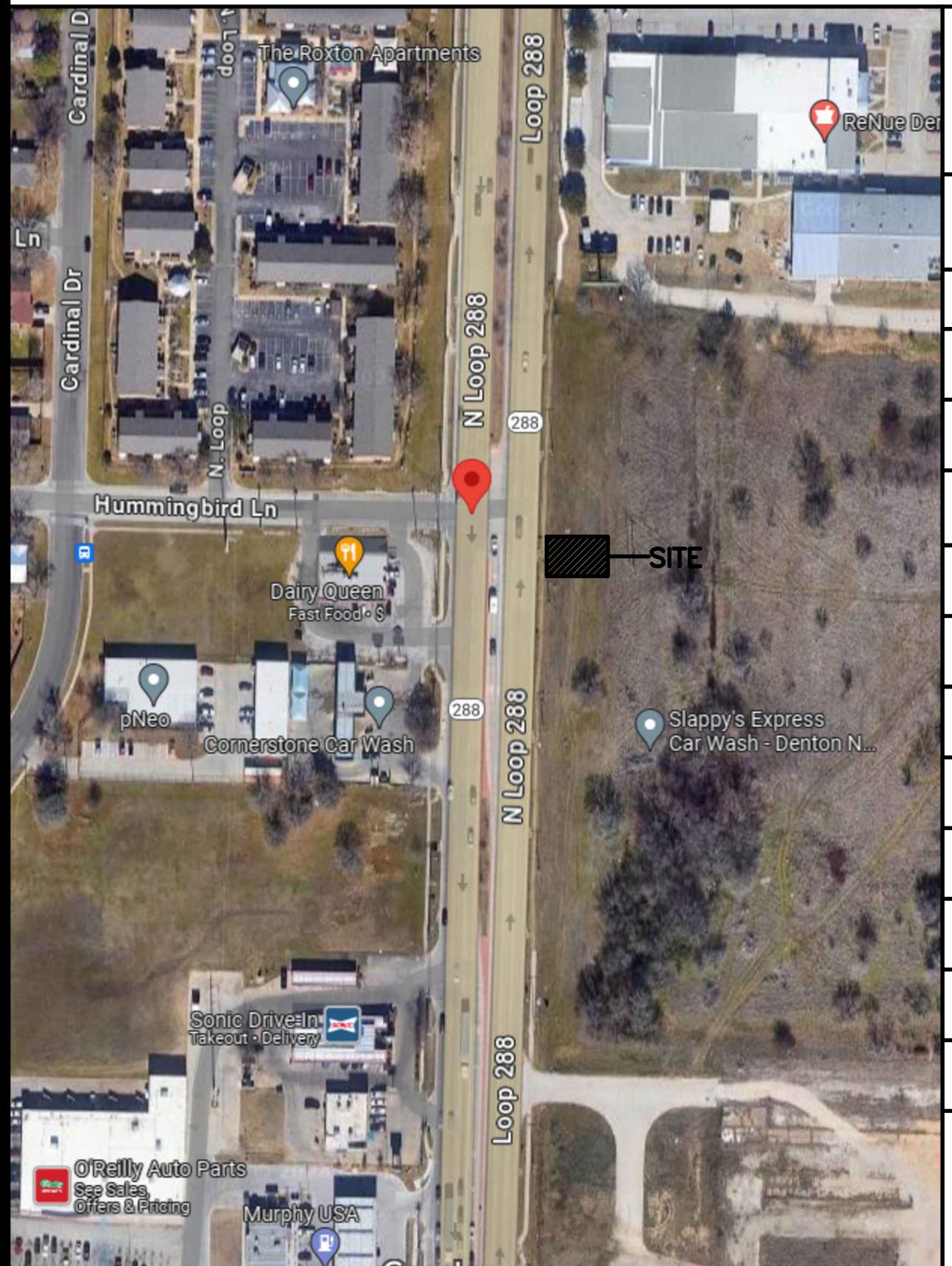


4597-WW PLAN



64 SEATS (4 ACCESSIBLE SEATS)



OCCUPANCY ALLOWANCE:

INTERNATIONAL BUILDING CODE 2021

TABLE 1004.5
MAXIMUM FLOOR AREA ALLOWANCES PER OCCUPANT

FUNCTION OF SPACE	ALLOWANCE	AREA	OCCUPANTS
ACCESSORY STORAGE AREAS, MECHANICAL EQUIPMENT ROOM	300 GROSS	600 SF	2
ASSEMBLY WITH FIXED SEATS	SEE PLAN	—	64
ASSEMBLY W/OUT FIXED SEATS STANDING SPACE	5 NET	125 SF	25
BUSINESS AREAS	150 GROSS	64 SF	1
KITCHEN, COMMERCIAL (OCCUPANT LOAD FOR FULL STAFF)	200 GROSS	1,400 SF	7
—	—	—	—
—	—	—	—
—	—	—	—
—	—	—	—
—	—	—	—
TOTAL OCCUPANCY ALLOWANCE	99		

2023 4597-WW BUILDING BB20

DALLAS FIELD OFFICE

BUILDING INFORMATION:

ADDRESS:

STATE SITE CODE: 042-3271
STREET ADDRESS: SEC OF S.H. LOOP 288 & HUMMINGBIRD LANE
CITY: DENTON
COUNTY: DENTON
STATE: TEXAS

STRUCTURE:

WOOD LOAD BEARING WALLS, WOOD ROOF FRAMING

UTILITIES:

ELECTRIC GRILLS & ELECTRIC FRYERS
GAS HVAC & GAS WATER HEATER

BUILDING CODE:

BUILDING CODE EDITION: 2021 INTERNATIONAL BUILDING CODE
MECHANICAL CODE EDITION: 2021 INTERNATIONAL MECHANICAL CODE
ELECTRICAL CODE EDITION: 2020 NFPA 70 NATIONAL ELECTRICAL CODE
PLUMBING CODE EDITION: 2021 INTERNATIONAL PLUMBING CODE
ENERGY CODE EDITION: 2021 INTERNATIONAL ENERGY CONSERVATION CODE
FIRE/LIFE SAFETY CODE EDITION: 2021 NFPA 101 LIFE SAFETY CODE
FUEL/GAS CODE EDITION: 2021 INTERNATIONAL FUEL GAS CODE
HEALTH CODE EDITION: DENTON COUNTY HEALTH CODE
ACCESSIBILITY CODE EDITION: 2012 TEXAS ACCESSIBILITY STANDARDS

BUILDING DATA:

OCCUPANCY: USE GROUP A2
CONSTRUCTION TYPE: VB
NUMBER OF STORIES: 1
BUILDING HEIGHT: 18'-9 1/2" (MAIN BLDG. PARAPET)

GROSS BUILDING AREA: 4,421 GROSS S.F.
BUILDING AREA: 4,117 NET S.F.

DESIGN LOADS:

GROUND SNOW LOAD: REFERENCE SHEET S4.0
WIND SPEED: REFERENCE SHEET S4.0
SEISMIC DESIGN CATEGORY: REFERENCE SHEET S4.0
SOIL BEARING CAPACITIES: REFERENCE SHEET S4.0

LIFE SAFETY SYSTEM:

EMERGENCY LIGHTING:	X	YES	NO
EXIT SIGNS:	X	YES	NO
FIRE ALARM:	X	YES	NO
DUCT SMOKE DETECTORS W/ AUDIBLE/VISIBLE DEVICE:	X	YES	NO
FIRE SPRINKLERS:	X	YES	NO
SPRINKLER FLOW/TAMPER SWITCH W/ AUDIBLE/VISIBLE DEVICE:	X	YES	NO
CO2 DETECTION SYSTEM W/ AUDIBLE/VISIBLE DEVICE:	X	YES	NO
PANIC HARDWARE:	X	YES	NO

DESIGNER OF RECORD:

DISCIPLINE:	NAME:	ADDRESS:	LICENSE #:
ARCHITECT:	JAW Architects Inc	jeramy@jaw-arch.com	21926
STRUCTURAL:	Rubix Consultants	Contact Architect	101398
MECHANICAL:	Robert D Anderson Inc.	Contact Architect	44987
PLUMBING:	Robert D Anderson Inc.	Contact Architect	44987
ELECTRICAL:	Robert D Anderson Inc.	Contact Architect	44987

CONSTRUCTION PROJECT MANAGER:

NAME: EMAIL:
MANAGER: Lee Morris lee.morris@us.mcd.com

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K2.0 Kitchen Equipment Plan
K2.1 Kitchen Equipment Schedule

PREPARED BY:		DRAWN BY:	
		JAW Architects Inc., LLC	
		PREPARED FOR:	
		©2025 McDonald's USA, LLC	
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SHEET NO. 042-3271		TITLE 2023 STANDARD BUILDING - BB20	
DESCRIPTION 4597-WW/WOOD		STD ISSUE DATE 2023	
DESCRIPTION WOOD BEARING WALLS W/4" BRICK VENEER		REVIEWED BY JAW	
DESCRIPTION STUCCO/BATEN/BRICK/NETAL PANEL EXTERIOR FINISHES		DATE ISSUED 03/08/24	
SITE ADDRESS 24-0014		BY JAWA 24-0014	
COVER		GN1.0	

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. IF THERE IS A CONFLICT BETWEEN THE DRAWINGS AND PROJECT MANUAL, NOTIFY THE AREA CONSTRUCTION MANAGER FOR RESOLUTION.

ABBREVIATIONS

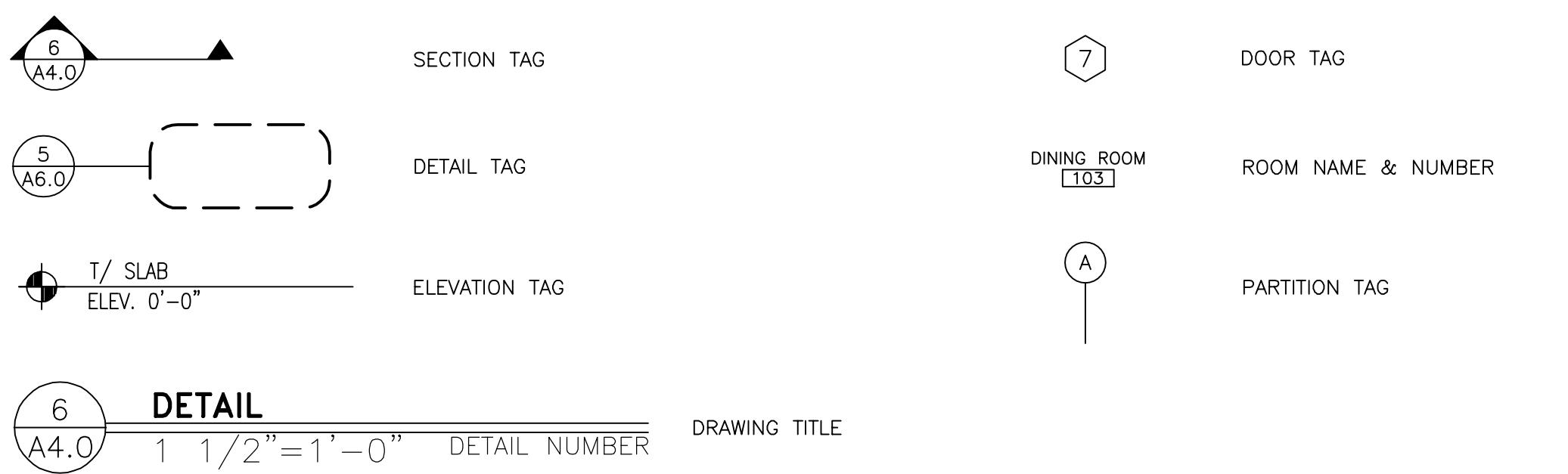
GENERAL ABBREVIATIONS

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	PAR	PARTIAL
DBL	DOUBLE	PF	PRE-FABRICATED
DF	DRINKING FOUNTAIN	PSF	POUNDS PER SQUARE FOOT
DIA	DIAMETER	PT	PRESSURE TREATED
DIM	DIMENSION	PTD	PAINTED
DN	DOWN	QT	QUARRY TILE
DS	DOWNSPOUT	R	RADIUS
EA	EACH	REBAR	REINFORCING BAR
EJ	EXPANSION JOINT	REF	REFERENCE
ELEC	ELECTRICAL	REQD.	REQUIRED
ELEV	ELEVATION	RO	ROUGH OPENING
EQ	EQUAL	SB	SPLASHBLOCK
EXIST	EXISTING	SIM	SIMILAR
FD	FLOOR DRAIN	SPEC	SPECIFICATION
FE	FIRE EXTINGUISHER	SS	STAINLESS STEEL
FEC	FIRE EXTINGUISHER CABINET	STL	STEEL
FF	FINISH FLOOR	STOR	STORAGE
FR	FIRE RATED	SUSP	SUSPENDED
FRP	FIBERGLASS REINFORCED PLASTIC	TYP	TYPICAL
GALV	GALVANIZED	UNO	UNLESS NOTED OTHERWISE
GYP BD	GYPSUM BOARD	VCT	VINYL COMPOSITION TILE
HD	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	ALPOLIC METAL PANEL	L	LIGHT FIXTURE
BM	BRAKE METAL	LAM	LAMINATE
C	ALUMINUM CANOPY	LE	ACCENT LIGHTING
CG	CORNER GUARD	LP	LOW POINT
CT	WALL TILE	LL	LEVEL LANDING
DE	DECOR ELEMENT	MACHINE	MACHINE
DF	DECOR FINISH	MANAGER	MANAGER
DEVICE		MF	METAL FASCIA
DMB	DIGITAL MENU BOARD	MS	MOP SINK
DS	DROP SOFFIT	PB	PIPE BOLLARD
D/T	DRIVE-THRU	PT	RMHC COIN COLLECTOR
FB	FILL BOX	RL	ROOF LADDER
F/C	FREEZER/COOLER	ROOM	
GC	GENERAL CONTRACTOR	S	McDONALD'S SIGNAGE
HP	HIGH POINT	SCH	SCHLUTER
KIOSK		UN	ALUMINUM CANOPY underscore

SYMBOL LEGEND:



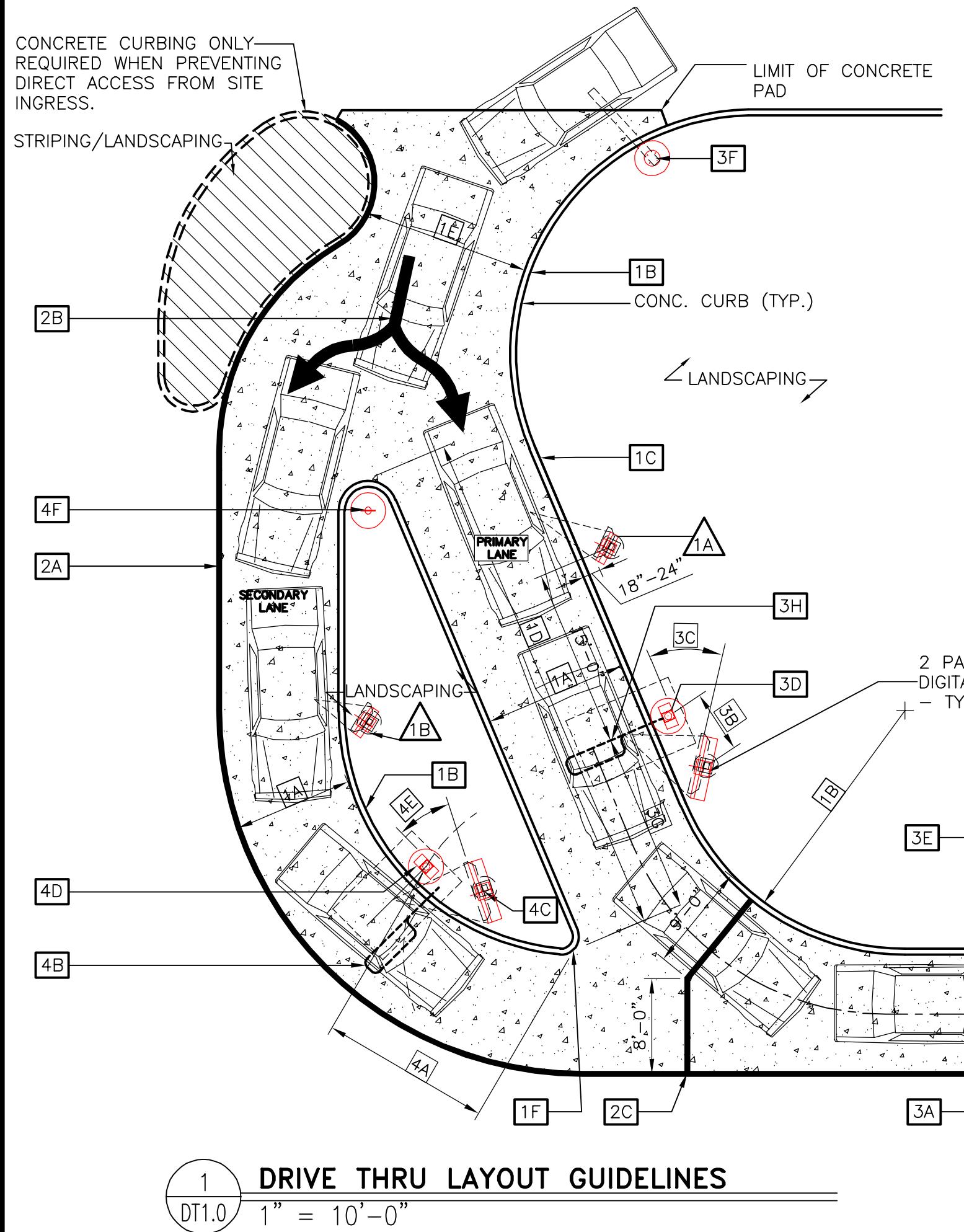
DRAWN BY:		PREPARED BY:	
McDonald's USA, LLC		@ 2023 McDonald's USA, LLC	
JAW		JAW	
STD ISSUE DATE 2023		STD ISSUE DATE 2023	
REVIEWED BY: JAW		REVIEWED BY: JAW	
DATE ISSUED 03/08/24		DATE ISSUED 03/08/24	
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DESCRIPTION WOOD BEARING WALLS W/4" BRICK VENEER		DESCRIPTION WOOD BEARING WALLS W/4" BRICK VENEER	
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SITE ADDRESS S.H. LOOP 288 & HUMMINGBIRD LANE, DENTON, TEXAS		SITE ADDRESS S.H. LOOP 288 & HUMMINGBIRD LANE, DENTON, TEXAS	
REV. DATE		REV. DATE	
BY		BY	

JAW

REGISTERED ARCHITECT
JAMES WILLIAMSON, AIA, NCARB
STATE OF TEXAS
#1926
Phone: 817-705-3387
Email: jwilliamson@jaw.com

GENERAL NOTES

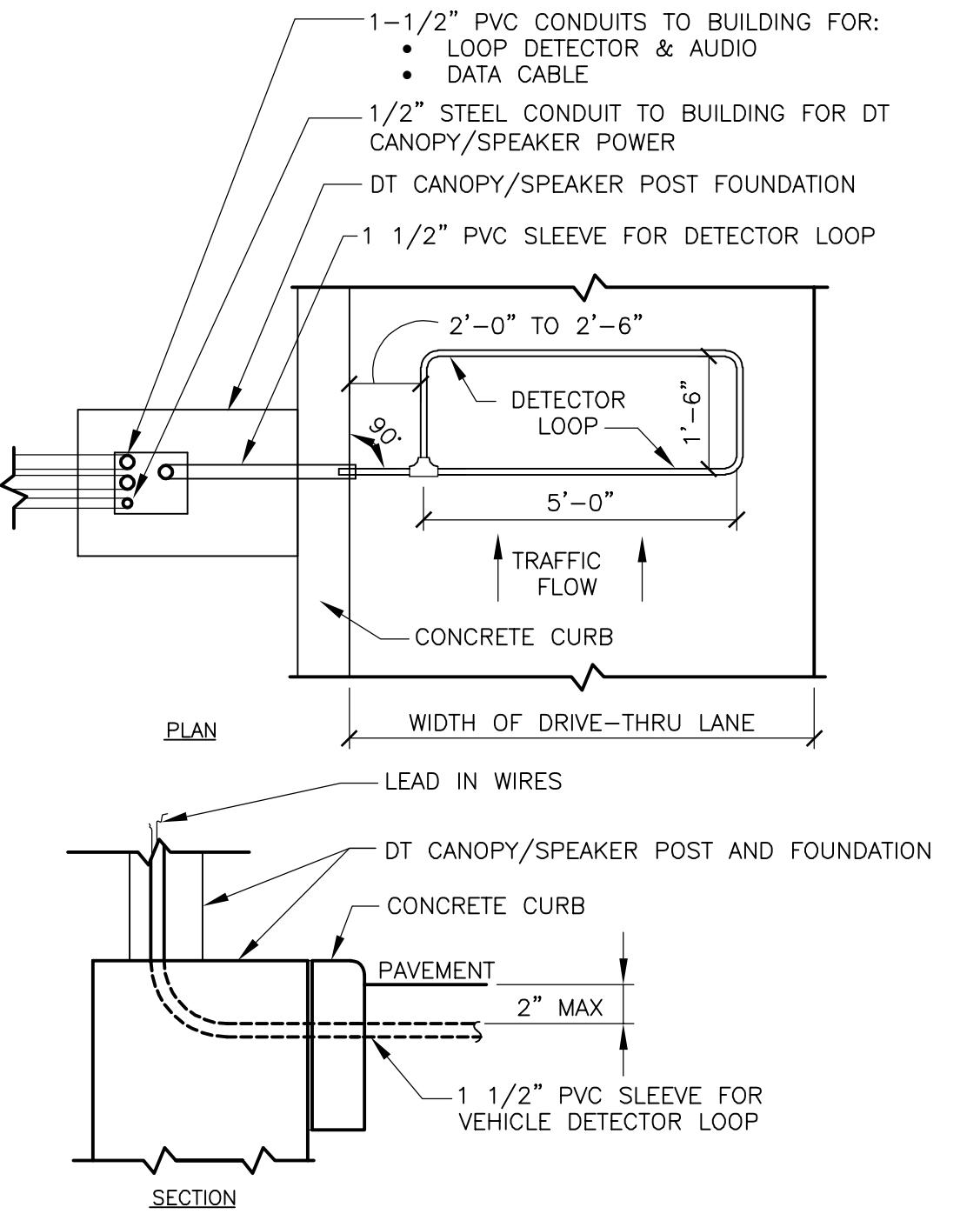
THE LAYOUT OF THE DRIVE-THRU LANES SHOWN IN THIS DETAIL ILLUSTRATES DRIVE-THRU DESIGN PRINCIPLES.



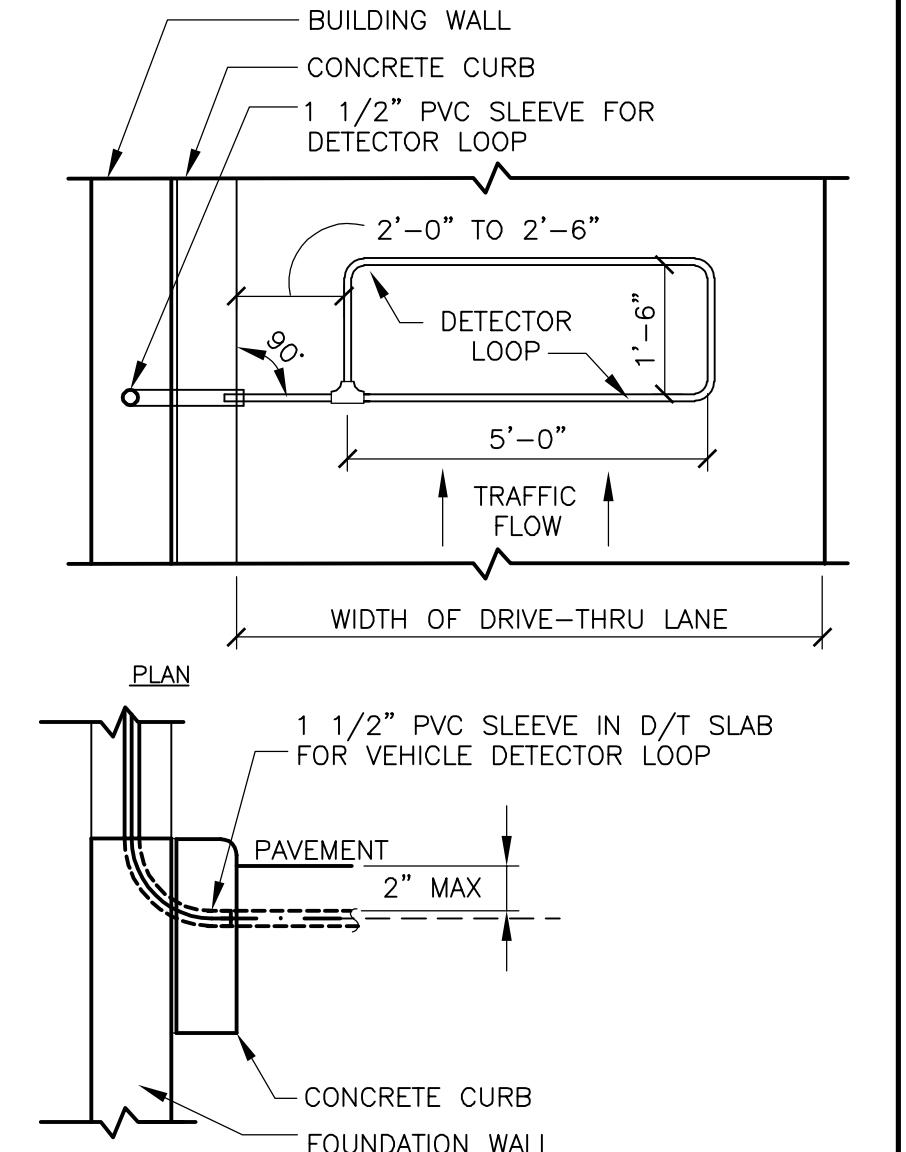
1 DRIVE THRU LAYOUT GUIDELINES

- NOTES**
- VERIFY CONDUIT SIZES AND LAYOUT WITH DETECTOR LOOP MANUFACTURER.
 - CENTER VEHICLE DETECTOR LOOP IN DRIVE THRU LANE. INSTALL PER MFR. RECOMMENDATIONS.
 - NO STEEL (REBAR OR ELECTRICAL WIRE) SHALL BE USED WITHIN 2' OF LOOP.
 - DETECTOR LOOP MANUFACTURERS:
DETECTOR LOOPS MAY BE BY ONE OF THE FOLLOWING COMPANIES OR EQUAL.
3M: 1-800-328-0033
HME: 1-800-848-4468
 - DETECTOR LOOP MATERIAL:
PVC TUBING 1/2" I.D. 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.

2 DETECTOR LOOP DETAILS



A - DT CANOPY/SPEAKER DETECTOR LOOP



B - DT WINDOW DETECTOR LOOP

SIDE BY SIDE DRIVE-THRU STANDARD 1.0

1. SIDE BY SIDE DRIVE-THRU STANDARD 1.0 CURBING DETAILS:

- [1A] DRIVE-THRU LANES BOUND BY CURB ON BOTH SIDES ARE TO BE 12'-0". LANES BOUND BY CURB ON ONE SIDE AND PAINTED STRIPING ON THE OTHER SIDE ARE TO BE A MIN. OF 10'-0".
- [1B] THE MIN. RADIUS FOR ALL INSIDE/DRIVER'S SIDE DRIVE-THRU CURBING IS 20'-0".
- [1C] PRIMARY LANE CURBING SHOULD BE AS STRAIGHT AS POSSIBLE. (LESS CURVING, THE BETTER).
- [1D] THE OVERALL LENGTH OF THE CURBED ISLAND SHOULD BE 35'-45'. THE LENGTH OF THE ISLAND FROM THE DT CANOPY/SPEAKER ALLOWS FOR THREE CARS IN THE SECONDARY LANE, TWO IN THE PRIMARY LANE AND ONE AT THE COMMITMENT POINT.
- [1E] ENTRANCE LANE ENTERING THE SIDE BY SIDE DRIVE-THRU IS TO BE 14'-0" MIN.
- [1F] THE RADIUS FOR THE ISLAND TIP SHALL BE 1'-6".

2. SIDE BY SIDE DRIVE-THRU STANDARD 1.0 PAVEMENT MARKINGS:

- [2A] 6" WIDE YELLOW PAINT STRIPE TO SPAN OUTER EDGE OF THE ENTIRE DRIVE-THRU LANE. LANE STARTS AT DRIVE-THRU ENTRANCE WHERE "McDONALD'S GATEWAY" SIGN IS LOCATED.
- [2B] DOUBLE-HEADED ARROW PAVEMENT MARKING. STANDARD STRIPING MARKINGS ARE 7"-0" SHAFT, 7"-0" ARROW STEM AND 3"-0" FOR THE ARROW HEAD. TIP OF ARROW HEAD TO BE LOCATED AT CENTER OF EACH LANE.
- [2C] MERGE POINT IS LOCATED WHERE TWO VEHICLES LEAVING EACH DT CANOPY/SPEAKER SIMULTANEOUSLY MEET. THE MERGE POINT STRIPING IS TO BE LOCATED BY OFFSETTING THE INNER PRIMARY LANE BACK OF CURB 9'-0" AND OFFSETTING THE OUTER LANE STRIPING 8'-0". AT THE INTERSECTION OF THESE OFFSETS, A 6" YELLOW STRIPE IS TO BE MARKED PERPENDICULAR TO THE OUTER LANE AS WELL AS THE INNER PRIMARY LANE.
- [2D] THE WORDS "THANK YOU" ARE TO BE PLACED 8" FROM THE EDGE OF THE YELLOW STRIPE TO THE BOTTOM OF THE WORD "YOU".
- [2E] THE 8" YELLOW STRIPE IS TO BE PLACED 40'-0" FROM THE CENTER LINE OF THE OPEN PRESENT WINDOW AND IS FOR PARKING CARS THAT ARE WAITING FOR ORDERS.
- [2F] A CIRCLE DIRECTIONAL ARROW CENTERED ABOVE THE WORD "DRIVE THRU" USED TO INDICATE THE DRIVE THRU ENTRY POINT.

3. SIDE BY SIDE DRIVE-THRU STANDARD 1.0 EQUIPMENT POSITIONING FOR PRIMARY LANE:

- [3A] MIN. 60'-0" (+5', 60'-65') LINEAR DISTANCE BETWEEN THE CENTER LINE OF THE DT CANOPY/SPEAKER FACE AND THE CENTER LINE OF THE OPEN ORDER BOOTH WINDOW AS MEASURED ALONG THE CENTER LINE OF THE LANE. THIS MAY ONLY BE INCREASED IN 20'-0" INCREMENTS (+5' FOR 80', 100', AND 120') TO A MAX OF 120'. 100'-0" IS OPTIMAL.
- [3B] THE CENTER OF THE PRIMARY MENU BOARD FOUNDATION IS TO BE 5'-9" (5'-6" MIN. AND 6'-0" MAX.) FROM THE CENTER OF THE DT CANOPY/SPEAKER FOUNDATION WITH THE END CAP OF THE PRIMARY MENU BOARD 15" PREFERRED BUT NOT LESS THAN 12" FROM THE FACE OF CURB.
- [3C] THE PRIMARY MENU BOARD SHOULD BE AT AN ANGLE OF APPROXIMATELY 25° TO 35° ANGLE (35° PREFERRED) FROM A CAR POSITIONED AT THE DT CANOPY/SPEAKER AND WITH 100% VISIBILITY.
- [3D] AUGER "McDONALD'S ORDER HERE CANOPY" CANOPY FOUNDATION TIGHT AGAINST BACK OF CURB. SEE MANUFACTURER/LOCAL SPECIFICATIONS FOR DETAILS.
- [3E] A SINGLE BOLLARD SHOULD BE POSITIONED AT THE CORNER OF THE BUILDING ON THE DRIVE-THRU SIDE. IT SHOULD BE FLUSH AGAINST THE BUILDING AND FACE OF THE BOLLARD SHOULD BE TIGHT AGAINST THE BACK OF THE CURB.
- [3F] AUGER "McDONALD'S GATEWAY" SIGN FOUNDATION TIGHT AGAINST BACK OF CURB. SEE MANUFACTURER/LOCAL SPECIFICATIONS FOR DETAILS.
- [3G] THE DISTANCE BETWEEN THE TIP OF THE CURBED ISLAND AND THE CENTER LINE OF THE PRIMARY DT CANOPY/SPEAKER MUST BE 15'-0". THIS MEASUREMENT IS TAKEN PARALLEL TO THE INSIDE CURB FACE OF THE PRIMARY LANE.
- [3H] THE PRIMARY LANE DETECTOR LOOP SHOULD BE PERPENDICULAR TO THE CENTER OF THE PRIMARY DT CANOPY/SPEAKER.

4. SIDE BY SIDE DRIVE-THRU STANDARD 1.0 EQUIPMENT POSITIONING FOR SECONDARY LANE:

- [4A] TO POSITION THE SECONDARY DT CANOPY/SPEAKER, DRAW AN ARC WITH A 14' RADIUS THAT IS CENTERED FROM THE MIDPOINT OF THE ISLAND TIP. THEN OFFSET THE FACE OF THE CURB BY 24" TO DETERMINE THE LOCATION OF CENTER OF FOUNDATION OF THE SECONDARY DT CANOPY/SPEAKER.
- [4B] WHEN THE SECONDARY DT CANOPY/SPEAKER IS LOCATED AT 14'-0" FROM THE TIP OF THE CURBED ISLAND, THE LOOP DETECTOR IS TO BE 2'-0" FORWARD OF THE DT CANOPY/SPEAKER CENTER LINE WITH THE LOOP FACING FORWARD AND THE DETECTOR LOOP PERPENDICULAR TO THE SECONDARY DT CANOPY/SPEAKER WHEN POSSIBLE.
- [4C] THE CENTER OF THE SECONDARY MENU BOARD FOUNDATION SHALL BE 5'-9" (5'-6" MIN. AND 6'-0" MAX.) FROM CENTER OF THE DT CANOPY/SPEAKER FOUNDATION WITH THE END CAP OF THE SECONDARY MENU BOARD 15" PREFERRED BUT NOT LESS THAN 12" FROM FACE OF CURB.
- [4D] AUGER "McDONALD'S ORDER HERE" DT CANOPY/SPEAKER FOUNDATION TIGHT AGAINST BACK OF CURB. SEE MANUFACTURER/LOCAL SPECIFICATIONS FOR DETAILS.
- [4E] THE SECONDARY MENU BOARD SHOULD BE AT AN ANGLE OF APPROXIMATELY 25° FROM A VEHICLE POSITIONED AT THE DT CANOPY/SPEAKER AND WITH 100% VISIBILITY.
- [4F] "ANY LANE, ANY TIME" BOLLARD SIGN MUST BE A MIN. OF 1'-6" FROM FACE OF CURB AT THE BEGINNING OF THE LANDSCAPE ISLAND. BOLLARD SIGN IS TO BE ORIENTED AT AN ANGLE OF 90° FROM THE CURB.

5. SIDE BY SIDE DRIVE-THRU STANDARD 1.0 DETECTOR LOOP:

- [5A] DETECTOR LOOPS SHALL BE LOCATED AT THE CENTER OF THE OPENING WINDOW AT THE CASH AND PRESENTER BOOTHS.

SIDE BY SIDE DRIVE-THRU STANDARD 1.0 FEATURES:

1. SIDE BY SIDE DRIVE-THRU STANDARD 1.0 EQUIPMENT:

- [1A] PRE-BROWSE BOARD MUST BE 18"-24" FROM FACE OF CURB. THE DISTANCE BETWEEN THE PRIMARY DT CANOPY/SPEAKER AND PRE-BROWSE BOARD IS TO BE 15' AS MEASURED ALONG THE FACE OF CURB. THIS IS MEASURED FROM THE CENTER OF THE PRE-BROWSE BOARD FOUNDATION TO THE CENTER OF THE DT CANOPY/SPEAKER FOUNDATION. THE ANGLE (APPROXIMATELY 50°) OF THE PRE-BROWSE BOARD SHOULD MAXIMIZE VISIBILITY TO THE SECOND CAR FROM DT CANOPY/SPEAKER.

- [1B] PRE-BROWSE BOARD MUST BE MIN. 12" FROM FACE OF CURB. THE DISTANCE BETWEEN THE SECONDARY DT CANOPY/SPEAKER AND PRE-BROWSE BOARD IS TO BE 15' AS MEASURED ALONG FACE OF CURB. THIS IS MEASURED FROM THE POINT PERPENDICULAR TO THE CENTER OF THE PRE-BROWSE BOARD FOUNDATION TO THE POINT PERPENDICULAR TO THE CENTER OF THE DT CANOPY/SPEAKER FOUNDATION. THE ANGLE OF THE PRE-BROWSE BOARD SHOULD MAXIMIZE VISIBILITY TO THE SECOND CAR FROM DT CANOPY/SPEAKER (PREFERRED 35°).

GENERAL NOTES

- 1. DRIVE-THRU ELEMENTS:**
DT CANOPY/SPEAKER DRIVE-THRU PYLON/CLEARANCE POLE AND BOLLARD SIGN SHALL BE CONSISTENT WITH THE STANDARD BUILDING DESIGN DRIVE-THRU ELEMENTS.
OTHER DESIGNS MAY NOT BE USED.
- CONTRACTOR SHALL COORDINATE WITH APPLICABLE PLANS, McDONALD'S AREA CONSTRUCTION MANAGER, CONTENT SUPPLIER AND SIGNAGE SUPPLIER TO DETERMINE EXACT LOCATION, ORIENTATION, MOUNTING HEIGHTS, AND NUMBER OF BOARDS AND OTHER DRIVE-THRU ELEMENTS TO BE INSTALLED AT THIS SITE. ALL WORK TO BE COORDINATED WITH OTHER TRADES.
- CONTACT McDONALD'S AREA CONSTRUCTION MANAGER FOR DRIVE-THRU ELEMENT FOOTING AND WIRING REQUIREMENTS NOT SHOWN. (INFORMATION ALSO AVAILABLE THROUGH VENDOR WEBSITES) SIGNAGE MANUFACTURER TO PROVIDE FOOTING ANCHORS & TEMPLATES TO G.C. PRIOR TO FOUNDATION POURING.
- SEE DETAIL 2/DT1.0 FOR DETECTOR LOOP INFORMATION, ELECTRICAL SHEETS FOR LOW VOLTAGE CONDUIT DIAGRAM AND FOR DRIVE THRU POWER DIAGRAM; VENDOR'S SPECIFICATIONS SHALL COVER ANY DISCREPANCIES.
- CONTRACTOR TO COORDINATE THE RESPONSIBILITIES OF THE ELECTRICAL CONTRACTOR, CONTENT SUPPLIER AND THE SIGN SUPPLIER.
- CONTRACTOR TO INSTALL PRE-FORMED, PRE-WIRED VEHICLE DETECTOR LOOP.
- CONTRACTOR SHALL VERIFY CONDUIT SIZES REQUIRED BY VEHICLE LOOP DETECTOR SUPPLIER.

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McDonald's USA, LLC

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PREPARED BY:

JAW

RECEIVED BY:

JAW

DATE ISSUED:

03/08/24

2023 STANDARD BUILDING - BB20

4597-WOOD/WOOD

WOOD BEARING WALLS W/4" BRICK VENEER

STUCCO/BATEN/BRICK/METAL PANEL EXTERIOR FINISHES

SEC OF S.H. LOOP 288 & HUMMINGBIRD LANE, DENTON, TEXAS

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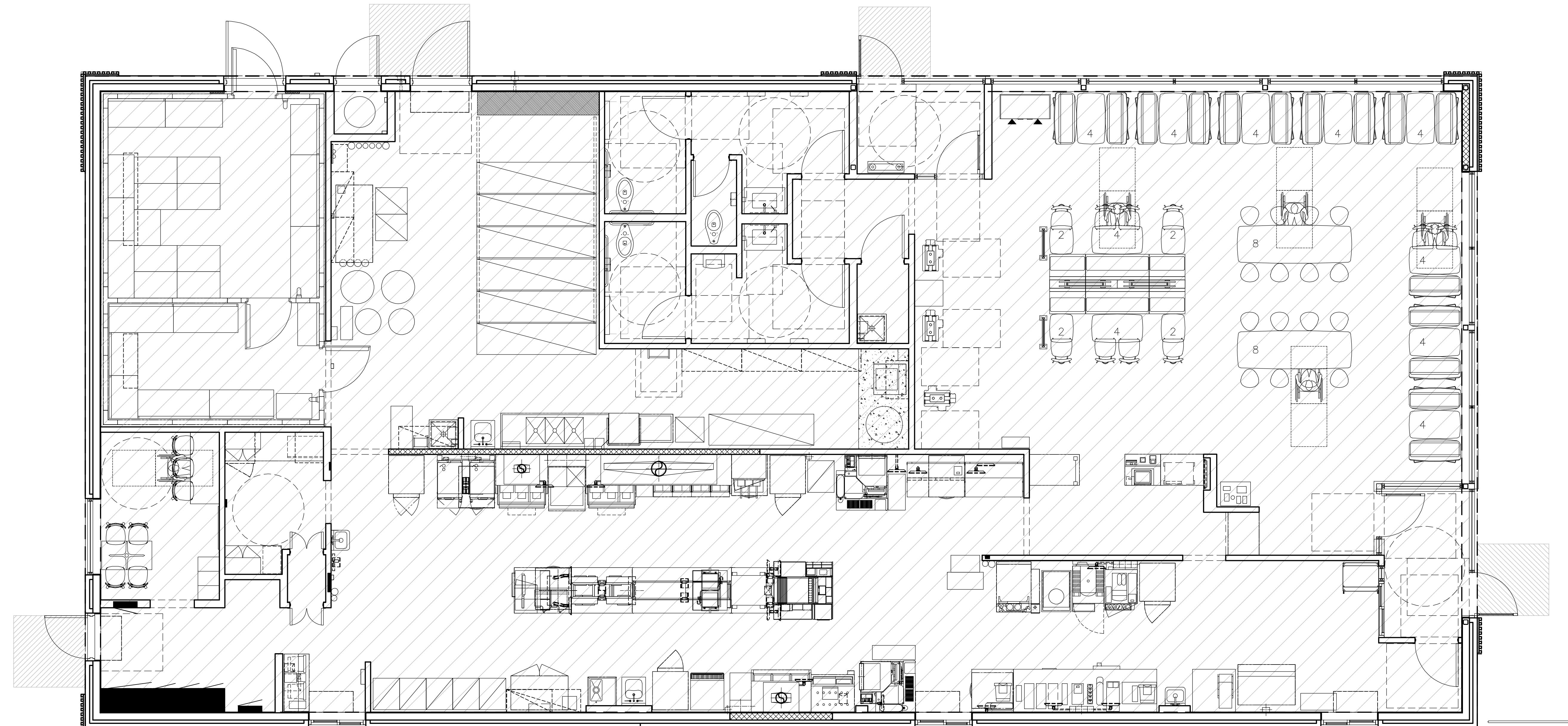
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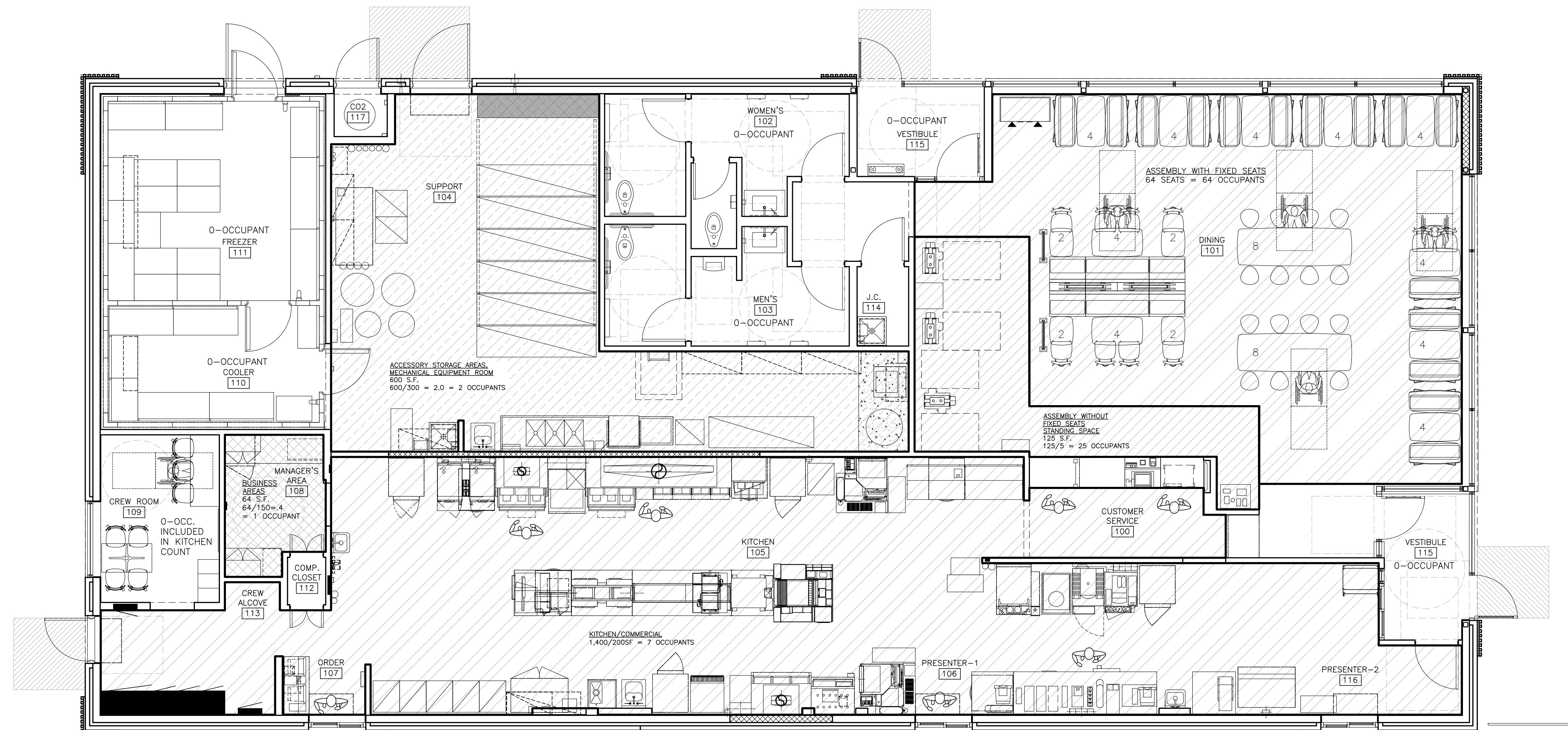


BASE BUILDING: 4,421 GROSS S.F.
4,117 NET S.F.



SQUARE FOOTAGE PLAN

1
R1.0 $\frac{1}{4}'' = 1'-0''$



OCCUPANY COUNT PLAN

OCCUPANCY ALLOWANCE:

INTERNATIONAL BUILDING CODE 2021

TABLE 1004.5 MAXIMUM FLOOR AREA ALLOWANCES PER OCCUPANT				
FUNCTION OF SPACE	ALLOWANCE	AREA	OCCUPANTS	
ACCESSORY STORAGE AREAS, MECHANICAL EQUIPMENT ROOM	300 GROSS	600 SF	2	
ASSEMBLY WITH FIXED SEATS	SEE PLAN	—	64	
ASSEMBLY W/OUT FIXED SEATS STANDING SPACE	5 NET	125 SF	25	
BUSINESS AREAS	150 GROSS	64 SF	1	
KITCHENS, COMMERCIAL	200 GROSS	1,400 SF	7	
TOTAL OCCUPANCY ALLOWANCE				99

SHEET NO.	TITLE	PREPARED FOR:	PREPARED BY: JAW	
JAWA R 1	2023 STANDARD BUILDING – BB20 4597-WOOD/WOOD	McDonald's USA, LLC	STD ISSUE DATE 2023	BY JAW
DESCRIPTION	WOOD BEARING WALLS W/4" BRICK VENEER WOOD ROOF TRUSS FRAMING STUCCO/BATTEN/BRICK/METAL PANEL EXTERIOR FINISHES	REVIEWED BY JAW	DATE ISSUED 03/08/24	Phone: 817-705-3387 Email: jeremy@jaw-arch.com
SITE ID	SITE ADDRESS 042-3271 SEC OF S.H. LOOP 288 & HUMMINGBIRD LANE, DENTON TEXAS	REV	DATE	DESCRIPTION BY

24-0014

1 . 1

OCCUPANCY PLAN

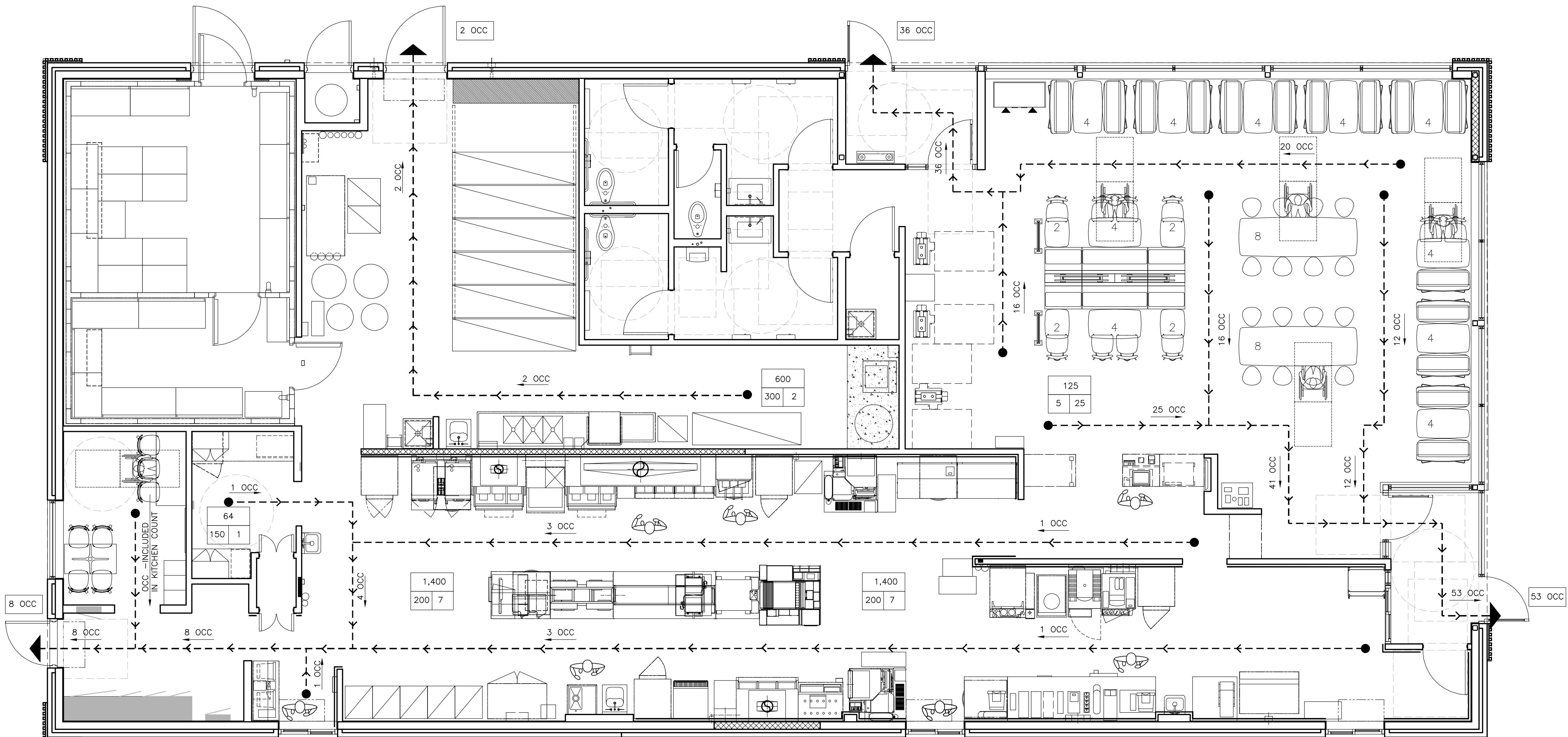
@ 2023 McDonald's USA, LLC



The seal is circular with a decorative border containing the words "REGISTERED ARCHITECT", "STATE OF TEXAS", and "1926". In the center, there is a star with the name "JEREMY WILLIAMS" written around it, and the date "2014" at the bottom.

ERIC H. WILLIAMS
JAW Architects, Inc.
Jeremy Williams, Architect

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EXITING PLAN

OCCUPANCY ALLOWANCE:

INTERNATIONAL BUILDING CODE 2021

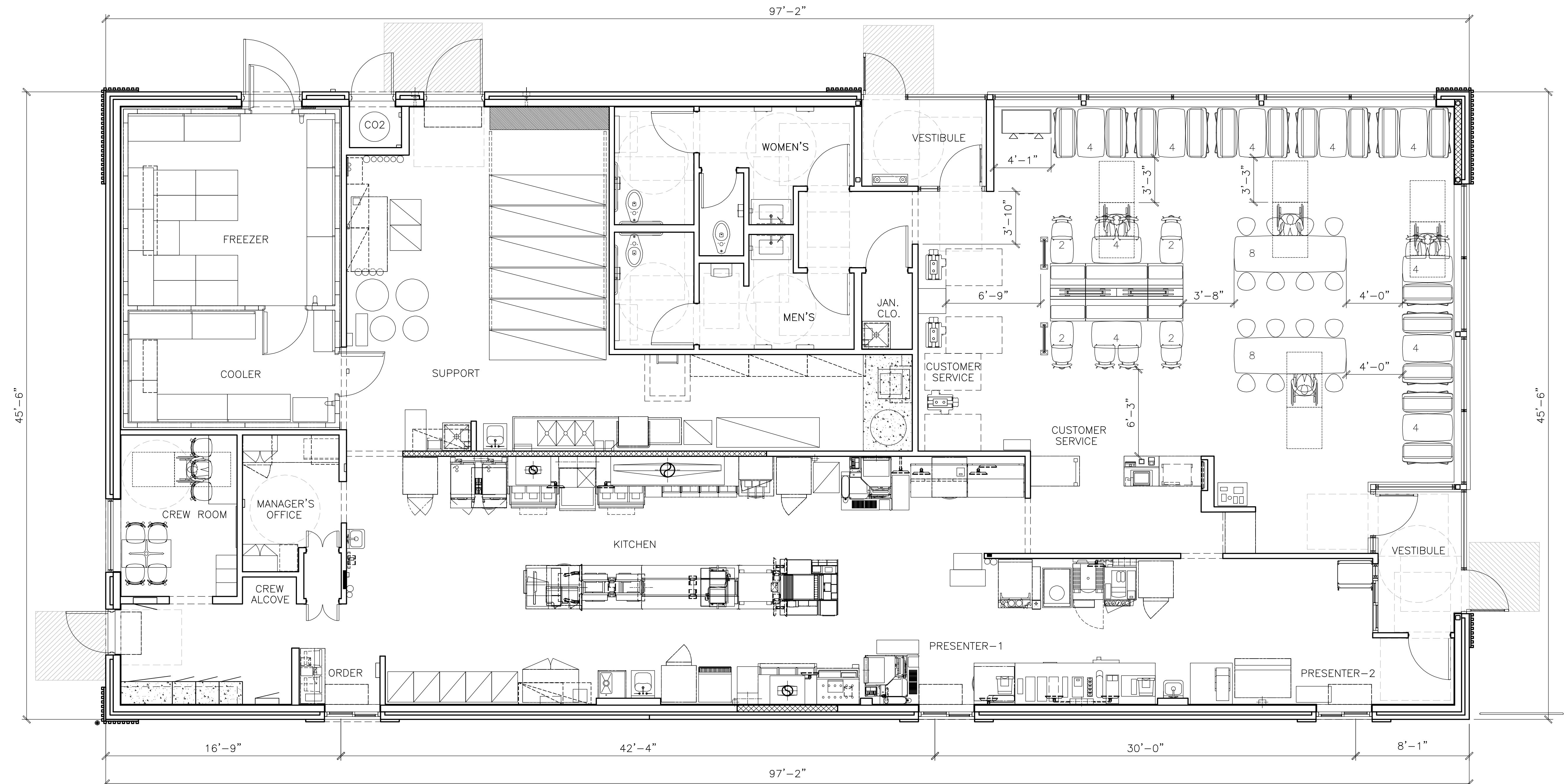
TABLE 1004.5
MAXIMUM FLOOR AREA ALLOWANCES PER OCCUPANT

FUNCTION OF SPACE	ALLOWANCE	AREA	OCCUPANTS
ACCESSORY STORAGE AREAS, MECHANICAL EQUIPMENT ROOM	300 GROSS	600 SF	2
ASSEMBLY WITH FIXED SEATS	SEE PLAN	—	64
ASSEMBLY W/OUT FIXED SEATS STANDING SPACE	5 NET	125 SF	25
BUSINESS AREAS	150 GROSS	64 SF	1
KITCHENS, COMMERCIAL	200 GROSS	1,400 SF	7
TOTAL OCCUPANCY ALLOWANCE			99

SHEET NO.	TITLE	DRAWN BY JAW	PREPARED FOR: JAW McDonald's USA, LLC	PREPARED BY: @ 2023 McDonald's USA, LLC
R1	2023 STANDARD BUILDING – BB20 4597-WOOD/WOOD	STD ISSUE DATE 2023		
DESCRIPTION	WOOD BEARING WALLS W/4" BRICK VENEER WOOD ROOF TRUSS FRAMING STUCCO/BATTEN/BRICK/METAL PANEL EXTERIOR FINISHES	REVIEWED BY JAW	DATE ISSUED 03/08/24	Phone: 817-705-3387 Email: jeremy@jaw-arch.com
SITE ID	SITE ADDRESS 042-3271 SEC OF S.H. LOOP 288 & HUMMINGBIRD LANE, DENTON TEXAS	REV	DATE	DESCRIPTION
BY				

JAW
REGISTERED
JEREMY WILLIAMS
STATE OF TEXAS
1926
A R C H I T E C T

JAW Architects, Inc.
Jeremy Williams, Architect



**4597 - WW BRICK VENEER PLAN
4,421 GROSS SQ. FT. / 4,117 NET SQ. FT.
64 SEATS (4 ACCESSIBLE SEATS)**

**THIS DRAWING IS
FOR REFERENCE ONLY
NOT FOR CONSTRUCTION**

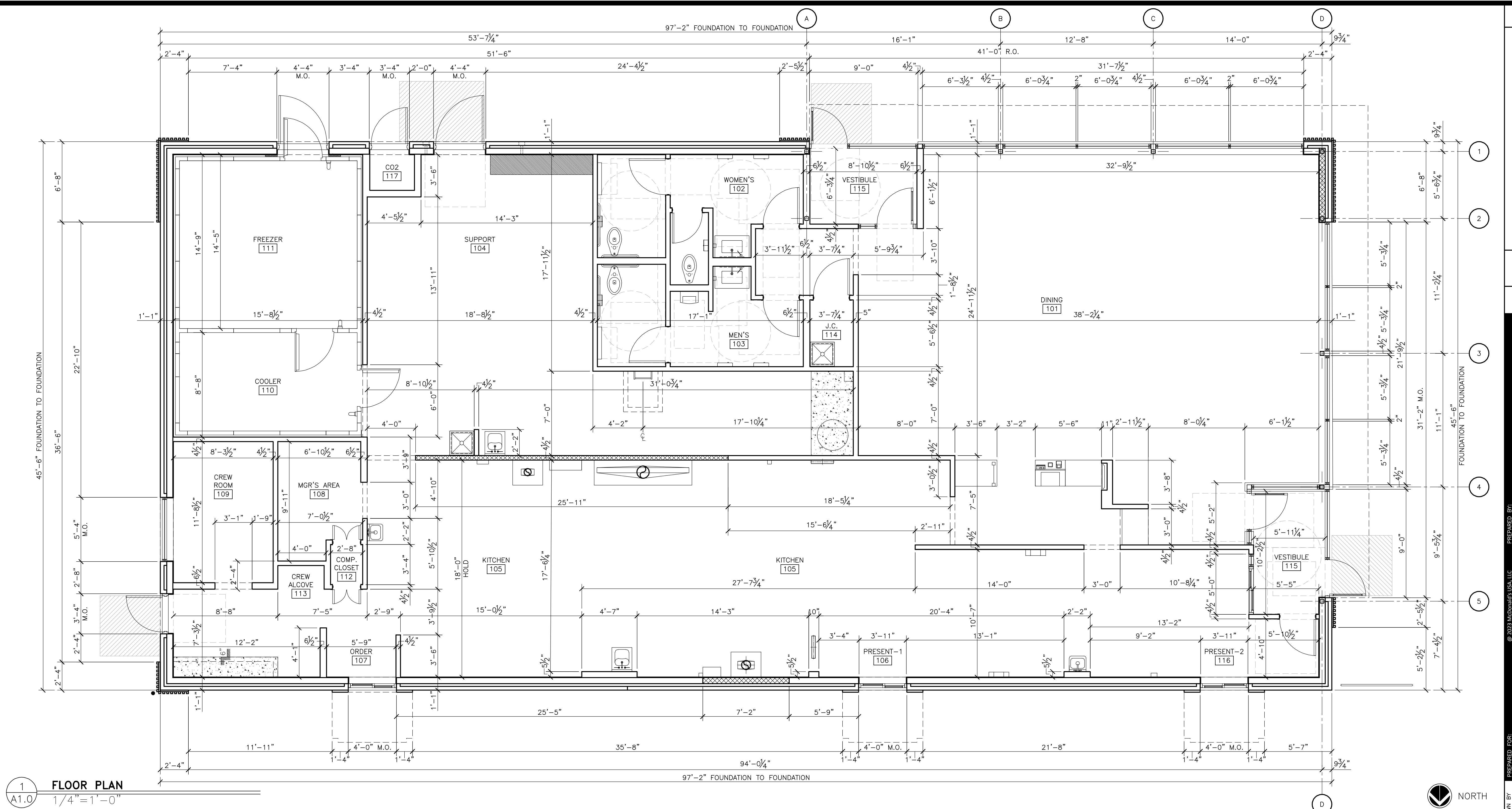
SEATING LAYOUT IS SCHEMATIC, THE FINAL
SEATING LAYOUT TO BE PROVIDED BY OTHERS.

