



Chick-fil-A
 5200 Buffington Road
 Atlanta, Georgia
 30349-2998

Kurzynske & Associates
 2705 Lebanon Pike - Suite One
 Nashville, Tennessee 37214
 Telephone: (615) 255-5203



07/19/23

CHICK-FIL-A
PRINCETON WOODS
 3330 PINE BLUFF DRIVE
 DUMFRIES, VA 22026

FSR#04916
 BUILDING TYPE / SIZE: P13 LSR LRG
 RELEASE: 22.05

| REVISION SCHEDULE | | |
|-------------------|------------|---------------------------|
| NO. | DATE | DESCRIPTION |
| 3 | 12/12/2022 | CODE COMMENTS |
| 11 | 07/13/2023 | REDESIGN & COORDINATION 2 |

CONSTRUCTION

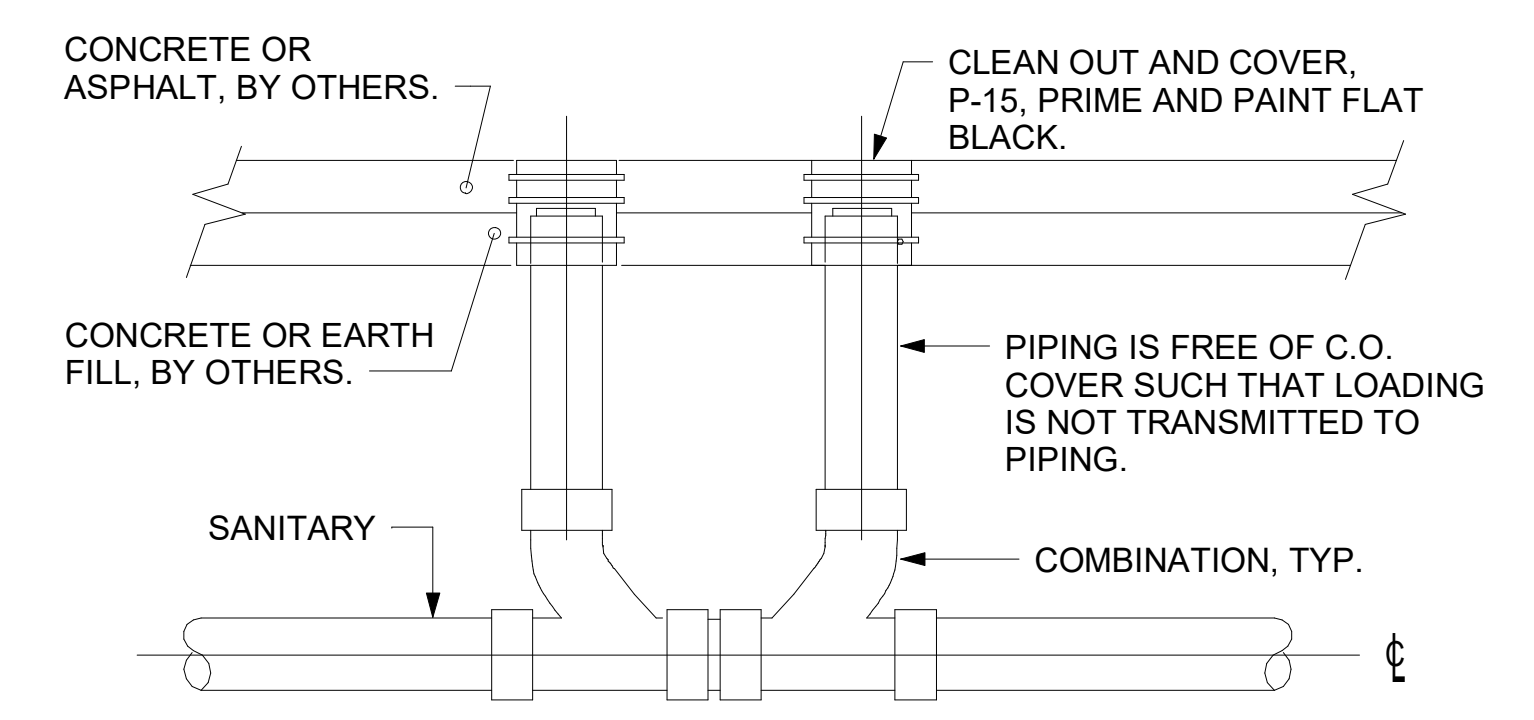
| | |
|----------------------|--------------|
| CONSULTANT PROJECT # | 22050.EH.S |
| PRINTED FOR | CONSTRUCTION |
| DATE | 07/19/23 |
| DRAWN BY | CAC |

Information contained on this drawing and in all digital files produced for above named project may not be reproduced in any manner without express written or verbal consent from authorized project representatives.

SHEET: BELOW SLAB PLUMBING PLAN
 SHEET NUMBER: **P-101**

5. SHEET NOTES

- COORDINATE INSTALLATION OF SANITARY PIPING WITH FOOTINGS IN THE FIELD. SLEEVE PENETRATIONS IN FOOTINGS WITH PVC.
- COMBINATION WASTE AND VENT SYSTEM SHOWN HERE. WHERE REQUIRED BY LOCAL AUTHORITY HAVING JURISDICTION, PROVIDE SAFE-WASTE SYSTEM OR DEDICATED VENT SYSTEM AS OUTLINED IN STATE AND LOCAL CODE AMENDMENTS.
- ALL WATER PIPING INSTALLED WITHIN EXTERIOR WALLS SHALL BE LOCATED ON THE INTERIOR SIDE OF THE INSULATION.
- ALL VENT PIPING TO BE 2" DIAMETER MIN U.N.O. SEE 1/P-301 FOR VENT LAYOUT.



4 SAN. C.O. OUTSIDE BUILDING NOT TO SCALE

KEY NOTES

- 4" DOUBLE CO. P-15. SEE DETAIL 4/P-101.
- INSTALL FLOOR DRAIN P-35 AT MOP SINK DEPRESSION WITH TOP OF STRAINER 0'-7" BFF.
- PROVIDE TRAP SEAL PROTECTOR P-26A.
- ROUTE TO GREASE TRAP - REFER TO DETAIL 2/P-101, REFER TO SITE UTILITY PLAN SHEET FOR EXACT LOCATION.

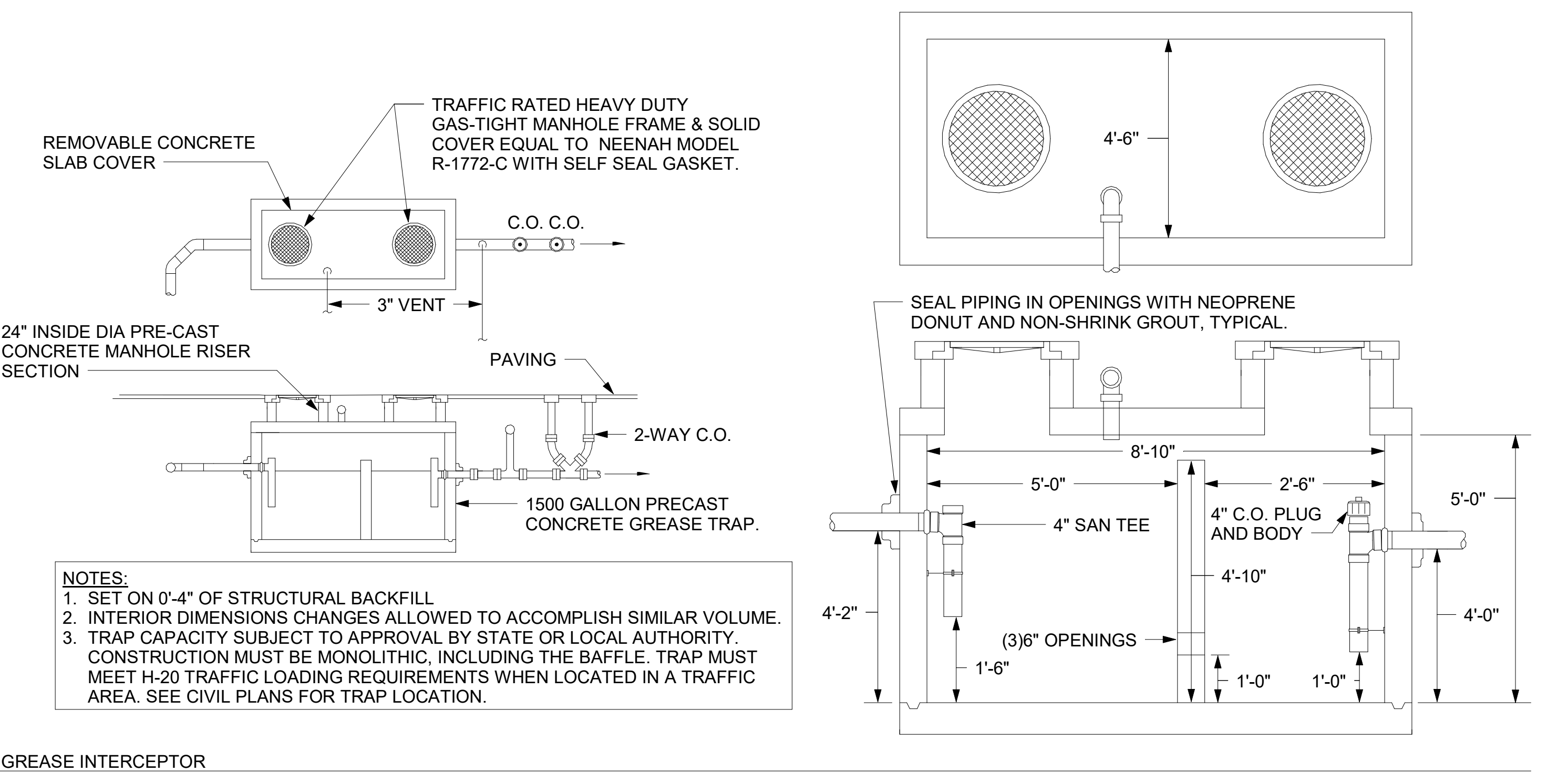
METHOD OF DRAINAGE AT REFUSE PAD -
 WHEN AREA DRAIN IS SHOWN ON CIVIL PLANS, SEE FIXTURE P-32 SPECIFICATION ON DRAWING P-901 FOR MAKE AND MODEL OF DRAIN, DRAIN AND PIPING PROVIDED AND INSTALLED BY CHICK-FIL-A SITE CONTRACTOR. WHEN AREA DRAIN IS NOT SHOWN, REFER TO ARCHITECTURAL DRAWINGS FOR DESIGN OPTION SHOWING DRAINAGE THROUGH BACK OF DUMPSTER ENCLOSURE.

3/4" NON-FREEZE POST HYDRANT, P-31, WITHIN PVC SLEEVES. SECURE BARREL TO WALL WITH SPLIT-RING HANGER AND THREADED ROD 2'-0" AFF. SET BASE OF HYDRANT BARREL IN ONE CUBIC FOOT OF PEA GRAVEL. WRAP BASE OF HYDRANT WITH SILT FENCE FABRIC TO PREVENT DRAIN HOLE FROM BEING OBSTRUCTED.

4" DIA SCHED 40 PVC SLEEVE. EXTEND THROUGH FOOTING. TERMINATE 1'-0" AFF. FILL WITH PEA GRAVEL. SECURE TO CMU WALL WITH SPLIT RING HANGER 0'-10" AFF.

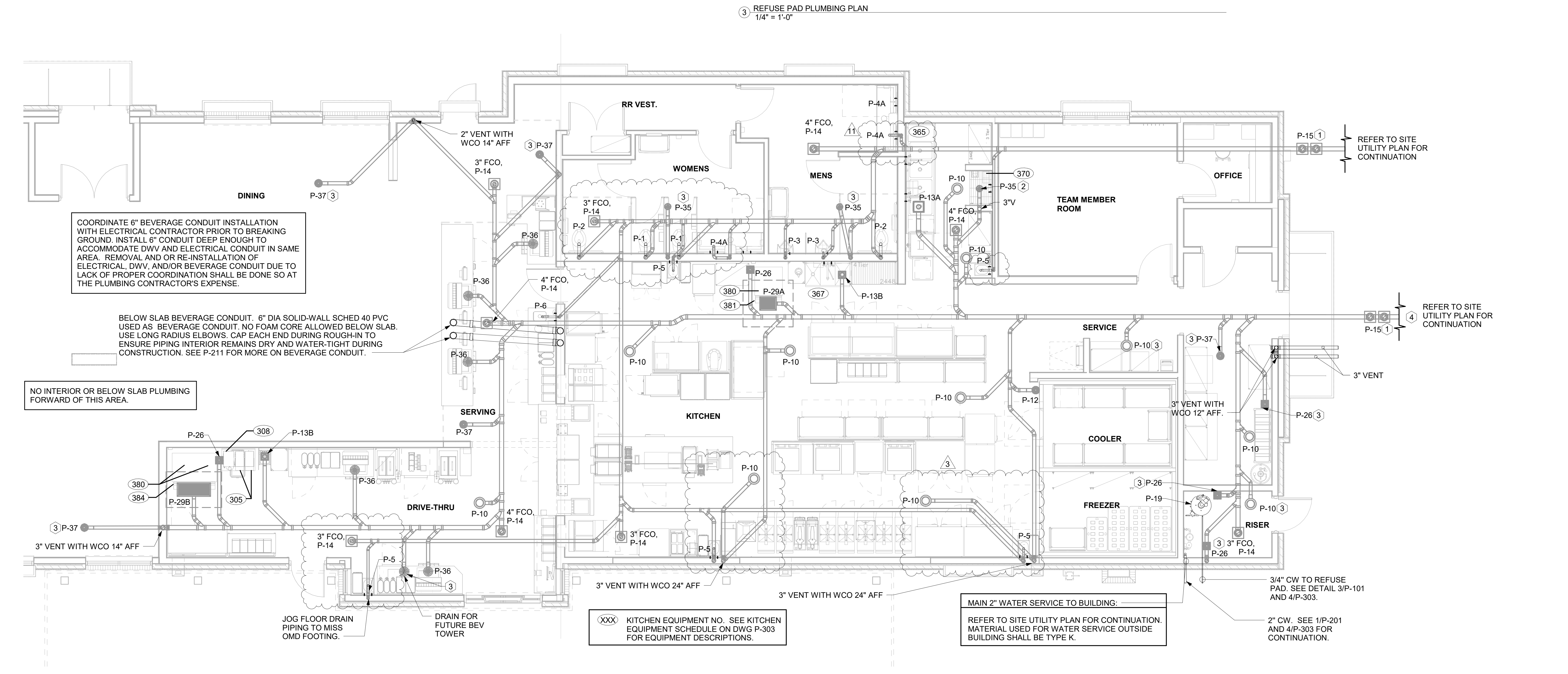
3/4" CW TO SERVICE ROOM. SEE 1/P-101 FOR CONTINUATION.

3 REFUSE PAD PLUMBING PLAN
 1/4" = 1'-0"



NOTES:
 1. SET ON 0'-4" OF STRUCTURAL BACKFILL.
 2. INTERIOR DIMENSIONS CHANGES ALLOWED TO ACCOMPLISH SIMILAR VOLUME.
 3. TRAP CAPACITY SUBJECT TO APPROVAL BY STATE OR LOCAL AUTHORITY. CONSTRUCTION MUST BE MONOLITHIC, INCLUDING THE BAFFLE. TRAP MUST MEET H-20 TRAFFIC LOADING REQUIREMENTS WHEN LOCATED IN A TRAFFIC AREA. SEE CIVIL PLANS FOR TRAP LOCATION.

2 GREASE INTERCEPTOR NOT TO SCALE



COORDINATE 6" BEVERAGE CONDUIT INSTALLATION WITH ELECTRICAL CONTRACTOR PRIOR TO BREAKING GROUND. INSTALL 6" CONDUIT DEEP ENOUGH TO ACCOMMODATE DWV AND ELECTRICAL CONDUIT IN SAME AREA. REMOVAL AND OR RE-INSTALLATION OF ELECTRICAL, DWV, AND/OR BEVERAGE CONDUIT DUE TO LACK OF PROPER COORDINATION SHALL BE DONE SO AT THE PLUMBING CONTRACTOR'S EXPENSE.

BELOW SLAB BEVERAGE CONDUIT. 6" DIA SOLID-WALL SCHED 40 PVC USED AS BEVERAGE CONDUIT. NO FOAM CORE ALLOWED BELOW SLAB. USE LONG RADIUS ELBOWS. CAP EACH END DURING ROUGH-IN TO ENSURE PIPING INTERIOR REMAINS DRY AND WATER-TIGHT DURING CONSTRUCTION. SEE P-211 FOR MORE ON BEVERAGE CONDUIT.

NO INTERIOR OR BELOW SLAB PLUMBING FORWARD OF THIS AREA.

XXX KITCHEN EQUIPMENT NO. SEE KITCHEN EQUIPMENT SCHEDULE ON DWG P-303 FOR EQUIPMENT DESCRIPTIONS.

MAIN 2" WATER SERVICE TO BUILDING. REFER TO SITE UTILITY PLAN FOR CONTINUATION. MATERIAL USED FOR WATER SERVICE OUTSIDE BUILDING SHALL BE TYPE K.

3/4" CW TO REFUSE PAD. SEE DETAIL 3/P-101 AND 4/P-303.

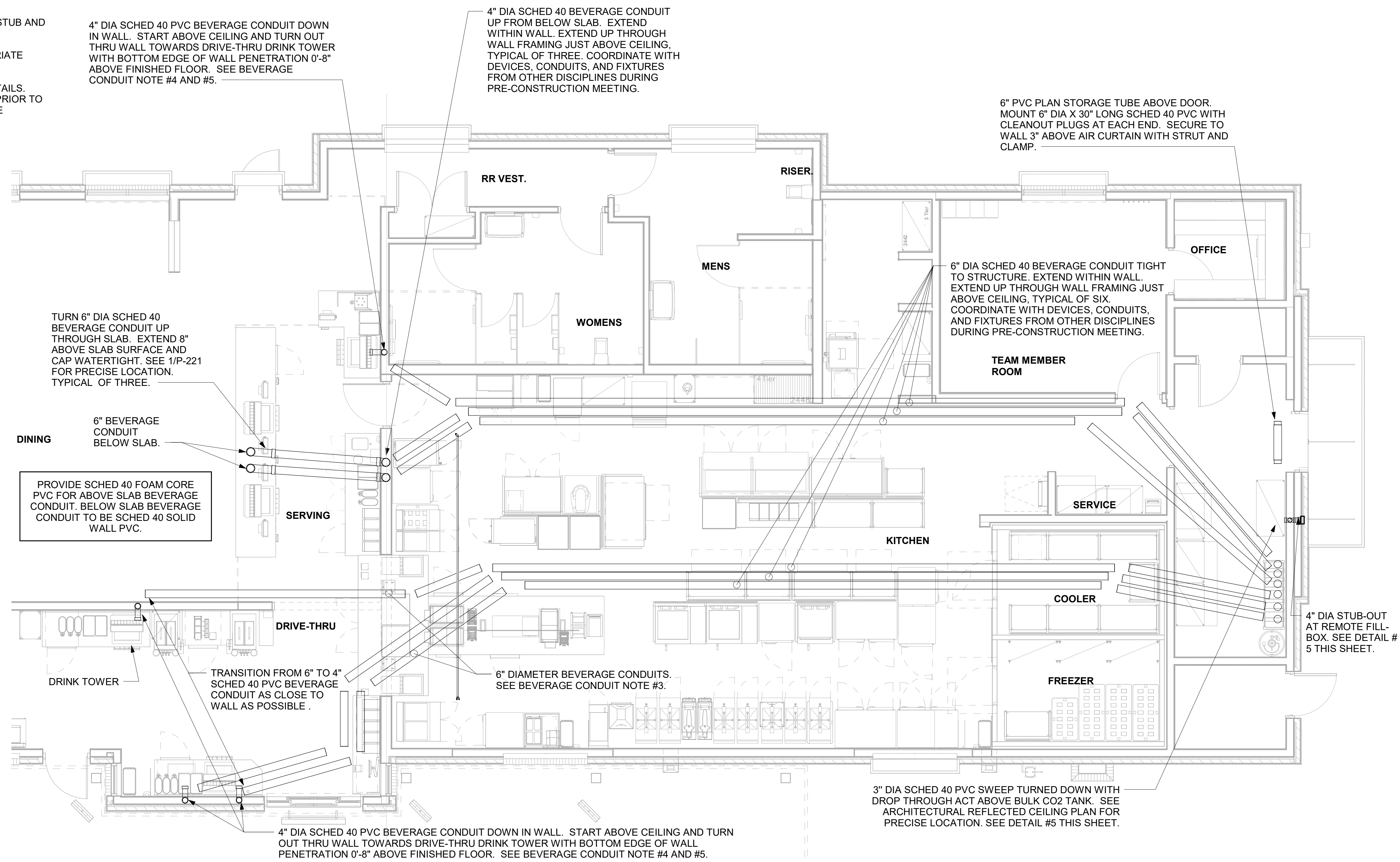
2" CW. SEE 1/P-201 AND 4/P-303 FOR CONTINUATION.

1 BELOW SLAB PLUMBING PLAN
 1/4" = 1'-0"

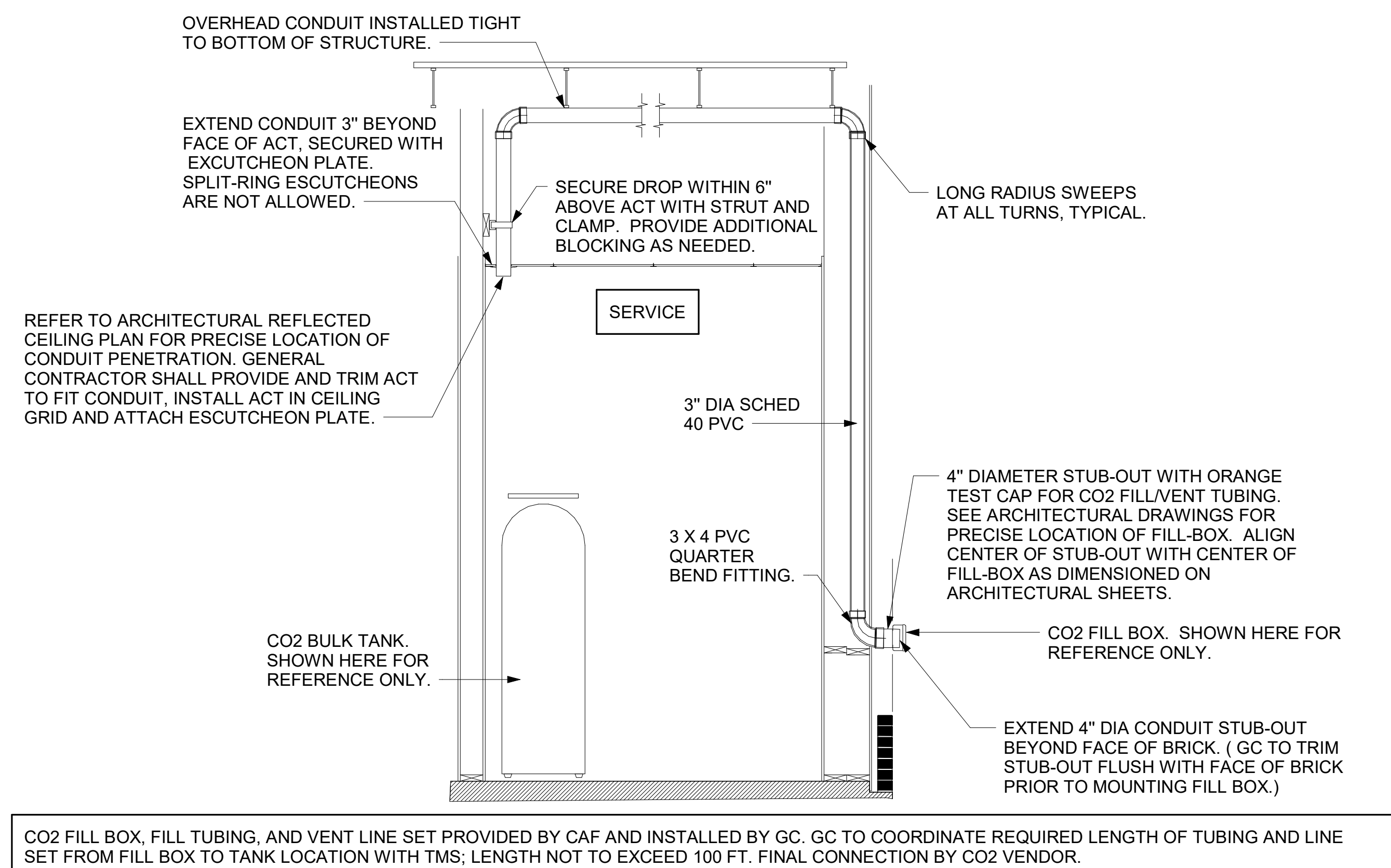
Autodesk Docs://VA_04916_Princton Woods_2021.4_FSR04916_Princton Woods_PLB.rvt
 7/19/2023 9:36:54 AM
 40-LSR-04916-P-101-BELOW SLAB PLUMBING PLAN

2. BEVERAGE CONDUIT NOTES

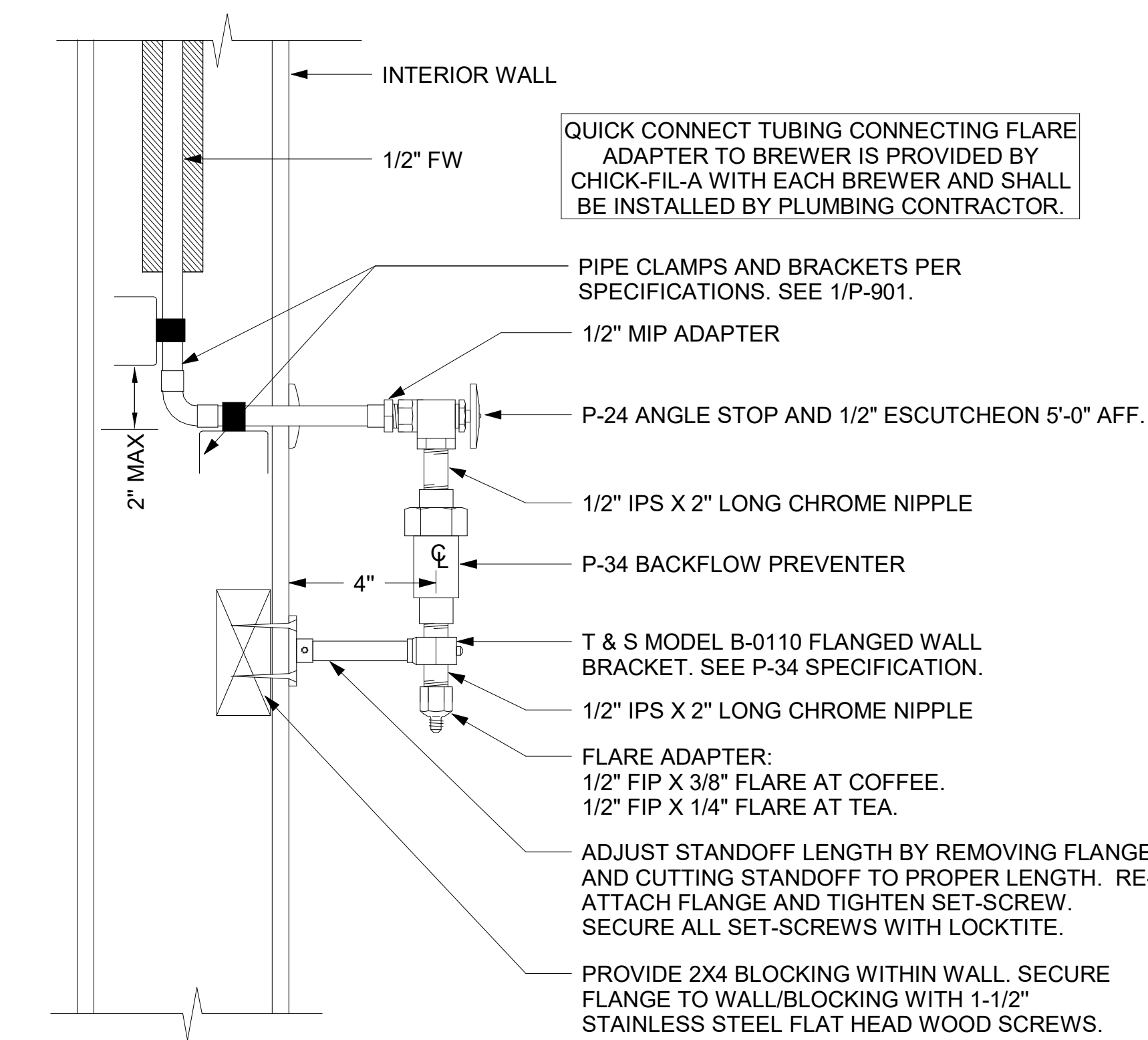
- ROUTE BEVERAGE SYSTEM PIPING OVERHEAD FROM THE BEVERAGE RACK TO DRINK TOWERS IN SIX (6)-6" DIA SCH 40 PVC DWV CONDUITS. ALL CONDUIT SHALL BE HELD TIGHT TO STRUCTURE AND SUPPORTED WITH THREADED ROD AND CLEVIS HANGERS AT INTERVALS SHOWN IN SPECIFICATIONS FOR HORIZONTAL OVERHEAD PIPING. COORDINATE ROUTING WITH THE GENERAL CONTRACTOR TO AVOID MECHANICAL AND ELECTRICAL SYSTEMS. SEE 1/P-101 AND 1/P-221 FOR BELOW-SLAB BEVERAGE CONDUIT.
- COORDINATE ROUTING OF ALL CONDUITS WITH HVAC DUCT IN KITCHEN. SEE SHEET M-201 FOR LOCATION OF AC UNITS AND DUCT ROUTING.
- TURN THE 6" DIA CONDUIT DOWN THROUGH THE CEILING AT THE BEVERAGE RACK AND PROVIDE CHROMED ESCUTCHEONS AT CEILING PENETRATIONS. TERMINATE OPPOSITE END ABOVE CEILING WHERE SHOWN ON PLANS.
- AT 4" DIA CONDUIT DROP IN WALL, PROVIDE 1/8TH BEND FITTING WITH SHORT PIPE STUB AT BASE OF DROP. CUT STUB AND FITTING FLUSH WITH FINISHED WALL.
- FOR BEVERAGE CONDUIT DROPS AT WALLS WITH SHEATHING EXTENDED ABOVE THE CEILING, PROVIDE APPROPRIATE FITTING AT UPPER END OF CONDUIT DROP TO EXTEND CONDUIT THROUGH SHEATHING.
- INSTALL CONTINUOUS CONDUIT FROM CO2 FILL-BOX LOCATION TO BULK CO2 TANK AS SHOWN ON PLANS AND DETAILS. COORDINATE 4" CONDUIT WALL STUB INSTALLATION CLOSELY WITH GENERAL CONTRACTOR AND BRICK MASON. PRIOR TO COVERING UP OF CONDUIT, VERIFY WITH GENERAL CONTRACTOR THE FULL LENGTH OF FILL/VENT TUBING MAY BE INSTALLED AND SUBSEQUENTLY REMOVED FROM CONDUIT. SEE PLAN AND DETAIL #5 THIS SHEET.



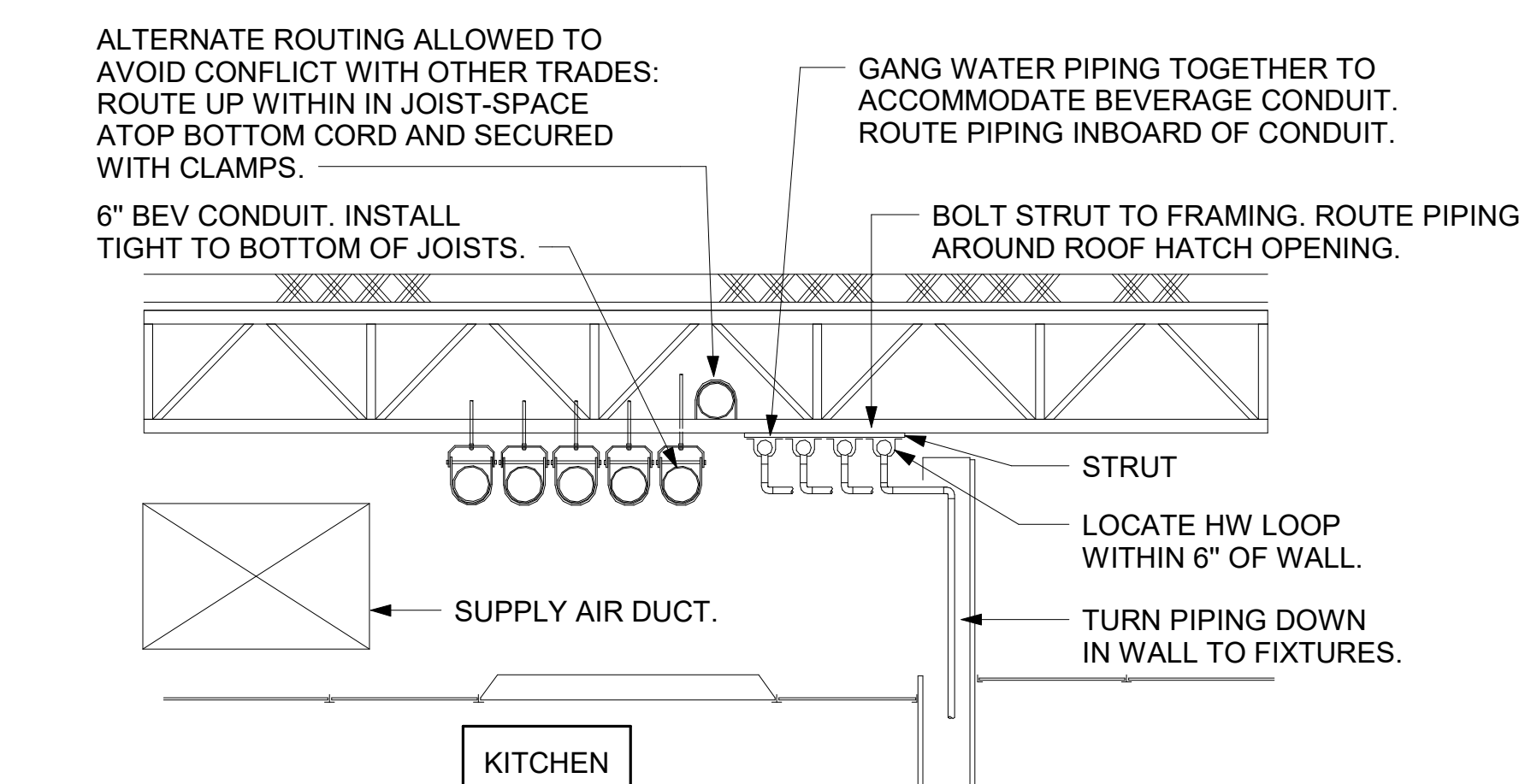
1 BEVERAGE CONDUIT PIPING PLAN
1/4" = 1'-0"



5 CO2 FILL/VENT CONDUIT AND FILL-BOX INSTALLATION
NOT TO SCALE



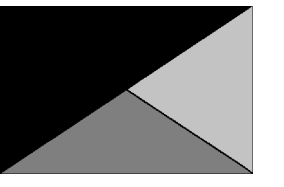
4 COFFEE & TEA BREWER STOP & BFP
1/4" = 1'-0"



3 SECTION AT WET WALL
NOT TO SCALE



Chick-fil-A
5200 Buffington Road
Atlanta, Georgia
30349-2998



Kurzynske & Associates
2705 Lebanon Pike - Suite One
Nashville, Tennessee 37214
Telephone: (615) 255-5203



02/15/23

CHICK-FIL-A
PRINCETON WOODS
3330 PINE BLUFF DRIVE
DUMFRIES, VA 22026

FSR#04916
BUILDING TYPE / SIZE: P13 LSR LRG
RELEASE: 22.05

REVISION SCHEDULE

| NO. | DATE | DESCRIPTION |
|-----|------|-------------|
| | | |

CONSULTANT PROJECT # 22050.EH.S
PRINTED FOR CONSTRUCTION
DATE 02/15/23
DRAWN BY CAC

Information contained on this drawing and in all digital files produced for above named project may not be reproduced in any manner without express written or verbal consent from authorized project representatives.

SHEET BEVERAGE CONDUIT PLAN

P-211

CONSTRUCTION

Autodesk Docs://VA_04916_Prinewood_Woods_2021.4_FSR04916_Prinewood_Woods_PLB.rvt
2/13/2023 10:35:56 AM
40-LSR-04916-P-211-BEVERAGE CONDUIT PLAN

NOTE OF SPECIAL IMPORTANCE:

BELOW-SLAB BEVERAGE CONDUIT SHALL BE 6" DIAMETER SCHED 40 DWV SOLID WALL, NO FOAM CORE ALLOWED. USE LONG RADIUS ELBOWS (A.K.A. SWEEPS) ON ALL BEVERAGE CONDUIT. PLEASE NOTE BEVERAGE CONDUIT ROUGH-IN LOCATIONS ARE MEASURED TO THE FRACTION OF AN INCH. CARE MUST BE TAKEN WHEN INSTALLING 6" DIAMETER CONDUIT LOCATED WITHIN A 2X8 WALL. THE MARGIN FOR ERROR IS ONLY 1/16TH INCH.

FLOOR FIXTURE ELEVATIONS

IMPORTANT: INSTALL THE FLOOR FIXTURE SUCH THAT THE TOP-OF-RIM ELEVATION IS AS FOLLOWS:

| FIXTURE | TYPE | RIM ELEVATION |
|---------|-------------------------|---------------|
| P-10 | FLOOR DRAIN | 1/2" BFF |
| P-35 | RESTROOM FLOOR DRAIN | 1/4" BFF |
| P-35 | MOP SINK DRAIN | 7" BFF |
| P-36 | INDIRECT WASTE RECEIVER | 1/4" BFF |
| P-37 | FLOOR DRAIN | 1/4" BFF |

NOTE: FIXTURE RIM/GRATE SHALL SET BE FLUSH WITH ADJACENT FLOOR. SEE ARCHITECTURAL PLANS FOR FLOOR SLOPE AT SLAB DEPRESSION FOR FIXTURES INSTALLED BELOW FINISHED FLOOR ELEVATION. FLOOR FIXTURES NOT LISTED HERE SHALL BE INSTALLED FLAT AND FLUSH WITH FINISHED FLOOR ELEVATION.

COORDINATE LEGEND

| TYPE | EXAMPLE | PIPE COORDINATES |
|------|-----------------------------------|--|
| #1 | CW X=43'8" Y=14'7" | APPLIES TO WATER PIPING ROUGH-IN PENETRATION ONLY. SEE P-101 FOR CONTINUATION. |
| #2 | VENT X=43'8" Y=14'7" | APPLIES TO DWV PENETRATION ONLY. |
| #3 | 6" BEV COND X=43'8" Y=27'3" | APPLIES TO 6" BEVERAGE CONDUIT PENETRATION ONLY. |

IMPORTANT NOTE TO INSTALLER

EXERCISE CAUTION WHEN LOCATING ROUGH-INS AT:
 -DRIVE THRU AREA
 -CUSTOMER WAIT AREA
 DO NOT PULL TAPE FROM THE SLAB EDGE AT THESE AREAS WITHOUT COMPENSATING FOR DIFFERENCE IN OFFSETS. NOTE OFFSET AT BACK CORNER OF BUILDING.

MOP SINK NOTE

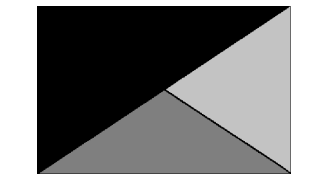
IMPORTANT: INSTALL FLOOR DRAIN WITH TOP OF DRAIN 0'-7" BFF. COORDINATE WITH GENERAL CONTRACTOR. SEE ARCHITECTURAL AND STRUCTURAL DRAWINGS.

NOTES ABOUT (0,0) BENCHMARK ORIGIN

- THE (X=0, Y=0) BENCHMARK ORIGIN IS LOCATED AT THE OUTSIDE FACE OF FRAMING FOR THE EXTERIOR WALL AT THE CORNER WHERE SHOWN ON THE ADJACENT PLAN.
- IT IS EXTREMELY IMPORTANT FOR THE PLUMBING INSTALLER TO BECOME COMPLETELY FAMILIAR WITH THE FACE-OF-FRAMING POSITION AND ITS RELATION TO THE FLOOR SLAB CONSTRUCTION PRIOR TO BEGINNING THE UNDERSLAB PLUMBING ROUGH-IN.
- PLUMBING CONTRACTOR SHALL REVIEW STRUCTURAL DETAIL "TYPICAL SECTION @ EXTERIOR WALL" FOR PRECISE LOCATION OF FACE-OF-FRAMING WITH RESPECT TO THE SLAB INSTALLATION PRIOR TO LOCATING SLAB ROUGH-INS.



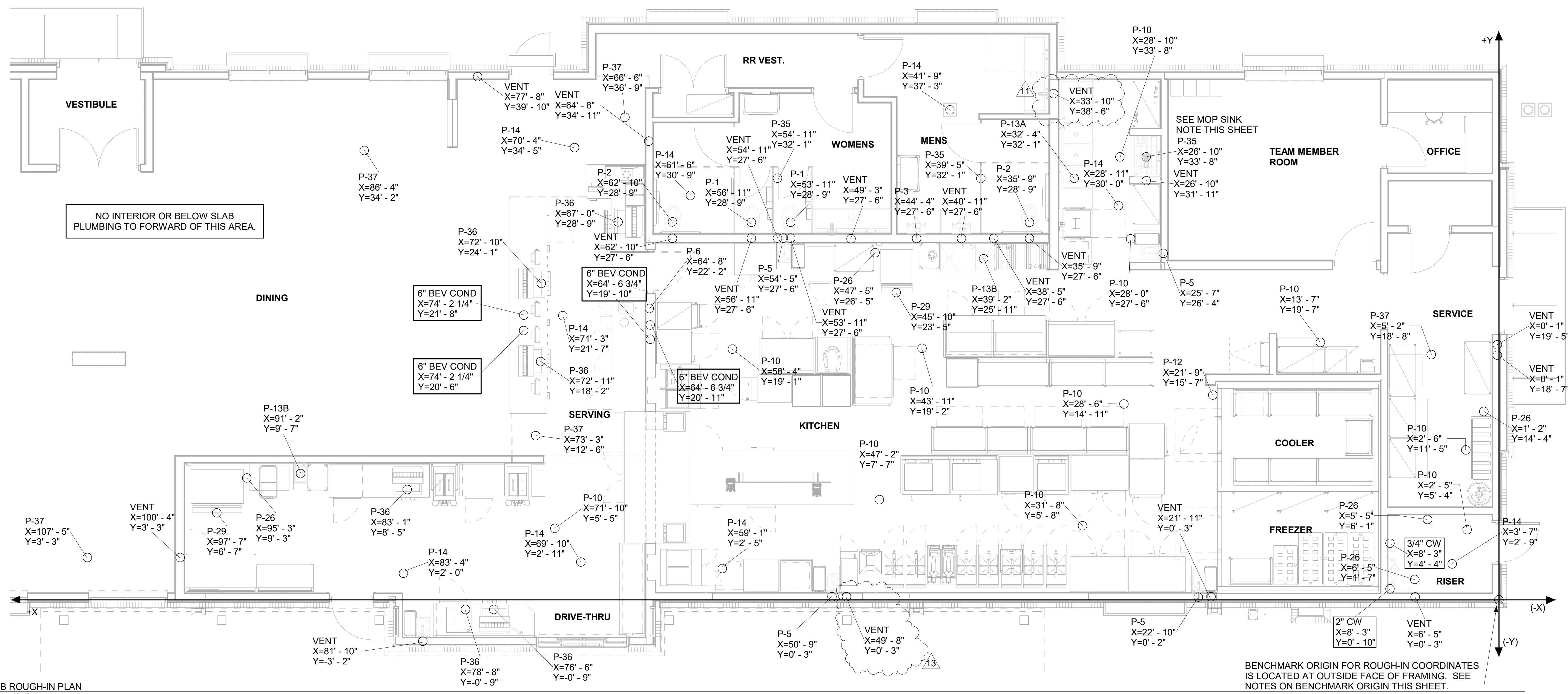
Chick-fil-A
 5200 Buffington Road
 Atlanta, Georgia
 30349-2998



Kurzynske & Associates
 2705 Lebanon Pike - Suite One
 Nashville, Tennessee 37214
 Telephone: (615) 255-5203



08/01/23



NO INTERIOR OR BELOW SLAB PLUMBING TO FORWARD OF THIS AREA.

BENCHMARK ORIGIN FOR ROUGH-IN COORDINATES IS LOCATED AT OUTSIDE FACE OF FRAMING. SEE NOTES ON BENCHMARK ORIGIN THIS SHEET.

CHICK-FIL-A
PRINCETON WOODS
 3330 PINE BLUFF DRIVE
 DUMFRIES, VA 22026

FSR#04916

BUILDING TYPE / SIZE: P13 LSR LRG

RELEASE: 22.05

| NO. | DATE | DESCRIPTION |
|-----|------------|-------------------------|
| 11 | 07/13/2023 | REDBUILT COORDINATION 2 |
| 13 | 08/01/2023 | REDBUILT COORDINATION-3 |

| CONSULTANT PROJECT # | 22050.EH.S |
|----------------------|--------------|
| PRINTED FOR | CONSTRUCTION |
| DATE | 08/01/23 |
| DRAWN BY | CAC |

Information contained on this drawing and in all digital files produced for above named project may not be reproduced in any manner without express written or verbal consent from authorized project representatives.

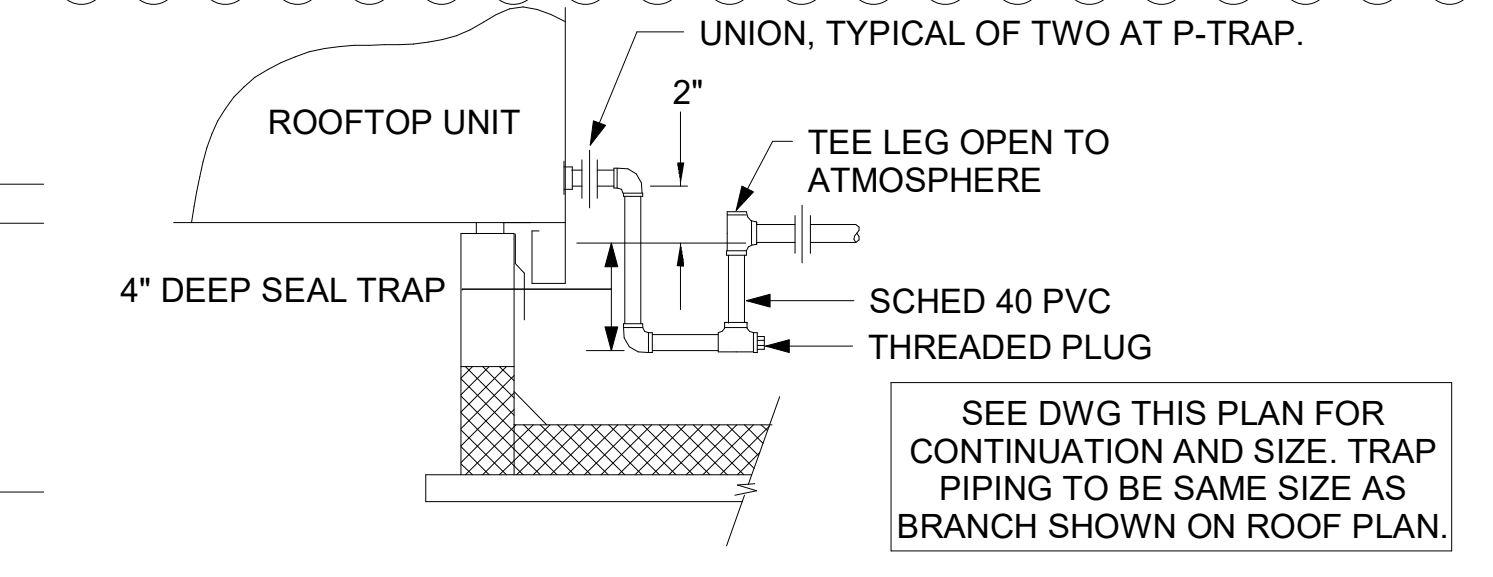
SHEET: SLAB ROUGH-IN PLAN

SHEET NUMBER

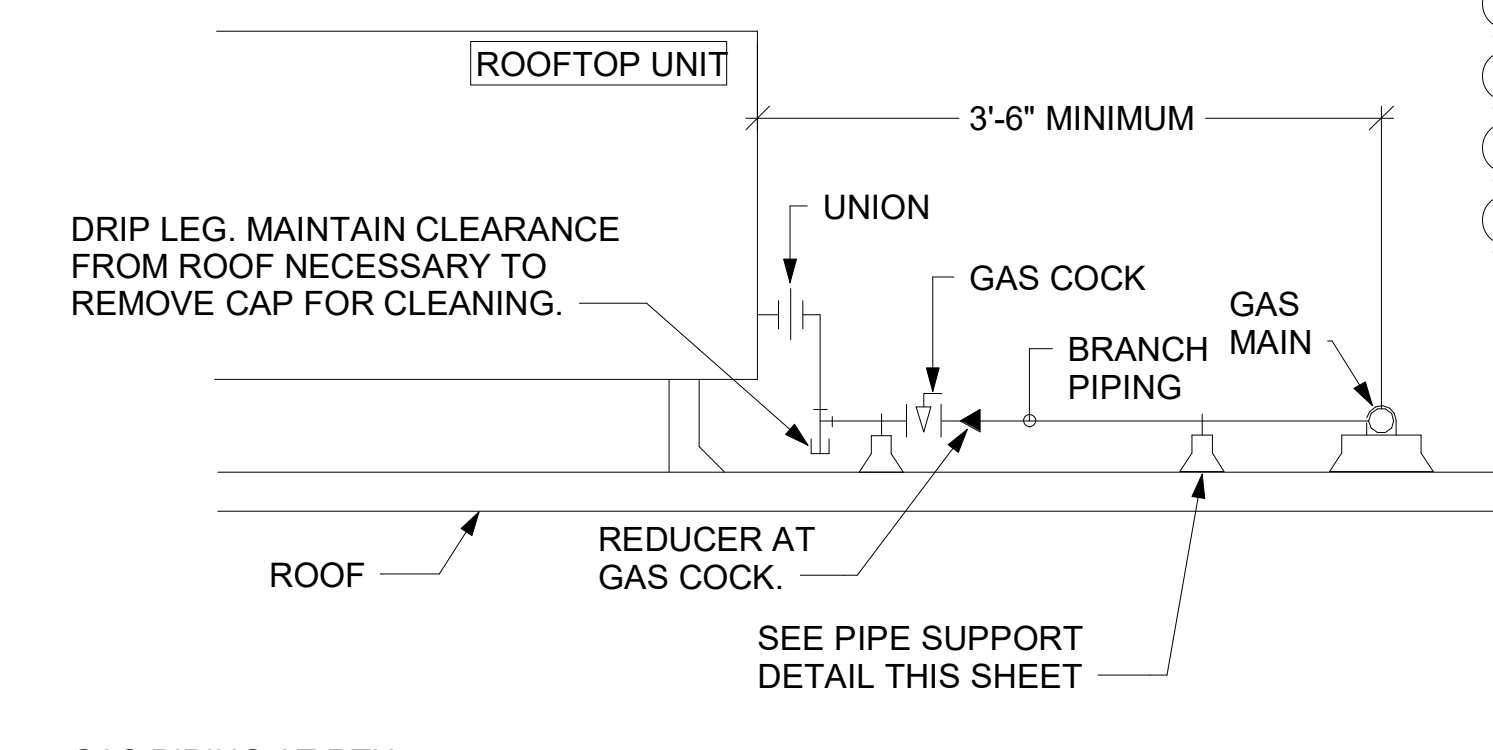
P-221

CONSTRUCTION

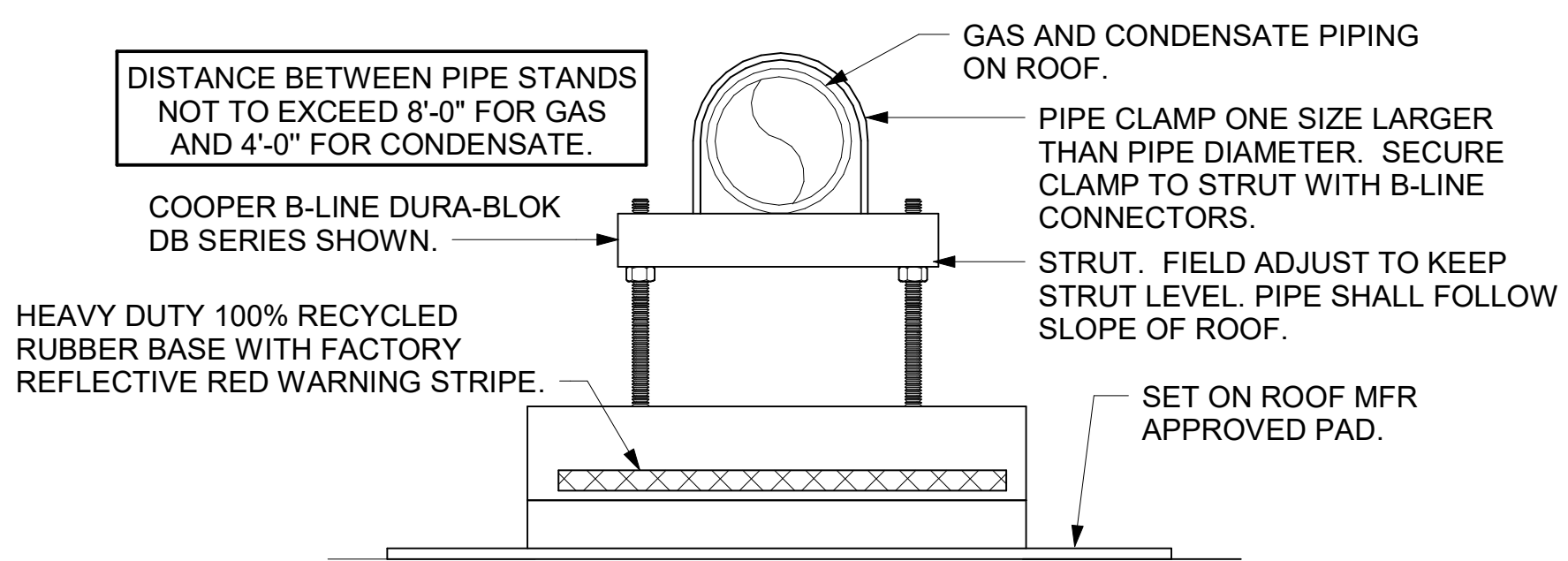
| 5. GAS CONNECTION SCHEDULE | |
|----------------------------|--|
| EQUIPMENT | GAS LOAD |
| AC#1 | 400,000 BTUS |
| AC#2 | 400,000 BTUS |
| AC#3 | 400,000 BTUS |
| GIH (6 @ 50,000 BTU EA.) | 300,000 BTUS |
| WATER HEATER | 125,000 BTUS |
| TOTAL CONNECTED LOAD | 1,625,000 BTUS |
| REMARKS: | 1) EQUIVALENT TO 1,625.0 CFH 2) 7" W.C. DELIVERY PRESSURE 3) DEVELOPED LENGTH: 200 FT (METER TO GIH) |



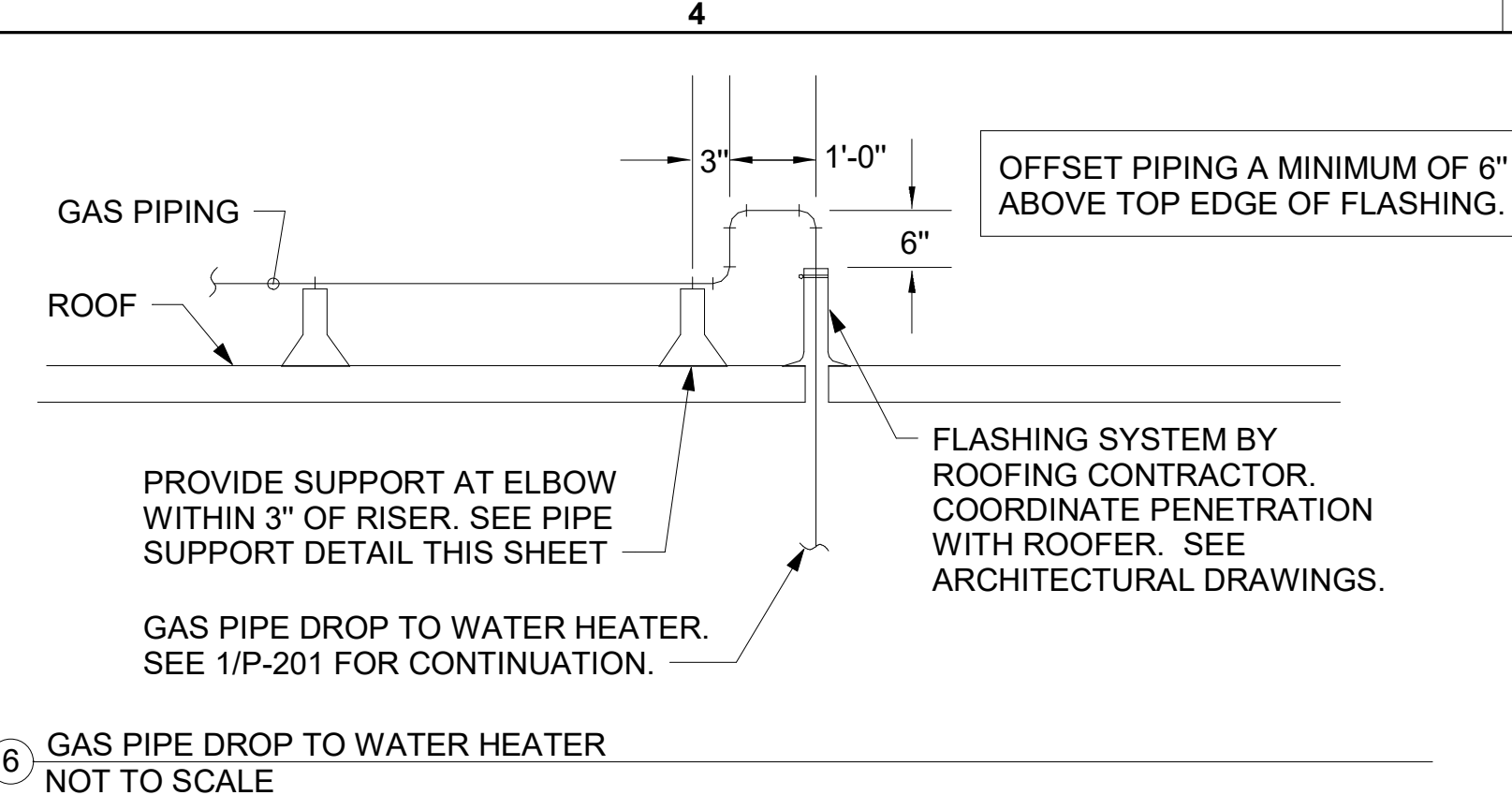
2) CONDENSATE DRAIN PIPING NOT TO SCALE



3) GAS PIPING AT RTU NOT TO SCALE



4) PIPING SUPPORT ON ROOF NOT TO SCALE



6) GAS PIPE DROP TO WATER HEATER NOT TO SCALE

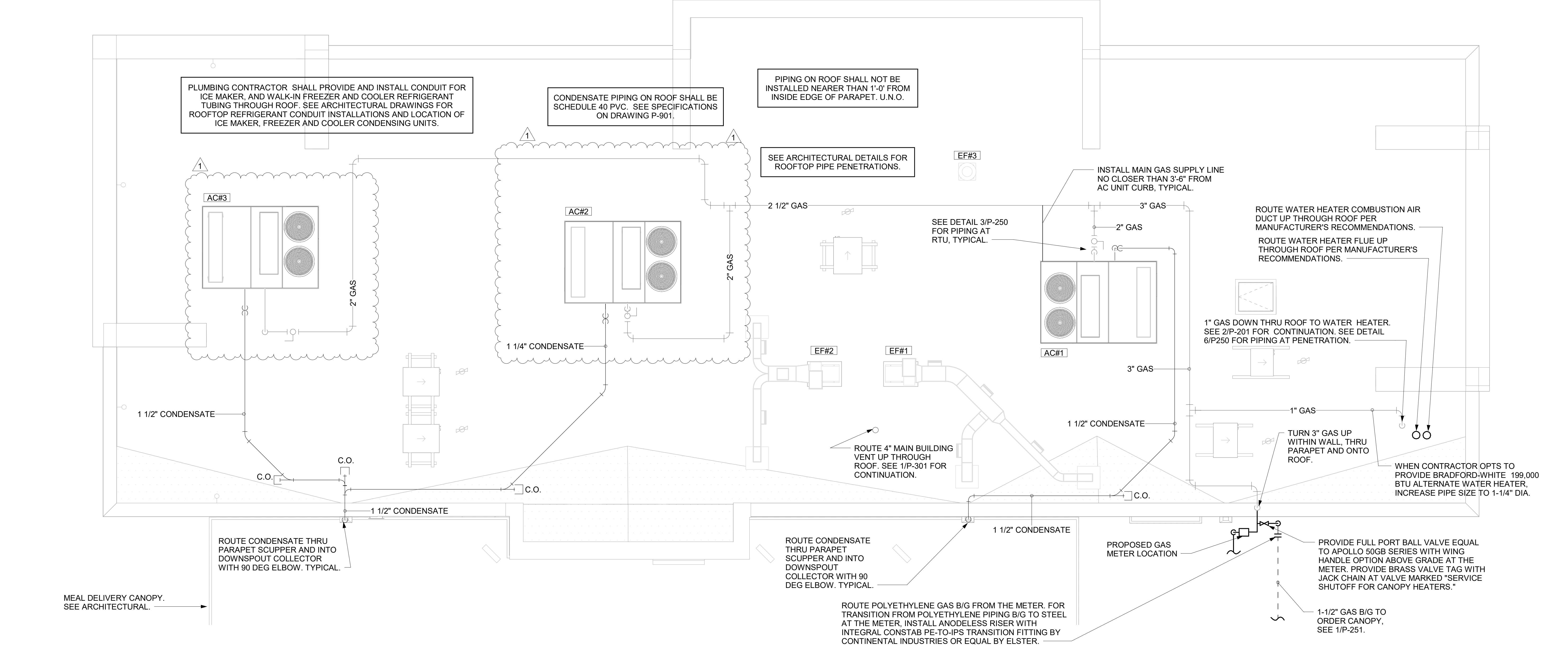
- NOTES:**
- NON ADJUSTABLE MODEL DB610 PIPE STAND TO BE USED FOR NON-ELEVATED PIPING INSTALLED FLAT ON ROOF DECK.
 - PROVIDE MODEL DBE 10-8 OR DBE 10-12 OR DBE 10-16 AS NEEDED FOR ELEVATING CONDENSATE PIPING TO MAINTAIN PROPER SLOPE AND FOR GAS PIPING CROSSING OVER CONDENSATE PIPING.
 - ENSURE GAS AND CONDENSATE PIPING DO NOT OBSTRUCT ROOFTOP EQUIPMENT ACCESS OPENINGS. RE-PIPING OF SYSTEMS DUE TO CONFLICTS WITH EQUIPMENT ACCESS OPENINGS SHALL BE DONE AT PLUMBING CONTRACTOR'S EXPENSE.

- NOTES:**
- INSTALL GAS PIPING SUCH THAT HVAC EQUIPMENT ACCESS PANELS AND/OR DOORS ARE IN NO WAY OBSTRUCTED BY PIPING, VALVES, OR SUPPORTS.
 - TO AVOID CONFLICT WITH AC UNIT ACCESS DORRS, INSTALL GAS PIPING NO CLOSER THAN 3'-6" FROM AC UNIT. (EXCEPT FOR BRANCH LINE CONNECTED TO AC UNIT.)
 - ROUTE BRANCH TAKE-OFF DIRECTLY FROM MAIN TO ROOFTOP UNIT AS SHOWN ON PLAN AND DETAILS WITHOUT LATERAL OFFSETS WHICH MAY OBSTRUCT UNIT ACCESS DOORS.

