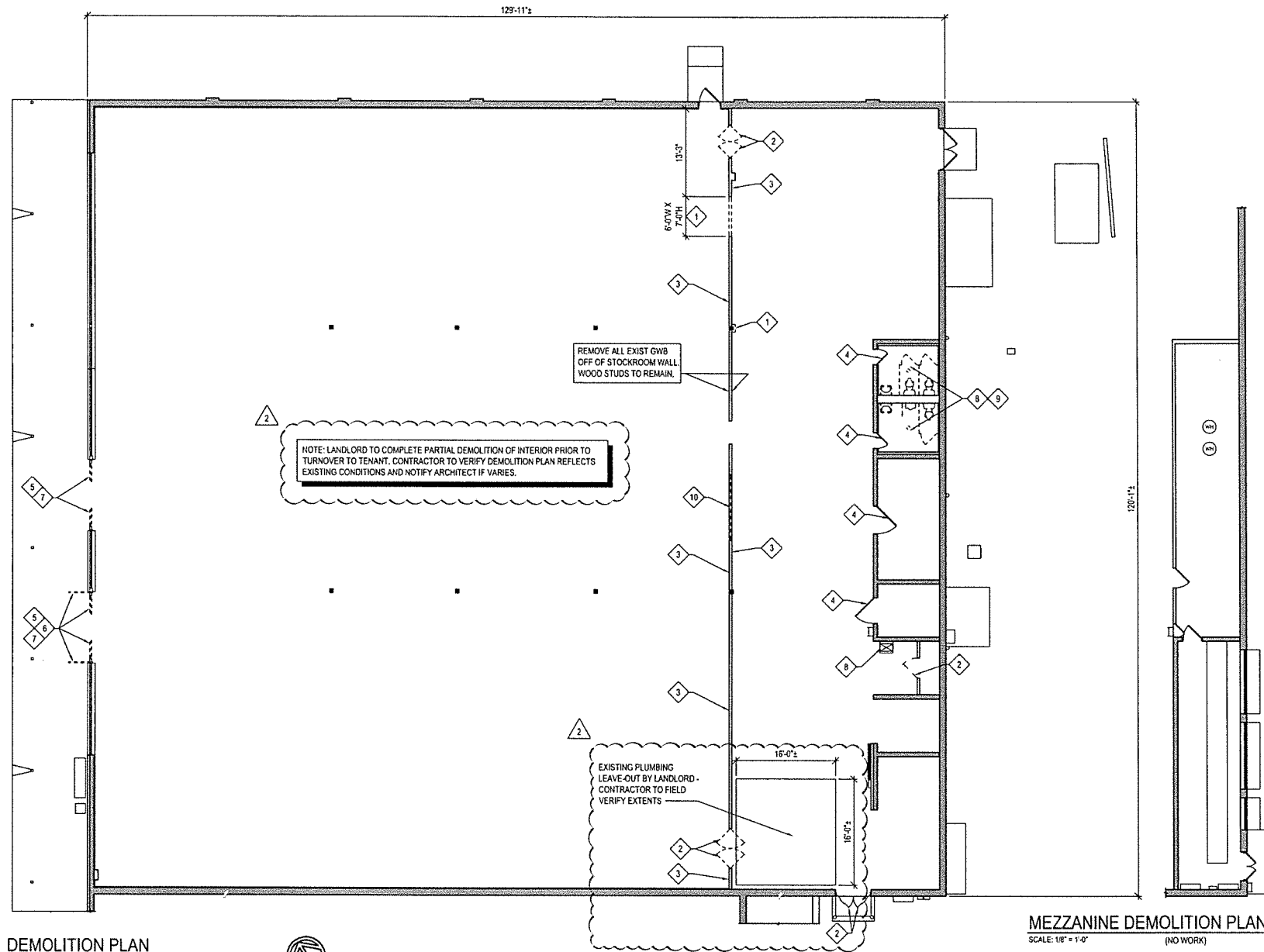




STORE # _____ TURNOVER DATE _____ OPEN DATE _____ CONTRACTOR _____ SVN TVN AS/SN SHELL MAIL / RELOCATION EXPANSION	
SCOPE OF WORK CORRECTIONS	
02/21/2022 SNB 02/15/2022 SNB date description revisions	02/21/2022 SNB 02/15/2022 SNB date description revisions
1-14-2022 210649 C/SY D/E	
date project designed drawn checked	date project designed drawn checked
 <p style="font-size: 24pt; font-weight: bold; margin: 0;">RRMM</p> <p style="font-weight: bold; margin: 0;">ARCHITECTS, P.C.</p> <p style="margin: 0;">1317 Executive Blvd, Suite 200 Chesapeake, VA 23320 (757) 622-2528 / fax (757) 622-6883</p>	
 <p style="font-size: 10pt; margin: 0;">STATE OF SOUTH CAROLINA DONNA A. ELLIOTT <i>Donna A. Elliott</i> Chesapeake, VA 6928 REGISTERED ARCHITECT</p>	
 <p style="font-size: 10pt; margin: 0;">STATE OF SOUTH CAROLINA RRMM Architects, P.C. CHESAPEAKE, VA 23320 REGISTERED ARCHITECT</p>	
<p style="font-size: 24pt; font-weight: bold; margin: 0;">FAMIN & DOLLAR</p> <p style="font-weight: bold; margin: 0;">25490 SC HWY 121, PROJECT#803780 WINTERHURST, SOUTH CAROLINA NOTES, LEGEND AND NET PLAN</p>	
project	drawing
sheet	
<p style="font-size: 36pt; font-weight: bold; margin: 0;">CS1</p>	



MEZZANINE DEMOLITION PLAN
SCALE: 1/8" = 1'-0" (NO WORK)

FAMILY \$ DOLLAR
26490 SC HWY 121, PROJECT#803780
WHITMIRE SOUTH CAROLINA
DEMOLITION PLAN

WALL CONSTRUCTION TYPES

- ▽ EXTERIOR DEMISING WALL: EXISTING MASONRY WALL. PATCH AND REPAIR WALL AS REQUIRED. FINISH PER FINISH SCHEDULE, SHEET A4.
- ▽ EXTERIOR DEMISING WALL: EXISTING MASONRY WALL WITH WOOD FURRING AND GWB. PATCH AND REPAIR AS REQUIRED. SEE DETAIL 4/A4. FINISH PER FINISH SCHEDULE, SHEET A4.
- ▽ PARTITION WALL: EXISTING WOOD STUDS @ 16" OC TO ROOF DECK. PROVIDE TWO LAYERS 5/8" TYPE "X" GWB EACH SIDE TO ROOF DECK SEALED TIGHT TO DECK. CONSTRUCTION SHALL COMPLY WITH UL DESIGN #J01 FOR TWO HOURS FIRE RATING. SEE DETAIL 5/A4. FINISH PER FINISH SCHEDULE, SHEET A4.
- ▽ INFILL PARTITION: MATCH EXIST WOOD STUD @ 12" OC WITH PROVIDE TWO LAYERS 5/8" TYPE "X" GWB EACH SIDE. ALIGN EXIST ADJACENT SURFACES. CONSTRUCTION SHALL COMPLY WITH UL DESIGN #J01 FOR TWO HOURS FIRE RATING. FINISH PER FINISH SCHEDULE, SHEET A4.
- ▽ PLUMBING PARTITION: 6" (20 GA) METAL STUDS @ 16" OC WITH ONE LAYER 5/8" GWB EACH EXPOSED SIDE TO FINISHED CEILING. PLUMBING WALLS ON INTERIOR OF TOILETS SHALL HAVE WATER RESISTANT GWB. FINISH PER FINISH SCHEDULE, SHEET A4.
- ▽ PARTITION WALL: 3 5/8" (20 GA) METAL STUDS @ 16" OC WITH ONE LAYER 5/8" GWB EACH EXPOSED SIDE TO FINISHED CEILING. PLUMBING WALLS ON INTERIOR OF TOILETS SHALL HAVE WATER RESISTANT GWB. SEE DETAIL 4/A1.2. FINISH PER FINISH SCHEDULE, SHEET A4.
- ▽ PARTITION WALL: EXIST WOOD STUDS. PROVIDE TWO LAYERS 5/8" TYPE "X" GWB EACH SIDE TO ROOF DECK. SEE DETAIL 3/A4 FOR ADDITIONAL REQUIREMENTS. FINISH PER FINISH SCHEDULE, SHEET A4.
- ▽ PARTITION WALL: EXISTING MASONRY WALL WITH METAL FURRING AND GWB. PATCH AND REPAIR AS REQUIRED. FINISH PER FINISH SCHEDULE, SHEET A4.
- ▽ PARTITION WALL: 6" (20 GA) METAL STUDS @ 16" OC WITH TWO LAYERS 5/8" TYPE "X" GWB EACH SIDE TO ROOF DECK. FIRE TAPE ALL JOINTS. CONSTRUCTION SHALL COMPLY WITH UL DESIGN #J19 FOR TWO HOURS FIRE RATING. SEE DETAIL 6/A4. FINISH PER FINISH SCHEDULE, SHEET A4.

FAMILY DOLLAR GENERAL NOTES

KEY BOX NOTE:

G.C. SHALL PROVIDE KEY BOX FOR LOCK ACCESS DURING PUNCHOUT AND TURNOVER. COMBINATION MUST MATCH LAST FOUR DIGITS OF STORE NUMBER.

DESIGNER NOTE: GC TO PROVIDE EYE BOLT EMBEDDED 12" MIN. INTO TOP OF LOADING AREA BOLLARD WITH DIAMETER SIZED FOR KEY LOCK BOX.

KNOX BOX NOTE:

IF A KNOX BOX ENTRY SYSTEM IS REQUIRED BY THE CODES GOVERNING THE CONSTRUCTION OF THE PROJECT, PROVIDE RECESSED KNOX BOX PROVIDED BY THE GC PRIOR TO THE COMPLETION OF THE PROJECT. LOCATE PER LOCAL CODE REQUIREMENTS. KNOX BOX CONTACT - 855-625-4563

CERTIFICATE OF OCCUPANCY

G.C. IS RESPONSIBLE FOR THE "CERTIFICATE OF OCCUPANCY". CERTIFICATE TO BE FRAMED AND MOUNTED IN THE MANAGERS OFFICE. IF MUNICIPALITY DOES NOT ISSUE A COO, IT IS THE RESPONSIBILITY OF THE G.C. TO GET A LETTER FROM THE MUNICIPALITY STATING AS SUCH ON CITY/COUNTY LETTERHEAD AND THAT LETTER IS TO BE FRAMED AND MOUNTED IN MANAGERS OFFICE.

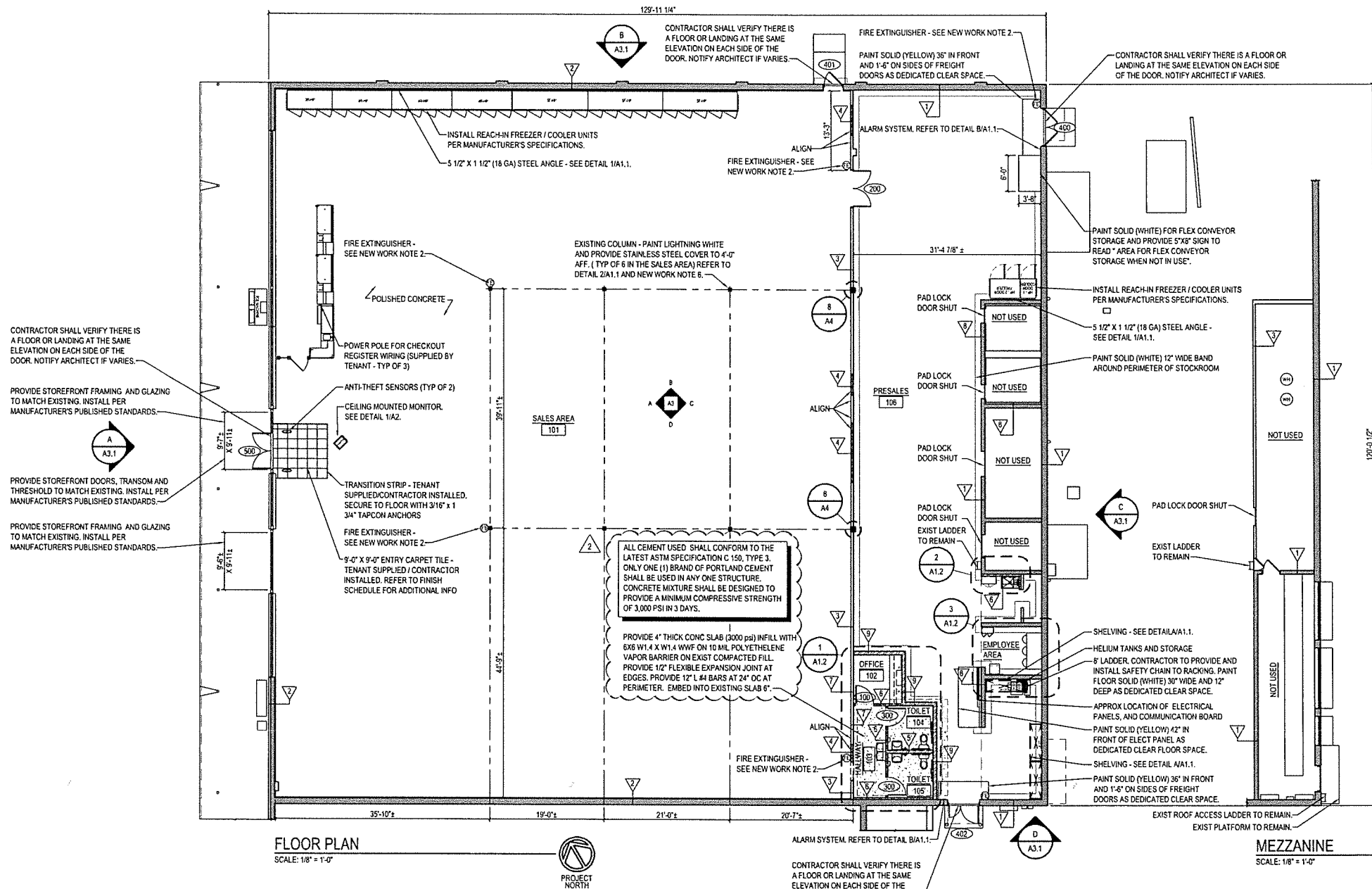
SIGN FOR GROUND UP STORES SIGN FOR IN-LINE STORES



SMOKE FREE NOTE: PROVIDE SIGNAGE AT EVERY ENTRY POINT ON EXTERIOR WALL INTO THE BUILDING PER THE GROUND UP OR IN-LINE STORE TYPE ABOVE. SIGNS MUST BE 10"x7" IN SIZE. THE MATERIAL IS PREFERRED TO BE ALUMINUM. SIGNS MAY BE FOUND AT WWW.compliancesigns.com

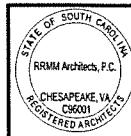
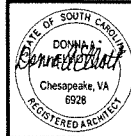
HIGH PILED STORAGE NOTE: NO HIGH PILED STORAGE, AS DEFINED BY THE CODES GOVERNING THE JURISDICTION IN WHICH THE PROJECT IS CONSTRUCTED, SHALL BE ALLOWED.

FREEZER / COOLER NOTE: ALL REACH-IN FREEZER / COOLER UNITS ARE SELF CONTAINED. REFER TO SHEET DS1 FOR SPECIFICATION.



SCOPE OF WORK CORRECTIONS			
SMB	SMB	by	description
02/15/2022	02/15/2022	date	mark
2	1	revisions	

1/4/2022	2/15/2022	CV	CR	DC
date	project	designed	drawn	checked



FAMILY DOLLAR
26490 SC HWY 121, PROJECT#03780
WHITFIRE, SOUTH CAROLINA
FLOOR PLAN AND WALL CONSTRUCTION TYPES

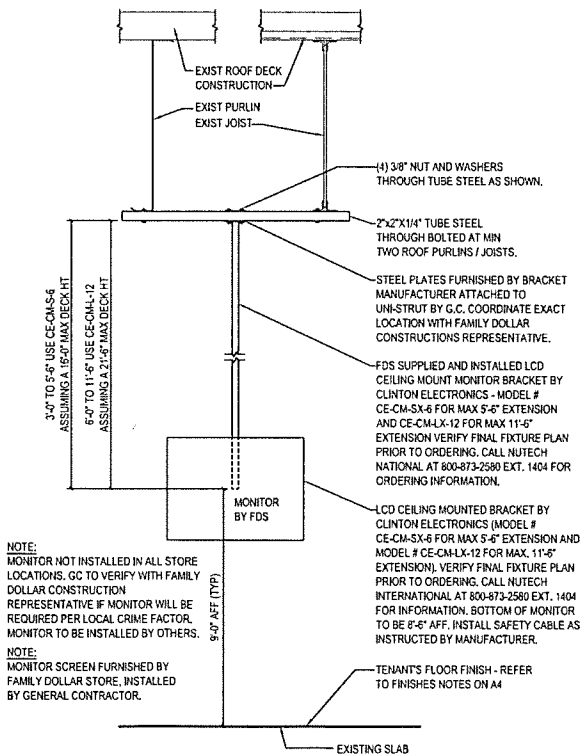
project drawing

sheet

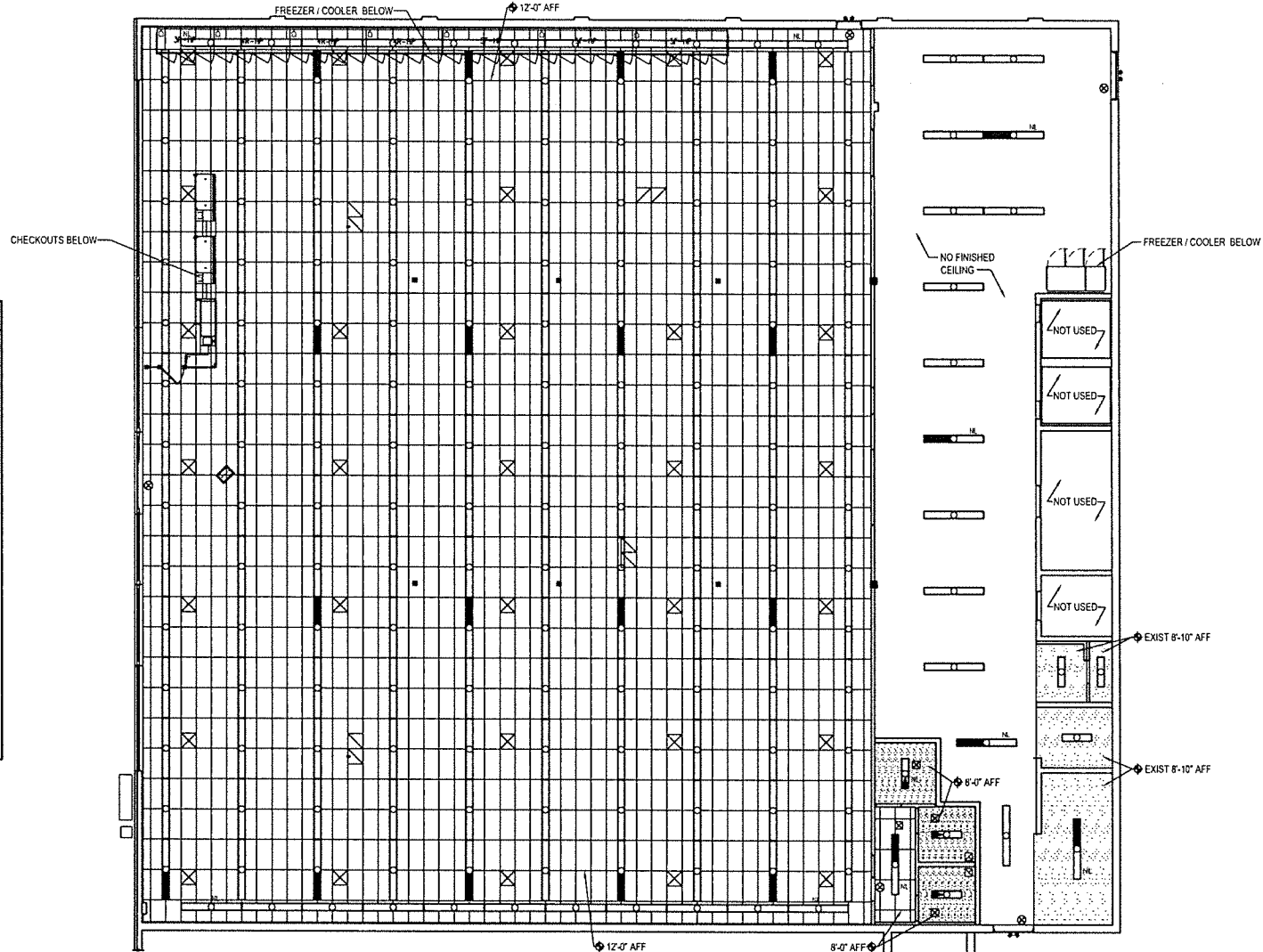
A1

NOTE: 1. THE ELECTRICIAN SHALL INSTALL ADDITIONAL #12 WIRE TIE SUPPORTS FROM THE CEILING GRID TO THE STRUCTURE ABOVE FOR SUPPORT OF THE LIGHT FIXTURES CLIPPED ON THE GRID.
NOTE: 2. LIGHT FIXTURES ARE TENANT SUPPLIED / CONTRACTOR INSTALLED.
NOTE: 3. MOUNT LIGHTS 10'-0" AFF IN STOCKROOM.

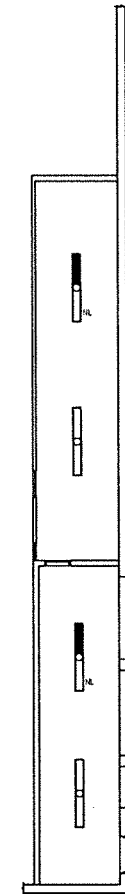
REFLECTED CEILING LEGEND			
	2'-0" x 4'-0" ACOUSTICAL CEILING TILE AND GRID-SEE FINISH NOTE 1.		EXIT LIGHT
	GWB - PAINT WHITE UNLESS OTHERWISE NOTED.		VENTILATION FAN
	6'-0" STRIP LED LIGHT FIXTURE WITH LAMPS ON NIGHT LIGHT CIRCUIT. SURFACE MOUNT TO GWB AND ACT CEILING.		CEILING HEIGHT ABOVE FINISH FLOOR
	6'-0" STRIP LED LIGHT FIXTURE. SURFACE MOUNT TO GWB AND ACT CEILING.		DIFFUSER
	6'-0" STRIP LED LIGHT FIXTURE WITH LAMPS ON EMERGENCY LIGHT CIRCUIT WITH BATTERY PACK. SURFACE MOUNT TO GWB AND ACT CEILING. FOR FIXTURES WITH 4 LAMPS, THE EMERGENCY BATTERY PACK WILL ONLY OPERATE 2 OF THE LAMPS.		RETURN AIR GRILLE
	4'-0" STRIP LED LIGHT FIXTURE WITH LAMPS ON NIGHT LIGHT CIRCUIT. SURFACE MOUNT TO GWB AND ACT CEILING.		POWER POLE
	4'-0" STRIP LED LIGHT FIXTURE. SURFACE MOUNT TO ACT AND GWB CEILING.		EMERGENCY LIGHT FIXTURE
	4'-0" STRIP LED LIGHT FIXTURE WITH LAMPS ON EMERGENCY LIGHT CIRCUIT WITH BATTERY PACK. SURFACE MOUNT TO TO GWB AND ACT CEILING.		SECURITY MONITOR



1
A2
MONITOR DETAIL
SCALE: 1" = 1'-0"

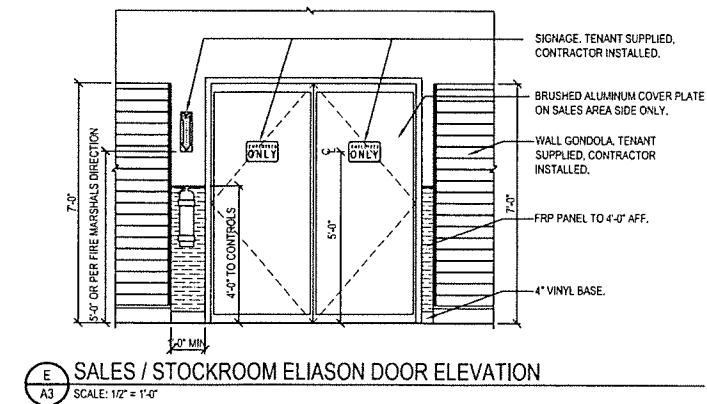
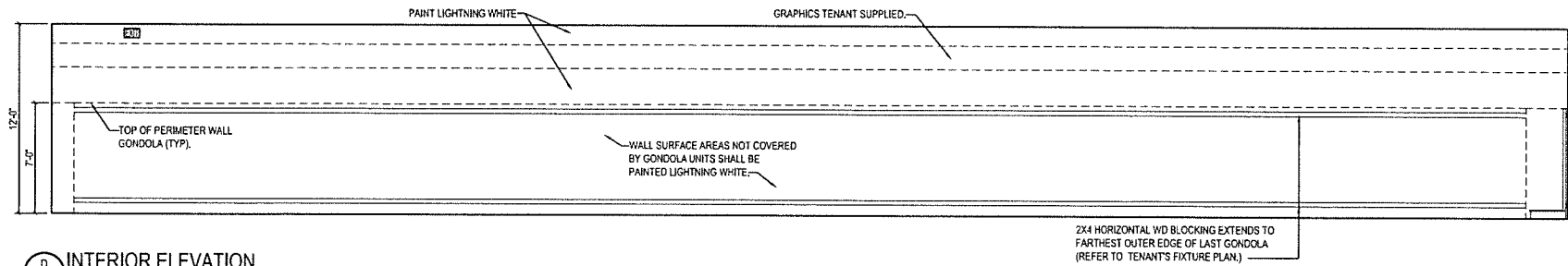
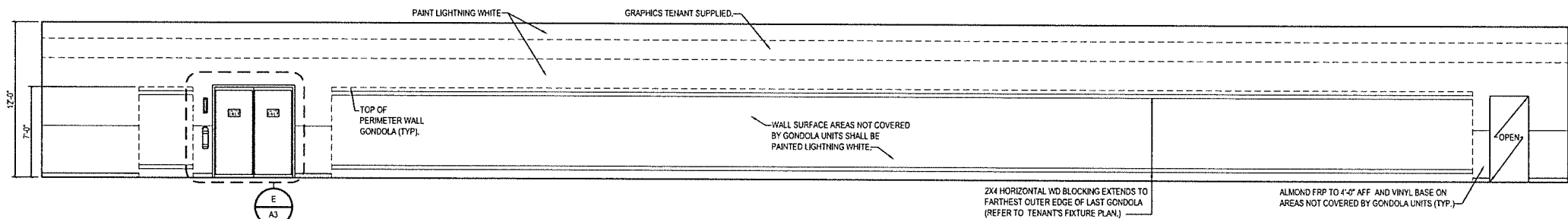
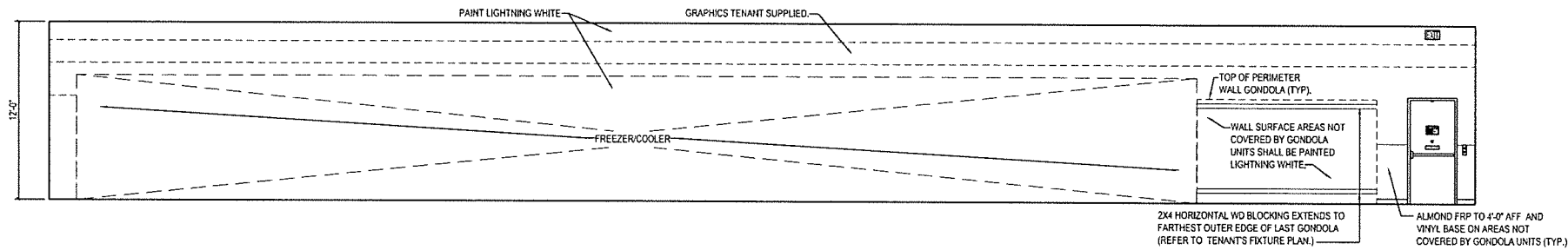
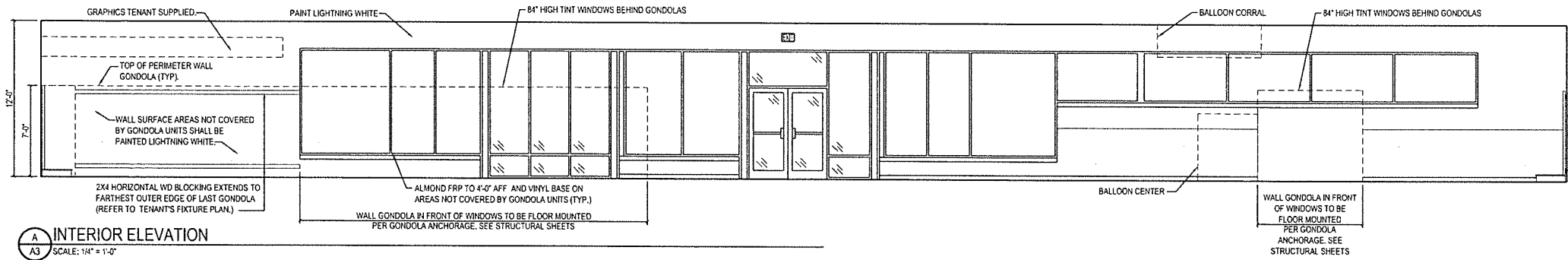


REFLECTED CEILING PLAN
SCALE: 1/8" = 1'-0"



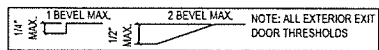
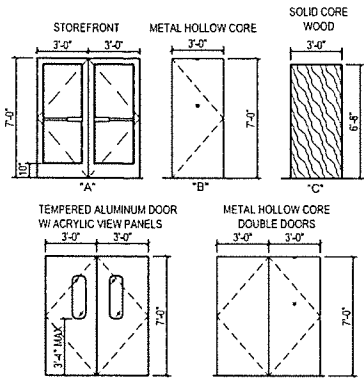
MEZZANINE CEILING PLAN
SCALE: 1/8" = 1'-0"

1-14-2022		2020-09		CSY	CSY	CSY	DAE
date	project	designed	drawn	checked	mark	date	revisions
<div>RRMM ARCHITECTS, P.C. 1317 Executive Blvd, Suite 200 Chesapeake, VA 23320 (757) 622-2828 / fax (757) 622-6883</div>							
<div>STATE OF SOUTH CAROLINA DONNA L. BARNETT Chesapeake, VA 6928 REGISTERED ARCHITECT</div>							
<div>STATE OF SOUTH CAROLINA RRMM Architects, P.C. CHESAPEAKE, VA 23061 REGISTERED ARCHITECTS</div>							
<div>FAMILY DOLLAR 26430 SC HWY 121, PROJECT#803780 WHAITIRE, SOUTH CAROLINA REFLECTED CEILING PLAN AND LEGEND</div>							
project	drawing						sheet
A2							

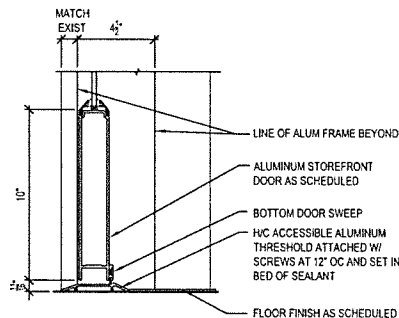


		description	
		by	
		date	
		revisions	
1-14-2022	2/10/2024	CRJ	CRJ
date	project	designed	checked
		drawn	drawn
 RRMM ARCHITECTS, P.C. 1317 Executive Blvd, Suite 200 Chesapeake, VA 23320 (757) 622-2828 / fax (757) 622-4883			
 26490 SC HWY 121, PROJECT #803780 WHITNEY, SOUTH CAROLINA ELEVATIONS			
project		drawing	
sheet			
A3			

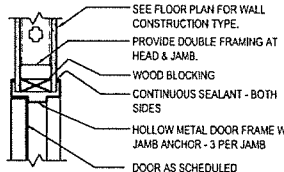
SCOPE OF WORK CORRECTIONS EXTERIOR ICE AOD deletion	
SMB by	SMB date
02/21/2022	02/15/2022
revisions	
1-14-2022	D&E
2/20/24	C&P
CSY	CSY
date	checked
project	drawn
designed	
1317 Executive Blvd, Suite 200 Chesapeake, VA 23320 (757) 622-3328 Fax (757) 622-6553	
FAMILY & DOLLAR 25490 SC HWY 121, PROJECT#803780 WHITMIRE SOUTH CAROLINA EXTERIOR ELEVATIONS	
project	drawing
sheet	
A3.1	



