



Public Works Department
City of Bellingham

Addendum No. 3

**Post Point Sludge Tank Replacement Project
City Project No.: EU194
Bid Number: 3B-2026**

October 15, 2026

Attention Bidders:

Included with this letter are descriptions and attachments that make up Addendum No. 3 to the Post Point Sludge Tank Replacement Project, EU194 bid documents.

The following are a list of clarifications relating to the contract.

BID OPENING DATE AND TIME

No revisions to the Bid Opening Date and Time. The Bid Opening Date and Time remain as previously revised in Addendum 2. The bid deadline is **October 28, 2026 at 11:00am**.

BID PROPOSAL

No revisions to the Bid Proposal.

PLANS

1. Drawing 030C102 – YARD PIPING PLAN
 - a. **DELETE** and **REPLACE** in its entirety. Drawing provided as Attachment A in this Addendum.
2. Drawing 420D101 – SCRUBBER BUILDING DEMOLITION GROUND LEVEL PLANS
 - a. **ADD** the following general notes:
 - i. “11. DEMOLISH LIGHTING FIXTURES AND ASSOCIATED CONDUIT AND WIRING.”
 - ii. “12. SEE 320DE101 FOR ADDITIONAL ELECTRICAL DEMOLITION REQUIREMENTS FOR AREA 420.”
3. Drawing 420D102 – SCRUBBER BUILDING DEMOLITION GROUND LEVEL PLANS

Engineering

2221 Pacific Street
Bellingham, WA 98229
Phone: (360) 778-7900
Fax: (360) 778-7901
TTY: (360) 778-8382
Email: pw@cob.org

Natural Resources

2221 Pacific Street
Bellingham, WA 98229
Phone: (360) 778-7800
Fax: (360) 778-7801
Email: pw@cob.org

Utilities Operations

2221 Pacific Street
Bellingham, WA 98229
Phone: (360) 778-7700
Fax: (360) 778-7701
Email: pw@cob.org

Transportation

2221 Pacific Street
Bellingham, WA 98229
Phone: (360) 778-7700
Fax: (360) 778-7701
Email: pw@cob.org

- a. **DELETE** and **REPLACE** note stating, "ELECTRICAL EQUIP PAD" with the following:
 - i. "MCC, ATS, CIRCUIT BREAKERS, POWER PANELS, DRY-TYPE TRANSFORMERS AND ASSOCIATED EQUIPMENT PADS"
 - b. **ADD** the following general notes:
 - i. "11. DEMOLISH LIGHTING FIXTURES AND ASSOCIATED CONDUIT AND WIRING."
 - ii. "12. SEE 320DE101 FOR ADDITIONAL ELECTRICAL DEMOLITION REQUIREMENTS FOR AREA 420."
- 4. Drawing 420H101 – SLUDGE STORAGE BUILDING BASEMENT PLAN
 - a. **DELETE** and **REPLACE** in its entirety. Drawing provided as Attachment A in this Addendum.
 - 5. Drawing 440M101 – SLUDGE STORAGE BUILDING LOWER LEVEL PLAN
 - a. **DELETE** and **REPLACE** in its entirety. Drawing provided as Attachment A in this Addendum.
 - 6. Drawing 440M104 – SLUDGE STORAGE TANKS SECTIONS 2
 - a. **DELETE** and **REPLACE** in its entirety. Drawing provided as Attachment A in this Addendum.
 - 7. Drawing 050E102 – WAS PUMPS POWER AND CONTROL PLAN
 - a. **DELETE** and **REPLACE** in its entirety. Drawing provided as Attachment A in this Addendum.
 - 8. Drawing 420E104 – SLUDGE STORAGE BUILDING LOWER LEVEL POWER AND CONTROL PLAN
 - a. **DELETE** and **REPLACE** in its entirety. Drawing provided as Attachment A in this Addendum.
 - 9. Drawing 010N108 – NETWORK BLOCK DIAGRAM 1
 - a. **DELETE** and **REPLACE** in its entirety. Drawing provided as Attachment A in this Addendum.

