

ADDENDUM NO. 2

TO: PLANS AND SPECIFICATIONS FOR STATE OF MISSOURI

Replace Boilers and Controls
Farmington Correctional Center
Farmington, MO
PROJECT NO.: C2006-01

Bid Opening Date: 1:30 PM Thursday, September 14th, 2023 (Changed)

Bidders are hereby informed that the construction Plans and/or Specifications are modified as follows:

VOLUME 1

SPECIFICATION CHANGES:

1. Volume 1 – Section 235223 Combination Gas/Light Oil Burner
 - a. Paragraph 2.01 Manufacturers: **ADD** Oilon to approved manufacturers.

DRAWING CHANGES:

1. Volume 1 – Drawing M1.1 – Site New Work Plan
 - a. **ADD** new General Note 1 as follows:
 1. EXISTING PLANT SOUTH OF DOUBET ROAD WILL PROVIDE HEATING WATER AND DOMESTIC HOT WATER WHILE THIS PROJECT IS BEING CONSTRUCTED. ONCE NEW PLANT AND PIPING IS COMPLETE CONTRACTOR TO MAKE FINAL TIE IN. CONTRACTOR TO COORDINATE TIE IN SCHEDULE WITH OWNER.

VOLUME 2

SPECIFICATION CHANGES:

1. Volume 2 - Section 230901, Instrumentation and Controls for HVAC – Power Plant
 - a. Paragraph 2.2 G (Page 230901-7): **REPLACE** with the following:
 - 2.2 G. Controller digital output alarm signals shall be processed using relay control logic with individual plug-in, “ice cube” type control relays. Control relays shall have 10-amp (minimum), 120-volt silver-cadmium oxide (AgCdO) contacts and LED pilot light to indicate when the relay coil is energized and shall be manufactured by Allen-Bradley, Eaton, Omron, Potter & Brumfield or Schneider Electric. Provide manufacturer’s recommended DIN rail mounting base for relays.
 - b. Paragraphs 2.1 DEAERATOR LEVEL CONTROLS (Page 230901-7) through

Paragraph 2.7 CONTROL VALVES (Page 230901-12): **CHANGE** to Paragraphs 2.3 DEAERATOR LEVEL CONTROLS through Paragraph 2.9 CONTROL VALVES respectively.

c. Paragraph 2.4 A (Page 230901-8): **REPLACE** with the following:

2.4 A. New controllers shall interface with the Owner's existing Building Automation System (BAS) and with the new Volume 1 BAS for monitoring/status reporting and archival of data.

1. Provide new control loop displays on existing and/or new Volume 1 BAS operator interface stations.
2. Coordinate specific requirements with Owner's Representative.

d. Paragraph 2.5 D (Page 230901-8): **REPLACE** with the following:

2.5 D. The control panel shall have a single-point of connection for a 120 VAC single-phase power supply terminating in a circuit breaker, with a minimum short circuit interrupting rating of 10,000 amps RMS symmetrical. The control panel short circuit current rating (SCCR) shall be a minimum of 10,000 amps RMS symmetrical. Do not proceed with construction of the control panel until the required short-circuit current ratings for the control panel have been determined in accordance with Section 260573 – Overcurrent Protective Device Coordination Study and Arc Flash Risk Assessment.

e. Paragraph 2.5 K: **REPLACE** with the following:

2.5 K. Pilot lights, push buttons and selector switches shall be NEMA Type 4/4X/13 watertight/ corrosion-resistant/oiltight, fiberglass reinforced thermoplastic polyester, 30 mm or 30.5 mm or size. Allen-Bradley Bulletin 800H or approved equal. Pilot lights shall be 120VAC, push-to-test, full voltage with high intensity LED type lamps. Lamps shall be replaceable by removal of the color cap. Push buttons shall have fully guarded (flush) spring loaded (momentary) type operator. Selector switches shall have the "standard" type operator.

f. **ADD** new Paragraph 2.5 L as follows:

2.5 L. All control equipment, miscellaneous devices and hardware shall be mounted in a factory wired control panel fabricated in a UL 508A certified industrial control panel shop (Category Code NITW). The completed control panel shall be UL 508A listed and labeled.

g. **ADD** new Paragraph 2.5 M as follows:

2.5 M. Where there is a discrepancy between the requirements of UL 508A and what is specified herein, the requirements of UL 508A shall govern.

2. Volume 2 - Section 232519.16, Reverse Osmosis Water Treatment Equipment

a. Paragraph 2.2 O.1: **REPLACE** with the following:

2.2 O.1. Provide a communications interface between the new RO control system and the existing power plant building automation system (Automated

Logic) and with the new Volume 1 building automation system for monitoring/status reporting and archival of data. Coordinate specific requirements with Owner's Representative.