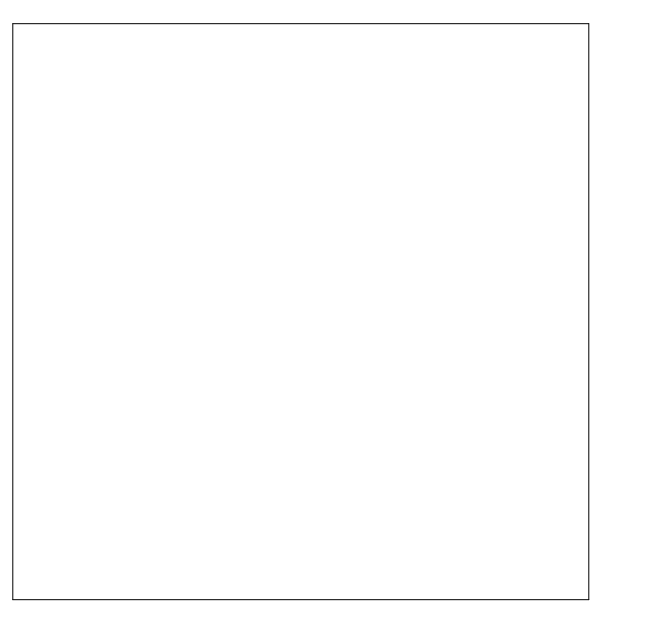
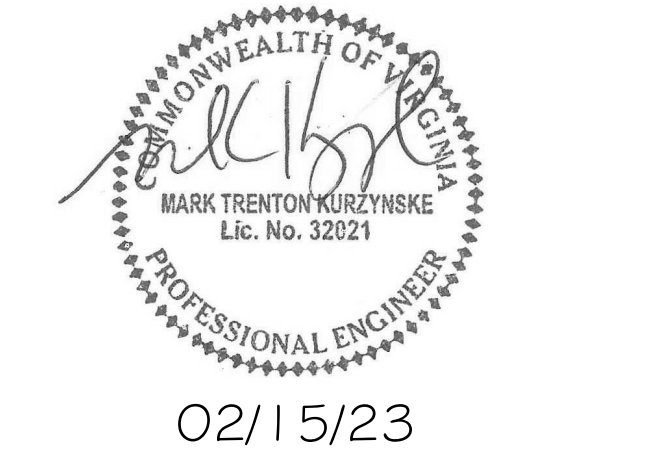
| LEGEND | | | |
|--------|-------------------------------|-----|-----------------------|
| GIH#1 | GAS INFRARED HEATER #1 (TYP.) | B/G | BELOW GRADE |
| --- | NEW GAS PIPING ABOVE GRADE | EC | ELECTRICAL CONTRACTOR |
| --- | NEW GAS PIPING BELOW GRADE | MC | MECHANICAL CONTRACTOR |

CANOPY GENERAL NOTES

- COORDINATE NEW WORK WITH EXISTING CONDUIT, STRUCTURE, AND PIPING. FIELD VERIFY EXISTING CONDITIONS PRIOR TO START OF WORK.
- COORDINATE LOCATION AND RESPONSIBILITIES FOR UNDERGROUND PIPING AND ASSOCIATED TRENCHING WITH GENERAL CONTRACTOR PRIOR TO START OF WORK.
- EXPOSED GAS PIPING SHALL BE PAINTED BY GENERAL CONTRACTOR.
- ACTUAL NUMBER OF GAS INFRARED HEATERS WILL BE DETERMINED BY SITE-SPECIFIC CANOPY LAYOUT AND EQUIPMENT LOCATIONS, AS INDICATED ON ARCHITECTURAL PLANS.



1) ROOF PIPING PLAN 1/4" = 1'-0"



CHICK-FIL-A
PRINCETON WOODS
 3330 PINE BLUFF DRIVE
 DUMFRIES, VA 22026

FSR#04916
 BUILDING TYPE / SIZE: P13 LSR LRG
 RELEASE: 22.05

| REVISION SCHEDULE | | |
|-------------------|------------|--------------------|
| NO. | DATE | DESCRIPTION |
| 1 | 09/21/2022 | BUILDING CHECKLIST |
| 3 | 12/12/2022 | CODE COMMENTS |

CONSULTANT PROJECT # 22050.EH.S
 PRINTED FOR CONSTRUCTION
 DATE 02/15/23
 DRAWN BY CAC

Information contained on this drawing and in all digital files produced for above named project may not be reproduced in any manner without express written or verbal consent from authorized project representatives.
ROOF PLAN AND DETAILS

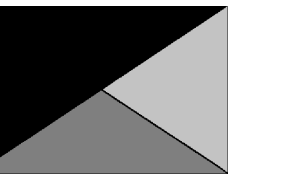
SHEET NUMBER
P-250

Autodesk Docs://VA_04916_Prinewood_Woods_2021.4_FSR04916_Prinewood_Woods_PLB.rvt
 2/13/2023 10:36:00 AM
 40-LSR-04916-P-250-ROOF PLAN AND DETAILS

CONSTRUCTION



Chick-fil-A
5200 Buffington Road
Atlanta, Georgia
30349-2998



**Kurzynske
& Associates**
2705 Lebanon Pike - Suite One
Nashville, Tennessee 37214
Telephone: (615) 255-5203



02/15/23

CHICK-FIL-A
PRINCETON WOODS
3330 PINE BLUFF DRIVE
DUMFRIES, VA 22026

FSR#04916

BUILDING TYPE / SIZE: P13 LSR LRG
RELEASE: 22.05

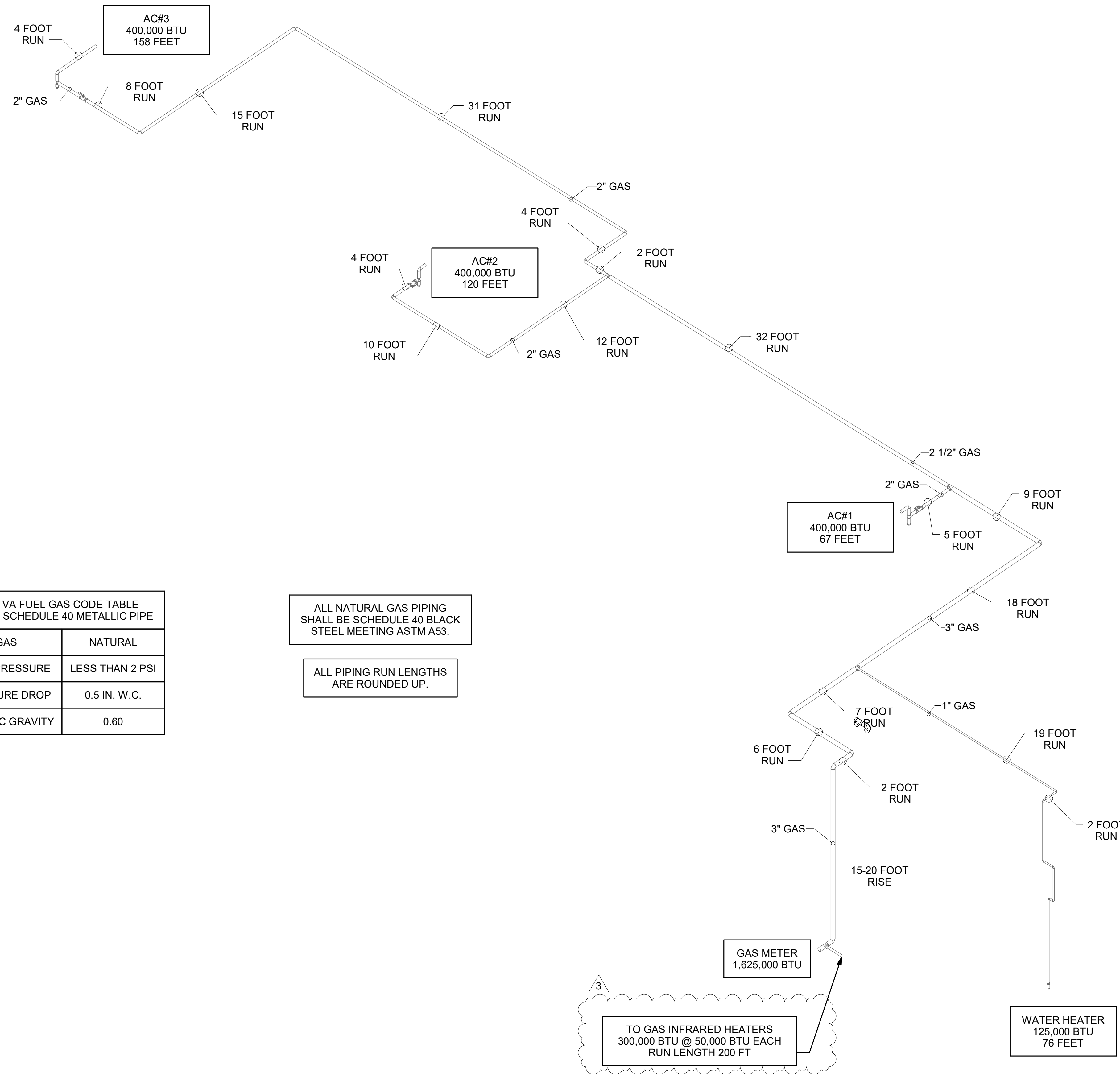
| REVISION SCHEDULE | | |
|-------------------|------------|---------------|
| NO. | DATE | DESCRIPTION |
| 3 | 12/12/2022 | CODE COMMENTS |

| | |
|----------------------|--------------|
| CONSULTANT PROJECT # | 22050.EH.S |
| PRINTED FOR | CONSTRUCTION |
| DATE | 02/15/23 |
| DRAWN BY | CAC |

Information contained on this drawing and in all digital files produced for above named project may not be reproduced in any manner without express written or verbal consent from authorized project representatives.

SHEET
GAS RISER

SHEET NUMBER
P-250R



| 2018 VA FUEL GAS CODE TABLE 402.4(2) SCHEDULE 40 METALLIC PIPE | |
|---|-----------------|
| GAS | NATURAL |
| INLET PRESSURE | LESS THAN 2 PSI |
| PRESSURE DROP | 0.5 IN. W.C. |
| SPECIFIC GRAVITY | 0.60 |

ALL NATURAL GAS PIPING SHALL BE SCHEDULE 40 BLACK STEEL MEETING ASTM A53.

ALL PIPING RUN LENGTHS ARE ROUNDED UP.

TO GAS INFRARED HEATERS
300,000 BTU @ 50,000 BTU EACH
RUN LENGTH 200 FT

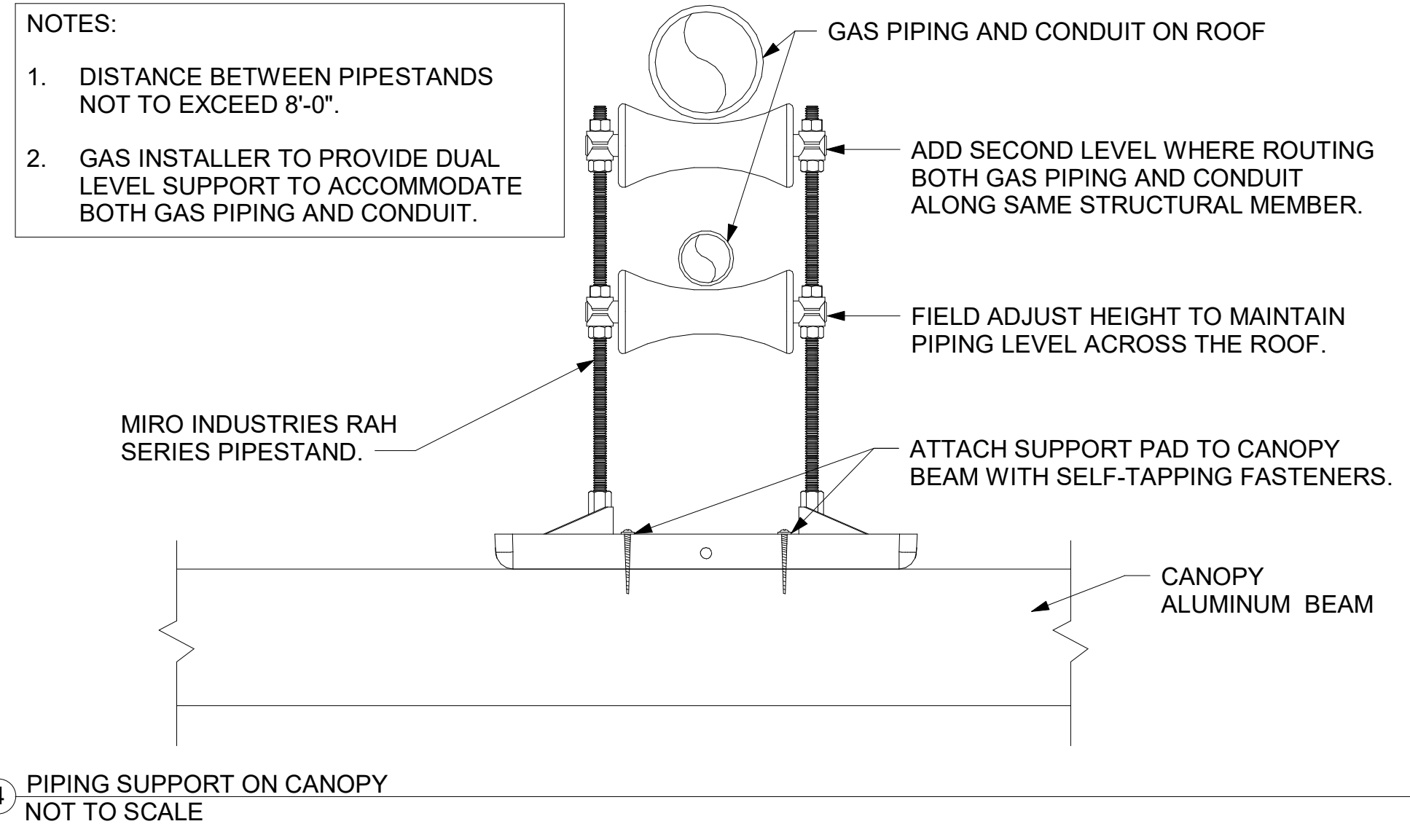
WATER HEATER
125,000 BTU
76 FEET

GAS METER
1,625,000 BTU

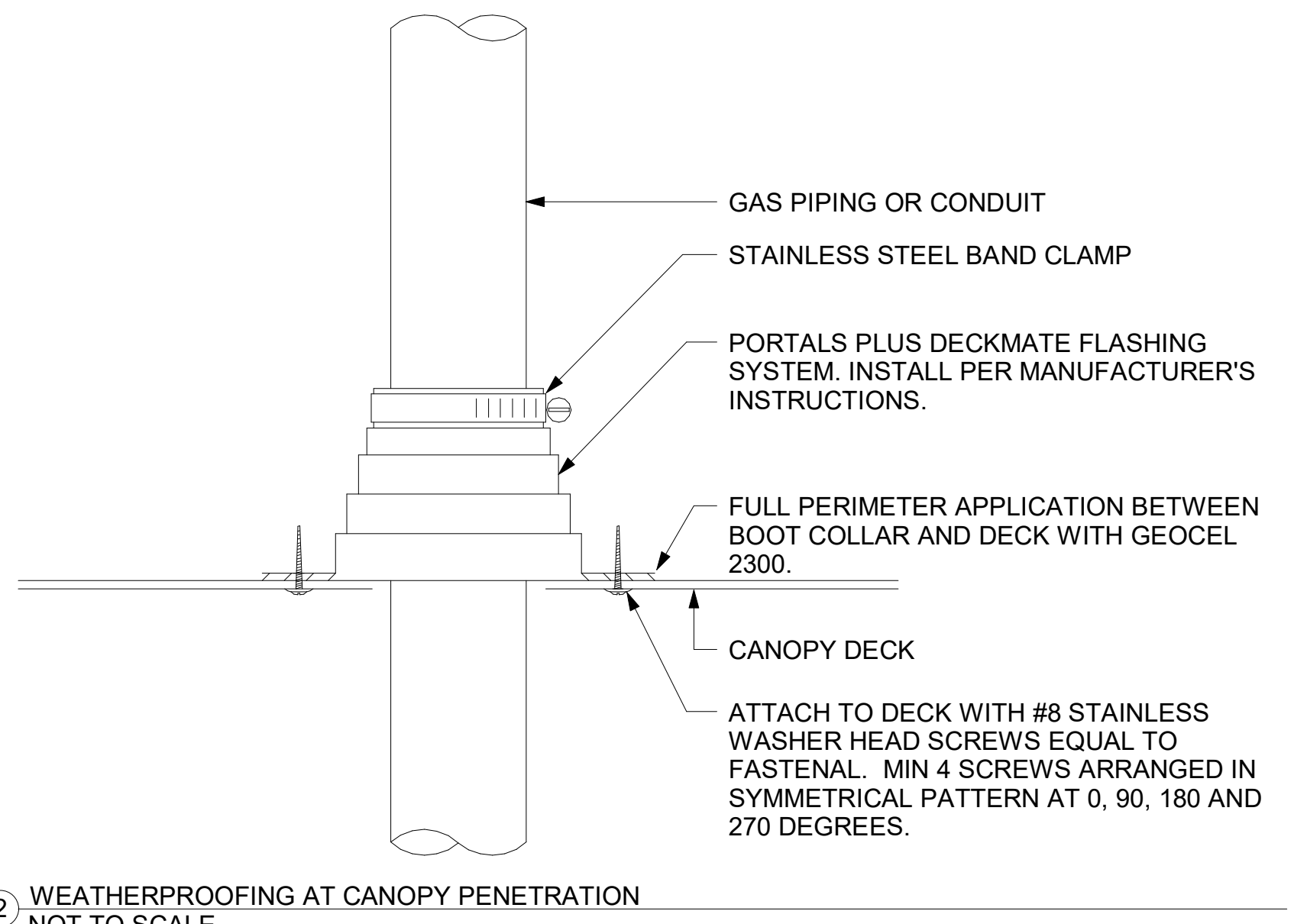
1 GAS RISER DIAGRAM

CONSTRUCTION

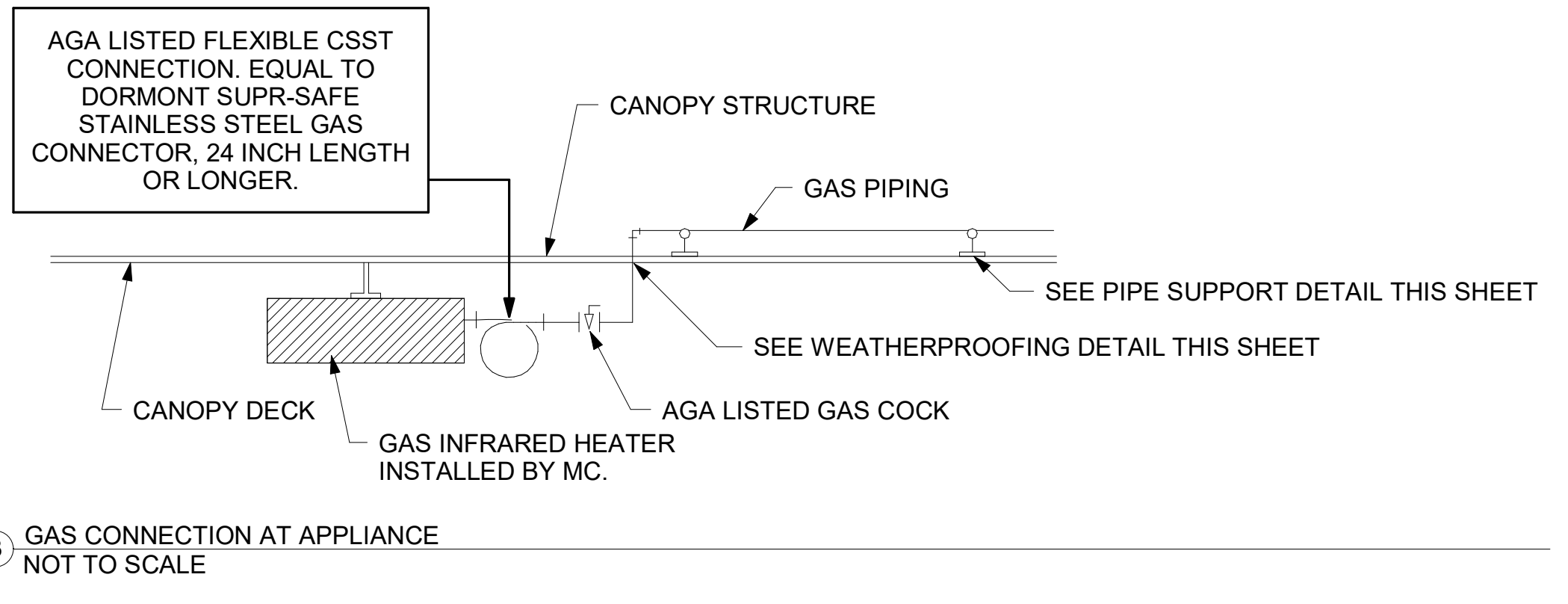
Autodesk Docs://VA_04916_Prineton Woods_2021.4_FSR04916_Prineton Woods_PLB.rvt
2/13/2023 10:36:01 AM
40-LSR-04916-P-250R-GAS RISER



④ PIPING SUPPORT ON CANOPY NOT TO SCALE



② WEATHERPROOFING AT CANOPY PENETRATION NOT TO SCALE



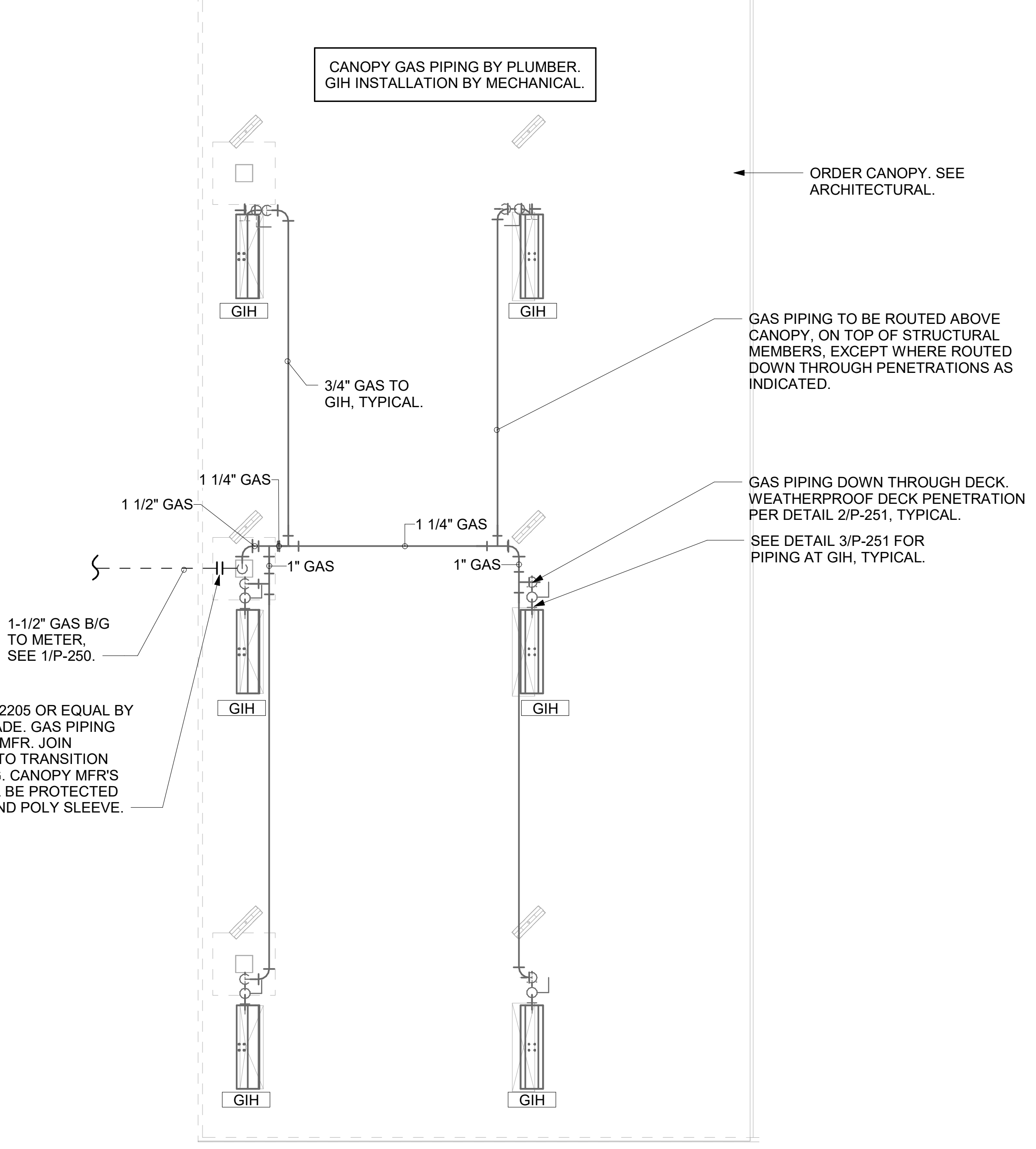
③ GAS CONNECTION AT APPLIANCE NOT TO SCALE

CANOPY GENERAL NOTES

- COORDINATE NEW WORK WITH EXISTING CONDUIT, STRUCTURE, AND PIPING. FIELD VERIFY EXISTING CONDITIONS PRIOR TO START OF WORK.
- COORDINATE LOCATION AND RESPONSIBILITIES FOR UNDERGROUND PIPING AND ASSOCIATED TRENCHING WITH GENERAL CONTRACTOR PRIOR TO START OF WORK.
- EXPOSED GAS PIPING SHALL BE PAINTED BY GENERAL CONTRACTOR.
- ACTUAL NUMBER OF GAS INFRARED HEATERS WILL BE DETERMINED BY SITE-SPECIFIC CANOPY LAYOUT AND EQUIPMENT LOCATIONS, AS INDICATED ON ARCHITECTURAL PLANS.

LEGEND

| | | | |
|-------|-------------------------------|-----|-----------------------|
| GIH#1 | GAS INFRARED HEATER #1 (TYP.) | B/G | BELOW GRADE |
| --- | NEW GAS PIPING ABOVE GRADE | EC | ELECTRICAL CONTRACTOR |
| --- | NEW GAS PIPING BELOW GRADE | MC | MECHANICAL CONTRACTOR |

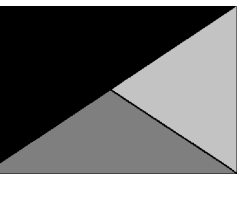


ATTACH GAS TRANSITION FITTING, ELSTER 702205 OR EQUAL BY GASTITE, TO GAS PIPE STUB-OUTS BELOW GRADE. GAS PIPING INSIDE COLUMN AND STUB-OUTS BY CANOPY MFR. JOIN UNDERGROUND POLYETHYLENE GAS PIPING TO TRANSITION FITTING WITH ELSTER PERMASERT COUPLING. CANOPY MFR'S EXPOSED STEEL PIPING BELOW GRADE SHALL BE PROTECTED WITH TWO COATS ASPHALTUM BASE PAINT AND POLY SLEEVE.

① ORDER CANOPY PIPING PLAN 1/4" = 1'-0"



Chick-fil-A
5200 Buffington Road
Atlanta, Georgia
30349-2998



Kurzynske & Associates
2705 Lebanon Pike - Suite One
Nashville, Tennessee 37214
Telephone: (615) 255-5203



02/15/23

CHICK-FIL-A
PRINCETON WOODS
3330 PINE BLUFF DRIVE
DUMFRIES, VA 22026

FSR#04916
BUILDING TYPE / SIZE: P13 LSR LRG
RELEASE: 22.05

| REVISION SCHEDULE | | |
|-------------------|------|-------------|
| NO. | DATE | DESCRIPTION |
| | | |

CONSULTANT PROJECT # 22050.EH.S
PRINTED FOR CONSTRUCTION
DATE 02/15/23
DRAWN BY CAC

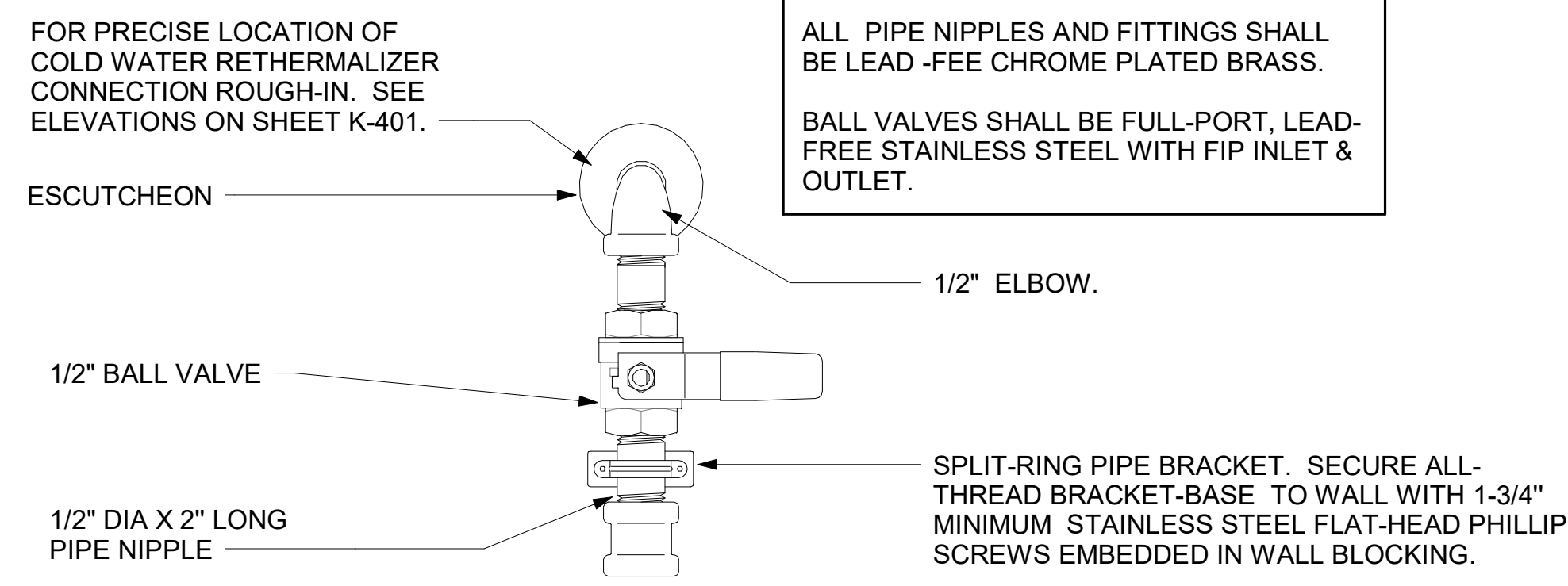
Information contained on this drawing and in all digital files produced for above named project may not be reproduced in any manner without express written or verbal consent from authorized project representatives.

SHEET CANOPY PLAN AND DETAILS

SHEET NUMBER

P-251

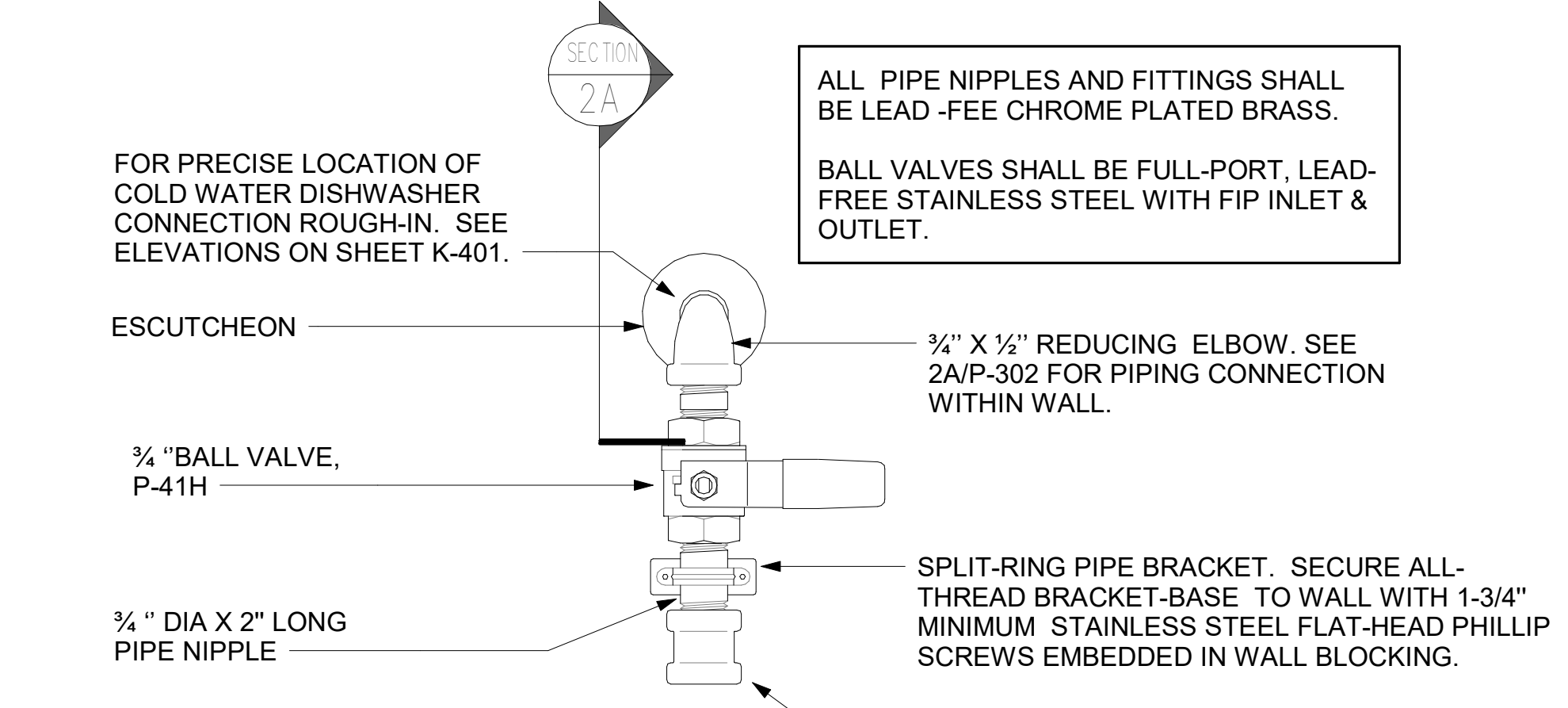
CONSTRUCTION



FOR PRECISE LOCATION OF COLD WATER RETHERMALIZER CONNECTION ROUGH-IN. SEE ELEVATIONS ON SHEET K-401.

ALL PIPE NIPPLES AND FITTINGS SHALL BE LEAD-FREE CHROME PLATED BRASS.
BALL VALVES SHALL BE FULL-PORT, LEAD-FREE STAINLESS STEEL WITH FIP INLET & OUTLET.

① RETHERMALIZER SUPPLY VALVE NOT TO SCALE

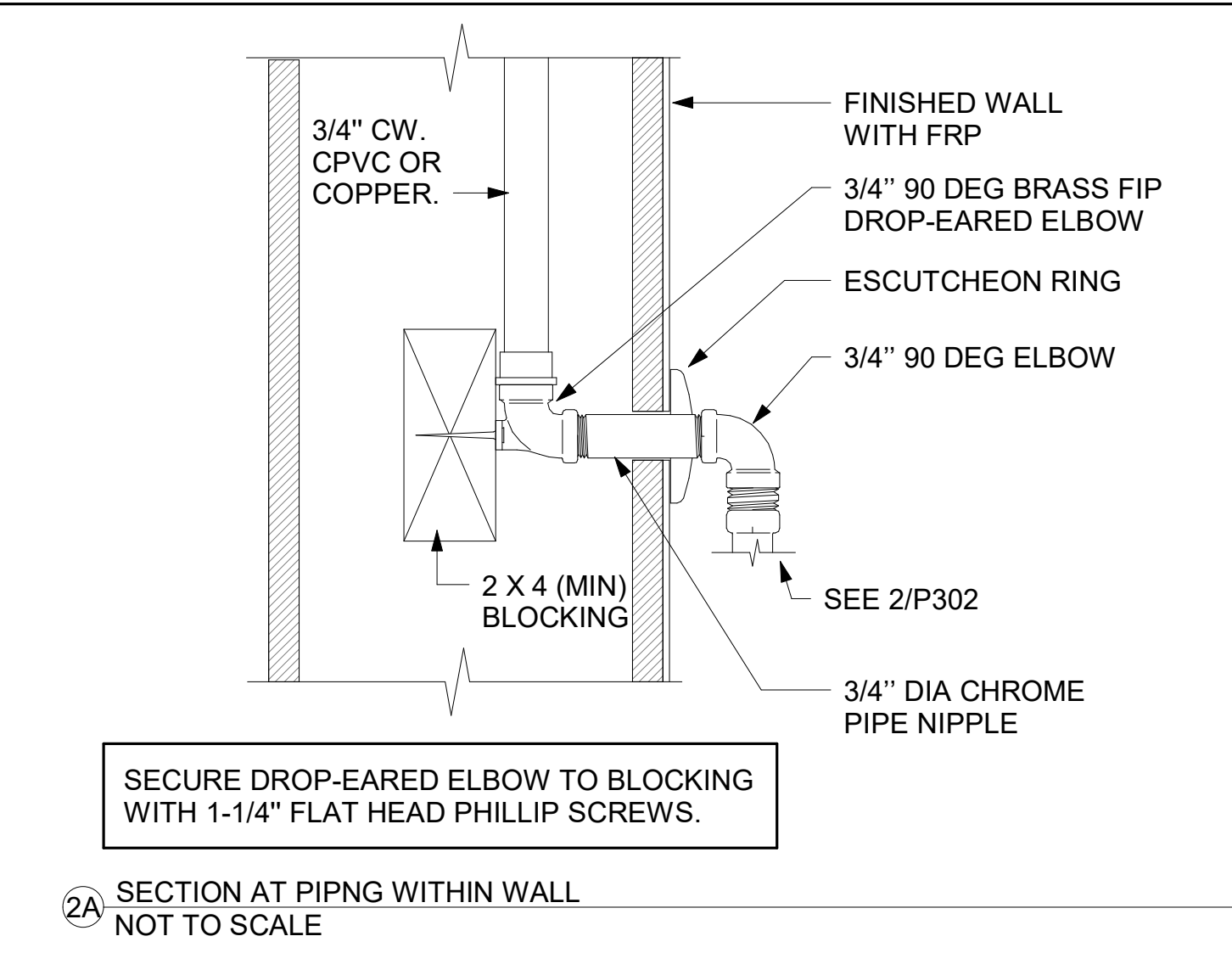


FOR PRECISE LOCATION OF COLD WATER DISHWASHER CONNECTION ROUGH-IN. SEE ELEVATIONS ON SHEET K-401.

ALL PIPE NIPPLES AND FITTINGS SHALL BE LEAD-FREE CHROME PLATED BRASS.
BALL VALVES SHALL BE FULL-PORT, LEAD-FREE STAINLESS STEEL WITH FIP INLET & OUTLET.

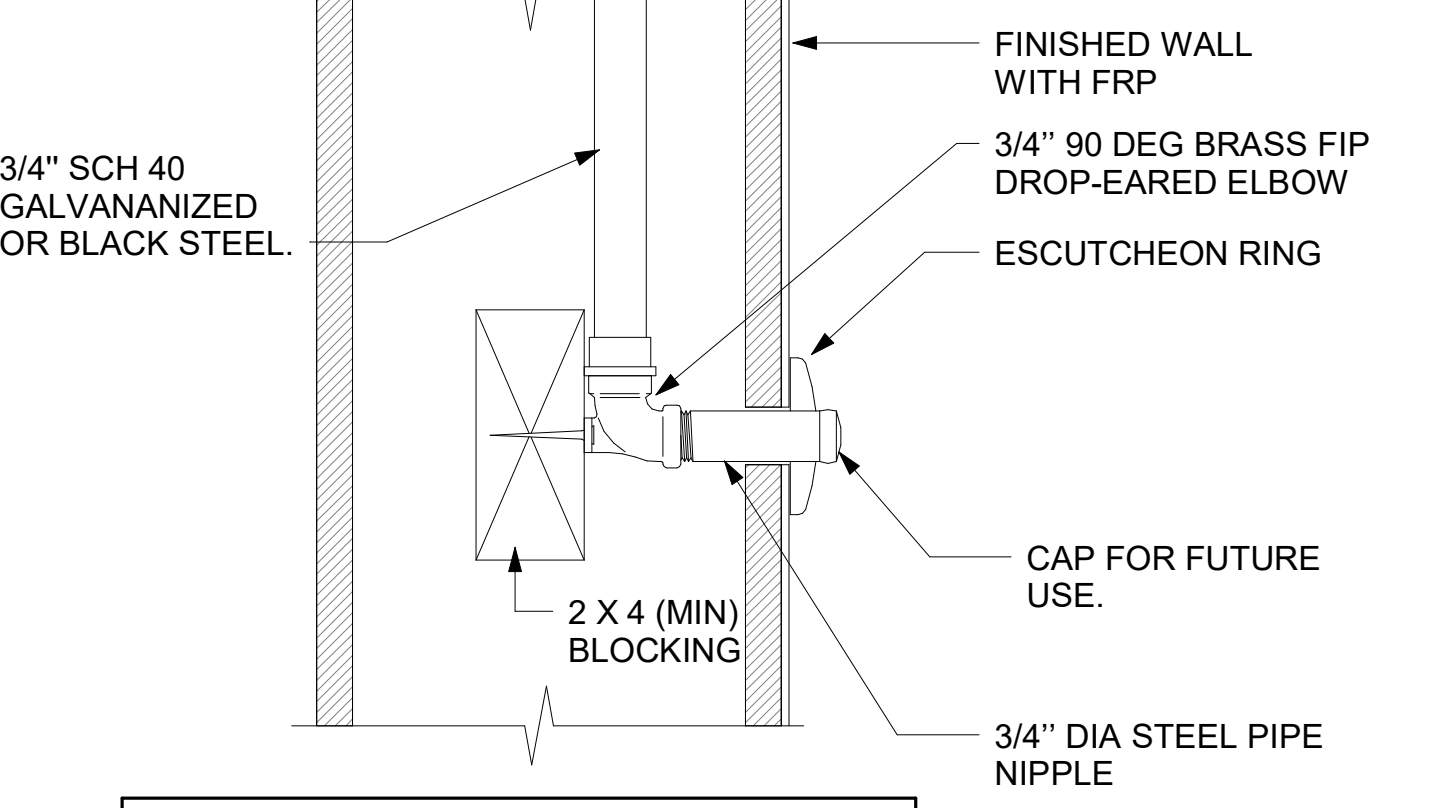
COORDINATE WALL BLOCKING LOCATION WITH GENERAL CONTRACTOR.
GENERAL CONTRACTOR TO PROVIDE AND INSTALL WALL BLOCKING SIM 2A/P-302.

② DISHWASHER SUPPLY VALVE ASSEMBLY-HOBART NOT TO SCALE



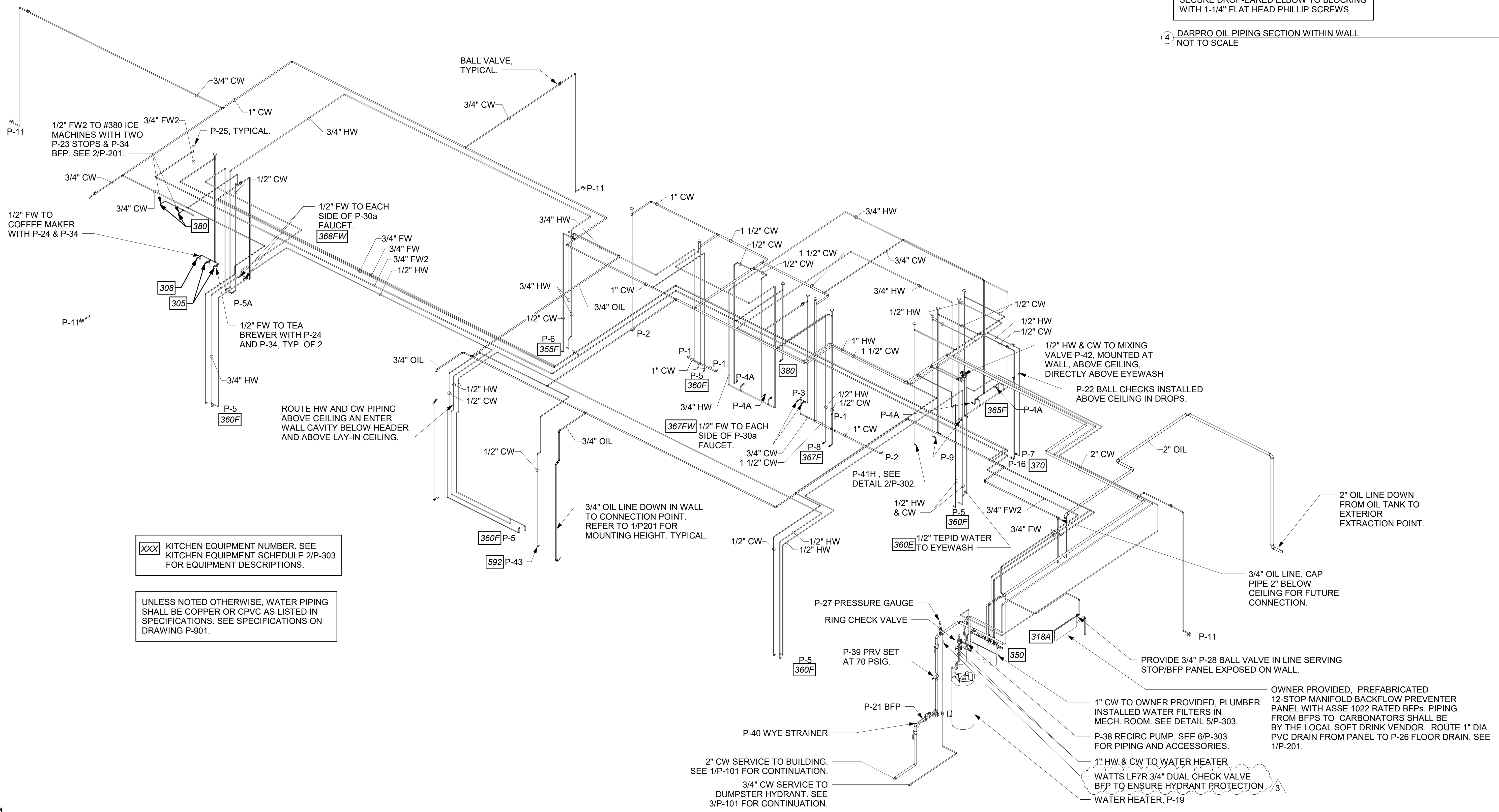
SECURE DROP-EARED ELBOW TO BLOCKING WITH 1-1/4\"/>

②A SECTION AT PIPING WITHIN WALL NOT TO SCALE



SECURE DROP-EARED ELBOW TO BLOCKING WITH 1-1/4\"/>

④ DARPRO OIL PIPING SECTION WITHIN WALL NOT TO SCALE



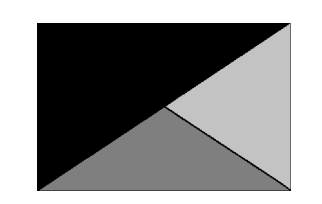
XXX KITCHEN EQUIPMENT NUMBER. SEE KITCHEN EQUIPMENT SCHEDULE 2/P-303 FOR EQUIPMENT DESCRIPTIONS.

UNLESS NOTED OTHERWISE, WATER PIPING SHALL BE COPPER OR CPVC AS LISTED IN SPECIFICATIONS. SEE SPECIFICATIONS ON DRAWING P-901.

① WATER RISER DIAGRAM



Chick-fil-A
5200 Buffington Road
Atlanta, Georgia
30349-2998



Kurzynske & Associates
2705 Lebanon Pike - Suite One
Nashville, Tennessee 37214
Telephone: (615) 255-5203



02/15/23

CHICK-FIL-A
PRINCETON WOODS
3330 PINE BLUFF DRIVE
DUMFRIES, VA 22026

FSR#04916
BUILDING TYPE / SIZE: P13 LSR LRG
RELEASE: 22.05

| REVISION SCHEDULE | | |
|-------------------|------------|---------------|
| NO. | DATE | DESCRIPTION |
| 3 | 12/12/2022 | CODE COMMENTS |

| CONSTRUCTION | |
|--------------|--------------|
| PRINTED FOR | CONSTRUCTION |
| DATE | 02/15/23 |
| DRAWN BY | CAC |

Information contained on this drawing and in all digital files produced for above named project may not be reproduced in any manner without express written or verbal consent from authorized project representatives.

SHEET WATER RISER DIAGRAM

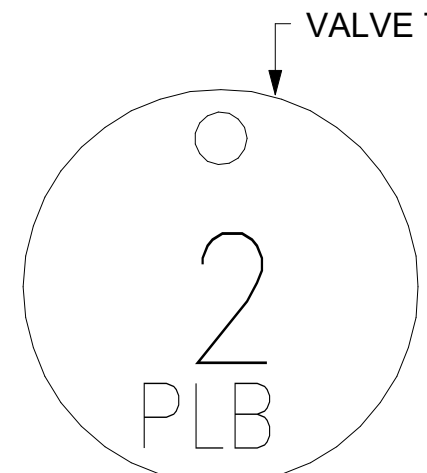
SHEET NUMBER **P-302**

Autodesk Docs://VA_04916_Princkton Woods_2021.4_FSR04916_Princkton Woods_PLB.rvt
2/13/2023 10:36:07 AM
40-LSR-04916-P-302-WATER RISER DIAGRAM

| VALVE TAG LEGEND | |
|---------------------------------|-----------------|
| VALVE | VALVE POSITION |
| ① MAIN WATER SHUT-OFF | NORMALLY OPEN |
| ② MAIN DRAIN | NORMALLY CLOSED |
| ③ ACCESSORY SHUT-OFF | NORMALLY OPEN |
| ④ WATER FILTER INLET | NORMALLY OPEN |
| ⑤ RECIRC PUMP ISOLATION VALVE | NORMALLY OPEN |
| ⑥ WATER HEATER INLET | NORMALLY OPEN |
| ⑦ RESTROOM & KITCHEN COLD WATER | NORMALLY OPEN |
| ⑧ POST HYDRANT COLD WATER | NORMALLY OPEN |
| ⑨ GAS TO WATER HEATER | NORMALLY OPEN |
| ⑩ WATER HEATER OUTLET | NORMALLY OPEN |

NOTE: HANDLE IN-LINE WITH PIPING = VALVE OPEN

LAMINATE VALVE TAG LEGEND AND MOUNT PERMANENTLY WHERE SHOWN ON WATER HEATER DETAIL IN AN ALUMINUM FRAME EQUAL TO SETON #68624.



② VALVE TAG SYMBOL AS SHOWN ON DETAIL 6/P-303. PROVIDE 1-1/2" ROUND BRASS VALVE TAG WITH 1/2" HIGH BLACK FILLED LETTERING. EACH TAG SHALL INDICATE VALVE NUMBER AND WILL ALSO HAVE "PLBG" STAMPED ON THE TAG IN 1/4" HIGH BLACK FILLED LETTERING EQUAL TO SETON #M4506. HANG WITH BRASS JACK CHAIN ON VALVE HANDLE.

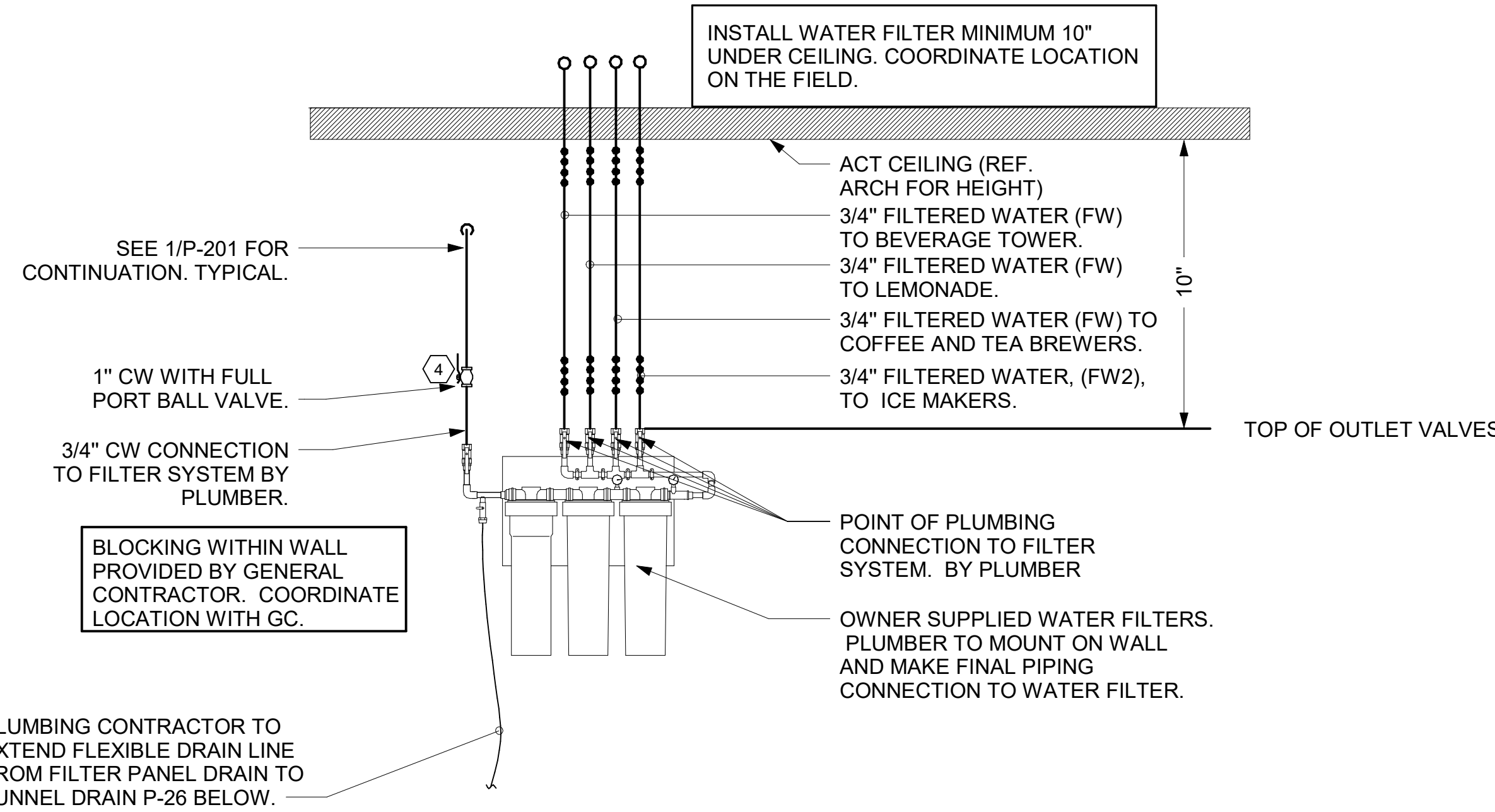
③ VALVE TAGS AND LEGEND NOT TO SCALE

| 2. KITCHEN EQUIPMENT SCHEDULE | | | | | | | |
|-------------------------------|---------------------------|----------|----------|----------|----------|-------------------|--|
| TAG | DESCRIPTION | FW | FW2 | CW | HW | WASTE | ROUGH-IN |
| 305 | TEA BREWER | 1/2" | X | X | X | X | P-24, SEE K-611 & 6/P-211 |
| 308 | COFFEE MAKER | 1/2" | X | X | X | X | P-24, SEE K-611 & 6/P-211 |
| 318A | CARBONATOR BFP PANEL | 3/4" | X | X | X | X | P-28, SEE K-611 |
| 350 | WATER FILTER PANEL | (3) 3/4" | 3/4" | 3/4" | X | X | SEE DET 5/P-303 |
| 360E | EMERGENCY EYEWASH STATION | X | X | 1/2" | 1/2" | X | *1/2" TEPID WATER FROM P-42, SEE K-611 & 1/P-201 |
| 363 | DISHWASHER | X | X | 3/4" | X | INDIRECT TO P-13A | P-41, SEE K-611 & 1/P-201 |
| 365 | POT SINK | X | X | (2) 1/2" | (2) 1/2" | INDIRECT | TWO #365F FAUCETS, P-9 SEE K-611 |
| 367 | VEGETABLE PREP SINK | X | X | 1/2" | 1/2" | INDIRECT | #367F FAUCET, P-8 SEE K-611 |
| 367FW | FILTERED WATER FAUCET | (2) 1/2" | X | X | X | X | P-30 48" AFF. |
| 368FW | FILTERED WATER FAUCET | (2) 1/2" | X | X | X | X | P-30 48" AFF. |
| 370 | MOP SINK | X | X | 1/2" | 1/2" | 3" P-35 | P-7 SEE K-611 |
| 380 | ICE MAKER | X | (3) 1/2" | X | X | INDIRECT | P-23 SEE K-611 & 3/P-201 |
| 381 | ICE BIN (1 HEAD) | X | X | X | X | INDIRECT | SEE DET 3/P-201 |
| 384 | ICE BIN (2 HEAD) | X | X | X | X | INDIRECT | SEE DET 3/P-201 |
| 592 | RETHEMALIZER | X | X | 1/2" | X | INDIRECT | P-43 SEE DET 3/P-302 |

1. FIXTURE CONNECTION SCHEDULE

| MARK | FIXTURE | FW | FW2 | CW | HW | WASTE |
|-------|---|----------|-------------|----------|----------|------------|
| P-1 | WATER CLOSET - FLOOR MOUNT (1.28 GPF) | X | X | 1" | X | 3" |
| P-2 | WATER CLOSET - ADA FLOOR MOUNT (1.28 GPF) | X | X | 1" | X | 3" |
| P-3 | URINAL - ADA WALL HUNG (0.125 GPF) | X | X | 3/4" | X | 2" |
| P-4A | LAVATORY - ADA COUNTERTOP (0.50 GPM) | X | X | 1/2" | 1/2" | 1-1/4" |
| P-5 | KITCHEN HAND SINK - WALL HUNG (0.5 GPM) | X | X | 1/2" | 1/2" | 1-1/2" |
| P-5A | KITCHEN DUMP SINK - WALL HUNG (1.0 GPM) | X | X | 1/2" | 1/2" | 1-1/2" |
| P-6 | SINGLE CUP SINK - COUNTERTOP (1.0 GPM) | X | X | 1/2" | 1/2" | 1-1/2" |
| P-7 | MOP SINK | X | X | 1/2" | 1/2" | 3" |
| P-8 | VEGETABLE PREP SINK (1.0 GPM SPRAYER) | X | X | 1/2" | 1/2" | (2) 1-1/2" |
| P-9 | POT SINK (1.0 GPM SPRAYER) | X | X | (2) 1/2" | (2) 1/2" | (4) 1-1/2" |
| P-10 | FLOOR DRAIN (ROUND TOP) | X | X | X | X | 3" |
| P-11 | WALL HYDRANT (NON FREEZE) | X | X | 3/4" | X | X |
| P-12 | FUNNEL DRAIN (3") | X | X | X | X | 3" |
| P-13A | FLOOR SINK (4") 12" TOP | X | X | X | X | 4" |
| P-13B | FLOOR SINK (3") 8" TOP | X | X | X | X | 3" |
| P-14 | CLEANOUT INSIDE BUILDING | X | X | X | X | SEE PLAN |
| P-15 | CLEANOUT OUTSIDE BUILDING | X | X | X | X | SEE PLAN |
| P-16 | 3-WAY VALVE/VACUUM BREAKER | X | X | 3/4" | 3/4" | X |
| P-17 | VACUUM RELIEF VALVE | X | X | 3/4" | X | X |
| P-18 | EXPANSION TANK | X | X | 3/4" | X | X |
| P-19 | WATER HEATER | X | X | 1" | 1" | X |
| P-20 | THERMOMETER | X | X | X | 1/2" | X |
| P-21 | BACKFLOW PREVENTER | X | X | 1-1/2" | X | X |
| P-22 | MOP SINK CHECK VALVES | X | X | 1/2" | 1/2" | X |
| P-23 | UTILITY CONNECTION (ICE MAKER) | X | 1/2" | X | X | X |
| P-24 | UTILITY CONNECTION (COFFEE & TEA) | 1/2" | X | X | X | X |
| P-25 | SHOCK ABSORBER | 1/2" | 1/2" & 3/4" | 1/2" | 1/2" | X |
| P-26 | FUNNEL DRAIN | X | X | X | X | 3" |
| P-26A | TRAP SEAL PROTECTOR | X | X | X | X | 3" |
| P-27 | WATER PRESSURE GAUGE | X | X | 1/4" | X | X |
| P-28 | BALL VALVE-CARBONATOR STOP/BFP PANEL | 3/4" | X | X | X | X |
| P-29A | ICE MACHINE TRENCH DRAIN | X | X | X | X | 3" |
| P-29B | ICE MACHINE TRENCH DRAIN | X | X | X | X | 3" |
| P-30a | FILTERED WATER FAUCET | (2) 1/2" | X | X | X | X |
| P-31 | DUMPSTER POST HYDRANT | X | X | 3/4" | X | X |
| P-33 | TRAP PRIMER (MECHANICAL TYPE) | X | X | 1/2" | X | X |
| P-34 | DISPENSER BACKFLOW PREVENTER | 1/2" | X | X | X | X |
| P-35 | FLOOR DRAIN | X | X | X | X | 3" |
| P-36 | BEVERAGE TOWER INDIRECT RECEIVER | X | X | X | X | 3" |
| P-37 | FLOOR DRAIN (SQUARE TOP) | X | X | X | X | 3" |
| P-38 | HOT WATER CIRCULATING PUMP | X | X | X | 1/2" | X |
| P-39 | PRESSURE REDUCING VALVE | X | X | 2" | X | X |
| P-40 | WYE STRAINER | X | X | 2" | X | X |
| P-41H | DISHWASHER SUPPLY VALVE - HOBART | X | X | 3/4" | X | X |
| P-42 | EMERGENCY EYEWASH MIXING VALVE | X | X | 1/2" | 1/2" | X |
| P-43 | RETHEMALIZER SUPPLY VALVE | X | X | 3/4" | X | X |

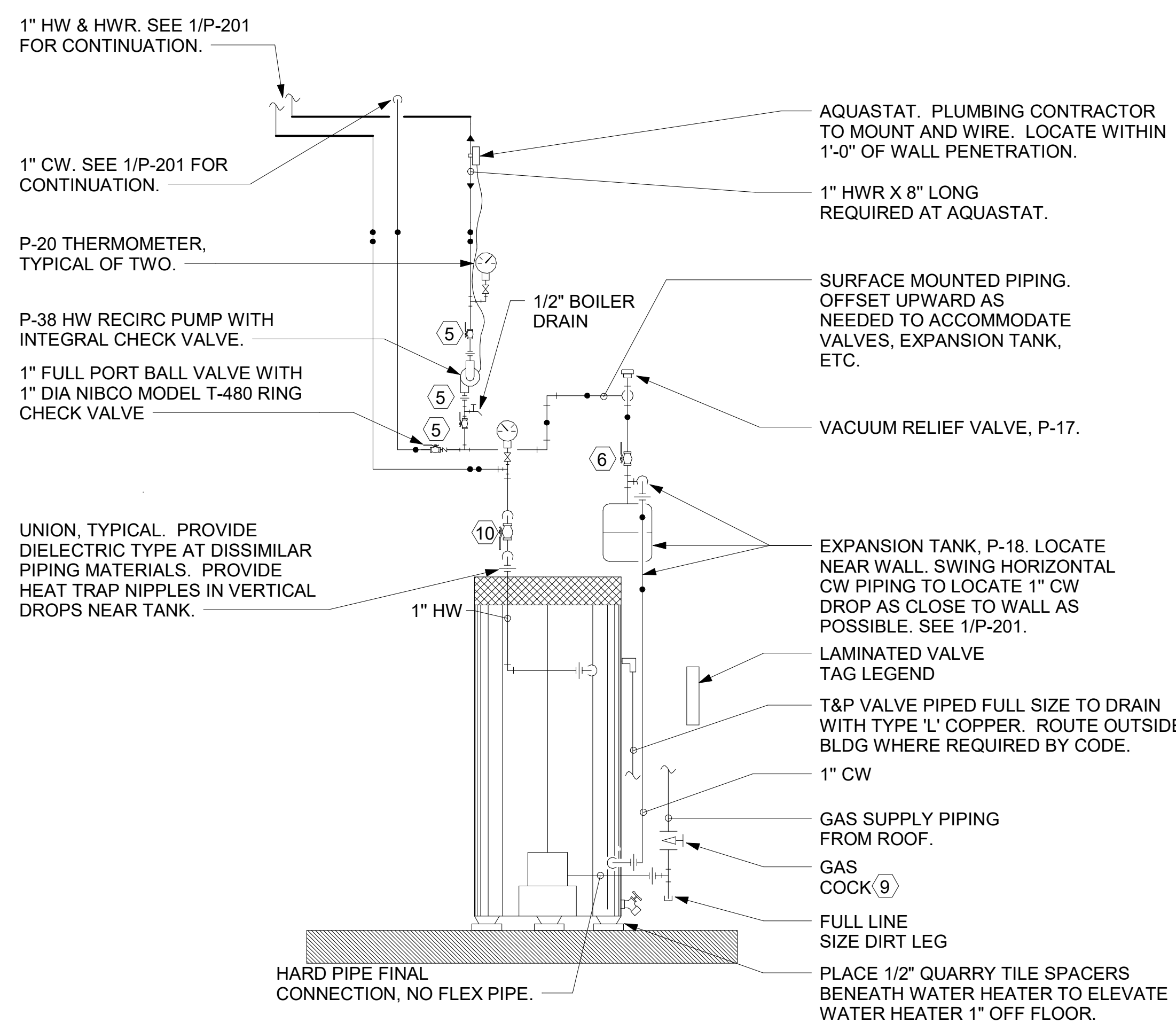
NOTES: ① REFER TO FOOD SERVICE DRAWINGS FOR KITCHEN EQUIPMENT INSTALLATION AND HOOK-UP RESPONSIBILITIES.
② DO NOT MANIFOLD POT OR PREP SINK DRAINS TOGETHER UNLESS ALLOWED BY LOCAL AUTHORITY.