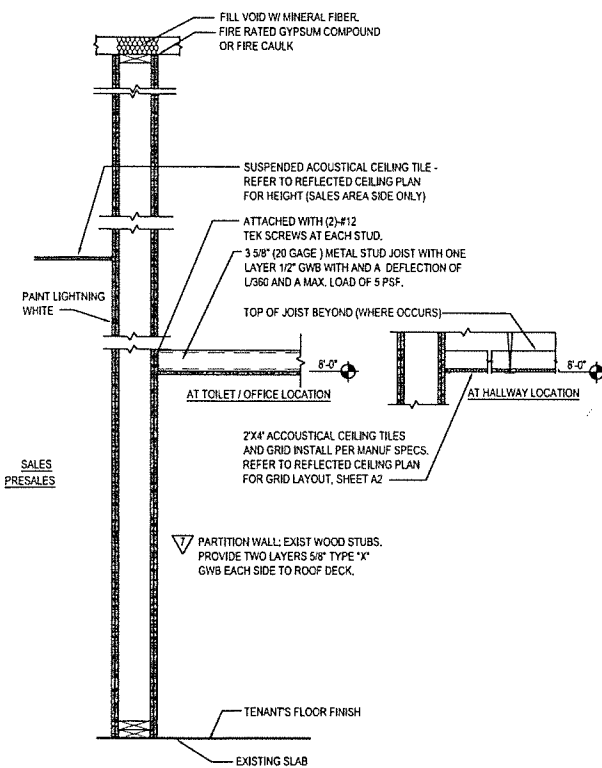
DOOR TYPES
SCALE: 1/4" = 1'-0"



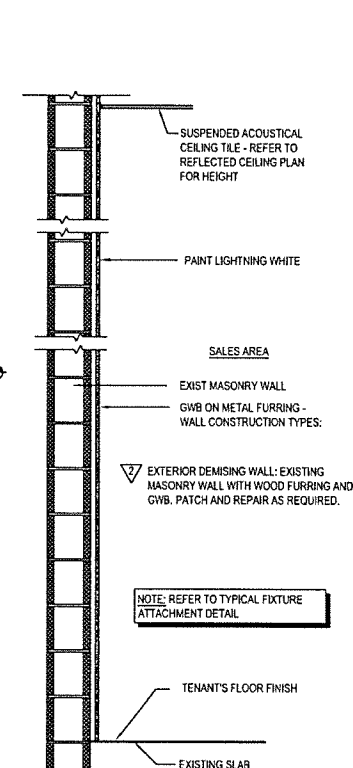
1 SILL AT STOREFRONT DOOR
SCALE: 3/8" = 1'-0"



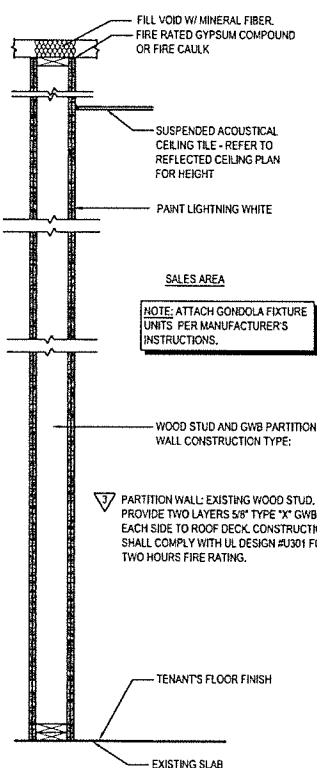
2 HEAD / JAMB DETAIL
SCALE: 1 1/2" = 1'-0"



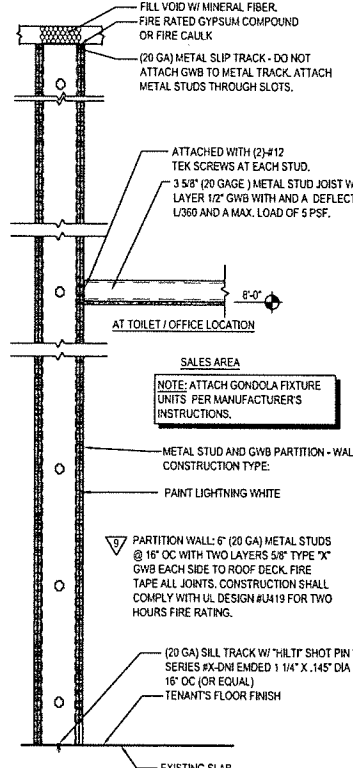
3 WALL SECTION - CONSTRUCTION TYPE: 7
SCALE: 1" = 1'-0"



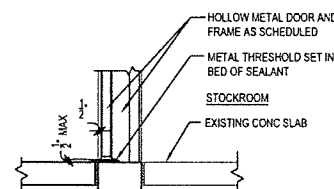
4 WALL SECTION - CONSTRUCTION TYPE: 2
SCALE: 1" = 1'-0"



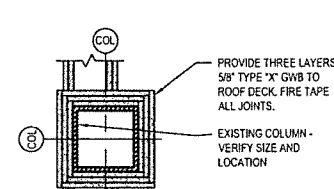
5 WALL SECTION - CONSTRUCTION TYPE: 3
SCALE: 1" = 1'-0"



6 WALL SECTION - CONSTRUCTION TYPE: 9
SCALE: 1" = 1'-0"



7 SILL AT REAR DOOR
SCALE: 1" = 1'-0"



8 COLUMN DETAIL
SCALE: 1 1/2" = 1'-0"

FINISH SCHEDULE						
ROOM #	SPACES	FLOORS	BASES	WALLS	CEILING	NOTES
101	SALES	ENTRY CARPET TILE / POLISHED CONCRETE	4" VINYL	GW-B - PAINT PT-1 / FRP TO 4'-0"	ACT	1,2,4,5,7,9,11,12
102	OFFICE	POLISHED CONCRETE	4" VINYL	GW-B - PAINT PT-3	GW-B - PT-3	2,7,10,12
103	HALLWAY	POLISHED CONCRETE	4" VINYL	GW-B - PAINT PT-2 / FRP TO 4'-0"	ACT	2,4,5,7
104 & 105	TOILETS	SHEET VINYL	SHEET VINYL	FRP	GW-B - PT-3	3,5
106	PRESALES	SEALED CONCRETE / 12" PAINTED AROUND PERIMETER. COLOR PT-8	---	EXISTING / GWB	---	2,5,6,8,13

PAINT FINISH SCHEDULE				
NO.	TYPE	COATS	BENJAMIN MOORE	BM-LOW VOC BASE PRODUCT
PT-1	EGGSHELL	2	'TD BM #2019-70 - LIGHTING WHITE'	SUPER MIDE ZERO VOC LATEX - 357
PT-2	SEMI-GLOSS ENAMEL	2	'TD BM #2019-70 - LIGHTING WHITE'	SUPER MIDE ZERO VOC LATEX - 358
PT-3	SEMI-GLOSS ENAMEL	2	'TD BM WHITE'	SUPER MIDE ZERO VOC LATEX - 358
PT-7	SEMI-GLOSS	2	'TD BM GREY'	TOUGH SHIELD ACRYLIC GLOSS - TY 43
PT-8	SEMI-GLOSS	2	'TD BM WHITE'	TOUGH SHIELD ACRYLIC GLOSS - TY 43

- FINISH NOTES**
- CARPET TILE: MANUFACTURED BY PORTICO SYSTEMS AND TENANT SUPPLIED / CONTRACTOR INSTALLED. INSTALL TILES QUARTER TURNED AND PER TENANT'S CRITERIA. ENTRY TILE: DOMINATOR LP TILE - ANTHRACITE #1593. CONTRACTOR SHALL PREPARE FLOOR, SURFACE AND COORDINATE CARPET INSTALLATION W/ CARPET INSTALLER.
 - VINYL COVE BASE: 4" HIGH TOPSET COVE VINYL - ARMSTRONG, BLACK. VINYL BASE ON EXPOSED AREAS ONLY IN SALES ROOM (NOT BEHIND GONDOLAS AND FREEZER / COOLERS). VINYL COVE BASE TO BE LOCATED IN PRESALES AT MOP SINK AND CABINET ONLY UON.
 - SHEET VINYL: CLASSIC CORLON SERIES MANUFACTURED BY ARMSTRONG - CONNECTION CORLON "PORCELAIN" #8724 OR EQUAL. SHEET VINYL BASE: INTEGRAL, 3/8" RADIUS, 6" HIGH COVED BASE W/ COVE STICK AND EXTRUDED ALUMINUM CAP TRIM.
 - PROVIDE 2'-0" X 4'-0" CEILING TILE EQUAL TO ARMSTRONG "CORTEGA" MINABOARD #169, WHITE, IN A WHITE METAL GRID, (IN AREAS WITH SIGNIFICANT AIR PRESSURE DIFFERENTIALS PROVIDE RETENTION CLIPS TO RETAIN PANELS IN PLACE.)
 - FRP (FIBERGLASS REINFORCED PANEL - GLASBORD # 85 - WHITE W/ PEBBLED EMBOSSED FINISH, BY CRANE COMPOSITES OR EQUAL): IN TOILET ROOM FROM FLOOR TO 8'-0" AFF SHALL BE WHITE COLOR. FRP TO 8'-0" AFF IN PRESALES BEHIND MOP SINK AND UTILITY CABINET ONLY. FRP IN HALLWAY FROM FLOOR TO 4'-0" AFF BEHIND DRINKING FOUNTAIN ONLY. FRP ON SALES FLOOR (WHERE NOTED ON PLANS/ELEVATIONS) SHALL BE ALMOND COLOR WITH "J" CHANNEL TRIM CAP AND "H" CHANNEL PANEL CONNECTORS.
 - SEALER: CLEAR ACRYLIC SEALER BY MASTERKURE, CC 3005B OR FDS APPROVED SUBSTITUTE.
 - POLISHED CONCRETE FLOOR PER MANUFACTURE SPECIFICATIONS BY TENANTS VENDOR. COORDINATE WITH TENANT.
 - 12" STRIPE AROUND PERIMETER & AROUND COLUMNS: COLOR: PT-8. BAND SHALL BE PAINTED PRIOR TO PAINTING ANY YELLOW CLEAR FLOOR AREAS.
 - EXPOSED STEEL COLUMNS TO BE PAINTED PT-1. ROUND COLUMNS ARE NOT TO RECEIVE COVE BASE.
 - PROVIDE PREFORMED COUNTER WITH WHITE HIGH PRESSURE LAMINATE FINISH. MOUNT TO WALLS. FILING CABINETS PROVIDED BY TENANT. SEE ENLARGED OFFICE PLAN AND OFFICE ELEVATION.
 - SALES AREA TO RECEIVE LEVEL 4 FINISH. PROVIDE FINISH TO 1'-0" BEHIND FREEZER / COOLER AND GONDOLA TO FF EVERYWHERE ELSE. CONTRACTOR SHALL ALLOW 72 HOUR CURE TIME.
 - SLATWALL: 3/4" SLATWALL WITH WHITE MELAMINE FINISH. SEE MANUFACTURER'S DRAWINGS FOR INSTALLATION DETAILS. SLATWALL IS TENANT SUPPLIED / CONTRACTOR INSTALLED.

DOOR SCHEDULE									
DOORS					DETAILS			FR	HDW NOTES
#	W	H	T	MATERIAL	TYPE	HEAD	JAMB	SILL	DOOR NOTES
100	3'-0"	6'-8"	1 3/4"	SOLID CORE WOOD	C	2/A4	2/A4	-	100A 5.14
200	PR 3'-0"	7'-0"	1 3/4"	HOLLOW METAL	D	2/A4	2/A4	-	200B 2.5,7,10,12,16
300	3'-0"	6'-8"	1 3/4"	SOLID CORE WOOD	C	2/A4	2/A4	-	300C 5,6,9,14
400	PR 3'-0"	7'-0"	1 3/4"	EXIST HOLLOW METAL	E	-	-	-	400A 3,4,5,8,11
401	3'-0"	7'-0"	1 3/4"	EXIST HOLLOW METAL	B	-	-	-	400C 3,4,5,8,11
402	PR 2'-0"	7'-0"	1 3/4"	HOLLOW METAL	B	-	-	7/A4	400A 4,5,8,11,17
500	PR 3'-0"	7'-0"	1 3/4"	ALUM & GLASS	A	-	-	1/A4	500A 1,8,13,15

DOOR NOTES

- PROVIDE A SIGN POSTED ON THE EGRESS SIDE, ON OR ADJACENT TO THE DOOR STAIRING. THIS DOOR TO REMAIN UNLOCKED WHEN BUILDING IS OCCUPIED. THE SIGN SHALL BE IN LETTERS 1" HIGH ON A CONTRASTING BACKGROUND.
- NEW DOORS - SUPPLIED BY TENANT - ELIASON BI-SWING DOORS W/ WINDOW.
- DOOR, FRAME AND HINGES ARE EXISTING. PROVIDE AND INSTALL ANY MISSING ITEMS OF HARDWARE PER HARDWARE NOTES.
- PROVIDE (ONE) PEEP HOLE TO VIEW OUT. MOUNT @ 4'-3" AFF.
- PAINT DOOR AND FRAME W/ WHITE SEMI-GLOSS ENAMEL PAINT.
- INSTALL TENANT SUPPLIED SIGNAGE PER DETAIL E/A1.2.
- REINFORCE JAMBS WITH WOOD BLOCKING.
- CONTRACTOR TO PROVIDE AND INSTALL DOOR SWEEP ON ALL EXTERIOR DOORS TO PREVENT WATER, WIND AND DEBRIS INFILTRATION.
- MOUNT TENANT SUPPLIED COAT HOOK AT 48" AFF. ON BACK SIDE OF DOOR.
- PAINT DOOR FRAME WHITE WITH SEMI-GLOSS ENAMEL PAINT. DOOR TO REMAIN WITH ORIGINAL FINISH.
- PROVIDE SIGNAGE THAT READS "EMERGENCY EXIT ONLY."
- PROVIDE SIGNAGE THAT READS "EMPLOYEES ONLY."
- PROVIDE NYLON WASHER/GROMMETS AT THE DOOR HANDLES AND CRASH BARS TO PREVENT METAL ON METAL CONTACT.
- ALL DOOR FRAME, CASED OPENING AND HARDWARE MATERIAL WILL BE SUPPLIED BY TENANT. GC IS RESPONSIBLE FOR INSTALLATION.
- PROVIDE STOREFRONT DOORS, TRANSOM AND THRESHOLD TO MATCH EXIST. PROVIDE SHOP DRAWINGS TO LANDLORD FOR APPROVAL PRIOR TO INSTALLATION.
- PROVIDE "B" LABEL DOOR AND FRAME PER UNDERWRITER'S LABORATORIES INC.
- VERIFY MASONRY OPENING PRIOR TO ORDERING DOOR AND FRAME.

GENERAL HARDWARE NOTES

- THRESHOLDS AT EGRESS DOORS SHALL BE NO MORE THAN 1/2" (MAX) HEIGHT AFF.
- ALL DOOR HANDLES, PULLS, LATCHES, LOCKS AND OTHER OPERATING DEVICES SHALL BE INSTALLED 34" (MIN) TO 44" (MAX) AFF AND SHALL BE "SINGLE-HANDED" OPERABLE WITHOUT USE OF KEY OR SPECIAL KNOWLEDGE.
- WHERE EGRESS DOORS ARE USED IN PAIRS, THE UNLATCHING OF THE LEAF SHALL NOT REQUIRE MORE THAN ONE (1) OPERATION AS MENTIONED IN GENERAL HARDWARE NOTE #2 ABOVE.
- CONTROLS AND OPERATING MECHANISMS SHALL BE LEVER-TYPE (OR EQUAL) PROVIDING OPERATION WITH ONE HAND AND NOT REQUIRE TIGHT GRASPING, PINCHING, OR TWISTING OF THE WRIST.
- THE FORCE REQUIRED TO ACTIVATE CONTROLS OF INTERIOR HINGED DOORS SHALL BE NO GREATER THAN 5 POUNDS (22.2 N).
- DOORS EQUIPPED WITH CLOSERS SHALL BE ADJUSTED SO THAT THE SWEEP PERIOD FROM AN OPEN POSITION OF 70 DEGREES WILL TAKE AT LEAST 3 SECONDS TO MOVE TO A POINT 3" FROM THE LATCH, MEASURED FROM THE LEADING EDGE OF THE DOOR.

HARDWARE NOTES

HDW # 100A

- 1 1/2 PAIR HINGES: STANDARD WEIGHT
- 1 MECHANICAL PUSH BUTTON LOCKSET WITH LEVER HANDLE
- 1 CLOSER
- 1 FLOOR STOP

HDW # 200B

- 3 PAIR HINGES: 4 1/2" HEAVY WEIGHT, BALL BEARING PINS
- 2 CLOSERS
- 1 COORDINATOR
- 1 PUSH - PULL LATCH SET
- 1 SET AUTOMATIC FLUSH BOLTS (ON INACTIVE LEAF)
- 1 STEEL PROOF STRIKE
- 1 STEEL ASTRAGAL
- 1 THRESHOLD (14" MAXIMUM HEIGHT)
- 1 SMOKE SEAL

HDW # 300C

- 1 1/2 PAIR HINGES: STANDARD WEIGHT
- 1 PRIVACY SET WITH LEVER HANDLE
- 1 CLOSER
- (FLOOR/WALL STOP IF SHIPPED WITH HARDWARE)

HDW # 400A

- 3 PAIR HINGES: 4 1/2" HEAVY WEIGHT, NON-REMOVABLE PINS
- 1 NON-ALARMED, NON-KEYED PANIC BAR DEVICE: WITH STAND ALONE ALARM - REFER TO DOOR ALARM MOUNTING DETAIL
- 1 CLOSER WITH STOP ARM
- 1 ALUM THRESHOLD (12" MAX HEIGHT)
- 1 SWEEP
- 1 WEATHER STRIP
- 1 RAIN DRIP

HDW # 500A

- HINGES PER STOREFRONT MANUFACTURER (BY GENERAL CONTRACTOR)
- 2 CLOSERS WITH STOP ARM AND DROP PLATE
- 2 PUSH PLATES (BY GENERAL CONTRACTOR)
- 2 PULL HANDLES (BY GENERAL CONTRACTOR)
- 1 KABA CYLINDER (SUPPLIED BY TENANT)
- 1 COMMERCIAL GRADE DEADLOCK W/ THUMB URN ON SALES SIDE (BY GENERAL CONTRACTOR)

NOTE: CONTRACTOR SHALL VERIFY CLOSER DOES NOT HAVE A HOLD-OPEN FEATURE. IF CLOSER DOES, THE CONTRACTOR SHALL REPLACE WITH NEW CLOSER.

project description

by

date revisions

1-14-2022 2/20/24

date project designed drawn checked

DATE

PROJECT

DESIGNED

DRAWN

CHECKED

RRMM ARCHITECTS, P.C.

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STATE OF SOUTH CAROLINA

DOING AS

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Chesapeake, VA

6928

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STATE OF SOUTH CAROLINA

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CHESAPEAKE, VA

230601

REGISTERED ARCHITECTS

FAMILY & POLAR

26490 SC HWY 121, PROJECT #603780

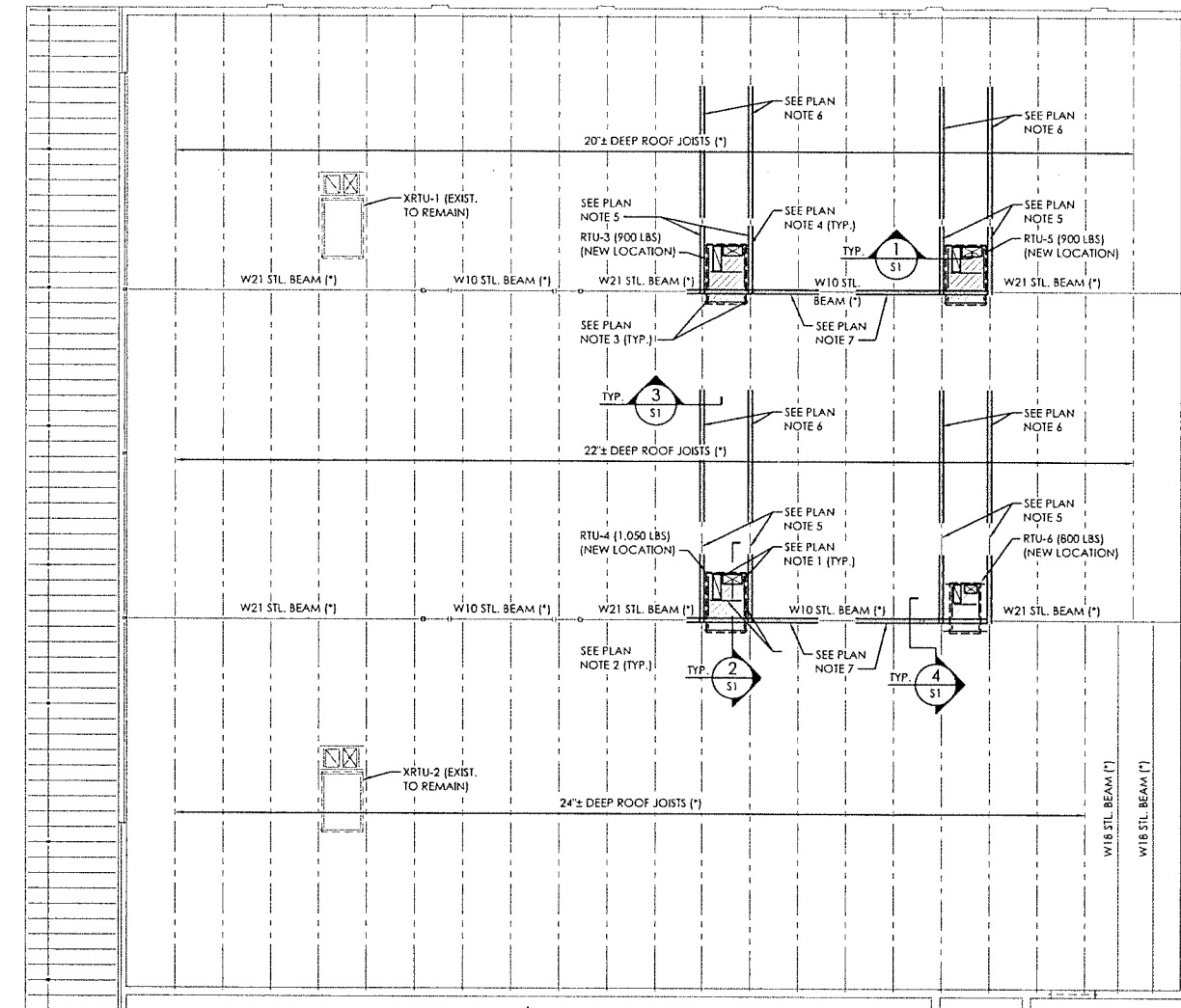
WHITMIRE, SOUTH CAROLINA

SCHEDULES, NOTES, DETAILS AND SECTIONS

project drawing

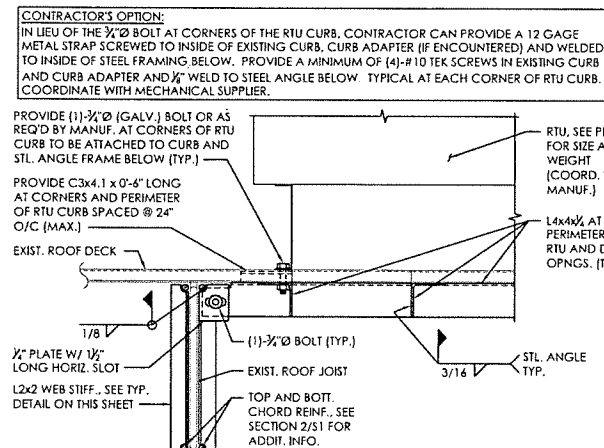
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A4



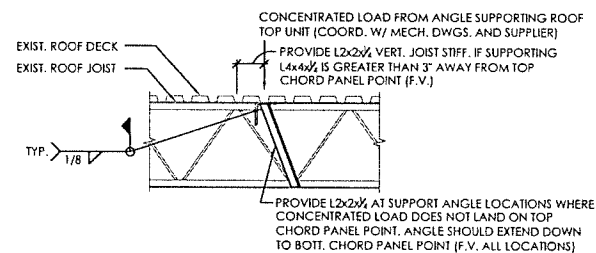
PROJECT
1/8" = 1'-0"
NORTH

NOTE: (*) INDICATES EXISTING STRUCTURAL MEMBERS.



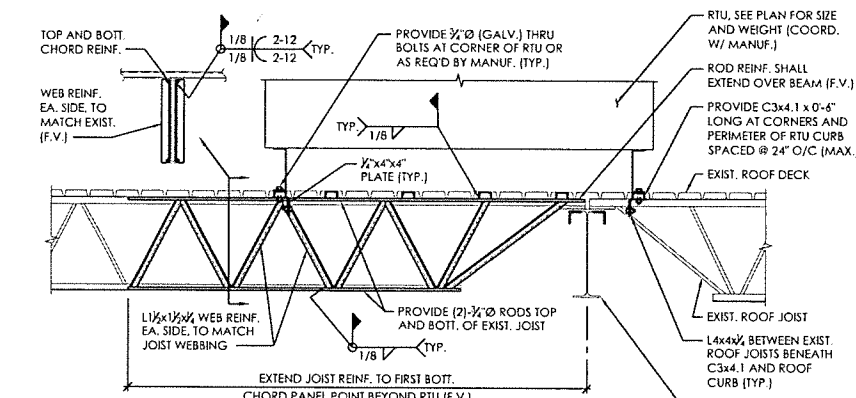
SECTION
1 1/2" = 1'-0"

1
S1/S1



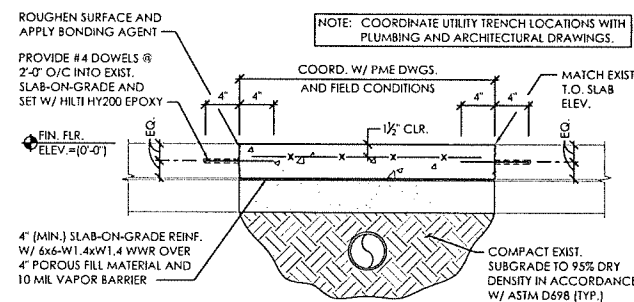
TYPICAL JOIST REINFORCING AT CONCENTRATED LOAD DETAIL

NOT TO SCALE



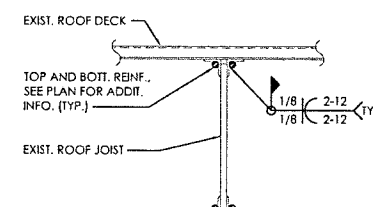
SECTION
3/4" = 1'-0"

2
S1/S1



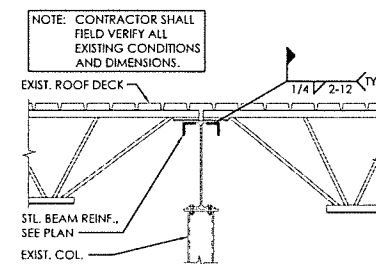
TYPICAL UTILITY TRENCH INFILL DETAIL

NOT TO SCALE



SECTION
1 1/2" = 1'-0"

3
S1/S1



SECTION
3/4" = 1'-0"

4
S1/S1

ROOF FRAMING - GENERAL NOTES:

- ALL WORK SHOWN IS NEW WORK UNLESS DENOTED AS EXISTING. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS PRIOR TO STARTING CONSTRUCTION. ALL DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT.
- SEE THE ARCHITECTURAL DRAWINGS FOR DEMOLITION NOT NOTED.
- COORDINATE DIMENSIONS NOT NOTED ON PLAN WITH THE ARCHITECTURAL DRAWINGS.
- CONTRACTOR SHALL IN NO WAY DAMAGE ANY BUILDING COMPONENT TO REMAIN. IF DAMAGE OCCURS, IT SHALL BE REPAIRED OR REPLACED (TO THE SATISFACTION OF THE OWNER) AT THE CONTRACTOR'S EXPENSE.
- COORDINATE SIZE AND LOCATION OF MECHANICAL ROOF TOP UNITS (RTU) WITH MECHANICAL DRAWINGS AND ACTUAL FIELD CONDITIONS.

ROOF FRAMING - PLAN NOTES:

- CONTRACTOR SHALL LOCATE SUPPLY AND RETURN DUCT PENETRATIONS AWAY FROM EXISTING JOISTS AND BRIDGING TO REMAIN.
- PROVIDE L4x4x1/2 BETWEEN JOISTS AT EDGES OF RTU CURB AND ROOF DECK OPENING. COORDINATE LOCATIONS WITH MECHANICAL SUPPLIER.
- PROVIDE (1) 3/4" Ø BOLT (GALVANIZED) OR AS REQUIRED BY MANUFACTURER AT EACH CORNER OF RTU CURB DOWN TO SUPPORTING STRUCTURE BELOW.
- PROVIDE L2x2x1/2 DIAGONAL WEB STIFFENER IN EXISTING JOIST AT L4x4x1/2 LOCATIONS. SEE TYPICAL JOIST REINFORCING AT CONCENTRATED LOAD DETAIL ON THIS SHEET.
- REINFORCE EXISTING JOISTS AT RTU LOCATION. SEE SECTION 2/S1 FOR JOIST REINFORCING REQUIREMENTS. STRUCTURAL STEEL REINFORCEMENT SHALL BE DONE PRIOR TO MECHANICAL RTU PLACEMENT ON ROOF.
- REINFORCE TOP AND BOTTOM CHORDS OF EXISTING JOISTS WITH (2) 3/4" Ø x 14'-0" LONG STEEL RODS, CENTERED IN JOIST SPAN. SEE SECTION 3/S1 FOR ADDITIONAL INFORMATION.
- REINFORCE EXISTING STEEL BEAM WITH L3x3x3/4 x 14'-0" LONG, EACH SIDE, WELDED TO TOP FLANGE OF, CENTERED OVER EXISTING COLUMN. SEE SECTION 4/S1 FOR ADDITIONAL INFORMATION.

STRUCTURAL STEEL NOTES:

- STRUCTURAL STEEL FOR THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH THE FOURTEENTH EDITION OF THE 'MANUAL OF STEEL CONSTRUCTION' OF THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC), ALLOWABLE STRESS DESIGN.
- STRUCTURAL STEEL SHALL COMPLY WITH THE FOLLOWING SPECIFICATIONS UNLESS OTHERWISE NOTED:
 - MISCELLANEOUS STEEL ANGLES, CHANNELS AND PLATES - ASTM A36, GRADE 36 KSI.
- ALL STRUCTURAL STEEL WORK SHALL CONFORM TO AISC STANDARDS (AISC 303).
- WELDING SHALL BE IN ACCORDANCE WITH AWS D1.1, 'STRUCTURAL WELDING CODE - STEEL' WELD ELECTRODES SHALL BE E70XX LOW HYDROGEN.
- 0.157" DIAMETER POWDER ACTUATED FASTENERS (PAF) SHALL HAVE A MINIMUM ALLOWABLE CAPACITY INTO THE BASE MATERIAL AS FOLLOWS, UNLESS OTHERWISE NOTED:
 - CONCRETE: SHEAR = 260 LBS; TENSION = 255 LBS (3" EDGE DISTANCE)
 - STEEL: SHEAR = 600 LBS; TENSION = 250 LBS 1/2" EDGE DISTANCE

GENERAL NOTES:

- ALL ITEMS SHOWN ON THIS DRAWING ARE NEW CONSTRUCTION, UNLESS OTHERWISE NOTED AS EXISTING.
- THE CONTRACTOR SHALL COORDINATE AND VERIFY ALL DIMENSIONS PRIOR TO STARTING CONSTRUCTION AND ANY DISCREPANCY SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD.
- IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO FOLLOW ALL APPLICABLE SAFETY CODES AND REGULATIONS DURING ALL PHASES OF CONSTRUCTION.
- THE CONTRACTOR SHALL VERIFY THE REQUIREMENTS OF OTHER TRADES AS TO ANCHORAGE AND FLASHING AROUND MECHANICAL EQUIPMENT AND ROOF PENETRATIONS.
- THE STRUCTURE WAS DESIGNED IN ACCORDANCE WITH THE 2018 SOUTH CAROLINA BUILDING CODE AND THE 2018 INTERNATIONAL BUILDING CODE (IBC 2018). THE FOLLOWING LOADS IN ADDITION TO THE LOADS OF THE PERMANENT MATERIALS AND CONSTRUCTION, WERE USED:

LIVE LOADS:	
ROOF	20 PSF
GROUND FLOOR	100 PSF
SNOW LOADS:	
GROUND SNOW LOAD	10 PSF
IMPORTANCE FACTOR (I)	1.0
EXPOSURE FACTOR (C _e)	1.0
THERMAL FACTOR (C _t)	1.0
FLAT ROOF SNOW LOAD (P _f)	10 PSF
WIND:	
WIND (3 SECOND GUST)	V _{ult} = 110 MPH V _{ult} = 85 MPH
EXPOSURE	C
RISK CATEGORY	II
INTERNAL PRESSURE (G _{Ci})	±0.18
SEISMIC:	
SEISMIC IMPORTANCE FACTOR (I _e)	1.0
MAPPED SPECTRAL RESPONSE ACCELERATIONS, S _s	0.309g
S ₁	0.076g
S ₂	0.320g
S ₃	0.158g
SITE CLASS	D
SEISMIC DESIGN CATEGORY	C
BASIC SEISMIC-FORCE RESISTING SYSTEM	ORDINARY REINFORCED MASONRY SHEAR WALLS
RESPONSE MODIFICATION FACTOR (R)	2
ANALYSIS PROCEDURE USED	EQUIVALENT LATERAL FORCE

- CONTRACTOR SHALL COORDINATE STRUCTURAL, ARCHITECTURAL, MECHANICAL AND CIVIL DRAWINGS PRIOR TO BEGINNING CONSTRUCTION. ALL DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT.