3. Volume 2 - Section 232519.20, Reverse Osmosis Water Treatment System Controls

a. Paragraph 2.1 B.2: **REPLACE** with the following:

2.1 B.2. Provide communications capability to allow the controller to interface with the Owner's existing Automated Logic Building Automation System (BAS) and with the new Volume 1 control system for monitoring, status reporting, and archival of data. Coordinate specific requirements with Owner's Representative.

b. **ADD** new Paragraph 2.7 as follows:

2.7 CONTROL RELAYS

A. Control relays shall have 10-amp (minimum), 120-volt silver-cadmium oxide (AgCdO) contacts and LED pilot light to indicate when the relay coil is energized and shall be manufactured by Allen-Bradley, Eaton, Omron, Potter & Brumfield or Schneider Electric. Provide manufacturer's recommended DIN rail mounting base for relays.

4. Volume 2 - Section 232519.40, Reverse Osmosis Water Pumping System

a. Paragraph 2.7 A: **REPLACE** with the following:

2.7 A. Provide a communications interface between the new RO pump control system and the existing power plant building automation system (Automated Logic) and with the new Volume 1 control system. Coordinate specific requirements with Owner's Representative.

b. Paragraphs 2.13 ALARM HORN through Paragraph 2.16 FACTORY TESTING: **CHANGE** to Paragraphs 2.14 ALARM HORN through Paragraph 2.17 FACTORY TESTING respectively.

c. **ADD** new Paragraph 2.13 as follows:

2.13 CONTROL RELAYS

A. Control relays shall have 10-amp (minimum), 120-volt silver-cadmium oxide (AgCdO) contacts and LED pilot light to indicate when the relay coil is energized and shall be manufactured by Allen-Bradley, Eaton, Omron, Potter & Brumfield or Schneider Electric. Provide manufacturer's recommended DIN rail mounting base for relays.

5. Volume 2 - Section 260573 – Protective Device Coordination Study and Arc Flash Risk Assessment

a. Paragraph 1.11 E.1: **CHANGE** "Section 260515" to "Section 230515".

b. Paragraph 1.11 E.3: **CHANGE** "Section 260515" to "Section 230515".

c. Paragraph 1.14 C.1.a: **REPLACE** with the following:

- 1.14 C.1.a. All switchboards, motor control centers, automatic transfer switches, panelboards, load centers, enclosed circuit breakers, motor starters, variable frequency drives, disconnect switches size 30A and larger, dry-type transformers and industrial control panels located at the Farmington Correctional Center Power Plant served from the 750kVA outdoor pad-mount transformer "T1" and the 200kW diesel-engine-driven generator at the Power Plant as indicated on Drawing E-601.

DRAWING CHANGES:

1. Volume 2 - Drawing E-501 – Schedules, Details & Elevations
 - a. **REVISE** per attached Revision A, dated 8/22/2023.
2. Volume 2 - Drawing E-601 – One-Line Diagram – North
 - a. **REVISE** per attached Revision A, dated 8/22/2023.
3. Volume 2 - Drawing E-602 – Motor Wiring Schematic
 - a. **ADD** new General Note E as follows:
 - E. CONFIGURE VFD AS REQD FOR OPERATION ON 480V-3Φ-3W GROUNDED BΦ POWER SYSTEM PER SPECIFICATION SECTION 230515.

GENERAL COMMENTS:

1. The Pre-Bid Meeting was held Thursday, August 10th, 2023 at 10:30 AM followed by a walk-through of the facility. Sign-In Sheet attached.
2. Please contact Paul Girouard, Contract Specialist, at 573-751-4797 or Paul.Girouard@oa.mo.gov for questions about bidding procedures and MBE/WBE/SDVE goals and submittal requirements.
3. **All bids shall be submitted on the bid forms without additional terms and conditions, modifications, or stipulations. Each space on the bid forms shall be properly filled including a bid amount for the alternate. Failure to do so will result in rejection of the bid.**
4. **MBE/WBE/SDVE participation requirements can be found in DIVISION 00. The MBE/WBE/SDVE participation goals are 10%/10%/3%, respectively. All MBE, WBE, and MBE/WBE contractors, subcontractors, and suppliers must be certified by the State of Missouri, Office of Equal Opportunity. No other certifications from other Missouri certifying agencies will be accepted. If a bidder is unable to meet a participation goal, a Good Faith Effort Determination Form must be completed. Failure to complete this process will result in rejection of the bid.**
5. **The NEW deadline for technical questions is September 6th, 2023 at noon.**
6. Changes to, or clarification of, the bid documents are only made as issued in the addenda.
7. All correspondence with respect to this project must include the State of Missouri project number as indicated above.

8. Current Planholders list available online at: <https://www.oafmdcplanroom.com/jobs/2077/planholders/c2006-01-replace-boilers-controls-farmington-correctional-center>
9. Prospective Bidders contact American Document Solutions, 1400 Forum Blvd., Suite 7A, Columbia MO 65203, 573-446-7768 to order official plans and specifications.

