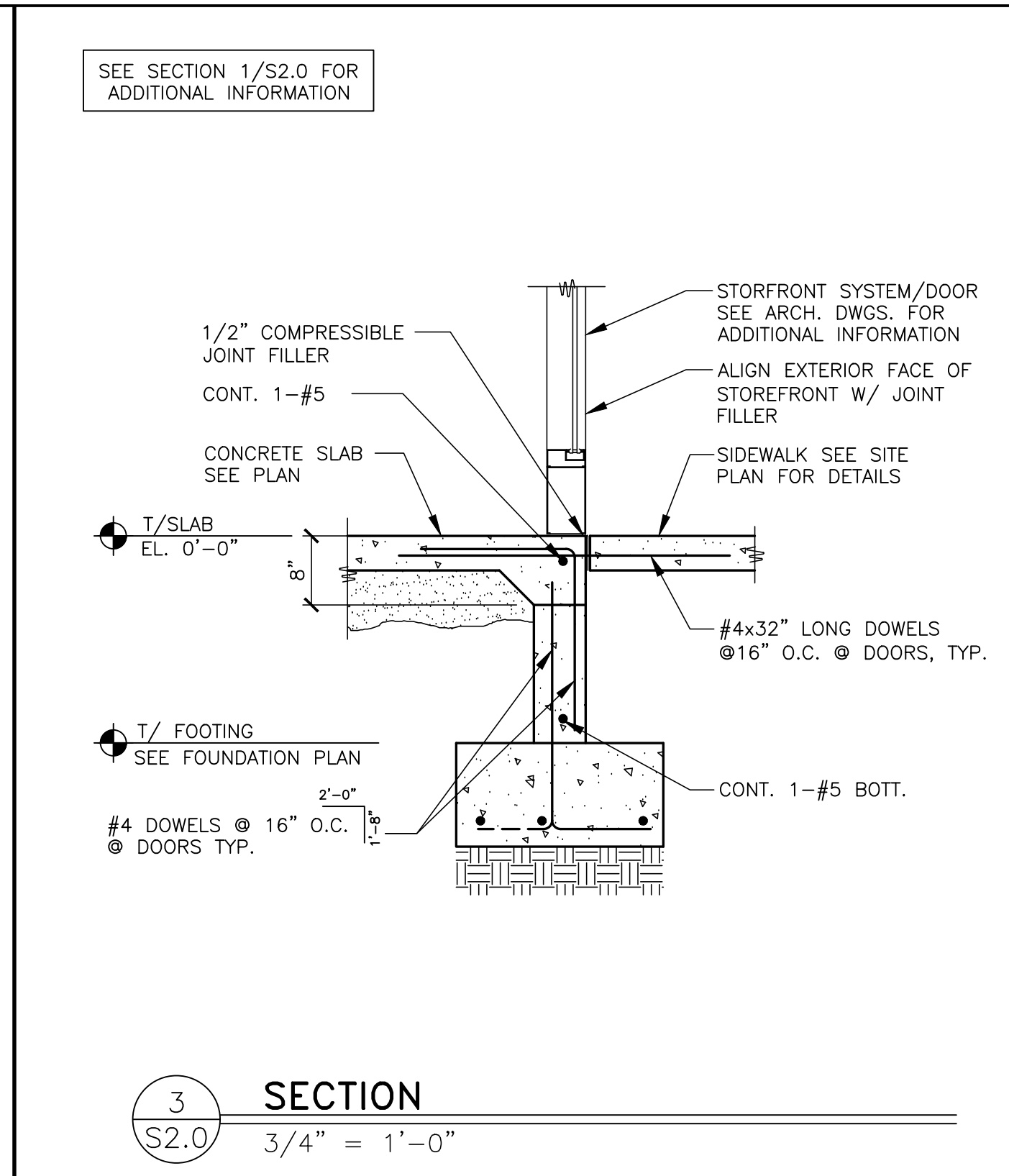
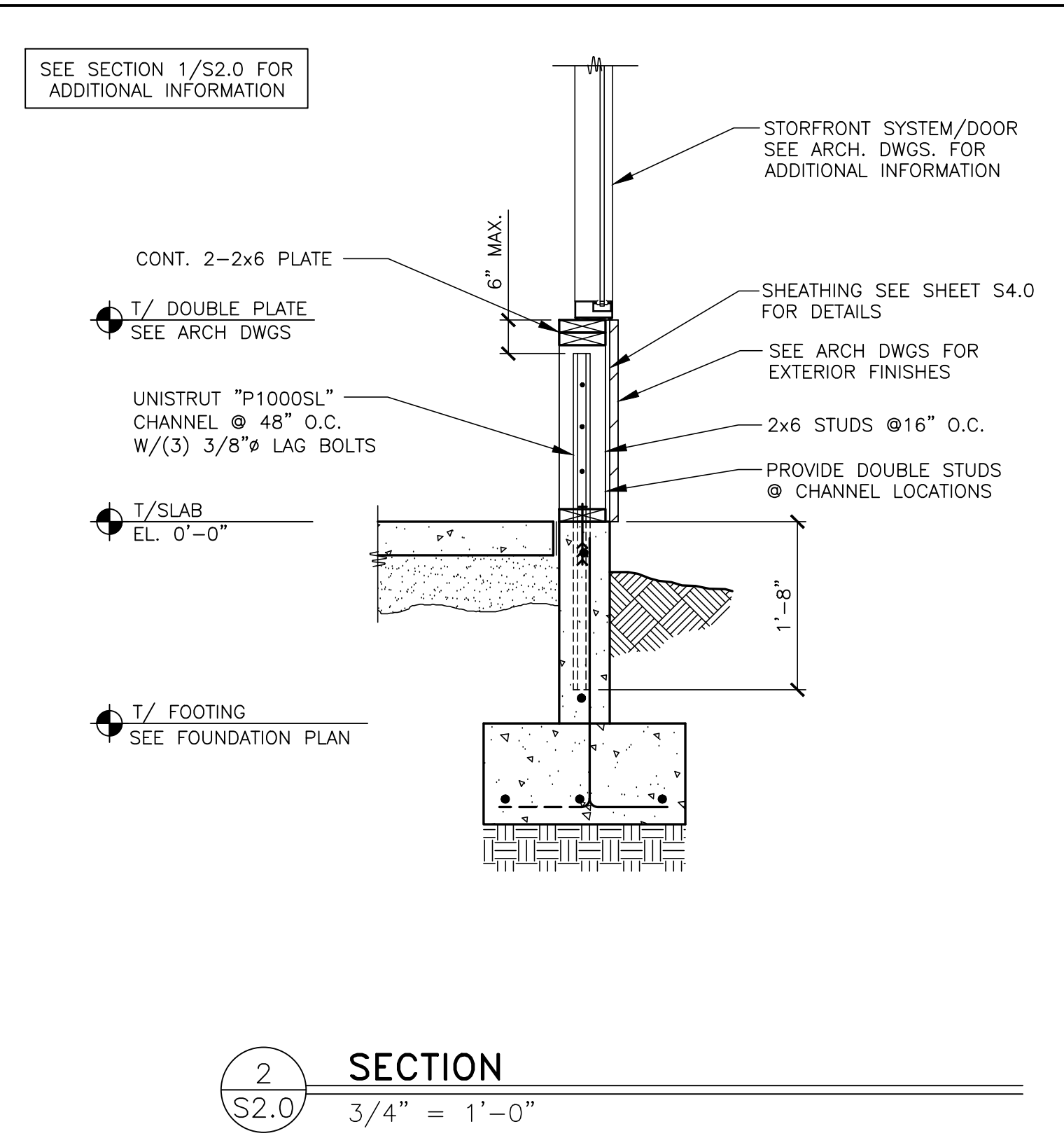
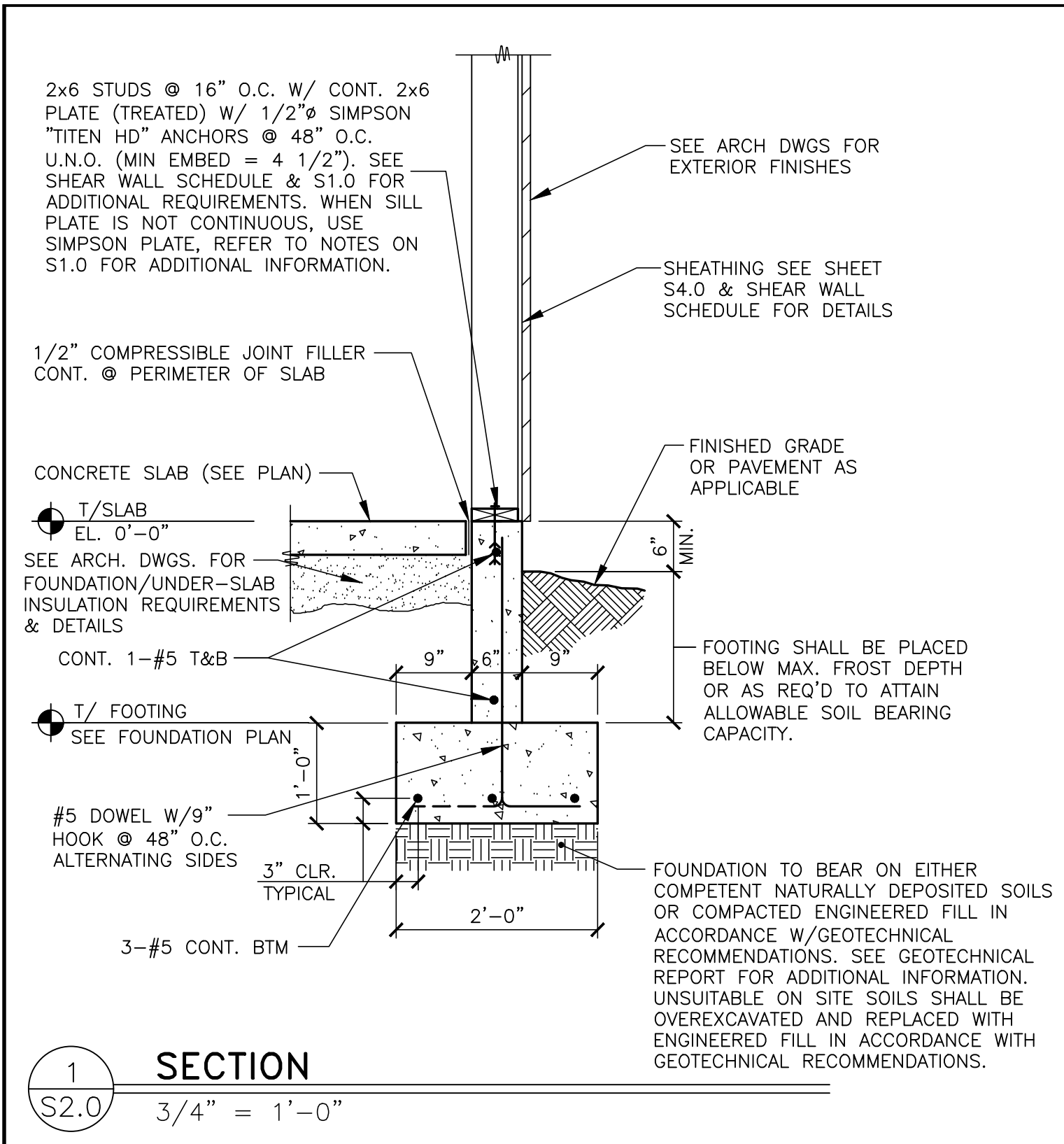
PREPARED BY: **McDonald's USA, LLC**
© 2022 McDonald's USA, LLC
These drawings and specifications are the confidential and proprietary property of McDonald's USA, LLC and shall not be copied or reproduced without written authorization. The contract documents were prepared not suitable for use on a different site or at a later time. Use of these drawings for reference or example on another project requires the contract documents for that project. Use of these drawings on any other project requires the contract documents for that project. Use of these drawings on any other project is not authorized.

DRAWN BY: J.CARRAS
STD ISSUE DATE: 2022-10
REVIEWED BY: J.PERRY
DATE ISSUED: 10-04-2022
C.S.G. PROJECT # MCD_35915

TITLE: 2022 STANDARD BUILDING - BB20
4597 - WOOD/WOOD
DESCRIPTION: WOOD BEARING WALLS W/HARDBOARD SIDING
WOOD ROOF TRUSS FRAMING
E.L.F.S./BATEN/HARDBOARD SIDING EXTERIOR FINISH
SITE ADDRESS: 3720 W. Sunshine
Springfield, MO

024-1290.00.0
S1.0
FOUNDATION PLAN

REV	DATE	DESCRIPTION	BY



NO.	REV.	DATE	DESCRIPTION
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			

DAVID BALMA
NUMBER PE-2015003007
PROFESSIONAL ENGINEER
11/7/2022

PREPARED BY: CORE STATES GROUP
301 S. Wacker Avenue
Arling Heights, IL 60014
www.corestates.com

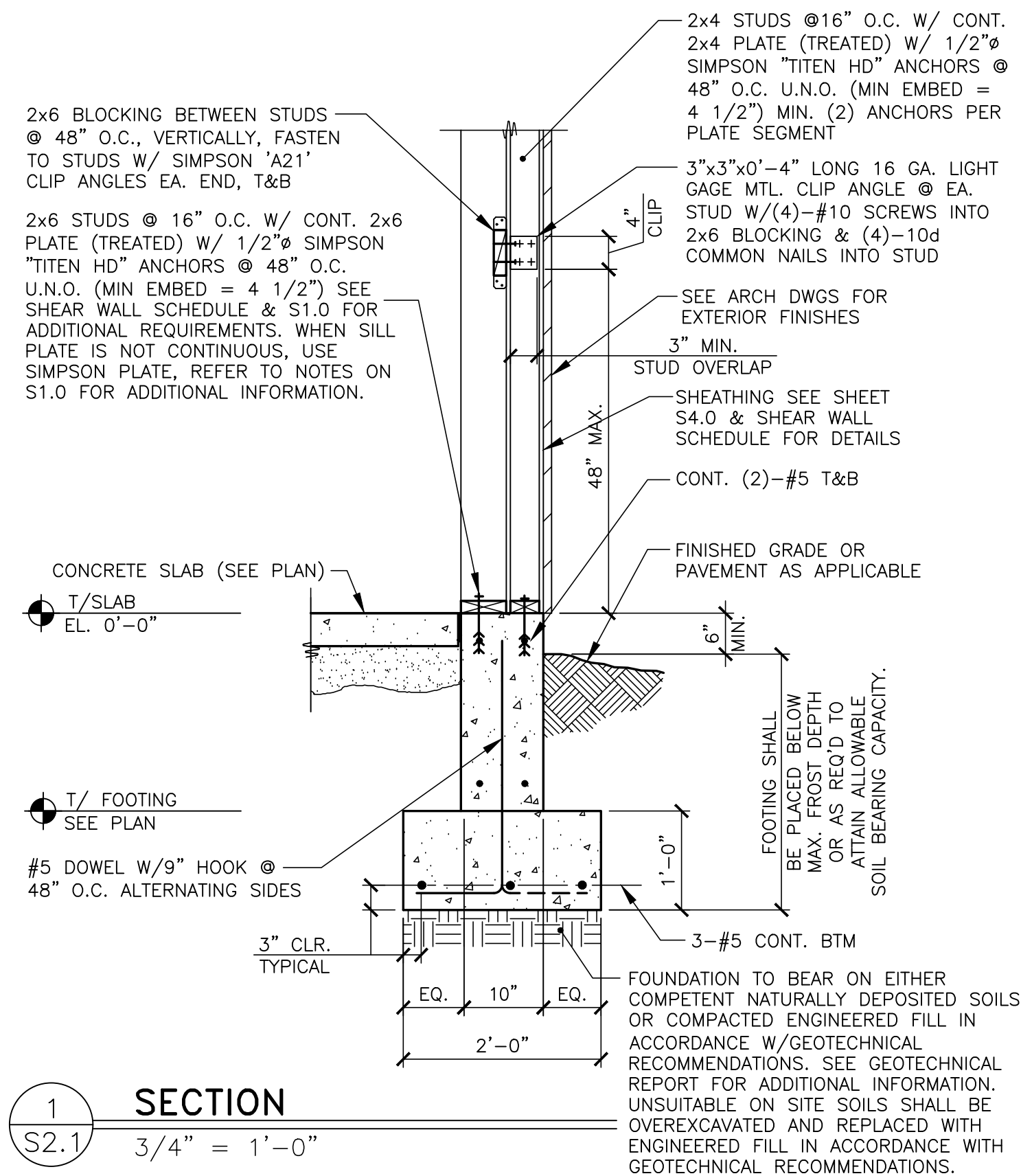
PREPARED FOR: McDonald's USA, LLC
These drawings and specifications are the confidential and proprietary property of McDonald's USA, LLC and shall not be copied or reproduced without written authorization. The contract documents were prepared not suitable for use on a different site or at a later time. Use of these drawings for reference or example on another project requires the the contract documents for reuse on another project is not authorized.

2022 STANDARD BUILDING - BB20
4597 - WOOD/WOOD
DESCRIPTION: WOOD BEARING WALLS W/HARDBOARD SIDING
WOOD ROOF TRUSS FRAMING
E.L.F.S./BATTEN/HARDBOARD SIDING EXTERIOR FINISH
SITE ID: 024-1290
SITE ADDRESS: 3720 W. Sunshine
Springfield, MO
MCD_35915

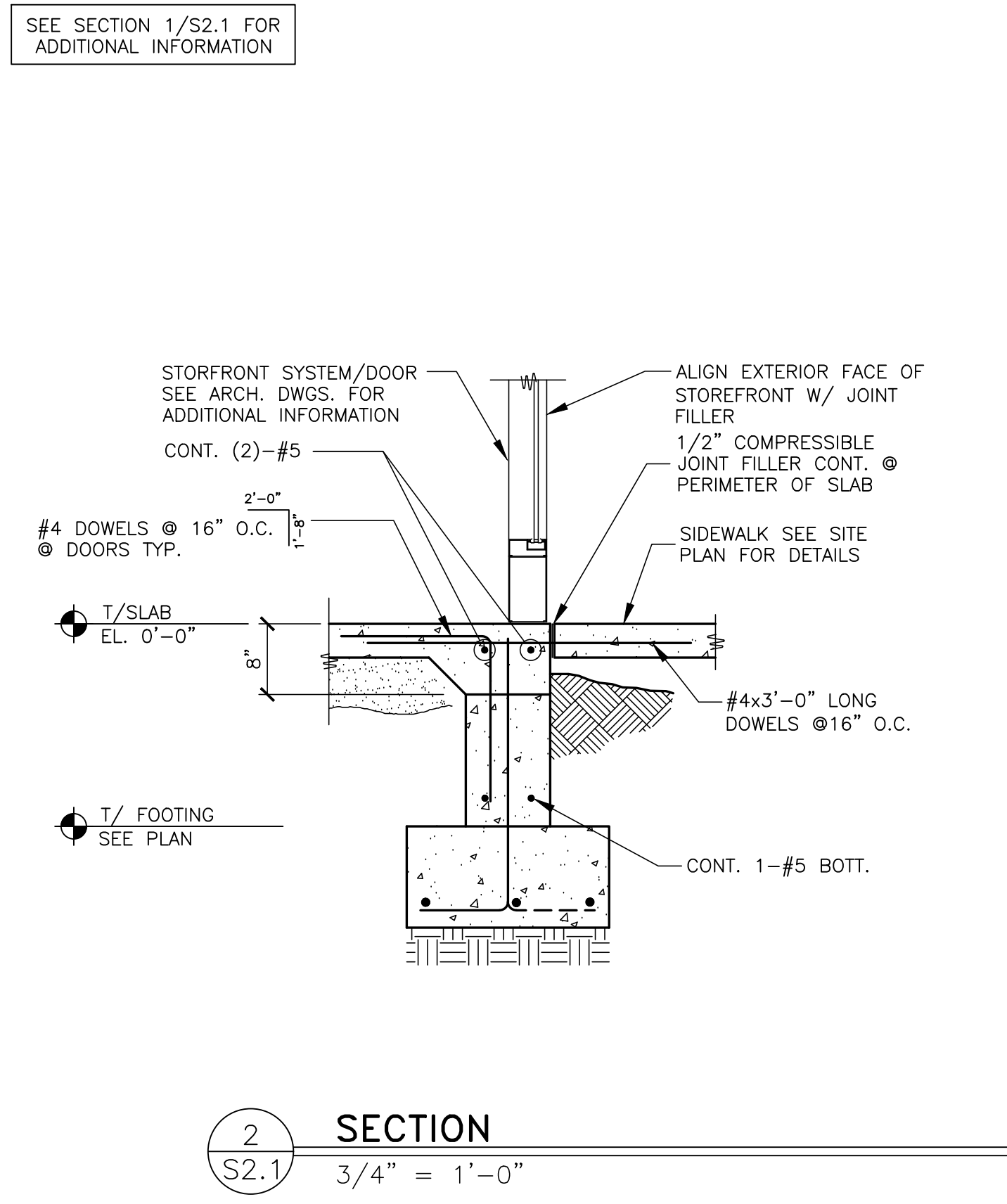
DATE: 10/04/2022
ISSUED BY: J.PERRY
REVIEWED BY: J.CARRAS
STD ISSUE DATE: 2022-10-10

TITLE: 2022 STANDARD BUILDING - BB20
4597 - WOOD/WOOD
DESCRIPTION: WOOD BEARING WALLS W/HARDBOARD SIDING
WOOD ROOF TRUSS FRAMING
E.L.F.S./BATTEN/HARDBOARD SIDING EXTERIOR FINISH
SITE ID: 024-1290
SITE ADDRESS: 3720 W. Sunshine
Springfield, MO
MCD_35915

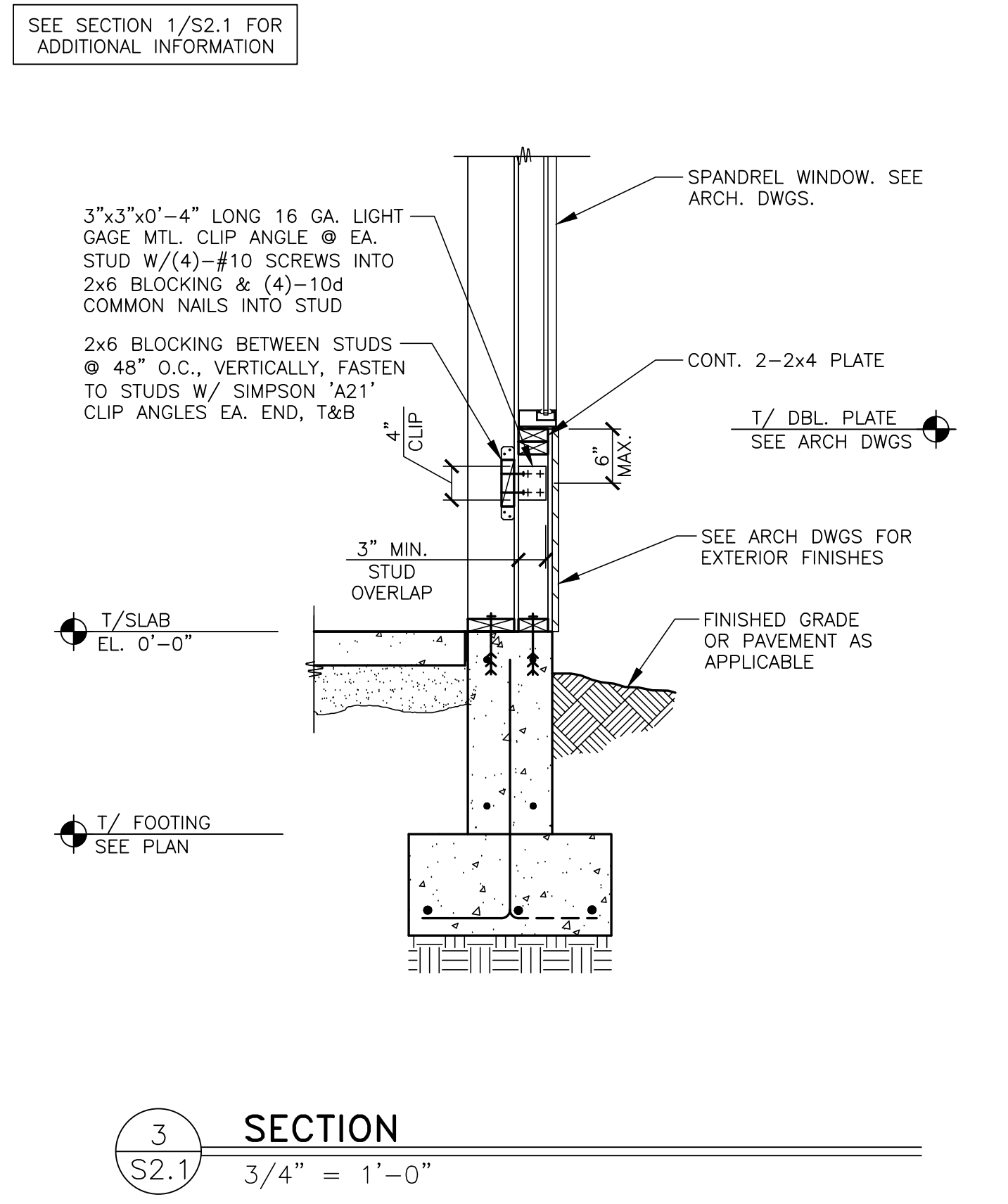
024-1290.00.0
S2.0
FOUNDATION SECTIONS



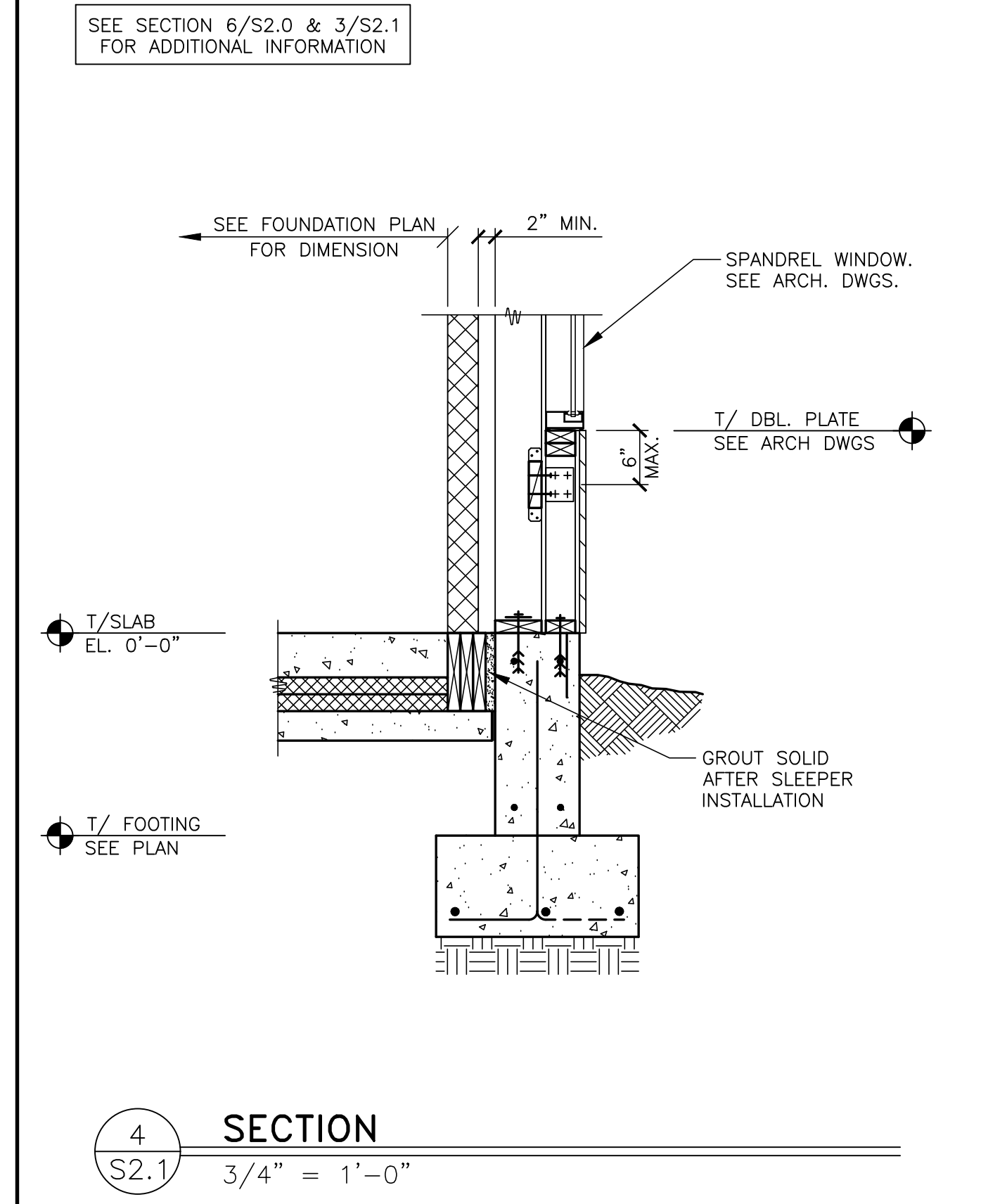
1 SECTION
S2.1 3/4" = 1'-0"



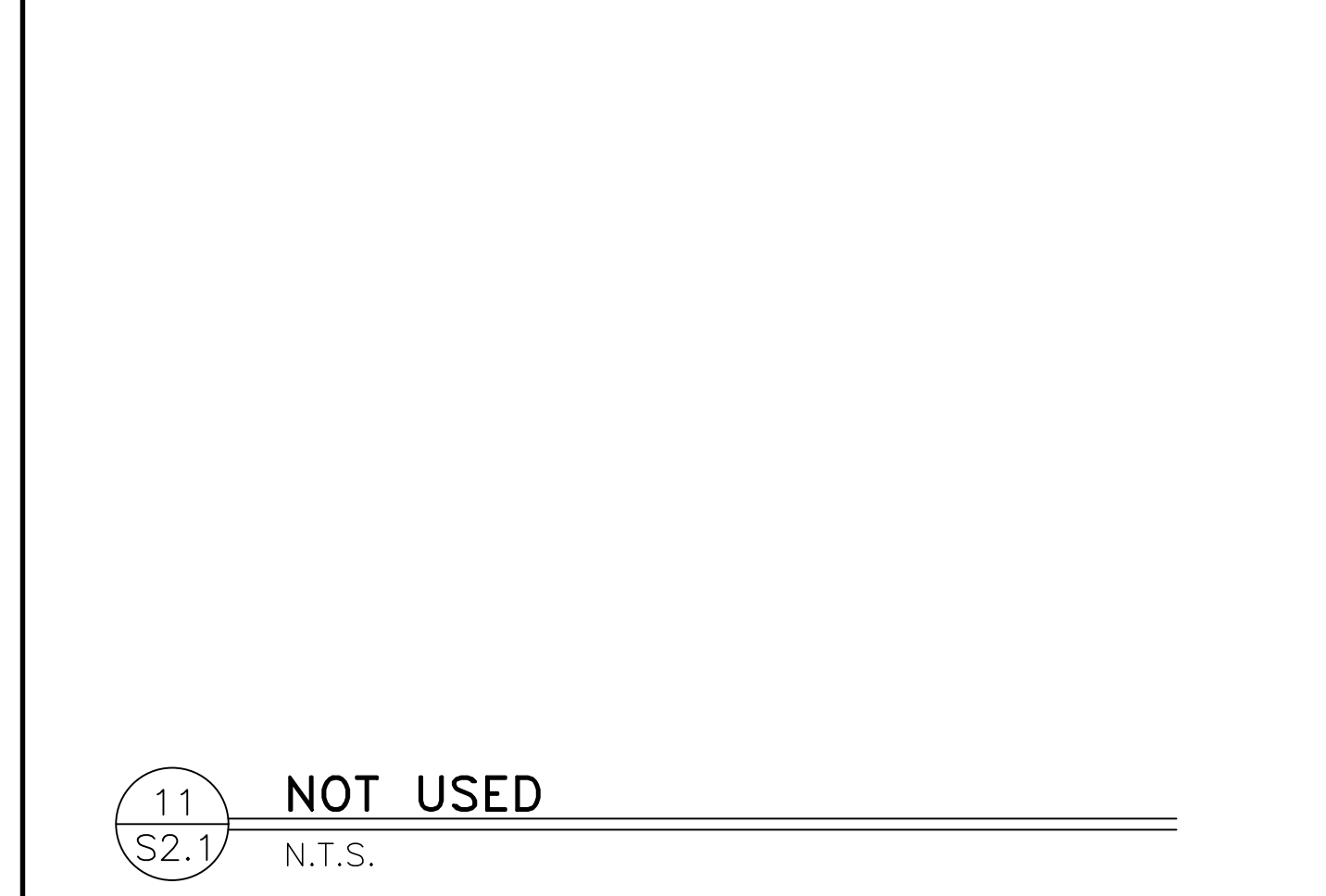
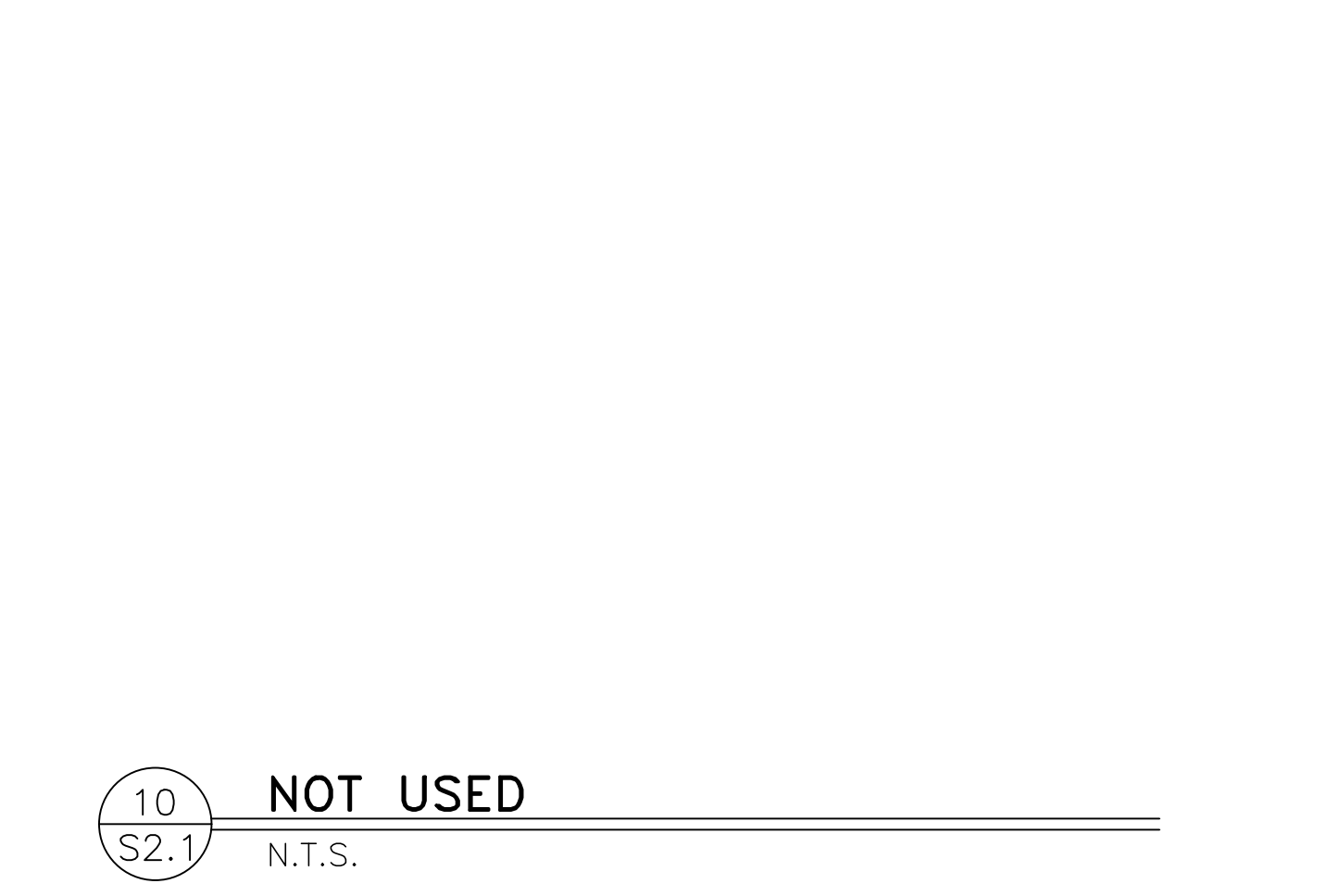
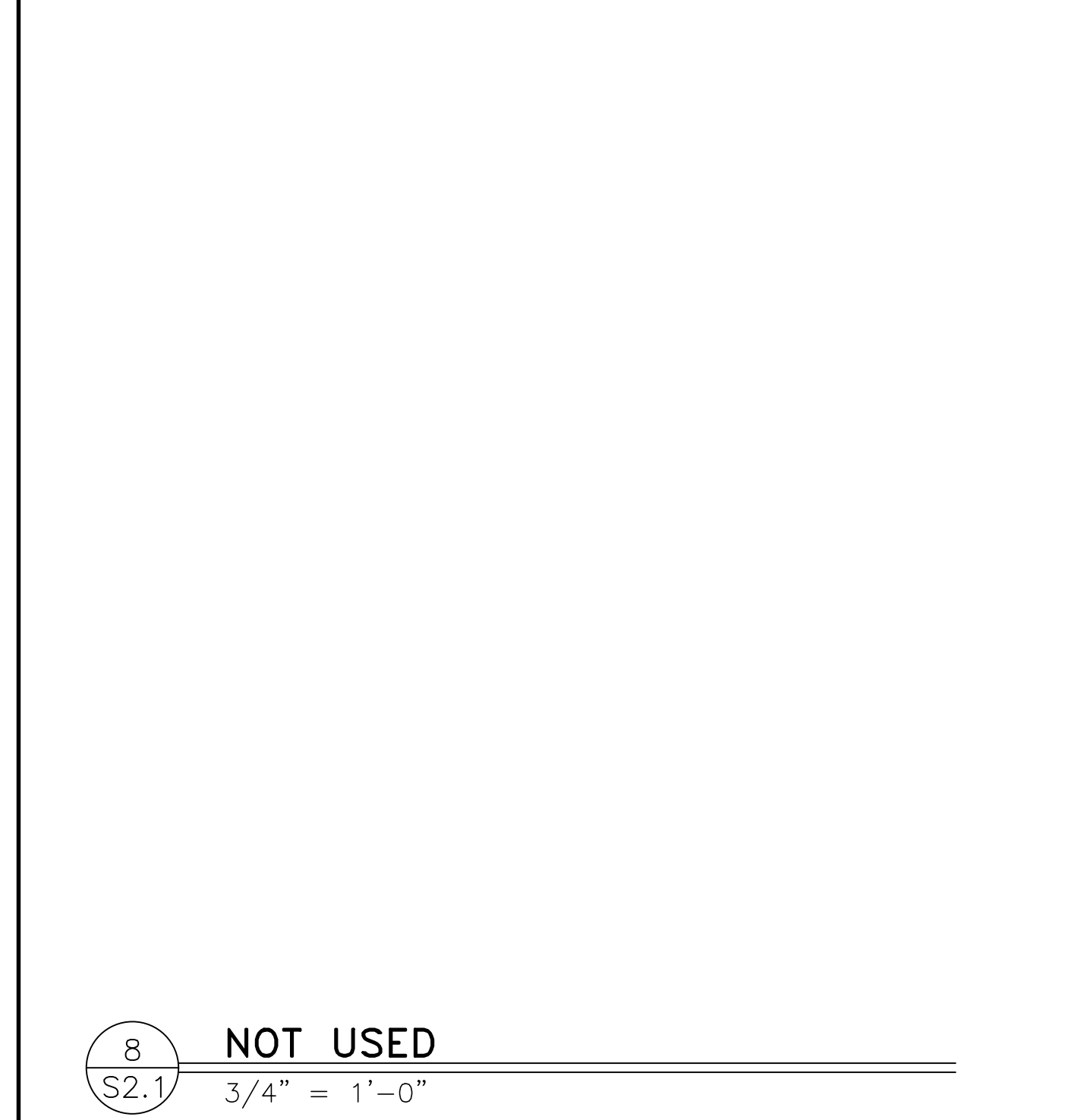
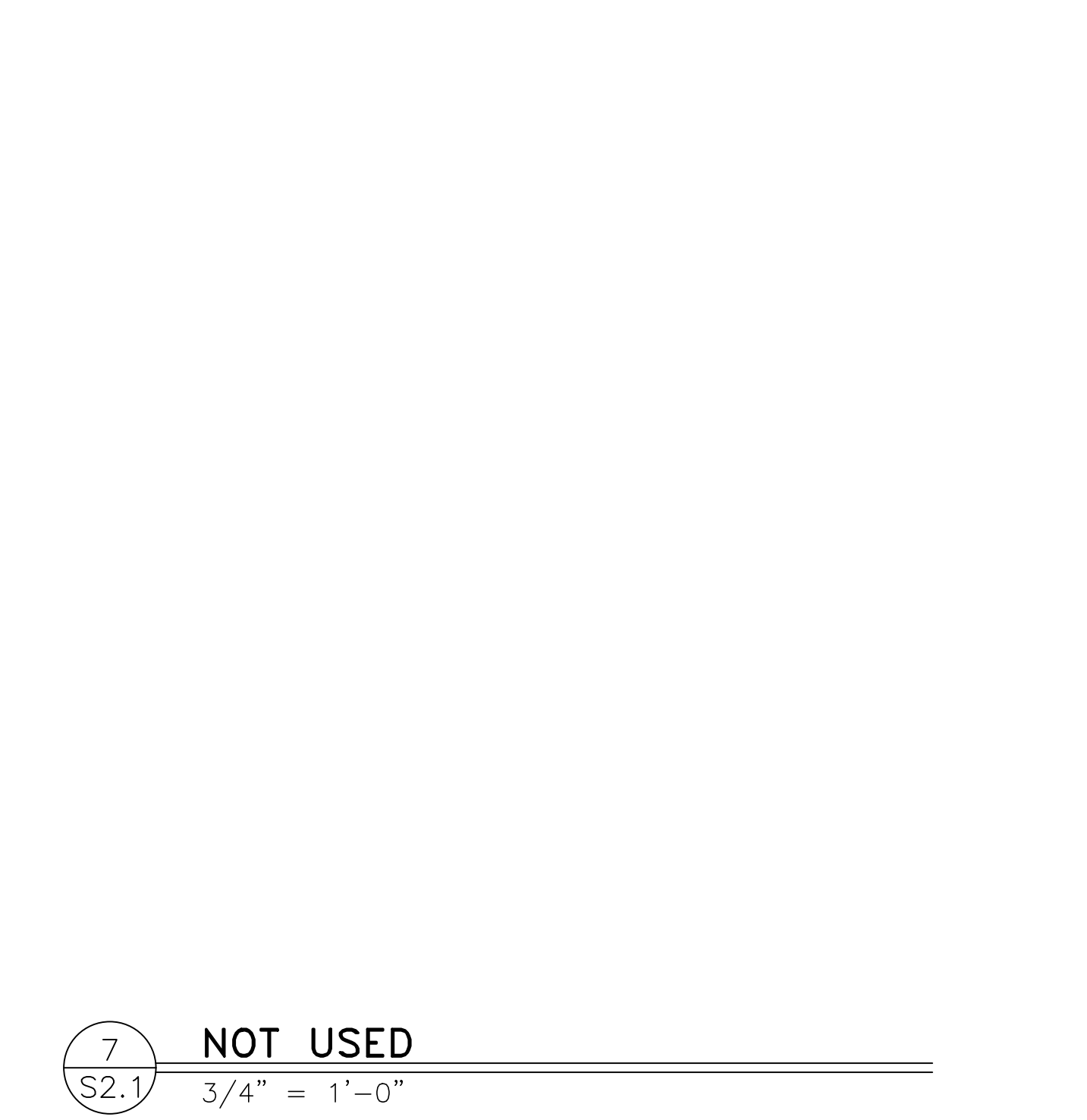
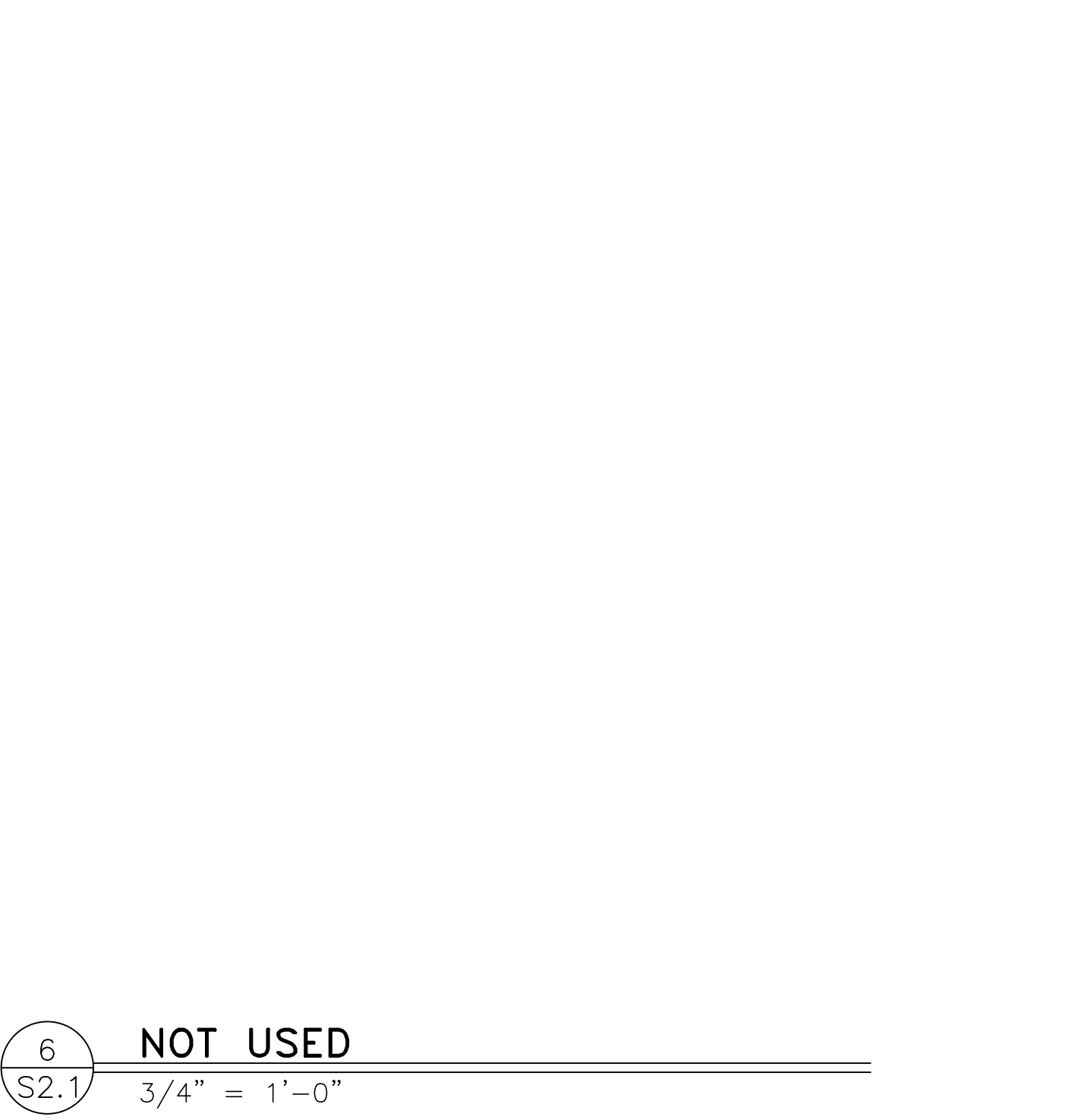
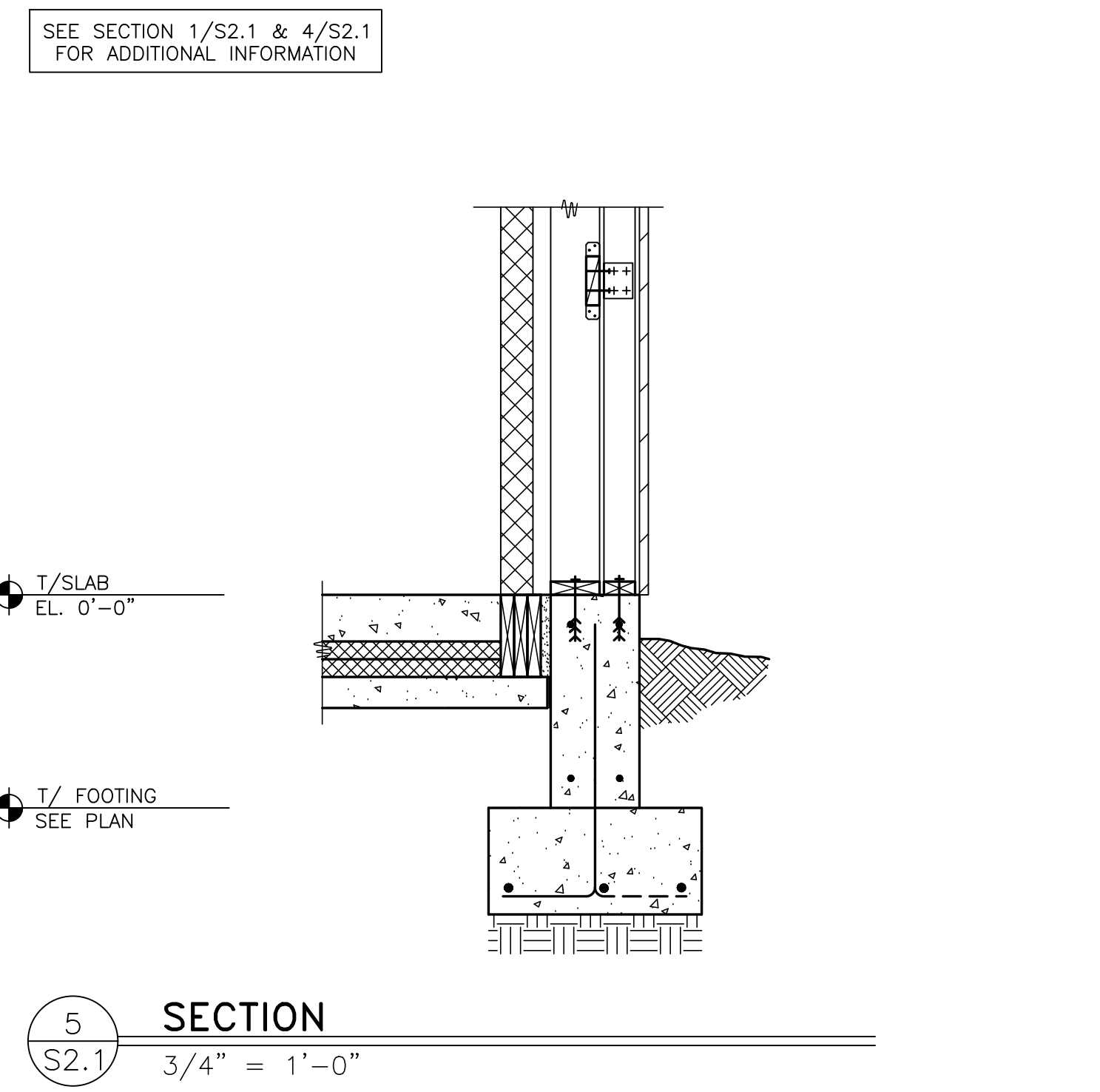
2 SECTION
S2.1 3/4" = 1'-0"



3 SECTION
S2.1 3/4" = 1'-0"



4 SECTION
S2.1 3/4" = 1'-0"



NO.	REV	DATE	DESCRIPTION
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			

STATE OF MISSOURI
DAVID BALMA
NUMBER PE-2015003007
PROFESSIONAL ENGINEER
1/17/2022

PREPARED BY
CORE STATES GROUP
CORSTATES, INC.
3015 W. State Avenue
Ames, IA 50010
www.corestates.com

PREPARED FOR:
McDonald's USA, LLC
These drawings and specifications are the confidential and proprietary property of McDonald's USA, LLC and shall not be copied or reproduced without written authorization. The contract documents were prepared not suitable for use on a different site or at a later time. Use of these drawings for reference or example on another project requires the contract documents for reuse on another project is not authorized.

