VERIFY SCALE

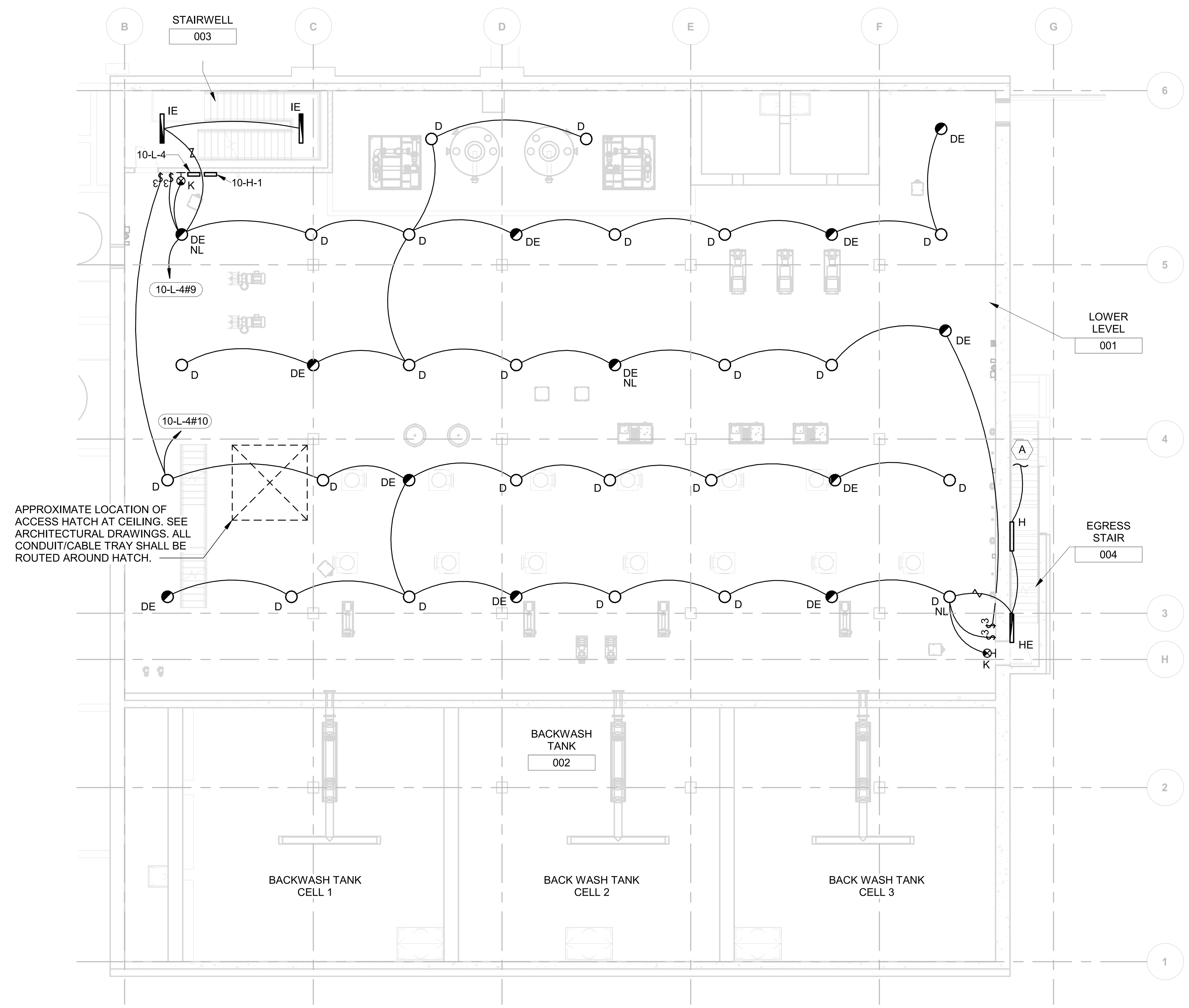
BAR IS ONE INCH ON ORIGINAL DRAWING

GENERAL NOTES

1. COORDINATE LIGHT FIXTURE HEIGHTS & LOCATIONS WITH OTHER DISCIPLINES AND MAKE REASONABLE ADJUSTMENTS AS NECESSARY TO AVOID CONFLICTS.
2. ALL LIGHTING CIRCUITS SHALL USE #12 WIRE AND 3/4"C UNLESS OTHERWISE NOTED.

KEYNOTES

A TO LIGHT ABOVE. SEE SHEET 10-E103.



LOWER LEVEL LIGHTING PLAN

SCALE: 3/32" = 1'-0"

AECOM

HANSEN ALLEN & LUCE INC

ENGINEERS

PROJECT

PROVO RIVER WATER TREATMENT PLANT

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REGISTRATION

PROFESSIONAL ENGINEER
No. 12639491-2202
CHRISTOPHER J. ADAMS
STATE OF UTAH
04/07/2023

ISSUE/REVISION

I/R	DATE	DESCRIPTION
C	2023-04-07	ISSUED FOR BID
B	2023-01-20	ISSUED FOR 90%
A	2022-10-14	ISSUED FOR 60%

PROJECT NUMBER

AECOM Project No. - 60670884
HAL Project No. - 035.15.420

SHEET TITLE

WATER TREATMENT ELECTRICAL LOWER LEVEL LIGHTING PLAN

DRAWING NUMBER

10-E101

ANSI D 22" x 34"

Approved: C.ADAMS

Checked: S.SHUGARS

Designer: C.SAULS

Drafter: C.SAULS

Project Manager: J.KRINKS

Last Plotted: 4/5/2023 12:26:30 PM
Filename: BIM 360://CI-AMER (USA) 60670884-Provo River WTP/60670884_10-E001.rvt

ANSI D 22" x 34"

Approved: C.ADAMS

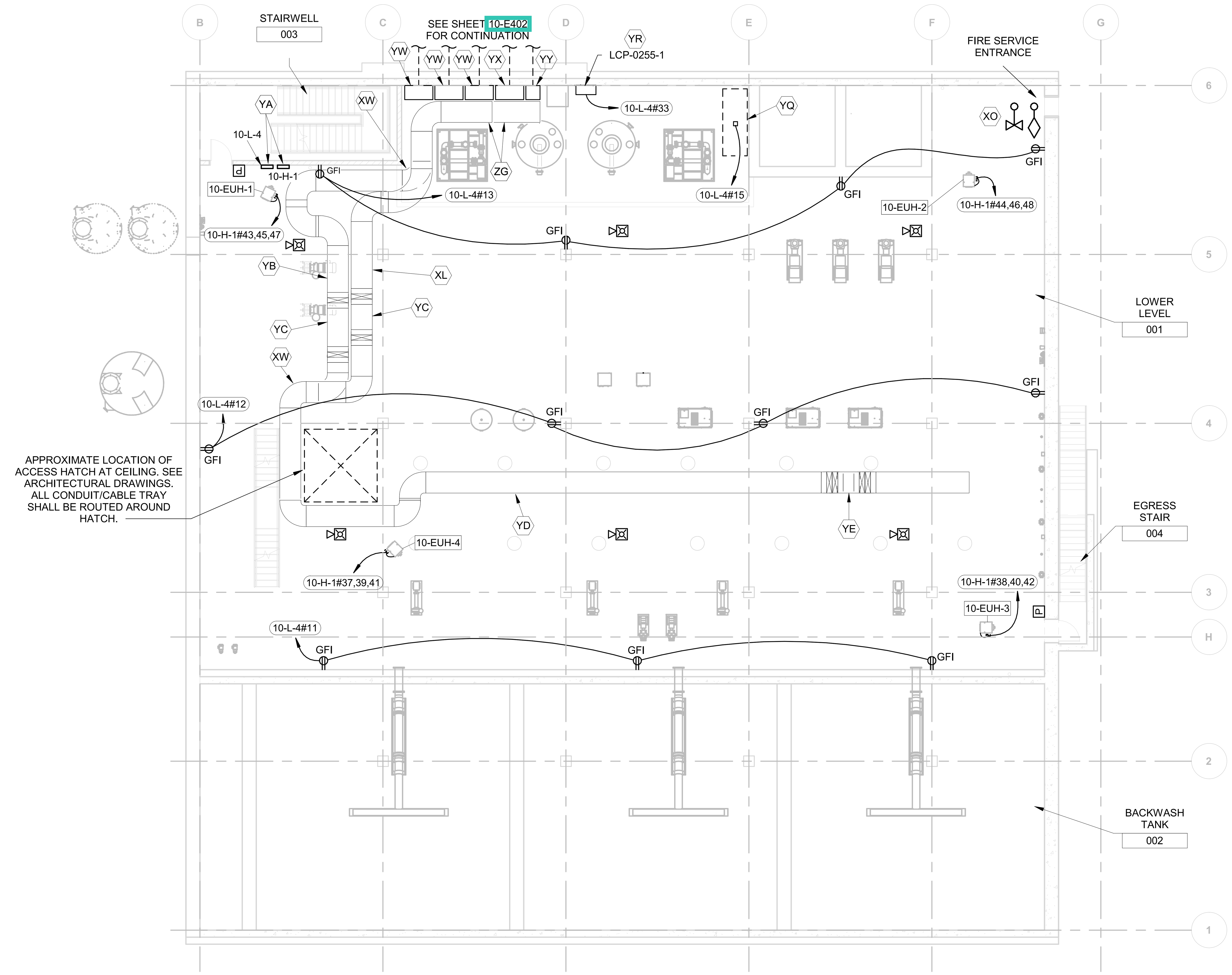
Checked: S.SHUGARS

Designer: C.SAULS

Drafter: C.SAULS

Project Manager: J.KRINKS

Last Plotted: 4/5/2023 12:26:38 PM
Filename: BIM 360://CI-AMER (USA) 60670884-Provo River WTP/60670884_10-E001.rvt



LOWER LEVEL POWER PLAN

SCALE: 3/32" = 1'-0"

VERIFY SCALE

BAR IS ONE INCH ON ORIGINAL DRAWING

GENERAL NOTES

1. REFER TO SHEET 10-E611 FOR HVAC SCHEDULE.
2. COORDINATE LOCATIONS OF PANELS WITH OTHER DISCIPLINES. NO DUCTWORK OR PIPING IS PERMITTED ABOVE PANELS.
3. ALL RECEPTACLE CIRCUITS SHALL USE #12 WIRE AND 3/4"C UNLESS OTHERWISE NOTED.
4. CABLE TRAY ROUTING CAN BE ADJUSTED AS NEEDED WITH APPROVAL OF THE ENGINEER. HEIGHTS INDICATED ARE MINIMUMS AND TRAY SHALL BE INSTALLED AS HIGH ABOVE THE FLOOR AS POSSIBLE.

KEYNOTES

XL 36" WIDE CABLE TRAY FOR POWER FEEDERS. BOTTOM ON POWER TRAY SHALL BE MOUNTED AT 11'-10".

XO PROVIDE TAMPER/FLOW SWITCHES FOR EACH ZONE AND CONNECT TO FIRE ALARM SYSTEM.

XW TRANSITION CONTROLS TRAY TO BELOW POWER TRAY.

YA MOUNT PANELS AS FAR NORTH AS POSSIBLE AND COORDINATE LOCATION WITH PANELS PLC-000-1 AND MCP-0200-1 ON FLOOR ABOVE.

YB 36" WIDE CABLE TRAY FOR CONTROLS AND NETWORKING CABLING. PROVIDE TWO DIVIDERS WITH AREAS TO ROUTE DISCRETE, ANALOG, AND NETWORK CABLING SEPARATELY. DIVIDERS SHALL PROVIDE AN 18" WIDE AREA FOR DISCRETE, AND 9" EACH FOR ANALOG AND NETWORK CABLING. BOTTOM OF CONTROLS TRAY SHALL BE MOUNTED AT 11'-0".

YC ROUTE CABLE TRAY BELOW DUCT IN THIS AREA AS HIGH AS POSSIBLE. REFER TO HVAC PLANS FOR DUCT LOCATION AND SIZES. COORDINATE WITH MECHANICAL CONTRACTOR.

YD ROUTE CONTROLS TRAY BELOW POWER TRAY WITH BOTTOM AT 11'-0" OR AS HIGH AS POSSIBLE.

YE ROUTE CABLE TRAY ABOVE WATER PIPE IN THIS AREA AS HIGH AS POSSIBLE. REFER TO PROCESS PLANS FOR PIPE LOCATION AND SIZE. COORDINATE WITH PROCESS SYSTEM CONTRACTOR.

YQ APPROXIMATE WATER SERVICE ENTRY LOCATION. PROVIDE ELECTRICAL CONNECTION TO FLOW METER FM-1 INCLUDED IN WATER SERVICE ASSEMBLY. REFER TO PLUMBING PLANS AND DETAIL P012 ON SHEET 99-P702. COORDINATE WITH PLUMBING CONTRACTOR.

YR SUMP PUMP CONTROL PANEL TO SERVE DUPLEX PUMP SYSTEM, SP-1. VERIFY EXACT LOCATION AND REQUIREMENTS WITH PLUMBING CONTRACTOR PRIOR TO ROUGH-IN. PUMPS ARE SUPPLIED WITH CORD AND PLUG. ELECTRICAL CONTRACTOR TO REMOVE CORD/PLUGS AND HARD-WIRE TO CONTROL PANEL. VERIFY WARRANTY WITH PLUMBING CONTRACTOR AND PUMP MANUFACTURER PRIOR TO PLUG REMOVAL.

YW FURNISH & INSTALL THREE (3) NEMA 4X PULL BOXES WITH HINGED COVERS FOR POWER FEEDERS FROM MCCs; ONE BOX FOR EACH MCC. PULL BOXES SHALL BE A MINIMUM OF 48" WIDE, 24" DEEP, & 24" HIGH. CONNECT CONDUITS FROM MCCs INTO BACK OF BOXES. EXTEND SIX (6) 4" CONDUITS FROM TOP OF EACH BOX TO POWER CABLE TRAY WITH LONG SWEEP ELBOWS. FIELD SELECT BEST MOUNTING HEIGHT.

YX FURNISH & INSTALL ONE (1) NEMA 4X PULL BOX WITH HINGED COVER FOR DISCRETE SIGNALS & SPARE CONTROL FROM MCCs. PULL BOX SHALL BE A MINIMUM OF 48" WIDE, 24" DEEP, & 24" HIGH. CONNECT CONDUITS FROM MCCs INTO BACK OF BOX. EXTEND SIX (6) 4" CONDUITS FROM TOP OF BOX TO CONTROLS CABLE TRAY WITH LONG SWEEP ELBOWS. FIELD SELECT BEST MOUNTING HEIGHT.

YY FURNISH & INSTALL ONE (1) NEMA 4X PULL BOX WITH HINGED COVER FOR ANALOG SIGNALS FROM MCCs. PULL BOX SHALL BE A MINIMUM OF 24" WIDE, 24" DEEP, & 24" HIGH. CONNECT CONDUITS FROM MCCs INTO BACK OF BOX. EXTEND SIX (6) 4" CONDUITS FROM TOP OF BOX TO CONTROLS CABLE TRAY WITH LONG SWEEP ELBOWS. FIELD SELECT BEST MOUNTING HEIGHT.

ZG END POWER TRAY AT END OF POWER JUNCTION BOXES. CONTINUE CONTROLS TRAY AS SHOWN TO END OF CONTROLS JUNCTION BOXES.

AECOM

HANSEN ALLEN & LUCE inc

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REGISTRATION

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C	2023-04-07	ISSUED FOR BID
B	2023-01-20	ISSUED FOR 90%
A	2022-10-14	ISSUED FOR 60%

PROJECT NUMBER

AECOM Project No. - 60670884
HAL Project No. - 035.15.420

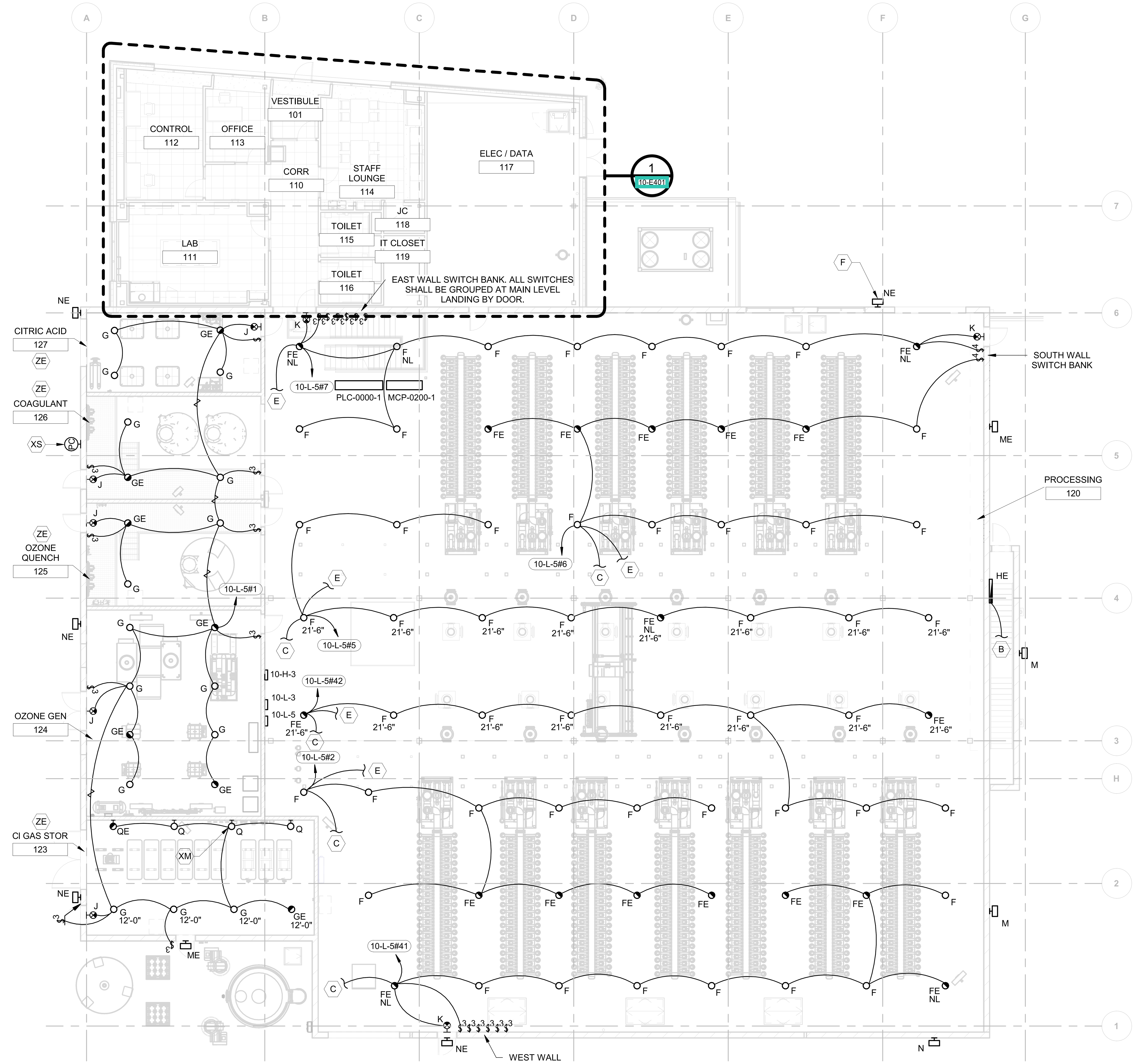
SHEET TITLE

WATER TREATMENT ELECTRICAL LOWER LEVEL POWER PLAN

DRAWING NUMBER

10-E102

ANSI D 22" x 34"
Approved: C.ADAMS
Checked: S.SHUGARS
Designer: C.SAULS
Drafter: C.SAULS
Project Manager: J.KRINKS



MAIN LEVEL LIGHTING PLAN

SCALE: 3/32" = 1'-0"

VERIFY SCALE

BAR IS ONE INCH ON ORIGINAL DRAWING

GENERAL NOTES

1. COORDINATE LIGHT FIXTURE HEIGHTS & LOCATIONS WITH OTHER DISCIPLINES AND MAKE REASONABLE ADJUSTMENTS AS NECESSARY TO AVOID CONFLICTS.
2. ALL LIGHTING CIRCUITS SHALL USE #12 WIRE AND 3/4"C UNLESS OTHERWISE NOTED.

KEYNOTES

- B TO LIGHTS BELOW. SEE SHEET 10-E101.
- C TO SWITCH BANK ON EAST WALL.
- E TO SWITCH BANK ON WEST WALL.
- F SEE SITE PLAN FOR EXTERIOR LIGHT CIRCUITING. TYPICAL.
- XM FIXTURES SHALL BE WALL-MOUNTED AND SHALL NOT EXTEND PAST THE DOUBLE DOOR THRESHOLD. CONTRACTOR SHALL VERIFY THAT FIXTURES WILL NOT INTERFERE WITH OPERATION OF LIFT/HOIST. COORDINATE MOUNTING HEIGHT WITH OTHER DISCIPLINES AND ADJUST AS NECESSARY TO AVOID PIPING/EQUIPMENT. TYPICAL FOR 'Q' AND 'QE' FIXTURE TYPES.
- XS PHOTOCELL PROVIDED WITH LIGHTING CONTROL PANEL 10-LC-1. MOUNT AT 8'-0" AFG AND AIM IN NORTHERLY DIRECTION. CONNECT TO 10-LC-1 PER MANUFACTURER'S INSTRUCTIONS.
- ZE REFER TO SPECIFICATION SECTION 26 05 33 FOR RACEWAY AND BOX TYPES REQUIRED IN CHEMICAL ROOMS.

AECOM
HANSEN ALLEN & LUCE inc ENGINEERS

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A	2022-10-14	ISSUED FOR 60%

PROJECT NUMBER

AECOM Project No. - 60670884
HAL Project No. - 035.15.420

SHEET TITLE

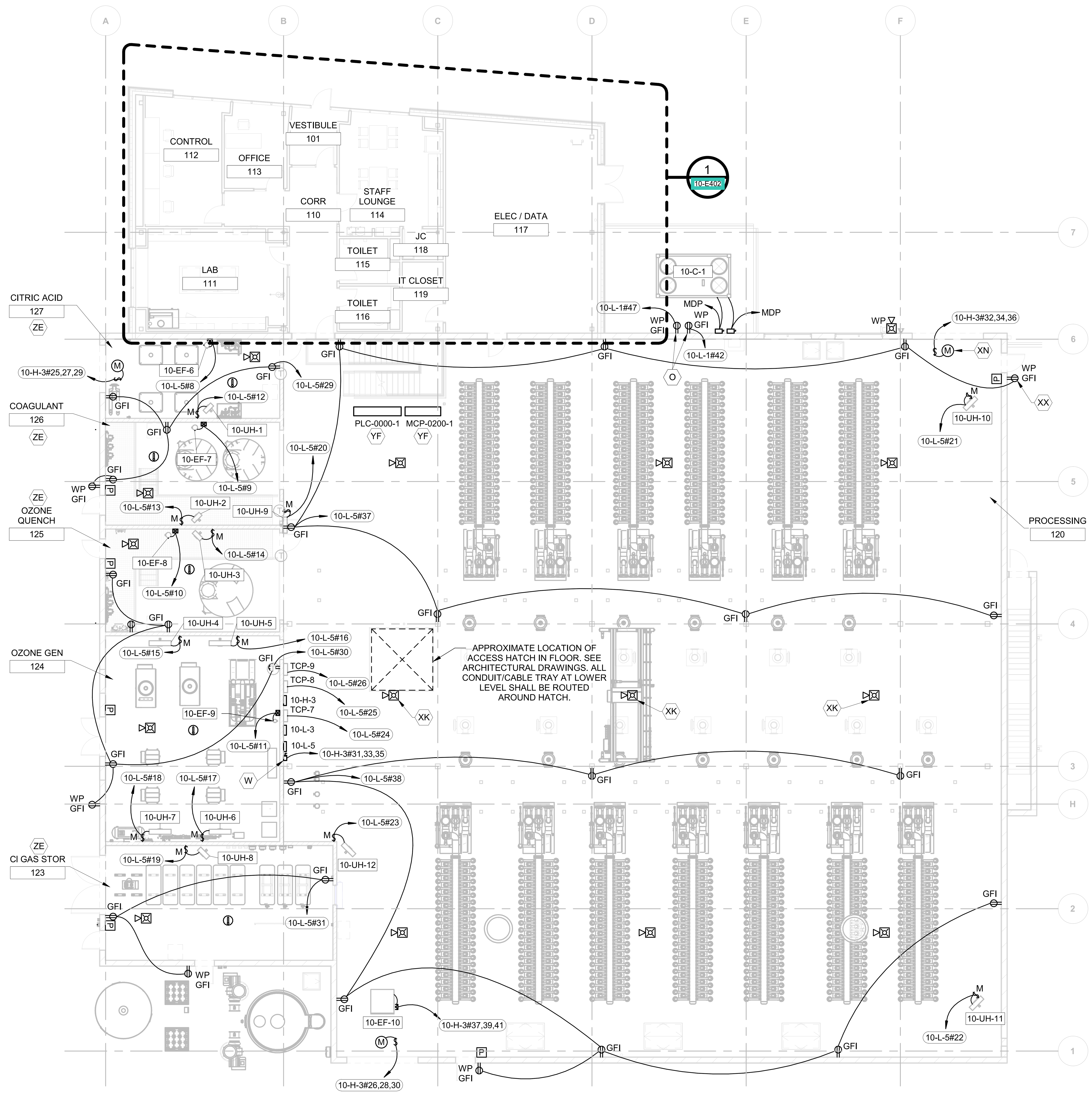
WATER TREATMENT ELECTRICAL MAIN LEVEL LIGHTING PLAN

DRAWING NUMBER

10-E103

Last Plotted: 4/5/2023 12:28:27 PM
Filename: BIM 360://CI-AMER (USA) 60670884-Provo River WTP/60670884_10-E001.rvt

ANSI D 22" x 34"
Approved: C.ADAMS
Checked: S.SHUGARS
Designer: C.SAULS
Drafter: C.SAULS
Project Manager: J.KRINKS



MAIN LEVEL POWER PLAN
SCALE: 3/32" = 1'-0"

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING

GENERAL NOTES

1. REFER TO SHEET 10-E611 FOR HVAC SCHEDULE.
2. COORDINATE LOCATIONS OF PANELS WITH OTHER DISCIPLINES. NO DUCTWORK OR PIPING IS PERMITTED ABOVE PANELS.
3. ALL RECEPTACLE CIRCUITS SHALL USE #12 WIRE AND 3/4"C UNLESS OTHERWISE NOTED.

KEYNOTES

- O RECEPTACLES TO SERVE HEAT TAPE ON CHILLER PIPES. SEE MECHANICAL PLANS FOR MORE INFORMATION.
- W PROVIDE 60/3 NON-FUSED DISCONNECT FOR BRIDGE CRANE. EXTEND CONDUIT UP TO BUSS AND CONNECT. VERIFY EXACT CONNECTION WITH APPROVED SHOP DRAWINGS AND VENDOR. PROVIDE 3-#6, #10 GND, 1"C.
- XK MOUNT FIRE ALARM DEVICE ABOVE BRIDGE CRANE AND VERIFY IT WILL NOT INTERFERE WITH BRIDGE CRANE OPERATION.
- XN OVERHEAD DOOR OPERATOR WITH PUSHBUTTON CONTROLS. ELECTRICAL CONNECTIONS, WIRING, CONDUIT, AND INSTALLATION BY ELECTRICAL CONTRACTOR. VERIFY ALL REQUIREMENTS AND LOCATIONS WITH DOOR SUPPLIER AND APPROVED SHOP DRAWINGS. TYPICAL.
- XX PROVIDE WEATHER RESISTANT, GFI RECEPTACLE WITH RECESSED, IN-USE ENCLOSURE AT 24" AFG. TYPICAL.
- YF PROVIDE FOUR 4" CONDUIT SLEEVES FROM BOTTOM OF CONTROL PANEL TO CONTROLS CABLE TRAY ON LOWER LEVEL. SEAL WITH DUCT SEAL IN CONTROL PANEL ONCE ALL CABLING IS INSTALLED. ROUTE DISCRETE AND ANALOG/NETWORK CABLING IN SEPARATE SLEEVES AS REQUIRED. REFER TO SHEET 10-E102 FOR CABLE TRAY LOCATION.
- ZE REFER TO SPECIFICATION SECTION 26 05 33 FOR RACEWAY AND BOX TYPES REQUIRED IN CHEMICAL ROOMS.

AECOM
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REGISTRATION
PROFESSIONAL ENGINEER No. 12839491-2202 CHRISTOPHER J. ADAMS STATE OF UTAH
04/07/2023

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A	2022-10-14	ISSUED FOR 60%

PROJECT NUMBER
AECOM Project No. - 60670884
HAL Project No. - 035.15.420

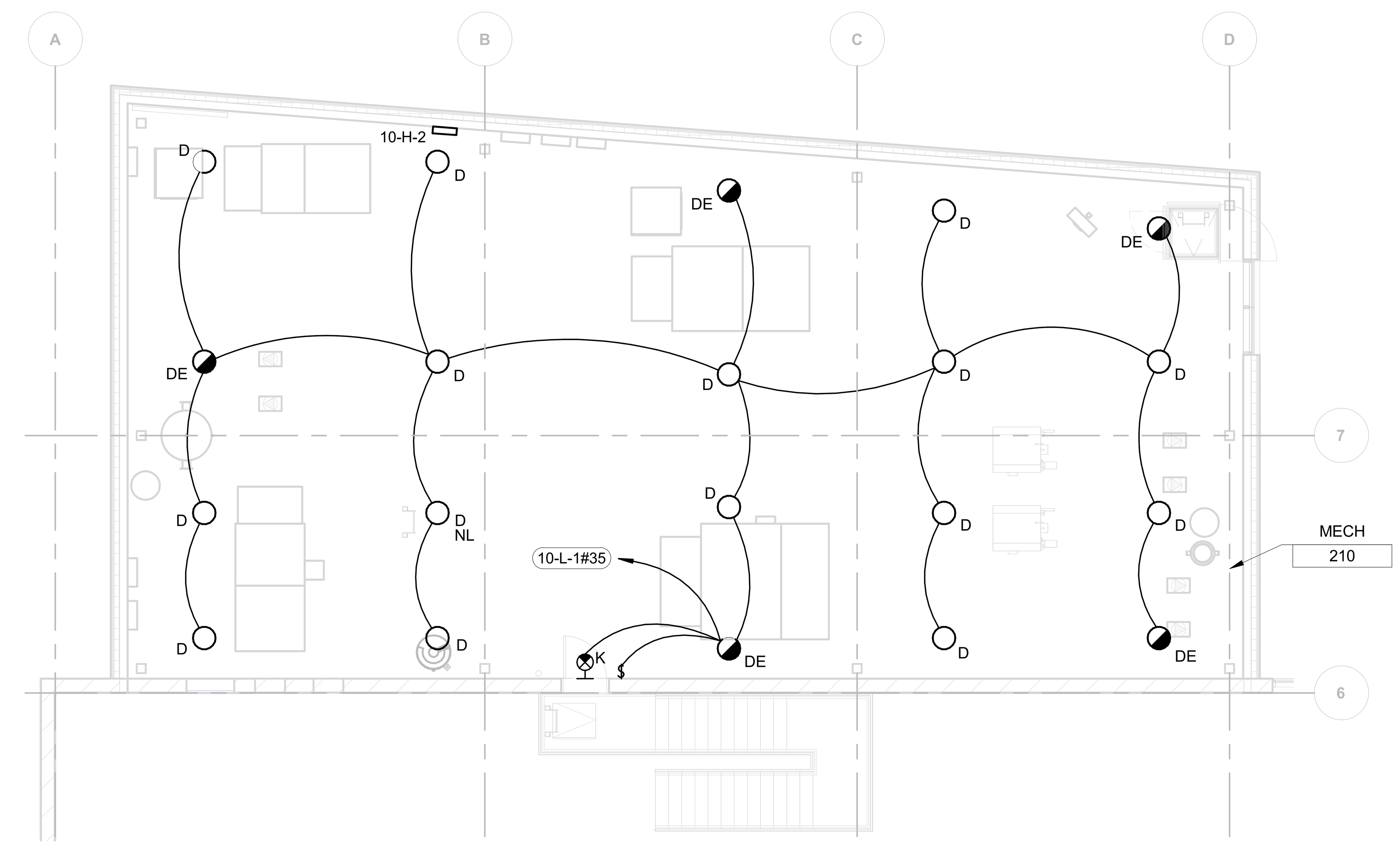
SHEET TITLE
WATER TREATMENT ELECTRICAL MAIN LEVEL POWER PLAN

DRAWING NUMBER
10-E104

Last Plotted: 4/5/2023 12:58:21 PM
Filename: BIM 360://CI-AMER (USA) 60670884-Provo River WTP/60670884_10-E001.rvt

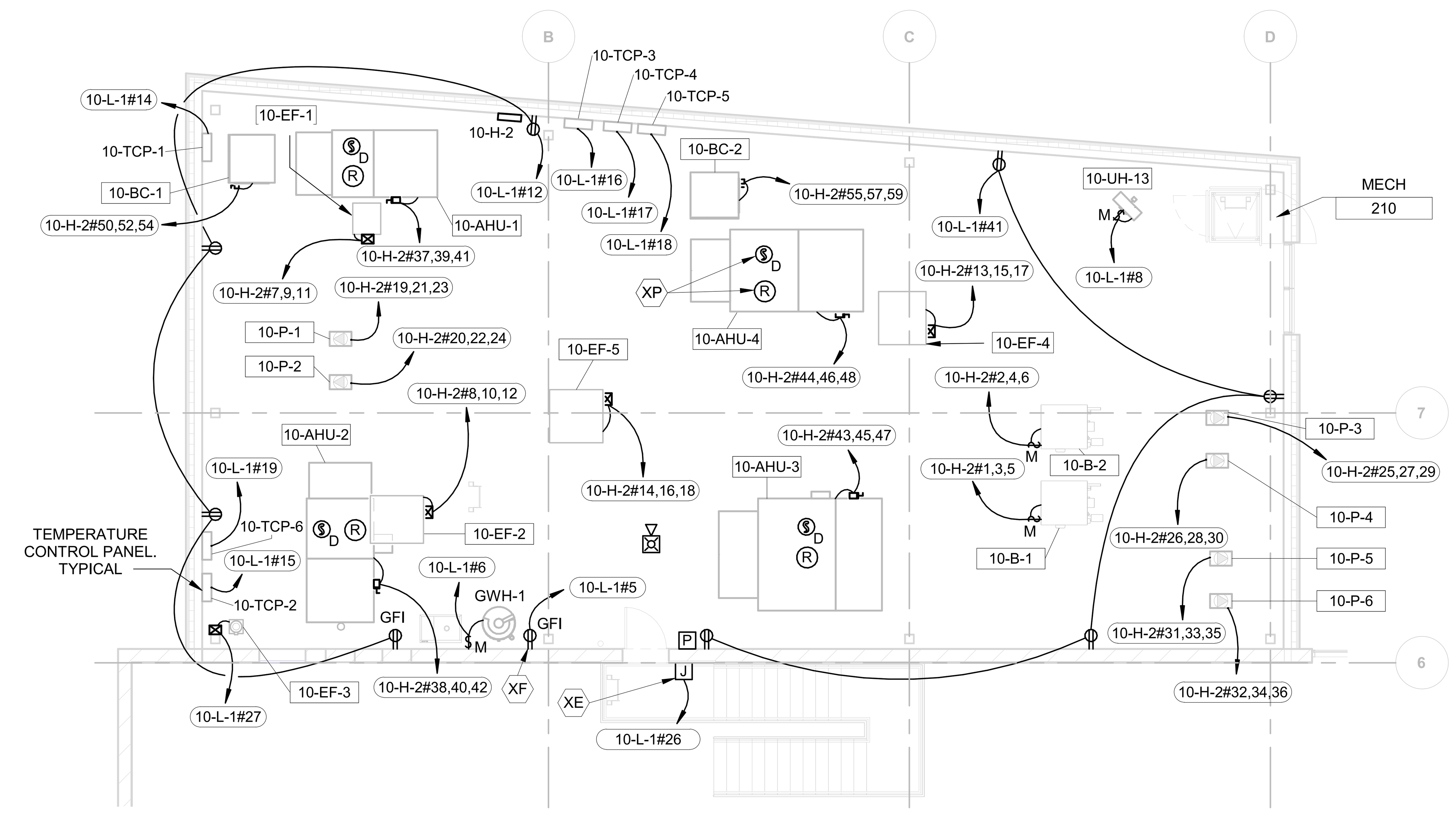
ANSI D 22" x 34"

Approved: C.ADAMS Checked: S.SHUGARS Designer: C.SAULS Drafter: C.SAULS Project Manager: J.KRINKS



SECOND LEVEL LIGHTING PLAN

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



SECOND LEVEL POWER PLAN

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

VERIFY SCALE

BAR IS ONE INCH ON ORIGINAL DRAWING

GENERAL NOTES

1. REFER TO SHEET 10-E611 FOR HVAC SCHEDULE.
2. COORDINATE LIGHT FIXTURE HEIGHTS & LOCATIONS WITH OTHER DISCIPLINES AND MAKE REASONABLE ADJUSTMENTS AS NECESSARY TO AVOID CONFLICTS.
3. COORDINATE LOCATIONS OF PANELS WITH OTHER DISCIPLINES. NO DUCTWORK OR PIPING IS PERMITTED ABOVE PANELS.
4. ALL LIGHTING CIRCUITS SHALL USE #12 WIRE AND 3/4"C UNLESS OTHERWISE NOTED.
5. ALL RECEPTACLE CIRCUITS SHALL USE #12 WIRE AND 3/4"C UNLESS OTHERWISE NOTED.

KEYNOTES

- XE PROVIDE POWER AS NEEDED FOR BOILER EMERGENCY SHUT-OFF CIRCUITS. VERIFY REQUIREMENTS WITH MECHANICAL CONTRACTOR.
- XF RECEPTACLE TO SERVE CIRCULATION PUMP CP-1. VERIFY EXACT LOCATION WITH PLUMBING CONTRACTOR.
- XP PROVIDE DUCT DETECTOR AND SHUT-DOWN RELAY. CONNECT TO FIRE ALARM SYSTEM. TYPICAL.