CAST-IN-PLACE CONCRETE NOTES:

- ALL CONCRETE CONSTRUCTION SHALL BE IN ACCORDANCE WITH ACI 301 'STRUCTURAL CONCRETE FOR BUILDINGS' AND ACI 318/318R 'BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE'.
- CONCRETE SHALL HAVE THE FOLLOWING (28) DAY COMPRESSIVE STRENGTH AND MAXIMUM SLUMPS:
 - INTERIOR CONCRETE 3,500 PSI, 4" TO 5"
 NOTE: ALL SLUMPS SHALL BE ±1/2" (SLUMP MEASURED PRIOR TO SUPERPLASTICIZER, WHERE OCCURS)
- ALL CONCRETE EXPOSED TO FREEZE/THAW CYCLE SHALL HAVE 6% (±1/2%) ENTRAINED AIR.
- REINFORCING STEEL:
 - DEFORMED BARS (DO NOT WELD) ASTM A615 [GRADE 60]
 - WELDED WIRE REINFORCING ASTM A185 (FLAT SHEETS ONLY)
- COVER TO REINFORCEMENT AS NOTED IN SECTIONS AND AS FOLLOWS:
 - TOP COVER TO WWR 1 1/2"
 - OTHER: AS NOTED IN ACI 318.
- ADHESIVE ANCHORS SHALL CONSIST OF GRADE 60 REBAR, ASTM A307 GRADE A ALL-THREAD OR ANCHOR ROD, NUT, WASHER AND ADHESIVE. EPOXY ANCHORS SHALL BE INSTALLED USING AT LEAST MINIMUM DEPTHS, EDGE DISTANCES, SPACING (UNLESS NOTED OTHERWISE), AND INSTALLATION PROCEDURES AS RECOMMENDED BY THE MANUFACTURER. DO NOT APPLY LOAD TO ANCHOR UNTIL RESIN HAS CURED IN ACCORDANCE WITH RECOMMENDATIONS OF THE MANUFACTURER.
- TORCHING TO BEND REINFORCING BARS SHALL NOT BE ALLOWED.
- ALL ITEMS EMBEDDED IN CONCRETE OR GROUTED CMU MUST BE TIED AND SECURED PRIOR TO PLACEMENT OF CONCRETE OR GROUT. NO "WET SETTING" IS ALLOWED.
- FOR SLAB-ON-GRADE, SLAB REINFORCING SHALL BE HELD IN PLACE BY BAR SUPPORTS AND ACCESSORIES AS DESCRIBED IN CHAPTER 3 OF THE CRSI MANUAL OF STANDARD PRACTICE. BAR SUPPORTS SHALL BE SPACED A MAXIMUM OF 4'-0" ON CENTER BOTH WAYS IN STRAIGHT LINES ON THE WELDED WIRE REINFORCING GRID.

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description
by
date
mark
revisions

11/14/2021
2/10/2024
title
project
designed
drawn
checked

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PROFESSIONAL
REGISTERED
ARCHITECT
No. 15026
RONALD L. BROYLES

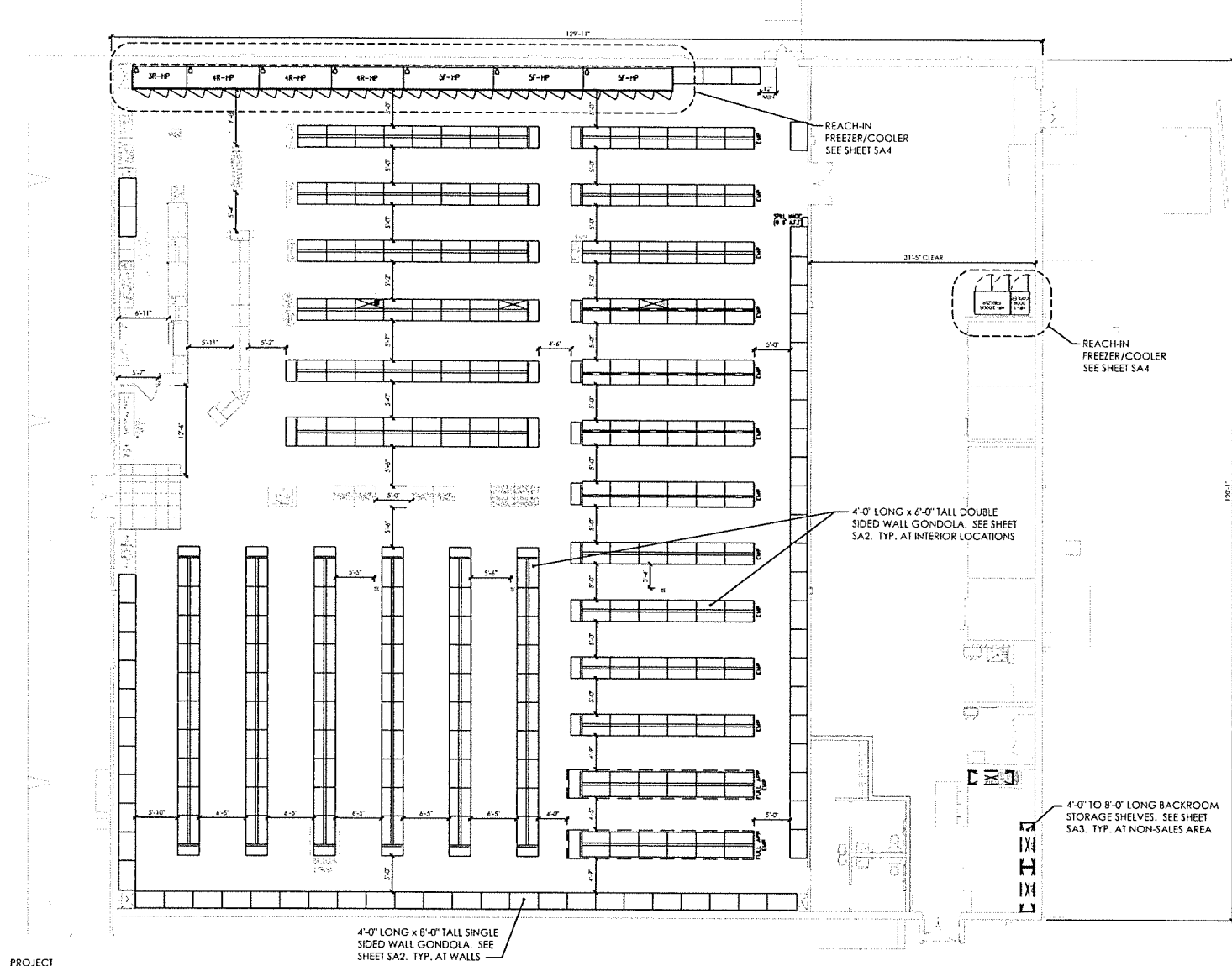
SEAL OF THE SOUTH CAROLINA
BOARD OF ARCHITECTS
No. 15026
DATE OF AUTHORIZATION

FAMILY DOLLAR
26490 SC HWY 121, PROJECT#803780
WHEATREE, SOUTH CAROLINA
ROOF FRAMING PLAN

project
drawing

sheet

S1



PROJECT
SEISMIC ANCHORAGE - FIXTURE PLAN
1/8" = 1'-0"
NORTH

RACK LEGEND	
TYPE	DESCRIPTION
	4'-0" LONG x 6'-0" TALL DOUBLE SIDED GONDOLA - SEE SHEET S3. TYPICAL AT INTERIOR LOCATIONS
	4'-0" LONG x 6'-0" TALL SINGLE SIDED WALL GONDOLA - SEE SHEET S3. TYPICAL AT WALLS
	4'-0" TO 8'-0" LONG x 8'-0" TALL BACK ROOM STORAGE SHELVES - SEE SHEET S4. TYPICAL AT NON-SALES AREA

NOTE: FIXTURE PLAN IS PROVIDED FOR REFERENCE TO ANCHOR REQUIREMENTS. SEE ARCHITECTURAL FIXTURE PLAN FOR ALL INFORMATION NOT SHOWN.

NOTE: SPECIAL INSPECTION IS REQUIRED FOR EPOXY AND EXPANSION ANCHOR INSTALLATION (PER ICC REPORT).

NOTE: SEE SA2 FOR GONDOLA FIXTURE ANCHORAGE REQUIREMENTS. SEE SA3 FOR BACKROOM FIXTURE ANCHORAGE REQUIREMENTS. SEE SA4 FOR FREEZER/COOLER ANCHORAGE REQUIREMENTS.

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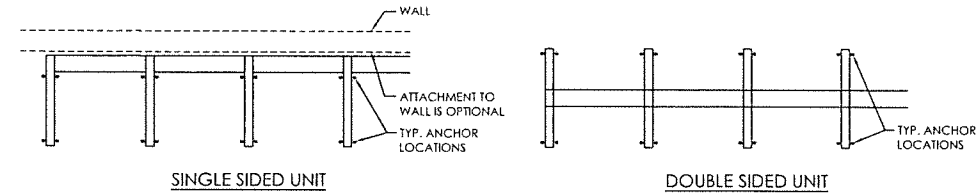
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1-14-2022	2120049	DLB	DLB
project	designed	drawn	checked

1-14-2022	2120049	DLB	CPC	DLB
project	designed	drawn	checked	



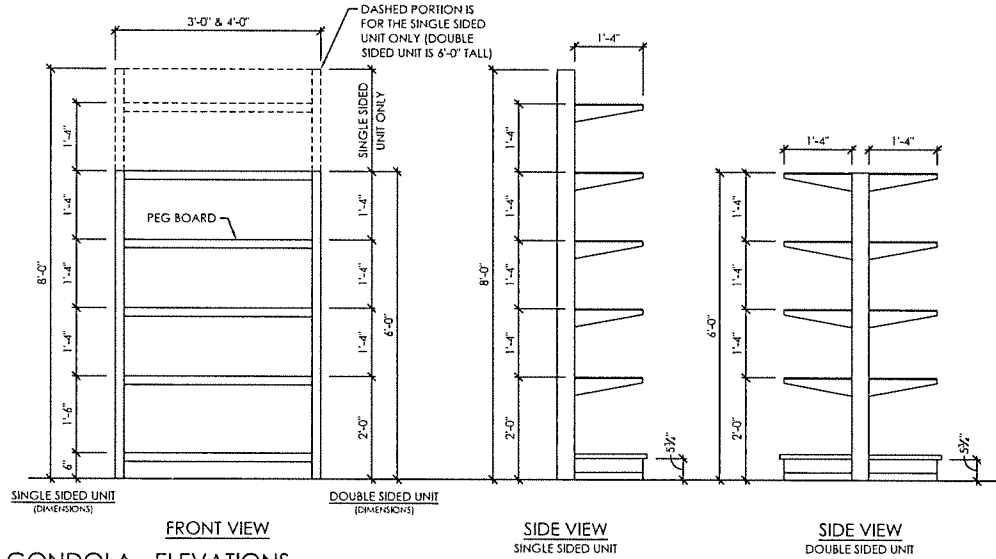
BRUNNEN & DILLON
26490 SC HWY 121, PROJECT#803780
WINTHROP, SOUTH CAROLINA
SEISMIC ANCHORAGE - FIXTURE PLAN

project
drawing
sheet
SA1



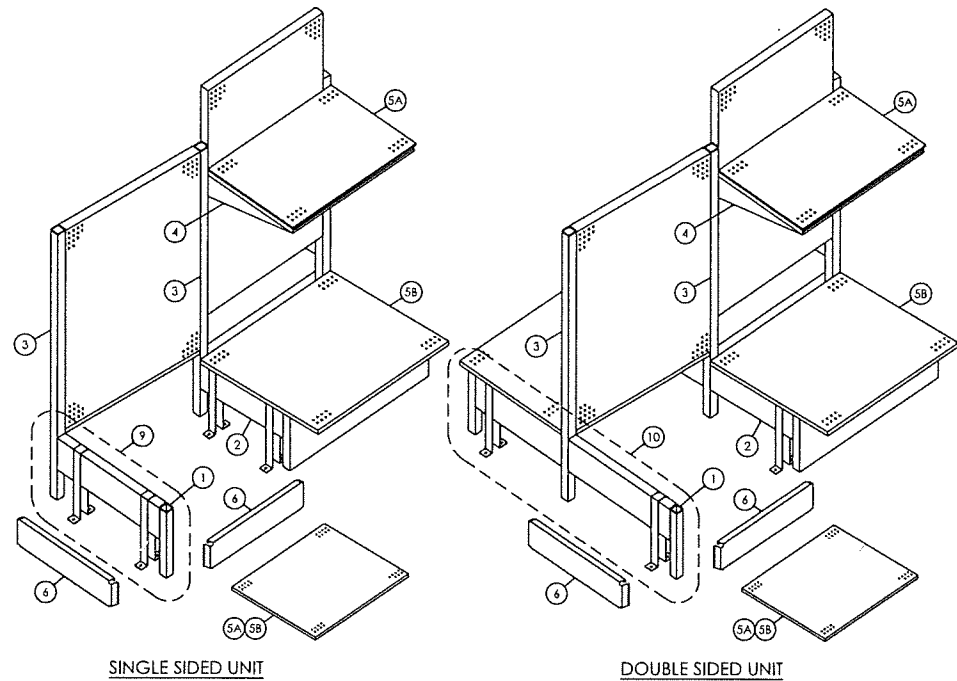
GONDOLA - PLAN VIEWS

NOT TO SCALE



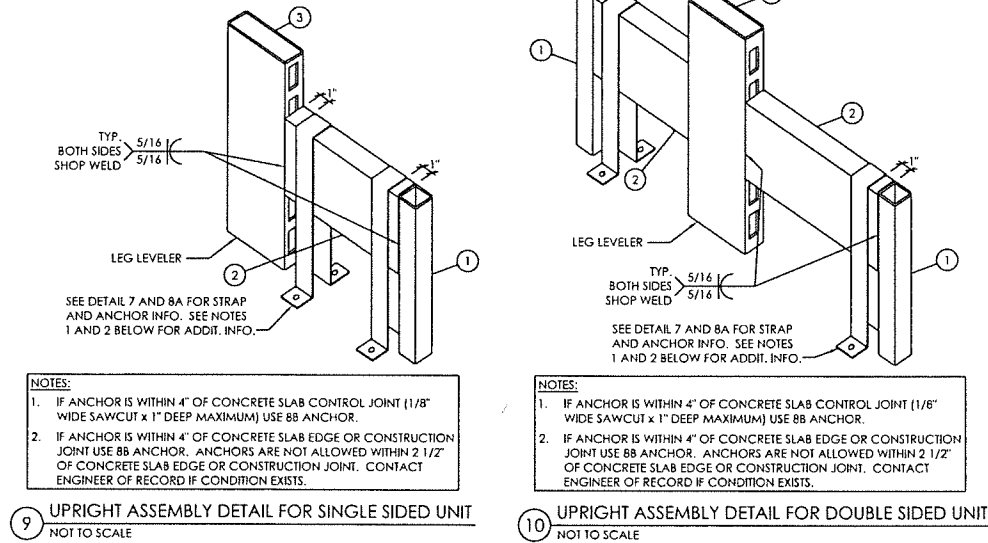
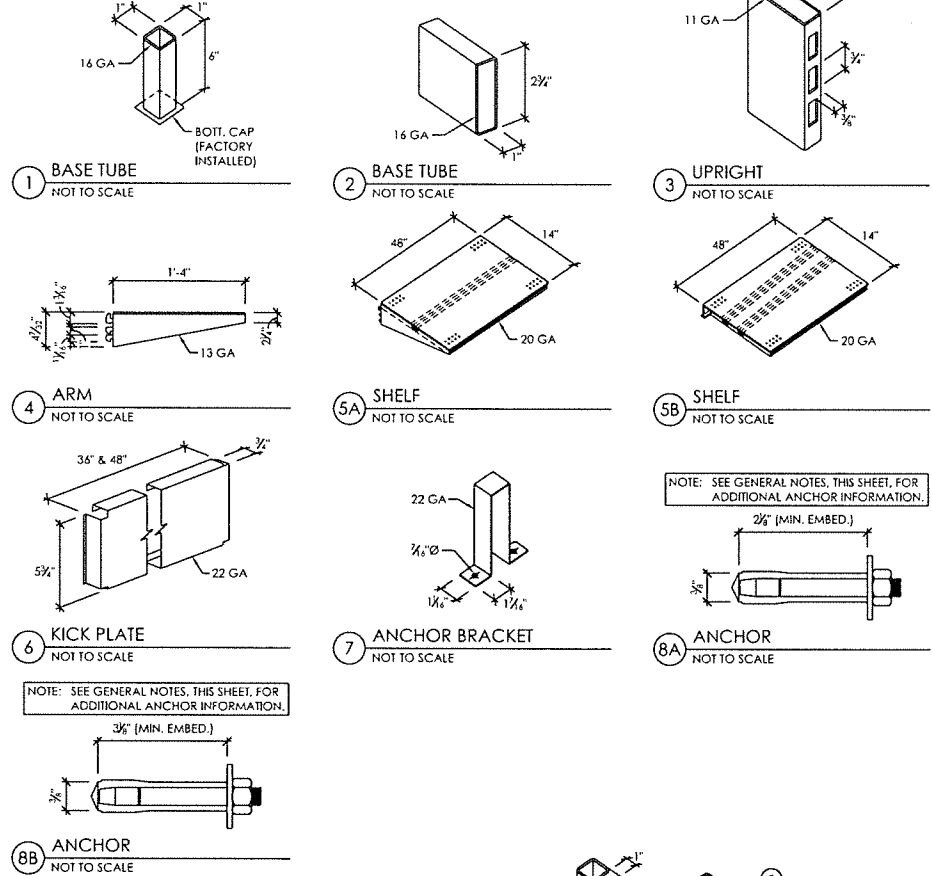
GONDOLA - ELEVATIONS

NOT TO SCALE



GONDOLA - GENERAL CONFIGURATION

NOT TO SCALE



ASSEMBLY DETAILS

NOT TO SCALE

GENERAL NOTES:

1. STORAGE CAPACITY: LIVE LOAD = 35 LBS PER LEVEL (INTERIOR)
2. ALL STEEL TO BE Fy = 50 KSI.
3. ALL BOLTS TO BE A307 (UNLESS OTHERWISE NOTED).
4. ANCHOR HILTI KWIK BOLT TZ (ICC REPORT ESR-1917) OR APPROVED EQUAL (3/8" Ø SIMPSON TITEN HD ACCESSORIES OK, ICC ESR-2713).
5. SPECIAL INSPECTION IS REQUIRED FOR ANCHOR INSTALLATION.
6. CONCRETE 4" THICK x 3,000 PSI. CONTRACTOR TO VERIFY.
7. SOIL BEARING PRESSURE = 1,500 PSF.

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date	project	designed	drawn	checked	revision
1-14-2022	2102048	DLB	CPG	DLB	

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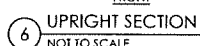
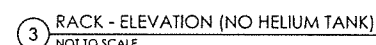
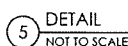
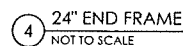


FAMILY DOLLAR
26490 SC HWY 121, PROJECT#803760
WHITMIRE, SOUTH CAROLINA
SEISMIC ANCHORAGE DETAILS - GONDOLA

project drawing

sheet

SA2



1. STORAGE CAPACITY:
24" SHELF - MAX LOAD = 300 LBS
2. ALL STEEL TO BE $F_y = 50$ KSI.
3. ALL BOLTS TO BE A307 (UNLESS OTHERWISE NOTED).
4. ANCHOR HILTI KWIK BOLT Z (ICC REPORT ESR-1917) OR APPROVED EQUAL.
5. SPECIAL INSPECTION IS REQUIRED FOR ANCHOR INSTALLATION.
6. CONCRETE 4" THICK \times 3,000 PSI. CONTRACTOR TO VERIFY.
7. GEAR BEARING PRESSURE $\geq 1,500$ PSF.
8. CLEAR SPACE BELOW SPRINKLERS SHALL BE A MINIMUM OF 18" BETWEEN TOP OF STORED MATERIAL AND SPRINKLER DEFLECTOR.

mark	date	by	description

date	15/4/2022
project	21200-69
designed	DUB
drawn	CNG
checked	MB



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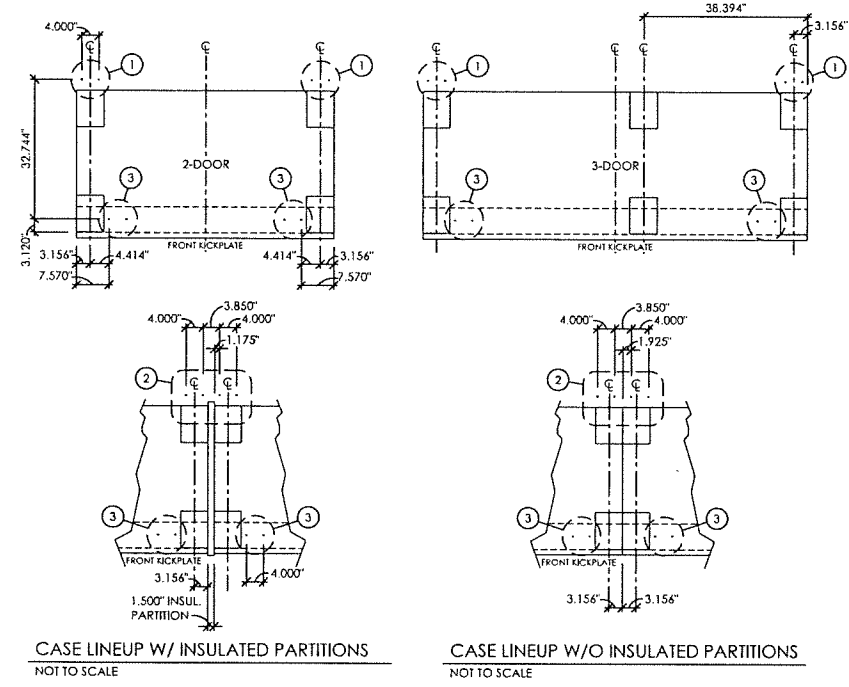
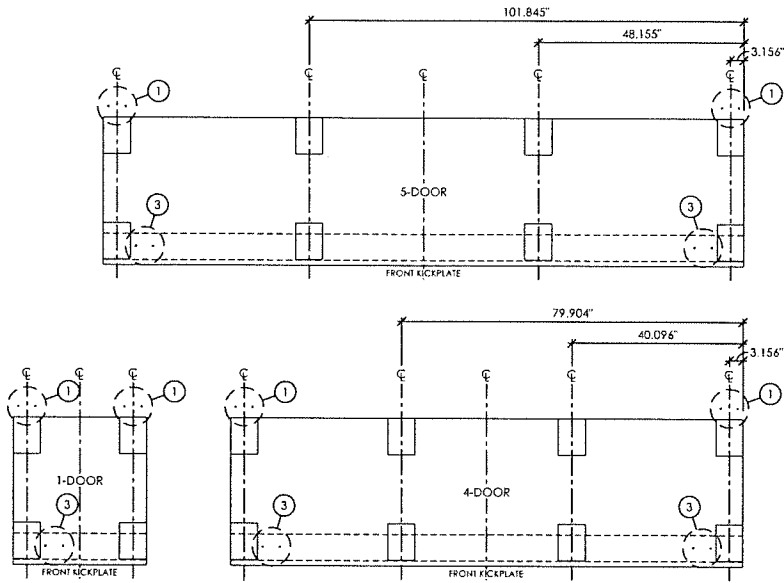


FAMILY DOLLAR
226490 SC HWY 121, PROJECT#803780
WHITMIRE, SOUTH CAROLINA
SEISMIC ANCHORAGE DETAILS - RACKS

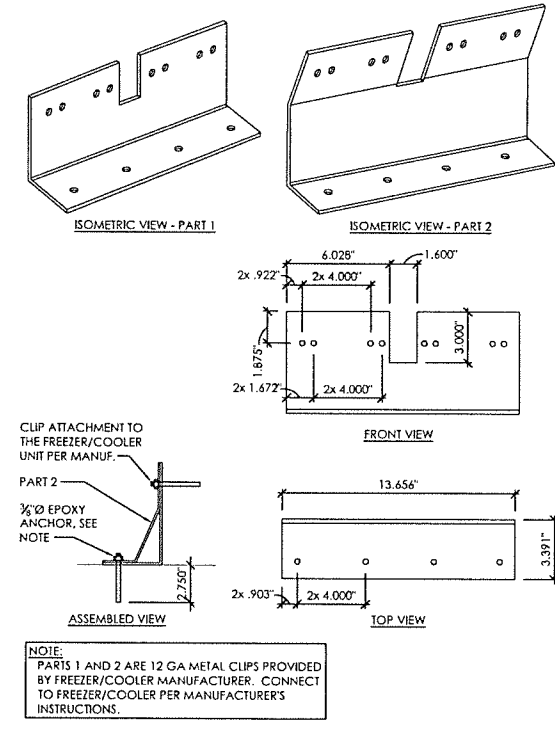
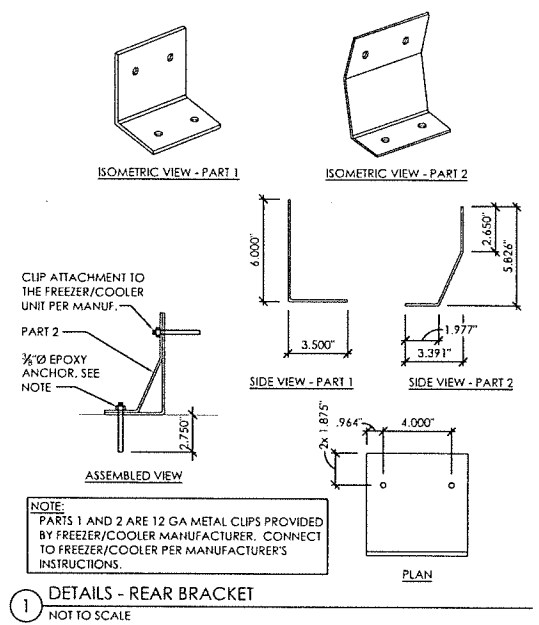
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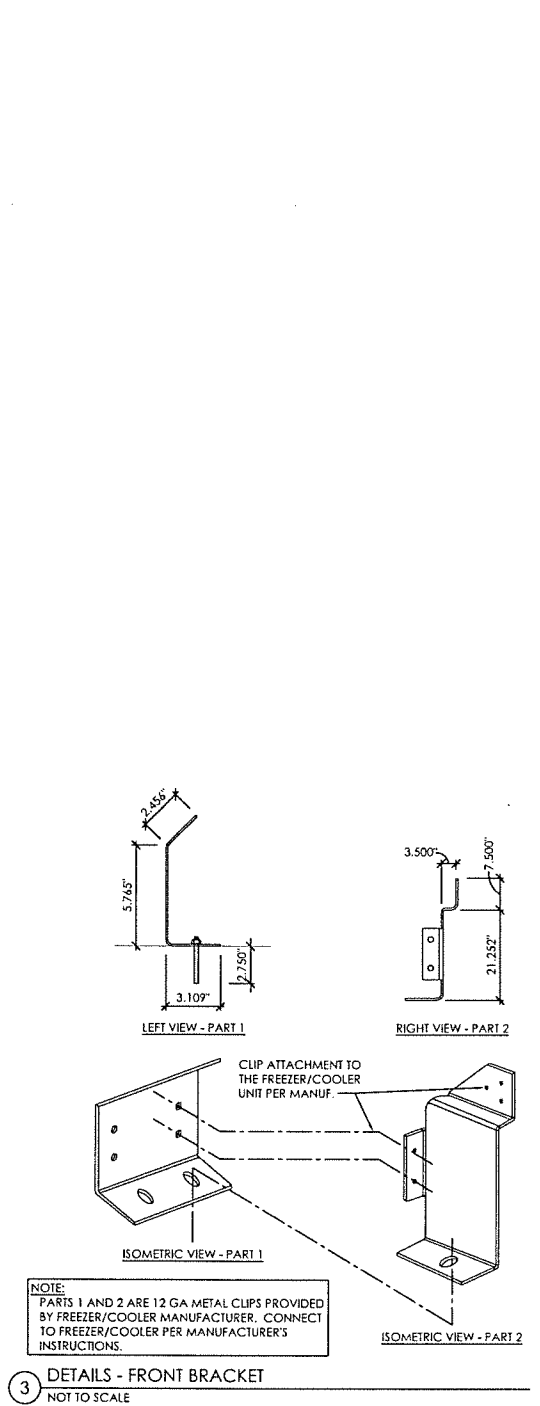
SA3



REACH-IN FREEZER/COOLER - ANCHORAGE PLANS
NOT TO SCALE



DETAILS - FRONT BRACKET
NOT TO SCALE



DETAILS - FRONT BRACKET
NOT TO SCALE

GENERAL NOTES:

- ALL STEEL ANCHOR CLIPS TO BE ASTM A570 Fy = 50,000 PSI (MINIMUM).
- ALL BOLTS TO BE A307 (UNLESS OTHERWISE NOTED).
- ANCHOR TO BE EPOXIED TO EXISTING CONCRETE SLAB WITH HILTI RE 500-V3 WITH 3\"/>
- SPECIAL INSPECTION IS REQUIRED FOR ANCHOR INSTALLATION.
- CONCRETE 4\"/>
- SOIL BEARING PRESSURE = 1,500 PSF.
- THE DESIGN ONLY ADDRESSES THE ANCHORAGE OF THE FREEZER/COOLER UNITS TO RESIST SITE APPLICABLE SEISMIC OVERTURNING AND SLIDING FORCES. THE FREEZER/COOLER UNITS ARE ASSUMED BY THIS DESIGN TO BE ABLE TO TRANSFER ALL APPLICABLE SEISMIC FORCES TO THE STEEL ANCHORAGE CLIPS SHOWN IN THE DETAILS. DESIGN OF THE STRUCTURE OF THE FREEZER/COOLER UNITS IS NOT PART OF THIS DESIGN AND IF REQUIRED, IS BY OTHERS.

SHELF LOADING LIMIT:
MAXIMUM 80 LBS OF PRODUCT PER SHELF. TYPICAL AT ALL REACH-IN FREEZER/COOLER.