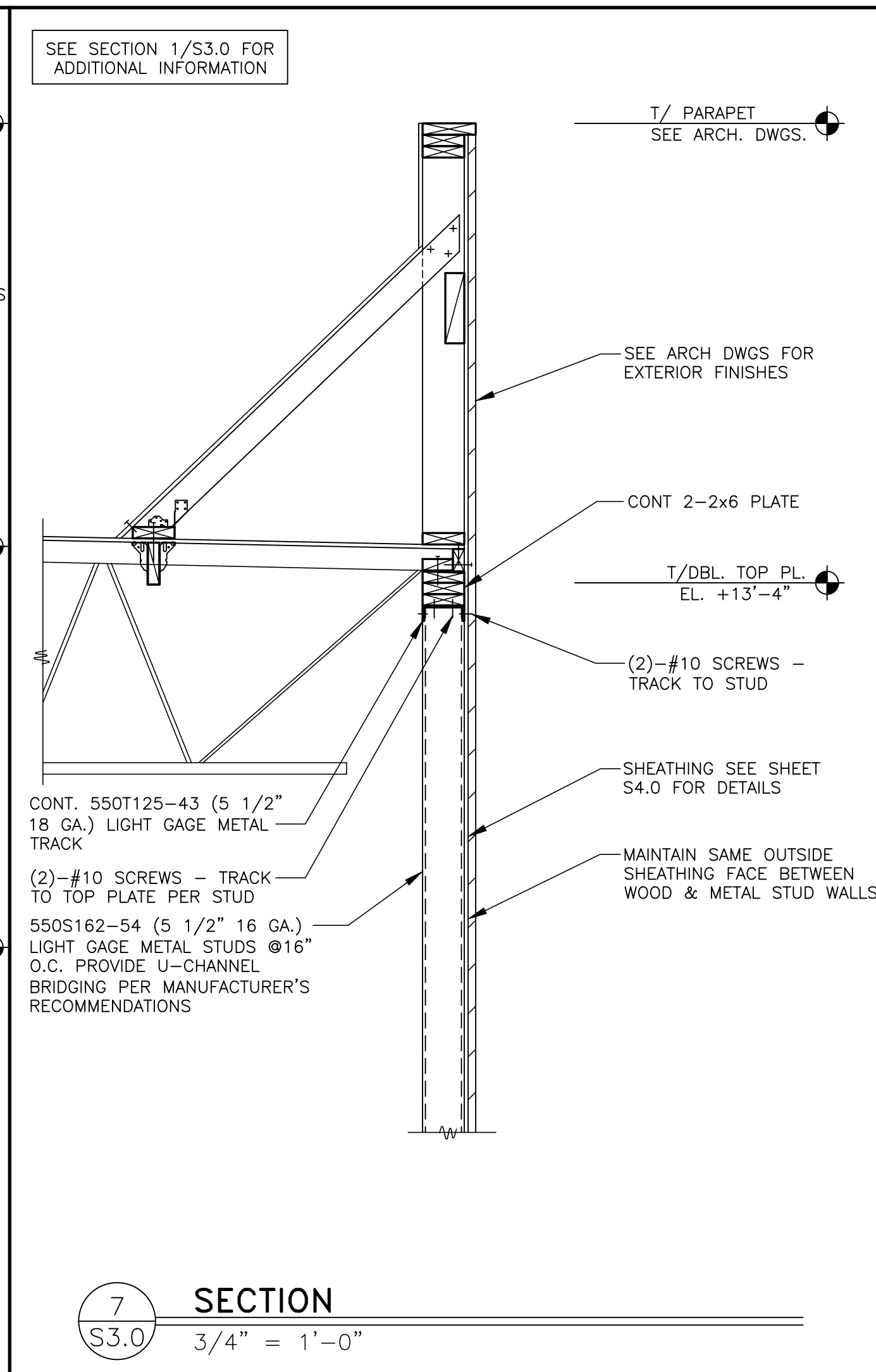
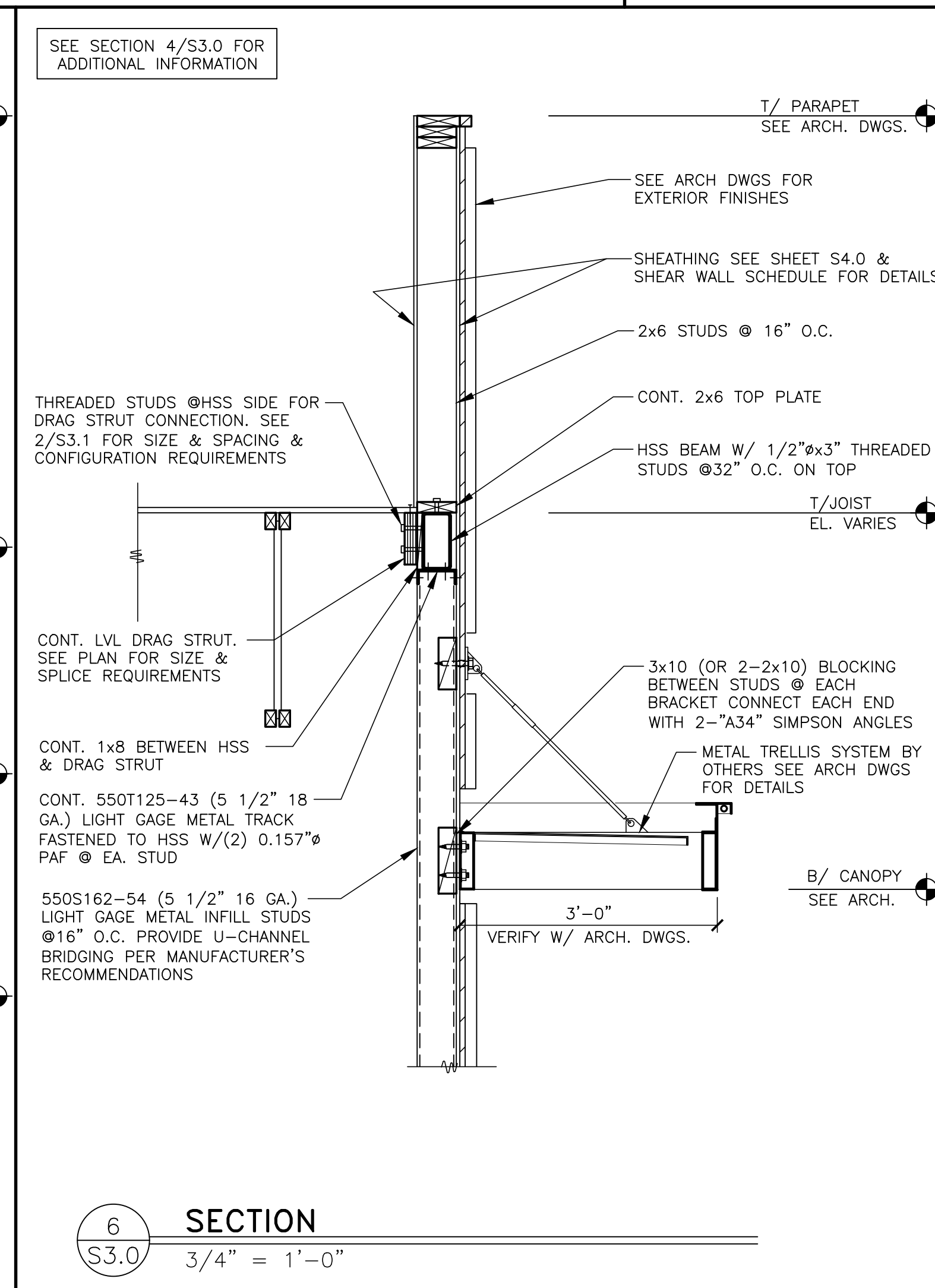
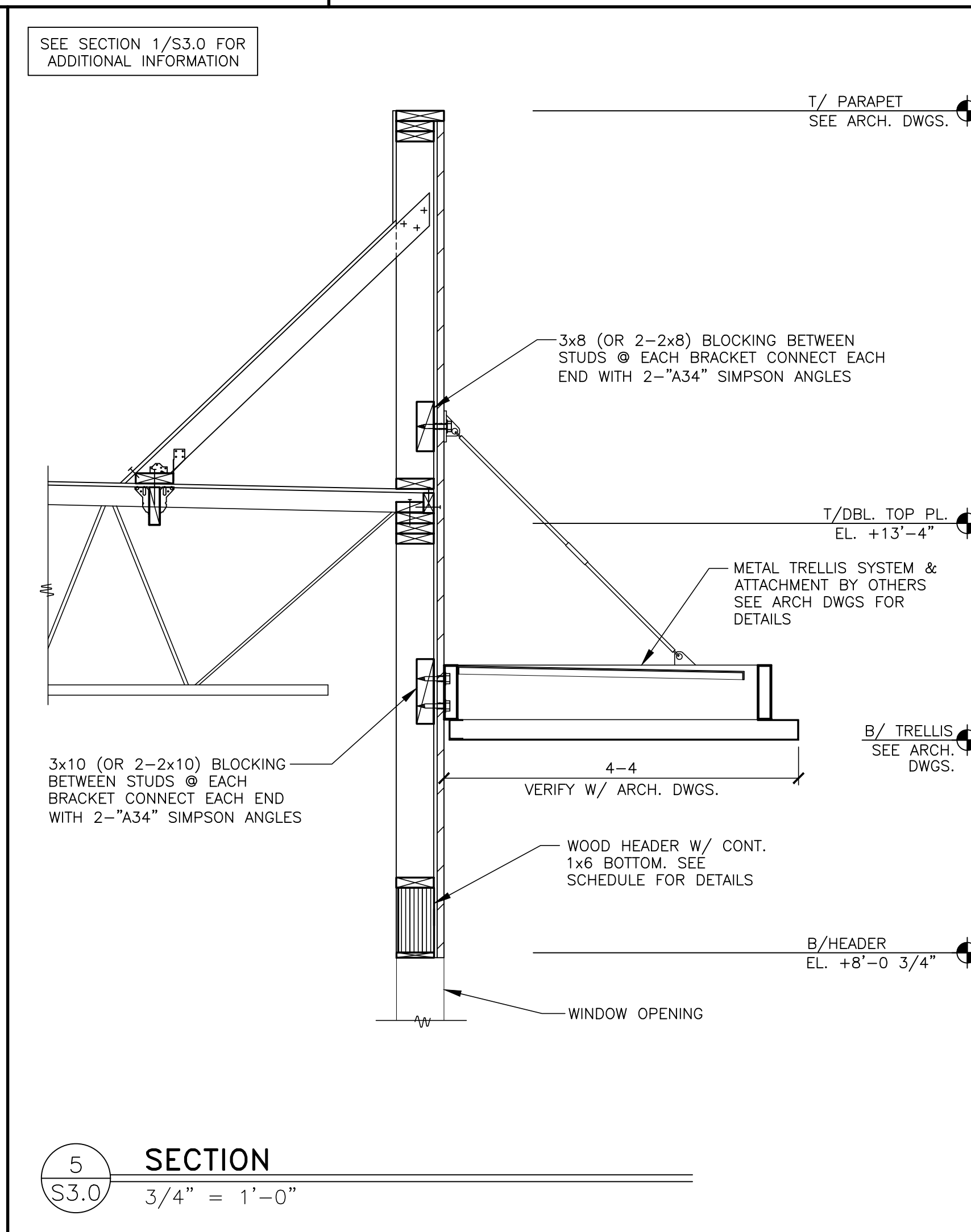
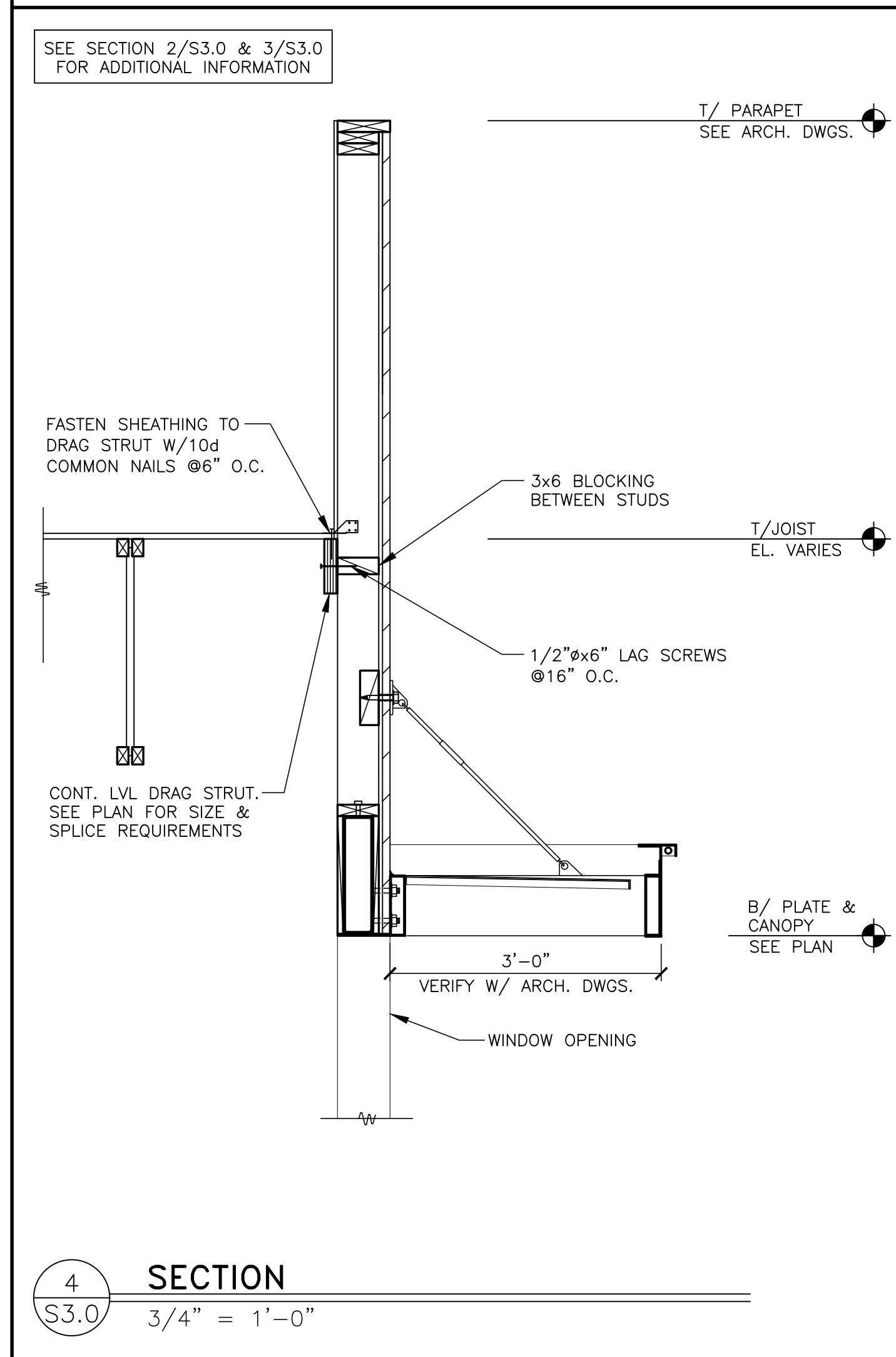
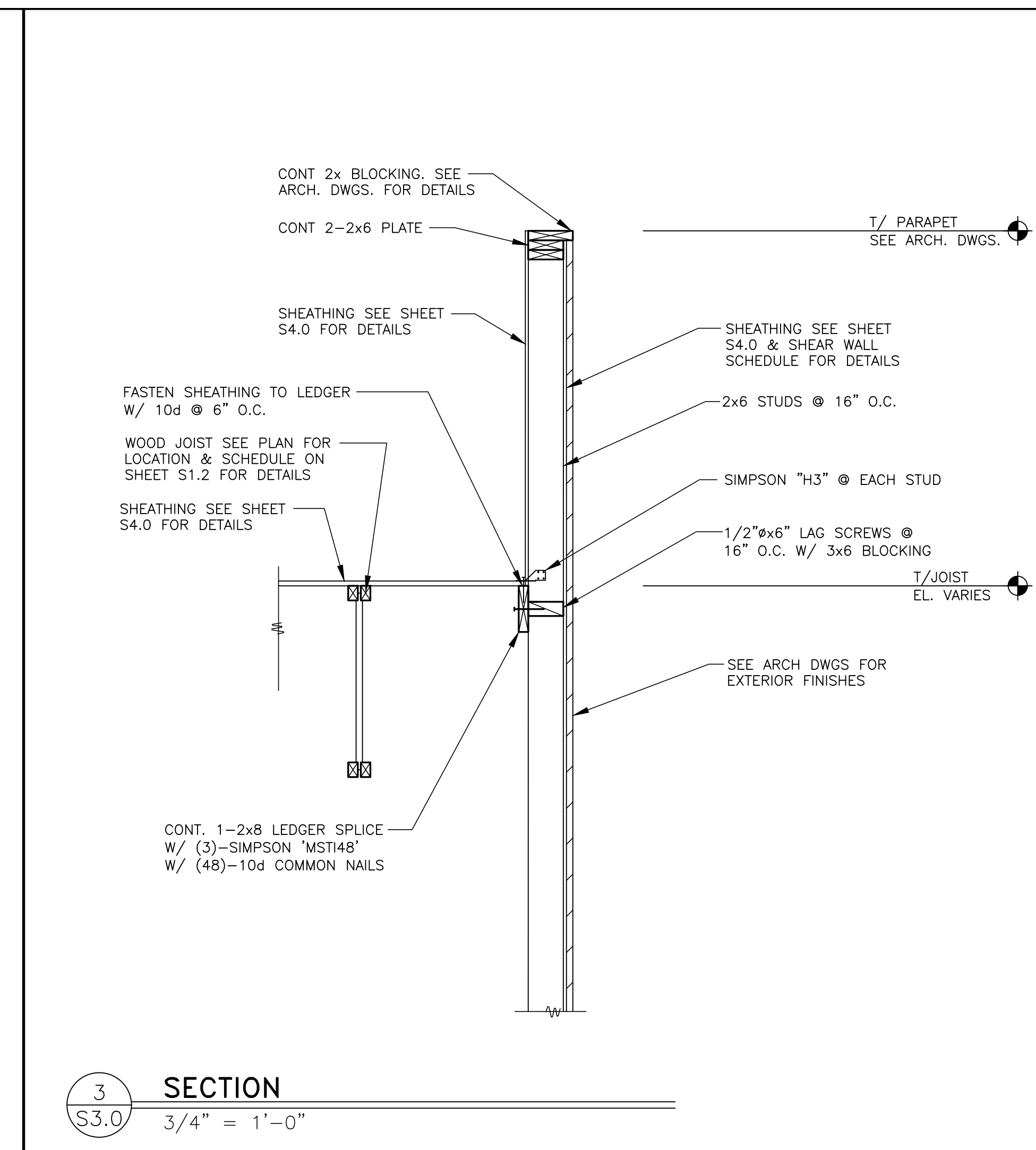
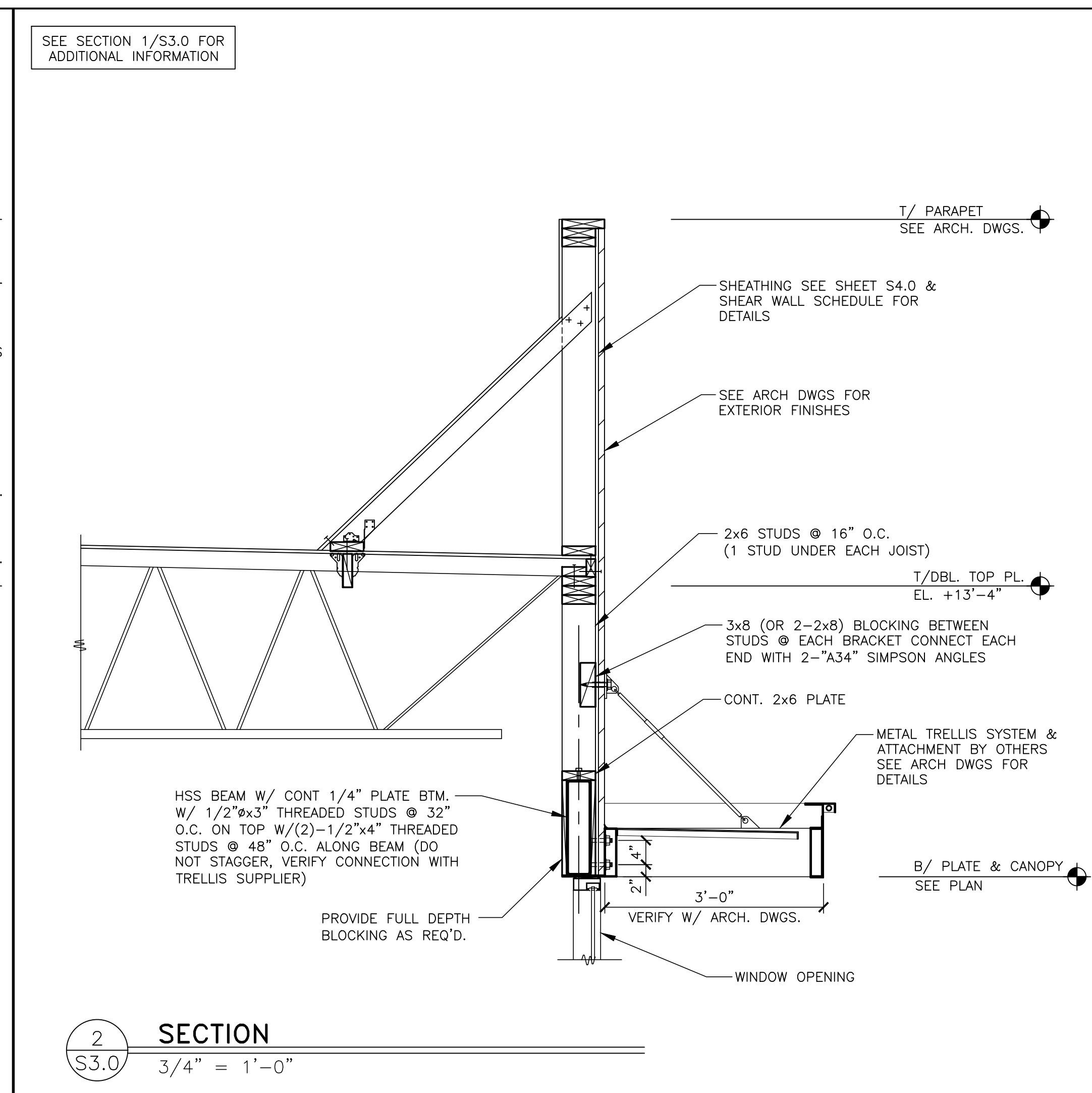
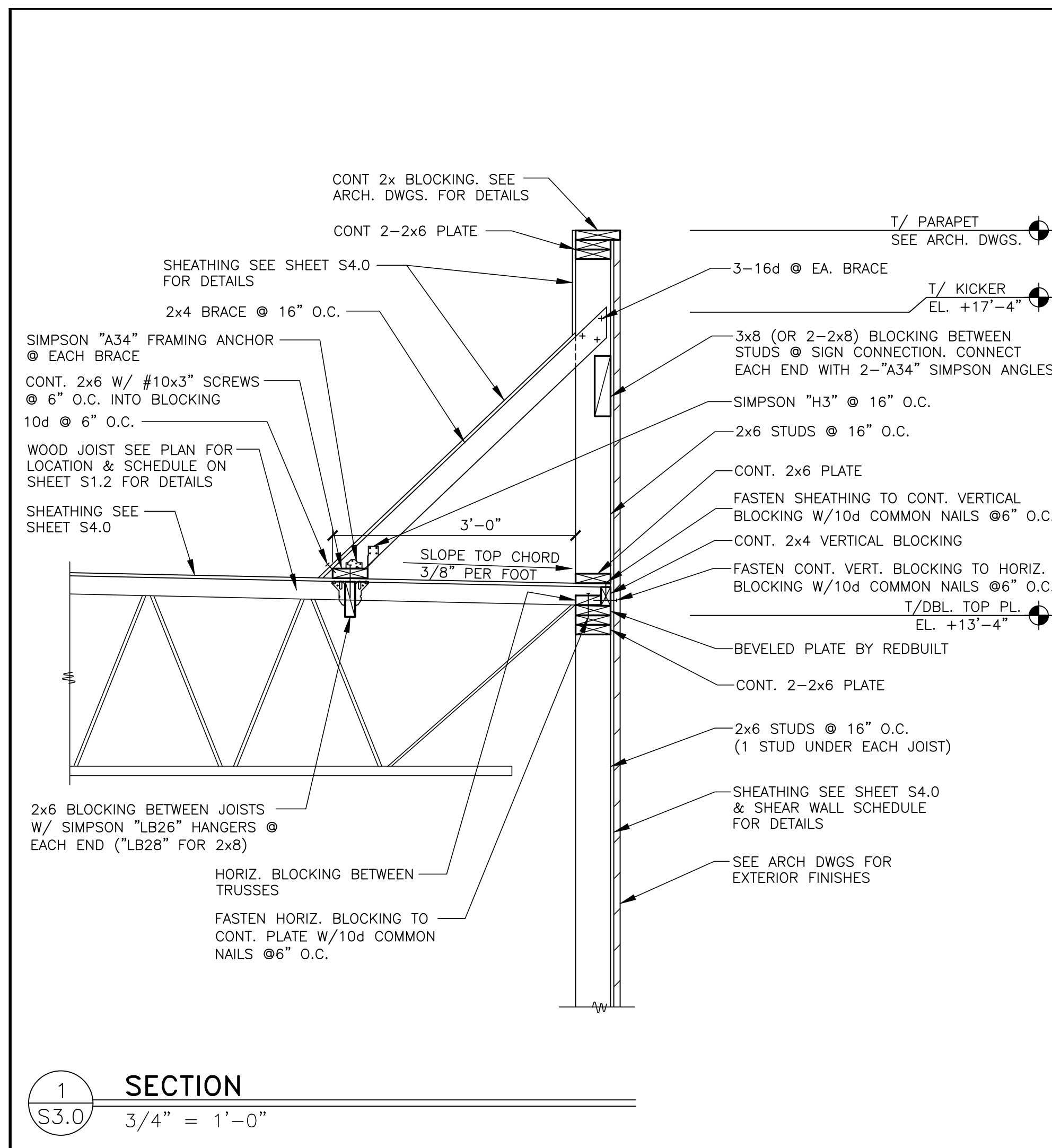
DRAWN BY	J.CARRAS
STD ISSUE DATE	2022-10
REVIEWED BY	J.PERRY
DATE ISSUED	10 04 2022
C.S.G. PROJECT #	MCD_35915

TITLE
2022 STANDARD BUILDING - BB20
4597 - WOOD/WOOD

DESCRIPTION
WOOD BEARING WALLS W/HARDBOARD SIDING
WOOD ROOF TRUSS FRAMING
E.L.F.S./BATTEN/HARDBOARD SIDING EXTERIOR FINISH

SITE ADDRESS
024-1290 3720 W Sunshine Springfield, MO

024-1290.00.0
S2.1
FOUNDATION SECTIONS



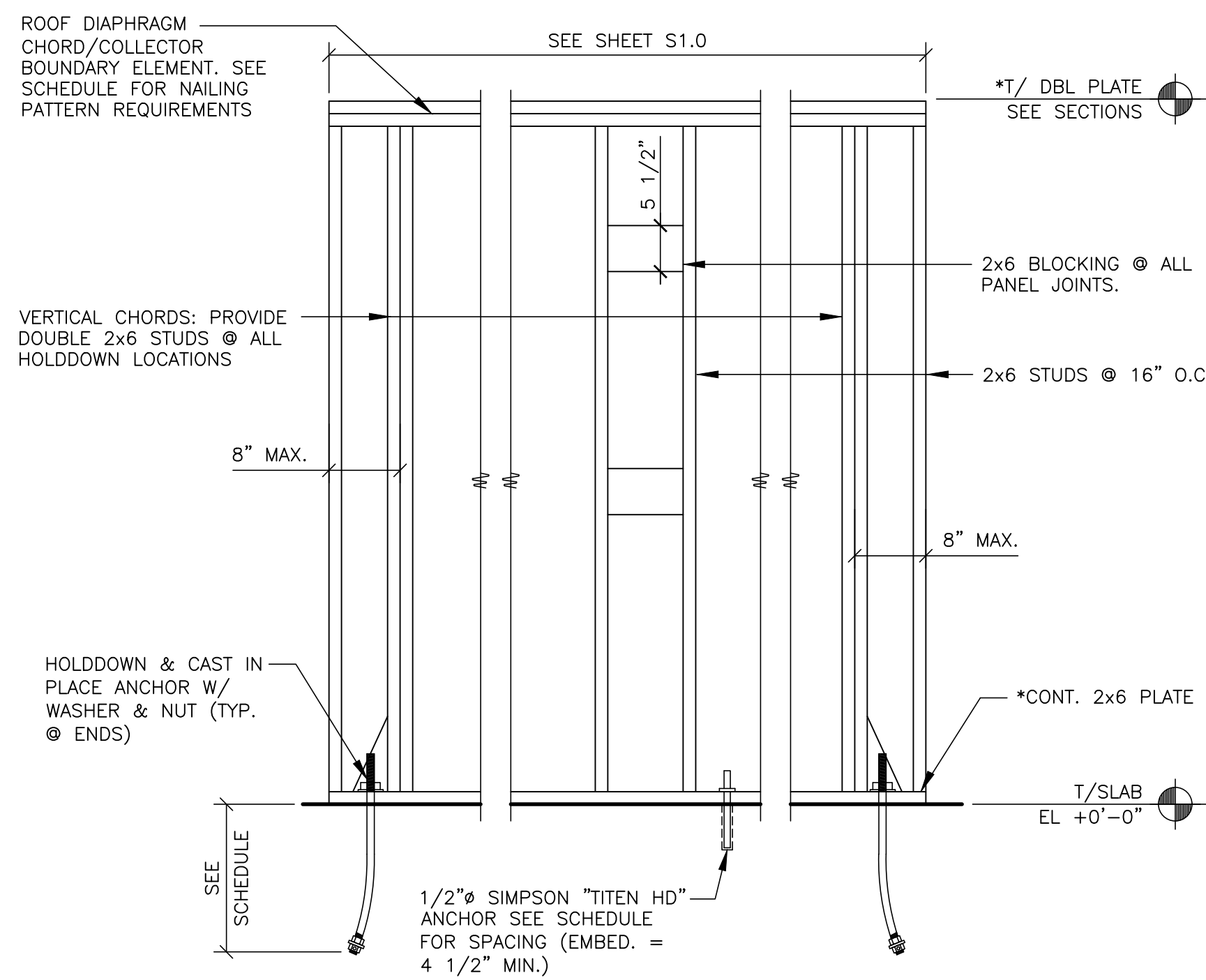
NO.	REV.	DATE	DESCRIPTION	BY
1				
2				
3				
4				
5				
6				
7				

PREPARED BY: **CORE STATES GROUP**
 2015 Warren Avenue
 Amesbury, MA 01922
 www.corestates.com

© 2022 McDonald's USA, LLC
McDonald's USA, LLC
 These drawings and specifications are the confidential and proprietary property of McDonald's USA, LLC and shall not be copied or reproduced without written authorization. The contract documents were prepared in the State of Missouri and shall govern in the event of any dispute. Use of these drawings for reference or example on another project requires the contractor to obtain the necessary permits and approvals from the local authorities. The contractor shall be responsible for obtaining all necessary permits and approvals for use on another project is not authorized.

TITLE	2022 STANDARD BUILDING - BB20
DESCRIPTION	4597 - WOOD/WOOD
WOOD BEARING WALLS W/HARDBOARD SIDING	
WOOD ROOF TRUSS FRAMING	
E.L.F.S./BATEN/HARDBOARD SIDING EXTERIOR FINISH	
SITE ADDRESS	3720 W Sunshine
SITE ID	024-1290
C.S.G. PROJECT #	MCD_35915
DATE	2022-10-04
ISSUED BY	J. PERRY
REVIEWED BY	J. PERRY
DATE ISSUED	10/04/2022
DATE	2022-10-04
STANDARD	BB20
DATE	2022-10-04
ISSUED BY	J. PERRY
REVIEWED BY	J. PERRY
DATE ISSUED	10/04/2022
DATE	2022-10-04

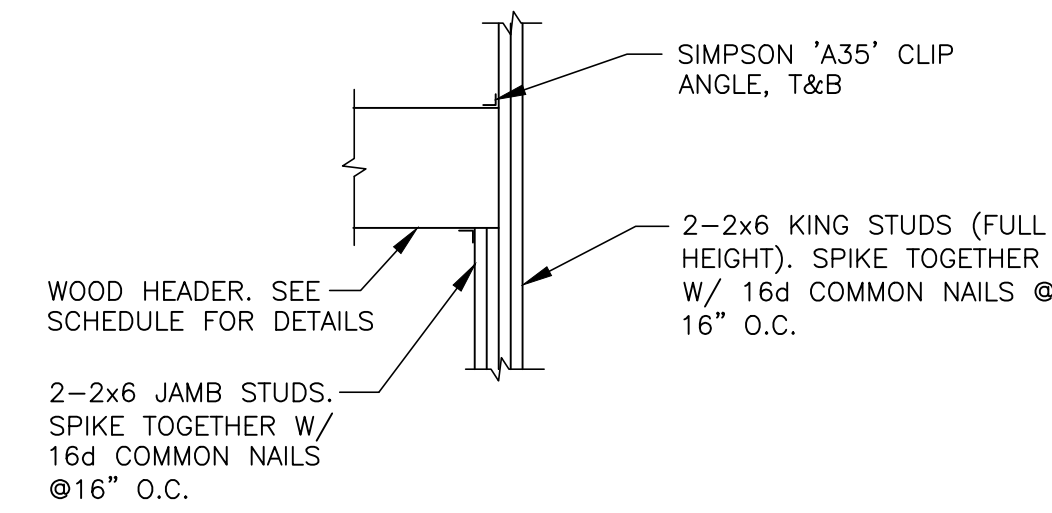
024-1290.00.0
S3.0
 FRAMING SECTIONS



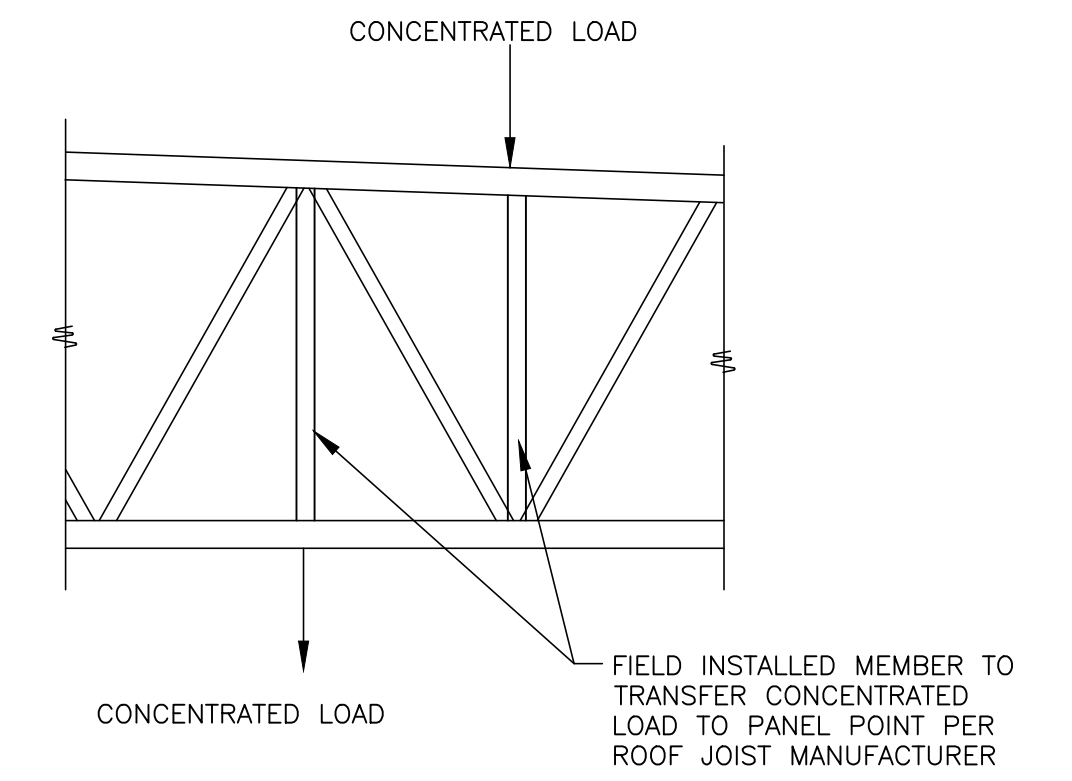
SHEAR WALL SCHEDULE						
WIND: 110 MPH (EXPOSURE B) SEISMIC: Sds = 16.0%, Sd1 = 10.3%						
MARK	SHEATHING	SHEATHING NAIL SIZE	SHEATHING NAIL** SPACING @ PANEL EDGES	HOLDDOWN*** ANCHORS	ANCHOR BOLT SPACING	REMARKS
A	1-15/32"	8d	6"	1-HDU5-SDS2.5 W/(1) SB5/8x24" PRECAST ANCHOR	48"	18" MIN. EMBED. ON HOLDDOWN ANCHORS.
B	1-15/32"	8d	6"	1-HDU5-SDS2.5 W/(1) SB5/8x24" PRECAST ANCHOR	48"	18" MIN. EMBED. ON HOLDDOWN ANCHORS.
C	1-15/32"	8d	6"	1-HDU5-SDS2.5 W/(1) SB5/8x24" PRECAST ANCHOR	48"	18" MIN. EMBED. ON HOLDDOWN ANCHORS.

- NOTES:
- SHEATHING PANELS MAY BE LAID UP HORIZONTALLY OR VERTICALLY. NO VERTICAL PANEL EDGES ON VERTICAL CHORDS (HOLDDOWN LOCATION).
 - WIND LOADS GOVERN OVER SEISMIC LOADS UNLESS AS NOTED IN THE REMARKS COLUMN.
 - NAIL ALL SHEATHING TO INTERMEDIATE SUPPORTS @ 12" O.C.
 - SCREW HOLDDOWN ANCHORS TO VERTICAL MEMBER W/ 14-SDS1/4"x2 1/2" SCREWS EACH.
 - IF SILL PLATE OR TOP PLATES ARE NOT CONTINUOUS, CONTACT THE ENGINEER OF RECORD FOR SOLUTION.
 - NAIL WALL SHEATHING TO ROOF DIAPHRAGM CHORD & TO EACH MEMBER/WALL VERTICAL CHORD W/ 10d COMMON NAILS @ 6" O.C., UNO.
 - HOLDDOWNS AND HOLD DOWN ANCHOR SYSTEMS PER SIMPSON STRONG TIE & SHALL BE INSTALLED PER MANUFACTURER SPECIFICATIONS.

1 SHEAR WALL SCHEDULE
S3.2 N.T.S.



2 HEADER SUPPORT DETAIL
S3.2 N.T.S.

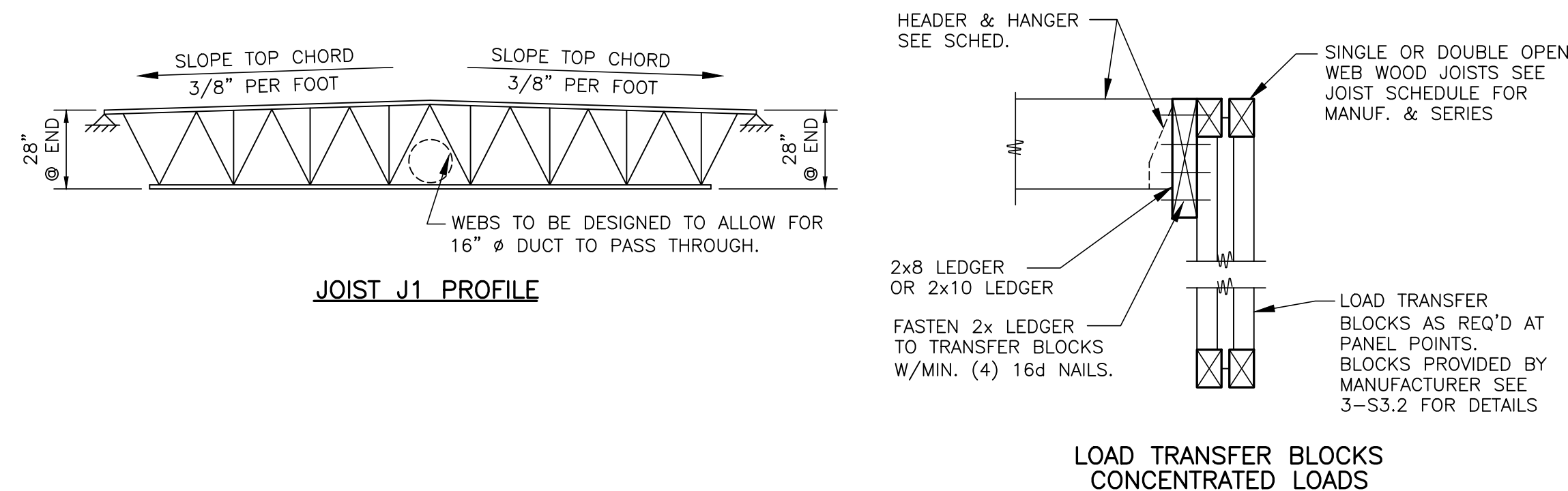


3 JOIST DETAIL @ POINT LOADS
S3.2 N.T.S.

- FOR NATIONAL ACCOUNT PACKAGE & PRICING CONTACT REDBUILT @ 1-866-859-6757
- JOIST MFR. TO VERIFY SIZE AT HVAC ROOF TOP UNITS.

HEADER	HANGER
2x6	LUS26
2-2x6	LUS26-2
2x8	LUS28
2-2x8	LUS28-2
2x10	LUS210
2-2x10	LUS210-2

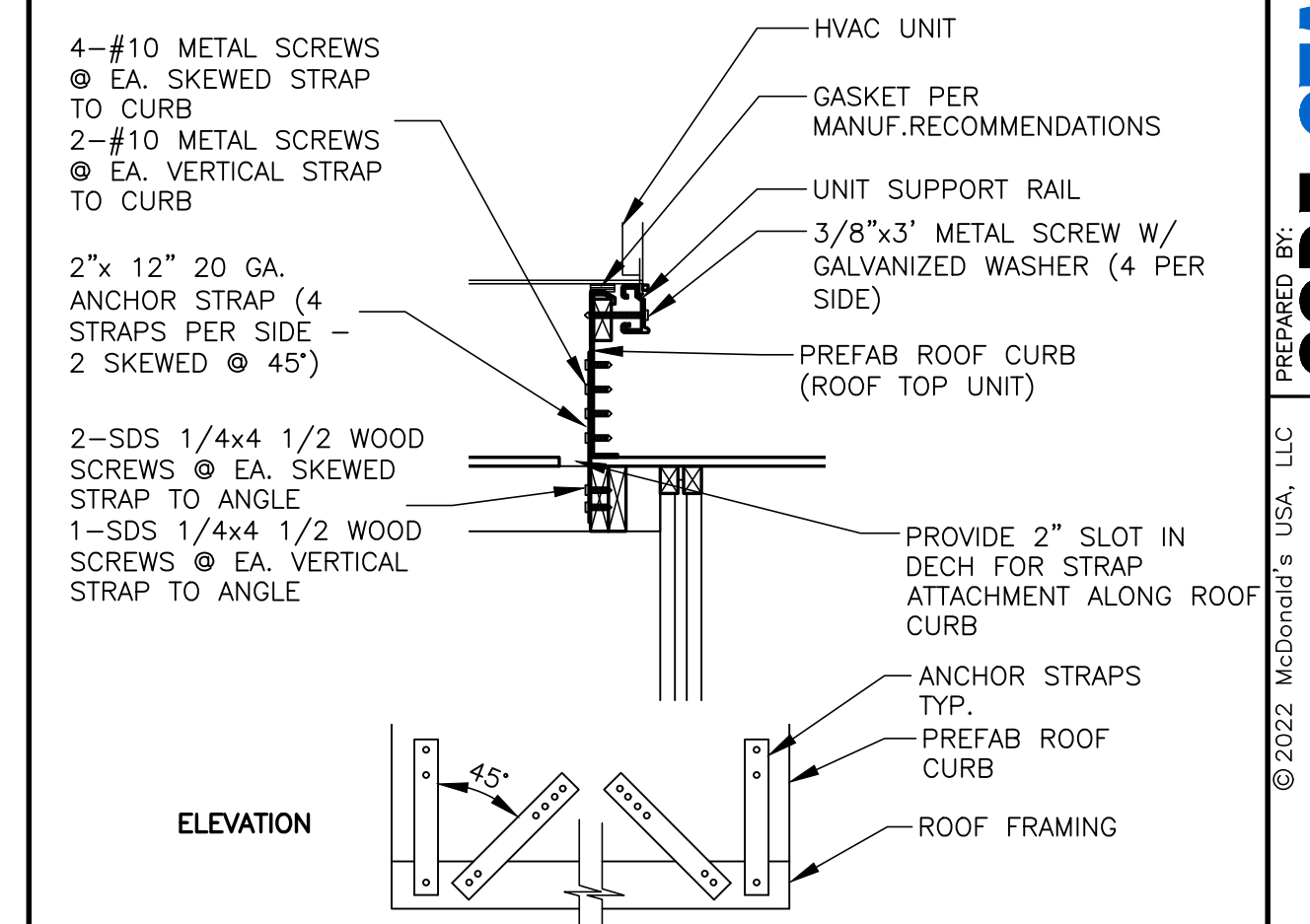
- FOR OPENINGS < 1'-4" USE 1-2x6
FOR OPENINGS > 1'-4" AND < 4'-0" USE 2-2x8
FOR OPENINGS > 4'-0" AND < 6'-0" USE 2-2x10
3. ALL JOISTS SHALL BE DESIGNED FOR THE FOLLOWING NET UPLIFT.
110 MPH (BASIC) - 5 PSF SERVICE (ASD: 0.6D + 0.6W)



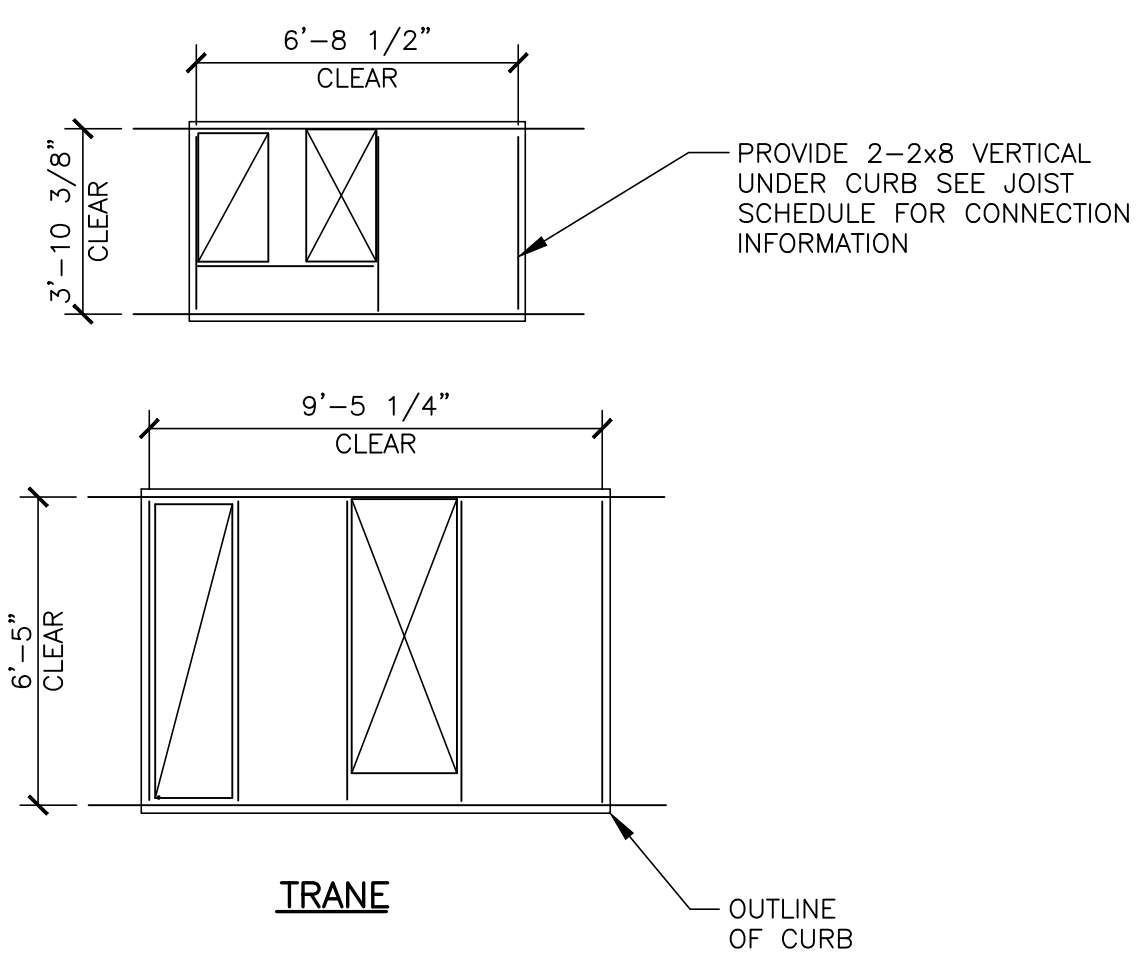
4 JOIST NOTES
S3.2 N.T.S.

DRIFT	SNOW DRIFT LOAD (PSF)	WIDTH (FT)
SHORT DIRECTION	23.0	5'-8"
LONG DIRECTION	35.0	8'-8"

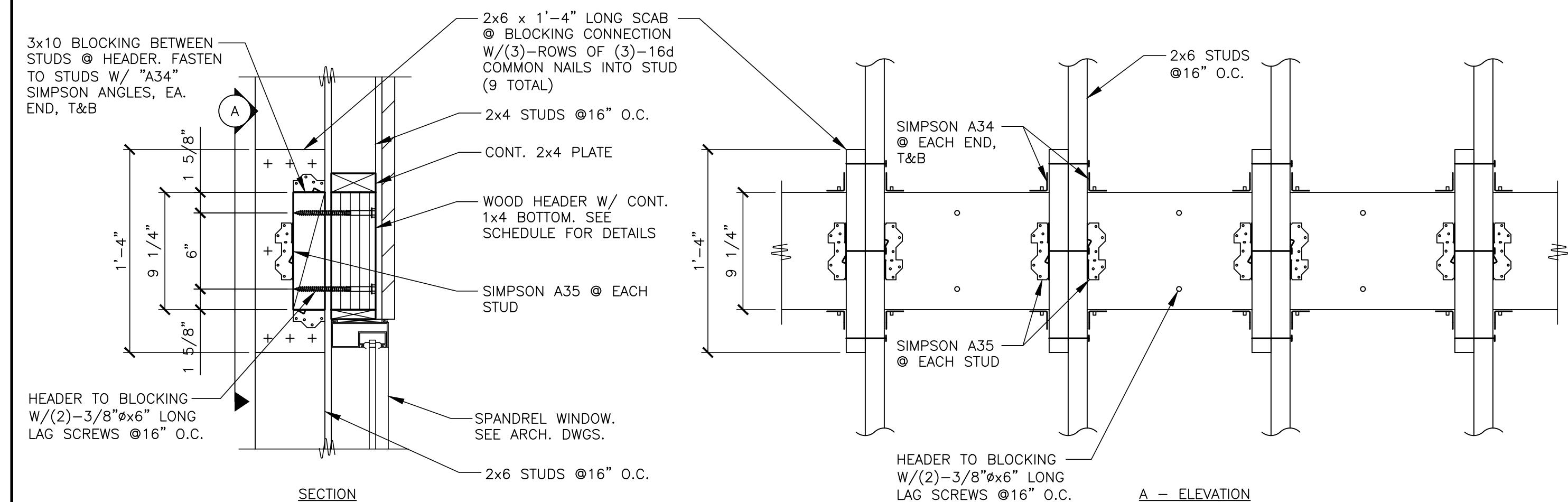
5 SNOW DRIFT DIAGRAM/SCHEDULE
S3.2 N.T.S.



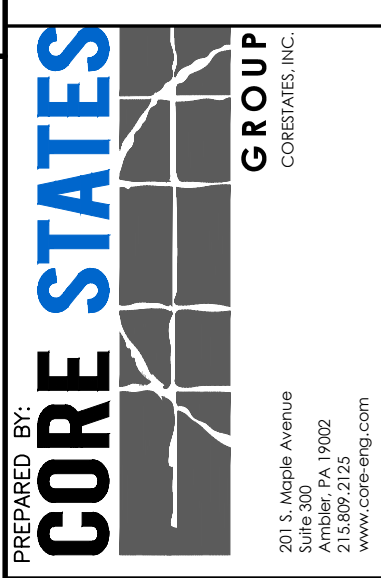
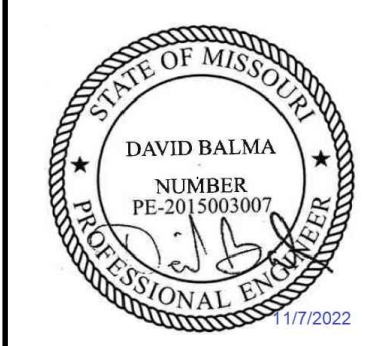
6 SECTION
S3.2 3/4" = 1'-0"



7 ROOF TOP UNIT CLEARANCES
S3.2 1/4" = 1'-0"

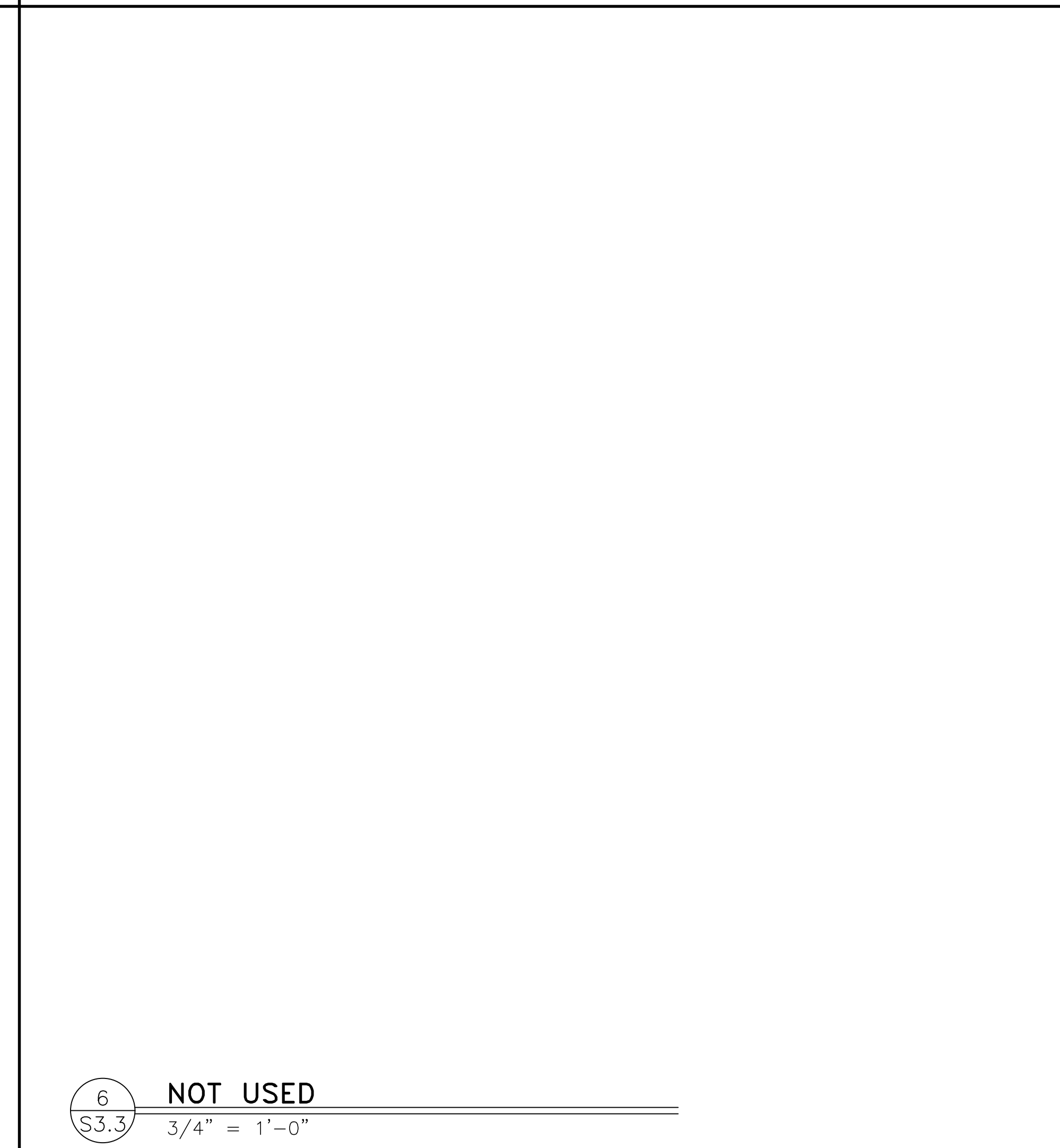
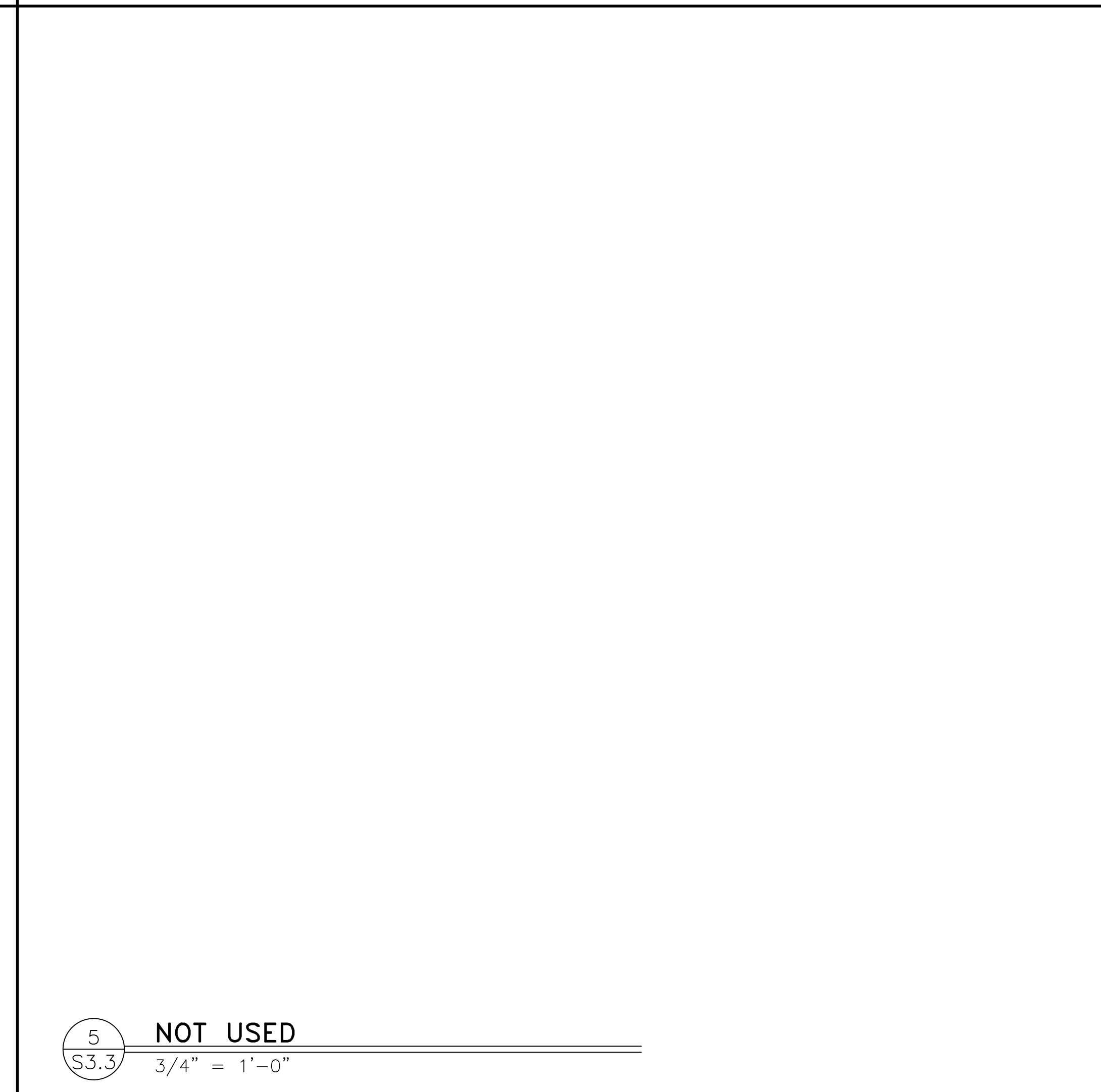
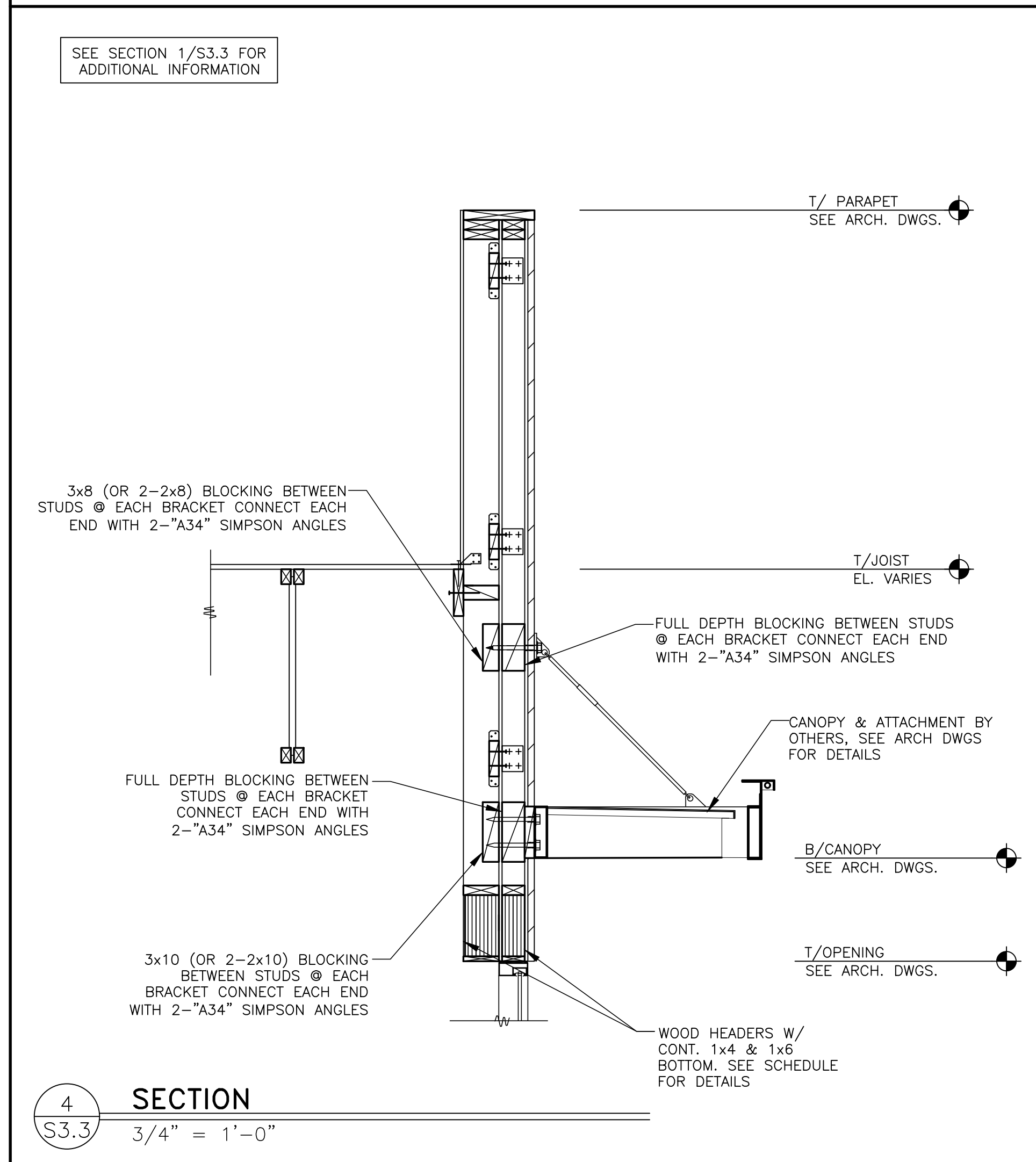
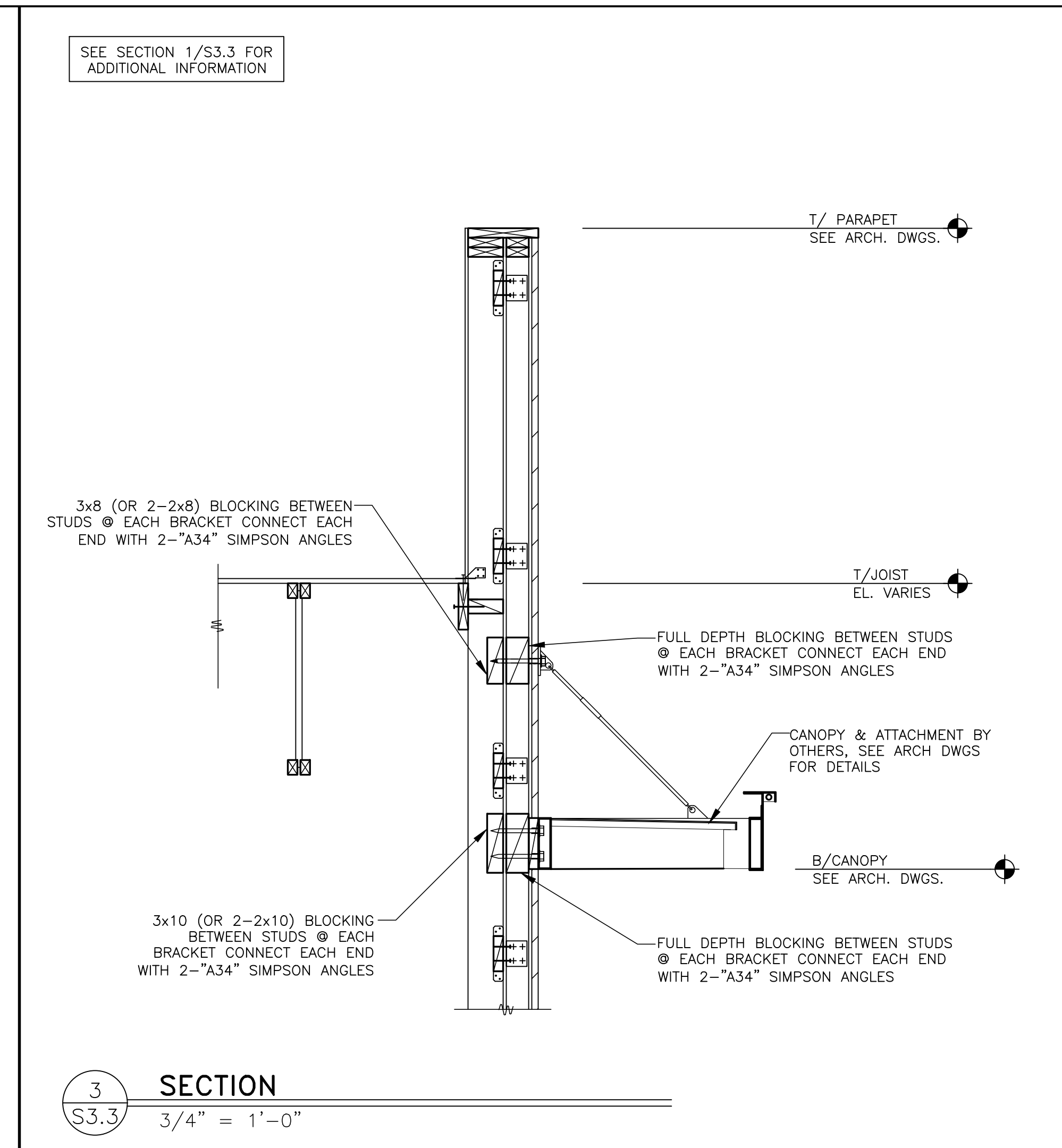
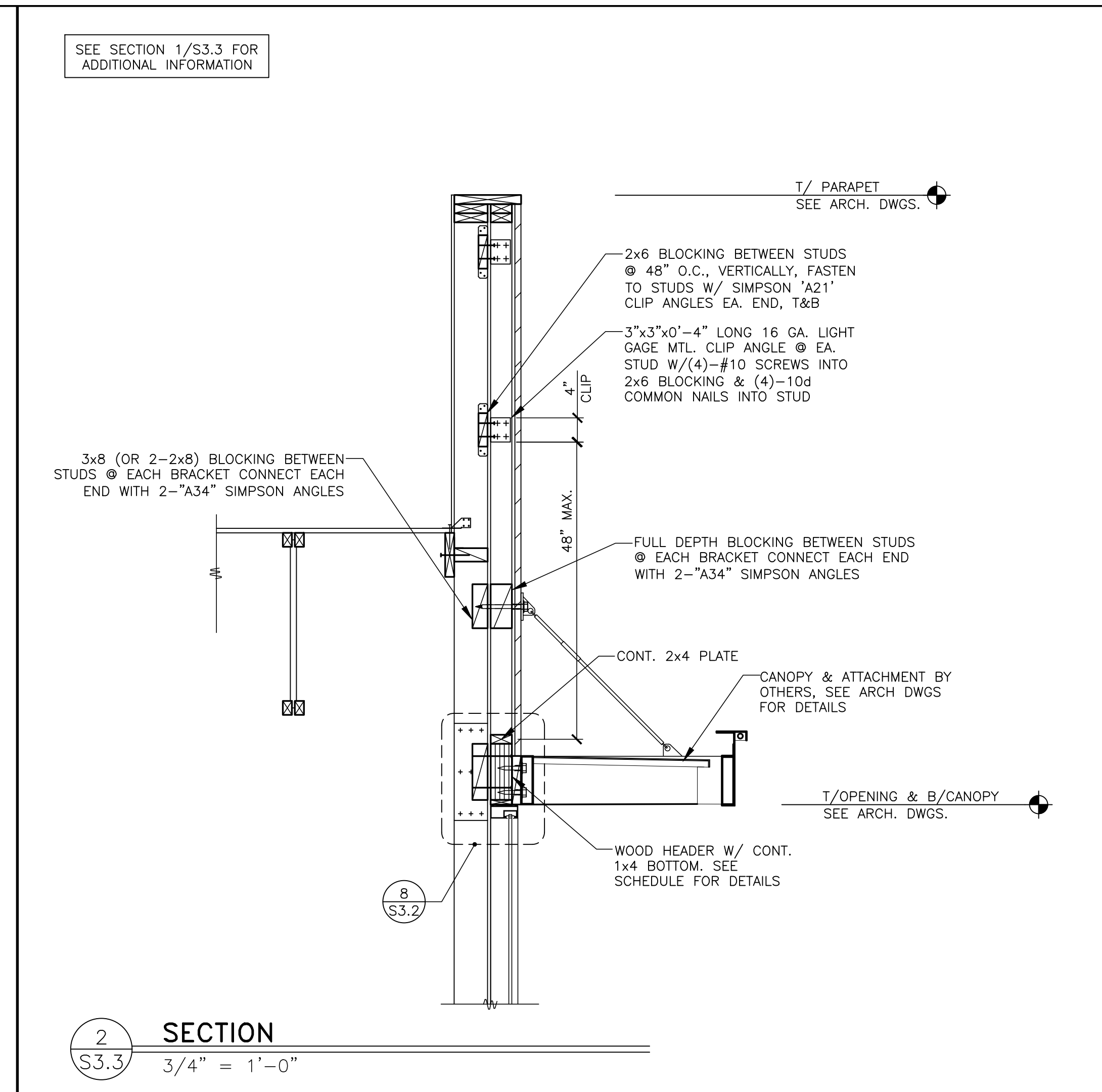
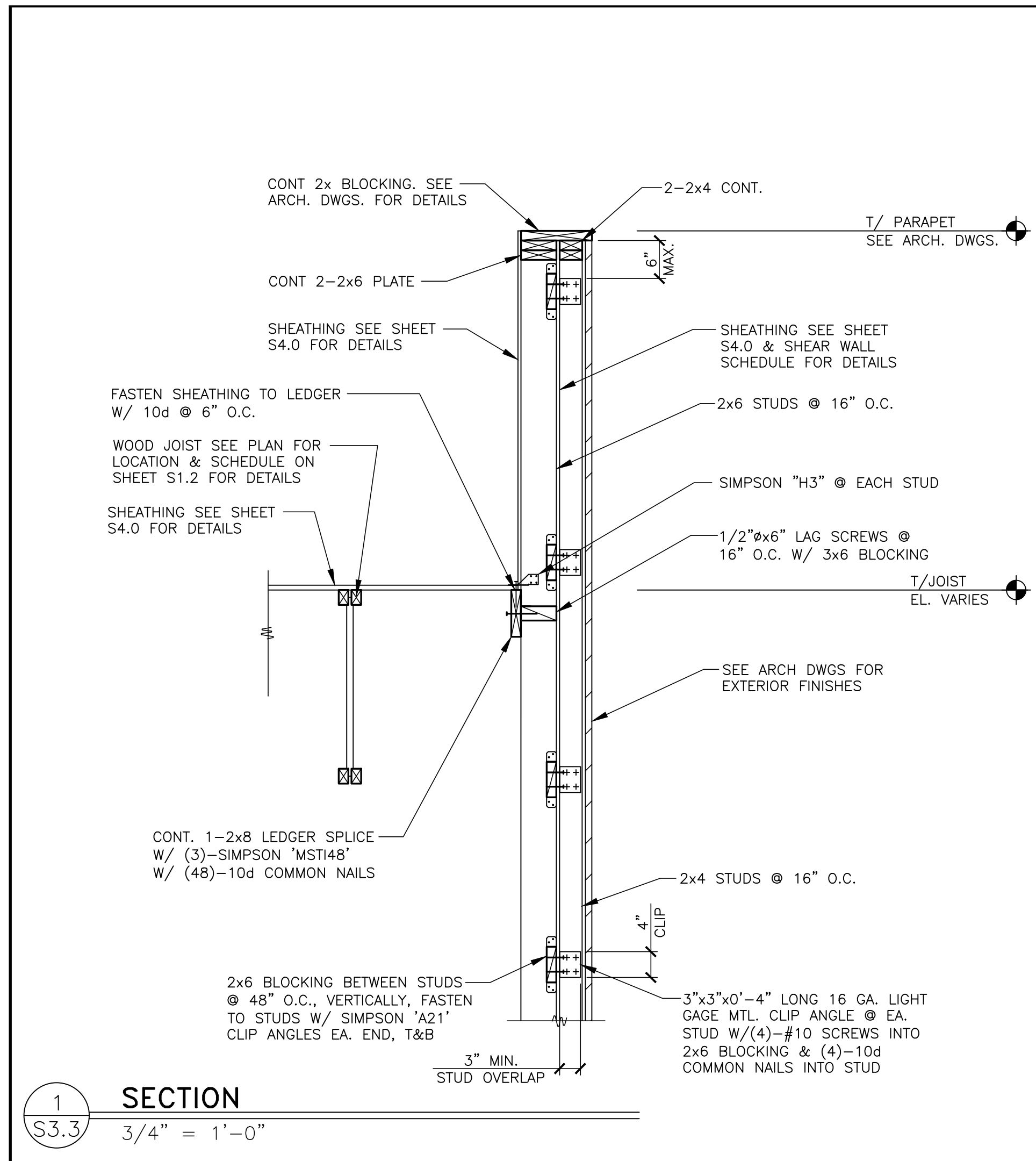


8 HEADER SUPPORT DETAIL
S3.2 1 1/2" = 1'-0"



PREPARED BY: McDonald's USA, LLC
 These drawings and specifications are the confidential and proprietary property of McDonald's USA, LLC and shall not be copied or reproduced without written authorization. The contract documents were prepared not suitable for use on a different site or at a later time. Use of these drawings for reference or example on another project requires the the contract documents for reuse on another project is not authorized.