AECOM

HANSEN ALLEN & LUCE INC ENGINEERS

PROJECT

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REGISTRATION

PROFESSIONAL ENGINEER No. 12339491-2202 CHRISTOPHER J. ADAMS STATE OF UTAH 04/07/2023

ISSUE/REVISION

I/R	DATE	DESCRIPTION
C	2023-04-07	ISSUED FOR BID
B	2023-01-20	ISSUED FOR 90%
A	2022-10-14	ISSUED FOR 60%

PROJECT NUMBER

AECOM Project No. - 60670884
HAL Project No. - 035.15.420

SHEET TITLE

WATER TREATMENT ELECTRICAL SECOND LEVEL LIGHTING & POWER PLANS

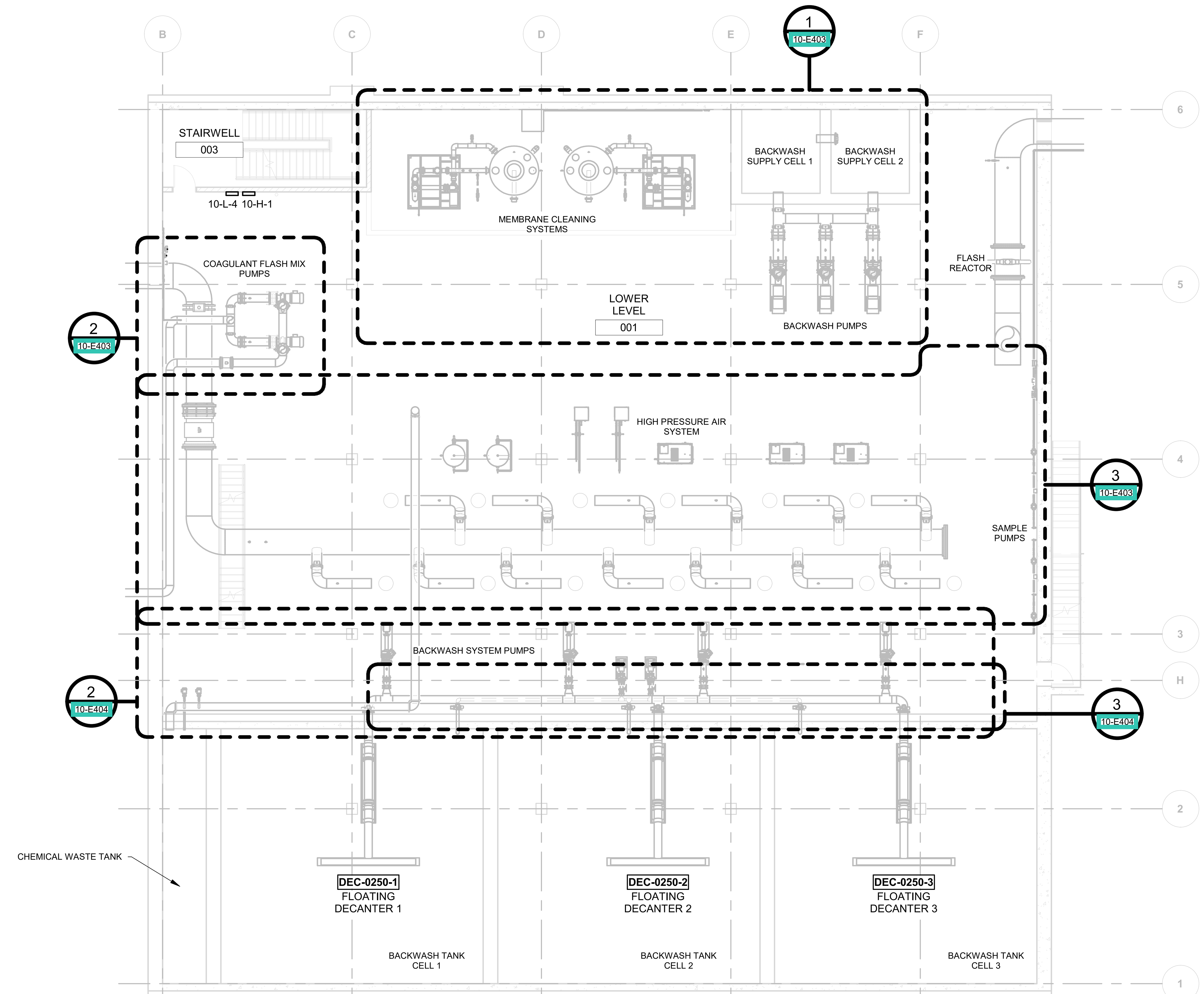
DRAWING NUMBER

10-E105

Last Plotted: 4/5/2023 12:58:23 PM
Filename: BIM 360://CI-AMER (USA) 60670884-Provo River WTP/60670884_10-E001.rvt

ANSI D 22" x 34"
Approved: C.ADAMS
Checked: S.SHUGARS
Designer: C.SAULS
Drafter: C.SAULS
Project Manager: J.KRINKS

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING



LOWER LEVEL PROCESS SYSTEMS ELECTRICAL POWER PLAN

SCALE: 3/32" = 1'-0"

AECOM
HANSEN ALLEN & LUCE INC
ENGINEERS

PROJECT

PROVO RIVER WATER TREATMENT PLANT

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REGISTRATION

PROFESSIONAL ENGINEER
No. 12839491-2202
CHRISTOPHER J. ADAMS
STATE OF UTAH
04/07/2023

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PROJECT NUMBER

AECOM Project No. - 60670884
HAL Project No. - 035.15.420

SHEET TITLE

WATER TREATMENT ELECTRICAL LOWER LEVEL PROCESSING SYSTEMS POWER PLAN

DRAWING NUMBER

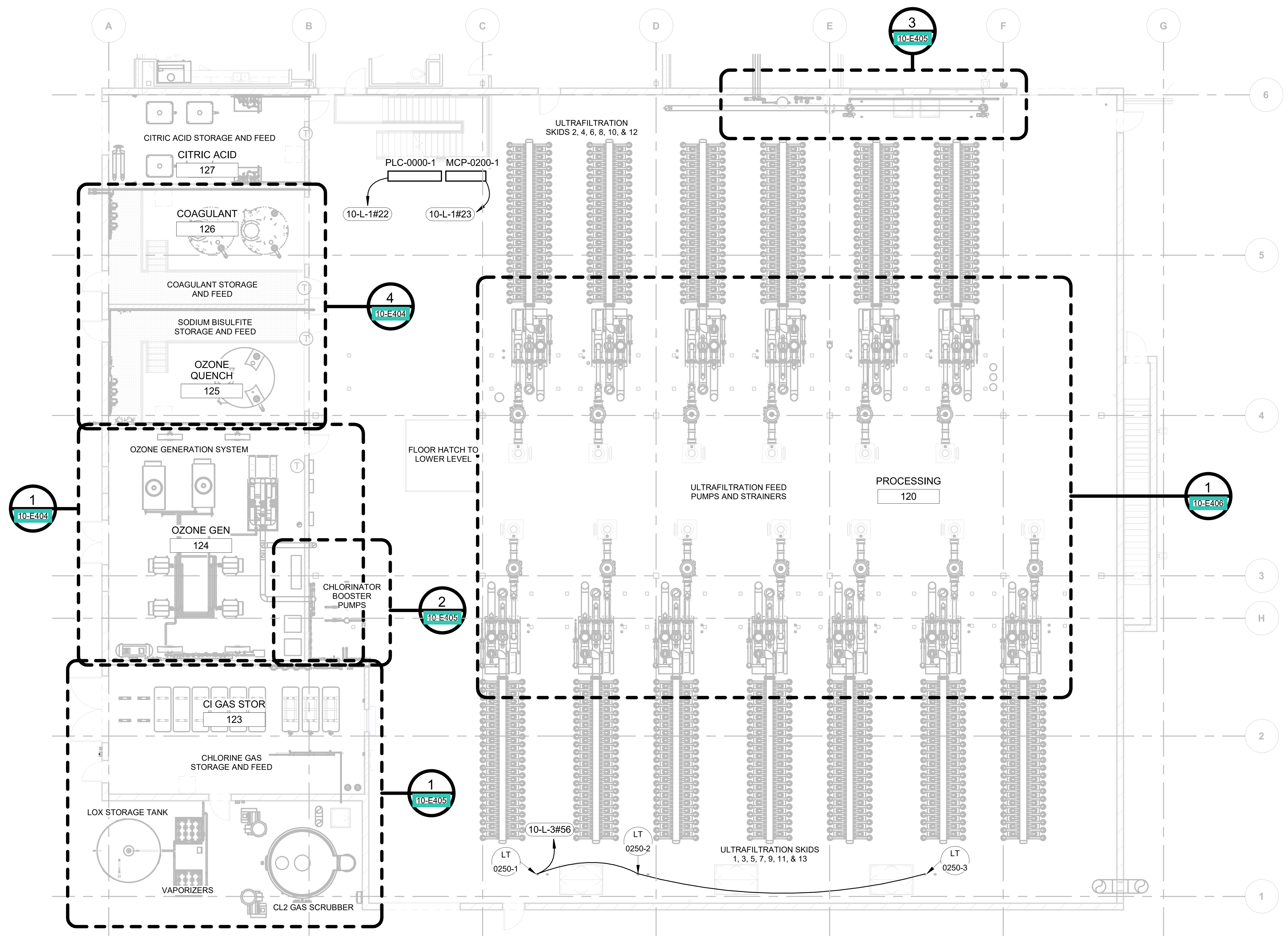
10-E111

Last Plotted: 4/5/2023 12:30:19 PM
Filename: BIM 360://CI-AMER (USA) 60670884-Provo River WTP/60670884_10-E001.rvt

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING

GENERAL NOTES

1. REFER TO SHEETS 10-E102 & 10-E402 FOR PANEL LOCATIONS.



MAIN LEVEL PROCESS SYSTEMS ELECTRICAL POWER PLAN
SCALE: 3/32" = 1'-0"

AECOM
HANSEN ALLEN & LUCE INC ENGINEERS

PROJECT
PROVO RIVER WATER TREATMENT PLANT

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PROJECT NUMBER
AECOM Project No. - 60670884
HAL Project No. - 035.15.420

SHEET TITLE
WATER TREATMENT ELECTRICAL MAIN LEVEL PROCESSING SYSTEMS POWER PLAN

DRAWING NUMBER
10-E112

ANSI D 22" x 34"
Approved: C.ADAMS
Checked: S.SHUGARS
Designer: Z.HARPER
Drafter: Z.HARPER
Project Manager: J.KRINKS

VERIFY SCALE
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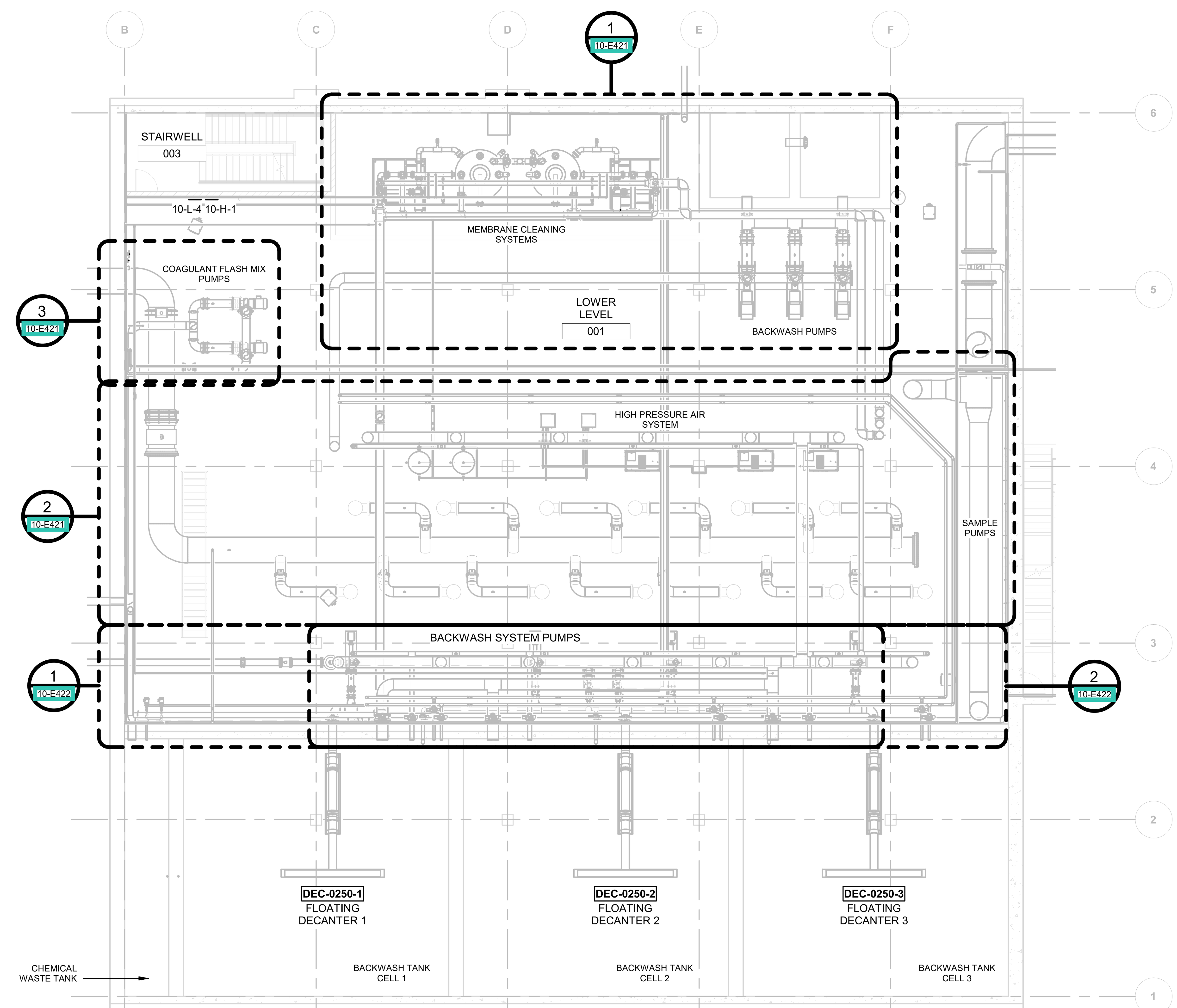

LOWER LEVEL PROCESS SYSTEMS I&C PLAN
SCALE: 3/32" = 1'-0"

AECOM
HANSEN ALLEN & LUCE inc
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HAL Project No. - 035.15.420

SHEET TITLE
WATER TREATMENT ELECTRICAL LOWER LEVEL PROCESSING SYSTEMS I&C PLAN

DRAWING NUMBER
10-E121

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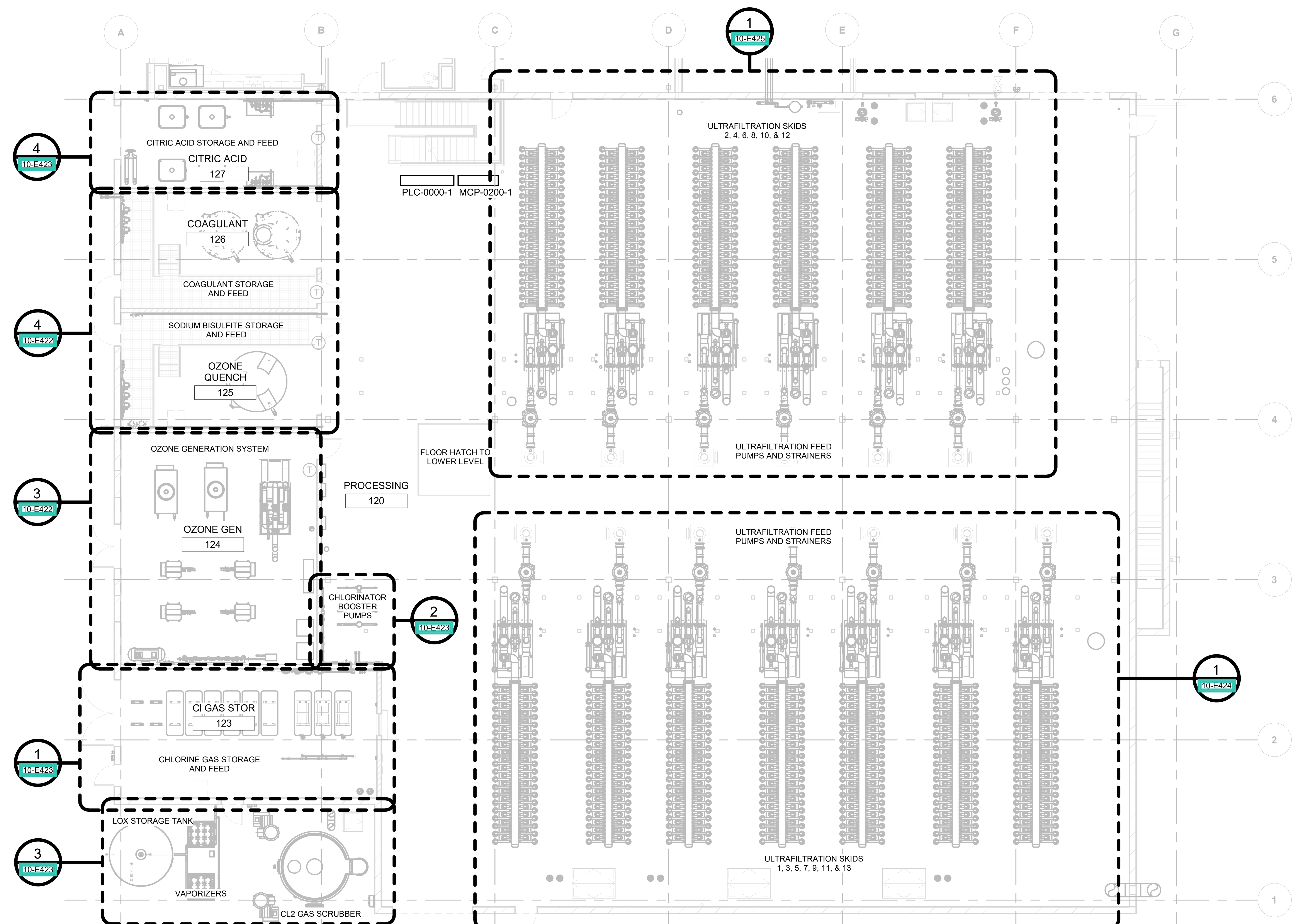

MAIN LEVEL PROCESS SYSTEMS
I&C PLAN

SCALE: 3/32" = 1'-0"

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING

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PROFESSIONAL ENGINEER
No. 12839491-2202
CHRISTOPHER J. ADAMS
STATE OF UTAH
04/07/2023

ISSUE/REVISION

I/R	DATE	DESCRIPTION
B	2023-04-07	ISSUED FOR BID
A	2023-01-20	ISSUED FOR 90%

PROJECT NUMBER
AECOM Project No. - 60670884
HAL Project No. - 035.15.420

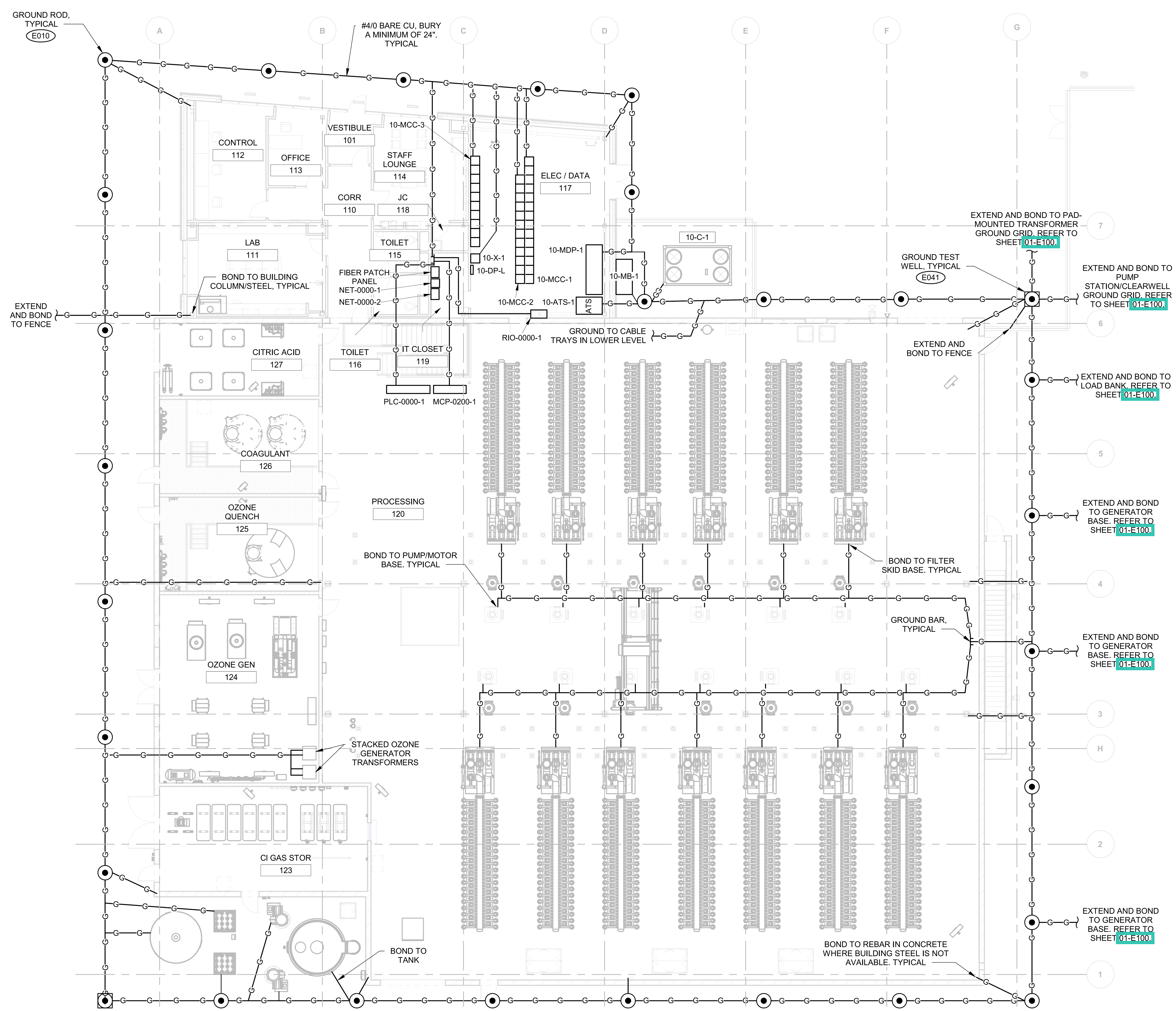
SHEET TITLE
WATER TREATMENT ELECTRICAL MAIN LEVEL PROCESSING SYSTEMS I&C PLAN

DRAWING NUMBER
10-E122

ANSI D 22" x 34"
Approved: C.ADAMS
Checked: S.SHUGARS
Designer: Z.HARPER
Drafter: Z.HARPER
Project Manager: J.KRINKS
Last Plotted: 4/5/2023 12:33:50 PM
Filename: BIM 360://CI-AMER (USA) 60670884-Provo River WTP/60670884_10-E001.rvt

ANSI D 22" x 34"
Approved: C.ADAMS
Checked: S.SHUGARS
Designer: C.SAULS
Drafter: C.SAULS
Project Manager: J.KRINKS

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING



ELECTRICAL GROUNDING PLAN
SCALE: 3/32" = 1'-0"

GENERAL NOTES

1. REFER TO SHEET 01-E101 FOR LIGHTNING PROTECTION SYSTEM. CONNECT TO LPS AS REQUIRED.

AECOM
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PROJECT

PROVO RIVER WATER TREATMENT PLANT

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C	2023-04-07	ISSUED FOR BID
B	2023-01-20	ISSUED FOR 90%
A	2022-10-14	ISSUED FOR 60%

PROJECT NUMBER

AECOM Project No. - 60670884
HAL Project No. - 035.15.420

SHEET TITLE

WATER TREATMENT ELECTRICAL GROUNDING PLAN

DRAWING NUMBER

10-E131

Last Plotted: 4/5/2023 12:35:09 PM
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ANSI D 22" x 34"
Approved: C.ADAMS
Checked: S.SHUGARS
Designer: C.SAULS
Drafter: C.SAULS
Project Manager: J.KRINKS

VERIFY SCALE
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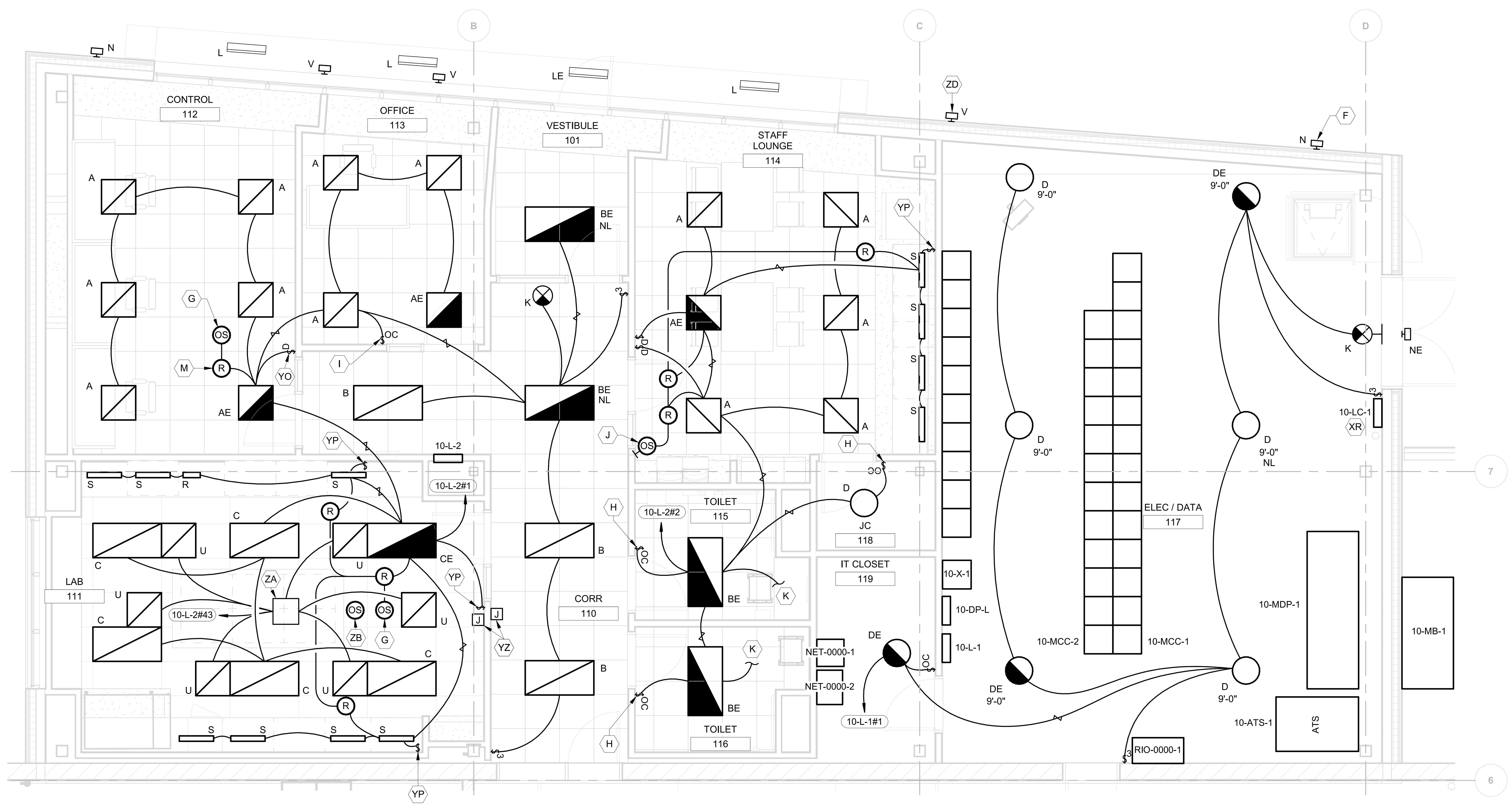

ENLARGED MAIN LEVEL LIGHTING PLAN - OFFICE & ELECTRICAL ROOM

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

GENERAL NOTES

1. COORDINATE LIGHT FIXTURE HEIGHTS & LOCATIONS WITH OTHER DISCIPLINES AND MAKE REASONABLE ADJUSTMENTS AS NECESSARY TO AVOID CONFLICTS.
2. ALL LIGHTING CIRCUITS SHALL USE #12 AND 3/4"C UNLESS OTHERWISE NOTED.

KEYNOTES

- F SEE SITE PLAN FOR EXTERIOR LIGHT CIRCUITING. TYPICAL.
- G LOW-VOLTAGE DUAL-TECHNOLOGY CEILING SENSOR.
- H LINE-VOLTAGE PASSIVE INFRARED WALL SENSOR SWITCH.
- I LINE-VOLTAGE DUAL-TECHNOLOGY WALL SENSOR DIMMER.
- J LOW-VOLTAGE DUAL-TECHNOLOGY CORNER-MOUNT SENSOR. AIM FOR MAXIMUM COVERAGE OF STAFF LOUNGE WHILE AVOIDING FALSE TRIGGERS FROM CORRIDOR.
- K TO EXHAUST FAN SERVING THIS SPACE.
- M POWER PACK CONSISTING OF A TRANSFORMER AND RELAY PER OCCUPANCY SENSOR MANUFACTURER'S RECOMMENDATIONS. TYPICAL.
- XR EXTERIOR LIGHTING CONTROL PANEL. REFER TO SPECIFICATIONS FOR REQUIREMENTS. CONNECT TO LIGHTING CONTACTOR 20-LC-1, REFER TO SHEET 10-E402. SEE 20-SERIES SHEETS FOR MORE INFORMATION ON THE CONTACTOR.
- YO LOW-VOLTAGE MOMENTARY SLIDE DIMMER WITH PRESET ON/OFF FOR MANUAL-ON OPERATION. TYPICAL.
- YP LOW-VOLTAGE MOMENTARY SWITCH FOR MANUAL-ON OPERATION.
- YZ WALL-MOUNTED UV SYSTEM TOUCH-SCREEN CONTROLS.
- ZA UV SYSTEM CONTROL BOX LOCATED ABOVE ACCESSIBLE CEILING.
- ZB UV SYSTEM OCCUPANCY SENSOR.
- ZD LOCATE 2'-0" ABOVE TOP OF BUILDING SIGNAGE. AIM FIXTURE FOR EVEN ILLUMINATION OF SIGNAGE. SEE ARCHITECTURAL ELEVATIONS FOR APPROXIMATE SIGNAGE LOCATIONS. TYPICAL FOR TYPE 'V' FIXTURES.

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PROJECT NUMBER
AECOM Project No. - 60670884
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SHEET TITLE
WATER TREATMENT ELECTRICAL ENLARGED MAIN LEVEL LIGHTING PLAN

DRAWING NUMBER
10-E401

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ANSI D 22" x 34"
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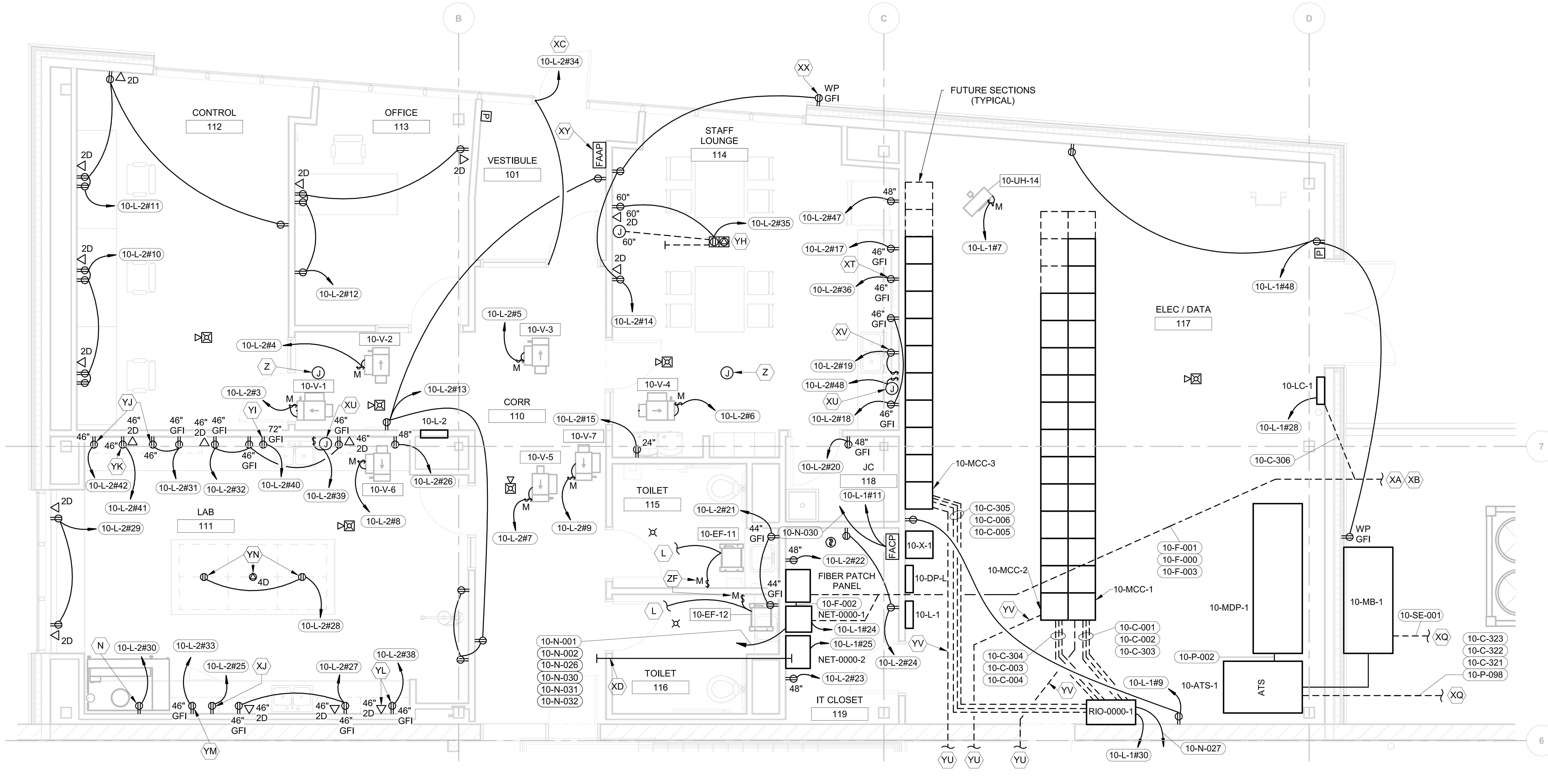
Designer: C.SAULS
Drafter: C.SAULS
Project Manager: J.KRINKS



ENLARGED MAIN LEVEL POWER PLAN - OFFICE & ELECTRICAL ROOM

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

VERIFY SCALE

BAR IS ONE INCH ON ORIGINAL DRAWING

GENERAL NOTES

1. COORDINATE LOCATIONS OF PANELS WITH OTHER DISCIPLINES. NO DUCTWORK OR PIPING IS PERMITTED ABOVE PANELS.
2. ALL RECEPTACLE CIRCUITS SHALL USE #12 WIRE AND 3/4"C UNLESS OTHERWISE NOTED.
3. REFER TO SHEET 10-E611 FOR HVAC SCHEDULE.

KEYNOTES

- L CONNECT TO LIGHTING CIRCUIT SERVING THIS SPACE.
- N RECEPTACLE TO SERVE FUME HOOD. PROVIDE CORD AND PLUG KIT FOR HOOD IF NEEDED; CONFIRM WITH SUPPLIER.
- XA ROUTE 10-F-000 TO PROVO POWER POLE PL6144 FOR CONNECTION TO CITY FIBER NETWORK. SEE SHEET 01-E100 FOR CONTINUATION.
- XB ROUTE 10-F-001, 10-F-003, AND 10-C-306 TO PUMP STATION ELECTRICAL ROOM. SEE SHEET 01-E100 FOR CONTINUATION.
- XC PROVIDE POWER FOR ELECTRIC STRIKE. SEE SECURITY PLANS FOR MORE DETAILS.
- XD PROVIDE (4) 2"C SLEEVES WITH PULL STRINGS ABOVE CEILING FOR DATA CABLE ROUTING.
- XJ RECEPTACLE TO SERVE UNDERCOUNTER REFRIGERATOR.
- XQ SEE SHEET 01-E100 FOR FEEDER CONTINUATION.
- XT MICROWAVE RECEPTACLE. VERIFY LOCATION WITH OWNER.
- XU DISHWASHER CONNECTION. PROVIDE WITH THERMAL ELEMENT SWITCH. INSTALL SWITCH UNDER KITCHEN SINK.
- XV GARBAGE DISPOSAL RECEPTACLE. LOCATE RECEPTACLE UNDER KITCHEN SINK AND SWITCH ABOVE COUNTER AT 46".
- XX PROVIDE WEATHER RESISTANT, GFI RECEPTACLE WITH RECESSED, IN-USE ENCLOSURE AT 24" AFG. TYPICAL.
- XY FIRE ALARM ANNUNCIATOR PANEL. CONNECT TO FIRE ALARM CONTROL PANEL.
- YH RECESSED FLOOR BOX, WIREMOLD RFB4-CI OR EQUAL, WITH TWO NEMA 5-20 DUPLEX RECEPTACLES, COMMUNICATION BRACKETS, AND BLANK COVER. VERIFY LOCATION AND FINISH WITH ARCHITECT. ROUTE 1-1 ¼" CONDUIT TO NEAREST WALL AND TO ABOVE ACCESSIBLE CEILING FOR TELECOM CABLING. ROUTE 1-1 1/4" CONDUIT TO JUNCTION BOX BEHIND TV AND THEN TO ABOVE ACCESSIBLE CEILING. TYPICAL.
- YI RECEPTACLE TO SERVE WALL-MOUNTED WATER PURIFICATION SYSTEM DI-1. VERIFY EXACT HEIGHT AND LOCATION WITH PLUMBING CONTRACTOR PRIOR TO ROUGH-IN.
- YJ RECEPTACLES TO SERVE INCUBATOR AND VIEWING CABINET. VERIFY EXACT LOCATION WITH ARCHITECT/OWNER PRIOR TO ROUGH-IN.
- YK RECEPTACLE TO SERVE SAMPLE SEALER. VERIFY EXACT LOCATION WITH ARCHITECT/OWNER PRIOR TO ROUGH-IN.
- YL RECEPTACLE AND DATA OUTLET TO SERVE TOC ANALYZER. VERIFY EXACT LOCATION WITH ARCHITECT/OWNER PRIOR TO ROUGH-IN.
- YM RECEPTACLE TO SERVE TDS OVEN. VERIFY EXACT LOCATION WITH ARCHITECT/OWNER PRIOR TO ROUGH-IN.
- YN PROVIDE SURFACE-MOUNTED TOMBSTONE STYLE RECEPTACLE AND DATA OUTLET AND MOUNT TO SURFACE OF ISLAND. RECEPTACLE TOMBSTONES SHALL HAVE ONE DUPLEX ON EACH SIDE WHILE THE DATA TOMBSTONE SHALL HAVE TWO DATA DROPS ON EACH SIDE.
- YU SEE SHEET 10-E102 FOR CONTINUATION.
- YV EXTEND NINE (9) 4" CONDUITS TO PULL BOXES IN LOWER LEVEL FOR ROUTING OF FEEDERS BETWEEN MCC & CABLE TRAY. SIX (6) CONDUITS ARE FOR POWER AND THREE (3) ARE FOR CONTROLS. IT IS AT THE DISCRETION OF THE CONTRACTOR TO LAY OUT CONDUITS UNDER MCC FOR BEST ROUTING OF CABLES. FOR CONTROLS, ROUTE DISCRETE CABLES IN ONE, ANALOG CABLES IN ONE, AND ONE SPARE.
- Z CEILING-MOUNTED J-BOX WITH DUPLEX RJ45 RECEPTACLE FOR WIRELESS ACCESS POINT. STUB 1-2"C FROM J-BOX LOCATION TO CORRIDOR ABOVE CEILING. ROUTE TWO CAT 6A TO NETWORK CABINET NET-0000-1.
- ZF LOCATE SWITCH ABOVE ACCESSIBLE CEILING.