ATTACHMENTS:

1. Pre-Bid Sign-In
2. Volume 2 E-501
3. Volume 2 E-601

END OF ADDENDUM NO. 2

Pre-Bid Meeting Attendance Sheet
 Replace Boilers and Controls
 Farmington Correctional Center
 Farmington, MO
 Project No. C2006-01
 8/10/23 1030

Name & Title	Company Name, Type of Contracting, MBE/WBE/SDVE Status	Phone	E-Mail Address
Chris Lloyd Project Manager	OA FMDC	573-526-0160	Christopher.Lloyd@oa.mo.gov
Eric Poettker	McClure Engineering (Volume 1)	314-645-6232	EPoettker@mcclureeng.com
Barry Freiner	Rogers-Schmidt (Volume 2)	636-600-1551	BFreiner@rogers-schmidt.com
Chris Barth	Rogers-Schmidt (Volume 2)	636-600-1551	CBarth@rogers-schmidt.com
Arlen Rieger	DOC PM	573-751-7383	Arlen.rieger@doc.mo.gov
Joe Coffelt	DOC	573-522-4678	Joe.Coffelt@doc.mo.gov

Pre-Bid Meeting Attendance Sheet
 Replace Boilers and Controls
 Farmington Correctional Center
 Farmington, MO
 Project No. C2006-01
 8/10/23 1030

Name & Title	Company Name, Type of Contracting, MBE/WBE/SDVE Status	Phone	E-Mail Address
Jesse Julian GM	North Point Boilers	816-215 1549	Jesse Julian JJuliana@NorthPointBoilers.com
George Heath Electrical PM	American Legacy Construction	816-352-5939	G.Heath@ALC-KC.COM
MIKE STEWELL PM	ALLOY GROUP APPRENTICES & DEMO	314-227- 1650	mstilwell@alloygroup.com
Tate Lietzauer PM	Brockmiller Construction	573-454-5638	bids@brockmillerconstruction.com
Matt Miller	Walker Lewis Equipment + Chemicals	217-223 2017	Sales@ walkerlewis.com
Tyler Roland	Airco	314-901-2828	Tyler@Airco.com

Pre-Bid Meeting Attendance Sheet
 Replace Boilers and Controls
 Farmington Correctional Center
 Farmington, MO
 Project No. C2006-01
 8/10/23 1030

Name & Title	Company Name, Type of Contracting, MBE/WBE/SDVE Status	Phone	E-Mail Address
Richard Allgier	FCC	573 218 7100 Ext 702	Richard.Allgier@doc-mo.gov
Kevin Huetbery	OASMDC	636-524-9402	Kevin.Huetbery@OA.MO.gov
Rick Luettkemeyer	Rhodes Equipment	314-353-2463	rick@rhodesequipment.com
Lewis Shekterford	Environ Mental Engineering Inc	623-257-7139	Lewis@enviroeng.com
Rick Balassone	Multi-Craft Contractors	417-44-8384	rbalassone@multi-craft.net
John Piliand	Raiden Mechanical	573-518-1444	jpiliand@raidk.net

Pre-Bid Meeting Attendance Sheet
 Replace Boilers and Controls
 Farmington Correctional Center
 Farmington, MO
 Project No. C2006-01
 8/10/23 1030

Name & Title	Company Name, Type of Contracting, MBE/WBE/SDVE Status	Phone	E-Mail Address
Austin Brown	American Boiler & Mechanical	314-740-2800	abrown@abmstl.com
D.S. Barber	American Boiler & Mechanical	314-267-7069	dbarber@abmstl.com
Jason Riejes POC			
Eric Poettker	McClure Engineering	314-645-6232	epoettker@mcclureeng.com
Jason Vinson PPS III	FCC	573-218-7100	jason.vinson@fcc.mo.gov

EXIST MOTOR CONTROL CENTER MCA SCHEDULE (WEST WALL OF CONDENSATE ROOM)

UNIT NUMBER	DESCRIPTION
1D	ROOF VENTILATOR
1H	SPARE
1K	RO WATER SYSTEM PUMP #1 (EAST)
1N	RO WATER SYSTEM PUMP #2 (WEST) - FUTURE
1V	SPARE FUSE STORAGE
1X	SPACE
2D	HOT WATER RETURN PUMP #2 (EAST)
2H	HOT WATER RETURN PUMP #1 (WEST)
2K	SPACE
2O	TRANSFORMER T200
2S	SPACE
2V	ZEOLITE PUMP #2 (CAPACITOR DISC SW)
2X	3-PHASE CAPACITOR
3D	TREATED WATER BOOSTER PUMP #2 (SOUTH)
3H	SPARE
3L	SPARE
3P	SPARE
3T	SPARE
3X	SPARE
4D	TREATED WATER BOOSTER PUMP #1 (NORTH)
4G	SPARE
4I	3-PHASE CAPACITOR
4L	SPARE
4N	3-PHASE CAPACITOR
4Q	SPARE
4S	3-PHASE CAPACITOR
4V	SPARE
4X	3-PHASE CAPACITOR
5O	MAIN MOLDED CASE SWITCH
5Q	SURGE ARRESTERS
5T	TRANSFORMER T100
5W	SUMP PUMPS FOR CONDENSATE ROOM
5X	SPACE
6X	AUTOMATIC TRANSFER SWITCH ATS3

EXIST PANELBOARD LPB SCHEDULE (EAST WALL OF RO WATER SYSTEM AREA)