SHEET NO.	TITLE	PREPARED FOR:			PREPARED BY:	
R1	2023 STANDARD BUILDING – BB20 4597-WOOD/WOOD	DRAWN BY JAW	STD ISSUE DATE 2023	JAW A R C H I T E C T S		
DESCRIPTION		REVIEWED BY JAW	DATE ISSUED 03/08/24	 <p>REGISTERED ARCHITECT JEREMY WILLIAMS 21926 STATE OF TEXAS Phone: 817-705-3387 Email: jeremy@jaw-arch.com</p>		
WOOD BEARING WALLS W/4" BRICK VENEER WOOD ROOF TRUSS FRAMING STUCCO/BATTEN/BRICK/METAL PANEL EXTERIOR FINISHES					DESCRIPTION	
SITE ID 042-3271		SITE ADDRESS SEC OF S.H. LOOP 288 & HUMMINGBIRD LANE, DENTON TEXAS			REV	DATE
						BY

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1 FLOOR PLAN

A1.0 $1/4'' = 1' - 0''$

KEY NOTES

- C ALUMINUM CANOPY SYSTEM ABOVE – SEE 4/A5.0 FOR NOTES – SEE ROOF PLAN FOR DIMENSIONS, SEE ELEVATION FOR COLORS AND FASCIA LOCATIONS
 - CG G.C. TO PROVIDE 4"x4"x5'-0" HIGH STAINLESS STEEL CORNER GUARDS AT ALL EXPOSED LOCATIONS IN KITCHEN/SUPPORT AREA. CORNER GUARDS TO START AT FINISH FLOOR. ATTACH WITH WOOD SCREWS INTO WOOD BLOCKING BULLNOSE COVE BASE WHERE TILE MEETS STAINLESS STEEL CORNER
 - CP CONCRETE EQMT PAD – SEE STRUCTURAL
 - CT WALL TILE: CROSSVILLE – COLOR BY NUMBERS
COLOR: AFTERNOON SPRAY, SIZE: 4"x12", PATTERN: RUNNING BOND
^B GROUT: MAPEI 02 PEWTER – JOINT TO BE $\frac{1}{6}$ " MAX.
USE THIS TILE WHEN HIGH LRV IS REQUIRED
COORDINATE WITH McDONALD'S AREA CONSTRUCTION MANAGER
 - DF DECOR FINISH TO BE ORDERED/INSTALLED BY GC AND
MANUFACTURED BY DECOR; REFER TO PORTFOLIO.
 - DS DROPPED SOFFIT ABOVE – SEE REFLECTED CEILING PLAN
 - FB CO2 FILL BOX (EQUIPMENT SCHEDULE ITEM 49.00)
CO2
 - FB OPTIONAL BULK OIL FILL BOX (EQPM SCHEDULE ITEM 700.18)
CONFIRM USE WITH McDONALD'S AREA CONSTRUCTION MANAGER
BO

- FL** FLOOR LINE – CHANGE IN MATERIAL – SEE DECOR DRAWINGS
 - FP** FIBERGLASS REINFORCED PLASTIC (FRP) – PANOLAM,
GRAY SMOOTH, CLASS A, .075. REFER TO ROOM FINISH
SCHEDULE SHEET A6.1 FOR INSTALLATION LOCATIONS.
FOR ORDERING, CONTACT KIMBERLY LAWSON
Kimberly_Lawson@panolam.com 1-866-925-4377
 - LL** LEVEL LANDING @ EXT. DOOR W/ MAX. 2% RUNNING/CROSS SLOPE
AWAY FROM BUILDING
5'x5'
SIZE OF LANDING
 - MS** MOP SINK – SEE DETAIL 8/A6.1 AND PLUMBING DRAWINGS.
 - RL** ROOF ACCESS LADDER W/HATCH ABOVE SEE
STRUCTURAL FRAMING PLAN FOR LOCATING DIMENSIONS
 - WW** LATE NIGHT WINDOW BY READYACCESS,
MANUAL OPEN/SELF CLOSE
(OPTIONAL FOR HIGH DELIVERY RESTAURANTS)
 - AL** ALUMINUM BATTEN SYSTEM, REFERENCE DETAIL 16/A4.1

SYMBOL LEGEND

- A PARTITION TYPE TAG SEE 2/A1.1
7 DOOR TAG - SEE DOOR SCHEDULE ON A6.0

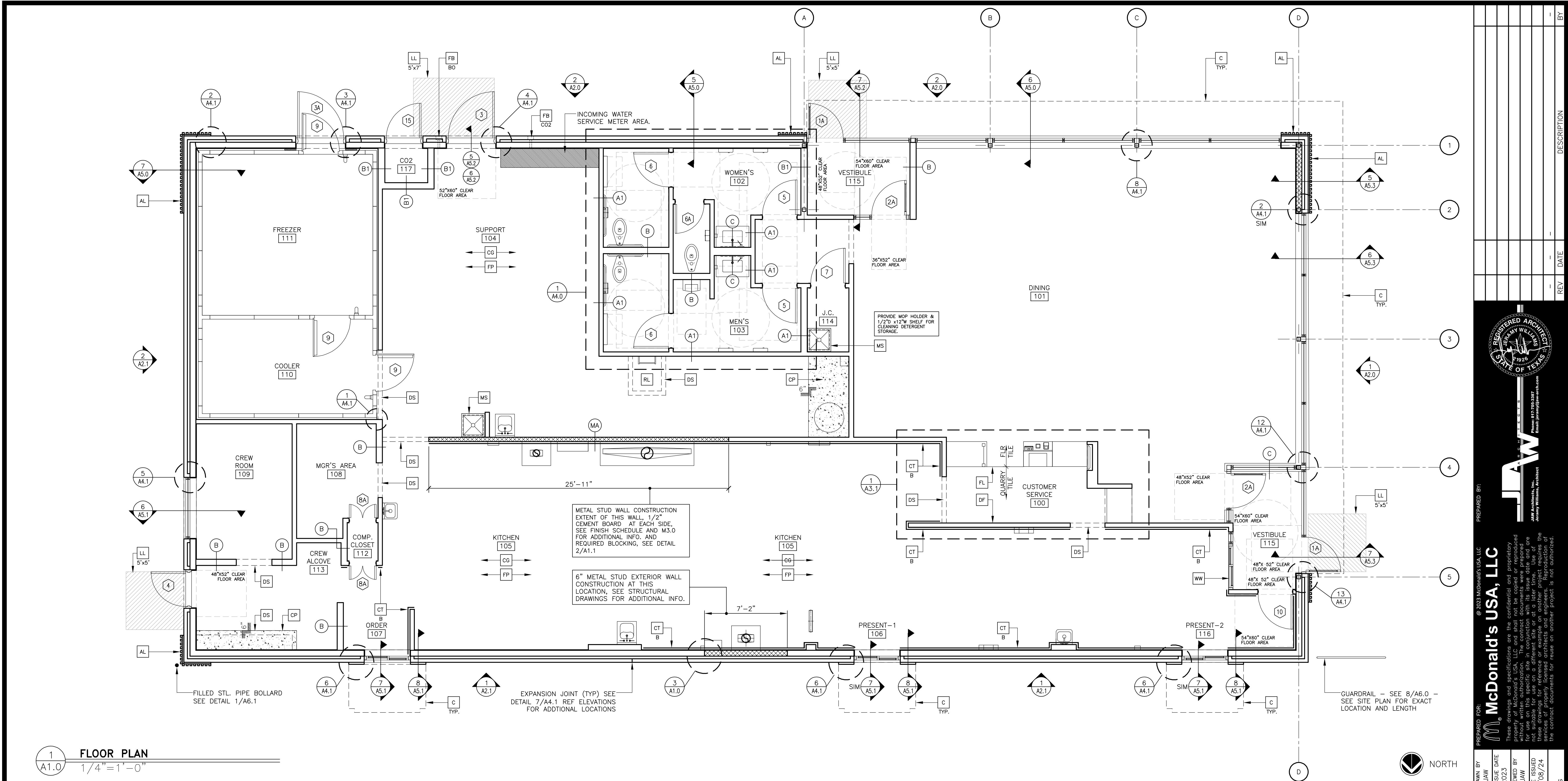
X KEY NOTE

GENERAL NOTES

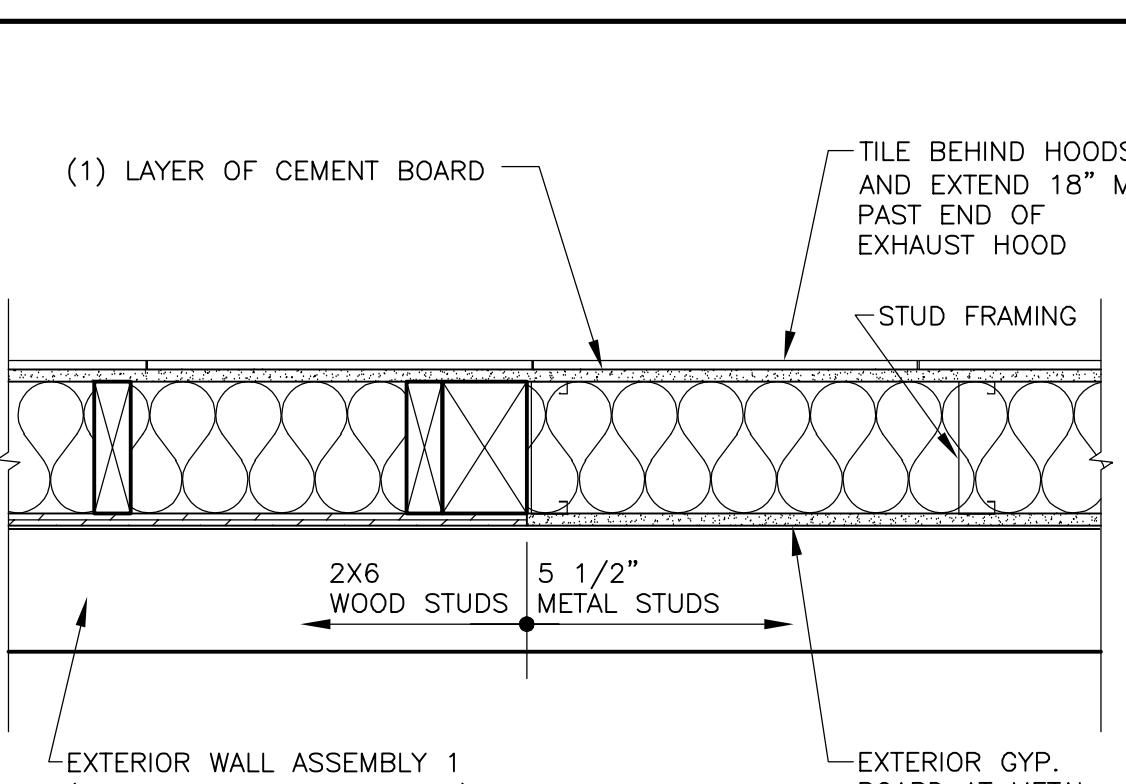
- GENERAL NOTES**

 1. EXTERIOR DIMENSIONS ARE TO COLUMN REFERENCE LINES AND EXTERIOR FACE OF MASONRY UNLESS OTHERWISE NOTED. INTERIOR DIMENSIONS ARE TO FACE OF INTERIOR WALL BOARD
 2. SEE 4/A5.0 FOR EXTERIOR WALL ASSEMBLY TYPES. SEE 2/A1.1 FOR INTERIOR PARTITION TYPES. INTERIOR PARTITIONS ARE TYPE 'A' UNLESS NOTED OTHERWISE.
 3. SEE EXTERIOR ELEVATIONS FOR WINDOW TYPES
 4. SEE SHEET A6.0 FOR DOOR AND ROOM FINISH SCHEDULES
 5. SEE SITE PLAN FOR SIDEWALKS, RAMPS, ETC.
 6. 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: FRANKE/S2K
1-800-423-5247 www.frankesupply.com
email: fs-frankesupply.us@franke.com
 7. MAXIMUM OCCUPANCY SIGN TO BE POSTED PER LOCAL CODE. SIGN FURNISHED AND INSTALLED BY GENERAL CONTRACTOR.
 8. ALL HANDSINK LOCATIONS SHALL HAVE CEMENT BOARD BACKING 48" IN HEIGHT A.F.F.
 9. GC TO COORDINATE ALL REQUIRED BLOCKING FOR WALL HUNG EQUIPMENT, SHELVES, ETC. FOR PROPER INSTALLATION HEIGHTS.
 10. KNOX BOX TO BE INSTALLED PER LOCAL CODE AS REQUIRED. MODEL AND LOCATION TO BE COORDINATED WITH FIRE MARSHALL.

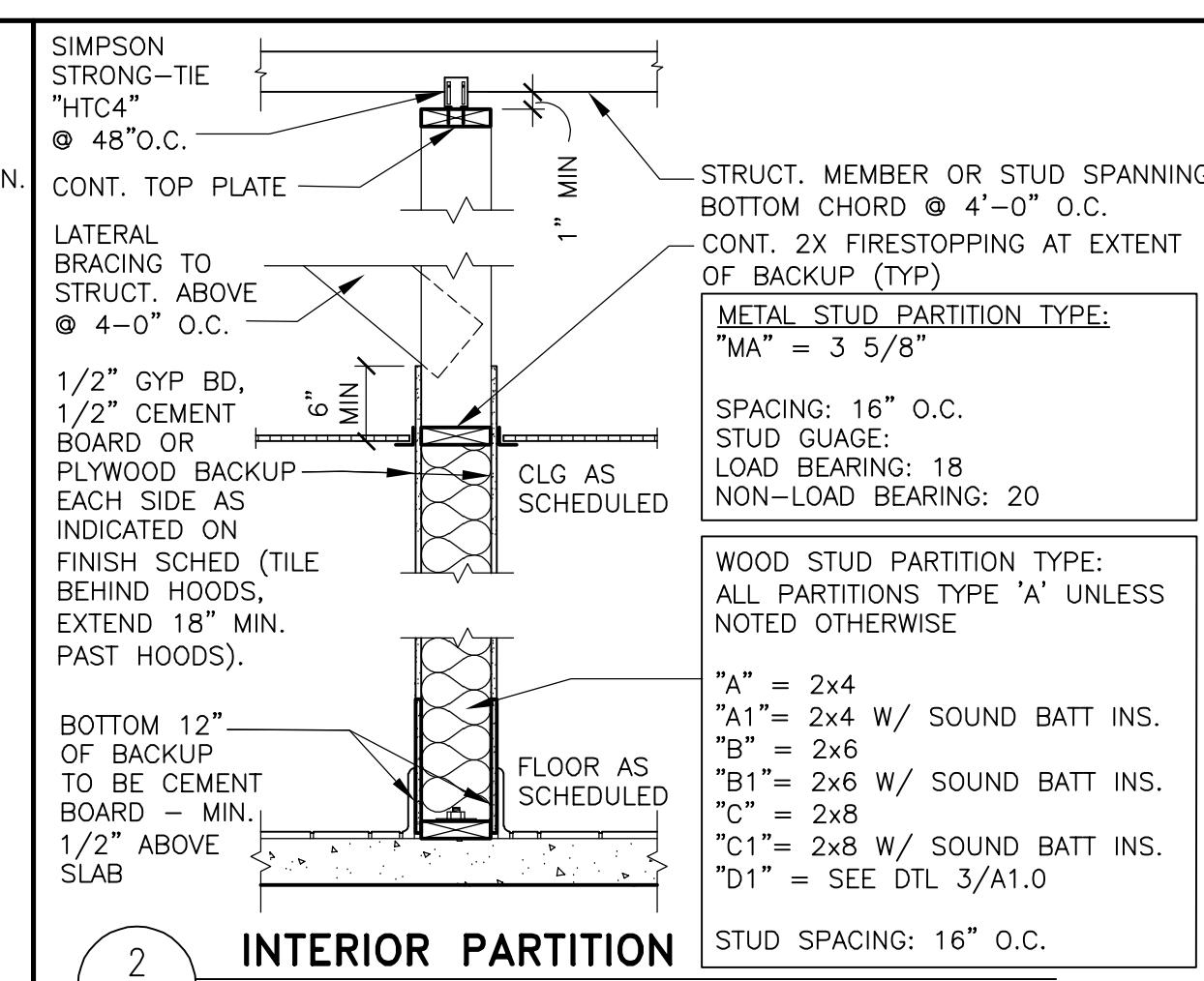
TITLE		2023 STANDARD BUILDING - BB20	
SHEET NO.		JAWA 24-0014	
4597-WOOD/WOOD		STD ISSUE DATE	JAW 2023
DESCRIPTION		REVIEWED BY	JAW
WOOD BEARING WALLS W/4" BRICK VENEER		DATE ISSUED	03/08/24
WOOD ROOF TRUSS FRAMING			
STUCCO/BATTEN/BRICK/METAL PANEL EXTERIOR FINISHES			
SITE ID	SITE ADDRESS		
042-3271	SEC OF S.H. LOOP 288 & HUMMINGBIRD LANE, DENTON TEXAS		



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



TRANSITON DETAIL
3 A1.0
1 1/2" = 1'-0"



INTERIOR PARTITION
2 A1.0
3/4" = 1'-0"

KEY NOTES

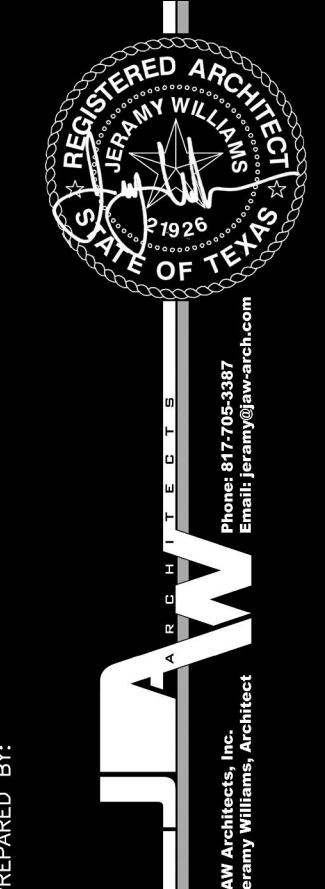
- [A] ALUMINUM CANOPY SYSTEM ABOVE - SEE 4/A5.0 FOR NOTES - SEE ROOF PLAN FOR DIMENSIONS, SEE ELEVATION FOR COLORS AND FASCIA LOCATIONS
- [CG] LATERAL BRACING TO STRUCT. ABOVE @ 4'-0" O.C.
- [CT] METAL STUD PARTITION TYPE: "MA" = 3 5/8"
- [CP] CONCRETE EQMT PAD - SEE STRUCTURAL
- [DF] DECOR FINISH TO BE ORDERED/INSTALLED BY GC AND MANUFACTURED BY DECOR; REFER TO PORTFOLIO.
- [DS] DROPPED SOFFIT ABOVE - SEE REFLECTED CEILING PLAN
- [FB] CO2 FILL BOX (EQUIPMENT SCHEDULE ITEM 49.00)
- [FB] OPTIONAL BULK OIL FILL BOX (EQPM SCHEDULE ITEM 700.18)
- [FB] CONFIRM USE WITH MCDONALD'S AREA CONSTRUCTION MANAGER
- [LL] LEVEL LANDING @ EXT. DOOR W/ MAX. 2% RUNNING/CROSS SLOPE AWAY FROM BUILDING
- [MS] MOP SINK - SEE DETAIL 8/A6.1 AND PLUMBING DRAWINGS.
- [RL] ROOF ACCESS LADDER W/HATCH ABOVE SEE STRUCTURAL FRAMING PLAN FOR LOCATING DIMENSIONS
- [WW] LATE NIGHT WINDOW BY READYACCESS, MANUAL OPEN/SELF CLOSE (OPTIONAL FOR HIGH DELIVERY RESTAURANTS)
- [AL] ALUMINUM BATTE SYSTEM, REFERENCE DETAIL 16/A4.1

SYMBOL LEGEND

- [A] PARTITION TYPE TAG SEE 2/A1.1
- [D] DOOR TAG - SEE DOOR SCHEDULE ON A6.0
- [X] KEY NOTE

GENERAL NOTES

- EXTERIOR DIMENSIONS ARE TO COLUMN REFERENCE LINES AND EXTERIOR FACE OF MASONRY UNLESS OTHERWISE NOTED. INTERIOR DIMENSIONS ARE TO FACE OF INTERIOR WALL BOARD.
- SEE 4/A5.0 FOR EXTERIOR WALL ASSEMBLY TYPES. SEE 2/A1.1 FOR INTERIOR PARTITION TYPES. INTERIOR PARTITIONS ARE TYPE 'A' UNLESS NOTED OTHERWISE.
- SEE EXTERIOR ELEVATIONS FOR WINDOW TYPES
- SEE SHEET A6.0 FOR DOOR AND ROOM FINISH SCHEDULES
- SEE SITE PLAN FOR SIDEWALKS, RAMPS, ETC.
- 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: FRANKE/S2K
1-800-423-5247 www.frankeSupply.com
email: fs-frankeesupply.us@franke.com
- MAXIMUM OCCUPANCY SIGN TO BE POSTED PER LOCAL CODE. SIGN FURNISHED AND INSTALLED BY GENERAL CONTRACTOR.
- ALL HANDSINK LOCATIONS SHALL HAVE CEMENT BOARD BACKING 48" IN HEIGHT A.F.F.
- GC TO COORDINATE ALL REQUIRED BLOCKING FOR WALL HUNG EQUIPMENT, SHELVES, ETC. FOR PROPER INSTALLATION HEIGHTS.
- KNOX BOX TO BE INSTALLED PER LOCAL CODE AS REQUIRED. MODEL AND LOCATION TO BE COORDINATED WITH FIRE MARSHALL.

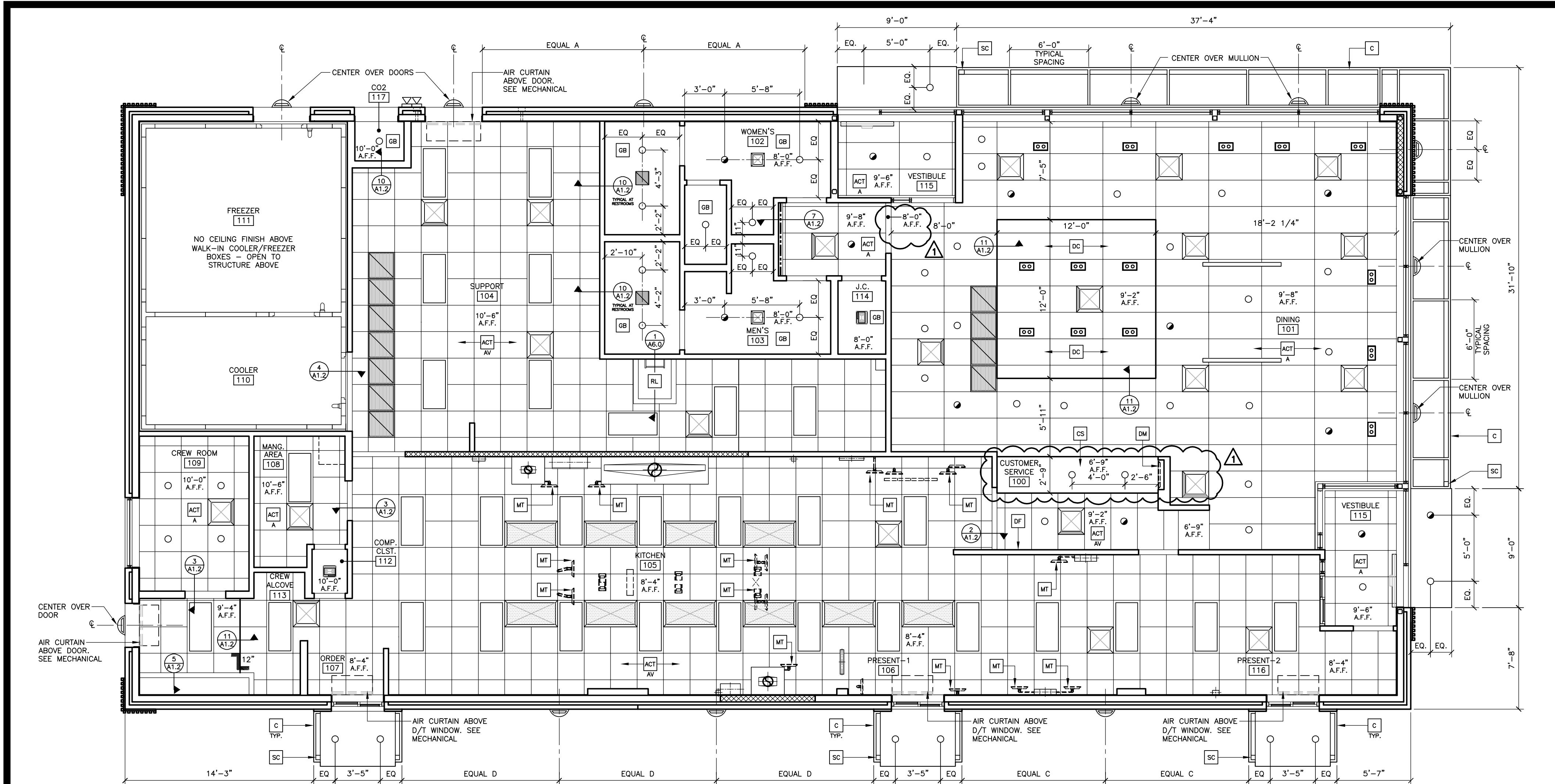


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SHEET NO.	TITLE	DRAWN BY	PREPARED BY:
402-3271	2023 STANDARD BUILDING - BB20	JAW	JAW
	4597-WOOD/WOOD	STD ISSUE DATE	STD ISSUE DATE
		2023	2023
		REVIEWED BY	
		JAW	
		DATE ISSUED	DATE ISSUED
		03/08/24	03/08/24
		SITE ADDRESS	SITE ADDRESS
		SEC OF S.H. LOOP 288 & HUMMINGBIRD LANE, DENTON, TEXAS	SEC OF S.H. LOOP 288 & HUMMINGBIRD LANE, DENTON, TEXAS

A1.1
FLOOR PLAN



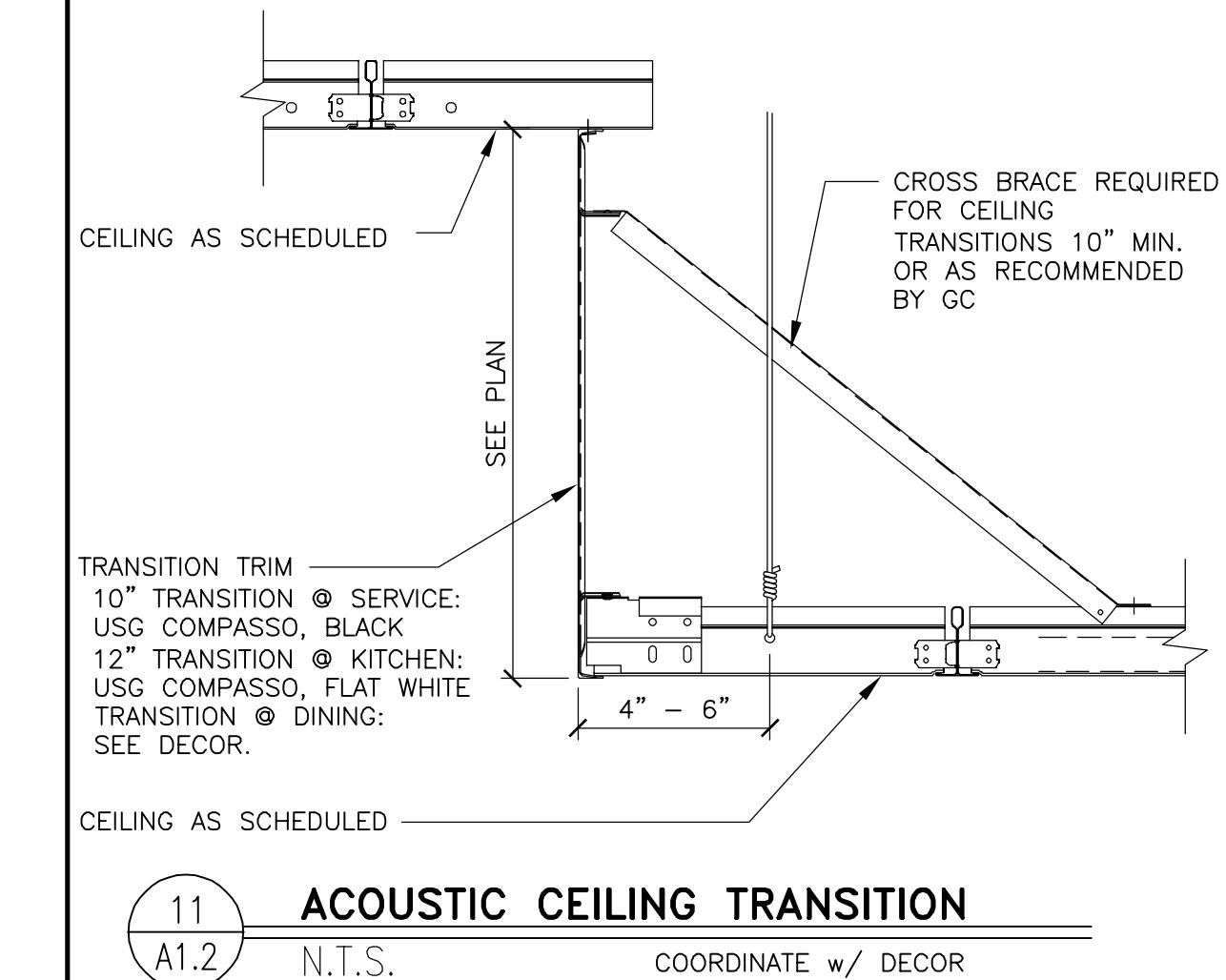
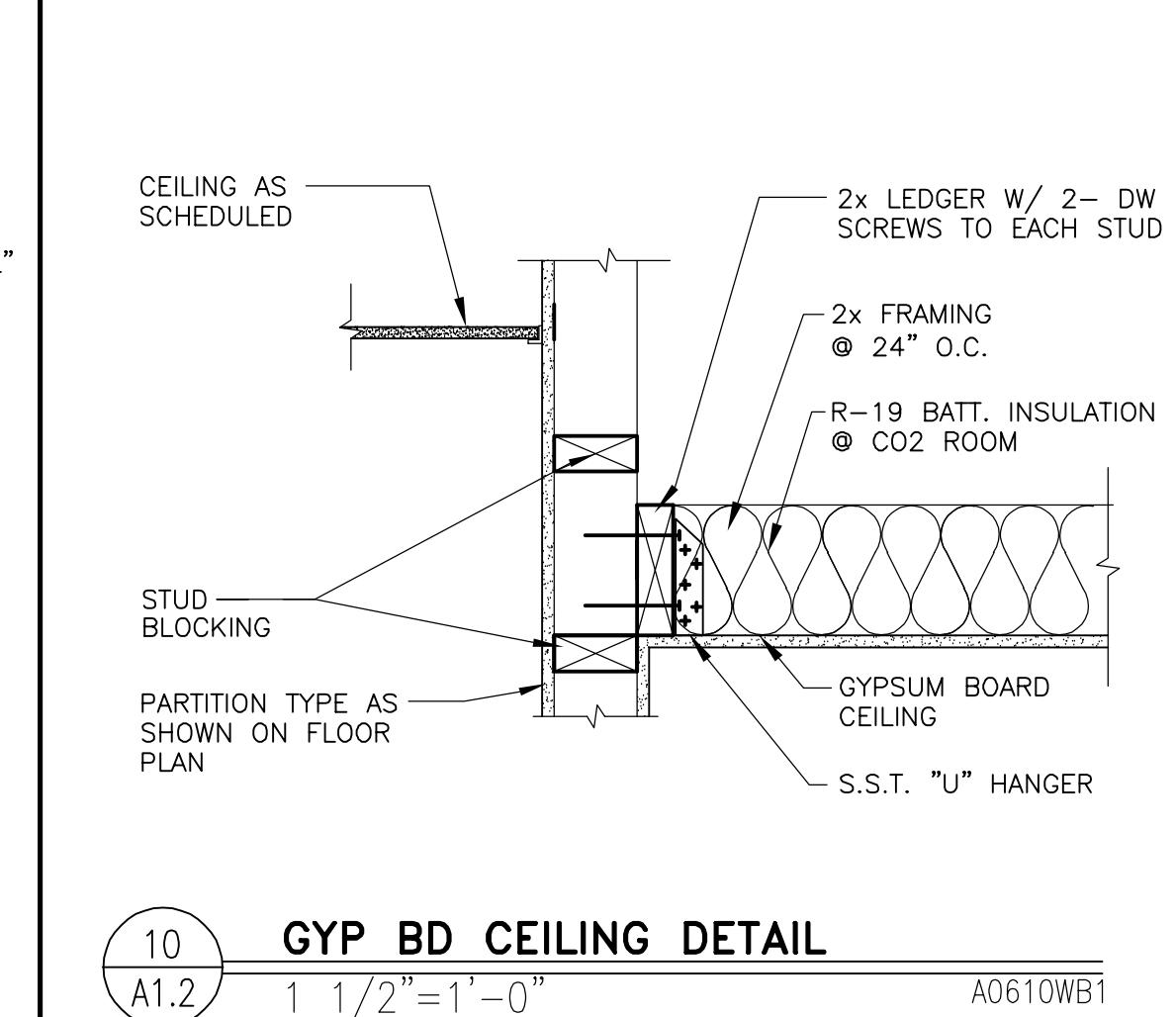
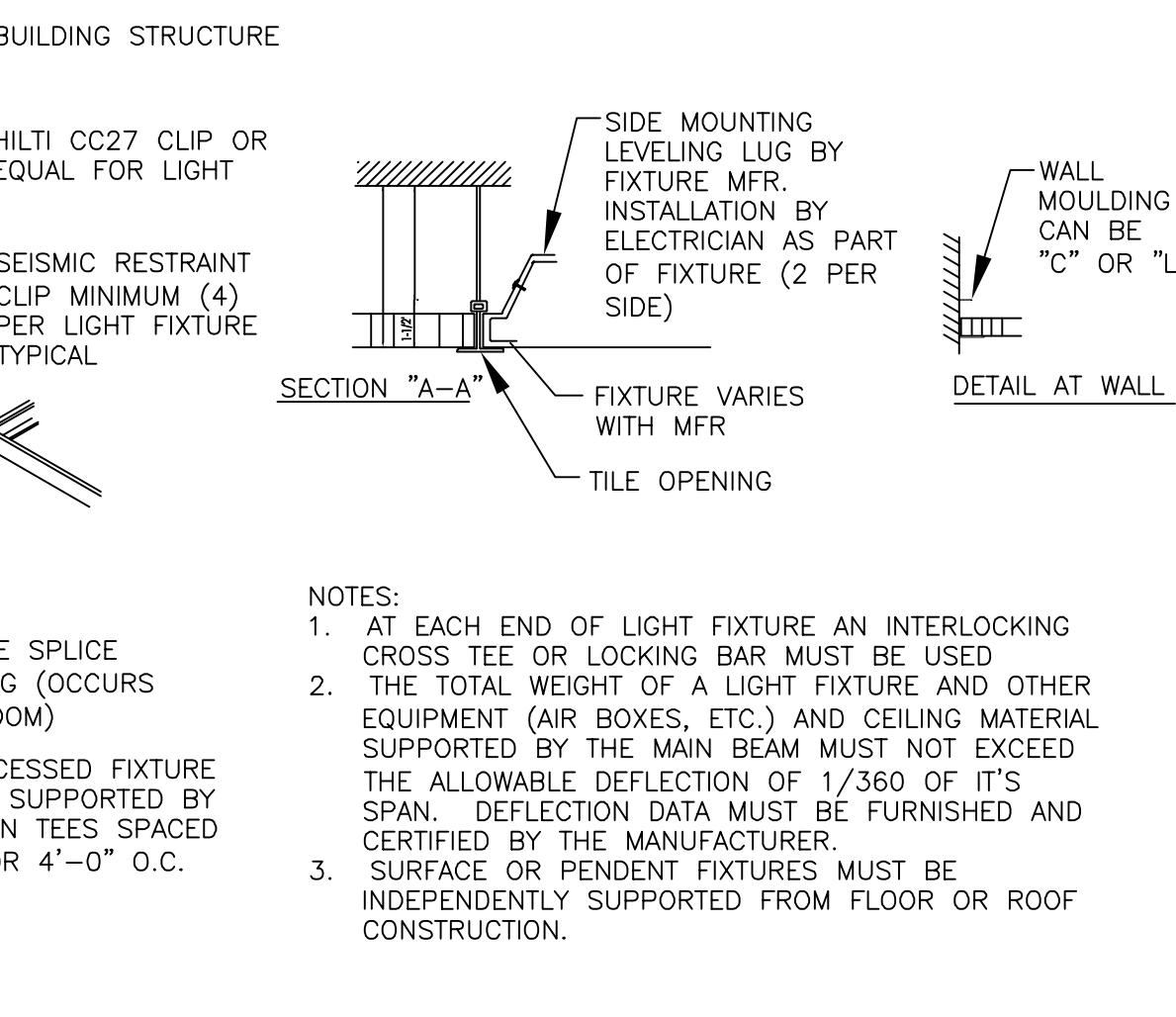
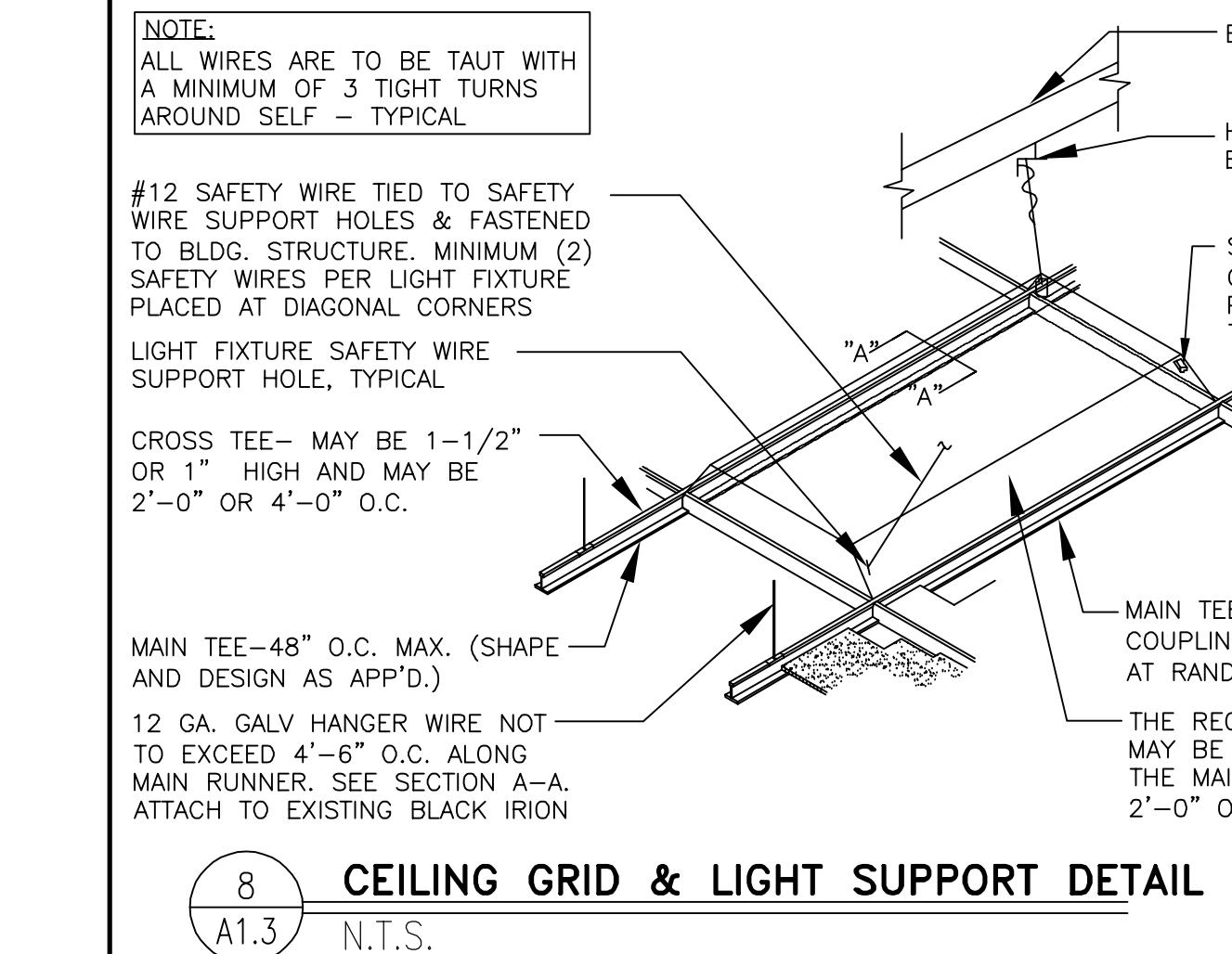
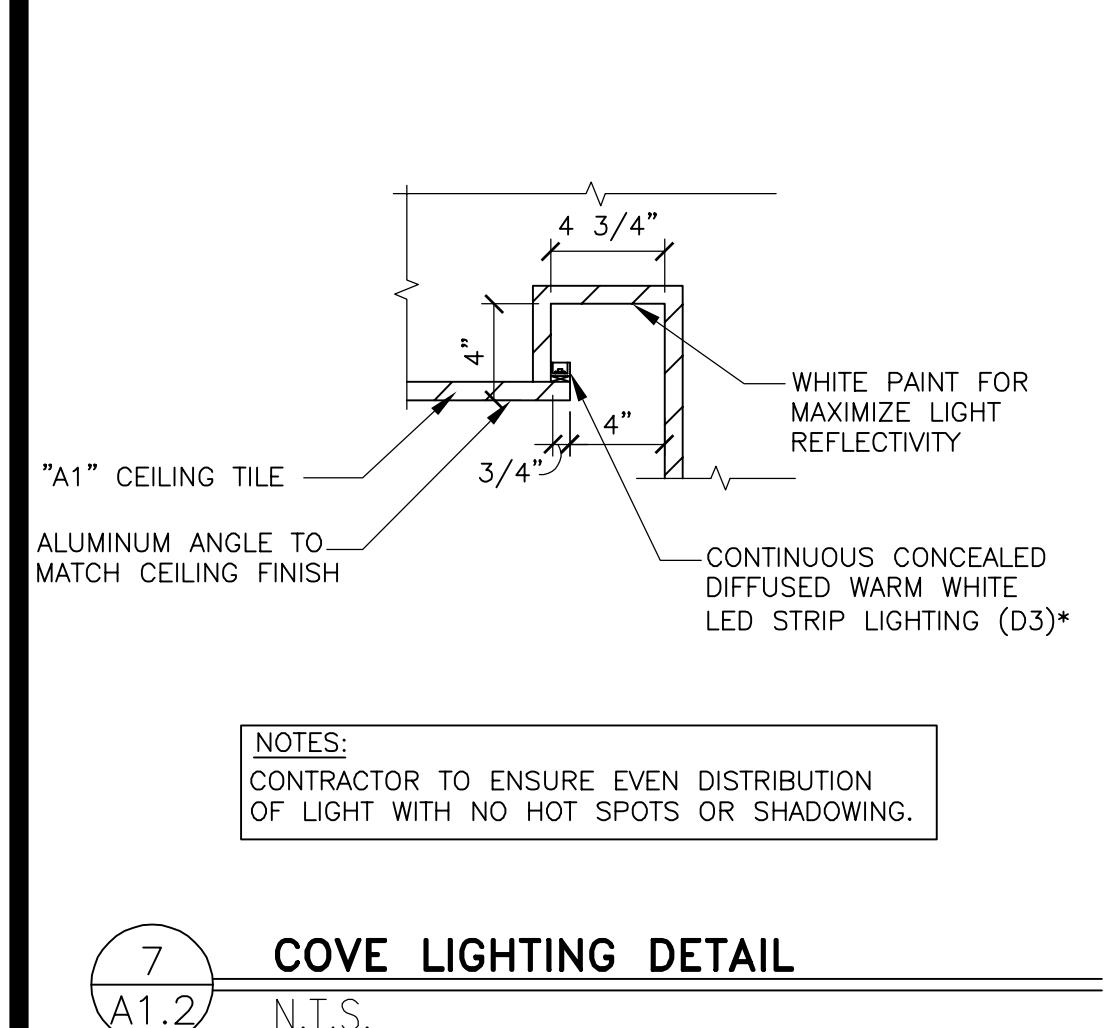
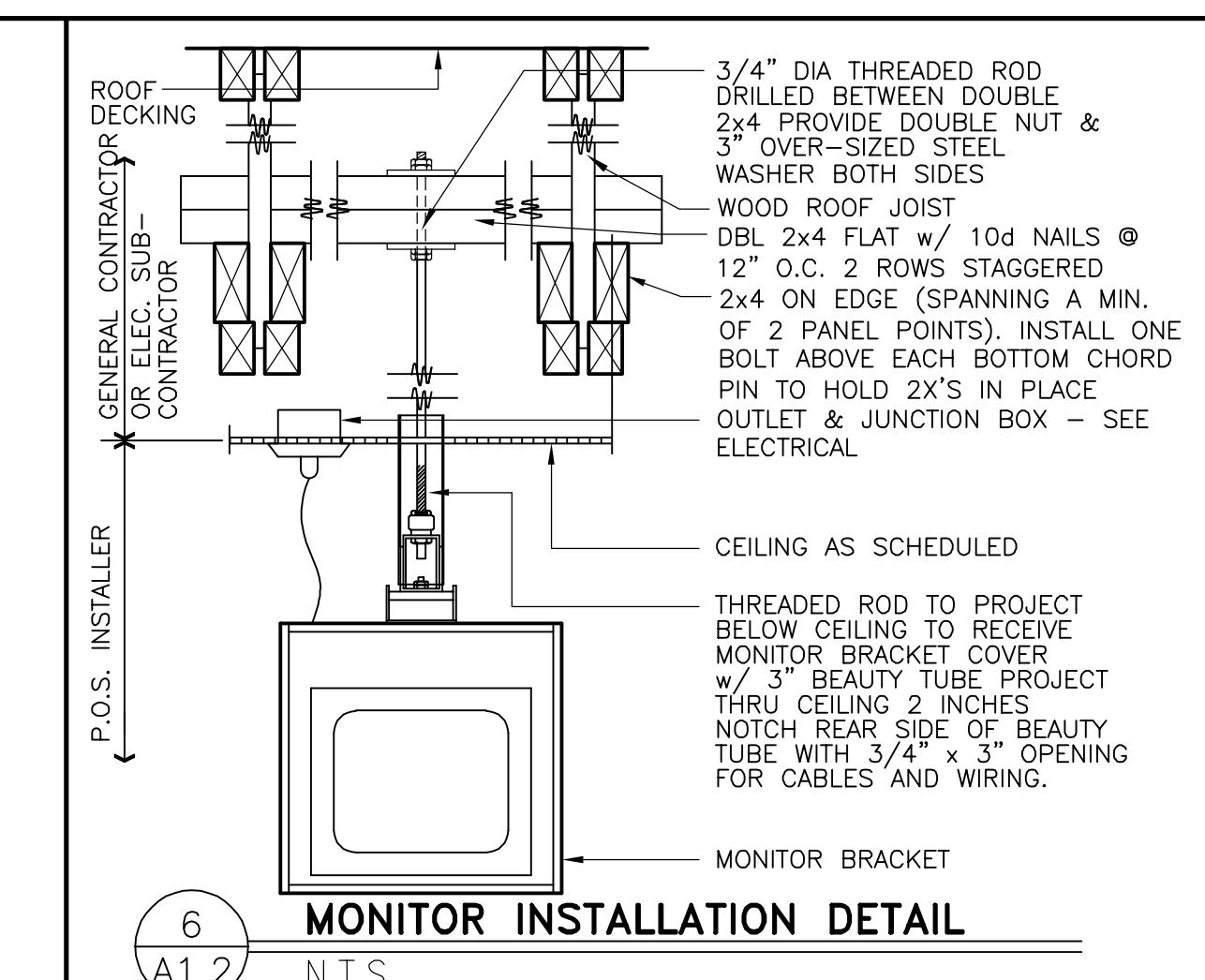
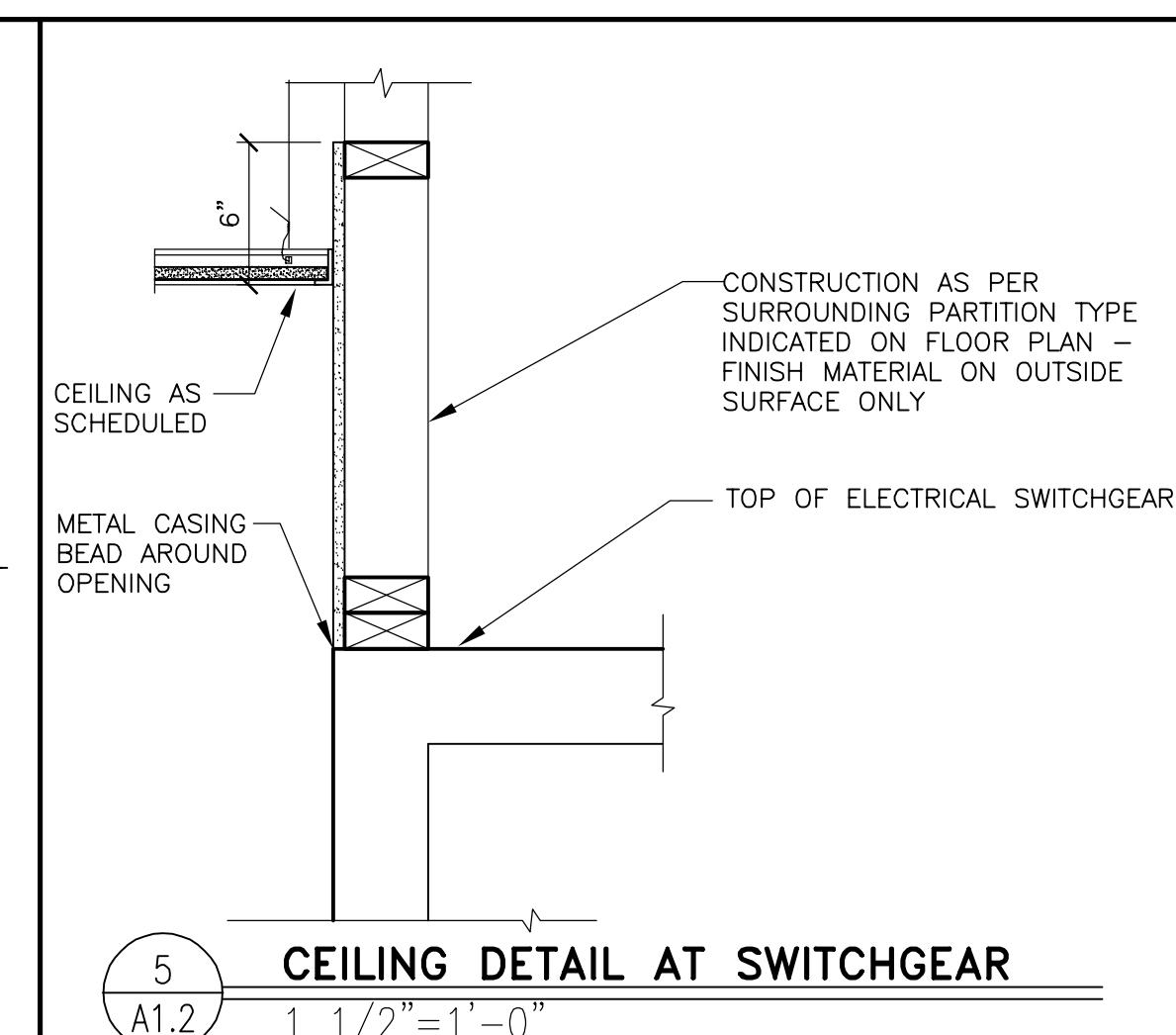
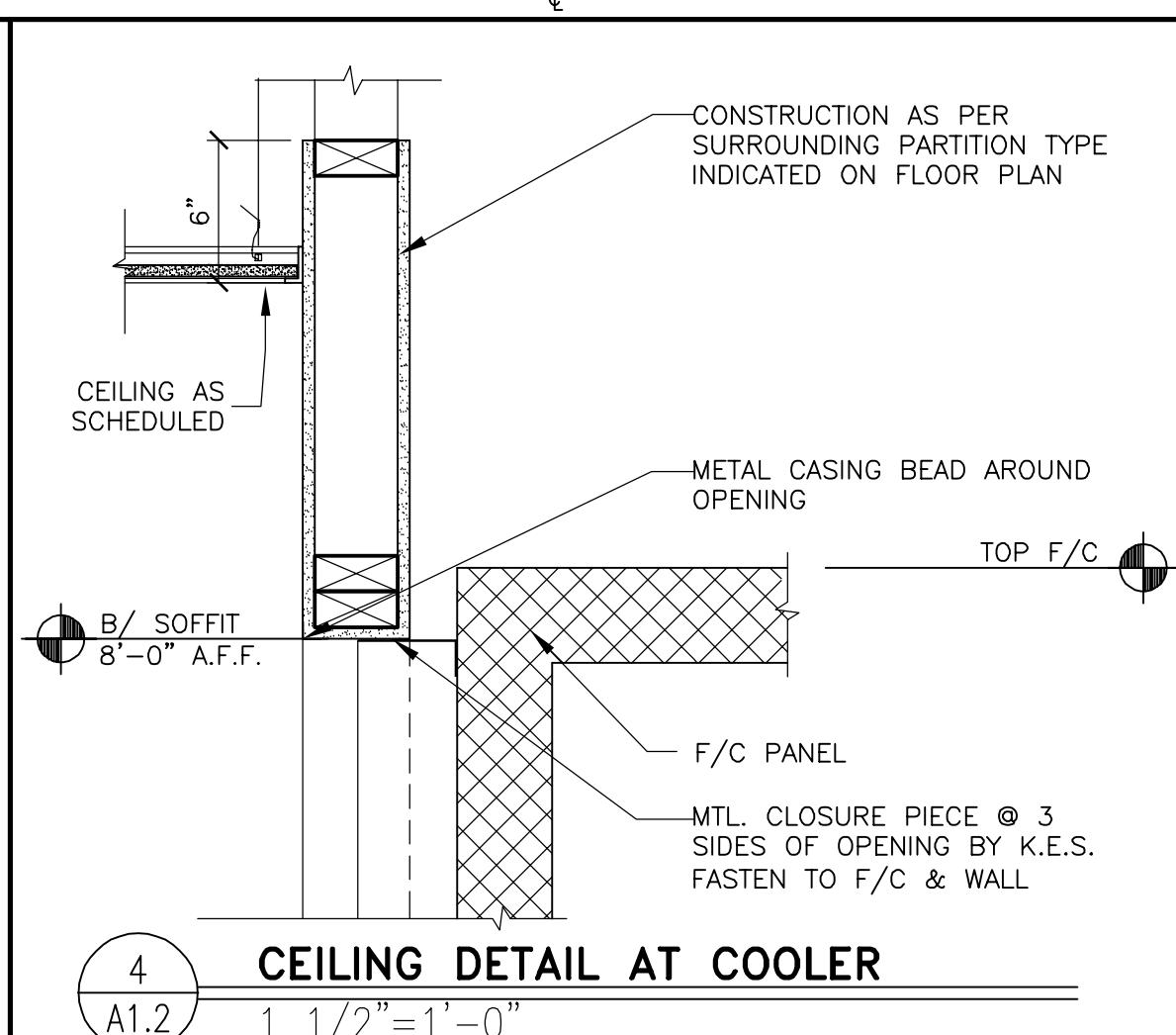
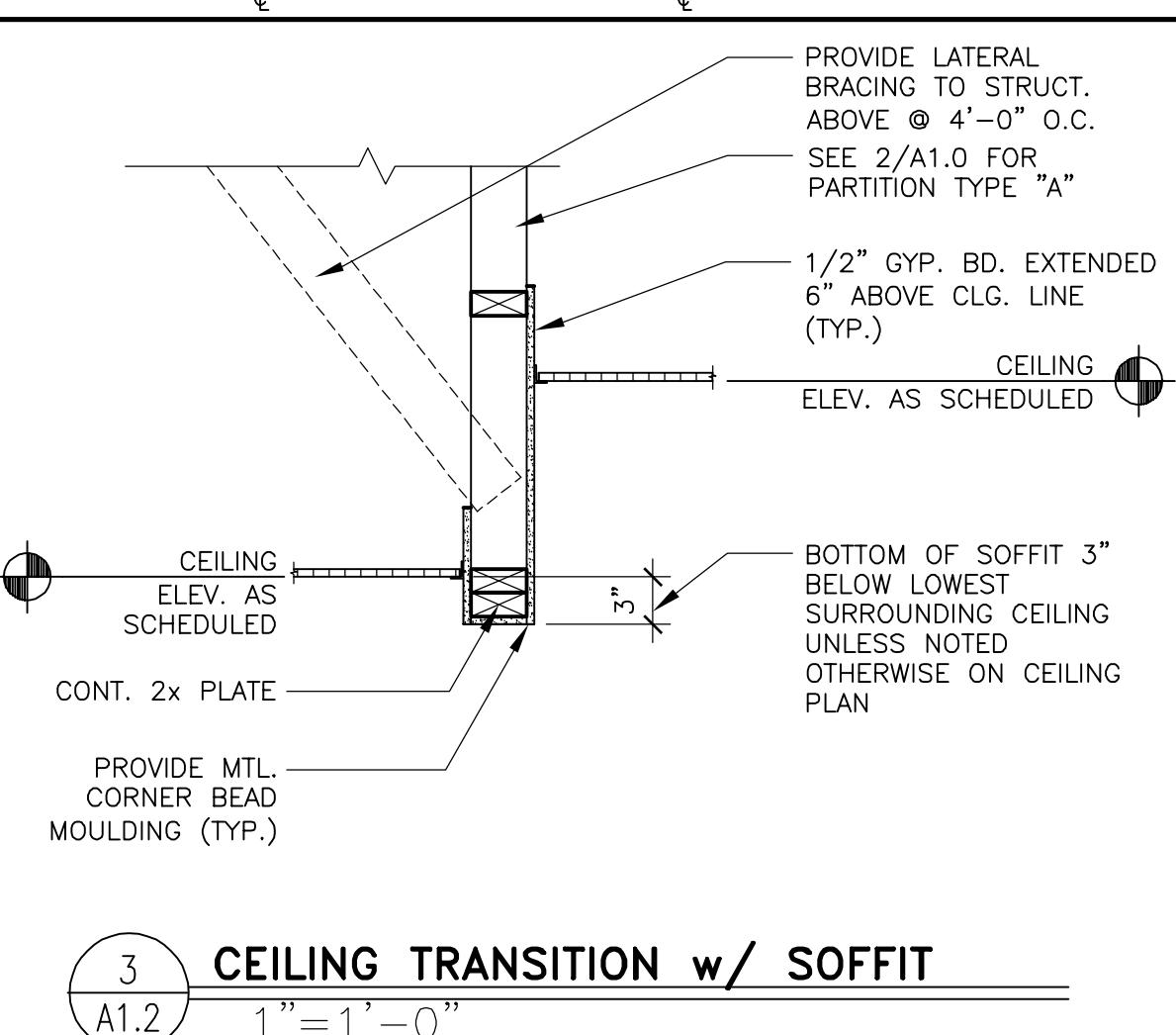
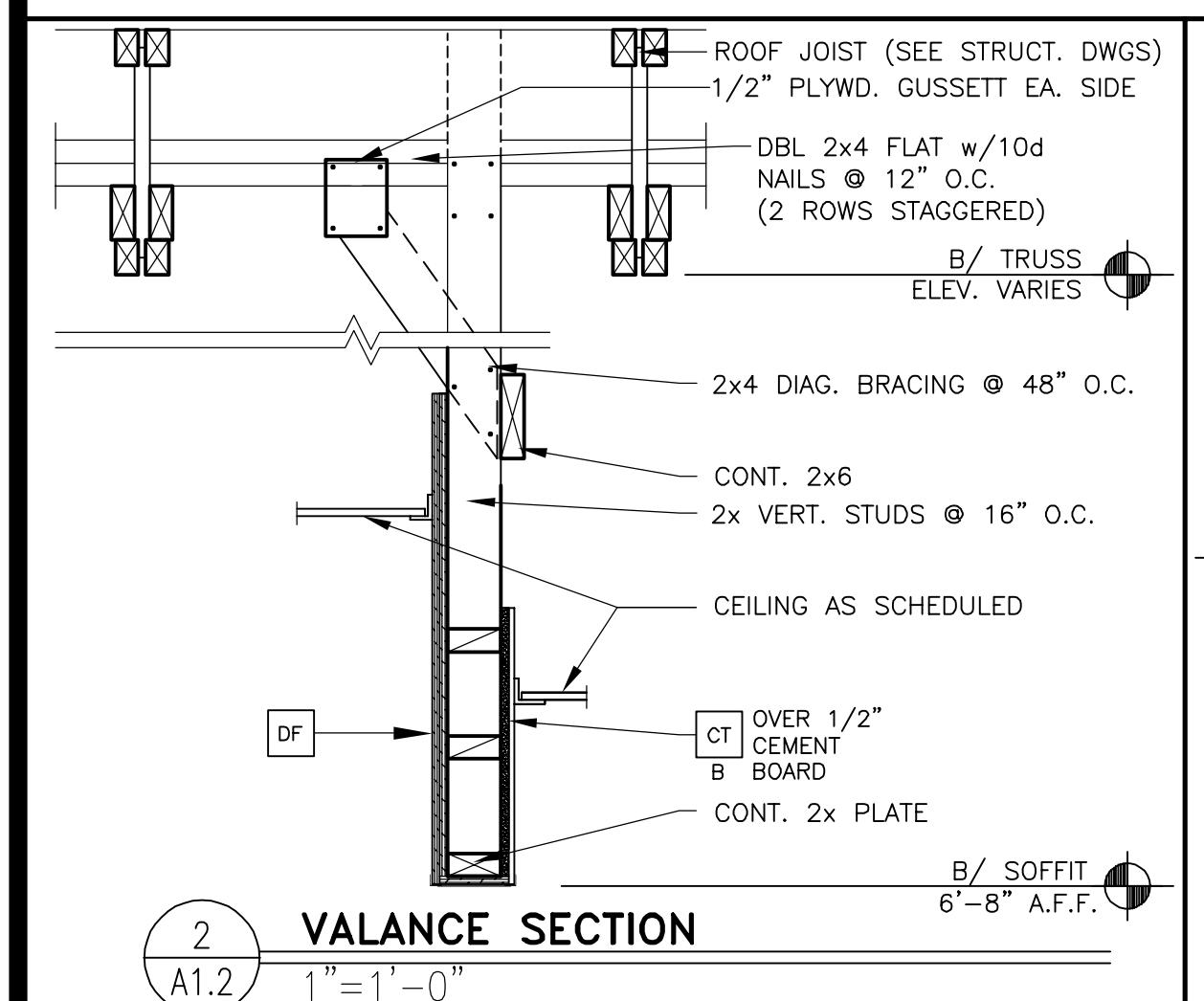
KEY NOTES