DRAWN BY	J. CARRAS
STD ISSUE DATE	2022-10
REVIEWED BY	J. PERRY
DATE ISSUED	10/04/2022
S.C.G. PROJECT #	MCD_35915
TITLE	2022 STANDARD BUILDING - BB20
DESCRIPTION	4597 - WOOD/WOOD
WOOD BEARING WALLS W/HARDBOARD SIDING	
WOOD ROOF TRUSS FRAMING	
E.L.F.S./BATTEN/HARDBOARD SIDING EXTERIOR FINISH	
SITE ID	024-1290.00.0
SITE ADDRESS	3720 W Sunshine
	Springfield, MO
SHEET NO.	S3.2
DATE	11/7/2022
REV	
DATE	
DESCRIPTION	



NO.	DATE	DESCRIPTION	BY
1			
2			
3			
4			
5			
6			

PREPARED BY: CORE STATES GROUP

301 S. Water Avenue
Amherst, PA 15002
www.corestates.com

© 2022 McDonald's USA, LLC

McDonald's USA, LLC

These drawings and specifications are the confidential and proprietary property of McDonald's USA, LLC and shall not be copied or reproduced without written authorization. The contract documents were prepared in reliance on the information provided to the architect. Use of these drawings for reference or example on another project requires the architect's approval. Use of these drawings for reuse on another project is not authorized.

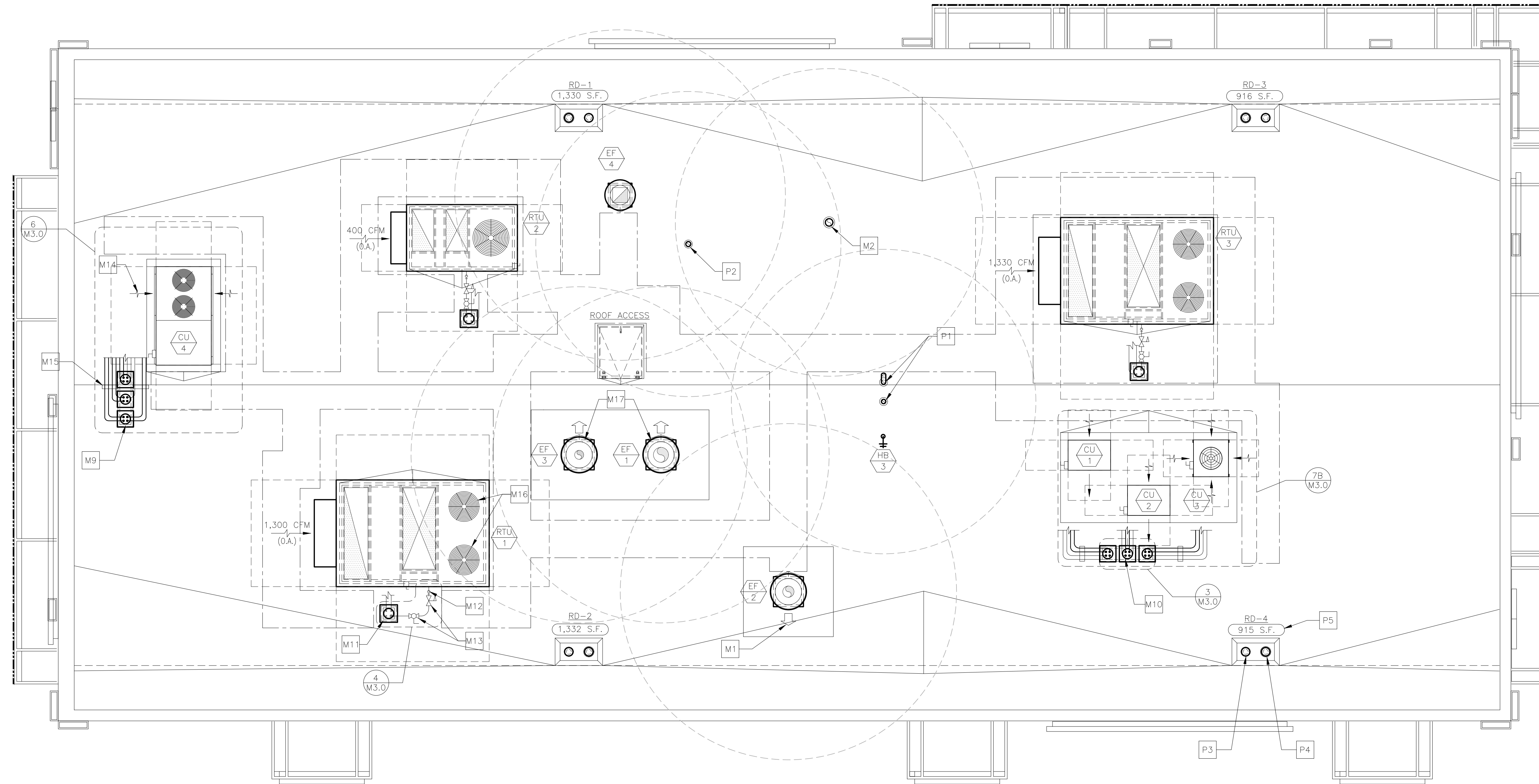
DRAWN BY	J. CARRAS
STD. ISSUE DATE	2022-10
REVIEWED BY	J. PERRY
DATE ISSUED	10/04/2022
C.S.G. PROJECT #	MCD_35915

TITLE	2022 STANDARD BUILDING - BB20
DESCRIPTION	4597 - WOOD/WOOD
DESCRIPTION	WOOD BEARING WALLS W/HARDBOARD SIDING
DESCRIPTION	WOOD ROOF TRUSS FRAMING
DESCRIPTION	E.L.F.'S/BATTEN/HARDBOARD SIDING EXTERIOR FINISH
SITE ID	024-1290
SITE ADDRESS	3720 W Sunshine
LOCATION	Springfield, MO

024-1290.00.0

S3.3

FRAMING SECTIONS



1 ROOF PLAN
M1.0 1/4"=1'-0"

DRAWING NOTES

- ROOFTOP EQUIPMENT LOCATIONS SHOWN ARE GENERAL. ACTUAL LOCATIONS SHALL BE COORDINATED WITH THE STRUCTURAL DRAWINGS.
- ROOF OPENINGS FOR ROOFTOP UNITS AND EXHAUST FANS SHALL BE COORDINATED WITH THE MANUFACTURER.
- ROOF OPENINGS FOR PIPE PORTALS SHALL ONLY BE LARGE ENOUGH TO ALLOW PIPE AND CONDUIT PENETRATIONS. PIPE PORTAL CURB SHALL BE FILLED WITH AS MUCH BATT INSULATION AS POSSIBLE.
- PRIOR TO INSTALLING THE TOP OF THE EQUIPMENT PLATFORM, INSIDE OF THE PLATFORM SHALL BE INSULATED WITH AS MUCH BATT INSULATION AS POSSIBLE.

KEYED NOTES

- M1 ARROW INDICATES DIRECTION OF EXHAUST FAN HINGE SWING (TYP.)
- M2 6"Ø ALUMINUM EXHAUST DUCT FROM EXHAUST FAN (EF-5). PROVIDE PORTALS PLUS PLASTI-FLASH WITH C-126 CAP (OR EQUAL) FOR ROOF PENETRATION. TERMINATE DUCT A MIN. OF 24" ABOVE FINISHED ROOF WITH GOOSENECK.
- M3 NOT USED
- M4 NOT USED
- M5 NOT USED
- M6 NOT USED
- M7 NOT USED
- M8 NOT USED
- M9 ROOF PIPE PORTAL FOR MAC UNIT
- M10 ROOF PIPE PORTAL FOR CONDENSING UNITS
- M11 ROOF PIPE PORTAL FOR ROOFTOP UNITS (TYP. 3 PLACES)
- M12 GAS PIPING FROM ROOF PORTAL TO ROOFTOP UNIT SHALL BE COATED WITH A CORROSION RESISTANT PAINT (SEE GAS PIPING NOTES)
- M13 GAS PRESSURE REGULATOR AND SHUT-OFF VALVE (TYP.)
- M14 ARROW INDICATES DIRECTION OF AIRFLOW FOR CONDENSING OR ROOFTOP UNIT AIR INTAKE (TYP.)
- M15 REFRIGERANT PIPING SUPPORT AS REQUIRED. PROVIDE ROOFTOP BLOX MODEL RTB-01 (OR EQUAL) AND ALL NECESSARY ACCESSORIES FOR PROPER PIPE AND CONDUIT SUPPORT. PROVIDE GALVANIZED PIPE SHIELD TO PROTECT INSULATION AT ALL SUPPORTS.
- M16 PROVIDE HAIL GUARD FOR RTU-1 PROTECTING CONDENSER COIL FROM GREASE.
- M17 EXHAUST FANS WITH WINDBAND EXTENSION AND/OR RAISED CURBS TO PREVENT DIRECT GREASE BLOW ONTO CONDENSER COIL OF UNIT RTU-1.
- P1 COMBUSTION AIR INTAKE AND EXHAUST VENT FOR SEALED COMBUSTION WATER HEATER (SEE PLUMBING DRAWINGS). PROVIDE PORTALS PLUS PLASTIFLASH WITH C-126 CAP (OR EQUAL) FOR ROOF PENETRATION.
- P2 PLUMBING VENT THROUGH ROOF (SEE PLUMBING DRAWINGS). PROVIDE PORTALS PLUS PLASTI-FLASH WITH C-126 CAP (OR EQUAL) FOR ROOF PENETRATION.
- P3 PRIMARY ROOF DRAIN WITH DOME STRAINER (SEE PLUMBING DRAWINGS)
- P4 OVERFLOW ROOF DRAIN WITH DOME STRAINER (SEE PLUMBING DRAWINGS)
- P5 AREA OF ROOF SERVED BY ROOF DRAIN (TYP.)

PIPE PORTAL SCHEDULE

MANUFACTURER	CURB DIMENSIONS	CURB TYPE	CAP TYPE (QTY)	SERVES
RPS	12"x12"x11"H	RC-2A	N18 (1)	RTU-1 THROUGH RTU-3
RPS	43"x12"x13"H	RC-2A	N18 (3)	CU-1 THROUGH CU-4

SEQUENCE OF OPERATION

THERMOSTAT SETTINGS			
MODE	FAN	SETPOINTS	
		COOLING	HEATING
OCCUPIED	ON	75°F	70°F
UNOCCUPIED	AUTO	90°F	55°F
HUMIDITY SETPOINT (FOR DEHUMIDIFICATION UNITS ONLY)			60%

RTU-1, RTU-2 & RTU-3:
 1. OCCUPIED MODE SHALL BEGIN AS FOLLOWS:
 • RTU-1: 1.5 HOURS BEFORE OPEN
 • RTU-2: 1 HOUR BEFORE OPEN
 • RTU-3: 30 MINUTES BEFORE OPEN
 2. ROOFTOP UNIT FAN SHALL RUN CONTINUOUSLY DURING OCCUPIED MODE
 3. ECONOMIZER SHALL BE OPEN DURING OCCUPIED MODE (OUTDOOR AIR THROUGH ROOFTOP UNITS SERVES AS MAKE-UP AIR FOR THE KITCHEN EXHAUST SYSTEM) - REFER TO E3.2 FOR HOOD/FAN INTERLOCK DETAILS.
 4. UNOCCUPIED MODE SHALL BEGIN ONE (1) HOUR AFTER STORE CLOSES
 5. DURING UNOCCUPIED MODE, ECONOMIZER IS CLOSED AND HEATING, COOLING AND FAN OPERATE IN AUTO MODE (ON DEMAND)

PREPARED FOR: **McDonald's USA, LLC**
 © 2022 McDonald's USA, LLC
 These drawings and specifications are the confidential and proprietary property of McDonald's USA, LLC and shall not be copied or reproduced without written authorization. The contract documents were prepared in accordance with the contract documents for the project and are not suitable for use on a different site or at a later time. Use of these drawings for reference or example on another project requires the approval of the project manager. The contract documents for the project are the contract documents for use on another project is not authorized.

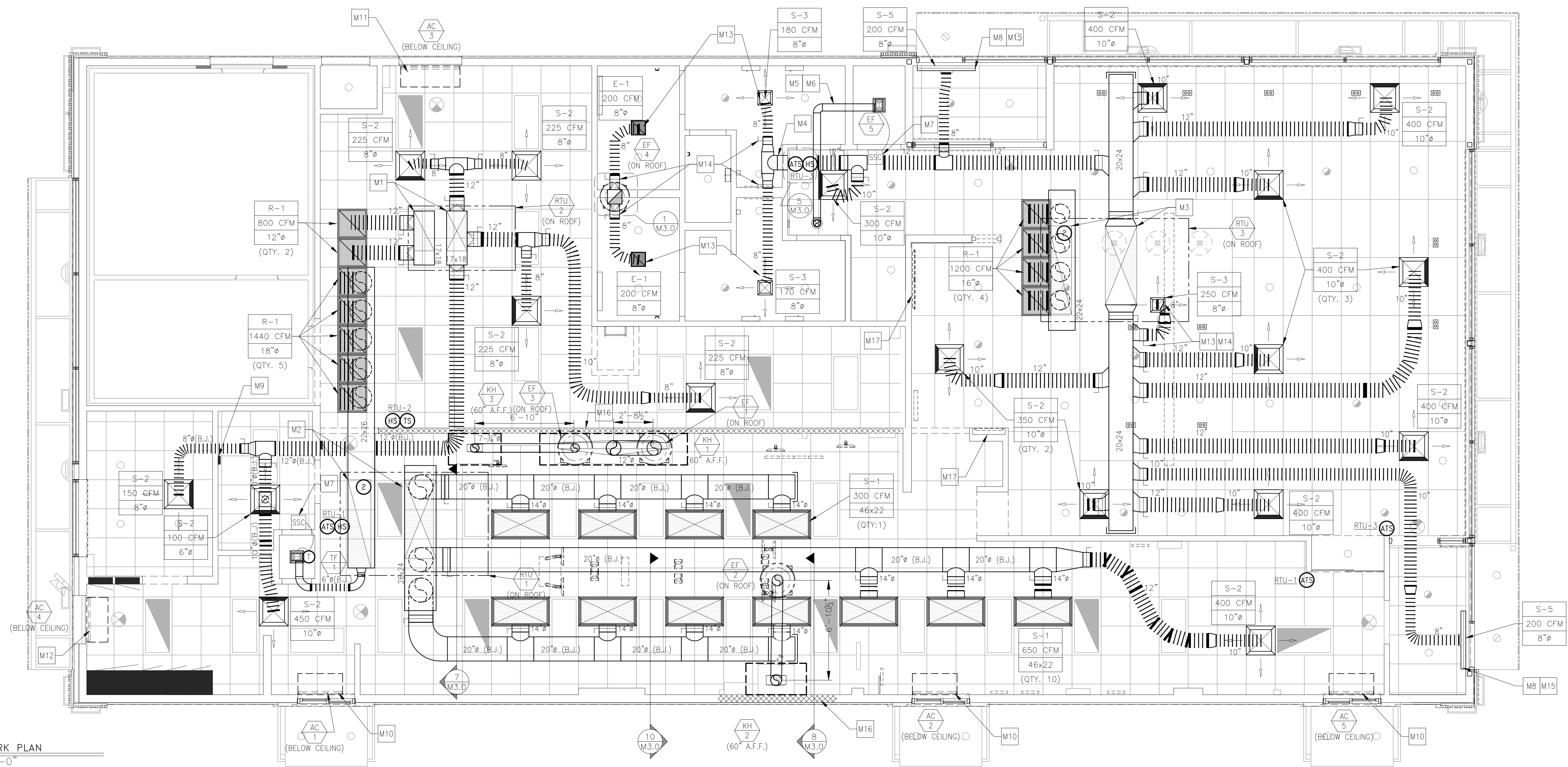
DATE ISSUED: 10/04/2022
 REVIEWED BY: DAVID M. LEFFER
 STD. ISSUE DATE: 2022-10-10
 DRAWN BY: TP

TITLE: 2022 STANDARD BUILDING - BB20
 DESCRIPTION: 4597 - WOOD/WOOD
 WOOD BEARING WALLS W/HARDBOARD SIDING
 WOOD ROOF TRUSS FRAMING
 E.L.F.S./BATEN/HARDBOARD SIDING EXTERIOR FINISH
 SHEET NO: M1.0
 SHEET ADDRESS: 3720 W. Sunshine
 024-1290.00.0
 Springfield, MO

REV. DATE DESCRIPTION

1 BY

STATE OF MISSOURI
 DAVID MICHAEL LEFFER
 PROFESSIONAL ENGINEER
 NUMBER: PE-201801214
 EXPIRES: 03-14-2023



1 DUCTWORK PLAN
1/4"=1'-0"

DRAWING NOTES

- ALL DUCTWORK SHALL BE RUN BETWEEN OR THROUGH THE JOISTS UNLESS NOTED OTHERWISE. DUCTWORK DESIGNATED WITH (B.J.) SHALL BE RUN BELOW THE JOISTS.
- DUCT SIZES SHOWN ARE INTERNAL FREE AREA DIMENSIONS UNLESS NOTED OTHERWISE.
- ALL SHEET METAL DUCTWORK SHALL BE EXTERNALLY INSULATED. INSULATION IS NOT SHOWN FOR CLARITY. SEE MECHANICAL NOTES FOR INSULATION REQUIREMENTS.
- CARBON STEEL KITCHEN EXHAUST DUCTWORK SHALL BE EXTERNALLY INSULATED. INSULATION NOT SHOWN FOR CLARITY. SEE MECHANICAL NOTES AND DETAILS FOR INSULATION REQUIREMENTS.
- RETURN AIRFLOW VOLUME SHOWN ON PLAN IS FOR DUCTWORK SIZING PURPOSES WHEN THE UNIT IS IN RECIRCULATION (UNOCCUPIED) MODE.
- DIFFUSERS IN DINING AREA ARE SPECIFIC TO THE DECOR PLAN SHOWN. DIFFERENT CEILING LAYOUTS MAY REQUIRE A DIFFERENT DIFFUSER TYPES, QUANTITIES, LOCATIONS AND FINISHES/COLORS.

KEYED NOTES

- M1 17x33 SUPPLY AND 17x33 RETURN DUCT DROPS FROM ROOFTOP UNIT (RTU-2)
- M2 26x63 SUPPLY AND 19x73 RETURN DUCT DROPS FROM ROOFTOP UNIT (RTU-1)
- M3 26x63 SUPPLY AND 19x73 RETURN DUCT DROPS FROM ROOFTOP UNIT (RTU-3)
- M4 PROVIDE SHEET METAL DUCT AT ALL DRAFTSTOP WALL PENETRATIONS (TYP.) (WHERE REQUIRED BY CODE.)
- M5 6"Ø ALUMINUM DUCT FROM EXHAUST FAN UP THROUGH ROOF
- M6 EXTERNALLY INSULATE EXHAUST DUCT FROM FAN TO ROOF PENETRATION
- M7 STEADY STATE SPEED CONTROLLER FOR CEILING MOUNTED EXHAUST FAN. STEADY STATE SPEED CONTROLLER SHALL BE INSTALLED OVER SUSPENDED CEILING FOR ACCESS. DO NOT INSTALL OVER AREAS WITH DRYWALL CEILINGS.
- M8 SET DIFFUSER (S-5) FOR VERTICAL AIR THROW PATTERN (TYP.)
- M9 BUILDING AUTOMATION SYSTEM LOCATION. SEE LIGHTING CONTROL DETAILS ON SHEET E4.1.
- M10 MOUNT AIR CURTAIN TIGHT TO CEILING
- M11 MOUNT AIR CURTAIN WITH BOTTOM OF UNIT AT TOP OF DOOR FRAME
- M12 MOUNT AIR CURTAIN WITH BOTTOM OF UNIT ABOVE DOOR FRAME AND TOP OF SWITCHGEAR TO MEET 3'-0" MINIMUM SWITCHGEAR'S CLEARANCE REQUIREMENT
- M13 FOR DIFFUSERS INSTALLED IN DRYWALL CEILINGS, VOLUME DAMPER IS INTEGRAL TO DIFFUSER AND ADJUSTABLE AT FACE OF DIFFUSER (SEE NOTE 18 UNDER "VENTILATION SYSTEMS" ON DRAWING M4.0 AND AIR DEVICE SCHEDULE ON DRAWING M4.1)
- M14 FOR DIFFUSERS INSTALLED IN DRYWALL CEILINGS, INSTALL HIGH-EFFICIENCY TAKE-OFFS WITH VOLUME DAMPER IN FULL-OPEN POSITION TO FACILITATE BALANCING AT FACE OF DIFFUSER.
- M15 GENERAL CONTRACTOR SHALL PROVIDE ADDITIONAL T-BAR FRAME TO PROPERLY LOCATE DIFFUSER AS SHOWN. AIR STREAM FROM DIFFUSER SHALL COVER ENTIRE DOOR OPENING.
- M16 NONCOMBUSTIBLE WALL CONSTRUCTION BEHIND TYPE I KITCHEN HOODS. REFER TO SHEET A1.0 FOR MORE INFORMATION.
- M17 CONTRACTOR TO PROVIDE LOUVERED RETURN AIR BEHIND EACH MENU BOARD.

2018 IMC SECTION 403.3 - VENTILATION SCHEDULE

UNIT	AREA SERVED	AREA FT ² (Az)	CFM/PERSON (Rp)	CFM/FT ² (Ra)	PEOPLE OR PEOPLE/1000 FT ² (Pz)	UNCORRECTED REQUIRED O/A CFM (Vbz)	E _s *	E _{vv} **	REQUIRED O/A CFM (Vot)***	ACTUAL O/A CFM	REQUIRED EXHAUST CFM	ACTUAL EXHAUST CFM
RTU-1	PRESENTER	347	5	0.06	4	42	0.8	0.98				
	KITCHEN	721	7.5	0.18	18							
						306			313	1350		
RTU-2	SUPPORT	600	0	0.12	0	72	0.8					
	MANAGER'S OFFICE	59	5	0.06	1	9	0.8	0.84				
	CREW ROOM	99	5	0.06	5	31	0.8					
	ORDER	140	5	0.06	7	43	0.8					
						154			184	350		
RTU-3	DINING	1264	7.5	0.18	88	891	0.8					
	VESTIBULE 1	53	0	0.06	0	3	0.8	0.89				
	VESTIBULE 2	48	0	0.06	0	3	0.8					
	WOMEN'S	136	0	0.06	0	8	0.8					
						913			1025	1330		
EF-1, 2 & 3	KITCHEN	721	-	0.7	-	-	-	-	-	-	505	2405
EF-4	WOMEN'S	136	-	-	-	-	-	-	-	-	100	200
	MEN'S	122	-	-	-	-	-	-	-	-	100	200
											200	400

* Zone Air Distribution Effectiveness Based on ASHRAE 62.1 Table 6.2 for Ceiling Supply of Warm Air 15°F or More Above Space Temperature and Ceiling Return (IMC Table 403.3.1.2)
 ** Ventilation System Efficiency Based on ASHRAE 62.1 Table 6.3 and Section 6.2.5 (IMC Section 403.3.2.3 MZ)
 *** Corrected Required O/A Intake Required for System Calculated Based on ASHRAE 62.1 Section 6.2 (IMC Section 403.3)

AIR BALANCE SCHEDULE

UNIT	SUPPLY AIR	RETURN AIR	OUTDOOR AIR	EXHAUST AIR	PRESSURE
RTU-1	7200	5850	1350		1350
RTU-2	1600	1250	350		350
RTU-3	4800	3470	1330		1330
EF-1				1350	-1350
EF-2				575	-575
EF-3				480	-480
EF-4				400	-400
EF-5				75	-75
TOTALS	13600	10570	3030	2880	150

- NOTES:
- BALANCING TOLERANCES ARE AS FOLLOWS:
 HOODS: 0% TO +10%
 OUTDOOR AIR: 0% TO +10%
 SUPPLY AND RETURN AIR DIFFUSERS: -10% TO +10%
 TOILET EXHAUST AIR: -10% TO +10%
 - BALANCE ROOFTOP UNIT SUPPLY AND RETURN AIR PRIOR TO TURNING ON EXHAUST FANS.
 - EXHAUST HOODS SHALL BE BALANCED WITH A 4" VANE ANEMOMETER.
 - RTU BLOWER TO RUN CONTINUOUSLY DURING OCCUPIED HOURS. REFER TO SEQUENCE OF OPERATIONS ON M1.0 AND E3.2 FOR HOOD/FAN INTERLOCK DETAILS.

HEATING SCHEDULE

EQUIPMENT	INPUT (kW)	OUTPUT (BTU/HR)	REQUIRED HEAT (BTU/HR)
ROOFTOP UNIT (RTU-1)	250,000	202,500	124,223
ROOFTOP UNIT (RTU-2)	60,000	48,000	43,469
ROOFTOP UNIT (RTU-3)	250,000	202,500	167,946
TOTALS	560,000	453,000	335,638

STATE OF MISSISSIPPI
 DAVID MICHAEL LEFFLER
 PROFESSIONAL ENGINEER
 NUMBER PE-201801214
 03-14-2023

CORE STATES GROUP

PREPARED BY: McDonald's USA, LLC
 DRAWN BY: TP
 STD ISSUE DATE: 2022-10
 REVIEWED BY: DAVID M LEFFLER
 DATE ISSUED: 10-04-2022

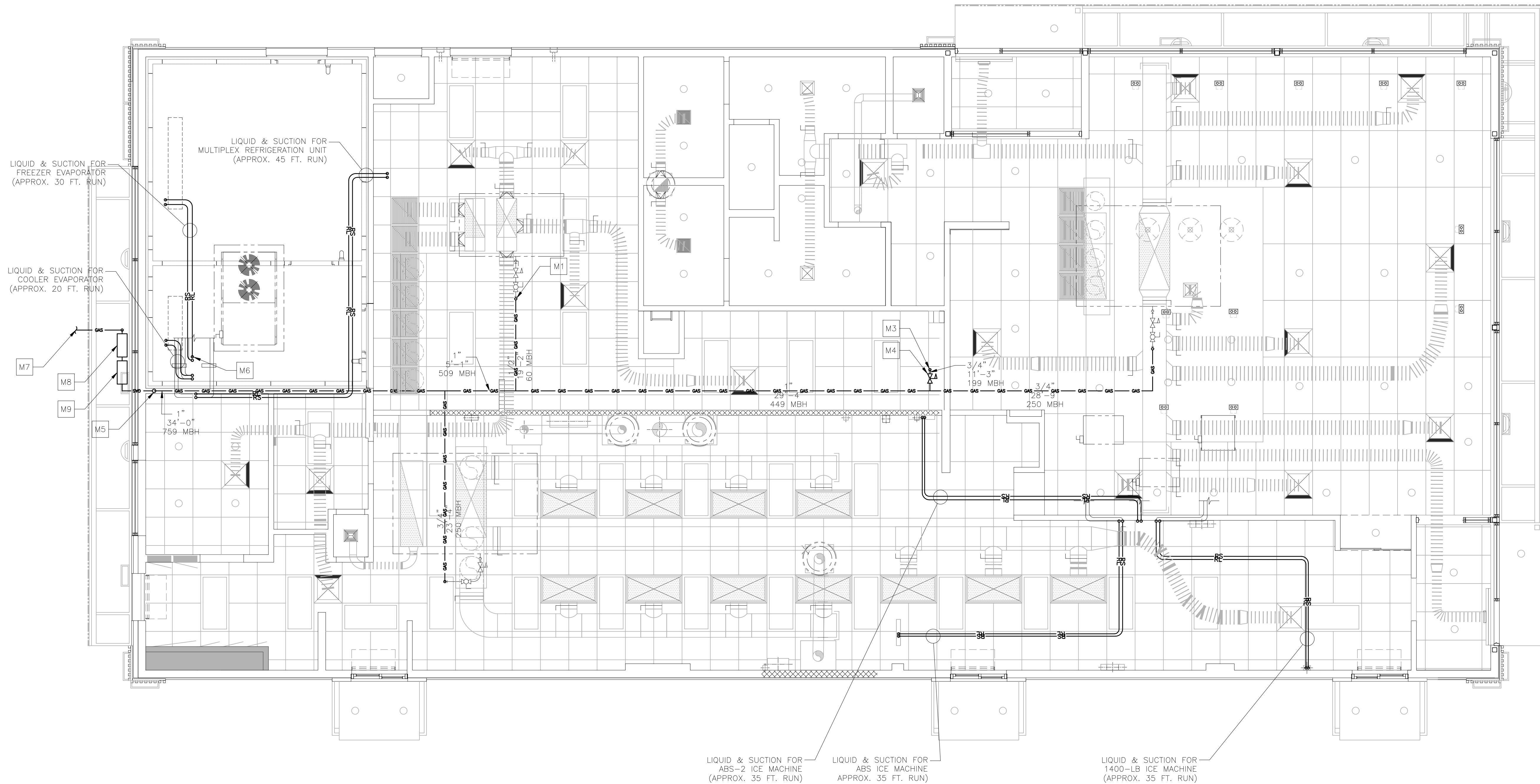
TITLE: 2022 STANDARD BUILDING - BB20
 4597 - WOOD/WOOD

DESCRIPTION: WOOD BEARING WALLS W/HARDBOARD SIDING
 WOOD ROOF TRUSS FRAMING
 E.L.F.S./BATEN/HARDBOARD SIDING EXTERIOR FINISH

SITE ID: 024-1290
 SITE ADDRESS: 3720 W. Sunshine
 Springfield, MO

2024-1290.00.0
M1.2
 DUCTWORK PLAN

REV	DATE	DESCRIPTION
1		



1 MECHANICAL PIPING PLAN
 M1.4 1/4"=1'-0"

DRAWING NOTES

- GAS PIPING LENGTHS ARE APPROXIMATE AND ARE SHOWN FOR SIZING PURPOSES ONLY.
- REFRIGERANT PIPE SIZES SHALL BE PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.

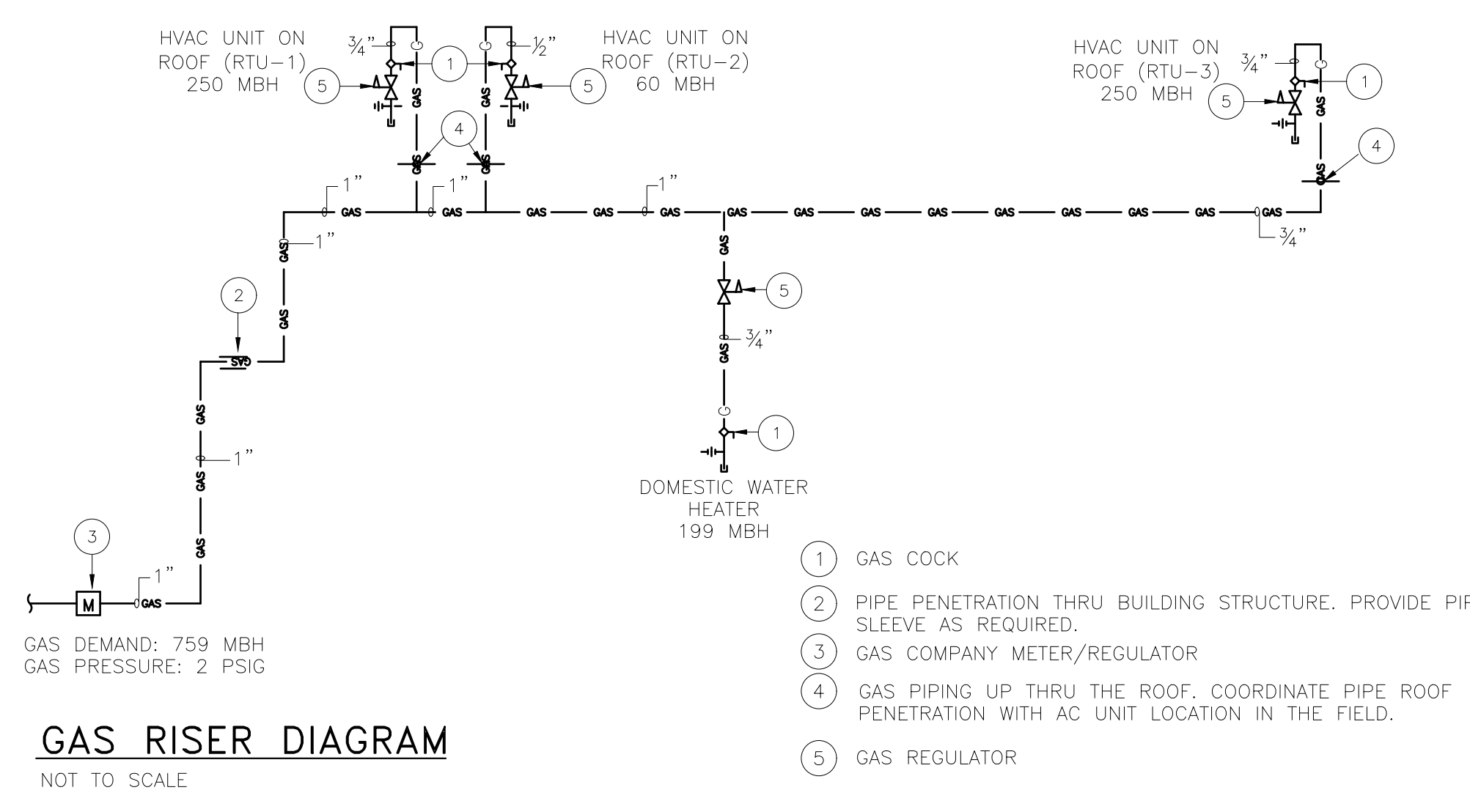
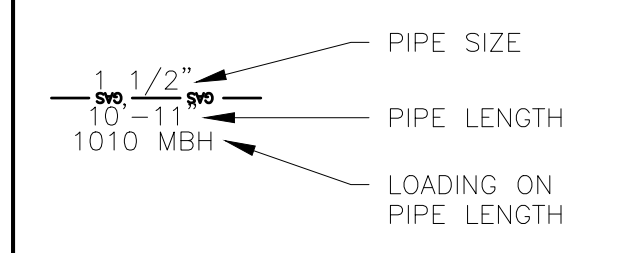
KEYED NOTES

- M1 GAS PIPE UP THROUGH ROOF TO RTU (TYP. 3 PLACES)
- M2 NOT USED
- M3 GAS PIPE DOWN TO WATER HEATER - APPROX. 10 FT. DROP
- M4 SIZE REGULATOR PROPERLY FOR APPLICATION - SET GAS PRESSURE REGULATOR OUTLET PRESSURE TO 10" W.C. AND PROVIDE VENT THROUGH ROOF AS REQUIRED
- M5 GAS PIPE UP IN WALL - APPROX. 10 FT. RISE
- M6 REFRIGERANT LIQUID AND SUCTION LINES UP THROUGH ROOF TO CONDENSING UNITS (TYP. 6 PLACES - SEE DETAIL 3 ON DRAWING M3.0)
- M7 INCOMING SERVICE LINE - SEE GAS PIPING NOTES ON DRAWING M4.0
- M8 INCOMING SERVICE REGULATOR SET TO 2 PSIG
- M9 INCOMING SERVICE METER - SEE GAS LOAD SCHEDULE FOR SIZING

GAS LOAD SCHEDULE

EQUIPMENT	INPUT (BTU/HR)	GAS FLOW (1,000 BTU/CF) (CF/HR)
ROOFTOP UNIT (RTU-1)	250,000	250
ROOFTOP UNIT (RTU-2)	60,000	60
ROOFTOP UNIT (RTU-3)	250,000	250
WATER HEATER (WH-1)	199,000	199
TOTAL	759,000	759

PIPING KEY



PREPARED BY: © 2022 McDonald's USA, LLC
McDonald's USA, LLC
 These drawings and specifications are the confidential and proprietary property of McDonald's USA, LLC and shall not be copied or reproduced without written authorization. The contract documents were prepared in reliance on information provided by the client. Use of these drawings for reference or example on another project requires the approval of the client. Use of these drawings for any other purpose without the client's written consent is prohibited.

DAVID MICHAEL LEFFER
 PROFESSIONAL ENGINEER
 LICENSE NUMBER: PE-20181214
 EXPIRES: 03-14-2023

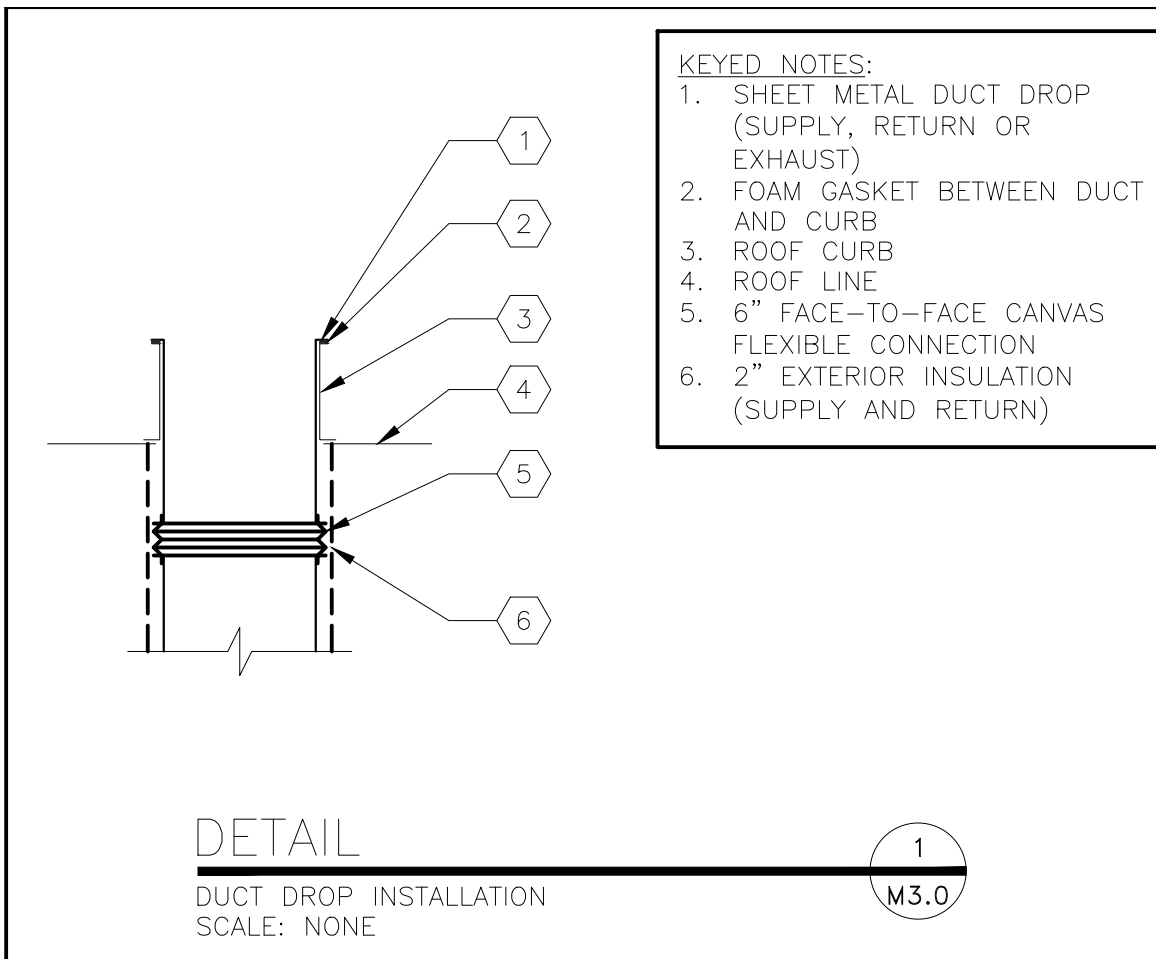
CORE STATES GROUP
 210 E. Main Street, Suite 100
 Annapolis, MD 21401
 www.corestates.com

REV	DATE	DESCRIPTION
1		

DRAWN BY: TP
 STD ISSUE DATE: 2022-10
 REVIEWED BY: DAVID M LEFFER
 DATE ISSUED: 10-04-2022

TITLE: 2022 STANDARD BUILDING - BB20
 DESCRIPTION: 4597 - WOOD/WOOD
 WOOD BEARING WALLS W/HARDBOARD SIDING
 WOOD ROOF TRUSS FRAMING
 E.L.F.S./BATTEN/HARDBOARD SIDING EXTERIOR FINISH
 SITE ID: 024-1290.00.0
 3720 W. Sunshine
 Springfield, MO

SHEET NO. **M1.4**
 MECH. PIPING PLAN

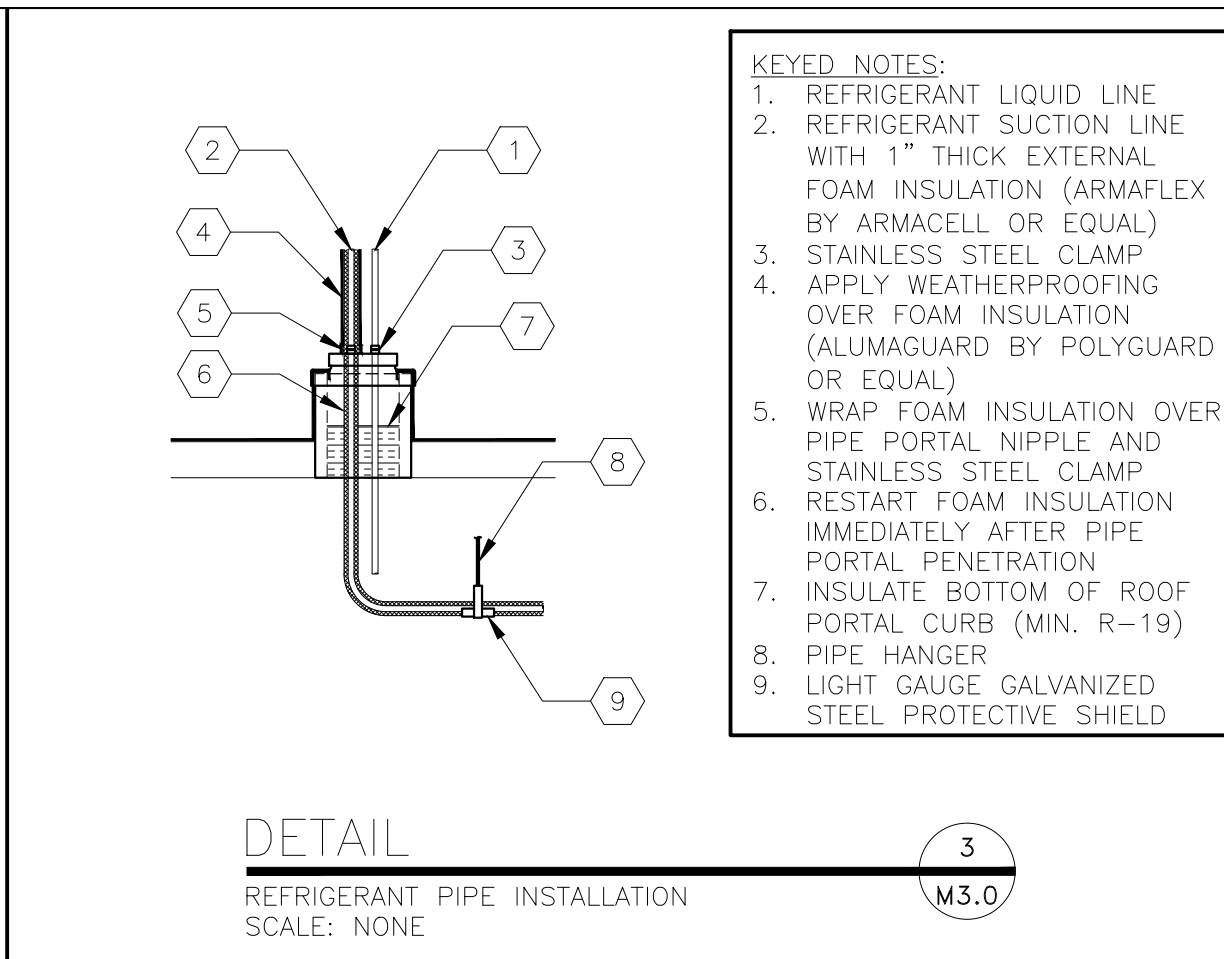


- KEYED NOTES:**
1. SHEET METAL DUCT DROP (SUPPLY, RETURN OR EXHAUST)
 2. FOAM GASKET BETWEEN DUCT AND CURB
 3. ROOF CURB
 4. ROOF LINE
 5. 6" FACE-TO-FACE CANVAS FLEXIBLE CONNECTION
 6. 2" EXTERIOR INSULATION (SUPPLY AND RETURN)

DETAIL 1
DUCT DROP INSTALLATION
SCALE: NONE
M3.0

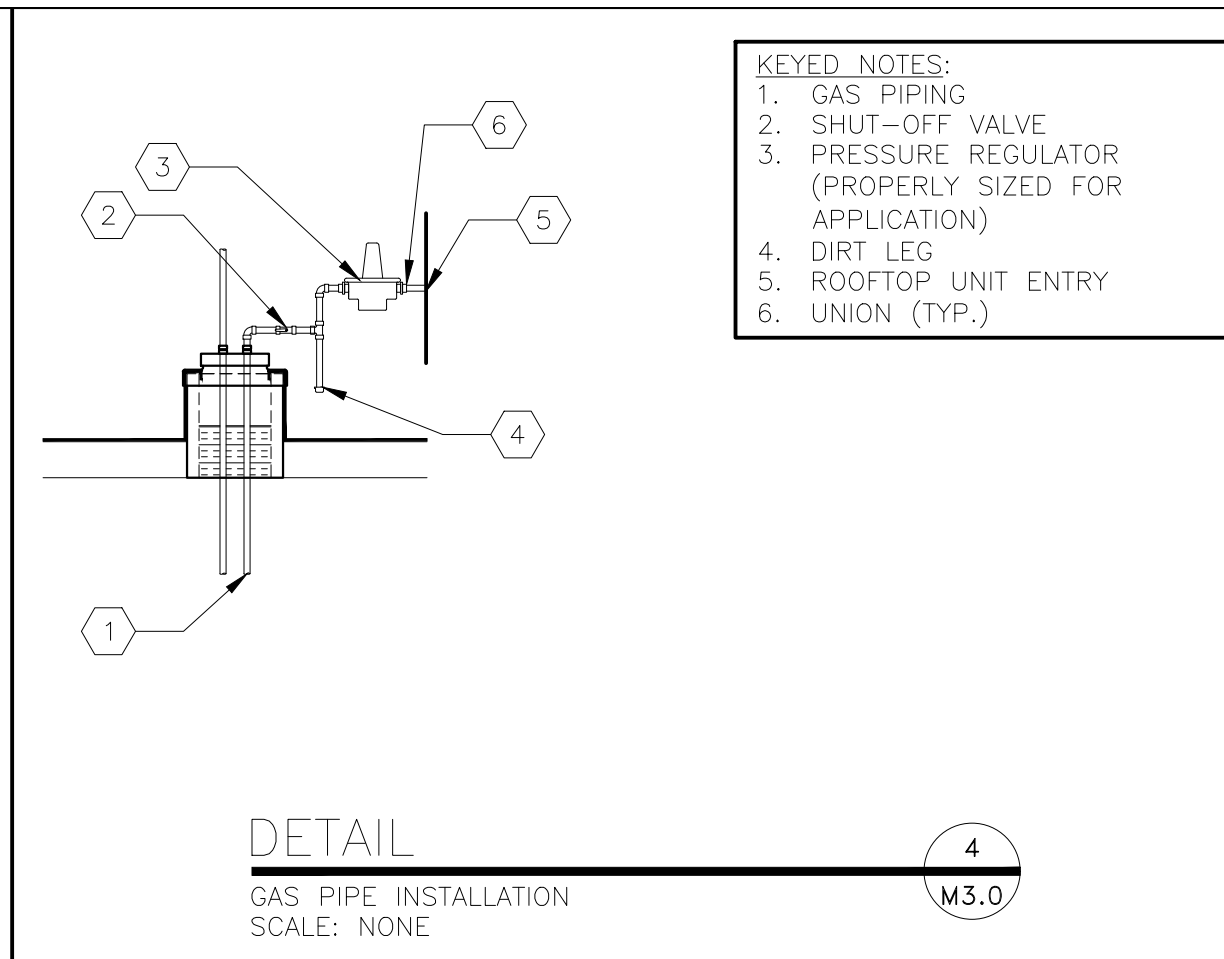


DETAIL 2
NOT USED
SCALE: NONE
M3.0



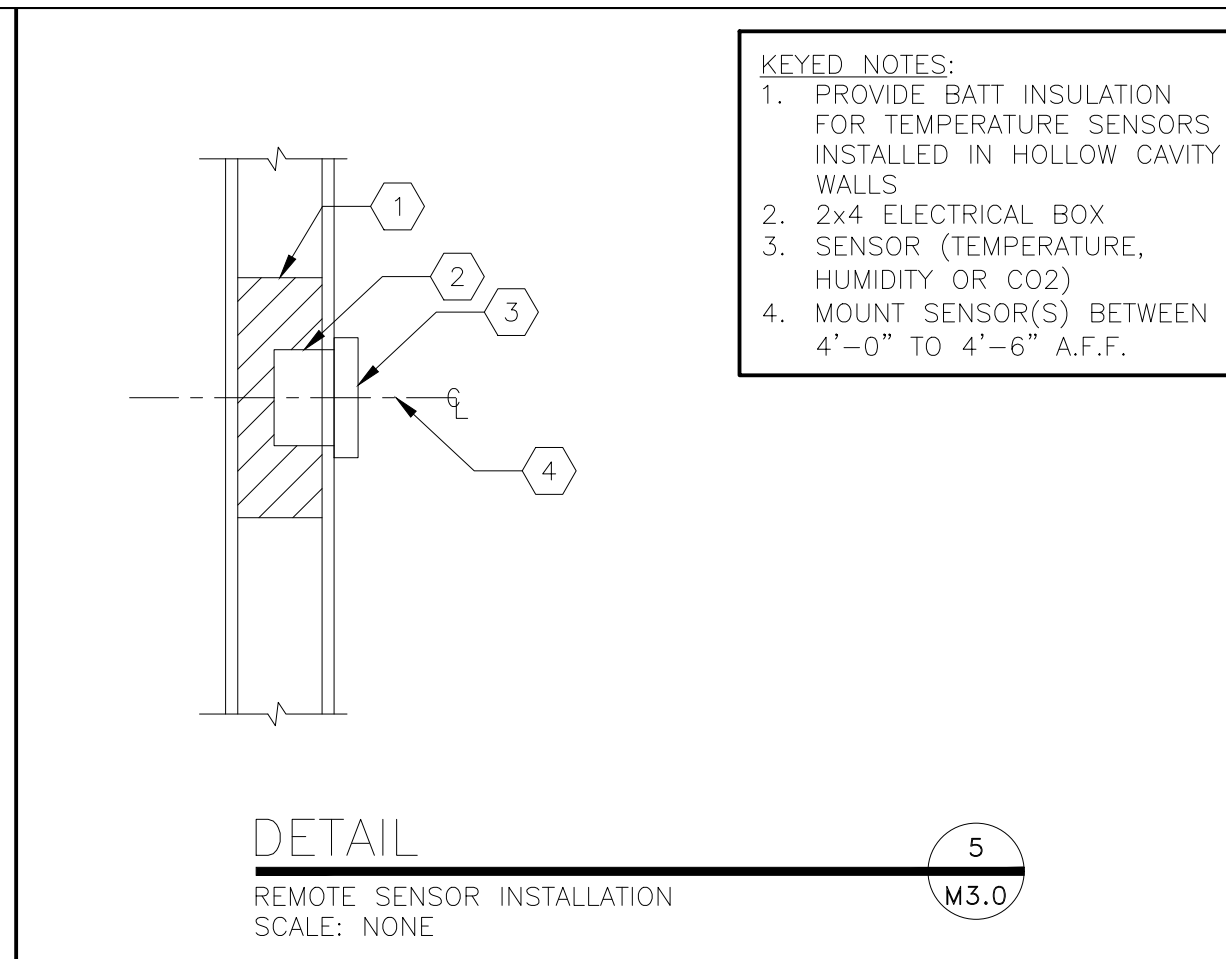
- KEYED NOTES:**
1. REFRIGERANT LIQUID LINE
 2. REFRIGERANT SUCTION LINE WITH 1" THICK EXTERNAL FOAM INSULATION (ARMAFLEX BY ARMACELL OR EQUAL)
 3. STAINLESS STEEL CLAMP
 4. APPLY WEATHERPROOFING OVER FOAM INSULATION (ALUMAGUARD BY POLYGUARD OR EQUAL)
 5. WRAP FOAM INSULATION OVER PIPE PORTAL NIPPLE AND STAINLESS STEEL CLAMP
 6. RESTART FOAM INSULATION IMMEDIATELY AFTER PIPE PORTAL PENETRATION
 7. INSULATE BOTTOM OF ROOF PORTAL CURB (MIN. R=19)
 8. PIPE HANGER
 9. LIGHT GAUGE GALVANIZED STEEL PROTECTIVE SHIELD

DETAIL 3
REFRIGERANT PIPE INSTALLATION
SCALE: NONE
M3.0



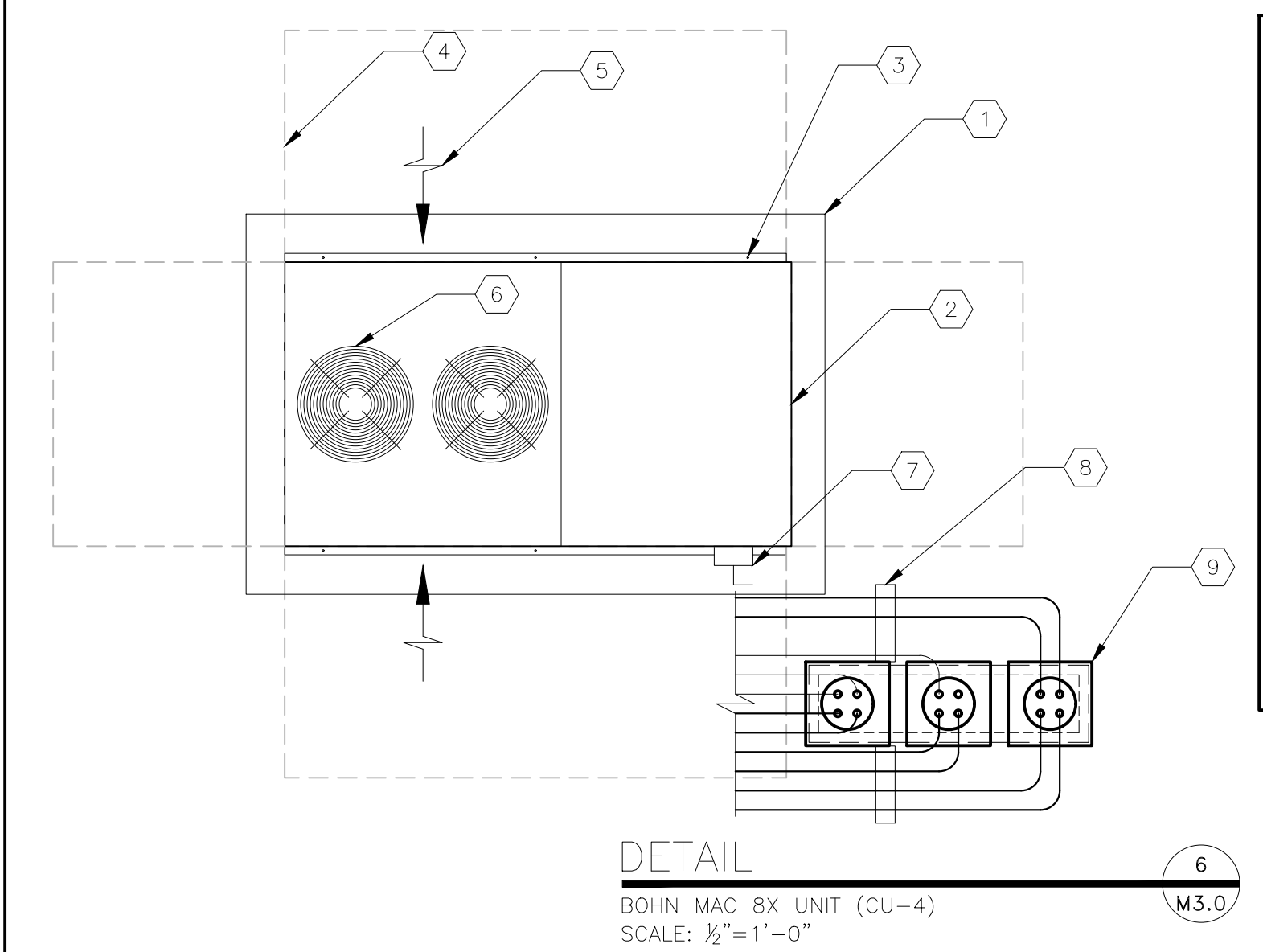
- KEYED NOTES:**
1. GAS PIPING
 2. SHUT-OFF VALVE
 3. PRESSURE REGULATOR (PROPERLY SIZED FOR APPLICATION)
 4. DIRT LEG
 5. ROOFTOP UNIT ENTRY
 6. UNION (TYP.)

DETAIL 4
GAS PIPE INSTALLATION
SCALE: NONE
M3.0



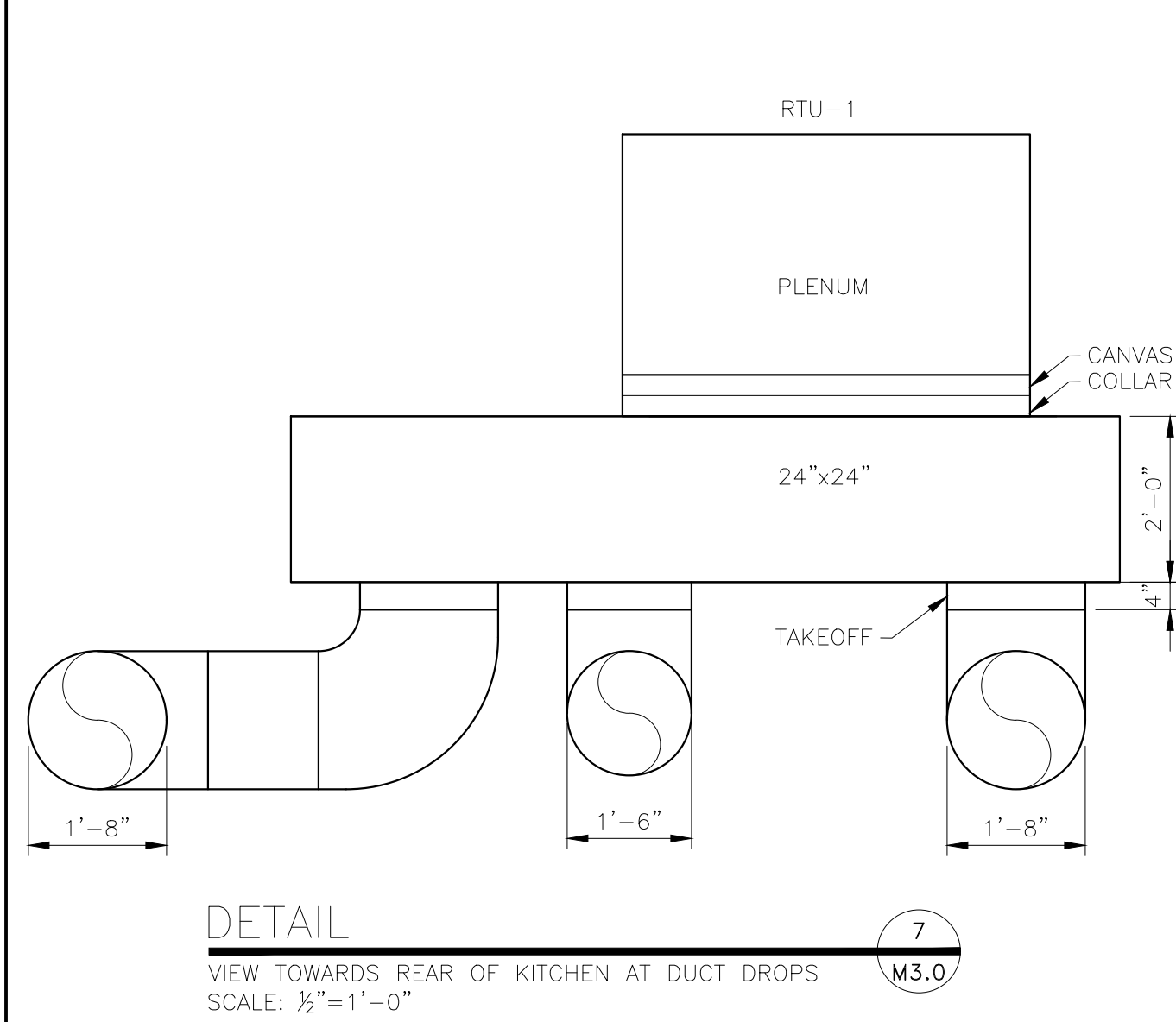
- KEYED NOTES:**
1. PROVIDE BATT INSULATION FOR TEMPERATURE SENSORS INSTALLED IN HOLLOW CAVITY WALLS
 2. 2x4 ELECTRICAL BOX
 3. SENSOR (TEMPERATURE, HUMIDITY OR CO2)
 4. MOUNT SENSOR(S) BETWEEN 4"-0" TO 4'-6" A.F.F.