ANCHOR NOTE:
REACH-IN FREEZER/COOLER ANCHORS ARE TO BE 3/8\"/>

NO SUBSTITUTIONS ALLOWED

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date	project	designed	drawn	checked
1/14/2022	210049	CLB	CNC	CLB

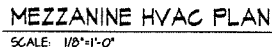
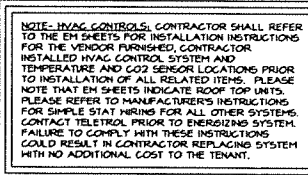
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PROFESSIONAL SEAL
NOTARY PUBLIC
No. 16035
VAC22
PAUL L. BROYLES

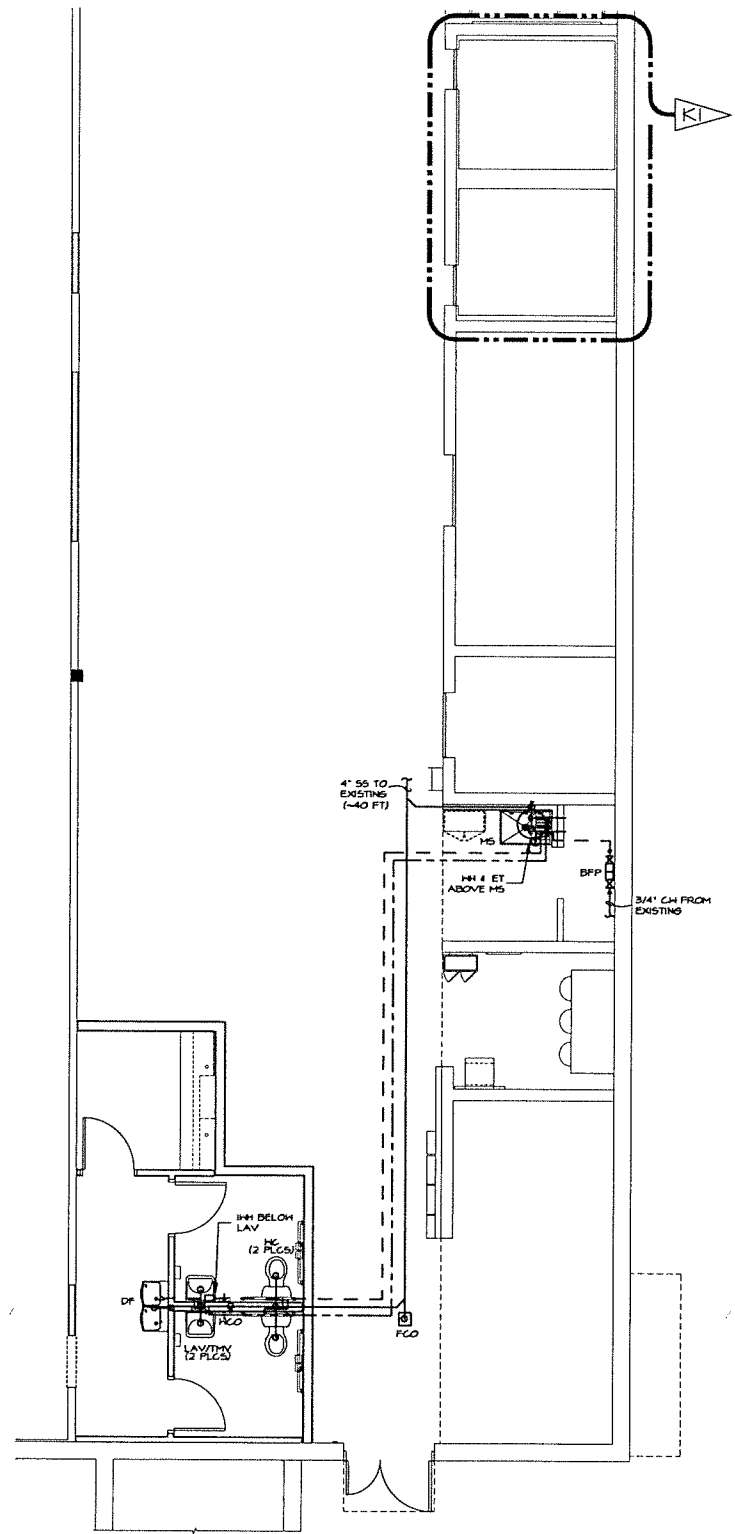
SEAL OF THE STATE OF VIRGINIA
PAUL L. BROYLES
No. 16035
VAC22

PROJECT
26490 SC HWY 121, PROJECT#803780
WHITMIRE, SOUTH CAROLINA
SEISMIC ANCHORAGE DETAILS - FREEZER/COOLER

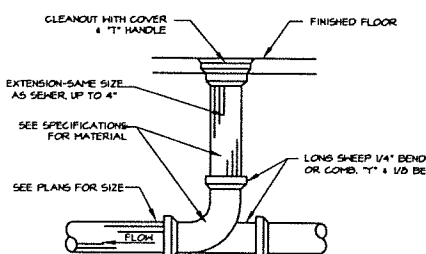
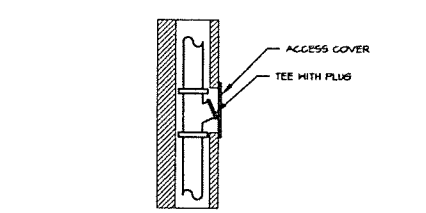
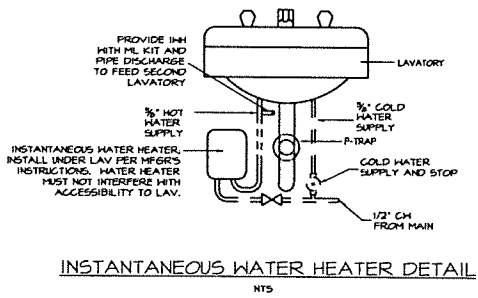
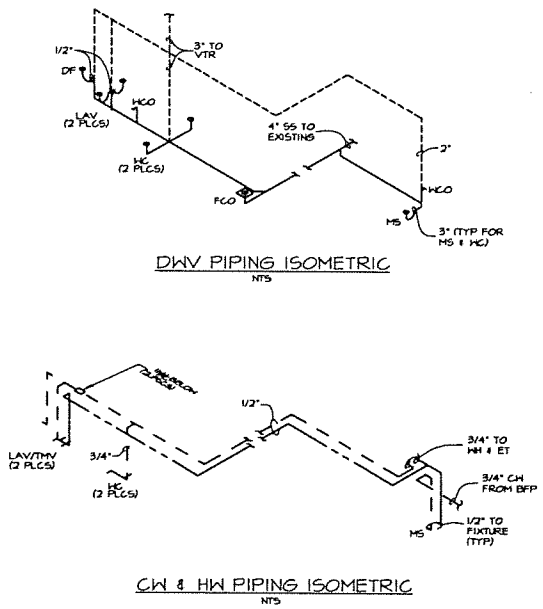
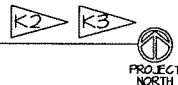
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SA4






MP-1



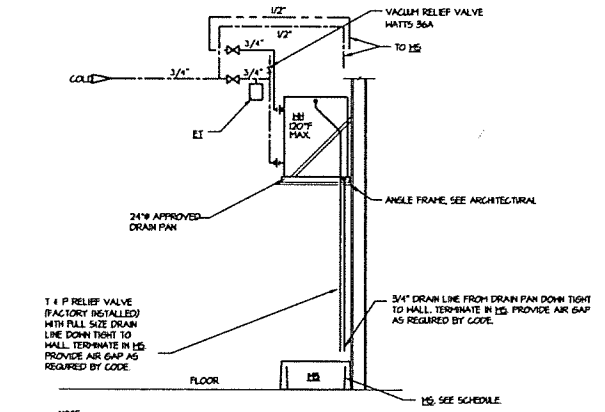
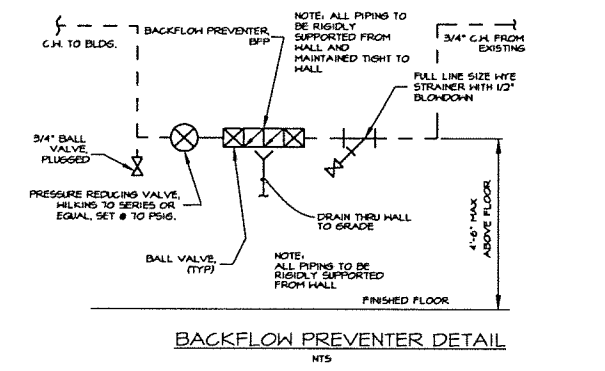
PARTIAL PLUMBING PLAN
SCALE: 1/4"=1'-0"



PLUMBING FIXTURE SCHEDULE							
PROVIDED BY TENANT'S VENDOR FOR INSTALLATION BY CONTRACTOR							
MARK	FIXTURE TYPE	MANUFACTURER MODEL NO.	FIXTURE CONNECTIONS				REMARKS
			CM	H	M	V	
BEP	BACKFLOW PREVENTER	WILKINS 975XLS2-AG (LEAD FREE)	LINE SIZE	---	---	---	REDUCED PRESSURE TYPE, INTEGRAL SHUT-OFF VALVES COMPLYING WITH ASSE 1013. PROVIDE WITH INLET MTE STRAINER AND AIR GAP FITTING
DE	3-LEVEL HANDICAP DRINKING FOUNTAIN	ELKAY MODEL NO. EH48F1000L NON-REFRIGERATED	1/2"	---	1/2"	1/2"	 FURNISH STANDARD CABINET FINISH FOUNTAIN, SUPPLY STOP, 1/2" TUBES, DRAIN KIT, AND WALL HANGER KIT
E1	EXPANSION TANK	WATTS MODEL PLT-3	3/4"	---	---	---	FDA APPROVED, PORTABLE WATER EXPANSION TANK, 2.1 GALLON CAPACITY
EH	INSTANTANEOUS WATER HEATER	EDHAX MODEL NO. SP4200 WITH MULTI-LAV KIT	3/8"	3/8"	---	---	FURNISH 200V, 41 KH INSTANTANEOUS HEATER, SET TO 105 DEGREE LEAVING TEMPERATURE
FS	FLOOR MTD. POP SINK	ZURN MODEL 2996-30	1/2"	1/2"	3"	2"	FURNISH SINK, ZURN MODEL NO. ZD43M SERVICE SINK, FAUCET WITH BUILT-IN VACUUM BREAKER, HOSE AND BRACKET, POP HANGER, AND DRAIN KIT
LAV	HANDICAP WALL HUNG LAVATORY	ZURN MODEL NO. Z5344 WITH 1/2 GPM FLOW RESTRICTOR, GRID DRAIN, FAUCET HOLES ON 4" CENTERS	1/2"	1/2"	1/2"	1/2"	 FURNISH LAVATORY, ZURN ZD6000-AL LEAD FREE PETERING FAUCET, WALL HANGER KIT, SUPPLY STOP, TUBES, DRAIN, AND ADA PIPING PROTECTION
TV	HUNG VALVE	SYNCHRO MODEL 7-325-CK-F	1/2"	1/2"	---	---	1/2" TAPERED OUTLET, MAX OUTLET TEMP. 105°F IN ACCORDANCE WITH ASSE AND BOLL ASSOCIATION AND 1070 AND 106 FANS 819 & 372
VS	HANDICAP WATER CLOSET	ZURN MODEL Z5640 17" H BLOWNATED PRESSURE ASSOCI 16 GPM	1/2"	---	3"	2"	 FURNISH ADA CLOSET & TANK, ADA OPEN FRONT SEAT, SELF-SUSTAINING HINGE, FLOOR FLANGE, CLOSET BOLTS & CAPS, MAX RING, SUPPLY STOP & TUBE, FLUSH CONTROL MUST BE LOCATED ON THE NON-ACCESS SIDE OF THE WC, SIDE OPPOSITE THE WALL
WC	WALL CLEANOUT	ZURN MODEL 12-1446	---	---	---	---	RAISED HEADPLUS POLISH SS COVER & YANGLI PROOF SCREEN
WH	ELECTRIC WATER HEATER	BRADFORD WHITE MODEL NO. REH16W WITH GATE 3/4"IN DRAIN PAN AND ZURN VSD VACUUM RELIEF VALVE	3/4"	3/4"	---	---	FURNISH 10 GALLON SHORT WATER HEATER, DOWNS, 2000 W ELEMENT WITH 1 & P RELIEF VALVE AND INTEGRAL HEAT TRAPS

NOTE: INSTALL ALL PLUMBING FIXTURES TO BE FULLY ACCESSIBLE TO INDIVIDUALS WITH DISABILITIES IN ACCORDANCE WITH LATEST EDITION OF THE AMERICANS WITH DISABILITIES ACT AND ALL CURRENT STATE AND LOCAL CODES. - PROVIDING ACCESSIBILITY AND USABILITY FOR PHYSICALLY HANDICAPPED PEOPLE AND/OR GOVERNING CODES. - ALL PLUMBING FIXTURES, EQUIPMENT, TRIM & FITTINGS SHALL COMPLY WITH LOCAL, STATE, AND FEDERAL REGULATIONS AND CODES, INCLUDING, BUT NOT LIMITED TO, WATER AND ENERGY CONSERVATION CODES. THE SCHEDULED AND/OR SPECIFIED PLUMBING FIXTURES AND EQUIPMENT REPRESENT THE MINIMUM CRITERIA AND SHALL BE THE BASIS FOR THE CONTRACTOR'S BASE BID. IF THE SCHEDULED OR SPECIFIED FIXTURES OR EQUIPMENT DO NOT COMPLY WITH GOVERNING CODES OR REGULATIONS IN ALL RESPECTS, THE CONTRACTOR SHALL PROVIDE AN ALTERNATE BID FOR COMPLYING FIXTURES, EQUIPMENT, TRIM, OR FITTINGS. THE ABSENCE OF AN ALTERNATE BID SHALL BE CONSTRUED TO MEAN THAT THE CONTRACTOR'S BID INCLUDES ALL COSTS NECESSARY TO MEET ALL REGULATIONS & CODES. ALL PIPING AND VALVES BELOW LAVATORY SHALL BE INSULATED WITH PVC LAY GUARDS AND CONFIGURED TO PROTECT AGAINST CONTACT PROVIDED WITH LAV KIT. THERE SHALL BE NO SHARP OR ABRASIVE SURFACES UNDER LAVATORY.

- KEYED NOTES**
- CONTRACTOR SHALL REMOVE ALL EXISTING PLUMBING FIXTURES IN THIS AREA AND CAP ALL PIPING AT FLOOR LEVEL.
 - REMOVE EXISTING TOILET FIXTURES, DRAINS, PIPING, ETC. COMPLETE. INSTALL NEW TOILETS PER TENANT PLANS. CONNECT NEW TOILETS TO EXISTING COLD WATER SUPPLY AND SANITARY SEWER. ALL EXISTING DRAINS, VENTS, AND SUPPLY PIPING SHALL BE REMOVED, COMPLETE TO ABOVE CEILING, INSIDE HALLS, AND BELOW FINISHED FLOOR AND CAPPED. PIPING REMAINING SHALL NOT INHIBIT THE USE OF PIPING TO REMAIN.
 - CONTRACTOR SHALL OBTAIN A COPY OF ALL PLUMBING SPEC SHEETS PRIOR TO INSTALLATION. CONTRACTOR SHALL ROUGH IN ALL PLUMBING BASED ON THE SPEC SHEET.



NOTE: ALL WATER PIPING INSIDE BUILDING SHALL BE INSULATED PER SPECIFICATIONS SHEET HPS. EXPANSION TANK (E1) TO BE MOUNTED ON COLD WATER LINE, ON THE TANK SIDE OF THE COLD WATER SHUT-OFF VALVE.

WATER HEATER DETAIL
NOT TO SCALE

1-14-2022

4401

TH

TL

BD

RRMM ARCHITECTS, PC

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EXAMIN & DESIGN

26490 SC HWY 121, PROJECT#803780

WYTHEVILLE, SOUTH CAROLINA

PARTIAL PLUMBING PLAN SCHEDULES

DETAILS, ISOMETRICS & KEYED NOTES

project

drawing

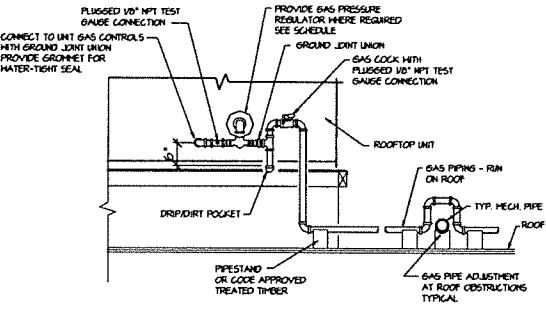
sheet

MP-2

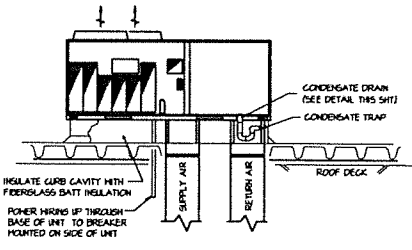
EXISTING ROOFTOP UNIT SCHEDULE (gas heat/elec. cool)																			
MARK	HFR/MODEL	DISCHARGE	TONE	ESP	CFM	OUTSIDE AIR CFM (MIN)	OUTSIDE AIR CFM (MAX)	ENTERING AIR CONDITIONS	NET COOLING CAPACITY (BTU/H)		ASU SEER	HEATING FUEL	HEATING CAPACITY (BTU/H)		APR #	ELECTRICAL VOLT / PH / HZ	HCA HOLF	ACCESSORIES	UNIT HEIGHT (LBS)
RTU-1	KP 855020	HORIZONTAL	10	10	4000	400	1000	80°F DB, 61°F WB @ 10' F AMBIENT	124.1	96.2	11.1	NATURAL GAS	180	148	B2	208/3/60	50/60	13,458.7/8	EXISTING
RTU-2	KP 855020	HORIZONTAL	10	10	4000	400	1000	80°F DB, 61°F WB @ 10' F AMBIENT	124.1	96.2	11.1	NATURAL GAS	180	148	B2	208/3/60	50/60	13,458.7/8	EXISTING
ACCESSORIES PROVIDED AND INSTALLED BY TENANT CONTRACTOR:																			
1. FULL PERIMETER INSULATED ROOF CURB OR ADAPTER CURB AS REQUIRED, SLOPED PER ROOF REQUIREMENTS FOR LEVEL UNIT INSTALLATION																			
2. DRAIN PAN OVERFLOW SWITCH FOR UNIT SHUT-DOWN																			
ACCESSORIES PROVIDED BY TENANT FOR TENANT CONTRACTOR INSTALLATION:																			
3. CO2 DEMAND CONTROL VENTILATION, O.A. MIN. OPEN POSITION SHALL BE THE MIN. AND SHALL MODULATE OPEN UP TO THE MAX. TO MAINTAIN MAXIMUM CO2 LEVELS IN THE BREATHING AREA OF 1000 PPM RELATIVE TO THE O.A. AMBIENT.																			
4. DIFFERENTIAL ENTHALPY ECONOMIZER WITH BAROMETRIC RELIEF																			
5. INSTALL EMS CONTROLS PACKAGE																			
6. LOWERED CONDENSER COIL GUARDS																			
7. UNIT MOUNTED NON-POWERED HEATERPROOF OFCI OUTLET																			
8. UNIT MOUNTED DISCONNECT SWITCH																			
NOTE: CONTRACTOR SHALL BE RESPONSIBLE FOR ALL STARTUP AND WARRANTY WORK. VERIFY ELECTRICAL POWER PRIOR TO INSTALLING UNITS. FAILURE TO DO SO SHALL RESULT IN CONTRACTOR FURNISHING CORRECT UNITS OR POWER AT NO ADDITIONAL COST TO TENANT. OUTSIDE AIR QUANTITIES BASED ON ASHRAE 62.1-2004 TABLE 6-1 BUILDING AND PEOPLE COMPONENTS FOR AN ENGINEERED VENTILATION SYSTEM EMPLOYING A CO2 MONITORING SYSTEM.																			

ROOFTOP UNIT SCHEDULE (gas heat/elec. cool)																			
RTU PROVIDED BY TENANT FOR INSTALLATION BY CONTRACTOR																			
MARK	HFR/MODEL	DISCHARGE	TONE	ESP	CFM	OUTSIDE AIR (CFM MIN)	OUTSIDE AIR (CFM MAX)	ENTERING AIR CONDITIONS	NET COOLING CAPACITY (BTU/H)		HEATING FUEL	HEATING CAPACITY (BTU/H)		APR	ELECTRICAL	HCAP	ACCESSORIES	UNIT HEIGHT (LBS)	
									TOTAL	SENSIBLE		INER	OUTER		VOL. T / PH / HZ	NOCF			
RTU-3	CARRIER 43KED00	DOWNFLOW	8	10	2400	250	650	DOY DB 61°F WB 61°F AMBIENT	75.2	56.9	12.0	NATURAL GAS	125	103	B2	208/3/60	38.1/50	13,458.7/8	400
RTU-4	CARRIER 43KED00	DOWNFLOW	15	10	2800	300	750	DOY DB 61°F WB 61°F AMBIENT	85.3	72.2	12.0	NATURAL GAS	180	148	B2	208/3/60	42.6/50	13,458.7/8	1050
RTU-5	CARRIER 43KED00	DOWNFLOW	8	10	2400	300	300	DOY DB 61°F WB 61°F AMBIENT	75.2	56.9	12.0	NATURAL GAS	125	103	B2	208/3/60	38.1/50	13,458.7/8	400
RTU-6	CARRIER 43KED00	DOWNFLOW	5	10	1800	300	300	DOY DB 61°F WB 61°F AMBIENT	60.4	48	B2	NATURAL GAS	15	12.5	B2	208/3/60	28.4/40	14,588.7/8	800
ACCESSORIES PROVIDED AND INSTALLED BY TENANT CONTRACTOR:																			
1. FULL PERIMETER INSULATED ROOF CURB OR ADAPTER CURB AS REQUIRED, SLOPED PER ROOF REQUIREMENTS FOR LEVEL UNIT INSTALLATION																			
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8. UNIT MOUNTED DISCONNECT SWITCH																			
NOTE:																			
CONTRACTOR SHALL BE RESPONSIBLE FOR ALL STARTUP AND WARRANTY WORK. VERIFY ELECTRICAL POWER PRIOR TO INSTALLING UNITS. FAILURE TO DO SO SHALL RESULT IN CONTRACTOR FURNISHING CORRECT UNITS OR POWER AT NO ADDITIONAL COST TO TENANT. OUTSIDE AIR QUANTITIES BASED ON ASHRAE 62.1-2004 TABLE 6-1 BUILDING AND PEOPLE COMPONENTS FOR AN ENGINEERED VENTILATION SYSTEM EMPLOYING A CO2 MONITORING SYSTEM.																			

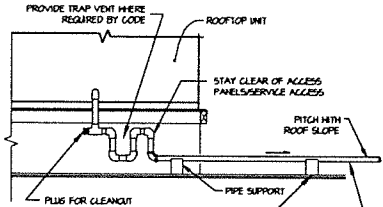
VENTILATION AIR CALCULATIONS														
Zone	Unit	Occupancy Category	DOAS / SZ / HZ	Area (sf)	People OA Rate (cfm/person)	Area OA Rate (cfm/sf)	Occupant Density (1/1000 sf)	Occupants	Zone Air Distribution Eff.	Zone Outdoor Air Flow (cfm)	System Ventilation Eff.	OA Inlets Flow Required (cfm)	Total OA Delivered (cfm)	Unit OA Delivered (cfm)
SALES	RTU-1	RETAIL	SZ	1836	15	0.12	15	175	2705	1.0	2705	0.8	3362	1000
	RTU-2													1000
	RTU-3													650
	RTU-4													750
STOCK	RTU-5	STORAGE	SZ	3410	0.0	0.12	0	0	464	1.0	464	0.8	587	300
	RTU-6													300



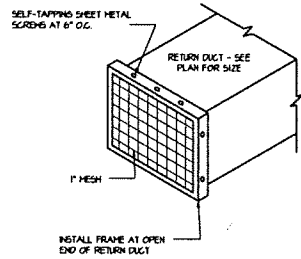
ROOFTOP UNIT GAS PIPING DETAIL



TYPICAL ROOFTOP UNIT INSTALLATION



ROOFTOP UNIT CONDENSATE PIPING DETAIL

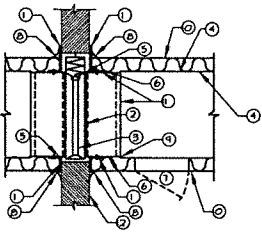


REMOVABLE METAL FRAME DETAIL

EXHAUST FAN SCHEDULE									
CONTRACTOR PROVIDED, CONTRACTOR INSTALLED									
MARK	HFR/MODEL	CFM	RPM	ESP	POTENTIAL	1/2" V.P. / 1/2" H.P.	1/2" V.P. / 1/2" H.P.	ACCESSORIES	
EF-1	YORKPAC BARRY	200	854	0.50	71 H	15 / 10 / 60		1, 2, 3, 4, 5, 7	
ACCESSORIES/OPTIONS:									
1. ROOF CURB & VENT CAP									
2. BACKDRAFT DAMPER									
3. PLUG DISCONNECT									
4. SPEED CONTROLLER									
5. VIBRATION ISOLATION MOUNT KIT									
6. CONTROLLED BY LINE VOLTAGE THERMOSTAT TO SHUT FAN AT 80°F AND STOP FAN AT 70°F									
7. FAN SHALL BE INTERLOCKED WITH MOTION SENSOR									
8. 277V TRANSFORMER									

GRILLE, REGISTER & DIFFUSER SCHEDULE									
CONTRACTOR PROVIDED, CONTRACTOR INSTALLED									
MARK	HFR	MODEL	MATERIAL	DEVICE	SIZE	MOUNTING	TYPE		
A	GRILLE	5000A	STEEL	12" X 12"	LAY-IN	SUPPLY			
B	GRILLE	5000B	STEEL	24" X 24"	LAY-IN	SUPPLY			
C	GRILLE	5000C	STEEL	12" X 10"	DUGT	SUPPLY			
D	GRILLE	5000D	ALUMINUM	24" X 24"	LAY-IN	RETURN			
E	GRILLE	5000E	STEEL	8" X 8"	SURFACE	EXHAUST			
F	GRILLE	5000F	STEEL	12" X 12"	LAY-IN	SUPPLY			
G	GRILLE	5000G	ALUMINUM	24" X 24"	SURFACE	DOOR GR			
NOTE: PROVIDE TYPE G DIFFUSERS WITH DAMPERS									

AIR CURTAIN SCHEDULE									
PROVIDED BY TENANT FOR INSTALLATION BY CONTRACTOR									
MARK	HFR/MODEL	OUTLET VELOCITY (FT/MIN)	VELOCITY @ 6' (FT/MIN)	CFM	HEATING CAPACITY (BTU/H)	HCAP (BTU/H)	ELECTRICAL (V / PH / HZ)	ACCESSORIES	
AC-1	POWERED AIR	2500	704	1000	-	-	208/3/60	1200/60	12,458.7/8
ACCESSORY OPTIONS:									
1. MEETS IBC BUILDING CODE ALLOWING ANCA CERTIFIED AIR CURTAIN IN LIEU OF VESTIBULE									
2. PROVIDE TWO DOOR SHUTTERS AND DELAY TIMER TO 30 SECONDS									
3. PROVIDE WITH THERMOSTAT AND THE DELAY RELAY									
4. REMOTE MOUNTED VARIABLE SPEED ON/OFF SWITCH									
5. SINGLE POINT POWER CONNECTION									
6. CLEANABLE WIRE MESH FILTERS									
7. PROVIDE DISCONNECT SWITCH, DISCONNECT SWITCH AND WIRING TO BE CONCEALED									
8. MOUNT UNIT WITH CONCEALED FASTENERS, PROVIDE TRAMON MOUNTING BRACKET AS REQUIRED.									
9. INSTALL BOTTOM OF CURTAIN 2 INCHES ABOVE TOP OF DOOR (6" ± AFF)									



- 1. 1-1/2" x 1-1/2" x 1/8" GA. RETAINING ANGLE ALL FOUR SIDES. FASTEN WITH #10 SHEET METAL SCREWS, 8" ON CENTER. ASSEMBLY MUST BE SELF-SUPPORTING INDEPENDENT OF DUCTWORK. ANGLES MUST LAP STRUCTURE OPENINGS A MINIMUM OF 1" AND COVER CORNERS OF OPENINGS.
- 2. UL 555 FIRE DAMPER ASSEMBLY.
- 3. REFER TO MECHANICAL SPECIFICATIONS FOR MAXIMUM PROTRUSION OF FIRE DAMPER BLADE/SUPPORT ASSEMBLY INTO AIR STREAM.
- 4. SHEET METAL DUCTWORK.
- 5. CLEARANCE BETWEEN WALL AND SLEEVE 1/8" PER FOOT OF DAMPER WIDTH OR HEIGHT. MINIMUM OPENING 1/4". MAXIMUM OPENING 1/8" PER FOOT. CLEARANCE CAN BE ON EITHER SIDE, TOP OR BOTTOM.
- 6. SLEEVE MUST NOT EXTEND MORE THAN 6" FROM FACE OF WALL.
- 7. STOP INSULATION AT WALL BOTH SIDES, AND SEAL WITH TAPE TO WALL.
- 8. S-JOINTS, SLEEVE TO DUCT.
- 9. EXTERNAL WRAP INSULATION.
- 10. DAMPER SLEEVE.
- 11. RATED WALL CONSTRUCTION.

VERTICAL FIRE DAMPER DETAIL

Oliver Little Gibson

OLG

ENGINEERING, INC.

15142022

DATE

PROJECT

DESIGNED

DRAWN

CHECKED

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FAMILY & DOLLAR

26490 SC HWY 121, PROJECT#803780

WYTHEVILLE, SOUTH CAROLINA

SCHEDULES & DETAILS

sheet

MP-3

TENANT SHALL FURNISH SELECTED MECHANICAL EQUIPMENT, ACCESSORIES AND CONTROLS AS SCHEDULED AND AS SPECIFIED. THE MECHANICAL SUBCONTRACTOR(S) SHALL BE RESPONSIBLE FOR DELIVERY, COORDINATION, RECEIVING, STORING, SETTING, STARTUP AND INSTALLING ALL TENANT FURNISHED EQUIPMENT AS WELL AS THE ONE YEAR PARTS AND LABOR WARRANTY FROM THE DATE OF STORE OPENING.

A. SCOPE

1. PROVIDE ALL LABOR, MATERIALS AND EQUIPMENT NECESSARY TO PROPERLY INSTALL AIR CONDITIONING SYSTEMS WHERE SHOWN ON DRAWINGS AND AS SCHEDULED.
2. PROVIDE EQUIPMENT AS SPECIFIED TOGETHER WITH ALL NECESSARY DUCTS, GRILLES, REGISTERS, CONTROLS, PIPING, LOW VOLTAGE FANS, CONTROL WIRING, HANGERS, STANDS, EQUIPMENT SUPPORTS, FLASHING AT EQUIPMENT, DUCT AND PIPE INSULATION, UNLESS OTHERWISE NOTED.
3. RELATED WORK BY OTHERS:
 - a. PAINTING EXCEPT AS HEREIN SPECIFIED.
 - b. LINE VOLTAGE WIRING AND CONDUIT.
 - c. ELECTRICAL SUPPLY CONNECTION TO EQUIPMENT.
4. ALL WORK SHALL CONFORM TO ALL FEDERAL, STATE AND LOCAL CODES AND ANY LANDLORD REQUIREMENTS AS SPECIFIED IN THE EXECUTED LEASE AGREEMENT. CONTRACTOR SHALL VERIFY AND COORDINATE SCOPE OF WORK WITH TENANT AND LANDLORD.
5. THE CONTRACTOR SHALL EXAMINE THE PREMISES AND VERIFY THE EXISTING CONDITIONS UNDER WHICH HE WILL BE OBLIGATED TO OPERATE IN PERFORMING HIS PART OF THE WORK OR THAT WILL IN ANY MANNER AFFECT THE WORK UNDER CONTRACT. NO ADDITIONAL COMPENSATION SHALL BE PROVIDED FOR CONDITIONS FOUND DURING THE EXECUTION OF CONTRACTED WORK. THE CONTRACTOR SHALL COOPERATE WITH ALL OTHER TRADES SO THAT THE INSTALLATION OF ALL EQUIPMENT MAY BE PROPERLY COORDINATED. CONTRACTOR SHALL BRING TO THE ATTENTION OF THE CONSTRUCTION MANAGER ANY DISCREPANCIES BETWEEN FIELD CONDITIONS AND DESIGN DOCUMENTS.
6. ALL EQUIPMENT FURNISHED SHALL FIT THE SPACE AVAILABLE, WITH CONNECTIONS, ETC., IN THE REQUIRED LOCATIONS AND WITH ADEQUATE SPACE FOR OPERATING AND SERVICING. SHOULD A CONFLICT EXIST BETWEEN THE DRAWINGS AND THE SPECIFICATIONS, THE CONTRACTOR SHALL PROMPTLY NOTIFY THE CONSTRUCTION MANAGER WHOSE DECISION SHALL BE FINAL. NO ALLOWANCE WILL BE MADE, SUBSEQUENTLY, IN THIS CONNECTION ON BEHALF OF THE CONTRACTOR AFTER AWARD OF THE CONTRACT.
7. ALL MECHANICAL EQUIPMENT SHALL CONFORM WITH THE REQUIREMENTS OF THE STATE MECHANICAL CODE, THE STATE BUILDING CODE, THE STATE ENERGY CODE, NFPA 90A, 90B, 90C AND ALL APPLICABLE LOCAL CODES AND ORDINANCES.
8. DRAWINGS FOR MECHANICAL WORK ARE DIAGRAMMATIC SHOWING THE GENERAL LOCATION, TYPE, LAYOUT AND EQUIPMENT REQUIRED. THE DRAWINGS SHALL NOT BE SCALED FOR EXACT MEASUREMENTS. REFER TO MANUFACTURER'S STANDARD INSTALLATION DRAWINGS FOR EQUIPMENT CONNECTIONS AND INSTALLATION REQUIREMENTS AS REQUIRED. FURNISH AND INSTALL DUCTWORK, CONNECTIONS, ACCESSORIES, OFFSETS AND MATERIALS NECESSARY TO FACILITATE THE SYSTEMS FUNCTIONING AS INDICATED BY THE DESIGN AND THE EQUIPMENT INDICATED. CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND PAY ANY ASSOCIATED FEES.
9. THE CONTRACTOR SHALL INSTALL ALL PIPES, DUCTWORK, FIXTURES AND EQUIPMENT AS REQUIRED TO CONFORM TO THE STRUCTURE, AVOID OBSTRUCTIONS, PRESERVE CEILING HEIGHTS AND HEADROOM AND MAKE ALL EQUIPMENT REQUIRING MAINTENANCE OR REPAIR ACCESSIBLE.
10. THE CONTRACTOR SHALL INSTALL MECHANICAL SYSTEMS AS SHOWN, NOTED AND SPECIFIED. EQUIPMENT MAY NOT BE SUBSTITUTED UNLESS WRITTEN APPROVAL BY THE ENGINEER OR TENANT'S REPRESENTATIVE IS OBTAINED. ANY UNAUTHORIZED CHANGES SHALL BE REMOVED AT CONTRACTOR'S EXPENSE IF DEEMED NECESSARY BY ENGINEER OR TENANT'S REPRESENTATIVE. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY REQUIRED CHANGE TO RELATED WORK CAUSED BY THE SUBSTITUTION OF ANY ITEMS OF MATERIALS OR EQUIPMENT AT NO ADDITIONAL COST TO THE OWNER.