PROJECT MANUAL – PROJECT SPECIAL PROVISIONS– TECHNICAL SPECIFICATIONS

- 1. Specification 28_46_13 – FIRE ALARM SYSTEMS
 - a. Section 2.03 A: **DELETE** in its entirety and **REPLACE** with
 - "A. Provide a complete, non-coded, microprocessor-based fire alarm system with initiation devices, notification appliances, controls, and supervisory devices for the modified Sludge Storage Building (Area 420).
 - 1. Connect this new Sludge Storage Building (Area 420) Fire Alarm Control Panel (FACP) to the existing master FACP in the Administration/control

building (Area 710), such that alarms from the Sludge Storage Building are also annunciated in the Administration/control building.

2. System connections for initiation (signaling) circuits and notification appliance circuits shall match the existing fire alarm system.
3. Examination of Existing System:
 - a. Examine the existing fire alarm and detection system and obtain all information required to ensure that new and modified systems provided under this section are compatible with the existing system."

2. Appendix B.6, Exhibit B – Geotechnical Design Services

- a. Figure 7: **DELETE** Figure 7 and **REPLACE** with Figure provided in Attachment C.

BIDDER QUESTIONS AND RESPONSES

The following questions were received by the City, and clarifying responses are provided:

1. Question: For fire alarm Honeywell provide identifier – spec does show multiple options but is Honeywell the preferred vendor to match on site?

Response: The Area 420 new Fire Alarm Control Panel interconnections to existing Area 710 existing master fire alarm control panel are hardwired and as result unclear if Honeywell is preferred. Other process area fire alarm control panels are Potter AFC-1000. See updated Specification language in this addendum.

2. Question: Please reference 31 50 00 2.01 B 1 h, which specifies a maximum total deflection of 1/2 inch on sheetpile. Please advise if this maximum deflection can be increased to 1 inch.

Response: The maximum deflection can be increased to no more than 1-inch insofar as the shoring system designer can show no impact on the buildings or infrastructure surrounding the excavation. Whereas no impact is defined as not causing additional settlement to the surrounding structure and infrastructure.

3. Question: SECTION 43_23_31.31, The motor and shafting are being reused so factory testing and lateral/torsional analysis will not be possible. Please confirm it is acceptable to remove this from the scope of supply. Spare shafting parts from the existing installation will not be provided, please confirm if this is acceptable.

Response: Source (factory) testing as specified in Section 43_23_31.31 is required. Note, a test driver shall be used to complete factory testing. Lateral/torsional analysis for the RAS pumps is not required. All spare parts as specified in Section 43_23_31.31 – 2.13.B are required.

4. Question: lead-based paint, Bid Item 2 (Chlorine Building Demolition Work) References: Section 01_35_44, Hazardous Material Procedures, Article 1.06; Appendix B.9 Exhibit A,

Asbestos Containing Material and Lead Based Paint Survey (ALL4, March 2025). The survey identifies lead-based paint by XRF at a limited number of locations in the Chlorine Building: yellow paint on curbs, door thresholds and EXT signage, and tan paint on one vertical pipe. Section 01_35_44, Article 1.06 is written around removal of lead paint from its substrate. We request clarification of the following so that all bidders price the same scope:

- a. Please confirm that the Contractor may demolish the Chlorine Building with the lead-painted components left intact, without removing the paint beforehand, provided the work complies with 29 CFR 1926.62 and applicable State worker protection rules.

Response: The contractor shall conduct demolition in accordance with WISHA, 29 CFR 1926.62, state regulations and other applicable state worker protection rules. The contractor may select to demolish the Chlorine Building with the lead-painted components left intact.

- b. Please confirm that Paragraphs 1.06.E through 1.06.K (removal equipment and procedures, SSPC Guide 6 Class 3 containment, a removal contractor with five references, and testing of each container of waste) apply only if the Contractor elects to remove paint from the substrate by abrasive blasting or chemical stripping, and do not apply to demolition with the paint left in place.