DETAIL 5
REMOTE SENSOR INSTALLATION
SCALE: NONE
M3.0

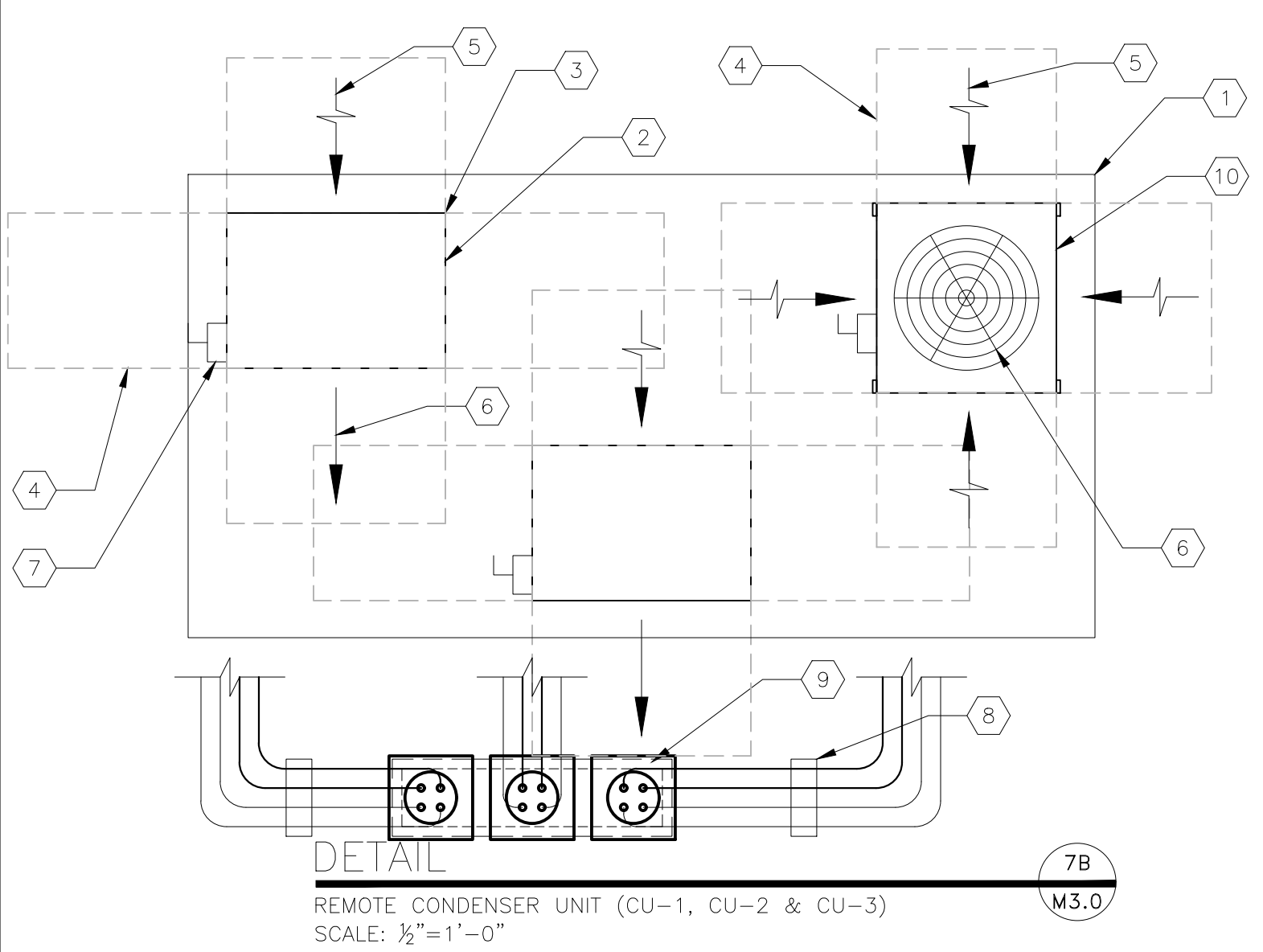


- KEYED NOTES:**
1. 90"x60"x14"H EQUIPMENT PLATFORM MANUFACTURED BY RPS OR EQUAL
 2. 6'-6 1/2"x3'-8 1/2"x2'-9 1/4"H CONDENSING UNIT
 3. FASTEN CONDENSING UNIT TO TOP OF PLATFORM AND SEAL FASTENER PENETRATIONS WITH UV RESISTANT SEALANT
 4. OUTLINE OF SERVICE CLEARANCE EXTENDING 3'-0" FROM CONDENSING UNIT ON ALL SIDES
 5. CONDENSER AIR INTAKE (BOTH SIDES)
 6. CONDENSER FAN OUTLETS ON TOP OF UNIT
 7. DISCONNECT SWITCH FURNISHED WITH UNIT
 8. PROVIDE PIPE SUPPORT AS REQUIRED (TREATED LUMBER IS NOT ACCEPTABLE)
 9. MULTIPLE PIPE PORTAL MANUFACTURED BY RPS OR EQUAL
- CONDUIT SIZES:**
- (1) 3/4" TO EVAPORATORS
(1) 3/4" WITH TWO (2) 8 CONDUCTOR LV CLASS II CABLES TO THE EVAPORATORS
(1) 3/4" TO ICE MACHINE
- REFRIGERANT PIPING SIZES:**
SEE MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR RECOMMENDED REFRIGERANT PIPE SIZING

DETAIL 6
BOHN MAC 8X UNIT (CU-4)
SCALE: 1/2"=1'-0"
M3.0

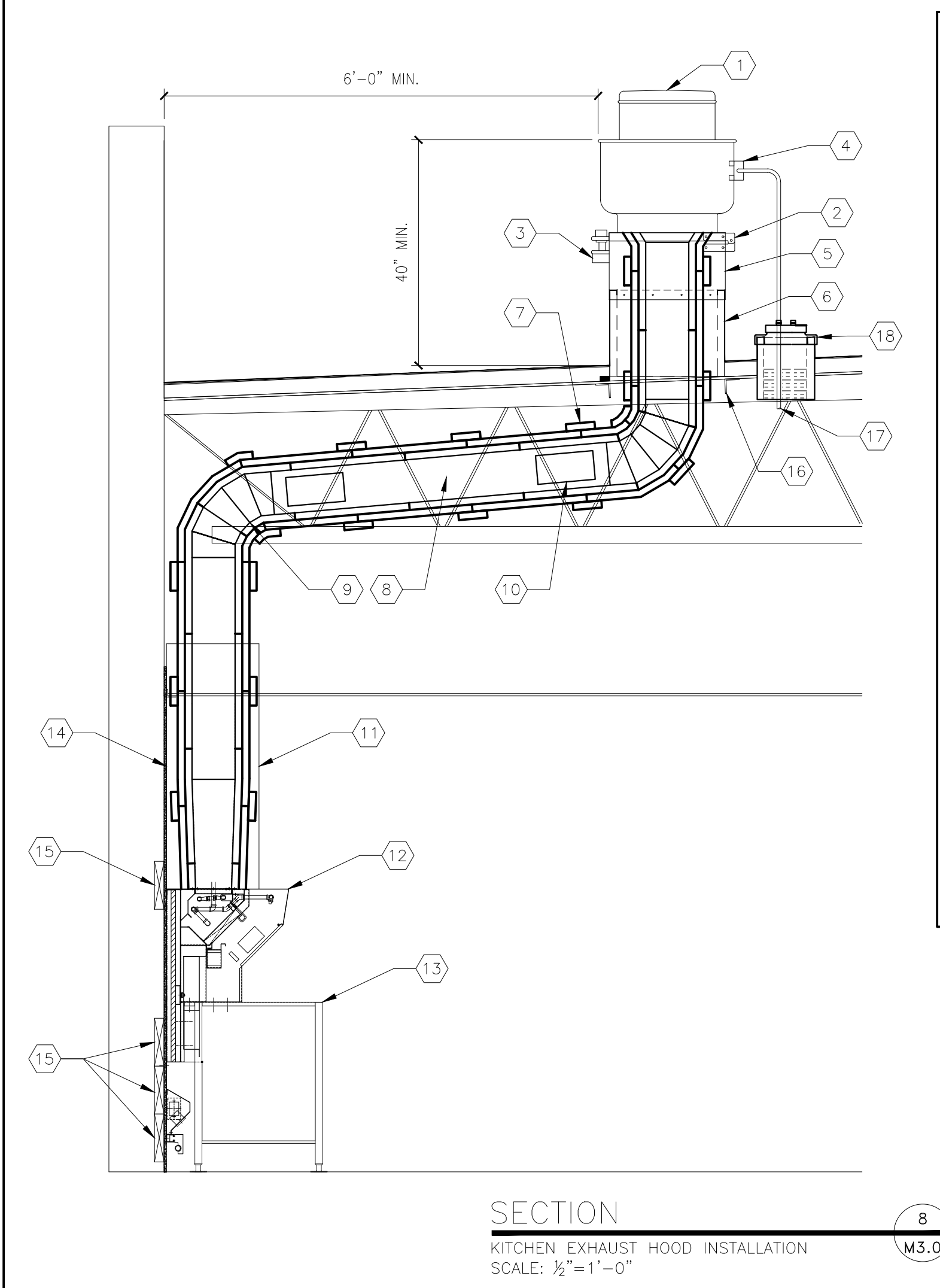


DETAIL 7
VIEW TOWARDS REAR OF KITCHEN AT DUCT DROPS
SCALE: 1/2"=1'-0"
M3.0



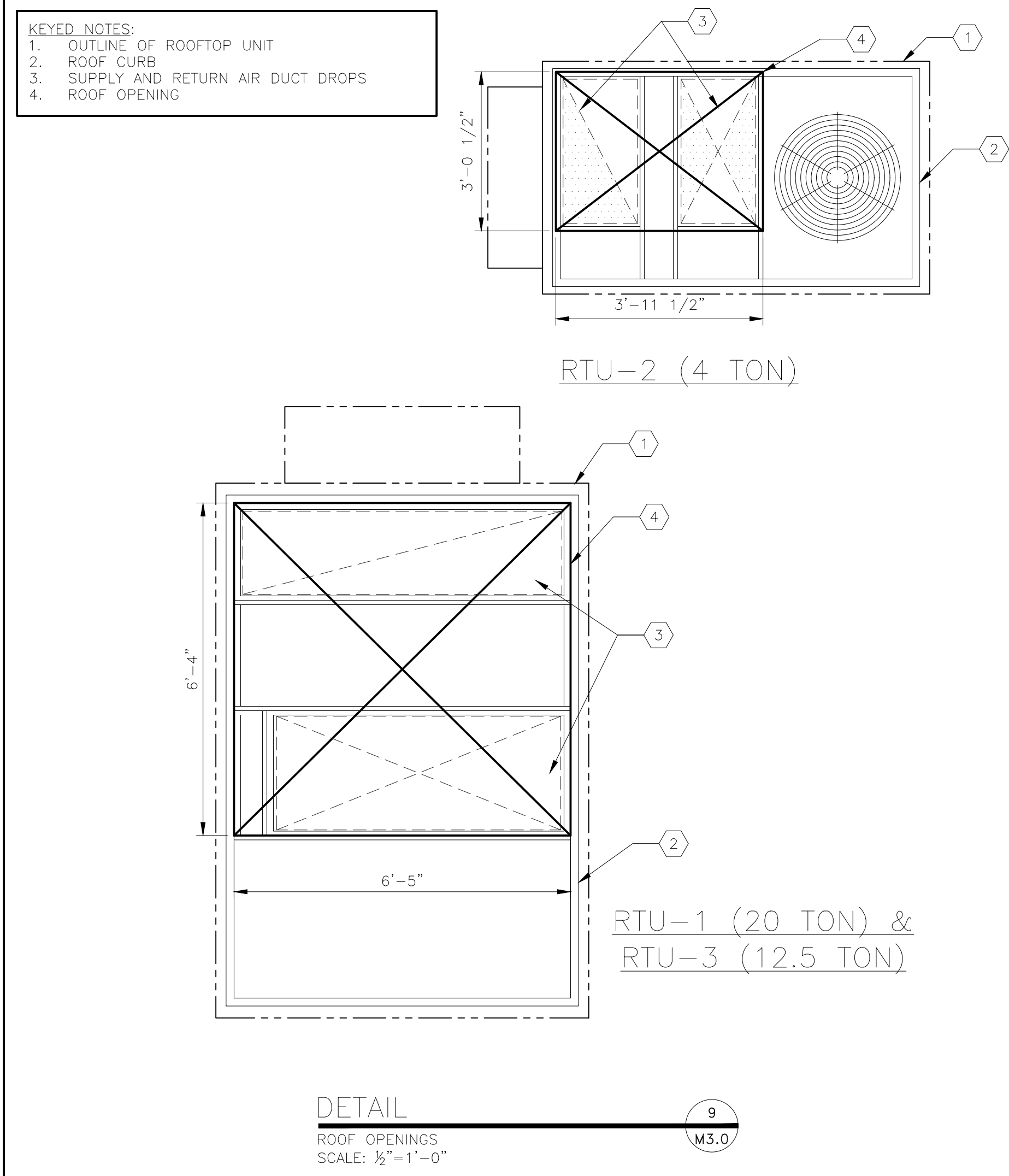
- KEYED NOTES:**
1. 14 1/2"x72"x14"H EQUIPMENT PLATFORM MANUFACTURED BY RPS OR EQUAL
 2. 34"x24 1/2"x25 3/4"H CONDENSING UNIT
 3. FASTEN CONDENSING UNIT TO TOP OF PLATFORM AND SEAL FASTENER PENETRATIONS WITH UV RESISTANT SEALANT
 4. OUTLINE OF SERVICE CLEARANCE EXTENDING FROM CONDENSING UNIT ON ALL SIDES
 5. CONDENSER AIR INTAKE
 6. CONDENSER FAN OUTLET
 7. DISCONNECT SWITCH PROVIDED BY ELECTRICAL CONTRACTOR
 8. PROVIDE PIPE SUPPORT AS NECESSARY (TREATED LUMBER IS NOT ACCEPTABLE)
 9. MULTIPLE PIPE PORTAL MANUFACTURED BY RPS OR EQUAL
 10. 29 1/2"x28"x38"H CONDENSING UNIT
- CONDUIT SIZES:** (PER CONDENSING UNIT)
(1) 3/4" POWER
(1) 3/4" CONTROL
- REFRIGERANT PIPING SIZES:** (PER CONDENSING UNIT)
ICE MACHINE - 1/2" LIQUID, 3/4" SUCTION (CU-3 CONDENSING UNIT)
ICE MACHINE - 3/8" LIQUID, 1/2" SUCTION

DETAIL 7B
REMOTE CONDENSER UNIT (CU-1, CU-2 & CU-3)
SCALE: 1/2"=1'-0"
M3.0



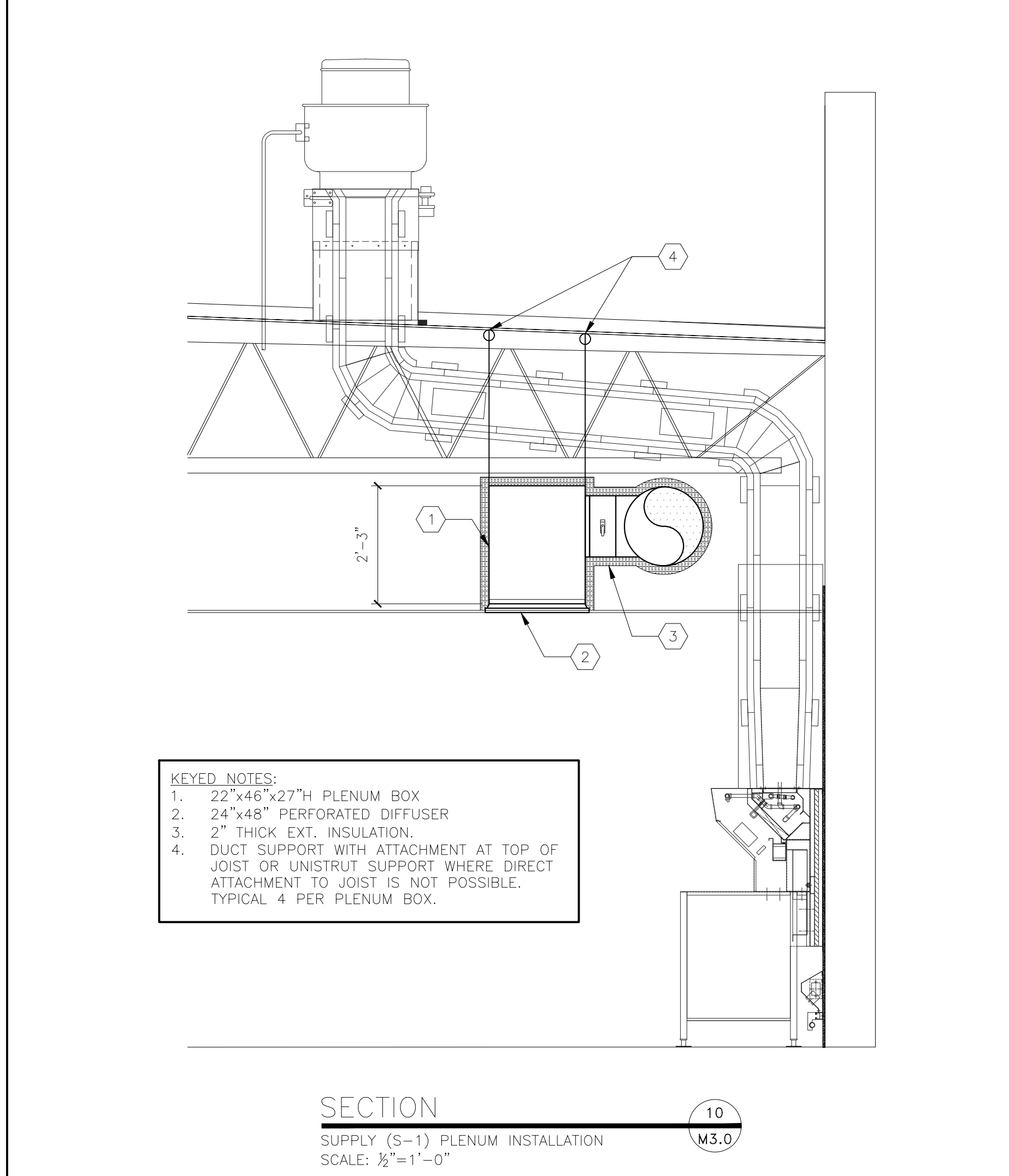
- KEYED NOTES:**
1. UPBLAST EXHAUST FAN (SEE EXHAUST FAN SCHEDULE)
 2. HINGED CURB CAP FOR CLEANING ACCESS (FURNISHED WITH FAN)
 3. GREASE TRAP (FURNISHED WITH FAN)
 4. NEMA 3R DISCONNECT SWITCH (FURNISHED WITH FAN)
 5. 12" HIGH CURB EXTENSION (FURNISHED WITH FAN)
 6. 18" HIGH CURB (FURNISHED WITH FAN)
 7. TWO (2) LAYERS OF 1/2" THICK DUCT WRAP TO MEET ASTM E2336 INSTALLED PER MANUFACTURER'S INSTRUCTIONS (SEE MECHANICAL NOTES FOR INSULATION SPECIFICATION)
 8. 16 GAUGE BLACK IRON (CARBON STEEL) OR 18 GAUGE STAINLESS STEEL DUCTWORK WELDED LIQUID-TIGHT
 9. 5-GORE BLACK IRON (CARBON STEEL) RADIUS ELBOW
 10. 12"x6" ACCESS DOOR AT ALL CHANGES IN DIRECTION
 11. STAINLESS STEEL FASCIA PANEL TO PROTECT DUCTWORK AND INSULATION
 12. BACKSHELF TYPE EXHAUST HOOD (SEE KITCHEN EXHAUST HOOD SCHEDULE)
 13. COOKING APPLIANCE (SEE KITCHEN DRAWINGS)
 14. REAR WALL CONSTRUCTION SHALL CONSIST OF CERAMIC TILE OR MIN. 22 GAUGE STAINLESS STEEL OVER 5/8" TYPE X GYPSUM BOARD OR 1/2" CEMENT BOARD FROM FLOOR TO CEILING AND EXTENDING 24" TO EACH SIDE OF THE HOOD INSTALLED ON NON-COMBUSTIBLE WALL (REFER TO SHEET A1.0 FOR MORE INFORMATION)
 15. 2x10 LIGHT GAUGE STEEL FOR SUPPORT BLOCKING FOR HOOD AND RACEWAY (COORDINATE INSTALLATION WITH HOOD INSTALLER)
 16. STRUCTURAL FRAMING FOR ROOF OPENING (SEE STRUCTURAL DRAWINGS)
 17. TRANSITION TO FLEXIBLE CONDUIT UNDER ROOF PENETRATION WHERE ALLOWED BY CODE.
 18. ROOF PIPE PORTAL, RPS-N18(1) RC-2A 12x12x11H.

SECTION 8
KITCHEN EXHAUST HOOD INSTALLATION
SCALE: 1/2"=1'-0"
M3.0



- KEYED NOTES:**
1. OUTLINE OF ROOFTOP UNIT
 2. ROOF CURB
 3. SUPPLY AND RETURN AIR DUCT DROPS
 4. ROOF OPENING

DETAIL 9
ROOF OPENINGS
SCALE: 1/2"=1'-0"
M3.0



- KEYED NOTES:**
1. 22"x46"x27"H PLENUM BOX
 2. 24"x48" PERFORATED DIFFUSER
 3. 2" THICK EXT. INSULATION
 4. DUCT SUPPORT WITH ATTACHMENT AT TOP OF JOIST OR UNISTRUT SUPPORT WHERE DIRECT ATTACHMENT TO JOIST IS NOT POSSIBLE. TYPICAL 4 PER PLENUM BOX.

SECTION 10
SUPPLY (S-1) PLENUM INSTALLATION
SCALE: 1/2"=1'-0"
M3.0

SHEET NO.	2022 STANDARD BUILDING - BB20		TITLE	4597 - WOOD/WOOD		DATE	2022-10		DRAWN BY	TP		REV	1		BY	DESCRIPTION	
	DESCRIPTION			WOOD BEARING WALLS W/HARDBOARD SIDING			WOOD ROOF TRUSS FRAMING			E.L.F.S./BATTEN/HARDBOARD SIDING EXTERIOR FINISH			SITE ADDRESS			3720 W. Sunshine	
PREPARED FOR:		McDonald's USA, LLC		© 2022 McDonald's USA, LLC		REVIEWED BY		DAVID M LEFFER		DATE ISSUED		10-04-2022		SITE ADDRESS		3720 W. Sunshine	
PREPARED BY:		DAVID MICAL LEFFER		PROFESSIONAL ENGINEER		LICENSE NUMBER		PE-20181214		EXPIRES		03-14-2023		REV		DATE	
GROUP		CORE STATES		GROUP		210 E. Main Street, Suite 1		Memphis, TN 38103		www.corestates.com							
SHEET NO.		M3.0		DETAILS		924-1290.00.0											

MECHANICAL NOTES

GENERAL:

- ALL WORK PERFORMED SHALL BE IN ACCORDANCE WITH ALL LOCAL CODES AND ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION.
- ALL DIMENSIONS, CLEARANCES AND TOLERANCES SHALL BE VERIFIED PRIOR TO INSTALLATION.
- ALL MATERIALS, FIXTURES AND EQUIPMENT USED SHALL BE IN ACCORDANCE WITH McDONALD'S SPECIFICATIONS. SPECIFICATIONS ARE CONTAINED WITHIN THESE DRAWINGS AND THE McDONALD'S PROJECT MANUAL. ANY CONTRACTOR IN NEED OF A COPY OF THE McDONALD'S PROJECT MANUAL SHALL CONTACT THE McDONALD'S AREA CONSTRUCTION MANAGER. ANY VARIANCE FROM THE McDONALD'S SPECIFICATIONS SHALL BE REVIEWED AND APPROVED BY THE ENGINEER-OF-RECORD.
- ALL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH ITS LISTING AND/OR THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- SEE COORDINATION SCHEDULE FOR ADDITIONAL SCOPE OF WORK.
- PRIOR TO BUILDING TURNOVER, A COMPLETE START-UP, TEST, ADJUST AND BALANCE SHALL BE PERFORMED ON ALL MECHANICAL SYSTEMS. THIS WORK SHALL BE PERFORMED BY A CERTIFIED TEST AND BALANCE CONTRACTOR. A CERTIFIED TEST AND BALANCE CONTRACTOR CAN BE FOUND BY VISITING:
[HTTP://WWW.AABCHO.COM/DIRECTORY](http://www.aabcho.com/directory)
[HTTP://WWW.NEBB.ORG/DIRECTORY.HTM](http://www.nebb.org/directory.htm)
[HTTP://WWW.TABCCERTIFIED.ORG/SITE/CONTENT/CONTRACTORS/SEARCH](http://www.tabccertified.org/site/content/contractors/search)
- UPON COMPLETION OF THE PUNCHLIST, THE MECHANICAL CONTRACTOR AND TEST AND BALANCE CONTRACTOR SHALL SUBMIT REDLINED OR AS-BUILT DRAWINGS ALONG WITH THE TEST AND BALANCE REPORT AND ALL EQUIPMENT OPERATION AND MAINTENANCE MANUALS TO THE McDONALD'S AREA CONSTRUCTION MANAGER. A MINIMUM OF TWO (2) COPIES SHALL BE PROVIDED, ONE (1) FOR REGIONAL RECORDS AND ONE (1) FOR THE RESTAURANT.
- ALL PENETRATIONS OF FIRE-RATED WALLS SHALL BE FIRESTOPPED WITH AN APPROVED AND LISTED FIRESTOPPING SYSTEM.

VENTILATION SYSTEMS:

- ALL SHEET METAL DUCTWORK SHALL BE FABRICATED AND INSTALLED IN ACCORDANCE WITH LOCAL CODES AND SMACNA STANDARDS.
- ALL DUCTWORK DIMENSIONS ARE INTERNAL FREE AREA DIMENSIONS AND SIZED FOR 0.1" W.C. PER 100 FT. OF DUCT.
- ALL SHEET METAL DUCTWORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH SMACNA TABLES FOR 2" W.C. AND SHALL BE SUPPORTED WITH AN APPROVED HANGER AT INTERVALS NOT EXCEEDING 10 FT.
- ALL DUCT DROPS INTO THE BUILDING SHALL BE INSTALLED WITH FLEXIBLE CONNECTIONS TO ISOLATE THE DUCTWORK SYSTEM FROM NOISE AND VIBRATION. FLEXIBLE CONNECTIONS SHALL BE TESTED IN ACCORDANCE WITH UL 181 AND LISTED AS CLASS 0 OR CLASS 1.
- ALL DUCT DROPS INTO THE BUILDING SHALL BE OFFSET AS NECESSARY TO ALLOW FOR THE CLEAR INSTALLATION OF THE EXTERNAL DUCTWORK INSULATION.
- ALL DUCTWORK BRANCHES SHALL BE SUPPLIED WITH A VOLUME DAMPER FOR BALANCING. VOLUME DAMPER SHALL HAVE A 2" OFFSET TO ACCOMMODATE EXTERNAL INSULATION.
- TAKE-OFFS FROM RECTANGULAR TO ROUND DUCT SHALL BE DUCTMATE STRAIGHT-SIDED OR CENTER HIGH-EFFICIENCY TAKE-OFFS WITH A 2" DAMPER STAND-OFF TO ACCOMMODATE FOR EXTERNAL INSULATION.
- ALL DUCTWORK JOINTS, LONGITUDINAL AND TRANSVERSE SEAMS SHALL BE SEALED WITH WELDS, GASKETS, MASTICS (ADHESIVES), TAPES, ETC. ALL SEALANT MATERIALS SHALL BE LISTED IN ACCORDANCE WITH UL 181A OR 181B.
- ALL SUPPLY AND RETURN SHEET METAL DUCTWORK LOCATED WITHIN THE CEILING SPACE SHALL BE EXTERNALLY INSULATED. INSULATION SHALL BE 2" THICK MICROLITE XG-100 BY JOHNS MANVILLE OR EQUAL.
- ALL SUPPLY AND RETURN SHEET METAL DUCTWORK LOCATED OUTSIDE OF THE BUILDING SHALL BE INTERNALLY LINED WITH A 1" THICK FIBERGLASS (MIN. R-4.2) AND EXTERNALLY INSULATED WITH A 2" THICK RIGID POLYSTYRENE, POLYURETHANE OR POLYISOCYANURATE BOARD (MIN. R-8 FOR CLIMATE ZONES 1 THROUGH 4), OR A 3" THICK (MIN R-12 FOR CLIMATE ZONES 5 THROUGH 8). INTERNAL FIBERGLASS INSULATION SHALL BE LINATEX BY JOHNS MANVILLE OR EQUAL. EXTERNAL RIGID BOARD INSULATION SHALL BE THERMAPINK BY OWENS CORNING OR EQUAL.
- ALL EXPOSED SPIRAL DUCTWORK SHALL BE INTERNALLY INSULATED TO PREVENT CONDENSATION (MIN. R-4.3). INTERNAL INSULATION SHALL BE 1" THICK SPIRACOUSTIC PLUS BY JOHNS MANVILLE OR EQUAL.
- ALL DUCTWORK PENETRATIONS THROUGH FIRE-RATED WALLS, BARRIERS OR PARTITIONS SHALL BE PROTECTED WITH A FIRE DAMPER. THE PERIMETER OF THE FIRE DAMPER SHALL BE FIRESTOPPED WITH AN APPROVED AND LISTED FIRESTOPPING MATERIAL.
- ALL EXTERIOR SHEET METAL DUCTWORK SHALL BE EXTERNALLY WRAPPED WITH AN APPROVED WEATHERPROOFING MATERIAL TO PROTECT AGAINST WATER PENETRATION AND CORROSION. SIDES AND TOP OF EXTERNAL WEATHERPROOFING SHALL BE ALUMAGUARD 60 MIL UV BARRIER BY POLYGUARD OR EQUAL. BOTTOM OF EXTERNAL WEATHERPROOFING SHALL BE VAPORGUARD 5 MIL MEMBRANE BY POLYGUARD OR EQUAL.
- ALL FLEXIBLE DUCTWORK, METALLIC AND NONMETALLIC, SHALL CONFORM TO THE FOLLOWING:
 - 2" THICK INSULATION (R-6.0)
 - INTEGRAL VAPOR BARRIER
 - LISTED AND LABELED UL 181, CLASS 0 OR CLASS 1
 - INSTALLED IN ACCORDANCE WITH:
 - SMACNA STANDARDS,
 - AIR DIFFUSION COUNCIL INSTALLATION GUIDELINES, AND/OR
 - MANUFACTURER'S INSTALLATION INSTRUCTIONS
- FLEXIBLE DUCTWORK SHALL NOT PENETRATE WALLS. SHEET METAL DUCTWORK IS REQUIRED AT ALL FIRE-RATED AND DRAFTSTOP WALL PENETRATIONS.
- ALL COVERINGS, LININGS AND ADHESIVES (TAPES, ETC.) SHALL HAVE A FLAME-SPREAD INDEX NOT GREATER THAN 25 AND A SMOKE-DEVELOPED INDEX NOT GREATER THAN 50.
- DUCT-MOUNTED SMOKE DETECTORS SHALL BE INSTALLED IN SYSTEMS WITH DESIGN CAPACITY GREATER THAN 2,000 CFM. SEE MECHANICAL DRAWINGS FOR LOCATIONS OF SMOKE DETECTORS. DUCT-MOUNTED SMOKE DETECTORS ARE NOT REQUIRED WHEN THE BUILDING IS PROTECTED THROUGHOUT BY AREA SMOKE DETECTORS CONNECTED TO A FIRE ALARM SYSTEM WHERE THE FIRE ALARM SYSTEM IS DESIGNED TO SHUT DOWN THE ROOFTOP UNITS.
- ALL SUPPLY AIR DIFFUSERS SHALL BE INSULATED TO PREVENT CONDENSATION.
- ALL AIR DEVICES LOCATED IN DRYWALL CEILINGS SHALL BE SUPPLIED WITH AN INTEGRAL VOLUME DAMPER ACCESSIBLE FROM THE AIR DEVICE FACE TO FACILITATE BALANCING.
- ALL OUTDOOR AIR INTAKES SHALL BE LOCATED A MINIMUM OF 10 FT. HORIZONTALLY FROM ANY SOURCE OF CONTAMINATION SUCH AS EXHAUST FANS, PLUMBING VENTS, WATER HEATER FLUES, ETC. WHERE A CONTAMINANT SOURCE IS LOCATED WITHIN 10 FT. OF AN INTAKE, THE INTAKE OPENING SHALL BE LOCATED A MINIMUM OF 2 FT. BELOW THE CONTAMINANT SOURCE.

- ALL ROOFTOP CONDENSING UNITS THAT DISCHARGE HORIZONTALLY SHALL BE ORIENTED SUCH THAT THE DISCHARGE DOES NOT BLOW IN THE DIRECTION OF AN OUTDOOR AIR INTAKE.

COMMERCIAL KITCHEN EXHAUST SYSTEMS:

- ALL METAL DUCTWORK USED FOR THE CONVEYANCE OF GREASE-LADEN AIR SHALL BE CONSTRUCTED OF MINIMUM 18 GAUGE STAINLESS STEEL OR 16 GAUGE CARBON STEEL (BLACK IRON).
- ALL GREASE EXHAUST DUCTWORK JOINTS SHALL BE EITHER TELESCOPING OR BELL TYPE. BUTT-WELDED JOINTS ARE PROHIBITED.
- ALL GREASE EXHAUST DUCTWORK SEAMS AND JOINTS SHALL BE CONTINUOUSLY WELDED WATER-TIGHT ON THE EXTERNAL SURFACE OF THE DUCT SYSTEM. ALL WELDING SHALL BE PERFORMED BY A CERTIFIED WELDER.
- ALL GREASE EXHAUST DUCTWORK SHALL BE EXTERNALLY INSULATED WITH A ASTM E2336 LISTED AND LABELED GREASE DUCT ENCLOSURE SYSTEM. INSULATION SHALL BE INSTALLED IN ACCORDANCE WITH ITS LISTING AND THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- ACCESS PANELS SHALL BE PROVIDED AT ALL CHANGES IN DIRECTION OF THE GREASE EXHAUST DUCTWORK SYSTEM. ACCESS PANELS SHALL BE INSTALLED IN ACCORDANCE WITH THE INSULATION MANUFACTURER'S INSTALLATION INSTRUCTIONS AND SHALL BE LABELED AS FOLLOWS: "ACCESS PANEL - DO NOT OBSTRUCT".
- ALL HORIZONTAL GREASE EXHAUST DUCTWORK SHALL BE INSTALLED WITH A MINIMUM 1/4" PER FOOT SLOPE AND SHALL BE PITCHED BACK TOWARD THE HOOD.
- UPBLAST KITCHEN EXHAUST FANS SHALL BE LOCATED A MINIMUM OF 6 FT. FROM ANY PARAPET WALL OR ADJACENT STRUCTURE AND SHALL TERMINATE A MINIMUM OF 40 INCHES ABOVE THE FINISHED ROOFING MATERIAL.

REFRIGERANT PIPING:

- ALL REFRIGERATION WORK SHALL BE PERFORMED BY A CERTIFIED REFRIGERATION CONTRACTOR.
- ALL REFRIGERANT PIPING SHALL BE SEAMLESS COPPER TUBING OF TYPE L IN ACCORDANCE WITH ASTM B 88 AND ALL JOINTS SHALL BE SOLDERED.
- ALL REFRIGERANT SUCTION LINES SHALL BE INSULATED WITH A MINIMUM 1" FOAM PIPE INSULATION. PIPE INSULATION INSTALLED OUTDOORS SHALL BE PROTECTED WITH AN APPROVED WEATHERPROOFING MATERIAL.
- ALL SUSPENDED REFRIGERANT PIPING SHALL BE SUPPORTED AS FOLLOWS:

MATERIAL	MAX. HORIZ. SPACING	MAX. VERT. SPACING
COPPER TUBING ≤ 1 1/4"	6 FT.	10 FT.
COPPER TUBING ≥ 1 1/2"	10 FT.	10 FT.
- ALL REFRIGERANT PIPING SHALL BE SIZED PER EQUIPMENT MANUFACTURER'S RECOMMENDATIONS.
- PRE-CHARGED LINESETS ARE NOT PERMITTED AS LINES WILL MOST LIKELY NEED TO BE CUT TO FIT THE APPLICATION AND REFRIGERANT WILL NEED TO BE RECLAIMED.
- ALL PIPE INSULATION SHALL BE PROTECTED FROM DAMAGE FROM PIPE HANGERS. PROTECTION SHALL BE LIGHT GAUGE GALVANIZED STEEL OR EQUAL.
- ALL REFRIGERANT PIPING SYSTEMS SHALL BE PRESSURE TESTED FOR LEAKS PRIOR TO START-UP. ALL LEAKS SHALL BE REMEDIATED PRIOR TO BUILDING TURNOVER.

CO2 DETECTION EQUIPMENT:

- THE CO2 DETECTOR SHALL BE HARD-WIRED TO PREVENT TAMPERING AND SHALL BE INSTALLED AT 12" A.F.F. WITHIN A 5 FT. RADIUS OF THE CO2 STORAGE TANKS.
- ONE (1) AUDIBLE AND ONE (1) VISUAL ALARM SHALL BE INSTALLED A MINIMUM OF 7 FT. A.F.F., IN PLAIN SIGHT IN THE SAME ROOM AS THE CO2 STORAGE TANKS.
- ONE (1) AUDIBLE AND ONE (1) VISUAL ALARM SHALL BE INSTALLED A MINIMUM OF 7 FT. A.F.F., AT THE BACK OF THE KITCHEN AND IN PLAIN SIGHT FROM THE MAIN SIDE OF THE PREP LINE.
- THE CO2 EXTERIOR STROBE SHALL BE INSTALLED AS SHOWN ON SHEET A2.0, (DETAIL 2) AND ON SHEET E1.1. THE INSIDE AUDIBLE AND VISUAL ALARM SHALL BE INSTALLED INSIDE THE CO2 CLOSET, AND IN THE SUPPORT/BACK-OF-THE HOUSE LOCATION AS SHOWN ON SHEETS E1.1 AND E3.0.

NATURAL GAS SYSTEMS (IF APPLICABLE):

- ALL GAS PIPING, WATER HEATER VENTS, INTAKES AND FLUES SHALL CONFORM TO THE CURRENT VERSION OF NFPA 54, NATIONAL FUEL GAS CODE, AND ANY LOCAL CODE REQUIREMENTS.
- THE NATURAL GAS MAIN PIPE SIZING IS BASED ON THE FOLLOWING:
 - MINIMUM SUPPLY PRESSURE AT THE METER OF 2 PSIG
 - 1 PSIG PRESSURE DROP FROM METER TO FARTHEST APPLIANCE
 - 1,000 BTU PER CU. FT. OF NATURAL GAS
- GAS PIPING RUN-OUTS TO EQUIPMENT ARE SIZED BASED ON THE FOLLOWING:
 - SUPPLY PRESSURE AT THE REGULATOR OF 10" W.C. (1/2 PSIG)
 - 0.5" W.C. PRESSURE DROP FROM REGULATOR TO FARTHEST APPLIANCE
 - 1,000 BTU PER CU. FT. OF NATURAL GAS
- ALL NATURAL GAS PIPE SHALL BE SCHEDULE 40 CARBON STEEL PIPE WITH MALLEABLE IRON FITTINGS AND SHALL BE COMPLY TO ONE OF THE FOLLOWING STANDARDS: ASME B36.10, 10M; ASTM A 53; OR ASTM A 106.
- NATURAL GAS PRESSURE REGULATORS SHALL BE MAXITROL 325 SERIES OR EQUAL.
- ALL SUSPENDED STEEL PIPING SHALL BE SUPPORTED AS FOLLOWS:

SIZE	MAX. HORIZ. SPACING	MAX. VERT. SPACING
1/2"	6 FT.	6 FT.
3/4" TO 1"	8 FT.	8 FT.
≥ 1 1/4"	10 FT.	10 FT.
- GAS PIPING SHALL NOT PENETRATE ANY FIRE-RATED CHASE OR SHAFT, DUCTWORK OR PLENUM.
- ALL NATURAL GAS PIPING INSTALLED OUTDOORS SHALL BE COATED WITH A CORROSION RESISTANT PAINT. PAINT COLOR SHALL BE ORANGE OR YELLOW.
- ALL INTAKE AND VENT PIPING FOR SEALED-COMBUSTION WATER HEATERS SHALL BE PVC OR ABS, SHALL BE SIZED AND INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND SHALL BE INSTALLED BY THE PLUMBING CONTRACTOR.
- ALL WATER HEATER VENTS SHALL BE LOCATED A MINIMUM OF 10 FT. HORIZONTALLY FROM ANY OUTDOOR AIR INTAKE. WHERE A WATER HEATER VENT IS LOCATED WITHIN 10 FT. OF AN INTAKE, THE FLUE OR VENT SHALL TERMINATE A MINIMUM OF 2 FT. ABOVE THE INTAKE.
- UPON COMPLETION OF INSTALLATION, THE GAS PIPING SYSTEM SHALL BE PURGED OF DELETERIOUS MATERIAL AND SHALL BE PRESSURE TESTED. PRESSURE TESTING SHALL BE PERFORMED WITH THE EQUIPMENT SHUT-OFF

VALVES IN THE CLOSED POSITION TO PROTECT EQUIPMENT FROM DAMAGE DUE TO EXCESSIVE PRESSURE.

- AFTER THE PRESSURE TEST HAS BEEN COMPLETED AND ANY LEAKS REMEDIATED, THE INSTALLING CONTRACTOR SHALL MEASURE AND VERIFY THE FOLLOWING GAS PRESSURES WHILE EQUIPMENT IS IN OPERATION:
 - GRILL - 6" W.C. NATURAL, 14" W.C. L.P.
 - FRYER - 6" W.C. NATURAL, 14" W.C. L.P.
 - WATER HEATER - 6" W.C. NATURAL, 14" W.C. L.P.
 - HVAC UNIT - 6" W.C. NATURAL, 14" W.C. L.P.
- IF THE MINIMUM PRESSURES ARE NOT MET, THIS SHALL BE IMMEDIATELY REPORTED TO THE McDONALD'S AREA CONSTRUCTION MANAGER.








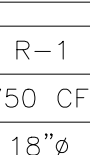
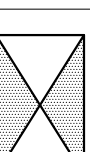










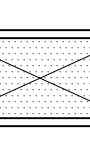

CONDENSATE PIPING:

- CONDENSATE PIPING SHALL BE GALVANIZED STEEL, COPPER OR PVC.
- PVC PIPE SHALL BE PAINTED WITH WATER BASED LATEX PAINTING TO RESIST DEGRADATION FROM ULTRAVIOLET EXPOSURE.
- PIPE SUPPORTS SHALL BE RPS MODEL PMP-2 OR EQUAL. QUANTITY AS REQUIRED DEPENDANT UPON PIPING MATERIAL.
- PIPING SHALL BE SUPPORTED AS FOLLOWS:

MATERIAL	MAX. HORIZ. SPACING	MAX. VERT. SPACING
COPPER PIPE	12 FT.	10 FT.
GALVANIZED STEEL	12 FT.	15 FT.
PVC	4 FT.	15 FT.
- CONDENSATE PIPING SHALL SLOPE A MINIMUM OF 1/8" PER FOOT.
- CONDENSATE PIPING SHALL BE SIZED BASED ON THE FOLLOWING:

TOTAL TONS SERVED BY PIPE	MINIMUM PIPE SIZE
<20 TONS	3/4"
>20 TONS, <40 TONS	1"
>40 TONS, <125 TONS	1 1/2"

LEGEND

	TEMPERATURE SENSOR
	AVERAGING TEMPERATURE SENSOR
	CO2 SENSOR FOR ROOFTOP UNIT DEMAND CONTROL VENTILATION
	HUMIDITY SENSOR
	THERMOSTAT
	SMOKE DETECTOR
	EQUIPMENT TAG
	<u>DIFFUSER INFORMATION</u> LINE 1: TAG LINE 2: AIRFLOW LINE 3: NECK SIZE
	SUPPLY AIR DUCT (VERTICAL)
	RETURN OR EXHAUST AIR DUCT (VERTICAL)
	ROUND DUCT (VERTICAL)
	STEADY-STATE SPEED CONTROLLER
	PLAQUE DIFFUSER (SHADED AREA DESIGNATES BLANK-OFF PANEL LOCATION)
	LINEAR SLOT DIFFUSER
	LOUVERED FACE DIFFUSER
	CEILING-MOUNTED EXHAUST FAN
	SPIN-IN COLLAR WITH VOLUME DAMPER
	VOLUME DAMPER
	FLEXIBLE DUCTWORK
	PERFORATED FACE DIFFUSER
	SHEET METAL TEE WITH CAP

ABBREVIATIONS

ACM	AREA CONSTRUCTION MANAGER
B.J.	BELOW JOISTS
BSI	BEVERAGE SYSTEM INSTALLER
DCV	DEMAND CONTROL VENTILATION
E.A.	EXHAUST AIR
EC	ELECTRICAL CONTRACTOR
FAC	FIRE ALARM CONTRACTOR
FOB	FLAT ON BOTTOM
FOT	FLAT ON TOP
FPC	FIRE PROTECTION CONTRACTOR
GC	GENERAL CONTRACTOR
I.D.	INSIDE DIMENSION
KEI	KITCHEN EQUIPMENT INSTALLER
KES	KITCHEN EQUIPMENT SUPPLIER
M.A. (S)	MIXED AIR - SUMMER
M.A. (W)	MIXED AIR - WINTER
MC	MECHANICAL CONTRACTOR
O.A.	OUTDOOR AIR
O.D.	OUTSIDE DIMENSION
O/O	OWNER/OPERATOR
PC	PLUMBING CONTRACTOR
R.A.	RETURN AIR
RC	REFRIGERATION CONTRACTOR
S.A.	SUPPLY AIR
S.P.	STATIC PRESSURE
MC	TEST AND BALANCE CONTRACTOR

TITLE: 2022 STANDARD BUILDING - BB20

DESCRIPTION: WOOD BEARING WALLS W/HARDBOARD SIDING, WOOD ROOF TRUSS FRAMING, E.L.F.S./BATTEN/HARDBOARD SIDING EXTERIOR FINISH

SHEET NO: M4.0 GENERAL NOTES


DATE: 10/04/2022

REVIEWED BY: DAVID M LEFFER

DATE ISSUED: 10/04/2022


PREPARED BY: MCDONALD'S USA, LLC

DATE: 10/04/2022




© 2022 McDonald's USA, LLC

These drawings and specifications are the confidential and proprietary property of McDonald's USA, LLC and shall not be copied or reproduced without written authorization. The contract documents were prepared in accordance with the contract documents and shall not be used for any other project without the written consent of McDonald's USA, LLC. Use of these drawings for reference or example on another project requires the approval of McDonald's USA, LLC. The contract documents for reuse on another project is not authorized.



PREPARED BY: CORE STATES GROUP

310 S. Main Street, Suite 106
Baltimore, MD 21201
www.corestates.com



STATE OF MARYLAND
DAVID MICHAEL LEFFER
NUMBER PE-20181214
EXPIRES 03-14-2023

DRAWN BY: TP

STD ISSUE DATE: 2022-10

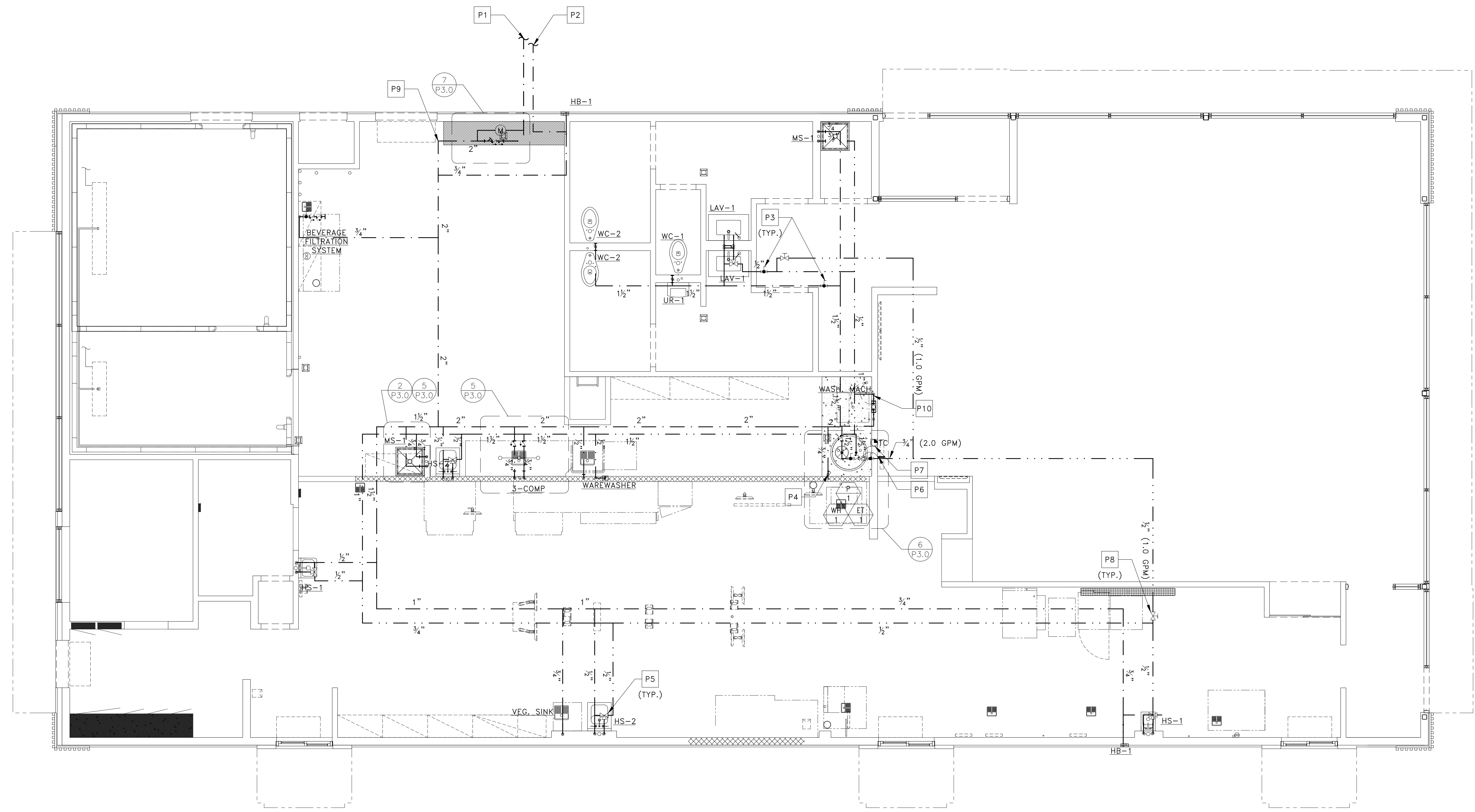
REVISED BY: DAVID M LEFFER

DATE ISSUED: 10/04/2022

SITE ADDRESS: 3720 W. Sunshine

Springfield, MO

024-1290.00.0



1
P1.0 DOMESTIC WATER PIPING
 SCALE: 1/4" = 1'-0"

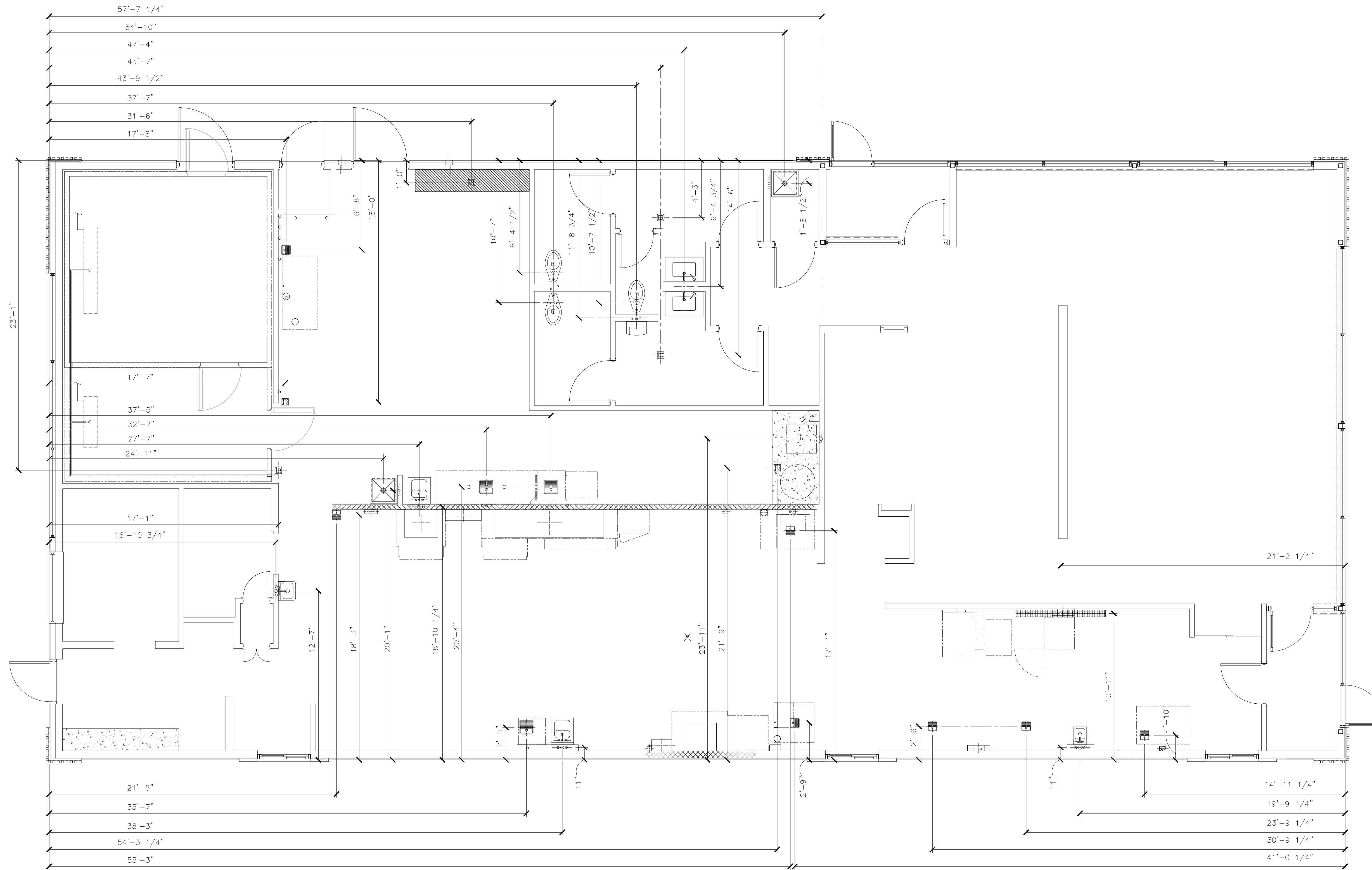
DRAWING NOTES

1. PIPING ROUTES AS SHOWN ARE GENERAL AND MAY VARY DUE TO FIELD CONDITIONS. COORDINATE ALL PIPE ROUTES WITH OTHER TRADES.
2. ALL WATER DISTRIBUTION PIPING SHALL BE INSULATED. INSULATION NOT SHOWN FOR CLARITY. SEE PLUMBING NOTES FOR INSULATION REQUIREMENTS.

KEYED NOTES

- P1** INCOMING UNDERGROUND WATER SERVICE (SEE SITE PLAN FOR CONTINUATION). WATER PIPING FROM THIS POINT TO CEILING PENETRATION INSIDE BUILDING SHALL BE COPPER.
- P2** COLD WATER UNDERGROUND TO YARD HYDRANT (HB-2) IN TRASH CORRAL. SEE SITE PLAN FOR CONTINUATION.
- P3** SHUT-OFF VALVE FOR RESTROOM ISOLATION. SEE VALVE SCHEDULE. ALL SHUT-OFF VALVES SHALL BE LOCATED OVER SUSPENDED CEILINGS FOR ACCESSIBILITY. DO NOT LOCATE IN AREAS WITH DRYWALL CEILINGS.
- P4** 3/4" COLD WATER UP TO ROOF HYDRANT.
- P5** MIXING VALVE LOCATIONS SHOWN FOR INFORMATIONAL PURPOSES. SEE DETAIL 3 ON DRAWING P3.0 FOR MIXING VALVE INSTALLATION DETAILS.
- P6** PIPE-MOUNTED AQUASTAT TO SHUT PUMP DOWN WHEN RECIRCULATION TEMPERATURE REACHES 140°F. SEE DETAIL 6 ON DRAWING P3.0.
- P7** TIME CLOCK TO SHUT PUMP AND WATER HEATER DOWN DURING UNOCCUPIED HOURS. SEE ELECTRICAL DRAWINGS FOR WIRING DETAIL.
- P8** BALANCING VALVE FOR RECIRCULATION SYSTEM. SEE VALVE SCHEDULE. ALL BALANCING VALVES SHALL BE LOCATED OVER SUSPENDED CEILINGS FOR ACCESSIBILITY. DO NOT LOCATE IN AREAS WITH DRYWALL CEILINGS.
- P9** WATER PIPING AFTER CEILING PENETRATION CAN TRANSITION TO CPVC WHERE PERMITTED BY CODE.
- P10** PROPERLY SEAL ALL PIPE PENETRATIONS THROUGH DRAFT STOP WALL (TYP.)

TITLE	2022 STANDARD BUILDING - BB20	DATE	10/04/2022
SHEET NO.	4597 - WOOD/WOOD	REV.	
DESCRIPTION	WOOD BEARING WALLS W/HARDBOARD SIDING WOOD ROOF TRUSS FRAMING E.I.F.S./BATTEN/HARDBOARD SIDING EXTERIOR FINISH	DATE ISSUED	10/04/2022
SITE ID	024-1290	SITE ADDRESS	3720 W. Sunshine Springfield, MO
PREPARED FOR:	<p>© 2022 McDonald's USA, LLC These drawings and specifications are the confidential and proprietary property of McDonald's USA, LLC and shall not be copied or reproduced without written authorization. The contract documents were prepared not suitable for use on a different site or at a later time. Use of these drawings for reference or example on another project requires the contract documents for reuse on another project is not authorized.</p>		
PREPARED BY:	<p>110 E. Main Street, Suite 100 Annapolis, MD 21401 www.corestates.com</p>		
DRAWN BY:	TP	DATE	2022-10
STD. ISSUE DATE	2022-10	REVIEWED BY:	DAVID M. LEFFER
DATE	10/04/2022	DATE ISSUED	10/04/2022
REV.		DATE	
DESCRIPTION			

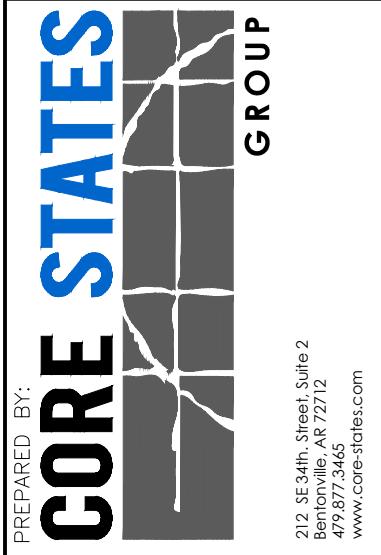


1 UNDERGROUND ROUGH-IN
 P1.4 SCALE: 1/4" = 1'-0"

DRAWING NOTES

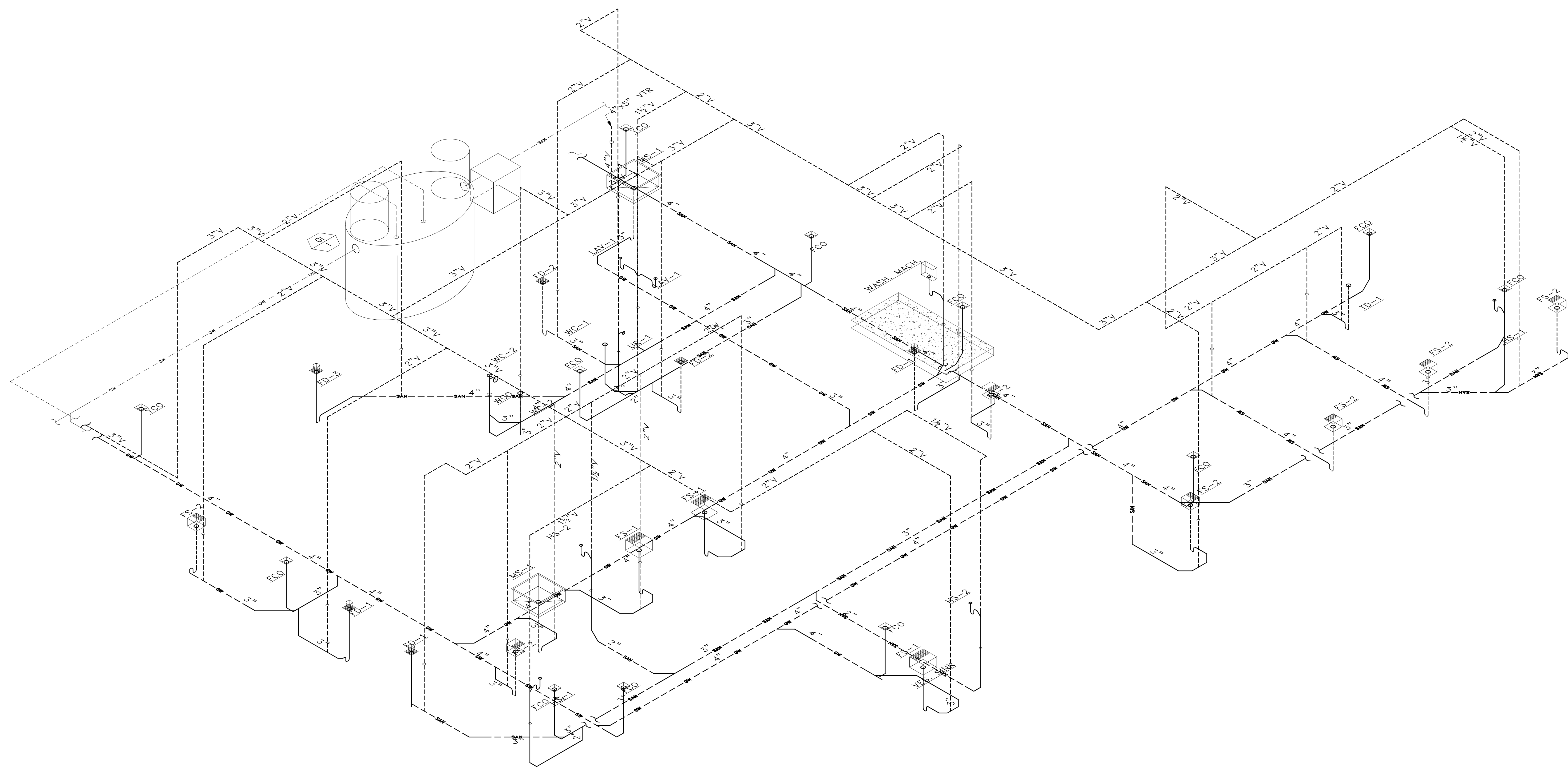
1. THIS PLAN IS PROVIDED AS A GUIDE FOR THE PLUMBING CONTRACTOR. ALL DIMENSIONS ARE ROUNDED TO THE NEAREST 1/8" AND ARE TAKEN FROM THE OUTSIDE EDGE OF THE FOUNDATION WALL TO CENTERLINE OF SLAB PENETRATION.

TITLE	2022 STANDARD BUILDING - BB20	DATE	2022-10
SHEET NO.	4597 - WOOD/WOOD	DESCRIPTION	WOOD BEARING WALLS W/HARDBOARD SIDING WOOD ROOF TRUSS FRAMING E.L.F.S./BATTEN/HARDBOARD SIDING EXTERIOR FINISH
PREPARED FOR	McDonald's USA, LLC	PREPARED BY	DAVID MICHAEL LEFFLER
PROFESSIONAL ENGINEER	DAVID MICHAEL LEFFLER	NUMBER	FE-30181214
DATE	03-14-2023	REV	DATE
DESCRIPTION		BY	

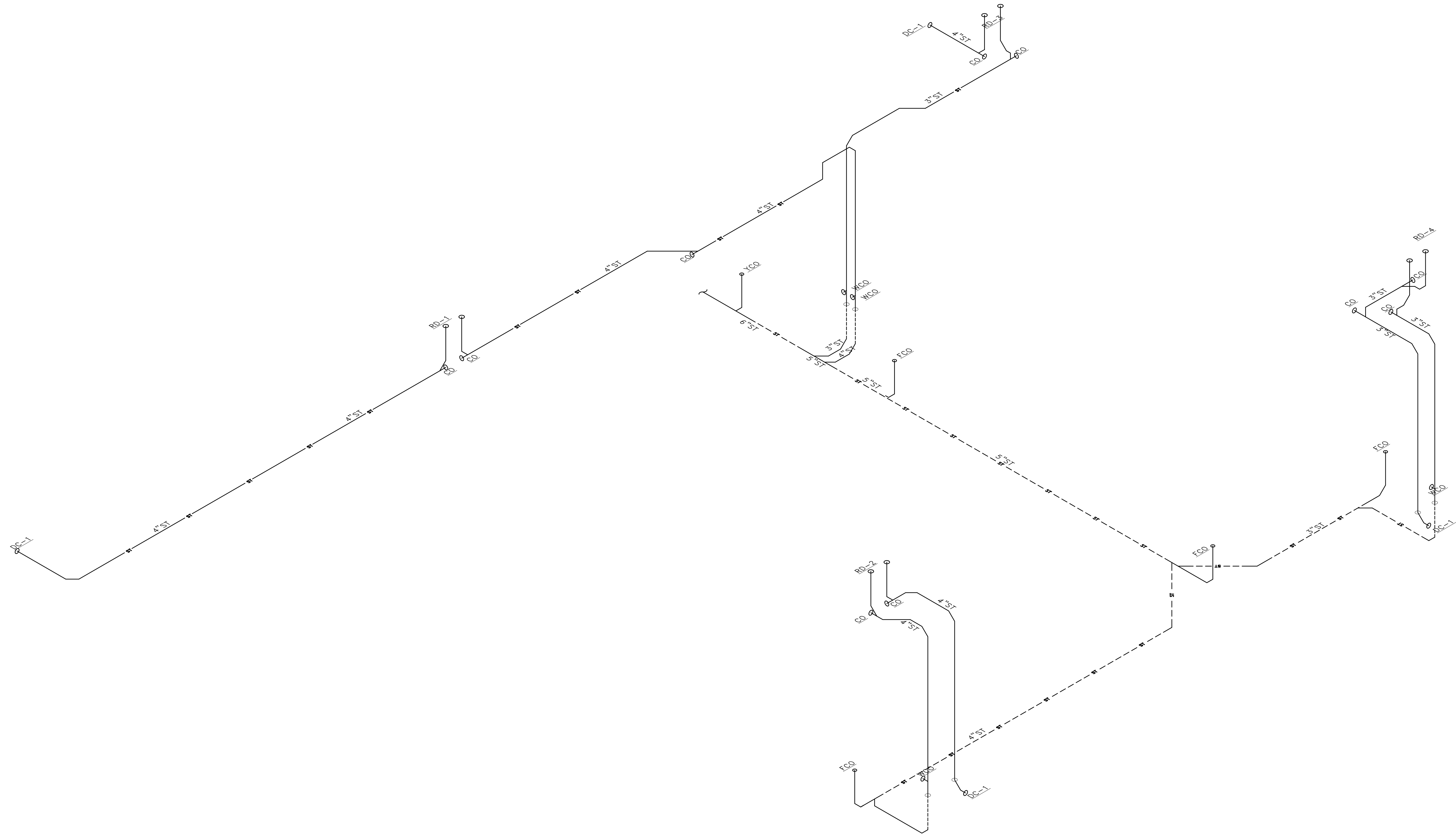


©2022 McDonald's USA, LLC
 These drawings and specifications are the confidential and proprietary property of McDonald's USA, LLC and shall not be copied or reproduced without written authorization. The contract documents were prepared for use on a different site or at a later time. Use of these drawings for reference or example on another project requires the contract documents for reuse on another project is not authorized.