AECOM

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B	2022-10-14	ISSUED FOR 60%
A	2022-07-01	ISSUED FOR 30%

PROJECT NUMBER

AECOM Project No. - 60670884
HAL Project No. - 035.15.420

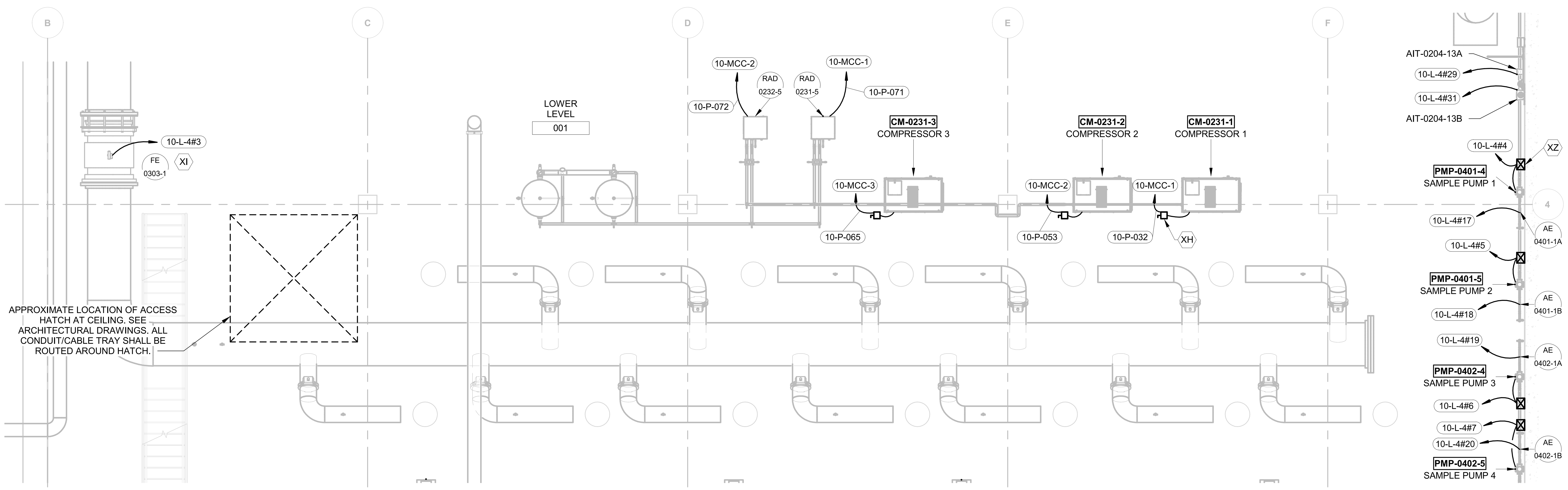
SHEET TITLE

WATER TREATMENT ELECTRICAL ENLARGED MAIN LEVEL POWER PLAN

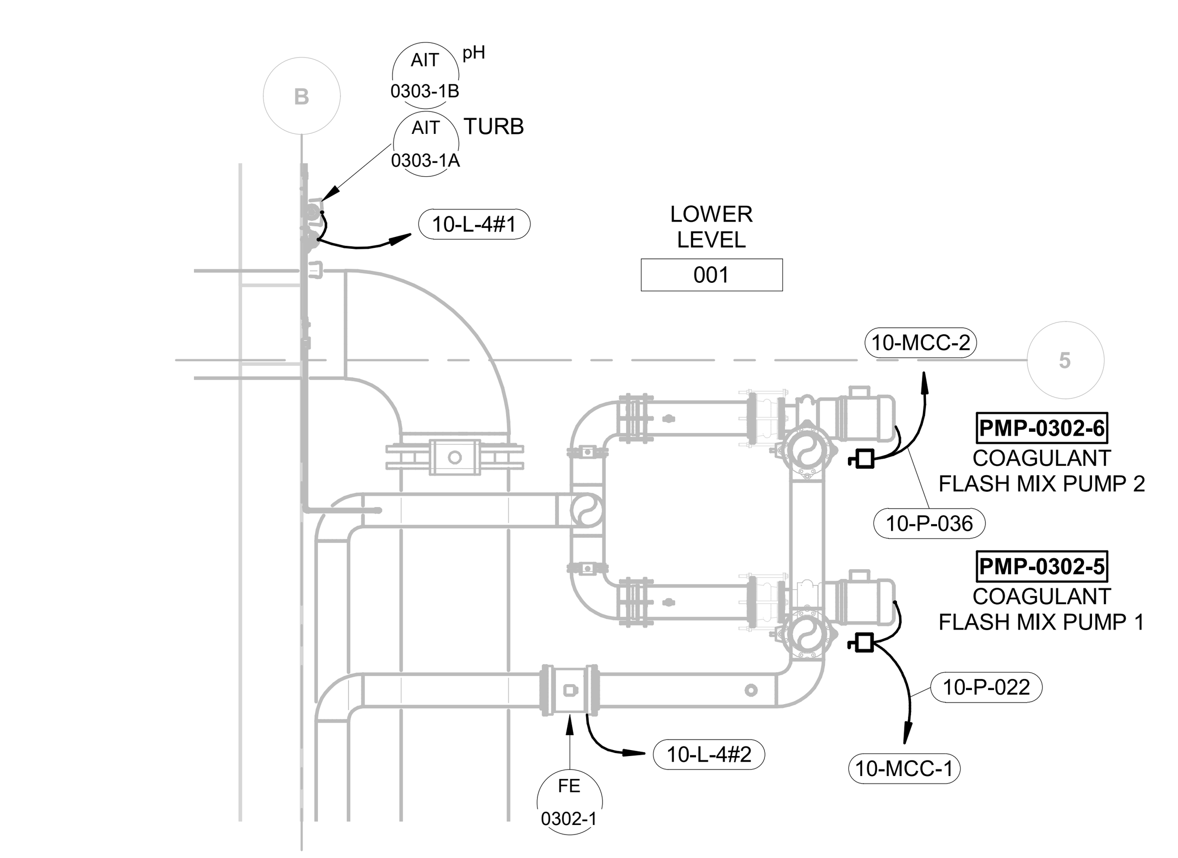
DRAWING NUMBER

10-E402

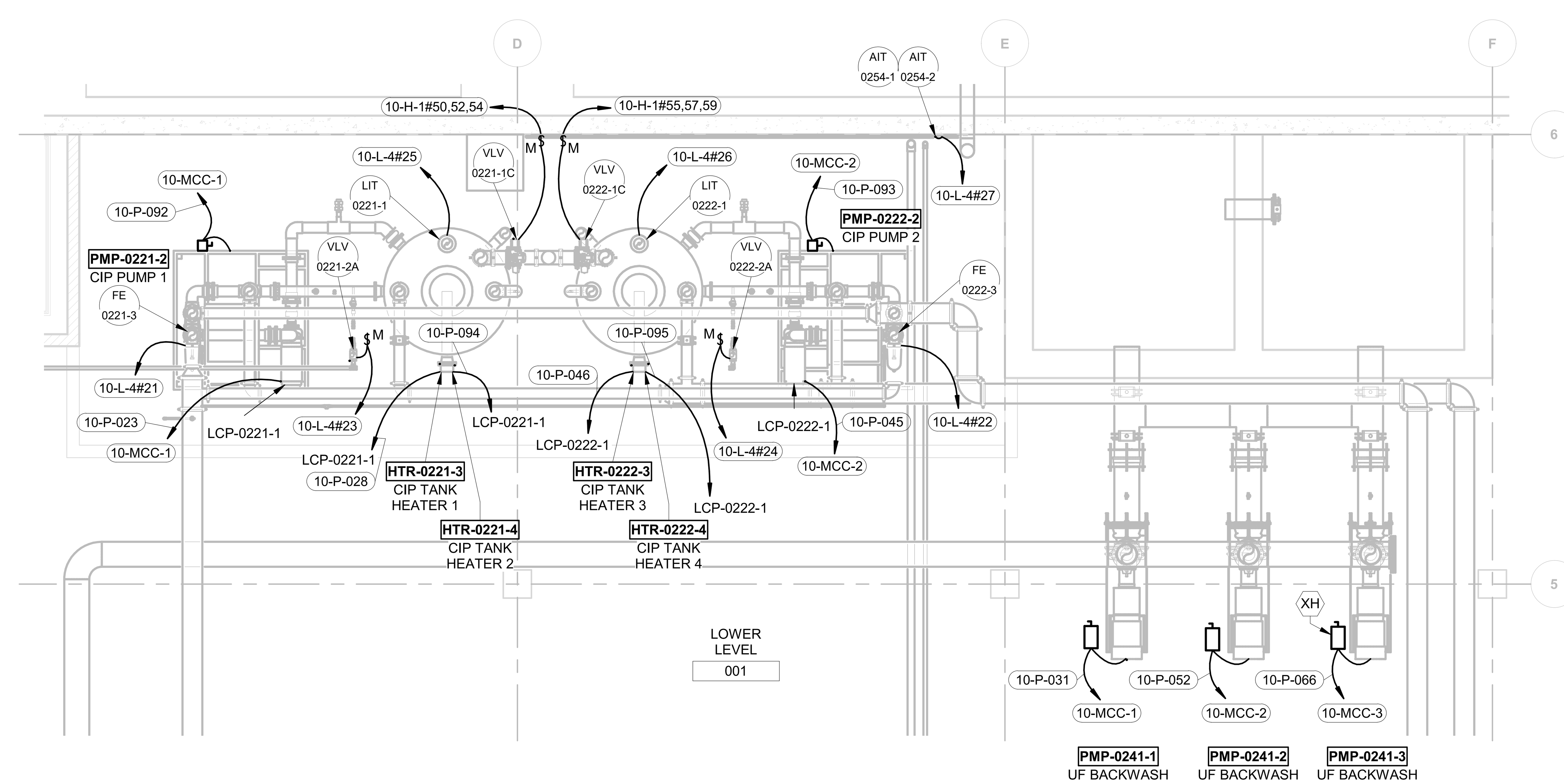
ANSI D 22" x 34"
Approved: C.ADAMS
Checked: S.SHUGARS
Designer: C.SAULS
Drafter: C.SAULS
Project Manager: J.KRINKS



3 ENLARGED PROCESS POWER PLAN - HIGH PRESSURE AIR SYSTEM & SAMPLE PUMPS
10-E111 SCALE: 3/16" = 1'-0"



2 ENLARGED PROCESS POWER PLAN - COAGULANT FLASH MIX PUMPS
10-E111 SCALE: 3/16" = 1'-0"



1 ENLARGED PROCESS POWER PLAN - MEMBRANE CLEANING SYSTEM & BACKWASH PUMPS
10-E111 SCALE: 3/16" = 1'-0"

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING

GENERAL NOTES

1. REFER TO SHEET 10-E102 FOR PANEL LOCATIONS.
2. REFER TO SHEET 10-E402 FOR MCC LOCATIONS.
3. REFER TO SHEET 10-E102 FOR CABLE TRAY LOCATION.

KEYNOTES

XH SEE EQUIPMENT PEDESTAL MOUNTING DETAIL FOR MOUNTING INSTRUCTIONS, SHEET 99-E704, TYPICAL.
XI GROUND FLOW METER PER DETAIL E033, SHEET 99-E703.
XZ PROVIDE 120V, COMBINATION NEMA 1 STARTER WITH BREAKER. REFER TO CONTROL DIAGRAM ON SHEET 10-E605, TYPICAL FOR SAMPLE PUMPS.

AECOM
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AECOM Project No. - 60670884
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SHEET TITLE
WATER TREATMENT ELECTRICAL ENLARGED PROCESS SYSTEMS POWER PLANS

DRAWING NUMBER
10-E403

Last Plotted: 4/5/2023 12:35:40 PM
Filename: BIM 360://CI-AMER (USA) 60670884-Provo River WTP/60670884_10-E001.rvt

ANSI D 22" x 34"

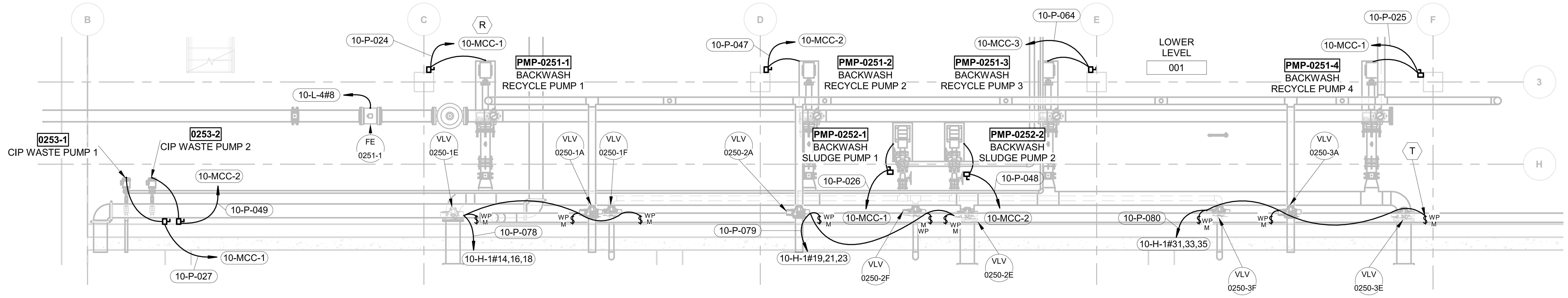
Approved: C.ADAMS

Checked: S.SHUGARS

Designer: C.SAULS

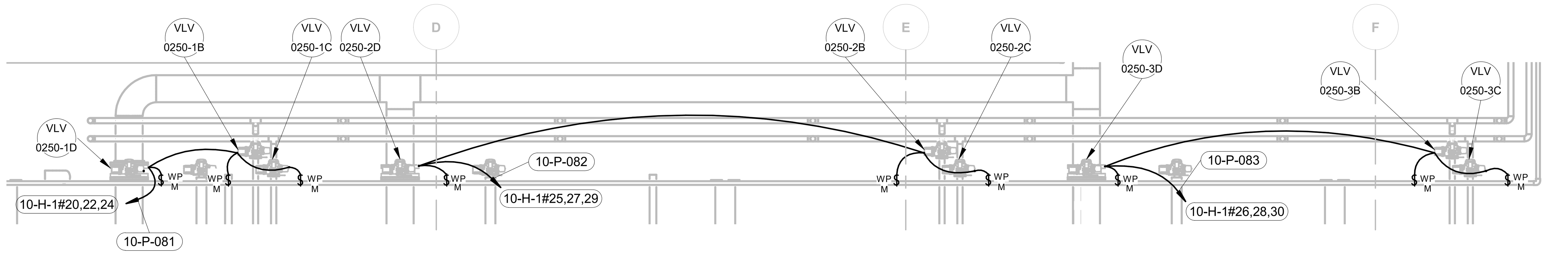
Drafter: C.SAULS

Project Manager: J.KRINKS



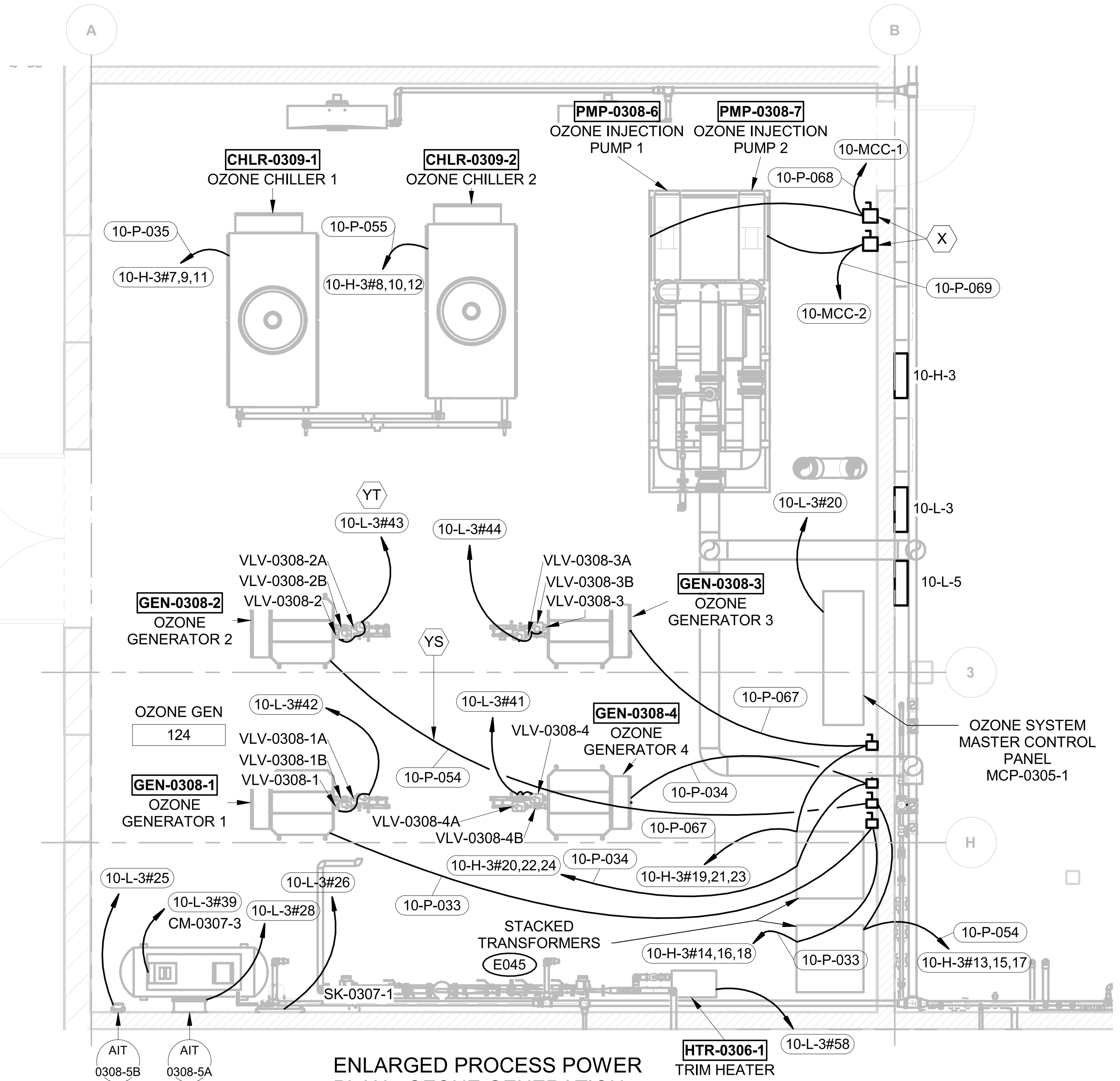
ENLARGED PROCESS POWER PLAN - BACKWASH SYSTEM PUMPS 1

2 10-E111 SCALE: 3/16" = 1'-0"



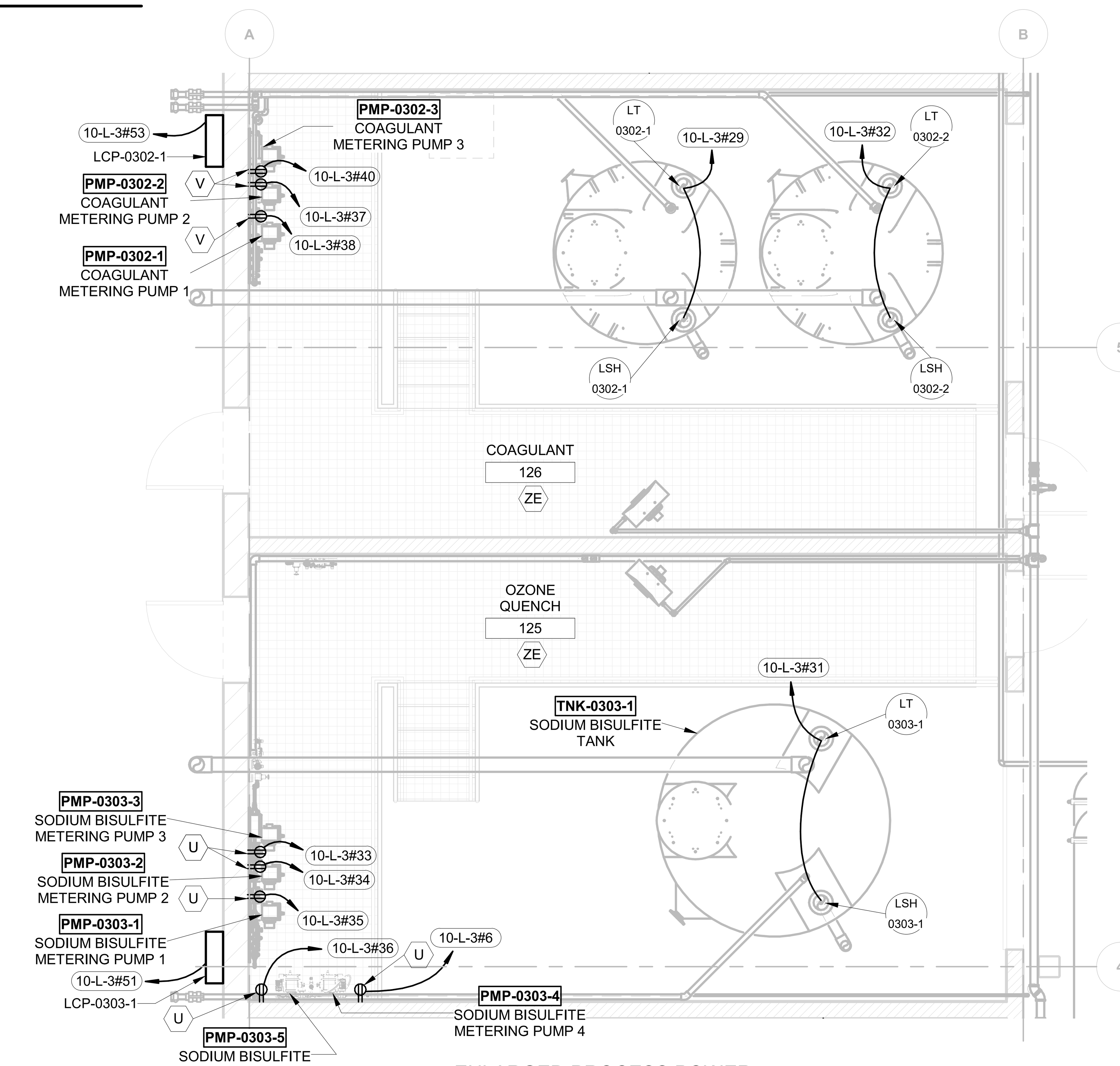
ENLARGED PROCESS POWER PLAN - BACKWASH SYSTEM PUMPS 2

3 10-E111 SCALE: 3/16" = 1'-0"



ENLARGED PROCESS POWER PLAN - OZONE GENERATION SYSTEM

1 10-E112 SCALE: 1/4" = 1'-0"



ENLARGED PROCESS POWER PLAN - COAGULANT & SODIUM BISULFITE STORAGE & FEED

4 10-E112 SCALE: 1/4" = 1'-0"

VERIFY SCALE

BAR IS ONE INCH ON ORIGINAL DRAWING

GENERAL NOTES

1. REFER TO SHEET 10-E102 & 10-E104 FOR PANEL LOCATIONS.
2. REFER TO SHEET 10-E402 FOR MCC LOCATIONS.

KEYNOTES

- R CONNECT WITH WFC. EXTEND UP AND ROUTE TO CABLE TRAY. TYPICAL.
- T PROVIDE A MANUAL MOTOR SWITCH, MOUNT ON WALL, AND CONNECT WITH WFC. TYPICAL.
- U DUPLEX RECEPTACLE WITH GFI PROTECTION TO SERVE SODIUM BISULFITE METERING PUMP.
- V DUPLEX RECEPTACLE WITH GFI PROTECTION TO SERVE COAGULANT METERING PUMP.
- X PROVIDE 100/3 DISCONNECT WITH AUXILIARY RELAY.
- YS ROUTE UNDER SLAB. TYPICAL FOR OZONE GENERATORS.
- YT PROVIDE MOTOR-RATED SWITCH FOR EACH VALVE IN THIS SPACE. TYPICAL.
- ZE REFER TO SPECIFICATION SECTION 26 05 33 FOR RACEWAY AND BOX TYPES REQUIRED IN CHEMICAL ROOMS.

AECOM

HANSEN ALLEN & LUCE INC ENGINEERS

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SHEET TITLE

WATER TREATMENT ELECTRICAL ENLARGED PROCESS SYSTEMS POWER PLANS

DRAWING NUMBER

10-E404

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ANSI D 22" x 34"

Approved: C.ADAMS

Checked: S.SHUGARS

Designer: C.SAULS

Drafter: C.SAULS

Project Manager: J.KRINKS

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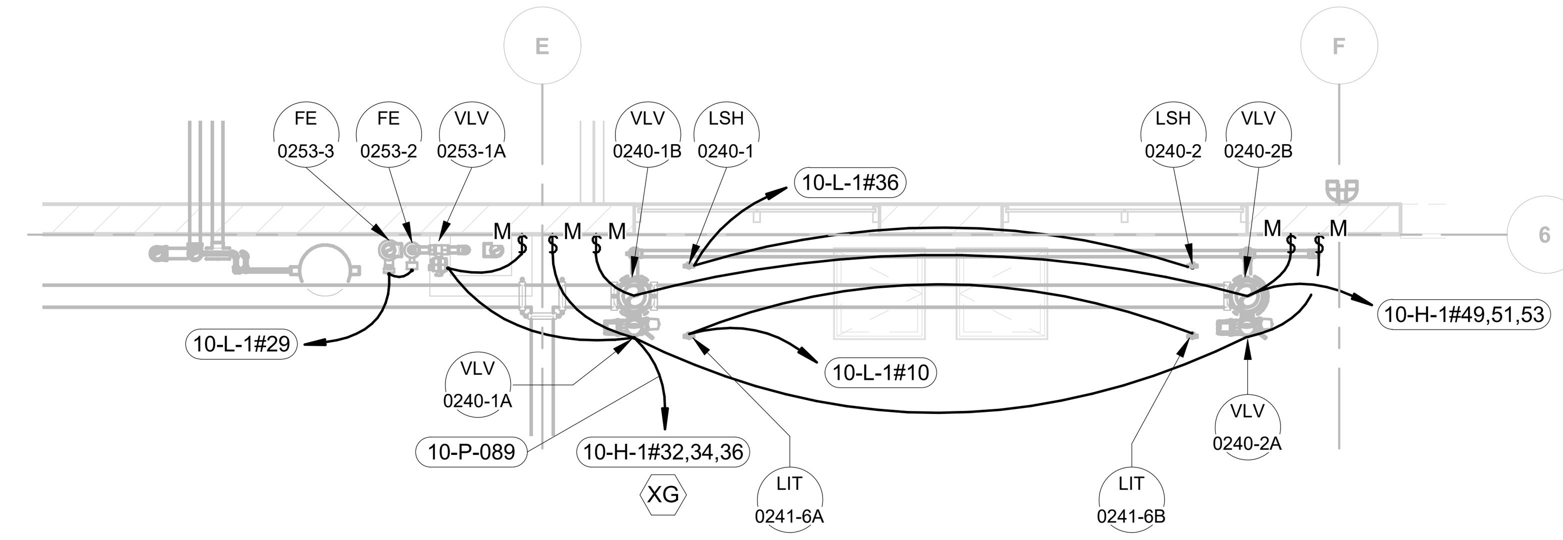
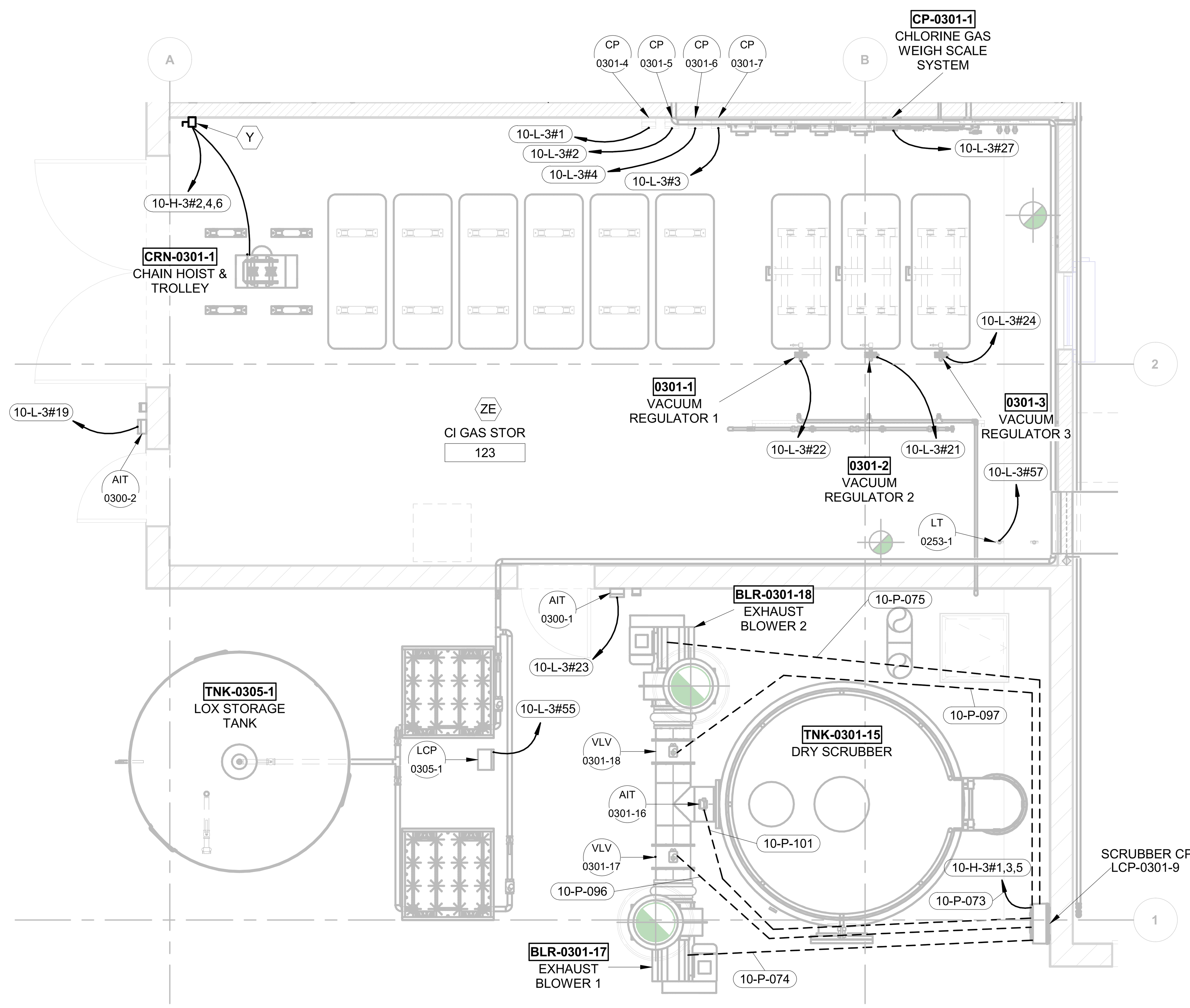
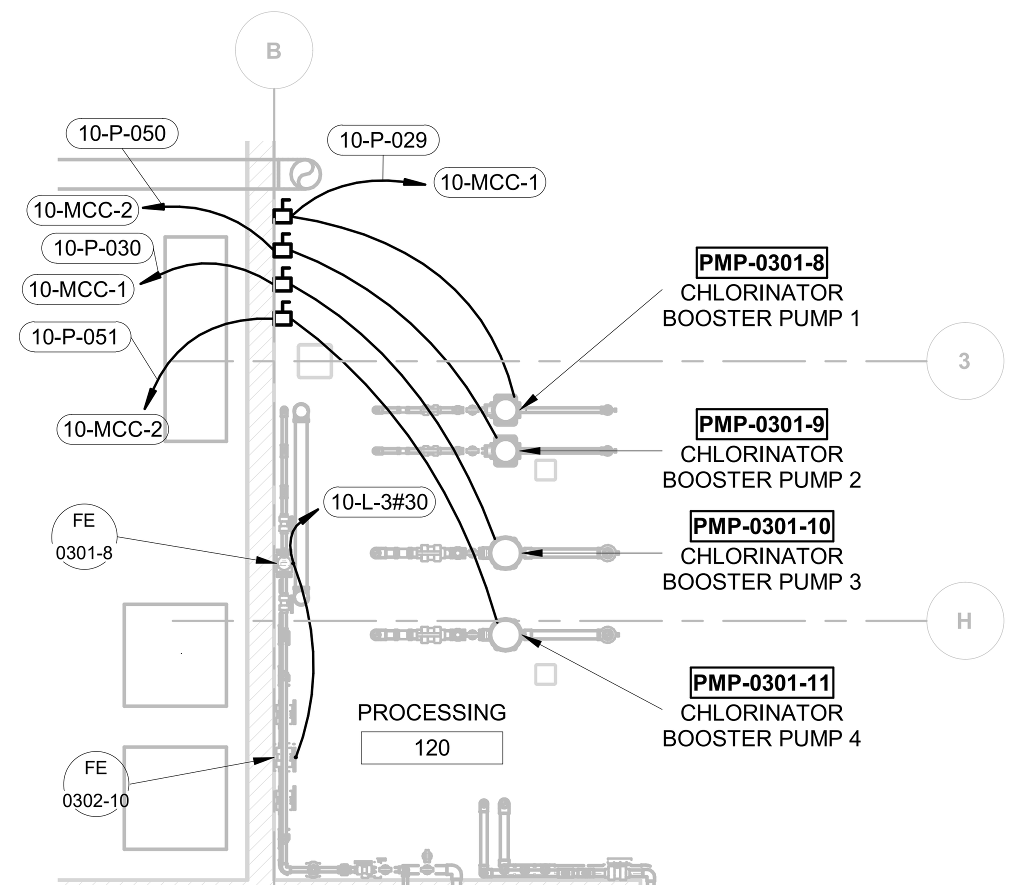


3 ENLARGED PROCESS POWER PLAN - BACKWASH SUPPLY
10-E112 SCALE: 3/16" = 1'-0"



1 ENLARGED PROCESS POWER PLAN - CHLORINE GAS STORAGE & FEED
10-E112 SCALE: 1/4" = 1'-0"



2 ENLARGED PROCESS POWER PLAN - CHLORINATOR BOOSTER PUMPS
10-E112 SCALE: 1/4" = 1'-0"

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING

GENERAL NOTES

1. REFER TO SHEET 10-E104 FOR PANEL LOCATIONS.
2. REFER TO SHEET 10-E402 FOR MCC LOCATIONS.

KEYNOTES

XG EXTEND DOWN TO PANEL 10-H-1 ON LOWER LEVEL.
Y PROVIDE 30/3 NON-FUSED DISCONNECT FOR HOIST. EXTEND UP AND CONNECT TO HOIST PER APPROVED SHOP DRAWINGS AND VENDOR.
ZE REFER TO SPECIFICATION SECTION 26 05 33 FOR RACEWAY AND BOX TYPES REQUIRED IN CHEMICAL ROOMS.

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DRAWING NUMBER
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Project Manager: J.KRINKS

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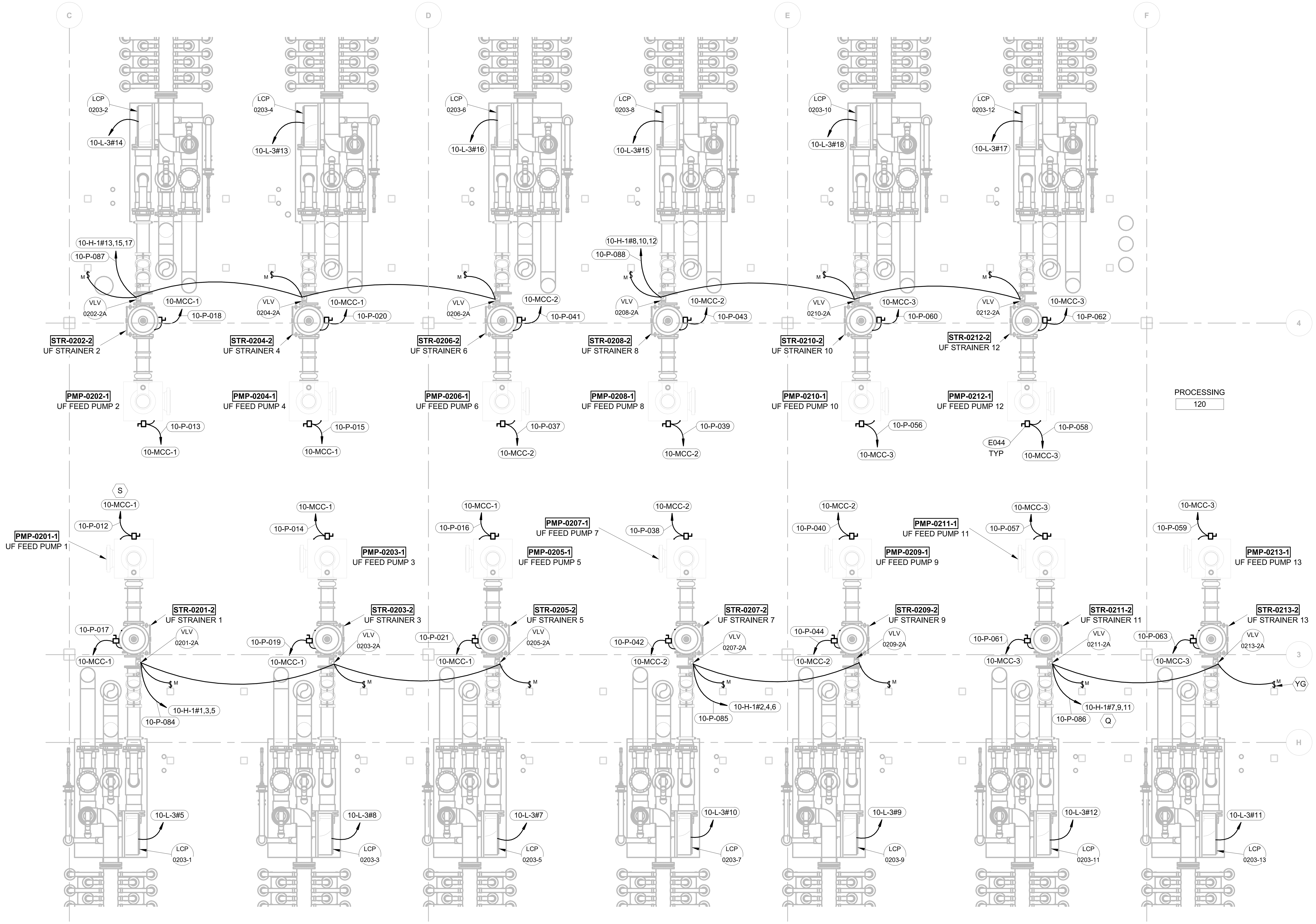

1 ENLARGED PROCESS POWER PLAN - UF FEED PUMPS & STRAINERS
10-E112 SCALE: 1/4" = 1'-0"

GENERAL NOTES

1. REFER TO SHEET 10-E104 FOR PANEL LOCATIONS.
2. REFER TO SHEET 10-E402 FOR MCC LOCATIONS.

KEYNOTES

- Q EXTEND TO PANEL 10-H-1 ON LOWER LEVEL. TYPICAL FOR DRAIN VALVE CIRCUITS.
- S STUB UP AT MOTOR AND CONNECT WITH WFC. EXTEND DOWN THROUGH FLOOR AND ROUTE TO CABLE TRAY. TYPICAL.
- YG MOUNT MANUAL SWITCH TO COLUMN. TYPICAL.

