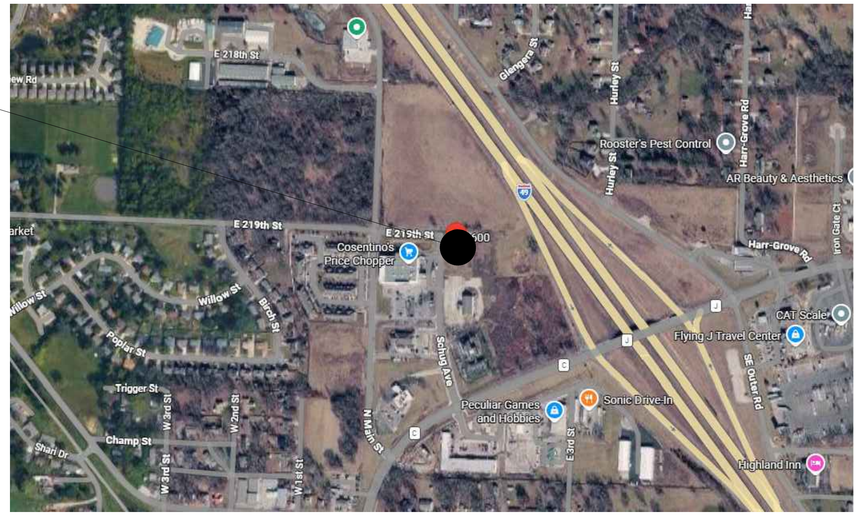


ALL SIGNAGE WILL BE UNDER SEPARATE PERMIT.
GENERAL CONTRACTOR RESPONSIBLE FOR OBTAINING ALL NECESSARY BUILDING PERMITS AND HEALTH APPROVALS

VICINITY MAP

N.T.S.

McDONALD'S RESTAURANT - BB20 - 4590 WW-HB

STATE SITE CODE: **241342**
STREET ADDRESS: 600 SCHUG AVENUE
CITY: **PECULIAR**
COUNTY: CASS
STATE: MISSOURI
DENVER FIELD OFFICE

BUILDING INFORMATION

BUILDING CODES:

BUILDING CODE	2012 INTERNATIONAL BUILDING CODE
MECHANICAL CODE	2012 INTERNATIONAL MECHANICAL CODE
ELECTRICAL CODE	2011 NATIONAL ELECTRICAL CODE
PLUMBING CODE	2012 INTERNATIONAL PLUMBING CODE
FIRE/ LIFE SAFETY CODE:	2018 INTERNATIONAL FIRE CODE
ENERGY CODE:	2012 INTERNATIONAL ENERGY CONSERVATION CODE
ACCESSIBILITY CODE	ADA/ ANSI. A117.1

STRUCTURE:

WOOD FRAMED LOAD BEARING WALLS, WOOD ROOF FRAMING

UTILITIES

ELECTRIC GRILLS, ELECTRIC FRYERS, GAS WATER HEATER, GAS HVAC

BUILDING DATA:

OCCUPANCY:	USE GROUP A2 (RESTAURANT)
CONSTRUCTION TYPE:	V-B NON-SPRINKLED
NUMBER OF STORIES:	SINGLE STORY
BUILDING HEIGHT:	18'-9 1/2"
GROSS BUILDING AREA:	4,187 S.F.

DESIGN LOADS:

GROUND SNOW LOAD:	20 PSF
WIND SPEED:	115 MPH (EXPOSURE C)
SEISMIC DESIGN CATEGORY:	B
SOIL BEARING CAPACITIES:	2000 PSF MIN

LIFE SAFETY SYSTEMS:

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

DESIGNER OF RECORD:

DISCIPLINE:	NAME:	COMPANY, ADDRESS	ADDRESS	PHONE#:
ARCHITECT:	CARL L LINGLE	LINGLE DESIGN GROUP, INC.	158 WEST MAIN STREET, LENA, IL 61048	815-369-9155
CIVIL:	JOEL JACKSON	BISHOP ENGINEERING COMPANY, INC.	3501 104TH STREET, DES MOINES, IA 50322	515-276-0467
STRUCTURAL:	BIKASH SIGDEL	TAMARACK GROVE ENGINEERING	1050 WALL ST W #203, LYNDHURST, NJ 07071	208-345-8941
MECHANICAL:	JOE THOMAS	WCW ENGINEERING, INC.	760 CREEL DRIVE, WOOD DALE IL 60191	630-595-8800
PLUMBING:	JOE THOMAS	WCW ENGINEERING, INC.	760 CREEL DRIVE, WOOD DALE IL 60191	630-595-8800
ELECTRICAL:	BILL HERZKE	DICKERSON ENGINEERING INC.	3343 N. RIDGE AVENUE, ARLINGTON HEIGHTS IL 60004	847-966-0290

CONSTRUCTION PROJECT MANAGER:

DISCIPLINE:	NAME:	COMPANY, ADDRESS	ADDRESS	PHONE#:
MANAGER:	ALBERTO DEL TORO	McDONALDS CORPORATION	110 N. CARPENTER STREET, CHICAGO, IL 60607-2101	208-751-4851
PROJECT MANAGER:	JOE KERCHNER	LINGLE DESIGN GROUP, INC.	158 WEST MAIN STREET, LENA IL 61048	815-369-9155

STATEMENT OF COMPLIANCE:

I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL UNDER THE LAWS OF THE STATE OF MISSOURI.

STATE OF MISSOURI · CARL LINGLE · NUMBER A-2003018555 · ARCHITECT

EXPIRES: 12-31-27 DATE: 07-15-26

I HAVE PREPARED OR CAUSED TO BE PREPARED UNDER MY DIRECT SUPERVISION, THE ATTACHED PLANS AND SPECIFICATIONS AND STATE THAT, TO THE BEST OF MY KNOWLEDGE AND BELIEF AND AND TO THE EXTENT OF MY CONTRACTUAL OBLIGATION, THEY ARE IN COMPLIANCE WITH THE MISSOURI ACCESSIBILITY CODE.

SYMBOL LEGEND:

- 6 / A4.0 — SECTION TAG
- 6 / A4.0 — DETAIL TAG
- T/ SLAB ELEV. 0'-0" — ELEVATION TAG
- N — CONSTRUCTION PLAN — DRAWING TITLE — Scale: 3/16" = 1'-0"
- 4 — DOOR TAG
- W3 — WINDOW TAG
- DINING ROOM 103 — ROOM NAME & NUMBER
- A — PARTITION TAG
- X — KEY NOTE

DRAWING INDEX

REVISIONS	SHEET#	SHEET NAME
	T1.0	COVER SHEET
1	T2.0	EGRESS AND OCCUPANCY PLAN
	T3.0	ACCESSIBLE SIGNAGE PLAN
	T4.0	MCDONALD'S SIGNAGE PLAN
	T5.0	IP-CCTV PLAN
	G1.0	GENERAL NOTES
	G2.0	GENERAL ACCESSIBILITY NOTES
		CIVIL
		REFER TO CIVIL COVER SHEET
		ARCHITECTURAL
	A0.2	TRASH ENCLOSURE PLAN AND DETAILS
	A1.0	CONSTRUCTION PLAN, NOTES & DETAILS
1	A1.2	REFLECTED CEILING PLAN
	A1.3	ROOF PLAN
	A1.4	FINISH PLAN & SCHEDULES
	A2.0	EXTERIOR ELEVATIONS
	A2.1	EXTERIOR ELEVATIONS
	A4.0	ENLARGED RESTROOM PLAN & DETAILS
	A4.1	EXTERIOR DETAILS
1	A4.2	ENLARGED FRONT COUNTER PLAN & ELEVATIONS
1	A4.3	ENLARGED FRONT COUNTER SECTIONS & DETAILS
	A4.4	CEILING & ROOF DETAILS
1	A5.0	WALL SECTIONS & DETAILS
1	A5.1	WALL SECTIONS & DETAILS
1	A5.2	WALL SECTIONS & DETAILS
1	A5.3	WALL SECTIONS & DETAILS
	A6.0	DOOR & WINDOW SCHEDULES
	A6.1	DETAILS
		STRUCTURAL
	S1.0	FOUNDATION PLAN
	S1.2	FRAMING PLAN
	S2.0	FOUNDATION DETAILS
	S2.1	FOUNDATION DETAILS
	S3.0	FRAMING SECTIONS
	S3.1	STEEL DETAILS
	S3.2	DETAILS
	S3.3	FRAMING SECTIONS
	S3.4	DETAILS
	S4.0	STRUCTURAL SPECIFICATIONS
	S4.1	STRUCTURAL SPECIFICATIONS
	S4.2	STRUCTURAL SPECIFICATIONS
	S4.3	STRUCTURAL SPECIFICATIONS
	S4.4	STRUCTURAL SPECIFICATIONS
	S4.5	STRUCTURAL SPECIFICATIONS
	S4.6	STRUCTURAL SPECIFICATIONS
	S4.7	STRUCTURAL SPECIFICATIONS

DRAWING INDEX (CONTINUED)

REVISIONS	SHEET#	SHEET NAME
		MECHANICAL
	M1.0	ROOF PLAN
1	M1.2	DUCTWORK PLAN
	M1.4	MECH. PIPING PLAN
1	M2.0	EXHAUST HOODS
1	M3.0	DETAILS
	M4.0	GENERAL NOTES
	M4.1	SCHEDULES
		PLUMBING
1	P1.0	DOMESTIC WATER PIPING
1	P1.2	VENT & STORM PIPING PLAN
1	P1.3	UNDERGROUND PLUMBING
	P1.4	UNDERGROUND ROUGH-IN
	P1.6	OVERHEAD ROUGH-IN
1	P2.0	DOMESTIC WATER ISOMETRIC
1	P2.1	WASTE & VENT ISOMETRIC
	P2.2	STORM ISOMETRIC
	P3.0	DETAILS
	P4.0	GENERAL NOTES
	P4.1	SCHEDULES
		ELECTRICAL
	E1.0	POS RISER DIAGRAM
	E1.1	ROUGH-IN FLOOR PLAN
1	E2.0	LIGHTING PLAN
	E2.1	ELECTRICAL ROOF PLAN
	E3.0	ROUGH-IN SCHEDULE
	E3.1	NOTES & DETAILS
	E3.2	INTERLOCK DIAGRAMS
	E4.0	WIRING DETAILS
	E4.1	LIGHTING CONTROLS
	E4.2	PANEL SCHEDULES & ONE LINE
		KITCHEN
1	K1.0	KITCHEN COVER SHEET
	K2.0	KITCHEN EQUIPMENT PLAN & ELEVATIONS
	K2.1	KITCHEN SCHEDULE
		DECOR
1		REFER TO DECOR COVER SHEET

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STATE OF MISSOURI · CARL LINGLE · NUMBER A-2003018555 · ARCHITECT

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DRAWN BY: RP
CHECKED BY: JK

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REVISIONS
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2
3
4
5
6

CLIENT
McDonald's USA, LLC

PROTOTYPE
BB20 4590 WW-HB
ISSUE DATE 06/26

ADDRESS
600 SCHUG AVENUE
PECULIAR, MO, 64078

SHEET TITLE
COVER SHEET

SHEET NUMBER:
T1.0

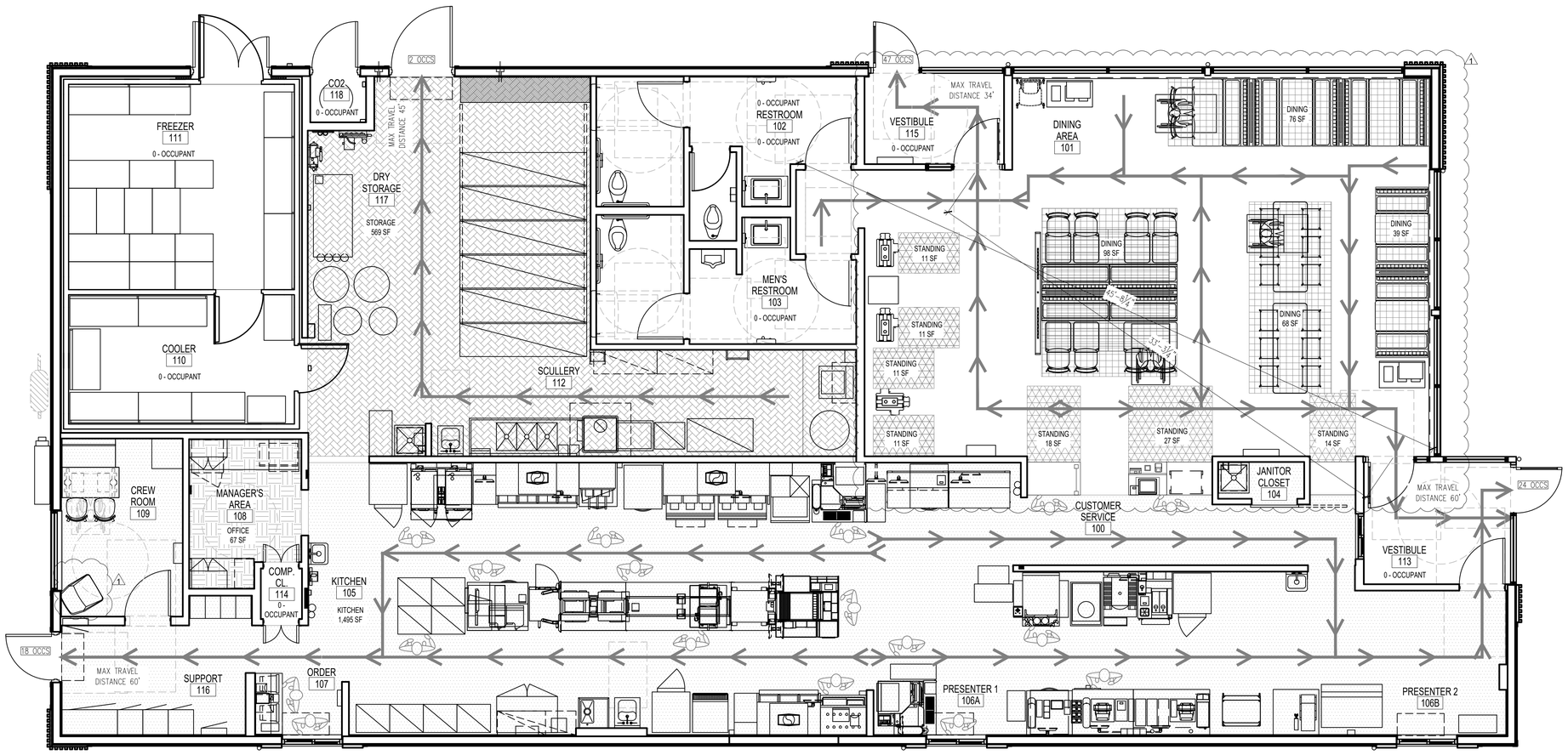
LEGEND	
	INDICATES 36" MIN. EGRESS PATH UNLESS NOTED OTHERWISE

OCCUPANCY ALLOWANCE

BUILDING CODE TABLE 1004.5
MAXIMUM FLOOR AREA ALLOWANCES PER OCCUPANT

FUNCTION OF SPACE	LOAD FACTOR	AREA	CALCULATED OCCUPANTS	LEGEND
ACCESSORY STORAGE AREAS, MECHANICAL EQUIPMENT ROOM	300 GROSS	569 SF	2	
ASSEMBLY WITH FIXED SEATS	SEE PLAN		48	
ASSEMBLY WITHOUT FIXED SEATING STANDING SPACE	5 NET	103 SF (1)	21	
BUSINESS AREAS	100 GROSS	67 SF	1	
KITCHEN, COMMERCIAL (BASED ON FULL KITCHEN STAFF)	200 GROSS		17	
TOTAL OCCUPANCY ALLOWANCE			89	

TOTAL SEATING:	48	NOTE:
TOTAL REQUIRED ACCESSIBLE SEATING (5% OF TOTAL):	3	A. SEATING CONFIGURATION IS SHOWN FOR REFERENCE ONLY. ACTUAL CONFIGURATION MAY VARY.
ACCESSIBLE SEATING PROVIDED:	3	B. SEE SHEET G2.0 & A4.0 FOR ADA CLEARANCES



N

EGRESS AND OCCUPANCY PLAN

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

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BB20 4590 WW-HB
ISSUE DATE 06/26

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600 SCHUG AVENUE
PECULIAR, MO, 64078

SHEET TITLE
EGRESS AND OCCUPANCY PLAN

SHEET NUMBER:
T2.0

3 CUSTOMER ASSISTANCE SIGNAGE

THE EXACT MOUNTING LOCATION AND MOUNTING HEIGHT OF THIS SIGN IS NOT SPECIFIED BY THE A.D.A., BUT IT SHOULD BE EASILY VISIBLE FROM A CAR IN THE DRIVE-THRU WINDOW.



EXTERIOR



EXTERIOR



DECAL – WHITE ON CHARCOAL 4.5"X4.5" ON LOWER PORTION OF DRIVE-THRU CASH WINDOW (INOPERABLE SIDE). SEE GENERAL NOTE BELOW

DECAL – WHITE ON CLEAR 4.5"X4.5" CUSTOMER ENTRIES ON INTERIOR VESTIBULE GLAZING AT DINING ROOM DOOR. ALIGN TOP OF DECAL WITH ADJACENT TACTILE SIGNAGE. SEE GENERAL NOTE BELOW.

DECAL – WHITE ON CHARCOAL 8"X5". FOR CUSTOMER AREAS. SEE GENERAL NOTE BELOW.



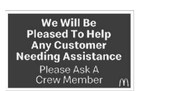
EXTERIOR EXTERIOR INTERIOR

DRIVE THRU SIGNAGE



EXTERIOR EXTERIOR

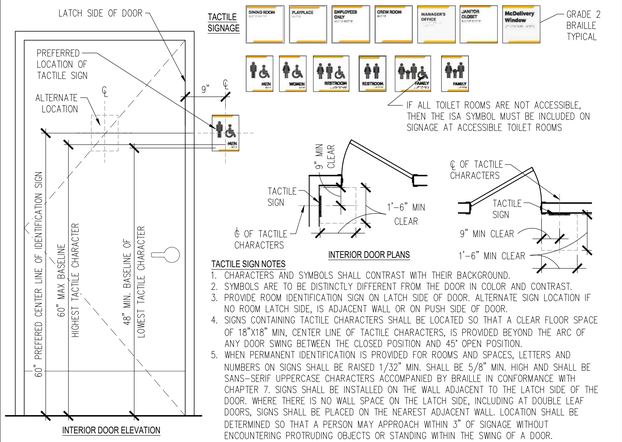
VESTIBULE SIGNAGE



PICK UP SIGNAGE

N.T.S.

2 ROOM IDENTIFICATION SIGNAGE

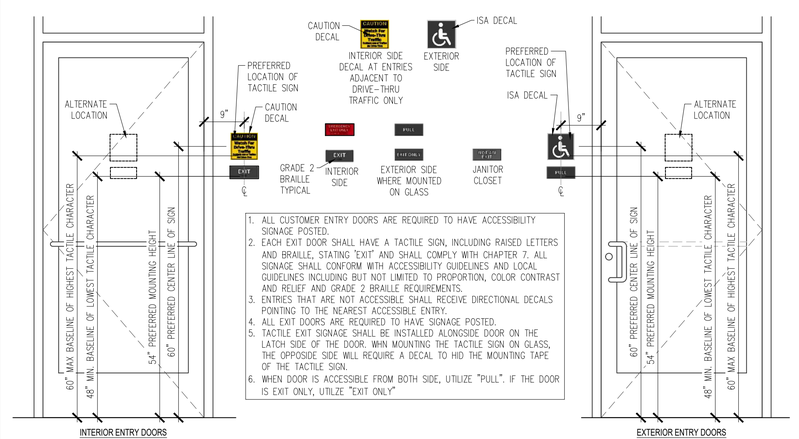


TACTILE SIGN NOTES

1. CHARACTERS AND SYMBOLS SHALL CONTRAST WITH THEIR BACKGROUND.
2. SYMBOLS ARE TO BE DISTINCTLY DIFFERENT FROM THE DOOR IN COLOR AND CONTRAST.
3. PROVIDE ROOM IDENTIFICATION SIGN ON LATCH SIDE OF DOOR. ALTERNATE SIGN LOCATION IF NO ROOM LATCH SIDE, IS ADJACENT WALL OR ON PUSH SIDE OF DOOR.
4. SIGNS CONTAINING TACTILE CHARACTERS SHALL BE LOCATED SO THAT A CLEAR FLOOR SPACE OF 18"X18" MIN, CENTER LINE OF TACTILE CHARACTERS, IS PROVIDED BEYOND THE ARC OF ANY DOOR SWING BETWEEN THE CLOSED POSITION AND 45° OPEN POSITION.
5. WHEN PERMANENT IDENTIFICATION IS PROVIDED FOR ROOMS AND SPACES, LETTERS AND NUMBERS ON SIGNS SHALL BE RAISED 1/32" MIN. SHALL BE 5/8" MIN. HIGH AND SHALL BE SANS-SERIF UPPERCASE CHARACTERS ACCOMPANIED BY BRAILLE IN CONFORMANCE WITH CHAPTER 7. SIGNS SHALL BE INSTALLED ON THE WALL ADJACENT TO THE LATCH SIDE OF THE DOOR. WHERE THERE IS NO WALL SPACE ON THE LATCH SIDE, INCLUDING AT DOUBLE LEAF DOORS, SIGNS SHALL BE PLACED ON THE NEAREST ADJACENT WALL. 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.

N.T.S.

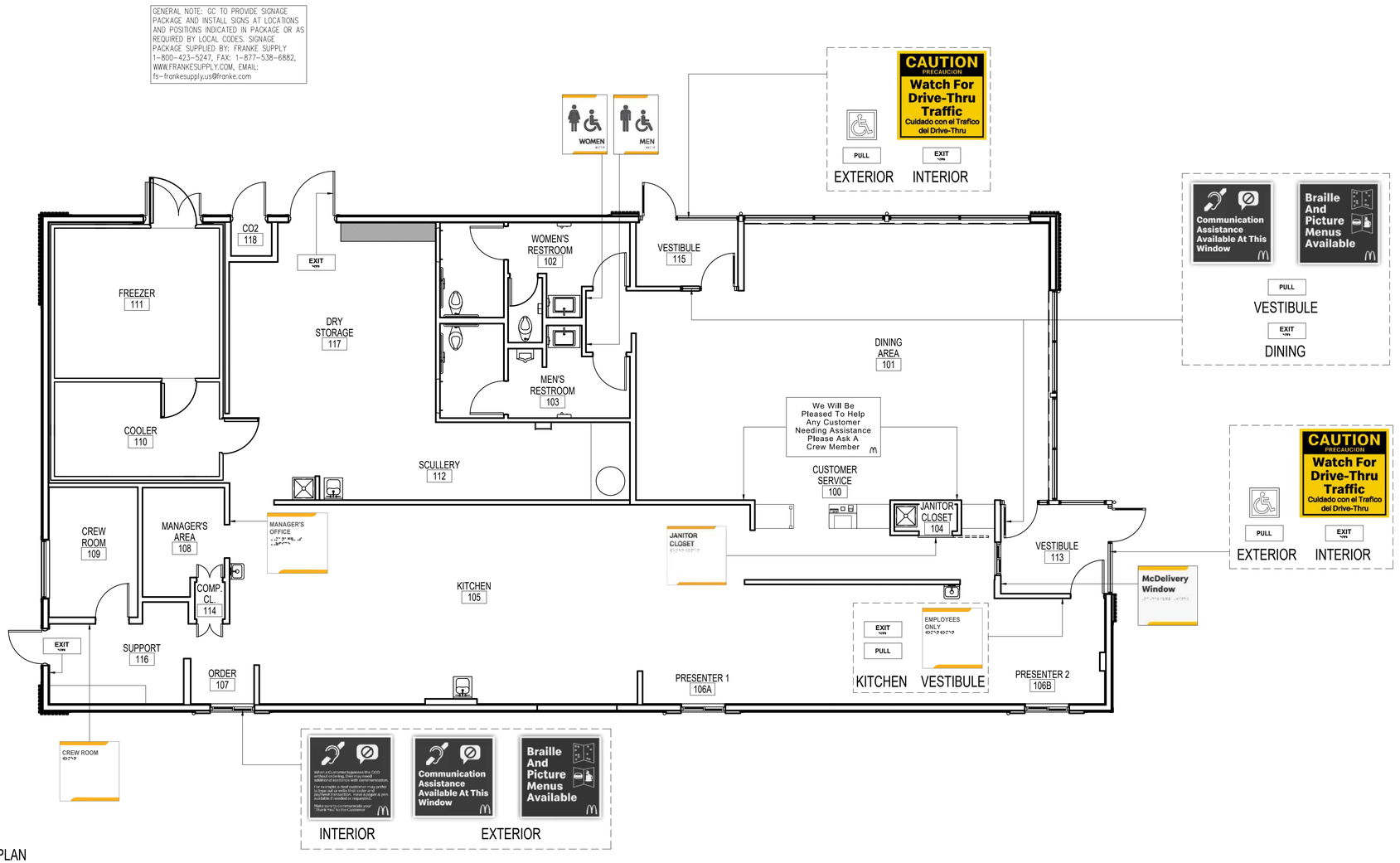
1 ACCESSIBLE ENTERANCE/ EXIT SIGNS



1. ALL CUSTOMER ENTRY DOORS ARE REQUIRED TO HAVE ACCESSIBILITY SIGNAGE POSTED.
2. 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.
3. ENTRIES THAT ARE NOT ACCESSIBLE SHALL RECEIVE DIRECTIONAL DECALS POINTING TO THE NEAREST ACCESSIBLE ENTRY.
4. ALL EXIT DOORS ARE REQUIRED TO HAVE SIGNAGE POSTED.
5. TACTILE EXIT SIGNAGE SHALL BE INSTALLED ALONGSIDE DOOR ON THE LATCH SIDE OF THE DOOR. WHN MOUNTING THE TACTILE SIGN ON GLASS, THE OPPOSIDE SIDE WILL REQUIRE A DECAL TO HID THE MOUNTING TAPE OF THE TACTILE SIGN.
6. WHEN DOOR IS ACCESSIBLE FROM BOTH SIDE, UTILIZE "PULL". IF THE DOOR IS EXIT ONLY, UTILIZE "EXIT ONLY"

N.T.S.

GENERAL NOTE: GC TO PROVIDE SIGNAGE PACKAGE AND INSTALL SIGNS AT LOCATIONS AND POSITIONS INDICATED IN PACKAGE OR AS REQUIRED BY LOCAL CODES. SIGNAGE PACKAGE SUPPLIED BY: FRANKE SUPPLY 1-800-423-5247, FAX: 1-877-538-6882, WWW.FRANKESUPPLY.COM, EMAIL: fs-frankesupply.us@franke.com



ACCESSIBLITY SIGNAGE PLAN

Scale: 3/16" = 1'-0"

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158 WEST MAIN STREET
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PROTOTYPE
BB20 4590 WW-HB
ISSUE DATE 06/26

ADDRESS
600 SCHUG AVENUE
PECULIAR, MO, 64078

SHEET TITLE
ACCESSIBLE SIGNAGE PLAN

SHEET NUMBER:
T3.0

MCDONALD'S SIGNAGE SCHEDULE

TAG	QTY.	DESCRIPTION	PROVIDER	COMMENTS
BH1	1	RESTAURANT DELIVERY SIGN – SUPPLIER	FRANKE	SEE SHEETS A2.0 & A2.1 FOR ADDITIONAL INFORMATION
BH2	1	RESTAURANT DELIVERY SIGN – CREW	FRANKE	SEE SHEETS A2.0 & A2.1 FOR ADDITIONAL INFORMATION
BH4	1	REAR DOOR – CREW SAFETY SIGN	FRANKE	
BH5	1	ELECTRICAL PANEL WARNING SIGN	FRANKE	SEE SHEET T3.0 FOR ADDITIONAL INFORMATION
BH6	1	ELECTRICAL PANEL INFO SIGN	FRANKE	SEE SHEET T3.0 FOR ADDITIONAL INFORMATION
BH7	1	CREW ROOM SIGN	FRANKE	SEE SHEET T3.0 FOR ADDITIONAL INFORMATION
BH8	1	MANAGER OFFICE SIGN	FRANKE	SEE SHEET T3.0 FOR ADDITIONAL INFORMATION
D1		48" NEXT GEN DIRECTIONAL ENTER	EVERBRITE/PERSONA	SEE CIVIL PLANS
D2		48" NEXT GEN DIRECTIONAL EXIT	EVERBRITE/PERSONA	SEE CIVIL PLANS
D3		48" NEXT GEN DIRECTIONAL WELCOME	EVERBRITE/PERSONA	SEE CIVIL PLANS
D4		48" NEXT GEN DIRECTIONAL THANK YOU	EVERBRITE/PERSONA	SEE CIVIL PLANS
D5		48" NEXT GEN DIRECTIONAL DRIVE-THRU	EVERBRITE/PERSONA	SEE CIVIL PLANS
DT1		SINGLE ARM / DOUBLE ARM GATEWAY	EVERBRITE/PERSONA	SEE CIVIL PLANS
DT2		ANY LANE, ANY TIME SIGN	EVERBRITE/PERSONA	SEE CIVIL PLANS
DT3		PRE-BROWSE BOARD	EVERBRITE/PERSONA	SEE CIVIL PLANS
DT4		SPRINGBOARD CANOPY	EVERBRITE/PERSONA	SEE CIVIL PLANS
DT5		OUTDOOR DIGITAL MENU BOARD	EVERBRITE/PERSONA	SEE CIVIL PLANS
DT6		COMMUNICATION ASSIST. DECAL	FRANKE	SEE CIVIL PLANS
DT7	2	NO SOLICITING	FRANKE	
DT8	1	BRAILLE MENU DECAL	FRANKE	SEE SHEET T3.0 FOR ADDITIONAL INFORMATION
DT9	1	COMMUNICATION ASSIST. DECAL	FRANKE	SEE SHEET T3.0 FOR ADDITIONAL INFORMATION
DT10	1	COMMUNICATION ASSIST. DECAL: CREW SIDE	FRANKE	SEE SHEET T3.0 FOR ADDITIONAL INFORMATION
DT11	1	STORE HOUR DECAL	IMS	

TAG	QTY.	DESCRIPTION	PROVIDER	COMMENTS
E1	1	EXTERIOR DELIVERY BLADE SIGN	EVERBRITE/PERSONA	SEE SHEETS A2.0 & A2.1 FOR ADDITIONAL INFORMATION
E2	2	WELCOME DECAL	FRANKE	SEE SHEETS A2.0 & A2.1 FOR ADDITIONAL INFORMATION
E3	2	STORE HOUR DECAL	IMS	
E4	2	HANDICAP DECAL	FRANKE	SEE SHEET T3.0 FOR ADDITIONAL INFORMATION
E5	4	PULL SIGN	FRANKE	SEE SHEET T3.0 FOR ADDITIONAL INFORMATION
E6	2	DRIVE-THRU TRAFFIC DECAL	FRANKE	SEE SHEET T3.0 FOR ADDITIONAL INFORMATION
E7	7	EXIT SIGN	FRANKE	SEE SHEET T3.0 FOR ADDITIONAL INFORMATION
E8	2	BRAILLE MENU DECAL	FRANKE	SEE SHEET T3.0 FOR ADDITIONAL INFORMATION
E9	2	COMMUNICATION ASSIST. DECAL	FRANKE	SEE SHEET T3.0 FOR ADDITIONAL INFORMATION
E10	1	EMPLOYEE ONLY SIGN	FRANKE	SEE SHEET T3.0 FOR ADDITIONAL INFORMATION
E11	2	MCDELIVERY TRIANGULAR SIGN	EIS/JBI	SEE SHEET A4.2 FOR ADDITIONAL INFORMATION
E12	1	MCDELIVERY WALK UP WINDOW SIGN	FRANKE	SEE SHEETS T3.0 & A4.2 FOR ADDITIONAL INFORMATION
E13	1	RING BELL FOR ASSISTANCE SIGN	FRANKE	SEE SHEET A4.2 FOR ADDITIONAL INFORMATION
E14	1	MCDELIVERY WALK UP HOURS	FRANKE	SEE SHEET A4.2 FOR ADDITIONAL INFORMATION
E15	1	EXTERIOR MOBILE BLADE SIGN	EVERBRITE/PERSONA	SEE SHEETS A2.0 & A2.1 FOR ADDITIONAL INFORMATION
F1	3	BUILDING ARCHES	EVERBRITE/PERSONA	SEE SHEETS A2.0 & A2.1 FOR ADDITIONAL INFORMATION
F2	2	BUILDING WORDMARK	EVERBRITE/PERSONA	SEE SHEETS A2.0 & A2.1 FOR ADDITIONAL INFORMATION
F6	1	PAY HERE 1 DECAL	EVERBRITE/PERSONA	SEE SHEET A2.1 FOR ADDITIONAL INFORMATION
F7	1	PICK UP 2 DECAL	EVERBRITE/PERSONA	SEE SHEET A2.1 FOR ADDITIONAL INFORMATION
F8	1	PICK UP 3 DECAL	EVERBRITE/PERSONA	SEE SHEET A2.1 FOR ADDITIONAL INFORMATION

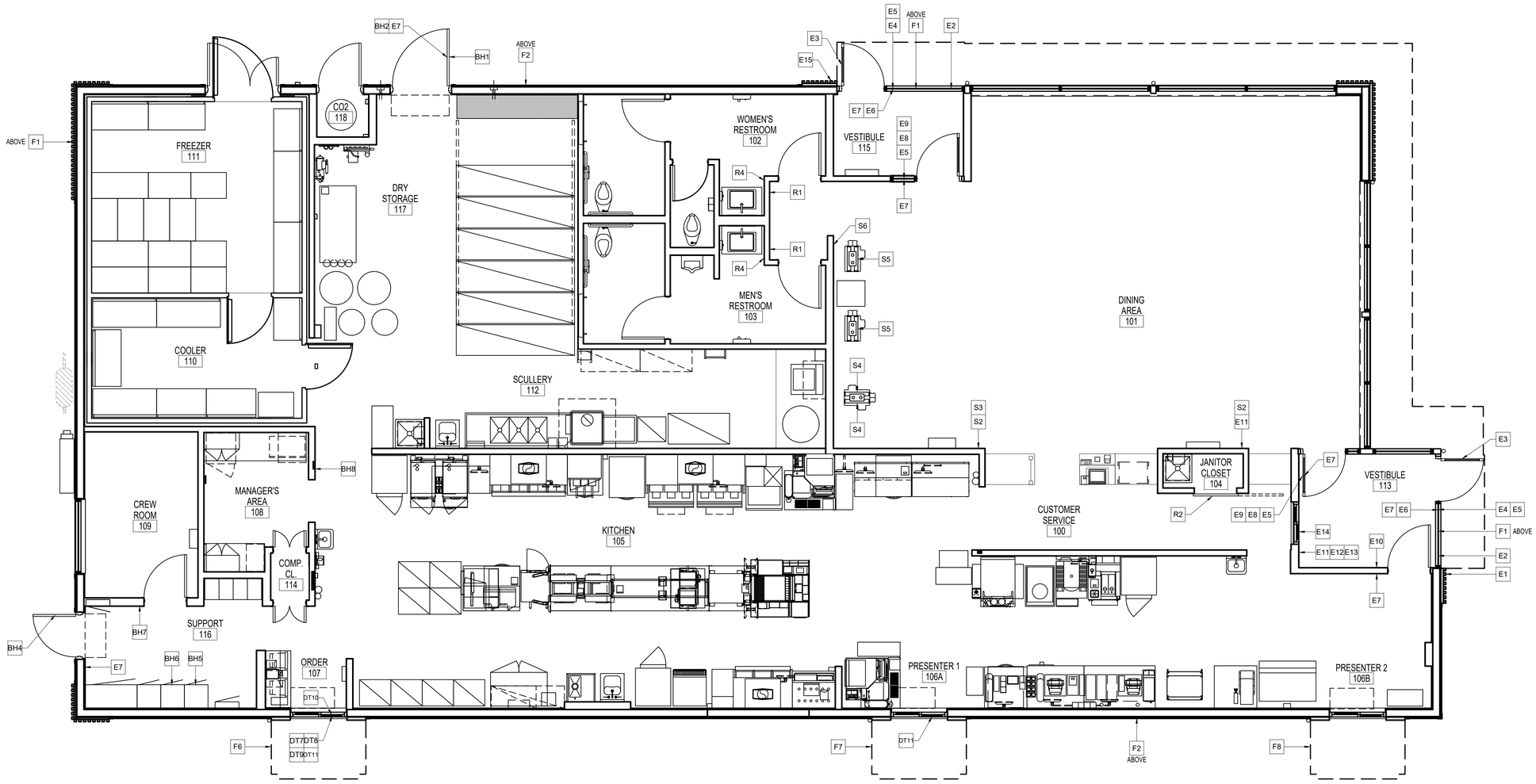
TAG	QTY.	DESCRIPTION	PROVIDER	COMMENTS
I1		MONUMENT SIGN	EVERBRITE/PERSONA	SEE CIVIL PLANS
I2		ROAD SIGN	EVERBRITE/PERSONA	SEE CIVIL PLANS
I3		HIGHWAY SIGN	EVERBRITE/PERSONA	SEE CIVIL PLANS
P1		ADA RESERVED PARKING	FRANKE	SEE CIVIL PLANS
P2		VAN ACCESSIBLE	FRANKE	SEE CIVIL PLANS
P3		DRIVE THRU RESERVED	EVERBRITE/PERSONA	SEE CIVIL PLANS
P4		MOBILE ORDER CURBSIDE PICK UP	EVERBRITE/PERSONA	SEE CIVIL PLANS
P5		MCDELIVERY COURIER RESERVED	EVERBRITE/PERSONA	SEE CIVIL PLANS
R1	2	RESTROOM GENDER SIGNS	FRANKE	SEE SHEETS T3.0 & A4.0 FOR ADDITIONAL INFORMATION
R2	1	JANITOR SIGN	FRANKE	SEE SHEET T3.0 FOR ADDITIONAL INFORMATION
R4	2	EMPLOYEE WASH HANDS SIGN	FRANKE	
S2	2	FULFILLMENT ASSISTANCE SIGN	FRANKE	SEE SHEETS T3.0 & A4.2 FOR ADDITIONAL INFORMATION
S3	1	MOBILE PICK-UP TRIANGULAR SIGN	EIS/JBI	SEE SHEET A4.2 FOR ADDITIONAL INFORMATION
S4	2	KIOSK SIGN – CREDIT ONLY	FRANKE	
S5	2	KIOSK SIGN – CASH CREDIT	FRANKE	
S6	1	MAX OCCUPANCY SIGN	FRANKE	SEE GENERAL NOTE 7 SHEET A1.0

SIGNAGE NOTES

1. SIGNAGE D1-D5, I1-I3, DT1-DT5, & P1-P5 LOCATIONS DEPENDENT ON SITE LAYOUT. SEE LOCATIONS IN MCDONALD'S RESTAURANT SIGNAGE GUIDELINES. COORDINATE WITH MCDONALD'S ACM.
2. SEE MCDONALD'S RESTAURANT SIGNAGE GUIDELINES FOR VISUAL REFERENCE OF SIGNAGE HEIGHTS, LOCATIONS, AND PLACEMENT.
3. SEE MCDONALD'S RESTAURANT SIGNAGE GUIDELINES FOR OPTIONAL AND NON-STANDARD SIGNAGE AVAILABILITY.

FRANKE ORDERING DETIALS

NEW RESTAURANT SIGNAGE PACKAGE
PURCHASE NUMBER: K1194150
PHONE: 1(800)423-5247
FAX: 1(877)538-6882
ONLINE: WWW.FRANKESUPPLY.COM
EMAIL: FS-FRANKESUPPLY.US@FRANKE.COM



N MCDONALD'S SIGNAGE PLAN

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

LINGLE DESIGN GROUP INC
158 WEST MAIN STREET
LENA, IL 61048
815.369.9155
1764 BLAKE ST
DENVER, CO 8020
303.974.5873
WWW.LINGLEDESIGN.COM

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STATE OF MISSOURI
CARL LINGLE
NUMBER A-2003018555
ARCHITECT

LICENSE EXPIRATION: 12-31-27

DATE ISSUED: 07-15-26

STATE ID: 241342

PROJECT #: 26-125

NATIONAL #: 46237

DRAWN BY: RP

CHECKED BY: JK

DATE:
07/15/26 - PERMIT / BID SET

REVISIONS
1 09/08/25 - DECOR UPDATE / PLUMBING & CIVIL COORDINATION

CLIENT

McDonald's USA, LLC

PROTOTYPE
BB20 4590 WW-HB
ISSUE DATE 06/26

ADDRESS
600 SCHUG AVENUE
PECULIAR, MO, 64078

SHEET TITLE
MCDONALD'S SIGNAGE PLAN

SHEET NUMBER:
T4.0

IP-CCTV SCHEDULE

CAMERA #	RESTAURANT AREA – CAMERA FOV	MODEL #
C01	OFFICE SAFE	QND-6011
C02	PRIMARY CUSTOMER ENTRANCE	QND-6011
C03	SECONDARY CUSTOMER ENTRANCE	QND-6011
C04	FRONT COUNTER / REGISTERS	QND-6011
C05	KIOSKS	QND-6011
C06	MAIN DINING / LOBBY	QND-6011
C07	MAIN DINING / LOBBY 2	QND-6011
C08	RESTROOM ENTRANCE / SIDE DINING	QND-6011
C09	PLACEPLACE INTERIOR / EXTERIOR (IF APPLICABLE)	QND-6011/ QNV-6012R1
C10	CASH BOOTH ID	QND-6011
C11	SIDE DELIVERY DOOR	QND-6011
C12	DELIVERY BACK DOOR	QND-6011
C13	DT LICENSE PLATE	QNV-6012R1
C14	TRASH CORRAL	QNV-6012R1
C15	FRONT PARKING LOT VIEW / CURBSIDE	QNV-6012R1
C16	GENERAL PARKING LOT / DRIVE THRU ENTRANCE	QNV-6012R1
C17	GENERAL PARKING LOT / DRIVE THRU EXIT / PULL FORWARD	QNV-6012R1
C18	NETWORK CLOSET	QND-6011
C19	FREEZER	QNV-6012R1
C20	DANGER ZONE	QNV-6012R1
C21	MERGE POINT	QNV-6012R1

IP-CCTV NOTES

C1. GC TO CONSULT OWNER OPERATOR (O/O) FOR PREFERRED SECURITY LEVEL. REFER TO THE U.S. IP-CCTV MINIMUM REQUIREMENT FIELD OF VIEW (FOV) GUIDE. REFER TO PLUS UP GUIDE FOR OTHER OPTIONAL SECURITY FEATURES. MCDONALD'S US SECURITY REFERENCE GUIDE AVAILABLE ON @MCD US SECURITY WEBSITE.

C2. GC TO COORDINATE INSTALLATION WITH SECURITY INSTALLER.

C3. FOR IP-CCTV SPECIFICATIONS REFER TO THE U.S. IP-CCTV MINIMUM REQUIREMENT FIELD OF VIEW (FOV). MCDONALD'S US SECURITY REFERENCE GUIDE AVAILABLE ON @MCD US SECURITY WEBSITE.

C4. ROUTE DATA CABLE IN ACCORDANCE TO THE LOW VOLTAGE CABLE MANAGEMENT SPECIFICATION ON E1.0.

C5. PARKING LOT IP-CCTV PLACEMENT WILL VARY BASED ON SITE LAYOUT. VERIFY IN FIELD.

C6. ADJUST INTERIOR IP-CCTV LOCATIONS BASED ON CEILING ELEMENTS AND DECOR PACKAGE SELECTED TO MAINTAIN FOV IN REFERENCE GUIDE.

RECOMMENDED IP-CCTV VENDORS

UAS
PHONE: 800-421-6661
EMAIL: CHRIS.MCGURK@UAS.COM

WACHTER
PHONE: 800-462-9638
EMAIL: MCDINSIDESALES@WACHTER.COM

CAMERA SPECIFICATIONS

LISTED BELOW ARE MCDONALD'S APPROVED IP-CCTV CAMERAS. THE BELOW SPECIFICATIONS MUST BE MET OR EXCEEDED BY ANY NEW CAMERAS.

HANWHA QND-6011

BEST FOR INTERIOR RESTAURANT USE SUCH AS DINING, KITCHEN, AND CREW AREAS

1. 2 MEGAPIXEL RESOLUTION
2. BUILT-IN 2.8MM FIXED LENS
3. ULTRA-COMPACT DESIGN
4. 30FPS@ALL RESOLUTIONS (H.265/H.264)
5. H.265, H.264, MJPEG CODEC SUPPORTED
6. ONVIF PROFILE S, ONVIF PROFILE G, AND ONVIF PROFILE T
7. MULTIPLE, INDIVIDUALLY CONFIGURABLE VIDEO STREAMS
8. FULL NDAA COMPLIANCE
9. DAY & NIGHT (ICR), WDR (120DB)
10. DEFOCUS DETECTION, MOTION DETECTION, TAMPERING DETECTION
11. PEOPLE COUNTING FOR RETAIL BUSINESS INTELLIGENCE
12. MICRO SD (128GB) MEMORY SLOT, POE / 12V DC
13. HALLWAY VIEW SUPPORT
14. IP42, IK08 RATED
15. LDC SUPPORT (LENS DISTORTION CORRECTION)
16. GENETEC STRATOCAST COMPATIBLE

HANWHA QNV-6012R1

BEST FOR ENVIRONMENTAL AREAS SUCH AS DRIVE-THRU, PARKING LOT, AND FREEZER/WALK-IN COOLER AREAS

1. MAXIMUM 2MEGAPIXEL (1920 X 1080) RESOLUTION
2. 0.03LUX (COLOR), 0LUX (B/W, IR LED ON)
3. 2.8MM FIXED LENS
4. MAXIMUM 30FPS@2MP ALL RESOLUTIONS (H.265/H.264)
5. H.265, H.264, MJPEG CODEC SUPPORTED
6. ONVIF PROFILE S, ONVIF PROFILE G, AND ONVIF PROFILE T
7. MULTIPLE, INDIVIDUALLY CONFIGURABLE VIDEO STREAMS
8. FULL NDAA COMPLIANCE
9. MOTION DETECTION, TAMPERING, DEFOCUS DETECTION
10. HALLWAY VIEW (90/270), LDC SUPPORT
11. MICRO SD/SDHC/SDXC MEMORY SLOT (MAX. 128GB)
12. IR VIEWABLE LENGTH 20M
13. IP66, IK10, POE, 12VDC

RECORDING APPLIANCE/SERVER AND VIDEO MANAGEMENT SOFTWARE SPECIFICATIONS

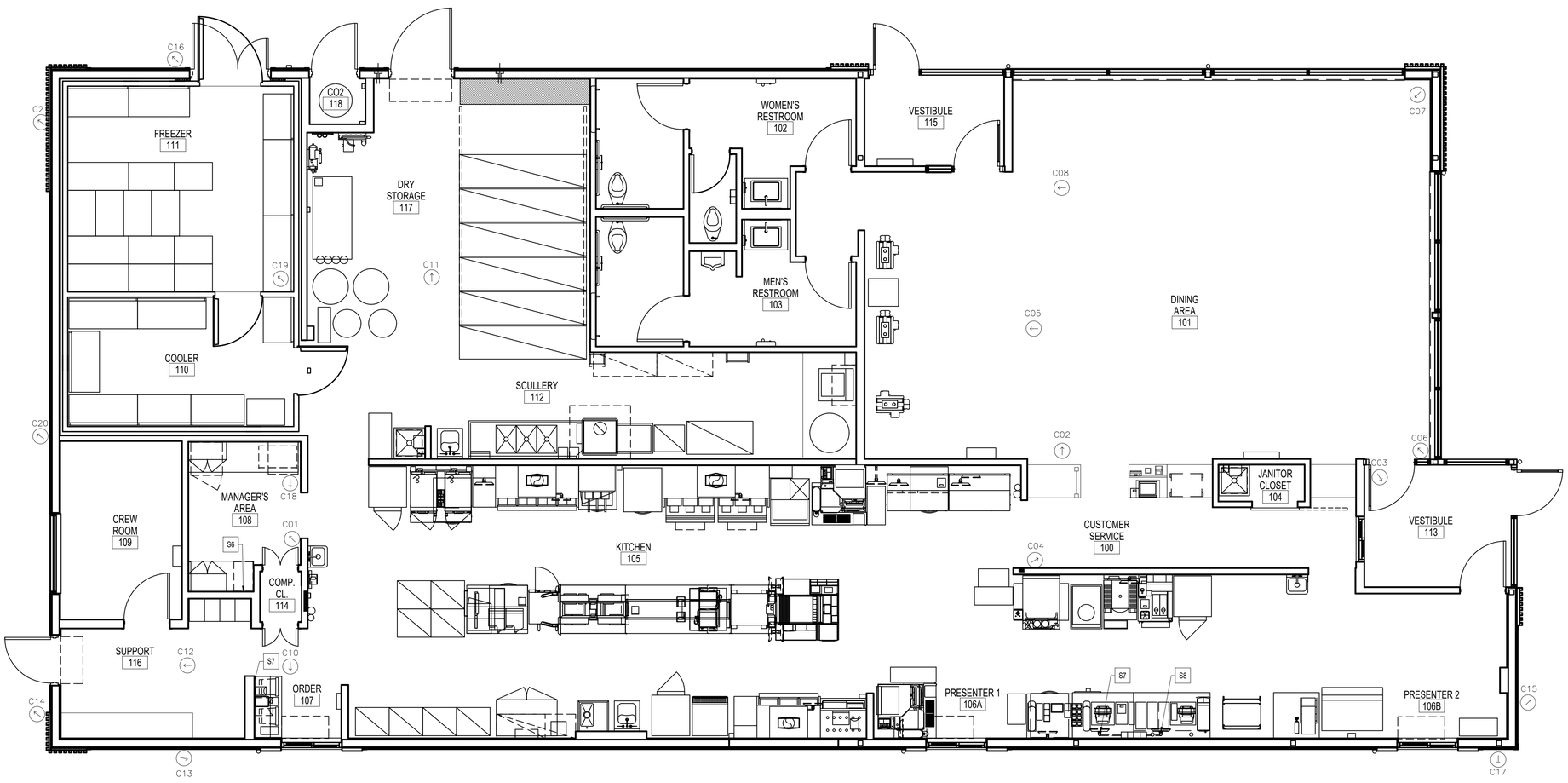
THE MINIMUM TECHNICAL SPECIFICATIONS THAT ANY NEW VMS SYSTEM MUST MEET ARE LISTED BELOW.

1. VIDEO RETENTION: AT LEAST 30 DAYS OF STORAGE*
2. CROSS-PLATFORM: LINUX (UBUNTU, CENTOS, REDHAT) OR WINDOWS (CLIENT, SERVER)
3. WEB BROWSER BASED: NO CLIENT SOFTWARE NEEDED – ACCESS ANYWHERE FROM ANYWHERE (PC, MAC, OR MOBILE)
4. QUICK SOFTWARE INSTALLATION: 5 MINUTES OR LESS (NO WINDOWS DEPENDENCIES)
5. SECURE: SRTP ENCRYPTED VIDEO TRANSMISSION, HTTPS SECURE USER INTERFACE
6. NETWORK OPTIMIZED: PEER-TO-PEER VIDEO TRANSMISSION ACROSS SUBNETS W/ WEBRTC
7. SCALABILITY: FEDERATE TO EITHER THE ENTERPRISE OR CLOUD
8. HARDWARE INDEPENDENT: X86_64, ARM, MIPS (APPLIANCES, SERVERS, IOT DEVICES)
9. APPLICATION PARTNER PLATFORM: THIRD-PARTY API BASED INTEGRATION PLATFORM

*DATA AND IMAGE RETENTION SHOULD FOLLOW LOCAL OR COUNTRY DATA PROTECTION STANDARDS AND REGULATIONS. IT IS RECOMMENDED THAT ORGANIZATIONS HAVE A RETENTION POLICY. THEY SHOULD ONLY KEEP THE IMAGES FOR AS LONG AS NECESSARY TO MEET THE PURPOSE OF RECORDING THEM. IN THE ABSENCE OF STANDARDS AND REGULATIONS, BEST PRACTICES SUGGEST RETAINING IMAGES FOR A MINIMUM OF 30 DAYS IN A SECURE FORMAT BEFORE THEY ARE DELETED OR OVERWRITTEN.

SYSTEM NOTES

TAG	DESCRIPTION
S1	IP-CCTV CAMERA SYSTEM SHALL BE SERVER BASED AND HOUSED IN THE O/O EQUIPMENT RACK (221.09) SEPARATE FROM THE POS RACK. EQUIPMENT TO BE POWERED FROM O/O EQUIPMENT RACK PDU (900W).
S2	O/O EQUIPMENT WILL HAVE ITS OWN PATCH PANELS AND SWITCHES. DO NOT CONNECT TO THE POS SWITCHES.
S3	CAMERAS ARE POWERED OVER ETHERNET (POE) AND ARE POWERED FROM A POE SWITCH.
S4	CAMERA PLACEMENTS AND VIEWS SHALL ADHERE TO THE MCD US IP-CCTV MINIMUM STANDARD DOCUMENT.
S5	ALERT CAPABILITY TO BE PROVIDED FOR BACK DOOR EVENTS.
S6	32 IN. MONITOR TO BE INSTALLED AT MANAGERS DESK. MONITOR TO BE CONFIGURED TO DISPLAY NINE VIEWS DETERMINED BY THE O/O WITH THE ABILITY TO DISPLAY ALL CAMERA VIEWS.
S7	24 IN. MONITOR TO BE INSTALLED TO DISPLAY. MERGE POINT, DANGER ZONE, AND CURBSIDE CAMERAS. SEE 217.13 ON ELECTRICAL SHEETS.
S8	24 IN. MONITOR TO DISPLAY PULL FORWARD CAMERA. SEE 217.13 ON ELECTRICAL SHEETS.



N IP-CCTV PLAN

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

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158 WEST MAIN STREET
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CLIENT

McDonald's USA, LLC

PROTOTYPE
BB20 4590 WW-HB
ISSUE DATE 06/26

ADDRESS
600 SCHUG AVENUE
PECULIAR, MO, 64078

SHEET TITLE
IP-CCTV PLAN

SHEET NUMBER:
T5.0

DIVISION 1 - GENERAL NOTES

A) CONSTRUCTION OBSERVATION SERVICES

1. DIRECT CONSTRUCTION OBSERVATIONS AND REVIEW OF THE CONTRACTOR'S PERFORMANCE IS NOT INCLUDED AS PART OF THE ARCHITECT'S BASIC SERVICES. IT IS UNDERSTOOD THAT SUCH RESPONSIBILITIES WILL BE ASSUMED BY OTHERS. LINGLE DESIGN GROUP, INC. AVAILS ITSELF TO THE CLIENT, CONTRACTOR AND OTHER PARTIES AS NECESSARY (VIA TELEPHONE, FAX AND E-MAIL) IN ORDER TO ASSIST IN PROVIDING CLARIFICATIONS OR RESOLVING ISSUES AND PROBLEMS

B) EXAMINATION

1. THE CONTRACTOR IS HEREBY SPECIFICALLY DIRECTED, AS A CONDITION OF THE CONTRACT, TO ACQUAINT HIMSELF WITH THE ARTICLES CONTAINED IN THE GENERAL NOTES, AND TO NOTIFY AND APPRISE ALL SUBCONTRACTORS AND ALL OTHER PARTIES OF THE CONTRACT OF, AND BIND THEM TO ITS CONDITIONS.

2. DO NOT SCALE DRAWINGS. WRITTEN DIMENSIONS GOVERN PARTITION LOCATIONS, DIMENSIONS AND TYPES. DOOR AND WINDOW LOCATIONS SHALL BE AS SHOWN ON CONSTRUCTION PLAN. IN CASE OF CONFLICT, NOTIFY DESIGNER/ARCHITECT FOR WRITTEN CLARIFICATION PRIOR TO PROCEEDING WITH CONSTRUCTION.

3. THE DESIGNER/ARCHITECT SHALL BE IMMEDIATELY NOTIFIED OF ANY APPARENT CONFLICTS, ERRORS, OR OMISSIONS IN THE CONSTRUCTION DRAWINGS OR ANY APPARENT MISAPPLICATION OF ANY PRODUCT, SYSTEM OR ASSEMBLY FOR THE INTENDED USE, OR ANY DISCOVERED EXISTING CONDITIONS THAT ARE CONTRARY TO THE CONDITIONS INDICATED IN THE CONSTRUCTION DRAWINGS. THE DESIGNER/ARCHITECT SHALL PROVIDE INTERPRETATION AND CLARIFICATION AND, IF REQUIRED, MAKE APPROPRIATE REVISIONS TO THE CONSTRUCTION DRAWINGS. FAILURE TO NOTIFY THE DESIGNER/ARCHITECT PRIOR TO PROCEEDING WITH RELATED WORK WILL RESULT IN THE CONTRACTOR CORRECTING SUCH ITEMS AT THE CONTRACTOR'S EXPENSE.

4. THE CONSTRUCTION DRAWINGS ARE GENERAL DIAGRAMMATIC REPRESENTATIONS OF THE WORK, AND DO NOT INDICATE OR SPECIFY IN DETAIL, EVERY CONDITION AND COMPONENT OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS AND EQUIPMENT, FABRICATE ALL ASSEMBLIES AND INSTALL ALL EQUIPMENT AND SYSTEMS TO PRODUCE A COMPLETE, INTEGRATED AND FULLY FUNCTIONAL WORK PRODUCT IN ACCORDANCE WITH ALL MATERIAL AND EQUIPMENT MANUFACTURER'S REQUIREMENTS, INDUSTRY STANDARDS AND FEDERAL, STATE AND LOCAL LAWS, CODES AND REGULATIONS.

5. PRIOR TO ACCEPTANCE OF SUB-CONTRACTOR BIDS AND COMMENCEMENT OF CONSTRUCTION, GENERAL CONTRACTOR TO PROVIDE ALL SUB-CONTRACTORS ACCESS TO A FULL SET OF CONSTRUCTION DOCUMENTS.

6. THE CONTRACTOR SHALL VERIFY THAT DRAWINGS ARE THE LATEST ISSUE PRIOR TO COMMENCING CONSTRUCTION.

7. GENERAL CONTRACTOR SHALL VISIT PROPOSED JOB SITE AND FAMILIARIZE HIMSELF WITH THE EXISTING CONDITIONS & LOCATIONS OF UTILITIES. FAILURE OF GENERAL CONTRACTOR TO VISIT JOB SITE PRIOR TO BIDDING WILL RESULT IN FORFEITURE OF EXTRA COMPENSATION FOR TIME AND MONEY.

8. THE GENERAL CONTRACTOR SHALL CONTACT LOCAL UTILITY COMPANIES TO VERIFY ALL ELEVATIONS, SIZES, LOCATIONS AND CONNECTION POINTS FOR ALL UTILITIES AFFECTED BY THIS PROJECT. THE GENERAL CONTRACTOR SHALL COORDINATE AND OBTAIN ALL PERMITS FOR, AND ENSURE ALL UTILITIES ARE TURNED ON PRIOR TO COMPLETION OF WORK.

C) CONTRACTS

1. REFER TO GENERAL CONTRACTOR'S EXECUTED CONTRACT FOR DETAILS.

D) INSURANCE

1. REFER TO GENERAL CONTRACTOR'S EXECUTED CONTRACT FOR DETAILS.

E) STANDARDS AND CODES

1. GIVE ALL NOTICES AND COMPLY WITH ALL NATIONAL, STATE AND LOCAL LAWS, ORDINANCES, CODES, RULES AND REGULATIONS BEARING ON THE CONDUCT OF THE WORK. IF THE CONTRACTOR OBSERVES THAT THE DRAWINGS AND SPECIFICATIONS ARE AT VARIANCE THEREWITH, PROMPTLY NOTIFY THE DESIGNER/ARCHITECT.

2. THE CONTRACTOR SHALL FILE, OBTAIN AND PAY FEES FOR BUILDING DEPARTMENT AND ALL OTHER AGENCY APPROVALS AND PERMITS, CONTROLLED INSPECTIONS, AND FINAL WRITE-OFFS FOR PROJECT COMPLETION.

3. IF THE CONTRACTOR KNOWINGLY PERFORMS ANY WORK WHICH IS CONTRARY TO SUCH LAWS, ORDINANCES, CODES, RULES AND REGULATIONS, HE SHALL PROMPTLY MAKE CHANGES AS REQUIRED TO COMPLY THEREWITH AND BEAR ALL COSTS ARISING THEREFROM.

4. CONFLICTS: IN CASE OF CONFLICTS IN THE REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION, THE MOST RESTRICTIVE REQUIREMENTS SHALL GOVERN.

5. WHERE CODES OR REGULATIONS, OTHER THAN THOSE LISTED IN THIS SECTION, ARE REFERRED TO IN VARIOUS SECTIONS OF THE DOCUMENTS. IT SHALL BE UNDERSTOOD THAT THEY APPLY TO THIS WORK AS FULLY AS IF CITED HEREIN.

6. CODE RESTRICTIONS FOR ALL DESIGN CONSIDERATIONS SHALL CONFORM TO LOCAL, STATE AND ALL GOVERNING CODES.

7. THE CONTRACTOR SHALL ARRANGE FOR ALL INSPECTIONS NECESSARY TO OBTAIN CERTIFICATE OF OCCUPANCY AND FINAL COMPLETION.

8. THE CONTRACTOR SHALL MAINTAIN FOR THE ENTIRE LENGTH OF HIS CONTRACT, EXITS, EXIT LIGHTING, FIRE PROTECTIVE DEVICES, AND ALARMS TO CONFORM TO LOCAL BUILDING CODE REQUIREMENTS.

9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADEQUATELY BRACING AND PROTECTING WORK DURING CONSTRUCTION AGAINST DAMAGE, BREAKAGE, COLLAPSE, DISTORTION AND/OR MISALIGNMENT IN ACCORDANCE WITH APPLICABLE CODES, STANDARDS AND GOOD PRACTICE.

10. WORK AND/OR CONSTRUCTION OPERATIONS SHALL NOT UNDERMINE THE STRUCTURAL INTEGRITY OF THE BUILDING.

11. ALL COMBUSTIBLE MATERIALS SHALL MEET APPLICABLE CODES. WOOD SHALL BE FIRE RETARDANT TREATED WHERE REQUIRED BY LOCAL BUILDING CODES.

12. THE CONTRACTOR SHALL PROVIDE BACK FLOW DEVICES AS REQUIRED BY LOCAL, STATE AND FEDERAL CODES.

F) LAYOUT OF WORK

1. EXERCISE PROPER PRECAUTIONS TO VERIFY ALL EXISTING CONDITIONS AND LAYOUT OF WORK.

2. CONTRACTOR IS RESPONSIBLE FOR ANY ERROR RESULTING FROM FAILURE TO EXERCISE SUCH PRECAUTIONS. ANY SUCH ERROR WILL NOT BE CONSIDERED AS A BASIS FOR EXTRA COMPENSATION.

3. GENERAL CONTRACTOR IS RESPONSIBLE FOR LAY OUT OF ALL WORK AND IS RESPONSIBLE FOR ALL LINES AND MEASUREMENTS OF THE BUILDING, UTILITIES, AND OTHER WORK EXECUTED UNDER THE CONTRACT.

4. DIMENSIONS ARE FROM FINISH FACE TO FINISH FACE, UNLESS OTHERWISE NOTED. DIMENSIONS MARKED "CLEAR" SHALL BE MAINTAINED AND SHALL ALLOW FOR THICKNESS OF FINISHES.

5. DIMENSIONS MARKED "CLEAR" ARE TO BE WITHIN 1/8" ALONG FULL HEIGHT AND FULL WIDTH OF WALLS.

6. DIMENSIONS KNOWN AS V.I.F. SHALL BE VERIFIED BY THE CONTRACTOR IN THE FIELD BY LAYING OUT THE PARTITIONS. CONTRACTOR SHALL NOTIFY CONSTRUCTION MANAGER AND ARCHITECT OF ANY DISCREPANCY IN DIMENSIONS PRIOR TO PROCEEDING WITH THE WORK IN THAT AREA.

7. THE ARCHITECT AND HIS CONSULTANTS WILL NOT HAVE CONTROL OVER OR CHARGE OF, NOR BE RESPONSIBLE FOR, THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES, THE WORK, THE CONTRACTOR'S FAILURE TO PERFORM THE WORK IN ACCORDANCE WITH THE REQUIREMENTS OF THE CONSTRUCTION DRAWINGS OR CONTRACT, OR THE ACTS OR OMISSIONS OF THE CONTRACTOR, SUBCONTRACTORS, OR THEIR AGENTS OR EMPLOYEES OR ANY OTHER PERSONS OR ENTITIES PERFORMING PORTIONS OF THE WORK. ACTS OR OMISSIONS OF THE CONTRACTOR, SUBCONTRACTORS, OR THEIR AGENTS OR EMPLOYEES OR ANY OTHER PERSONS OR ENTITIES PERFORMING PORTIONS OF THE WORK.

8. WORK NOT PARTICULARLY DETAILED, NOTED OR SPECIFIED, SHALL BE THE SAME AS SIMILAR PARTS THAT ARE DETAILED, NOTED OR SPECIFIED.

9. IN THE EVENT OF INCONSISTENCIES AMONG THE CONTRACT DOCUMENTS, THE DESIGNER/ARCHITECT SHALL INTERPRET THEM WHEN ASKED TO DO SO BY THE OWNER OR CONTRACTOR. THE DESIGNER/ARCHITECT SHALL NOT BE RESPONSIBLE FOR THE RESULTS OF SUCH INTERPRETATIONS MADE BY OTHERS.

10. THE GENERAL CHARACTER OF DETAIL WORK IS SHOWN ON THE CONTRACT DOCUMENTS. SUBSEQUENT CLARIFICATIONS MAY BE MADE BY ADDITIONAL LAYOUTS OR LARGE SCALE OR FULL SIZE DETAILS.

11. DRAWINGS AND DIAGRAMS FOR MECHANICAL AND ELECTRICAL WORK SHALL BE CONSIDERED AS DIAGRAMMATIC ONLY, NOT TO BE USED FOR ANY STRUCTURAL GUIDANCE OR PHYSICAL LAYOUT. IN CASE OF CONFLICT, UNLESS OTHERWISE NOTED, THE ARCHITECTURAL DRAWINGS SHOWING LOCATIONS FOR MECHANICAL AND ELECTRICAL ITEMS AND ACCESSORIES SHALL TAKE PRECEDENCE.

12. UNLESS OTHERWISE NOTED, IT IS THE INTENTION OF THE DRAWINGS AND SPECIFICATIONS FOR ALL WORK, EQUIPMENT, CASEWORK, MECHANICAL, ELECTRICAL AND SIMILAR DEVICES OF WHATEVER NATURE, BE COMPLETELY INSTALLED, HOOKED-UP, MADE OPERATIONAL AND FUNCTIONAL FOR THE PURPOSE INTENDED, AND THAT ALL COSTS FOR THIS BE INCLUDED IN THE CONTRACTOR'S PROPOSAL.

13. THE CONTRACTOR SHALL, IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS, APPLY, INSTALL, CONNECT, ERECT, CLEAN AND/OR CONDITION MANUFACTURED ARTICLES, MATERIALS AND/OR EQUIPMENT PER MANUFACTURER'S INSTRUCTIONS. IN CASE OF CONFLICT BETWEEN MANUFACTURER'S INSTRUCTIONS AND THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL NOTIFY THE PROJECT MANAGER AND THE ARCHITECT BEFORE PROCEEDING.

G) ALTERATIONS

1. ARRANGE WITH OWNER/OPERATOR A CONVENIENT TIME TO PERFORM ALL WORK AND INSTALL TEMPORARY PROTECTED MEANS OF EGRESS FROM REQUIRED EXITS, INCLUDING TEMPORARY LIGHTING AND SAFETY DEVICES IN ACCORDANCE WITH GOVERNING STATE AND LOCAL CODE AND BUILDING MANAGEMENT REQUIREMENTS.

2. THE CONTRACTOR SHALL REMOVE, REPAIR, RESTORE AND REPLACE ANY WORK NECESSARY OR INDICATED ON THE DRAWINGS. CUT ALL NECESSARY OPENINGS AND REPAIR AFTER CUTTING WHERE NECESSARY. ALL PROTRUSIONS, MARKS, GRACKS, OR OTHER EVIDENCE OF A DEFICIENT OR DAMAGED CONDITION SHALL BE ELIMINATED UNLESS SPECIFICALLY NOTED OTHERWISE. ANY ITEMS WHICH ARE SPLIT, CRACKED, CHIPPED, SPALLED, BROKEN, MISSING, OUT OF ALIGNMENT OR ADJUSTMENT, MECHANICALLY OR STRUCTURALLY UNSAFE OR UNSOUND, BENT, TORN, OR OTHERWISE DEFICIENT OR DAMAGED IN ANY MANNER SHALL BE REMOVED, REPLACED, RESTORED OR SATISFACTORILY REPAIRED AS DIRECTED BY THE OWNER'S REPRESENTATIVE.

H) HAZARDOUS MATERIALS

1. ASBESTOS AND HAZARDOUS WASTE EXCLUSION: THE ARCHITECT HEREBY STATES, AND THE OWNER ACKNOWLEDGES, THAT THE ARCHITECT HAS NO PROFESSIONAL LIABILITY OR OTHER INSURANCE (AND IS UNABLE TO REASONABLY OBTAIN SUCH INSURANCE) FOR CLAIMS ARISING OUT OF THE PERFORMANCE OF OR THE FAILURE TO PERFORM PROFESSIONAL SERVICES, INCLUDING BUT NOT LIMITED TO, THE PREPARATION OF REPORTS, DESIGNS, DRAWINGS, AND SPECIFICATIONS, AND RELATED TO THE INVESTIGATION DETECTION OF HAZARDOUS MATERIALS ON THE SITE.

I) CONTRACTOR USE OF PREMISES

1. CONSTRUCTION OPERATIONS: LIMITED TO AREAS NOTED ON DRAWINGS.

2. TIME RESTRICTIONS FOR PERFORMING WORK: VERIFY WITH CONSTRUCTION MANAGER & LOCAL CODES.

3. UTILITY OUTAGES AND SHUTDOWN SHALL BE COORDINATED WITH THE LANDLORD/OWNER.

4. AT ALL TIMES CONDUCT OPERATIONS TO INSURE THE LEAST INCONVENIENCE TO THE GENERAL PUBLIC. COMPLY WITH APPLICABLE CODES AND ORDINANCES FOR SAFETY.

5. ASSUME FULL RESPONSIBILITY FOR THE PROTECTION AND SAFEKEEPING OF PRODUCTS STORED ON THE SITE UNDER THIS CONTRACT.

6. PERFORM DEMOLITION WORK AND SUCH SPRINKLER WORK, CONCRETE SAW CUTTING, PAINTING AND SIMILAR WORK CAUSING EXCESSIVE NOISE, DUST OR ODORS DISTURBING BUILDING OCCUPANTS, OR ANY WORK DISRUPTING TENANTS OR PUBLIC TRAFFIC WITHIN THE BUILDING, AFTER HOURS OR AT TIMES AND IN SUCH A MANNER AS OTHERWISE APPROVED BY OWNER/OPERATOR/CONST. MGR.

7. COORDINATE USE OF PREMISES FOR WORK WITH THE LANDLORD/OWNER.

8. LIMIT USE OF SITE FOR WORK AND STORAGE TO AREAS DESIGNATED UNLESS SPECIFIC ADDITIONAL AREAS ARE ALLOWED IN WRITING BY THE OWNER/OPERATOR/CONST. MGR.

J) FINISH NOTES

1. ENSURE THAT SURFACE TO RECEIVE FINISHES ARE CLEAN, TRUE AND FREE OF IRREGULARITIES. DO NOT PROCEED WITH WORK UNTIL UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED. COMMENCEMENT OF WORK SHALL INDICATE INSTALLER'S ACCEPTANCE OF SUBSTRATE.

2. REPAIR AND PREPARE EXISTING SURFACES SCHEDULED TO REMAIN AS NECESSARY FOR APPLICATION OF NEW FINISHES.

3. ALL CODE-REQUIRED LABELS SUCH AS "UL", FACTORY MUTUAL OR ANY EQUIPMENT IDENTIFICATION, PERFORMANCE RATING, NAME OR NOMENCLATURE PLATES SHALL REMAIN READABLE AND NOT PAINTED.

4. THE CONTRACTOR SHALL PATCH SURFACES TO MATCH ADJACENT IN A MANNER SUITABLE TO RECEIVE FINISHES.

5. COORDINATE WITH OWNER'S DESIGNATED REPRESENTATIVE FOR DELIVERY AND PLACEMENT OF ALL FURNITURE & WALL-HUNG EQUIPMENT.

K) GENERAL CLEANING

1. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR ALL TRASH REMOVAL, INCLUDING TRASH MADE BY ALL OTHER TRADES, AND SHALL KEEP THE SPACE CLEAN AND CLEAR OF REFUSE AT ALL TIMES.

L) PUNCH LIST / CLOSE-OUT

1. UPON NOTIFICATION, THE OWNER'S REPRESENTATIVE SHALL PREPARE A PUNCH LIST OF THE PROJECT AND THE GENERAL CONTRACTOR SHALL MAKE GOOD ALL PUNCH LIST ITEMS TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE PRIOR TO FINAL PAYMENT.

M) RECORD DRAWINGS / WARRANTIES

1. THE CONTRACTOR SHALL LEAVE A COPY OF REDLINED AS-BUILT DRAWINGS AT THE STORE NOTING ALL REVISIONS OF WORK UPON COMPLETION OF CONSTRUCTION. DRAWINGS SHALL BE PLACED IN A 36" LONG 4" PVC WITH A CAP. PVC PIPE SHALL BE ATTACHED TO WALL AT LOCATION AS SPECIFIED BY THE PROJECT MANAGER.

2. UPON COMPLETION OF THE WORK AND BEFORE FINAL PAYMENT IS MADE, THE CONTRACTOR SHALL SECURE AND DELIVER TO THE OWNER ALL GUARANTEES AND/OR WARRANTIES ON ALL EQUIPMENT SUPPLIED AND/OR INSTALLED BY THE CONTRACTOR AND HIS SUB-CONTRACTORS, AND ALL OPERATIONS / MAINTENANCE MANUALS. (SEE BUY-OUT PACKAGE FOR MORE DETAILS)

N) GUARANTEE

1. THE GENERAL CONTRACTOR SHALL GUARANTEE THE WORK FOR ONE (1) YEAR AFTER SUBSTANTIAL COMPLETION OF ALL WORK.

GENERAL NOTES

1. 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.
2. GENERAL CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE OWNER'S VENDORS REGARDING SCHEDULING ON SITE DURING CONSTRUCTION AND SEQUENCING OF THE WORK.
3. 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.
4. 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
5. 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.
6. 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.
7. CONTRACTOR SHALL PROVIDE ALL NECESSARY BLOCKING IN WALLS FOR SUPPORT OF ALL EQUIPMENT, SHELVING, ACCESSORIES, SIGNAGE, AND OTHER DEVICES REQUIRED.
8. ALL PENETRATIONS SHALL RECEIVE CAULKING TO SEAL ANY TYPE OF ENERGY LOSS.
9. THE CONTRACTOR SHALL VERIFY AND COORDINATE ALL APPLICABLE DIMENSIONS OF FIXTURES AND EQUIPMENT SUPPLIED AND/OR INSTALLED BY OTHERS.
10. 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.
11. 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.
12. GENERAL CONTRACTOR TO PROVIDE FOUR (4) 30 YARD DUMPSTERS DURING McDONALD RETAIL MOVE-IN.
13. GENERAL CONTRACTOR SHALL PROVIDE ONE SKILLED LABORER FOR ONE WEEK DURING McDONALD RETAIL MOVE-IN. (40 HOURS)
14. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR SET-UP AND COORDINATION OF ALL THE UTILITY SERVICES FOR THE PROJECT.
15. 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.
16. FINAL KEYING TO BE COORDINATED WITH McDONALD FACILITY MANAGER AND PAID FOR BY McDONALD.
17. 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.

GENERAL ABBREVIATIONS

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

MCDONALD'S ABBREVIATIONS

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

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STATE OF MISSOURI
CARL LINGLE
NUMBER A-2003018555
ARCHITECT

LICENSE EXPIRATION: 12-31-27

DATE ISSUED: 07-15-26

STATE ID: 241342

PROJECT #: 26-125

NATIONAL #: 46237

DRAWN BY: RP

CHECKED BY: JK

DATE:
07/15/26 - PERMIT / BID SET

REVISIONS
1 09/08/25 - DECOR UPDATE / PLUMBING & CIVIL COORDINATION
2
3
4
5
6

CLIENT

McDonald's USA, LLC

PROTOTYPE

BB20 4590 WW-HB
ISSUE DATE 06/26

ADDRESS

600 SCHUG AVENUE
PECULIAR, MO, 64078

SHEET TITLE

GENERAL NOTES

SHEET NUMBER:

G1.0

GENERAL

1. THIS PROJECT SHALL COMPLY WITH ALL LOCAL, STATE & FEDERAL ACCESSIBILITY CODES/STANDARDS. IF A CONFLICT EXISTS BETWEEN ANY OF THESE STANDARDS, THEN THE MOST STRINGENT CODE SHALL APPLY.

ENTRANCES

1. IF ALL PUBLIC ENTRANCES ARE NOT ACCESSIBLE, PROVIDE AN INTERNATIONAL SYMBOL OF ACCESSIBILITY SIGN AT THE ACCESSIBLE ENTRANCE AND ADDITIONAL DIRECTIONAL SIGNS, AS REQUIRED, VISIBLE FROM APPROACHING PEDESTRIAN WAYS TO THE INACCESSIBLE ENTRANCE.
2. EVERY REQUIRED ENTRANCE OR PASSAGE DOORWAY SHALL BE OF A SIZE AS TO PERMIT THE INSTALLATION OF A DOOR NOT LESS THAN 3' IN WIDTH AND NOT LESS THAN 6'-8" IN HEIGHT. DOORS SHALL BE CAPABLE OF OPENING AT LEAST 90 DEGREES AND SHALL BE SO MOUNTED THAT THE CLEAR WIDTH OF THE DOORWAY IS NOT LESS THAN 32".
3. WHERE A PAIR OF DOORS IS UTILIZED, AT LEAST ONE OF THE DOORS SHALL PROVIDE A CLEAR UNOBSTRUCTED OPENING WIDTH OF 32" WITH THE LEAF POSITIONED AT AN ANGLE OF 90 DEGREES FROM ITS CLOSED POSITION.
4. LATCHING AND LOCKING DOORS THAT ARE HAND ACTIVATED AND WHICH ARE IN A PATH OF TRAVEL SHALL BE OPERABLE WITH A SINGLE EFFORT BY LEVER TYPE HARDWARE, PANIC BARS, PUSH-PULL ACTIVATING BARS, OR OTHER HARDWARE DESIGNED TO PROVIDE PASSAGE WITHOUT REQUIRING THE ABILITY TO GRASP THE OPENING HARDWARE.
5. HAND ACTIVATED DOOR OPENING HARDWARE SHALL BE CENTERED BETWEEN 30" AND 44" ABOVE THE FLOOR.
6. THE MINIMUM REQUIRED MANEUVERING CLEARANCES ON EACH SIDE OF AN ENTRANCE OR PASSAGE DOOR SHALL BE CLEAR, AND THE FLOOR SLOPE SHALL NOT EXCEED 2%.
7. THE FLOOR OR LANDING SHALL BE NOT MORE THAN 1/2" LOWER THAN THE THRESHOLD OF THE DOORWAY. CHANGE IN LEVEL BETWEEN 1/4" AND 1/2" SHALL BE BEVELED WITH A SLOPE NO GREATER THAN 1:2.
8. THE BOTTOM 10" OF ALL DOORS EXCEPT AUTOMATIC AND SLIDING SHALL HAVE A SMOOTH UNINTERRUPTED SURFACE TO ALLOW THE DOOR TO BE OPENED BY A WHEELCHAIR FOOTREST WITHOUT CREATING A TRAP OR HAZARDOUS CONDITION. WHERE NARROW FRAME DOORS ARE USED, A 10" HIGH SMOOTH PANEL SHALL BE INSTALLED ON THE PUSH SIDE OF THE DOOR WHICH WILL ALLOW THE DOOR TO BE OPENED BY A WHEELCHAIR FOOTREST WITHOUT CREATING A TRAP OR HAZARDOUS CONDITION.
9. MAXIMUM EFFORT TO OPERATE DOORS SHALL NOT EXCEED 8.5 POUNDS FOR EXTERIOR DOORS AND 5 POUNDS FOR INTERIOR DOORS, SUCH PULL OR PUSH EFFORT BEING APPLIED AT RIGHT ANGLES TO DOORS AND AT THE CENTER PLANE OF SLIDING OR FOLDING DOORS. COMPENSATING DEVICES OR AUTOMATIC DOOR OPERATORS MAY BE UTILIZED TO MEET THE ABOVE STANDARDS. WHEN FIRE DOORS ARE REQUIRED, THE MAXIMUM EFFORT TO OPERATE THE DOOR MAY BE INCREASED NOT TO EXCEED 15 POUNDS.

DOORS

1. PROVIDE DOOR (LEVER) HARDWARE ON ALL DOORS.
2. PROVIDE PANIC HARDWARE ON EXIT DOORS FROM PUBLIC ASSEMBLY AREAS.

FLOORS AND LEVELS

1. IN BUILDINGS AND FACILITIES, FLOORS OF A GIVEN STORY SHALL BE A COMMON LEVEL THROUGHOUT, OR SHALL BE CONNECTED BY PEDESTRIAN RAMPS, PASSENGER ELEVATORS OR SPECIAL ACCESS LIFTS.
2. FLOOR SURFACES SHALL BE SLIP-RESISTANT.

CORRIDORS AND AISLES

1. EVERY CORRIDOR SERVING AN OCCUPANT LOAD OF 10 OR MORE SHALL BE NOT LESS IN WIDTH THAN 44".
2. EVERY PORTION OF EVERY BUILDING IN WHICH ARE INSTALLED SEATS, TABLES, MERCHANDISE, EQUIPMENT OR SIMILAR MATERIALS SHALL BE PROVIDED WITH WITH AISLES LEADING TO AN EXIT.
3. EVERY AISLE SHALL BE NOT LESS THAN 3' WIDE IF SERVING ONLY ONE SIDE, AND NOT LESS THAN 3'-6" WIDE IF SERVING BOTH SIDES. SUCH MINIMUM WIDTH SHALL BE MEASURED AT THE POINT FARTHEST FROM AN EXIT, CROSS AISLE OR FOYER AND SHALL BE INCREASED BY 1-1/2" FOR EACH 5' IN LENGTH TOWARD THE EXIT, CROSS AISLE OR FOYER.

SANITARY FACILITIES

1. WHEN SANITARY FACILITIES ARE LOCATED ON ACCESSIBLE FLOORS OF A BUILDING, THEY SHALL BE MADE ACCESSIBLE TO THE PHYSICALLY DISABLED.
2. WHERE SEPARATE FACILITIES ARE PROVIDED FOR NON-DISABLED PERSONS OF EACH SEX, SEPARATE FACILITIES SHALL BE PROVIDED FOR DISABLED PERSONS OF EACH SEX ALSO. WHERE UNISEX FACILITIES ARE PROVIDED FOR NON-DISABLED PERSONS, SUCH UNISEX FACILITIES MAY BE PROVIDED FOR THE THE DISABLED.
3. ALL DOORWAYS LEADING TO SANITARY FACILITIES SHALL HAVE 32" CLEAR UNOBSTRUCTED OPENINGS.
4. PROVIDE SIGNAGE AS SHOWN IN THIS SET.
5. ON THE WALL ADJACENT TO THE MEN'S AND WOMEN'S SANITARY FACILITIES BRAILLE SIGNAGE SHALL BE PROVIDED. LETTERS BE RAISED 1/32", UPPER CASE AND ACCOMPANIED WITH GRADE 2 BRAILLE. RAISED CHARACTERS SHALL BE MINIMUM 5/8" HIGH, PICTOGRAMS MINIMUM 6" HIGH, CHARACTERS AND SYMBOLS SHALL CONTRAST WITH THEIR BACKGROUND. THE SIGN SHALL BE LOCATED SO THAT A MINIMUM CLEAR FLOOR SPACE OF 18"X18", CENTERED ON THE TACTILE CHARACTERS, IS PROVIDED BEYOND THE ARC OF ANY DOOR SWING BETWEEN THE CLOSED POSITION AND 45° OPEN POSITION. MOUNTING HEIGHT SHALL BE 60" ABOVE THE FINISHED FLOOR TO THE CENTER OF THE SIGN.
6. WATER CLOSET COMPARTMENTS SHALL BE EQUIPPED WITH A DOOR THAT IS SELF CLOSING, AND SHALL HAVE A CLEAR UNOBSTRUCTED OPENING WIDTH OF 32" WHEN LOCATED AT THE END AND 34" WHEN LOCATED AT THE SIDE WITH THE DOOR POSITIONED AT AN ANGLE OF 90 DEGREES FROM ITS CLOSED POSITION.

TOILET ROOM FIXTURES AND ACCESSORIES

1. TOILET FLUSH CONTROLS SHALL BE OPERABLE WITH ONE HAND, AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING OR TWISTING OF THE WRIST. CONTROLS FOR THE FLUSH VALVES SHALL BE MOUNTED ON THE WIDE SIDE OF THE TOILET AREAS, NO MORE THAN 44" ABOVE THE FLOOR. THE FORCE REQUIRED TO ACTIVATE CONTROLS SHALL BE NO GREATER THAN 5 POUNDS.
2. WHERE URINALS ARE PROVIDED, AT LEAST ONE WITH A RIM PROJECTING A MINIMUM OF 13.5" FROM THE WALL AND AT A MAXIMUM OF 17" ABOVE THE FLOOR SHALL BE PROVIDED.
3. FLUSH CONTROLS SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING OR TWISTING OF THE WRIST AND SHALL BE MOUNTED NO MORE THAN 44" ABOVE THE FLOOR. THE FORCE REQUIRED TO ACTIVATE CONTROLS SHALL BE NO GREATER THAN 5 POUNDS PER FOOT.
4. LAVATORIES SHALL BE MOUNTED WITH A CLEARANCE OF AT LEAST 29" FROM THE FLOOR TO THE BOTTOM OF THE APRON WITH KNEE CLEARANCE UNDER THE FRONT LIP EXTENDING A MINIMUM OF 30" IN WIDTH WITH 8" MINIMUM DEPTH AT THE TOP. TOE CLEARANCE SHALL BE THE SAME WIDTH AND SHALL BE A MINIMUM OF 9" HIGH FROM THE FLOOR AND A MINIMUM OF 17" DEEP FROM THE FRONT OF THE LAVATORY.
5. A PROJECTION OF A LAVATORY BOWL INTO THE 8" CLEAR SPACE, THEREBY REDUCING THE CLEAR HEIGHT BELOW THE LAVATORY TO NO LESS THAN 27" AT 8" BACK FROM THE APRON, MEETS THE REQUIREMENT FOR PROVIDING KNEE CLEARANCE. A MAXIMUM HEIGHT OF 34" TO THE TOP OF THE LAVATORY IS REQUIRE.
6. HOT WATER AND DRAIN PIPES UNDER LAVATORIES SHALL BE INSULATED OR OTHERWISE COVERED. THERE SHALL BE NO SHARP OR ABRASIVE SURFACES UNDER LAVATORIES.
7. FAUCET CONTROLS AND OPERATING MECHANISMS SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING OR TWISTING OF THE WRIST. THE FORCE REQUIRED TO ACTIVATE CONTROLS SHALL BE NO MORE THAN 5 POUNDS. LEVER OPERATED, PUSH TYPE AND ELECTRONICALLY CONTROLLED MECHANISMS ARE EXAMPLES OF ACCEPTABLE DESIGNS. SELF-CLOSING VALVES ARE ALLOWED IF THE FAUCET REMAINS OPEN FOR AT LEAST 10 SECONDS.

GRAB BARS

1. HORIZONTAL GRAB BARS SHALL BE LOCATED ON EACH SIDE, OR ONE SIDE AND THE BACK OF THE PHYSICALLY DISABLED TOILET STALL OR COMPARTMENT AND SHALL BE SECURELY ATTACHED 33"-36" ABOVE AND PARALLEL TO THE FLOOR TO THE TOP OF THE BAR. VERTICAL GRAB BAR SHALL BE LOCATED ON SIDE OF THE PHYSICALLY DISABLED TOILET STALL OR COMPARTMENT AND SHALL BE SECURELY ATTACHED 39"-41" ABOVE AND PERPENDICULAR TO THE FLOOR TO THE BOTTOM OF THE BAR. GRAB BARS SHALL NOT ROTATE WITHIN THEIR FITTINGS.
2. HORIZONTAL GRAB BARS AT THE SIDE SHALL BE AT LEAST 42" LONG, INSTALLED 12" FROM THE REAR WALL, VERTICAL GRAB BAR AT THE SIDE WALL SHALL BE AT LEAST 18" HIGH, INSTALLED 39"-41" CENTERED FROM BACK WALL, AND HORIZONTAL GRAB BARS AT THE BACK SHALL BE NOT LESS THAN 36" LONG, & EXTENDING 12" MINIMUM ON ONE SIDE OF THE WATER CLOSET CENTERLINE AND 24" MINIMUM ON THE OTHER SIDE.
3. THE DIAMETER OR WIDTH OF THE GRIPPING SURFACES OF A GRAB BAR SHALL BE 1-1/4" TO 1-1/2" OR THE SHAPE SHALL PROVIDE AN EQUIVALENT GRIPPING SURFACE.
4. IF THE GRAB BARS ARE MOUNTED ADJACENT TO A WALL, THE SPACE BETWEEN THE WALL AND THE GRAB BARS SHALL BE 1-1/2".
5. A GRAB BAR AND ANY WALL OR OTHER SURFACE ADJACENT TO IT SHALL BE FREE OF ANY SHARP OR ABRASIVE ELEMENTS.
6. GRAB BARS SHALL NOT ROTATE WITHIN THEIR FITTINGS.
7. EDGES SHALL HAVE A MINIMUM RADIUS OF 1/8".
8. GRAB BAR, TUB AND SHOWER SEATS, FASTENERS AND MOUNTING DEVICES SHALL BE DESIGNED FOR 250 POUNDS PER LINEAR FOOT LOAD.
9. THE SPACE BETWEEN THE GRAB BAR & PROJECTING OBJECTS BELOW SHALL BE 1 $\frac{1}{2}$" MINIMUM. THE SPACE BETWEEN THE GRAB BAR & PROJECTING OBJECTS ABOVE SHALL BE 12" MINIMUM.

ADDITIONAL REQUIREMENTS

1. THE CENTER OF RECEPTACLE OUTLETS SHALL BE NOT LESS THAN 15" ABOVE THE FLOOR OR WORKING PLATFORM.
2. THE CENTER OF THE GRIP OF THE OPERATING HANDLE OF SWITCHES INTENDED TO BE USED BY THE OCCUPANT OF THE ROOM OR AREA TO CONTROL LIGHTING AND RECEPTACLE OUTLETS, APPLIANCES, OR COOLING, HEATING AND VENTILATING EQUIPMENT SHALL BE NOT LESS THAN 36" NOR MORE THAN 48" ABOVE THE FLOOR OR WORKING PLATFORM.
3. THE CENTER OF FIRE ALARM INITIATING DEVICES (BOXES) SHALL BE INSTALLED PER BUILDING CODE & FIRE DEPARTMENT REQUIREMENTS.
4. IF EMERGENCY WARNING SYSTEMS ARE REQUIRED, THEY SHALL ACTIVATE A MEANS OF WARNING THE HEARING IMPAIRED. FLASHING VISUAL WARNING SHALL BE A FREQUENCY OF NOT MORE THAN 60 FLASHES PER MINUTE.

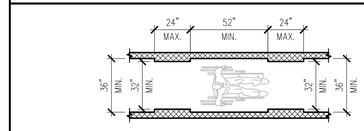
SIGNS & IDENTIFICATION NOTE

1. THE INTERNATIONAL SYMBOL OF ACCESSIBILITY SHALL BE THE STANDARD USED TO IDENTIFY FACILITIES THAT ARE ACCESSIBLE TO AND USABLE BY PHYSICALLY DISABLED PERSONS AS SET FORTH IN ADA AND AS SPECIFICALLY REQUIRED IN THIS SECTION.THE INTERNATIONAL SYMBOL OF ACCESSIBILITY SHALL CONSIST OF A WHITE FIGURE ON A BLUE BACKGROUND. THE BLUE SHALL BE EQUAL TO COLOR NO. 15090 IN FEDERAL STANDARD 595B.
2. LETTERS AND NUMBERS ON SIGNS SHALL HAVE A WIDTH-TO-HEIGHT RATIO OF BETWEEN 3:5 AND 1:1 AND A STROKE WIDTH-TO-HEIGHT RATIO BETWEEN 1:5 AND 1:10.
3. CHARACTERS AND NUMBERS ON SIGNS SHALL BE SIZED ACCORDING TO THE VIEWING DISTANCE FROM WHICH THEY ARE TO BE READ. THE MINIMUM HEIGHT IS MEASURED USING AN UPPER CASE X. LOWER CASE CHARACTERS ARE PERMITTED. FOR SIGNS SUSPENDED OR PROJECTED ABOVE THE FINISH FLOOR THE MINIMUM CHARACTER HEIGHT SHALL BE 3".
4. CHARACTERS AND SYMBOLS SHALL CONTRAST WITH THEIR BACKGROUND, EITHER LIGHT CHARACTERS ON A DARK BACKGROUND OR DARK CHARACTERS ON A LIGHT BACKGROUND.
5. WHEN RAISED CHARACTERS OR SYMBOLS ARE USED, THEY SHALL CONFORM TO THE FOLLOWING:
   - A. LETTERS AND NUMBERS ON SIGNS SHALL BE RAISED 1/32" MINIMUM AND SHALL BE SANS-SERIF UPPERCASE CHARACTERS ACCOMPANIED BY GRADE 2 BRAILLE.
   - B. RAISED CHARACTERS OR SYMBOLS SHALL BE A MINIMUM OF 5/8" HIGH.
   - C. PICTORIAL SYMBOL SIGNS (PICTOGRAMS) SHALL BE ACCOMPANIED BY THE EQUIVALENT VERBAL DESCRIPTION PLACED DIRECTLY BELOW THE PICTOGRAM. THE BORDER DIMENSION OF THE PICTOGRAM SHALL BE A MINIMUM OF 6" IN HEIGHT.
6. CONTRACTED GRADE 2 BRAILLE SHALL BE USED WHEREVER BRAILLE SYMBOLS ARE SPECIFICALLY REQUIRED IN OTHER PORTIONS OF THESE REGULATIONS. DOTS SHALL BE .1" ON CENTERS IN EACH CELL WITH .3" SPACE BETWEEN CELLS. DOTS SHALL BE RAISED .3" ABOVE THE BACKGROUND.
7. WHEN PERMANENT IDENTIFICATION IS PROVIDED FOR ROOMS AND SPACES, RAISED LETTERS SHALL BE PROVIDED AND SHALL BE ACCOMPANIED BY BRAILLE. 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 MOUNTING HEIGHT SHALL BE 60" ABOVE THE FINISHED FLOOR TO THE CENTERLINE OF THE SIGN. SIGN SHALL BE MOUNTED SO THAT A CLEAR FLOOR SPACE OF 18"x18" MINIMUM, CENTER ON THE TACTILE CHARACTERS, IS PROVIDED BEYOND THE ARC OF ANY DOOR SWING BETWEEN THE CLOSED POSITION & 45 DEGREE OPEN POSITION.

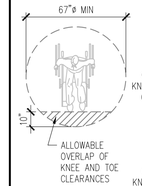
TABLES AND SEATING DISTRIBUTION NOTES:

1. AT LEAST 5% OF ALL SEATING AND STANDING SPACES ARE TO BE ACCESSIBLE AND LOCATED ON AN ACCESSIBLE ROUTE. THE ACCESSIBLE TABLES ARE ALSO REQUIRED TO BE DISTRIBUTED THROUGHOUT ALL DINING AREAS.
2. ACCESSIBLE ROUTE TO SEATING LOCATIONS
   - A) A 36" MINIMUM WIDE ACCESSIBLE ROUTE IS REQUIRED TO CONNECT THE ACCESSIBLE TABLES TO EACH OF THE RESTAURANT ELEMENTS.
   - B) THE 36" ROUTE SHOULD TAKE INTO ACCOUNT CUSTOMERS SEATED AT THE TABLES. IT SHOULD NOT BE MEASURED WITH THE SEATS PUSHED COMPLETELY UNDER THE TABLES.
3. MINIMUM NUMBER OF ACCESSIBLE TABLES
   - A) A MINIMUM OF 5% OF SEATING AND STANDING LOCATIONS ARE REQUIRED TO BE ACCESSIBLE. THIS IS CALCULATED BY ADDING THE TOTAL NUMBER OF SEATS OR STANDING TABLE SPACES AND MULTIPLYING BY .05.
4. SEATING DISPERSION
   - A) THE ACCESSIBLE TABLES ARE REQUIRED TO BE DISPERSED THROUGHOUT THE VARIOUS TYPES OF DINING AREAS INCLUDING PLAYPLACE SEATING AND PARTY ROOMS.
   - B) IF OUTLETS ARE PROVIDED IN DINING AREA FOR CUSTOMERS USE, AN OUTLET MUST BE PROVIDED AT AN ACCESSIBLE TABLE.
   - C) IF TELEVISIONS ARE PROVIDED IN DINING AREA, A LINE OF SIGHT MUST BE PROVIDED TO THE TELEVISION FROM AN ACCESSIBLE TABLE.
   - D) THE OPEN SPACE AT THE ENDS OF BOOTHS IS NOT AN ACCEPTABLE ACCESSIBLE SEATING LOCATION.
   - E) MOVEABLE CHAIRS MAY BE POSITIONED AT ACCESSIBLE SEATING LOCATION FOR USE BY AMBULATORY CUSTOMERS.
5. REQUIRED KNEE SPACE UNDER ACCESSIBLE TABLES TO BE MINIMUM OF 27" HIGH, 30" WIDE AND 19" DEEP. TABLE TOP HEIGHT TO BE BETWEEN 28" & 34"AFF.

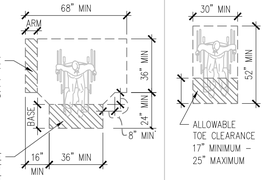
TYPICAL ACCESSIBILITY DETAILS



CLEAR WIDTH OF AN INTERIOR ACCESSIBLE ROUTE

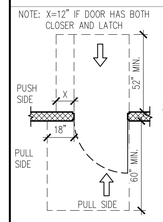


CIRCULAR TURNING SPACE

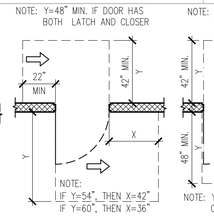


T-SHAPED TURNING SPACE

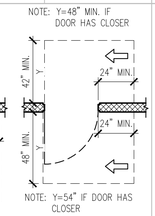
SIZE OF CLEAR FLOOR SPACE



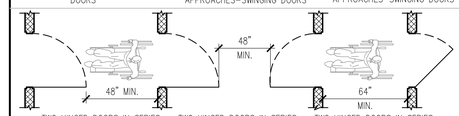
FRONT APPROACHES-SWINGING DOORS

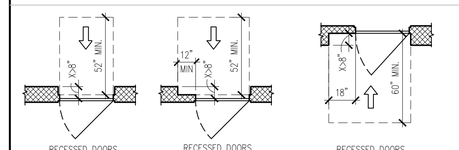


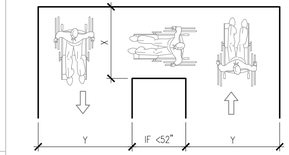
HINGE SIDE APPROACHES-SWINGING DOORS



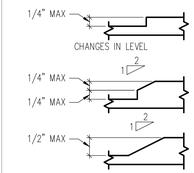
LATCH SIDE APPROACHES-SWINGING DOORS



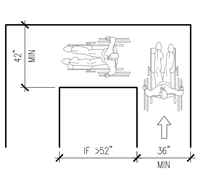




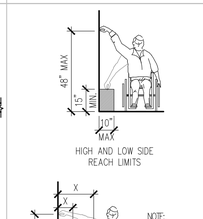
IF X=43"-48", THEN Y= 43" MIN
IF X=48"-60", THEN Y= 42" MIN
IF X>60", THEN Y= 36" MIN
CLEAR WIDTH OF 180° TURN



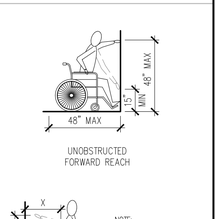
BEVELED CHANGES IN LEVEL



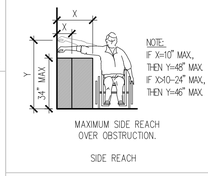
90° TURN



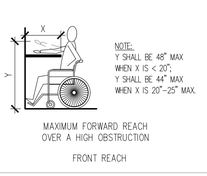
HIGH AND LOW SIDE REACH LIMITS



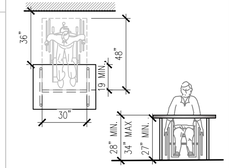
UNOBSTRUCTED FORWARD REACH



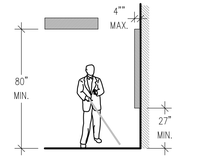
MAXIMUM SIDE REACH OVER OBSTRUCTION.
SIDE REACH



MAXIMUM FORWARD REACH OVER A HIGH OBSTRUCTION
FRONT REACH



ACCESSIBLE SEATING



LIMITS OF PROTRUDING OBJECTS

LINGLE DESIGN GROUP INC
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STATE OF MISSOURI
CARL LINGLE
NUMBER A-2003018555
ARCHITECT

LICENSE EXPIRATION: 12-31-27

DATE ISSUED: 07-15-26

STATE ID: 241342
NATIONAL #: 46237
PROJECT #: 26-125
DRAWN BY: RP
CHECKED BY: JK

DATE:
07/15/26 - PERMIT / BID SET

REVISIONS
1. 09/08/25 - DECOR UPDATE / PLUMBING & CIVIL COORDINATION
2.
3.
4.
5.
6.
7.

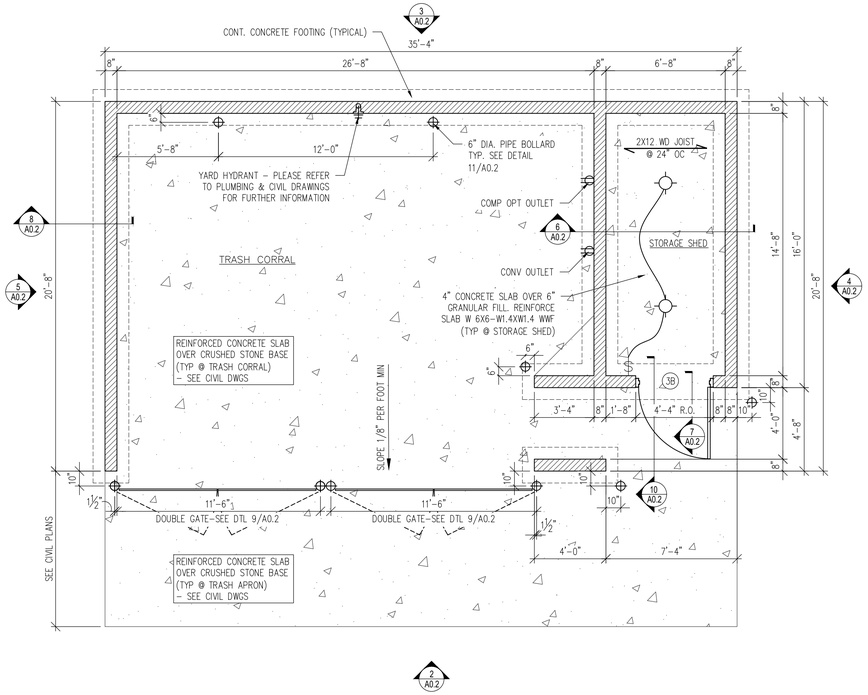
CLIENT
McDonald's USA, LLC

PROTOTYPE
BB20 4590 WW-HB
ISSUE DATE 06/26

ADDRESS
600 SCHUG AVENUE
PECULIAR, MO, 64078

SHEET TITLE
GENERAL ACCESSIBLITY NOTES

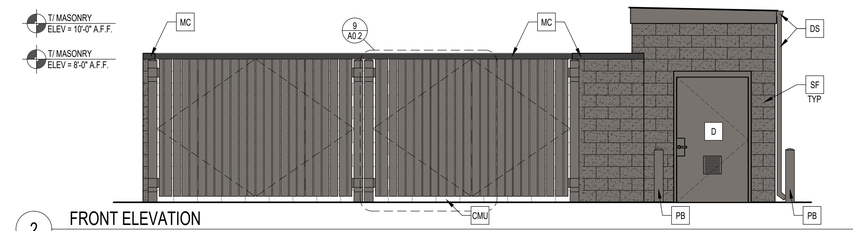
SHEET NUMBER:
G2.0



NOTES:
- SEE SHEET A6.0 FOR DOOR SCHEDULE
- INCANDESCENT LIGHT FIXTURE SHALL BE FURNISHED. WIRE GUARD, 40 WATT LAMP, AND SURFACE MOUNT. PASS & SEMORE-#44 OR LIGHTING LTD-#1743-2000 AWG
- TURBINE FAN SHALL BE FURNISHED AND INSTALLED IN SHED ROOF
- TRASH CORRAL POWER: 3/4"C-4#10 & #10 GND TO A 30A-2P AND A 20A-1P CB IN PANEL AP-2 FOR TRASH COMPACTOR AND WP GFCI DCO. PROVIDE 30A-2P NF DISCONNECT FOR TRASH COMPACTOR. VERIFY EXACT LOCATION AND ALL REQUIREMENTS OF TRASH CORRAL IN FIELD.

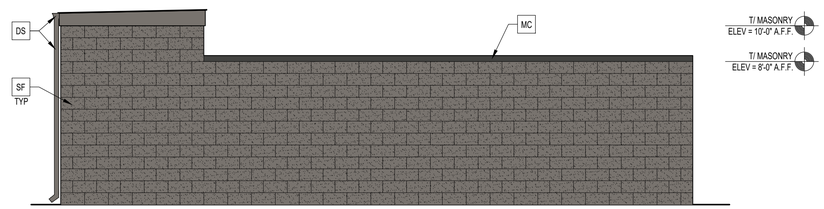
1 TRASH ENCLOSURE PLAN W/ SHED

1/4" = 1'-0"



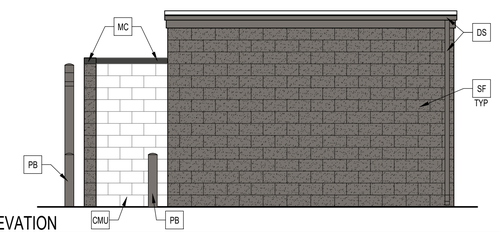
2 FRONT ELEVATION

1/4" = 1'-0"



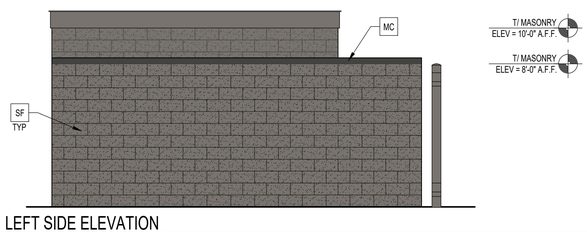
3 REAR ELEVATION

1/4" = 1'-0"



4 RIGHT SIDE ELEVATION

1/4" = 1'-0"



5 LEFT SIDE ELEVATION

1/4" = 1'-0"

KEY NOTES:

- CMU — CMU SEMI-GLOSS PAINTED FINISH
- D — HOLLOW METAL DOOR PAINT: GAUNTLET GRAY SW 7019 BY SHERWIN WILLIAMS
- DS — GUTTER AND DOWNSPOUT PAINT: GAUNTLET GRAY SW 7019 BY SHERWIN WILLIAMS
- PB — PIPE BOLLARD PAINT: GAUNTLET GRAY SW 7019 BY SHERWIN WILLIAMS
- SF — 8" SPLIT FACE CMU BLOCK BY NORTHFIELD BLOCK ASH OR EQUAL COLOR: MATCH MAIN BUILDING, PRISM PIGMENTS OR EQUAL MORTAR TO MATCH BLOCK
- MC — METAL COPING - UNA-CLAD BY FIRESTONE ANNODIZED ALUMINUM COLOR: RAL 7022

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LICENSE EXPIRATION: 01-31-27

STATE OF MISSOURI — CARL LINGLE — NUMBER A-2007018576 — ARCHITECT

PRELIMINARY NOT FOR CONSTRUCTION

DATE ISSUED: 07-15-26

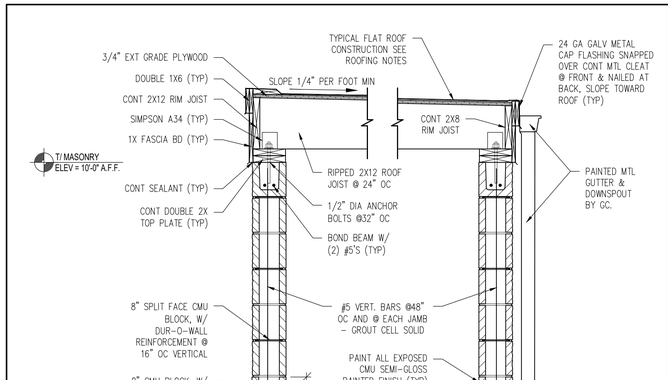
STATE ID: 24342

PROJECT #: 26-125

NATIONAL #: 46237

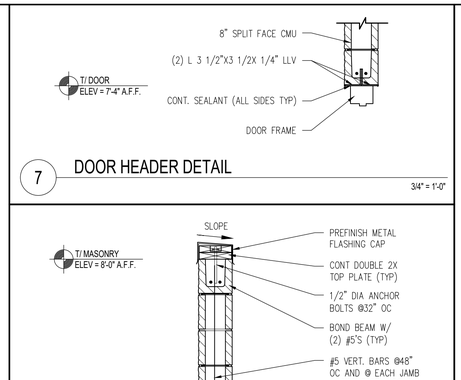
DRAWN BY: RP

CHECKED BY: JK



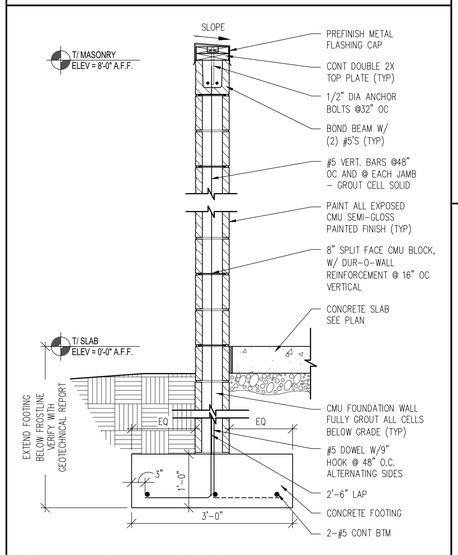
6 TYPICAL STORAGE SHED SECTION

3/4" = 1'-0"



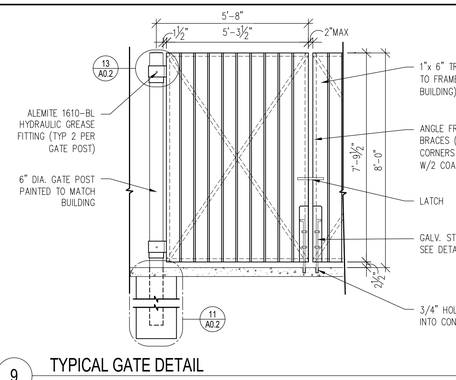
7 DOOR HEADER DETAIL

3/4" = 1'-0"



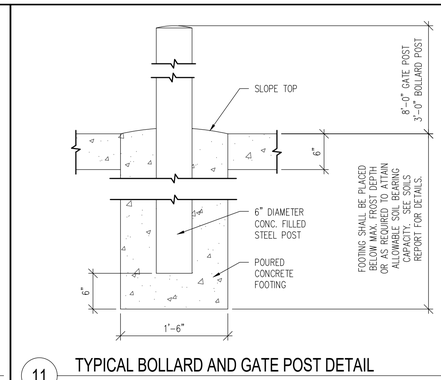
8 TYPICAL WALL SECTION

3/4" = 1'-0"



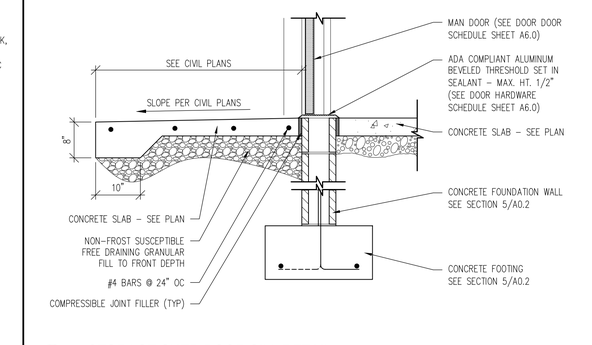
9 TYPICAL GATE DETAIL

3/8" = 1'-0"



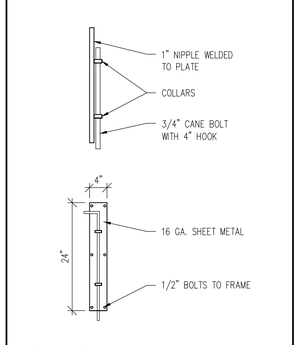
11 TYPICAL BOLLARD AND GATE POST DETAIL

1" = 1'-0"



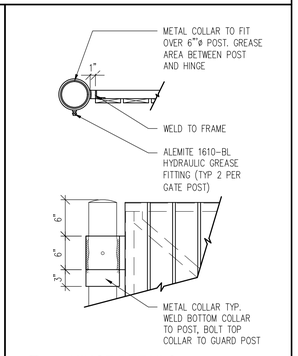
10 STORAGE SHED DOOR SILL DETAIL

3/4" = 1'-0"



12 BOLT DETAILS

N.T.S.



13 HINGE DETAILS

N.T.S.