HVAC UNITS (NEW)

- WHERE EXISTING HVAC COMPONENTS ARE TO REMAIN FOR REUSE, CONTRACTOR SHALL MODIFY, SERVICE, ETC. PER PLANS, SCHEDULES, AND NOTES

1. CONTRACTOR SHALL COORDINATE THE DELIVERY, RECEIVING, STORAGE, RIGGING, HOISTS, INSTALLATION AND START UP OF HEATING AND COOLING UNITS INCLUDING ALL ACCESSORIES AS SCHEDULED AND AS INDICATED ON THE DRAWINGS.

2. HVAC UNITS SHALL BE FURNISHED COMPLETE WITH CASINGS, REFRIGERATION SYSTEM, HEATING SECTION (AS SCHEDULED ON DRAWINGS), FANS, MOTORS AND DRIVES, FILTERS, AUTOMATIC CONTROLS, AND OPTIONS AND ACCESSORIES AS SCHEDULED ON DRAWINGS.

C. TEMPERATURE CONTROLS

1. HVAC UNITS SHALL BE FURNISHED WITH FACTORY INSTALLED AND TESTED COMPONENTS TO PROVIDE TWO STAGES OF COOLING, TWO STAGES OF HEATING (WHERE APPLICABLE), ANTI-RECYCLE TIMER, FIVE (5) MINUTE COMPRESSOR STAGING RELAY, AND OTHER ITEMS AS SCHEDULED ON DRAWINGS.

D. SEQUENCE OF OPERATION

1. OCCUPIED HOURS

- a. UNIT OUTDOOR AIR DAMPER SHALL OPEN TO ITS MINIMUM POSITION AND UNIT SUPPLY FAN SHALL OPERATE CONTINUOUSLY.
- b. FOR UNITS CONNECTED TO THE CO2 SENSOR SYSTEM, UNIT OUTDOOR AIR DAMPER SHALL MODULATE FROM ITS MINIMUM SCHEDULED POSITION TO ITS MAXIMUM SCHEDULED POSITION IN RESPONSE TO SPACE MOUNTED CO2 SENSOR (BY OTHERS) SET AT 800 PPM.
- c. UNIT HEATING SHALL ENGAGE CYCLING COMPRESSOR(S), HEATING (HEAT EXCHANGER, COMPRESSOR (HEAT PUMP), AND ELECTRIC HEAT AS EQUIPPED) AND SHALL STAGE TO MAINTAIN SPACE SETPOINT.

2. UNOCCUPIED HOURS

- a. UNIT OUTDOOR AIR DAMPER SHALL REMAIN CLOSED AND UNIT SUPPLY FAN SHALL CYCLE ON A SIGNAL FROM SPACE SENSOR.
- b. UNIT HEATING SHALL ENGAGE CYCLING COMPRESSOR(S), HEATING (HEAT EXCHANGER, COMPRESSOR (HEAT PUMP), AND ELECTRIC HEAT AS EQUIPPED) AND SHALL STAGE TO MAINTAIN SPACE SETPOINT.

3. UNIT ECONOMIZER CYCLE (WHERE EQUIPPED) SHALL BE INITIATED UPON A SIGNAL FROM OUTDOOR AND RETURN AIR TEMPERATURE AND ENTHALPY SENSORS. OUTDOOR AIR DAMPER, RETURN AIR DAMPER, AND UNIT COMPRESSOR(S) SHALL CYCLE TO MAINTAIN SPACE SETPOINT. ECONOMIZER CYCLE SHALL OVER RIDE CO2 MONITORING SYSTEM.

4. SMOKE ALARM (WHERE REQUIRED)

- a. UNIT OUTDOOR AIR DAMPER SHALL CLOSE AND UNIT SUPPLY FAN SHALL STOP ON A SIGNAL FROM DETECTED SMOKE DETECTOR. DUCT SMOKE DETECTOR SHALL SEND A SIGNAL TO REMOVE ALARM DEVICE.

GRILLES, REGISTERS AND DIFFUSERS

- A. THE CONTRACTOR SHALL PROVIDE GRILLES, REGISTERS AND DIFFUSERS WHERE INDICATED AND AS SCHEDULED ON THE DRAWINGS.
- B. GRILLES, REGISTERS AND DIFFUSERS SHALL BE PROVIDED WITH OPPOSED BLADE VOLUME DAMPERS AS SCHEDULED ON THE DRAWINGS.
- C. GRILLES, REGISTERS AND DIFFUSERS SHALL BE PROVIDED WITH FRAME TYPES TO MATCH THE SURFACE INTO WHICH THEY WILL BE INSTALLED.
- D. GRILLES, REGISTERS AND DIFFUSERS SHALL BE PROVIDED WITH FACTORY APPLIED WHITE FINISH.
- E. DESIGN IS BASED ON PRODUCTS MANUFACTURED BY TITUS. PRODUCTS OF EQUIVALENT PERFORMANCE, CONSTRUCTION AND APPEARANCE MAY BE SUPPLIED.

EXHAUST FANS

- A. THE CONTRACTOR SHALL PROVIDE EXHAUST FANS WHERE INDICATED AND AS SCHEDULED ON THE DRAWINGS.
- B. INLINE EXHAUST FANS SHALL BE FURNISHED WITH VIBRATION ISOLATING HANGARS AND ALL RELATED HARDWARE.
- C. ALL EXHAUST FANS SHALL BE FURNISHED WITH BACK DRAFT DAMPER, INSECT SCREEN, MOTOR AND DRIVE, AND OPTIONS AND ACCESSORIES AS SCHEDULED ON DRAWINGS.

DUCTWORK

- A. ALL DUCTWORK SHALL BE CONSTRUCTED OF GALVANIZED STEEL SHEET METAL AND BE FABRICATED ACCORDING TO THE LATEST EDITION OF THE SHACMA HVAC DUCT CONSTRUCTION STANDARDS FOR METAL AND FLEXIBLE DUCTWORK.
- B. ALL ELBOWS SHALL HAVE PROPER RADIUS OR CONTRACTOR SHALL PROVIDE TURNING VANES AS REQUIRED BY SHACMA DUCT CONSTRUCTION MANUAL.
- C. ALL DUCT CONNECTIONS TO EQUIPMENT SHALL BE LOADED TYPE VINYL VIBRATION ELIMINATION CONNECTIONS, (V) FLEXIBLE CONNECTIONS.
- D. FLEX DUCT: PROVIDE FACTORY ASSEMBLED CLASS I AIR DUCT (M ID) WITH FIBERGLASS INSULATION AND REINFORCED OUTER PROTECTIVE COVER/VAPOR BARRIER. FLEX DUCT SHALL MEET NFPA 90A WITH FLAME SPREAD UNDER 25, SMOKE DEVELOPED UNDER 50, AND SHALL BE RATED FOR 1" H₂O, PRESSURE AND 0 TO 250 DEGREE TEMPERATURE. MAXIMUM LENGTH SHALL BE 5'-0". MINIMUM CENTER LINE BEND RADIUS SHALL BE 1/2 DUCT DIAMETERS. VAPOR BARRIER SHALL BE SEALED AT EACH END AFTER CONNECTION TO DUCT AND AIR DEVICE.
- E. ALL NEW SUPPLY AND RETURN DUCTWORK SHALL BE INSULATED. NO EXCEPTIONS. INSULATE WITH EXTERNAL DUCT WRAP OR WITH SHOP APPLIED DUCT LINER. DUCT WRAP SHALL BE FOIL REINFORCED KRAFT FACINGS. ALL INSULATION SHALL MEET NFPA 90A FLAME SPREAD UNDER 25 AND SMOKE DEVELOPED UNDER 50. THICKNESS, DENSITY AND "R" VALUE SHALL BE PER CODE. INSULATION SHALL BE FASTENED TO DUCTWORK PER MANUFACTURER'S INSTRUCTIONS AND SHACMA STANDARDS. ROUND BRANCH DUCTWORK SHALL BE INSULATED WITH 1" THICK FIBERGLASS SLEEVE WITH FOIL JACKET AND ALL JOINTS AND TERMINATIONS SEALED WITH FOIL DUCT TAPE.

EXECUTION

- A. ALL DUCTWORK: TRANSITIONS SHALL BE (FOT) "FLAT ON TOP" UNLESS OTHERWISE SPECIFIED ON PLAN. ALL DUCT DIMENSIONS LISTED ARE INNER AIR STREAM DIMENSIONS.
- B. ALL DUCTWORK: SHALL BE ROUTED ABOVE THE SUSPENDED CEILING SPACE UNLESS OTHERWISE NOTED ON THE PLANS. ALL DUCTWORK SHALL BE SUSPENDED FROM TOP CHORD OF STRUCTURE AND ACCORDING TO THE LATEST EDITION OF THE SHACMA HVAC DUCT CONSTRUCTION STANDARDS FOR METAL AND FLEXIBLE DUCTWORK.
- C. ALL OUTSIDE AIR INTAKES SHALL BE A MINIMUM OF 10'-0" AWAY FROM EXHAUST DISCHARGE OPENINGS AND PLUMBING VENT STACKS.
- D. PROVIDE UL APPROVED FIRE DAMPERS FOR ALL PENETRATIONS THROUGH FIRE RATED WALLS, PARTITIONS, CEILINGS, AND FLOORS. INSTALL FIRE DAMPERS AS PER MANUFACTURER'S DIRECTIONS AND AS PER UL GUIDELINES.
- E. PROVIDE ROUND SPIN-IN FITTINGS WITH LOCKING VOLUME DAMPER FOR EVERY INLET AND OUTLET ATTACHMENT TO THE MAIN TRUNK DUCT WHETHER SHOWN ON THE PLANS OR NOT. PROVIDE ADDITIONAL LOCKING VOLUME DAMPERS AT ALL SECONDARY BRANCH TAKEOFFS FROM DUCTWORK MAINS AND AS INDICATED ON PLANS. PROVIDE INSPECTION ACCESS PANELS IN DUCTS AT ALL FIRE DAMPERS.
- F. SUPPLY, RETURN AND POSITIVE PRESSURE EXHAUST DUCTWORK SHALL BE SEALED IN ACCORDANCE WITH SHACMA SEAL CLASS "C".
- G. CORE-DRILL OR SAW-CUT EXISTING WALLS, ROOF, ETC. AS REQUIRED FOR PIPING OR DUCTWORK AND FIRE-STOP OPENINGS AROUND PIPE OR DUCTWORK. VERIFY LOCATION OF STRUCTURAL BEAMS, JOISTS, ETC. BEFORE DRILLING OR CUTTING. NOTIFY ARCHITECT OF ANY DISCREPANCIES.
- H. WHEREVER FOUNDATION WALLS, OUTSIDE WALLS, ROOFS, ETC. ARE CUT FOR INSTALLATION OF SYSTEMS, THEY SHALL BE PATCHED TO MATCH EXISTING CONSTRUCTION AND SEALED WEATHER TIGHT. WORK SHALL BE PERFORMED BY CRAFTSMEN SKILLED IN THEIR RESPECTIVE TRADES.

1. PROVIDE 3 SETS OF PLEATED DISPOSABLE FILTERS. ONE SET TO BE USED UNTIL COMPLETION OF CONSTRUCTION PHASE. INSTALL ONE SET AT COMPLETION OF CONSTRUCTION PHASE AND DELIVER ONE SET TO OWNER AND LABEL EACH SET OF FILTERS TO DENOTE THEIR RESPECTIVE HVAC UNITS.

2. PROVIDE TWO OPERATION AND MAINTENANCE MANUALS BOUND IN 8-1/2" X 11" PAGE BINDERS, TITLED "OPERATION AND MAINTENANCE MANUAL". SUBDIVIDE BINDER CONTENTS WITH PAGE DIVIDERS BY SYSTEM AND EQUIPMENT. INCLUDE ALL SHOP DRAWINGS, AS-BUILT DRAWINGS AND WARRANTIES. SUBMISSION OF THESE DOCUMENTS SHALL BE WITHIN 90 DAYS OF SYSTEM ACCEPTANCE, PER ENERGY CODE, AND A REQUIREMENT FOR FINAL PAYMENT.

TESTING, ADJUSTING, BALANCING AND INSPECTION

- A. WORK SHALL BE PERFORMED AFTER THE COMPLETE INSTALLATION AND STARTUP OF ALL EQUIPMENT, DUCT SYSTEMS AND TEMPERATURE AND ENERGY MANAGEMENT CONTROLS AND COMPLETED PRIOR TO TURNOVER FOR THE START OF STOCKING.
- B. CONTRACTOR SHALL SUBMIT TEST AND BALANCE REPORT TO GENERAL CONTRACTOR FOR SUBMITTAL TO TENANT'S PROJECT MANAGER AND LOCAL CODE AUTHORITY (IF REQUIRED).
- C. BALANCING OF AIR DEVICES SHALL BE ACCOMPLISHED BY ADJUSTING BRANCH TAKEOFF DAMPER AT MAIN TRUNK DUCT. DAMPERS IN THE NECKS OF AIR DEVICES SHALL BE USED FOR FINAL TRIM ONLY AND IN NO CASE FOR GREATER THAN 10% OF THE INDICATED VOLUME FOR THE INDIVIDUAL AIR DEVICE.
- D. WHERE EXISTING DUCT IS TO BE REUSED, CONTRACTOR SHALL PROVIDE AND INSTALL NEW MANUAL DAMPERS WITH LOCKING QUADRANT IN THE RUNOUT DUCT AT THE CONNECTION TO THE TRUNK DUCT AS REQUIRED FOR THE COMPLETION OF BALANCING.
- E. TESTING AND BALANCING CONTRACTOR SHALL ALSO INSPECT THE COMPLETED AND OPERATIONAL HVAC EQUIPMENT, DUCT SYSTEMS AND TEMPERATURE AND ENERGY MANAGEMENT CONTROLS PRIOR TO TURNOVER OF THE STORE FOR THE START OF STOCKING. TESTING AND BALANCING CONTRACTOR SHALL SUBMIT THE COMPLETED TENANT'S HVAC FIELD INSPECTION REPORT TO THE GENERAL CONTRACTOR FOR SUBMITTAL TO TENANT'S PROJECT MANAGER FOR REVIEW.

FIRE AND SMOKE PARTITION PENETRATIONS (WHERE REQUIRED)

- A. THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH ALL FIRE RATED CONSTRUCTION AND INSTALL HIS WORK SO AS TO MAINTAIN THE INTEGRITY OF THE FIRE CODE RATING. MAINTAIN RATINGS OF FIRE RATED AND SMOKE RATED CONSTRUCTION. SLEEVES SHALL BE STEEL OR PRE-MANUFACTURED SLEEVES SIMILAR TO PIPE SLEEVES, INC., FOR BARE PIPE THROUGH FIRE WALLS AND FLOORS, MODEL WFB, DFB OR GDFB. FOR PLASTIC PIPE, USE TYPE WFB WITH ONE INCH THICK CALCIUM SILICATE INSULATION ENCASED IN METAL SLEEVE EXTENSION TWO FEET EITHER SIDE OF FIRE RATED WALLS OR FLOOR. SEAL ANNULAR SPACE AROUND CONDUITS, FOR FIRE AND SMOKE RATED FLOORS, WALLS AND PARTITIONS, USE UL LISTED MATERIAL THAT MAINTAINS FIRE RATED WALL AND FLOOR INTEGRITY, SIMILAR TO RTV FOAM, DOW CORNING "FIRE STOP" OR PIPE SLEEVES, INC., MODEL WFB, DFB, OR GDFB. FOR NON-RATED WALLS AND PARTITIONS, USE MINERAL OR GLASS FIBER INSULATION.

GENERAL PLUMBING CONDITIONS

A. SCOPE

1. PROVIDE ALL LABOR, MATERIALS, TOOLS AND EQUIPMENT NECESSARY TO COMPLETE THE WORK, INCLUDING INSTALLATION OF PLUMBING PIPING AND FIXTURES. ALL MATERIALS SHALL BE NEW AND BE INSTALLED IN A WORKMANLIKE MANNER IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS.
2. PROVIDE EXCAVATION AND BACK FILL OF ALL TRENCHES INCIDENTAL TO THE PLUMBING WORK AS SHOWN ON THE DRAWINGS. BACK FILL SHALL BE COMPACTED TO 90%.
3. PROVIDE ALL BACKING, SUPPORTS AND CARRIERS FOR FIXTURES.
4. PROVIDE ALL CUTTING AND PATCHING OF THE CONSTRUCTION WORK, ROUGH FINISH AND TRIM, WHICH MAY BE REQUIRED FOR THE INSTALLATION OF EQUIPMENT. ALL PATCHING SHALL MATCH ALL SURROUNDING WORK.
5. CONTRACTOR SHALL MAKE ALL PLUMBING AND PIPING CONNECTIONS TO EQUIPMENT SPECIFIED TO BE FURNISHED BY TENANT OR UNDER OTHER SECTIONS OF THE SPECIFICATIONS INCLUDING FINAL CONNECTIONS TO AIR CONDITIONING AND HEATING EQUIPMENT.
6. CONTRACTOR SHALL PROVIDE SUFFICIENT APPROVED WATER HAMMER ARRESTORS (MADE "SHOCKSTOP", OR EQUIVALENT) TO PREVENT WATER HAMMER.
7. CONTRACTOR SHALL THOROUGHLY CLEAN ALL FIXTURES, EQUIPMENT AND PIPING AFTER INSTALLATION.
8. CONTRACTOR SHALL PROVIDE APPROVED ACCESS DOORS IN FRAMED HOLES FOR ALL VALVES, TRAPS WHICH MUST BE INSTALLED IN INACCESSIBLE LOCATIONS.
9. CONTRACTOR SHALL PROVIDE CUTOUT DATA FOR ALL SINKS AND LAVATORIES TO ALL OTHER RELATED TRADES.
10. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL REQUIRED PERMITS, INSPECTIONS AND CERTIFICATES IN CONNECTION WITH THE HIS WORK AND MAKE ALL ARRANGEMENTS WITH UTILITY COMPANIES FOR SERVICE AND CONNECTIONS AND PAY ALL FEES, CHARGES PERMITS AND METER CHARGES.

A. DRAIN, WASTE AND VENT

1. SERVICE WEIGHT, CAST IRON HUB AND SPIGOT PIPE AND FITTINGS WITH NEOPRENE GASKET JOINTS. NO-HUB SERVICE WEIGHT PIPE AND FITTINGS MAY BE USED ABOVE GRADE WHEN PERMITTED BY LOCAL CODE.
2. SCHEDULE 40, GALVANIZED STEEL PIPE AND Banded MALLEABLE IRON SCREEN FITTINGS.
3. SCHEDULE 40 AND 80 PVC OR ABS PIPING WITH DWV PATTERN FITTINGS MAY BE USED WHERE ALLOWED BY LOCAL CODE. FOAM CORE PVC PIPING WILL NOT BE APPROVED. NO PVC SHALL BE INSTALLED IN RETURN AIR PLenums.

B. HOT AND COLD WATER

1. ABOVE GRADE:

- a. TYPE "L" COPPER TUBING, HARD TEMPER, COLD DRAWN WITH WROUGHT COPPER LEAD FREE SWEAT FITTINGS. CONNECTIONS TO FIXTURES AND EQUIPMENT SHALL BE MADE WITH 85% RED BRASS IPS SIZE PIPE OR COMPRESSION ANGLE STOPS. PROVIDE DIELECTRIC UNIONS WHERE CONNECTING PIPING OF DISSIMILAR MATERIALS.
- b. PVC FOR COLD WATER AND CPVC FOR HOT WATER MAY BE SUBSTITUTED FOR COPPER PIPING WHERE ALLOWED BY LOCAL CODE AUTHORITY FOR ABOVE GRADE WATER PIPING ONLY.
- c. PEX PIPING FOR HOT AND COLD WATER MAY BE SUBSTITUTED WHERE ALLOWED BY LOCAL CODE AUTHORITY. CONNECTION AT WATER HEATERS MUST BE TYPE "L" COPPER PIPING. CONTRACTOR IS RESPONSIBLE FOR CORRECTLY SIZING AND INSTALLING ALL PEX PIPING PER MANUFACTURER'S REQUIREMENTS.

2. BELOW GRADE:

- a. TYPE "K" COPPER TUBING, HARD OR SOFT TEMPER, WITH WROUGHT COPPER LEAD FREE SWEAT FITTINGS. NOTE: NO FITTINGS SHALL BE PERMITTED BELOW GRADE INSIDE BUILDING.
- c. PEX PIPING MAY BE SUBSTITUTED WHERE ALLOWED BY LOCAL CODE AUTHORITY. CONTRACTOR IS RESPONSIBLE FOR CORRECTLY SIZING AND INSTALLING ALL PEX PIPING PER MANUFACTURER'S REQUIREMENTS.

C. AIR CONDITIONING CONDENSATE

1. TYPE "M" COPPER TUBING, HARD TEMPER, COLD DRAWN WITH WROUGHT COPPER LEAD FREE SWEAT FITTINGS.
2. PVC PIPING MAY BE SUBSTITUTED FOR AIR CONDITIONING CONDENSATE PIPING ABOVE ROOF ONLY WHERE ALLOWED BY LOCAL CODE AUTHORITY. ALL AIR CONDITIONING CONDENSATE PIPING SHALL BE OF THE SAME MATERIAL.

D. NATURAL GAS PIPING

1. SCHEDULE 40 BLACK IRON PIPE WITH ISO LB. BLACK MALLEABLE THREADED OR SOCKET WELDED FITTINGS.

EXECUTION

A. GENERAL REQUIREMENTS

1. CONTRACTOR SHALL EXAMINE THE PREMISES AND SATISFY HIMSELF OF EXISTING CONDITIONS UNDER WHICH HE WILL BE OBLIGATED TO OPERATE IN PERFORMING HIS PART OF THE WORK THAT IN ANY MANNER AFFECT THE WORK UNDER THE CONTRACT. THE CONTRACTOR SHALL COOPERATE WITH OTHER TRADES SO THAT THE INSTALLATION OF ALL EQUIPMENT MAY BE PROPERLY COORDINATED.
2. ALL EQUIPMENT FURNISHED SHALL FIT THE SPACE AVAILABLE, WITH CONNECTION ETC., IN THE REQUIRED LOCATIONS AND WITH ADEQUATE SPACE FOR OPERATION AND SERVICE.
3. ALL PIPING, EXCEPT FIXTURE SUPPLIES, SHALL BE CONCEALED, CUT ACCURATELY TO EXACT MEASUREMENTS TAKEN AT THE BUILDING AND WORKED CAREFULLY INTO PLACE WITHOUT FORCING OR SPRINGING. CHANGES IN DIRECTION OF ALL PIPING SHALL BE MADE WITH FITTINGS. CHANGES IN PIPE SIZE SHALL BE MADE WITH REDUCING FITTINGS.
4. NO WATER OR DRAIN LINES SHALL BE PERMITTED OVER ELECTRICAL OR TELECOMMUNICATION PANELS OR IN TELECOMMUNICATION ROOMS.
5. PROVIDE PROTECTIVE METAL COVER PLATES OVER STUDS AND JOISTS WHERE PIPES PENETRATE CLOSE TO EDGE OF STUD OR JOIST.
6. PROVIDE CHROME PLATED ESCUTCHEONS WHERE PIPES PASS THROUGH FLOORS, WALLS AND CEILINGS IN FINISHED SPACES.
7. ALL PIPING SHALL BE INSTALLED WITH ADEQUATE PROVISION FOR EXPANSION AND CONTRACTION USING SHIMS, JOINTS, PIPE CLAMPS, ANCHORS AND EXPANSION JOINTS. FITTINGS SHALL BE 50 SPACED THAT THEY WILL NOT INTERFERE WITH SLIDING OF PIPE ON SUPPORTS.
8. ALL OPENINGS IN THE ROOF SHALL BE FLASHED WATERTIGHT PER THE INSTRUCTION OF THE LANDLORD'S ROOFING CONTRACTOR TO MAINTAIN ROOF WARRANTY.

B. DRAIN, WASTE AND VENT

1. ALL WASTE PIPING SHALL BE PITCHED A MINIMUM OF 1/4" PER FOOT WHERE POSSIBLE. PIPING GREATER THAN 4" DIAMETER MAY BE PITCHED AT 1/8" PER FOOT, ONLY WHERE REQUIRED BY EXISTING CONDITIONS, SUBJECT TO THE APPROVAL OF THE AUTHORITY HAVING JURISDICTION.
2. DRAINS AND P-TRAPS: 1) 6A, C.P. BRASS WHERE EXPOSED TO VIEW EXTENDING TO HALL. 2) SIZE OF DRAIN AND TRAP SHALL NOT BE SMALLER THAN THE FIXTURE OUTLET TO WHICH IT IS ATTACHED.
3. VENTS SHALL EXTEND NOT LESS THAN 12" THROUGH ROOF. THEY SHALL BE GATHERED TOGETHER WHERE POSSIBLE INTO ONE VENT OF EQUIVALENT AREA. VENTS SHALL BE FLASHED AS INDICATED ON THE DRAWINGS. ALL VENTS SHALL BE A MINIMUM OF 10'-0" FROM ANY FRESH AIR INTAKES, OR GREATER IF REQUIRED BY LOCAL CODE.
4. CLEANOUTS, SAME SIZE AS PIPE, SHALL BE INSTALLED IN SOIL AND WASTE LINES AT EVERY CHANGE OF DIRECTION AND AT EVERY 100 FEET OF RUN WHETHER SHOWN ON THE DRAWINGS OR NOT, AND SHALL BE ACCESSIBLE IN ALL CASES, WHEN OCCURRING IN FINISHED WALL OR FLOOR, SET FLUSH WITH SURROUNDING SURFACE.

5. CLEANOUTS AS A MINIMUM SHALL BE LOCATED SO THAT ALL SOIL AND WASTE LINES WITHIN OR UNDER BUILDING ARE ACCESSIBLE FOR CLEANING WITHOUT PASSING THROUGH MORE THAN ONE NINETY DEGREE OR TWO FORTY FIVE DEGREE BENDS. CLEANOUT COVERS SHALL BE SET FLUSH WITH FLOORS AND GRADE WITH EXPOSED PLASTIC NUT AT WALLS.

C. HOT AND COLD WATER

1. ALL WATER PIPING SHALL BE PITCHED IN DIRECTION OF FLOW TO ALLOW FOR SYSTEM DRAINING. INSTALL PIPING PARALLEL TO MAJOR BUILDING ELEMENTS.
2. INSTALL WATER PRESSURE REGULATOR, "WATTS" OR "MILKINS", WHERE AVAILABLE UTILITY PRESSURE EXCEEDS 80 PSI.
3. INSTALL WATER MAIN SHUTOFF VALVES (WATTS, OR APPROVED EQUAL FULL PORT BALL VALVE), UPSTREAM OF PRESSURE REGULATOR.
4. INSTALL ACCESSIBLE HOT AND COLD WATER STOPS AT ALL FIXTURES.
5. INSTALL DIELECTRIC ISOLATORS WHERE INCOMPATIBLE PIPING MATERIALS COME IN CONTACT.
6. INSTALL TEMPERATURE AND PRESSURE RELIEF VALVES AS REQUIRED BY CODE.

D. NATURAL GAS

1. INSTALL NATURAL GAS PIPING AS INDICATED ON DRAWINGS AND AS REQUIRED BY LOCAL CODES.
2. INSTALL SHUTOFF VALVES CLOSE TO FIXTURE AND APPLIANCE CONNECTIONS, AND AHEAD OF UNION AND DIRT LEG AT ROOFTOP UNITS.
3. UNIONS SHALL BE INSTALLED ON BOTH SIDES OF ALL EQUIPMENT AND WHERE REQUIRED TO FACILITATE REMOVAL OF EQUIPMENT.
4. PROVIDE GAS PRESSURE REGULATING VALVES WITH TURNED DOWN VENTS AT ALL GAS APPLIANCES WHEN DISTRIBUTION PRESSURE IS GREATER THAN 7" W.C.
5. PROVIDE GAS MAIN SHUTOFF VALVE WITH LEVER TYPE HANDLE PLACED ON ON HOUSE SIDE OF METER.
6. PAINT ALL EXTERIOR PIPING INCLUDING PIPING INSTALLED ON ROOF WITH TWO COATS OF RUST INHIBITING EXTERIOR PAINT.
7. SUPPORT PIPING ON ROOF PER INSTRUCTION OF LANDLORD'S ROOFING CONTRACTOR TO MAINTAIN ROOF WARRANTY.

E. INSULATION

1. ALL WATER PIPING, HORIZONTAL AND VERTICAL SHALL BE INSULATED WITH FIBERGLASS PIPE INSULATION WITH AN ALL PURPOSE VAPOR BARRIER JACKET. USE MINIMUM 1" INSULATION ON WATER PIPING. ALL INSULATING MATERIALS SHALL HAVE A MAXIMUM 25 FLAME SPREAD RATINGS AND 50 SMOKE DEVELOPED RATINGS.
2. APPROVED INSULATION BLOCKING SHALL BE PLACED BETWEEN SHEET METAL JACKET AND BOTTOM OF THE PIPE WHERE JACKET ALONE CANNOT PREVENT CRUSHING. INSULATION JACKET OR VAPOR BARRIER SHALL BE SEALED AFTER INSTALLING BLOCKING (SEE HANGERS, SUPPORTS AND SLEEVES).

F. HANGERS, SUPPORTS AND SLEEVES

1. ALL DRAIN, WASTE, HOT AND COLD WATER, AND NATURAL GAS PIPING EXPOSED, ABOVE GRADE AND IN FINISHED AREAS, SHALL BE SUPPORTED IN PLACE WITH SECURELY FASTENED SOLID PIPE HANGERS NOT OVER 8'-0" APART AND AT EACH CHANGE IN DIRECTION, 15'-0" ON CAST IRON PIPE).
2. PIPE HANGERS SHALL BE INSTALLED AROUND THE OUTSIDE OF INSULATION WITH VAPOR BARRIERS, AND INSULATION SHALL BE PROTECTED AGAINST CRUSHING BY SHEET METAL JACKET OF PROPER AREA AND HEIGHT.
3. ALL WATER PIPING RUNNING THROUGH FLOORS OR WALLS SHALL BE ISOLATED FROM THE PENETRATION WITH A SLEEVE. MAINTAIN THE FIRE RATINGS OF ALL WALL AND FLOOR PENETRATIONS BY USE OF APPROVED FIRE STOP MATERIALS.
4. SLEEVES THROUGH WALLS SHALL BE CUT SO AS TO BE FLUSH WITH THE FINISHED SURFACE OF THE WALL IN EACH CASE AND SHALL BE MADE WATERTIGHT.

G. TESTING

1. DRAIN, WASTE AND VENT LINES SHALL PASS INSPECTION UNDER HEAD OF WATER BY SYSTEM WITH WATER TO TOP OF HIGHEST VENT STACK.
2. WATER LINES SHALL PASS INSPECTION OF FOUR (4) HOURS UNDER 150 PSI PRESSURE. BEFORE ANY USE OF SYSTEM IS MADE FOR DOMESTIC PURPOSES, IT SHALL BE DISINFECTED BY SLOWLY FILLING WITH WATER TO WHICH A DISINFECTING AGENT HAS BEEN INJECTED AT A RATE OF 50 P.P.M. OF CHLORINE, WHICH SHOULD BE ALLOWED TO STAND IN THE PIPING FOR AT LEAST 24 HOURS, AFTER WHICH TESTS FOR RESIDUAL CHLORINE SHALL SHOW NOT LESS THAN FIVE (5) P.P.M. OF RESIDUAL CHLORINE AT EVERY WATER OUTLET IN THE BUILDING. IF THE RESIDUAL IS LESS THAN FIVE PPM, THE DISINFECTION SHALL BE REPEATED UNTIL THE REQUIRED RESIDUAL IS OBTAINED AT EVERY OUTLET. AFTER REQUIRED RESIDUAL IS OBTAINED AT EVERY OUTLET, THE SYSTEM SHALL BE FLUSHED UNTIL THE CHLORINE LEVEL AT EVERY OUTLET IS REDUCED TO THAT OF INCOMING WATER SUPPLY.
3. GAS LINES SHALL STAND A PRESSURE OF 25 PSI FOR A PERIOD OF 15 MINUTES WITHOUT PERCEPTIBLE DROP.