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REGISTRATION
PROFESSIONAL ENGINEER
No. 12839491-2202
CHRISTOPHER J. ADAMS
STATE OF UTAH
04/07/2023

ISSUE/REVISION

I/R	DATE	DESCRIPTION
B	2023-04-07	ISSUED FOR BID
A	2023-01-20	ISSUED FOR 90%

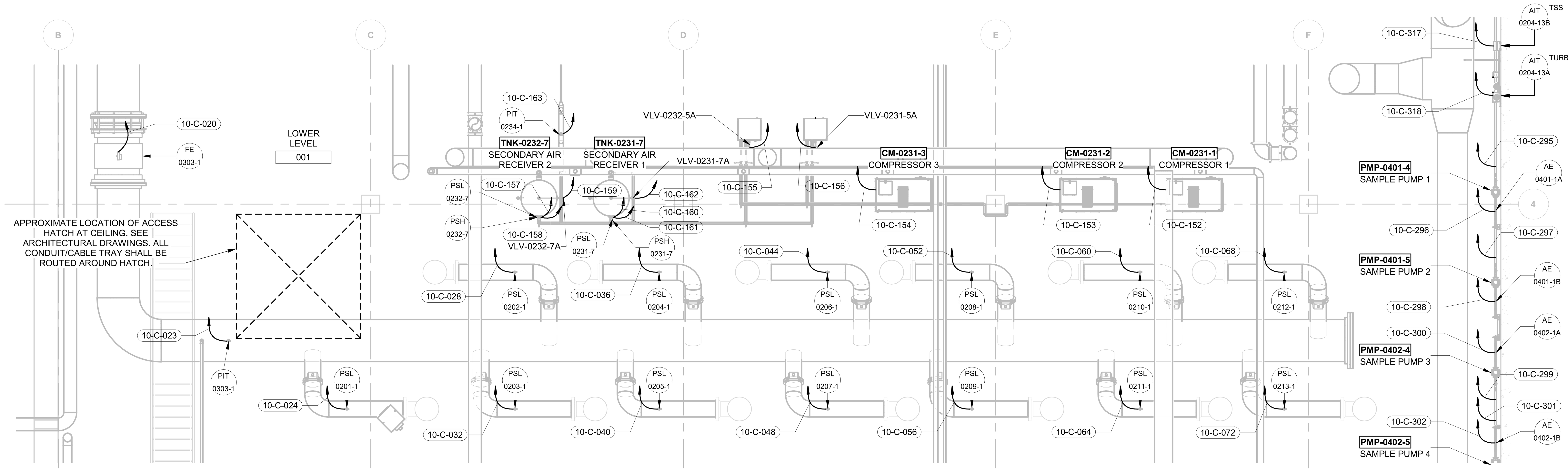
PROJECT NUMBER
AECOM Project No. - 60670884
HAL Project No. - 035.15.420

SHEET TITLE
WATER TREATMENT ELECTRICAL ENLARGED PROCESS SYSTEMS POWER PLANS

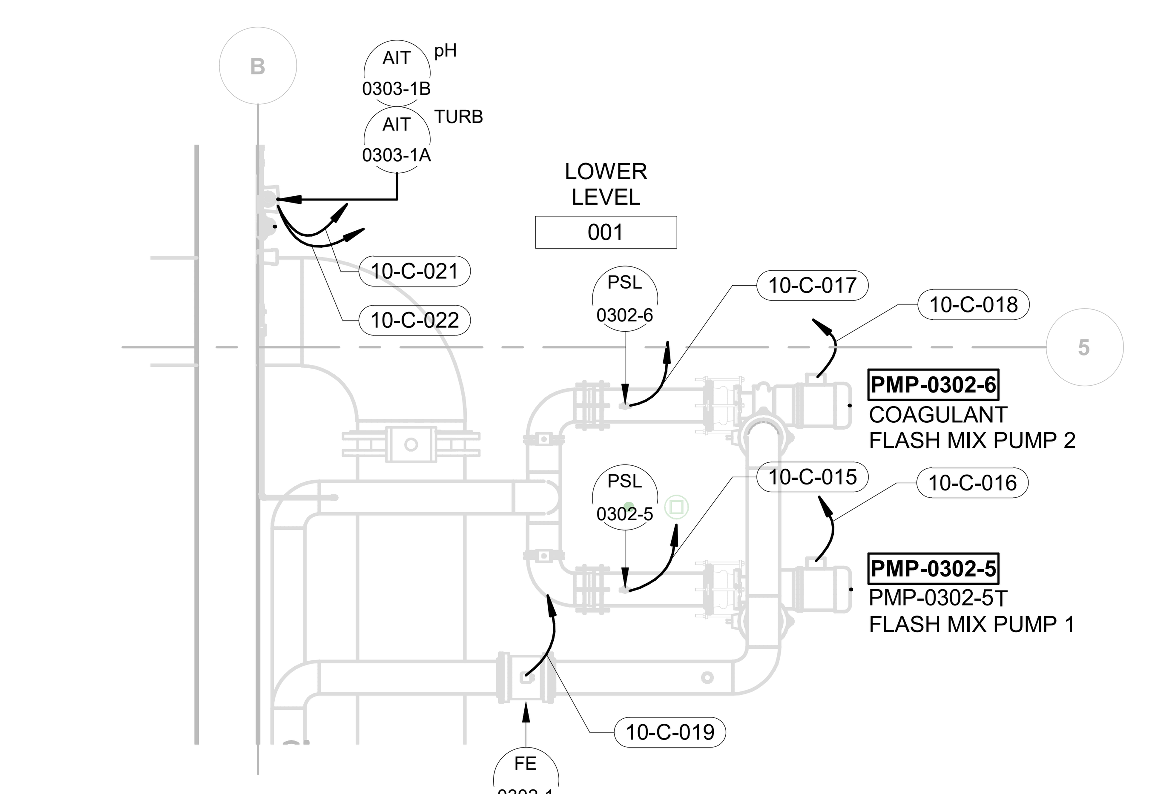
DRAWING NUMBER
10-E406

ANSI D 22" x 34"
Approved: C.ADAMS
Checked: S.SHUGARS
Designer: Z.HARPER
Drafter: Z.HARPER
Project Manager: J.KRINKS

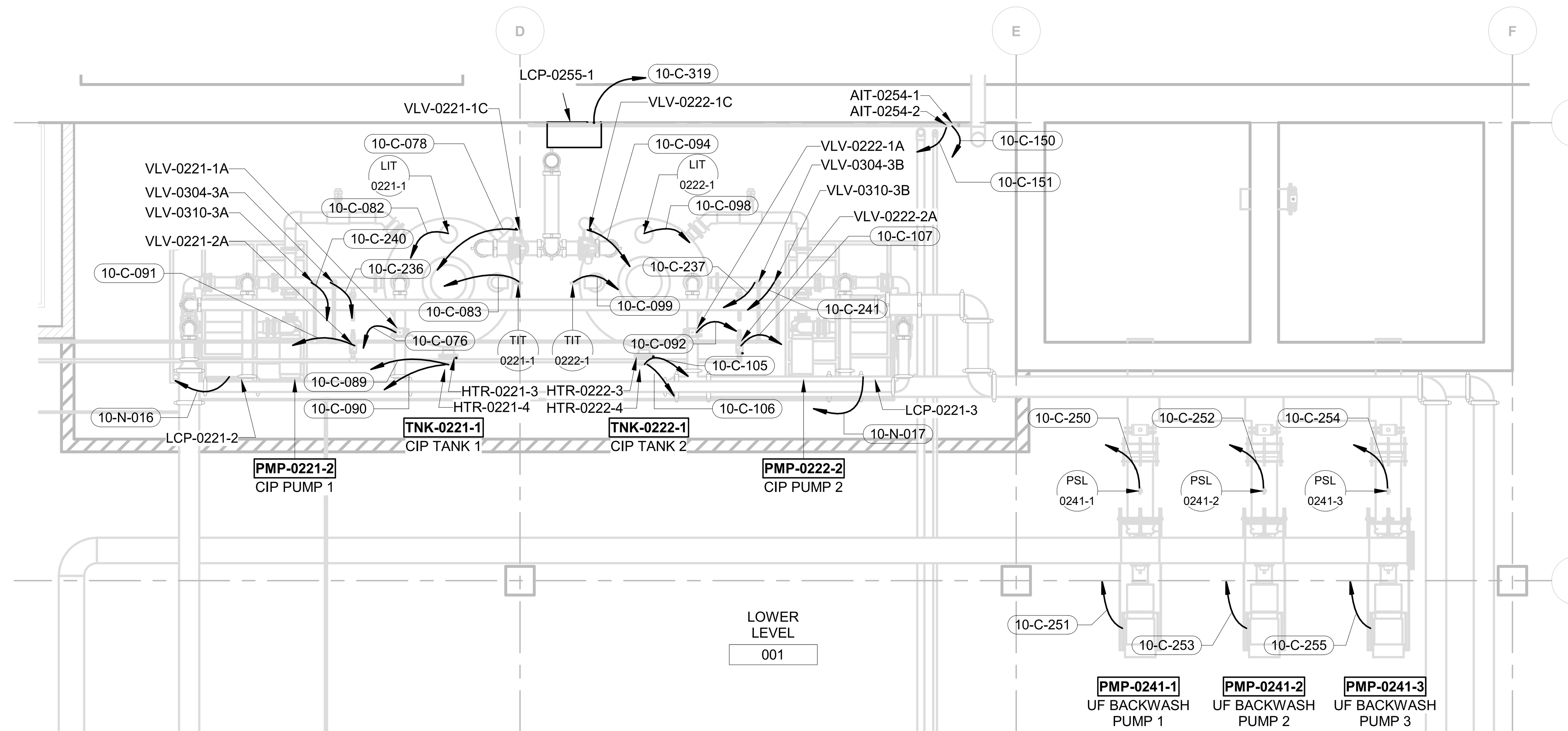
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING



2 ENLARGED PROCESS I&C PLAN - HIGH PRESSURE AIR SYSTEM & SAMPLE PUMPS
10-E121
SCALE: 3/16" = 1'-0"



3 ENLARGED PROCESS I&C PLAN - COAGULANT FLASH MIX PUMPS
10-E121
SCALE: 3/16" = 1'-0"



1 ENLARGED PROCESS I&C PLAN - MEMBRANE CLEANING SYSTEM & BACKWASH PUMPS
10-E121
SCALE: 3/16" = 1'-0"

Last Plotted: 4/5/2023 12:59:09 PM
Filename: BIM 360://CI-AMER (USA) 60670884-Provo River WTP/60670884_10-E001.rvt

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STATE OF UTAH
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PROJECT NUMBER
AECOM Project No. - 60670884
HAL Project No. - 035.15.420

SHEET TITLE
WATER TREATMENT ELECTRICAL ENLARGED PROCESS I&C PLANS

DRAWING NUMBER
10-E421

ANSI D 22" x 34"

Approved: C.ADAMS

Checked: S.SHUGARS

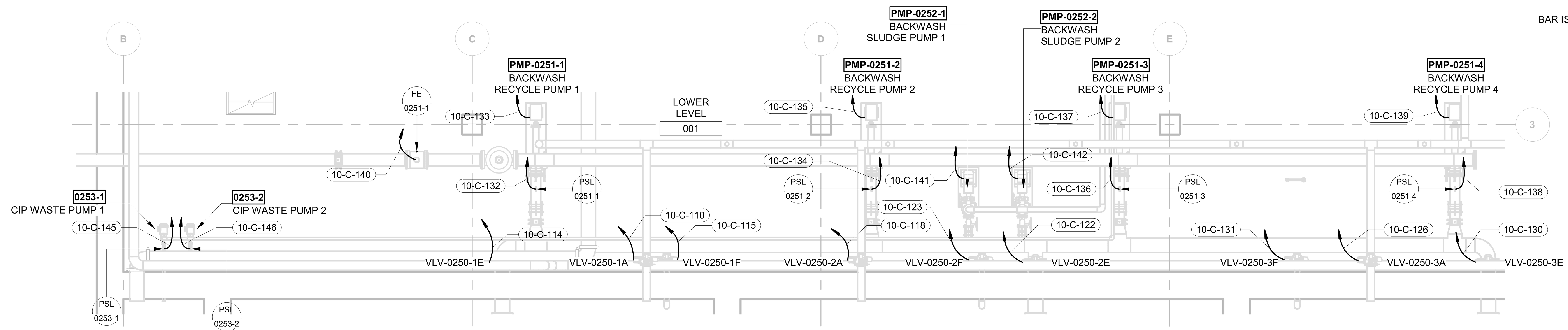
Designer: Z.HARPER

Drafter: Z.HARPER

Project Manager: J.KRINKS

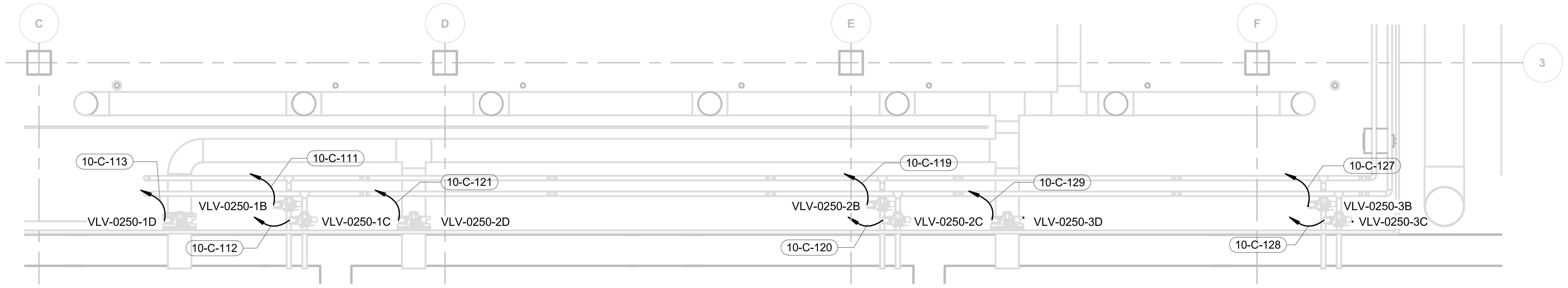
VERIFY SCALE

BAR IS ONE INCH ON ORIGINAL DRAWING



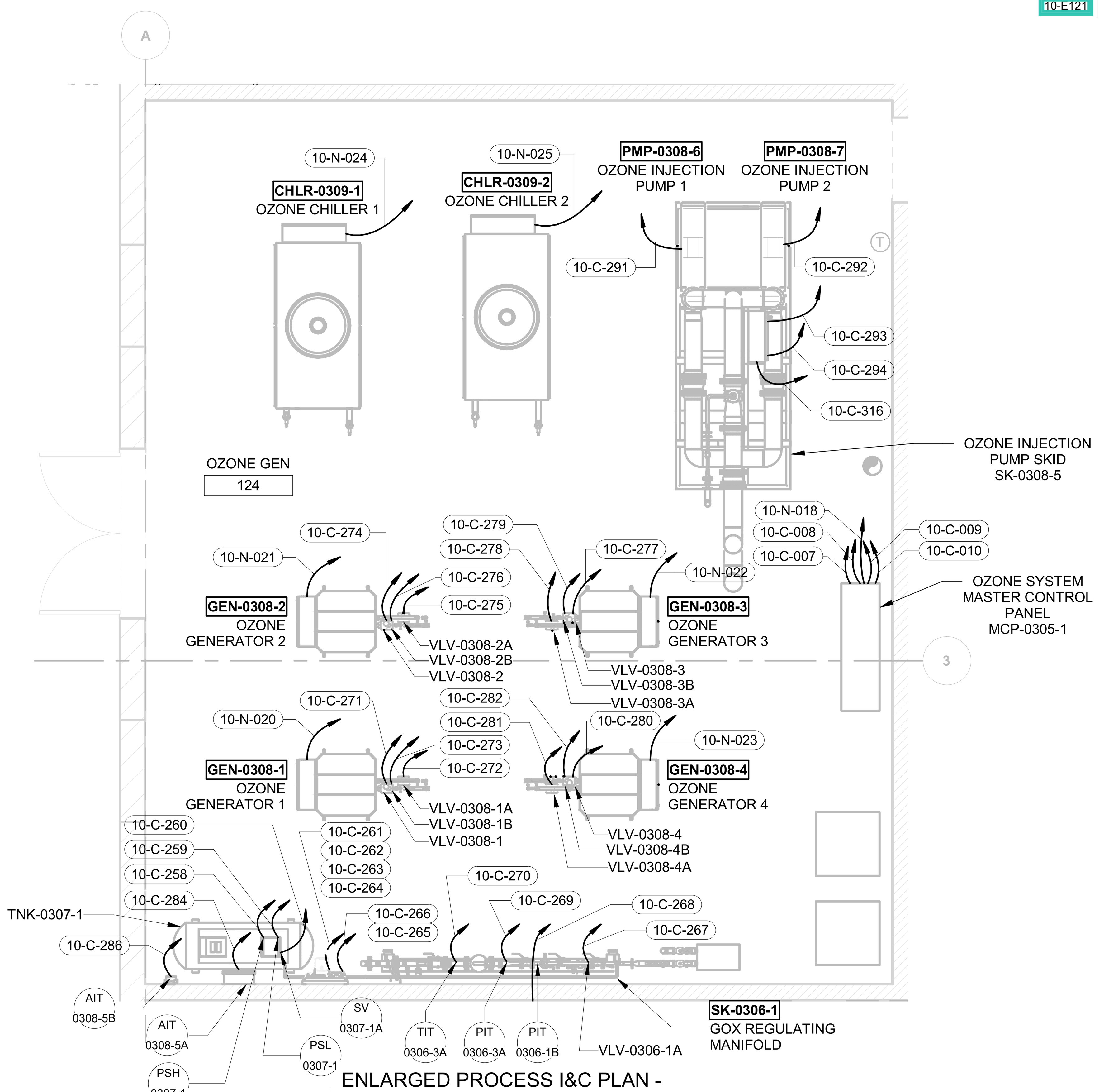
1 ENLARGED PROCESS I&C PLAN - BACKWASH SYSTEM PUMPS 1

10-E121 SCALE: 3/16" = 1'-0"



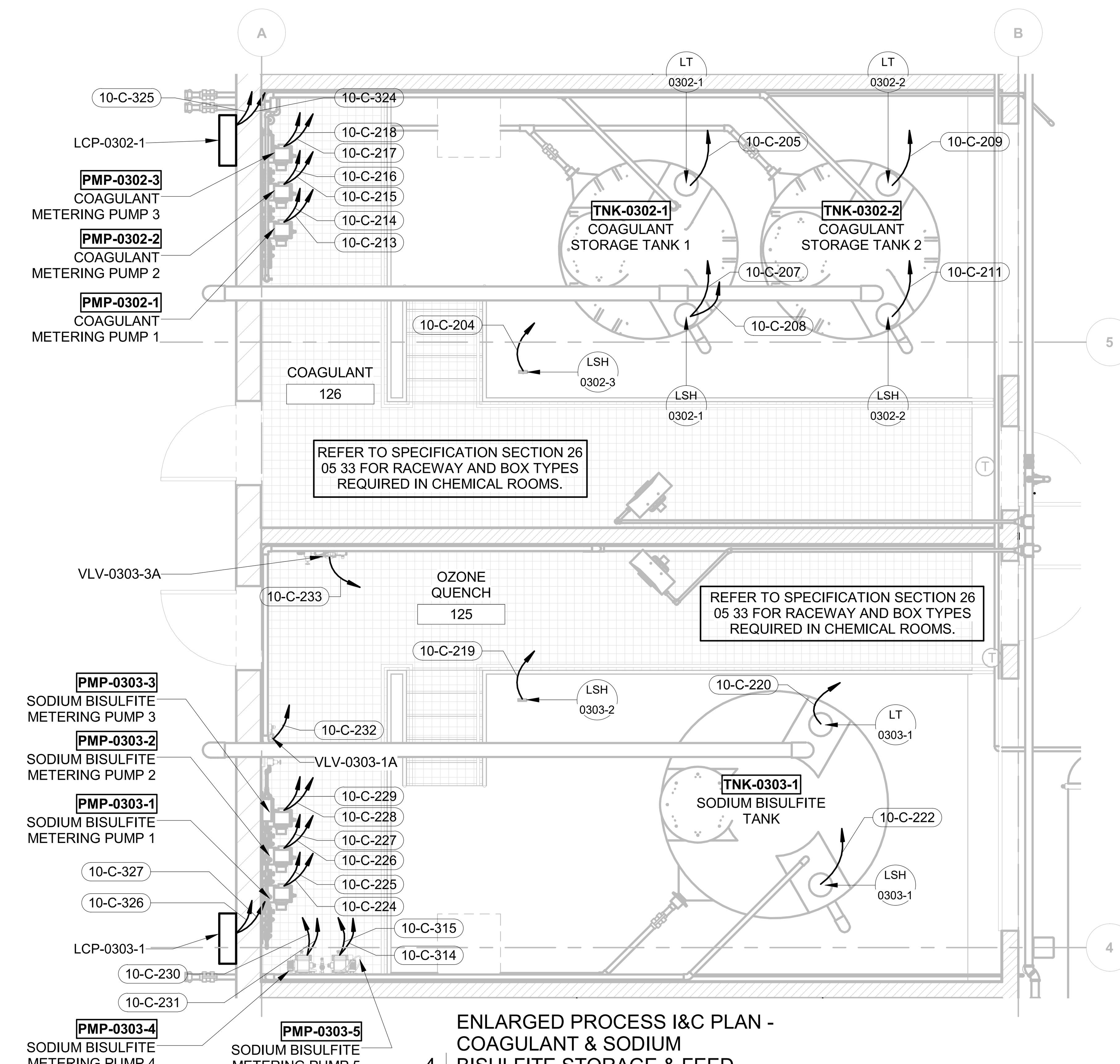
2 ENLARGED PROCESS I&C PLAN - BACKWASH SYSTEM PUMPS 2

10-E121 SCALE: 3/16" = 1'-0"



3 ENLARGED PROCESS I&C PLAN - OZONE GENERATION SYSTEM

10-E122 SCALE: 1/4" = 1'-0"



4 ENLARGED PROCESS I&C PLAN - COAGULANT & SODIUM BISULFITE STORAGE & FEED

10-E122 SCALE: 1/4" = 1'-0"

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REGISTRATION

PROFESSIONAL ENGINEER No. 12839491-2202 CHRISTOPHER J. ADAMS STATE OF UTAH 04/07/2023

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PROJECT NUMBER

AECOM Project No. - 60670884
HAL Project No. - 035.15.420

SHEET TITLE

WATER TREATMENT ELECTRICAL ENLARGED PROCESS I&C PLANS

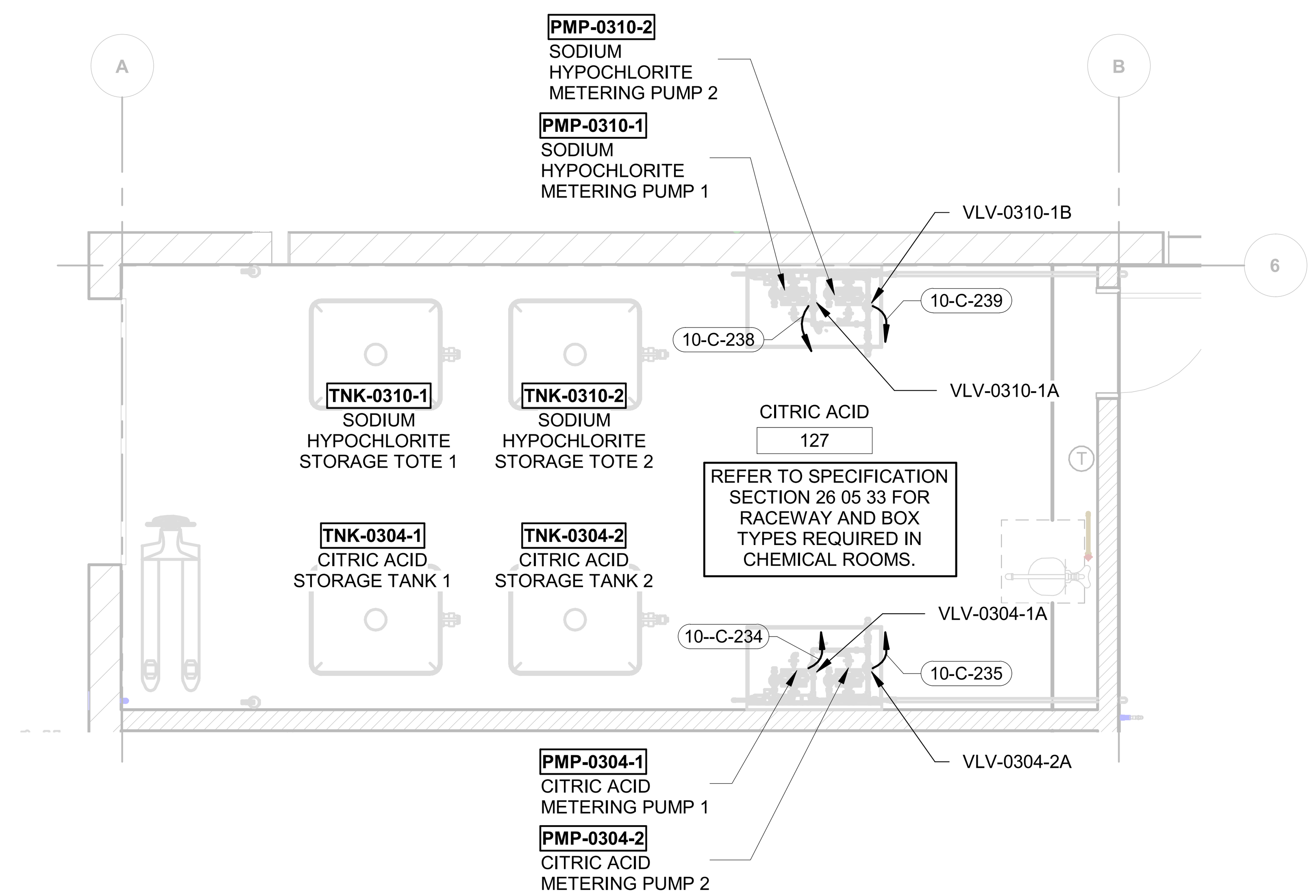
DRAWING NUMBER

10-E422

Last Plotted: 4/5/2023 12:37:45 PM
Filename: BIM 360://CI-AMER (USA) 60670884-Provo River WTP/60670884_10-E001.rvt

ANSI D 22" x 34"
Approved: C.ADAMS
Checked: S.SHUGARS
Designer: Z.HARPER
Drafter: Z.HARPER
Project Manager: J.KRINKS

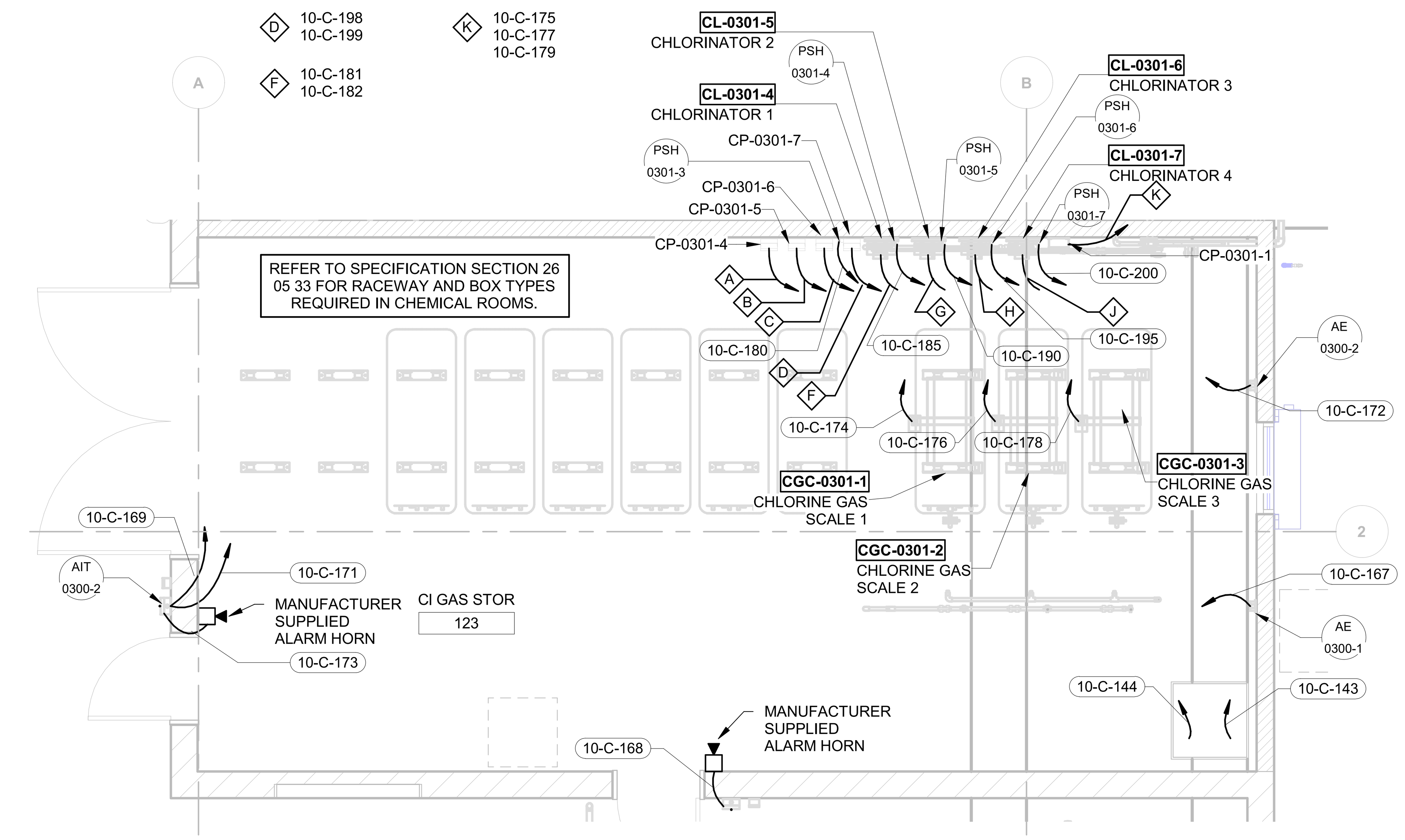
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING



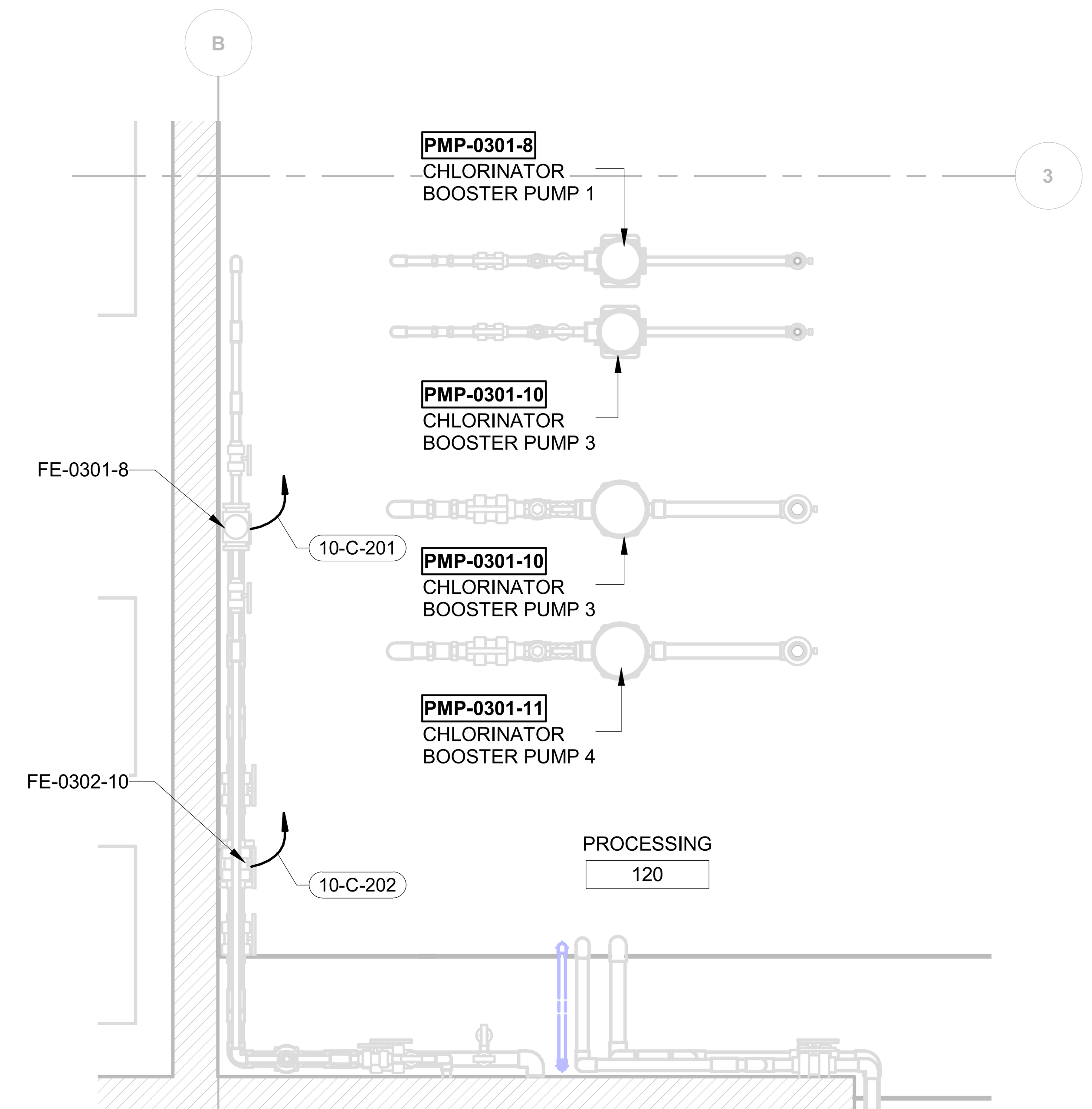
4 ENLARGED PROCESS I&C PLAN - CITRIC ACID STORAGE & FEED
10-E122 SCALE: 1/4" = 1'-0"

FEEDER SCHEDULE

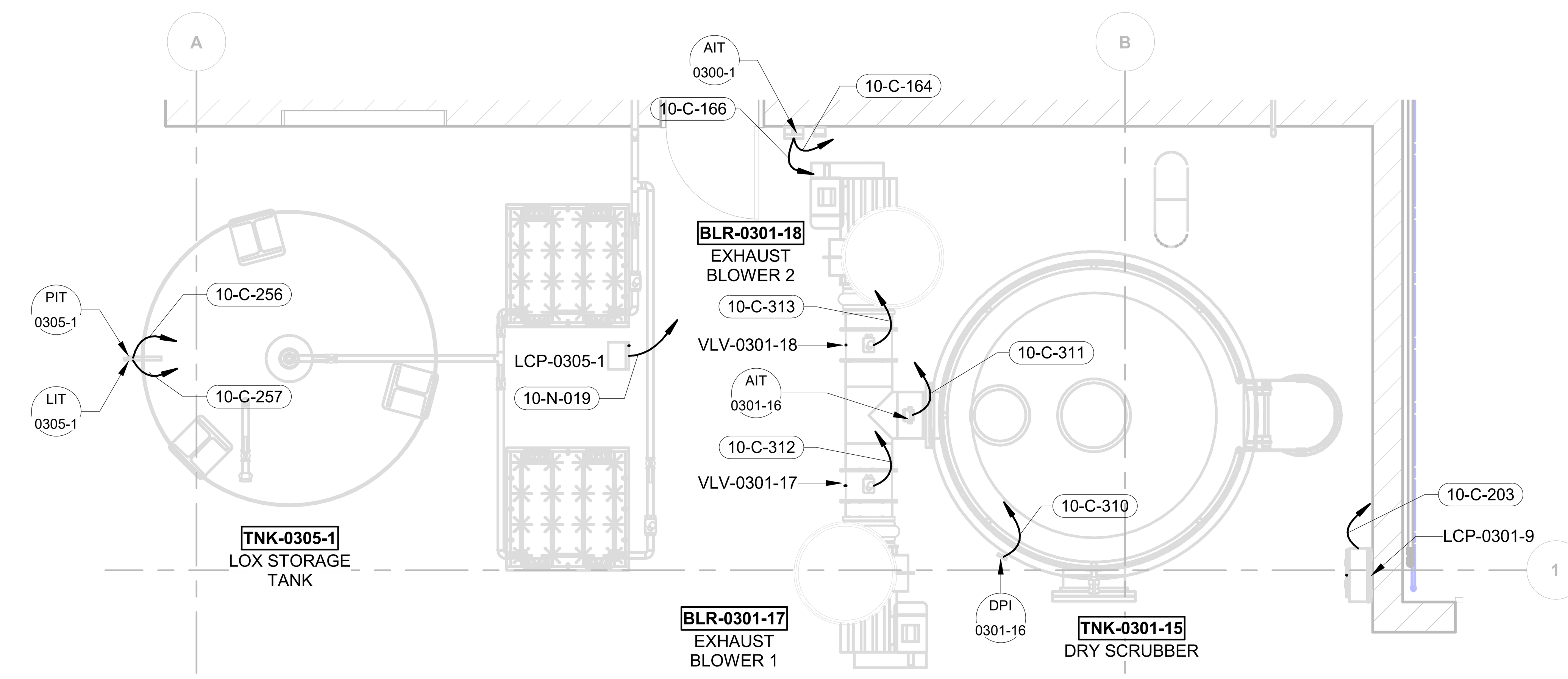
A	10-C-183, 10-C-184	G	10-C-186, 10-C-187
B	10-C-188, 10-C-189	H	10-C-191, 10-C-192
C	10-C-193, 10-C-194	J	10-C-196, 10-C-197
D	10-C-198, 10-C-199	K	10-C-175, 10-C-177, 10-C-179
F	10-C-181, 10-C-182		