DATE:
07/15/26 - PERMIT / BID SET

REVISIONS
1 09/08/25 - DECOR UPDATE / PLUMBING & CIVIL COORDINATION

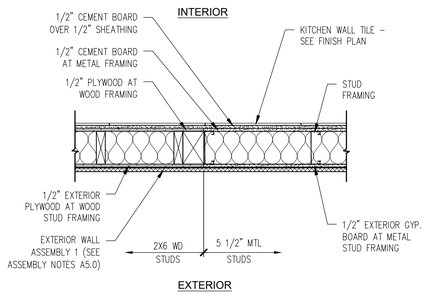
CLIENT
McDonald's USA, LLC

PROTOTYPE
BB20 4590 WW-HB
ISSUE DATE 06/26

ADDRESS
600 SCHUG AVENUE
PECULIAR, MO, 64078

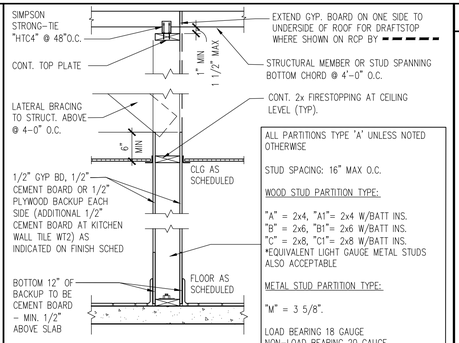
SHEET TITLE
TRASH ENCLOSURE PLAN AND DETAILS

SHEET NUMBER:
A0.2



1 TRANSITION DETAIL

1" = 1'-0"



2 INTERIOR PARTITIONS

3/4" = 1'-0"

GENERAL NOTES

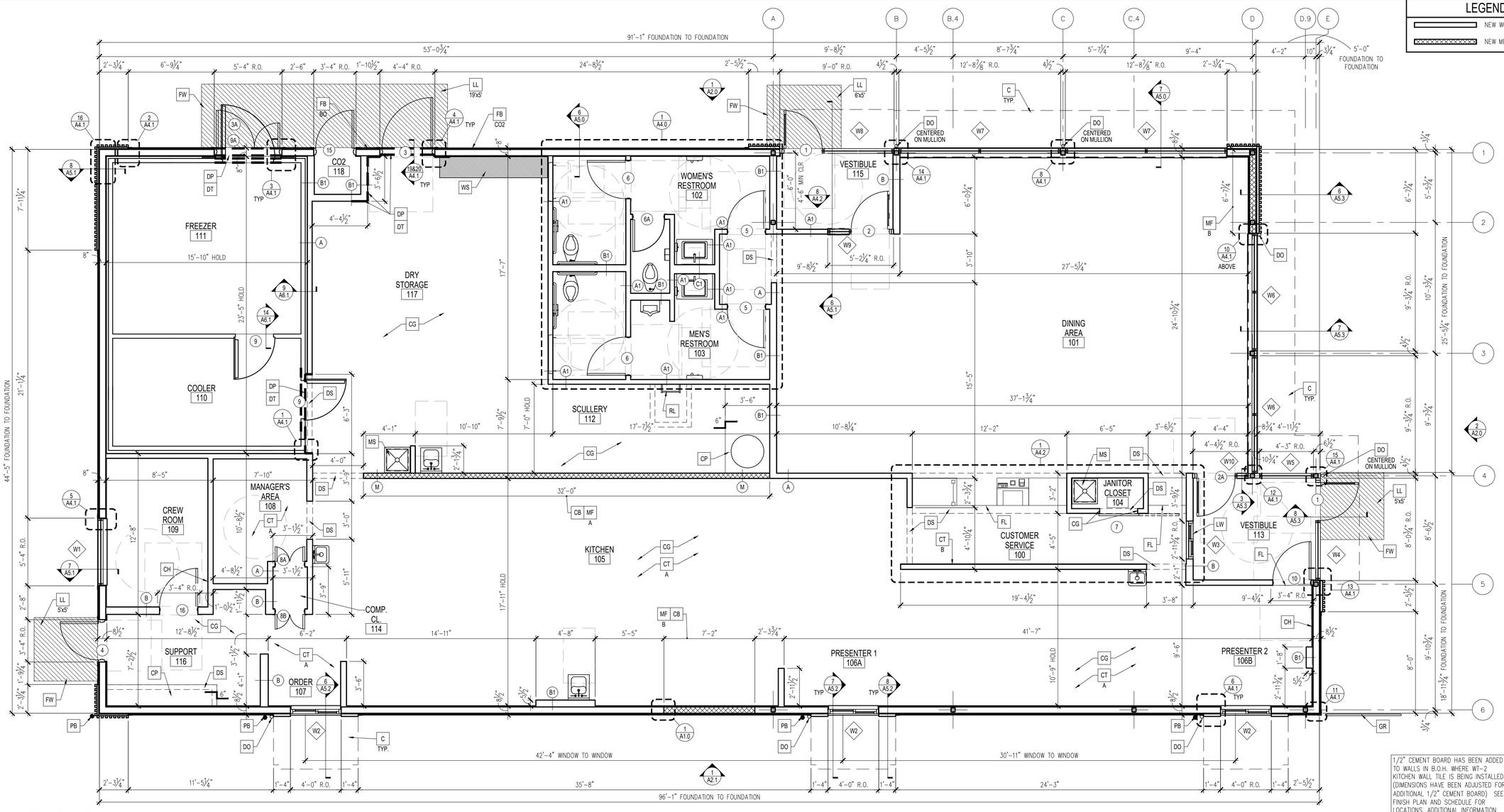
1. EXTERIOR DIMENSIONS ARE TO COLUMN REFERENCE LINES, FACE OF FOUNDATION AND ROUGH OPENINGS. UNLESS OTHERWISE NOTED. INTERIOR DIMENSIONS ARE TO FACE OF INTERIOR WALL BOARD.
2. SEE 5/A5.0 FOR EXTERIOR WALL ASSEMBLY TYPES. SEE 2/A1.0 FOR INTERIOR PARTITION TYPES. INTERIOR PARTITIONS ARE TYPE 'A' UNLESS NOTED OTHERWISE.
3. SEE SHEET A6.0 FOR WINDOW SCHEDULE
4. SEE SHEET A6.0 FOR DOOR SCHEDULE
5. SEE SHEET A1.4 AND DECOR PLANS FOR ROOM FINISHES
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, SEE SHEET T3.0.
7. MAXIMUM OCCUPANCY SIGN TO BE POSTED PER LOCAL CODE. SIGN SUPPLIED BY: FRANKE/S2K 1–800–423–5247 WWW.FRANKESUPPLY.COM, EMAIL: FS–FRANKESUPPLY.US@FRANKE.COM
8. SEE SITE PLAN FOR SIDEWALKS, RAMPS, ETC.
9. GC TO COORDINATE ALL REQUIRED BLOCKING FOR WALL HUNG EQUIPMENT, SHELVES, ETC. FOR PROPER INSTALLATION HEIGHTS.
10. KNOX BOX TO BE INSTALLED BY GENERAL CONTRACTOR PER LOCAL CODE AS REQUIRED. MODEL AND LOCATION TO BE COORDINATED WITH FIRE MARSHALL.
11. DASHED LINES @ DOORS, RESTROOMS, & FIXTURES REPRESENT CLEAR FLOOR MANEUVERING CLEARANCES AS REQUIRED BY THE ACCESSIBILITY CODE. SEE SHEETS G2.0 AND A4.0. CLEARANCES MUST BE MAINTAINED WITHOUT EXCEPTION. IF CONDITIONS PREVENT ANY CLEAR FLOOR SPACE FROM BEING MAINTAINED, CONTACT THE ARCHITECT FOR RESOLUTION.

KEY NOTES

- C – ALUMINUM CANOPY SYSTEM ABOVE – SEE 5/A5.0 FOR NOTES – SEE ROOF PLAN FOR DIMENSIONS, SEE ELEVATION FOR COLORS.
- CB – 1/2" CEMENT BOARD AT EACH SIDE (EXTENT OF METAL FRAMING) TO REPLACE PLYWOOD BACKING SEE FINISH SCHEDULE AND M3.0 FOR ADDITIONAL INFORMATION AND REQUIRED BLOCKING
- 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 SPECIALTY SCREWS AND ANCHORS INTO TILE. BULLNOSE COVE BASE WHERE TILE MEETS STAINLESS STEEL CORNER – SEE DETAIL 10/A6.1.
- CH – COAT HOOKS, WALL MOUNTED – SEE DETAIL 19/A6.1. (2 UNITS STACKED IN CREW ROOM)
- CP – CONCRETE EQMT PAD – SEE DETAIL 13/A6.1 AND STRUCTURAL
- CT – CERAMIC TILE – COORDINATE WITH MCDONALD'S AREA CONSTRUCTION MANAGER.
  - X: A = KITCHEN WALL TILE – 1/2" CEMENT BOARD OVER 1/2" PLYWOOD BACKING – SEE FINISH PLAN AND SCHEDULE FOR ADDITIONAL INFORMATION AND EXCEPTIONS
  - B = CUSTOMER SERVICE WALL TILE – SEE DECOR PLANS FOR SPEC
- DO – DOWNSPOUT CONNECTED TO CANOPY SYSTEM. SEE ELEVATIONS. COORDINATE CONNECTION WITH CIVIL.
- DP – 48"Hx1/8" THICK DIAMOND PLATE WALL AND DOOR PROTECTION BY DIAMOND PLATE CONTRACTOR. COVER AREA SHOWN ON PLAN (DASHED LINES).
- DS – DROPPED SOFFIT ABOVE – SEE REFLECTED CEILING PLAN
- DT – 3/16" THICK DIAMOND PLATE THRESHOLD BY DIAMOND PLATE CONTRACTOR. DOOR 3: 12"x48" DOOR 3A/9A: 24"x60" DOOR 9 COOLER ENTRANCE: 12"x36"
- FB/XX – FILL BOX. CO2 (EQUIPMENT SCHEDULE ITEM 49.00) BO – OPTIONAL BULK OIL (EQPM SCHEDULE ITEM 700.18) CONFIRM USE WITH MCDONALD'S AREA CONSTRUCTION MANAGER
- FL – FLOOR LINE – CHANGE IN MATERIAL – TO ALIGN WITH BACK OF FRONT COUNTER AND FACE OF WALL (KITCHEN SIDE) – SEE FINISH PLAN
- FW – LINE OF FROST WALL: SEE STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
- GR – GUARDRAIL – SEE DETAIL 3/A2.0 – SEE SITE PLAN FOR EXACT LOCATION AND LENGTH.
- LL/6'x9' – LEVEL LANDING @ EXT. DOOR W/ MAX. 2% RUNNING / CROSS SLOPE AWAY FROM BUILDING. * FROST FOOTING * PROPER MANEUVERING CLEARANCE * REFER TO STRUCTURAL / CIVIL PLANS SIZE OF LANDING
- LW – LATE–NIGHT WINDOW (OPTIONAL) BY READYACCESS, MANUAL OPEN/SELF CLOSE. SEE SHEET A4.2 & A6.0 FOR ADDITIONAL INFO.
- MF/X – METAL FRAMING A = METAL STUD WALL CONSTRUCTION EXTENT OF THIS WALL – SEE DETAIL 2/A1.0 B = 5 1/2" METAL STUD EXTERIOR WALL CONSTRUCTION AT THIS LOCATION – SEE SECTIONS AND STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION
- MS – MOP SINK – SEE DETAIL 8/A6.1 AND PLUMBING DRAWINGS. PROVIDE MOP HOLDER & 12"Lx12"W SHELF FOR CLEANING DETERGENT STORAGE
- PB – FILLED PIPE BOLLARD – SEE SITE PLAN AND DETAIL 3/A2.1. COLOR: SEE ELEVATIONS.
- RL – ROOF ACCESS LADDER W/HATCH ABOVE – SEE DETAIL 16/A6.1 & STRUCT FRAMING PLAN FOR LOCATING DIMENSIONS
- WS – INCOMING WATER SERVICE METER AREA

LEGEND

- NEW WOOD FRAMED WALL
- NEW METAL FRAMED WALL



N CONSTRUCTION PLAN

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

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LICENSE EXPIRATION: 12–31–27

CARL LINGLE NUMBER A-2003018555 STATE OF MISSOURI ARCHITECT

DATE ISSUED: 07–15–26

STATE ID: 24134?
NATIONAL #: 46237
PROJECT #: 26-125
DRAWN BY: RP
CHECKED BY: JK

DATE:
07/15/26 - PERMIT / BID SET

REVISIONS
1 09/08/25 - DECOR UPDATE / PLUMBING & CIVIL COORDINATION

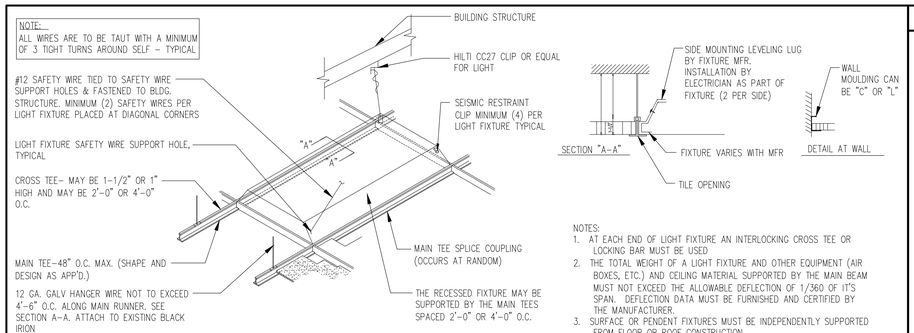
CLIENT
McDonald's USA, LLC

PROTOTYPE
BB20 4590 WW-HB
ISSUE DATE 06/26

ADDRESS
600 SCHUG AVENUE
PECULIAR, MO, 64078

SHEET TITLE
FLOOR PLAN & DETAILS

SHEET NUMBER:
A1.0



NOTES:
1. AT EACH END OF LIGHT FIXTURE AN INTERLOCKING CROSS TEE OR LOCKING BAR MUST BE USED
2. THE TOTAL WEIGHT OF A LIGHT FIXTURE AND OTHER EQUIPMENT (AIR BOXES, ETC.) AND CEILING MATERIAL SUPPORTED BY THE MAIN BEAM MUST NOT EXCEED THE ALLOWABLE DEFLECTION OF 1/360 OF IT'S SPAN. DEFLECTION DATA MUST BE FURNISHED AND CERTIFIED BY THE MANUFACTURER.
3. SURFACE OR PENDENT FIXTURES MUST BE INDEPENDENTLY SUPPORTED FROM FLOOR OR ROOF CONSTRUCTION.

1 CEILING GRID & LIGHT SUPPORT DETAIL

N.T.S.

LEGEND

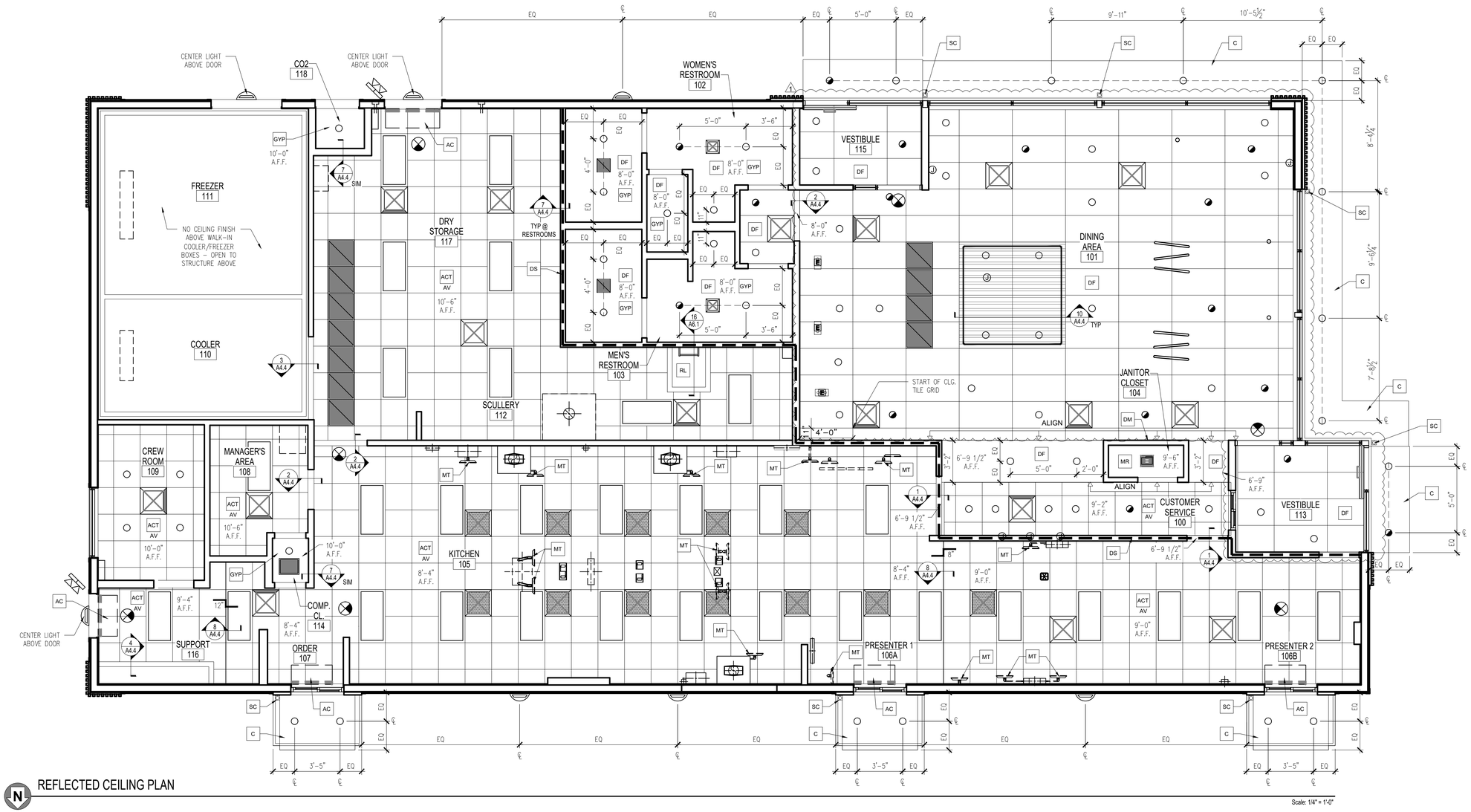
- DIFFUSERS – REFER TO MECHANICAL DRAWINGS
- RETURN AIR GRILL OR EXHAUST FAN – REFER TO MECHANICAL DRAWINGS
- 2x4 RECESSED LIGHT FIXTURE – REFER TO ELECTRICAL DRAWINGS
- DIRECTIONAL EMERGENCY EXIT SIGNAGE – REFER TO ELECTRICAL DRAWINGS
- EXTERIOR EMERGENCY LIGHT W/ BATTERY BACKUP – REFER TO ELECTRICAL
- EXHAUST FAN WITH LIGHT – REFER TO ELECTRICAL AND MECHANICAL DRAWINGS
- DOWN CAN LIGHTING – REFER TO ELECTRICAL
- EMERGENCY DOWN CAN LIGHTING – REFER TO ELECTRICAL
- EXTERIOR SCONCE – REFER TO ELECTRICAL
- POWER & DATA THROUGH CEILING – REFER TO ELECTRICAL AND DECOR DRAWINGS

GENERAL NOTES

1. GENERAL CONTRACTOR SHALL COORDINATE HVAC DIFFUSER LOCATION WITH DECOR & MECHANICAL PLANS AND REPORT ANY DISCREPANCIES TO ARCHITECT.
2. REFERENCE MECHANICAL AND ELECTRICAL DRAWINGS FOR DIFFUSER AND LIGHTING INFORMATION.
3. SEE ELECTRICAL DRAWINGS FOR EMERGENCY LIGHTING LOCATIONS
4. PROVIDE USG V15 CEILING TILE RETENTION CLIPS IN ALL VESTIBULE AREAS
5. SEE 1/A1.2 FOR CEILING GRID & LIGHT SUPPORT DETAIL.
6. REFER TO DECOR DRAWINGS FOR FINAL FINISHES AND LOCATIONS.

KEY NOTES

TAG	DESCRIPTION
AC	AIR CURTAIN – ABOVE D/T WINDOW – SEE MECHANICAL AND ELECTRICAL PLANS
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 5/A5.0 FOR NOTES – SEE ROOF PLAN FOR DIMENSIONS – SEE ELEVATION FOR COLOR.
DF	DECOR FINISH – REFER TO DECOR DRAWINGS FOR ADDITIONAL INFORMATION, LIGHTING AND FINISHES. SHOWN FOR REFERENCE AND COORDINATION PURPOSES.
DS	LINE OF DRAFT STOPPING – DRAFT STOPPING TO BE INSTALLED BETWEEN DINING / RESTROOMS AND KITCHEN. AREAS NOT TO EXCEED 3000 SF.
DM	DIGITAL MERCHANDISER – SEE ELEC PLANS
GYP	GYPSUM BOARD CEILING
MR	PAINTED GYPSUM CEILING TO MATCH RESTROOMS. – SEE DECOR PLANS
MT	CEILING MOUNTED MONITOR: A) VERIFY MONITOR LOCATIONS WITH McDONALD'S PROJECT MANAGER PRIOR TO INSTALLATION. B) SEE DETAIL 5/A4.4 FOR INSTALLATION METHOD
RL	ROOF LADDER OPENING
SC	INTEGRAL GUTTER SCUPPER



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STATE OF MISSOURI – CARL LINGLE – NUMBER A-2003018555 – ARCHITECT

LICENSE EXPIRATION: 12–31–27

DATE ISSUED: 07–15–26

STATE ID: 241342

NATIONAL #: 46237

PROJECT #: 26-125

DRAWN BY: RP

CHECKED BY: JK

DATE: 07/15/26 - PERMIT / BID SET

REVISIONS
1 09/08/25 - DECOR UPDATE / PLUMBING & CIVIL COORDINATION

CLIENT
McDonald's USA, LLC

PROTOTYPE
BB20 4590 WW-HB
ISSUE DATE 06/26

ADDRESS
600 SCHUG AVENUE
PECULIAR, MO, 64078

SHEET TITLE
REFLECTED CEILING PLAN

SHEET NUMBER:
A1.2

GENERAL NOTES

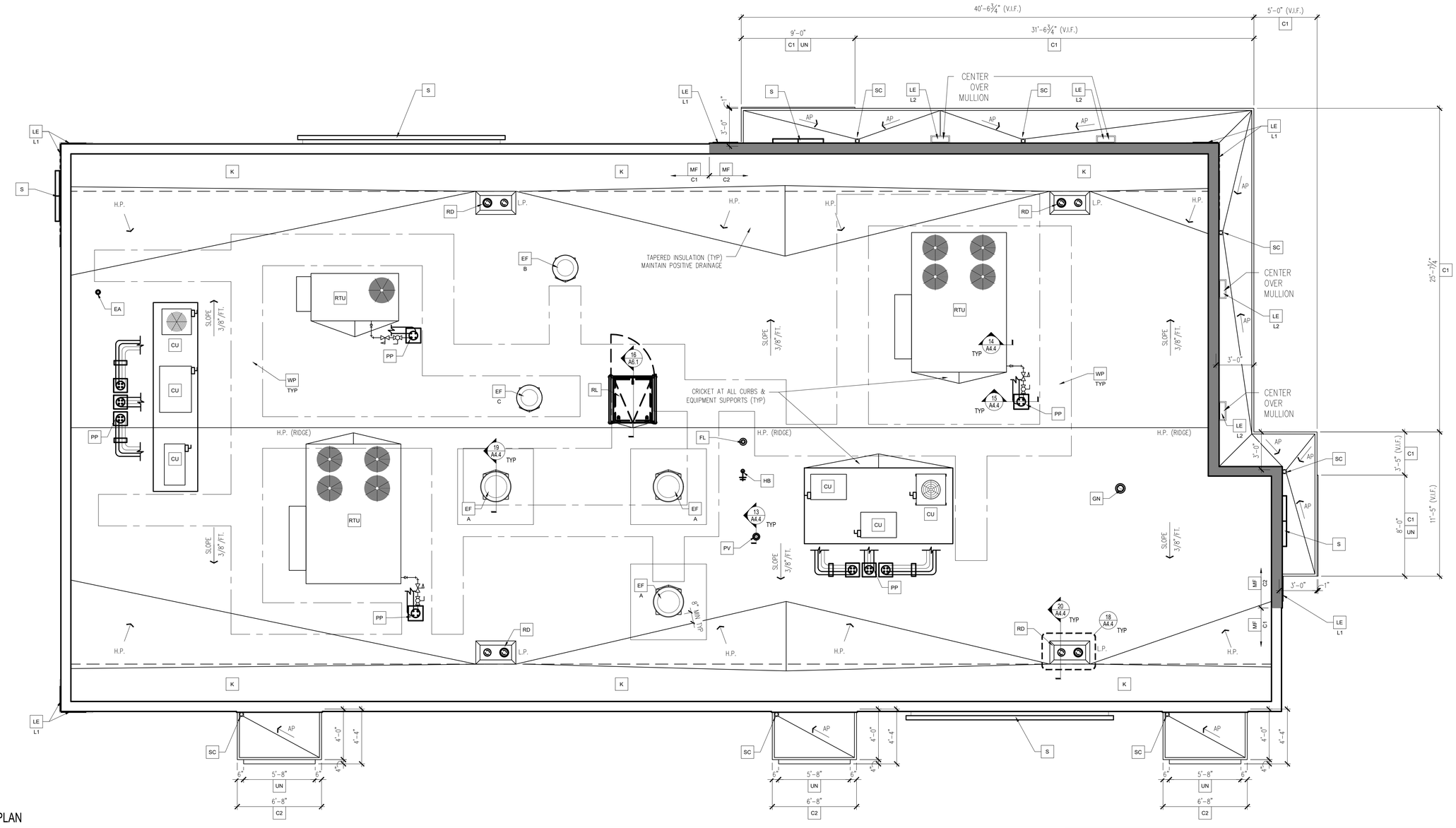
1. SINGLE-PLY ROOFING SYSTEM WITH BASE FLASHING SHEET EXTENDING UP PARAPET AND TERMINATED UNDER COPING HOT WELDED TO SEALING STRIP SECURED TO WOOD BLOCKING.
2. INSTALLATION OF ROOFING SHALL BE IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS AND PER DETAIL 16 / A4.4
3. PROVIDE PREFABRICATED METAL CURBS. COORDINATE SIZE, LOCATION AND INSTALLATION REQUIREMENTS W/ M, E, P & S SHEETS. PROVIDE SHIMS TO LEVEL CURB AREAS WHERE ROOF DECK IS PITCHED.
4. FOR EXACT LOCATION OF EXHAUST FANS, HVAC UNITS, AND ROOF HATCH. REFER TO STRUCTURAL DRAWINGS.
5. CRICKETS MUST BE INSTALLED AT ALL ROOF CURBS & EQUIPMENT PLATFORMS BY GENERAL CONTRACTOR.

KEY NOTES

TAG	DESCRIPTION
C1	ALUMINUM CANOPY SYSTEM (COLOR: SEE ELEVATIONS)
C2	ALUMINUM CANOPY SYSTEM (COLOR: SEE ELEVATIONS)
CU	CONDENSING UNIT – SEE MECHANICAL
EA	ELECTRICAL ANTENNA GOOSENECK – SEE ELECTRICAL
EF X	EXHAUST FAN – SEE MECHANICAL TYPE: A = KITCHEN – WITH 2'-0" ADDITION LAYER OF ROOF MEMBRANE B = RESTROOM C = WAREWASHER
FL	WATER HEATER FLUE AND INTAKE
GN	GOOSENECK FOR JANITOR CLOSET EXHAUST FAN
HB	HOSE BIBB – SEE PLUMBING
K	KICKER – SEE STRUCTURAL
LE X#	ACCENT LIGHTING – SEE ELEVATIONS & ELECTRICAL LED LIGHT TYPE: L1 = SLIM LED (DOWN ONLY) L2 = UP FLOOD FIXTURE
MF X#	METAL FASCIA COLOR: C1 = SEE ELEVATIONS C2 = SEE ELEVATIONS
PP	PIPE PORTAL – SEE MECHANICAL
PV	PLUMBING VENT – SEE PLUMBING
RD	ROOF DRAIN WITH OVERFLOW DRAIN – SEE PLUMBING
RL	ROOF LADDER HATCH WITH LOCK – PROVIDE CURB AND CRICKET AS SHOWN
RTU	ROOFTOP UNIT – SEE MECHANICAL
S	McDONALD'S SIGNAGE BY OTHERS UNDER SEPARATE PERMIT (SEE ELEVATIONS)
SC	INTEGRAL GUTTER SCUPPER
UN	UNDERSCORE
WP	ROOF WALKWAY PAD

LEGEND

L.P.	LOW POINT
H.P.	HIGH POINT
⟶	DIRECTION OF DRAINAGE
AP ⟶	TRELLIS SYSTEM WITH ALUMINUM INFILL PANELS. SLOPE TO EDGE @ 1/4"PER FT.



ROOF PLAN

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

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SHEET TITLE
ROOF PLAN

SHEET NUMBER:
A1.3

FINISH SCHEDULE

TAG	DESCRIPTION	SPEC	COMMENTS
	WALL FINISHES		
FRP	FIBERGLASS REINFORCED PANELS	PANOLAM, .075, COLOR: GRAY SMOOTH	1/2" PLYWOOD SUBSTRATE TYP (SEE GENERAL NOTES 4) CONTACT: KIMBERLY LAWSON 1-866-925-4377 OR KIMBERLY_LAWSON@PANOLAM.COM
WT2	KITCHEN WALL TILE	CROSSVILLE – COLOR BY NUMBERS (4"x12") STACKED BOND PATTERN COLOR: AFTERNOON SPRAY GROUT: MAPEI 27 SILVER – JOINT TO BE 1/16" MAX. * USE THIS TILE WHEN HIGH LRV IS REQUIRED, COORDINATE WITH THE McDONALD'S AREA CONSTRUCTION MANAGER.	1/2" CEMENT BOARD OVER 1/2" PLYWOOD SUBSTRATE TYP. (SEE GENERAL NOTES 4) 1/2" CEMENT BOARD OVER 1/2" CEMENT BOARD @ METAL STUDS
COR	CORIAN WALL FINISH AT LATE NIGHT WINDOW	1/2" DUPONT, CORIAN, DEEP TITANIUM	
	FLOOR & BASE FINISHES		
B1	KITCHEN BASE TILE	CROSSVILLE – COVED QUARRY TILE (6"x6") COLOR: PURITAN GRAY GROUT: KERAPOXY IEG BLACK #10 BY MAPEI, CHEMICAL RESISTANT, WATER-CLEANABLE, TILE-SETTING EPOXY – 100% SOLIDS, INDUSTRIAL-GRADE MORTAR SETTING BED: MODIFIED-PORTLAND CEMENT THIN SET MORTAR (MEDIUM BED)	
B2	WALK-IN COOLER/FREEZER BASE	4" ALUMINUM COVED BASE	SUPPLIED BY K.E.S.
QT1	KITCHEN FLOOR TILE	CROSSVILLE – METROPOLITAN QUARRY BASICS ABRASIVE (6"x6") COLOR: PURITAN GRAY EXTRA ABRASIVE 57XA GROUT: KERAPOXY IEG BLACK #10 BY MAPEI, CHEMICAL RESISTANT, WATER-CLEANABLE, TILE-SETTING EPOXY – 100% SOLIDS, INDUSTRIAL-GRADE MORTAR SETTING BED: MODIFIED-PORTLAND CEMENT THIN SET MORTAR (MEDIUM BED)	
	MISCELLANEOUS		
LM3	LAMINATE	FORMICA COMPACT LAMINATE MATTE BLACK	BY GC @ FRONT COUNTER BASE BOARD (DINING SIDE)
LM4	LAMINATE	WILSONART – DOVE GREY D92-60	BY GC @ OVERHEAD SHELVING (CUSTOMER SERVICE)

ROOM FINISH SCHEDULE

MARK	ROOM NAME	FLOOR	WALLS	CEILING
100	CUSTOMER SERVICE	QT1, B1	REFER TO DECOR DRAWINGS	2'x2" ACOUST. (ACT AV)
101	DINING	TILE –REFER TO DECOR DRAWINGS	REFER TO DECOR DRAWINGS	REFER TO DECOR DRAWINGS
102	WOMEN'S TOILET	TILE –REFER TO DECOR DRAWINGS	TILE – REFER TO DECOR DRAWINGS	PAINTED GYP. BD. REFER TO DECOR DRAWINGS
103	MEN'S TOILET	TILE –REFER TO DECOR DRAWINGS	TILE – REFER TO DECOR DRAWINGS	PAINTED GYP. BD. REFER TO DECOR DRAWINGS
104	JANITOR CLOSET	QT1, B1	FRP (SEE GENERAL NOTE 5)	PAINTED GYP. BD. MATCH RESTROOMS
105	KITCHEN	QT1, B1	WT2	2'x2" ACOUST. (ACT AV)
106A	PRESENTER 1	QT1, B1	WT2	2'x2" ACOUST. (ACT AV)
106B	PRESENTER 2	QT1, B1	WT2	2'x2" ACOUST. (ACT AV)
107	ORDER	QT1, B1	WT2	2'x2" ACOUST. (ACT AV)
108	MANAGER'S AREA	QT1, B1	WT2	2'x2" ACOUST. (ACT AV)
109	CREW ROOM	QT1, B1	REFER TO DECOR DRAWINGS	2'x2" ACOUST. (ACT AV)
110	COOLER	QT1, B2	PRE-FAB METAL SKIN PANEL	PRE-FAB METAL SKIN PANEL
111	FREEZER	QT1, B2	PRE-FAB METAL SKIN PANEL	PRE-FAB METAL SKIN PANEL
112	SCULLERY	QT1, B1	FRP (SEE GENERAL NOTE 5)	2'x2" ACOUST. (ACT AV)
113	VESTIBULE	TILE –REFER TO DECOR DRAWINGS	REFER TO DECOR DRAWINGS	REFER TO DECOR DRAWINGS
114	COMPUTER CLOSET	QT1, B1	FRP	PAINTED GYP. BD.
115	VESTIBULE	TILE –REFER TO DECOR DRAWINGS	REFER TO DECOR DRAWINGS	REFER TO DECOR DRAWINGS
116	SUPPORT	QT1, B1	WT2	2'x2" ACOUST. (ACT AV)
117	DRY STORAGE	QT1, B1	FRP	2'x2" ACOUST. (ACT AV)
118	CO2	N/A	FRP	PAINTED GYP. BD.

* FOR REFERENCE ONLY, ALL FINISHES PER INTERIOR DESIGN DRAWINGS.

GENERAL NOTES

1. ALL FINISH SURFACES OF WALL AND CEILING MATERIALS SHALL BE CLASS B AND SHALL HAVE A FLAME SPREAD RATING OF 26 TO 75 AND A SMOKE DENSITY OF 450 MAX. (PER IBC TABLE 803.9).
2. DECORATIVE MATERIALS SHALL BE FLAME RETARDANT AND MEET THE CRITERIA OF NFPA 701.
3. DECORATIVE MATERIAL SHALL NOT CONCEAL EXITS, EXIT LIGHTS, ALARM STATIONS, HOSE CABINETS, AND EXTINGUISHER LOCATIONS.
4. WHEN BUILDING TYPE IS A NON-COMBUSTIBLE CATEGORY, ALL PLYWOOD SHALL BE FIRE RETARDANT TREATED.
5. WALL FINISH EXCEPTIONS

   QUARRY TILE WAINSCOT TO 6' A.F.F. OVER 1/2" CEMENT BD. AT MOP SINKS.
6. PROVIDE CEMENT BOARD BACKER OR EQUIVALENT AT ALL TILE LOCATIONS.
7. PROVIDE VAPOR BARRIER BEHIND PLYWOOD AT WALLS AND BEHIND GYP. AT CEILING.
8. ALL DECOR ELEMENTS MANUFACTURED BY DECOR TO BE PURCHASED AND INSTALLED BY GC, UNO.
9. SEE TILE DETAILS SHEET A6.1.
10. REFER TO INTERIOR DESIGN DRAWINGS FOR ALL FINAL FINISHES AND LOCATIONS.

* SEE CEILING PLANS FOR FINISHES, HEIGHTS & LAYOUTS.
** VWC ON EXTERIOR WALL ASSEMBLIES TO BE PERFORATED

KEY NOTES

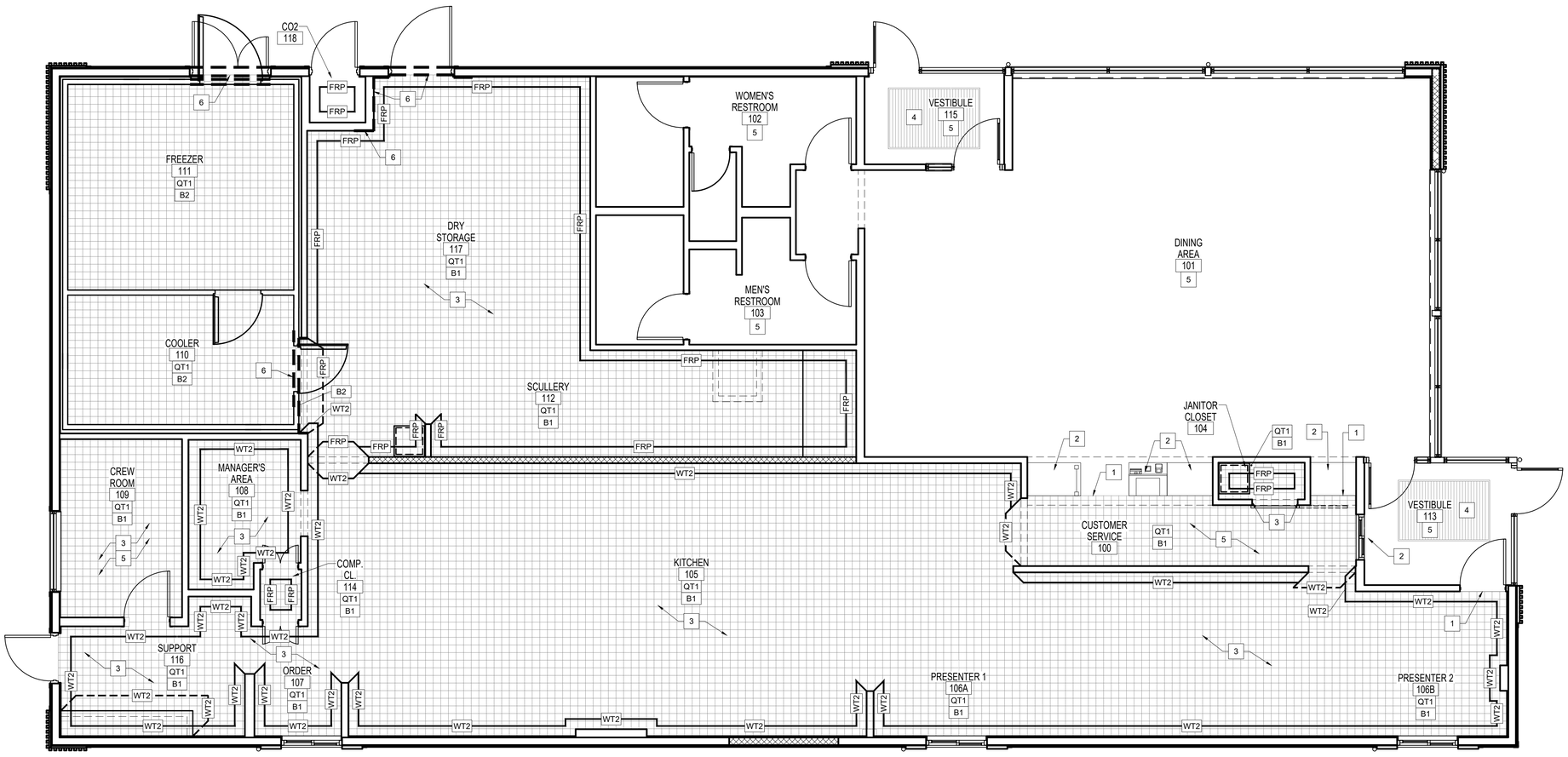
1. NEW LINE OF FLOORING TRANSITION BETWEEN DINING TILE AND KITCHEN TILE TO ALIGN WITH BACK OF FRONT COUNTER AND WALL FACE (KITCHEN SIDE).
2. SEE SHEET A4.2 & A4.3 FOR ADDITIONAL FINISH INFORMATION
3. G.C. TO PROVIDE 4"x4"x5'-0" HIGH STAINLESS STEEL CORNER GUARDS AT ALL EXPOSED LOCATIONS IN KITCHEN/SUPPORT AREA. CORNER GUARDS TO START AT FINISH FLOOR. ATTACH WITH WOOD SCREWS INTO WOOD BLOCKING BULLNOSE COVE BASE WHERE TILE MEETS STAINLESS STEEL CORNER – SEE DETAIL 10/A6.1.
4. PEDIMAT. SEE DETAIL 20/A6.1
5. REFER TO DECOR DRAWINGS FOR ADDITIONAL INFORMATION AND FINISHES.
6. 48"Hx1/8" THICK DIAMOND PLATE WALL AND DOOR PROTECTION BY DIAMOND PLATE CONTRACTOR. COVER AREA SHOWN ON PLAN (DASHED LINES).

GENERAL TILE NOTES

1. REFERENCE: McDONALD'S PROJECT MANUAL – SECTION 093000
2. DINING ROOM FLOOR TILE:
   MAIN & ACCENT: USE ONLY APPROVED TILE SERIES AND COLORS BY CROSSVILLE AND EUROWEST. VERIFY COLOR AND PATTERN PER INTERIOR DESIGN DRAWINGS.
   A) MUST BE PER McDONALD'S USA, LLC: STANDARDS FOR INTERIOR FLOOR TILE AND APPROVED TILE LIST.
      MUST MEET THE FOLLOWING:
      STATIC COEFFICIENT OF FRICTION (PER ASTM F1667-96)
   B) LEVEL SURFACES: MINIMUM 0.50 DRY AND WET (McDONALD'S STANDARD)
      DYNAMIC COEFFICIENT OF FRICTION (PER ANSI A137.1 2012)
      LEVEL SURFACES: MINIMUM 0.5 DRY AND WET (McDONALD'S STANDARD)
3. TILE TRANSITION AND EDGE PROTECTION:
   A) TILE BASE (RESTROOM ONLY): SCHLUTER DILEX-AHK SERIES, BRUSHED STAINLESS STEEL.
   B) TILE EDGE PROTECTION (WALL TRANSITION): SCHLUTER-RONDEC-DB, SATIN ANODIZED ALUMINUM.
   C) TILE CORNER PROTECTION (OUTSIDE CORNER): SCHLUTER-RONDEC-AE, SATIN ANODIZED ALUMINUM.
   D) SEE INTERIOR DECOR DRAWINGS FOR ALL LOCATIONS.

   BEFORE FINAL INSPECTION, REMOVE PROTECTIVE COVERINGS AND PERFORM FINAL CLEANING.
4. TILE CLEANER: DETERDEK, BY FILA SURFACE CARE PRODUCTS – NO SUBSTITUTIONS ALLOWED
   CAN BE ORDERED BY EUROWEST, CROSSVILLE, OR DIRECT FROM MANUFACTURER: FILA/DETEREK
   POST INSTALLATION CLEANING REQUIRED ON ALL FLOOR TILE INSTALLTIONS PRIOR TO RESTAURANT TURN OVER.

   APPLY CLEANER PER MANUFACTURER'S WRITTEN INSTRUCTIONS.
   REFERENCE: McDONDALDS PROJECT MANUAL – SECTION 09300 TILING INTERIOR.
6. GROUT COLORS AND MANUFACTURER AS INDICATED IN FINISH SCHEDULE AND INTERIOR DESIGN DRAWINGS.



N FINISH PLAN

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

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CARL LINGLE
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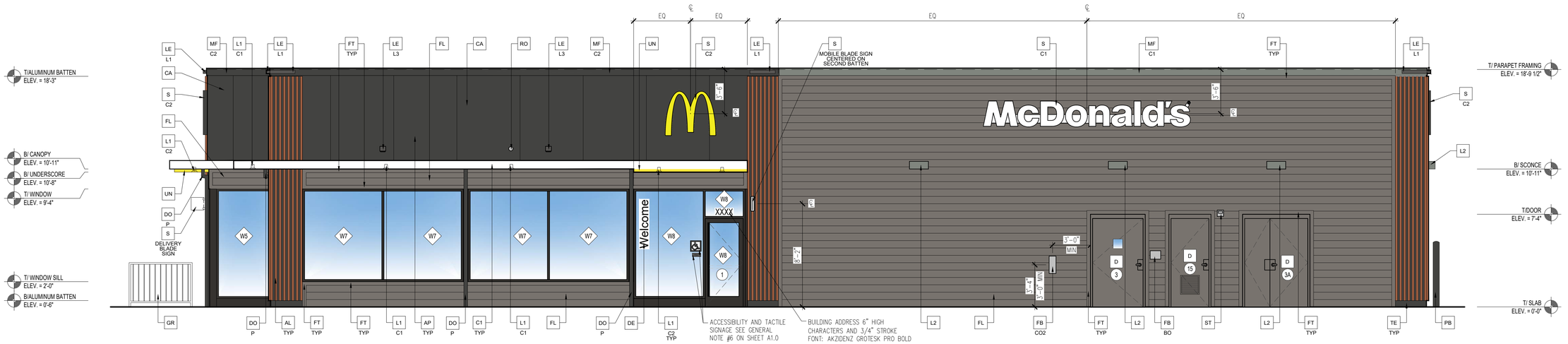
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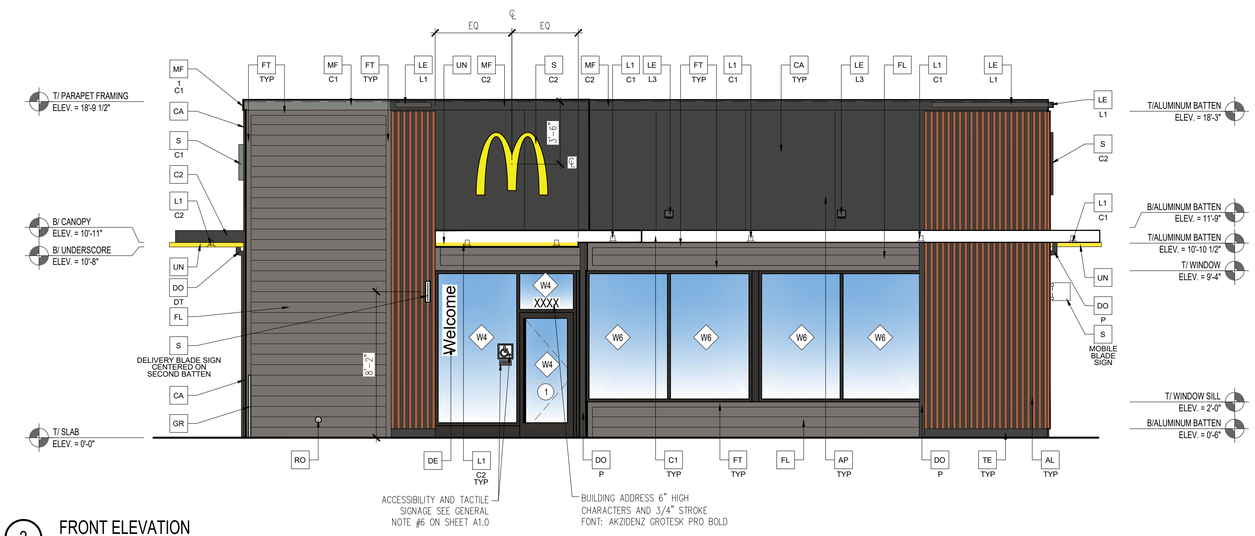
SHEET TITLE
FINISH PLAN

SHEET NUMBER:
A1.4



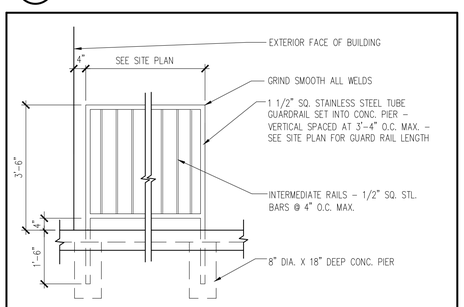
1 NON DRIVE-THRU ELEVATION

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



2 FRONT ELEVATION

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



3 GUARD RAIL DETAIL

1/2" = 1'-0"

ELEVATION KEY NOTES:

COLOR SCHEME: 'STEEL' SCHEME

- AL — ALUMINUM BATTEN SYSTEM
  SIZE: 2"X2" PROFILE
  COLOR: WOOD GRAIN, BACKRAIL UNFINISHED, ENDCAP PAINTED TO MATCH SUBSTRATE: 1/2" EXTERIOR HIGH DENSITY OVERLAY (HDO) PLYWOOD, BB, GROUP 1, HDO BOTH FACES, APA TRADEMARKED. COURSE GRIT SAND SURFACES PRIOR TO PRIMING. PRIME AND PAINT BOTH SIDES AND ALL EDGES PRIOR TO INSTALLATION. SUBSTRATE COLOR: "IRON ORE" SW 7069 BY SHERWIN WILLIAMS
- C1 — ALUMINUM CANOPY SYSTEM
  COLOR: WHITE
- C2 — ALUMINUM CANOPY SYSTEM
  COLOR: RAL 7022
- CA — CITADEL ACM WALL PANELS
  COLOR: UMBRA GRAY
- CT — CT CABINET – SEE ELECTRICAL
- D — HOLLOW METAL DOOR
  PAINT: GAUNTLET GRAY SW 7019 BY SHERWIN WILLIAMS
- DE — DECAL BY GRAPHICS SUPPLIER
  SURFACE APPLIED, FIELD INSTALLED, PRE CUT, PRE SPACED.
  SUPPLIERS:
  VOMELA (865) 330-7337, ann.bowen@vomela.com
  GFX INTERNATIONAL (847) 543-4600, mcdonaldsdecor@gfxi.com
- DO ## — DOWNSPOUT – 3" DOWNSPOUT BY CANOPY SYSTEM MANUFACTURER – COORDINATE WITH CIVIL TO TIE INTO STORM DRAIN – COLOR: RAL 7022
  TYPE/LOCATION:
  DT = AT DRIVE THRU LOCATIONS, DOWNSPOUTS CAN OUTLET DIRECTLY TO PAVEMENT IN DRIVE THRU LANE.
  P = AT PEDESTRIAN LOCATIONS, APPROVED CONNECTION OPTIONS ARE: DRAIN TO LANDSCAPE OR AREA DRAIN.
- FB ## — FILL BOX
  TYPE:
  BO = BULK OIL (EQPM SCHEDULE ITEM 700.18)
  CO2 = BULK CO2 (EQPM SCHEDULE ITEM 49.00)
- FL — FIBER CEMENT LAP SIDING: SMOOTH HARDI-BOARD PLANK BY JAMES HARDIE, 8-1/4" WIDTH, 7" EXPOSURE, HZ5
  PAINT: "GAUNTLET GREY" SW7019 BY SHERWIN WILLIAMS
- FT — FIBER CEMENT TRIM: HARDIE TRIM BOARDS 4/4 SMOOTH, 3 1/2" WIDTH, 3/4" THICK, HZ5
  PAINT: "GAUNTLET GREY" SW7019 BY SHERWIN WILLIAMS
- GM — GAS METER – SEE MECHANICAL
- GR — GUARD RAIL – STAINLESS STEEL
  SEE SITE PLAN AND DETAIL 3/A2.0
- KB — KNOX BOX – SEE GENERAL NOTE 10 SHEET A1.0
- L1 ## — RECESSED LIGHT FIXTURE – SEE ELECTRICAL
  COLOR:
  C1 = WHITE
  C2 = GOLD
- L2 — RADIAL SCONCE LIGHT FIXTURE – SEE ELECTRICAL
  COLOR: PLATINUM SILVER
- LE ## — ACCENT LIGHTING – SEE ELECTRICAL
  LED LIGHT:
  L1 = SLIM LED (DOWN ONLY)
  L2 = UP ONLY FLOOD FIXTURE
- MF ## — METAL FASCIA: PRE-FAB ANCHOR-TITE FASCIA
  COLOR:
  C1 = WEATHERED ZINC
  C2 = RAL 7022
- PB — PIPE BOLLARD – SEE SITE PLAN AND DETAIL 3/A2.1
  USA 310-SD BASTION, COLOR: RAL 7022
- RO — ROOF DRAIN OVERFLOW PIPE – PAINT TO MATCH SURROUNDING MATERIAL
- S ## — McDONALD'S SIGNAGE BY OTHERS – UNDER SEPARATE
  COLOR:
  C1 = WEATHERED ZINC RACEWAY
  C2 = RAL 7022 RACEWAY
- ST — CO2 STROBE/ALARM. SEE MECHANICAL DRAWINGS FOR SPECIFICATION.
- TE — TRU EXTERIOR 1"X6" TRIM, PAINTED ON SITE
  COLOR: "IRON ORE" SW 7069 BY SHERWIN WILLIAMS
- UN — METAL UNDERSCORE
  COLOR: GOLD
- WW XX — EXTERIOR WINDOW ASSEMBLY – TEMPERED GLASS
  COLOR: DARK BRONZE – SEE SHEET A5.0 FOR ASSEMBLY NOTE & A6.0 FOR WINDOW TYPES.
  DRIVE-THRU WINDOWS BY READY ACCESS
  MODEL: 600 SERIES, 36" SERVICE HEIGHT WITH TRANSOM, MANUAL OPEN; ELECTRONIC RELEASE
  COLOR: DEEP BRONZE
  SLIDE DIRECTION: RL = RIGHT TO LEFT
  LR = LEFT TO RIGHT

GC TO PROVIDE SIGNAGE PACKAGE AND INSTALL SIGNS AT LOCATIONS AND POSITIONS INDICATED IN SIGNAGE PACKAGE OR AS REQUIRED BY LOCAL CODES. SIGNAGE PACKAGE SUPPLIED BY: FRANKE SUPPLY 1-800-423-5247, FAX: 1-877-538-6882, WWW.FRANKESUPPLY.COM, EMAIL: fs-frankesupply.us@franke.com

NOTE:
1. TRASH CORRAL INCLUDING DOORS, BOLLARDS ETC. TO MATCH MAIN BUILDING FINISHES AND COLORS.

RAL 7022 COLOR CHART (FOR REFERENCE)
(SEE ELEVATION KEY NOTES AP, C2, C3, MF-1-C2)
HEX CODE: #4C4A44
RGB CODE: RED 76 (30%), GREEN 74 (29%), BLUE 68 (27%)
CMYK CODE: CYAN 40%, MAGENTA 30%, YELLOW 40%, BLACK 80%

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5
6

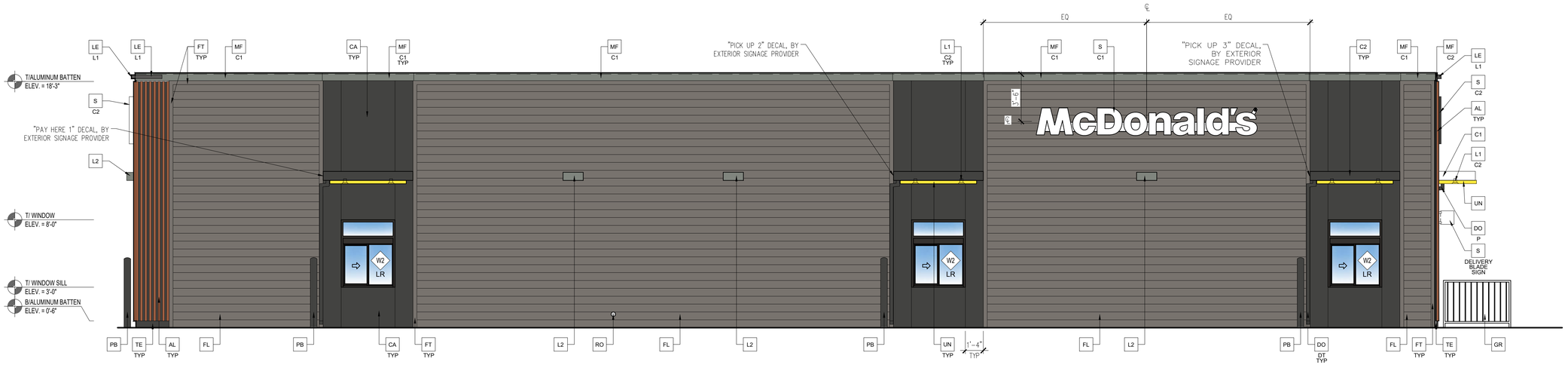
CLIENT
McDonald's USA, LLC

PROTOTYPE
BB20 4590 WW-HB
ISSUE DATE 06/26

ADDRESS
600 SCHUG AVENUE
PECULIAR, MO, 64078

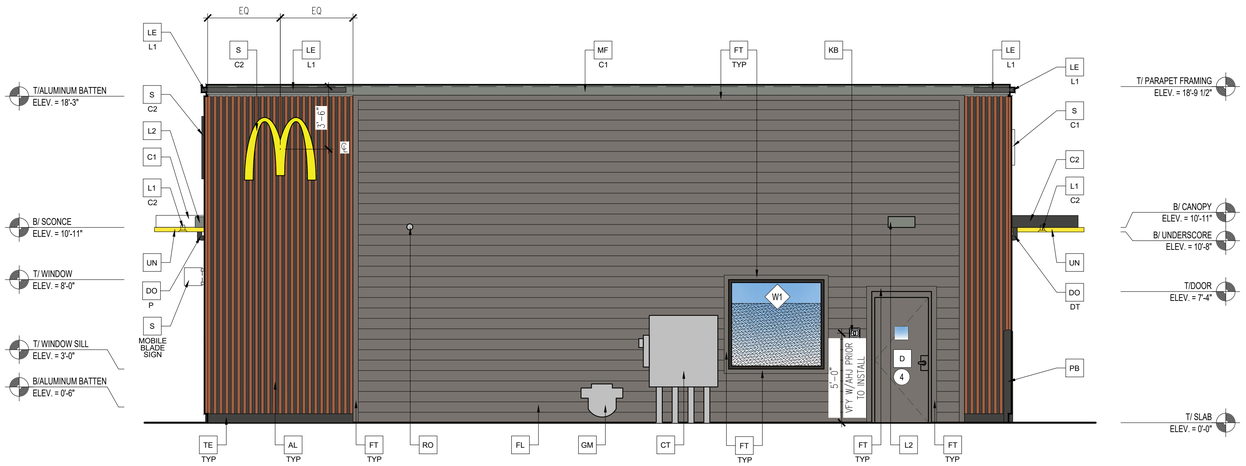
SHEET TITLE
EXTERIOR ELEVATIONS

SHEET NUMBER:
A2.0



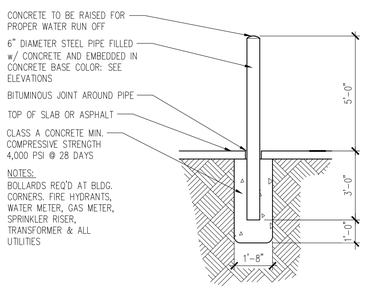
1 DRIVE-THRU ELEVATION

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



2 REAR ELEVATION

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



3 PIPE BOLLARD DETAIL

N.T.S.

ELEVATION KEY NOTES:

COLOR SCHEME: 'STEEL' SCHEME

- AL — ALUMINUM BATTEN SYSTEM SIZE: 2"X2" PROFILE COLOR: WOOD GRAIN, BACKRAIL UNFINISHED, ENDCAP PAINTED TO MATCH SUBSTRATE: 1/2" EXTERIOR HIGH DENSITY OVERLAY (HDO) PLYWOOD, BB, GROUP 1, HDO BOTH FACES, APA TRADEMARKED. COURSE GRIT SAND SURFACES PRIOR TO PRIMING. PRIME AND PAINT BOTH SIDES AND ALL EDGES PRIOR TO INSTALLATION. SUBSTRATE COLOR: "IRON ORE" SW 7069 BY SHERWIN WILLIAMS
- C1 — ALUMINUM CANOPY SYSTEM COLOR: WHITE
- C2 — ALUMINUM CANOPY SYSTEM COLOR: RAL 7022
- CA — CITADEL ACM WALL PANELS COLOR: UMBRA GRAY
- CT — CT CABINET – SEE ELECTRICAL
- D — HOLLOW METAL DOOR PAINT: GAUNTLET GRAY SW 7019 BY SHERWIN WILLIAMS
- DE — DECAL BY GRAPHICS SUPPLIER SURFACE APPLIED, FIELD INSTALLED, PRE CUT, PRE SPACED. SUPPLIERS: VOMELA (865) 330-7337, ann.bowen@vomela.com GFX INTERNATIONAL (847) 543-4600, mcdonaldsdecor@gfxi.com
- DO ## — DOWNSPOUT – 3" DOWNSPOUT BY CANOPY SYSTEM MANUFACTURER – COORDINATE WITH CIVIL TO TIE INTO STORM DRAIN – COLOR: RAL 7022 TYPE/LOCATION: DT = AT DRIVE THRU LOCATIONS, DOWNSPOUTS CAN OUTLET DIRECTLY TO PAVEMENT IN DRIVE THRU LANE. P = AT PEDESTRIAN LOCATIONS, APPROVED CONNECTION OPTIONS ARE: DRAIN TO LANDSCAPE OR AREA DRAIN.
- FB ## — FILL BOX TYPE: BO = BULK OIL (EQPM SCHEDULE ITEM 700.18) CO2 = BULK CO2 (EQPM SCHEDULE ITEM 49.00)
- FL — FIBER CEMENT LAP SIDING: SMOOTH HARDI-BOARD PLANK BY JAMES HARDIE, 8-1/4" WIDTH, 7" EXPOSURE, HZ5 PAINT: "GAUNTLET GREY" SW7019 BY SHERWIN WILLIAMS
- FT — FIBER CEMENT TRIM: HARDIE TRIM BOARDS 4/4 SMOOTH, 3 1/2" WIDTH, 3/4" THICK, HZ5 PAINT: "GAUNTLET GREY" SW7019 BY SHERWIN WILLIAMS
- GM — GAS METER – SEE MECHANICAL
- GR — GUARD RAIL – STAINLESS STEEL SEE SITE PLAN AND DETAIL 3/A2.0
- KB — KNOX BOX – SEE GENERAL NOTE 10 SHEET A1.0
- L1 ## — RECESSED LIGHT FIXTURE – SEE ELECTRICAL COLOR: C1 = WHITE C2 = GOLD
- L2 — RADIAL SCONCE LIGHT FIXTURE – SEE ELECTRICAL COLOR: PLATINUM SILVER
- LE ## — ACCENT LIGHTING – SEE ELECTRICAL LED LIGHT: L1 = SLIM LED (DOWN ONLY) L2 = UP ONLY FLOOD FIXTURE
- MF ## — METAL FASCIA: PRE-FAB ANCHOR-TITE FASCIA COLOR: C1 = WEATHERED ZINC C2 = RAL 7022
- PB — PIPE BOLLARD – SEE SITE PLAN AND DETAIL 3/A2.1 USA 310-SD BASTION, COLOR: RAL 7022
- RO — ROOF DRAIN OVERFLOW PIPE – PAINT TO MATCH SURROUNDING MATERIAL
- S ## — McDONALD'S SIGNAGE BY OTHERS – UNDER SEPARATE COLOR: C1 = WEATHERED ZINC RACEWAY C2 = RAL 7022 RACEWAY
- ST — CO2 STROBE/ALARM. SEE MECHANICAL DRAWINGS FOR SPECIFICATION.
- TE — TRU EXTERIOR 1"X6" TRIM, PAINTED ON SITE COLOR: "IRON ORE" SW 7069 BY SHERWIN WILLIAMS
- UN — METAL UNDERSCORE COLOR: GOLD
- W# XX — EXTERIOR WINDOW ASSEMBLY – TEMPERED GLASS COLOR: DARK BRONZE – SEE SHEET A5.0 FOR ASSEMBLY NOTE & A6.0 FOR WINDOW TYPES. DRIVE-THRU WINDOWS BY READY ACCESS MODEL: 600 SERIES, 36" SERVICE HEIGHT WITH TRANSOM, MANUAL OPEN; ELECTRONIC RELEASE COLOR: DEEP BRONZE SLIDE DIRECTION: RL = RIGHT TO LEFT LR = LEFT TO RIGHT

CC TO PROVIDE SIGNAGE PACKAGE AND INSTALL SIGNS AT LOCATIONS AND POSITIONS INDICATED IN SIGNAGE PACKAGE OR AS REQUIRED BY LOCAL CODES. SIGNAGE PACKAGE SUPPLIED BY: FRANKE SUPPLY 1-800-423-5247, FAX: 1-877-538-6882, WWW.FRANKESUPPLY.COM, EMAIL: fs-frankesupply.us@franke.com

NOTE:
1. TRASH CORRAL INCLUDING DOORS, BOLLARDS ETC. TO MATCH MAIN BUILDING FINISHES AND COLORS.

RAL 7022 COLOR CHART (FOR REFERENCE)
(SEE ELEVATION KEY NOTES AP, C2, C3, MF-1-C2)
HEX CODE: #4C4A44
RGB CODE: RED 76 (30%), GREEN 74 (29%), BLUE 68 (27%)
CMYK CODE: CYAN 40%, MAGENTA 30%, YELLOW 40%, BLACK 80%

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STATE OF MISSOURI — CARL LINGLE — NUMBER A-2003018555 — ARCHITECT

LICENSE EXPIRATION: 12-31-27

DATE ISSUED: 07-15-26

STATE ID: 241342

PROJECT #: 26-125

NATIONAL #: 46237

DRAWN BY: RP

CHECKED BY: JK

DATE:
07/15/26 - PERMIT / BID SET

REVISIONS
1 09/08/25 - DECOR UPDATE / PLUMBING & CIVIL COORDINATION
2
3
4
5
6

CLIENT

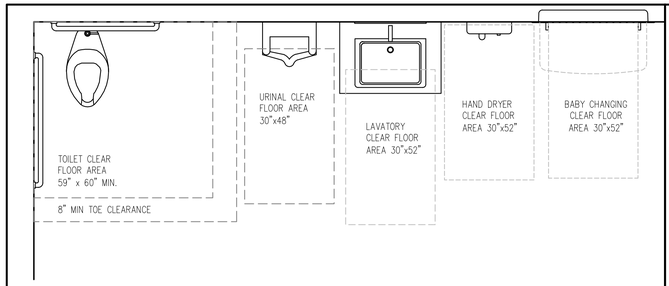
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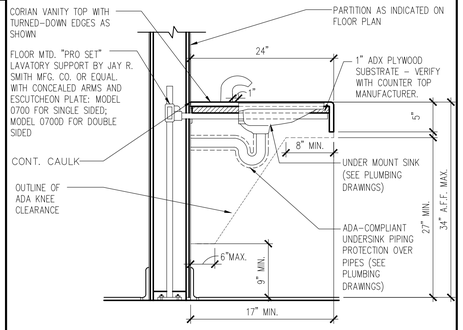
SHEET TITLE
EXTERIOR ELEVATIONS

SHEET NUMBER:
A2.1



5 REQUIRED ADA RESTROOM CLEAR FLOOR SPACES

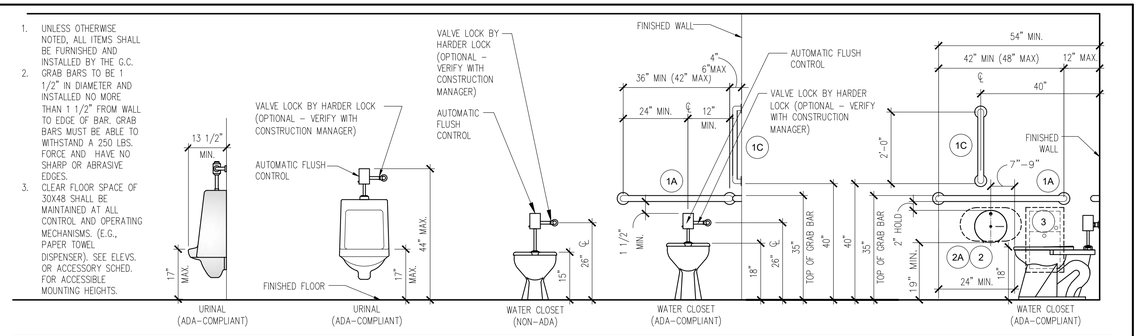
1/2" =1'-0"

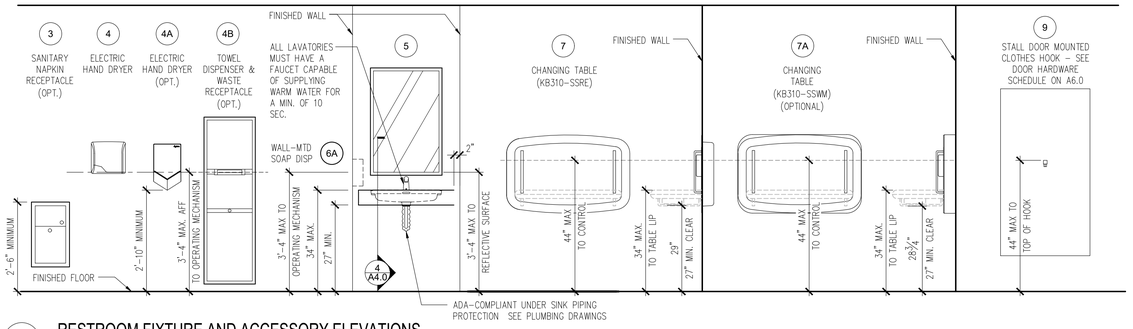


4 LAVATORY SECTION

1" =1'-0"

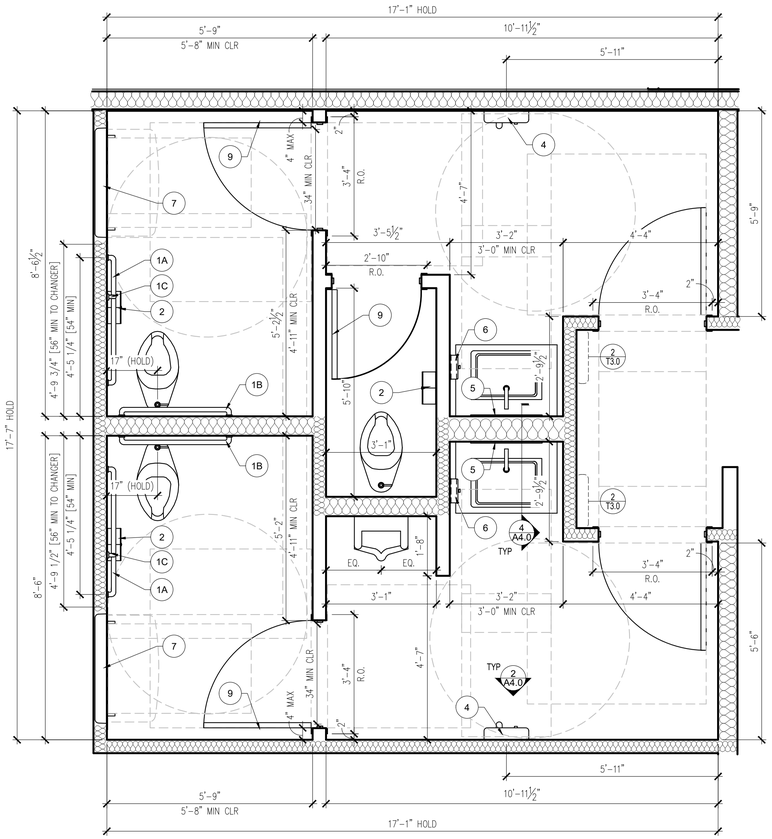
1. UNLESS OTHERWISE NOTED, ALL ITEMS SHALL BE FURNISHED AND INSTALLED BY THE G.C.
2. GRAB BARS TO BE 1 1/2" IN DIAMETER AND INSTALLED NO MORE THAN 1 1/2" FROM WALL TO EDGE OF BAR. GRAB BARS MUST BE ABLE TO WITHSTAND A 250 LBS. FORCE AND HAVE NO SHARP OR ABRASIVE EDGES.
3. CLEAR FLOOR SPACE OF 30X48 SHALL BE MAINTAINED AT ALL CONTROL AND OPERATING MECHANISMS. (E.G., PAPER TOWEL DISPENSER). SEE ELEVS. OR ACCESSORY SCHED. FOR ACCESSIBLE MOUNTING HEIGHTS.





3 RESTROOM FIXTURE AND ACCESSORY ELEVATIONS

1/2" =1'-0"

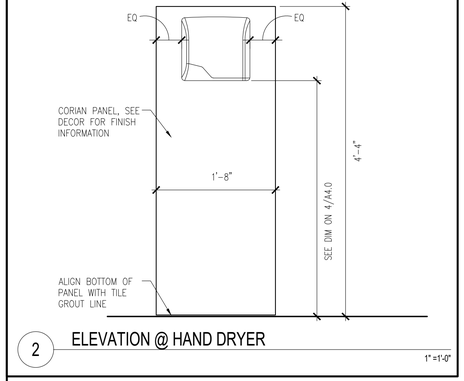


1 ENLARGED RESTROOM PLAN

1/2" =1'-0"

NOTES
1. ALL DIMENSIONS SHOWN ARE TAKEN FROM CEMENT BOARD
2. SEE SHEET A1.0 FOR PARTITION TYPES
3. SEE SHEET A6.0 FOR DOOR SCHEDULES.
4. SEE SHEET DECOR DRAWINGS FOR FINISHES.
5. DASHED LINES @ DOORS, RESTROOMS, & FIXTURES REPRESENT CLEAR FLOOR MANEUVERING CLEARANCES AS REQUIRED BY THE ACCESSIBILITY CODE. CLEARANCES MUST BE MAINTAINED WITHOUT EXCEPTION. IF CONDITIONS PREVENT ANY CLEAR FLOOR SPACE FROM BEING MAINTAINED, CONTACT THE ARCHITECT FOR RESOLUTION.
6. SEE DOOR CLEARANCE DETAILS ON SHEET G2.0 FOR REQUIRED DOOR CLEARANCE.
7. SEE 5/A4.0 FOR FIXTURE CLEARANCES.
8. SEE 3/A4.0 FOR FIXTURE MOUNTING HEIGHTS

(#) = RESTROOM ACCESSORY - SEE SCHEDULE



2 ELEVATION @ HAND DRYER

1" =1'-0"

RESTROOM ACCESSORY SCHEDULE

	ITEM (SEE NOTE 2)	MFR MODEL #	SUPPLIER	BACKUP SUPPORT (SEE NOTE 3)
1A	GRAB BAR 42" OR 48"	BOBRICK B-6806X42 OR B-6806X48	HUGHES SUPPLY (866) 310-3576 MCDCOORD@HAJOCA.COM	(1) 2x6 4'-0" LONG CENTER MOUNTED
1B	GRAB BAR 36" OR 42"	BOBRICK B-6806X36 OR B-6806X42		
1C	GRAB BAR 24"	BOBRICK B-6806X24		
2	TOILET TISSUE DISPENSER, JUMBO SINGLE ROLL SURFACE MOUNTED	BRADLEY 5424	HUGHES SUPPLY (866) 310-3576 MCDCOORD@HAJOCA.COM	
2A	TOILET TISSUE DISPENSER, JUMBO DOUBLE ROLL SURFACE MOUNTED	BRADLEY 5425	HUGHES SUPPLY (866) 310-3576 MCDCOORD@HAJOCA.COM	
3	SANITARY NAPKIN RECEPTACLE, RECESSED (OPTIONAL)	BOBRICK B-353	HUGHES SUPPLY (866) 310-3576 MCDCOORD@HAJOCA.COM	FRAME WALL OPENING PER MANUFACTURER'S RECOMMENDATIONS
4	HAND DRYER, ENERGY EFFICIENT MODEL, ADA, ALUMINUM BRUSHED	WORLD DRYER Q-973A2 VERDEDRI	HUGHES SUPPLY (866) 310-3576 MCDCOORD@HAJOCA.COM	FRAME WALL OPENING PER MANUFACTURER'S RECOMMENDATIONS
4A	HAND DRYER, ENERGY EFFICIENT MODEL, ADA, SPRAYED NICKEL	DYSON AIRBLADE V	HUGHES SUPPLY (866) 310-3576 MCDCOORD@HAJOCA.COM	
4B	TOWEL DISPENSER & WASTE RECEPTACLE, COMBINATION, RECESSED	BOBRICK B-3974	HUGHES SUPPLY (866) 310-3576 MCDCOORD@HAJOCA.COM	FRAME WALL OPENING PER MANUFACTURER'S RECOMMENDATIONS
5	MIRROR, CHANNEL FRAME	BOBRICK B-165 2436	HUGHES SUPPLY (866) 310-3576 MCDCOORD@HAJOCA.COM	
6	SOAP DISPENSER, WALL-MOUNTED	BOBRICK B-2112	HUGHES SUPPLY (866) 310-3576 MCDCOORD@HAJOCA.COM	
6A	SOAP DISPENSER, COUNTER MOUNTED, 6" SPOUT	BOBRICK B-82216	HUGHES SUPPLY (866) 310-3576 MCDCOORD@HAJOCA.COM	
7	BABY CHANGING TABLE, HORIZONTAL, RECESSED, ADA COMPLIANT, STAINLESS STEEL	KOALA KARE KB310-SSRE	HUGHES SUPPLY (866) 310-3576 MCDCOORD@HAJOCA.COM	INSTALL PER MANUFACTURER'S RECOMMENDATIONS
7A	BABY CHANGING TABLE, HORIZONTAL, SURFACE MOUNT, ADA COMPLIANT, STAINLESS STEEL	KOALA KARE KB310-SSWM	HUGHES SUPPLY (866) 310-3576 MCDCOORD@HAJOCA.COM	INSTALL PER MANUFACTURER'S RECOMMENDATIONS
8	DIAPER CONTAINER (OPTIONAL)	-	BY OWNER	
9	CLOTHES HOOK	BRADLEY 917	HUGHES SUPPLY (866) 310-3576 MCDCOORD@HAJOCA.COM	

NOTES
1) SEE 3/A4.0 FOR ACCESSORY MOUNTING HEIGHTS
2) SELECT ONE ITEM FROM ITEM GROUPS 4, 6, & 7 VERIFY WITH AREA CONSTRUCTION MANAGER.
3) CUT BACK-UP SUPPORTS BETWEEN STUDS SO FACE OF SUPPORT IS FLUSH W/WALL STUD

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NUMBER A-2003018555
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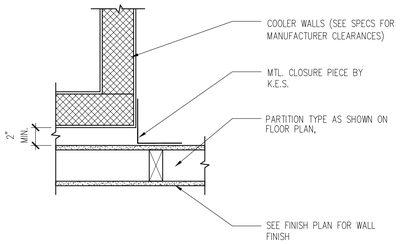
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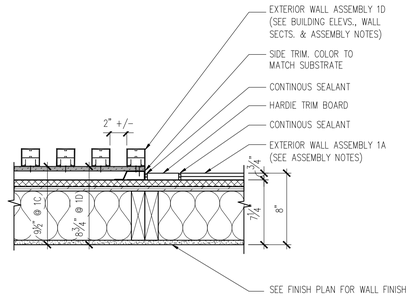
SHEET TITLE
ENLARGED RESTROOM PLAN & DETAILS

SHEET NUMBER:
A4.0



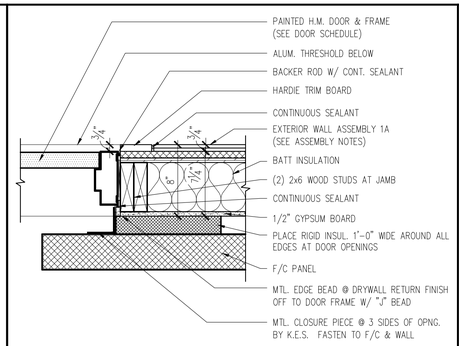
1 CLOSURE DETAIL @ COOLER

1 1/2" = 1'-0"



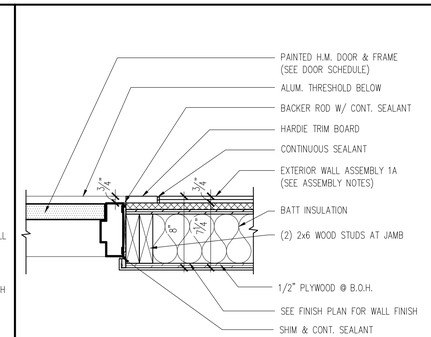
2 BATTEN TO HARDIE PLANK TRANSITION

1 1/2" = 1'-0"



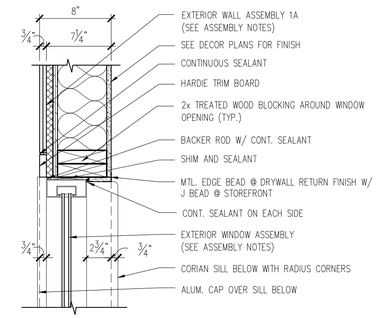
3 DOOR JAMB @ F/C DOOR

1 1/2" = 1'-0"



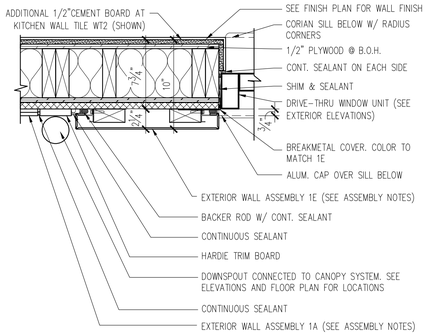
4 EXTERIOR DOOR JAMB DETAIL

1 1/2" = 1'-0"



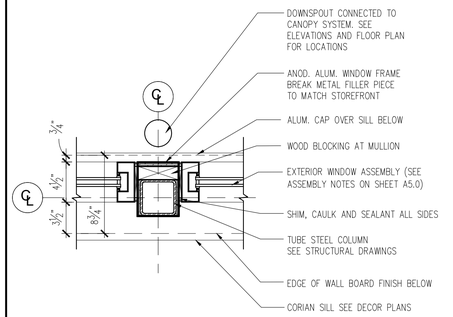
5 CREW ROOM WINDOW JAMB DETAIL

1 1/2" = 1'-0"



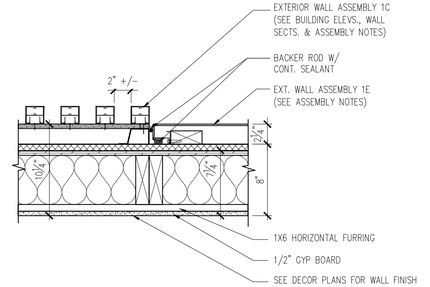
6 DRIVE-THRU WINDOW JAMB DETAIL

1 1/2" = 1'-0"



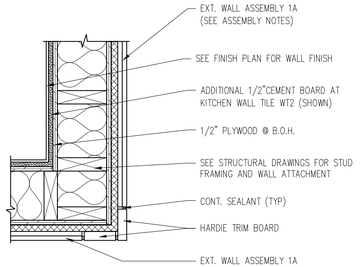
8 DETAIL @ COLUMN

1 1/2" = 1'-0"



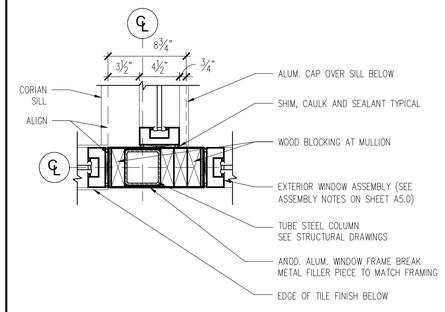
10 BATTEN TO CITADEL PANEL TRANSITION

1 1/2" = 1'-0"



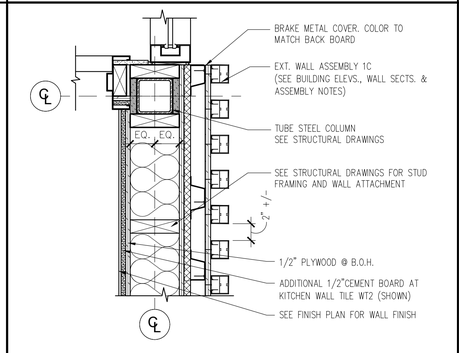
11 CORNER DETAIL @ DT SURROUND

1 1/2" = 1'-0"



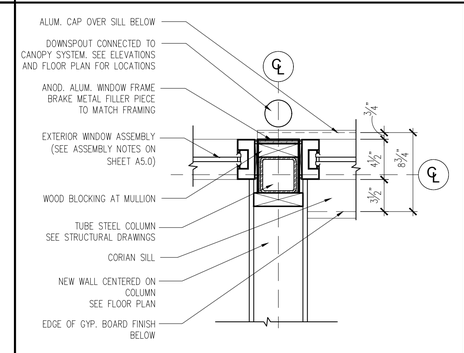
12 DETAIL @ COLUMN

1 1/2" = 1'-0"



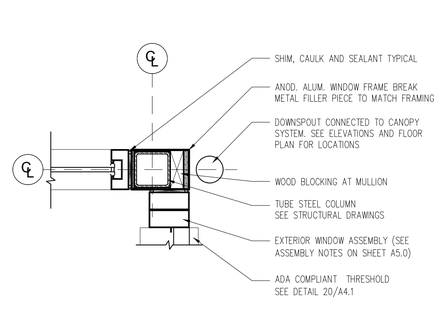
13 DETAIL @ COLUMN

1 1/2" = 1'-0"



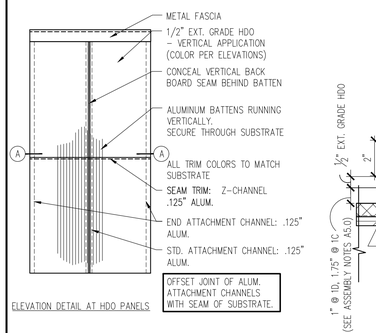
14 DETAIL AT COLUMN

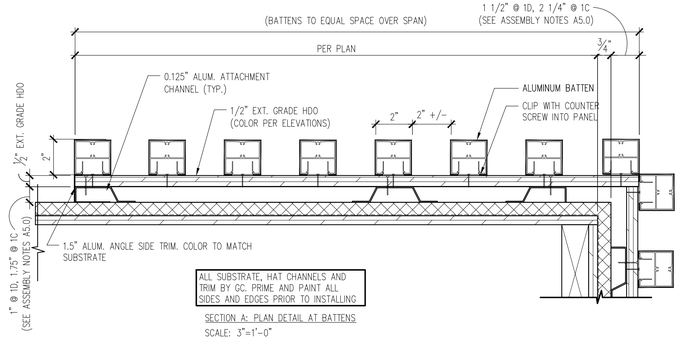
1 1/2" = 1'-0"

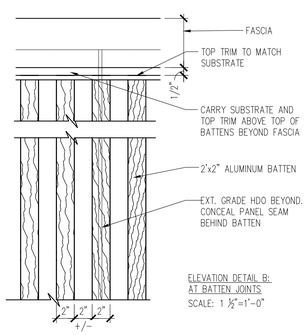


15 DETAIL @ COLUMN

1 1/2" = 1'-0"

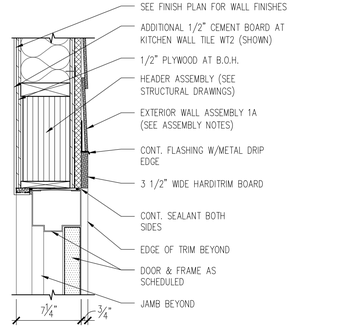






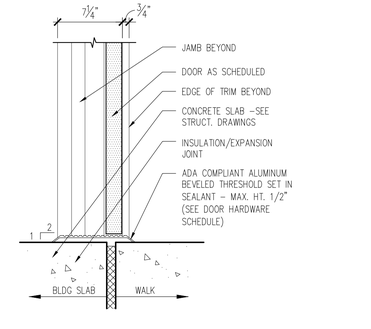
16 ALUMINUM BATTEN DETAIL

1/4" = 1'-0"



19 SECTION @ DOOR HEAD

1 1/2" = 1'-0"



20 SECTION @ DOOR SILL

1 1/2" = 1'-0"

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STATE OF MISSOURI
CARL LINGLE
NUMBER A-2003018555
ARCHITECT

LICENSE EXPIRATION: 12-31-27

DATE ISSUED: 07-15-26

STATE ID: 241342

PROJECT #: 26-125

NATIONAL #: 46237

DRAWN BY: RP

CHECKED BY: JK

DATE:
07/15/26 - PERMIT / BID SET

REVISIONS
1 09/08/25 - DECOR UPDATE / PLUMBING & CIVIL COORDINATION
2
3
4
5
6
7

CLIENT

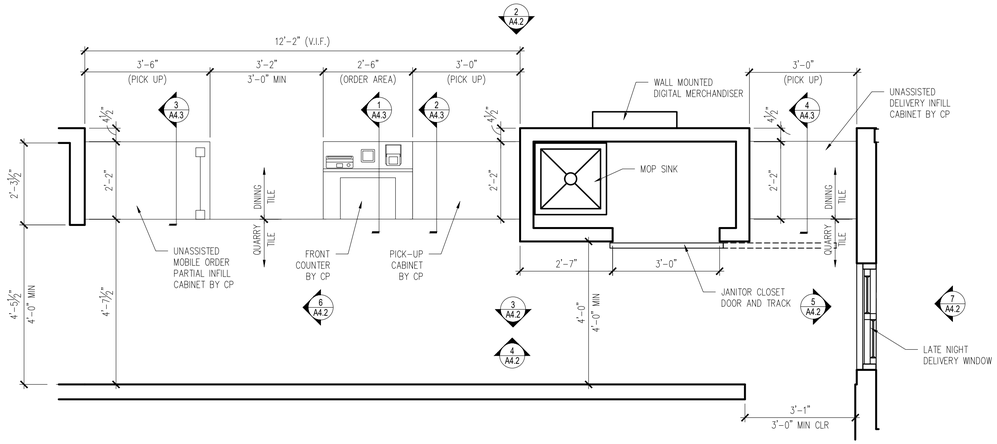
McDonald's USA, LLC

PROTOTYPE
BB20 4590 WW-HB
ISSUE DATE 06/26

ADDRESS
600 SCHUG AVENUE
PECULIAR, MO, 64078

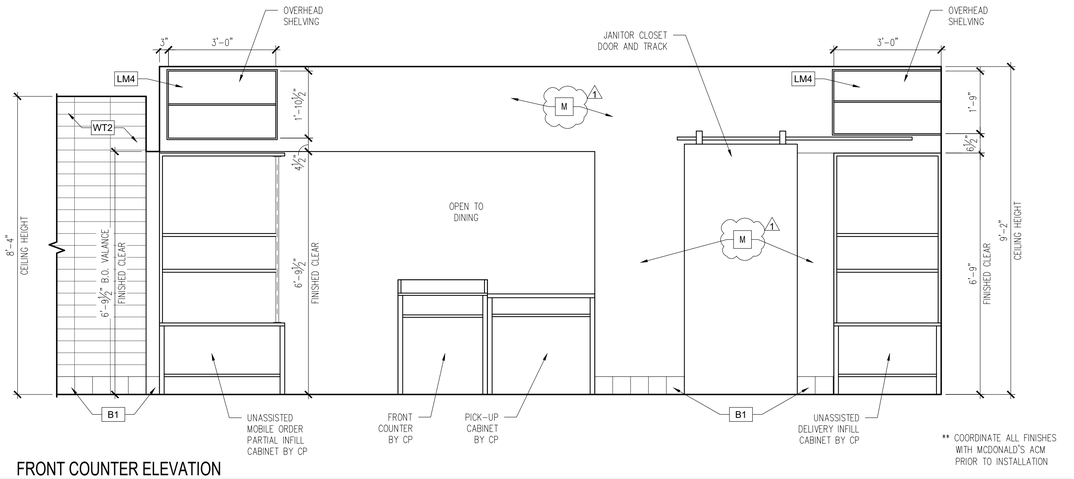
SHEET TITLE
DETAILS

SHEET NUMBER:
A4.1



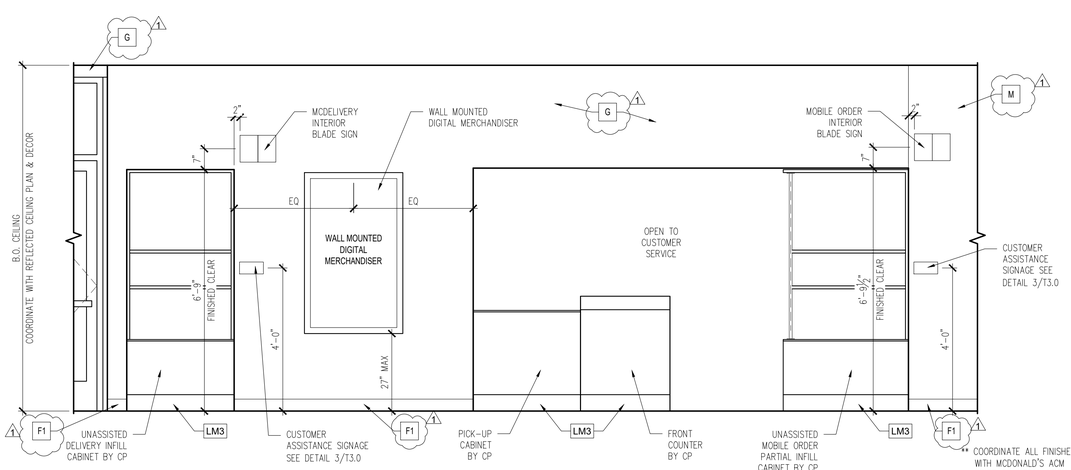
1 ENLARGED FRONT COUNTER PLAN

1/2" =1'-0"



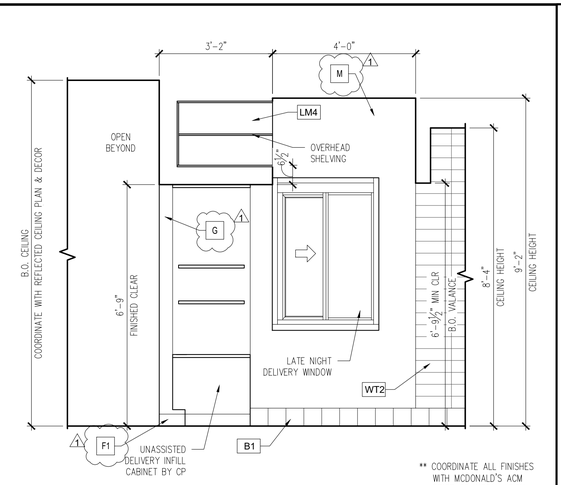
4 FRONT COUNTER ELEVATION

1/2" =1'-0"



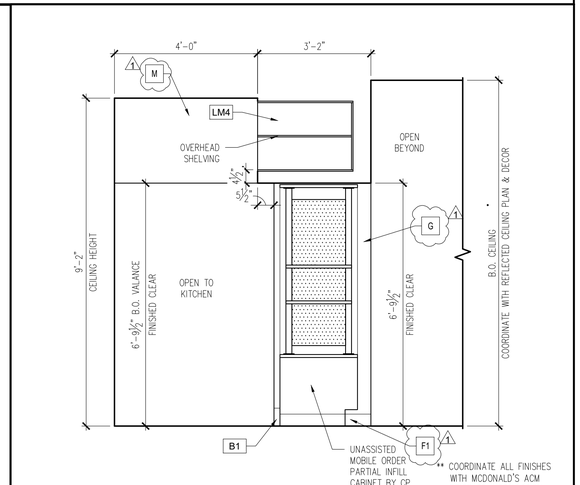
2 FRONT COUNTER ELEVATION

1/2" =1'-0"



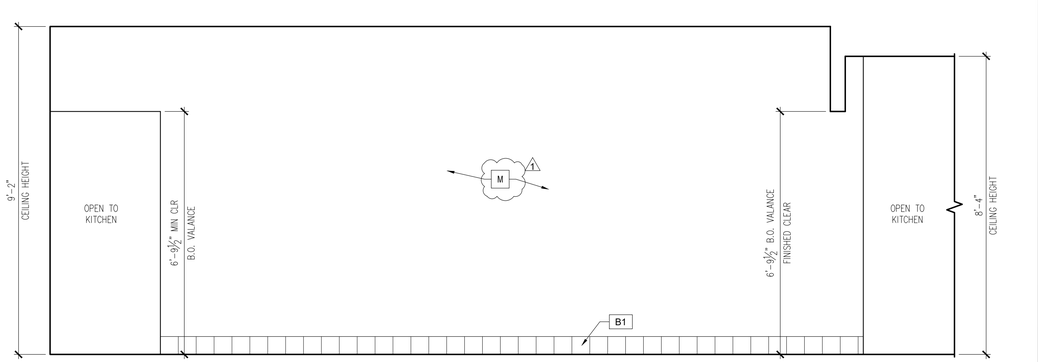
5 ELEVATION @ FRONT COUNTER

1/2" =1'-0"



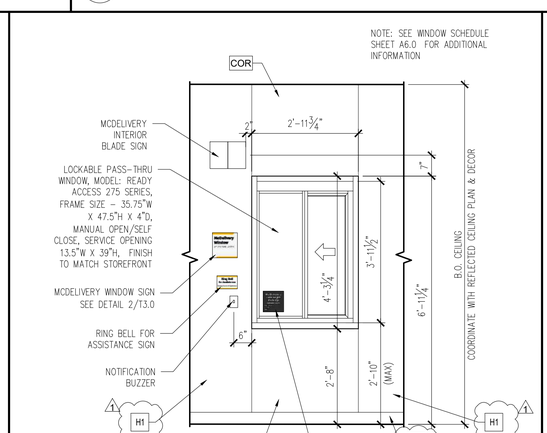
6 ELEVATION @ FRONT COUNTER

1/2" =1'-0"



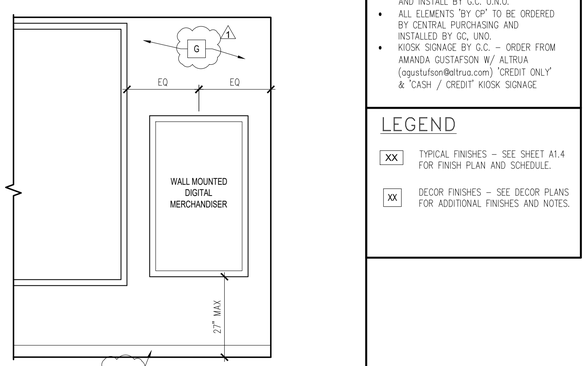
3 ESE WALL ELEVATION

1/2" =1'-0"



7 ELEVATION @ LATE NIGHT DELIVERY WINDOW

1/2" =1'-0"



8 ELEVATION @ NON-DT VESTIBULE

1/2" =1'-0"

GENERAL NOTES

- ALL WALL LAMINATE PANELING MANUFACTURED BY DECOR, PURCHASE AND INSTALL BY G.C. U.N.O.
- ALL ELEMENTS 'BY CP' TO BE ORDERED BY CENTRAL PURCHASING AND INSTALLED BY GC, UNO.
- KIOSK SIGNAGE BY G.C. – ORDER FROM AMANDA GUSTAFSON W/ ALTRUA (agustufson@altrua.com) 'CREDIT ONLY' & 'CASH / CREDIT' KIOSK SIGNAGE

LEGEND

XX TYPICAL FINISHES – SEE SHEET A1.4 FOR FINISH PLAN AND SCHEDULE.

XX DECOR FINISHES – SEE DECOR PLANS FOR ADDITIONAL FINISHES AND NOTES.

LINGLE DESIGN GROUP INC
158 WEST MAIN STREET
LENA, IL 61048
815.369.9155
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CLIENT
McDonald's USA, LLC

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ISSUE DATE 06/26

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PECULIAR, MO, 64078

SHEET TITLE
ENLARGED FRONT COUINTER PLAN

SHEET NUMBER:
A4.2

GENERAL NOTES

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- KIOSK SIGNAGE BY G.C. - ORDER FROM AMANDA GUSTAFSON W/ ALTRUA (agustafson@altrua.com) 'CREDIT ONLY' & 'CASH / CREDIT' KIOSK SIGNAGE

LEGEND

XX TYPICAL FINISHES - SEE SHEET A1.4 FOR FINISH PLAN AND SCHEDULE.

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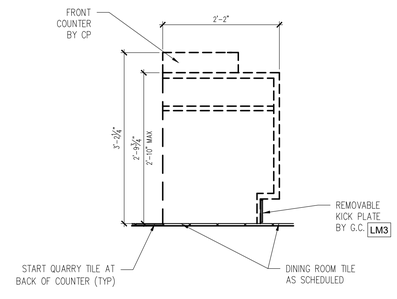
McDonald's USA, LLC

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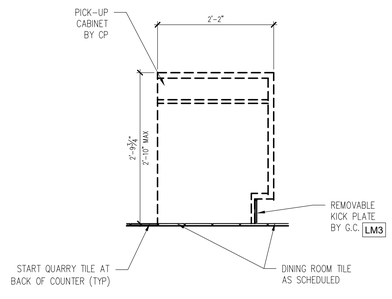
ADDRESS
600 SCHUG AVENUE
PECULIAR, MO, 64078

SHEET TITLE
ENLARGED FRONT COUINTER DETAILS

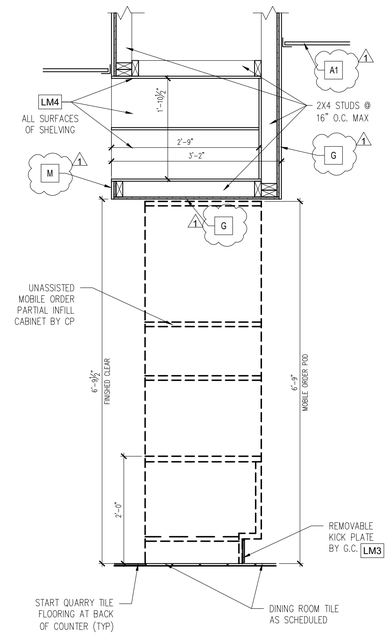
SHEET NUMBER:
A4.3



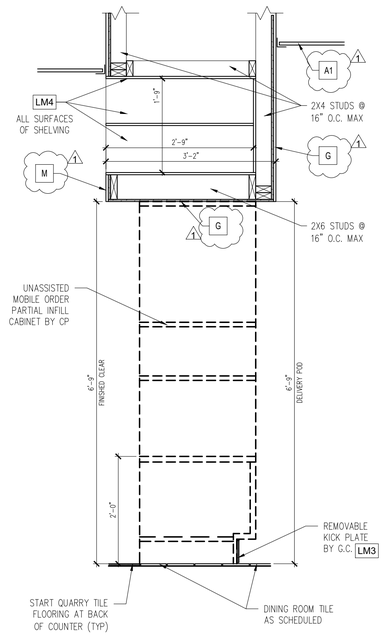
1 FRONT COUNTER POD SECTION
3/4" =1'-0"



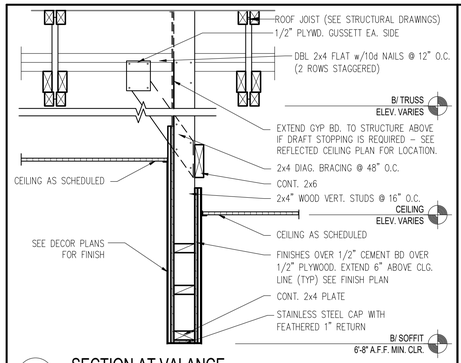
2 PICK-UP POD SECTION
3/4" =1'-0"



3 UNASSISTED MOBILE ORDER POD SECTION
3/4" =1'-0"

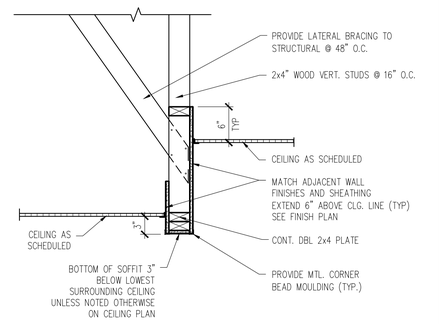


4 UNASSISTED DELIVERY POD SECTION
3/4" =1'-0"



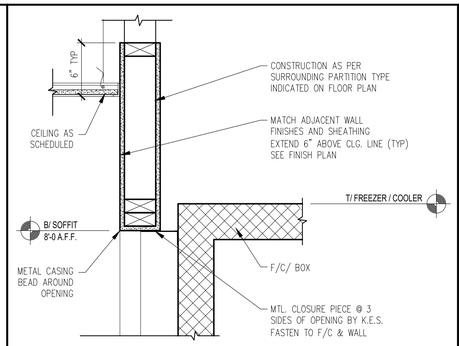
1 SECTION AT VALANCE

1" = 1'-0"



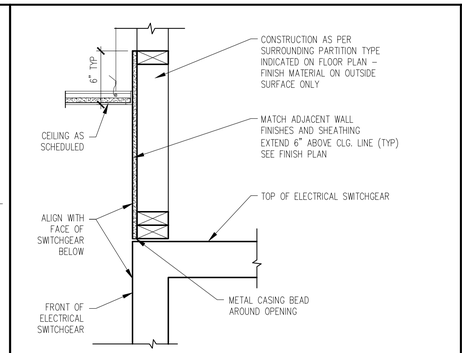
2 CEILING TRANSITION W/ SOFFIT

1" = 1'-0"



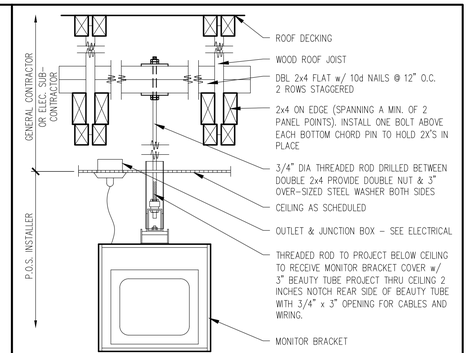
3 CEILING DETAIL AT COOLER

1 1/2" = 1'-0"



4 CEILING DETAIL AT SWITCHGEAR

1 1/2" = 1'-0"

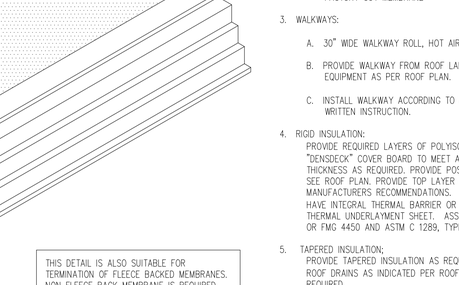


5 MONITOR INSTALLATION DETAIL

1 1/2" = 1'-0"

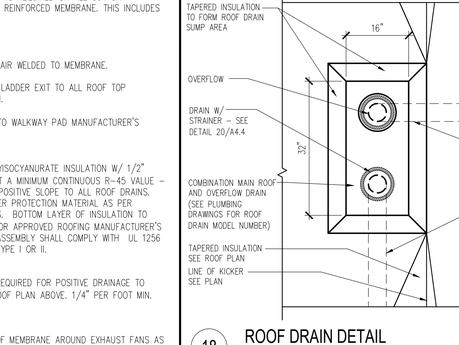
6 COVE LIGHTING DETAIL (COORDINATE WITH DECOR)

3" = 1'-0"



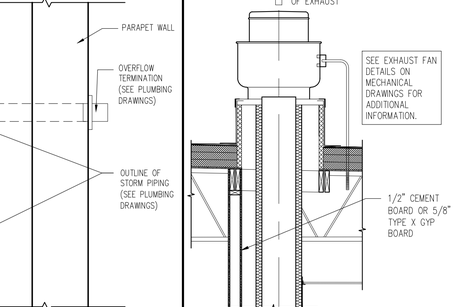
7 RESTROOM CEILING DETAIL

1 1/2" = 1'-0"



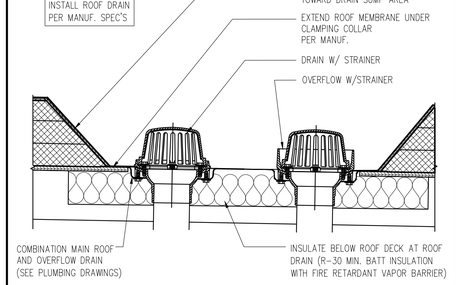
8 ACOUSTIC CEILING TRANSITION (COORDINATE WITH DECOR)

1 1/2" = 1'-0"



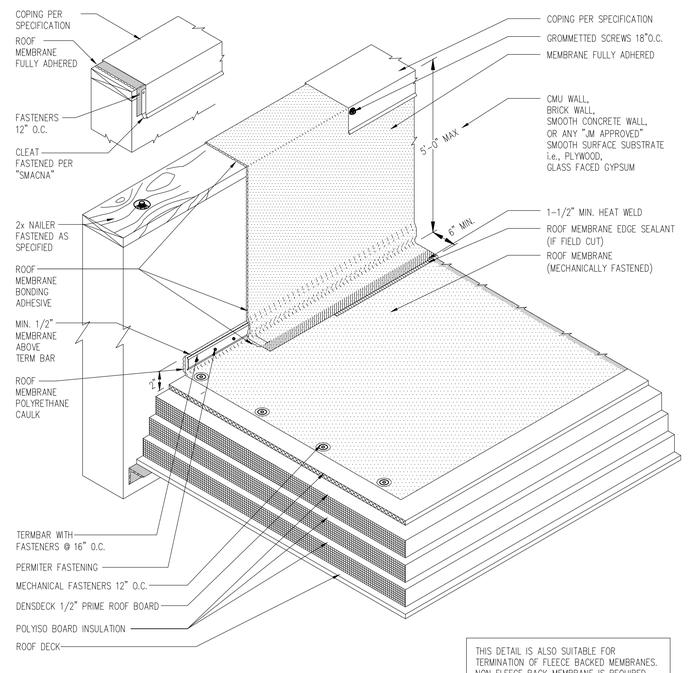
9 FRAMED CEILING DETAIL (COORDINATE WITH DECOR)

1/2" = 1'-0"



10 UNISTRUT CEILING DETAIL (COORDINATE WITH DECOR)

1/2" = 1'-0"



16 ROOFING SYSTEM DETAIL

N.T.S.

ROOFING SYSTEM

1. 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

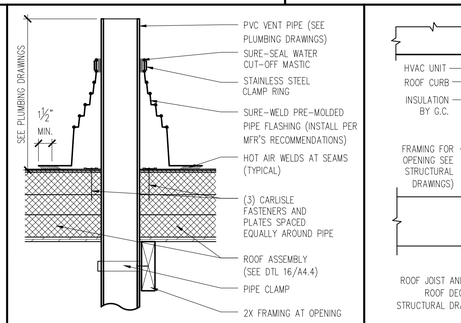
2. SPECIFIED ROOFING SYSTEMS (AS SHOWN): HEAT–WELDABLE SINGLE–PLY 50 MIL PVC ROOFING SYSTEM, INSTALLED OVER RIGID INSULATION ON WOOD ROOF DECK HAVING A SLOPE OF 3/8"/FT. MATERIALS SHALL BE AS FOLLOWS:
   A. SINGLE–PLY ROOFING SYSTEM AS MANUFACTURED BY MANUFACTURER LISTED ABOVE TO COMPLY WITH ASTM E 108 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 CONSTRUCTED 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 GUARANTEE.
   F. ROOF MEMBRANE EDGE SEALANT IS REQUIRED ON ALL CUT OR NON–ENCAPSULATED EDGES OF REINFORCED MEMBRANE. THIS INCLUDES FACTORY CUT MEMBRANE

3. 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.
   C. INSTALL WALKWAY ACCORDING TO WALKWAY PAD MANUFACTURER'S WRITTEN INSTRUCTION.

4. RIGID INSULATION:
   PROVIDE REQUIRED LAYERS OF POLYISOCYANURATE INSULATION W/ 1/2" "DENSDECK" COVER BOARD TO MEET A MINIMUM CONTINUOUS R–45 VALUE – THICKNESS AS REQUIRED. PROVIDE POSITIVE SLOPE TO ALL ROOF DRAINS. SEE ROOF PLAN. PROVIDE TOP LAYER PROTECTION MATERIAL AS PER MANUFACTURERS 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.

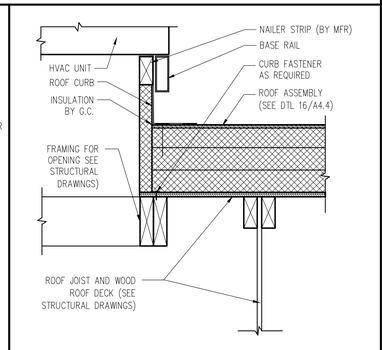
5. TAPERED INSULATION;
   PROVIDE TAPERED INSULATION AS REQUIRED FOR POSITIVE DRAINAGE TO ROOF DRAINS AS INDICATED PER ROOF PLAN ABOVE. 1/4" PER FOOT MIN. REQUIRED.