⑤ PIPING AT WATER FILTER NOT TO SCALE

NOTES TO WATER HEATER INSTALLER:

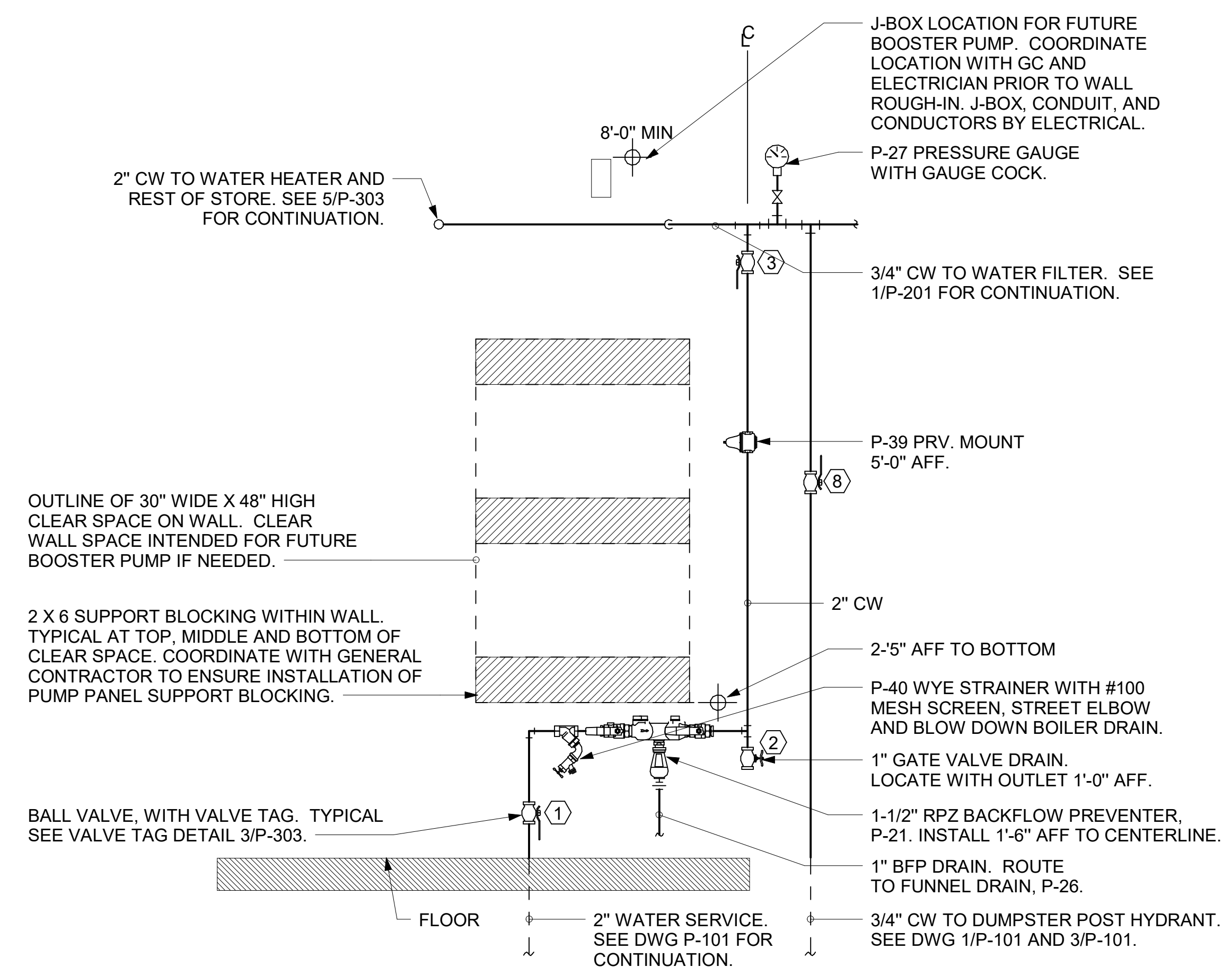
- POSITION VALVES AND TRIM SUCH THAT VALVES AND TRIM ARE UNOBSTRUCTED TO VIEW AND SO THAT ACCESS FOR OPERATION OR REPAIR IS POSSIBLE WITHOUT USE OF STEP LADDERS OR NEED TO DISASSEMBLE ANY COMPONENTS.
- VENT HEATER UP THRU ROOF AND PROVIDE FRESH AIR PIPING PER MANUFACTURER'S RECOMMENDATIONS.



⑥ PIPING AT WATER HEATER NOT TO SCALE

NOTE OF SPECIAL IMPORTANCE

- LOCATIONS OF 2" CW RISER AND CLEAR SPACE ARE DIMENSIONED BECAUSE THEY ARE CRITICAL FOR THE FUTURE PUMP PANEL INSTALLATION.
- GENERAL CONTRACTOR SHALL ENSURE OTHER TRADES SHALL NOT INSTALL ANY OTHER BUILDING COMPONENT WITHIN CLEAR SPACE OR WITHIN 10" OF EDGES.

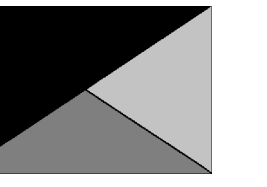


④ PIPING AT WATER SERVICE ENTRANCE IN MECHANICAL ROOM NOT TO SCALE



Chick-fil-A

Chick-fil-A
5200 Buffington Road
Atlanta, Georgia
30349-2998



Kurzynski & Associates
2705 Lebanon Pike - Suite One
Nashville, Tennessee 37214
Telephone: (615) 255-5203



02/15/23

CHICK-FIL-A
PRINCETON WOODS
3330 PINE BLUFF DRIVE
DUMFRIES, VA 22026

FSR#04916
BUILDING TYPE / SIZE: P13 LSR LRG
RELEASE: 22.05

REVISION SCHEDULE

| NO. | DATE | DESCRIPTION |
|-----|------|-------------|
| | | |

CONSULTANT PROJECT # 22050.EH.S
PRINTED FOR CONSTRUCTION
DATE 02/15/23
DRAWN BY CAC

Information contained on this drawing and in all digital files produced for above named project may not be reproduced in any manner without express written or verbal consent from authorized project representatives.

SHEET
DETAILS AND SCHEDULES

SHEET NUMBER
P-303

CONSTRUCTION

1. SECTION C15100 - PLUMBING SPECIFICATIONS

PART I - PRODUCTS (C15100)

1.01 GENERAL REQUIREMENTS

A. THE FOLLOWING SPECIFICATIONS ARE THE MINIMUM REQUIREMENT. WHERE FEDERAL, STATE OR LOCAL REQUIREMENTS DIFFER FROM THIS SPECIFICATION, THE MORE STRINGENT OF THE TWO SHALL BE FOLLOWED.

1.02 SCOPE

- A. HOT AND COLD POTABLE WATER PIPING ABOVE SLAB SHALL BE TYPE 'L' HARD DRAWN COPPER OR FLOWGUARD GOLD CPVC AS MANUFACTURED BY NIBCO OR CHARLOTTE PIPE & FOUNDRY AND MEETING ASTM D-2846. FILTERED WATER PIPING SHALL BE FLOWGUARD GOLD CPVC. HOT AND COLD PIPING WITHIN WALLS BEHIND KITCHEN HOODS SHALL BE COPPER.
- B. POTABLE WATER PIPING BELOW SLAB AND OUTSIDE BELOW GRADE SHALL BE TYPE "K" SOFT ANNEALED SEAMLESS. NO JOINTS SHALL BE ALLOWED BELOW SLAB. POTABLE WATER PIPING BELOW GRADE SHALL BE SLEEVED FOR ITS ENTIRE LENGTH WITH POLY SLEEVE AS MADE BY IPS WATER-TITE. ALL SLAB PENETRATIONS SHALL BE SLEEVED WITH POLY SLEEVE TO PROTECT PIPING FROM CORROSION BY CONCRETE.
- C. COPPER PIPE FITTINGS SHALL BE WROUGHT COPPER SWEEP PATTERN FITTINGS SOLDERED USING 95-5 LEAD-FREE SOLDER MEETING ASTM B-32 OR BRAZED WITH SIL-FOS. SOLDER FLUXES SHALL MEET ASTM B-813 AND SHALL BE LEAD FREE. BRAZING FLUXES SHALL MEET AWS FB3-A OR FB3-C.
- D. WATER PIPING DOWNSTREAM OF SOFT DRINK CARBONATORS SHALL BE PROVIDED AND INSTALLED BY LOCAL SOFT DRINK VENDOR.
- E. CPVC FITTINGS FOR PIPING SHALL BE SOLVENT WELD TYPE MEETING ASTM D-2846 WITH CEMENTS MEETING ASTM F-493 AND PRIMER MEETING ASTM F-656. CURE TIME MUST COMPLY WITH MANUFACTURER'S RECOMMENDATIONS. FOR CPVC PIPING INSTALLATION, WALL STUBS AT FIXTURES AND EQUIPMENT SHALL BE COPPER AND SHALL BE SERIES 630-C. CPVC-TO-COPPER STUB OUT ELBOWS BY SIOUX CHIEF.
- F. NIPPLES, ELBOWS, AND OTHER ACCESSORY FITTINGS REQUIRED TO COMPLETE ANY WATER PIPING CONNECTION SHALL BE BRASS OR OF SIMILAR TYPE METAL AS THE FITTING TO WHICH IT IS CONNECTED. GALVANIZED FITTINGS ARE PROHIBITED. (EXCEPTION: GALVANIZED HEAT TRAP WATER HEATER NIPPLES IF INTERNALLY PROTECTED WITH TEFLON OR POLYMER CORROSION-RESISTANT COATING.)
- G. ALL HVAC CONDENSATE PIPING SHALL BE SCHEDULE 40 PVC DWV AS MANUFACTURED BY CHARLOTTE PIPE AND MEETING ASTM D-1784, D-1785 AND D-2665.
- H. U.N.O., ALL SANITARY WASTE, VENT, STORM DRAINAGE PIPING AND FITTINGS INSIDE THE BUILDING, ABOVE AND BELOW GRADE, AND FOR ROOFTOP CONDENSATE, SHALL BE SOLID WALL SCHEDULE 40 PVC DWV AS MANUFACTURED BY CHARLOTTE PIPE AND MEETING ASTM D-2665 AND D-2949. FOAM CORE AND/OR CELLULAR CORE PVC PIPING SHALL NOT BE ALLOWED. PVC PIPING OUTSIDE THE BUILDING, BELOW GRADE, SHALL BE TYPE SDR-35 MEETING ASTM D-3034, U.N.O.
- I. DWV PIPE AND FITTINGS WITHIN WALLS BEHIND KITCHEN HOODS SHALL BE SERVICE WEIGHT HUBLESS CAST IRON WITH SLEEVE, SHIELD, AND DRAWBAND JOINTS MEETING ASTM A-888 AND ASTM C-564.
- J. PVC-DWV FITTINGS FOR PIPING SHALL BE SOLVENT WELD TYPE INSIDE AND UNDERSLAB MEETING ASTM D-2665, D-3311 AND F-186. CEMENTS SHALL MEET ASTM D-2664 AND PRIMER MEETING ASTM F-656. CURE TIME MUST COMPLY WITH MANUFACTURER'S RECOMMENDATIONS. EXTERIOR PIPING JOINTS SHALL BE NEOPRENE PUSH-ON TYPE.
- K. PROVIDE 1" THICK PIPE INSULATION FOR ALL ABOVE SLAB HOT AND TEMPERED WATER PIPING. PROVIDE 1/2" THICK INSULATION FOR ALL ABOVE SLAB COLD WATER, FILTERED WATER, CONDENSATE PIPING, AND HORIZONTAL RAIN WATER CONDUCTORS INSIDE THE BUILDING. PIPING INSULATION SHALL BE KNAUF 1000F 25/50 FIBERGLASS PIPE COVERING, WHITE KRAFT PAPER VAPOR BARRIER (02 PERMS) BONDED TO ALUMINUM FOIL AND REINFORCED WITH GLASS FIBERS. MAXIMUM THERMAL CONDUCTIVITY OF 0.23 AT 75F. LONGITUDINAL LAP SHALL BE SELF SEALING. INSULATION FOR WALK-IN COOLER/FREEZER CONDENSATE PIPING SHALL BE ARMACELL A/P ARMAFLEX WITH MINIMUM 3/4" WALL THICKNESS.
- L. PIPE INSULATION AND COVERINGS SHALL HAVE A RATING OF NOT GREATER THAN 25 FLAME SPREAD, NO HIGHER THAN 50 SMOKE DEVELOPED, AND NO MORE THAN 50 FUEL CONTRIBUTED. THE ONLY EXCEPTION SHALL BE ARMAFLEX AP, WHEN SPECIFIED, WHICH SHALL NOT EXCEED 100 SMOKE DEVELOPED.
- M. A PVC 25/50 PRE-FORMED COVER SHALL BE PROVIDED AT ALL INSULATED PIPING FITTINGS EQUAL TO PROTO PVC CORP LOSMOKE, 800-875-7768.
- N. ALL ABOVE GRADE NATURAL GAS PIPING SHALL BE SCHEDULE 40 BLACK STEEL MEETING ASTM A53 WITH SCREWED OR WELDED FITTINGS AND GASKET TYPE UNIONS AND FLANGES. FOR SCREWED PIPING, PIPING SHALL BE JOINED WITH BLACK 150 POUND MALLEABLE IRON SCREWED FITTINGS AS ALLOWED BY LOCAL AUTHORITY. CONTRACTOR SHALL VERIFY THE NEED FOR WELDED PIPING AS REQUIRED BY THE LOCAL GAS CODE AND/OR APPLICABLE LOCAL ORDINANCES AND AMENDMENTS.
- O. ALL BELOW GRADE NATURAL GAS PIPING SHALL BE MEDIUM DENSITY POLYETHYLENE (PE) MEETING ASTM D2513 AS MANUFACTURED BY GASTITE WITH JOINING SYSTEM AS MANUFACTURED BY CON-STAB. TRANSITIONS FROM ABOVE GRADE RIGID PIPING TO PE BELOW GRADE PIPING SHALL BE MADE WITH ANODE-LESS RISER ASSEMBLY AS MANUFACTURED BY CON-STAB.
- P. EXPOSED SUPPORTS AND ATTACHMENTS SHALL BE STAINLESS STEEL, CHROME OR CHROME PLATED. GALVANIZED ATTACHMENTS WILL NOT BE ACCEPTED.
- Q. USE MATERIALS SPECIFIED ON THESE PLANS. SUBSTITUTIONS ARE ALLOWED ONLY IF SPECIFIED MATERIALS ARE UNAVAILABLE. PRODUCT SUBSTITUTIONS WILL NOT BE ACCEPTED WITHOUT PRIOR APPROVAL. ALL WATER PIPING, FITTINGS, FIXTURES AND ACCESSORIES SHALL BE CERTIFIED LEAD FREE AS DEFINED IN, AND PER THE INTENT OF, THE "REDUCTION IN LEAD IN DRINKING WATER ACT".

PART II - EXECUTION (C15100)

2.01 TRENCHING (C15100)

- A. EXCAVATION, BACKFILLING, AND TRENCH WORK SHALL BE DONE IN ACCORDANCE WITH LATEST O.S.H.A. AND APPLICABLE SAFETY STANDARDS.
- B. PROVIDE NECESSARY SHORING AND CLEANING TO KEEP TRENCHES IN GOOD WORKING CONDITION, INCLUDING PUMPING OUT WATER.
- C. IN MOSTLY ROCK MATERIAL, TRENCHES SHALL BE EXCAVATED TO 6" BELOW THE ELEVATION OF THE BOTTOM OF THE PIPES. AFTER EXCAVATION, TRENCH SHALL THEN BE FILLED TO THE PROPER ELEVATION WITH CRUSHED LIMESTONE. GRAVEL SHALL BE REMOVED FROM UNDER PIPE BELLS SO THE PIPE RESTS FIRMLY ON THE TRENCH BOTTOM.
- D. IN MOSTLY EARTH OR SAND MATERIAL, TRENCHES SHALL BE EXCAVATED TO 6" BELOW THE ELEVATION OF THE BOTTOM OF THE PIPES. AFTER EXCAVATION, TRENCH SHALL THEN BE FILLED TO THE PROPER ELEVATION WITH FINE SAND OR GRAVEL. TRENCH BOTTOM SHALL BE REMOVED AT PIPE BELLS SO THE PIPE RESTS FIRMLY ON THE TRENCH BOTTOM.
- E. BACKFILLING AND TAMPING SHALL BE CAREFULLY DONE BY HAND SIMULTANEOUSLY ALONG BOTH SIDES OF THE PIPE USING ROCK FREE EARTH, CRUSHED STONE OR SAND UNTIL THE PIPE IS COVERED TO A DEPTH OF AT LEAST 12". BACKFILL SHALL BE ACCOMPLISHED IN SUCCESSIVE 6" LAYERS. THE REST OF THE FILL-UP TO THE TOPSOIL LAYER MAY BE GRAVEL OR ROCK FREE EARTH.
- F. ACCEPTABLE SOIL MATERIALS FOR BACKFILL AND FILL SHALL BE FREE OF CLAY, ROCK OR GRAVEL LARGER THAN 2" IN ANY DIMENSION, DEBRIS, WASTE, FROZEN MATERIALS AND OTHER DELETERIOUS MATTER HAVING A PLASTICITY INDEX LESS THAN 30. BACKFILL SHALL BE ACCOMPLISHED IN LAYERS OF NOT MORE THAN 6" AND EACH LAYER SHALL BE COMPACTED. THE LAST 12" OF BACKFILL SHALL BE ROCK FREE TOPSOIL.
- G. SURFACE SHALL BE RESTORED TO ITS ORIGINAL CONDITION.

2.02 INSTALLATION (C15100)

- A. WATER PIPING IN EXTERIOR WALL SHALL BE INSTALLED ON THE HEATED SIDE OF WALL INSULATION.
- B. EXPOSED HOT AND COLD WATER TRIM FITTINGS AND ACCESSORIES IN FINISHED AREAS SHALL BE CHROME FINISHED.
- C. ACCEPTABLE METHODS OF PIPE SUPPORT WITHIN WALLS SHALL BE THE SUMNER SYSTEM, POSIFIX, STAKFIX, PIPEFIX, HILDORITE OR CHANNEL.
- D. PROVIDE J.R. SMITH OR APPROVED EQUAL SHOCK ABSORBERS #5005 THRU 5050 SIZE AS RECOMMENDED BY MANUFACTURER INSTALLED ON HOT AND COLD WATER BRANCH LINES CONTAINING SINGLE LEVER FAUCETS, FLUSH VALVES OR EQUIPMENT WITH QUICK CLOSING VALVES BETWEEN THE LAST TWO FIXTURES AS SHOWN ON THE CONTRACT DRAWINGS. SHOCK ABSORBERS SERVICING FIXTURES WITH FLUSH VALVES SHALL BE SECURELY ANCHORED IN THEIR VERTICAL POSITION.
- E. SANITARY WASTE LINES SHALL BE UNIFORMLY GRADED TO ELEVATIONS SHOWN. IF NO ELEVATIONS ARE GIVEN, SEWERS SHALL BE PITCHED NOT LESS THAN 1/4" PER FOOT FOR ALL PIPING 2-1/2" IN DIAMETER AND SMALLER AND 1/8" PER FOOT FOR ALL PIPING 3" IN DIAMETER AND LARGER.
- F. STORM PIPING SHALL BE SLOPED AT 1/4" PER FT (2%) UNLESS NOTED OTHERWISE ON PLANS.
- G. SUPPORT HORIZONTAL PIPING ACCORDING TO LOCAL PLUMBING CODE. HANGER RODS SHALL BE SIZED AS FOLLOWS:

| NOMINAL PIPE SIZE (IN) | MINIMUM HANGER DIAMETER (IN) |
|------------------------|------------------------------|
| 1/2 | 3/8 |
| 3/4 TO 1-1/2 | 3/8 |
| 2 TO 2-1/2 | 3/8 |
| 3 TO 6 | 1/2 |
- H. HANGERS FOR PIPING GREATER THAN 1" SHALL PASS OVER THE INSULATION. PROVIDE SADDLES FOR PIPING GREATER THAN 1" SHALL PASS OVER THE INSULATION. PROVIDE SADDLES FOR INSULATED PIPING.
- I. INSULATION SHALL BE APPLIED WITH JOINTS TIGHTLY BUTTED. OPEN CRACKS, VOIDS AND DEPRESSIONS SHALL BE FILLED WITH HYDRAULIC SETTING CEMENT, LAPPING MATCHING THE FINISH SHALL BE PASTED NEATLY OVER JOINTS. FITTINGS AND VALVES SHALL BE INSULATED WITH THE SAME TYPE.
- J. PROVIDE AND INSTALL A CUT-OFF VALVE, UNION AND FULL SIZE DIRT LEG AT CONNECTION TO EACH GAS-FIRED PIECE OF EQUIPMENT. INSTALL PIPING AT AND AROUND EQUIPMENT SO AS TO NO WAY OBSTRUCT EQUIPMENT ACCESS PANELS AND/OR ACCESS DOORS.
- K. COORDINATE ABOVE-CEILING PIPING LOCATIONS AND ROUTING WITH HVAC CONTRACTOR AND M-SHEETS PRIOR TO INSTALLATION. ALL MAIN DUCT TRUNK LOCATIONS SHALL TAKE PRIORITY. PIPING MAY REQUIRE REMOVAL AND REINSTALLATION AT PLUMBING CONTRACTOR'S EXPENSE IF PIPING OBSTRUCTS THE M-SHEET DUCT LAYOUT AS SHOWN OR PREVENTS ACCESS TO GREASE DUCT CLEANOUT OPENINGS.
- L. ALL GAS PIPING ABOVE ROOF SHALL BE CLEANED FREE OF RUST AND PAINTED WITH COAT OF ZINC RUST PRIMER AND ONE COAT OF ALUMINUM BASE PAINT. METER AND GAS RISER SHALL BE PRIMED AND PAINTED TO MATCH BUILDING.

2.03 TESTING (C15100)

- A. POTABLE WATER PIPING SHALL BE PRESSURE TESTED IN ACCORDANCE WITH APPLICABLE CODE REQUIREMENTS AND MANUFACTURERS RECOMMENDATIONS.
- B. THE POTABLE WATER SYSTEM SHALL BE FLUSHED OUT PROGRESSIVELY BY OPENING OUTLETS AND FLOWING WATER UNTIL IT RUNS CLEAR. AFTER PIPE CLEANING IS COMPLETED, THE STRAINERS SHALL BE REMOVED, CLEANED, AND REPLACED. THEN THE ENTIRE POTABLE WATER SYSTEM SHALL BE DISINFECTED IN ACCORDANCE WITH THE AUTHORITY HAVING JURISDICTION.
- C. THE SANITARY WASTE SYSTEM SHALL BE FLUSHED OUT PROGRESSIVELY WITH FLOWING WATER UNTIL IT RUNS CLEAR.
- D. THE ENTIRE SANITARY WASTE SYSTEM AND STORM DRAINAGE SYSTEM SHALL BE PRESSURE TESTED IN ACCORDANCE WITH APPLICABLE CODE REQUIREMENTS AND MANUFACTURERS RECOMMENDATIONS.
- E. NATURAL GAS PIPING SHALL BE LEAK TESTED IN ACCORDANCE WITH APPLICABLE CODE REQUIREMENTS AND MANUFACTURERS RECOMMENDATIONS.

PART III - MANUFACTURERS

3.01 PRODUCTS - PIPING SYSTEMS, ETC (C15100)

- A. HYDRANTS, CARRIERS, DRAINS, AND SHOCK ABSORBERS: ZURN. ACCEPTABLE ALTERNATES: JAY R. SMITH, JONES STEPHENS CORP, WATTS, OR JOSAM.
- B. ALTERNATES TO ZURN (ZRN) FIXTURES: ONLY AS SHOWN ON PLANS. APPROVED JAY R. SMITH (JRS), WATTS (WTS), MODEL NUMBERS LISTED ON FIXTURE SCHEDULE, THIS SHEET.

3.02 PRODUCTS - RESTROOM FIXTURES PORCELAIN & VALVES (C15405)

- A. PREFERRED FIXTURES: TOTO. NO EXCEPTION.
- B. ALTERNATE FIXTURES: ONLY AS SHOWN ON PLANS.
- C. FITTINGS: AS SPECIFIED ON THE PLANS. NO SUBSTITUTIONS ALLOWED.
- D. FLUSH VALVES AND LAVATORY FAUCETS: TOTO MANUFACTURING. NO SUBSTITUTIONS ALLOWED.
- E. PREFERRED TOILET SEATS: TOTO. ALTERNATE TOILET SEATS: CHURCH, BEMIS, AND BENEKE.
- F. FLOOR SINKS: ZURN WITH ALUMINUM SEDIMENT BUCKETS. NO SUBSTITUTIONS ALLOWED.

| COORDINATION NOTE | |
|-------------------|--|
| 1. | CONTRACTOR SHALL THOROUGHLY REVIEW THE KITCHEN EQUIPMENT DRAWINGS TO ENSURE ALL ITEMS REGARDING THE PLUMBING SCOPE ARE FULLY UNDERSTOOD. MOST NOTABLY, ALL FAUCETS ARE REQUIRED TO BE PROVIDED (THROUGH HJC) & INSTALLED BY THE CONTRACTOR AS OUTLINED IN THE KITCHEN EQUIPMENT SCHEDULES. |

| NATIONAL ACCOUNTS | |
|-------------------|---|
| 1. | TOTO VALVES AND FIXTURES (NO SUBSTITUTIONS). HAINES, JONES & CADBURY LLC. (HJC DISTRIBUTORS). PLEASE CONTACT HJC-CFA CUSTOMER SERVICE REPRESENTATIVE AT (800) 459-7099 OR VIA E-MAIL AT: CF@HJCCINC.COM FOR NATIONAL ACCOUNT PRICING AND DELIVERY FOR ALL ITEMS ON PLUMBING FIXTURE SCHEDULE. |

2. PLUMBING FIXTURES

RESTROOM FIXTURES (C15405) AND PLUMBING (15100)

- P-1 WATER CLOSET: TOTO MODEL CT705UN#01 BOWL WITH 1.28 GPF TET1LA32#CP ECO-POWER FLUSH VALVE AND SC534 SEAT (ALL PROVIDED BY HJC). NO SUBSTITUTIONS. WHITE, FLOOR MOUNTED, FLUSH VALVE TYPE, VITREOUS CHINA, 1-1/2" TOP SPUD, ELONGATED BOWL, ELECTRONIC SENSOR OPERATED HANDS-FREE FLUSH VALVE, WHITE OPEN FRONT SEAT WITH CHECK HINGE. CHICK-FIL-A HAS NATIONAL ACCOUNTS WITH TOTO. PLEASE SEE NATIONAL ACCOUNT INFORMATION ON THIS SHEET FOR PRICING OF TOTO FIXTURES.
- P-2 WATER CLOSET (ADA): TOTO MODEL CT705UL#01 BOWL WITH 1.28 GPF TET1LA32#CP ECO-POWER FLUSH VALVE AND SC534 SEAT (ALL PROVIDED BY HJC). NO SUBSTITUTIONS. H.C. ACCESSIBLE, WHITE, FLOOR MOUNTED, 17-1/2" HIGH, FLUSH VALVE TYPE, VITREOUS CHINA, 1-1/2" TOP SPUD, ELONGATED BOWL, ELECTRONIC SENSOR OPERATED HANDS-FREE FLUSH VALVE, WHITE OPEN FRONT SEAT WITH CHECK HINGE, AND NO OFFSET TOILET FLANGES. CHICK-FIL-A HAS NATIONAL ACCOUNTS WITH TOTO. PLEASE SEE NATIONAL ACCOUNT INFORMATION ON THIS SHEET FOR PRICING OF TOTO FIXTURES.
- P-3 URINAL: TOTO MODEL UT445U#01 URINAL WITH TEU1UA12#CP 0.125 GPF SELF SUSTAINED HYDROPOWER SELF-GENERATING ELECTRONIC SENSOR-OPERATED FLUSH VALVE (BOTH PROVIDED BY HJC). NO SUBSTITUTIONS. VITREOUS CHINA, 3/4" TOP SPUD, SENSOR OPERATED WITH MANUAL OVERRIDE BUTTON, INTERIOR WALL, VACUUM FILTER PROTECTION. PLEASE SEE NATIONAL ACCOUNT INFORMATION ON THIS SHEET FOR PRICING OF TOTO PRODUCTS.
- P-4A LAVATORY FAUCET: (BUILT-IN COUNTERTOP LAVATORY PROVIDED BY OWNER) TOTO MODEL T24551ET#CP ECO-POWER SENSOR HOT/COLD FAUCET WITH THERMOSTATICALLY CONTROLLED ASSE 1070 MIXING VALVE FAUCET. 0.09 GALLONS PER CYCLE. NO SUBSTITUTIONS. PROVIDE MCGUIRE LF175 SUPPLY WITH STOP, MCGUIRE 155-WC GRID DRAIN WITH OFFSET TAILPIECE, MCGUIRE 8872 POLISHED CHROME P-TRAP. P-TRAP SHALL BE PARALLEL WITH BACK WALL. PROVIDE A TRUBEBO INC., HAND LAY-GUARD INSULATION KITS MODELS 101E-Z AND 105E-Z. CHICK-FIL-A HAS NATIONAL ACCOUNTS WITH TOTO. PLEASE SEE NATIONAL ACCOUNT INFORMATION ON THIS SHEET FOR PRICING OF TOTO FIXTURES.
- P-5 KITCHEN HAND SINK ROUGH IN: SINK BY TMS; FAUCET: TOTO MODEL #TEL165-C20E#CP - PROVIDED BY HJC WITH THP3094 NOZZLE. CONTRACTOR SHALL INSTALL WALL HUNG, STAINLESS STEEL SINK AND FAUCET SET AND MAKE FINAL CONNECTIONS. MCGUIRE LF175 SUPPLIES WITH STOPS (PROVIDED BY HJC).
- P-6 SERVING COUNTER DROP IN SINK ROUGH IN: (SINK PROVIDED BY CLAYTON FIXTURE; FAUCET: TOTO MODEL T24T51ET#CP WITH 1.0 GPM AERATOR PROVIDED BY HJC) CONTRACTOR SHALL INSTALL SINK AND FAUCET SET AND MAKE FINAL CONNECTIONS. MCGUIRE 8912C POLISHED CHROME P-TRAP AND MCGUIRE LF175R20 STOPS WITH 20" CHROME PLATED 3/8" COPPER RISERS (PROVIDED BY HJC). ADJUST FAUCET OUTLET TEMPERATURE TO 110 DEGREES F (OR HIGHER AS REQUIRED BY LOCAL JURISDICTION).
- P-7 MOP SINK FAUCET: (MOP SINK BASIN BUILT BY GENERAL CONTRACTOR) PROVIDE T&S BRASS MODEL B-2345 FAUCET WITH CERAMA SPRING CHECK VALVE CARTRIDGES, HOSE THREAD SPOUT OUTLET, TOP BRACE, ADJUSTABLE INLET SPREAD FROM 3" TO 8", INCLUDE T&S BRASS MODEL 4072 HOSE THREAD X 3/4" FEMALE NPT CHROME ADAPTOR (ALL PROVIDED BY HJC). NO SUBSTITUTIONS. SEE ALSO P-16.
- P-8 VEGETABLE PREP SINK ROUGH-IN: (SINK PROVIDED BY TMS; FAUCET T&S B-0152-14-CR#CT WITH 0.65 GPM SPRAY HEAD BY HJC) CONTRACTOR SHALL INSTALL SINK AND MAKE FINAL CONNECTIONS. MCGUIRE LFST08 STOPS AND BRASSCRAFT 36" CHROME PLATED 1/2" OD COPPER RISERS MODEL 3-36AC (PROVIDED BY HJC), ASSEMBLE AND MOUNT TWO HANDLE FAUCET WITH PRE-RINSE SPRAY ARM. INSTALL ADD-ON FAUCET WITH SPOUT AT BASE OF PRE-RINSE RISER. SEE K-SHEET ELEVATIONS. PROVIDE 1-1/2" SCHED 80 PVC (PIPE AND FITTINGS) INDIRECT WASTE LINES FROM SINK BASINS TO FLOOR SINK P-13B. NO P-TRAPS REQUIRED. HJC TO PROVIDE FISHER #22209 DRAINS WITH FLAT STRAINERS.
- P-9 FOUR COMPARTMENT POT SINK ROUGH-IN: (SINK PROVIDED BY TMS; FAUCETS: T&S B-0152-14CR#CT & B2299-CR WITH 0.65 GPM SPRAY HEAD PROVIDED BY HJC) CONTRACTOR SHALL INSTALL SINK, ASSEMBLE & MOUNT TWO FAUCETS, AND MAKE FINAL CONNECTIONS. MCGUIRE LFST08 STOPS AND BRASSCRAFT 36" CHROME PLATED 1/2" OD COPPER RISERS MODEL 3-36AC (PROVIDED BY HJC), ASSEMBLE AND MOUNT ONE TWO-HANDLE FAUCET WITH PRE-RINSE SPRAY. INSTALL ADD-ON FAUCET WITH SPOUT AT BASE OF PRE-RINSE RISER. ASSEMBLE AND MOUNT ONE TWO-HANDLE FAUCET WITH DOUBLE JOINT SPOUT ON OPPOSITE SIDE. SEE K-SHEET ELEVATIONS FOR FAUCET LOCATIONS. PROVIDE 1-1/2" SCHED 80 PVC (PIPE AND FITTINGS) INDIRECT WASTE LINES FROM EACH SINK BASIN TO FLOOR SINK P-13A. NO P-TRAPS REQUIRED. HJC TO PROVIDE FISHER #22209 DRAINS WITH FLAT STRAINERS.
- P-10 FLOOR DRAIN (3"): ZURN E21-PV3-R8 PVC BODY, BRONZE SPUD WITH 8" DIAMETER NICKEL BRONZE STRAINER (PROVIDED BY HJC). ALT: JONES STEPHENS CORP D53-144.
- P-11 WALL HYDRANT (NON-FREEZE): WOODFORD MODEL 67C AUTOMATIC DRAINING WALL HYDRANT WITH DUAL CHECK BFF, ASSE 1052 APPROVED, WALL CLAMP, POLISHED BRASS FINISH (PROVIDED BY HJC). "C" STYLE INLET. SEE WALL HYDRANT NOTES ON 1/P-201 FOR WALL THICKNESS AT WALL HYDRANTS. ALT: (WTS) HY-42.
- P-12 FUNNEL DRAIN (3"): ZURN MODEL ZN415-3NL-6S-4 FLOOR DRAIN W/FUNNEL, INDIRECT WASTE RECEIVER WITH NICKEL BRONZE STRAINER AND FUNNEL. PROVIDE 6" SQUARE STRAINER WITH 4" ROUND FUNNEL AT WALK-IN COOLER (PROVIDED BY HJC). 4" ROUND FUNNEL (ZURN) ZN328-4.
- P-13A FLOOR SINK (POT SINK): ZURN MODEL Z1901-4NL-1-23-KC CAST IRON INDIRECT WASTE RECEIVER WITH 12" SQUARE BODY, FLASHING CLAMP, 8" DEEP ALUMINUM SEDIMENT BUCKET, AND NO GRATE. NO SUBSTITUTIONS (PROVIDED BY HJC).
- P-13B FLOOR SINK (VEGETABLE SINK): ZURN MODEL Z1910-KC-3NL-1-23 CAST IRON INDIRECT WASTE RECEIVER WITH FLASHING CLAMP, 8" SQ. BODY, ALUMINUM SEDIMENT BUCKET, AND NO GRATE (PROVIDED BY HJC). NO SUBSTITUTIONS.
- P-14 CLEANOUTS INSIDE BUILDING: ZURN ZN1400-XNL-T-BP CLEANOUT WITH 6" SQUARE NICKEL BRONZE TOP AND TAPER THREAD BRONZE PLUG. SEE PLAN FOR SIZE. (X=PIPE DIA) (PROVIDED BY HJC).
- P-15 CLEANOUTS OUTSIDE BUILDING: ZURN Z1474-NX EXTRA HEAVY DUTY CAST IRON CLEANOUT, "C.O." CAST IN COVER, ABS PLUG, NEO-LOCKOUT. (X=PIPE DIA) (PROVIDED BY HJC). ALT: (ZURN) Z1474-X-N.
- P-16 3-WAY DIVERTER VALVE ASSEMBLY: WATTS MODEL LFB 6780 ROUGH BRASS LEAD-FREE DIVERTER BALL VALVE WITH 3/4" FIP INLET AND OUTLETS AND QUARTER TURN LEVER HANDLE. PROVIDE WITH TWO (2) FORGED BRASS 3/4" MIP X 3/4" MALE GARDEN HOSE THREAD ADAPTERS (PLUMBEST MODEL 620-103 OR EQUAL). PROVIDE WITH ONE ASSE 1011 APPROVED CHROME PLATED VACUUM BREAKER (WOODFORD MODEL 34H-CH OR EQUAL) (ALL PROVIDED BY HJC). FOR INSTALLATION AT MOP SINK. SEE 4/P-201. PROVIDE ALSO TWO 3/4" CLOSE CHROME PLATED BRASS NIPPLE AND 3/4" POLISHED CHROME 90 DEGREE ELBOW.
- P-17 VACUUM RELIEF VALVE: WATTS MODEL #FN36M1, 3/4" CONNECTION. (PROVIDED BY HJC).
- P-18 EXPANSION TANK: AO SMITH MODEL TW12-5. ACCEPTANCE 2.19 GALLONS (PROVIDED BY HJC) AT 40 PSI PRECHARGE, 3/4" CONNECTION. ALTERNATE MODELS SIZED PER WATER HEATER MANUFACTURER RECOMMENDATIONS ARE ACCEPTABLE.
- P-19 WATER HEATER: BRADFORD-WHITE EF-60T-125E-3N STORAGE TYPE GAS FIRED 60 GALLON WATER HEATER, 125MBH INPUT, 145 GPH RECOVERY AT 100F RISE, DIRECT VENT, BLOWER POWERED, CONDENSING TYPE WITH THREE-YEAR WARRANTY (PROVIDED BY HJC), CONTRACTOR TO PROVIDE DIELECTRIC HEAT TRAP NIPPLES. STATE INDUSTRIES SUF-100-199-NE, RHEEM GHE80-130, AND BRADFORD-WHITE EF-60T-199-3N MODELS ARE ACCEPTABLE SUBSTITUTES. (ANY SUBSTITUTIONS PROVIDED ON REQUEST FROM HJC.)
- P-20 THERMOMETER: PROVIDE TRECIRE MODEL B83404 - 04 3" DIAL TYPE THERMOMETER WITH BOTTOM 1/2" N.P.T. CONNECTION, 4" STEM AND 0 DEG F TO 200 DEG F RANGE. LEAD FREE. (PROVIDED BY HJC.)
- P-21 BACKFLOW PREVENTERS: COORDINATE LOCATION WITH CIVIL SITE UTILITY PLAN. BACKFLOW PREVENTER TYPE AND MODEL IS DETERMINED BY CIVIL ENGINEER IF LOCATED OUTSIDE THE BUILDING.

DOUBLE CHECK TYPE:
WATTS NO. LFU007M1QT 1-1/2" DUAL CHECK MODULAR TYPE BACKFLOW PREVENTER MEETING ASSE 1015 AND AWWA C510-92. WHERE REQUIRED BY LOCAL AUTHORITY, USE THE RPZ TYPE BFF SHOWN BELOW. ALT: (ZRN) 112-350XL.

REDUCED PRESSURE ZONE (RPZ) TYPE:
WATTS NO. LFU009M2 1-1/2" MODULAR TYPE WITH TEST PORTS AND INTERMEDIATE RELIEF VALVE MEETING ASSE 1013 AND AWWA C511-89. PROVIDE WATTS NO. 909-AG-C AIR GAP DEVICE. ALT: (ZRN) 112-975XL2TU. (ANY AND ALL PROVIDED BY HJC.)
- P-22 MOP SINK CHECK VALVES: T&S BRASS 1/2" MODEL B-CVV1-2 BALL CHECK. (PROVIDED BY HJC)
- P-23 UTILITY CONNECTION (ICEMAKER): PROVIDE A MCGUIRE MODEL LFHST06SB LEAD-FREE CHROME WHEEL ANGLE STOP, 1/2" FIP INLET AND OUTLET (PROVIDED BY HJC). PROVIDE CHROME WALL ESCUTCHEON. INSTALL WITH BFF P-34. SEE DETAIL 3/P-201 FOR PIPING AT ICE MAKERS.
- P-24 UTILITY CONNECTION (COFFEE & TEA BREWERS): PROVIDE A MCGUIRE MODEL LFHST06SB LEAD-FREE CHROME WHEEL ANGLE STOP, 1/2" FIP INLET AND OUTLET (PROVIDED BY HJC). PROVIDE CHROME WALL ESCUTCHEON. INSTALL WITH BFF P-34.
- P-25 SHOCK ABSORBER: ZURN Z1700-100 THRU Z1700-300 AS NEEDED. SIZE AS RECOMMENDED BY MANUFACTURER (PROVIDED BY HJC). ALT: (WTS) SSA + SSB; (JRS 5005 THROUGH 5050)
- P-26 FUNNEL DRAIN (3"): ZURN ZN415-3NL-4S-OF FLOOR DRAIN W/FUNNEL, INDIRECT WASTE RECEIVER WITH NICKEL BRONZE STRAINER AND FUNNEL. PROVIDE 8"X8" SQUARE STRAINER WITH 3.25"X 8.25" OBLONG FUNNEL (DRAIN AND STRAINER PROVIDED BY HJC). ALT: (JRS) 3510L03-F22NB.
- P-26A TRAP SEAL PROTECTOR: PROVENT TRAP GUARD MODEL TG3H 3" TRAP SEAL INSERT FOR INTERIOR INSTALLATION AND REPLACEMENT ACCESS THROUGH STRAINER (PROVIDED BY HJC). PROVIDE AT P-35 FLOOR DRAINS IN RESTROOMS, P-37 FLOOR DRAINS DINING ROOM, P-26 FUNNEL, AND P-10 DRAINS IN MECH ROOM. PROVIDE PRESET MODEL TG33-ZURN WHEN USING ZURN FLOOR FIXTURES (PROVIDED BY HJC).
- P-27 WATER PRESSURE GAUGE: TRECIRE MODEL 800B, 2-1/2" ROUND, BOTTOM OUTLET WITH 1/4" N.P.T. CONNECTION AND 0 TO 100 PSI RANGE. (PROVIDED BY HJC).
- P-28 ISOLATION BALL VALVE (8-STOP WATER MANIFOLD PANEL): NIBCO MODEL 4660-T, 3/4", WITH IPS INLET AND OUTLET. (PROVIDED BY HJC.)
- P-29A ICE MACHINE TRENCH DRAIN: ZURN/STAINLESS DRAINS TR12-CFA-18 STAINLESS STEEL TRENCH DRAIN, 14.5" X 18", STAINLESS STEEL SEDIMENT CUP AND STAINLESS STEEL SERRATED LADDER GRATE (PROVIDED BY HJC), NO SUBSTITUTIONS.
- P-29B ICE MACHINE TRENCH DRAIN: ZURN/STAINLESS DRAINS TR12-CFA-36 STAINLESS STEEL TRENCH DRAIN, 14.5" X 36", STAINLESS STEEL SEDIMENT CUP AND STAINLESS STEEL SERRATED LADDER GRATE (PROVIDED BY HJC), NO SUBSTITUTIONS.
- P-30a FILTERED WATER FAUCET: (FAUCETS: T&S B-05299-CR PROVIDED BY HJC) TWO-HANDLE WALL MOUNT FAUCET WITH SWING SPOUT. MOUNT ON WALL AS SHOWN ON K-SHEETS. PROVIDE 1-1/2" SCHED 80 PVC (PIPE AND FITTINGS) CONNECT TO SUPPLY PIPING WITH BRASS OR CHROME NIPPLES; GALVANIZED NOT ALLOWED.
- P-31 DUMPSTER POST HYDRANT (NON-FREEZE): WOODFORD MODEL S3 LEVER TYPE SANITARY POST HYDRANT, 3/4 HOSE CONNECTION, DOUBLE CHECK VALVE BFF, LOCKABLE LEVER HANDLE, BRASS CASING, BRASS OPERATING ROD, ASSE 1052 APPROVED AND 36" DEPTH OF BURY (PROVIDED BY HJC.)
- P-33 TRAP PRIMER (MECHANICAL TYPE); PRECISION PRODUCTS PR-500. PROVIDE DISTRIBUTION UNIT WHERE SERVING MULTIPLE DRAINS. PROVIDE SCREWDRIIVER STOP AT PRIMER INLET. ALT: (WTS) TP-300A-DR.
- P-34 DISPENSER BACKFLOW PREVENTER: WATTS MODEL #LF7R2-2 ASSE 1024 RATED WITH 1/2" FIP INLET AND OUTLET, DUAL CHECK TYPE. PROVIDE 1/2" DIA X 2" LONG CHROME NIPPLE AT BFF INLET AND OUTLET. PROVIDE T&S BRASS MODEL B-9110 CHROME WALL BRACKET. (ALL PROVIDED BY HJC.)
- P-35 FLOOR DRAIN (3"): ZURN E21-PV3-R8 PVC BODY, BRONZE SPUD WITH 6" DIAMETER NICKEL BRONZE STRAINER (PROVIDED BY HJC). ALT: JONES STEPHENS CORP D50-064.
- P-36 BEVERAGE TOWER INDIRECT RECEIVER (3"): ZURN E21-PV3-R8 PVC BODY, BRONZE SPUD WITH 8" DIAMETER NICKEL BRONZE STRAINER (PROVIDED BY HJC). ALT: JONES STEPHENS CORP D53-144.
- P-37 FLOOR DRAIN (3"): ZURN E21-PV3-S6 PVC BODY, BRONZE SPUD WITH 6" SQUARE NICKEL BRONZE STRAINER (PROVIDED BY HJC). ALT: JONES STEPHENS CORP D50-077.
- P-38 HOT WATER CIRCULATING PUMP: TACO MODEL 006-5CT-JFC. 1/2" UNION CONNECTIONS, INTEGRAL FLOW CHECK, ELECTRICIAN TO PROVIDE AND WIRE PLUG AND CORD, 1/40 HP, 3 GPM AT 7 FT TOTAL DYNAMIC HEAD. PROVIDE CONTROL WIRING AND HONEYWELL MODEL L6006C1018 110 VAC AQUA-STAT, WITH ADJUSTABLE SETPOINT, MOUNTED DIRECTLY ON PIPE (ALL PROVIDED BY HJC). SET SHUT-OFF TEMPERATURE AT 130 DEG F.
- P-39 2" PRESSURE REDUCING VALVE: WATTS NO. #LF223-SB WITH BUILT-IN BYPASS FEATURE (PROVIDED BY HJC). SET NO FLOW CONDITION AT 70 PSI. ALT: (ZRN) SERIES 500XLSBR.
- P-40 WYE STRAINER WITH #100 SCREEN: 2" WATTS LF777SM3-2. BRONZE WYE STRAINER WITH THREADED CONNECTION AND TAPPED RETAINER CAP. PROVIDE #100 MESH SCREEN. PROVIDE WATTS 1/2" LFB-1C BRASS BOILER DRAIN WITH BRASS STRAINER 90 DEGREE ELBOW, MALE END SIZED FOR CONNECTION TO WYE STRAINER RETAINER CAP OUTLET TAP. (ALL PROVIDED BY HJC.)
- P-41H DISHWASHER SUPPLY VALVE (HOBART): FULL-PORT LEAD-FREE STAINLESS STEEL BALL VALVE WITH SPLIT-RING BRACKET, CHROME FITTINGS, PIPE NIPPLES AND ESCUTCHEON AS DETAILED ON 2/P-302.
- P-42 EMERGENCY EYEWASH: ACORN MODEL S0660-RH AND BRADLEY S19-2000-EFX#RB THERMOSTATIC TEMPERING VALVE (PROVIDED BY HJC), ANSI Z358-1 CERTIFIED FOR EMERGENCY FIXTURES, ASSE 1071 COMPLIANT, WITH DIAL THERMOMETER, INLET CHECK STOPS, ADJUSTABLE SETPOINT, ACCURATE WHITIN +/- 3 DEG F. INCLUDES INTEGRAL COLD WATER BYPASS WITH POSITIVE HOT WATER SHUT-OFF WHEN COLD WATER SUPPLY IS LOST. FACTORY SETPOINT OF 85 DEG F. MOUNTING BRACKET INCLUDED. FACTORY ASSEMBLED AND TESTED. ROUGH BRASS FINISH. NO SUBSTITUTIONS. CONTACT CHICK-FIL-A NATIONAL ACCOUNTS AS HAINES, JONES & CADBURY FOR PRICING AND DELIVERY.
- P-43 SUPPLY VALVE (REETHERMALIZER): FULL-PORT LEAD-FREE STAINLESS STEEL BALL VALVE (PROVIDED BY HJC) WITH SPLIT-RING BRACKET, CHROME FITTINGS, PIPE NIPPLES AND ESCUTCHEON AS DETAILED ON 3/P-302.



Chick-fil-A
 5200 Buffington Road
 Atlanta, Georgia
 30349-2998

Kurzynske & Associates
 2705 Lebanon Pike - Suite One
 Nashville, Tennessee 37214
 Telephone: (615) 255-5203



02/15/23

CHICK-FIL-A
PRINCETON WOODS
 3330 PINE BLUFF DRIVE
 DUMFRIES, VA 22026

FSR#04916
 BUILDING TYPE / SIZE: P13 LSR LRG
 RELEASE: 22.05

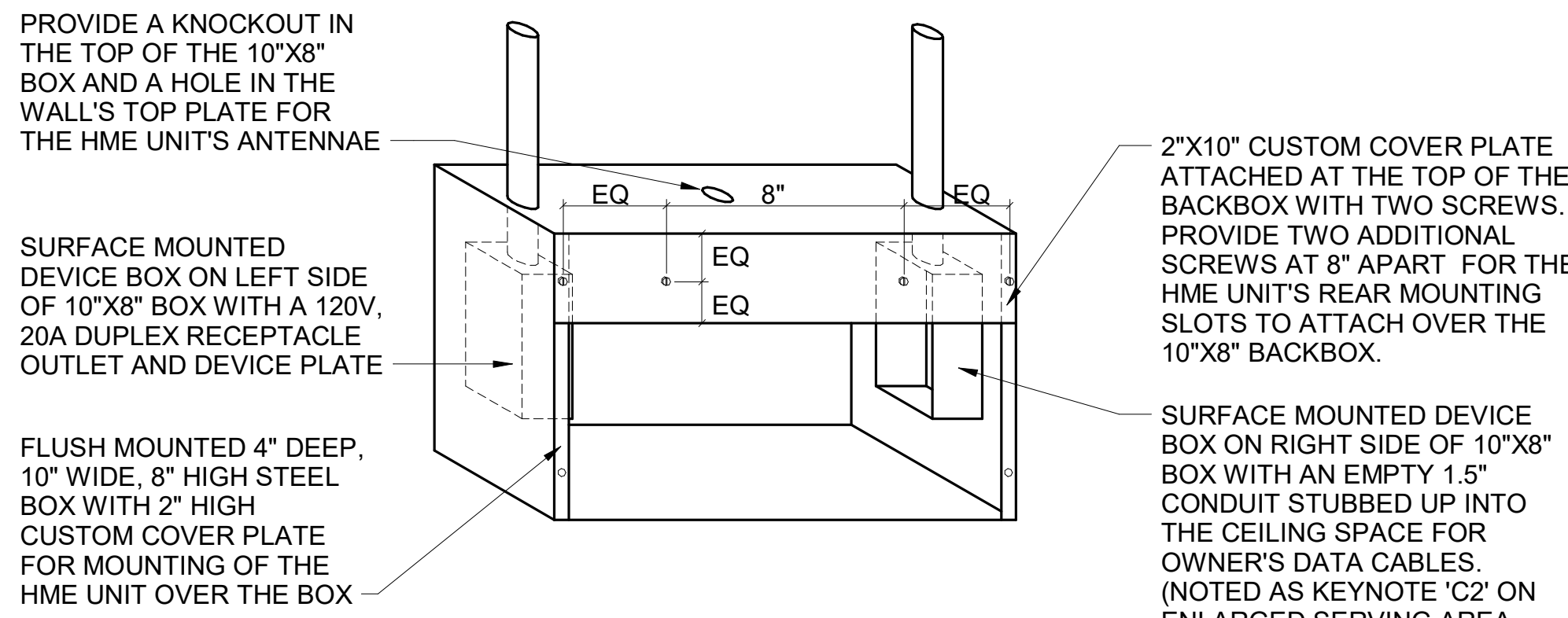
| REVISION SCHEDULE | | |
|-------------------|------------|---------------|
| NO. | DATE | DESCRIPTION |
| 3 | 12/12/2022 | CODE COMMENTS |

| CONSULTANT PROJECT # | | 22050.EH.S |
|--|--------------|------------|
| PRINTED FOR | CONSTRUCTION | |
| DATE | | 02/15/23 |
| DRAWN BY | CAC | |
| Information contained on this drawing and in all digital files produced for above named project may not be reproduced in any manner without express written or verbal consent from authorized project representatives. | | |
| SHEET PLUMBING SPECIFICATIONS | | |
| SHEET NUMBER | | |

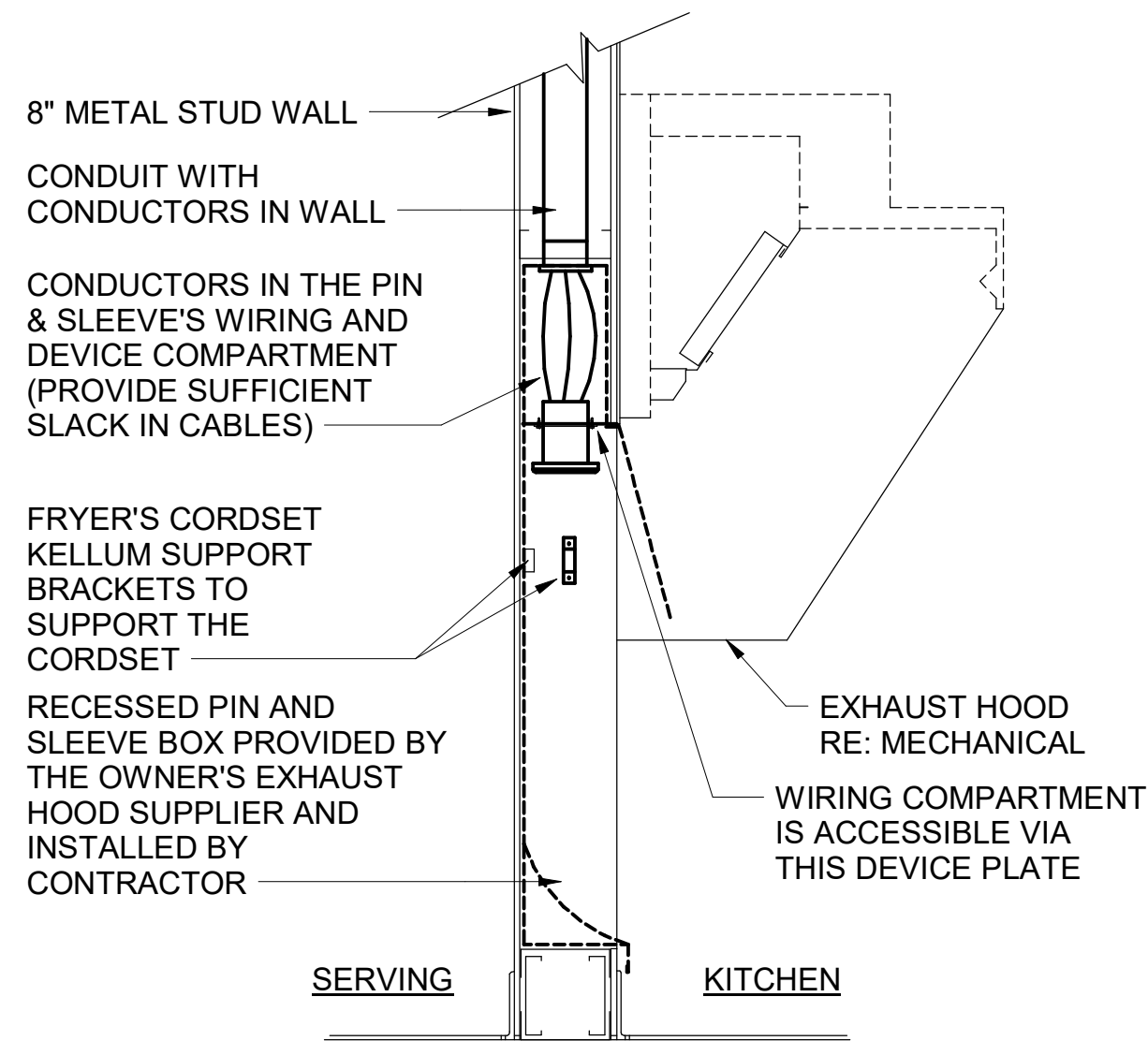
P-901

Autodesk Docs://VA_04916_Princeton Woods_2023_1_4_FSR#04916_Princeton Woods_PLB.rvt
 2/13/2023 10:36:10 AM
 40-LSF-04916-9-001-PLUMBING SPECIFICATIONS

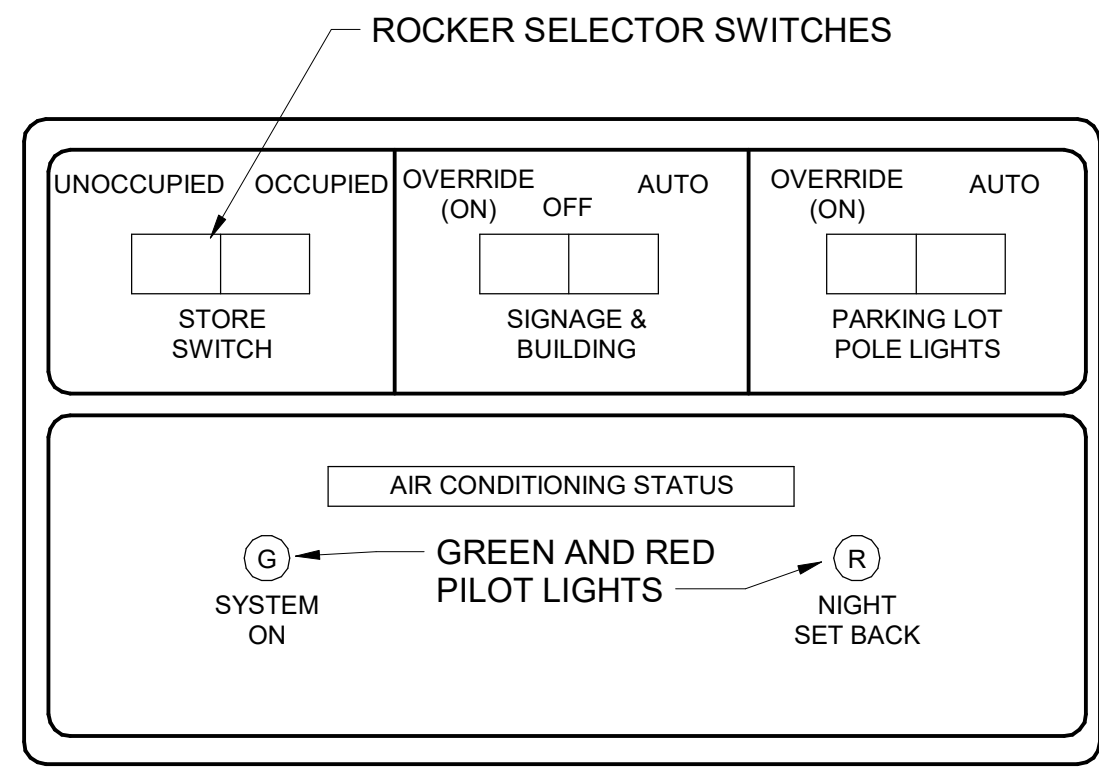
CONSTRUCTION



E3 HME UNIT POWER & DATA BOX DETAIL
NO SCALE

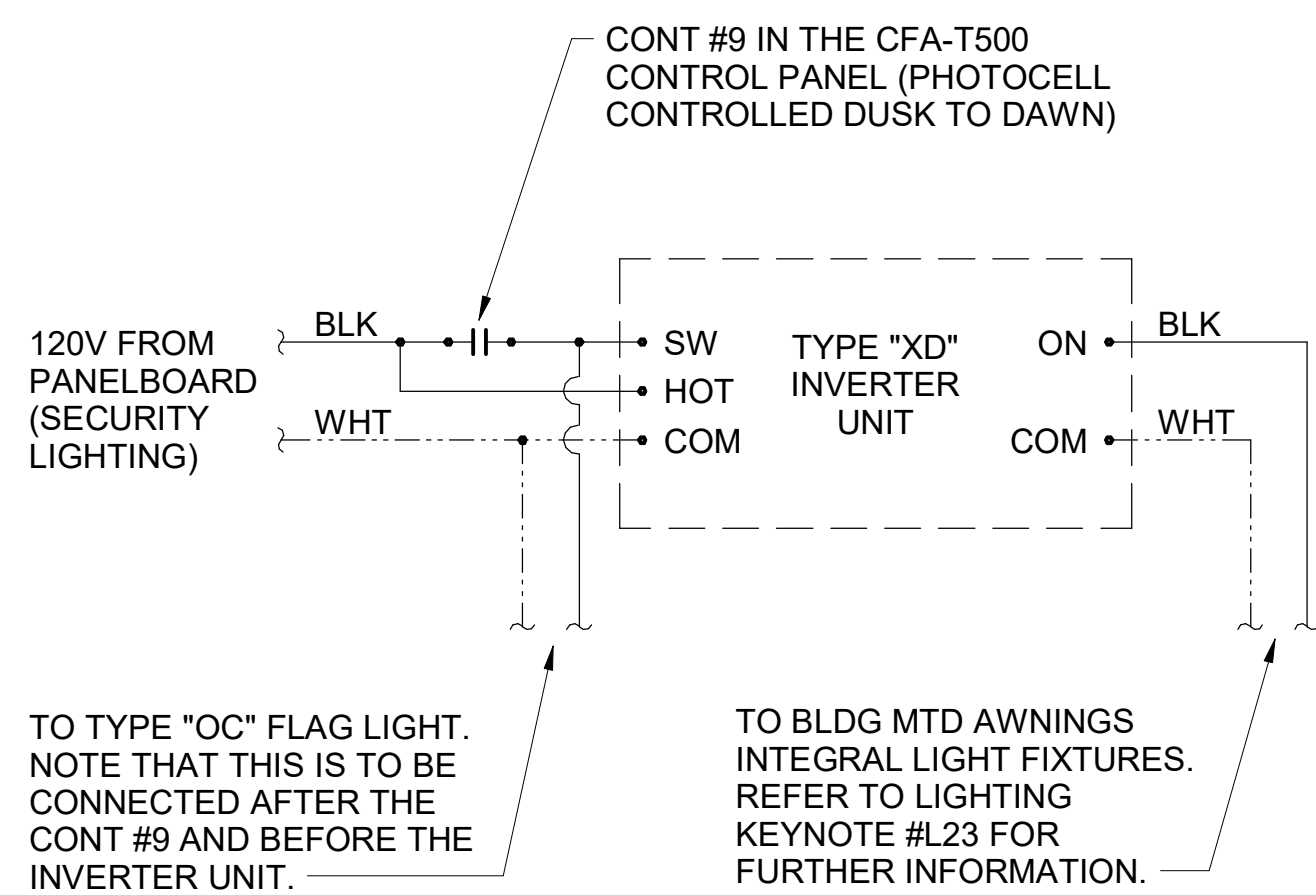


D4 PIN & SLEEVE BOX DETAIL
NO SCALE

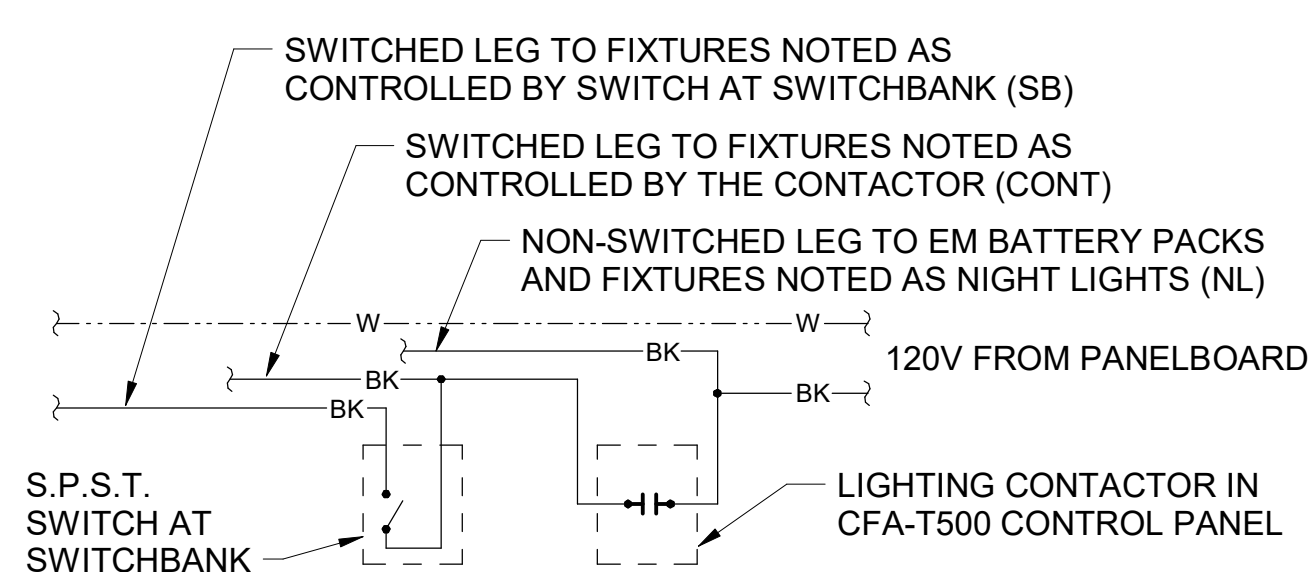


NOTE: THIS UNIT IS MOUNTED IN THE DOOR OF THE CFA-T500 CONTROL CABINET AND IS INCLUDED WITH THE GEAR ORDER FROM SUNCOAST ENVIRONMENTAL INC.