1 ENLARGED PROCESS I&C PLAN - CHLORINE GAS STORAGE & FEED
10-E122 SCALE: 1/4" = 1'-0"



2 ENLARGED PROCESS I&C PLAN - CHLORINATOR BOOSTER PUMPS
10-E122 SCALE: 1/2" = 1'-0"



3 ENLARGED PROCESS I&C PLAN - LOX STORAGE & DRY SCRUBBER
10-E122 SCALE: 1/4" = 1'-0"

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PROVO RIVER WATER TREATMENT PLANT

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PROJECT NUMBER

AECOM Project No. - 60670884
HAL Project No. - 035.15.420

SHEET TITLE

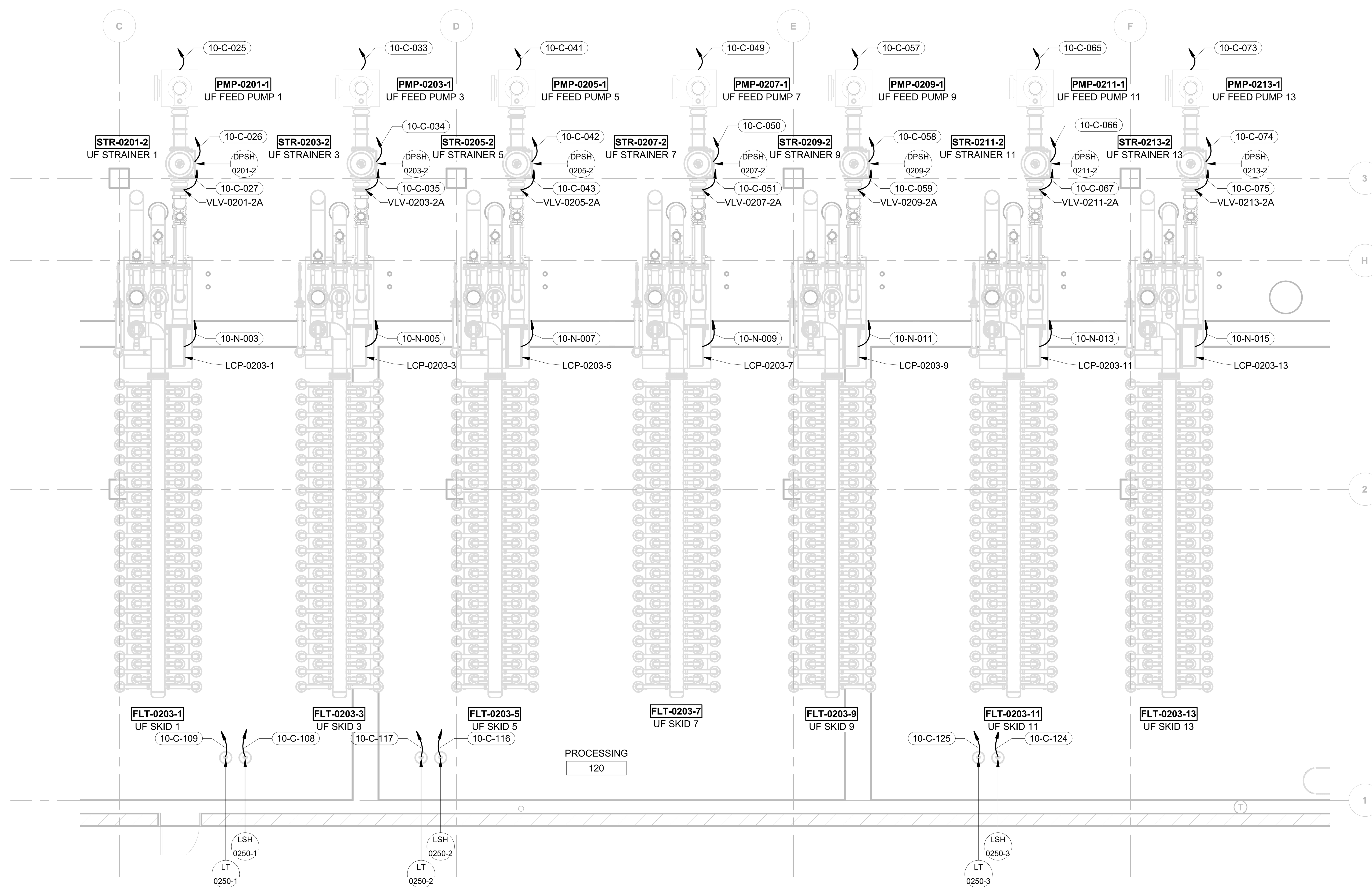
WATER TREATMENT ELECTRICAL ENLARGED PROCESS I&C PLANS

DRAWING NUMBER

10-E423

Last Plotted: 4/5/2023 12:37:51 PM
Filename: BIM 360://CI-AMER (USA) 60670884-Provo River WTP/60670884_10-E001.rvt

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING



1 ENLARGED PROCESS I&C PLAN - UF FEED PUMPS & STRAINERS 1
10-E122
SCALE: 3/16" = 1'-0"

ANSI D 22" x 34"
Approved: C.ADAMS
Checked: S.SHUGARS
Designer: Z.HARPER
Drafter: Z.HARPER
Project Manager: J.KRINKS
Last Plotted: 4/5/2023 12:37:56 PM
Filename: BIM 360://CI-AMER (USA) 60670884-Provo River WTP/60670884_10-E001.rvt

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REGISTRATION
PROFESSIONAL ENGINEER No. 12539491-2202 CHRISTOPHER J. ADAMS STATE OF UTAH
04/07/2023

ISSUE/REVISION

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B	2023-04-07	ISSUED FOR BID
A	2023-01-20	ISSUED FOR 90%

PROJECT NUMBER
AECOM Project No. - 60670884
HAL Project No. - 035.15.420

SHEET TITLE
WATER TREATMENT ELECTRICAL ENLARGED PROCESS I&C PLANS

DRAWING NUMBER
10-E424

ANSI D 22" x 34"

Approved: C.ADAMS

Checked: S.SHUGARS

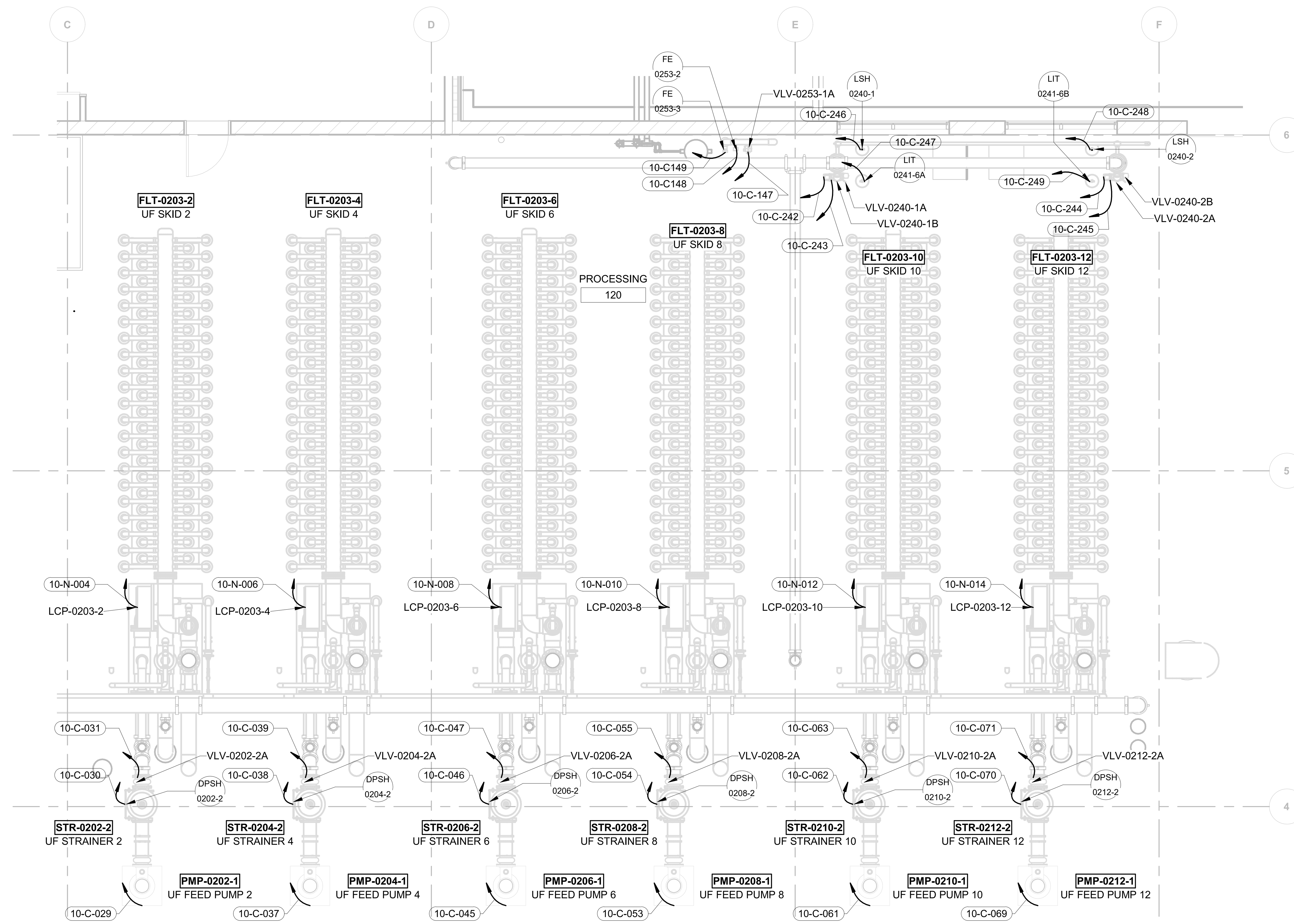
Designer: Z.HARPER

Drafter: Z.HARPER

Project Manager: J.KRINKS

Last Plotted: 4/5/2023 12:38:02 PM
Filename: BIM 360://CI-AMER (USA) 60670884-Provo River WTP/60670884_10-E001.rvt

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING



1 ENLARGED PROCESS I&C PLAN - UF FEED PUMPS & STRAINERS 2

10-E122 SCALE: 3/16" = 1'-0"

AECOM

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PROJECT

PROVO RIVER WATER TREATMENT PLANT

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REGISTRATION

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ISSUE/REVISION

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B	2023-04-07	ISSUED FOR BID
A	2023-01-20	ISSUED FOR 90%

PROJECT NUMBER

AECOM Project No. - 60670884
HAL Project No. - 035.15.420

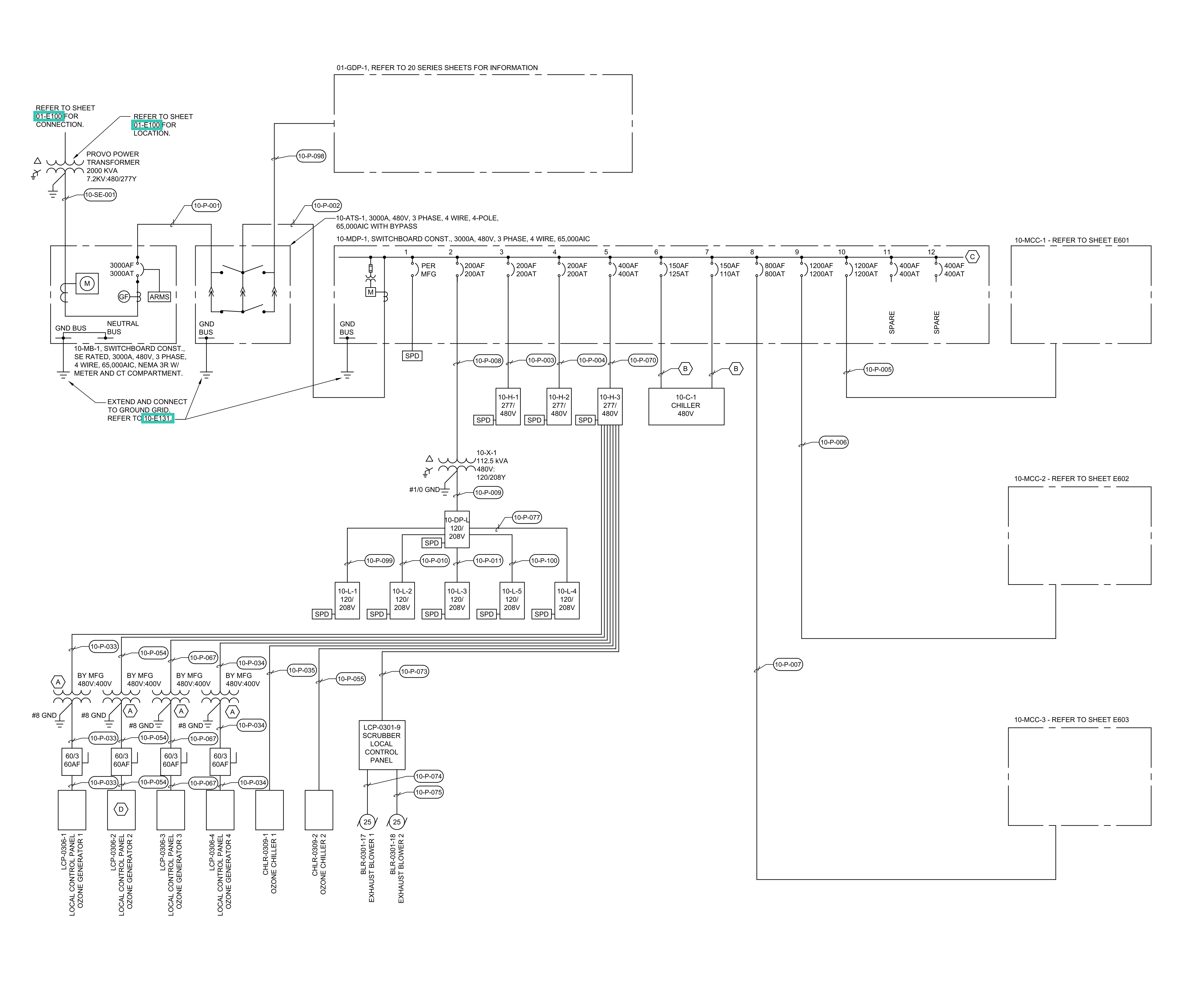
SHEET TITLE

WATER TREATMENT ELECTRICAL ENLARGED PROCESS I&C PLANS

DRAWING NUMBER

10-E425

ANSI D 22" x 34"
Approved: C.ADAMS
Checked: S.SHUGARS
Designer: C.ADAMS
Drafter: A.ODONNELL
Project Manager: J.KRINKS



VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING

GENERAL NOTES

1. UNLESS OTHERWISE NOTED, ALL ELECTRICAL EQUIPMENT TAGS SHALL BE PRECEDED BY "P25-".

KEY NOTES

A. PROVIDE NAMEPLATE TO INDICATE LOCATION OF PRIMARY DISCONNECT IN PANEL 10-H-3.

B. REFER TO HVAC SCHEDULE FOR FEEDER.

C. PROVIDE PROVISIONS FOR FUTURE SECTIONS.

D. REFER TO SPECIFICATION SECTION 00 43 00 BID SCHEDULE, PART 3.05A. DEDUCTIVE ALTERNATE BID ITEM NO D1 - "20 MGD CAPACITY PLANT". OZONE GENERATOR 2 SHALL BE INCLUDED AS PART OF THE DEDUCTIVE ALTERNATE. REMOVE DISCONNECT, POWER CABLING, AND CONTROL CABLING. ALL CONDUIT SHALL BE INSTALLED ALONG WITH TRANSFORMER RACK.

AECOM
HANSEN ALLEN & LUCE inc
ENGINEERS

PROJECT

PROVO RIVER WATER TREATMENT PLANT

CLIENT

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REGISTRATION

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D	2023-04-07	ISSUED FOR BID
C	2023-01-20	ISSUED FOR 90%
B	2022-10-14	ISSUED FOR 60%
A	2022-07-01	ISSUED FOR 30%

PROJECT NUMBER

AECOM Project No. - 60670884
HAL Project No. - 035.15.420

SHEET TITLE

WATER TREATMENT ELECTRICAL ONE-LINE DIAGRAM

DRAWING NUMBER

10-E600

Last Plotted: 15.06.2022_8:35 AM
Filename: C:\Users\SaulsC\ACCDocs\AECOM\CI-AMER (USA) 60670884-Provo River WTP\Project Files\900 Design Collaboration\910 CAD-BIM\E\Sheets\60670884_10-E600.dwg

ANSI D 22" x 34"

Approved: C.ADAMS

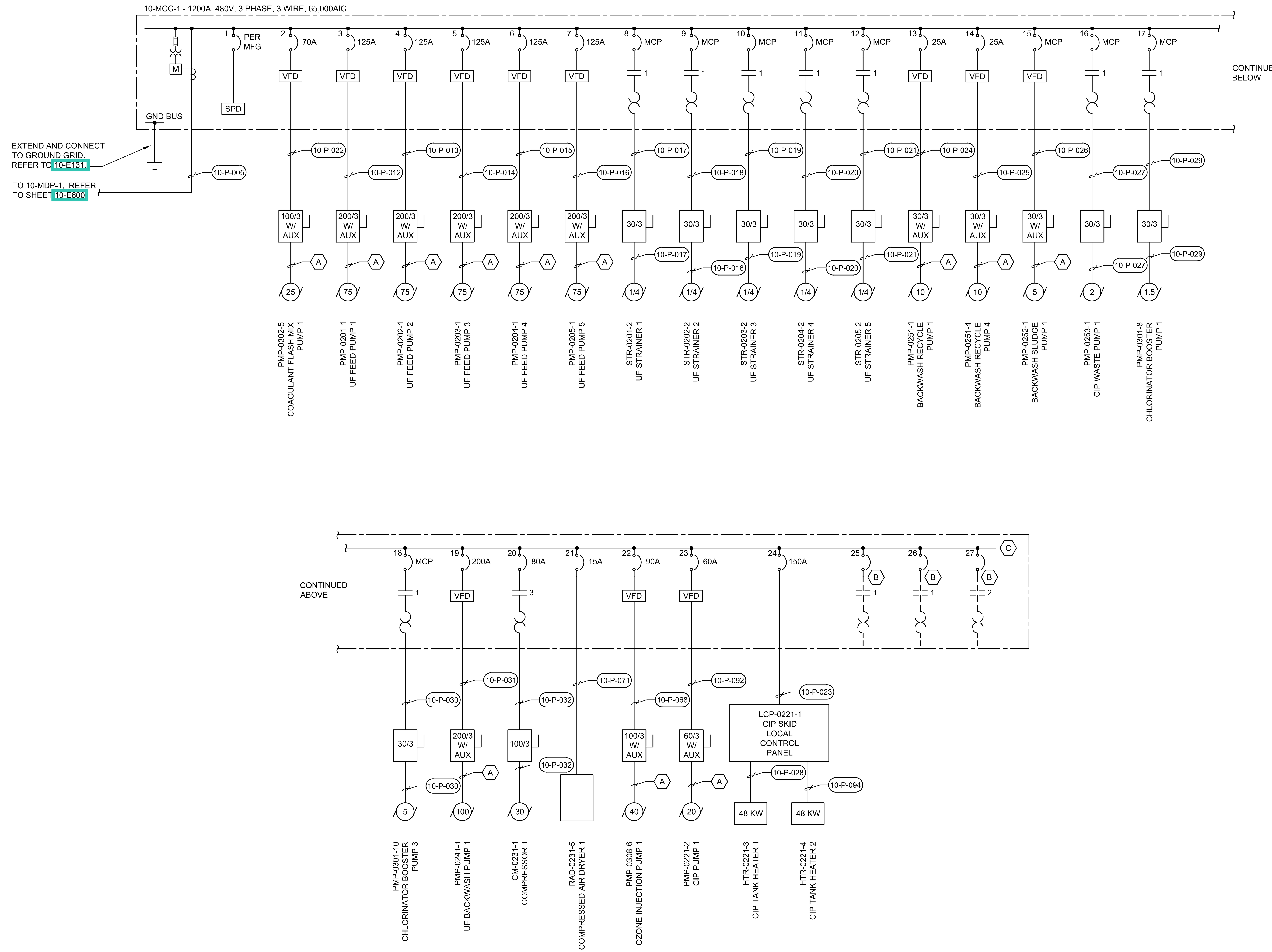
Checked: S.SHUGARS

Designer: C.ADAMS

Drafter: A.ODONNELL

Project Manager: J.KRINKS

Last Plotted: 15.06.2022_8:35 AM
Filename: C:\Users\Saul\DC\ACCDocs\AECOM\CI-AMER (USA) 60670884-Provo River WTP\Project Files\900 Design Collaboration\910 CAD-BIM\E\Sheets\60670884_10-E601.dwg



VERIFY SCALE

BAR IS ONE INCH ON ORIGINAL DRAWING

GENERAL NOTES

1. UNLESS OTHERWISE NOTED, ALL ELECTRICAL EQUIPMENT TAGS SHALL BE PRECEDED BY "P25-".

KEY NOTES

A. FEEDER IS THE SAME AS ABOVE MINUS AUX CONNECTIONS.

B. PROVIDE PREPARED SPACE FOR FUTURE BREAKER/STARTER.

C. PROVIDE PROVISIONS FOR FUTURE SECTIONS.

AECOM

HANSEN ALLEN & LUCE inc

ENGINEERS

PROJECT

PROVO RIVER WATER TREATMENT PLANT

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A	2022-10-14	ISSUED FOR 60%

PROJECT NUMBER

AECOM Project No. - 60670884
HAL Project No. - 035.15.420

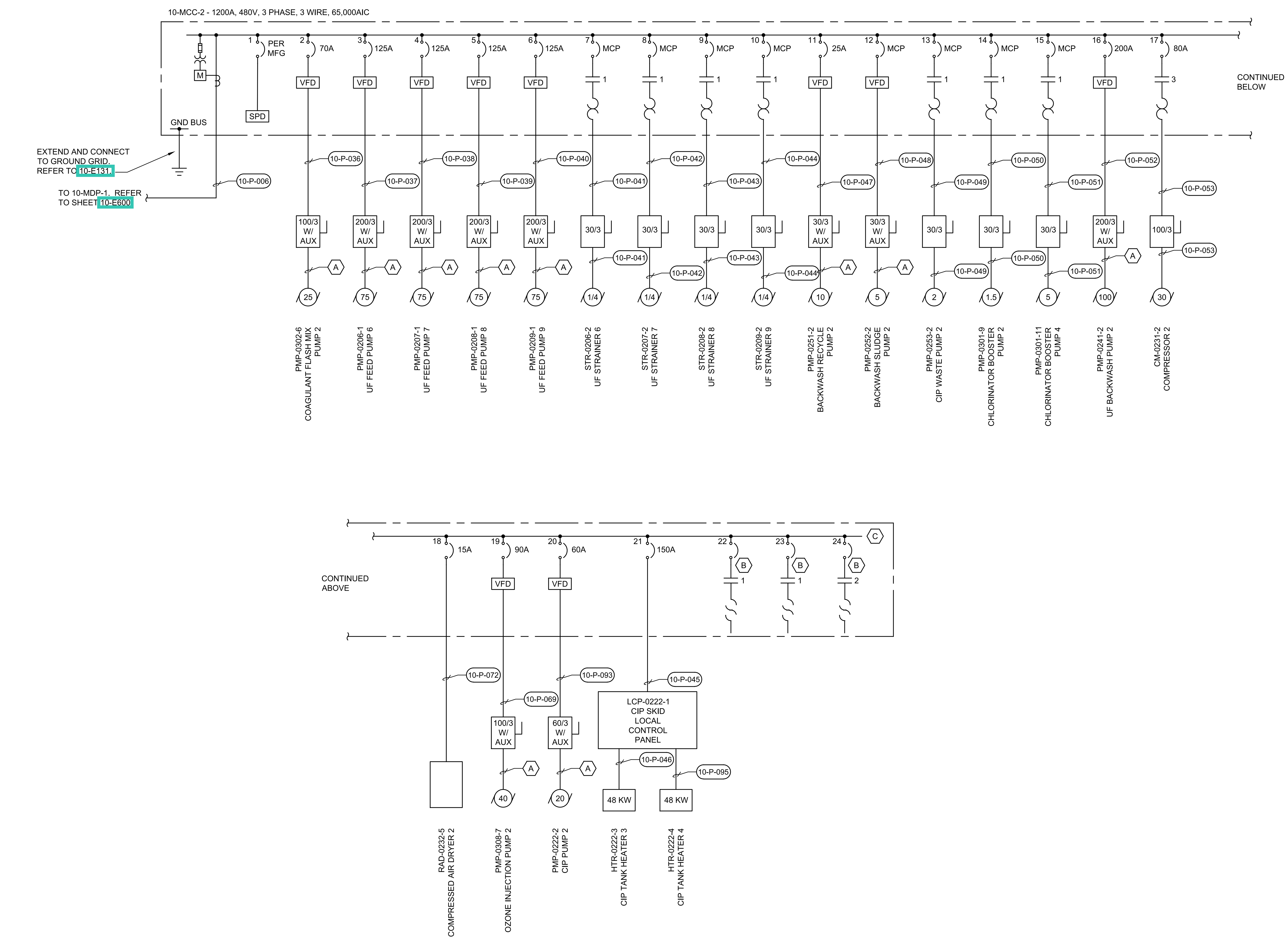
SHEET TITLE

WATER TREATMENT ELECTRICAL 10-MCC-1 ONE-LINE DIAGRAM

DRAWING NUMBER

10-E601

ANSI D 22" x 34"
Approved: C.ADAMS
Checked: S.SHUGARS
Designer: C.ADAMS
Drafter: A.ODONNELL
Project Manager: J.KRINKS



VERIFY SCALE

BAR IS ONE INCH ON ORIGINAL DRAWING

GENERAL NOTES

1. UNLESS OTHERWISE NOTED, ALL ELECTRICAL EQUIPMENT TAGS SHALL BE PRECEDED BY "P25-".

KEY NOTES

A. FEEDER IS THE SAME AS ABOVE MINUS AUX CONNECTIONS.

B. PROVIDE PREPARED SPACE FOR FUTURE BREAKER/STARTER.

C. PROVIDE PROVISIONS FOR FUTURE SECTIONS.

AECOM
HANSEN ALLEN & LUCE inc
ENGINEERS

PROJECT

PROVO RIVER WATER TREATMENT PLANT

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REGISTRATION

PROFESSIONAL ENGINEER No. 12339491-2202 CHRISTOPHER J. ADAMS STATE OF UTAH
04/07/2023

ISSUE/REVISION

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B	2022-10-14	ISSUED FOR 60%
A	2022-07-01	ISSUED FOR 30%

PROJECT NUMBER

AECOM Project No. - 60670884
HAL Project No. - 035.15.420

SHEET TITLE

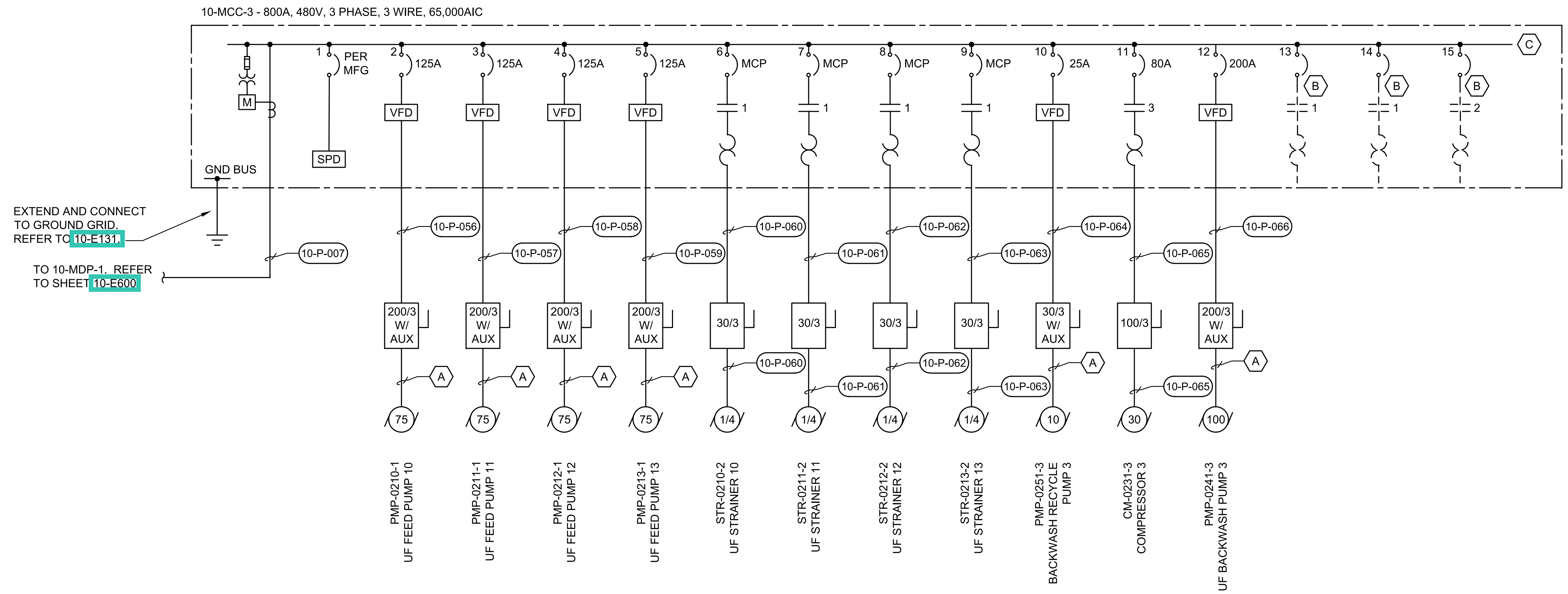
WATER TREATMENT ELECTRICAL 10-MCC-2 ONE-LINE DIAGRAM

DRAWING NUMBER

10-E602

Last Plotted: 15.06.2022_8:35 AM
Filename: C:\Users\Saudx\ACCDocs\AECOM\CI-AMER (USA) 60670884-Provo River WTP\Project Files\900 Design Collaboration\910 CAD-BIM\E\Sheets\60670884_10-E602.dwg

ANSI D 22" x 34"
Approved: C.ADAMS
Checked: S.SHUGARS
Designer: C.ADAMS
Drafter: A.ODONNELL
Project Manager: J.KRINKS



VERIFY SCALE

BAR IS ONE INCH ON ORIGINAL DRAWING

GENERAL NOTES

1. UNLESS OTHERWISE NOTED, ALL ELECTRICAL EQUIPMENT TAGS SHALL BE PRECEDED BY "P25-".
2. REFER TO SPECIFICATION SECTION 00 43 00 BID SCHEDULE, PART 3.05A. DEDUCTIVE ALTERNATE BID ITEM NO. D1 - "20 MGD CAPACITY PLANT". 10-MCC-3 SHALL BE INCLUDED AS PART OF DEDUCTIVE ALTERNATE. REMOVE MCC, POWER CABLING, AND CONTROL CABLING. ALL CONDUIT SHALL BE INSTALLED ALONG WITH THE HOUSEKEEPING PAD FOR MCC.

KEY NOTES

A. FEEDER IS THE SAME AS ABOVE MINUS AUX CONNECTIONS.

B. PROVIDE PREPARED SPACE FOR FUTURE BREAKER/STARTER.

C. PROVIDE PROVISIONS FOR FUTURE SECTIONS.

AECOM

HANSEN ALLEN & LUCE inc
ENGINEERS

PROJECT

PROVO RIVER WATER TREATMENT PLANT

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http:// www.aecom.com

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http:// www.hansenallenluce.com

REGISTRATION

PROFESSIONAL ENGINEER No. 8394914-2202 CHRISTOPHER J. ADAMS STATE OF UTAH
04/07/2023

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B	2022-10-14	ISSUED FOR 60%
A	2022-07-01	ISSUED FOR 30%

PROJECT NUMBER

AECOM Project No. - 60670884
HAL Project No. - 035.15.420

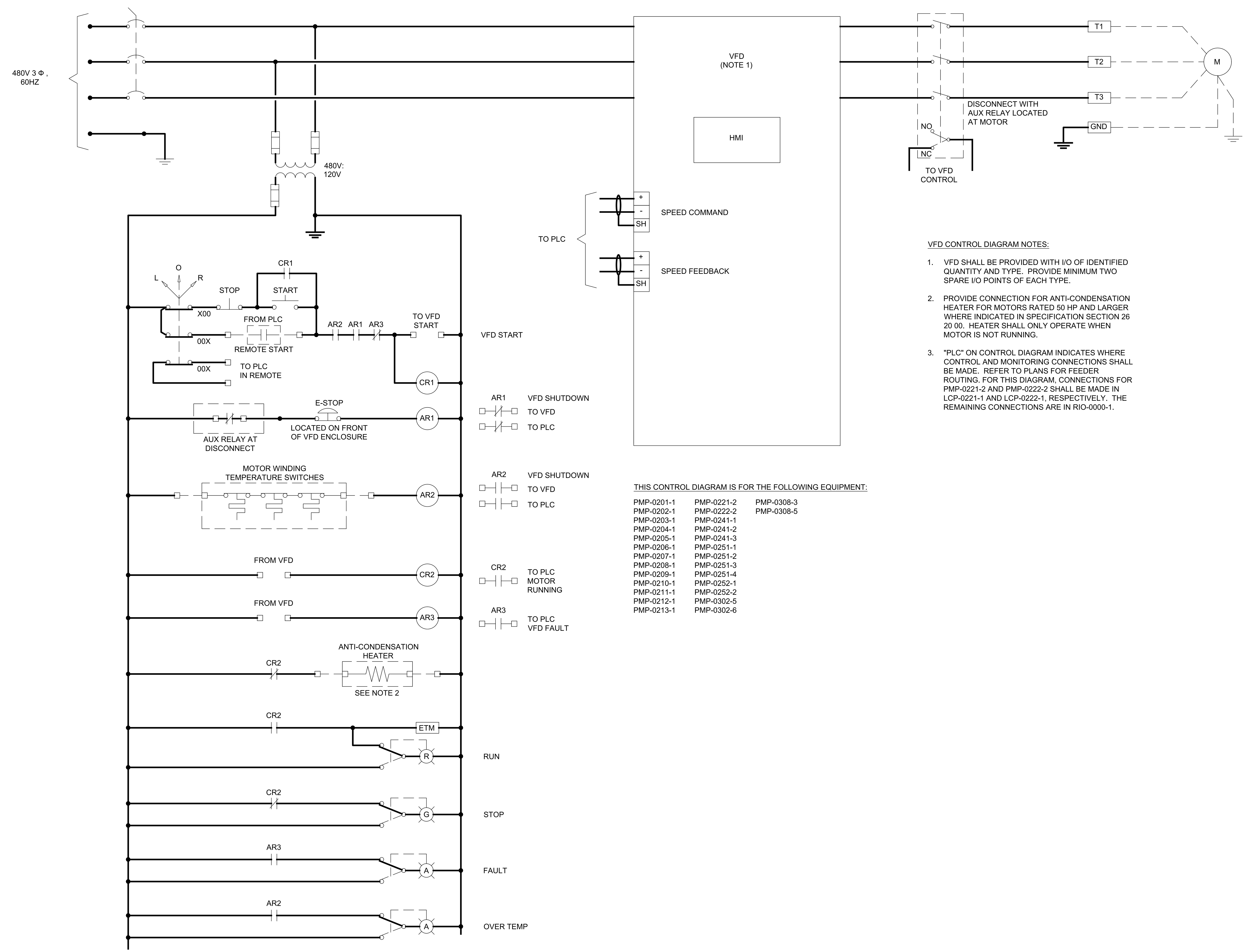
SHEET TITLE

WATER TREATMENT ELECTRICAL 10-MCC-3 ONE-LINE DIAGRAM

DRAWING NUMBER

10-E603

Last Plotted: 15.06.2022_8:35 AM
Filename: C:\Users\Saule\CACCDocs\AECOM\CI-AMER (USA) 60670884-Provo River WTP\Project Files\900 Design Collaboration\910 CAD-BIM\E\Sheets\60670884_10-E603.dwg



VFD CONTROL DIAGRAM NOTES:

1. VFD SHALL BE PROVIDED WITH I/O OF IDENTIFIED QUANTITY AND TYPE. PROVIDE MINIMUM TWO SPARE I/O POINTS OF EACH TYPE.
2. PROVIDE CONNECTION FOR ANTI-CONDENSATION HEATER FOR MOTORS RATED 50 HP AND LARGER WHERE INDICATED IN SPECIFICATION SECTION 26 20 00. HEATER SHALL ONLY OPERATE WHEN MOTOR IS NOT RUNNING.
3. "PLC" ON CONTROL DIAGRAM INDICATES WHERE CONTROL AND MONITORING CONNECTIONS SHALL BE MADE. REFER TO PLANS FOR FEEDER ROUTING. FOR THIS DIAGRAM, CONNECTIONS FOR PMP-0221-2 AND PMP-0222-2 SHALL BE MADE IN LCP-0221-1 AND LCP-0222-1, RESPECTIVELY. THE REMAINING CONNECTIONS ARE IN RIO-0000-1.