6. EXHAUST FANS:
   PROVIDE ADDITIONAL LAYER OF ROOF MEMBRANE AROUND EXHAUST FANS AS INDICATED PER ROOF PLAN.



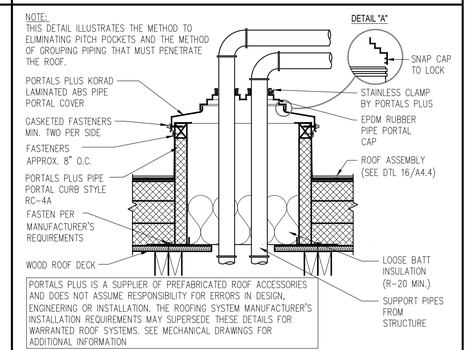
13 VENT PENETRATION DETAIL

1 1/2" = 1'-0"



14 HVAC UNIT ROOF CURB DETAIL

1 1/2" = 1'-0"



15 PIPE PORTAL DETAIL

1 1/2" = 1'-0"

18 ROOF DRAIN DETAIL

3/4" = 1'-0"

19 EXHAUST FAN DETAIL

1/2" = 1'-0"

20 ROOF DRAIN SECTION

3/4" = 1'-0"

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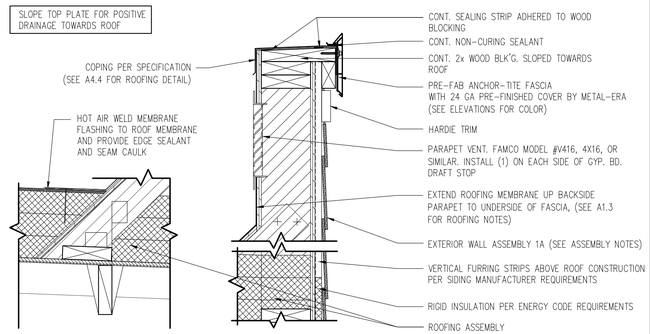
600 SCHUG AVENUE
PECULIAR, MO, 64078

SHEET TITLE

CEILING & ROOF DETAILS

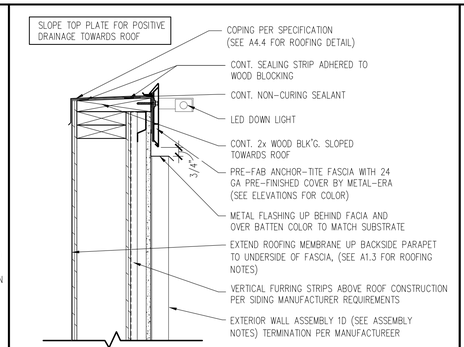
SHEET NUMBER:

A4.4



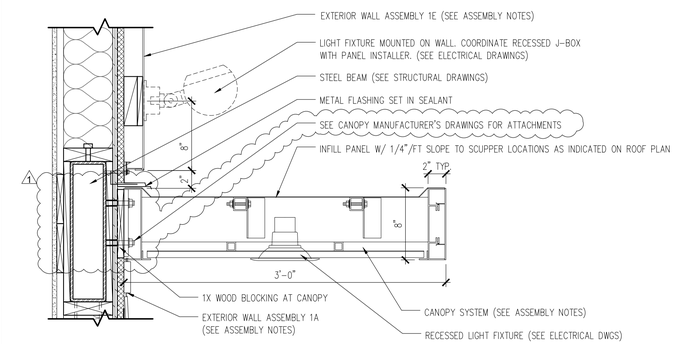
1 DETAIL- FASCIA @ METAL REVEAL PANEL PARAPET

1 1/2" = 1'-0"



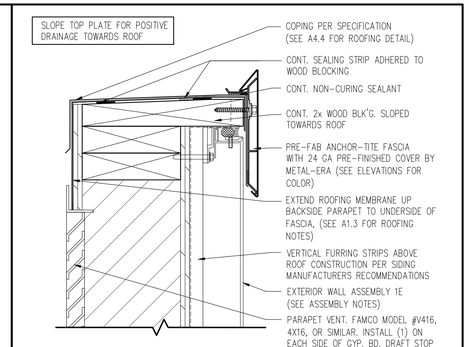
2 DETAIL- FASCIA @ BATTEN PARAPET

1 1/2" = 1'-0"



3 DETAIL- CANOPY ABOVE WINDOW

1 1/2" = 1'-0"



4 DETAIL- FASCIA @ CITADEL PANEL PARAPET

3" = 1'-0"

EXTERIOR WINDOW ASSEMBLY

(STOREFRONT & ENTRANCE SYSTEM)

GLAZING REQ'S: U VALUE = 0.34 U VALUE "DOOR"= 0.63 SHGC = 0.38

1. DARK BRONZE ANODIZED ALUMINUM FRAME, THERMALLY BROKEN WITH HEAD RECEIVER CHANNEL.
2. 1" TEMPERED INSULATED GLAZING
3. PROVIDE FLASHING AT HEAD & SILL – CONTINUOUS SEALANT.
4. PROVIDE METAL CAP AT EXTERIOR AS SHOWN IN DETAILS
5. 1/2" CORIAN SILL AT INTERIOR

CANOPY SYSTEM

CANOPY INFORMATION SHOWN IN CONSTRUCTION DOCUMENTS IS FOR DESIGN INTENT ONLY. APPROVED MANUFACTURERS SHALL PROVIDE A COMPLETE AND CODE COMPLIANT FINAL DESIGN. REFER TO ELEVATIONS FOR COLOR OF ELEMENTS

1. CANOPY STRUCTURE/OUTRIGGERS: CONT. 2" x 8" PAINTED ALUM. TUBE. PROVIDE CLOSURE PIECE WHERE TUBE ENDS ARE EXPOSED.
2. WHERE INDICATED ON ROOF PLAN, PROVIDE PAINTED ALUM. PANEL INFILL WITH INTEGRAL GUTTER AND SCUPPER TO MATCH OUTRIGGERS. PANEL TO PROVIDE POSITIVE SLOPE FOR DRAINAGE.
3. SYSTEM SHALL ALLOW FOR MOVEMENT AT EXPANSION JOINTS AND FOR MOVEMENT OF EXTERIOR WALL SYSTEM ON WHICH THE CANOPY IS MOUNTED.
4. STRUCTURAL ATTACHMENTS & LOAD CALCULATIONS SHALL BE FURNISHED BY CANOPY SYSTEM DESIGNER OF RECORD. SUPPLIER'S DESIGNER OF RECORD SHALL DESIGN PER PREVAILING CODES.
5. CANOPY SYSTEM SHALL BE SELECTED FROM ONE OF THE SUPPLIERS LISTED BELOW.
6. MANUFACTURER SHALL PROVIDE INSTALLER WITH INSTALLATION INSTRUCTIONS. MANUFACTURER SHALL DESIGN CANOPY IN ACCORDANCE WITH THE WALL SYSTEM AND BLOCKING AS INDICATED IN THE CONSTRUCTION DOCUMENTS.
7. INSTALLER SHALL NOTIFY CANOPY DESIGNER OF RECORD, McDONALD'S ACM, G.C. AND ARCHITECT OF ANY DEFICIENCIES THAT WOULD NOT ALLOW FOR THE PROPER INSTALLATION OF THE CANOPY. CANOPY SHALL NOT BE INSTALLED UNTIL DEFICIENCIES HAVE BEEN CORRECTED IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS AND THE CANOPY MANUFACTURER'S INSTALLATION INSTRUCTIONS.

CANOPY SYSTEM BY:

AWNEX (770) 704-7140	ALL-LITE (817) 509-2300	GREENHECK (715) 355-3942
www.awnexinc.com	www.allite.com	www.greenheck.com

FOUNDATION AND PERIMETER INSULATION

1. SEE STRUCTURAL DRAWINGS FOR FOUNDATION AND SLAB DETAILS
2. PROVIDE RIGID UNDER SLAB INSULATION AS FOLLOWS:
   - R-VALUE: R-15
   - VERTICALLY FROM TOP OF FOOTING TO TOP OF SLAB.
   - HORIZONTALLY FROM FOUNDATION WALL 2'-0" MIN.

EXTERIOR WALL ASSEMBLIES

FROM EXTERIOR TO INTERIOR

1A. FIBER CEMENT HORIZONTAL LAP SIDING

1. JAMES HARDIE, HARDIEPLANK LAP SIDING, SMOOTH, 8 1/4" WIDTH, 7" EXPOSURE, HZ5, COLOR: SEE ELEVATIONS.
   a. COORDINATE FIBER CEMENT PANELS WITH FLASHING, TRIM, PARAPET WALLS AND OTHER ADJOINING WORK TO PROVIDE A LEAKPROOF, SECURE AND NONCORROSIVE INSTALLATION. INSTALL A 2" STARTER STRIP TO ENSURE A CONSISTENT PLANK ANGLE. OVERLAP PANELS 1 1/4" MIN. PROVIDE 7" EXPOSURE. SEE EXTERIOR ELEVATIONS.
   b. USE A POLYCRYSTALLINE DIAMOND-TIPPED FIBER CEMENT BLADE FOR CIRCULAR, MITER, AND TABLE SAWS.
2. OVER WALL ASSEMBLY 2

1B. NOT USED

1C. VERTICAL BATTEN SYSTEM – (WHEN ADJACENT TO CITADEL ACM PANEL, ASSEMBLY 1E)

1. ALUMINUM BATTEN W/MOUNTING BACK RAIL. SIZE: 2" WIDE x 2" DEEP. REFER TO EXTERIOR ELEVATIONS FOR COLOR. INSTALL PER LOCAL CODES AND MANUFACTURERS SPECIFICATIONS ON TERMINATION AND INSTALLATION DETAILS. BY SUPPLIER. GC INSTALL
2. 1/2" EXTERIOR HIGH DENSITY OVERLAY (HDO) PLYWOOD, BB, GROUP 1. HDO BOTH FACES. APA TRADEMARKED. SAND WITH COURSE GRIT ALL SURFACES PRIOR TO PRIMING. PRIME AND PAINT BOTH SIDES AND ALL EDGES. BY GC, INSTALL BY GC. ALUM EDGE TRIM BY GC. COLOR TO MATCH SUBSTRATE.
3. 1.75" – 0.125 ALUMINUM CHANNEL
4. OVER WALL ASSEMBLY 2

VERTICAL BATTEN SYSTEM BY:

B+N INDUSTRIES (650) 393-2347	TUBELITE (214) 288-5801
TALENE KAPEGHIAN	CHASITY DICKSON
tkapeghian@bnind.com	mcdonalds@tubeliteinc.com

1D. VERTICAL BATTEN SYSTEM – (TYPICAL)

1. ALUMINUM BATTEN W/MOUNTING BACK RAIL. SIZE: 2" WIDE x 2" DEEP. REFER TO EXTERIOR ELEVATIONS FOR COLOR. INSTALL PER LOCAL CODES AND MANUFACTURERS SPECIFICATIONS ON TERMINATION AND INSTALLATION DETAILS. BY SUPPLIER. GC INSTALL
2. 1/2" EXTERIOR HIGH DENSITY OVERLAY (HDO) PLYWOOD, BB, GROUP 1. HDO BOTH FACES. APA TRADEMARKED. SAND WITH COURSE GRIT ALL SURFACES PRIOR TO PRIMING. PRIME AND PAINT BOTH SIDES AND ALL EDGES. BY GC, INSTALL BY GC. ALUM EDGE TRIM BY GC. COLOR TO MATCH SUBSTRATE.
3. 1" – 0.125 ALUMINUM CHANNEL
4. OVER WALL ASSEMBLY 2

VERTICAL BATTEN SYSTEM BY:

B+N INDUSTRIES (650) 393-2347	TUBELITE (214) 288-5801
TALENE KAPEGHIAN	CHASITY DICKSON
tkapeghian@bnind.com	mcdonalds@tubeliteinc.com

1E. CITADEL ACM PANEL

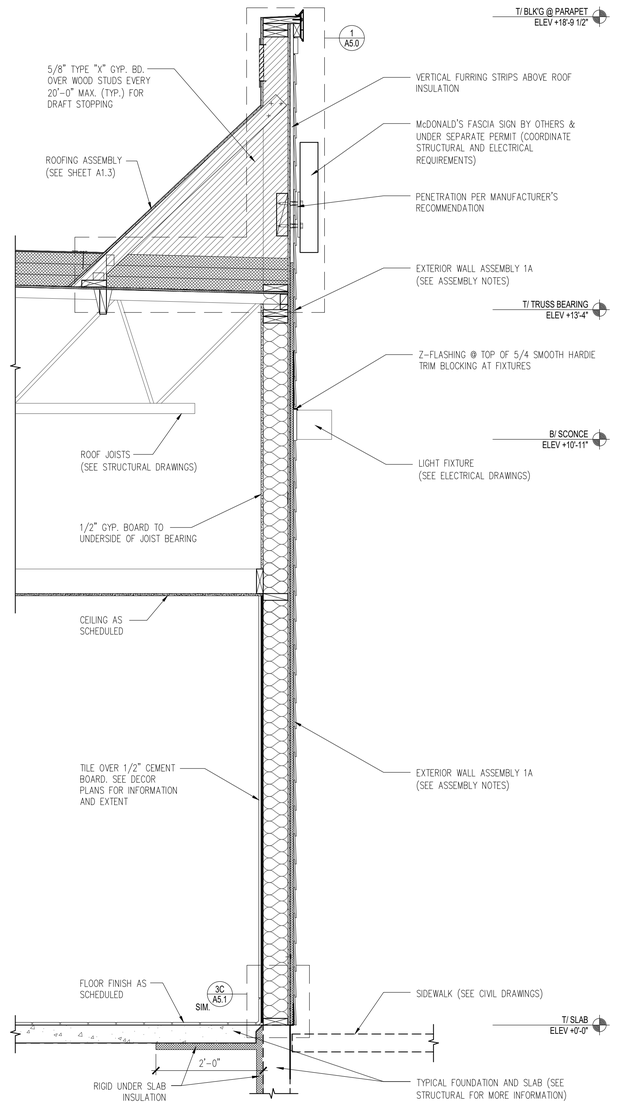
1. 4MM CITADEL E2000 METAL PANEL KIT. SEE ELEVATIONS FOR COLOR. PROVIDE MFG. SHOP DRAWINGS TO ARCHITECT FOR REVIEW. Mcdonalds@metalera.com
2. OVER WALL ASSEMBLY 2

2. 3/4" POLYISO CONTINUOUS RIGID INSULATION (R-VALUE = 5 MIN.)
3. PERMEABLE BUILDING WRAP. INSTALL PER LOCAL CODES AND MFR'S SPEC'S.
4. 1/2" EXTERIOR GRADE PLYWOOD.
5. 2x6 WOOD STUD FRAMING @ 16" O.C. (WITH CONTINUOUS DRAFTSTOP/FIRESTOP BLOCKING AT FINISH CEILING LEVEL).
6. 5 1/2" THICK UNFACED BATT INSULATION (R-VALUE = 23 MIN.).
7. "CERTAINTEED MEMBRAIN" SMART VAPOR RETARDER (SEMI-VAPOR PERMEABLE) BY CERTAINTEED OR EQUAL.
8. 1X6 HORIZONTAL WOOD FURRING STRIPS @ 24" O.C. FOR ALL DINING ROOM EXTERIOR WALLS HOUSING STOREFRONT WINDOW ASSEMBLY.
9. 1/2" CEMENT BOARD SUBSTRATE AT DINING, VESTIBULE AND RESTROOM TILE LOCATIONS.

   1/2" CEMENT BOARD OVER 1/2" PLYWOOD SUBSTRATE AT B.O.H. WT2 TILE LOCATIONS.

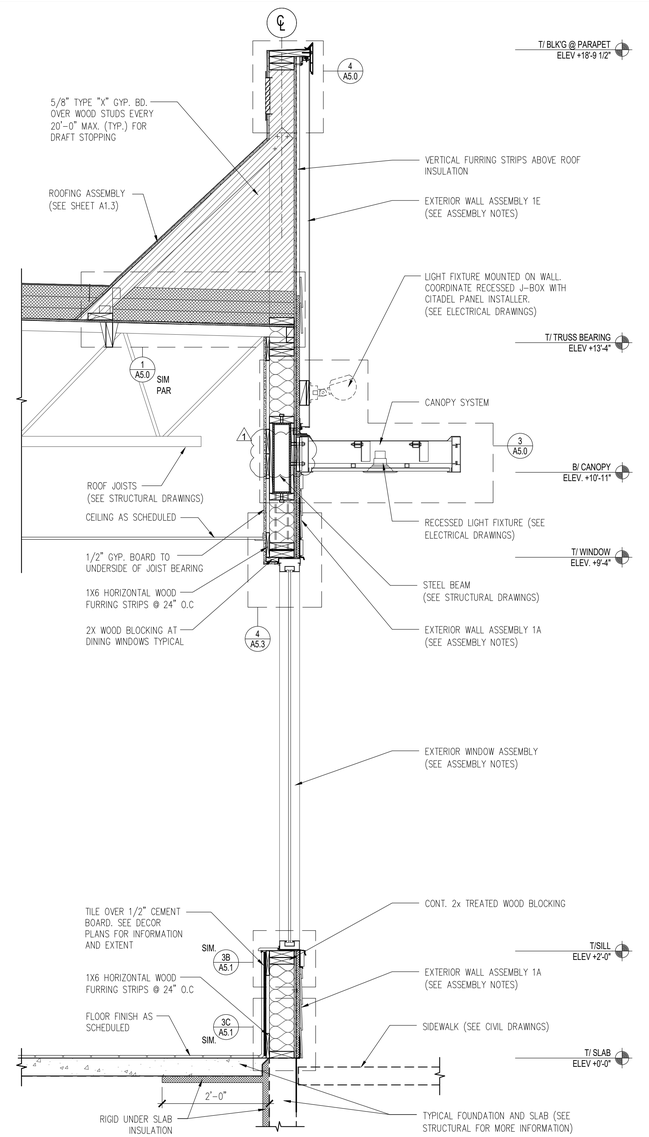
   NON TILE LOCATIONS: 1/2" GYPSUM BOARD TO EXTEND TO DECK ABOVE. UNLESS NOTED OTHERWISE. ALL GYP. BOARD MUST SCORE 10 PER ASTM D3273. REFERENCE CURRENT PROJECT MANUAL.
10. SEE A1.0 & ROOM FINISH SCHEDULE FOR ADDITIONAL SUBSTRATE INFORMATION.
11. GENERAL NOTE FOR PROJECTS CONFORMING TO IECC 2024: BUILDING THERMAL ENVELOPE SHALL UNDERGO TESTING AND REPORTING AS REQUIRED BY SECTION C406.2.

5 WALL ASSEMBLY NOTES



6 WALL SECTION - RESTROOM (NON-DT SIDE)

3/4" = 1'-0"



7 WALL SECTION - DINING (NON-DT SIDE)

3/4" = 1'-0"

LINGLE DESIGN GROUP INC
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STATE OF MISSOURI CARL LINGLE NUMBER A-2003018555 ARCHITECT

LICENSE EXPIRATION: 12-31-27

DATE ISSUED: 07-15-26

STATE ID: 24342

NATIONAL #: 46237

PROJECT #: 26-125

DRAWN BY: RP

CHECKED BY: JK

DATE: 07/15/26 - PERMIT / BID SET

REVISIONS
1 09/08/25 - DECOR UPDATE / PLUMBING & CIVIL COORDINATION

CLIENT

McDonald's USA, LLC

PROTOTYPE

BB20 4590 WW-HB
ISSUE DATE 06/26

ADDRESS

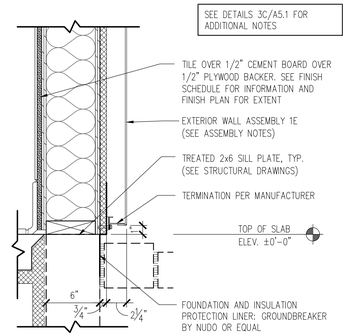
600 SCHUG AVENUE
PECULIAR, MO, 64078

SHEET TITLE

WALL SECTIONS AND DETAILS

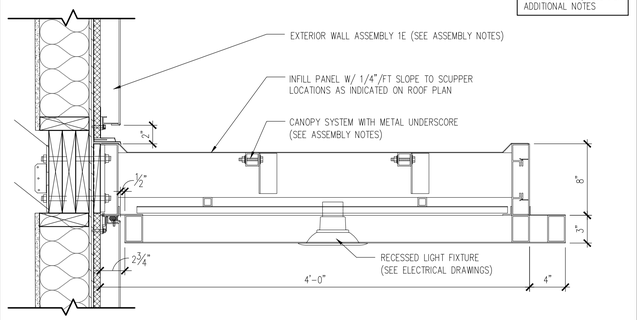
SHEET NUMBER:

A5.0



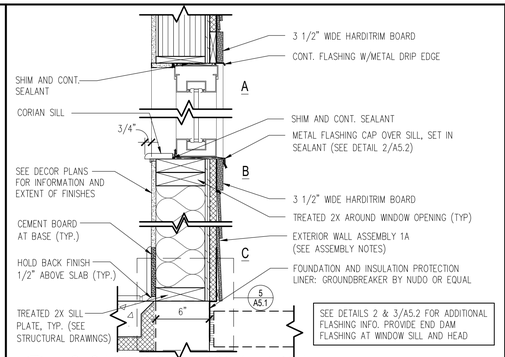
1 DETAIL- CITADEL TERMINATION

1 1/2" = 1'-0"



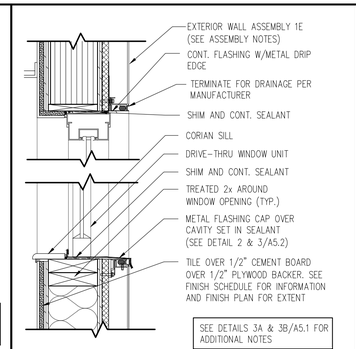
2 DETAIL- CANOPY @ DRIVE-THRU

1 1/2" = 1'-0"



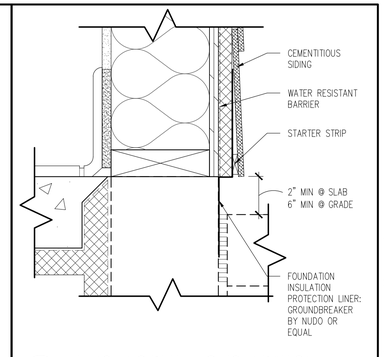
3 SECTION @ CREW ROOM WINDOW

1 1/2" = 1'-0"



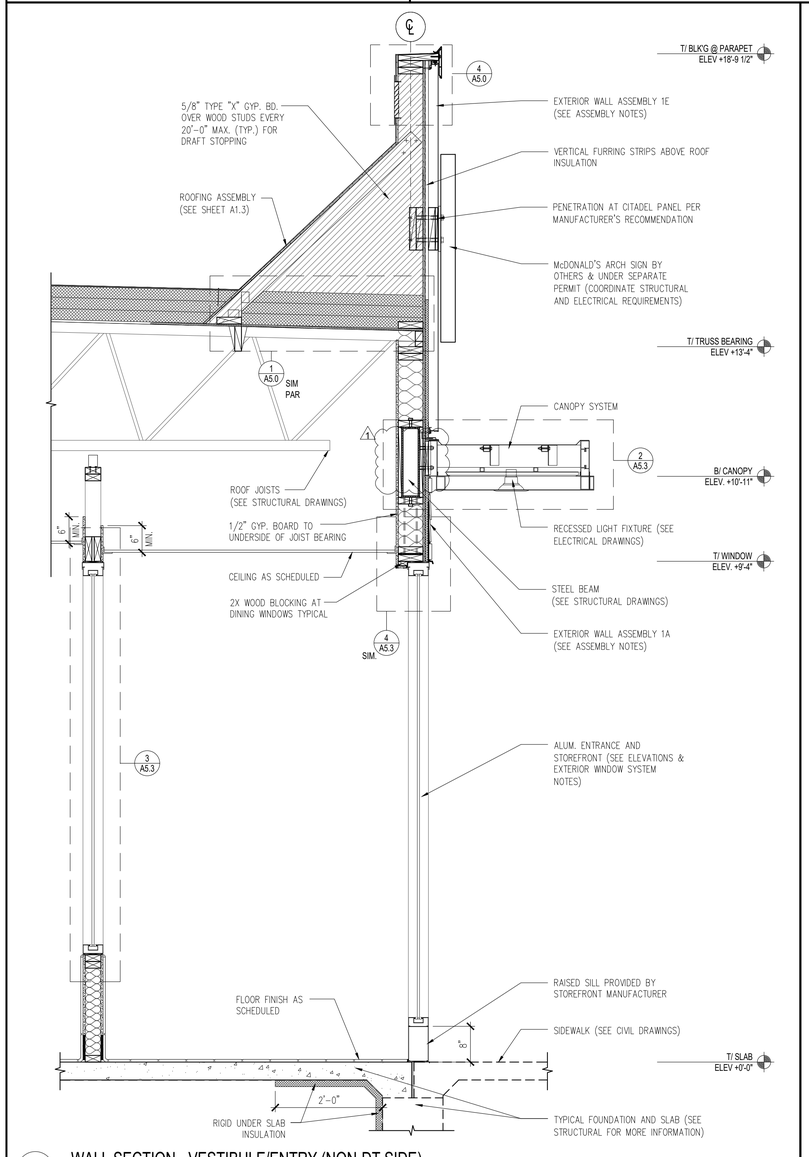
4 SECTION @ DRIVE-THRU WINDOW

1 1/2" = 1'-0"



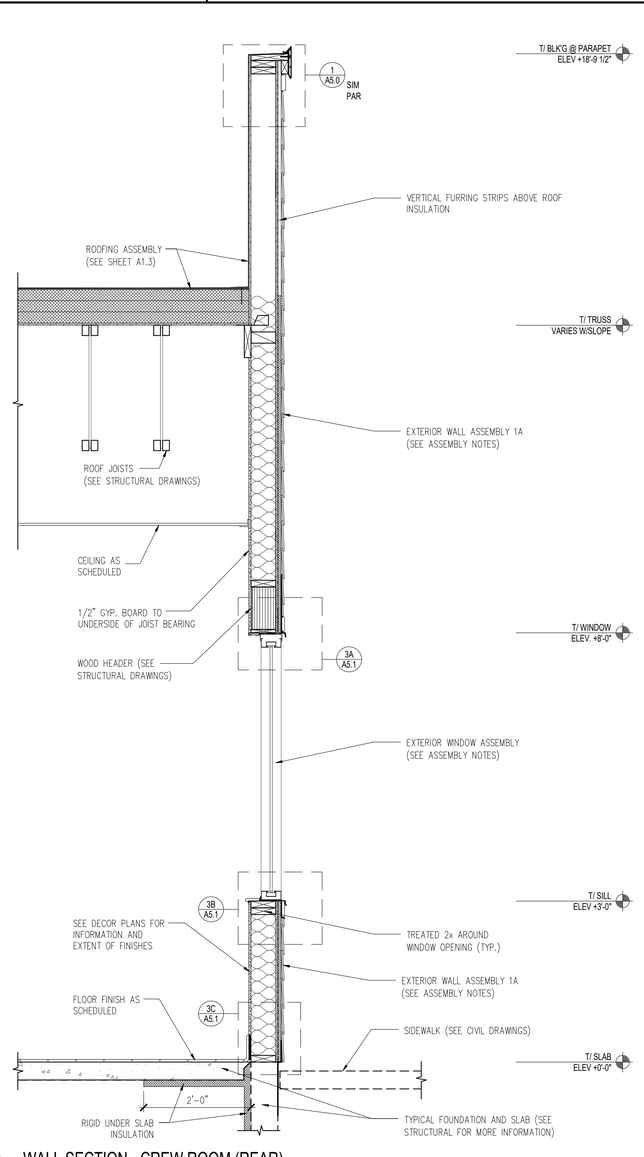
5 FLASHING DETAIL @ FOUNDATION

3" = 1'-0"



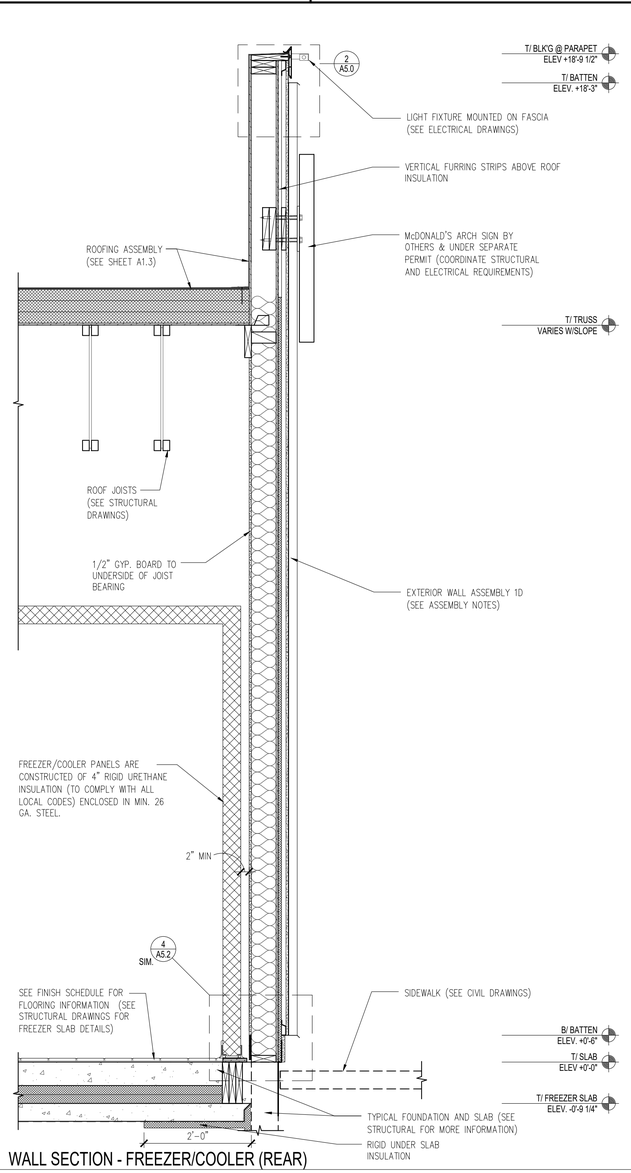
6 WALL SECTION - VESTIBULE/ENTRY (NON-DT SIDE)

3/4" = 1'-0"



7 WALL SECTION - CREW ROOM (REAR)

3/4" = 1'-0"



8 WALL SECTION - FREEZER/COOLER (REAR)

3/4" = 1'-0"

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WWW.LINGLEDESIGN.COM

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STATE OF MISSOURI
CARL LINGLE
NUMBER A-2003018555
ARCHITECT

LICENSE EXPIRATION: 12-31-27

DATE ISSUED: 07-15-26

STATE ID: 24134Z

PROJECT #: 26-125

NATIONAL #: 46237

DRAWN BY: RP

CHECKED BY: JK

DATE:
07/15/26 - PERMIT / BID SET

REVISIONS
1 09/08/25 - DECOR UPDATE / PLUMBING & CIVIL COORDINATION
2
3
4
5
6

CLIENT

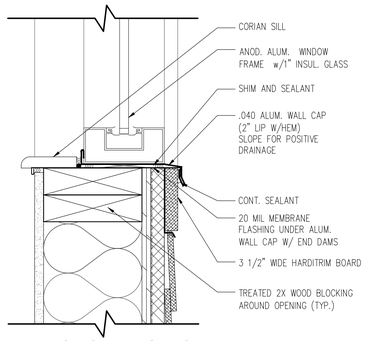
McDonald's USA, LLC

PROTOTYPE
BB20 4590 WW-HB
ISSUE DATE 06/26

ADDRESS
600 SCHUG AVENUE
PECULIAR, MO, 64078

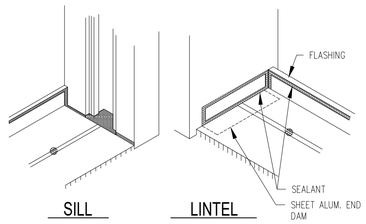
SHEET TITLE
WALL SECTIONS AND DETAILS

SHEET NUMBER:
A5.1



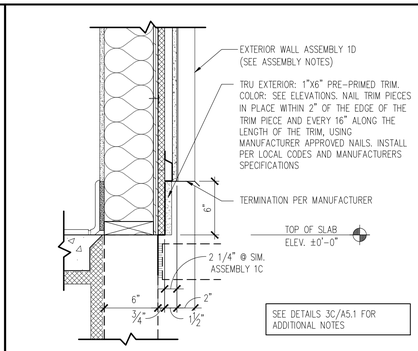
2 WINDOW SILL FLASHING

3" = 1'-0"



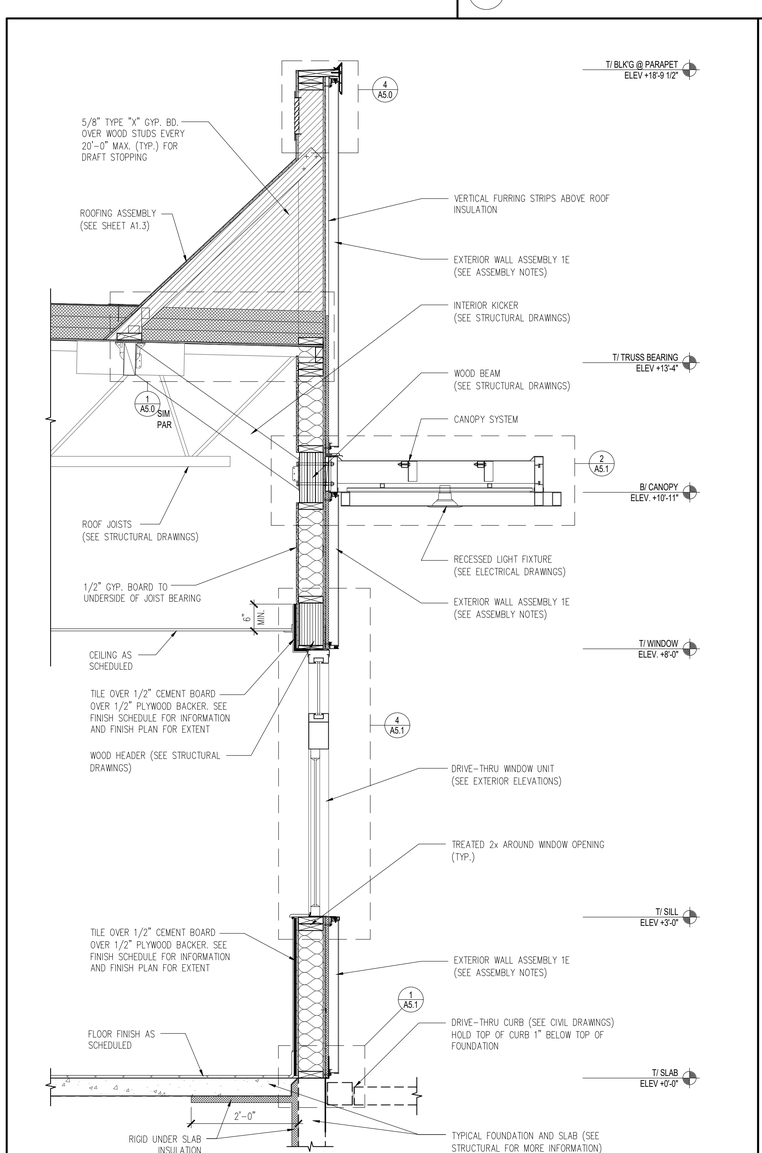
3 FLASHING DETAIL @ JAMB

N.T.S.



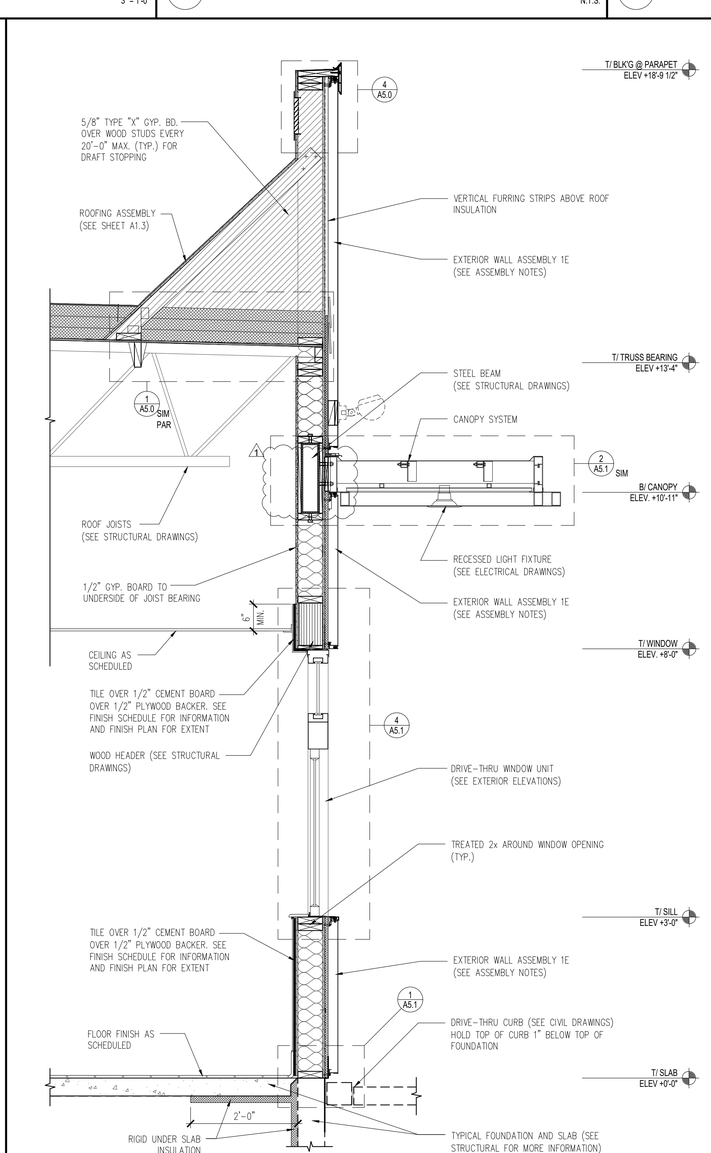
4 DETAIL- BATTEN TERMINATION

1 1/2" = 1'-0"



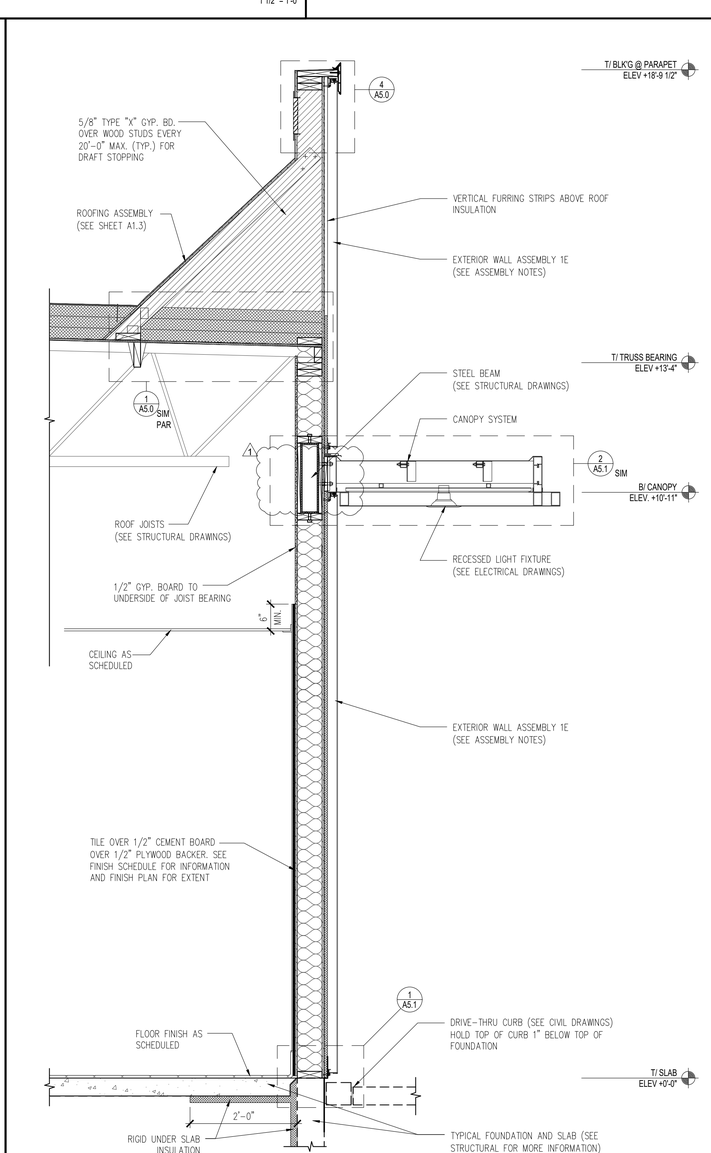
6 WALL SECTION - ORDER WINDOW (DT)

3/4" = 1'-0"



7 WALL SECTION - PRESENTER WINDOW (DT)

3/4" = 1'-0"



8 WALL SECTION - ORDER / PRESENTER WINDOW (DT)

3/4" = 1'-0"

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STATE OF MISSOURI
CARL LINGLE
NUMBER A-2003018555
ARCHITECT

LICENSE EXPIRATION: 12-31-27

DATE ISSUED: 07-15-26

STATE ID: 241342

PROJECT #: 26-125

NATIONAL #: 46237

DRAWN BY: RP

CHECKED BY: JK

DATE:
07/15/26 - PERMIT / BID SET

REVISIONS
1 09/08/25 - DECOR UPDATE / PLUMBING & CIVIL COORDINATION

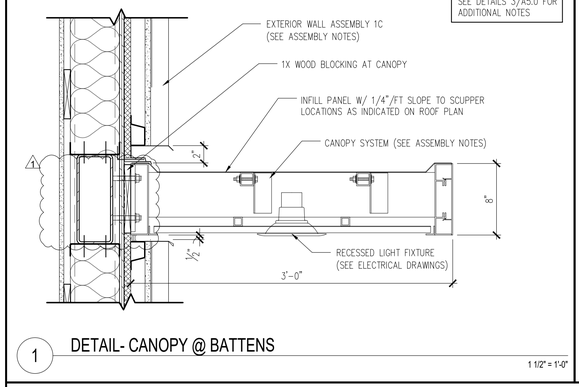
CLIENT
McDonald's USA, LLC

PROTOTYPE
BB20 4590 WW-HB
ISSUE DATE 06/26

ADDRESS
600 SCHUG AVENUE
PECULIAR, MO, 64078

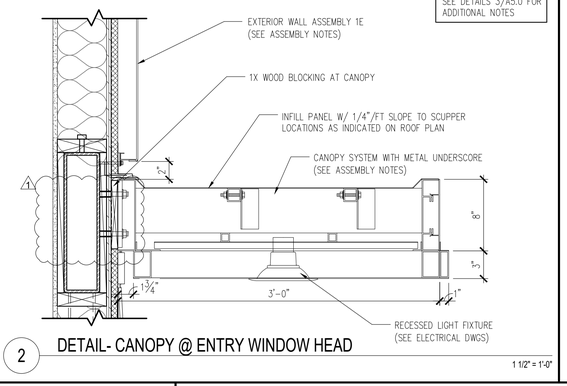
SHEET TITLE
WALL SECTIONS AND DETAILS

SHEET NUMBER:
A5.2



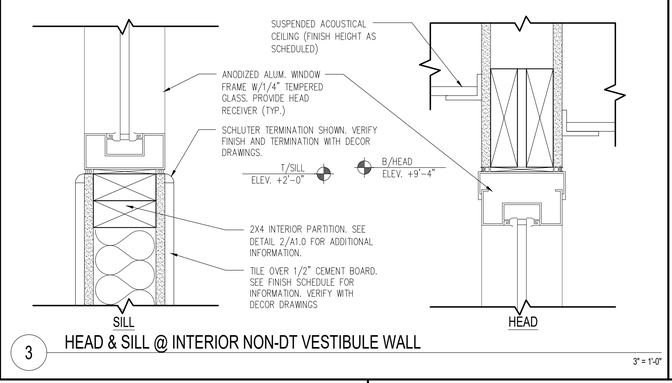
1 DETAIL- CANOPY @ BATTENS

1 1/2" = 1'-0"



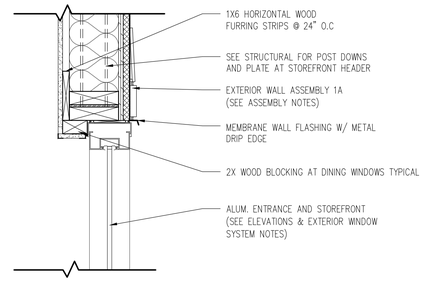
2 DETAIL- CANOPY @ ENTRY WINDOW HEAD

1 1/2" = 1'-0"



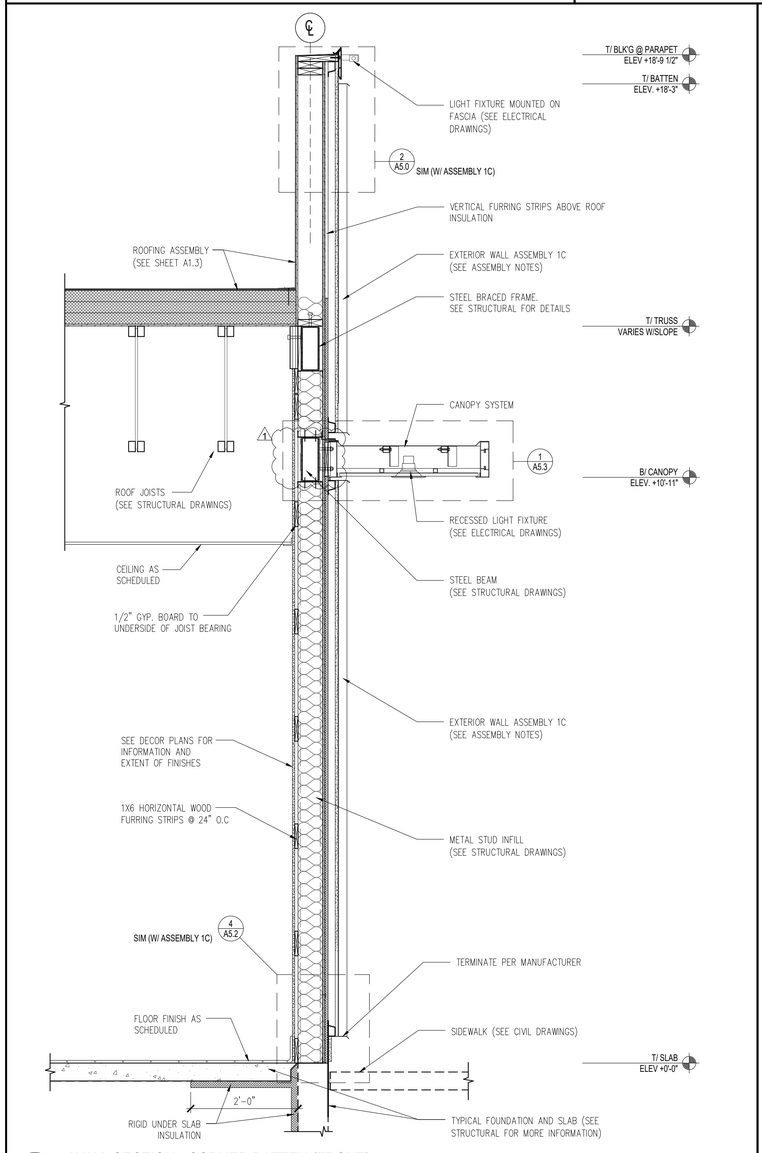
3 HEAD & SILL @ INTERIOR NON-DT VESTIBULE WALL

3" = 1'-0"



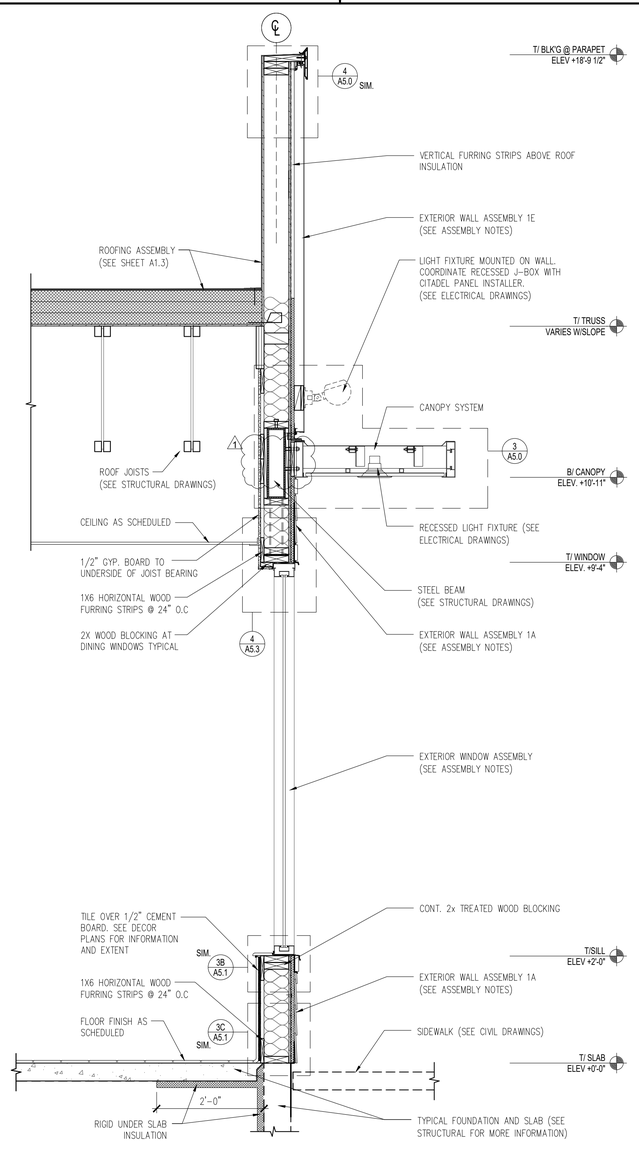
4 DETAIL- STOREFRONT HEADER

1 1/2" = 1'-0"



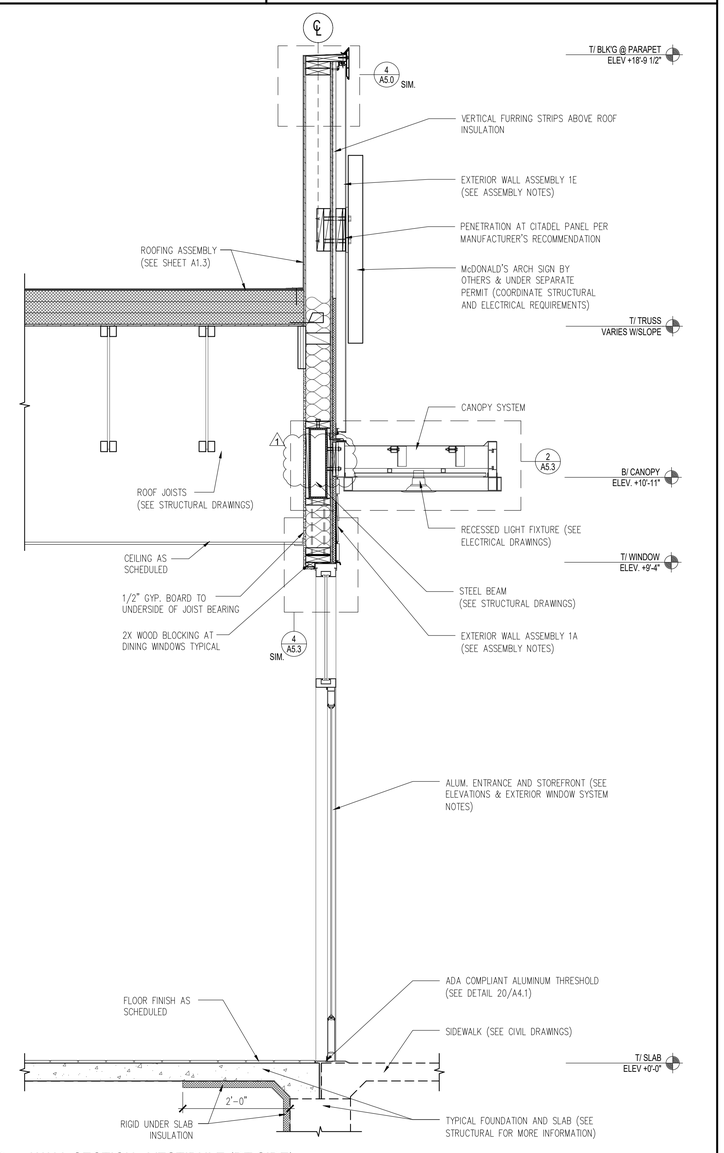
6 WALL SECTION - CORNER BATTEN (FRONT)

3/4" = 1'-0"



7 WALL SECTION - STOREFRONT (FRONT)

3/4" = 1'-0"



8 WALL SECTION - VESTIBULE (DT SIDE)

3/4" = 1'-0"

LINGLE DESIGN GROUP INC
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STATE OF MISSOURI
CARL LINGLE
NUMBER A-2003018555
ARCHITECT

LICENSE EXPIRATION: 12-31-27

DATE ISSUED: 07-15-26

STATE ID: 24342

NATIONAL #: 46237

PROJECT #: 26-125

DRAWN BY: RP

CHECKED BY: JK

DATE: 07/15/26 - PERMIT / BID SET

REVISIONS
1 09/08/25 - DECOR UPDATE / PLUMBING & CIVIL COORDINATION

CLIENT

McDonald's USA, LLC

PROTOTYPE

BB20 4590 WW-HB
ISSUE DATE 06/26

ADDRESS

600 SCHUG AVENUE
PECULIAR, MO, 64078

SHEET TITLE

WALL SECTIONS AND DETAILS

SHEET NUMBER:

A5.3

DOOR SCHEDULE

#	DOOR				FRAME		
	MATERIAL	SIZE	TYPE	FINISH	MATL	SIZE	FINISH
1	ALUM.	3'-0"x7'-0"x1 3/4"	A	MFR. – SEE EXTERIOR WINDOW ASSEMBLY, 5/A5.0	ALUM.	(NOTE 5)	MFR. – SEE EXTERIOR WINDOW ASSEMBLY, 5/A5.0
2	ALUM.	3'-0"x7'-0"x1 3/4"	A1	MFR. – SEE EXTERIOR WINDOW ASSEMBLY, 5/A5.0	ALUM.	(NOTE 5)	MFR. – SEE EXTERIOR WINDOW ASSEMBLY, 5/A5.0
2A	ALUM.	3'-0"x7'-0"x1 3/4"	A1	MFR. – SEE EXTERIOR WINDOW ASSEMBLY, 5/A5.0	ALUM.	(NOTE 5)	MFR. – SEE EXTERIOR WINDOW ASSEMBLY, 5/A5.0
3	H.M.	4'-0"x7'-0"x1 3/4"	B	PAINT INTERIOR BENJAMIN MOORE 2121-10 "GRAY" SEE EXTERIOR ELEVATIONS FOR EXTERIOR PAINT COLOR	H.M.	2"JAMB & 4"HEAD	PAINT INTERIOR BENJAMIN MOORE 2121-10 "GRAY" SEE EXTERIOR ELEVATIONS FOR EXTERIOR PAINT COLOR
3A	H.M.	3'-0"x7'-0"x1 3/4" 2'-0"x7'-0"x1 3/4"	G		H.M.	2"JAMB & 4"HEAD	
3B	H.M.	4'-0"x7'-0"x1 3/4"	N		H.M.	2"JAMB & 4"HEAD	
4	H.M.	3'-0"x7'-0"x1 3/4"	B		H.M.	2"JAMB & 4"HEAD	
5	S.C. WOOD W/ LAM.	3'-0"x6'-8"x1 3/4"	C	LUNA: INT. LAMTECH 1540 PR "ONTARIO OAK", EXT. LAMTECH 1467 MT "LINEAL OAK" RT 66: INT. LAMTECH 1540 PR "ONTARIO OAK", EXT. WILSONART D90-60 "NORTH SEA" RAY: INT. LAMTECH 1540 PR "ONTARIO OAK", EXT. LAMTECH 2255 MT "IRON"	H.M.	2"JAMB & HEAD	LUNA: INT. BENJAMIN MOORE 2134-30 "IRON MOUNTAIN", EXT. BENJAMIN MOORE 2121-10 "GRAY" RT. 66: INT. BENJAMIN MOORE 2121-10 "GRAY", EXT. BENJAMIN MOORE 2134-40 "WHALE GRAY" RAY: INT. BENJAMIN MOORE 2134-30 "IRON MOUNTAIN", EXT. BENJAMIN MOORE 1631 "MIDNIGHT OIL"
6	S.C. WOOD W/ LAM.	3'-0"x4'-8"x1 3/4"	D	LUNA: INT. LAMTECH 1540 PR "ONTARIO OAK", EXT. LAMTECH 1467 MT "LINEAL OAK"	H.M.	2"JAMB & HEAD	LUNA: INT. & EXT. BENJAMIN MOORE 2134-30 "IRON MOUNTAIN"
6A	S.C. WOOD W/ LAM.	2'-6"x4'-8"x1 3/4"	D	RT 66: INT. & EXT. LAMTECH 1540 PR "ONTARIO OAK"	H.M.	2"JAMB & HEAD	RT. 66: INT. & EXT. BENJAMIN MOORE 2121-10 "GRAY"
7	S.C. WOOD W/ LAM.	3'-0"x7'-0"x1 3/4"	C	RAY: INT. & EXT. LAMTECH 1540 PR "ONTARIO OAK"	H.M.	2"JAMB & HEAD	RAY: INT. & EXT. BENJAMIN MOORE 2134-30 "IRON MOUNTAIN"
8A	S.C. WOOD W/ LAM.	(2) 1'-2"x8'-0"x1 3/4"	E	INT. & EXT. WILSONART D92-60 "DOVE GREY"	H.M.	2"JAMB & HEAD	INT. & EXT. BENJAMIN MOORE 2121-10 GRAY
8B	S.C. WOOD W/ LAM.	(2) 1'-2"x8'-0"x1 3/4"	M	INT. & EXT. WILSONART D92-60 "DOVE GREY"	H.M.	2"JAMB & HEAD	INT. & EXT. BENJAMIN MOORE 2121-10 GRAY
9	INSULATED METAL	3'-0"x6'-6"x4"	K	MFR.	N/A	N/A	MFR.
9A	INSULATED METAL	4'-0"x6'-6"x4"	K	MFR.	N/A	N/A	MFR.
10	H.M.	3'-0"x7'-0"x1 3/4"	F	LUNA: INT. & EXT. BENJAMIN MOORE 2121-10 "GRAY" RT. 66: INT. BENJAMIN MOORE 2121-10 "GRAY", EXT. BENJAMIN MOORE 2134-40 "WHALE GRAY" RAY: INT. BENJAMIN MOORE 2121-10 "GRAY", EXT. BENJAMIN MOORE 1117 "GUESTHOUSE"	H.M.	2"JAMB & HEAD	LUNA: INT. & EXT. BENJAMIN MOORE 2121-10 "GRAY" RT. 66: INT. BENJAMIN MOORE 2121-10 "GRAY", EXT. BENJAMIN MOORE 2134-40 "WHALE GRAY" RAY: INT. BENJAMIN MOORE 2121-10 "GRAY", EXT. BENJAMIN MOORE 1117 "GUESTHOUSE"
15	H.M.	3'-0"x7'-0"x1 3/4"	J	PAINT INTERIOR BENJAMIN MOORE 2121-10 "GRAY" SEE EXTERIOR ELEVATIONS FOR EXTERIOR PAINT COLOR	H.M.	2"JAMB & 4"HEAD	PAINT INTERIOR BENJAMIN MOORE 2121-10 "GRAY" SEE EXTERIOR ELEVATIONS FOR EXTERIOR PAINT COLOR
16	S.C. WOOD W/ LAM.	3'-0"x7'-0"x1 3/4"	C	LUNA: INT. LAMTECH 1557 PR "SEASON ASH", EXT. WILSONART D92-60 "DOVE GREY" RT 66: INT. & EXT. LAMTECH 1540 PR "ONTARIO OAK" RAY: INT. & EXT. LAMTECH 1540 PR "ONTARIO OAK"	H.M.	2"JAMB & HEAD	LUNA: INT. BENJAMIN MOORE 2134-30 "IRON MOUNTAIN", EXT. BENJAMIN MOORE 2121-10 "GRAY" RT. 66: INT. BENJAMIN MOORE 2121-10 "GRAY" RAY: INT. BENJAMIN MOORE 2134-30 "IRON MOUNTAIN", EXT. BENJAMIN MOORE 2121-10 "GRAY"

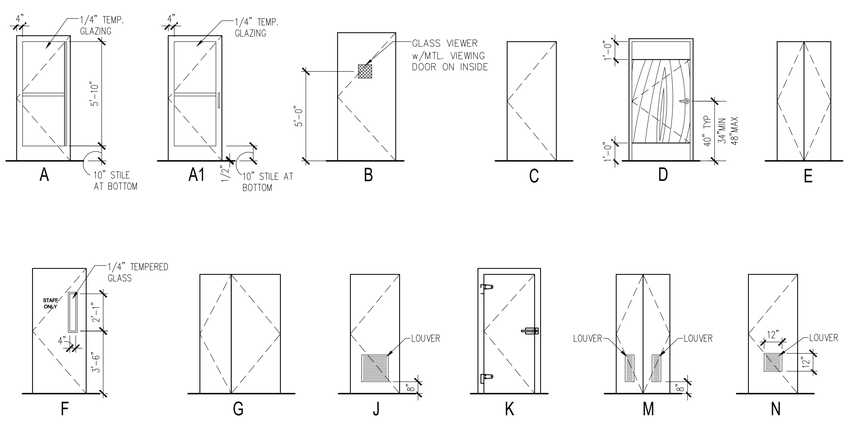
* G.C. TO VERIFY ALL LUNA, RT. 66 AND RAY DECOR FINISHES WITH DECOR DRAWINGS.

GENERAL DOOR 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.
6. GC TO INSTALL ACCESSIBILITY DOOR SIGNS WHERE REQ'D BY LOCAL CODES – SEE GENERAL NOTE 6, SHEET A1.0
7. ALARM CONTACT SWITCHES SHALL BE RECESSED INTO THE TOP OF THE DOOR & HOLLOW METAL FRAME ABOVE.
8. DOORS, DOOR FRAMES, & HARDWARE FOR DOORS 3, 3A, 3B, 4, 5, 6, 6A, 7, 8A, 8B, 10, 15 & 16 SUPPLIED BY: UNIVERSAL MANUFACTURING 1-800-821-1414.
9. DOOR 9 & 9A SUPPLIED BY FREEZER/COOLER MANUFACTURER
10. SEE ELEVATIONS AND WALL SECTIONS.
11. DOOR 8A & 8B – 1" UNDERCUT FOR MAKE UP AIR.
12. DOORS 3, 3A, 4 & 15 TO HAVE MAXIMUM U VALUE = 0.37
13. ALL INTERIOR SOLID CORE WOOD DOORS TO HAVE A LAMINATED FINISH AND PAINTED FRAMES.

DOOR TYPES

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



HARDWARE TYPES

DOOR #1 – ENTRY DOOR
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 PULL HANDLE ROCKWOOD MFG. MODEL: RM3311. SIZE: 1–1/4" DIA. CTC: 5'–10". FINISH: BLACK POWDER COAT (BPC). OFFSET MOUNTING: TYPE 1XHD – THRU BOLT HEAVY DUTY
4. 1 EA 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 – NON–DT 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 1640/V/B.

DOOR #2A – DT 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 1640/V/B.
4. 1 EA 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 WTH/STP160V 48 X 84 N.GUARD
8. 1 EA SWEEP 101VA 48" N.GUARD
9. 1 EA VIEW FRAME LVGLFMD 9 X 9 DKB W/FLAP ON INSIDE N.GUARD
10. 1 EA MORTISE CYL HOUSING 7PIN SFIC 626
11. 1 EA 7 PIN CONSTRUCTION CORE FOR ABOVE 626
12. 1 EA CONTROL KEY FOR ABOVE
13. SEE A1.0 FOR 3/16" DIAMOND PLATE THRESHOLD BY DIAMOND PLATE PROTECTION CONTRACTOR
14. SEE A1.0 FOR 1/8" DIAMOND KICK PLATE SCOPE BY DIAMOND PLATE PROTECTION CONTRACTOR
15. (OPTIONAL) 1 EA THRESHOLD 325HD 48" N.GUARD

DOOR #3A – FREEZER DELIVERY (DOUBLE DOOR)
1. 2 EA CONTINUOUS HINGE A210HDC 83
2. 1 EA DEADBOLT B661P 626 SCHLAGE
3. 1 EA LATCH PROTECTOR CLP–110 630
4. 1 EA PULL H3E US28 HAGER
5. 1 EA GASKETING 160V 1 x 60" 2 x 84" SMS–TEKS 6 x 3/4"
6. 1 EA DRIP CAP 16 A 64" SMS–TEKS 6 x 3/4"
7. 2 EA SURFACE BOLT 2750 8" US26D
8. 1 EA SWEEP 101VA 24" N.GUARD
9. 1 EA SWEEP 101VA 36" N.GUARD
10. 1 EA OVERHEAD DOOR HOLDER 60–17–CON–SZ1–US32D–SX1N HAGER
11. 1 EA OVERHEAD DOOR HOLDER 60–17–CON–SZ2–US32D–SX1N HAGER
12. SEE A1.0 FOR 3/16" DIAMOND PLATE THRESHOLD BY DIAMOND PLATE PROTECTION CONTRACTOR
13. SEE A1.0 FOR 1/8" DIAMOND KICK PLATE SCOPE BY DIAMOND PLATE PROTECTION CONTRACTOR
14. (OPTIONAL) 1 EA THRESHOLD 325HD 60" N.GUARD

DOOR #3B – STORAGE SHED
1. 1 EA HINGE 780–112HD 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 WEATHER STRIPPING 160V 48 X 84 N.GUARD
7. 1 EA THRESHOLD 325HD 48" N.GUARD
8. 1 EA SWEEP 101VA 48" N.GUARD
9. 1 EA SEC. LOUVER LVRSG–3 DKB 12 X 12 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 36" 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 WEATHER STRIPPING 160V 36 X 84 N.GUARD
9. 1 EA THRESHOLD 325HD 36" 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

DOOR #5 – RESTROOM ENTRY
1. 3 EA HINGE BB1279 4 ½ X 4 ½ 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 ½ X 4 ½ US26D HAGER
2. 1 EA HINGE BB1279 4 ½ X 4 ½ 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 – 28⅝" MOUNTED 28⅝" 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 ½ X 4 ½ US26D HAGER
2. 1 EA HINGE BB1279 4 ½ X 4 ½ 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 – MOUNTED 28⅝" 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. 1 EA NGP SLSS1 TOP MOUNT BARN DOOR TRACK, STAINLESS STEEL 78–3/4 ", SOFT CLOSE
2. 1 EA ROCKWOOD 872 CAST FLUSH PULL 1–5/16" X 3–1/8", SATIN CHROMIUM PLATED 626/US26D

DOOR #8A – COMPUTER CLOSET
1. 8 EA HINGE BB1279 4 ½ X 4 ½ US26D HAGER
2. 1 EA LOCK ND80PD RHO 626 SCHLAGE
3. 2 EA FLUSH BOLT 283D US26D HAGER

DOOR #8B – COMPUTER CLOSET
1. 8 EA HINGE BB1279 4 ½ X 4 ½ US26D HAGER
2. 1 EA LOCK ND80PD RHO 626 SCHLAGE
3. 2 EA FLUSH BOLT 283D US26D HAGER
4. 2 EA LOUVER L–700–RX 6 X 18 N.GUARD

DOOR #9 & 9A– COOLER
1. ALL DOOR HARDWARE FOR THE REFRIGERATED COOLER / FREEZER SHALL BE PROVIDED BY THE MANUFACTURER.
   MANUFACTURER:
   KOLPAK @ HY 641 N. McCORKLE PARK RD
   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. INTERIOR SAFETY RELEASE HANDLE
   6. HINGES – BRUSHED CHROME CAST ALLOY
2. SEE A1.0 FOR 3/16" DIAMOND PLATE THRESHOLD BY DIAMOND PLATE PROTECTION CONTRACTOR
3. SEE A1.0 FOR 1/8" DIAMOND KICK PLATE SCOPE BY DIAMOND PLATE PROTECTION CONTRACTOR

DOOR #10 – CREW BDAP DOOR #10
1. 1 EA HINGE 780–112HD 83" ALUM HAGER
2. 1 EA CLOSER 1461 RW/PA ALUM LCN
3. 1 EA PANIC 9975EO–LD 36" SP28 V.DUPRIN
4. 1 EA TRIM 990DT US26D V.DUPRIN
5. 1 EA ELEC STRIKE 6211 24V DC FSE US32D SCHLAGE
6. 1 EA PWR SUPPLY PS902 SCHLAGE
7. 1 EA ANNUNCIATOR BSV–24P SURFACE MOUNTED
8. 3 EA PUSH BUTTON 621–BK–DA HDP 626 SCHLAGE
9. 1 EA PUSH BUTTON 621–RD–DA HDP 626 SCHLAGE
10. 1 EA HORN WITH STROBE 1910S SCHLAGE
11. 1 EA GLASS 5 X 26 X ¼ UMCO
12. 1 EA VIEW FRAME LFRA100 6 X 27 DKB N.GUARD

DOOR #15 CO2
1. 1 EA HINGE 780–112HD 83" ALUM HAGER
2. 1 EA LOCK ND80PD RHO 626 SCHLAGE
3. 1 EA LOCK GUARD CLP110 US32D DON JO
4. 1 EA WEATHER STRIPPING 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 CREW ROOM
1. 3 EA HINGE BB1279 4 ½ X 4 ½ US26D HAGER
2. 1 EA ND60PD RHO VESTIBULE LEVER LOCK 626 SCHLAGE

WINDOW TYPES

SCALE: 1/4" = 1'–0"

EXTERIOR WINDOW ASSEMBLY
(STOREFRONT & ENTRANCE SYSTEM)
FOR GLAZING & FRAME REQUIREMENTS: SEE EXTERIOR WINDOW ASSEMBLY, 5/A5.0

INTERIOR WINDOW ASSEMBLY
(STOREFRONT & ENTRANCE SYSTEM)
1. EXTRA DARK BRONZE ALUMINUM FRAME, THERMALLY BROKEN WITH HEAD RECEIVER CHANNEL.
2. 1/4" CLEAR TEMPERED GLAZING
3. 1/2" CORIAN SILL EACH SIDE

LINGLE DESIGN GROUP INC
158 WEST MAIN STREET
LENA, IL 61048
815.369.9155
1764 BLAKE ST
DENVER, CO 8020
303.974.5873
WWW.LINGLEDESIGN.COM

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STATE OF MISSOURI
CARL LINGLE
NUMBER A-2003018555
ARCHITECT

LICENSE EXPIRATION: 12–31–27

DATE ISSUED: 07–15–26

STATE ID: 241342

NATIONAL #: 46237

PROJECT #: 26-125

DRAWN BY: RP

CHECKED BY: JK

DATE: 07/15/26 - PERMIT / BID SET

REVISIONS
1. 09/08/25 - DECOR UPDATE / PLUMBING & CIVIL COORDINATION

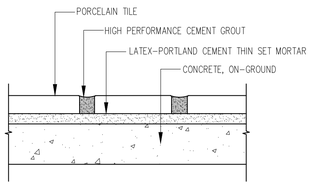
CLIENT
McDonald's USA, LLC

PROTOTYPE
BB20 4590 WW-HB
ISSUE DATE 06/26

ADDRESS
600 SCHUG AVENUE
PECULIAR, MO, 64078

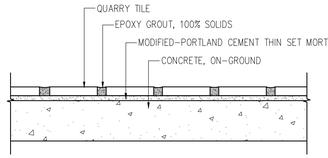
SHEET TITLE
DOOR & WINDOW SCHEDULES

SHEET NUMBER:
A6.0



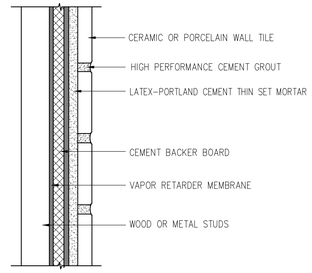
1 DINING ROOM AND RESTROOM FLOORS OVER CONCRETE

N.T.S.



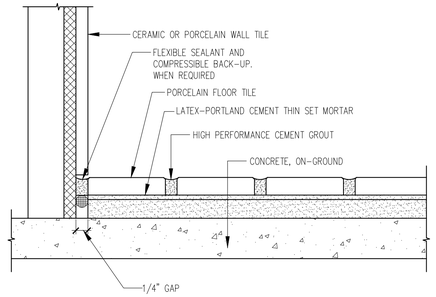
2 KITCHEN/ SUPPORT FLOORS OVER CONCRETE

N.T.S.



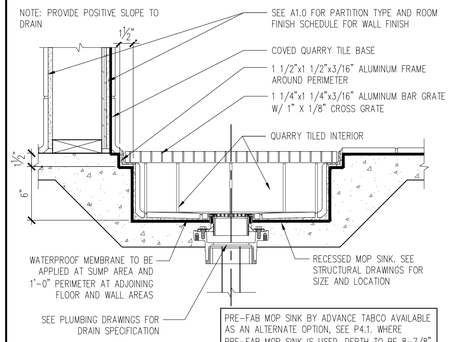
3 DINING ROOM INTERIOR WALLS OVER WOOD OR METAL STUDS

N.T.S.



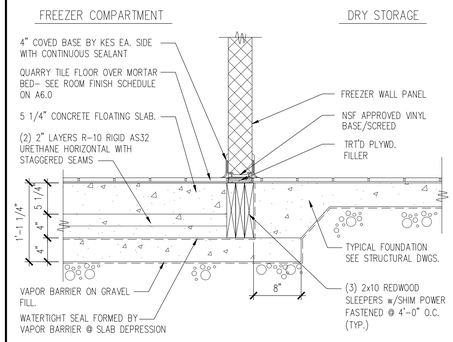
4 DINING ROOM PERIMETER JOINT

N.T.S.



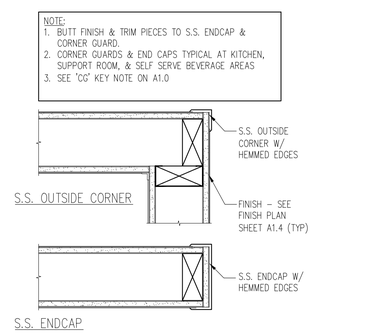
8 MOP SINK

1 1/2" = 1'-0"



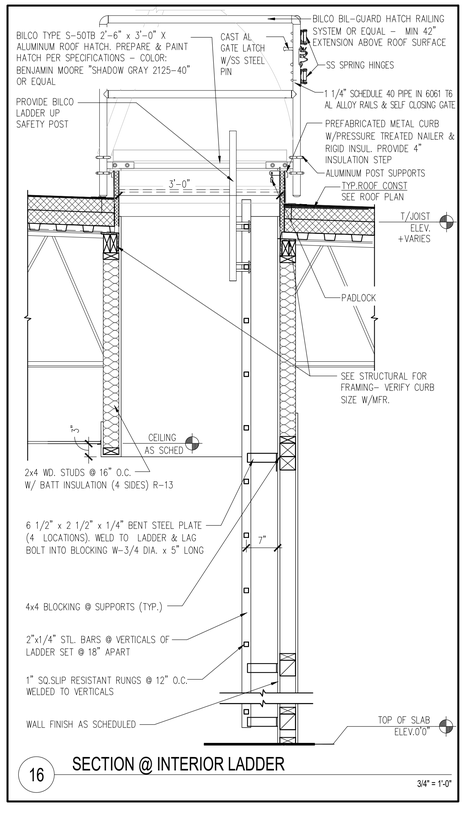
9 FREEZER FLOOR DETAIL @ INT. WALL

1" = 1'-0"



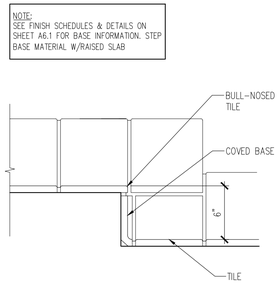
10 STAINLESS STEEL DETAILS

1 1/2" = 1'-0"



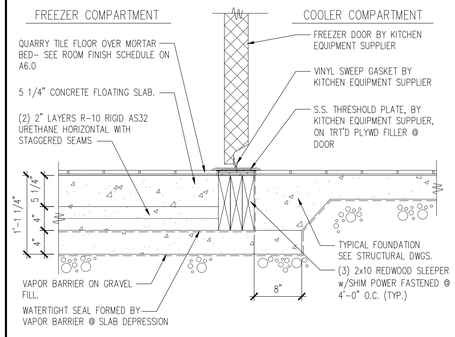
16 SECTION @ INTERIOR LADDER

3/4" = 1'-0"



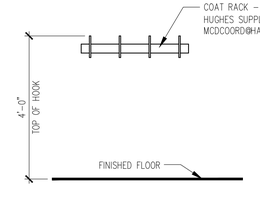
13 DETAIL RAISED SLAB

1 1/2" = 1'-0"



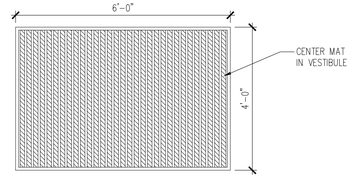
14 FREEZER FLOOR DETAIL @ DOOR

1" = 1'-0"



19 WALL MOUNTED COAT HOOKS (CREW ROOM & BDAP)

1/2" = 1'-0"



PEDIMAT BY CONSTRUCTION SPECIALTIES
- RAIL/FRAME FINISH: CLEAR ANODIZED
- CARPET INSERT: #7325 WROUGHT IRON
CONTACT: NATIONAL ACCOUNTS DIVISION
PHONE: (888) 424-6287
FAX: (908) 849-4295
NATIONALACCOUNTS@C-SGROUP.COM

OPTIONAL: VERIFY WITH MCDONALD'S CONSTRUCTION MANAGER

20 PEDIMAT (OPTIONAL)

1/2" = 1'-0"

LINGLE DESIGN GROUP INC
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STATE OF MISSOURI
CARL LINGLE
NUMBER A-2003018555
ARCHITECT

LICENSE EXPIRATION: 12-31-27

DATE ISSUED: 07-15-26

STATE ID: 24342

PROJECT #: 26-125

NATIONAL #: 46237

DRAWN BY: RP

CHECKED BY: JK

DATE:
07/15/26 - PERMIT / BID SET

REVISIONS
1 09/08/25 - DECOR UPDATE / PLUMBING & CIVIL COORDINATION
2
3
4
5
6

CLIENT

McDonald's USA, LLC

PROTOTYPE
BB20 4590 WW-HB
ISSUE DATE 06/26

ADDRESS
600 SCHUG AVENUE
PECULIAR, MO, 64078

SHEET TITLE
DETAILS

SHEET NUMBER:
A6.1

LEGEND:

- INDICATES FRAMING SHEAR WALL. SEE SHEAR WALL SCHEDULE AND S3.2 FOR SHEAR WALL INFORMATION.
- INDICATES DEPRESSION IN FOUNDATION WALL @ DOORS. SEE 3 / S2.0 FOR THRESHOLD DETAILS.
- INDICATES METAL STUD FRAME WALL. SEE 5 / S2.0 FOR DETAILS.
- INDICATES 5" CONCRETE SLAB w/ FIBERMESH OR 6x6-W1.4xW1.4 WWF. PROVIDE 4" CONCRETE SLAB w/ FIBERMESH OR 6x6-W1.4xW1.4 WWF OUTSIDE OF INDICATED HATCHED AREA. SEE 9 / S2.0 FOR ADDITIONAL SLAB INFORMATION.

HOLDOWN SCHEDULE

TYPE	MEMBER FASTENERS	MIN.MEMBER SIZE	ANCHORAGE TO CONCRETE		
			TYPE	DIAMETER	EMBEDMENT
HDUE5-SDS3	(10) 1/4" x 3" SDS	3" x 3 1/2"	SBS/8x24	5/8"	18"

NOTES:
1. ALL HOLDOWNS INDICATED ARE SIMPSON STRONG-TIE. INSTALL PER MANUFACTURER'S SPECIFICATIONS.
2. FOR TYPICAL HOLDOWN ANCHORAGE REQUIREMENTS, RE: 1 / S3.2
3. EMBEDMENT INDICATED IS INTO CONCRETE.
4. HOLDOWNS SHOWN ARE FOR CAST-IN-PLACE, UNLESS NOTED OTHERWISE.

FOOTING SCHEDULE

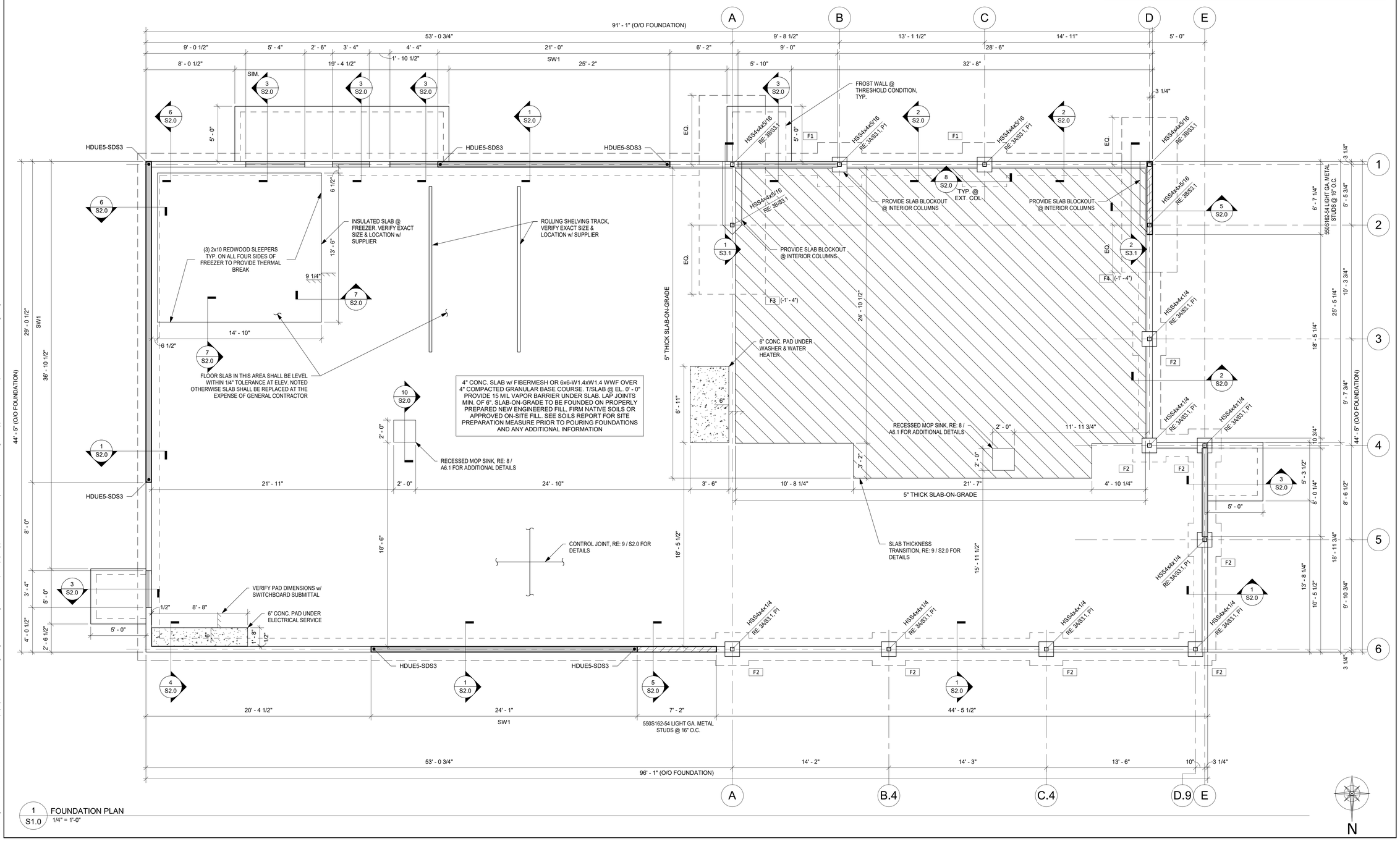
MARK	SIZE	BOTTOM REINFORCING	TOP REINFORCING
F1	4' - 0" x 4' - 0" x 1' - 0"	(5) #5 EA. WAY BOTT.	N/A
F2	3' - 0" x 3' - 0" x 1' - 0"	(4) #5 EA. WAY BOTT.	N/A
F3	6' - 0" x 18' - 0" x 3' - 0"	(14) #7 LONG. & #6 @ 12" O.C. TRANS.	(14) #7 LONG. & #6 @ 12" O.C. TRANS.
F4	5' - 0" x 14' - 0" x 3' - 0"	(11) #7 LONG. & #6 @ 12" O.C. TRANS.	(11) #7 LONG. & #6 @ 12" O.C. TRANS.

PIER SCHEDULE

MARK	SIZE	REINFORCING	REMARKS
P1	1' - 4" x 1' - 4"	(4) #6 VERT. w/ #4 TIES @ 12" O.C.	SEE DETAIL 8 / S2.0

FOUNDATION PLAN NOTES:

1. TOP OF FOOTING @ EL. (-2' - 8") UNLESS NOTED OTHERWISE.
2. TOP OF PIER @ EL. (-0' - 8") UNLESS NOTED OTHERWISE.
3. SEE SHEETS S4.0 - S4.7 FOR GENERAL STRUCTURAL NOTES.
4. PROVIDE POSITIVE DRAINAGE TO ALL FLOOR DRAINS/SINKS (MIN. 6" BEYOND. DRAIN) . SEE PLUMBING DRAWINGS FOR EXACT LOCATIONS.
5. SEE SHEET S2.0 FOR TYPICAL CORNER BAR DETAILS.
6. MINIMUM REQUIREMENTS FOR SILL PLATE CONNECTION TO FOUNDATION:
   MINIMUM # OF BOLTS = (2) PER PIECE OF SILL
   MAXIMUM DISTANCE FROM END OF SILL TO ANCHOR = 12"
   MINIMUM DISTANCE FROM END OF SILL TO ANCHOR = 4"
7. WHERE SILL PLATES ARE NOT CONTINUOUS AT ALL LOCATIONS EXCEPT SHEAR WALLS, USE SIMPSON "RPS22Z" TIE FOR NOTCH < 5 1/2", USE SIMPSON "RPS28Z" TIE FOR NOTCH < 12", w/ 16d NAILS INTO SILL PLATE ENDS (MAX. SPACING BETWEEN STUDS - 16" O.C.).
8. WHERE SILL PLATES ARE NOT CONTINUOUS AT SHEAR WALLS, CONTACT ENGINEER OR RECORD FOR RESPONSE.
9. SEE SHEET S2.1 FOR RE-ENTRANT CORNER BAR DETAILS AND CONCRETE FOUNDATION WALL/FOOTING PENETRATION DETAILS.



1 S1.0 FOUNDATION PLAN
1/4" = 1'-0"

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BRIAN JAMES SIELAFF
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DATE ISSUED: 07-15-26

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NATIONAL #: 46237

PROJECT #: 26-125

DRAWN BY: JMS

CHECKED BY: BS

DATE:
07/15/26 - PERMIT / BID SET

REVISIONS

CLIENT
McDonald's USA, LLC

PROTOTYPE
BB20 4590 WW-HB
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600 SCHUG AVENUE
PECULIAR, MO 64078

SHEET TITLE
FOUNDATION PLAN

SHEET NUMBER:
S1.0

LEGEND:

- INDICATES FRAMING SHEAR WALL. SEE SHEAR WALL SCHEDULE AND S3.2 FOR SHEAR WALL INFORMATION.
- INDICATES METAL STUD FRAME WALL. SEE 5 / S2.0 FOR DETAILS.
- INDICATES ALLOWABLE RTU PLACEMENT ZONE. RTU VENDOR/SUPPLIER, MODEL AND WEIGHTS, SHALL BE VERIFIED PRIOR TO INSTALLATION FOR COORDINATION AND FINAL TRUSS DESIGN VERIFICATION. G.C. TO PROVIDE (2) - 2x8 HDRS. BELOW RTU CURBS PER DETAIL 4 / S3.2 AND COORDINATE LOCATIONS WITH MANUFACTURER CURB SPECIFICATIONS.
- INDICATES RTU SUPPLY/RETURN ROOF DECK PENETRATIONS. G.C. TO PROVIDE (2) - 2x8 HDRS. AT PERIMETER OF ALL PENETRATIONS/OPENINGS PER DETAIL 4 / S3.2 AND COORDINATE EXTENT WITH MANUFACTURER SPECIFICATIONS.

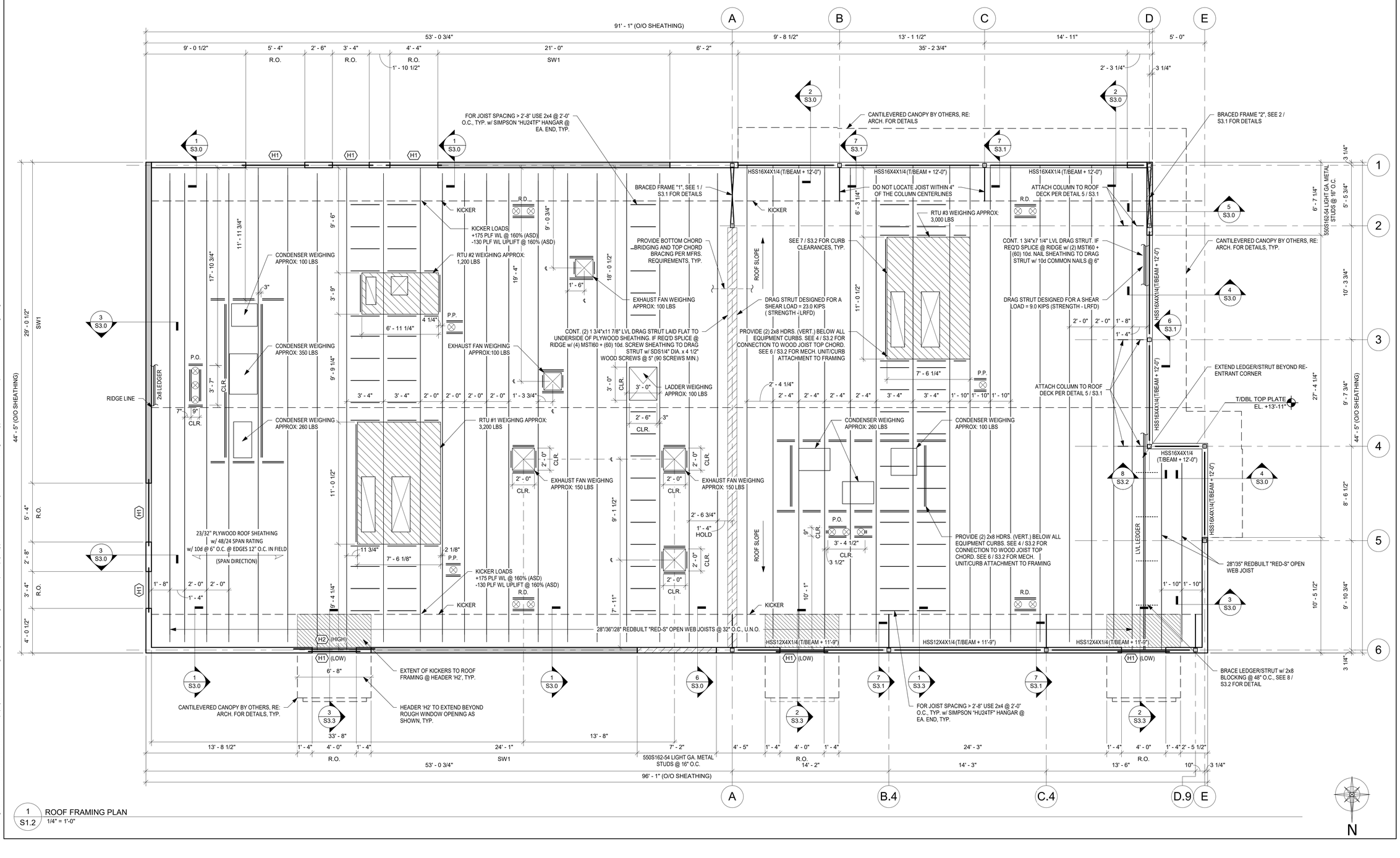
HEADER SCHEDULE

MARK	HEADER SIZE	KING STUD	TRIMMER STUD
H1	5 1/4" x 9 1/2" LVL	(2)2x6	(2)2x6
H2	5 1/4" x 16" LVL	(2)2x6	(2)2x6

NOTES:
1. ALL HEADER'S NOT LABELED ON PLANS SHALL BE H1.
2. FOR HEADER CONNECTIONS, RE: 2 / S3.2.

FRAMING PLAN NOTES:

1. SEE SHEETS S.4.0 - S4.7 FOR GENERAL STRUCTURAL NOTES.
2. R.D.: ROOF DRAINS. RE: 4 / S3.2 FOR SUPPORT FRAMING FOR OPENINGS.
3. P.O.: ROOF CURB PORTAL OPENING - COORDINATE WITH MECHANICAL DRAWINGS. RE: 4 / S3.2 FOR SUPPORT FRAMING FOR OPENINGS.
4. WHEN TOP PLATES ARE NOT CONTINUOUS, USE SIMPSON "RPS22" TIE FOR NOTCH < 5 1/2", USE SIMPSON "RPS26" TIES FOR NOTCH < 12" w/ 16d NAILS INTO TOP PLATE ENDS (MAX. SPACING BETWEEN STUDS = 16" O.C.).
5. TOP PLATE SPLICE SHALL BE MINIMUM LENGTH OF 48" WITH (2) ROWS (2 1/2" APART) OF (22) 16d COMMON NAILS SPACED @ 2" O.C. (44 TOTAL), RE: 3 / S3.4.
6. SEE 5 / S3.2 FOR SNOW DRIFT DIAGRAM.
7. ANY SPRINKLER LINES GREATER THAN 3" DIAMETER SHALL BE VERIFIED BY THE SPRINKLER CONTRACTOR PRIOR TO TRUSS FABRICATION.
8. WALL SHEATHING SHALL BE 15/32" PLYWOOD SHEATHING, EXPOSURE 1, 32/16 SPAN RATING. ALL WALL SHEATHING SHALL BE FASTENED TO SUPPORTING MEMBERS w/ 8d COMMON NAILS @ 6" O.C. AT PANEL EDGES AND 12" O.C. AT INTERMEDIATED SUPPORTS, U.N.O.
9. P.P.: PIPE PORTAL OPENING - COORDINATE WITH MECHANICAL DRAWINGS. RE: 4 / S3.2 FOR SUPPORT FRAMING FOR OPENINGS.



1 S1.2 ROOF FRAMING PLAN
1/4" = 1'-0"

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6 _____

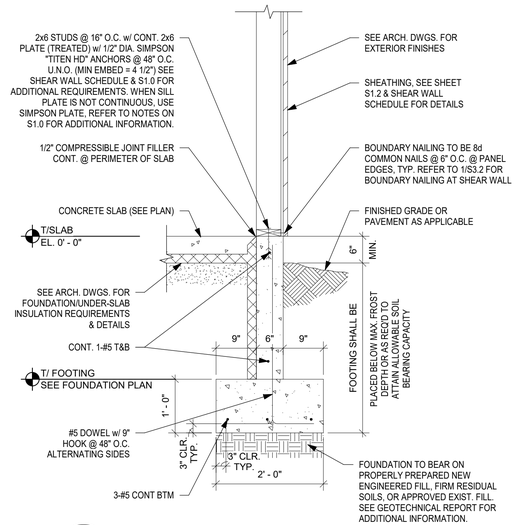
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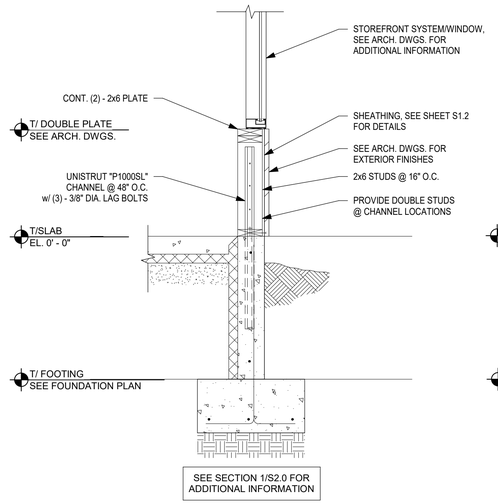
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PECULIAR, MO 64078

SHEET TITLE
FRAMING PLAN

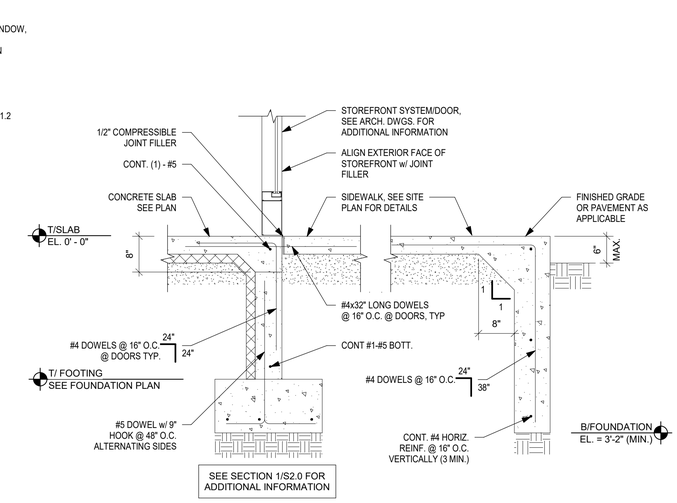
SHEET NUMBER:
S1.2



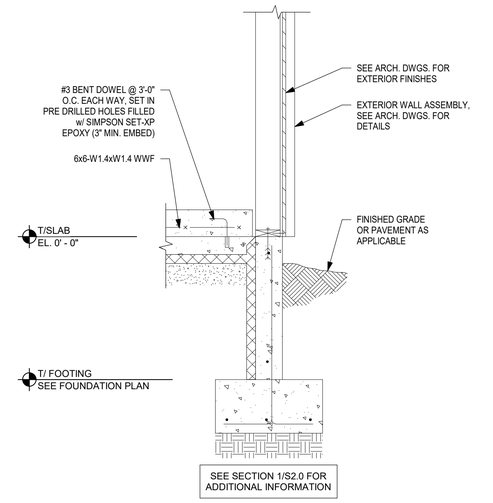
1 S2.0 SECTION (TYPICAL)
3/4" = 1'-0"



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



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



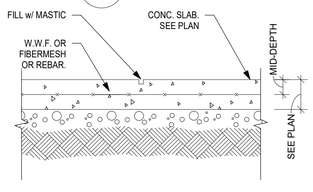
4 S2.0 SECTION @ RAISED SLAB
3/4" = 1'-0"

5 S2.0 SECTION @ METAL STUD WALL
3/4" = 1'-0"

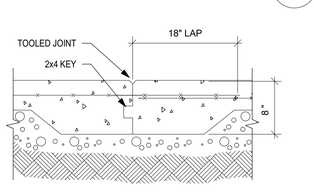
6 S2.0 SECTION @ FREEZER
3/4" = 1'-0"

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

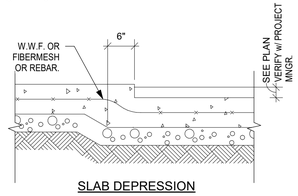
8 S2.0 ISOLATED COLUMN FOOTING DETAIL
3/4" = 1'-0"



CONTROL JOINT
SAWCUT MAX NEXT MORNING AFTER SLAB IS CAST



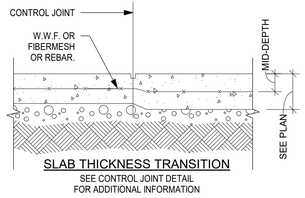
CONSTRUCTION JOINT



SLAB DEPRESSION

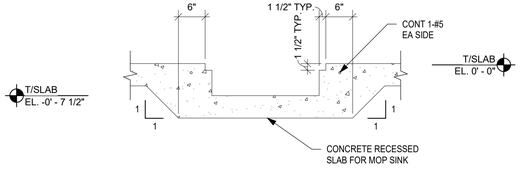
CONTROL JOINTS SHALL BE IN A SQUARE PATTERN OF 400 SQ. FT. AND/OR THE LENGTH SHALL NOT BE MORE THAN 2x WIDTH. ALIGN WITH COLUMN CENTER LINES.

SLAB-ON-GRADE TO BEAR ON PROPERLY PREPARED NEW ENGINEERED FILL, FIRM RESIDUAL SOILS, OR APPROVED EXIST. FILL. SEE GEOTECHNICAL REPORT FOR ADDITIONAL INFORMATION.



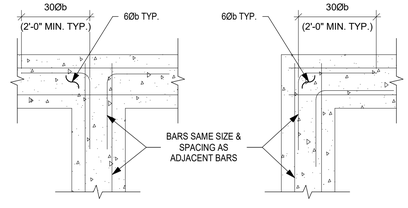
SLAB THICKNESS TRANSITION
SEE CONTROL JOINT DETAIL FOR ADDITIONAL INFORMATION

9 S2.0 SLAB ON GRADE DETAILS
N.T.S.



NOTE:
1. WHERE PREFAB MOP SINK IS USED, DEPTH TO BE 8 7/8" TO ACCOMMODATE FACTORY-BUILT MOP SINK DIMENSION

10 S2.0 RECESSED SLAB DETAIL
3/4" = 1'-0"



TYPICAL CORNER BAR DETAIL

11 S2.0 CORNER BAR DETAILS
N.T.S.

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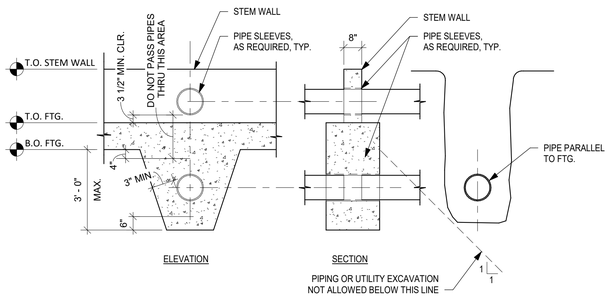
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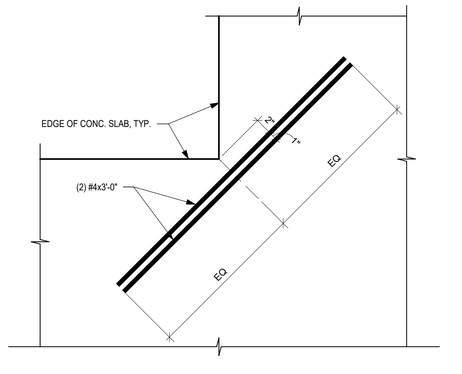
ADDRESS
600 SCHUG AVENUE
PECULIAR, MO 64078

SHEET TITLE
FOUNDATION DETAILS

SHEET NUMBER:
S2.0



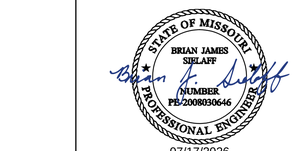
1 S2.1 TYPICAL CONCRETE FOUNDATION WALL AND FOOTING PENETRATION
N.T.S.



NOTES:
1. CORNER REINF. TO BE CENTERED IN SLAB.
2. DO NOT SAW CUT OR PLACE JONTS IN AREA OF REINFORCING THAT ALLOWS MOVEMENT.

2 S2.1 REINF. AT RE-ENTRANT CORNERS
N.T.S.

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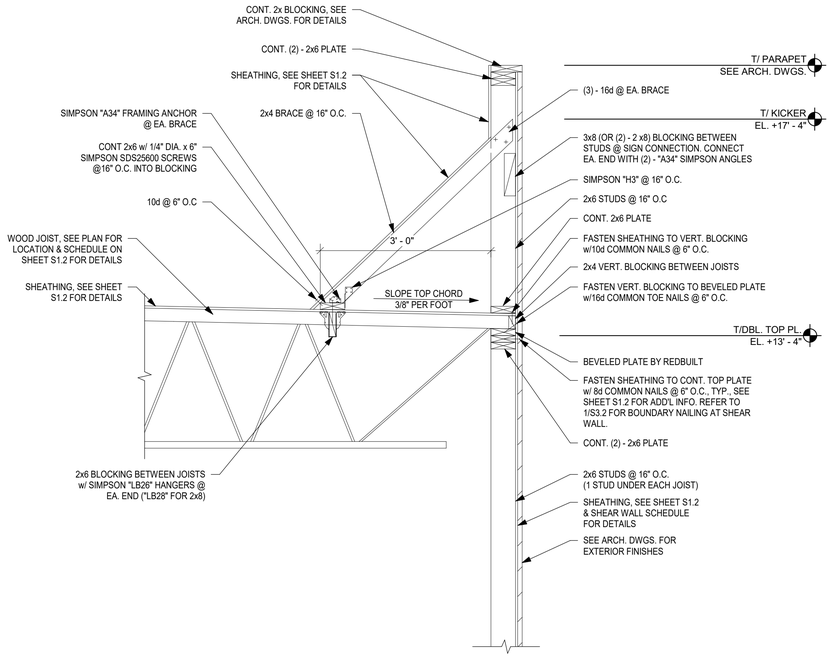
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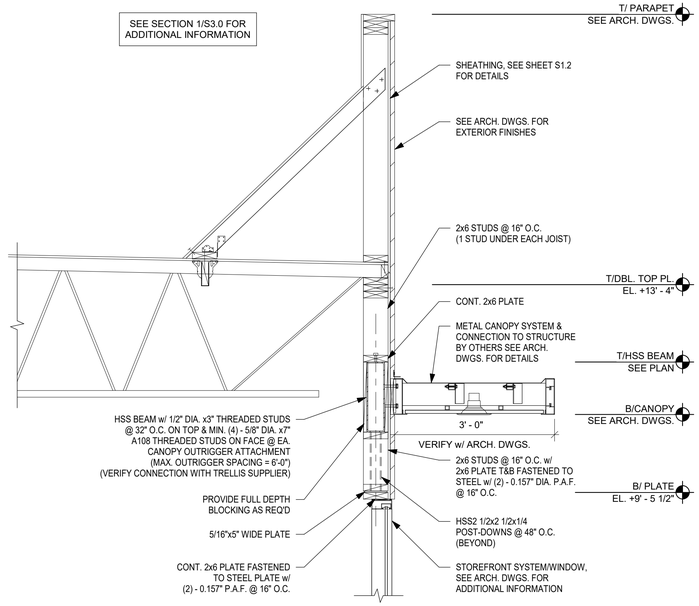
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FOUNDATION DETAILS

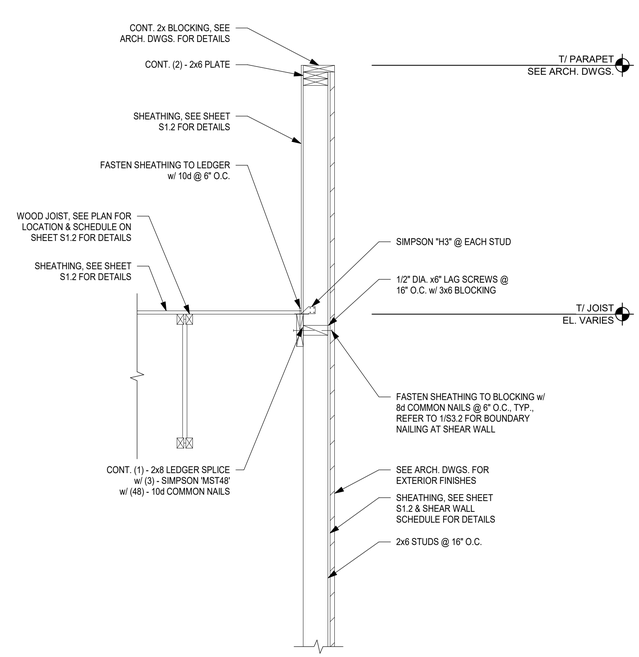
SHEET NUMBER:
S2.1



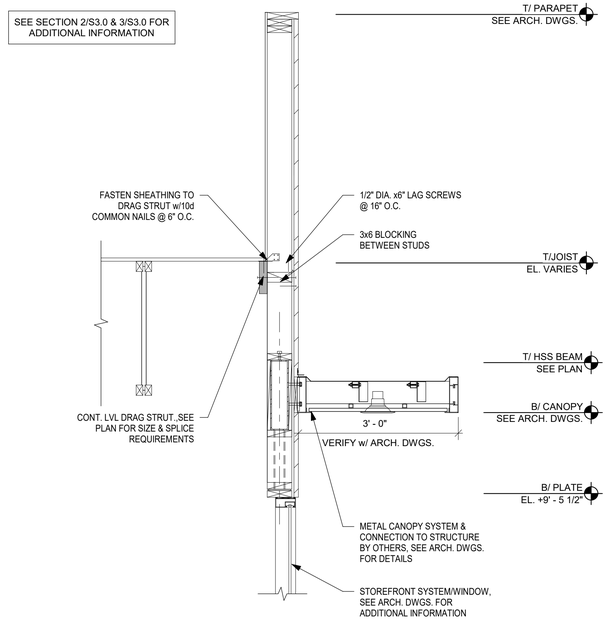
1 S3.0 SECTION (PERPENDICULAR TO TRUSS)
3/4" = 1'-0"



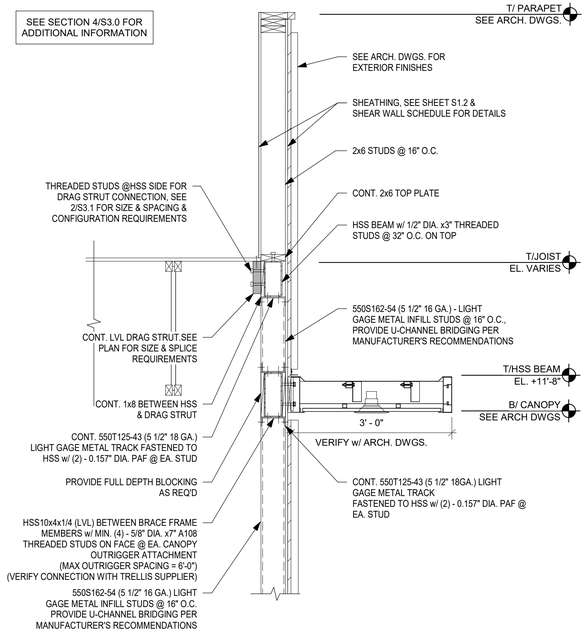
2 S3.0 SECTION @ CANOPY (PERPENDICULAR TO TRUSS)
3/4" = 1'-0"



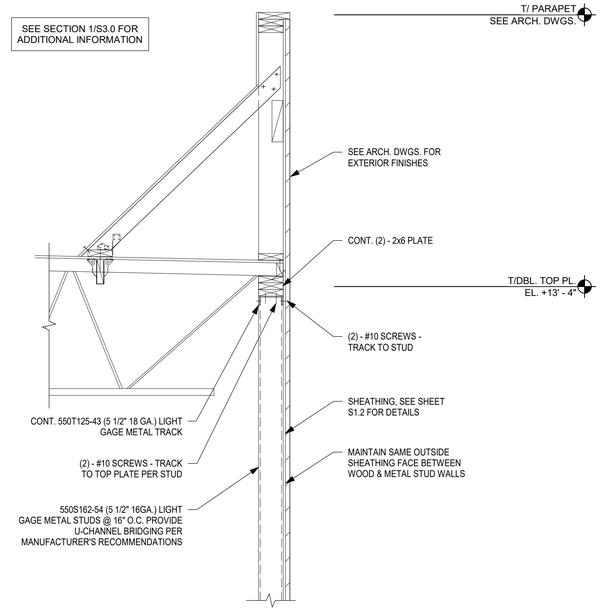
3 S3.0 SECTION (PARALLEL TO TRUSS)
3/4" = 1'-0"



4 S3.0 SECTION @ CANOPY (PARALLEL TO TRUSS)
3/4" = 1'-0"



5 S3.0 SECTION @ CANOPY (PARALLEL TO TRUSS)
3/4" = 1'-0"



6 S3.0 SECTION @ METAL STUD WALL (PERPENDICULAR TO TRUSS)
3/4" = 1'-0"

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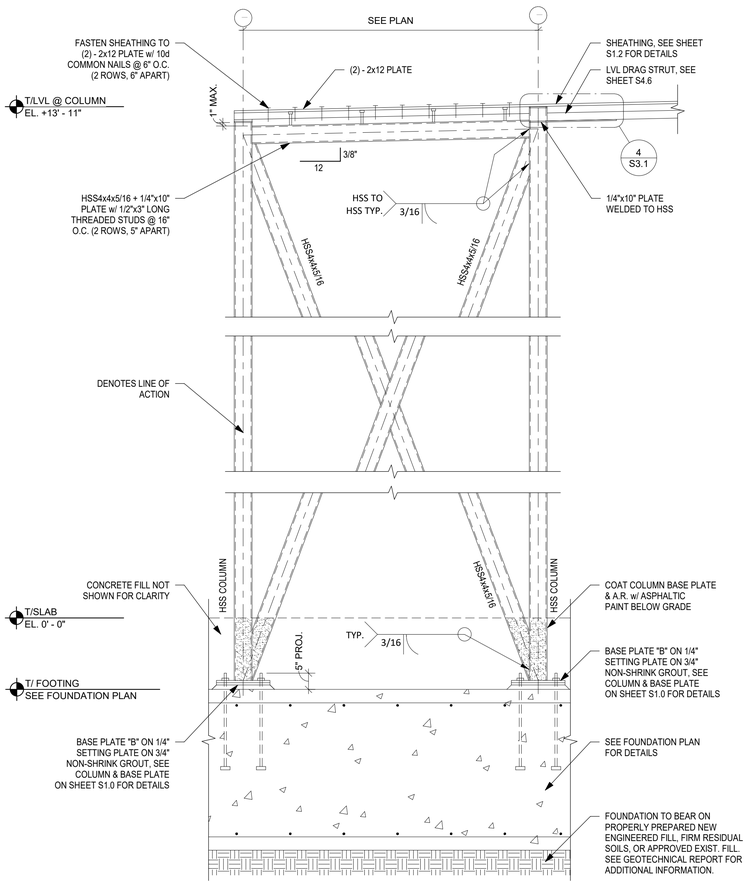
McDonald's USA, LLC

PROTOTYPE
BB20 4590 WW-HB
ISSUE DATE 06/26

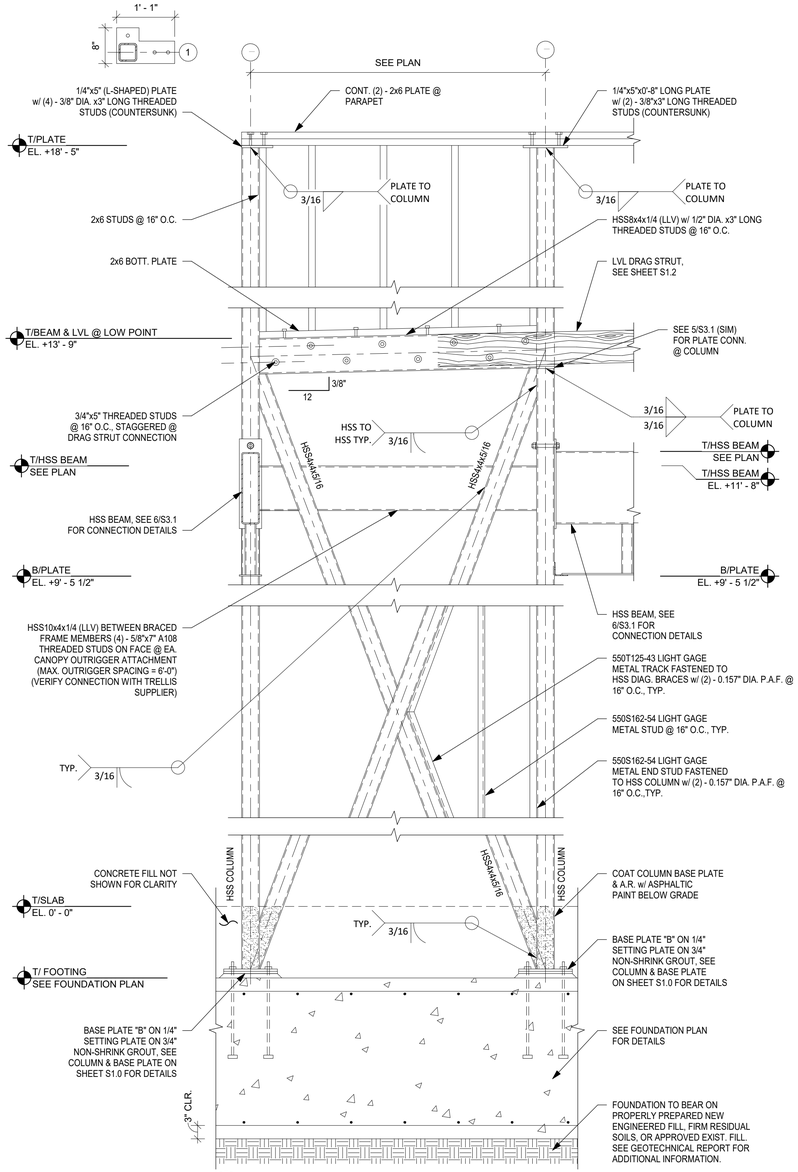
ADDRESS
600 SCHUG AVENUE
PECULIAR, MO 64078

SHEET TITLE
FRAMING SECTIONS

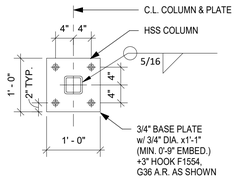
SHEET NUMBER:
S3.0



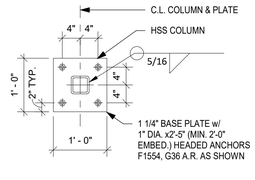
1 S3.1 BRACED FRAME DETAIL AT INTERIOR
3/4" = 1'-0"



2 S3.1 BRACED FRAME DETAIL AT EXTERIOR
3/4" = 1'-0"

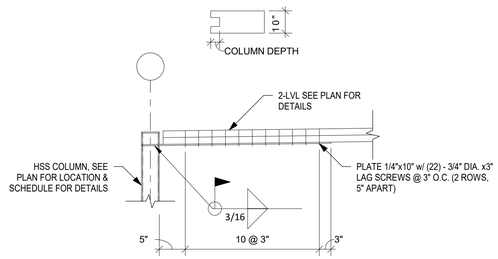


BASE PLATE A

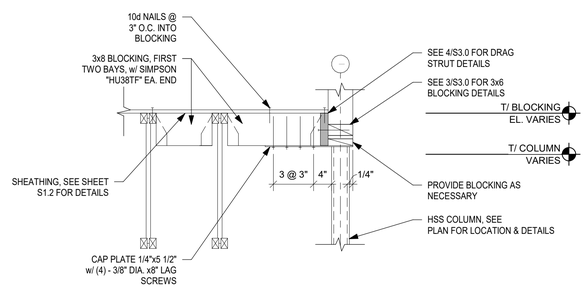


BASE PLATE B

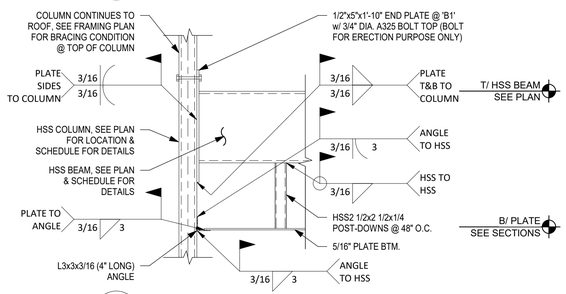
3 S3.1 BASEPLATE DETAILS
N.T.S.