- [ACT A] 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
- [C] ALUMINUM CANOPY WITH INTEGRAL GUTTER AND SCUPPER - SEE 4/A.5.O FOR NOTES - SEE ROOF PLAN FOR DIMENSIONS - SEE ELEVATION FOR COLOR AND FASCIA LOCATIONS
- [DC] SUSPENDED DECORATIVE CEILING TREATMENT - SEE DECOR DRAWINGS FOR ADDITIONAL INFORMATION
- [DM] DIGITAL MERCHANDISER
- [DF] DECOR FINISH TO BE ORDERED/INSTALLED BY GC AND MANUFACTURED BY DECOR; REFER TO PORTFOLIO.
- [GB] GYPSUM BOARD CEILING FINISH. SEE DECOR.
- [MT] CEILING MOUNTED MONITOR: A) VERIFY MONITOR LOCATIONS WITH MCDONALD'S PROJECT MANAGER PRIOR TO INSTALLATION. B) SEE DETAIL 6/A.1.2 FOR INSTALLATION METHOD
- [RL] ROOF LADDER OPENING
- [SC] INTERGRAL GUTTER SCUPPER
- [CS] GC BUILD SOFFIT OVER FRONT COUNTER PROVIDE FINISHES PER DECOR DRAWINGS

GENERAL NOTES

- SEE SHT A.6.1 FOR CEILING FINISHES.
- SEE SHT A.1.0 FOR MENU BOARD DROPPED SOFFIT LOCATION DIMENSIONS
- GENERAL CONTRACTOR SHALL COORDINATE HVAC DIFFUSER LOCATION WITH DECOR & MECHANICAL PLANS AND REPORT ANY DISCREPANCIES TO ARCHITECT.
- REFERENCE MECHANICAL AND ELECTRICAL DRAWINGS FOR DIFFUSER AND LIGHTING INFORMATION.
- PROVIDE USG V15 CEILING TILE RETENTION CLIPS IN ALL VESTIBULE AREAS

REFLECTED CEILING PLAN
A1.2 3/16"=1'-0"



PREPARED BY:

McDonald's USA, LLC

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DRAWN BY:

JAW

STD ISSUE DATE:

2023

REVIEWED BY:

JAW

DATE ISSUED:

03/08/24

SITE ADDRESS:

SEC OF S.H. LOOP 288 & HUMMINGBIRD LANE, DENTON TEXAS

SHEET NO. A1.2

TITLE: 2023 STANDARD BUILDING - BB20

DESCRIPTION: 4.597-WOOD/WOOD

WOOD BEARING WALLS W/4" BRICK VENEER

WOOD ROOF TRUSS FRAMING

STUCCO/BATEN/BRICK/METAL PANEL EXTERIOR FINISHES

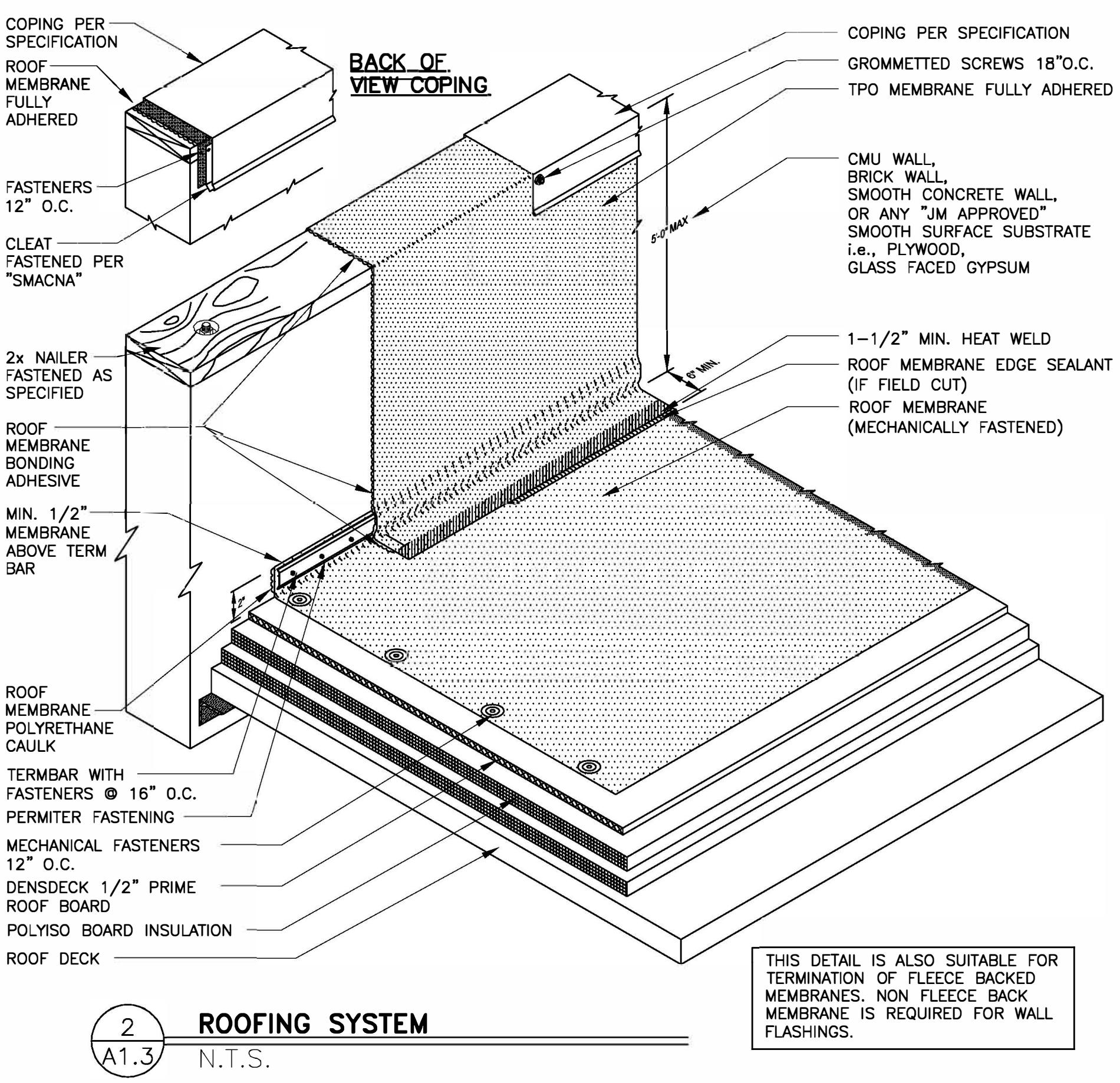
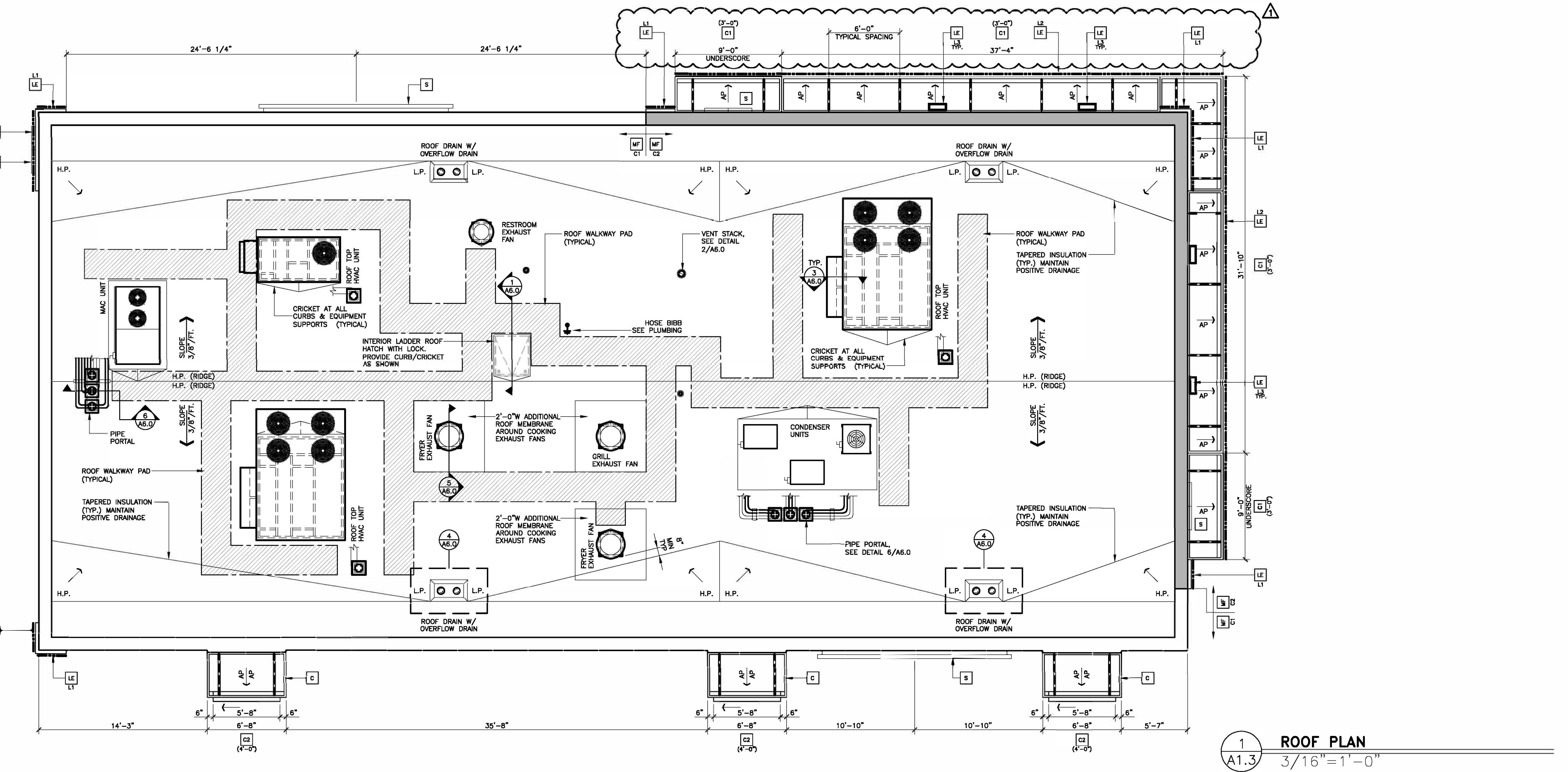
SEC OF S.H. LOOP 288 & HUMMINGBIRD LANE, DENTON TEXAS

04-2-3271

COORDINATE w/ DECOR

REFLECTED CLG. PLAN

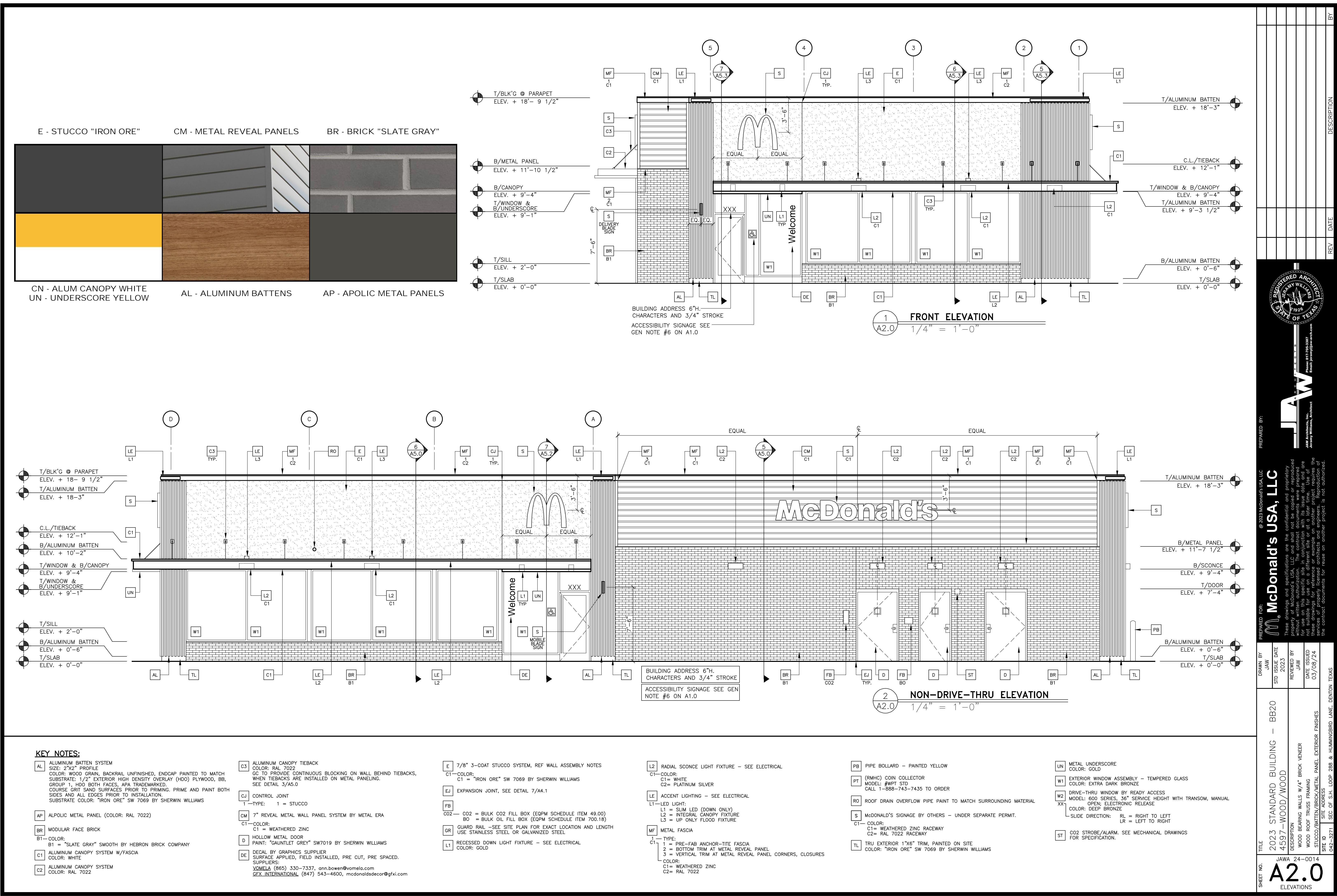
JAWA 24-0014

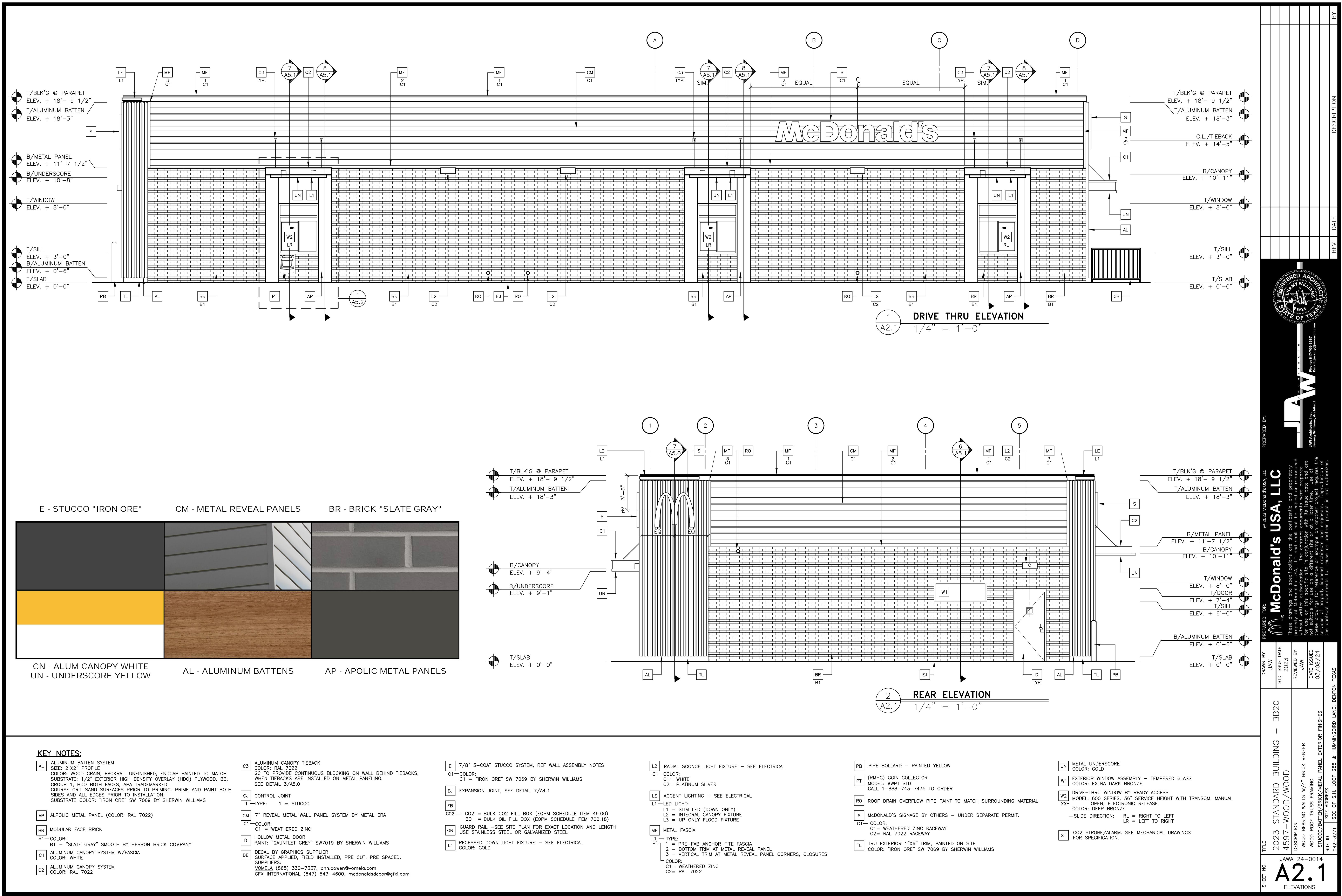


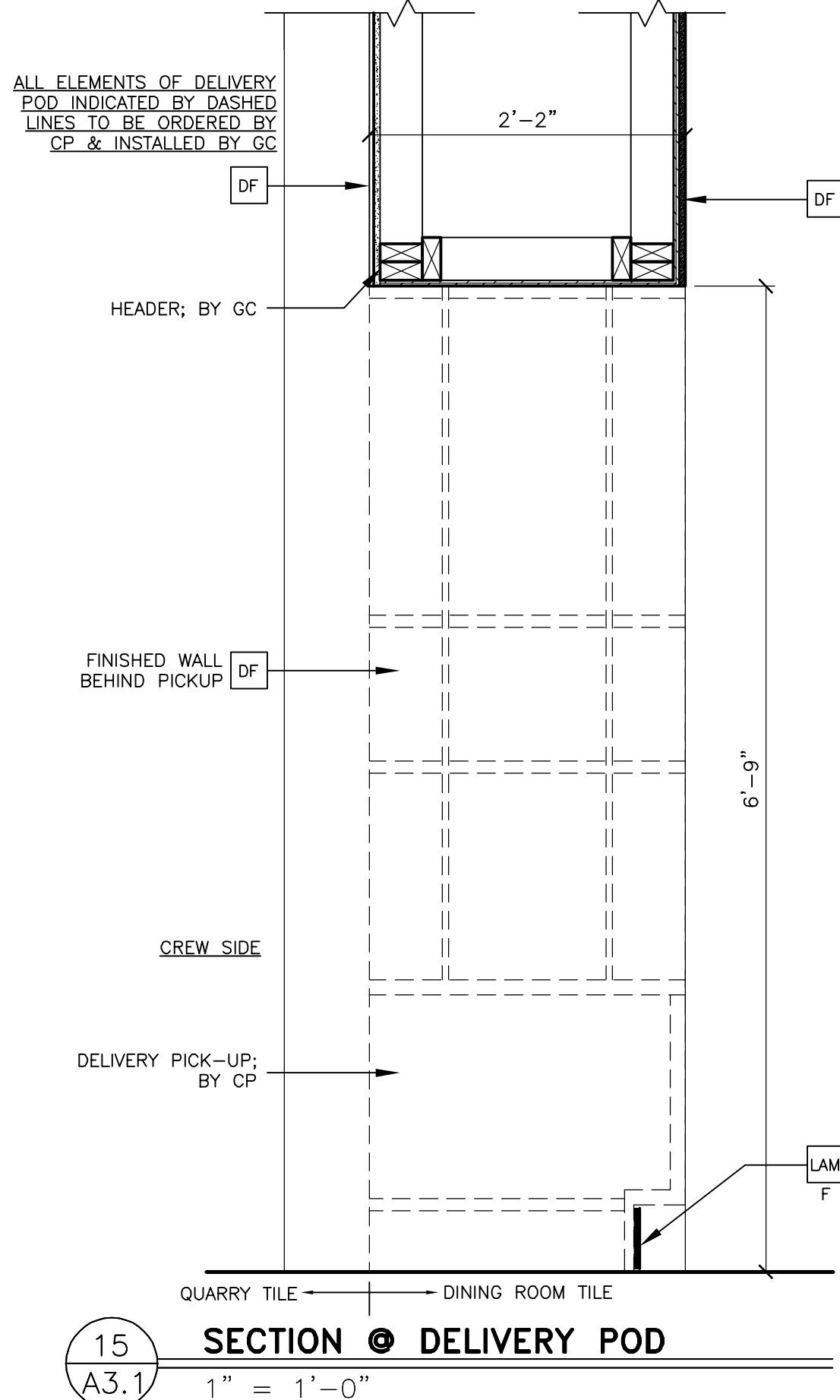
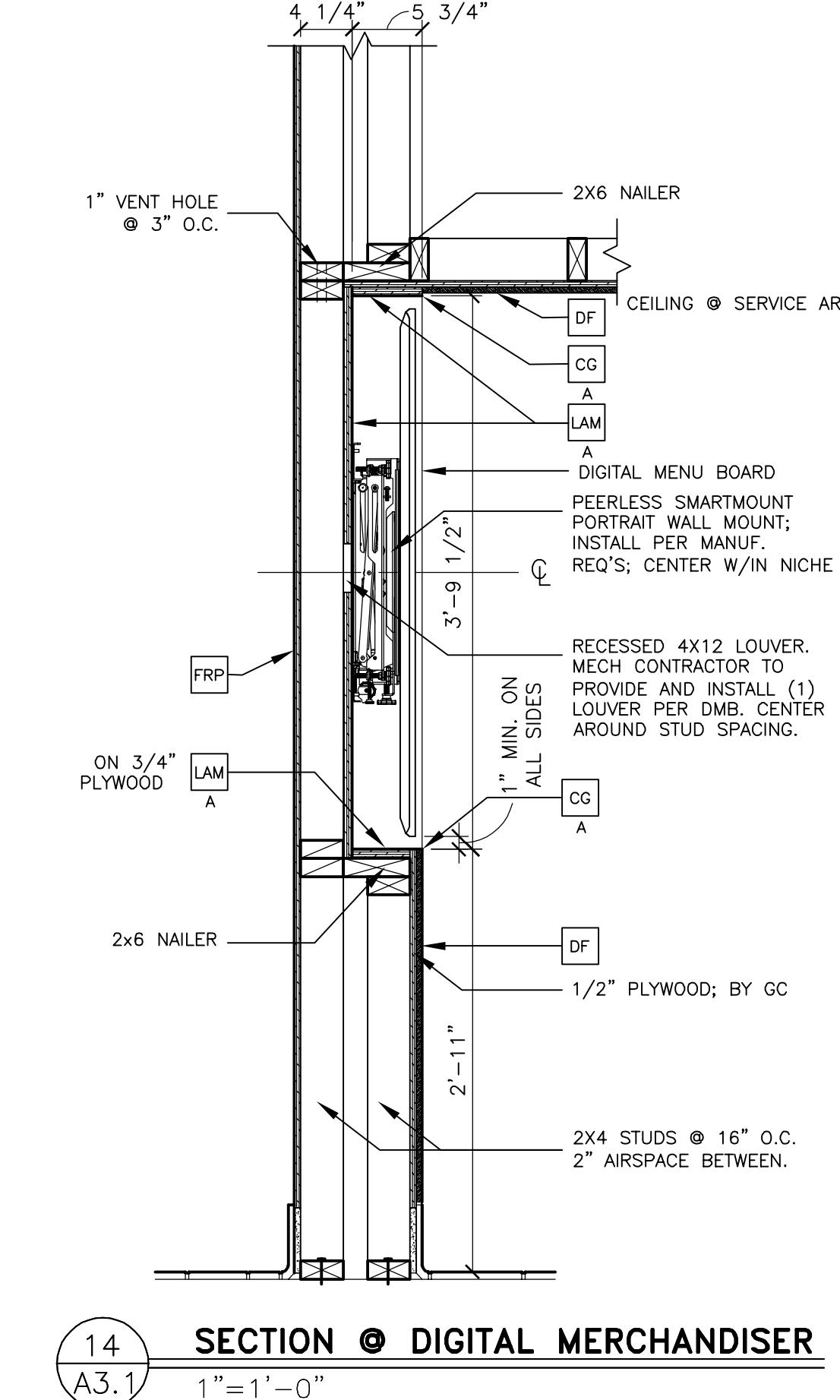
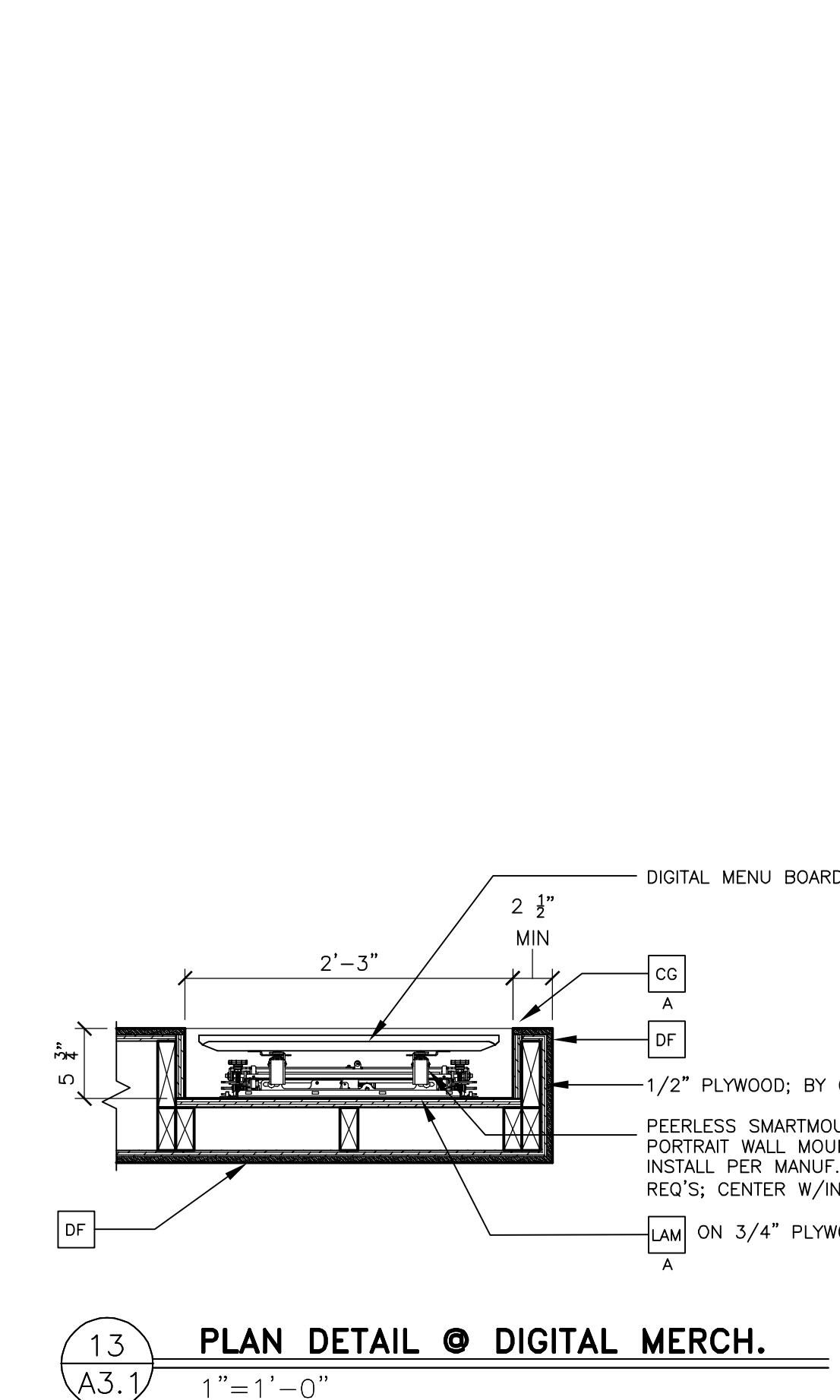
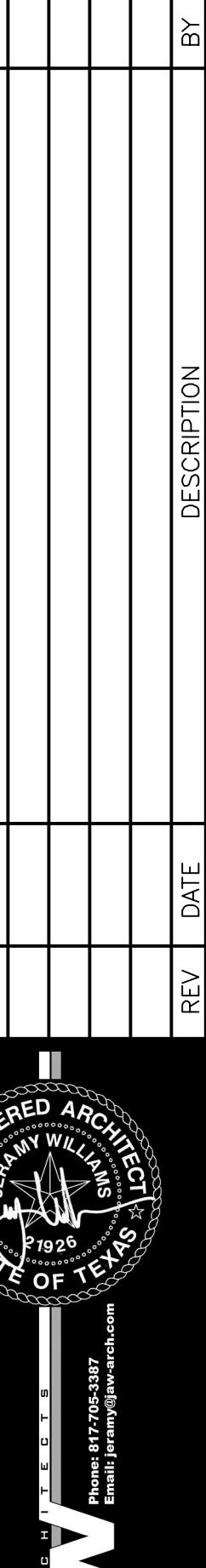
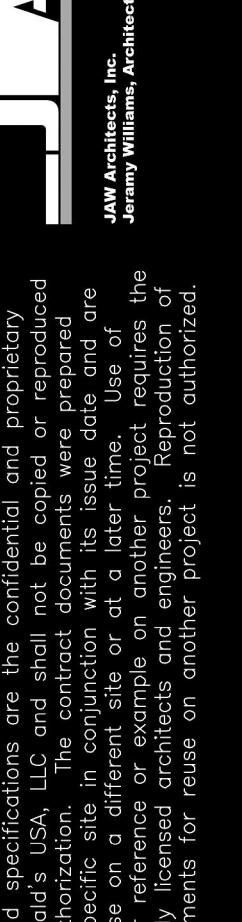
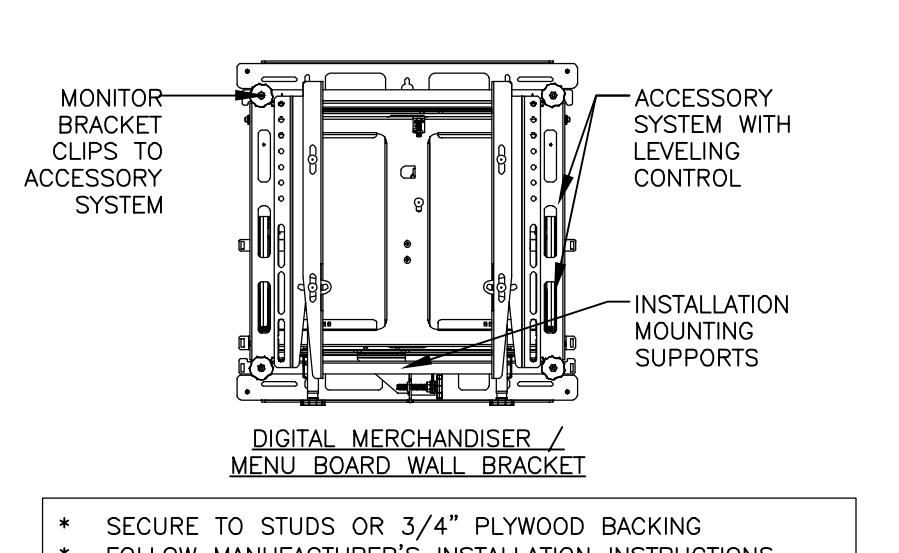
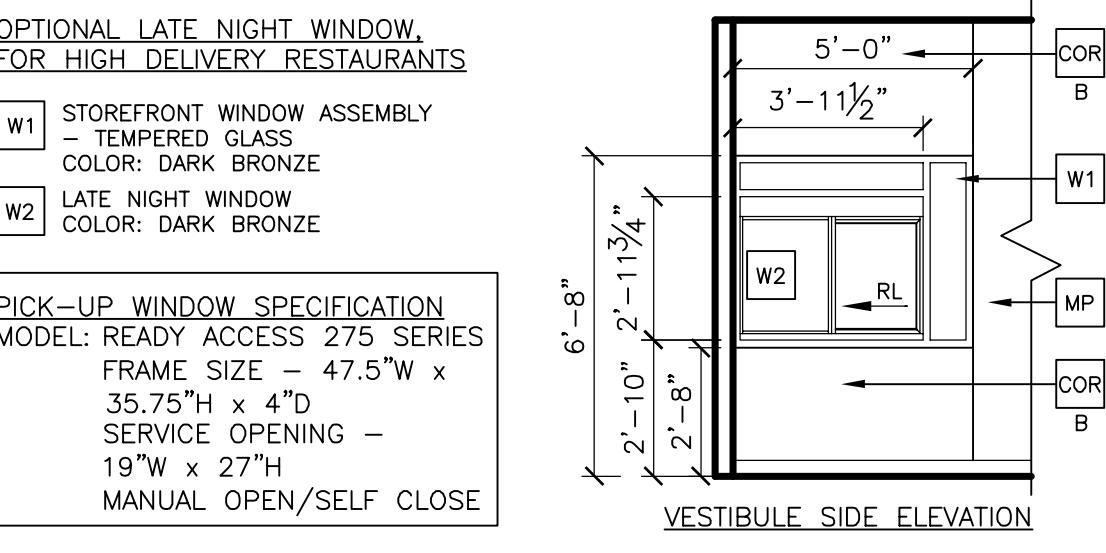
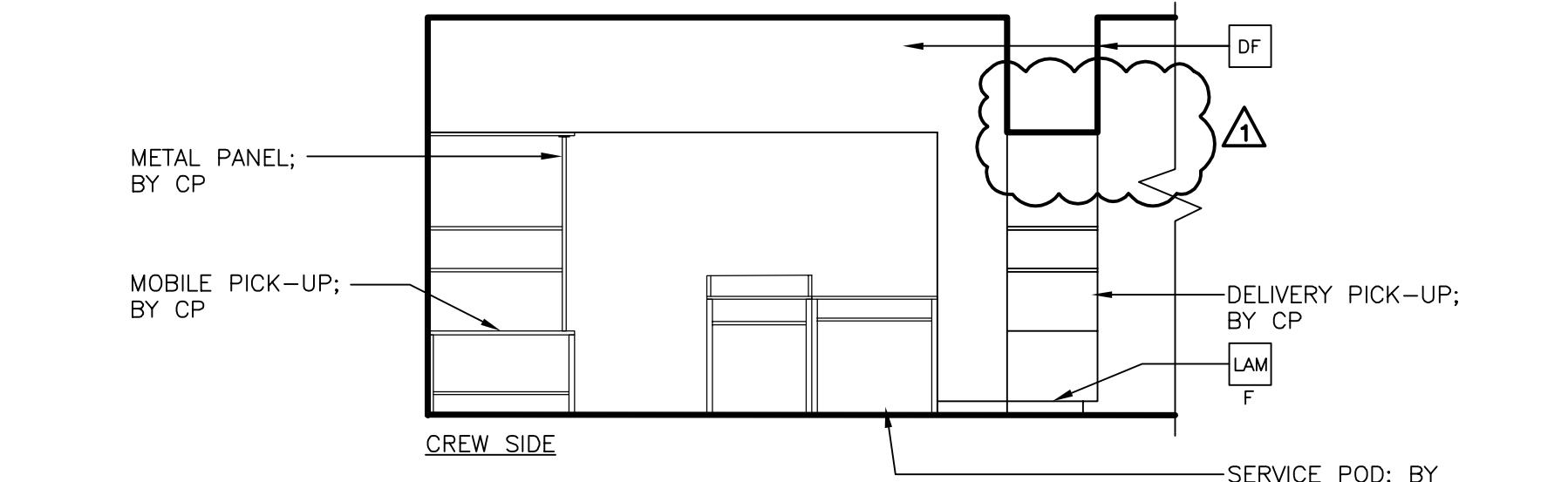
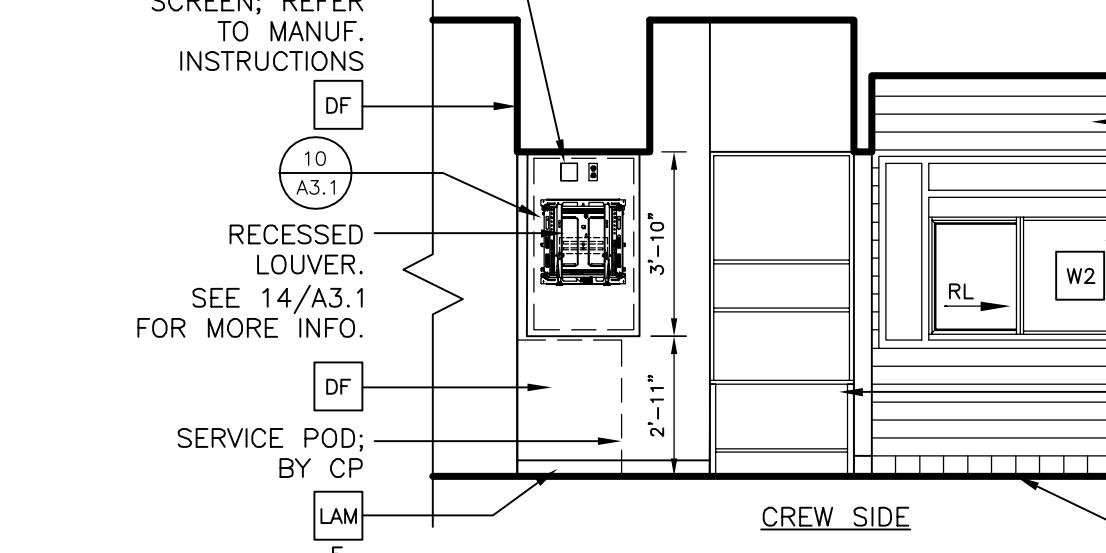
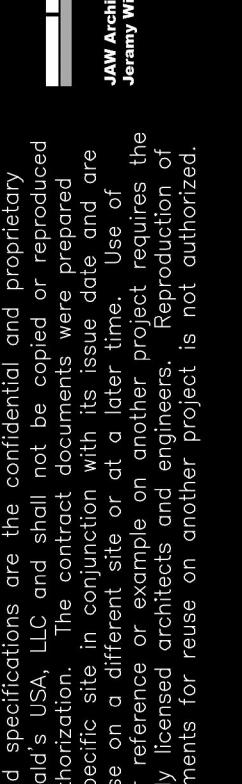
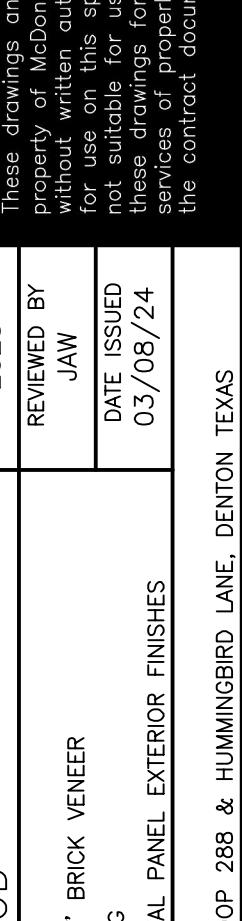
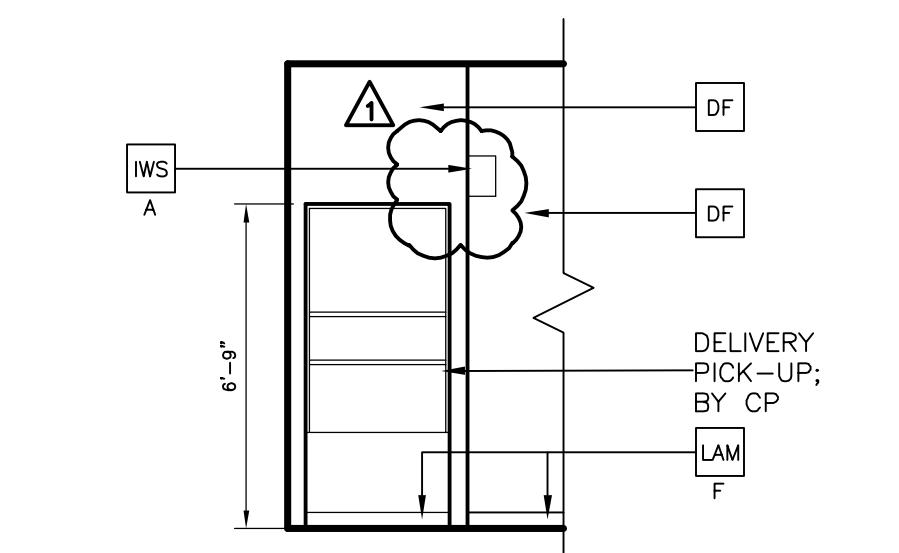
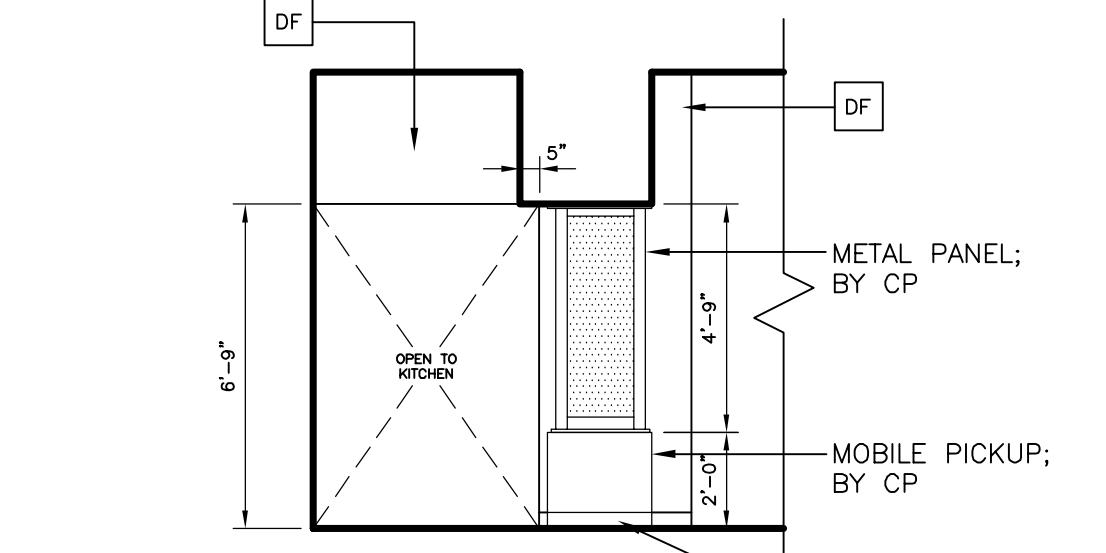
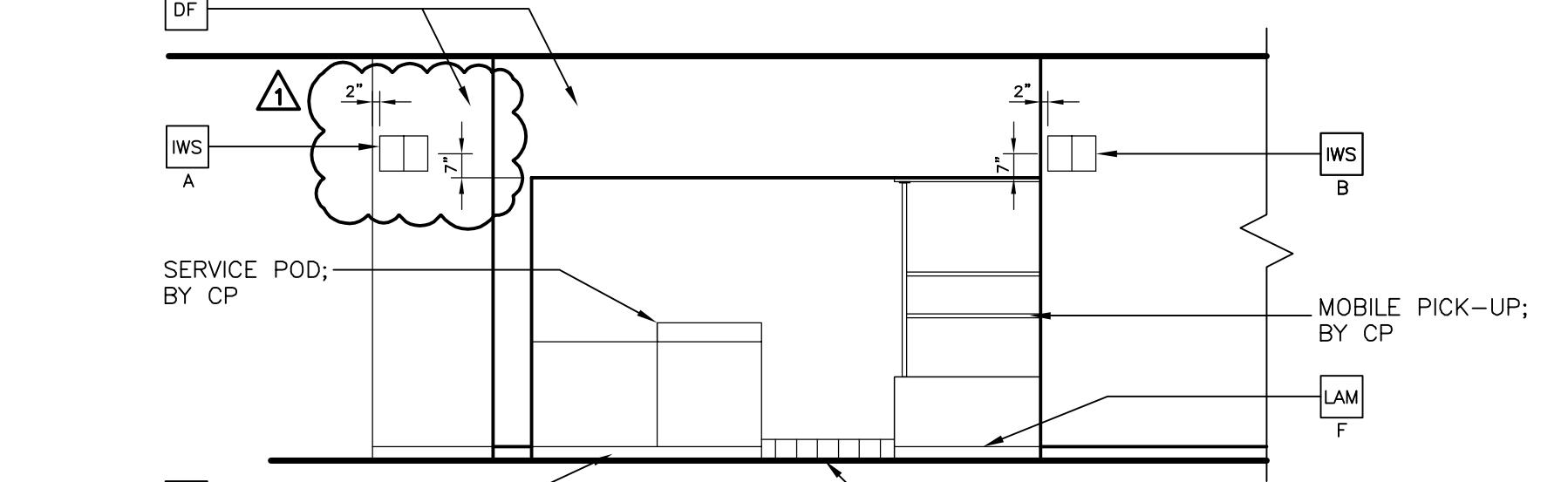
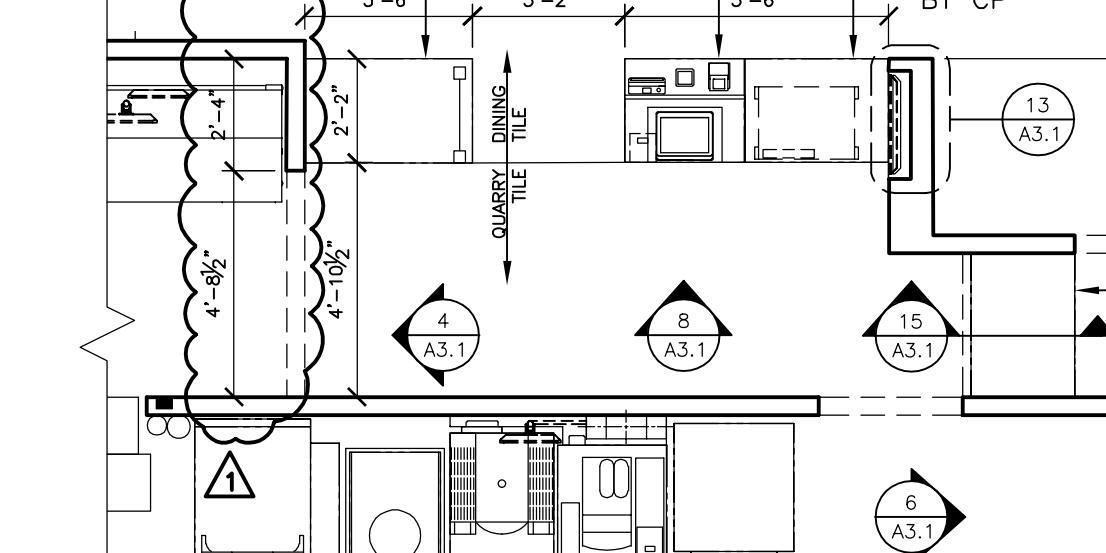
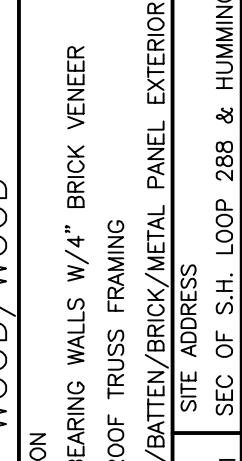
ROOFING SYSTEM

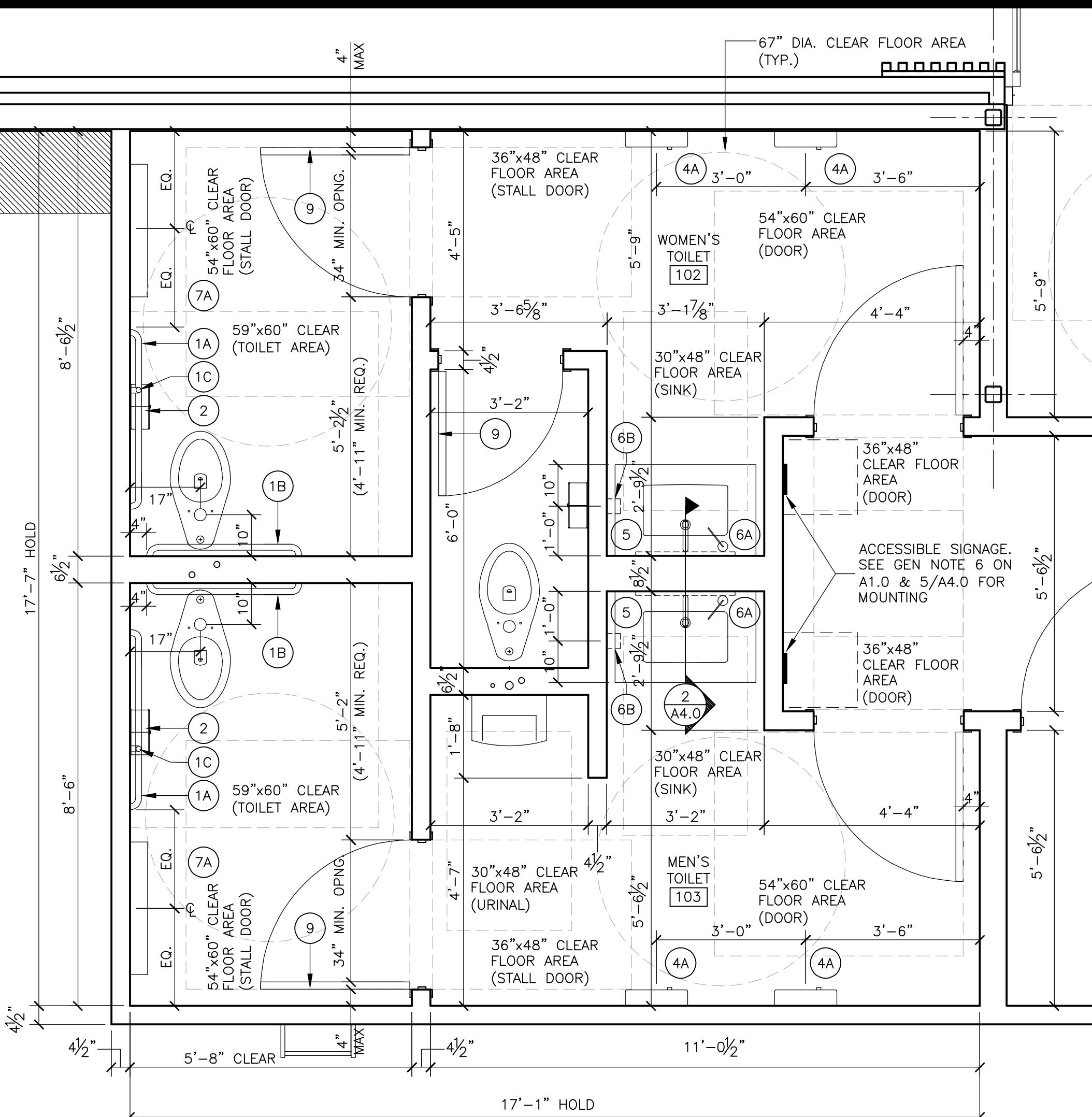
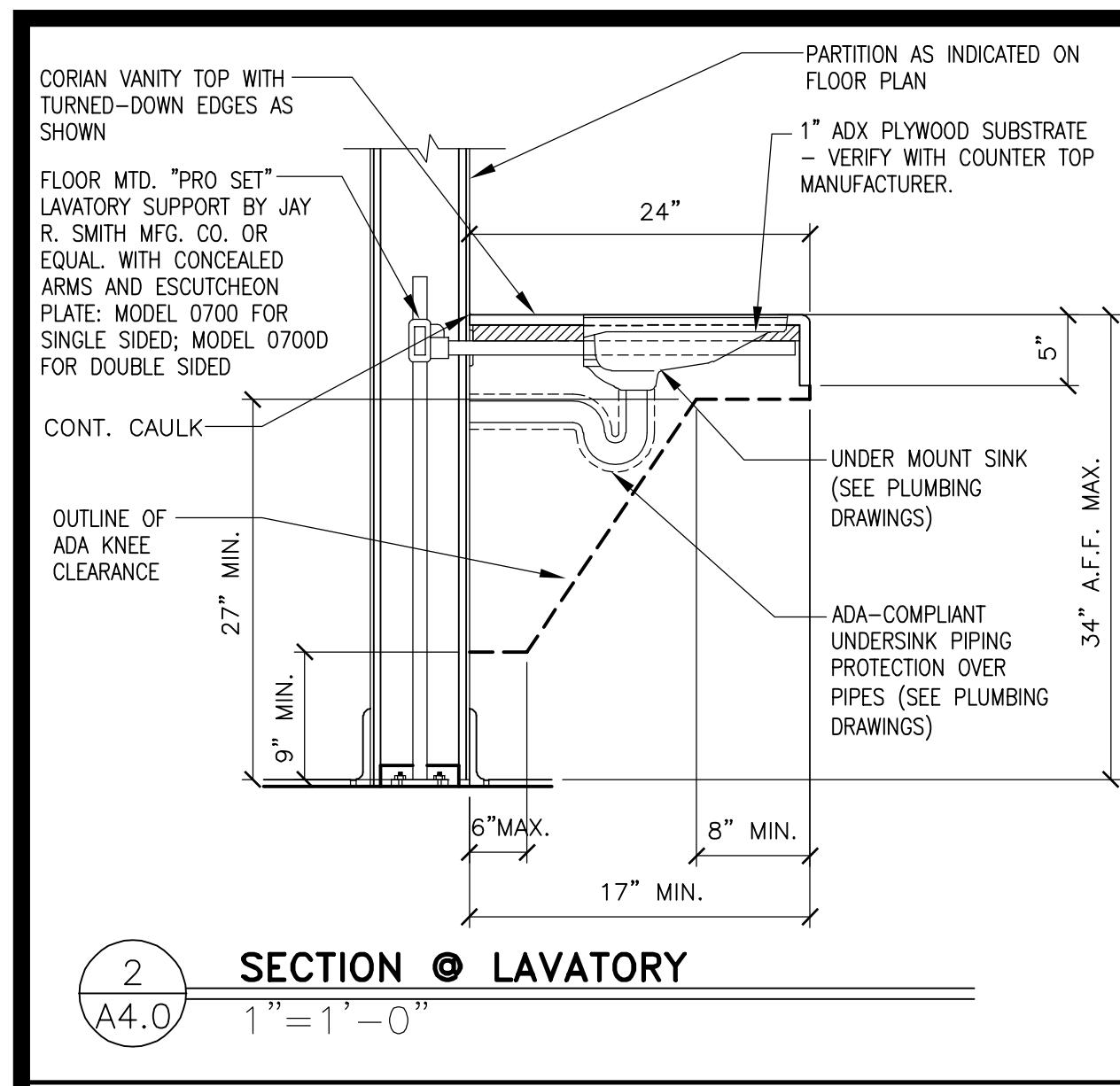
- MANUFACTURERS AND PRODUCTS:
A. DURO-LAST PVC ROOFING SYSTEM
B. JM-PVC REFER TO JOHNS MANVILLE WEBSITE (www.jm.com) FOR MOST UP-TO-DATE INFORMATION.
NO SUBSTITUTIONS ALLOWED
- SPECIFIED ROOFING SYSTEMS (AS SHOWN):
HEAT-WELDABLE SINGLE-PLY 50 MIL PVC ROOFING SYSTEM, INSTALLED OVER RIGID INSULATION ON WOOD ROOF DECK HAVING A SLOPE OF 3/8"/FT. MATERIALS SHALL BE AS FOLLOWS:
A. SINGLE-PLY ROOFING SYSTEM AS MANUFACTURED BY MANUFACTURER LISTED ABOVE TO COMPLY WITH ASTM E 108 OR UL 790, ASTM D-6878, AND FMG I-90 FOR WIND UPLIFT.
B. FASTENERS: METAL FASTENERS AND PLATES AS PER MANUFACTURER.
C. ACCESSORIES: PRE-FABRICATED CURBS, FLASHING, CORNERS, TERMINATION BARS, PIPE FLASHING, VENT FLASHING ETC. AS PER MANUFACTURER.
D. PLEASE SEE SINGLE-PLY FLASHING SPECIFICATIONS FOR A FULL DESCRIPTION OF INSTALLATION INSTRUCTIONS AND REQUIREMENTS WHICH ARE CONSIDERED A PART OF THIS DETAIL.
E. ANY CARPENTRY OR METAL WORK SHOULD BE DESIGNED AND CONSTRAINED IN ACCORDANCE WITH LOCAL CODE REQUIREMENTS AND/OR PROJECT SPECIFICATIONS. THESE COMPONENTS SHOULD BE REVIEWED AND APPROVED BY A LICENSED DESIGN PROFESSIONAL. CONTACT MANUFACTURER FOR METAL OPTIONS TO BE INCLUDED WITHIN THE MANUFACTURER'S GUARANTEES.
F. ROOF MEMBRANE EDGE SEALANT IS REQUIRED ON ALL CUT OR NON-ENCAPSULATED EDGES OF REINFORCED MEMBRANE. THIS INCLUDES FACTORY CUT MEMBRANE.
- WALKWAYS:
A. 30" WIDE WALKWAY ROLL, HOT AIR WELDED TO MEMBRANE.
B. PROVIDE WALKWAY FROM ROOF LADDER EXIT TO ALL ROOF TOP EQUIPMENT AS PER ROOF PLAN ABOVE.
C. INSTALL WALKWAY ACCORDING TO WALKWAY PAD MANUFACTURER'S WRITTEN INSTRUCTION.
- RIGID INSULATION:
PROVIDE REQUIRED LAYERS OF POLYISOCYANURATE INSULATION W/ 1/2" "DENSEDECK" COVER BOARD TO MEET A MINIMUM CONTINUOUS R-30 VALUE — THICKNESS AS REQUIRED. PROVIDE POSITIVE SLOPE TO ALL ROOF DRAINS. SEE ROOF PLAN. PROVIDE TOP LAYER PROTECTION MATERIAL AS PER MANUFACTURER'S RECOMMENDATIONS. BOTTOM LAYER OF INSULATION TO HAVE INTEGRAL THERMAL BARRIER OR APPROVED ROOFING MANUFACTURER'S THERMAL UNDERLAYMENT SHEET. ASSEMBLY SHALL COMPLY WITH UL 1256 OR FMG 4450 AND ASTM C 1289, TYPE I OR II.
- TAPERED INSULATION:
PROVIDE TAPERED INSULATION AS REQUIRED FOR POSITIVE DRAINAGE TO ROOF DRAINS AS INDICATED PER ROOF PLAN ABOVE. 1/4" PER FOOT MIN. REQUIRED.
- EXHAUST FANS:
PROVIDE ADDITIONAL LAYER OF ROOF MEMBRANE AROUND EXHAUST FANS AS INDICATED PER ROOF PLAN ABOVE.

SHEET NO.	TITLE	DRAWN BY	STD ISSUE DATE	REVIEWED BY	DATE ISSUED	BY
JAWA 24-0014	2023 STANDARD BUILDING - BB20	JAW	2023	JAW	03/08/24	
4597-WOOD/WOOD	DESCRIPTION	WOOD BEARING WALLS W/4" BRICK VENEER				
	STUDCO/BATTEN/BRICK/METAL PANEL EXTERIOR FINISHES	STUDCO/BATTEN/BRICK				
042-3271	SITE ID	SEC OF S.H. LOOP 288 & HUNNINGGRD LANE, DENTON TEXAS				

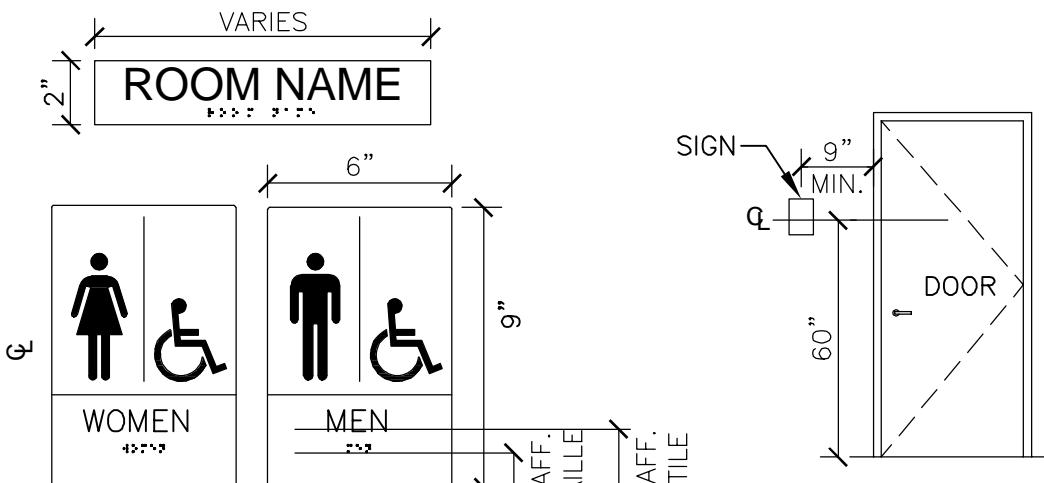




SECTION @ DELIVERY POD		SECTION @ DIGITAL MERCHANTISER	PLAN DETAIL @ DIGITAL MERCH.	McDonald's USA, LLC	
15 A3.1	1" = 1'-0"	14 A3.1	1" = 1'-0"	13 A3.1	1" = 1'-0"
					
					
					
KEY NOTES				GENERAL NOTES	
<p>CG CORNER GUARD: 3/4" ANGLE BY DECOR X = BLACK</p> <p>COR CORIAN: X = 1/2" CORIAN CAMEO WHITE B = 1/2" CORIAN DEEP TITANIUM</p> <p>DF DECOR FINISH TO BE ORDERED/INSTALLED BY GC AND MANUFACTURED BY DECOR; REFER TO PORTFOLIO.</p> <p>FRP FIBERGLASS REINFORCED PLASTIC - PANOLAM, GRAY SMOOTH, CLASS C, .075. FOR ORDERING, CONTACT KIMBERLY LAWSON Kimberly_Lawson@panolam.com 1-866-925-4377</p>	<p>CT CERAMIC WALL TILE: CROSSVILLE - COLOR BY NUMBERS COLOR: AFTERNOON SPRAY, SIZE: 4"x12", PATTERN: RUNNING BOND GROUT: MAPEI O2 PEWTER - JOINT TO BE $\frac{1}{8}$" MAX. USE THIS TILE WHEN HIGH LRV IS REQUIRED COORDINATE WITH THE McDONALD'S AREA CONSTRUCTION MANAGER</p> <p>IWS INTERIOR WAYFINDING SIGNAGE A = McDELIVERY INTERIOR TRIANGULAR SIGN B = MOBILE ORDER INTERIOR TRIANGULAR SIGN C = ADA ASSISTANCE SIGNAGE</p> <p>KS KIOSK SIGNAGE BY GC; ORDER FROM AMANDA GUSTAFSON W/ ALTRUA X = "CREDIT ONLY" KIOSK SIGNAGE B = "CASH/CREDIT" KIOSK SIGNAGE</p>	<p>LAM LAMINATE: X = COLOR: A = IDMB / DIG. MERCH., SMOOTH BLACK PLASTIC LAMINATE BY GC B = TRASH/ COND., WHITE PLASTIC LAMINATE BY GC C = TRASH/ COND., LAMITECH GRAPHITE K MATTE FINISH D = SEE DECOR DRAWINGS, MFR BY DECOR, PURCHASE AND INSTALL BY GC E = McDELIVERY UNDERSCORE, LAMITECH GOLDEN F = BASE BOARD, FORMICA COMPACT LAMINATE MATTE BLACK BY GC</p> <p>MP METAL INFILL PANEL. MATCH DARK BRONZE WINDOW ASSEMBLY</p>	<ul style="list-style-type: none"> ALL WALL LAMINATE PANELING MANUFACTURED BY DECOR PURCHASE AND INSTALL BY GC, UNO. ALL ELEMENTS 'BY CP' TO BE ORDERED BY CENTRAL PURCHASING AND MANUFACTURED BY GC, UNO. A2E TO VERIFY LOCATION AND QUANTITY OF LIGHTS AND DIFFUSERS AFTER SERVICE AREA WALL ADDITION. 		