THIS CONTROL DIAGRAM IS FOR THE FOLLOWING EQUIPMENT:

PMP-0201-1	PMP-0221-2	PMP-0308-3
PMP-0202-1	PMP-0222-2	PMP-0308-5
PMP-0203-1	PMP-0241-1	
PMP-0204-1	PMP-0241-2	
PMP-0205-1	PMP-0241-3	
PMP-0206-1	PMP-0251-1	
PMP-0207-1	PMP-0251-2	
PMP-0208-1	PMP-0251-3	
PMP-0209-1	PMP-0251-4	
PMP-0210-1	PMP-0252-1	
PMP-0211-1	PMP-0252-2	
PMP-0212-1	PMP-0302-5	
PMP-0213-1	PMP-0302-6	

TYPICAL VFD CONTROL DIAGRAM

SCALE: NOT TO SCALE

VERIFY SCALE

BAR IS ONE INCH ON ORIGINAL DRAWING

ANSI D 22" x 34"

Approved: C.ADAMS

Checked: S.SHUGARS

Designer: C.ADAMS

Drafter: A.ODONNELL

Project Manager: J.KRINKS

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AECOM

HANSEN ALLEN & LUCE Inc

ENGINEERS

PROJECT

PROVO RIVER WATER TREATMENT PLANT

CLIENT

PROVO CITY PUBLIC WORKS

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REGISTRATION

PROFESSIONAL ENGINEER No. 12639491-2202 CHRISTOPHER J. ADAMS STATE OF UTAH

04/07/2023

ISSUE/REVISION

I/R	DATE	DESCRIPTION
D	2023-04-07	ISSUED FOR BID
C	2023-01-20	ISSUED FOR 90%
B	2022-10-14	ISSUED FOR 60%
A	2022-07-01	ISSUED FOR 30%

PROJECT NUMBER

AECOM Project No. - 60670884
HAL Project No. - 035.15.420

SHEET TITLE

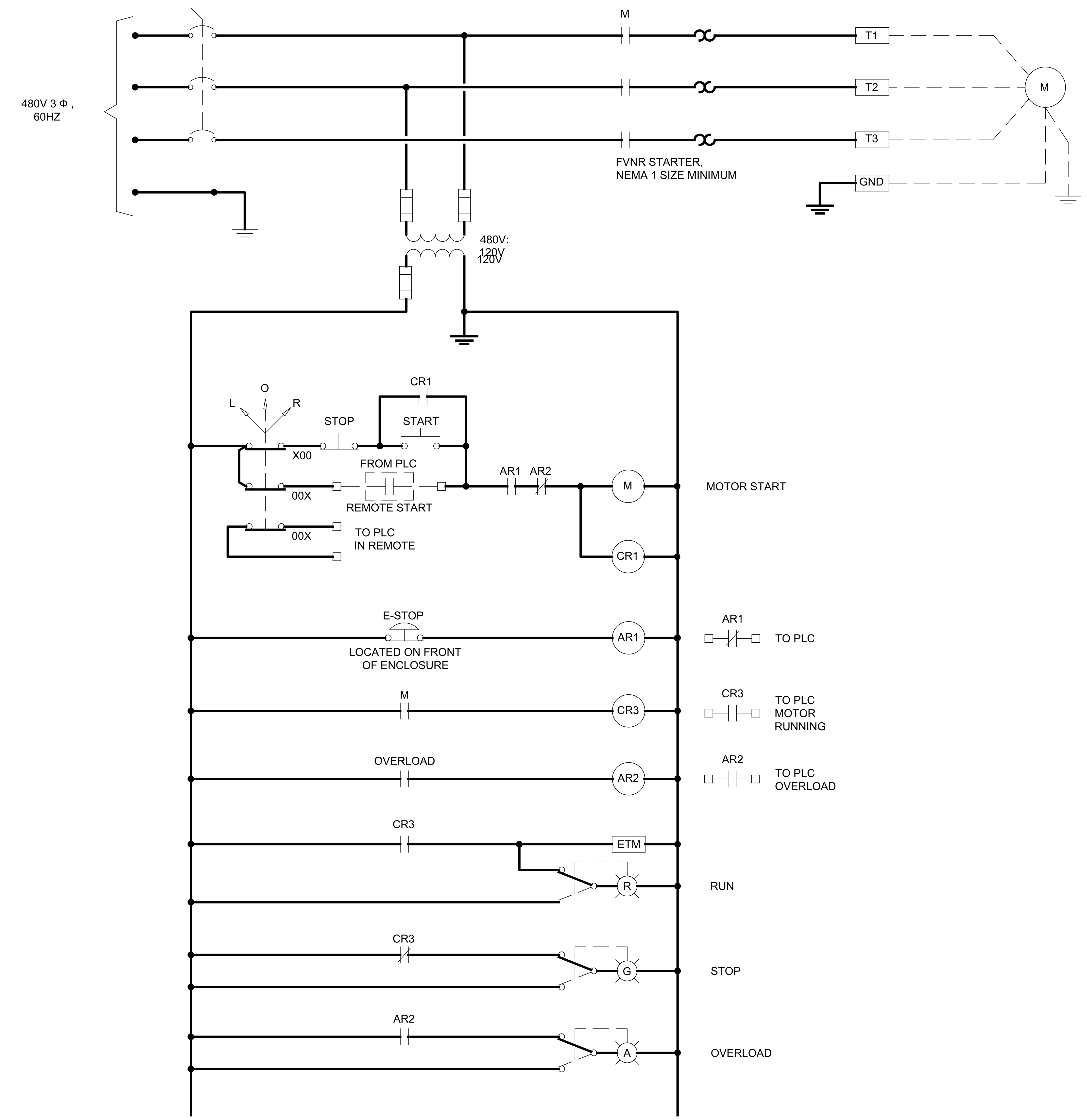
WATER TREATMENT ELECTRICAL VFD TYPICAL CONTROL DIAGRAM

DRAWING NUMBER

10-E604

ANSI D 22" x 34"
Approved: C.ADAMS
Checked: S.SHUGARS
Designer: C.ADAMS
Drafter: A.ODONNELL
Project Manager: J.KRINKS

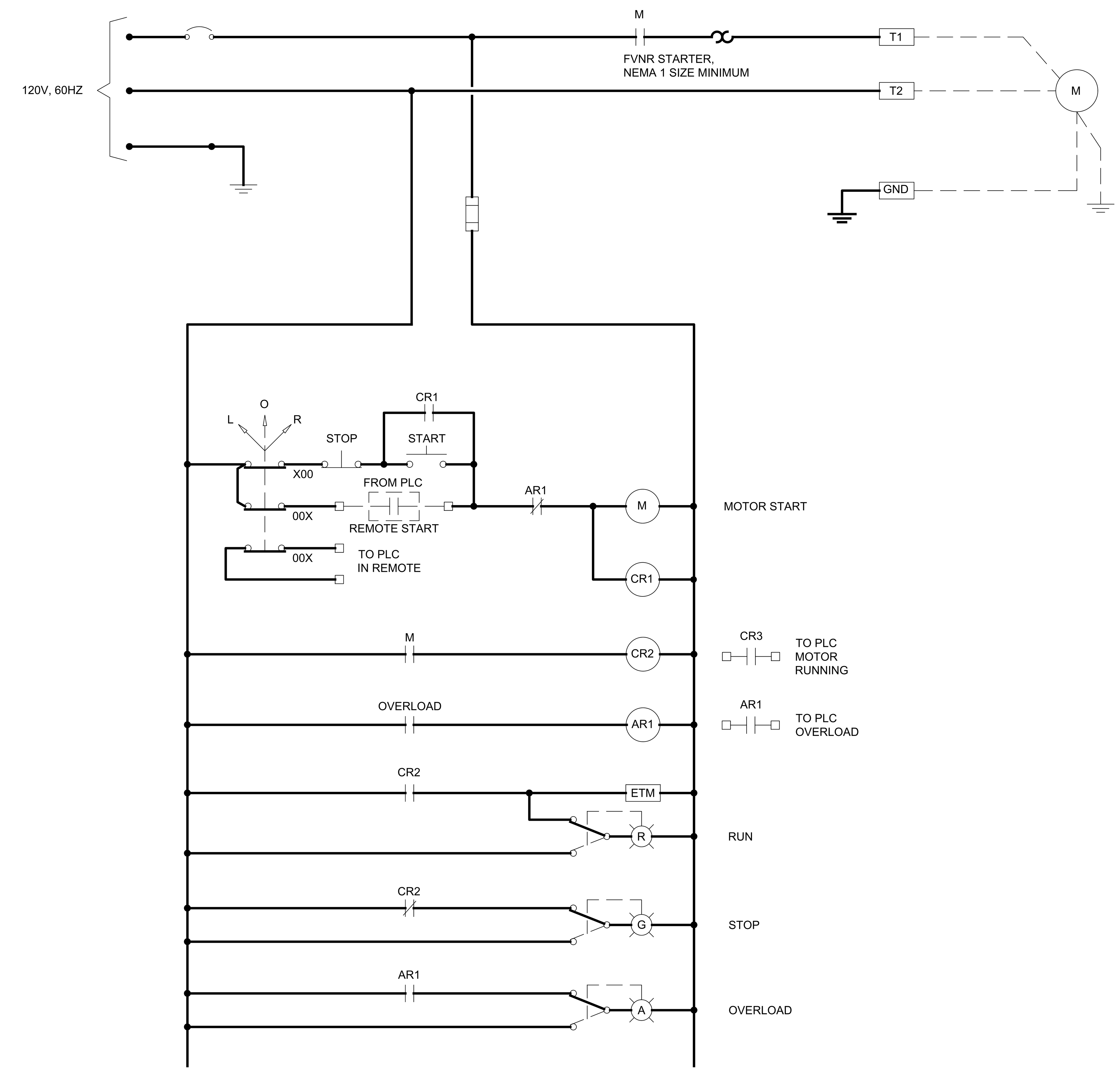
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING



THIS CONTROL DIAGRAM IS FOR THE FOLLOWING EQUIPMENT:

STR-0201-1	PMP-0253-1
STR-0202-1	PMP-0253-2
STR-0203-1	PMP-0301-8
STR-0204-1	PMP-0301-9
STR-0205-1	PMP-0301-10
STR-0206-1	PMP-0301-11
STR-0207-1	
STR-0208-1	
STR-0209-1	
STR-0210-1	
STR-0211-1	
STR-0212-1	
STR-0213-1	

TYPICAL FVNR MOTOR CONTROL DIAGRAM
SCALE: NOT TO SCALE



THIS CONTROL DIAGRAM IS FOR THE FOLLOWING EQUIPMENT:

PMP-0401-4
PMP-0401-5
PMP-0402-4
PMP-0402-5

TYPICAL 120V FVNR MOTOR CONTROL DIAGRAM
SCALE: NOT TO SCALE

AECOM
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ADAMS
STATE OF UTAH
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PROJECT NUMBER
AECOM Project No. - 60670884
HAL Project No. - 035.15.420

SHEET TITLE
WATER TREATMENT
ELECTRICAL
TYPICAL CONTROL
DIAGRAMS

DRAWING NUMBER
10-E605

Last Plotted: 15.06.2022_8:35 AM
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ANSI D 22" x 34"
Approved: C.ADAMS
Checked: S.SHUGARS
Designer: C.SAULS
Drafter: C.SAULS
Project Manager: J.KRINKS

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING

HVAC EQUIPMENT CONNECTION SCHEDULE

TAG	DESCRIPTION	KILOWATTS	HORSEPOWER	MCA	MOCP	VOLTAGE	PHASE	CONDUCTORS	GROUNDING	RACEWAY	PLUG NEMA CONFIG.	DIRECT CONNECTION	DISCONNECT SWITCH	NOTES
10-AHU-1	AIR HANDLER UNIT		2	3 A	15 A	480 V	3	3-#12	#12	3/4"		X	NEMA 1 NON-FUSED	2
10-AHU-2	AIR HANDLER UNIT		3	5 A	15 A	480 V	3	3-#12	#12	3/4"		X	NEMA 1 NON-FUSED	2
10-AHU-3	AIR HANDLER UNIT		10	15 A	20 A	480 V	3	3-#12	#12	3/4"		X	NEMA 1 NON-FUSED	2
10-AHU-4	AIR HANDLER UNIT		2	4 A	15 A	480 V	3	3-#12	#12	3/4"		X	NEMA 1 NON-FUSED	2
10-B-1	BOILER			4 A	15 A	480 V	3	3-#12	#12	3/4"		X	MOTOR SWITCH	
10-B-2	BOILER			4 A	15 A	480 V	3	3-#12	#12	3/4"		X	MOTOR SWITCH	
10-BC-1	BLOWER COIL		3	7 A	15 A	480 V	3	3-#12	#12	3/4"		X	NEMA 1 NON-FUSED	2
10-BC-2	BLOWER COIL		3	7 A	15 A	480 V	3	3-#12	#12	3/4"		X	NEMA 1 NON-FUSED	2
10-BC-55														
10-C-1	CHILLER CIRCUIT 1			105 A	125 A	480 V	3	3-#1	#6	1 1/2"		X	NEMA 4X SST NON-FUSED	2
10-C-1	CHILLER CIRCUIT 2			96 A	110 A	480 V	3	3-#2	#6	1 1/4"		X	NEMA 4X SST NON-FUSED	2
10-EF-1	EXHAUST FAN		1		15 A	480 V	3	3-#12	#12	3/4"		X	STARTER	
10-EF-2	EXHAUST FAN		1		15 A	480 V	3	3-#12	#12	3/4"		X	STARTER	
10-EF-3	EXHAUST FAN		.4	9 A	15 A	120 V	1	2-#12	#12	3/4"		X	STARTER	
10-EF-4	EXHAUST FAN		1		15 A	480 V	3	3-#12	#12	3/4"		X	STARTER	
10-EF-5	EXHAUST FAN		1		15 A	480 V	3	3-#12	#12	3/4"		X	STARTER	
10-EF-6	EXHAUST FAN		.4	9 A	15 A	120 V	1	2-#12	#12	3/4"		X	STARTER	
10-EF-7	EXHAUST FAN		.4	9 A	15 A	120 V	1	2-#12	#12	3/4"		X	STARTER	
10-EF-8	EXHAUST FAN		.4	9 A	15 A	120 V	1	2-#12	#12	3/4"		X	STARTER	
10-EF-9	EXHAUST FAN		FRAC		15 A	120 V	1	2-#12	#12	3/4"		X	STARTER	
10-EF-10	EXHAUST FAN		7.5		20 A	480 V	3	3-#12	#12	3/4"		X	STARTER	
10-EF-11	EXHAUST FAN		FRAC		20 A	120 V	1	2-#12	#12	3/4"		X	MOTOR SWITCH	
10-EF-12	EXHAUST FAN		FRAC		20 A	120 V	1	2-#12	#12	3/4"		X	MOTOR SWITCH	
10-EUH-1	ELECTRIC UNIT HEATER	10		12 A	15 A	480 V	3	3-#12	#12	3/4"		X	NEMA 1 NON-FUSED	
10-EUH-2	ELECTRIC UNIT HEATER	10		12 A	15 A	480 V	3	3-#12	#12	3/4"		X	NEMA 1 NON-FUSED	
10-EUH-3	ELECTRIC UNIT HEATER	10		12 A	15 A	480 V	3	3-#12	#12	3/4"		X	NEMA 1 NON-FUSED	
10-EUH-4	ELECTRIC UNIT HEATER	10		12 A	15 A	480 V	3	3-#12	#12	3/4"		X	NEMA 1 NON-FUSED	
10-GWH-1	GAS WATER HEATER				15 A	120 V	1	2-#12	#12	3/4"		X	MOTOR SWITCH	
10-P-1	CIRCULATING PUMP		5		15 A	480 V	3	3-#12	#12	3/4"		X	VFD	1
10-P-2	CIRCULATING PUMP		5		15 A	480 V	3	3-#12	#12	3/4"		X	VFD	1
10-P-3	CIRCULATING PUMP		3		15 A	480 V	3	3-#12	#12	3/4"		X	VFD	1
10-P-4	CIRCULATING PUMP		3		15 A	480 V	3	3-#12	#12	3/4"		X	VFD	1
10-P-5	CIRCULATING PUMP		20		60 A	480 V	3	3-#6	#10	1"		X	VFD	1
10-P-6	CIRCULATING PUMP		20		60 A	480 V	3	3#6	#10	1"		X	VFD	1
10-UH-1	HYDRONIC UNIT HEATER		FRAC		15 A	120 V	1	2-#12	#12	3/4"		X	MOTOR SWITCH	
10-UH-2	HYDRONIC UNIT HEATER		FRAC		15 A	120 V	1	2-#12	#12	3/4"		X	MOTOR SWITCH	
10-UH-3	HYDRONIC UNIT HEATER		FRAC		15 A	120 V	1	2-#12	#12	3/4"		X	MOTOR SWITCH	
10-UH-4	HYDRONIC UNIT HEATER		1/2		20 A	120 V	1	2-#12	#12	3/4"		X	MOTOR SWITCH	
10-UH-5	HYDRONIC UNIT HEATER		1/2		20 A	120 V	1	2-#12	#12	3/4"		X	MOTOR SWITCH	
10-UH-6	HYDRONIC UNIT HEATER		1/2		20 A	120 V	1	2-#12	#12	3/4"		X	MOTOR SWITCH	
10-UH-7	HYDRONIC UNIT HEATER		1/2		20 A	120 V	1	2-#12	#12	3/4"		X	MOTOR SWITCH	
10-UH-8	HYDRONIC UNIT HEATER		1/8		15 A	120 V	1	2-#12	#12	3/4"		X	MOTOR SWITCH	
10-UH-9	HYDRONIC UNIT HEATER		1/3		15 A	120 V	1	2-#12	#12	3/4"		X	MOTOR SWITCH	
10-UH-10	HYDRONIC UNIT HEATER		1/3		15 A	120 V	1	2-#12	#12	3/4"		X	MOTOR SWITCH	
10-UH-11	HYDRONIC UNIT HEATER		1/3		15 A	120 V	1	2-#12	#12	3/4"		X	MOTOR SWITCH	
10-UH-12	HYDRONIC UNIT HEATER		1/3		15 A	120 V	1	2-#12	#12	3/4"		X	MOTOR SWITCH	
10-UH-13	HYDRONIC UNIT HEATER		FRAC		15 A	120 V	1	2-#12	#12	3/4"		X	MOTOR SWITCH	
10-UH-14	HYDRONIC UNIT HEATER		1/8		15 A	120 V	1	2-#12	#12	3/4"		X	MOTOR SWITCH	
10-V-1	VARIABLE AIR VOLUME BOX			5 A	20 A	120 V	1	2-#12	#12	3/4"		X	MOTOR SWITCH	
10-V-2	VARIABLE AIR VOLUME BOX			5 A	20 A	120 V	1	2-#12	#12	3/4"		X	MOTOR SWITCH	
10-V-3	VARIABLE AIR VOLUME BOX			5 A	20 A	120 V	1	2-#12	#12	3/4"		X	MOTOR SWITCH	
10-V-4	VARIABLE AIR VOLUME BOX			5 A	20 A	120 V	1	2-#12	#12	3/4"		X	MOTOR SWITCH	
10-V-5	VARIABLE AIR VOLUME BOX			5 A	20 A	120 V	1	2-#12	#12	3/4"		X	MOTOR SWITCH	
10-V-6	VARIABLE AIR VOLUME BOX			5 A	20 A	120 V	1	2-#12	#12	3/4"		X	MOTOR SWITCH	
10-V-7	VARIABLE AIR VOLUME BOX			5 A	20 A	120 V	1	2-#12	#12	3/4"		X	MOTOR SWITCH	

1. VFD PROVIDED BY MECHANICAL CONTRACTOR. REFER TO MECHANICAL PLANS FOR EXACT LOCATION.
2. STARTER INCLUDED IN PACKAGED EQUIPMENT BY MECHANICAL CONTRACTOR.

LIGHT FIXTURE SCHEDULE

TAG	DESCRIPTION	LUMENS	COLOR TEMP	MOUNTING	LAMP	VOLTAGE	WATTAGE	MANUFACTURER	NOTES
A	2X2 FLAT PANEL	3300 lm	4000 K	RECESSED	LED	120 V	41 VA	LITHONIA CPANL 2X2 ALO1 SWW7 M4	
AE	2X2 FLAT PANEL WITH EM BATTERY	3300 lm	4000 K	RECESSED	LED	120 V	41 VA	LITHONIA CPANL 2X2 ALO1 SWW7 M4 ILBCP10A	
B	2X4 FLAT PANEL	4000 lm	4000 K	RECESSED	LED	120 V	55 VA	LITHONIA CPANL 2X4 ALO6 SWW7 M2	
BE	2X4 FLAT PANEL WITH EM BATTERY	4000 lm	4000 K	RECESSED	LED	120 V	55 VA	LITHONIA CPANL 2X4 ALO6 SWW7 M2 ILBCP10A	
C	2X4 FLAT PANEL	5000 lm	4000 K	RECESSED	LED	120 V	55 VA	LITHONIA CPANL 2X4 ALO6 SWW7 M2	
CE	2X4 FLAT PANEL WITH EM BATTERY	5000 lm	4000 K	RECESSED	LED	120 V	55 VA	LITHONIA CPANL 2X4 ALO6 SWW7 M2 ILBCP10A	
D	ROUND LOW BAY PENDANT	7900 lm	4000 K	PENDANT, BOTTOM @ 10'-0"	LED	120 V	56 VA	LITHONIA VCVL LED V4 P4 40K 70CRI T5W MVOLT PM UPL2 LDS72 DBLXD	2
DE	ROUND LOW BAY PENDANT WITH EM BATTERY	7900 lm	4000 K	PENDANT, BOTTOM @ 10'-0"	LED	120 V	56 VA	LITHONIA VCVL LED V4 P4 40K 70CRI T5W MVOLT PM UPL2 E10WH LDS72 DBLXD	2
F	ROUND HIGH BAY PENDANT	12000 lm	4000 K	CHAIN, BOTTOM @ 20'-0"	LED	120 V	130 VA	LITHONIA CPRB ALO13 MVOLT 40K 80CRI DBL	2
FE	ROUND HIGH BAY PENDANT WITH EM BATTERY	12000 lm	4000 K	CHAIN, BOTTOM @ 20'-0"	LED	120 V	130 VA	LITHONIA CPRB ALO13 MVOLT 40K 80CRI DBL RBAY BLDE40WCP	2
G	ROUND CORROSION-RESISTANT PENDANT	5000 lm	4000 K	PENDANT, BOTTOM @ 10'-0"	LED	120 V	35 VA	HOLOPHANE PXLW 5000LM MDU5FR MVOLT 40K 70CRI PM DBXD	2
GE	ROUND CORROSION-RESISTANT PENDANT WITH EM BATTERY	5000 lm	4000 K	PENDANT, BOTTOM @ 10'-0"	LED	120 V	35 VA	HOLOPHANE PXLW 5000LM MDU5FR MVOLT 40K 70CRI PM E10WMCP DBXD	2
H	4' SURFACE-MOUNT STRIP LIGHT WITH STEP-LEVEL DIMMING	2000 lm	4000 K	WALL @ 7'-6" ABOVE STAIR TREADS/LANDING	LED	120 V	20 VA	LITHONIA WL4 20L SLD LP840 MSD7 DIM50	1
HE	4' SURFACE-MOUNT STRIP LIGHT WITH STEP-LEVEL DIMMING AND EM BATTERY	2000 lm	4000 K	WALL @ 7'-6" ABOVE STAIR TREADS/LANDING	LED	120 V	20 VA	LITHONIA WL4 20L SLD LP840 MSD7 DIM50 EL7L	1
IE	4' SURFACE-MOUNT STRIP LIGHT WITH STEP-LEVEL DIMMING AND EM BATTERY	4000 lm	4000 K	CEILING SURFACE	LED	120 V	40 VA	LITHONIA WL4 40L SLD SP840 MSD7 DIM50 EL7L	1
J	RED EDGE-LIT SINGLE-FACE CORROSION-RESISTANT EXIT SIGN WITH EM BATTERY	____	____	WALL ABOVE DOOR	LED	120 V	5 VA	HOLOPHANE HDXE 1 R 12/27 EL PW	
K	RED EDGE-LIT SINGLE-FACE EXIT SIGN WITH EM BATTERY	____	____	WALL ABOVE DOOR	LED	120 V	5 VA	LITHONIA LQM S W 3 R 120/277 ELN	
L	2' RECESSED WET LOCATION LINEAR	900 lm	4000 K	RECESSED	LED	120 V	10 VA	PINNACLE WET 840 2 IND FL(F) U FSD 1 0 BL	
LE	2' RECESSED WET LOCATION LINEAR WITH EM BATTERY	900 lm	4000 K	RECESSED	LED	120 V	10 VA	PINNACLE WET 840 2 IND FL(F) U FSD 1 1P BL	
M	EXTERIOR WALL PACK, TYPE II DISTRIBUTION	750 lm	4000 K	WALL @ 8'-0"	LED	120 V	7 VA	LITHONIA WDGE2 LED P0 40K 70CRI T2M MVOLT SRM XXXX	2
ME	EXTERIOR WALL PACK, TYPE II DISTRIBUTION WITH EM BATTERY	750 lm	4000 K	WALL @ 8'-0"	LED	120 V	7 VA	LITHONIA WDGE2 LED P0 40K 70CRI T2M MVOLT SRM E20WC XXXX	2
N	EXTERIOR WALL PACK, TYPE IV DISTRIBUTION	3200 lm	4000 K	WALL @ 13'-0"	LED	120 V	32 VA	LITHONIA WDGE2 LED P3 40K 70CRI T4M MVOLT SRM XXXX	2
NE	EXTERIOR WALL PACK, TYPE IV DISTRIBUTION, EM BATTERY	3200 lm	4000 K	WALL @ 13'-0"	LED	120 V	32 VA	LITHONIA WDGE2 LED P3 40K 70CRI T4M MVOLT SRM E20WC XXXX	2
O	AREA LIGHT WITH POLE, LEFT CORNER CUTOFF DISTRIBUTION	8900 lm	4000 K	POLE	LED	120 V	70 VA	LITHONIA DSX1 LED P2 40K LCCO MVOLT RPA DBLXD G1	3
P	AREA LIGHT WITH POLE, TYPE III SHORT DISTRIBUTION	12600 lm	4000 K	POLE	LED	120 V	102 VA	LITHONIA DSX1 LED P3 40K T3S MVOLT RPA DBLXD G1	3
Q	ROUND CORROSION-RESISTANT	5000 lm	4000 K	WALL @ 13'-6"	LED	120 V	35 VA	HOLOPHANE PXLW 5000LM MDU5FR MVOLT 40K 70CRI UNM DBXD P3US35	2
QE	ROUND CORROSION-RESISTANT WITH EM BATTERY	5000 lm	4000 K	WALL @ 13'-6"	LED	120 V	35 VA	HOLOPHANE PXLW 5000LM MDU5FR MVOLT 40K 70CRI UNM E10WMCP DBXD P3US35	2
R	18" UNDERCABINET LIGHT	585 lm	3000 K	UNDER CABINET	LED	120 V	10 VA	LITHONIA UCLD 18IN 30K 90CRI WH	
S	24" UNDERCABINET LIGHT	740 lm	3000 K	UNDER CABINET	LED	120 V	13 VA	LITHONIA UCLD 24IN 30K 90CRI WH	
T	4' SURFACE-MOUNT VAPOR TIGHT	4000 lm	4000 K	CEILING SURFACE	LED	120 V	34 VA	LITHONIA CSVT L48 ALO3 MVOLT SWW3 80CRI WLFEND2	
TE	4' SURFACE-MOUNT VAPOR TIGHT WITH EM BATTERY	4000 lm	4000 K	CEILING SURFACE	LED	120 V	34 VA	LITHONIA CSVT L48 ALO3 MVOLT SWW3 80CRI IE7WCP WLFEND2	
U	UV DISINFECTION FIXTURE	____	____	RECESSED	-	120 V	125 VA	PURO H-F1-6-FC-COM-110	4
V	SIGNAGE FLOODLIGHT FIXTURE	2600 lm	4000 K	SEE PLANS	LED	120 V	24 VA	BEGA 84 100 K4 BLK	

1. FIXTURES SHALL DIM TO 50% WHEN STAIRWELL IS NOT OCCUPIED.
2. FIXTURE SHALL BE HUNG AT HEIGHT SHOWN ON SCHEDULE UNLESS NOTED OTHERWISE.
3. PROVIDE WITH ROUND STEEL POLE RSS 22-6 4B DM19AS VD DBLXD.
4. FIXTURE SHOWN IS FOR DESIGN INTENT ONLY. UV DISINFECTION SYSTEM SHALL BE DESIGNED BY MANUFACTURER. REFER TO SPEC SECTION 26 50 00 FOR MORE INFORMATION. SYSTEM SHALL INCLUDE ALL FIXTURES, CONTROL SYSTEM, ETHERNET CONNECTIVITY, ALL ETHERNET WIRING INTERCONNECTIONS, AND ANY ADDITIONAL COMPONENTS NECESSARY FOR A FULLY FUNCTIONAL SYSTEM.

AECOM
HANSEN ALLEN & LUCE INC
ENGINEERS

PROJECT

PROVO RIVER WATER TREATMENT PLANT

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WELCOME HOME

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HAL Project No. - 035.15.420

SHEET TITLE

WATER TREATMENT ELECTRICAL SCHEDULES 1

DRAWING NUMBER

10-E611

Last Plotted: 4/5/2023 12:38:04 PM
Filename: BIM 360://CI-AMER (USA) 60670884-Provo River WTP/60670884_10-E001.rvt

ANSI D 22" x 34"

Approved: C.ADAMS

Checked: S.SHUGARS

Designer: C.SAULS

Drafter: C.SAULS

Project Manager: J.KRINKS

Last Plotted: 4/5/2023 12:38:06 PM
Filename: BIM 360://CI-AMER (USA) 60670884-Provo River WTP/60670884_10-E001.rvt

VERIFY SCALE

BAR IS ONE INCH ON ORIGINAL DRAWING

Panelboard: 10-L-1

Location: ELEC 117 | **Supply From:** 10-DP-L | **Mounting:** Surface | **Enclosure:** Type 1

Volts: 208/120 Wye | **Phases:** 3 | **Wires:** 4

A.I.C. Rating: 42k | **Mains Type:** MLO | **Bus Rating:** 100 A | **MCB Rating:**

NOTES	Ckt	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	Ckt	NOTES
	1	LIGHITNG IT CLOSET 119	20 A	1	397 VA	75 VA					1	20 A	LIGHTING EXTERIOR SIGNAGE	2	
	3	LIGHTING EXTERIOR	20 A	1			262 VA	156 VA			1	20 A	LIGHTING EXTERIOR	4	
	5	10-CP-1	15 A	1					500 VA	500 VA	1	15 A	10-GWH-1	6	
	7	10-UH-14	15 A	1	100 VA	75 VA					1	15 A	10-UH-13	8	
	9	RECEPTACLE ELEC/DATA 117	20 A	1			360 VA	360 VA			1	20 A	LIT-0241-6A, 6B	10	
	11	FACP	20 A	1					0 VA	720 VA	1	20 A	RECEPTACLE MECH 210	12	
	13	Space	--	1	--	180 VA					1	20 A	10-TCP-1	14	
	15	10-TCP-2	20 A	1			180 VA	180 VA			1	20 A	10-TCP-3	16	
	17	10-TCP-4	20 A	1					180 VA	180 VA	1	20 A	10-TCP-5	18	
	19	10-TCP-6	20 A	1	180 VA	--					1	--	Space	20	
	21	Space	--	1			--	180 VA			1	20 A	PLC-0000-1	22	
	23	MCP-0200-1 UF SKID MAIN CONTROL PANEL	20 A	1					180 VA	180 VA	1	20 A	NET-000-1	24	
	25	NET-0000-2	20 A	1	180 VA	180 VA					1	20 A	BOILER EMERGENCY SHUT-OFF	26	
	27	10-EF-3	15 A	1			308 VA	180 VA			1	20 A	10-LC-1	28	
	29	FE/FIT-0253-2, 3 FLOW METERS	20 A	1					360 VA	180 VA	1	20 A	RIO-0000-1	30	
	31	EV CHARGER EAST	50 A	2	4800 VA	4800 VA					2	50 A	EV CHARGER EAST	32	
	33	--	--	--			4800 VA	4800 VA			--	--	--	34	
	35	LIGHTING MECH 210	20 A	1					1120 VA	360 VA	1	20 A	LSH-0240-1, 2	36	
	37	Space	--	1	--	--					1	--	Space	38	
	39	Space	--	1			--	--			1	--	Space	40	
	41	RECEPTACLE MECH 210	20 A	1					720 VA	1500 VA	1	20 A	CHILLER HEAT TAPE	42	
	43	Space	--	1	--	--					1	--	Space	44	
	45	Space	--	1			--	--			1	--	Space	46	
	47	CHILLER HEAT TAPE	20 A	1					1500 VA	540 VA	1	20 A	RECEPTACLE ELEC/DATA 117	48	
	49	Spare	20 A	1	0 VA	0 VA					3	60 A	SPD	50	
	51	Spare	20 A	1			0 VA	0 VA			--	--	--	52	
	53	Spare	20 A	1					0 VA	0 VA	--	--	--	54	
	55	Spare	20 A	1	0 VA	0 VA					1	20 A	Spare	56	
	57	Spare	20 A	1			0 VA	0 VA			1	20 A	Spare	58	
	59	Spare	20 A	1					0 VA	0 VA	1	20 A	Spare	60	
	61	Spare	20 A	1	0 VA	0 VA					1	20 A	Spare	62	
	63	Space	--	1			--	0 VA			1	20 A	Spare	64	
	65	Space	--	1					--	0 VA	1	20 A	Spare	66	
	67	Space	--	1	--	0 VA					1	20 A	Spare	68	
	69	Space	--	1			--	--			1	--	Space	70	
	71	Space	--	1					--	--	1	--	Space	72	
		Connected Volt-Amps:			10967 VA		11766 VA		8720 VA						

Total Connected Load: 31453 VA

Total Current: 87 A

Panelboard: 10-L-2

Location: CORRIDOR 110 | **Supply From:** 10-DP-L | **Mounting:** Recessed | **Enclosure:** Type 1

Volts: 208/120 Wye | **Phases:** 3 | **Wires:** 4

A.I.C. Rating: 42k | **Mains Type:** MLO | **Bus Rating:** 100 A | **MCB Rating:**

NOTES	Ckt	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	Ckt	NOTES
	1	LIGHTING LAB 111	20 A	1	1127 VA	468 VA					1	20 A	LIGHTING TOILET 115	2	
	3	10-V-1	20 A	1			600 VA	600 VA			1	20 A	10-V-2	4	
	5	10-V-3	20 A	1					600 VA	600 VA	1	20 A	10-V-4	6	
	7	10-V-5	20 A	1	600 VA	600 VA					1	20 A	10-V-6	8	
	9	10-V-7	20 A	1			600 VA	720 VA			1	20 A	RECEPTACLE CONTROL 112	10	
	11	RECEPTACLE CONTROL 112	20 A	1					720 VA	720 VA	1	20 A	RECEPTACLE OFFICE 113	12	
	13	RECEPTACLE CORR 110	20 A	1	900 VA	540 VA					1	20 A	RECEPTACLE STAFF LOUNGE 114	14	
1	15	WATER COOLER	20 A	1			600 VA	--			1	--	Space	16	
	17	RECEPTACLE STAFF LOUNGE 114	20 A	1					1200 VA	360 VA	1	20 A	STAFF LOUNGE 114	18	
1	19	GARBAGE DISPOSAL	20 A	1	1200 VA	180 VA					1	20 A	RECEPTACLE JC 118	20	
	21	RECEPTACLES RESTROOMS	20 A	1			360 VA	180 VA			1	20 A	RECEPTACLE IT CLOSET 119	22	
	23	RECEPTACLE IT CLOSET 119	20 A	1					180 VA	360 VA	1	20 A	RECEPTACLE IT CLOSET 119	24	
1	25	LAB FRIDGE	20 A	1	200 VA	200 VA					1	20 A	LAB FRIDGE	26	1
	27	RECEPTACLE LAB 111	20 A	1			360 VA	1560 VA			1	20 A	RECEPTACLE LAB 111	28	
	29	RECEPTACLE LAB 111	20 A	1					360 VA	500 VA	1	20 A	FUME HOOD	30	
	31	RECEPTACLE LAB 111	20 A	1	360 VA	540 VA					1	20 A	RECEPTACLE LAB 111	32	
	33	TDS OVEN LAB 111	20 A	1			1800 VA	360 VA			1	20 A	FRONT DOOR ELECTRIC STRIKES	34	
	35	RECEPTACLE STAFF LOUNGE 114	20 A	1					360 VA	1200 VA	1	20 A	MICROWAVE STAFF LOUNGE 114	36	
	37	Space	--	1	--	600 VA					1	20 A	TOC ANALYZER LAB 111	38	
	39	DISHWASHER LAB 111	20 A	1			500 VA	180 VA			1	20 A	WATER PURIFICATION SYSTEM LAB 111	40	
	41	SAMPLE SEALER LAB 111	20 A	1					180 VA	180 VA	1	20 A	INCUBATOR LAB 111	42	
	43	UV DISINFECTION SYSTEM LAB 111	20 A	1	500 VA	--					1	--	Space	44	
	45	Space	--	1			--	--			1	--	Space	46	
1	47	REFRIGERATOR	20 A	1					800 VA	1800 VA	1	20 A	DISHWASHER STAFF LOUNGE 114	48	
	49	Spare	20 A	1	0 VA	0 VA					3	60 A	SPD	50	
	51	Spare	20 A	1			0 VA	0 VA			--	--	--	52	
	53	Spare	20 A	1					0 VA	0 VA	--	--	--	54	
	55	Spare	20 A	1	0 VA	0 VA					1	20 A	Spare	56	
	57	Spare	20 A	1			0 VA	0 VA			1	20 A	Spare	58	
	59	Spare	20 A	1					0 VA	0 VA	1	20 A	Spare	60	
	61	Spare	20 A	1	0 VA	0 VA					1	20 A	Spare	62	
	63	Space	--	1			--	0 VA			1	20 A	Spare	64	
	65	Space	--	1					--	0 VA	1	20 A	Spare	66	
	67	Space	--	1	--	0 VA					1	20 A	Spare	68	
	69	Space	--	1			--	--			1	--	Space	70	
	71	Space	--	1					--	--	1	--	Space	72	
		Connected Volt-Amps:			8015 VA		8420 VA		10120 VA						

Total Connected Load: 26555 VA

Total Current: 74 A

1. PROVIDE GFCI BREAKER.

Panelboard: 10-L-3

Location: PROCESSING 120 | **Supply From:** 10-DP-L | **Mounting:** Surface | **Enclosure:** Type 1

Volts: 208/120 Wye | **Phases:** 3 | **Wires:** 4

A.I.C. Rating: 42k | **Mains Type:** MLO | **Bus Rating:** 100 A | **MCB Rating:**