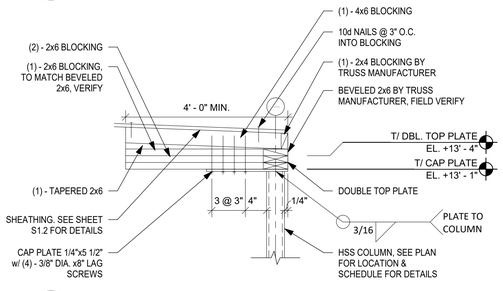
4 S3.1 DRAG STRUT CONNECTION DETAIL
3/4" = 1'-0"



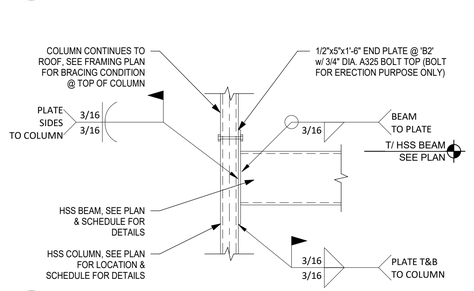
5 S3.1 COLUMN BRACING DETAIL
3/4" = 1'-0"



6 S3.1 HSS BEAM CONNECTION DETAIL
3/4" = 1'-0"



7 S3.1 COLUMN BRACING DETAIL
3/4" = 1'-0"



8 S3.1 HSS BEAM CONNECTION DETAIL
3/4" = 1'-0"

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STATE OF MISSOURI
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DATE ISSUED: 07-15-26

STATE ID: 24134Z

NATIONAL #: 46237

PROJECT #: 26-125

DRAWN BY: JMS

CHECKED BY: BS

DATE:
07/15/26 - PERMIT / BID SET

REVISIONS

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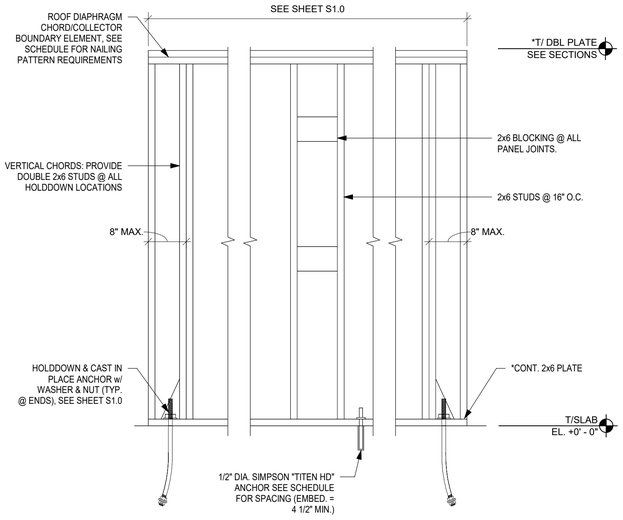
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SHEET TITLE
STEEL DETAILS

SHEET NUMBER:
S3.1

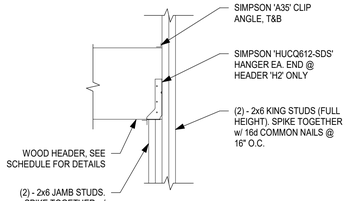


SHEAR WALL SCHEDULE

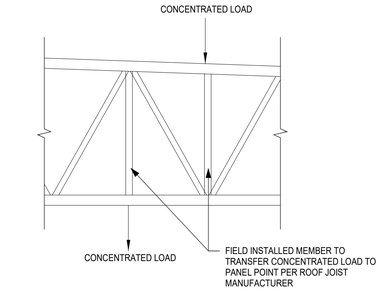
MARK	MATERIAL SIZE AND LAYOUT	FASTENER SIZE	FASTENER SPACING		SILL ANCHORAGE		TOP PLATE FASTENER AND SPACING
			FIELD	EDGE	TYPE	SIZE AND SPACING	
SW1	15/32" SHEATHING, EXTERIOR SIDE	8d	12"	6"	TITEN HD	1/2" DIA. @ 40" O.C.	16d TOE NAIL @ 6" O.C.

NOTES:
1. SHADED WALLS DENOTE SHEARWALL LOCATIONS.
2. FOR TYPICAL SILL PLATE ANCHORAGE REQUIREMENTS, RE: 8 / S3.4
3. FOR TYPICAL SHEAR WALL FRAMING REQUIREMENTS, RE: 1 / S3.2
4. SILL ANCHORAGE SHOWN IS FOR CAST-IN-PLACE, UNLESS NOTED OTHERWISE.
5. SW1 INDICATES SHEARWALL LENGTH & TYPE. (#'-#")
6. NAIL WALL SHEATHING TO ROOF DIAPHRAGM CHORD & TO EA. MEMBER/WALL VERTICAL CHORD w/ 10d COMMON NAILS @ 6" O.C., U.N.O.

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



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



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

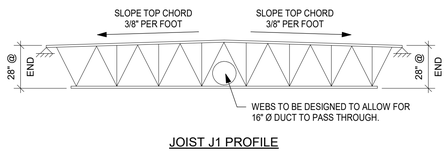
1. FOR NATIONAL ACCOUNT PACKAGE & PRICING CONTACT REDBUILT @ 1-866-859-6757

2. JOIST MFGR. TO VERIFY SIZE AT HVAC ROOF TOP UNITS.

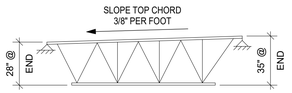
HEADER	HANGER
2x6	LUS26
(2) - 2x6	LUS26-2
2x8	LUS28
(2) - 2x8	LUS28-2
2x10	LUS210
(2) - 2x10	LUS210-2

FOR OPENINGS < 1'-4" USE (1) - 2x6
FOR OPENINGS > 1'-4" AND < 4'-0" USE (2) - 2x8
FOR OPENINGS > 4'-0" AND < 6'-0" USE (2) - 2x10

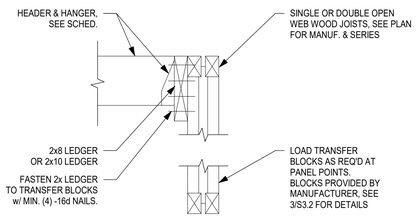
3. ALL JOISTS SHALL BE DESIGNED FOR THE FOLLOWING NET UPLIFT.
115 MPH (BASIC) - 8 PSF SERVICE (ASD: 0.6D + 0.6W)



JOIST J1 PROFILE

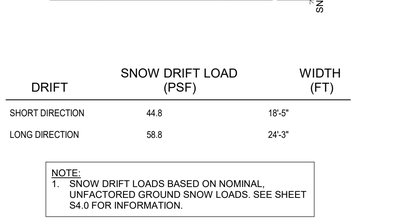


JOIST J2 PROFILE



LOAD TRANSFER BLOCKS CONCENTRATED LOADS

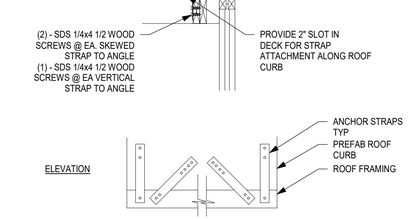
4 S3.2 JOIST NOTES
N.T.S.



DRIFT	SNOW DRIFT LOAD (PSF)	WIDTH (FT)
SHORT DIRECTION	44.8	18'-5"
LONG DIRECTION	58.8	24'-3"

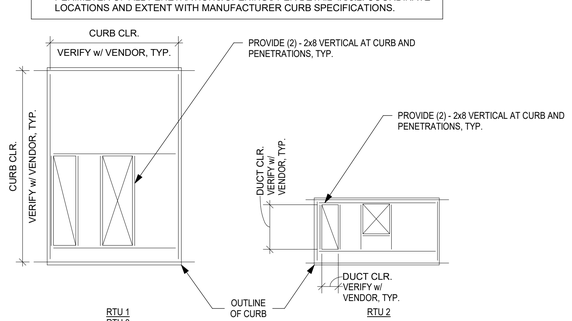
NOTE:
1. SNOW DRIFT LOADS BASED ON NOMINAL, UNFACTORED GROUND SNOW LOADS. SEE SHEET S4.0 FOR INFORMATION.

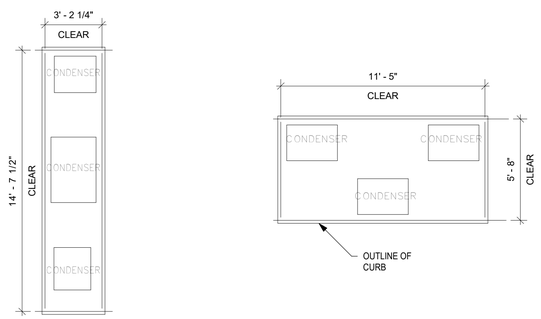
5 S3.2 SNOW DRIFT DIAGRAM/SCHEDULE
N.T.S.



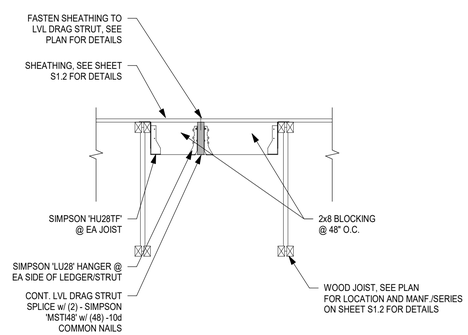
6 S3.2 SECTION
3/4" = 1'-0"

NOTE:
1. RTU VENDOR/SUPPLIER AND MODEL SHALL BE VERIFIED PRIOR TO INSTALLATION. G.C. TO PROVIDE (2) - 2x8 HDRS. BELOW ALL CURBS AND AT PERIMETER OF ALL PENETRATIONS/OPENINGS PER DETAIL 4/S3.2. COORDINATE LOCATIONS AND EXTENT WITH MANUFACTURER CURB SPECIFICATIONS.





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



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

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STATE ID: 241342

PROJECT #: 26-125

NATIONAL #: 46237

DRAWN BY: JMS

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6 _____

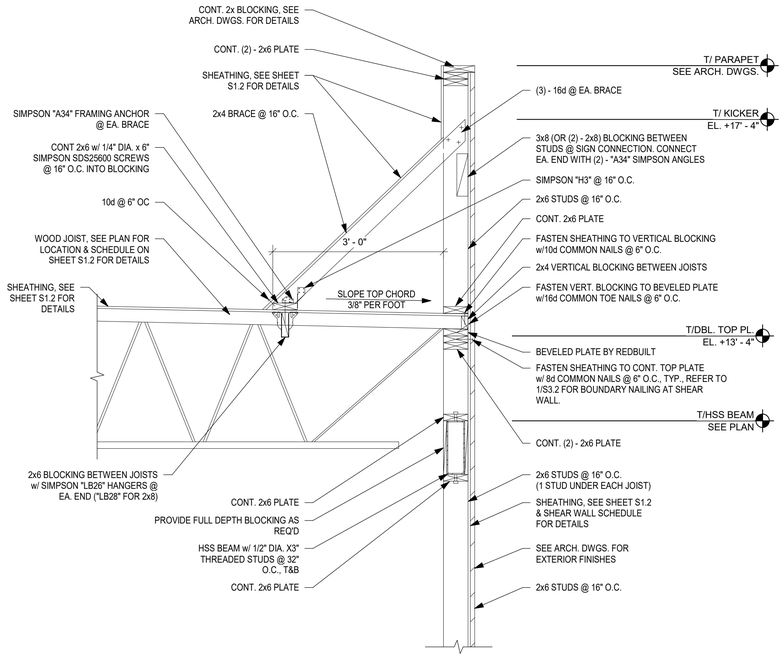
CLIENT
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PROTOTYPE
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ISSUE DATE 06/26

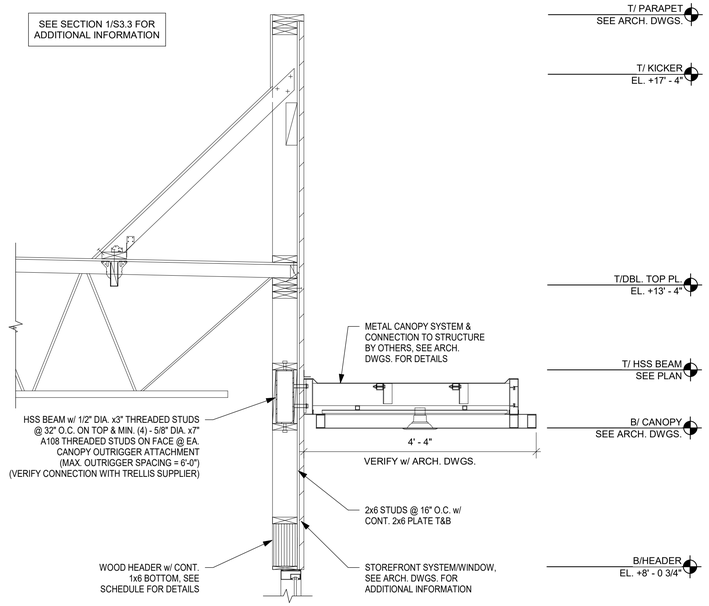
ADDRESS
600 SCHUG AVENUE
PECULIAR, MO 64078

SHEET TITLE
DETAILS

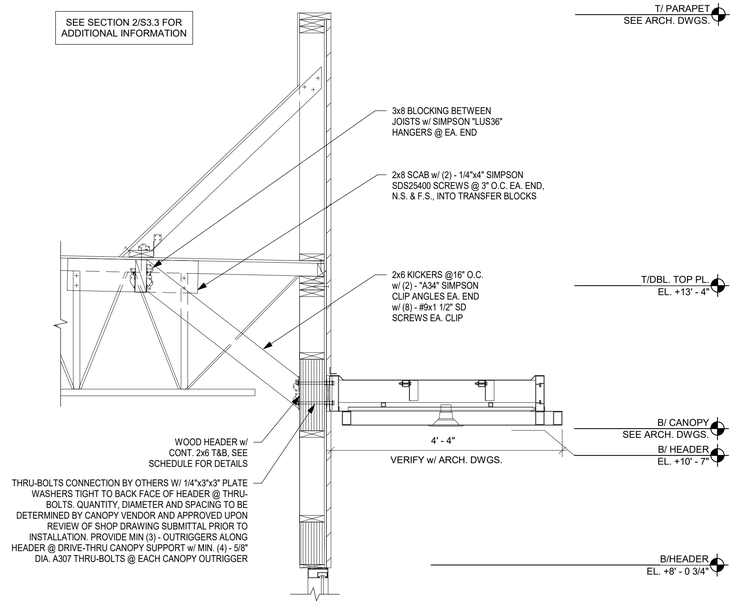
SHEET NUMBER:
S3.2



1 S3.3 SECTION @ HSS HEADER
3/4" = 1'-0"



2 S3.3 SECTION @ HSS HEADER OVER THE OPENING
3/4" = 1'-0"



3 S3.3 SECTION @ WOOD HEADER OVER THE OPENING
3/4" = 1'-0"

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PROJECT #:
26-125

DRAWN BY:
JMS

CHECKED BY:
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DATE:
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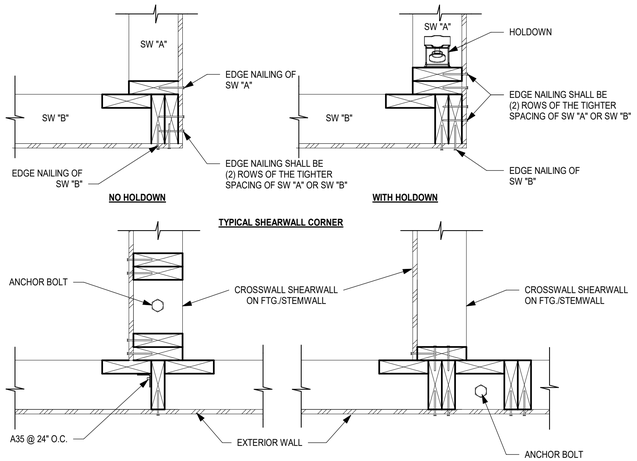
CLIENT
McDonald's USA, LLC

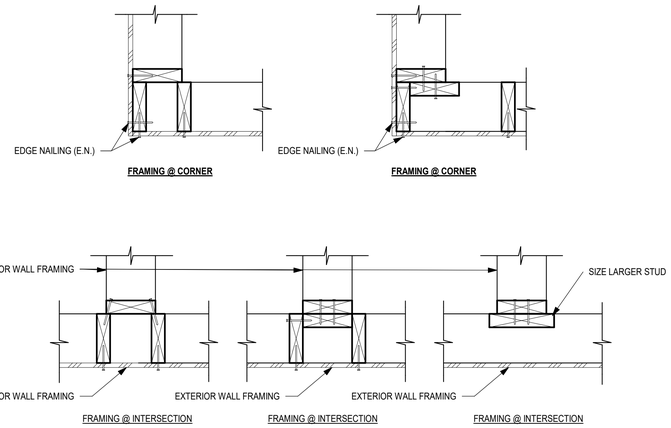
PROTOTYPE
BB20 4590 WW-HB
ISSUE DATE 06/26

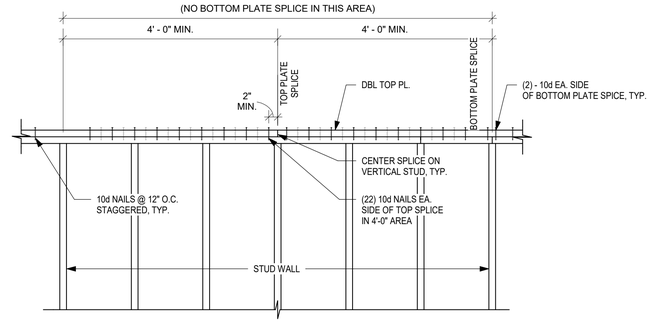
ADDRESS
600 SCHUG AVENUE
PECULIAR, MO 64078

SHEET TITLE
FRAMING SECTIONS

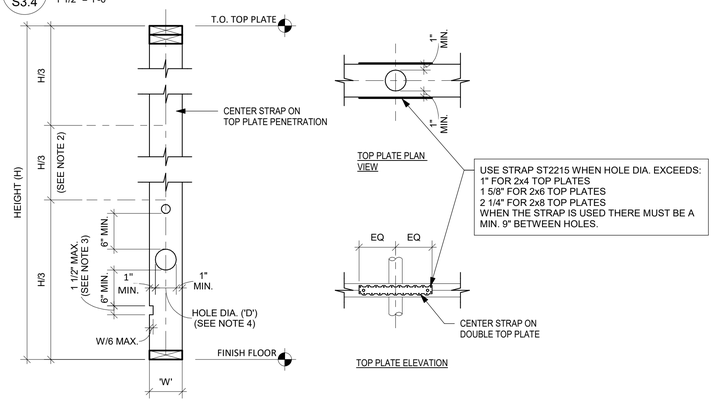
SHEET NUMBER:
S3.3







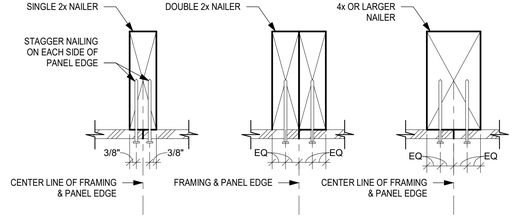
1 S3.4 SHEAR WALL INTERSECTION & CORNER DETAILS
1 1/2" = 1'-0"



NOTES:
1. BORING, CUTTING, & NOTCHING WALL FRAMING OTHER THAN INDICATED HERE REQUIRES APPROVAL FROM STRUCTURAL ENGINEER.
2. BORING, CUTTING, & NOTCHING WITHIN THE MIDDLE 1/3 OF THE STUD HEIGHT IS NOT ALLOWED WITHOUT PROPER APPROVAL FROM STRUCTURAL ENGINEER.
3. NOTCHING IN THE FACE OF THE STUD AS SHOWN, IS PERMITTED.
4. MAXIMUM BORED HOLE DIAMETER IN STUD IS LIMITED TO 25% "W" AT BUILT-UP STUDS & HOLDOWN ANCHOR LOCATIONS.

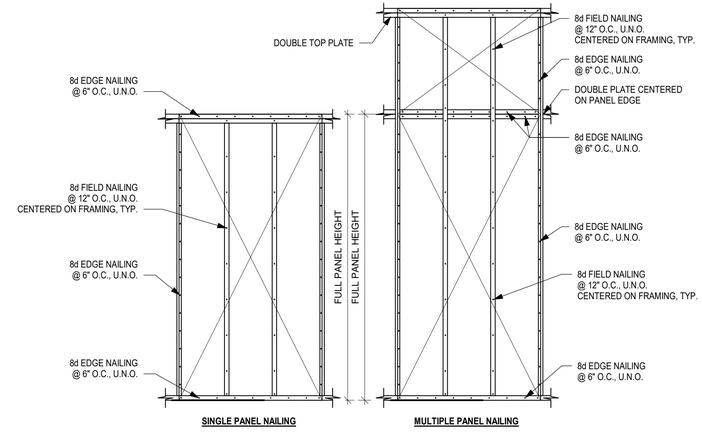
4 S3.4 STUD BORRING, CUTTING & NOTCHING
1" = 1'-0"

2 S3.4 TYPICAL FRAMING INTERSECTIONS
1 1/2" = 1'-0"

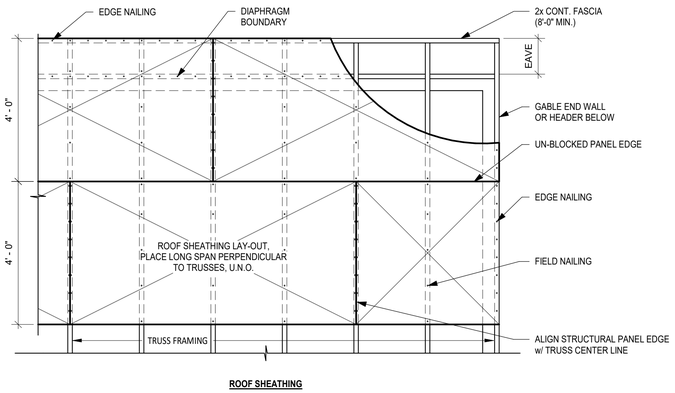


5 S3.4 EDGE NAILING SECTIONS
3" = 1'-0"

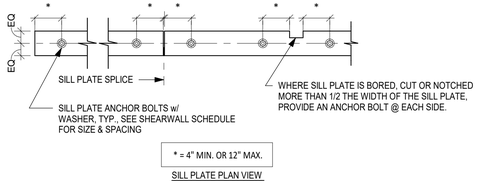
3 S3.4 WALL TOP PLATE SPLICE DETAIL
3/4" = 1'-0"



6 S3.4 TYPICAL PLYWOOD PANEL NAILING
1/2" = 1'-0"



7 S3.4 ROOF DIAPHRAGM/SHEATHING NAILING (TYPICAL)
1/2" = 1'-0"



NOTES:
1. ALL EMBEDDED ANCHOR BOLTS SHALL BE A36 OR A307 STEEL w/ SIMPSON BPS 5/8-6 PLATE WASHERS.
2. TYPICAL SILL PLATE ANCHOR TO BE 1/2" DIA. ANCHOR BOLTS w/ 4 1/2" EMBEDMENT INTO CONCRETE @ 32" O.C., MAX. (2) ANCHORS MIN. PER WALL, U.N.O.
3. ALL PLATES AND WOOD INSTALLED WITHIN 1" OF CONCRETE OR MASONRY SHALL BE PRESSURE TREATED OR HAVE SUFFICIENT WEATHER RESISTANT PROPERTIES.
4. ANCHOR BOLT HOLES IN SILL PLATE SHALL BE 1/32" TO 1/16" MAX. LARGER THAN BOLT DIA.

8 S3.4 SILL PLATE ANCHORAGE
3/4" = 1'-0"

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ADDRESS
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PECULIAR, MO 64078

SHEET TITLE
DETAILS

SHEET NUMBER:
S3.4

S00 00 00 - Project Information

2026-04-10

Project and Scope

Single-story commercial restaurant building for McDonald's, approx. 4,187sf in area. The structure will consist of wood framed and light-gauge metal walls, pre-engineered framing, and shallow concrete foundations.

Delegated Design of Structural Elements

Design of the following items are delegated by the *Engineer* to the identified party:

1. Open web joists and calculations.
2. Trellis system and calculations.

Deferred Submittals Pertaining to Structural Elements

Deferred Submittals are design information for portions of the *Project* that are not submitted to the *Building Official* at the time of permit application and that are to be submitted at a later date. The following is a list of *Deferred Submittals* pertaining to structural elements (See drawings for other disciplines for additional Deferred Submittals if any):

1. Concrete mix design.
2. Foundation reinforcing bar.
3. Structural steel.
4. Open web joists and calculations.
5. Roof sheathing.
6. Trellis system and calculations.
7. Laminated veneer lumber (LVL).
8. Sawn lumber and connectors.

Statement of Special Inspection

1. *Special Inspection and Testing* - Inspection of construction requiring the expertise of an approved *Special Inspector* in order to ensure compliance with the building code and the *Construction Documents*. This is to be performed in accordance with the *Statement of Special Inspections*. This is distinct and separate from inspections performed by the *Building Official*.
2. This *Project* is subject to the *Special Inspection and Testing* requirements enumerated in these *Structural Drawings*, and the *Contractor* shall be responsible for coordinating and meeting those requirements.
3. The *Owner* shall employ an independent approved testing agency to oversee and inspect the portions of structural work requiring special inspection in accordance with the *Schedules of Special Inspection* listed in each division of these *Structural Specifications*.
4. The *Engineer* is not the *Special Inspector*; site visits of any sort by the *Engineer* shall not be considered as any form of inspection.
5. The *Special Inspector* shall observe structural work performed for compliance with the code, standards, and these *Structural Drawings*.
6. The *Contractor* shall make accommodations for *Special Inspections and Testing* without additional cost to the *Owner*. If work to be inspected is covered prior to inspections being performed, the *Contractor* shall be responsible for uncovering as necessary.
7. Each inspection shall be followed by a report by the *Special Inspector* to the *Engineer*, *Contractor*, *Building Official*, and *Owner*.
8. Discrepancies and/or deficiencies shall be immediately brought to the attention of the *Contractor* for correction and shall be noted in the special inspection report. Items not immediately corrected shall be brought to the attention of the *Engineer* and *Building Official*.
9. Unless otherwise stipulated in the *Contract Documents*, additional testing and/or inspections resulting from the rejection of more than 5% of the work on any inspection item (See *Schedules of Special Inspection*) shall be performed at the exclusive expense of the *Contractor*.
10. At the end of the *Project*, the *Special Inspector* shall prepare a final report identifying all inspections, discrepancies, and the repairs/remediation thereof. This report shall be submitted to the *Engineer*, *Architect*, and *Building Official*.
11. *Special Inspection and Testing* by the *Special Inspector* and/or the *Engineer* does not relieve the *Contractor's* responsibility to provide inspections, testing, and other quality control measures to furnish proper materials and workmanship in accordance with the *Structural Drawings*.
12. As required by the *Governing Code* 1704.4, the *Contractor* and all sub contractors thereto who are responsible for the construction of the *Main Wind Force Resisting System* and/or *Seismic Force Resisting System* shall submit a written statement of responsibility to the *Building Officia*l, *Owner*, *Engineer*, and *Architect* prior to commencement of work on the *LFRS*. This statement of responsibility shall contain acknowledgement of awareness of the special requirements contained in the *Statement of Special Inspection*.

Statement of Structural Observation

1. *Structural Observation* is the visual observation of the structural system(s) by *Engineer* for general conformance with the design intent and the *Structural Drawings*.
2. In addition to the *Structural Observations* listed below, the *Engineer* may periodically and at the *Engineer's* sole discretion, provide discretionary *Structural Observations* for work relevant to these *Structural Drawings*.
3. The *Engineer's Structural Observations* constitute neither *Special Inspection* nor any guarantee of the *Contractor's* work; the *Contractor* retains the responsibility for acts, omissions, and/or failure to complete the structure in accordance with these *Structural Drawings*.
4. The *Contractor* shall notify the *Engineer* when the *Project* has reached the following milestones to permit on-site *Structural Observations*:

Governing Codes and Standards

1. This *Project* was designed according to and is subject to the requirements of the *Governing Code*: 2012 International Building Code.
2. All codes and standards listed herein are as referenced and amended by the *Building Official*.
3. Where the specific edition of referenced codes and/or standards are not specified in the *Construction Documents* or the *Governing Code*, the *Contractor* shall use the latest edition published as of the date on the *Construction Documents*.

Definitions

Construction Documents - Written, graphic, and pictorial documents prepared or assembled for describing the design, location and physical characteristics of the elements necessary to complete the *Project*.

Contract Documents - Generally, all of the drawings, specifications, contracts, and other documents that define the roles, responsibilities, and work to be performed under the construction contract. Refer to the Owner-Contractor Agreement for a detailed definition and itemization of *Contract Documents*.

Owner - The owner of the *Project*, not necessarily the legal owner of the property (e.g. tenant infill projects inside of a building owned by another party).

Project - The *Project* consists of the design, construction, and development of building(s), structure(s), and/or infrastructure on the *Owner's* property as depicted in the *Construction Documents*.

Specialty Engineer - An engineer with specialized expertise typically employed or retained by the *Contractor* to design specialty structural components where such design is delegated by Engineer. e.g. cold formed steel framing, steel joists, tilt-up concrete, wood trusses, metal building systems, precast/prestressed concrete, or post tensioned slab systems.

Structural Drawings - This package of drawings that are prepared by the *Engineer* and describe the structural portions of the *Project*.

Structural Specifications - The sheets of the *Structural Drawings* labeled as such, that contain detailed information regarding procedures and material specific construction information that is pertinent to the structural portions of the *Project*. Unless otherwise stipulated, this information is deliberately included in the *Structural Drawings* and not in a separate project manual by the *Engineer* so that it is more likely to be preserved for future changes to the structure and to ensure conformity with the structural design intent.

These drawings, as instruments of service, are, and shall remain, the property of Tamarack Grove Engineering. Use of this drawing is limited to the specified project by persons named hereon. Any use or reuse of said drawings is strictly prohibited without written permission of Tamarack Grove Engineering

S00 10 00 - Design Loads and Criteria

2026-04-17

Risk Category	Lowest Anticipated Service Temp.	Geotechnical Information			
II	N/A	Minimum Allowable Bearing Pressure	2,000 psf	Frost Depth	36 in

Lowest Anticipated Service Temperature (LAST) is provided as an estimate for reference in steel seismic systems where ASTM D1.8 is applicable. It is based on historic climate data available to the *Engineer* at the time of design and is not a guarantee of actual in-service conditions.

Live Loads

Refer to structural loading sheets (when included) for detailed information regarding live loads and applicable areas.

Live Load Reduction Factors Have Not been used in the design of the structure.

Occupancy/Use	Uniform Load	Concentrated Load	Reducible
Residential	40 psf	N/A	Yes
Offices	50 psf	2,000 lbs	Yes
Office Partitions	15 psf	N/A	N/A
Light Storage	125 psf	N/A	No

Snow Loads

Refer to structural loading sheets (when included) for detailed information regarding snow drifts.

Ground Snow Load (p_g)	Importance Factor (I_s)	Exposure Factor (C_e)	Thermal Factor (C_t)	Slope Factor (C_s)	Flat Roof Snow Load (p_f)
20.0 psf	1.00	1.00	1.00	1.00	20.0 psf

Earthquake Design Data

Site Class	C	S_1	0.068 g	S_S	0.114 g
Importance Factor	1.00	S_{M1}	0.115 g	S_{MS}	0.137 g
Seismic Design Category	B	S_{D1}	0.077 g	S_{DS}	0.091 g

Seismic Force Resisting System (N-S)

SFRS (N-S)	H. Structural steel system not specifically detailed for seismic resistance.				
Response Mod. Factor (R)	3.0	Overstrength Factor (Ω_0)	2.5	Analysis Procedure	ELF (ASCE 7 - 12.8)
Response Coefficient (C_s)	0.03 g	Deflection Amp. Factor (C_d)	3.0	Base Shear (V)	0.03W kip (1.0 E_h)

Seismic Force Resisting System (E-W)

SFRS (E-W)	A.16 Light-frame wood walls with structural shear panels.				
Response Mod. Factor (R)	6.5	Overstrength Factor (Ω_0)	2.5	Analysis Procedure	ELF (ASCE 7 - 12.8)
Response Coefficient (C_s)	0.04 g	Deflection Amp. Factor (C_d)	4.0	Base Shear (V)	0.04W kip (1.0 E_h)

Wind Design Data - MWFRS

Basic Wind Speed (V)	115 mph	Exposure (N-S)	C	Enclosure Classification	[Enclosed]
ASD Wind Speed (V_{asd})	89.1 mph	Exposure (E-W)	C	Internal Presssure Coeff. (GCpi)	[± 0.18]

Wind Design Data - Components and Cladding

Corner Zone Width (a)	Mean Roof Height (h)	Roof Slope (Θ)
4.5 ft	13.5 ft	0.00 degrees

Special Inspections - Wind Resistance

Req'd	Subject of Inspection	Reference	Frequency	Notes
-	Roof cladding.	IBC 1705.10.3	Periodic	-
-	Wall cladding.	IBC 1705.10.3	Periodic	-

Wind Pressures - Components and Cladding

Walls and Gable Roofs 7°-10° - ASCE 7-22 Ch 30 Figure 30.3-1 & 30.3-2A

Zone		Effective Wind Area (A_{EFF})			
		≤ 10 ft²	50 ft²	100 ft²	≥ 500 ft²
Roof	Negative Zone 1	-28.8 psf	-27.1 psf	-26.4 psf	-26.4 psf
	Negative Zone 2	-48.4 psf	-36.4 psf	-31.3 psf	-31.3 psf
	Negative Zone 3	-48.4 psf	-36.4 psf	-31.3 psf	-31.3 psf
	Positive Zone 1	16.0 psf	16.0 psf	16.0 psf	16.0 psf
	Positive Zones 2 & 3	26.4 psf	23.7 psf	22.5 psf	19.8 psf
	Overhang Zone 1 & 2	-41.5 psf	-39.8 psf	-39.1 psf	-26.9 psf
	Overhang Zone 3	-41.5 psf	-39.8 psf	-39.1 psf	-26.9 psf
Walls	Negative Zone 4	-28.6 psf	-24.7 psf	-23.5 psf	-22.0 psf
	Negative Zone 5	-35.2 psf	-27.4 psf	-25.1 psf	-22.0 psf
	Positive Zone 4 & 5	26.4 psf	22.5 psf	21.3 psf	19.8 psf

Wind pressures shown are unfactored (1.0W). Do not interpolate for A_{EFF} between listed values; wind pressures for components with different effective wind areas may be calculated in accordance with ASCE 7 Ch 30 - Part 1 using the above information.

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BRIAN JAMES SIELAFF
NUMBER PE-2008030646
PROFESSIONAL ENGINEER
07/17/2026

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LICENSE EXPIRATION: 12-31-27

DATE ISSUED: 07-15-26

STATE ID: 241342

PROJECT #: 26-125

NATIONAL #: 46237

DRAWN BY: JMS

CHECKED BY: BS

DATE:
07/15/26 - PERMIT / BID SET

REVISIONS

CLIENT

McDonald's USA, LLC

PROTOTYPE

BB20 4590 WW-HB
ISSUE DATE 06/26

ADDRESS

600 SCHUG AVENUE
PECULIAR, MO 64078

SHEET TITLE

STRUCTURAL SPECIFICATIONS

SHEET NUMBER:

S4.0

S01 00 00 - General Requirements

2026-04-10

Structural Drawings

1. All structural work on the *Project* shall be performed in accordance with these *Structural Drawings*.
2. These *Structural Drawings* are not intended to be a stand alone document; successful completion of the *Project* will require information contained in these *Structural Drawings* as well as references listed herein. These references include but are not limited to codes of standard practice, evaluation reports, building codes, manufacturer's instructions, institutional specifications, and drawings of other disciplines.
3. The *Contractor* shall adhere strictly to all limitations and guidelines included in evaluation reports and shall follow all manufacturer's published installation instructions when installing or using a manufactured product specified in these *Structural Drawings*.
4. Unless specifically referenced herein, it is the *Engineer's* intent that all structurally pertinent specifications are included in the *Structural Drawings*.
5. All work shall conform to the local laws and ordinances of the *Building Official* over the *Project* and shall be subject to the codes listed below as adopted and amended therein. In the event of conflict between local, state, and national codes, the most stringent shall govern.
6. Written dimensions have precedent over scaled dimensions, do not attempt to derive information by scaling any portion of the *Structural Drawings*.
7. Deviations from these *Structural Drawings* are not permitted; this includes but is not limited to notches, holes, or other modifications to structural elements.
8. The *Contractor* shall coordinate all requirements in these *Structural Drawings* with those of the *Architect* and all other disciplines and trades prior to commencing work.
9. In the event that conflicting information is present in *Contract Documents*, the *Contractor* shall consult with the *Engineer* and *Architect* for clarification prior to continuing related work; for the purposes of preparing a bid or estimate, until further clarification is provided, the *Contractor* shall assume that the more expensive alternative was the design intent.
10. The *Contractor* shall promptly report to the *Architect* and the *Engineer* any errors, inconsistencies, omissions, and/or ambiguous conditions in the *Contract Documents* discovered by or made known to the *Contractor*.
11. Items not covered by these *Structural Drawings* include but are not limited to: building envelope, moisture intrusion, thermal efficiency, fire and/or smoke protection, life safety systems, rodent and/or vector control, occupancy, land use, zoning, construction type, energy use, plumbing, mechanical, electrical, site civil, traffic or any other design elements governed by OSHA, HUD, HOA, CCR's, and any other portion of the building code or governing law which is not specifically enumerated herein as a referenced standard. See Architectural Drawings and those of other disciplines for additional information pertaining to Project requirements which are beyond the purview of these *Structural Drawings*.

Temporary Conditions and Construction

1. These *Structural Drawings* depict the structural portions of the *Project* in the completed state. These *Structural Drawings* do not and are not intended to convey information regarding the means or methods of construction. The responsibility for the means and methods of construction lies solely with the *Contractor*.
2. During all phases of erection and construction, the *Contractor's* means and methods shall recognize, consider, and safely address the effects of all loads and displacements during construction including loads from hydrostatic conditions, soil, snow, rain, ice, wind, earthquakes, the effects of thermal movement, construction live loads, and the self weight of the structure without causing damage or distress to any element of the structure.
3. Where required, or at the discretion of the *Contractor*, the *Contractor* shall retain a registered professional engineer for the design of any temporary bracing, shoring, and/or erection engineering including any evaluation of the structure in its partially completed form.
4. The *Contractor* shall adhere to and enforce all applicable safety codes and regulations pertaining to construction.

Existing Conditions

1. All existing conditions, dimensions, and elevations shall be field verified by the *Contractor*; the *Contractor* shall notify the *Architect* and the *Engineer* of any discrepancies from the conditions shown on the *Structural Drawings*.
2. Any information contained in the *Structural Drawings* regarding underground or overhead utilities are not guaranteed to be accurate; it shall be the *Contractor's* responsibility to locate and safely avoid all such hazards before and during construction as required by applicable laws.

Submittals

1. The *Contractor* shall provide *Submittals* to the *Engineer* and *Architect* for review as required by the material specific sections of the *Structural Specifications*.
2. The *Contractor* shall have provided a review of all *Submittals* prior to submission to the *Engineer* to ensure completeness, dimensions and quantities. *Submittals* received without the *Contractor's* final review stamp will be rejected and returned without review.
3. *Submittals* shall be provided with sufficient planning to allow for a 10 working day review period prior to starting fabrication or installation. Due dates listed in submittal documents which do not provide for this review period will be ignored. Requests for expedited review on critical items may be considered; however, no guarantee is provided as to whether the request will be accommodated.
4. *Submittals* containing *Design Change Requests* or *Substitution Requests* requiring engineering analysis may require a longer review period.
5. If the *Contractor* elects to fabricate or install items submitted for review prior to receiving a response, the *Contractor* shall be responsible for the costs associated with removal, repair, and/or re-fabrication of those items and all portions of the structure thereto connected should they be rejected or modified in the review.

Shop Drawings

1. All *Shop Drawings* reviewed by the *Engineer* are reviewed strictly for general conformance with the design intent. The *Contractor* and fabricator retain responsibility for the detailing of components and coordinating dimensions and locations with field conditions and other trades.
2. The *Contractor* is granted a limited, revocable, non-transferable, non-exclusive license to use these *Structural Drawings* or portions thereof exclusively for the purpose of preparing *Shop Drawings* and *Submittals* in service of the *Project*. Such license shall terminate upon completion of the *Project*. No *Instruments of Service* including these *Structural Drawings*, which are the property of the *Engineer*, may be used by the *Contractor* for any other purpose.
3. Where erection or *Shop Drawings* are prepared with the aid of these *Structural Drawings*, the *Contractor* shall use only the line-work thereof and shall remove all company names and references to these *Structural Drawings*. The erection and/or *Shop Drawings* shall be as if entirely prepared by the *Contractor*.

Delegated Design Submittals

1. *Submittals* for *Specialty Engineered Components* shall contain drawings and calculations signed and sealed by a *Specialty Engineer* demonstrating conformance with the *Governing Codes and Standards* and all *Design Loads and Criteria* contained in these *Structural Drawings*.
2. *Specialty Engineers* shall be currently licensed professional or structural engineers in the state the *Project* occurs and shall have specific specialty knowledge and expertise in the design of the components being designed.
3. The design, inspection, construction, and material requirements for these elements shall be no less stringent than the requirements of the remainder of the *Project* as enumerated in these *Structural Drawings*.

Requests for Information (RFIs)

1. Where the *Contractor* is not clear on the requirements set forth in these *Structural Drawings* or the *Structural Notes and Specifications*, they may submit an *RFI* to the *Engineer*.
2. *RFIs* shall be provided with sufficient planning to allow for a 10 working day review period prior to starting fabrication or installation. Due dates listed in RFIs which do not provide for this review period will be ignored. Requests for expedited review on critical items may be considered; however, no guarantee is provided as to whether the request will be accommodated.
3. If the *Contractor* elects to fabricate or install items which are the subject of an RFI, prior to receiving a response, the *Contractor* shall be responsible for the costs associated with removal, repair, and/or re-fabrication of those items and all portions of the structure thereto connected should they be rejected or modified in the review.

Substitution Requests

1. Alternative products may be proposed by the *Contractor* for review by the *Engineer* as a *Substitution Request*. Such a request shall have sufficient documentation to establish an equivalency to the specified product.
2. Where equivalence cannot be demonstrated, the *Contractor* shall provide an engineered request signed and sealed by an appropriately licensed professional engineer demonstrating the proposed product's adequacy under all code imposed loads as set forth in *Design Loads and Criteria*.
3. Review and/or consideration does not guarantee approval.

Design Change Requests

1. *A Design Change Request* is a request to change the design of the *Project* or portion thereof that is more substantive than a simple *Substitution Request*.
2. Where the *Contractor* feels that some aspect of the structure could be adjusted to achieve better economy or efficiency, they may submit a *Design Change Request* to the *Engineer* for discussion/review. If the *Engineer* finds sufficient merit to the request, subject to *Owner* and *Architect* approval, the *Engineer* may consider changes to the structure to accommodate the request.
3. *Design Change Requests* are reviewed at the exclusive expense of the *Contractor* including any required changes to these *Structural Drawings*.
4. Review and/or consideration does not guarantee approval.

Structural Terms

The following structural terms and definitions are provided as general reference to aid in the Contractor's understanding of the structural intent:

Beam - Generally, a *Beam* is a discrete member, individually identified, which supports loads directly from decking, slabs, roofing, etc.

Braced Frame - A type of vertical element in the *LFRS* comprised of one or more bays of columns and beams with diagonal braces where lateral loads are resisted primarily by axial forces in the members.

Cantilever - A member, element, or portion thereof that extends past a support or extends from a fixed support with no support at its end.

Cantilevered Column - A type of vertical element in the *LFRS* where lateral loads are resisted by the bending of columns that are embedded or otherwise fixed at their base.

Chords - Members generally found at the boundary of *Diaphragms*, *Shear Walls*, and/or *Braced Walls* that resist the axial forces generated by bending in the *Diaphragm* or overturning in walls.

Collectors (Alternatively: *Struts*) - Members within or extending from *Diaphragms* that collect loads from other portions of the structure and deliver those loads to the *Diaphragm*. *Collectors* also provide reinforcement or redistribution of forces in *Diaphragms* with discontinuities or load concentrations.

Diaphragm - Horizontal plate elements or trusses (e.g. roof deck, floor deck, roof bracing, slabs, etc.) that connect and transmit lateral forces from the structure to the vertical elements of the *LFRS* (e.g. Shear Walls, Braced Frames, Moment Frames, Cantilevered Columns).

Girder - Generally, a *Girder* is a discrete beam-like member which supports *Beams* or *Joists* rather than receiving loads from decking, slabs, roofing, etc.

Joist - Generally, *Joists* are repetitive beam-like members which are defined in arrays rather than being individually identified.

Lateral Force Resisting System (LFRS) Alternatively: *Main Wind Force Resisting System (MWFRS)* or *Seismic Force Resisting System (SFRS)* - The *LFRS* is comprised of the members, elements, and connections which receive, resist, and transfer lateral loads due to Wind and Earthquakes through the *Structure* and into the foundation. Elements of the *LFRS* generally in include roof deck diaphragms, floor diaphragms, boundary elements, collectors, chords, shear walls, braced frames, moment frames, cantilevered columns, and the foundation.

Moment Frame - A type of vertical element in the *LFRS* comprised of one or more bays of columns and beams connected by fully restrained connections that resist lateral loads through the rigidity of the columns and beams in flexure.

Outrigger - A short cantilevered member that extends laterally from a column or beam.

Shear Wall - A type of vertical element in the *LFRS* comprised of vertical framing members sheathed with panels or sheets of wood, steel, or other materials capable of resisting lateral forces through shear rigidity.

Vertical Force Resisting System (VFRS) - The *VFRS* is comprised of the members, elements, and connections which carry the weight of the structure and other loads due to gravity downward into the foundation. Members, elements, and connections of the *VFRS* may simultaneously serve as portions of the *LFRS* and/or *SFRS*. Elements of the *VFRS* generally include roof decks, floor decks, slabs, beams, joists, girders, columns, walls, and the foundation.

These drawings, as instruments of service, are, and shall remain, the property of Tamarack Grove Engineering. Use of this drawing is limited to the specified project by persons named hereon. Any use or reuse of said drawings is strictly prohibited without written permission of Tamarack Grove Engineering.

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BRIAN JAMES SIELAFF
NUMBER PE-2008030646
PROFESSIONAL ENGINEER

07/17/2026

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LICENSE EXPIRATION:
12-31-27

DATE ISSUED:
07-15-26

STATE ID:
241342

NATIONAL #:
46237

PROJECT #:
26-125

DRAWN BY:
JMS

CHECKED BY:
BS

DATE:
07/15/26 - PERMIT / BID SET

REVISIONS

CLIENT

McDonald's USA, LLC

PROTOTYPE

BB20 4590 WW-HB
ISSUE DATE 06/26

ADDRESS

600 SCHUG AVENUE
PECULIAR, MO 64078

SHEET TITLE

STRUCTURAL SPECIFICATIONS

SHEET NUMBER:

S4.1

S03 20 00 - Reinforcing for Concrete and Masonry

2026-04-10

General

Referenced Standards

[Governing Code] - Chapter 19 - Concrete
[Governing Code] - Chapter 21 - Masonry
ACI 301 - Specifications for Structural Concrete
ANSI/AWS D1.4 - Structural Welding Code - Reinforcing Steel
CRSI - Manual of Standard Practice
ACI 315 - Guide to Presenting Reinforcing Steel Design Details
ACI 117 - Specifications for Tolerances for Concrete Construction and Materials
SP-066 - ACI Detailing Manual
TMS 602 - Specification for Masonry Structures

Definitions

None

Quality Assurance

1. Submittals

Submittals - Reinforcing for Concrete and Masonry

Req'd	Submittal	Notes
X	Reinforcement Shop Drawings	Submit shop drawings for reinforcement. Drawings shall indicate size, placement, spacing, bends, fabrication dimensions, lengths, materials, grade, splices, laps, mechanical connectors, and bar supports.
X	Welding Procedure Specifications	Submit WPS and Procedure Qualification Records according to AWS D1.4 for all welds on reinforcement.
X	Welders' Performance Qualification Records	Submit Welder Performance Qualification Records for each welder performing welding on reinforcement. WPQ shall show AWS D1.4 certification for the proposed WPS.
X	Reinforcement Mill Certificates	Submit mill certificates indicating physical and chemical properties for reinforcement to be used in elements of the SFRS.
X	Mechanical Bar Connectors	Submit manufacturer's product data demonstrating compliance with ACI 318.

2. Testing

   For testing requirements, refer to the pertinent concrete or masonry division of the *Structural Specifications*:

   S03 30 00 Cast-in-Place Concrete
   S03 40 00 Precast Concrete
   S03 47 13 Tilt-Up Concrete
   S04 20 00 Unit Masonry

3. Special Inspection

   For *Special Inspection* requirements, refer to the pertinent concrete or masonry division of the *Structural Specifications*:

   S03 30 00 Cast-in-Place Concrete
   S03 40 00 Precast Concrete
   S03 47 13 Tilt-Up Concrete
   S04 20 00 Unit Masonry

Products and Materials

Reinforcing materials for concrete and masonry construction shall be as specified in the table below:

Products and Materials - Reinforcing for Concrete and Masonry

	Item	Standard	Grade	Notes
Plain Steel	Reinforcing Bars	ASTM A615	Gr. 60	Where Project includes reinforced concrete walls that are identified as part of the SFRS, and ASTM A615 bars are provided in SFRS walls, additional testing shall be performed on the reinforcing to demonstrate conformance with ACI 318 20.2.2.5, else provide ASTM A706 bars.
	Reinforcing Bars - Weldable	ASTM A706	Gr. 60	
	Headed Reinforcing Bars	ASTM A970	Gr. 60	
	Joint Reinforcement	ASTM A951		
	Welded Wire Reinforcement - Smooth	ASTM A185		Alternate: ASTM A1064
	Welded Wire Reinforcement - Deformed	ASTM A497		Alternate: ASTM A1064
	Wire Reinforcement - Smooth	ASTM A82		Alternate: ASTM A1064
	Wire Reinforcement - Deformed	ASTM A496		Alternate: ASTM A1064
Galvanized	Reinforcing Bars - Galvanized	ASTM A767	Class I	
	Joint Reinforcement - Mill Galvanized	ASTM A641	0.1 oz/ft²	
	Joint Reinforcement - Hot-Dip Galvanized	ASTM A153	1.50 oz/ft²	
Epoxy-Coated	Reinforcing Bars - Epoxy-Coated	ASTM A775 ASTM A934	Gr. 60	Coating applied by CRSI accredited plant.
	Joint Reinforcement - Epoxy-Coated	ASTM A884		
	Welded Wire Reinforcement - Epoxy Coated	ASTM A884	Class A Type 1 7 mil	
Stainless	Reinforcing Bars - Stainless	ASTM A955		
	Joint Reinforcement - Stainless	ASTM A580		
	Welded Wire Reinforcement - Stainless	ASTM A1022		
GFRP	Reinforcing Bars - Glass Fiber Reinforced Polymer	ASTM D7957		GFRP Reinforcement shall not be used in structural elements where the project is located in Seismic Design Category D, E, or F; refer to S00 10 00 Design Loads and Criteria. Under no circumstance whatsoever shall any steel reinforcement specified in these drawings be replaced with GFRP reinforcement without a stamped and sealed letter from the *Engineer* explicitly detailing which bars may be replaced as such. Where GFRP reinforcement is specified, the drawings shall indicate which manufacturer and product is to be used. Substitutions may not be made without written approval by the *Engineer*.

Execution

General

1. For conditions not addressed by these specifications, the arrangement, fabrication, detailing, and installation of reinforcing steel shall be in accordance with the Referenced Standards above.
2. Reinforcement shall be clean and free of excessive mill scale, excessive rust, oil, or other deleterious material harmful to bonding qualities.
3. All welded wire reinforcement shall be flat sheets and remain unbent.
4. All bars shall be sufficiently tied and positively supported so that they will remain in place during concrete and/or grout placement.
5. All dowels, bars, anchor bolts, and other embedments shall be tied in place prior to placement of concrete and/or grout; wet setting, stabbing, rodding, or other movement of embedded items is strictly prohibited.

Concrete Construction

1. Unless otherwise stated, all slab reinforcement shall be centered in the slab.
2. Corrosion resistant bar supports shall be provided for all reinforcement in concrete exposed to ground or weather.
3. Placement of reinforcement shall be subject to the tolerance limits in ACI 117.
4. Corner bars shall be provided at all corners and intersections of walls and footings. Corner bars shall be of the same size and spacing as the adjacent reinforcement and shall have typical lap splices.

Coated Reinforcement

1. Fabrication and handling of epoxy coated bars shall conform to ASTM D3963.
2. Repair damaged coatings in accordance with manufacturer's written recommendations and ASTM A780, A775, A934, or A884 as applicable to the reinforcement and coating type.
3. The maximum area of damaged coatings shall not exceed 2% in any linear foot of reinforcement. The 2% limit includes repaired areas damaged before shipment.

Welding Reinforcement

1. Welding shall only be performed where indicated in the *Structural Drawings*.
2. Welding of reinforcement shall be performed on only A706 reinforcement by welders certified to ANSI/AWS D1.4 using the approved WPS for the specified weld.
3. Do not weld crossing bars.
4. Welding of electrical grounding conductors to structural reinforcement is not permitted, even where otherwise allowed by the National Electrical Code.
5. After welding galvanized or epoxy-coated bars, repair coating and coat weld in accordance with ACI 301.

Minimum Cover

1. For cast-in-place nonprestressed concrete, minimum cover requirements are as follows:

Minimum Reinforcement Cover for Cast-in-Place Nonprestressed Concrete

Exposure Condition	Cast against and permanently in contact with the ground	Exposed to weather or in contact with the ground	Not exposed to weather or in contact with the ground		Cast against and permenently in contact with ground, NOT enclosed by steel pipe, tube, permanent casing, or stable rock socket	Enclosed by steel pipe, tube, permanent casing, or stable rock socket
Member Type	All		Slabs, Joists, and Walls	Beams, Columns, Pedestals, and Tension Ties	Deep Foundation Members	
Bar Size						
Wire, #3 - #5	3"	1 ½"	¾"	1 ½"	3"	1 ½"
#6 - #11		2"	1 ½"			
#14 - #18						
Bundled Bars	The lesser of 2" or the equivalent diameter of the bundle Not less than 3" for concrete cast against and permanently in contact with the ground					

2. For cast-in-place prestressed concrete, minimum cover requirements are as follows:

Minimum Reinforcement Cover for Cast-in-Place Prestressed Concrete

Exposure Condition	Cast against and permanently in contact with the ground	Exposed to weather or in contact with the ground		Not exposed to weather or in contact with the ground		
Member Type	All	Slabs, Joists, and Walls	All Other Members	Slabs, Joists, and Walls	Beams, Columns, Pedestals, and Tension Ties (Primary Bars)	Beams, Columns, Pedestals, and Tension Ties (Stirrups, Ties, Spirals, and Hoops)
Bar Size						
All	3"	1"	1 ½"	¾"	1 ½"	1 ½"
Bundled Bars	The lesser of 2" or the equivalent diameter of the bundle Not less than 3" for concrete cast against and permanently in contact with the ground					

3. For masonry construction, minimum masonry cover requirements are as follows:

Minimum Reinforcement Cover for Masonry

Exposure Condition	Masonry face exposed to earhy or weather	Masonry face not exposed to earth or weather
Bar Size		
Wire	⅝"	½"
#3 - #5	1 ½"	1 ½"
#6 - #11	2"	

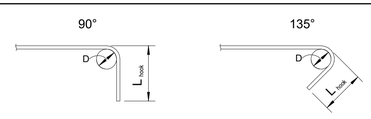
4. For other construction types, refer to the following divisions of *Structural Specifications* for cover requirements:

   S03 40 00 Precast Concrete
   S03 47 13 Tilt-Up Concrete

Bar Bends

1. Provide bar bends for rebar in accordance with the following table:

Standard Dimensions for Reinforcement Bends and Hooks



	Standard Hooks				Stirrups, Ties, and Hoops			
Plain Steel (ASTM A615 & A706)	Bar Size	D_{min}	L_{hook} 90°	L_{hook} 180°	D_{min}	L_{hook} 90°	L_{hook} 135°	L_{hook} 180°/2
	#3	2 ¼"	6"	4"	2"	4 ½"	4 ¼"	3 ¾"
	#4	3"	8"	4 ½"	2 ½"	4 ¾"	4 ¾"	4 ¼"
	#5	3 ¾"	10"	5"	3 ¼"	6"	6"	4 ¾"
	#6	4 ½"	12"	6"	4 ½"	12"	7 ¾"	6"
	#7	5 ¼"	14"	7"	5 ¼"	14"	8 ¾"	7"
	#8	6"	16"	8"	6"	16"	10"	8"
	#9	9 ½"	19"	11"	Notes: 1. Dimensions are for ASTM A615 & A706 60 ksi plain steel reinforcement. 2. Where a 180° hook is specified as a "seismic hook," use the L_{hook} dimensions from the 135° column. 3. Where a 135° hook is specified on a non-stirrup/tie bar, use L_{hook} for a 90° hook. 4. Contact engineer for information for conditions not covered.			
	#10	10 ¾"	22"	12"				
	#11	12"	24"	13"				
	#14	18 ¼"	31"	18"				
	#18	24"	41"	24"				

	Galvanized (ASTM A767)							
	Bar Size	D_{min}	L_{hook} 90°	L_{hook} 180°	D_{min}	L_{hook} 90°	L_{hook} 135°	L_{hook} 180°/2
	#3	2 ¼"	6"	4"	2 ¼"	4 ½"	4 ½"	4"
	#4	3"	8"	4 ½"	3"	5"	5"	4 ½"
	#5	3 ¾"	10"	5"	3 ¾"	6 ¼"	6 ¼"	5"
	#6	4 ½"	12"	6"	4 ½"	12"	7 ¾"	6"
	#7	7"	15"	8"	7"	15"	9 ¾"	8"
	#8	8"	17"	9"	8"	17"	11"	9"
	#9	9 ½"	19"	11"	Notes: 1. Dimensions are for ASTM A767 galvanized steel rebar. 2. Where a 180° hook is specified as a "seismic hook," use the L_{hook} dimensions from the 135° column. 3. Where a 135° hook is specified on a non-stirrup/tie bar, use L_{hook} for a 90° hook. 4. Contact engineer for information for conditions not covered.			
	#10	10 ¾"	22"	12"				
	#11	12"	24"	13"				
	#14	18 ¼"	31"	18"				
	#18	24"	41"	24"				

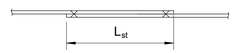
2. Bars shall be bent at ambient temperatures above 32°F without preheat.
3. Bars shall only be bent once.
4. Bars shall not be twisted.
5. Bars with kinks or bends not indicated in the *Structural Drawings* shall not be used.
6. Field bending of reinforcement shall conform to ACI 301. Only #3, #4, and #5 bars may be field bent. Field bending shall be done only once per bar, and field bends may not exceed 45°.
7. Bars partially embedded in hardened concrete or masonry shall not be bent.

Concrete Reinforcement Splices

1. Unless otherwise indicated in *Structural Drawings*, all reinforcement splices shall be lap splices; mechanical and welded splices are to be used only where specifically detailed in the *Structural Drawings*, or approved by the *Engineer*.
2. Splicing of reinforcement shall conform to ACI 301.
3. Unless otherwise specified in details, splices shall be staggered in adjacent lays by at least one splice length.
4. Wire mesh reinforcement shall be lapped at least 1.5 full mesh squares, but not less than 12".
5. Minimum lap splice length for concrete applications shall be in accordance with the following table. Splice lengths specified elsewhere in the *Structural Drawings* shall be as specified in that detail.

Minimum Reinforcement Lap Splices - Concrete

Contact Lap Splice



Noncontact Lap Splice



Concrete Strength (f'c)	Bar Position	Bar Size #3	#4	#5	#6	#7	#8	#9	#10	#11
2000 psi	Top Bar	35"	46"	57"	69"	100"	114"	128"	144"	160"
	Other Bar	27"	35"	44"	53"	77"	88"	99"	111"	123"
3000 psi	Top Bar	28"	38"	47"	56"	81"	93"	105"	118"	131"
	Other Bar	22"	29"	36"	43"	63"	72"	81"	91"	101"
4000 psi	Top Bar	25"	33"	41"	49"	71"	81"	91"	102"	114"
	Other Bar	19"	25"	31"	37"	54"	62"	70"	79"	87"
5000 psi	Top Bar	22"	29"	36"	44"	63"	72"	81"	92"	102"
	Other Bar	17"	23"	28"	34"	49"	56"	63"	71"	78"
6000+ psi	Top Bar	20"	27"	33"	40"	58"	66"	74"	84"	93"
	Other Bar	16"	21"	26"	31"	45"	51"	57"	64"	71"

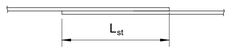
Notes:
1. Use tabulated values only where lengths are not indicated on drawings.
2. Tabulated values are for a Class B splice and were calculated using ACI 318-19 Table 25.4.2.3 assuming reinforcement is plain steel, Grade 60 with normal weight concrete.
3. Increase schedule lengths by 30% for lightweight concrete.
4. When splicing different bar sizes, use the lap length for the smaller bar.
5. "Top Bar" occurs where reinforcement is placed such that 12" or more of fresh concrete is cast in the member below the bar.
6. For noncontact lap splices, bar to bar spacing s_b may not exceed either $L_d/5$ or 6".
7. Where specified concrete strength falls between tabulated values, use the splice length for the lesser concrete strength.
8. Contact Engineer for splice lengths if any of the following conditions occur: bundled bars, bars with clear spacing less than 2db or clear cover less than db, epoxy coated bars, or bars of other materials and/or grades.

Masonry Reinforcement Splices

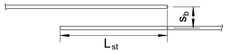
1. Unless otherwise indicated in *Structural Drawings*, all reinforcement splices shall be lap splices; mechanical and welded splices are to be used only where specifically detailed in the *Structural Drawings*, or approved by the *Engineer*.
2. Joint reinforcement, where used, shall have a minimum splice length of 6".
3. Typical lap splice length for masonry applications shall be in accordance with the following table. Splice lengths specified elsewhere in the Structural Drawings shall be as specified in that detail.

Minimum Reinforcement Lap Splices - Masonry

Contact Lap Splice



Noncontact Lap Splice



Bar Position		Masonry Strength (f'm)	Bar Size #3	#4	#5	#6	#7	#8	#9
	Bars w/ Min Clear Cover	1500 psi	19"	34"	45"	54"	63"	72"	82"
		2000 psi	17"	30"					
		2500 psi	15"	26"	41"				
		3000+ psi	14"	24"	38"				
	One Mat of Bars Ctr'd in 8" CMU	1500 psi	12"	16"	25"	49"	63"	72"	82"
		2000 psi		14"	22"	42"	60"		
		2500 psi		12"	20"	38"	53"		
		3000+ psi			18"	35"	49"		
	One Mat of Bars Ctr'd in 10" CMU	1500 psi	12"	12"	19"	37"	51"	72"	82"
		2000 psi			17"	32"	45"	69"	
		2500 psi			15"	29"	40"	62"	81"
		3000+ psi			14"	26"	36"	57"	74"

Notes:
1. Use tabulated values only where lengths are not indicated on drawings.
2. Tabulated values are for a Class B splice and have been calculated using TMS 402 assuming reinforcement is grade 60 plain steel.
3. Increase schedule lengths by 50% for epoxy coated bars.
4. When splicing different bar sizes, use the lap length for the smaller bar.
5. For noncontact lap splices, bar to bar spacing s_b may not exceed either $L_d/5$ or 8".
6. Where specified masonry strength falls between tabulated values, use the splice length for the lesser strength.
7. Contact Engineer for splice lengths if any of the following conditions occur: bundled bars or bars of other materials and/or grades.

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REVISIONS

CLIENT

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ISSUE DATE 06/26

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SHEET TITLE
STRUCTURAL SPECIFICATIONS

SHEET NUMBER:
S4.2

S03 30 00 - Cast-in-Place Concrete

2026-04-10

General

Referenced Standards

[Governing Code] - Chapter 19 - Concrete
CRSI - Manual of Standard Practice 2017
ACI 302.1R-15 - Guide to Concrete Floor and Slab Construction
ACI 304R-00 - Guide for Measuring Mixing Transporting, and Placing Concrete
ACI 305R-10 - Guide to Hot Weather Concreting
ACI 306R-16 - Guide to Cold Weather Concreting
ACI 347R14 - Guide to Formwork for Concrete
ACI 117-10 - Specifications for Tolerances for Concrete Construction and Materials
SP-066(04) - ACI Detailing Manual

Definitions

None

Quality Assurance

1. Submittals

Submittals - Cast-in-Place Concrete

Req'd	Submittal	Notes
X	Concrete Mix Design(s) & Testing Data	Submit mix design and substantiating test results for each concrete mix used on the project. Testing and reporting shall be in accordance with ACI 318 and ACI 301.
X	Concrete Curing Plan	
X	Finishing Plan	
X	Quality Control Plan	
X	Product Data	Submit manufacturer's product data demonstrating compliance with ACI 318.
X	Formwork & Formwork Accessories	
X	Slab-on-Ground Joint Layout	Submit proposed plan for joints in slabs on ground.
X	Reinforcement Submittals	See Structural Specifications S03 20 00 for reinforcement submittals.

Notes:
1. These submittals pertain to structural requirements; additional submittals may be required by other disciplines, refer to Architect for additional non-structural submittal requirements.

2. Testing

Testing - Cast-in-Place Concrete

Req'd	Subject of Testing	Reference	Frequency	Notes
X	Concrete - Strength	ASTM C39	Periodic	Fabricate specimens at time fresh concrete is placed. Samples for strength tests of each class of concrete placed each day shall be taken not less than once a day, nor less than once for each 150 yd^3 of concrete, nor less than once for each 5000 ft^2 of surface area for slabs/walls, nor less than once each shift from in-place work or from test panel. If the total volume of concrete is such that the frequency of testing note above results in less than 5 samples for a given class of concrete, samples shall be made from at least 5 randomly selected batches or from every batch if fewer than 5 batches are used.
X	Concrete - Slump	ASTM C143	Continuous	At the time strength specimens are fabricated, perform slump and air content tests, and determine the temperature of the concrete.
X	Concrete - Air Content	ASTM C231	Continuous	
X	Concrete - Temperature	ASTM C1064	Continuous	
-	Post-Tensioned Concrete - In-Situ Strength	ACI 318: 26.11.2	Periodic	Verify in-situ concrete strength, prior to stressing of tendons.
-	Elevated Concrete - In-Situ Strength	ACI 318: 26.11.2	Periodic	Verify in-situ concrete strength prior to removal of shoring and forms from beams and structural slabs.
-	Reinforcement - A615 in Seismic Systems	ACI 318: 21.1.5.2	Periodic	Unless certified mill test reports are provided, perform tensile testing on all heats/batches of ASTM A615 reinforcement used to resist earthquake induced load in special moment frames, special structural walls, and end coupling beam connecting structural walls in structures assigned to seismic design categories B, C, D, E, and F.

3. Special Inspection

Special Inspection - Cast-in-Place Concrete

Req'd	Subject of Inspection		Reference	Frequency	Notes
X	Reinforcement/Tendons - Placement		ACI 318: Ch. 20, 25.2, 25.3, 26.6.1-26.6.3	Periodic	Tolerances and reinforcement placement per ACI 7.5; spacing limits for reinforcing ACI 7.6; protection of reinforcement per ACI 7.7
X	Welding Reinforcement	a. Weldability	ACI 318: 26.13.1.4, 26.13.3 AWS D1.4	Periodic	Verification of weldability of reinforcing steel other than ASTM A706.
-		b. Seismic Systems		Continuous	Reinforcing steel in special moment frames, boundary elements of special structural walls, and coupling beams
-		c. Reinforcement Splices		Continuous	
-		d. Primary Tension Reinf. in Corbels		Continuous	
X		e. Single Pass Fillet Welds ($^5/_{16}$" Max)		Periodic	
X		f. All other welds		Periodic	
X	Cast-in-Place Anchors		ACI 318: 26.13.3.3	Periodic	
X	Post-Installed Anchors	a. Adhesive anchors installed in horizontally or upwardly inclined orientations in hardened concrete members to resist sustained tension loads.	ACI 318: 26.13.3.2 Applicable Product ICC Report	Continuous	Special inspections apply to anchor product name, type, and dimension, hole dimensions, compliance with drill bit requirements, cleanliness of the hole and anchor, adhesive expiration date, anchor/adhesive installation, anchor embedment, and tightening torque.
		b. Mechanical anchors and adhesive anchors in hardened concrete members not defined in part a.	ACI 318: 26.13.3.3 Applicable Product ICC Report	Periodic	
X	Concrete - Mix Design		IBC 1904.1, 1904.2 ACI 318 - Ch 19, 26.4.3, 26.4.4	Periodic	Verify use of required mix design.
X	Concrete - Placement		ACI 318: 26.5	Continuous	Inspection of concrete placement for proper application techniques.
X	Concrete Curing		ACI 318: 26.5.3-26.5.5	Periodic	Inspection for maintenance of specified curing temperature and techniques.
X	Formwork		ACI 318: 26.11.1.2(b)	Periodic	Shape, location, and dimensions of the concrete member being formed.

Products and Materials

Reinforcing materials for concrete and masonry construction shall be as specified in the table below:

Products and Materials - Cast-in-Place Concrete

	Item	Standard	Type/Grade	Notes
Cementitious Materials	Portland Cement	ASTM C150	Type I/II	
	Blended Hydraulic Cement	ASTM C595	Type IL	
	Expansive Hydraulic Cement	ASTM C845		
	Hydraulic Cement	ASTM C1157		
	Fly Ash & Natural Pozzolans	ASTM C618		
	Slag Cement	ASTM C989		
	Silica Fume	ASTM C1240		
Aggregate	Normalweight Aggregate	ASTM C33		
	Lightweight Aggregate	ASTM C330		
Admixtures	Water Reduction and Setting Time Modification	ASTM C494		
	Flowable Concrete	ASTM C1017		
	Air Entrainment	ASTM C260		
	Cloride-Induced Corrosion Inhibitors	ASTM C1582		
	Containing Expansive Cements	ASTM C845		
Water		ASTM C1602		
Cast-in-Place Anchor Bolts/Rods		ASTM F1554	Gr 36	Unless otherwise noted, Grade 36 or Grade 55 F1554 anchor bolts may be provided as plain steel or galvanized. Grade 105 F1554 anchor bolts shall be plain steel unless explicitly noted in these structural drawings. Where Grade 55 is supplied, it shall be weldable with the S1 supplementary testing.

Mix Requirements - Cast-in-Place Concrete

Application	Exposure Class F	S	P	C	Min 28 day Compressive Strength (f'c)	Unit Weight	Air Entrainment	Max w/cm ratio	Nominal Coarse Aggregate Size	Notes
Deep Foundations	F0	S0	P0	C0	4500 psi	145 lb/ft^3	-	0.45	Size 57	-
Footings & Pile Caps	F1	S0	P0	C0	4500 psi	145 lb/ft^3	4.5%	0.45	Size 57	-
Foundation Walls - Exterior	F2	S0	P0	C0	4500 psi	145 lb/ft^3	6.0%	0.45	Size 57	-
Foundation Walls - Interior	F0	S0	P0	C0	4500 psi	145 lb/ft^3	-	0.45	Size 57	-
Slab-on-Ground - Exterior	F2	S0	P0	C0	4500 psi	145 lb/ft^3	6.0%	0.45	Size 57	-
Slab-on-Ground - Interior	F0	S0	P0	C0	3000 psi	145 lb/ft^3	-	0.45	Size 57	-
Columns, Piers, Pedestals, & Pilasters - Exterior	F1	S0	P0	C0	4500 psi	145 lb/ft^3	5.0%	0.45	Size 67	-
Columns, Piers, Pedestals, & Pilasters - Interior	F0	S0	P0	C0	4500 psi	145 lb/ft^3	-	0.45	Size 67	-
Walls - Exterior	F1	S0	P0	C0	4500 psi	145 lb/ft^3	4.5%	0.45	Size 57	-
Walls - Interior	F0	S0	P0	C0	4500 psi	145 lb/ft^3	-	0.45	Size 57	-
Elevated Slabs - Exterior	F2	S0	P0	C0	4500 psi	145 lb/ft^3	6.0%	0.45	Size 67	-
Elevated Slabs - Interior	F0	S0	P0	C0	4500 psi	145 lb/ft^3	-	0.45	Size 67	-
Slab on Metal Deck - Exterior	F2	S0	P0	C0	4500 psi	145 lb/ft^3	6.0%	0.45	Size 67	-
Slab on Metal Deck - Interior	F0	S0	P0	C0	3000 psi	145 lb/ft^3	-	0.45	Size 67	-

Notes:

Execution

General

1. Structural tolerances for cast-in-place concrete structural elements shall be in accordance with ACI 117.

Formwork

1. Design of formwork to resist imposed loading during concrete placement is the responsibility of the Contractor.
2. All formwork shall conform to ACI 301 Section 2 and ACI 347R14.
3. Contractor is responsible for determining appropriate concrete cure times prior to removal of forms and for determining any required additional temporary shoring of the structure during this time.

Reinforcement

1. See Structural Specifications S03 20 00 - Reinforcement for Concrete and Masonry

Handling, Placing, Constructing and Curing

1. All exposed corners shall be chamfered 3/4" unless otherwise noted.
2. Concrete shall contain no embedded aluminum or aluminum alloys nor shall it be delivered in pipes or chutes made of aluminum or aluminum alloys.
3. Under no circumstance shall it be acceptable to add water to concrete after it has been mixed and proportioned by the supplier.
4. Construction and contraction joints shall be provided in accordance with these drawings. Joints may be provided in slab on metal deck at the Contractors option, however these are unlikely to control cracking.
5. Cast in place slabs may require require evaporation reducers to prevent excessive slab curling in dry, hot, or windy conditions. Contractor is responsible for evaluating whether this measure is required.
6. All concrete slabs shall have a minimum floor flatness as required/specified by the Architect.
7. Standing water shall be removed from the place of deposit before concrete is placed unless a tremie is used.
8. Concrete shall be placed; at a rate so concrete at all times has sufficient workability to be consolidated appropriately; without segregation or loss of materials; without interruptions to maintain workability between successive placements to prevent an unintentional cold joint; as near to its final location as practicable to avoid segregation due to rehandling or flowing.
9. Concrete that has been contaminated or has lost its initial workability to the extent that it can no longer be consolidated appropriately shall not be used.
10. Joint locations or joint details not shown or that differ from those indicated in the *Structural Drawings* shall be submitted for review by the *Engineer*.
11. Construction joints shall be cleaned and laitance removed before new concrete is placed.
12. The surface of concrete construction joints shall be intentionally roughened.
13. Immediately before the new concrete is placed, construction joints shall be pre-wetted and standing water removed.
14. Concrete beams, girders, or slabs supported by columns or walls shall not be cast until concrete in the vertical support members has reached specified design strength.
15. Concrete beams, girders, haunches, drop panels, shear caps, and capitals shall be placed monolithically as part of a slab system, UNO.

Post Installed Anchors

1. Installation of post installed anchors shall conform to the manufacturer's printed instructions, the current evaluation report listed above, and these drawings.
2. Anchors shall be installed only in locations allowed by the Engineer.
3. Under no circumstance shall a post installed anchor be substituted for a cast in place anchor bolt unless explicitly approved as a design change by the Engineer.
4. Where a specific brand and model of anchor is called out in these drawings, those anchors shall be as specified. For all other anchors, any of the products of that type listed in the materials section above may be used but must be of the type, size, and embedment listed in the drawings.
5. Adhesive anchors installed into concrete denoted as "Creep Critical" must be installed by personnel certified for overhead continuous tension applications. This certification must be granted by a program that includes written and performance testing in accordance with the ACI/CRSI Adhesive Anchor Certification Program or an equivalent program recognized by the local authority having jurisdiction.
6. Reinforcing bars present in concrete shall not be damaged during installation of post installed anchors.

Cast In Place Anchor Bolts

1. When locating and placing anchor bolts for steel construction, the Contractor shall adhere to the tolerances specified in Section 7 of the AISC Code of Standard Practice.

S05 05 20 - Concrete and Masonry Embedments and Post-Installed Anchors

2026-04-10

General

1. ANCHOR CAPACITY USED IN DESIGN SHALL BE BASED ON THE TECHNICAL DATA PUBLISHED BY THE MANUFACTURER OR SUCH AN OTHER METHOD AS APPROVED BY THE E.O.R. SUBSTITUTION REQUESTS FOR ALTERNATE PRODUCTS MUST BE APPROVED IN WRITING BY THE E.O.R. PRIOR TO USE. SUBSTITUTIONS WILL BE EVALUATED BY THEIR HAVING AN ICC ESR SHOWING COMPLIANCE WITH THE GOVERNING CODE FOR SEISMIC USES, LOAD RESISTANCE, INSTALLATION CATEGORY, AND AVAILABILITY OF COMPREHENSIVE INSTALLATION INSTRUCTIONS. ADHESIVE ANCHOR EVALUATION WILL ALSO CONSIDER CREEP, IN-SERVICE TEMPERATURE, AND INSTALLATION TEMPERATURE.
2. REFER TO CONSTRUCTION DOCUMENTS FOR EMBEDMENT DEPTH, ROD TYPE AND SIZE, AND OTHER SPECIFIC INFORMATION.
3. DO NOT APPLY LOAD TO ANCHOR UNTIL CONCRETE OR GROUT HAS REACHED FULL DESIGN STRENGTH.

Execution

1. ALL HOLES SHALL BE DRILLED WITH ANSI STANDARD BIT DESIGNED FOR CONCRETE OR HOLLOW DRILL BIT, DIAMOND CORED HOLES ARE NOT ALLOWED U.N.O. IN DESIGN DETAIL OR PRE-APPROVED BY THE E.O.R.
2. NO ANCHOR SHALL BE INSTALLED WITHIN 1.5 ROD DIAMETERS OF AN ABANDONED HOLE THAT HAS BEEN GROUT FILLED, (3.0 ROD DIAMETERS FOR UN-GROUTED HOLES).
3. OVER DRILL REINFORCEMENT PER MANUFACTURER REQUIREMENTS AND TO THE REQUIRED DEPTH AS INDICATED ON THE CONTRACT DRAWINGS.
4. REMOVE ALL DIRT, DUST, WATER AND ICE FROM DRILLED HOLES BEFORE INSTALLATION.
5. REMOVE ANY DIRT, DUST, RUST OR OIL ON BAR OR ROD BEFORE INSTALLATION U.N.O.
6. UTILIZE HOLE CLEANING AS RECOMMENDED FOR THE PRODUCT BY THE MANUFACTURER. REFER TO MANUFACTURERS PUBLISHED INSTALLATION INSTRUCTIONS (MPII).
7. FOLLOW ALL MANUFACTURERS RECOMMENDATIONS AND CERTIFICATION TESTING REPORTS FOR INSTALLATION.
8. DO NOT INSTALL ANCHORS IN CONCRETE IF THE CONCRETE IS LESS THAN 21 DAYS OLD. THE CONTRACTOR MUST OBTAIN WRITTEN APPROVAL FROM THE E.O.R. TO INSTALL IN THE 7-21 DAY TIME PERIOD.

Adhesive Anchor Requirements

1. APPROVED ADHESIVE ANCHORS FOR CONCRETE:
   a. HILTI HIT-RE 500 (ICC-ES ESR-3814)
   b. HILTI HIT-HY 200 (ICC-ES ESR-4868)
   c. DEWALT PURE 110+ (ICC-ES ESR-3298)
   d. DEWALT AC100+ GOLD (ICC-ES ESR-2582)
   e. SIMPSON SET-3G (ICC-ES ESR-4057)
2. APPROVED ADHESIVE ANCHORS FOR GROUTED MASONRY:
   a. HILTI HIT-HY 270 (ICC-ES ESR-4143)
   b. HILTI HIT-HY-200 (ICC-ES ESR-4878)
   c. SIMPSON SET-3G (ICC-ES ESR-4844)
   d. DEWALT AC100+GOLD (ICC-ES ESR-3200)
3. APPROVED ADHESIVE ANCHORS FOR UNGROUTED MASONRY:
   a. HILTI HIT-HY 270 (ICC-ES ESR-4143)
   b. DEWALT AC100+GOLD (ICC-ES ESR-3200)
4. APPROVED ADHESIVE ANCHORS FOR UNREINFORCED MASONRY OR BRICK:
   a. HILTI HIT-HY 270 (ICC-ES ESR-4144)
   b. DEWALT AC100+GOLD (ICC-ES ESR-4105)
5. PLASTIC MESH OR STAINLESS-STEEL SCREEN TUBES SHALL BE USED FOR HOLLOW MASONRY IF INDICATED BY E.O.R. ON CONSTRUCTION DOCUMENTS.
6. ALL ADHESIVE SHALL BE WITHIN THE MANUFACTURERS RECOMMENDED LIFETIME AND PRIOR TO EXPIRATION DATE. DO NOT USE ADHESIVE THAT HAS NOT BEEN STORED PER MANUFACTURERS RECOMMENDATIONS AND MAY HAVE EXPERIENCED FREEZE THAW CYCLES OR EXTREME HEAT.
7. DO NOT INSTALL ADHESIVE ANCHORS IF SUBSTRATE TEMPERATURE IS BELOW 40 DEGREE F UNLESS ADHESIVE IS APPROVED FOR LOWER TEMPERATURE, REFER TO MANUFACTURERS PUBLISHED INSTALLATION INSTRUCTIONS (MPII)
8. DO NOT INSTALL ADHESIVE ANCHOR IN WET OR DAMP HOLE UNLESS PRODUCT IS APPROVED FOR SUCH CONDITIONS WITHOUT STRENGTH REDUCTION, CONTACT E.O.R. IF HOLES BECOME WET OR DAMP
9. ADHESIVE ANCHORS INSTALLED IN HORIZONTAL OR VERTICAL OVERHEAD ORIENTATION TO SUPPORT SUSTAINED TENSION LOADS SHALL BE INSTALLED BY A CERTIFIED ADHESIVE ANCHOR INSTALLER (AAI) AS CERTIFIED THROUGH ACI/CRSI (ACI 318) PROOF OF CURRENT CERTIFICATION SHALL BE SUBMITTED TO E.O.R. FOR APPROVAL PRIOR TO INSTALLATION. ADDITIONAL REQUIREMENTS ARE:
   a. SHOULD AN ACI CERTIFIED INSTALLER NOT BE AVAILABLE AT A MINIMUM THE INSTALLER SHALL BE TRAINED BY THE MANUFACTURERS EMPLOYED REPRESENTATIVE.
   b. THE INSTALLATION OF ANCHORS SHALL HAVE CONTINUOUS OR PERIODIC INSPECTION IN ACCORDANCE WITH THE GOVERNING CODE AND WHERE DESIGNATED IN THE SPECIAL INSPECTIONS PROGRAM.
   c. HOLES WILL BE ADHESIVE FILLED UTILIZING A 'PISTON PLUG' OR EQUIVALENT DEVICE TO ELIMINATE THE POSSIBILITY OF AIR GAPS.
10. BARS AND RODS USED MUST BE DEFORMED OR THREADED FOR THE FULL EMBEDMENT DEPTH THE ADHESIVE IS APPLIED.

Wedge Anchor Requirements

1. APPROVED WEDGE ANCHORS FOR CONCRETE:
   a. HILTI KWIK BOLT TZ2 (ICC-ES ESR-4266)
   b. SIMPSON STRONG-BOLT 2 (ICC-ES ESR-3037)
   c. DEWALT POWER-STUD+SD2 (ICC-ES ESR-2502)
   d. DEWALT POWER-STUD+SD1 (ICC-ES ESR-2818)
2. APPROVED WEDGE ANCHORS FOR GROUTED MASONRY:
   a. HILTI KWIK BOLT TZ2 (ICC-ES ESR-4561)
   b. SIMPSON STRONG-BOLT 2 (IAPMO-UES ER-240)
   c. DEWALT POWER-STUD+SD1 (ICC-ES ESR-2966)

Screw Anchor Requirements

1. APPROVED SCREW ANCHORS FOR CONCRETE:
   a. HILTI KWIK HUS-EZ (ICC-ES ESR-3027)
   b. SIMPSON TITEN HD (ICC-ES ESR-2713)
   c. DEWALT SCREW BOLT+ (ICC-ER ESR-3889)
2. APPROVED SCREW ANCHORS FOR GROUTED MASONRY:
   a. HILTI KWIK HUS-EZ (ICC-ES ESR-3056)
   b. SIMPSON TITEN HD (ICC-ES ESR-1056)
   c. DEWALT SCREW BOLT+ (ICC-ER ESR-4042)

Power Actuated Fastener Requirements

a. RE S05 40 00 - COLD FORMED METAL FRAMING FOR PAF'S.

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PROJECT #: 26-125
DRAWN BY: JMS
CHECKED BY: BS

DATE:
07/15/26 - PERMIT / BID SET

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CLIENT

McDonald's USA, LLC

PROTOTYPE
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ISSUE DATE 06/26

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PECULIAR, MO 64078

SHEET TITLE
STRUCTURAL SPECIFICATIONS

SHEET NUMBER:
S4.3

S05 12 00 - Structural Steel

2026-04-10

General

Referenced Standards

[Governing Code] - Chapter 22 - Steel
AISC 303 - Code of Standard Practice for Steel Buildings and Bridges
AISC 360 - Specification for Structural Steel Buildings
AISC 341 - Seismic Provisions for Structural Steel Buildings
AISC 358 - Prequalified Connections for Special and Intermediate Steel Moment Frames for Seismic Applications
RCSC - Specification for Structural Joints Using High Strength Bolts
AWS D1.1 - Structural Welding Code - Steel
AWS D1.8 - Structural Welding Code - Seismic Supplement

Definitions

None

Quality Assurance

1. Submittals

Submittals - Structural Steel

Req'd	Submittal	Notes
X	Delegated Engineered Design Steel Connections	Where steel connections are indicated as a delegated engineered design element, Contractor shall prepare and submit drawings and calculations for the design of designated structural steel connections stamped by an appropriately licensed Specialty Engineer demonstrating compliance with the Structural Drawings and the Structural Notes and Specifications.
-	Delegated Engineered Design Buckling Restrained Braces	Where buckling restrained braces are used on the Project, Contractor shall prepare and submit drawings and calculations for the braces stamped by an appropriately licensed Specialty Engineer demonstrating compliance with the Structural Drawings and the Structural Notes and Specifications.
X	Shop Drawings	Submit shop drawings for review showing the complete information necessary for the fabrication of structural steel framing on the project including: member sizes, grades, locations, and dimensions; location, type and size of welds including which of these are to be performed in the shop vs. field; and connections, fastenings, and pertinent details.
X	Erection Drawings	Submit erection drawings for record showing the complete information necessary for the safe erection of structural steel framing on the project. No review to be provided by Engineer.
X	Material Test Reports - Structural Steel Framing	For main structural steel elements, submit copies of material test reports in accordance with AISC 360 Section A3.1.
X	Material Test Reports - Steel Castings and Forgings	For steel casting sand forgings, submit copies of material test reports in accordance with AISC 360 Section A3.2.
X	Product Data - Fasteners	For fasteners, submit copies of manfacturer's certifications in accordance with AISC 360 Section A3.3.
X	Material Test Reports - Anchor Rods & Threaded Rods	For anchor rods and threaded rods, submit copies of material test reports in accordance with AISC 360 Section A3.4.
X	Product Data - Welding Consumables and Filler Metals	For welding consumables, submit copies of manfacturer's certifications in accordance with AISC 360 Section A3.5. Submit manufacturer's product data sheets or catalog data for welding filler metals and fluxes to be used. The data sheets shall describe the product, limitations of use, recommended or typical welding parameters, and storage and exposure require-ments, including backing, if applicable. For demand critical welds, submit manufacturer's certifications that the filler metal meets the supplemental notch toughness requirements. When the filler metal manufacturer does not supply such supplemental certifications, the fabricator or erector, as applicable, shall have testing performed and provide the applicable test reports in accordance with AWS D1.8. Where performed, submit Supplemental notch toughness data for intermix testing per AWS D1.8.
X	Product Data - Headed Stud Anchors	For headed stud anchors, submit copies of manfacturer's certifications in accordance with AISC 360 Section A3.6.
X	Welding Procedure Specifications (WPS) & Procedure Qualification Records (PQR)	Submit WPS for each weld to be used on the Project. Submit Procedure Qualification Records (PQR) for WPS that are not prequalified in accordance with AWS D1.1 or AWS D1.3, as applicable.
X	Welding Performance Qualification Records (WPQR)	Submit welding personnel Performance Qualification Records (WPQR) and continuity records for all personnel performing welding on the Project.
X	Fabricator's QC Manual & QCI Qualifications	Submit Fabricator's Quality Control Inspector (QCI) qualifications and written quality control manual that shall include, as a minimum the following: material control procedures, inspection procedures, and nonconformance procedures
X	Erector's QC Manual & QCI Qualifications	Submit Erector's Quality Control Inspector (QCI) qualifications and written quality control manual that shall include, as a minimum the following: material control procedures, inspection procedures, and nonconformance procedures
X	Fabricator's NDT Personnel Qualifications	Submit Fabricator's Non-Destructive Testing personnel qualifications.
X	Bolt Installation Procedures	Submit bolt installation procedures including instructions for pre-installation verification testing by the Fabricator's or Erector's personnel and instructions for installing the bolts using the method chosen for pretensioning (commonly: turn-of-nut method, twist-off type tension control bolt method, direct tension indicator method, or calibrated wrench method).
X	Galvanizer's Certificate of Compliance	Submit coating applicator's Certificate of Compliance that the hot-dip galvanized coating meets or exceeds the specified requirements of ASTM A123.

Notes:
1. These submittals pertain to structural requirements; additional submittals may be required by other disciplines, refer to Architect for additional non-structural submittal requirements
2. *Contractor* shall make any item that is not marked as required available upon request for review by *Engineer*.

2. Testing

Non-Destructive testing of welds shall be performed as per the following table, AISC 360, AISC 341, AWS D1.1, AWS D1.3, and AWS D1.8 as applicable.

Non-Destructive Testing of Welds - Structural Steel

Req'd	Subject of Testing	Reference	Frequency	Notes
X	As Designated	-	-	In addition to defined conditioins in this table, NDT on welds shall be performed where so designated in the Structural Drawings and details.
-	Ultrasonic Testing (UT) - CJP Welds	AISC 360 N5.5b AISC 341 J7.2a	100%	Ultrasonic Testing (UT) shall be performed on all complete joint peneteration (CJP) groove welds in material 5/16" thick or greater.
-	Magnetic Particle Testing (MT) - CJP Welds Beam-to-Column Connections	AISC 360 N5.5b AISC 341 J7.2a	25%	Magnetic Particle Testing (MT) shall be performed on 25% of all beam-to-column complete joint peneteration (CJP) groove welds in material 5/16" thick or greater.
X	Ultrasonic Testing (UT) - PJP Welds Column Splices & Column-to-Base-Plate Welds	AISC 341 J7.2b	100%	Ultrasonic Testing (UT) shall be performed on all parital joint peneteration (CJP) groove welds in column splices and column to base plate welds.
-	Ultrasonic Testing (UT) - CJP Welds Base Metal Lamellar Tearing and Laminations	AISC 341 J7.2c	100%	After joint completion, base metal thicker than 1 1/2" in T- and corner-joints, where the connected material is greater than 3/4" and contains CJP groove welds, shall be ultrasonically tested for discontinuities behind and adjacent to the fusion line of such welds. Any base metal discontinuities found within t/4 of the steel surface shall be accepted or rejected on the basis of criteria of AWS D1.1, Table 8.2, where t is the thickness of the part subjected to the through-thickness strain.
-	Beam Copes & Weld Access Holes	AISC 341 J7.2d	100%	At welded splices and connections, thermally cut surfaces of beam copes and weld access holes shall be tested using Magnetic Particle Testing (MT) or Penetrant Testing (PT), when the flange thickness exceeds 1 1/2" for rolled shapes, or when the web thickness exceeds 1 1/2" for built-up shapes.
-	Reduced Beam Section Repairs	AISC 341 J7.2e	100%	Magnetic Particle Testing (MT) shall be performed on any weld and adjacent area of the reduced beam section (RBS) cut surface that has been repaired by welding, or on the base metal of the RBS cut surface if a sharp notch has been removed by grinding.
-	Weld Tab Removal Sites	AISC 341 J7.2f	100%	At the end of welds where weld tabs have been removed, Magnetic Particle Testing (MT) shall be performed on the same joints receiving Ultrasonic Testing (UT) as required under AISC 341 Section J7.2a.

3. Special Inspection

Special Inspection - Structural Steel

Special Inspections for Structural Steel elements of the *Project* shall be in accordance with the quality assurance inspection requirements of AISC 360.

Special Inspection - Structural Steel - Seismic

Req'd	Subject of Inspection	Reference	Frequency	Notes
-	Structural steel portions of the SFRS.	IBC 1705.13.1.1 AISC 341	-	Seismic Design Categories B, C, D, E, and F. Follow quality assurance requirements of AISC 341. Special inspection is not required where SDC is B or C, R=3, and SFRS is "H. Steel system not specifically detailed for seismic resistance excluding cantilever columns systems." Special inspection is not required where SDC is D, E, or F and SFRS is permitted to be designed and detailed in accordance with AISC 360 by ASCE 7, Table 15.4-1.
-	Structural steel elements of the LFRS including struts, collectors, chords and foundation elements.	IBC 1705.13.1.2 AISC 341	-	Seismic Design Categories B, C, D, E, and F. Follow quality assurance requirements of AISC 341. Special inspection is not required where SDC is B or C and R≤3. Special inspection is not required where SDC is D, E, or F and SFRS is not required to be designed and detailed in accordance with AISC 341 by ASCE 7, Table 15.4-1.

Special Inspection - Structural Steel - Metal Building Systems

Req'd	Subject of Inspection	Reference	Frequency	Notes
-	Installation of rafter/beam flange braces and column flange braces	IBC 1705.2.6	Periodic	
-	Installation of purlins and girts, including specified lapping	IBC 1705.2.6	Periodic	
-	Purlin and girt restraint, bridging, and bracing	IBC 1705.2.6	Periodic	
-	Installation of X-bracing, tightened to remove any sag.	IBC 1705.2.6	Periodic	

Products and Materials

Members & Shapes

1. Hot rolled shapes with flange thickness equal to or greater than 11/2" shall have a minimum Charpy V-Notch toughness of 20 ft-lb at 70°F.
2. Plates with thickness equal to or greater than 2 in chall have a minimum Charpy V-Notch toughness of 20 ft-lb at 70°F.
3. Structural steel members and elements shall be of the following standards and grades:

Members and Shapes - Structural Steel

Structural Steel Shape	Standard	Grade	Minimum Yield Strength	Notes
Wide Flanges	ASTM A992	-	50 ksi	
HSS - Rectangular	ASTM A500	Grade C	50 ksi	
HSS - Round.	ASTM A500	Grade C	46 ksi	
Angles	ASTM A36	-	36 ksi	
Pipes	ASTM A53	Grade B	35 ksi	
Channels	ASTM A36	-	36 ksi	
Plates	ASTM A36	-	36 ksi	
Plates (SFRS)	ASTM A572	Grade 50	50 ksi	Plates use in the SFRS shall be ASTM A572 Gr. 50.

Galvanizing

1. Unless otherwise noted, all exposed exterior structural steel shall be hot dip galvanized.
2. All structural steel specified as galvanized shall be hot dip galvanized in accordance with ASTM A123.
3. Where a duplex coating system is required, follow Architectural specifications, the recommendations of the American Galvanizer's Association, and where applicable, ASTM D6386 and ASTM D7803.

Welding Materials

1. Filler metals, fluxes, and cover gasses shall conform to all applicable AWS standards.
2. All welds in connections of the SFRS and to members of the SFRS shall comply with AWS D1.8.
3. Welding consumables shall be selected to suit the application and shall follow the WPS for the weld being performed.
4. Welding electrodes shall have a tensile strength of 70 ksi.
5. Welding electrodes for welds not a part of the SFRS shall have a Charpy V-Notch toughness rating of 20 ft-lb at 40°F.
6. Welding electrodes for welds that are part of the SFRS shall have a Charpy V-Notch toughness rating of 20 ft-lb at 0°F.
7. Welding electrodes for welds that are part of the SFRS and are Demand Critical shall have a Charpy V-Notch toughness rating of 40 ft-lb at 70°F.
8. Where the Lowest Anticipated Service Temperature (LAST) of the SFRS is below 50°F, welding electrodes for welds that are part of the SFRS and are Demand Critical shall have a Charpy V-Notch toughness rating of 40 ft-lb at or below LAST + 20°F.

Fasteners & Misc

1. Structural steel fasteners shall be of the following standards and grades:

Fasteners - Structural Steel

Items	Standard	Grade	Notes
Structural Bolts (Heavy Hex Head)	ASTM F3125	A325	Type 1 for carbon steel, Type 3 for weathering steel
Structural Bolts (Torque Controlled Assemblies)	ASTM F3125	F1852	Type 1 for carbon steel, Type 3 for weathering steel
Non-Structural Bolts	ASTM A307	Grade A	
Threaded Rod (Not AB's)	ASTM A307	Grade A	
Nuts	ASTM A563	Grade DH	
Washers	ASTM A436	-	
Direct Tension Indicating Washers	ASTM F959	-	DTI's shall be sized to match the size and grade of bolt.
Headed Shear Studs and Shear Connectors	AWS D1.1	Grade B	
Base Plate Grout (Non-Shrink)	ASTM C1107	f'c = 5000 psi	
Base Plate Grout (Precision Epoxy)	ASTM C579	f'c = 12,000 psi	

Execution

General

1. All seel members shall bear identification correlating to the piecemark in the shop/erection drawings; such labeling shall be durable and remain legible throughout fabrication and erection.
2. Structural steel members shall not be spliced except where explicitly detailed in these drawings.
3. Where camber is specified, the curve should approximate a circular curve and shall be uniform over the entire length of the beam.
4. Beams shall be fabricated and placed such that specified or natural camber results in a crowned (not sagged) condition.
5. Contractor shall notify fabricator and Engineer immediately upon discovery of any structural steel which has been or appears to have been damaged.
6. Use of thermal cutting torches in the field is not permitted on structural steel elements.

Base Plates and Anchor Bolts

1. Provide grout below base plates as detailed in these drawings.
2. Grout shall have achieved design strength prior to installation of decking on steel framing.
3. Grout shall be formed at base plates; it is not permissible to fill the column blockout with grout.
4. Sufficient thread extension for anchor bolts shall be provided above the top of footing to allow nuts atop base plates to be fully engaged in the final condition.
5. Welding of anchor rods is prohibited unless specifically detailed and approved by the *Engineer*.

Galvanizing

1. Fabricate structural steel that will be galvanized in accordance with Class I, II, III guidelines as described in the American Galvanizers Association, "Recommended Details for Galvanized Structures."
2. The design and fabrication of the product to be galvanized are the responsibilities of the designer and the fabricator. Practices ASTM A385/A385M provides guidance for steel fabrication for optimum hot dip galvanizing and shall be complied with in both design and fabrication. Consultation between the designer, fabricator, and galvanizer at appropriate stages in the design and fabrication process will reduce future problems.
3. Do not add zinc drain holes or vents to structural members without Engineer approval.
4. Safeguard products against steel embrittlement in conformance with ASTM A143/A143M. Avoid fabrication techniques that could cause steel embrittlement.
5. Safeguard products against distortion in conformance with ASTM A384/A384M. Avoid fabrication techniques that could cause steel distortion.
6. The fabricator shall consult with architect/engineer and hot-dip galvanizer regarding potential concerns, including handling issues, during the galvanizing process that may require design modification before fabrication proceeds.
7. Provide holes and/or lifting lugs to allow for handling during galvanizing.
8. Handle all articles to be galvanized in such a manner as to avoid any mechanical damage and to minimize distortion.
9. Repair areas damaged by welding, flame cutting or during handling, transport or erection by one of the approved methods in accordance with ASTM A780/A780M whenever damage exceeds 3/16" in width. Minimum thickness requirements for the repair are those described in ASTM A123/A123M, Section 6.2.
10. Mask off areas unsuitable for galvanizing; this includes all faying surfaces for slip critical connections where a Class B faying surface is specified.
11. The galvanizer's pretreatment process removes organic contaminants (grease, dirt, and oil), rust, and mill scale meaning the following materials shall be removed prior to arrival at the galvanizing facility as they are unable to be sufficiently cleaned by the galvanizing pretreatment process:

    - Weld slag and other welding flux residues
    - Weld splatter and anti-splatter
    - Burrs and/or excessively rough edges
    - Very heavy or extremely adherent mill scale
    - Mill coatings such as varnishes or lacquers present on some types of pipe
    - Epoxies, types of vinyl, and asphalt
    - Sand and other impurities on castings
    - Oil-based paints and markers
    - Crayon markers
    - Very heavy or thick deposits of wax or grease

Coatings

1. Primer, paint, and/or powder coat coatings on structural steel shall be in accordance with the Architect's specifications and requirements.

Bolting

1. All bolting shall be performed in accordance with the RCSC Specification for Structural Joints Using High Strength Bolts.
2. Oversized and/or slotted holes may be used only where explicitly detailed as such in these drawings.
3. Unless otherwise noted, all bolts shall be installed to the "snug tight" condition.
4. All bolts in connections identified as part of the SFRS shall be pretensioned.
5. All bolts identified as slip critical (SC) shall be pretensioned.
6. Unless otherwise noted, any joint indicating slip critical bolting shall be provided with Class A faying surfaces.
7. All faying surfaces, whether slip critical or not, shall be free of burs, dirt, spatter, or any other contamination or defect that would prevent firm seating of the plies with one another.
8. Bolts and bolting assemblies shall be installed with appropriate washers and nuts.

Welding

1. Welding shall only be permitted where shown in these drawings.
2. All welding shall be performed in strict accordance with AWS D1.1 and where applicable AWS D1.8.
3. All weld access holes shall be provided in accordance with AWS D1.8.
4. All welding shall be performed exclusively by welders currently and appropriately certified in accordance with AWS D1.1 and where applicable AWS D1.8.
5. Where welding is not performed in accordance with the required standards or is performed by welders not properly or currently certified as above, all affected welds shall, at the sole cost of the Contractor and to the exclusive satisfaction of the Engineer, be tested via non destructive testing by a qualified and independent testing agency. Welds failing testing criteria shall be completely removed and replaced.

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PROTOTYPE
BB20 4590 WW-HB
ISSUE DATE 06/26

ADDRESS
600 SCHUG AVENUE
PECULIAR, MO 64078

SHEET TITLE
STRUCTURAL SPECIFICATIONS

SHEET NUMBER:
S4.4

S05 40 00 - Cold Formed Metal Framing

2026-04-10

General

Referenced Standards

[Governing Code] - Chapter 22 - Steel
AISI S202 - Code of Standard Practice for Cold-Formed Steel Framing
AISI S100 - North American Specification for Design of Cold Formed Steel Structural Members
AISI S220 - North American Standard for Cold-Formed Steel Nonstructural Framing
AISI S230 - Standard for Cold-Formed Steel Framing - Prescriptive Method for One and Two Family Dwellings
AISI S240 - North American Standard for Cold-Formed Steel Structural Framing
AISI S310 - North American Standard for the Design of Profiled Steel Diaphragm Panels
AISI S400 - North American Standard for Seismic Design of Cold-Formed Steel Structural Systems
ANSI/AWS D1.3 - Structural Welding Code Sheet Steel

Definitions

None

Quality Assurance

1. Submittals

Submittals - Cold Formed Metal Framing

Req'd	Submittal	Notes
-	Delegated Engineered Design	Where indicated as delegated engineered design, Contractor shall prepare and submit drawings and calculations for cold formed metal framing stamped by an appropriately licensed Specialty Engineer demonstrating compliance with the Structural Drawings and the Structural Notes and Specifications.
X	Shop Drawings	Submit shop drawings for review showing the complete information necessary for the construction of cold formed metal framing on the project including: member sizes, grades, locations, and dimensions; location, type and size of welds including which of these are to be performed in the shop vs. field; and connections, fastenings, and pertinent details.
X	Product Data	Submit product data indicating framing components, sizes, materials, finishes, and accessories.
-	Welder Certifications	Submit performance qualification records for all welders performing welding on cold formed metal framing showing certification to AWS D1.3 for the welds to be performed on the Project.

Notes:
1. These submittals pertain to structural requirements; additional submittals may be required by other disciplines, refer to Architect for additional non-structural submittal requirements

2. Testing

None

3. Special Inspection

Special Inspection - Cold Formed Metal Framing

Req'd	Subject of Inspection	Reference	Frequency	Notes
-	Cold-formed steel trusses spanning 60 ft or greater	IBC 1705.5.2	Periodic	Verify that temporary and permanent restraint/bracing are installed in accordance with approved truss submittal.

Special Inspection - Cold Formed Metal Framing - Wind

Req'd	Subject of Inspection	Reference	Frequency	Notes
Y	Welding operations on cold-formed steel light-frame construction elements of the MWFRS.	IBC 1705.12.2	Periodic	-
Y	Screw fastening, bolting, anchoring, and other fastening of cold-formed steel light-frame constuction elements of the MWFRS including shear walls, braces, diaphragms, collectors, and hold-downs.	IBC 1705.12.2	Periodic	Special inspection is not required for cold-formed steel light-frame shear walls and diaphragms including screwing, bolting, anchoring and other fastening where either: a) the sheathing is gypsum board or fiberboard or b) the sheathing is wood structural panel or steel sheet on only one side of the shear wall or diaphragm assembly and the specified fastener spacing at panel edges is more than 4" oc.

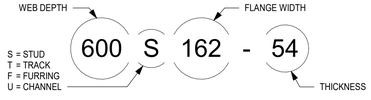
Special Inspection - Cold Formed Metal Framing - Seismic

Req'd	Subject of Inspection	Reference	Frequency	Notes
Y	Welding operations on cold-formed steel light-frame construction elements of the SFRS.	IBC 1705.13.3	Periodic	Seismic Design Categories C, D, E, and F.
Y	Screw fastening, bolting, anchoring, and other fastening of cold-formed steel light-frame constuction elements of the SFRS including shear walls, braces, diaphragms, collectors, and hold-downs.	IBC 1705.13.3	Periodic	Seismic Design Categories C, D, E, and F. Special inspection is not required for cold-formed steel light-frame shear walls and diaphragms including screwing, bolting, anchoring and other fastening where either: a) the sheathing is gypsum board or fiberboard or b) the sheathing is wood structural panel or steel sheet on only one side of the shear wall or diaphragm assembly and the specified fastener spacing at panel edges is more than 4" oc.

Products and Materials

Members & Shapes

1. Typical light gauge member nomenclature is as follows:



2. All cold formed steel framing including studs, track, joists, and miscellaneous shapes shall be formed of mill certified steel conforming to the following:

Members and Shapes - Cold Formed Metal Framing

Designated Steel Thickness	Reference Gauge	Minimum Steel Thickness	Design Steel Thickness	Standard	Grade	Notes
18 mil	25 ga	0.0179"	0.0188"	ASTM A1003	Gr 33 Type H	Galvanized - Minimum G40
27 mil	22 ga	0.0269"	0.0283"			
30 mil	20 ga	0.0296"	0.0312"			
33 mil	20 ga	0.0329"	0.0346"			
43 mil	18 ga	0.0428"	0.0451"			
54 mil	16 ga	0.0538"	0.0566"	ASTM A1003	Gr 50 Type H	Galvanized - Minimum G40
68 mil	14 ga	0.0677"	0.0713"			
97 mil	12 ga	0.0966"	0.1017"			
118 mil	10 ga	0.1180"	0.1242"			

3. All cold formed sections shall bear legible markings at 4'-0" o.c. identifying the manufacturer, evaluation report agency and number, the uncoated base metal thickness, and steel yield stress.
4. All stud and track sections shall conform to the SSMA Product Technical Guide and ICC ESR 3064P.
5. Unless otherwise noted, track sections shall have a thickness to match the attached studs.
6. Unless otherwise noted, vertical wall studs may have punched webs, all other members and sections are to be unpunched.