ENLARGED RESTROOM PLAN



GRAPHICS SHOWN ARE FOR REFERENCE ONLY.

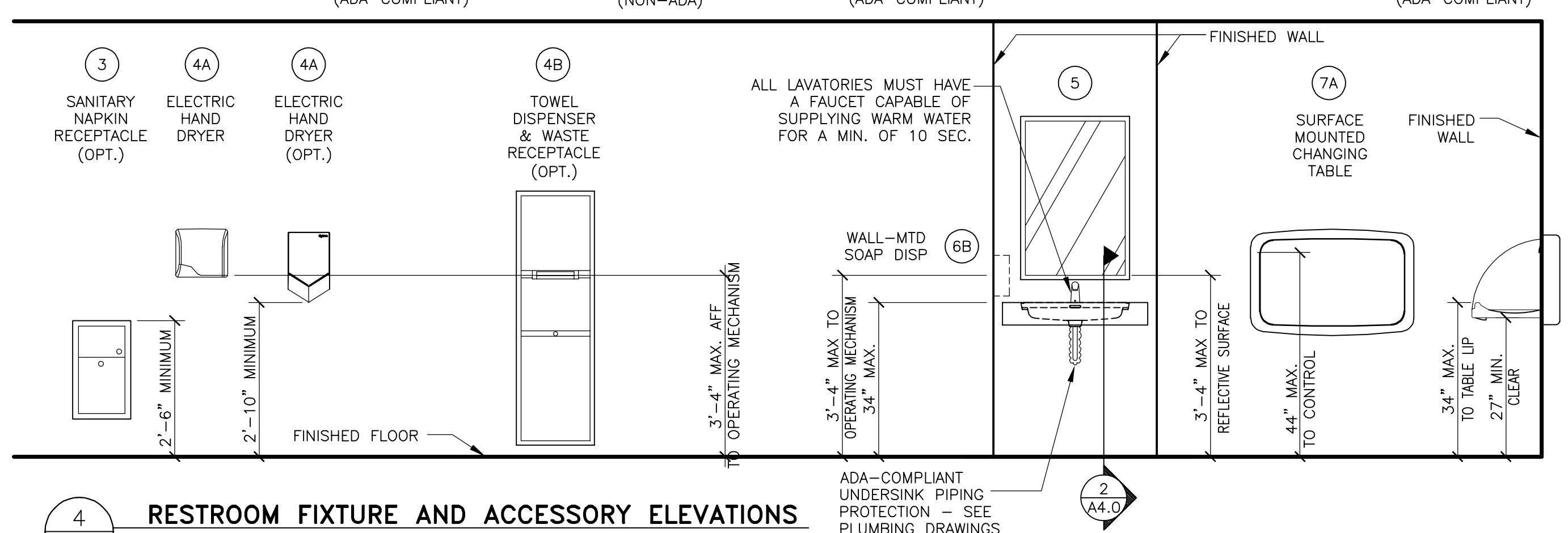
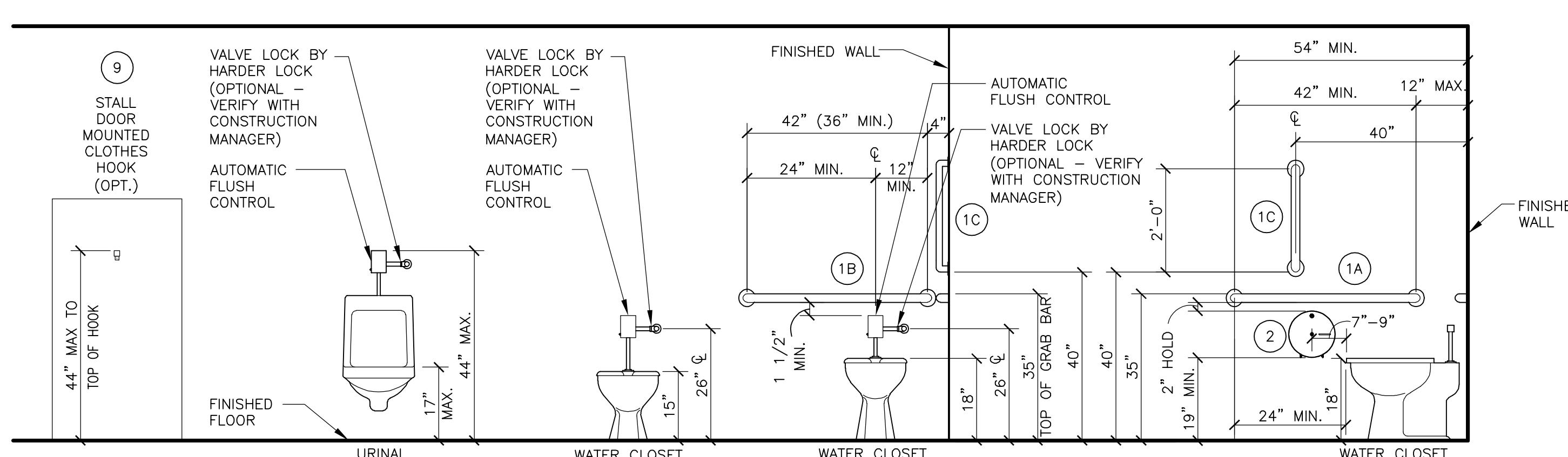
GC TO PROVIDE ADA SIGNAGE PACKAGE AND INSTALL SIGNS AT LOCATIONS AND POSITIONS INDICATED IN PACKAGE OR AS REQUIRED BY LOCAL CODES. SIGNAGE PACKAGE SUPPLIED BY:

FRANKE/S2K
1-800-423-5247
www.frankesupply.com
email: fs-frankesupply.us@franke.com

SIGNAGE NOTES:

1. 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.
 2. WHEN PERMANENT IDENTIFICATION IS PROVIDED FOR ROOMS AND SPACES, RAISED LETTERS SHALL BE PROVIDED AND SHALL BE ACCCOMPANIED 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
A4.0 ACCESSIBLE SIGNAGE NTS



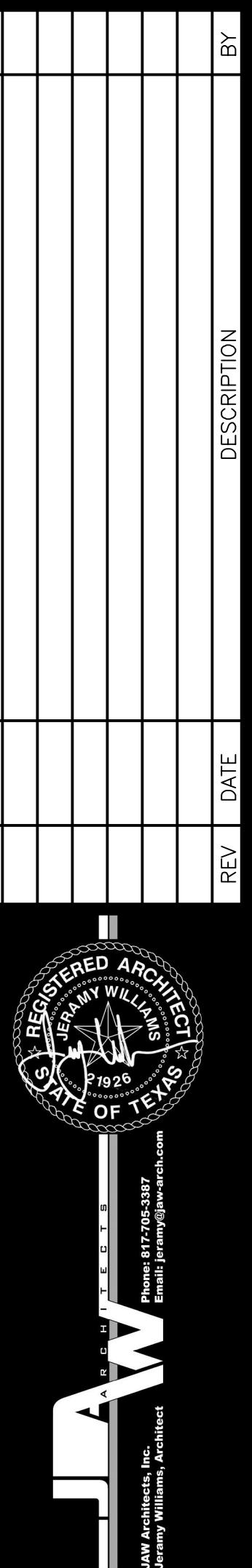
4 RESTROOM FIXTURE AND ACCESSORY ELEVATIONS
A4.0 1/2" = 1'-0"

	ITEM (SEE NOTE 2)	MFR MODEL #	SUPPLIER	BACKUP SUPPORT (SEE NOTE 3)
1A	GRAB BAR 42"	BOBRICK B-6806X42	HUGHES SUPPLY (866) 310-3576 MCDCOORD@HAJOCACOM	(1)2x6 4'-0" LONG CENTER MOUNTED
1B	GRAB BAR 36"	B-6806X36		
1C	GRAB BAR 24"	B-6806X24		
2	TOILET TISSUE DISPENSER, JUMBO, SURFACE MOUNTED	BRADLEY 5424	HUGHES SUPPLY (866) 310-3576 MCDCOORD@HAJOCACOM	FRAME WALL OPENING PER MANUFACTURER'S RECOMMENDATIONS
3	SANITARY NAPKIN RECEPTACLE, RECESSED (OPTIONAL)	BOBRICK B-354	HUGHES SUPPLY (866) 310-3576 MCDCOORD@HAJOCACOM	
4A	HAND DRYER, ENERGY EFFICIENT MODEL, ADA, ALUMINUM BRUSHED	WORLD DRYER Q-973A2 VerdeDri	HUGHES SUPPLY (866) 310-3576 MCDCOORD@HAJOCACOM	FRAME WALL OPENING PER MANUFACTURER'S RECOMMENDATIONS
4A OPTION	HAND DRYER, ENERGY EFFICIENT MODEL ADA, SPRAYED NICKEL	DYSON AIRBLADE V	HUGHES SUPPLY (866) 310-3576 MCDCOORD@HAJOCACOM	
4B OPTION	TOWEL DISPENSER & WASTE RECEPTACLE, COMBINATION, RECESSED (OPTIONAL)	BOBRICK B-3974	HUGHES SUPPLY (866) 310-3576 MCDCOORD@HAJOCACOM	
5	MIRROR, CHANNEL FRAME	BOBRICK B-165 2436	HUGHES SUPPLY (866) 310-3576 MCDCOORD@HAJOCACOM	
6A	SOAP DISPENSER, COUNTER MOUNTED, 6" SPOUT (OPTIONAL)	BOBRICK B-82216	HUGHES SUPPLY (866) 310-3576 MCDCOORD@HAJOCACOM	
6B	SOAP DISPENSER, WALL-MOUNTED	BOBRICK B-2112	HUGHES SUPPLY (866) 310-3576 MCDCOORD@HAJOCACOM	
7	BABY CHANGING TABLE, HORIZONTAL, RECESSED, ADA COMPLIANT, STAINLESS STEEL	KOALA KARE KB310-SSRE	HUGHES SUPPLY (866) 310-3576 MCDCOORD@HAJOCACOM	INSTALL PER MANUFACTURER'S RECOMMENDATIONS
7 OPTION "A"	BABY CHANGING TABLE, HORIZONTAL, SURFACE MOUNT, ADA COMPLIANT, STAINLESS STEEL	KOALA KARE KB310-SSWM	HUGHES SUPPLY (866) 310-3576 MCDCOORD@HAJOCACOM	INSTALL PER MANUFACTURER'S RECOMMENDATIONS
8	DIAPER CONTAINER (OPTIONAL)	-	BY OWNER	
9	CLOTHES HOOK	BRADLEY 917	HUGHES SUPPLY (866) 310-3576 MCDCOORD@HAJOCACOM	

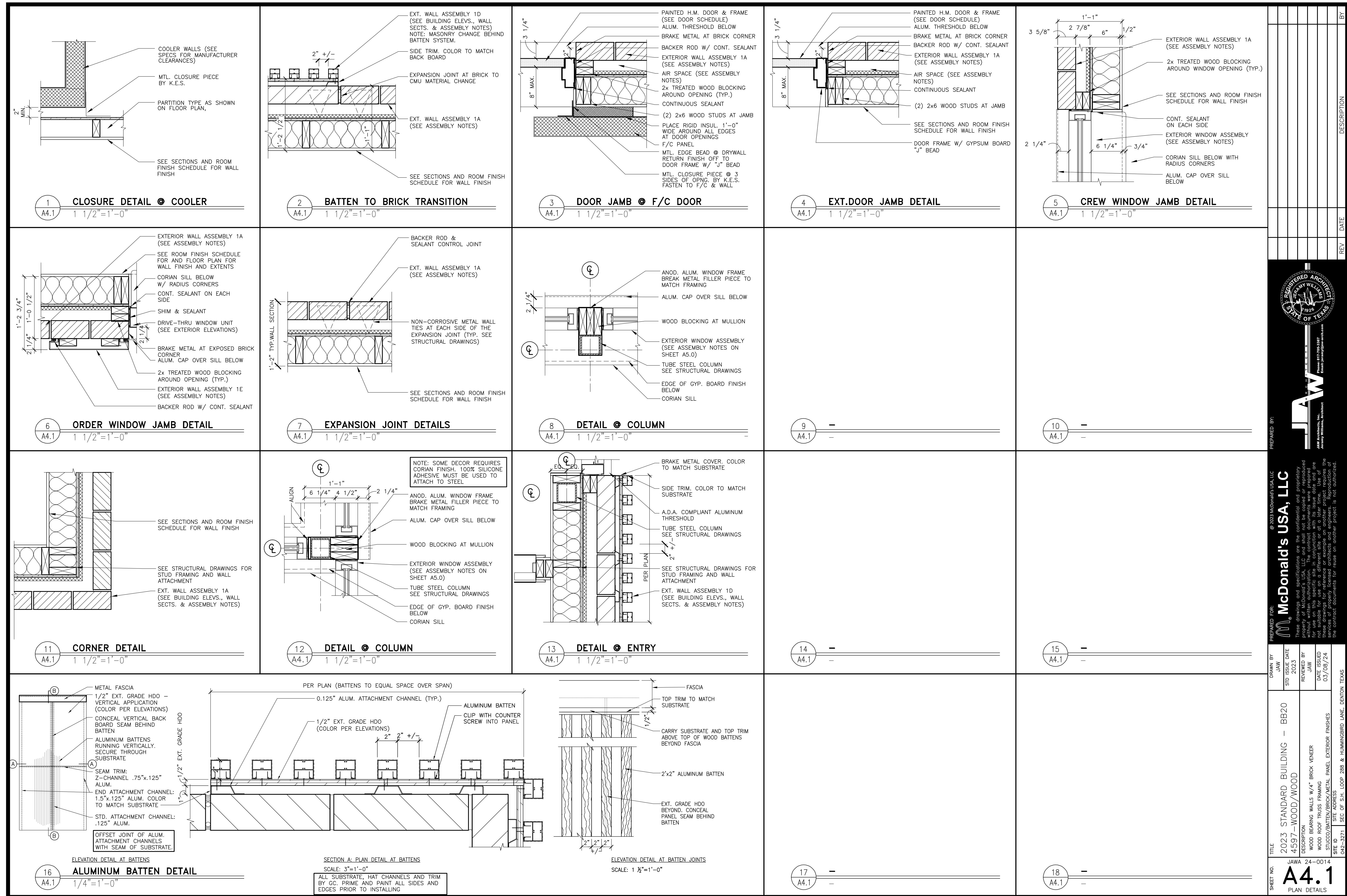
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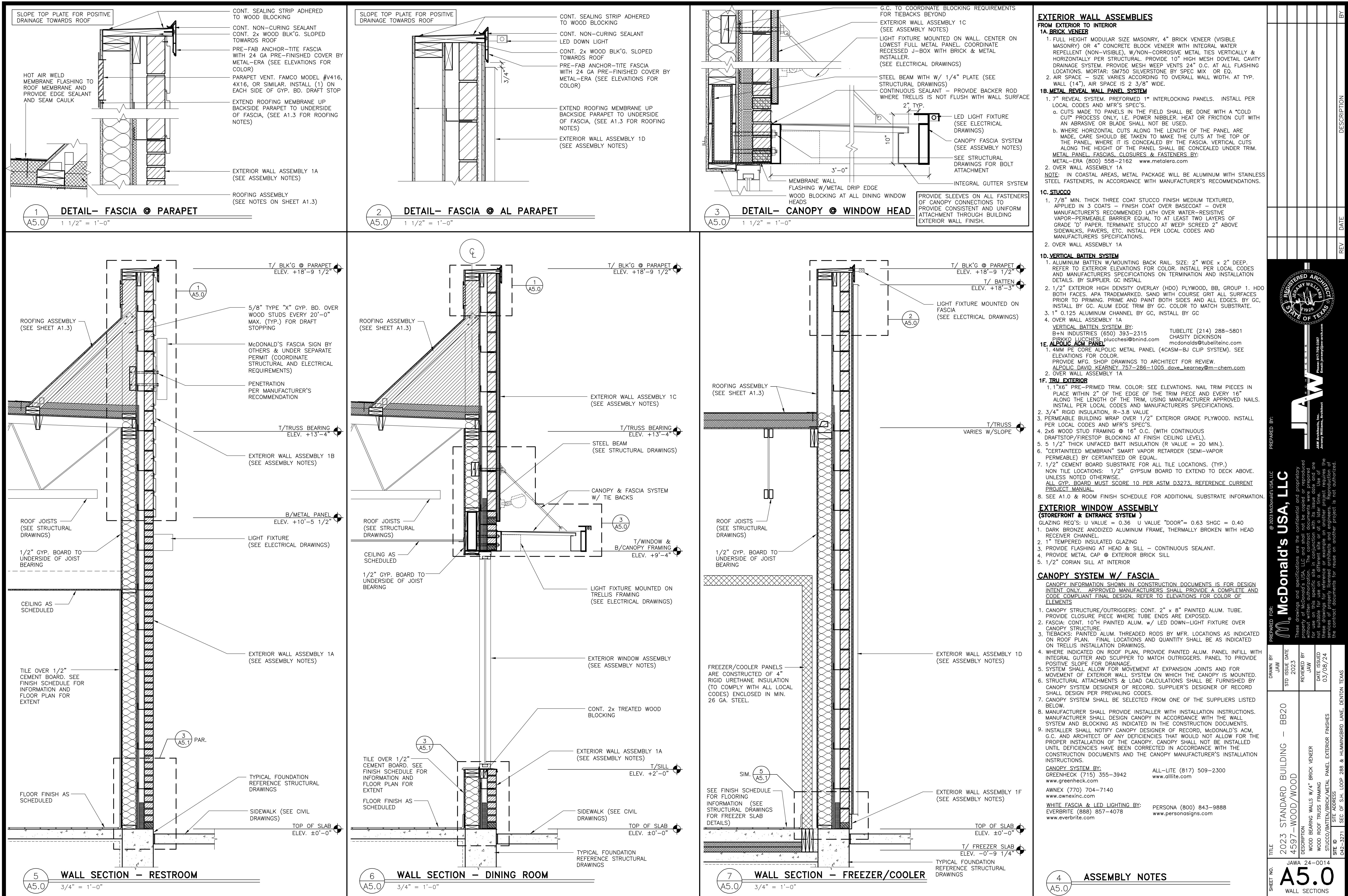
- 1) SEE 4/A4.0 FOR ACCESSORY MOUNTING HEIGHTS
- 2) SELECT ONE ITEM FROM ITEM GROUPS 4 & 6, VERIFY WITH AREA CONSTRUCTION MANAGER
- 3) CUT BACK-UP SUPPORTS BETWEEN STUDS SO FACE OF SUPPORT IS FLUSH W/WALL STUD

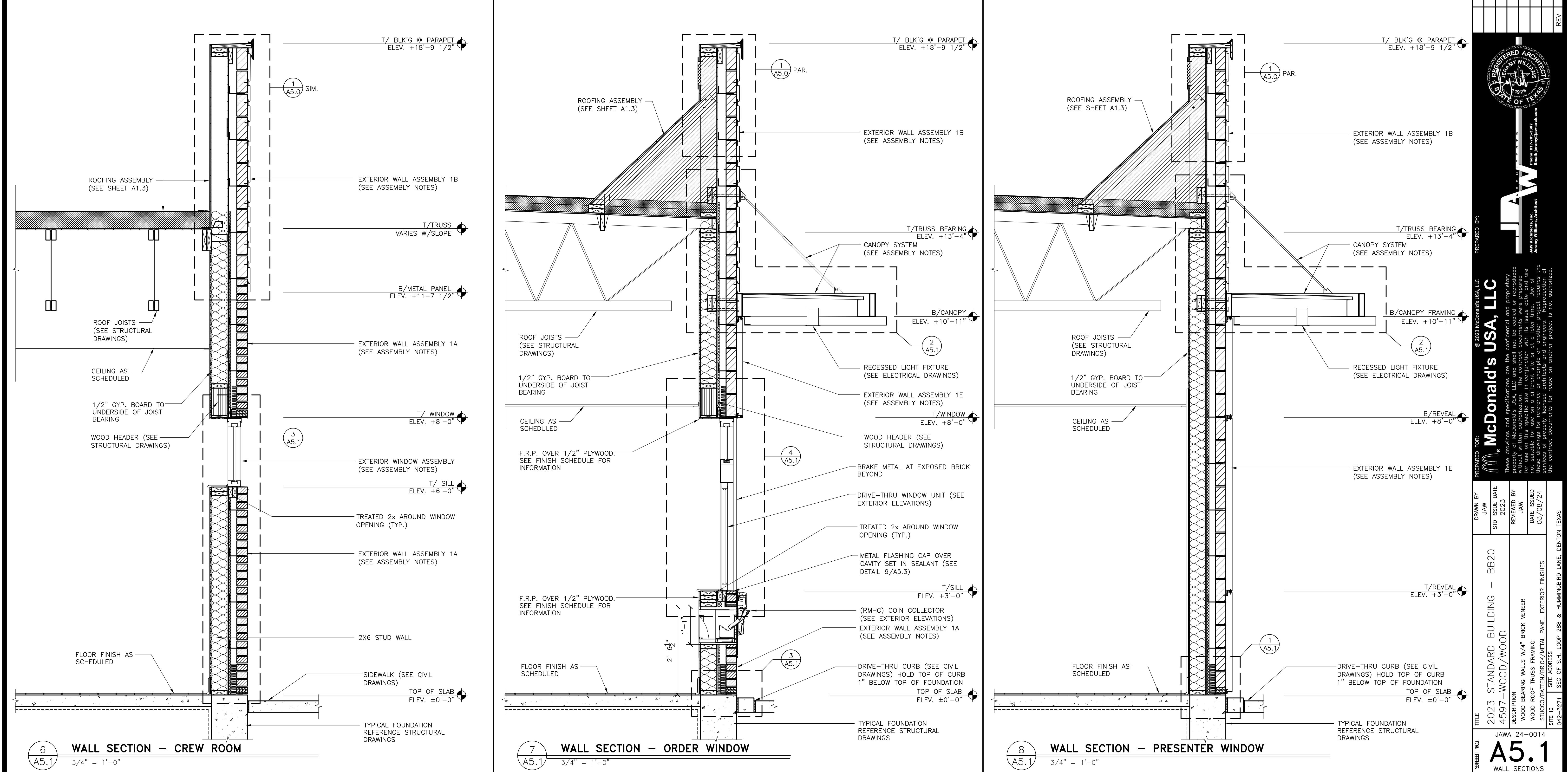
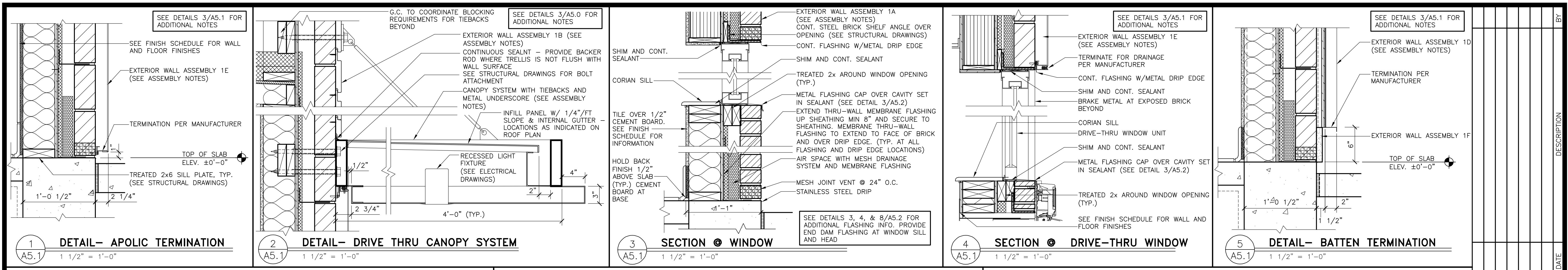
RESTROOM ACCESSORY SCHEDULE

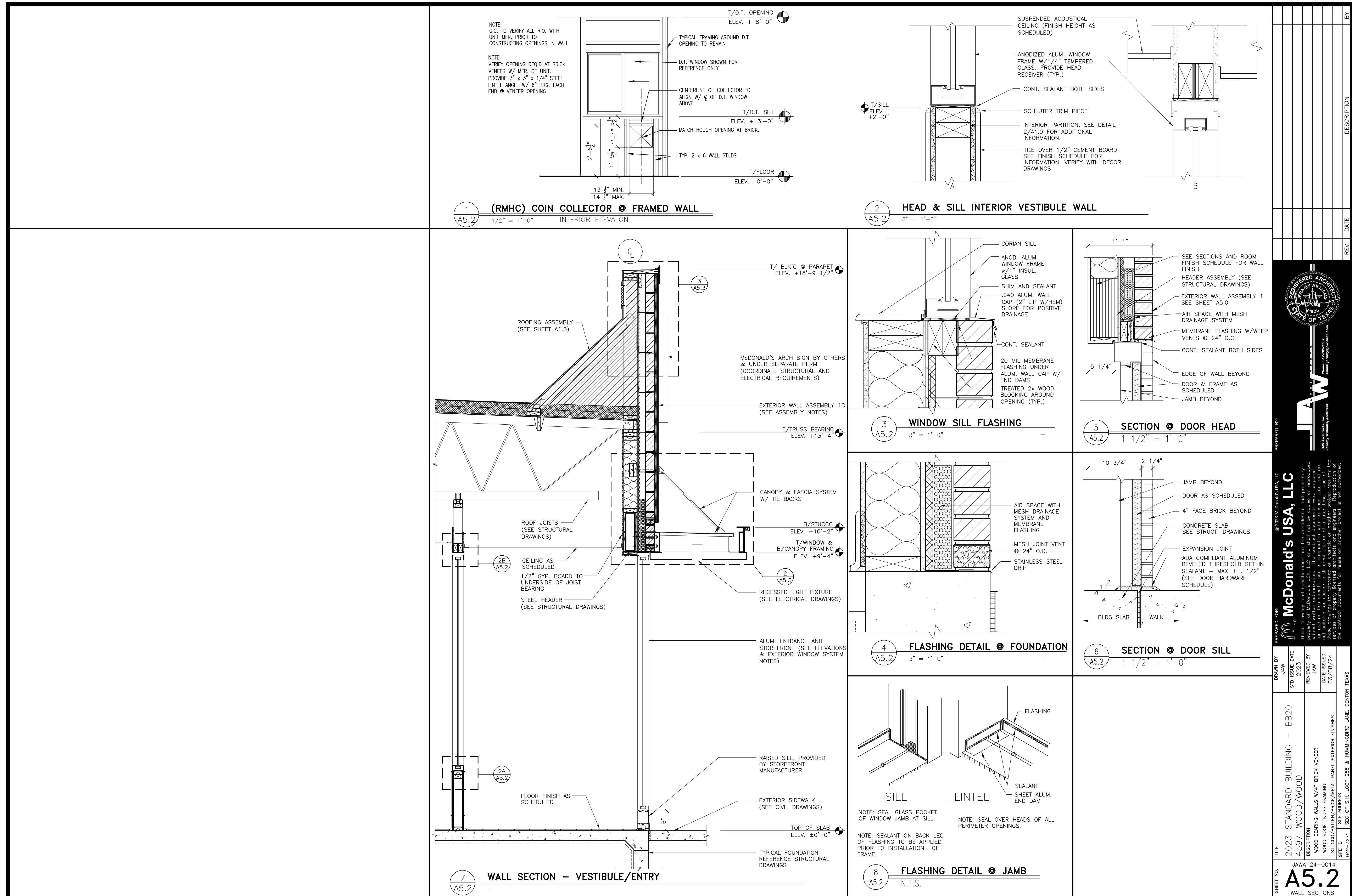


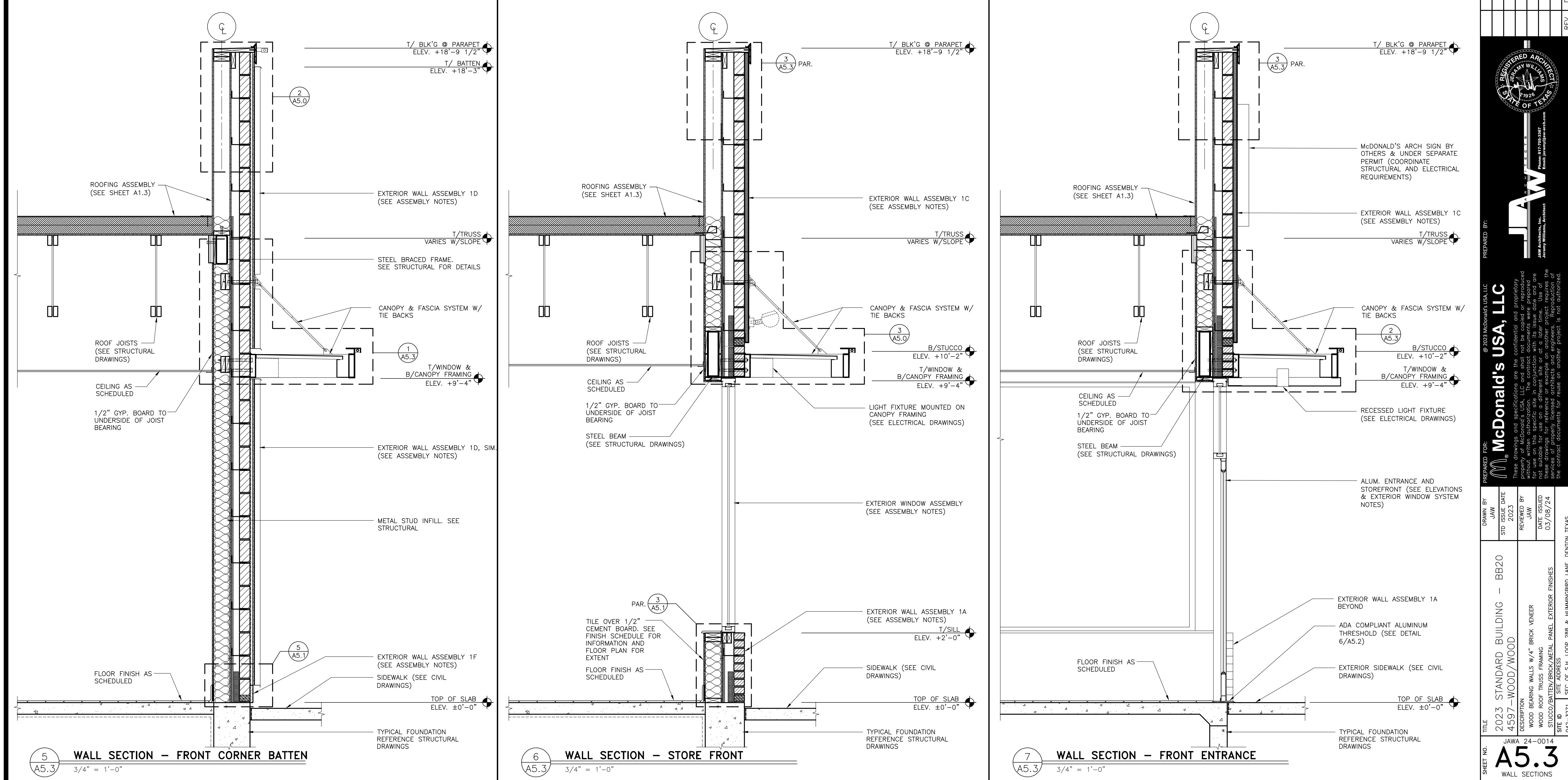
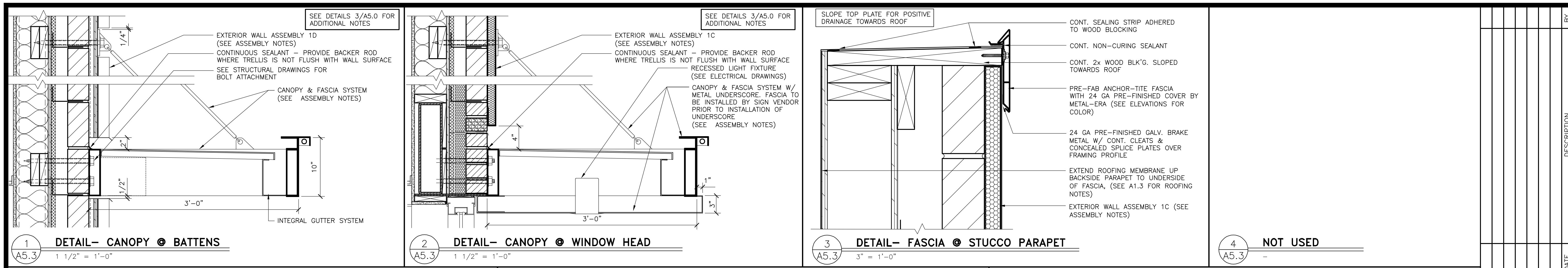
2023 STANDARD BUILDING — BB20		STD ISSUE DATE 2023	JAW
4597-WOOD/WOOD		REVIEWED BY JAW	DATE ISSUED 03/08/24
DESCRIPTION		WOOD BEARING WALLS W/4" BRICK VENEER WOOD ROOF TRUSS FRAMING STUCCO/BATTEN/BRICK/METAL PANEL EXTERIOR FINISHES	
SITE ID 042-3271	SITE ADDRESS JAWA 24-0014	SEC OF S.H. LOOP 288 & HUMMINGBIRD LANE, DENTON TEXAS	

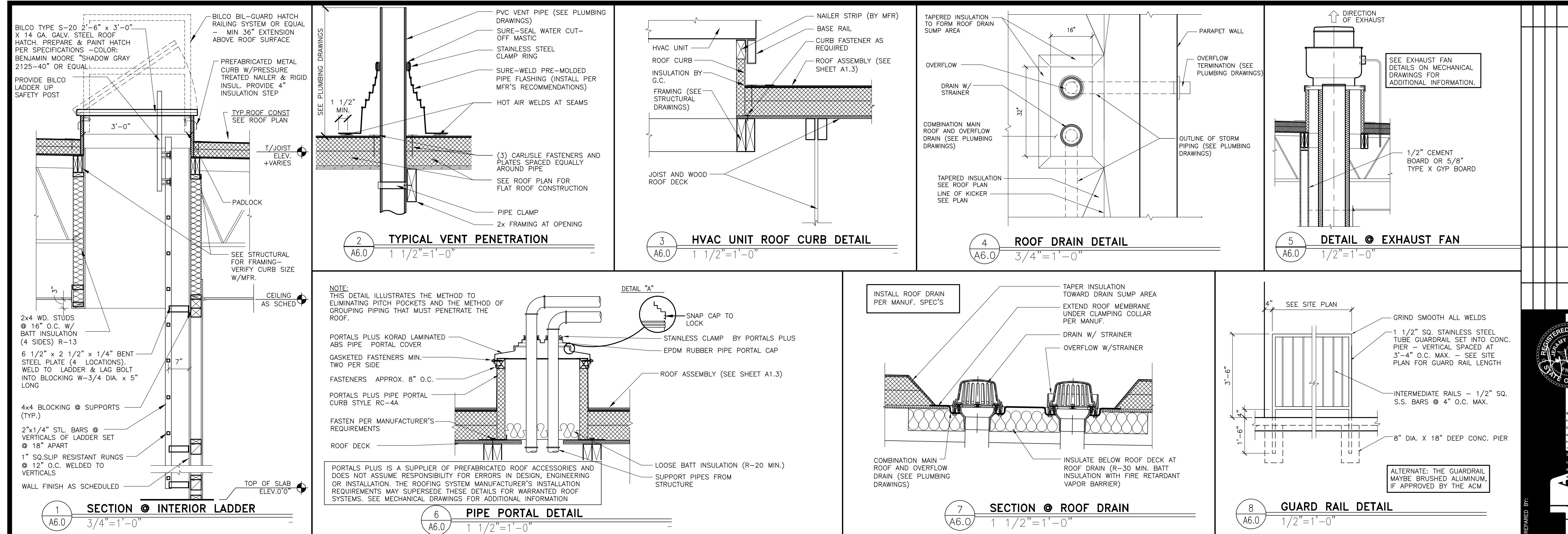












DOOR HARDWARE

GENERAL NOTES:

1. ALL EXIT DOORS SHALL BE KEYLESS IN THE DIRECTION OF EGRESS.
2. THE OPENING FORCE OF ALL EXT. PUSH/PULL DOORS SHALL NOT EXCEED 8 1/2 LBS.
3. THE OPENING FORCE OF ALL INTERIOR PUSH/PULL DOORS SHALL NOT EXCEED 5 LBS.
4. PROVIDE PANIC HARDWARE FOR ALL EXTERIOR DOORS AS NOTED ON THE DOOR SCHEDULE.
5. ALL DOOR HARDWARE SHALL NOT REQUIRE TIGHT GRASPING, TIGHT PINCHING OR TWISTING OF THE WRIST TO OPERATE.

DOOR #1 & #1A – ENTRY DOOR/EMERGENCY EXIT

1. 1 EA CLOSER LCN 4021 x 18
2. 3 EA HINGES OFFSET PIVOT ANSI -A-156.4 GRADE 1; PROVIDE EXPOSED PARTS OF CAST ALUMINUM ALLOY, AS SUPPLIED BY DOOR MANUFACTURER.
3. 1 EA (DOOR #1 ONLY) PULL HANDLE ROCKWOOD MFG. MODEL: RM3311. SIZE: 1-1/4" DIA. CTC: 5'- FINISH: TO MATCH STOREFRONT DOOR. OFFSET MOUNTING: TYPE 1XHD – THRU BOLT HEAVY DUTY
4. 1 EA (DOOR #1A ONLY) PANIC HARDWARE ADAMS RITE MFG. CO. 8800 SERIES WITH OUTSIDE CYLINDER (FINISH TO MATCH STOREFRONT DOOR)
5. 1 EA THRESHOLD NATIONAL GUARD PRODUCTS, INC. SADDLE TYPE THRESHOLD 325, 36" WIDE x 1/2" RISE (ADA ACCESSIBLE).
6. 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.
7. 1 EA SIGN MOUNT ONTO DOOR, TO READ "THIS DOOR MUST REMAIN UNLOCKED WHENEVER THE BUILDING IS OCCUPIED/DURING BUSINESS HOURS."

DOOR #2 & #2A – VESTIBULE

1. 1 EA CLOSER LCN 4041 x 18
2. 3 EA HINGES OFFSET PIVOT ANSI -A-156.4 GRADE 1; BY DOOR MANUFACTURER.
3. 1 EA PUSH/PULL HANDLE HAGER PUSH/PULL SET 164D/V/B.
4. 1 EA (DOOR #2A) PANIC HARDWARE ADAMS RITE MFG. CO. 8800 SERIES WITH OUTSIDE CYLINDER (FINISH TO MATCH STOREFRONT DOOR)

DOOR #3 – STORAGE DELIVERY

1. 1 EA HINGE 780-112HD 83" ALUM HAGER
2. 1 EA CLOSER 4111 H-CUSH ALUM LCN
3. 1 EA PANIC 9975EO-LD 48" SP28 V.DUPRIN
4. 1 EA TRIM 990DT US26D V.DUPRIN
5. 1 EA ALARM LOCK PG21MSS ALARM
6. 1 EA LOCKGUARD CLP110 US32D DON-JO
7. 1 EA TREADPLATE 24 X 46 UMCO
8. 1 EA WTH/STP160V 48 X 84 N.GUARD
9. 1 EA THRESHOLD 325HD 48" N.GUARD
10. 1 EA SWEEP 101VA 48" N.GUARD
11. 1 EA VIEW FRAME LVGLFMD 9 X 9 DKB W/FLAP ON INSIDE N.GUARD
12. 1 EA MORTISE CYL HOUSING 7PIN SFIC 626
13. 1 EA 7 PIN CONSTRUCTION CORE FOR ABOVE 626
14. 1 EA CONTROL KEY FOR ABOVE

DOOR #3A – FREEZER DELIVERY

1. 1 EA HINGE780-112HD 83" ALUM HAGER
2. 1 EA DEADBOLT B661P 626 SCHLAGE
3. 1 EA PULL H3E US28 HAGER
4. 1 EA LOCKGUARD CLP110 US32D DON-JO
5. 1 EA TREADPLATE 24 X 46 UMCO
6. 1 EA WTH/STP 160V 48 X 84 N.GUARD
7. 1 EA THRESHOLD 325HD 48" N.GUARD
8. 1 EA SWEEP 101VA 48" N.GUARD

DOOR #4 – REAR EXIT

1. 1 EA HINGE 780-112HD 83" ALUM HAGER
2. 1 EA CLOSER 4111 H-CUSH ALUM LCN
3. 1 EA PANIC 9975EO-LD 48" SP28 V.DUPRIN
4. 1 EA TRIM 990DT US26D V.DUPRIN
5. 1 EA ALARM LOCK PG21MSS ALARM
6. 1 EA LOCKGUARD CLP110 US32D DON-JO
7. 1 EA TREADPLATE 24 X 34 UMCO
8. 1 EA WTH/STP160V 36 X 84 N.GUARD
9. 1 EA THRESHOLD 325HD 48" N.GUARD
10. 1 EA SWEEP 101VA 36" N.GUARD
11. 1 EA VIEW FRAME LVGLFMD 9 X 9 DKB W/FLAP ON INSIDE N.GUARD
12. 1 EA MORTISE CYL HOUSING 7PIN SFIC 626
13. 1 EA 7 PIN CONSTRUCTION CORE FOR ABOVE 626
14. 1 EA CONTROL KEY FOR ABOVE

DOOB HARDWARE

DOOR #5 – RESTROOM ENTRY

1. 3 EA HINGE BB1279 4 1/2 X 4 1/2 US26D HAGER
2. 1 EA CLOSER LDPA4031 SNB ALUM LCN
3. 1 EA PUSH PLATE 30S 4 X 32 US32D 40" AFF MOUNTED TO CENTER OF PLATE
4. 1 EA PULL PLATE LADDER PULL HANDLE WITH DECORATIVE FIXING, 32" L 1" DIA
#S-32-1000 – UMCO 32D. 40" AFF MOUNTED CENTER OF PULL
ALT. OPTION: 1 EA PULLPLATE SANITGRASP
ALT. OPTION: 1 EA PULL-PUSH BUTTON CYLINDRICAL LOCK –
TRILOGY DL2700 US26D CHROME
5. 2 EA KICKPLATE 190S 8 X 34 US32D HAGER
6. 1 EA DOOR STOP 236W US32D HAGER
7. 1 EA FINGER GRD MKIA PUSH SIDE BRN F.SAFE
8. 1 EA FINGER GRD MKIB PULL SIDE BRN F.SAFE
9. 1 EA STEPNPULL PULL SIDE (OPTIONAL)

DOOR #6 – ADA STALL

1. 2 EA HINGE 1250 4 1/2 X 4 1/2 US26D HAGER
2. 1 EA HINGE BB1279 4 1/2 X 4 1/2 US26D HAGER
3. 1 EA DEADBOLT B571 X 10-087 214EE X 12 X 291 X 626 SCHLAGE
4. 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
5. 1 EA ROBE HOOK 917 BRADLEY
6. 1 EA DOOR STOP 236W US32D HAGER

DOOR #6A – STANDARD STALL

1. 2 EA HINGE 1250 4 1/2 X 4 1/2 US26D HAGER
2. 1 EA HINGE BB1279 4 1/2 X 4 1/2 US26D HAGER
3. 1 EA DEADBOLT B571 X 10-087 214EE X 12 X 291 X 626 SCHLAGE
4. 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
5. 1 EA ROBE HOOK 917 BRADLEY
6. 1 EA DOOR STOP 236W US32D HAGER

DOOR #7 – DINING ROOM JANITORS CLOSET

1. 3 EA HINGE BB1279 4 1/2 X 4 1/2 US26D HAGER
2. 1 EA LOCK ND80PD RHO 626 SCHLAGE

DOOR #8 – COMPUTER CLOSET (NOT USED)

1. 4 EA HINGE BB1279 4 1/2 X 4 1/2 US26D HAGER
2. 1 EA LOCK ND80PD RHO 626 SCHLAGE

DOOR #8A – COMPUTER CLOSET

1. 8 EA HINGE BB1279 4 1/2 X 4 1/2 US26D HAGER
2. 1 EA LOCK ND80PD RHO 626 SCHLAGE
3. 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:
 1. MAGNETIC PERIMETER DOOR GASKET
 2. THRESHOLD REINFORCED PLASTIC (FRP)
 3. POSI-SEAL DOOR CLOSURE
 4. STATIONARY CHROME DOOR PULL HANDLE
 5. INTRIOR SAFETY RELEASE HANDLE

- 5. INTERIOR SAFETY RELEASE HANDLE
- 6. HINGES - BRUSHED CHROME CAST ALLOY

DOOR #10

1. 1 EA HINGE 780-112HD 83" ALUM HAGER
2. 1 EA CLOSER 1461 RW/PA ALUM LCN
3. 1 EA LOCK ND80PD RHO 626 SCHLAGE
OPTIONAL - FOR OUTSWING DOOR REPLACE WITH 3A&B:
3A. 1 EA PANIC 9975EO-LD 36" SP28 V.DUPRIN
3B. 1 EA TRIM 990DT US26D V.DUPRIN
4. 1 EA ELEC STRIKE 6211 24V DC FSE US32D SCHLAGE
5. 1 EA PWR SUPPLY PS902 SCHLAGE
6. 1 EA ANNUNCIATOR BSV-24P SURFACE MOUNTED
7. 3 EA PUSH BUTTON 621-BK-DA HDP 626 SCHLAGE
8. 1 EA PUSH BUTTON 621-RD-DA HDP 626 SCHLAGE
9. 1 EA HORN WITH STROBE 1910S SCHLAGE
10. 1 EA GLASS 5 X 26 X 1/4 UMCO
11. 1 EA VIEW FRAME LFRA100 6 X 27 DKB N.GUARD
12. 1 EA GLASS 5 X 26 X 1/4 UMCO

DOOR #11 (NOT USED) PLAYPLACE RESTROOM

1. 3 EA HINGE BB1279 4 1/2 X 4 1/2 US26D HAGER
2. 1 EA CLOSER LDPA4031 SNB ALUM LCN
3. 1 EA LOCK ND40S RHO 626 SCHLAGE
4. 2 EA KICKPLATE 190S 8 X 34 US28 HAGER
5. 1 EA DOOR STOP 236W US32D HAGER
6. 2 EA TOE GUARD 202NA 36" N.GUARD
7. 1 EA FINGER GRD MKIA PUSH SIDE BRN F.SAFE
8. 1 EA FINGER GRD MKIB PULL SIDE BRN F.SAFE

DOOR #12 (EMERGENCY EXIT ONLY) (NOT USED) - PLAYPLACE EMERGENCY EXIT

1. 1 EA CLOSER: LCN 4041 x 18
2. 3 EA HINGES: OFFSET PIVOT SET. GRADE 1 CAST ALUMINUM ALLOY AS SUPPLIED BY DOOR MANUFACTURER.
3. 1 EA PANIC HARDWARE ADAMS RITE MFG. CO. 8800 SERIES (EXIT ONLY) (FINISH TO MATCH STOREFRONT DOOR)
4. 1 EA THRESHOLD NATIONAL GUARD PRODUCTS, INC. SADDLE TYPE THRESHOLD 325, 36" WIDE x 1/2" RISE (ADA ACCESSIBLE).
5. 1 EA WEATHER STRIPPING: PROVIDE COMPRESSION WEATHER STRIPPING AGAINST FIXED STOPS. AT OTHER AGAINST FIXED EDGES PROVIDE SLIDING WEATHER STRIPPING RETAINED IN 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.
6. 1 EA ALARM DETEX MODEL NO. EAX-500

DOOR #13 (NOT USED) 38111 COUNTER DOOR

1. 3 EA HINGE BB1279 4 1/2 X 4 1/2 US26D HAGER
2. 1 EA CLOSER LDPA4031 SNB ALUM LCN
3. 1 EA LOCK ND80PD RHO 626 SCHLAGE
4. 1 EA VIEW FRAME LFRA100 8 X 34 DKB N.GUARD
5. 1 EA GLASS 7 X 33 X 1/4 UMCO

DOOR #14 (NOT USED) MANAGERS OFFICE

1. 3 EA HINGE BB1279 4 1/2 X 4 1/2 US26D HAGER
2. 1 EA LOCK ND53BD RHO 626 FINISH SCHLAGE
3. 1 EA VIEW FRAME LFRA100 24 X 30 DKB N.GUARD
4. 1 EA GLASS 23 X 29 X 1/4 CLEAR UMCO
5. 1 EA 7 PIN CONSTRUCTION CORE 626
6. 1 EA CONTROL KEY FOR ABOVE

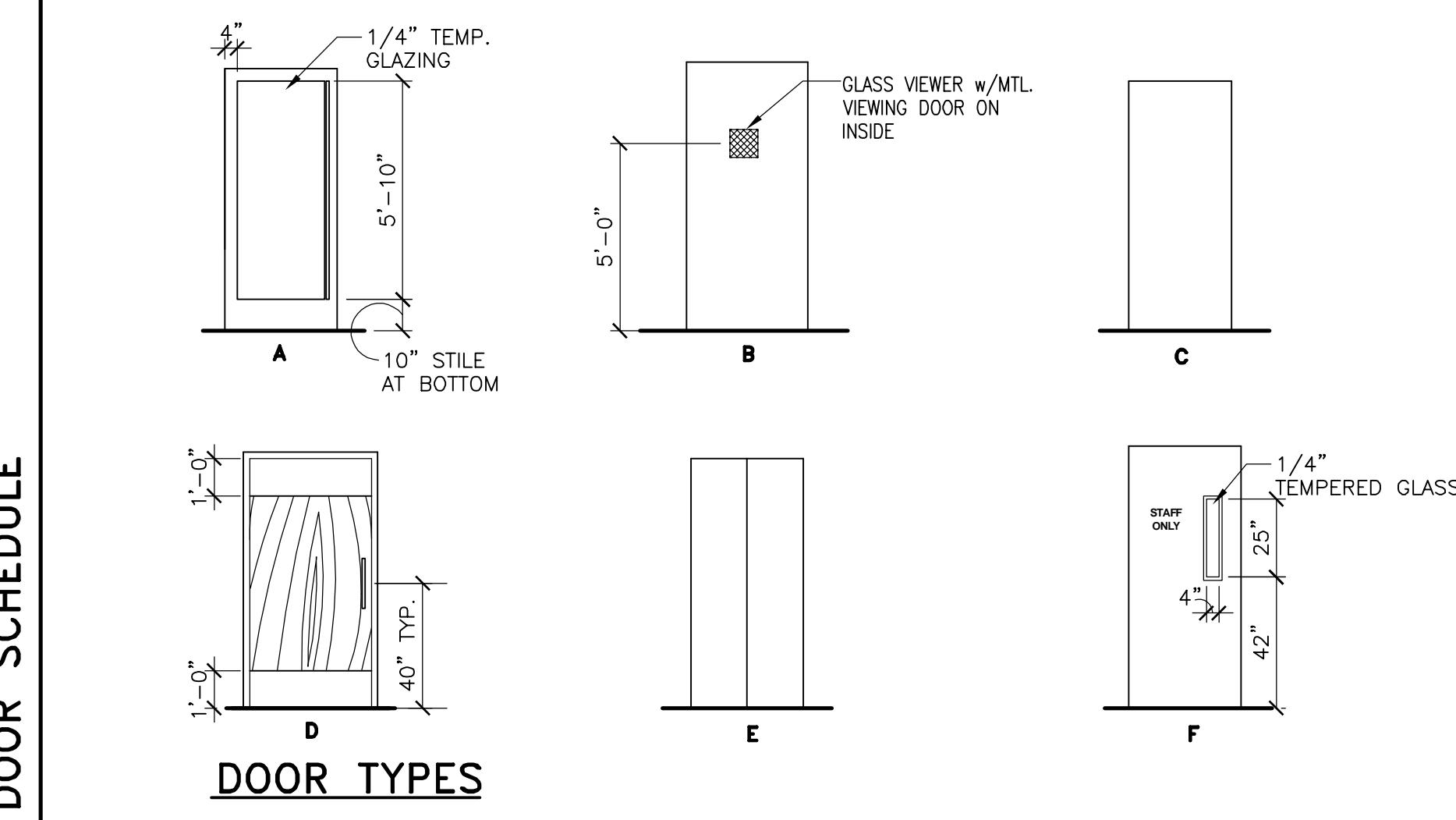
DOOR #15 CO2

1. 1 EA HINGE 780-112HD 83" ALUM HAGER
2. 1 EA LOCK ND80PD RHO 626 SCHLAGE

2. 1 EA LOCK ND80PD RHO 626 SCHLAGE
3. 1 EA LOCK GUARD CLP110 US32D DON JO
4. 1 EA WTH/STP 160V 36 X 84 N.GUARD
5. 1 EA THRESHOLD 425E 36" N.GUARD
6. 1 EA SWEEP 101VA 36" N.GUARD
7. 1 EA SEC. LOUVER LVRSG-3 DKB 18 X 18 N.GUARD

DOOR #16 (NOT USED) CREW ROOM

1. 3 EA HINGE BB1279 4 1/2 X 4 1/2 US26D HAGER
2. 1 EA LOCK ND10S RHO 626 SCHLAGE
3. 1 EA VIEW FRAME LERA100 24 X 30 DKB N.GUARD

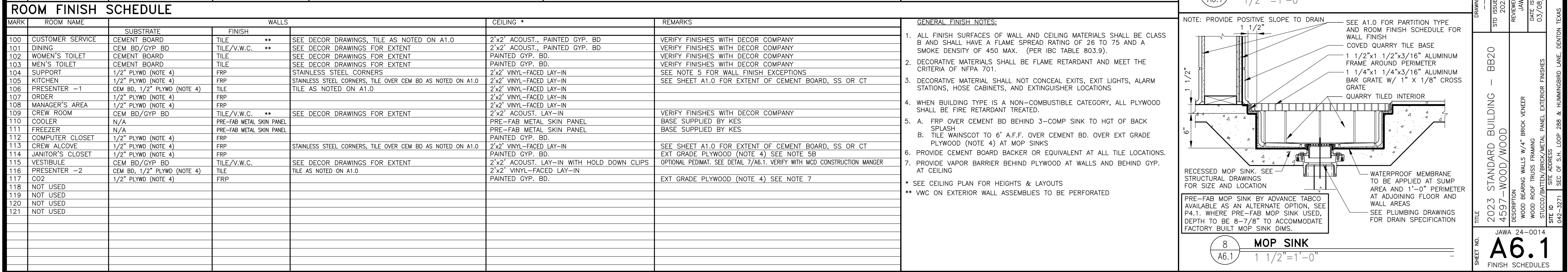
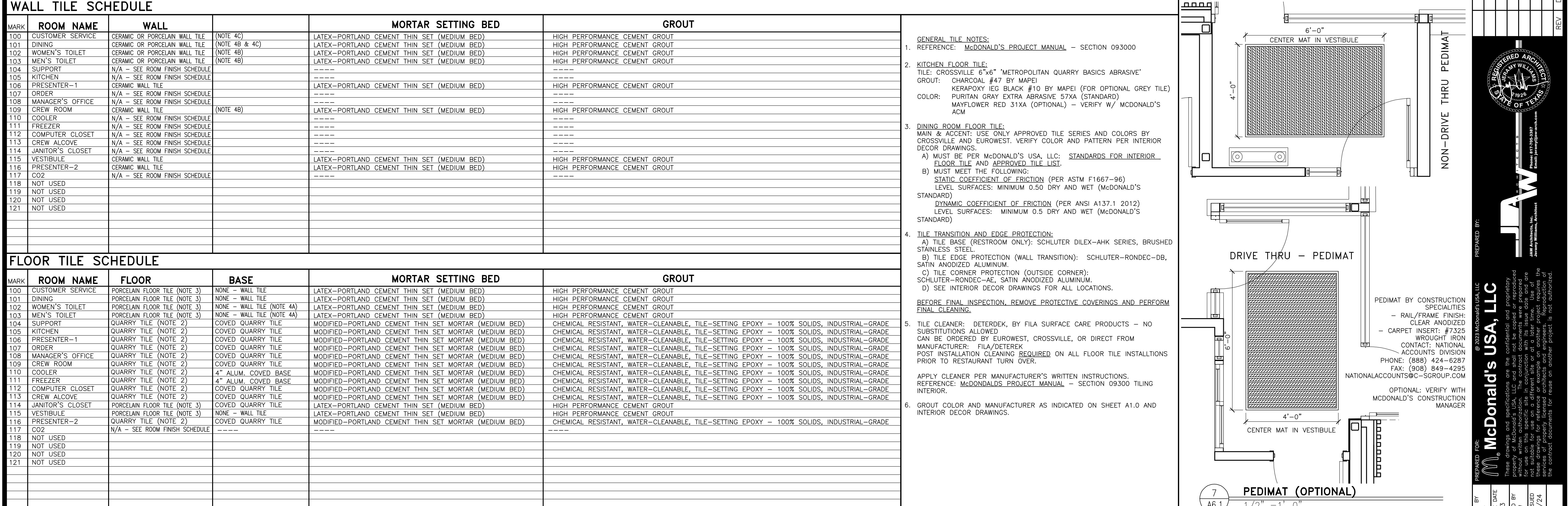
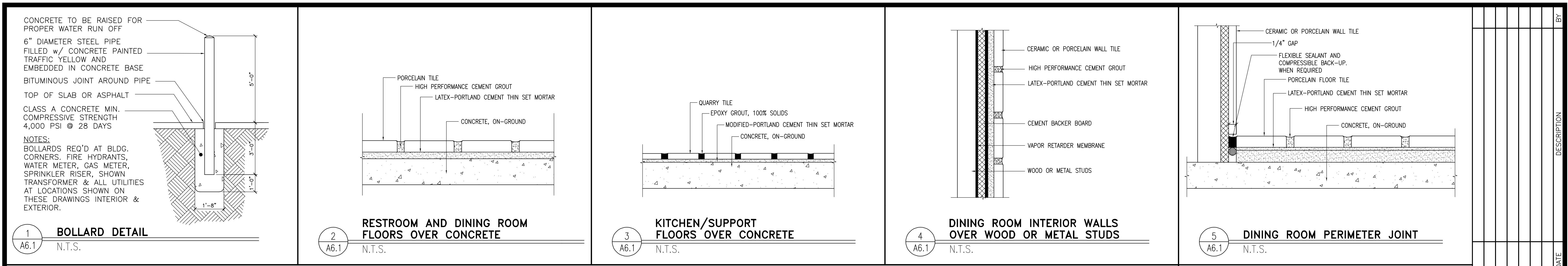


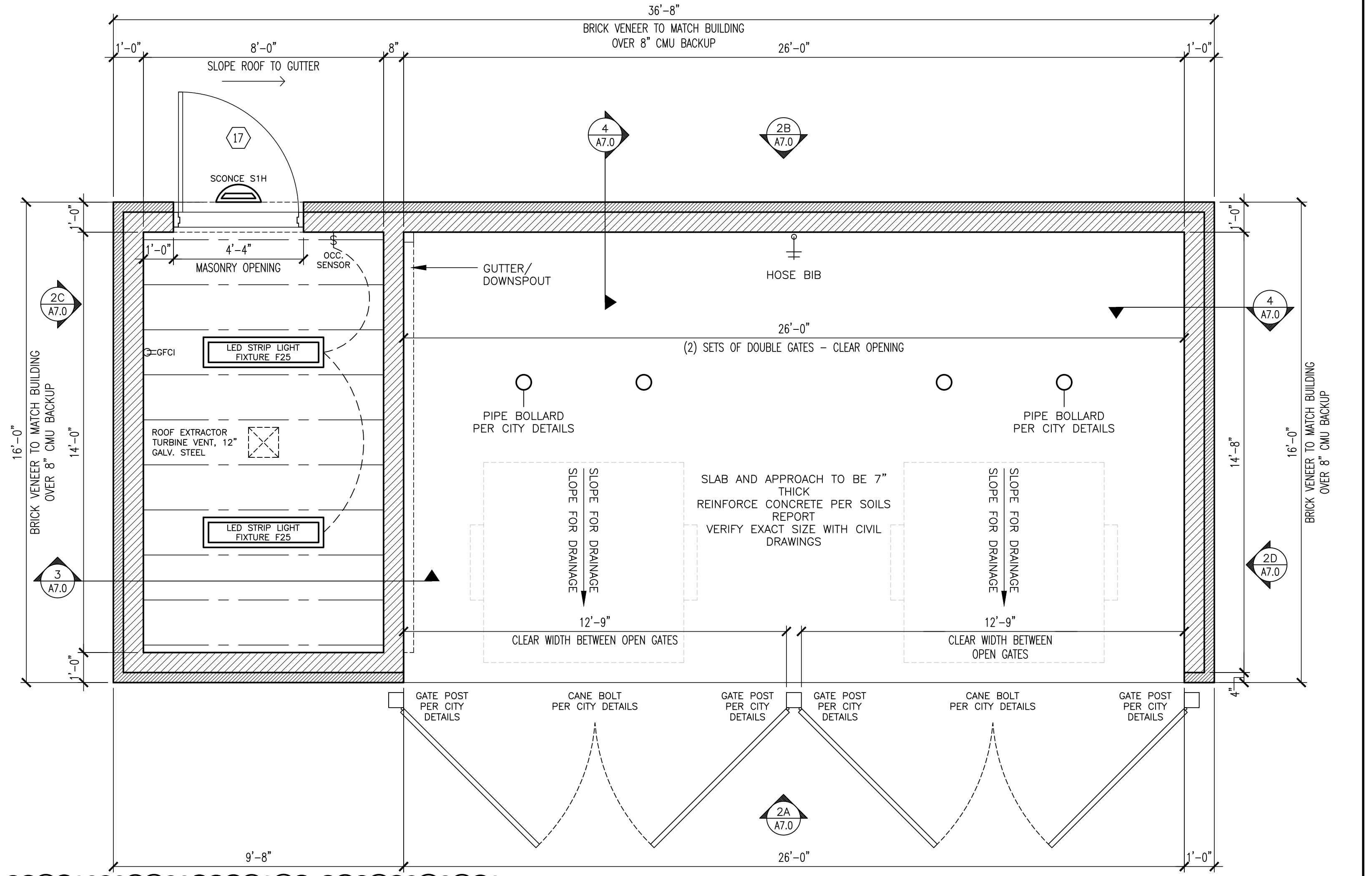
GENERAL DOOR NOTES:

- 1. GC TO INSTALL ACCESSIBILITY DOOR SIGNS WHERE REQ'D BY LOCAL CODES – SEE GENERAL NOTE 6, SHEET A1.0.
- 2. DETEX ALARM CONTACT SWITCHES SHALL BE RECESSED INTO THE TOP OF THE DOOR & HOLLOW METAL FRAME ABOVE.
- 3. DOORS, DOOR FRAMES, & HARDWARE FOR DOORS 3, 3A, 4, 5, 6, 6A, 7, 8, 8A, 10, 11, 12, 14, 15, 16 SUPPLIED BY: UNIVERSAL MANUFACTURING 1-800-821-1414.
- 4. DOOR 9 SUPPLIED BY FREEZER/COOLER MANUFACTURER
- 5. SEE ELEVATIONS AND WALL SECTIONS
- 6. ALL INTERIOR SOLID CORE WOOD DOORS TO HAVE A LAMINATED FINISH, AS INDICATED PER DECOR DWGS
- 7. DOOR 8 & 8A – 1" UNDERCUT FOR MAKE UP AIR.
LAMINATED FINISH – "WILSONART DOVE GREY" D92-60
- 8. DOOR 3, 3A, 4 & 15 TO HAVE MAXIMUM U VALUE = 0.61

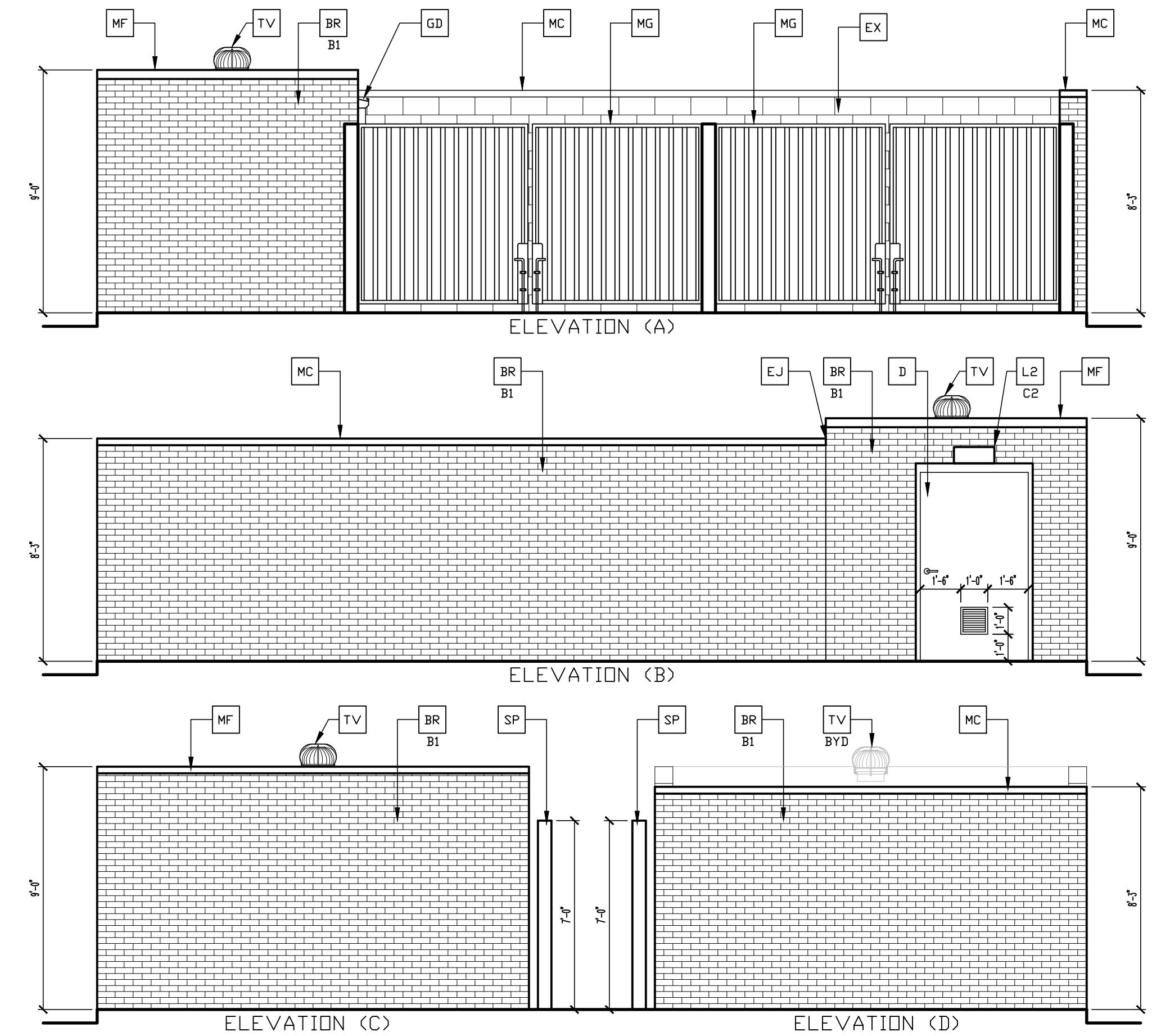
 McDonald's USA, LLC

2023 STANDARD BUILDING - BB20		STD ISSUE DATE 2023	REVIEWED BY JAW
4597-WOOD/WOOD		DATE ISSUED 03/08/24	
DESCRIPTION			
WOOD BEARING WALLS W/4" BRICK VENEER			
WOOD ROOF TRUSS FRAMING			
STUCCO/BATTEN/BRICK/METAL PANEL EXTERIOR FINISHES			
SITE ID	SITE ADDRESS		
042-3271	SEC OF S.H. LOOP 288 & HUMMINGBIRD LANE, DENTON TEXAS		
JAWA 24-0014			

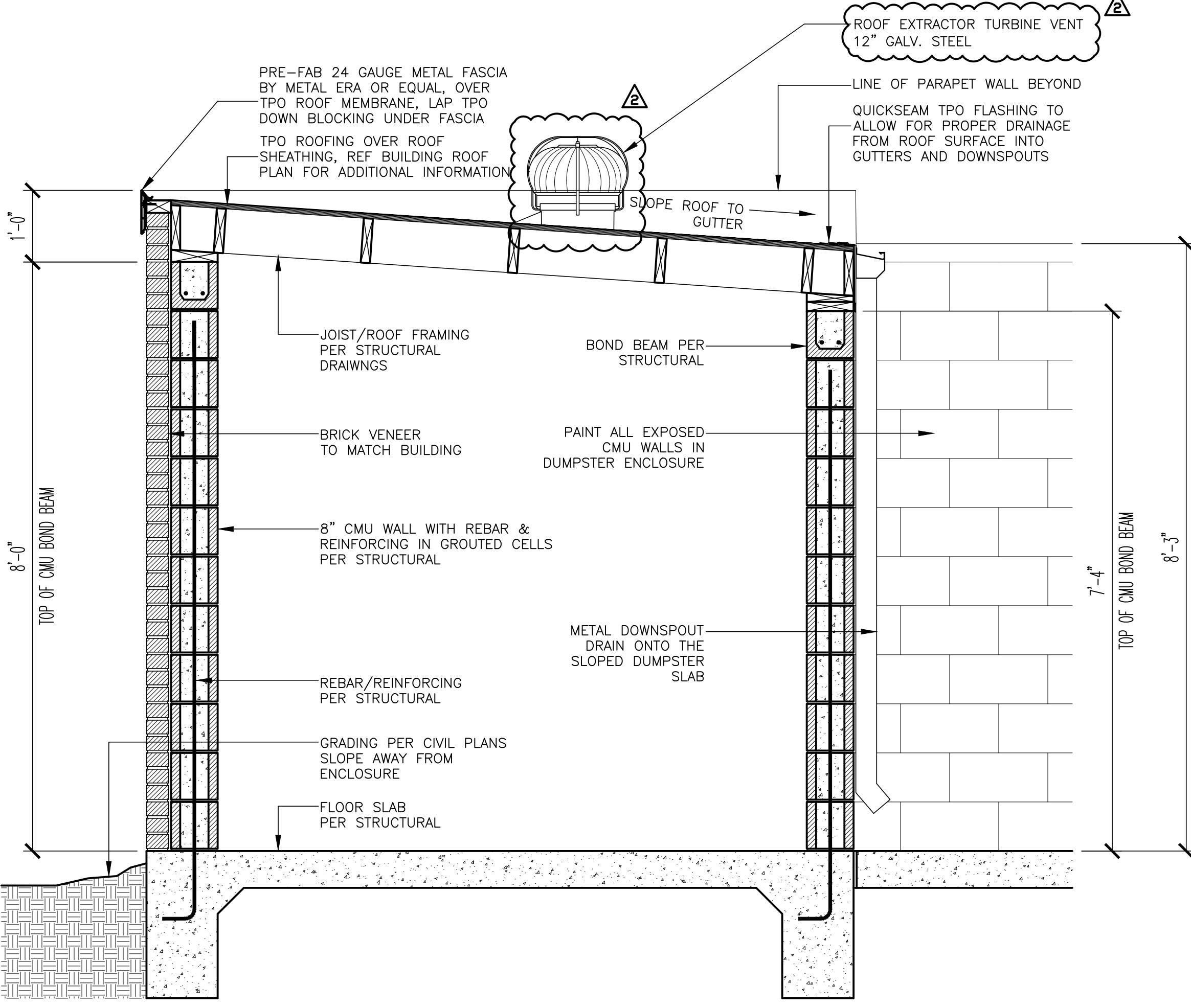




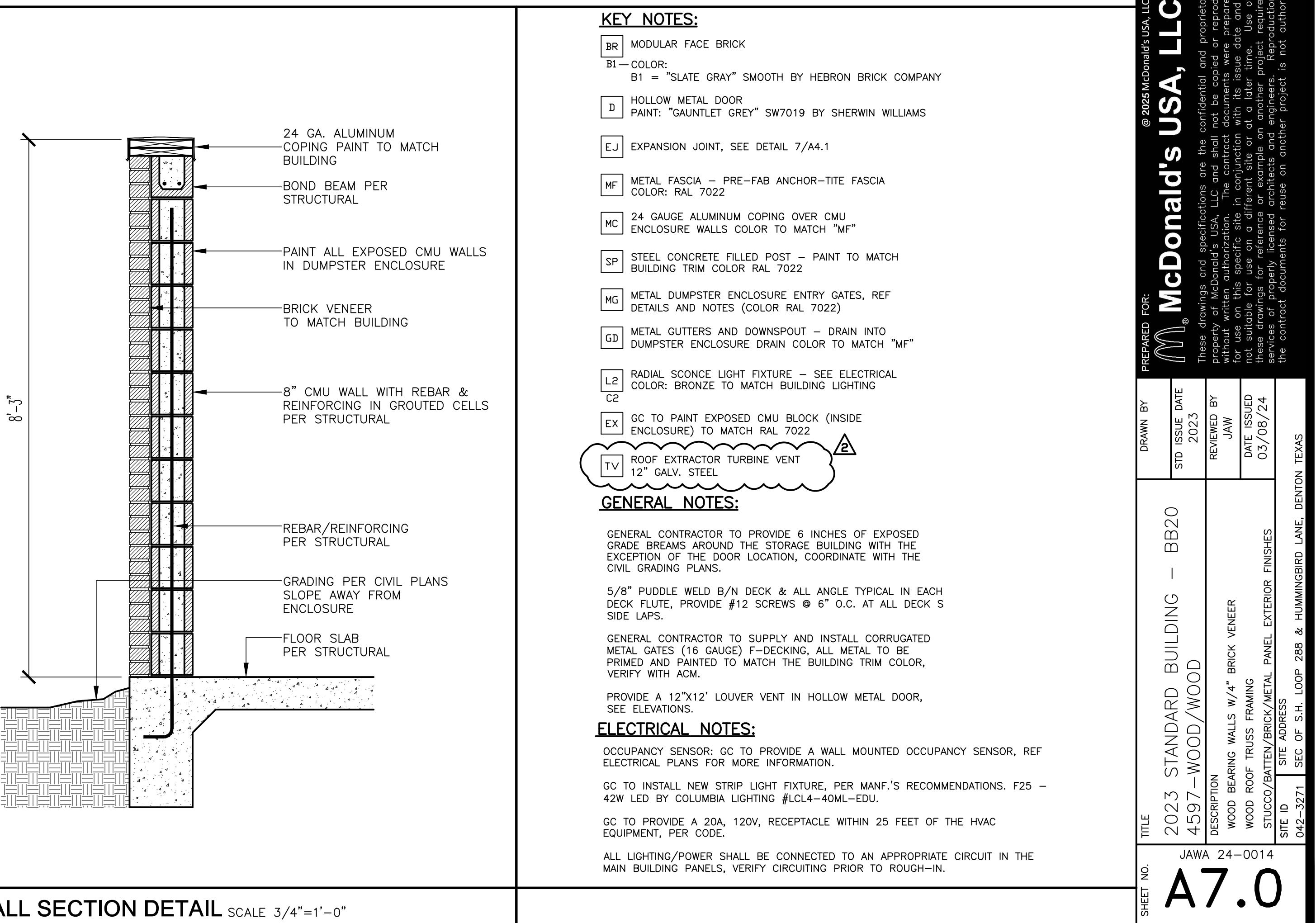
1 | DUMPSTER ENCLOSURE PLAN SCALE 3/8"=1'-0"



2 | DUMPSTER ELEVATIONS SCALE 1/4"=1'-0"



3 | WALL SECTION DETAIL SCALE 3/4"=1'-0"



4 | WALL SECTION DETAIL SCALE 3/4"=1'-0"

PREPARED BY:

JAW

J.W. Williams, Architect

Phone: 817-705-3387

Email: jwilliams@jaws.com

McDonald's USA, LLC

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RECORDED IN THE OFFICE OF THE CLERK OF TARRANT COUNTY, TEXAS

ON THIS 25TH DAY OF JUNE, 2025

AT 10:00 AM

BY

J.W. WILLIAMS

REGISTERED ARCHITECT

TARRANT COUNTY TEXAS

EXPIRES 06/25/2026

RECORDED IN THE OFFICE OF THE CLERK OF TARRANT COUNTY, TEXAS

ON THIS 25TH DAY OF JUNE, 2025

AT 10:00 AM

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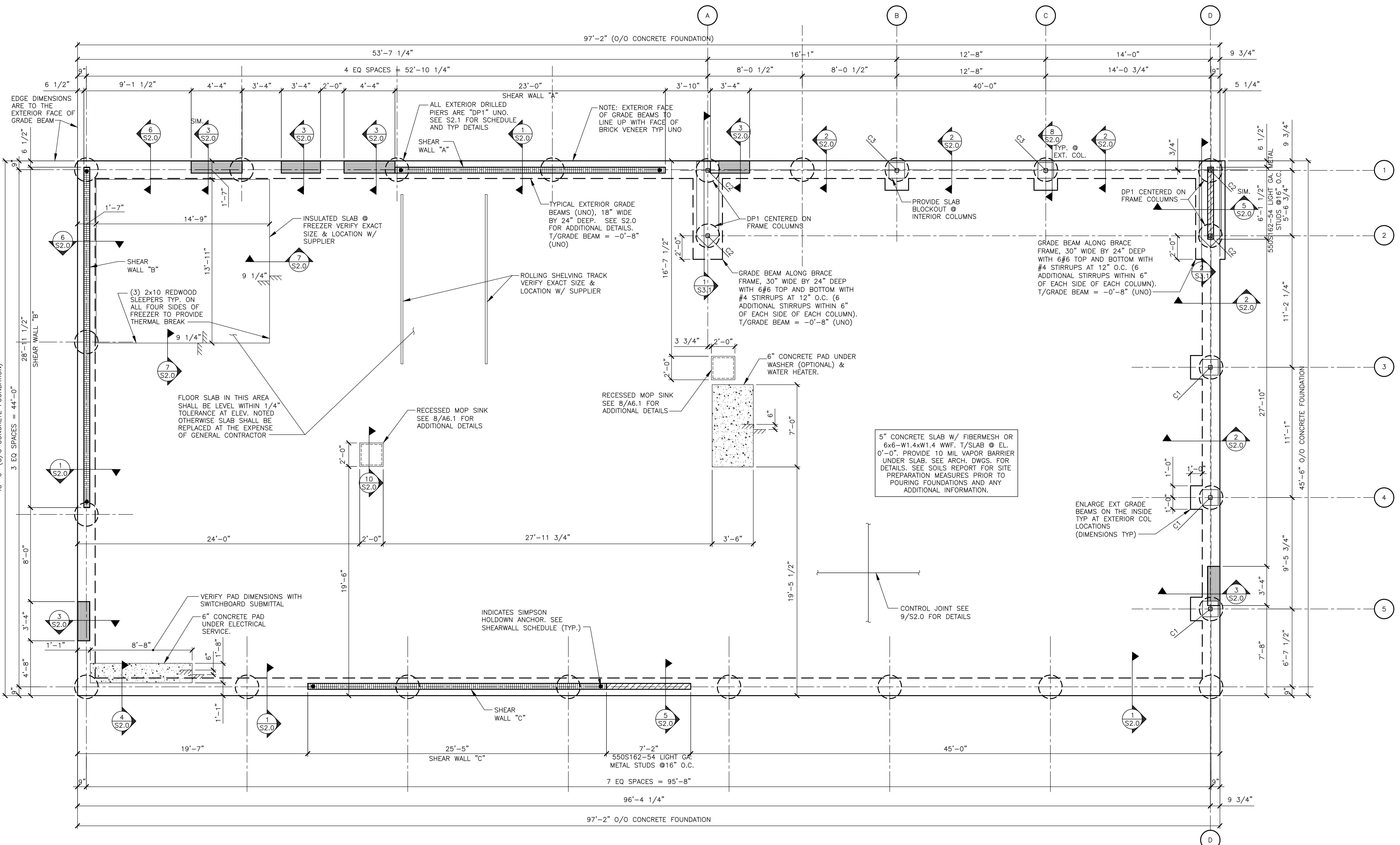
TARRANT COUNTY TEXAS

EXPIRES 06/25/2026

BY

J.W. WILLIAMS

REGISTERED ARCHITECT



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

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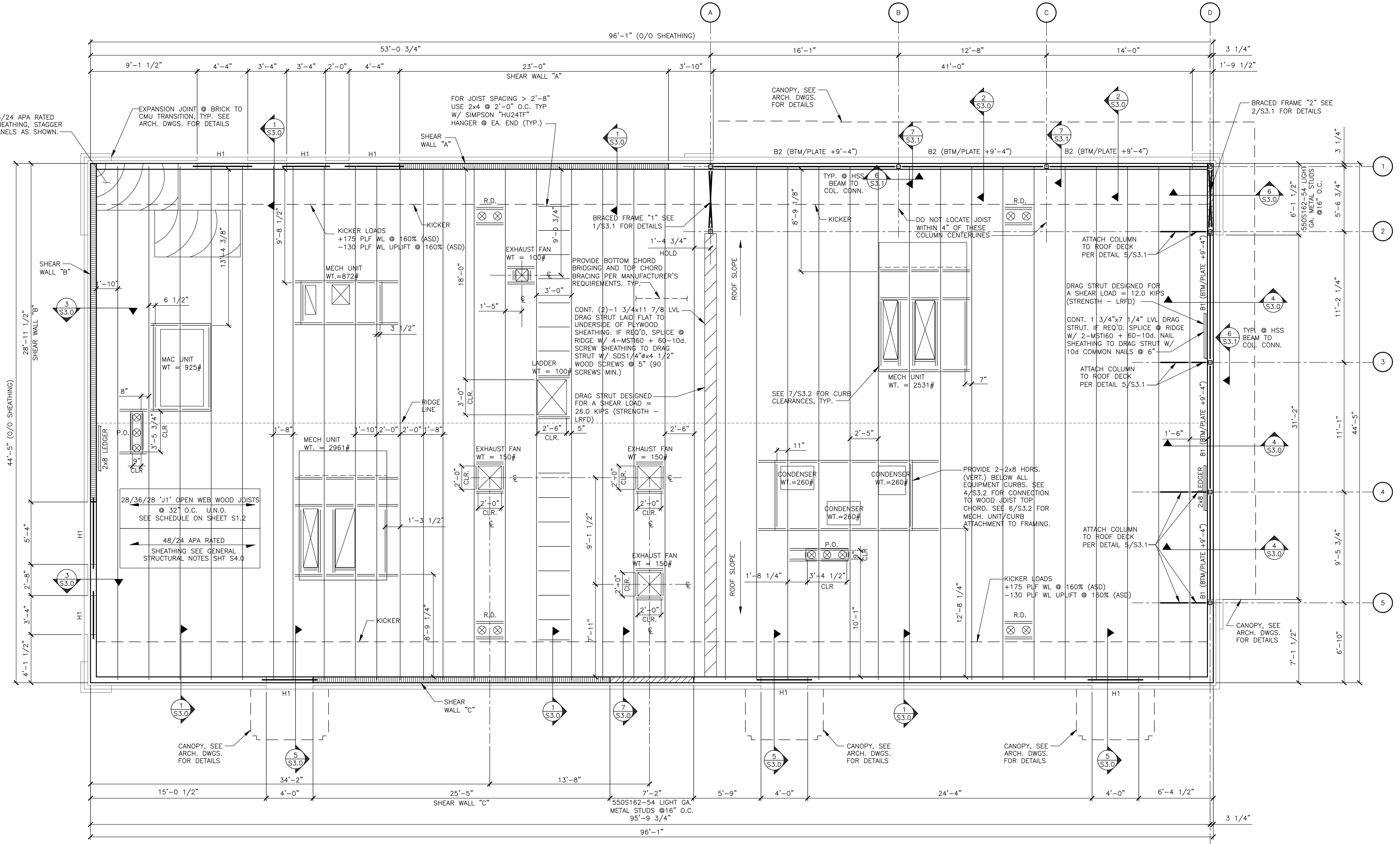


Signed/Sealed:
03/06/2024

REV	DATE	DESCRIPTION

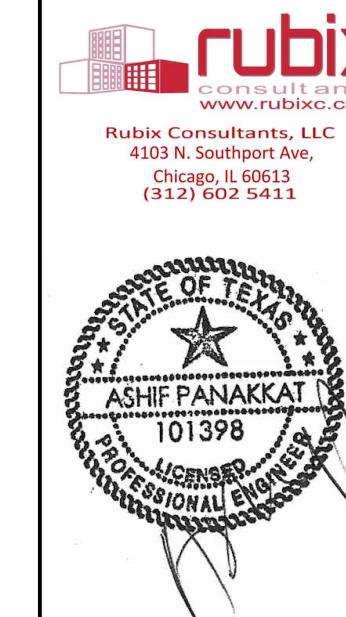
SHEET NO.	TITLE	DRAWN BY	REVIEWED BY	APPROVED BY
1	2023 STANDARD BUILDING - BB20	MKP		
	STD ISSUE DATE	2023		
	STUDS			
	WOOD BEARING WALLS W/4" BRICK VENEER			
	STUCCO/BATEN/BRICK/METAL PANEL EXTERIOR FINISHES			
	STUDS			
	WOOD ROOF TRUSSES			
	HUMMINGBIRD LANE, DENTON TEXAS			
	SEC OF S.H. LOOP 288 & HUMMINGBIRD LANE			

JAWA 24-0014
S1.0
FOUNDATION PLAN



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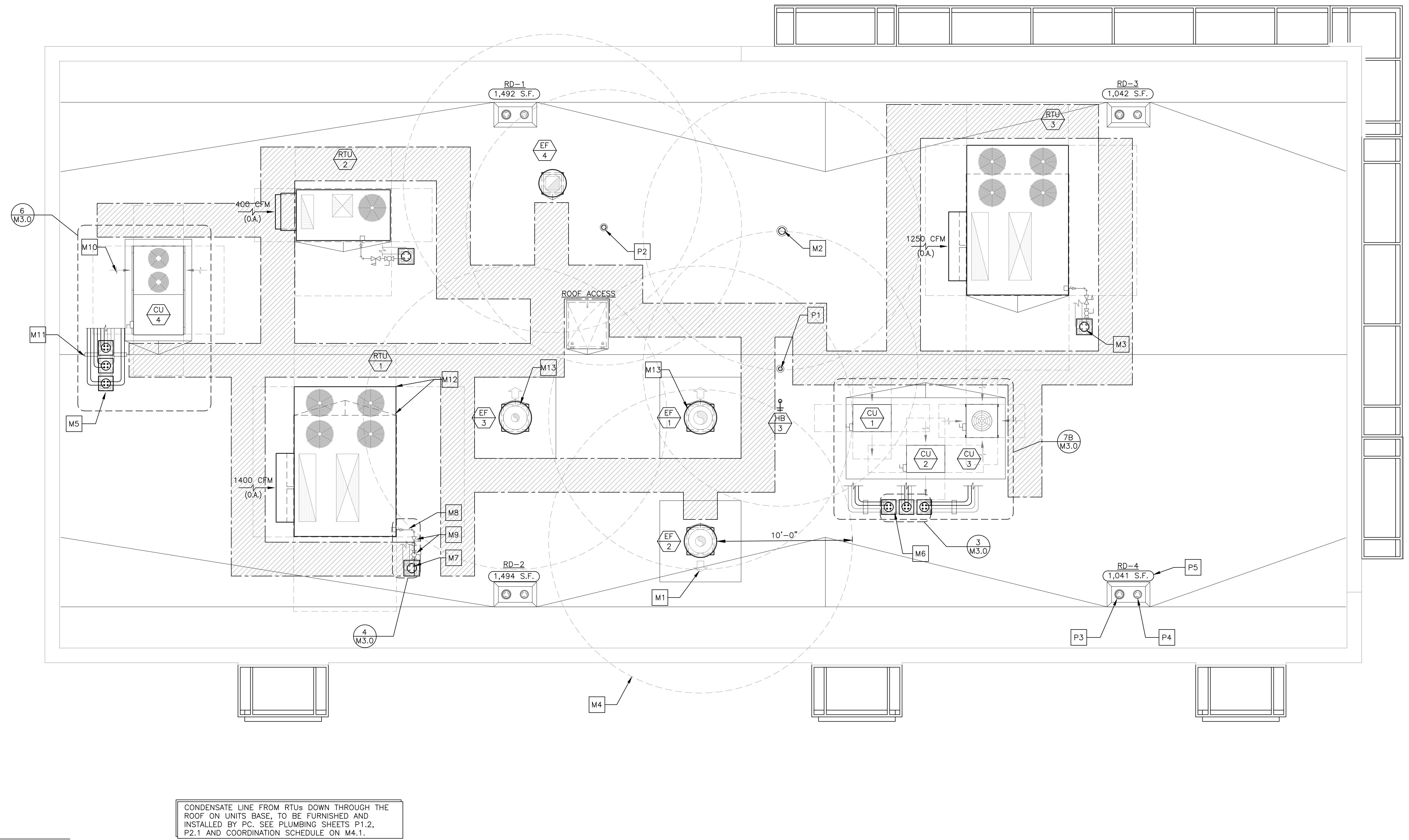
Signed/Sealed:
03/08/2024

JAWA 24-0014

SHEET NO.	TITLE
4597-WOOD/WOOD	2023 STANDARD BUILDING - BB20
DESCRIPTION	WOOD BEARING WALLS W/4" BRICK VENEER
SITE ID	SEC OF S.H. LOOP 288 & HUMMINGBIRD LANE, DENTON TEXAS
DRAWN BY	MKP
STD ISSUE DATE	2023
REVISED BY	AP
DATE ISSUED	03/08/24

S1.2
FRAMING PLAN

STRUCTURAL GENERAL NOTES:		
DESIGN AND LOADING	<p>1. THE STRUCTURAL DESIGN OF THIS BUILDING WAS BASED ON THE DESIGN CRITERIA: A. BUILDING CODE: 2021 INTERNATIONAL BUILDING CODE B. FLOOR: LIVE LOAD: 115 PSF C. ROOF: LIVE LOAD: 20 PSF DEAD LOAD: 20 PSF D. SNOW: GROUND LOAD: 5 PSF FLAT ROOF LOAD: 5 PSF SNOW EXPOSURE FACTOR, CE: 1.0 IMPORTANCE FACTOR, I: 1.0 THERMAL COEFFICIENT, CT: 1.0 E. WIND: BASIC WIND SPEED: 105 MPH (3 SEC GUST) IMPORTANCE FACTOR: 1.00 BUILDING OCCUPANCY CATEGORY: II WIND EXPOSURE: C PRESSURES PER ASCE 7 F. SEISMIC: OCCUPANCY CATEGORY: II IMPORTANCE FACTOR: 1.00 SITE CLASS: C SS = 0.121, SD1 = 0.057 SDS = 0.105, SD1 = 0.057 DESIGN CATEGORY: A PLYWOOD SHEAR WALLS (R = 6.5) STEEL ORDINARY CONCENTRICALLY BRACED FRAME (R = 3.25) ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE PROCEDURE G. FLOOD LOAD: N/A H. SPECIAL LOADS: N/A</p> <p>1. FOUNDATION DESIGN OF THIS BUILDING WAS BASED ON THE FOLLOWING CRITERIA: A. MINIMUM ALLOWABLE SOIL BEARING CAPACITY = 11,800 PSF (AT THE BASE OF STRAIGHT-DRILLED SHAFTS BEARING ON DARK GRAY SHALE). ALLOWABLE SKIN FRICTION IN TENSION = 1,300 PSF. B. RECOMMENDED BY TERRACON CONSULTANTS, INC IN THEIR REPORT NO. 94235335 DATED OCTOBER 16, 2023. C. ALL GRADE BEAM SHALL HAVE A MINIMUM CARDBOARD VOID FORM BELOW AS NOTED ON GEOTECHNICAL REPORT. .</p> <p>2. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT OR ENGINEER OF RECORD IMMEDIATELY IN THE EVENT THAT THE SOILS CONDITIONS ENCOUNTERED VARY FROM THOSE SHOWN ON THE BORING LOGS.</p> <p>3. ALL FOUNDATION EXCAVATIONS AND PIER PENETRATIONS IN GRAY LIMESTONE SHALL BE INSPECTED AND APPROVED BY A SOILS TESTING LABORATORY PRIOR TO PLACEMENT OF CONCRETE.</p> <p>CONCRETE AND REINFORCING</p> <p>1. ALL CONCRETE SHALL BE IN ACCORDANCE WITH THE "AMERICAN CONCRETE INSTITUTE BUILDING CODE" (ACI 318) AND WITH "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS" (ACI 301) LATEST EDITIONS.</p> <p>2. ALL NORMAL WEIGHT CONCRETE (145 PCF) SHALL OBTAIN A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI (3500 PSI FOR SLABS).</p> <p>3. ALL CONCRETE SUBJECT TO EXTERIOR EXPOSURE SHALL BE AIR ENTRAINED AS RECOMMENDED BY ACI 318.</p> <p>4. TEST CYLINDERS SHALL BE MADE AND TESTED AS OUTLINED IN CHAPTER 16 OF ACI-301.</p> <p>5. REINFORCING BARS SHALL BE DEFORMED BARS OF NEW BILLET STEEL CONFORMING TO ASTM A-615, GRADE 60. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185. ALL REINFORCING AND ACCESSORIES SHALL BE DETAILED AND PLACED IN ACCORDANCE WITH ACI STANDARD 315 AND 315R.</p> <p>6. PROVIDE ALL ACCESSORIES NECESSARY TO SUPPORT REINFORCEMENT AT POSITIONS SHOWN ON THE PLANS AND DETAILS. PLASTIC COATED ACCESSORIES SHALL BE USED IN ALL EXPOSED CONCRETE WORK.</p> <p>7. THE GENERAL CONTRACTOR SHALL CHECK WITH ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS AND THE SUB-CONTRACTORS FOR OPENINGS, SLEEVES, ANCHORS, HANGERS, INSERTS, SLAB DEPRESSIONS AND OTHER ITEMS RELATED TO THE CONCRETE WORK AND SHALL ASSUME RESPONSIBILITY FOR THEIR PROPER LOCATION.</p> <p>STRUCTURAL STEEL</p> <p>1. STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED AND ERECTED IN CONFORMANCE WITH THE AISC360 "SPECIFICATION FOR STRUCTURAL STEEL". SEISMIC DESIGN OF STRUCTURAL STEEL STRUCTURES SHALL CONFORM TO AISC 341.</p> <p>2. STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING ASTM SPECIFICATIONS: A. ANCHOR RODS F1554, GRADE 36 B. HIGH STRENGTH STRUCTURAL BOLTS A325-N U.N.O. C. STRUCTURAL SHAPES (W) A992 D. STRUCTURAL SHAPES (M, S, C, MC, PLATES) A36 E. STRUCTURAL SHAPES (HP) A572 F. STRUCTURAL TUBING (HSS) A500 GRADE B G. STRUCTURAL ANGLES A36</p> <p>3. ALL WELDING ELECTRODES SHALL BE E70-XX. ALL SHOP AND FIELD WELDING SHALL BE MADE IN ACCORDANCE WITH A.W.S. D1.1 "CODE FOR WELDING IN BUILDING CONSTRUCTION" AND SHALL BE MADE BY CERTIFIED WELDERS.</p> <p>LAMINATED VENEER LUMBER (LVL)</p> <p>1. ALL BEAMS SHALL BE MANUFACTURED WITH LAMINATED VENEER LUMBER AND WATERPROOF ADHESIVES.</p> <p>2. SIZE, MANUFACTURER & SERIES OF ALL LVL MEMBERS SHALL BE AS SHOWN ON DRAWINGS.</p> <p>3. ANY SUBSTITUTIONS MUST BE APPROVED IN WRITING BY ENGINEER OR ARCHITECT OF RECORD.</p> <p>4. PROVIDE 3" MINIMUM BEARING OR AS SPECIFIED ON PLANS. REFER TO PLANS FOR FASTENING OF MULTIPLE PIECE BEAMS.</p> <p>OPEN WEB WOOD JOISTS</p> <p>1. OPEN WEB WOOD JOISTS SHALL BE MANUFACTURED WITH MACHINE STRESS RATED TOP AND BOTTOM CHORDS. WEBS SHALL BE TUBULAR STEEL MEMBERS PER MANUFACTURERS' SPECIFICATIONS.</p> <p>2. SIZE, MANUFACTURER & SERIES OF ALL OPEN WEB JOISTS SHALL BE AS SHOWN ON DRAWINGS. ANY SUBSTITUTIONS MUST BE APPROVED IN WRITING BY ENGINEER OR ARCHITECT OF RECORD.</p> <p>3. PROVIDE 3 1/2" MINIMUM BEARING OR AS SPECIFIED ON PLANS. SHIM AS REQUIRED TO PROVIDE FULL BEARING AND LEVEL SUPPORT.</p> <p>4. DO NOT CUT TOP OR BOTTOM CHORDS.</p> <p>5. ALL HANGERS AND FRAMING CONNECTORS SHOWN ARE MANUFACTURED BY SIMPSON STRONG TIE, ANY SUBSTITUTIONS MUST BE APPROVED IN WRITING BY ENGINEER OR ARCHITECT OF RECORD.</p> <p>6. REFER TO PLANS FOR WEB STIFFENER AND CONCENTRATED LOAD REQUIREMENTS.</p> <p>7. REFER TO MANUFACTURERS' INSTALLATION GUIDE FOR JOIST BRACING DURING ERECTION. REFER TO MANUFACTURERS' INSTALLATION GUIDE FOR JOIST BRIDGING REQUIREMENTS.</p> <p>SAWN LUMBER</p> <p>1. ALL GRADES OF LUMBER INDICATED ON STRUCTURAL DRAWINGS SHALL BE RATED BY THE</p>	<p>SOUTHERN PINE INSPECTION BUREAU (SPIB), OR THE WESTERN WOOD PRODUCTS ASSOCIATION (WWPA), LUMBER GRADES SHALL BE AS FOLLOWS, WITH A MAXIMUM MOISTURE CONTENT OF 19%: A. SOUTHERN PINE NO. 1. B. DOUGLASS FIR-LARCH NO. 1. C. HEM-FIR NORTH NO. 1</p> <p>2. BOLT HEADS AND NUTS BEARING ON WOOD SHALL BE PROVIDED WITH STANDARD CUT WASHERS. ALL WOOD IN CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESSURE TREATED.</p> <p>3. MINIMUM NAILED CONNECTIONS FOR WOOD FRAMING MEMBERS SHALL BE IN ACCORDANCE WITH THE LOCAL BUILDING CODE OR TABLE 2304.9.1 OF THE INTERNATIONAL BUILDING CODE IF NO OTHER CRITERIA IS GIVEN.</p> <p>4. CONNECTORS SHOWN ON THE DETAILS ARE MANUFACTURED BY SIMPSON. WRITTEN APPROVAL BY ENGINEER REQUIRED FOR SUBSTITUTIONS.</p> <p>ROOF & WALL SHEATHING</p> <p>1. ALL SHEATHING SHALL CONFORM TO AMERICAN PLYWOOD ASSOCIATION (APA) DESIGN SPECIFICATIONS, LATEST EDITION. SHEATHING SHALL BE CONTINUOUS OVER THREE ADJACENT SPANS MINIMUM.</p> <p>2. WALL SHEATHING SHALL BE 15/32" (1/2" NOMINAL) APA RATED SHEATHING, EXPOSURE 1, 3/16". ALL WALL SHEATHING SHALL BE FASTENED TO SUPPORTING MEMBERS W/ 8d COMMON NAILS @ 6" O.C. AT PANEL EDGES AND 12" O.C. AT INTERMEDIATE SUPPORTS, U.N.O.</p> <p>3. ROOF SHEATHING SHALL BE 23/32" (3/4" NOMINAL) APA RATED SHEATHING, EXPOSURE 1, 48/24". ALL ROOF SHEATHING SHALL BE FASTENED TO SUPPORTING MEMBERS W/ 10d COMMON NAILS @ 6" O.C. AT PANEL EDGES, AND 12" O.C. AT INTERMEDIATE SUPPORTS. U.N.O.</p> <p>MASONRY</p> <p>CONCRETE BLOCK DESIGN AND CONSTRUCTION SHALL CONFORM TO "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES," TMS 402/ACI 530/ASCE 5 AND "SPECIFICATIONS FOR MASONRY STRUCTURES" (TMS 602/ACI 530.1/ASCE 6)</p> <p>1. MASONRY MATERIALS SHALL CONFORM TO THE LATEST EDITION OF THE FOLLOWING SPECIFICATIONS: A. HOLLOW LOAD BEARING CONCRETE BLOCK: ASTM C-90. MINIMUM COMPRESSIVE STRENGTH = 2800 PSI AT 28 DAYS. B. MORTAR: ASTM C-270, TYPE S. MINIMUM COMPRESSIVE STRENGTH = 1800 PSI AT 28 DAYS. C. MORTAR: ASTM C-270, TYPE M. MINIMUM COMPRESSIVE STRENGTH = 2500 PSI AT 28 DAYS. (USED FOR BELOW GRADE WORK) D. GROUT: ASTM C-476. MINIMUM COMPRESSIVE STRENGTH = 2000 PSI AT 28 DAYS. E. MASONRY REINFORCEMENT: ASTM A-82 GALVANIZED (JOINT BEDS, TIES) F. MASONRY PRISM STRENGTH: F'm = 2000 PSI</p> <p>2. PRIOR TO DELIVERY OF MASONRY UNITS TO THE JOB SITE, FURNISH TO THE OWNER AFFIDAVITS FROM AN APPROVED TESTING LABORATORY CERTIFYING THAT ALL UNITS CONFORM TO THEIR RESPECTIVE ASTM REQUIREMENTS.</p> <p>3. GROUT ALL CAVITIES CONTAINING REINFORCEMENT IN LIFTS NOT TO EXCEED 5'-0".</p> <p>4. LABORATORY PREPARED MIXES SHALL BE PREPARED AND TESTED IN ACCORDANCE WITH ASTM C-270. FIELD MORTAR SHALL BE TESTED BY AN APPROVED TESTING LABORATORY IN ACCORDANCE WITH ASTM C-780 TWO SETS OF THREE MORTAR CUBES SHALL BE TAKEN DIRECTLY FROM THE MIXER FOR EACH DAY OF MASONRY WORK. TEST THE CUBES AT 28 DAYS. ACCEPTANCE OF THE MORTAR SHALL BE AT THE DISCRETION OF THE ENGINEER.</p> <p>5. CALCIUM CHLORIDE AND/OR ADMIXTURES CONTAINING CALCIUM CHLORIDE SHALL NOT BE INCLUDED IN MORTAR OR GROUT MIX, EXCEPT WHEN APPROVED IN WRITING BY THE STRUCTURAL ENGINEER. NO ANTI FREEZE COMPOUNDS SHALL BE USED TO LOWER THE MORTAR'S FREEZING POINT.</p> <p>6. NO EXTERIOR MASONRY SHALL BE LAID WHEN THE OUTSIDE AIR TEMPERATURE IS LESS THAN 40 DEGREES FAHRENHEIT, UNLESS THE RECOMMENDATIONS SPECIFIED BY THE BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES" TMS 402/ACI 530/ASCE 5 AND "SPECIFICATIONS FOR MASONRY STRUCTURES" (TMS 602/ACI 530.1/ASCE 6) FOR COLD WEATHER CONSTRUCTION ARE STRICTLY FOLLOWED.</p> <p>7. THE MASONRY CONTRACTOR SHALL PROVIDE BRACING TO WITHSTAND HORIZONTAL PRESSURES AS REQUIRED BY THE BUILDING CODE AND LOCAL ORDINANCE.</p> <p>LIGHT GAGE METAL FRAMING</p> <p>1. 16 GA. AND HEAVIER STUDS SHALL HAVE A MINIMUM YIELD STRESS OF 50,000 PSI. 18 GA. AND LIGHTER STUDS AND TRACKS SHALL HAVE A MINIMUM YIELD STRESS OF 33,000 PSI. 2. STUDS AND TRACKS SHALL BE 18 GA. MINIMUM U.N.O. THEY SHALL BE MANUFACTURED BY DIETRICH INDUSTRIES, INC. OR APPROVED EQUAL. 3. PROVIDE DOUBLE STUDS FOR FULL HEIGHT OF WALL EACH SIDE OF ALL OPENINGS UNLESS OTHERWISE NOTED. WELD STUDS TO EACH OTHER WITH 1 1/2" LONG 1/8" FILLET WELDS AT 12" O.C. EACH SIDE. PROVIDE STUD TRACK AT EACH HEAD AND SILL. 4. REFER TO PLANS AND DETAILS FOR CONNECTION OF STUD WALLS TO FOUNDATION, FLOOR OR ROOF.</p> <p>SHOP DRAWINGS</p> <p>1. SHOP DRAWING SUBMITTALS SHALL BE SUBMITTED ELECTRONICALLY. 2. SHOP DRAWINGS SHALL BE REVIEWED BY CONTRACTOR TO VERIFY THAT SUBMITTAL IS COMPLETE PRIOR TO SUBMITTING TO ARCHITECT/ENGINEER. 3. DRAWINGS CREATED BY THE ENGINEER OF RECORD CANNOT BE REPRODUCED AND/OR USED AS A SHOP DRAWING SUBMITTAL. SHOP DRAWING SUBMITTALS SHALL INCLUDE THE FOLLOWING: A. CONCRETE MIX DESIGN B. FOUNDATION REINFORCING BARS C. STRUCTURAL STEEL D. OPEN WEB JOISTS AND CALCULATIONS E. ROOF SHEATHING F. TRELLIS SYSTEM & CALCULATIONS G. LAMINATED VENEER LUMBER (LVL) H. SAWN LUMBER AND CONNECTORS</p> <p>SPECIAL INSPECTIONS</p> <p>1. SPECIAL INSPECTIONS SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 1705 OF IBC AND THE OWNER SHALL EMPLOY ONE OR MORE SPECIAL INSPECTORS TO PROVIDE INSPECTIONS DURING CONSTRUCTION ON THE TYPES OF WORK LISTED UNDER SECTION 1705. THE FOLLOWING AREAS OF WORK REQUIRE SPECIAL INSPECTIONS IN ACCORDANCE WITH THE LISTED 2021 INTERNATIONAL BUILDING CODE SECTIONS/LOCATIONS: A. SOILS – SECTION 1705.6 PER TABLE 1705.6 B. CONCRETE – SECTION 1705.3 PER TABLE 1705.3 C. STEEL – SECTION 1705.2 (SEE AISC 360.10) D. MASONRY – SECTION 1705.4 E. WOOD – SECTION 1705.5</p> <p>MISCELLANEOUS</p> <p>ALL DIMENSIONS ON STRUCTURAL DRAWINGS TO BE CHECKED AGAINST ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS BY THE GENERAL CONTRACTOR AND ANY DISCREPANCIES ARE TO BE REPORTED TO THE ARCHITECT IMMEDIATELY.</p> <p>THE CONTRACTOR SHALL ASSUME RESPONSIBILITY, UNRELIEVED BY REVIEW OF SHOP DRAWINGS OR PERIODIC OBSERVATION OF CONSTRUCTION, FOR COMPLIANCE WITH THE CONTRACT DOCUMENTS, FOR FABRICATION PROCESSES AND CONSTRUCTION TECHNIQUES, AND FOR SAFE CONDITIONS ON THE JOB SITE.</p> <p>DO NOT SCALE THE DRAWINGS.</p> <p>CONCRETE BLOCK JOINT REINFORCEMENT (AT DUMPSTER ENCLOSURE):</p> <p>ALL CONCRETE BLOCK WALLS TO RECEIVE THE FOLLOWING JOINT REINFORCEMENT: LADDER TYPE JOINT REINFORCING WITH SIDE AND CROSS RODS WITH WIRE SIZE (W.2.8 OR 3/16") SPACED 16" O.C. VERTICALLY. (HOHMANN & BARNARD 220 "SUPER HEAVY DUTY" OR EQUAL) SIMILAR FOR CONCRETE BRICK PRODUCTS.</p> <p>CONCRETE BLOCK JOINT REINFORCEMENT</p> <p>1 S4.0</p> <p>VENeer TIE REQUIREMENTS:</p> <p>1. FOR SEISMIC DESIGN CATEGORIES 'A' THROUGH 'C' WITH ULTIMATE WIND SPEED LESS THAN 140 MPH, USE THE FOLLOWING: VENEER TIES W/ WIRE SIZE (W.2.8 OR 3/16") SPACED 16" O.C. VERTICALLY AND 32" HORIZONTALLY. ADDITIONAL TIES ALONG ALL OPENINGS GREATER THAN 16" ARE REQUIRED TO BE LOCATED WITHIN 12" OF OPENING AND SPACED 36" O.C. MAX. AROUND OPENING PERIMETER. (HOHMANN & BARNARD VBT-VEE-BYNA TIE WITH DW10-HS ANCHOR PLATE OR EQUAL).</p> <p>2 S4.0</p> <p>ALL UTILITY CONNECTIONS IS TO BE COORDINATED WITH CIVIL ENGINEER ON RECORD AND ACM, CC TO VERIFY ANY DISCREPANCIES WITH ARCHITECT, ENGINEERS OF RECORD, AND ACM.</p>
<p>rubix Rubix Consultants, LLC www.rubix.com 4803 N. Cicero Ave., Suite 100 Chicago, IL 60613 (312) 602-5411</p> <p>ASHIF PANAKKAT 101598 LICENSED PROFESSIONAL ENGINEER SIGNED/SEALED 03/08/2024</p> <p>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 for use on other projects or sites in conjunction with its issue date and are not suitable to use on a different site or at a later time. Use of these drawings and specifications on another project requires the express written consent of McDonald's USA, LLC. These drawings and specifications are intended for use on one specific project and are not authorized for the contract documents for reuse on another project. If reuse on another project is desired, the contractor must obtain a copy of the original contract documents for reuse on another project.</p>		
<p>DRAWN BY MKP STD ISSUE DATE 2023</p> <p>REVIEWED BY AP</p> <p>DATE ISSUED 03/08/24</p> <p>TITLE 2023 STANDARD BUILDING - BB20</p> <p>DESCRIPTION 4.597-WOOD/WOOD</p> <p>WOOD BEARING WALLS W/4" BRICK VENEER</p> <p>STUCCO/BATEN/BRICK/METAL PANEL EXTERIOR FINISHES</p> <p>SITE ID 402-3271</p> <p>SITE ADDRESS SEC OF S.H. LOOP 288 & HUMMINGBIRD LANE, DENTON, TEXAS</p> <p>SHEET NO. JAWA 24-0014</p> <p>S4.0 STRUCTURAL NOTES</p>		



1
M1.0 ROOF PLAN $\frac{1}{4}'' = 1'-0''$

DRAWING NOTES

1. ROOFTOP EQUIPMENT LOCATIONS SHOWN ARE GENERAL. ACTUAL LOCATIONS SHALL BE COORDINATED WITH THE STRUCTURAL DRAWINGS.
 2. ROOF OPENINGS FOR ROOFTOP UNITS AND EXHAUST FANS SHALL BE COORDINATED WITH THE MANUFACTURER.
 3. 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.
 4. 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 GAS PIPING DOWN (TYP. 3 PLACES)
 - M4 MAINTAIN A MINIMUM 10'-0" CLEARANCE FROM EDGE OF OUTLETS AND VENT TERMINALS TO FRESH AIR INTAKES (TYP.)
 - M5 ROOF PIPE PORTAL FOR MAC UNIT
 - M6 ROOF PIPE PORTAL FOR CONDENSING UNITS
 - M7 ROOF PIPE PORTAL FOR ROOFTOP UNITS (TYP. 3 PLACES)
 - M8 GAS PIPING FROM ROOF PORTAL TO ROOFTOP UNIT SHALL BE COATED WITH A CORROSION RESISTANT PAINT (SEE SHEET M4.0 "NATURAL GAS SYSTEMS", NOTE 8).
 - M9 GAS PRESSURE REGULATOR AND SHUT-OFF VALVE, SET PRESSURE AT 7" W.C. - NATURAL GAS (TYP. OF 3)
 - M10 ARROW INDICATES DIRECTION OF AIRFLOW FOR CONDENSING OR ROOFTOP UNIT AIR INTAKE (TYP.)
 - M11 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.

PIPE PORTAL SCHEDULE

ER	CURB DIMENSIONS	CURB TYPE	CAP TYPE (QTY)	SERVES	THERMOSTAT SETTINGS				DRAWN MES	STD ISSUE 2023	REVIEWED JAW	DATE ISSUED 03/08/2023		
					SETPOINTS		FAN	COOLING						
	12"x12"x11"H	RC-2A	N18 (1)	RTU-1 THROUGH RTU-3	MODE	FAN		COOLING		HEATING		B20		
					OCCUPIED	ON		75°F		70°F				
	43"x12"x13"H	RC-2A	N18 (3)	CU-1 THROUGH CU-4	UNOCCUPIED	AUTO		90°F		55°F		ES		
					HUMIDITY					HUMIDITY SETPOINT (FOR DEHUMIDIFICATION UNITS ONLY)				

SEQUENCE OF OPERATION

- TU-1, RTU-2 & RTU-3:

 - . 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
 - . ROOFTOP UNIT FAN SHALL RUN CONTINUOUSLY DURING OCCUPIED MODE
 - . 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.
 - . UNOCCUPIED MODE SHALL BEGIN ONE (1) HOUR AFTER STORE CLOSES
 - . DURING UNOCCUPIED MODE, ECONOMIZER IS CLOSED AND HEATING, COOLING AND FAN OPERATE IN AUTO MODE (ON DEMAND)

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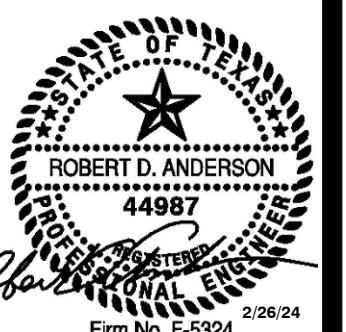
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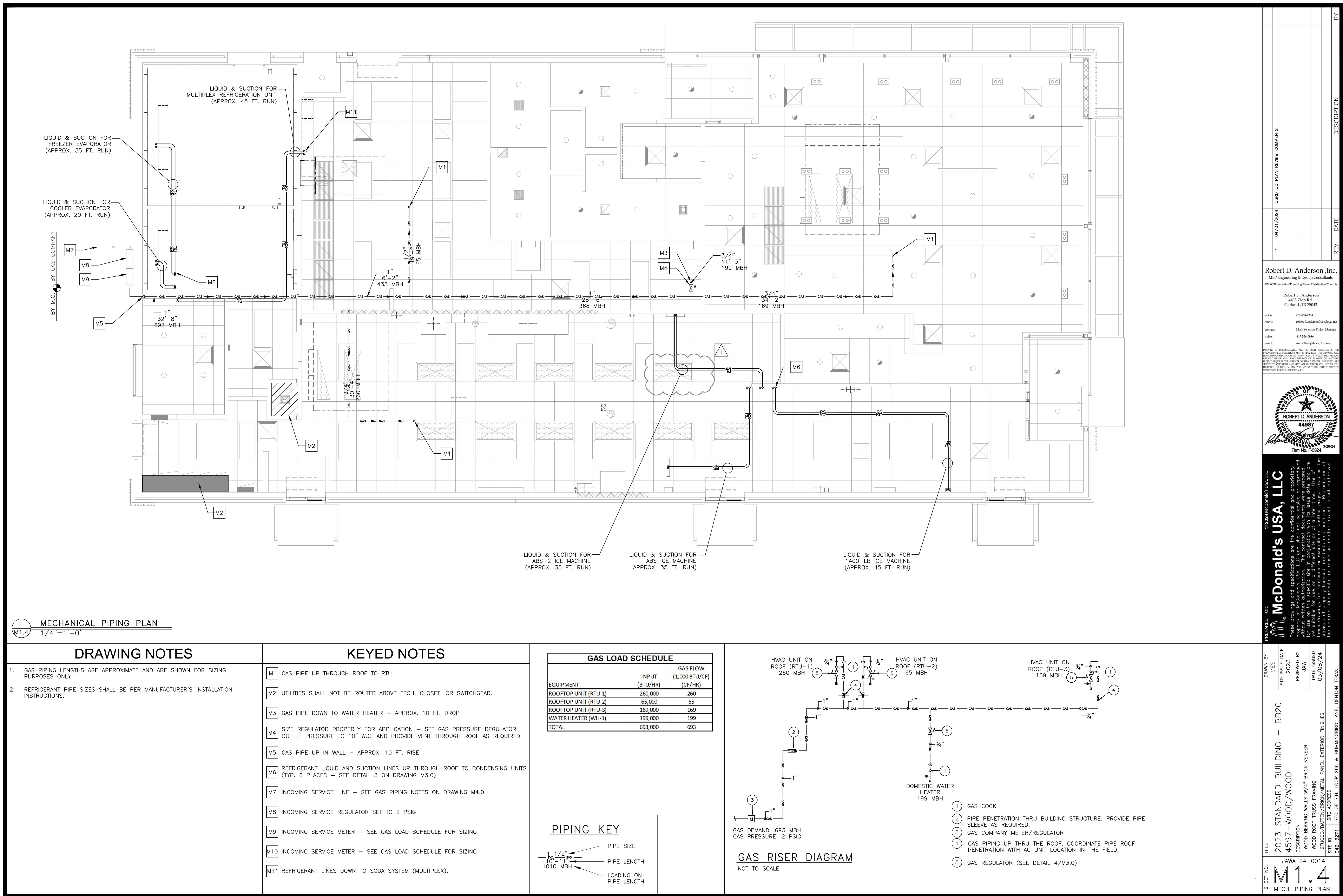
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2023 STANDARD BUILDING		BB20	STD ISSUE DATE 2023
4597-WOOD/WOOD		REVIEWED BY JAW	DATE ISSUED 03/08/24
<p>DESCRIPTION</p> <p>WOOD BEARING WALLS W/4" BRICK VENEER</p> <p>WOOD ROOF TRUSS FRAMING</p> <p>STUCCO/BATTEN/BRICK/METAL PANEL EXTERIOR FINISHES</p>			
SITE ID 042-3271	SITE ADDRESS SEC OF S.H. LOOP 288 & HUMMINGBIRD LANE, DENTON TEXAS		
JAWA 24-0014			
 1  ROOF PLAN			



MECHANICAL NOTES

GENERAL:																																																				
1.	ALL WORK PERFORMED SHALL BE IN ACCORDANCE WITH ALL LOCAL CODES AND ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION.	6.																																																		
2.	ALL DIMENSIONS, CLEARANCES AND TOLERANCES SHALL BE VERIFIED PRIOR TO INSTALLATION.																																																			
3.	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.																																																			
4.	ALL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH ITS LISTING AND/OR THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.																																																			
5.	SEE COORDINATION SCHEDULE FOR ADDITIONAL SCOPE OF WORK.																																																			
6.	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.AABCHQ.COM/DIRECTORY HTTP://WWW.NEBB.ORG/DIRECTORY.HTM HTTP://WWW.TBBCERTIFIED.ORG/SITE/CONTENT/CONTRACTORS/SEARCH																																																			
7.	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.																																																			
8.	ALL PENETRATIONS OF FIRE-RATED WALLS SHALL BE FIRESTOPPED WITH AN APPROVED AND LISTED FIRESTOPPING SYSTEM.																																																			
<u>VENTILATION SYSTEMS:</u>																																																				
1.	ALL SHEET METAL DUCTWORK SHALL BE FABRICATED AND INSTALLED IN ACCORDANCE WITH LOCAL CODES AND SMACNA STANDARDS.																																																			
2.	ALL DUCTWORK DIMENSIONS ARE INTERNAL FREE AREA DIMENSIONS AND SIZED FOR 0.08" W.C. PER 100 FT. OF DUCT.																																																			
3.	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.																																																			
4.	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.																																																			
5.	ALL DUCT DROPS INTO THE BUILDING SHALL BE OFFSET AS NECESSARY TO ALLOW FOR THE CLEAR INSTALLATION OF THE EXTERNAL DUCTWORK INSULATION.																																																			
6.	ALL DUCTWORK BRANCHES THAT SERVE A SINGLE DIFFUSER SHALL BE SUPPLIED WITH A VOLUME DAMPER FOR BALANCING. BRANCHES THAT SERVE MULTIPLE DIFFUSERS, THE BALANCING IS HANDLED VIA REMOTE DAMPER INSTALLED NEAR THE DIFFUSER. REFER TO M1.2 FOR DAMPER LOCATIONS. VOLUME DAMPER SHALL HAVE A 2" OFFSET TO ACCOMMODATE EXTERNAL INSULATION.																																																			
7.	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.																																																			
8.	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.																																																			
9.	ALL SUPPLY AND RETURN SHEET METAL DUCTWORK LOCATED WITHIN THE CEILING SPACE SHALL BE EXTERNALLY INSULATED. INSULATION SHALL BE 2" THICK MICROLITE FSK-100 BY JOHNS MANVILLE OR EQUAL.																																																			
10.	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.																																																			
11.	FOR APPLICABLE SITUATIONS OR PLAYPLACE ADDITIONS: 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.																																																			
12.	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.																																																			
13.	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.																																																			
14.	ALL FLEXIBLE DUCTWORK, METALLIC AND NONMETALLIC, SHALL CONFORM TO THE FOLLOWING: A. 2" THICK INSULATION (R-6.0) SEE NOTE#9 AND TABLE(S) BELOW:																																																			
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	(*) EXHAUST DUCTWORK IS ONLY REQUIRED TO BE INSULATED WITHIN 2-FEET OF ROOF PENETRATION. REFER TO "COMMERCIAL KITCHEN EXHAUST SYSTEMS", NOTE#4 FOR FIRE WRAPPING REQUIREMENTS ON KITCHEN GREASE DUCTWORK.																																																			
B.	INTEGRAL VAPOR BARRIER																																																			
C.	LISTED AND LABELED UL 181, CLASS 0 OR CLASS 1																																																			
D.	INSTALLED IN ACCORDANCE WITH: i. SMACNA STANDARDS, ii. AIR DIFFUSION COUNCIL INSTALLATION GUIDELINES, AND/OR iii. MANUFACTURER'S INSTALLATION INSTRUCTIONS																																																			
14.	FLEXIBLE DUCTWORK SHALL NOT PENETRATE WALLS. SHEET METAL DUCTWORK IS REQUIRED AT ALL FIRE-RATED AND DRAFTSTOP WALL PENETRATIONS.																																																			
15.	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.	6.																																																		
16.	DUCT-MOUNTED SMOKE DETECTORS, PROVIDED BY ROOFTOP UNIT MANUFACTURER, 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.	7.																																																		
17.	ALL SUPPLY AIR DIFFUSERS SHALL BE INSULATED TO PREVENT CONDENSATION.	8.																																																		
18.	ALL AIR DEVICES LOCATED IN DRYWALL CEILINGS SHALL BE SUPPLIED WITH AN INTEGRAL VOLUME DAMPER ACCESSIBLE FROM THE AIR DEVICE FACE TO FACILITATE BALANCING.	9.																																																		
19.	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.	10.																																																		
20.	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.	11.																																																		
<u>COMMERCIAL KITCHEN EXHAUST SYSTEMS:</u>																																																				
1.	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).																																																			
2.	ALL GREASE EXHAUST DUCTWORK JOINTS SHALL BE EITHER TELESCOPING OR BELL TYPE. BUTT-WELDED JOINTS ARE PROHIBITED.																																																			
3.	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.																																																			
4.	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.																																																			
5.	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".																																																			
6.	ALL HORIZONTAL GREASE EXHAUST DUCTWORK SHALL BE INSTALLED WITH A MINIMUM $\frac{1}{4}$ " PER FOOT SLOPE AND SHALL BE PITCHED BACK TOWARD THE HOOD.																																																			
7.	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.																																																			
<u>REFRIGERANT PIPING:</u>																																																				
1.	ALL REFRIGERATION WORK SHALL BE PERFORMED BY A CERTIFIED REFRIGERATION CONTRACTOR.																																																			
2.	ALL REFRIGERANT PIPING SHALL BE SEAMLESS COPPER TUBING OF TYPE L IN ACCORDANCE WITH ASTM B 88 AND ALL JOINTS SHALL BE SOLDERED.																																																			
3.	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.																																																			
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6.	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.																																																			
7.	ALL PIPE INSULATION SHALL BE PROTECTED FROM DAMAGE FROM PIPE HANGERS. PROTECTION SHALL BE LIGHT GAUGE GALVANIZED STEEL OR EQUAL.																																																			
8.	ALL REFRIGERANT PIPING SYSTEMS SHALL BE PRESSURE TESTED FOR LEAKS PRIOR TO START-UP. ALL LEAKS SHALL BE REMEDIED PRIOR TO BUILDING TURNOVER.																																																			
9.	ALL PIPING SHALL MEET MINIMUM INSULATION THICKNESS PER THE TABLE BELOW:																																																			
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<u>CO₂ DETECTION EQUIPMENT:</u>																																																				
1.	THE CO ₂ DETECTOR SHALL BE HARD-WIRED TO PREVENT TAMPERING AND SHALL BE INSTALLED AT 12" A.F.F. WITHIN A 5 FT. RADIUS OF THE CO ₂ STORAGE TANKS.																																																			
2.	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 CO ₂ STORAGE TANKS.																																																			
3.	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.																																																			
4.	THE CO ₂ 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 CO ₂ CLOSET, AND IN THE SUPPORT/BACK-OF-THE-HOUSE LOCATION AS SHOWN ON SHEETS E1.1 AND E3.0.																																																			
<u>NATURAL GAS SYSTEMS:</u>																																																				
1.	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.																																																			
2.	THE NATURAL GAS MAIN PIPE SIZING IS BASED ON THE FOLLOWING: A. MINIMUM SUPPLY PRESSURE AT THE METER OF 2 PSIG B. 1 PSIG PRESSURE DROP FROM METER TO FARDEST APPLIANCE C. 1,000 BTU PER CU. FT. OF NATURAL GAS																																																			
3.	GAS PIPING RUN-OUTS TO EQUIPMENT ARE SIZED BASED ON THE FOLLOWING: A. SUPPLY PRESSURE AT THE REGULATOR OF 10" W.C. ($\frac{1}{4}$ PSIG) B. 0.5" W.C. PRESSURE DROP FROM REGULATOR TO FARDEST APPLIANCE C. 1,000 BTU PER CU. FT. OF NATURAL GAS																																																			
4.	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.																																																			
5.	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
½"	6 FT.	6 FT.
¾" TO 1"	8 FT.	8 FT.
≥1¼"	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 REMEDIED, THE INSTALLING CONTRACTOR SHALL MEASURE AND VERIFY THE FOLLOWING GAS PRESSURES WHILE EQUIPMENT IS IN OPERATION:		
A.	GRILL - 6" W.C. NATURAL, 14" W.C. L.P.	
B.	FRYER - 6" W.C. NATURAL, 14" W.C. L.P.	
C.	WATER HEATER - 6" W.C. NATURAL, 14" W.C. L.P.	
D.	HVAC UNIT - 7" 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.		
<u>CONDENSATE PIPING:</u> 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 ½" PER FOOT.		
CONDENSATE PIPING SHALL BE SIZED BASED ON THE FOLLOWING:		
TOTAL TONS SERVED BY PIPE	MINIMUM PIPE SIZE	
<20 TONS	¾"	
>20 TONS, <40 TONS	1"	
>40 TONS, <125 TONS	1½"	