4. ALL TESTING SHALL BE PERFORMED BY CONTRACTOR AT HIS OWN EXPENSE.

H. WARRANTY

1. ALL MATERIALS FURNISHED AND INSTALLED UNDER THIS CONTRACT SHALL BE NEW AND FREE FROM ALL DEFECTS IN MATERIALS AND WORKMANSHIP AND SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF ACCEPTANCE BY TENANT.

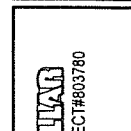
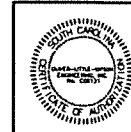


date	project	designed	drawn	checked
11-14-2022	11-14-2022	11-14-2022	11-14-2022	11-14-2022
description	by	date	mark	revisions

date	project	designed	drawn	checked
11-14-2022	11-14-2022	11-14-2022	11-14-2022	11-14-2022



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FAMILY & DOLLAR
26490 SC HWY 121, PROJECT#803780
WYTHE, SOUTH CAROLINA
SPECIFICATIONS

project	drawing
sheet	MP-4

POWER/WIRING INFORMATION FOR COOLER/FREEZER EQUIPMENT

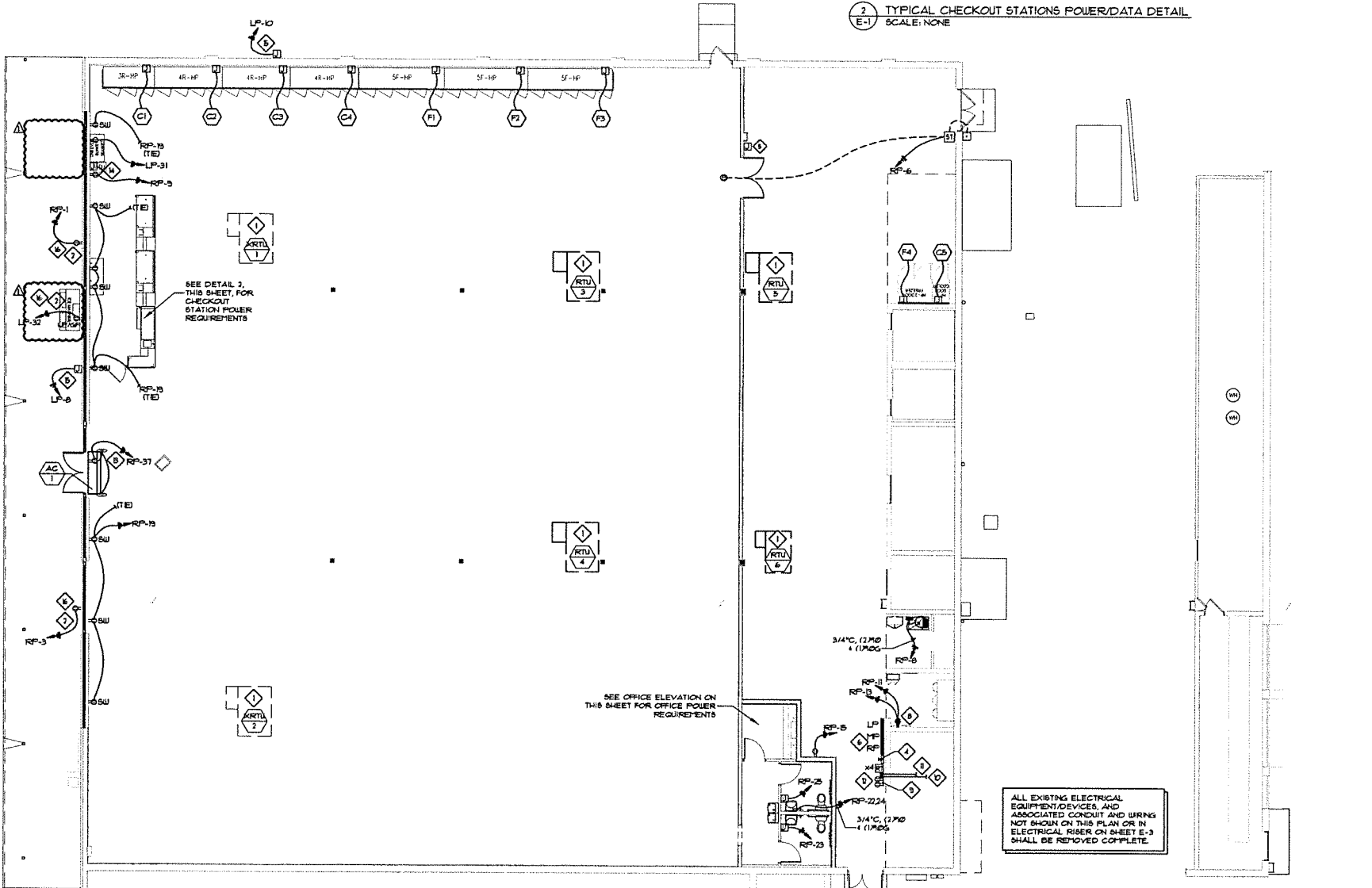
DEVICE*	DISCONNECT SIZE	CONDUIT/WIRE SIZE	FEEDER PANEL	FEEDER BREAKER(S)
(C1)	JUNCTION BOX # 120" AFF W/40' WHIP	1/2" (3/16" + (1/16" GND.))	LP	14,16
(C2)	JUNCTION BOX # 120" AFF W/40' WHIP	1/2" (3/16" + (1/16" GND.))	LP	18,20
(C3)	JUNCTION BOX # 120" AFF W/40' WHIP	1/2" (3/16" + (1/16" GND.))	LP	22,24
(C4)	JUNCTION BOX # 120" AFF W/40' WHIP	1/2" (3/16" + (1/16" GND.))	LP	26,28
(C5)	JUNCTION BOX # 120" AFF W/40' WHIP	1/2" (3/16" + (1/16" GND.))	LP	30
(F1)	JUNCTION BOX # 120" AFF W/40' WHIP	3/4" (3/16" + (1/16" GND.))	LP	8,11
(F2)	JUNCTION BOX # 120" AFF W/40' WHIP	3/4" (3/16" + (1/16" GND.))	LP	19,21
(F3)	JUNCTION BOX # 120" AFF W/40' WHIP	3/4" (3/16" + (1/16" GND.))	LP	23,25
(F4)	JUNCTION BOX # 120" AFF W/40' WHIP	3/4" (3/16" + (1/16" GND.))	LP	27,29

NOTE: ALL DIMENSIONS ARE TO THE TOP OF THE ASSOCIATED DEVICE. AS PART OF THIS PROJECT, THE MANUFACTURER'S REPRESENTATIVE WILL MAKE THE FINAL CONNECTION TO INTEGRAL EQUIPMENT DISCONNECTS AT TIME OF STARTUP.

** INCLUDES: (2) HOT, (1) NEUTRAL, (1) GROUND

POWER/WIRING INFORMATION FOR HVAC EQUIPMENT

HVAC*	DISCONNECT SIZE	CONDUIT/WIRE SIZE	FEEDER PANEL	FEEDER BREAKER(S)
XRTU-1	EXISTING TO REMAIN	3/4" (3/16" + (1/16" GND.))	FP	7,9,11
XRTU-2	EXISTING TO REMAIN	3/4" (3/16" + (1/16" GND.))	FP	19,21,23
RTU-3	PROVIDED WITH UNIT	3/4" (3/16" + (1/16" GND.))	FP	25,27,29
RTU-4	PROVIDED WITH UNIT	3/4" (3/16" + (1/16" GND.))	FP	31,33,35
RTU-5	PROVIDED WITH UNIT	3/4" (3/16" + (1/16" GND.))	FP	37,39,41
RTU-6	PROVIDED WITH UNIT	3/4" (3/16" + (1/16" GND.))	FP	38
AG-1	RATED SWITCH (TO BE CONCEALED)	1/2" (3/16" + (1/16" GND.))	FP	

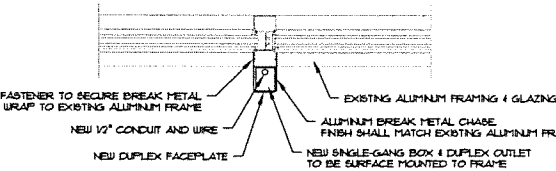


POWER PLAN
SCALE: 1/8"=1'-0"

MEZZANINE POWER PLAN
SCALE: 1/8"=1'-0"

ELECTRICAL POWER SYMBOL LEGEND

- ARROWHEAD INDICATES HOT/RED TO PANEL, NOTED.
- JUNCTION BOX WALL OR CEILING MOUNTED.
- SINGLE POLE, 120V, 20A MOTOR RATED TOGGLE SWITCH
- DUPLEX RECEPTACLE, 20 AMP, 120 VOLT, 18" AFF. TO CENTER, UNLESS OTHERWISE SPECIFIED. "NTP" INDICATES GROUND FAULTY CIRCUIT INTERRUPTER TYPE. "NTP" INDICATES WEATHERPROOF WITH "N-USE" COVER. "NTP" INDICATES SHOWN UNDOOR INSTALL WITHIN 18" OF TOP OF UNDOOR. "IG" INDICATES ISOLATED GROUND RECEPTACLE WITH ISOLATED GROUND WIRE AND DEDICATED NEUTRAL. HUBBELL "66-5167"
- QUADRUPLUX RECEPTACLE, AS ABOVE, 18" AFF. TO CENTER, UNLESS OTHERWISE SPECIFIED.
- WEATHERPROOF PUSH BUTTON FOR DOORBELL SYSTEM MOUNTED 46" AFF. TO CENTER. EDWARDS MODEL 9590-W WITH EDWARDS MODEL 941-1 MOUNTING PLATE
- DOOR CHIME FOR DOORBELL SYSTEM MOUNTED ABOVE CEILING. CONNECT TO DOOR CHIME TRANSFORMER. EDWARDS MODEL 9380-65 (24VAC, 2VA)
- LOW VOLTAGE STEP DOWN TRANSFORMER FOR DOORBELL SYSTEM. EDWARDS MODEL 952 PROVIDE WITH EDWARDS MODEL 953 TRANSFORMER MOUNTING PLATE. MOUNT 5'-0" AFF. IN SUPPORT ROOF.
- TELEPHONE OUTLET, 18" AFF. TO CENTER OR AT HEIGHT INDICATED ON PLANS. PROVIDE SINGLE GANG DATA BOX WITH 1" CONDUIT WITH PULL STRING TO 6" ABOVE LAY-IN CEILING OR TO 12" AFF. IN AREAS WITH NO CEILING. CAT5E CABLE AND COVERPLATE SHALL BE INSTALLED BY FD'S LOW VOLTAGE CONTRACTOR AT TIME OF FUTURE TENANT UPT.
- DATA OUTLET, 18" AFF. TO CENTER OR AT HEIGHT INDICATED ON PLANS. PROVIDE SINGLE GANG DATA BOX WITH 1" CONDUIT WITH PULL STRING TO 6" ABOVE LAY-IN CEILING OR TO 12" AFF. IN AREAS WITH NO CEILING. CAT5E CABLE AND COVERPLATE SHALL BE INSTALLED BY FD'S LOW VOLTAGE CONTRACTOR AT TIME OF FUTURE TENANT UPT.
- GENERAL DUTY FUSIBLE-NON-FUSIBLE DISCONNECT SWITCH, NUMBERS INDICATE FRAME SIZE, NUMBER OF POLES AND RATING. PROVIDE NEMA 1 ENCLOSURE INSIDE. PROVIDE NEMA 3 ENCLOSURE FOR ALL SWITCHES LOCATED OUTSIDE. "TYP" INDICATES TYPE PER EQUIPMENT NAMEPLATE. "NF" INDICATES NON-FUSIBLE.
- ELECTRICAL PANEL. SEE SCHEDULE FOR DETAILS.
- ELECTRIC UTILITY METER LOCATION
- EXTERIOR LED LIGHT FIXTURE
- DUCT MOUNTED SMOKE DETECTOR
- DUCT SMOKE DETECTOR REMOTE TEST STATION MOUNTED AT COMMUNICATION BOARD. SEE DETAIL 1E-4 FOR EXACT LOCATION. COORDINATE INSTALLATION RESPONSIBILITIES WITH ALL CONTRACTORS. SEE WIRING DIAGRAM 3E-3 FOR DETAILS.
- WATER HEATER. PROVIDE DISCONNECTING MEANS AS REQUIRED.



STOREFRONT CONDUIT CONCEALMENT DETAIL
SCALE: NONE

POWER PLAN NOTES:

- INSTALL AND/OR CONNECT W/40" RECEPTACLE AT HVAC UNIT AS REQUIRED. CONNECT TO CIRCUIT RP-5. UNIT MAY BE SUPPLIED WITH UN-WIRED RECEPTACLE BUILT-IN.
- PROVIDE DEDICATED 20A, 20A, 60A WEATHERPROOF EXTERIOR RECEPTACLE RECESSED IN WALL WITH FACE FLUSH WITH EXTERIOR WALL. PROVIDE WITH "N-USE" COVERS.
- PROVIDE THREE (3) DEDICATED ISOLATED GROUND CIRCUITS AND THREE (3) DIRTY CIRCUITS FOR FUTURE CASH STATIONS. CIRCUITS SHALL BE TERMINATED TO JUNCTION BOXES SECURED TO STRUCTURE. CONFIRM LOCATION OF JUNCTION BOXES WITH FD SITE SPECIFIC FUTURE PLAN PRIOR TO BEGINNING CONSTRUCTION. POWER POLES ARE FURNISHED WITH CHECKOUT COVERS. JUNCTION BOXES SHALL BE LOCATED WITHIN 3' OF POWER POLE LOCATIONS. LABEL ALL JUNCTION BOXES WITH CIRCUIT NUMBER AND DESCRIPTION AS SHOWN IN PANEL SCHEDULE. ALL DIRTY AND ISOLATED GROUND (IG) CIRCUITS SHALL HAVE DEDICATED NEUTRALS. DO NOT SHARE NEUTRALS.
- ENERGY MANAGEMENT SYSTEM (EMS). CONTRACTOR SHALL REFER TO E-3 SHEETS FOR INSTRUCTION AND RESPONSIBILITIES FOR INSTALLING TENANT SUPPLIED ENERGY MANAGEMENT SYSTEM (EMS) PRIOR TO BIDDING AND INSTALLATION.
- PROVIDE SINGLE GANG JUNCTION BOX MOUNTED NEXT TO RECEIVING DOOR FOR PAGING PHONE. EC SHALL MOUNT JUNCTION BOX IN WALL AT 48" AFF WITH 3/4" CONDUIT WITH PULL STRING UP IN WALL TO 15'-0" AFF. PAGING SYSTEM SHALL BE VENDOR SUPPLIED AND VENDOR INSTALLED.
- ALL PANELBOARDS SHALL HAVE FIELD-APPLIED HAZARD MARKINGS INSTALLED PER 2014 NEC 100.1 (B).
- MC CABLE IS ALLOWED AS BUILDING STANDARD WHERE LOCAL CODE JURISDICTION WILL ALLOW. ALL MC CABLE SHALL BE RUN OVERHEAD, AND IN A NEAT AND ORGANIZED FASHION. WHERE CODE DOES NOT ALLOW MC CABLE, EMT SHALL BE USED. ALL EXPOSED CABLE AND CONDUIT SHALL BE RUN TIGHT TO CEILING CONSTRUCTION AND CONCEALED FROM VIEW WHEREVER POSSIBLE.
- THE QUAD RECEPTACLE SHOWN IS ACTUALLY MADE UP OF TWO DUPLEX RECEPTACLES WITH THE TWO CIRCUITS SHOWN. MOUNT RECEPTACLE AT 18" AFF. COORDINATE LOCATION WITH FUTURE PLAN.
- PROVIDE (2) TWO DEDICATED ISOLATED GROUND RECEPTACLES WITH ISOLATED GROUNDING CONDUCTOR BACK TO SERVICE GROUND. RECEPTACLES SHALL BE SURFACE MOUNTED AT COMMUNICATION BOARD AND CONNECTED TO CIRCUITS RP-7 & RP-4. SEE COMMUNICATION BOARD DETAIL 2 ON SHEET E-3 FOR MOUNTING LOCATIONS AND INSTRUCTIONS ON USING STENCIL FOR LOCATING RECEPTACLES. RECEPTACLES SHALL BE "ORANGE" WITH WHITE COVER PLATES.
- CONTRACTOR SHALL PROVIDE 2" EMPTY CONDUIT, SCHEDULE 40 PVC, WITH NYLON PULLWIRE FOR INCOMING TELEPHONE SERVICE. CONTRACTOR SHALL ROUTE TELEPHONE CONDUIT TO PHONE PEDESTAL, PROPERTY LINE, OR POINT AS COORDINATED WITH LOCAL TELEPHONE COMPANY.
- CONTRACTOR SHALL PROVIDE 2" EMPTY CONDUIT, SCHEDULE 40 PVC, WITH NYLON PULLWIRE FOR DATA SERVICE (CABLE, DSL, OR T1). CONTRACTOR SHALL ROUTE DATA CONDUIT TO DATA PEDESTAL, PROPERTY LINE, OR POINT AS COORDINATED WITH LOCAL DATA PROVIDER. CONTACT FAMILY DOLLAR FOR DATA SERVICE PROVIDER THAT WILL BE UTILIZED.
- TERMINATE ENDS OF TELEPHONE AND DATA CONDUITS WITHIN 6" TO THE LEFT OF COMMUNICATION BOARD AT 30" AFF. DO NOT INSTALL CONDUIT EXPOSED ON FACE OF EXTERIOR WALL. SEE DETAIL 2E-3 FOR ADDITIONAL DETAILS.
- PROVIDE DEDICATED ISOLATED GROUND CIRCUIT TO FLUSH MOUNTED IG RECEPTACLE IN WALL 18" AFF. FOR EAS POWER SUPPLY. RECEPTACLE SHALL BE MOUNTED DIRECTLY ABOVE DOOR HULLON CLOSEST TO CHECKOUT STATIONS. IG RECEPTACLE SHALL BE "ORANGE" WITH WHITE COVER PLATE. CONFIRM SIDE TO MOUNT RECEPTACLE WITH FD SITE SPECIFIC FUTURE PLAN PRIOR TO BEGINNING CONSTRUCTION. EAS SHALL BE FURNISHED AND INSTALLED BY EAS VENDOR AT TIME OF FD UPT.
- PROVIDE DEDICATED ISOLATED GROUND CIRCUIT TO FLUSH MOUNTED IG RECEPTACLE IN WALL 18" AFF. FOR DATA SERVICE. RECEPTACLES SHALL BE "ORANGE" WITH WHITE COVER PLATE. PROVIDE SINGLE GANG JUNCTION BOX MOUNTED NEXT TO ATM RECEPTACLE FOR DATA CONNECTION. EC SHALL MOUNT JUNCTION BOX IN WALL AT 18" AFF WITH 3/4" CONDUIT WITH PULL STRING UP IN WALL TO 15'-0" AFF. DATA CABLES SHALL BE PROVIDED BY FD VENDOR. CONFIRM RECEPTACLE LOCATIONS WITH FD SITE SPECIFIC FUTURE PLAN PRIOR TO BEGINNING CONSTRUCTION.
- FURNISH AND INSTALL CONDUIT AND WIRING FOR EXTERIOR BUILDING SIGNS. CIRCUIT SHALL BE TERMINATED AT JUNCTION BOXES LOCATED MINIMUM 18'-0" AFF. BUILDING SIGN CIRCUIT SHALL BE CIRCUITED VIA ENERGY MANAGEMENT SYSTEM. PROVIDE ADDITIONAL 6'-0" FEET OF BLACK ABOVE ELECTRICAL PANEL. COORDINATE ACTUAL NUMBER OF BUILDING MOUNTED SIGNS WITH ARCHITECTURAL ELEVATIONS AND FOR PROJECT MANAGER PRIOR TO CONSTRUCTION. COORDINATE REQUIRED JUNCTION BOX QUANTITIES AND LOCATION WITH ARCHITECTURAL ELEVATIONS AND SIGN SUPPLIER PRIOR TO ELECTRICAL REQUEST.
- SEE STOREFRONT CONDUIT CONCEALMENT DETAIL ON THIS SHEET FOR THIS DEVICE AND CIRCUIT.

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Oliver • Little • Cincin

ENGINEERING, INC.

SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION: No. 003381-1400-0000-0000

ADD ICE HAZARD POWER

DESCRIPTION

DATE

BY

DATE

BY

DATE

BY

1-14-2022

64031

DATE

PROJECT

DESIGNED

DRAWN

CHECKED

DATE

BY

DATE

BY

RRMM ARCHITECTS, PC

1317 Executive Blvd, Suite 200
Chesapeake, VA 23320
(757) 622-2828 / fax (757) 622-6863

REGISTERED PROFESSIONAL ARCHITECT
STATE OF VIRGINIA
No. 0000000000
D. O. O'NEILL

REGISTERED PROFESSIONAL ARCHITECT
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D. O. O'NEILL

FAMILY DOLLAR

26490 SC HWY 121, PROJECT #803780
WHITMIRE, SOUTH CAROLINA

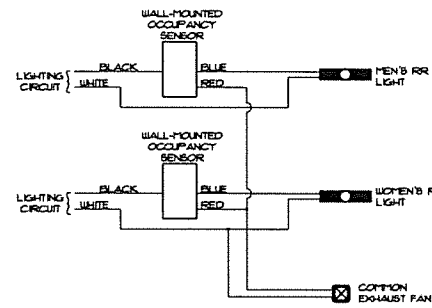
POWER PLAN

project

drawing

sheet

E-1

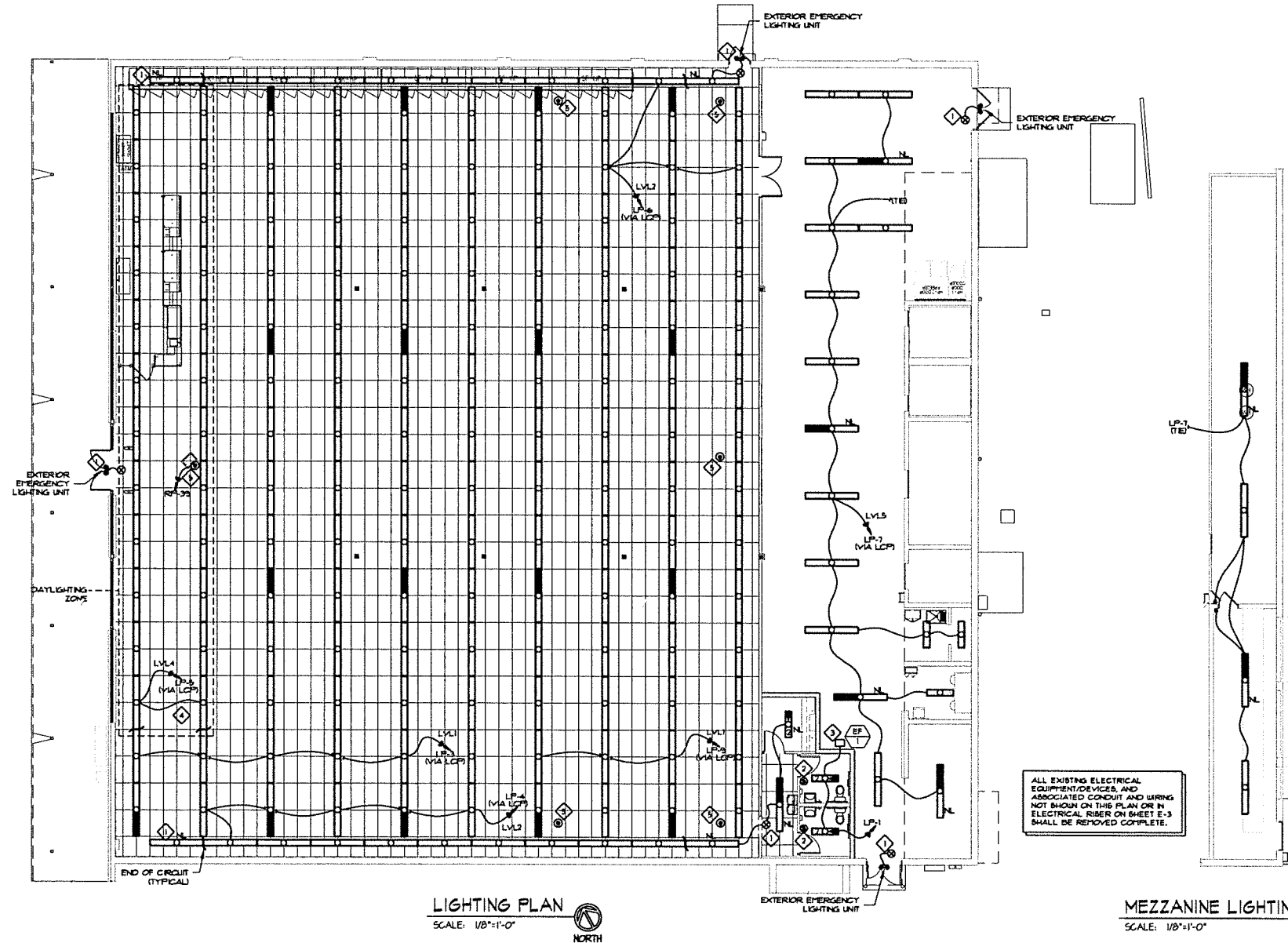


1 SCHEMATIC DIAGRAM: BATHROOM OCCUPANCY SENSOR
E-2 SCALE: NONE

REFLECTED CEILING LEGEND	
	7'-0" X 4'-0" ACOUSTICAL CEILING TILE AND GRID
	GWB - PAINT WHITE UNLESS OTHERWISE NOTED.
	DIFFUSER
	RETURN GRILLE
	DOPE
	VENTILATION FAN
	CEILING HEIGHT (ABOVE FINISH FLOOR)
	POWER POLE
	OCCUPANCY SENSOR. SEE NOTE 6.
	CEILING RECEPTACLE, 0.0V, 20A

ANY NEW LIGHTING WILL BE PROVIDED BY TENANT FOR TENANT'S CONTRACTOR INSTALLATION					
LIGHT FIXTURE SCHEDULE					
FIXT. SYM.	LIGHT DESCRIPTION	VOLTS	WATTS	LAMP QTY, WATTS, TYPE	SCHEDULE NOTES
	EMERGENCY LIGHT (EXTERIOR)	SEE ELEC. PANEL	2	(2) 1 WATT LED	WALL OVER EXTERIOR DOOR. EMERGENCY LIGHT WITH REMOTE BATTERY.
	EMERGENCY LIGHT (INTERIOR)	SEE ELEC. PANEL	2	(2) 1 WATT LED	SURFACE. EMERGENCY LIGHT UNIT.
	EXIT LIGHT	SEE ELEC. PANEL	5	FURNISHED WITH FIXTURE	CEILING UNLESS OTHERWISE REQUIRED BY CODE. L.E.D. SINGLE-FACE EXIT SIGN WITH EMERGENCY BATTERY. NOTES: A, C, D, E, G.
	8'-0" STRIP LIGHT	SEE ELEC. PANEL	36	(12) 18W LED	INTERIOR EXTERIOR STRIP. NOTES: A, C, D, E, G.
	8'-0" STRIP LIGHT (EMERGENCY LIGHT)	SEE ELEC. PANEL	36	(12) 18W LED	CEILING SURFACE. EMERGENCY LIGHT WITH INTEGRAL BATTERY PACK. NOTES: A, C, D, E, F, G.
	4'-0" STRIP LIGHT	SEE ELEC. PANEL	18	(12) 18W LED	CEILING SURFACE. INTERIOR/EXTERIOR STRIP. NOTES: A, C, D, E, G.
	4'-0" STRIP LIGHT (EMERGENCY LIGHT)	SEE ELEC. PANEL	18	(12) 18W LED	CEILING SURFACE. EMERGENCY LIGHT WITH INTEGRAL BATTERY PACK. NOTES: A, C, D, E, F, G.
	4'-0" STRIP LIGHT (TWO-LAMP EMERGENCY LIGHT)	SEE ELEC. PANEL	36	(12) 18W LED	CEILING SURFACE. EMERGENCY LIGHT WITH INTEGRAL BATTERY PACK. NOTES: A, C, D, E, F, G.

CONTRACTOR SHALL INSTALL ADDITIONAL WIRE TIE SUPPORTS FROM THE CEILING GRID TO THE STRUCTURE ABOVE FOR SUPPORT OF THE LIGHT FIXTURES CLIPPED ON THE GRID.
PROVIDE DEDICATED NEUTRAL FOR EACH LIGHTING CIRCUIT.



LIGHTING PLAN
SCALE: 1/8"=1'-0"
NORTH

MEZZANINE LIGHTING PLAN
SCALE: 1/8"=1'-0"
NORTH

LIGHTING PLAN NOTES:

- ALL EXIT SIGNS, NIGHT LIGHTS, AND EXTERIOR EMERGENCY LIGHTS SHALL BE CIRCUITED TO PANEL "LP", CIRCUIT 2. WIRING NOT SHOWN FOR DRAWING CLARITY.
- TOILET ROOMS SHALL HAVE OCCUPANCY SENSORS INSTALLED AND CONNECTED AS SHOWN IN DETAIL #1 - SCHEMATIC DIAGRAM, THIS SHEET. MOUNT ON WALL NEXT TO DOOR INSIDE RESTROOM. LIGHTS AND OCCUPANCY SENSORS TO BE WIRED INDEPENDENTLY OF THE ENERGY MANAGEMENT SYSTEM VIA CIRCUIT LP-1.
- TOILET ROOM EXHAUST SYSTEM TO CONNECT TO OCCUPANCY SENSORS PER THE SCHEMATIC DIAGRAM ON THIS SHEET. COORDINATE EXHAUST FAN LOCATION WITH MECHANICAL.
- THE LIGHT FIXTURES WITHIN THE DESIGNATED DAYLIGHTING ZONE IN FIRST TWO ROWS WILL BE PROVIDED WITH INDEPENDENT CONTROL FOR DAY-LIGHTING PER IECC. THESE CIRCUITS SHALL BE ROUTED THROUGH THE LCP FOR DAY-LIGHTING CONTROL.
- PROVIDE RECEPTACLE IN CEILING FOR SECURITY MONITOR EQUIPMENT AND CONNECT TO CIRCUIT RP-35. CONFIRM RECEPTACLE LOCATION WITH PD SITE SPECIFIC FIXTURE PLAN PRIOR TO BEGINNING CONSTRUCTION.

ALL EXISTING ELECTRICAL EQUIPMENT/DEVICES, AND ASSOCIATED CONDUIT AND WIRING NOT SHOWN ON THIS PLAN OR IN ELECTRICAL RIBER ON SHEET E-3 SHALL BE REMOVED COMPLETE.