Screws

1. Screws for steel-to-steel connections in cold formed metal framing shall be qualified for use in engineered connections of cold formed steel construction.
2. Qualification of screws for structural use shall be established by a current evaluation report published by either the International Code Council (ICC) or the International Association of Plumbing and Mechanical Officials (IAPMO).
3. Screws shall be used in strict accordance with the associated evaluation report; the Contractor is responsible for selecting screw configurations and products for which the sizes are permissible in the detailed materials thicknesses and with suitable head configurations for the intended application.
4. A list of screws approved for use is provided:

Steel-to-Steel Screws - Cold Formed Metal Framing

Product	Manufacturer	Evaluation Report	Notes
Strong-Drive® Self-Drilling X-Metal Screws	Simpson StrongTie®	ICC ESR 3006	
Strong-Drive® FPHSD Self-Drilling Screws	Simpson StrongTie®	ICC ESR 3006	
Drill® Self-Drilling Structural Screws	DEWALT®	ICC ESR 3294	
Dril-Flex® Self-Drilling Structural Screws	DEWALT®	ICC ESR 3332	
TEKS® Self-Drilling Fasteners	ITW Buildex	ICC ESR 1976	
TEKS Select™ Self-Drilling Fasteners	ITW Buildex	ICC ESR 3223	
Pro-Twist™ Self-Drilling Tapping Screws	Primesource®	ICC ESR 1408	
Grabber® Self-Drilling Tapping Screws	Grabber® Construction Products	ICC ESR 1271	
HILTI® Self-Drilling Screws	HILTI®	ICC ESR 2196	

Wood Structural Panel-to-Steel Screws - Cold Formed Metal Framing

Product	Manufacturer	Evaluation Report	Notes
Strong-Drive® CBSDQ Self-Drilling Screws	Simpson StrongTie	ICC ESR 4208	
Strong-Drive® PPHD Self-Drilling Screws	Simpson StrongTie	ICC ESR 4208	
Drill® Self-Drilling Screws W/ Wings	DEWALT®	ICC ESR 4367	
Dril-Flex® Self-Drilling Screws	DEWALT®	ICC ESR 4367	
Bi-Flex® Self-Drilling Screws W/ Wings	DEWALT®	ICC ESR 4367	
Pro-Twist™ Self-Drilling Tapping Screws	Primesource	ICC ESR 4706	

Power Actuated Fasteners

1. PAF's for attachment of cold formed metal framing to the structure shall be qualified for use.
2. Qualification of PAF's for specific uses shall be established by a current evaluation report published by either the International Code Council (ICC) or the International Association of Plumbing and Mechanical Officials (IAPMO).
3. PAF's shall be used in strict accordance with the associated evaluation report.
4. A list of PAF's approved for use is provided:

Power Actuated Fasteners - Cold Formed Metal Framing

Product	Manufacturer	Evaluation Report	Notes
X-P	HILTI	ICC ESR 2269	
X-U & X-U 15	HILTI	ICC ESR 2269	
PDPA	Simpson StrongTie	ICC ESR 2138	
TE	ITW Ramset	ICC ESR 1799	
CSI Spiral	DEWALT®	ICC ESR 2024	

Execution

General

1. Fabrication and installation of cold formed steel framing shall conform to the requirements of the AISI Code of Standard Practice.
2. No members shall be spliced except as explicitly shown and permitted in the Structural Drawings.
3. Finishing materials such as sheathing shall not bridge deflection joints or shall be detailed by the architect to allow for the full motion of the joint without incurring damage or inducing additional loads on the structure.
4. Studs used in the exterior envelope of the structure shall be galvanized G60 or greater.
5. Ends of wall studs 54 mils and less shall be seated tight against the track with a gap that does not exceed 1/8" between the end of the wall framing member and the web of the track.
6. Ends of wall studs greater than 54 mils in thickness shall be seated tight against the track with a gap that does not exceed 1/32" between the end of the wall framing member and the web of the track.
7. All members shall be cut square or to the angle the member makes with the connecting part.

Screw Fastening

1. Screws must be installed perpendicular to the surface of the member.
2. Screws must penetrate through the supporting steel with a minimum of three (3) threads protruding past the back side of the supporting steel.
3. Edge distance and spacing of screws shall be as detailed in these drawings but shall not be less than 3D for spacing and 1.5D for edge distance. Where D is the nominal diameter of the screw body.
4. Where a screw is removed and replaced, it shall be replaced with the next size larger screw.

Welding

1. Welding shall only be permissible where explicitly specified in these drawings.
2. Where welding is specified, it shall be performed in accordance with AWS D1.3.
3. Welding electrodes shall be E70XX minimum with CVNT of 20 ft-lb @ 40° F.
4. Electrodes shall be designated by the manufacturer for use in resisting seismic forces.
5. Where welding to structural steel, electrodes shall be low hydrogen electrodes.
6. Where welds are made to galvanized structural steel, the galvanizing shall be repaired in accordance with ASTM A780 and shall be performed with a coating of a composition and thickness sufficient to provide at least as much zinc as is present in the typical coating on the remainder of the component.

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LICENSE EXPIRATION:
12-31-27

DATE ISSUED:
07-15-26

STATE ID:
241342

NATIONAL #:
46237

PROJECT #:
26-125

DRAWN BY:
JMS

CHECKED BY:
BS

DATE:
07/15/26 - PERMIT / BID SET

REVISIONS

CLIENT

McDonald's USA, LLC

PROTOTYPE

BB20 4590 WW-HB
ISSUE DATE 06/26

ADDRESS

600 SCHUG AVENUE
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SHEET TITLE

STRUCTURAL SPECIFICATIONS

SHEET NUMBER:

S4.5

S06 00 00 - Wood Construction

2026-04-10

General

Referenced Standards

[Governing Code] - Chapter 23 - Wood
2018 AWC National Design Specification for Wood Construction (NDS)
2021 AWC Special Design Provisions for Wind and Seismic (SDPWS)
2018 TFEC - Code of Standard Practice for Timber Frame Structures
ANSI/TPI 1-2022 - National Design Standard for Metal Plate Connected Wood Truss Construction
AWPA U1-23 - American Wood Protection Association Use Category System: User Specification for Treated Wood
ANSI A190.1 - Product Standard for Structural Glued Laminated Timber

Definitions

None

Quality Assurance

1. Submittals

Submittals - Wood Construction

Req'd	Submittal	Notes
-	Metal Plate Connected Wood Trusses Engineering and Drawings	Contractor shall prepare and submit drawings and calculations for all metal plate connected wood trusses stamped by an appropriately licensed Specialty Engineer demonstrating compliance with the Structural Drawings and the Structural Notes and Specifications. Drawings shall clearly identify all locations where bracing of the truss members are required.
-	Engineered Wood I-Joists Engineering and Drawings	Contractor shall prepare and submit drawings and calculations for all engineered wood I-joists. Drawings and Calculations shall be prepared and stamped by an appropriately licensed Specialty Engineer and shall demonstrate compliance with the Structural Drawings and the Structural Notes and Specifications.
X	Engineered Wood Open Web Trusses Engineering and Drawings	Contractor shall prepare and submit drawings and calculations for all wood open web trusses trusses stamped by an appropriately licensed Specialty Engineer demonstrating compliance with the Structural Drawings and the Structural Notes and Specifications. Drawings shall clearly identify all locations where bracing of the truss members are required.
X	Glulam Members - Shop Drawings	Contractor shall prepare and submit shop drawings for all glulam members. Shop drawings shall include a layout plan to identify members. Drawings shall be provided for each member indicating all pertinent member dimensions, species, laminating combination, adhesives, and appearance classification.
X	Timber Framing - Shop Drawings	Contractor shall prepare and submit shop drawings for timber framing members. Shop drawings shall include timber sizes, dimensions, grades, edge treatment, finishes, and connection joinery details.
X	Steel Fabrications - Shop Drawings	Submit shop drawings for review showing the complete information necessary for the fabrication of all steel fabrications on the project including: member sizes, grades, locations, and dimensions; location, type and size of welds and bolts including which of these are to be performed in the shop vs. field.
-	Proprietary Lateral Systems Engineering and Drawings	Contractor Contractor shall prepare and submit drawings and calculations for all proprietary lateral systems and/or components stamped by an appropriately licensed Specialty Engineer demonstrating compliance with the Structural Drawings and the Structural Notes and Specifications.

Notes:
1. These submittals pertain to structural requirements; additional submittals may be required by other disciplines, refer to Architect for additional non-structural submittal requirements

2. Testing

None

3. Special Inspection

Special Inspection - Wood Construction

Req'd	Subject of Inspection		Reference	Frequency	Notes
Y	Fabrication of Prefabricated Structural Elements.		IBC 1704.2.5	Periodic	Refer to special inspections for fabricators.
-	High-Load Diaphragms	Structural Panel - Grade and Thickness	IBC 1705.5.1 IBC Table 2306.2 (2)	Periodic	Verify structural panel grade and thickness.
		Framing Members - Size			Verify nominal size of framing members ad adjoining panel edges.
		Fasteners - Type and Layout			Verify nail or staple diameter and length, number of fastener lines and spacing between fasteners in each line and at edge margins.
-	Metal-Plate Connected Wood Trusses Spanning 60 Feet or Greater		IBC 1705.5.2	Periodic	Verify that temporary and permanent restraint/bracing are installed in accordance with approved truss submittal.

Special Inspection - Wood Construction - Wind

Req'd	Subject of Inspection	Reference	Frequency	Notes
-	Field gluing of structural wood elements of the MWFRS.	IBC 1705.12.1	Continuous	-
-	Nailing, bolting, anchoring, and other fastening structural wood elements of the MWFRS.	IBC 1705.12.1	Periodic	Special inspection is not required for wood shear walls, shear panels, and diaphragms including nailing, bolting, anchoring and other fastening where the lateral resistance is provided by structural sheathing and the specified fastener spacing at panel edges is more than 4" oc.

Special Inspection - Wood Construction - Seismic

Req'd	Subject of Inspection	Reference	Frequency	Notes
-	Field gluing of structural wood elements of the SFRS.	IBC 1705.13.2	Continuous	Seismic Design Categories C, D, E, and F.
-	Nailing, bolting, anchoring, and other fastening structural wood elements of the SFRS.	IBC 1705.13.2	Periodic	Seismic Design Categories C, D, E, and F. Special inspection is not required for wood shear walls, shear panels, and diaphragms including nailing, bolting, anchoring and other fastening where the lateral resistance is provided by structural sheathing and the specified fastener spacing at panel edges is more than 4" oc.

Products and Materials

Sawn Lumber

1. All sawn lumber sizes are specified as standard nominal sizes and shall conform to US Department of Commerce Voluntary Product Standard PS20-10.
2. All sawn lumber shall have a maximum 12% moisture content at time of installation.
3. Unless noted otherwise, all sawn lumber shall be of the following species and grades and shall bear a grade stamp as required by the applicable grading agency rules:

Sawn Lumber

Item	Species & Grading Agency	Minimum Grade	Notes
Studs & Plates	Douglas Fir - Larch or Southern Pine or Hem-Fir North (WCLIB or WWPA)	#1	
Joists & Rafters	Douglas Fir - Larch or Southern Pine or Hem-Fir North (WCLIB or WWPA)	#1	
Beams & Stringers	Douglas Fir - Larch or Southern Pine or Hem-Fir North (WCLIB or WWPA)	#1	
Posts and Timbers	Douglas Fir - Larch or Southern Pine or Hem-Fir North (WCLIB or WWPA)	#1	

Preservative Treated Wood

1. Wood exposed to moisture or exterior conditions shall be preservative treated.
2. Wood in contact with concrete or masonry shall be preservative treated unless it is within the moisture barrier envelope of the building and an approved moisture barrier is provide between the wood and the substrate.
3. Unless otherwise specified in the Contract Documents, Contractor shall select materials treated with a preservative appropriate for each use category as defined in AWPA U1-23.

Structural Composite Lumber (SCL)

1. SCL members shall be of the type and size indicated in the Structural Drawings, shall conform to ASTM D5456, and shall have a current code evaluation or APA product report for the specified product.
2. Each SCL member shall bear a marking indicating the product designation, grade, manufacturer, and evaluation report.

Structural Composite Lumber

Product	Allowable Bending Stress (F_b)	Allowable Shear Stress (F_v)	Elastic Modulus (E)	Manufacturer/Product	Evaluation Report
Laminated Veneer Lumber (LVL)	2,600 psi	285 psi	2,000 ksi	Weyerhauser Microllam ®	ICC ESR 1387
				RedBuilt RedLam ®	ICC ESR 2993
				Boise-Cascade Versa-Lam ®	ICC ESR 1040
				Roseburg RigidLam ®	ICC ESR 1210
				Murphy Co. LVL	ICC ESR 2913
				Pacific Woodtech LVL	ICC ESR 2403
				Freres Lumber LVL	ICC ESR 4759
Parallel Strand Lumber (PSL)	Columns 2,400 psi Beams 2,900 psi	Columns 190 psi Beams 290 psi	Columns 1,800 ksi Beams 2,000 ksi	Weyerhauser Parallam ®	ICC ESR 1387
Laminated Strand Lumber (LSL)	2,325 psi	310 psi	1,550 ksi	Weyerhauser TimberStrand ®	ICC ESR 1387

Prefabricated Wood I-Joists

1. Except where design and engineering is delegated to the Contractor, Prefabricated Wood I-Joists shall shall be of the type and size indicated in the Structural Drawings, shall conform to ASTM D5055, and shall have a current code evaluation report for the specified product.
2. Each joist shall bear a marking indicating the product designation, grade, manufacturer, and evaluation report.

Prefabricated Wood I-Joists

Product	Manufacturer/Product	Evaluation Report	Notes
I-Joists	Weyerhauser TrusJoist ®	ICC ESR 1153	
	RedBuilt Red-I ®	ICC ESR 2994	
	Boise-Cascade AJS ® Joists	ICC ESR 1144	
	Boise-Cascade BCI ® Joists	ICC ESR 1336	
	Roseburg RFPI ® Joists	ICC ESR 1251	
	Pacific Woodtech I-Joists	ICC ESR 1305	

Glue Laminated Timbers (Glulam)

1. Glulam members shall be fabricated in accordance with ANSI A190.1 and ANSI 117-2020.
2. Each member shall bear an identifying mark complying with ANSI A190.1.
3. Unless noted otherwise in the Architectural drawings and specifications, exposed glulam members shall be provided with an "Architectural" appearance classification. Concealed glulam members shall be provided with an "Industrial" appearance classification.
4. Glulam members shall be of the type and size indicated in the Structural Drawings.
5. Where glulam members are identified as wet-use or where glulam members are to be preservative treated, the adhesive used in the manufacture of the members must be suitable for wet-use.
6. Where glulam members are to be preservative treated, the treatment shall conform to AWPA Standard U1 and APA Technical Note Form S580: Preservative Treatment of Glued Laminated Timber.
7. Camber shall be provided as indicated in the Structural Drawings.
8. Cutting and drilling operations shall be completed by the manufacturer during fabrication including tapers, curves, notches, daps, holes, and cutting to length.
9. Unless noted otherwise, the species and grades for glulam members shall be as follows:

Glue Laminated Timbers

Item	Combination Symbol	Species (Outer/Core)	Allowable Bending Stress (F_{bx})	Allowable Shear Stress (F_{vx})	Elastic Modulus (E)
Simple-Span Beams	24F-V4	DF/DF	2,400 psi	265 psi	1,800 ksi
Cantilevered or Multi-Span Beams	24F-V8	DF/DF	2,400 psi	2,400 psi	1,800 ksi
Columns	3	DF	2,400 psi (F_{by}) 2,000 psi (F_{bx})	230 psi (F_{vy}) 265 psi (F_{vx})	1,900 ksi

Wood Structural Panels

1. Wood structural panels shall be APA Rated, Exposure 1, and shall have an APA grade stamp.
2. Wood Structural Panels shall comply with US Department of Commerce Voluntary Product Standard PS1 or PS2 and APA PRP-108.
3. Type and grade of Wood Structural Panels shall be as indicated in the Structural Drawings.

Metal Plate Connected Wood Trusses

1. Design and engineering of metal plate connected wood trusses is delegated to the Contractor.
2. All prefabricated wood trusses shall be engineered and constructed in accordance with ANSI/TPI 1-2022 by an appropriately licensed design professional to resist the loads specified in the design criteria above and all other loads specified by the Engineer.

Open Web Pin-Connected Trusses

1. Design and engineering of Open Web Pin-Connected Trusses is delegated to the Contractor.
2. Design and fabrication of Open Web Pin-Connected Trusses shall comply with ICC-ES AC306 Acceptance Criteria for Pin-connected Open Web Trusses with Wood Chords and Tubular Steel Webs.

Manufactured Metal Connectors, Straps, Hangers, and Hold-Downs

1. Unless noted otherwise, all metal hardware shall be assumed to be manufactured by Simpson StrongTie.
2. Unless noted otherwise, all metal hardware shall be galvanized. G185 minimum for metal hardware in contact with treated wood, G90 minimum otherwise.

Steel Fabrications for Primarily Wood Construction

1. Unless noted otherwise, incidental steel and steel fabrications for wood and timber construction shall be made of A36 steel.
2. Unless noted otherwise, welding electrodes shall be E70XX 20 ft-lb at 40° F.

Nails

1. Nails shall be common steel wire nails and spikes, box nails, or sinker nails and shall conform to ASTM F1667.
2. Containers or packaging for nails shall have labels identifying the type, size, manufacturer, and evaluation report.
3. Nail designations include a specific nail length; nail lengths shorter than the standard are not permitted.
4. Standard nail sizes from ASTM F1667 are reproduced here:

Standard Nail Dimensions - ASTM F1667

Type	Dimension	Nail Size									
		6d	7d	8d	10d	12d	16d	20d	30d	40d	50d	60d
Common	Length	2.000"	2.250"	2.500"	3.000"	3.250"	3.500"	4.000"	4.500"	5.000"	5.500"	6.000"
	Shank Diameter	0.113"	0.113"	0.131"	0.148"	0.148"	0.162"	0.192"	0.207"	0.225"	0.244"	0.263"
	Head Diameter	0.266"	0.266"	0.281"	0.312"	0.312"	0.344"	0.406"	0.438"	0.469"	0.500"	0.531"
Box	Length	2.000"	2.250"	2.500"	3.000"	3.250"	3.500"	4.000"	4.500"	5.000"	-	-
	Shank Diameter	0.099"	0.099"	0.113"	0.128"	0.128"	0.135"	0.148"	0.148"	0.162"	-	-
	Head Diameter	0.266"	0.266"	0.297"	0.312"	0.312"	0.344"	0.375"	0.375"	0.406"	-	-
Sinker	Length	1.875"	2.125"	2.375"	2.875"	3.125"	3.250"	3.750"	4.250"	4.750"	-	5.750"
	Shank Diameter	0.092"	0.099"	0.113"	0.120"	0.135"	0.148"	0.177"	0.192"	0.207"	-	0.244"
	Head Diameter	0.234"	0.250"	0.266"	0.281"	0.312"	0.344"	0.375"	0.406"	0.438"	-	0.500"

Screws

1. Except where proprietary screws are specified, wood screws shall comply with ANSI/ASME Standard B18.6.1.
2. Containers or packaging for screws shall have labels identifying the type, size, manufacturer, and evaluation report.

Lag Screws

1. Lag screws shall comply with ANSI ASME Standard B18.2.1.
2. Containers or packaging for lag screws shall have labels identifying the type, size, manufacturer, and evaluation report.

Bolts, Nuts, and Washers

1. Unless noted otherwise, bolts and associated hardware for wood construction shall be as follows:

Bolts and Hardware

Item	Standard	Grade	Notes
Bolts and Threaded Rods	ASTM A307	A	Does not include anchor bolts to concrete.
Nuts	ASTM A563	A	
Washers	ASTM F884		

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DATE ISSUED: 07-15-26

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NATIONAL #: 46237

PROJECT #: 26-125

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CHECKED BY: BS

DATE:
07/15/26 - PERMIT / BID SET

REVISIONS

CLIENT

McDonald's USA, LLC

PROTOTYPE

BB20 4590 WW-HB
ISSUE DATE 06/26

ADDRESS

600 SCHUG AVENUE
PECULIAR, MO 64078

SHEET TITLE

STRUCTURAL SPECIFICATIONS

SHEET NUMBER:

S4.6

S06 00 00 - Wood Construction (Cont'd...)

2026-04-10

Execution

General

1. Contractor shall protect the structure and materials during construction from damage due to weather exposure, jobsite handling, and shipping.
2. Construction of Engineered Wood Products shall conform to APA Form E30.
3. Construction of Timber Framed Structures shall comply with TFEC - Code of Standard Practice for Timber Framed Structures.

Tolerances

1. All members and elements shall be installed true, plumb, and with uniform close fitting joints within the tolerances prescribed herein or in the associated code of standard practice.
2. Dimensional tolerances for members and elements shall be as specified in the material specific standards above.
3. Fabrication and erection tolerances for timber construction shall be as specified in the TFEC COSP for Timber Framed Structures.
4. Wall surfaces shall have a maximum out of plumb limit of 1/4" in 10 ft.
5. Stud walls shall have a maximum 1/8" horizontal offset between adjacent studs and no more than 1/4" in 8' total horizontal deviation along the wall.
6. Walls, partitions, and members shall be located within 1/4" of the intended position.

Sawn Lumber

1. Cuts, notches, and holes in wood members shall only be permitted where explicitly detailed as such in the Structural Drawings.

Preservative Treated Wood

1. All cuts, holes, and injuries such as abrasions or holes from removal of nails and spikes which may penetrate the treated zone shall be field treated in accordance with AWPA Standard M4.

Structural Composite Lumber

1. Installation of SCL shall be in strict compliance with the manufacturer's installation instructions and the evaluation report for the product.
2. Cuts, notches, and holes in wood members shall only be permitted where explicitly detailed as such in the Structural Drawings and as permitted in the evaluation report for the product.

Prefabricated Wood I-Joists

1. Installation of I-joists shall be in strict compliance with the manufacturer's installation instructions and the evaluation report for the product.
2. Cuts, notches, and holes in wood members shall only be permitted where explicitly detailed as such in the Structural Drawings and as permitted in the evaluation report for the product.
3. Prefabricated Wood I-Joists are not stable and cannot be expected to support loads until all specified blocking, bracing, and/or sheathing has been installed. Contractor is responsible for providing temporary bracing and shoring.

Glue Laminated Timbers

1. Contractor shall conform to the recommendations of AITC 111 - Recommended Practice for Protection of Structural Glued Laminated Timber during Transit, Storage, and Erection and APA Builder Tips R540 - Proper Storage and Handling of Glulam Beams.
2. Cutting, notching, and drilling holes in glulam beams in the field shall not be permitted unless explicitly approved by the Engineer.
3. Beams with camber, whether specified or inherent, shall be installed with the camber up.

Wood Structural Panels

1. Installation of wood structural panels shall conform to APA recommendations.
2. Fasteners shall be driven until the head of the fastener is flush with the surface of the sheathing. Fasteners shall not be driven below the surface of the sheathing. Where fasteners have been overdriven, the Engineer shall be notified; Contractor shall be exclusively responsible for remediation of the condition.
3. Fasteners shall be located no closer than 3/8" from panel edges.
4. Panels in horizontal conditions (floor and roof) shall be oriented with the strong direction perpendicular to the supporting members.
5. Panels in vertical conditions (walls) may be oriented horizontally or vertically.
6. Panels shall not be less than 4'x8' except at boundaries and changes in framing.
7. Provide 1/8" gap between panel edge and end joints unless otherwise indicated by the panel manufacturer.
8. For horizontal conditions, suitable edge support shall be provided where indicated in the Structural Drawings or where recommended by APA by use of panel clips, tongue-and-groove edges, or blocking between joists.
9. Where blocking is specified, neither panel clips nor tongue-and-groove edges may be substituted for the blocking.

Metal Plate Connected Wood Trusses

1. Contractor shall install the trusses in accordance with the approved shop drawings, the Structural Drawings, and ANSI/TPI 1 - National Design Standard for Metal Plate Connected Wood Truss Construction.
2. Trusses shall be braced adequately for safety during construction and sufficiently to prevent trusses and member from buckling during installation.
3. Permanent bracing specified in the approved shop drawings and/or Structural Drawings may not be sufficient for the trusses to be stable in the partially complete condition; Contractor is solely responsible for shoring and bracing trusses during construction.

Open Web Pin-Connected Wood Trusses

1. Contractor shall install the trusses in accordance with the approved shop drawings, the Structural Drawings, and the specifications of the Specialty Engineer.
2. Trusses shall be braced adequately for safety during construction and sufficiently to prevent trusses and member from buckling during installation.
3. Permanent bracing specified in the approved shop drawings and/or Structural Drawings may not be sufficient for the trusses to be stable in the partially complete condition; Contractor is solely responsible for shoring and bracing trusses during construction.
4. Prior to enclosing the trusses, the Contractor shall give notification to the Specialty Engineer to provide an opportunity for review of the installation.

Manufactured Metal Connectors, Straps, Hangers, and Hold Downs

1. Installation shall be in accordance with the manufacturer's instructions and the Structural Drawings.

Steel Fabrications

1. All welding (Shop and Field) shall be exclusively performed by welders currently and appropriately certified in accordance with AWS D1.1 by a third party and independent testing agency.
2. Welding shall only be permitted where shown in these drawings and all welding shall be in accordance with AWS D1.1 or where applicable AWS D1.8.
3. Where welding is not performed in accordance with the required standards or is performed by welders not properly or currently certified as above, all affected welds shall, at the sole cost of the Contractor, be tested via non destructive testing by a qualified and independent testing agency. Welds failing testing criteria shall, at the sole cost of the Contractor, be completely removed and replaced.
4. Except where steel is to be galvanized, apply a rust inhibitive black primer in the shop to all steel fabrications.

Nails

1. Toe-nails shall be driven at an angle of approximately 30° with the member and started approximately 1/3 of the length of the nail from the member end.
2. Nails may be installed with or without a bored pilot hole; where a bored pilot hole is provided, the diameter of the hole shall not exceed 75% of the nail diameter.
3. Machine applied nailing: use of machine nailing is subject to satisfactory jobsite demonstration for each project and the approval by the project engineer. Approval is subject to continued satisfactory performance. If nailheads penetrate the outer ply by more than would be normal for a hand hammer or if minimum allowable edge distances are not maintained, the performance will be deemed unsatisfactory.

Screws

1. Proprietary screws shall be installed in accordance with the manufacturer's instructions and the Structural Drawings.
2. Unless otherwise noted, non-proprietary wood screws installed in DF-L members shall be installed in pre-bored lead holes.
3. Pre-bored lead holes for wood screws in DF-L shall be as follows:
4. Lead holes for wood screws shall be stepped.
5. The upper portion of the hole around the unthreaded shank of the screw shall be approximately 7/8 times the diameter of the screw.
6. The lower portion of the hole around the threaded portion of the screw shall be approximately 7/8 times the diameter of the root of the thread.
7. For screws with rolled threads where the unthreaded shank is the same diameter as the thread root, the lead hole will not be stepped.
8. Contact Engineer for drilling requirements in members other than DF-L.
9. Wood screws installed in lead holes shall be inserted by turning the screw, not by driving with a hammer.
10. Soap or wax may be used to lubricate threads during installation.

Lag Screws

1. Lag screws larger than 3/8" installed in DF-L members shall be installed in pre-bored lead holes.
2. Pre-bored lead holes for lag screws in DF-L shall be as follows:
3. Lead holes for lag screws shall be stepped.
4. The upper portion of the hole around the unthreaded shank of the lag screw shall be the same diameter as the shank of the screw.
5. For 7/16" - 1/2" lag screws, the lower portion of the hole around the threads shall be 1/4" smaller than the shank.
6. For 5/8" - 7/8" lag screws, the lower portion of the hole around the threads shall be 5/16" smaller than the shank.
7. For 1" - 1 1/4" lag screws, the lower portion of the hole around the threads shall be 3/8" smaller than the shank.
8. Contact Engineer for drilling requirements in members other than DF-L.
9. Lag screws installed in lead holes shall be inserted by turning the screw, not by driving with a hammer.
10. Soap or wax may be used to lubricate threads during installation.

Bolts

1. Holes for bolts shall be bored 1/32" to 1/16" larger than nominal bolt diameter.
2. All bolts bearing on wood shall have standard cut washer under head and nut.
3. All bolts shall be re-tightened prior to application of plaster, drywall, plywood, etc.

S31 00 00 - Soils & Earthwork for Structures

2026-04-10

Soil Preparation

1. IT IS RECOMMENDED THAT ALL GRADING, EXCAVATION, PLACEMENT AND INSTALLATION OF STRUCTURAL FILL AND FOUNDATIONS BE PERFORMED UNDER THE INSPECTION AND TESTING OF A QUALIFIED GEOTECHNICAL CONSULTANT DURING THE CRITICAL STAGES OF CONSTRUCTION.
2. IF A GEOTECHNICAL REPORT HAS BEEN CONDUCTED FOR THE SITE, THE CONTRACTOR SHALL FULLY REVIEW THE REPORT FOR ADDITIONAL REQUIREMENTS AND INFORMATION PRIOR TO CONSTRUCTION.
3. THE CONTRACTOR SHALL INVESTIGATE THE SITE DURING CLEARING AND EARTHWORK OPERATION FOR FILLED EXCAVATIONS OR BURIED STRUCTURES AND NOTIFY THE E.O.R. IF ANY STRUCTURES ARE FOUND PRIOR TO CONSTRUCTION.
4. DURING EXCAVATION, LOCATE AND PROTECT UNDERGROUND OR CONCEALED UTILITIES WHERE WORK IS BEING PERFORMED. WHEN OVERSIZE MATERIALS, CONCRETE, OR ASPHALT ARE ENCOUNTERED, THESE MATERIALS SHOULD BE HAULED OFF SITE AND DISPOSED OF IN ACCORDANCE WITH APPLICABLE CODES AND REGULATIONS.
5. ALL SHALLOW SPREAD FOUNDATIONS SYSTEMS SHALL BEAR ON COMPETENT NATIVE SOILS OR STRUCTURAL FILL PLACED PER THE GEOTECHNICAL REPORT RECOMMENDATIONS. IF THE SITE HAS A LOWER BEARING CAPACITY THAN LISTED, THEN THE FOUNDATION PLAN WILL NEED TO BE REDESIGNED.
6. MINIMUM FROST DEPTH LISTED IS FROM LOWEST ADJACENT FINISH GRADE TO BOTTOM OF THE FOOTING. THE MINIMUM FROST DEPTH SHALL BE MAINTAINED FOR ALL EXTERIOR FOOTINGS. THE CONTRACTOR SHALL COORDINATE AND VERIFY WITH ENGINEER OF RECORD PRIOR TO THE PLACEMENT OF FOUNDATIONS.
7. ALL STRUCTURAL FILL BELOW FOOTINGS SHALL EXTEND OUT PAST THE EDGE OF THE FOOTING AND SLOPE AT 2 TO 1 (2 VERTICAL TO 1 HORIZONTAL) UNTIL REACHING COMPETENT SOILS.
8. ALL WATER SHALL BE REMOVED FROM FOUNDATION EXCAVATIONS PRIOR TO THE PLACEMENT OF CONCRETE. THE CONTRACTOR IS RESPONSIBLE FOR THE GOUND WATER CONTROL SYSTEM DESIGN.
9. ALL STRUCTURAL FILL MATERIAL SHOULD BE PLACED IN UNIFORM 12" THICK LOOSE LIFTS AND COMPACTED TO 95% OF ITS MAXIMUM DRY DENSITY AS DETERMINED BY A STANDARD PROCTOR AT OPTIMUM MOISTURE CONTENT, IN ACCORDANCE WITH ASTM D1557. IN RESTRICTED AREAS WHERE ONLY HAND-OPERATED EQUIPMENT IS PERMITTED, THE MAXIMUM LOOSE LIFT SHALL BE 8".

Slab Requirements

1. ALL CONCRETE SLABS SHALL HAVE A MINIMUM 4" THICKNESS AND CONTROL JOINTS AT 10'-0" O.C. MAX SPACING.
2. WHERE RECOMMENDED INTERIOR CONCRETE SLABS SHALL HAVE A PLASTIC VAPOR RETARDER PER ASTM E1745 UNDER A MINIMUM OF 6" OF COMPACTED CLEAN GRANULAR STRUCTURAL FILL.
3. SEAL ALL VAPOR RETARDER COMPLETELY AROUND ALL PIPES AND CONDUITS. INSPECT VAPOR RETARDER THOROUGHLY AND REPAIR ALL PUNCTURES AND TEARS PRIOR TO PLACING CONCRETE. ALL ALPS SHALL BE 18" MINIMUM AND SEALED CONTINUOUSLY WITH PRESSURE SENSITIVE TAPE.
4. ALL SLAB SAWN CONTROL AND CONSTRUCTION JOINTS SHALL BE MADE AS SOON AS POSSIBLE WITHOUT DAMAGE TO THE SURACE. FILLING OF SAWN JOINTS WHERE REQUIRED SHALL BE DELAYED AS LONG AS POSSIBLE TO ALLOW MAXIMUM SHRINKAGE TO OCCUR IN SLABS.
5. SEE ARCHITECTURAL PLANS FOR LOCATIONS OF SLAB SLOPES, DEPRESSIONS, CURBS, DRAINS, NON-STRUCTURAL PARTITIONS AND OTHER EMBEDDED ITEMS NOT SHOWN ON THE FOUNDATION PLAN.

Retaining Wall Requirements

1. ALL FILL MATERIALS BEHIND RETAINING WALLS SHALL BE FULLY DRAINED BY MEANS OF SUB-DRAIN, WEEP HOLES, OR FREE DRAINING AGGREGATE. BACKFILL FINISHED GRADE SHALL BE SLOPED AWAY FROM THE BACKFACE OF RETAINING WALL. THE DESIGN OF RETAINING WALLS AND SUBTERRANEAN BUILDING WALLS ARE BASED ON DRAINED SOILS.
2. DO NOT PLACE BACKFILL BEHIND WALLS BEFORE THEY HAVE ATTAINED THEIR DESIGN STRENGTH.
3. ANY SUPERIMPOSED LOADS, OTHER THAN RETAINED EARTH, SHALL BE CONSIDERED AS SURCHARGES AND ACCOUNTED FOR IN DESIGN. LOADS APPLIED WITHIN A HORIZONTAL DISTANCE EQUAL TO WALL STEM HEIGHT AS MEASURED FROM BACK FACE OF THE WALL SHALL BE CONSIDERED AS SURCHARGE. TEMPORARY CONSTRUCTION LOADS SHALL NOT BE APPLIED WITHIN A HORIZONTAL DISTANCE EQUAL TO STEM WALL HEIGHT FROM THE BACK FACE OF THE WALL. NOTIFY EOR IF TEMPORARY CONSTRUCTION LOADS WILL BE APPLIED WITHIN THE SPECIFIED HORIZONTAL ZONE PRIOR TO CONSTRUCTION.
4. THE CONTRACTOR IS RESPONSIBLE TO ADEQUATELY PROTECT ALL EXCAVATION SLOPES. WHERE NECESSARY, SHEET PILES AND SHORING OF EXCAVATION SHALL BE PROVIDED WITH ALL REQUIRED TIEBACKS AND BRACING.
5. APPROPRIATE FOUNDATION WATERPROOFING METHODS SHALL BE PROVIDED ON BACKSIDE OF SUB-SURFACE RETAINING WALLS FROM BASE OF WALL TO FINISHED GRADE.

These drawings, as instruments of service, are, and shall remain, the property of Tamarack Grove Engineering. Use of this drawing is limited to the specified project by persons named hereon. Any date or revisit of said drawings is strictly prohibited without written permission of Tamarack Grove Engineering.

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LICENSE EXPIRATION:
12-31-27

DATE ISSUED:
07-15-26

STATE ID:
241342

PROJECT #:
26-125

NATIONAL #:
46237

DRAWN BY:
JMS

CHECKED BY:
BS

DATE:
07/15/26 - PERMIT / BID SET

REVISIONS

CLIENT

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PROTOTYPE

BB20 4590 WW-HB
ISSUE DATE 06/26

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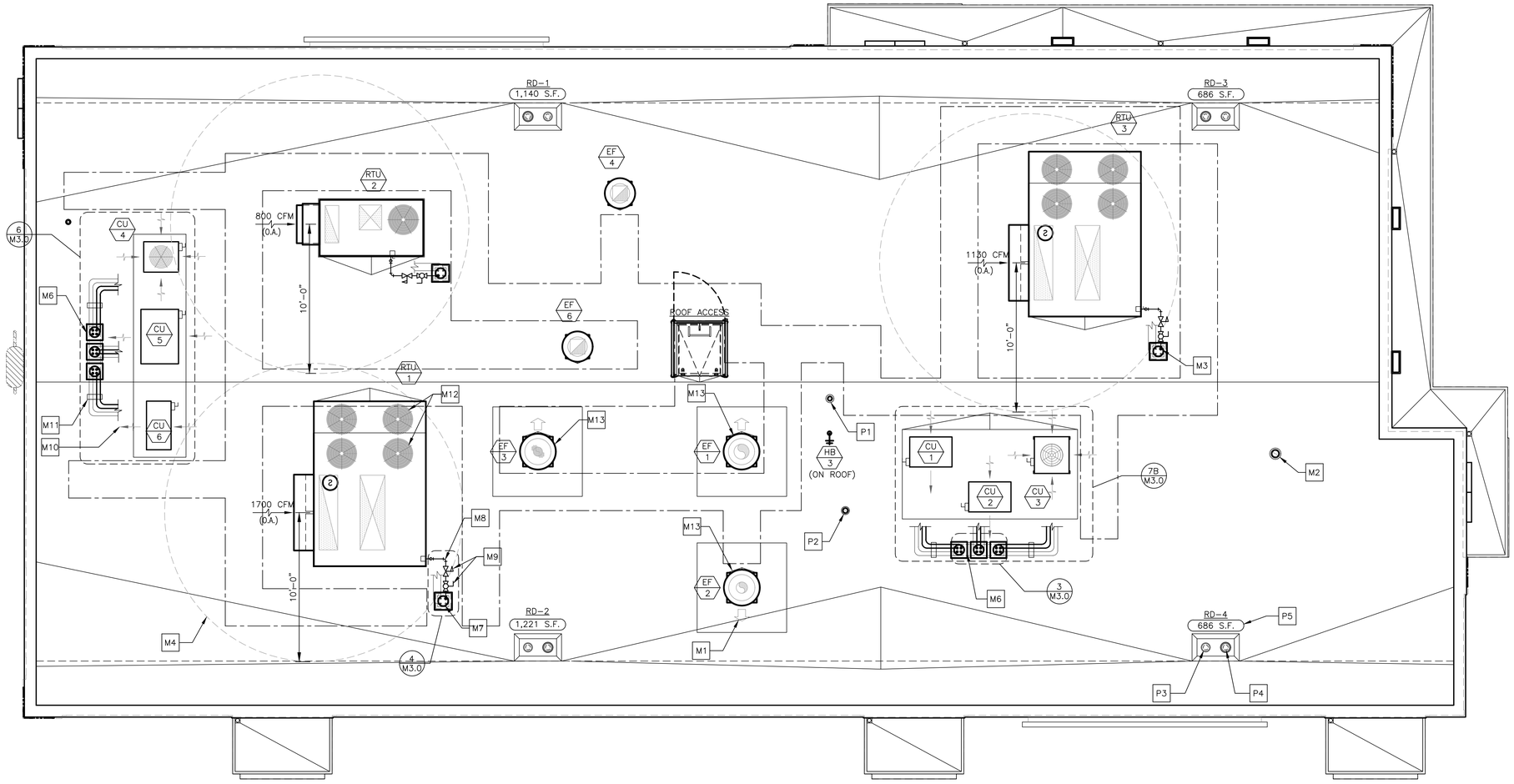
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PECULIAR, MO 64078

SHEET TITLE

STRUCTURAL SPECIFICATIONS

SHEET NUMBER:

S4.7



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

CONDENSATE LINE FROM RTUs DOWN THROUGH THE ROOF ON UNITS BASE, TO BE FURNISHED AND INSTALLED BY PC. SEE PLUMBING SHEETS P1.2, P2.1 AND COORDINATION SCHEDULE ON M4.1.

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 NOT USED
- 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.
- M12 PROVIDE HAIL GUARD FOR RTU-1 PROTECTING CONDENSER COIL FROM GREASE.
- M13 EXHAUST FANS WITH WINDBAND EXTENSION AND/OR RAISED CURBS TO PREVENT DIRECT GREASE BLOW ONTO CONDENSER COIL OF UNIT RTU-1.
- P1 CONCENTRIC VENTING KIT FOR COMBUSTION AIR INTAKE AND FLUE EXHAUST FOR SEALED COMBUSTION WATER HEATER (SEE PLUMBING DRAWINGS). PROVIDE PORTALS PLUS PLASTIFLASH WITH C-126 CAP (OR EQUAL) FOR ROOF PENETRATION.
- P2 PLUMBING VENT THROUGH ROOF (SEE PLUMBING DRAWINGS). PROVIDE PORTALS PLUS PLASTI-FLASH WITH C-126 CAP (OR EQUAL) FOR ROOF PENETRATION.
- P3 PRIMARY ROOF DRAIN WITH DOME STRAINER (TYP). (SEE PLUMBING DRAWINGS)
- P4 OVERFLOW ROOF DRAIN WITH DOME STRAINER (TYP). (SEE PLUMBING DRAWINGS)
- P5 AREA OF ROOF SERVED BY ROOF DRAIN (TYP.)

PIPE PORTAL SCHEDULE

MANUFACTURER	CURB DIMENSIONS	CURB TYPE	CAP TYPE (QTY)	SERVES
RPS	12"x12"x11"H	RC-2A	N18 (1)	RTU-1 THROUGH RTU-3
RPS	43"x12"x13"H	RC-2A	N18 (3)	CU-1 THROUGH CU-6

SEQUENCE OF OPERATION

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

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

1. OCCUPIED MODE SHALL BEGIN AS FOLLOWS:
   - RTU-1: 1.5 HOURS BEFORE OPEN
   - RTU-2: 1 HOUR BEFORE OPEN
   - RTU-3: 30 MINUTES BEFORE OPEN
2. ROOFTOP UNIT FAN SHALL RUN CONTINUOUSLY DURING OCCUPIED MODE
3. ECONOMIZER SHALL BE OPEN DURING OCCUPIED MODE (OUTDOOR AIR THROUGH ROOFTOP UNITS SERVES AS MAKE-UP AIR FOR THE KITCHEN EXHAUST SYSTEM) - REFER TO E3.2 FOR HOOD/FAN INTERLOCK DETAILS.
4. UNOCCUPIED MODE SHALL BEGIN ONE (1) HOUR AFTER STORE CLOSES
5. DURING UNOCCUPIED MODE, ECONOMIZER IS CLOSED AND HEATING, COOLING AND FAN OPERATE IN AUTO MODE (ON DEMAND)
6. RTU-2 SHALL BE INTERLOCKED WITH EF-6. UPON ACTIVATION OF EF-6, RTU-2 SHALL INCREASE SUPPLY AND OUTSIDE AIR BY 600 CFM, WHILE MAINTAINING 1250 CFM RETURN AIR. COORDINATED WITH E.C. AND BAS SUPPLIER.

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LICENSE EXPIRATION: DEC 31, 2027

STATE OF MISSOURI
JOSEPH G. THOMAS
NUMBER E-27428
REGISTERED PROFESSIONAL ENGINEER

DATE ISSUED: SEPT 8, 2026

STATE ID: 241342
PROJECT #: 26-125
NATIONAL #: 46237
DRAWN BY: SC
CHECKED BY: JT

DATE:
07/15/26 - PERMIT / BID SET

REVISIONS
1 09/08/25 - DECOR UPDATE / PLUMBING & CIVIL COORDINATION

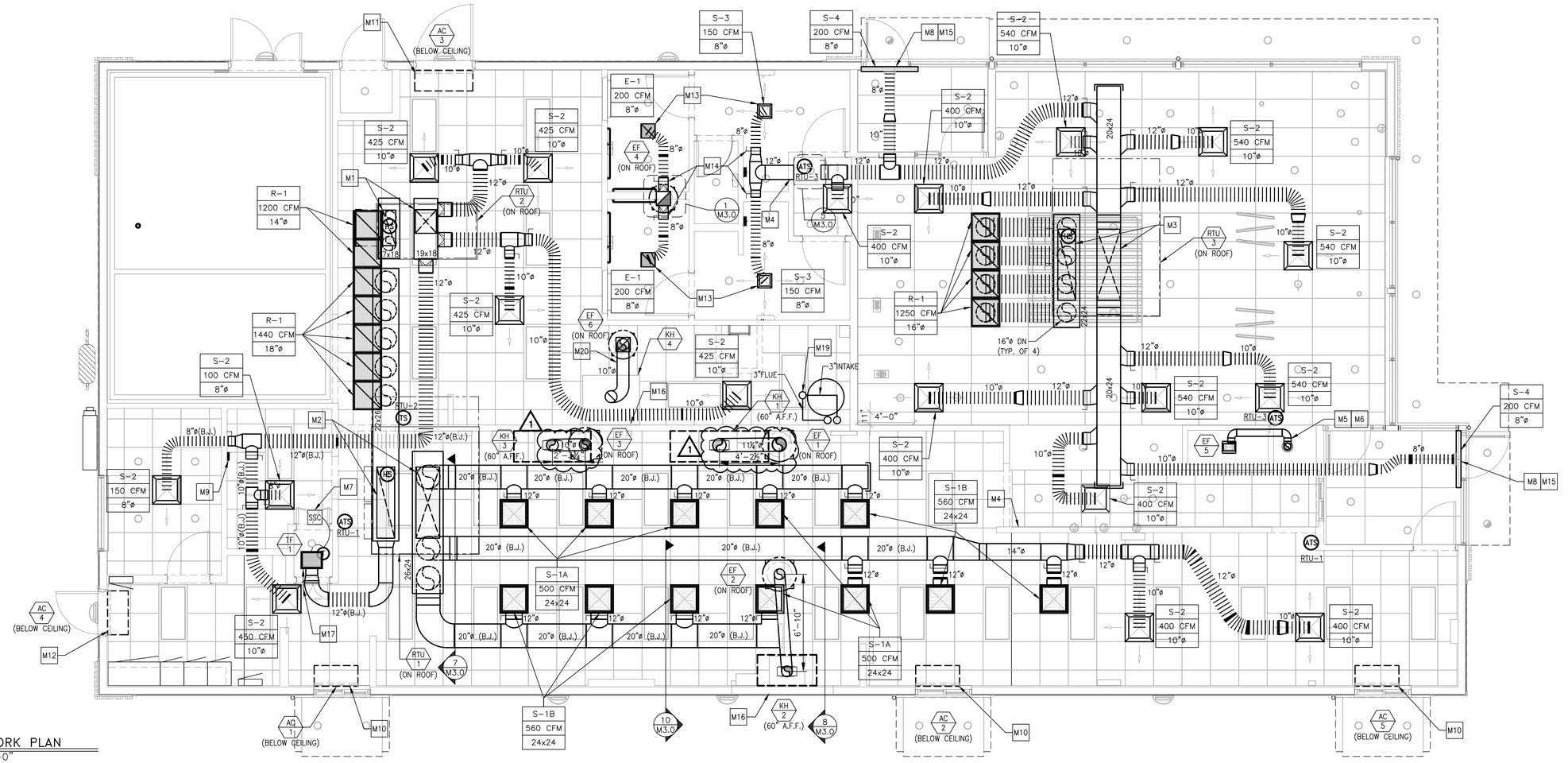
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ISSUE DATE 06/26

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SHEET TITLE
ROOF PLAN

SHEET NUMBER:
M1.0



1 M1.2 DUCTWORK PLAN
1/4"=1'-0"

DRAWING NOTES

1. ALL DUCTWORK SHALL BE RUN BETWEEN OR THROUGH THE JOISTS UNLESS NOTED OTHERWISE. DUCTWORK DESIGNATED WITH (B.J.) SHALL BE RUN BELOW THE JOISTS.
2. DUCT SIZES SHOWN ARE INTERNAL FREE AREA DIMENSIONS UNLESS NOTED OTHERWISE.
3. ALL SHEET METAL DUCTWORK SHALL BE EXTERNALLY INSULATED. INSULATION IS NOT SHOWN FOR CLARITY. SEE MECHANICAL NOTES FOR INSULATION REQUIREMENTS.
4. CARBON STEEL KITCHEN EXHAUST DUCTWORK SHALL BE EXTERNALLY INSULATED. INSULATION NOT SHOWN FOR CLARITY. SEE MECHANICAL NOTES AND DETAILS FOR INSULATION REQUIREMENTS.
5. RETURN AIRFLOW VOLUME SHOWN ON PLAN IS FOR DUCTWORK SIZING PURPOSES WHEN THE UNIT IS IN RECIRCULATION (UNOCCUPIED) MODE.
6. DIFFUSERS IN DINING ROOM ARE SPECIFIC TO THE DECOR PLAN SHOWN. DIFFERENT CEILING LAYOUTS MAY REQUIRE A DIFFERENT DIFFUSER TYPES, QUANTITIES, LOCATIONS AND FINISHES/COLORS.
7. NO DIFFUSERS OR GRILLES TO BE INSTALLED ABOVE KIOSKS TO AVOID CONFLICTS WITH KIOSK'S CEILING PENETRATIONS FOR CONDUITS

KEYED NOTES

- M1 18x20 SUPPLY AND 11x30 RETURN DUCT DROPS FROM ROOFTOP UNIT (RTU-2)
- M2 20x60 SUPPLY AND 15x60 RETURN DUCT DROPS FROM ROOFTOP UNIT (RTU-1)
- M3 20x60 SUPPLY AND 15x60 RETURN DUCT DROPS FROM ROOFTOP UNIT (RTU-3)
- M4 PROVIDE SHEET METAL DUCT AT ALL DRAFTSTOP WALL PENETRATIONS (TYP.)
- M5 6"ø ALUMINUM DUCT FROM EXHAUST FAN UP THROUGH ROOF
- M6 EXTERNALLY INSULATE EXHAUST DUCT FROM FAN TO ROOF PENETRATION
- M7 STEADY STATE SPEED CONTROLLER FOR CEILING MOUNTED EXHAUST FAN. STEADY STATE SPEED CONTROLLER SHALL BE INSTALLED OVER SUSPENDED CEILING FOR ACCESS. DO NOT INSTALL OVER AREAS WITH DRYWALL CEILINGS. SET COMPUTER CLOSET THERMOSTAT TO 80 F (adj.).
- M8 SET DIFFUSER'S (S-5) OUTER SLOT FOR VERTICAL AIR THROW PATTERN AND INNER SLOT FOR HORIZONTAL THROW PATTERN (TYP.)
- M9 BUILDING AUTOMATION SYSTEM LOCATION. SEE LIGHTING CONTROL DETAILS ON SHEET E4.1.
- M10 MOUNT AIR CURTAIN TIGHT TO CEILING
- M11 MOUNT AIR CURTAIN WITH BOTTOM OF UNIT AT TOP OF DOOR FRAME
- M12 MOUNT AIR CURTAIN WITH BOTTOM OF UNIT ABOVE DOOR FRAME AND TOP OF SWITCHGEAR TO MEET 3'-0" MINIMUM SWITCHGEAR'S CLEARANCE REQUIREMENT
- M13 FOR DIFFUSERS INSTALLED IN DRYWALL CEILINGS, VOLUME DAMPER IS INTEGRAL TO DIFFUSER AND ADJUSTABLE AT FACE OF DIFFUSER (SEE NOTE 18 UNDER "VENTILATION SYSTEMS" ON DRAWING M4.0 AND AIR DEVICE SCHEDULE ON DRAWING M4.1)
- M14 FOR DIFFUSERS INSTALLED IN DRYWALL CEILINGS, INSTALL HIGH-EFFICIENCY TAKE-OFFS WITH VOLUME DAMPER IN FULL-OPEN POSITION TO FACILITATE BALANCING AT FACE OF DIFFUSER.
- M15 GENERAL CONTRACTOR SHALL PROVIDE ADDITIONAL T-BAR FRAME TO PROPERLY LOCATE DIFFUSER AS SHOWN. AIR STREAM FROM DIFFUSER SHALL COVER ENTIRE DOOR OPENING.
- M16 NONCOMBUSTIBLE WALL CONSTRUCTION BEHIND TYPE I KITCHEN HOODS. REFER TO SHEET A1.0 FOR MORE INFORMATION.
- M17 ONE INCH DOOR UNDERCUT TRANSFER AIR TO CLOSET (100 CFM). SEE ARCH PLANS FOR LOUVERED DOOR SCHEDULE.
- M18 MECHANICAL CONTRACTOR TO PROVIDE 4x12 LOUVERED RETURN AIR BEHIND EACH RECESSED MENU BOARD. SEE ARCHITECTURAL PLANS, DETAIL 14/A3.1. AND AIR DEVICE SCHEDULE (R-2) ON SHEET M4.1.

2021 IMC SECTION 403.3 - VENTILATION SCHEDULE

UNIT	AREA SERVED	AREA FT² (Az)	CFM / PERSON (Rp)	CFM/FT² (Ra)	PEOPLE / 1000 FT² (Pz)	BREATHING ZONE REQUIRED O/A CFM (Vbz)	Ez*	Ev**	REQUIRED O/A CFM (Vot)***	ACTUAL O/A CFM	REQUIRED EXHAUST CFM	ACTUAL EXHAUST CFM
RTU-1	PRESENTER	261	7.5	0.12	20	70	0.8	1.00	-	-	-	-
	KITCHEN	762	7.5	0.12	20	206	0.8		-	-	-	-
						276			*232*	*1700*		
RTU-2	SUPPORT	565	5	0.06	2	40	0.8	1.00	-	-	-	-
	MANAGER'S OFFICE	65	5	0.06	5	6	0.8		-	-	-	-
	CREW ROOM	95	5	0.06	5	8	0.8		-	-	-	-
	ORDER	104	7.5	0.12	20	28	0.8		-	-	-	-
						81			*132*	*800*		
RTU-3	DINING	730	7.5	0.18	70	515	0.8	0.95	-	-	-	-
	CUSTOMER SERVICE	111	7.5	0.18	70	78	0.8		-	-	-	-
	VESTIBULE 113	64	-	0.06	-	4	0.8		-	-	-	-
	VESTIBULE 115	61	-	0.06	-	4	0.8		-	-	-	-
	WOMEN'S	138	-	-	-	-	-		-	-	-	-
	MEN'S	121	-	-	-	-	-		-	-	-	-
						600			*569*	*1130*		
EF-1, 2 & 3	KITCHEN	1000	-	0.7	-	-	-	-	-	-	700	2375
EF-4	WOMEN'S	135	-	-	-	-	-	-	-	-	100	200
	MEN'S	120	-	-	-	-	-		-	-	100	200
EF-5	JANITOR'S CLOSET	20	-	-	-	-	-		-	-	-	75
EF-6	WAREWASHER	-	-	-	-	-	-	-	-	-	350	600
									933	3630	900	3450

* ZONE AIR DISTRIBUTION EFFECTIVENESS BASED ON IMC TABLE 403.3.1.1.2 FOR CEILING SUPPLY OF WARM AIR 15° F OR MORE ABOVE SPACE TEMPERATURE AND CEILING RETURN.
** VENTILATION SYSTEM EFFICIENCY BASED ON IMC TABLE 403.3.1.1.2.3.2.
*** CORRECTED REQUIRED O/A INTAKE REQUIRED FOR SYSTEM CALCULATED BASED ON IMC SECTION 403.3.1.1.2.3.3.

- M19 PROVIDE AIR INTAKE AND FLUE EXHAUST PER MANUFACTURER'S INSTALLATION MANUAL. AIR INTAKE AND FLUE EXHAUST TO COMBINE WITH CONCENTRIC VENT KIT. REFER TO 6/P3.0 FOR FURTHER DETAILS.
- M20 10" TYPE 304 STAINLESS STEEL DUCT FROM TYPE II EXHAUST HOOD UP THROUGH ROOF TO EXHAUST FAN. DUCTWORK SHALL BE PITCHED TOWARDS TYPE II EXHAUST HOOD. EXTERNALLY INSULATE EXHAUST DUCT FROM TYPE II EXHAUST HOOD CONNECTION TO ROOF PENETRATION.

AIR BALANCE SCHEDULE

UNIT	SUPPLY AIR	RETURN AIR	OUTDOOR AIR	EXHAUST AIR	PRESSURE
RTU-1	7200	5500	1700		1700
RTU-2	2400	1600	800		800
RTU-3	5000	3870	1130		1130
EF-1				1000	-1000
EF-2				575	-575
EF-3				800	-800
EF-4				400	-400
EF-5				75	-75
EF-6				600	-600
TOTALS	14600	10970	3630	3450	180

NOTES:
1. BALANCING TOLERANCES ARE AS FOLLOWS:
   HOODS: 0% TO +10%
   OUTDOOR AIR: 0% TO +10%
   SUPPLY AND RETURN AIR DIFFUSERS: -10% TO +10%
   TOILET EXHAUST AIR: -10% TO +10%
2. BALANCE ROOFTOP UNIT SUPPLY AND RETURN AIR PRIOR TO TURNING ON EXHAUST FANS.
3. EXHAUST HOODS SHALL BE BALANCED WITH A 4" VANE ANEMOMETER.
4. RTU BLOWER TO RUN CONTINUOUSLY DURING OCCUPIED HOURS. REFER TO SEQUENCE OF OPERATIONS ON M1.0 AND E3.2 FOR HOOD/FAN INTERLOCK DETAILS.
5. EF-6 DOES NOT RUN CONTINUOUSLY - VALUES SHOWN IN AIR BALANCE SCHEDULE REFLECT OPERATIONAL STATE. WHEN EF-6 IS NOT OPERATIONAL, RTU-2 SHALL BE DECREASED BY 600 CFM ACCORDINGLY. REFER TO M1.0 FOR ADDITIONAL DETAILS OF SEQUENCE OF OPERATIONS AND INTERLOCKING REQUIREMENTS.

HEATING SCHEDULE

EQUIPMENT	INPUT (BTU/HR)	OUTPUT (BTU/HR)	REQUIRED HEAT (BTU/HR)
ROOFTOP UNIT (RTU-1)	260,000	211,000	148,453
ROOFTOP UNIT (RTU-2)	150,000	121,000	74,021
ROOFTOP UNIT (RTU-3)	260,000	211,000	117,647
TOTALS	670,000	543,000	340,121

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LICENSE EXPIRATION: DEC 31, 2027

STATE OF MISSOURI
JOSEPH G. THOMAS
NUMBER E-27428
REGISTERED PROFESSIONAL ENGINEER

DATE ISSUED: SEPT 8, 2026

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NATIONAL #: 46237
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CHECKED BY: JT

DATE:
07/15/26 - PERMIT / BID SET

REVISIONS
1 09/08/25 - DECOR UPDATE / PLUMBING & CIVIL COORDINATION

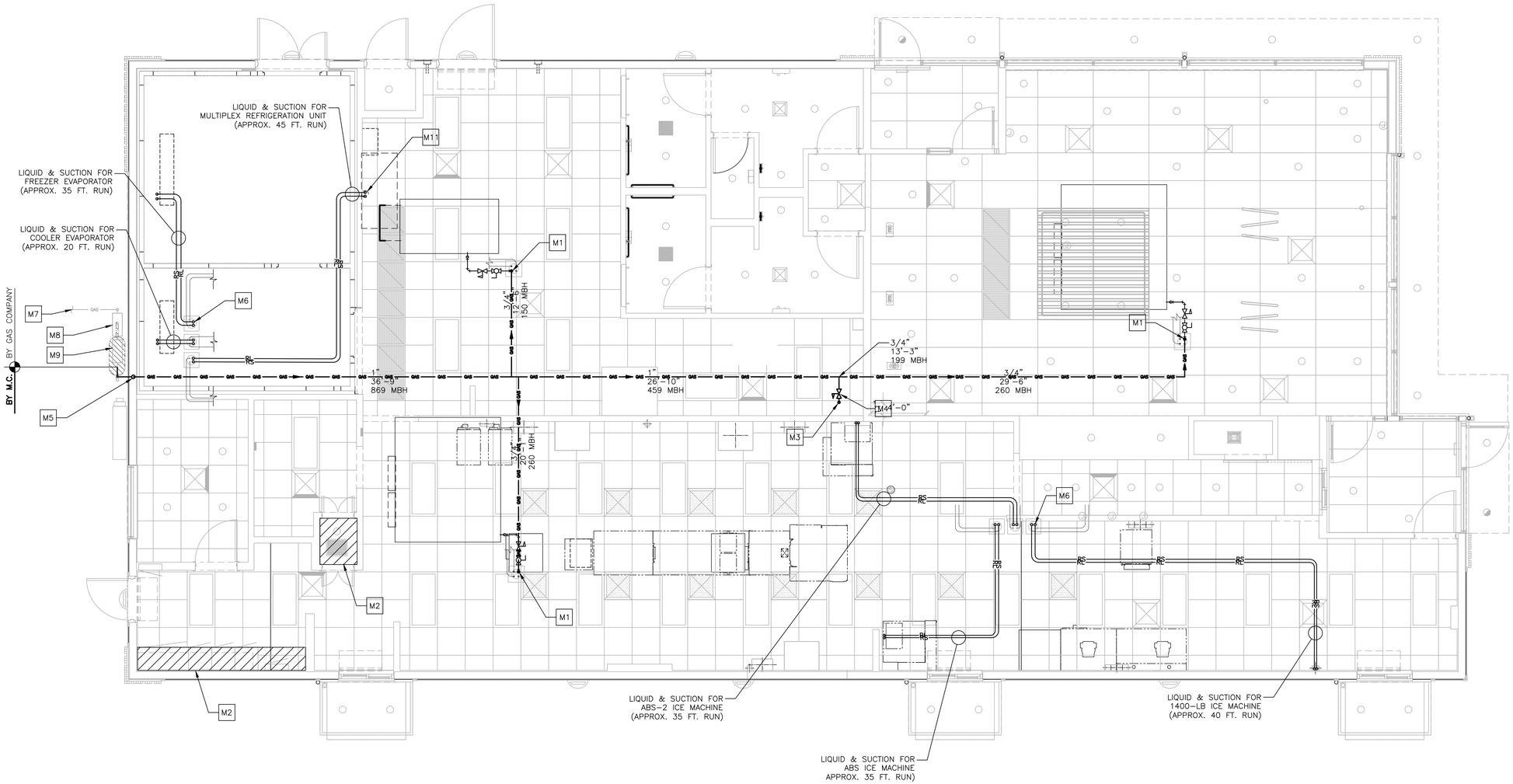
CLIENT
McDonald's USA, LLC

PROTOTYPE
BB20 4590 WW-HB
ISSUE DATE 06/26

ADDRESS
600 SCHUG AVENUE
PECULIAR, MO, 64078

SHEET TITLE
DUCTWORK PLAN

SHEET NUMBER:
M1.2



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

DRAWING NOTES

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

KEYED NOTES

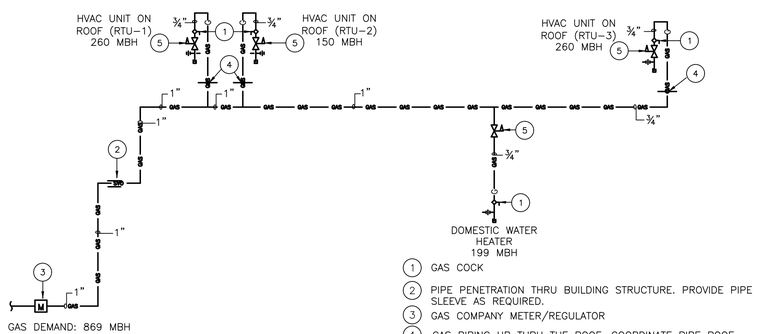
- M1 GAS PIPE UP THROUGH ROOF TO RTU.
- M2 UTILITIES SHALL NOT BE ROUTED ABOVE TECH. CLOSET. OR SWITCHGEAR.
- M3 GAS PIPE DOWN TO WATER HEATER – APPROX. 10 FT. DROP
- M4 SIZE REGULATOR PROPERLY FOR APPLICATION – SET GAS PRESSURE REGULATOR OUTLET PRESSURE TO 10" W.C. AND PROVIDE VENT THROUGH ROOF AS REQUIRED.
- M5 GAS PIPE UP IN WALL – APPROX. 10 FT. RISE
- M6 REFRIGERANT LIQUID AND SUCTION LINES UP THROUGH ROOF TO CONDENSING UNITS (TYP. 6 PLACES – SEE DETAIL 3 ON DRAWING M3.0)
- M7 INCOMING SERVICE LINE – SEE GAS PIPING NOTES ON DRAWING M4.0
- M8 INCOMING SERVICE REGULATOR SET TO 2 PSIG.
- M9 INCOMING SERVICE METER – SEE GAS LOAD SCHEDULE FOR SIZING
- M10 REFRIGERANT LINES DOWN TO SODA SYSTEM (MULTIPLEX).

GAS LOAD SCHEDULE

EQUIPMENT	INPUT (BTU/HR)	GAS FLOW (1,000 BTU/CF) (CF/HR)
ROOFTOP UNIT (RTU-1)	260,000	260
ROOFTOP UNIT (RTU-2)	150,000	150
ROOFTOP UNIT (RTU-3)	260,000	260
WATER HEATER (WH-1)	199,999	199.999
TOTAL	869,999	869.999

PIPING KEY

1 1/2" PG 10'-11" 1010 MBH
- PIPE SIZE
- PIPE LENGTH
- LOADING ON PIPE LENGTH



GAS RISER DIAGRAM
NOT TO SCALE

1. GAS COCK
2. PIPE PENETRATION THRU BUILDING STRUCTURE. PROVIDE PIPE SLEEVE AS REQUIRED.
3. GAS COMPANY METER/REGULATOR
4. GAS PIPING UP THRU THE ROOF. COORDINATE PIPE ROOF PENETRATION WITH AC UNIT LOCATION IN THE FIELD.
5. GAS REGULATOR (SEE DETAIL 4/M3.0)

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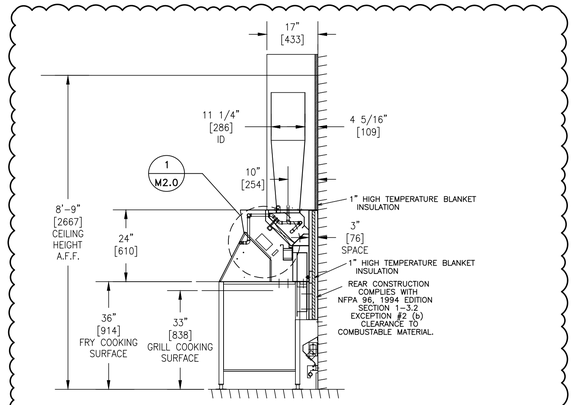
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PROTOTYPE
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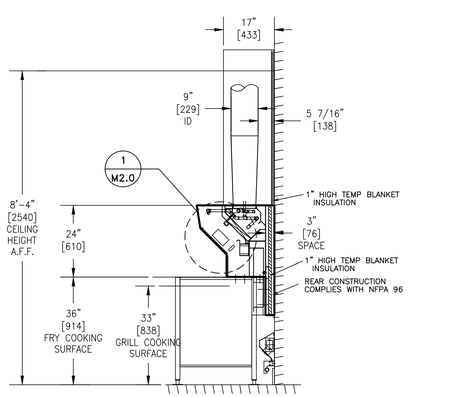
SHEET TITLE
MECH. PIPING PLAN

SHEET NUMBER:
M1.4



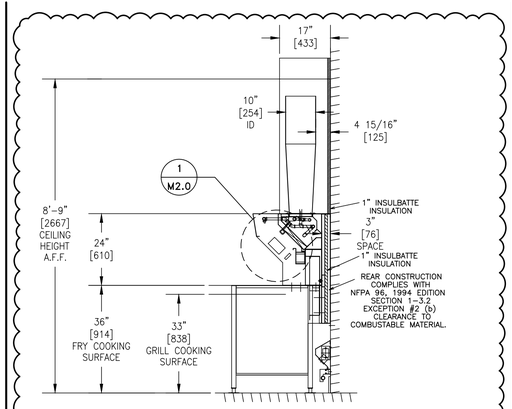
KITCHEN EXHAUST HOOD (TYPE I)

TAG: KH-1 (SEE KITCHEN EXHAUST HOOD SCHEDULE)
SCALE: ½"=1'-0"



KITCHEN EXHAUST HOOD

TAG: KH-2 (SEE KITCHEN EXHAUST HOOD SCHEDULE)
SCALE: ½"=1'-0"



KITCHEN EXHAUST HOOD (TYPE I)

TAG: KH-3 (SEE KITCHEN EXHAUST HOOD SCHEDULE)
SCALE: ½"=1'-0"

McDONALD'S CORPORATION
OAK BROOK, ILLINOIS 60521

EQUIP. ID. **EXHAUST HOOD: UH SERIES**
MANUF. ID. HRD **SERIAL #** 512341
MANUF. EQUIP. ID. UH60096 **MFG DATE** 05/2012

LENGTH OF HOOD	MINIMUM DESIGN EXHAUST AIRFLOW, CFM/ft (CUM/m) OF HOOD LENGTH W/OUT	MINIMUM DESIGN EXHAUST AIRFLOW, CFM/ft (CUM/m) OF HOOD LENGTH W/ESP
28" (68)	128 (12)	128 (12)
34.5" (88)	143 (13.3)	137 (12.8)
35-122" (89-310)	166 (15.5)	151 (14.0)
139.75" (339.7)	132 (12.3)	132 (12.3)

FOR USE OVER COMMERCIAL GAS OR ELECTRIC COOKING EQUIPMENT UP TO 400°F (204°C) (EXCEPT UPPER PLATEN OF 2-SIDED COOKER MAY BE UP TO 425°F (218°C)).

-22" (558.8mm) MAXIMUM CLEARANCE FROM COOKING SURFACE TO FRONT LOWER EDGE OF HOOD
-16" (406.4mm) MINIMUM CLEARANCE FROM COOKING SURFACE TO FRONT LOWER EDGE OF HOOD
-2 1/4" (57.15mm) MINIMUM SIDE HOOD OVERHANG FROM EDGE OF COOKING SURFACE
-18 1/4" (412.75mm) MAXIMUM FRONT HOOD SETBACK FROM EDGE OF COOKING SURFACE
-THESE HOODS ARE LISTED FOR DIRECT REAR MOUNTING ON A COMBUSTIBLE SURFACE
-HOODS MAY BE INSTALLED WITH DUCTS OR ESP DIRECTLY ON TOP OF HOOD ASSEMBLY.
-WHEN A GRILL IS OPERATED UNDER THE HOOD, AN EXTENSION SIDE PANEL (REMOVABLE OR INTEGRAL) MUST BE MOUNTED AT WHICHEVER END(S) OF HOOD IS ADJACENT TO THE GRILL(S)
-FILTERS SHALL ONLY BE REPLACED WITH FILTERS TESTED TO UL 1046 S"ANDARDS
-FOR USE w/GARLAND MODEL MEVWE GRILL OR FOR USE w/TAYLOR MODEL C842 GRILL
-ONLY THE REMOVABLE SIDESKIRTS WILL BE INDIVIDUALLY MARKED AS FOLLOWS: UH SERIES/GRILL/RH or LH
-THESE HOODS ARE LISTED FOR COMPLIANCE WITH ICBO, BOCA, AND SBCCI PER NFR-320
-THESE HOODS MUST BE INSTALLED PER NFPA-96

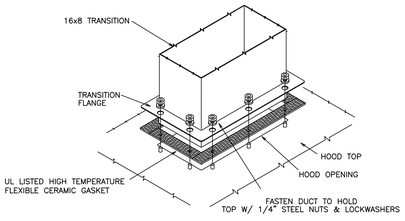
Intertek
4001095

EXHAUST HOOD WITHOUT EXHAUST DAMPERS (COA #5535)

DETAIL

UL LABEL
SCALE: NONE

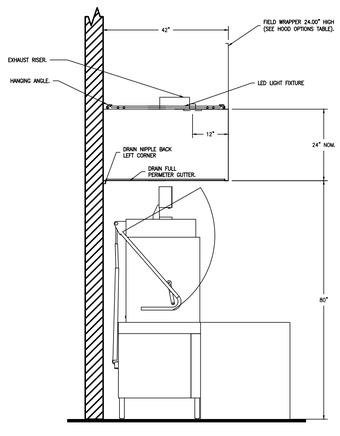
1 M2.0

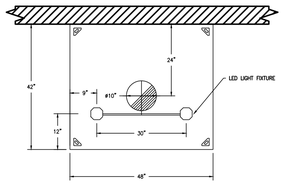


DETAIL

HOOD CONNECTION
SCALE: NONE

2 M2.0





KITCHEN EXHAUST HOOD

TAG: KH-4 (SEE KITCHEN EXHAUST HOOD SCHEDULE)
SCALE: ½"=1'-0"

HOOD INFORMATION

HOOD NO.	TAG	MODEL	LENGTH	MAX. COOKING TEMP.	APPLIANCE DUTY	DESIGN CFM/ft	TOTAL EXH. CFM	EXHAUST PLENUM SIZE(S) WIDTH	LENG.	HEIGHT	DIA.	CFM	VEL.	S.P.	HOOD CONSTRUCTION	HOOD CONFIG. END TO END	ROW
1	DISH	CLASS 2	48"	NA	DISH	150	600			4"	10"	600	1100	-0.25"	304 SS	ALONE	ALONE

HOOD OPTIONS

HOOD NO.	TAG	OPTION
1	DISH	FASCIA PANEL 14.00" HIGH FRONT, LEFT, RIGHT (FASCIA HEIGHT INCREASES FOR TALLER CEILING)

DRAWING NOTES

1. 16 GA. STAINLESS STEEL MATERIAL USED FOR HOOD CONSTRUCTION
2. FILTER BAFFLE:
   UL FILE R14372, VOL. 1, SEC. 1
   UL CONTROL NUMBER 5L65
   MEA-446-92-M
3. EXHAUST HOOD:
   UL FILE MH12755, VOL. 4
   UL CONTROL NUMBER 78L1
4. UTILITY CHASE AND RACEWAY:
   UL FILE E163328, VOL.1, SEC.3
5. HIGH TEMP GASKET:
   UL FILE MH12755, VOL. 2, SEC. 1, ILL. 9
6. HOOD CONSTRUCTION COMPLIES WITH NSF STANDARD 2
7. HOOD PERFORMANCE TESTED IN ACCORDANCE WITH UL 710
8. UL 300 AND NFPA 17A COMPLIANT R-102 WET CHEMICAL SYSTEM INCLUDED WITH HOOD INSTALLATION
9. ANSUL CONNECTIONS AND STARTUP BY APPROVED ANSUL REPRESENTATIVE
10. REFER E3.2 FOR HOOD/FAN INTERLOCK DETAILS
11. CAPTURE JET PLENUMS ARE TO BE ATTACHED WHEN CALLED OUT PER KITCHEN SCHEDULE.

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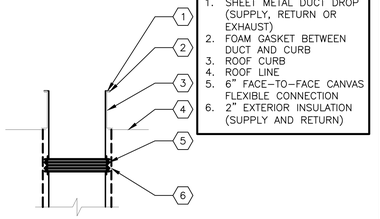
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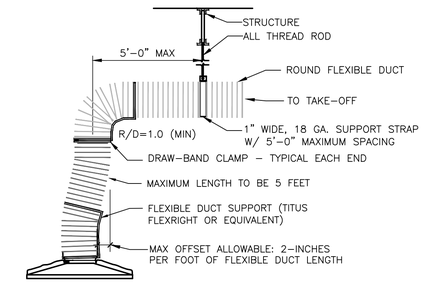
SHEET TITLE
EXHAUST HOODS

SHEET NUMBER:
M2.0

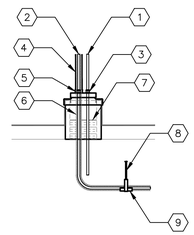


KEYED NOTES:
1. SHEET METAL DUCT DROP (SUPPLY, RETURN OR EXHAUST)
2. FOAM GASKET BETWEEN DUCT AND CURB
3. ROOF CURB
4. ROOF LINE
5. 6" FACE-TO-FACE CANVAS FLEXIBLE CONNECTION
6. 2" EXTERIOR INSULATION (SUPPLY AND RETURN)

DETAIL 1 M3.0
DUCT DROP INSTALLATION
SCALE: NONE

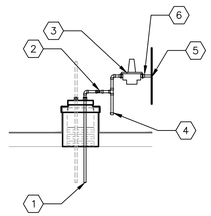


DETAIL 2 M3.0
DIFFUSER/GRILLE CONNECTION
SCALE: NONE



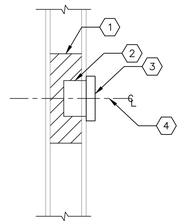
KEYED NOTES:
1. REFRIGERANT LIQUID LINE
2. REFRIGERANT SUCTION LINE WITH 1" THICK EXTERNAL FOAM INSULATION (ARMAFLEX BY ARMACELL OR EQUAL)
3. STAINLESS STEEL CLAMP
4. APPLY WEATHERPROOFING OVER FOAM INSULATION (ALUMAGUARD BY POLYGUARD OR EQUAL)
5. WRAP FOAM INSULATION OVER PIPE PORTAL NIPPLE AND STAINLESS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

DETAIL 3 M3.0
REFRIGERANT PIPE INSTALLATION
SCALE: NONE



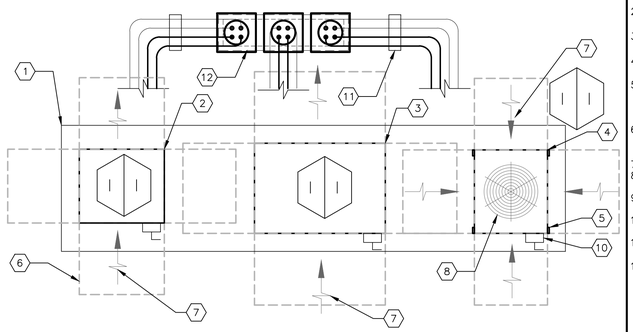
KEYED NOTES:
1. GAS PIPING
2. SHUT-OFF VALVE
3. PRESSURE REGULATOR (PROPERLY SIZED FOR APPLICATION)
4. DIRT LEG
5. ROOFTOP UNIT ENTRY
6. UNION (TYP.)

DETAIL 4 M3.0
GAS PIPE INSTALLATION
SCALE: NONE



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

DETAIL 5 M3.0
REMOTE SENSOR INSTALLATION
SCALE: NONE

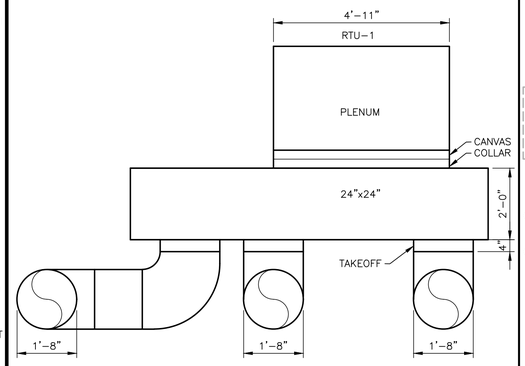


DETAIL 6 M3.0
REMOTE CONDENSER UNITS (CU-4, CU-5 & CU-6)
SCALE: ½"=1'-0"

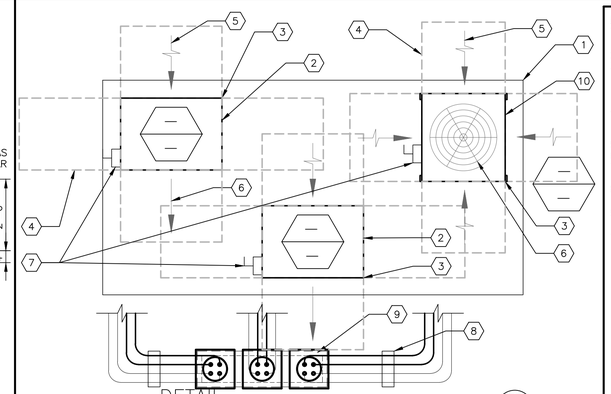
KEYED NOTES:
1. 180"Lx43"Wx14"H EQUIPMENT PLATFORM MANUFACTURED BY RPS OR EQUAL
2. 28⅝"Lx24¾"Wx19¾"H CONDENSING UNIT (COOLER).
3. 43⅜"Lx30½"Wx29¾"H CONDENSING UNIT (FREEZER).
4. 29"Lx24½"Wx34"H CONDENSING UNIT (MULTIPLEX).
5. FASTEN CONDENSING UNIT TO TOP OF PLATFORM AND SEAL FASTENER PENETRATIONS WITH UV RESISTANT SEALANT
6. OUTLINE OF SERVICE CLEARANCE EXTENDING 3'-0" FROM CONDENSING UNIT ON ALL SIDES
7. CONDENSER AIR INTAKE
8. CONDENSER FAN OUTLET ON TOP OF UNIT
9. CONDENSER FAN OUTLET ON SIDE OF UNIT
10. DISCONNECT SWITCH FURNISHED WITH UNIT
11. PROVIDE PIPE SUPPORT AS REQUIRED (TREATED LUMBER IS NOT ACCEPTABLE)
12. MULTIPLE PIPE PORTAL MANUFACTURED BY RPS OR EQUAL

CONDUIT SIZES: (PER CONDENSING UNIT
(1) ¾" POWER
(1) ¾" CONTROL

REFRIGERANT PIPING SIZES:
SEE MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR RECOMMENDED REFRIGERANT PIPE SIZING



DETAIL 7 M3.0
VIEW TOWARDS REAR OF KITCHEN AT DUCT DROPS
SCALE: ½"=1'-0"

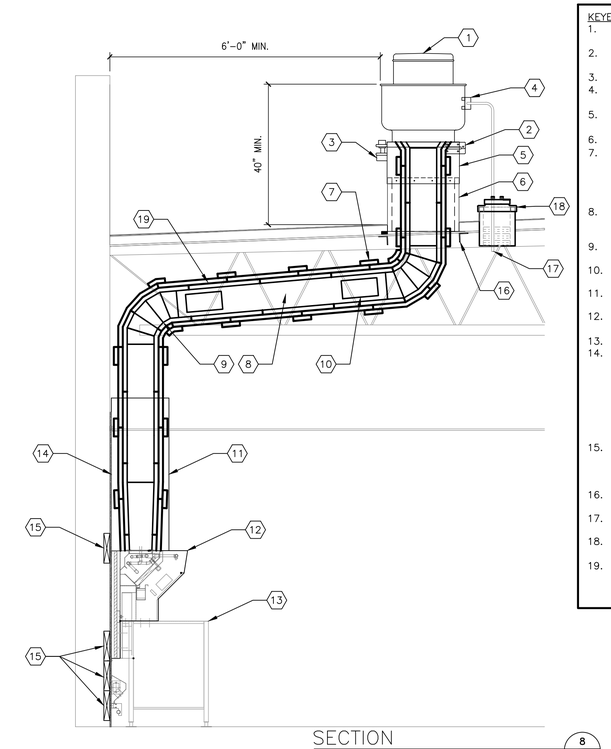


DETAIL 7B M3.0
REMOTE CONDENSER UNIT (CU-1, CU-2 & CU-3)
SCALE: ½"=1'-0"

KEYED NOTES:
1. 141"x72"x14"H EQUIPMENT PLATFORM MANUFACTURED BY RPS OR EQUAL
2. 34"x24⅛"x25⅞"H CONDENSING UNIT
3. FASTEN CONDENSING UNIT TO TOP OF PLATFORM AND SEAL FASTENER PENETRATIONS WITH UV RESISTANT SEALANT
4. OUTLINE OF SERVICE CLEARANCE EXTENDING FROM CONDENSING UNIT ON ALL SIDES
5. CONDENSER AIR INTAKE
6. CONDENSER FAN OUTLET
7. DISCONNECT SWITCH PROVIDED BY ELECTRICAL CONTRACTOR
8. PROVIDE PIPE SUPPORT AS NECESSARY (TREATED LUMBER IS NOT ACCEPTABLE)
9. MULTIPLE PIPE PORTAL MANUFACTURED BY RPS OR EQUAL
10. 29½"x28"x38"H CONDENSING UNIT

CONDUIT SIZES: (PER CONDENSING UNIT)
(1) ¾" POWER
(1) ¾" CONTROL

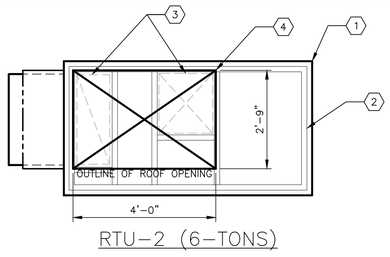
REFRIGERANT PIPING SIZES:
(PER CONDENSING UNIT)
ICE MACHINE - ½" LIQUID, ¾" SUCTION
(CU-3 CONDENSING UNIT)
ICE MACHINE - ⅜" LIQUID, ½" SUCTION



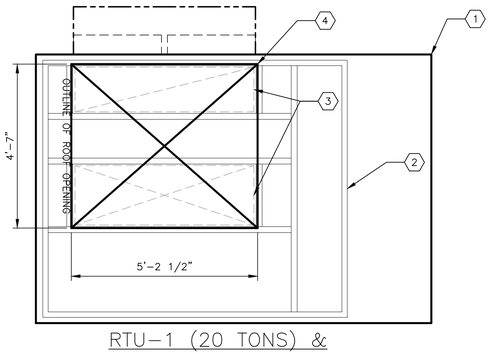
KEYED NOTES:
1. UPBLAST EXHAUST FAN (SEE EXHAUST FAN SCHEDULE)
2. HINGED CURB CAP FOR CLEANING ACCESS (FURNISHED WITH FAN)
3. GREASE TRAP (FURNISHED WITH FAN)
4. NEMA 3R DISCONNECT SWITCH (FURNISHED WITH FAN)
5. 12" HIGH CURB EXTENSION (FURNISHED WITH FAN)
6. 18" HIGH CURB (FURNISHED WITH FAN)
7. TWO (2) LAYERS OF 1½" THICK DUCT WRAP TO MEET ASTM E2336 INSTALLED PER MANUFACTURER'S INSTRUCTIONS (SEE MECHANICAL NOTES FOR INSULATION SPECIFICATION)
8. 16 GAUGE BLACK IRON (CARBON STEEL) OR 18 GAUGE STAINLESS STEEL DUCTWORK WELDED LIQUID-TIGHT
9. 5-GORE BLACK IRON (CARBON STEEL) RADIUS ELBOW
10. 12"x6" ACCESS DOOR AT ALL CHANGES IN DIRECTION
11. STAINLESS STEEL FASCIA PANEL TO PROTECT DUCTWORK AND INSULATION
12. BACKSHELF TYPE EXHAUST HOOD (SEE KITCHEN EXHAUST HOOD SCHEDULE)
13. COOKING APPLIANCE (SEE KITCHEN DRAWINGS)
14. REAR WALL CONSTRUCTION SHALL CONSIST OF CERAMIC TILE OR MIN. 22 GAUGE STAINLESS STEEL OVER ⅝" TYPE X GYPSUM BOARD OR ½" CEMENT BOARD FROM FLOOR TO CEILING AND EXTENDING 24" TO EACH SIDE OF THE HOOD INSTALLED ON NON-COMBUSTIBLE WALL (REFER TO SHEET A1.0 FOR MORE INFORMATION.
15. 2x10 LIGHT GAUGE STEEL FOR SUPPORT BLOCKING FOR HOOD AND RACEWAY (COORDINATE INSTALLATION WITH HOOD INSTALLER)
16. STRUCTURAL FRAMING FOR ROOF OPENING (SEE STRUCTURAL DRAWINGS)
17. TRANSITION TO FLEXIBLE CONDUIT UNDER ROOF PENETRATION WHERE ALLOWED BY CODE.
18. ROOF PIPE PORTAL, RPS-N18(1) RC-2A 12x12x11H.
19. ¼" PER FOOT SLOPE PITCHED BACK TOWARDS THE HOOD.

SECTION 8 M3.0
KITCHEN EXHAUST HOOD INSTALLATION
SCALE: ½"=1'-0"

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

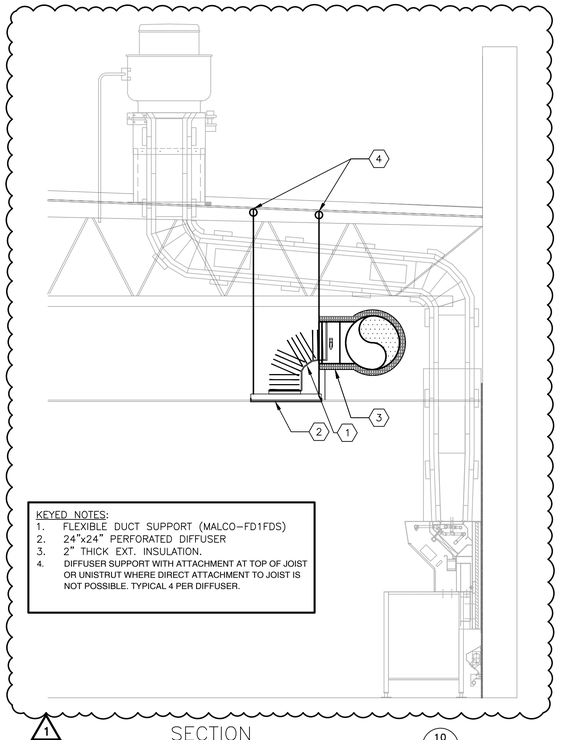


RTU-2 (6-TONS)



RTU-1 (20 TONS) &
RTU-3 (13-TONS)

DETAIL 9 M3.0
ROOF OPENINGS
SCALE: ½"=1'-0"



KEYED NOTES:
1. FLEXIBLE DUCT SUPPORT (MALCO-FD1FDS)
2. 24"x24" PERFORATED DIFFUSER
3. 2" THICK EXT. INSULATION.
4. DIFFUSER SUPPORT WITH ATTACHMENT AT TOP OF JOIST OR UNISTRUT WHERE DIRECT ATTACHMENT TO JOIST IS NOT POSSIBLE. TYPICAL 4 PER DIFFUSER.

1 SECTION 10 M3.0
SUPPLY (S-1) PLENUM INSTALLATION
SCALE: ½"=1'-0"

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LICENSE EXPIRATION: DEC 31, 2027

STATE OF MISSOURI
JOSEPH G. THOMAS
NUMBER E-27428
REGISTERED PROFESSIONAL ENGINEER

DATE ISSUED: SEPT 8, 2026

STATE ID: 241342
PROJECT #: 26-125
NATIONAL #: 46237
DRAWN BY: SC
CHECKED BY: JT

DATE:
07/15/26 - PERMIT / BID SET

REVISIONS
1 09/08/25 - DECOR UPDATE / PLUMBING & CIVIL COORDINATION

CLIENT
McDonald's USA, LLC

PROTOTYPE
BB20 4590 WW-HB
ISSUE DATE 06/26

ADDRESS
600 SCHUG AVENUE
PECULIAR, MO, 64078

SHEET TITLE
DETAILS

SHEET NUMBER:
M3.0

MECHANICAL NOTES

GENERAL:
1. ALL WORK PERFORMED SHALL BE IN ACCORDANCE WITH ALL LOCAL CODES AND ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION.
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.TABBCERTIFIED.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.

VENTILATION SYSTEMS:
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:

DUCT LOCATION: UNCONDITIONED SPACE			CLIMATE ZONES 1 THROUGH 8
DUCTWORK CLASSIFICATION	PRESSURE	SEAL CLASS	INSULATION
SUPPLY	2.00" W.C.	A	TYPE A (R–6)
RETURN	–2.00" W.C.	A	TYPE A (R–6)
EXHAUST	–2.00" W.C.	A	(•)TYPE A (R–6)
HANGER SUPPORTS	EVERY 6 FT.		1" TYPE B

DUCT LOCATION: EXTERIOR (INCLUDES ATTICS ABOVE INSULATED CEILINGS AND CRAWL SPACES.			CLIMATE ZONES 1 THROUGH 4	CLIMATE ZONES 5 THROUGH 8
DUCTWORK CLASSIFICATION	PRESSURE	SEAL CLASS	INSULATION	INSULATION
SUPPLY	2.00" W.C.	A	TYPE A (R–8)	TYPE A (R–12)
RETURN	–2.00" W.C.	A	TYPE A (R–8)	TYPE A (R–12)
EXHAUST	–2.00" W.C.	A	(•)TYPE A (R–8)	(•)TYPE A (R–12)
HANGER SUPPORTS	EVERY 6 FT.		1" TYPE B	

   (•) 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.
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.
17. ALL SUPPLY AIR DIFFUSERS SHALL BE INSULATED TO PREVENT CONDENSATION.
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.
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.
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.

COMMERCIAL KITCHEN EXHAUST SYSTEMS:
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 ¼" 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.

REFRIGERANT PIPING:
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.
4. ALL SUSPENDED REFRIGERANT PIPING SHALL BE SUPPORTED AS FOLLOWS:

MATERIAL	MAX. HORIZ. SPACING	MAX. VERT. SPACING
COPPER TUBING ≤1¼"	6 FT.	10 FT.
COPPER TUBING ≥1½"	10 FT.	10 FT.

5. ALL REFRIGERANT PIPING SHALL BE SIZED PER EQUIPMENT MANUFACTURER'S RECOMMENDATIONS.
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:

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
LIQUID (REFRIGERATION) (<40°F)	0.5	1.0	1.0	1.0	1.5
SUCTION (REFRIGERATION) (<40°F)	0.5	1.0	1.0	1.0	1.5

CO2 DETECTION EQUIPMENT:
1. THE CO2 DETECTOR SHALL BE HARD–WIRED TO PREVENT TAMPERING AND SHALL BE INSTALLED AT 12" A.F.F. WITHIN A 5 FT. RADIUS OF THE CO2 STORAGE TANKS.
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 CO2 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 CO2 EXTERIOR STROBE SHALL BE INSTALLED AS SHOWN ON SHEET A2.0, (DETAIL 2) AND ON SHEET E1.1. THE INSIDE AUDIBLE AND VISUAL ALARM SHALL BE INSTALLED INSIDE THE CO2 CLOSET, AND IN THE SUPPORT/BACK–OF–THE HOUSE LOCATION AS SHOWN ON SHEETS E1.1 AND E3.0.

NATURAL GAS SYSTEMS:
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 FARTHEST 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. (¼ PSIG)
   B. 0.5" W.C. PRESSURE DROP FROM REGULATOR TO FARTHEST 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.
6. 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.

7. GAS PIPING SHALL NOT PENETRATE ANY FIRE–RATED CHASE OR SHAFT, DUCTWORK OR PLENUM.
8. ALL NATURAL GAS PIPING INSTALLED OUTDOORS SHALL BE COATED WITH A CORROSION RESISTANT PAINT. PAINT COLOR SHALL BE ORANGE OR YELLOW.
9. 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.
10. 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.
11. 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.
12. 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.
13. IF THE MINIMUM PRESSURES ARE NOT MET, THIS SHALL BE IMMEDIATELY REPORTED TO THE MCDONALD'S AREA CONSTRUCTION MANAGER.
14. UNDERGROUND GAS PIPING SHALL BE INSTALLED AT A MINIMUM DEPTH OF 12 INCHES BELOW GRADE. COORDINATE WITH LOCAL BUILDING CODE FROST LINE DEPTH REQUIREMENTS.
15. GAS SHUTOFF VALVES SHALL BE OF AN APPROVED TYPE. REFER TO MANUAL GAS VALVE STANDARDS TABLE FOR APPLICATION SPECIFIC REQUIREMENTS.

VALUE STANDARDS	APPLIANCE SHUTOFF VALVE APPLICATION UP TO ½ PSIG PRESSURE	OTHER VALVE APPLICATIONS	
		UP TO ½ PSIG PRESSURE	UP TO 2 PSIG PRESSURE
ANSI Z21.15 / CGA 9.1	X	–	–
ASME B16.44	X	X	X[A]
ASME B16.33	X	X	X
A. IF LABELED 2G.			

CONDENSATE PIPING:
1. CONDENSATE PIPING SHALL BE GALVANIZED STEEL, COPPER OR PVC.
2. PVC PIPE SHALL BE PAINTED WITH WATER BASED LATEX PAINTING TO RESIST DEGRADATION FROM ULTRAVIOLET EXPOSURE.
3. PIPE SUPPORTS SHALL BE RPS MODEL PMP–2 OR EQUAL. QUANTITY AS REQUIRED DEPENDANT UPON PIPING MATERIAL.
4. 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.

5. CONDENSATE PIPING SHALL SLOPE A MINIMUM OF ⅛" PER FOOT.
6. 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"

MECHANICAL & PLUMBING COMMISSIONING
1. MECHANICAL & PLUMBING ENGINEER OF RECORD: REVIEW IECC CHAPTER 4, SECTION C408.2 FOR MECHANICAL SYSTEMS AND SERVICE WATER–HEATING SYSTEM COMMISSIONING AND COMPLETION REQUIREMENTS. PROJECTS EXCEEDING THE HEATING AND COOLING CAPACITY THRESHOLDS IN SECTION C408.2 SHALL PROVIDE DOCUMENTATION OF A COMPLETED COMMISSIONING PLAN PREPARED BY A REGISTERED DESIGN PROFESSIONAL OR APPROVED AGENCY. ALL REQUIRED COMMISSIONING DOCUMENTATION SHALL BE PROVIDED TO THE OWNER AND MADE AVAILABLE TO THE AHJ UPON REQUEST.

LEGEND

TS	TEMPERATURE SENSOR
ATS	AVERAGING TEMPERATURE SENSOR
CO2	CO2 SENSOR FOR ROOFTOP UNIT DEMAND CONTROL VENTILATION
HS	HUMIDITY SENSOR
T	THERMOSTAT
2	SMOKE DETECTOR
KH 2	EQUIPMENT TAG
R–1 / 1750 CFM / 18"ø	DIFFUSER INFORMATION LINE 1: TAG LINE 2: AIRFLOW LINE 3: NECK SIZE
	SUPPLY AIR DUCT (VERTICAL)
	RETURN OR EXHAUST AIR DUCT (VERTICAL)
	ROUND DUCT (VERTICAL)
SSC	STEADY–STATE SPEED CONTROLLER
	PLAQUE DIFFUSER (SHADED AREA DESIGNATES BLANK–OFF PANEL LOCATION)
	LINEAR SLOT DIFFUSER
	LOUVERED FACE DIFFUSER
	CEILING–MOUNTED EXHAUST FAN
	SPIN–IN COLLAR WITH VOLUME DAMPER
	VOLUME DAMPER
	FLEXIBLE DUCTWORK
12"ø	SHEET METAL DUCTWORK W/DIA. SIZE
	PERFORATED FACE DIFFUSER
	SHEET METAL TEE WITH CAP

ABBREVIATIONS

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

LINGLE DESIGN GROUP INC
158 WEST MAIN STREET
LENA, IL 61048
815.369.9155
1764 BLAKE ST
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LICENSE EXPIRATION: DEC 31, 2027

STATE OF MISSOURI
JOSEPH G. THOMAS
NUMBER E-27428
REGISTERED PROFESSIONAL ENGINEER

DATE ISSUED: SEPT 8, 2026

STATE ID: 241342
PROJECT #: 26-125
NATIONAL #: 46237
DRAWN BY: SC
CHECKED BY: JT

DATE:
07/15/26 - PERMIT / BID SET

REVISIONS
1 09/08/25 - DECOR UPDATE / PLUMBING & CIVIL COORDINATION
2
3
4
5
6

CLIENT
McDonald's USA, LLC

PROTOTYPE
BB20 4590 WW-HB
ISSUE DATE 06/26

ADDRESS
600 SCHUG AVENUE
PECULIAR, MO, 64078

SHEET TITLE
GENERAL NOTES

SHEET NUMBER:
M4.0

COORDINATION SCHEDULE

GENERAL REQUIREMENTS	FURNISH	INSTALL	FINAL CONNECTION	NOTES
MECHANICAL PERMIT	MC			1–3
HOT WORK (WELDING) PERMIT (IF APPLICABLE)	MC			1–3
REFRIGERATION PERMIT (IF APPLICABLE)	MC			1–3
PLUMBING PERMIT	PC			1–3
ELECTRICAL PERMIT	EC			1–3
FIRE SPRINKLER PERMIT (IF APPLICABLE)	FPC			1–3
FIRE ALARM PERMIT (IF APPLICABLE)	FAC			1–3
CONTRACTOR COORDINATION REQUIREMENTS				
HEATING & AIR–CONDITIONING				
ROOFTOP UNITS, INTAKE AND RELIEF	MCD CP	MC		1–5, 17, 22
ROOF CURBS	MCD CP	MC		1–3, 20, 22
GAS PIPING AND GAS PIPE KIT	PC	PC	PC	1–3, 14, 22–23
CONTROLS WIRING	MC	EC	EC	1–3, 19, 22, 24
POWER WIRING	EC	EC	EC	1–3, 19, 22, 24
CONDENSATE TRAP	MC	PC		1–3, 22–23
CONDENSATE PIPING (IF APPLICABLE)	PC	PC		1–3, 22–23
DUCT–MOUNTED SMOKE DETECTOR	MC	MC	EC	1–3, 22, 24
GENERAL EXHAUST SYSTEMS				
EXHAUST FANS	MCD CP	MC		1–3, 17, 22
ROOF CURBS	MCD CP	MC		1–3, 22
CONTROLS (WHERE APPLICABLE)	MC	EC	EC	1–3, 22, 24
POWER WIRING	EC	EC	EC	1–3, 22, 24
TEMPERATURE CONTROLS				
BUILDING AUTOMATION SYSTEM	MCD CP	MC	EC	1–3, 22, 24
REMOTE SENSORS (RH AND/OR TEMPERATURE)	MC	MC	EC	1–3, 22, 24
CONTROLS WIRING (WHERE APPLICABLE)	MC	EC	EC	1–3, 22, 24
POWER WIRING	EC	EC	EC	1–3, 22, 24
DUCTWORK AND ACCESSORIES				
GALVANIZED SHEET METAL DUCTWORK	MC	MC		1–3, 22
EXTERNAL INSULATION	MC	MC		1–3, 22
INTERNAL INSULATION (IF APPLICABLE)	MC	MC		1–3, 22
WEATHERPROOFING (IF APPLICABLE)	MC	MC		1–3, 22
SPIN–IN COLLARS	MC	MC		1–3, 22
FLEXIBLE DUCTWORK	MC	MC		1–3, 22
VOLUME/BALANCING DAMPERS	MC	MC		1–3, 22
FIRE DAMPERS (IF APPLICABLE)	MC	MC		1–3, 22
FIRESTOPPING (IF APPLICABLE)	MC	MC		1–3, 22
AIR DEVICES AND ACCESSORIES	MC	MC	MC	1–3, 7, 22, 28
PLUMBING SYSTEMS				
WATER HEATERS	MCD CP	PC	PC	1–3, 11–12, 23
HOT AND COLD WATER PIPE	PC	PC	PC	1–3, 23
VENTS AND INTAKES	PC	PC	PC	1–3, 23
THERMOSTATIC MIXING VALVE	PC	PC	PC	1–3, 23
POWER AND CONTROL WIRING	EC	EC	EC	1–3, 23–24
KITCHEN EXHAUST SYSTEMS				
McDONALD'S BACKSHELF EXHAUST HOODS	KES	KEI		1–3, 6, 22, 27
CANOPY EXHAUST HOODS (IF APPLICABLE)	KES	KEI		1–3, 6, 22, 27
BLACK IRON DUCTWORK	KES	KEI		1–3, 6, 22
STAINLESS STEEL DUCTWORK (IF APPLICABLE)	KES	KEI		1–3, 6, 22
ALUMINUM DUCTWORK (IF APPLICABLE)	KES	KEI		1–3, 6, 22
UL LISTED DUCT WRAP	MC	MC		1–3, 6, 22
FIRE–RATED DUCT ENCLOSURE (IF APPLICABLE)	GC	GC		1–3, 6, 20, 22
EXHAUST FANS	MCD CP	MC		1–3, 6, 17, 22
ROOF CURBS	MCD CP	MC		1–3, 6, 20, 22
CURB EXTENSIONS	MC	MC		1–3, 6, 22
CONTROLS (WHERE APPLICABLE)	EC	EC	EC	1–3, 6, 22, 24
POWER WIRING	EC	EC	EC	1–3, 6, 22, 24
FIRE SUPPRESSION SYSTEM	KES	KES	KES	1–3, 16, 22, 27
KITCHEN EQUIPMENT				
COOLER/FREEZER	KES	GC		1–3, 27
EVAPORATOR COILS	KES	MC		1–3, 27
CONDENSATE PIPING	PC	PC	PC	1–3, 23, 27
REMOTE CONDENSING UNIT (MAC)	KES	MC		1–3, 22, 27
ROOF CURBS	MC	MC		1–3, 22
REFRIGERANT PIPING	KES	MC	MC	1–3, 22, 27
POWER WIRING	EC	EC	EC	1–3, 22, 24, 27
CONTROL WIRING	EC	EC	EC	1–3, 24, 27
PIPE PORTALS	MC	MC		1–3, 22
ICE MACHINES	KES	KEI		1–3, 27
WATER SUPPLY PIPING	KES	KEI	BSI	1–3, 27
REMOTE CONDENSING UNITS	KES	MC		1–3, 22, 27
ROOF CURBS	MC	MC		1–3, 22, 27
REFRIGERANT PIPING	KES	MC	MC	1–3, 22, 27
POWER WIRING	EC	EC	EC	1–3, 22, 24, 27
CONTROL WIRING	KES	EC	EC	1–3, 24, 27
PIPE PORTALS	MC	MC		1–3, 22
GRILLS	KES	KES		1–3, 27
GAS PIPING (IF APPLICABLE)	PC	PC	PC	1–3, 23, 27
POWER WIRING	EC	EC	EC	1–3, 24, 27
CONTROL CABLE (6' CLAMSHELL ONLY)	MC	EC	EC	1–3, 23, 24, 27
FRYERS	KES	KES		1–3, 27
GAS PIPING (IF APPLICABLE)	PC	PC	PC	1–3, 23, 27
POWER WIRING	EC	EC	EC	1–3, 24, 27
3–COMPARTMENT SINK	KES	KES		1–3, 12, 27
FAUCETS AND PRE–RINSE SPRAYER	KES	KES		1–3, 27
WATER SUPPLY PIPING	PC	PC	PC	1–3, 23, 27
SANITARY DRAIN PIPING	PC	PC	PC	1–3, 23, 27
HAND SINKS	MCD CP	PC		1–3, 23, 27
FAUCET	MCD CP	PC		1–3, 23, 27
WATER SUPPLY PIPING	PC	PC	PC	1–3, 23, 27
SANITARY DRAIN PIPING	PC	PC	PC	1–3, 23, 27
VEGETABLE SINK	KES	KES		1–3, 23, 27
FAUCET	KES	KES		1–3, 23, 27
WATER SUPPLY PIPING	PC	PC	PC	1–3, 23, 27
SANITARY DRAIN PIPING	PC	PC	PC	1–3, 23, 27
WASHING MACHINE	KES	KES		1–3, 23, 27
WATER SUPPLY PIPING	PC	PC	PC	1–3, 23, 27
SANITARY DRAIN PIPING	PC	PC	PC	1–3, 23, 27
WARE WASHER	KES	KES		1–3, 23, 27
WATER SUPPLY PIPING	PC	PC	PC	1–3, 23, 27
SANITARY DRAIN PIPING	PC	PC	PC	1–3, 23, 27
MISCELLANEOUS ITEMS				
FIRE SPINKLER SYSTEMS	FPC	FPC	FPC	1–3, 15, 25
HVAC EQUIPMENT START–UP	MC			1–3, 22
TEST, ADJUST AND BALANCE HVAC SYSTEMS	TAB			1–3, 22
DOOR GRILLES (IF APPLICABLE)	MC	GC		1–3, 20, 22
ROOF/WALL OPENINGS	GC			1–3, 20–24
APPLIANCE BACKFLOW PREVENTION	KES/BSI	PC	PC	1–3, 23, 27
CO2 DETECTION SYSTEM	KES/BSI	EC/BSI	EC/BSI	1–3, 22, 27, 30

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.
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.
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.
20. WALK–IN COOLER AND WALK–IN FREEZER REFRIGERATION SYSTEMS SHALL MEET THE PERFORMANCE REQUIREMENTS OUTLINED IN THE LATEST EDITION OF IECC. MINIMUM ANNUAL WALK–IN ENERGY FACTOR (AWEF) PROVIDED BY EQUIPMENT MANUFACTURER IS DETERMINED IN ACCORDANCE WITH AHRI 1250.
21. SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
22. SEE STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
23. SEE MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.
24. SEE PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.
25. SEE ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
26. SEE FIRE PROTECTION DRAWINGS FOR ADDITIONAL INFORMATION.
27. SEE FIRE ALARM DRAWINGS FOR ADDITIONAL INFORMATION.
28. SEE KITCHEN DRAWINGS FOR ADDITIONAL INFORMATION.
29. SEE DECOR DRAWINGS FOR ADDITIONAL INFORMATION.
30. CLARK COUNTY NEVADA–INSTALLATION REQUIRED TO BE BY A LICENSED FIRE ALARM CONTRACTOR PER LOCAL FIRE CODE.

AIR DEVICE SCHEDULE

TAG	MANUFACTURER	MODEL	BORDER	SIZE	COLOR	ACCESSORIES	NOTES
S–1A	CAPTIVEAIRE	DI–PSP	LAY–IN	24x24	SILVER	7	1,2
S–1B	CAPTIVEAIRE	DI–FUSE					
S–2	TITUS	OMNI	LAY–IN	24x24	VARIES	4,6,7	1,6,7
	PRICE	SPD					
S–3	TITUS	OMNI	LAY–IN	12x12	VARIES	1,2,7	1,3,6
	PRICE	SPD					
S–4	TITUS	TBDI–80	LAY–IN	48" (2) 1½" SLOTS	VARIES	7	1,5,6
	PRICE	TBDI4					
S–5	TITUS	TBDI–80	LAY–IN	48" (1) ¾" SLOT	VARIES	7	1,5,6
	PRICE	TBDI4					
R–1	TITUS	23RL	LAY–IN	24x24	VARIES	3,7	1,6
	PRICE	60L					
R–2	TITUS	23RL	SURFACE MOUNT	4x12	WHITE	–	–
	PRICE	60L					
E–1	TITUS	23RL	LAY–IN	12x12	WHITE	1,7	1
	PRICE	60L					

ACCESSORIES:
1. COMBINATION DAMPER AND EQUALIZING GRID
2. PLASTER FRAME FOR DRYWALL CEILING INSTALLATION
3. SQUARE–TO–ROUND COLLAR CONNECTION
4. BACKPAN INSULATION
5. (NOT USED)
6. BLANK–OFF PANEL AS SHOWN ON DUCTWORK PLAN
7. PLASTER FRAME MAY BE NECESSARY – COORDINATE WITH DECOR DRAWINGS

NOTES:
1. SEE PLAN FOR NECK SIZES
2. CONTACT CAPTIVEAIRE FOR ORDERING: BARRETT.LAW@CAPTIVEAIRE.COM 208.989.6947
3. PROVIDE 1" FIBERGLASS INSULATION FOR DIFFUSER BACKPAN
4. NOT USED
5. GENERAL CONTRACTOR SHALL PROVIDE ADDITIONAL 4 FT. T–BAR FOR DIFFUSER FRAMING
6. AIR DEVICE FINISH WILL VARY:
   * KITCHEN, STORAGE, RESTROOMS – WHITE
   * DINING ROOM, VESTIBULES – WHITE, BLACK OR PAINTABLE/PRIME COAT (COORDINATE FINAL COLOR WITH DECOR PLANS).
7. ADDITIONAL ACCESSORIES AND/OR ALTERNATE DIFFUSERS MAY BE REQUIRED. REFER TO DECOR DRAWINGS TO VERIFY.

AIR CURTAIN SCHEDULE

TAG	MANUFACTURER	MODEL	SERVES	AIRFLOW	ELEC	ACCESS.	NOTES
AC 1	POWERED AIRE	MP–1–30E	CASH BOOTH	VARIABLE	8.0 KW HEATER; ⅓ HP FAN	2,3,5	1,2
AC 2	POWERED AIRE	MP–1–30E	PRESENTER'S BOOTH	VARIABLE	8.0 KW HEATER; ⅓ HP FAN	2,3,5	1,2
AC 3	POWERED AIRE	RBT 1–48	STORAGE ENTRANCE	2,559 CFM	MCA: 10 MOCP: 20 ¾ HP	1–4	1,2
AC 4	POWERED AIRE	RBT 1–36	REAR ENTRANCE	2,541 CFM	MCA: 10 MOCP: 20 ¾ HP	1–4	1,2
AC 5	POWERED AIRE	MP 1–30	FORWARD PRESENTER'S BOOTH	VARIABLE	MCA: 5.5 MOCP: 10 ⅓ HP	2–4	1,2

ACCESSORIES:
1. NSF LISTING
2. DOOR SWITCH
3. DELAY TIMER
4. 120V/1ø/60Hz
5. 208V/1ø/60Hz

NOTES:
1. SET DELAY TIMER TO 30 SECONDS
2. MAINTAIN 7" CLEARANCE FOR MOTOR ACCESS ON SIDE OF AIR CURTAIN.

CONTROLS

SYMBOL	DESCRIPTION	MANUFACTURER	MODEL
T	24V THERMOSTAT (ROOFTOP UNITS)	–	–
	120V THERMOSTAT (COMPUTER CLOSET)	HONEYWELL	T651A3018
TS	REMOTE TEMPERATURE SENSOR	–	–
ATS	REMOTE AVERAGING TEMPERATURE SENSOR	–	–
HS	REMOTE HUMIDITY SENSOR	–	–
	BULK CO2 DETECTION SYSTEM	LOGIC02	–

NOTES:
1. FOR TSTAT, TS, HS AND ATS INFORMATION, REFER TO E4.1
2. TO ORDER HONEYWELL EQUIPMENT CALL (800)575–4841
3. SEE KITCHEN DRAWINGS FOR BULK CO2 DETECTION LOCATIONS

KITCHEN HOOD SCHEDULE

TAG	SERVED BY	MANUFACTURER	MODEL	NOTES	AIRFLOW CFM	AIRFLOW CFM/LF	FILTERS QTY/SIZE	FILTERS FPM
KH 1	EXHAUST FAN (EF–1)	FRANKE H&K	UH–83	1–4	1000	166	(4)10x26	250
KH 2	EXHAUST FAN (EF–2)	FRANKE H&K	UH–50	1–4	575	173	(3)10x16	255
KH 3	EXHAUST FAN (EF–3)	FRANKE H&K	UH–65	1–4	800	166	(4)10x16	260
KH 4	EXHAUST FAN (EF–6)	FRANKE H&K	TYPE II	1–2, 5	600	150	–	–

NOTES:
1. HOODS SHALL BE PROVIDED BY THE KES (SEE COORDINATION SCHEDULE)
2. SEE HOOD DRAWINGS FOR CONSTRUCTION DETAILS AND UL INFORMATION
3. REFER TO E3.2 FOR HOOD/FAN INTERLOCK DETAILS
4. CAPTURE JET PLENUMS TO BE INSTALLED ON HOOD, REFER TO K2.1 KITCHEN SCHEDULE.
5. PROVIDE WITH FASCIA KIT. COORDINATE CONDENSATE DRAINAGE WITH P.C.