LEGEND		ABBREVIATIONS	
(TS)	TEMPERATURE SENSOR	ACM	AREA CONSTRUCTION MANAGER
(ATS)	AVERAGING TEMPERATURE SENSOR	B.J.	BELOW JOISTS
(CO2)	CO2 SENSOR FOR ROOFTOP UNIT DEMAND CONTROL VENTILATION	BSI	BEVERAGE SYSTEM INSTALLER
(HS)	HUMIDITY SENSOR	DCV	DEMAND CONTROL VENTILATION
(T)	THERMOSTAT	E.A.	EXHAUST AIR
(S)	SMOKE DETECTOR	EC	ELECTRICAL CONTRACTOR
(KH 2)	EQUIPMENT TAG	FAC	FIRE ALARM CONTRACTOR
R-1 1750 CFM 18"Ø	DIFFUSER INFORMATION LINE 1: TAG LINE 2: AIRFLOW LINE 3: NECK SIZE	FOB FOT	FLAT ON BOTTOM FLAT ON TOP
	SUPPLY AIR DUCT (VERTICAL)	FPC	FIRE PROTECTION CONTRACTOR
		GC	GENERAL CONTRACTOR
	RETURN OR EXHAUST AIR DUCT (VERTICAL)	I.D.	INSIDE DIMENSION
		KEI	KITCHEN EQUIPMENT INSTALLER
	ROUND DUCT (VERTICAL)	KES	KITCHEN EQUIPMENT SUPPLIER
	STEADY-STATE SPEED CONTROLLER	M.A. (S)	MIXED AIR – SUMMER
	PLAQUE DIFFUSER (SHADED AREA DESIGNATES BLANK-OFF PANEL LOCATION)	M.A. (W)	MIXED AIR – WINTER
		MC	MECHANICAL CONTRACTOR
	LINEAR SLOT DIFFUSER	O.A.	OUTDOOR AIR
		O.D.	OUTSIDE DIMENSION
	LOUVERED FACE DIFFUSER	O/O	OWNER/OPERATOR
		PC	PLUMBING CONTRACTOR
	CEILING-MOUNTED EXHAUST FAN	R.A.	RETURN AIR
		RC	REFRIGERATION CONTRACTOR
	SPIN-IN COLLAR WITH VOLUME DAMPER	S.A.	SUPPLY AIR
	VOLUME DAMPER	S.P.	STATIC PRESSURE
	FLEXIBLE DUCTWORK	MC	TEST AND BALANCE CONTRACTOR
	SHEET METAL DUCTWORK W/DIA. SIZE		
	PERFORATED FACE DIFFUSER		
	SHEET METAL TEE WITH CAP		

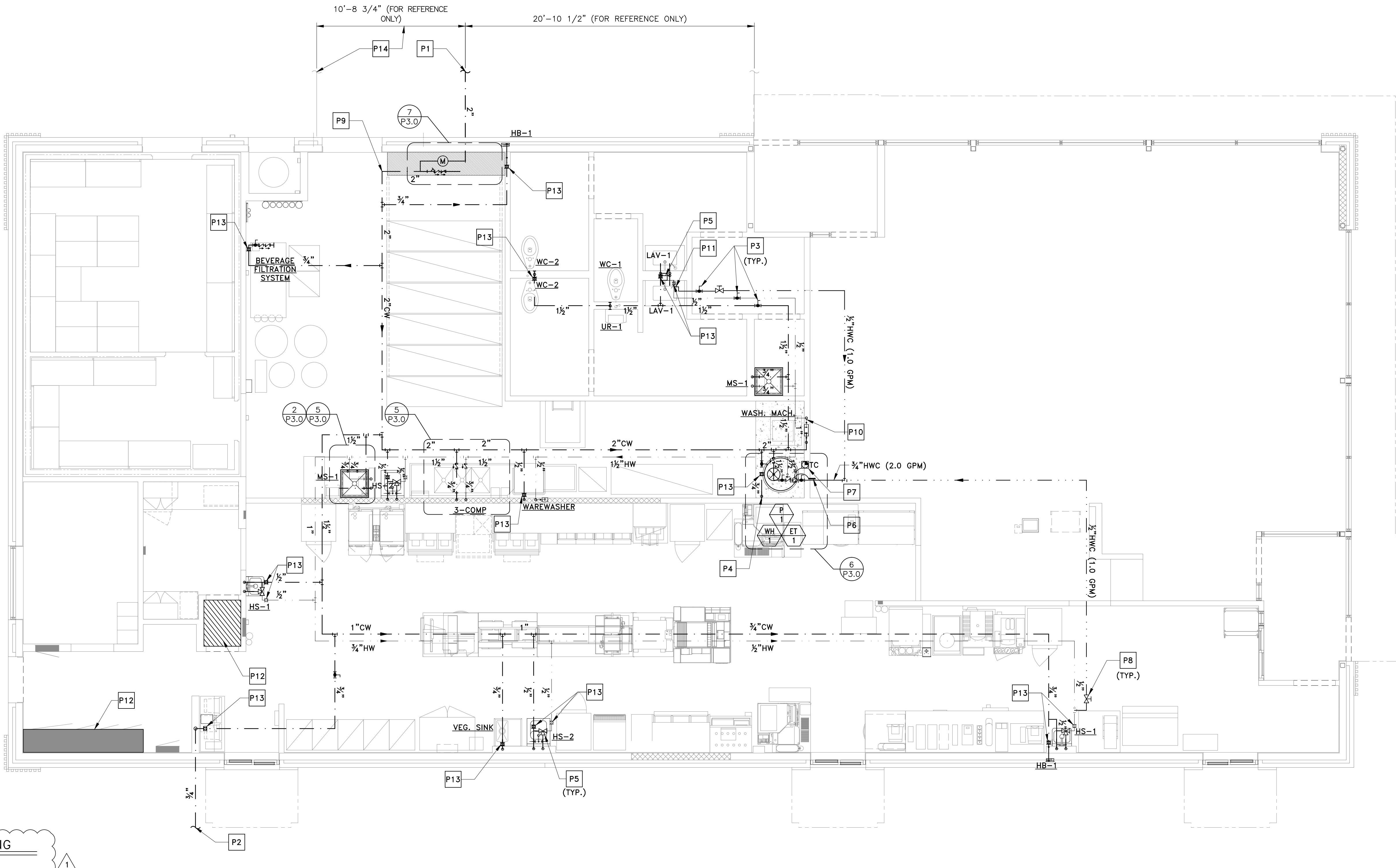
McDonald's USA, LLC			
W [®]			
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2023 STANDARD BUILDING – BB20	STD ISSUE DATE	2023	REVIEWED BY
4597-WOOD/WOOD	JAW		DATE ISSUED
DESCRIPTION	WOOD BEARING WALLS W/4" BRICK VENEER	03/08/24	
	WOOD ROOF TRUSS FRAMING		
	STUCCO/BATTEN/BRICK/METAL PANEL EXTERIOR FINISHES		
SITE ID	SITE ADDRESS		
042-3271	SEC OF SH 100P 288 & HUMMINGBIRD LANE DENTON TEXAS		
JAWA 24-0014			
M 4.0			
GENERAL NOTES			

COORDINATION SCHEDULE

	FURNISH	INSTALL	FINAL CONNECTION	NOTES
GENERAL REQUIREMENTS				
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				
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 BACKSHLF 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
REFRIGERANT PIPING	KES	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
REFRIGERANT PIPING	KES	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	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	PC	1-3, 23, 27
FAUCET	MCD CP	PC	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
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 SPRINKLER 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

COORDINATION SCHEDULE

NOTES:				
1. 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.				
2. 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.				
3. 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.				
4. 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.				
5. ALL ROOFTOP UNITS INSTALLED IN McDONALD'S RESTAURANTS SHALL BE HIGH EFFICIENCY EQUIPMENT. THE INSTALLATION OF STANDARD EFFICIENCY ROOFTOP UNITS IS PROHIBITED. PLEASE REFER TO THE LATEST EDITION OF IECC FOR HVAC EQUIPMENT PERFORMANCE REQUIREMENTS.				
6. 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.				
7. WHERE GYPSUM BOARD CEILINGS ARE INSTALLED, THE MECHANICAL CONTRACTOR SHALL SUPPLY DRYWALL MOUNTING FRAMES FOR LAY-IN TYPE DIFFUSERS.				
8. 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.				
9. ALL WORK ON P1.0 & P1.2 DRAWING(S) SHALL BE BY THE PLUMBING CONTRACTOR.				
10. THE BEVERAGE SYSTEM INSTALLER FURNISHES, RUNS AND CONNECTS ALL FLEXIBLE WATER AND SYRUP LINES FOR ALL Affected EQUIPMENT INCLUDING THE FOLLOWING:				
A. HOT CHOCOLATE				
B. COFFEE BREWER				
C. ICE MACHINE				
D. O.J.				
E. SODA TOWERS				
11. 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. PLEASE REFER TO THE LATEST EDITION OF IECC FOR SERVICE WATER-HEATING EQUIPMENT PERFORMANCE REQUIREMENTS.				
12. THE CONSTRUCTION MANAGER, PLUMBING CONTRACTOR AND KITCHEN EQUIPMENT SUPPLIER SHALL COORDINATE WHICH SOILED DISHWASHER (3-COMPARTMENT SINK) IS BEING INSTALLED IN THE RESTAURANT.				
13. 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.				
14. 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.				
15. 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.				
16. 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.				
17. ALL ROOFTOP UNITS AND EXHAUST FANS ARE SUPPLIED WITH A FACTORY-INSTALLED DISCONNECT SWITCH.				
18. ELECTRICAL CONTRACTOR SHALL PROVIDE DISCONNECT SWITCHES FOR REMOTE CONDENSING UNITS.				
19. 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.				



DRAWING NOTES

- PIPING ROUTES AS SHOWN ARE GENERAL AND MAY VARY DUE TO FIELD CONDITIONS. COORDINATE ALL PIPE ROUTES WITH OTHER TRADES. MAKE SURE HOT WATER MAIN LOOP REMAINS WITHIN 10 FT OF FIXTURE FOR ENERGY CODE PURPOSE.
- ALL WATER DISTRIBUTION PIPING SHALL BE INSULATED. INSULATION NOT SHOWN FOR CLARITY. SEE PLUMBING NOTES FOR INSULATION REQUIREMENTS, SHEET M4.0, "DOMESTIC SUPPLY SYSTEMS", NOTE 18.
- INCOMING UNDERGROUND WATER SERVICE (SEE SITE PLAN FOR CONTINUATION). WATER PIPING FROM THIS POINT TO CEILING PENETRATION INSIDE BUILDING SHALL BE COPPER.
- COLD WATER UNDERGROUND TO YARD HYDRANT (HB-2) IN TRASH CORRAL. SEE SITE PLAN FOR CONTINUATION.
- 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.
- 3/4" COLD WATER UP TO ROOF HYDRANT.
- FOR MIXING VALVE LOCATIONS AND INSTALLATION DETAILS ON PUBLIC LAVATORIES, SEE DETAIL 3 ON DRAWING P3.0 FOR PRIVATE HAND SINKS OR LAVS, MIXING VALVES FOR INFORMATIONAL PURPOSES.
- PIPE-MOUNTED AQUASTAT TO SHUT PUMP DOWN WHEN RECIRCULATION TEMPERATURE REACHES 140°F. SEE DETAIL 6 ON DRAWING P3.0.
- TIME CLOCK TO SHUT PUMP AND WATER HEATER DOWN DURING UNOCCUPIED HOURS. SEE ELECTRICAL DRAWINGS FOR WIRING DETAIL.
- 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.
- WATER PIPING AFTER CEILING PENETRATION CAN TRANSITION TO CPVC OR PEX WHERE PERMITTED BY CODE.
- PROPERLY SEAL ALL PIPE PENETRATIONS THROUGH DRAFT STOP WALL (TYP.).
- HOT WATER RECIRCULATION SHALL CONNECT WITHIN 6" OF SUPPLY STUB OUT TO FIXTURE.
- UTILITIES SHALL NOT BE ROUTED ABOVE THE TECH. CLOSET AND THE SWITCHGEAR.

KEYED NOTES

- P13 INSTALL WATER-HAMMER ARRESTOR WHERE QUICK-CLOSING VALVES ARE UTILIZED. WATER-HAMMER ARRESTORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. WATER-HAMMER ARRESTORS SHALL CONFORM TO ASSE 1010.
- P14 MAINTAIN A MINIMUM OF 10'-0" CLEARANCE FROM THE INCOMING DOMESTIC WATER TO THE GREASE WASTE AND SANITARY LINES.

HOT OR COLD WATER SUPPLY
PDI SIZE "A"
INSTALL PER PDI STANDARDS AND MANUFACTURER'S INSTRUCTIONS
IF HORIZONTAL BRANCH IS LESS THAN 20' LONG, PROVIDE ONE WHA AT END OF LINE
PROVIDE ANOTHER WHA IN MIDDLE, EACH SIZED FOR HALF THE FIXTURE UNITS

SINGLE FIXTURE
MULTIPLE FIXTURES
PDI SIZE PIPE SIZE FIXTURE UNIT LOAD

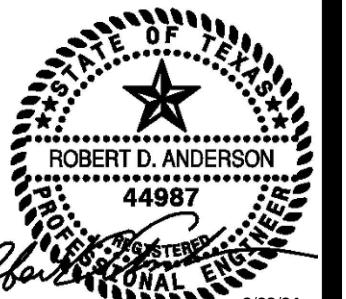
PDI SIZE	PIPE SIZE	FIXTURE UNIT LOAD
A	1/2"	1-11
B	3/4"	12-32

PC TO PROVIDE WATER HAMMER ARRESTERS BY SIOUX CHIEF, PRECISION PLUMBING PRODUCTS, WATTS OR APPROVED EQUIVALENT WITH PISTON AND O-RING CONSTRUCTION, HAVING PDI #WH-201, ASSE #1010 AND ANSI #A112.26.1M CERTIFICATION, INSTALL IN HORIZONTAL OR VERTICAL POSITION, BUT NEVER UPSIDE DOWN. INSTALL IN LINE WITH WATER FLOW DIRECTION IF POSSIBLE. SIZE THE UNITS AS SHOWN ON THE DRAWINGS AND/OR PER THE TABLES SHOWN ABOVE.

DETAIL
WATER-HAMMER ARRESTER (TYP.)
NOT TO SCALE

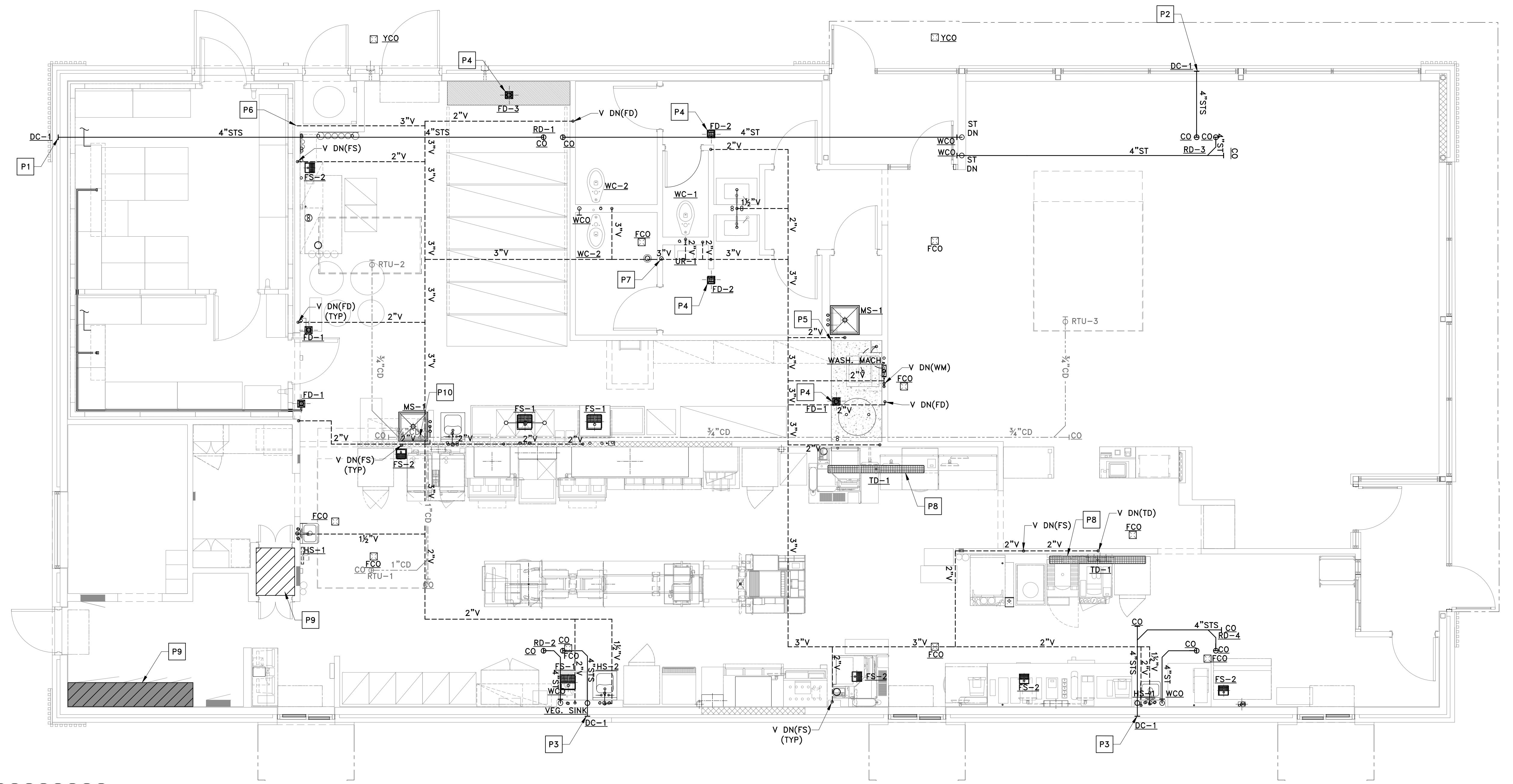
Fixture Count - IPC

NO.	Fixture Description	SUPPLY CONNECTIONS			DRAWN BY MES	STD ISSUE DATE 2023	REVIEWED BY JAW	DATE ISSUED 03/08/24
		WSFU	COLD	HOT				
1	VEGETABLE PREP SINK	4	3/4"	-	4			
2	HAND SINK	1	1/2"	1/2"	2			
4	HOSE BIBB	3	3/4"	-	12			
1	SODA FACTORY	10	1"	-	10			
1	KITCHEN SINK (3-COMP)	4	3/4"	3/4"	4			
2	MOP SINK	2	3/4"	3/4"	4			
2	LAVATORY	1	1/2"	1/2"	2			
1	URINAL	5	1"	-	5			
3	WATER CLOSET	5	1 1/2"	-	15			
1	WASHING MACHINE	4	3/4"	3/4"	4			
1	WREWASHER (*)	4	*(1/2)"	1/2"	4			
(*) CW FOR VAPOR VENT								TOTAL: 66 (55 GPM)
SITE ADDRESS: 4597-WOOD/WOOD								(55 GPM)
402-3271	SEC OF S.H. LOOP 288 & HUMMINGBIRD LANE, DENTON, TEXAS	402-3271	SEC OF S.H. LOOP 288 & HUMMINGBIRD LANE, DENTON, TEXAS	402-3271	SEC OF S.H. LOOP 288 & HUMMINGBIRD LANE, DENTON, TEXAS	402-3271	SEC OF S.H. LOOP 288 & HUMMINGBIRD LANE, DENTON, TEXAS	402-3271

DESCRIPTION	REV	DATE
1 04/01/2024 USRD OC PLAN REVIEW COMMENTS		
1 04/01/2024 Robert D. Anderson, Inc. MEP Engineering & Design Consultants HVAC/illumination/Plumbing/Power Distributor/Control		
1 04/01/2024 Robert D. Anderson 4405 Zinn Rd, Garland, TX 75043		
1 04/01/2024 voice: 972-447-7204 email: robert.d.anderson@boglegal.net contact: Mark Swanson Project Manager voice: 817-556-0986 email: mark@mjwdesigns.com		
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PREPARED FOR:
McDonald's USA, LLC
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TITLE: 2023 STANDARD BUILDING - BB20
DESCRIPTION: 4597-WOOD/WOOD
SITE ID: JAWA 24-0014
STREET ADDRESS: 4597-WOOD/WOOD
CITY: DENTON, TX
STATE: TEXAS
ZIP: 76209
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DRAWN BY: MES
CHECKED BY: JAW
APPROVED BY: JAW
DATE ISSUED: 03/08/24



VENT & STORM PIPING PLAN

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

P1.2

DRAWING NOTES

1. PIPING ROUTES ARE GENERAL AND MAY VARY DUE TO FIELD CONDITIONS. COORDINATE ALL PIPE ROUTES WITH OTHER TRADES.
2. WALL CLEAN-OUTS FOR WASTE PIPING NOT SHOWN FOR CLARITY. SEE GENERAL NOTES FOR REQUIREMENTS.
3. ONLY MAIN FLOOR CLEAN-OUTS ARE SHOWN FOR CLARITY. SEE GENERAL NOTES FOR REQUIREMENTS.
4. ALL HORIZONTAL STORM DRAINAGE PIPING SHALL BE INSULATED TO PREVENT CONDENSATION. INSULATION NOT SHOWN FOR CLARITY. SEE PLUMBING NOTES FOR INSULATION REQUIREMENTS.

KEYED NOTES

- P1 TERMINATE OVERFLOW DRAIN AS HIGH AS POSSIBLE WITH DOWNSPOUT COVER.
- P2 TERMINATE OVERFLOW DRAIN ABOVE TRELLIS WITH DOWNSPOUT COVER. BOTTOM OF DOWNSPOUT OUTLET PIPE SHALL BE AT LEAST 3" BUT NOT MORE THAN 8" ABOVE TOP OF TRELLIS.
- P3 TERMINATE BOTTOM OF OVERFLOW DRAIN A MINIMUM OF 12" ABOVE GRADE WITH DOWNSPOUT COVER.
- P4 PROVIDE PROSET TRAP GUARD® FOR FLOOR DRAIN.
- P5 TOP OF CONCRETE SLAB IS 0'-6" A.F.F.
- P6 VENT FROM GREASE INTERCEPTOR. SEE SITE PLAN FOR CONTINUATION. COORDINATE PIPE ROUTING WITH LOCATION OF GREASE INTERCEPTOR.
- P7 4" VENT UP THROUGH ROOF WITH A 4"x5" VENT CAP
- P8 REFERENCE MANUFACTURER INSTALLATION GUIDE FOR LAYOUT AND SLOPING GUIDELINES PRIOR TO INSTALL AND POURING THE SLAB.
- P9 UTILITIES SHALL NOT BE Routed ABOVE THE TECH. CLOSET AND THE SWITCHGEAR.
- P10 CONDENSATE LINE FROM RTUs DOWN TO DRAIN AT MOP SINK INDIRECT WITH AIR GAP 2 x DIAMETER. TERMINATE PIPE ABOVE FLOOD RIM. FURNISHED AND INSTALLED BY PC. SEE COORDINATION SCHEDULE ON P4.1 & M4.1.

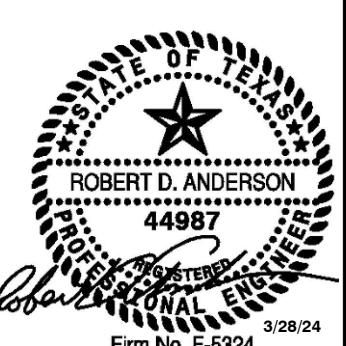
STORM PIPE SIZING

RAINFALL =	4 IN./HR	DRAWN BY:	MES
VERTICAL LEADERS		STD ISSUE DATE:	2023
ROOF DRAIN		SIZE	
RD-1	1,492	IN.	4
RD-2	1,494	IN.	4
RD-3	1,042	IN.	4
RD-4	1,041	IN.	4
TOTAL	5,069		
HORIZONTAL PIPING (SLOPE % PER FOOT)			
ROOF DRAIN		SIZE	
RD-2 & RD-4	2,535	IN.	6
RD-2, RD-3 & RD-4	3,577	IN.	6
RD-1, RD-2, RD-3 & RD-4	5,069	IN.	6

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ROBERT D. ANDERSON
4493
Firm No. 5324
3/28/24

REVISION	DATE	DESCRIPTION
1	04/01/2024	USRD CC PLAN REVIEW COMMENTS

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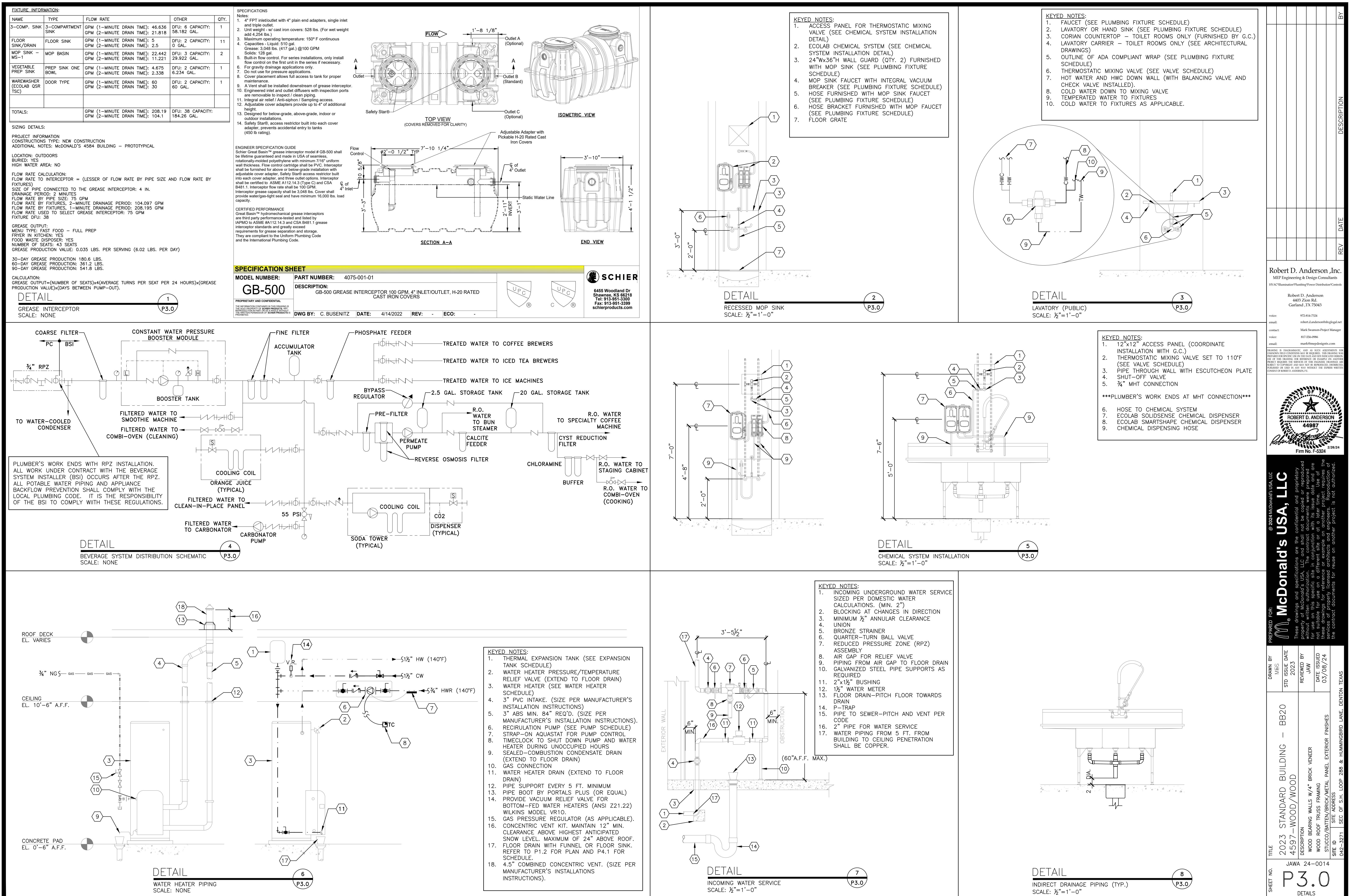
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GENERAL PLUMBING NOTES

- 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 10 FT. FROM THE INCOMING WATER SERVICE. WHERE A 10 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	⅜" PER FT. (MIN.)

- CLEANOUTS SHALL BE INSTALLED IN ALL HORIZONTAL DRAINAGE PIPE AND SHALL BE LOCATED NOT MORE THAN 100 FT. APART. (UNLESS OTHERWISE dictated BY LOCAL CODES).
- 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"	¼" PER FT.	2'-6"
1½"	¼" PER FT.	3'-6"
2"	¼" 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 GROSTET TRAP GUARD. ALL TRAPS SHALL BE FILLED WITH AN INITIAL LAYER OF COOKING OIL.
- 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. CONCRETE GREASE INTERCEPTORS ARE NOT PERMITTED UNLESS REQUIRED BY THE LOCAL AHJ.
 - GREASE INTERCEPTORS SHALL BE GRAVITY OR HYDROMECHANICAL TYPE, SIZED FOR THE APPLICATION LISTED.

- THE GREASE INTERCEPTOR SHALL BE VENTED.
- 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 10 FT. FROM THE EXITING SANITARY PIPE. WHERE A 10 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), PEX OR CPVC. IF CPVC IS USED, FOAM INSULATION SHALL BE INSTALLED AT ALL CHANGES OF DIRECTION TO ACCOUNT FOR EXPANSION AND CONTRACTION.
- IF PEX PIPING IS USED, ALL MAINS SHALL BE UPSIZED BY 0.5" DIAMETER.
- INCOMING WATER SERVICE PRESSURE SHOULD BE BETWEEN 50 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 50 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" ANNUAL CLEARANCE AROUND ALL PIPE SLAB PENETRATIONS.
- A REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTER (RPZ) SHALL BE INSTALLED AT THE INCOMING SERVICE WHERE REQUIRED BY CODE. (MIN. 60" A.F.F.)
- 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, PEX 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 OATEY.
- 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 $\leq 1\frac{1}{2}"$ | 6 FT. | 10 FT. |
| COPPER TUBING $> 1\frac{1}{2}"$ | 10 FT. | 10 FT. |
| CPVC $\leq 1"$ | 3 FT. | 10 FT. |
| CPVC $\geq 1\frac{1}{4}"$ | 4 FT. | 10 FT. |
| PEX $\leq 1"$ | 3 FT. | 10 FT. |
| PEX $\geq 1\frac{1}{4}"$ | 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 (EX.: SODA MACHINE, COFFEE MACHINE, BEVERAGE DISPENSERS, ETC.) 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 PER SCHEDULE THIS SHEET WITH 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.

11. MINIMUM PIPING INSULATION THICKNESS HEATING AND HOT-WATER SYSTEMS (STEAM, STEAM CONDENSATE, HOT-WATER HEATING AND DOMESTIC WATER SYSTEMS). PLEASE REFER TO THE LATEST EDITION OF IECC FOR MINIMUM PIPE INSULATION THICKNESS (TABLE C403.12.3)

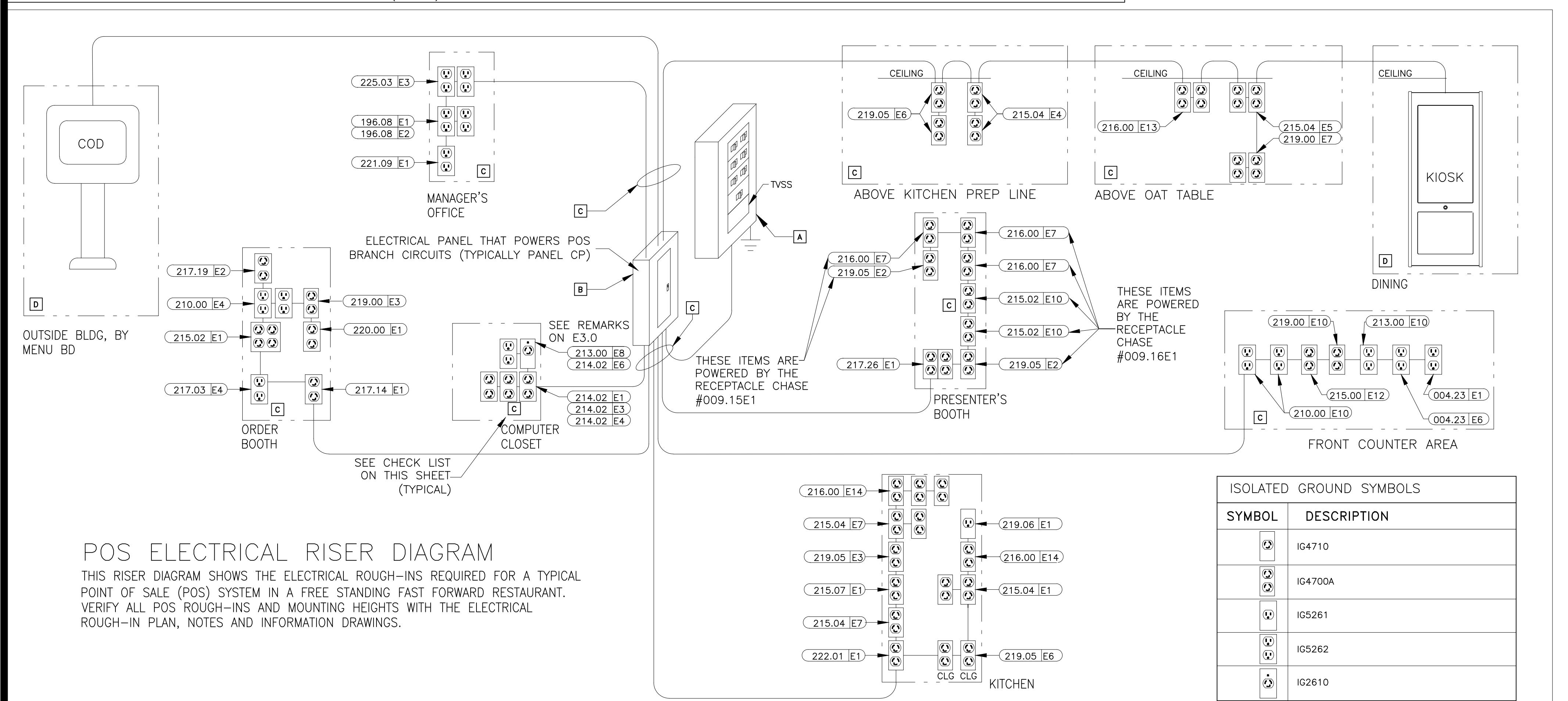
PIPING	MINIMUM INSULATION THICKNESS (IN INCHES) PER NOMINAL PIPE OR TUBE SIZE					
NOMINAL PIPE SIZE	<1	1 TO 1.5	1.5 TO <4	4 TO <8	>8	≥8
DOMESTIC COLD WATER (40°F TO 60°F)	0.5	0.5	1.0	1.0	1.0	
TEMPERATE HOT WATER (105°F TO 140°F)	1.0	1.0	1.5	1.5	1.5	
HOT WATER (141°F TO 200°F)	1.5	1.5	2.0	2.0	2.0	
STORM DRAIN (HORIZONTAL)	-	-	1.0	1.0	1.0	

LEGEND

— — — — —	COLD WATER PIPING	ACM	AREA CONSTRUCTION MANAGER
— — — — —	TEMPERED WATER PIPING (110°F)	AVB	ATMOSPHERIC VACUUM BREAKER
— — — — —	HOT WATER PIPING (140°F)	BSI	BEVERAGE SYSTEM INSTALLER
— — — — —	RECIRCULATED HOT WATER PIPING	CO	CLEAN-OUT
— — — — —	OVERHEAD LINES (BY P.C.)	DC	DOWNSPOUT COVER
— — SAN — —	UNDERGROUND SANITARY PIPING	DFU	DRAINAGE FIXTURE UNIT(S)
— — GW — —	UNDERGROUND GREASE WASTE PIPING	EC	ELECTRICAL CONTRACTOR
— — — — —	VENT PIPING	FAC	FIRE ALARM CONTRACTOR
— — ST — —	ABOVE GROUND PRIMARY STORM PIPING	FCO	FLOOR CLEAN-OUT
— — ST — —	UNDERGROUND PRIMARY STORM PIPING	FD	FLOOR DRAIN
— — STS — —	ABOVE GROUND SECONDARY STORM PIPING	FPC	FIRE PROTECTION CONTRACTOR
— — CD — —	CONDENSATE PIPING	FS	FLOOR SINK
♀	HOSE BIBB	GC	GENERAL CONTRACTOR
↑	CHECK VALVE	GI	GREASE INTERCEPTOR
⊕	BALL VALVE	GPF	GALLONS PER FLUSH
☒	THERMOSTATIC MIXING VALVE	GPM	GALLONS PER MINUTE
□	FLOOR DRAIN	GW	GREASE WASTE
☒	CLEAN-OUT (FLOOR OR YARD)	HS	HAND SINK
□	FLOOR SINK	I.P.S.	IRON PIPE SIZE (ALSO NPS)
○	PRESSURE GAUGE	KEI	KITCHEN EQUIPMENT INSTALLER
□	LOW PRESSURE SWITCH	KES	KITCHEN EQUIPMENT SUPPLIER
□	HIGH PRESSURE SWITCH	LAV	LAVATORY
§	SOLENOID VALVE	MC	MECHANICAL CONTRACTOR
☒	THREE-WAY VALVE	MHT	MALE HOSE THREADS
☒	PRESSURE REGULATOR	MS	MOP SINK
☒	DUAL CHECK VALVE OR RPZ	NPS	NATIONAL PIPE THREAD STANDARD
☒	DUAL CHECK VALVE WITH ATMOSPHERIC VENT	NPT	NATIONAL PIPE THREAD TAPERED
☒	STRAINER	O/O	OWNER/OPERATOR
☒	RELIEF VENT	OH	OVERHEAD
●	WATER-HAMMER ARRESTOR	P	PUMP
PC	PLUMBING CONTRACTOR		
RC	REFRIGERATION CONTRACTOR		
RPZ	REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTER		
SS	SANITARY SEWER		
ST STS	STORM SEWER (PRIMARY) STORM SEWER (SECONDARY)		
SVB	ANTI-SIPHON, SPILL RESISTANT VACUUM BREAKER		
TAB	TEST AND BALANCE CONTRACTOR		
UG	UNDERGROUND		
UR	URINAL		
V	VENT		
WC	WATER CLOSET		

COORDINATION SCHEDULE					EXPANSION TANK SCHEDULE					WATER HEATER SCHEDULE																
GENERAL REQUIREMENTS		FURNISH	INSTALL	FINAL CONNECTION	NOTES	NOTES:					TAG		MANUFACTURER	MODEL	TOTAL VOL.	CONNECTION	ACCESSORIES	TAG		MANUFACTURER	MODEL	SIZE	HEATING	RECOV.		
MECHANICAL PERMIT		MC			1-3	1. 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.					ET-1	AMTROL	ST-12	4.4 GAL.	%"	-	WH-1	BRADFORD-WHITE	EF-100T-199E-3N	100	GAS	239	120	1	60	<20
HOT WORK (WELDING) PERMIT (IF APPLICABLE)		KES			1-3	2. 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.					NOTES:					1. SEE DETAIL 6 ON DRAWING P3.0					NOTES:					
REFRIGERATION PERMIT (IF APPLICABLE)		MC			1-3	3. 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.					NOTES:					1. CONCENTRIC VENT KIT.					1. MINIMUM THERMAL EFFICIENCY 97%					
PLUMBING PERMIT		PC			1-3	4. 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.					NOTES:					2. DESIGN: 2 GPM, 7 FT. HEAD					2. SEE DETAIL 6 ON DRAWING P3.0					
ELECTRICAL PERMIT		EC			1-3	5. ALL ROOFTOP UNITS INSTALLED IN McDONALD'S RESTAURANTS SHALL BE HIGH EFFICIENCY EQUIPMENT. THE INSTALLATION OF STANDARD EFFICIENCY ROOFTOP UNITS IS PROHIBITED. PLEASE REFER TO THE LATEST EDITION OF IECC FOR HVAC EQUIPMENT PERFORMANCE REQUIREMENTS.					NOTES:					3. SEE ELECTRICAL DRAWINGS FOR TIMECLOCK WIRING					3. SEE DETAIL 6 ON DRAWING P3.0					
FIRE SPRINKLER PERMIT (IF APPLICABLE)		FPC			1-3	6. 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.					NOTES:					4. SEE DETAIL 6 ON DRAWING P3.0					4. SEE DETAIL 6 ON DRAWING P3.0					
FIRE ALARM PERMIT (IF APPLICABLE)		FAC			1-3	7. WHERE GYPSUM BOARD CEILINGS ARE INSTALLED, THE MECHANICAL CONTRACTOR SHALL SUPPLY DRYWALL MOUNTING FRAMES FOR LAY-IN TYPE DIFFUSERS.					NOTES:					5. SEE DETAIL 6 ON DRAWING P3.0					5. SEE DETAIL 6 ON DRAWING P3.0					
CONTRACTOR COORDINATION REQUIREMENTS	GENERAL EXHAUST SYSTEMS					8. 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.					NOTES:					6. SEE DETAIL 6 ON DRAWING P3.0					6. SEE DETAIL 6 ON DRAWING P3.0					
HEATING & AIR-CONDITIONING	EXHAUST FANS					9. ALL WORK ON P1.0 & P1.2 DRAWING(S) SHALL BE BY THE PLUMBING CONTRACTOR.					NOTES:					7. SEE DETAIL 6 ON DRAWING P3.0					7. SEE DETAIL 6 ON DRAWING P3.0					
ROOFTOP UNITS, INTAKE AND RELIEF	MCD CP	MC			1-5, 17, 22	10. THE BEVERAGE SYSTEM INSTALLER FURNISHES, RUNS AND CONNECTS ALL FLEXIBLE WATER AND SYRUP LINES FOR ALL Affected EQUIPMENT INCLUDING THE FOLLOWING:					NOTES:					8. SEE DETAIL 6 ON DRAWING P3.0					8. SEE DETAIL 6 ON DRAWING P3.0					
ROOF CURBS	MCD CP	MC			1-3, 20, 22	A. HOT CHOCOLATE					NOTES:					9. SEE DETAIL 6 ON DRAWING P3.0					9. SEE DETAIL 6 ON DRAWING P3.0					
GAS PIPING AND GAS PIPE KIT	PC	PC	PC		1-3, 14, 22-23	B. COFFEE BREWER					NOTES:					10. SEE DETAIL 6 ON DRAWING P3.0					10. SEE DETAIL 6 ON DRAWING P3.0					
CONTROLS WIRING	MC	EC			1-3, 19, 22, 24	C. ICE MACHINE					NOTES:					11. SEE DETAIL 6 ON DRAWING P3.0					11. SEE DETAIL 6 ON DRAWING P3.0					
POWER WIRING	EC				1-3, 19, 22, 24	D. O.J.					NOTES:					12. SEE DETAIL 6 ON DRAWING P3.0					12. SEE DETAIL 6 ON DRAWING P3.0					
CONDENSATE TRAP	MC	PC			1-3, 22-23	E. SODA TOWERS					NOTES:					13. SEE DETAIL 6 ON DRAWING P3.0					13. SEE DETAIL 6 ON DRAWING P3.0					
CONDENSATE PIPING (IF APPLICABLE)	PC	PC			1-3, 22-23	14. SEE DETAIL 6 ON DRAWING P3.0					NOTES:					15. SEE DETAIL 6 ON DRAWING P3.0					15. SEE DETAIL 6 ON DRAWING P3.0					
DUCT-MOUNTED SMOKE DETECTOR	MC	MC	EC		1-3, 22, 24	16. SEE DETAIL 6 ON DRAWING P3.0					NOTES:					17. SEE DETAIL 6 ON DRAWING P3.0					17. SEE DETAIL 6 ON DRAWING P3.0					
GENERAL EXHAUST SYSTEMS	MCD CP	MC			1-3, 22	18. SEE DETAIL 6 ON DRAWING P3.0					NOTES:					19. SEE DETAIL 6 ON DRAWING P3.0					19. SEE DETAIL 6 ON DRAWING P3.0					
EXHAUST FANS	MCD CP	MC			1-3, 17, 22	20. SEE DETAIL 6 ON DRAWING P3.0					NOTES:					21. SEE DETAIL 6 ON DRAWING P3.0					21. SEE DETAIL 6 ON DRAWING P3.0					
ROOF CURBS	MCD CP	MC			1-3, 22	22. SEE DETAIL 6 ON DRAWING P3.0					NOTES:					23. SEE DETAIL 6 ON DRAWING P3.0					23. SEE DETAIL 6 ON DRAWING P3.0					
CONTROLS (WHERE APPLICABLE)	MC	EC			1-3, 22, 24	24. SEE DETAIL 6 ON DRAWING P3.0					NOTES:					25. SEE DETAIL 6 ON DRAWING P3.0					25. SEE DETAIL 6 ON DRAWING P3.0					
POWER WIRING	EC				1-3, 22, 24	26. SEE DETAIL 6 ON DRAWING P3.0					NOTES:					27. SEE DETAIL 6 ON DRAWING P3.0					27. SEE DETAIL 6 ON DRAWING P3.0					
TEMPERATURE CONTROLS	MCD CP	MC			1-3, 22	28. SEE DETAIL 6 ON DRAWING P3.0					NOTES:					29. SEE DETAIL 6 ON DRAWING P3.0					29. SEE DETAIL 6 ON DRAWING P3.0					
BUILDING AUTOMATION SYSTEM	MCD CP	MC			1-3, 22	30. SEE DETAIL 6 ON DRAWING P3.0					NOTES:					31. SEE DETAIL 6 ON DRAWING P3.0										

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.



LOW VOLTAGE CABLE MANAGEMENT SPECIFICATION

GENERAL/MATERIALS

1. 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 13/8";
 - 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 MANUFACTURER'S INSTALLATION INSTRUCTIONS.
2. 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

1. 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.
 - KIOSK
 - DIGITAL MERCHANDISER
- 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.
2. 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. FINAL INSTALLATION LOCATION SHALL BE READILY ACCESSIBLE TO ALLOW FOR EASE IN INSTALLATION OF THE POS CABLING BY THE POS VENDOR'S INSTALLER.
3. 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.
4. 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.
5. 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, AND OTHER NON-POS LOW VOLTAGE CONDUCTORS.
6. 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.
7. 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.
8. 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: _____

BY: _____

DATE: _____

ELECTRICAL CONTRACTOR: _____

BY: _____

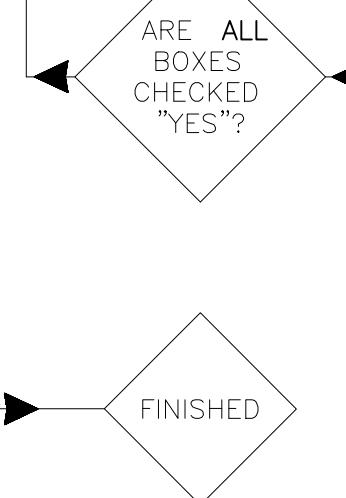
DATE: _____

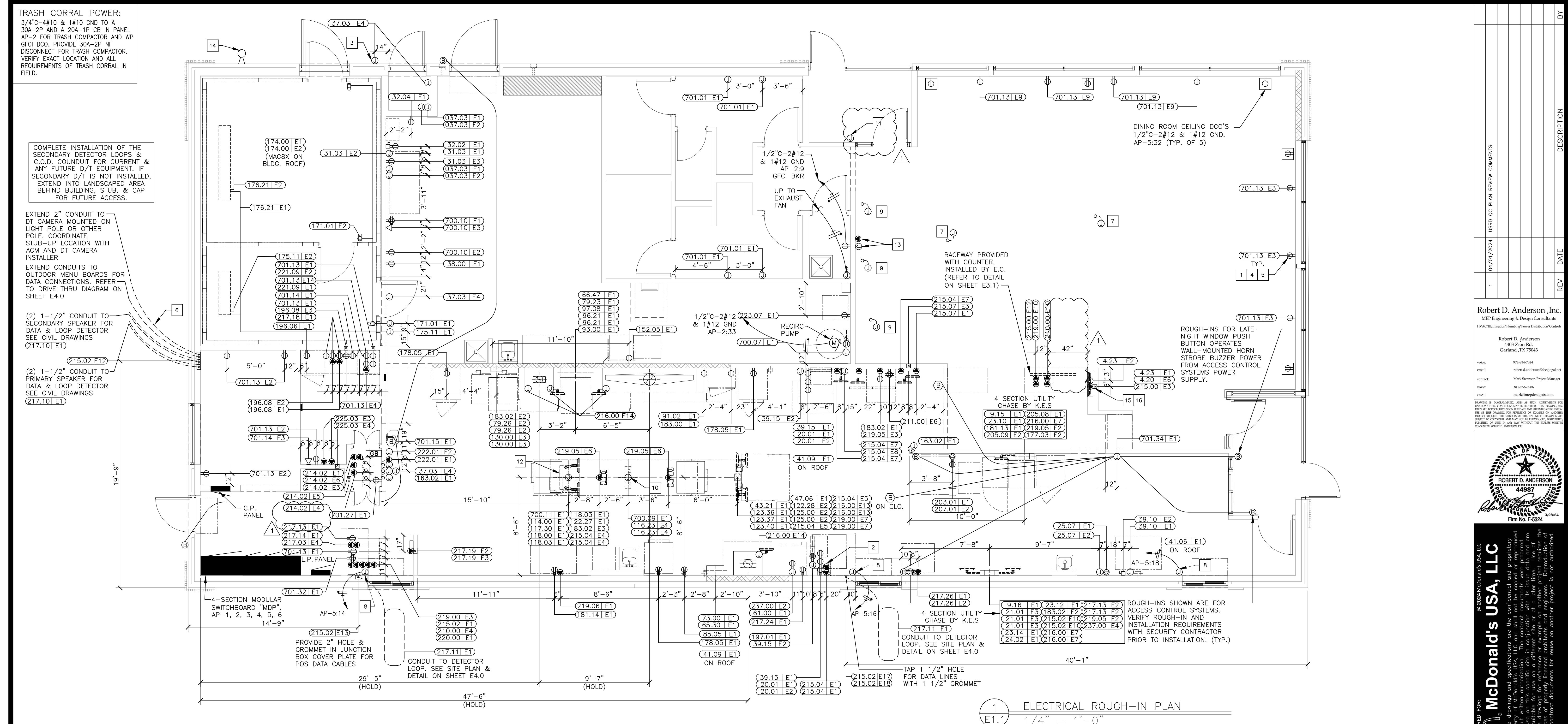
NOTICE:

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.

YES





SYMBOLS AND ABBREVIATIONS			
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
↪	SINGLE POLE SWITCH, 3W=THREE WAY SWITCH, K=KEYED SWITCHED, VS=VACANCY SENSOR	(B)	BUZZER
↪T	MANUAL SWITCH (T=THERMAL OVERLOADS)	(B)	BUTTON FOR BUZZER
T	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 ○○ = IG4710, ○○ = IG5261, ○○ = IG4700A, ○○ = IG5262	C	CONDUIT
◀	INTERCOM STATION W/ 3/4"C- TO MAIN STATION	CCT	CIRCUIT
◀	TELEPHONE JACK	EC	ELECTRICAL CONTRACTOR
○○	JUNCTION BOX - WALL OR CEILING MOUNTED	GC	GENERAL CONTRACTOR
□	DISCONNECT SWITCH	GFI/GFCI	GROUND FAULT CIRCUIT INTER
○○	STUB UP THRU ROOF	GND	GROUND
○○	THERMOSTAT SENSOR W/ 1/2"C- UP TO CEILING SPACE	IG	ISOLATED GROUND
○○	MOTOR CONNECTION	JB	JUNCTION BOX
~~~~~	CONDUIT RUN CONCEALED IN CEILING OR WALLS	KES	KITCHEN EQUIPMENT SUPPLIER
~~~~~	CONDUIT RUN IN FLOOR SLAB	MLO	MAIN LUGS ONLY
x	HOT (SHORT), NEUTRAL (LONG), EQUIP GRD (LONG WITH DOT), & 'X' DENOTES ISOLATED GRD	WP	WEATHERPROOF
○○	J-BOX WITH FINAL EQUIPMENT CONNECTION	(CO)	CARBON MONOXIDE SENSOR
○○→	CEILING MOUNTED OCCUPANCY SENSOR	GB	GROUND BUS TERMINAL
○○		DS	DAYLIGHT SENSOR

APPENDIX A

- ADT ROUGH-IN NOTES

 1. COORDINATE EXACT INSTALLATION REQUIREMENTS WITH ADT PRIOR TO INSTALLATION
TEL. 800-417-8238
 2. EC SHALL PROVIDE A 2 GANG $3\frac{25}{32}$ " X $3\frac{25}{32}$ " X $3\frac{1}{2}$ "D JUNCTION BOX AT DOOR FOR INSTALLATION OF DOOR ALARM UNIT. STUB 1/2"C ABOVE CEILING FROM JUNCTION BOX. PROVIDE $\frac{1}{2}$ "C FROM J-BOX TO DOOR MAGNETIC SWITCH LOCATION.
 3. EC SHALL PROVIDE 4" X 4" JUNCTION BOX ABOVE CEILING FOR INSTALLATION OF LOW VOLTAGE TRANSFORMER. VERIFY EXACT LOCATION WITH ADT PRIOR TO

GENERAL NOTES

- GENERAL NOTES**

 1. 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.
 2. SEE LOW VOLTAGE CABLE MANAGEMENT SPECIFICATION ON SHEET E1.0 FOR POS, DATA, AND SOUND SYSTEM REQUIREMENTS.
 3. 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 NOT

- 1 TAMPER RESISTANT GFCI DUPLEX RECEPTACLE IN PUBLIC AREAS. EC SHALL PROVIDE HUBBELL GFTRST* ("*": 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)
 - 2 SEE POS ELECTRICAL RISER DIAGRAM ON SHEET E1.0. (TYPICAL)

1714-1127(2)

- 3 EC TO FURNISH AND INSTALL A FLUSH MOUNTED JUNCTION BOX WITH WEATHERPROOF GASKET AND OUTDOOR WEATHERPROOF, 24 VOLT CO2 HORN/STROBE UNIT COMPATIBLE WITH CO2 ALARM SYSTEM – EDWARDS GENESIS WGAVRN OR APPROVED EQUAL. STROBE SHALL HAVE AN AMBER COVER AND MEET ALL LOCAL REGULATORY REQUIREMENTS FOR SPECIFICATIONS AND INSTALLATION. PROVIDE A $\frac{3}{4}$ " CONDUIT STUB-IN INTO BUILDING WITH THERMOPLASTIC BUSHING FROM WEATHERPROOF BACKBOX. PROVIDE FINAL WIRING TERMINATIONS AT HORN/STROBE UNIT AND THEN PROVIDE 36 INCHES OF PIGTAIL WIRING FROM HORN/STROBE INTO THE BUILDING AND NEATLY COIL FOR FINAL CONNECTION. FINAL WIRING CONNECTION FROM OUTDOOR HORN/STROBE PIGTAILS TO THE CO2 ALARM SYSTEM INSTALLATION TO BE PROVIDED BY BEVERAGE INSTALLED.

REF. THE AM

- 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
FOR RECEIPT

- DECOR DRAWINGS PRIOR TO ROUGH-IN.

6 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.

7 E.C. TO PROVIDE AN ALLOWANCE IN BID TO PROVIDE TWO(2) FLEXIBLE POWER

— CONNECTION OF THE DEC

- 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.

8 DRIVE THRU WINDOW POWER, CONFIRM REQUIREMENTS WITH MANUFACTURER

■ 4. MAGNETS

- PROVIDE POWER 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 EVERY 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.

- 1** PROVIDE J-BOX ABOVE CEILING NEAR KIOSK FOR DIGITAL MERCHANDISER. EXTEND CIRCUIT TO THIS LOCATION FROM FRONT COUNTER MERCHANDISER IN SERVICE AREA.

- 2 EC TO INSTALL DROP CORDS JUSTIFIED TO THE DRIVE THRU SIDE OF THE BUILDING.

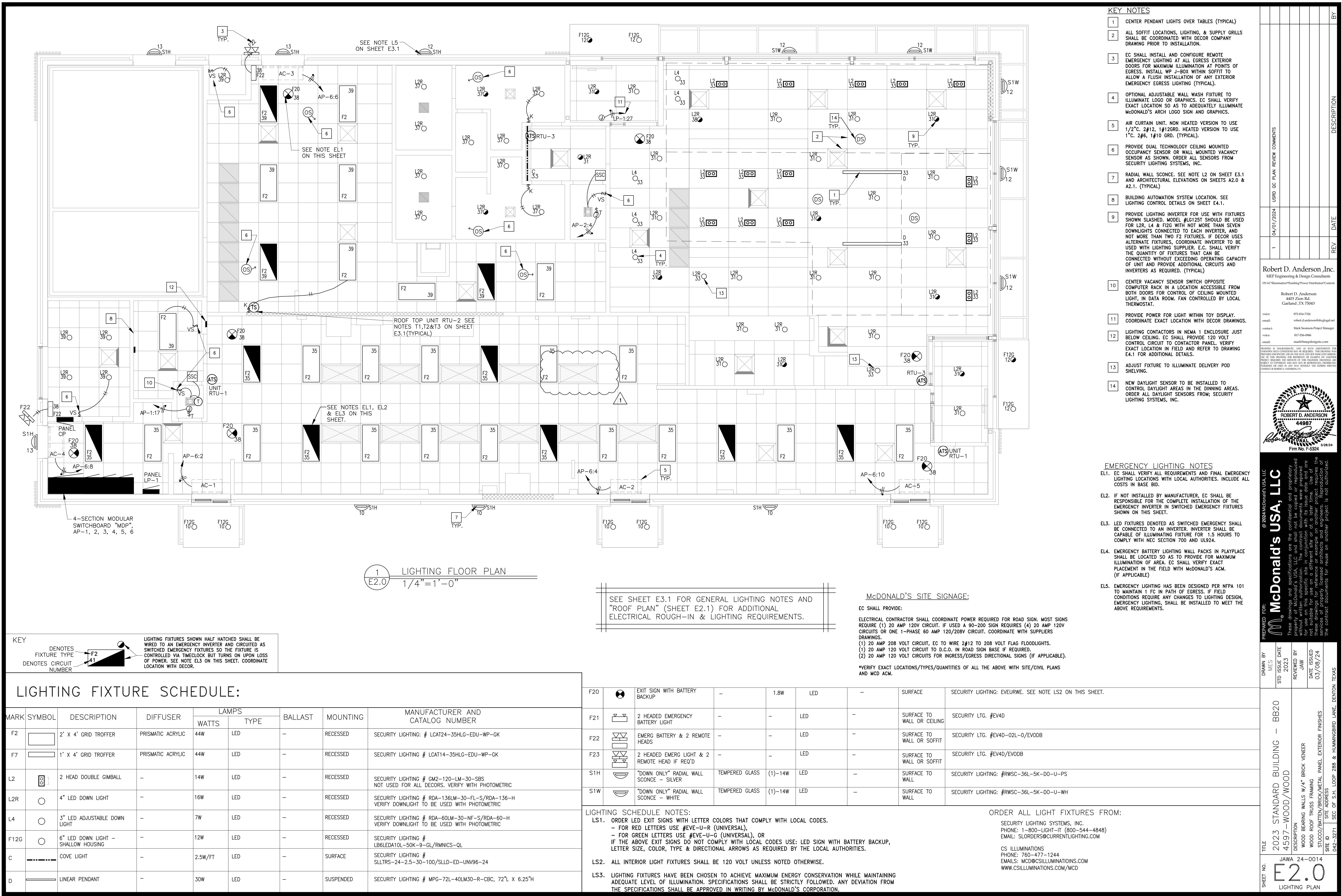
- 3** PROVIDE POWER AND DATA ROUGH-INS FOR CASH HANDLERS REFER TO 4/E3.1 FOR MORE INFORMATION. COORDINATE EXACT LOCATION WITH DECOR DRAWINGS.