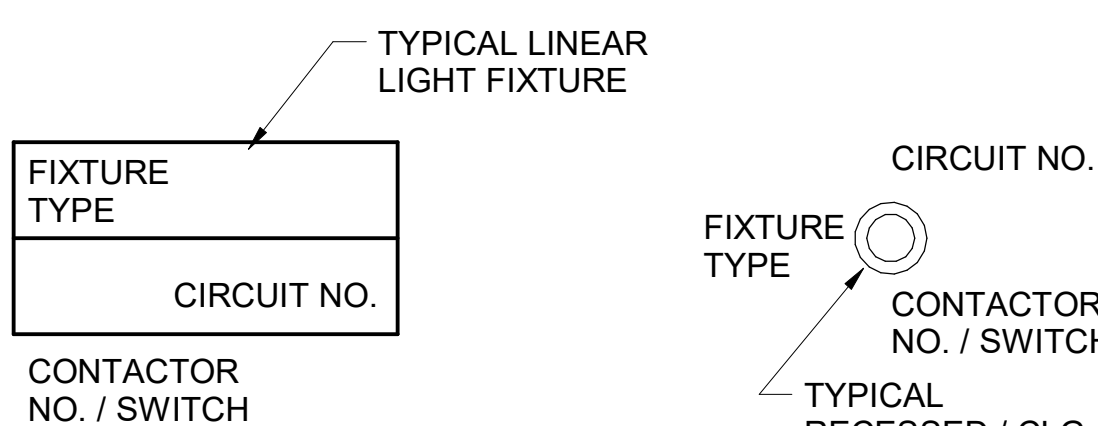
D3 OPEN-CLOSED CONTROL SWITCH
NO SCALE



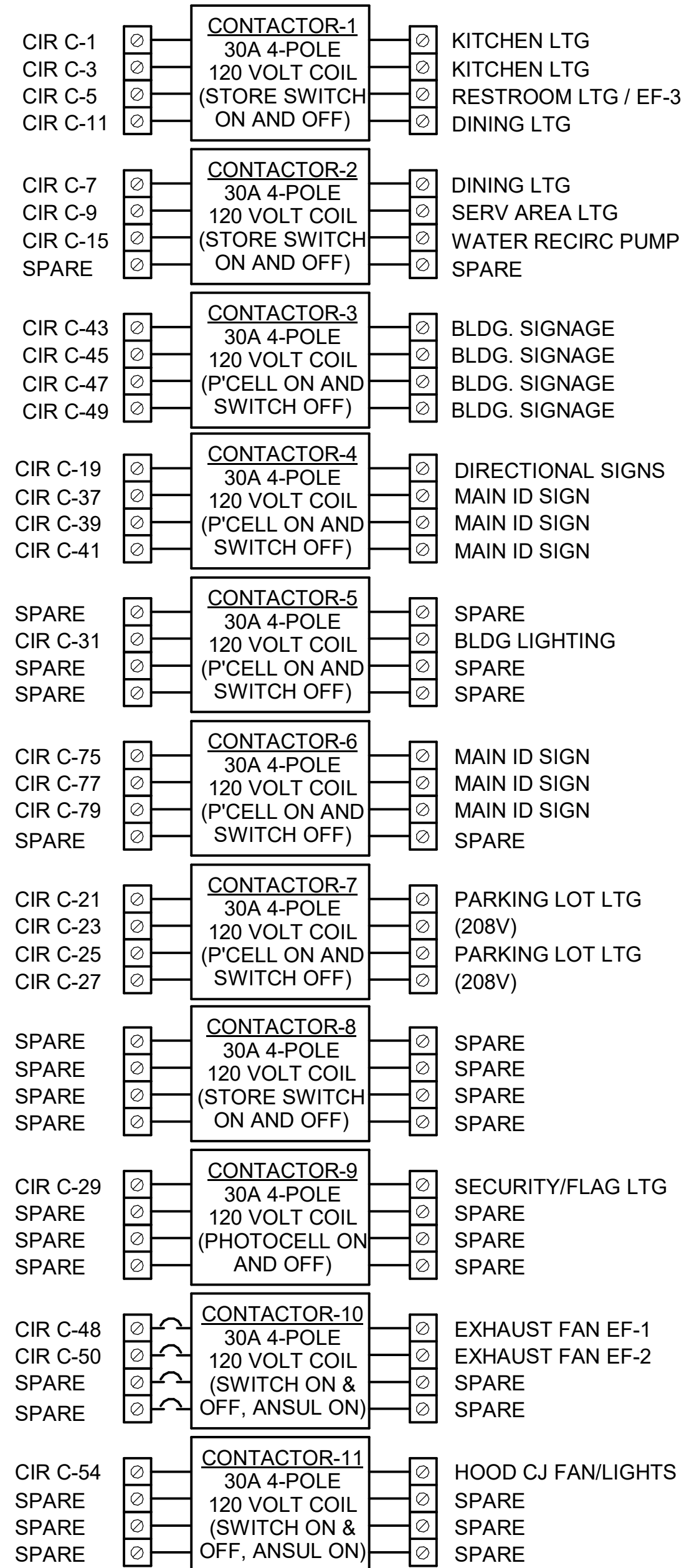
C4 INVERTER XD WIRING DIAGRAM
NO SCALE



B4 LIGHTING CONTROL DIAGRAM
NO SCALE



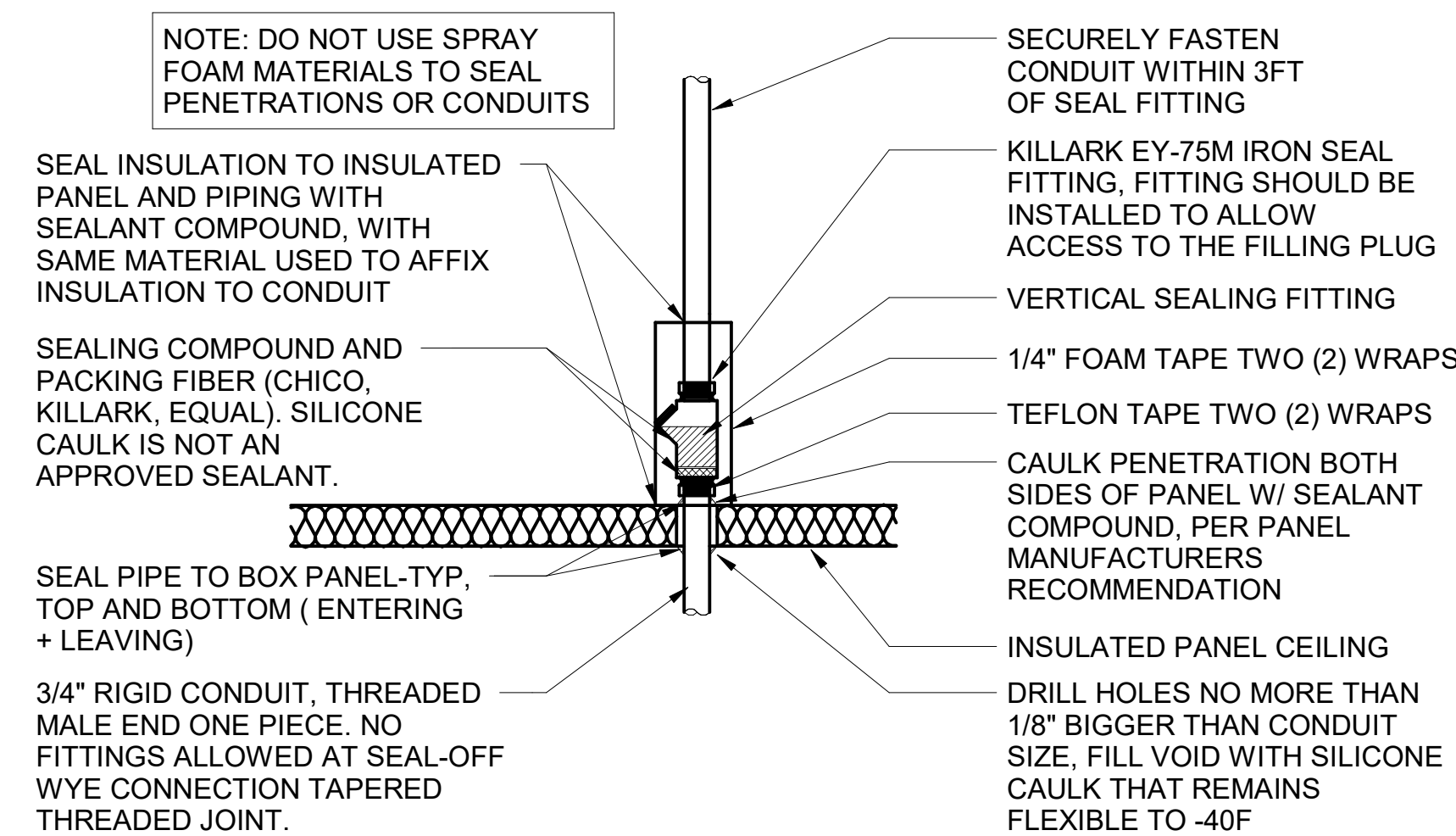
A4 LIGHT FIXTURE NOMECLATURE
NO SCALE



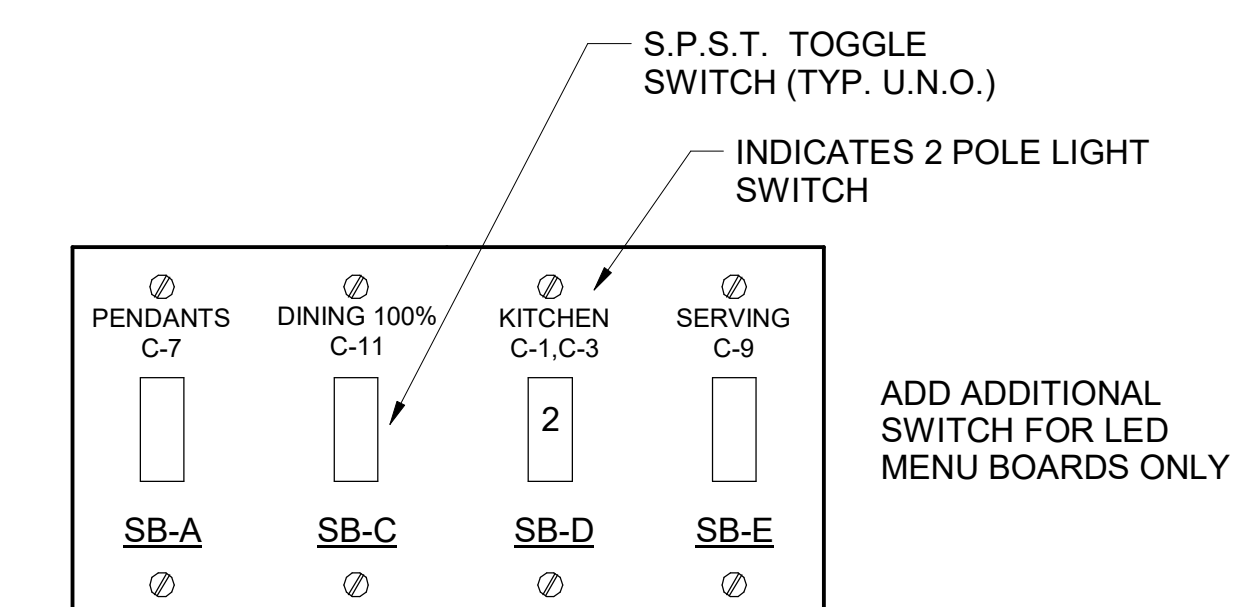
NOTES:
1) VERIFY WITH SUNCOAST ENVIRONMENTAL CONTROLS' SHOP DRAWINGS.
2) ONLY THE 'HOT' CONDUCTOR OF EACH CIRCUIT SHALL BE RUN THRU THE CONTACTOR.
3) ANY TAPS OR WIRING CONNECTIONS OTHER THAN TO THE TERMINALS SHALL BE DONE IN A JUNCTION BOX OUTSIDE OF THIS CABINET.
4) VERIFY WITH THE LOCAL CODE IF CONTACTORS #10 AND #11 WILL BE ON OR OFF WHEN THE ANSUL SYSTEM IS INITIATED.
5) CIRCUITS C-49, C-25, AND C-27 WILL BE SPARES IF NOT NEEDED.

PER ASHRAE 90.1 2016
CONTRACTOR SHALL COORDINATE WITH SUNCOAST ON PROVIDING AN AUTOMATIC TIME SWITCH THAT COMPLIES WITH 90.1 SECTION 9.4

C2 CFA-T500 CONTROL PANEL DIAGRAM
NO SCALE



A2 WIC/WIF SEAL-OFF DETAIL
NO SCALE

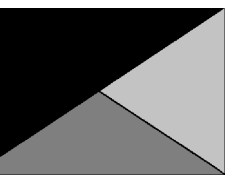


A1 SWITCH BANK "SB" DETAIL
NO SCALE

| SYMBOL | | DESCRIPTION | MTG HT AFF TO CL | SYMBOL | | DESCRIPTION | MTG HT AFF TO CL | |
|--|--|--|----------------------------------|---|--|---|------------------|---|
| LIGHTING FIXTURES | | | | MISCELLANEOUS SYMBOLS | | | | |
| ☐ | | SURFACE MOUNTED LIGHTING FIXTURE | | ⊕ | | GROUND | | |
| ☐ | | RECESSED LED TROFFER LIGHTING FIXTURE | | Ⓜ | | MOTOR | | |
| ☐ | | SURFACE MOUNTED LED LIGHTING FIXTURE | | Ⓜ | | EXHAUST FAN MOTOR | | |
| ☐ | | RECESSED LED LIGHTING FIXTURE | | Ⓜ | | JUNCTION BOX | | |
| ☐ | | WALL MOUNTED LIGHTING FIXTURE, SEE LIGHTING FIXTURE SCHEDULE | | Ⓜ | | CONDUIT AND WIRE 'MARK' NUMBER, REFER TO CONDUCTORS AND CONDUIT SCHEDULE FOR SIZE | | |
| ☐ | | WALL MOUNTED EXIT SIGN, SHADE INDICATES FACES, PROVIDE CHEVRON DIRECTIONALS WHEN NEEDED | AS NOTED, 6" FROM CEILING TO TOP | Ⓜ | | KITCHEN EQUIPMENT 'MARK' NUMBER, REFER TO KITCHEN EQUIPMENT SCHEDULE FOR REQUIREMENTS | | |
| ☐ | | CEILING MTD EXIT SIGN, SHADING INDICATES FACES, PROVIDE W/ CHEVRON DIRECTIONALS WHEN NEEDED | | Ⓜ | | NOTE NUMBER | | |
| ☐ | | COMBO EXIT WITH TWO LAMPHEADS | | Ⓜ | | HOOD EXTINGUISHING ANSUL PULL STATION | | |
| ☐ | | WALL MTD EMERGENCY BATTERY PACK LIGHTING FIXTURE | AS NOTED | Ⓜ | | SMOKE DETECTORS REMOTE STATUS INDICATOR W/ 1/2" C STUB-UP | | |
| ☐ | | CEILING MTD EMERGENCY BATTERY PACK LIGHTING FIXTURE | | Ⓜ | | PUSHBUTTON | | |
| ☐ | | FLUORESCENT STRIP LIGHTING FIXTURE | | Ⓜ | | BELL, TYPE AS NOTED ON PLANS | | |
| ☐ | | WALLWASHER TYPE RECESSED DOWNLIGHT, AIM LIGHT TOWARD WALL | | Ⓜ | | PHOTO-ELECTRIC CELL | | |
| ☐ | | RECESSED LIGHTING FIXTURE W/ EMERGENCY BATTERY PACK | | Ⓜ | | TRANSFORMER / DRIVER | | |
| ☐ | | PENDANT LIGHTING FIXTURE | NOTED | Ⓜ | | LOCKABLE SINGLE POLE SWITCH | | |
| ☐ | | LIGHTING TRACK WITH TRACK HEADS | | ABBREVIATIONS | | | | |
| WIRING DEVICES | | | | | | | | |
| ☐ | | 120 VOLT DUPLEX RECEPTACLE, 20 AMPS U.O.N. | 14" UON | AF | | ABOVE FINISHED FLOOR | | |
| ☐ | | 120 VOLT DUPLEX AT SPECIAL MTD HEIGHT, 20 AMPS U.O.N. | 44" UON | AFG | | ABOVE FINISHED GRADE | | |
| ☐ | | 120 VOLT QUADRAPLEX RECEPTACLE, 20 AMPS U.O.N. | 14" UON | AH | | AIR HANDLING UNIT | | |
| ☐ | | 120 VOLT QUAD. AT SPECIAL MTD HEIGHT, 20 AMPS U.O.N. | 44" | C | | CONDUIT | | |
| ☐ | | 120 VOLT SIMPLEX RECEPTACLE, 20 AMPS U.O.N. | 14" UON | CL | | CENTER-LINE | | |
| ☐ | | SINGLE SPECIAL PURPOSE RECEPT W/ VOLTS, AMPS, & PHASE AS NOTED, NEMA CONFIGURATION AS REQUIRED BY EQUIP. | 14" UON | CT | | CONTACTOR | | |
| ☐ | | RECEPTACLE MOUNTED ON DROP CORD, 120 VOLT, 20 AMP, UON, OUTLET BOX FLUSH WITH CEILING | | EF | | EXHAUST FAN | | |
| ☐ | | SINGLE POLE TOGGLE SWITCH | 48" | FLA | | FULL LOAD AMPS | | |
| ☐ | | DOUBLE POLE TOGGLE SWITCH | 48" | GF/GFI | | GROUND FAULT CIRCUIT INTERRUPTER | | |
| ☐ | | THREE WAY TOGGLE SWITCH | 48" | ND/GRD | | GROUND | | |
| ☐ | | MANUAL MOTOR STARTER SWITCH (WP=NEMA 3R) | 48" | HT | | HEIGHT | | |
| ☐ | | SWITCH WITH PILOT LIGHT (ON WHEN SWITCH IS ON) | 48" | IG | | ISOLATED GRD, PROVIDE ORANGE DEVICE WHEN ADJACENT TO WIRING DEVICE | | |
| ☐ | | KEY OPERATED SWITCH | 48" | MOC | | MAXIMUM OVER-CURRENT PROTECTION | | |
| NOTE: RECEPTACLES ON A DEDICATED CIRCUIT (THAT IS, NO OTHER LOAD CONNECTED TO THE BRANCH CIRCUIT) SHALL HAVE AMPACITY RATING NOT LESS THAN THE AMPERAGE OF THE CIRCUIT BREAKER SERVING THE DEVICE. | | | | MUA | | | | MAKE UP AIR UNIT |
| | | | | NEC | | | | LOCALLY ADOPTED EDITION OF THE NATIONAL ELECTRICAL CODE (NFPA 70) |
| | | | | NL | | | | NIGHT LIGHT (ON 24 HOURS) |
| | | | | OC | | | | ON CENTER |
| | | | | POS | | | | POINT OF SALE EQUIPMENT |
| | | | | RTU | | | | ROOF TOP UNIT |
| | | | | TB | | | | TERMINAL BLOCK |
| | | | | TL | | | | TWIST-LOCK TYPE DEVICE |
| | | | | TR | | | | TAMPER-RESISTANT |
| | | | | UON | | | | UNLESS OTHERWISE NOTED |
| | | | | WP | | | | WEATHERPROOF (NEMA 3R) |
| | | | | TELEPHONE | | | | |
| | | | | ▶ | | | | TELEPHONE OUTLET 18" UON |
| | | | | ▶ | | | | TELEPHONE OUTLET AT SPECIAL MOUNTING HEIGHT 60" UON |
| | | | | DISTRIBUTION EQUIPMENT | | | | |
| ☐ | | NON-FUSIBLE SAFETY SWITCH, SIZE AND TYPE AS NOTED ON PLANS (AMP/POLES/ENCLOSURE) OR ON SCHEDULE, NEMA 1 ENCLOSURE UNLESS NOTED WP FOR NEMA 3R ENCLOSURE. | 6'-6" | NOTE: EACH TELEPHONE OUTLET (FLOOR OR WALL MOUNTED) SHALL BE PROVIDED WITH A 3/4" EMPTY CONDUIT, WITH PULL WIRE, TO ACCESSIBLE CEILING SPACE. | | | | |
| ☐ | | FUSIBLE SAFETY SWITCH, SIZE & TYPE AS NOTED ON PLANS (AMP/POLES/FUSE AMPS/ENCLOSURE) OR ON SCHEDULE, NEMA 1 ENCLOSURE UNLESS NOTED WP FOR NEMA 3R. | 6'-6" | CCTV / SECURITY SYSTEM | | | | |
| ☐ | | FLUSH MOUNTED LIGHTING PANELBOARD | 6'-6" | K | | | | SECURITY ALARM KEYPAD |
| ☐ | | SURFACE MOUNTED LIGHTING PANELBOARD | 6'-6" | S | | | | SECURITY SYSTEM KEY NOTE |
| | | | | * 6'-6" DISTANCE IS TO TOP-MOST DISCONNECTING DEVICE OR HIGHEST POSITION OF OPERATING HANDLE OF DISCONNECTING DEVICE | | | | |



Chick-fil-A
5200 Buffington Road
Atlanta, Georgia
30349-2998



Kurzynske & Associates
2705 Lebanon Pike - Suite One
Nashville, Tennessee 37214
Telephone: (615) 255-5203



02/15/23

CHICK-FIL-A
PRINCETON WOODS
3330 PINE BLUFF DRIVE
DUMFRIES, VA 22026

FSR#04916

BUILDING TYPE / SIZE: P13 LSR ALL
RELEASE: 22.05

PRINTED FOR
CONSTRUCTION

REVISION SCHEDULE
NO. DATE DESCRIPTION

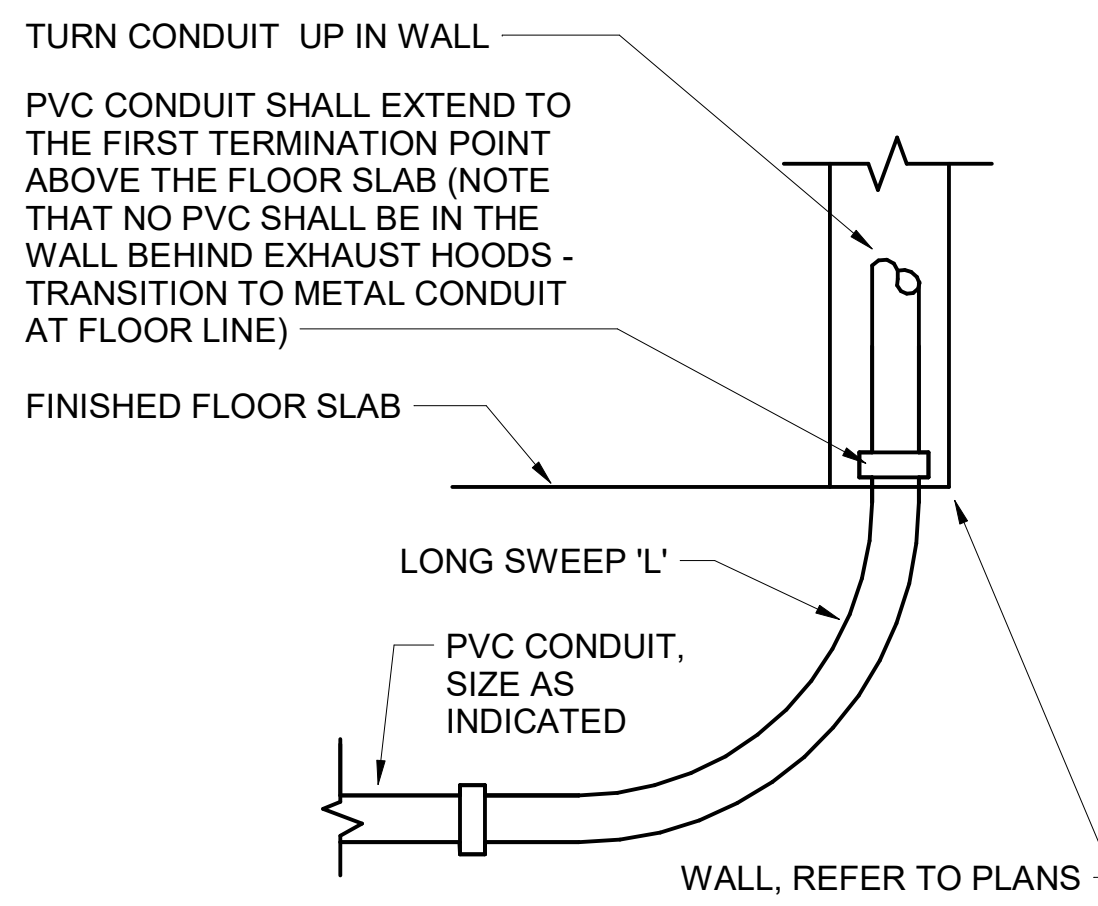
CONSULTANT PROJECT # 22050.EH.S
DATE 08/22/2022

DRAWN BY ES
Information contained on this drawing and all digital files produced for above named project may not be reproduced in any manner without explicit written or verbal consent from authorizing project representatives.

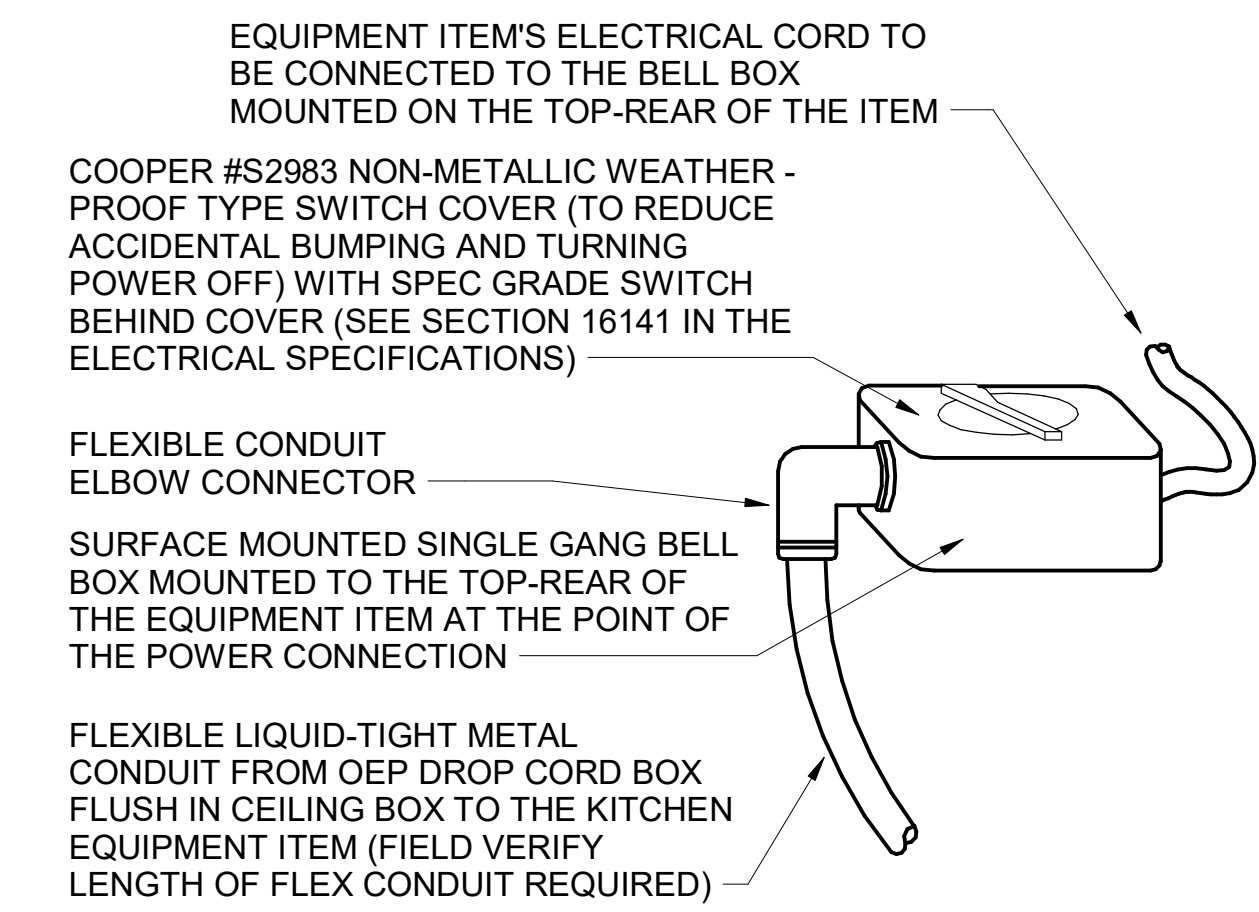
ELECTRICAL SCHEDULES AND DETAILS

SHEET NUMBER

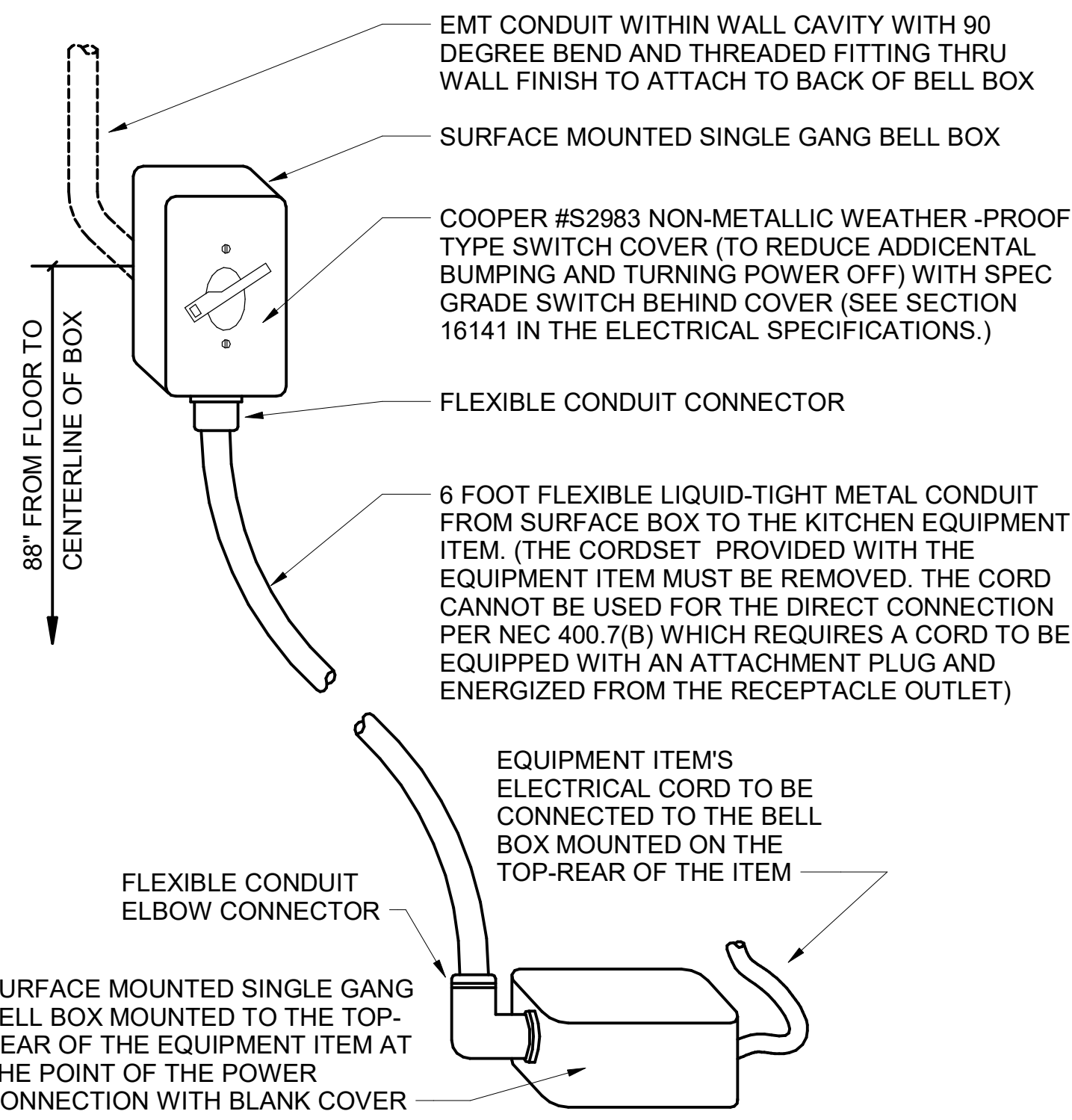
E-001



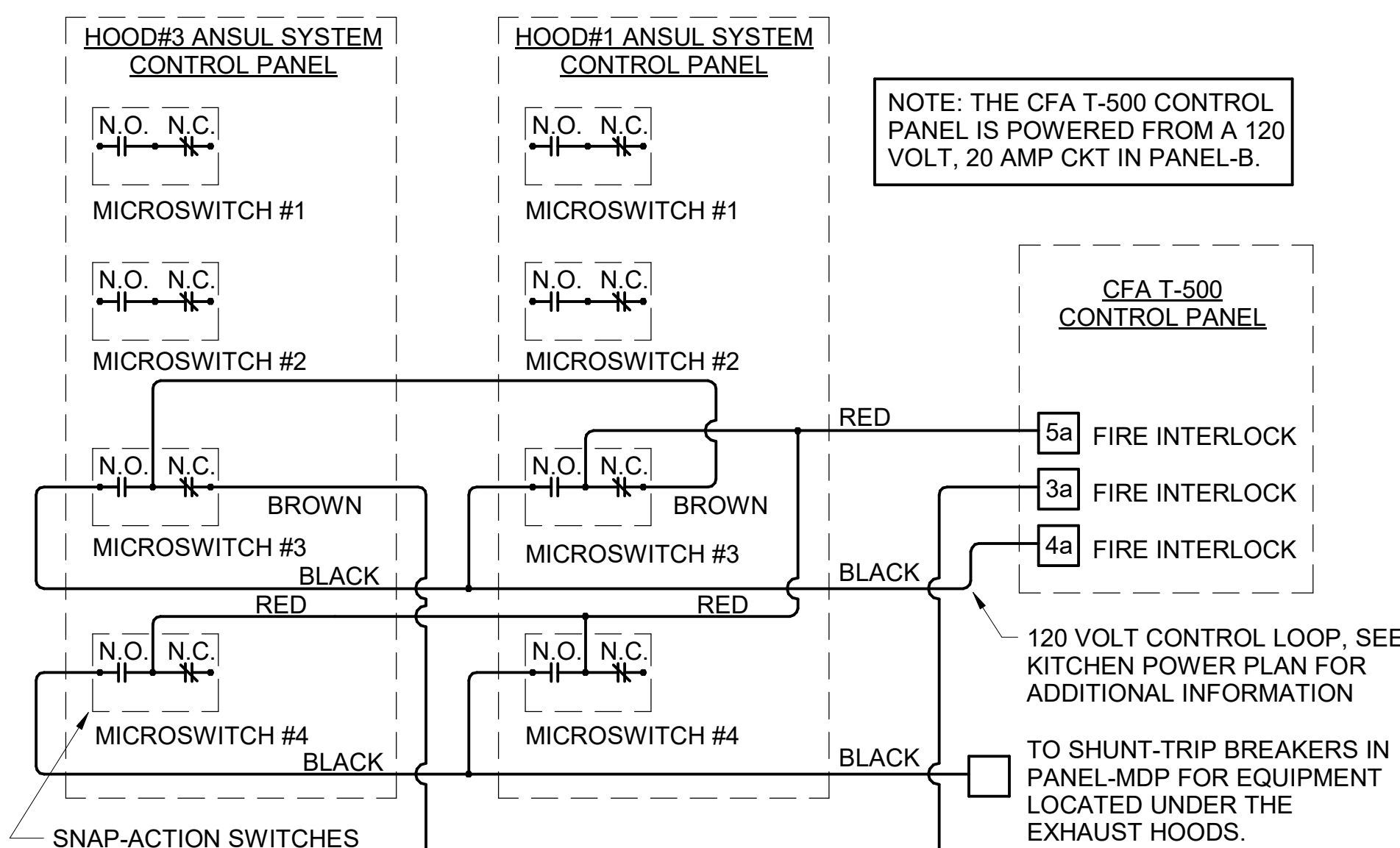
D4 INTERIOR PVC CONDUIT DETAIL
NO SCALE



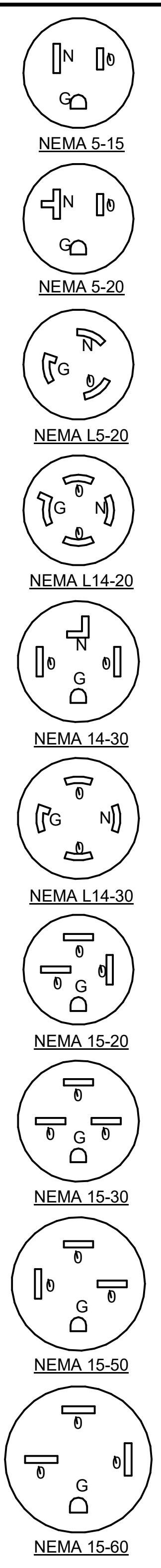
C4 DIRECT CONNECTION - ISLAND LOCATION
NO SCALE



B4 DIRECT CONNECTION - WALL LOCATION
NO SCALE



A3 ANSUL SYSTEM PANEL WIRING DIAGRAM
NO SCALE



KITCHEN EQUIPMENT SCHEDULE NOTES

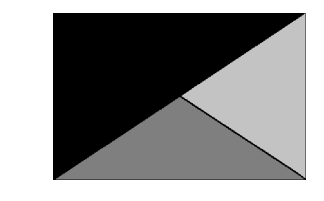
- ALL SO CORD LENGTHS SHALL BE MEASURED FROM THE REAR OF THE EQUIPMENT TO THE END OF THE CORD.
- CONTRACTOR SHALL PROVIDE GROUND-FAULT PROTECTION FOR ALL 120 VOLT 15 AMP AND 20 AMP RECEPTACLES IN THE KITCHEN / FOOD PREPARATION AREAS. GROUND-FAULT PROTECTION SHALL BE PROVIDED AT THE RECEPTACLE AS A GFCI TYPE RECEPTACLE UNLESS NOTED OTHERWISE ON THE PLANS WHERE A GFCI TYPE BREAKER IS INDICATED.
- PROVIDE GFCI TYPE BRANCH BREAKER FOR KITCHEN / FOOD PREPARATION AREA RECEPTACLES THAT ARE TWIST-LOCK, CLOCK STYLE, OR IG (ISOLATED GROUND) TYPE.

KITCHEN EQUIPMENT SCHEDULE - CHICK-FIL-A P13 EDITION

| ITEM NO. | DESCRIPTION OF EQUIPMENT | VOLTS | PH | KW | AMPS | NEMA-RATING | COMMENTS AND REMARKS |
|----------|--|-------|----|--------|----------------|-------------------|--|
| 180 | ORDER REGISTER | 120 | 1 | | <varies> | 5-20P | |
| 182 | RECEIPT PRINTER | other | 1 | | 1.80 | 5-20P | PROVIDED WITH 120V/24V POWER SUPPLY ADAPTER FOR USE WITH 120V IG OUTLET |
| 182L | LABEL PRINTER | other | 1 | | 1.7 | 5-20P | PROVIDED WITH 120V/24V POWER SUPPLY ADAPTER FOR USE WITH 120V IG OUTLET |
| 183 | ORDER MONITOR | 120 | 1 | | 0.125 | 5-20P | PROVIDED BY CFA IT |
| 184 | IPAD | 120 | 1 | 0.120 | 1.00 | 5-20P | PROVIDED BY CONNECTION |
| 184T | ITIMER | 120 | 1 | 0.120 | 1.00 | 5-20P | PROVIDED BY CLARK |
| 190 | DRIVE-THRU VIDEO MONITOR | 120 | 1 | | 0.8 | 5-20P | |
| 211B | FLY SYSTEM | 120 | 1 | 0.10 | 0.60 | 5-15P | CLOCK STYLE RECEPTACLE REQUIRED |
| 211C | FLY SYSTEM | 120 | 1 | .03 | .25 | 5-15P | RE: ARCHITECTURAL SHEETS FOR MOUNTING DETAILS |
| 269 | ANSUL FIRE SUPPRESSION SYSTEM | 120 | 1 | | VERIFY | DIRECT CONNECTION | REMOTE CABINET - REFER TO SHOP DRAWINGS - FED FROM CFA-T500 PANEL |
| 270 | ANSUL FIRE SUPPRESSION SYSTEM | 120 | 1 | | VERIFY | DIRECT CONNECTION | LOCATED ABOVE HOOD - BEHIND CLOSURE PANEL - REFER TO SHOP DRAWINGS - FED FROM CFA-T500 PANEL |
| 300a | MILKSHAKE BASE DISPENSER | 120 | 1 | | 4.00 | 5-20P | MOUNTED ON ITEM #300b |
| 300X | DOUBLE BARREL ICE CREAM MACHINE | 208 | 3 | | 19.00/15.00 | 15-30P/15-20P | PROVIDED WITH HUBBELL HBL8432C & HBL8421C ANGLE PLUGS |
| 305 | TEA BREWER | 120 | 1 | 1.650 | 13.80 | | PROVIDE QUICK DISCONNECT HOSES |
| 308 | SINGLE COFFEE MAKER | 208 | 1 | 4.000 | 19.20 | L14-30P | QUICK DISCONNECT HOSES PROVIDED BY CFA WAREHOUSE |
| 310 | DOUBLE LEMONADE BUBBLER | 120 | 1 | | 8.50 | 5-15P | ORDER (1) #3CRA016 BOWL KIT AND (1) #3CRA018 BASE PER BUBBLER AND ORDER TOTAL OF (1) #3CRA021 SET OF (2) 2.4 GAL BOWLS |
| 315W | 10-HEAD BEVERAGE DISPENSER WITH ICE BIN | 115 | 1 | | 10.00 | 5-15P/5-15P | PROVIDED WITH (2) CORDS AND PLUGS PER TOWER |
| 320 | TURBO CARBONATOR | 115 | 1 | | 6.2 | 5-20P | ORDER (8) #44231, (3) #44233, (8) DR. PEPPER PUMPS, & (3) #T5274SN-01 |
| 363H | HIGH-TEMP UPRIGHT DISHWASHER | 208 | 3 | | 53.68 | DIRECT CONNECTION | INCLUDES 6 FT BRAIDED HOSE AND INTEGRATED DRAIN WATER TEMPERING SYSTEM |
| 380 | ICE MACHINE | 115 | 1 | 0.600 | 5.00 | 5-15P | INSTALLED ON TOP OF ICE BIN - PROVIDED WITH 6 FT CORD AND 35 FT LINE SETS |
| 380a | ICE BIN SANITATION SYSTEM | 120 | 1 | 0.0096 | | 5-15P | INSTALLED ON WALL ABOVE ICE BIN - SHARES DUPLEX WITH (1) ICE MACHINE |
| 380C | ICE MACHINE REMOTE CONDENSING UNIT | 208 | 3 | 3.100 | 14.20 | DIRECT CONNECTION | AIR COOLED UNIT - GC SHALL PLACE AND INSTALL CONDENSER ON ROOF - NOT SHOWN ON DRAWINGS |
| 380CD | ICE MACHINE REMOTE CONDENSING UNIT | 208 | 3 | 3.600 | 15.70 | DIRECT CONNECTION | AIR COOLED UNIT - GC SHALL PLACE AND INSTALL CONDENSER ON ROOF - NOT SHOWN ON DRAWINGS |
| 380D | ICE MACHINE | 115 | 1 | 0.368 | 5.00 | 5-15P | INSTALLED ON TOP OF ICE BIN - PROVIDED WITH 6 FT CORD AND 35 FT LINE SETS |
| 400 | SINGLE UPRIGHT FREEZER (30" WIDE) | 115 | 1 | 1.100 | 9.40 | 5-15P | HINGE RIGHT - PROVIDE FINISHED BACK - ORDER ON 4 5/8 IN CASTERS |
| 404 | UNDERCOUNTER FREEZER (27") | 115 | 1 | | 8.00 | 5-15P | HINGE RIGHT - ORDER ON 4 IN CASTERS |
| 410 | WALK-IN FREEZER | 120 | 1 | | 3.3 | DIRECT CONNECTION | ORDER WITHOUT FLOOR - REFER TO LIGHTING PLAN |
| 410a | WALK-IN FREEZER CONDENSER | 208 | 3 | | 16.30 | DIRECT CONNECTION | GC SHALL INSTALL CONDENSER ON ROOF - NOT SHOWN ON DRAWINGS |
| 410b | WALK-IN FREEZER EVAPORATOR | 208 | 1 | | 1.50 | DIRECT CONNECTION | POWER FED FROM CONDENSER |
| 420 | SINGLE UNDERCOUNTER REFRIGERATOR | 115 | 1 | 0.564 | 4.70 | 5-20P | HINGE RIGHT - ORDER ON 4" CASTERS |
| 420L | SINGLE UNDERCOUNTER REFRIGERATOR | 115 | 1 | 0.564 | 4.70 | 5-20P | HINGE LEFT - ORDER ON 4" CASTERS |
| 420LA | SINGLE UNDERCOUNTER REFRIGERATOR | 115 | 1 | 0.564 | 4.70 | 5-20P | HINGE LEFT - ORDER ON 2 IN CASTERS |
| 421 | DOUBLE UNDERCOUNTER REFRIGERATOR | 115 | 1 | 0.756 | 6.30 | 5-15P | ORDER ON 4 IN CASTERS |
| 422T | REFRIGERATED EQUIPMENT STAND (48") | 115 | 1 | 0.80 | 6.70 | L5-15P | EC TO CHANGE PLUG TO TWIST LOCK - PROVIDED W/9' CORD - ORDER ON 4" CASTERS |
| 431T | DOUBLE REFRIGERATED WORK TABLE | 115 | 1 | 0.756 | 6.30 | L5-15P (BY EC) | EC TO CHANGE PLUG TO TWIST LOCK - ORDER ON 6 IN CASTERS WITH BACKSPLASH TOP |
| 432T | DOUBLE REFRIGERATED WORK TABLE | 115 | 1 | 0.756 | 6.30 | L5-20P (BY EC) | EC TO CHANGE PLUG TO TWIST LOCK - ORDER ON 6 IN CASTERS WITH BACKSPLASH TOP |
| 439 | 40" COLD RAIL | 115 | 1 | 0.800 | 7.10 | 5-15P | COMPRESSOR ON RIGHT - SUPPLIED WITH 9 FT CORD AND PLUG |
| 440CT | ICE BATH BREADING TABLE | 120 | 1 | | 1.00 | L5-15P (BY EC) | EC TO CHANGE PLUG TO TWIST LOCK - 10 FT CORD AND PLUG - LEAF INCLUDED WITH TABLE - INSTALL IF SHOWN ON PLANS |
| 441 | SALAD PREP TABLE | 115 | 1 | | 9.0 | L5-15P | PROVIDE WITH TWIST LOCK PLUG, ORDER ON 4" CASTERS WITH PAN PKG., SEC TO PROVIDE PAN PKG. |
| 442WCT | SINGLE UPRIGHT REFRIGERATOR (30" WIDE) | 115 | 1 | | 7 | L5-15P (BY EC) | HINGE RIGHT - PROVIDE FINISHED BACK - ORDER ON 6 IN CASTERS - EC TO CHANGE PLUG TO TWIST LOCK |
| 443G | SINGLE UPRIGHT REFRIGERATOR (24" WIDE) | 115 | 1 | | 8 | 5-15P | HINGE RIGHT - HALF HEIGHT GLASS DOORS - PROVIDE FINISHED BACK - ORDER ON 6" CASTERS |
| 444D | DOUBLE THAWING CABINET (52" WIDE) | 115 | 1 | | 16.00 | DIRECT CONNECTION | HINGE STANDARD - GC TO INSTALL LIQUID TIGHT FLEX CONDUIT - ORDER ON 6 IN CASTERS |
| 444S | SINGLE THAWING CABINET (32" WIDE) | 115 | 1 | | 16.00 | DIRECT CONNECTION | HINGE RIGHT - GC TO INSTALL LIQUID TIGHT FLEX CONDUIT - ORDER ON 6 IN CASTERS |
| 444SL | SINGLE THAWING CABINET (32" WIDE) | 115 | 1 | | 16.00 | DIRECT CONNECTION | HINGE LEFT - GC TO INSTALL LIQUID TIGHT FLEX CONDUIT - ORDER ON 6 IN CASTERS |
| 449 | WALK-IN COOLER | 120 | 1 | | 2.4 | DIRECT CONNECTION | ORDER WITHOUT FLOOR - REFER TO LIGHTING PLAN |
| 449a | WALK-IN COOLER CONDENSER | 208 | 3 | | 9.50 | DIRECT CONNECTION | GC SHALL INSTALL CONDENSER ON ROOF - NOT SHOWN ON DRAWINGS |
| 449b | WALK-IN COOLER EVAPORATOR | 208 | 1 | 0.110 | 1.00 | DIRECT CONNECTION | POWER FED FROM CONDENSER |
| 500A | VERTICAL CONTACT TOASTER | 120 | 1 | 1.80 | 15.00 | 5-15P | |
| 500B | RADIANT TOASTER | 208 | 1 | 5.50 | 24.00 | L6-30P | PROVIDED WITH TWIST LOCK PLUG |
| 503T | EGG STATION | 208 | 1 | 2.5 | 12.5 | L6-20P | PROVIDED W/TWIST LOCK PLUG |
| 505V | VECTOR OVEN | 208 | 3 | 7.90 | 22.00 | 15-30P | HINGE RIGHT |
| 505VLT | VECTOR OVEN | 208 | 3 | 7.90 | 22.00 | L15-30P (BY EC) | HINGE LEFT - EC TO CHANGE PLUG TO TWIST LOCK |
| 522 | SINGLE OPEN FRYER | 208 | 3 | 22.000 | 62.00 | PIN & SLEEVE | PIN & SLEEVE PROVIDED WITH EQUIPMENT AND RECEPTACLE BOX PROVIDED WITH HALTON ITEMS - (1) POWER CONNECTION PER WELL |
| 522A | DOUBLE OPEN FRYER | 208 | 3 | 44.000 | 124.00 | PIN & SLEEVE | PIN & SLEEVE PROVIDED WITH EQUIPMENT AND RECEPTACLE BOX PROVIDED WITH HALTON ITEMS - (1) POWER CONNECTION PER WELL |
| 523 | PRESSURE FRYER | 208 | 3 | 13.500 | 38.00 | 15-50P | PROVIDED WITH 6 FT CORD AND PLUG |
| 524 | DUAL SIDE CLAMSHELL GRILL | 208 | 3 | 9 | 24.1/28.2/23.1 | 15-50P | PROVIDED WITH 5' CORD & PLUG |
| 560 | FRY HOLDING STATION | 120 | 1 | 1.90 | 15.4 | 5-20P | |
| 562A | HIGH DENSITY HOT HOLDING TOWER | 120 | 1 | 1.80 | 16.00 | 5-20P | PROVIDED WITH 8 FT CORD AND PLUG |
| 563DL | DOUBLE TIER SANDWICH SLIDE | 120 | 1 | 1.09 | 9.13 | 5-15P | CORD EXITS LEFT - 6' CORD AND PLUG |
| 563S | SINGLE TIER SANDWICH SLIDE | 120 | 1 | 0.548 | 4.56 | 5-15P | CORD EXITS RIGHT - 6' CORD AND PLUG |
| 564B | VISUAL HOT HOLDING CABINET (2x2 LANDSCAPE) | 120 | 1 | 0.660 | 5.50 | 5-15P | ORDER WITH LIDS/TRAY SEALS, AMBER PANS, AND FALSE BOTTOMS |
| 565C | FOOD COOKER/WARMER | 120 | 1 | 1.500 | 12.50 | 5-15P | ORDER WITH (1) 3VOL042, (2) 3VOL043, (8) 3VOL051, AND (8) 3VOL061 |
| 580H | VISUAL HOT HOLDING CABINET (5x2) | 120 | 1 | 1.920 | 16.00 | 5-20P | ORDER WITH LIDS/TRAY SEALS |
| 592 | RETHERMALIZER | 208 | 3 | 8.000 | 22.00 | 15-30P | PROVIDED WITH 6' CORD AND ANGLE PLUG - WATER SUPPLY TO BE S/S BRAIDED HOSE WITH MALE QUICK CONNECT ADAPTER |
| 600 | MIXER | 120 | 1 | | 8.0 | L5-20P | E.C. TO CHANGE PLUG TO TWIST LOCK - ORDER WITH 3HOB405, 3HOB061, 3HOB318, 3HOB319, & 3HOB058 |
| 607 | COUNTERTOP LEMON JUICER | 115 | 1 | | | 5-15P | LOCATED ON ITEM #606 |
| 669 | OFFICE SAFE | 120 | 1 | | | | INSTALL SAFE PER MANUFACTURE'S WRITTEN INSTRUCTIONS |
| 672 | DIGITAL MENU BOARD | 120 | 1 | | | 5-15P | PROVIDED BY COATES |



Chick-fil-A
5200 Buffington Road
Atlanta, Georgia
30349-2998



Kurzynske & Associates
2705 Lebanon Pike - Suite One
Nashville, Tennessee 37214
Telephone: (615) 255-5203



02/15/23

CHICK-FIL-A
PRINCETON WOODS
3330 PINE BLUFF DRIVE
DUMFRIES, VA 22026

FSR#04916

BUILDING TYPE / SIZE: P13 LSR ALL
RELEASE: 22.05
PRINTED FOR:
CONSTRUCTION
REVISION SCHEDULE
NO. DATE DESCRIPTION

CONSULTANT PROJECT # 22050.EH.S
DATE 08/22/2022
DRAWN BY ES
Information contained on this drawing and all digital files produced for above named project may not be reproduced in any manner without express written or verbal consent from authorized project representatives.
SHEET
ELECTRICAL SCHEDULES AND DETAILS
SHEET NUMBER

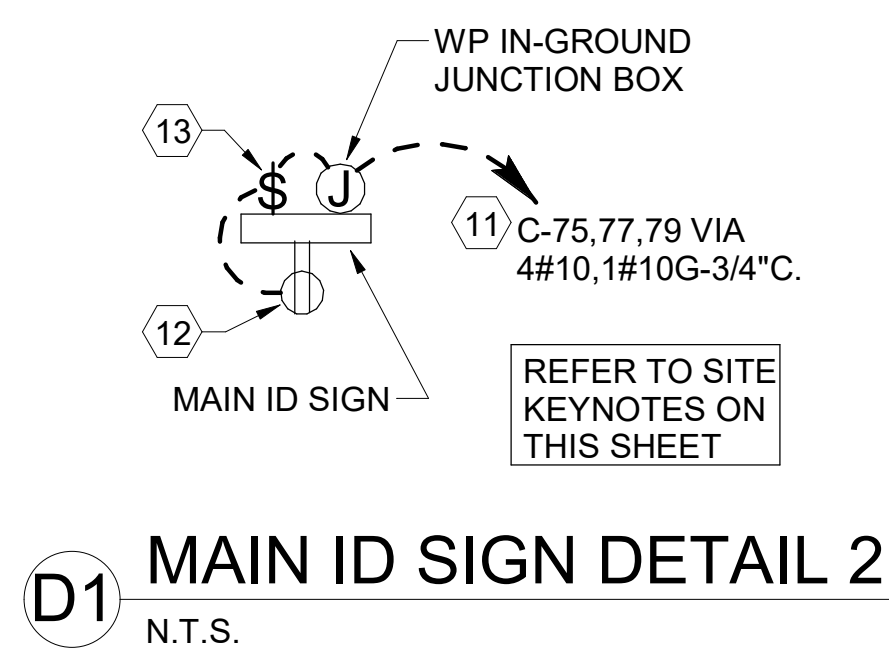
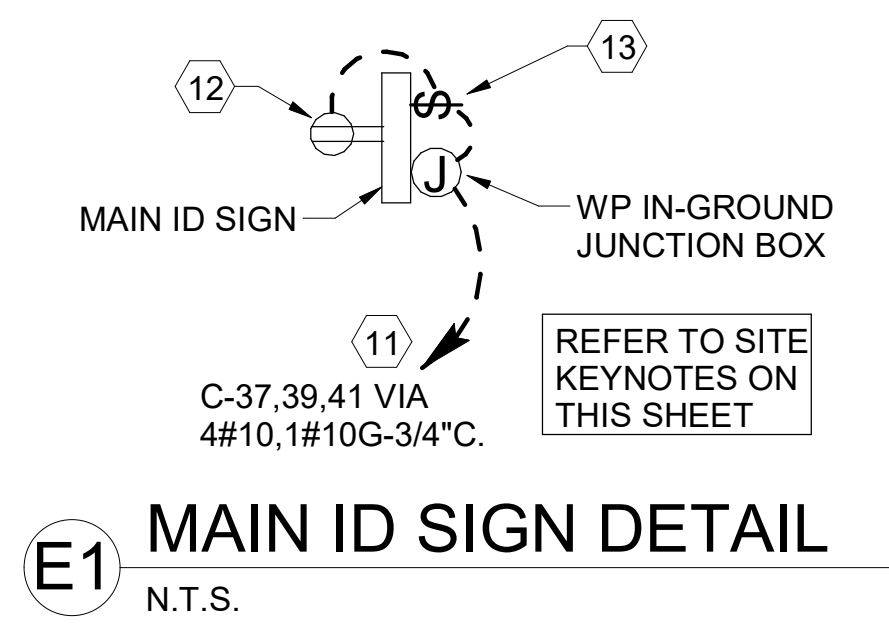
E-002

| ELECTRICAL SITE PLAN SYMBOLS | |
|------------------------------|---|
| SYMBOL | DESCRIPTION (UNLESS OTHERWISE NOTED ON PLANS) |
| | UTILITY COMPANY TRANSFORMER, (208 VOLT, 3 PHASE, 4 WIRE SECONDARY) |
| | S.P.S.T. LIGHT SWITCH (600V AC QUIET TYPE) |
| | GROUND FAULT CIRCUIT INTERRUPTER DUPLEX RECEPTACLE |
| | CONDUIT HOMERUN TO PANEL |
| | JUNCTION BOX (SINGLE GANG STEEL WHERE WALL MOUNTED, 4" SQ. STEEL WHERE CEILING MOUNTED, UNLESS NOTED OTHERWISE) |
| | CONDUIT BURIED BELOW GRADE |
| | POLE MOUNTED SITE LIGHTING FIXTURE. CHEVRON INDICATES DIRECTION OF PRIMARY LIGHT DISTRIBUTION. |

- ### GENERAL ELECTRICAL SITE PLAN NOTES
- VERIFY WITH LOCAL AUTHORITIES AND UTILITIES THAT OWNER'S SIGNS, POLES, AND THEIR APPURTENANCES ARE NOT LOCATED ON OR OVER ANY EASEMENT OR MUNICIPAL RIGHT OF WAY.
 - SITE WORK, UTILITY, AND ROADWAY INFORMATION ARE TAKEN FROM BOUNDARY AND TOPO SURVEY SITE PLANS. REFER TO C-DRAWINGS.
 - MINIMUM CONDUIT SIZE SHALL BE 3/4" C. MINIMUM CONDUCTOR SIZE SHALL BE #10AWG COPPER UNLESS OTHERWISE NOTED.
 - REFER TO BUILDING ELECTRICAL DRAWINGS FOR EXTERIOR LIGHTING CONTROL.
 - FOR WORK UNDER THIS DIVISION, ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL ONLY NEW AND U.L. LABELED ELECTRICAL EQUIPMENT, UNLESS INDICATED OTHERWISE BY THE CONTRACT DOCUMENTS.
 - FOR WORK UNDER THIS DIVISION, ELECTRICAL CONTRACTOR SHALL CONTACT ALL UTILITIES FOR VERIFICATION AND IDENTIFICATION OF ALL UNDERGROUND RUNS, PRIOR TO SITE TRENCHING ("CALL BEFORE YOU DIG").
 - FOR WORK UNDER THIS DIVISION, ELECTRICAL CONTRACTOR SHALL PERFORM ALL WORK IN STRICT ACCORDANCE WITH THE CURRENT EDITION OF THE NATIONAL ELECTRIC CODE (NFPA 70), AND THE LIFE SAFETY CODE (NFPA 101), AS ADOPTED AND/OR AMENDED BY STATE AND LOCAL AUTHORITIES HAVING JURISDICTION.
 - FOR WORK UNDER THIS DIVISION, ELECTRICAL CONTRACTOR SHALL COORDINATE AND FIELD VERIFY LOCATIONS OF ALL UTILITY SERVICE RUNS, ORIGINATIONS, TERMINATIONS AND ANY INSTALLATION REQUIREMENTS (i.e. ELECTRICAL, TELEPHONE, WATER, GAS, SEWAGE, ETC.), AS RELATED TO THIS JOB, OR THEREBY EFFECTED.
 - REFER TO SHEETS E-901, & E-902 FOR ELECTRICAL SPECIFICATIONS PERTAINING TO ELECTRICAL WORK DESCRIBED ON THIS SHEET.
 - REFER TO SHEET E-102 FOR AREA LIGHTING FIXTURE SCHEDULE AND SHEET E-211 FOR BUILDING LIGHTING FIXTURE SCHEDULE.