FAN SCHEDULE

TAG	MANUFACTURER	MODEL	SERVES	ACCESSORIES	NOTES	DESIGN CFM	S.P.	BHP	FRPM	ELECTRICAL VOLTS	Ø	Hz	HP	FLA AMPS
EF 1	ACCUREX	XCUE–14010VG124MCD	KITCHEN HOOD (KH–1)	1–5,13,14	1,2,6	1000	1.75	0.61	1725	115 TO 10VDC ECM	1	60	1	11.5
EF 2	ACCUREX	XCUE–14010VG124MCD	KITCHEN HOOD (KH–2)	1–5,14	1,2,6	575	1.75	0.19	1725	115 TO 10VDC ECM	1	60	1	11.5
EF 3	ACCUREX	XCUE–14010VG124MCD	KITCHEN HOOD (KH–3)	1–5,13,14	1,2,6	800	1.75	0.19	1725	115 TO 10VDC ECM	1	60	1	11.5
EF 4	ACCUREX	XRED–099–VG4X–QD	DINING RESTROOMS	6–9,14	1,2,5	400	0.50	0.07	1126	115 TO 10VDC ECM	1	60	¼	2.5
EF 5	GREENHECK	SP–AP0511WL	DINING ROOM JANITOR'S CLOSET	10–12	1–3,5	80	0.20	–	900	115	1	60	–	0.29
EF 6	ACCUREX	XCUE–099–VG	KITCHEN HOOD (KH–4)	6–9,14	1,2,7	600	0.75	0.19	1725	115	1	60	¼	2.9
TF 1	GREENHECK	SP–A510	COMPUTER CLOSET	9–12	1–4	375	0.25	0.11	1100	115	1	60	–	3.3

ACCESSORIES:
1. 2–POLE NEMA 3R DISCONNECT SWITCH FACTORY–WIRED AND MOUNTED TO FAN
2. UL 762 LISTED AND LABELED
3. ROOF CURB MODEL GPF–24–G30 WITH 1" INSULATION
4. CURB EXTENSION INTEGRAL TO MCD FAN PACKAGE
5. HINGED CURB CAP KIT WITH CABLES
6. 120VAC BACKDRAFT DAMPER
7. ROOF CURB MODEL GPI–19–G14 WITH 1" INSULATION AND DAMPER TRAY
8. NEMA 3R DISCONNECT SWITCH
9. EXTERNAL STEADY–STATE SPEED CONTROLLER
10. ROUND DUCT CONNECTOR
11. TWO (2) 10W COMPACT LED LAMPS
12. PRISMATIC LENS
13. WINDBAND EXTENSION ON FAN OUTLET
14. VARIGREEN 10VDC ELECTRONICALLY COMMUTATED MOTOR

NOTES:
1. NO SUBSTITUTIONS PERMITTED
2. TO ORDER ACCUREX EQUIPMENT CALL (888)325–6629 OR E–MAIL: MCD@ACCUREX.COM
3. ELECTRICAL CONTRACTOR SHALL PROVIDE DOOR SWITCH FOR LIGHT CONTROL
4. MECHANICAL CONTRACTOR SHALL FURNISH LINE VOLTAGE THERMOSTAT FOR FAN CONTROL. ELECTRICAL CONTRACTOR SHALL INSTALL THERMOSTAT.
5. CONNECT TO TIMECLOCK FOR FAN SHUT–OFF DURING UNOCCUPIED HOURS
6. REFER TO E3.2 FOR HOOD/FAN INTERLOCK DETAILS
7. UNIT SHALL BE INTERLOCKED WITH WAREWASHER SWITCHING CONTACT.

PACKAGED ROOFTOP UNIT SCHEDULE - DX/GAS

TAG	AREA SERVED	NOMINAL TONNAGE	MINIMUM OA (CFM)	SUPPLY FAN AIRFLOW (CFM)	SUPPLY FAN EXT. S.P. (IN W.C.)	SUPPLY FAN MHP	SUPPLY FAN BHP	SUPPLY FAN RPM	COOLING COIL (DX) ENTERING AIR DB °F	ENTERING AIR WB °F	LEAVING AIR DB °F	LEAVING AIR WB °F	COOLING CAPACITY (MBH) SENSIBLE	COOLING CAPACITY (MBH) TOTAL	HEAT EXCHANGER (GAS) ENTERING AIR (DB °F)	LEAVING AIR (DB °F)	TOTAL CAPACITY INPUT	TOTAL CAPACITY OUTPUT	# OF STAGES	ARI RATING SEER	ARI RATING EER	ARI RATING IEER	WEIGHT (LBS.)*	UNIT POWER CONNECTION VOLT.	PHASE	MCA	MOCP	MANUFACTURER	MODEL NO.	ACCESSORIES
RTU–1	KITCHEN	20	1,700	7,200	1.40	5.0	5.19	1,013	78.5	71.4	56.4	47.4	172.2	237.6	56.8	84.0	260,000	211,000	2	-	12	15.4	3,230	208	3	89	100	LENNOX	LGT240	1,3,4,7,9,10,11,12,16,17,19,20,21
RTU–2	SUPPORT	6	800	2,400	0.80	1.5	1.50	2,816	80.0	72.2	58.0	48.6	56.9	73.9	49.3	96.0	150,000	121,000	2	-	12.2	17.3	1,041	208	3	32	50	LENNOX	LGT072	1,3,4,7,8,9,10,11,12,16,17,19,20,21
RTU–3	DINING ROOM	13	1,130	5,000	1.00	3.0	2.30	815	78.4	71.4	57.1	47.8	115.0	153.3	57.6	96.7	260,000	211,000	2	-	12	15.4	3,010	208	3	66	80	LENNOX	LGT156	1,3,4,7,8,9,10,11,12,16,17,19,20,21

ACCESSORIES:
1. DIFF. ENTHALPY ECONOMIZER
2. MOTORIZED O.A. DAMPER
3. BAROMETRIC RELIEF
4. MERV 13 FILTER
5. POWER EXHAUST
6. CO2 SENSOR FOR DCV
7. HUMIDITY CONTROL
8. SUPPLY AIR TEMPERING
9. TEMPERATURE SENSOR
10. COMBINED TEMP/HUMIDITY SENSOR
11. DISCONNECT SWITCH
12. FIELD WIRED 120V CONVENIENCE OUTLET
13. STAINLESS STEEL HEAT EXCHANGER
14. CONDENSER COIL PROTECTIVE COATING
15. EVAPORATOR COIL PROTECTIVE COATING
16. HAIL GUARD
17. RETURN AIR SMOKE DETECTOR
18. SUPPLY AIR SMOKE DETECTOR
19. 14" ROOF CURB
20. CONDENSATE DRAIN W/ P–TRAP
21. FLOAT SWITCH KIT

* NET WEIGHT ONLY - DOES NOT INCLUDE ADDITIONAL FACTORY OR FIELD INSTALLED OPTIONS / ACCESSORIES.

NOTES:
1. NO SUBSTITUTIONS PERMITTED.
2. TO ORDER TRANE EQUIPMENT, CALL (630) 400-4285 OR EMAIL: MCDONALDS@TRANE.COM
3. FACTORY INSTALLED DISCONNECT SWITCH IS NOT AVAILABLE WHEN MOCP IS 200 AMPS OR HIGHER. VERIFY WITH MANUFACTURER'S DOCUMENTATION PRIOR TO ORDERING.
4. MECHANICAL CONTRACTOR SHALL INSTALL SECONDARY ENTHALPY SENSOR IN RETURN AIR DUCT DROP & WIRE TO UNIT PER MAUFACTURERS INSTRUCTIONS.

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LICENSE EXPIRATION: DEC 31, 2027

STATE OF MISSOURI
JOSEPH G. THOMAS
NUMBER E-27428
REGISTERED PROFESSIONAL ENGINEER

DATE ISSUED: SEPT 8, 2026

STATE ID: 241342
PROJECT #: 26-125
NATIONAL #: 46237
DRAWN BY: SC
CHECKED BY: JT

DATE:
07/15/26 - PERMIT / BID SET

REVISIONS
1 09/08/25 - DECOR UPDATE / PLUMBING & CIVIL COORDINATION

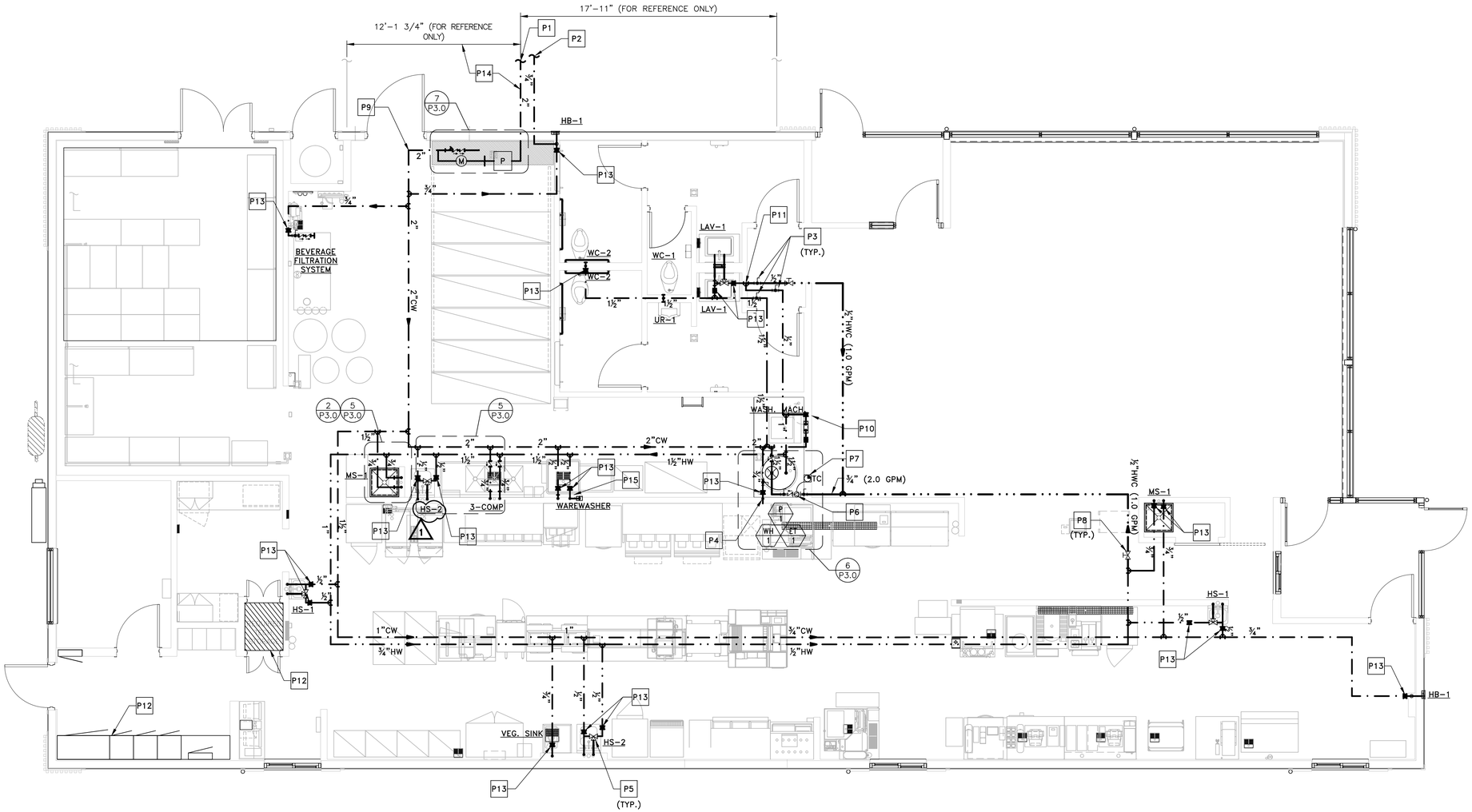
CLIENT
McDonald's USA, LLC

PROTOTYPE
BB20 4590 WW-HB
ISSUE DATE 06/26

ADDRESS
600 SCHUG AVENUE
PECULIAR, MO, 64078

SHEET TITLE
SCHEDULES

SHEET NUMBER:
M4.1



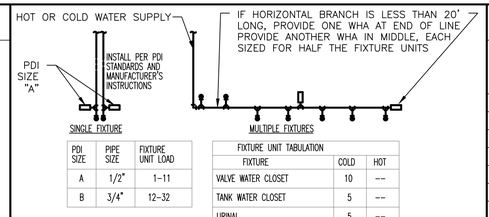
1 P1.0 **DOMESTIC WATER PIPING**
SCALE: 1/4" = 1'-0"

DRAWING NOTES

1. PIPING ROUTES AS SHOWN ARE GENERAL AND MAY VARY DUE TO FIELD CONDITIONS. COORDINATE ALL PIPE ROUTES WITH OTHER TRADES. MAKE SURE HOT WATER MAIN LOOP REMAINS WITHIN 10 FT OF FIXTURE FOR ENERGY CODE PURPOSE.
2. 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.

KEYED NOTES

- P1 INCOMING UNDERGROUND WATER SERVICE (SEE SITE PLAN FOR CONTINUATION). WATER PIPING FROM THIS POINT TO CEILING PENETRATION INSIDE BUILDING SHALL BE COPPER.
- P2 COLD WATER UNDERGROUND TO YARD HYDRANT (HB-2) IN TRASH CORRAL. SEE SITE PLAN FOR CONTINUATION.
- P3 SHUT-OFF VALVE FOR RESTROOM ISOLATION. SEE VALVE SCHEDULE. ALL SHUT-OFF VALVES SHALL BE LOCATED OVER SUSPENDED CEILINGS FOR ACCESSIBILITY. DO NOT LOCATE IN AREAS WITH DRYWALL CEILINGS.
- P4 ¾" COLD WATER UP TO ROOF HYDRANT.
- P5 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. REFER TO PLUMBING FIXTURE SCHEDULE FOR WAREWASHER MIXING VALVE REQUIREMENTS.
- P6 AQUASTAT INTEGRAL TO PUMP SHALL SHUT OFF PUMP WHEN RECIRULATION TEMPERATURE REACHES 140°F. SEE DETAIL 6 ON DRAWING P3.0.
- P7 TIME CLOCK TO SHUT PUMP AND WATER HEATER DOWN DURING UNOCCUPIED HOURS. SEE ELECTRICAL DRAWINGS FOR WIRING DETAIL.
- P8 BALANCING VALVE FOR RECIRCULATION SYSTEM. SEE VALVE SCHEDULE. ALL BALANCING VALVES SHALL BE LOCATED OVER SUSPENDED CEILINGS FOR ACCESSIBILITY. DO NOT LOCATE IN AREAS WITH DRYWALL CEILINGS.
- P9 WATER PIPING AFTER CEILING PENETRATION CAN TRANSITION TO CPVC OR PEX WHERE PERMITTED BY CODE.
- P10 PROPERLY SEAL ALL PIPE PENETRATIONS THROUGH DRAFT STOP WALL (TYP.)
- P11 HOT WATER RECIRCULATION SHALL CONNECT WITHIN 6" OF SUPPLY STUB OUT TO FIXTURE.
- P12 UTILITIES SHALL NOT BE ROUTED ABOVE THE TECH. CLOSET AND THE SWITCHGEAR.
- 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.
- P15 ROUTE CW AND HW DOWN IN WALL TO WALL BOX AND CONNECT COMPLETE. REFER TO PLUMBING FIXTURE SCHEDULE FOR WAREWASHER CONNECTION REQUIREMENTS.



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

FIXTURE UNIT TABULATION		
FIXTURE	COLD	HOT
VALVE WATER CLOSET	10	--
TANK WATER CLOSET	5	--
URINAL	5	--
LAVATORY/SINK	1.5	1.5
JANITOR'S SINK	3	3
HOSE BIBB	2	--
SODA FACTORY	10	--
WAREWASHER	4	4

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 2 P1.0
WATER-HAMMER ARRESTER (TYP.)
NOT TO SCALE

FIXTURE COUNT - IPC

NO.	FIXTURE DESCRIPTION	SUPPLY CONNECTIONS WSFU	COLD	HOT	TOTAL
1	VEGETABLE PREP SINK	4	¾"	–	3
4	HAND SINK	1	½"	½"	4
4	HOSE BIBB	3	¾"	–	12
1	SODA FACTORY	10	1"	–	10
1	KITCHEN SINK (3-COMP)	4	¾"	¾"	4
2	MOP SINK	2	¾"	¾"	4
2	LAVATORY	1	½"	½"	2
1	URINAL	5	1"	–	5
3	WATER CLOSET	5	1 ½"	–	15
1	WASHING MACHINE	4	¾"	¾"	4
1	WAREWASHER	4	½"	½"	4
				TOTAL:	66

(55 GPM)

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1 CIVIL COORDINATION

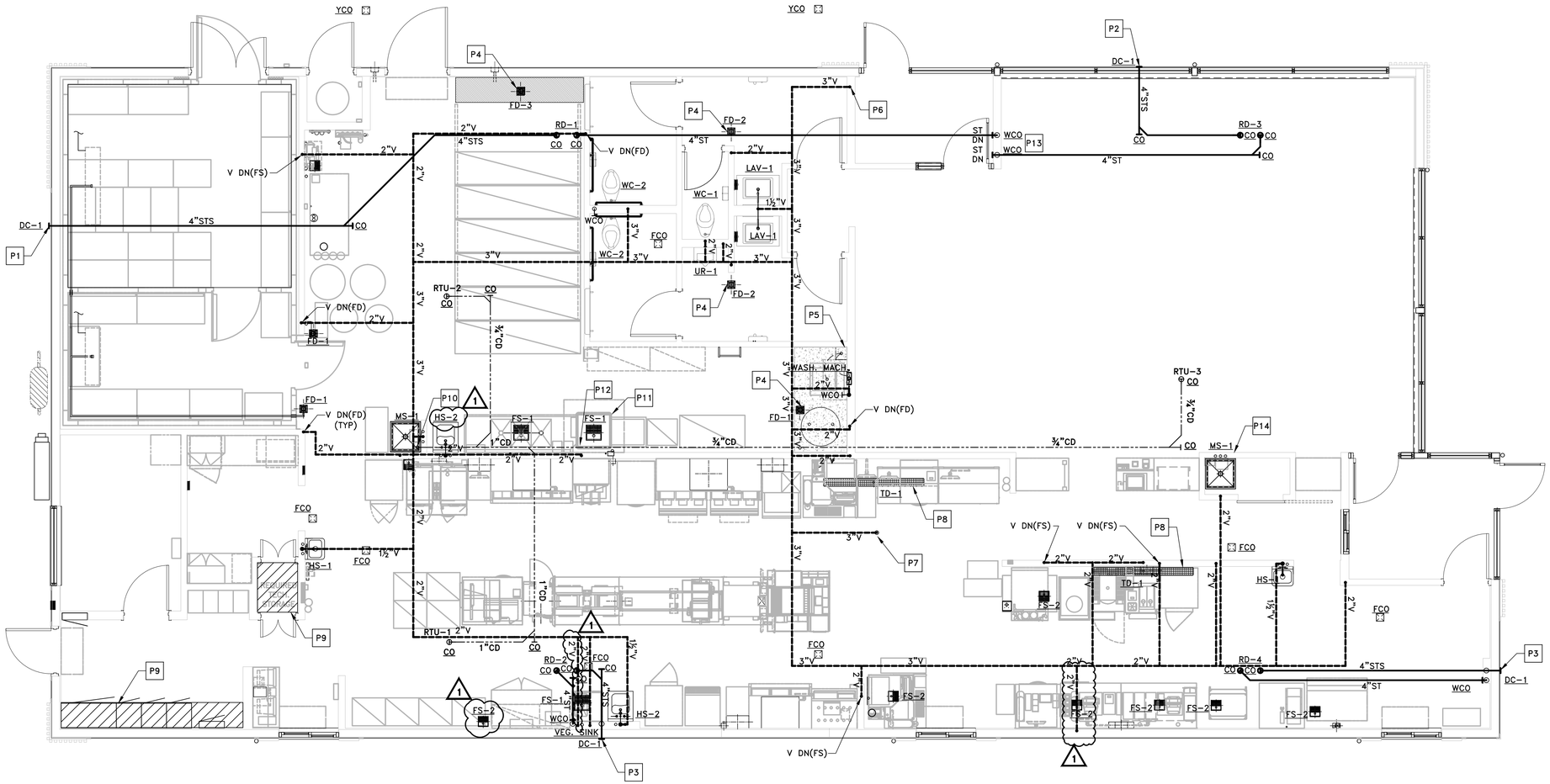
CLIENT
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PROTOTYPE
BB20 4590 WW-HB
ISSUE DATE 06/26

ADDRESS
600 SCHUG AVENUE
PECULIAR, MO, 64078

SHEET TITLE
DOMESTIC WATER PIPING

SHEET NUMBER:
P1.0



1 P1.2 **VENT & STORM PIPING PLAN**

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

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.
- P11 CONTRACTOR SHALL ROUTE ½" OD 304 S/S PIPE (PROVIDED BY OTHERS) FROM TYPE II EXHAUST HOOD TO FLOOR SINK.
- P12 CONTRACTOR SHALL INSTALL DRAIN PIPE AND AIR GAP KIT (PROVIDED BY OTHERS). CONNECT DRAIN HOSES FROM WAREWASHER TO DRAIN PIPE PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. REFER TO DETAIL 9/P3-0 FOR FURTHER DETAILS.
- P13 WALL CLEAN OUTS TO BE INSTALLED 18" A.F.F. ON VESTIBULE SIDE. OPTIONAL: PAINT TO MATCH WALL FINISH FOR CONCEALMENT.
- P14 WALL CLEAN OUTS TO BE INSTALLED 18" A.F.F. ON BACK OF HOUSE SIDE. COORDINATE FINISH COLOR WITH WALL DECOR.

STORM PIPE SIZING

RAINFALL = 3.25 IN./HR

VERTICAL LEADERS

ROOF DRAIN	ROOF AREA SQ. FT.	SIZE IN.
RD-1	1,140	4
RD-2	1,221	4
RD-3	686	3
RD-4	686	3
TOTAL	3,733	

HORIZONTAL PIPING (SLOPE ¼" PER FOOT)

ROOF DRAIN	ROOF AREA SQ. FT.	SIZE IN.
RD-1 & RD-3	1,826	6
RD-1, RD-3 & RD-4	2,512	6
RD-1, RD-2, RD-3 & RD-4	3,733	6

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STATE OF MISSOURI JOSEPH G. THOMAS NUMBER E-27428 REGISTERED PROFESSIONAL ENGINEER

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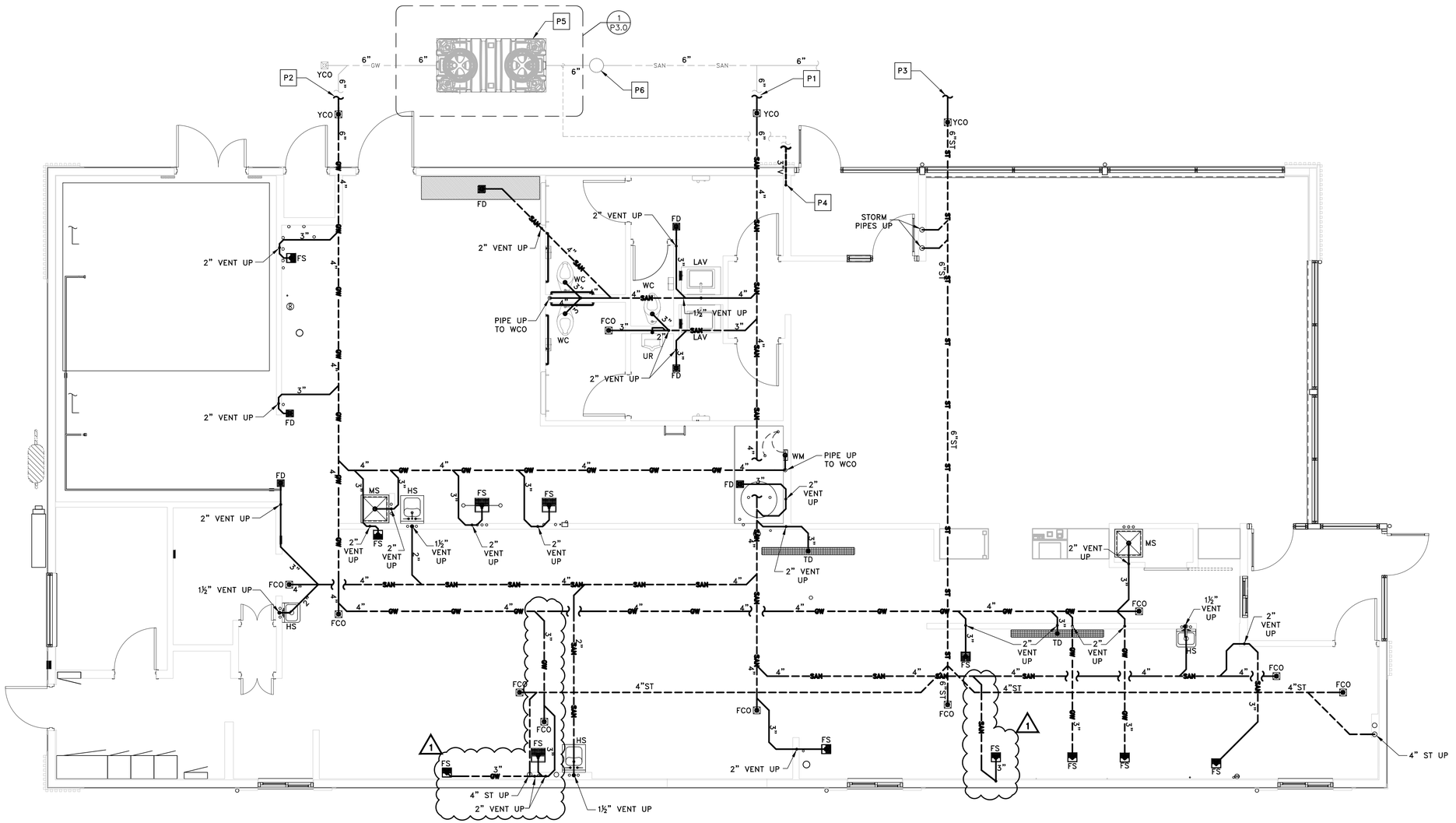
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PROTOTYPE
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ISSUE DATE 06/26

ADDRESS
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PECULIAR, MO, 64078

SHEET TITLE
VENT & STORM PIPING PLAN

SHEET NUMBER:
P1.2



1 P1.3 **UNDERFLOOR PLUMBING PLAN**

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

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.

KEYED NOTES

- P1 SANITARY LINE TO SANITARY SEWER. SEE SITE PLAN FOR CONTINUATION.
- P2 GREASE LINE TO EXTERIOR GREASE INTERCEPTOR. SEE SITE PLAN FOR CONTINUATION
- P3 STORM LINE TO STORM SYSTEM. SEE SITE PLAN FOR CONTINUATION.
- P4 VENT FROM GREASE INTERCEPTOR. SEE SITE PLAN FOR CONTINUATION. COORDINATE PIPE ROUTING WITH LOCATION OF GREASE INTERCEPTOR.
- P5 GREASE INTERCEPTOR LOCATION SHOWN FOR REFERENCE ONLY. COORDINATE GREASE INTERCEPTOR LOCATION WITH CIVIL ENGINEER AND SITE CONTRACTOR.
- P6 INSTALL SAMPLING PORT (IF REQUIRED) SCHIER, MODEL SV10 FOR SCHIER HYDROMECHANICAL GREASE INTERCEPTOR.

WASTE PIPE SIZING - IPC

FIXTURE TYPE	TRAP SIZE	DFU	QUANTITY	TOTAL
URINAL	2 IN.	4	1	4
WATER CLOSET	3 IN.	4	3	12
LAVATORY	1¼ IN.	1	2	2
WASH SINK (HAND SINK)	1½ IN.	2	4	8
FLOOR DRAIN OR SINK	3 IN.	5	6	30
FLOOR DRAIN OR SINK	4 IN.	6	1	6
EMERGENCY FLOOR DRAIN (BATHROOMS)	3 IN.	0	2	0
			TOTAL	62

GREASE PIPE SIZING - IPC

SERVICE SINK (MOP SINK)	3 IN.	3	2	6
FLOOR DRAIN OR SINK	3 IN.	5	10	50
FLOOR DRAIN OR SINK	4 IN.	6	0	0
WASHING MACHINE	2 IN.	3	1	3
			TOTAL	59

STORM PIPE SIZING

RAINFALL = 3.25 IN./HR

VERTICAL LEADERS

	ROOF AREA	SIZE
ROOF DRAIN	SQ. FT.	IN.
RD-1	1,330	4
RD-2	1,332	4
RD-3	916	4
RD-4	915	4
TOTAL	4,493	

HORIZONTAL PIPING (SLOPE ⅛" PER FOOT)

	ROOF AREA	SIZE
ROOF DRAIN	SQ. FT.	IN.
RD-1 & RD-3	2,246	6
RD-1, RD-3 & RD-4	3,161	6
RD-1, RD-2, RD-3 & RD-4	4,493	6

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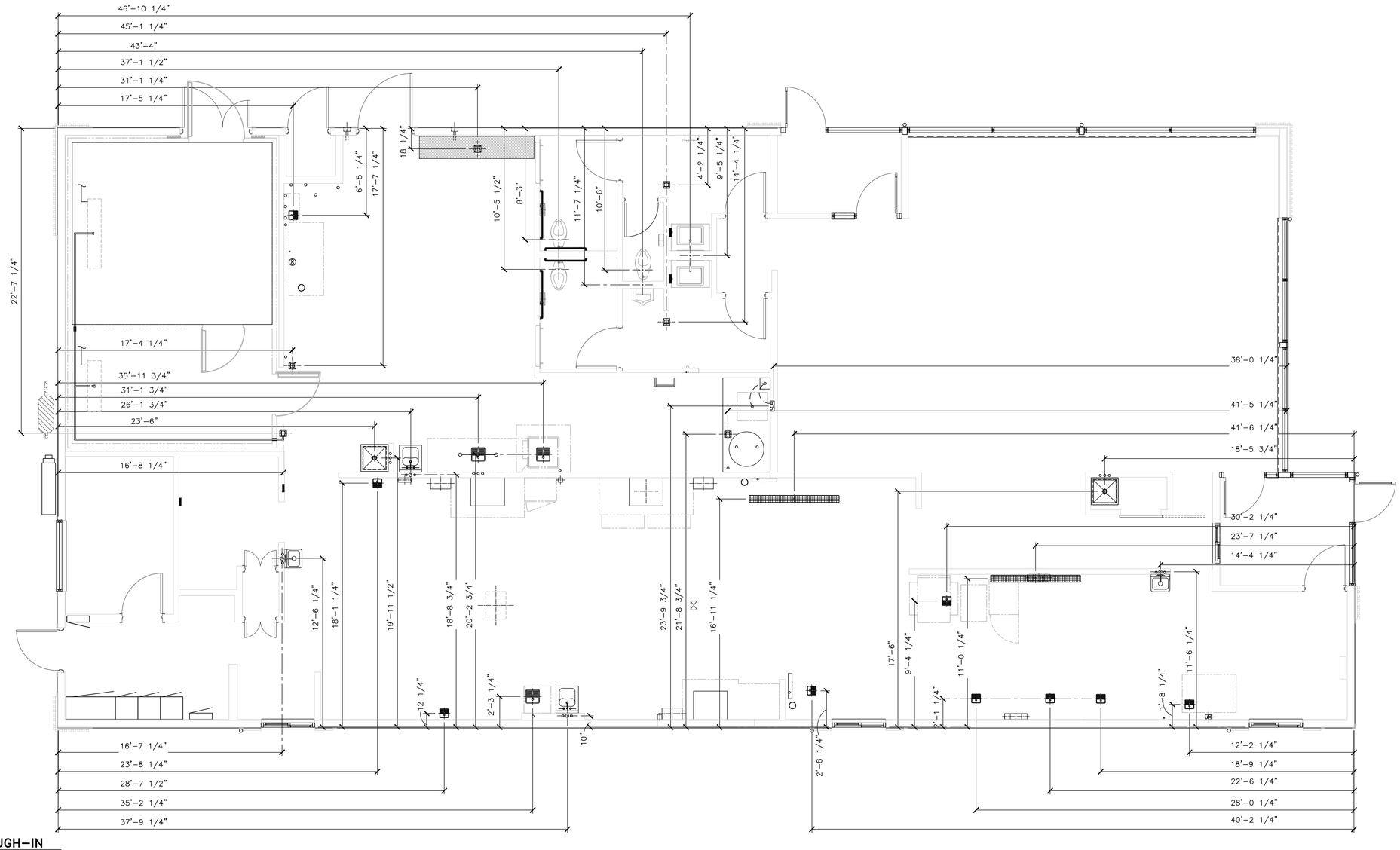
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PROTOTYPE
BB20 4590 WW-HB
ISSUE DATE 06/26

ADDRESS
600 SCHUG AVENUE
PECULIAR, MO, 64078

SHEET TITLE
UNDERGROUND PLUMBING

SHEET NUMBER:
P1.3



1 / P1.4 **UNDERGROUND ROUGH-IN**

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

DRAWING NOTES

1. THIS PLAN IS PROVIDED AS A GUIDE FOR THE PLUMBING CONTRACTOR. ALL DIMENSIONS ARE ROUNDED TO THE NEAREST ¼" AND ARE TAKEN FROM THE OUTSIDE EDGE OF THE FOUNDATION WALL TO CENTERLINE OF SLAB PENETRATION.

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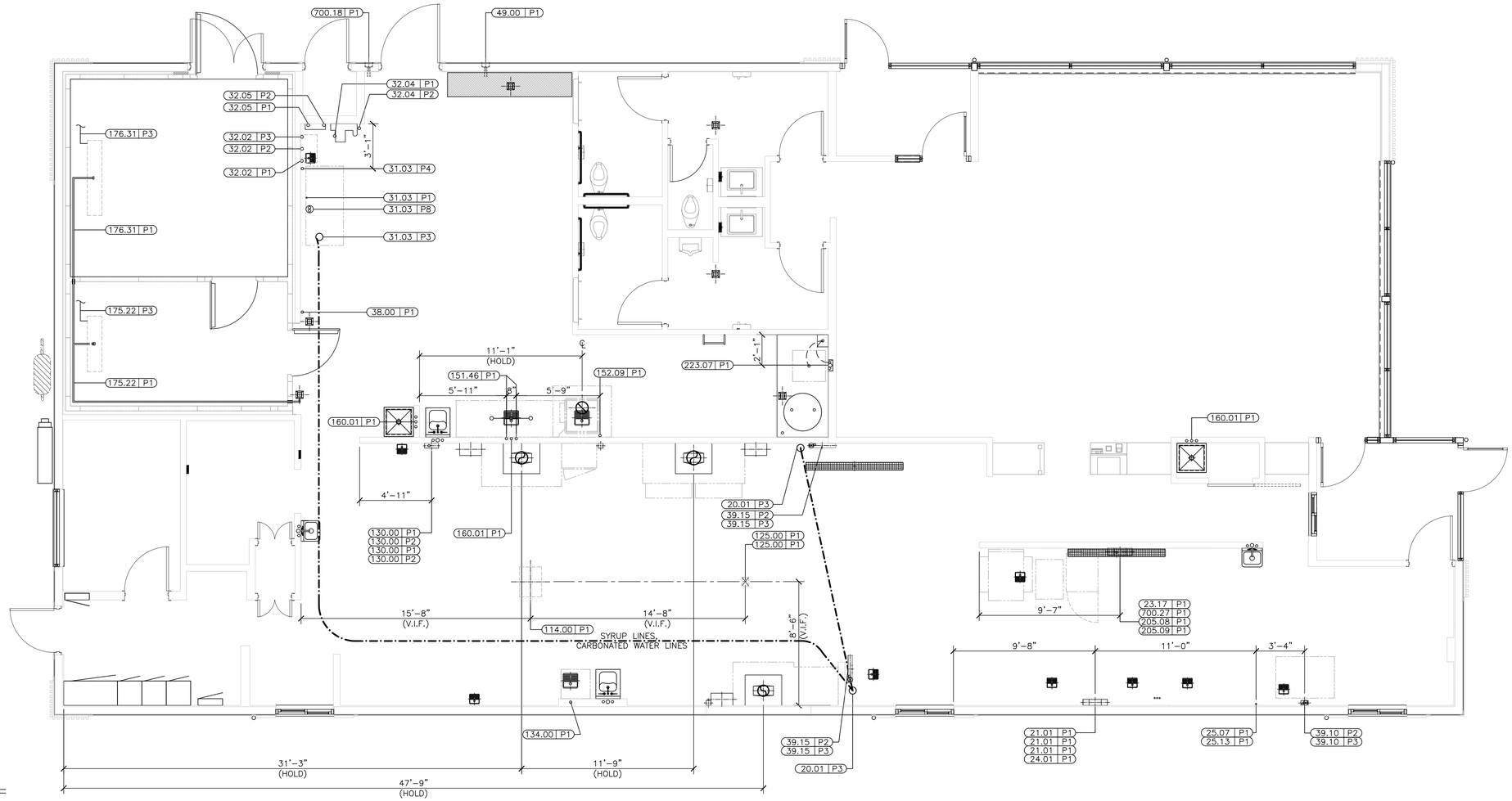
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PECULIAR, MO, 64078

SHEET TITLE
UNDERGROUND ROUGH-IN

SHEET NUMBER:
P1.4



1 P1.6 **OVERHEAD ROUGH-IN**

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

VIF = Verify in Field
PC = Plumbing Contractor
BSI = Beverage System Installer

PLUMBING SCHEDULE

TAG #	QTY	DESCRIPTION	GAS TYPE	GAS BTU	GAS SIZE	HW	CW	MISC PLBG	HGT AFF	DRAIN	REQUIREMENTS & REMARKS
020.01P3	2	AUTOMATED BEVERAGE SYSTEM 2.0	–	–	–	–	–	SODA BUNDLE	SEE RMKS	–	DN CHASE FROM SODA SYSTEM – "T" FROM D/T – BSI TO MAKE FINAL CONNECTIONS PER LOCAL CODES
021.01P1	3	COFFEE BREWER (GLASS DECANTERS)	–	–	–	–	1/4" TRTD	–	SEE RMKS	–	DN CHASE FROM SODA SYSTEM – IF NO CHASE RUN IN 2"COND TO JB –BSI TO CONN CW LINE PER LOCAL CODES. 1/4" R.O. WATER OPTIONAL
023.10P1	1	ESPRESSO BREWER	–	–	–	–	3/8" R.O.	–	SEE RMKS	3/8" IND	DN CHASE FROM R.O. SYSTEM – IF NO CHASE RUN IN 2"COND TO JB –BSI TO CONN CW LINE PER LOCAL CODES
024.01P1	1	ORANGE JUICE DISPENSER	–	–	–	–	1/2" FLTR	–	SEE RMKS	–	DN CHASE FROM SODA TOWER CW LINE W/ RECIRC/CHIILED INSULATED BUNDLE–BSI CONN CWLINE,LOCAL CODES PERMITTING
025.07P1	1	INFUSION TEA BREWER – MIS	–	–	–	–	1/2" TRTD	3/8" CO2	SEE RMKS	–	DN CHASE FROM SODA SYSTEM – IF NO CHASE RUN IN 2"COND TO JB –BSI TO CONN CW LINE PER LOCAL CODES
025.13P1	1	GLASS FILLER HOSE ASSEMBLY	–	–	–	–	1/4" FLTR	–	SEE RMKS	–	TEE–OFF FROM 25.07P1, INFUSION TEA BREWER –BSI TO CONN CW LINE PER LOCAL CODES
031.03P1	1	SODA SYSTEM PACKAGE B.I.B.(RECIRCULATING– 3 TOWERS)	–	–	–	–	–	3/8" OUTLET	SEE RMKS	–	FLEX LINE OVERHEAD TO VARIOUS EQUIP. BSI TO MAKE FINAL CONN PER LOCAL CODES
031.03P3	1	SODA SYSTEM PACKAGE B.I.B.(RECIRCULATING– 3 TOWERS)	–	–	–	–	–	SODA BUNDLE	SEE RMKS	–	OVERHEAD TO SODA TOWER CHASE(S) – BSI TO MAKE FINAL CONNECTIONS PER LOCAL CODES
031.03P4	1	SODA SYSTEM PACKAGE B.I.B.(RECIRCULATING– 3 TOWERS)	–	–	–	–	3/4"	–	1'–6"	3/4" IND	BSI TO MAKE CONNECTION FROM BACKFLOW PREVENTER (VERIFY HEIGHT IN FIELD)
031.03P8	1	SODA SYSTEM PACKAGE B.I.B.(RECIRCULATING– 3 TOWERS)	–	–	–	–	–	REFRIG LINES	SEE RMKS	–	FROM REMOTE CONDENSING UNIT
032.02P1	1	REVERSE OSMOSIS WATER FILTRATION SYSTEM – TANKLESS	–	–	–	–	3/8" FLTR	–	SEE RMKS	–	FLEX LINE OVERHEAD FROM SODA SYSTEM –BSI TO MAKE FINAL CONN PER LOCAL CODES
032.02P2	1	REVERSE OSMOSIS WATER FILTRATION SYSTEM – TANKLESS	–	–	–	–	–	3/8" OUTLET	SEE RMKS	–	FLEX LINE OVERHEAD TO RAPID STEAMER, ESPRESSO, AND COFFEE (OPT.) –BSI TO MAKE FINAL CONN PER LOCAL CODES
032.02P3	1	REVERSE OSMOSIS WATER FILTRATION SYSTEM – TANKLESS	–	–	–	–	–	–	–	1/4" WASTE	–
032.04P1	1	WATER FILTRATION SYSTEM	–	–	–	–	–	3/4" INLET	6'–0"	–	–
032.04P2	1	WATER FILTRATION SYSTEM	–	–	–	–	–	3/4" OUTLET	–	–	3/4" GHT RINSE CONN. FLEX LINE OVHD. TO RAPID STEAMER, ESPRESSO, & COFFEE (OPT.) –BSI TO MAKE FINAL CONN PER LOCAL CODE
032.05P1	1	WATER FILTRATION SYSTEM	–	–	–	–	–	3/4" INLET	SEE RMKS	–	FLEX LINE OVERHEAD FROM R.O. SYSTEM –BSI TO MAKE FINAL CONN PER LOCAL CODES
032.05P2	1	WATER FILTRATION SYSTEM	–	–	–	–	–	3/4" OUTLET	SEE RMKS	–	FLEX LINE OVERHEAD TO COMBI OVENS AND STAGING CABINET –BSI TO MAKE FINAL CONN PER LOCAL CODES
038.00P1	1	CLEAN IN PLACE PANEL	–	–	–	–	1/2" FLTR	–	6'–0"	–	FOR CLEANING BULK COKE TANKS. INSTALL HEIGHT TO BOTTOM OF UNIT
039.10P2	1	ICE MACHINE – 1400 LB.	–	–	–	–	1/2" TRTD	–	SEE RMKS	3/4" IND	WATER LINE OVERHEAD FROM SODA SYSTEM – BSI TO MAKE FINAL CONNECTIONS PER LOCAL CODES
039.10P3	1	ICE MACHINE – 1400 LB.	–	–	–	–	–	REFRIG LINES	–	–	REFRIGERATION LINES OVERHEAD FROM REMOTE CONDENSING UNIT

VIF = Verify in Field
PC = Plumbing Contractor
BSI = Beverage System Installer

PLUMBING SCHEDULE

TAG #	QTY	DESCRIPTION	GAS TYPE	GAS BTU	GAS SIZE	HW	CW	MISC PLBG	HGT AFF	DRAIN	REQUIREMENTS & REMARKS
039.15P2	2	ICE MACHINE – 1000 LB.	–	–	–	–	1/2" TRTD	–	SEE RMKS	3/4" IND	WATER LINE OVERHEAD FROM SODA SYSTEM – BSI TO MAKE FINAL CONNECTIONS PER LOCAL CODES
039.15P3	2	ICE MACHINE – 1000 LB.	–	–	–	–	–	REFRIG LINES	–	–	REFRIGERATION LINES OVERHEAD FROM REMOTE CONDENSING UNIT
049.00P1	1	CO2 FILL BOX	–	–	–	–	–	–	3'–4"	–	HEIGHT IS TO BOTTOM OF FILL BOX;SUPPLIED BY MANUFACTURER;INSTALLED BY G.C. SEE BUILDING ELEVATIONS.
096.27P1	2	36" NEXT GEN 3–PLATEN CLAMSHELL GRILL – GAS/ELECTRIC	–	96,000	1"	–	–	–	–	–	EXTEND (1) GAS LINE DN CHASE AFTER EQUIPMENT ITEM(S) INSTALLED
114.00P1	1	HUMIDIFIED HOLDING CABINET	–	–	–	–	3/8" R.O.	–	SEE RMKS	–	BSI EXTENDS CW LINE OVERHEAD FROM R.O. SYSTEM & TERM. W/QUICK DISCONN. AND SHUTOFF
125.00P1	2	RAPID BUN STEAMER	–	–	–	–	3/8" R.O.	–	SEE RMKS	–	BSI EXTENDS CW LINE FROM R.O. SYSTEM & TERM. W/QUICK DISCONN.
130.00P1	2	COMBI OVEN	–	–	–	–	1/2" FLTR	–	SEE RMKS	1 1/2" IND	BSI EXTENDS CW LINE OVERHEAD FROM SODA SYSTEM & TERM. W/QUICK DISCONN. AND SHUTOFF
130.00P2	2	COMBI OVEN	–	–	–	–	3/8" R.O.	–	SEE RMKS	–	BSI EXTENDS CW LINE OVERHEAD FROM R.O. SYSTEM & TERM. W/QUICK DISCONN. AND SHUTOFF
134.00P1	1	VEGETABLE SINK	–	–	–	–	3/4"	–	1'–10"	1–1/2" IND	–
151.46P1	1	SOILED DISHTABLE – RIGHT HAND – 90.5" WIDE	–	–	–	3/4" 140	3/4"	–	1'–6"	–	PC MAKES FINAL CONNECTIONS PER LOCAL CODE
152.09P1	1	WAREWASHER – HIGH TEMP	–	–	–	1/2" 140	1/2"	–	2'–0"	1 1/2"	PC TO PROVIDE HW, CW, DRAIN PIPING.DRAIN @9" AFF. FOR ECOLAB FROM WB–2, SPLIT CW: 1/2" CW TO DTV, 3/8" CW TO VAPOR VENT.
160.01P1	3	CHEMICAL SYSTEM	–	–	–	3/4" 110	–	–	SEE RMKS	–	PC TO PROVIDE 3/4" MHT. FINAL CONNECTIONS BY EQUIPMENT INSTALLER PER LOCAL CODE, SEE SHEET P3.0 FOR INSTALLATION HEIGHT
175.22P1	1	COOLER EVAPORATOR	–	–	–	–	–	–	–	3/4" COND.	PC TO ROUTE CONDENSATE DRAIN LINE TO FLOOR DRAIN. PC TO LIQUID–TIGHT SEAL OPENING FOR LINE EXITING BOX
175.22P3	1	COOLER EVAPORATOR	–	–	–	–	–	REFRIG LINES	–	–	RUN TO REMOTE CONDENSING UNIT–INSULATE FULL RUN LENGTH –INSTALLED BY REFRIG. CONTRACTOR
176.31P1	1	FREEZER EVAPORATOR	–	–	–	–	–	–	–	3/4" COND.	PC TO ROUTE CONDENSATE DRAIN LINE TO FLOOR DRAIN. PC TO LIQUID–TIGHT SEAL OPENING FOR LINE EXITING BOX. HEAT TAPE BY REF.
176.31P3	1	FREEZER EVAPORATOR	–	–	–	–	–	REFRIG LINES	–	–	RUN TO REMOTE CONDENSING UNIT–INSULATE FULL RUN LENGTH –INSTALLED BY REFRIG. CONTRACTOR
205.08P1	1	BIC MACHINE	–	–	–	–	1/2" FLTR	–	SEE RMKS	1" IND	DN CHASE. IF NO CHASE RUN IN 2"COND TO JB –BSI TO CONNECT LINES PER LOCAL CODES
205.09P1	1	FROZEN BEVERAGE DISPENSER	–	–	–	–	1/2" FLTR	3/8" CO2	SEE RMKS	–	DN CHASE. IF NO CHASE RUN IN 2"COND TO JB –BSI TO CONNECT LINES PER LOCAL CODES
223.07P1	1	WASHER	–	–	–	3/4" 140	3/4"	–	4'–0"	1 1/2" D	SEE PLUMBING DWGS FOR WALL BOX. INSTALL HEIGHT IS TO BOTTOM OF THE BOX
700.18P1	1	BULK OIL FILL BOX	–	–	–	–	–	–	3'–4"	–	HEIGHT IS TO BOTTOM OF FILL BOX;SUPPLIED BY MANUFACTURER;INSTALLED BY G.C. SEE BUILDING ELEVATIONS.

LINGLE DESIGN GROUP INC
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LICENSE EXPIRATION: DEC 31, 2027

STATE OF MISSOURI
JOSEPH G. THOMAS
NUMBER E-27428
REGISTERED PROFESSIONAL ENGINEER

DATE ISSUED: SEPT 8, 2026

STATE ID: 241342
PROJECT #: 26-125
NATIONAL #: 46237
DRAWN BY: SC
CHECKED BY: JT

DATE:
07/15/26 - PERMIT / BID SET

REVISIONS
1 09/08/25 - DECOR UPDATE / PLUMBING & CIVIL COORDINATION

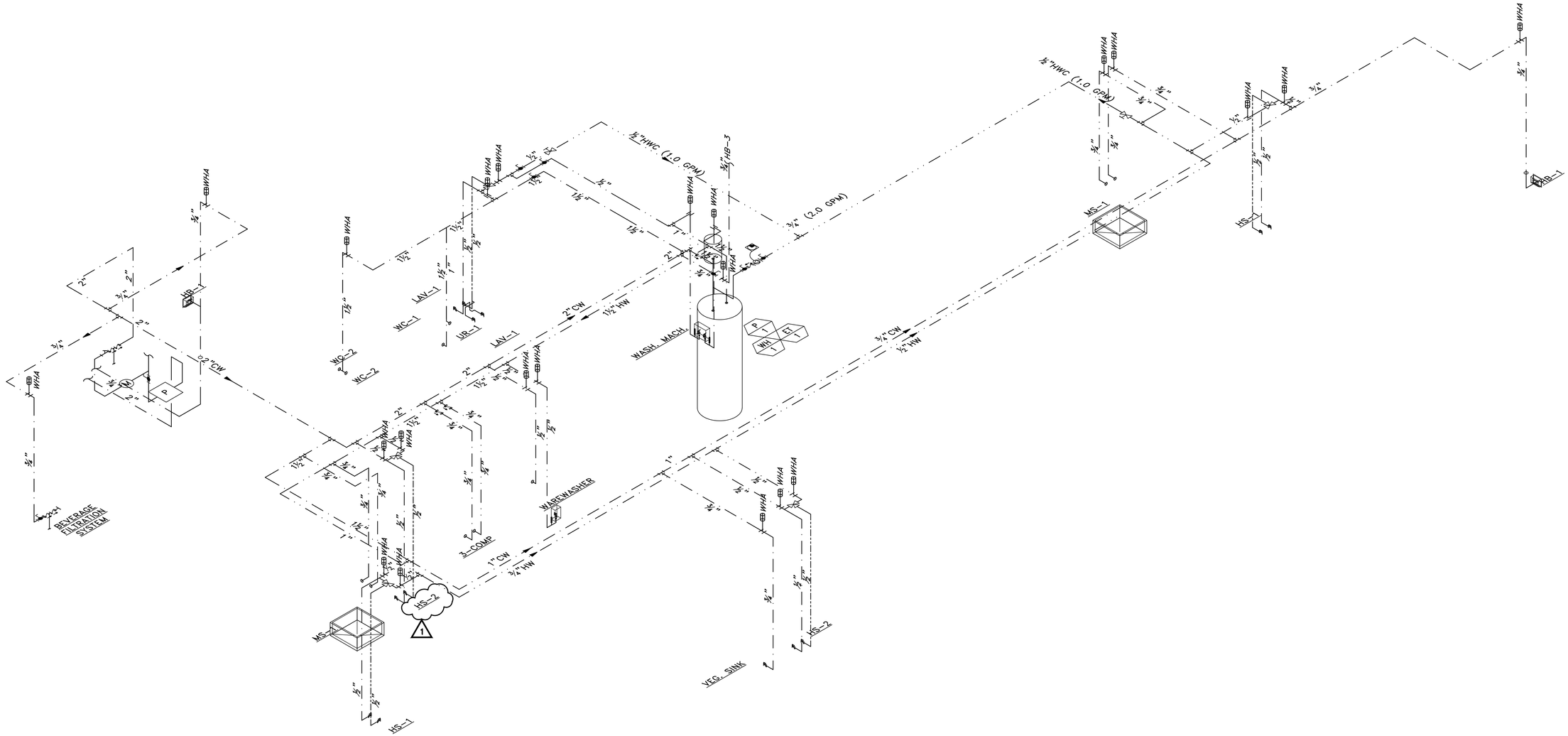
CLIENT
McDonald's USA, LLC

PROTOTYPE
BB20 4590 WW-HB
ISSUE DATE 06/26

ADDRESS
600 SCHUG AVENUE
PECULIAR, MO, 64078

SHEET TITLE
OVERHEAD ROUGH-IN

SHEET NUMBER:
P1.6



1 P2.0 **DOMESTIC WATER PIPING ISOMETRIC**
SCALE: NONE

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JOSEPH G. THOMAS
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REGISTERED PROFESSIONAL ENGINEER

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REVISIONS
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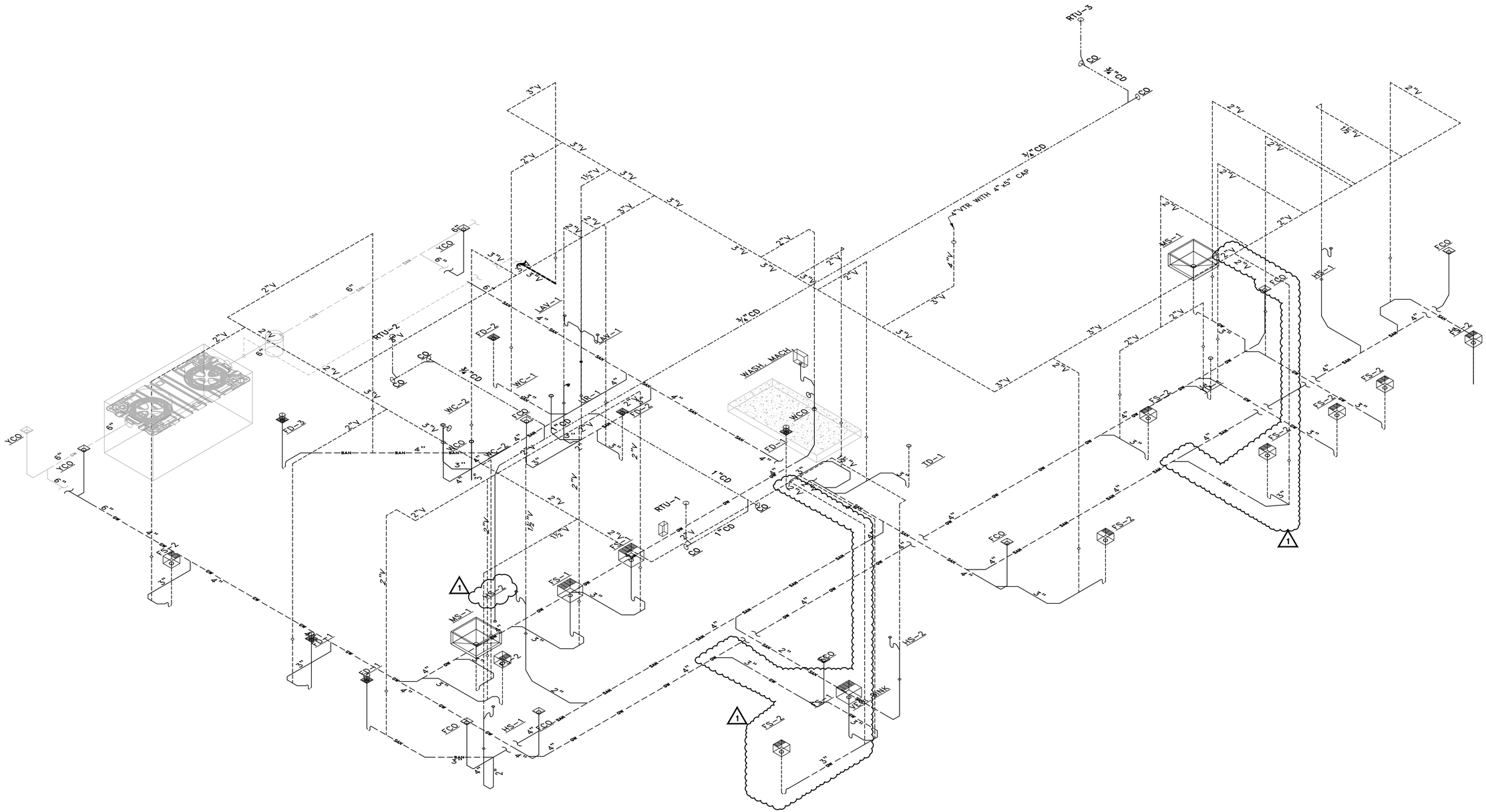
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ISSUE DATE 06/26

ADDRESS
600 SCHUG AVENUE
PECULIAR, MO, 64078

SHEET TITLE
DOMESTIC WATER ISOMETRIC

SHEET NUMBER:
P2.0



1 P2.1 **WASTE & VENT PIPING ISOMETRIC**
SCALE: NONE

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LICENSE EXPIRATION: DEC 31, 2027

STATE OF MISSOURI
JOSEPH G. THOMAS
NUMBER E-27428
REGISTERED PROFESSIONAL ENGINEER

DATE ISSUED: SEPT 8, 2026

STATE ID: 241342	PROJECT #: 26-125
NATIONAL #: 46237	DRAWN BY: SC
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REVISIONS
1 09/08/25 - DECOR UPDATE / PLUMBING & CIVIL COORDINATION
2
3
4
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6

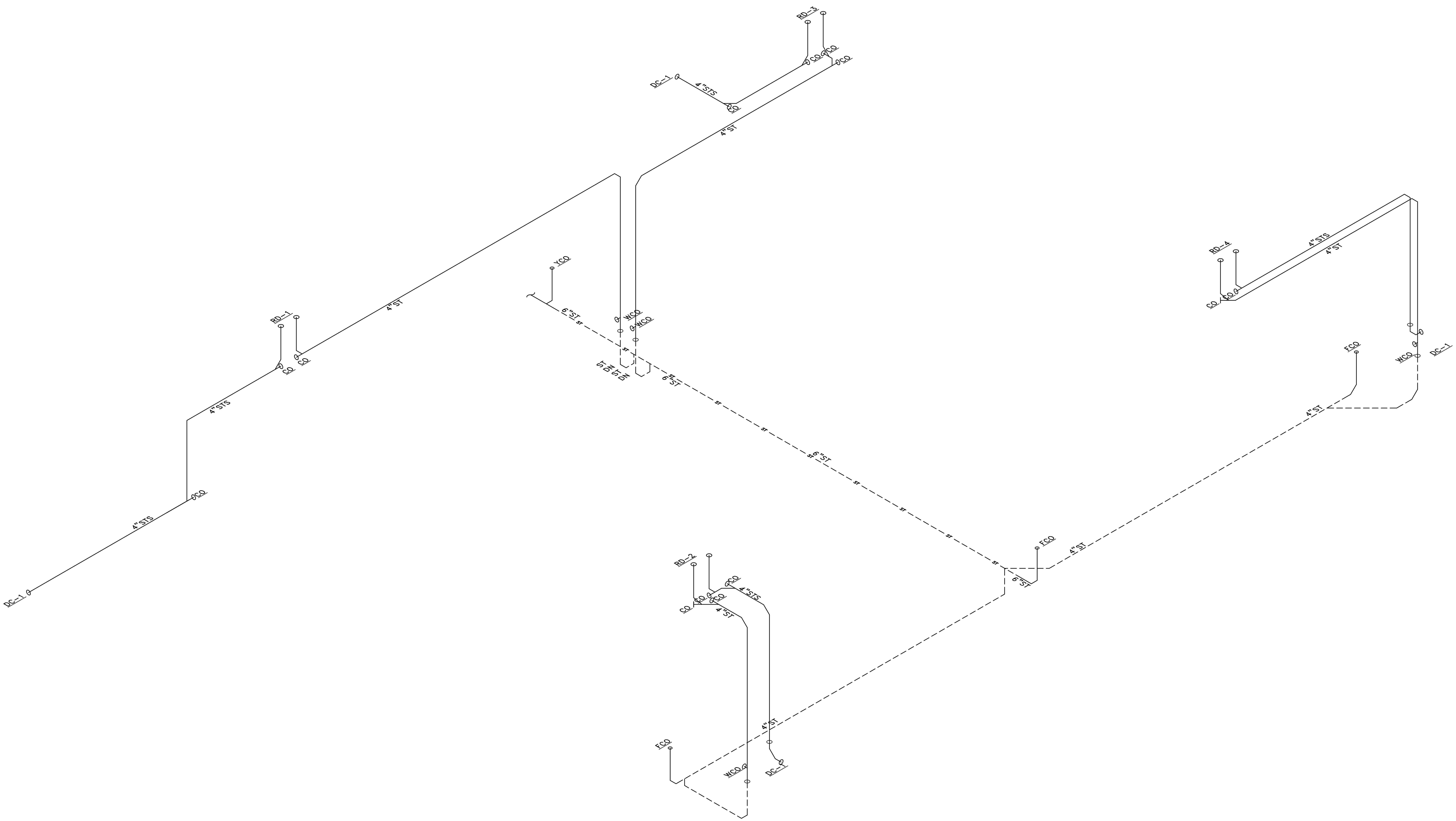
CLIENT
McDonald's USA, LLC

PROTOTYPE
BB20 4590 WW-HB
ISSUE DATE 06/26

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PECULIAR, MO, 64078

SHEET TITLE
WASTE & VENT ISOMETRIC

SHEET NUMBER:
P2.1



1
P2.2
STORM PIPING ISOMETRIC
SCALE: NONE

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LICENSE EXPIRATION: DEC 31, 2027

STATE OF MISSOURI
JOSEPH G. THOMAS
NUMBER E-27428
REGISTERED PROFESSIONAL ENGINEER

DATE ISSUED: SEPT 8, 2026

STATE ID: 241342	PROJECT #: 26-125
NATIONAL #: 46237	DRAWN BY: SC
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DATE:
07/15/26 - PERMIT / BID SET

REVISIONS
1 09/08/25 - DECOR UPDATE / PLUMBING & CIVIL COORDINATION

CLIENT
McDonald's USA, LLC

PROTOTYPE
BB20 4590 WW-HB
ISSUE DATE 06/26

ADDRESS
600 SCHUG AVENUE
PECULIAR, MO, 64078

SHEET TITLE
STORM ISOMETRIC

SHEET NUMBER:
P2.2

FIXTURE INFORMATION:

NAME	TYPE	FLOW RATE	OTHER	QTY.
3-COMP. SINK	3-COMPARTMENT SINK	GPM (1-MINUTE DRAIN TIME): 46.636 GPM (2-MINUTE DRAIN TIME): 21.818	DFU: 6 CAPACITY: 58.182 GAL.	1
FLOOR SINK/DRAIN	FLOOR SINK	GPM (1-MINUTE DRAIN TIME): 5 GPM (2-MINUTE DRAIN TIME): 2.5	DFU: 2 CAPACITY: 0 GAL.	11
MOP SINK - MS-1	MOP BASIN	GPM (1-MINUTE DRAIN TIME): 22.442 GPM (2-MINUTE DRAIN TIME): 11.221	DFU: 3 CAPACITY: 29.922 GAL.	2
MOP SINK - MS-1	MOP BASIN	GPM (1-MINUTE DRAIN TIME): 22.442 GPM (2-MINUTE DRAIN TIME): 11.221	DFU: 3 CAPACITY: 29.922 GAL.	2
VEGETABLE PREP SINK	PREP SINK ONE BOWL	GPM (1-MINUTE DRAIN TIME): 4.675 GPM (2-MINUTE DRAIN TIME): 2.338	DFU: 2 CAPACITY: 6.234 GAL.	1
WAREWASHER (ECOLAB QSR TSC)	DOOR TYPE	GPM (1-MINUTE DRAIN TIME): 60 GPM (2-MINUTE DRAIN TIME): 30	DFU: 2 CAPACITY: 60 GAL.	1
TOTALS:		GPM (1-MINUTE DRAIN TIME): 208.19 GPM (2-MINUTE DRAIN TIME): 104.1	DFU: 38 CAPACITY: 184.26 GAL.	

SIZING DETAILS:

PROJECT INFORMATION
CONSTRUCTIONS TYPE: NEW CONSTRUCTION
ADDITIONAL NOTES: MCDONALD'S 4584 BUILDING - PROTOTYPICAL

LOCATION: OUTDOORS
BURIED: YES
HIGH WATER AREA: NO

FLOW RATE CALCULATION:
FLOW RATE TO INTERCEPTOR = (LESSER OF FLOW RATE BY PIPE SIZE AND FLOW RATE BY FIXTURES)
SIZE OF PIPE CONNECTED TO THE GREASE INTERCEPTOR: 4 IN.
DRAINAGE PERIOD: 2 MINUTES
FLOW RATE BY PIPE SIZE: 75 GPM
FLOW RATE BY FIXTURES, 2-MINUTE DRAINAGE PERIOD: 104.097 GPM
FLOW RATE BY FIXTURES, 1-MINUTE DRAINAGE PERIOD: 208.195 GPM
FLOW RATE USED TO SELECT GREASE INTERCEPTOR: 75 GPM
FIXTURE DFU: 38

GREASE OUTPUT:
MENU TYPE: FAST FOOD - FULL PREP
FRYER IN KITCHEN: YES
FOOD WASTE DISPOSER: YES
NUMBER OF SEATS: 43 SEATS
GREASE PRODUCTION VALUE: 0.035 LBS. PER SERVING (6.02 LBS. PER DAY)

30-DAY GREASE PRODUCTION 180.6 LBS.
60-DAY GREASE PRODUCTION: 361.2 LBS.
90-DAY GREASE PRODUCTION: 541.8 LBS.

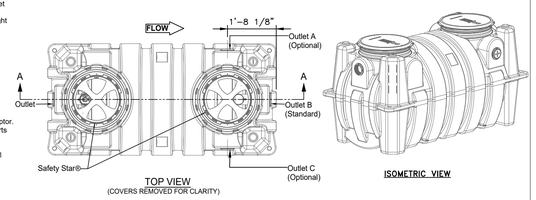
CALCULATION:
GREASE OUTPUT=(NUMBER OF SEATS)x4(AVERAGE TURNS PER SEAT PER 24 HOURS)x(GREASE PRODUCTION VALUE)x(DAYS BETWEEN PUMP-OUT).

DETAIL 1
GREASE INTERCEPTOR
SCALE: NONE
P3.0

SPECIFICATIONS
Notes:
1. 6" FPT inlet/outlet with 6" plain end adapters, single inlet and triple outlet.
2. Unit weight - w/ cast iron covers: 528 lbs. (For wet weight add 4,254 lbs.)
3. Maximum operating temperature: 150º F continuous
4. Capacities - Liquid: 510 gal.
Grease: 3,048 lbs. (417 gal.) @100 GPM
Solids: 128 gal.
5. Built-in flow control. For series installations, only install flow control on the first unit in the series if necessary.
6. For gravity drainage applications only.
7. Do not use for pressure applications.
8. Cover placement allows full access to tank for proper maintenance.
9. A Vent shall be installed downstream of grease interceptor.
10. Engineered inlet and outlet diffusers with inspection ports are removable to inspect / clean piping.
11. Integral air relief / Anti-siphon / Sampling access.
12. Adjustable cover adapters provide up to 4" of additional height.
13. Designed for below-grade, above-grade, indoor or outdoor installations.
14. Safety Star®, access restrictor built into each cover adapter, prevents accidental entry to tanks (450 lb rating).

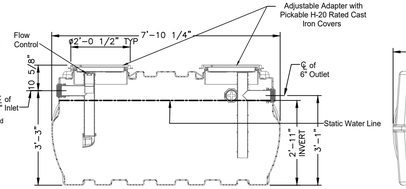
ENGINEER SPECIFICATION GUIDE
Schier Great Basin™ grease interceptor model # GB-500 shall be lifetime guaranteed and made in USA of seamless, rotationally-molded polyethylene with minimum 7/16" uniform wall thickness. Flow control cartridge shall be PVC. Interceptor shall be furnished for above or below-grade installation with adjustable cover adapter, Safety Star® access restrictor built into each cover adapter, and three outlet options. Interceptor shall be certified to ASME A112.14.3 (Type C) and CSA B481.1. Interceptor flow rate shall be 100 GPM. Interceptor grease capacity shall be 3,048 lbs. Cover shall provide water/gas-tight seal and have minimum 16,000 lbs. load capacity.

CERTIFIED PERFORMANCE
Great Basin™ hydromechanical grease interceptors are third party performance-tested and listed by IAPMO to ASME #A112.14.3 and CSA B481.1 grease interceptor standards and greatly exceed requirements for grease separation and storage. They are compliant to the Uniform Plumbing Code and the International Plumbing Code.

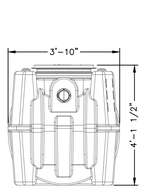


TOP VIEW
(COVERS REMOVED FOR CLARITY)

ISOMETRIC VIEW



SECTION A-A



END VIEW

SPECIFICATION SHEET

MODEL NUMBER: GB-500

PROPRIETARY AND CONFIDENTIAL
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PART NUMBER: 4075-001-01

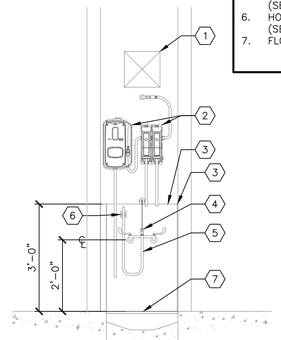
DESCRIPTION: GB-500 GREASE INTERCEPTOR 100 GPM, 6" INLET/OUTLET, H-20 RATED CAST IRON COVERS

DWG BY: C. BUSENITZ | DATE: 4/14/2022 | REV: - | ECO: -

UPC | UPC C

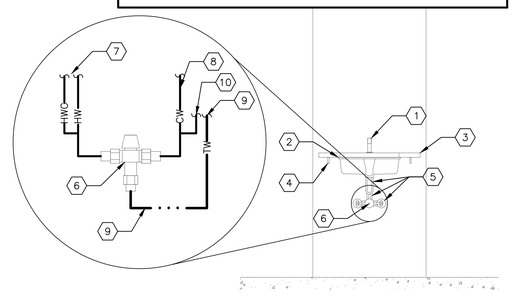
SCHIER
6455 Woodland Dr
Shawnee, KS 66218
Tel: 913-951-3300
Fax: 913-951-3399
schierproducts.com

KEYED NOTES:
1. ACCESS PANEL FOR THERMOSTATIC MIXING VALVE (SEE CHEMICAL SYSTEM INSTALLATION DETAIL)
2. ECOLAB CHEMICAL SYSTEM (SEE CHEMICAL SYSTEM INSTALLATION DETAIL)
3. 24"Wx36"H WALL GUARD (QTY. 2) FURNISHED WITH MOP SINK (SEE PLUMBING FIXTURE SCHEDULE)
4. MOP SINK FAUCET WITH INTEGRAL VACUUM BREAKER (SEE PLUMBING FIXTURE SCHEDULE)
5. HOSE FURNISHED WITH MOP SINK FAUCET (SEE PLUMBING FIXTURE SCHEDULE)
6. HOSE BRACKET FURNISHED WITH MOP FAUCET (SEE PLUMBING FIXTURE SCHEDULE)
7. FLOOR GRATE

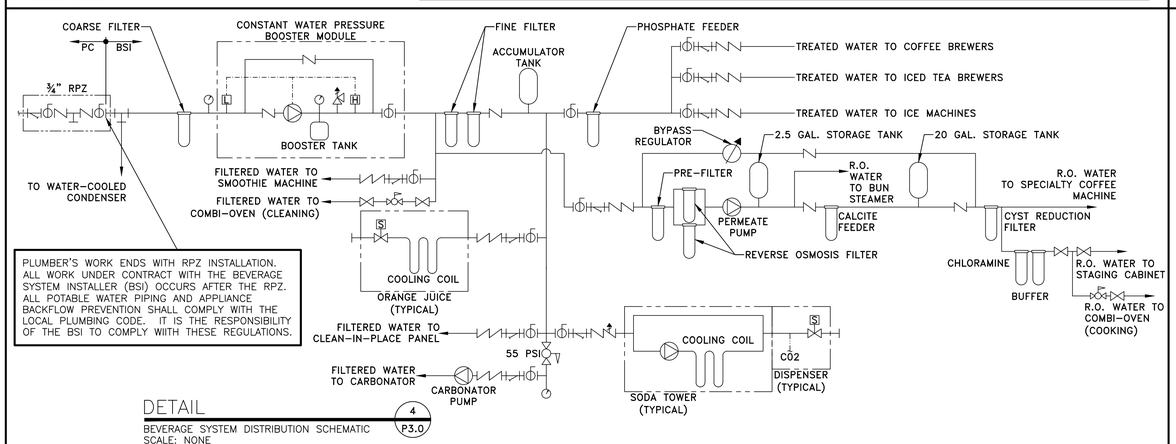


DETAIL 2
RECESSED MOP SINK
SCALE: ½"=1'-0"
P3.0

KEYED NOTES:
1. FAUCET (SEE PLUMBING FIXTURE SCHEDULE)
2. LAVATORY OR HAND SINK (SEE PLUMBING FIXTURE SCHEDULE)
3. CORIAN COUNTERTOP - TOILET ROOMS ONLY (FURNISHED BY G.C.)
4. LAVATORY CARRIER - TOILET ROOMS ONLY (SEE ARCHITECTURAL DRAWINGS)
5. OUTLINE OF ADA COMPLIANT WRAP (SEE PLUMBING FIXTURE SCHEDULE)
6. THERMOSTATIC MIXING VALVE (SEE VALVE SCHEDULE)
7. HOT WATER AND HWC DOWN WALL (WITH BALANCING VALVE AND CHECK VALVE INSTALLED).
8. COLD WATER DOWN TO MIXING VALVE
9. TEMPERATED WATER TO FIXTURES
10. COLD WATER TO FIXTURES AS APPLICABLE.

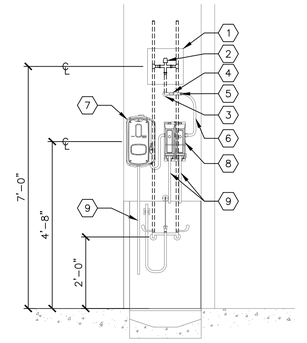


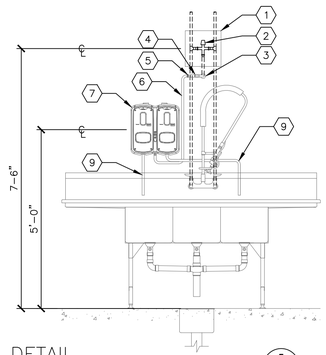
DETAIL 3
LAVATORY (PUBLIC)
SCALE: ½"=1'-0"
P3.0



PLUMBER'S WORK ENDS WITH RPZ INSTALLATION. ALL WORK UNDER CONTRACT WITH THE BEVERAGE SYSTEM INSTALLER (BSI) OCCURS AFTER THE RPZ. ALL POTABLE WATER PIPING AND APPLIANCE BACKFLOW PREVENTION SHALL COMPLY WITH THE LOCAL PLUMBING CODE. IT IS THE RESPONSIBILITY OF THE BSI TO COMPLY WITH THESE REGULATIONS.

DETAIL 4
BEVERAGE SYSTEM DISTRIBUTION SCHEMATIC
SCALE: NONE
P3.0



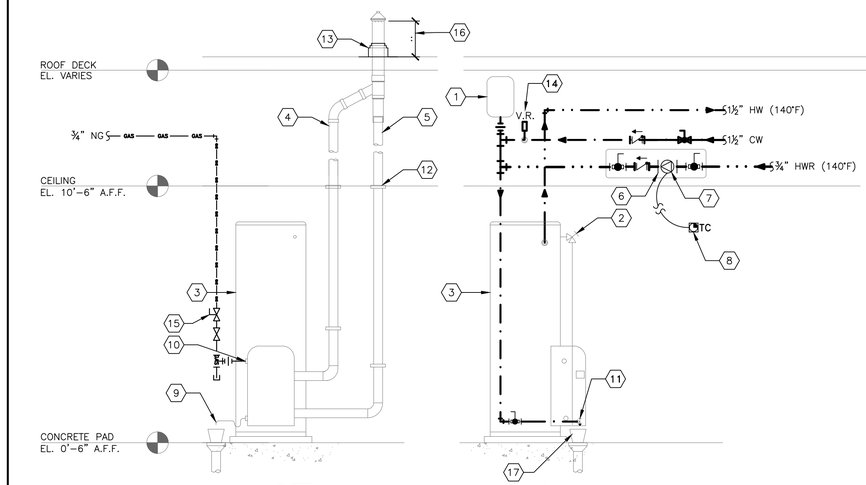


DETAIL 5
CHEMICAL SYSTEM INSTALLATION
SCALE: ½"=1'-0"
P3.0

KEYED NOTES:
1. 12"x12" ACCESS PANEL (COORDINATE INSTALLATION WITH G.C.)
2. THERMOSTATIC MIXING VALVE SET TO 110°F (SEE VALVE SCHEDULE)
3. PIPE THROUGH WALL WITH ESCUTCHEON PLATE
4. SHUT-OFF VALVE
5. ¾" MHT CONNECTION

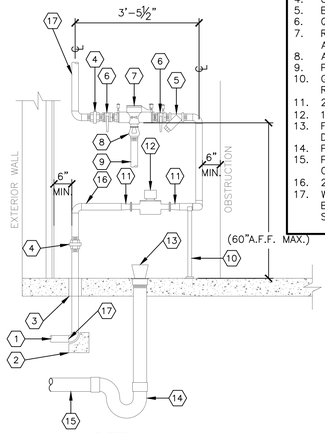
PLUMBER'S WORK ENDS AT MHT CONNECTION

6. HOSE TO CHEMICAL SYSTEM
7. ECOLAB SOLIDSENSE CHEMICAL DISPENSER
8. ECOLAB SMARTSHAPE CHEMICAL DISPENSER
9. CHEMICAL DISPENSING HOSE



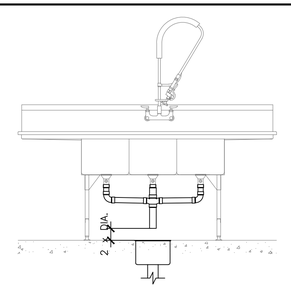
KEYED NOTES:
1. THERMAL EXPANSION TANK (SEE EXPANSION TANK SCHEDULE)
2. WATER HEATER PRESSURE/TEMPERATURE RELIEF VALVE (EXTEND TO FLOOR DRAIN)
3. WATER HEATER (SEE WATER HEATER SCHEDULE)
4. 3" PVC INTAKE. (SIZE PER MANUFACTURER'S INSTALLATION INSTRUCTIONS)
5. 3" ABS MIN. 84" REQ'D. (SIZE PER MANUFACTURER'S INSTALLATION INSTRUCTIONS).
6. RECIRULATION PUMP (SEE PUMP SCHEDULE)
7. INTEGRAL AQUASTAT FOR PUMP CONTROL
8. TIMECLOCK TO SHUT DOWN PUMP AND WATER HEATER DURING UNOCCUPIED HOURS
9. SEALED-COMBUSTION CONDENSATE DRAIN (EXTEND TO FLOOR DRAIN)
10. GAS CONNECTION
11. WATER HEATER DRAIN (EXTEND TO FLOOR DRAIN)
12. PIPE SUPPORT EVERY 5 FT. MINIMUM
13. PIPE BOOT BY PORTALS PLUS (OR EQUAL)
14. PROVIDE VACUUM RELIEF VALVE FOR BOTTOM-FED WATER HEATERS (ANSI Z21.22) WILKINS MODEL VR10.
15. GAS PRESSURE REGULATOR (AS APPLICABLE).
16. CONCENTRIC VENT KIT. MAINTAIN 12" MIN. CLEARANCE ABOVE HIGHEST ANTICIPATED SNOW LEVEL. MAXIMUM OF 24" ABOVE ROOF.
17. FLOOR DRAIN WITH FUNNEL OR FLOOR SINK. REFER TO P1.2 FOR PLAN AND P4.1 FOR SCHEDULE.

DETAIL 6
WATER HEATER PIPING
SCALE: NONE
P3.0

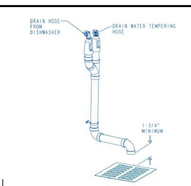


KEYED NOTES:
1. INCOMING UNDERGROUND WATER SERVICE SIZED PER DOMESTIC WATER CALCULATIONS. (MIN. 2")
2. BLOCKING AT CHANGES IN DIRECTION
3. MINIMUM ½" ANNULAR CLEARANCE
4. UNION
5. BRONZE STRAINER
6. QUARTER-TURN BALL VALVE
7. REDUCED PRESSURE ZONE (RPZ) ASSEMBLY
8. AIR GAP FOR RELIEF VALVE
9. PIPING FROM AIR GAP TO FLOOR DRAIN
10. GALVANIZED STEEL PIPE SUPPORTS AS REQUIRED
11. 2"x1½" BUSHING
12. 1½" WATER METER
13. FLOOR DRAIN-PITCH FLOOR TOWARDS DRAIN
14. P-TRAP
15. PIPE TO SEWER-PITCH AND VENT PER CODE
16. 2" PIPE FOR WATER SERVICE
17. WATER PIPING FROM 5 FT. FROM BUILDING TO CEILING PENETRATION SHALL BE COPPER.

DETAIL 7
INCOMING WATER SERVICE
SCALE: ½"=1'-0"
P3.0



DETAIL 8
INDIRECT DRAINAGE PIPING (TYP.)
SCALE: ½"=1'-0"
P3.0



DETAIL 9
WAREWASHER DRAIN AIR GAP KIT
SCALE: NTS
P3.0

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STATE OF MISSOURI
JOSEPH G. THOMAS
NUMBER E-27428
REGISTERED PROFESSIONAL ENGINEER

DATE ISSUED: SEP

STATE ID: 241342
PROJECT #: 26-125
NATIONAL #: 46237
DRAWN BY: SC
CHECKED BY: JT

DATE: 07/15/26 - PERMIT / BID SET

REVISIONS
1 09/08/25 - DECOR UPDATE / PLUMBIN CIVIL COORDINATION

CLIENT
McDonald's USA, LLC

PROTOTYPE
BB20 4590 WW-HB
ISSUE DATE 06/26

ADDRESS
600 SCHUG AVENUE
PECULIAR, MO, 64078

SHEET TITLE
DETAILS

SHEET NUMBER:
P3.0

GENERAL PLUMBING NOTES

GENERAL:

1. ALL WORK PERFORMED SHALL BE IN ACCORDANCE WITH ALL LOCAL CODES AND ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION.
2. ALL PLUMBING WORK SHALL BE PERFORMED BY A LICENSED PLUMBER.
3. ALL DIMENSIONS, CLEARANCES AND TOLERANCES SHALL BE VERIFIED PRIOR TO INSTALLATION. ALL ROUGH–IN LOCATIONS SHALL BE COORDINATED WITH THE MANUFACTURER'S SUBMITTAL INFORMATION.
4. ALL DIMENSIONAL INFORMATION IS AS FOLLOWS (UNLESS NOTED OTHERWISE):
   A. UNDERGROUND PIPE IS TO FOUNDATION
   B. OVERHEAD PIPE IS TO FINISHED WALL
   C. ELEVATIONS ARE TO FINISHED FLOOR
5. 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.
6. SEE COORDINATION SCHEDULE FOR ADDITIONAL SCOPE OF WORK.
7. ALL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH ITS LISTING AND/OR THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.
8. 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.
9. ALL PIPE SLEEVES SHALL BE PROPERLY SEALED AND INSULATED TO PREVENT HEAT LOSS AND SEEPAGE.
10. ALL PIPE INSULATION SHALL BE PROTECTED FROM DAMAGE FROM PIPE HANGERS. PROTECTION SHALL BE LIGHT GAUGE GALVANIZED STEEL OR EQUAL.
11. ALL PENETRATIONS OF FIRE–RATED WALLS SHALL BE FIRESTOPPED WITH AN APPROVED AND LISTED FIRESTOPPING SYSTEM.

SANITARY AND VENT SYSTEMS:

1. 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.
2. ALL SANITARY AND VENT PIPE SHALL BE PVC TYPE DWV, ABS OR CAST–IRON WHERE REQUIRED BY CODE.
3. 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"	⅛" PER FT.
8" OR LARGER	⅛" PER FT. (MIN)

4. 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).
5. 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.
6. CLEANOUTS SHALL BE INSTALLED ON PIPES PRIOR TO ANY SLAB PENETRATION.
7. WHERE PIPING IS LOCATED WITHIN WALL CAVITIES, ACCESS TO THE CLEANOUTS SHALL BE PROVIDED.
8. 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.
9. 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.

10. 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
1¼"	¼" PER FT.	2'–6"
1½"	¼" PER FT.	3'–6"
2"	¼" PER FT.	5'–0"
3"	⅛" PER FT.	6'–0"
4" & LARGER	⅛" PER FT.	10'–0"

11. 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.
12. 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.
13. ALL SIDE WALL VENT TERMINATIONS SHALL BE PROTECTED TO PREVENT BIRDS OR RODENTS FROM ENTERING OR BLOCKING THE VENT OPENING.
14. ALL FLOOR DRAINS THAT DO NOT SERVE EQUIPMENT SHALL BE PROTECTED AGAINST DRYING OUT EITHER THROUGH THE INSTALLATION OF A TRAP PRIMER, DEEP SEAL TRAP OR PROSET TRAP GUARD. ALL TRAPS SHALL BE FILLED WITH AN INITIAL LAYER OF COOKING OIL.
15. 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:

1. SEE SITE PLAN FOR THE SIZE AND LOCATION OF THE GREASE INTERCEPTOR.
2. THE GREASE INTERCEPTOR SHALL BE INSTALLED IN A LOCATION THAT IS ACCESSIBLE FOR PUMPING.
3. 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.
4. GREASE INTERCEPTORS SHALL BE GRAVITY OR HYDROMECHANICAL TYPE, SIZED FOR THE APPLICATION LISTED.
5. THE GREASE INTERCEPTOR SHALL BE VENTED.
6. 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.
7. PIPING INLET AND OUTLET SIDES SHALL BE CLEARLY LABELED ON THE TOP OF THE GREASE INTERCEPTOR TO INSURE PROPER INSTALLATION.

DOMESTIC SUPPLY SYSTEMS:

1. 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.
2. 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.
3. EXTERIOR WATER SUPPLY PIPING SHALL BE INSTALLED NOT LESS THAN 6 INCHES BELOW FROST LINE AND NOT LESS THAN 12 INCHES BELOW GRADE.
4. INCOMING DOMESTIC WATER SIZE TO BE 2" INNER DIAMETER. FOR PROJECTS WISHING TO DOWNSIZE, A HYDRANT FLOW TEST IS REQUIRED PRIOR TO CONSTRUCTION DOCUMENTS. ENGINEER OF RECORD TO SUBMIT PRESSURE DROP CALCULATIONS AND HYDRANT FLOW TEST TO USRD FOR REVIEW AND APPROVAL OF SMALLER INCOMING DOMESTIC WATER LINE.
5. IF PEX PIPING IS USED, ALL MAINS SHALL BE UPSIZED BY 0.5" DIAMETER.
6. 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.
7. 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.
8. PROVIDE A MINIMUM ½" ANNULAR CLEARANCE AROUND ALL PIPE SLAB PENETRATIONS.
9. A REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTER (RPZ) SHALL BE INSTALLED AT THE INCOMING SERVICE WHERE REQUIRED BY CODE. (MIN. 60" A.F.F.)
10. AN EXPANSION TANK SHALL BE INSTALLED ON THE COLD WATER LINE INLET TO THE WATER HEATER. SEE EXPANSION TANK SCHEDULE.
11. 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.
12. CPVC PIPE SHALL BE FLOWGUARD GOLD OR FLOWGUARD BENDABLE AS MANUFACTURED BY LUBRIZOL.
13. CPVC PIPE SHALL BE CONNECTED WITH FLOWGUARD GOLD YELLOW LOW–VOC SOLVENT CEMENT AS MANUFACTURED BY IPS WELD–ON OR OATEY.
14. ALL CPVC PIPE SHALL BE INSULATED TO PREVENT EXPOSURE TO GREASE.
15. ALL SUSPENDED PIPE SHALL BE SUPPORTED AS FOLLOWS:

MATERIAL	MAX. HORIZ. SPACING	MAX. VERT. SPACING
COPPER PIPE	12 FT.	10 FT.
COPPER TUBING ≤1¼"	6 FT.	10 FT.
COPPER TUBING >1½"	10 FT.	10 FT.
CPVC ≤1"	3 FT.	10 FT.
CPVC ≥1¼"	4 FT.	10 FT.
PEX ≤1"	3 FT.	10 FT.
PEX ≥1¼"	4 FT.	10 FT.

16. 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).
17. 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.
18. ALL WATER SUPPLY LINES SHALL BE PROVIDED WITH A QUARTER–TURN SHUT–OFF VALVE BEFORE FINAL CONNECTION TO EQUIPMENT.
19. QUARTER–TURN SHUT–OFF VALVES SHALL BE INSTALLED UPSTREAM OF ANY INLINE BACKFLOW PREVENTION DEVICE.
20. ALL VALVES AND BACKFLOW PREVENTION DEVICES SHALL BE INSTALLED WITH FITTINGS THAT FACILITATE REMOVAL IN CASE OF FAILURE.
21. ALL OVERHEAD WATER LINES SHALL BE INSULATED PER SCHEDULE THIS SHEET WITH EXTERNAL JACKETED INSULATION AND A MINIMUM INSTALLED R–VALUE OF 3.7.
22. 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:

1. ALL ROOF DRAINS SHALL BE SIZED IN ACCORDANCE WITH LOCAL CODES AND SHALL CONFORM TO ASME A112.21.2M OR A112.3.1.
2. ALL STORM DRAINAGE PIPING SHALL BE ABS, PVC TYPE DWV OR CAST–IRON WHERE REQUIRED BY CODE.
3. ALL SUSPENDED STORM DRAINAGE PIPE SUPPORT REQUIREMENTS SHALL BE THE SAME AS THE SANITARY AND VENT REQUIREMENTS.
4. ALL HORIZONTAL STORM DRAINAGE PIPE PITCH REQUIREMENTS SHALL BE THE SAME AS THE SANITARY AND VENT REQUIREMENTS.
5. 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.
6. CLEANOUTS SHALL BE INSTALLED IN ALL HORIZONTAL DRAINAGE PIPE AND SHALL BE LOCATED NOT MORE THAN 100 FT. APART.
7. 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.
8. CLEANOUTS SHALL BE INSTALLED ON PIPES PRIOR TO ANY SLAB PENETRATION.
9. WHERE PIPING IS LOCATED WITHIN WALL CAVITIES, ACCESS TO THE CLEANOUTS SHALL BE PROVIDED.
10. 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). PER TABLE 6.8.3–1 & 6.8.3–2 (ASHRAE STANDARD 90.1–2022)

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
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

MECHANICAL & PLUMBING COMMISIONING

1. MECHANICAL & PLUMBING ENGINEER OF RECORD: REVIEW IECC CHAPTER 4, SECTION C408.2 FOR MECHANICAL SYSTEMS AND SERVICE WATER–HEATING SYSTEM COMMISSIONING AND COMPLETION REQUIREMENTS. PROJECTS EXCEEDING THE HEATING AND COOLING CAPACITY THRESHOLDS IN SECTION C408.2 SHALL PROVIDE DOCUMENTATION OF A COMPLETED COMMISSIONING PLAN PREPARED BY A REGISTERED DESIGN PROFESSIONAL OR APPROVED AGENCY. ALL REQUIRED COMMISSIONING DOCUMENTATION SHALL BE PROVIDED TO THE OWNER AND MADE AVAILABLE TO THE AHJ UPON REQUEST.

LEGEND

	COLD WATER PIPING
	TEMPERED WATER PIPING (110°F)
	HOT WATER PIPING (140°F)
	RECIRCULATED HOT WATER PIPING
	OVERHEAD LINES (BY P.C.)
SAN	UNDERGROUND SANITARY PIPING
GW	UNDERGROUND GREASE WASTE PIPING
	VENT PIPING
STS	ABOVE GROUND STORM PIPING
STS	UNDERGROUND STORM PIPING
	HOSE BIBB
	CHECK VALVE
	BALL VALVE
	THERMOSTATIC MIXING VALVE
	FLOOR DRAIN
	CLEAN–OUT (FLOOR OR YARD)
	FLOOR SINK
	PRESSURE GUAGE
L	LOW PRESSURE SWITCH
H	HIGH PRESSURE SWITCH
S	SOLENOID VALVE
	THREE–WAY VALVE
	PRESSURE REGULATOR
	DUAL CHECK VALVE OR RPZ
	DUAL CHECK VALVE WITH ATMOSPHERIC VENT
	STRAINER
	RELIEF VENT
	WATER–HAMMER ARRESTER

ABBREVIATIONS

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

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LICENSE EXPIRATION: DEC 31, 2027

STATE OF MISSOURI
JOSEPH G. THOMAS
NUMBER E-27428
REGISTERED PROFESSIONAL ENGINEER

DATE ISSUED: SEPT 8, 2026

STATE ID: 241342
PROJECT #: 26-125
NATIONAL #: 46237
DRAWN BY: SC
CHECKED BY: JT

DATE:
07/15/26 - PERMIT / BID SET

REVISIONS:
1 09/08/25 - DECOR UPDATE / PLUMBING & CIVIL COORDINATION
2
3
4
5
6

CLIENT
McDonald's USA, LLC

PROTOTYPE
BB20 4590 WW-HB
ISSUE DATE 06/26

ADDRESS
600 SCHUG AVENUE
PECULIAR, MO, 64078

SHEET TITLE
GENERAL NOTES

SHEET NUMBER:
P4.0

COORDINATION SCHEDULE

GENERAL REQUIREMENTS	FURNISH	INSTALL	FINAL CONNECTION	NOTES
MECHANICAL PERMIT	MC			1–3
HOT WORK (WELDING) PERMIT (IF APPLICABLE)	MC			1–3
REFRIGERATION PERMIT (IF APPLICABLE)	MC			1–3
PLUMBING PERMIT	PC			1–3
ELECTRICAL PERMIT	EC			1–3
FIRE SPRINKLER PERMIT (IF APPLICABLE)	FPC			1–3
FIRE ALARM PERMIT (IF APPLICABLE)	FAC			1–3
CONTRACTOR COORDINATION REQUIREMENTS				
HEATING & AIR–CONDITIONING				
ROOFTOP UNITS, INTAKE AND RELIEF	MCD CP	MC		1–5, 17, 22
ROOF CURBS	MCD CP	MC		1–3, 20, 22
GAS PIPING AND GAS PIPE KIT	PC	PC	PC	1–3, 14, 22–23
CONTROLS WIRING	MC	EC	EC	1–3, 19, 22, 24
POWER WIRING	EC	EC	EC	1–3, 19, 22, 24
CONDENSATE TRAP	MC	PC		1–3, 22–23
CONDENSATE PIPING (IF APPLICABLE)	PC	PC		1–3, 22–23
DUCT–MOUNTED SMOKE DETECTOR	MC	MC	EC	1–3, 22, 24
GENERAL EXHAUST SYSTEMS				
EXHAUST FANS	MCD CP	MC		1–3, 17, 22
ROOF CURBS	MCD CP	MC		1–3, 22
CONTROLS (WHERE APPLICABLE)	MC	EC	EC	1–3, 22, 24
POWER WIRING	EC	EC	EC	1–3, 22, 24
TEMPERATURE CONTROLS				
BUILDING AUTOMATION SYSTEM	MCD CP	MC	EC	1–3, 22, 24
REMOTE SENSORS (RH AND/OR TEMPERATURE)	MC	MC	EC	1–3, 22, 24
CONTROLS WIRING (WHERE APPLICABLE)	MC	EC	EC	1–3, 22, 24
POWER WIRING	EC	EC	EC	1–3, 22, 24
DUCTWORK AND ACCESSORIES				
GALVANIZED SHEET METAL DUCTWORK	MC	MC		1–3, 22
EXTERNAL INSULATION	MC	MC		1–3, 22
INTERNAL INSULATION (IF APPLICABLE)	MC	MC		1–3, 22
WEATHERPROOFING (IF APPLICABLE)	MC	MC		1–3, 22
SPIN–IN COLLARS	MC	MC		1–3, 22
FLEXIBLE DUCTWORK	MC	MC		1–3, 22
VOLUME/BALANCING DAMPERS	MC	MC		1–3, 22
FIRE DAMPERS (IF APPLICABLE)	MC	MC		1–3, 22
FIRESTOPPING (IF APPLICABLE)	MC	MC		1–3, 22
AIR DEVICES AND ACCESSORIES	MC	MC	MC	1–3, 7, 22, 28
PLUMBING SYSTEMS				
WATER HEATERS	MCD CP	PC	PC	1–3, 11–12, 23
HOT AND COLD WATER PIPE	PC	PC	PC	1–3, 23
VENTS AND INTAKES	PC	PC	PC	1–3, 23
THERMOSTATIC MIXING VALVE	PC	PC	PC	1–3, 23
POWER AND CONTROL WIRING	EC	EC	EC	1–3, 23–24
KITCHEN EXHAUST SYSTEMS				
McDONALD'S BACKSHELF EXHAUST HOODS	KES	KEI		1–3, 6, 22, 27
CANOPY EXHAUST HOODS (IF APPLICABLE)	KES	KEI		1–3, 6, 22, 27
BLACK IRON DUCTWORK	KES	KEI		1–3, 6, 22
STAINLESS STEEL DUCTWORK (IF APPLICABLE)	KES	KEI		1–3, 6, 22
ALUMINUM DUCTWORK (IF APPLICABLE)	KES	KEI		1–3, 6, 22
UL LISTED DUCT WRAP	MC	MC		1–3, 6, 22
FIRE–RATED DUCT ENCLOSURE (IF APPLICABLE)	GC	GC		1–3, 6, 20, 22
EXHAUST FANS	MCD CP	MC		1–3, 6, 17, 22
ROOF CURBS	MCD CP	MC		1–3, 6, 20, 22
CURB EXTENSIONS	MC	MC		1–3, 6, 22
CONTROLS (WHERE APPLICABLE)	EC	EC	EC	1–3, 6, 22, 24
POWER WIRING	EC	EC	EC	1–3, 6, 22, 24
FIRE SUPPRESSION SYSTEM	KES	KES	KES	1–3, 16, 22, 27
KITCHEN EQUIPMENT				
COOLER/FREEZER	KES	GC		1–3, 27
EVAPORATOR COILS	KES	MC		1–3, 27
CONDENSATE PIPING	PC	PC	PC	1–3, 23, 27
REMOTE CONDENSING UNIT (MAC)	KES	MC		1–3, 22, 27
ROOF CURBS	MC	MC		1–3, 22
REFRIGERANT PIPING	KES	MC	MC	1–3, 22, 27
POWER WIRING	EC	EC	EC	1–3, 22, 24, 27
CONTROL WIRING	EC	EC	EC	1–3, 24, 27
PIPE PORTALS	MC	MC		1–3, 22
ICE MACHINES	KES	KEI		1–3, 27
WATER SUPPLY PIPING	KES	KEI	BSI	1–3, 27
REMOTE CONDENSING UNITS	KES	MC		1–3, 22, 27
ROOF CURBS	MC	MC		1–3, 22, 27
REFRIGERANT PIPING	KES	MC	MC	1–3, 22, 27
POWER WIRING	EC	EC	EC	1–3, 22, 24, 27
CONTROL WIRING	KES	EC	EC	1–3, 24, 27
PIPE PORTALS	MC	MC		1–3, 22
GRILLS	KES	KES		1–3, 27
GAS PIPING (IF APPLICABLE)	PC	PC	PC	1–3, 23, 27
POWER WIRING	EC	EC	EC	1–3, 24, 27
CONTROL CABLE (6' CLAMSHELL ONLY)	MC	EC	EC	1–3, 23, 24, 27
FRYERS	KES	KES		1–3, 27
GAS PIPING (IF APPLICABLE)	PC	PC	PC	1–3, 23, 27
POWER WIRING	EC	EC	EC	1–3, 24, 27
3–COMPARTMENT SINK	KES	KES		1–3, 12, 27
FAUCETS AND PRE–RINSE SPRAYER	KES	KES		1–3, 27
WATER SUPPLY PIPING	PC	PC	PC	1–3, 23, 27
SANITARY DRAIN PIPING	PC	PC	PC	1–3, 23, 27
HAND SINKS	MCD CP	PC		1–3, 23, 27
FAUCET	MCD CP	PC		1–3, 23, 27
WATER SUPPLY PIPING	PC	PC	PC	1–3, 23, 27
SANITARY DRAIN PIPING	PC	PC	PC	1–3, 23, 27
VEGETABLE SINK	KES	KES		1–3, 23, 27
FAUCET	KES	KES		1–3, 23, 27
WATER SUPPLY PIPING	PC	PC	PC	1–3, 23, 27
SANITARY DRAIN PIPING	PC	PC	PC	1–3, 23, 27
WASHING MACHINE	KES	KES		1–3, 23, 27
WATER SUPPLY PIPING	PC	PC	PC	1–3, 23, 27
SANITARY DRAIN PIPING	PC	PC	PC	1–3, 23, 27
WARE WASHER	KES	KES		1–3, 23, 27
WATER SUPPLY PIPING	PC	PC	PC	1–3, 23, 27
SANITARY DRAIN PIPING	PC	PC	PC	1–3, 23, 27
MISCELLANEOUS ITEMS				
FIRE SPINKLER SYSTEMS	FPC	FPC	FPC	1–3, 15, 25
HVAC EQUIPMENT START–UP	MC			1–3, 22
TEST, ADJUST AND BALANCE HVAC SYSTEMS	TAB			1–3, 22
DOOR GRILLES (IF APPLICABLE)	MC	GC		1–3, 20, 22
ROOF/WALL OPENINGS	GC			1–3, 20–24
APPLIANCE BACKFLOW PREVENTION	KES/BSI	PC	PC	1–3, 23, 27
CO2 DETECTION SYSTEM	KES/BSI	EC/BSI	EC/BSI	1–3, 22, 27, 30

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.
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.
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.
20. WALK–IN COOLER AND WALK–IN FREEZER REFRIGERATION SYSTEMS SHALL MEET THE PERFORMANCE REQUIREMENTS OUTLINED IN THE LATEST EDITION OF IECC. MINIMUM ANNUAL WALK–IN ENERGY FACTOR (AWEF) PROVIDED BY EQUIPMENT MANUFACTURER IS DETERMINED IN ACCORDANCE WITH AHRI 1250.
21. SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
22. SEE STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
23. SEE MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.
24. SEE PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.
25. SEE ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
26. SEE FIRE PROTECTION DRAWINGS FOR ADDITIONAL INFORMATION.
27. SEE FIRE ALARM DRAWINGS FOR ADDITIONAL INFORMATION.
28. SEE KITCHEN DRAWINGS FOR ADDITIONAL INFORMATION.
29. SEE DECOR DRAWINGS FOR ADDITIONAL INFORMATION.
30. CLARK COUNTY NEVADA– INSTALLATION REQUIRED TO BE BY A LICENSED FIRE ALARM CONTRACTOR PER LOCAL FIRE CODE.

BOOSTER PUMP SCHEDULE

US PUMPS PACKAGED BOOSTER SYSTEM

1– SIMPLEX "iBOOST" iBV1–X221G–A12 PRE–PACKAGED PUMPING SYSTEM WITH STAINLESS STEEL VERTICAL MULTISTAGE PUMP, VARIABLE FREQUENCY DRIVE PRESSURE CONTROL INCLUDING (1) VERTICAL MULTISTAGE PUMP RATE FOR 70 GPM @ 20 PSI (46') BOOST WITH 3 HP, 230/60/1 MOTORS, NEMA 1 VARIABLE FREQUENCY DRIVE, 2" SUCTION AND DISCHARGE PORTS WITH DISCHARGE CHECK VALVES, BALL VALVES, 2" FLANGED SYSTEM CONNECTION ALL SKID MOUNTED TO A STRUCTURAL SUPPORT FRAME AS WELL AS 2" TCH NSF–61 FLEX CONNECTORS, STAINLESS STEEL, BRAIDED, FLANGED BY GROOVE. SYSTEM IS PROVIDED WITH AN ASME HYDRO–PNEUMATIC TANK, 21 GALLON TANK, WITH FDA APPROVED BLADDER. FLEX CONNECTORS AND TANK ARE SHIPPED LOOSE AND REQUIRE INSTALLATION IN THE FIELD. CALL MECHANICAL EQUIPMENT AT 800–355–7061.

230/60/1 POWER:
FULL LOAD AMPS (FLA) DATA: 9

EXPANSION TANK SCHEDULE

TAG	MANUFACTURER	MODEL	TOTAL VOL.	CONNECTION	ACCESSORIES
ET–1	AMTROL	ST–12	4.4 GAL.	¾"	–

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

BACKFLOW PREVENTER SCHEDULE

TYPE	MFR.	MODEL	ASSE LISTING	SERVES	LOCATION
AG	FURN. WITH CHEM. SYS.		1055B	CHEMICAL SYSTEM	DIN. RM.–MOP SINK
AG	FURN. WITH CHEM. SYS.		1055B	CHEMICAL SYSTEM	KITCHEN–MOP SINK
AVB	FURN. WITH CHEM. SYS.		1001	CHEMICAL SYSTEM	SUPP. RM.–3–COMP
AVB	FURN. WITH FAUCET		–	MOP SINK FAUCET	SEE DRAWINGS
VB	FURN. WITH HB		1011	WALL HYDRANT	SEE DRAWINGS
DCV	FURN. WITH HB		1052	YARD HYDRANT	TRASH CORRAL
DCV	FURN. WITH HB		1052	ROOF HYDRANT	ROOF
DCV	WATTS	SD–3	1022	SODA TOWERS AND SPEC. COFFEE	
RPZ	WILKINS	375XL–SXL–AG	1013	INCOMING WATER	SUPPORT ROOM
RPZ	WILKINS	375XL–AG	1013	FILTRATION SYSTEM	SUPPORT ROOM

PUMP SCHEDULE

TAG	MANUFACTURER	MODEL	HP	V	Ø	Hz	ACCESSORIES
P–1	GRUNDFOS	ALPHA 15–29 SU/T	1/35	115	1	60	1–3

ACCESSORIES:
1. TIMECLOCK
2. AQUASTAT INTEGRAL TO PUMP
3. CHECK VALVE

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

WATER HEATER SCHEDULE

TAG	MANUFACTURER	MODEL	SIZE GAL.	HEATING TYPE	HEATING MBH	RECOV. 100°F ΔT GPH	ELECTRICAL VOLTS	Ø	Hz	F.L.A.
WH–1	BRADFORD–WHITE	EF–100T–199E–3N	100	GAS	199	239	120	1	60	<20

ACCESSORIES:
1. CONCENTRIC VENT KIT.

NOTES:
1. MINIMUM THERMAL EFFICIENCY 97%

VALVE SCHEDULE

MANUFACTURER	MODEL	TEMP. SETTING	LISTING	SERVES
WATTS	LFMMV	110°F	ASSE 1017,1069,1070	CHEMICAL SYSTEM MIXING
WATTS	LFMMV	104°F	ASSE 1017,1069,1070	LAVS & HAND SINKS MIXING
ZURN	ZW3870XLT	104°F		
WATTS	LFUSG–B	110°F	ASSE 1016, 1070	VEGETABLE PREP. SINK MIXING
B & G	CB–1/2	–	–	RECIRC. SYSTEM BALANCING VALVE
NIBCO	585–70–HC	–	–	CHEMICAL SYSTEM SHUT–OFF
NIBCO	S–FP–600A–LF	–	–	RESTROOM SHUT–OFF
NIBCO	S–FP–600A–LF	–	–	COMBI OVEN WATER SHUT OFF
WATTS	LFFBV–PEX	–	–	COMBI OVEN RO WATER SHUT OFF

INTERCEPTOR SCHEDULE

TAG	DESCRIPTION	MANUFACTURER	MODEL	ACCESSORIES	NOTES
GI–1	EXTERIOR GREASE INTERCEPTOR	SCHIER PRODUCTS	GB–500	6" INLET, 6" OUTLET	1–3
		ZURN – GREEN TURTLE	PROCEPTOR MODEL GMC1300–UPC	6" INLET, 6" OUTLET	1–2, 4

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

PLUMBING FIXTURE SCHEDULE

TAG	DESCRIPTION	MANUFACTURER	MODEL	WATER USE	ACCESSORIES/COMMENTS	
F–1	FAUCET FOR LAV–1	SLOAN	SF–2150	0.5 GPM (0.08 GAL./10 SEC CYCLE)	FAUCET OPERATION: SENSOR	
		ZURN	ZG6950XL–F–10S			
		CHICAGO FAUCETS	EO–R11A–21ABCP			
F–2	FAUCET FOR MS–1	ZURN	Z843M4		FAUCET OPERATION: MANUAL SEE DETAIL 2 ON DRAWING P3.0	5' VINYL HOSE WALL HOOK
		CHICAGO FAUCETS	897–RCF			
FCO	6x6 FLOOR CLEAN OUT	ZURN	Z1400–SZ		SEE DRAWINGS FOR PIPE SIZES SEE NOTE 8	
		JAY R. SMITH	4040			
FD–1	6x6 FLOOR DRAIN WITH FUNNEL	ZURN	Z415–SZ1		PIPE SIZE: 3" STRAINER SIZE: 6" NICKEL BRONZE	FUNNEL: ZURN Z329 SEE NOTE 8
		JAY R. SMITH	3510–F25			
FD–2	6x6 FLOOR DRAIN	ZURN	Z415–SZ1		PIPE SIZE: 3" STRAINER SIZE: 6" NICKEL BRONZE	FUNNEL: NONE SEE NOTE 8
		JAY R. SMITH	2005			
FD–3	6x6 FLOOR DRAIN WITH FUNNEL	ZURN	Z415–SZ1		PIPE SIZE: 4" STRAINER SIZE: 6" NICKEL BRONZE	FUNNEL: ZURN Z329 SEE NOTE 8
		JAY R. SMITH	3510–F25			
FD–4	6x6 FLOOR DRAIN	ZURN	Z415–SZ1		PIPE SIZE: 4" STRAINER SIZE: 6" NICKEL BRONZE	FUNNEL: NONE SEE NOTE 8
		JAY R. SMITH	2005			
FS–1	12x12 FLOOR SINK WITH HALF–GRATE	ZURN	ZN1901		PIPE SIZE: 3" DOME STRAINER: ALUMINUM	GRATE: HALF – NICKEL–BRONZE SEE NOTE 8
		JAY R. SMITH	3435			
FS–2	8x8 FLOOR SINK WITH HALF–GRATE	ZURN	ZN1910		PIPE SIZE: 3" DOME STRAINER: ALUMINUM	GRATE: HALF – NICKEL–BRONZE SEE NOTE 8
		JAY R. SMITH	3415			
FS–3	8x8 FLOOR SINK	ZURN	ZN1910		PIPE SIZE: 3" DOME STRAINER: ALUMINUM	GRATE: FULL – NICKEL–BRONZE SEE NOTE 8
		JAY R. SMITH	3415			
HB–1	WALL HYDRANT	WOODFORD	B65		WALL CLAMP: ADJUSTABLE WALL THICKNESS: M/S = 9½" W/W = 13¾"	SEE NOTE 3
		ZURN	Z1320–EZ			
		JAY R. SMITH	5519			
HB–2	YARD HYDRANT	WOODFORD	S4H		SEE NOTES 4 & 9	
HB–3	ROOF HYDRANT	WOODFORD	RHY2–MS		(NO DRAIN REQUIRED)	
HS–1	STAINLESS STEEL HAND SINK	ADVANCE TABCO	7–PS–61	1 GPM	ZURN 6922–XL, CHICAGO FAUCET 116.309402ABT	SEE NOTES 6 & 10
HS–2	STAINLESS STEEL HAND SINK – ADA	ADVANCE TABCO	7–PS–26	1 GPM	ZURN 6922–XL, CHICAGO FAUCET 116.309410ABT	SEE NOTES 6 & 10
LAV–1	LAVATORY	KOHLER	K–2882–0		FAUCET: F–1 TRUEBRO LAVGUARD2 MODEL #102–E–Z CORIAN COUNTER BY G.C.	SEE NOTE 10 SEE DETAIL 3 ON P3.0 SEE NOTE 11
		SLOAN	SS3021			
MS–1	MOP SINK	FIELD FABRICATED	RECESSED – FLOOR		FAUCET: F–2 INCLUDES HOSE, HOSE BRACKET AND TWO (2) 24"Wx36"H WALL GUARDS SEE DETAIL 2 ON P3.0	
			(24x24x12)			
		ADVANCE TABCO	9–OP–24FM			
TD–1	TRENCH DRAIN	ZURN	Z886–DGC		CLASS A STAINLESS STEEL MESH SCREEN GRATE. NO–HUB BOTTOM OUTLET. BOTTOM DOME STRAINER. CLOSED END CAP	
UR–1	ADA WALL–HUNG URINAL	SLOAN	SU–1009	0.125 GPF	FLUSH VALVE: SLOAN SOLIS 8186 ZURN ZTR6203–ULF–LL ¾" I.P.S., 1" TOP SPUD	FLUSH VALVE OPERATION: SENSOR SEE NOTE 2
		ZURN	ZK5755.380.00			
		–	–			
WB–1	WALL BOX FOR WASHING MACHINE	SIOUX CHIEF	696–2313		HAMMER ARRESTERS INCLUDED WITH BOX MOUNTING HEIGHT: 12" A.F.F.	SEE NOTE 7
WB–2	WALL BOX FOR WAREWASHER	SIOUX CHIEF	696–2413MF		MOUNTING HEIGHT: 12" A.F.F.	SEE NOTE 7
WC–1	WATER CLOSET	SLOAN	ST–2009	1.28 GPF	FLUSH VALVE: SLOAN SOLIS 8111 ZURN ZTR6200EV–LL 1" I.P.S., 1½" TOP SPUD	FLUSH VALVE OPERATION: SENSOR SEAT: BEMIS MODEL 2155CT
		ZURN	ZK5655.381.00.03.00			
		–	–			
WC–2	ADA WATER CLOSET	SLOAN	ST–2029 ADA	1.28 GPF	FLUSH VALVE: SLOAN SOLIS 8111 ZURN ZTR6200EV–CC–LL 1" I.P.S., 1½" TOP SPUD	FLUSH VALVE OPERATION: SENSOR SEAT: BEMIS MODEL 2155CT
		ZURN	ZK5655.4MC.00.03.00			
		–	–			
–	SOILED DISHTABLE (3–COMPARTMENT SINK)	–	–		ITEM: 151.46	SEE NOTE 7
–	VEGETABLE PREPARATION SINK	–	–		ITEM: 134.02	SEE NOTE 7
–	WAREWASHER	HOBART	AM16SVLT WITH DRAIN WATER ENERGY RECOVERY		ITEM: 152.08 WALL BOX: WB–2	SEE NOTE 7. PROVIDE MIXING VALVE. TIE ¼" MIXING VALVE OUTLET INTO HOBART
		ECOLAB	XL–HTHH–VV		ITEM: 152.09 WALL BOX: WB–2	SEE NOTE 7. TIE ¼"HW INTO ECOLAB. SPLIT CW: ¼" TO DTV, ¾" TO VAPOR VENT
–	WASHING MACHINE	–	–		ITEM: 223.07 WALL BOX: WB–1	SEE NOTE 7
WHA	WATER–HAMMER ARRESTER	SIOUX CHIEF	SERIES 650		–	SEE SHEET P1.2
			ROOF DRAINS AND ACCESSORIES			
DC–1	OVERFLOW DOWNSPOUT COVER	ZURN	Z199–SS		SEE DRAWINGS FOR PIPE SIZES BIRD SCREEN	SEE NOTE 8
		JAY R. SMITH	1770–BS			
RD–1 THRU RD–4	COMBINATION MAIN ROOF AND OVERFLOW DRAIN	ZURN	Z165		SEE DRAWINGS FOR PIPE SIZES ROOF OPENING: 30"x14"	SEE NOTE 8

NOTES:
1. SEE McDONALD'S PROJECT MANUAL FOR ADDITIONAL MANUFACTURERS
2. PLUMBING CONTRACTOR SHALL COORDINATE WITH G.C. TO PROVIDE BLOCKING FOR PROPER URINAL SUPPORT
3. PLUMBING CONTRACTOR SHALL COORDINATE WITH G.C. TO PROVIDE INTERIOR BLOCKING ON W/W BUILDING FOR WALL CLAMP
4. YARD HYDRANT IS FOR TRASH CORRAL – SEE SITE PLAN FOR LOCATION
5. PLUMBING CONTRACTOR SHALL ROUTE ⅛" DRAIN PIPE FROM HOSE BIBB TO NEAREST FLOOR DRAIN OR FLOOR SINK
6. PLUMBING CONTRACTOR SHALL COORDINATE WITH G.C. TO PROVIDE BLOCKING FOR PROPER SINK SUPPORT
7. SEE KITCHEN DRAWINGS FOR ADDITIONAL INFORMATION – PLUMBING CONTRACTOR SHALL COORDINATE INSTALLATION WITH K.E.S.
8. PLUMBING CONTRACTOR SHALL SPECIFY CONNECTION MATERIAL/TYPE WHEN ORDERING
9. PLUMBING CONTRACTOR SHALL SPECIFY BURY DEPTH WHEN ORDERING
10. PLUMBING CONTRACTOR SHALL PROVIDE GRID DRAIN, P–TRAP AND VALVE STOPS FOR ALL SINKS & LAVS
11. FOR ALTERNATIVE LAVATORY OPTIONS, SUCH AS MOLDED SINKS OR DECK MOUNTED HAND DRYER, PLEASE CONTACT USRD OR HUGHES DIRECTLY.