NOTES	Ckt	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	Ckt	NOTES
	1	CP-0301-4 GAS MEASURING SYSTEM 1	20 A	1	180 VA	180 VA					1	20 A	CP-0301-5 GAS MEASURING SYSTEM 2	2	
	3	CP-0301-7 GAS MEASURING SYSTEM 4	20 A	1			180 VA	180 VA			1	20 A	CP-0301-6 GAS MEASURING SYSTEM 3	4	
	5	LCP-0203-1 SKID CONTROL PANEL	20 A	1					180 VA	700 VA	1	20 A	PMP-0303-4 SODIUM B. METERING PUMP 4	6	
	7	LCP-0203-5 SKID CONTROL PANEL	20 A	1	180 VA	180 VA					1	20 A	LCP-0203-3 SKID CONTROL PANEL	8	
	9	LCP-0203-9 SKID CONTROL PANEL	20 A	1			180 VA	180 VA			1	20 A	LCP-0203-7 SKID CONTROL PANEL	10	
	11	LCP-0203-13 SKID CONTROL PANEL	20 A	1					180 VA	180 VA	1	20 A	LCP-0203-11 SKID CONTROL PANEL	12	
	13	LCP-0203-4 SKID CONTROL PANEL	20 A	1	180 VA	180 VA					1	20 A	LCP-0203-2 SKID CONTROL PANEL	14	
	15	LCP-0203-8 SKID CONTROL PANEL	20 A	1			180 VA	180 VA			1	20 A	LCP-0203-6 SKID CONTROL PANEL	16	
	17	LCP-0203-12 SKID CONTROL PANEL	20 A	1					180 VA	180 VA	1	20 A	LCP-0203-10 SKID CONTROL PANEL	18	
	19	AIT-0300-2	20 A	1	180 VA	500 VA					1	20 A	MCP-0305-1 OZONE CONTROL PANEL	20	
	21	RGL-0301-2 VACUUM REGULATOR 2	20 A	1			180 VA	180 VA			1	20 A	RGL-0301-1 VACUUM REGULATOR 1	22	
	23	AIT-0300-1	20 A	1					180 VA	180 VA	1	20 A	RGL-0301-3 VACUUM REGULATOR 3	24	
	25	AIT-0308-5B	20 A	1	180 VA	1800 VA					1	20 A	SK-0307-1 NITRO BOOST COMPR. SKID J-BOX	26	
	27	CP-0301-1 CHLORINE GAS WEIGH SCALE...	20 A	1			180 VA	180 VA			1	20 A	AIT-0308-5A	28	
	29	LT-0302-1 & LSH-0302-1	20 A	1					360 VA	360 VA	1	20 A	FE/FIT-0301-8 & 0302-10 FLOW METERS	30	
	31	LT-0303-1 & LSH-0303-1	20 A	1	360 VA	360 VA					1	20 A	LT-0302-2 & LSH-0302-2	32	
	33	PMP-0303-3 BISULFITE METERING PUMP 3	20 A	1			700 VA	700 VA			1	20 A	PMP-0303-2 BISULFITE METERING PUMP 2	34	
	35	PMP-0303-1 BISULFITE METERING PUMP 1	20 A	1					700 VA	700 VA	1	20 A	PMP-0303-5 BISULFITE METERING PUMP 5	36	
	37	PMP-0302-2 COAGULANT METERING PUMP 2	20 A	1	700 VA	700 VA					1	20 A	PMP-0302-1 COAGULANT METERING PUMP 1	38	
	39	CM-0307-3	20 A	1			180 VA	700 VA			1	20 A	PMP-0302-3 COAGULANT METERING PUMP 3	40	
	41	VLV-0308-4, 4A, 4B	20 A	1					540 VA	540 VA	1	20 A	VLV-0308-1, 1A, 1B	42	
	43	VLV-0308-2, 2A, 2B	20 A	1	540 VA	540 VA					1	20 A	VLV-0308-3, 3A, 3B	44	
	45	PMP-0102-1 SUMP PUMP	20 A	1			700 VA	180 VA			1	20 A	LIT-0102-1	46	
	47	LCP-0102-2 IRRIGATION CONTROLLER	20 A	1					180 VA	450 VA	1	20 A	COAGULANT INJECTION VAULT LIGHTING	48	
	49	FE/FIT-0102-2	20 A	1	180 VA	0 VA					3	60 A	SPD	50	
	51	LCP-0303-1	20 A	1			180 VA	0 VA			--	--	--	52	
	53	LCP-0302-1	20 A	1					180 VA	0 VA	--	--	--	54	
	55	LCP-0305-1 LOX CONTROL PANEL	20 A	1	180 VA	540 VA					1	20 A	LE/LT-0250-1, 2, 3	56	
	57	LE/LT-0253-1	20 A	1			180 VA	1000 VA			1	20 A	HTR-0306-1	58	
	59	Spare	20 A	1					0 VA	0 VA	1	20 A	Spare	60	
	61	Spare	20 A	1	0 VA	0 VA					1	20 A	Spare	62	
	63	Spare	20 A	1			0 VA	0 VA			1	20 A	Spare	64	
	65	Spare	20 A	1					0 VA	0 VA	1	20 A	Spare	66	
	67	Spare	20 A	1	0 VA	0 VA					1	20 A	Spare	68	
	69	Spare	20 A	1			0 VA	0 VA			1	20 A	Spare	70	
	71	Spare	20 A	1					0 VA	0 VA	1	20 A	Spare	72	
		Connected Volt-Amps:			7840 VA		6320 VA		5970 VA						

Total Connected Load: 20130 VA

Total Current: 56 A

Panelboard: 10-L-4

Location: LOWER LEVEL 001 | **Supply From:** 10-DP-L | **Mounting:** Surface | **Enclosure:** Type 1

Volts: 208/120 Wye | **Phases:** 3 | **Wires:** 4

A.I.C. Rating: 42k | **Mains Type:** MLO | **Bus Rating:** 100 A | **MCB Rating:**

NOTES	Ckt	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	Ckt	NOTES
	1	AIT 0303-1A, 1B PH & TURBIDITY	20 A	1	360 VA	180 VA					1	20 A	FE/FIT-0302-1 FLOW METER	2	
	3	FE/FIT 0303-1	20 A	1			180 VA	1176 VA			1	20 A	PMP-0401-4 SAMPLE PUMP 1	4	
	5	PMP-0401-5 SAMPLE PUMP 2	20 A	1					1176 VA	1176 VA	1	20 A	PMP-0402-4 SAMPLE PUMP 3	6	
	7	PMP-0402-5 SAMPLE PUMP 4	20 A	1	1176 VA	180 VA					1	20 A	FE/FIT 0251-1	8	
	9	LIGHTING LOWER LEVEL EAST	20 A	1			1144 VA	961 VA			1	20 A	LIGHTING LOWER LEVEL WEST	10	
	11	RECEPTACLE LOWER LEVEL	20 A	1					540 VA	720 VA	1	20 A	RECEPTACLE LOWER LEVEL	12	
	13	RECEPTACLE LOWER LEVEL	20 A	1	720 VA	--					1	--	Space	14	
	15	FM-1 FLOW METER	20 A	1			180 VA	--			1	--	Space	16	
	17	AE/AIT-0401-1A	20 A	1					180 VA	180 VA	1	20 A	AE/AIT-0401-1B	18	
	19	AE/AIT-0402-1A	20 A	1	180 VA	180 VA					1	20 A	AE/AIT-0402-1B	20	
	21	FE/FIT-0221-3	20 A	1			180 VA	180 VA			1	20 A	FE/FIT-0222-3	22	
	23	VLV-0221-2A	20 A	1					180 VA	180 VA	1	20 A	VLV-0222-2A	24	
	25	LIT-0221-1	20 A	1	180 VA	180 VA					1	20 A	LIT-0222-1	26	
	27	AIT-0254-1, 2	20 A	1			360 VA	0 VA			3	60 A	SPD	28	
	29	AIT-0204-13A TURBIDITY	20 A	1					180 VA	0 VA	--	--	--	30	
	31	AIT-0204-13B TSS	20 A	1	180 VA	0 VA					--	--	--	32	
	33	SUMP PUMP CONTROL PANEL	20 A	1			1800 VA	0 VA			1	20 A	Spare	34	
	35	Spare	20 A	1					0 VA	0 VA	1	20 A	Spare	36	
	37	Spare	20 A	1	0 VA	0 VA					1	20 A	Spare	38	
	39	Spare	20 A	1			0 VA	0 VA			1	20 A	Spare	40	
	41	Spare	20 A	1					0 VA	0 VA	1	20 A	Spare	42	
	43	Spare	20 A	1	0 VA	0 VA					1	20 A	Spare	44	
	45	Spare	20 A	1			0 VA	0 VA			1	20 A	Spare	46	
	47	Spare	20 A	1					0 VA	0 VA	1	20 A	Spare	48	
	49	Spare	20 A	1	0 VA	--					1	--	Space	50	
	51	Space	--	1			--	--			1	--	Space	52	
	53	Space	--	1					--	--	1	--	Space	54	
		Connected Volt-Amps:			3516 VA		6161 VA		4512 VA						

Total Connected Load: 14189 VA

Total Current: 39 A

AECOM

HANSEN ALLEN & LUCE INC
ENGINEERS

PROJECT

PROVO RIVER WATER TREATMENT PLANT

CLIENT

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REGISTRATION

PROFESSIONAL ENGINEER
No. 12839491-2202
CHRISTOPHER J. ADAMS
STATE OF UTAH
04/07/2023

ISSUE/REVISION

I/R	DATE	DESCRIPTION
B	2023-04-07	ISSUED FOR BID
A	2023-01-20	ISSUED FOR 90%

PROJECT NUMBER

AECOM Project No. - 60670884
HAL Project No. - 035.15.420

SHEET TITLE

WATER TREATMENT ELECTRICAL SCHEDULES 2

DRAWING NUMBER

10-E612

ANSI D 22" x 34"

Approved: C.ADAMS

Checked: S.SHUGARS

Designer: C.SAULS

Drafter: C.SAULS

Project Manager: J.KRINKS

Last Plotted: 4/5/2023 12:38:07 PM
Filename: BIM 360://CI-AMER (USA) 60670884-Provo River WTP/60670884_10-E001.rvt

VERIFY SCALE

BAR IS ONE INCH ON ORIGINAL DRAWING

Panelboard: 10-L-5

Location: PROCESSING 120 | **Volts:** 208/120 Wye | **A.I.C. Rating:** 42k
Supply From: 10-DP-L | **Phases:** 3 | **Mains Type:** MLO
Mounting: SURFACE | **Wires:** 4 | **Bus Rating:** 225 A
Enclosure: Type 1 | **MCB Rating:**

NOTES	Ckt	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	Ckt	NOTES
	1	LIGHTING CHEMICAL ROOM	20 A	1	935 VA	1430 VA					1	20 A	LIGHTING PROCESSING 120	2	
	3													4	
	5	LIGHTING PROCESSING 120	20 A	1					1430 VA	1430 VA	1	20 A	LIGHTING PROCESSING 120	6	
	7	LIGHTING PROCESSING 120	20 A	1	1305 VA	308 VA					1	15 A	10-EF-6	8	
	9	10-EF-7	15 A	1			308 VA	308 VA			1	15 A	10-EF-8	10	
	11	10-EF-9	15 A	1					100 VA	75 VA	1	15 A	10-UH-1	12	
	13	10-UH-2	15 A	1	75 VA	75 VA					1	15 A	10-UH-3	14	
	15	10-UH-4	20 A	1			1176 VA	1176 VA			1	20 A	10-UH-5	16	
	17	10-UH-6	20 A	1					1176 VA	1176 VA	1	20 A	10-UH-7	18	
	19	10-UH-8	15 A	1	100 VA	865 VA					1	15 A	10-UH-9	20	
	21	10-UH-10	15 A	1			865 VA	865 VA			1	15 A	10-UH-11	22	
	23	10-UH-12	15 A	1					865 VA	180 VA	1	20 A	10-TCP-7	24	
	25	10-TCP-8	20 A	1	180 VA	180 VA					1	20 A	TCP-9	26	
	27													28	
	29	RECEPTACLE CITRIC ACID 127	20 A	1					900 VA	900 VA	1	20 A	RECEPTACLE OZONE GEN 124	30	
	31	RECEPTACLE CI GAS STORE 123	20 A	1	540 VA	4800 VA					2	50 A	EV CHARGER WEST	32	
	33	EV CHARGER WEST	50 A	2			4800 VA	4800 VA			--	--	--	34	
	35	--	--	--					4800 VA					36	
	37	RECEPTACLE PROCESSING 120	20 A	1	1440 VA	1440 VA					1	20 A	RECEPTACLE PROCESSING 120	38	
	39							0 VA			1	20 A	Spare	40	
	41	LIGHTING PROCESSING 120	20 A	1					1430 VA	1430 VA	1	20 A	LIGHTING PROCESSING 120	42	
	43	Spare	20 A	1	0 VA	0 VA					3	60 A	SPD	44	
	45	Spare	20 A	1			0 VA	0 VA			--	--	--	46	
	47	Spare	20 A	1					0 VA	0 VA	--	--	--	48	
	49	Spare	20 A	1	0 VA	0 VA					1	20 A	Spare	50	
	51	Spare	20 A	1			0 VA	0 VA			1	20 A	Spare	52	
	53	Spare	20 A	1					0 VA	0 VA	1	20 A	Spare	54	
		Connected Volt-Amps:			13673 VA		14298 VA		15892 VA						

Total Connected Load: 43863 VA
Total Current: 122 A

Panelboard: 10-DP-L

Location: ELEC 117 | **Volts:** 208/120 Wye | **A.I.C. Rating:** 42k
Supply From: 10-X-1 | **Phases:** 3 | **Mains Type:** MCB
Mounting: SURFACE | **Wires:** 4 | **Bus Rating:** 400 A
Enclosure: Type 1 | **MCB Rating:** 400 A

NOTES	Ckt	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	Ckt	NOTES
	1	10-L-1	100 A	3	10967 VA	8015 VA					3	100 A	10-L-2	2	
	3	--	--	--			11766 VA	8420 VA			--	--	--	4	
	5	--	--	--					8720 VA	10120 VA	--	--	--	6	
	7	10-L-3	100 A	3	7840 VA	3516 VA					3	100 A	10-L-4	8	
	9	--	--	--			6320 VA	6161 VA			--	--	--	10	
	11	--	--	--					5970 VA	4512 VA	--	--	--	12	
	13	10-L-5	200 A	3	13673 VA	0 VA					3	60 A	SPD	14	
	15	--	--	--			14298 VA	0 VA			--	--	--	16	
	17	--	--	--					15892 VA	0 VA	--	--	--	18	
	19	Space	--	3	--	--					3	--	Space	20	
	21	--	--	--			--	--			--	--	--	22	
	23	--	--	--					--	--	--	--	--	24	
	25	Spare	100 A	3	0 VA	0 VA					3	100 A	Spare	26	
	27	--	--	--			0 VA	0 VA			--	--	--	28	
	29	--	--	--					0 VA	0 VA	--	--	--	30	
		Connected Volt-Amps:			44011 VA		46965 VA		45214 VA						

Total Connected Load: 136190 VA
Total Current: 378 A

AECOM

HANSEN ALLEN & LUCE inc
ENGINEERS

PROJECT

PROVO RIVER WATER TREATMENT PLANT

CLIENT

PROVO CITY PUBLIC WORKS
1377 South 350 East
Provo, UT 84606
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provo
WELCOME HOME

CONSULTANTS

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859 West South Jordan Pkwy, Ste 200
South Jordan, UT 84095
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REGISTRATION

PROFESSIONAL ENGINEER
No. 12839491-2202
CHRISTOPHER J. ADAMS
STATE OF UTAH
04/07/2023

ISSUE/REVISION

I/R	DATE	DESCRIPTION
A	2023-04-07	ISSUED FOR BID

PROJECT NUMBER

AECOM Project No. - 60670884
HAL Project No. - 035.15.420

SHEET TITLE

WATER TREATMENT ELECTRICAL SCHEDULES 3

DRAWING NUMBER

10-E613

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING

Panelboard: 10-H-1

Location: LOWER LEVEL 001 **Volts:** 480/277 Wye **A.I.C. Rating:** 42k
Supply From: 10-MDP-1 **Phases:** 3 **Mains Type:** MLO
Mounting: Surface **Wires:** 4 **Bus Rating:** 200 A
Enclosure: Type 1 **MCB Rating:**

NOTES	Ckt	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	Ckt	NOTES
	1	VLV-0201-2A, 0203-2A, 0205-2A DRAIN VALVES	20 A	3	180 VA	120 VA					3	20 A	VLV-0207-2A, 0209-2A DRAIN VALVES	2	
	3	--	--	--			180 VA	120 VA			--	--	--	4	
	5	--	--	--					180 VA	120 VA	--	--	--	6	
	7	VLV-0211-2A, 0213-2A DRAIN VALVES	20 A	3	120 VA	180 VA					3	20 A	VLV-0208-2A, 0210-2A, 0212-2A DRAIN VALVES	8	
	9	--	--	--			120 VA	180 VA			--	--	--	10	
	11	--	--	--					120 VA	180 VA	--	--	--	12	
	13	VLV-0202-2A, 0204-2A, 0206-2A DRAIN VALVES	20 A	3	180 VA	180 VA					3	20 A	VLV-0250-1A, 1E, 1F BACKWASH VALVES	14	
	15	--	--	--			180 VA	180 VA			--	--	--	16	
	17	--	--	--					180 VA	180 VA	--	--	--	18	
	19	VLV-0250-2A, 2E, 2F BACKWASH VALVES	20 A	3	180 VA	180 VA					3	20 A	VLV-0250-1B, 1C, 1D BACKWASH VALVES	20	
	21	--	--	--			180 VA	180 VA			--	--	--	22	
	23	--	--	--					180 VA	180 VA	--	--	--	24	
	25	VLV-0250-2B, 2C, 2D BACKWASH VALVES	20 A	3	180 VA	180 VA					3	20 A	VLV-0250-3B, 3C, 3D BACKWASH VALVES	26	
	27	--	--	--			180 VA	180 VA			--	--	--	28	
	29	--	--	--					180 VA	180 VA	--	--	--	30	
	31	VLV-0250-3A, 3E, 3F BACKWASH VALVES	20 A	3	180 VA	180 VA					3	20 A	VLV-0253-1A, VLV-0240-1A, VLV-0240-2A	32	
	33	--	--	--			180 VA	180 VA			--	--	--	34	
	35	--	--	--					180 VA	180 VA	--	--	--	36	
	37	10-EUH-4	15 A	3	3333 VA	3333 VA					3	15 A	10-EUH-3	38	
	39	--	--	--			3333 VA	3333 VA			--	--	--	40	
	41	--	--	--					3333 VA	3333 VA	--	--	--	42	
	43	10-EUH-1	15 A	3	3333 VA	3333 VA					3	15 A	10-EUH-2	44	
	45	--	--	--			3333 VA	3333 VA			--	--	--	46	
	47	--	--	--					3333 VA	3333 VA	--	--	--	48	
	49	VLV-0240-1B, 2B	20 A	3	120 VA	60 VA					3	20 A	VLV-0221-1C	50	
	51	--	--	--			120 VA	60 VA			--	--	--	52	
	53	--	--	--					120 VA	60 VA	--	--	--	54	
	55	VLV-0222-1C	20 A	3	60 VA	0 VA					3	60 A	SPD	56	
	57	--	--	--			60 VA	0 VA			--	--	--	58	
	59	--	--	--					60 VA	0 VA	--	--	--	60	
	61	Spare	20 A	3	0 VA	0 VA					3	20 A	Spare	62	
	63	--	--	--			0 VA	0 VA			--	--	--	64	
	65	--	--	--					0 VA	0 VA	--	--	--	66	
	67	Spare	20 A	3	0 VA	0 VA					3	20 A	Spare	68	
	69	--	--	--			0 VA	0 VA			--	--	--	70	
	71	--	--	--					0 VA	0 VA	--	--	--	72	
		Connected Volt-Amps:			15613 VA		15613 VA		15613 VA						

Total Connected Load: 46840 VA
Total Current: 56 A

Panelboard: 10-H-2

Location: MECH 210 **Volts:** 480/277 Wye **A.I.C. Rating:** 42k
Supply From: 10-MDP-1 **Phases:** 3 **Mains Type:** MLO
Mounting: Surface **Wires:** 4 **Bus Rating:** 200 A
Enclosure: Type 1 **MCB Rating:**

NOTES	Ckt	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	Ckt	NOTES
	1	10-B-1	15 A	3	1025 VA	1025 VA					3	15 A	10-B-2	2	
	3	--	--	--			1025 VA	1025 VA			--	--	--	4	
	5	--	--	--					1025 VA	1025 VA	--	--	--	6	
	7	10-EF-1	15 A	3	582 VA	582 VA					3	15 A	10-EF-2	8	
	9	--	--	--			582 VA	582 VA			--	--	--	10	
	11	--	--	--					582 VA	582 VA	--	--	--	12	
	13	10-EF-4	15 A	3	582 VA	582 VA					3	15 A	10-EF-5	14	
	15	--	--	--			582 VA	582 VA			--	--	--	16	
	17	--	--	--					582 VA	582 VA	--	--	--	18	
	19	10-P-1	15 A	3	2106 VA	2106 VA					3	15 A	10-P-2	20	
	21	--	--	--			2106 VA	2106 VA			--	--	--	22	
	23	--	--	--					2106 VA	2106 VA	--	--	--	24	
	25	10-P-3	15 A	3	1330 VA	1330 VA					3	15 A	10-P-4	26	
	27	--	--	--			1330 VA	1330 VA			--	--	--	28	
	29	--	--	--					1330 VA	1330 VA	--	--	--	30	
	31	10-P-5	60 A	3	7482 VA	7482 VA					3	60 A	10-P-6	32	
	33	--	--	--			7482 VA	7482 VA			--	--	--	34	
	35	--	--	--					7482 VA	7482 VA	--	--	--	36	
	37	10-AHU-1	15 A	3	887 VA	1413 VA					3	15 A	10-AHU-2	38	
	39	--	--	--			887 VA	1413 VA			--	--	--	40	
	41	--	--	--					887 VA	1413 VA	--	--	--	42	
	43	10-AHU-3	20 A	3	4268 VA	1081 VA					3	15 A	10-AHU-4	44	
	45	--	--	--			4268 VA	1081 VA			--	--	--	46	
	47	--	--	--					4268 VA	1081 VA	--	--	--	48	
	49	SPD	60 A	3	0 VA	1940 VA					3	20 A	BC-1	50	
	51	--	--	--			0 VA	1940 VA			--	--	--	52	
	53	--	--	--					0 VA	1940 VA	--	--	--	54	
	55	BC-2	20 A	3	1940 VA	0 VA					3	20 A	Spare	56	
	57	--	--	--			1940 VA	0 VA			--	--	--	58	
	59	--	--	--					1940 VA	0 VA	--	--	--	60	
	61	Spare	20 A	3	0 VA	0 VA					3	20 A	Spare	62	
	63	--	--	--			0 VA	0 VA			--	--	--	64	
	65	--	--	--					0 VA	0 VA	--	--	--	66	
	67	Spare	20 A	3	0 VA	--					3	--	Space	68	
	69	--	--	--			0 VA	--			--	--	--	70	
	71	--	--	--					0 VA	--	--	--	--	72	
		Connected Volt-Amps:			37745 VA		37745 VA		37745 VA						

Total Connected Load: 113236 VA
Total Current: 136 A

Panelboard: 10-H-3

Location: PROCESSING 120 **Volts:** 480/277 Wye **A.I.C. Rating:** 42k
Supply From: 10-MDP-1 **Phases:** 3 **Mains Type:** MLO
Mounting: Surface **Wires:** 4 **Bus Rating:** 400 A
Enclosure: Type 1 **MCB Rating:**

NOTES	Ckt	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	Ckt	NOTES
	1	LCP-0301-9 SCRUBBER CP	70 A	3	15519 VA	4133 VA					3	20 A	CRN-0301-1 CHAIN HOIST	2	
	3	--	--	--			15519 VA	4133 VA			--	--	--	4	
	5	--	--	--					15519 VA	4133 VA	--	--	--	6	
	7	CHLR-0309-1 OZONE CHILLER 1	80 A	3	2106 VA	2106 VA					3	80 A	CHLR-0309-2 OZONE CHILLER 2	8	
	9	--	--	--			2106 VA	2106 VA			--	--	--	10	
	11	--	--	--					2106 VA	2106 VA	--	--	--	12	
	13	LCP-0308-2 OZONE GENERATOR 2	50 A	3	9667 VA	9667 VA					3	50 A	LCP-0308-1 OZONE GENERATOR 1	14	
	15	--	--	--			9667 VA	9667 VA			--	--	--	16	
	17	--	--	--					9667 VA	9667 VA	--	--	--	18	
	19	LCP-0308-3 OZONE GENERATOR 3	50 A	3	9667 VA	9667 VA					3	50 A	LCP-0308-4 OZONE GENERATOR 4	20	
	21	--	--	--			9667 VA	9667 VA			--	--	--	22	
	23	--	--	--					9667 VA	9667 VA	--	--	--	24	
	25	OVERHEAD DOOR NORTH	20 A	3	167 VA	167 VA					3	20 A	OVERHEAD DOOR WEST	26	
	27	--	--	--			167 VA	167 VA			--	--	--	28	
	29	--	--	--					167 VA	167 VA	--	--	--	30	
	31	BRIDGE CRANE	40 A	3	8867 VA	167 VA					3	20 A	OVERHEAD DOOR EAST	32	
	33	--	--	--			8867 VA	167 VA			--	--	--	34	
	35	--	--	--					8867 VA	167 VA	--	--	--	36	
	37	10-EF-10	20 A	3	3048 VA	0 VA					3	60 A	SPD	38	
	39	--	--	--			3048 VA	0 VA			--	--	--	40	
	41	--	--	--					3048 VA	0 VA	--	--	--	42	
	43					60 VA					3	20 A	SDG-0102-1B	44	
	45							60 VA			--	--	--	46	
	47									60 VA	--	--	--	48	
	49	SDG-0102-1A	20 A	3	60 VA	0 VA					3	20 A	Spare	50	
	51	--	--	--			60 VA	0 VA			--	--	--	52	
	53	--	--	--					60 VA	0 VA	--	--	--	54	
	55	Spare	20 A	3	0 VA	0 VA					3	20 A	Spare	56	
	57	--	--	--			0 VA	0 VA			--	--	--	58	
	59	--	--	--					0 VA	0 VA	--	--	--	60	
	61	Spare	20 A	3	0 VA	--					3	--	Space	62	
	63	--	--	--			0 VA	--			--	--	--	64	
	65	--	--	--					0 VA	--	--	--	--	66	
	67	Space	--	3	--	--					3	--	Space	68	
	69	--	--	--			--	--			--	--	--	70	
	71	--	--	--					--	--	--	--	--	72	
		Connected Volt-Amps:			75066 VA		75066 VA		75066 VA						

Total Connected Load: 225197 VA
Total Current: 271 A

AECOM

HANSEN ALLEN & LUCE INC
ENGINEERS

PROJECT
PROVO RIVER WATER TREATMENT PLANT

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REGISTRATION
PROFESSIONAL ENGINEER
No. 12839491-2202
CHRISTOPHER J. ADAMS
STATE OF UTAH
04/07/2023

ISSUE/REVISION

I/R	DATE	DESCRIPTION
B	2023-04-07	ISSUED FOR BID
A	2023-01-20	ISSUED FOR 90%

PROJECT NUMBER
AECOM Project No. - 60670884
HAL Project No. - 035.15.420

SHEET TITLE
WATER TREATMENT ELECTRICAL SCHEDULES 4

DRAWING NUMBER
10-E614

VERIFY SCALE

BAR IS ONE INCH ON ORIGINAL DRAWING

POWER CONDUIT SCHEDULE

TAG	# SETS	SIZE	CONDUCTORS	SOURCE	DESTINATION	NOTES
10-SE-001	8	4"	4#500KCMIL	PAD MOUNTED XFRMR	10-MB-1	SERVICE ENTRANCE
10-P-001	8	4"	4#500KCMIL, 1#400KCMIL G.	10-MB-1	10-ATS-1	
10-P-002	8	4"	4#500KCMIL, 1#400KCMIL G.	10-ATS-1	10-MDP-1	
10-P-003	1	3"	4#3/0, 1#6G.	10-MDP-1	10-H-1	
10-P-004	1	3"	4#3/0, 1#6G.	10-MDP-1	10-H-2	
10-P-005	4	4"	3#350KCMIL, 1#3/0G.	10-MDP-1	10-MCC-1	
10-P-006	4	4"	3#350KCMIL, 1#3/0G.	10-MDP-1	10-MCC-2	
10-P-007	3	4"	3#300KCMIL, 1#1/0G.	10-MDP-1	10-MCC-3	
10-P-008	1	3"	3#3/0, 1#6G.	10-MDP-1	10-X-1	
10-P-009	1	4"	4#500KCMIL, 1#3G.	10-X-1	10-DP-L	
10-P-010	1	2"	4#3, 1#8G.	10-DP-L	10-L-2	
10-P-011	1	2"	4#3, 1#8G.	10-DP-L	10-L-3	
10-P-012	1	2-1/2"	1-3/C #1 VFD CABLE, 1-2/C #14	10-MCC-1	PMP-0201-1	ROUTE IN CABLE TRAY SEE PLANS
10-P-013	1	2-1/2"	1-3/C #1 VFD CABLE, 1-2/C #14	10-MCC-1	PMP-0202-1	ROUTE IN CABLE TRAY SEE PLANS
10-P-014	1	2-1/2"	1-3/C #1 VFD CABLE, 1-2/C #14	10-MCC-1	PMP-0203-1	ROUTE IN CABLE TRAY SEE PLANS
10-P-015	1	2-1/2"	1-3/C #1 VFD CABLE, 1-2/C #14	10-MCC-1	PMP-0204-1	ROUTE IN CABLE TRAY SEE PLANS
10-P-016	1	2-1/2"	1-3/C #1 VFD CABLE, 1-2/C #14	10-MCC-1	PMP-0205-1	ROUTE IN CABLE TRAY SEE PLANS
10-P-017	1	3/4"	1-4/C #12 INC #12G	10-MCC-1	STR-0201-2	ROUTE IN CABLE TRAY SEE PLANS
10-P-018	1	3/4"	1-4/C #12 INC #12G	10-MCC-1	STR-0202-2	ROUTE IN CABLE TRAY SEE PLANS
10-P-019	1	3/4"	1-4/C #12 INC #12G	10-MCC-1	STR-0203-2	ROUTE IN CABLE TRAY SEE PLANS
10-P-020	1	3/4"	1-4/C #12 INC #12G	10-MCC-1	STR-0204-2	ROUTE IN CABLE TRAY SEE PLANS
10-P-021	1	3/4"	1-4/C #12 INC #12G	10-MCC-1	STR-0205-2	ROUTE IN CABLE TRAY SEE PLANS
10-P-022	1	1"	1-3/C #8 VFD CABLE, 1-2/C #14	10-MCC-1	PMP-0302-5	ROUTE IN CABLE TRAY SEE PLANS
10-P-023	1	3"	1-3/C #1/0 W/#6G	10-MCC-1	LCP-0221-1	ROUTE IN CABLE TRAY SEE PLANS
10-P-024	1	1"	1-3/C #12 VFD CABLE, 1-2/C #14	10-MCC-1	PMP-0251-1	ROUTE IN CABLE TRAY SEE PLANS
10-P-025	1	1"	1-3/C #12 VFD CABLE, 1-2/C #14	10-MCC-1	PMP-0251-4	ROUTE IN CABLE TRAY SEE PLANS
10-P-026	1	1"	1-3/C #12 VFD CABLE, 1-2/C #14	10-MCC-1	PMP-0252-1	ROUTE IN CABLE TRAY SEE PLANS
10-P-027	1	3/4"	1-4/C #12 INC #12G	10-MCC-1	PMP-0253-1	ROUTE IN CABLE TRAY SEE PLANS
10-P-028	1	1-1/2"	1-3#4, 1#8G	LCP-0221-1	HTR-0221-3	
10-P-029	1	3/4"	1-4/C #12 INC #12G	10-MCC-1	PMP-0301-8	ROUTE IN CABLE TRAY SEE PLANS
10-P-030	1	3/4"	1-4/C #12 INC #12G	10-MCC-1	PMP-0301-10	ROUTE IN CABLE TRAY SEE PLANS
10-P-031	1	3"	1-3/C #2/0 VFD CABLE, 1-2/C #14	10-MCC-1	PMP-0241-1	ROUTE IN CABLE TRAY SEE PLANS
10-P-032	1	1"	1-3/C #6 W/#10G	10-MCC-1	CM-0231-1	ROUTE IN CABLE TRAY SEE PLANS
10-P-033	1	1"	3#6, 1#10G.	10-H-3	LCP-0308-1	
10-P-034	1	1"	3#6, 1#10G.	10-H-3	LCP-0308-4	
10-P-035	1	2"	3#3, 1#8G.	10-H-3	CHLR-0309-1	
10-P-036	1	1"	1-3/C #8 VFD CABLE, 1-2/C #14	10-MCC-2	PMP-0302-6	ROUTE IN CABLE TRAY SEE PLANS
10-P-037	1	2-1/2"	1-3/C #1 VFD CABLE, 1-2/C #14	10-MCC-2	PMP-0206-1	ROUTE IN CABLE TRAY SEE PLANS
10-P-038	1	2-1/2"	1-3/C #1 VFD CABLE, 1-2/C #14	10-MCC-2	PMP-0207-1	ROUTE IN CABLE TRAY SEE PLANS
10-P-039	1	2-1/2"	1-3/C #1 VFD CABLE, 1-2/C #14	10-MCC-2	PMP-0208-1	ROUTE IN CABLE TRAY SEE PLANS
10-P-040	1	2-1/2"	1-3/C #1 VFD CABLE, 1-2/C #14	10-MCC-2	PMP-0209-1	ROUTE IN CABLE TRAY SEE PLANS
10-P-041	1	3/4"	1-4/C #12 INC #12G	10-MCC-2	STR-0206-2	ROUTE IN CABLE TRAY SEE PLANS
10-P-042	1	3/4"	1-4/C #12 INC #12G	10-MCC-2	STR-0207-2	ROUTE IN CABLE TRAY SEE PLANS
10-P-043	1	3/4"	1-4/C #12 INC #12G	10-MCC-2	STR-0208-2	ROUTE IN CABLE TRAY SEE PLANS
10-P-044	1	3/4"	1-4/C #12 INC #12G	10-MCC-2	STR-0209-2	ROUTE IN CABLE TRAY SEE PLANS
10-P-045	1	3"	1-3/C #1/0 W/#6G	10-MCC-2	LCP-0222-1	ROUTE IN CABLE TRAY SEE PLANS
10-P-046	1	1-1/2"	1-3#4, 1#8G	LCP-0222-1	HTR-0222-3	ROUTE IN CABLE TRAY SEE PLANS
10-P-047	1	1"	1-3/C #12 VFD CABLE, 1-2/C #14	10-MCC-2	PMP-0251-2	ROUTE IN CABLE TRAY SEE PLANS
10-P-048	1	1"	1-3/C #12 VFD CABLE, 1-2/C #14	10-MCC-2	PMP-0252-2	ROUTE IN CABLE TRAY SEE PLANS
10-P-049	1	3/4"	1-4/C #12 INC #12G	10-MCC-2	PMP-0253-2	ROUTE IN CABLE TRAY SEE PLANS
10-P-050	1	3/4"	1-4/C #12 INC #12G	10-MCC-2	PMP-0301-9	ROUTE IN CABLE TRAY SEE PLANS
10-P-051	1	3/4"	1-4/C #12 INC #12G	10-MCC-2	PMP-0301-11	ROUTE IN CABLE TRAY SEE PLANS
10-P-052	1	3"	1-3/C #2/0 VFD CABLE, 1-2/C #14	10-MCC-2	PMP-0241-2	ROUTE IN CABLE TRAY SEE PLANS
10-P-053	1	1"	1-3/C #6 W/#10G	10-MCC-2	CM-0231-2	ROUTE IN CABLE TRAY SEE PLANS
10-P-054	1	1"	3#6, 1#10G.	10-H-3	LCP-0308-2	
10-P-055	1	2"	3#3, 1#8G.	10-H-3	CHLR-0309-2	
10-P-056	1	2-1/2"	1-3/C #1 VFD CABLE, 1-2/C #14	10-MCC-3	PMP-0210-1	ROUTE IN CABLE TRAY SEE PLANS
10-P-057	1	2-1/2"	1-3/C #1 VFD CABLE, 1-2/C #14	10-MCC-3	PMP-0211-1	ROUTE IN CABLE TRAY SEE PLANS
10-P-058	1	2-1/2"	1-3/C #1 VFD CABLE, 1-2/C #14	10-MCC-3	PMP-0212-1	ROUTE IN CABLE TRAY SEE PLANS
10-P-059	1	2-1/2"	1-3/C #1 VFD CABLE, 1-2/C #14	10-MCC-3	PMP-0213-1	ROUTE IN CABLE TRAY SEE PLANS
10-P-060	1	3/4"	1-4/C #12 INC #12G	10-MCC-3	STR-0210-2	ROUTE IN CABLE TRAY SEE PLANS
10-P-061	1	3/4"	1-4/C #12 INC #12G	10-MCC-3	STR-0211-2	ROUTE IN CABLE TRAY SEE PLANS
10-P-062	1	3/4"	1-4/C #12 INC #12G	10-MCC-3	STR-0212-2	ROUTE IN CABLE TRAY SEE PLANS
10-P-063	1	3/4"	1-4/C #12 INC #12G	10-MCC-3	STR-0213-2	ROUTE IN CABLE TRAY SEE PLANS
10-P-064	1	1"	1-3/C #12 VFD CABLE, 1-2/C #14	10-MCC-3	PMP-0251-3	ROUTE IN CABLE TRAY SEE PLANS
10-P-065	1	1"	1-3/C #6 W/#10G	10-MCC-3	CM-0231-3	ROUTE IN CABLE TRAY SEE PLANS
10-P-066	1	3"	1-3/C #2/0 VFD CABLE, 1-2/C #14	10-MCC-3	PMP-0241-3	ROUTE IN CABLE TRAY SEE PLANS
10-P-067	1	1"	3#6, 1#10G.	10-H-3	LCP-0308-3	
10-P-068	1	2"	1-3/C #4 VFD CABLE, 1-2/C #14	10-MCC-1	PMP-0308-6	ROUTE IN CABLE TRAY SEE PLANS
10-P-069	1	2"	1-3/C #4 VFD CABLE, 1-2/C #14	10-MCC-2	PMP-0308-7	ROUTE IN CABLE TRAY SEE PLANS
10-P-070	1	4"	4#500KCMIL, 1#3G.	10-MDP-1	10-H-3	
10-P-071	1	3/4"	1-4/C #12 INC #12G	10-MCC-1	RAD-0231-5	ROUTE IN CABLE TRAY SEE PLANS
10-P-072	1	3/4"	1-4/C #12 INC #12G	10-MCC-2	RAD-0232-5	ROUTE IN CABLE TRAY SEE PLANS
10-P-073	1	1-1/2"	3#4, 1#8G.	10-H-3	LCP-0301-9	
10-P-074	1	1"	3#8, 1#10G.	LCP-0301-9	BLR-0301-17	
10-P-075	1	1"	3#8, 1#10G.	LCP-0301-9	BLR-0301-18	
10-P-076	1	1-1/2"	8#10, 4#10G.	10-L-3	COAGULANT INJECTION VAULT	MULTIPLE FEEDERS IN SINGLE COND.