DRAWN BY	DAVID MICHAEL LEFFLER
STD. ISSUE DATE	2022-10
REVIEWED BY	DAVID M. LEFFLER
DATE ISSUED	10-04-2022
SHEET ADDRESS	3720 W. Sunshine
SHEET NO.	P1.4
TITLE	UNDERGROUND ROUGH-IN



SHEET NO.	2022 STANDARD BUILDING - BB20	DRAWN BY TP	PREPARED FOR McDonald's USA, LLC		REV	DATE	DESCRIPTION
	4597 - WOOD/WOOD						
TITLE	2022 STANDARD BUILDING - BB20	STD ISSUE DATE	©2022 McDonald's USA, LLC	<p>McDonald's USA, LLC</p> <p>These drawings and specifications are the confidential and proprietary property of McDonald's USA, LLC and shall not be copied or reproduced without written authorization. The contract documents were prepared in accordance with the contract documents for use on a different site or at a later time. Use of these drawings for reference or example on another project requires the approval of the project engineer. Use of these drawings for any other project requires the approval of the project engineer. The contract documents for reuse on another project is not authorized.</p>	BY		
	4597 - WOOD/WOOD	2022_10	REVIEWED BY DAVID M LEFFER				
DESCRIPTION	WOOD BEARING WALLS W/HARDIE BOARD SIDING	DATE ISSUED	10 04 2022				
	WOOD ROOF TRUSS FRAMING						
SITE ID	E.I.E.S./BATTEN/HARDIE BOARD SIDING EXTERIOR FINISH	SITE ADDRESS	3720 W Sunshine	<p>215 S Main Street, Suite 7 Bentonville, AR 72715 www.corestates.com</p>			
	024-1290	3720 W Sunshine	Springfield, MO				
P2.1							
WASTE & VENT ISOMETRIC							



SHEET NO. P2.2 STORM ISOMETRIC	TITLE 2022 STANDARD BUILDING - BB20 4597 - WOOD/WOOD	DRAWN BY TP	PREPARED FOR: McDonald's USA, LLC		REV. DATE	BY
	DESCRIPTION WOOD BEARING WALLS W/HARDBOARD SIDING WOOD ROOF TRUSS FRAMING E.I.F.S./BATTEN/HARDBOARD SIDING EXTERIOR FINISH	STD ISSUE DATE 2022_10	REVIEWED BY DAVID M LEFFER			
	SITE ADDRESS 024-1290 3720 W. Sunshine Springfield, MO		<p>© 2022 McDonald's USA, LLC</p> <p>These drawings and specifications are the confidential and proprietary property of McDonald's USA, LLC and shall not be copied or reproduced without written authorization. The contract documents were prepared not suitable for use on a different site or at a later time. Use of these drawings for reference or example on another project requires the the contract documents for reuse on another project is not authorized.</p>			



GENERAL PLUMBING NOTES

GENERAL:

- ALL WORK PERFORMED SHALL BE IN ACCORDANCE WITH ALL LOCAL CODES AND ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION.
- ALL PLUMBING WORK SHALL BE PERFORMED BY A LICENSED PLUMBER.
- ALL DIMENSIONS, CLEARANCES AND TOLERANCES SHALL BE VERIFIED PRIOR TO INSTALLATION. ALL ROUGH-IN LOCATIONS SHALL BE COORDINATED WITH THE MANUFACTURER'S SUBMITTAL INFORMATION.
- ALL DIMENSIONAL INFORMATION IS AS FOLLOWS (UNLESS NOTED OTHERWISE):
 - UNDERGROUND PIPE IS TO FOUNDATION
 - OVERHEAD PIPE IS TO FINISHED WALL
 - ELEVATIONS ARE TO FINISHED FLOOR
- ALL MATERIALS, FIXTURES AND EQUIPMENT USED SHALL BE IN ACCORDANCE WITH McDONALD'S SPECIFICATIONS. SPECIFICATIONS ARE CONTAINED WITHIN THESE DRAWINGS AND THE McDONALD'S PROJECT MANUAL. ANY CONTRACTOR IN NEED OF A COPY OF THE McDONALD'S PROJECT MANUAL SHALL CONTACT THE McDONALD'S AREA CONSTRUCTION MANAGER. ANY VARIANCE FROM THE McDONALD'S SPECIFICATIONS SHALL BE REVIEWED AND APPROVED BY THE ENGINEER-OF-RECORD.
- SEE COORDINATION SCHEDULE FOR ADDITIONAL SCOPE OF WORK.
- ALL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH ITS LISTING AND/OR THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- WHERE POOR SOIL CONDITIONS EXIST OR WHERE SUBSTANTIAL SETTLEMENT OF EITHER THE PIPING, THE BUILDING OR ADJACENT WALKS, PLANTERS, ETC., MAY OCCUR, THE CONTRACTOR SHALL PROVIDE ADEQUATE UNDERSLAB STAINLESS STEEL PIPE HANGERS OR APPROVED OTHER SUPPORT.
- ALL PIPE SLEEVES SHALL BE PROPERLY SEALED AND INSULATED TO PREVENT HEAT LOSS AND SEEPAGE.
- ALL PIPE INSULATION SHALL BE PROTECTED FROM DAMAGE FROM PIPE HANGERS. PROTECTION SHALL BE LIGHT GAUGE GALVANIZED STEEL OR EQUAL.
- ALL PENETRATIONS OF FIRE-RATED WALLS SHALL BE FIRESTOPPED WITH AN APPROVED AND LISTED FIRESTOPPING SYSTEM.

SANITARY AND VENT SYSTEMS:

- THE BUILDING SANITARY PIPE SHALL BE LOCATED A MINIMUM OF 5 FT. FROM THE INCOMING WATER SERVICE. WHERE A 5 FT. SEPARATION IS NOT POSSIBLE, THE BOTTOM OF THE WATER SERVICE PIPE SHALL BE A MINIMUM OF 12 IN. ABOVE THE TOP OF THE HIGHEST POINT OF THE SANITARY PIPE.
- ALL SANITARY AND VENT PIPE SHALL BE PVC TYPE DWV, ABS OR CAST-IRON WHERE REQUIRED BY CODE.
- ALL HORIZONTAL SANITARY PIPE SHALL BE INSTALLED WITH A MINIMUM PITCH AS FOLLOWS:

PIPE SIZE	MIN. SLOPE
2½" OR LESS	¼" PER FT.
3" TO 6"	⅜" PER FT.
8" OR LARGER	⅝" PER FT.

- CLEANOUTS SHALL BE INSTALLED IN ALL HORIZONTAL DRAINAGE PIPE AND SHALL BE LOCATED NOT MORE THAN 100 FT. APART.
- CLEANOUTS SHALL BE INSTALLED AT ALL CHANGES OF DIRECTION GREATER THAN 45 DEGREES. WHERE MORE THAN ONE CHANGE OF DIRECTION OCCURS IN A SINGLE PIPE RUN, ONLY ONE (1) CLEANOUT SHALL BE REQUIRED FOR EVERY 40 FEET OF DEVELOPED LENGTH.
- CLEANOUTS SHALL BE INSTALLED ON PIPES PRIOR TO ANY SLAB PENETRATION.
- WHERE PIPING IS LOCATED WITHIN WALL CAVITIES, ACCESS TO THE CLEANOUTS SHALL BE PROVIDED.
- CLEANOUTS ON 6-IN. AND SMALLER PIPES SHALL BE PROVIDED WITH A CLEARANCE OF NOT LESS THAN 18 IN. CLEANOUTS ON 8-IN. AND LARGER PIPE SHALL BE PROVIDED WITH A CLEARANCE OF NOT LESS THAN 36 IN.
- ALL SUSPENDED SANITARY AND VENT PIPE SHALL BE SUPPORTED AS FOLLOWS:

MATERIAL	MAX. HORIZ. SPACING	MAX. VERT. SPACING
ABS	4 FT.	10 FT.
PVC (TYPE DWV)	4 FT.	10 FT.
CAST-IRON (<10 FT. PIPE SECTIONS)	5 FT.	15 FT.
CAST-IRON (10 FT. PIPE SECTIONS)	10 FT.	15 FT.

- ALL PLUMBING FIXTURES SHALL BE VENTED AND THE MAXIMUM DISTANCE FROM THE FIXTURE TRAP TO THE VENT SHALL BE AS FOLLOWS:

TRAP SIZE	SLOPE	DISTANCE
1½"	⅜" PER FT.	2'-6"
1½"	½" PER FT.	3'-6"
2"	⅜" PER FT.	5'-0"
3"	⅜" PER FT.	6'-0"
4" & LARGER	⅜" PER FT.	10'-0"

- ALL PLUMBING VENTS THROUGH THE ROOF SHALL TERMINATE A MINIMUM OF 12 INCHES ABOVE THE ROOF AND SHALL BE LOCATED A MINIMUM OF 8 FT. FROM ANY PARAPET WALL. WHERE A VENT TERMINATES WITHIN 8 FT. OF A PARAPET WALL, THE VENT SHALL TERMINATE A MINIMUM OF 6 INCHES ABOVE THE PARAPET.
- ALL PLUMBING VENTS SHALL TERMINATE A MINIMUM OF 10 FT. HORIZONTALLY FROM ANY OUTDOOR AIR INTAKE. WHERE A PLUMBING VENT IS LOCATED WITHIN 10 FT. OF AN INTAKE, THE VENT SHALL TERMINATE A MINIMUM OF 2 FT. ABOVE THE INTAKE.
- ALL SIDE WALL VENT TERMINATIONS SHALL BE PROTECTED TO PREVENT BIRDS OR RODENTS FROM ENTERING OR BLOCKING THE VENT OPENING.
- ALL FLOOR DRAINS THAT DO NOT SERVE EQUIPMENT SHALL BE PROTECTED AGAINST DRYING OUT EITHER THROUGH THE INSTALLATION OF A TRAP PRIMER, DEEP SEAL TRAP OR PROSET TRAP GUARD.
- ALL APPLIANCES SHALL DRAIN TO AN APPROVED SANITARY WASTE RECEPTOR (FLOOR SINK OR FLOOR DRAIN WITH FUNNEL). INDIRECT DRAINAGE FROM AN APPLIANCE SHALL MAINTAIN AN AIR GAP BETWEEN THE PIPE OUTLET AND THE TOP OF THE RECEPTOR. THE MINIMUM DISTANCE BETWEEN THE PIPE OUTLET AND THE TOP OF THE RECEPTOR SHALL BE TWICE THE DIAMETER OF THE APPLIANCE DRAIN PIPE.

GREASE INTERCEPTORS:

- SEE SITE PLAN FOR THE SIZE AND LOCATION OF THE GREASE INTERCEPTOR.
- THE GREASE INTERCEPTOR SHALL BE INSTALLED IN A LOCATION THAT IS ACCESSIBLE FOR PUMPING.
- THE GREASE INTERCEPTOR SHALL BE CONSTRUCTED OF FIBERGLASS OR ROTATIONALLY-MOLDED POLYETHYLENE. GREASE INTERCEPTOR CONSTRUCTION SHALL CONFORM TO ALL LOCAL CODES.
- GREASE INTERCEPTORS SHALL BE GRAVITY OR HYDROMECHANICAL TYPE, SIZED FOR THE APPLICATION LISTED.
- THE GREASE INTERCEPTOR SHALL BE VENTED, OR AS REQUIRED, IN ACCORDANCE WITH THE LOCAL CODE OR THE MANUFACTURER'S REQUIREMENTS

AND SPECIFICATIONS.

- ACCESS TO THE GREASE INTERCEPTOR SHALL BE PROVIDED WITH TWO (2) 24-IN. MANHOLES. COVER SHALL PROVIDE WATER/GAS-TIGHT SEAL AND HAVE A MINIMUM 16,000 LBS. LOAD CAPACITY. ALL SURFACE WATER MUST DRAIN AWAY FROM MANHOLES.
- PIPING INLET AND OUTLET SIDES SHALL BE CLEARLY LABELED ON THE TOP OF THE GREASE INTERCEPTOR TO INSURE PROPER INSTALLATION.

DOMESTIC SUPPLY SYSTEMS:

- THE INCOMING WATER SERVICE PIPE SHALL BE LOCATED A MINIMUM OF 5 FT. FROM THE EXITING SANITARY PIPE. WHERE A 5 FT. SEPARATION IS NOT POSSIBLE, THE BOTTOM OF THE WATER SERVICE PIPE SHALL BE A MINIMUM OF 12 IN. ABOVE THE TOP OF THE HIGHEST POINT OF THE SANITARY PIPE.
- ALL UNDERGROUND SITE PLUMBING SHALL CONFORM TO NSF 61, SHALL BE TYPE K COPPER TUBING OR COPPER PIPE, POLYETHYLENE (PE) OR CPVC. IF CPVC IS USED, FOAM INSULATION SHALL BE INSTALLED AT ALL CHANGES OF DIRECTION TO ACCOUNT FOR EXPANSION AND CONTRACTION.
- INCOMING WATER SERVICE PRESSURE SHOULD BE BETWEEN 45 AND 55 PSI STATIC. WHERE WATER PRESSURE SERVICE EXCEEDS 80 PSI STATIC, AN APPROVED WATER-PRESSURE REDUCING VALVE WITH STRAINER CONFORMING TO ASSE 1003 SHALL BE INSTALLED. WHERE INCOMING WATER PRESSURE IS BELOW 45 PSI STATIC, A PRESSURE BOOSTER SYSTEM SHALL BE INSTALLED.
- IF THE RESTAURANT HAS A COMBINED WATER AND FIRE SPRINKLER SERVICE, THE INCOMING WATER SERVICE SHALL BE SIZED BASED ON THE FIRE SPRINKLER CONTRACTOR'S HYDRAULIC CALCULATIONS.
- PROVIDE A MINIMUM ½" ANNULAR CLEARANCE AROUND ALL PIPE SLAB PENETRATIONS.
- A REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTER (RPZ) SHALL BE INSTALLED AT THE INCOMING SERVICE WHERE REQUIRED BY CODE.
- AN EXPANSION TANK SHALL BE INSTALLED ON THE COLD WATER LINE INLET TO THE WATER HEATER. SEE EXPANSION TANK SCHEDULE.
- ALL WATER SUPPLY PIPE WITHIN 5 FT. OF THE BUILDING AND INSIDE THE BUILDING SHALL COMPLY WITH NSF 61 AND SHALL BE TYPE L COPPER TUBING, COPPER PIPE OR CPVC PIPE.
- CPVC PIPE SHALL BE FLOWGUARD GOLD OR FLOWGUARD BENDABLE AS MANUFACTURED BY LUBRIZOL.
- CPVC PIPE SHALL BE CONNECTED WITH FLOWGUARD GOLD YELLOW LOW-VOC SOLVENT CEMENT AS MANUFACTURED BY IPS WELD-ON OR DATEY.
- ALL CPVC PIPE SHALL BE INSULATED TO PREVENT EXPOSURE TO GREASE.
- ALL SUSPENDED PIPE SHALL BE SUPPORTED AS FOLLOWS:

MATERIAL	MAX. HORIZ. SPACING	MAX. VERT. SPACING
COPPER PIPE	12 FT.	10 FT.
COPPER TUBING ≤1¼"	6 FT.	10 FT.
COPPER TUBING >1¼"	10 FT.	10 FT.
CPVC ≤1"	3 FT.	10 FT.
CPVC ≥1¼"	4 FT.	10 FT.

- A REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTER (RPZ) SHALL BE INSTALLED AT THE INLET TO THE WATER FILTRATION SYSTEM. ALL PIPING DOWNSTREAM OF THE RPZ SHALL BE COPPER OR CROSS-LINKED POLYETHYLENE (PEX).
- ALL DEVICES, APPLIANCES, AND APPARATUS INTENDED TO SERVE SOME SPECIAL FUNCTION SHALL BE PROVIDED WITH PROTECTION AGAINST BACKFLOW AND CONTAMINATION OF THE WATER SUPPLY SYSTEM. ALL BACKFLOW PREVENTION DEVICES SHALL BE ASSE LISTED AND APPROVED FOR THE DEVICE OR APPLIANCE THEY SERVE.
- ALL WATER SUPPLY LINES SHALL BE PROVIDED WITH A QUARTER-TURN SHUT-OFF VALVE BEFORE FINAL CONNECTION TO EQUIPMENT.
- QUARTER-TURN SHUT-OFF VALVES SHALL BE INSTALLED UPSTREAM OF ANY INLINE BACKFLOW PREVENTION DEVICE.
- ALL VALVES AND BACKFLOW PREVENTION DEVICES SHALL BE INSTALLED WITH FITTINGS THAT FACILITATE REMOVAL IN CASE OF FAILURE.
- ALL OVERHEAD WATER LINES SHALL BE INSULATED WITH 1" THICK EXTERNAL JACKETED INSULATION AND A MINIMUM INSTALLED R-VALUE OF 3.7.
- PRIOR TO BUILDING TURNOVER, THE DOMESTIC WATER SUPPLY SYSTEM SHALL BE PURGED OF DELETERIOUS MATERIAL AND DISINFECTED. DISINFECTION SHALL BE DONE IN ACCORDANCE WITH THE LOCAL HEALTH CODE, PLUMBING CODE OR IN ACCORDANCE WITH AWWA C651 OR AWWA C652.

STORM DRAINAGE SYSTEMS:

- ALL ROOF DRAINS SHALL BE SIZED IN ACCORDANCE WITH LOCAL CODES AND SHALL CONFORM TO ASME A112.21.2M OR A112.3.1.
- ALL STORM DRAINAGE PIPING SHALL BE ABS, PVC TYPE DWV OR CAST-IRON WHERE REQUIRED BY CODE.
- ALL SUSPENDED STORM DRAINAGE PIPE SUPPORT REQUIREMENTS SHALL BE THE SAME AS THE SANITARY AND VENT REQUIREMENTS.
- ALL HORIZONTAL STORM DRAINAGE PIPE PITCH REQUIREMENTS SHALL BE THE SAME AS THE SANITARY AND VENT REQUIREMENTS.
- ALL HORIZONTAL STORM DRAINAGE PIPE SHALL BE INSULATED WITH 1" THICK EXTERNAL JACKETED INSULATION AND A MINIMUM INSTALLED R-VALUE OF 3.7 TO PROTECT AGAINST CONDENSATION.
- CLEANOUTS SHALL BE INSTALLED IN ALL HORIZONTAL DRAINAGE PIPE AND SHALL BE LOCATED NOT MORE THAN 100 FT. APART.
- CLEANOUTS SHALL BE INSTALLED AT ALL CHANGES OF DIRECTION GREATER THAN 45 DEGREES. WHERE MORE THAN ONE CHANGE OF DIRECTION OCCURS IN A SINGLE PIPE RUN, ONLY ONE (1) CLEANOUT SHALL BE REQUIRED FOR EVERY 40 FEET OF DEVELOPED LENGTH.
- CLEANOUTS SHALL BE INSTALLED ON PIPES PRIOR TO ANY SLAB PENETRATION.
- WHERE PIPING IS LOCATED WITHIN WALL CAVITIES, ACCESS TO THE CLEANOUTS SHALL BE PROVIDED.
- ROOF DRAINS AND OVERFLOW ROOF DRAINS SHALL BE PIPED INDEPENDENTLY. OVERFLOW ROOF DRAINS SHALL NOT BE CONNECTED TO THE PRIMARY ROOF DRAINAGE SYSTEM.

LEGEND

- - - - -	COLD WATER PIPING
- - - - -	TEMPERED WATER PIPING (110°F)
- - - - -	HOT WATER PIPING (140°F)
- - - - -	RECIRCULATED HOT WATER PIPING
- - - - -	OVERHEAD LINES (BY P.C.)
---SAN---	UNDERGROUND SANITARY PIPING
---GW---	UNDERGROUND GREASE WASTE PIPING
- - - - -	VENT PIPING
---ST---	ABOVE GROUND STORM PIPING
- - - - -	UNDERGROUND STORM PIPING
+o	HOSE BIBB
↑	CHECK VALVE
●	BALL VALVE
⊠	THERMOSTATIC MIXING VALVE
⊠	FLOOR DRAIN
⊠	CLEAN-OUT (FLOOR OR YARD)
⊠	FLOOR SINK
○	PRESSURE GAUGE
⊠	LOW PRESSURE SWITCH
⊠	HIGH PRESSURE SWITCH
⊠	SOLENOID VALVE
⊠	THREE-WAY VALVE
⊠	PRESSURE REGULATOR
Z	DUAL CHECK VALVE OR RPZ
Z	DUAL CHECK VALVE WITH ATMOSPHERIC VENT
⊠	STRAINER
⊠	RELIEF VENT

ABBREVIATIONS

ACM	AREA CONSTRUCTION MANAGER
AVB	ATMOSPHERIC VACUUM BREAKER
BSI	BEVERAGE SYSTEM INSTALLER
CO	CLEAN-OUT
DC	DOWNSPOUT COVER
DFU	DRAINAGE FIXTURE UNIT(S)
EC	ELECTRICAL CONTRACTOR
FAC	FIRE ALARM CONTRACTOR
FCO	FLOOR CLEAN-OUT
FD	FLOOR DRAIN
FPC	FIRE PROTECTION CONTRACTOR
FS	FLOOR SINK
GC	GENERAL CONTRACTOR
GI	GREASE INTERCEPTOR
GPF	GALLONS PER FLUSH
GPM	GALLONS PER MINUTE
GW	GREASE WASTE
HS	HAND SINK
I.P.S.	IRON PIPE SIZE (ALSO NPS)
KEI	KITCHEN EQUIPMENT INSTALLER
KES	KITCHEN EQUIPMENT SUPPLIER
LAV	LAVATORY
MC	MECHANICAL CONTRACTOR
MHT	MALE HOSE THREADS
MS	MOP SINK
NPS	NATIONAL PIPE THREAD STANDARD
NPT	NATIONAL PIPE THREAD TAPERED
O/O	OWNER/OPERATOR
OH	OVERHEAD
P	PUMP
PC	PLUMBING CONTRACTOR
RC	REFRIGERATION CONTRACTOR
RPZ	REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTER
SS	SANITARY SEWER
ST	STORM SEWER
SVB	ANTI-SIPHON, SPILL RESISTANT VACUUM BREAKER
TAB	TEST AND BALANCE CONTRACTOR
UG	UNDERGROUND
UR	URINAL
V	VENT
WC	WATER CLOSET
WCO	WALL CLEAN-OUT
WSFU	WATER SUPPLY FIXTURE UNIT(S)
YC	YARD CLEAN-OUT

PREPARED BY: **McDonald's USA, LLC**

PREPARED FOR: **McDonald's USA, LLC**

DRAWN BY: TP

STD ISSUE DATE: 2022-10

REVIEWED BY: DAVID M LEFFER

DATE ISSUED: 10-04-2022

TITLE: 2022 STANDARD BUILDING - BB20

DESCRIPTION: 4597 - WOOD/WOOD

WOOD BEARING WALLS W/HARDBOARD SIDING

WOOD ROOF TRUSS FRAMING

E.L.F.S./BATEN/HARDBOARD SIDING EXTERIOR FINISH

SHEET NO. **P4.0**

GENERAL NOTES

REV. DATE

DESCRIPTION

STATE OF MISSISSIPPI

DAVID MICHAEL LEFFER

REGISTERED PROFESSIONAL ENGINEER

NUMBER PE-20181214

03-14-2023

CORE STATES GROUP

215.85.9446, Suite 1067
Birmingham, AL 35217
www.corestates.com

COORDINATION SCHEDULE

GENERAL REQUIREMENTS	FURNISH	INSTALL	FINAL CONNECTION	NOTES
MECHANICAL PERMIT	MC			1-3
HOT WORK (WELDING) PERMIT (IF APPLICABLE)	KES			1-3
REFRIGERATION PERMIT (IF APPLICABLE)	MC			1-3
PLUMBING PERMIT	PC			1-3
ELECTRICAL PERMIT	EC			1-3
FIRE SPRINKLER PERMIT (IF APPLICABLE)	FPC			1-3
FIRE ALARM PERMIT (IF APPLICABLE)	FAC			1-3
CONTRACTOR COORDINATION REQUIREMENTS				
HEATING & AIR-CONDITIONING				
ROOFTOP UNITS, INTAKE AND RELIEF	MCD CP	MC		1-5, 17, 22
ROOF CURBS	MCD CP	MC		1-3, 20, 22
GAS PIPING AND GAS PIPE KIT	PC	PC	PC	1-3, 14, 22-23
CONTROLS WIRING	MC	EC	EC	1-3, 19, 22, 24
POWER WIRING	EC	EC	EC	1-3, 19, 22, 24
CONDENSATE TRAP	MC	PC		1-3, 22-23
CONDENSATE PIPING (IF APPLICABLE)	PC	PC		1-3, 22-23
DUCT-MOUNTED SMOKE DETECTOR	MC	MC	EC	1-3, 22, 24
GENERAL EXHAUST SYSTEMS				
EXHAUST FANS	MCD CP	MC		1-3, 17, 22
ROOF CURBS	MCD CP	MC		1-3, 22
CONTROLS (WHERE APPLICABLE)	MC	EC	EC	1-3, 22, 24
POWER WIRING	EC	EC	EC	1-3, 22, 24
TEMPERATURE CONTROLS				
BUILDING AUTOMATION SYSTEM	MCD CP	MC	EC	1-3, 22, 24
REMOTE SENSORS (RH AND/OR TEMPERATURE)	MC	MC	EC	1-3, 22, 24
CONTROLS WIRING (WHERE APPLICABLE)	MC	EC	EC	1-3, 22, 24
POWER WIRING	EC	EC	EC	1-3, 22, 24
DUCTWORK AND ACCESSORIES				
GALVANIZED SHEET METAL DUCTWORK	MC	MC		1-3, 22
EXTERNAL INSULATION	MC	MC		1-3, 22
INTERNAL INSULATION (IF APPLICABLE)	MC	MC		1-3, 22
WEATHERPROOFING (IF APPLICABLE)	MC	MC		1-3, 22
SPIN-IN COLLARS	MC	MC		1-3, 22
FLEXIBLE DUCTWORK	MC	MC		1-3, 22
VOLUME/BALANCING DAMPERS	MC	MC		1-3, 22
FIRE DAMPERS (IF APPLICABLE)	MC	MC		1-3, 22
FIRESTOPPING (IF APPLICABLE)	MC	MC		1-3, 22
AIR DEVICES AND ACCESSORIES	MC	MC	MC	1-3, 7, 22, 28
PLUMBING SYSTEMS				
WATER HEATERS	MCD CP	PC	PC	1-3, 11-12, 23
HOT AND COLD WATER PIPE	PC	PC	PC	1-3, 23
VENTS AND INTAKES	PC	PC	PC	1-3, 23
THERMOSTATIC MIXING VALVE	PC	PC	PC	1-3, 23
POWER AND CONTROL WIRING	EC	EC	EC	1-3, 23-24
KITCHEN EXHAUST SYSTEMS				
MCDONALD'S BACKSHELF EXHAUST HOODS	KES	KEI		1-3, 6, 22, 27
CANOPY EXHAUST HOODS (IF APPLICABLE)	KES	KEI		1-3, 6, 22, 27
BLACK IRON DUCTWORK	KES	KEI		1-3, 6, 22
STAINLESS STEEL DUCTWORK (IF APPLICABLE)	KES	KEI		1-3, 6, 22
ALUMINUM DUCTWORK (IF APPLICABLE)	KES	KEI		1-3, 6, 22
UL LISTED DUCT WRAP	MC	MC		1-3, 6, 22
FIRE-RATED DUCT ENCLOSURE (IF APPLICABLE)	GC	GC		1-3, 6, 20, 22
EXHAUST FANS	MCD CP	MC		1-3, 6, 17, 22
ROOF CURBS	MCD CP	MC		1-3, 6, 20, 22
CURB EXTENSIONS	MC	MC		1-3, 6, 22
CONTROLS (WHERE APPLICABLE)	EC	EC	EC	1-3, 6, 22, 24
POWER WIRING	EC	EC	EC	1-3, 6, 22, 24
FIRE SUPPRESSION SYSTEM	KES	KES	KES	1-3, 16, 22, 27
KITCHEN EQUIPMENT				
COOLER/FREEZER	KES	GC		1-3, 27
EVAPORATOR COILS	KES	MC		1-3, 27
CONDENSATE PIPING	PC	PC	PC	1-3, 23, 27
REMOTE CONDENSING UNIT (MAC)	KES	MC		1-3, 22, 27
ROOF CURBS	MC	MC		1-3, 22
REFRIGERATION PIPING	KES	MC	MC	1-3, 22, 27
POWER WIRING	EC	EC	EC	1-3, 22, 24, 27
CONTROL WIRING	EC	EC	EC	1-3, 24, 27
PIPE PORTALS	MC	MC		1-3, 22
ICE MACHINES	KES	KEI		1-3, 27
WATER SUPPLY PIPING	KES	KEI	BSI	1-3, 27
REMOTE CONDENSING UNITS	KES	MC		1-3, 22, 27
ROOF CURBS	MC	MC		1-3, 22, 27
REFRIGERATION PIPING	KES	MC	MC	1-3, 22, 27
POWER WIRING	EC	EC	EC	1-3, 22, 24, 27
CONTROL WIRING	KES	EC	EC	1-3, 24, 27
PIPE PORTALS	MC	MC		1-3, 22
GRILLS	KES	KES		1-3, 27
GAS PIPING (IF APPLICABLE)	PC	PC	PC	1-3, 23, 27
POWER WIRING	EC	EC	EC	1-3, 24, 27
CONTROL CABLE (6" CLAMSHELL ONLY)	MC	EC		1-3, 23, 24, 27
FRYERS	KES	KES		1-3, 27
GAS PIPING (IF APPLICABLE)	PC	PC	PC	1-3, 23, 27
POWER WIRING	EC	EC	EC	1-3, 24, 27
3-COMPARTMENT SINK	KES	KES		1-3, 12, 27
FAUCETS AND PRE-RINSE SPRAYER	KES	KES		1-3, 27
WATER SUPPLY PIPING	PC	PC	PC	1-3, 23, 27
SANITARY DRAIN PIPING	PC	PC	PC	1-3, 23, 27
HAND SINKS	MCD CP	PC		1-3, 23, 27
FAUCET	MCD CP	PC		1-3, 23, 27
WATER SUPPLY PIPING	PC	PC	PC	1-3, 23, 27
SANITARY DRAIN PIPING	PC	PC	PC	1-3, 23, 27
VEGETABLE SINK	KES	KES		1-3, 23, 27
FAUCET	KES	KES		1-3, 23, 27
WATER SUPPLY PIPING	PC	PC	PC	1-3, 23, 27
SANITARY DRAIN PIPING	PC	PC	PC	1-3, 23, 27
WASHING MACHINE	KES	KES		1-3, 23, 27
WATER SUPPLY PIPING	PC	PC	PC	1-3, 23, 27
SANITARY DRAIN PIPING	PC	PC	PC	1-3, 23, 27
WARE WASHER	KES	KES		1-3, 23, 27
WATER SUPPLY PIPING	PC	PC	PC	1-3, 23, 27
SANITARY DRAIN PIPING	PC	PC	PC	1-3, 23, 27
MISCELLANEOUS ITEMS				
FIRE SPINKLER SYSTEMS	FPC	FPC	FPC	1-3, 15, 25
HVAC EQUIPMENT START-UP	MC			1-3, 22
TEST, ADJUST AND BALANCE HVAC SYSTEMS	TAB			1-3, 22
DOOR GRILLES (IF APPLICABLE)	MC	GC		1-3, 20, 22
ROOF/WALL OPENINGS	GC			1-3, 20-24
APPLIANCE BACKFLOW PREVENTION	KES/BSI	PC	PC	1-3, 23, 27
CO2 DETECTION SYSTEM	KES/BSI	EC/BSI	EC/BSI	1-3, 22, 27

- NOTES:**
- THIS SCHEDULE IS INTENDED AS A GUIDE FOR THE WORK TO BE PERFORMED. ALL WORK SHALL BE COORDINATED BETWEEN THE MCDONALD'S AREA CONSTRUCTION MANAGER AND ALL GC AND O/O SUBCONTRACTORS.
 - ONE (1) COPY OF THE DECOR PACKAGE DRAWINGS SHALL BE SUPPLIED TO THE GENERAL CONTRACTOR AND EACH OF THE SUBCONTRACTORS. IT SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR AND THE SUBCONTRACTORS TO INSURE THAT THEY HAVE RECEIVED THE DECOR PACKAGE DRAWINGS.
 - FOR ANY WORK NOT CLARIFIED IN THIS SCHEDULE OR IN THE NOTES AND SPECIFICATIONS, PLEASE CONSULT THE MCDONALD'S CONSTRUCTION MANAGER FOR SCOPE OF WORK.
 - ALL ROOFTOP UNIT EQUIPMENT SUPPLIED BY THE MECHANICAL CONTRACTOR AND THE KITCHEN EQUIPMENT SUPPLIER SHALL BE ON SITE AT THE SAME TIME FOR A SINGLE CRANE LIFT. EQUIPMENT SITE ARRIVAL DATE SHALL BE COORDINATED BETWEEN THE CONSTRUCTION MANAGER, MECHANICAL CONTRACTOR AND KITCHEN EQUIPMENT SUPPLIER.
 - ALL ROOFTOP UNITS INSTALLED IN MCDONALD'S RESTAURANTS SHALL BE HIGH EFFICIENCY EQUIPMENT. THE INSTALLATION OF STANDARD EFFICIENCY ROOFTOP UNITS IS PROHIBITED.
 - ALL KITCHEN EQUIPMENT REQUIRING EXHAUST SHALL BE INSTALLED IN ACCORDANCE WITH THESE PLANS. ANY VARIATION FROM THESE PLANS SHALL BE REPORTED TO THE CONSTRUCTION MANAGER AND THE ENGINEER-OF-RECORD.
 - WHERE GYPSUM BOARD CEILINGS ARE INSTALLED, THE MECHANICAL CONTRACTOR SHALL SUPPLY DRYWALL MOUNTING FRAMES FOR LAY-IN TYPE DIFFUSERS.
 - ALL WORK SHOWN ON P1.6 DRAWING(S) SHALL BE COMPLETED BY THE BEVERAGE SYSTEM INSTALLER (OR K.E.S.) UNLESS OTHERWISE NOTED IN THE PLUMBING DRAWINGS.
 - ALL WORK ON P1.0 & P1.2 DRAWING(S) SHALL BE BY THE PLUMBING CONTRACTOR.
 - THE BEVERAGE SYSTEM INSTALLER FURNISHES, RUNS AND CONNECTS ALL FLEXIBLE WATER AND SYRUP LINES FOR ALL AFFECTED EQUIPMENT INCLUDING THE FOLLOWING:
 - HOT CHOCOLATE
 - COFFEE BREWER
 - ICE MACHINE
 - O.J.
 - SODA TOWERS
 - ALL WATER HEATERS INSTALLED IN MCDONALD'S RESTAURANTS SHALL BE HIGH EFFICIENCY SEALED-COMBUSTION WATER HEATERS. THE INSTALLATION OF STANDARD EFFICIENCY GRAVITY-VENTED WATER HEATERS IS PROHIBITED.
 - THE CONSTRUCTION MANAGER, PLUMBING CONTRACTOR AND KITCHEN EQUIPMENT SUPPLIER SHALL COORDINATE WHICH SOILED DISHWASHER (3-COMPARTMENT SINK) IS BEING INSTALLED IN THE RESTAURANT.
 - ALL GAS PIPING FOR COOKING EQUIPMENT SHALL TERMINATE IN THE CEILING PRIOR TO THE INSTALLATION OF THE PIPING CHASE. UPON INSTALLATION OF THE CHASE, THE GAS PIPING SHALL THEN BE CONTINUED IN THE CHASE FOR FINAL CONNECTION TO THE APPLIANCE.
 - ALL GAS PIPING FOR ROOFTOP EQUIPMENT SHALL BE BROUGHT UP THROUGH THE BASE OF THE UNIT TO MINIMIZE ROOF PENETRATIONS. WHERE THIS IS NOT POSSIBLE, THE PLUMBING CONTRACTOR SHALL PROVIDE THE NECESSARY PIPE PORTALS ON ROOF.
 - ALL FIRE PROTECTION DRAWINGS CONTAINED WITHIN THIS SET ARE STRICTLY FOR REFERENCE ONLY. FIRE SPRINKLER DRAWINGS SHALL BE DESIGNED AND PERMITTED BY A FIRE PROTECTION CONTRACTOR.
 - ALL R-102 WET CHEMICAL FIRE SUPPRESSION SYSTEMS FOR TYPE I HOODS SHALL BE DESIGNED AND INSTALLED BY A LOCAL ANSUL AGENT. THE USE OF DRY CHEMICAL SYSTEMS IS PROHIBITED. THE LOCAL ANSUL AGENT CONTRACT IS HANDLED THROUGH THE KITCHEN EQUIPMENT SUPPLIER.
 - ALL ROOFTOP UNITS AND EXHAUST FANS ARE SUPPLIED WITH A FACTORY-INSTALLED DISCONNECT SWITCH.
 - ELECTRICAL CONTRACTOR SHALL PROVIDE DISCONNECT SWITCHES FOR REMOTE CONDENSING UNITS.
 - ALL ELECTRICAL CONDUITS FOR ROOFTOP EQUIPMENT SHALL BE BROUGHT UP THROUGH THE BASE OF THE UNIT TO MINIMIZE ROOF PENETRATIONS. WHERE THIS IS NOT POSSIBLE, THE ELECTRICAL CONTRACTOR SHALL PROVIDE THE NECESSARY PIPE PORTALS ON ROOF.
 - SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
 - SEE STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
 - SEE MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.
 - SEE PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.
 - SEE ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
 - SEE FIRE PROTECTION DRAWINGS FOR ADDITIONAL INFORMATION.
 - SEE FIRE ALARM DRAWINGS FOR ADDITIONAL INFORMATION.
 - SEE KITCHEN DRAWINGS FOR ADDITIONAL INFORMATION.
 - SEE DECOR DRAWINGS FOR ADDITIONAL INFORMATION.

EXPANSION TANK SCHEDULE

TAG	MANUFACTURER	MODEL	TOTAL VOL.	CONNECTION	ACCESSORIES
ET-1	AMTROL	ST-12	4.4 GAL.	3/4"	-

NOTES:
1. SEE DETAIL 6 ON DRAWING P3.0

PUMP SCHEDULE

TAG	MANUFACTURER	MODEL	HP	V	Ø	HZ	ACCESSORIES
P-1	GRUNDFOS	UP 15-18 B7	1/25	120	1	60	1-3

ACCESSORIES:
1. TIMELOCK
2. AQUASTAT
3. CHECK VALVE

NOTES:
1. SEE ELECTRICAL DRAWINGS FOR TIMELOCK WIRING
2. DESIGN: 2 GPM, 7 FT. HEAD
3. SEE DETAIL 6 ON DRAWING P3.0

BACKFLOW PREVENTER SCHEDULE

TYPE	MFR.	MODEL	ASSE LISTING	SERVES	LOCATION
AG	FURN. WITH CHEM. SYS.	10558	CHEMICAL SYSTEM	DIN. RM.-MOP SINK	
AG	FURN. WITH CHEM. SYS.	10558	CHEMICAL SYSTEM	KITCHEN-MOP SINK	
AVB	FURN. WITH CHEM. SYS.	1001	CHEMICAL SYSTEM	SUPP. RM.-3-COMP	
AVB	FURN. WITH FAUCET	-	MOP SINK FAUCET	SEE DRAWINGS	
VB	FURN. WITH HB	1011	WALL HYDRANT	SEE DRAWINGS	
DCV	FURN. WITH HB	1052	YARD HYDRANT	TRASH CORRAL	
DCV	FURN. WITH HB	1052	ROOF HYDRANT	ROOF	
DCV	WATTS	SD-3	1022	SODA TOWERS AND SPEC. COFFEE	
RPZ	WILKINS	375XL-SXL-AG	1013	INCOMING WATER	SUPPORT ROOM
RPZ	WILKINS	375XL-AG	1013	FILTRATION SYSTEM	SUPPORT ROOM

INTERCEPTOR SCHEDULE

TAG	DESCRIPTION	MANUFACTURER	MODEL	ACCESSORIES	NOTES
GI-1	EXTERIOR GREASE INTERCEPTOR	SCHIER PRODUCTS ZURN - GREEN TURTLE	GB-500 PROCEPTOR MODEL GMC1300-UPC	4" INLET, 4" OUTLET 4" INLET, 4" OUTLET	1-3 1-2, 4

NOTES:
1. SEE GREASE INTERCEPTOR NOTES ON DRAWING P4.0
2. GREASE INTERCEPTOR IS SIZED FOR CITY SEWER APPLICATIONS ONLY. DO NOT USE FOR SEPTIC FIELDS.
3. FOR SCHIER HYDROMECHANICAL GREASE INTERCEPTOR ORDERING, CONTACT: LEE FLASHER, HUGHES SUPPLY, DIRECT LINE: (407) 509-7626, OR E-MAIL: MCDCOORD@HAJOCA.COM
4. FOR ZURN PROCEPTOR ORDERING, CONTACT HUGHES SUPPLY, DIRECT LINE: (407) 244-7918, OR E-MAIL: MCDCOORD@HAJOCA.COM

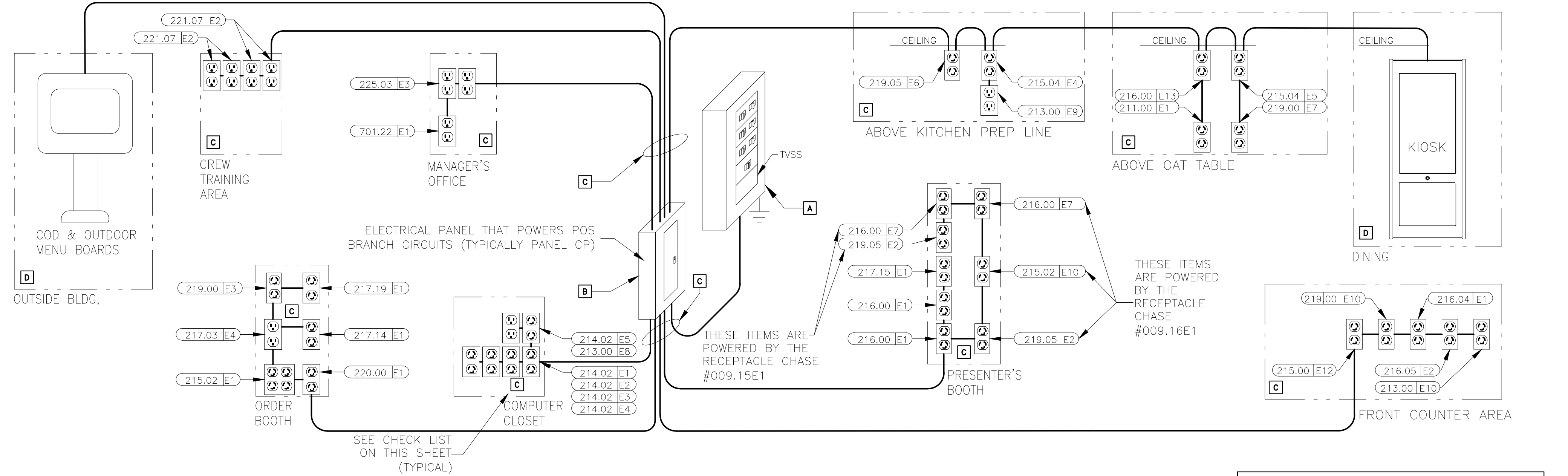
PLUMBING FIXTURE SCHEDULE

TAG	DESCRIPTION	MANUFACTURER	MODEL	WATER USE	ACCESSORIES/COMMENTS
F-1	FAUCET FOR LAV-1	TOTO ZURN	T28551E#CP Z6950-XL-S-N-10S	0.5 GPM (0.08 GAL/10 SEC CYCLE)	FAUCET OPERATION: SENSOR
F-2	FAUCET FOR MS-1	ZURN	Z843M4		FAUCET OPERATION: MANUAL SEE DETAIL 2 ON DRAWING P3.0 5' VINYL HOSE WALL HOOK
FCO	6x6 FLOOR CLEAN OUT	ZURN JAY R. SMITH	Z1400-SZ 4040		SEE DRAWINGS FOR PIPE SIZES SEE NOTE 8
FD-1	6x6 FLOOR DRAIN WITH FUNNEL	ZURN JAY R. SMITH	Z415-SZ-OF 3510-F25		PIPE SIZE: 3" STRAINER SIZE: 6" NICKEL BRONZE FUNNEL: ZURN Z329 SEE NOTE 8
FD-2	6x6 FLOOR DRAIN	ZURN JAY R. SMITH	Z415-SZ 2005		PIPE SIZE: 3" STRAINER SIZE: 6" NICKEL BRONZE FUNNEL: NONE SEE NOTE 8
FD-3	6x6 FLOOR DRAIN WITH FUNNEL	ZURN JAY R. SMITH	Z415-SZ-OF 3510-F25		PIPE SIZE: 4" STRAINER SIZE: 6" NICKEL BRONZE FUNNEL: ZURN Z329 SEE NOTE 8
FD-4	6x6 FLOOR DRAIN	ZURN JAY R. SMITH	Z415-SZ 2005		PIPE SIZE: 4" STRAINER SIZE: 6" NICKEL BRONZE FUNNEL: NONE SEE NOTE 8
FS-1	12x12 FLOOR SINK WITH HALF-GRATE	ZURN JAY R. SMITH	ZN1901 3435		PIPE SIZE: 3" DOME STRAINER: ALUMINUM GRATE: HALF - NICKEL-BRONZE SEE NOTE 8
FS-2	8x8 FLOOR SINK WITH HALF-GRATE	ZURN JAY R. SMITH	ZN1910 3415		PIPE SIZE: 3" DOME STRAINER: ALUMINUM GRATE: HALF - NICKEL-BRONZE SEE NOTE 8
FS-3	8x8 FLOOR SINK	ZURN JAY R. SMITH	ZN1910 3415		PIPE SIZE: 3" DOME STRAINER: ALUMINUM GRATE: FULL - NICKEL-BRONZE SEE NOTE 8
HB-1	WALL HYDRANT	WOODFORD ZURN	B65 Z1320-EZ		WALL CLAMP: ADJUSTABLE WALL THICKNESS: M/S = 9 1/2" W/W = 1 3/4"
HB-2	YARD HYDRANT	WOODFORD	S4H		SEE NOTES 4 & 9
HB-3	ROOF HYDRANT	WOODFORD	RHYZ-MS		SEE NOTE 5
HS-1	STAINLESS STEEL HAND SINK	ADVANCE TABCO	7-PS-61		FAUCET: INCLUDED WITH SINK SEE NOTES 6 & 10
HS-2	STAINLESS STEEL HAND SINK - ADA	ADVANCE TABCO	7-PS-26		FAUCET: INCLUDED WITH SINK SEE NOTES 6 & 10
HS-3	STAINLESS STEEL HAND SINK - SPACESAVER	ADVANCE TABCO	7-PS-22		FAUCET: INCLUDED WITH SINK SEE NOTES 6 & 10
LAV-1	LAVATORY	KOHLER TOTO	K-2882-0 LT191G		FAUCET: F-1 TRUEBRO LAVGUARD2 MODEL #102-E-Z CORIAN COUNTER BY G.C. SEE NOTE 10 SEE DETAIL 3 ON P3.0
MS-1	MOP SINK	FIELD FABRICATED ADVANCE TABCO	RECESSED - FLOOR (24x24x12) 9-OP-24FM		FAUCET: F-2 INCLUDES HOSE, HOSE BRACKET AND TWO (2) 24"Wx36"H WALL GUARDS SEE DETAIL 2 ON P3.0
TD-1	TRENCH DRAIN	ZURN	Z886-SMG		CLASS A STAINLESS STEEL MESH SCREEN GRATE. NO-HUB BOTTOM OUTLET. BOTTOM DOME STRAINER. CLOSED END CAP
UR-1	ADA WALL-HUNG URINAL	TOTO ZURN	UT445U#01 Z5755	0.125 GPF	FLUSH VALVE: TOTO TEU1UA12#CP ZURN ZTR6203-ULF-LL FLUSH VALVE OPERATION: SENSOR SEE NOTE 2
WB-1	WALL BOX FOR WASHING MACHINE	SIoux CHIEF	696-2313		3/4" I.P.S., 1" TOP SPUD HAMMER ARRESTERS INCLUDED WITH BOX SEE NOTE 7
WB-2	WALL BOX FOR WAREWASHER	SIoux CHIEF	696-1011		HAMMER ARRESTER INCLUDED WITH BOX MOUNTING HEIGHT: 12" A.F.F. SEE NOTE 7
WC-1	WATER CLOSET	TOTO ZURN	CT705EN#01 Z5655	1.28 GPF	FLUSH VALVE: TOTO TET1LA32#CP ZURN ZTR6200EV-LL 1" I.P.S., 1 1/2" TOP SPUD FLUSH VALVE OPERATION: SENSOR SEAT: BEMIS MODEL 2155CT
WC-2	ADA WATER CLOSET	TOTO ZURN	CT705ELN#01 Z5665	1.28 GPF	FLUSH VALVE: TOTO TET1LA32#CP ZURN ZTR6200EV-CC-LL 1" I.P.S., 1 1/2" TOP SPUD FLUSH VALVE OPERATION: SENSOR SEAT: BEMIS MODEL 2155CT
-	SOILED DISHTABLE (3-COMPARTMENT SINK)	-	-	-	ITEM: 151.46 SEE NOTE 7
-	VEGETABLE PREPARATION SINK	-	-	-	ITEM: 134.02 SEE NOTE 7
-	WAREWASHER	ECOLAB	QSR TSC WITH VAPOR VENT HOOD	-	ITEM: 152.05 WALL BOX: WB-2 SEE NOTE 7
-	WASHING MACHINE	-	-	-	ITEM: 223.07 WALL BOX: WB-1 SEE NOTE 7

ROOF DRAINS AND ACCESSORIES

TAG	DESCRIPTION	MANUFACTURER	MODEL	ACCESSORIES	NOTES
RD-1 THRU RD-4	COMBINATION MAIN ROOF AND OVERFLOW DRAIN	ZURN	Z165		SEE DRAWINGS FOR PIPE SIZES ROOF OPENING: 30"x1

THE PURPOSE OF THIS SHEET IS TO PROVIDE A CHECKLIST AND VISUAL GUIDE SO THE INSTALLING EC CAN VERIFY THE WORK IS IN COMPLIANCE WITH MCDONALD'S SPECIFICATIONS THAT ARE CRITICAL TO THE PROPER FUNCTIONING OF OUR POINT OF SALE (POS) COMPUTER SYSTEMS.



POS ELECTRICAL RISER DIAGRAM

THIS RISER DIAGRAM SHOWS THE ELECTRICAL ROUGH-INS REQUIRED FOR A TYPICAL POINT OF SALE (POS) SYSTEM IN A FREE STANDING FAST FORWARD RESTAURANT. VERIFY ALL POS ROUGH-INS AND MOUNTING HEIGHTS WITH THE ELECTRICAL ROUGH-IN PLAN, NOTES AND INFORMATION DRAWINGS.

ISOLATED GROUND SYMBOLS	
SYMBOL	DESCRIPTION
	IG4710
	IG4700A
	IG5261
	IG5262

START HERE

A VISUALLY INSPECT THE MAIN ELECTRICAL PANEL (MDP)

YES NO N/A

1. IS AN EQUIPMENT GROUND BAR INSTALLED SUCH THAT IT IS ELECTRICALLY CONNECTED TO THE PANEL?
2. DO ALL NEUTRAL CONDUCTORS TERMINATE ONLY TO THE NEUTRAL BAR?
3. DO ALL EQUIPMENT GROUND CONDUCTORS TERMINATE ONLY TO THE EQUIPMENT GROUND BAR?
4. DOES THE ISOLATED GROUND CONDUCTOR (GREEN W/YELLOW STRIPE) TERMINATE ON THE EQUIPMENT GROUND BAR?
5. IS THERE AN APPROPRIATE ELECTRICAL CONNECTION (BOND) BETWEEN THE NEUTRAL BAR AND THE EQUIPMENT GROUND BAR?
6. DOES THE GROUNDING SYSTEM COMPLY WITH MCDONALD'S "BUILDING ELECTRICAL GROUNDING DETAIL"?
7. IS A SURGE PROTECTOR INSTALLED THAT COMPLIES WITH MCDONALD'S "TVSS INSTALLATION GUIDE" OR DETAIL?
8. ARE ALL ELECTRICAL CONNECTIONS (WIRING & BUSING) PROPERLY TIGHTENED?
9. ARE ALL CIRCUIT BREAKERS CLEARLY LABELED?

B VISUALLY INSPECT THE PANEL "CP" THAT POWERS POS

YES NO N/A

1. IS AN EQUIPMENT GROUND BAR INSTALLED SUCH THAT IT IS ELECTRICALLY CONNECTED TO THE PANEL?
2. IS AN ISOLATED GROUND BAR INSTALLED SUCH THAT IT IS ELECTRICALLY INSULATED FROM THE PANEL?
3. DO ALL NEUTRAL CONDUCTORS TERMINATE ONLY TO THE NEUTRAL BAR?
4. DO ALL EQUIPMENT GROUND CONDUCTORS TERMINATE ONLY TO THE EQUIPMENT GROUND BAR?
5. DO ALL ISOLATED GROUND CONDUCTORS (GREEN W/YELLOW STRIPE) TERMINATE ONLY TO THE ISOLATED GROUND BAR?
6. ARE ALL ELECTRICAL CONNECTIONS (WIRING & BUSING) PROPERLY TIGHTENED?
7. ARE ALL POS AND COD CIRCUIT BREAKERS ON THE SAME PANEL?
8. ARE ALL CIRCUIT BREAKERS CLEARLY LABELED?
9. DO ALL POS & COD CIRCUIT BREAKERS HAVE A LOCKING MECHANISM ON THEIR HANDLES TO PREVENT THEM FROM BEING SHUT OFF BY MISTAKE?
10. DOES THE FEEDER CIRCUIT FOR THIS SUBPANEL CONTAIN PHASE, NEUTRAL AND ONE EQUIPMENT GROUND AND ONE ISOLATED GROUND CONDUCTORS THAT ARE PROPERLY TERMINATED (SEE POS & COD ISO GND/DED CXT DETAIL)?

VISUALLY INSPECT ALL REMAINING ELECTRICAL SUBPANELS

YES NO N/A

1. IS AN EQUIPMENT GROUND BAR INSTALLED SUCH THAT IT IS ELECTRICALLY CONNECTED TO THE PANEL?
2. DO ALL NEUTRAL CONDUCTORS TERMINATE ONLY TO THE NEUTRAL BAR?
3. DO ALL EQUIPMENT GROUND CONDUCTORS TERMINATE ONLY TO THE EQUIPMENT GROUND BAR?
4. ARE ALL ELECTRICAL CONNECTIONS (WIRING & BUSING) PROPERLY TIGHTENED?
5. ARE ALL CIRCUIT BREAKERS CLEARLY LABELED?
6. DOES THE FEEDER CIRCUIT FOR THIS SUBPANEL CONTAIN PHASE, NEUTRAL AND ONE EQUIPMENT GROUND CONDUCTORS THAT ARE PROPERLY TERMINATED? (SEE BUILDING ELECTRICAL GROUNDING DETAIL)

C VISUALLY INSPECT THE POS BRANCH CIRCUITS

YES NO N/A

1. ARE THE POS BRANCH CIRCUITS ROUTED IN THEIR OWN CONDUIT BY THEMSELVES?
2. IF THE POS BRANCH CIRCUIT IS ROUTED ABOVE GRADE, IS IT IN A METALLIC CONDUIT?
3. DOES EACH POS BRANCH CIRCUIT CONTAIN: ONE PHASE (BLACK COLORED INSULATION) ONE NEUTRAL (WHITE COLORED INSULATION) ONE EQUIPMENT GROUND (GREEN COLORED INSULATION) ONE ISOLATED GROUND (GREEN W/YELLOW STRIPE COLORED INSULATION).
4. DO ALL POS BRANCH CIRCUITS TERMINATE AT EITHER AN IG4700, IG4710, IG5261, IG5262 RECEPTACLES OR ANY COMBINATION OF THESE?
5. ARE ALL ELECTRICAL TERMINATIONS TO IG RECEPTACLES MADE WITH SOLID #12 AWG WIRE CAPTURED AROUND THE SCREW BARREL AND SUITABLY TIGHTENED?
6. ARE ALL BRANCH CIRCUIT CONNECTIONS PROPERLY TIGHTENED?
7. ARE THE CORRECT AMOUNT AND TYPE OF IG RECEPTACLES PROVIDED AS SHOWN IN THE ELECTRICAL ROUGH-IN PLAN, NOTES AND INFORMATION?
8. DO ALL POS RECEPTACLES HAVE ORANGE "COMPUTER ONLY" COVERPLATES?
9. DO ALL POS BRANCH CIRCUITS COMPLY WITH THE "POS & COD ISOLATED GROUND/DEDICATED CIRCUIT DETAIL"?

D VISUALLY INSPECT THE POS BRANCH CIRCUIT FOR THE COD & KIOSK

YES NO N/A

1. ARE THE COD AND KIOSK BRANCH CIRCUITS ROUTED IN THEIR OWN CONDUIT BY THEMSELVES?
2. DOES EACH COD AND KIOSK BRANCH CIRCUIT CONTAIN:
 - ONE PHASE (BLACK COLORED INSULATION),
 - ONE NEUTRAL (WHITE COLORED INSULATION),
 - ONE EQUIPMENT GROUND (GREEN COLORED INSULATION),
 - ONE ISOLATED GROUND (GREEN W/YELLOW STRIPE COLORED INSULATION).
3. ARE THE COD(S) AND KIOSK(S) POWERED FROM THE SAME PANEL AS THE POS?
4. DO THE BREAKERS FOR THE COD(S) AND KIOSK(S) HAVE A LOCKING MECHANISM ON THEIR HANDLES THAT WILL PREVENT IT FROM BEING SHUT OFF?
5. DO THE COD BRANCH CIRCUIT(S) COMPLY WITH THE "POS & COD ISOLATED GROUND/DEDICATED CIRCUIT DETAIL"?
6. IF THE COD HAS AN OPTICAL ISOLATOR, IS A STRAIGHT BLADE ISOLATED GROUND RECEPTACLE ON AN ISOLATE GROUND/DEDICATED CIRCUIT PROVIDED FOR IT?

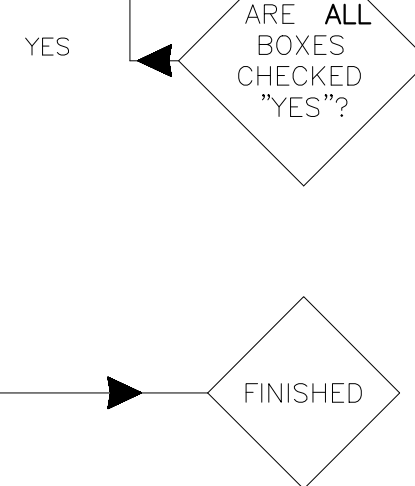
REWORK ELECTRICAL SYSTEM TO BRING INTO COMPLIANCE WITH MCDONALD'S SPECIFICATIONS

ALL WORK IS NOT CONSIDERED TO MEET MCDONALD'S SPECIFICATIONS UNTIL THE INSTALLED ELECTRICAL SYSTEM SUPPORTS A "YES" ANSWER FOR ALL QUESTIONS ASKED.

AS PART OF THIS PROCESS, THE EC AND THE GC WILL BE REQUIRED TO SIGN THE ELECTRICAL CERTIFICATION DOCUMENT INDICATING THAT THE INSTALLED ELECTRICAL SYSTEM MEETS MCDONALD'S SPECIFICATIONS.

NOTICE:
CHANGES SHALL NOT BE MADE TO THE POS ELECTRICAL SYSTEM AFTER THE POS EQUIPMENT HAS BEEN INSTALLED WITHOUT FIRST NOTIFYING THE POS VENDOR.

IF CHANGES ARE MADE TO THE POS ELECTRICAL SYSTEM AFTER THE CERTIFICATION PROCESS HAS BEEN COMPLETED, THEN A SYSTEM RE-CERTIFICATION SHALL BE REQUIRED.



LOW VOLTAGE CABLE MANAGEMENT SPECIFICATION

GENERAL/MATERIALS

- THE GC OR EC SHALL FURNISH AND INSTALL A COMPLETE LOW VOLTAGE CABLE MANAGEMENT SYSTEM UTILIZING CADDY-ERICO TYPE CAT-32 J-HOOK SUPPORTS (2-INCH DIAMETER LOOP MINIMUM). ALL J-HOOKS SHALL:
 - HAVE A MINIMUM BEARING SURFACE OF 1 3/8",
 - HAVE FLARED EDGES TO PREVENT DAMAGE TO HIGH PERFORMANCE CABLES,
 - HAVE AN ELECTRO-GALVANIZED FINISH,
 - HAVE 3/8" WIDE CABLE RETAINING STRAPS,
 - BE UL LISTED AND LABELED,
 - BEAR THE UL SYMBOL MARKING ON THE PART FOR IDENTIFICATION
 - BE INSTALLED PER THE MANUFACTURERS INSTALLATION INSTRUCTIONS.
- THE ENTIRE INSTALLATION SHALL BE IN COMPLIANCE WITH THE NATIONAL ELECTRICAL CODE (NEC), NEC SECTION 800, BICSI STANDARDS 568 & 569, ALL APPLICABLE NATIONAL, STATE, LOCAL, AND SAFETY CODES, AND MCDONALD'S SPECIFICATIONS.