TO ORDER PLUMBING FIXTURES, CONTACT HUGHES SUPPLY:
E–MAIL:
MCDCOORD@HUGHESSUPPLY.COM
OR MCDCOORD@HAJOCA.COM

LINGLE DESIGN GROUP INC
158 WEST MAIN STREET
LENA, IL 61048
815.369.9155
1764 BLAKE ST
DENVER, CO 8020
303.974.5873
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LICENSE EXPIRATION: DEC 31, 2027

STATE OF MISSOURI JOSEPH G. THOMAS NUMBER E-27428 REGISTERED PROFESSIONAL ENGINEER

DATE ISSUED: SEPT 8, 2026

STATE ID: 241342
PROJECT #: 26-125
NATIONAL #: 46237
DRAWN BY: SC
CHECKED BY: JT

DATE:
07/15/26 - PERMIT / BID SET

REVISIONS
1 09/08/25 - DECOR UPDATE / PLUMBING & CIVIL COORDINATION
2
3
4
5
6

CLIENT
McDonald's USA, LLC

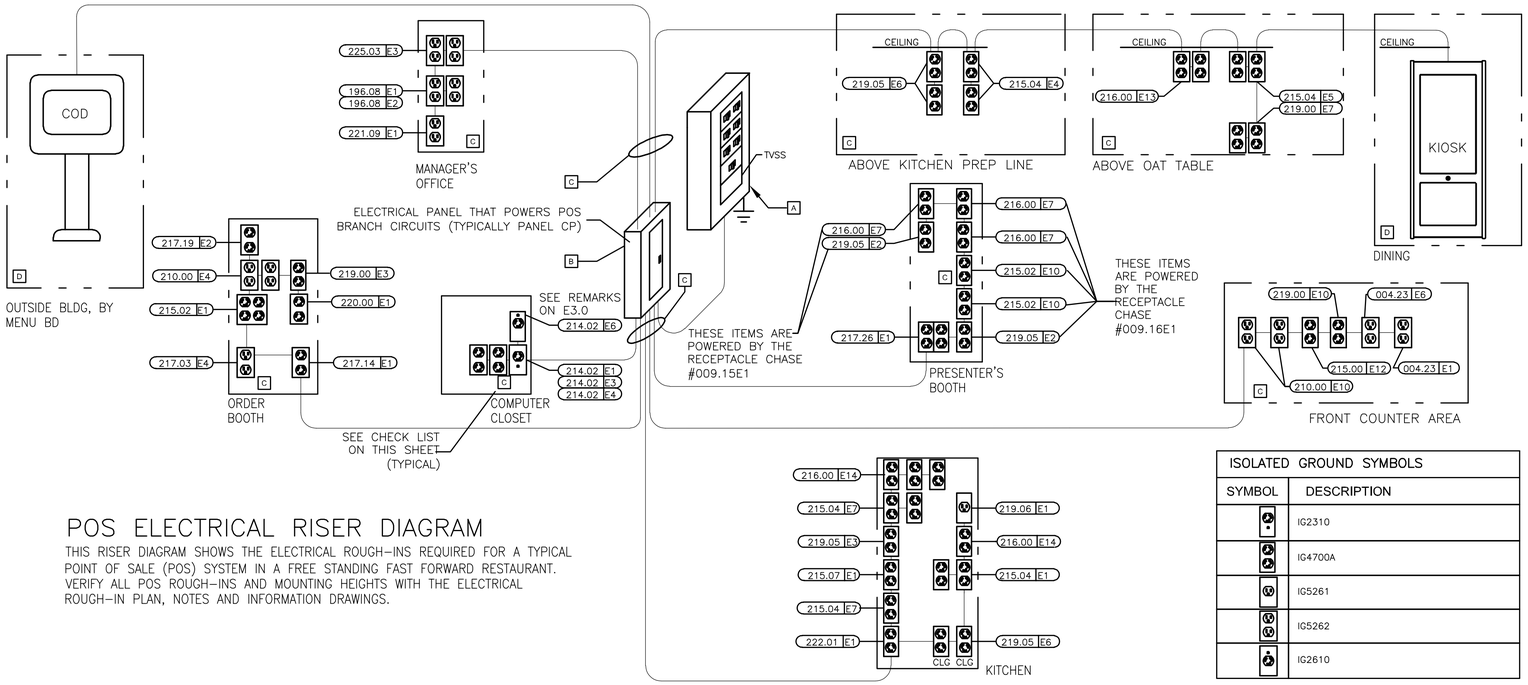
PROTOTYPE
BB20 4590 WW-HB
ISSUE DATE 06/26

ADDRESS
600 SCHUG AVENUE
PECULIAR, MO, 64078

SHEET TITLE
SCHEDULES

SHEET NUMBER:
P4.1

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



POS ELECTRICAL RISER DIAGRAM

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

ISOLATED GROUND SYMBOLS	
SYMBOL	DESCRIPTION
	IG2310
	IG4700A
	IG5261
	IG5262
	IG2610

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 1⅛",
   - HAVE FLARED EDGES TO PREVENT DAMAGE TO HIGH PERFORMANCE CABLES,
   - HAVE AN ELECTRO-GALVANIZED FINISH,
   - HAVE 3/8" WIDE CABLE RETAINING STRAPS,
   - BE UL LISTED AND LABELED,
   - BEAR THE UL SYMBOL MARKING ON THE PART FOR IDENTIFICATION
   - BE INSTALLED PER THE MANUFACTURERS INSTALLATION INSTRUCTIONS.
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.
9. GENERAL CONTRACTOR TO COORDINATE WITH POS INSTALLER. POS INSTALLER TO PERFORM POS CABLE INSTALLATION PRIOR TO CLOSING OF WALLS AND CEILING.

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: _____

START HERE

A VISUALLY INSPECT THE MAIN ELECTRICAL PANEL (MDP)

YES	NO	N/A		
☐	☐	☐	1.	IS AN **EQUIPMENT GROUND BAR** INSTALLED SUCH THAT IT IS ELECTRICALLY **CONNECTED** TO THE PANEL?
☐	☐	☐	2.	DO ALL NEUTRAL CONDUCTORS TERMINATE ONLY TO THE NEUTRAL BAR?
☐	☐	☐	3.	DO ALL EQUIPMENT GROUND CONDUCTORS TERMINATE ONLY TO THE EQUIPMENT GROUND BAR?
☐	☐	☐	4.	DOES THE ISOLATED GROUND CONDUCTOR (GREEN W/YELLOW STRIPE) TERMINATE ON THE EQUIPMENT GROUND BAR?
☐	☐	☐	5.	IS THERE AN APPROPRIATE ELECTRICAL CONNECTION (BOND) BETWEEN THE NEUTRAL BAR AND THE EQUIPMENT GROUND BAR?
☐	☐	☐	6.	DOES THE GROUNDING SYSTEM COMPLY WITH MCDONALD'S "BUILDING ELECTRICAL GROUNDING DETAIL"?
☐	☐	☐	7.	IS A SURGE PROTECTOR INSTALLED THAT COMPLIES WITH MCDONALD'S "TVSS INSTALLATION GUIDE" OR DETAIL?
☐	☐	☐	8.	ARE ALL ELECTRICAL CONNECTIONS (WIRING & BUSING) PROPERLY TIGHTENED?
☐	☐	☐	9.	ARE ALL CIRCUIT BREAKERS CLEARLY LABELED?

B VISUALLY INSPECT THE PANEL "CP" THAT POWERS POS

YES	NO	N/A		
☐	☐	☐	1.	IS AN **EQUIPMENT GROUND BAR** INSTALLED SUCH THAT IT IS ELECTRICALLY **CONNECTED** TO THE PANEL?
☐	☐	☐	2.	IS AN **ISOLATED GROUND BAR** INSTALLED SUCH THAT IT IS ELECTRICALLY **INSULATED** FROM THE PANEL?
☐	☐	☐	3.	DO ALL NEUTRAL CONDUCTORS TERMINATE ONLY TO THE NEUTRAL BAR?
☐	☐	☐	4.	DO ALL EQUIPMENT GROUND CONDUCTORS TERMINATE ONLY TO THE EQUIPMENT GROUND BAR?
☐	☐	☐	5.	DO ALL ISOLATED GROUND CONDUCTORS (GREEN W/YELLOW STRIPE) TERMINATE ONLY TO THE ISOLATED GROUND BAR?
☐	☐	☐	6.	ARE ALL ELECTRICAL CONNECTIONS (WIRING & BUSING) PROPERLY TIGHTENED?
☐	☐	☐	7.	ARE ALL POS AND COD CIRCUIT BREAKERS ON THE SAME PANEL?
☐	☐	☐	8.	ARE ALL CIRCUIT BREAKERS CLEARLY LABELED?
☐	☐	☐	9.	DO ALL POS & COD CIRCUIT BREAKERS HAVE A LOCKING MECHANISM ON THEIR HANDLES TO PREVENT THEM FROM BEING SHUT OFF BY MISTAKE?
☐	☐	☐	10.	DOES THE FEEDER CIRCUIT FOR THIS SUBPANEL CONTAIN PHASE, NEUTRAL ONE EQUIPMENT GROUND AND ONE ISOLATED GROUND CONDUCTORS THAT ARE PROPERLY TERMINATED (SEE POS & COD ISO GND/DED CKT DETAIL)?

VISUALLY INSPECT ALL REMAINING ELECTRICAL SUBPANELS

YES	NO	N/A		
☐	☐	☐	1.	IS AN **EQUIPMENT GROUND BAR** INSTALLED SUCH THAT IT IS ELECTRICALLY **CONNECTED** TO THE PANEL?
☐	☐	☐	2.	DO ALL NEUTRAL CONDUCTORS TERMINATE ONLY TO THE NEUTRAL BAR?
☐	☐	☐	3.	DO ALL EQUIPMENT GROUND CONDUCTORS TERMINATE ONLY TO THE EQUIPMENT GROUND BAR?
☐	☐	☐	4.	ARE ALL ELECTRICAL CONNECTIONS (WIRING & BUSING) PROPERLY TIGHTENED?
☐	☐	☐	5.	ARE ALL CIRCUIT BREAKERS CLEARLY LABELED?
☐	☐	☐	6.	DOES THE FEEDER CIRCUIT FOR THIS SUBPANEL CONTAIN PHASE, NEUTRAL AND ONE EQUIPMENT GROUND CONDUCTORS THAT ARE PROPERLY TERMINATED? (SEE BUILDING ELECTRICAL GROUNDING DETAIL)

C VISUALLY INSPECT THE POS BRANCH CIRCUITS

YES	NO	N/A		
☐	☐	☐	1.	ARE THE POS BRANCH CIRCUITS ROUTED IN THEIR OWN CONDUIT BY THEMSELVES?
☐	☐	☐	2.	IF THE POS BRANCH CIRCUIT IS ROUTED ABOVE GRADE, IS IT IN A METALLIC CONDUIT?
☐	☐	☐	3.	DOES EACH POS BRANCH CIRCUIT CONTAIN: ONE PHASE (BLACK COLORED INSULATION) ONE NEUTRAL (WHITE COLORED INSULATION) ONE EQUIPMENT GROUND (GREEN COLORED INSULATION) ONE ISOLATED GROUND (GREEN W/YELLOW STRIPE COLORED INSULATION).
☐	☐	☐	4.	DO ALL POS BRANCH CIRCUITS TERMINATE AT EITHER AN IG4700, IG4710, IG5261, IG5262 RECEPTACLES OR ANY COMBINATION OF THESE?
☐	☐	☐	5.	ARE ALL ELECTRICAL TERMINATIONS TO IG RECEPTACLES MADE WITH SOLID #12 AWG WIRE CAPTURED AROUND THE SCREW BARREL AND SUITABLY TIGHTENED?
☐	☐	☐	6.	ARE ALL BRANCH CIRCUIT CONNECTIONS PROPERLY TIGHTENED?
☐	☐	☐	7.	ARE THE CORRECT AMOUNT AND TYPE OF IG RECEPTACLES PROVIDED AS SHOWN IN THE ELECTRICAL ROUGH-IN PLAN, NOTES AND INFORMATION?
☐	☐	☐	8.	DO ALL POS RECEPTACLES HAVE ORANGE "COMPUTER ONLY" COVERPLATES?
☐	☐	☐	9.	DO ALL POS BRANCH CIRCUITS COMPLY WITH THE "POS & COD ISOLATED GROUND/DEDICATED CIRCUIT DETAIL?

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

YES	NO	N/A		
☐	☐	☐	1.	ARE THE COD AND KIOSK BRANCH CIRCUITS ROUTED IN THEIR OWN CONDUIT BY THEMSELVES?
☐	☐	☐	2.	DOES EACH COD AND KIOSK BRANCH CIRCUIT CONTAIN; – ONE PHASE (BLACK COLORED INSULATION), – ONE NEUTRAL (WHITE COLORED INSULATION), – ONE EQUIPMENT GROUND (GREEN COLORED INSULATION), – ONE ISOLATED GROUND (GREEN W/YELLOW STRIPE COLORED INSULATION).
☐	☐	☐	3.	ARE THE COD(S) AND KIOSK(S) POWERED FROM THE SAME PANEL AS THE POS?
☐	☐	☐	4.	DO THE BREAKERS FOR THE COD(S) AND KIOSK(S) HAVE A LOCKING MECHANISM ON THEIR HANDLES THAT WILL PREVENT IT FROM BEING SHUT OFF?
☐	☐	☐	5.	DO THE COD BRANCH CIRCUIT(S) COMPLY WITH THE "POS & COD ISOLATED GROUND/DEDICATED CIRCUIT DETAIL?

ARE ALL BOXES CHECKED "YES"?

NO

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

YES

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

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

FINISHED

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.

ELECTRICAL DRAWING INDEX

E1.0	POS RISER DIAGRAM
E1.1	ROUGH-IN FLOOR PLAN
E2.0	LIGHTING PLAN
E2.1	ELECTRICAL ROOF PLAN
E3.0	ROUGH-IN SCHEDULE
E3.1	NOTES & DETAILS
E3.2	INTERLOCK DIAGRAMS
E4.0	WIRING DETAILS
E4.1	LIGHTING CONTROLS
E4.2	PANEL SCHEDULES & ONE LINE

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STATE OF MISSOURI
GREGORY L. DOFFIN
NUMBER PE-2015022305
PROFESSIONAL ENGINEER

SIGNATURE

09/02/2026 DATE
12/31/2027 EXPIRATION DATE
COVERING ELECTRICAL DESIGN

STATE ID: 24134Z
PROJECT #: 26-125
NATIONAL #: 46237
DRAWN BY: DEI
CHECKED BY: GD/RS

DATE:
07/15/2026 - PERMIT / BID SET

REVISIONS
⚠ 09/08/2026 - DECOR UPDATE / PLUMBING & CIVIL COORDINATION

CLIENT
McDonald's USA, LLC

PROTOTYPE
BB20 4590 WW-HB
ISSUE DATE 06/26

ADDRESS
600 SCHUG AVENUE
PECULIAR, MO, 64078

SHEET TITLE
POS RISER DIAGRAM

SHEET NUMBER:
E1.0

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

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

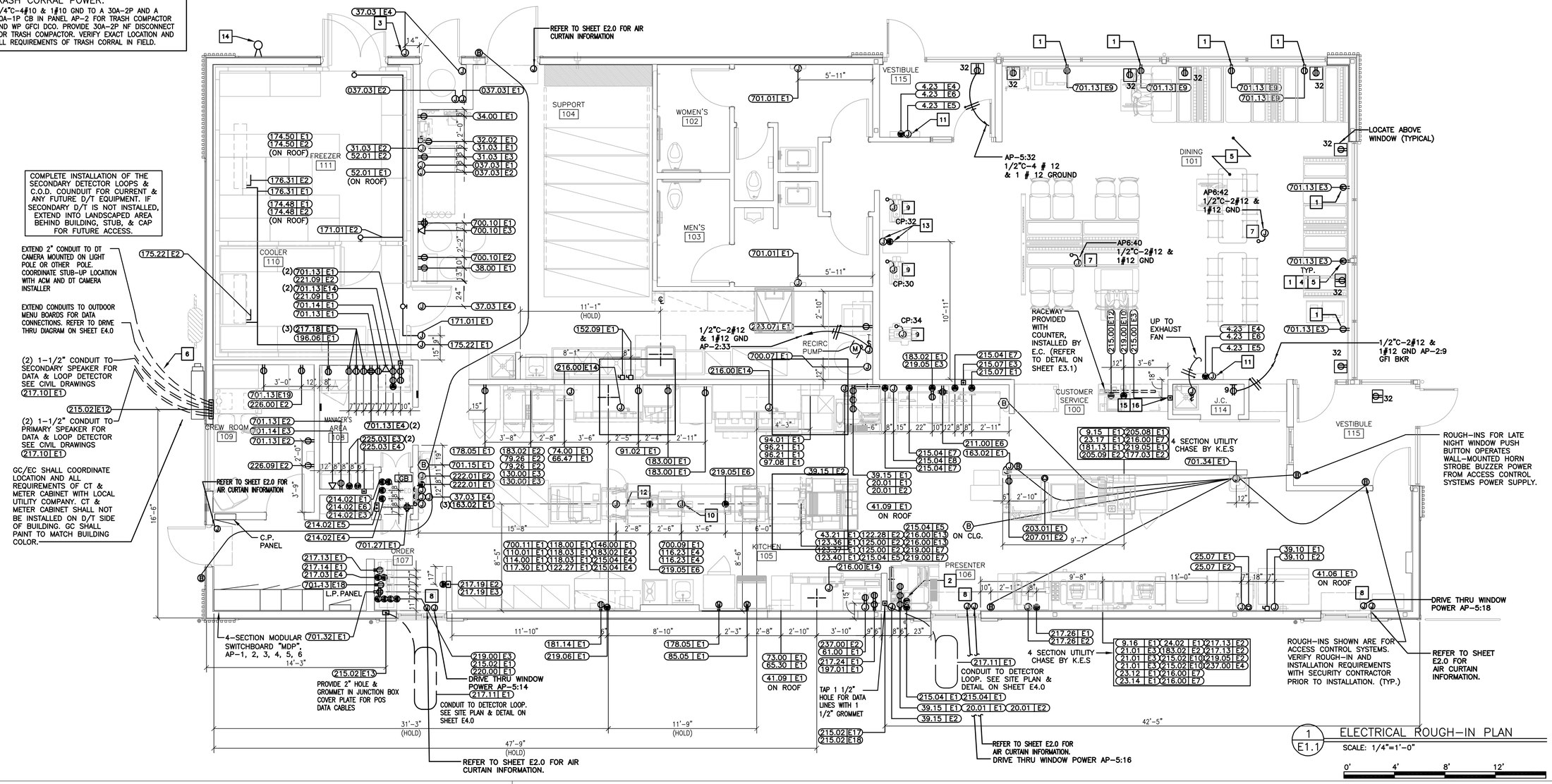
EXTEND 2" CONDUIT TO DT CAMERA MOUNTED ON LIGHT POLE OR OTHER POLE. COORDINATE STUB-UP LOCATION WITH ACM AND DT CAMERA INSTALLER

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

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

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

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.



1 E1.1 ELECTRICAL ROUGH-IN PLAN
SCALE: 1/4"=1'-0"
0' 4' 8' 12'

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
		CCT	CIRCUIT
	INTERCOM STATION W/ 3/4"C- TO MAIN STATION	EC	ELECTRICAL CONTRACTOR
	TELEPHONE JACK	GC	GENERAL CONTRACTOR
(J)	JUNCTION BOX - WALL OR CEILING MOUNTED	GFI/GFCI	GROUND FAULT CIRCUIT INTERRUPTER
	DISCONNECT SWITCH	GND	GROUND
(S)	STUB UP THRU ROOF	IG	ISOLATED GROUND
(T)	THERMOSTAT SENSOR W/ 1/2"C- UP TO CEILING SPACE	JB	JUNCTION BOX
(M)	MOTOR CONNECTION	KES	KITCHEN EQUIPMENT SUPPLIER
	CONDUIT RUN CONCEALED IN CEILING OR WALLS	MLO	MAIN LUGS ONLY
	CONDUIT RUN IN FLOOR SLAB	WP	WEATHERPROOF
	HOT (SHORT), NEUTRAL (LONG), EQUIP GRD (LONG WITH DOT), & & 'X' DENOTES ISOLATED GRD	(CO)	CARBON MONOXIDE SENSOR
	J-BOX WITH FINAL EQUIPMENT CONNECTION	GB	GROUND BUS TERMINAL
(OS)	CEILING MOUNTED OCCUPANCY SENSOR	(DS)	DAYLIGHT SENSOR

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 23/32" X 3 23/32" X 3 1/2"D JUNCTION BOX AT DOOR FOR INSTALLATION OF DOOR ALARM UNIT. STUB 1/2"C ABOVE CEILING FROM JUNCTION BOX. PROVIDE 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 INSTALLATION. PROVIDE 1/2"C-2#12 TO LOCKOUT TYPE CB IN PANEL LP-1.

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. PROVIDE GFCI BREAKER FOR ALL SINGLE PHASE RECEPTACLES RATED 150 VOLTS TO GROUND OR LESS, 50AS OR LESS; AND THREE-PHASE RECEPTACLES RATED 150 VOLTS OR LESS, 100 AMPS OR LESS INSTALLED IN BATHROOMS, KITCHEN, OR WITHIN 6 FEET OF ANY SINK.

KEY NOTES

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)

KEY NOTES

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 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 INSTALLER.
4. PER THE AMERICAN WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES (ADAAG), A MINIMUM OF ONE (1) ADA COMPLIANT ELECTRICAL RECEPTACLE SHALL BE INSTALLED AT AN ACCESSIBLE TABLE. GC/EC SHALL REFERENCE FINAL DECOR PLANS AND PROVIDE RECEPTACLES AS NECESSARY FOR COMPLIANCE. (TYPICAL)
5. COORDINATE LOCATION OF RECEPTACLES SO THAT RECEPTACLES ARE LOCATED ON FULL HEIGHT WALLS PER THE DECOR PLAN. STUB UP AND CIRCUIT IN HALF WALL FOR RECEPTACLES NOT ON FULL HEIGHT WALLS, CONFIRM FINAL LOCATIONS WITH DECOR DRAWINGS PRIOR TO ROUGH-IN.
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 CONNECTIONS FOR POWER TO FURNITURE/ FAMILY EXPERIENCE ELEMENTS AS PART OF THE DECOR PACKAGE. E.C. SHALL VERIFY EXACT LOCATIONS IN FIELD AND WITH DECOR DRAWINGS. PROVIDE ALL NECESSARY MATERIALS AND LABOR FOR A COMPLETE AND FULLY NEC CODE COMPLIANT INSTALLATION. ALL COMPONENTS SHALL BE FED FROM A GFCI TYPE CIRCUIT BREAKER AND BRANCH CIRCUIT SHALL CONTAIN TWO PATHS OF GROUNDING (CONDUIT BODY AND AN INSULATED GROUNDING CONDUCTOR) TO COMPLY WITH McDONALD'S GROUNDING STANDARDS.
8. DRIVE THRU WINDOW POWER, CONFIRM REQUIREMENTS WITH MANUFACTURER DRAWINGS. 1/2"C.-2 # 12 & 1 # 12 GROUND COORDINATE EXACT LOCATION IN FIELD

KEY NOTES

9. 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.
10. 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.
11. PROVIDE POWER AND DATA ROUGH-INS FOR DIGITAL MERCHANDISER. EXTEND CIRCUIT TO DINING FROM FRONT COUNTER MERCHANDISER IN SERVICE AREA. EXTEND J-HOOKS FROM SERVICE AREA FOR DATA CABLES. REFER TO 3/E3.1.
12. EC TO INSTALL DROP CORDS JUSTIFIED TO THE DRIVE THRU SIDE OF THE BUILDING.
13. PROVIDE POWER AND DATA ROUGH-INS FOR CASH HANDLERS REFER TO 4/E3.1 FOR MORE INFORMATION. COORDINATE EXACT LOCATION WITH DECOR DRAWINGS.
14. COORDINATE EXACT LOCATION OF ACCESS POINT IN FIELD WITH ACCENTURE. ELECTRICAL CONTRACTOR TO PROVIDE A WALL PENETRATION INTO INTERIOR CEILING AT 11'-0". PROVIDE # 8 GROUND CONDUCTOR FROM BUILDING GROUNDING SYSTEM TO BUILDING EXTERIOR WIRELESS ACCESS POINT. FINAL CONNECTIONS TO ACCESS POINT BY ACCENTURE.
15. CONTRACTOR TO PUNCH HOLES IN SERVICE POD FOR CABLE AND CONDUIT ROUTING. UTILIZE BUSHINGS PROVIDE WITH SERVICE POD TO PROTECT CABLES.
16. REFER TO DETAIL ON A3.1 FOR SERVICE AREA ELEVATIONS.

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STATE OF MISSOURI
GREGORY L. DOFFIN
NUMBER PE-2015022305
PROFESSIONAL ENGINEER
SIGNATURE
09/02/2026 DATE
12/31/2027 EXPIRATION DATE
COVERING ELECTRICAL DESIGN

STATE ID: 241342
PROJECT #: 26-125
NATIONAL #: 46237
DRAWN BY: DEI
CHECKED BY: GD/RS

DATE:
07/15/2026 - PERMIT / BID SET

REVISIONS
09/08/2026 - DECOR UPDATE / PLUMBING & CIVIL COORDINATION

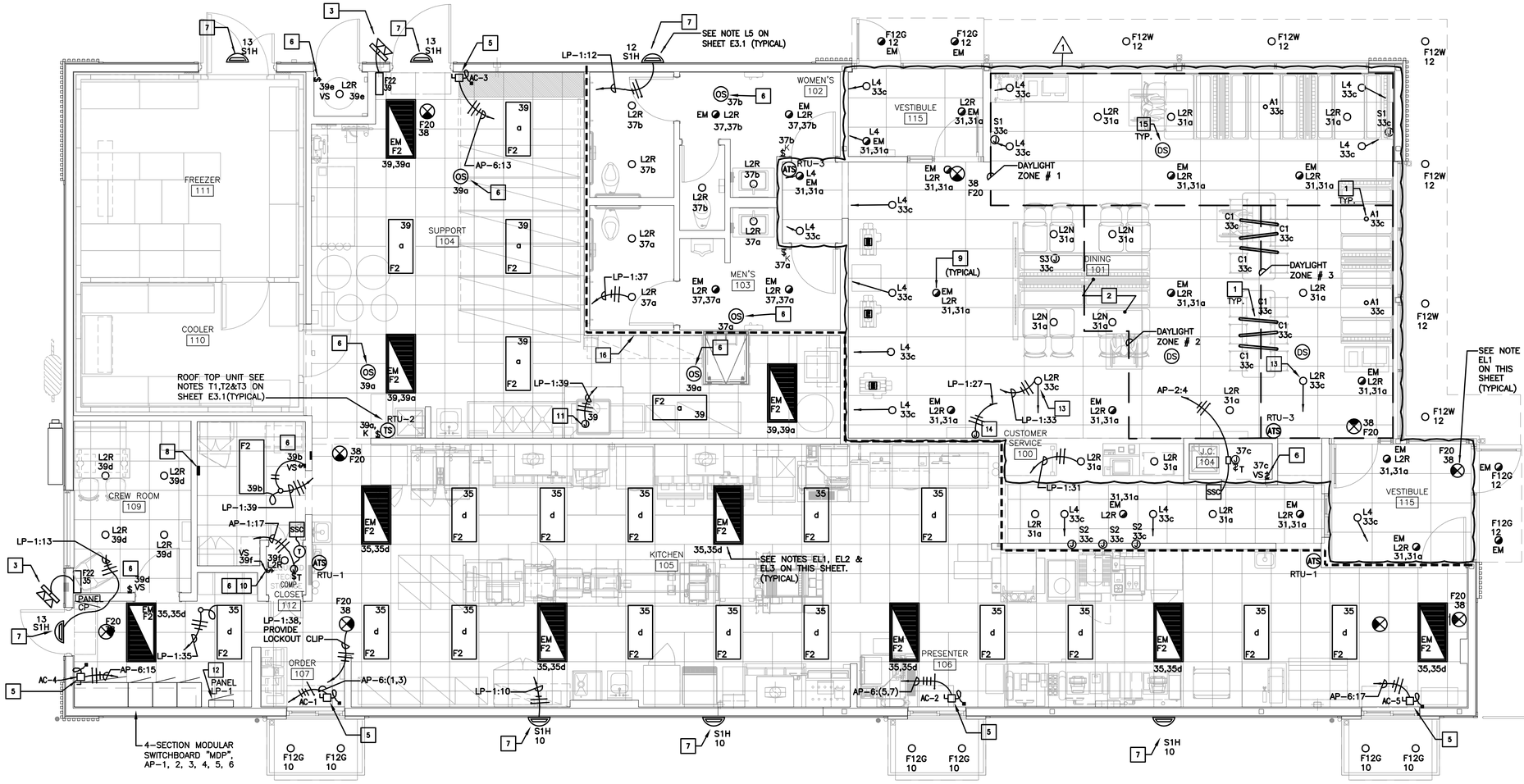
CLIENT
McDonald's USA, LLC

PROTOTYPE
BB20 4590 WW-HB
ISSUE DATE 06/26

ADDRESS
600 SCHUG AVENUE
PECULIAR, MO, 64078

SHEET TITLE
ROUGH-IN FLOOR PLAN

SHEET NUMBER:
E1.1



KEY NOTES

1. CENTER PENDANT LIGHTS OVER TABLES (TYPICAL)
2. ALL SOFFIT LOCATIONS, LIGHTING, & SUPPLY GRILLS SHALL BE COORDINATED WITH DECOR COMPANY DRAWING PRIOR TO INSTALLATION.
3. EC SHALL INSTALL AND CONFIGURE REMOTE EMERGENCY LIGHTING AT ALL EGRESS EXTERIOR DOORS FOR MAXIMUM ILLUMINATION AT POINTS OF EGRESS. INSTALL WP J-BOX WITHIN SOFFIT TO ALLOW A FLUSH INSTALLATION OF ANY EXTERIOR EMERGENCY EGRESS LIGHTING (TYPICAL).
4. ADJUSTABLE WALL WASH FIXTURE TO ILLUMINATE LOGO OR GRAPHICS. EC SHALL VERIFY EXACT LOCATION SO AS TO ADEQUATELY ILLUMINATE McDONALD'S ARCH LOGO SIGN AND GRAPHICS.
5. AIR CURTAIN UNIT. NON HEATED VERSION TO USE 1/2"C. 2#12, 1#12GRD. HEATED VERSION TO USE 1"C. 2#6, 1#10 GRD. (TYPICAL).
6. PROVIDE DUAL TECHNOLOGY CEILING MOUNTED OCCUPANCY SENSOR OR WALL MOUNTED VACANCY SENSOR AS SHOWN. ORDER ALL SENSORS FROM SECURITY LIGHTING SYSTEMS, INC.
7. RADIAL WALL SCONCE. SEE NOTE L2 ON SHEET E3.1 AND ARCHITECTURAL ELEVATIONS ON SHEETS A2.0 & A2.1. (TYPICAL)
8. BUILDING AUTOMATION SYSTEM LOCATION. SEE LIGHTING CONTROL DETAILS ON SHEET E4.1.
9. PROVIDE LIGHTING INVERTER FOR USE WITH FIXTURES SHOWN SLASHED. MODEL #LG125T SHOULD BE USED FOR L2R, L4 & FI2G WITH NOT MORE THAN SEVEN DOWNLIGHTS CONNECTED TO EACH INVERTER, AND NOT MORE THAN TWO F2 FIXTURES. IF DECOR USES ALTERNATE FIXTURES, COORDINATE INVERTER TO BE USED WITH LIGHTING SUPPLIER. E.C. SHALL VERIFY THE QUANTITY OF FIXTURES THAT CAN BE CONNECTED WITHOUT EXCEEDING OPERATING CAPACITY OF UNIT AND PROVIDE ADDITIONAL CIRCUITS AND INVERTERS AS REQUIRED. (TYPICAL)
10. CENTER VACANCY SENSOR SWITCH OPPOSITE COMPUTER RACK IN A LOCATION ACCESSIBLE FROM BOTH DOORS FOR CONTROL OF CEILING MOUNTED LIGHT, IN DATA ROOM. FAN CONTROLLED BY LOCAL THERMOSTAT.
11. PROVIDE POWER FOR LIGHT WITHIN EXHAUST HOOD. INTEGRATE INTO LOCAL LIGHTING CONTROLS.
12. LIGHTING CONTACTORS IN NEMA 1 ENCLOSURE JUST BELOW CEILING. EC SHALL PROVIDE 120 VOLT CONTROL CIRCUIT TO CONTACTOR PANEL. VERIFY EXACT LOCATION IN FIELD AND REFER TO DRAWING E4.1 FOR ADDITIONAL DETAILS.
13. ADJUST FIXTURE TO ILLUMINATE DELIVERY POD SHELVING.
14. PROVIDE POWER FOR LIGHT WITHIN TOY DISPLAY. COORDIANTE EXACT LOCATION WITH DECOR DRAWINGS.
15. NEW DAYLIGHT SENSOR TO BE INSTALLED TO CONTROL DAYLIGHT AREAS IN THE DINNING AREAS. ORDER ALL DAYLIGHT SENSORS FROM; SECURITY LIGHTING SYSTEMS, INC.
16. DRAFT STOP ABOVE CEILING, SEAL ALL ELECTRICAL PENETRATIONS.

EMERGENCY LIGHTING NOTES

EL1. EC SHALL VERIFY ALL REQUIREMENTS AND FINAL EMERGENCY LIGHTING LOCATIONS WITH LOCAL AUTHORITIES. INCLUDE ALL COSTS IN BASE BID.

EL2. IF NOT INSTALLED BY MANUFACTURER, EC SHALL BE RESPONSIBLE FOR THE COMPLETE INSTALLATION OF THE EMERGENCY INVERTER IN SWITCHED EMERGENCY FIXTURES SHOWN ON THIS SHEET.

EL3. LED FIXTURES DENOTED AS SWITCHED EMERGENCY SHALL BE CONNECTED TO AN INVERTER. INVERTER SHALL BE CAPABLE OF ILLUMINATING FIXTURE FOR 1.5 HOURS TO COMPLY WITH NEC SECTION 700 AND UL924.

EL4. EMERGENCY BATTERY LIGHTING WALL PACKS IN PLAYPLACE SHALL BE LOCATED SO AS TO PROVIDE FOR MAXIMUM ILLUMINATION OF AREA. EC SHALL VERIFY EXACT PLACEMENT IN THE FIELD WITH McDONALD'S ACM. (IF APPLICABLE)

EL5. EMERGENCY LIGHTING HAS BEEN DESIGNED PER NFPA 101 TO MAINTAIN 1 FC IN PATH OF EGRESS. IF FIELD CONDITIONS REQUIRE ANY CHANGES TO LIGHTING DESIGN, EMERGENCY LIGHTING, SHALL BE INSTALLED TO MEET THE ABOVE REQUIREMENTS.

EL6. WIRE NIGHT LIGHTING/EXIT SIGNS/BATTERY LIGHTS AHEAD OF LOCAL SWITCHING IN ACCORDANCE WITH THE NEC 700-12(e) PROVIDE IDENTIFICATION OF ALL EMERGENCY CIRCUITS IN ACCORDANCE WITH NEC 700-9. PROVIDE LOCKOUT CIRCUIT BREAKERS FOR EMERGENCY LIGHTING CIRCUITS.

EL7. EC SHALL INSTALL A LOCK ON CIRCUIT BREAKER HANDLE, FOR ALL EMERGENCY LIGHTING CIRCUITS. EC SHALL VERIFY ALL REQUIREMENTS AND FINAL EMERGENCY LIGHTING LOCATIONS WITH LOCAL AUTHORITIES. INCLUDE ALL COSTS IN BASE BID.

1 E2.0 LIGHTING FLOOR PLAN
SCALE: 1/4"=1'-0"
0' 4' 8' 12' 16'

KEY
DENOTES FIXTURE TYPE — EM / F2
DENOTES CIRCUIT NUMBER — 35,35d

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

LIGHTING FIXTURES SHOWN WITH ARROW DENOTES GENERAL DIRECTION TO AIM ADJUSTABLE FIXTURES. VERIFY IN FIELD.

VERIFY FINAL LIGHTING LAYOUT AND SPECIFICATION W/ ACM AND SEATING & DECOR COMPANY PRIOR TO ORDERING LIGHTING PACKAGE.

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

McDONALD'S SITE SIGNAGE:

EC SHALL PROVIDE:

ELECTRICAL CONTRACTOR SHALL COORDINATE POWER REQUIRED FOR ROAD SIGN. MOST SIGNS REQUIRE (1) 20 AMP 120V CIRCUIT. IF USED A 90-200 SIGN REQUIRES (4) 20 AMP 120V CIRCUITS OR ONE 1-PHASE 60 AMP 120/208V CIRCUIT. COORDINATE WITH SUPPLIERS DRAWINGS.
(1) 20 AMP 208 VOLT CIRCUIT, EC TO WIRE 2#12 TO 208 VOLT FLAG FLOODLIGHTS.
(1) 20 AMP 120 VOLT CIRCUIT TO D.C.O. IN ROAD SIGN BASE IF REQUIRED.
(2) 20 AMP 120 VOLT CIRCUITS FOR INGRESS/EGRESS DIRECTIONAL SIGNS (IF APPLICABLE).

*VERIFY EXACT LOCATIONS/TYPES/QUANTITIES OF ALL THE ABOVE WITH SITE/CIVIL PLANS AND MCD ACM.

LIGHTING FIXTURE SCHEDULE:

MARK	SYMBOL	DESCRIPTION	DIFFUSER	LAMPS WATTS	LAMPS TYPE	BALLAST	MOUNTING	MANUFACTURER AND CATALOG NUMBER
F2		2' X 4' GRID TROFFER	PRISMATIC ACRYLIC	48W	LED	–	RECESSED	SECURITY LIGHTING: # CBT24-A-LSCS-EDD-HIGH, EMERGENCY FIXTURE # CBT24-A-LSCS-EDD-ELL14-HIGH
L2R	○ OR ⊕	4" LED DOWN LIGHT	–	16W	LED	–	RECESSED	SECURITY LIGHTING # RDA-136LM-30-FL-B/RDA-136-H VERIFY DOWNLIGHT TO BE USED WITH PHOTOMETRIC
L2N	○ OR ⊕	LED DOWN LIGHT	–	16W	LED	–	RECESSED	EXACT FIXTURE TYPE TO BE COORDINATED WITH DECOR FIRM & AREA CONSTRUCTION MANAGER
L4	○ OR ◐	3" LED ADJUSTABLE DOWN LIGHT	–	7W	LED	–	RECESSED	SECURITY LIGHTING # RDA-60LM-30-NF-B/RDA-60-H VERIFY DOWNLIGHT TO BE USED WITH PHOTOMETRIC
F12G	○	6" LED DOWN LIGHT – GOLD TRIM	–	12.5W	LED	–	RECESSED	SECURITY LIGHTING # 8542-5CCT
F12W	○	6" LED DOWN LIGHT – WHITE TRIM	–	12.5W	LED	–	RECESSED	SECURITY LIGHTING # 8542-5CCT
A1	○	PENDANT	–	4W	LED	–	SUSPENDED	EXACT FIXTURE TYPE TO BE COORDINATED WITH DECOR FIRM & AREA CONSTRUCTION MANAGER
C1	▬	PENDANT	–	19W	LED	–	SUSPENDED	EXACT FIXTURE TYPE TO BE COORDINATED WITH DECOR FIRM & AREA CONSTRUCTION MANAGER
S1	Ⓢ	LINEAR	–	5W/LNFT	LED	–	SUSPENDED	EXACT FIXTURE TYPE TO BE COORDINATED WITH DECOR FIRM & AREA CONSTRUCTION MANAGER
S2	Ⓢ	LINEAR	–	5W/LNFT	LED	–	SUSPENDED	EXACT FIXTURE TYPE TO BE COORDINATED WITH DECOR FIRM & AREA CONSTRUCTION MANAGER
S3	Ⓢ	LINEAR	–	5W/LNFT	LED	–	SUSPENDED	EXACT FIXTURE TYPE TO BE COORDINATED WITH DECOR FIRM & AREA CONSTRUCTION MANAGER
F20	⊗	EXIT SIGN WITH BATTERY BACKUP	–	1.8W	LED	–	SURFACE	SECURITY LIGHTING: EVEURWE. SEE NOTE LS2 ON THIS SHEET.
F22	▽	EMERG BATTERY & 2 REMOTE HEADS	–	–	LED	–	SURFACE TO WALL OR SOFFIT	SECURITY LTG. #EV4D-02L-0/EVODB
S1H	◡	"DOWN ONLY" RADIAL WALL SCONCE – SILVER	TEMPERED GLASS	(1)-14W	LED	–	SURFACE TO WALL	SECURITY LIGHTING: #RWSC-36L-5K-DO-U-PS

LIGHTING SCHEDULE NOTES:

LS1. ORDER LED EXIT SIGNS WITH LETTER COLORS THAT COMPLY WITH LOCAL CODES.
– FOR RED LETTERS USE #EVE-U-R (UNIVERSAL),
– FOR GREEN LETTERS USE #EVE-U-G (UNIVERSAL), OR
IF THE ABOVE EXIT SIGNS DO NOT COMPLY WITH LOCAL CODES USE: LED SIGN WITH BATTERY BACKUP, LETTER SIZE, COLOR, TYPE & DIRECTIONAL ARROWS AS REQUIRED BY THE LOCAL AUTHORITIES.

LS2. ALL INTERIOR LIGHT FIXTURES SHALL BE 120 VOLT UNLESS NOTED OTHERWISE.

LS3. LIGHTING FIXTURES HAVE BEEN CHOSEN TO ACHIEVE MAXIMUM ENERGY CONSERVATION WHILE MAINTAINING ADEQUATE LEVEL OF ILLUMINATION. SPECIFICATIONS SHALL BE STRICTLY FOLLOWED. ANY DEVIATION FROM THE SPECIFICATIONS SHALL BE APPROVED IN WRITING BY McDONALD'S CORPORATION.

ORDER ALL LIGHT FIXTURES FROM:

SECURITY LIGHTING SYSTEMS, INC.
PHONE: 1-800-LIGHT-IT (800-544-4848)
EMAIL: SLORDERS@CURRENTLIGHTING.COM

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

BACK OF HOUSE TROFFERS, EXTERIOR LIGHTING, AND LOT LIGHTING FURNISHED BY MCDONALDS GLOBAL STRATEGIC SOURCING SERVICES. ALL OTHER INTERIOR LIGHTING INCLUDING EMERGENCY AND EXIT ARE FURNISHED BY GENERAL CONTRACTOR.

LINGLE DESIGN GROUP INC
158 WEST MAIN STREET
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815.369.9155
1764 BLAKE ST
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303.974.5873
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STATE OF MISSOURI
GREGORY L. DOFFIN
NUMBER PE-2015022305
PROFESSIONAL ENGINEER
SIGNATURE
09/02/2026 DATE
12/31/2027 EXPIRATION DATE
COVERING ELECTRICAL DESIGN

STATE ID: 241342
NATIONAL #: 46237
PROJECT #: 26-125
DRAWN BY: DEI
CHECKED BY: GD/RS

DATE: 07/15/2026 - PERMIT / BID SET

REVISIONS
09/08/2026 - DECOR UPDATE / PLUMBING & CIVIL COORDINATION

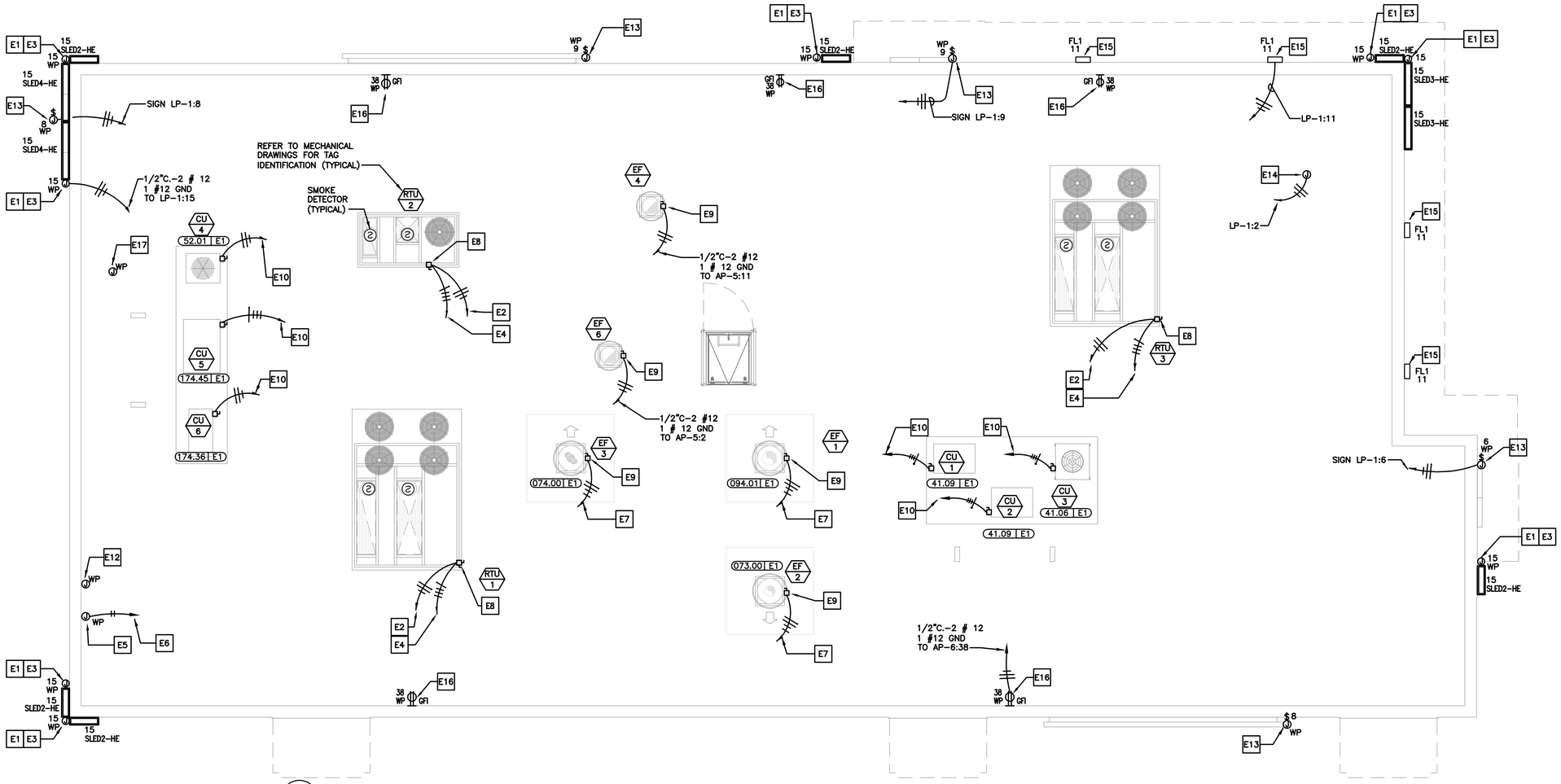
CLIENT
McDonald's USA, LLC

PROTOTYPE
BB20 4590 WW-HB
ISSUE DATE 06/26

ADDRESS
600 SCHUG AVENUE
PECULIAR, MO, 64078

SHEET TITLE
LIGHTING PLAN

SHEET NUMBER:
E2.0



1 E2.1 ELECTRICAL ROOF PLAN

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

0' 4' 8' 12' 16'

LED GENERAL NOTES

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

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 NOT USED.

E12 E.C. SHALL PROVIDE A WEATHER-PROOF JUNCTION BOX WITH ¾"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)

E16 WEATHER PROOF "IN USE" COVER TO COMPLY WITH NEC 406.8(B) (TYPICAL).

E17 PROVIDE 2" CONDUIT FOR 5G ANTENNA. PROVIDE PORTALS PLUS PLASTI-FLASH WITH C-126 CAP (OR EQUAL) FOR ROOF PENETRATION. TERMINATE CONDUIT A MIN. OF 24" ABOVE FINISHED ROOF WITH GOOSENECK. PROVIDE # 6 GROUND CONDUCTOR FROM BUILDING GROUNDING SYSTEM TO BUILDING EXTERIOR 5G ANTENNA. FINAL CONNECTIONS TO ANTENNA BY ACCENTURE.

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. EC SHALL FIELD VERIFY THAT LIGHT FIXTURES DO NOT OBSTRUCT OR CONFLICT WITH THE WORK OF OTHER TRADES. IF A DISCREPANCY IS FOUND, THE EC SHALL IMMEDIATELY NOTIFY THE GC BEFORE THE THE INSTALLATION OF SUCH FIXTURE(S). EC SHALL COORDINATE LOCATIONS OF ALL LIGHT FIXTURES IN DINING AREA WITH FINAL SEATING AND DECOR PLANS.
6. EC SHALL COORDINATE LOCATION OF ALL EXTERIOR LIGHTS WITH McDONALD'S PROJECT MANAGER TO AVOID INTERFERENCE WITH ANY SPECIAL EXTERIOR TREATMENTS. INSTALL LIGHT FIXTURES WITH CORRECT ORIENTATION PER MANUFACTURER'S INSTRUCTIONS. EC SHALL VERIFY THAT NOT MORE

DUCT MOUNTED SMOKE DETECTOR NOTES:
REFER TO MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION

DUCT MOUNTED SMOKE DETECTOR OPERATION:

1) DUCT MOUNTED DETECTOR ACTIVATION SHALL SHUT DOWN THE AIR DISTRIBUTION SYSTEM COMPLIANT WITH INTERNATIONAL MECHANICAL CODE (IMC) 606-SMOKE DETECTOR SYSTEM CONTROL, NFPA 72 & 90A AND UNIFORM MECHANICAL CODE (UMC) 609-AUTOMATIC SHUTOFFS.
2) DUCT MOUNTED DETECTOR SHALL ACTIVATE A VISIBLE AND AUDIBLE SUPERVISORY SIGNAL COMPLIANT WITH ABOVE MENTIONED CODE.
3) A DUCT MOUNTED DETECTOR TROUBLE CONDITION SHALL ACTIVATE A VISIBLE OR AUDIBLE SIGNAL COMPLIANT WITH ABOVE MENTIONED CODE.
4) CONDUCT A SMOKE TEST ON THE HVAC UNITS WITNESSED BY THE BUILDING INSPECTOR TO VERIFY FAN SHUT-DOWN AND SIGNAL ACTIVATION UPON SMOKE DETECTION.

REMOTE ALARM INSTALLATION:

1) CLEARLY LABEL TO INDICATE BOTH FUNCTION (IN-DUCT SMOKE DETECTOR ALARM) AND AIR HANDLING UNIT ASSOCIATED WITH EACH SMOKE DETECTOR. COMPLY WITH NFPA 72 AND ALL LOCAL CODES.
2) PLACE REMOTE ALARMS IN A READILY ACCESSIBLE LOCATION APPROVED BY THE AUTHORITY HAVING JURISDICTION.

COMPONENT REQUIREMENTS:
(1) DUCT MOUNTED SMOKE DETECTOR FURNISHED WITH UNIT
(1) MULTI-SIGNALING DEVICE CONTAINING:
-A BLUE LENSED STROBE LIGHT INDICATING "SMOKE"
-A KEYED TEST SWITCH
-A GREEN "POWER" LED (ON WHEN DUCT DETECTOR IS POWERED-ALL LEDS ARE OFF UPON LOSS OF POWER)
-A YELLOW "TROUBLE" LED (ON WHEN DUCT DETECTOR SENSOR BOARD IS MISSING OR THE COVER IS REMOVED FOR MORE THAN 20 MINUTES)
-A RED "ALARM" LED (LED AND HORN WILL BE ON WHEN EVER THE DUCT SMOKE DETECTOR IS IN ALARM)

INSTALLATION:
1. ALL WIRING BETWEEN THE DUCT MOUNTED SMOKE DETECTOR AND DEVICES SHALL BE CONNECTED AS INDICATED IN MANUFACTURER'S GUIDELINES.

LED FIXTURE SCHEDULE:

CONTRACTOR SHALL VERIFY ALL FIXTURE LENGTHS PRIOR TO ORDER

MARK	SYMBOL	DESCRIPTION	DIFFUSER	LAMPS		BALLAST	MOUNTING	MANUFACTURER AND CATALOG NUMBER
				WATTS	TYPE			
SLED2-HE	▬	DOWN ONLY ACCENT LIGHTING (SEE PLAN)	TEMPERED GLASS	1-10W PER FIXTURE	LED	–	SURFACE	SECURITY LIGHTING: SLED-HE-24-DO-U-IO CUSTOM BUILT FOR EXTERIOR ACCENT CHANNELS.
SLED3-HE	▬	DOWN ONLY ACCENT LIGHTING (SEE PLAN)	TEMPERED GLASS	1-14W PER FIXTURE	LED	–	SURFACE	SECURITY LIGHTING: SLED-HE-36-DO-U-IO CUSTOM BUILT FOR EXTERIOR ACCENT CHANNELS.
SLED4-HE	▬	DOWN ONLY ACCENT LIGHTING (SEE PLAN)	TEMPERED GLASS	1-19W PER FIXTURE	LED	–	SURFACE	SECURITY LIGHTING: SLED-HE-48-DO-U-IO CUSTOM BUILT FOR EXTERIOR ACCENT CHANNELS.
FL1	▫	UP ONLY ACCENT LIGHTING (SEE PLAN)	TEMPERED GLASS	1-16W PER FIXTURE	LED	–	SURFACE	SECURITY LIGHTING: RF2-44L-25-5K7-W-UNV-K-IO-JWIO

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STATE OF MISSOURI
GREGORY L. DOFFIN
NUMBER PE-2015022305
PROFESSIONAL ENGINEER
SIGNATURE
09/02/2026 DATE
12/31/2027 EXPIRATION DATE
COVERING ELECTRICAL DESIGN

STATE ID: 241342
PROJECT #: 26-125
NATIONAL #: 46237
DRAWN BY: DEI
CHECKED BY: GD/RS

DATE:
07/15/2026 - PERMIT / BID SET

REVISIONS
⚠ 09/08/2026 - DECOR UPDATE / PLUMBING & CIVIL COORDINATION

CLIENT
McDonald's USA, LLC

PROTOTYPE
BB20 4590 WW-HB
ISSUE DATE 06/26

ADDRESS
600 SCHUG AVENUE
PECULIAR, MO, 64078

SHEET TITLE
ELECTRICAL ROOF PLAN

SHEET NUMBER:
E2.1

PB = Pullbox
JB = Junction Box
EC = Electrical Contractor
VIF = Verify in Field

ELECTRICAL SCHEDULE

TAG #	QTY	DESCRIPTION	VOLT/PH	FLA	BRK SIZE	COND/WIRE	PNL/CCT	RECEP TYPE	HGT AFF	REQUIREMENTS & REMARKS
004.23E4	2	DIGITAL MERCHANDISER – MEDIA PLAYER	120/1 ISOLATED	1.0	20A	1/2"C–2#12IG	CP:6	IG5262	3'–4"	USE SAME RECEPTACLE AS 4.23E6
004.23E5	2	DIGITAL MERCHANDISER – MEDIA PLAYER	DATA CABLE	–	–	–	–	JB	3'–4"	JB W/ 1" C. TO FULL HEIGHT WALL AND TO ABOVE CEILING W/BUSHINGS. FOR DATA CABLES. SUPPLY W/GROMMETED OPENING IN COVER PLATE
004.23E6	2	DIGITAL MERCHANDISER	120/1 ISOLATED	2.6	20A	1/2"C–2#12IG	CP:6	IG5262	3'–4"	–
009.15E1	1	UTILITY CHASE – FFDT INTERIOR WALL	–	–	–	–	–	–	SEE RMKS	UTILITY CHASE AND RECEPTACLES PROVIDED BY K.E.S.
009.16E1	1	UTILITY CHASE – FFDT EXTERIOR WALL	–	–	–	–	–	–	SEE RMKS	UTILITY CHASE AND RECEPTACLES PROVIDED BY K.E.S.
020.01E1	2	AUTOMATED BEVERAGE SYSTEM 2.0	120/1	5.0	20A	1/2"C–2#12	AP–1:12, AP–2:24	5–20R	2'–0"	–
020.01E2	2	AUTOMATED BEVERAGE SYSTEM 2.0	120/1	14.9	20A	1/2"C–2#12	AP–1:6, AP–2:26	5–20R	3'–10"	FOR PRE–COOLER
021.01E3	3	COFFEE BREWER (THERMAL POTS)	120–208/1	15.5	20A	1/2"C–3#12	AP–1:(2,4)(14,16), AP–5:(20,22)	BY KES	SEE RMKS	EC TO EXTEND CIRCUIT TO L14–20R RECEPTACLE IN CHASE
023.12E1	1	COFFEE CREAM DISPENSER	120/1	1.0	20A	1/2"C–2#12	AP–1:8	BY KES	SEE RMKS	EC TO EXTEND CIRCUIT TO 5–20R RECEPTACLE IN CHASE
023.14E1	1	SUGAR/SWEETENER DISPENSER	120/1	1.5	20A	1/2"C–2#12	AP–1:8	BY KES	SEE RMKS	EC TO EXTEND CIRCUIT TO 5–20R RECEPTACLE IN CHASE
023.17E1	1	SPECIALTY COFFEE	208/1	27.0	40A GFCI	3/4"C–3#8	AP–1:(19,21)	BY KES	SEE RMKS	EC TO EXTEND CIRCUIT TO L6–30R RECEPTACLE IN CHASE
024.02E1	1	JUICE DISPENSER	120/1	4.5	20A	1/2"C–2#12	AP–1:8	5–20R	SEE RMKS	EC TO EXTEND CIRCUIT TO 5–20R RECEPTACLE IN CHASE
025.07E1	1	INFUSION TEA BREWER – MIS	120–208/1	13.0	20A	1/2"C–3#12	AP–2:(32,34)	L14–20R	2'–3"	–
025.07E2	1	INFUSION TEA BREWER – MIS	–	–	–	–	–	JB	2'–3"	FOR WATER LINE TO ICED TEA BREWER IF CHASE IS NOT SPECIFIED. (SEE P1.6)
031.03E1	1	SODA SYSTEM PACKAGE B.I.B.(RECIRCULATING– 3 TOWERS) – REMOTE	208/3	26.0	30A	3/4"C–3#10	AP–2:(37,39,41)	SEE RMKS	3'–0" SEE RMKS	EC SUPPLIES 30A–3P NF DISC SW MTD 9" BELOW CEILING PER NEC SECT. 404.8(A)
031.03E2	1	SODA SYSTEM PACKAGE B.I.B.(RECIRCULATING– 3 TOWERS) – REMOTE	–	–	–	–	–	JB	4'–0"	FOR CONTROL WIRES FROM REMOTE CONDENSING UNIT
031.03E3	1	SODA SYSTEM PACKAGE B.I.B.(RECIRCULATING– 3 TOWERS) – REMOTE	120/1	(2) 6.8	20A	1/2"C–2#12	AP–2:35	5–20R	6'–6"	FOR WATER BOOSTER SYSTEM AND OPTIONAL AIR COMPRESSOR
032.02E1	1	REVERSE OSMOSIS WATER FILTRATION SYSTEM – TANKLESS	120/1	4.0	20A	1/2"C–2#12 EA.	AP–2:23	5–20R	6'–0"	–
034.00E1	1	AIR COMPRESSOR	120/1	5.7	20A	1/2"C–2#12	AP–2:2	5–20R	6'–0"	–
037.03E1	2	CO2 SAFETY SYSTEM – DETECTOR	120/1	1.0	20A	1/2"C–2#12	AP–1:10	JB	SEE RMKS	PROVIDE LOCKOUT CB. SEE MECHANICAL DRAWINGS
037.03E2	2	CO2 SAFETY SYSTEM	–	–	–	–	–	JB	SEE RMKS	FOR LV WIRES. STUB 3/4"C. ABV. CLG. SEE MECHANICAL DRAWINGS
037.03E4	4	CO2 SAFETY SYSTEM – CO2 DETECTOR AV ALARM	–	–	–	–	–	JB	7'–0" MINIMUM	STUB 3/4"C. ABOVE CLG. FOR LV COND. TO 037.03E2. SEE MECHANICAL DRAWINGS
038.00E1	1	CLEAN IN PLACE PANEL	120/1	1.0	20A	1/2"C–2#12	AP–2:21	5–20R	5'–6"	–
039.10E1	1	ICE MACHINE – 1400 LB.	208/3	13.4	20A	1/2"C–3#12	AP–2:(1,3,5)	SEE RMKS	SEE RMKS	EC SUPPLIES 30A–3P NF DISC SW MTD9"BELOW CEILING PER NEC 404.8(A) EX.2 VERIFY W/ AHJ
039.10E2	1	ICE MACHINE – 1400 LB.	–	–	–	–	–	JB	4'–6" SEE RMKS	CONTROL WIRES TO REMOTE CONDENSER
039.15E1	2	ICE MACHINE – 1000 LB.	120/1	1.1	15A	1/2"C–2#12	AP–1:37,39	5–20R	SEE RMKS	MOUNT 9" BELOW CEILING – CIRCUIT BREAKERS SHALL BE HACR TYPE
039.15E2	2	ICE MACHINE – 1000 LB.	–	–	–	1/2"C	–	JB	SEE RMKS	MOUNT 9" BELOW CEILING – CONTROL WIRES TO REMOTE CONDENSER
041.06E1	1	ICE MACHINE REMOTE CONDENSER – 1400 LB.	208/1	1.0	20A SEE RMKS	1/2"C–3#12	AP–1:(26,28)	SEE RMKS	SEE RMKS	EC TO PROVIDE WP 30A–2P NF DISC AT UNIT ON ROOF – CIRCUIT BREAKERS SHALL BE HACR TYPE
041.09E1	2	ICE MACHINE REMOTE CONDENSER – 1000 LB.	208/3	11.1	15A SEE RMKS	1/2"C–3#12 SEE RMKS	AP–1:(32,34,36)(38,40,42)	SEE RMKS	SEE RMKS	EC TO PROVIDE WP 30A–3P NF DISC AT UNIT ON ROOF – CIRCUIT BREAKERS SHALL BE HACR TYPE
043.21E1	1	OPTIMIZED ORDER ASSEMBLY TABLE	120/1	5.4	20A	SEE RMKS	KES BREAKER PANEL	SEE RMKS	SEE RMKS	PLUGS INTO KES OUTLET CHASE FOR HLA
052.01E1	1	SODA SYSTEM PACKAGE REMOTE CONDENSER – 3–TOWER	208/1	2.5	20A SEE RMKS	SEE RMKS	SEE RMKS	SEE RMKS	SEE RMKS	EC TO PROVIDE 30A–2P DISC SW W/15A FUSE – POWERED BY 31.03 – LOCATION BY ACM
052.01E2	1	SODA SYSTEM PACKAGE REMOTE CONDENSER – 3–TOWER	–	–	–	–	–	–	SEE RMKS	CONTROL WIRES TO SODA SYSTEM – LOCATION BY ACM
061.00E1	1	FRY BAGGING STATION 36"	120/1	12.5	20A	1/2"C–2#12	AP–1:31	JB	4'–0"	–
065.30E1	1	3–VAT LOV FRYER – ELECTRIC – F/F/F	208/3	38.9 EA. VAT	(3) 50A	1"C–3#6 EA. VAT	AP–4:(13,15,17)(19,21,23)(25,27,29)	BY KES	SEE RMKS	PLUGS INTO RACEWAY RECEP WITH(1)L21–20P INTERLOCK PLUG &(3) 15–60P POWER PLUG BY KES
066.47E1	1	4–VAT LOV FRYER – ELECTRIC – S/S/S/S	208/3	38.9 EA. VAT	(4) 50A	1"C–3#6 EA. VAT	AP–3:(1,3,5)(7,9,11)(2,4,6)(8,10,12)	BY KES	SEE RMKS	PLUGS INTO RACEWAY RECEP WITH(1)L21–20P INTERLOCK PLUG &(4) 15–60P POWER PLUG BY KES
073.00E1	1	UNIVERSAL EXHAUST HOOD 3–VAT FRYER	120/1	12.5, 9.8	(2)20A–1P	1/2"C–2#12EA	AP–1:23,24	BY KES	SEE RMKS	EC TO CONN POWER TO RACEWAY FLA = 12.0 FRYER CONTROLS, 0.5 CAPTURE JET & 9.8 INDIVID. EXHAUST FAN INTERLOCK
074.00E1	1	UNIVERSAL EXHAUST HOOD 4–VAT FRYER	120/1	13.5, 9.8	(2)20A–1P	1/2"C–2#12EA	AP–1:29,41	BY KES	SEE RMKS	EC TO CONN POWER TO RACEWAY FLA = 13.0 FRYER CONTROLS, 0.5 CAPTURE JET & 9.8 INDIVID. EXHAUST FAN INTERLOCK
079.26E2	2	VENTLESS HOOD COMBI OVEN	120/1	8.0	15A	1/2"C–2#12	AP–4:14,16	BY KES	SEE RMKS	EC TO EXTEND DEDICATED CIRCUIT TO 5–15R RECEPTACLE IN CHASE
085.05E1	1	FROZEN FRY DISPENSER	120/1	9.0	20A	1/2"C–2#12	AP–1:27	5–20R	4'–0"	–
091.02E1	1	WALL MOUNT FREEZER UNIT–SINGLE WIDE–HIGH CAPACITY	120/1	5.0	20A	1/2"C–2#12	AP–5:23	5–20R	7'–6"	–
094.01E1	1	UNIVERSAL EXHAUST HOOD 2–FULL–CLAM GRILLS	120/1	7.2, 13.8	(2)20A–1P	1/2"C–2#12	AP–2:13,17	BY KES	SEE RMKS	EC TO CONN. POWER TO RACEWAY FLA = (2) 3.6 GRILL CONTROLS & 13.8 INDIVID. EXHAUST FAN INTERLOCK
096.21E1	2	36" NEXT GEN 3–PLATEN CLAMSHELL GRILL – ELECTRIC	208/3	21.7, 43.3	(2)50A	1–1/2"C– 6#4	AP–3:(14,16,18)(20,22,24) AP–4:(1,3,5)(7,9,11)	BY KES	SEE RMKS	PLUGS IN RACEWAY RECEP WITH(1)L21–20P INTERLOCK& (2) 15–50P POWER PLUG EA GRILL
097.08E1	1	MEAT FREEZER – DOUBLE WIDE – HIGH CAPACITY – RIGHT HAND	120/1	7.0	20A	1/2"C–2#12	AP–2:19	5–15R	SEE RMKS	UNIT PLUGS INTO RACEWAY RECEPTACLE
110.01E1	1	OPTIMIZED BREAKFAST TABLE	–	–	–	–	AP–5:9	–	5'–6"	PLUGS INTO OVERHEAD RECEPTACLE # 320C4W(Y) PROVIDED BY KES– HEIGHT TO BOTTOM OF RECEPTACLE
114.00E1	1	HUMIDIFIED HOLDING CABINET	208/1	9.1	20A	1/2"C–2#12	AP–5:(34,36)	SEE RMKS	5'–6"	PLUGS INTO OVERHEAD RECEPTACLE # 320C6W(B) PROVIDED BY KES – HEIGHT TO BOTTOM OF RECEPTCLE
116.23E4	2	UNIVERSAL HOLDING CABINET – HIGH DENSITY – 2–SIDED – PIN & SLEEVE	208/1	15.2	20A	1/2"C–2#12	AP–5:(4,6)(8,10)	BY KES	5'–6"	PLUGS INTO OVERHEAD RECEPTACLE # 320C6W(B) PROVIDED BY KES – HEIGHT TO BOTTOM OF RECEPTCLE
117.30E1	1	UHC TABLE COPL – 2 SIDED – 51"D x 34"W – PIN&SLEEVE	120/1	2.0	20A	1/2"C–2#12	AP–5:12	BY KES	5'–6"	PLUGS INTO OVERHEAD RECEPTACLE # 320C4W(Y) PROVIDED BY KES– HEIGHT TO BOTTOM OF RECEPTACLE
118.00E1	1	Q'ING OVEN – PIN & SLEEVE	208/1	15.4	20A	1/2"C–2#12	AP–2:(38,40)	SEE RMKS	5'–6"	PLUGS INTO OVERHEAD RECEPTACLE # 320C6W(B) PROVIDED BY KES– HEIGHT TO BOTTOM OF RECEPTACLE
118.03E1	2	Q'ING OVEN – PIN & SLEEVE	208/1	14.9	20A	1/2"C–2#12	AP–2:(18,20)(28,30)	SEE RMKS	5'–6"	PLUGS INTO OVERHEAD RECEPTACLE # 320C6W(B) PROVIDED BY KES– HEIGHT TO BOTTOM OF RECEPTACLE
122.27E1	1	NEXT GEN. UNIVERSAL RADIANT TOASTER –PIN & SLEEVE	208/1	25.2	30A	1/2"C–2#10	AP–5:(27,29)	SEE RMKS	5'–6"	PLUGS INTO OVERHEAD RECEPTACLE # 330C6W(B) PROVIDED BY KES– HEIGHT TO BOTTOM OF RECEPTACLE
122.28E2	1	NEXT GEN. UNIVERSAL CONTACT TOASTER –PIN & SLEEVE	208/1	25.2	30A	1/2"C–2#10	KES BREAKER PANEL	SEE RMKS	SEE RMKS	PLUGS INTO KES RACEWAY RECEPTACLE
123.36E1	1	ECU TABLE – COPL	208/1	4.9	15A	SEE RMKS	KES BREAKER PANEL	SEE RMKS	SEE RMKS	PLUGS INTO KES OUTLET CHASE.
123.37E1	1	BREAKER PANEL– 125 AMP – 1 PHASE – EQUIPMENT MOUNTED	120–208/1	SEE RMKS	125A	1–1/2C"–3#1	MDP:11	–		EC TO EXTEND AND CONNECT ELECTRICAL SERVICE. HARDWIRE TO KES BREAKER PANEL.
123.40E1	1	PREP TABLE – HD – 2–SIDED COPL – 38"D x 83 1/2" – PIN & SLEEVE W/ REF.	120/1	10.0	20A	SEE RMKS	KES BREAKER PANEL	SEE RMKS	SEE RMKS	PLUGS INTO KES OUTLET CHASE.
125.00E2	2	RAPID BUN STEAMER	208/1	14.3	30A	1/2"C–2#10	KES BREAKER PANEL	SEE RMKS	SEE RMKS	PLUGS INTO KES RACEWAY RECEPTACLE
130.00E3	2	COMBI OVEN	208/3	15.1	30A	1/2"C–3#10	AP–4:(2,4,6)(8,10,12)	BY KES	SEE RMKS	EC TO EXTEND CIRCUIT TO L430R9 RECEPTACLE IN CHASE
146.00E1	1	BUTTER WARMER	120/1	0.5	20A	1/2"C–2#12	AP–5:9	BY KES	SEE RMKS	PLUGS INTO EQUIPMENT–MOUNTED RECEPTACLE
152.09E1	1	WAREWASHER – HIGH TEMP	208/3	29.4, 22.3	40A, 30A	3/4"C–3#8, 1/2"C–3#10	AP–5(31,33,35)(37,39,41)	SEE RMKS	SEE RMKS	EC TO SUPPLY 30A & 60A–3P NF DISC SW HANDLE HGT. MTD @ 6'–7" AFF PER NEC 404.8(A). LABEL "WAREWASHER (# OF 2)" IF HOBART IS ORDERED USE (2) 30A BRKRS
163.02E1	4	REMOTE ANSUL PULL	–	–	–	–	–	JB	SEE DETAILS	4" OCTAGONAL, RACO #165 OR EQUAL MUST BE USED.
171.01E1	1	WALK–IN COOLER / FREEZER FLOORLESS	120/1	10.0	20A	1/2"C–2#12	AP–2:14,16	JB	FLUSH ON CLG	JB FOR LIGHTS &]DOOR HEATER– UNSWITCHED LIGHT TO BE IN BOTH COOLER & FREEZER,EC TO CONNECT POWER
171.01E2	1	WALK–IN COOLER / FREEZER FLOORLESS	–	–	–	–	–	–	VIF	EC TO FURNISH & INSTALL CONDUIT,WIRE & LIGHT FIXTURES& OTHER DEVICES INSIDE COOLER/FREEZER BOX
174.48E1	1	REMOTE CONDENSING UNIT	208/1	17.6	25A	1/2"C–2#10	AP–5(38,40)	JB	VIF	EC TO PROVIDE 30A–2P NF DISC AT UNIT ON ROOF. CIRCUIT BREAKERS TO BE HARC RATED.
174.48E2	1	REMOTE CONDENSING UNIT	LOW VOLT WIRES	–	–	–	–	–	VIF	–
174.50E1	1	REMOTE CONDENSING UNIT	208/3	22.4	50A	1"C–3#6	MDP:15	JB	VIF	EC TO PROVIDE 60A–3P NF DISC AT UNIT ON ROOF. CIRCUIT BREAKERS TO BE HARC RATED.
174.50E2	1	REMOTE CONDENSING UNIT	LOW VOLT WIRES	–	–	–	–	–	VIF	–
175.22E1	1	COOLER EVAPORATOR	208/1	1.2	15A	1/2"C–2#12	AP–6:(10,12)	JB	FLUSH ON CLG	–
175.22E2	1	COOLER EVAPORATOR	LOW VOLT WIRES	–	–	–	–	–	FLUSH ON CLG	L V WIRES CONN UNIT TO EVAPS & SHALL BE ROUTED SEPARATELY FROM POWER CONDUCTORS
176.31E1	1	FREEZER EVAPORATOR	208/1	12.0	15A	1/2"C–2#12	AP–6:(14,16)		FLUSH ON CLG	
176.31E2	1	FREEZER EVAPORATOR	LOW VOLT WIRES	–	–	–	–	–	FLUSH ON CLG	L V WIRES CONN UNIT TO EVAPS & SHALL BE ROUTED SEPARATELY FROM POWER CONDUCTORS
177.03E2	1	REACH–IN REFRIGERATOR–SINGLE WIDE	120/1	2.7	20A	1/2"C–2#12	AP–2:31	SEE RMKS	SEE RMKS	EC TO EXTEND CIRCUIT TO 5–20R RECEPTACLE IN CHASE
178.05E1	2	REACH–IN FREEZER–SINGLE WIDE	120/1	11.0	20A	1/2"C–2#12	AP–1:25,30	5–20R	7'–6"	–
181.13E1	1	REFRIGERATOR – SPECIALTY COFFEE– 27" WIDE	120/1	3.9	20A	1/2"C–2#12	AP–2:22	BY KES	SEE RMKS	EC TO EXTEND CIRCUIT TO 5–20R RECEPTACLE IN CHASE
181.14E1	1	REFRIGERATOR – WORK TOP – 48" WIDE	120/1	5.0	20A	1/2"C–2#12	AP–2:8	5–20R	2'–0"	–
183.00E1	2	REFRIGERATOR/FREEZER – 2 DRAWER BASE – 30" W X 33" H	120/1	5.0	20A	1/2"C–2#12	AP–5:1,15	5–20R	2'–0"	–
183.02E1	1	REFRIGERATOR/FREEZER – 2 DRAWER BASE – 30" W X 30" H	120/1	5.0	20A	1/2"C–2#12	AP–5:3	5–20R	2'–0"	–
183.02E2	2	REFRIGERATOR/FREEZER – 2 DRAWER BASE – 30" W X 30" H	120/1	5.0	20A	1/2"C–2#12	AP–5:5,7	BY KES	SEE RMKS	EC TO EXTEND CIRCUIT TO 5–20R RECEPTACLE IN CHASE
183.02E4	1	REFRIGERATOR/FREEZER – 2 DRAWER BASE – 30" W X 30" H	120/1	5.0	20A	1/2"C–2#12	AP–5:9	BY KES	SEE RMKS	PLUGS INTO EQUIPMENT–MOUNTED RECEPTACLE
196.06E1	1	SAFE – STANDARD BLDG.	120/1	1.0	20A	1/2"C–2#12	AP–1:7	5–20R	2'–0"	PROVIDE LOCKOUT TYPE CB

SF: 1.00 BH JN: H:\26010.23 FN: E3.0_241342–PECULAR MO–ROUGH IN SCHEDULE

PB = Pullbox
JB = Junction Box
EC = Electrical Contractor
VIF = Verify in Field

ELECTRICAL SCHEDULE

TAG #	QTY	DESCRIPTION	VOLT/PH	FLA	BRK SIZE	COND/WIRE	PNL/CCT	RECEP TYPE	HGT AFF	REQUIREMENTS & REMARKS
197.01E1	1	HAND WASH TIMER	120/1	0.1	20A	1/2"C–2#12	AP–1:33	5–20R	4'–6"	–
203.01E1	1	HEAT TREAT COMBINATION SHAKE/SUNDAE MACHINE	208/3	13.0	30A	3/4"C–3#8	AP–1:(18,20,22)	4x4x4 PB	1'–0"	RECEP #A460R9 BY KES, IF TAYLOR C602 IS ORDERED USE A 40A BRKR & #6 CONDUCTORS –EC MAKES FINAL CONN
205.08E1	1	BIC MACHINE	120/1	8.6	20A	1/2"C–2#12	AP–2:29	BY KES	SEE RMKS	EC TO EXTEND DEDICATED CIRCUIT TO 5–20R RECEPTACLE IN CHASE
205.09E2	1	FROZEN BEVERAGE DISPENSER	208/1	20.0	30A	1/2"C–2#10	AP–5:(17,19)	SEE RMKS	SEE RMKS	RECEP L6–30R IN CHASE BY KES, EC MAKES FINAL CONN
207.01E2	1	BLENDER – MCFLURRY – RAIL MOUNT	120/1	1.2	20A	1/2"C–2#12	AP–2:7	5–20R	4'–0"	
211.00E6	1	DELIVERY TABLETS	120/1	3.0	20A	1/2"C–2#12	AP–5:21	(2) 5–20R	5'–6"	–
214.02E1	1	82" 44U STATIONARY RACK	120/1 ISOLATED	5.0	20A	1/2"C–2#12IG	CP:11	IG4700	2'–0"	FOR NETWORK HARDWARE (GATEWAY/CONTROLLER, SWITCHES & HUBS)
214.02E3	1	82" 44U STATIONARY RACK	120/1 ISOLATED	10.0	20A	1/2"C–2#12IG	CP:15	IG4700	2'–0"	FOR POS SYSTEM SERVERS
214.02E4	1	82" 44U STATIONARY RACK	120/1 ISOLATED	12.0	20A	1/2"C–2#12IG	CP:17	IG2310	4'–0"	FOR OTHER POS SYSTEM & BACK OFFICE HARDWARE
214.02E5	1	82" 44U STATIONARY RACK	DATA CABLE	–	–	–	–	8x6x4 PB	7'–6"	EXTEND (2) 2 1/2" CONDUIT ABOVE CLG. W/BUSHING FOR DATA CABLES
214.02E6	1	82" 44U STATIONARY RACK	120/1 ISOLATED	14.0	30A	1/2"C–2#10IG	CP:12	IG2610	3'–0"	FOR POS SYSTEM UPS
215.00E12	1	POS REGISTER – FRONT COUNTER	120/1 ISOLATED	3.0 EA.	–	3/4"C–2#12IG	CP:19	IG4700	SEE RMKS	PROVIDE IG RECEP. IN COUNTER–MOUNTED RACEWAY
215.00E3	1	POS REGISTER – FRONT COUNTER	DATA CABLE	–	–	–	–	4x4x4 PB	10"	EXTEND 2" CONDUIT TO ABOVE CEILING FOR POS DATA CABLES
215.02E1	1	POS REGISTER – 2 WINDOW D/T	120/1 ISOLATED	3.0 EA.	SEE RMKS	1/2"C–2#12IG	SEE REMARKS	(2)IG4700	2'–5"	IN ORDER BOOTH, CONNECT TO CP:7 – IF INCLUDED IN PRESENTERS BOOTH, CONNECT TO CP:8
215.02E10	2	POS REGISTER – 2 WINDOW D/T	120/1 ISOLATED	3.0 EA.	20A	1/2"C–2#12IG	CP:1	BY KES	SEE RMKS	EC TO EXTEND CIRCUIT TO IG4700 RECEPTACLE IN CHASE
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.
215.02E13	1	POS REGISTER – 2 WINDOW D/T	–	–	–	–	–	4x4x4 PB	10"	EXTEND 1 1/2"C. UNDER SLAB TO 217.11E1 AND 2 1/2" C. TO ABOVE CEILING FOR POS DATA CABLES
215.02E17	1	POS REGISTER – 2 WINDOW D/T	–	–	–	–	–	4x4x4 PB	10"	EXTEND 1 1/2"C. UNDER SLAB TO 217.11E1 AND 2 1/2" C. ABOVE TO 215.02E18
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
215.04E1	2	POS – KVS MONITOR	120/1 ISOLATED	1.5 EA.	20A	1/2"C–2#12IG	CP:8	IG4700	FLUSH ON CLG	–
215.04E4	2	POS – KVS MONITOR	120/1 ISOLATED	1.5	20A	1/2"C–2#12IG	CP:26	SEE RMKS	SEE RMKS	EC TO EXTEND CIRCUIT TO IG4700 RECEPTACLE IN OEP
215.04E5	2	POS – KVS MONITOR	120/1 ISOLATED	1.5 EA.	20A	1/2"C–2#12IG	CP:3	SEE RMKS	SEE RMKS	EC TO EXTEND CIRCUIT TO IG4700 RECEPTACLE IN CHASE
215.04E7	3	POS – KVS MONITOR	120/1 ISOLATED	1.5 EA.	20A	1/2"C–2#12IG	CP:23	IG4700	5'–6"	–
215.04E8	1	POS – KVS MONITOR	DATA CABLE	–	–	–	–	4x4x4 PB	4'–0"	EXTEND 2" CONDUIT ABOVE CEILING. CABLE FURNISHED AND INSTALLED BY POS SYSTEM SUPPLIER
215.07E1	1	POS REGISTER – DELIVERY	120/1 ISOLATED	3.0	20A	1/2"C–2#12IG	CP:23	IG4700	3'–6"	
215.07E3	1	POS REGISTER – DELIVERY	DATA CABLE	–	–	–	–	4x4x4 PB	3'–6"	EXTEND 2" CONDUIT TO ABOVE CEILING FOR POS DATA CABLES
216.00E13	2	POS – VIDEO MONITOR	120/1 ISOLATED	1.5 EA.	20A	1/2"C–2#12IG	CP:3	SEE RMKS	SEE RMKS	EC TO EXTEND CIRCUIT TO IG4700 RECEPTACLE IN CHASE
216.00E14	4	POS – VIDEO MONITOR	120/1 ISOLATED	1.5 EA.	20A	1/2"C–2#12IG	CP:9	IG4700	SEE RMKS	EXTEND CONDUIT DOWN GRILL HOOD SHROUD AND PROVIDE IG4700 RECEPTACLE
216.00E7	3	POS – VIDEO MONITOR	120/1 ISOLATED	1.5 EA.	20A	1/2"C–2#12IG	CP:1	BY KES	SEE RMKS	EC TO EXTEND CIRCUIT TO IG4700 RECEPTACLE IN CHASE
217.03E4	1	POS – COD OPTICAL ISOLATOR	120/1 ISOLATED	1.0	20A	1/2"C–2#12IG	CP:14	IG5262	7'–6"	–
217.10E1	2	REMOTE DETECTOR LOOP	–	–	–	–	–	–	–	1 1/2"CONDUIT–CONN TO PULLBOX#215.03E5,215.01E4, OR 215.02E12 PER DRIVE–THRU CONFIG–SEE SITE PLAN
217.11E1	2	DETECTOR LOOP	–	–	–	–	–	–	–	1 1/2"CONDUIT–CONN TO PULLBOX#215.02E5,215.02E13, OR 215.02E4 PER DRIVE–THRU CONFIG–SEE SITE PLAN
217.13E1	1	MERGE POINT MONITOR (DOUBLE DRIVE THRU)	120/1	2.0	20A	1/2"C–2#12	AP–1:11	5–20R	3'–6"	DO NOT POWER FROM POS CIRCUIT
217.13E2	2	MERGE POINT MONITOR (DOUBLE DRIVE THRU)	120/1	2.0	20A	1/2"C–2#12	AP–1:11	BY KES	SEE RMKS	EC TO EXTEND CIRCUIT TO 5–20R RECEPTACLE IN CHASE
217.14E1	1	POS– VIDEO MONITOR (DOUBLE DRIVE THRU)	120/1 ISOLATED	1.5	SEE RMKS	1/2"C–2#12IG	CP:7	IG4700	3'–6"	–
217.18E1	3	HAND HELD ORDER TAKER AND MANAGEMENT OF SHIFT EQUIPMENT	120/1	5.0	20A	1/2"C–2#12	AP–1:15	5–20R	4'–6"	–
217.19E2	1	WIRELESS HEADSET BASE STATION	120/1 ISOLATED	1.9	20A	1/2"C–2#12IG	CP:1	IG4700	4'–6"	
217.19E3	1	WIRELESS HEADSET BASE STATION	DATA CABLE	–	–	–	–	4x4x4 PB	5'–0"	
217.24E1	1	DANGER POINT MONITOR (DOUBLE DRIVE–THRU)	120/1	2.0	20A	1/2"C–2#12	AP–1:11	5–20R	8'–0"	DO NOT POWER FROM POS CIRCUIT
217.26E1	1	ZOOM TIMER	120/1 ISOLATED	6.0	20A	1/2"C–2#12IG	CP:10	(2) IG4700	7'–6"	–
217.26E2	1	ZOOM TIMER	DATA CABLE	–	–	–	–	JB	7'–6"	JB W/ 1–1/2" C. TO TERMINATE ABOVE CEILING W/BUSHINGS. FOR DATA CABLES. SUPPLY W/ GROMMETED OPENING IN COVER PLATE
219.00E10	1	POS – RECEIPT PRINTER	120/1 ISOLATED	0.7	20A	3/4"C–2#12IG	SEE RMKS	IG4700	SEE RMKS	PROVIDE IG RECEP. IN COUNTER–MOUNTED RACEWAY, POWER FROM SAME CIRCUIT AS 215.00E12
219.00E3	1	POS – RECEIPT PRINTER/CASHLESS	120/1 ISOLATED	0.7	20A	1/2"C–2#12IG	CP:4	IG4700	2'–0"	–
219.00E7	2	POS – RECEIPT PRINTER	120/1 ISOLATED	0.7	20A	1/2"C–2#12IG	CP:3	BY KES	SEE RMKS	EC TO EXTEND IG CIRCUIT TO IG4700 RECEPTACLE IN KES OUTLET CHASE.
219.05E1	1	STICKY LABEL PRINTER	120/1 ISOLATED	0.7	20A	1/2"C–2#12IG	CP:3	BY KES	SEE RMKS	EC TO EXTEND IG CIRCUIT TO IG4700 RECEPTACLE IN KES OUTLET CHASE.
219.05E2	1	STICKY LABEL PRINTER	120/1 ISOLATED	0.7	20A	1/2"C–2#12IG	CP:1	BY KES	SEE RMKS	EC TO EXTEND IG CIRCUIT TO IG4700 RECEPTACLE IN CHASE
219.05E3	1	STICKY LABEL PRINTER	120/1 ISOLATED	0.7	20A	1/2"C–2#12IG	CP:3	IG4700	3'–2"	–
219.05E6	2	STICKY LABEL PRINTER	120/1 ISOLATED	0.7	20A	1/2"C–2#12IG	CP:3	IG4700	FLUSH ON CLG	–
219.06E1	1	LABELING SYSTEM	120/1 ISOLATED	2.0	20A	1/2"C–2#12IG	CP:8	IG5261	2'–0"	–
220.00E1	1	POS – COIN DISPENSER	120/1 ISOLATED	0.75	20A	1/2"C–2#12IG	CP:7	IG4700	2'–0"	–
221.09E1	1	O/O EQUIPMENT RACK	120/1 ISOLATED	4.0	20A	1/2"C–2#12IG	CP:31	IG5262	8'–0"	–
221.09E2	1	O/O EQUIPMENT RACK	DATA CABLE	–	–	2" C	–	4x4x4 PB	8'–0"	EXTEND 2" CONDUIT ABOVE CLG. W/ BUSHING FOR DATA CABLES
222.01E1	1	TIME CLOCK	120/1 ISOLATED	0.5	20A	1/2"C–2#12IG	CP:28	IG4700	4'–0"	–
222.01E2	1	TIME CLOCK	DATA CABLE	–	–	–	–	JB	4'–0"	EXTEND 1" CONDUIT ABOVE CEILING
223.07E1	1	WASHER	120/1	8.0	15A	1/2"C–2#12	AP–1:13	5–15R	3'–6"	–
225.03E3	2	OFFICE PACKAGE/DESK UNIT	120/1 ISOLATED	10.0	20A	1/2"C–2#12IG	CP:20,22	IG5262	4'–6"	FOR MONITOR, PRINTER AND THIN CLIENT
225.03E4	1	OFFICE PACKAGE/DESK UNIT	DATA CABLE	–	–	–	–	4x4x4 PB	4'–6"	EXTEND 2 1/2" CONDUIT ABOVE CLG. W/BUSHING FOR DATA CABLE
226.00E2	1	CREW MICROWAVE & REFRIGERATOR	120/1	10.0	20A	1/2"C–2#12	AP–6:26	5–20R	1'–6"	EC TO PROVIDE DEDICATED CIRCUIT FOR CREW MICROWAVE AND REFRIGERATOR
226.09E2	1	CREW SMART LOCKERS	120/1	1.7	20A	1/2"C–2#12	AP–6:28	5–20R	2'–0"	–
237.00E2	1	PIE DISPLAY	120/1	4.7	20A	1/2"C–2#12	AP–5:24	5–20R	5'–5"	–
237.00E4	1	PIE DISPLAY	120/1	4.7	20A	1/2"C–2#12	AP–5:26	BY KES	SEE RMKS	EC TO EXTEND CIRCUIT TO KES OUTLET IN CHASE
700.07E1	1	WATER HEATER – GAS	120/1	4.0	20A	1/2"C–2#12	AP–2:11	JB	SEE RMKS	EC TO VERIFY JB HEIGHT IN FIELD – EC TO PROVIDE PADLOCKABLE DEVICE AT CCT BRKR PER NEC 422.31
700.09E1	1	ECONOMY OEP BOX W/MOUNTING HARDWARE	–	–	–	–	–	BY KES	SEE RMKS	CEILING MOUNTED
700.10E1	1	BULK OIL SYSTEM	120/1	7.2, 10.0	(2) 20A	1/2"C– 2#12	AP–2:15,27	(2)5–20R	8'–0"	PROVIDE DOUBLE DUPLEX WALL PLATE. FOR OIL PUMP AND RECIRCULATION HEATING SYSTEM
700.10E2	1	BULK OIL SYSTEM	120/1	6.9	20A	1/2"C–2#12	AP–5:25	5–20R	1'–6"	FOR GRILL GREASE PUMP
700.10E3	1	BULK OIL SYSTEM	PHONE BOX	–	–	–	–	RJ–11C JACK	8'–0"	TELEPHONE LINE FOR TELEMETRY SYSTEM
700.11E1	1	OEP UTILITY PANEL W/ MOUNTING HARDWARE – STATIC BOX	–	–	–	–	–	–	SEE RMKS	SUPPLIED WITH RECEPTACLES,ITEM MOUNTS ON CEILING
701.01E1	2	HAND DRYER	120/1	9.1	20A	1/2"C–2#12	AP–6:2,4	JB	SEE RMKS	INSTALL JB AT A MOUNTING HGT. THAT RESULTS IN DRYER BOTTOM EDGE TO BE AT 44" AFF.
701.13E1	3	DCO – GENERAL PURPOSE	120/1	1.5	20A	1/2"C–2#12	AP–1:5	5–20R	4'–6"	CONTROL VIA CONTACTOR PANEL. PERMANENTLY MARK RECEP.
701.13E14	2	DCO – GENERAL PURPOSE	120/1	1.7	20A	1/2"C–2#12	AP–1:1	5–20R	4'–6"	CONTROL VIA CONTACTOR PANEL. PERMANENTLY MARK RECEP. PROVIDE USB CHARGER RECEP., HUBBELL USB20X2* AND DEEP BOX AS REQ.
701.13E18	1	DCO – GENERAL PURPOSE	120/1	1.5	20A	1/2"C–2#12	AP–1:3	5–20R	4'–6"	–
701.13E19	1	DCO – GENERAL PURPOSE	120/1	1.7	20A	1/2"C–2#12	AP–1:1	5–20R	1'–6"	CONTROL VIA CONTACTOR PANEL. PERMANENTLY MARK RECEP. PROVIDE USB CHARGER RECEP., HUBBELL USB20X2* AND DEEP BOX AS REQ.
701.13E2	2	DCO – GENERAL PURPOSE	120/1	1.7	20A	1/2"C–2#12	AP–1:1	5–20R	3'–6"	CONTROL VIA CONTACTOR PANEL. PERMANENTLY MARK RECEP. PROVIDE USB CHARGER RECEP., HUBBELL USB20X2* AND DEEP BOX AS REQ.
701.13E3	3	DCO – GENERAL PURPOSE	120/1	1.5	20A	1/2"C–2#12	AP–2:6	5–20R	1'–6"	–
701.13E4	2	DCO – GENERAL PURPOSE	120/1	3.0	20A	1/2"C–2#12	AP–1:3	(2) 5–20R	FLUSH ON CLG	PROVIDE DOUBLE DUPLEX WALL PLATE
701.13E9	4	DCO – GENERAL PURPOSE	120/1	1.5	20A	1/2"C–2#12	AP–2:42	5–20R	1'–6"	–
701.14E1	1	TELEPHONE	PHONE BOX	–	–	–	–	RJ–11C JACK	4'–6"	–
701.14E3	1	TELEPHONE	PHONE BOX	–	–	–	–	RJ–11C JACK	3'–6"	–
701.15E1	1	DOOR BUZZER	120/1	.5	20A	1/2"C–2#12	LP–1:16	–	8'–0"	CONNECT TRANSFORMER TO POWER & ROUTE LOW VOLTAGE WIRES OVERHEAD TO DOOR BUTTON

(SCHEDULE CONTINUED ON NEXT SHEET)

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STATE OF MISSOURI
GREGORY L. DOFFIN
NUMBER PE-2015022305
PROFESSIONAL ENGINEER
SIGNATURE
09/02/2026 DATE
12/31/2027 EXPIRATION DATE
COVERING ELECTRICAL DESIGN

STATE ID: 241342
PROJECT #: 26-125
NATIONAL #: 46237
DRAWN BY: DEI
CHECKED BY: GD/RS

DATE:
07/15/2026 - PERMIT / BID SET

REVISIONS
1 09/08/2026 - DECOR UPDATE / PLUMBING & CIVIL COORDINATION

CLIENT
McDonald's USA, LLC

PROTOTYPE
BB20 4590 WW-HB
ISSUE DATE 06/26

ADDRESS
600 SCHUG AVENUE
PECULIAR, MO, 64078

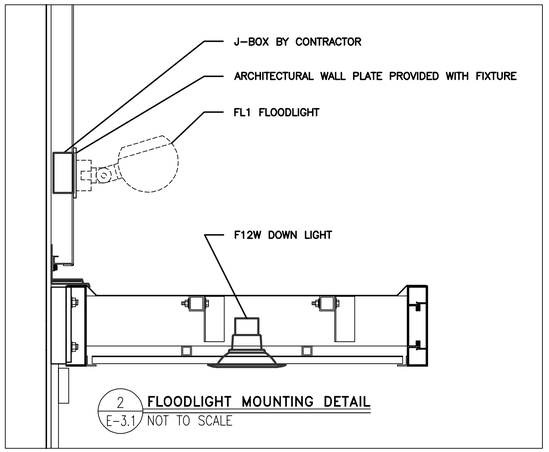
SHEET TITLE
ROUGH-IN SCHEDULE

SHEET NUMBER:
E3.0

PB = Pullbox VIF = Verify in Field
JB = Junction Box
EC = Electrical Contractor

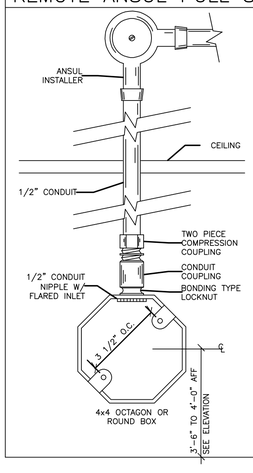
ELECTRICAL SCHEDULE

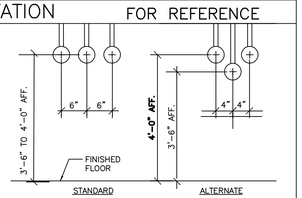
TAG #	QTY	DESCRIPTION	VOLT/PH	FLA	BRK SIZE	COND/WIRE	PNL/CCT	RECEP TYPE	HGT AFF	REQUIREMENTS & REMARKS
701.27E1	1	DCO–SATELLITE MUSIC SYSTEM	120/1	1.0	20A	1/2"C–2#12	AP–5:30	(2) 5–20R	3'–0"	PROVIDE DOUBLE DUPLEX WALL PLATE
701.32E1	1	REMOTE ORDER TAKER BATTERY PACK	120/1	2.0	20A	1/2"C–2#12	AP–1:9	(2) 5–20R	4'–6"	PROVIDE DOUBLE DUPLEX WALL PLATE. FIELD VERIFY HEIGHT AND LOCATION WITH ACM
701.34E1	1	ACCESS CONTROL PANEL	120/1	2.0	20A	1/2"C–2#12	LP–1:16	JB	8'–0"	ROUTE LOW VOLTAGE WIRES TO DOOR BUTTON, HORN AND DOOR STRIKE AS REQUIRED. SUPPLY WITH 4 RELAY CONTROL BOARD.



2 FLOODLIGHT MOUNTING DETAIL
E–3.1 NOT TO SCALE

REMOTE ANSUL PULL STATION FOR REFERENCE





ELEVATIONS

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

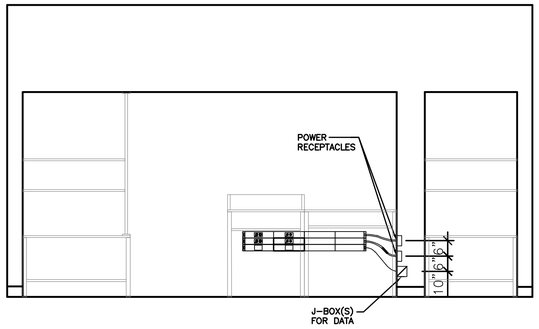
GENERAL ELECTRICAL NOTES:

POST CONSTRUCTION ENERGY CODE REQUIREMENTS:

PC1. EC SHALL FURNISH AS–BUILT DRAWINGS FOR ELECTRICAL POWER SYSTEMS WITHIN 30 DAYS OF SYSTEM ACCEPTANCE.

PC2. EC SHALL FURNISH O&M INSTRUCTIONS FOR SYSTEMS AND EQUIPMENT TO THE BUILDING OWNER OR DESIGNATED REPRESENTATIVE.

PC3. EC SHALL PROVIDE WRITTEN VERIFICATION THAT LIGHTING SYSTEMS HAVE BEEN TESTED TO ENSURE PROPER CALIBRATION, ADJUSTMENT, PROGRAMMING AND OPERATION.



SYMBOL	CATALOG #	DESCRIPTION
	HBLALU57DR & IG4700	RECEPTACLE COVERPLATE WITH ORANGE, TWIST LOCK, ISOLATED GROUND DUPLEX RECEPTACLE
	HBLALU57DR & 5–20R FOR BAKED GOODS AND IG5262 FOR CASH	RECEPTACLE COVERPLATE WITH STRAIGHT BLADE RECEPTACLE
	HBLALU57LPB	COMMUNICATIONS COVERPLATE
	HBLALU7620B02M290	2' SECTION OF RACEWAY. INCLUDES COUPLERS
	HBLALU7620B03M290	3' SECTION OF RACEWAY. INCLUDES COUPLERS
	HBLALU7610B2M2	SERVICE ENTRANCE FITTING & BUSHING FOR DATA CABLES
	HBLALU7610B	BLANK END FITTING
N/A	HBLALU5701	COUPLER (INCLUDED WITH RACEWAY SECTION)
N/A	HBLALU5709	GROUND ADAPTER

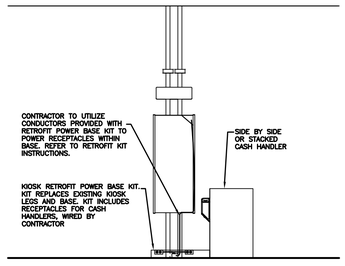
NOTES:
1. REFER TO SERVICE POD MANUFACTURER INSTRUCTIONS FOR EXACT PLACEMENT OF RACEWAY

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.

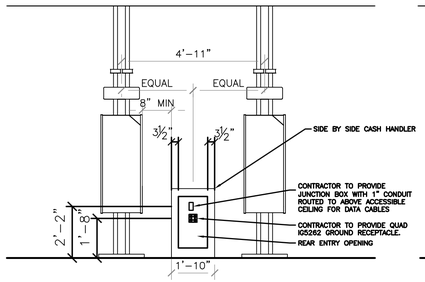
4. PART NUMBERS SHOWN REFLECT HUBBELL, SOME SUPPIERS MAY USE WIREMOLE EQUIVALENT.

1 SERVICE POD RACEWAY DETAIL
E–3.1 NOT TO SCALE



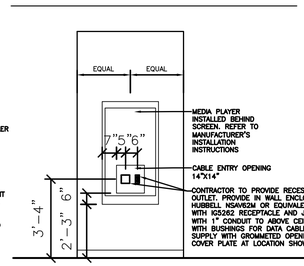
NOTES:
1. THIS EXAMPLE IS FOR A SIDE BY SIDE CASH HANDLER THAT DOES NOT HAVE A GC WALL BEHIND IT AND IS NEXT TO A KIOSK. IT IS ALSO INTENDED FOR ALL STACKED CASH HANDLERS.
2. EACH SIDE BY SIDE CASH HANDLER UTILIZES 3 PLUGS AND ADDS 4.4 AMPS OF LOAD TO THE KIOSK CIRCUIT.
3. EACH STACKED CASH HANDLER UTILIZED 2 PLUGS AND ADDS 3.6 AMPS OF LOAD TO THE KIOSK CIRCUIT.
4. ONLY 1 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 GC BUILT WALL.
2. EACH SIDE BY SIDE CASH HANDLER UTILIZES 3 PLUGS AND ADDS 4.4 AMPS OF LOAD.

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



NOTES:
1. THIS EXAMPLE IS FOR A WALL MOUNTED DIGITAL MERCHANDISER.

3 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, DCOs, 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 PJ8CO (ONE DUPLEX) OR PJ82CO (TWO DUPLEX) FROM HUBBELL.

M6. ROUGH–INS FOR OPTIONAL EQUIPMENT ARE SHOWN ON THESE SHEETS. EC SHALL VERIFY WITH McDONALD'S PROJECT MANAGER WHICH OPTIONAL EQUIPMENT IS TO BE INCLUDED AND INSTALL OPTIONAL ROUGH–INS AS REQUIRED. PRICING FOR OPTIONAL ROUGH–INS SHALL BE INCLUDED IN BID AND CALLED OUT AS OPTIONAL.

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. HUBBELL EDGE CONNECT IS APPROVED ALTERNATE.

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 208Y/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 10 PAIR (OR MORE) COPPER TELEPHONE CABLE FROM THE TELEPHONE UTILITY EASEMENT TO THE RESTAURANT TELEPHONE DEMARCATION POINT. IF THE TELEPHONE PANEL/BOX IS LOCATED INSIDE THE RESTAURANT, EC SHALL PROVIDE (2) EMPTY 3/4" CONDUITS FROM THE TELEPHONE PANEL/BOX UP TO ABOVE THE CEILING FOR FUTURE TELEPHONE CABLE INSTALLATION. ADDITIONALLY, THE EC SHALL PROVIDE AN EMPTY 3/4" CONDUIT FROM THE TELEPHONE PANEL/BOX TO THE LOCATION OF THE FUTURE INTERNET SERVER (VERIFY LOCATION WITH PM). EC SHALL CONNECT, INSTALL AND INCORPORATE ALL OTHER REQUIREMENTS NECESSARY FOR COMPLETE AND OPERATIONAL TELEPHONE SYSTEM(S) FOR THIS SITE. THE REMAINING UNUSED TELEPHONE CONDUCTOR PAIRS SHALL BE CAPPED AND LEFT IN PLACE FOR FUTURE USE. THE TELEPHONE PANEL/BOX SHALL BE GROUNDED AS SHOWN IN THE "BUILDING ELECTRICAL GROUNDING DETAIL."

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:

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

CONDUIT AND WIRE:

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 (SMURF–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)

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

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

1. EXPOSED: EMT, IMC.
2. CONCEALED: EMT, IMC.

(CONTINUED ON TOP)

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 COMPR. 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 COMPR. FTGS >2.5" IMC THREADED. FTGS	2" EMT COMPR. FTGS < >2.5" IMC THREADED. FTGS	EMT COMPR. FTGS
NON AIR HANDLING CEILING/SPACE	<2" EMT SET SCREW FTGS >2.5" IMC THREADED. FTGS	<2" EMT COMPR. FTGS >2.5" IMC THREADED. FTGS	EMT 1/2" – 2" SET SCREW FTGS 2.5"– 4" COMPR. FTGS
BELOW GRADE			
INTERIOR	IMC THREADED FTGS OR SCHEDULE 40 OR 80 PVC	IMC THREADED FTGS	IMC THREADED FTGS SCHEDULE 40 OR 80 PVC
EXTERIOR	SCHEDULE 40 OR 80 PVC OR RMC THREADED FTGS	SCHEDULE 40 OR 80 PVC OR RMC THREADED FTGS	SCHEDULE 40 OR 80 PVC OR RMC THREADED FTGS

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 GROUNDING CONDUCTOR CONTAINED WITHIN THE SAME CONDUIT AS THE PHASE CIRCUIT CONDUCTORS AND SIZED PER NEC SECTION 250 REQUIREMENTS. THIS INSULATED EQUIPMENT GROUNDING CONDUCTOR SHALL HAVE ONE END PROPERLY TERMINATED AT THE EQUIPMENT GROUND BUS IN THE CORRESPONDING CIRCUIT BREAKER PANEL, AND THE OTHER END TERMINATED AT THE GROUNDING CONTACT OF A GROUNDING RECEPTACLE AND TO THE JUNCTION BOX OR TO AN EQUIPMENT CABINET, AS APPLICABLE. THE SECOND METHOD PROVIDES EQUIPMENT GROUNDING VIA METALLIC CONDUIT THAT IS CONNECTED AND TERMINATED IN FITTINGS LISTED FOR GROUNDING PER NEC SECTION 250 REQUIREMENTS. BOTH GROUNDING METHODS ARE REQUIRED IN A MCDONALD'S RESTAURANT. ISOLATED GROUND SHALL BE INSTALLED WHERE INDICATED ON PLAN AND AS SHOWN IN POS ISOLATED GROUND/DEDICATED CIRCUIT DETAIL ON SHEET E4.2.

G2. THE BUILDING GROUNDING SYSTEM SHALL COMPLY WITH NEC ARTICLE 250, McDONALD'S SPECIFICATIONS, AND SHEET E4.2. CAUTION: IT IS A SAFETY HAZARD AND AN NEC VIOLATION TO HAVE ANY NEUTRAL TO GROUND CONNECTIONS BEYOND THE MAIN ELECTRICAL DISCONNECT MEANS. McDONALD'S GROUNDING STANDARDS PURPOSELY EXCEED THOSE GIVEN BY THE NEC. THE EC SHALL PROVIDE A BUILDING GROUNDING SYSTEM MEETING NEC SECTION 250 REQUIREMENTS AS WELL AS MCDONALD'S STANDARDS.

G3. EC SHALL REFER TO "POS ISOLATED GROUND/DEDICATED CIRCUIT DETAIL, SHEET E4.2, FOR REQUIRED WIRING REQUIREMENTS OF COMPUTER PANEL CP.

G4. METAL RACEWAYS CONTAINING A GROUNDING ELECTRODE 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'–0" TO 4'–6" AFF.

T2. SEE DETAIL ON SHEET M3.0. FOR SENSOR MOUNTING DETAIL. LOCATION OF WALL MOUNTED TEMPERATURE SENSORS ARE SHOWN ON SHEET M1.2 AND E2.0.

T3. WHEN WIRING FOR PROGRAMMABLE THERMOSTATS AND REMOTE SENSORS IS NOT IN A CONDUIT, THE WIRING SHALL BE RUN TO THE UNDERSIDE OF THE ROOF DECK. NONE OF THE WIRING SHALL BE ROUTED OVER FLUORESCENT BALLASTS, POWER BOXES OR IN A CONDUIT WITH LINE VOLTAGE WIRING AS ELECTRICAL INTERFERENCE (NOISE) WILL CAUSE ERRATIC CONTROL OPERATION. ALL THERMOSTATS SHALL BE MOUNTED 4'–0" AFF.

FLAT PANEL TELEVISIONS:

TV1. EC SHALL PROVIDE A DUPLEX RECEPTACLE AND A LOW VOLTAGE BROADBAND CONNECTION FOR THE INSTALLATION OF FLAT PANEL TELEVISIONS. COORDINATE EXACT LOCATIONS WITH DECOR COMPANY. FOR BROADBAND CONNECTION, EC SHALL PROVIDE A 4 X 4 BOX WITH A 3/4" CONDUIT STUB–UP WITH A BUSHING INTO ACCESSIBLE CEILING SPACE.

ELECTRICAL PANELS:

E1. THE EC SHALL BE RESPONSIBLE FOR BALANCING THE LOADS ON ALL PANELS.

E2. THE EC SHALL PROVIDE ELECTRICAL SERVICE TO THE EQUIPMENT MOUNTED BREAKER PANEL. SEE ELECTRICAL ROUGH–IN PLAN AND SCHEDULE FOR ALL REQUIREMENTS.

E3. THE EC SHALL BE RESPONSIBLE FOR THE PROPER IDENTIFICATION AND LABELING OF ALL CIRCUIT BREAKERS. EACH PANEL SHALL BE PROVIDED WITH AN ACCURATE TYPEWRITTEN CIRCUIT DIRECTORY AT THE CONCLUSION OF THE PROJECT AND PRIOR TO RESTAURANT OPENING.

SECURITY AND DRIVE–THRU CAMERAS:

S1. EC TO PROVIDE ELECTRICAL POWER AND COMMUNICATION CONDUITS FOR BUILDING MOUNTED SECURITY AND DRIVE THRU CAMERAS. COORDINATE FINAL LOCATIONS WITH SECURITY AND DRIVE THRU CAMERA INSTALLERS.