- ### ELECTRICAL SITE PLAN KEYNOTES
- FIELD COORDINATE LOCATION OF PRIMARY UNDERGROUND ELECTRICAL UTILITY LINES: PROVIDE THREE 4", SCH. 40 PVC CONDUIT TO UTILITY SOURCE, AT MINIMUM 30" BELOW FINISHED GRADE AND IN ACCORDANCE WITH UTILITY COMPANY REQUIREMENTS. COORDINATE ALL REQUIREMENTS WITH THE UTILITY COMPANY PRIOR TO BID.
 - PROPOSED LOCATION OF PAD MOUNTED TRANSFORMER FURNISHED BY THE ELECTRICAL UTILITY COMPANY. THE ELECTRICAL CONTRACTOR SHALL PROVIDE CONCRETE PAD FOR IN ACCORDANCE WITH UTILITY COMPANY REQUIREMENTS.
 - FIELD COORDINATE LOCATION OF SECONDARY UNDERGROUND ELECTRICAL UTILITY LINES: PROVIDE SECONDARY CONDUIT FROM UTILITY TRANSFORMER TO THE CT CABINET. PROVIDE CONDUIT AND CONDUCTORS FROM CT CABINET TO PANEL "MDP". SEE SHEET E-502, "SINGLE-LINE DIAGRAM". REFER TO "ELECTRICAL SERVICE LATERAL CONDUIT DETAIL", SHEET E-101, FOR ADDITIONAL INFORMATION.
 - LOCATION OF TERMINATION OF SECONDARY SERVICE LATERAL AT PANEL "MDP". REFER TO "SINGLE-LINE DIAGRAM" ON SHEET E-502 FOR ADDITIONAL INFORMATION.
 - A. PROVIDE TWO 4" SCH. 40 PVC CONDUIT (ONE IS A SPARE), MINIMUM 24" BELOW FINISHED GRADE, FOR TELEPHONE SERVICE FROM TELEPHONE UTILITY SOURCE TO JUNCTION BOX INSIDE THE BUILDING. REFER TO SHEET E-302 FOR LOCATION OF JUNCTION BOX IN SERVICE AREA. REFER TO "TELEPHONE SERVICE CONDUIT DETAIL", SHEET E-101, FOR ADDITIONAL INFORMATION. COORDINATE EXACT LOCATION OF UTILITY SOURCE WITH TELEPHONE UTILITY. TERMINATE CONDUITS AT UTILITY SOURCE AS REQUIRED BY THE UTILITY COMPANY.
B. PROVIDE ONE 3" SCH. 40 PVC CONDUIT, MINIMUM 24" BELOW FINISHED GRADE, FOR ISP SERVICE FROM UTILITY SOURCE TO JUNCTION BOX INSIDE THE BUILDING. REFER TO SHEET E-302 FOR LOCATION OF JUNCTION BOX IN BUILDING. REFER TO "TELEPHONE SERVICE CONDUIT DETAIL", SHEET E-101, FOR ADDITIONAL INFORMATION. COORDINATE EXACT LOCATION OF UTILITY SOURCE WITH SERVICE SUPPLY COMPANY. TERMINATE CONDUITS AT AS REQUIRED BY THE UTILITY COMPANY.
 - REFER TO SHEET E-303 AND E-304 FOR ELECTRICAL REQUIREMENTS AT MENU BOARD AND DRIVE-THRU CANOPY.
 - LOCATION OF DUMPSTER. REFER TO "REFUSE ENCLOSURE PLAN - ELECTRICAL", SHEET E-303 FOR ELECTRICAL REQUIREMENTS IN THIS AREA.
 - NOT USED.
 - PROVIDE UNDERGROUND CONDUIT TO LOCATION WITHIN THE BUILDING FOR POLE MOUNTED SECURITY CAMERA. REFER TO SHEET E-302 FOR LOCATION OF CONDUIT STUB-UP AND REQUIRED SIZE OF CONDUIT. COORDINATE EXACT CAMERA LOCATION WITH CHICK-FIL-A SECURITY SYSTEM REPRESENTATIVE PRIOR TO ROUGH-IN.
 - CONNECT AREA LIGHTING CIRCUITS TO TERMINAL BLOCKS LOCATED IN THE "CFA-T500" CONTROL PANEL (TYPICAL). SEE PANEL SCHEDULES ON SHEET E-501.
 - CONNECT SITE SIGNAGE CIRCUITS TO TERMINAL BLOCKS LOCATED IN THE "CFA-T500" CONTROL PANEL (TYPICAL). SEE PANEL SCHEDULES ON SHEET E-501. COORDINATE LOCATIONS OF ALL SIGNS WITH CHICK-FIL-A SIGNAGE PLANS PRIOR TO BID AND PRIOR TO CONDUIT INSTALLATION.
 - PROVIDE GFCI TYPE WEATHERPROOF RECEPTACLE MOUNTED ON MAIN SIGN SUPPORT +14" AFG. THIS RECEPTACLE SHALL NOT BE SWITCHED. (BYPASS THE CONTACTOR AND SIGN'S DISCONNECT SWITCH.)
 - PROVIDE WEATHERPROOF 20A SPST TOGGLE SWITCH 18" AFG AND CONNECTION TO MAINTENANCE DISCONNECT SWITCH FOR MAIN I.D. SIGN.
 - PROPOSED LOCATION OF BUILDING MOUNTED ELECTRICAL UTILITY METER. METER BASE WILL BE FURNISHED BY THE UTILITY COMPANY AND INSTALLED BY THE CONTRACTOR. THE CURRENT TRANSFORMER CABINET SHALL BE FURNISHED AND INSTALLED ON THE BUILDING BY THE CONTRACTOR. THE CONTRACTOR SHALL ALSO FURNISH AND INSTALL A 1-1/4" RIGID GALVANIZED CONDUIT BETWEEN METER BASE AND CURRENT TRANSFORMER CABINET. COORDINATE LOCATIONS AND REQUIREMENTS WITH ELECTRIC UTILITY COMPANY PRIOR TO BID.

- ### DT CASH STATION - KEYNOTES
- LOCATION OF A 360 DEGREE BUILDING MOUNTED EXTERIOR CAMERA (BY OTHERS). PROVIDE A 3/4" CONDUIT AT 9'-4" AFF TO AN EXTERIOR WALL MOUNTED WP JUNCTION BOX WITH THE CONDUIT ABOVE THE INTERIOR CEILING AND EXTENDED TO AN ACCESSIBLE CEILING AREA FOR CAMERA CABLES BY OTHERS.
 - PROVIDE AN EXTERIOR DUPLEX 120V, 20A RECEPTACLE AT 18" AFF WITH 'IN-USE' STYLE LOCKABLE WP COVER AND CONNECT TO A GENERAL PURPOSE 120V RECEPTACLE CIRCUIT.
 - PROVIDE A JUNCTION BOX ON THE INSIDE PARAPET WALL ABOVE THE ROOF WITH A 3/4" CONDUIT STUBBED DOWN INTO AN ACCESSIBLE CEILING SPACE AREA BELOW FOR THE OWNER PROVIDED WI-FI EXTERIOR ANTENNAE.

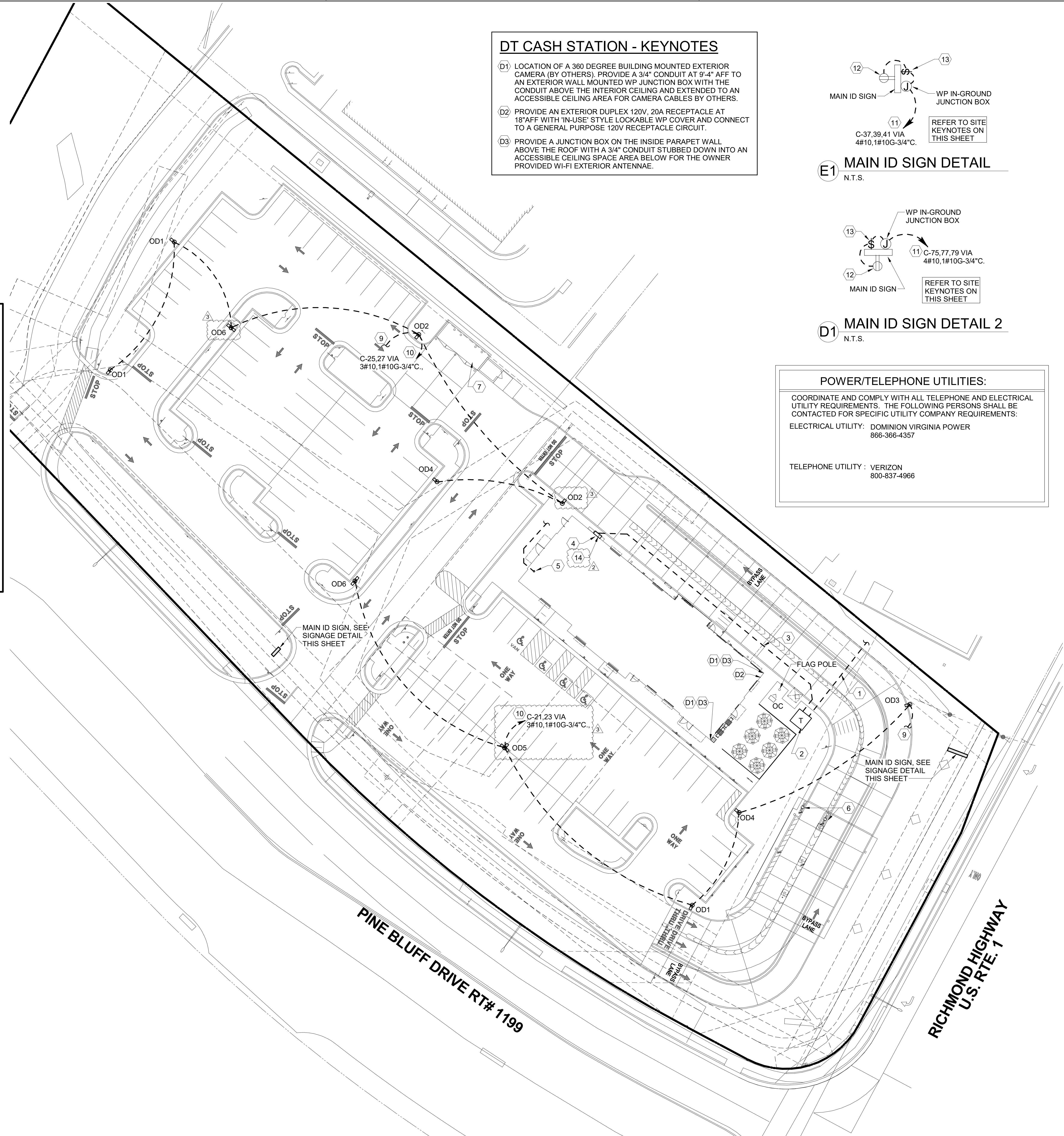


POWER/TELEPHONE UTILITIES:

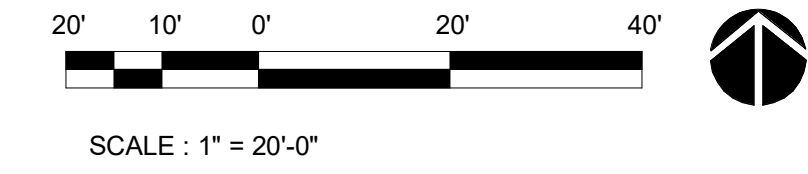
COORDINATE AND COMPLY WITH ALL TELEPHONE AND ELECTRICAL UTILITY REQUIREMENTS. THE FOLLOWING PERSONS SHALL BE CONTACTED FOR SPECIFIC UTILITY COMPANY REQUIREMENTS:

ELECTRICAL UTILITY: DOMINION VIRGINIA POWER
866-366-4357

TELEPHONE UTILITY: VERIZON
800-837-4966



A1 ELECTRICAL SITE PLAN
1" = 20'-0"



Chick-fil-A
5200 Buffington Road
Atlanta, Georgia
30349-2998

Kurzynske & Associates
2705 Lebanon Pike - Suite One
Nashville, Tennessee 37214
Telephone: (615) 255-5203



02/15/23

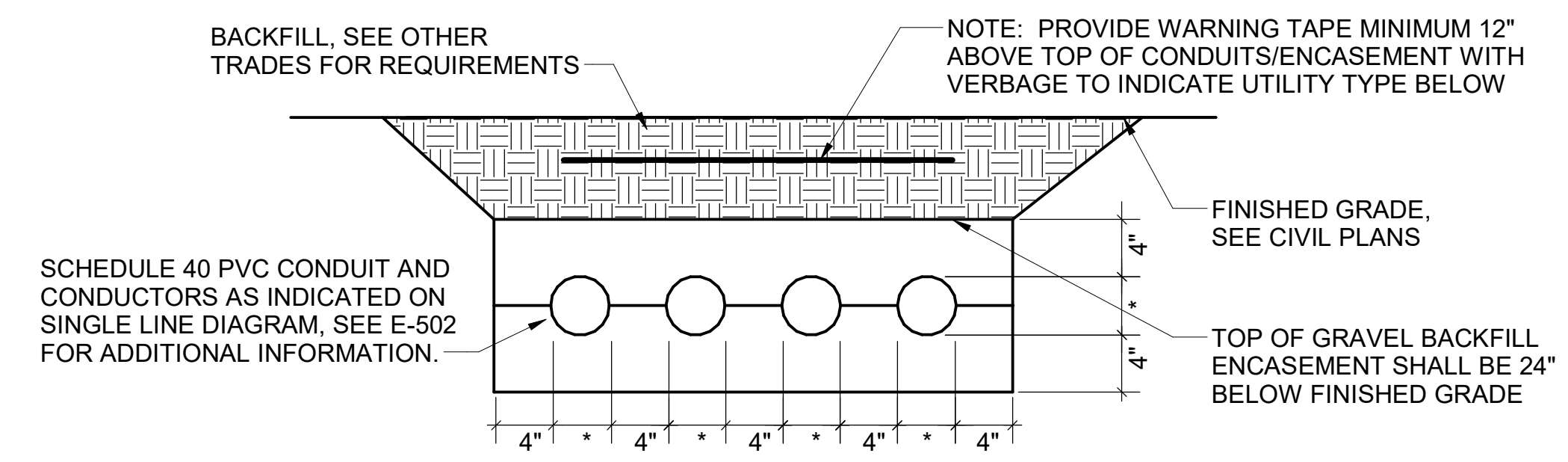
CHICK-FIL-A
PRINCETON WOODS
3330 PINE BLUFF DRIVE
DUMFRIES, VA 22026

FSR#04916
BUILDING TYPE / SIZE: P13 LSR
RELEASE:
PRINTED FOR:
CONSTRUCTION

| REVISION SCHEDULE | | |
|-------------------|------------|---------------|
| NO. | DATE | DESCRIPTION |
| 2 | 12/09/2022 | UTILITY COORD |
| 3 | 12/12/2022 | CODE COMMENTS |

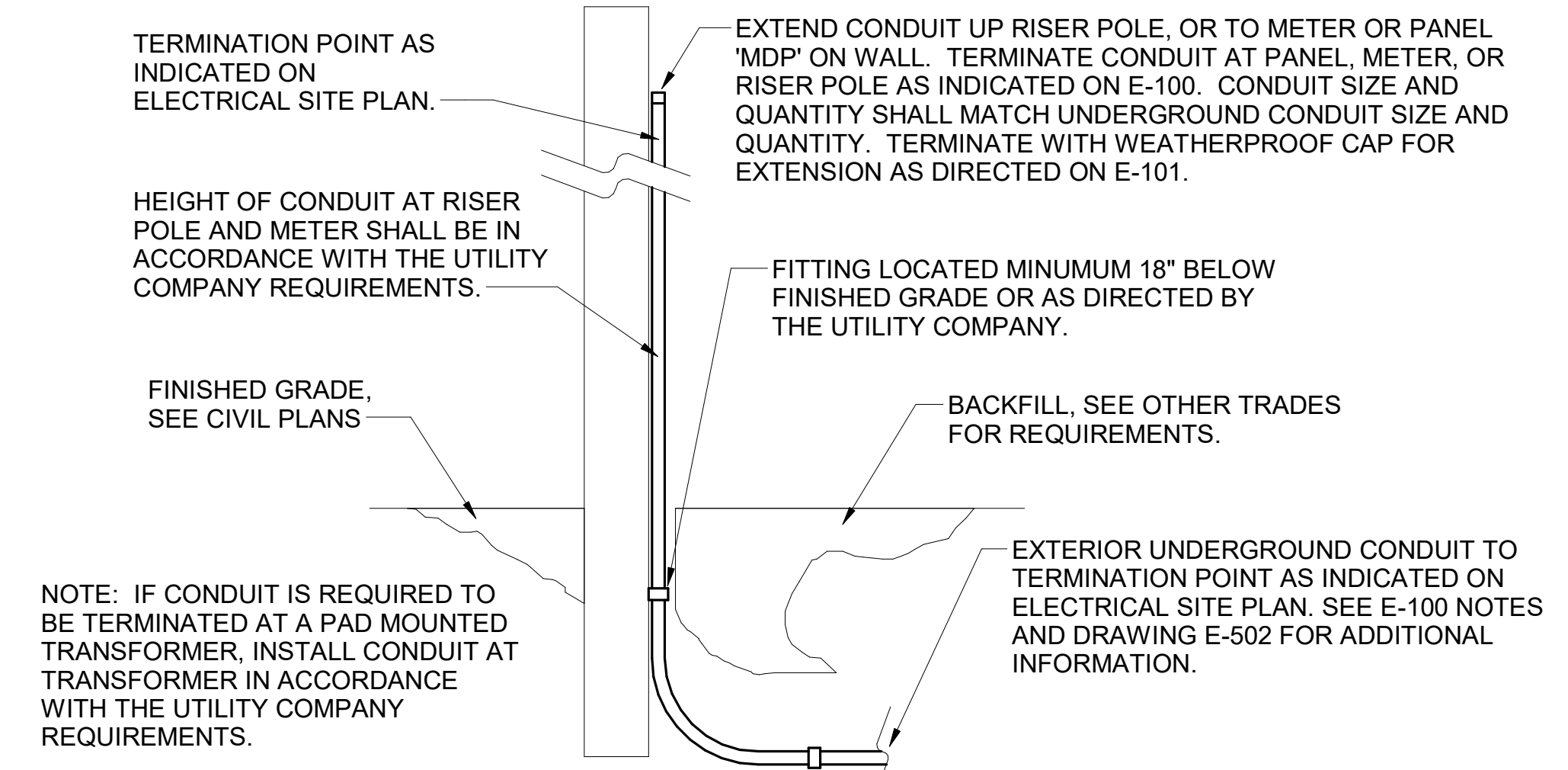
CONSULTANT PROJECT # 22050.EH.S
DATE 07/22/2022
DRAWN BY BTS
Information contained on this drawing and all digital files produced for above named project may not be reproduced in any manner without express written or verbal consent from authorized project representatives.
ELECTRICAL SITE PLAN
SHEET NUMBER

E-100

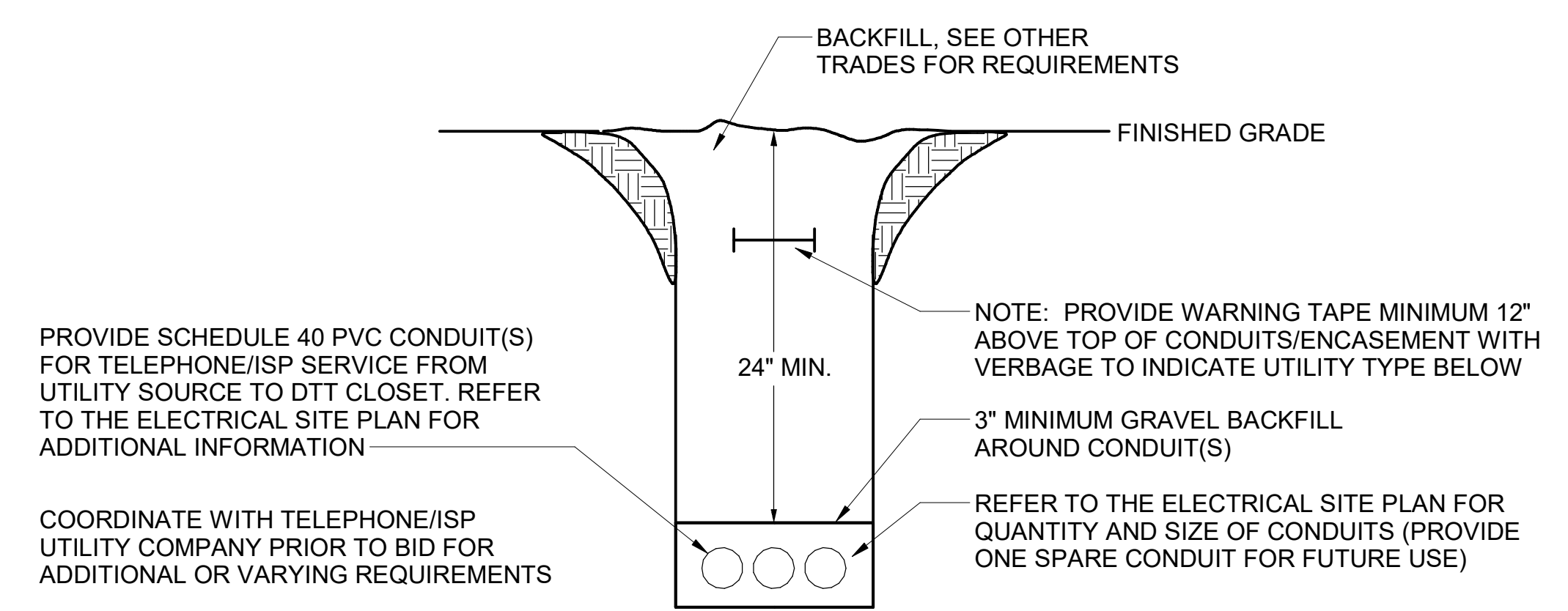


NOTE: WHERE THE SECONDARY CONDUITS FROM THE UTILITY TRANSFORMER TO THE CURRENT TRANSFORMER CABINET (OR MAIN PANELBOARD) ARE FURNISHED BY THE UTILITY COMPANY (FOR INSTALLATION BY THE CONTRACTOR) OR ARE FURNISHED AND INSTALLED BY THE UTILITY COMPANY, THE CONTRACTOR SHALL COORDINATE ALL REQUIREMENTS WITH THE UTILITY COMPANY PRIOR TO BID. REFER TO THE ELECTRICAL SITE PLAN FOR ADDITIONAL INFORMATION.

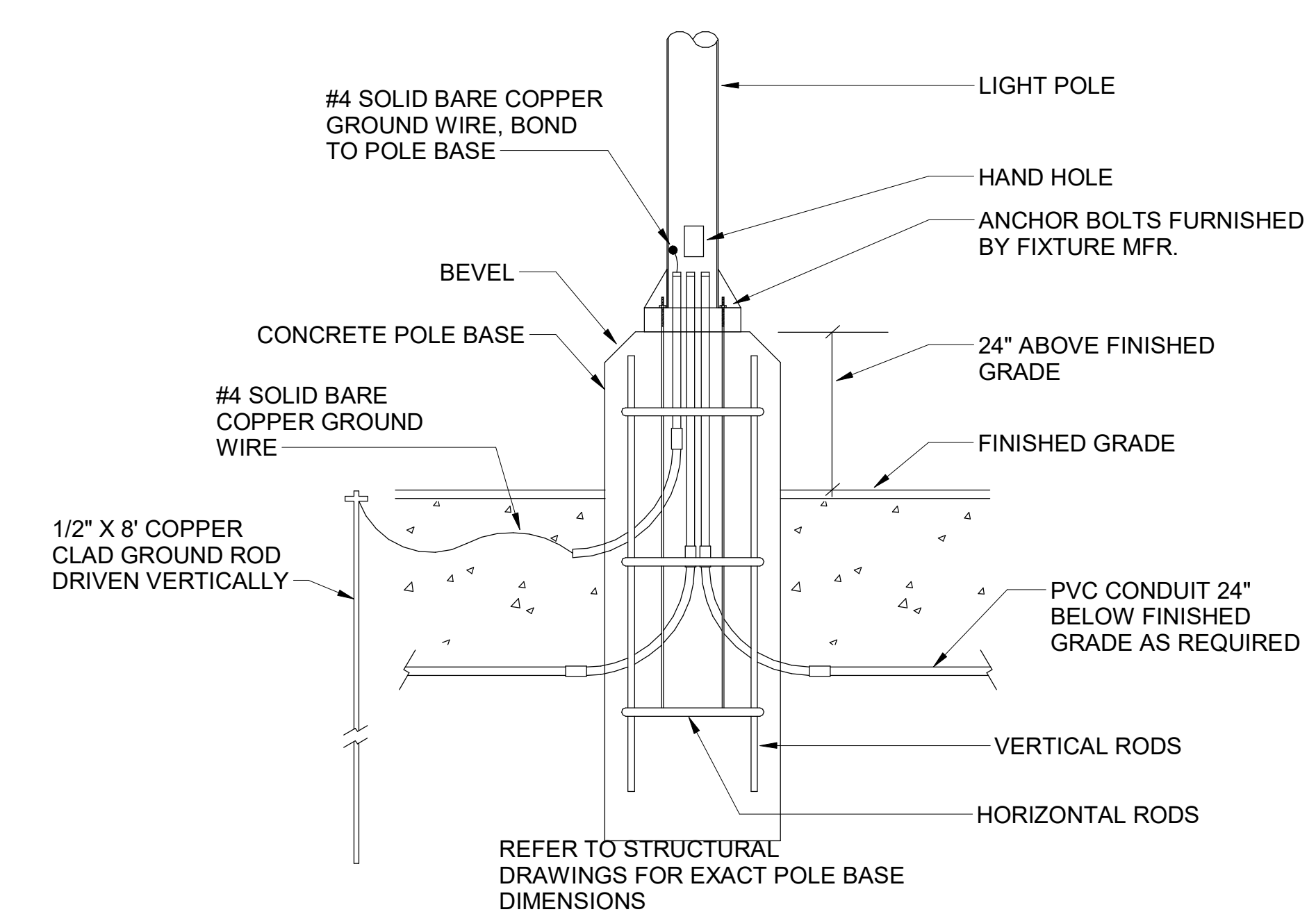
E1 ELECTRICAL SERVICE LATERAL CONDUIT DETAIL
N.T.S.



C1 EXTERIOR CONDUIT TURN UP DETAIL
N.T.S.



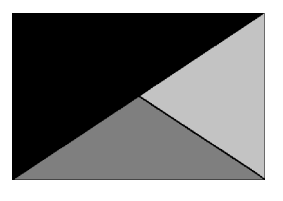
B1 TELEPHONE/ISP SERVICE CONDUIT DETAIL
N.T.S.



A1 TYPICAL CONCRETE BASE POLE DETAIL
N.T.S.



Chick-fil-A
Chick-fil-A
5200 Buffington Road
Atlanta, Georgia
30349-2998



Kurzynske & Associates
 2705 Lebanon Pike - Suite One
 Nashville, Tennessee 37214
 Telephone: (615) 255-5203



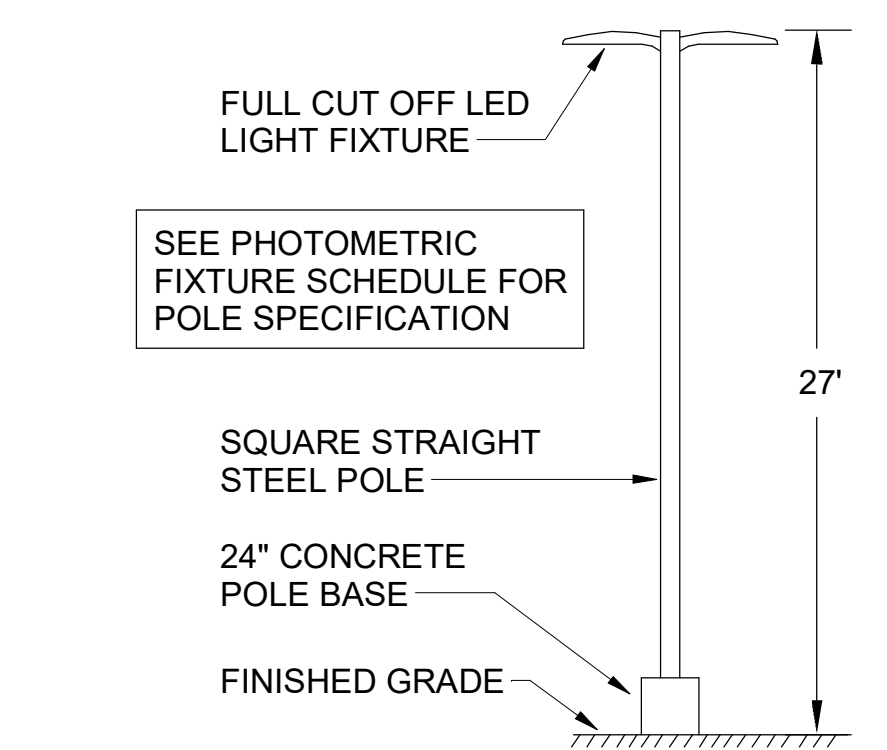
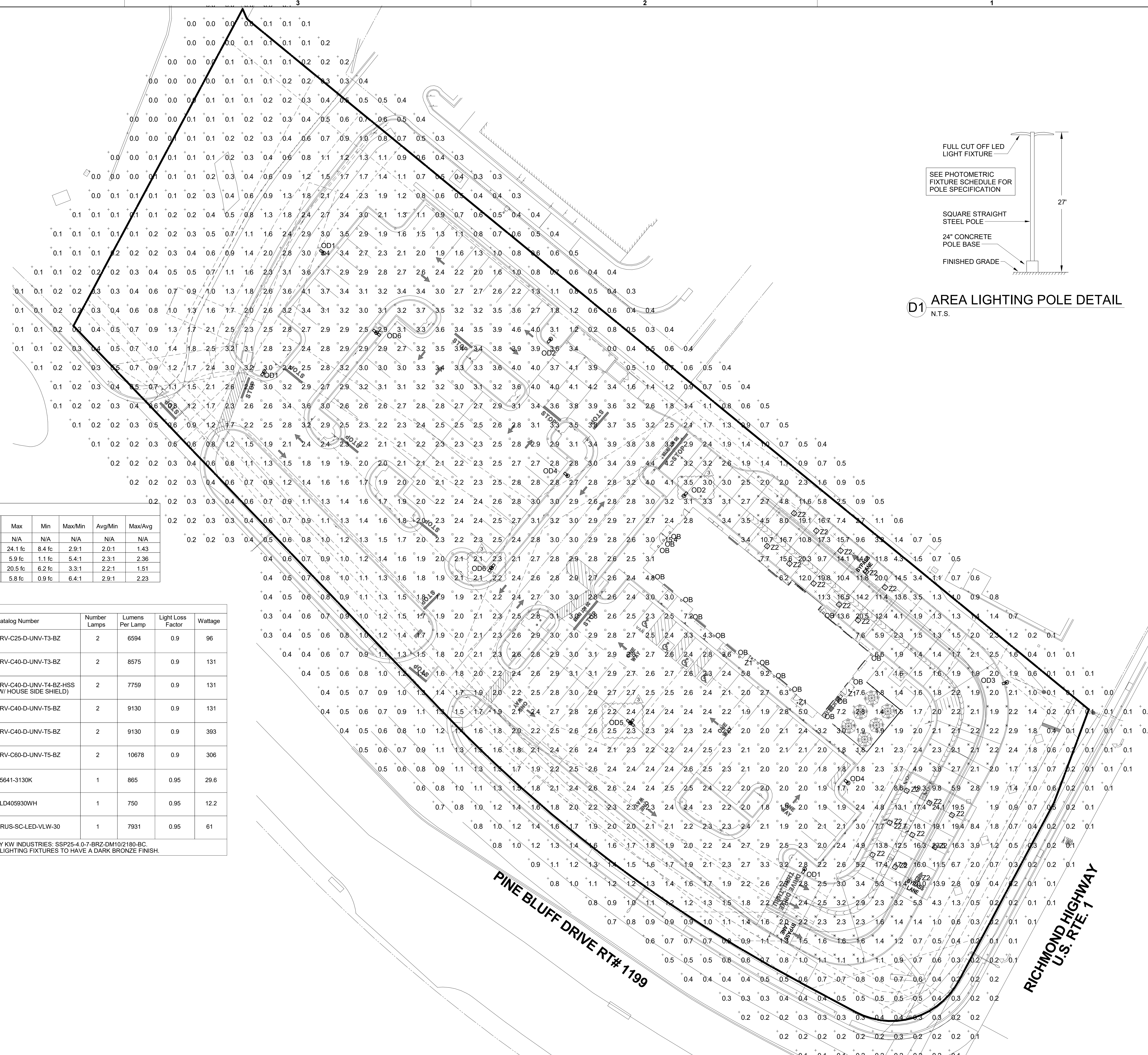
02/15/23

CHICK-FIL-A
PRINCETON WOODS
 3330 PINE BLUFF DRIVE
 DUMFRIES, VA 22026

FSR#04916

BUILDING TYPE / SIZE: P13 LSR
 RELEASE:
 PRINTED FOR:
CONSTRUCTION
 REVISION SCHEDULE
 NO. DATE DESCRIPTION

CONSULTANT PROJECT # 22050.EH.S
 DATE 07/22/2022
 DRAWN BY BTS
 Information contained on this drawing and all digital files produced for above named project may not be reproduced in any manner without express written or verbal consent from authorized project representatives.
ELECTRICAL SITE PLAN DETAILS
 SHEET NUMBER



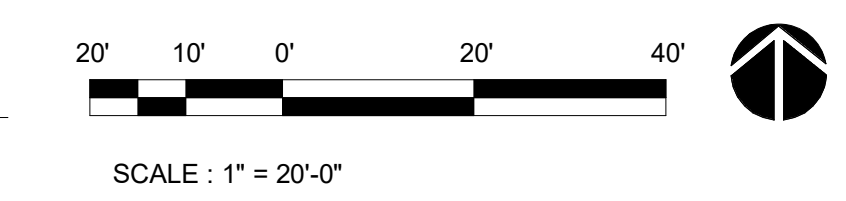
D1 AREA LIGHTING POLE DETAIL
N.T.S.

| Statistics | | | | | | | |
|---------------------|--------|---------|---------|--------|---------|---------|---------|
| Description | Symbol | Avg | Max | Min | Max/Min | Avg/Min | Max/Avg |
| Calc Zone | + | N/A | N/A | N/A | N/A | N/A | N/A |
| DT Order Canopy | X | 16.9 fc | 24.1 fc | 8.4 fc | 2.9:1 | 2.0:1 | 1.43 |
| DT w/out Canopies | X | 2.5 fc | 5.9 fc | 1.1 fc | 5.4:1 | 2.3:1 | 2.36 |
| OMD Canopy | X | 13.6 fc | 20.5 fc | 6.2 fc | 3.3:1 | 2.2:1 | 1.51 |
| Parking Lot Summary | □ | 2.6 fc | 5.8 fc | 0.9 fc | 6.4:1 | 2.9:1 | 2.23 |

| Schedule | | | | | | | | |
|----------|-------|----------|---------------------|--|--------------|-----------------|-------------------|---------|
| Symbol | Label | Quantity | Manufacturer | Catalog Number | Number Lamps | Lumens Per Lamp | Light Loss Factor | Wattage |
| OD1 | OD1 | 3 | COOPER/LUMARK | PRV-C25-D-UNV-T3-BZ | 2 | 6594 | 0.9 | 96 |
| OD2 | OD2 | 2 | COOPER/LUMARK | PRV-C40-D-UNV-T3-BZ | 2 | 8575 | 0.9 | 131 |
| OD3 | OD3 | 1 | COOPER/LUMARK | PRV-C40-D-UNV-T4-BZ-HSS (W/ HOUSE SIDE SHIELD) | 2 | 7759 | 0.9 | 131 |
| OD4 | OD4 | 2 | COOPER/LUMARK | PRV-C40-D-UNV-T5-BZ | 2 | 9130 | 0.9 | 131 |
| OD5 | OD5 | 1 | COOPER/LUMARK | PRV-C40-D-UNV-T5-BZ | 2 | 9130 | 0.9 | 393 |
| OD6 | OD6 | 2 | COOPER/LUMARK | PRV-C60-D-UNV-T5-BZ | 2 | 10678 | 0.9 | 306 |
| OB | OB | 16 | PROGRESS LTG | P5641-3130K | 1 | 865 | 0.95 | 29.6 |
| Z1 | Z1 | 3 | COOPER/HALO | SLD405930WH | 1 | 750 | 0.95 | 12.2 |
| Z2 | Z2 | 19 | LSI INDUSTRIES, INC | CRUS-SC-LED-VLW-30 | 1 | 7931 | 0.95 | 61 |

OD POLES SHALL BE 25" SQUARE STRAIGHT STEEL POLES BY KW INDUSTRIES: SSP25-4.0-7-BRZ-DM10/2180-BC MOUNT POLES ON A 2" CONCRETE POLE BASE. POLES AND LIGHTING FIXTURES TO HAVE A DARK BRONZE FINISH.

A1 PHOTOMETRIC PLAN
1" = 20'-0"



Chick-fil-A
5200 Buffington Road
Atlanta, Georgia
30349-2998

Kurzynske & Associates
2705 Lebanon Pike - Suite One
Nashville, Tennessee 37214
Telephone: (615) 255-5203



02/15/23

CHICK-FIL-A
PRINCETON WOODS
3330 PINE BLUFF DRIVE
DUMFRIES, VA 22026

FSR#04916
BUILDING TYPE / SIZE: P13 LSR
RELEASE: CONSTRUCTION
REVISION SCHEDULE
NO. DATE DESCRIPTION
3 12/12/2022 CODE COMMENTS

CONSULTANT PROJECT # 22050.EH.S
DATE 07/22/2022
DRAWN BY BTS
Information contained on this drawing and in all digital files produced for above named project may not be reproduced in any manner without express written or verbal consent from authorized project representatives.
PHOTOMETRIC PLAN

SHEET NUMBER
E-102

SECTION C16124
SUPPORTING DEVICES AND HANGERS

PART 1 - PRODUCTS

- 1.01 ACCEPTABLE MANUFACTURERS
A. Supporting devices and hangers shall be manufactured by RACO Fasteners, or approved equivalent.

PART 2 - EXECUTION

- 2.01 INSTALLATION
A. Secure conduits to within 3' of each outlet box, junction box, cabinet, fitting, etc., and at intervals not to exceed ten feet (10') and in accordance with the National Electric Code. In seismic zones, support conduits 1" and under at 6' intervals.
B. Install clamps secured to structure for feeder and other conduits routed against the structure. Use drop rods and hangers or racks to support conduits run apart from the structure.
C. Provide and install suitable angle iron, channel iron or steel metal framing with accessories to support or brace electrical equipment including safety switches, fixtures, panelboards, etc.
D. Use of chains, perforated iron, baling wire, or tie wire for supporting conduit runs is not permitted.
E. For support of low voltage wiring not required to be in conduit, bundle cables together in a neat manner using approved nylon tie wraps. Bundled cables shall be supported with "J" hooks on telephone type bridle rings, a minimum of 6 feet on centers. Clearly identify all differing types of cables being run and tag with tape tags regarding telephone, POS System, music / communication, security, etc. for various system utilizing said cable. Identification tape shall be provided at minimum intervals of 25 feet on center and within each building space.
F. Provide a system of supporting devices and hangers to insure secure support or bracing for conduit, electrical equipment, including safety switches, fixtures, panelboards, outlet boxes, junction boxes, cabinets, etc.

SECTION C16140
WIRING DEVICES AND PLATES

PART 1 - PRODUCTS

- 1.01 WALL SWITCHES
A. Ratings: 20 amps, 120/277 volts a.c. or as identified on drawings.
B. Devices: (Cooper/Arrow Hart catalog numbers are listed unless noted otherwise):
1. Single pole toggle switches: 20 AMP device - #AH1221-GY (Kitchen) or #AH1221-B (Dining) 20 AMP Pilot lights illuminated with load on - #AH1221-PL
2. Double pole toggle switches: 20 AMP device - #AH1222-GY (Kitchen) or #AH1222-B (Dining)
3. Three-way toggle switches: 20 AMP device - #AH1223-GY (Kitchen) or #AH1223-B (Dining)
1.02 RECEPTACLES
A. Devices: (Cooper/Arrow Hart catalog numbers are listed unless otherwise noted):
1. Specification grade devices to be 20 amp, 125 volts, a.c. receptacles:
a. Single (simplex) device: #1877-GY (Kit) or #1877-B (Dining)
b. Duplex device: #CR20-GY (Kitchen) or #CR20-B (Dining)
c. Tamper resistant duplex device: #TRCR20-B or #TR7756-B (with USB charging)
d. GF (ground-fault circuit interrupter) duplex device: #VGF20-GY (Kitchen) or #VGF20-B (Dining)
e. IG (isolated ground) duplex device: #GS362-RN (orange face)
B. Color:
1. Devices mounted in the FRP or tile shall be gray.
2. Devices mounted in wood finish shall be brown.
3. Isolated ground receptacles shall be orange.

1.03 SPECIAL DEVICES

- A. Manual motor starter switch: SQ, D Class 2510, Type F, for use on motors up to 3/4 horsepower. Provide NEMA 1 enclosure in dry locations; provide NEMA 3R enclosure in wet or exterior locations.

1.04 WALL PLATES

- A. Provide blank plates on all outlet boxes for future outlets, or outlets without devices. Plate style shall match device plates.
B. Provide non-metallic weatherproof covers for duplex GF receptacles located outside or in wet locations that feature 'while-in-use' cover equivalent to Arrow Hart #WU-1.
C. Where devices installed in exposed boxes or conduit fittings; provide properly designed plates and covers equal to Arrow Hart RS-Series exposed work covers.
D. Install galvanized steel plates on outlet boxes and junction boxes in unfinished areas, above accessible ceilings, and on surface mounted boxes.
E. Color:
1. Wall plates mounted in FRP or tile shall be smooth satin stainless steel 302-ss series.
2. Wall plates mounted in wood finish shall be brown nylon plastic.
3. Isolated ground wall plates shall be orange nylon plastic with a circuit number printed in 3/16 inch black lettering on clear adhesive label adhered to plate.

PART 2 - EXECUTION

2.01 INSTALLATION

- A. Mounting
1. Mount switches and receptacles at height above finished floor as indicated on plans, and legend.
2. Mount switches on strike side of door maximum 8" from door frame. Outlet box for switch shall be located clear of door frame. Coordinate with architectural plans prior to rough-in.
3. Install switches with off position down.
4. Do not use the feed thru feature for the GF Type receptacle, unless required by the plans.
5. Use jumbo sized plates for outlets installed in masonry walls.
6. Each receptacle shall be provided with a #12 green grounding jumper between the ground terminal of the receptacle and the outlet box.
7. The grounding conductor to each receptacle shall be installed such that the removal of the device will not interfere with the continuity of the ground.
B. Testing
1. Test each switch and verify proper operation with energized circuit.
2. Test each receptacle for proper polarity on energized circuit.
3. Test each GF receptacle with a GF receptacle tester and verify circuit is opened by GF device at milli-ampere ranges established by the manufacturer.

SECTION C16440
PANELBOARDS

PART 1 - PRODUCTS

- 1.01 MANUFACTURER (via Chick-fil-A National Accounts Program)
A. Square-D (for all Regions); from Villa Lighting, Dave Christanell (800)325-0963
1.02 PANELBOARD FEATURES
A. Panelboards shall have a minimum symmetrical interrupting rating to meet or exceed the available symmetrical interrupting fault current at the device intended to interrupt current.
B. Bus bars shall be copper.
C. Provide factory-installed copper ground bus in each panelboard with lugs or connectors on bar.
D. Provide electrically isolated, factory installed, neutral bus in each 3 phase, 4 wire or 1 phase 3 wire panelboard.
E. In addition to the ground bus required by paragraph 1.02D (above), provide factory installed, electrically isolated, copper ground bus in each panelboard serving isolated ground receptacles.
F. Main lugs and main circuit breaker lugs shall be UL Listed for use with both aluminum and copper conductors.
G. Provide panelboard doors with chrome-plated locks and catches. All locks shall be keyed alike. Provide two keys for each lock.
H. Provide thermal-magnetic circuit breakers which are rated for 40 degrees C ambient temperature. Breakers shall be quick-make, quick-break type trip with trip indication shown by handle position other than on or off. Multi-pole breakers shall have a common trip handle. Tandem type circuit breakers shall not be permitted.
I. MDP 100% rated main breaker, 1200 Amps or higher, shall be equipped with Arc Flash Maintenance Setting switch for use as a temporary arc-flash incident energy reduction device during maintenance activities.
J. Provide typed directory card with clear holder for each panelboard.

PART 2 - EXECUTION

2.01 INSTALLATION

- A. Panelboards shall be mounted at height above finished floor such that the height of the top-most breaker in the panel is not more than 6-1/2 feet above finished floor in its highest position per the NEC.
B. Where multiple panelboards are installed on walls in common areas of buildings, the panelboards shall be installed with the top of all panelboards at the same height.
C. Provide blank filler plates over all unused spaces in panelboards.
D. A typed directory card shall indicate devices being served and the space name where the device is located.
E. Provide minimum of one (1) 3/4" empty spare conduit for every 3 poles of spare breaker or space in the panelboard. Stub conduit to nearest accessible ceiling space. Label conduit as spare at panelboard and termination point.
F. Non-isolated ground bars shall be grounded to panelboard can and main service entrance ground bus with a code sized grounding conductor installed in the same conduit as the phase and neutral conductors.
G. Circuits using a common neutral shall be installed in accordance with the National Electrical Code.
H. Inspect each panelboard for proper installation, physical damage, tightness and installation of overcurrent devices. Verify proper color coding of conductors. Correct or repair all items found in inspection.
I. Neutral wires, ground wires, and isolated ground wires shall be connected to the appropriate panel bus bar. Do not mix bus wire connections.

SECTION C16441
ENCLOSED SWITCHES
PART 1 - PRODUCTS

1.01 MANUFACTURERS

- A. Square D
B. GE / ABB
C. Siemens

1.02 ENCLOSED SWITCHES

- A. Nonfusible switch assemblies: NEMA KS 1, General Duty Type for 208 volt load interrupter enclosed knife switch with externally operable handle interlocked to prevent opening front cover with switch in on position. Handle lockable in off position. Provide equipment ground lug in each switch.
B. Enclosures: NEMA KS 1.
1. Interior dry locations: Type 1.
2. Exterior locations: Type 3R.

SECTION C16442
UTILITY SERVICE ENTRANCE AND DISTRIBUTION SYSTEM

PART 1 - GENERAL

1.01 SYSTEM DESCRIPTION

- A. The underground electrical system service characteristics shall be 208Y/120 volts, Three Phase, Four Wire service and shall extend from utility company transformer secondary.
B. Metering of electrical usage shall be located as required by local electrical utility company. Coordinate requirements with local utility company.
C. Distribution system originates at secondary of utility transformer and includes service entrance conduit and conductors, distribution equipment, lighting panelboards, utilization equipment, overcurrent devices, disconnecting means, controls, branch and feeder circuits, etc.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Furnish service entrance conduit, cable, and miscellaneous hardware as required by plans and specifications for electrical service entrance and system grounding at main electrical service.

PART 3 - EXECUTION

3.01 EXAMINATION AND PREPARATION

- A. Coordinate exact locations of electrical service utility transformer, metering equipment, service lateral, etc. prior to commencement of installation. Contact engineer with conflicts prior to bid.
B. Ensure pad mounted transformer is not located within roadway or sidewalk.
C. Coordinate with local electrical utility for all utility company requirements and provide for the following items and any others required by the utility:
1. Concrete pad for utility transformer with required dimensions and details.
2. Primary underground conduit, excavation, and backfill requirements.
3. Pay for all fees associated with establishment of electrical service.
4. Furnish list of loads to the electrical utility company serving the facility.
5. Verify that utility company clearances are provided on all sides of utility equipment.
D. Ensure proper access to utility equipment is maintained.
E. Provide pull rope, excavation in accordance with electrical utility company requirements, backfill and concrete envelope for primary in accordance with electrical utility company requirements. Turn conduits up riser pole as required. Cap spare conduits 12 inches above grade with plumbers pipe cap.
F. Provide secondary lugs on utility transformer and perform drilling and installation of lugs in accordance with utility requirements. Type of lugs shall be in accordance with electrical utility company requirements. Connect service conductor to transformer secondary lugs as directed by electrical utility.

SECTION C16500
LIGHTING FIXTURES (LUMINAIRES)

PART 1 - GENERAL

1.01 ACCEPTABLE MANUFACTURERS AND VENDORS

- A. Lighting fixtures indicated on lighting fixture schedule are to be purchased from the National Account Vendor for the region of the project (verify region designation with Owner's Representative):
1. Villa Lighting - all regions. Contact at Villa Lighting; Dave Christanell at 800-325-0963, fax: 314-531-8720, email - davec@villalighting.com
B. Lamps to be Osram-Sylvania and will typically be provided with the luminaire by the lighting manufacturer.

1.02 FIXTURE REQUIREMENTS

- A. Provide regulating, HPF ballasts in all HID lighting fixtures. HID lamp types shall be as indicated on the drawings.
B. Recessed fluorescent lighting fixture ballasts shall be provided with integral thermal protection.
C. Provide energy-saving Instant or Rapid Start lamps for all fluorescent fixtures.
D. All lamps and ballasts shall meet or exceed the requirements of the National Energy Policy Act of 1992 and any other applicable Codes or Criteria.
E. All components of recessed fixtures shall be accessible without disturbing fixture in or on ceiling.
F. Energy saving ballasts and energy saving lamps provided shall be compatible for operation together.
G. Exterior fixtures and poles shall be suitable for exterior use, shall be UL Listed, and shall be a standard design for exterior application.
H. Exterior poles for fixtures with luminaires installed shall be designed for maximum constant velocity wind load with luminaires installed, applicable to the geographic area.

1.03 CONTROLS

- A. Lighting contactors shall be Square-D, GE / ABB, Cutler-Hammer or Siemens of types and quantity shown on drawings, except those furnished with the switchgear as part of the National Account Program by Suncoast Environmental Controls (SEC).

1.04 EMERGENCY LIGHTING UNITS

- A. Batteries shall supply emergency power for lighting with minimum operating time of 1-1/2 hours.
B. Emergency lighting shall be automatically operational upon normal utility power failure.

PART 3 - EXECUTION

3.01 INSTALLATION

- A. Lighting fixtures shall be structurally supported. Fluorescent fixtures mounted in suspended ceilings shall be supported by and attached to ceiling system as required by NEC Article 410. In addition, fluorescent troffers shall be supported at two opposite corners to building structure.
B. Recessed fixtures in dropped ceiling areas shall be connected to power source using flexible conduit. Flexible conduit shall contain a separate insulated green No. 12 copper ground wire. Flexible conduit shall be connected to junction box and fixture. Green ground wire shall provide ground continuity between conduit system and fixture. Grounding conductors shall be permanently and mechanically connected between fixture and conduit system so as to be electrically continuous.
C. Fixtures surface mounted on exposed tee bar ceilings shall use grip clamps on tee bars to support fixtures.
D. Wire shall be continuous from splice in outlet box of building wiring system to lamp socket or ballast terminals.
E. Maintain the integrity of enclosures on enclosed and gasketed fixtures. Minimize the number of enclosure penetrations and make such penetrations water and dust tight with appropriate gaskets and fittings.
F. Concrete bases shall be provided for all exterior ground mounted or pole mounted fixtures.
G. Install accessories furnished with each fixture.
H. Wiring from pole bases to pole mounted luminaire shall be No. 12 with fuse protection provided by a 30 amp, 600 volt waterproof fuseholder with Bussman 'Limित्रon' fuse of ampere rating 3 times the load current.

3.02 FIELD QUALITY CONTROL

- A. Relamp fixtures that have failed lamps at substantial completion.

SECTION C16596
SPECIAL SYSTEMS

PART 1 - GENERAL

1.01 WORK INCLUDED

- A. Furnish and install raceway system for music / communications security, CCTV, POS, and other owner-furnished systems, consisting of empty conduits, junction boxes, outlet boxes, and device plates, etc., as specified and shown on owner selected vendor wiring schematics. Cable, equipment, and installation of the interior system will be provided by the owner's system vendor.
B. Interior system equipment will be furnished by Owner's Vendor.
C. Install special backboxes furnished by Owner's Vendor. Coordinate with the Vendor for the installation. Coordinate with the Vendor if backboxes are to be contractor provided in order to provide and install the appropriate item for the Vendor.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Provide 4-11/16" square boxes, with plaster rings. Provide device plates for system outlets as specified in Section 16141. Provide separate conduit to nearest accessible ceiling space from each outlet.

- B. Cable shall be in conduit where installed in walls or inaccessible ceilings.
C. Minimum conduit size shall be 3/4" .

PART 3 - EXECUTION

3.01 INSTALLATION

- A. Furnish and install conduits, junction boxes, outlet boxes, and plates.
B. Provide one #10 equivalent nylon pull wire in each system empty conduit.
C. Provide a complete raceway system in accordance with interior system vendor requirements. Interior system vendor shall review the drawings. Contractor shall provide for any additional or varying requirements.
D. Final connections and testing of systems will be provided by the system vendor. Contractor shall contact the owner's vendor and schedule the work so as to complete system installation and testing prior to occupancy of the facility.
E. Terminate each conduit stub-up or termination with nylon insulated bushing.

SECTION C16597
TELEPHONE SERVICE

PART 1 - GENERAL

1.01 WORK INCLUDED

- A. Furnish and install telephone system consisting of empty conduits, junction boxes, outlet boxes, device plates, etc., as specified and shown on owner selected vendor wiring schematics. Cable, equipment, and installation of the interior system will be provided by the owner's system vendor.
B. Provide underground PVC, Schedule 40, service conduit as required by plans.
C. Telephone Utility Company will provide service entrance cable.
D. Interior telephone system will be furnished by owner's vendor.
E. Special backboxes (unless otherwise noted) and faceplates will be furnished by the owner's vendor.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Provide 4-11/16" square boxes, with plaster rings. Provide device plates for telephone outlets to match those specified in wiring device section. Provide separate conduit to nearest accessible ceiling space from each outlet.
B. Minimum conduit size shall be 3/4".
C. Provide lightning arrester for telephone service entrance at main telephone backboard in accordance with UL96A paragraph 11.2 and NFPA 780.
D. Cable shall be in conduit where installed in walls or above inaccessible ceiling spaces.

PART 3 - EXECUTION

3.01 INSTALLATION

- A. Provide one #10 equivalent nylon pull wire in each empty telephone conduit.
B. Provide trenching, backfilling, etc., for installation of service entrance conduit in accordance with other divisions, plans, and telephone utility requirements. Provide pull wire in empty conduit.
C. Coordinate with the local utility for point of service and type of service required. Pay for any utility company charges and fees for establishment of service.
D. Provide a complete raceway system in accordance with telephone utility company and interior system vendor/utility requirements. Telephone utility company and interior system vendor shall review the drawings. Contractor shall provide for any additional or varying requirements.
E. Terminate each conduit stub-up or termination with nylon insulated bushings.
F. Final connections and testing of system will be provided by the system vendor. Contractor shall contact the owner and vendor and schedule the work.

CLOSE OUT DOCUMENT REQUIREMENTS

Provide the following to the building owner upon completion of construction:

1. Submittal data stating equipment rating and selected options for each piece of equipment requiring maintenance.
2. Operation manuals and maintenance manuals for each piece of equipment requiring maintenance. Required routine maintenance actions shall be clearly identified.
3. Names and addresses of at least one qualified service agency.
4. A complete narrative of how each system is intended to operate.



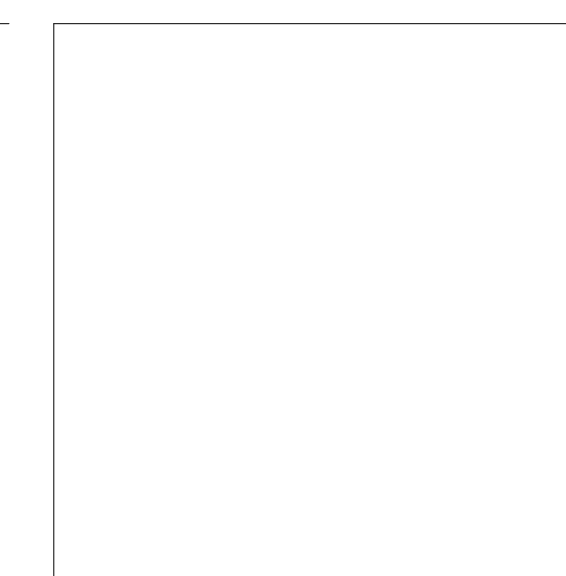
Chick-fil-A
5200 Buffington Road
Atlanta, Georgia
30349-2998



Kurzynske & Associates
2705 Lebanon Pike - Suite One
Nashville, Tennessee 37214
Telephone: (615) 255-5203



02/15/23



CHICK-FIL-A
PRINCETON WOODS
3330 PINE BLUFF DRIVE
DUMFRIES, VA 22026

FSR#04916

BUILDING TYPE / SIZE: P13 LSR ALL
RELEASE: 22.05

PRINTED FOR
CONSTRUCTION

REVISION SCHEDULE

| NO. | DATE | DESCRIPTION |
|-----|------|-------------|
|-----|------|-------------|

CONSULTANT PROJECT # 22050 EH S
DATE 08/22/2022

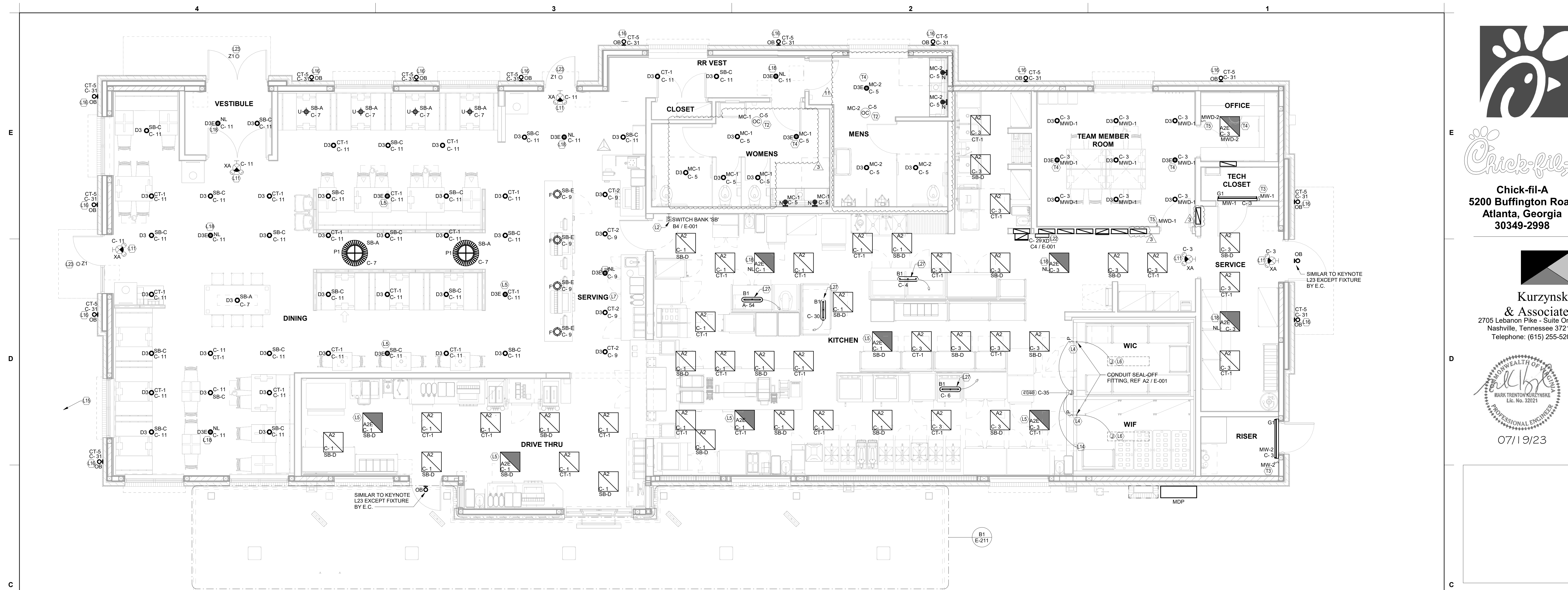
DRAWN BY ES

Information contained on this drawing and all digital files produced for above named project may not be reproduced in any manner without explicit written or verbal consent from authorized project representatives.

SHEET
ELECTRICAL SPECIFICATIONS

SHEET NUMBER

E-902



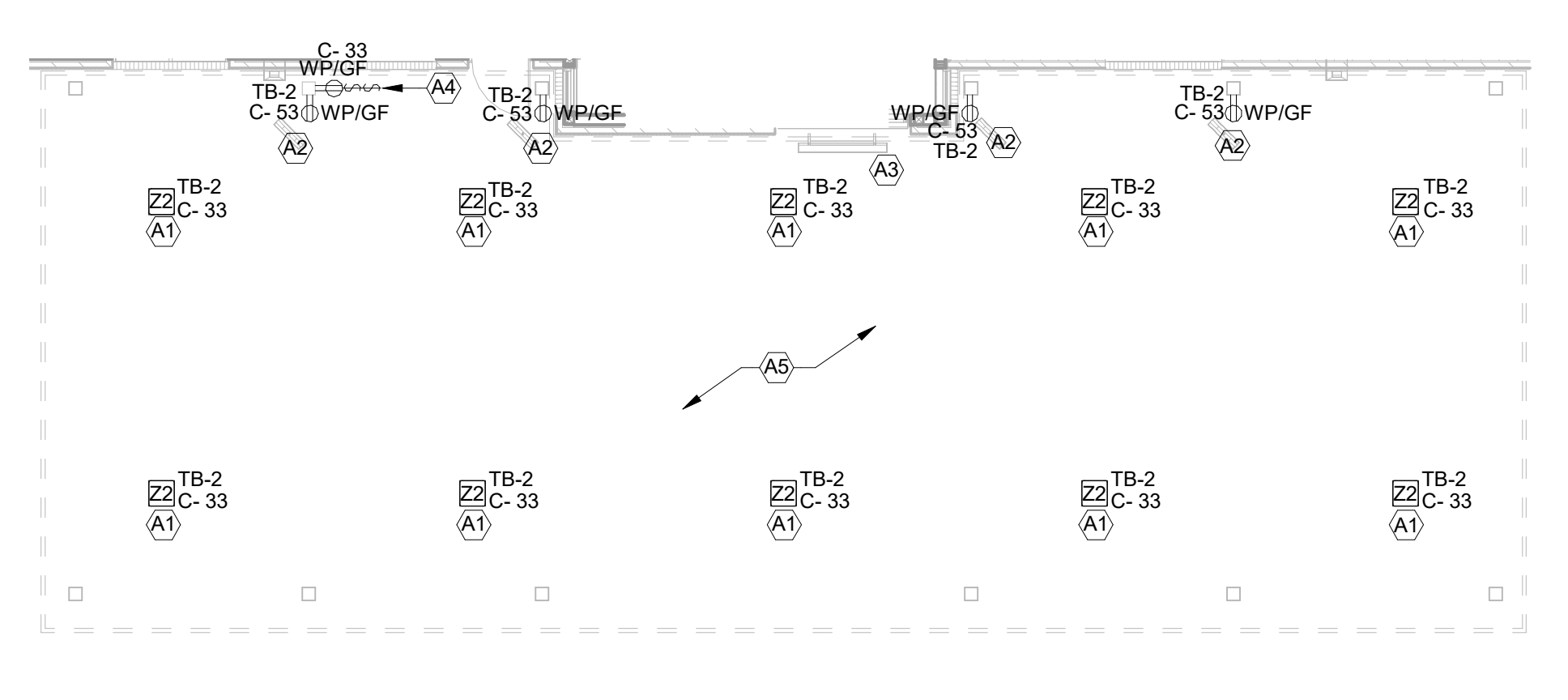
C1 LIGHTING PLAN
1/4" = 1'-0"

LIGHTING PLAN KEYNOTES

- (L2) APPROXIMATE LOCATION OF SWITCH BANK 'SB'. SEE DETAIL ON THE LIGHTING PLAN FOR MORE INFORMATION.
- (L4) FOR CONTROL OF LIGHTING FIXTURE IN WALK-IN COOLER AND FREEZER. SWITCH FURNISHED WITH EQUIPMENT, INSTALLED BY ELECTRICAL CONTRACTOR.
- (L5) CONNECT FIXTURE SO THAT BATTERY PACK IS NOT SWITCHED WITH LIGHTS, BUT ALL LAMPS ARE SWITCHED.
- (L6) FOR CONNECTION TO LIGHTING FIXTURE IN THE WALK-IN COOLER AND FREEZER WHICH IS FURNISHED WITH EQUIPMENT. CONTRACTOR SHALL ROUGH-IN AND CONNECT ALL FIXTURES AS REQUIRED BY THE EQUIPMENT MANUFACTURER.
- (L7) THE LIGHT FIXTURES IN THE SERVING AREA ARE PROVIDED WITH LAMP SHIELDING VIA A LENS.
- (L9) TO THE TOILET EXHAUST FAN ON ROOF. SEE SHEET E-250, ROOF ELECTRICAL PLAN.
- (L11) THIS FIXTURE SHALL NOT BE SWITCHED. CONNECT TO CIRCUIT AHEAD OF ALL SWITCHING AND CONTROLS.
- (L13) SEE THE ROOF ELECTRICAL PLAN FOR LOCATION OF TYPE 'OC' ROOF MOUNTED FLAG POLE LIGHT. FIXTURE TO BE CONNECTED TO CIRCUIT C-29 THRU THE CFA-T500 CONTROL PANEL CONTACTOR #9 (AHEAD OF THE INVERTER, NOT THRU THE INVERTER.)
- (L14) TO WALK-IN FREEZER DOOR FRAME HEATER AND AIR RELIEF ASSEMBLY (PRESSURE REDUCTION VALVE - PRV). THE PRV IS TO BE FITTING VERY ROUGH-IN AND FINAL CONNECTION WITH EQUIPMENT.
- (L15) SEE THE SITE ELECTRICAL PLAN FOR LOCATION OF TYPE 'OC' GROUND MOUNTED FLAG POLE LIGHT. FIXTURE TO BE CONNECTED TO CIRCUIT C-29 THRU THE CFA-T500 CONTROL PANEL CONTACTOR #9 (AHEAD OF THE INVERTER, NOT THRU THE INVERTER.)
- (L16) ROUTE THROUGH CONTROL PANEL CFA-T500 AND CONTROLLED BY OCCUPIED SWITCH AND PHOTOCELL.
- (L18) CONNECT LIGHTING FIXTURE SO THAT LAMP BALLAST OR DRIVER AND EMERGENCY BATTERY PACK ARE NOT SWITCHED. 'NL' ADJACENT TO FIXTURE INDICATES THAT FIXTURE SHALL BE ON 24 HOURS.
- (L22) TYPE 'XD' INVERTER CABINET TO BE WALL MOUNTED AT THE CEILING AND CONNECTED TO CIRCUIT C-29 THRU THE CFA-T500'S CONTACTOR #9 (DUSK TO DAWN CONTROL). CONNECT WITH BOTH A CONTROLLED (VIA THE CONTACTOR FOR LIGHTS ON AT DUSK AND OFF AT DAWN) LEG AND AN UNSWITCHED LEG FOR THE BATTERY IN THE INVERTER. WHEN POWER IS INTERRUPTED ON THE UNSWITCHED LEG, THEN THE INVERTER'S BATTERY WILL ENERGIZE THE LIGHTS CONNECTED TO THE INVERTER NO MATTER THE TIME OF DAY. PROVIDE CONNECTIONS IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

OMD CANOPY KEYNOTES:

- (A1) CEILING LIGHT FIXTURE PROVIDED BY THE CANOPY SUPPLIER AND INSTALLED BY ELECTRICAL CONTRACTOR.
- (A2) AIR CIRCULATING FAN (WITH INTEGRAL ON-OFF SWITCH) PROVIDED AND INSTALLED BY MECHANICAL CONTRACTOR. PROVIDE A DUPLEX RECEPTACLE OUTLET (WITH IN-USE WP COVER PLATE) AT THE TOP OF THE COLUMN FLUSH MOUNTED IN THE CUT-OUT FOR THE FAN'S PLUG AND CORD CONNECTION.
- (A3) ELECTRIC HEATER PROVIDED AND INSTALLED BY MECHANICAL CONTRACTOR.
- (A4) PROVIDE ONE DUPLEX GFCI (WITH IN-USE WP COVER PLATE) AND TWO 120V SINGLE-POLE SWITCHES (EACH WITH HUBBELL #RW1550 WP COVER PLATE) MOUNTED IN THE COLUMN IN FLUSH MOUNTED METAL SINGLE-GANG BOXES FOR LOCAL ON-OFF CONTROL OF THE FANS AND CANOPY LIGHTS. SEE WIRING SCHEMATIC FOR FURTHER INFORMATION. ALL SURFACE (OR VISIBLE) ITEMS AND COVERPLATES TO BE FIELD PAINTED MATTE BLACK.
- (A5) ALL CONDUIT AND BOXES SHALL BE CONCEALED FROM NORMAL VIEW; IN WALLS OR ABOVE THE CANOPY (ON THE ROOF). MC CABLE (GALVANIZED STEEL WITH PVC JACKET) MAY BE USED INSIDE THE WALL FOR THE DEVICES, BUT MUST CONVERT TO IMC ABOVE THE CANOPY ROOF. (PROVIDE A NEMA 3R JUNCTION BOX ON THE ROOF SIDE OF THE CANOPY TO TRANSITION FROM MC CABLES IN WALL TO IMC CONDUIT ON THE ROOF.) ALL EXPOSED BOXES AND FITTINGS TO BE CAST-METAL NEMA 3R. REFER TO THE MECHANICAL SHEETS FOR CONDUIT MOUNTING DETAILS ON THE ROOF.