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WHITE CHALK DESIGN/ARCHITECTURE/INTERIOR DESIGN/PLANNING/CONSTRUCTION/REPAIRS/MAINTENANCE

1-14-2022
date
project
designed
drawn
checked

DATE
DAB
DAB
ADG

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FAMILY @ DUTMAN
26490 SC HWY 121, PROJECT#603780
WYTHE, SOUTH CAROLINA
LIGHTING PLAN

project
sheet

E-2

PANEL SCHEDULE																	
PANEL NUMBER		MP	STOCKROOM														
LOCATION																	
DIRECTORY			CAT	Q	Q	A	B	C	Q	Q	A	B	C	Q	Q	DIRECTORY	
			DES	DES					DES	DES				DES	DES		
PANEL RP			1	7.90	*				0.00	201	2				SPARE		
			3	100V	5.67	*	*		0.00	201	4				SPARE		
			5		7.77	*	*		0.00	201	6				SPARE		
XRTU-1 (HACR)			7		4.80	*	*		0.00	201	8				SPARE		
			9	60V	4.80	*	*		0.00	201	10				SPARE		
			11		4.80	*	*		0.00	201	12				SPARE		
XRTU-2 (HACR)			13		4.80	*	*		0.00	201	14				SPARE		
			15	60V	4.80	*	*		0.00	201	16				SPARE		
			17		4.80	*	*		0.00	201	18				SPARE		
RTU-3 (HACR)			19		3.66	*	*		0.00	201	20				SPARE		
			21	50V	3.66	*	*		0.00	201	22				SPARE		
			23		3.66	*	*		0.00	201	24				SPARE		
RTU-4 (HACR)			25		4.09	*	*		0.00	201	26				SPARE		
			27	50V	4.09	*	*		0.00	201	28				SPARE		
			29		4.09	*	*		1.06	201	30				AIR CURTAIN, AC-1		
RTU-5 (HACR)			31		3.66	*	*		17.27		32				PANEL LP		
			33	50V	3.66	*	*		19.41		150V	34					
			35		3.66	*	*		16.83		36						
RTU-6 (HACR)			37		2.73	*	*		0.10		38						
			39			*	*		0.10		20V	40					
			41	40V	2.73	*	*		0.10		20V	42					
MAIN BREAKER		600A			kW PHASE "A"				49.01						NOTES:		
MAIN BUS		600A			kW PHASE "B"				48.82						R = RECEPTACLE LOAD		
VOLTAGE		208V/120V			kW PHASE "C"				49.50						CIRCUIT BREAKERS SHALL BE PROVIDED BY E.C. AS REQUIRED		
AFC		22.00															
MOUNTING		SURFACE			TOTAL KW				147.43								
LOAD SUMMARY			Connected kW		Demand Factor				Demand kW								
LIGHTING			8.35		1.25				11.69								
			72.28		1.00				72.28								
RECEPTACLES			15.54		1.00				15.54								
WATER HEATER			6.10		1.00				6.10								
COOLER/FREEZER			44.16		1.00				44.16								
			147.43						149.77								

*PROVIDE CIRCUIT BREAKER WITH A MEANS OF BEING LOCKED

PANEL SCHEDULE															
PANEL NUMBER		LP													
LOCATION:		STOCKROOM													
DIRECTORY			CAT	NO	AMP	DES	A	B	C	KW	AMP	DES	CAT	NO	DIRECTORY
LTO, TOILETS / EF-1			1	201	0.20	*				0.30	201	1	EXIT SIGNS / NITE LIGHTS / EMG. LIGHTS*		
LTO, SALES AREA (LVL 1)			3	201	1.08	*				1.40	201	4	LTG. SALES AREA (LVL 2)		
LTO, SALES AREA (LVL 4)			5	201	0.86	*				1.33	201	6	LTG. SALES AREA (LVL 2)		
LTO, STOCKROOM (LVL 5)			7	201	0.77	*				1.20	201	8	SIGNAGE (LVL 3)		
LTO, SALES AREA (LVL 1)			9	201	1.01	*				1.20	201	10	SIGNAGE (LVL 3)		
SPARE			11	201	0.00				*	0.00	201	12	SPARE		
SPARE			13	201	0.00				*	0.00	202	14	REACHIN COOLER (C1)		
REACHIN FREEZER (F1)			15	402	3.82	*				1.58	16				
			17		3.82	*				1.59	202	18	REACHIN COOLER (C2)		
REACHIN FREEZER (F2)			19	402	3.82	*				1.59	202	20			
			21		3.82	*				1.59	202	22	REACHIN COOLER (C3)		
REACHIN FREEZER (F3)			23	402	3.82	*				1.59	204	24			
			25		3.82	*				1.59	202	26	REACHIN COOLER (C4)		
REACHIN FREEZER (F4)			27	302	2.32	*				1.59	28				
			29		2.32	*				1.59	201	30	REACHIN COOLER (C5)		
ICE CREAM BUNKER			31	201	1.20	*				1.20	201	32	BAGGED ICE MACHINE		
SPARE			33	201	0.00	*				0.00	201	34	SPARE		
SPARE			35	201	0.00	*				0.00	201	36	SPARE		
SPARE			37	201	0.00	*				0.00	201	38	SPARE		
SPARE			39	201	0.00	*				0.00	201	40	SPARE		
SPARE			41	201	0.00	*				0.00	201	42	SPARE		
MAIN BREAKER		MLO	kW PHASE "A"										17.27	NOTES:	
MAIN BUS		150A	kW PHASE "B"										19.41	R = RECEPTACLE LOAD	
VOLTAGE		208/120	kW PHASE "C"										16.43		
AAC		10.00													
MOUNTING		SURFACE	TOTAL kW										53.51	CIRCUIT BREAKERS SHALL BE PROVIDED BY E.C. AS REQUIRED	
LOAD SUMMARY		Connected kW	Demand Factor		Demand kW										
LIGHTING		9.35	1.25		11.69										
HVAC		0.00	1.00		0.00										
RECEPTACLES		0.00	1.00		0.00										
WATER HEATER		0.00	1.00		0.00										
COOLER/FREEZER		44.16	1.00		44.16										
		53.51			55.85										

*PROVIDE CIRCUIT BREAKER WITH A MEANS OF BEING LOCKED

CASH REGISTER GROUNDING DIAGRAM NOTES

1. CASH REGISTER AND COMPUTER WIRING

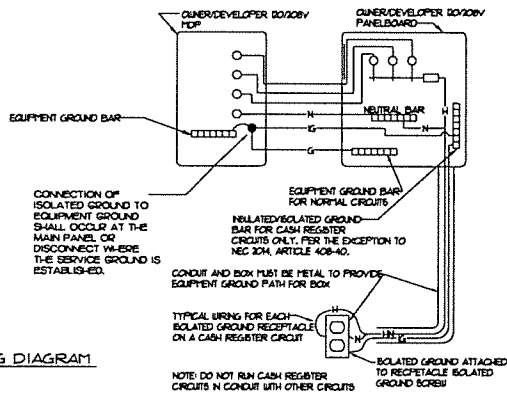
FURNISH AND INSTALL AN ISOLATED, ISOLATED GROUND BAR IN PANEL. INSTALL AN ISOLATED ISOLATED GROUND WIRE IN EACH BRANCH CIRCUIT NOMINALLY TO PANELBOARD. CONNECT ISOLATED WIRE FOR CASH REGISTER AND COMPUTER CIRCUITS TO ISOLATED GROUND BAR IN PANELBOARD AND DIRECTLY TO ISOLATED GROUND WIRE/SCREW ON ISOLATED GROUND RECEPTACLES.

DO NOT CONNECT ISOLATED GROUND WIRE TO RACINWAY OR BOX. CONDUIT AND BOX SHALL BE METAL AND METAL-TO-METAL CONNECTORS SHALL BE USED NO FLEX CONDUIT TO ESTABLISH GROUND PATH FOR BOX AND RACINWAY. DO NOT RUN ANY CIRCUITS WITH CASH REGISTER OR COMPUTER WIRING.

CASH REGISTER DATA SYSTEM CABLE SHALL BE FURNISHED AND INSTALLED BY OTHERS. FURNISH AND INSTALL JUNCTION BOX IN OFFICE AND 7' CONDUIT WITH FULL WIRE TO SALES AREA CEILING CAVITY.

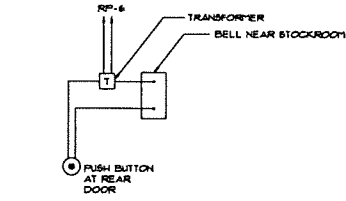
1. CASH REGISTER GROUNDING DIAGRAM

E-3 SCALE: NONE

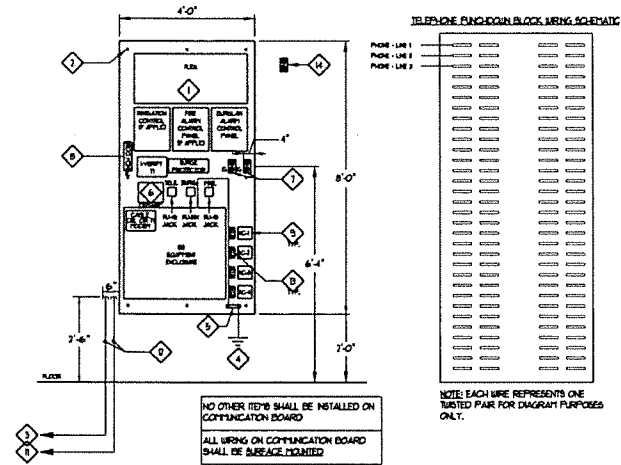


1. DOOR CHIME SCHEMATIC DIAGRAM

E-3 SCALE: NONE



ALL EXISTING ELECTRICAL EQUIPMENT/DEVICES, AND ASSOCIATED CONDUIT AND WIRING NOT SHOWN ON THIS PLAN OR IN ELECTRICAL RISES ON SHEET E-3 SHALL BE REMOVED COMPLETE.



2. COMMUNICATION BOARD DIAGRAM

E-3 SCALE: NONE

COMMUNICATION BOARD GENERAL NOTES:

- ALL PHONE AND DATA LINES SHALL BE RUN BY PD'S LOW VOLTAGE VENDOR. INSTALLATION SHALL COMPLY WITH ALL CITY & STATE CODES. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING CONDUIT WITH FULL STRING FOR ALL PHONE AND DATA LINES WHERE REQUIRED BY CODE.
- TELEPHONE CONDUIT, TELEPHONE SERVICE (THREE (3) LINES OPERATIONAL) AND PUNCHDOWN BLOCK SHOULD BE EXISTING AS PROVIDED AS PART OF SHELL BUILDING. CONTRACTOR SHALL VERIFY THAT THREE (3) PHONE LINES ARE OPERATIONAL, AND NOTIFY PD PROJECT MANAGER IF NOT EXISTING OR ANY OTHER ISSUES AFFECTING INSTALLATION OF COMMUNICATION BOARD/EQUIPMENT.
- DATA CONDUIT SHOULD BE EXISTING AS PROVIDED AS PART OF SHELL BUILDING. CONTRACTOR SHALL VERIFY EXISTING DATA CONDUIT AND NOTIFY PD PROJECT MANAGER IF NOT EXISTING OR ANY OTHER ISSUES AFFECTING INSTALLATION OF COMMUNICATION BOARD/EQUIPMENT.
- CONTRACTOR SHALL INSTALL FIRE RETARDANT PLYWOOD COMMUNICATION BACKBOARD, GROUND BAR, TELEPHONE PUNCHDOWN BLOCK & DUPLEX RECEPTACLES A MINIMUM OF 4 WEEKS PRIOR TO DELIVERY DATE OF STORE TURNOVER TO FOR.
- CONTRACTOR SHALL INSTALL COMMUNICATION BACKBOARD AND RECEPTACLE POWER PRIOR TO TELEPHONE AND DATA INSTALLATION DATE. PER FCC REQUIREMENTS PERMANENT POWER IS REQUIRED PRIOR TO TELEPHONES BEING INSTALLED.
- CONTRACTOR SHALL PROVIDE ONSITE CONTACT AVAILABLE TO PROVIDE ACCESS TO TELEPHONE AND DATA COMPANIES. (TELEPHONE AND DATA COMPANIES REQUIRE SOMEONE ONSITE ON THE DAY OF INSTALL.)
- CONTRACTOR SHALL PROVIDE ONSITE CONTACT TO PROVIDE PROBLEM RESOLUTION FOR ALL ISSUES PERTAINING TO PHONE/DATA FACILITIES, I.E. CONDUIT PLACEMENT, FULL STRING, BUILDING PENETRATION, SITE ACCESS, ETC.
- FAMILY DOLLAR CONTACT INFO: DEPLOYMENT CENTRAL 1-800-425-8111 (AVAILABLE 8AM-4PM EST MON-FRI) EMAIL: NEUSTONECONSTRUCTION@FAMILYDOLLAR.COM

COMMUNICATION BOARD KEYED NOTES:

- CONTRACTOR SHALL PROVIDE 4"X8"X4" COMMUNICATION BOARD MADE OF FIRE RETARDANT PLYWOOD, WITH A UL CLASSIFICATION STAMP THAT MEETS OR EXCEEDS THE REQUIREMENTS FOR CLASS 1 OR CLASS A FLAME-SPREAD RATING (IBC SECTION 2603.2). BOARD SHALL NOT TO BE PAINTED EXCEPT FOR STENCIL TRANSFER. MOUNT BOARD WITH BRACKETS AND FASTENERS RATED TO SUPPORT UP TO 75 LBS WEIGHT. COMMUNICATION BOARD SHALL BE MOUNTED VERTICALLY. HORIZONTALLY MOUNTED COMMUNICATION BOARD WILL NOT BE ACCEPTED.
- 1/4" METAL ANCHOR BOLTS, TYPICAL 8 PLACES.
- 3" CONDUIT, SCHEDULE 40 PVC, WITH INCOMING TELEPHONE SERVICE.
- CONTRACTOR SHALL PROVIDE 1/2" CU GROUND TO SERVICE GROUND BAR AS REQUIRED FOR GROUNDING OF COMMUNICATION EQUIPMENT. PROVIDE 18" LOOP OF 1/2" GROUND WIRE TERMINATED WITH LUGS.
- CONTRACTOR SHALL PROVIDE GROUND BAR WITH 1 TERMINAL FOR GROUNDING OF COMMUNICATION EQUIPMENT.
- NETWORK INTERFACE DEVICE (DEHARC) ON COMMUNICATION BOARD.
- CONTRACTOR SHALL PROVIDE TWO (2) DUPLEX ISOLATED GROUND RECEPTACLES AND CONNECT TO CIRCUIT RP-2. RECEPTACLES SHALL BE SURFACE MOUNTED. RECEPTACLES SHALL BE "ORANGE" WITH WHITE COVER PLATES.
- CONTRACTOR SHALL PROVIDE 15 PAIR (66 CLIPS) TELEPHONE PUNCHDOWN BLOCK AS SHOWN ON COMMUNICATION BOARD DIAGRAM.
- EMV HVAC THERMOSTAT LOCATION. CONTRACTOR SHALL INSTALL THERMOSTATS FOR HVAC SYSTEMS (FIELD VERIFY QUANTITY WITH MECHANICAL PLANS).
- NOT USED.
- 3" EMPTY CONDUIT, SCHEDULE 40 PVC, WITH NYLON PULLWIRE FOR INCOMING WANDATA SERVICE (CABLE, DSL OR T1).
- TELEPHONE AND DATA CONDUITS SHALL BE STUBBED UP WITHIN 6" OF THE COMMUNICATION BOARD AT 30" APP. CONDUITS SHOULD NOT BE EXPOSED ON FACE OF EXTERIOR WALL.
- DUCT SMOKE DETECTOR REMOTE TEST STATION LOCATION. CONTRACTOR SHALL INITIAL REMOTE TEST STATION.
- CONTRACTOR SHALL PROVIDE DUPLEX ISOLATED GROUND RECEPTACLE IN WALL, NEXT TO OR ABOVE COMMUNICATION BOARD TO BE USED FOR PAGING SYSTEM. CONNECT TO CIRCUIT RP-4. RECEPTACLE SHALL BE "ORANGE" WITH WHITE COVER PLATE.

COMMUNICATION BOARD STENCILING NOTE:

A STENCIL SHALL BE USED TO MARK THE LOCATIONS OF EQUIPMENT ON THE COMMUNICATION BOARD. ORDER STENCIL DIRECTLY FROM LASE AREA 8/8M (SPEAK WITH DANNY OR JEREMY AT 351-625-4175) USING ORDER FORM. THE STENCIL COST IS \$25.00 PLUS SHIPPING AND IS TO BE PAID BY CONTRACTOR USING A CREDIT CARD. THERE IS A 10 BUSINESS DAY LEAD TIME. THE STENCIL TRANSFER TAKES LESS THAN 15 MINUTES. RED OR BLACK SPRAY PAINT SHOULD BE USED. IT TAKES LESS THAN 1/2 CAN OF PAINT PER STENCIL. THE STENCIL SHOULD BE APPLIED IMMEDIATELY TO THE BOARD ON THE WALL TO MAKE SURE THE ANCHORS ARE NOT PLACED IN SPACES MARKED FOR EQUIPMENT. A PHOTO OF THE INSTALLED COMMUNICATION BOARD ALONG WITH THE UL CLASSIFICATION STAMP AND TRANSFERRED STENCIL PRIOR TO ANY EQUIPMENT INSTALLED SHALL BE SENT TO YOUR FAMILY DOLLAR PROJECT MANAGER. NO DEVIATIONS TO THE LAYOUT WILL BE ACCEPTED BY FAMILY DOLLAR. IT IS RESPONSIBILITY OF CONTRACTOR TO ENSURE THAT ALL SUBCONTRACTORS ADHERE TO THIS.

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SOUTH CAROLINA SUBSIDIARY OF AUTOMATION-SOLAR, INC. 00001-Regulation-0002

Oliver • Little • Gibson
OLG
Engineering, Inc.

date project designed drawn checked
11/20/22 6/10/22

RRMM
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PROJECT
26490 SC HWY 121, PROJECT#803780
WHITEHOUSE, SOUTH CAROLINA
SCHEDULES, NOTES, 4 DETAILS

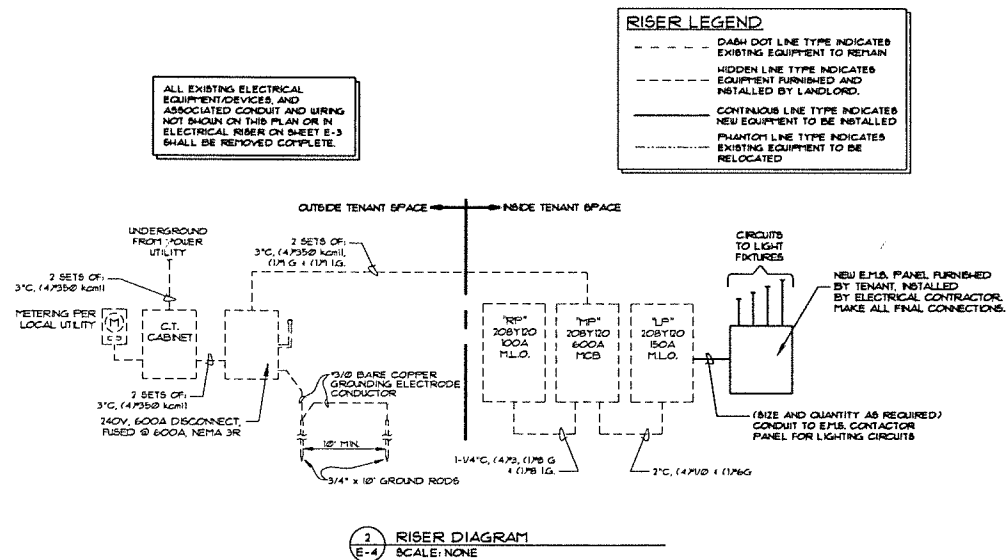
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E-3

1. ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE AND ALL LOCAL AND STATE CODES.

1. ALL MATERIAL, DEVICES, APPLIANCES, AND EQUIPMENT SHALL BE NEW AND SHALL CONFORM TO THE STANDARDS OF THE UNDERWRITERS LABORATORIES, INC. AND THE NATIONAL ELECTRICAL MANUFACTURES ASSOCIATION.
2. ALL ELECTRICAL PERMITS AND INSPECTION FEES SHALL BE OBTAINED AND PAID FOR BY THE ELECTRICAL CONTRACTOR. DRAWINGS ARE DIAGNOSTIC ONLY AND INDICATE ONLY THE GENERAL ARRANGEMENT, NOT THE EXACT LOCATION, DRAWINGS FOR EXACT DIMENSIONS, DO NOT SCALE PLANS.
3. ELECTRICAL CONTRACTOR SHALL GUARANTEE ALL WORK AND MATERIALS FOR ONE YEAR EFFECTIVE THE DAY THE PROJECT IS ACCEPTED BY THE OWNER.
4. ELECTRICAL CONTRACTOR SHALL MAKE ALL ELECTRICAL POWER CONNECTIONS TO HVAC, PLUMBING AND OTHER EQUIPMENT AS REQUIRED.
5. A COMPLETE GROUNDING SYSTEM SHALL BE PROVIDED AND INSTALLED IN ACCORDANCE WITH ARTICLE 250 OF THE NEC, AND AS SHOWN ON THE DRAWINGS.
6. ALL CUTTING AND PATCHING OF WALLS AND FLOORS FOR ELECTRICAL EQUIPMENT SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.
7. CONDUCTORS SHALL BE COPPER RATED AT NOT LESS THAN 600 VOLTS. MINIMUM SIZE SHALL BE 10 AWG UNLESS OTHERWISE NOTED ON DRAWINGS. ALL CONDUCTORS SHALL BE RIGIDLY SUPPORTED. ALL CONDUCTORS 10 AND SMALLER SHALL BE SOLID, UNLESS OTHERWISE NOTED. BRANCH CIRCUIT CONDUCTORS SHALL BE NOT THINNER THAN 10 AWG UNLESS REQUIRED.
8. ALL WIRING SHALL BE INSTALLED IN ACCORDANCE WITH NEC. TYPE MC CABLE IS THE PREFERRED WIRING METHOD, USE EMT WHERE TYPE MC IS PROHIBITED, USE RIGID STEEL CONDUIT WHERE EXPLOSION PROTECTIVE EQUIPMENT IS REQUIRED. ALL WIRING SHALL BE LOCATED IN THE FOLLOWING MANNER: CONDENSING UNITS: MINIMUM CONDUIT SIZE TO BE 3/4". E.C. TO RUN ALL ELECTRICAL OVERHEAD IN A NEAT AND ORGANIZED FASHION.
9. PROVIDE A PULLLINE IN ALL EMPTY CONDUITS.
10. PROVIDE A TYPE1 DIRECTORY IN ALL PANELBOARDS CLEARLY DESCRIBING THE LOCATION OF AND TYPE OF LOAD BEING SERVED. PROVIDE A TYPE1 DIRECTORY PROVIDE ENGINEERED PNEUMATIC NAMEPLATES FOR ALL PANELBOARDS AND DISCONNECT SWITCHES. WHITE LETTERS ON BLACK BACKGROUND.
11. RISES OF 600 AND ABOVE SHALL BE UL CLASS "FCK" IN LOW PEAK DIAL ELEMENT THE DELAY AT 2000000 AMPERE INTERRUPTING RATINGS AS MANUFACTURED BY MANUFACTURER (SEE NOTE OTHERWISE).
12. ALL TERMINALS SHALL BE TO BE "TS" RATED. ALL TERMINALS, SPlicing CONNECTORS, LUGS, ETC. SHALL BE IDENTIFY FOR USE WITH THE MATERIAL (CULG) OF THE CONDUCTOR AND SHALL BE PROPERLY INSTALLED.
13. VERIFY ALL REQUIREMENTS AND COORDINATE EXACT LOCATION OF ALL WIRING, ELECTRICAL SERVICE AND ALL PROJECT EQUIPMENT PRIOR TO PROJECT START-UP. NOTIFY ENGINEER OF ANY CHANGES AS MAY BE REQUIRED.
14. ALL ELECTRICAL DEVICES (SWITCHES AND OUTLETS) SHALL BE "WHITE" OR "WHITE" COLOR. ALL DEVICES SHALL COVER PLATES EXCEPT THAT ALL OUTLETS SHALL BE "ORANGE".

- THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL ELECTRICAL EQUIPMENT FROM FOREIGN MATERIAL DURING CONSTRUCTION (PAINT, SPARKLE, ETC.).
17. PENETRATIONS OF REQUIRED SPOKE PARTITIONS SHALL BE SEALED BY THE CONTRACTOR WITH AN APPROVED GROUTING COMPOUND. COORDINATION WITH THE GENERAL CONTRACTOR SHALL BE MAINTAINED TO INSURE THAT THIS SPOKE STOPPING IS ACCOMPLISHED.
18. WHERE PENETRATIONS ARE MADE THROUGH A REQUIRED FIRE-RESISTIVE WALL, FLOOR, OR PARTITION FOR THE PURPOSE OF RUNNING RACEWAY CARRYING ELECTRICAL, TELEPHONE, TELEVISION, OR CABLE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE OPENING AROUND THE RACEWAY SHALL BE FIRE STOPPED PER THE STATE BUILDING CODE. COORDINATION WITH THE GENERAL CONTRACTOR SHALL BE MAINTAINED TO INSURE THAT THIS FIRE STOPPING IS ACCOMPLISHED. USE APPROVED UL OR EQUIVALENT ASSEMBLIES.
19. IN REQUIRED FIRE RATED WALLS AND PARTITIONS, OPENINGS FOR ALL TYPES OF BOARDS THAT ARE GREATER THAN 18 SQUARE INCHES SHALL BE PROTECTED AS REQUIRED BY UL. COORDINATE CLOSELY WITH THE GENERAL CONTRACTOR TO INSURE THAT THE INTEGRITY OF THE PARTITION IS MAINTAINED.
20. WHERE A MORE RAN IS SHOWN THE CIRCUIT SHALL BE INSTALLED IN A SEPARATE CONDUIT AND NOT COMBINE WITH OTHER CIRCUITS. WHERE A CIRCUIT HORNEN IS NOT SHOWN, THE CONTRACTOR SHALL COMBINE ALL CIRCUITS TO THE SAME HORNEN. IF THE CIRCUITS ARE TO BE COMBINED IN A COMMON HORNEN WITH SEPARATE NEUTRALS FOR A MAXIMUM TOTAL OF SIX CURRENT CARRYING CIRCUITS, THE CONDUIT SHALL BE LARGER THAN 7/8" SHALL BE SEPARATELY HORNEN TO THE PANEL.
21. EACH DISCONNECT SHALL BE EQUIPPED WITH A GROUND BAR.
22. PROVIDE GREEN EQUIPMENT GROUNDING CONDUCTOR WITH ALL FEEDER AND BRANCH CIRCUITS.
23. DEVICE HEIGHTS INDICATED ARE TO THE CENTER OF THE DEVICE OR EQUIPMENT UNLESS NOT OTHERWISE. RECEPTACLE AND DATA/TELEPHONE OUTLETS SHOWN ADJACENT ON DRAWINGS SHALL BE CENTERED AT THE CENTER OF THE HORIZONTAL SURFACE.
24. COORDINATE ALL DEVICES AND OUTLETS ABOVE AND BELOW WITH CABLEWORK AND UPDATES OF THE HORIZONTAL POSITION AT THE PROPER LOCATION AND HEIGHT.
25. ALL EXTERIOR FIXTURES AND DEVICES SHALL BE RATED FOR OPERATION AT 60° F AND SHALL BE DAMP OR WET LABELED AS REQUIRED.
26. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ALL ELEC. EQUIPMENT IN ACCORDANCE WITH THE CODES AND ACCORDANCE WITH LOCAL SEISMIC CODE REQUIREMENTS. PROVIDE SEISMIC RESTRAINTS, ACCESSORIES AND INSTALLATION DETAIL AS REQUIRED.
27. THE CONTRACTOR SHALL VISIT THE SITE AND BECOME THOROUGHLY FAMILIAR WITH ALL DETAILS OF THE WORK AND WORKING CONDITIONS. VERIFY ALL FIELD CONDITIONS INCLUDING LOCATION OR UTILITY LINES, EXISTING UTILITIES, AND ALL OTHER CONDITIONS THAT MAY PREVENT OR HINDER THE SPECIFIED WORK FROM BEING COMPLETED.
28. THE CONTRACTOR SHALL STUDY THE STRUCTURE AND FINISH CONDITIONS OF THE BUILDING AND SHALL COORDINATE THE WORK ACCORDINGLY. THE CONTRACTOR SHALL PROVIDE ALL ACCESSORIES, HANDERS, AND ANCHORS AS NECESSARY TO MEET THE CONSTRUCTION AND ERECTION REQUIREMENTS.
29. PRIOR TO ACCOMPLISHING ANY WORK IN ANY AREA, ALL WORK SHALL BE PLANNED AND COORDINATED WITH OTHER TRADES AND THE OWNER. THE CONDUIT ROUTING SHALL BE COORDINATED WITH THE CABLEWORK AND SUPPLIES AND DISCREES FOR PROPER SUPPORT, EFFICIENT AND AESTHETICALLY PLEASING INSTALLATIONS.
30. PROPERLY SUPPORT ALL WORK AND EQUIPMENT INSTALLED UNDER THIS CONTRACT. STUDY ALL DRAWINGS, MANUFACTURER'S INSTRUCTIONS, AND CATALOG DATA TO DETERMINE HOW EQUIPMENT ACCESSORIES AND DETAIL SHALL BE INSTALLED. PROVIDE ALL MOUNTED OR UNMOUNTED. PROVIDE ALL BOLTS, NUTS, BRACKET, BUSHINGS, AND SUPPLIES. PROVIDE ALL MATERIALS AND EQUIPMENT BEING FURNISHED UNDER THIS CONTRACT.



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SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION - NO. C02019 - Expires 12/31/2006

mark	date	by	description

date	1-14-2022
project	644321
designed	DWB
drawn	DWB
checked	AOG



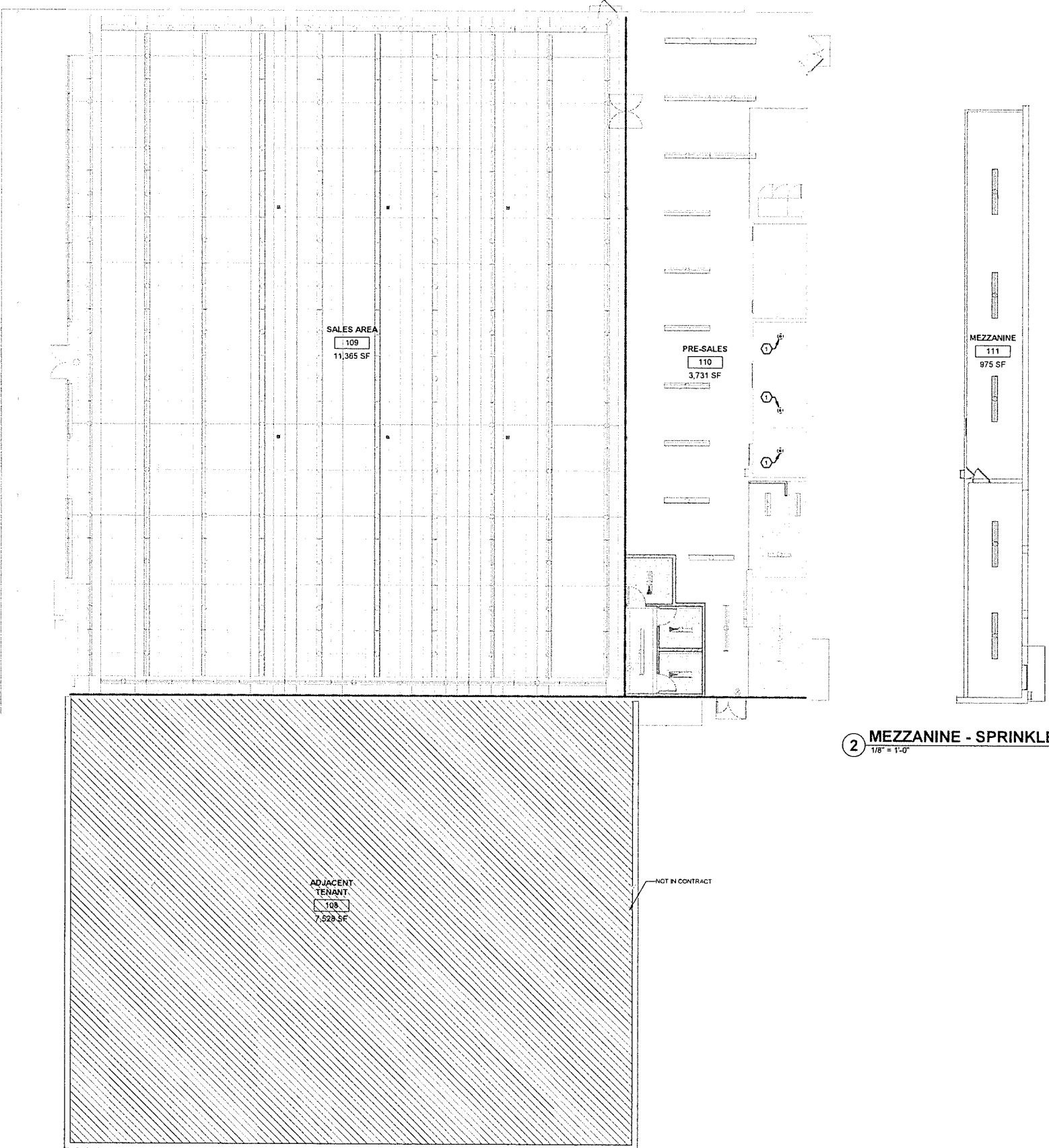
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project
drawing

sheet

E-4



1 LEVEL 1 - SPRINKLER DEMOLITION PLAN
1/8" = 1'-0"

2 MEZZANINE - SPRINKLER DEMOLITION PLAN
1/8" = 1'-0"

SCOPE OF WORK

THE CONTRACTOR SHALL DEMOLISH THE LIMITED AREA SPRINKLER SYSTEM.

IN ACCORDANCE WITH NEW CONSTRUCTION CODE REQUIREMENTS A SPRINKLER SYSTEM IS REQUIRED FOR GROUP M (MERCANTILE) OCCUPANCIES WHEN THE FIRE AREA EXCEEDS 12,000 SQFT OR WHEN THE COMBINED GROUP M FIRE AREAS ON ALL FLOORS INCLUDING MEZZANINES EXCEEDS 24,000 SQFT PER IBC 903.2.7.