CKT NO	AMPS	POLES	LOAD	VOLT-AMPERES		LOAD	POLES	AMPS	CKT NO
				ØA	ØB				
1	20	1	UNKNOWN LOAD	-	-	RO WATER SYSTEM ROOM LIGHTS	1	20	2
3	20	1	SOFTNER CONTROL	-	-	RO WATER SYSTEM ROOM LIGHTS	1	20	4
5	20	1	CONDENSATE PIT PUMPS	-	-	RO WATER SYSTEM ROOM LIGHTS	1	20	6
7	60	2	PANEL LP4	-	-	CONDENSATE CONTROL	1	20	8
9				-	-	FACP	1	20	10
11				-	-	FIBER PANEL	1	20	12
13	60	2	PANEL LP5 / BRINE PUMP	-	-	EXIST RECEPTACLES	1	20	14
15	20	1	PHOTOCELL	-	-	EXIST RECEPTACLES	1	20	16
17	20	1	DEALKALIZER	-	-	ASH TUNNEL LIGHTS	1	20	18
19	20	1	RECEPTACLES	-	-	BASEMENT LIGHTS	1	20	20
21	20	1	EXTERIOR LIGHTS	-	-	BASEMENT LIGHTS	1	20	22
23	20	1	RECEPTACLES	-	-	SUMP PUMP	1	20	24
25	20	1	EXTERIOR LIGHTS	-	-	SPARE OLD PANEL	1	20	26
27	20	1	CONDENSATE METER	-	-	RECEPTACLE PHONE HORN	1	20	28
29	20	1	SPARE	-	-	SPARE	1	20	30
31	20	1	SPARE	-	-	SPARE	1	20	32
33	20	1	SPARE	-	500	RO WATER SYS NO. 1 (EAST) - CNTRL PNL	1	15	34
35	20	1	SPARE	-	400	RO WATER PUMPS CNTRL PNL	1	15	36
37	20	1	SPARE	-	200	COND TANK & DA LEVEL CNTRL PNL	1	15	38
39	20	1	SPARE	-	-	MAIN SERVICE TO RADIO	2	100	40
41	20	1	SPARE	-	-				42

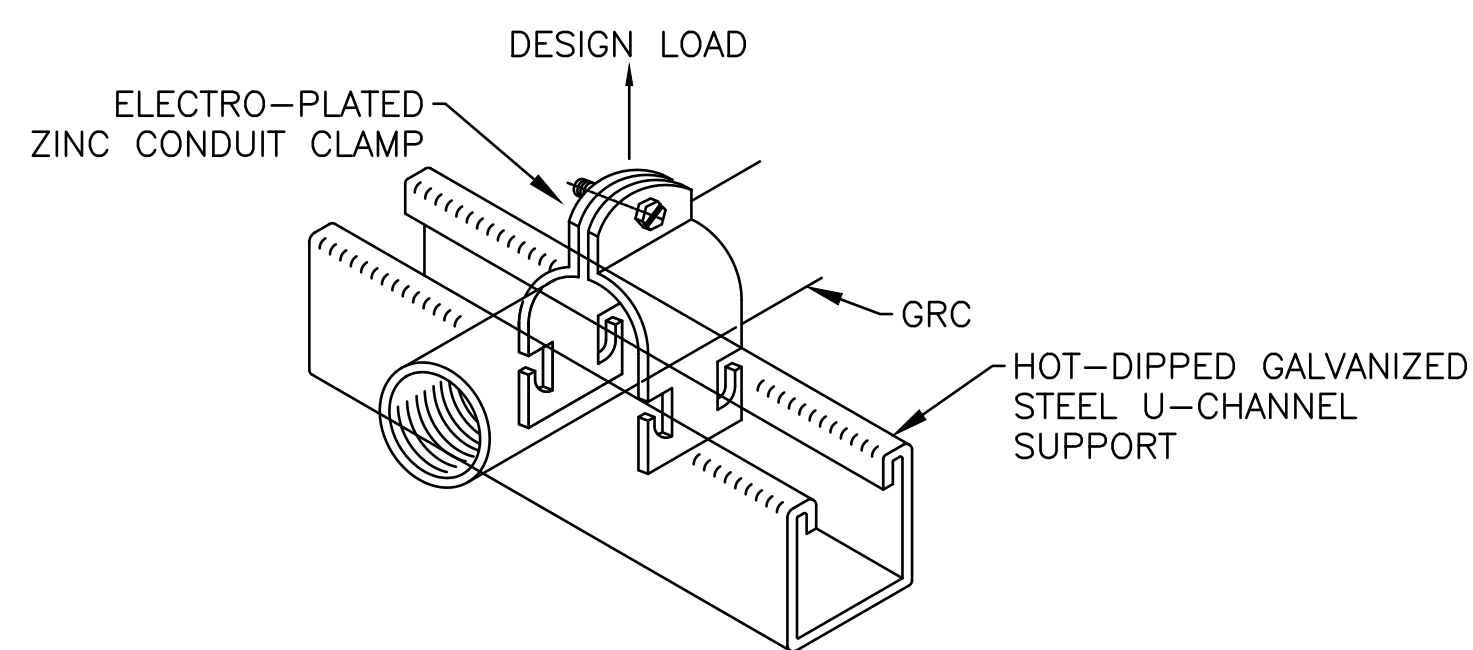
200 AMP MCB, 120/240V-1Ø-3W, 42 CKT, 10KA
 NEMA TYPE 1 ENCLOSURE
 SIEMENS CAT. NO. P1A42QJ200CTS W/ TYPE BL CBs
 700 400 TOTAL NEW LOAD: 1100 VA