INSTALLATION

- LOW VOLTAGE J-HOOK CABLE PATHWAY (FOR POS CABLING SYSTEM) SHALL BE PROVIDED FROM THE MANAGERS OFFICE (OR COMPUTER CLOSET) DATA CONDUIT STUB-UP LOCATION TO THE FOLLOWING DATA CONDUIT STUB-UP LOCATIONS (AS APPLICABLE):
 - FRONT COUNTER.
 - PRESENTERS BOOTH.
 - CASHIERS BOOTH.
 - THIRD DRIVE-THRU WINDOW(IF PRESENT).
 - CREW ROOM.
 - VALENCE WALL.
 - REMOTE ORDERING STATIONS.
 - NETPOP TELEPHONE PANEL LOCATION.

CABLE SUPPORTS SHALL BE PROVIDED WITHIN 24 INCHES OF THESE STUB-UP LOCATIONS. ALL STUB-UP CONDUITS SHALL BE PROVIDED WITH AN INSULATED BUSHING TO PROTECT CABLES DURING INSTALLATION.
- THE LOCATION AND ROUTING OF THE LOW VOLTAGE CABLE MANAGEMENT SYSTEM SHALL BE COORDINATED WITH ALL OTHER CONSTRUCTION TRADES PRIOR TO INSTALLATION TO AVOID CONFLICTS WITH THE OTHER TRADES. FINAL INSTALLATIONS, BOTH BEFORE AND AFTER THE CABLE MANAGEMENT SYSTEM AND THE POS CABLING ARE INSTALLED. LOCATION SHALL BE READILY ACCESSIBLE TO ALLOW FOR EASE IN INSTALLATION OF THE POS CABLING BY THE POS VENDOR'S INSTALLER.
- LOW VOLTAGE J-HOOK CABLE SUPPORTS AND APPURTENANCES SHALL BE FASTENED TO THE BUILDING STRUCTURAL AND/OR FRAMING MEMBERS. LOW VOLTAGE J-HOOK CABLE SUPPORTS SHALL NOT BE FASTENED OR UTILIZE THE CEILING GRID SUSPENSION WIRES OR T-BAR GRID FOR INSTALLATION. CONTRACTOR SHALL PROVIDE ALL NECESSARY BRACKETS, HANGERS, RODS, CLAMPS, FLANGES, SUPPORTS, ETC. FOR A COMPLETE AND FULLY FUNCTIONAL SYSTEM. THE INSTALLATION OF THE LOW-VOLTAGE CABLE MANAGEMENT SYSTEM SHALL BE DONE SO THAT THE ROUTING OF THE CABLES IS PARALLEL TO AND/OR PERPENDICULAR TO FRAMING AND STRUCTURAL BUILDING MEMBERS.
- LOW VOLTAGE J-HOOK CABLE SUPPORTS SHALL BE INSTALLED A MAXIMUM OF 36 INCHES APART. AT TRANSITION LOCATIONS, THE CONTRACTOR SHALL PROVIDE ADDITIONAL J-HOOKS TO ALLOW FOR A MINIMUM ONE-FOOT RADIUS BEND AND FOR ADDITIONAL CABLE SUPPORT AT THESE TRANSITION POINTS.
- TO AVOID ELECTROMAGNETIC INTERFERENCE (EMI), ALL PATHWAYS SHALL PROVIDE A MINIMUM CLEARANCE OF 4 FEET (1.2 METERS) FROM MOTORS AND TRANSFORMERS AND A MINIMUM CLEARANCE OF 1 FOOT (0.3 METERS) FROM CONDUIT AND CABLES UTILIZED FOR ELECTRICAL POWER DISTRIBUTION, OR FROM FLUORESCENT OR HID TYPE LIGHTING FIXTURES AND OTHER NON-POS LOW VOLTAGE CONDUCTORS.
- ANY CEILING TILES IN THE AREA WHERE THE LOW-VOLTAGE CABLE MANAGEMENT SYSTEM IS LOCATED SHALL NOT BE INSTALLED UNTIL THE POS VENDOR'S CONTRACTOR COMPLETES THE INSTALLATION OF ALL POS CABLING.
- ALL NON-POS LOW VOLTAGE CABLING SHALL BE INSTALLED IN A SEPARATE CABLE MANAGEMENT SYSTEM INDEPENDENT OF THE LOW-VOLTAGE CABLE MANAGEMENT SYSTEM UTILIZED FOR THE POS CABLING.
- THE POS INSTALLER SHALL BE RESPONSIBLE TO FURNISH AND INSTALL ALL LOW VOLTAGE CABLING REQUIRED FOR THE COMPLETE AND FULLY FUNCTIONAL OPERATION OF THE POS SYSTEM. ALL POS CABLING SHALL BE INSTALLED WITHIN THE LOW-VOLTAGE CABLE MANAGEMENT SYSTEM.

ELECTRICAL POS CERTIFICATION

AS OF THE DATE BELOW, I HEREBY CERTIFY THAT ALL ELECTRICAL WORK, ELECTRICAL SERVICE AND ELECTRICAL SYSTEMS, MATERIALS AND LABOR RELATED TO THE POS ELECTRICAL INSTALLATION IN WHICH THE UNDERSIGNED ARE DIRECTLY OR INDIRECTLY RESPONSIBLE HAVE BEEN PROPERLY INSTALLED IN FULL COMPLIANCE WITH ALL CONSTRUCTION DOCUMENTS AND ALL NFPA, BUILDING, ELECTRICAL AND OTHER APPLICABLE CODES, ALONG WITH ALL OF THE REQUIREMENTS OUTLINED ON THIS DRAWING. I FURTHER CERTIFY THAT THE ELECTRIC SERVICE POWERING THE POS SYSTEM HAS BEEN PROPERLY INSTALLED BY A QUALIFIED ELECTRICIAN, SKILLED, KNOWLEDGEABLE AND TRAINED TO INSTALL ALL THE REQUIRED ELECTRICAL DISTRIBUTION COMPONENTS NECESSARY TO POWER THE POINT OF SALE (POS) SYSTEM.

GENERAL CONTRACTOR: _____ ELECTRICAL CONTRACTOR: _____

BY: _____ BY: _____

DATE: _____ DATE: _____

PREPARED BY: **McDonald's USA, LLC**

DATE: 10/04/2022

REVIEWED BY: RH

DATE ISSUED: 10/04/2022

TITLE: 2022 STANDARD BUILDING - BBZ0

DESCRIPTION: WOOD BEARING WALLS W/HARDBOARD SIDING

WOOD ROOF TRUSS FRAMING

E.L.F.'S/BATTEN/HARDBOARD SIDING EXTERIOR FINISH

SHEET NO: **E1.0**

POS RISER DIAGRAM

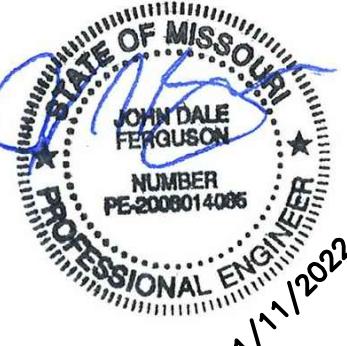
024-1290.00.0

024-1290

3720 W. Sunshine

Springfield, MO

REV. DATE DESCRIPTION



TRASH CORRAL POWER:

3/4" C-4#10 & #10 GND TO A 30A-2P AND A 20A-1P CB IN PANEL AP-2 FOR TRASH COMPACTOR AND WP GFCI DCO. PROVIDE 30A-2P NF DISCONNECT FOR TRASH COMPACTOR. VERIFY EXACT LOCATION AND ALL REQUIREMENTS OF TRASH CORRAL IN FIELD.

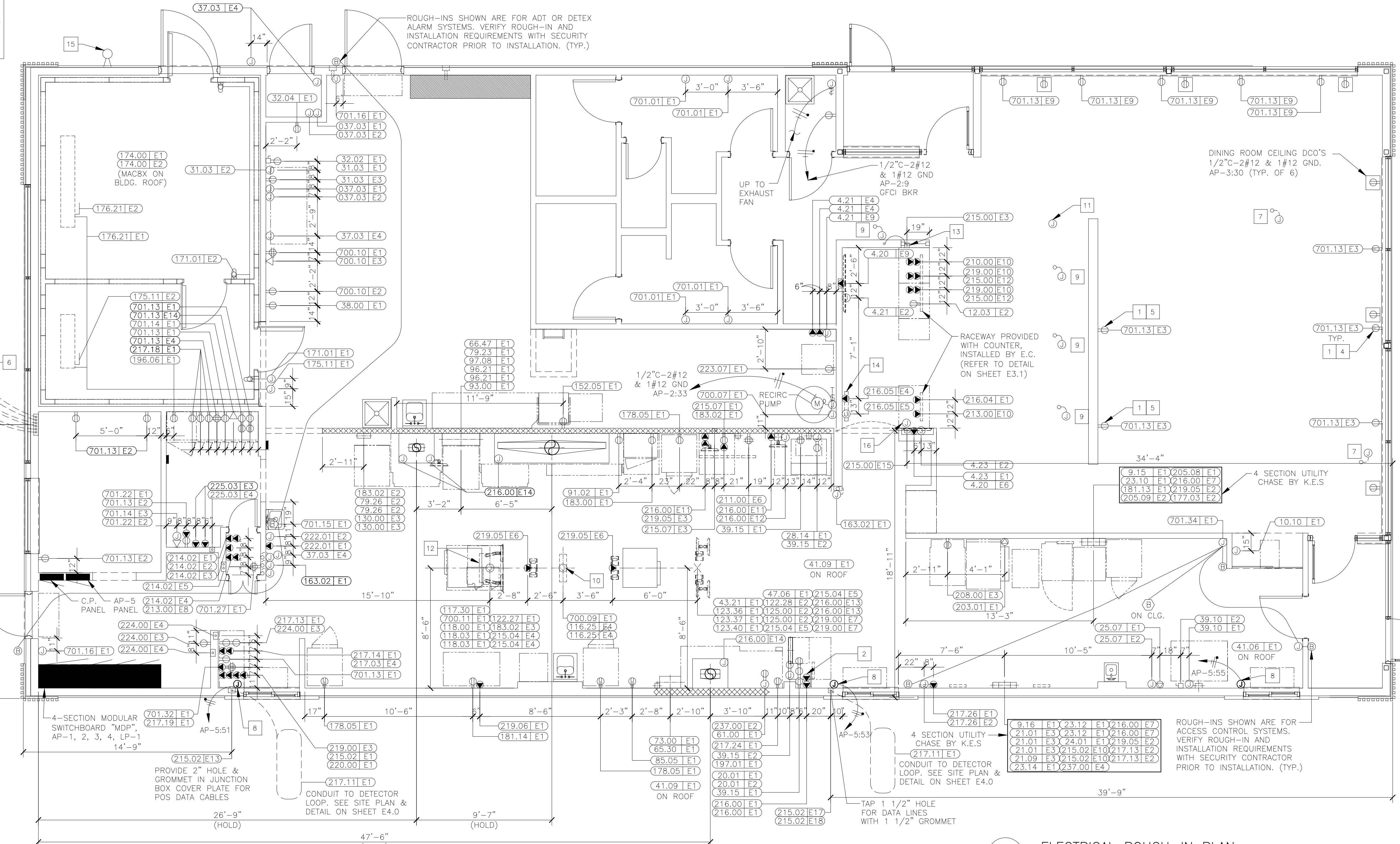
COMPLETE INSTALLATION OF THE SECONDARY DETECTOR LOOPS & C.O.D. CONDUIT FOR CURRENT & ANY FUTURE D/T EQUIPMENT. IF SECONDARY D/T IS NOT INSTALLED, EXTEND INTO LANDSCAPED AREA BEHIND BUILDING, STUB, & CAP FOR FUTURE ACCESS.

EXTEND 2" CONDUIT TO DT CAMERA MOUNTED ON LIGHT POLE OR OTHER POLE. COORDINATE STUB-UP LOCATION WITH ACM AND DT CAMERA INSTALLER

EXTEND CONDUITS TO OUTDOOR MENU BOARDS FOR DATA CONNECTIONS. REFER TO DRIVE THRU DIAGRAM ON SHEET E4.0

(2) 1-1/2" CONDUIT TO SECONDARY SPEAKER FOR DATA & LOOP DETECTOR SEE CIVIL DRAWINGS (217.10) E1

(2) 1-1/2" CONDUIT TO PRIMARY SPEAKER FOR DATA & LOOP DETECTOR SEE CIVIL DRAWINGS (217.10) E1



1 ELECTRICAL ROUGH-IN PLAN
E1.1 1/4" = 1'-0"

SYMBOLS AND ABBREVIATIONS

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	SINGLE POLE SWITCH, 3W=THREE WAY SWITCH, K=KEYED SWITCHED, VS=VACUANCY SENSOR		BUZZER
	MANUAL SWITCH (T=THERMAL OVERLOADS)		BUTTON FOR BUZZER
	TRANSFORMER		PULLBOX
	JB WITH DUPLEX CONVENIENCE OUTLET (FLUSH WITH CEILING)		PANELBOARD
	JB WITH SINGLE CONVENIENCE OUTLET		CIRCUIT BREAKER
	JB WITH DUPLEX CONVENIENCE OUTLET	A	AMPERES
	JB WITH TWO DUPLEX CONVENIENCE OUTLETS	ACM	AREA CONSTRUCTION MANAGER
	JB WITH SPECIAL PURPOSE OUTLET	AFF	ABOVE FINISHED FLOOR
	JB WITH ISOLATED GROUND OUTLET	C	CONDUIT
	IG4710, IG5261, IG4700A, IG5262	CCT	CIRCUIT
	INTERCOM STATION W/ 3/4"C- TO MAIN STATION	EC	ELECTRICAL CONTRACTOR
	TELEPHONE JACK	GC	GENERAL CONTRACTOR
	JUNCTION BOX - WALL OR CEILING MOUNTED	GFI/GFCI	GROUND FAULT CIRCUIT INTERRUPTER
	DISCONNECT SWITCH	GND	GROUND
	STUB UP THRU ROOF	IG	ISOLATED GROUND
	THERMOSTAT SENSOR W/ 1/2"C- UP TO CEILING SPACE	JB	JUNCTION BOX
	MOTOR CONNECTION	KES	KITCHEN EQUIPMENT SUPPLIER
	CONDUIT RUN CONCEALED IN CEILING OR WALLS	MLO	MAIN LUGS ONLY
	CONDUIT RUN IN FLOOR SLAB	WP	WEATHERPROOF
	HOT (SHORT), NEUTRAL (LONG), EQUIP GRD (LONG WITH DOT), & 'X' DENOTES ISOLATED GRD	CO	CARBON MONOXIDE SENSOR
	J-BOX WITH FINAL EQUIPMENT CONNECTION		
	CEILING MOUNTED OCCUPANCY SENSOR		

ADT ROUGH-IN NOTES

- COORDINATE EXACT INSTALLATION REQUIREMENTS WITH ADT PRIOR TO INSTALLATION TEL. 800-417-8238
- EC SHALL PROVIDE A 2 GANG 3 2 1/2" X 3 2 1/2" X 3 1/2" D JUNCTION BOX AT DOOR FOR INSTALLATION OF DOOR ALARM UNIT. STUB 1/2" ABOVE CEILING FROM JUNCTION BOX. PROVIDE 1/2" FROM J-BOX TO DOOR MAGNETIC SWITCH LOCATION.
- EC SHALL PROVIDE 4" X 4" JUNCTION BOX ABOVE CEILING FOR INSTALLATION OF LOW VOLTAGE TRANSFORMER. VERIFY EXACT LOCATION WITH ADT PRIOR TO INSTALLATION. PROVIDE 1/2" C-2#12 TO LOCKOUT TYPE CB IN PANEL LP-1.

GENERAL NOTES

- SEE SHEET E3.0 FOR PANEL & CIRCUIT BREAKER ASSIGNMENT, VOLT/PH, FLA, BREAKER SIZE, COND/WIRE, RECEPTACLE TYPE, HEIGHT ABOVE FINISHED FLOOR, REQUIREMENTS & REMARKS FOR ALL ELECTRICAL EQUIPMENT.
- SEE LOW VOLTAGE CABLE MANAGEMENT SPECIFICATION ON SHEET E1.0 FOR POS, DATA, AND SOUND SYSTEM REQUIREMENTS.
- GC/EC SHALL COORDINATE LOCATION AND ALL REQUIREMENTS OF CT & METER CABINET WITH LOCAL UTILITY COMPANY. CT & METER CABINET SHALL NOT BE INSTALLED ON D/T SIDE OF BUILDING. GC SHALL PAINT TO MATCH BUILDING COLOR.

KEY NOTES

- TAMPER RESISTANT GFCI DUPLEX RECEPTACLE IN PUBLIC AREAS. EC SHALL PROVIDE HUBBELL GFRST* (**: AL=ALMOND, BK=BLACK, =BROWN, GY=GRAY, I=IVORY, LA=LIGHT ALMOND, R=RED, W=WHITE). SPECIFIED RECEPTACLE BECOMES DE-ENERGIZED UPON FAILURE OF GFCI DEVICE. NO SUBSTITUTIONS.(TYPICAL)
- SEE POS ELECTRICAL RISER DIAGRAM ON SHEET E1.0. (TYPICAL)
- NOT USED.

KEY NOTES

- PER THE AMERICAN WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES (ADAAG), A MINIMUM OF ONE (1) ADA COMPLIANT ELECTRICAL RECEPTACLE SHALL BE INSTALLED AT AN ACCESSIBLE TABLE. GC/EC SHALL REFERENCE FINAL DECOR PLANS AND PROVIDE RECEPTACLES AS NECESSARY FOR COMPLIANCE. (TYPICAL)
- COORDINATE LOCATION OF RECEPTACLES SO THAT RECEPTACLES ARE LOCATED ON FULL HEIGHT WALLS PER THE DECOR PLAN. STUB UP AND CIRCUIT IN HALF WALL FOR RECEPTACLES NOT ON FULL HEIGHT WALLS. CONFIRM FINAL LOCATIONS WITH DECOR DRAWINGS PRIOR TO ROUGH-IN.
- IF MOUNTED TO A LIGHTING POLE, DT CAMERA SHALL ONLY BE INSTALLED ON A POLE WITH MAXIMUM OF (2) LIGHTING HEADS. PROVIDE ISOLATION OF DT CAMERA MOUNTING HARDWARE AND POLE TO PREVENT BI-METALLIC OR GALVANIC CORROSION.
- EC TO PROVIDE AN ALLOWANCE IN BID TO PROVIDE TWO(2) FLEXIBLE POWER CONNECTIONS FOR POWER TO FURNITURE/ FAMILY EXPERIENCE ELEMENTS AS PART OF THE DECOR PACKAGE. E.C. SHALL VERIFY EXACT LOCATIONS IN FIELD AND WITH DECOR DRAWINGS. PROVIDE ALL NECESSARY MATERIALS AND LABOR FOR A COMPLETE AND FULLY NEC CODE COMPLIANT INSTALLATION. ALL COMPONENTS SHALL BE FED FROM A GFCI TYPE CIRCUIT BREAKER AND BRANCH CIRCUIT SHALL CONTAIN TWO PATHS OF GROUNDING (CONDUIT BODY AND AN INSULATED GROUNDING CONDUCTOR) TO COMPLY WITH MCDONALD'S GROUNDING STANDARDS.
- DRIVE THRU WINDOW POWER, CONFIRM REQUIREMENTS WITH MANUFACTURER DRAWINGS.
- PROVIDE POWER WITHIN CEILING FOR CONNECTION TO SELF ORDER KIOSKS. COORDINATE EXACT LOCATION OF KIOSKS WITH DECOR DRAWINGS. PROVIDE 2#12, 1#12 GRD., & 1#12 ISOLATED GROUND ON A 20A DEDICATED CIRCUIT FED FROM THE CP PANEL FOR EACH KIOSK.

- VERIFY DROP CORDS AND RECEPTACLES DO NOT FALL BELOW HEIGHTS LISTED ON E3.0 ELECTRICAL SCHEDULE. RECEPTACLES SHOULD BE LOCATED AT HEIGHTS TO AVOID CONTACT WITH HOT APPLIANCES. ELECTRICAL CONTRACTOR TO COORDINATE THE LOCATIONS OF THE OVERHEAD DROP CORDS WITH THE CENTER ISLAND EQUIPMENT. OVERHEAD ELECTRICAL TO BE RAN IN A TRAPEZED SUPPORT VIA UNI-STRUT WITH A THREADED ROD. COORDINATE LOCATIONS WITH KES SUPPLIER AND MECHANICAL DRAWINGS. REFER TO 3/E3.1 FOR OEP MOUNTING DETAIL.
- PROVIDE J-BOX ABOVE CEILING NEAR KIOSK FOR FUTURE DIGITAL MERCHANDISER. EXTEND CIRCUIT TO THIS LOCATION FROM DIGITAL MERCHANDISER NEAR SERVICE AREA. EXTEND J-HOOKS FROM SERVICE AREA FOR FUTURE DATA CABLES.
- EC TO INSTALL DROP CORDS JUSTIFIED TO THE DRIVE THRU SIDE OF THE BUILDING
- CONTRACTOR TO PUNCH HOLES IN SERVICE POD FOR CABLE AND CONDUIT ROUTING. UTILIZE BUSHINGS PROVIDE WITH SERVICE POD TO PROTECT CABLES
- REFER TO DETAIL 4/E3.1 FOR DIMENSIONS OF ORB MONITOR, DIGITAL MERCHANDISER AND DMB'S ROUGH-INS.
- AT&T TO PROVIDE #8 GRD CONDUCTOR FROM BUILDING EXTERIOR WIRELESS ACCESS POINT TO ABOVE INTERIOR CEILING. EC TO EXTEND CONDUCTOR TO BUILDING GROUNDING SYSTEM. COORDINATE EXACT LOCATION OF ACCESS POINT IN FIELD WITH AT&T.
- PROVIDE J-BOX ABOVE CEILING FOR DIGITAL MERCHANDISER. EXTEND CIRCUIT TO THIS LOCATION FROM DIGITAL MERCHANDISER NEAR SERVICE AREA. EXTEND J-HOOKS FROM SERVICE AREA FOR FUTURE DATA CABLES.

STATE OF MISSOURI
JOHN DALE FERGUSON
REGISTERED PROFESSIONAL ENGINEER
NUMBER PE-50001-4085
EXPIRES 11/1/2022

CORE STATES GROUP

2022 McDonald's USA, LLC
McDonald's USA, LLC
These drawings and specifications are the confidential and proprietary property of McDonald's USA, LLC and shall not be copied or reproduced without written authorization. The contract documents were prepared not suitable for use on a different site or at a later time. Use of these drawings for reference or example on another project requires the contract documents for reuse on another project is not authorized.

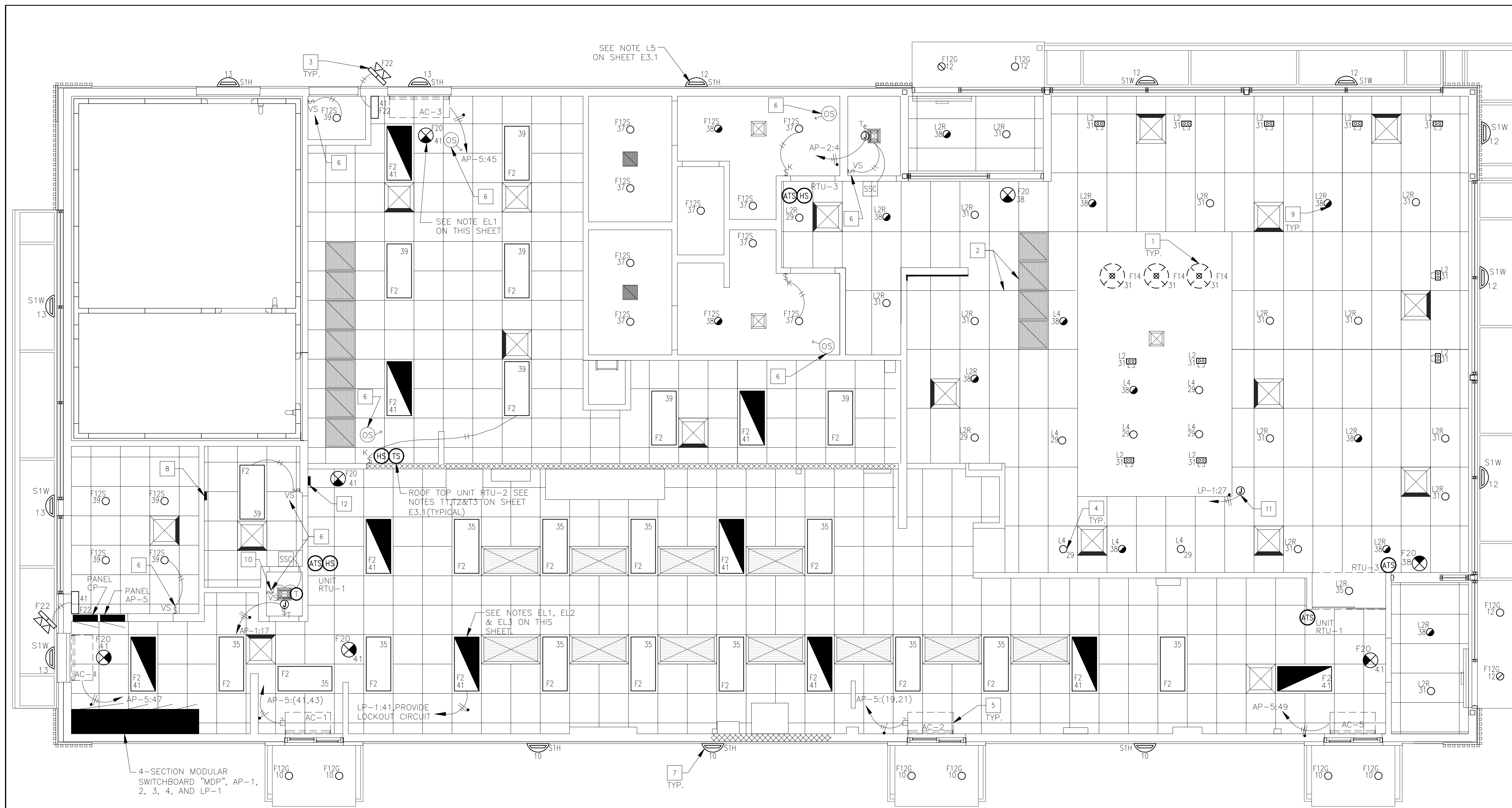
PREPARED BY: McDonald's USA, LLC
DRAWN BY: [Name]
STD ISSUE DATE: 2022-10-10
REVIEWED BY: [Name]
DATE ISSUED: 10-04-2022

TITLE: 2022 STANDARD BUILDING - BB20
DESCRIPTION: 4-597 - WOOD/WOOD
WOOD BEARING WALLS W/HARDBOARD SIDING
WOOD ROOF TRUSS FRAMING
E.L.F.S./BATEN/HARDBOARD SIDING EXTERIOR FINISH

SHEET NO. 024-1290.00
E1.1
ROUGH-IN PLAN

024-1290 3720 W Sunshine Springfield, MO

REV	DATE	DESCRIPTION



1 LIGHTING FLOOR PLAN
E2.0 1/4" = 1'-0"

SEE SHEET E3.1 FOR GENERAL LIGHTING NOTES AND "ROOF PLAN" (SHEET E2.1) FOR ADDITIONAL ELECTRICAL ROUGH-IN & LIGHTING REQUIREMENTS.

McDONALD'S SITE SIGNAGE:

EC SHALL PROVIDE:
ELECTRICAL CONTRACTOR SHALL COORDINATE POWER REQUIRED FOR ROAD SIGN. MOST SIGNS REQUIRE (1) 20 AMP 120V CIRCUIT. IF USED A 90-200 SIGN REQUIRES (4) 20 AMP 120V CIRCUITS OR ONE 1-PHASE 60 AMP 120/208V CIRCUIT. COORDINATE WITH SUPPLIERS DRAWINGS.
(1) 20 AMP 120 VOLT CIRCUIT, EC TO WIRE 2#12 TO 120 VOLT FLAG FLOODLIGHTS.
(1) 20 AMP 120 VOLT CIRCUIT TO D.C.O. IN ROAD SIGN BASE IF REQUIRED.
(2) 20 AMP 120 VOLT CIRCUITS FOR INGRESS/EGRESS DIRECTIONAL SIGNS (IF APPLICABLE).
*VERIFY EXACT LOCATIONS/TYPES/QUANTITIES OF ALL THE ABOVE WITH SITE/CIVIL PLANS AND MCD ACM.

- KEY NOTES**
- CENTER PENDANT LIGHTS OVER TABLES (TYPICAL)
 - ALL SOFFIT LOCATIONS, LIGHTING, & SUPPLY GRILLS SHALL BE COORDINATED WITH DECOR COMPANY DRAWING PRIOR TO INSTALLATION.
 - EC SHALL INSTALL AND CONFIGURE REMOTE EMERGENCY LIGHTING AT ALL EGRESS EXTERIOR DOORS FOR MAXIMUM ILLUMINATION AT POINTS OF EGRESS. INSTALL WP J-BOX WITHIN SOFFIT TO ALLOW A FLUSH INSTALLATION OF ANY EXTERIOR EMERGENCY EGRESS LIGHTING (TYPICAL).
 - OPTIONAL ADJUSTABLE WALL WASH FIXTURE TO ILLUMINATE LOGOS OR GRAPHICS. EC SHALL VERIFY EXACT LOCATION SO AS TO ADEQUATELY ILLUMINATE McDONALD'S ARCH LOGO SIGN AND GRAPHICS.
 - AIR CURTAIN UNIT. NON HEATED VERSION TO USE 1/2" C. 2#12, 1#12GRD. HEATED VERSION TO USE 1" C. 2#6, 1#10 GRD. (TYPICAL).
 - PROVIDE DUAL TECHNOLOGY CEILING MOUNTED OCCUPANCY SENSOR OR WALL MOUNTED VACANCY SENSOR AS SHOWN. ORDER ALL SENSORS FROM SECURITY LIGHTING SYSTEMS, INC.
 - RADIAL WALL SCOFF. SEE NOTE L2 ON SHEET E3.1 AND ARCHITECTURAL ELEVATIONS ON SHEETS A2.0 & A2.1. (TYPICAL)
 - BUILDING AUTOMATION SYSTEM LOCATION. SEE LIGHTING CONTROL DETAILS ON SHEET E4.1.
 - PROVIDE LIGHTING INVERTER FOR USE WITH FIXTURES SHOWN SHADED OR SLASHED. MODEL #L125T SHOULD BE USED FOR F12S, F12SA & F12S WITH NOT MORE THAN EIGHT DOWNLIGHTS CONNECTED TO EACH INVERTER. IF DECOR USES ALTERNATE FIXTURES, COORDINATE INVERTER TO BE USED WITH LIGHTING SUPPLIER. EC SHALL VERIFY THE QUANTITY OF FIXTURES THAT CAN BE CONNECTED WITHOUT EXCEEDING OPERATING CAPACITY OF UNIT AND PROVIDE ADDITIONAL CIRCUITS AND INVERTERS AS REQUIRED. (TYPICAL)
 - CENTER VACANCY SENSOR SWITCH OPPOSITE COMPUTER RACK IN A LOCATION ACCESSIBLE FROM BOTH DOORS FOR CONTROL OF CEILING MOUNTED LIGHT. IN DATA ROOM. FAN CONTROLLED BY LOCAL THERMOSTAT.
 - PROVIDE POWER FOR LIGHT WITHIN TOY DISPLAY. COORDINATE EXACT LOCATION WITH DECOR DRAWINGS.
 - LIGHTING CONTACTORS IN NEMA 1 ENCLOSURE JUST BELOW CEILING. EC SHALL PROVIDE 120 VOLT CONTROL CIRCUIT TO CONTACTOR PANEL. VERIFY EXACT LOCATION IN FIELD AND REFER TO DRAWING E4.1 FOR ADDITIONAL DETAILS.

EMERGENCY LIGHTING NOTES

- EC SHALL INSTALL A LOCK ON CIRCUIT BREAKER HANDLE FOR ALL EMERGENCY LIGHTING CIRCUITS. EC SHALL VERIFY ALL REQUIREMENTS AND FINAL EMERGENCY LIGHTING LOCATIONS WITH LOCAL AUTHORITIES. INCLUDE ALL COSTS IN BASE BID.
- IF NOT INSTALLED BY MANUFACTURER, EC SHALL BE RESPONSIBLE FOR THE COMPLETE INSTALLATION OF THE EMERGENCY INVERTER IN NIGHT LIGHTING FIXTURES SHOWN ON THIS SHEET.
- LED FIXTURES DENOTED AS NIGHT LIGHTING OR SWITCHED EMERGENCY SHALL BE CONNECTED TO AN INVERTER. INVERTER SHALL BE CAPABLE OF ILLUMINATING FIXTURE FOR 1.5 HOURS TO COMPLY WITH NEC SECTION 700 AND UL924.
- EMERGENCY BATTERY LIGHTING WALL PACKS IN PLAYPLACE SHALL BE LOCATED SO AS TO PROVIDE FOR MAXIMUM ILLUMINATION OF AREA. EC SHALL VERIFY EXACT PLACEMENT IN THE FIELD WITH McDONALD'S ACM. (IF APPLICABLE)
- EMERGENCY LIGHTING HAS BEEN DESIGNED PER NFPA 101 TO MAINTAIN 1 FC IN PATH OF EGRESS. IF FIELD CONDITIONS REQUIRE ANY CHANGES TO LIGHTING DESIGN, EMERGENCY LIGHTING SHALL BE INSTALLED TO MEET THE ABOVE REQUIREMENTS.

KEY

DENOTES FIXTURE TYPE
DENOTES CIRCUIT NUMBER

DENOTES FIXTURE TYPE
DENOTES CIRCUIT NUMBER

LIGHTING FIXTURES SHOWN HALF SHADED SHALL BE WIRED TO AN EMERGENCY INVERTER AND CIRCUITED AS A NIGHT LIGHT. SEE NOTE EL3 ON THIS SHEET. COORDINATE LOCATION WITH DECOR.

LIGHTING FIXTURES SHOWN WITH A SLASH SHALL BE WIRED TO AN EMERGENCY INVERTER AND CIRCUITED AS SWITCHED EMERGENCY FIXTURES SO THE FIXTURE IS CONTROLLED VIA TIMELOCK BUT TURNS ON UPON LOSS OF POWER. SEE NOTE EL3 ON THIS SHEET. COORDINATE LOCATION WITH DECOR.

LIGHTING FIXTURE SCHEDULE:

MARK	SYMBOL	DESCRIPTION	DIFFUSER	LAMPS		BALLAST	MOUNTING	MANUFACTURER AND CATALOG NUMBER
				WATTS	TYPE			
F2	[Symbol]	2' x 4' GRID TROFFER	PRISMATIC ACRYLIC	44W	LED	-	RECESSED	SECURITY LIGHTING: # LCA124-35HLG-EDU-WP-GK
F7	[Symbol]	1' x 4' GRID TROFFER	PRISMATIC ACRYLIC	44W	LED	-	RECESSED	SECURITY LIGHTING # LCA114-35HLG-EDU-WP-GK
L2	[Symbol]	2 HEAD DOUBLE GIMBALL	-	14W	LED	-	RECESSED	SECURITY LIGHTING # GM2-120-LM-30-SBS NOT USED FOR ALL DECORS. VERIFY WITH PHOTOMETRIC
L2R	[Symbol]	4" LED DOWN LIGHT	-	16W	LED	-	RECESSED	SECURITY LIGHTING # RDA-136LM-30-FL-S/RDA-136-H VERIFY DOWNLIGHT TO BE USED WITH PHOTOMETRIC
L4	[Symbol]	3" LED ADJUSTABLE DOWN LIGHT	-	7W	LED	-	RECESSED	SECURITY LIGHTING # RDA-60LM-30-NF-S/RDA-60-H VERIFY DOWNLIGHT TO BE USED WITH PHOTOMETRIC
F12G	[Symbol]	6" LED DOWN LIGHT - SHALLOW HOUSING	-	12W	LED	-	RECESSED	SECURITY LIGHTING # LB6LEDA10L-50K-9-GL/RMNIC-QL
F12DP	[Symbol]	4" LED DOWN LIGHT - GOLD TRIM - DELIVERY POD	-	9W	LED	-	RECESSED	SECURITY LIGHTING # LB4A-6LD-30K-9-GD/IBX40L-120 (PROVIDED WITH DELIVERY POD)
F14	[Symbol]	ALPHABET PENDANT	-	(1)-8W	LED	-	PENDANT	SECURITY LIGHTING # MS-P-A-BM-108LED-CBC (TO BE VERIFIED WITH DECOR DRAWINGS)
F20	[Symbol]	EXIT SIGN WITH BATTERY BACKUP	-	1.8W	LED	-	SURFACE	SECURITY LIGHTING: EUEURWE. SEE NOTE LS2 ON THIS SHEET.

F21	[Symbol]	2 HEADED EMERGENCY BATTERY LIGHT	-	-	LED	-	SURFACE TO WALL OR CEILING	SECURITY LTG. #EV4D
F22	[Symbol]	EMERG BATTERY & 2 REMOTE HEADS	-	-	LED	=	SURFACE TO WALL OR SOFFIT	SECURITY LTG. #EV4D-02L-0/EV0DB
F23	[Symbol]	2 HEADED EMERG LIGHT & 2 REMOTE HEAD IF REQ'D	-	-	LED	-	SURFACE TO WALL OR SOFFIT	SECURITY LTG. #EV4D/EV0DB
S1H	[Symbol]	"DOWN ONLY" RADIAL WALL SCOFF - SILVER	TEMPERED GLASS	(1)-14W	LED	-	SURFACE TO WALL	SECURITY LIGHTING: #RWSC-36L-5K-DO-U-PS
S1W	[Symbol]	"DOWN ONLY" RADIAL WALL SCOFF - WHITE	TEMPERED GLASS	(1)-14W	LED	-	SURFACE TO WALL	SECURITY LIGHTING: #RWSC-36L-5K-DO-U-WH

- LIGHTING SCHEDULE NOTES:**
- LS1. ORDER LED EXIT SIGNS WITH LETTER COLORS THAT COMPLY WITH LOCAL CODES.
- FOR RED LETTERS USE #EVE-U-R (UNIVERSAL),
- FOR GREEN LETTERS USE #EVE-U-G (UNIVERSAL), OR
IF THE ABOVE EXIT SIGNS DO NOT COMPLY WITH LOCAL CODES USE: LED SIGN WITH BATTERY BACKUP, LETTER SIZE, COLOR, TYPE & DIRECTIONAL ARROWS AS REQUIRED BY THE LOCAL AUTHORITIES.
- LS2. ALL INTERIOR LIGHT FIXTURES SHALL BE 120 VOLT UNLESS NOTED OTHERWISE.
- LS3. LIGHTING FIXTURES HAVE BEEN CHOSEN TO ACHIEVE MAXIMUM ENERGY CONSERVATION WHILE MAINTAINING ADEQUATE LEVEL OF ILLUMINATION. SPECIFICATIONS SHALL BE STRICTLY FOLLOWED. ANY DEVIATION FROM THE SPECIFICATIONS SHALL BE APPROVED IN WRITING BY McDONALD'S CORPORATION.

ORDER ALL LIGHT FIXTURES FROM:

SECURITY LIGHTING SYSTEMS, INC.
PHONE: 1-800-LIGHT-IT
EMAIL: QUOTATIONS@SECURITYLIGHTING.COM

CS ILLUMINATIONS
PHONE: 760-477-1244
EMAILS: MCD@CSILLUMINATIONS.COM
WWW.CSILLUMINATIONS.COM/MCD

© 2022 McDonald's USA, LLC

McDonald's USA, LLC

These drawings and specifications are the confidential and proprietary property of McDonald's USA, LLC and shall not be copied or reproduced without written authorization. The contract documents were prepared not suitable for use on a different site or at a later time. Use of these drawings for reference or example on another project requires the contract documents for reuse on another project is not authorized.

PREPARED FOR: McDonald's USA, LLC

DRAWN BY: TFF

STD ISSUE DATE: 2022-10

REVIEWED BY: RH

DATE ISSUED: 10-04-2022

TITLE: 2022 STANDARD BUILDING - BB20

DESCRIPTION: WOOD BEARING WALLS W/HARDBOARD SIDING WOOD ROOF TRUSS FRAMING E.L.F.S./BATTEN/HARDBOARD SIDING EXTERIOR FINISH

SHEET NO: E2.0 LIGHTING PLAN

DATE: 11/11/2022

REV. DATE. DESCRIPTION

ELECTRICAL ROOF PLAN

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

KEYED NOTES

- E1** EVERY LINEAR RUN OF SLED FIXTURES REQUIRES A DEDICATED WHIP KIT PROVIDED WITH FIXTURE. CONTRACTOR TO FIELD VERIFY FIXTURE MOUNTING HEIGHT, LOCATION, QUANTITY, FIXTURE LENGTHS, AND ALL ELECTRICAL CONNECTION REQUIREMENTS WITH SECURITY LIGHTING PRIOR TO ORDERING AND INSTALLATION (TYPICAL).
- E2** WEATHER PROOF RECEPTACLES WITH GFCI PROTECTION ARE PROVIDED AND MOUNTED WITHIN MOTOR HOUSING LOCATIONS PER NEC ARTICLE 210.63. CIRCUIT SHALL EMANATE FROM PANEL AP-5,CCT.#13,(TYPICAL).
- E3** SMOOTH BRACING IS REQUIRED FOR LED FIXTURE INSTALLATION UNDER COPING/FLASHING.(TYPICAL)
- E4** REFER TO SHEET E4.0 FOR CONDUIT AND WIRE SIZE.(TYPICAL)
- E5** E.C SHALL PROVIDE A WEATHER-PROOF J-BOX ON INSIDE FACE OF PARAPET, MOUNTED 6" BELOW TOP OF PARAPET FOR LIGHTING CONTROL PANEL PHOTOCELL. (PHOTOCELL FURNISHED BY OTHERS AND INSTALLED BY EC). REFER TO LIGHTING CONTROL DETAILS ON E4.1
- E6** TO LIGHTING ENCLOSURE W/ TIMER. COORDINATE WITH LIGHTING CONTROL DETAILS ON SHEET E4.1
- E7** COOKING EQUIPMENT EXHAUST FANS. SEE SHEET E3.0 FOR ELECTRICAL REQUIREMENTS. SEE SHEET E3.2 FOR EXHAUST FAN INTERLOCK WIRING DIAGRAMS. (TYPICAL)
- E8** PROVIDE NEMA 3R DISCONNECT WITH CURRENT LIMITING FUSES TO COMPLY WITH NEC 110 AND 440. ELECTRICAL CONTRACTOR SHALL STUB UP THRU RACEWAY IN CURB TO ELIMINATE CONDUIT PENETRATION OF ROOFING. (TYPICAL)
- E9** EXTERNAL NEMA 3R MOUNTED ON SIDE OF FAN BY MANUFACTURER. ELECTRICAL CONTRACTOR SHALL STUB-UP THRU ROOF AND PROVIDE FLEXIBLE WEATHERPROOF CONDUIT FROM ROOF PENETRATION TO DISCONNECT (TYPICAL).
- E10** REMOTE CONDENSING UNITS. SEE SHEET E3.0 FOR WIRING AND CIRCUITRY REQUIREMENTS.
- E11** CANOPY LIGHT. LP-1:11 EC SHALL VERIFY EXACT SPECIFICATIONS AND LOCATION WITH MANUFACTURER. PLACE REMOTE POWER SUPPLIES ABOVE ACCESSIBLE CEILING WITHIN VESTIBULE. VERIFY EXACT INFEEED REQUIREMENTS IN THE FIELD. SEE NOTE L5 ON SHEET E3.1. (TYPICAL)
- E12** E.C. SHALL PROVIDE A WEATHER-PROOF JUNCTION BOX WITH 3/4" C STUB DOWN TO CEILING SPACE WITH BUSHING FOR ROOF-TOP CAMERA OR SATELLITE. VERIFY EXACT LOCATION(S) WITH MCD AREA CONSTRUCTION MANAGER PRIOR TO INSTALLATION.
- E13** E.C. SHALL PROVIDE A JUNCTION BOX FOR ARCH LOGO / McDONALD'S FASCIA / PLAY-PLACE SIGN. SEE NOTE L1 ON SHEET E3.1. COORDINATE EXACT LOCATION IN FIELD WITH ACM. ALL SIGNS PROVIDED WITH INTEGRAL DISCONNECT SWITCH FROM MANUFACTURER.(TYPICAL)
- E14** E.C. SHALL PROVIDE A JUNCTION BOX FOR ROOF-TOP FLAG POLE LIGHTING. VERIFY LOCATION(S) WITH MCD PROJECT MANAGER PRIOR TO INSTALLATION.
- E15** FLOOD LIGHT MOUNTED ABOVE CANOPY. LP-1:11 EC SHALL VERIFY EXACT SPECIFICATIONS AND LOCATION WITH ARCHITECTURAL ELEVATIONS. PLACE REMOTE POWER SUPPLIES ABOVE ACCESSIBLE CEILING WITHIN VESTIBULE. VERIFY EXACT INFEEED REQUIREMENTS IN THE FIELD. SEE FLOOD LIGHT DETAIL ON SHEET E3.1. (TYPICAL)

DRAWING NOTES

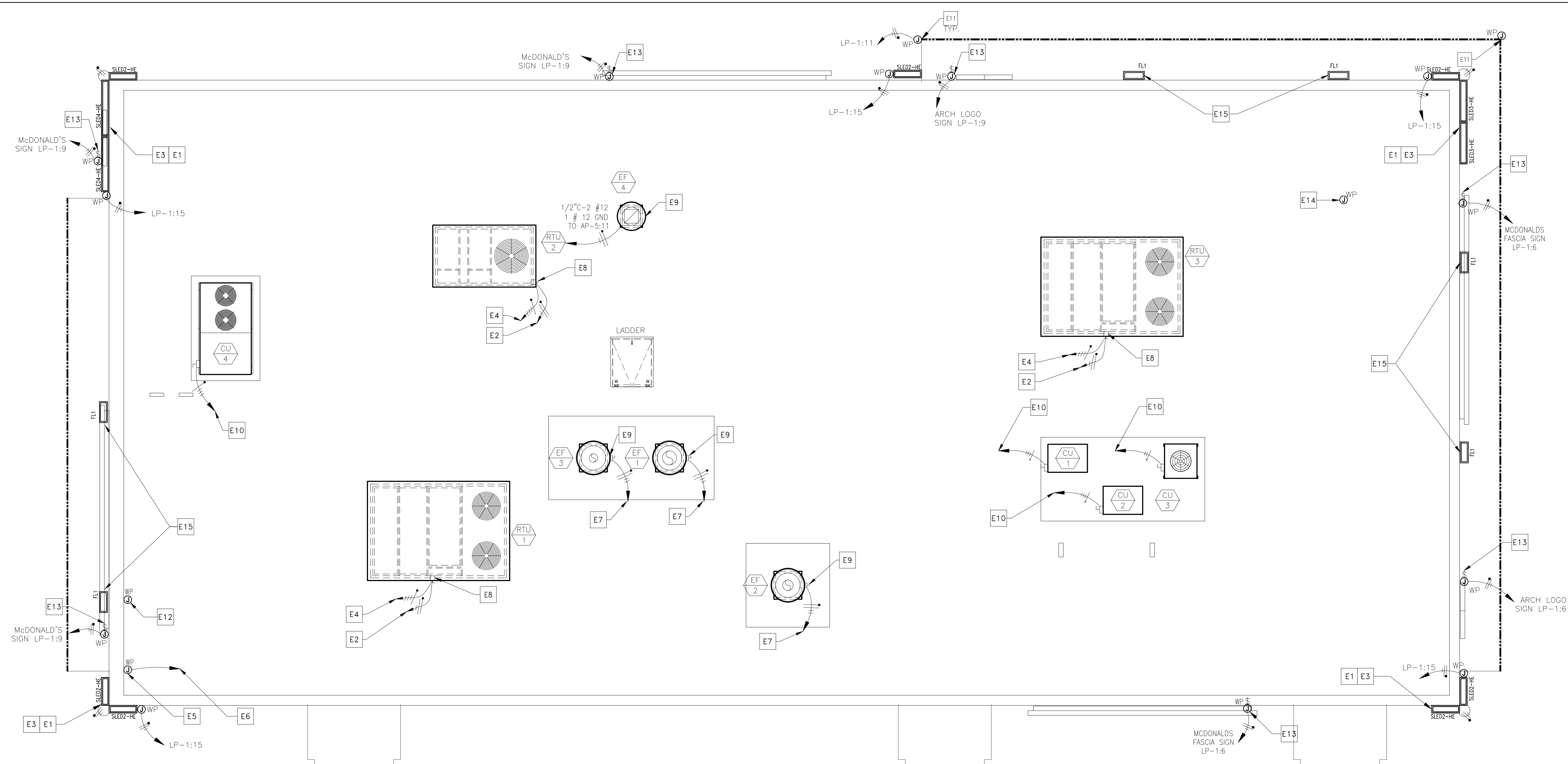
1. SEE DRAWING M-4.0 FOR GENERAL MECHANICAL NOTES.
2. SEE DRAWINGS M-3.0 AND M-4.1 FOR MECHANICAL EQUIPMENT SCHEDULES AND DETAILS.
3. SEE DRAWING M-4.0 FOR MECHANICAL LEGEND.
4. SEE DRAWING K-2.1 FOR REMOTE CONDENSER AND MAC UNIT INFORMATION.
5. SEE ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.

LED GENERAL NOTES

1. PLACE LED FIXTURE AT DESIRED LOCATION AND ATTACH POWER SUPPLY AND MOUNTING BRACKET AS RECOMMENDED BY MANUFACTURER.
2. EC SHALL CONNECT NEW FIXTURES TO A 120V CIRCUIT AND MAKE ALL ELECTRICAL CONNECTIONS AS REQUIRED FOR A COMPLETE OPERATING SYSTEM.
3. POWER SUPPLY SHALL ALWAYS BE INSTALLED TO THE LEFT SIDE OF FIXTURE WHEN FACING BRAND WALL.

LED FIXTURE SCHEDULE:

MARK	SYMBOL	DESCRIPTION	DIFFUSER	LAMPS		MOUNTING	MANUFACTURER AND CATALOG NUMBER
				WATTS	TYPE		
SLED2-HE		DOWN ONLY ACCENT LIGHTING (SEE PLAN)	TEMPERED GLASS	1-10W PER FIXTURE	LED	SURFACE	SECURITY LIGHTING: SLED-HE-24-DO-U-IO CUSTOM BUILT FOR EXTERIOR ACCENT CHANNELS.
SLED3-HE		DOWN ONLY ACCENT LIGHTING (SEE PLAN)	TEMPERED GLASS	1-14W PER FIXTURE	LED	SURFACE	SECURITY LIGHTING: SLED-HE-36-DO-U-IO CUSTOM BUILT FOR EXTERIOR ACCENT CHANNELS.
SLED4-HE		DOWN ONLY ACCENT LIGHTING (SEE PLAN)	TEMPERED GLASS	1-19W PER FIXTURE	LED	SURFACE	SECURITY LIGHTING: SLED-HE-48-DO-U-IO CUSTOM BUILT FOR EXTERIOR ACCENT CHANNELS.
FL1		UP ONLY ACCENT LIGHTING (SEE PLAN)	TEMPERED GLASS	1-16W PER FIXTURE	LED	SURFACE	SECURITY LIGHTING: EL218-W-5-8L-SK-UV-IO-JWIO



DRAWN BY: TFF
 STD ISSUE DATE: 2022-10
 REVIEWED BY: RH
 DATE ISSUED: 10-04-2022

PREPARED FOR: McDonald's USA, LLC
 TITLE: 2022 STANDARD BUILDING - BB20
 DESCRIPTION: 4597 - WOOD/WOOD
 WOOD BEARING WALLS W/HAROE BOARD SIDING
 WOOD ROOF TRUSS FRAMING
 E.L.F.S./BATTEN/HAROE BOARD SIDING EXTERIOR FINISH
 SITE ID: 024-1290.00.0
 SITE ADDRESS: 3720 W. Sunshine
 Springfield, MO

© 2022 McDonald's USA, LLC
McDonald's USA, LLC
 These drawings and specifications are the confidential and proprietary property of McDonald's USA, LLC and shall not be copied or reproduced without written authorization. The contract documents were prepared for use on a different site or at a later time. Use of these drawings for reference or example on another project requires the contract documents for reuse on another project is not authorized.

PREPARED BY: CORE STATES GROUP
 210 S.E. 4th Street
 Birmingham, AL 3713
 www.corestates.com