B1 CANOPY PLAN
1/8" = 1'-0"

LIGHTING FIXTURE (LUMINAIRE) SCHEDULE - CHICK-FIL-A P13 EDITION

NOTE: NOT ALL FIXTURE TYPES ARE USED IN ALL OF THE P13 BUILDINGS. CONFIRM WITH THE LIGHTING VENDOR FOR ANY UPDATES TO THE CURRENT LIGHTING MANUFACTURER AND CATALOG NUMBER.

| MARK | MANUFACTURER | NO. LAMPS/TYPE | WATTS | VOLTS | MOUNTING | REMARKS | |
|------|-------------------|-------------------------------------|-----------------------|--------|--------------|--|---|
| A2 | COOPER/METALUX | 22FP4240C | INTEGRAL WITH FIXTURE | 39 VA | 120 V | RECESSED | 2X2 LED FLAT PANEL |
| A2E | COOPER/METALUX | 22FP4240C | INTEGRAL WITH FIXTURE | 39 VA | 120 V | RECESSED | 2X2 EMERGENCY LED FLAT PANEL |
| B1 | COOPER/METALUX | 2VFS-LD5-4-120V-1-840-001-SSL-U | INTEGRAL WITH FIXTURE | 32 VA | 120 V | SURFACE | MOUNT LIGHT TO BTM OF OVERHEAD WIRE SHELVING WITH CORD & PLUG |
| D3 | COOPER/HALO | HC620D010HM612830-61NDC | INTEGRAL WITH FIXTURE | 21 VA | 120 V | RECESSED | LED DOWNLIGHT WITH CLEAR LENS LENS & TRIM RATED 2000 LUMENS, 3000K COLOR TEMP |
| D3E | COOPER/HALO | HC620D010EM14HM612830-61NDCIEM | INTEGRAL WITH FIXTURE | 21 VA | 120 V | RECESSED | SAME AS 'D3' EXCEPT WITH EMERGENCY BATTERY PACK/INTEGRAL TEST SWITCH |
| F | MEYA | 30894-8 (144638) | INTEGRAL WITH FIXTURE | 12 VA | 120 V | CEILING | EGG LIGHT FURNISHED WITH A 12 WATT A19-G24 LED LAMP |
| G1 | COOPER/METALUX | 4SL5TP4040DDUNV | INTEGRAL WITH FIXTURE | 44 VA | 120 V | WALL | 4760 LUMEN 4 FOOT LENSED LED STRIPLIGHT, MTD ABOVE DOOR FRAME |
| N | MMKA | 4531-2678 | 14LED1A1819827D | 11 VA | 120 V | WALL | LAVATORY WALL SCIENCE-SHADE POINTED DOWN W/ LED LAMP & CL ON LAVATORY |
| OB | PROGRESS LIGHTING | PS64-13130K | INTEGRAL WITH FIXTURE | 30 VA | 120 V | WALL | LED DOWNLIGHT WITH CLEAR LENS LENS & TRIM RATED 2000 LUMENS, 3000K COLOR TEMP |
| OC | HUBBELL | FL-42L-95-4K7-N-U-K-DB (SEE NOTE 4) | INTEGRAL WITH FIXTURE | 97 VA | 120 V | PIPE | GROUND MTD FLOODLIGHT MTD ON 2" PIPE SUPPORT AND AIMED AT FLAG AFTER DARK |
| OD | COOPER/LUMARK | LUMINAIRE-PRV-A60D-UNV--SA-BZ | INTEGRAL WITH FIXTURE | 153 VA | 208 V | POLE | SEE SHEET E-102 FOR SITE LIGHTING SPECIFICATIONS |
| OK | HUBBELL | LNC-SLU-3K-3-1 | INTEGRAL WITH FIXTURE | 13 VA | 120 V | WALL | LED WALLPACK W/ CENTERLINE OF FIXTURE AT 80" ABV 00" (FINISH FLOOR LINE) |
| P1 | MEYDA | 142778 | 2LED1A1819827D | 22 VA | 120 V | PENDANT | 31" DIA PEACH BASKET PENDANT WITH BTM AT 8'-8" AFF ABV TABLE, 8'-0" OTHERWISE |
| U | BESA LIGHTING | BES0298-060 | FURNISHED | 8 VA | 120 V | PENDANT | RED FRUIT GLASS, BRONZE CABLE & CANOPY, 6'-8" AFF |
| XA | COOPER/SURE-LITES | APCH7R | INTEGRAL WITH FIXTURE | 4 VA | 120 V | WALL | EXIT SIGN WITH BATTERY PACK AND TWO INTEGRAL ADJUSTABLE LAMPHEADS |
| XD | MULE LIGHTING | SPS-220/250-120/277 | NONE | 250 VA | 120 V | WALL | INVERTER UNIT FOR EXTERIOR EGRESS LTG. ON AT DUSK, OFF AT DAWN, ON DURING PWR OUTAGE |
| Z1 | COOPER/HALO | SLD405930WH | INTEGRAL WITH FIXTURE | 13 VA | 120 V | SURFACE | LED DOWNLIGHT PROVIDED BY CANOPY SUPPLIER INSTALLED BY CANOPY SUPPLIER, CONNECTION BY ELECTRICAL CONTRACTOR |
| Z2 | LSI | CRUS-SC-LED-VLW30-JE-WHT | INTEGRAL WITH FIXTURE | 61 VA | 120 V | RECESSED | CANOPY LIGHT PROVIDED BY CANOPY SUPPLIER AND INSTALLED BY ELECTRICAL CONTRACTOR |
| *MC | SENSOR SWITCH | CMR-PDT-9 | - | 120V | CEILING | CEILING MOUNTED LINE VOLTAGE OCCUPANCY SENSOR WITH DUAL TECHNOLOGY. | |
| *MCL | SENSOR SWITCH | CM-PDT-9 | - | 24V | CEILING | CEILING MOUNTED LOW VOLTAGE OCCUPANCY SENSOR FOR LOCAL RECEPTACLE CONTROLS. | |
| *MW | SENSOR SWITCH | WSX-WH | - | 120V | WALL | WALL SWITCH OCCUPANCY SENSOR, AUTOMATIC ON AND OFF. | |
| *MWD | SENSOR SWITCH | WSX-PDT-D-SA-WH | - | 120V | WALL | MANUAL ON / AUTOMATIC OFF OCCUPANCY SWITCH, 0-10V DIMMING | |
| *PC | SENSOR SWITCH | RMR-PC-ADC | - | 120V | WALL | RECESSED AUTOMATIC PHOTOCELL FOR DAYLIGHT CONTROLS, FIELD COORDINATE MTD LOCATION. | |
| *PP | SENSOR SWITCH | PP20 | - | 120V | JUNCTION BOX | POWER PACK FOR OCCUPANCY SENSOR 'MCL' AND RECEPTACLE CONTROL, AUTO ON / AUTO OFF. | |

NOTES:
 1. LUMINAIRES UTILIZING DOUBLE-ENDED LAMPS AND CONTAIN BALLASTS THAT CAN BE SERVICED IN PLACE SHALL HAVE A DISCONNECTING MEANS EITHER INTERNAL OR EXTERNAL TO EACH LUMINAIRE PER NEC 410.130(G).
 2. THE LIGHTING FIXTURE PACKAGE IS AVAILABLE THROUGH A NATIONAL ACCOUNT PROGRAM. REFER TO THE ELECTRICAL SPECIFICATIONS SHEET, SECTION C1650 FOR VENDOR INFORMATION.
 3. THE ASTERISK (*) BESIDE THE FIXTURE MARK IN THE ABOVE SCHEDULE INDICATES THE FIXTURE IS A NON-PROTOTYPICAL LIGHT FIXTURE PER THE CFA NATIONAL P13 PROTOTYPE.
 4. IF TYPE OC IS GROUND MOUNTED IN LIEU OF ROOF MOUNTED, PROVIDE EITHER THE FLL-VISOR-DV (VISOR) OR THE FLL-LOUVER-BL (LOUVER) FOR GLARE CONTROL.

LIGHTING CONTROLS KEYNOTES

- (T1) CEILING MOUNTED RECESSED AUTOMATIC PHOTOCELL FOR DAYLIGHT CONTROLS. LIGHTS IN DAYLIGHT ZONES SHALL DIM BASED ON THE AMOUNT OF DAYLIGHT DETECTED AT THE PHOTOCELL. FIELD CALIBRATE PHOTOCELL. ROUTE LIGHTS IN DAYLIGHT ZONE THROUGH THE T500 AND LOCAL PHOTOCELL.
- (T2) CEILING MOUNTED LINE VOLTAGE OCCUPANCY SENSOR. ROUTE LOCAL AREA LIGHTS THROUGH SENSOR.
- (T3) WALL MOUNTED LINE VOLTAGE OCCUPANCY SENSOR. ROUTE LOCAL AREA LIGHTS THROUGH SENSOR.
- (T4) EMERGENCY BATTERY PACK SHALL NOT BE SWITCHED OR ROUTED THROUGH ANY CONTROLS, BUT LIGHT SHALL BE CONTROLLED VIA OCCUPANCY OR DAYLIGHT CONTROLS.
- (T5) LINE VOLTAGE 0-10V DIMMING OCCUPANCY SENSOR SWITCH. ROUTE LOCAL AREA LIGHTS THROUGH SENSOR.



Chick-fil-A
 5200 Buffington Road
 Atlanta, Georgia
 30349-2998

Kurzynske & Associates
 2705 Lebanon Pike - Suite One
 Nashville, Tennessee 37214
 Telephone: (615) 255-5203



07/19/23

CHICK-FIL-A
PRINCETON WOODS
 3330 PINE BLUFF DRIVE
 DUMFRIES, VA 22026

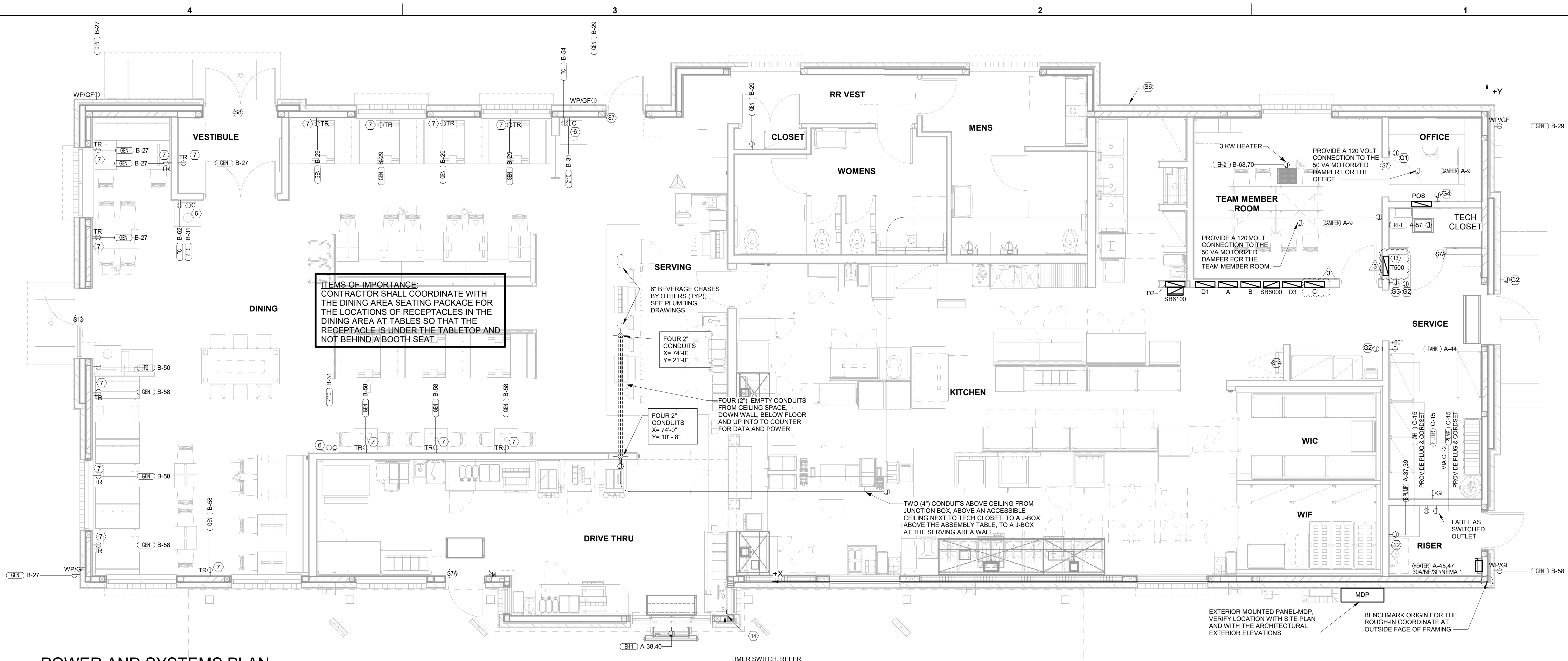
FSR#04916

BUILDING TYPE / SIZE: P13 LSR LRG
 RELEASE: 22.05
 PRINTED FOR: CONSTRUCTION
 REVISION SCHEDULE

- NO. DATE DESCRIPTION
- 3 12/12/2022 CODE COMMENTS
- 11 07/19/2023 REBUILT COORDINATION-2

CONSULTANT PROJECT # 22050.EH.S
 DATE 08/22/2022
 DRAWN BY ES
 Information contained on this drawing and all digital files produced for above named project may not be reproduced in any manner without express written consent from the authoring project representatives.

LIGHTING PLAN
 SHEET NUMBER **E-211**



ITEMS OF IMPORTANCE:
 CONTRACTOR SHALL COORDINATE WITH THE DINING AREA SEATING PACKAGE FOR THE LOCATIONS OF RECEPTACLES IN THE DINING AREA AT TABLES SO THAT THE RECEPTACLE IS UNDER THE TABLETOP AND NOT BEHIND A BOOTH SEAT.

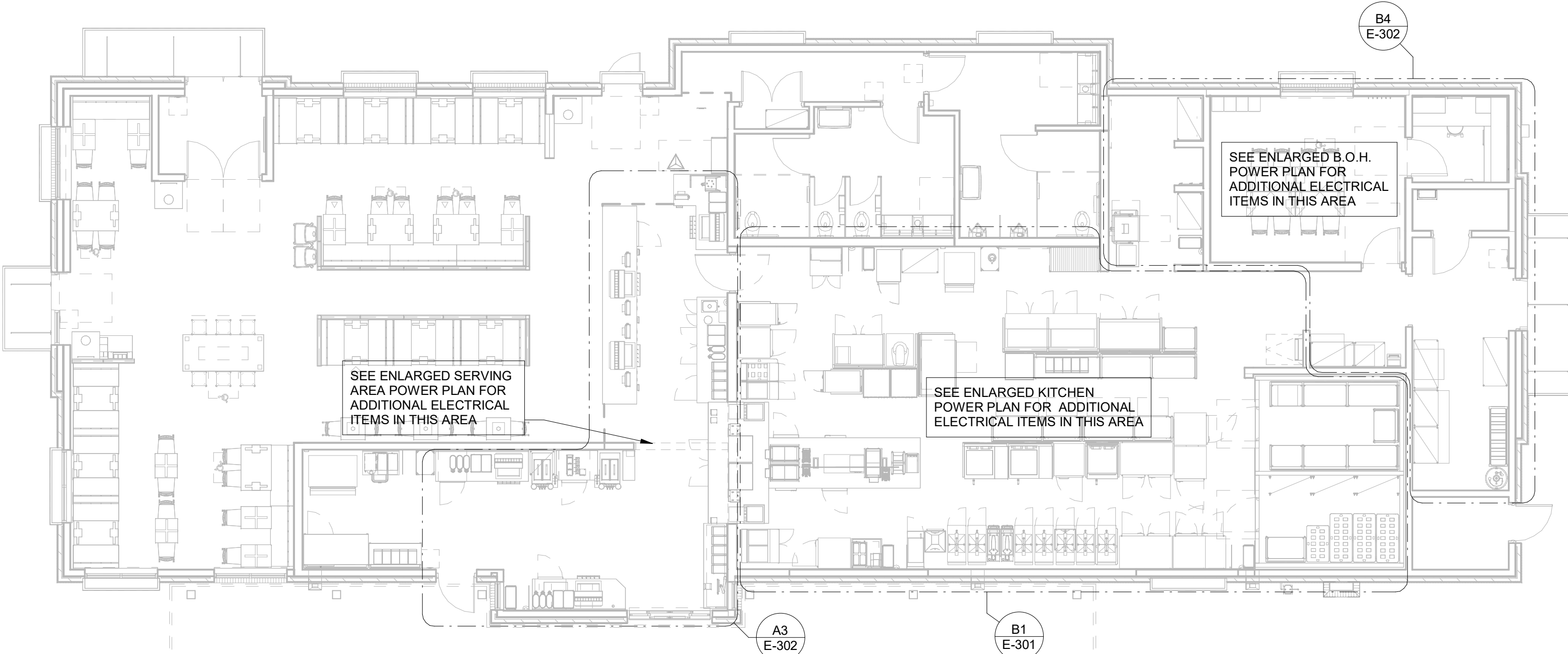
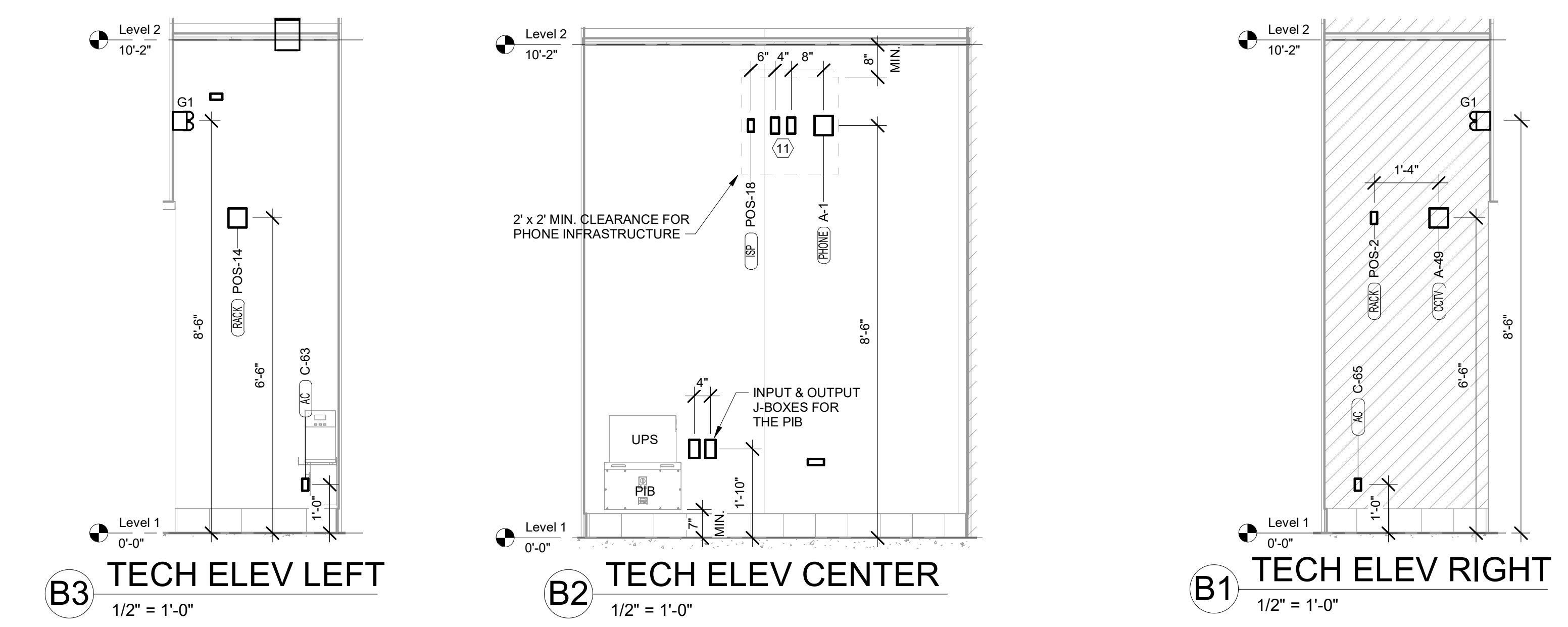
C1 POWER AND SYSTEMS PLAN
 1/4" = 1'-0"

REFER TO THE ELECTRICAL SITE PLAN FOR ADDITIONAL REQUIREMENTS FOR THE DRIVE-THRU CASH STATION ("D" KEYNOTES)

- POWER PLAN KEYNOTES**
- 6 PROVIDE DUPLEX RECEPTACLE (SEE ELEVATIONS FOR MTG HT) IN AN ARLINGTON #DFR2W DOUBLE-GANG RECESSED BOX FOR THE FLYLIGHT SYSTEM ITEMS. DO NOT CUT THE CORDSET FURNISHED WITH THE UNIT, BUT COIL THE CORD ON THE BACK OF THE UNIT AND TUCK INTO THE BACKBOX.
 - 7 TAMPER RESISTANT (TR) DUPLEX RECEPTACLE (IN DINING AREAS) WITH USB CHARGER SHALL BE COOPER/ARROW HART #TR756-B (BROWN) WITH MATCHING COLOR 'DECOR' STYLE PLATE. VERIFY COLOR WITH OWNER.
 - 12 PROVIDE JUNCTION BOX AT 8'-0" AFF WITH CONDUIT AND CONDUCTORS TO PANELBOARD FOR FUTURE CONNECTION TO BOOSTER PUMP. REFER TO THE PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.
 - 13 THE STORE OPEN-CLOSE UNIT SWITCH IS FURNISHED WITH THE CFA-T500 CONTROL PANEL AND FACTORY INSTALLED IN THE DOOR OF THE CFA-T500 CABINET.
 - 14 TIMER SWITCH FOR OUTSIDE ELECTRICAL HEATER. REFER TO A1 / E-304 FOR DETAILS AND WIRING SCHEMATIC.
- SECURITY KEYNOTES**
- S6 PROVIDE A 1/2" CONDUIT THRU THE EXTERIOR WALL AND STUBBED INTO THE ACCESSIBLE CEILING SPACE FOR THE EXTERIOR WALL MOUNTED AUDIO-VISUAL ALARM NOTIFICATION DEVICE. VERIFY LOCATION WITH THE EXTERIOR ELEVATIONS AND WITH THE SECURITY INSTALLER - TYPICALLY TO BE LOCATED NEAR THE FIRE PROTECTION SYSTEMS EXTERIOR ALARM UNIT AND VISIBLE FROM THE STREET.
 - S7 EXTEND 1/2" RIGID CONDUIT FROM TOP OF STRIKE-SIDE DOOR FRAME CHANNEL TO ABOVE ACCESSIBLE CEILING.
 - S7A EXTEND 3/4" RIGID CONDUIT FROM TOP OF STRIKE-SIDE DOOR FRAME CHANNEL TO ABOVE ACCESSIBLE CEILING.
 - S8 EXTEND 1/2" CONDUIT FROM A POINT 3" WITHIN EITHER HINGE-SIDE DOOR VERTICAL FRAME MULLION TO ABOVE ACCESSIBLE CEILING.
 - S13 EXTEND 1/2" CONDUIT FROM A POINT 3" INSIDE THE STRIKE-SIDE DOOR FRAME MULLION TO ABOVE ACCESSIBLE CEILING.
 - S14 PROVIDE JUNCTION BOX ON THE LATCH SIDE OF THE ROOF ACCESS HATCH WITH 1/2" CONDUIT ABOVE THE CEILING TO AN ACCESSIBLE CEILING SPACE FOR A DOOR CONTACT.

- CO2 DETECTOR NOTES**
- G1 CO2 CENTRAL CONTROL UNIT - PROVIDE SINGLE-GANG BACKBOX AT 60" AFF WITH 3/4" CONDUIT STUBBED ABOVE ACCESSIBLE CEILING SPACE
 - G2 CO2 ANNUNCIATOR UNIT - PROVIDE SINGLE-GANG BACKBOX AT 60" AFF WITH 3/4" CONDUIT STUBBED ABOVE ACCESSIBLE CEILING SPACE
 - G3 CO2 SENSOR UNIT - PROVIDE SINGLE-GANG BACKBOX AT 12" AFF WITH 3/4" CONDUIT STUBBED ABOVE ACCESSIBLE CEILING SPACE
 - G4 CO2 POWER SUPPLY - PROVIDE SINGLE-GANG BACKBOX AT 18" BELOW CEILING WITH 3/4" CONDUIT STUBBED ABOVE ACCESSIBLE CEILING SPACE. PROVIDE DUPLEX OUTLET, AND CONNECT TO A LOCAL GENERAL OUTLET CIRCUIT. FIELD VERIFY EXACT LOCATION WITH STRONG SYSTEMS 800-500-5566

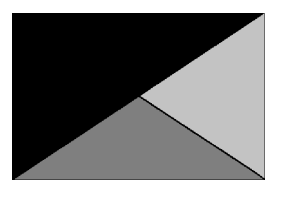
- POWER PLAN GENERAL NOTES**
1. ALL SECURITY, POS, MUSIC, COMMUNICATIONS, AND POWER ROUGH-IN SHALL BE INSTALLED DURING THE FRAMING/ROUGH-IN PHASE OF CONSTRUCTION.
 2. REFER TO KITCHEN EQUIPMENT SHEETS FOR EQUIPMENT ELECTRICAL ROUGH-IN ELEVATIONS ABOVE FINISHED FLOOR.
 3. ALL EMPTY CONDUITS SHALL BE PROVIDED WITH PULL STRING.
 4. PROVIDE INSULATED BUSHING AT TERMINATION POINTS OF ALL CONDUITS FOR LOW VOLTAGE WIRING.
 5. THE ELECTRICAL INSTALLER SHALL COORDINATE THE ROUTING OF ALL CONDUIT IN THE BUILDING WITH OTHER TRADES (SPECIFICALLY THE DUCTWORK INSTALLATION) TO AVOID CONFLICTS OF SPACE REQUIREMENTS IN WALLS AND CEILING SPACES.



A1 ELECTRICAL KEY PLAN
 1/8" = 1'-0"



Chick-fil-A
 5200 Buffington Road
 Atlanta, Georgia
 30349-2998



Kurzynske & Associates
 2705 Lebanon Pike - Suite One
 Nashville, Tennessee 37214
 Telephone: (615) 255-5203



02/15/23

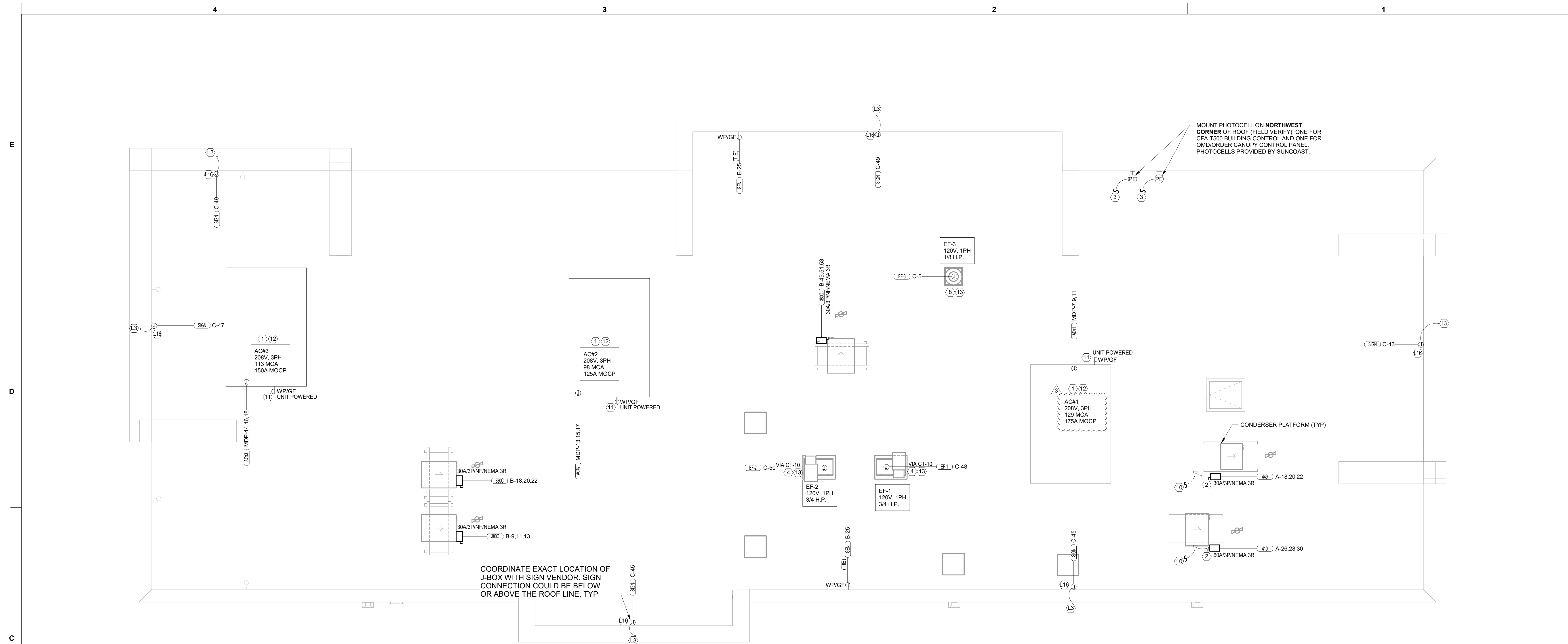
CHICK-FIL-A
PRINCETON WOODS
 3330 PINE BLUFF DRIVE
 DUMFRIES, VA 22026

FSR#04916
 BUILDING TYPE / SIZE: P13 LSR LRG
 RELEASE: 22.05

| REVISION SCHEDULE | | |
|-------------------|------------|---------------|
| NO. | DATE | DESCRIPTION |
| 3 | 12/12/2022 | CODE COMMENTS |

CONSULTANT PROJECT # 22050.EH.S
 DATE 08/22/2022
 DRAWN BY ES
 INFORMATION CONTAINED ON THIS DRAWING AND ALL DIGITAL FILES PRODUCED FOR ABOVE NAMED PROJECT MAY NOT BE REPRODUCED IN ANY MANNER WITHOUT EXPRESS WRITTEN OR VERBAL CONSENT FROM AUTHORIZED PROJECT REPRESENTATIVES.
POWER AND SYSTEMS PLAN
 SHEET NUMBER

E-221



C1 ROOF POWER PLAN
1/4" = 1'-0"

NOTE: REFER TO MECHANICAL DRAWINGS FOR ROOFTOP PACKAGED AC UNIT SCHEDULE. ALL UNITS ARE FURNISHED WITH FACTORY INSTALLED DISCONNECT SWITCH. REFER TO SAME SCHEDULE FOR INDICATION OF UNITS FURNISHED WITH FACTORY RECEPTACLE FOR COMPLIANCE WITH NEC 210-63.

LIGHTING PLAN KEYNOTES

- L3 FOR SIGNAGE BY OTHERS; CONNECT AS REQUIRED. GROUND ALL LOCATIONS IN ACCORDANCE WITH NEC AND MANUFACTURER'S REQUIREMENTS. SIGN IS FURNISHED WITH AN INTEGRAL PRE-WIRED DISCONNECTING MEANS.
- L16 ROUTE THROUGH CONTROL PANEL CFA-T500 AND CONTROLLED BY OCCUPIED SWITCH AND PHOTOCELL.

ROOF POWER KEYNOTES

- 1 ROUTE ELECTRICAL CONDUITS TO UNIT CONNECTIONS THROUGH WEATHERPROOF RACEWAY FURNISHED WITH UNIT. COORDINATE WITH MECHANICAL CONTRACTOR FOR EXACT LOCATIONS.
- 2 MOUNT WEATHER-PROOF FUSED DISCONNECT SWITCHES FOR W/C AND W/P CONDENSERS ON UNISTRUT WITH CONDUIT DOWN INTO CEILING SPACE BELOW THRU ROOF PENETRATION DEVICE (NOT THRU ROOF). SEE THE ARCHITECTURAL ROOF PENETRATION DETAIL(S) FOR FURTHER INFORMATION. PROVIDE FUSE SIZE PER MANUFACTURER REQUIREMENTS.
- 3 CONNECT ONE PHOTOCELL ON ROOF TO THE CFA-T500 CONTROL PANEL TERMINALS AND ONE PHOTOCELL ON ROOF TO THE ORDER/OMD CANOPY CONTROL PANEL AS DIRECTED BY SUNCOAST ENVIRONMENTAL INC WIRING DIAGRAMS. PHOTOCELLS ON THE ROOF FURNISHED WITH CONTROL PANELS ORDER (SUNCOAST) AND INSTALLED BY CONTRACTOR.
- 4 COORDINATE EXACT LOCATION OF CONDUIT AND DISCONNECT AT EXHAUST FAN. CONDUIT SHALL BE INSTALLED THROUGH ROOF ON OUTSIDE OF FAN CURB. CONDUIT SHALL BE LOCATED AT FAN HINGE SUCH THAT THE FAN HOOD CAN BE FULLY HINGED OPEN AND NOT TOUCH THE CONDUIT. PROVIDE 1/4" DIAMETER LOOP IN THE FLEXIBLE CONDUIT BETWEEN THE ROOF AND THE FAN ELECTRICAL CONNECTION.
- 8 COORDINATE EXACT LOCATION OF CONDUIT AND DISCONNECT AT EXHAUST FAN. CONDUIT SHALL BE ROUTED WITH DUCTWORK WITHIN FAN ROOF CURB AND TO THE FAN WIREWAY. PROVIDE SEALTIGHT FITTINGS AS THE CONDUIT ENTERS AND LEAVES THE DUCTWORK. INTERLOCK WITH LIGHTING CIRCUIT IN RESTROOM PRIOR TO CONTROLS.
- 9 MOUNT TYPE 'OC' LIGHTING FIXTURE, WITH INTEGRAL SLIPFITTER, ON PIPE. PIPE WILL BE PROVIDED BY OTHER TRADES. AIM LIGHTING FIXTURE AT NIGHT FOR BEST ILLUMINATION OF FLAG.
- 10 CONNECT POWER FROM EACH CONDENSING UNIT'S COMPRESSOR CONTACTOR TO THE EVAPORATOR COIL UNIT'S JUNCTION BOX BELOW. REFER TO ENLARGED KITCHEN POWER PLAN FOR LOCATION.
- 11 CONVENIENCE RECEPTACLE PROVIDED PRE-INSTALLED IN HVAC UNIT. CONNECT TO 120 VOLT CIRCUIT AS REQUIRED AND/OR AS INDICATED (NOTE THAT ONE UNIT WILL NOT BE FURNISHED WITH AN INTEGRAL PRE-INSTALLED RECEPTACLE OUTLET. CONTRACTOR SHALL PROVIDE A GFCI TYPE 20 AMP RECEPTACLE WITH IN-USE WP COVERPLATE MOUNTED TO THE OUTSIDE OF THE ROOFTOP AC UNIT.)
- 12 A/C UNIT DISCONNECT IS FURNISHED WITH A/C UNIT AND SHALL BE CONNECTED BY THE CONTRACTOR.
- 13 EXHAUST FAN IS FURNISHED WITH A PREWIRED DISCONNECT.

POWER PLAN GENERAL NOTES

1. ALL SECURITY, POS, MUSIC, COMMUNICATIONS, AND POWER ROUGH-IN SHALL BE INSTALLED DURING THE FRAMING/ROUGH-IN PHASE OF CONSTRUCTION.
2. REFER TO KITCHEN EQUIPMENT SHEETS FOR EQUIPMENT ELECTRICAL ROUGH-IN ELEVATIONS ABOVE FINISHED FLOOR.
3. ALL EMPTY CONDUITS SHALL BE PROVIDED WITH PULL STRING.
4. PROVIDE INSULATED BUSHING AT TERMINATION POINTS OF ALL CONDUITS FOR LOW VOLTAGE WIRING.
5. THE ELECTRICAL INSTALLER SHALL COORDINATE THE ROUTING OF ALL CONDUIT IN THE BUILDING WITH OTHER TRADES (SPECIFICALLY THE DUCTWORK INSTALLATION) TO AVOID CONFLICTS OF SPACE REQUIREMENTS IN WALLS AND CEILING SPACES.



Chick-fil-A

Chick-fil-A
5200 Buffington Road
Atlanta, Georgia
30349-2998

Kurzynske & Associates
2705 Lebanon Pike - Suite One
Nashville, Tennessee 37214
Telephone: (615) 255-5203



02/15/23

CHICK-FIL-A
PRINCETON WOODS
3330 PINE BLUFF DRIVE
DUMFRIES, VA 22026

FSR#04916

BUILDING TYPE / SIZE: P13 LSR LRG
RELEASE: 22.05
PRINTED FOR:
CONSTRUCTION

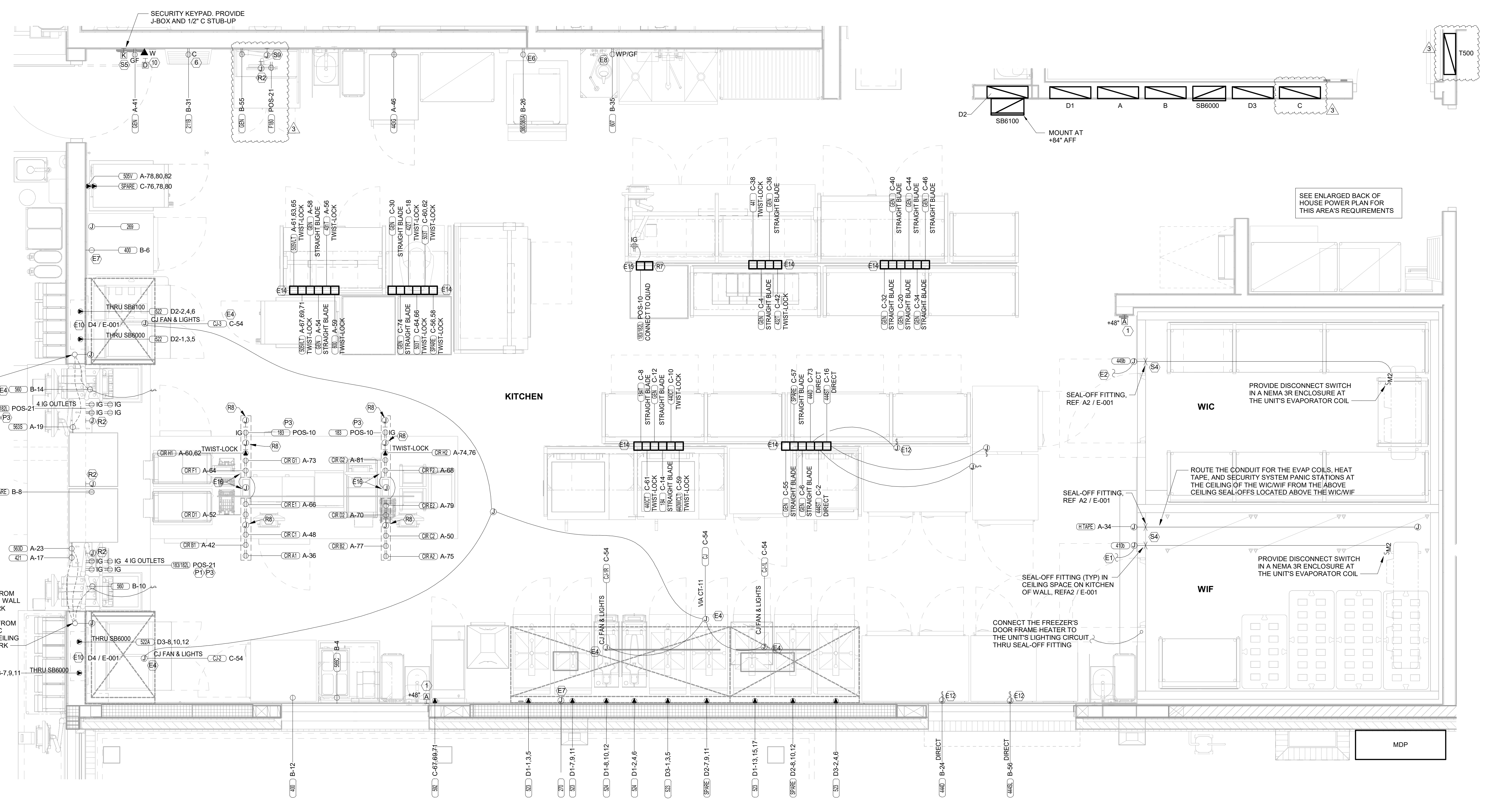
| NO. | DATE | DESCRIPTION |
|-----|------------|---------------|
| 3 | 12/12/2022 | CODE COMMENTS |

CONSULTANT PROJECT # 22050.EH.S
DATE 08/22/2022

DRAWN BY ES
Information contained on this drawing and all digital files produced for above named project may not be reproduced in any manner without express written or verbal consent from authorized project representatives.

ROOF POWER PLAN

SHEET NUMBER
E-250



B1 ENLARGED KITCHEN POWER PLAN
1/2" = 1'-0"

| POWER PLAN KEYNOTES | |
|---------------------|--|
| ① | PROVIDE TWO-GANG DEEP BOX (2" MIN.) FOR ANSUL PULL STATION. EXTEND 1/2" CONDUIT FROM BOX, STUBBED ABOVE CEILING. |
| ⑥ | PROVIDE DUPLEX RECEPTACLE (SEE ELEVATIONS FOR MTG HT) IN AN ARLINGTON #DVF2W DOUBLE-GANG RECESSED BOX FOR THE FLY SYSTEM ITEMS. DO NOT CUT THE CORDSET FURNISHED WITH THE UNIT, BUT COIL THE CORD ON THE BACK OF THE UNIT AND TUCK INTO THE BACKBOX. |
| ⑩ | PROVIDE 2 GANG DEEP BOX (2" MIN.) FOR EACH DUCT SMOKE DETECTOR INDICATED ON THE MECHANICAL DRAWINGS. FOR INSTALLATION OF DUCT DETECTOR REMOTE ANNUNCIATORS BY MECHANICAL. THE DUCT SMOKE REMOTE ANNUNCIATORS ARE PROVIDED TO THE ELECTRICIAN WITH THE SUNCOAST ELECTRONICS PACKAGE OF GEAR AND CONTROLS. EXTEND 1/2" CONDUIT FROM EACH BOX AND STUB ABOVE CEILING. |

| SECURITY KEYNOTES | |
|-------------------|--|
| S4 | PROVIDE TWO GANG WEATHERPROOF JUNCTION BOX AND STAINLESS STEEL PLATE WITH 7/8" HOLE IN CENTER FOR PANIC BUTTON. LOCATE AT 48" AFF AND EXTEND 1/2" CONDUIT UP TO ABOVE ACCESSIBLE CEILING WITH CONDUIT SEAL FITTING. SEAL CONDUIT PENETRATION AT WIC/WIF CEILING. |
| S5 | PROVIDE SINGLE GANG BOX WITHOUT COVER PLATE. EXTEND 1/2" CONDUIT UP IN WALL TO ABOVE ACCESSIBLE CEILING. |
| S9 | PROVIDE SINGLE GANG JUNCTION BOX WITHOUT COVERPLATE. EXTEND 1/2" CONDUIT UP IN WALL TO ABOVE ACCESSIBLE CEILING. |

| POS DATA KEYNOTES | |
|-------------------|---|
| R2 | PROVIDE SINGLE-GANG JUNCTION BOX WITH A 1" CONDUIT EXTENDING UP INTO THE CEILING SPACE FOR POS MONITOR(S). COVER PLATE PROVIDED BY OWNER'S POS SYSTEM VENDOR. |
| R7 | PROVIDE A SINGLE GANG BOX FLUSH MOUNTED IN THE CEILING FOR THE POS DATA PLATE (BY OTHERS) FOR THE SALAD PREP AREA POS MONITOR AND PRINTER. |
| R8 | 3/4" FLEX PROVIDED FOR DATA CABLES IN CHASE. |

| POS POWER KEYNOTES | |
|--------------------|--|
| P1 | PROVIDE ORANGE ISOLATED GROUND (IG) DUPLEX RECEPTACLE. |
| P3 | USE TYPE MC CABLE FOR THE ISOLATED GROUND CIRCUIT: #12 HOT, NEUTRAL, GREEN GROUND, STRIPED ISOLATED GROUND. EACH 15 AMP HOMERUN SHALL BE DEDICATED TO A CIRCUIT BREAKER VIA DEDICATED CONDUCTORS WITHIN A CABLE ASSEMBLY. ALL MC CABLES SHALL BE RUN OVERHEAD ABOVE THE CEILING AND RACKED TOGETHER ON J-HOOKS. NO SPLICES IN ANY HOMERUN CABLES FROM FIRST RECEPTACLE TO BREAKER. |

| ENLARGED POWER PLAN KEYNOTES | |
|------------------------------|---|
| E1 | CONNECT EVAPORATOR UNIT IN FREEZER TO FREEZER CONDENSING UNIT CONTROLS LOCATED ON ROOF. SEE THE ROOF ELECTRICAL PLAN. |
| E2 | CONNECT EVAPORATOR UNIT IN COOLER TO COOLER CONDENSING UNIT CONTROLS LOCATED ON ROOF. SEE THE ROOF ELECTRICAL PLAN. |
| E4 | CONNECT AS REQUIRED TO HOOD. CONNECT HOMERUN VIA A RELAY IN THE CFA-T500 CONTROL SECTION. |
| E6 | SEE THE ROOF ELECTRICAL PLAN FOR THE LOCATION OF THE ICE MAKER CONDENSERS AND ANY ADDITIONAL REQUIREMENTS. |
| E7 | PROVIDE 3/8" IN 1/2" CONDUIT BETWEEN THE CFA-T500 CONTROL PANEL AND THE ANSUL SYSTEM PANEL(S). SEE ANSUL SYSTEM WIRING DIAGRAM DETAIL ON SHEET E-002 FOR ADDITIONAL INFORMATION. |
| E8 | PROVIDE GROUND FAULT CIRCUIT INTERRUPTER (GFCI) TYPE RECEPTACLE IN COMPLIANCE WITH THE NEC REQUIREMENT FOR KITCHEN/FOOD PREP AREAS. IF THE RECEPTACLE OUTLET IS NOT NOTED AS GFCI, THEN THE BREAKER IS TO BE GFCI TYPE. |
| E10 | THE RECESSED PIN AND SLEEVE BOX WITH THE 'SLEEVE' RECEPTACLE FOR THE OPEN FRYERS (ITEMS #522 AND 522A) ARE FURNISHED BY THE EXHAUST HOOD SUPPLIER AND INSTALLED BY THE CONTRACTOR. THE OPEN FRYER SUPPLIER PROVIDES PREWIRED CORDSET WITH A PIN AND INTERGRAL WITH THE OPEN FRYER TO PLUG INTO THE SLEEVE RECEPTACLE. |
| E12 | SINGLE POLE SWITCH SHALL SERVE AS THE LOCAL "IN-SIGHT" MEANS OF DISCONNECT FOR EQUIPMENT ITEM AS NOTED. SEE DIRECT CONNECTION DETAILS ON SHEET E-002 FOR FURTHER INFORMATION. |
| E14 | OVERHEAD EQUIPMENT POWER (OEP) DROP CORD RECEPTACLES FROM A FLUSH MOUNTED CEILING OEP BOX (MAXIMUM OF SIX PER ASSEMBLY.) PROVIDE A-C-S OEP ASSEMBLY #12360-1000. ASSEMBLY WILL CONSIST OF A FLUSH CEILING OUTLET BOX, TWIST-LOCK PENDANT RECEPTACLES, STRAIGHT BLADE PENDANT RECEPTACLES, CORDS, STRAIN RELIEF, AND TWISTLOCK PLUGS AS NOTED ON PLAN. CONTACT BRIDGID DEFRAKCESHI EMAIL: BRIDGID1985@GMAIL.COM (800-639-7584) TO PURCHASE OEP BOX AND DROP CORD/RECEPTACLES. PROVIDE LIQUID-TIGHT CONDUIT WITH CONDUCTORS FOR DIRECT CONNECTED EQUIPMENT. CONDUIT SHALL NOT TOUCH THE FLOOR WHEN EQUIPMENT IS IN PLACE. USE SUPPORT GRIPS W/ SUPPORT HOOK ATTACHED TO SHELVING ABOVE AS NEEDED. PASS & SEYMOUR MODEL #S075-U-GH5 OR EQUIVALENT. |
| E15 | PROVIDE A DOUBLE-GANG BOX FLUSH MOUNTED IN THE CEILING WITH A BLANK PLATE WITH HOLE FOR A DROP CORD. PROVIDE THE #12 DROP CORD (WITH STRAIN RELIEF AT THE BOX AND AT THE OUTLET BACKBOX) AND CONNECT THE CORD TO AN OUTLET BOX CONTAINING TWO 15 AMP IG (ORANGE) DUPLEX OUTLETS. OUTLET BOX TO BE MOUNTED TO THE OVERHEAD SHELVING AT THE PRINTER AND MONITOR MOUNTING BRACKET. |

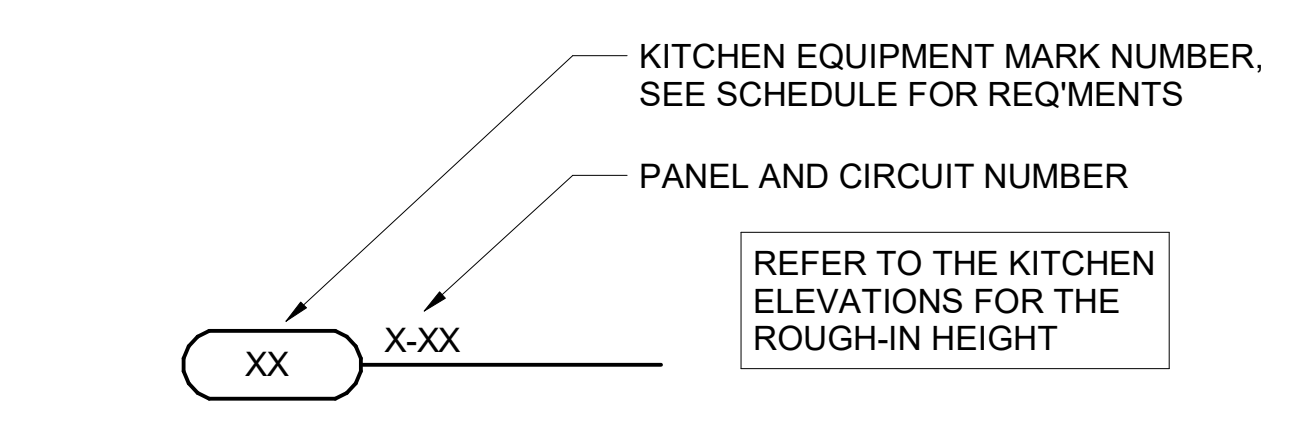
| POWER PLAN GENERAL NOTES | |
|--------------------------|---|
| 1. | ALL SECURITY, POS, MUSIC, COMMUNICATIONS, AND POWER ROUGH-IN SHALL BE INSTALLED DURING THE FRAMING/ROUGH-IN PHASE OF CONSTRUCTION. |
| 2. | REFER TO KITCHEN EQUIPMENT SHEETS FOR EQUIPMENT ELECTRICAL ROUGH-IN ELEVATIONS ABOVE FINISHED FLOOR. |
| 3. | ALL EMPTY CONDUITS SHALL BE PROVIDED WITH PULL STRING. |
| 4. | PROVIDE INSULATED BUSHING AT TERMINATION POINTS OF ALL CONDUITS FOR LOW VOLTAGE WIRING. |
| 5. | THE ELECTRICAL INSTALLER SHALL COORDINATE THE ROUTING OF ALL CONDUIT IN THE BUILDING WITH OTHER TRADES (SPECIFICALLY THE DUCTWORK INSTALLATION) TO AVOID CONFLICTS OF SPACE REQUIREMENTS IN WALLS AND CEILING SPACES. |

COORDINATE WITH THE EQUIPMENT SUPPLIER FOR THE CHASE LOCATIONS. ROUTE ONE SET OF CIRCUITS 'A' THRU 'H' AND POS CIRCUIT TO EACH JUNCTION BOX PROVIDED ABOVE CEILING. CONNECT TO PREWIRED LABELED CIRCUITS. ENSURE CIRCUITS ARE LABELED CORRECTLY FOR EACH PREWIRED OUTLET PROVIDED IN EACH CHASE.

NOTE FOR GF TYPE RECEPTACLES IN KITCHEN/FOOD PREP AREAS:
THE CONTRACTOR SHALL PROVIDE GROUND FAULT CIRCUIT INTERRUPTER PROTECTION FOR PERSONNEL FOR ALL 125V - 250V RECEPTACLES SUPPLIED BY 120V SINGLE-PHASE BRANCH CIRCUITS 50 AMPS OR LESS, 208V SINGLE-PHASE BRANCH CIRCUITS 50 AMPS OR LESS, AND 208V THREE-PHASE BRANCH CIRCUITS 100 AMPS OR LESS. SEE FLOOR PLANS FOR ADDITIONAL INFORMATION.

NOTE FOR POS GF IN KITCHEN:
THE CONTRACTOR SHALL PROVIDE GROUND FAULT PROTECTION FOR ALL 120 VOLT, 15 AND 20 AMP ISOLATED GROUND RECEPTACLE OUTLET BRANCH CIRCUITS IN THE KITCHEN/FOOD PREPARATION AREAS. GROUND FAULT PROTECTION SHALL BE PROVIDED AT THE BREAKER VIA A GROUND FAULT TYPE BRANCH BREAKER. (GFCI TYPE ISOLATED GROUND RECEPTACLES ARE NOT AVAILABLE.)

NOTE:
RECEPTACLES FOR THE POS EQUIPMENT SHALL BE THE ONLY ITEMS THAT CONNECT TO PANEL-POS. THERE SHALL BE NO OTHER LOADS CONNECTED TO THIS ISOLATED GROUND PANEL AND, IF SO, SHALL BE REMOVED AND RECONNECTED TO ANOTHER PANELBOARD AT THE EXPENSE OF THE CONTRACTOR.



A1 KITCHEN EQUIP NOMENCLATURE
NO SCALE

Chick-fil-A
5200 Buffington Road
Atlanta, Georgia
30349-2998

Kurzynske & Associates
2705 Lebanon Pike - Suite One
Nashville, Tennessee 37214
Telephone: (615) 255-5203

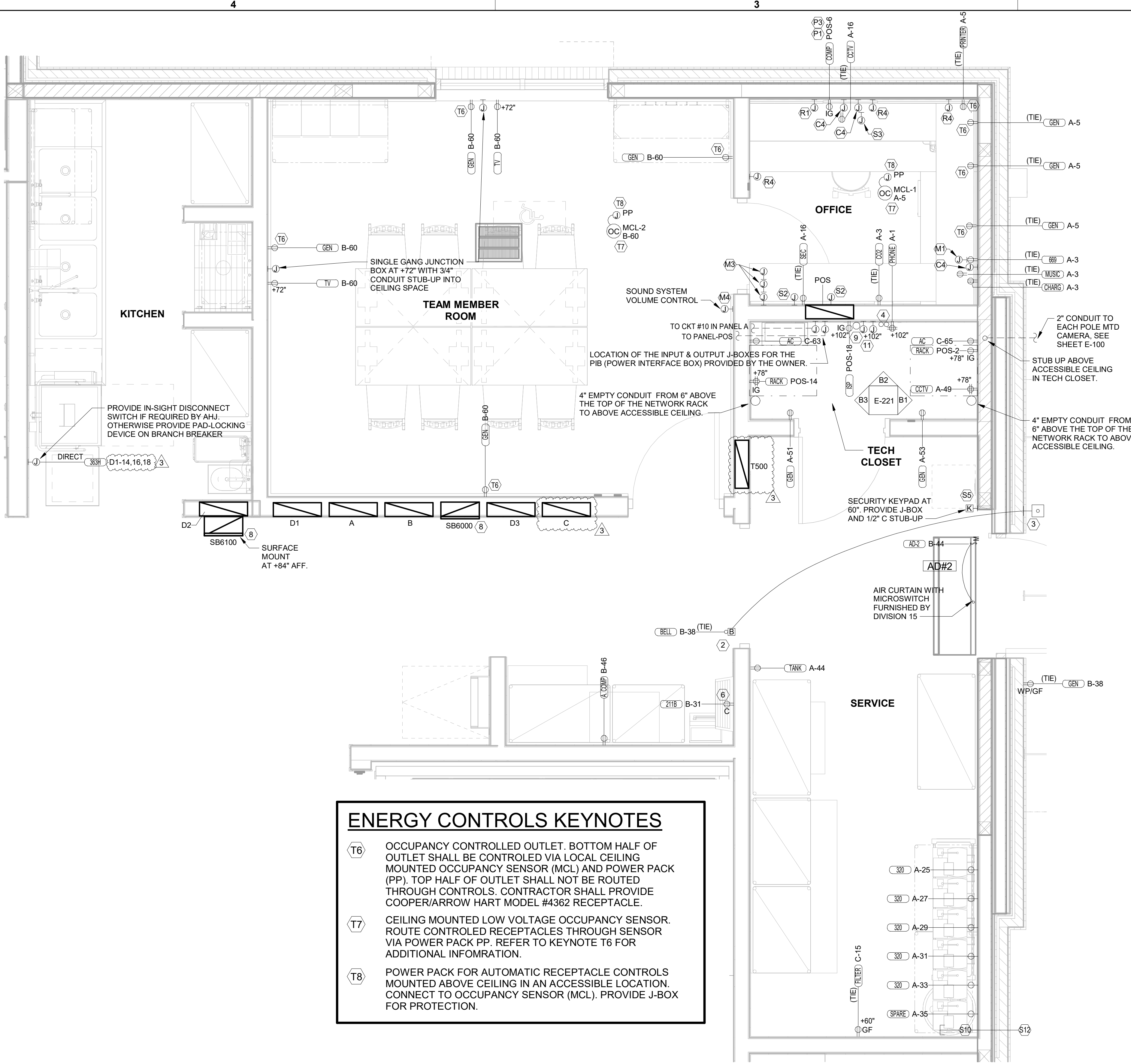


02/15/23

CHICK-FIL-A
PRINCETON WOODS
3330 PINE BLUFF DRIVE
DUMFRIES, VA 22026

FSR#04916
BUILDING TYPE / SIZE: P13 LSR ALL
RELEASE: 22.05
PRINTED FOR:
CONSTRUCTION
REVISION SCHEDULE
NO. DATE DESCRIPTION
3 12/12/2022 CODE COMMENTS

CONSULTANT PROJECT # 22050 EH S
DATE 08/22/2022
DRAWN BY ES
Information contained on this drawing and all digital files produced for above named project may not be reproduced in any manner without express written or verbal consent from the originating project representatives.
ENLARGED KITCHEN POWER PLAN
SHEET NUMBER



B4 ENLARGED BOH POWER PLAN
1/2" = 1'-0"

- ### POWER PLAN GENERAL NOTES
- ALL SECURITY, POS, MUSIC, COMMUNICATIONS, AND POWER ROUGH-IN SHALL BE INSTALLED DURING THE FRAMING/ROUGH-IN PHASE OF CONSTRUCTION.
 - REFER TO KITCHEN EQUIPMENT SHEETS FOR EQUIPMENT ELECTRICAL ROUGH-IN ELEVATIONS ABOVE FINISHED FLOOR.
 - ALL EMPTY CONDUITS SHALL BE PROVIDED WITH PULL STRING.
 - PROVIDE INSULATED BUSHING AT TERMINATION POINTS OF ALL CONDUITS FOR LOW VOLTAGE WIRING.
 - THE ELECTRICAL INSTALLER SHALL COORDINATE THE ROUTING OF ALL CONDUIT IN THE BUILDING WITH OTHER TRADES (SPECIFICALLY THE DUCTWORK INSTALLATION) TO AVOID CONFLICTS OF SPACE REQUIREMENTS IN WALLS AND CEILING SPACES.

- ### ENLARGED POWER PLAN KEYNOTES
- E6** SEE THE ROOF ELECTRICAL PLAN FOR THE LOCATION OF THE ICE MAKER CONDENSERS AND ANY ADDITIONAL REQUIREMENTS.
 - E13** JUNCTION BOX ABOVE CEILING FOR AD-1 AT THE DRIVE-THRU WINDOW.

- ### MUSIC KEYNOTES
- M1** PROVIDE JUNCTION BOX WITH STAINLESS STEEL COVER PLATE AND 3/4" HOLE IN PLATE WITH GROMMET ON HOLE IN PLATE. EXTEND 3/4" CONDUIT UP IN WALL TO ABOVE CEILING FOR MUSIC SYSTEM.
 - M3** THREE SINGLE GANG EXTRA DEEP J-BOXES STACKED WITH A 1/2" CONDUIT FROM EACH TO THE TOP J-BOX BOX AND A 1" CONDUIT STUBBED INTO THE CEILING SPACE FOR MUSIC SYSTEM VOLUME CONTROLS PROVIDED BY OWNER'S VENDOR.
 - M4** PROVIDE A SINGLE GANG EXTRA DEEP JUNCTION BOX AT 74" AFF WITH 1/2" CONDUIT STUBBED INTO THE CEILING SPACE FOR MUSIC SYSTEM VOLUME CONTROLS.

- ### COMMUNICATIONS KEYNOTES
- C2** PROVIDE JUNCTION BOX, LESS COVER PLATE, AND EXTEND 1.5" CONDUIT UP IN WALL TO ABOVE CEILING FOR INSTALLATION OF WIRELESS COMMUNICATION CONTROL UNIT.
 - C4** PROVIDE SINGLE-GANG JUNCTION BOX WITH A 1" EMPTY CONDUIT STUBBED UP INTO THE ACCESSIBLE CEILING SPACE FOR OWNER'S VOIP PHONE JACK AND CABLES.
 - C5** PROVIDE SINGLE-GANG JUNCTION BOX WITH A 3/4" EMPTY CONDUIT STUBBED UP INTO THE ACCESSIBLE CEILING SPACE FOR FUTURE MENU BOARD CABLES.