KEY NOTES:

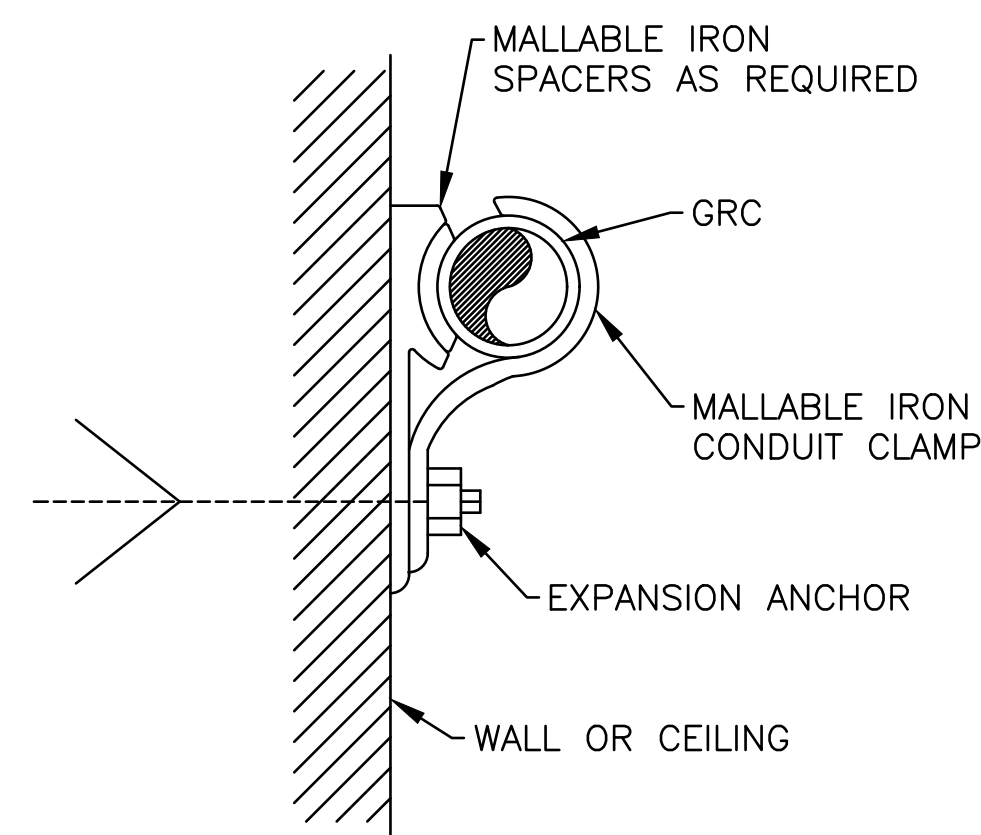
- REPLACE ORANGE TAPE/IDENTIFY BØ CONDUCTOR(S) WITH WHITE OR GRAY VINYL TAPE.
- PROVIDE SOLID COPPER "DUMMY FUSE" LINK IN BØ FUSE CLIPS.
- PROVIDE ENGRAVED LAMINATED PLASTIC NAMEPLATE PER SPECIFICATION SECTION 260553:
 SERVED FROM SWBD-1
 IN RO WATER SYSTEM AREA
 480V-3Ø-3W
 GROUNDED B-PHASE
- PROVIDE ENGRAVED LAMINATED NAMEPLATE PER SPECIFICATION SECTION 260553.
- UTILIZE EXIST SPARE CB.
- TRACE CKT AND PROVIDE DESCRIPTION THAT COMPLIES WITH NEC 408.4(A).
- PROVIDE TYPEWRITTEN CKT DIRECTORY PER SPECIFICATION SECTION 260553.
- PROVIDE ARC FLASH HAZARD WARNING LABEL PER SPECIFICATION SECTIONS 260553 & 260573.
- IN ACCORDANCE WITH THE SPECIFICATIONS AND EQUIP WIRING SCHEMATICS.
- VFD IS PROVIDED FACTORY MTD ON EQUIP SKID.
- PROVIDE NEW 30A/3P CLASS R FUSIBLE SWITCH UNIT FOR EXIST SQUARE D MODEL 5 MCC.