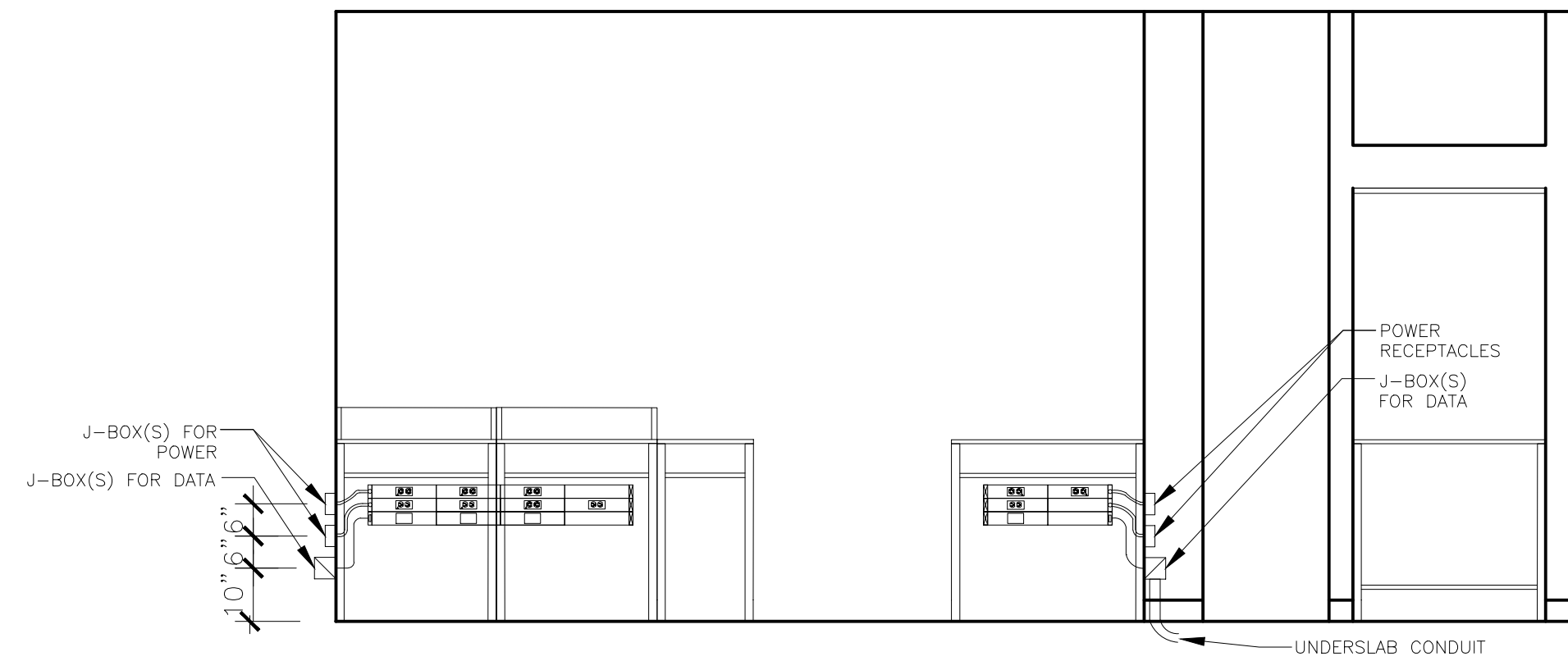
PROFESSIONAL ENGINEER
 NUMBER: PE-8000714085
 DATE: 11/11/2022

REV	DATE	DESCRIPTION	BY

ELECTRICAL SCHEDULE										
TAG #	QTY	DESCRIPTION	VOLT/PH	FLA	BRK SIZE	COND/WIRE	PNL/CCT	RECEP TYPE	HGT AFF	REQUIREMENTS & REMARKS
004.20E6	1.00	DIGITAL MERCHANDISER	120/1 ISOLATED	2.6	20A	1/2" C-2#12IG	CP-6	IG5262	6'-5"	
004.20E9	1.00	MENU BOARD - DIGITAL	120/1 ISOLATED	2.6 EACH	20A	1/2" C-2#12IG	CP-6	(2) IG5262	6'-5"	PROVIDE IN-WALL ENCLOSURE HUBBELL NSAV62M OR EQUIVALENT, VERIFY ENCLOSURE IS CONCEALED BEHIND BOARDS
004.21E2	1.00	MENU BOARD - DIGITAL - MEDIA PLAYER	120/1 ISOLATED	2.6 EACH	20A	1/2" C-2#12IG	CP-6	JIB	9'-2"	JB W/ 2-1/2" C. TO TERMINATE ABOVE CEILING W/BUSHINGS. FOR DATA CABLES. SUPPLY W/GROMMETED OPENING IN COVER PLATE
004.21E4	2.00	MENU BOARD - DIGITAL - MEDIA PLAYER	120/1 ISOLATED	2.6 EACH	20A	1/2" C-2#12IG	CP-6	IG5262	7'-9"	
004.21E9	1.00	MENU BOARD - DIGITAL - MEDIA PLAYER	120/1 ISOLATED	2.6 EACH	20A	1/2" C-2#12IG	CP-6	JIB	7'-9"	JB W/ 2-1/2" C. TO TERMINATE ABOVE CEILING W/BUSHINGS. FOR DATA CABLES. SUPPLY W/ GROMMETED OPENING IN COVER PLATE
004.23E1	1.00	DIGITAL MERCHANDISER - MEDIA PLAYER	120/1 ISOLATED	1.0	20A	1/2" C-2#12IG	CP-6	IG5262	6'-5"	
004.23E2	1.00	DIGITAL MERCHANDISER - MEDIA PLAYER	120/1 ISOLATED	1.0	20A	1/2" C-2#12IG	CP-6	JIB	6'-5"	JB W/ 1" C. TO FULL HEIGHT WALL AND TO ABOVE CEILING W/BUSHINGS. FOR DATA CABLES. SUPPLY W/GROMMETED OPENING IN COVER PLATE
009.15E1	1.00	UTILITY CHASE - FDDT INTERIOR WALL								UTILITY CHASE AND RECEPTABLES PROVIDED BY K.E.S.
009.16E1	1.00	UTILITY CHASE - FDDT EXTERIOR WALL								UTILITY CHASE AND RECEPTABLES PROVIDED BY K.E.S.
010.10E1	1.00	CO2 DRIVEN KETCHUP DISPENSER								FOR CO2 LINE TO KETCHUP DISP. IF CHASE IS NOT SPECIFIED. (SEE P1.6)
012.03E2	1.00	BAKED GOODS DISPLAY CASE - 14"	120/1	2.5	15A	1/2" C-2#12	AP-5:25	5-15R	SEE RMKS	PROVIDE RECEPT. IN COUNTER-MOUNTED RACEWAY
020.01E1	1.00	AUTOMATED BEVERAGE SYSTEM 2.0	120/1	5.0	20A	1/2" C-2#12	AP-1:12	5-20R	2'-0"	
020.01E2	1.00	AUTOMATED BEVERAGE SYSTEM 2.0	120/1	14.9	20A	1/2" C-2#12	AP-1:5	5-20R	3'-10"	FOR PRE-COOLER
021.01E3	3.00	COFFEE BREWER (THERMAL POTS)	120-208/1	15.5	20A	1/2" C-3#12	AP-1:(2,4),(14,16), AP-5:(34,36)	BY KES	SEE RMKS	EC TO EXTEND CIRCUIT TO L14-20R RECEPTACLE IN CHASE
021.09E3	1.00	HOT WATER DISPENSER	120/1	15.4	20A	1/2" C-2#12	AP-2:13	BY KES	SEE RMKS	EC TO EXTEND CIRCUIT TO 5-20R RECEPTACLE IN CHASE
023.10E1	1.00	ESPRESSO BREWER	208/1	21.6	30A	1/2" C-2#10	AP-1:(19,21)	BY KES	SEE RMKS	EC TO EXTEND CIRCUIT TO L6-30R RECEPTACLE IN CHASE
023.12E1	2.00	COFFEE CREAM DISPENSER	120/1	1.0	20A	1/2" C-2#12	AP-1:8	BY KES	SEE RMKS	EC TO EXTEND CIRCUIT TO 5-20R RECEPTACLE IN CHASE
023.14E1	1.00	SUGAR/SWEETENER DISPENSER	120/1	1.5	20A	1/2" C-2#12	AP-1:8	BY KES	SEE RMKS	EC TO EXTEND CIRCUIT TO 5-20R RECEPTACLE IN CHASE
024.01E1	1.00	ORANGE JUICE DISPENSER	120/1	10.0	20A	1/2" C-2#12	AP-1:8	BY KES	SEE RMKS	EC TO EXTEND CIRCUIT TO 5-20R RECEPTACLE IN CHASE
025.07E1	1.00	INFUSION TEA BREWER - MIS	120-208/1	13.0	20A	1/2" C-3#12	AP-2:(32,34)	L14-20R	2'-3"	
025.07E2	1.00	INFUSION TEA BREWER - MIS						JIB	2'-3"	FOR WATER LINE TO ICED TEA BREWER IF CHASE IS NOT SPECIFIED. (SEE P1.6)
028.14E1	1.00	SODA TOWER - RECIRCULATING - 10 VALVE - LEVER CONTROL	120/1	3.5	20A	1/2" C-2#12	AP-2:7	5-20R	2'-0"	
031.03E1	1.00	SODA SYSTEM PACKAGE - B.I.B. (RECIRCULATING - 3 TOWERS)	208/3	26.0	30A	3/4" C-3#10	AP-2:(37,39,41)	SEE RMKS	3'-0"	EC SUPPLIES 30A-3P NF DISC SW MTD 9" BELOW CEILING PER NEC SECT. 404.8(A)
031.03E2	1.00	SODA SYSTEM PACKAGE - B.I.B. (RECIRCULATING - 3 TOWERS)						JIB	4'-0"	FOR CONTROL WIRES FROM REMOTE CONDENSING UNIT
031.03E3	1.00	SODA SYSTEM PACKAGE - B.I.B. (RECIRCULATING - 3 TOWERS)	120/1	(2) 6.8	20A	1/2" C-2#12	AP-2:35	5-20R	6'-6"	FOR WATER BOOSTER SYSTEM AND OPTIONAL AIR COMPRESSOR
032.02E1	1.00	REVERSE OSMOSIS WATER FILTRATION SYSTEM - TANKLESS	120/1	4.0	20A	1/2" C-2#12 EA	AP-2:23	5-20R	6'-0"	
032.04E1	1.00	WATER FILTRATION SYSTEM	120/1	0.08	20A	1/2" C-2#12 EA	AP-2:23	5-20R	6'-0"	
037.03E1	2.00	CO2 SAFETY SYSTEM - DETECTOR	120/1	1.0	20A	1/2" C-2#12	AP-5:2	JIB	SEE RMKS	PROVIDE LOCKOUT CB. SEE MECHANICAL DRAWINGS
037.03E2	2.00	CO2 SAFETY SYSTEM						JIB	SEE RMKS	FOR LV WIRES. STUB 3/4" ABV. CLG. SEE MECHANICAL DRAWINGS
037.03E4	4.00	CO2 SAFETY SYSTEM - CO2 DETECTOR AV ALARM						JIB	7'-0"	STUB 3/4" ABOVE CLG. FOR LV COND. TO 037.03E2. SEE MECHANICAL DRAWINGS
038.00E1	1.00	CLEAN IN PLACE PANEL	120/1	1.0	20A	1/2" C-2#12	AP-2:21	5-20R	5'-6"	
039.10E1	1.00	ICE MACHINE - 1400 LB.	208/3	12.8	20A	1/2" C-3#12	AP-2:(1,3,5)	SEE RMKS	SEE RMKS	EC SUPPLIES 30A-3P NF DISC SW MTD 9" BELOW CEILING PER NEC 404.8(A) EX.2 VERIFY W/ AHJ
039.10E2	1.00	ICE MACHINE - 1400 LB.						JIB	4'-6"	CONTROL WIRES TO REMOTE CONDENSER
039.15E1	2.00	ICE MACHINE - 1000 LB.	120/1	1.1	15A	1/2" C-2#12	AP-1:37,39	5-20R	SEE RMKS	MOUNT 9" BELOW CEILING - CIRCUIT BREAKERS SHALL BE HACR TYPE
039.15E2	2.00	ICE MACHINE - 1000 LB.						JIB	SEE RMKS	MOUNT 9" BELOW CEILING - CONTROL WIRES TO REMOTE CONDENSER
041.06E1	1.00	ICE MACHINE REMOTE CONDENSER - 1400 LB.	208/1	1.0	20A	1/2" C-3#12	AP-1:(26,28)	SEE RMKS	SEE RMKS	EC TO PROVIDE WP 30A-2P NF DISC AT UNIT ON ROOF - CIRCUIT BREAKERS SHALL BE HACR TYPE
041.09E1	2.00	ICE MACHINE REMOTE CONDENSER - 1000 LB.	208/3	10.2	15A	1/2" C-3#12	AP-1:(32,34,36)(38,40,42)	SEE RMKS	SEE RMKS	EC TO PROVIDE WP 30A-3P NF DISC AT UNIT ON ROOF - CIRCUIT BREAKERS SHALL BE HACR TYPE
043.21E1	1.00	OPTIMIZED ORDER ASSEMBLY TABLE	120/1	5.4	20A	1/2" C-2#12	SEE RMKS	SEE RMKS	SEE RMKS	PLUGS INTO KES OUTLET CHASE FOR HLA
047.06E1	1.00	CHILLED RAIL	120/1	2.0	20A	1/2" C-2#12	SEE RMKS	SEE RMKS	SEE RMKS	PLUGS INTO SPARE PLUG ON PREP TABLE
061.00E1	1.00	FRY BAGGING STATION 36"	120/1	12.5	20A	1/2" C-2#12	AP-1:31	JIB	4'-0"	
065.30E1	1.00	3-VAT LOV FRYER - ELECTRIC - F/F/F	208/3	38.9 EA. VAT	(3) 50A	1" C-3#6	AP-4:(13,15,17)(19,21,23)(25,27,29)	BY KES	SEE RMKS	PLUGS INTO RACEWAY RECEPT WITH(1)121-20P INTERLOCK PLUG & (3) 15-60P POWER PLUG BY KES
066.47E1	1.00	4-VAT LOV FRYER - ELECTRIC - S/S/S/S	208/3	38.9 EA. VAT	(4) 50A	1" C-3#6	AP-3:(2,4,6)(8,10,12)(1,3,5)(7,9,11)	BY KES	SEE RMKS	PLUGS INTO RACEWAY RECEPT WITH(1)121-20P INTERLOCK PLUG & (4) 15-60P POWER PLUG BY KES
073.00E1	1.00	UNIVERSAL EXHAUST HOOD 3-VAT FRYER	120/1	12.5, 9.8	(2)20A-1P	1/2" C-2#12EA	AP-1:6,30	BY KES	SEE RMKS	EC TO CONN POWER TO RACEWAY FLA = 12.0 FRYER CONTROLS, 0.5 CAPTURE JET & 9.8 INDIVID. EXHAUST FAN INTERLOCK
079.23E1	1.00	UNIVERSAL EXHAUST HOOD FULL-CLAM/4-VAT FRYER	120/1	17.6, 13.8	(2)20A-1P	1/2" C-2#12EA	AP-1:29,23	BY KES	SEE RMKS	EC TO CONN POWER TO RACEWAY FLA=3.6 GRILL,13.0 FRYER CONTROLS, 1.0 CAPTURE JET & 13.8 INDIVID EXHAUST FAN INTERLOCK
079.26E2	2.00	VENTLESS HOOD COMBI OVEN	120/1	8.0	15A	1/2" C-2#12	AP-4:(14)(16)	BY KES	SEE RMKS	EC TO EXTEND DEDICATED CIRCUIT TO 5-15R RECEPTACLE IN CHASE
085.05E1	1.00	FROZEN FRY DISPENSER	120/1	9.0	20A	1/2" C-2#12	AP-1:27	5-20R	4'-0"	
091.02E1	1.00	WALL MOUNT FREEZER UNIT-SINGLE WIDE-HIGH CAPACITY	120/1	5.0	20A	1/2" C-2#12	AP-5:33	5-20R	7'-6"	
093.00E1	1.00	UNIVERSAL EXHAUST HOOD FULL-CLAM GRILL	120/1	13.9	20A	1/2" C-2#12	AP-2:17	BY KES	SEE RMKS	EC TO CONN. POWER TO RACEWAY FLA = 3.6 GRILL CONTROLS, 0.5 CAPTURE JET & 9.8 INDIVID. EXHAUST FAN INTERLOCK
096.21E1	2.00	36" NEXT GEN 3-PLATEN CLAMSHELL GRILL - ELECTRIC	208/3	21.7, 43.3	(2)50A	1-1/2" C- 6#4	AP-3:(14,16,18)(20,22,24) AP-4:(1,3,5)(7,9,11)	BY KES	SEE RMKS	PLUGS IN RACEWAY RECEPT WITH(1)121-20P INTERLOCK & (2) 15-SOP POWER PLUG EA GRILL
097.08E1	1.00	MEAT FREEZER - DOUBLE WIDE - HIGH CAPACITY - RIGHT HAND	120/1	7.0	20A	1/2" C-2#12	AP-2:19	5-15R	SEE RMKS	PLUGS INTO RACEWAY RECEPTACLE
116.25E4	2.00	UNIVERSAL HOLDING CABINET - HIGH DENSITY - 2-SIDED - PIN & SLEEVE	208/1	14.2	20A	1/2" C-2#12	AP-5:4,(6),(8),(10)	BY KES	5'-6"	PLUGS INTO OVERHEAD RECEPTACLE # 320C6W(B) VIA EXTENSION ON #17.26 - HEIGHT TO BOTTOM OF RECEPTACLE
117.30E1	1.00	LHC TABLE COPL - 2 SIDED - 51" d x 34" w - PINK/SLEEVE	120/1	2.0	20A	1/2" C-2#12	AP-5:12	BY KES	5'-6"	PLUGS INTO OVERHEAD RECEPTACLE # 320C4W(Y) PROVIDED BY KES - HEIGHT TO BOTTOM OF RECEPTACLE
118.00E1	1.00	Q'ING OVEN - PIN & SLEEVE	208/1	15.4	20A	1/2" C-2#12	AP-2:(36,38)	SEE RMKS	5'-6"	PLUGS INTO OVERHEAD RECEPTACLE # 320C6W(B) PROVIDED BY KES - HEIGHT TO BOTTOM OF RECEPTACLE
118.03E1	2.00	Q'ING OVEN - PIN & SLEEVE	208/1	14.9	20A	1/2" C-2#12	AP-2:(18,20)(28,30)	SEE RMKS	5'-6"	PLUGS INTO OVERHEAD RECEPTACLE # 320C6W(B) PROVIDED BY KES - HEIGHT TO BOTTOM OF RECEPTACLE
122.27E1	1.00	NEXT GEN. UNIVERSAL RADIANT TOASTER - PIN & SLEEVE	208/1	25.2	30A	1/2" C-2#10	AP-5:(37,39)	SEE RMKS	5'-6"	PLUGS INTO OVERHEAD RECEPTACLE # 330C6W(B) PROVIDED BY KES - HEIGHT TO BOTTOM OF RECEPTACLE
122.28E2	1.00	NEXT GEN. UNIVERSAL CONTACT TOASTER - PIN & SLEEVE	208/1	25.2	30A	1/2" C-2#10	AP-5:(37,39)	SEE RMKS	SEE RMKS	PLUGS INTO KES RACEWAY RECEPTACLE
123.36E1	1.00	EQUI TABLE - COPL	208/1	4.9	15A	SEE RMKS	SEE RMKS	SEE RMKS	SEE RMKS	PLUGS INTO KES OUTLET CHASE.
123.37E1	1.00	BREAKER PANEL- 125 AMP - 1 PHASE - EQUIPMENT MOUNTED	120-208/1	SEE RMKS	125A	1-1/2" C-3#1	MDP:11			EC TO EXTEND AND CONNECT ELECTRICAL SERVICE. HARDWARE TO KES BREAKER PANEL.
123.40E1	1.00	PREP TABLE - HD - 2-SIDED COPL - 38" d x 83 1/2" - PIN & SLEEVE W/ REF.	120/1	10.0	20A	SEE RMKS	SEE RMKS	SEE RMKS	SEE RMKS	PLUGS INTO KES OUTLET CHASE.
125.00E2	2.00	RAPID BUN STEAMER	208/1	14.3	30A	1/2" C-2#10	SEE RMKS	SEE RMKS	SEE RMKS	PLUGS INTO KES RACEWAY RECEPTACLE
130.00E3	2.00	COMBI OVEN	208/3	15.1	30A	1/2" C-3#10	AP-4:(2,4,6)(8,10,12)	BY KES	SEE RMKS	EC TO EXTEND CIRCUIT TO L430R RECEPTACLE IN CHASE
152.05E1	1.00	WAREWASHER	120/1	11.4	20A	1/2" C-2#12	AP-5:31	5-20R	6'-0"	
163.02E1	4.00	REMOTE ANSUL PULL						SEE DETAILS		4" OCTAGONAL, RACO #165 OR EQUAL MUST BE USED.
171.01E1	1.00	WALK-IN COOLER / FREEZER	120/1	10.00	20A	1/2" C-2#12	AP-2:14,16	FLUSH ON CLG		JB FOR LIGHTS & IDOR HEATER - UNSWITCHED LIGHT BE IN BOTH COOLER & FREEZER TO CONNECT POWER
171.01E2	1.00	WALK-IN COOLER / FREEZER						VIF		EC TO FURNISH & INSTALL CONDUIT,WIRE & LIGHT FIXTURES& OTHER DEVICES INSIDE COOLER/FREEZER BOX
174.00E1	1.00	REMOTE CONDENSING UNIT	208/3	41.0	50A	1" C-3#6	MDP:15	JIB		TERMINATE PWR CONDUCTORS TO REMOTE COND UNIT FUSIBLE DISC SWITCH, IF MASTER-BILT USE 70A BKR & #4 CONDUCTORS
174.00E2	1.00	REMOTE CONDENSING UNIT						VIF		L V WIRES CONNECT MAC UNIT TO EVAPS & SHALL BE ROUTED IN SEALTITE WHERE EXPOSED TO WEATHER
175.11E1	1.00	COOLER EVAPORATOR	208/1		SEE RMKS	1/2" C-2#12	PWR BY MAC UNIT	JIB	FLUSH ON CLG	IF MAC UNIT IS NOT USED, PROVIDE A 20A CIRCUIT
175.11E2	1.00	COOLER EVAPORATOR							FLUSH ON CLG	L V WIRES CONN MAC UNIT TO EVAPS & SHALL BE ROUTED SEPARATELY FROM POWER CONDUCTORS
176.21E1	1.00	FREEZER EVAPORATOR	208/1		30A	1/2" C-2#10	PWR BY MAC UNIT	JIB	FLUSH ON CLG	NO CCT BREAKER REQ WITH MAC UNIT-IF FAN SHUT-OFF SW. REQ SJ PUMPDOWN RELAY MUST BE INSTALLED
176.21E2	1.00	FREEZER EVAPORATOR							FLUSH ON CLG	L V WIRES CONN MAC UNIT TO EVAPS & SHALL BE ROUTED SEPARATELY FROM POWER CONDUCTORS
177.03E2	1.00	REACH-IN REFRIGERATOR-SINGLE WIDE	120/1	5.7	20A	1/2" C-2#12	AP-2:31	SEE RMKS	SEE RMKS	EC TO EXTEND CIRCUIT TO 5-20R RECEPTACLE IN CHASE
178.05E1	3.00	REACH-IN FREEZER-SINGLE WIDE	120/1	10.0	20A	1/2" C-2#12	AP-1:10,25,35	5-20R	7'-6"	
181.13E1	1.00	REFRIGERATOR - SPECIALTY COFFEE- 27" WIDE	120/1	3.9	20A	1/2" C-2#12	AP-2:22	BY KES	SEE RMKS	EC TO EXTEND CIRCUIT TO 5-20R RECEPTACLE IN CHASE
181.14E1	1.00	REFRIGERATOR - WORK TOP - 48" WIDE	120/1	5.0	20A	1/2" C-2#12	AP-2:26	5-20R	2'-0"	
183.00E1	1.00	REFRIGERATOR/FREEZER - 2 DRAWER BASE - 30" W X 33" H	120/1	5.0	20A	1/2" C-2#12	AP-5:9	5-20R	2'-0"	
183.02E1	1.00	REFRIGERATOR/FREEZER - 2 DRAWER BASE - 30" W X 30" H	120/1	5.0	20A	1/2" C-2#12	AP-5:27	5-20R	2'-0"	
183.02E2	1.00	REFRIGERATOR/FREEZER - 2 DRAWER BASE - 30" W X 30" H	120/1	5.0	20A	1/2" C-2#12	AP-5:29	BY KES	SEE RMKS	EC TO EXTEND CIRCUIT TO 5-20R RECEPTACLE IN CHASE
183.02E3	1.00	REFRIGERATOR/FREEZER - 2 DRAWER BASE - 30" W X 30" H	120/1	5.0	20A	1/2" C-2#12	AP-5:22	BY KES	5'-6"	PLUGS INTO OVERHEAD RECEPTACLE # 320C4W(Y) PROVIDED BY KES - HEIGHT TO BOTTOM OF RECEPTACLE

ELECTRICAL SCHEDULE										
TAG #	QTY	DESCRIPTION	VOLT/PH	FLA	BRK SIZE	COND/WIRE	PNL/CCT	RECEP TYPE	HGT AFF	REQUIREMENTS & REMARKS
196.06E1	1.00	SAFE - STANDARD BLDG.	120/1	1.0	20A	1/2" C-2#12	AP-1:7	5-20R	2'-0"	PROVIDE LOCKOUT TYPE CB
197.01E1	1.00	HAND WASH TIMER	120/1	0.1	20A	1/2" C-2#12	AP-1:33	5-20R	4'-6"	
203.01E1	1.00	HEAT TREAT COMBINATION SHAKE/SUNDAE MACHINE	208/3	13.0	30A	3/4" C-3#8	AP-1:(18,20,22)	4x4x4 PB	1'-0"	RECEP #44609R BY KES, IF TAYLOR C602 IS ORDERED USE A 45A BRKR & #6 CONDUCTORS - EC MAKES FINAL CONN
205.08E1	1.00	BIC MACHINE	120/1	8.6	20A	1/2" C-2#12	AP-2:29	BY KES	SEE RMKS	EC TO EXTEND DEDICATED CIRCUIT TO 5-20R RECEPTACLE IN CHASE
205.09E2	1.00	FROZEN BEVERAGE DISPENSER	208/1	20.0	30A	1/2" C-2#10	AP-5:(16,18)	SEE RMKS	SEE RMKS	RECEP L6-30R IN CHASE BY KES, EC MAKES FINAL CONN
208.00E3	1.00	FINISHING STATION	120/1	8.0	20A	1/2" C-2#12	AP-5:23	5-20R	2'-0"	FOR REFRIGERATED BASE AND COUNTERTOP UNIT
210.00E10	1.00	CASH RECYCLER	120/1 ISOLATED	4.4	20A	1/2" C-2#12IG	CP:29	SEE RMKS	(2) IG5262	PROVIDE RECEPT. IN COUNTER-MOUNTED RACEWAY
211.00E6	1.00	DELIVERY TABLETS	120/1	3.0	20A	1/2" C-2#12	AP-5:17	(2) 5-20R	5'-6"	
213.00E10	1.00	TABLE LOCATOR SYSTEM	120/1 ISOLATED	2.6	20A	1/2" C-2#12IG	CP:4	IG5262	SEE RMKS	PROVIDE IG RECEP. IN COUNTER-MOUNTED RACEWAY
213.00E8	1.00	TABLE LOCATOR SYSTEM	120/1 ISOLATED	2.6	20A	1/2" C-2#12IG	CP:23	SEE RMKS	4'-0"	TSS SERVICE, COORDINATE WITH MANUFACTURERS REQUIREMENTS
214.02E1	1.00	TECHNOLOGY RACK	120/1 ISOLATED	5.0	20A	1/2" C-2#12IG	CP:11	IG4700	7'-6"	FOR SWITCHES, HUBS AND RADIUS
214.02E2	1.00	TECHNOLOGY RACK	120/1 ISOLATED	3.0	20A	1/2" C-2#12IG	CP:12	IG4700	3'-0"	FOR SECURITY SYSTEM
214.02E3	1.00	TECHNOLOGY RACK	120/1 ISOLATED	10.0	20A	1/2" C-2#12IG	CP:15	IG4700		

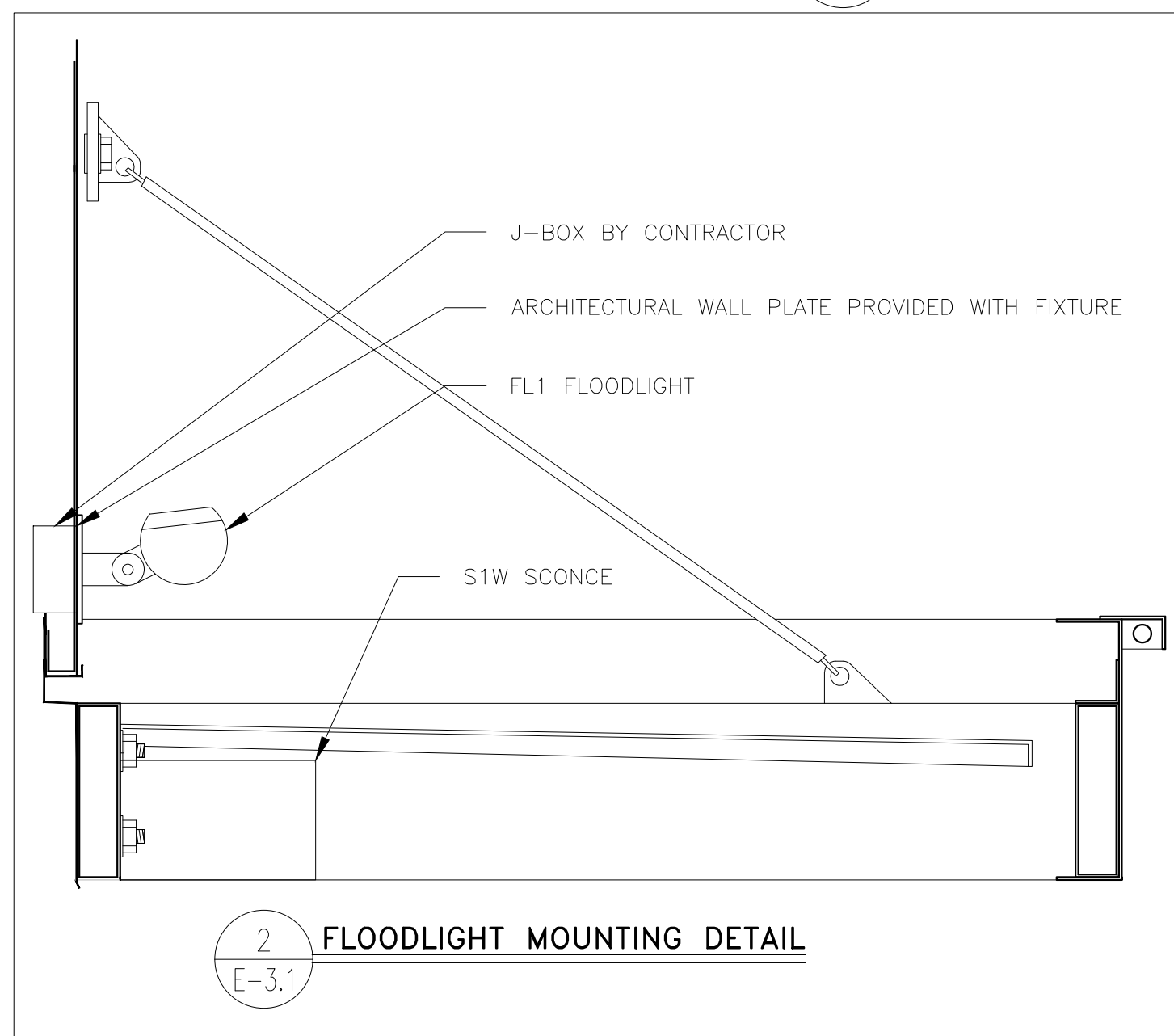
TAG #	QTY	DESCRIPTION	VOLT/PH	FLA	BRK SIZE	COND/WIRE	PNL/CCT	RECEP TYPE	HGT AFF	REQUIREMENTS & REMARKS
701.14E3	1.00	TELEPHONE	PHONE BOX	-	-	-	-	RJ-11C JACK	3'-6"	-
701.15E1	1.00	DOOR BUZZER	120/1	.5	20A	1/2" C-2#12	LP-1:16	-	8'-0"	CONNECT TRANSFORMER TO POWER & ROUTE LOW VOLTAGE WIRES OVERHEAD TO DOOR BUTTON
701.16E1	2.00	DOOR ALARM	120/1	.5	20A	1/2" C-2#12	LP-1:16	JB	SEE RMKS	JUNCTION BOX ABOVE CEILING, PROVIDE LOCKOUT ON CIRCUIT BREAKER HANDLE.
701.22E1	1.00	WAYPORT - WIRELESS INTERNET SERVER	120/1 ISOLATED	1.5	20A	1/2" C-2#12IG	CP:2	IG5262	8'-0"	-
701.22E2	1.00	WAYPORT - WIRELESS INTERNET SERVER	DATA CABLE	-	-	-	-	JB	8'-0"	EXTEND 1" CONDUIT ABOVE CLG. W/BUSHING FOR DATA CABLE
701.27E1	1.00	DCO-SATELLITE MUSIC SYSTEM	120/1	1.0	20A	1/2" C-2#12	AP-5:30	(2) 5-20R	3'-0"	PROVIDE DOUBLE DUPLEX WALL PLATE
701.32E1	1.00	REMOTE ORDER TAKER BATTERY PACK	120/1	2.0	20A	1/2" C-2#12	AP-1:9	(2) 5-20R	4'-6"	PROVIDE DOUBLE DUPLEX WALL PLATE. FIELD VERIFY HEIGHT AND LOCATION WITH ACM
701.34E1	1.00	ACCESS CONTROL PANEL	120/1	2.0	20A	1/2" C-2#12	LP-1:16	JB	8'-0"	ROUTE LOW VOLTAGE WIRES TO DOOR BUTTON, HORN AND DOOR STRIKE AS REQUIRED



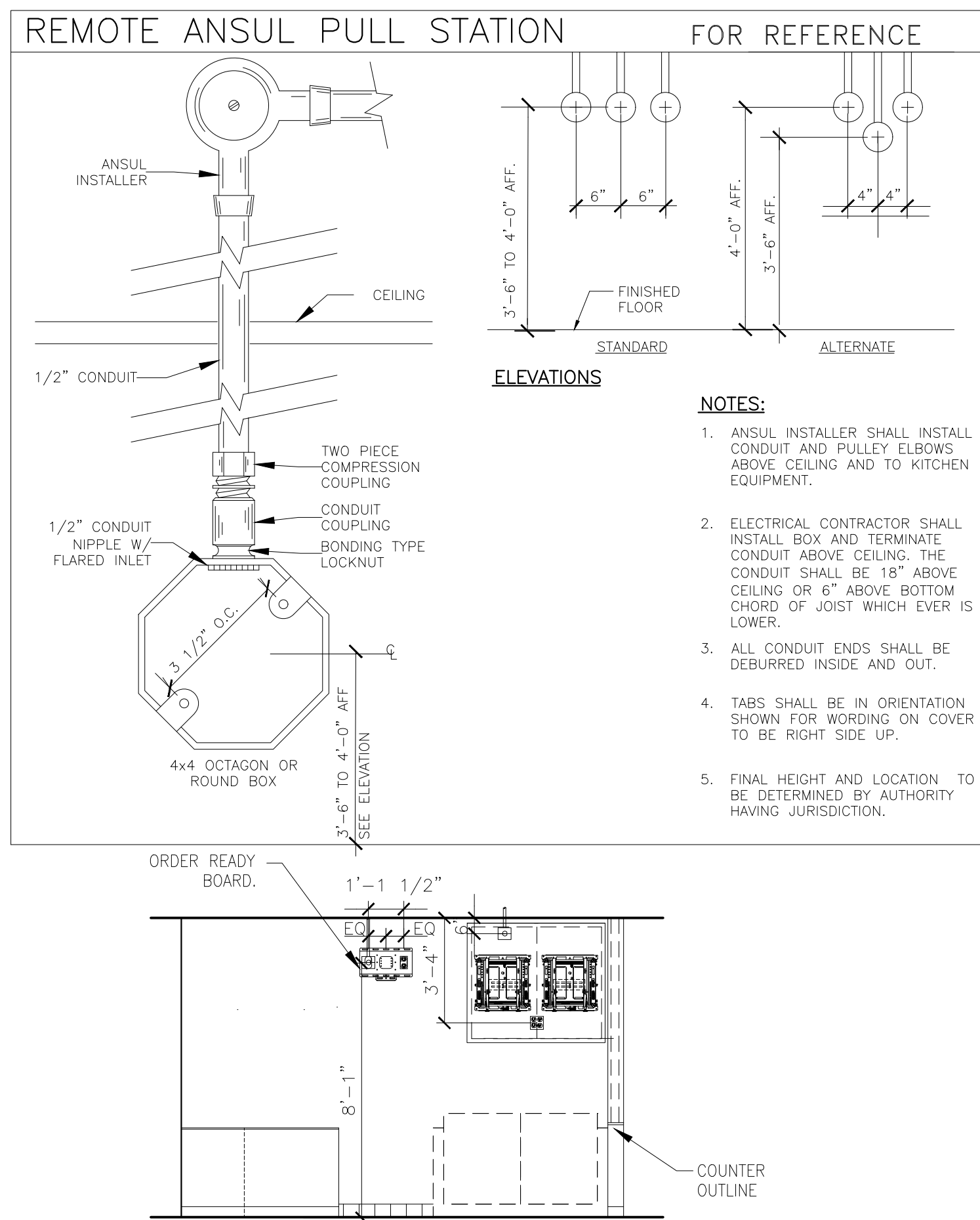
SYMBOL	CATALOG #	DESCRIPTION
[Symbol]	HBLAU57DR & IG4700	RECEPTACLE COVERPLATE WITH ORANGE, TWIST LOCK, ISOLATED GROUND DUPLEX RECEPTACLE
[Symbol]	HBLAU57DR & 5-20R FOR BAKED GOODS AND IG5262 FOR CASH	RECEPTACLE COVERPLATE WITH STRAIGHT BLADE RECEPTACLE
[Symbol]	HBLAU57PB	COMMUNICATIONS COVERPLATE
[Symbol]	HBLAU7620B02M290	2" SECTION OF RACEWAY, INCLUDES COUPLERS
[Symbol]	HBLAU7620B03M290	3" SECTION OF RACEWAY, INCLUDES COUPLERS
[Symbol]	HBLAU7610B2M2	SERVICE ENTRANCE FITTING & BUSHING FOR DATA CABLES
[Symbol]	HBLAU7610B1	BLANK END FITTING
N/A	HBLAU5701	COUPLER (INCLUDED WITH RACEWAY SECTION)
N/A	HBLAU5709	GROUND ADAPTER

- NOTES:
- REFER TO SERVICE POD MANUFACTURER INSTRUCTIONS FOR EXACT PLACEMENT OF RACEWAY
 - RACEWAY AND RECEPTACLES TO BE PROVIDED WITH SERVICE POD, INSTALLED BY CONTRACTOR.
 - DETAIL SHOWN IS A TYPICAL CONFIGURATION ONLY. SITE SPECIFICS MIGHT CAUSE DEVIATIONS.

1 MODULAR COUNTER RACEWAY DETAIL
E-3.1 NOT TO SCALE



2 FLOODLIGHT MOUNTING DETAIL
E-3.1



- NOTES:**
- ANSUL INSTALLER SHALL INSTALL CONDUIT AND PULLEY ELBOWS ABOVE CEILING AND TO KITCHEN EQUIPMENT.
 - ELECTRICAL CONTRACTOR SHALL INSTALL BOX AND TERMINATE CONDUIT ABOVE CEILING. THE CONDUIT SHALL BE 18" ABOVE CEILING OR 6" ABOVE BOTTOM CHORD OF JOIST WHICH EVER IS LOWER.
 - ALL CONDUIT ENDS SHALL BE DEBURRED INSIDE AND OUT.
 - TABS SHALL BE IN ORIENTATION SHOWN FOR WORDING ON COVER TO BE RIGHT SIDE UP.
 - FINAL HEIGHT AND LOCATION TO BE DETERMINED BY AUTHORITY HAVING JURISDICTION.

3 SERVICE AREA ELEVATION
E3.1 1/4" = 1'-0"

GENERAL ELECTRICAL NOTES:

INSTALLATION METHODS:

- ALL ELECTRICAL MATERIAL USED ON THIS PROJECT SHALL BE "UL" LISTED AND LABELED.
- ALL DIMENSIONS SHOWN ARE TAKEN FROM FACE OF GYP BOARD/PLYWOOD. THE EC SHALL MAKE NECESSARY DIMENSIONAL ALLOWANCES. ALL DIMENSIONS SHOWN ARE TO CENTER LINE OF OUTLET BOX AND/OR RECEPTACLE UNLESS NOTED OTHERWISE.
- ALL J-BOXES, DCOs, AND OTHER ELECTRICAL DEVICES SHOWN SHALL BE RECESSED INTO A WALL, FLOOR OR CEILING UNLESS SPECIFICALLY NOTED OTHERWISE.
- ALL RECEPTACLES (EXCEPT SPECIFIED HUBBELL PIN & SLEEVE TYPES) SHALL BE FURNISHED BY THE EC. THE RECEPTACLES INCLUDING PIN AND SLEEVE TYPE SHALL BE INSTALLED BY THE EC.
- EC SHALL PROVIDE STAINLESS STEEL COVER PLATES ON ALL RECEPTACLES AND J-BOXES. ADDITIONALLY, EC SHALL PROVIDE ORANGE NYLON COVER PLATES MARKED "COMPUTER ONLY" ON ALL ISOLATED GROUND/DEDICATED CIRCUIT RECEPTACLES. PURCHASE PJB80 (ONE DUPLEX) OR PJB200 (TWO DUPLEX) FROM HUBBELL.
- ROUGH-INS FOR OPTIONAL EQUIPMENT ARE SHOWN ON THESE SHEETS. EC SHALL VERIFY WITH McDONALD'S PROJECT MANAGER WHICH OPTIONAL EQUIPMENT IS TO BE INCLUDED AND INSTALL OPTIONAL ROUGH-INS AS REQUIRED. PRICING FOR OPTIONAL ROUGH-INS SHALL BE INCLUDED IN BID AND CALLED OUT AS OPTIONAL.
- EC SHALL COORDINATE WITH KITCHEN EQUIPMENT SUPPLIER, MECHANICAL CONTRACTOR AND GC FOR FINAL LOCATIONS AND CONNECTION REQUIREMENTS OF ALL EQUIPMENT PRIOR TO INSTALLATION OF ANY CONDUIT AND/OR STUB-UP LOCATIONS.
- CEILING MOUNTED ECONOMY OEP BOX IS FURNISHED BY McDONALD'S, AND INSTALLED BY THE GC. CORD AND PLUG SET FURNISHED BY KES AND INSTALLED BY THE EC.
- FOR GRILLS, FRYERS, AND ANSUL SYSTEMS, EC SHALL EXTEND CONDUIT AND CONDUCTORS DOWN CHASE OR WALL TO TERMINAL BLOCK MOUNTED ON EQUIPMENT AND MAKE FINAL CONNECTIONS TO TERMINAL BLOCKS.
- ALL HOLES IN THE FRONT COUNTER FOR THE POS CORDS AND CABLES SHALL BE LOCATED BY OWNER AND DRILLED BY GC.
- ALL ELECTRICAL CONDUCTORS SHALL BE CONNECTED TO RECEPTACLES USING ONLY THE TERMINAL SCREWS. RECEPTACLE BACK WIRE/QUICK CONNECTIONS SHALL NOT BE USED.
- EC SHALL PROVIDE 208V HEAT TRACE ON THE FREEZER EVAPORATOR CONDENSATE DRAIN LINE. HEAT TRACE SHALL OPERATE CONTINUOUSLY. EC SHALL WIRE HEAT TRACE TO FREEZER EVAPORATOR POWER SUPPLY. A SEPARATE CIRCUIT FOR HEAT TRACE IS NOT REQUIRED. VERIFY HEAT TRACE REQUIREMENTS WITH EVAPORATOR MANUFACTURER.
- POWER AND CONTROL CORDS ARE FURNISHED WITH KITCHEN APPLIANCES. THE EC SHALL CONNECT CORD SETS TO APPLIANCES AS REQUIRED.
- GC SHALL NOT INSTALL CEILING TILE IN AREAS OF THE BEVERAGE BAR REFRIGERATION LINES AND EQUIPMENT PENETRATION LOCATIONS UNTIL THE LINES HAVE BEEN INSTALLED. THE CEILING TILE INSTALLER SHALL RETURN AND INSTALL THE TILES AFTER THE REFRIGERATION LINES HAVE BEEN INSTALLED AND TESTED.

UTILITIES:

- INCOMING SERVICE SHALL BE 208Y/120V, 3 PHASE, 4 WIRE, ANY DEVIATIONS TO THIS SERVICE TYPE SHALL NOT BE PERMITTED UNLESS APPROVED IN WRITING BY McDONALD'S.
- THE EC SHALL ARRANGE WITH THE ELECTRIC, TELEPHONE, AND OTHER UTILITY COMPANIES FOR INCOMING SERVICE REQUIREMENTS AND SHALL INCLUDE ALL COSTS IN BASE BID.
- THE EC SHALL VERIFY EXACT METHODS AND REQUIREMENTS FOR ELECTRICAL SERVICE WITH LOCAL UTILITY COMPANY. CURRENT TRANSFORMERS SHALL BE INSTALLED OUTSIDE RESTAURANT, LOCATE INSIDE ONLY IF REQUIRED BY UTILITY COMPANY OR LOCAL AUTHORITIES.
- PROVIDE CONCRETE PAD IF TRANSFORMER IS LOCATED ON GRADE AND PROVIDE SECONDARY SERVICE FEEDER AND CONDUITS TO PANEL MOP AS PER LOCAL UTILITY REQUIREMENTS.
- THE EC/GC/ACM SHALL OBTAIN AVAILABLE SHORT CIRCUIT CURRENT FROM THE LOCAL UTILITY COMPANY. THE EC/GC/ACM SHALL ADVISE IN WRITING (FAX SUPPLIER THE UTILITY LETTER) THE AVAILABLE AMOUNT OF FAULT CURRENT. THE PANELBOARD SUPPLIER SHALL BE RESPONSIBLE TO VERIFY THAT THE ELECTRICAL EQUIPMENT SHIPPED HAS APPROPRIATE ELECTRICAL RATINGS WHICH ARE EQUAL TO OR GREATER THAN THE AVAILABLE AMOUNT OF FAULT CURRENT AT THE SITE.
- EC AND ACM OR OWNER/OPERATOR AND ACM SHALL COORDINATE WITH LOCAL PHONE COMPANY TO PROVIDE A 10 PAIR (OR MORE) COPPER TELEPHONE CABLE FROM THE TELEPHONE UTILITY EASEMENT TO THE RESTAURANT TELEPHONE DEMARCATION POINT. IF THE TELEPHONE PANEL/BOX IS LOCATED INSIDE THE RESTAURANT, EC SHALL PROVIDE (2) EMPTY 3/4" CONDUITS FROM THE TELEPHONE PANEL/BOX UP TO ABOVE THE CEILING FOR FUTURE TELEPHONE CABLE INSTALLATION. ADDITIONALLY, THE EC SHALL PROVIDE AN EMPTY 3/4" CONDUIT FROM THE TELEPHONE PANEL/BOX TO THE LOCATION OF THE FUTURE INTERNET SERVER (VERIFY LOCATION WITH PM). EC SHALL CONNECT, INSTALL AND INCORPORATE ALL OTHER REQUIREMENTS NECESSARY FOR COMPLETE AND OPERATIONAL TELEPHONE SYSTEM(S) FOR THIS SITE. THE REMAINING UNUSED TELEPHONE CONDUCTOR PAIRS SHALL BE CAPPED AND LEFT IN PLACE FOR FUTURE USE. THE TELEPHONE PANEL/BOX SHALL BE GROUNDED AS SHOWN IN THE "BUILDING ELECTRICAL GROUNDING DETAIL."
- EC SHALL PROVIDE A 4" SCHEDULE 40/80 PVC CONDUIT THAT IS SUITABLE FOR DIRECT BURIAL FROM BUILDING TO UTILITY EASEMENT/ROW IN UTILITY CABLING/CONDUIT TRENCH PROVIDED BY GC. CONDUIT SHALL RUN FROM INCOMING TELCOM LOCATION AT BUILDING TO TELCOM PEDESTAL LOCATION IN UTILITY EASEMENT/ROW. VERIFY EXACT LOCATIONS IN FIELD WITH AREA CONSTRUCTION MANAGER AND TELCOM UTILITY PROVIDER PRIOR TO INSTALLATION.

INSTALLATION NOTES:

- IF TELCOM CONDUIT IS TERMINATED WITHIN BUILDING, PVC SHALL TRANSITION TO HWG/RMC TYPE CONDUIT PRIOR TO RISING ABOVE FINISHED SLAB.
- PROVIDE THERMOPLASTIC BUSHINGS AT BOTH ENDS OF CONDUIT FOR CABLE PROTECTION.
- IF 90 DEGREE BENDS ARE REQUIRED, CONTRACTOR SHALL PROVIDE WIDE SWEEPING BENDS TO PREVENT BENDING/DAMAGE TO CABLE.
- ALL COMMUNICATIONS CABLING SHALL BE PULLED VIA THIS CONDUIT.
- INSTALL A MINIMUM OF 6 PULL WIRES IN CONDUIT TO ALLOW FOR THE INSTALLATION OF FUTURE CABLING. USE NON-DEGRADING POLYPROPYLENE OR MONOFILAMENT PLASTIC LINE OR #12 AWGT SOLID COPPER CONDUCTORS WITH NOT LESS THAN 200 LBF TENSILE STRENGTH. PROVIDE AT LEAST 12 INCHES OF SLACK AT EACH END OF PULL WIRE.
- AFTER INSTALLATION OF COMMUNICATIONS CABLING AND PULLSTRINGS/WIRES, CONTRACTOR SHALL SEAL BOTH ENDS OF CONDUIT TO PREVENT INTRUSION FROM WEATHER, RODENTS, DEBRIS, ETC. SEAL SHALL BE OF TYPE TO ALLOW FOR REMOVAL FOR INSTALLATION OF FUTURE CABLING

CONDUIT AND WIRE:

- THE FOLLOWING WIRING METHODS SHALL NOT BE USED: NON-METALLIC SHEATHED CABLE (ROMEX, NM, NMC, & NMS), ARMORED CABLE TYPE AC (BX), ELECTRICAL NON-METALLIC TUBING, TYPE ENT (SMURF-TUBE).
- CONDUIT RUNS MAY BE COMBINED EXCEPT WHERE ISOLATED GROUNDS ARE USED. IC CIRCUITS SHALL BE RUN IN SEPARATE CONDUITS. ALL HOME RUNS SHALL BE SIZED BASED ON DERATED CONDUCTOR AMPACITIES AND INCREASE CONDUIT AND WIRE SIZE AS REQUIRED BY NEC SECTION 310 REQUIREMENTS.
- CONDUIT SHALL HAVE A MAXIMUM OF 4 BENDS WITHOUT A JUNCTION BOX TO PREVENT DAMAGE TO CABLE DURING PULLING. THE EC SHALL PIGTAIL #12 PULL WIRE AT EACH END FOR INSTALLER TO PULL CABLE. ALL LOW VOLTAGE CONDUIT STUB-UPS SHALL BE PROVIDED WITH A BUSHING.
- MINIMUM WIRE SIZE SHALL BE #12 AWG COPPER UNLESS NOTED OTHERWISE. MINIMUM CONDUIT SIZE SHALL BE 1/2" UNLESS NOTED OTHERWISE. WIRES INSTALLED UNDERGROUND OR OUTDOORS SHALL BE THW.
- CONDUCTORS #10 AWG AND SMALLER SHALL BE SOLID COPPER. CONDUCTORS #8 AND LARGER SHALL BE STRANDED COPPER. ALUMINUM CONDUCTORS SHALL NOT BE UTILIZED FOR FEEDER OR BRANCH CIRCUIT DISTRIBUTION.
- RACEWAYS SHALL BE ANY OF THE FOLLOWING MATERIALS, INSTALLED IN ACCORDANCE WITH ALL APPLICABLE CODES:

OUTDOORS: (FOR SPECIFIC APPLICATIONS AND APPROPRIATE FITTINGS, SEE TABLE W6)

- EXPOSED: RMC, IMC
- CONCEALED: RMC, IMC
- BELOW GRADE, SINGLE RUN: RNC, RMC
- BELOW GRADE, GROUPED: RNC, RMC
- CONNECTION TO VIBRATING EQUIPMENT (INCLUDING TRANSFORMERS AND HYDRAULIC, PNEUMATIC, ELECTRIC SOLENOID, OR MOTOR-DRIVEN EQUIPMENT): LFMC
- BOXES AND ENCLOSURES: NEMA 250, TYPE 3R OR 4

INDOORS: (FOR SPECIFIC APPLICATIONS AND APPROPRIATE FITTINGS, SEE TABLE W6)

- EXPOSED: EMT, IMC
- CONCEALED: EMT, IMC
- (CONTINUED ON TOP)

- CONNECTION TO VIBRATING EQUIPMENT (INCLUDING TRANSFORMERS AND HYDRAULIC, PNEUMATIC, ELECTRIC SOLENOID, OR MOTOR-DRIVEN EQUIPMENT): FMIC; EXCEPT USE LFMC IN DAMP OR WET LOCATIONS.
- DAMP OR WET LOCATIONS: RIGID STEEL CONDUIT.
- BOXES AND ENCLOSURES: NEMA 250, TYPE 1. EXCEPT AS FOLLOWS: A. DAMP, WET OR KITCHEN LOCATIONS: NEMA 250, TYPE 4, STAINLESS STEEL.

TABLE W6:

LOCATION	208V.	480V.	LOW ENERGY*
EXPOSED			
INDOORS	< 1" EMT COMPRESS. FTGS >1.25" IMC THREADED FTGS	IMC THREADED FTGS	EMT COMP. FTGS
OUTDOORS	RMC OR IMC THREADED FTGS	RMC OR IMC THREADED FTGS	RMC OR IMC THREADED FTGS
CONCEALED			
WALLS	<2" EMT SET SCREW FTGS >2.5" IMC THREADED FTGS	<2" EMT SET SCREW. FTGS >2.5" IMC THREADED FTGS	EMT 1/2" - 2" SET SCREW FTGS 2.5" - 4" COMP. FTGS
AIR HANDLING CEILING/SPACE	<2" EMT COMP. FTGS >2.5" IMC THREADED. FTGS	2" EMT COMP. FTGS < >2.5" >2.5" IMC THREADED. FTGS	EMT COMP. FTGS
NON AIR HANDLING CEILING/SPACE	<2" EMT SET SCREW FTGS >2.5" IMC THREADED. FTGS	<2" EMT COMP. FTGS >2.5" IMC THREADED. FTGS	EMT 1/2" - 2" SET SCREW FTGS 2.5" - 4" COMP. FTGS
BELOW GRADE			
INTERIOR	IMC THREADED FTGS OR SCHEDULE 40 OR 80 PVC	IMC THREADED FTGS	IMC THREADED FTGS SCHEDULE 40 OR 80 PVC
EXTERIOR	SCHEDULE 40 OR 80 PVC OR RMC THREADED FTGS	SCHEDULE 40 OR 80 PVC OR RMC THREADED FTGS	SCHEDULE 40 OR 80 PVC OR RMC THREADED FTGS

- ALL CONDUITS PENETRATING THE FREEZER/COOLER BOX SHALL BE SEALED IN COMPLIANCE NEC SECTION 300 AND THE FREEZER/COOLER BOX MANUFACTURERS REQUIREMENTS.
- PROVIDE THREE (3) 3/4" EMPTY CONDUITS FROM PANEL LP-1 UP TO THE CEILING SPACE AND CAP FOR FUTURE USE.

GROUNDING:

- ALL BRANCH AND FEEDER CIRCUITS SHALL BE GROUNDED BY TWO METHODS. THE FIRST METHOD SHALL INCLUDE AN INSULATED COPPER EQUIPMENT GROUNDING CONDUCTOR CONTAINED WITHIN THE SAME CONDUIT AS THE PHASE CIRCUIT CONDUCTORS AND SIZED PER NEC SECTION 250 REQUIREMENTS. THIS INSULATED EQUIPMENT GROUNDING CONDUCTOR SHALL HAVE ONE END PROPERLY TERMINATED AT THE EQUIPMENT GROUND BUS IN THE CORRESPONDING CIRCUIT BREAKER PANEL AND THE OTHER END TERMINATED AT THE GROUNDING CONTACT OF A GROUNDING RECEPTACLE AND TO THE JUNCTION BOX OR TO AN EQUIPMENT CABINET, AS APPLICABLE. THE SECOND METHOD PROVIDES EQUIPMENT GROUNDING VIA METALLIC CONDUIT THAT IS CONNECTED AND TERMINATED IN FITTINGS LISTED FOR GROUNDING PER NEC SECTION 250 REQUIREMENTS. BOTH GROUNDING METHODS ARE REQUIRED IN A McDONALD'S RESTAURANT. ISOLATED GROUND SHALL BE INSTALLED WHERE INDICATED ON PLAN AND AS SHOWN IN POS ISOLATED GROUND/DEDICATED CIRCUIT DETAIL ON SHEET E4.0.
- THE BUILDING GROUNDING SYSTEM SHALL COMPLY WITH NEC ARTICLE 250, McDONALD'S SPECIFICATIONS, AND SHEET E4.2. CAUTION: IT IS A SAFETY HAZARD AND AN NEC VIOLATION TO HAVE ANY NEUTRAL TO GROUND CONNECTIONS BEYOND THE MAIN ELECTRICAL DISCONNECT MEANS. McDONALD'S GROUNDING STANDARDS PURPOSELY EXCEED THOSE GIVEN BY THE NEC. THE EC SHALL PROVIDE A BUILDING GROUNDING SYSTEM MEETING NEC SECTION 250 REQUIREMENTS AS WELL AS McDONALD'S STANDARDS.
- EC SHALL REFER TO "POS ISOLATED GROUND/DEDICATED CIRCUIT DETAIL, SHEET E4.0, FOR REQUIRED WIRING REQUIREMENTS OF COMPUTER PANEL CP.
- METAL RACEWAYS CONTAINING A GROUNDING ELECTRODE CONDUCTOR SHALL BE BONDED AT BOTH ENDS AS REQUIRED BY NEC SECTION 250 REQUIREMENTS.

TEMPERATURE CONTROLS:

- REMOTE TEMPERATURE SENSORS: EC SHALL PROVIDE 1/2" CONDUIT FROM JUNCTION BOX ABOVE CEILING DOWN TO SENSOR MOUNTED AT 4'-0" TO 4'-6" AFF.
- SEE DETAIL ON SHEET M3.0, FOR SENSOR MOUNTING DETAIL. LOCATION OF WALL MOUNTED TEMPERATURE SENSORS ARE SHOWN ON SHEET M1.2 AND E2.0.
- WHEN WIRING FOR PROGRAMMABLE THERMOSTATS AND REMOTE SENSORS IS NOT IN A CONDUIT, THE WIRING SHALL BE RUN TO THE UNDERSIDE OF THE ROOF DECK. NONE OF THE WIRING SHALL BE ROUTED OVER FLUORESCENT BALLASTS, POWER BOXES OR IN A CONDUIT WITH LINE VOLTAGE WIRING AS ELECTRICAL INTERFERENCE (NOISE) WILL CAUSE ERRATIC CONTROL OPERATION. ALL THERMOSTATS SHALL BE MOUNTED 4'-0" AFF.

FLAT PANEL TELEVISIONS:

- EC SHALL PROVIDE A DUPLEX RECEPTACLE AND A LOW VOLTAGE BROADBAND CONNECTION FOR THE INSTALLATION OF FLAT PANEL TELEVISIONS. COORDINATE EXACT LOCATIONS WITH DECOR COMPANY. FOR BROADBAND CONNECTION, EC SHALL PROVIDE A 4 X 4 BOX WITH A 3/4" CONDUIT STUB-UP WITH A BUSHING INTO ACCESSIBLE CEILING SPACE.

ELECTRICAL PANELS:

- THE EC SHALL BE RESPONSIBLE FOR BALANCING THE LOADS ON ALL PANELS.
- THE EC SHALL PROVIDE ELECTRICAL SERVICE TO THE EQUIPMENT MOUNTED BREAKER PANEL. SEE ELECTRICAL ROUGH-IN PLAN AND SCHEDULE FOR ALL REQUIREMENTS.
- THE EC SHALL BE RESPONSIBLE FOR THE PROPER IDENTIFICATION AND LABELING OF ALL CIRCUIT BREAKERS. EACH PANEL SHALL BE PROVIDED WITH AN ACCURATE TYPEWRITTEN CIRCUIT DIRECTORY AT THE CONCLUSION OF THE PROJECT AND PRIOR TO RESTAURANT OPENING.

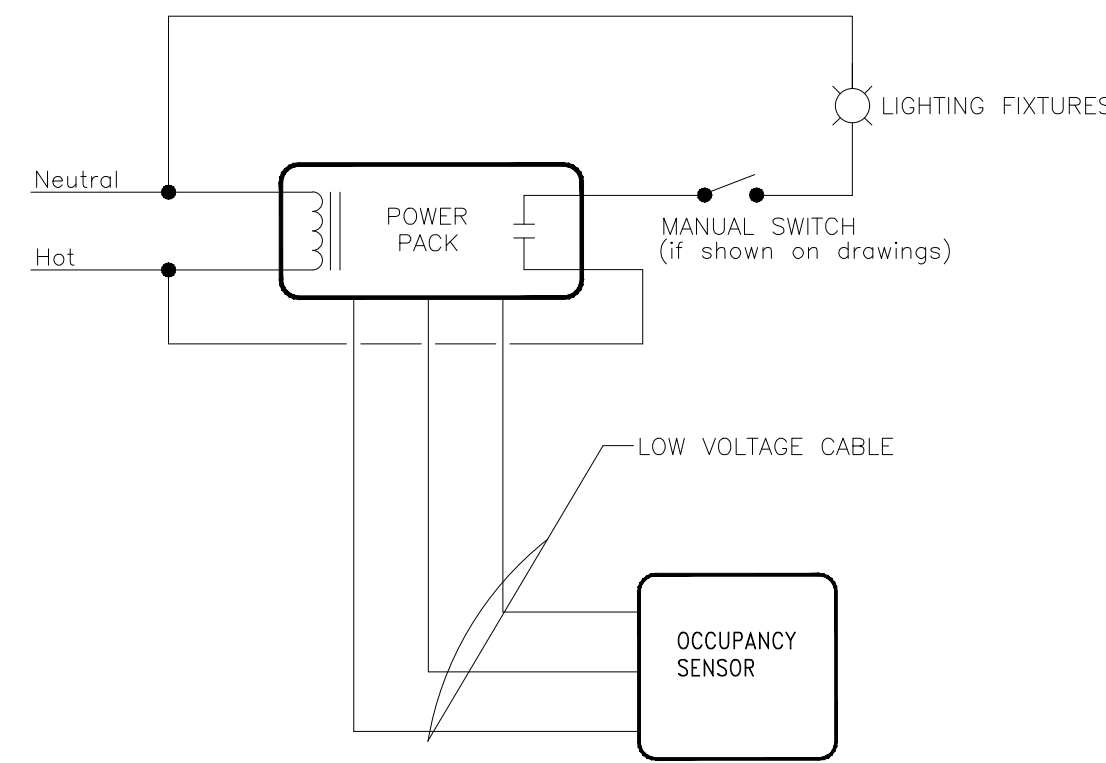
SECURITY AND DRIVE-THRU CAMERAS:

- EC TO PROVIDE ELECTRICAL POWER AND COMMUNICATION CONDUITS FOR BUILDING MOUNTED SECURITY AND DRIVE THRU CAMERAS. COORDINATE FINAL LOCATIONS WITH SECURITY AND DRIVE THRU CAMERA INSTALLERS.

LIGHTING:

- PROVIDE A WEATHERPROOF JUNCTION BOX IN PARAPET FOR FASCIA SIGN. FINAL CONNECTION BY OTHERS.
- COORDINATE THE LOCATION OF JUNCTION BOX (IN THE WALL) WITH THE OPENING IN TRELIS (FOR THE LIGHT FIXTURE WIRES). THE LOCATION OF THE JUNCTION BOX AND THE OPENING IN THE TRELIS SHALL BE ALIGNED FOR THE LIGHT FIXTURE TO BE INSTALLED PROPERLY. COORDINATE INSTALLATION OF JUNCTION BOX AND ANY NECESSARY OPENINGS IN TRELIS WITH GC AND TRELIS/CANOPY MANUFACTURER. SEE LIGHT FIXTURE INSTALLATION INSTRUCTIONS FOR REQUIREMENTS REGARDING MOUNTING BRACKETS FOR USE IN C-CANAL TRELISES.
- EC SHALL FIELD VERIFY THAT LIGHT FIXTURES DO NOT OBSTRUCT OR CONFLICT WITH THE WORK OF OTHER TRADES. IF A DISCREPANCY IS FOUND, THE EC SHALL IMMEDIATELY NOTIFY THE GC BEFORE THE INSTALLATION OF SUCH FIXTURE(S). EC SHALL COORDINATE LOCATIONS OF ALL LIGHT FIXTURES IN DINING AREA WITH FINAL SEATING AND DECOR PLANS.
- IF PC-POS CASH REGISTER SYSTEM IS INSTALLED, EC SHALL RELOCATE FIXTURES ABOVE FRONT COUNTER TO AVOID GLARE ON THE CASH REGISTER SCREENS. EC SHALL INSTALL CABLE WHIP TO FIXTURES SO THAT FIXTURE MAY BE RELOCATED FOUR FEET WITHOUT DISCONNECTING CABLE WHIP.
- EC SHALL COORDINATE LOCATION OF ALL EXTERIOR LIGHTS TO AVOID INTERFERENCE WITH ANY CORBELS, TRUSSES, BEAMS OR OTHER SPECIAL EXTERIOR TREATMENTS. INSTALL LIGHT FIXTURES WITH CORRECT ORIENTATION PER MANUFACTURER'S INSTRUCTIONS
- THE USE OF INTERLOCK TYPE "MC" CABLE IN LENGTHS OF 6 FEET OR LESS (WHERE PERMITTED BY LOCAL CODES) SHALL BE ALLOWED FOR WIRING TO INTERIOR LIGHTING FIXTURES. "TROMEX" OR "BX" SHALL NOT BE USED.
- EC SHALL VERIFY THAT NOT MORE THAN 3% VOLTAGE DROP EXISTS FROM THE LIGHTING PANEL TO ANY EXTERIOR LIGHTING FIXTURE OR SIGNAGE BALLAST.
- WHERE McDONALD'S RESTAURANT HAS A PLAYPLACE, THE EC SHALL COORDINATE EXACT LOCATION OF PLAYPLACE LIGHTING WITH PLAYPLACE TOY VENDOR FOR MAXIMUM ILLUMINATION AND SAFETY PER THE FINAL LOCATION OF THE PLAYPLACE TOY. LIGHTING FIXTURES SHALL NOT BE MOUNTED TO THE TOY OR ANY PART OF THE TOY STRUCTURE.
- EC SHALL VERIFY ALL TAP SETTINGS FOR H.I.D. LIGHTING FIXTURES AND MAKE ANY NECESSARY CORRECTIONS PRIOR TO INSTALLATION.

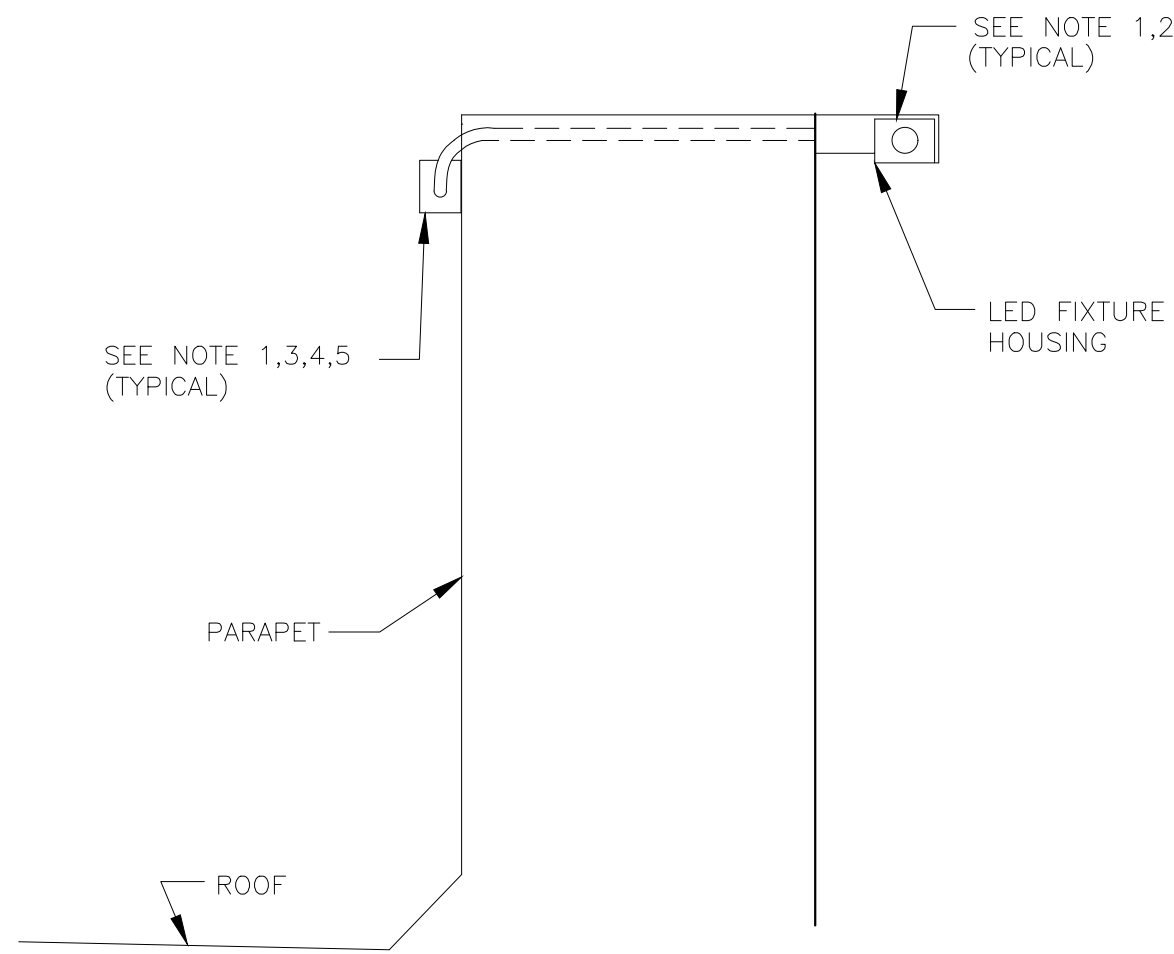
PREPARED BY: **McDonald's USA, LLC**
 DRAWN BY: TFF
 STD. ISSUE DATE: 2022-10
 REVIEWED BY: RH
 DATE ISSUED: 10-04-2022
 TITLE: 2022 STANDARD BUILDING - BB20
 DESCRIPTION: 4597 - WOOD/WOOD
 WOOD BEARING WALLS W/HARDBOARD SIDING
 WOOD ROOF TRUSS FRAMING
 E.L.F.S./BATTEN/HARDBOARD SIDING EXTERIOR FINISH
 SHEET NO: E3.1
 NOTES & DETAILS
 024-1290.00.0
 024-1290.00.0
 1/1/2022
 CORE STATES GROUP
 212.54.4m3@aet.com
 Birmingham, AL 35213
 www.corestates.com
 PREPARED FOR: 2022 McDonald's USA, LLC
 These drawings and specifications are the confidential and proprietary property of McDonald's USA, LLC and shall not be copied or reproduced without written authorization. The contract documents were prepared not suitable for use on a different site or at a later time. Use of these drawings for reference or example on another project requires the contract documents for reuse on another project is not authorized.



NOTES:

- REFER TO LIGHTING PLAN FOR OCCUPANCY SENSOR LOCATIONS AND QUANTITIES.

1 OCCUPANCY SENSOR CONTROL DETAIL
E-4.0 NOT TO SCALE



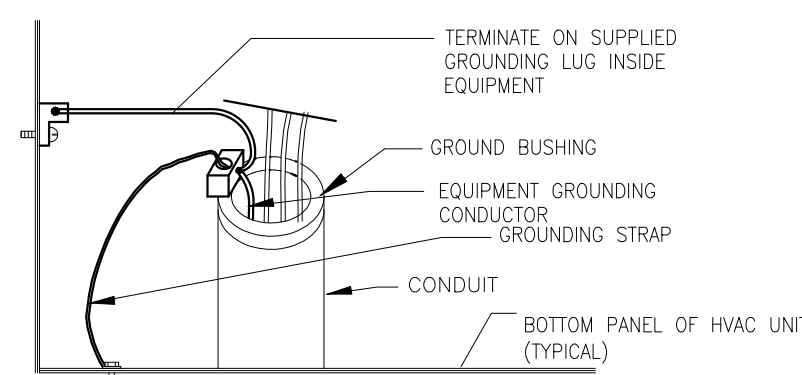
3 BRAND WALL LIGHTING DETAIL
E-4.0 NOT TO SCALE

GENERAL NOTES

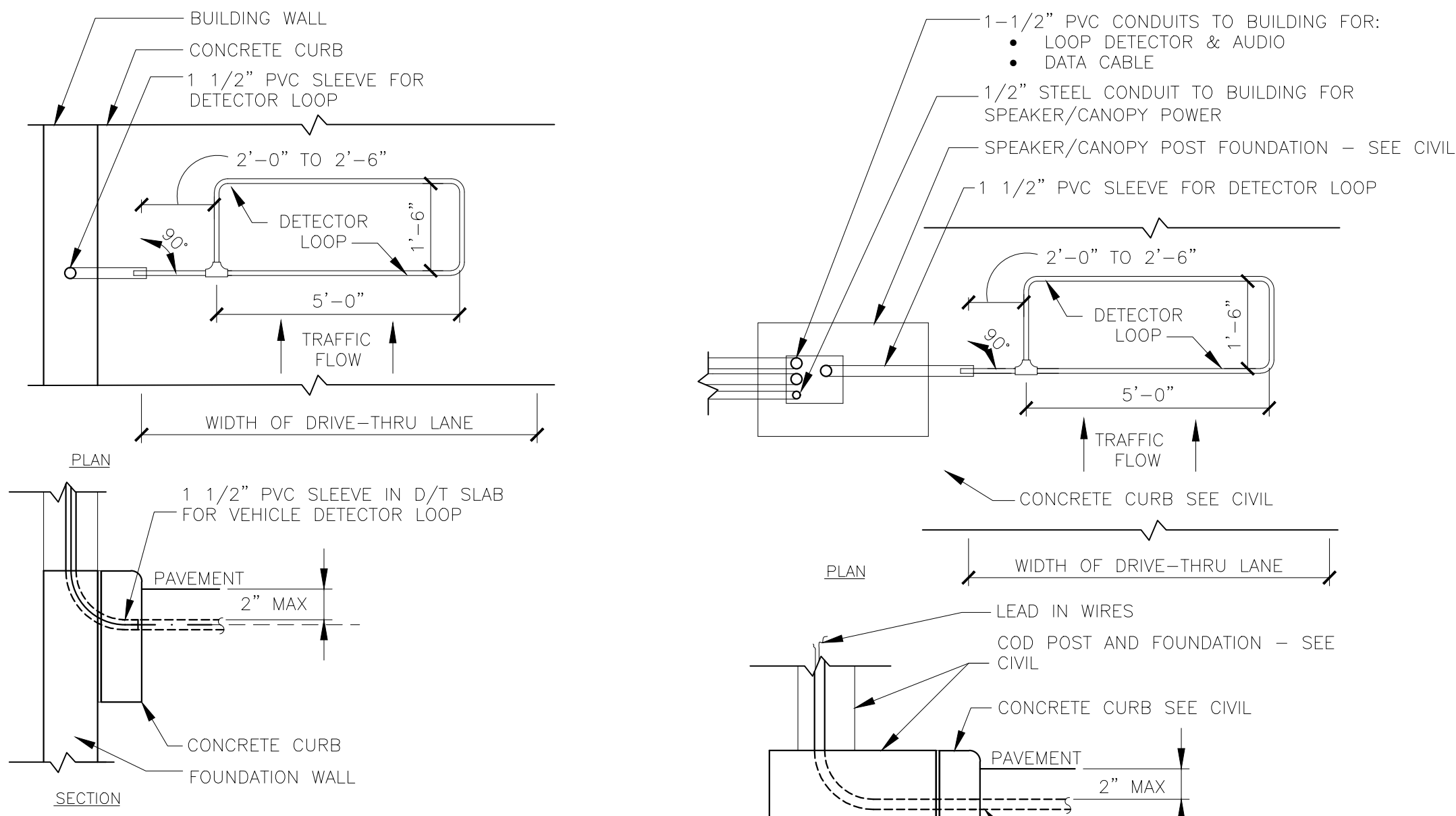
- PLACE LED FIXTURE AT DESIRED LOCATION AND INSTALL FIXTURE FROM LEFT TO RIGHT WHEN FACING ARCADE AND ATTACH POWER SUPPLY AND MOUNTING BRACKET AS RECOMMENDED BY MANUFACTURER.
- EC SHALL CONNECT NEW FIXTURES TO THE NEXT AVAILABLE SPARE 120V CIRCUIT AND MAKE ALL ELECTRICAL CONNECTIONS AS REQUIRED FOR A COMPLETE OPERATING SYSTEM.
- POWER SUPPLY SHALL ALWAYS BE INSTALLED TO THE LEFT SIDE OF FIXTURE WHEN FACING ARCADE.
- OVERALL FIXTURE RUN TO BE CENTERED ON OVERALL LENGTH OF WALL.
- CONNECT NEW LED FIXTURES TO EXISTING LIGHTING CIRCUIT(S) AS REQUIRED. ENSURE THAT CIRCUIT BREAKER AND CONDUCTOR SIZES DO NOT EXCEED 1200 WATTS ON A 15A CIRCUIT AND 1600 WATTS ON A 20A CIRCUIT. VERIFY EXISTING CONDITIONS AND REQUIREMENTS IN FIELD. PROVIDE ADDITIONAL CIRCUITS (C.B., WIRING, CONDUITS) AS REQUIRED.