Response: Referenced paragraphs are not generally applicable if the lead itself is not being removed. The work, including demolition, manipulation, handling, and disposal of objects that contain lead in any fashion, shall abide by WISHA, 29 CFR 1926.62, state regulations and other applicable state worker protection rules.

- c. Please confirm that demolition debris may be characterized by TCLP testing of samples representative of the waste stream, rather than by container, and that debris passing TCLP may be disposed of as non-hazardous construction and demolition debris.

Response: Demolition debris shall be handled and characterized in accordance with the receiving disposal facility requirements.

- d. Paragraph 1.06.B requires the Contractor to sample and test paint "from the structures identified in this Section," but no structures are identified. Please confirm that the Appendix B.9 Exhibit A survey satisfies this requirement, or identify the structures and the number of samples required.

Response: The "structures identified in this Section" include the Chlorine Building (Area 420), the Chlorine Scrubber Building (Area 420), Pipe Gallery (Area 050), RAS Pump Room (Area 340), and the existing Solids Tank (Area 510/530) as referenced in the cover letter of the aforementioned Exhibit. The sampling performed in that Exhibit satisfies the intent of Section 01_35_44 1.06 B. Note, all work performed by Contractor shall abide by WISHA, 29 CFR 1926.62, state regulations and other applicable state worker protection rules.

- e. If any portion of the debris fails TCLP, please confirm that the Owner is the generator and will provide its EPA identification number per Paragraph 1.06.M, and state whether hazardous waste disposal costs are to be included in Bid Item 2.

Response: The Owner is the generator. Please include the disposal costs under Bid Item 2L.

- 5. Question: buried yard piping elevations, Bid Item 6 (Site Civil Work) References: Drawing 030C102, Yard Piping Plan; Drawings 050M104, 420M102, 440M103 and 440M104; Section 31_23_35, Trenching; Addendum 1, Question 5 and Attachment G. General Note 1 on Drawing 030C102 states that pipe elevations are shown with a plus or minus, but the only elevations on the sheet are the two storm drain inverts (IE 14.8 and IE 14.7). No invert or centerline elevations, and no finished grades, are shown for the other buried lines. Because Bid Item 6 is lump sum, trench depth drives excavation, shoring, dewatering and backfill cost. We request the following so that all bidders price the same depths:

- a. Please provide invert or centerline elevations at each end, and at any grade break, for each new buried line on Drawing 030C102: both 6-inch BS lines, both 8-inch BS lines, the 4-inch PD, the 6-inch PD, the 6-inch OA, the 6-inch FA, the 1.5-inch W3, and the odor control drains (3-inch D and 2-inch D). Please also provide finished grade elevations along these routes.

Response: Both the 6" PD and 4" PD invert elevations were issued with Addendum 2 in Attachment A. The invert elevations for the remaining pipes are included in Attachment A with this Addendum. The finished grade can be found in 020C107.

- b. The response to Question 5 in Addendum 1 states that elevations and inverts for the new manhole and its associated pipe will be provided in Addendum 2. Please confirm that Addendum 2 will include the manhole rim and all invert elevations. Please also clarify whether the 4-inch PD running north from the manhole, labeled "4" PD (E)" on Drawing 030C102, is new or existing, and if new, its length and point of connection.

Response: See Addendum 2 for the answer to this question, and the updated version of Drawing 030C102 included in Attachment A to this addendum.

- c. The mechanical drawings show the 6-inch BS at centerline elevation 12.60 at the gallery (050M104, Section G), 15.80 inside Sludge Storage Building 420 (420M102, Section D) and 12.50 at the tanks (440M104, Section E). Please confirm these are the elevations at the wall penetrations and that the buried pipe runs at uniform slope between them.

Response: See Attachment A for clarification on the elevations. Continuous slope between the points is required. For pressurized pipes, the Contractor can install elbows to adjust elevation as needed to accommodate yard interferences insofar

as those elbows maintain a uniform elevation direction (i.e. pipe doesn't go up and down).