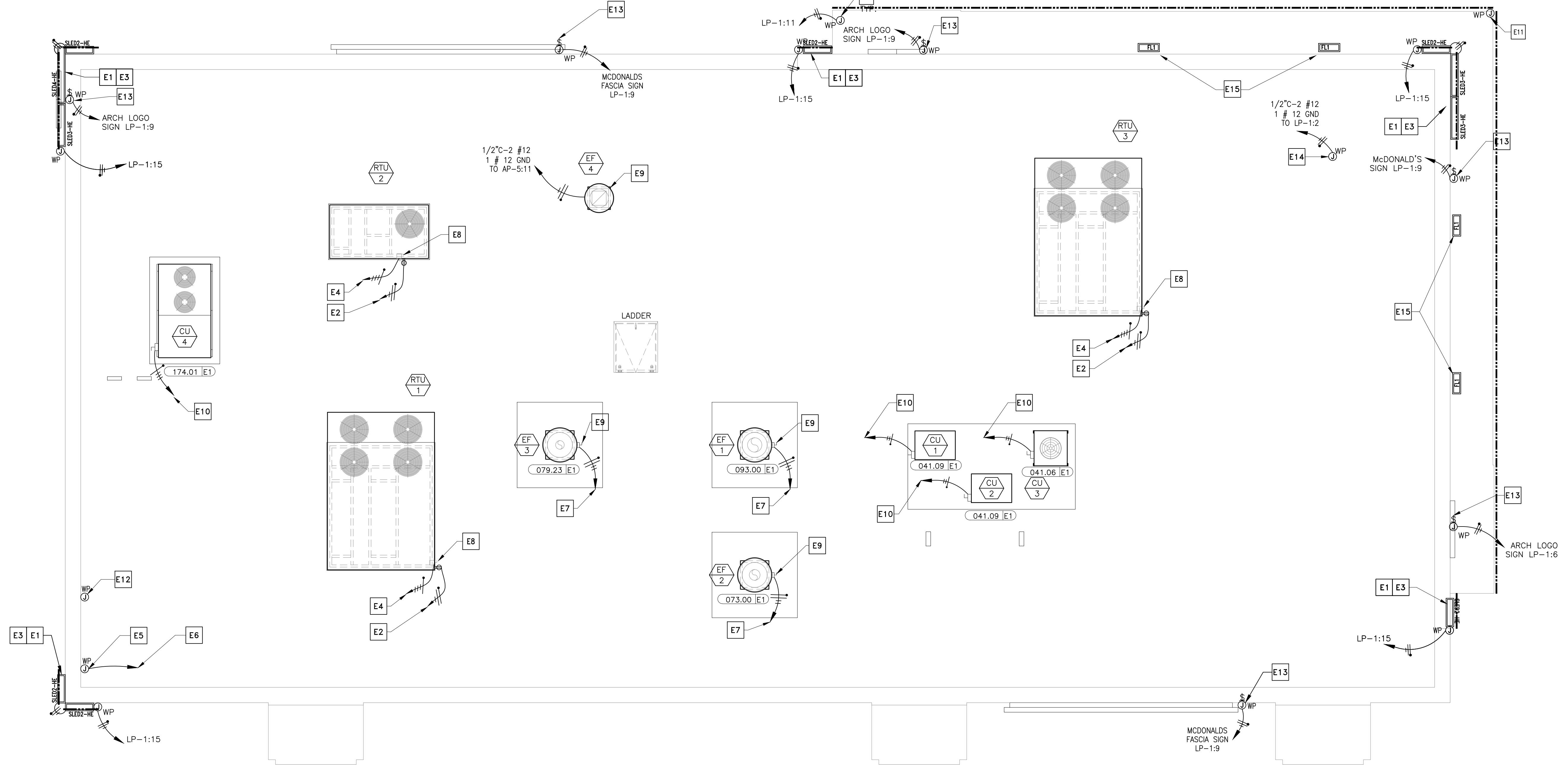
- AT&T TO PROVIDE #8 GGD CONDUCTOR FROM BUILDING EXTERIOR WIRELESS ACCESS POINT TO ABOVE INTERIOR CEILING. EC TO EXTEND CONDUCTOR TO BUILDING GROUNDING SYSTEM. COORDINATE EXACT LOCATION OF ACCESS POINT IN FIELD WITH AT&T.

- 5 CONTRACTOR TO PUNCH HOLES IN SERVICE POD FOR CABLE AND CONDUIT ROUTING. UTILIZE BUSHINGS PROVIDED WITH SERVICE POD TO PROTECT CABLES.

- 6 REFER TO DETAIL ON A3.1 FOR DIMENSIONS OF DIGITAL MERCHANDISER ROUGH-INS.

SHEET NO.	TITLE		
	2023 STANDARD BUILDING – BB20 4597-WOOD/WOOD		
DRAWN BY MES		STD ISSUE DATE 2023	
DESCRIPTION		REVIEWED BY JAW	
WOOD BEARING WALLS W/4" BRICK VENEER WOOD ROOF TRUSS FRAMING STUCCO/BATTEN/BRICK/METAL PANEL EXTERIOR FINISHES		DATE ISSUED 03/08/24	
SITE ID	SITE ADDRESS SEC OF S.H. LOOP 288 & HUMMINGBIRD LANE, DENTON TEXAS		
042-3271	JAWA 24-0014		
	1 1		





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. VERIFY EXACT INFEED REQUIREMENTS IN THE FIELD. SEE NOTE L5 ON SHEET E3.1. (TYPICAL)

E12 E.C. SHALL PROVIDE A WEATHER-PROOF JUNCTION BOX WITH $\frac{3}{4}$ "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. VERIFY EXACT INFEED 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

- PLACE LED FIXTURE AT DESIRED LOCATION AND ATTACH POWER SUPPLY AND MOUNTING BRACKET AS RECOMMENDED BY MANUFACTURER.

EC SHALL CONNECT NEW FIXTURES TO A 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 BRAND WALL.

LED FIXTURE SCHEDULE:

RK	SYMBOL	DESCRIPTION	DIFFUSER	LAMPS		BALLAST	MOUNTING	MANUFACTURER AND CATALOG NUMBER
				WATTS	TYPE			
02-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.
03-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.
04-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.
		UP ONLY ACCENT LIGHTING (SEE PLAN)	TEMPERED GLASS	1-16W PER Fixture	LED	-	SURFACE	SECURITY LIGHTING: EL218-W-5-8L-5K-UV-IO-JWIO

Robert D. Anderson ,Inc.
MEP Engineering & Design Consultants
HVAC* Illumination* Plumbing* Power Distribution* Controls



PREPARED FOR:

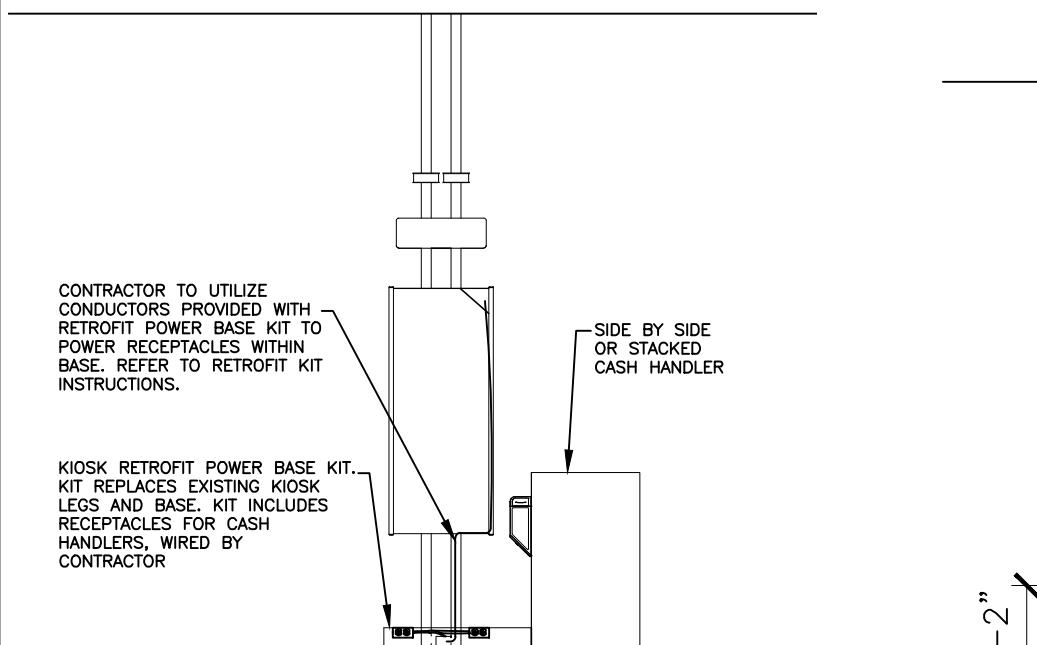
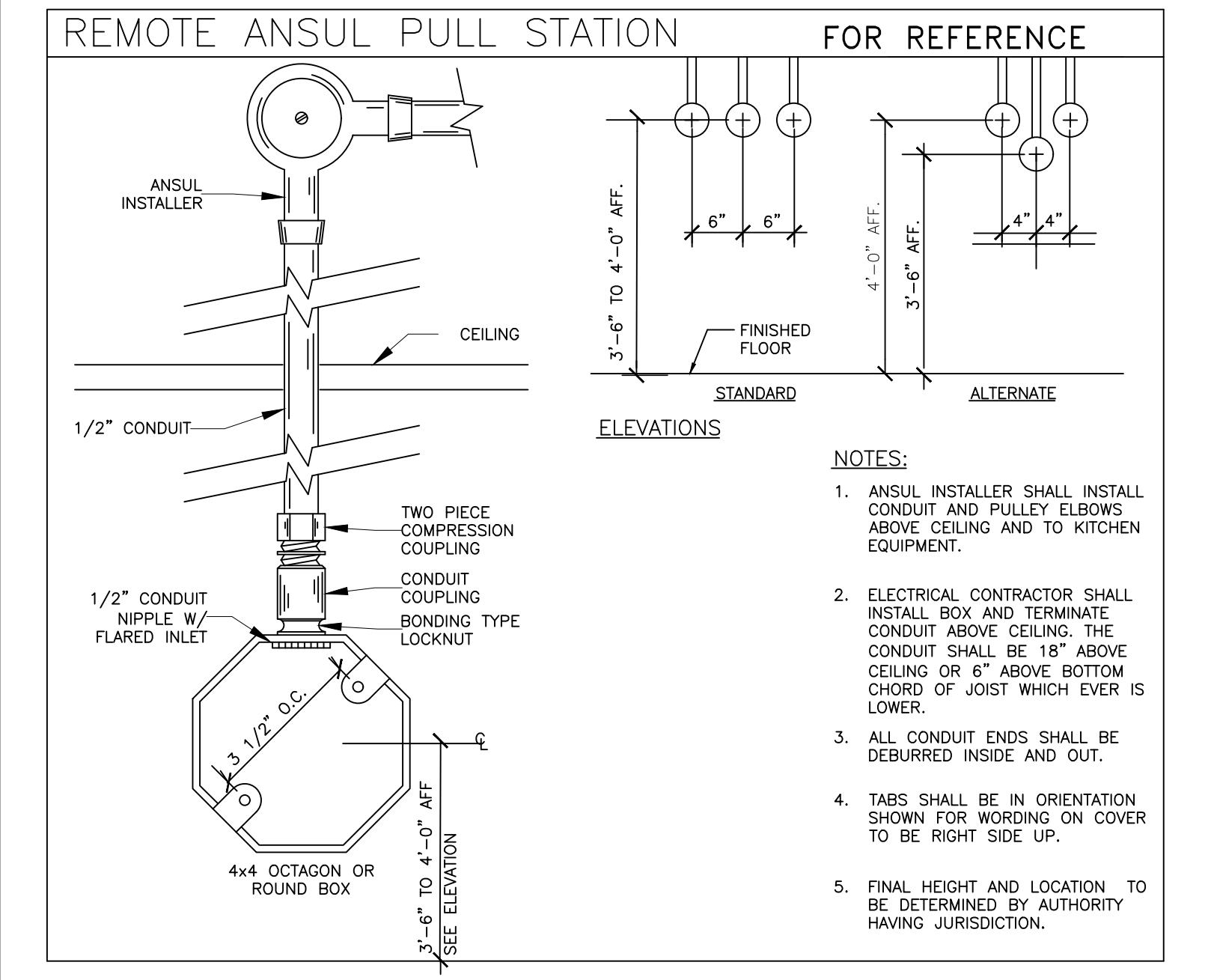
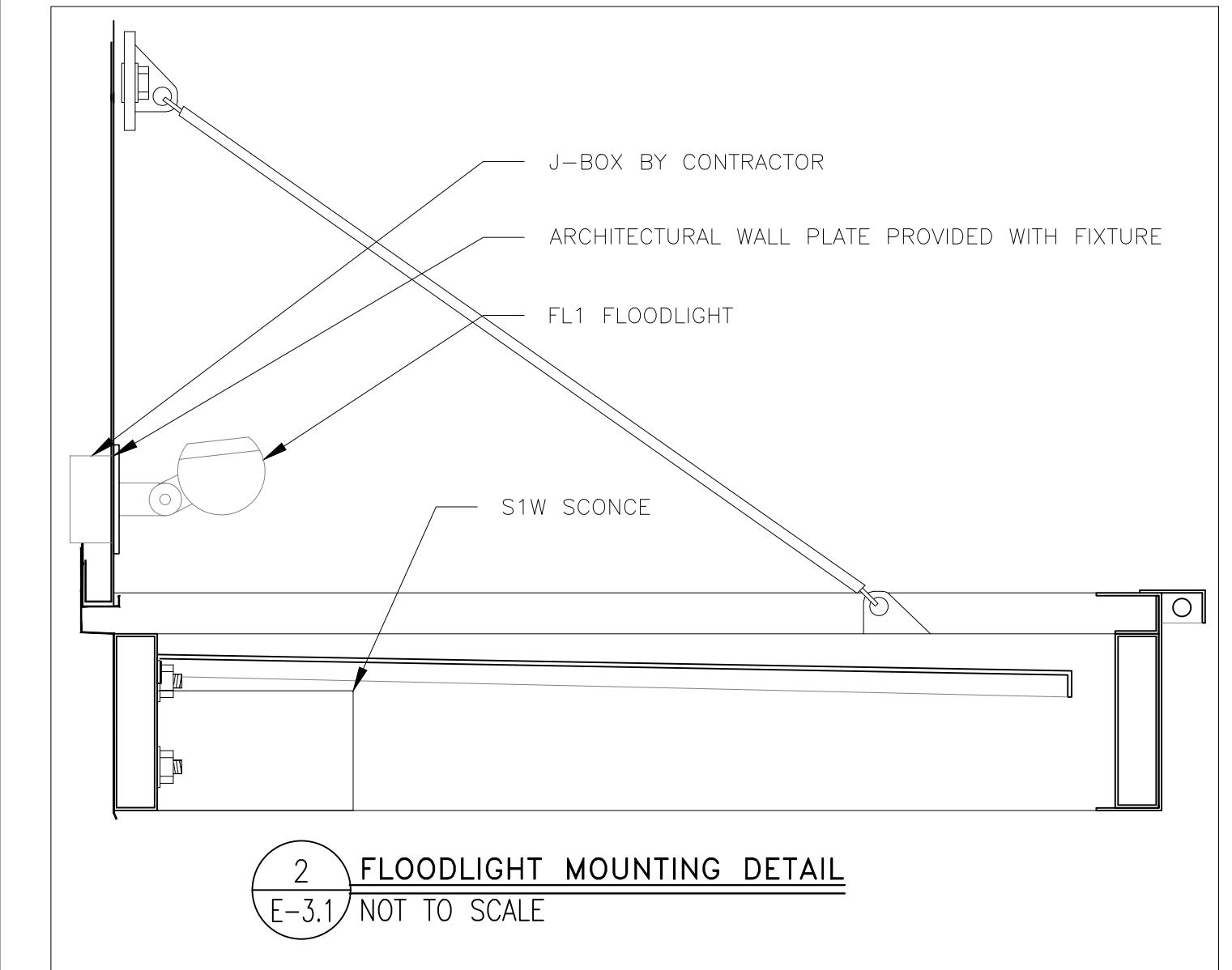
 **McDonald's USA, LLC**

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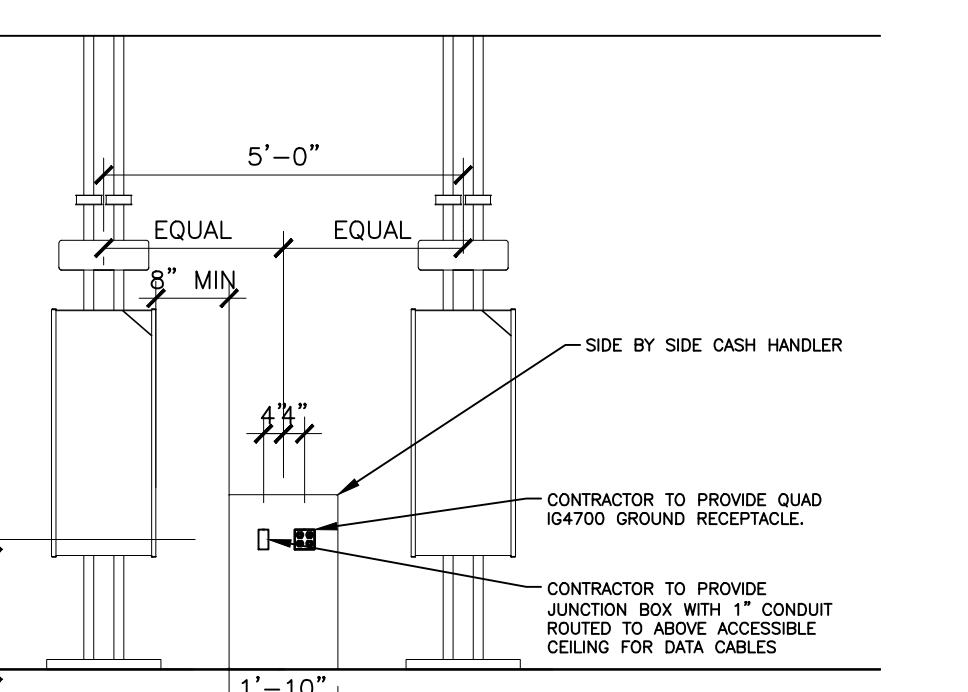
SHEET NO.	TITLE		DRAWN BY MESS	
	2023 STANDARD BUILDING – BB20		STD ISSUE DATE 2023	
	DESCRIPTION WOOD BEARING WALLS W/4" BRICK VENEER WOOD ROOF TRUSS FRAMING STUCCO/BATTEN/BRICK/METAL PANEL EXTERIOR FINISHES		REVIEWED BY JAW	
	SITE ID 042-3271	SITE ADDRESS SEC OF S.H. LOOP 288 & HUMMINGBIRD LANE, DENTON TEXAS	DATE ISSUED 03/08/24	
 ELEC. ROOF PLAN JAWA 24-0014 2 ® 1				

ELECTRICAL SCHEDULE														ELECTRICAL SCHEDULE																					
PB	VIF	Verify in Field												PB	VIF	Verify in Field																			
JBL	JB	Junction Box												EC	EC	Electrical Contractor																			
TAG #	QTY	DESCRIPTION	VOLT/PH	FLA	BRK SIZE	COND/WIRE	PNL/CCT	RECEP TYPE	HGT AFF	REQUIREMENTS & REMARKS	TAG #	QTY	DESCRIPTION	VOLT/PH	FLA	BRK SIZE	COND/WIRE	PNL/CCT	RECEP TYPE	HGT AFF	REQUIREMENTS & REMARKS														
D04.20E6	1	DIGITAL MERCHANTISER	120/1 ISOLATED	2.6	20A	1/2C-2#12G	CP:6	IG5262	6'-5"	-	205.09E2	1	FROZEN BEVERAGE DISPENSER	208/1	20.0	30A	1/2C-2#10	AP-5:(17,19)	SEE RMKS	SEE RMKS	RECEP L6-30R IN CHASE BY KES, EC MAKES FINAL CONN														
D04.23E1	1	DIGITAL MERCHANTISER - MEDIA PLAYER	120/1 ISOLATED	1.0	20A	1/2C-2#12G	CP:6	IG5262	6'-5"	USE SAME RECEPTACLE AS 4.20E6	207.01E2	1	BLENDER - MCFLURRY - RAIL MOUNT	120/1	1.2	20A	1/2C-2#12	AP-2:7	5-20R	4"-0"															
D04.23E2	1	DIGITAL MERCHANTISER - MEDIA PLAYER	DATA CABLE	-	-	-	-	JB	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.	210.00E10	1	CASH RECYCLER	120/1 ISOLATED	4.4	20A	1/2C-2#12G	CP:27	(2) IG5262	SEE RMKS	PROVIDE RECEP. IN COUNTER-MOUNTED RACEWAY														
D09.15E1	1	UTILITY CHASE - FFDT INTERIOR WALL	-	-	-	-	-	-	SEE RMKS	UTILITY CHASE AND RECEPTACLES PROVIDED BY K.E.S.	210.00E4	1	CASH RECYCLER	120/1 ISOLATED	4.4	20A	1/2C-2#12G	CP:24	(2) IG5262	2'-10"	-														
D09.16E1	1	UTILITY CHASE - FFDT EXTERIOR WALL	-	-	-	-	-	-	SEE RMKS	UTILITY CHASE AND RECEPTACLES PROVIDED BY K.E.S.	211.00E6	1	DELIVERY TABLETS	120/1	3.0	20A	1/2C-2#12	AP-5:21	(2) 5-20R	5"-0"	-														
D20.01E1	2	AUTOMATED BEVERAGE SYSTEM 2.0	120/1	5.0	20A	1/2C-2#12	AP-1:12, AP-2:24	5-20R	2"-0"	-	1																								
D20.01E2	2	AUTOMATED BEVERAGE SYSTEM 2.0	120/1	14.9	20A	1/2C-2#12	AP-1:6, AP-2:26	5-20R	3"-10"	FOR PRE-COOLER	214.02E1	1	TECHNOLOGY RACK	120/1 ISOLATED	5.0	20A	1/2C-2#12G	CP:11	IG4700	7"-6"	FOR SWITCHES, HUBS AND RADIUS														
D21.01E3	3	COFFEE BREWER (THERMAL POTS)	120-208/1	15.5	20A	1/2C-3#12	AP-1:(2,4)(14,16), AP-6:(11,13)	BY KES	SEE RMKS	EC TO EXTEND CIRCUIT TO L14-20R RECEPTACLE IN CHASE	214.02E3	1	TECHNOLOGY RACK	120/1 ISOLATED	10.0	20A	1/2C-2#12G	CP:15	IG4700	3"-0"	FOR CASHLESS DEVICE UPS														
D23.10E1	1	ESPRESSO BREWER	208/1	21.6	30A	1/2C-2#10	AP-1:(19,21)	BY KES	SEE RMKS	EC TO EXTEND CIRCUIT TO L6-30R RECEPTACLE IN CHASE	214.02E4	1	TECHNOLOGY RACK	120/1 ISOLATED	12.0	20A	1/2C-2#12G	CP:17	IG4700	3"-0"	FOR POS SYSTEM UPS AND ORB CONTROLLER														
D23.12E1	1	COFFEE CREAM DISPENSER	120/1	1.0	20A	1/2C-2#12	AP-1:8	BY KES	SEE RMKS	EC TO EXTEND CIRCUIT TO 5-20R RECEPTACLE IN CHASE	214.02E5	1	TECHNOLOGY RACK	120/1 ISOLATED	14.0	30A	1/2C-2#10G	CP:12	8x6x4 PB	7"-6"	EXTEND (2) 2 1/2" CONDUIT ABOVE CLG. W/BUSHING FOR DATA CABLES														
D23.14E1	1	SUGAR/SWEETENER DISPENSER	120/1	1.5	20A	1/2C-2#12	AP-1:8	BY KES	SEE RMKS	EC TO EXTEND CIRCUIT TO 5-20R RECEPTACLE IN CHASE	214.02E6	1	TECHNOLOGY RACK	120/1 ISOLATED	3.0	20A	1/2C-2#12	AP-5:21	(2) 5-20R	5"-0"	-														
D24.02E1	1	JUICE DISPENSER	120/1	4.5	20A	1/2C-2#12	AP-1:8	5-20R	SEE RMKS	EC TO EXTEND CIRCUIT TO 5-20R RECEPTACLE IN CHASE	215.00E12	1	POS REGISTER - FRONT COUNTER	120/1 ISOLATED	3.0 EA.	-	3/4C-2#12G	CP:19	IG4700	SEE RMKS	PROVIDE IO RECEP. IN COUNTER-MOUNTED RACEWAY														
D25.07E1	1	INFUSION TEA BREWER - MIS	120-208/1	13.0	20A	1/2C-3#12	AP-2:(32,34)	L14-20R	2"-3"	SEE RMKS	FOR WATER LINE TO ICED TEA BREWER IF CHASE IS NOT SPECIFIED. (SEE P1.6)	215.00E3	1	POS REGISTER - FRONT COUNTER	120/1 ISOLATED	3.0 EA.	-	4x4x4 PB	10"	SEE RMKS	PROVIDE IO RECEP. IN COUNTER-MOUNTED RACEWAY														
D31.03E1	1	SODA SYSTEM PACKAGE - B.I.B. (RECIRCULATING- 3 TOWERS)	208/3	26.0	30A	3/4C-3#10	AP-2:(37,39,41)	SEE RMKS	3"-0"	EC SUPPLIES 30A-3P NF DISC SW MTD 9" BELOW CEILING PER NEC SEC. 404.8(A)	215.02E10	2	POS REGISTER - 2 WINDOW D/T	120/1 ISOLATED	3.0 EA.	20A	1/2C-2#12G	CP:1	BY KES	SEE RMKS	EC TO EXTEND CIRCUIT TO IG4700 RECEPTACLE IN CHASE														
D31.03E2	1	SODA SYSTEM PACKAGE - B.I.B. (RECIRCULATING- 3 TOWERS)	120/1	(2) 6.8	20A	1/2C-2#12	AP-2:35	5-20R	6'-6"	FOR WATER BOOSTER SYSTEM AND OPTIONAL AIR COMPRESSOR	215.02E12	1	POS REGISTER - 2 WINDOW D/T	-	-	-	-	-	18x12x4 PB	10"	REFER TO D/T LOW VOLTAGE CONDUIT DIAGRAM FOR CONDUITS UNDER SLAB AND EXTEND (2) 2 1/2" C. TO ABOVE CLG.														
D32.02E1	1	REVERSE OSMOSIS WATER FILTRATION SYSTEM - TANKLESS	120/1	4.0	20A	1/2C-2#12 EA	AP-2:23	5-20R	6"-0"	-	215.02E13	1	POS REGISTER - 2 WINDOW D/T	-	-	-	-	-	4x4x4 PB	10"	EXTEND 1 1/2" UNDER SLAB TO 217.11E1 AND 2 1/2" C. TO ABOVE CEILING FOR POS DATA CABLES														
D32.04E1	1	WATER FILTRATION SYSTEM	120/1	0.08	20A	1/2C-2#12 EA	AP-2:23	5-20R	6"-0"	-	215.02E17	1	POS REGISTER - 2 WINDOW D/T	-	-	-	-	-	4x4x4 PB	10"	EXTEND 1 1/2" UNDER SLAB TO 217.11E1 AND 2 1/2" C. TO ABOVE CEILING FOR POS DATA CABLES														
D37.03E1	1	C02 SAFETY SYSTEM - DETECTOR	120/1	1.0	20A	1/2C-2#12	AP-1:10	JB	SEE RMKS	PROVIDE LOCKOUT CB. SEE MECHANICAL DRAWINGS	215.02E18	1	POS REGISTER - 2 WINDOW D/T	-	-	-	-	-	4x4x4 PB	5"-0"	EXTEND 2 1/2" C. BELOW TO 215.02E17 AND 2 1/2" C. TO ABOVE CEILING FOR POS DATA CABLES														
D37.03E2	2	C02 SAFETY SYSTEM - C02 DETECTOR AV ALARM	-	-	-	-	-	JB	SEE RMKS	FOR LV WIRES. STUB 3/4" ABV. CLG. SEE MECHANICAL DRAWINGS	215.04E1	2	POS - KVS MONITOR	120/1 ISOLATED	1.5 EA.	20A	1/2C-2#12G	CP:8	IG4700	FLUSH ON CLG	-														
D37.03E4	4	C02 SAFETY SYSTEM - C02 DETECTOR AV	-	-	-	-	-	JB	SEE RMKS	SEE RMKS	215.04E4	2	POS - KVS MONITOR	120/1 ISOLATED	1.5	20A	1/2C-2#12G	CP:26	SEE RMKS	SEE RMKS	EC TO EXTEND CIRCUIT TO IG4700 RECEPTACLE IN OEP														
D39.10E1	1	CLEAN IN PLACE PANEL	120/1	1.0	20A	1/2C-2#12	AP-2:21	5-20R	5"-6"	-	215.04E5	2	POS - KVS MONITOR	120/1 ISOLATED	1.5 EA.	20A	1/2C-2#12G	CP:3	SEE RMKS	SEE RMKS	SEE RMKS	SEE RMKS	SEE RMKS	SEE RMKS	SEE RMKS	SEE RMKS	SEE RMKS	SEE RMKS	SEE RMKS	SEE RMKS	SEE RMKS				
D39.10E2	1	ICE MACHINE - 1400 LB.	208/3	12.8	20A	1/2C-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	215.04E7	3	POS - KVS MONITOR	120/1 ISOLATED	1.5 EA.	20A	1/2C-2#12G	CP:23	IG4700	5"-6"	-														
D39.15E1	2	ICE MACHINE - 1000 LB.	120/1	1.1	15A	1/2C-2#12	AP-1:37,39	5-20R	SEE RMKS	MOUNT 9" BELOW CEILING - CIRCUIT BREAKERS SHALL BE HACR TYPE	215.04E8	1	POS - KVS MONITOR	120/1 ISOLATED	1.5 EA.	20A	1/2C-2#12G	CP:24	4x4x4 PB	4"-0"	EXTEND 2" CONDUIT ABOVE CEILING. CABLE FURNISHED AND INSTALLED BY POS SYSTEM SUPPLIER														
D39.15E2	2	ICE MACHINE - 1000 LB.	-	-	-	1/2C	-	-	JB	SEE RMKS	SEE RMKS	2																							



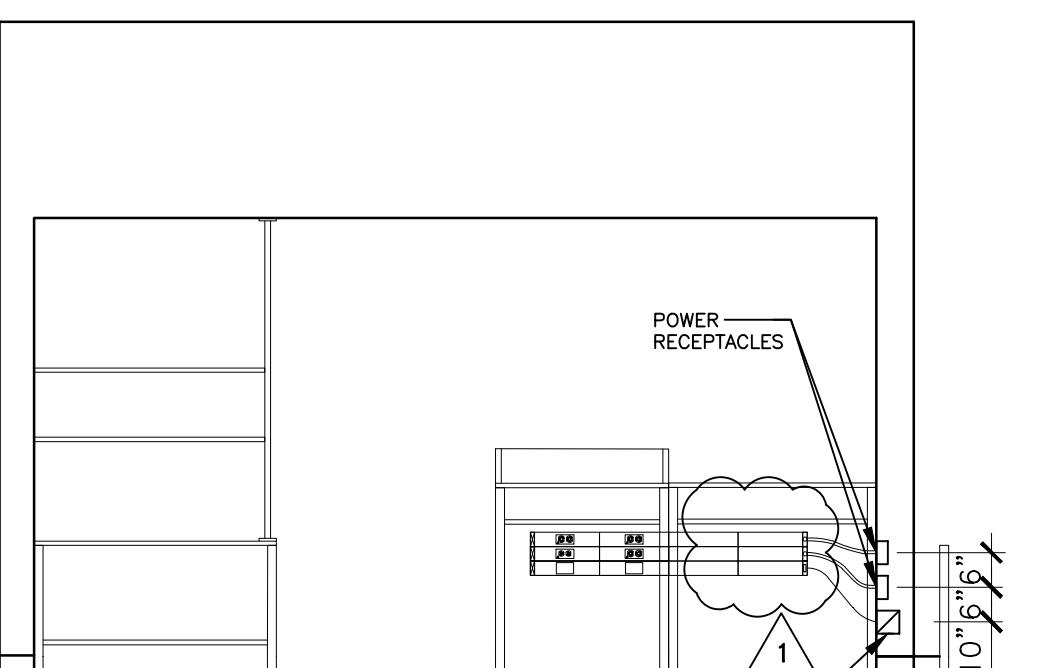
NOTES:
1. THIS EXAMPLE IS FOR A SIDE BY SIDE CASH HANDLER THAT DOES NOT HAVE A RETROFIT KIT PROVIDED BY THE CASH HANDLER.
2. EACH SIDE BY SIDE CASH HANDLER UTILIZES 3 PLUGS AND ADDS 4.4 AMPS OF LOAD.
3. EACH STACKED CASH HANDLER UTILIZED 2 PLUGS AND ADDS 3.6 AMPS OF LOAD.
4. ONE SIDE BY SIDE CAN BE CONNECTED TO A KIOSK, HOWEVER TWO STACKED UNITS CAN BE CONNECTED. REFER TO DECOR PLANS FOR EXACT CONFIGURATIONS.

5 TYP. CASH HANDLER POWER DETAIL
E-3.1 NOT TO SCALE



NOTES:
1. THIS EXAMPLE IS FOR A SIDE BY SIDE CASH HANDLER WITH THE REAR OF THE UNIT FACING A FULL HEIGHT GO BUILT WALL.
2. EACH SIDE BY SIDE CASH HANDLER UTILIZED 3 PLUGS AND ADDS 4.4 AMPS OF LOAD.
3. EACH STACKED CASH HANDLER UTILIZED 2 PLUGS AND ADDS 3.6 AMPS OF LOAD.
4. ONE SIDE BY SIDE CAN BE CONNECTED TO A KIOSK, HOWEVER TWO STACKED UNITS CAN BE CONNECTED. REFER TO DECOR PLANS FOR EXACT CONFIGURATIONS.

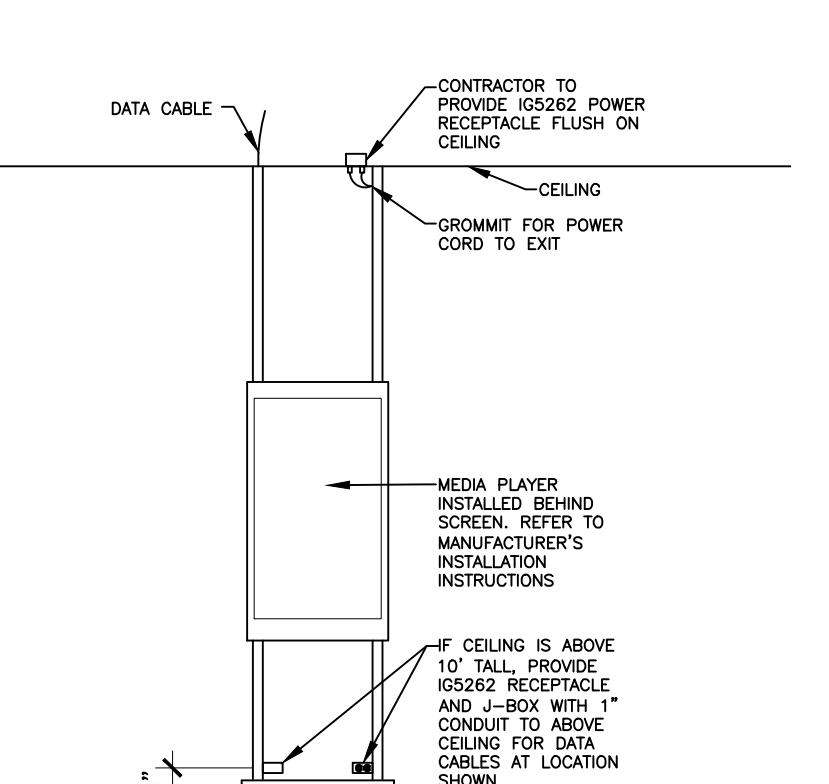
4 CASH HANDLER POWER DETAIL W/REAR TO WALL
E-3.1 NOT TO SCALE



SYMBOL	CATALOG #	DESCRIPTION	J-BOX(S) FOR DATA
■	HBLALU570R & IG4700	RECEPTACLE COVERPLATE WITH ORANGE, DUPLEX RECEPTACLE	
■	HBLALU570R & S-20R FOR BAKED GOODS AND IG5562 FOR CASH	RECEPTACLE COVERPLATE WITH STRAIGHT BLADE RECEPTACLE	
■	HBLALU71PB	COMMUNICATIONS COVERPLATE	
■	HBLALU720B02V290	2' SECTION OF RACEWAY, INCLUDES COUPLERS	
■	HBLALU720B03V290	3' SECTION OF RACEWAY, INCLUDES COUPLERS	
■	HBLALU710R2M2	SERVICE ENTRANCE FITTING & BUSHING FOR DATA CABLES	
■	HBLALU710E	BLANK END FITTING	
N/A	HBLALU5701	COUPLER (INCLUDED WITH RACEWAY SECTION)	
N/A	HBLALU5709	GROUND ADAPTER	

NOTES:
1. REFER TO SERVICE POD MANUFACTURER INSTRUCTIONS FOR EXACT PLACEMENT OF RACEWAY
2. RACEWAY AND RECEPTACLES TO BE PROVIDED WITH SERVICE POD, INSTALLED BY CONTRACTOR.
3. DETAIL SHOWN IS A TYPICAL CONFIGURATION ONLY. SITE SPECIFICS MIGHT CAUSE DEVIATIONS.
4. PART NUMBERS SHOWN REFLECT HUBBELL, SOME SUPPLIERS MAY USE WIREMOLE EQUIVALENT.

1 SERVICE POD RACEWAY DETAIL
E-3.1 NOT TO SCALE



NOTES:
1. DIGITAL MERCHANDISE CHANNELS ARE DESIGNED TO REACH UP TO A 10' CEILING. IF CEILING IS TALLER, EXTENDER KIT CAN BE ORDERED TO REACH 15'.

3 FREESTANDING MERC POWER DETAIL
E-3.1 NOT TO SCALE

GENERAL ELECTRICAL NOTES:

INSTALLATION METHODS:

- M1. ALL ELECTRICAL MATERIAL USED ON THIS PROJECT SHALL BE "UL" LISTED AND LABELED.
- M2. 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.
- M3. ALL J-BOXES, DCO's, AND OTHER ELECTRICAL DEVICES SHOWN SHALL BE RECESSED INTO A WALL, FLOOR OR CEILING UNLESS SPECIFICALLY NOTED OTHERWISE.
- M4. 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.
- M5. 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 P80C (ONE DUPLEX) OR PJ82C (TWO DUPLEX) FROM HUBBELL.
- M6. ROUGH-IN 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.
- M7. 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.
- M8. 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.
- M9. 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.
- M10. ALL HOLES IN THE FRONT COUNTER FOR THE POS CORDS AND CABLES SHALL BE LOCATED BY OWNER AND DRILLED BY GC.
- M11. ALL ELECTRICAL CONDUCTORS SHALL BE CONNECTED TO RECEPTACLES USING ONLY THE TERMINAL SCREWS. RECEPTACLE BACK WIRE/QUICK CONNECTIONS SHALL NOT BE USED.
- M12. 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.
- M13. POWER AND CONTROL CORDS ARE FURNISHED WITH KITCHEN APPLIANCES. THE EC SHALL CONNECT CORD SETS TO APPLIANCES AS REQUIRED.

- M14. 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:

- U1. INCOMING SERVICE SHALL BE 208V/120V, 3 PHASE, 4 WIRE. ANY DEVIATIONS TO THIS SERVICE TYPE SHALL NOT BE PERMITTED UNLESS APPROVED IN WRITING BY McDONALD'S.
- U2. THE EC SHALL ARRANGE WITH THE ELECTRIC, TELEPHONE, AND OTHER UTILITY COMPANIES FOR INCOMING SERVICE REQUIREMENTS AND SHALL INCLUDE ALL COSTS IN BASE BID.
- U3. 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.
- U4. PROVIDE CONCRETE PAD IF TRANSFORMER IS LOCATED ON GRADE AND PROVIDE SECONDARY SERVICE FEEDER AND CONDUITS TO PANEL MDP AS PER LOCAL UTILITY REQUIREMENTS.
- U5. 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.

- U6. EC AND ACM OR OWNER/OPERATOR AND ACM SHALL COORDINATE WITH LOCAL PHONE COMPANY TO PROVIDE A 4 PAIR (OR MORE) COPPER TELEPHONE CABLE FROM THE TELEPHONE UTILITY EASEMENT TO THE RESTAURANT TELEPHONE DEMARCAION 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 INCOPORATE 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".
- U7. 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 TELECOM PEDESTAL LOCATION IN UTILITY EASEMENT/ROW. VERIFY EXACT LOCATIONS IN FIELD WITH AREA CONSTRUCTION MANAGER AND TELECOM UTILITY PROVIDER PRIOR TO INSTALLATION.

INSTALLATION NOTES:

- I1. IF TELCOM CONDUIT IS TERMINATED WITHIN BUILDING, PVC SHALL TRANSITION TO HWG/RMC TYPE CONDUIT PRIOR TO RISING ABOVE FINISHED SLAB.
- I2. PROVIDE THERMOPLASTIC BUSHINGS AT BOTH ENDS OF CONDUIT FOR CABLING PROTECTION.
- I3. IF 90 DEGREE BENDS ARE REQUIRED, CONTRACTOR SHALL PROVIDE WIDE SWEEPING BENDS TO PREVENT BENDING/DAMAGE TO CABLE.
- I4. ALL COMMUNICATIONS CABLING SHALL BE PULLED VIA THIS CONDUIT.
- I5. 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 AWG SOLID COPPER CONDUCTORS WITH NOT LESS THAN 200 LB TENSILE STRENGTH. PROVIDE AT LEAST 12 INCHES OF SLACK AT EACH END OF PULL WIRE.
- I6. 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.

CONDUT AND WIRE:

- W1. 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 (SMUR-TUBE).

- W2. CONDUIT RUNS MAY BE COMBINED EXCEPT WHERE ISOLATED GROUNDS ARE USED. IG 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.

- W3. 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.

- W4. 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.

- W5. 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.

- W6. 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)

- O1. EXPOSED: RMC, IMC.
- O2. CONCEALED: RMC, IMC.
- O3. BELOW GRADE, SINGLE RUN: RNC, RMC.
- O4. BELOW GRADE, GROUPED: RNC, RMC.
- O5. CONNECTION TO VIBRATING EQUIPMENT (INCLUDING TRANSFORMERS AND HYDRAULIC, PNEUMATIC, ELECTRIC SOLENOID, OR MOTOR-DRIVEN EQUIPMENT): LFMC.
- O6. BOXES AND ENCLOSURES: NEMA 250, TYPE 3R OR 4.

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

- I1. EXPOSED: EMT, IMC.
- I2. CONCEALED: EMT, IMC.
- I3. BELOW GRADE, SINGLE RUN: RNC, RMC.
- I4. BELOW GRADE, GROUPED: RNC, RMC.
- I5. CONNECTION TO VIBRATING EQUIPMENT (INCLUDING TRANSFORMERS AND HYDRAULIC, PNEUMATIC, ELECTRIC SOLENOID, OR MOTOR-DRIVEN EQUIPMENT): LFMC.
- I6. BOXES AND ENCLOSURES: NEMA 250, TYPE 3R OR 4.

- I1. EXPOSED: EMT, IMC.
- I2. CONCEALED: EMT, IMC.
- I3. BELOW GRADE, SINGLE RUN: RNC, RMC.
- I4. BELOW GRADE, GROUPED: RNC, RMC.
- I5. CONNECTION TO VIBRATING EQUIPMENT (INCLUDING TRANSFORMERS AND HYDRAULIC, PNEUMATIC, ELECTRIC SOLENOID, OR MOTOR-DRIVEN EQUIPMENT): LFMC.
- I6. BOXES AND ENCLOSURES: NEMA 250, TYPE 3R OR 4.

3. CONNECTION TO VIBRATING EQUIPMENT (INCLUDING TRANSFORMERS AND HYDRAULIC, PNEUMATIC, ELECTRIC SOLENOID, OR MOTOR-DRIVEN EQUIPMENT): FMC; EXCEPT USE LFMC IN DAMP OR WET LOCATIONS.
4. DAMP OR WET LOCATIONS: RIGID STEEL CONDUIT.
5. 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" COMPR. FTGS
AIR HANDLING CEILING/SPACE	<2" EMT COMP. FTGS >2.5" IMC THREADED. FTGS	<2" EMT COMP. FTGS >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" COMPR. FTGS
BELLOW 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

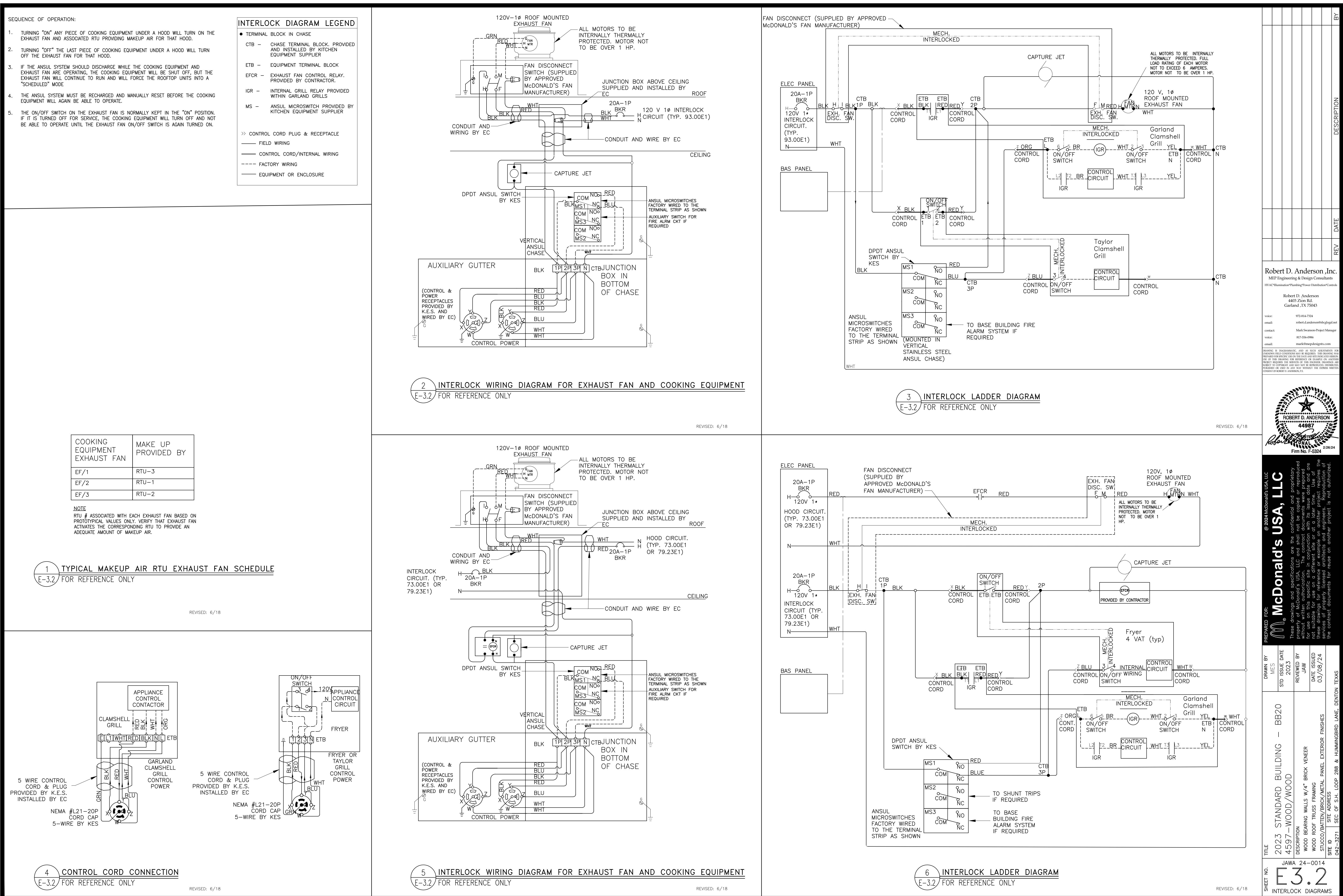
- W7. ALL CONDUITS PENETRATING THE FREEZER/COOLER BOX SHALL BE SEALED IN COMPLIANCE NEC SECTION 300 AND THE FREEZER/COOLER BOX MANUFACTURERS REQUIREMENTS.
- W8. PROVIDE THREE (3) 3/4" EMPTY CONDUITS FROM PANEL LP-1 UP TO THE CEILING SPACE AND CAP FOR FUTURE USE.

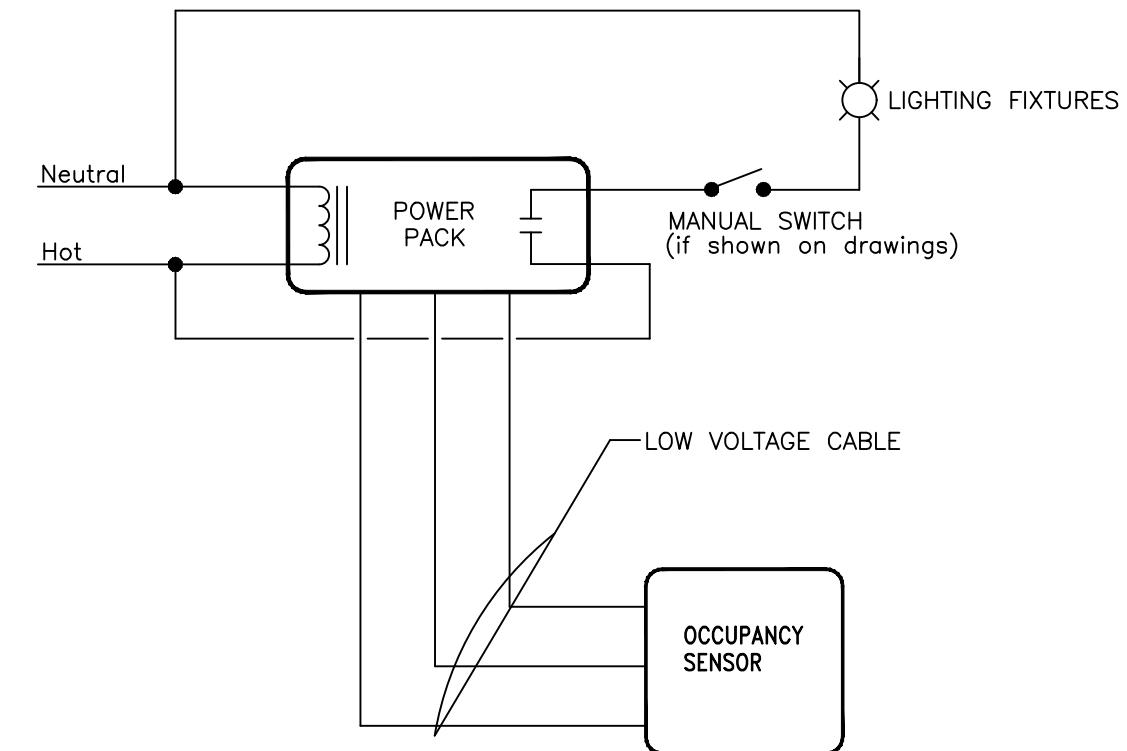
GROUNDING:

- G1. ALL BRANCH AND FEEDER CIRCUITS SHALL BE GROUNDED BY TWO METHODS. THE FIRST METHOD SHALL INCLUDE AN INSULATED COPPER EQUIPMENT GROUNDBUS CONTAINED WITHIN THE SAME CONDUIT AS THE PHASE CIRCUIT CONDUCTORS AND SIZED PER NEC SECTION 250 REQUIREMENTS. THIS INSULATED GROUNDBUS IS TO BE CONNECTED TO THE EQUIPMENT GROUNDBUS BUS IN THE CORRESPONDING GROUND BREAKER PANEL AND AT THE OTHER END TERMINATED AT THE GROUNDBUS CONTACT OF A GROUNDBREAKER RECEPTACLE AND TO THE JUNCTION BOX OR TO AN EQUIPMENT CABINET AS APPLICABLE. THE SECOND METHOD PROVIDES EQUIPMENT GROUNDBUS VIA METALLIC CONDUIT THAT IS CONNECTED AND TERMINATED IN FITTINGS LISTED FOR GROUNDBUS PER NEC SECTION 250 REQUIREMENTS. BOTH GROUNDBUS SHALL BE INSTALLED WHERE INDICATED ON PLAN AND AS SHOWN IN POS ISOLATED GROUNDED/DEDICATED CIRCUIT DETAIL ON SHEET E4.2.
- G2. THE BUILDING GROUNDBUS 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 GROUNDBUS STANDARDS PURPOSELY EXCEED THOSE GIVEN BY THE NEC. THE EC SHALL PROVIDE A BUILDING GROUNDBUS SYSTEM MEETING NEC SECTION 250 REQUIREMENTS AS WELL AS McDONALD'S STANDARDS.
- G3. EC SHALL REFER TO "POS ISOLATED GROUNDED/DEDICATED CIRCUIT DETAIL, SHEET E4.2, FOR REQUIRED WIRING REQUIREMENTS OF COMPUTER PANEL CP.
- G4. METAL RACEWAYS CONTAINING A GROUNDBUS CONDUCTOR SHALL BE BONDED AT BOTH ENDS AS REQUIRED BY NEC SECTION 250 REQUIREMENTS.

TEMPERATURE CONTROLS:

- T1. REMOTE TEMPERATURE SENSORS: EC SHALL PROVIDE 1/2" CONDUIT FROM JUNCTION BOX ABOVE CEILING DOWN TO SENSOR MOUNTED AT 4'-



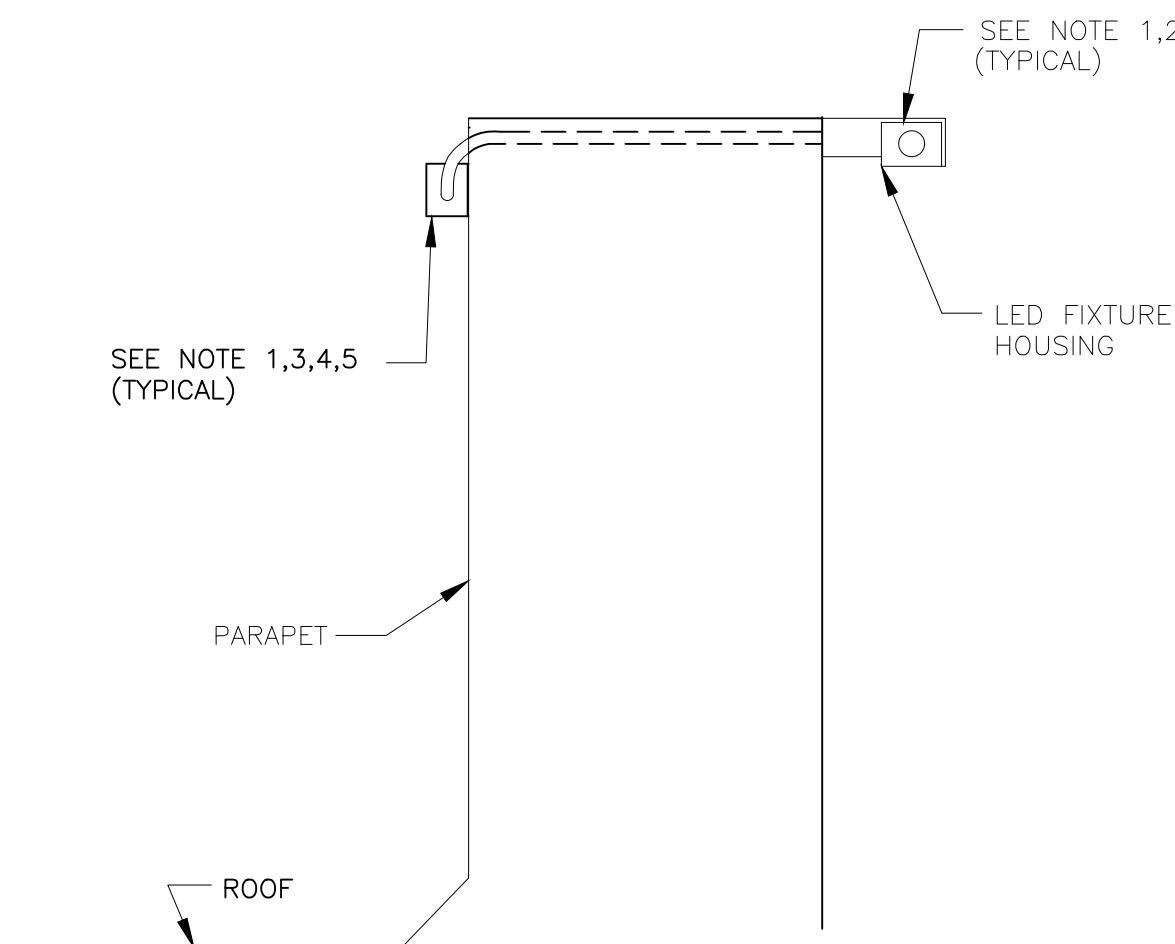


NOTE

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

1 OCCUPANCY SENSOR CONTROL DETAIL
E-4.0 NOT TO SCALE

E-4.0 NOT TO SCALE



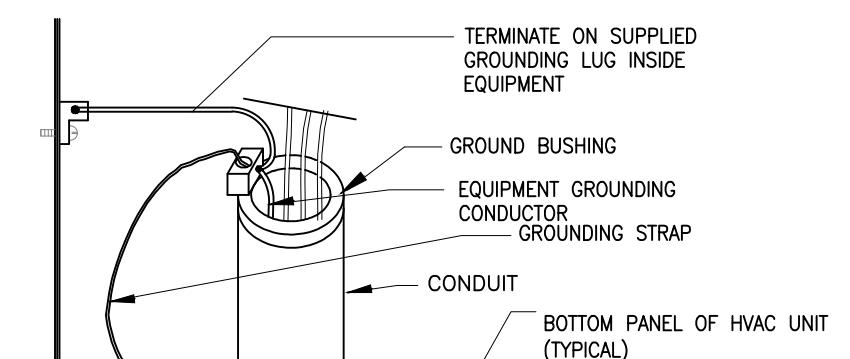
3 BRAND WALL LIGHTING DETAIL
E-4.0 NOT TO SCALE

GENERAL NOTES

1. 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.
 2. EC SHALL CONNECT NEW FIXTURES TO THE NEXT AVAILABLE SPARE 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 ARCADE.
 4. OVERALL FIXTURE RUN TO BE CENTERED ON OVERALL LENGTH OF WALL.
 5. 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.R. WIRING CONDUITS) AS REQUIRED.