MOTOR CONTROL SCHEDULE

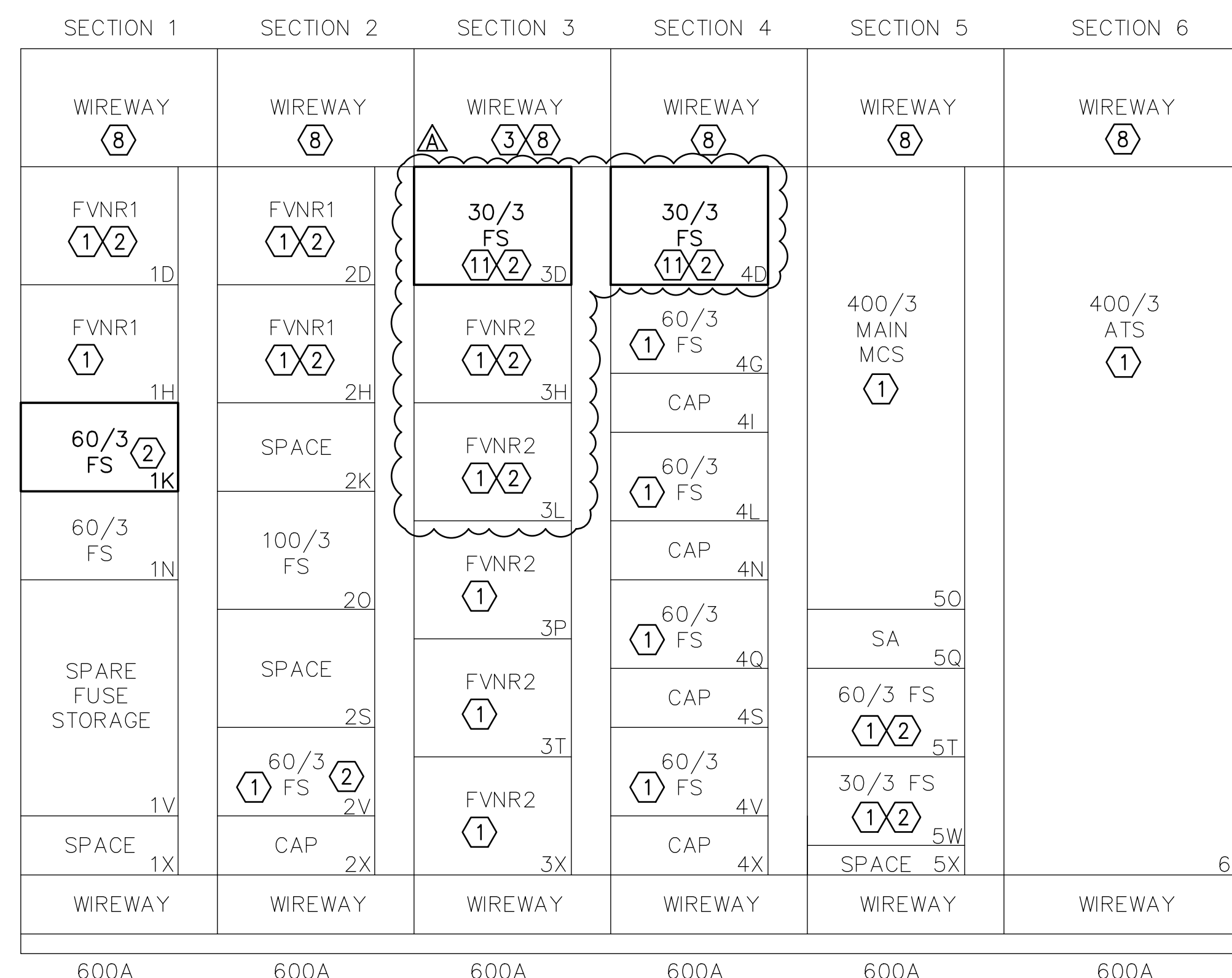
TAG	EQUIPMENT NAME	MOTOR DATA					MOTOR STARTER DATA						DISCONNECT SWITCH DATA				WIRING SCHEMATIC NUMBER	REMARKS			
		HORSEPOWER	VOLTAGE	PHASE	F.L.A.	TYPE	LOCATION	NEMA SIZE	POLES	MAGNETIC TYPE OR VFD	MANUAL TYPE	LOCATION	ADDITIONAL AUXILIARY INTERLOCK CONTACTS		CONTROLS LOCATED ON VFD OR MS ENCL DOOR	AMP SIZE			POLES	LOCATION	FUSE AMPS
													N.C.	N.O.							
ROWSP1E	RO WATER SYSTEM PUMP NO. 1 - EAST	20	460	3	27	TEFC	RO WATER SYS AREA	-	3	VFD	-	AT MOTOR	9	9	9	60	3	ON VFD	45	VFD1	10
ROWP1N	RO WATER PUMP NO. 1 - NORTH	5	460	3	7.6	TEFC	RO WATER SYS AREA	-	3	VFD	-	AT MOTOR	9	9	9	30	3	ON VFD	12	VFD1	10
ROWP2S	RO WATER PUMP NO. 2 - SOUTH	5	460	3	7.6	TEFC	RO WATER SYS AREA	-	3	VFD	-	AT MOTOR	9	9	9	30	3	ON VFD	12	VFD1	10