2-HOUR FIRE BARRIERS CONSTRUCTED IN ACCORDANCE WITH IBC 707 DIVIDE THE FAMILY DOLLAR TENANT SPACE FROM THE ADJACENT TENANT AND THE FAMILY DOLLAR SALES AREA FROM THE PRE-SALES AREA. AS SUCH NO GROUP M FIRE AREA EXCEEDS 12,000 SQFT. ADDITIONALLY, THE COMBINED GROUP M FIRE AREAS FOR THE BUILDING IS 23,599 SQFT WHICH DOES NOT EXCEED 24,000 SQFT. THEREFORE A SPRINKLER SYSTEM IS NOT REQUIRED FOR THIS BUILDING.

IBC 901.1 REQUIRES THE APPROVAL OF THE BUILDING OFFICIAL IN ORDER TO DEMOLISH AN EXISTING SPRINKLER SYSTEM. THESE DRAWINGS SERVE AS A REQUEST FOR DEMOLITION.

ALL SPRINKLER WORK IS PART OF A DELEGATED DESIGN PROCESS. THE CONTRACTOR IS RESPONSIBLE FOR ALL SHOP DRAWING DOCUMENTATION AND PERMITS.

APPLICABLE CODES AND STANDARDS

STATE CODE
SOUTH CAROLINA STATE BUILDING CODE
INTERNATIONAL CODE COUNCIL
IBC - INTERNATIONAL BUILDING CODE - 2018 EDITION - AS INCORPORATED AND AMENDED BY THE SOUTH CAROLINA STATE BUILDING CODE
IFC - INTERNATIONAL FIRE CODE - 2018 EDITION - AS INCORPORATED AND AMENDED BY THE SOUTH CAROLINA STATE BUILDING CODE
NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)
NFPA 13 - STANDARD FOR THE INSTALLATION OF SPRINKLERS - 2015 EDITION
NFPA 25 - STANDARD FOR THE INSPECTION, TESTING, AND MAINTENANCE OF WATER-BASED FIRE PROTECTION SYSTEMS - 2014 EDITION

FIRE PROTECTION LEGEND

- NEW WORK
- EXISTING WORK
- DEMOLITION WORK
- 2-HOUR FIRE BARRIER
- PENDENT SPRINKLER
- UPRIGHT SPRINKLER
- SIDEWALL SPRINKLER
- PIPE BREAK
- POINT OF NEW CONNECTION
- LIMIT OF DEMOLITION

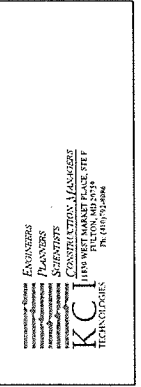
KEYED NOTES

1 DEMOLISH PENDENT SPRINKLER AND ASSOCIATED AREA-OVER PIPING BACK TO DOMESTIC WATERLINE AND CHS.

BUILDING FIRE AREAS

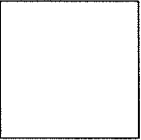
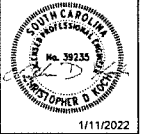
NAME	FIRE AREA
ADJACENT TENANT	7,528 SF
PRE-SALES AND MEZZANINE	4,706 SF
SALES AREA	11,365 SF
	23,599 SF

0 4 8 16
SCALE: 1/8" = 1'-0"



description	by	date	mark	revisions

date	project	designed	drawn	checked
11/11/2022	230918	MCF	MCF	CDK



FAMILY DOLLAR
25490 SC HWY 121, PROJECT #803780
WATKINS, SOUTH CAROLINA
SPRINKLER FLOOR PLAN

I. GENERAL CONTRACTOR'S RESPONSIBILITIES:

- a. Read Cylon Retail Solutions (CRS) / Dollar Tree (DT) Documentation Package.
b. Review all DT drawings.
 • Contact Cylon Retail Solutions Inc. at (888) 211-6789 and submit a fully completed EMS Installation Survey.
 • Confirm CRS Survey Form is fully completed and EMAILED to CRS National Account Team at Surveys@Cylon.com or FAXED to (855) 224-0879, **24 Hours Prior to scheduling the EMS Commissioning.**
 • EMS Commissioning dates cannot be scheduled until fully completed EMS Installation Surveys have been received and approved by the CRS National Deployment Team.
c. Schedule remote EMS commissioning **24 hours prior** to the requested commissioning date.

II. ELECTRICAL RESPONSIBILITIES:

Power to all EMS equipment and devices must be OFF while terminations are made.

- a. Provide all labor and installation material, as required, for a complete and operational EMS for this DT store location.
b. Receive and store all CRS material in a dry and secure place until the EMS installation is completed.
c. The EMS equipment will be supplied by CRS and installed by an approved DT contractor.
d. Review the entire set of plans, perform a job site survey and inventory the CRS equipment to ensure the proper equipment has been ordered and received for a complete and operational CRS EMS.
e. If any material is missing or additional equipment is required, immediately call CRS at (888) 211-6789 to request an order.
f. Approved Contractor shall verify number of controlled lighting circuits against the design, report discrepancies, which cannot be resolved in the field, to the CRS National Account Support Team at (888) 211-6789 and wait for resolution instructions.
g. Coordinate the EMS installation with the Mechanical Contractor to avoid any interference that may delay progress during construction.
h. Perform all work in accordance with all National, State and Local Codes for this project.
i. All EMS cables are to be installed per National and Local Codes. It is the Electrical Contractor's responsibility to determine if National and Local Codes permit Class 2 cables to be installed exposed within the building structure or if a full conduit system is required.
j. EMT connectors and bushings are to be installed at the top of every conduit sleeve and threaded connector to protect EMS cables from abrasions.
k. All cables are to be clearly and distinctly labeled within one foot of both ends.
l. Furnish and install all required conduit, boxes, wire ways, fittings, straps, hangers and wiring for a complete and operational EMS as required.
m. Furnish and install a dedicated 120 VAC circuit with breaker lock for the EMS Panel.
n. Label breaker: DO NOT TURN OFF / EMS
o. Confirm wiring is completed as per this documentation package before applying power. Improper wiring will cause damage to equipment.
p. Mount the EMS Panel adjacent to the electrical panels.
q. Install an Ethernet cable run from the eSCI RJ-45 jack located in the EMS Panel to the network switch specified by the DT networking team.
r. Call CRS at 888.211.6789 to verify Network Connectivity before proceeding with the EMS Installation.
s. Install and terminate the CRS BACnet communication trunk, in a daisy chain fashion, from the EMS Panel to each of the Thermostat Controls and all other BACnet devices. (see this documentation package for requirements)
t. When applicable, mount the Auxiliary I/O Panel adjacent to the EMS Panel and ensure both panels are connected to the same Earth Ground.
u. When applicable, ensure the Auxiliary I/O panel is connected in series with the other BACnet devices on the BACnet communications trunk.
v. Mount and terminate the Outdoor Sensor Assembly (OSA) on the HVAC unit that resides closest to the EMS Panel. When installing, make sure OSA enclosure is:
 I. Mounted on a 1" rigid riser with an "LB" secured to the back of the OSA (Refer to OTS/OLS Detail as shown on EM-4)
 II. Mounted 3 feet above the HVAC unit
 III. Mounted facing north, away from the combustion heat blower and condenser fan
 IV. Weather-proofed
 V. Mounted with the white PVC sensor pointed downward
 VI. Positioned to allow the Outdoor Light Sensor exposure to full ambient daylight but is not shadowed or exposed to any artificial illumination
w. When applicable, mount and terminate the CO2 Sensor as per the location specified by the DT drawings and this documentation package.
x. Mount and terminate the Override Button assembly as per the location specified by the DT drawings and this documentation package.
y. Do not adjust the DIP Switches for the EMS Override Buttons. They are factory preset for:
 I. MSTP Address = 35
 II. Baud Rate = 19200
 III. Network Termination = Off
z. When applicable, mount and terminate the Indoor Ambient Light Sensor(s) as per the location specified by the DT drawings and the Special Instructions in this documentation package.
aa. Employee Zone = 40% of Sales floor and 100% of all Stockroom areas
ab. Customer Zone = Remaining 60% of Sales Floor
ac. Exterior Zone = Building Exterior and Parking lights
ad. When applicable, Daylight Zone = First two (2) rows of lights along the store-front windows.
ae. Furnish and install a 3-pole, 20-amp breaker/disconnect at the Main Electrical Distribution Panel (MDP) for the Phase Loss Power Monitor and Energy Meter.
af. When applicable, furnish and install a 3-pole, 20-amp breaker/disconnect at each Electrical Distribution Panel for each additional Phase Loss Power Monitor
ag. Terminate wiring as specified in this documentation package.
ah. Label Main Electrical Distribution Panel breaker/disconnect: DO NOT TURN OFF / PHASE FAILURE & ENERGY METER
ai. When applicable, label auxiliary Electrical Distribution Panel breaker/disconnect: DO NOT TURN OFF / PHASE FAILURE
aj. Confirm wiring is completed as per this documentation package before applying power. Improper wiring will cause damage to equipment.
ak. Install and terminate the CRS Modbus communication trunk from the eSCI Controller to the Energy Meter. (Refer to OEM instructions and this documentation package for requirements)
al. Permanently mount and terminate the Electrical Meter in close proximity to the main utility power feed.
am. Permanently mount the 3 Current Sensors, one each, around the 3 phases of the main utility feed.
an. Terminate the 3 Current Sensors to the Energy Meter, correctly maintaining Electrical Phase and Meter Input relationships.
ao. Using the OEM Instructions, configure the EMS Energy Meter for:
 I. Proper Current Transformer (CT) Ratio - Current Sensor Primary (CI) = 400 - 1500 Amp
 II. Nominal Line to Line Voltage = 480 Vac
 III. Baud Rate = 19200
 IV. Address = 1
 V. Voltage Input Mode = True 3 Phase
 VI. CT Auto Rotation = Auto Rotate

Note: The EMS is designed to monitor a single primary 3 phase power feed. Contact CRS for support when attempting to monitor multiple power feeds

- ah. Provide a technician, on site, for an approximate 2-hour remote telephone checkout with CRS.
ai. Coordinate with the Mechanical Contractor to verify HVAC control during the CRS remote telephone checkout.
aj. Prior to scheduling the Remote Commissioning Checkout, the Electrical Contractor will:
 I. Confirm CRS Survey Form is completed and EMAILED to CRS National Account Team at Surveys@Cylon.com or FAXED to (855) 224-0879, **24 Hours Prior to scheduling the EMS Commissioning.**
 II. Confirm the Mechanical Contractor will be present during the CRS Remote Commissioning Checkout.
 III. Contact CRS to schedule the EMS Commissioning, **24 hours prior** at (888) 211-6789.
















III. MECHANICAL RESPONSIBILITIES:






Power to all EMS equipment and devices must be OFF while terminations are made.

- a. Provide labor and installation material, as required, for a complete and operational EMS for this DT store location.
b. Verify number and type of HVAC units against the design, report discrepancies, which cannot be resolved in the field, to the CRS National Account Support Team at (888) 211-6789 and wait for resolution instructions.
c. Perform all work in accordance with all National, State and Local Codes for this project.
d. Mount and terminate the SimpleSTAT module(s) as per the location(s) specified by the DT drawings and this documentation package.
e. Utilizing 18/8 cable between the SimpleSTAT module and HVAC unit.
f. Terminate C, R, G, Y1, Y2, W1 and W2 on the HVAC unit for control of fan, cooling and heating.
g. Terminate the communications cables to the SimpleSTAT(s) as shown in this documentation package.
h. Set address on the SimpleSTAT module, as shown in the SimpleSTAT installation instructions. When communications to the EMS is in a failed state, the SimpleSTAT will operate 24/7 as a stand-alone STAT using the following temperature setpoints:
 I. Default Cooling Setpoint = 72.0 °F
 II. Default Heating Setpoint = 68.0 °F
i. Utilizing the Downrods and associated hardware, specified by the DT drawings and the "Special Instructions" section of this documentation package, mount and terminate the Remote Space Temperature Sensor(s) as per the location(s) specified by the DT drawings.
j. In close proximity to the zone return air grille and away from supply air drafts.
k. Install and secure the Remote Temperature Sensor wire to the Thermostat Controller.
l. Mount the Supply Duct Temperature sensor of each HVAC unit.
m. The remote Supply Duct Temperature Sensor should be mounted in the main Supply Air Duct on the interior side of the HVAC unit's building penetration.
n. Utilizing 18/2 wire, terminate the supply duct temperature sensor wire to the Thermostat module as shown in this documentation package.
o. Provide Electrical Contractor with roof plan layout, showing location of HVAC Units on the roof.
p. Provide a technician, on site, for an approximate 2-hour remote telephone checkout with CRS.
q. Coordinate with the Electrical Contractor to verify proper HVAC control during the CRS Remote Commissioning Checkout.


IV. CYLON RETAIL SOLUTIONS RESPONSIBILITIES:

- a. The following services will be supplied by CRS:
 I. Shipping of all contracted EMS components for the job.
 II. Programming and downloading of CRS equipment and software.
 III. Provide telephone technical support at (888) 211-6789.
 IV. Remote system checkout with installing contractor
b. Verification of proper operation of the following items by exercising the controlled load:
 I. Timed operation of all applicable EMS lighting loads - Interior and Exterior.
 II. Outside light level control of all applicable EMS lighting loads - Interior and Exterior.
 III. Operation of HVAC heating stages, as indoor environment allows.
 IV. Operation of HVAC cooling stages, as indoor and outdoor environments allow.
 V. Verification of HVAC unit sensor readings - space and supply temperatures.
c. If any end unit (e.g. lighting, HVAC unit, supply air fan, etc.) cannot be operated for mechanical or electrical reasons, CRS will verify the proper operation of the EMS control devices (e.g. contactors, discrete I/O) leading up to the unit, in order to fully verify the operations of the EMS.
d. CRS will issue an "EMS Check-Out Number" once all store systems are verified as operational.

DEVICE LEGEND	
SYMBOL	DESCRIPTION
	HVAC UNIT CONTROLLER (SIMPLESTAT)
	HVAC UNIT CONTROLLER (TRC)
	DUCT TEMPERATURE SENSOR
	SPACE TEMPERATURE SENSOR
	OUTDOOR LIGHT SENSOR
	OUTDOOR TEMPERATURE & RELATIVE HUMIDITY SENSORS
	REMOTE TEMPERATURE SENSOR
	INDOOR CO ₂ SENSOR
	INDOOR RELATIVE HUMIDITY SENSOR
	INDOOR LIGHT SENSOR
	O/H DOOR SENSOR
	SECURITY INTERFACE DEVICE
	eBUILDING SYSTEM CONTROLLER
	REMOTE OVERRIDE SWITCH
	OCCUPANCY SENSOR

CABLE LEGEND				
KEY	SIZE	TYPE	MFG.	MFG. PART #
	18/2	SHIELDED PLENUM	WINDY CITY	# 002320-S
	18/4	SHIELDED PLENUM	WINDY CITY	# 002340-S
	18/8	NON SHIELDED PLENUM	WINDY CITY	# 002392-S
	18/10	NON SHIELDED PLENUM	WINDY CITY	# 002393-S
	24/8	CAT5 E PLENUM	WINDY CITY	# 5556140-S

REVISION: 1	
DATE: 06/05/20	ECN#: 2396
LOOSE DT OPTION	
REVISION:	
DATE:	ECN#:
REVISION:	
DATE:	ECN#:
DRAWN:WPC	
ENGINEER:CGP	
PART #: 94-403	OPTION:P



25 Sundial Ave - Suite 310 W
Manchester, NH 03103

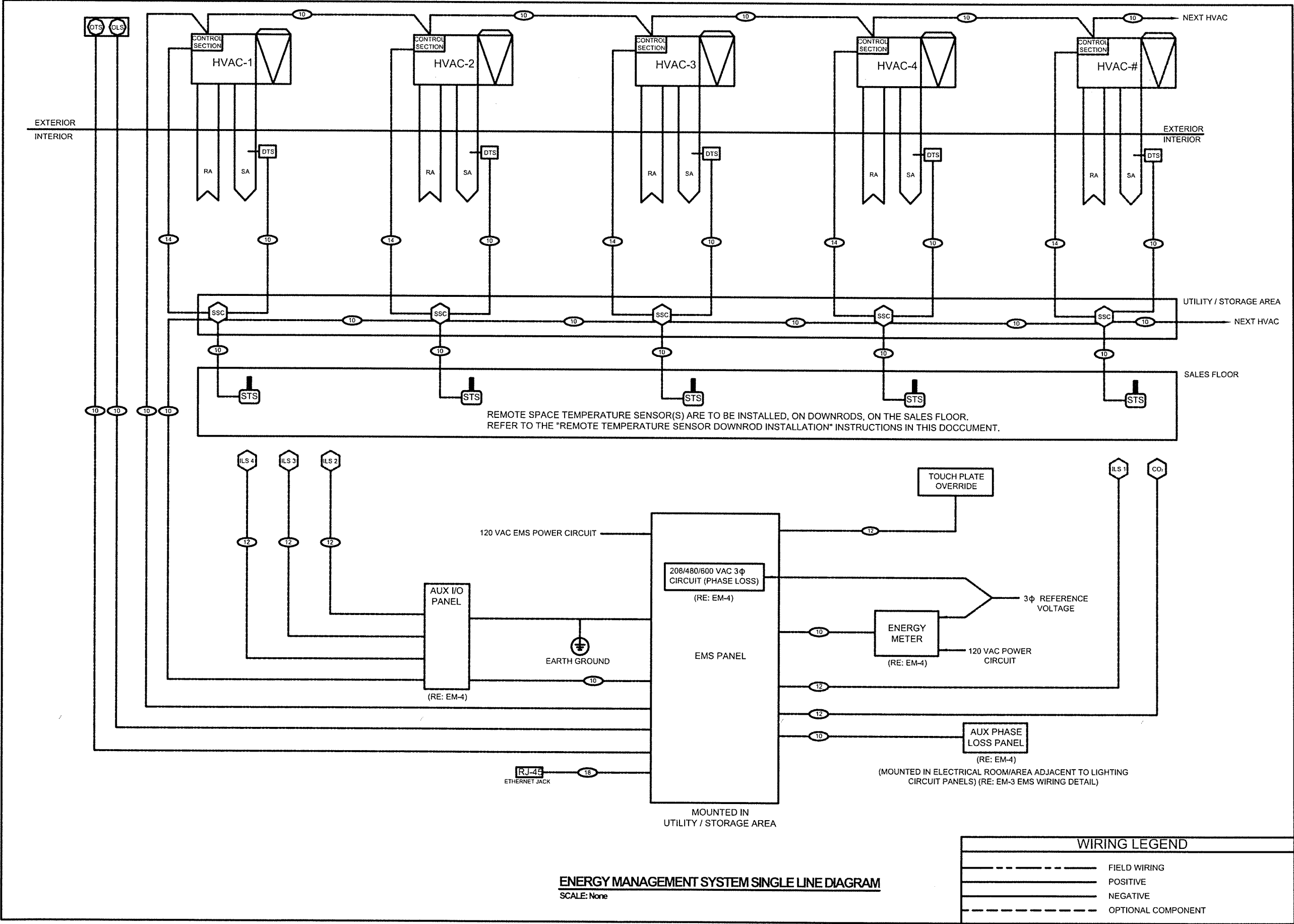
FAMILY DOLLAR

DRAWING NOTES

(FOR REFERENCE ONLY)

ENERGY
MANAGEMENT
PLAN

EM-1 of 4





RETAIL SOLUTIONS
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Manchester, NH 03103

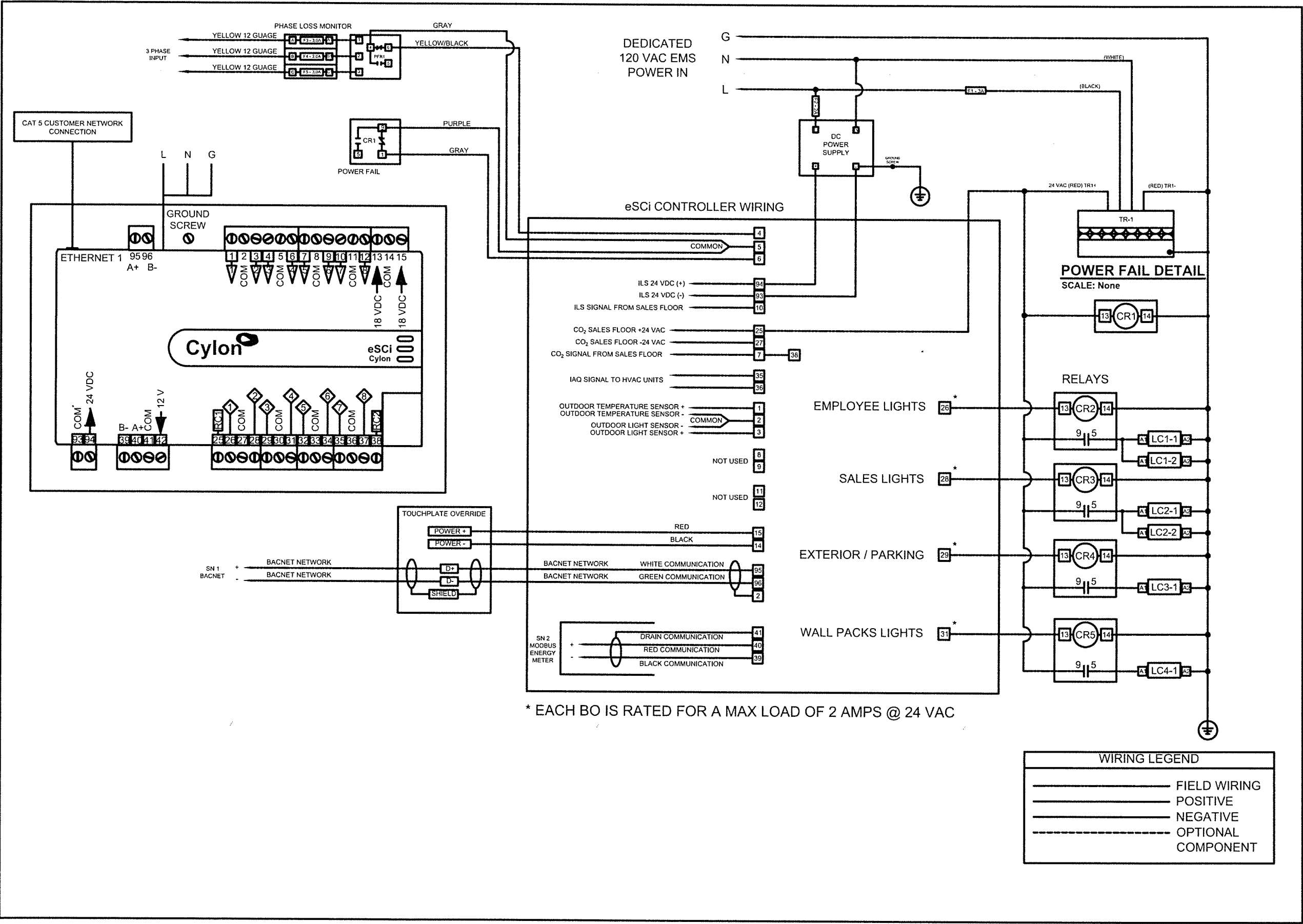
FAMILY DOLLAR

LINE DIAGRAM

(FOR REFERENCE ONLY NOT TO SCALE)

ENERGY MANAGEMENT PLAN

EM-2 of 4



FAMILY DOLLAR FIELD WIRING (FOR REFERENCE ONLY NOT TO SCALE)

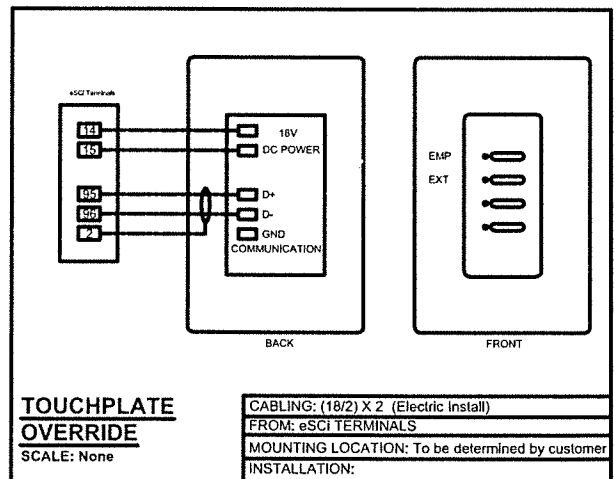
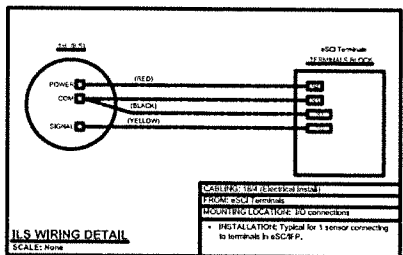
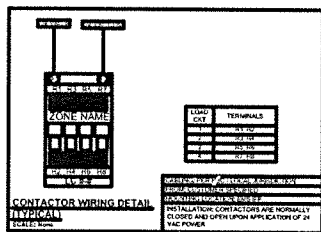
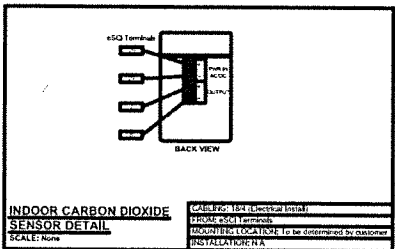
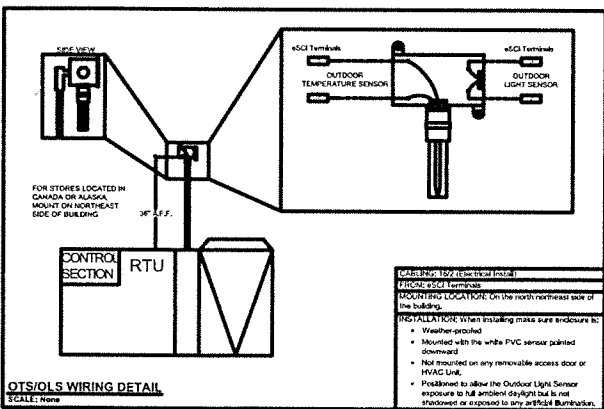
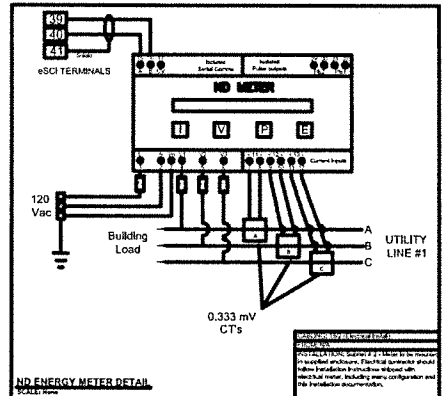
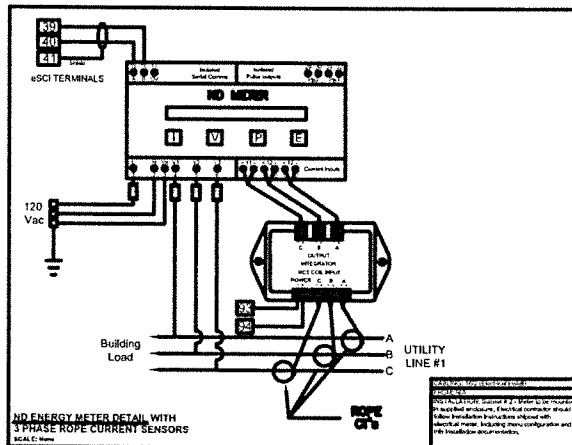
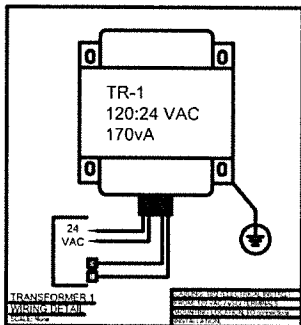
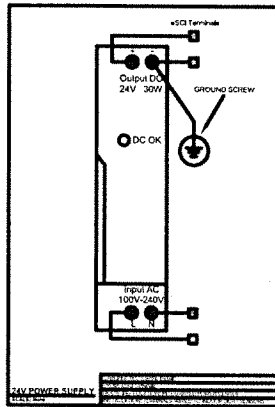
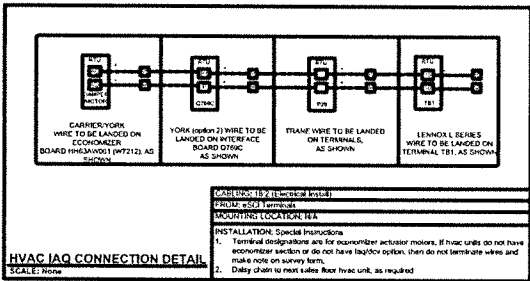
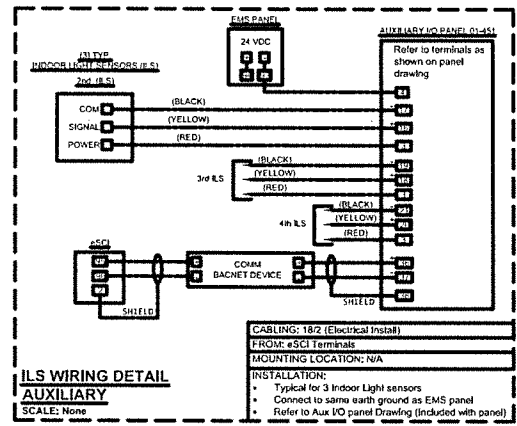
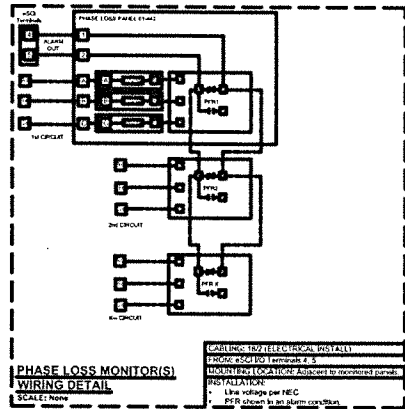
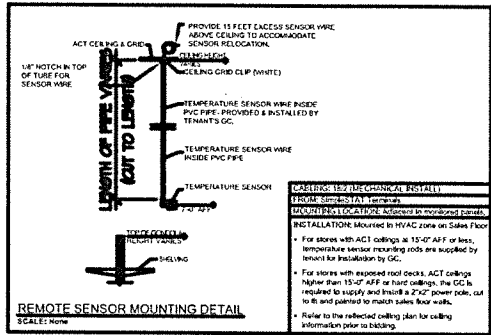
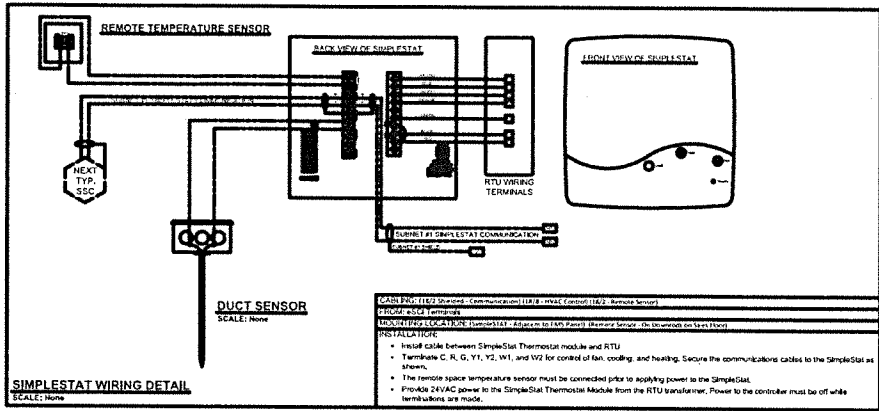
REVISION: 1	
DATE: 06/05/20	ECNR#: 2396
LOOSE DT OPTION	

REVISION: ---	
DATE: ---	ECNR#: ---

REVISION: ---	
DATE: ---	ECNR#: ---

REVISION: ---	
DATE: ---	ECNR#: ---

DRAWN: WPC	CHECKED: CGP
PART #: 94-403	OPTION: P



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Manchester, NH 03103

FAMILY DOLLAR EQUIPMENT DETAILS (FOR REFERENCE ONLY NOT TO SCALE)

REVISION: 1	DATE: 06/05/20	ECN#: 2396
LOOSE DT OPTION		
REVISION: ---	DATE: ---	ECN#: ---
REVISION: ---	DATE: ---	ECN#: ---
REVISION: ---	DATE: ---	ECN#: ---
REVISION: ---	DATE: ---	ECN#: ---
DRAWN: WPC	CHECKED: CGP	PART #: 94-403
	OPTION: P	

ENERGY MANAGEMENT PLAN

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