- ### SECURITY KEYNOTES
- S1** PROVIDE SINGLE GANG JUNCTION BOX AND STAINLESS STEEL COVER PLATE WITH 7/8" HOLE IN CENTER. EXTEND 1" CONDUIT UP IN WALL TO ABOVE ACCESSIBLE CEILING.
 - S2** PROVIDE 4"W X 4"H X 3"D FLUSH JUNCTION BOX WITH A COVER PLATE. EXTEND 2" CONDUIT UP TO ABOVE ACCESSIBLE OFFICE CEILING AREA AND PROVIDE BUSHING ON CONDUIT.
 - S3** PROVIDE A SINGLE-GANG JUNCTION BOX WITH A 1.5" CONDUIT STUBBED UP INTO ACCESSIBLE CEILING SPACE WITH A BUSHING ON THE CONDUIT END FOR THE CCTV MONITOR AND DVR LOCATION.
 - S5** PROVIDE SINGLE GANG BOX WITHOUT COVER PLATE. EXTEND 1/2" CONDUIT UP IN WALL TO ABOVE ACCESSIBLE CEILING.
 - S10** PROVIDE SINGLE GANG JUNCTION BOX WITH STAINLESS STEEL COVER PLATE MOUNTED ABOVE THE CEILING SPACE AND ABOVE ON THE INTERIOR SIDE OF THE REAR DOOR. ROUTE 1" CONDUIT FROM THE BOX TO THE "S12" BOX NOTED BELOW.
 - S11** EXTEND 1/2" CONDUIT FROM WINDOW'S FRAME MULLION (RIGHT SIDE) TO ABOVE ACCESSIBLE CEILING.
 - S12** PROVIDE SINGLE GANG, WEATHER-PROOF JUNCTION BOX WITH STAINLESS STEEL COVER PLATE MOUNTED ABOVE THE REAR DOOR ON THE EXTERIOR WALL. ROUTE 1" CONDUIT FROM THE BOX AND INTO THE BUILDING AND TERMINATE CONDUIT IN THE BOX NOTED IN "S10" ABOVE.

- ### ENERGY CONTROLS KEYNOTES
- T6** OCCUPANCY CONTROLLED OUTLET. BOTTOM HALF OF OUTLET SHALL BE CONTROLLED VIA LOCAL CEILING MOUNTED OCCUPANCY SENSOR (MCL) AND POWER PACK (PP). TOP HALF OF OUTLET SHALL NOT BE ROUTED THROUGH CONTROLS. CONTRACTOR SHALL PROVIDE COOPER/ARROW HART MODEL #4362 RECEPTACLE.
 - T7** CEILING MOUNTED LOW VOLTAGE OCCUPANCY SENSOR. ROUTE CONTROLLED RECEPTACLES THROUGH SENSOR VIA POWER PACK PP. REFER TO KEYNOTE T6 FOR ADDITIONAL INFORMATION.
 - T8** POWER PACK FOR AUTOMATIC RECEPTACLE CONTROLS MOUNTED ABOVE CEILING IN AN ACCESSIBLE LOCATION. CONNECT TO OCCUPANCY SENSOR (MCL). PROVIDE J-BOX FOR PROTECTION.

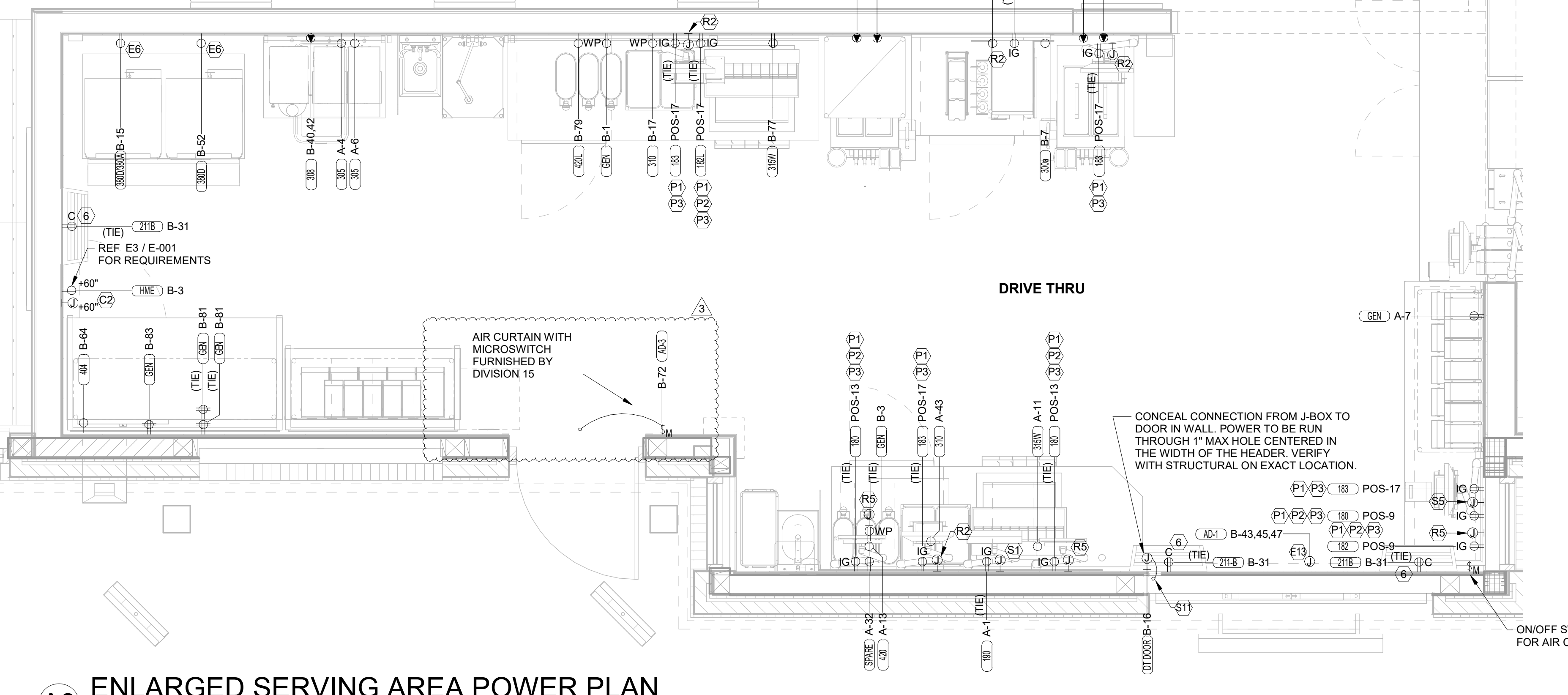
NOTE FOR GF TYPE RECEPTACLES IN KITCHEN/FOOD PREP AREAS:
THE CONTRACTOR SHALL PROVIDE GROUND FAULT CIRCUIT INTERRUPTER PROTECTION FOR PERSONNEL FOR ALL 125V - 250V RECEPTACLES SUPPLIED BY 120V SINGLE-PHASE BRANCH CIRCUITS 50 AMPS OR LESS, 208V SINGLE-PHASE BRANCH CIRCUITS 50 AMPS OR LESS, AND 208V THREE-PHASE BRANCH CIRCUITS 100 AMPS OR LESS. SEE FLOOR PLANS FOR ADDITIONAL INFORMATION.

NOTE FOR POS GF IN KITCHEN:
THE CONTRACTOR SHALL PROVIDE GROUND FAULT PROTECTION FOR ALL 120 VOLT, 15 AND 20 AMP ISOLATED GROUND RECEPTACLE OUTLET BRANCH CIRCUITS IN THE KITCHEN/FOOD PREPARATION AREAS. GROUND FAULT PROTECTION SHALL BE PROVIDED AT THE BREAKER VIA A GROUND FAULT TYPE BRANCH BREAKER. (GFCI TYPE ISOLATED GROUND RECEPTACLES ARE NOT AVAILABLE.)

NOTE:
RECEPTACLES FOR THE POS EQUIPMENT SHALL BE THE ONLY ITEMS THAT CONNECT TO PANEL-POS. THERE SHALL BE NO OTHER LOADS CONNECTED TO THIS ISOLATED GROUND PANEL AND, IF SO, SHALL BE REMOVED AND RECONNECTED TO ANOTHER PANELBOARD AT THE EXPENSE OF THE CONTRACTOR.

- ### POWER PLAN KEYNOTES
- 2** PROVIDE EDWARDS #340-4N5 VIBRATING 4" DIAMETER BELL. THE BELL SHALL BE RATED AT 120 VOLTS.
 - 3** PROVIDE A 120 VOLT WEATHERPROOF DOORBELL. PUSHBUTTON AT DOOR. PUSHBUTTON SHALL BE FLUSH MOUNTED. PROVIDE DORTRONICS SYSTEMS #W5286-P25 CLEAR ANODIZED ALUMINUM PUSHBUTTON WITH SINGLE GANG SWITCHPLATE.
 - 4** TWO 2" TELEPHONE SERVICE ENTRANCE CONDUIT(S). EXTEND WITH PULL STRING FROM TELEPHONE SERVICE J-BOX TO THE UTILITY SOURCE. REFER TO THE ELECTRICAL SITE PLAN FOR ADDITIONAL INFORMATION.
 - 6** PROVIDE DUPLEX RECEPTACLE (SEE ELEVATIONS FOR MTG HT) IN AN ARLINGTON #DVF2RW DOUBLE-GANG RECESSED BOX FOR THE FLY SYSTEM ITEMS. DO NOT CUT THE CORDSET FURNISHED WITH THE UNIT, BUT COIL THE CORD ON THE BACK OF THE UNIT AND TUCK INTO THE BACKBOX.
 - 8** SB8000 PANEL ENCLOSURE WITH 3 LITTELFUSE SHOCK BLOCK GFCI PROTECTION DEVICES AND SB6100 PANEL ENCLOSURE SHOCK BLOCK GFCI PROTECTION DEVICE. ENSURE CONDUITS ARE INSTALLED FOR LINE AND LOAD WIRES TO BE INSTALLED WITH PROPER WIRE BENDING SPACE. LABEL EACH SHOCK BLOCK WITH PANEL AND CIRCUIT NUMBER IT CONTROLS.
 - 9** ONE 3" ISP SERVICE CONDUIT. EXTEND WITH PULL STRING FROM J-BOX TO SUPPLIER'S SOURCE. REFER TO ELECTRICAL SITE PLAN FOR ADDITION INFORMATION.
 - 11** PROVIDE TWO 6"H X 6"W X 4"D J-BOXES (ONE FOR TELEPHONE AND ONE FOR ISP) AT 6'-6" AFF AND EXTEND A 2" CONDUIT WITH PULL STRING IN THE WALL FROM EACH J-BOX INTO THE ACCESSIBLE CEILING SPACE. PROVIDE A COPPER GROUND BAR (EQUAL TO ERICO TGBA24L14P) AT THE BOTTOM OF THE BACKBOARD WITH A #6 AWG INSULATED CU GROUNDING CONDUCTOR IN A 3/4" FROM THE GROUND BAR TO THE INTER SYSTEM BONDING TERMINATION NEXT TO THE SERVICE ENTRANCE. THE GROUND BAR SHALL HAVE TAPS FOR USE BY THE TELEPHONE AND ISP UTILITY COMPANIES AND FOR THE #6 COMMUNICATIONS GROUNDING CONDUCTOR TO THE GES. PROVIDE A 15 AMP ISOLATED GROUND (IG) ORANGE-FACED DUPLEX RECEPTACLE IN THE WALL BESIDE THE BACKBOARD AND LABEL THE RECEPTACLE "FOR FIBER TO CABLE MODEM USE ONLY". BOND NETWORK RACKS TO GROUND BAR.

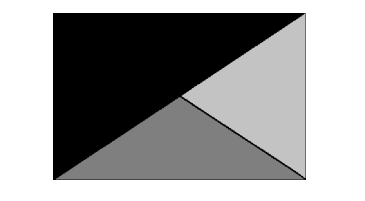
- ### POS DATA KEYNOTES
- R1** PROVIDE A 'RETROFIT' SINGLE GANG RING (CARLON #SC100RR) FOR OWNER'S DEVICE PLATE WITH A 1" EMPTY CONDUIT AT THE OPENING STUBBED UP INTO THE CEILING SPACE FOR OWNER'S DATA CABLES.
 - R2** PROVIDE SINGLE-GANG JUNCTION BOX WITH A 1" CONDUIT EXTENDING UP INTO THE CEILING SPACE FOR POS MONITOR(S). COVER PLATE PROVIDED BY OWNER'S POS SYSTEM VENDOR.
 - R3** PROVIDE A 2" CONDUIT FROM FACE OF WALL AND EXTEND CONDUIT TO JUNCTION BOX IN CEILING SPACE ABOVE SERVING AREA. CONDUIT SHALL TERMINATE FLUSH WITH FACE OF WALL BELOW CONDUIT. CUSTOM STAINLESS STEEL COVER PLATE IN WALL WITH GROMMET ON 2" DIAMETER HOLE AT CONDUIT TERMINATION IN WALL.
 - R4** PROVIDE A 'RETROFIT' SINGLE GANG RING (CARLON #SC100RR) FOR OWNER'S DEVICE PLATE WITH A 1" EMPTY CONDUIT AT THE OPENING STUBBED UP INTO THE CEILING SPACE FOR OWNER'S DATA CABLES.
 - R5** PROVIDE SINGLE-GANG JUNCTION BOX WITH A 1" CONDUIT EXTENDING UP INTO THE CEILING SPACE FOR POS TERMINAL. POS SYSTEM SUPPLIER WILL PROVIDE COVER PLATE ON BOX.
 - R6** PROVIDE SINGLE-GANG EXTRA DEEP JUNCTION BOX MOUNTED ON THE MOUNTING PLATE WITHIN THE FRONT SERVING COUNTER CASEWORK. MOUNT BOX ADJACENT TO THE RECEPTACLE FOR EQUIPMENT 180. DO NOT MOUNT BOX BETWEEN EQUIPMENT 180 AND EQUIPMENT 182 RECEPTACLES.
- ### POS POWER KEYNOTES
- P1** PROVIDE ORANGE ISOLATED GROUND (IG) DUPLEX RECEPTACLE.
 - P2** PROVIDE GROUND FAULT PROTECTION FOR THESE DEVICES VIA A GROUND FAULT CIRCUIT BREAKER IF LOCAL CODE DEFINES THIS A FOOD PREPARATION AREA.
 - P3** USE TYPE MC CABLE FOR THE ISOLATED GROUND CIRCUIT: #12 HOT, NEUTRAL, GREEN GROUND, STRIPED ISOLATED GROUND. EACH 15 AMP HOMERUN SHALL BE DEDICATED TO A CIRCUIT BREAKER VIA DEDICATED CONDUCTORS WITHIN A CABLE ASSEMBLY. ALL MC CABLES SHALL BE RUN OVERHEAD ABOVE THE CEILING AND RACKED TOGETHER ON J-HOOKS. NO SPLICES IN ANY HOMERUN CABLES FROM FIRST RECEPTACLE TO BREAKER.
 - P4** THE RECEPTACLE BACKBOX AND SYSTEM CABLE JUNCTION BOX FOR ITEMS 180 AND 182 SHALL BE TURNED HORIZONTAL. REFER TO THE KITCHEN EQUIPMENT ROUGH-IN ELEVATIONS FOR ADDITIONAL INFORMATION.



A3 ENLARGED SERVING AREA POWER PLAN
1/2" = 1'-0"



Chick-fil-A
5200 Buffington Road
Atlanta, Georgia
30349-2998



Kurzynske & Associates
2705 Lebanon Pike - Suite One
Nashville, Tennessee 37214
Telephone: (615) 255-5203



02/15/23

CHICK-FIL-A
PRINCETON WOODS
3330 PINE BLUFF DRIVE
DUMFRIES, VA 22026

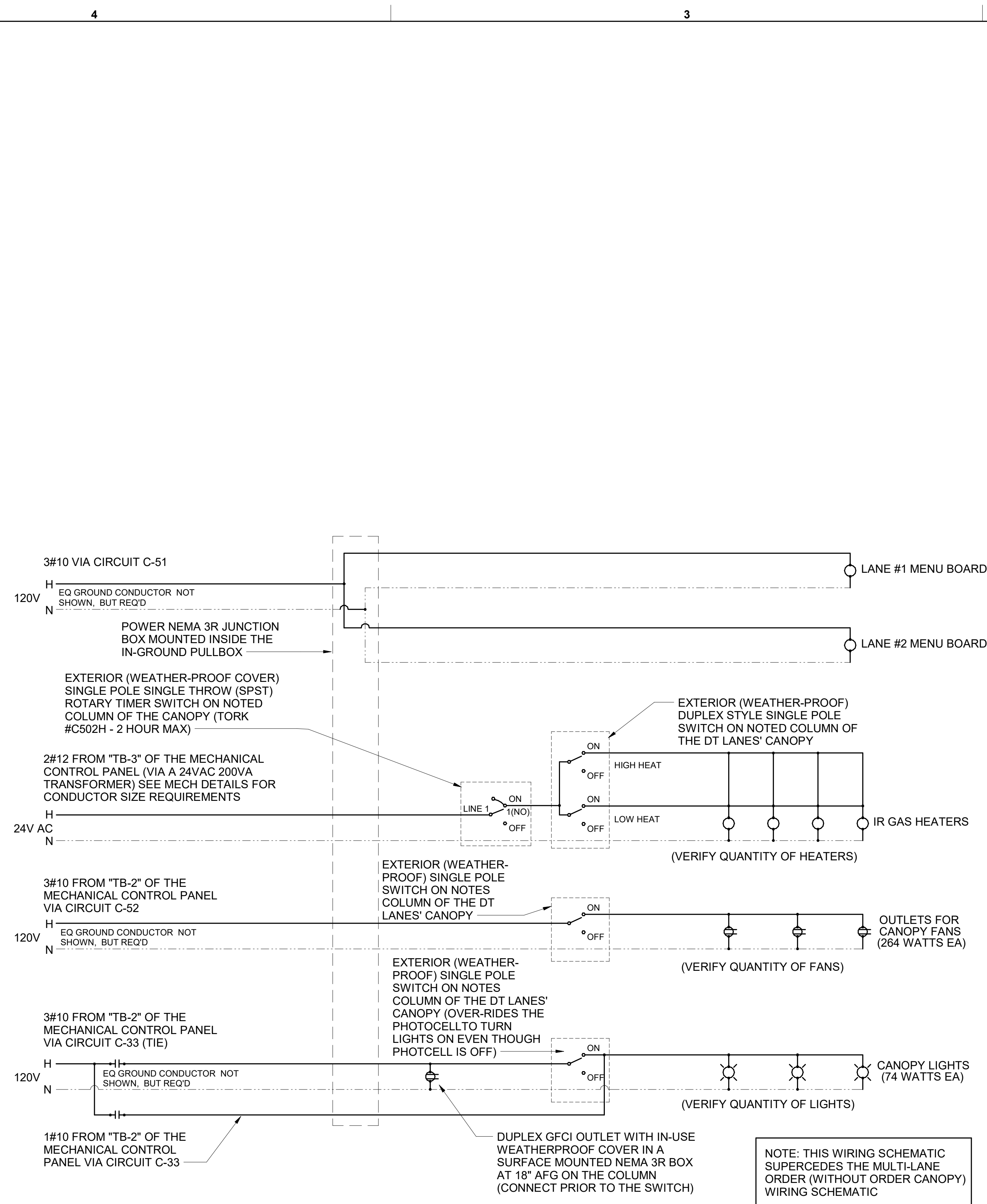
FSR#04916
BUILDING TYPE / SIZE: P13 LSR ALL
RELEASE: 22.05

PRINTED FOR
CONSTRUCTION

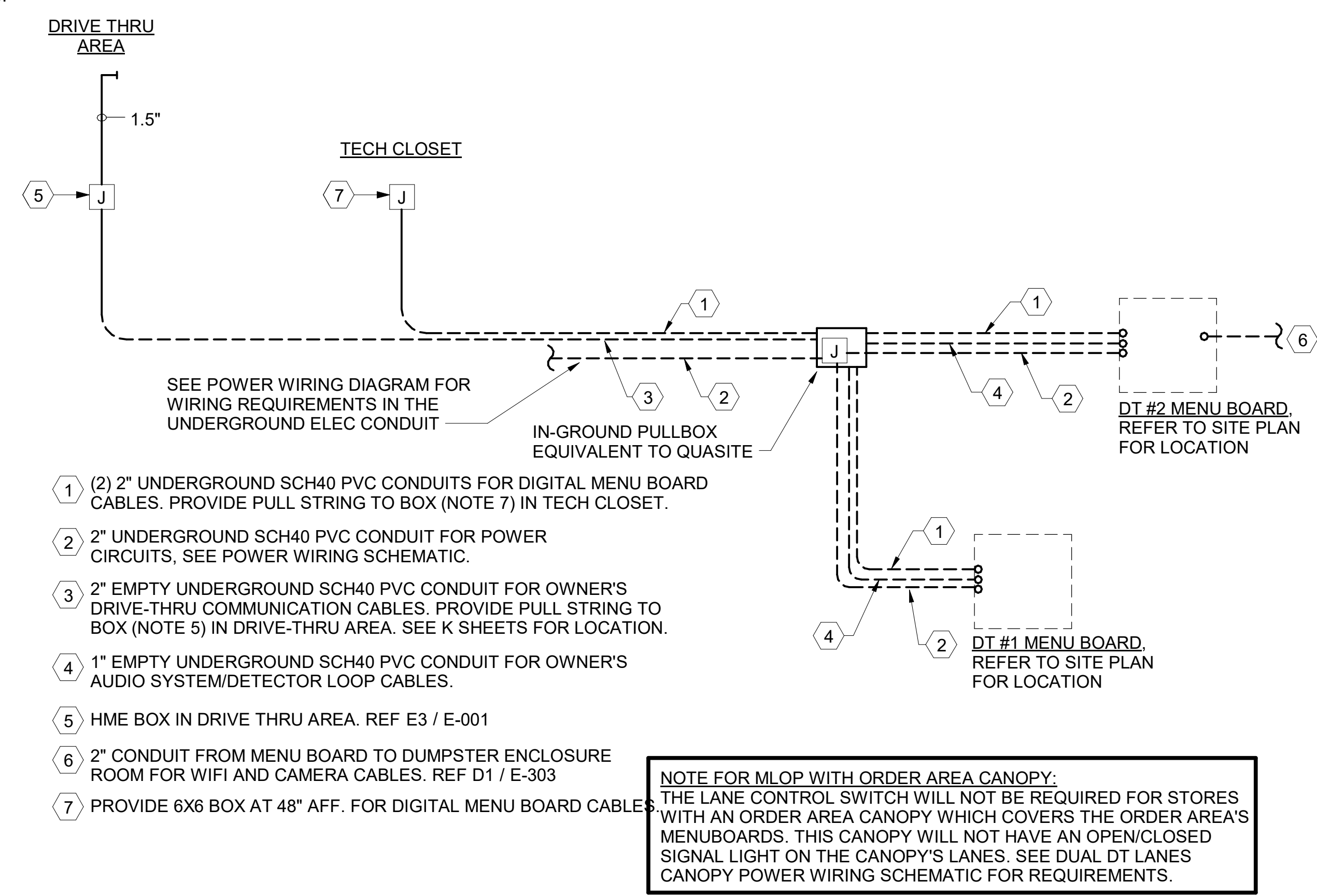
REVISION SCHEDULE

| NO. | DATE | DESCRIPTION |
|-----|------------|---------------|
| 3 | 12/12/2022 | CODE COMMENTS |

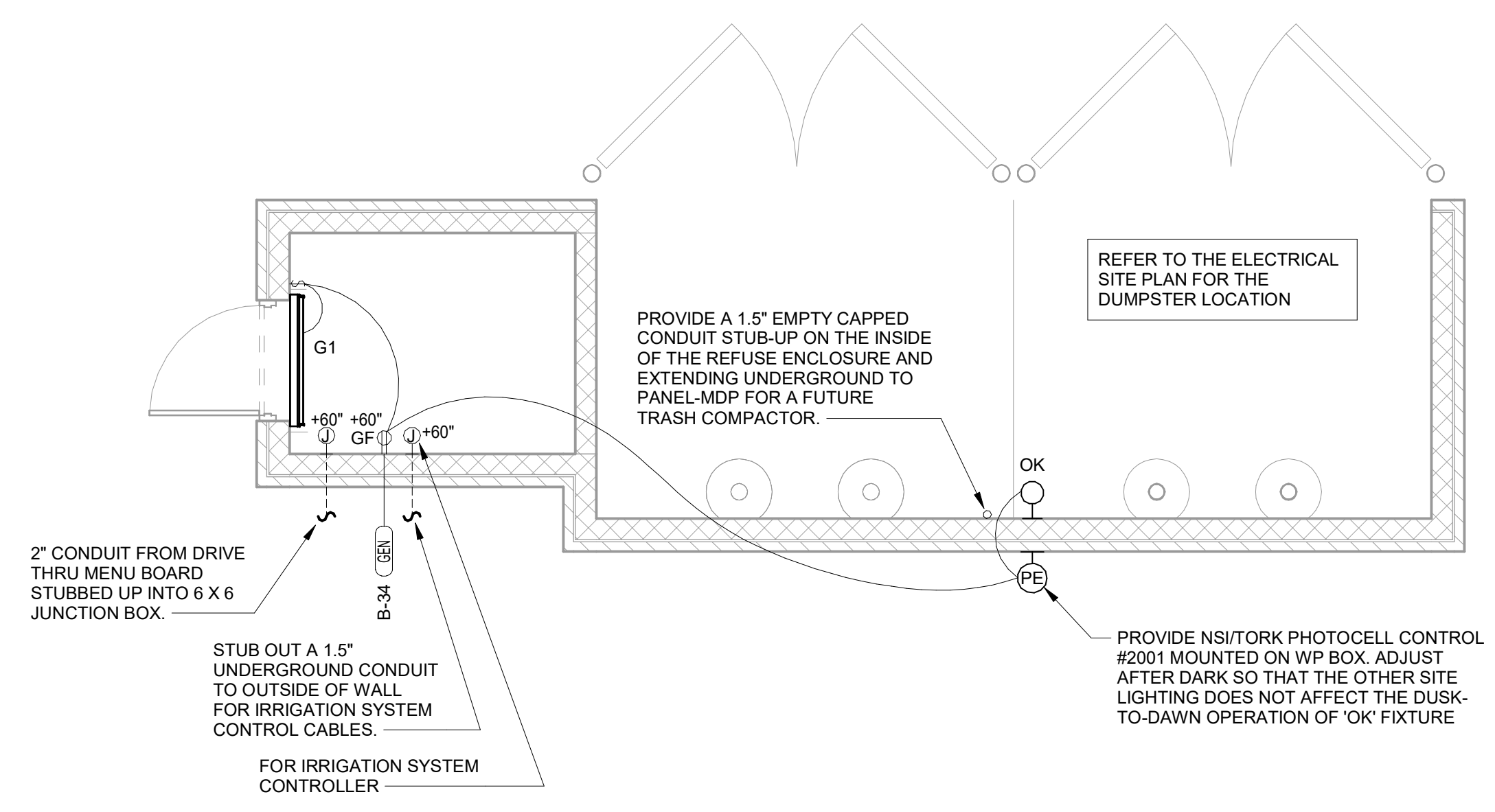
CONSULTANT PROJECT # 22050 EH.S
DATE 08/22/2022
DRAWN BY ES
Information contained on this drawing and all digital files produced for above named project may not be reproduced in any manner without express written or verbal consent from authorized project representatives.
ENLARGED SERVING AND BOH POWER PLAN
SHEET NUMBER



B3 MULTI-LANE ORDER CANOPY POWER WIRING SCHEMATIC
 N.T.S.



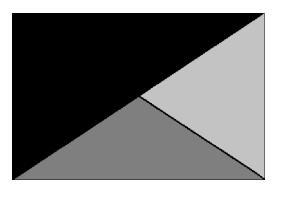
A3 MLOP DT REQUIREMENTS - WITH ORDER AREA F2F CANOPY
 NO SCALE



D1 REFUSE ENCLOSURE ELECTRICAL PLAN
 1/4" = 1'-0"



Chick-fil-A
 5200 Buffington Road
 Atlanta, Georgia
 30349-2998



Kurzynske & Associates
 2705 Lebanon Pike - Suite One
 Nashville, Tennessee 37214
 Telephone: (615) 255-5203



02/15/23

CHICK-FIL-A
PRINCETON WOODS
 3330 PINE BLUFF DRIVE
 DUMFRIES, VA 22026

FSR#04916

BUILDING TYPE / SIZE: P13 LSR ALL
 RELEASE: 22.05

CONSTRUCTION
 REVISION SCHEDULE
 NO. DATE DESCRIPTION

CONSULTANT PROJECT # 22050.EH.S
 DATE 08/22/2022

DRAWN BY ES
 Information contained on this drawing and all digital files produced for above named project may not be reproduced in any manner without express written or verbal consent from authorized project representatives.

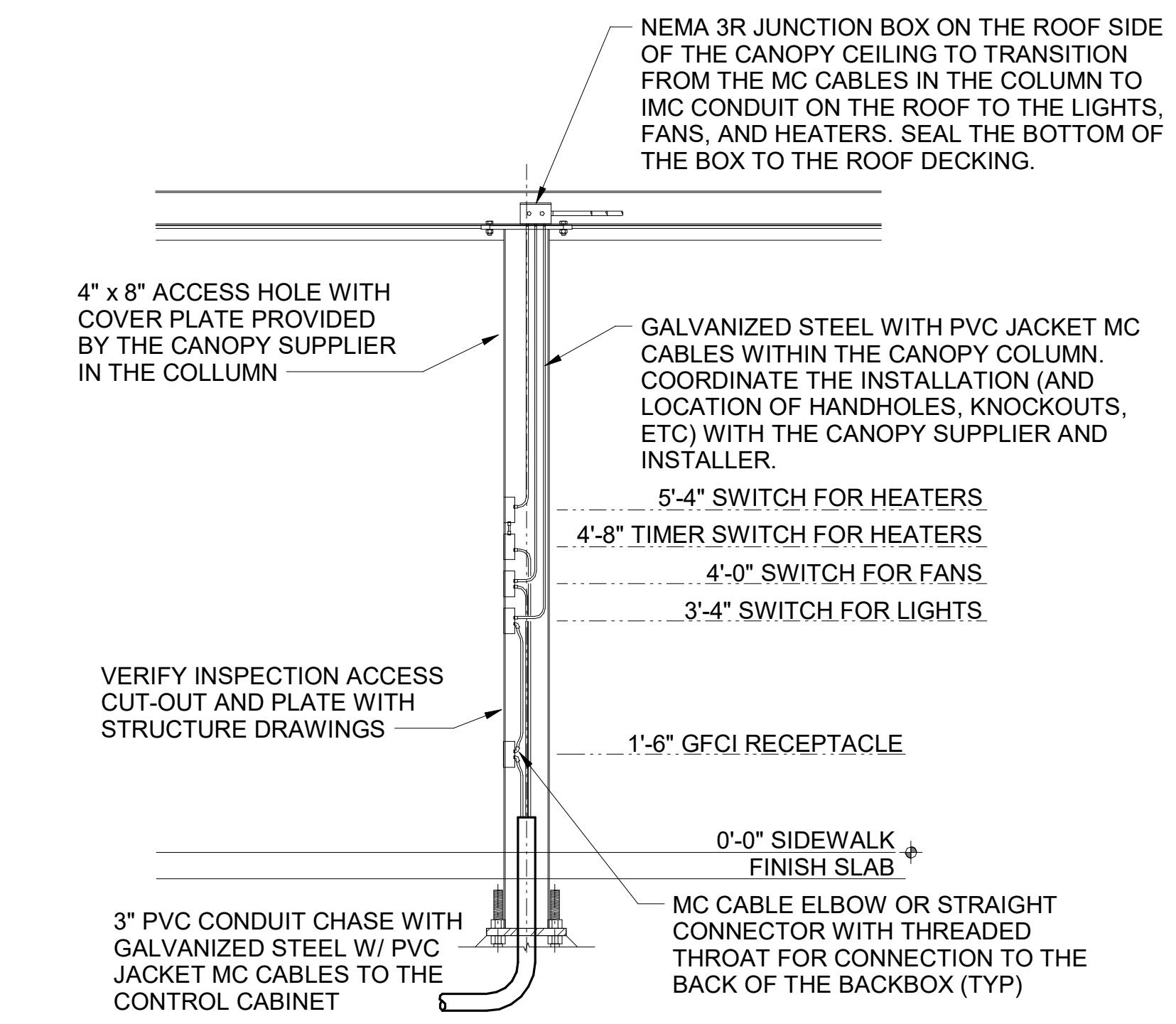
DT ORDERING AREA
DETAILS & REFUSE
ENCLOSURE PLAN
 SHEET NUMBER

E-303

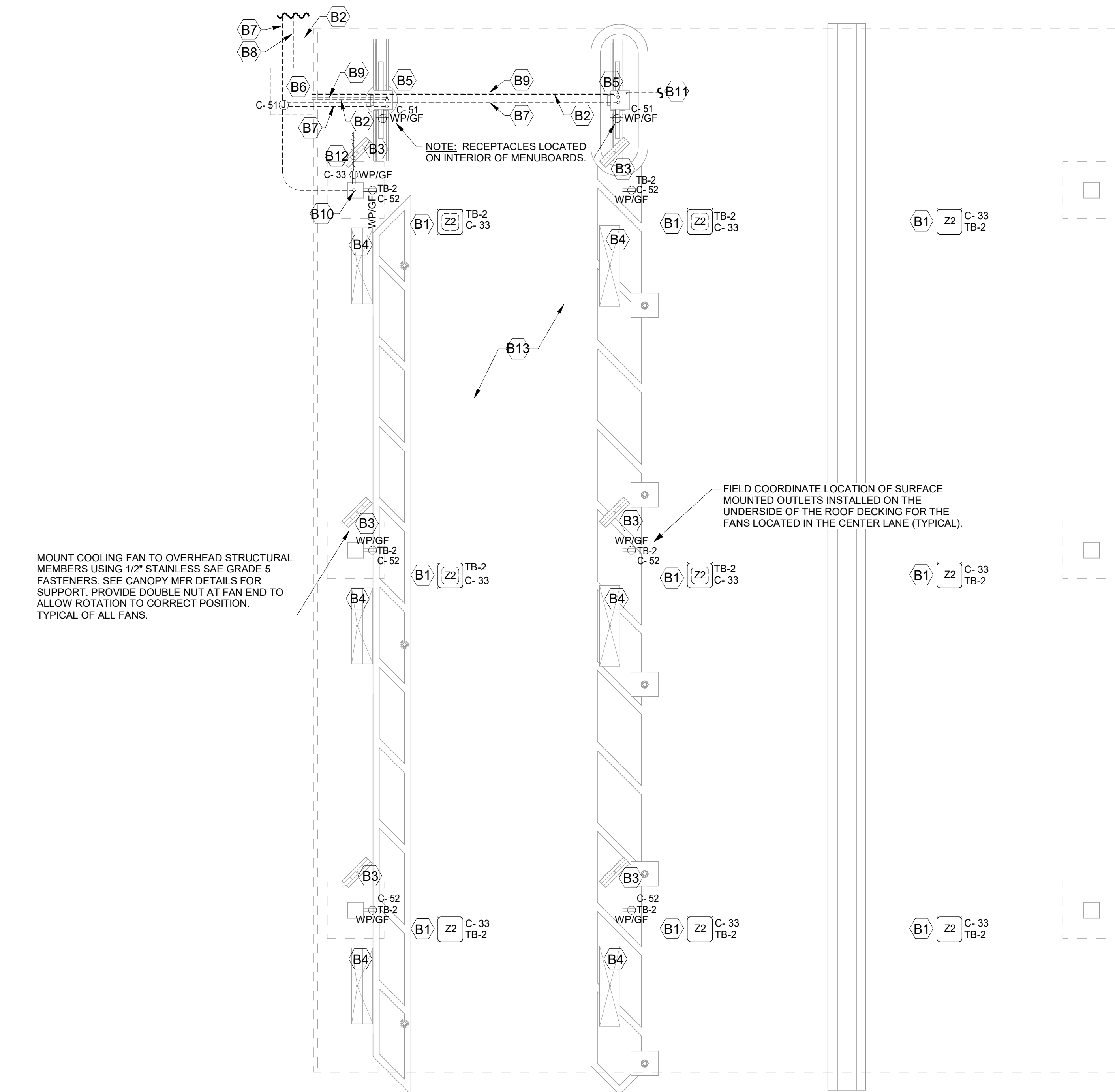
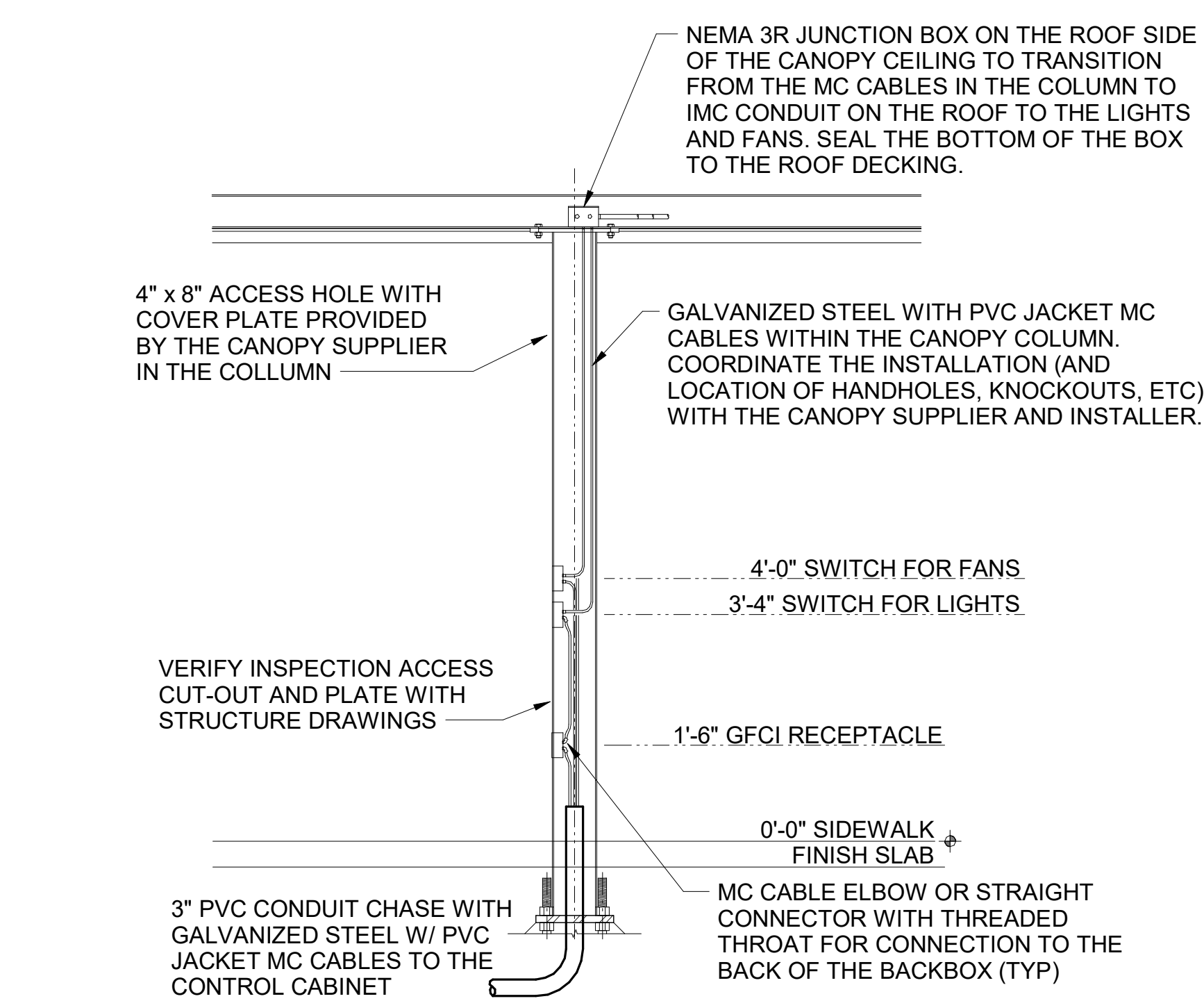
ORDER CANOPY ELECTRICAL KEYNOTES:

- (B1) CEILING LIGHT PROVIDED BY CANOPY SUPPLIER AND INSTALLED BY E.C.
- (B2) (2) 2" UNDERGROUND SCH40 PVC CONDUIT FOR MENU BOARD FIBER. PROVIDE PULL STRING. STUB UP INTO ACCESSIBLE CEILING SPACE AT TECH CLOSET OR OFFICE IF NO TECH CLOSET.
- (B3) AIR CIRCULATING FAN (WITH INTEGRAL ON-OFF SWITCH) PROVIDED BY OTHERS. PROVIDE A DUPLEX OUTLET (WITH IN-USE COVER PLATE) FLUSH MOUNTED IN CUT-OUT AT TOP OF COLUMN FOR FAN'S PLUG AND CORD. OUTLET TO BE ON DOWNSTREAM SIDE OF COLUMN AND AWAY FROM ONCOMING VEHICLES' VIEW.
- (B4) INFRARED GAS HEATER WITH INTEGRAL ON-OFF SWITCH PROVIDED BY OTHERS.
- (B5) MENUBOARD PROVIDED BY OTHERS.
- (B6) PROVIDE IN-GROUND QUAZITE PULLBOX FOR MLOP DATA CABLES WITH POWER NEMA 3R JUNCTION BOX MOUNTED INSIDE THE PULLBOX.
- (B7) 2" UNDERGROUND SCH40 PVC CONDUIT WITH POWER CIRCUITS, SEE WIRING SCHEMATIC.
- (B8) 2" EMPTY UNDERGROUND SCH40 PVC CONDUIT FOR OWNER'S DETECTOR LOOP CABLES. EXTEND CONDUITS UP INTO ACCESSIBLE CEILING SPACE ABOVE THE HME BOX IN THE DRIVE THRU AREA.
- (B9) 1" EMPTY UNDERGROUND SCH40 PVC CONDUIT FOR OWNER'S AUDIO SYSTEM/DETECTOR LOOP CABLES.
- (B10) INSTALL UNDERGROUND 3" SCH40 PVC CONDUIT UP INTO THE CANOPY COLUMN WITH TYPE MC CABLE (GALVANIZED STEEL WITH PVC JACKET) RUN WITHIN FOR THE 120V POWER FOR LIGHTS, 120 VOLT POWER FOR FANS, AND 24 VOLT POWER FOR THE INFRARED GAS HEATERS.
- (B11) 2" CONDUIT FROM DRIVE-THRU MENU BOARD TO DUMPSTER ENCLOSURE ROOM FOR WIFI AND CAMERA CABLES.
- (B12) PROVIDE ONE DUPLEX GFCI (WITH IN-USE WP COVER PLATE), TWO 120V SINGLE-POLE SWITCHES (EACH WITH HUBBELL #RW51550 WP COVER PLATE), AND ONE DUPLEX SINGLE-POLE SWITCH (WITH HUBBELL #RW51470 WP COVER PLATE) MOUNTED ON THE COLUMN IN FLUSH MOUNTED METAL SINGLE GANG BOXES FOR LOCAL ON-OFF CONTROL OF THE FAN, TWO-STAGE HEATERS, AND CANOPY LIGHTS. SEE WIRING SCHEMATIC AND CANOPY COLUMN DETAILS FOR FURTHER INFORMATION. ALL SURFACE MOUNTED ITEMS AND COVER PLATES TO BE FIELD PAINTED MATTE BLACK.
- (B13) ALL CONDUIT AND BOXES SHALL BE CONCEALED FROM NORMAL VIEW; UNDERGROUND, IN COLUMNS, OR ABOVE THE CANOPY (ON THE ROOF). MC CABLE (GALVANIZED STEEL WITH PVC JACKET) TO BE USED INSIDE THE COLUMNS, BUT MUST CONVERT BACK TO IMC ABOVE THE ROOF. REFER TO THE MECHANICAL DRAWINGS FOR LOCATIONS OF GAS PIPING ABOVE THE ROOF AND INSTALL CONDUIT ALONG THE SAME LOCATIONS USING THE SAME PIPE STAND FOR PIPING AND CONDUIT. ALL EXPOSED ELECTRICAL BOXES TO BE NEMA 3R CAST-METAL.

D2 MLOP ORDER CANOPY COLUMN SECTION
N.T.S.

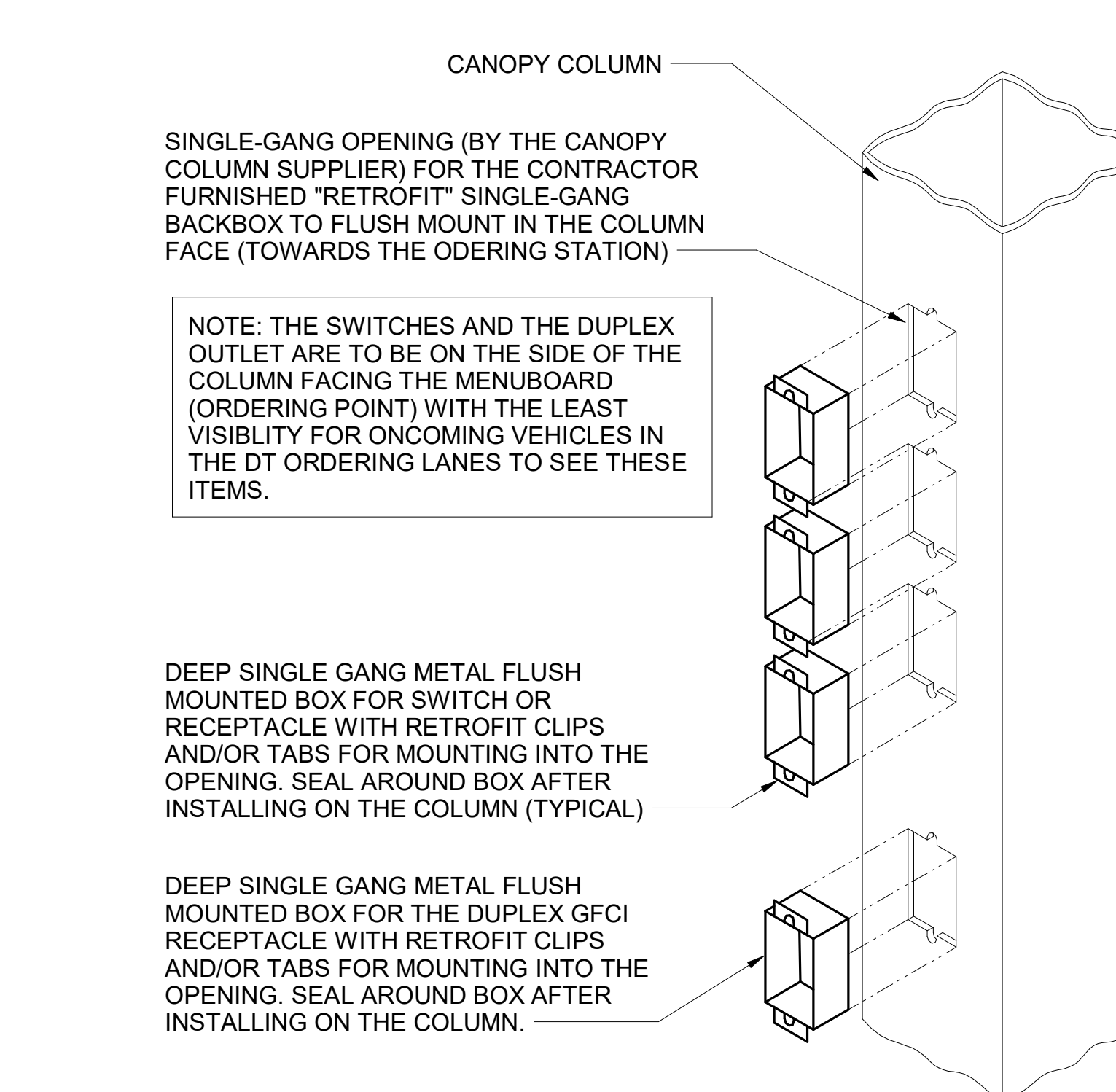


D1 MEAL DELIVERY CANOPY COLUMN SECTION
N.T.S.

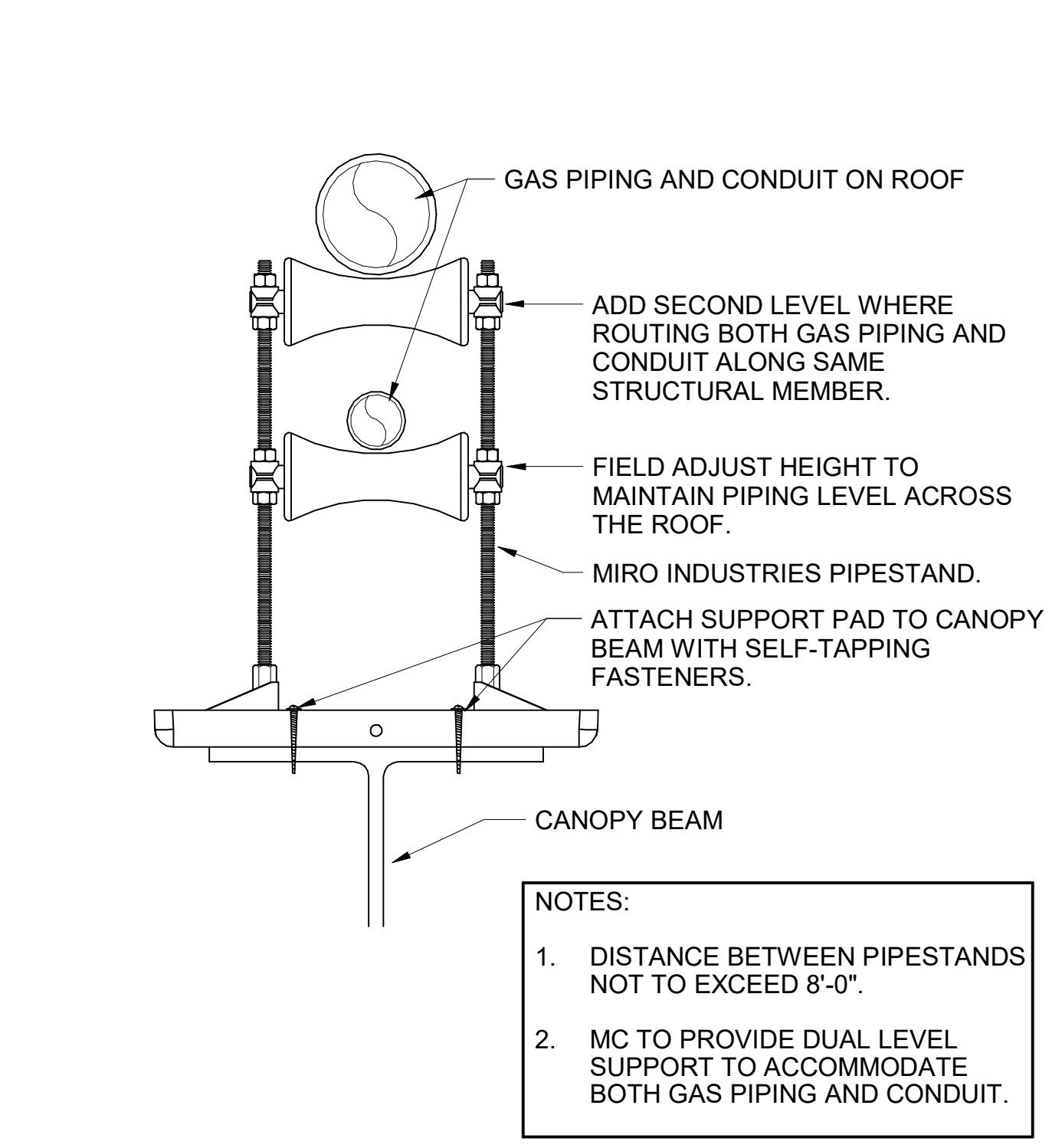


B4 MLOP ORDER CANOPY POWER PLAN
1/4" = 1'-0"

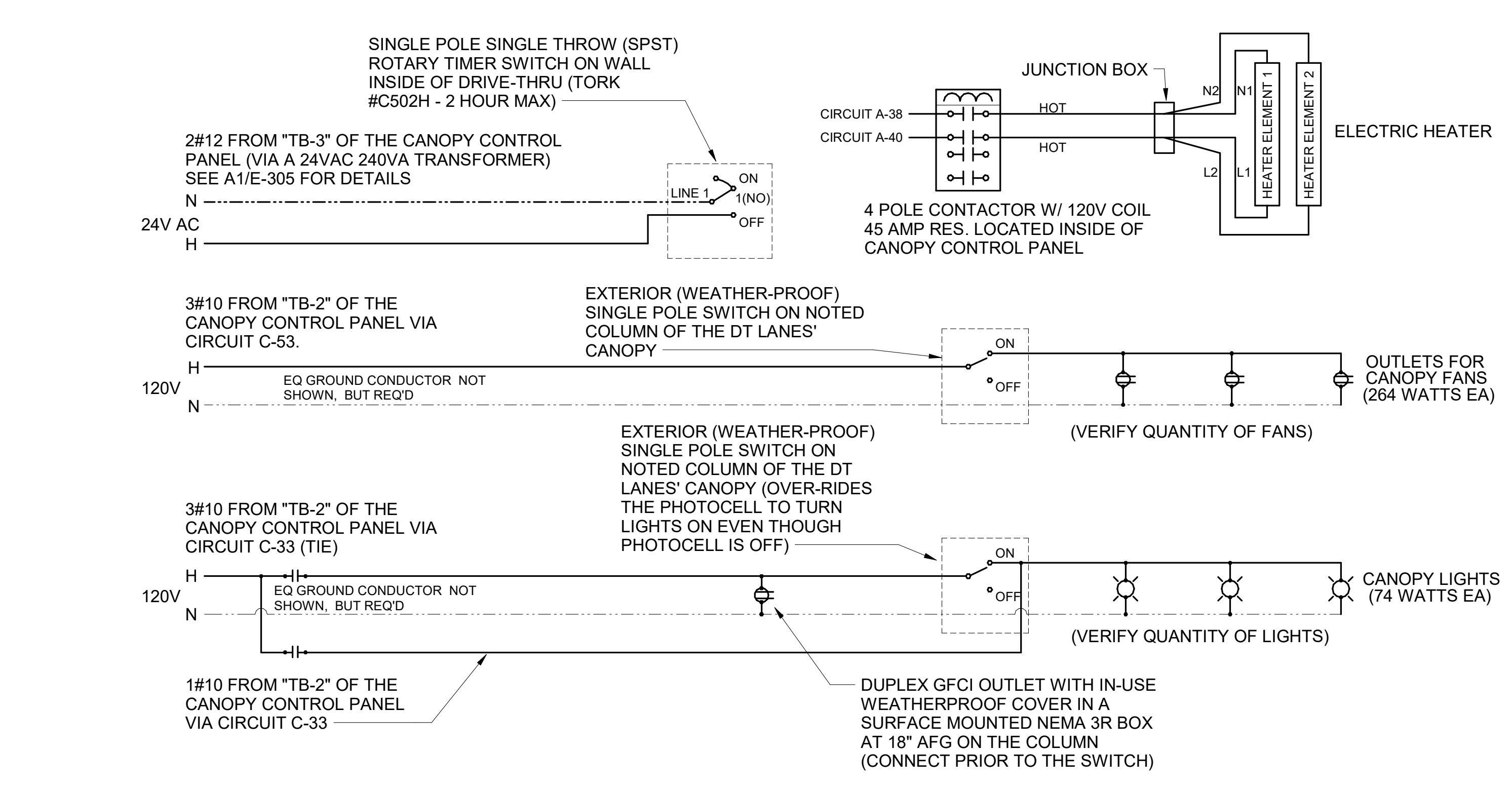
C3 CANOPY COLUMN ISOMETRIC
N.T.S.



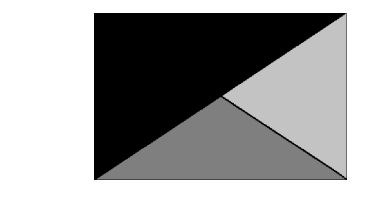
C1 PIPING SUPPORT ON CANOPY
1/4" = 1'-0"



A1 MEAL DELIVERY CANOPY POWER WIRING SCHEMATIC
N.T.S.



Chick-fil-A
5200 Buffington Road
Atlanta, Georgia
30349-2998



Kurzynske & Associates
2705 Lebanon Pike - Suite One
Nashville, Tennessee 37214
Telephone: (615) 255-5203



02/15/23

CHICK-FIL-A
PRINCETON WOODS
3330 PINE BLUFF DRIVE
DUMFRIES, VA 22026

FSR#04916
BUILDING TYPE / SIZE: P13 LSR ALL
RELEASE: 22.05

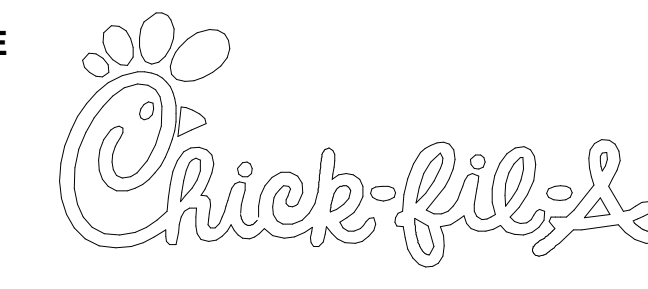
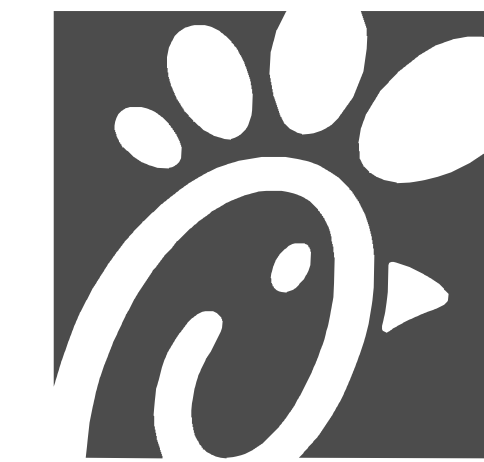
PRINTED FOR
CONSTRUCTION
REVISION SCHEDULE
NO. DATE DESCRIPTION

CONSULTANT PROJECT # 22050.EH.S
DATE 08/22/2022

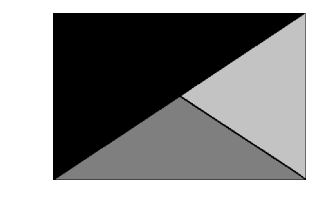
DRAWN BY ES
Information contained on this drawing and all digital files produced for above named project may not be reproduced in any manner without express written or verbal consent from authorized project representatives.

ORDER CANOPY PLAN AND DETAILS
SHEET NUMBER

E-304



Chick-fil-A
 5200 Buffington Road
 Atlanta, Georgia
 30349-2998



Kurzynske & Associates
 2705 Lebanon Pike - Suite One
 Nashville, Tennessee 37214
 Telephone: (615) 255-5203



02/15/23

SEQUENCE OF OPERATION

| STORE SWITCH IN "STORE OPEN" POSITION | STORE SWITCH IN "STORE CLOSED" POSITION |
|---|---|
| A. INFRARED HEATERS ARE ENABLED. | A. INFRARED HEATERS ARE DISABLED. |
| B. COOLING FANS ARE ENABLED. | B. COOLING FANS ARE DISABLED. |
| C. LIGHTS ARE ENABLED. | C. LIGHTS ARE DISABLED. |
| D. MASTER AUTO/OFF SWITCH FOR IR HEATERS AND COOLING FANS. PROVIDE SINGLE POINT ON/OFF CONTROL. | |

NOTES

- CONTRACTOR SHALL PURCHASE CONTROL PANEL DIRECT FROM SUNCOAST ENVIRONMENTAL CONTROLS (727-544-6679).
- COORDINATE WITH GC TO ESTABLISH LOCATION TO MOUNT PANEL IN A CONDITIONED SPACE INSIDE THE BUILDING. SUGGESTED LOCATION IS SURFACE MOUNTED DIRECTLY ABOVE THE LOCATION OF THE CFA-T500 CONTROL PANEL.
- THE SUNCOAST ENVIRONMENTAL CONTROLS (SEC) IS TO BE SURFACE MOUNTED, UNLESS OTHERWISE REQUESTED TO SUNCOAST.
- PROVIDE LAMINATED LEGEND SHOWING NAMED LOCATIONS OF FANS AND IR HEATERS. MOUNT LEGEND AT PANEL.

LEGEND

- SEC SUNCOAST ENVIRONMENTAL CONTROLS (SUPPLIER OF CONTROL PANELS)
- LOW VOLTAGE BY CONTRACTOR
 - LOW VOLTAGE WIRING BY SUNCOAST
 - 120 VOLT BY CONTRACTOR
 - 120 VOLT BY SUNCOAST

SUNCOAST RELAYS CONTACTORS SHOWN IN DE-ENERGIZED "STORE UNOCCUPIED" CONDITION. RELAYS AND CONTACTORS FACTORY INSTALLED BY SEC IN CONTROL PANEL. RELAYS AND CONTACTORS ENERGIZED VIA "STORE OPEN/CLOSED" SWITCH.

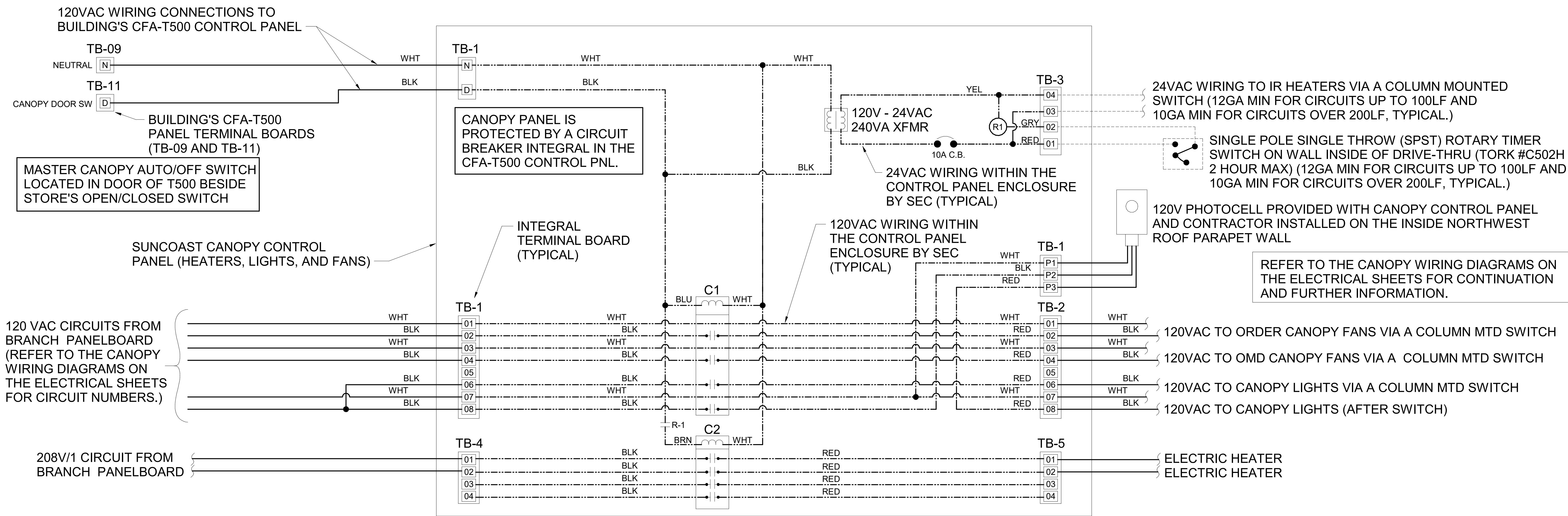
CIRCULATING FAN SCHEDULE

| MARK | CFM | RPM | HP | MODEL | MANUFACTURER |
|------|-------|-------|-----|----------|--------------|
| CF | 5,750 | 1,625 | 1/8 | U18TE-HD | TPI |

REMARKS

- ALUMINUM PADDLE WITH STEEL HUB/SPIDER PROPELLER.
- 360° ROTATING HEAD HORIZONTALLY AND VERTICALLY.
- OSHA COMPLIANT DOUBLE LOCKING, COATED STEEL WIRE GUARD.
- 3-SPEED, TOTALLY ENCLOSED, PERMANENTLY LUBRICATED BALL BEARING MOTOR.
- FACTORY PRE-WIRED POWER CORD.
- PROVIDE FACTORY WALL MOUNTING BRACKET. SEE FAN MOUNTING DETAIL ON CANOPY SHOP DRAWINGS FOR TYPICAL INSTALLATION INSTRUCTIONS.
- PROVIDE ENGRAVED PLASTIC LABEL AT EACH UNIT WITH UNIT DESIGNATION IN 1" HIGH WHITE LETTERS ON A BLACK BACKGROUND. MOUNT TO UNDERSIDE OF CANOPY OR EXISTING OVERHANG, FACING DOWNWARD, 12" LATERALLY FROM THE FAN LOCATION.
- REMOVE PULL CHAIN EXTENSION AT ON/OFF SWITCH IN THE FIELD.
- FACTORY CERTIFIED FOR OUTDOOR INSTALLATION.

TPI FAN PACKAGE - THE CONTRACTOR IS REQUIRED TO PURCHASE THE FAN PACKAGE DIRECTLY FROM TOM BARROW COMPANY. CONTACT MR. SCOTT GEORGE AT 404-351-1010 FOR PRICING AND AVAILABILITY. FANS NOT PURCHASED THRU TOM BARROW COMPANY WILL NOT BE ACCEPTED.