U-CHANNEL SUPPORT CONDUIT MOUNTING DETAIL
 NO SCALE



CONCRETE/MASONRY WALL/CEILING CONDUIT MOUNTING DETAIL
 NO SCALE



101 EXISTING MCC-MCA ELEVATION
 E-501 SCALE: 1" = 1'-0"



BARRY D. FREINER
 Registered Professional Engineer
 MO # E-24220
 Expires 12-31-2024

ROGERS-SCHMIDT
 ENGINEERING CO., P.C.
 CONSULTING ENGINEERS
 1736 WEST PARK CENTER DR.
 SUITE 204
 ST. LOUIS, MO 63026
 PHONE: 636-600-1551
 MISSOURI STATE CERTIFICATE
 OF AUTHORITY #000408

OFFICE OF ADMINISTRATION
 DIVISION OF FACILITIES
 MANAGEMENT,
 DESIGN AND CONSTRUCTION

DEPARTMENT OF
 CORRECTIONS

VOLUME 2 -
 REPLACE BOILERS AND
 CONTROLS, POWER PLANT

FARMINGTON
 CORRECTIONAL CENTER
 1012 WEST COLUMBIA
 STREET,
 FARMINGTON, MO 63640

PROJECT # C2006-01
 SITE # 7008
 ASSET # 9327008094

REVISION: _____
 DATE: _____
 REVISION: _____
 DATE: _____
 REVISION: **ADDENDUM 2**
 DATE: 08/22/2023

ISSUE DATE: 04/26/2023

CAD DWG FILE: C2007-01-9237-9327008094-E-501.DWG
 DRAWN BY: MNS
 CHECKED BY: BDF
 DESIGNED BY: BDF

SHEET TITLE:
**SCHEDULES,
 DETAILS &
 ELEVATIONS**

SHEET NUMBER:

E-501

22 OF 24 SHEETS
 APRIL 26, 2023



BARRY D. FREINER
Registered Professional Engineer
MO # E-24220
Expires 12-31-2024
ROGERS-SCHMIDT
ENGINEERING CO., P.C.
CONSULTING ENGINEERS
1736 WEST PARK CENTER DR.
SUITE 204
ST. LOUIS, MO 63026
PHONE: 636-600-1551
MISSOURI STATE CERTIFICATE
OF AUTHORITY #000408

OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES
MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF
CORRECTIONS

VOLUME 2 -
REPLACE BOILERS AND
CONTROLS, POWER PLANT

FARMINGTON
CORRECTIONAL CENTER
1012 WEST COLUMBIA
STREET,
FARMINGTON, MO 63640

PROJECT # C2006-01
SITE # 7008
ASSET # 9327008094

REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
REVISION: **ADDENDUM 2**
DATE: 08/22/2023

ISSUE DATE: 04/26/2023

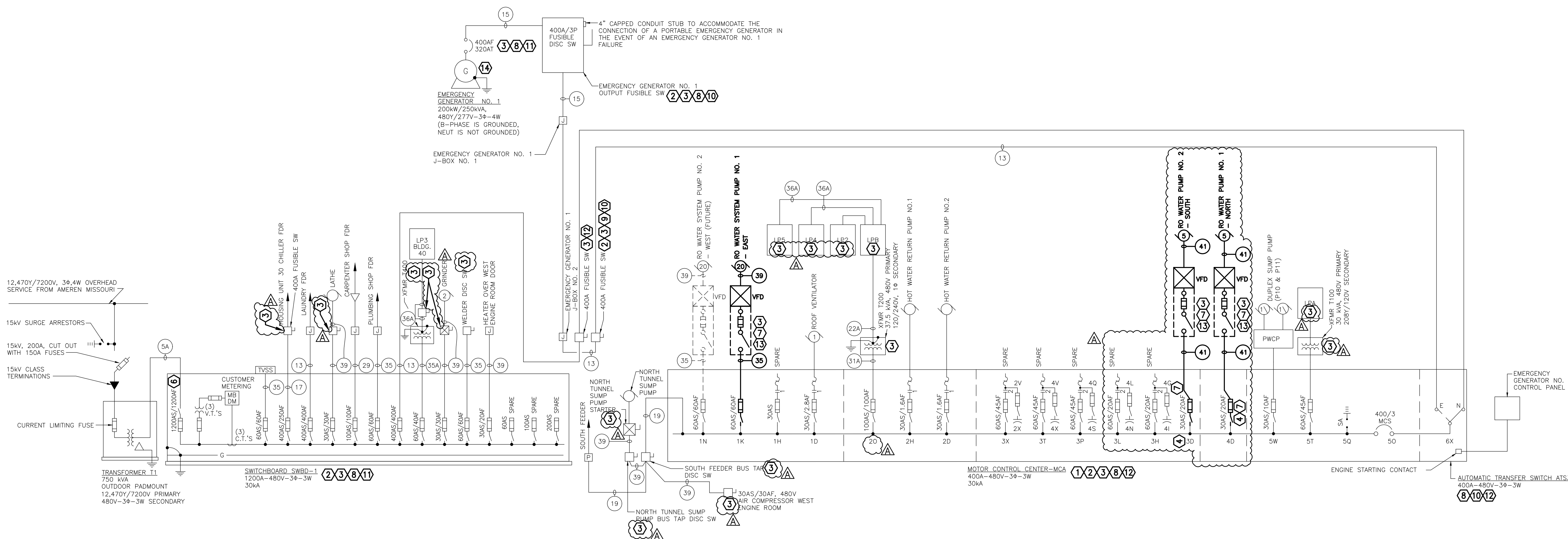
CAD DWG FILE: C2007-01-9237-9327008094-E-601.DWG
DRAWN BY: MNS
CHECKED BY: BDF
DESIGNED BY: BDF