POWER CONDUIT SCHEDULE

TAG	# SETS	SIZE	CONDUCTORS	SOURCE	DESTINATION	NOTES
10-P-077	1	2"	4#3, 1#8G.	10-DP-L	10-L-4	
10-P-078	1	3/4"	3#12, 1#12G.	10-H-4	VLV-0250-1A, 1E, 1F	
10-P-079	1	3/4"	3#12, 1#12G.	10-H-4	VLV-0250-2A, 2E, 2F	
10-P-080	1	3/4"	3#12, 1#12G.	10-H-4	VLV-0250-3A, 3E, 3F	
10-P-081	1	3/4"	3#12, 1#12G.	10-H-4	VLV-0250-1B, 1C, 1D	
10-P-082	1	3/4"	3#12, 1#12G.	10-H-4	VLV-0250-2B, 2C, 2D	
10-P-083	1	3/4"	3#12, 1#12G.	10-H-4	VLV-0250-3B, 3C, 3D	
10-P-084	1	3/4"	3#12, 1#12G.	10-H-4	VLV-0201-2A, 0203-2A, 0205-2A	
10-P-085	1	3/4"	3#12, 1#12G.	10-H-4	VLV-0207-2A, 0209-2A	
10-P-086	1	3/4"	3#12, 1#12G.	10-H-4	VLV-0211-2A, 0213-2A	
10-P-087	1	3/4"	3#12, 1#12G.	10-H-4	VLV-0202-2A, 0204-2A, 0206-2A	
10-P-088	1	3/4"	3#12, 1#12G.	10-H-4	VLV-0208-2A, 0210-2A, 0212-2A	
10-P-089	1	3/4"	3#12, 1#12G.	10-H-4	VLV-0240-1A, 0240-2A, 0253-1A	
10-P-090	1	1"	3#10, 1#10G.	10-H-3	SDG-0102-1A	
10-P-091	1	1"	3#10, 1#10G.	10-H-3	SDG-0102-1B	
10-P-092	1	1"	1-3/C #8 VFD CABLE, 1-2/C #14	10-MCC-1	PMP-0221-2	ROUTE IN CABLE TRAY SEE PLANS
10-P-093	1	1"	1-3/C #8 VFD CABLE, 1-2/C #14	10-MCC-2	PMP-0222-2	ROUTE IN CABLE TRAY SEE PLANS
10-P-094	1	1-1/2"	1-3#4, 1#8G	LCP-0221-1	HTR-0221-4	
10-P-095	1	1-1/2"	1-3#4, 1#8G	LCP-0222-1	HTR-0222-4	
10-P-096	1	1"	3#10, 1#10G.	LCP-0301-9	VLV-0301-17	
10-P-097	1	1"	3#10, 1#10G.	LCP-0301-9	VLV-0301-18	
10-P-098	8	4"	4#500KCMIL, 1#400KCMIL G.	01-GDP-1	10-ATS-1	GENERATOR SERVICE
10-P-099	1	2"	4#3, 1#8G.	10-DP-L	10-L-1	
10-P-100	1	3"	4#3/0, 1#6G.	10-DP-L	10-L-5	
10-P-101	1	3/4"	2#12, 1#12G.	LCP-0301-9	AIT-0301-16	

AECOM

HANSEN ALLEN & LUCE inc

ENGINEERS

PROJECT

PROVO RIVER WATER TREATMENT PLANT

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REGISTRATION

PROFESSIONAL ENGINEER No. 12339491-2202 CHRISTOPHER J. ADAMS STATE OF UTAH 04/07/2023

ISSUE/REVISION

I/R	DATE	DESCRIPTION
B	2023-04-07	ISSUED FOR BID
A	2023-01-20	ISSUED FOR 90%

PROJECT NUMBER

AECOM Project No. - 60670884
HAL Project No. - 035.15.420

SHEET TITLE

WATER TREATMENT ELECTRICAL CONDUIT SCHEDULES

DRAWING NUMBER

10-E615

ANSI D 22" x 34"
Approved: C.ADAMS
Checked: S.SHUGARS
Designer: C.ADAMS
Drafter: A.ODONNELL
Project Manager: J.KRINKS

Last Plotted: 15.06.2022_8:35 AM
Filename: C:\Users\SaulsC\ACCDocs\AECOM\CI-AMER (USA) 60670884-Provo River WTP\Project Files\900 Design Collaboration\910 CAD-BIM\E\Sheets\60670884_10-E615.dwg

ANSI D 22" x 34"

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Filename: C:\Users\SaudsC\ACCDocs\AECOM\C-AMER (USA) 60670884-Provo River WTP\Project Files\900 Design Collaboration\910 CAD-BIM\E\Sheets\60670884_10-E616.dwg

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING

INSTRUMENTATION CONDUIT SCHEDULE

TAG	SIZE	CONDUCTORS	SOURCE	DESTINATION	NOTES
10-C-001	4"	5-8/C #14, 3-10/C#14, 10-12/C #14	RIO-0000-1	10-MCC-1	DISCRETE
10-C-002	4"	20-1PR#16TSP	RIO-0000-1	10-MCC-1	ANALOG
10-C-003	4"	4-8/C #14, 3-10/C#14, 8-12/C #14	RIO-0000-1	10-MCC-2	DISCRETE
10-C-004	4"	18-1PR#16TSP	RIO-0000-1	10-MCC-2	ANALOG
10-C-005	4"	4-8/C #14, 6-12/C #14	RIO-0000-1	10-MCC-3	DISCRETE
10-C-006	4"	12-1PR#16TSP	RIO-0000-1	10-MCC-3	ANALOG
10-C-007	3"	1-12/C #14	MCP-0305-1	10-MCC-1	DISCRETE
10-C-008	3"	2-1PR#16TSP	MCP-0305-1	10-MCC-1	ANALOG
10-C-009	3"	1-12/C #14	MCP-0305-1	10-MCC-2	DISCRETE
10-C-010	3"	2-1PR#16TSP	MCP-0305-1	10-MCC-2	ANALOG
10-C-011	1"	1-12/C #14	PLC-0000-1	SDG-0102-1A	
10-C-012	1"	1-12/C #14	PLC-0000-1	SDG-0102-1B	
10-C-013	3/4"	1PR#16TSP	PLC-0000-1	LIT-0102-1	
10-C-014	3/4"	1PR#16TSP	PLC-0000-1	FE/FIT-0102-2	
10-C-015	3/4"	1-2/C #14	PLC-0000-1	PSL-0302-5	
10-C-016	3/4"	1-2/C #14	PMP-0302-5	10-MCC-1	MOTOR TEMPERATURE SWITCHES
10-C-017	3/4"	1-2/C #14	PLC-0000-1	PSL-0302-6	
10-C-018	3/4"	1-2/C #14	PMP-0302-6	10-MCC-2	MOTOR TEMPERATURE SWITCHES
10-C-019	3/4"	1PR#16TSP	PLC-0000-1	FE/FIT-0302-1	
10-C-020	3/4"	1PR#16TSP	PLC-0000-1	FE/FIT-0303-1	
10-C-021	3/4"	1PR#16TSP	PLC-0000-1	AIT-0303-1A	
10-C-022	3/4"	1PR#16TSP	PLC-0000-1	AIT-0303-1B	
10-C-023	3/4"	1PR#16TSP	PLC-0000-1	PIT-0303-1	
10-C-024	3/4"	1-2/C #14	PLC-0000-1	PSL-0201-1	
10-C-025	3/4"	1-2/C #14	PMP-0201-1	10-MCC-1	MOTOR TEMPERATURE SWITCHES
10-C-026	3/4"	1-4/C #14	PLC-0000-1	DPSH-0201-2	
10-C-027	1"	1-12/C #14	PLC-0000-1	VLV-0201-2A	ROUTE TO ACTUATOR
10-C-028	3/4"	1-2/C #14	PLC-0000-1	PSL-0202-1	
10-C-029	3/4"	1-2/C #14	PMP-0202-1	10-MCC-1	MOTOR TEMPERATURE SWITCHES
10-C-030	3/4"	1-4/C #14	PLC-0000-1	DPSH-0202-2	
10-C-031	1"	1-12/C #14	PLC-0000-1	VLV-0202-2A	ROUTE TO ACTUATOR
10-C-032	3/4"	1-2/C #14	PLC-0000-1	PSL-0203-1	
10-C-033	3/4"	1-2/C #14	PMP-0203-1	10-MCC-1	MOTOR TEMPERATURE SWITCHES
10-C-034	3/4"	1-4/C #14	PLC-0000-1	DPSH-0203-2	
10-C-035	3/4"	1-12/C #14	PLC-0000-1	VLV-0203-2A	ROUTE TO ACTUATOR
10-C-036	3/4"	1-2/C #14	PLC-0000-1	PSL-0204-1	
10-C-037	3/4"	1-2/C #14	PMP-0204-1	10-MCC-1	MOTOR TEMPERATURE SWITCHES
10-C-038	3/4"	1-4/C #14	PLC-0000-1	DPSH-0204-2	
10-C-039	1"	1-12/C #14	PLC-0000-1	VLV-0204-2A	ROUTE TO ACTUATOR
10-C-040	3/4"	1-2/C #14	PLC-0000-1	PSL-0205-1	
10-C-041	3/4"	1-2/C #14	PMP-0205-1	10-MCC-1	MOTOR TEMPERATURE SWITCHES
10-C-042	3/4"	1-4/C #14	PLC-0000-1	DPSH-0205-2	
10-C-043	1"	1-12/C #14	PLC-0000-1	VLV-0205-2A	ROUTE TO ACTUATOR
10-C-044	3/4"	1-2/C #14	PLC-0000-1	PSL-0206-1	
10-C-045	3/4"	1-2/C #14	PMP-0206-1	10-MCC-2	MOTOR TEMPERATURE SWITCHES
10-C-046	3/4"	1-4/C #14	PLC-0000-1	DPSH-0206-2	
10-C-047	1"	1-12/C #14	PLC-0000-1	VLV-0206-2A	ROUTE TO ACTUATOR
10-C-048	3/4"	1-2/C #14	PLC-0000-1	PSL-0207-1	
10-C-049	3/4"	1-2/C #14	PMP-0207-1	10-MCC-2	MOTOR TEMPERATURE SWITCHES
10-C-050	3/4"	1-4/C #14	PLC-0000-1	DPSH-0207-2	
10-C-051	3/4"	1-12/C #14	PLC-0000-1	VLV-0207-2A	ROUTE TO ACTUATOR
10-C-052	1"	1-2/C #14	PLC-0000-1	PSL-0208-1	
10-C-053	3/4"	1-2/C #14	PMP-0208-1	10-MCC-2	MOTOR TEMPERATURE SWITCHES
10-C-054	3/4"	1-4/C #14	PLC-0000-1	DPSH-0208-2	
10-C-055	1"	1-12/C #14	PLC-0000-1	VLV-0208-2A	ROUTE TO ACTUATOR
10-C-056	3/4"	1-2/C #14	PLC-0000-1	PSL-0209-1	
10-C-057	3/4"	1-2/C #14	PMP-0209-1	10-MCC-2	MOTOR TEMPERATURE SWITCHES
10-C-058	3/4"	1-4/C #14	PLC-0000-1	DPSH-0209-2	
10-C-059	1"	1-12/C #14	PLC-0000-1	VLV-0209-2A	ROUTE TO ACTUATOR
10-C-060	3/4"	1-2/C #14	PLC-0000-1	PSL-0210-1	
10-C-061	3/4"	1-2/C #14	PMP-0210-1	10-MCC-3	MOTOR TEMPERATURE SWITCHES
10-C-062	3/4"	1-4/C #14	PLC-0000-1	DPSH-0210-2	
10-C-063	1"	1-12/C #14	PLC-0000-1	VLV-0210-2A	ROUTE TO ACTUATOR
10-C-064	3/4"	1-2/C #14	PLC-0000-1	PSL-0211-1	
10-C-065	3/4"	1-2/C #14	PMP-0211-1	10-MCC-3	MOTOR TEMPERATURE SWITCHES
10-C-066	3/4"	1-4/C #14	PLC-0000-1	DPSH-0211-2	
10-C-067	1"	1-12/C #14	PLC-0000-1	VLV-0211-2A	ROUTE TO ACTUATOR
10-C-068	3/4"	1-2/C #14	PLC-0000-1	PSL-0212-1	
10-C-069	3/4"	1-2/C #14	PMP-0212-1	10-MCC-3	MOTOR TEMPERATURE SWITCHES
10-C-070	3/4"	1-4/C #14	PLC-0000-1	DPSH-0212-2	
10-C-071	1"	1-12/C #14	PLC-0000-1	VLV-0212-2A	ROUTE TO ACTUATOR
10-C-072	3/4"	1-2/C #14	PLC-0000-1	PSL-0213-1	
10-C-073	3/4"	1-2/C #14	PMP-0213-1	10-MCC-3	MOTOR TEMPERATURE SWITCHES
10-C-074	3/4"	1-4/C #14	PLC-0000-1	DPSH-0213-2	
10-C-075	1"	1-12/C #14	PLC-0000-1	VLV-0213-2A	ROUTE TO ACTUATOR
10-C-076	3/4"	1-4/C #14	LCP-0221-1	VLV-0221-1A	ROUTE TO ACTUATOR
10-C-077	N/A	NOT USED	NOT USED	NOT USED	NOT USED

INSTRUMENTATION CONDUIT SCHEDULE

TAG	SIZE	CONDUCTORS	SOURCE	DESTINATION	NOTES
10-C-078	1"	1-12/C #14	LCP-0221-1	VLV-0221-1C	ROUTE TO ACTUATOR
10-C-079	N/A	NOT USED	NOT USED	NOT USED	NOT USED
10-C-080	N/A	NOT USED	NOT USED	NOT USED	NOT USED
10-C-081	N/A	NOT USED	NOT USED	NOT USED	NOT USED
10-C-082	3/4"	1PR#16TSP	LCP-0221-1	LIT-0221-1	
10-C-083	3/4"	1PR#16TSP	LCP-0221-1	TIT-0221-1	
10-C-084	N/A	NOT USED	NOT USED	NOT USED	NOT USED
10-C-085	N/A	NOT USED	NOT USED	NOT USED	NOT USED
10-C-086	N/A	NOT USED	NOT USED	NOT USED	NOT USED
10-C-087	N/A	NOT USED	NOT USED	NOT USED	NOT USED
10-C-088	N/A	NOT USED	NOT USED	NOT USED	NOT USED
10-C-089	3/4"	1-4/C #14	LCP-0221-1	HTR-0221-3	
10-C-090	3/4"	1-4/C #14	LCP-0221-1	HTR-0221-4	
10-C-091	1"	1-12/C #14	PLC-0000-1	VLV-0221-2A	ROUTE TO ACTUATOR
10-C-092	3/4"	1-4/C #14	LCP-0222-1	VLV-0222-1A	ROUTE TO ACTUATOR
10-C-093	N/A	NOT USED	NOT USED	NOT USED	NOT USED
10-C-094	1"	1-12/C #14	LCP-0222-1	VLV-0222-1C	ROUTE TO ACTUATOR
10-C-095	N/A	NOT USED	NOT USED	NOT USED	NOT USED
10-C-096	N/A	NOT USED	NOT USED	NOT USED	NOT USED
10-C-097	N/A	NOT USED	NOT USED	NOT USED	NOT USED
10-C-098	3/4"	1PR#16TSP	LCP-0222-1	LIT-0222-1	
10-C-099	3/4"	1PR#16TSP	LCP-0222-1	TIT-0222-1	
10-C-100	N/A	NOT USED	NOT USED	NOT USED	NOT USED
10-C-101	N/A	NOT USED	NOT USED	NOT USED	NOT USED
10-C-102	N/A	NOT USED	NOT USED	NOT USED	NOT USED
10-C-103	N/A	NOT USED	NOT USED	NOT USED	NOT USED
10-C-104	N/A	NOT USED	NOT USED	NOT USED	NOT USED
10-C-105	3/4"	1-4/C #14	LCP-0222-1	HTR-0222-3	
10-C-106	3/4"	1-4/C #14	LCP-0222-1	HTR-0222-4	
10-C-107	1"	1-12/C #14	PLC-0000-1	VLV-0222-2A	ROUTE TO ACTUATOR
10-C-108	3/4"	1-4/C #14	PLC-0000-1	LSH-0250-1	
10-C-109	3/4"	1PR#16TSP	PLC-0000-1	LE-0250-1	
10-C-110	1"	1-12/C #14	PLC-0000-1	VLV-0250-1A	ROUTE TO ACTUATOR
10-C-111	1"	1-12/C #14	PLC-0000-1	VLV-0250-1B	ROUTE TO ACTUATOR
10-C-112	1"	1-12/C #14	PLC-0000-1	VLV-0250-1C	ROUTE TO ACTUATOR
10-C-113	1"	1-12/C #14	PLC-0000-1	VLV-0250-1D	ROUTE TO ACTUATOR
10-C-114	1"	1-12/C #14	PLC-0000-1	VLV-0250-1E	ROUTE TO ACTUATOR
10-C-115	1"	1-12/C #14	PLC-0000-1	VLV-0250-1F	ROUTE TO ACTUATOR
10-C-116	3/4"	1-4/C #14	PLC-0000-1	LSH-0250-2	
10-C-117	3/4"	1PR#16TSP	PLC-0000-1	LE-0250-2	
10-C-118	1"	1-12/C #14	PLC-0000-1	VLV-0250-2A	ROUTE TO ACTUATOR
10-C-119	1"	1-12/C #14	PLC-0000-1	VLV-0250-2B	ROUTE TO ACTUATOR
10-C-120	1"	1-12/C #14	PLC-0000-1	VLV-0250-2C	ROUTE TO ACTUATOR
10-C-121	1"	1-12/C #14	PLC-0000-1	VLV-0250-2D	ROUTE TO ACTUATOR
10-C-122	1"	1-12/C #14	PLC-0000-1	VLV-0250-2E	ROUTE TO ACTUATOR
10-C-123	1"	1-12/C #14	PLC-0000-1	VLV-0250-2F	ROUTE TO ACTUATOR
10-C-124	3/4"	1-4/C #14	PLC-0000-1	LSH-0250-3	
10-C-125	3/4"	1PR#16TSP	PLC-0000-1	LE-0250-3	
10-C-126	1"	1-12/C #14	PLC-0000-1	VLV-0250-3A	ROUTE TO ACTUATOR
10-C-127	1"	1-12/C #14	PLC-0000-1	VLV-0250-3B	ROUTE TO ACTUATOR
10-C-128	1"	1-12/C #14	PLC-0000-1	VLV-0250-3C	ROUTE TO ACTUATOR
10-C-129	1"	1-12/C #14	PLC-0000-1	VLV-0250-3D	ROUTE TO ACTUATOR
10-C-130	1"	1-12/C #14	PLC-0000-1	VLV-0250-3E	ROUTE TO ACTUATOR
10-C-131	1"	1-12/C #14	PLC-0000-1	VLV-0250-3F	ROUTE TO ACTUATOR
10-C-132	3/4"	1-4/C #14	PLC-0000-1	PSL-0251-1	
10-C-133	3/4"	1-2/C #14	PMP-0251-1	10-MCC-1	MOTOR TEMPERATURE SWITCHES
10-C-134	3/4"	1-4/C #14	PLC-0000-1	PSL-0251-2	
10-C-135	3/4"	1-2/C #14	PMP-0251-2	10-MCC-2	MOTOR TEMPERATURE SWITCHES
10-C-136	3/4"	1-4/C #14	PLC-0000-1	PSL-0251-3	
10-C-137	3/4"	1-2/C #14	PMP-0251-3	10-MCC-3	MOTOR TEMPERATURE SWITCHES
10-C-138	3/4"	1-4/C #14	PLC-0000-1	PSL-0251-4	
10-C-139	3/4"	1-2/C #14	PMP-0251-4	10-MCC-1	MOTOR TEMPERATURE SWITCHES
10-C-140	3/4"	1PR#16TSP	PLC-0000-1	FE/FIT-0251-1	
10-C-141	3/4"	1-2/C #14	PMP-0252-1	10-MCC-1	MOTOR TEMPERATURE SWITCHES
10-C-142	3/4"	1-2/C #14	PMP-0252-2	10-MCC-2	MOTOR TEMPERATURE SWITCHES
10-C-143	3/4"	1-4/C #14	PLC-0000-1	LSH-0253-1	
10-C-144	3/4"	1PR#16TSP	PLC-0000-1	LE-0253-1	
10-C-145	3/4"	1-4/C #14	PLC-0000-1	PSL-0253-1	
10-C-146	3/4"	1-4/C #14	PLC-0000-1	PSL-0253-2	
10-C-147	1"	1-12/C #14	PLC-0000-1	VLV-0253-1A	ROUTE TO ACTUATOR
10-C-148	3/4"	1PR#16TSP	PLC-0000-1	FE/FIT-0253-2	
10-C-149	3/4"	1PR#16TSP	PLC-0000-1	FE/FIT-0253-3	
10-C-150	3/4"	1PR#16TSP	PLC-0000-1	AIT-0254-1	
10-C-151	3/4"	1PR#16TSP	PLC-0000-1	AIT-0254-2	
10-C-152	3/4"	1-6/C #14	MCP-0200-1	CM-0231-1	
10-C-153	3/4"	1-6/C #14	MCP-0200-1	CM-0231-2	
10-C-154	3/4"	1-6/C #14	MCP-0200-1	CM-0231-3	

AECOM
HANSEN ALLEN & LUCE inc
ENGINEERS

PROJECT

PROVO RIVER WATER TREATMENT PLANT

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REGISTRATION

PROFESSIONAL ENGINEER No. 12339491-2202 CHRISTOPHER J. ADAMS STATE OF UTAH 04/07/2023

ISSUE/REVISION

I/R	DATE	DESCRIPTION
B	2023-04-07	ISSUED FOR BID
A	2023-01-20	ISSUED FOR 90%

PROJECT NUMBER

AECOM Project No. - 60670884
HAL Project No. - 035.15.420

SHEET TITLE

WATER TREATMENT ELECTRICAL CONDUIT SCHEDULES

DRAWING NUMBER

10-E616

VERIFY SCALE

BAR IS ONE INCH ON ORIGINAL DRAWING

INSTRUMENTATION CONDUIT SCHEDULE

TAG	SIZE	CONDUCTORS	SOURCE	DESTINATION	NOTES
10-C-155	3/4"	1-4/C #14	MCP-0200-1	VLV-0231-5A	ROUTE TO ACTUATOR
10-C-156	3/4"	1-4/C #14	MCP-0200-1	VLV-0232-5A	ROUTE TO ACTUATOR
10-C-157	3/4"	1-4/C #14	MCP-0200-1	PSH-0231-7	
10-C-158	3/4"	1-4/C #14	MCP-0200-1	PSL-0231-7	
10-C-159	3/4"	1-4/C #14	MCP-0200-1	VLV-0231-7A	ROUTE TO ACTUATOR
10-C-160	3/4"	1-4/C #14	MCP-0200-1	PSH-0232-7	
10-C-161	3/4"	1-4/C #14	MCP-0200-1	PSL-0232-7	
10-C-162	3/4"	1-4/C #14	MCP-0200-1	VLV-0232-7A	ROUTE TO ACTUATOR
10-C-163	3/4"	1PR#16TSP	MCP-0200-1	PIT-0234-1	
10-C-164	3/4"	1PR#16TSP	PLC-0000-1	AIT-0300-1	
10-C-165	N/A	N/A	N/A	N/A	NOT USED
10-C-166	3/4"	1-4/C #14	AIT-0300-1	LCP-0301-9	
10-C-167	1"	VSC	AIT-0300-1	AE-0300-1	VENDOR SUPPLIED CABLE
10-C-168	1"	VSC	AIT-0300-1	ALARM HORN	VENDOR SUPPLIED CABLE
10-C-169	3/4"	1PR#16TSP	PLC-0000-1	AIT-0300-2	
10-C-170	N/A	N/A	N/A	N/A	NOT USED
10-C-171	3/4"	1-4/C #14	AIT-0300-2	LCP-0301-9	
10-C-172	1"	VSC	AIT-0300-2	AE-0300-2	VENDOR SUPPLIED CABLE
10-C-173	1"	VSC	AIT-0300-2	ALARM HORN	VENDOR SUPPLIED CABLE
10-C-174	1"	VSC	WE-0301-1	WIT-0301-1	VENDOR SUPPLIED CABLE
10-C-175	3/4"	1PR#16TSP	PLC-0000-1	WIT-0301-1	
10-C-176	1"	VSC	WE-0301-2	WIT-0301-2	VENDOR SUPPLIED CABLE
10-C-177	3/4"	1PR#16TSP	PLC-0000-1	WIT-0301-2	
10-C-178	1"	VSC	WE-0301-3	WIT-0301-3	VENDOR SUPPLIED CABLE
10-C-179	3/4"	1PR#16TSP	PLC-0000-1	WIT-0301-3	
10-C-180	3/4"	1-4/C #14	PLC-0000-1	PSH-0301-3	
10-C-181	3/4"	1-6/C #14	CL-0301-4	CP-0301-4	
10-C-182	3/4"	1PR#16TSP	CL-0301-4	CP-0301-4	
10-C-183	3/4"	1-6/C #14	PLC-0000-1	CP-0301-4	
10-C-184	3/4"	1PR#16TSP	PLC-0000-1	CP-0301-4	
10-C-185	3/4"	1-4/C #14	PLC-0000-1	PSH-0301-4	
10-C-186	3/4"	1-6/C #14	CL-0301-5	CP-0301-5	
10-C-187	3/4"	1PR#16TSP	CL-0301-5	CP-0301-5	
10-C-188	3/4"	1-6/C #14	PLC-0000-1	CP-0301-5	
10-C-189	3/4"	1PR#16TSP	PLC-0000-1	CP-0301-5	
10-C-190	3/4"	1-4/C #14	PLC-0000-1	PSH-0301-5	
10-C-191	3/4"	1-6/C #14	CL-0301-6	CP-0301-6	
10-C-192	3/4"	1PR#16TSP	CL-0301-6	CP-0301-6	
10-C-193	3/4"	1-6/C #14	PLC-0000-1	CP-0301-6	
10-C-194	3/4"	1PR#16TSP	PLC-0000-1	CP-0301-6	
10-C-195	3/4"	1-4/C #14	PLC-0000-1	PSH-0301-6	
10-C-196	3/4"	1-6/C #14	CL-0301-7	CP-0301-7	
10-C-197	3/4"	1PR#16TSP	CL-0301-7	CP-0301-7	
10-C-198	3/4"	1-6/C #14	PLC-0000-1	CP-0301-7	
10-C-199	3/4"	1PR#16TSP	PLC-0000-1	CP-0301-7	
10-C-200	3/4"	1-4/C #14	PLC-0000-1	PSH-0301-7	
10-C-201	3/4"	1PR#16TSP	PLC-0000-1	FE/FIT-0301-8	
10-C-202	3/4"	1PR#16TSP	PLC-0000-1	FE/FIT-0302-10	
10-C-203	1-1/4"	1-24/C #14	PLC-0000-1	LCP-0301-9	
10-C-204	3/4"	1-2/C #14	PLC-0000-1	LSH-0302-3	
10-C-205	3/4"	1PR#16TSP	LT-0302-1	PLC-0000-1	
10-C-206	N/A	NOT USED	NOT USED	NOT USED	NOT USED
10-C-207	3/4"	1-2/C #14	LSH-0302-1	PLC-0000-1	
10-C-208	N/A	NOT USED	NOT USED	NOT USED	NOT USED
10-C-209	3/4"	1PR#16TSP	LT-0302-2	PLC-0000-1	
10-C-210	N/A	NOT USED	NOT USED	NOT USED	NOT USED
10-C-211	3/4"	1-2/C #14	LSH-0302-2	PLC-0000-1	
10-C-212	N/A	NOT USED	NOT USED	NOT USED	NOT USED
10-C-213	1"	1-10/C #14	PLC-0000-1	PMP-0302-1	ROUTE TO SKID MOUNTED J-BOX
10-C-214	1"	2PR#16TSP	PLC-0000-1	PMP-0302-1	ROUTE TO SKID MOUNTED J-BOX
10-C-215	1"	1-10/C #14	PLC-0000-1	PMP-0302-2	ROUTE TO SKID MOUNTED J-BOX
10-C-216	1"	2PR#16TSP	PLC-0000-1	PMP-0302-2	ROUTE TO SKID MOUNTED J-BOX
10-C-217	1"	1-10/C #14	PLC-0000-1	PMP-0302-3	ROUTE TO SKID MOUNTED J-BOX
10-C-218	1"	2PR#16TSP	PLC-0000-1	PMP-0302-3	ROUTE TO SKID MOUNTED J-BOX
10-C-219	3/4"	1-2/C #14	LSH-0303-2	PLC-0000-1	
10-C-220	3/4"	1PR#16TSP	LT-0303-1	PLC-0000-1	
10-C-221	N/A	NOT USED	NOT USED	NOT USED	NOT USED
10-C-222	3/4"	1-2/C #14	LSH-0303-1	PLC-0000-1	
10-C-223	N/A	NOT USED	NOT USED	NOT USED	NOT USED
10-C-224	1"	1-10/C #14	PLC-0000-1	PMP-0303-1	ROUTE TO SKID MOUNTED J-BOX
10-C-225	1"	2PR#16TSP	PLC-0000-1	PMP-0303-1	ROUTE TO SKID MOUNTED J-BOX
10-C-226	1"	1-10/C #14	PLC-0000-1	PMP-0303-2	ROUTE TO SKID MOUNTED J-BOX
10-C-227	1"	2PR#16TSP	PLC-0000-1	PMP-0303-2	ROUTE TO SKID MOUNTED J-BOX
10-C-228	1"	1-10/C #14	PLC-0000-1	PMP-0303-3	ROUTE TO SKID MOUNTED J-BOX
10-C-229	1"	2PR#16TSP	PLC-0000-1	PMP-0303-3	ROUTE TO SKID MOUNTED J-BOX
10-C-230	1"	1-10/C #14	PLC-0000-1	PMP-0303-4	ROUTE TO SKID MOUNTED J-BOX
10-C-231	1"	2PR#16TSP	PLC-0000-1	PMP-0303-4	ROUTE TO SKID MOUNTED J-BOX

INSTRUMENTATION CONDUIT SCHEDULE

TAG	SIZE	CONDUCTORS	SOURCE	DESTINATION	NOTES
10-C-232	1"	1-12/C #14	PLC-0000-1	VLV-0303-1A	ROUTE TO ACTUATOR
10-C-233	1"	1-12/C #14	PLC-0000-1	VLV-0303-3A	ROUTE TO ACTUATOR
10-C-234	3/4"	1-4/C #14	MCP-0200-1	VLV-0304-1A	
10-C-235	3/4"	1-4/C #14	MCP-0200-1	VLV-0304-2A	
10-C-236	3/4"	1-4/C #14	MCP-0200-1	VLV-0304-3A	
10-C-237	3/4"	1-4/C #14	MCP-0200-1	VLV-0304-3B	
10-C-238	3/4"	1-4/C #14	MCP-0200-1	VLV-0310-1A	
10-C-239	3/4"	1-4/C #14	MCP-0200-1	VLV-0310-2A	
10-C-240	3/4"	1-4/C #14	MCP-0200-1	VLV-0310-3A	
10-C-241	3/4"	1-4/C #14	MCP-0200-1	VLV-0310-3B	
10-C-242	1"	1-12/C #14	PLC-0000-1	VLV-0240-1A	ROUTE TO ACTUATOR
10-C-243	1"	1-12/C #14	PLC-0000-1	VLV-0240-1B	ROUTE TO ACTUATOR
10-C-244	1"	1-12/C #14	PLC-0000-1	VLV-0240-2A	ROUTE TO ACTUATOR
10-C-245	1"	1-12/C #14	PLC-0000-1	VLV-0240-2B	ROUTE TO ACTUATOR
10-C-246	3/4"	1-2/C #14	PLC-0000-1	LSH-0240-1	
10-C-247	3/4"	1PR#16TSP	PLC-0000-1	LIT-0241-6A	
10-C-248	3/4"	1-2/C #14	PLC-0000-1	LSH-0240-2	
10-C-249	3/4"	1PR#16TSP	PLC-0000-1	LIT-0241-6B	
10-C-250	3/4"	1-2/C #14	PLC-0000-1	PSL-0241-1	
10-C-251	3/4"	1-2/C #14	PMP-0241-1	10-MCC-1	MOTOR TEMPERATURE SWITCHES
10-C-252	3/4"	1-2/C #14	PLC-0000-1	PSL-0241-2	
10-C-253	3/4"	1-2/C #14	PMP-0241-2	10-MCC-2	MOTOR TEMPERATURE SWITCHES
10-C-254	3/4"	1-2/C #14	PLC-0000-1	PSL-0241-3	
10-C-255	3/4"	1-2/C #14	PMP-0241-3	10-MCC-3	MOTOR TEMPERATURE SWITCHES
10-C-256	3/4"	1PR#16TSP	LCP-0305-1	PIT-0305-1	
10-C-257	3/4"	1PR#16TSP	LCP-0305-1	LIT-0305-1	
10-C-258	3/4"	1-2/C #14	PSH-0307-1	SK-0307-1	ROUTE TO SKID MOUNTED J-BOX
10-C-259	3/4"	1-2/C #14	PSL-0307-1	SK-0307-1	ROUTE TO SKID MOUNTED J-BOX
10-C-260	3/4"	1-4/C #14	VLV-0307-1A	SK-0307-1	ROUTE FROM FV-0307-1A TO SKID MOUNTED J-BOX
10-C-261	3/4"	1-2/C #14	DPSH-0307-2A	SK-0307-1	ROUTE TO SKID MOUNTED J-BOX
10-C-262	3/4"	1-2/C #14	DPSH-0307-2C	SK-0307-1	ROUTE TO SKID MOUNTED J-BOX
10-C-263	3/4"	1PR#16TSP	FE/FIT-0307-3	SK-0307-1	ROUTE TO SKID MOUNTED J-BOX
10-C-264	3/4"	1-4/C #14	VLV-0307-2A	SK-0307-1	ROUTE FROM FV-0307-2A TO SKID MOUNTED J-BOX
10-C-265	1-1/4"	1-20/C #14	SK-0307-1	MCP-0305-1	ROUTE TO SKID MOUNTED J-BOX
10-C-266	3/4"	1PR#16TSP	SK-0307-1	MCP-0305-1	ROUTE TO SKID MOUNTED J-BOX
10-C-267	1"	1-12/C #14	MCP-0305-1	VLV-0306-1A	ROUTE TO ACTUATOR
10-C-268	3/4"	1PR#16TSP	MCP-0305-1	PIT-0306-1B	
10-C-269	3/4"	1PR#16TSP	MCP-0305-1	PIT-0306-3A	
10-C-270	3/4"	1PR#16TSP	MCP-0305-1	TIT-0306-3A	
10-C-271	1"	1-12/C #14	MCP-0305-1	VLV-0308-1	ROUTE TO ACTUATOR
10-C-272	1"	1-12/C #14	MCP-0305-1	VLV-0308-1A	ROUTE TO ACTUATOR
10-C-273	1"	1-12/C #14	MCP-0305-1	VLV-0308-1B	ROUTE TO ACTUATOR
10-C-274	1"	1-12/C #14	MCP-0305-1	VLV-0308-2	ROUTE TO ACTUATOR
10-C-275	1"	1-12/C #14	MCP-0305-1	VLV-0308-2A	ROUTE TO ACTUATOR
10-C-276	1"	1-12/C #14	MCP-0305-1	VLV-0308-2B	ROUTE TO ACTUATOR
10-C-277	1"	1-12/C #14	MCP-0305-1	VLV-0308-3	ROUTE TO ACTUATOR
10-C-278	1"	1-12/C #14	MCP-0305-1	VLV-0308-3A	ROUTE TO ACTUATOR
10-C-279	1"	1-12/C #14	MCP-0305-1	VLV-0308-3B	ROUTE TO ACTUATOR
10-C-280	1"	1-12/C #14	MCP-0305-1	VLV-0308-4	ROUTE TO ACTUATOR
10-C-281	1"	1-12/C #14	MCP-0305-1	VLV-0308-4A	ROUTE TO ACTUATOR
10-C-282	1"	1-12/C #14	MCP-0305-1	VLV-0308-4B	ROUTE TO ACTUATOR
10-C-283	N/A	NOT USED	NOT USED	NOT USED	NOT USED
10-C-284	3/4"	1PR#16TSP	AIT-0308-5A	MCP-0305-1	
10-C-285	N/A	NOT USED	NOT USED	NOT USED	NOT USED
10-C-286	3/4"	1PR#16TSP	AIT-0308-5B	MCP-0305-1	
10-C-287	N/A	NOT USED	NOT USED	NOT USED	NOT USED
10-C-288	N/A	NOT USED	NOT USED	NOT USED	NOT USED
10-C-289	N/A	NOT USED	NOT USED	NOT USED	
10-C-290	N/A	NOT USED	NOT USED	NOT USED	
10-C-291	3/4"	1-2/C #14	PMP-0308-6	10-MCC-1	MOTOR TEMPERATURE SWITCHES
10-C-292	3/4"	1-2/C #14	PMP-0308-7	10-MCC-2	MOTOR TEMPERATURE SWITCHES
10-C-293	2-1/2"	4-1PR#16TSP	SK-0308-6	MCP-0305-1	ROUTE TO SKID MOUNTED J-BOX
10-C-294	2"	1-26/C #14	SK-0308-6	MCP-0305-1	ROUTE TO SKID MOUNTED J-BOX
10-C-295	1"	1-12/C #14	PMP-0401-4 STARTER	PLC-0000-1	
10-C-296	3/4"	1PR#16TSP	AIT-0401-1A	PLC-0000-1	
10-C-297	1"	1-12/C #14	PMP-0401-5 STARTER	PLC-0000-1	
10-C-298	3/4"	1PR#16TSP	AIT-0401-1B	PLC-0000-1	
10-C-299	1"	1-12/C #14	PMP-0402-4 STARTER	PLC-0000-1	
10-C-300	3/4"	1PR#16TSP	AIT-0402-1A	PLC-0000-1	
10-C-301	1"	1-12/C #14	PMP-0402-5 STARTER	PLC-0000-1	
10-C-302	3/4"	1PR#16TSP	AIT-0402-1B	PLC-0000-1	
10-C-303	4"	PULL STRING	RIO-0000-1	10-MCC-1	SPARE
10-C-304	4"	PULL STRING	RIO-0000-1	10-MCC-2	SPARE
10-C-305	4"	PULL STRING	RIO-0000-1	10-MCC-3	SPARE
10-C-306	1"	1-2/C #14	10-LC-1	20-LC-1	EXTERIOR LIGHTING CONTROL
10-C-307	1"	3-2/C #14	PLC-0000-1	COAGULANT INJECTION VAULT	LSHH-0102-1, ZSO-0102-1A, ZSO-0102-1B
10-C-308	2"	3-2/C #14, 2-12/C #14	PLC-0000-1	COAGULANT INJECTION VAULT & DIVERSION BOX DISCRETE JUNCTION BOX	COMBINE 10-C-011, 10-C-012, AND 10-C307 FOR ROUTING TO PLC-0000-1

AECOM

HANSEN ALLEN & LUCE inc

ENGINEERS

PROJECT

PROVO RIVER WATER TREATMENT PLANT

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REGISTRATION

PROFESSIONAL ENGINEER No. 12839491-2202 CHRISTOPHER J. ADAMS STATE OF UTAH

04/07/2023

ISSUE/REVISION

I/R	DATE	DESCRIPTION
B	2023-04-07	ISSUED FOR BID
A	2023-01-20	ISSUED FOR 90%

PROJECT NUMBER

AECOM Project No. - 60670884
HAL Project No. - 035.15.420

SHEET TITLE

WATER TREATMENT ELECTRICAL CONDUIT SCHEDULES

DRAWING NUMBER

10-E617

ANSI D 22" x 34"

Approved: C.ADAMS

Checked: S.SHUGARS

Designer: C.ADAMS

Drafter: A.ODONNELL

Project Manager: J.KRINKS

Last Plotted: 15.06.2022_8:35 AM
Filename: C:\Users\Saulsc\ACCDocs\AECOM\CI-AMER (USA) 60670884-Provo River WTP\Project Files\900 Design Collaboration\910 CAD-BIM\E\Sheets\60670884_10-E617.dwg