CONDUIT, WIRE SIZE AND GROUNDING FOR HVAC UNITS

HACR BRKR SIZE	CONDUIT & WIRE SIZE
40A	1" C-3#8
45A	1" C-3#6
50A	1" C-3#6
60A	1" C-3#6
70A	1-1/4" C-3#4
80A	1-1/4" C-3#3
90A	1-1/4" C-3#3
100A	1-1/4" C-3#2
125A	1-1/2" C-3#1
150A	1-1/2" C-3#1/0
175A	2" C-3#2/0
200A	2" C-3#3/0
225A	2" C-3#4/0
250A	2-1/2" C-3#250



4 HVAC GROUNDING DETAIL
E-4.0 NOT TO SCALE



B - DT WINDOW DETECTOR LOOP

2 DETECTOR LOOP DETAILS
E-4.0 NOT TO SCALE

A - SPEAKER CANOPY DETECTOR LOOP

NOTES

- VERIFY CONDUIT SIZES AND LAYOUT WITH DETECTOR LOOP MANUFACTURER.
- CENTER VEHICLE DETECTOR LOOP (ITEM # 217.11E1) IN DRIVE THRU LANE. INSTALL PER MFR. RECOMMENDATIONS.
- SEE CIVIL FOR DIMENSIONS OF DRIVE-THRU LANE CONCRETE PAD FOR DETECTOR LOOP.
- NO STEEL (REBAR OR ELECTRICAL WIRE) SHALL BE USED WITHIN 2" OF LOOP.
- DETECTOR LOOP MANUFACTURERS: DETECTOR LOOPS MAY BE BY ONE OF THE FOLLOWINGS COMPANIES OR EQUAL.
3M: 1-800-328-0033
HME: 1-800-848-4468
- DETECTOR LOOP MATERIAL: PVC TUBING 1/2" LD, 100 PSI LOOP MADE FROM ONE LENGTH OF THIN FOURTEEN GAUGE STRANDED WIRE. LEAD-IN IS PRE-TWISTED AT FACTORY.
- DETECTOR LOOP CONSTRUCTION: FORMED WITH ONE CONTINUOUS LENGTH OF PVC WITH NO SHARP CORNERS AS DETAILED. WIRE LOOPED, FORMED, & PIGTAILED AS DETAILED.

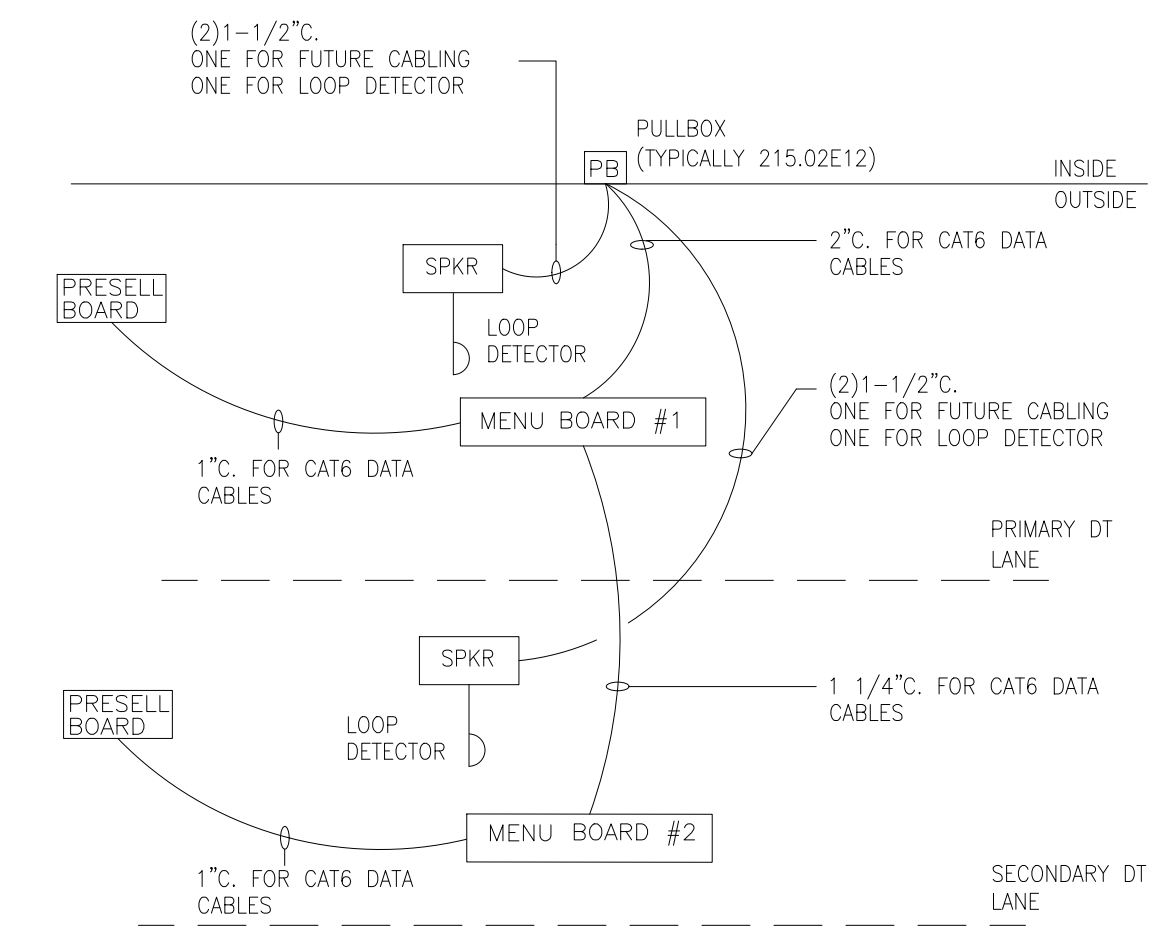
NOTES

- ALL P.O.S. EQUIPMENT (COMPUTERS, PRINTERS, MONITORS, KVS, MODEM, HUB & COO) SHALL BE POWERED FROM THE COMPUTER PANEL.
- ALL OTHER COMPUTER/DIGITAL EQUIPMENT SHALL BE POWERED FROM PHASE "A" IN THE COMPUTER PANEL.
- ISOLATED GROUND INSTALLATION SHALL COMPLY WITH THE REQUIREMENTS OF NEC SECTION 250.
- EACH 20 AMP CIRCUIT SHALL HAVE ITS OWN ISOLATED EQUIPMENT GROUNDING CONDUCTOR.
- ENTIRE GROUNDING SYSTEM SHALL COMPLY WITH NEC ARTICLE 250 AND MCDONALD'S BUILDING GROUNDING DETAIL.
- EC SHALL VERIFY CORRECT POLARITY AT RECEPTACLE.
- EC SHALL VERIFY THAT SUBPANEL CP DOES NOT CONTAIN ANY ILLEGAL NEUTRAL TO GROUND BONDS.
- PANEL CP SHALL ONLY BE USED TO POWER SENSITIVE ELECTRONIC EQUIPMENT, AS OUTLINED IN NOTE #1. IT SHALL NOT BE USED TO POWER ANY OTHER LOADS.
- IT IS A SAFETY HAZARD AND AN NEC VIOLATION FOR THE POS SYSTEM TO HAVE ITS OWN INDEPENDENT GROUNDING ROD. IF AN INDEPENDENT GROUND ROD IS FOUND FOR THE POS SYSTEM, IT SHALL BE BONDED TO THE BUILDING GROUNDING SYSTEM.

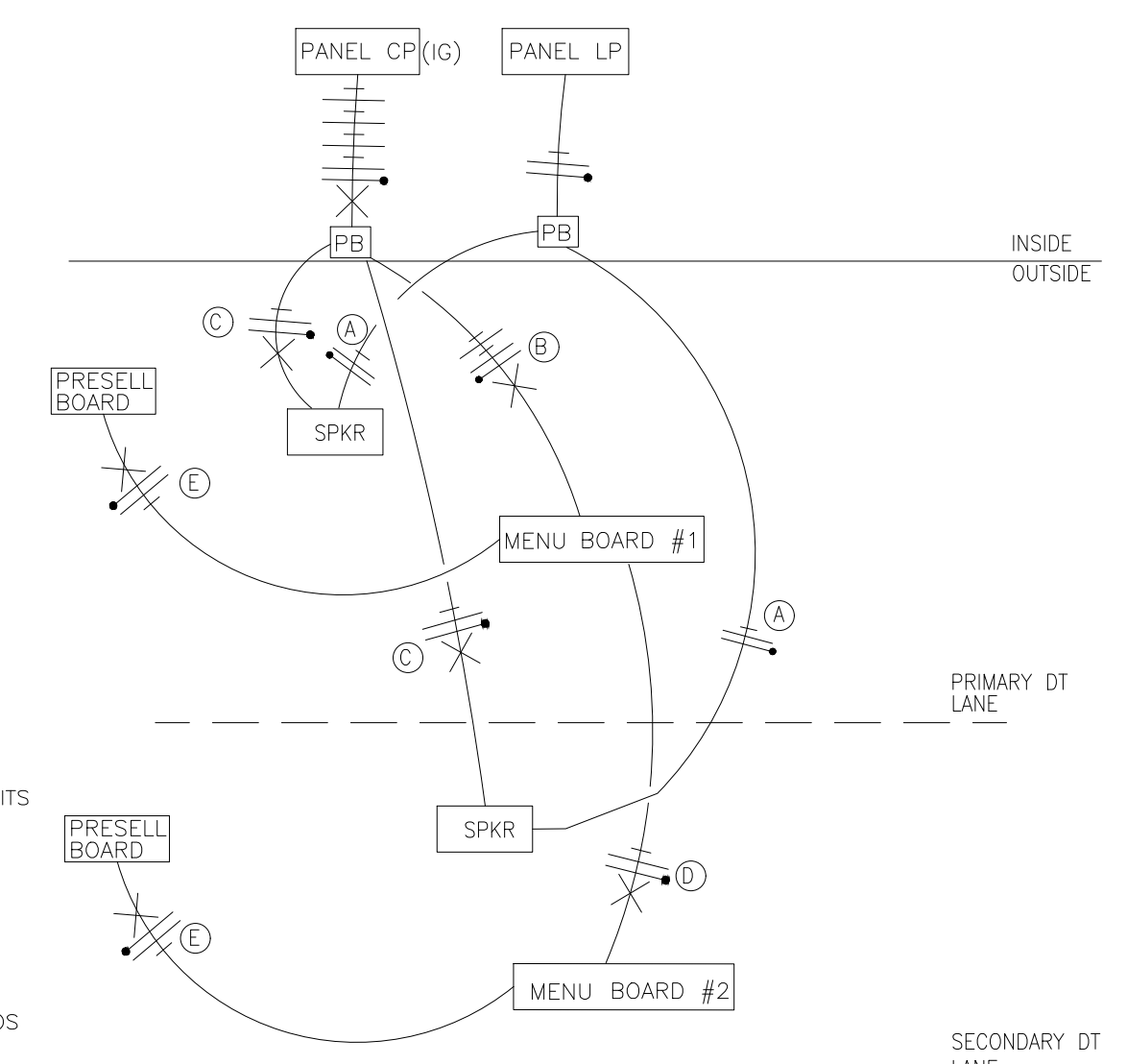
KEY NOTES

- THIS IS THE ONLY POINT WHERE THE ISOLATED EQUIPMENT GROUNDING CONDUCTOR SHALL BE CONNECTED TO THE BUILDING'S GROUNDING SYSTEM.
- SEE BUILDING GROUNDING DETAIL SHEET E4.2.
- 1 1/2" METAL CONDUIT: 4-#1 CU + 1-#6 CU EQUIP GND + 1-#4 CU ISOLATED GND.
- ALL ISOLATED GROUND/DEDICATED CIRCUIT RECEPTACLE COVER PLATES SHALL BE ORANGE HUBBELL PJ700 (SINGLE), PJ800 (ONE DUPLEX) OR PJ8200 (TWO DUPLEX) MARKED "COMPUTER ONLY".
- METAL CONDUIT SHALL CONTAIN ONLY P.O.S. CIRCUIT CONDUCTORS (DEDICATED CIRCUIT). ONLY USE RIGID NON-METALLIC CONDUIT BELOW GRADE WHEN REQUIRED BY LOCAL CODE.
- EQUIPMENT GROUNDING BONDING CONDUCTOR (TYPICAL)
- ISOLATED GROUND BUS, ELECTRICALLY INSULATED FROM PANEL ENCLOSURE USED TO TERMINATE ONLY ISOLATED EQUIPMENT GROUNDING CONDUCTORS.
- ALL CONDUCTORS SHALL BE SOLID COPPER AND TERMINATED TO THEIR APPROPRIATE TERMINAL SCREWS BY WRAPPING THE CONDUCTOR COMPLETELY AROUND THE SCREW BARREL AND TIGHTENING THE SCREW PER MANUFACTURER'S TORQUE SPECIFICATIONS.
- ISOLATED GROUND RECEPTACLE HUBBELL-IG4700/IG4710/IG5262 OR IG5261. SEE ROUGH IN SCHEDULE FOR THE APPROPRIATE RECEPTACLE TO USE.
- ISOLATED GREEN GROUND SCREW.
- ISOLATED EQUIPMENT GROUNDING CONDUCTOR (GRN W/YLW STRIP)
- NEUTRAL CONDUCTOR TERMINATED ON SILVER SCREW.
- PHASE CONDUCTOR TERMINATED ON BRASS SCREW

5 POS & COD ISOLATED GROUND/DEDICATED CIRCUIT
E-4.0 NOT TO SCALE



DT LOW VOLTAGE CONDUIT DIAGRAM
NOT TO SCALE



6 DRIVE THRU POWER DIAGRAM
E-4.0 NOT TO SCALE

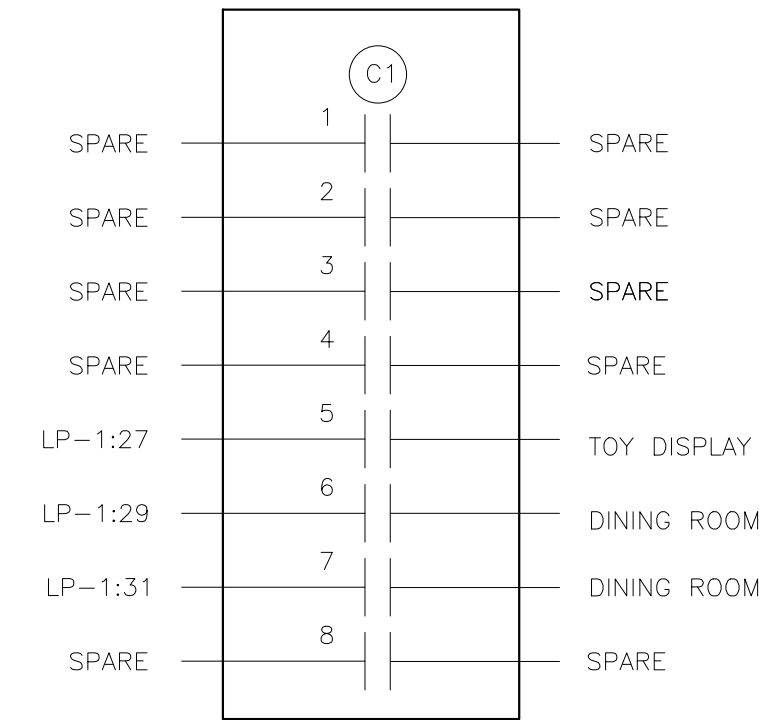
NOTE:

- VERIFY EXACT CIRCUITS & QUANTITIES OF CIRCUITS WITH PANEL SCHEDULES AND MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- 2#12 & 1#12 GND. TO LP-1 FOR COD CANOPY LIGHTING.
- 4#12 & 1#12 GND & 1#12 ISOLATED GND., TO CP FOR ISOLATED GROUND POWER TO MENUBOARDS AND MEDIA PLAYERS.
- 2#12 & 1#12 GND & 1#12 ISOLATED GND., TO CP FOR ISOLATED GROUND POWER TO SPEAKER CANOPY/STAND. EACH CANOPY/STAND SHALL BE ON ITS OWN SEPARATE CIRCUIT.
- 2#12 & 1#12 GND & 1#12 ISOLATED GND., TO CP FOR ISOLATED GROUND POWER TO MENUBOARDS AND MEDIA PLAYERS.
- 2#12 & 1#12 GND & 1#12 ISOLATED GND., TO CP FOR ISOLATED GROUND POWER TO FOR PRESELL BOARDS AND MEDIA PLAYER.

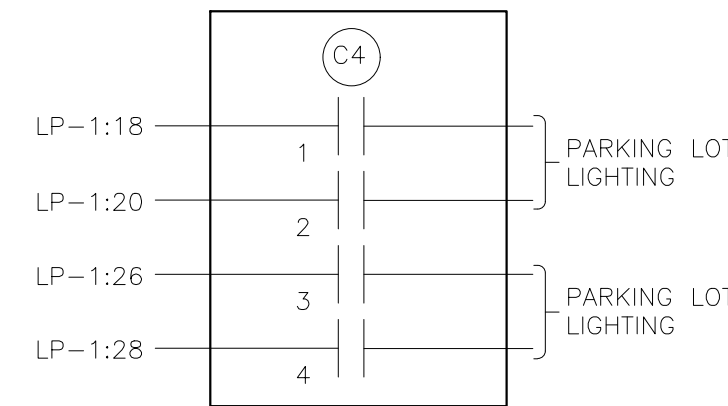
PREPARED BY: CORE STATES GROUP
 210 S.E. 4th Street, Room 210, AF 2713, Pompano Beach, FL 33062
 www.corestates.com
 11/11/2022
 PREPARED FOR: McDonald's USA, LLC
 © 2022 McDonald's USA, LLC
 These drawings and specifications are the confidential and proprietary property of McDonald's USA, LLC and shall not be copied or reproduced without written authorization. The contract documents were prepared in this jurisdiction, in the state of Florida, and shall govern. Use of these drawings for reference or example on another project requires the contract documents for reuse on another project is not authorized.
 DRAWN BY: TFF
 STD ISSUE DATE: 2022-10
 REVIEWED BY: RH
 DATE ISSUED: 10.04.2022
 TITLE: 2022 STANDARD BUILDING - BB20
 DESCRIPTION: WOOD BEARING WALLS W/HAROE BOARD SIDING, WOOD ROOF TRUSS FRAMING, E.L.F.'S/BATTEN/HAROE BOARD SIDING EXTERIOR FINISH
 SITE ID: 024-1290.00.0
 SITE ADDRESS: 3720 W. Sunshine, Springfield, MO
 SHEET NO: E4.0
 WIRING DETAILS
 024-1290.00.0

LIGHTING CONTROL SYSTEM

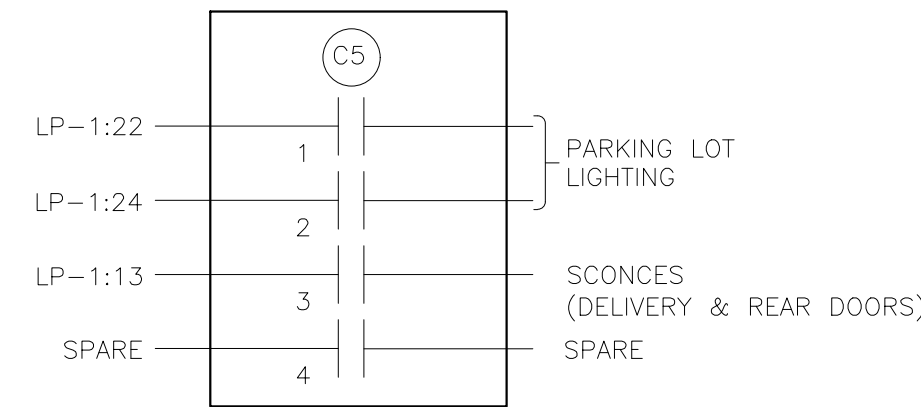
INTERIOR CUSTOMER LIGHTING



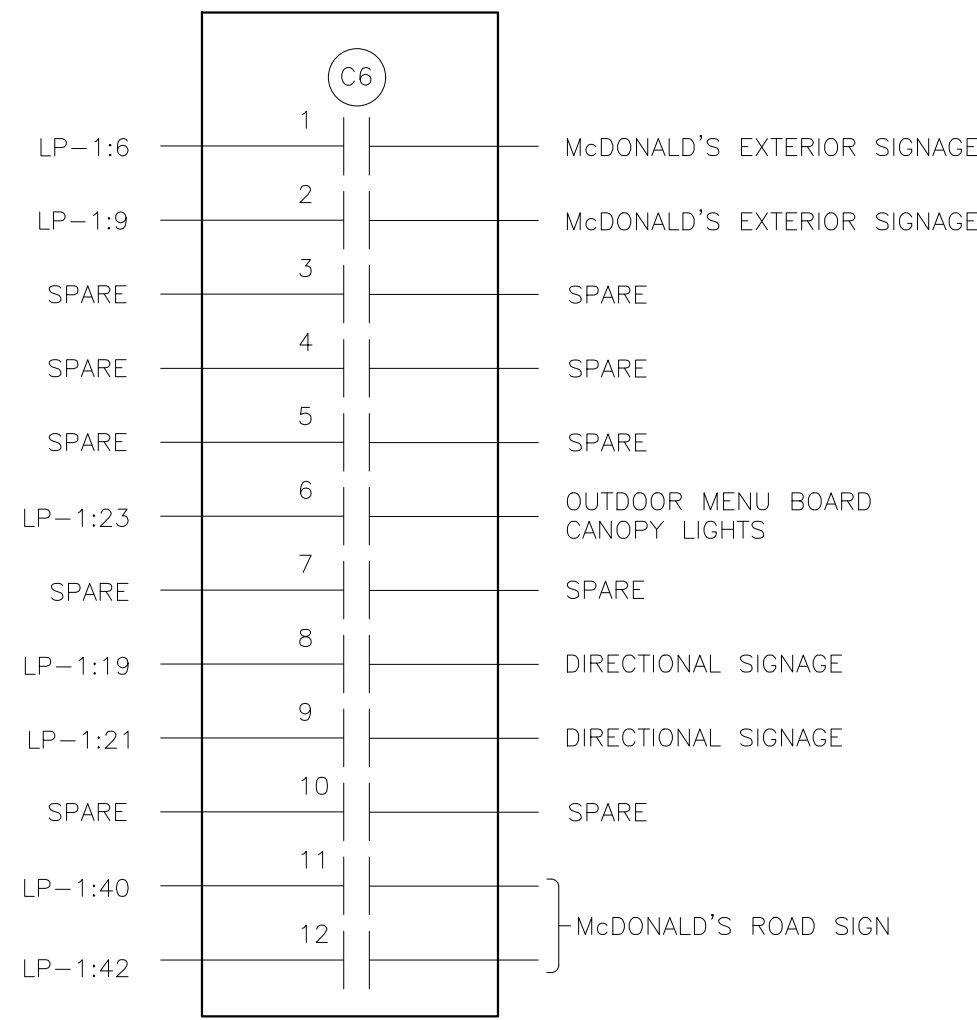
EXTERIOR LIGHTING



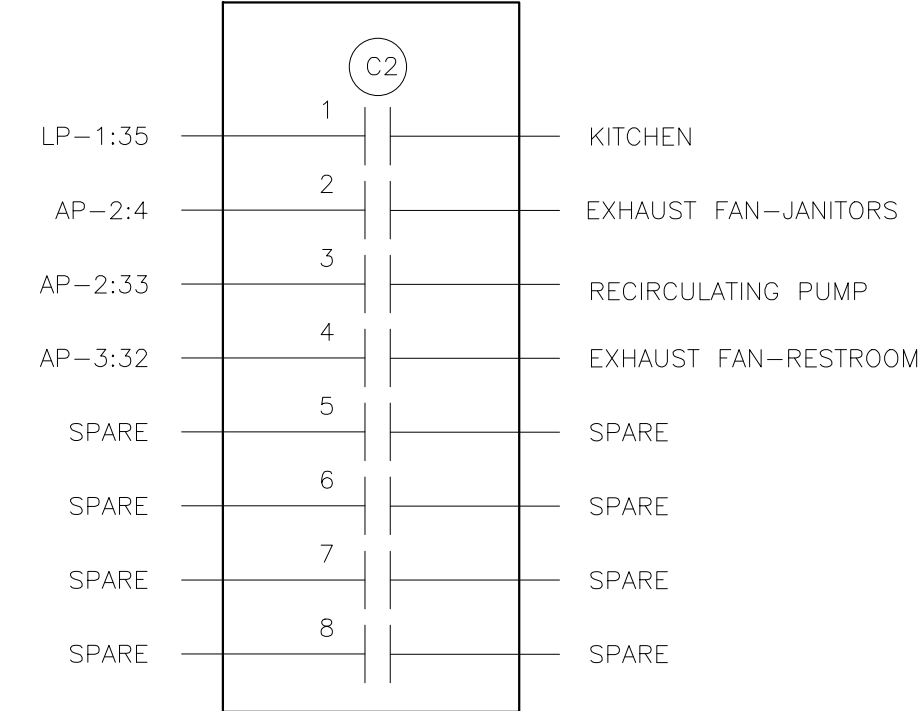
EXTERIOR LIGHTING



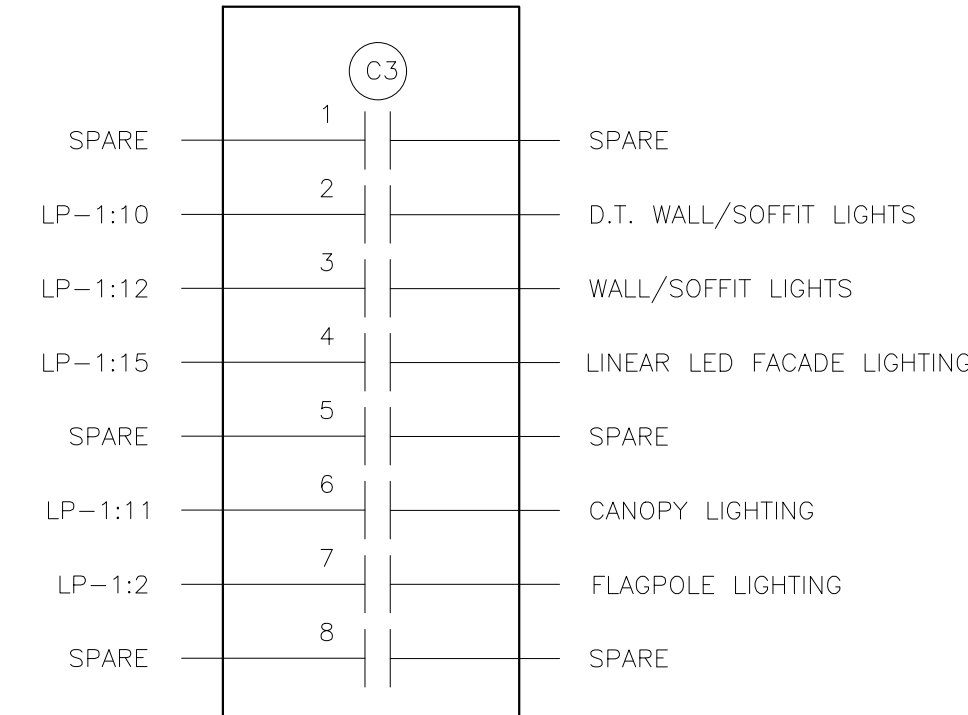
EXTERIOR SIGNAGE



INTERIOR CREW LIGHTING



BUILDING FACADE



LIGHTING CONTROL NOTES:

LIGHTING CONTROL NOTES

- LC1. CONTACTOR DETAILS ARE DIAGRAMMATIC ONLY AND ARE SHOWN WITH TYPICAL LOADS AND CIRCUIT ASSIGNMENTS. LOADS, CIRCUIT ASSIGNMENTS AND NUMBER OF CONTACTORS MAY VARY BY RESTAURANT LOCATION AND PER BAS SUPPLIERS SYSTEMS. VERIFY EXACT REQUIREMENTS WITH BAS INSTALLATION DETAILS, SITE PLANS, ELECTRICAL PANEL SCHEDULES AND ACM. EC SHALL MAKE ALL MODIFICATIONS AS REQUIRED. FINAL INSTALLATION SHALL BE FULLY NEC AND ENERGY CODE COMPLIANT.
- LC2. ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL ALL WIRING, CONNECTIONS, TERMINATIONS, ETC. THAT ARE NOT PROVIDED BY THE BAS SUPPLIER FOR A COMPLETE, FULLY OPERATIONAL AND CODE COMPLIANT LIGHTING CONTROL SYSTEM.
- LC3. ALL COMPONENTS FOR THIS LIGHTING CONTROL SYSTEM SHALL BE INSTALLED BY THE ELECTRICAL CONTRACTOR. SEE BOXED NOTE BELOW FOR OPTIONS.
- LC4. ALL COMPONENTS SHALL BE UL LISTED AND LABELED AND THE SYSTEM SHALL COMPLY WITH ALL LOCAL, STATE AND FEDERAL ENERGY CODE REQUIREMENTS.
- LC5. ALL CONTACTORS SHALL BE LOCATED IN A NEMA 1 ENCLOSURE WITH SCREW TYPE COVER MOUNTED DIRECTLY ABOVE LIGHTING PANEL OR SWITCHGEAR SO AS TO BE ACCESSIBLE.
- LC6. ALL CONTACTORS SHALL BE RATED FOR 30 AMP LOADS UNLESS NOTED OTHERWISE AND SHALL BE HID RATED WHERE REQUIRED.
- LC7. COIL VOLTAGES FOR ALL CONTACTORS SHALL BE 120 VOLT UNLESS NOTED OTHERWISE.
- LC8. CONTACTOR C5 IS INTENDED TO CONTROL PARKING LOT LIGHTS NEAR TRASH CORRAL, DELIVERY DOORS, AND EMPLOYEE PARKING, THUS ALLOWING A DIFFERENT LIGHTING SCHEDULE TO BE USED IN THOSE AREAS.

LIGHTING CONTROL INSTALLATION OPTIONS

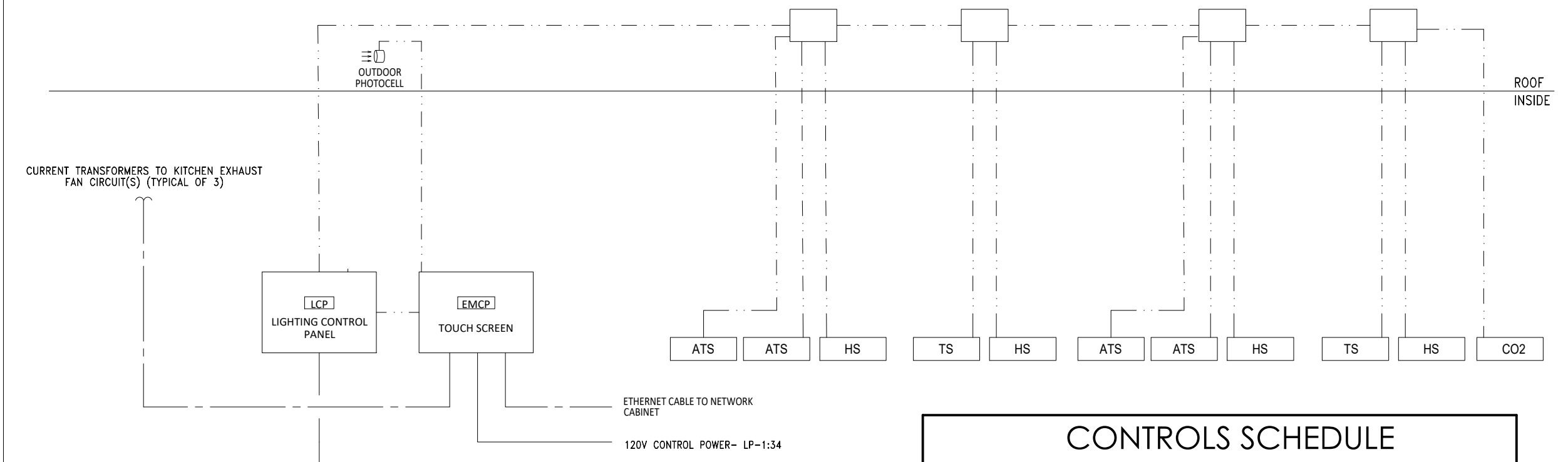
- OPTION 1 (STANDARD) CONTACTORS AND CONTACTOR ENCLOSURE FOR THIS LIGHTING CONTROL SYSTEM SHALL BE FURNISHED BY THE BAS SUPPLIER AND INSTALLED BY THE ELECTRICAL CONTRACTOR ON SITE FOR A COMPLETE AND FULLY FUNCTIONAL SYSTEM.
- OPTION 2 (OPTIONAL) LIGHTING CONTROL CAN BE ACCOMPLISHED VIA UTILIZATION OF A SMART TYPE BREAKER PANEL REPLACING STANDARD PANEL LP-1. PANEL SHALL UTILIZE AN INTEGRAL MOTOR OPERATED CIRCUIT BREAKERS OR AN INTEGRAL CIRCUIT BREAKER/CONTACTOR TYPE COMBINATION DEVICE WITH AN INTEGRAL PROGRAMMING CONTROL MODULE AND SHALL BE ORDERED THROUGH OUR ELECTRICAL EQUIPMENT NATIONAL ACCOUNT PROGRAM (SQUARE-D) THROUGH OUR CONSTRUCTION PURCHASING TEAM.

BUILDING AUTOMATION SYSTEM NOTES

- BAS1. THE DIAGRAM SHOWN ABOVE IS SCHEMATIC IN NATURE AND SHOWS THE GENERAL REQUIREMENTS FOR THE INSTALLATION OF THE BUILDING AUTOMATION SYSTEM. EXACT EQUIPMENT REQUIREMENTS AND QUANTITIES WILL VARY PER SITE. G.C., M.C., T.C.C. AND E.C. SHALL COORDINATE ALL EXACT EQUIPMENT AND INSTALLATION REQUIREMENTS WITH SUPPLIER PRIOR TO SUBMITTING BID FOR A COMPLETE AND FULLY FUNCTIONAL SYSTEM.
- BAS2. THE BUILDING AUTOMATION SYSTEM ALSO HAS ADDITIONAL OPTIONS AVAILABLE SUCH AS MONITORING DOOR CONTACTS (RESTROOM & COOLER FREEZER), ENERGY METER, COOLER/FREEZER TEMP. ADDITIONAL OPTIONS MAY BE SELECTED ON CENTRAL PURCHASING PROJECT DETAIL FORM. G.C., M.C., T.C.C. AND E.C. SHALL COORDINATE ALL EXACT INSTALLATION REQUIREMENTS WITH SUPPLIER PRIOR TO SUBMITTING BID FOR A COMPLETE AND FULLY FUNCTIONAL SYSTEM.
- BAS3. ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL ALL LINE AND LOW VOLTAGE WIRING AND CONNECTIONS, INCLUDING BUT NOT LIMITED TO CONTROL POWER TO ALL BAS COMPONENTS AND POWER CIRCUITRY WIRING OF ALL LIGHTING CONTACTORS. COORDINATE INSTALLATION WITH SITE SPECIFIC BAS INSTALLATION DETAILS PROVIDED BY SUPPLIER.

BUILDING AUTOMATION SYSTEM

INSTALLATION & TECHNICAL ASSISTANCE INFORMATION:
LENNOX BAS: McD@CCBAC.com



PROVIDE AND INSTALL DATA OUTLET NEXT TO BAS PANEL. REMOTE COMMISSIONING IS NOT POSSIBLE WITHOUT DATA CONNECTION.

INSTALLATION NOTES:

1. PROVIDE, INSTALL AND SECURE ALL NECESSARY CABLE & CONDUIT PER BAS DRAWINGS AND SPECIFICATIONS.
2. MOUNT ALL BAS CONTROL ENCLOSURES.
3. PERFORM ALL LOW VOLTAGE TERMINATIONS.
4. ROUGH-IN, INSTALLATION AND WIRING FOR TEMPERATURE SENSORS AND TOUCHSCREEN PER PLAN LOCATIONS.
5. PROVIDE POWER CIRCUITS INTO CONTROL CANS PER BAS DETAILS.
6. COORDINATE WITH SUPPLIER TO SCHEDULE REMOTE COMMISSIONING.
7. CORRECT ALL PUNCH LIST ITEMS FOUND DURING REMOTE COMMISSIONING.

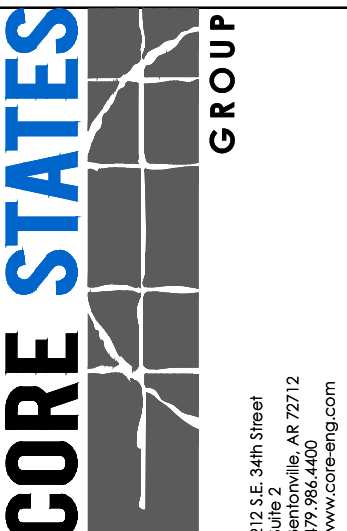
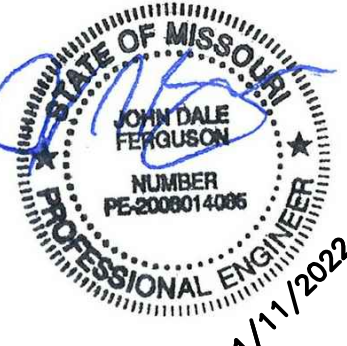
CONTROLS SCHEDULE

MARK	DESCRIPTION	MANUFACTURER	MODEL
TS	TEMPERATURE SENSOR	*PROVIDED WITH BAS	
ATS	AVERAGING TEMPERATURE SENSOR	*PROVIDED WITH BAS	
HS	HUMIDITY SENSOR	*PROVIDED WITH BAS	

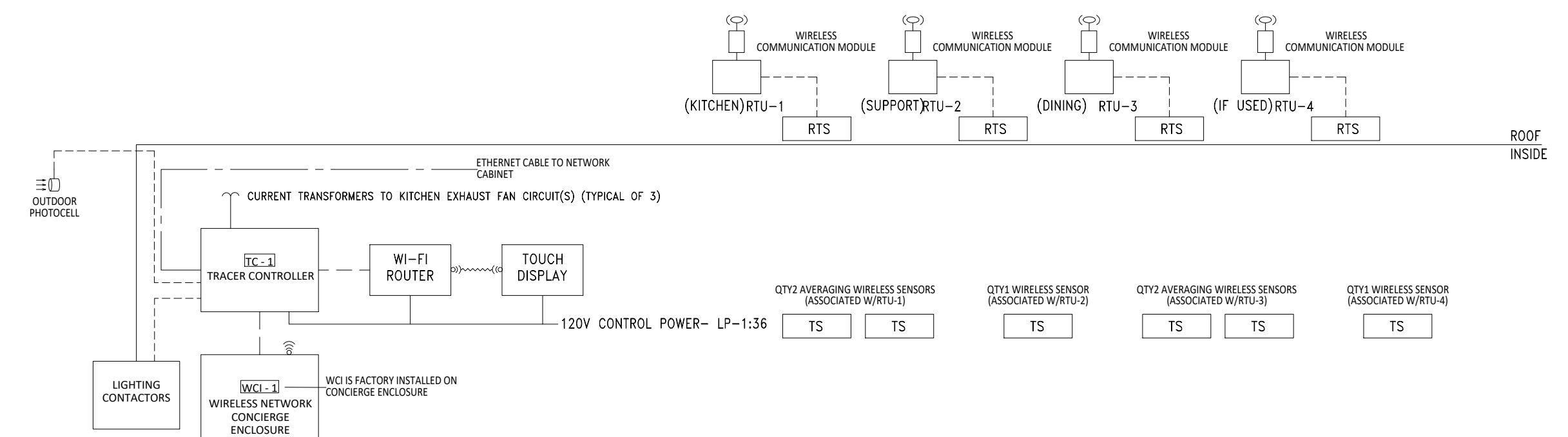
NOTES:
1. FOR TS, HS AND ATS LOCATIONS, REFER TO M1.2

WIRE LEGEND

MARK	WIRE/CABLE TYPE
---	CAT 5E
---	18 AWG CONDUCTORS



INSTALLATION & TECHNICAL ASSISTANCE INFORMATION:
TRANE BAS: McDcontrols@Trane.com



PROVIDE AND INSTALL DATA OUTLET NEXT TO BAS PANEL. REMOTE COMMISSIONING IS NOT POSSIBLE WITHOUT DATA CONNECTION.

INSTALLATION NOTES:

1. PROVIDE, INSTALL AND SECURE ALL NECESSARY CABLE & CONDUIT PER BAS DRAWINGS AND SPECIFICATIONS.
2. MOUNT ALL BAS CONTROL ENCLOSURES.
3. PERFORM ALL LOW VOLTAGE TERMINATIONS.
4. ROUGH-IN, INSTALLATION AND WIRING FOR TEMPERATURE SENSORS AND TOUCHSCREEN PER PLAN LOCATIONS.
5. PROVIDE POWER CIRCUITS INTO CONTROL CANS PER BAS DETAILS.
6. COORDINATE WITH SUPPLIER TO SCHEDULE REMOTE COMMISSIONING.
7. CORRECT ALL PUNCH LIST ITEMS FOUND DURING REMOTE COMMISSIONING.

CONTROLS SCHEDULE

MARK	DESCRIPTION	MANUFACTURER	MODEL
TS	WIRELESS SPACE TEMPERATURE SENSOR	*PROVIDED WITH BAS	
RTS	RETURN TEMPERATURE SENSOR	*PROVIDED WITH BAS	
HS	OUTDOOR TEMPHUMIDITY SENSOR	FACTORY FURNISHED AND INSTALLED W/EACH RTU	

NOTES:
1. FOR TS LOCATIONS, REFER TO M1.2
2. RTS TO BE MOUNTED IN RETURN AIR DUCT OF RTU

WIRE LEGEND

MARK	WIRE/CABLE TYPE
---	CAT 5E
---	18 AWG CONDUCTORS

© 2022 McDonald's USA, LLC
McDonald's USA, LLC
These drawings and specifications are the confidential and proprietary property of McDonald's USA, LLC and shall not be copied or reproduced without written authorization. The contract documents were prepared in Birmingham, AL and shall govern in the event of a dispute. Use of these drawings for reference or example on another project requires the contractor to obtain written permission from McDonald's USA, LLC. The contract documents for reuse on another project is not authorized.

TITLE	2022 STANDARD BUILDING - BB20
DESCRIPTION	4597 - WOOD/WOOD
REVISION	WOOD BEARING WALLS W/HARDBOARD SIDING
DATE ISSUED	10/04/2022
SHEET NO.	E4.1
PROJECT NO.	024-1290.00.0
DATE	11/1/2022
BY	
REV	
DATE	
DESCRIPTION	
REV	
DATE	
DESCRIPTION	

EQUIPMENT SCHEDULE									
ITEM	QTY	DESCRIPTION	MANUFACTURER	MODEL #	UL	NSF	FURNISHED	GENERAL REMARKS	SPECIAL REQUIREMENTS
1.40	2	SERVICE POD - 30"	DECOR	SEE PLAN	-	2	GC	-	-
1.51	1	PICKUP POD - 30"	DECOR	SEE PLAN	-	2	GC	-	-
1.63	1	MODELIVERY PICKUP COUNTER	DECOR	SEE PLAN	-	2	GC	-	-
1.64	1	AMENITY TOWER	GC	SEE PLAN	-	2	GC	-	-
1.72	1	DISPLAY CASE BASE CABINET - 18"	DECOR	SEE PLAN	-	2	GC	-	-
2.05	1	UNDER COUNTER CART - 24" W x 18" D FRONT COUNTER	INTERMETRO	UC18-DMS	-	2	KES	-	-
4.20	3	MENUBOARD - DIGITAL	LG	49SH7DB	-	-	AT&T	-	-
9.04	1	UTILITY CHASE - WALL VERSION	KES	6"x6"x76"	-	2	KES	CHASE TO BE 2-SIDED IF USED IN DRIVE-THRU BOOTH	-
9.08	1	UTILITY CHASE - ICE MAKER ON ABS VERSION	KES	5"x8"x23"	-	2	KES	CONCEALS WATER AND CONDENSING UNIT LINES	-
9.09	1	UTILITY CHASE - ICE MAKER ON TOWER VERSION	KES	4"x4"x76"	-	2	KES	CONCEALS WATER AND CONDENSING UNIT LINES	-
9.15	1	UTILITY CHASE - FFDT INTERIOR WALL	KES	20"x5"x76"	-	2	KES	4 SECTION CHASE FOR BUYOUT RECEPTACLES, POS, CO2 AND WATER	-
9.16	1	UTILITY CHASE - FFDT EXTERIOR WALL	KES	20"x5"x76"	-	2	KES	4 SECTION CHASE FOR BUYOUT RECEPTACLES, POS AND WATER	-
9.18	2	UTILITY CHASE - WALL VERSION	KES	4"x4"x82"	-	2	KES	CHASE FOR BULK OIL LINES, MOUNT AT 2'-0"	-
9.20	1	UTILITY CHASE - COMBI CELL	KES	4"x8"x84"	-	2	KES	CHASE FOR BUYOUT RECEPTACLES AND WATER	-
10.09	1	MAPKIN DISPENSER - DROP-IN	GEORGIA PACIFIC	54219	-	2	KES	-	-
10.10	1	CO2 DRIVEN KETCHUP DISPENSER	PERFECTION	MCD-11	-	2	KES	-	-
12.03	1	BAKED GOODS DISPLAY CASE - 14"	ANTUNES	DC-14	-	2	KES	-	-
19.00	1	DELIVERY STAGING TECH CENTER - 48"	INTERMETRO	MCD3048-ODSTC	-	2	KES	-	-
19.04	1								
20.01	1	AUTOMATED BEVERAGE SYSTEM 2.0	IMI CORNELIUS	62105890LON	-	-	KES	INSTALLATION KIT INCLUDES STAINLESS STEEL CHASE & DATA LINE	-
21.01	3	COFFEE BREWER (THERMAL POTS)	BUNN-O- MATIC	AXIOM-DV-3	E32066	4	KES	W/ELECTRONIC CONTROLLER FOR CONVERSION TO LOW OR HIGH VOLTAGE	-
21.09	1	HOT WATER DISPENSER	BUNN-O- MATIC	HW2	E32066	4	KES	-	-
23.10	1	ESPRESSO BREWER	FRANKE	FM850	-	4	KES	-	-
23.12	2	COFFEE CREAM DISPENSER	SURESHOT	AC110-PC-51	E217698	20	KES	-	-
23.14	1	SUGAR/SWEETENER DISPENSER	SURESHOT	AC2-GP-30	E217698	18	KES	-	-
24.01	1	ORANGE JUICE DISPENSER	TAYLOR	CO09	-	18	KES	-	-
25.01	4	SUMLINE ICED BEVERAGE DISPENSER	BUNN-O- MATIC	TDO-N	E32066	4	KES	KEYS TO VERIFY EXACT QUANTITY PER MARKET	-
25.06	4	SUMLINE ICED BEVERAGE DISPENSER - SHORT	BUNN-O- MATIC	TDO-N LP	E32066	4	KES	KEYS TO VERIFY EXACT QUANTITY PER MARKET	-
25.07	1	INFUSION TEA BREWER - MIS	BUNN-O- MATIC	ITCB-DV	E32066	4	KES	PROVIDED WITH BREWER, INSTALLATION KIT AND TDO-N BOOSTER	-
26.00	1	TEA BREWER TABLE - 30"x36"	ISS SHELING	WST1756C	-	2	KES	-	-
28.14	1	SODA TOWER - RECIRCULATING - 10 VALVE - LEVER CONTROL	IMI CORNELIUS	ED250BZ	SA7493	18	KES	-	-
31.03	1	SODA SYSTEM PACKAGE B.I.B.(RECIRCULATING - 3 TOWERS) - REMOTE	MULTIPLEX	50GR04	E121876	18	KES	-	-
32.02	1	REVERSE OSMOSIS WATER FILTRATION SYSTEM - TANKLESS	EVERPURE	ENVI-RO-600	-	-	KES	FOR COFFEE MAKER, ESPRESSO MACHINE, AND RAPID BUN STEAMER	-
32.04	1	WATER FILTRATION SYSTEM	EVERPURE	EV9337-26	-	-	KES	-	-
36.00	2	BULK COKE	CHART INDUSTRIES	10667511	-	18	MANU-FACTURER	SYRUP LINES BY CHART INDUSTRIES	-
37.00	1	BULK CO2 - 750 LB.	CHART INDUSTRIES	CARBO-MAX 750	-	-	MANU-FACTURER	-	-
37.03	2	CO2 SAFETY SYSTEM	SEE RMKS	-	-	-	KES	SEE MECHANICAL DRAWINGS	INCLUDES DETECTOR AND (4) AV ALARMS
38.00	1	CLEAN IN PLACE PANEL	CHART INDUSTRIES	10667431	-	18	MANU-FACTURER	MOUNT 6"W x 7"H, BOX @ 6'-0" AFF TO BOX CENTER LINE	-
38.10	1	ICE MACHINE - 1400 LB.	MANITOWOC	IY1494N3/ B970	SA4027	12	KES	USE HEADMASTER KIT K00221	-
38.15	2	ICE MACHINE - 1000 LB.	MANITOWOC	IB1094VC	SA4027	12	KES	CONDENSER: ICVD-1195-263	-
40.00	1	ICE MACHINE CHASE	KES	4"x6"x48"	-	2	KES	CONCEALS WATER AND CONDENSING UNIT LINES	-
41.06	1	ICE MACHINE REMOTE CONDENSER - 1000 LB.	MANITOWOC	JC-1395	SA4027	12	KES	-	-
41.09	2	ICE MACHINE REMOTE CONDENSER - 1400 LB.	MANITOWOC	ICVD-1195-263	SA4027	12	KES	-	-
43.21	1	OPTIMIZED ORDER ASSEMBLY TABLE	KES	90001	E152097	2	KES	-	-
44.45	1	CENTER ISLAND - 48"	KES	CMFY-48	-	2	KES	-	-
44.45	1	MEDIUM RISER SHELF - 31" TO 43"	KES	-	-	2	KES	-	-
45.19	1	MODULAR BEVERAGE CABINET - 13'-0"	KES	-	-	2	KES	-	-
46.00	1	CUP DISPENSER VERTICAL 3 CUP	KES	-	-	2	KES	-	-
46.02	1	SYRUP BOTTLE RACK - (5) SYRUP PUMPS	PRONTO	-	-	2	KES	-	-
47.06	1	CHILLED RAIL	KES	-	-	7	KES	LOCATED UNDER PREP TABLE OVERSHELF	-
49.00	1	CO2 FILL BOX - 6 1/2"W x 18"H	CHART INDUSTRIES	8512629	-	-	MANU-FACTURER	SEE EXTERIOR ELEVATIONS FOR MOUNTING HEIGHT, INSTALLED BY GC	-
51.03	2	CUP LID HOLDER 3 HIGH S/S	KES	-	-	2	KES	-	-
51.04	4	CUP LID HOLDER SINGLE STACK 8" HIGH	KES	-	-	2	KES	-	-
61.00	1	FRY BAGGING STATION 36"	KES	FB01-4	E99018	2	KES	-	-
65.30	1	3-VAT LOV FRYER - ELECTRIC - F/F/F	HENNY PENNY	LVE-203	E30993	4	KES	-	-
66.47	1	4-VAT LOV FRYER - ELECTRIC - S/S/S/S	HENNY PENNY	LVE-204	E30993	4	KES	-	-
69.00	2	CAPTURE JET PLENUM - FRYER	HALTON	CJP-F	MH27607	2	KES	ATTACH TO UNIVERSAL EXHAUST HOOD	-
69.01	2	CAPTURE JET PLENUM - GRILL	HALTON	CJP-G	MH27607	2	KES	ATTACH TO UNIVERSAL EXHAUST HOOD	-
73.00	1	UNIVERSAL EXHAUST HOOD 3-VAT FRYER	KES	UH-50	MH12755	2	KES	-	-
79.23	1	UNIVERSAL EXHAUST HOOD FULL-CLAM/4-VAT FRYER	KES	UH-122	MH12755	2	KES	-	-
79.26	2	VENTLESS HOOD FOR COMBI OVEN	HALTON	COV	E325060	2	KES	-	-
80.00	1	MECHANICAL CHASE	KES	9"x18" SGCL	E163328	2	KES	-	-
80.08	1	PRODUCT LANDING SHELF - SOLID TOP	KES	9"x32" SGCL	E163328	2	KES	-	-
81.01	1	LANDING TABLE WITH POWER	KES	-	-	2	KES	-	-
85.05	1	FROZEN FRY DISPENSER	RAM	280-FP	E140753	4	KES	-	-
91.02	1	WALL MOUNT FREEZER UNIT-SINGLE WIDE-HIGH CAPACITY	KES	HCWF1	SA7329	7	KES	AIR-COOLED, SELF-CONTAINED - MOUNT BOTTOM AT 51" AFF	HCWF1.99A INSTALL HARDWARE KIT REQUIRED
93.00	1	UNIVERSAL EXHAUST HOOD FULL-CLAM GRILL	KES	UH-43	MH12755	2	KES	-	-
96.21	2	36" NEXT GEN 3-PLATEN CLAMSHELL GRILL - ELECTRIC	GARLAND	ME-3PX	E28898	4	KES	-	-
97.08	1	MEAT FREEZER - DOUBLE WIDE - HIGH CAPACITY - RIGHT HAND	KES	HCMF30B-RH	SA6032	5	2	KES	AIR-COOLED, SELF-CONTAINED
99.01	2	GRILL TOOL ORGANIZER - 43" HOOD	KES	-	-	2	KES	-	-
110.01	1	OPTIMIZED BREAKFAST TABLE	KES	OBT	-	2	KES	-	-
116.25	2	UNIVERSAL HOLDING CABINET - HIGH DENSITY - 2-SIDED - PIN & SLEEVE	PRINCE CASTLE	UHC6PT-22MCD	-	4	KES	ETL RATINGS: SAFETY = 3197509CH1-003, SANITATION = 3197509CH1-004	-
117.30	1	UHC TABLE COPL - 2 SIDED - 51"D x 34"W - PIN&SLEEVE	KES	91011	-	2	KES	-	-
118.00	1	Q'ING OVEN - PIN & SLEEVE	AMANA	MC23MPW2	E40456	4	KES	-	-
118.03	2	Q'ING OVEN - PIN & SLEEVE	ACP	MCMOC24	-	4	KES	-	-
122.27	1	NEXT GEN UNIVERSAL RADIANT TOASTER - PIN & SLEEVE	ANTUNES	HRT-5H	-	4	KES	-	-
122.28	1	NEXT GEN UNIVERSAL CONTACT TOASTER - PIN & SLEEVE	ANTUNES	HCT-5H	-	4	KES	-	-
123.36	1	ECU TABLE - COPL	KES	90165	-	2	KES	-	-
123.37	1	BREAKER PANEL - 125 AMP - 1 PHASE - EQUIPMENT MOUNTED	KES	-	-	-	KES	-	-
123.40	1	PREP TABLE - HD - 2-SIDED COPL - 38"D x 83 1/2" - PIN & SLEEVE W/REF.	KES	91010	-	2	KES	-	-
125.00	2	RAPID BUN STEAMER	PRINCE CASTLE	625-MFY	-	4	KES	-	-
130.00	2	COMBI OVEN	MANITOWOC	MS610-20B3LCMD-1	-	4	KES	-	-
134.02	1	VEGETABLE SINK	KES	SK04-4	-	2	KES	-	-
139.04	1	COMBI OVEN STAND - DOUBLE WIDE	KES	-	-	2	KES	-	-
151.12	1	CLEAN DISHABLE - LEFT HAND - 28.23"	KES	SK-SPL	-	2	KES	-	-
151.46	1	SOILED DISHABLE - RIGHT HAND - 90.5" WIDE	KES	SK-SPL	-	2	KES	-	-
152.05	1	WAREWASHER	ECOLAB	QSR TSC	E5956	3	MANU-FACTURER	PROVIDE VAPOR VENT - REQUIRED	-
153.00	1	SCULLERY SHELING KIT - 3 TIER - 14" x 36"	INTERMETRO	SHSS-4	-	2	KES	-	-
153.04	1	SMALLWARE WALL ORGANIZER	INTERMETRO	SW1812-MPS	-	2	KES	-	-
154.00	1	BRUSH CABINET	DISPLAY HOUSE	TBC-1	-	4	KES	-	-
157.00	1	TRASH LINER DISPENSER SHELF	KES	A0053	-	2	KES	-	-
159.03	1	UNIVERSAL PARTS CART - 36" W	INTERMETRO	MCD-1836UPC	-	2	KES	-	-
160.01	4	CHEMICAL SYSTEM	ECOLAB	-	-	-	MANU-FACTURER	-	-
163.00	2	FIRE EXTINGUISHER - 5 LB. - ABC	ANSUL	SEE RMKS	-	-	SEE RMKS	LOCAL ANSUL AGENT SPECIFICS, SUPPLIES & LOCATES PER LOCAL CODE	-
163.01	2	FIRE EXTINGUISHER - 6 L. - K GUARD	ANSUL	SEE RMKS	-	-	SEE RMKS	LOCAL ANSUL AGENT SPECIFICS, SUPPLIES & LOCATES PER LOCAL CODE	-
163.02	4	REMOTE ANSUL PULL	ANSUL	4835	EX3470	-	SEE RMKS	CODE MAY REQUIRE LOCAL ANSUL AGENT TO SUPPLY	-
171.01	1	WALK-IN COOLER / FREEZER FLOORLESS	NORLAKE	-	E42763	7	KES	-	-
174.00	1	REMOTE CONDENSING UNIT	BOHN	MAC8X56CA	SA4272	-	KES	BEACON II SYSTEM	-
175.11	1	COOLER EVAPORATOR	BOHN	ADT1048B2N6MK	SA1525	-	KES	BEACON SYSTEM II EVAPORATOR	-
176.21	1	FREEZER EVAPORATOR	BOHN	LET1808B2N6MK	SA1525	-	KES	BEACON SYSTEM II EVAPORATOR	-
177.03	1	REACH-IN REFRIGERATOR-SINGLE WIDE	BEVERAGE AIR	ER24-1AHS-34	SA2651	7	KES	-	-
178.05	3	REACH-IN REFRIGERATOR - SINGLE WIDE	BEVERAGE AIR	ER24-1AHS-34	SA2651	7	KES	-	-
181.13	1	REFRIGERATOR - SPECIALTY COFFEE - 27" WIDE	TRUE	TW-27 MCD0F1	SA3040	7	KES	RIGHT-HAND HINGED	-
181.14	1	REFRIGERATOR - WORKTOP - 48" WIDE	TRUE	TWT-48 MCD1	SA4065	7	KES	-	-
183.00	1	REFRIGERATOR/FREEZER - 2 DRAWER BASE - 30" W x 33" H	KES	18012498	SA4044	7	KES	-	-

EQUIPMENT SCHEDULE									
ITEM	QTY	DESCRIPTION	MANUFACTURER	MODEL #	UL	NSF	FURNISHED	GENERAL REMARKS	SPECIAL REQUIREMENTS
183.02	4	REFRIGERATOR/FREEZER - 2 DRAWER BASE - 30" W x 30" H	KE'S	18021304	SA4044	7	KES	-	-
187.72	1	FREEZER SHELING 24" x 42" x 74" H. - 4-TIER	ISS SHELING	FSMS/FSMA742442E	-	2	KES	-	-
187.73	2	FREEZER SHELING 24" x 48" x 74" H. - 4-TIER	ISS SHELING	FSMS/FSMA742448E	-	2	KES	-	-
187.75	2	FREEZER SHELING 24" x 60" x 74" H. - 4-TIER	ISS SHELING	FSMS/FSMA742460E	-	2	KES	-	-
188.00	10	DUNNAGE RACK 22" x 36"	INTERMETRO	HP2236PD	-	2	KES	-	-
188.07	1	UNIVERSAL STAGING CART	ISS SHELING	WST1384Y	-	2	KES	-	-
188.08	1	DUNNAGE RACK 22" x 30"	INTERMETRO	HP2230PD	-	2	KES	-	-
188.09	1	DUNNAGE RACK 22" x 48"	INTERMETRO	HP2248PD	-	2	KES	-	-
189.65	1	COOLER SHELING 18" x 36" x 74" H. - 4-TIER	ISS SHELING	FSMS/FSMA741836E	-	2	KES	-	-
189.71	2	COOLER SHELING 24" x 36" x 74" H. - 4-TIER	ISS SHELING	FSMS/FSMA742436E	-	2	KES	-	-
189.74	3	COOLER SHELING 24" x 54" x 74" H. - 4-TIER	ISS SHELING	FSMS/FSMA742454E	-	2	KES	-	-
189.75	1	COOLER SHELING 24" x 60" x 74" H. - 4-TIER	ISS SHELING	FSMS/FSMA742460E	-	2	KES	-	-
191.00	5	VALANCE SHELING - 18" x 36"	INTERMETRO	M1836C-MP	-	2	KES	MOUNT AT 6'-8" AFF TO SHELF BOTTOM UNLESS OTHERWISE NOTED	-
191.01	4	VALANCE SHELING - 18" x 48"	INTERMETRO	M1848C-MP	-	2	KES	MOUNT AT 6'-8" AFF TO SHELF BOTTOM	