SHEET TITLE:
**ONE-LINE
DIAGRAM -
NORTH**

SHEET NUMBER:

E-601

23 OF 24 SHEETS
APRIL 26, 2023



ONE-LINE DIAGRAM - NORTH
NO SCALE

GENERAL NOTE:
A. VERIFY ALL EXISTING FEEDERS (CONDUIT TYPE & SIZE AND CONDUCTOR TYPE, SIZE, QTY AND LENGTH) FOR THE SPECIFICATION SECTION 260573 POWER SYSTEM STUDY. NOTE ALL CHANGES ON AS-BUILT DWGS.

- KEY NOTES:**
- SEE DWG E-501 FOR MCC-MCA ELEVATION & SCHEDULE.
 - GROUNDING BΦ SYSTEM. REPLACE EXIST FUSE WITH SOLID COPPER "DUMMY FUSE" PER SPECIFICATION SECTION 262813 IN BΦ FUSE CLIPS OF ALL FUSIBLE SWITCHES SERVING 3-PHASE LOADS.
 - PROVIDE ARC FLASH HAZARD WARNING LABEL(S) PER SPECIFICATION SECTIONS 260553 & 260573.
 - PROVIDE NEW 30A/3P CLASS R FUSIBLE SWITCH UNIT FOR EXIST SQUARE D MODEL 5 MCC.
 - NOTE DELETED.
 - PROVIDE LABEL ON LINE SIDE OF MAIN FUSIBLE SWITCH INDICATING MAX AVAIL FAULT CURRENT. LABEL SHALL INDICATE DATE THE FAULT CURRENT CALCULATIONS WERE PERFORMED PER NEC 110.24(A).
 - PROVIDE SOLID COPPER "DUMMY FUSE" IN BΦ FUSE CLIPS PER SPECIFICATION SECTION 262813.
 - REMOVE ORANGE PHASE MARKING TAPE FROM EACH BΦ CONDUCTOR AND MARK WITH WHITE OR GRAY VINYL TAPE PER SPECIFICATION SECTION 260553.
 - REMOVE MARKING TAPE FROM EACH PHASE CONDUCTOR AND MARK PER SPECIFICATION SECTION 260553.

- PROVIDE ENGRAVED LAMINATED PLASTIC NAMEPLATE PER SPECIFICATION SECTION 260553:
SERVED FROM EMER GENERATOR NO. 1
480V-3Φ-3W
GROUNDED B-PHASE
- PROVIDE ENGRAVED LAMINATED PLASTIC NAMEPLATE WITH WHITE CHARACTERS ON A RED BACKGROUND PER SPECIFICATION SECTION 260553:
480V-3Φ-3W
GROUNDED B-PHASE
- PROVIDE ENGRAVED LAMINATED PLASTIC NAMEPLATE PER SPECIFICATION SECTION 260553:
SERVED FROM SWBD-1
480V-3Φ-3W
GROUNDED B-PHASE
- PROVIDE ENGRAVED LAMINATED PLASTIC NAMEPLATE PER SPECIFICATION SECTION 260553:
EQUIPMENT NAME
SERVED FROM MCC-MCA
480V-3Φ-3W
GROUNDED B-PHASE

FEEDER SCHEDULE
(ALL FEEDERS ARE COPPER)

FEEDER NUMBER	PHASE		NEUTRAL		GROUND		CONDUIT	
	TOTAL NO.	SIZE	TOTAL NO.	SIZE	TOTAL NO.	SIZE	TOTAL NO.	SIZE
5A	12	350MCM	-	-	-	-	4	3"
13	3	500MCM	-	-	1	3	1	3"
15	3	350MCM	-	-	1	4	1	3"
17	3	250MCM	-	-	1	4	1	2 1/2"
19	3	4/0	-	-	1	4	1	2"
22A	2	3/0	1	3/0	1	6	1	2"
29	3	2	-	-	1	6	1	1 1/4"
31A	2	3	-	-	1	8	1	1 1/4"
35	3	6	-	-	1	10	1	3/4"
35A	2	6	-	-	1	10	1	3/4"
36A	2	6	1	6	1	10	1	3/4"
37	3	8	-	-	1	10	1	3/4"
39	3	10	-	-	1	10	1	3/4"
41	3	12	-	-	1	12	1	3/4"

2020NEC TABLE 310-16
86°F AMBIENT CONDUIT
IN AIR NOMINAL
AMPACITY BASED ON
75°C CONDUCTOR
INSULATION