A1 SUNCOAST CANOPY CONTROL PANEL WIRING DIAGRAM
 NO SCALE

CHICK-FIL-A
 PRINCETON WOODS
 3330 PINE BLUFF DRIVE
 DUMFRIES, VA 22026

FSR#04916
 BUILDING TYPE / SIZE: P13 LSR ALL
 RELEASE: 22.05
 PRINTED FOR CONSTRUCTION
 REVISION SCHEDULE
 NO. DATE DESCRIPTION

CONSULTANT PROJECT # 22050.EH.S
 DATE 08/22/2022
 DRAWN BY ES
 Information contained on this drawing and all digital files produced for above named project may not be reproduced in any manner without explicit written or verbal consent from authorized project representatives.
CANOPY CONTROL PANEL WIRING DIAGRAM
 SHEET NUMBER

Distribution Panel: MDP

LOCATION: SUPPLY FROM: MOUNTING: SURFACE ENCLOSURE: NEMA 3R
VOLTS: 120/208 Wye PHASES: 3 WIRES: 4
A.I.C. SERIES RATING: 65K MAINS TYPE: MCB MAINS RATINGS: 1200 A MCB RATINGS:

Table with columns: NT, CKT, LOAD DESCRIPTION, TRIP, POLE, A, B, C, POLE, TRIP, LOAD DESCRIPTION, CKT, NT. Includes rows for PANEL-D1, ROOFTOP UNIT 25 TON (AC-1), ROOFTOP UNIT 17.5 TON (AC-2), PANEL-A (SUB-FEEDS PANEL-POS), TVSS, and Total Load/Amperage.

Table with columns: Load Classification, Connected Load, Demand Factor, Estimated Demand, Panel Totals. Includes categories like HEAT, HVAC, HVAC COOL, KITCHEN EQUIPMENT, LIGHTING, MISCELLANEOUS, Motor, RECEPTACLES, KITCHEN EQUIPMENT (100% DEMAND).

LOAD SUMMARY

Table with columns: TOTAL CONNECTED KVA, IF TOTAL LOAD IS 0_200 KVA, IF TOTAL LOAD IS 201_325 KVA, IF TOTAL LOAD IS 326-800 KVA, IF TOTAL LOAD IS OVER 800 KVA, DIVERSIFIED AMPS AT 208 VOLT. Includes calculation per NEC 220.88.

Branch Panel: A

LOCATION: SUPPLY FROM: MDP MOUNTING: FLUSH ENCLOSURE: NEMA 1
VOLTS: 120/208 Wye PHASES: 3 WIRES: 4
A.I.C. SERIES RATING: 65K/10K MAINS TYPE: MLO MAINS RATINGS: 250 A

Table with columns: NT, CKT, LOAD DESCRIPTION, TRIP, POLE, A, B, C, POLE, TRIP, LOAD DESCRIPTION, CKT, NT. Includes rows for TELEPHONE DT VIDEO (190), OFFICE GEN OUTLETS (C02,669), GENERAL OUTLET, DRINK TOWER (315W), U.C. REFRIG (420L), SANDWICH SLIDE (563S), CARBONATOR (320), CARBONATOR (320), CARBONATOR (320), CARBONATOR (320), CARBONATOR (320), BOOSTER PUMP, GENERAL OUTLETS, DOUBLE LEMONADE BUBBLER (310), RISER ROOM WALL HEATER, CCTV TECH CLOSET, GEN OUTLET TECH CLOSET, SPARE, FLOOR MIXER (600), VECTOR OVEN (505VLT), VECTOR OVEN (505VLT), CIR G1-VERTICAL TOASTER (500A), CIR A2-HOT HOLDING CABINET (562A), CIR B2-HOT HOLDING CABINET (564B), CIR E2-U.C. REFRIG (420L), CIR G2-COLD RAIL (439L), SPARE.

Table with columns: Load Classification, Connected Load, Demand Factor, Estimated Demand, Panel Totals. Includes categories like HEAT, HVAC, KITCHEN EQUIPMENT, LIGHTING, MISCELLANEOUS, Motor, RECEPTACLES, KITCHEN EQUIPMENT (100% DEMAND).

Branch Panel: POS

LOCATION: SUPPLY FROM: A MOUNTING: FLUSH ENCLOSURE: NEMA 1
VOLTS: 120/120 Single PHASES: 1 WIRES: 3
A.I.C. SERIES RATING: 10K MAINS TYPE: MLO MAINS RATINGS: 100 A MCB RATINGS:

Table with columns: NT, CKT, LOAD DESCRIPTION, TRIP, POLE, A, B, C, POLE, TRIP, LOAD DESCRIPTION, CKT, NT. Includes rows for COUNTER STATIONS (180,182), SPACE, PASS THRU MONITORS (183,182L), MLOP POS STATIONS (180,182), MLOP MONITORS (183), PASS THRU MONITORS (183,182L), SPACE.

Table with columns: Load Classification, Connected Load, Demand Factor, Estimated Demand, Panel Totals. Includes categories like MISCELLANEOUS, RECEPTACLES.

GFCI REQUIREMENTS PER 2017 NEC.

THE CONTRACTOR SHALL PROVIDE GROUND FAULT PROTECTION FOR ALL RECEPTACLE OUTLET BRANCH CIRCUITS (IN ADDITION TO WHAT IS INDICATED IN THESE DOCUMENTS FOR 15 AND 20 AMP, 120 VOLT RECEPTACLES) IN THE KITCHEN/FOOD PREPARATION AREAS IN ACCORDANCE WITH THE 2017 EDITION OF THE NEC.

GROUND FAULT PROTECTION SHALL BE PROVIDED AT THE BRANCH BREAKER VIA A GROUND FAULT TYPE BREAKER FOR ALL 50 AMP AND LESS RECEPTACLE CIRCUITS UNLESS ALREADY NOTED TO BE PROVIDED WITH AN ACCESSIBLE GFCI TYPE RECEPTACLE. (NOTE THAT SQUARE-D DOES NOT HAVE ANY GFCI TYPE BRANCH BREAKERS ABOVE 50 AMP AVAILABLE AT THIS TIME).

Branch Panel: B

LOCATION: SUPPLY FROM: MDP MOUNTING: FLUSH ENCLOSURE: NEMA 1
VOLTS: 120/208 Wye PHASES: 3 WIRES: 4
A.I.C. SERIES RATING: 65K/10K MAINS TYPE: MLO MAINS RATINGS: 250 A

Table with columns: NT, CKT, LOAD DESCRIPTION, TRIP, POLE, A, B, C, POLE, TRIP, LOAD DESCRIPTION, CKT, NT. Includes rows for GENERAL OUTLET, TEA BREWER (305), DRINK TOWER (315W), MILKSHAKE DISPENSER (300a), ROOF MOUNTED ICE MAKER (380C), MILKSHAKE DISPENSER (300a), FRY HOLDING STATION (560), INTERIOR ICE MAKER (380B), DOUBLE LEMONADE BUBBLER (310), ICE CREAM MACHINE (300X), ROOF MOUNTED ICE MAKER (380C), DOUBLE THAWING CABINET (444D), INTERIOR ICE MAKER (380,380A), DINING AREA OUTLETS, FRY HOLDING STATION (560), FLY LIGHT SYSTEM (2118.C), TRASH COMPACTOR (TC), DOUBLE LEMONADE BUBBLER (310), LEMON JUICER STAND (607), ICE CREAM MACHINE (300X), COFFEE MAKER (308), HEATED AIR DOOR (AD-1), UNHEATED AIR DOOR (AD-3), OPTIONAL COMPRESSOR, TRASH COMPACTOR (TC), THAWING CABINET (444SL), MANAGERS STATION (GEN), DINING AREA OUTLETS, TEAM MEMBER OUTLETS, TRASH COMPACTOR (TC), SPARE, CIR F1-GEN OUTLET, CIR F1-U.C. REFRIG (420L), CIR F2-HOT HOLDING CABINET (564B), CIR D2-HOT HOLDING CABINET (580H), ICE CREAM MACHINE (300X), UNHEATED AIR DOOR (AD-3), SPARE, DRINK TOWER (315W), VECTOR OVEN (505V), U.C. REFRIG (420L), GENERAL OUTLETS, GENERAL OUTLETS.

Table with columns: Load Classification, Connected Load, Demand Factor, Estimated Demand, Panel Totals. Includes categories like HEAT, KITCHEN EQUIPMENT, KITCHEN REFRIG EQUIPMENT, LIGHTING, MISCELLANEOUS, Motor, RECEPTACLES.

PANELBOARD NOTES

- (A) CONTROLLED BY RELAY IN CONTROL PANEL CFA-T500 AND STORE-OPEN EXHAUST FAN SWITCH. PANELBOARD SUPPLIER TO PROVIDE NOTATION ON CIRCUIT THAT THE CFA-T500 ALSO HAS AN INTEGRAL BREAKER ON THE FAN CIRCUITS FOR THE DISCONNECTION OF POWER AT THE CONTROLLER PER THE NEC. SEE CFA-T500 CONTROL PANEL CONNECTION DIAGRAM ON E-001.
(B) CONTROLLED BY EXTERIOR SIGN RELAY IN CONTROL PANEL CFA-T500.
(C) CONTROLLED BY EXTERIOR LIGHTING RELAY IN CONTROL PANEL CFA-T500.
(D) CONTROLLED BY EXTERIOR LIGHTING RELAY - DUSK TO DAWN ZONE.
(E) CONTROLLED BY PARKING LOT LIGHTING CONTROL SWITCH.
(F) GFCI TYPE BREAKER TO BE 30MA TYPE BREAKER.
(H) THE CONTRACTOR SHALL PROVIDE GROUND FAULT TYPE RECEPTACLES FOR ALL 120 VOLT, 15 AND 20 AMP, RECEPTACLES IN THE KITCHEN/FOOD PREPARATION AREA UNLESS NOTED OTHERWISE. (NOTE THAT THE RECEPTACLES FOR THE OEP BOXES, THE KITCHEN/SERVING AREA, SERVING EQUIPMENT, AND THE CIRCUIT FOR THE FLY SYSTEM SHALL BE PROTECTED BY GROUND FAULT TYPE CIRCUIT BREAKERS RATHER THAN GROUND FAULT TYPE RECEPTACLES SINCE ISOLATED GROUNDING TYPE RECEPTACLES, AND CLOCK TYPE RECEPTACLES ARE NOT AVAILABLE AS GROUND FAULT TYPE.) GFCI BREAKERS REQUIRE A DEDICATED NEUTRAL (NOT SHARED) TO OPERATE PROPERLY.
(I) GFCI TYPE BREAKER TO BE 5MA TYPE BREAKER.
(J) ISOLATED GROUND.
(K) CONTROLLED BY INTERIOR LIGHTING RELAYS IN CONTROL PANEL T-500. LIGHTS SHALL TURN ON WHEN STORE IS OCCUPIED.
(L) LOCK-ON.
(M) LOCK-OFF FOR MAINTENANCE.
(N) HIGH MAG LOAD.
(O) THRU (1) SB6100-020-0 GFCI PROTECTION DEVICE IN SB6000 PANEL ENCLOSURE OR (1) SB6100-021-0 GFCI PROTECTION DEVICE.
(S) SHUNT TRIP. INTERLOCK W/ ANSUL SYSTEM VIA T-500 PANEL.
(T) SURGE PROTECTION FOR INDIVIDUAL CIRCUIT. MOUNT SINGLE CIRCUIT SURGE PROTECTION DEVICE (SQUARE D) SDSA 1175T TO FACEPLATE MOUNTED ON JUNCTION BOX DIRECTLY ABOVE PANELBOARD SERVING LOAD.



Chick-fil-A
5200 Buffington Road
Atlanta, Georgia
30349-2998

Kurzynski & Associates
2705 Lebanon Pike - Suite One
Nashville, Tennessee 37214
Telephone: (615) 255-5203



02/15/23

CHICK-FIL-A
PRINCETON WOODS
3330 PINE BLUFF DRIVE
DUMFRIES, VA 22026

FSR#04916

BUILDING TYPE / SIZE: P13 LSR LRG
RELEASE: 22.05
CONSTRUCTION

REVISION SCHEDULE

NO. DATE DESCRIPTION
3 12/12/2022 CODE COMMENTS

CONSULTANT PROJECT # 22050.EH.S
DATE 08/22/2022

DRAWN BY ES
Information contained on this drawing and all digital files produced for above named project may not be reproduced in any manner without express written or verbal consent from authorized project representatives.

PANEL SCHEDULES

SHEET NUMBER

E-501a

Branch Panel: D1

LOCATION: SUPPLY FROM: MDP MOUNTING: FLUSH ENCLOSURE: NEMA 1

VOLTS: 120/208 Wye PHASES: 3 WIRES: 4

A.I.C. SERIES RATING: 65K/10K MAINS TYPE: MLO MAINS RATING: 250 A

Table with columns: NT, CKT, LOAD DESCRIPTION, TRIP, POLE, A, B, C, POLE, TRIP, LOAD DESCRIPTION, CKT, NT. Includes load descriptions like PRESSURE FRYER (523) and CHARGRILL COOKER (524).

Summary table with columns: Load Classification, Connected Load, Demand Factor, Estimated Demand, Panel Totals. Includes values for Kitchen Equipment and Total Conn. Load.

Branch Panel: D2

LOCATION: SUPPLY FROM: MDP MOUNTING: FLUSH ENCLOSURE: NEMA 1

VOLTS: 120/208 Wye PHASES: 3 WIRES: 4

A.I.C. SERIES RATING: 65K/10K MAINS TYPE: MLO MAINS RATING: 250 A

Table with columns: NT, CKT, LOAD DESCRIPTION, TRIP, POLE, A, B, C, POLE, TRIP, LOAD DESCRIPTION, CKT, NT. Includes load descriptions like OPEN FRYER (522) and SPARE/FUTURE FRYER (523).

Summary table with columns: Load Classification, Connected Load, Demand Factor, Estimated Demand, Panel Totals. Includes values for Kitchen Equipment and Total Conn. Load.

Branch Panel: D3

LOCATION: SUPPLY FROM: MDP MOUNTING: FLUSH ENCLOSURE: NEMA 1

VOLTS: 120/208 Wye PHASES: 3 WIRES: 4

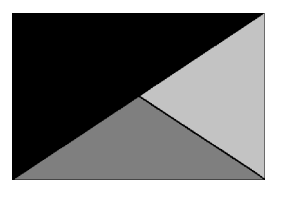
A.I.C. SERIES RATING: 65K/10K MAINS TYPE: MLO MAINS RATING: 250 A

Table with columns: NT, CKT, LOAD DESCRIPTION, TRIP, POLE, A, B, C, POLE, TRIP, LOAD DESCRIPTION, CKT, NT. Includes load descriptions like PRESSURE FRYER (523) and OPEN FRYER (522A).

Summary table with columns: Load Classification, Connected Load, Demand Factor, Estimated Demand, Panel Totals. Includes values for Kitchen Equipment and Total Conn. Load.



Chick-fil-A 5200 Buffington Road Atlanta, Georgia 30349-2998



Kurzynske & Associates 2705 Lebanon Pike - Suite One Nashville, Tennessee 37214 Telephone: (615) 255-5203



02/15/23

CHICK-FIL-A PRINCETON WOODS 3330 PINE BLUFF DRIVE DUMFRIES, VA 22026

FSR#04916

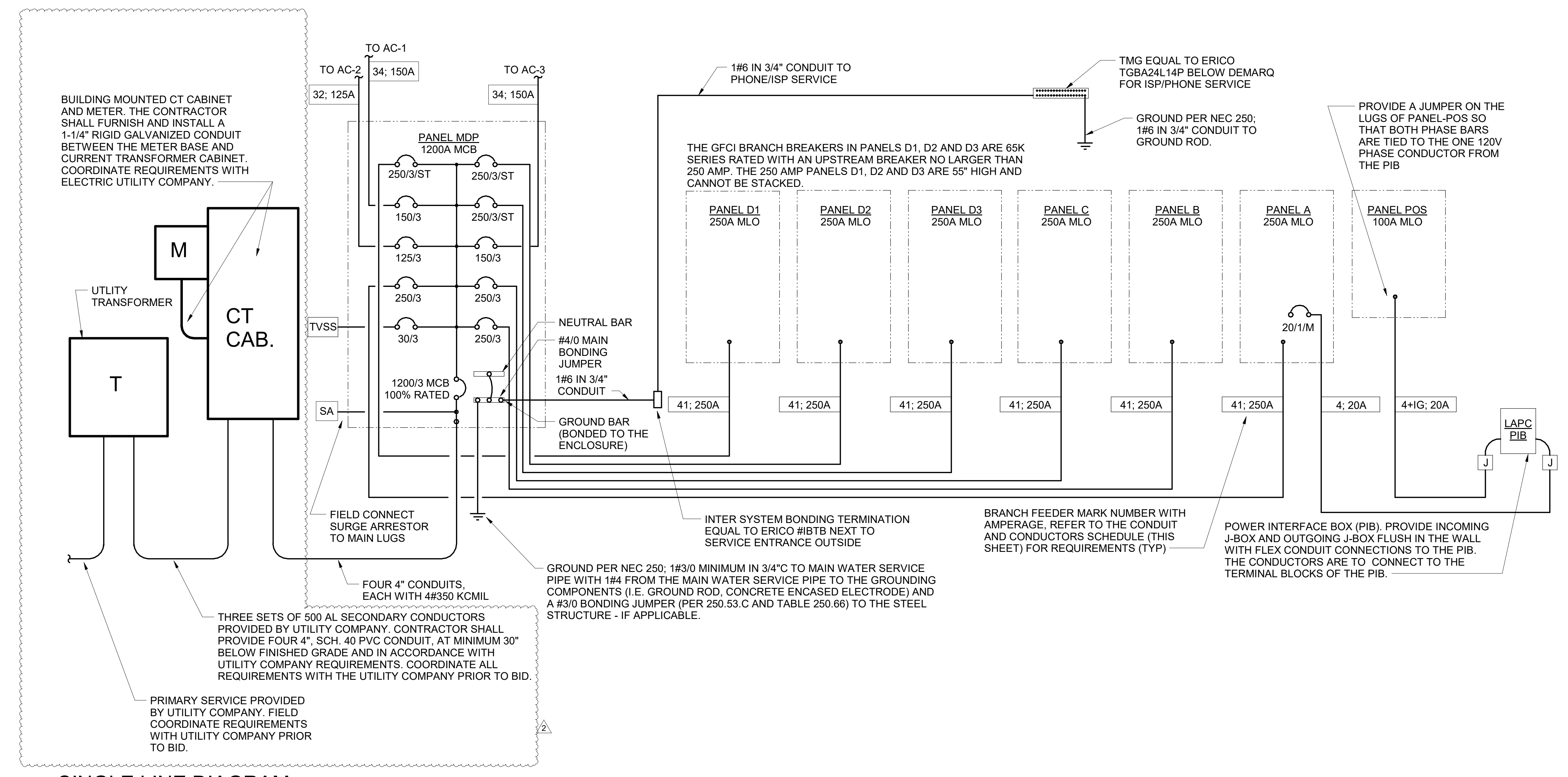
BUILDING TYPE / SIZE: P13 LSR LRG RELEASE: 22.05 PRINTED FOR CONSTRUCTION

REVISION SCHEDULE table with columns: NO., DATE, DESCRIPTION. Includes revision 3 on 12/12/2022 for CODE COMMENTS.

CONSULTANT PROJECT # 22050.EH.S DATE 08/22/2022 DRAWN BY ES

PANEL SCHEDULES SHEET NUMBER

E-501b



C2 SINGLE LINE DIAGRAM
NO SCALE

SINGLE-LINE DIAGRAM NOTES

- VERIFY SERVICE LOCATIONS AND CONFORM TO THE REQUIREMENTS OF THE POWER COMPANY AND/OR DEVELOPER. POWER COMPANY AND/OR DEVELOPER SHALL BE CONTACTED PRIOR TO BEGINNING CONSTRUCTION TO ARRANGE AND VERIFY FOR THE INSTALLATION OF THE POWER COMPANY SERVICE, METER, AND OTHER ITEMS.
- GROUND ALL EQUIPMENT AND SERVICES IN ACCORDANCE WITH ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE, LOCAL APPLICABLE CODES, AND ALSO AS INDICATED ON DRAWINGS.
- MAKE NECESSARY INSPECTIONS OF EXISTING SITE AND SERVICE LOCATIONS AS REQUIRED FOR PROPER INSTALLATION OF THE ELECTRICAL WORK. ALL PATCHING SHALL MATCH THE SURROUNDING WORK TO THE SATISFACTION OF THE ARCHITECT. ALL CONDUIT SHALL BE INSTALLED CONCEALED UNLESS SPECIFICALLY APPROVED BY THE ARCHITECT. COORDINATE SAW CUTTING WITH LANDLORD'S OR OWNER'S REPRESENTATIVE.
- CUT AND PATCH THE CONSTRUCTION WORK AS REQUIRED FOR PROPER INSTALLATION OF THE ELECTRICAL WORK. ALL PATCHING SHALL MATCH THE SURROUNDING WORK TO THE SATISFACTION OF THE ARCHITECT. ALL CONDUIT SHALL BE INSTALLED CONCEALED UNLESS SPECIFICALLY APPROVED BY THE ARCHITECT. COORDINATE SAW CUTTING WITH LANDLORD'S OR OWNER'S REPRESENTATIVE.
- WIRE AND CABLE:
 - CONDUCTORS SHALL BE COPPER, #12 AWG, MINIMUM UNLESS SPECIFICALLY NOTED OTHERWISE.
 - CONDUCTOR #10 AWG AND SMALLER SHALL BE SOLID AND #8 AWG AND LARGER SHALL BE STRANDED. INSULATION SHALL BE 600 VOLT, THHN/THWN.
- PROVIDE ENGRAVED LAMINATED PHENOLIC BLOCK-ON-WHITE (UNLESS NOTED OTHERWISE) NAMEPLATES SECURED TO EQUIPMENT WITH ADHESIVE AND SCREWS FOR PANELBOARDS, RELAY CABINETS, TRANSFORMERS, DISTRIBUTION BOARDS, AND MAIN PANELBOARD - IDENTIFYING EQUIPMENT DESIGNATION (CORRESPONDING WITH DESIGNATION USED ON DRAWINGS) AND EQUIPMENT VOLTAGE. LETTERING SHALL BE 1/4" HIGH. PROVIDE LABELS FOR CIRCUIT BREAKERS, FUSIBLE SWITCHES AND STARTERS IN PANELBOARDS AND DISTRIBUTION BOARDS FOR EACH DEVICE IDENTIFYING EQUIPMENT CONTROLLED. LETTERING SHALL BE 1/8" HIGH.
- ALL DEVICES SHALL HAVE AN INTERRUPTING CAPACITY NOT LESS THAN THE POWER COMPANY AVAILABLE FAULT CURRENT, OR AS INDICATED ON THE DRAWINGS.
- 120/208 VOLT BRANCH CIRCUIT PANELBOARD BREAKERS SHALL HAVE A MINIMUM U.L. SERIES RATING OF 65 KAIC WITH UP-STREAM FEEDER BREAKERS AS NOTED.
- AVAILABLE SPACE FOR MAIN PANELBOARD IS LIMITED. PANELBOARD MUST FIT IN ALLOCATED SPACE. COORDINATE WITH CONSTRUCTION AS REQUIRED.
- ALL WIRING SHALL BE IN CONDUIT, E.M.T OR RIGID. FLEXIBLE CONDUIT MAY ONLY BE USED FOR FINAL CONNECTIONS AND WITH GREEN EQUIPMENT GROUNDING CONDUCTORS.

SWITCHGEAR AND CONTROL EQUIPMENT NOTES

- PURCHASE PANEL BOARDS, SURGE ARRESTOR, AND TVSS FROM AN APPROVED NATIONAL ACCOUNTS VENDOR (SEE SHEET E-902 SECTION C18440, PANELBOARDS) PROVIDING SQUARE-D EQUIPMENT. NO SUBSTITUTIONS ALLOWED.
- PURCHASE CONTROL PANEL "CFA-T500" FROM SUNCOAST ENVIRONMENTAL, INC. (NO SUBSTITUTIONS ALLOWED). ALL EQUIPMENT IN THE CONTROL PANEL SHALL BE INSTALLED, WIRED AND CONNECTED AT THE FACTORY - INCLUDING AUTOMATIC LIGHTING CONTROL SYSTEM, LIGHTING RELAYS, HVAC STARTERS, POWER SUPPLIES, MISCELLANEOUS RELAYS AND CONTROLS, AND THERMOSTATS.
- CONTRACTOR SHALL PROVIDE PANEL FEEDERS A, B, C, D1, D2, D3, AND POS, BRANCH CIRCUIT CONDUIT AND WIRE, AND INSTALL ALL EQUIPMENT AS REQUIRED.
- ALL BREAKERS AND PANELS SHALL BE SQUARE-D.
- TVSS AND SURGE ARRESTOR UNITS SHALL BE MOUNTED DIRECTLY ADJACENT TO THE SIDE OF THE MAIN DISTRIBUTION PANEL IN NEMA 3R ENCLOSURES. CLOSE NIPPLE THE UNITS TO THE SIDE OF THE PANEL. PROVIDE CONNECTION OF TVSS UNIT TO BREAKER IN PANEL. CONNECT SURGE ARRESTOR TO MAIN INCOMING LUGS OF THE PANEL. CONNECT USING MINIMUM LENGTH OF WIRE WITHOUT SHARP BENDS IN THE WIRE AND SHALL NOT BE LENGTHENED FROM WIRE LENGTH PROVIDED WITH THE TVSS OR SURGE SUPPRESSOR DEVICE.

(B1) CONDUIT AND CONDUCTORS SCHEDULE

| Mark No. | OCP Device (Amp/Poles) | Conductors | | Conductors | | Raceway Size (Nominal Inches) | | | | | | |
|----------|------------------------|------------|-------------|---------------------|--------------------|-------------------------------|------|------|-------|------|---------|------|
| | | Total Amps | 60d C 75d C | Phase & Neutral Qty | Min Eq Grd Qty/Set | No. Sets | EMT | IMC | RIGID | PVC | With IG | |
| 1 | 20/1 | 20 | - | 2 12 THHN | 1 12 | One | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 |
| 2 | 20/2 | 20 | - | 3 12 THHN | 1 12 | One | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 |
| 3 | 20/3 | 20 | - | 4 12 THHN | 1 12 | One | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 |
| 4 | 25/1 | 30 | - | 2 10 THHN | 1 10 | One | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 |
| 5 | 25/2 | 30 | - | 3 10 THHN | 1 10 | One | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 |
| 6 | 25/3 | 30 | - | 4 10 THHN | 1 10 | One | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 |
| 7 | 30/1 | 30 | - | 2 10 THHN | 1 10 | One | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 |
| 8 | 30/2 | 30 | - | 3 10 THHN | 1 10 | One | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 |
| 9 | 30/3 | 30 | - | 4 10 THHN | 1 10 | One | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 |
| 10 | 40/1 | 40 | - | 2 8 THHN | 1 10 | One | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 |
| 11 | 40/2 | 40 | - | 3 8 THHN | 1 10 | One | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 |
| 12 | 40/3 | 40 | - | 4 8 THHN | 1 10 | One | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 1.00 |
| 13 | 45/3 | 55 | - | 4 6 THHN | 1 10 | One | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| 14 | 50/1 | 55 | - | 2 6 THHN | 1 10 | One | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 |
| 15 | 50/2 | 55 | - | 3 6 THHN | 1 10 | One | 0.75 | 0.75 | 0.75 | 0.75 | 1.00 | 1.00 |
| 16 | 50/3 | 55 | - | 4 6 THHN | 1 10 | One | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| 17 | 60/1 | 70 | - | 2 4 THW | 1 8 | One | 1.00 | 1.00 | 1.00 | 1.00 | 1.25 | 1.25 |
| 18 | 60/2 | 70 | - | 3 4 THW | 1 8 | One | 1.25 | 1.00 | 1.25 | 1.25 | 1.25 | 1.25 |
| 19 | 60/3 | 70 | - | 4 4 THW | 1 8 | One | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 |
| 20 | 70/1 | 70 | - | 2 4 THW | 1 8 | One | 1.00 | 1.00 | 1.00 | 1.00 | 1.25 | 1.00 |
| 21 | 70/2 | 70 | - | 3 4 THW | 1 8 | One | 1.25 | 1.00 | 1.25 | 1.25 | 1.25 | 1.25 |
| 22 | 70/3 | 70 | - | 4 4 THW | 1 8 | One | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 |
| 23 | 80/2 | 85 | - | 3 3 THW | 1 8 | One | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 |
| 24 | 80/3 | 85 | - | 4 3 THW | 1 8 | One | 1.25 | 1.25 | 1.25 | 1.25 | 1.50 | 1.25 |
| 25 | 90/2 | 95 | - | 3 2 THW | 1 8 | One | 1.25 | 1.25 | 1.25 | 1.25 | 1.50 | 1.25 |
| 26 | 90/3 | 95 | - | 4 2 THW | 1 8 | One | 1.50 | 1.25 | 1.50 | 1.50 | 1.50 | 1.50 |
| 27 | 100/2 | 110 | - | 3 1 THW | 1 6 | One | 1.50 | 1.50 | 1.50 | 1.50 | 2.00 | 2.00 |
| 28 | 100/3 | 110 | - | 4 1 THW | 1 6 | One | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| 29 | 110/2 | - | 150 | 3 1/0 THW | 1 6 | One | 1.25 | 1.25 | 1.25 | 1.25 | 1.50 | 1.50 |
| 30 | 110/3 | - | 150 | 4 1/0 THW | 1 6 | One | 1.50 | 1.25 | 1.50 | 1.50 | 1.50 | 1.50 |
| 31 | 125/2 | - | 150 | 3 1/0 THW | 1 6 | One | 1.50 | 1.50 | 1.50 | 1.50 | 2.00 | 2.00 |
| 32 | 125/3 | - | 150 | 4 1/0 THW | 1 6 | One | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| 33 | 150/2 | - | 150 | 3 1/0 THW | 1 6 | One | 2.00 | 1.50 | 2.00 | 2.00 | 2.00 | 2.00 |
| 34 | 150/3 | - | 150 | 4 1/0 THW | 1 6 | One | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| 35 | 175/2 | - | 175 | 3 2/0 THW | 1 6 | One | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| 36 | 175/3 | - | 175 | 4 2/0 THW | 1 6 | One | 2.00 | 2.00 | 2.00 | 2.00 | 2.50 | 2.50 |
| 37 | 200/2 | - | 200 | 3 3/0 THW | 1 6 | One | 2.00 | 2.00 | 2.00 | 2.00 | 2.50 | 2.50 |
| 38 | 200/3 | - | 200 | 4 3/0 THW | 1 6 | One | 2.50 | 2.50 | 2.50 | 2.50 | 2.50 | 2.50 |
| 39 | 225/2 | - | 230 | 3 4/0 THW | 1 4 | One | 2.50 | 2.00 | 2.50 | 2.50 | 2.50 | 2.50 |
| 40 | 225/3 | - | 230 | 4 4/0 THW | 1 4 | One | 2.50 | 2.50 | 2.50 | 2.50 | 3.00 | 3.00 |
| 41 | 250/3 | - | 255 | 4 250 THW | 1 4 | One | 2.50 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 |
| 42A | 300/3 | - | 285 | 4 300 THW | 1 4 | One | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 |
| 42B | 300/3 | - | 310 | 4 350 THW | 1 4 | One | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 |
| 43A | 350/3 | - | 335 | 4 400 THW | 1 4 | One | 3.00 | 3.50 | 3.50 | 3.50 | 3.50 | 3.50 |
| 43B | 350/3 | - | 380 | 4 500 THW | 1 4 | One | 3.50 | 3.50 | 3.50 | 3.50 | 3.50 | 3.50 |
| 44A | 400/3 | - | 380 | 4 500 THW | 1 3 | One | 3.50 | 3.50 | 3.50 | 3.50 | 3.50 | 3.50 |
| 44B | 400/3 | - | 400 | 4 3/0 THW | 1 3 | Two | 2.50 | 2.50 | 2.50 | 2.50 | 2.50 | 2.50 |
| 45A | 600/3 | - | 570 | 4 300 THW | 1 1 | Two | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 |
| 45B | 600/3 | - | 620 | 4 350 THW | 1 1 | Two | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 |
| 46A | 800/3 | - | 760 | 4 500 THW | 1 1/0 | Two | 3.50 | 3.50 | 3.50 | 3.50 | 3.50 | 3.50 |
| 46B | 800/3 | - | 820 | 4 600 THW | 1 1/0 | Two | 4.00 | 4.00 | 4.00 | 4.00 | 4.00 | 4.00 |
| 47 | 1000/3 | - | 1005 | 4 400 THW | 1 2/0 | Three | 3.50 | 3.50 | 3.50 | 3.50 | 3.50 | 3.50 |
| 48 | 1200/3 | - | 1240 | 4 350 THW | 1 3/0 | Four | 3.50 | 3.50 | 3.50 | 3.50 | 3.50 | 4.00 |
| 49 | 1600/3 | - | 1675 | 4 400 THW | 1 4/0 | Five | 4.00 | 4.00 | 4.00 | 4.00 | 4.00 | 4.00 |

Notes:
Conductors are rated at 600 volt or below and are to be copper.

NEC Table 310.15(B)(16) - formerly Table 310.16 - is used for the basis of the conductor ampacities, which is not more than three current carrying conductors in a raceway at an ambient temperature of 30 deg C with 60 deg C rated conductors and connectors per 110.14-C-1 for up to 100 amp rated and up to #1 AWG conductors for equipment terminations and 75 deg C rated conductors and termination connectors for larger than 100 amp or above #1 AWG conductors.

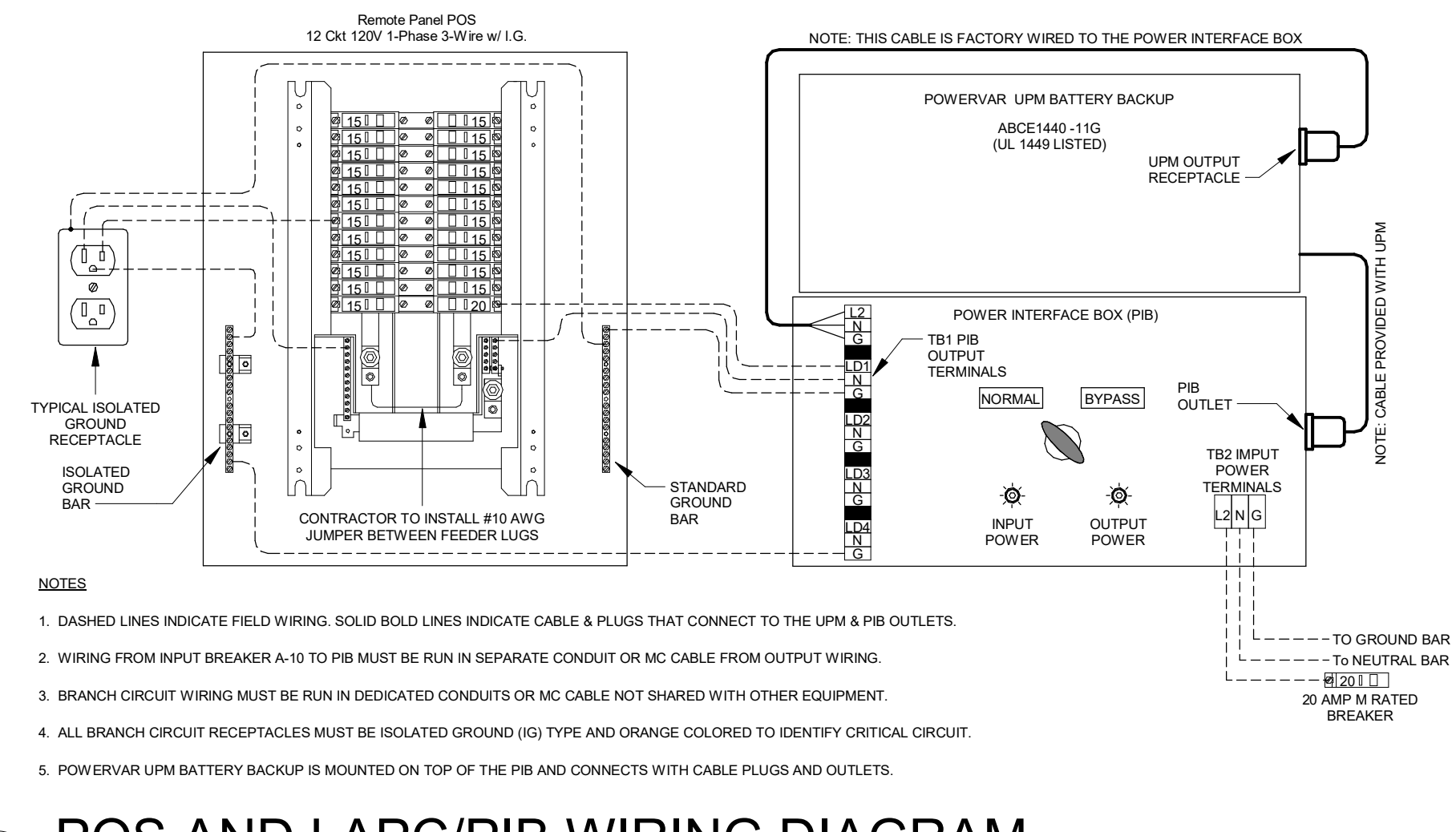
NEC Tables 4, 5, and Appendix C is used for the basis of the conduit sizes. Table C1 for EMT, Table C4 for IMC, Table C8 for Rigid, and Table C10 for PVC (Sch 40).

All Branch Feeders and Branch Circuits shall include a green Equipment Grounding Conductor.

Omit Grounding conductor on Service Entrance Feeders.

Omit Neutral conductor on all Delta primary transformer feeders or single-phase 2 pole loads and 3 phase loads not requiring a neutral.

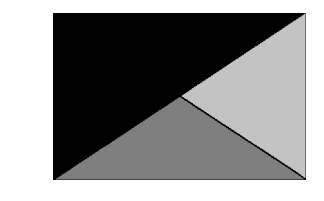
The above conductors are not calculated for Voltage Drop. Any circuits that exceed 100 feet shall be calculated by the installer to have less than a three percent voltage drop on feeders and five percent on branch circuits per the NEC.



A1 POS AND LAPC/PIB WIRING DIAGRAM
NO SCALE



Chick-fil-A
5200 Buffington Road
Atlanta, Georgia
30349-2998



Kurzynske & Associates
2705 Lebanon Pike - Suite One
Nashville, Tennessee 37214
Telephone: (615) 255-5203



02/15/23

CHICK-FIL-A
PRINCETON WOODS
3330 PINE BLUFF DRIVE
DUMFRIES, VA 22026

FSR#04916
BUILDING TYPE / SIZE: P13 LSR ALL
RELEASE: 22.05

PRINTED FOR
CONSTRUCTION
REVISION SCHEDULE
NO. DATE DESCRIPTION
2 12/09/2022 UTILITY COORD

CONSULTANT PROJECT # 22050.EH.S
DATE 08/22/2022
DRAWN BY ES
Information contained on this drawing and all digital files produced for above named project may not be reproduced in any manner without express written or verbal consent from SHEETS
SINGLE LINE DIAGRAM AND NOTES
SHEET NUMBER
E-502

SECTION C16100
ELECTRICAL GENERAL PROVISIONS

PART 1 - GENERAL

- 1.01 WORK INCLUDED
A. Provide all materials, labor and equipment required to furnish and install a complete electrical system as indicated on drawings and as specified herein.
- 1.02 REGULATORY REQUIREMENTS
A. Equipment furnished shall be UL listed where such label is available. Installation shall conform to UL standards where applicable.
B. Electrical work shall be installed in accordance with drawings and specifications, NEC and NFPA codes in effect at project location, state and local electrical and building codes and special codes having jurisdiction over specific portions within complete installation.
C. Obtain permits and certificates of approval from all authorities having jurisdiction over the installation and pay all fees required.

- 1.03 SUBMITTALS
A. Submit list of materials and equipment prior to manufacture, order or installation and within twenty days after award of contract for approval. Include each item of material and equipment whether or not shop drawings are also required. List shall include name of manufacturer, catalog number and other complete identification as well as dimensions and detailed data. Submittals shall be included for the following:
1. Lighting Fixtures
2. Panelboards/Breakers
3. Wiring Devices and Device Plates
4. Enclosed Switches

- B. Certified shop drawings and submittals shall bear stamp of approval of contractor as evidence that drawings have been checked. Drawings submitted without this stamp of approval will not be considered and will be returned for proper resubmission.
C. If submittals show variances or substitutions from requirements of contract, contractor shall make specific mention of such variation in his letter of transmittal in order that, if acceptable, suitable action may be taken for proper adjustment. Otherwise, contractor shall not be relieved of responsibility for executing work in accordance with contract even though such submittals have been approved.

- 1.04 SITE VISIT
A. Visit job site prior to bid date to determine actual conditions under which work shall be done, to familiarize oneself with project and to verify total scope of work required. Failure to do so shall constitute a reason for an extra charge.

SECTION C16101
BASIC MATERIALS AND METHODS

PART 1 - GENERAL

- 1.01 COORDINATION
A. Obtain and review shop drawings, product data, and manufacturer's instructions for equipment furnished under other sections to determine connection locations and requirements.
B. Sequence rough-in of electrical connections to coordinate with installation and start-up of equipment furnished under other sections.

PART 2 - PRODUCTS

- 2.01 SUBSTITUTIONS
A. Where specifications list one or more manufacturers and do not include "or approved equal", furnish materials made by one of manufacturers listed. Where "or approved equal" is included, contractor may substitute equal products by another manufacturer subject to approval by engineer and owner.

PART 3 - EXECUTION

- 3.01 INSTALLATION
A. Make electrical connections to utilization equipment in accordance with equipment manufacturer's instructions.
B. Drawings are diagrammatic and shall not be scaled for exact sizes or locations, they are not intended to disclose absolute or unconditional knowledge of actual field conditions.
C. Protect work and materials from damage by weather, entrance of water and dirt. Cap conduit during installation. Avoid damage to materials and equipment in place.
D. Satisfactorily repair or remove and replace damaged work with new materials. Deliver equipment and materials to job site in original, unopened, labeled containers. Store ferrous materials to prevent rusting. Store finished materials and equipment to prevent staining and discoloring.
E. Trenches shall be excavated 6" below elevation of bottom of conduit.
F. Failure to route conduit through building without interfering with other equipment and construction shall not constitute a reason for an extra charge. Equipment, conduit and fixtures shall fit into available spaces in building and shall not be introduced into building at such times and manner as to cause damage to structure. Equipment requiring service shall be readily accessible.

- 3.02 TESTING AND EQUIPMENT SERVICING
A. Make test to ensure that entire system is in proper operating condition, and that adjustments and apparatus setting of circuit breakers, fuses, control equipment and apparatus have been made. Correct defects discovered during tests.

- 3.03 REMOVAL OF DEBRIS
A. Remove surplus materials and debris caused by, or incidental to, electrical work. Remove such debris at frequent intervals. Keep job clean during construction.

- 3.04 IDENTIFICATION OF EQUIPMENT
A. Identify electrical distribution equipment, disconnects, and contactors with black laminated plastic name-plates, attached with two screws, engraved with 1/4" high, white letters.

- 3.05 TEMPORARY LIGHTING AND POWER IN AREAS OF CONSTRUCTION
A. Provide, maintain and remove after construction is completed, temporary lighting adequate for workman safety and temporary power for all trades including any 3 phase power required.
B. Provide and maintain barricade lighting where required to adequately protect owner against liability for damage to public or personnel. All lamps used in barricade shall be 60 watt red, installed in weatherproof socket with wire guard. All wiring shall be approved for weatherproof installation.

- 3.06 GUARANTEE-WARRANTY
A. Guarantee work to be free from defects of materials and workmanship for a period of one year from date of final acceptance of building. Repair and replace defective work and other work damaged thereby which becomes defective during term of guarantee-warranty. Furnish owner with three written copies of guarantee-warranty.

SECTION C16120
RACEWAYS AND CONDUIT SYSTEMS

PART 1 - PRODUCTS

- 1.01 ACCEPTABLE MANUFACTURERS
A. Rigid IMC, and EMT conduit shall be hot-dipped, galvanized, or electro-galvanized steel by Allied, Republic, Triangle, Wheatland, or approved equal.
B. PVC conduit shall be Carlon, schedule 40, 90 degrees C. rated, unless otherwise noted.
C. MC cable shall be manufactured by AFC Cable Systems or approved equal. Type "AC-90" is not allowed. All MC Cables shall have a green equipment ground conductor and an additional isolated ground (green + yellow stripe) conductor for isolated ground circuits (POS system). Fittings used for connecting MC cable to boxes, cabinets, or other equipment shall be listed and identified for such use.
D. Associated couplings, connectors and fittings shall be steel as manufactured by Raco or equivalent. Catalog numbers used below are those of Raco.
E. Erickson Couplings, Series 1502, shall be used where neither length of conduit can be rotated.
F. Insulated bushings shall be series 1402.
G. EMT box connectors shall be compression or set-screw fittings.
H. Conduit, connectors, couplings and fittings shall be UL listed and labeled.

SECTION C16121
CONDUCTORS

PART 1 - PRODUCTS

- 1.01 CONDUCTORS
A. Provide 98% conductivity copper conductors with 600-volt insulation. For conductors No. 12 AWG and No. 10 AWG, provide solid type. For all conductors No. 8 AWG and larger, provide stranded type. All conductors shall have THHN/THWN insulation unless noted otherwise.
B. Conductors shall be manufactured by Triangle, American, Rome, Southwire or approved equal.
C. Provide No. 14 AWG type THHN fixture conductors, for conductors entering lighting fixtures.
D. Branch circuit conductors shall be minimum #12 AWG, copper.
E. Use Ideal wing nuts, Scotchlok Type Y, R, G, or B, or approved equivalent connectors for fixture connections at outlet boxes.
F. Where exposed to continuous or intermittent moisture, conduit shall be UL Type EF lightweight or type as indicated.
G. For connection to ceiling mounted lighting fixtures from outlet boxes.
H. Length shall not exceed 6 feet in accessible ceiling areas.
I. Shall not be concealed in walls.
J. Where exposed to continuous or intermittent moisture, conduit shall be UL Type EF lightweight or type as indicated.
K. MC Cable shall be UL listed per standard 1569, color coded copper conductors (type THHN), the sheathing shall be constructed of interlocking galvanized steel, and shall conform to the requirements of Article 330 of the National Electrical Code.
L. MC Cable with an isolated grounding conductor shall be used, concealed above ceiling and in walls, for the connection of the Point Of Sales (POS) system equipment from the isolated ground receptacles to the panelboard serving the POS loads when allowed by local codes and Article 330 of the National Electrical Code.
M. MC Cable may be used when allowed by local codes and Article 330 of the National Electrical Code for branch circuits (except the main homerun to the panelboard which shall be conduit with conductors) for the following:
1. Lighting
2. Dining area receptacles
3. Fly Lights
4. Building mounted signage
5. Office area receptacles
N. MC Cable shall not be used for branch circuits serving Kitchen Equipment Items and similar circuits in the Kitchen, the Drive-Thru area, and the Serving area's back counter.

PART 2 - EXECUTION

- 2.01 INSTALLATION
A. Minimum size of conduits shall be 1/2 inch.

- B. Run concealed conduits in direct line with long sweep bends or offsets. Run exposed conduits parallel to and at right angles to building lines. Group multiple conduit runs in banks.
C. Cap ends of conduits to prevent entrance of water and other foreign material during construction.
D. Provide No. 12 AWG copper pull wires or nylon cord in all empty conduits. Steel wire not acceptable as pull wire.
E. Where IMC enters a cabinet, junction box, or pull box conductors shall be protected by an insulated bushing. Locknuts shall be installed on conduit outside and inside enclosure.
F. In areas where enclosed and gasketed fixtures and weatherproof devices are specified, where Rigid Conduit enters a sheet metal enclosure, junction box and outlet box, and terminated in a threaded hub, a steel, or malleable iron nylon insulated hub, complete with recessed sealing "O" ring or sealing locknut shall be used.
G. Provide seal-off fitting in all conduits entering a cold temperature area such as freezers and dry refrigerators.
H. In concrete slabs, block up conduit from forms and securely fasten in place, all conduits in slabs shall have a minimum of 4" inches concrete coverage above.
I. Failure to route conduit through building without interfering with other equipment, and construction shall not constitute a reason for an extra charge. Equipment, conduit, and fixtures shall fit into available spaces in building and shall not be introduced into building at such times and manner as to cause damage to structure or equipment. Equipment requiring servicing shall be readily accessible.
J. In dry locations, where final connections to motors and other equipment may be made with Flexible Metal Conduit, fittings shall be of steel or malleable iron only with insulated throats or insulated bushings, and shall be of wedge and screw type having an angular wedge fitting between convolutions of conduit.

- 2.02 EMT (ELECTRICAL METALLIC TUBING) RACEWAY
A. Do not use Electrical Metallic Tubing in cinder concrete or cinder fill or where conduit system is in contact with dissimilar metals or in wet locations.

- 2.03 PVC RACEWAY
A. Use threaded fittings for all connectors and adapters.
B. Provide 1/4-inch nylon pull rope in all primary power and incoming telephone service entrance conduits.
C. PVC conduit shall convert to galvanized rigid metal per detail on drawings.

- 2.04 FLEXIBLE METAL CONDUIT
A. Where fittings for liquid tight flexible conduit are brought into an enclosure with a knock-out, a gasket assembly, consisting of one piece "O" ring, with Buna-N sealing material, series 3400, shall be installed on outside of box. Fittings shall be made of either steel or malleable iron only, and shall have insulated throats or insulated bushings.
B. In dry locations, where final connections to motors and other equipment may be made with Flexible Metal Conduit, fittings shall be of steel or malleable iron only with insulated throats or insulated bushings, and shall be of wedge and screw type having an angular wedge fitting between convolutions of conduit.

- 2.05 MC CABLE
A. MC Cable may be used for branch circuits as noted in Part 1 above and where the local code allows use of MC Cable. The installation shall conform to Article 330 of the National Electrical Code and shall be concealed in walls and above ceilings. (Exposed MC Cable will not be acceptable.)
B. MC Cables shall be secured and supported by the building structure per the National Electrical Code and any local code requirements. MC Cable shall not lay on ceilings.

SECTION C16122
OUTLET AND JUNCTION BOXES

PART 1 - GENERAL

- 1.01 PROJECT CONDITIONS
A. Verify field measurements are as shown on drawings.
B. Verify locations of floor boxes and outlets in work areas prior to rough-in.

PART 2 - PRODUCTS

- 2.01 OUTLET BOXES
A. Sheet metal outlet boxes: galvanized steel.
B. Cast boxes: type FS, cast fer alloy. Provide gasketed cover by box manufacturer.
C. Manufacturers: National, Appleton, General Electric, RACO, or Steel City.
D. Provide boxes for fixtures with fixture studs in center.

- 2.02 PULL AND JUNCTION BOXES
A. Sheet metal boxes: galvanized steel.
B. Surface-mounted cast metal box: type 4; flat-flanged, surface-mounted junction box.
1. Material: galvanized cast iron.
2. Cover: furnish with ground flange, neoprene gasket, and stainless steel cover screws.
C. In-ground cast metal box: inside flanged, recessed cover box for flush mounting.
1. Material: galvanized cast iron.
2. Cover: nonskid cover with neoprene gasket and stainless steel cover screws.
3. Cover legend: electric.
D. Manufacturers: National, Appleton, General Electric, RACO, Oz-Gedney or Steel City.

PART 3 - EXECUTION

- 3.01 INSTALLATION
A. Install electrical boxes as shown on drawings, and as required for splices, taps, wire pulling, equipment connections and compliance with regulatory requirements.
B. Install pull boxes and junction boxes above accessible ceilings.
C. Inaccessible ceiling areas: Install outlet and junction boxes no more than 6 inches from ceiling access panel or from removable recessed light fixture.
D. Use flush mounting outlet boxes in finished areas.
E. Use stamped steel bridges to fasten flush mounting outlet box between studs.
F. Install flush mounted box without damaging wall insulation or reducing its effectiveness.
G. Use adjustable steel channel fasteners for hung ceiling outlet box.
H. Do not fasten boxes to ceiling support wires.
I. Support boxes independently of conduit, except cast box that is connected to two Rigid Metal Conduits both supported within 12 inches of box.
J. Use gang box where more than one device is mounted together. Do not use sectional box.
K. Use gang box with plaster ring for single device outlets.

SECTION C16123
GROUNDING AND BONDING

PART 1 - PRODUCTS

- 1.01 ROD ELECTRODES
A. Material: copper-clad steel.
B. Diameter: 3/4 inch.
C. Length: 10 feet.
- 1.02 MECHANICAL CONNECTORS
A. Material: bronze.
- 1.03 GROUNDING CONDUCTOR (WIRE)
A. Material: stranded copper, sized to meet NFPA 70, Article 250 requirements.

PART 2 - EXECUTION

- 2.01 INSTALLATION
A. Install rod electrodes at locations indicated. Install additional rod electrodes as required to achieve resistance to ground of less than 25 ohms.
B. Provide grounding electrode conductor and connect to reinforcing steel in foundation footing.
C. Provide bonding to meet regulatory requirements.
D. Bond together each metallic raceway, pipe, duct and other metal objects.
E. Provide isolated grounding conductor for circuits supplying all isolated ground outlets. Insulation shall be green with yellow stripe. Size per NEC Table 250.66. This isolated grounding conductor shall run in addition to equipment grounding conductor and along with the branch circuit conductors.

2.02 GROUNDING

- A. Ground electrical system in accordance with NEC Article 250 and local authorities having jurisdiction.
B. Install a #3/0 bare copper wire bond across the water meter attached to ground clamps on water line on each side of meter. Arrangements shall be made to do this work at the time the water meter is installed.
C. From the point of entrance of the water main into the building and on the meter side of the main inside water valve and union install a stranded copper cable #3/0 in 1-1/4" conduit to the main distribution panel. Connect the cable to the equipment ground bus.
D. Install a green equipment grounding conductor in each raceway, sized per NEC Table 250-122. Terminate on equipment ground bus within panelboard serving load.
E. Install #6 awg copper grounding conductor from ground bar in main telephone box to inter system bonding termination to grounded neutral bus in main distribution panel.
F. All separate grounding electrode conductors shall be bonded together to limit potential differences between them and between their associated wiring systems. This includes the power system, telephone system, etc.

2.03 FIELD QUALITY CONTROL

- A. Inspect grounding and bonding system conductors and connections for tightness and proper installation.

- F. Make feeder taps and joints with OZ Type T, PT, PM or PTS, or approved equivalent clamp connectors as manufactured by Kupler, or with approved compression sleeves. Wrap connectors with No. 10 Electro-Seal or approved equivalent plastic filler and vinyl tape.
G. Leave a minimum of 8" slack wire in every outlet box.
H. Provide color coded wire and with a different color for each phase and neutral and ground as follows: Phase A, B, C: Black, Red and Blue respectively; Neutral: White; Isolated Ground: Green with Yellow Stripes. Approved color tape is acceptable for feeders using larger than #6 conductors.
I. All conductors shall be continuous from origin to panel or equipment termination without splices where possible. Where splices and taps are necessary or are required, they shall be made in splice boxes with suitable connectors.
J. Tighten all electrical connectors and terminals, including screws and bolts, in accordance with manufacturer's published torque tightening values. Where manufacturer's torquing requirements are not indicated, tighten connectors and terminals to comply with tightening torques specified in UL486A and UL486B.

- L. Use cast outlet box in exterior locations and wet locations.

- 3.02 OUTLET BOXES
A. Select boxes according to intended use and type of outlet. Ceiling outlet boxes shall be 4" octagon and 1-1/2" deep. Use 2-1/8" deep octagon boxes or 4" square boxes required. All ceiling outlet boxes shall have a fixture stud of no bolt self-locking type installed if required to hang the fixture specified at the outlet.

- 3.03 JUNCTION BOXES
A. Junction boxes shall be sized according to number of conductors in box or type of service to be provided. Minimum junction box size 4-11/16" square and 2-1/8" deep. Provide screw covers for junction boxes.
B. Use code gauge steel with screw covers for pull boxes with prime coat and provide with screw cover. Size pull boxes according to the NEC.
C. Provide pull box every 100 feet of conduit run or where excessive number of bends necessitates a box for ease of wire installation.

SECTION C16123
GROUNDING AND BONDING

PART 1 - PRODUCTS

- 1.01 PROJECT CONDITIONS
A. Verify field measurements are as shown on drawings.
B. Verify locations of floor boxes and outlets in work areas prior to rough-in.

PART 2 - PRODUCTS

- 2.01 OUTLET BOXES
A. Sheet metal outlet boxes: galvanized steel.
B. Cast boxes: type FS, cast fer alloy. Provide gasketed cover by box manufacturer.
C. Manufacturers: National, Appleton, General Electric, RACO, or Steel City.
D. Provide boxes for fixtures with fixture studs in center.

- 2.02 PULL AND JUNCTION BOXES
A. Sheet metal boxes: galvanized steel.
B. Surface-mounted cast metal box: type 4; flat-flanged, surface-mounted junction box.
1. Material: galvanized cast iron.
2. Cover: furnish with ground flange, neoprene gasket, and stainless steel cover screws.
C. In-ground cast metal box: inside flanged, recessed cover box for flush mounting.
1. Material: galvanized cast iron.
2. Cover: nonskid cover with neoprene gasket and stainless steel cover screws.
3. Cover legend: electric.
D. Manufacturers: National, Appleton, General Electric, RACO, Oz-Gedney or Steel City.

PART 3 - EXECUTION

- 3.01 INSTALLATION
A. Install electrical boxes as shown on drawings, and as required for splices, taps, wire pulling, equipment connections and compliance with regulatory requirements.
B. Install pull boxes and junction boxes above accessible ceilings.
C. Inaccessible ceiling areas: Install outlet and junction boxes no more than 6 inches from ceiling access panel or from removable recessed light fixture.
D. Use flush mounting outlet boxes in finished areas.
E. Use stamped steel bridges to fasten flush mounting outlet box between studs.
F. Install flush mounted box without damaging wall insulation or reducing its effectiveness.
G. Use adjustable steel channel fasteners for hung ceiling outlet box.
H. Do not fasten boxes to ceiling support wires.
I. Support boxes independently of conduit, except cast box that is connected to two Rigid Metal Conduits both supported within 12 inches of box.
J. Use gang box where more than one device is mounted together. Do not use sectional box.
K. Use gang box with plaster ring for single device outlets.

SECTION C16123
GROUNDING AND BONDING

PART 1 - PRODUCTS

- 1.01 ROD ELECTRODES
A. Material: copper-clad steel.
B. Diameter: 3/4 inch.
C. Length: 10 feet.
- 1.02 MECHANICAL CONNECTORS
A. Material: bronze.
- 1.03 GROUNDING CONDUCTOR (WIRE)
A. Material: stranded copper, sized to meet NFPA 70, Article 250 requirements.

PART 2 - EXECUTION

- 2.01 INSTALLATION
A. Install rod electrodes at locations indicated. Install additional rod electrodes as required to achieve resistance to ground of less than 25 ohms.
B. Provide grounding electrode conductor and connect to reinforcing steel in foundation footing.
C. Provide bonding to meet regulatory requirements.
D. Bond together each metallic raceway, pipe, duct and other metal objects.
E. Provide isolated grounding conductor for circuits supplying all isolated ground outlets. Insulation shall be green with yellow stripe. Size per NEC Table 250.66. This isolated grounding conductor shall run in addition to equipment grounding conductor and along with the branch circuit conductors.

2.02 GROUNDING

- A. Ground electrical system in accordance with NEC Article 250 and local authorities having jurisdiction.
B. Install a #3/0 bare copper wire bond across the water meter attached to ground clamps on water line on each side of meter. Arrangements shall be made to do this work at the time the water meter is installed.
C. From the point of entrance of the water main into the building and on the meter side of the main inside water valve and union install a stranded copper cable #3/0 in 1-1/4" conduit to the main distribution panel. Connect the cable to the equipment ground bus.
D. Install a green equipment grounding conductor in each raceway, sized per NEC Table 250-122. Terminate on equipment ground bus within panelboard serving load.
E. Install #6 awg copper grounding conductor from ground bar in main telephone box to inter system bonding termination to grounded neutral bus in main distribution panel.
F. All separate grounding electrode conductors shall be bonded together to limit potential differences between them and between their associated wiring systems. This includes the power system, telephone system, etc.

2.03 FIELD QUALITY CONTROL

- A. Inspect grounding and bonding system conductors and connections for tightness and proper installation.

- L. Use cast outlet box in exterior locations and wet locations.

- 3.02 OUTLET BOXES
A. Select boxes according to intended use and type of outlet. Ceiling outlet boxes shall be 4" octagon and 1-1/2" deep. Use 2-1/8" deep octagon boxes or 4" square boxes required. All ceiling outlet boxes shall have a fixture stud of no bolt self-locking type installed if required to hang the fixture specified at the outlet.

- 3.03 JUNCTION BOXES
A. Junction boxes shall be sized according to number of conductors in box or type of service to be provided. Minimum junction box size 4-11/16" square and 2-1/8" deep. Provide screw covers for junction boxes.
B. Use code gauge steel with screw covers for pull boxes with prime coat and provide with screw cover. Size pull boxes according to the NEC.
C. Provide pull box every 100 feet of conduit run or where excessive number of bends necessitates a box for ease of wire installation.

SECTION C16123
GROUNDING AND BONDING

PART 1 - PRODUCTS

- 1.01 ROD ELECTRODES
A. Material: copper-clad steel.
B. Diameter: 3/4 inch.
C. Length: 10 feet.
- 1.02 MECHANICAL CONNECTORS
A. Material: bronze.
- 1.03 GROUNDING CONDUCTOR (WIRE)
A. Material: stranded copper, sized to meet NFPA 70, Article 250 requirements.

PART 2 - EXECUTION

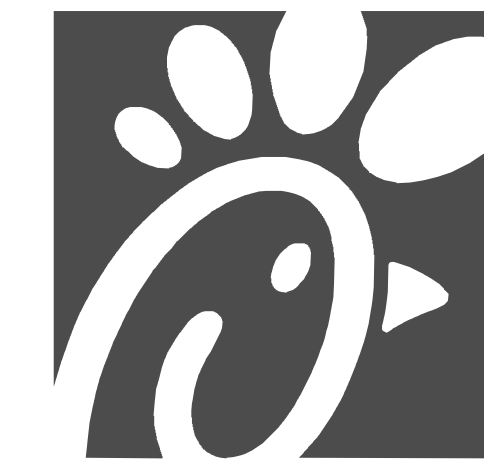
- 2.01 INSTALLATION
A. Install rod electrodes at locations indicated. Install additional rod electrodes as required to achieve resistance to ground of less than 25 ohms.
B. Provide grounding electrode conductor and connect to reinforcing steel in foundation footing.
C. Provide bonding to meet regulatory requirements.
D. Bond together each metallic raceway, pipe, duct and other metal objects.
E. Provide isolated grounding conductor for circuits supplying all isolated ground outlets. Insulation shall be green with yellow stripe. Size per NEC Table 250.66. This isolated grounding conductor shall run in addition to equipment grounding conductor and along with the branch circuit conductors.

2.02 GROUNDING

- A. Ground electrical system in accordance with NEC Article 250 and local authorities having jurisdiction.
B. Install a #3/0 bare copper wire bond across the water meter attached to ground clamps on water line on each side of meter. Arrangements shall be made to do this work at the time the water meter is installed.
C. From the point of entrance of the water main into the building and on the meter side of the main inside water valve and union install a stranded copper cable #3/0 in 1-1/4" conduit to the main distribution panel. Connect the cable to the equipment ground bus.
D. Install a green equipment grounding conductor in each raceway, sized per NEC Table 250-122. Terminate on equipment ground bus within panelboard serving load.
E. Install #6 awg copper grounding conductor from ground bar in main telephone box to inter system bonding termination to grounded neutral bus in main distribution panel.
F. All separate grounding electrode conductors shall be bonded together to limit potential differences between them and between their associated wiring systems. This includes the power system, telephone system, etc.

2.03 FIELD QUALITY CONTROL

- A. Inspect grounding and bonding system conductors and connections for tightness and proper installation.



Chick-fil-A

Chick-fil-A
5200 Buffington Road
Atlanta, Georgia
30349-2998



Kurzynski
& Associates
2705 Lebanon Pike - Suite One
Nashville, Tennessee 37214
Telephone: (615) 255-5203



02/15/23



CHICK-FIL-A
PRINCETON WOODS
3330 PINE BLUFF DRIVE
DUMFRIES, VA 22026

FSR#04916

BUILDING TYPE / SIZE: P13 LSR ALL
RELEASE: 22.05
PRINTED FOR: CONSTRUCTION

REVISION SCHEDULE

| NO. | DATE | DESCRIPTION |
|-----|------|-------------|
|-----|------|-------------|

CONSULTANT PROJECT # 22050 EH S
DATE 08/22/2022

DRAWN BY: ES
Information contained on this drawing and all digital files produced for above named project may not be reproduced in any manner without express written or verbal consent from authorized project representatives.

SHEET ELECTRICAL SPECIFICATIONS

SHEET NUMBER

E-901