LIGHTING:

L1. PROVIDE A WEATHERPROOF JUNCTION BOX IN PARAPET FOR FASCIA SIGN. FINAL CONNECTION BY OTHERS.

L2. COORDINATE THE LOCATION OF JUNCTION BOX (IN THE WALL) WITH THE OPENING IN TRELLIS (FOR THE LIGHT FIXTURE WIRES). THE LOCATION OF THE JUNCTION BOX AND THE OPENING IN THE TRELLIS SHALL BE ALIGNED FOR THE LIGHT FIXTURE TO BE INSTALLED PROPERLY. COORDINATE INSTALLATION OF JUNCTION BOX AND ANY NECESSARY OPENINGS IN TRELLIS WITH GC AND TRELLIS/CANOPY MANUFACTURER. SEE LIGHT FIXTURE INSTALLATION INSTRUCTIONS FOR REQUIREMENTS REGARDING MOUNTING BRACKETS FOR USE IN C–CHANNEL TRELLISES.

L3. EC SHALL FIELD VERIFY THAT LIGHT FIXTURES DO NOT OBSTRUCT OR CONFLICT WITH THE WORK OF OTHER TRADES. IF A DISCREPANCY IS FOUND, THE EC SHALL IMMEDIATELY NOTIFY THE GC BEFORE THE THE INSTALLATION OF SUCH FIXTURE(S). EC SHALL COORDINATE LOCATIONS OF ALL LIGHT FIXTURES IN DINING AREA WITH FINAL SEATING AND DECOR PLANS.

L4. IF PC–POS CASH REGISTER SYSTEM IS INSTALLED, EC SHALL RELOCATE FIXTURES ABOVE FRONT COUNTER TO AVOID GLARE ON THE CASH REGISTER SCREENS. EC SHALL INSTALL CABLE WHIP TO FIXTURES SO THAT FIXTURE MAY BE RELOCATED FOUR FEET WITHOUT DISCONNECTING CABLE WHIP.

L5. EC SHALL COORDINATE LOCATION OF ALL EXTERIOR LIGHTS TO AVOID INTERFERENCE WITH ANY CORBELS, TRUSSES, BEAMS OR OTHER SPECIAL EXTERIOR TREATMENTS. INSTALL LIGHT FIXTURES WITH CORRECT ORIENTATION PER MANUFACTURER'S INSTRUCTIONS

L6. THE USE OF INTERLOCK TYPE "MC" CABLE IN LENGTHS OF 6 FEET OR LESS (WHERE PERMITTED BY LOCAL CODES) SHALL BE ALLOWED FOR WIRING TO INTERIOR LIGHTING FIXTURES. "ROMEX" OR "BX" SHALL NOT BE USED.

L7. EC SHALL VERIFY THAT NOT MORE THAN 3% VOLTAGE DROP EXISTS FROM THE LIGHTING PANEL TO ANY EXTERIOR LIGHTING FIXTURE OR SIGNAGE BALLAST.

L8. WHERE MCDONALD'S RESTAURANT HAS A PLAYPLACE, THE EC SHALL COORDINATE EXACT LOCATION OF PLAYPLACE LIGHTING WITH PLAYPLACE TOY VENDOR FOR MAXIMUM ILLUMINATION AND SAFETY PER THE FINAL LOCATION OF THE PLAYPLACE TOY. LIGHTING FIXTURES SHALL NOT BE MOUNTED TO THE TOY OR ANY PART OF THE TOY STRUCTURE.

L9. EC SHALL VERIFY ALL TAP SETTINGS FOR H.I.D. LIGHTING FIXTURES AND MAKE ANY NECESSARY CORRECTIONS PRIOR TO INSTALLATION.

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STATE OF MISSOURI
GREGORY L. DOFFIN
NUMBER PE-2015022305
PROFESSIONAL ENGINEER
SIGNATURE
09/02/2026 DATE
12/31/2027 EXPIRATION DATE
COVERING ELECTRICAL DESIGN

STATE ID: 24134
PROJECT #: 26-125
NATIONAL #: 46237
DRAWN BY: DEI
CHECKED BY: GD/RS

DATE:
07/15/2026 - PERMIT / BID SET

REVISIONS
09/08/2026 - DECOR UPDATE / PLUMBING & CIVIL COORDINATION

CLIENT
McDonald's USA, LLC

PROTOTYPE
BB20 4590 WW-HB
ISSUE DATE 06/26

ADDRESS
600 SCHUG AVENUE
PECULIAR, MO, 64078

SHEET TITLE
NOTES & DETAILS

SHEET NUMBER:
E3.1

SEQUENCE OF OPERATION:

1. TURNING "ON" ANY PIECE OF COOKING EQUIPMENT UNDER A HOOD WILL TURN ON THE EXHAUST FAN AND ASSOCIATED RTU PROVIDING MAKEUP AIR FOR THAT HOOD.
2. TURNING "OFF" THE LAST PIECE OF COOKING EQUIPMENT UNDER A HOOD WILL TURN OFF THE EXHAUST FAN FOR THAT HOOD.
3. IF THE ANSUL SYSTEM SHOULD DISCHARGE WHILE THE COOKING EQUIPMENT AND EXHAUST FAN ARE OPERATING, THE COOKING EQUIPMENT WILL BE SHUT OFF, BUT THE EXHAUST FAN WILL CONTINUE TO RUN AND WILL FORCE THE ROOFTOP UNITS INTO A "SCHEDULED" MODE
4. THE ANSUL SYSTEM MUST BE RECHARGED AND MANUALLY RESET BEFORE THE COOKING EQUIPMENT WILL AGAIN BE ABLE TO OPERATE.
5. THE ON/OFF SWITCH ON THE EXHAUST FAN IS NORMALLY KEPT IN THE "ON" POSITION. IF IT IS TURNED OFF FOR SERVICE, THE COOKING EQUIPMENT WILL TURN OFF AND NOT BE ABLE TO OPERATE UNTIL THE EXHAUST FAN ON/OFF SWITCH IS AGAIN TURNED ON.

INTERLOCK DIAGRAM LEGEND

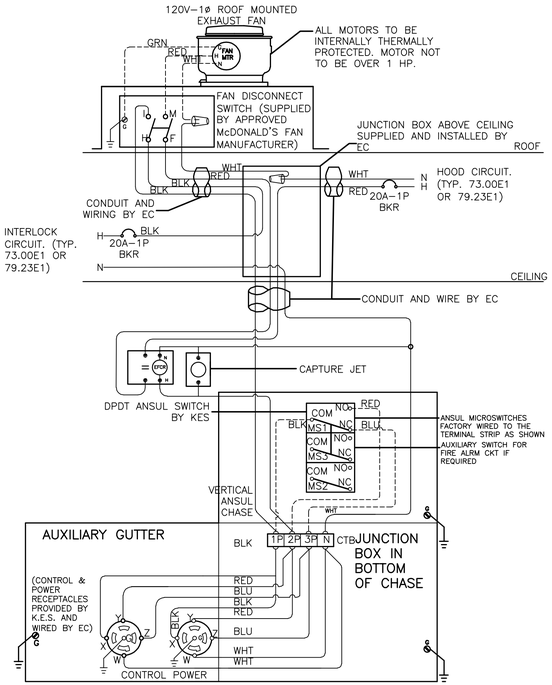
- ● TERMINAL BLOCK IN CHASE
- CTB – CHASE TERMINAL BLOCK. PROVIDED AND INSTALLED BY KITCHEN EQUIPMENT SUPPLIER
- ETB – EQUIPMENT TERMINAL BLOCK
- EFCR – EXHAUST FAN CONTROL RELAY. PROVIDED BY CONTRACTOR.
- IGR – INTERNAL GRILL RELAY PROVIDED WITHIN GARLAND GRILLS
- MS – ANSUL MICROSWITCH PROVIDED BY KITCHEN EQUIPMENT SUPPLIER
- » CONTROL CORD PLUG & RECEPTACLE
- —— FIELD WIRING
- ▬▬ CONTROL CORD/INTERNAL WIRING
- - - - FACTORY WIRING
- —— EQUIPMENT OR ENCLOSURE

COOKING EQUIPMENT EXHAUST FAN	MAKE UP PROVIDED BY
EF/1	RTU–3
EF/2	RTU–1
EF/3	RTU–2

NOTE
RTU # ASSOCIATED WITH EACH EXHAUST FAN BASED ON PROTOTYPICAL VALUES ONLY. VERIFY THAT EXHAUST FAN ACTIVATES THE CORRESPONDING RTU TO PROVIDE AN ADEQUATE AMOUNT OF MAKEUP AIR.

1 E-3.2 **TYPICAL MAKEUP AIR RTU EXHAUST FAN SCHEDULE**
FOR REFERENCE ONLY

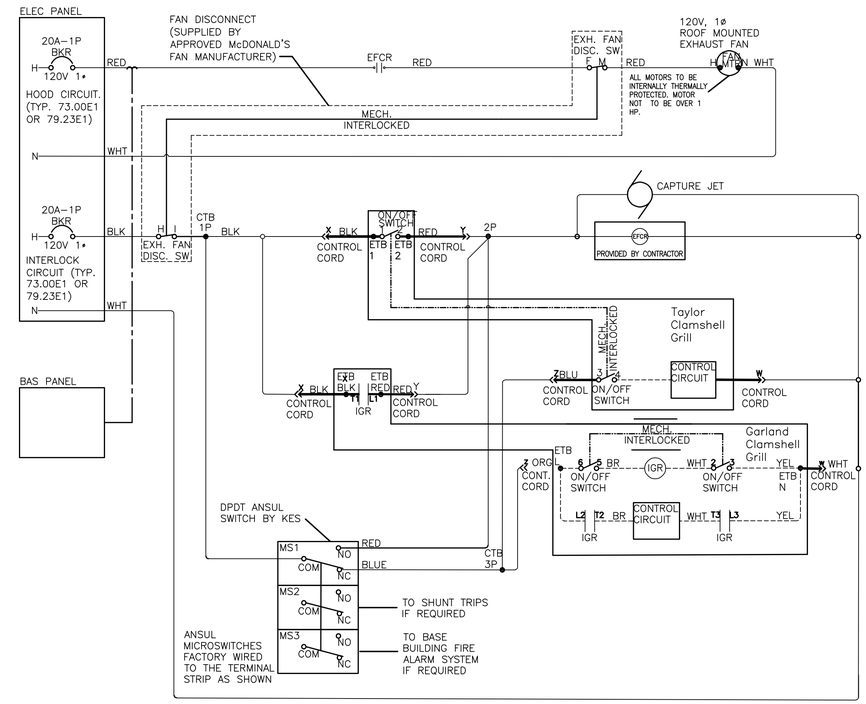
REVISED: 6/18



NOTE
IF CAPTURE JET IS REQUIRED TO BE OFF DURING AN ANSUL DISCHARGE EVENT, POWER FROM TERMINAL 2P THROUGH AN ANSUL SWITCH. IF ALL SHIPPED ANSUL SWITCH SPARES ARE USED, ANSUL SWITCHES ARE AVAILABLE THROUGH THE KES.

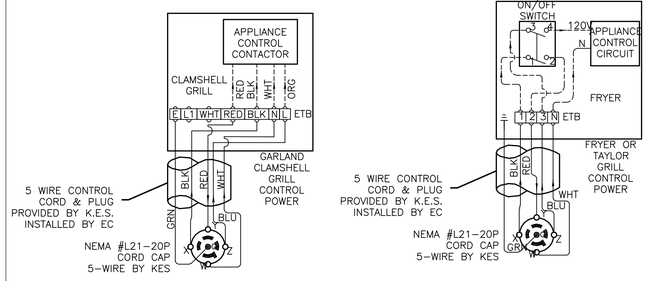
2 E-3.2 **INTERLOCK WIRING DIAGRAM FOR EXHAUST FAN AND COOKING EQUIPMENT**
FOR REFERENCE ONLY

REVISED: 6/18



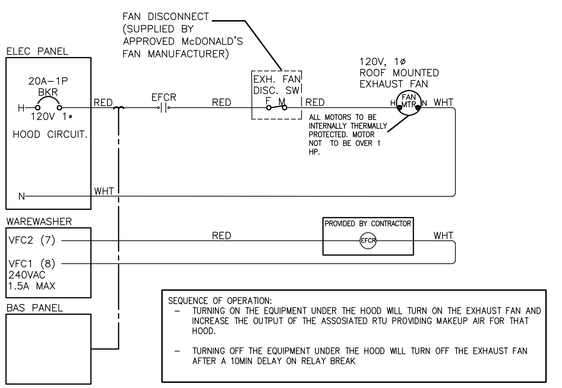
3 E-3.2 **INTERLOCK LADDER DIAGRAM**
FOR REFERENCE ONLY

REVISED: 4/26



4 E-3.2 **CONTROL CORD CONNECTION**
FOR REFERENCE ONLY

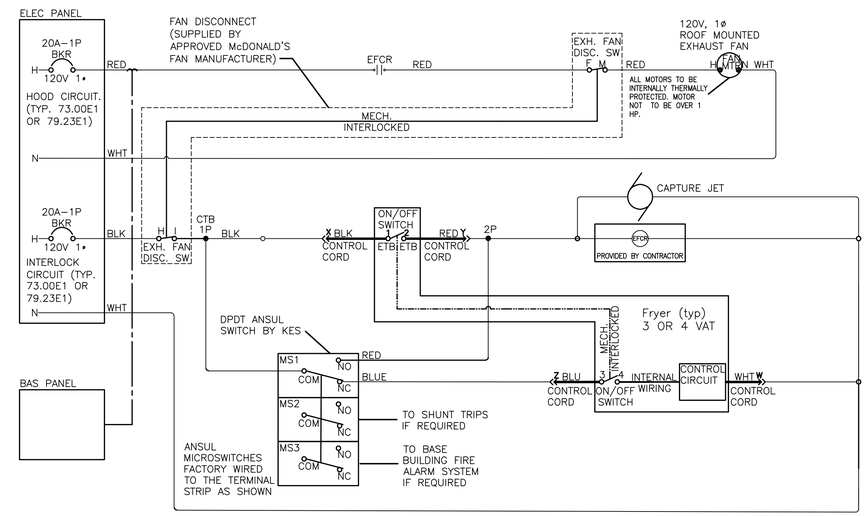
REVISED: 6/18



SEQUENCE OF OPERATION:
– TURNING ON THE EQUIPMENT UNDER THE HOOD WILL TURN ON THE EXHAUST FAN AND INCREASE THE OUTPUT OF THE ASSOSIATED RTU PROVIDING MAKEUP AIR FOR THAT HOOD.
– TURNING OFF THE EQUIPMENT UNDER THE HOOD WILL TURN OFF THE EXHAUST FAN AFTER A 10MIN DELAY ON RELAY BREAK

5 E-3.2 **INTERLOCK LADDER DIAGRAM FOR EXHAUST FAN AND WAREWASHER**
FOR REFERENCE ONLY

REVISED: 02/24



6 E-3.2 **INTERLOCK LADDER DIAGRAM**
FOR REFERENCE ONLY

REVISED: 4/26

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STATE OF MISSOURI
GREGORY L. DOFFIN
NUMBER PE-2015022305
PROFESSIONAL ENGINEER
SIGNATURE

09/02/2026 DATE
12/31/2027 EXPIRATION DATE
COVERING ELECTRICAL DESIGN

STATE ID: 241342
PROJECT #: 26-125
NATIONAL #: 46237
DRAWN BY: DEI
CHECKED BY: GD/RS

DATE:
07/15/2026 - PERMIT / BID SET

REVISIONS
09/08/2026 - DECOR UPDATE / PLUMBING & CIVIL COORDINATION

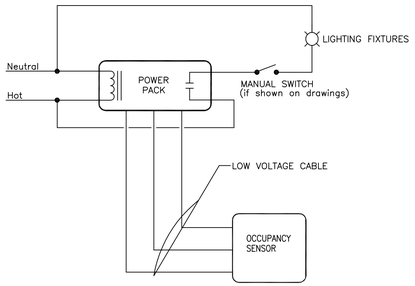
CLIENT
McDonald's USA, LLC

PROTOTYPE
BB20 4590 WW-HB
ISSUE DATE 06/26

ADDRESS
600 SCHUG AVENUE
PECULIAR, MO, 64078

SHEET TITLE
INTERLOCK DIAGRAMS

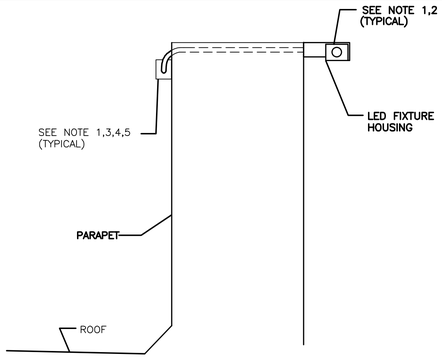
SHEET NUMBER:
E3.2



NOTES:

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

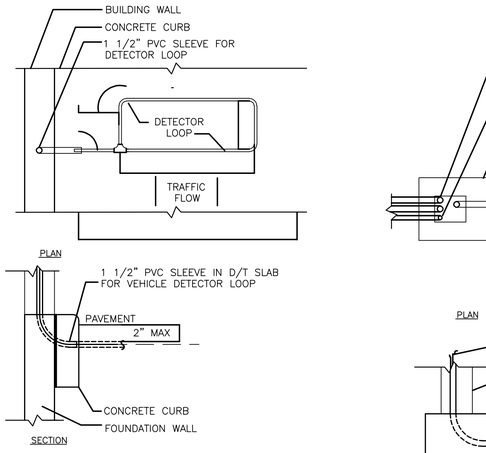
1 / E-4.0 **OCCUPANCY SENSOR CONTROL DETAIL**
NOT TO SCALE



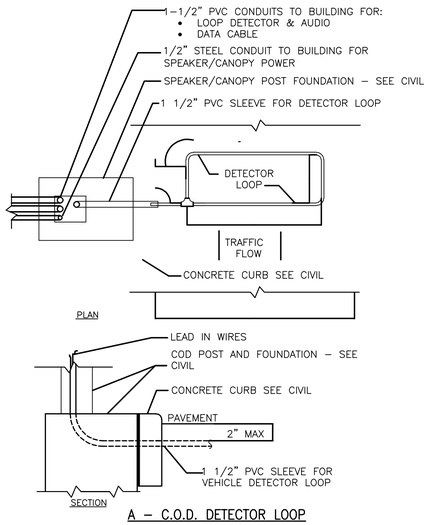
3 / E-4.0 **BRAND WALL LIGHTING DETAIL**
NOT TO SCALE

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.B.,WIRING,CONDUITS) AS REQUIRED.



B – DT WINDOW DETECTOR LOOP



A – C.O.D. DETECTOR LOOP

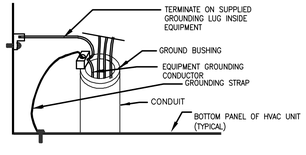
2 / E-4.0 **DETECTOR LOOP DETAILS**
NOT TO SCALE

NOTES

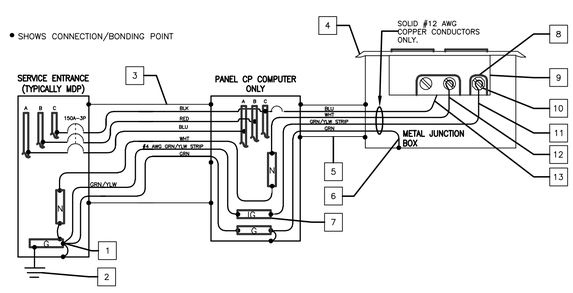
1. VERIFY CONDUIT SIZES AND LAYOUT WITH DETECTOR LOOP MANUFACTURER.
2. CENTER VEHICLE DETECTOR LOOP (ITEM # 217.11E1) IN DRIVE THRU LANE. INSTALL PER MFR. RECOMMENDATIONS.
3. SEE CIVIL FOR DIMENSIONS OF DRIVE-THRU LANE CONCRETE PAD FOR DETECTOR LOOP.
4. NO STEEL (REBAR OR ELECTRICAL WIRE) SHALL BE USED 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.

CONDUIT, WIRE SIZE AND GROUNDING FOR HVAC UNITS			
HACR BRKR SIZE	CONDUIT & WIRE SIZE	ROOF TOP UNIT	PANEL:CIRCUIT #
40A	1"C-3#8		
45A	1"C-3#6		
50A	1"C-3#6	RTU-2	MDP:12
60A	1"C-3#6		
70A	1-1/4"C-3#4		
80A	1-1/4"C-3#3	RTU-3	MDP:8
90A	1-1/4"C-3#3		
100A	1-1/4"C-3#2	RTU-1	MDP:5
110A	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		

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.



4 / E-4.0 **HVAC GROUNDING DETAIL**
NOT TO SCALE



NOTES

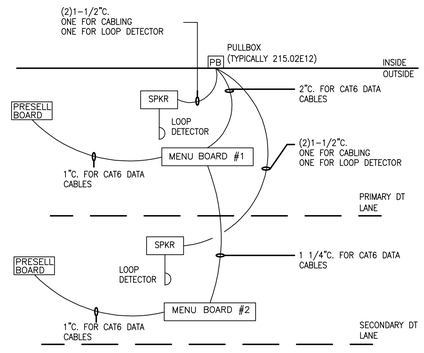
1. ALL P.O.S. EQUIPMENT (COMPUTERS,PRINTERS,MONITORS KVS, MODEM, HUB & COD) SHALL BE POWERED FROM THE COMPUTER PANEL.

   ALL OTHER COMPUTER/DIGITAL EQUIPMENT SHALL BE POWERED FROM PHASE "A" IN THE COMPUTER PANEL.
2. ISOLATED GROUND INSTALLATION SHALL COMPLY WITH THE REQUIREMENTS OF NEC SECTION 250 .
3. EACH 20 AMP CIRCUIT SHALL HAVE IT'S OWN ISOLATED EQUIPMENT GROUNDING CONDUCTOR.
4. ENTIRE GROUNDING SYSTEM SHALL COMPLY WITH NEC ARTICLE 250 AND MCDONALD's BUILDING GROUNDING DETAIL.
5. EC SHALL VERIFY CORRECT POLARITY AT RECEPTACLE.
6. EC SHALL VERIFY THAT SUBPANEL CP DOES NOT CONTAIN ANY ILLEGAL NEUTRAL TO GROUND BONDS.
7. 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.
8. IT IS A SAFETY HAZARD AND AN NEC VIOLATION FOR THE POS SYSTEM TO HAVE ITS OWN INDEPENDENT GROUNDING ROD. IF AN INDEPENDENT GROUND ROD IS FOUND FOR THE POS SYSTEM, IT SHALL BE BONDED TO THE BUILDING GROUNDING SYSTEM.

KEY NOTES

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

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



6 / E-4.0 **DT LOW VOLTAGE CONDUIT DIAGRAM**
NOT TO SCALE

NOTE:

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

* VERIFY LOW VOLTAGE CABLE COUNT WITH POS INSTALLER. LOW VOLTAGE CABLE SUPPLIED AND TERMINATED BY POS INSTALLER. ELECTRICAL CONTRACTOR TO PULL CABLE.

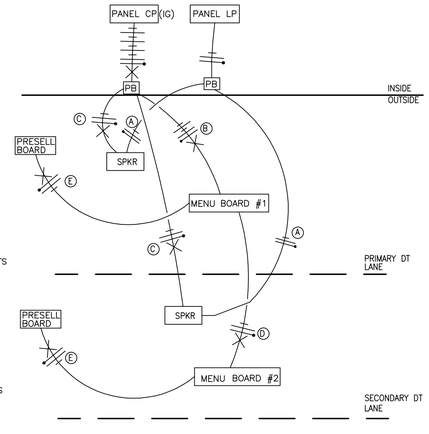
Ⓐ 2#12 & 1#12 GND. TO LP-1 FOR COD CANOPY LIGHTING.

Ⓑ 4#12 & 1#12 GND & 1#12 ISOLATED GND., TO CP FOR ISOLATED GROUND POWER TO MENUBOARDS AND MEDIA PLAYERS.

Ⓒ 2#12 & 1#12 GND & 1#12 ISOLATED GND., TO CP FOR ISOLATED GROUND POWER TO SPEAKER CANOPY/STAND. EACH CANOPY/STAND SHALL BE ON ITS OWN SEPARATE CIRCUIT.

Ⓓ 2#12 & 1#12 GND & 1#12 ISOLATED GND., TO CP FOR ISOLATED GROUND POWER TO MENUBOARDS AND MEDIA PLAYERS.

Ⓔ 2#12 & 1#12 GND & 1#12 ISOLATED GND., TO CP FOR ISOLATED GROUND POWER TO FOR PRESELL BOARDS AND MEDIA PLAYER.



7 / E-4.0 **DRIVE THRU POWER DIAGRAM**
NOT TO SCALE

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STATE OF MISSOURI
GREGORY L. DOFFIN
NUMBER PE-2015022305
PROFESSIONAL ENGINEER
SIGNATURE

09/02/2026 DATE
12/31/2027 EXPIRATION DATE
COVERING ELECTRICAL DESIGN

STATE ID: 24134Z
PROJECT #: 26-125
NATIONAL #: 46237
DRAWN BY: DEI
CHECKED BY: GD/RS

DATE:
07/15/2026 - PERMIT / BID SET

REVISIONS
09/08/2026 - DECOR UPDATE / PLUMBING & CIVIL COORDINATION

CLIENT
McDonald's USA, LLC

PROTOTYPE
BB20 4590 WW-HB
ISSUE DATE 06/26

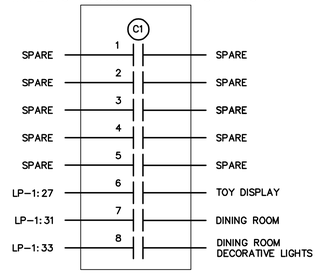
ADDRESS
600 SCHUG AVENUE
PECULIAR, MO, 64078

SHEET TITLE
WIRING DETAILS

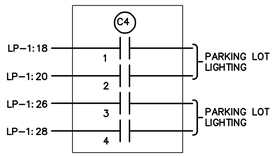
SHEET NUMBER:
E4.0

LIGHTING CONTROL SYSTEM

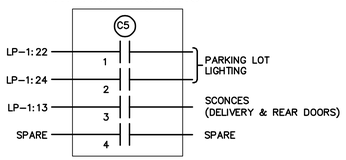
INTERIOR CUSTOMER LIGHTING



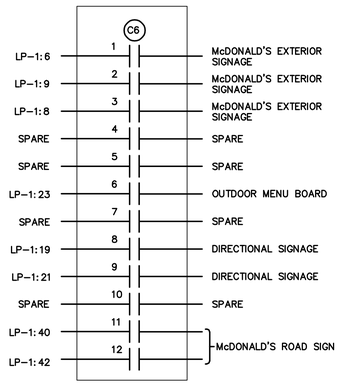
EXTERIOR LIGHTING



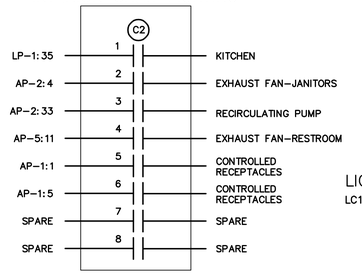
EXTERIOR LIGHTING



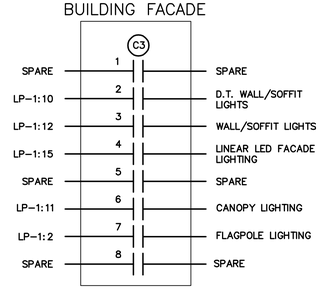
EXTERIOR SIGNAGE



INTERIOR CREW LIGHTING



BUILDING FACADE



LIGHTING CONTROL NOTES

LC1. CONTACTOR DETAILS ARE DIAGRAMMATIC ONLY AND ARE SHOWN WITH TYPICAL LOADS AND CIRCUIT ASSIGNMENTS. LOADS, CIRCUIT ASSIGNMENTS AND NUMBER OF CONTACTORS MAY VARY BY RESTAURANT LOCATION AND PER BAS SUPPLIERS SYSTEMS. VERIFY EXACT REQUIREMENTS WITH BAS INSTALLATION DETAILS, SITE PLANS, ELECTRICAL PANEL SCHEDULES AND ACM. EC SHALL MAKE ALL MODIFICATIONS AS REQUIRED. FINAL INSTALLATION SHALL BE FULLY NEC AND ENERGY CODE COMPLIANT.

LC2. ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL ALL WIRING, CONNECTIONS, TERMINATIONS, ETC. THAT ARE NOT PROVIDED BY THE BAS SUPPLIER FOR A COMPLETE, FULLY OPERATIONAL AND CODE COMPLIANT LIGHTING CONTROL SYSTEM.

LC3. ALL COMPONENTS FOR THIS LIGHTING CONTROL SYSTEM SHALL BE INSTALLED BY THE ELECTRICAL CONTRACTOR. SEE BOXED NOTE BELOW FOR OPTIONS.

LC4. ALL COMPONENTS SHALL BE UL LISTED AND LABELED AND THE SYSTEM SHALL COMPLY WITH ALL LOCAL, STATE AND FEDERAL ENERGY CODE REQUIREMENTS.

LC5. ALL CONTACTORS SHALL BE LOCATED IN A NEMA 1 ENCLOSURE WITH SCREW TYPE COVER MOUNTED DIRECTLY ABOVE LIGHTING PANEL OR SWITCHGEAR SO AS TO BE ACCESSIBLE.

LC6. ALL CONTACTORS SHALL BE RATED FOR 30 AMP LOADS UNLESS NOTED OTHERWISE AND SHALL BE HID RATED WHERE REQUIRED.

LC7. COIL VOLTAGES FOR ALL CONTACTORS SHALL BE 120 VOLT UNLESS NOTED OTHERWISE.

LC8. CONTACTOR C5 IS INTENDED TO CONTROL PARKING LOT LIGHTS NEAR TRASH CORRAL, DELIVERY DOORS, AND EMPLOYEE PARKING, THUS ALLOWING A DIFFERENT LIGHTING SCHEDULE TO BE USED IN THOSE AREAS.

INTERIOR LIGHTING CONTROL SCHEDULE							
	LOCAL CONTROL	MANUAL ON	PARTIAL ON	MULTI LEVEL	DAYLIGHTING	AUTO OFF	SCHEDULE OFF
DINING	MANAGERS OFFICE		X		X		X
KITCHEN	MANAGERS OFFICE		X				X
SUPPORT/STOCK	X					X	
CREW	X	X		X		X	
MANAGER	X	X		X		X	
BATHROOM						X	
SMALL STORAGE	X	X				X	
ENTRY VESTIBULE							X

NOTES:
1. LOCAL CONTROL: MANUAL LIGHTING CONTROL THAT PROVIDES ON AND OFF CONTROL IN SPACE. REMOTE LOCATION CONTROL DEVICE MUST BE LABELED TO IDENTIFY CONTROLLED LIGHTING.
2. MANUAL ON: NONE OF THE LIGHTING SHALL BE AUTOMATICALLY TURNED ON.
3. PARTIAL ON: 50% OF THE GENERAL LIGHTING SHALL BE AUTOMATICALLY TURNED ON.
4. MULTI LEVEL: GENERAL LIGHTING SHALL BE FITTED WITH A MANUAL CONTROLLED CONTINUOUS DIMMER.
5. DAYLIGHTING: REQUIRED WHEN PRIMARY AND SECONDARY ZONES CONTAIN 150W OF GENERAL LIGHTING. PHOTOCONTROL SHALL REDUCE LIGHTING IN RESPONSE TO AVAILABLE DAYLIGHT USING CONTINUOUS DIMMING TO 20% AND OFF.
6. AUTO OFF: ALL LIGHTING INCLUDING LIGHTING CONNECTED TO EMERGENCY CIRCUITS SHALL BE AUTOMATICALLY SHUT OFF WITHIN 20 MINUTES OF OCCUPANTS LEAVING THE SPACE.
7. SCHEDULE OFF: ALL LIGHTING, INCLUDING LIGHTING CONNECTED TO EMERGENCY CIRCUITS, SHALL BE AUTOMATICALLY SHUT OFF DURING PERIODS WHEN THE SPACE IS SCHEDULED TO BE UNOCCUPIED.
8. 0.02W PER SQUARE FT OF BUILDING ALLOWED TO BE CONTINUOUSLY LIT.

EXTERIOR LIGHTING CONTROL SCHEDULE			
	TIME CLOCK	PHOTCELL	OCCUPANCY SENSOR
POLE LIGHTING	X	X	X
BUILDING MOUNT LIGHTING	X	X	
SIGNAGE	X	X	

NOTES:
1. TIME CLOCK: LIGHTING SHALL BE AUTOMATICALLY SHUT OFF BETWEEN BUSINESS CLOSING (OR MIDNIGHT) AND BUSINESS OPENING (OR 6AM) WHICHEVER PROVIDES THE SHORTEST OFF DURATION.
2. PHOTOCELL: LIGHTING SHALL BE AUTOMATICALLY TURNED OFF WHEN SUFFICIENT DAYLIGHT IS AVAILABLE.
3. OCCUPANCY SENSOR: LIGHTING SHALL AUTOMATICALLY REDUCE THE CONNECTED LIGHTING POWER BY 50% WHEN NO ACTIVITY HAS BEEN DETECTED IN AREA IN 15 MINUTES. NO MORE THAN 1500W OF LIGHTING PER CONTROL ZONE.

LIGHTING CONTROL COMMISSIONING:

1. PROVIDE DOCUMENTATION THAT LIGHTING CONTROLS MEET DOCUMENTED PERFORMANCE CRITERIA TO COMPLY WITH IECC C408.3.

LIGHTING CONTROL SYSTEM SHALL COMPLY WITH IECC:

1. HAVE A MINIMUM 7-DAY CLOCK.
2. BE CAPABLE OF BEING SET FOR SEVEN DIFFERENT DAY TYPES PER WEEK.
3. INCORPORATE AN AUTOMATIC HOLIDAY "SHUTOFF" FEATURE, WHICH TURNS OFF ALL CONTROLLED LIGHTING LOADS FOR NOT FEWER THAN 24 HOURS AND THEN RESUMES NORMALLY SCHEDULED OPERATIONS.
4. HAVE PROGRAM BACKUP CAPABILITIES, WHICH PREVENT THE LOSS OF PROGRAM AND TIME SETTINGS FOR NOT FEWER THAN 10 HOURS, IF POWER IS INTERRUPTED.
5. INCLUDE AN OVERRIDE SWITCH THAT COMPLIES WITH THE FOLLOWING:
   - 5.1. THE OVERRIDE SWITCH SHALL BE A MANUAL CONTROL.
   - 5.2. THE OVERRIDE SWITCH, WHEN INITIATED, SHALL PERMIT THE CONTROLLED LIGHTING TO REMAIN ON FOR NOT MORE THAN 2 HOURS.
   - 5.3 ANY INDIVIDUAL OVERRIDE SWITCH SHALL CONTROL THE LIGHTING FOR AN AREA NOT LARGER THAN 5,000 SQUARE FEET (465 M2).

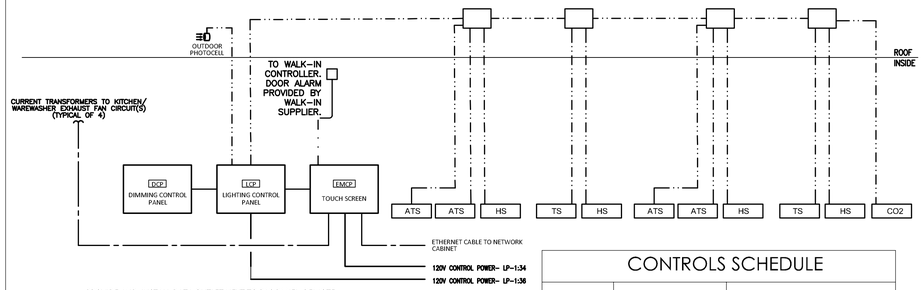
LIGHTING CONTROL INSTALLATION OPTIONS

OPTION 1 (STANDARD) CONTACTORS AND CONTACTOR ENCLOSURE FOR THIS LIGHTING CONTROL SYSTEM SHALL BE FURNISHED BY THE BAS SUPPLIER AND INSTALLED BY THE ELECTRICAL CONTRACTOR ON SITE FOR A COMPLETE AND FULLY FUNCTIONAL SYSTEM.

OPTION 2 (OPTIONAL) LIGHTING CONTROL CAN BE ACCOMPLISHED VIA UTILIZATION OF A SMART TYPE BREAKER PANEL REPLACING STANDARD PANEL LP-1. PANEL SHALL UTILIZE AN INTEGRAL MOTOR OPERATED CIRCUIT BREAKERS OR AN INTEGRAL CIRCUIT BREAKER/CONTACTOR TYPE COMBINATION DEVICE WITH AN INTEGRAL PROGRAMMING CONTROL MODULE AND SHALL BE ORDERED THROUGH OUR ELECTRICAL EQUIPMENT NATIONAL ACCOUNT PROGRAM (SQUARE-D) THROUGH OUR CONSTRUCTION PURCHASING TEAM.

BUILDING AUTOMATION SYSTEM

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



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

INSTALLATION NOTES:

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

CONTROLS SCHEDULE

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

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

WIRE LEGEND

MARK	WIRE/CABLE TYPE
———	CAT 5E
— · · —	18 AWG CONDUCTORS

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.

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DICKERSON ENGINEERING, INC.
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ILLINOIS REGISTERED DESIGN FIRM # 184-000949

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STATE OF MISSOURI
GREGORY L. DOFFIN
NUMBER PE-2015022305
PROFESSIONAL ENGINEER
SIGNATURE

09/02/2026 DATE — 12/31/2027 EXPIRATION DATE
COVERING ELECTRICAL DESIGN

STATE ID: 241342
NATIONAL #: 46237
PROJECT #: 26-125
DRAWN BY: DEI
CHECKED BY: GD/RS

DATE:
07/15/2026 - PERMIT / BID SET

REVISIONS
1 09/08/2026 - DECOR UPDATE / PLUMBING & CIVIL COORDINATION

CLIENT
McDonald's USA, LLC

PROTOTYPE
BB20 4590 WW-HB
ISSUE DATE 06/26

ADDRESS
600 SCHUG AVENUE
PECULIAR, MO, 64078

SHEET TITLE
LIGHTING CONTROLS

SHEET NUMBER:
E4.1

MLO, AIC: NOTES D7,&D8, Mounting: flush, NEMA 1 — PANEL LP-1 — 225A, 208Y/120 VAC, 3PH, 4W, CB TYPE: BL or BLH

WATTS A	WATTS B	WATTS C		BRKR REQ	TRIP POLES	CCT NO.	CCT NO.	TRIP POLES	BRKR REQ	DESCRIPTION	WATTS A	WATTS B	WATTS C
0			Spare		20A-1	1	2	20A-1	S	Flag Pole	220		
	0		Spare		20A-1	3	4	20A-1		Spare		0	
		0	Spare		20A-1	5	6	20A-1	S	Exterior Signage			294
0			Spare		20A-1	7	8	20A-1	S	Exterior Signage	294		
	294		Exterior Signage	S	20A-1	9	10	20A-1	S	Exterior Wall/Soffit Lights DT		114	
		193	Flood Lights & Canopy lights	S	20A-1	11	12	20A-1	S	Exterior Wall/Soffit Lights			114
42			Back of House Sconces	S,L	20A-1	13	14	20A-1		DCO In Road Sign Base	180		
	126		Linear LED Façade Lighting	S	20A-1	15	16	20A-1	L	Dr Alarm\CO2		524	
		0	Space		20A-1	17	18	30A-2		Lot Lights			480
96			Directional Sign	S	20A-1	19	20	I		I	480		
	96		Directional Sign	S	20A-1	21	22	30A-2		Lot Lights		240	
		120	COD lighting	S	20A-1	23	24	I		I			240
0			Spare		20A-1	25	26	30A-2		Lot Lights	480		
	180		Toy Display	S	20A-1	27	28	I		I		480	
		0	Spare	S	20A-1	29	30	30A-2		Spare			0
308			Dining Area Lighting	S	20A-1	31	32	I		I	0		
	180		Pendants/cove lights	S	20A-1	33	34	20A-1	L	BAS Controller		300	
		880	Kitchen Lighting	S	20A-1	35	36	20A-1	L	Lighting Control Panel			180
176			Restroom Lighting	S	20A-1	37	38	20A-1	S,L	Exit/Egress Lighting	80		
	520		Support Area Lighting	S	20A-1	39	40	60A-2	S	Mcd'S Road Sign		2496	
		0	Spare		20A-1	41	42	I	I	I			2496
										Total Connect	2356	5550	4997
										Connect Amps		36	Amps
										Demand Amps		45	Amps

MLO, AIC: NOTES D7, & D8, Mounting: MDP, NEMA 1 — PANEL AP-1 — 225A, 208Y/120 VAC, 3PH, 4W, CB TYPE: BL or BLH

WATTS A	WATTS B	WATTS C	DESCRIPTION	BRKR REQ	TRP PLS	CCT NO.	CCT NO.	TRIP PLS	BRKR REQ	DESCRIPTION	WATTS A	WATTS B	WATTS C
1224			Dco-manager's office (man offi)		20A-1	1	2	20A-2	G	Coffee brewer (presenter's booth)	1612		
	900		Dco-General Purpose	G	20A-1	3	4	I	I	I		1612	
		720	Dco-General Purpose	G	20A-1	5	6	20A-1	G	ABS (phase c, presenter's booth)			1788
120			Safe - (mo) DCO Gen Purp	L	20A-1	7	8	20A-1	G	Oj dispenser/ coffee cream disp	840		
	240		Remote Order Battery		20A-1	9	10	20A-1	G	CO2 Detector		120	
		960	Merge/audio sys/drv mon/Deliv.	G	20A-1	11	12	20A-1	G	Automated beverage sys			600
0			Spare		15A-1	13	14	20A-2	G	Coffee Brewer (front counter)	1612		
	1800		Hand Held Order		20A-1	15	16	I	I	I		1612	
		120	Computer Room (TF/1)		20A-1	17	18	30A-3	G	Heat treat combo shake			1560
2808			Espresso Brewer	G	40A-2	19	20	I	I	I	1560		
	2808		I	I	I	21	22	I	I	I		1560	
		1500	3-Vat fryer hood interlock		20A-1	23	24	20A-1		3-Vat fryer hood Interlock			1176
1320			Reach in Freezer-SW	G	20A-1	25	26	20A-2	H	Ice Machine Remote Cond 1400lb	104		
	1080		Frozen fry dispenser (fry wall)	G	20A-1	27	28	I	I	I		104	
		1620	4-Vat fryer hood interlock		20A-1	29	30	20A-1	G	Reach in Freezer-SW			1320
1500			Fry Bagging Station	L,G	20A-1	31	32	15A-3	H	Ice Machine Remote Cond 1000lb	1332		
	60		Hand Wash Timers	G	20A-1	33	34	I	I	I		1332	
		0	Spare	G	20A-1	35	36	I	I	I			1332
132			Ice mach - 1000 lb (self serve)		15A-1	37	38	15A-3	H	Ice Machine Remote Cond 1000lb	1332		
	132		Ice mach - 1000 lb (self serve)		15A-1	39	40	I	I	I		1332	
		1176	4-Vat fryer hd interlock		20A-1	41	42	I	I	I			1332
										Total Connect	15496	14692	15204
										Connect Amps		126	Amps
										Demand Amps		85	Amps

MLO, AIC: NOTES D7,&D8, Mounting: MDP, NEMA 1 — PANEL AP-2 — 225A, 208Y/120 VAC, 3PH, 4W, CB TYPE: BL or BLH

WATTS A	WATTS B	WATTS C	DESCRIPTION	BRKR REQ	TRP PLS	CCT NO.	CCT NO.	TRIP PLS	BRKR REQ	DESCRIPTION	WATTS A	WATTS B	WATTS C
1609			Ice machine 1400LB	H	20A-3	1	2	20A-1		Air Compressor	684		
	1609		I	I	I	3	4	20A-1		Janitors EF		100	
		1609	I	I	I	5	6	20A-1	G	Dco-General Purpose			540
144			Blender McFlurry	G	20A-1	7	8	20A-1	G	Refrig-wt-48"	600		
	180		Janitor's closet	G	20A-1	9	10	30A-2	H	Trash Compactor		2496	
		480	Water Heater	L	20A-1	11	12	I	I	I			2496
864			Clm gril exhast hood interlock		20A-1	13	14	20A-1		Walk in cooler / freezer	600		
	864		Bulk oil system (sup area)	G	20A-1	15	16	20A-1		Walk in cooler / freezer		600	
		1656	Clm gril exhast hood interlock		20A-1	17	18	20A-2	G	Q'ing oven - P& S			1550
840			Meat freezer DW (grill side)	G	20A-1	19	20	I	I	I	1550		
	120		Clean in place panel	G	20A-1	21	22	20A-1	G	Specialty Coffee Refrigerator 27"		468	
		490	Reverse Osmosis, Filtration	G	20A-1	23	24	20A-1	G	Automated beverage sys			600
180			Dco in trash corrall	G	20A-1	25	26	20A-1	G	ABS (presenter's booth)	1788		
	1200		Bulk oil sys - support area (sa)	G	20A-1	27	28	20A-2	G	Q'ing oven - P& S		1550	
		1032	BIC Machine	G	20A-1	29	30	I	I	I			1550
324			Reach In SW fridge	G	20A-1	31	32	20A-2	G	Infusiion Tea Brewer	1352		
	120		Recirc pump		20A-1	33	34	I	I	I		1352	
		1632	Soda syst pack (support area)		20A-1	35	36	20A-1		Spare			0
3120			Soda syst pack (support area)		30A-3	37	38	20A-2	G	Q'ing oven - P& S	1602		
	3120		I		I	39	40	I	I	I		1602	
		3120	I		I	41	42	20A-1	G	Dco-General Purpose			540
										Total Connect	15257	15381	17295
										Connect Amps		133	Amps
										Demand Amps		88	Amps

MLO, AIC: NOTES D7,&D8, Mounting: MDP, NEMA 1 — PANEL AP-3 — 225A, 208Y/120 VAC, 3PH, 4W, CB TYPE: BL or BLH

WATTS A	WATTS B	WATTS C	DESCRIPTION	BRKR REQ	TRP PLS	CCT NO.	CCT NO.	TRIP- PLS	BRKR REQ	DESCRIPTION	WATTS A	WATTS B	WATTS C
4671			4 Vat Fryer - Electric - S/S/S/S	G	50A-3	1	2	50A-3	G	4 Vat Fryer - Electric - S/S/S/S	4671		
	4671		I	I	I	3	4	I	I	I		4671	
		4671	I	I	I	5	6	I	I	I			4671
4671			4 Vat Fryer - Electric - S/S/S/S	G	50A-3	7	8	50A-3	G	4 Vat Fryer - Electric - S/S/S/S	4671		
	4671		I	I	I	9	10	I	I	I		4671	
		4671	I	I	I	11	12	I	I	I			4671
0			Space			13	14	50A-3	G	Clamshell Grill	2604		
	0		Space			15	16	I	I	I		2604	
		0	Space			17	18	I	I	I			2604
0			Space			19	20	50A-3	G	Clamshell Grill	5196		
	0		Space			21	22	I	I	I		5196	
		0	Space			23	24	I	I	I			5196
0			Space			25	26			Space	0		
	0		Space			27	28			Space		0	
			Space			29	30			Space			0
0		0	Space			31	32			Space	0		
	0		Space			33	34			Space		0	
		0	Space			35	36			Space			0
0			Space			37	38			Space	0		
	0		Space			39	40			Space		0	
		0	Space			41	42			Space			0
										Total Connect	26484	26484	26484
										Connect Amps		221	Amps
										Demand Amps		143	Amps

MLO, AIC: NOTES D7,&D8, Mounting: MDP, NEMA 1 — PANEL AP-4 — 225A, 208Y/120 VAC, 3PH, 4W, CB TYPE: BL or BLH

WATTS A	WATTS B	WATTS C	DESCRIPTION	BRKR REQ	TRP PLS	CCT NO.	CCT NO.	TRIP PLS	BRKR REQ	DESCRIPTION	WATTS A	WATTS B	WATTS C
2604			Clamshell Grill	G	50A-3	1	2	30A-3	G	Combi Oven	1812		
	2604		I	I	I	3	4	I	I	I		1812	
		2604	I	I	I	5	6	I	I	I			1812
5196			Clamshell Grill	G	50A-3	7	8	30A-3	G	Combi Oven	1812		
	5196		I	I	I	9	10	I	I	I		1812	
		5196	I	I	I	11	12	I	I	I			1812
4671			3-Vat Fryer - Electric - F/F/F	G	50A-3	13	14	15A-1		Combi Oven Hood	960		
	4671		I	I	I	15	16	15A-1		Combi Oven Hood		960	
		4671	I	I	I	17	18			Space			0
4671			3-Vat Fryer - Electric - F/F/F	G	50A-3	19	20			Space	0		
	4671		I	I	I	21	22			Space		0	
		4671	I	I	I	23	24			Space			0
4671			3-Vat Fryer - Electric - F/F/F	G	50A-3	25	26			Space	0		
	4671		I	I	I	27	28			Space		0	
		4671	I	I	I	29	30			Space			0
0			Space			31	32			Space	0		
	0		Space			33	34			Space		0	
		0	Space			35	36			Space			0
0			Space			37	38			Space	0		
	0		Space			39	40			Space		0	
		0	Space			41	42			Space			0
										Total Connect	26397	26397	25437
										Connect Amps		217	Amps
										Demand Amps		141	Amps

MLO, AIC: NOTES D7,&D8, Mounting: MDP, NEMA 1 — PANEL AP-5 — 225A, 208Y/120 VAC, 3PH, 4W, CB TYPE: BL or BLH

WATTS A	WATTS B	WATTS C	DESCRIPTION	BRKR REQ	TRP PLS	CCT NO.	CCT NO.	TRIP PLS	BRKR REQ	DESCRIPTION	WATTS A	WATTS B	WATTS C
600			Fridge/Freezer 2Dr Base	G	20A-1	1	2	20A-1		Warewasher Exhaust Fan	864		
	600		Fridge/Freezer 2Dr Base	G	20A-1	3	4	20A-2	G	Universal Holding Cabinet P&S		1581	
		600	Fridge/Freezer 2Dr Base	G	20A-1	5	6	I	I	I			1581
600			Fridge/Freezer 2Dr Base	G	20A-1	7	8	20A-2	G	Univeral Holding Cabinet P&S	1581		
	600		Fridge/Freezer 2Dr Base	G	20A-1	9	10	I	I	I		1581	
		864	Toilet Exhaust Fan	G	20A-1	11	12	20A-1	G	Univeral Holding Cabinet Table			240
540			Roof Receptacles		20A-1	13	14	20A-1		DT Power Window	120		
	600		Fridge/Freezer 2Dr Base	G	20A-1	15	16	20A-1		DT Power Window		120	
		2080	Frozen Carbonated Beverage	G	30A-2	17	18	20A-1		DT Power Window			120
2080			I	I	I	19	20	20A-2	G	Coffee Brewer (front counter)	1612		
	360		Delivery Tablets	G	20A-1	21	22	I	I	I		1612	
		600	Wall Mount Frz Unit SW HC	G	20A-1	23	24	20A-1	G	Pie Display			564
828			Bulk Oil System	G	20A-1	25	26	20A-1	G	Pie Display	564		
	2620		Universal Radiant Toaster	G	30A-1	27	28	20A-1		Spare		0	
		2620	I	I	I	29	30	20A-1		DCO-Muzak satellite system			120
3528			Warewasher - High Temp	G	40A-3	31	32	20A-1		Clg. Mt window recepts	1440		
	3528		I	I	I	33	34	20A-2	G	Humidified Holding Cabinet		947	
		3528	I	I	I	35	36	I	I	I			947
2676			Warewasher - High Temp	G	30A-3	37	38	25A-2	H	Remote condensing unit	1560		
	2676		I	I	I	39	40	I	I			1560	
		2676	I	I	I	41	42	20A-1		Spare			0
										Total Connect	18593	18385	16540
										Connect Amps		149	Amps
										Demand Amps		97	Amps

MLO, AIC: NOTES D7,&D8, Mounting: MDP, NEMA 1 — PANEL AP-6 — 225A, 208Y/120 VAC, 3PH, 4W, CB TYPE: BL or BLH

WATTS A	WATTS B	WATTS C	DESCRIPTION	BRKR REQ	TRP PLS	CCT NO.	CCT NO.	TRIP PLS	BRKR REQ	DESCRIPTION	WATTS A	WATTS B	WATTS C
4212			Unit AC-1 (Cash Booth)		60A-2	1	2	20A-1	L,G	Hand Dryer	1092		
	4212		I		I	3	4	20A-1	L,G	Hand Dryer		1092	
		4212	Unit AC-2 (Presenter Booth)		60A-2	5	6	20A-1	L,G	Spare			0
4212			I		I	7	8	20A-1	L,G	Spare	0		
	0		Spare		20A-1	9	10	15A-2	H	Cooler Evaporator		104	
		0	Spare		20A-1	11	12	I	I	I			104
1200			Unit AC-3 (Rear Entrance)		20A-1	13	14	15A-2	H	Freezer Evaporator	1248		
	1200		Unit AC-4 (Storage Entrance)		20A-1	15	16	I	I	I		1248	
		660	Unit AC-5 (Forward Presenter)		20A-1	17	18	20A-1		Spare			0
0			Spare		20A-1	19	20	20A-1		Spare	0		
	0		Spare		20A-1	21	22	30A-2		Stacked Washer/Dryer		2496	
		0	Spare		20A-1	23	24			I			2496
0			Spare		20A-1	25	26	20A-1	G	Crew Microwave/refrigerator	1200		
	0		Space			27	28	20A-1	G	Crew smart lockers		180	
		0	Space			29	30			Space			0
0			Space			31	32			Space	0		
	0		Space			33	34			Space		0	
		0	Space			35	36			Space			0
0			Space			37	38	20A-1		Roof receptacles	720		
	0		Space			39	40	20A-1	G	Dining furniture receptacles		720	
		0	Space			41	42	20A-1	G	Dining furniture receptacles			720
										Total Connect	13884	11252	8192
										Connect Amps		93	Amps
										Demand Amps		79	Amps

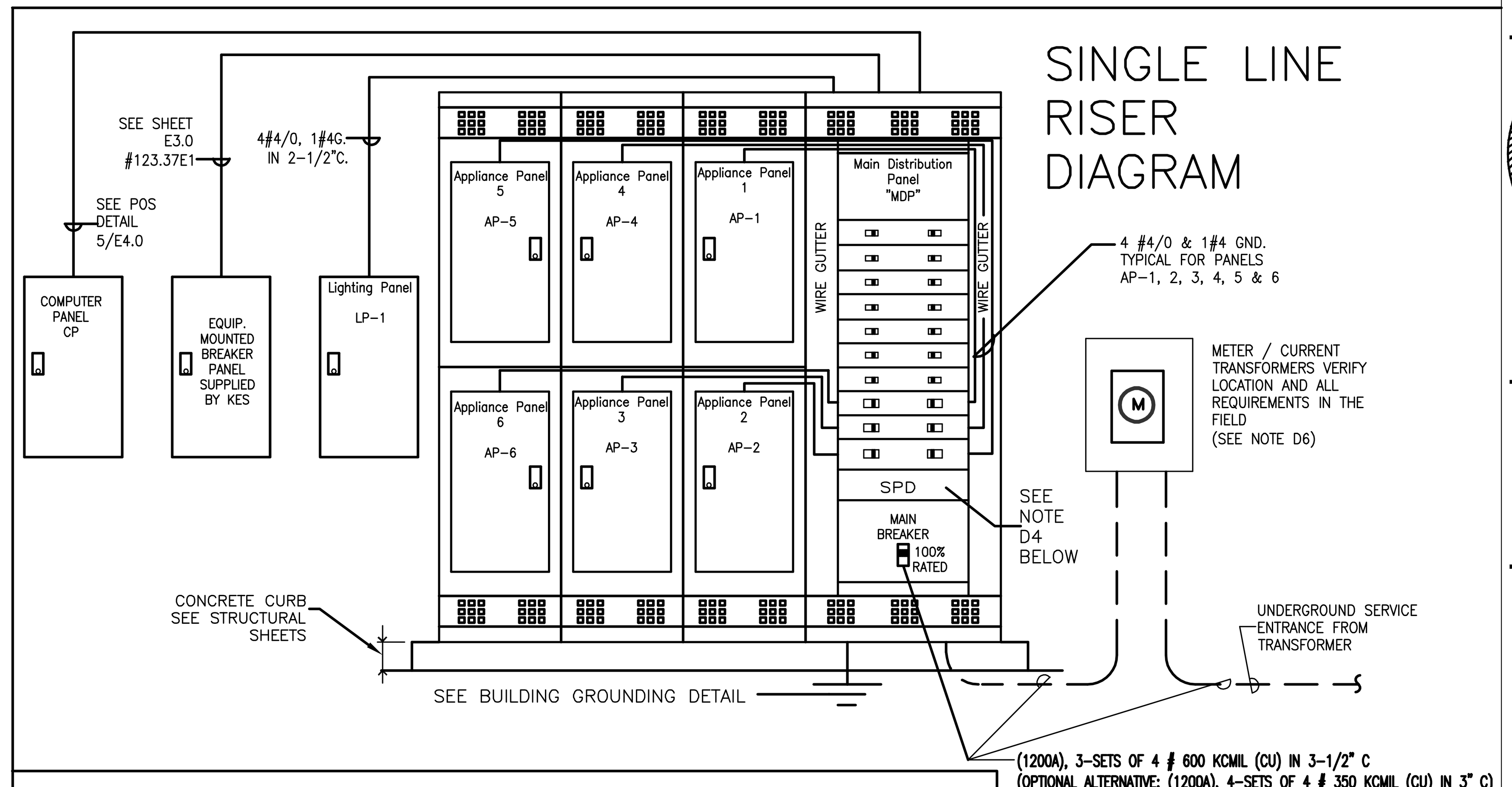
1200A MCB, NOTES D6, D7, & D8, Mounting: Free Standing, NEMA 1 — PANEL MDP — 208Y/120 VAC, 3PH, 4W

WATTS A	WATTS B	WATTS C	DESCRIPTION	BRKR REQ	TRP PLS	CCT NO.	CCT NO.	TRP PLS	BRKR REQ	DESCRIPTION	WATTS A	WATTS B	WATTS C
2356	5550	4997	Lighting Panel 1; LP-1		225A-3	1	2	225A-3		Appliance Panel; AP-1	15496	14692	15204
15257	15381	17295	Appliance Panel; AP-2		225A-3	3	4	225A-3	SHT	Appliance Panel; AP-3	26484	26484	26484
10687	10687	10687	*Roof Top Unit 1	H	100A-3	5	6	150A-3	L	CP Panel	8658	6408	7648
0	0	0	SPACE			7	8	80A-3	H	*Roof Top Unit 3	7925	7925	7925
18593	18385	16540	Appliance Panel; AP-5		225A-3	9	10	225A-3	SHT	Appliance Panel; AP-4	26397	26397	25437
9444	9564	0	KES Breaker Panel		125A-2	11	12	50A-3	H	*Roof Top Unit 2	3842	3842	3842
0	0	0	Spare	H,L	200A-3	13	14	225A-3		Apliance Panel; AP-6	13884	11252	8192
2688	2688	2688	Remote Cond Unit	H	50A-3	15	16	30A-3		SPD			
0	0	0	SPACE			17	18						
0	0	0	SPACE			19	20						
* SEE ELECT SHTS FOR CONDUIT AND WIRE SIZE										Total Connect	161711	159255	146939
										Connect Amps		1299	Amps

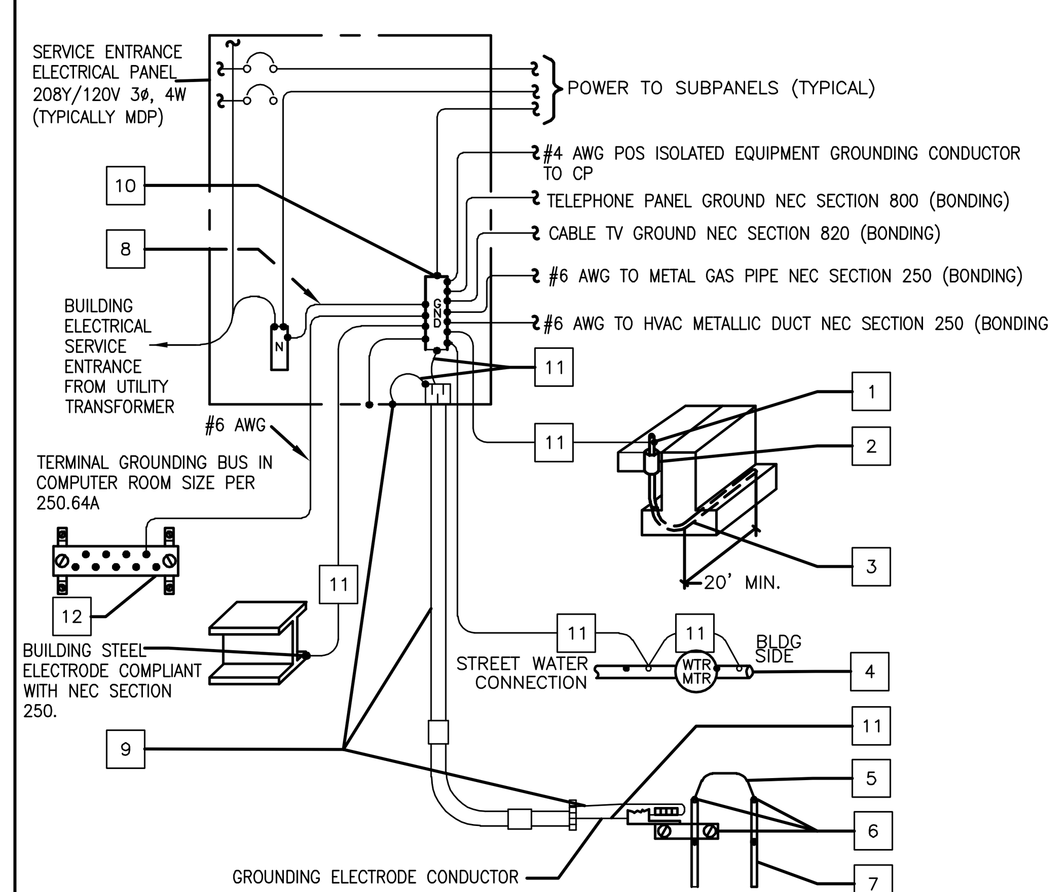
225 MLO AIC: SEE NOTES D7, & D8, Mounting: Flush — COMPUTER PANEL CP — 150A, 208Y/120 VAC, 3PH, 4W, CB TYPE: BL or BLH

WATTS A	WATTS B	WATTS C	DESCRIPTION	BRKR REQ	TRP PLS	CCT NO.	CCT NO.	TRIP PLS	BRKR REQ	DESCRIPTION	WATTS A	WATTS B	WATTS C
1488			POS/Reg/Mon/Printer/Headset	L	20A-1	1	2	20A-1	L	Spare	0		
	1764		Pos Prep-K\s Monitor / Rec Prntr Video Mon	G, L	20A-1	3	4	20A-1	G, L	Receipt Printer/cashless		84	
		100	Cctv/Timer	L	20A-1	5	6	20A-1	L	Menu Bd-Digital/Media Player			1368
390			Coin Dispenser/Pos-Pc Hardware/POS timer/Vido	L	20A-1	7	8	20A-1	G, L	Pos-Pc Hardware Presenter's Booth /Video Mon. w/supports	600		
	180		Pos Video Monitor	G, L	20A-1	9	10	20A-1		Zoom Timer		720	
		600	Tech Rack	L	20A-1	11	12	30A-1	L	POS Tech Rack			360
0			Spare	L	20A-1	13	14	20A-1	L	POS Optical Isolator	120		
	1200		Tech Rack	L	20A-1	15	16	20A-1	L	Speaker Canopy #1		120	
		1440	Tech Rack	L	20A-1	17	18	20A-1	L	Speaker Canopy #2,			120
1080			Pos PC front counter	L	20A-1	19	20	20A-1	L	Office desk	1200		
	0		Spare	L	20A-1	21	22	20A-1	L	Office desk		1200	
		720	KVS mon/Register/Delivery	G, L	20A-1	23	24	20A-1	L	Spare			0
1860			Exterior Menu Boards	L	20A-1	25	26	20A-1	G, L	POS video monitor	360		
	0		Spare	L	20A-2	27	28	20A-1	G, L	Time Clock		60	
		1860	Exterior Menu Boards	L	20A-1	29	30	20A-1	L	Kiosks			1080
480			Equipment Rack	L	20A-1	31	32	20A-1	L	Kiosks	1080		
	0		Spare	L	20A-1	33	34	20A-1	L	Kiosks		1080	
		0	Space			35	36	20A-1	L	Spare			0
0			Space			37	38	20A-1	L	Spare	0		
	0		Space			39	40			Space		0	
		0	Space			41	42			Space			0
										Total Connect	8658	6408	7648
										Connect Amps		63	Amps
										Demand Amps		79	Amps

SINGLE LINE RISER DIAGRAM



BUILDING ELECTRICAL GROUNDING DETAIL



KEY NOTES

1. PROVIDE ENOUGH LENGTH TO TERMINATE DIRECTLY TO GROUND BUS OR USE BOLTED-TYPE CONNECTION DEVICE OR EXOTHERMIC WELD.
2. NON-METALLIC PROTECTIVE SLEEVE. LOCATE SLEEVE DIRECTLY UNDER THE ELECTRICAL SERVICE ENTRANCE PANEL. EC TO PROVIDE PLIABLE SEALANT BETWEEN COPPER WIRE AND SLEEVE.
3. FOR NEW CONSTRUCTION WHEN A SPREAD FOOTING OR DOWN TURNED SLAB IS USED, EC SHALL INSTALL A CONCRETE ENCASED ELECTRODE, COMPLIANT WITH NEC SECTION 250, CONSISTING OF AT LEAST 20 FEET OF BARE #4 AWG COPPER ENCASED IN 2 INCHES OF CONCRETE NEAR THE BOTTOM OF THE FOOTING OR FOUNDATION (BELOW GRADE) THAT IS IN DIRECT CONTACT WITH EARTH.
4. METAL UNDERGROUND WATER PIPE ELECTRODE COMPLIANT WITH NEC SECTION 250. THE GROUNDING CONNECTION TO THE INTERIOR METAL WATER PIPE SHALL BE MADE WITHIN THE FIRST FIVE FEET OF THE WATER PIPE ENTRANCE TO THE BUILDING.
5. IF MULTIPLE GROUNDING RODS ARE BEING USED OR NEED TO BE USED, THEY SHALL ALL BE BONDED TOGETHER PER NEC SECTION 250.
6. CLAMPS SUITABLE FOR DIRECT BURIAL OR EXOTHERMIC WELD.
7. 8'-0" X 5/8" CU ROD GROUNDING ELECTRODE COMPLIANT WITH NEC SECTION 250.
8. CU BONDING JUMPER SIZED PER NEC SECTION 250 OR FACTORY PROVIDED NEUTRAL TO GROUND BAR LINK. (THIS IS THE ONLY PLACE IN THE BUILDING WHERE N-G SHALL BE BONDED TOGETHER)
9. ALL METAL RACEWAYS CONTAINING GROUNDING ELECTRODE CONDUCTORS SHALL BE BONDED AT BOTH ENDS AS REQUIRED BY NEC SECTION 250. PROVIDE GROUNDING TYPE BUSHINGS & FITTINGS.
10. MCDONALD'S GROUNDING STANDARDS PURPOSELY EXCEED THOSE GIVEN BY THE NEC. THE ELECTRICAL CONTRACTOR SHALL PROVIDE A BUILDING GROUNDING SYSTEM MEETING NEC AND MCDONALD'S STANDARDS AS SHOWN ON THIS DRAWING.
11. CU GROUNDING ELECTRODE CONDUCTORS AND BONDING JUMPERS SHALL BE SIZED BASED UPON ELECTRICAL SERVICE SIZE PER NEC SECTION 250

800A	1000A	1200A
3/0 CU	3/0 CU	4/0 CU

● SHOWS CONNECTION/BONDING POINT

12. TERMINAL GROUNDING BUS AT 90"AFF. HARGER #GBI14212D.

DISTRIBUTION EQUIPMENT NOTES:

D1. ALL ELECTRICAL MATERIAL USED ON THIS PROJECT SHALL BE "UL" LISTED AND LABELED.

D2. THE EC/GC/AREA CONSTRUCTION MANAGER WHEN ORDERING PANELBOARDS, SHALL DETERMINE THE NUMBER OF SERVICE ENTRANCE CONDUCTORS, SIZE AND MATERIAL TYPE, AND SHALL PROVIDE THIS INFORMATION TO THE PANELBOARD SUPPLIER SO THAT THE APPROPRIATE LUGS CAN BE PROVIDED FROM THE FACTORY.

D3. ALUMINUM SERVICE ENTRANCE CONDUCTORS SHALL ONLY BE USED WHEN THEY ARE TERMINATED DIRECTLY TO THE LINE LUGS ON A C/T AND METERING CABINET, THE LINE LUGS OF A FUSIBLE DISCONNECT SWITCH OR TO THE LINE LUGS OF A MAIN LUG ONLY (6 HANDLE RULE) SERVICE ENTRANCE PANEL. ALUMINUM SERVICE ENTRANCE CONDUCTORS SHALL NOT BE TERMINATED TO THE LINE LUGS OF ANY MAIN BREAKER SINCE DOING SO WILL VIOLATE IT'S 100% UL RATING. IF ALUMINUM CONDUCTORS ARE USED AS PREVIOUSLY INDICATED THEY SHALL BE TERMINATED AS FOLLOWS, AND THE WIRE SIZE INCREASED DUE TO LOWER AMPACITY OF ALUMINUM. EXPOSED ALUMINUM CONDUCTOR STRANDS SHALL BE COATED WITH AN ANTI-OXIDANT IMMEDIATELY AFTER INSULATION IS STRIPPED AWAY. A COMPRESSION LUG SHALL BE PROPERLY INSTALLED ONTO THE EXPOSED ALUMINUM CONDUCTOR STRANDS, AND THAT COMPRESSION LUG SHALL THEN BE BOLTED TO THE TRANSFORMER TAPS AND SWITCHBOARD BUSS USING PROPERLY SIZED BOLTS, NUTS AND WASHERS. MERELY INSERTING ALUMINUM STRANDS UNDER A SCREW LUG SHALL NOT BE ACCEPTABLE.

D4. THE SURGE PROTECTIVE DEVICE (SPD) UNIT SHALL BE AN INTEGRAL UNIT PROVIDED AND INSTALLED BY THE SWITCHBOARD MANUFACTURER. ORDER APPROVED UNITS AS SHOWN IN D5.

D5. APPROVED SWITCHBOARDS, PANEL, & SPD SUPPLIER (IN ADDITION TO ORDERING SWITCHBOARD & PANELS ALSO ORDER SPD) SUPPLIERS:

SQUARE D VIA GRAYBAR
900 REGENCY DRIVE
GLENDALE HEIGHTS, IL 60139
TEL: (800)784-6059 OR (630) 671.6304

SPD INTEGRAL: I-LINE SERIES,
(208Y/120V, 3Ø)

D6. MAIN INCOMING METER / CURRENT TRANSFORMER CABINET, MAIN DISTRIBUTION PANEL MDP, SERVICE CABINET AND SWITCH SHALL BE BRACED FOR THE HIGHEST AVAILABLE FAULT CURRENT BUT NOT LESS THAN NEMA SYMMETRICAL RMS OF 65,000 AMPERES. CONTACT UTILITY/PM/GC/EC AS REQUIRED.

D7. BRANCH BREAKERS IN ALL LP, AP AND (CP IF USED) PANELS SHALL HAVE A NEMA SYMMETRICAL RMS RATING OF 10,000 AMPS. ALL CIRCUIT BREAKERS IN AP, LP AND CP PANELS SHALL BE SERIES RATED WITH THE CIRCUIT BREAKERS IN PANEL MDP SO THAT ALL CIRCUIT BREAKERS IN ALL BRANCH PANELBOARDS ARE PROTECTED AGAINST THE MAXIMUM FAULT CURRENT AVAILABLE AT THE MAIN SERVICE DISCONNECT. NO DESIGN CHANGES SHALL BE MADE TO THE DISTRIBUTION SYSTEM WITHOUT THE WRITTEN APPROVAL OF THE PROFESSIONAL ELECTRICAL ENGINEER OF RECORD. FOR A SERIES RATED SYSTEM USING PANEL BOARDS MANUFACTURED BY SQUARE-D USE A FULLY RATED MAIN BREAKER (SM-RGC) AS WELL AS OTHER FULLY RATED BREAKERS IN THE MDP (QG, FH, RGC) AND SERIES RATED BREAKERS (QO (B), QO (B) VH) IN THE SUB-BREAKERS.

D8. PANELBOARD SUPPLIER SHALL MARK CLEARLY & LEGIBLY ON THE DOORS OF ALL PANELS. DOORS OF ALL PANELS "CAUTION - SERIES RATED SYSTEM ______A AVAILABLE. IDENTIFIED REPLACEMENT COMPONENTS REQUIRED."

D9. ALL BREAKERS SHALL BE THE BOLT-ON TYPE. ALL CIRCUIT BREAKERS SHALL BE CAPABLE OF BEING LOCKED OUT TO COMPLY WITH OSHA REGULATION 1910.147 LOCKOUT/TAGOUT PROCEDURES.

D10. BRANCH BREAKERS OF 2P AND 3P CONFIGURATION SHALL HAVE A COMMON TRIP.

D11. ALL CIRCUIT BREAKERS USED TO SWITCH LIGHT FIXTURES SHALL BE APPROVED FOR THE PURPOSE AND MARKED "SWD".

D12. ALL HVAC CIRCUIT BREAKERS SHALL BE HACR TYPE. SEE TABLE ON SHEET E4.0 FOR CONDUIT AND WIRE SIZE REQUIREMENTS.

D13. PANELBOARD SUPPLIER SHALL PROVIDE ENGRAVED PLASTIC LAMINATED LABELS TO IDENTIFY ALL PANELS. LABEL FOR COMPUTER PANEL SHALL READ "COMPUTER ONLY PANEL".

D14. ALL PANELS SHALL BE PROVIDED WITH A KEY LOCK AND LATCH. EACH PANEL SHALL HAVE TWO KEYS WITH ALL PANELS KEYED ALIKE.

D15. PANELBOARD MANUFACTURER SHALL PROVIDE ARC-FLASH WARNING LABELS FOR MDP AND ALL BRANCH PANELBOARDS IN ACCORDANCE WITH NEC110. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR DATA COLLECTION INCLUDING BUT NOT LIMITED TO UTILITY TRANSFORMER DATA, CABLE LENGTHS, ETC AND COORDINATING WITH THE SWITCHBOARD SUPPLIER TO PERFORM AN ARC FLASH STUDY. CONTRACTOR SHALL BE RESPONSIBLE TO AFFIX THE LABELS ON THE DESIGNATED EQUIPMENT PROVIDED BY THE SUPPLIER.

D16. ALL RECEPTACLES IN THE KITCHEN AREA MUST HAVE GROUND FAULT CIRCUIT-INTERRUPTER PROTECTION PER NEC 210.8 (B) (2).

D17. MDP 100% RATED MAIN BREAKER, 1200 AMPS OR HIGHER SHALL BE EQUIPPED WITH ARC FLASH MAINTENANCE SETTING SWITCH FOR USE AS TEMPORARY ARC-FLASH MAINTENANCE SETTING SWITCH FOR USE AS A TEMPORARY ARC-FLASH INCIDENT ENERGY REDUCTION DEVICE DURING MAINTENANCE ACTIVITIES.

SEE SHEET E3.1 FOR GENERAL ELECTRICAL NOTES

BREAKER MODIFICATIONS:

G - GFCI PERSONNEL PROTECTION (5MA)
HID - HID & SWD RATED
L - HANDLE LOCK
H - HACR RATED
S - SWITCH DUTY RATED
SHT - SHUNT TRIP

TOTAL BUILDING 208Y/120V, 3 PHASE, 4-WIRE GENERAL SERVICE POWER BASED **ON NEC 220.88 FOR A "NOT ALL ELECTRIC"** NEW RESTAURANT.

ELECTRIC UTILITIES CALC

NEC Optional Method	(kW)	(A)
1. Continuous Loads:	36	99
2. Kitchen Loads:	340	945
3. HVAC Loads:	92	256
4. Cooling:	0	0
5. Total (1+2+3+4):	468	1299
6. Base Value (See 220.88):	325	902
7. Amount Over Base Value (5-6):	143	397
8. Demand Factor:	0.45	
9. Adjusted Value (8*7):	64	179
10. Adjusted Base Value (220.88):	262.5	729
11. Demand (9+10):	327	**907**

LINGLE DESIGN GROUP INC
158 WEST MAIN STREET
LENA, IL 61048
815.369.9155
1764 BLAKE ST
DENVER, CO 8020
303.974.5873
WWW.LINGLEDESIGN.COM

DICKERSON ENGINEERING, INC.
Professional Electrical Engineers
3343 NORTH RIDGE AVENUE
ARLINGTON HEIGHTS, IL 60004
TEL (847) 966-0290
WWW.DEI-PE.COM
ILLINOIS REGISTERED DESIGN FIRM # 184-000949

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STATE OF MISSOURI — GREGORY L. DOFFIN — NUMBER PE-2015022305 — PROFESSIONAL ENGINEER

SIGNATURE

DATE 09/02/2026 — EXPIRATION DATE 12/31/2027

COVERING ELECTRICAL DESIGN

STATE ID: 241342
PROJECT #: 26-125
NATIONAL #: 46237
DRAWN BY: DEI
CHECKED BY: GD/RS

DATE: 07/15/2026 - PERMIT / BID SET

REVISIONS
1 — 09/08/2026 - DECOR UPDATE / PLUMBING & CIVIL COORDINATION

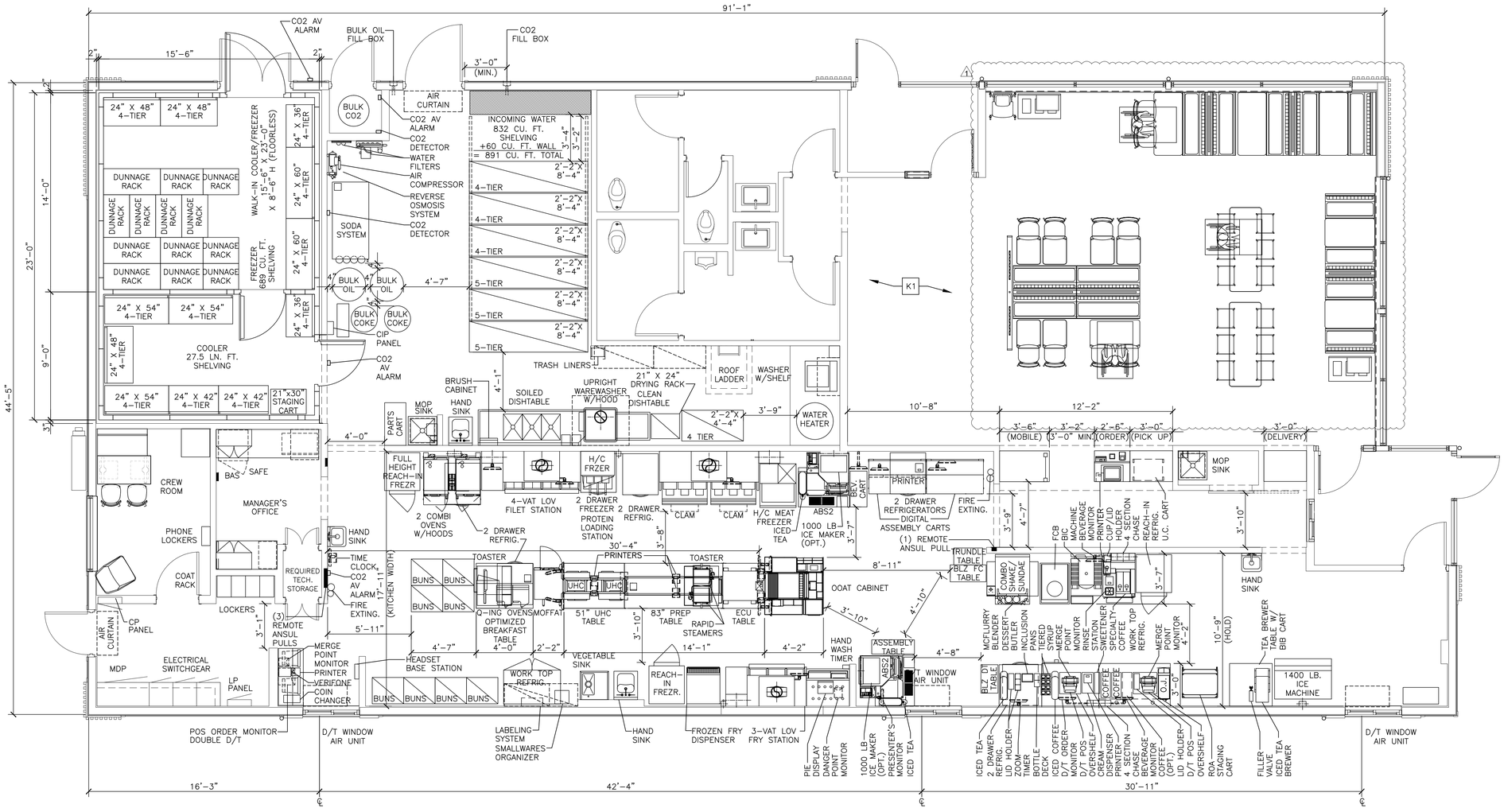
CLIENT
McDonald's USA, LLC

PROTOTYPE
BB20 4590 WW-HB
ISSUE DATE 06/26

ADDRESS
600 SCHUG AVENUE
PECULIAR, MO, 64078

SHEET TITLE
PANEL SCHEDULES & ONE LINE

SHEET NUMBER:
E4.2



1 / K1.0 KITCHEN COVER SHEET

1/4" = 1'-0"

KEYED NOTES

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

LINGLE DESIGN GROUP INC
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STATE OF MISSOURI — CARL LINGLE — NUMBER A-2003018555 — ARCHITECT

LICENSE EXPIRATION: 12-31-27

DATE ISSUED: 07-15-26

STATE ID: 241342

PROJECT #: 26-125

NATIONAL #: 46237

DRAWN BY: RP

CHECKED BY: JK

DATE: 07/15/26 - PERMIT / BID SET

REVISIONS

1 09/08/25 - DECOR UPDATE / PLUMBING & CIVIL COORDINATION

CLIENT

McDonald's USA, LLC

PROTOTYPE

BB20 4590 WW-HB

ISSUE DATE 06/26

ADDRESS

600 SCHUG AVENUE
PECULIAR, MO, 64078

SHEET TITLE

KITCHEN COVER SHEET

SHEET NUMBER:

K1.0

DRAWING NOTES

1. ALL DIMENSIONS SHOWN ARE TAKEN TO FACE OF WALL FINISH
2. * INDICATES OPTIONAL EQUIPMENT
3. KES TO VERIFY ALL BLOCKING FOR WALL MOUNTED EQUIPMENT AS REQUIRED BY GENERAL NOTE 9 ON A1.0 PRIOR TO INSTALLATION

SEE SHEET K2.1 FOR EQUIPMENT SCHEDULE

BETWEEN CLR/FZR & EXT. WALL 2" MIN. – 4" MAX. SEE ARCH DWGS.

INCOMING WATER

(TRACK W/ STOPS)

(HOLD)

(CLEAR)

(MOBILE) (3'–0" MIN.) (ORDER) (PICKUP) (DELIVERY)

(REFERENCE) (REFERENCE)

REQUIRED TECH. STORAGE

ELECTRICAL PANELS

KITCHEN EQUIPMENT PLAN
1/4" = 1'–0"

2 K2.0 COMPUTER CLOSET RACK
1/4" = 1'–0"

3 K2.0 FRONT COUNTER
1/4" = 1'–0"

4 K2.0 FRONT COUNTER ELEVATION
1/4" = 1'–0"

5 K2.0 BEVERAGE CELL (INTERIOR WALL)
1/4" = 1'–0"

6 K2.0 BEVERAGE CELL (EXTERIOR WALL)
1/4" = 1'–0"

7 K2.0 COMPACT OPTIMIZED PREP LINE
1/4" = 1'–0"

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STATE OF MISSOURI · CARL LINGLE · NUMBER A-2003018555 · ARCHITECT

LICENSE EXPIRATION: 12–31–27

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STATE ID: 241342
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REVISIONS
1 09/08/25 - DECOR UPDATE / PLUMBING & CIVIL COORDINATION

CLIENT
McDonald's USA, LLC

PROTOTYPE
BB20 4590 WW-HB
ISSUE DATE 06/26

ADDRESS
600 SCHUG AVENUE
PECULIAR, MO, 64078

SHEET TITLE
KITCHEN EQUIPMENT PLAN & ELEVATIONS

SHEET NUMBER:
K2.0

x = Optional Equipment VIF = Verify in Field
GC = General Contractor
R = Relocated Equipment

EQUIPMENT SCHEDULE

ITEM	O	QTY	DESCRIPTION	MANUFACTURER	MODEL #	UL	NSF	FURNISHED	GENERAL REMARKS	SPECIAL REQUIREMENTS
1.40		1	SERVICE POD – 30"	DECOR	SEE PLAN	–	2	GC	–	
1.51		1	PICKUP POD – 36"	DECOR	SEE PLAN	–	2	GC	–	
1.52		1	PICKUP POD – 42"	DECOR	SEE PLAN	–	2	GC	–	
1.63		1	McDELIVERY PICKUP COUNTER	DECOR	SEE PLAN	–	2	GC	–	
2.05		1	UNDER COUNTER CART – 24"W x 18"D FRONT COUNTER	INTERMETRO	UC18–DMS	–	2	KES	–	
9.08		2	UTILITY CHASE – ICE MAKER ON ABS VERSION	KES	5"x8"x23"	–	2	KES	CONCEALS WATER AND CONDENSING UNIT LINES	
9.15		1	UTILITY CHASE – FFDT INTERIOR WALL	KES	20"x5"x76"	–	2	KES	4 SECTION CHASE FOR BUYOUT RECEPTACLES, POS, CO2 AND WATER	
9.16		1	UTILITY CHASE – FFDT EXTERIOR WALL	KES	20"x5"x76"	–	2	KES	4 SECTION CHASE FOR BUYOUT RECEPTACLES, POS AND WATER	
9.18		2	UTILITY CHASE – WALL VERSION	KES	4"x4"x82"	–	2	KES	CHASE FOR BULK OIL LINES, MOUNT AT 2'–0"	
9.20		1	UTILITY CHASE – COMBI CELL	KES	4"x8"x84"	–	2	KES	CHASE FOR BUYOUT RECEPTACLES AND WATER	
19.00		2	DIGITAL ASSEMBLY CART – 48"	INTERMETRO	MCDDAC–48	–	2	KES	–	
19.04		1	ROA STAGING CART – 24"X 30"	INTERMETRO	MCDROA–2430	–	2	KES	–	
20.01		2	AUTOMATED BEVERAGE SYSTEM 2.0	IMI CORNELIUS	621058590LON	–	–	KES	INSTALLATION KIT INCLUDES STAINLESS STEEL CHASE & DATA LINE	
21.01		3	COFFEE BREWER (THERMAL POTS)	BUNN–O– MATIC	AXIOM–DV–3	E32066	4	KES	W/ELECTRONIC CONTROLLER FOR CONVERSION TO LOW OR HIGH VOLTAGE	
23.12		1	COFFEE CREAM DISPENSER	SURESHOT	AC110–PC–51	E217698	20	KES	–	
23.14		1	SUGAR/SWEETENER DISPENSER	SURESHOT	AC2–GP–1–G38	E217698	18	KES	–	
23.17		1	SPECIALTY COFFEE	THERMOPLAN	BW4–CTS	–	4	KES	–	
24.02		1	JUICE DISPENSER	BUNN–O– MATIC	JDF–2S	–	18	KES	–	
25.01		4	SLIMLINE ICED BEVERAGE DISPENSER	BUNN–O– MATIC	TDO–N	E32066	4	KES	KES TO VERIFY EXACT QUANTITY PER MARKET	
25.06		3	SLIMLINE ICED BEVERAGE DISPENSER – SHORT	BUNN–O– MATIC	TDO–N LP	E32066	4	KES	KES TO VERIFY EXACT QUANTITY PER MARKET	
25.07		1	INFUSION TEA BREWER – MIS	BUNN–O– MATIC	ITCB–DV	E32066	4	KES	PROVIDED WITH BREWER, INSTALLATION KIT AND TDO–N BOOSTER	
25.13		1	GLASS FILLER HOSE ASSEMBLY	FISHER	H–14650–KIT	–	–	GC	–	
25.95		3	SLIMLINE ICED BEVERAGE DISPENSER – 2 TIER STAND	KES	–	–	2	KES	–	
26.01		1	TEA BREWER TABLE – 36"X36"	ISS SHELVING	WST1758C	–	2	KES	–	
31.03		1	SODA SYSTEM PACKAGE B.I.B.(RECIRCULATING– 3 TOWERS) – REMOTE	MULTIPLEX	50MR04	SA4632	18	KES	–	
32.02		1	REVERSE OSMOSIS WATER FILTRATION SYSTEM – TANKLESS	EVERPURE	MRS–600HE	–	–	KES	FOR COFFEE MAKER, ESPRESSO MACHINE, AND RAPID BUN STEAMER	
32.04		1	WATER FILTRATION SYSTEM	EVERPURE	EV9437–32	–	–	KES	–	
32.05		1	WATER FILTRATION SYSTEM	EVERPURE	EV9272–24	–	–	KES	FOR COMBI OVENS AND STAGING CABINET	
34.00		1	AIR COMPRESSOR	GAST	87R–10BA	–	–	KES	PROVIDE WITH AIR MANIFOLD	
36.00		2	BULK COKE	CHART INDUSTRIES	10667511	–	18	MANU–FACTURER	SYRUP LINES BY CHART INDUSTRIES	
37.00		1	BULK CO2 – 750 LB.	CHART INDUSTRIES	CARBO–MAX 750	–	–	MANU–FACTURER	–	
37.03		2	CO2 SAFETY SYSTEM	SEE RMKS	–	–	–	KES	SEE MECHANICAL DRAWINGS	INCLUDES DETECTOR, PWER MONITOR W/ TROUBLE SIGNAL AND (4) AV ALARMS
38.00		1	CLEAN IN PLACE PANEL	CHART INDUSTRIES	10667431	–	18	MANU–FACTURER	MOUNT 6"W x 7"H. BOX @ 6'–0" AFF TO BOX CENTER LINE	
39.10		1	ICE MACHINE – 1400 LB.	MANITOWOC	IYT1500N3/ D970	SA4027	12	KES	USE HEADMASTER KIT K00221	
39.15		2	ICE MACHINE – 1000 LB.	MANITOWOC	IBT1020C–161	SA4027	12	KES	CONDENSER: CVDT1200	
40.00		1	ICE MACHINE CHASE	KES	4"x6"x48"	–	2	KES	CONCEALS WATER AND CONDENSING UNIT LINES	
41.06		1	ICE MACHINE REMOTE CONDENSER – 1400 LB.	MANITOWOC	JCT–1500	SA4027	12	KES	–	
41.09		2	ICE MACHINE REMOTE CONDENSER – 1000 LB.	MANITOWOC	CVDT1200–263A	SA4027	12	KES	–	
43.21		1	OPTIMIZED ORDER ASSEMBLY TABLE	KES	90001	E152097	2	KES	–	
44.46		2	SMALL RISER SHELF – 18" TO 30"	FRANKE	18006010	–	2	KES	–	
44.60		1	MODULAR CENTER ISLAND CABINET – 36"	H&K	–	–	2	KES	–	
44.61		1	MODULAR CENTER ISLAND CABINET – 48"	H&K	–	–	2	KES	–	
44.62		1	MODULAR CENTER ISLAND CABINET– 60"	H&K	–	–	2	KES	–	
46.13		2	SYRUP BOTTLE RACK	H&K	HK15028	–	2	KES	–	
46.14		2	BOTTLE DOCK	KES	95058	–	2	KES	–	
46.15		1	INCLUSION PAN HOLDER	KES	95099	–	2	KES	–	
46.16		1	CUP DISPENSER VERTICAL F/ 3 TUBES	H&K	79095	–	2	KES	–	
49.00		1	CO2 FILL BOX – 6 1/2"W x 18"H	CHART INDUSTRIES	8512629	–	–	MANU–FACTURER	SEE EXTERIOR ELEVATIONS FOR MOUNTING HEIGHT. INSTALLED BY GC	
51.03		2	CUP LID HOLDER 3 HIGH S/S	KES	–	–	2	KES	–	
51.04		3	CUP LID HOLDER SINGLE STACK 8" HIGH	KES	–	–	2	KES	–	
51.11		1	CUP LID HOLDER – SINGLE WIDE, 3 TIER	H&K	95020	–	2	KES	–	
52.01		1	REMOTE CONDENSING UNIT – 50MR04	MULTIPLEX	TS–0895	SA2298	–	KES	ORDER PRE–CHARGE LINE #204017 – VIF LENGTH FROM UNIT TO SODA SYST.	
61.00		1	FRY BAGGING STATION 36"	KES	FB25A	E99018	2	KES	–	
65.30		1	3–VAT LOV FRYER – ELECTRIC – F/F/F	HENNY PENNY	LVE–303	E30993	4	KES	–	IDLE ENERGY RATE=0.73kW, ENERGY EFFICIENCY=87%
66.47		1	4–VAT LOV FRYER – ELECTRIC – S/S/S/S	HENNY PENNY	LVE–304	E30993	4	KES	–	IDLE ENERGY RATE=0.73kW, ENERGY EFFICIENCY=87%
69.00		2	CAPTURE JET PLENUM – FRYER	HALTON	CJP–F	MH27607	2	KES	ATTACH TO UNIVERSAL EXHAUST HOOD	
73.00		1	UNIVERSAL EXHAUST HOOD 3–VAT FRYER	KES	UH–50	MH12755	2	KES	–	
74.00		1	UNIVERSAL EXHAUST HOOD 4–VAT FRYER	KES	UH–65	MH12755	2	KES	–	
79.26		2	VENTLESS HOOD FOR COMBI OVEN	CONVOTHERM	CONOVENT MINI 6.10	E325060	2	KES	–	
80.00		3	MECHANICAL CHASE	KES	9"x18" SGCL.	E163328	2	KES	–	
81.00		1	PROTEIN LOADING STATION KIT	KES	272436	–	2	KES	–	
81.01		1	PRODUCT LANDING SHELF – SOLID TOP	KES	–	–	2	KES	–	
81.02		1	PRODUCT LANDING SHELF – CUT OUT TOP	KES	–	–	2	KES	–	
85.05		1	FROZEN FRY DISPENSER	RAM	280–FP	E140753	4	KES	–	
91.02		1	WALL MOUNT FREEZER UNIT–SINGLE WIDE–HIGH CAPACITY	KES	HCWF1	SA7329	7	KES	AIR–COOLED, SELF–CONTAINED – MOUNT BOTTOM AT 51" AFF	HCWF1.99A INSTALL HARDWARE KIT REQUIRED
94.01		1	UNIVERSAL EXHAUST HOOD 2–FULL–CLAM GRILLS	KES	UH–83	MH12755	2	KES	–	
96.21		2	36" NEXT GEN 3–PLATEN CLAMSHELL GRILL – ELECTRIC	GARLAND	ME–3PX	E28898	4	KES	–	
97.08		1	MEAT FREEZER – DOUBLE WIDE – HIGH CAPACITY – RIGHT HAND	KES	HCMF30B–RH	SA6032 S	2	KES	AIR–COOLED, SELF–CONTAINED	
99.00		1	GRILL TOOL ORGANIZER	KES	–	–	2	KES	–	
110.01		1	OPTIMIZED BREAKFAST TABLE	KES	OBT	–	2	KES	–	
114.00		1	HUMIDIFIED HOLDING CABINET	MOFFAT	HP10T–LMD	197	4	KES	–	
116.23		2	UNIVERSAL HOLDING CABINET – HIGH DENSITY – 2–SIDED – PIN & SLEEVE	FRYMASTER	UHCHD6T	E44571	4	KES	–	
117.30		1	UHC TABLE COPL – 2 SIDED – 51"D x 34"W – PIN&SLEEVE	KES	91011	–	2	KES	–	
118.00		1	Q'ING OVEN – PIN & SLEEVE	AMANA	MC23MPW2	E40456	4	KES	–	
118.03		2	Q'ING OVEN – PIN & SLEEVE	ACP	MCMOC24	–	4	KES	–	
122.27		1	NEXT GEN. UNIVERSAL RADIANT TOASTER – PIN & SLEEVE	ANTUNES	HRT–5H	–	4	KES	–	
122.28		1	NEXT GEN. UNIVERSAL CONTACT TOASTER – PIN & SLEEVE	ANTUNES	HCT–5H	–	4	KES	–	
123.36		1	ECU TABLE – COPL	KES	90165	–	2	KES	–	
123.37		1	BREAKER PANEL– 125 AMP – 1 PHASE – EQUIPMENT MOUNTED	KES	–	–	–	KES	–	
123.40		1	PREP TABLE – HD – 2–SIDED COPL – 38"D x 83 1/2" – PIN & SLEEVE W/REF.	KES	91010	–	2	KES	–	
125.00		2	RAPID BUN STEAMER	PRINCE CASTLE	625–MFY	–	4	KES	–	
130.00		2	COMBI OVEN	CONVOTHERM	MS6102083LCMD1	E360598	4	KES	–	0.89kW, 69% STEAM MODE, 0.61kW, 81% CONVECTION MODE
134.02		1	VEGETABLE SINK	KES	SK04–4	–	2	KES	PROVIDE W/ BOWL COVER	
139.04		1	COMBI OVEN STAND – DOUBLE WIDE	KES	–	–	2	KES	–	
146.00		2	BUTTER WARMER	H&K	90016	–	–	KES	–	
151.12		1	CLEAN DISHTABLE – LEFT HAND – 28.23"	KES	SK–SPL	–	2	KES	–	
151.46		1	SOILED DISHTABLE – RIGHT HAND – 90.5" WIDE	KES	SK–SPL	–	2	KES	–	
152.04		1	WAREWASHER HOOD	KES	–		3		TYPE 2 HOOD FOR NON GREASE APPLICATION – REQUIRED PER CODE	
152.09		1	WAREWASHER – HIGH TEMP	ECOLAB	XL–HTHH–VV	E5956	3	MANU–FACTURER	PROVIDE VAPOR VENT	IDLE ENERGY RATE=0.486kW, WATER CONSUMPTION=0.84 GAL./RACK
153.00		1	SCULLERY SHELVING KIT – 3 TIER – 14" x 36"	INTERMETRO	SHSS–4	–	2	KES	–	
153.04		1	SMALLWARE WALL ORGANIZER	INTERMETRO	SW1812–MPS	–	2	KES	–	
153.06		1	REUSABLE DRYING RACK	INTERMETRO	MCD2124–DRY6	–	2	KES	–	
154.00		1	BRUSH CABINET	KES	8047	–	4	KES	–	
157.00		1	TRASH LINER DISPENSER SHELF	KES	A0053	–	2	KES	–	
159.03		1	UNIVERSAL PARTS CART – 36" W	INTERMETRO	MCD–1836UPC	–	2	KES	–	
160.01		4	CHEMICAL SYSTEM	ECOLAB	–	–	–	MANU–FACTURER	–	
163.00		2	FIRE EXTINGUISHER – 5 LB. – ABC	ANSUL	SEE RMKS	–	–	SEE RMKS	LOCAL ANSUL AGENT SPECIFIES, SUPPLIES & LOCATES PER LOCAL CODE	
163.01		2	FIRE EXTINGUISHER – 6 L. – K GUARD	ANSUL	SEE RMKS	–	–	SEE RMKS	LOCAL ANSUL AGENT SPECIFIES, SUPPLIES & LOCATES PER LOCAL CODE	
163.02		4	REMOTE ANSUL PULL	ANSUL	4835	EX3470	–	SEE RMKS	CODE MAY REQUIRE LOCAL ANSUL AGENT TO SUPPLY	
171.01		1	WALK–IN COOLER / FREEZER FLOORLESS	NORLAKE	–	E42763	7	KES	–	
174.48		1	REMOTE CONDENSING UNIT	MASTER–BILT	MSMC015MB	SA5649	–	KES	ALT. VENDOR HEATCRAFT. VERIFY EQUIPMENT SELECTION AND POWER REQ. W/ KES.	
174.50		1	REMOTE CONDENSING UNIT	MASTER–BILT	MSLA040MC	SA5649	–	KES	ALT. VENDOR HEATCRAFT. VERIFY EQUIPMENT SELECTION AND POWER REQ. W/ KES.	

x = Optional Equipment VIF = Verify in Field
GC = General Contractor
R = Relocated Equipment

EQUIPMENT SCHEDULE

ITEM	O	QTY	DESCRIPTION	MANUFACTURER	MODEL #	UL	NSF	FURNISHED	GENERAL REMARKS	SPECIAL REQUIREMENTS
175.22		1	COOLER EVAPORATOR	MASTER–BILT	E1MCK140B–MA	SA5649	–	KES	ALT. VENDOR HEATCRAFT. VERIFY EQUIPMENT SELECTION AND POWER REQ. W/ KES.	
176.31		1	FREEZER EVAPORATOR	MASTER–BILT	E1LAK140B–ME	SA5649	–	KES	ALT. VENDOR HEATCRAFT. VERIFY EQUIPMENT SELECTION AND POWER REQ. W/ KES.	
177.03		1	REACH–IN REFRIGERATOR–SINGLE WIDE	BEVERAGE AIR	HR1HC–1HS	SA2651	7	KES	–	
178.05		2	REACH–IN FREEZER – SINGLE WIDE	BEVERAGE AIR	HF1HC–1HS	SA2651	7	KES	–	
181.13		1	REFRIGERATOR – SPECIALTY COFFEE– 27" WIDE	TRUE	TUC–27 MCDCF1	SA33040	7	KES	RIGHT–HAND HINGED	
181.14		1	REFRIGERATOR – WORKTOP – 48" WIDE	TRUE	TWT–48 MCD1	SA4065	7	KES	–	
183.00		2	REFRIGERATOR/FREEZER – 2 DRAWER BASE – 30" W X 33" H	KES	18012498	SA4044	7	KES	–	
183.02		4	REFRIGERATOR/FREEZER – 2 DRAWER BASE – 30" W X 30" H	KES	18021304	SA4044	7	KES	–	
187.71		1	FREEZER SHELVING 24" x 36" x 74" H. – 4–TIER	ISS SHELVING	FSMS/FSMA742436E	–	2	KES	–	
187.73		2	FREEZER SHELVING 24" x 48" x 74" H. – 4–TIER	ISS SHELVING	FSMS/FSMA74248E	–	2	KES	–	
187.75		2	FREEZER SHELVING 24" x 60" x 74" H. – 4–TIER	ISS SHELVING	FSMS/FSMA74260E	–	2	KES	–	
188.00		7	DUNNAGE RACK 22" x 36"	INTERMETRO	HP2236PD	–	2	KES	–	
188.07		1	UNIVERSAL STAGING CART	ISS SHELVING	WST1384Y	–	2	KES	–	
188.08		3	DUNNAGE RACK 22" x 30"	INTERMETRO	HP2230PD	–	2	KES	–	
188.09		3	DUNNAGE RACK 22" x 48"	INTERMETRO	HP2248PD	–	2	KES	–	
189.71		1	COOLER SHELVING 24" x 36" x 74" H. – 4–TIER	ISS SHELVING	FSMS/FSMA742436E	–	2	KES	–	
189.72		2	COOLER SHELVING 24" x 42" x 74" H. – 4–TIER	ISS SHELVING	FSMS/FSMA742442E	–	2	KES	–	
189.73		1	COOLER SHELVING 24" x 48" x 74" H. – 4–TIER	ISS SHELVING	FSMS/FSMA74248E	–	2	KES	–	
189.74		3	COOLER SHELVING 24" x 54" x 74" H. – 4–TIER	ISS SHELVING	FSMS/FSMA742454E	–	2	KES	–	
191.01		2	VALANCE SHELVING – 18" x 48"	INTERMETRO	M1848C–MP	–	2	KES	MOUNT AT 6'–8"AFF TO SHELF BOTTOM UNLESS OTHERWISE NOTED	
191.02		1	VALANCE SHELVING – 18" x 60"	INTERMETRO	M1860C–MP	–	2	KES	MOUNT AT 6'–8"AFF TO SHELF BOTTOM UNLESS OTHERWISE NOTED	
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	
191.04		1	VALANCE SHELVING – 18" x 36"	INTERMETRO	M1836C–MP	–	2	KES	MOUNT AT 5'–0"AFF TO SHELF BOTTOM –W/ST STL LINER FOR SALAD EQUIP	
194.32		1	DRY SHELVING 26" x 52" x 84" H.– 4–TIER – MOBILE	DENSTOR	–	–	2	KES	–	
194.36		3	DRY SHELVING 26" x 100" x 84" H.–4–TIER – MOBILE	DENSTOR	–	–	2	KES	–	
195.36		2	DRY SHELVING 26" x 100" x 84" H.–5–TIER– MOBILE	DENSTOR	–	–	2	KES	–	
195.51		1	DRY SHELVING 26" x 100" x 84" H.– 5–TIER– FIXED	DENSTOR	–	–	2	KES	–	
196.06		1	SAFE – STANDARD BLDG. – LEFT HINGE	NKL	BSD4125FGXL–MC	–	–	OWNER	–	
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	PROVIDE SIDE SPLASHES (7–PS–11) WHEN REQUIRED BY LOCAL CODE
197.01		1	HAND WASH TIMER	NATIONAL CONTROLS	TMD–T1715–120	E53595	–	KES	–	
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	PROVIDE SIDE SPLASHES (7–PS–11D) WHEN REQUIRED BY LOCAL CODE
201.13		1	DRIVE–THRU CASH STAND – 21" D x 48" W	INTERMETRO	DT48–8	–	2	KES	SOLID WORK TOP, WIRE SHELVES	
201.15		1	READY NEXT DRIVE–THRU ASSEMBLY CART – 12" D x 36" W	INTERMETRO	DTPC–36	–	2	KES	–	
201.16		2	DRIVE–THRU ABS CART – LEFT HAND	KES	–	–	2	KES	ABS DRINK STAGING CART WITH TROUGH	
201.18		2	CBB STAGING CART	INTERMETRO	MCD–CBB	–	2	KES	–	
201.21		1	BLZ FRONT COUNTER TABLE – 30" D x 14" W	INTERMETRO	MCD1430–BLZM	–	2	KES	W/ CASTERS AND OVERSHELF	
201.22		1	BLZ DRIVE THRU TABLE – 24" D x 14" W	INTERMETRO	MCD1430–BLZT	–	2	KES	–	
203.01		1	HEAT TREAT COMBINATION SHAKE/SUNDAE MACHINE	CARPIGIANNI	K3	SA4203	6	KES	SUPPLIED WITH CONE DISPENSER AND 7'–6" LONG CORD	
203.03		2	CUP/CONE DISPENSER	KES	–	–	2	KES	–	
205.08		1	BIC MACHINE	MULTIPLEX	MA–8–2	SA12070	6	KES	–	
205.09		1	FROZEN BEVERAGE DISPENSER	IMI CORNELIUS	VIPER 3	SA2128	6	KES	–	
206.01		1	SPECIALTY BEVERAGE STANDOFF SHELF	KES	KES	–	2	KES	MOUNT SHELF @ 2'–6" AFF	
207.01		1	BLENDER – RAIL MOUNT – MCFLURRY	VITAMIX	056385	–	8	KES	SUPPLIED MOUNTING BRACKETS	
207.09		1	DESSERT BUTLER	KES	–	–	2	KES	–	–
211.00		1	DELIVERY TABLET	APPLE	IPAD	–	–	DELIVERY PARTNER	QUANTITY DEPENDENT UPON NUMBER OF DELIVERY PARTNERS	
214.02		1	82" 44U STATIONARY RACK	BY OWNER	BY OWNER	OEM	–	OWNER	–	
215.00		1	POS REGISTER – FRONT COUNTER	BY OWNER	BY OWNER	OEM	–	OWNER	INCLUDES MONITOR AND CPU	
215.02		4	POS REGISTER – 2 WINDOW D/T	BY OWNER	BY OWNER	OEM	–	OWNER	INCLUDES MONITOR AND CPU	
215.04		8	POS – KVS MONITOR	BY OWNER	BY OWNER	OEM	–	OWNER	–	
215.07		1	POS REGISTER – DELIVERY	BY OWNER	BY OWNER	OEM	–	OWNER	–	
216.00		9	POS – VIDEO MONITOR	BY OWNER	BY OWNER	E106786	–	OWNER	SUPPORTS INSTALLED BY GC IF REQUIRED – MOUNT @ 5'–8" AFF	FOR APPLICATIONS ABOVE ABS, MOUNT AT 6'–6" AFF
217.13		3	MERGE POINT MONITOR (DOUBLE DRIVE–THRU)	BY OWNER	BY OWNER	–	–	OWNER	MONITORS ARE REQUIRED FOR SIDE BY SIDE DRIVE THRU SYSTEM	–
217.14		1	POS – ORDER MONITOR (DOUBLE DRIVE THRU)	BY OWNER	BY OWNER	E106786	–	OWNER	SUPPORTS INSTALLED BY GC IF REQUIRED – MOUNT @ 5'–8" AFF	
217.19		1	WIRELESS HEADSET BASE STATION	HME	NEXEO HDX	–	–	OWNER	–	
217.24		1	DANGER POINT MONITOR (DOUBLE DRIVE–THRU)	BY OWNER	BY OWNER	–	–	OWNER	MONITORS ARE REQUIRED FOR SIDE BY SIDE DRIVE THRU SYSTEM	
217.26		1	ZOOM TIMER	HME	ZOOM NITRO	–	–	OWNER	–	
219.00		4	POS – RECEIPT PRINTER	BY OWNER	BY OWNER	OEM	–	OWNER	–	
219.05		7	STICKY LABEL PRINTER	BY OWNER	BY OWNER	OEM	–	OWNER	–	–
219.06		1	LABELING SYSTEM	TRANSACT	9700	–	–	KES	–	
220.00		1	POS – COIN DISPENSER	BY OWNER	BY OWNER	OEM	–	OWNER	–	
221.02		1	25" 12U NETWORK WALL RACK	TRIPP–LITE	SRW12USDP	OEM	–	OWNER	–	
221.09		1	O/O EQUIPMENT RACK	TRIPP–LITE	SRW12USDP	–	–	OWNER	AVAILABLE THROUGH POS SUPPLIER	
222.01		1	TIME CLOCK	BY OWNER	BY OWNER	OEM	–	OWNER	–	
223.07		1	WASHER – ELECTRIC	WHIRLPOOL	CAE2793BQ	–	–	KES	–	
225.03		1	OFFICE PACKAGE/DESK UNIT	DENSTOR	2000–0100	–	–	KES	WORK SURFACE 75", (1) DESK PEDESTAL W/ 2 DRAWERS AND (1) PEDESTAL W/ 3 DRAWERS	
225.04		1	OFFICE PACKAGE/ 2–WALL CABINETS	DENSTOR	2000–0200	–	–	KES	–	
225.05		1	OFFICE PACKAGE/HIGH WORK SURFACE	DENSTOR	2000–0300	–	–	KES	W/ (6) L–BRACKETS – WORK SURFACE IS 75" W. – CUT IN FIELD IF REQUIRED	
225.06		1	OFFICE PACKAGE W/3 DRAWER LATERAL FILE	DENSTOR	2000–0400	–	–	KES	–	
226.08		4	CREW LOCKERS –12" x 12" x 18" (6 HIGH)	DENSTOR	3–121278	–	2	KES	–	
226.09		1	CREW SMART LOCKERS	DENSTOR	C3	–	–	KES	LOCATED IN CREW ACCESSORY CABINET	
237.00		1	PIE DISPLAY	PRINCE CASTLE	524–MCDC	E341354	4	KES	PROVIDE WITH S/S PANEL	
700.02		2	MOP SINK	GC	–	–	2	GC	–	
700.07		1	WATER HEATER – GAS	GC	SEE RMKS	–	2	GC	REFER TO PLUMB. DWGS. FOR DETAILS	
700.09		1	ECONOMY OEP BOX W/MOUNTING HARDWARE	ACS	OEP–6	E71309	–	KES	6" W. x 24" D.	
700.10	X	1	BULK OIL SYSTEM	RTI	BI–3F	SEE RMKS	4	MANU–FACTURER	IF AVAILABLE IN MARKET – ETL ELECTRICAL RATING: 9900762	
700.11		1	OEP UTILITY PANEL W/ MOUNTING HARDWARE – STATIC BOX	H&K DALLAS	–	–	–	H&K DALLAS	2'–4"x2'–4" x4" HIGH BOX	
700.18	X	1	BULK OIL FILL BOX – 8"Wx10"H	RTI	–	–	–	MANU–FACTURER	SEE EXTERIOR ELEVATIONS FOR MOUNTING HEIGHT, INSTALLED BY GC	
700.27		1	RINSE STATION – NO SPOON WASH	H&K	HK94024	–	–	KES	–	

SEE SHEET K2.0 FOR EQUIPMENT LAYOUT AND TAG IDENTIFICATION

1 KITCHEN SCHEDULE
K2.1

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STATE OF MISSOURI
CARL LINGLE
NUMBER A-2003018555
ARCHITECT

LICENSE EXPIRATION: 12–31–27

DATE ISSUED: 07–15–26

STATE ID: 241342

PROJECT #: 26-125

NATIONAL #: 46237

DRAWN BY: RP

CHECKED BY: JK

DATE:
07/15/26 - PERMIT / BID SET

REVISIONS
1 09/08/25 - DECOR UPDATE / PLUMBING & CIVIL COORDINATION
2
3
4
5
6

CLIENT

McDonald's USA, LLC

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BB20 4590 WW-HB
ISSUE DATE 06/26

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SHEET TITLE
KITCHEN SCHEDULE

SHEET NUMBER:
K2.1