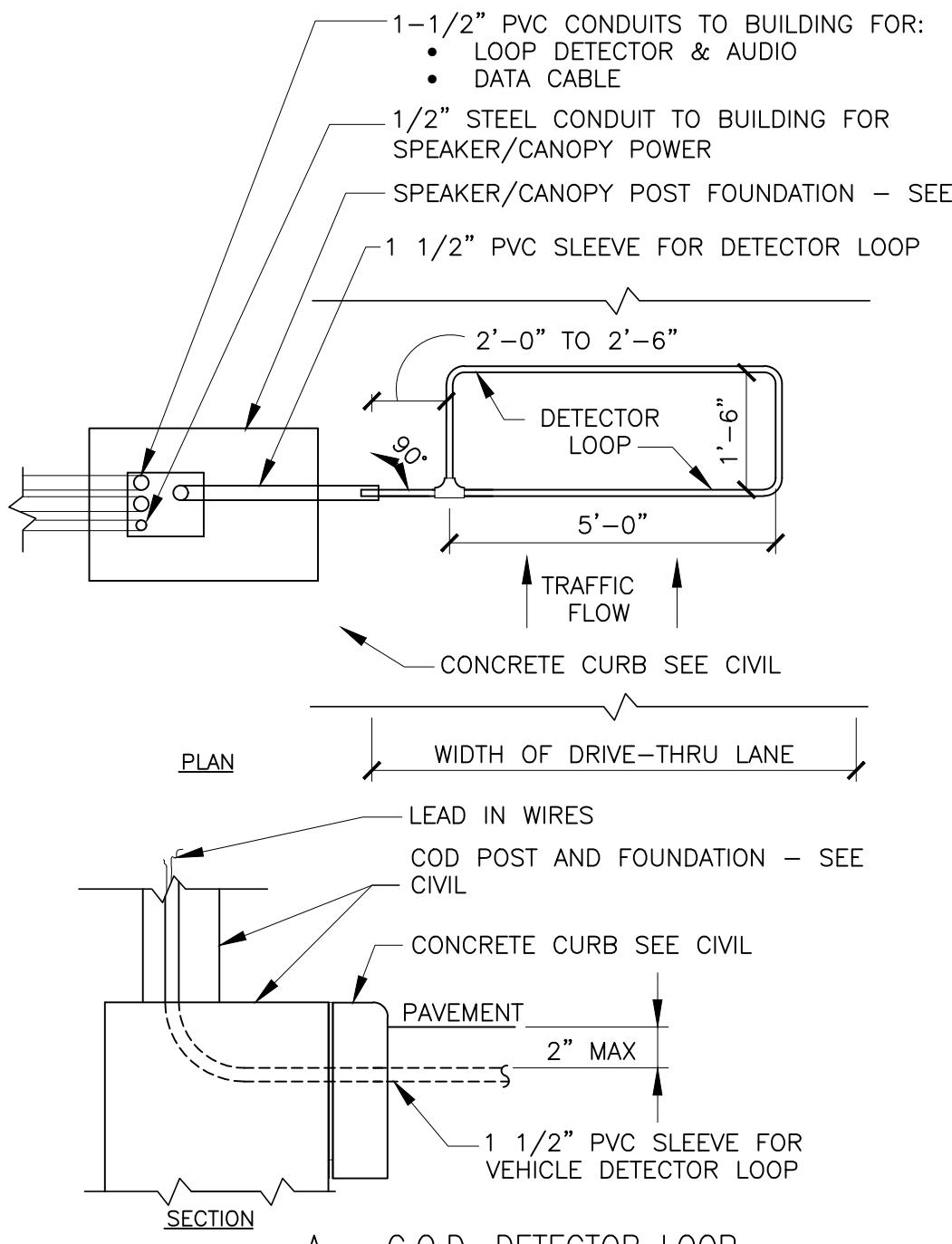
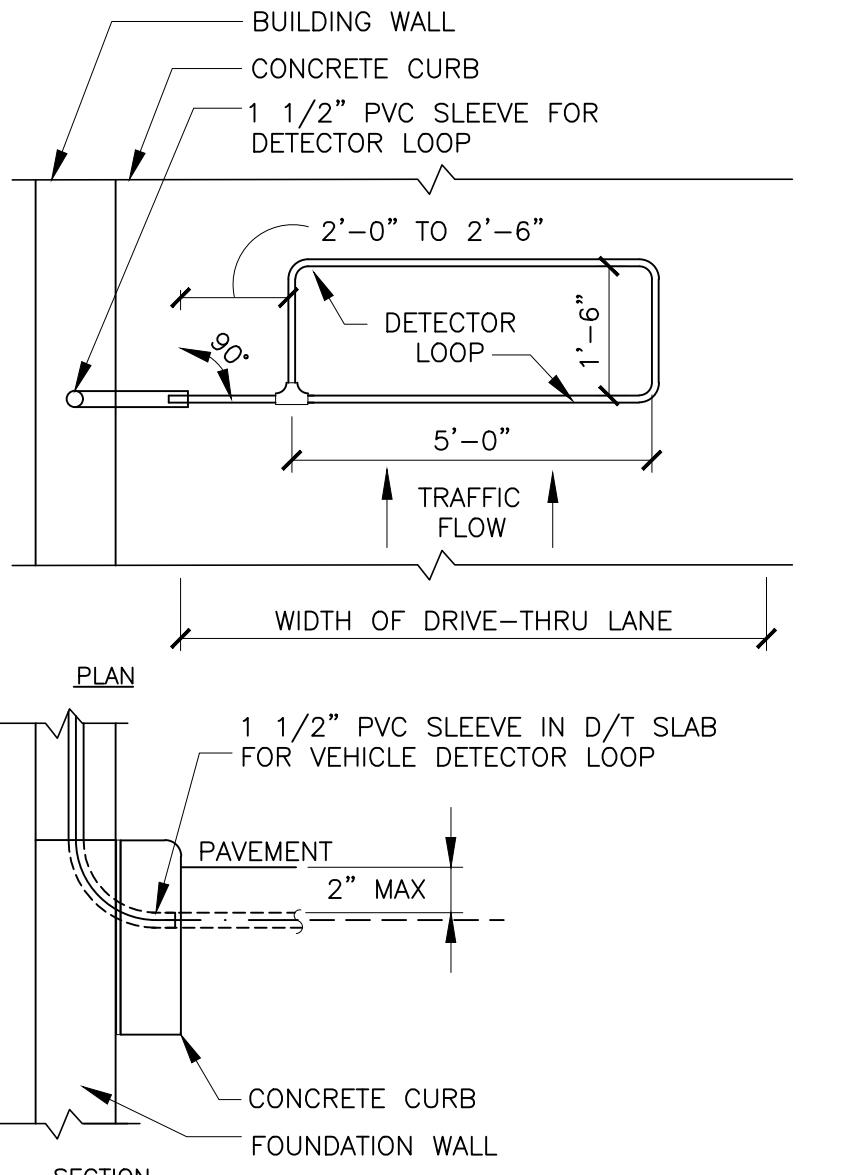
CONDUIT, WIRE SIZE AND GROUNDING FOR HVAC UNITS

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



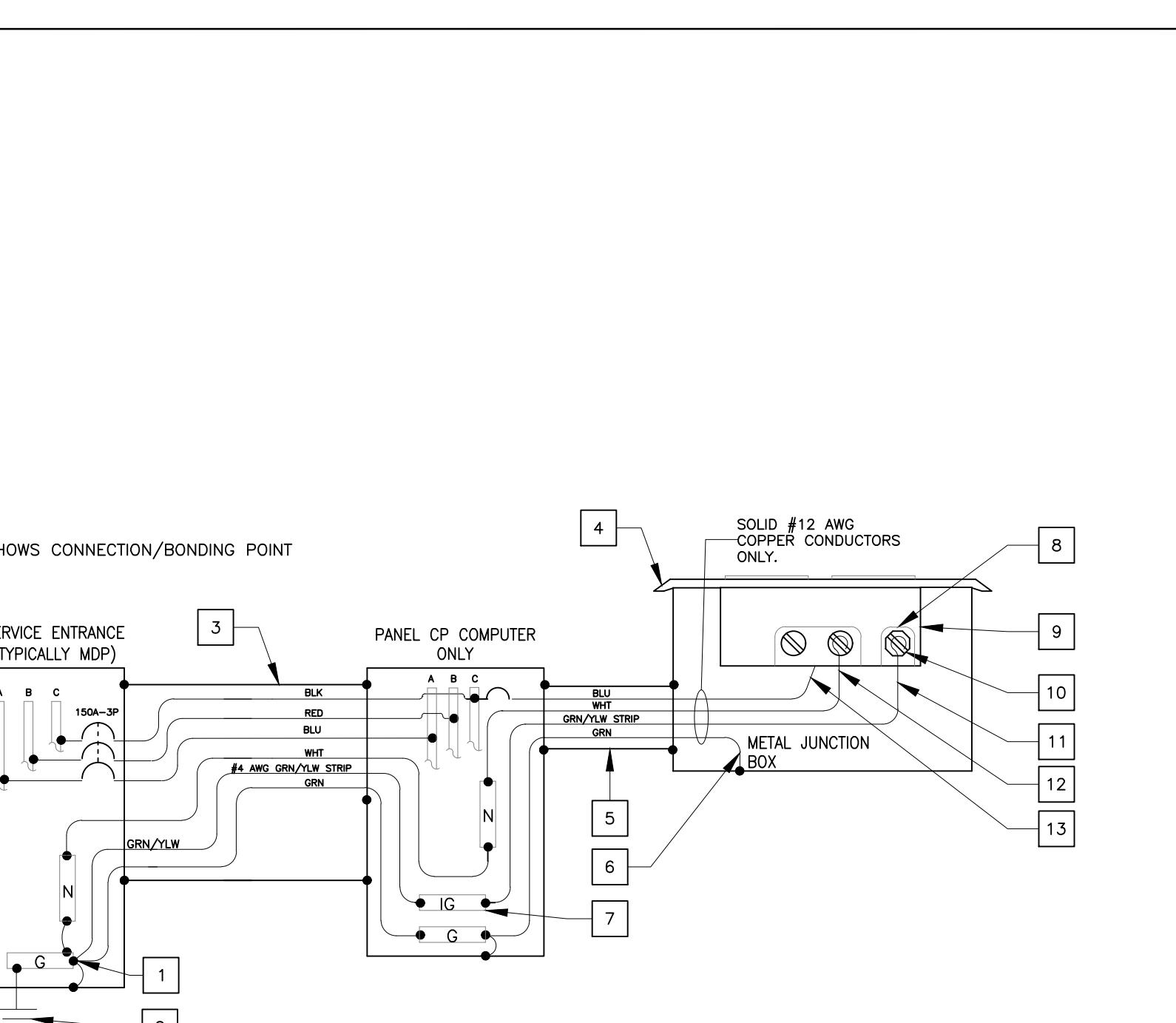
4 HVAC GROUNDING DETAIL
E-4.0 NOT TO SCALE

THE CONTRACTOR SHALL BE RESPONSIBLE FOR FINAL COORDINATION OF ALL ELECTRICAL FEEDERS AND CIRCUIT BREAKERS WITH THE MANUFACTURER'S WRITTEN DATA FOR EACH MECHANICAL DEVICE PRIOR TO SUBMITTAL OF ANY ELECTRICAL EQUIPMENT FOR REVIEW. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR ANY CHANGES TO ELECTRICAL FEEDERS OR CIRCUIT BREAKERS REQUIRED FOR ANY MECHANICAL DEVICES.



NOTES

1. VERIFY CONDUIT SIZES AND LAYOUT WITH DETECTOR LOOP MANUFACTURER.
 2. CENTER VEHICLE DETECTOR LOOP (ITEM # 217.11E1) IN DRIVE THRU LANE. INSTALL PER MFR. RECOMMENDATIONS.
 3. SEE CIVIL FOR DIMENSIONS OF DRIVE-THRU LANE CONCRETE PAD FOR DETECTOR LOOP.
 4. NO STEEL (REBAR OR ELECTRICAL WIRE) SHALL BE USED WITHIN 2' OF LOOP.
 5. 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
 6. DETECTOR LOOP MATERIAL:
PVC TUBING 1/2" I.D. 100 PSI LOOP MADE FROM ONE LENGTH OF THIN FOURTEEN GAUGE STRANDED WIRE. LEAD-IN IS PRE-TWISTED AT FACTORY.
 7. 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 & COD) 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 IT'S 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

KEY NOTES

- 1 THIS IS THE ONLY POINT WHERE THE ISOLATED EQUIPMENT GROUNDING CONDUCTOR SHALL BE CONNECTED TO THE BUILDING'S GROUNDING SYSTEM.
 - 2 SEE BUILDING GROUNDING DETAIL SHEET E4.2.
 - 3 1 1/2" METAL CONDUIT: 4-#1/0 CU + 1-#6 CU EQUIP GND + 1-#4 CU ISOLATED GND.
 - 4 ALL ISOLATED GROUND/ DEDICATED CIRCUIT RECEPTACLE COVER PLATES SHALL BE ORANGE HUBBELL PJ7CO (SINGLE), PJ8CO (ONE DUPLEX) OR PJ82CO (TWO DUPLEX) MARKED "COMPUTER ONLY".
 - 5 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.
 - 6 EQUIPMENT GROUNDING BONDING CONDUCTOR (TYPICAL)
 - 7 ISOLATED GROUND BUS, ELECTRICALLY INSULATED FROM PANEL ENCLOSURE USED TO TERMINATE ONLY ISOLATED EQUIPMENT GROUNDING CONDUCTORS.
 - 8 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.
 - 9 ISOLATED GROUND RECEPTACLE HUBBELL-IG4700,IG4710,IG5262 OR IG5261. SEE ROUGH IN SCHEDULE FOR THE APPROPRIATE RECEPTACLE TO USE.
 - 10 ISOLATED GREEN GROUND SCREW.
 - 11 ISOLATED EQUIPMENT GROUNDING CONDUCTOR (GRN W/YLW STRIP)
 - 12 NEUTRAL CONDUCTOR TERMINATED ON SILVER SCREW.
 - 13 PHASE CONDUCTOR TERMINATED ON BRASS SCREW

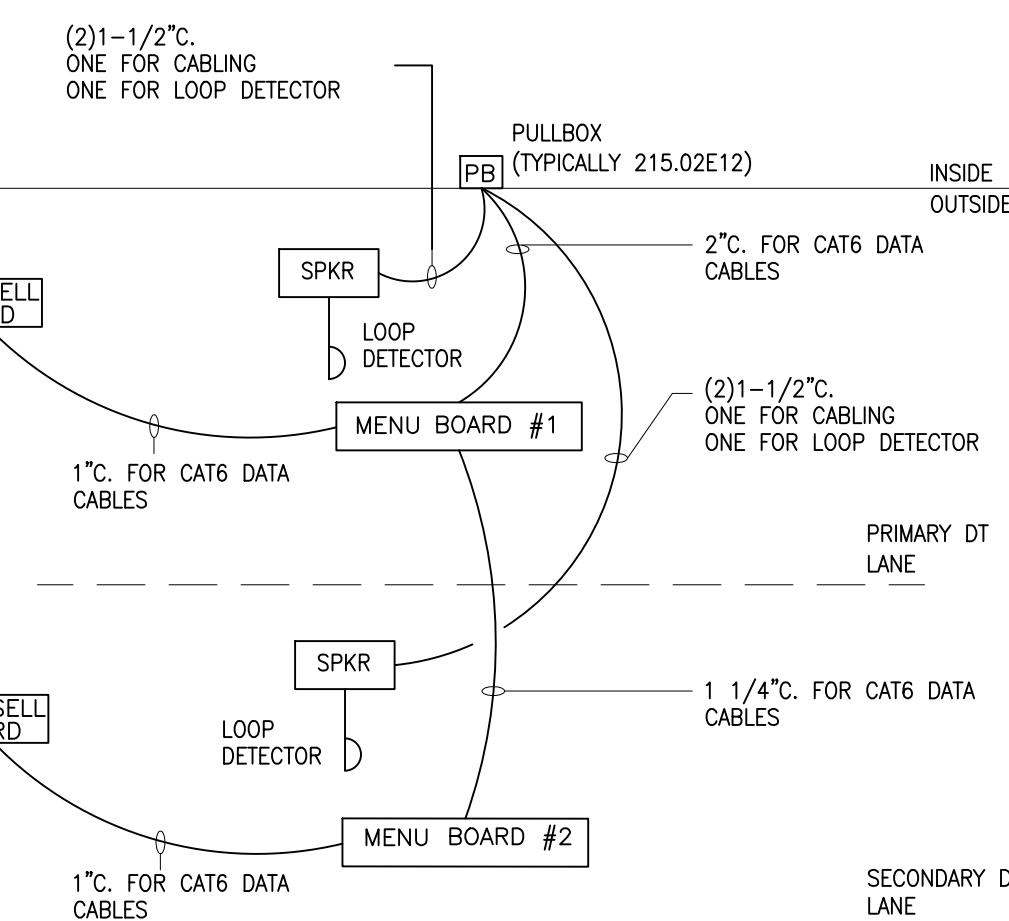
NOTE:

- * VERIFY EXACT CIRCUITS & QUANTITIES OF CIRCUITS WITH PANEL SCHEDULES AND MANUFACTURERS INSTALLATION INSTRUCTIONS.

* VERIFY LOW VOLTAGE CABLE COUNT WITH MANUFACTURERS INSTALLATION INSTRUCTIONS.

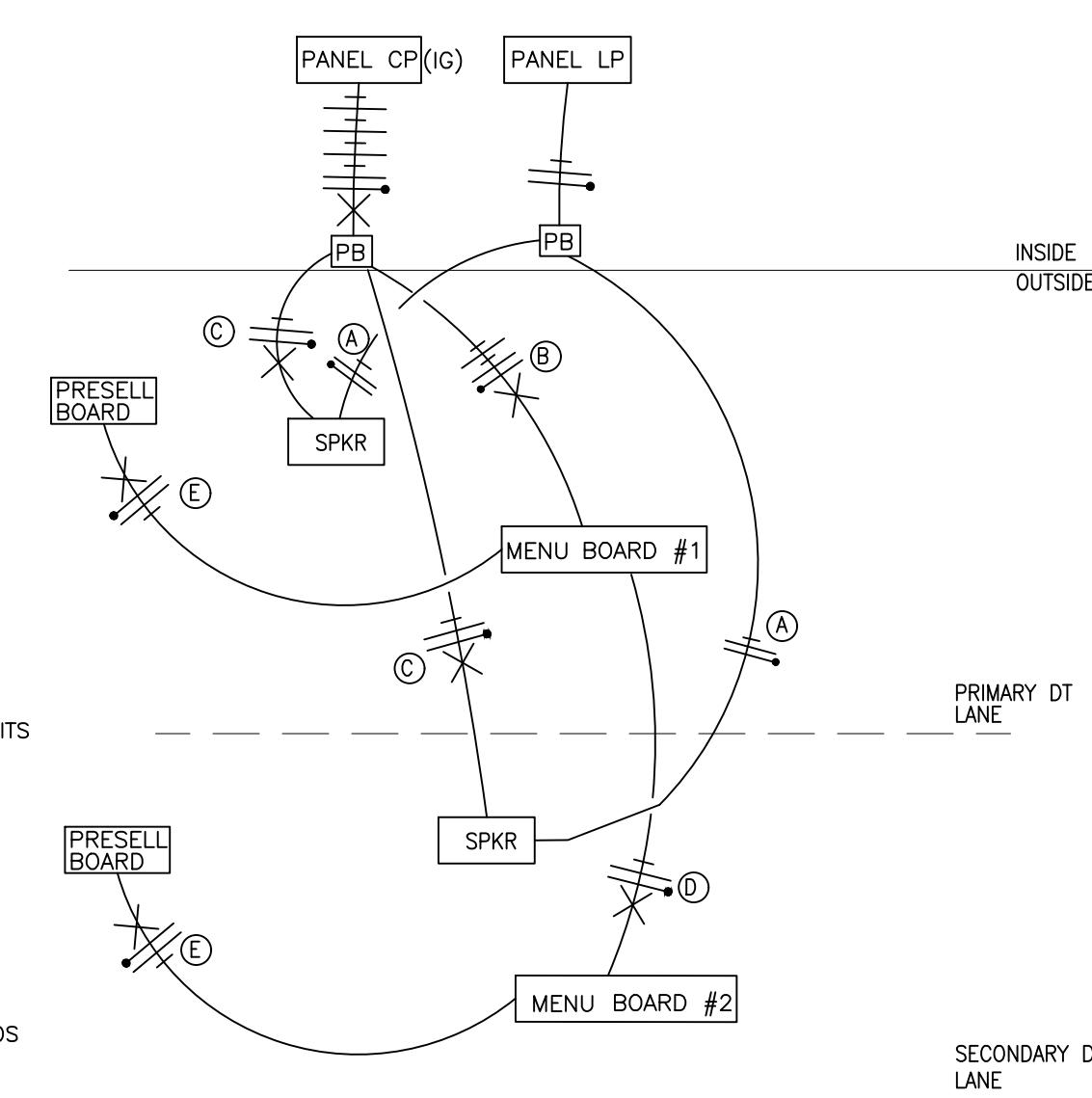
[PRE
BOA]

 - (A) 2#12 & 1#12 GND. TO LP-1 FOR COD CANOPY LIGHTING.
 - (B) 4#12 & 1#12 GND & 1#12 ISOLATED GND., TO CP FOR ISOLATED GROUND POWER TO MENUBOARDS AND MEDIA PLAYERS.
 - (C) 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.
 - (D) 2#12 & 1#12 GND & 1#12 ISOLATED GND., TO CP FOR ISOLATED GROUND POWER TO MENUBOARDS AND MEDIA PLAYERS.
 - (E) 2#12 & 1#12 GND & 1#12 ISOLATED GND., TO CP FOR ISOLATED GROUND POWER TO FOR PRESELL BOARDS AND MEDIA PLAYER.



DT LOW VOLTAGE CONDUIT DIAGRAM
NOT TO SCALE

NOT TO SCALE

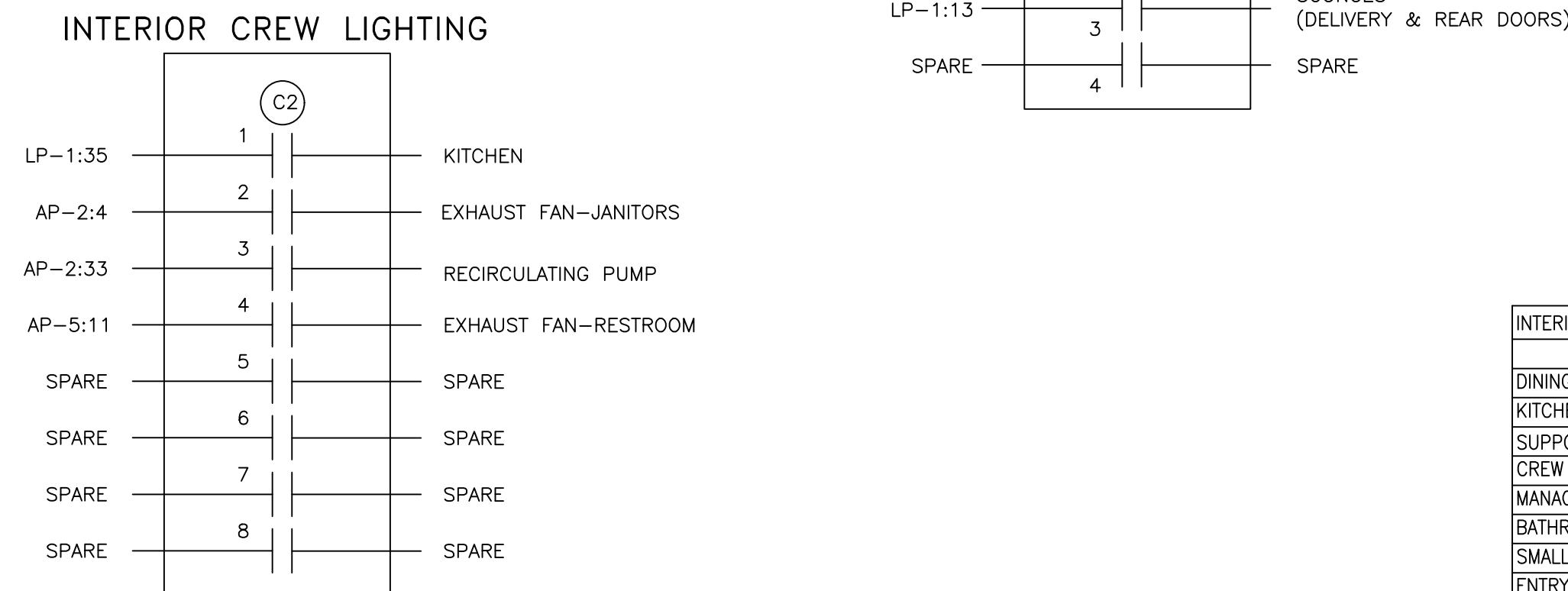
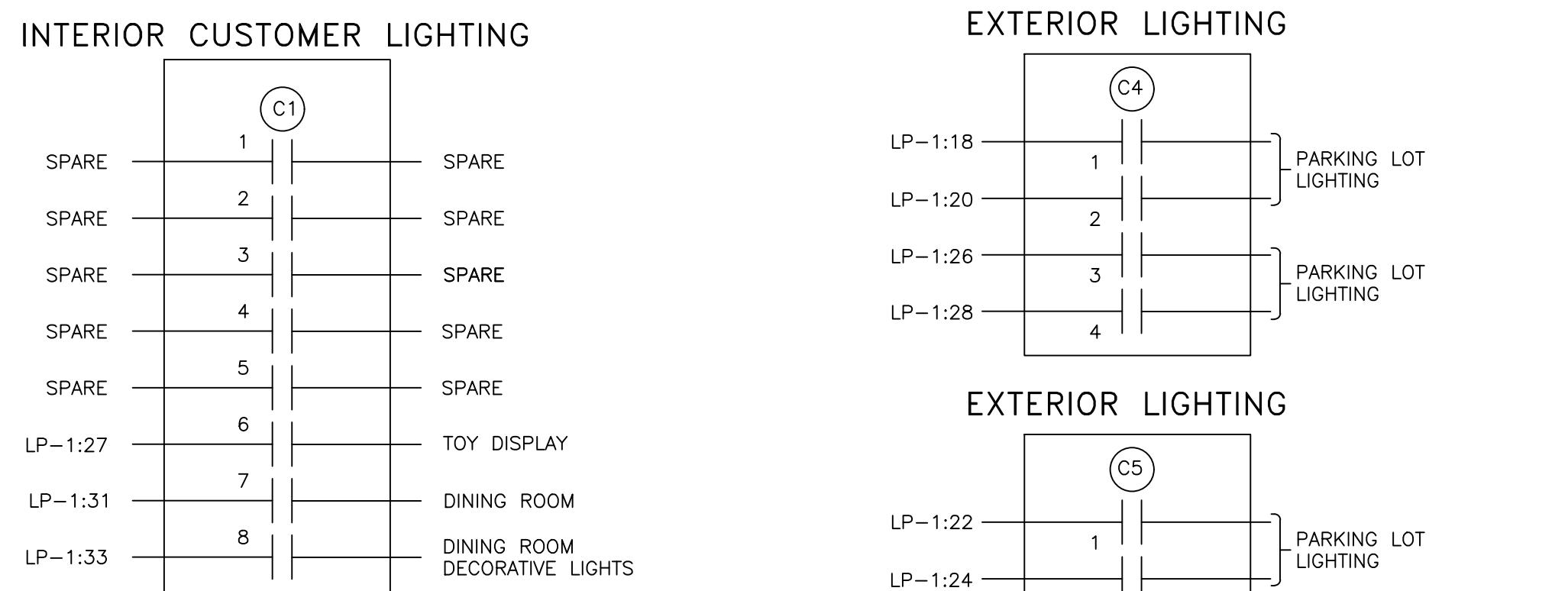


DRIVE THRU POWER DIAGRAM

NOT TO SCALE

SHEET NO.	TITLE	DRAWN BY MES	PREPARED FOR:
	2023 STANDARD BUILDING – BB20 4597-WOOD/WOOD	STD ISSUE DATE 2023	M McDonald's USA, LLC®
DESCRIPTION	WOOD BEARING WALLS W/4" BRICK VENEER WOOD ROOF TRUSS FRAMING STUCCO/BATTEN/BRICK/METAL PANEL EXTERIOR FINISHES	REVIEWED BY JAW	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 this specific site in conjunction with its issue date 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 services of properly licensed architects and engineers. Reproduction or the contract documents for reuse on another project is not authorized.
SITE ID	SITE ADDRESS 042-3271 SEC OF SH 100B 288 & HUMMINGBIRD LANE DENTON TEXAS	DATE ISSUED 03/08/24	JAWA 24-0014
  			

LIGHTING CONTROL SYSTEM



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.

- 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.

LIGHTING CONTROL INSTALLATION OPTIONS

OPTION 1 CONTACTORS AND CONTACTOR ENCLOSURE FOR THIS LIGHTING CONTROL SYSTEM SHALL
(STANDARD) 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.

- 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.

BUILDING AUTOMATION SYSTEM NOTES

- BUILDING AUTOMATION SYSTEM NOTES**

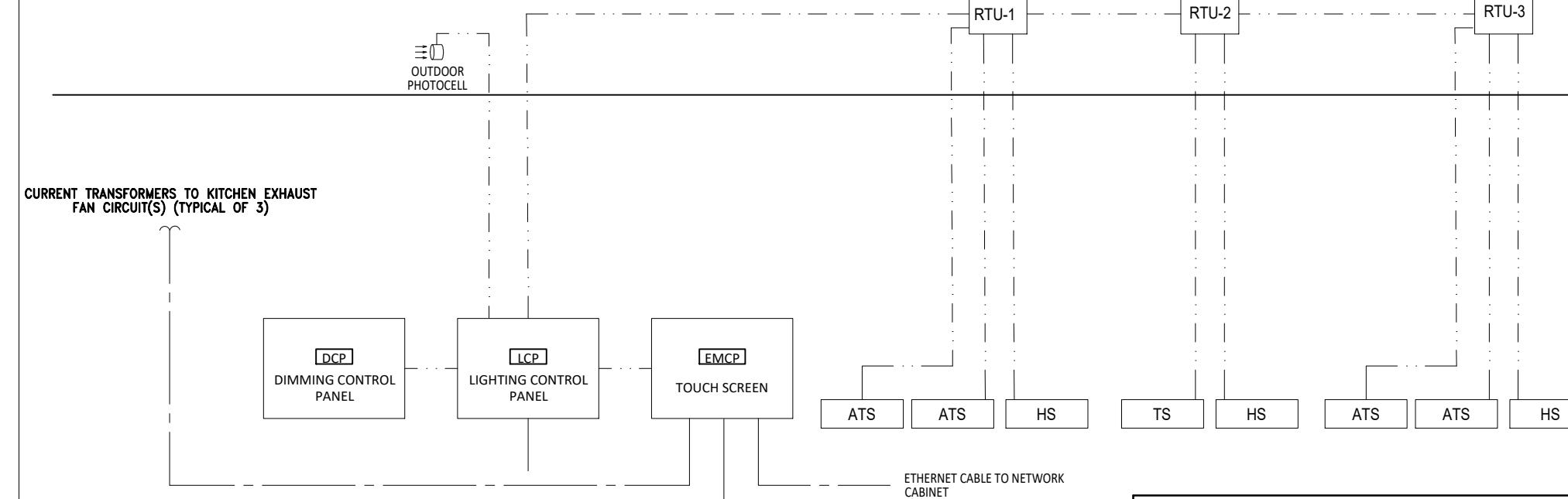
BAS1. THE DIAGRAM SHOWN ABOVE IS SCHEMATIC IN NATURE AND SHOWS THE GENERAL REQUIREMENTS FOR THE INSTALLATION OF THE BUILDING AUTOMATION SYSTEM. EXACT EQUIPMENT REQUIREMENTS AND QUANTITIES WILL VARY PER SITE. G.C., M.C., T.C.C. AND E.C. SHALL COORDINATE ALL EXACT EQUIPMENT AND INSTALLATION REQUIREMENTS 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.

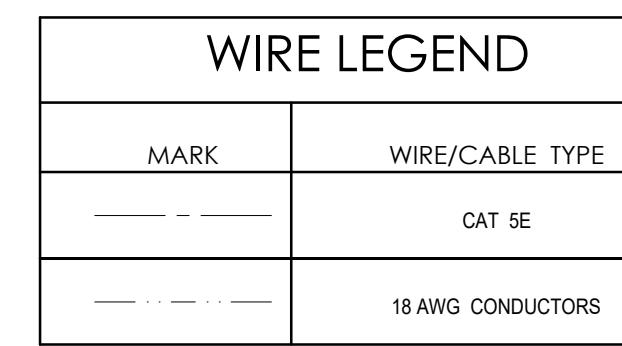
BAS3. ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL ALL LINE AND LOW VOLTAGE WIRING AND CONNECTIONS, INCLUDING BUT NOT LIMITED TO CONTROL POWER TO ALL BAS COMPONENTS AND POWER CIRCUITRY WIRING OF ALL LIGHTING CONTACTORS. COORDINATE INSTALLATION WITH SITE SPECIFIC BAS INSTALLATION DETAILS PROVIDED BY SUPPLIER.

BUILDING AUTOMATION SYSTEM

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



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	



REARED FOR:

The logo for McDonald's USA, LLC. It features a stylized 'M' composed of two overlapping circles, with a registered trademark symbol (®) at the bottom right. To the right of the 'M', the words "McDonald's USA, LLC" are written in a bold, sans-serif font.

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SHEET NO.	TITLE	DRAWN BY MES
	2023 STANDARD BUILDING – BB20 4597-WOOD/WOOD	STD ISSUE DATE 2023
	DESCRIPTION	REVIEWED BY JAW
	WOOD BEARING WALLS W/4" BRICK VENEER WOOD ROOF TRUSS FRAMING STUCCO/BATTEN/BRICK/METAL PANEL EXTERIOR FINISHES	DATE ISSUED 03/08/24
SITE ID	SITE ADDRESS	
042-3271	SEC OF S.H. LOOP 288 & HUMMINGBIRD LANE, DENTON TEXAS	
 <p>JAWA 24-0014</p> <p>LIGHTING CONTROLS</p>		

MLO, AIC: NOTES D6,D7,&D8, Mounting: Surface, NEMA 1

PANEL LP-1									225A, 208Y/120 VAC, 3PH, 4W, CB TYPE: BL or BLH										
WATTS	A	B	C	BRKR	TRIP	CCT	REQ	POLES	NO.	NO.	POLES	REQ	DESCRIPTION	A	B	C	WATTS		
0	0	0	0	Spare	20A-1	2	20A-1	S	FLAG Pole	20A-1	3	4	S	Space	220	0	294		
0	0	0	0	Spare	20A-1	5	6	20A-1	Spare	20A-1	7	8	G	Exterior Signage	0	0	294		
294	193	193	193	Exterior Signage	S	20A-1	9	10	20A-1	S	20A-1	11	12	S	Exterior Wall/Soffit Lights DT	114	114	114	
42	126	126	126	Flood Lights & Canopy lights	S	20A-1	11	12	20A-1	S	20A-1	13	14	D	DCO In Road Sign Base	180	180	180	
384	0	0	0	Back of House Sconces	S.L.	20A-1	13	14	20A-1	L	Dr Alarm/CO2/Access Control panel	20A-1	15	16	L	Dr Alarm/CO2/Access Control panel	524	524	524
96	96	96	96	Linear LED Façade Lighting	S	20A-1	17	18	20A-1	L	Lot Lights	20A-1	19	20	L	Lot Lights	480	480	480
120	120	120	120	Directional Sign	S	20A-1	21	22	20A-2	L	Lot Lights	20A-1	23	24	I	Lot Lights	240	240	240
30	0	0	0	CDD lighting	S	20A-1	25	26	20A-2	L	Lot Lights	20A-1	27	28	I	Lot Lights	480	480	480
384	384	384	384	Toy Display	S	20A-1	29	30	20A-2	Spare	20A-1	31	32	I	I	0	0	0	
293	293	293	293	Dining Area Lighting	S	20A-1	33	34	20A-1	L	BAS Controller	20A-1	35	36	L	Lighting Control Panel	300	180	180
154	154	154	154	Pendant/Cove lights	S	20A-1	37	38	20A-1	S	20A-1	39	40	G	NightLtg./Emerg. LED Lighting	128	128	128	
510	0	0	0	Kitchen Lighting	S	20A-1	40	40	20A-2	S	20A-1	41	42	I	I	0	0	0	
154	154	154	154	Restroom Lighting	S	20A-1	41	42	20A-2	S	20A-1	41	42	I	I	0	0	0	
0	0	0	0	Support Area Lighting	S	20A-1	41	42	20A-2	Spare	20A-1	41	42	I	I	0	0	0	
293	293	293	293	Total Connect												2164	5503	5041	
154	154	154	154	Connect Amps												35	35	35	
510	510	510	510	Demand Amps												44	44	44	

MLO, AIC: NOTES D6, D7, & D8, Mounting: MDP, NEMA 1

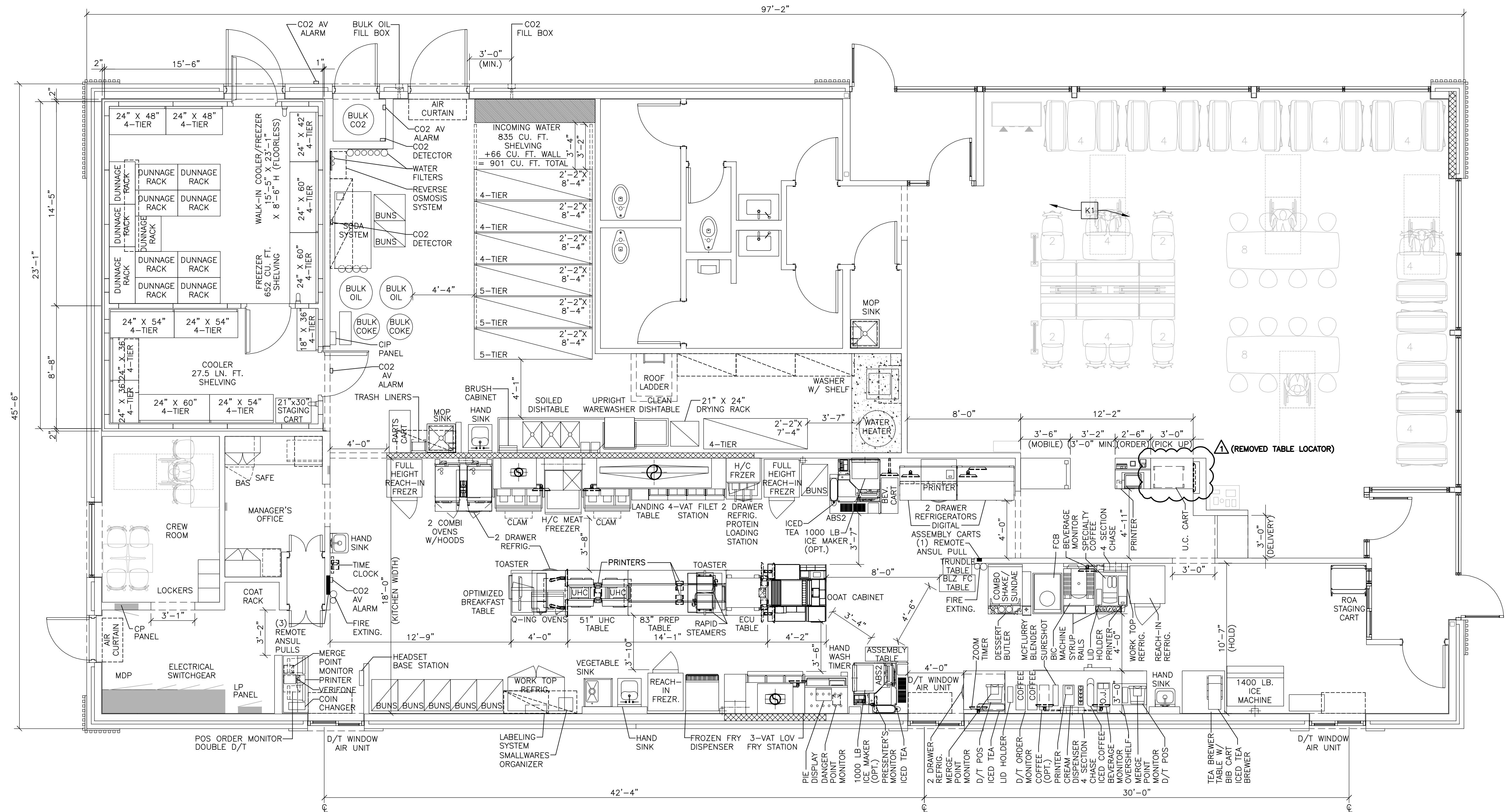
PANEL AP-1									225A, 208Y/120 VAC, 3PH, 4W, CB TYPE: BL or BLH										
WATTS	A	B	C	BRKR	TRIP	CCT	REQ	PLS	NO.	NO.	PLS	REQ	DESCRIPTION	A	B	C	WATTS		
1224	720	720	720	Dco-managers office (main off)	G	20A-1	1	2	20A-2	G	20A-1	3	4	I	G	coffee brewer (presenter's booth)	1612	1612	1612
120	540	540	540	Dco-General Purpose	G	20A-1	5	6	20A-1	G	20A-1	6	7	G	ABS (phase c, presenter's booth)	1788	1788	1788	
240	960	960	960	Safe - (mo) DCO Gen Purp	L	20A-1	7	8	20A-1	G	20A-1	7	8	G	Juice disp/coffee cream disp	840	840	840	
960	1500	1500	1500	Remote Order Battery	G	20A-1	9	10	20A-1	G	20A-1	11	12	G	CO2 Detector	120	120	120	
1800	1800	1800	1800	Washer	G	20A-1	13	14	20A-2	G	20A-1	14	20A-2	G	Automated beverage sys	600	600	600	
120	2246	2246	2246	Hand Held Order	G	20A-1	15	16	I	I	20A-1	17	18	I	I	1612	1612	1612	
2246	2246	2246	2246	Computer Room (TF1)	G	20A-1	17	18	20A-3	G	20A-1	19	20	I	I	1560	1560	1560	
1500	1500	1500	1500	Espresso Brewer	G	20A-1	19	20	I	I	20A-1	21	22	I	I	1560	1560	1560	
1080	1080	1080	1080	3-Vat fryer hood interlock	G	20A-1	23	24	20A-1	H	20A-1	25	26	20A-2	3-Vat fryer hood interlock	104	104	104	
2112	2112	2112	2112	Frozen fry dispenser (fr. wall)	G	20A-1	27	28	20A-1	G	20A-1	29	30	20A-1	Reach in Freezer-SW	1320	1320	1320	
1500	60	60	60	Hand Wash Timers	L.G.	20A-1	31	32	16A-3	H	20A-1	33	34	I	I	Ice Machine Remote Cond 1000lb	1332	1332	1332
132	132	132	132	Reach in Freezer-SW	G	20A-1	35	36	I	I	20A-1	37	38	15A-3	H	Ice Machine Remote Cond 1000lb	1332	1332	1332
1656	1656	1656	1656	4-Vat fryer hd interlock	20A-1	41	42	I	I	20A-1	41	42	I	I	Ice machine	1332	1332	1332	
15894	15894	15894	15894	Total Connect												15984	13950	17316	
131	131	131	131	Connect Amps												131	131	131	
89	89	89	89	Demand Amps												89	89	89	

MLO, AIC: NOTES D6,D7,&D8, Mounting: MDP, NEMA 1

PANEL AP-2									225A, 208Y/120 VAC, 3PH, 4W, CB TYPE: BL or BLH										
WATTS	A	B	C	BRKR	TRIP	CCT	REQ	PLS	NO.	NO.	PLS	REQ	DESCRIPTION	A	B	C	WATTS		
1536	1536	1536	1536	Ice machine 1400LB	H	20A-1	3	2	20A-1	Spare	20A-1	4	5	G	Janitors EF	100	540	540	
144	144	144	144	Blender McFlurry	G	20A-1	7	8	20A-1	G	20A-1	9	10	H	Refrig w/40°	600	600	600	
180	480	480	480	Janitors closet	G	20A-1	11	12	20A-2	G	20A-1	13	14	I	I	Walk in cooler freezer	600	2496	2496
0	864	864	864	Water Heater, Gas	L	20A-1	21	22	20A-2	G	20A-1	23	24	G	Qing oven - P&S	600	1550	1550	
840	1668	1668	1668	Bulk oil system (sup area)	G	20A-1	15	16	20A-2	G	20A-1	17	18	G	Qing oven - P&S	1550	1550	1550	
120	120	120	120	Clean in place panel	G	20A-1	19	20	I	I	20A-1	21	22	G	Specialty Coffee Refrigerator 27"	468	468	468	
180	490	490	490	Reverse Osmosis, Filtration	G	20A-1	23	24	20A-2	G	20A-1	25	26	G	Automated beverage sys	600	600	600	
1200	1200	1200	1200	Dco in trash corral	G	20A-1	27	28	20A-2	G	20A-1	29	30	I	I	Qing oven - P&S	1550	1550	1550
324	324	324	324	Reach in SW fridge	G	20A-1	31	32	20A-2	G	20A-1	33	34	G	Infusion Tea Brewer	1352	1352	1352	
120	1632	1632	1632	Recirc pump	G	20A-1	35	36	20A-2	G	20A-1	37	38	G	Qing oven - P & S	1602	0	0	
3120	3120	3120	3120	Soda syst pack (support area)	G	20A-1	39	40	I	I	20A-1	41	42	20A-1	G	Dco-General Purpose	540	540	540
3120	3120	3120	3120	Total Connect												3894	2292	2292	
0	0	0	0	Connect Amps												24	24	24	
0	0	0	0	Demand Amps												20	20	20	

MLO, AIC: NOTES D6,D7,&D8, Mounting: MDP, NEMA 1

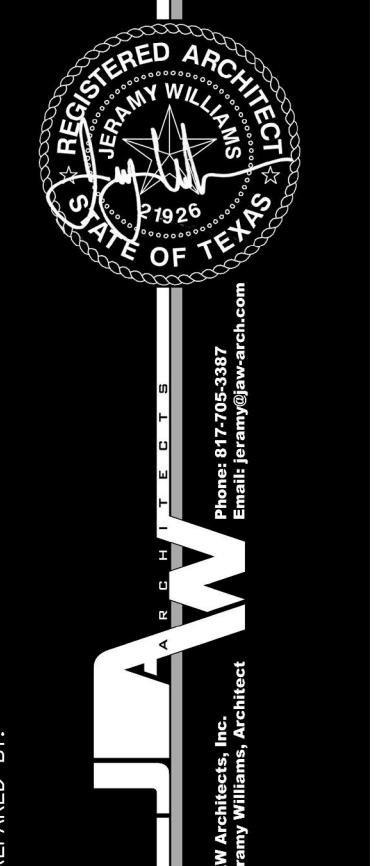
PANEL AP-3									225A, 208Y/120 VAC, 3PH, 4W, CB TYPE: BL or BLH								
WATTS	A	B	C	BRKR	TRIP	CCT	REQ	PLS	NO.	NO.	PLS	REQ	DESCRIPTION	A	B	C	WATTS
4668	4668	4668	4668	4-Vat-Fry													



KEYED NOTES

K1 CUSTOMER KIOSK & DECOR LAYOUT FOR
REFERENCE ONLY. VERIFY KIOSK PLACEMENT PER
USRD APPROVED KIOSK REVIEW

SHEET NO.	TITLE	DRAWN BY	PREPARED BY:
	2023 STANDARD BUILDING - BB20	JAW	@ 2023 McDonald's USA, LLC
	4597-WOOD/WOOD	JAW	McDonald's USA, LLC
	WOOD BEARING WALLS W/4" BRICK VENEER	JAW	These drawings and specifications are the confidential and proprietary
	STUCCO/BATEN/BRICK/METAL PANEL EXTERIOR FINISHES	JAW	property of McDonald's USA, LLC and shall not be copied or reproduced
	04-2-3271 SEC OF S.H. LOOP 288 & HUMMINGBIRD LANE, DENTON TEXAS	JAW	without authorization. The contents of these drawings and specifications were prepared for the project identified above. They are not to be used for another project or for any other purpose without the express written consent of McDonald's USA, LLC. These drawings and specifications were prepared for the project identified above. They 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 services of properly licensed architects and engineers. Reproduction of the content documents for reuse on another project is not authorized.



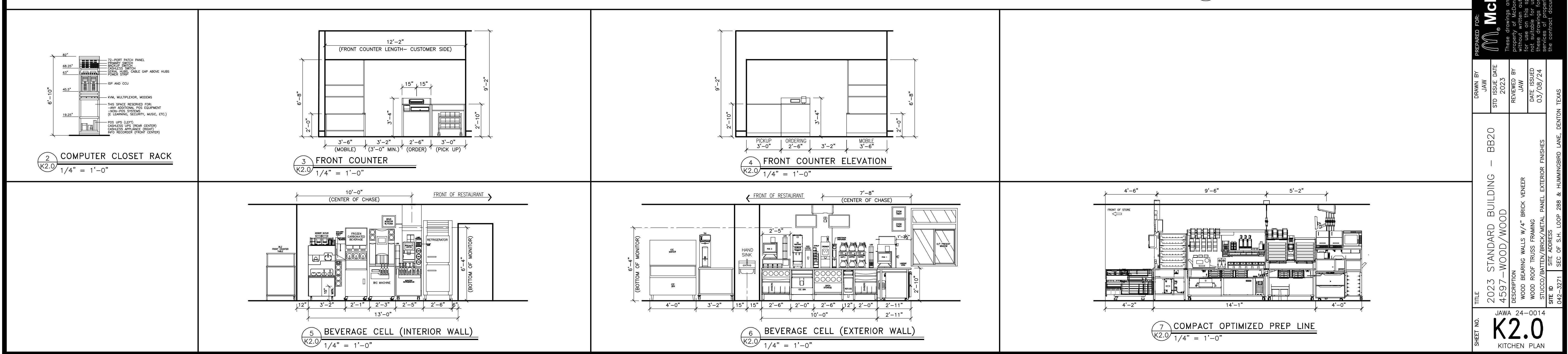
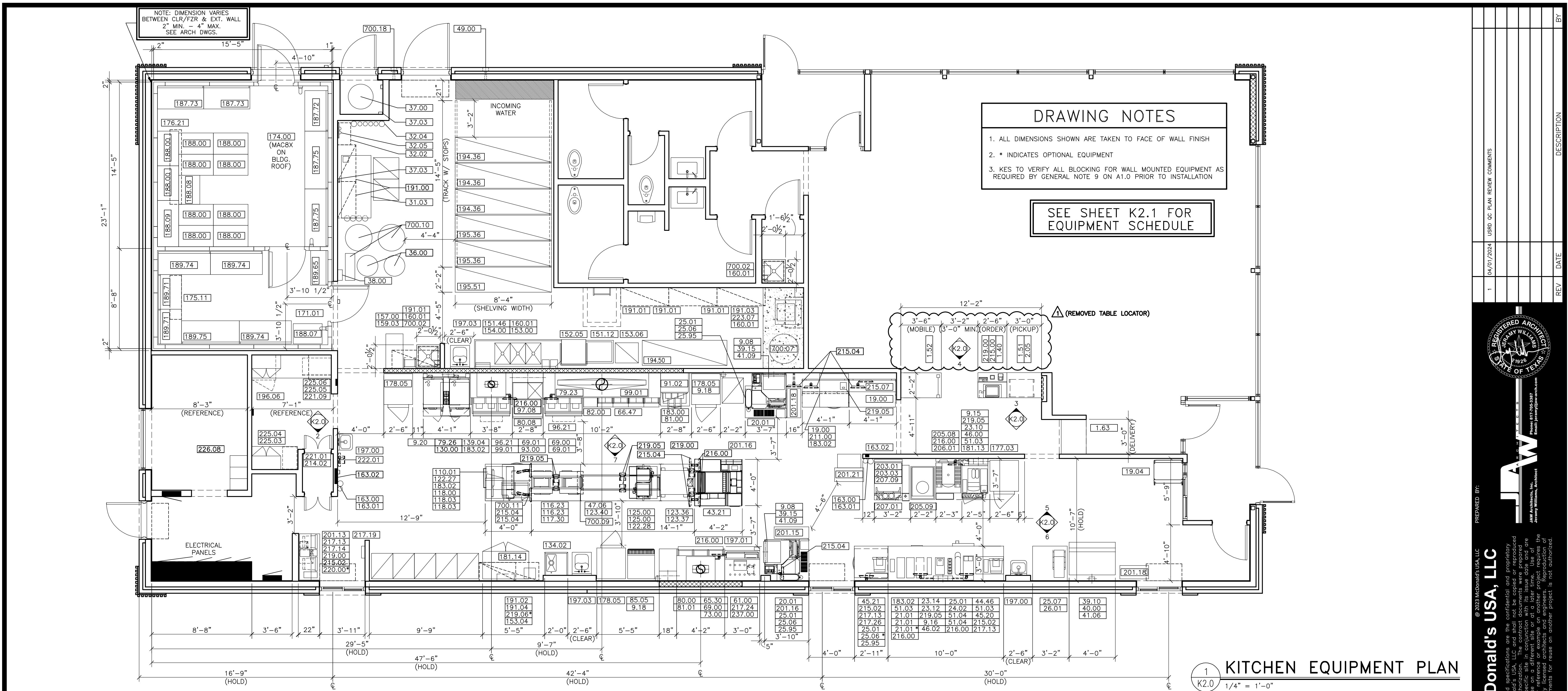
JAW

Amy Williams, Architect

REV DATE DESCRIPTION

REV	DATE	DESCRIPTION
1	1/24/01/2024	USRD QC PLAN REVIEW COMMENTS

BY



EQUIPMENT SCHEDULE												EQUIPMENT SCHEDULE											
	O	QTY	DESCRIPTION	MANUFACTURER	MODEL #	UL	NSF	FURNISHED	GENERAL REMARKS	SPECIAL REQUIREMENTS			O	QTY	DESCRIPTION	MANUFACTURER	MODEL #	UL	NSF	FURNISHED	GENERAL REMARKS	SPECIAL REQUIREMENTS	
1.40	1	SERVICE POD - 30"	DECOR	SEE PLAN	-	2	GC	-					187.73	2	FREEZER SHELVING 24" x 48" x 74" H. - 4-TIER	ISS SHELVING	FSMS/FSMA742448E	-	2	KES	-		
1.51	1	PICKUP POD - 36"	DECOR	SEE PLAN	-	2	GC	-					187.75	2	FREEZER SHELVING 24" x 60" x 74" H. - 4-TIER	ISS SHELVING	FSMS/FSMA742460E	-	2	KES	-		
1.52	1	PICKUP POD - 42"	DECOR	SEE PLAN	-	2	GC	-					188.00	10	DUNNAGE RACK 22" x 36"	INTERMETRO	HP2236PD	-	2	KES	-		
1.63	1	McDELIVERY PICKUP COUNTER	DECOR	SEE PLAN	-	2	GC	-					188.07	1	UNIVERSAL STAGING CART	ISS SHELVING	WST1384Y	-	2	KES	-		
2.05	1	UNDER COUNTER CART - 24" W x 18" D FRONT COUNTER	INTERMETRO	UC18-DMS	-	2	KES	-					188.08	1	DUNNAGE RACK 22" x 30"	INTERMETRO	HP2230PD	-	2	KES	-		
9.08	2	UTILITY CHASE - ICE MAKER ON ABS VERSION	KES	5"x8"x23"	-	2	KES	CONCEALS WATER AND CONDENSING UNIT LINES					188.09	1	DUNNAGE RACK 22" x 48"	INTERMETRO	HP2248PD	-	2	KES	-		
9.15	1	UTILITY CHASE - FFDT INTERIOR WALL	KES	20"x5"x76"	-	2	KES	4 SECTION CHASE FOR BUYOUT RECEPTACLES, POS, CO2 AND WATER					189.65	1	COOLER SHELVING 18" x 36" x 74" H. - 4-TIER	ISS SHELVING	FSMS/FSMA741836E	-	2	KES	-		
9.16	1	UTILITY CHASE - FFDT EXTERIOR WALL	KES	20"x5"x76"	-	2	KES	4 SECTION CHASE FOR BUYOUT RECEPTACLES, POS AND WATER					189.71	2	COOLER SHELVING 24" x 36" x 74" H. - 4-TIER	ISS SHELVING	FSMS/FSMA742436E	-	2	KES	-		
9.18	2	UTILITY CHASE - WALL VERSION	KES	4"x4"x82"	-	2	KES	CHASE FOR BULK OIL LINES, MOUNT AT 2'-0"					189.74	3	COOLER SHELVING 24" x 54" x 74" H. - 4-TIER	ISS SHELVING	FSMS/FSMA742454E	-	2	KES	-		
9.20	1	UTILITY CHASE - COMBI CELL	KES	4"x8"x48"	-	2	KES	CHASE FOR BUYOUT RECEPTACLES AND WATER					189.75	1	COOLER SHELVING 24" x 60" x 74" H. - 4-TIER	ISS SHELVING	FSMS/FSMA742460E	-	2	KES	-		
19.00	2	DIGITAL ASSEMBLY CART - 48"	INTERMETRO	MCDAAC-48	-	2	KES	-					190.04	1	VALANCE SHELVING - 18" x 36"	INTERMETRO	M1836C-MP	-	2	KES	MOUNT AT 6'-8" AFF TO SHELF BOTTOM UNLESS OTHERWISE NOTED		
19.04	1	ROA STAGING CART - 24"x 30"	INTERMETRO	MCDROA-2430	-	2	KES	-					191.01	4	VALANCE SHELVING - 18" x 48"	INTERMETRO	M1848C-MP	-	2	KES	MOUNT AT 6'-8" AFF TO SHELF BOTTOM UNLESS OTHERWISE NOTED		
20.01	2	AUTOMATED BEVERAGE SYSTEM 2.0	IMI CORNELIUS	621058590LON	-	-	KES	INSTALLATION KIT INCLUDES STAINLESS STEEL CHASE & DATA LINE					191.02	1	VALANCE SHELVING - 18" x 60"	INTERMETRO	M1860C-MP	-	2	KES	MOUNT AT 6'-8" AFF TO SHELF BOTTOM UNLESS OTHERWISE NOTED		
21.01	3	COFFEE BREWER (THERMAL POTS)	BUNN-O-MATIC	AXOM-POV-3	E32066	4	KES	W/ELECTRONIC CONTROLLER FOR CONVERSION TO LOW OR HIGH VOLTAGE					191.03	1	VALANCE SHELVING - 18" x 30"	INTERMETRO	M1830C-MP	-	2	KES	MOUNT AT 5'-0" AFF TO SHELF BOTTOM FOR ABOVE WASHER APPLICATION		
23.10	1	ESPRESSO BREWER	FRANKE	FMS850	-	4	KES	-					191.04	1	VALANCE SHELVING - 18" x 36"	INTERMETRO	M1836C-MP	-	2	KES	MOUNT AT 5'-0" AFF TO SHELF BOTTOM -W/STL LINER FOR SALAD EQUIP		
23.12	1	COFFEE CREAM DISPENSER	SURESHOT	AC110-PC-51	E217698	20	KES	-					194.36	3	DRY SHELVING 26" x 100" x 84" H. - 4-TIER	DENSTOR	-	-	2	KES	-		
23.14	1	SUGAR/SWEETENER DISPENSER	SURESHOT	AC2-GP-1-G38	E217698	18	KES	-					194.50	1	DRY SHELVING 26" x 88" x 84" H. - 4-TIER	DENSTOR	-	-	2	KES	-		
24.02	1	JUICE DISPENSER	BUNN-O-MATIC	JDF-2S	-	18	KES	-					194.56	1	DRY SHELVING 26" x 100" x 84" H. - 5-TIER	DENSTOR	-	-	2	KES	-		
25.01	4	SLIMLINE ICED BEVERAGE DISPENSER	BUNN-O-MATIC	TDO-N	E32066	4	KES	KES TO VERIFY EXACT QUANTITY PER MARKET					195.51	1	DRY SHELVING 26" x 100" x 84" H. - 5-TIER	DENSTOR	-	-	2	KES	-		
25.06	3	SLIMLINE ICED BEVERAGE DISPENSER - SHORT	BUNN-O-MATIC	TDO-N LP	E32066	4	KES	KES TO VERIFY EXACT QUANTITY PER MARKET					195.56	2	DRY SHELVING 26" x 100" x 84" H. - 5-TIER	DENSTOR	-	-	2	KES	-		
25.07	1	INFUSION TEA BREWER - MID	BUNN-O-MATIC	ITCB-DV	E32066	4	KES	PROVIDED WITH BREWER, INSTALLATION KIT AND TDO-N BOOSTER					195.60	1	DRY SHELVING 26" x 100" x 84" H. - 5-TIER	DENSTOR	-	-	2	KES	-		
25.95	3	SLIMLINE ICED BEVERAGE DISPENSER - 2 TIER	KES	-	-	2	KES	-					195.66	1	DRY SHELVING 26" x 88" x 84" H. - 4-TIER	DENSTOR	-	-	2	KES	-		
26.01	1	TEA BREWER TABLE - 36"x36"	ISS SHELVING	WST1758C	-	2	KES	-					195.70	2	DRY SHELVING 26" x 100" x 84" H. - 5-TIER	DENSTOR	-	-	2	KES	-		
31.03	1	SODA SYSTEM PACKAGE B.I.B. (RECIRCULATING - 3 MULTIPLEX TOWERS) - REMOTE	50GR04	S44632	18	KES	-						195.74	1	DRY SHELVING 26" x 100" x 84" H. - 5-TIER	DENSTOR	-	-	2	KES	-		
32.02	1	REVERSE OSMOSIS WATER FILTRATION SYSTEM - TANKLESS	EVERPURE	MRS-600HE	-	-	KES	FOR COFFEE MAKER, ESPRESSO MACHINE, AND RAPID BUN STEAMER					196.06	1	SAFE - STANDARD BLDG. - LEFT HINGE	NKL	BSD4125FGXL-MC	-	-	OWNER	-		
32.04	1	WATER FILTRATION SYSTEM	EVERPURE	EV9337-26	-	-	KES	-					197.00	2	STAINLESS STEEL HAND SINK	ADVANCE TABCO	7-PS-61	-	2	GC	REFER TO PLUMB. DWGS. FOR DETAILS, SOAP & TOWEL DISP. BY OTHERS	REQUIRED BY LOCAL CODE	
32.05	1	WATER FILTRATION SYSTEM	EVERPURE	EV92972-24	-	-	KES	FOR COMBI OVENS AND STAGING CABINET					197.01	1	HAND WASH TIMER	NATIONAL CONTROLS	TMD-T1715-120	E53595	-	KES	-		
36.00	2	BULK COKE	CHART INDUSTRIES	10667511	-	18	MANUFACTURER	SYRUP LINES BY CHART INDUSTRIES					197.03	2	STAINLESS STEEL HAND SINK - ADA	ADVANCE TABCO	7-PS-26	-	2	GC	REFER TO PLUMB. DWGS. FOR DETAILS, SOAP & TOWEL DISP. BY OTHERS	REQUIRED BY LOCAL CODE	
37.00	1	BULK CO2 - 750 LB.	CHART INDUSTRIES	CARBO-MAX 750	-	-	MANUFACTURER	-					201.13	1	DRIVE-THRU CASH STAND - 21" D x 48" W	INTERMETRO	DT48-8	-	2	KES	SOLID WORK TOP, WIRE SHELVES		
37.03	2	CO2 SAFETY SYSTEM	SEE RMKS	-	-	KES	SEE MECHANICAL DRAWINGS	INCLUDES DETECTOR AND (4) AV ALARMS					201.15	1	READY-NEAT DRIVE-THRU ASSEMBLY CART - 12' D x 36" W	INTERMETRO	DTPC-36	-	2	KES	-		
38.00	1	CLEAN PLACE PANEL	CHART INDUSTRIES	10667431	-	18	MANUFACTURER	SEE MECHANICAL DRAWINGS	INCLUDES DETECTOR AND (4) AV ALARMS				201.16	2	DRIVE-THRU ABS CART	INTERMETRO	DRIVE-THRU ABS CART	-	2	KES	ABS DRINK STAGING CART WITH TROUGH		
39.10	1	ICE MACHINE - 1400 LB.	MANITOWOC	IY1500N3 / B970	SA4027	12	KES	SEE HEADMASTER KIT K00221					201.18	2	CBB STAGING CART	INTERMETRO	MCD-CBB	-	2	KES	-		
39.15	2	ICE MACHINE - 1000 LB.	MANITOWOC	IBT1020C-161	SA4027	12	KES	CONDENSER: CVDT1200					201.21	1	BLZ FRONT COUNTER TABLE - 30" D x 14" W	INTERMETRO	MCD1430-BLZM	-	2	KES	W/ CASTERS AND OVERSHELF		
40.00	1	ICE MACHINE CHASE	KES	4"x6"x48"	-	2	KES	CONCEALS WATER AND CONDENSING UNIT LINES					203.01	1	HEAT TREAT COMBINATION SHAKE/SUNDAE MACHINE	CARPAGIANI	K3	SA4203	6	KES	SUPPLIED WITH CONE DISPENSER AND 7'-6" LONG CORD		
41.06	1	ICE MACHINE REMOTE CONDENSER - 1400 LB.	MANITOWOC	JCT-1500	SA4027	12	KES	-					203.03	1	CUP/CONE DISPENSER	KES	-	-	2	KES	-		
41.09	2	ICE MACHINE REMOTE CONDENSER - 1000 LB.	MANITOWOC	CVDT1200-263A	SA4027	12	KES	-					205.08	1	BIG MACHINE	MULTIPLEX	MA-8-2	SA12070	6	KES</td			