- d. The 1990 record drawings in Attachment G (Drawing 420-H-1) show the existing OA duct leaving the building with bottom of duct at elevation 16.50, which leaves roughly 2 feet of cover. Section 31_23_35, Paragraph 3.03 requires not less than 3 feet of cover. Please confirm the required elevation of the new 6-inch OA at its connection to the existing pipe, and whether the 3 foot minimum cover applies to this line.

Response: See Attachment A for clarification on the elevations.

- e. Please state the relationship between the vertical datum of the 1990 record drawings in Attachment G and the NAVD 88 datum of the contract drawings.

Response: The vertical difference in the datums are shown on Drawing 020C101. The 1992 Record Drawings were based on the City Datum. The City Datum is 1.72' higher than the current NAVD 88 datum.

- f. If elevations cannot be provided for any of these lines before bid, please state the depth of cover bidders are to assume for that line.

Response: Every subgrade pipe will have a minimum depth of 3ft.

- 6. Question: Section 31 50 00 allows pressure-preservative-treated wood lagging to remain in place if acceptable to the Engineer. For a soldier pile and lagging shoring system, would the associated steel soldier piles also be permitted to remain in place and be cut off below finished grade where extraction would disturb the retained lagging or completed work?

Response: The Geotech report was written with the assumption that sheet pile shoring would be installed. The contractor may propose a different shoring system with associated calculations during the submittal process if desired. The proposed shoring system must be coordinated with the proposed dewatering system. The shoring must be removed in full, or at least as far down as the invert of the lowest pipe within the shored area.

- 7. Question: For demolition of the existing sludge storage tank in the Solids Handling Building (Area 510), will the Contractor be permitted to temporarily remove a portion of the existing building roof to allow the tank, or large sections of the tank, to be removed vertically by crane, in lieu of cutting the tank into smaller pieces for removal through the existing roll-up door? If permitted, the Contractor would be responsible for temporary weather protection and restoration of the roof and affected building components to existing conditions.

Response: It is not acceptable to remove and replace the building roof to remove the sludge storage tank.

8. Question: Please clarify the concrete work on the south side of Area 420 – Scrubber/Sludge Storage Building. Drawing 020C108 shows concrete sidewalk restoration in this area, while Drawing 420S102 shows concrete equipment/entrance pads in portions of the same area. Is the Contractor intended to provide both the structural concrete pads shown on 420S102 and the surrounding concrete sidewalk restoration shown on 020C108, or does one drawing govern where these limits overlap? Please clarify the intended limits of each concrete placement.

Response: Drawing 420S102 details the requirements for the entrance pads. Those requirements should be met for those areas, whereas the remainder of the sidewalk construction is defined by Drawing 020C108.

9. Question: Drawing 510D101, Key Note 2, calls for demolition of the "existing polymer mixer" shown in a dashed outline at the northeast side of the existing sludge tank. Drawing 530D101, Key Note 3, also calls for demolition of a polymer mixer in the East Addition. Are these two separate units, or the same unit shown on two drawings?

Response: Two separate polymer systems. The polymer mixer on Drawing 530D101 is the one referenced in the work restrictions (01_14_00 1.09 E) and associated with temporary facilities (01_50_00 1.14).

10. Question: If they are separate units, please provide the type, approximate dimensions and weight of the unit shown on 510D101, and confirm whether any access platform, ladder or tank associated with it is included in the demolition. Reference drawings in Addendum 1, Attachment G (510-S-2) show a sludge blending tank with a motor and elevated platform at this location.

Response: No weights are known. The sludge blending tank at this location as shown in reference drawings was previously removed. The existing polymer mixer equipment in this area (510D101) consists of a mixing pump and piping only.

11. Question: Is the unit shown on 510D101 currently in service? Is it subject to the requirement of 01_14_00, 1.09.E that the sludge/polymer mixer remain in service continuously, or may it be removed with the existing sludge tank?

Response: The polymer unit in Area 510 is not in service. The polymer unit referenced in the Work Restrictions is for Area 530, not Area 510.

12. Question: Please confirm that demolition of the unit shown on 510D101 is paid under Bid Item 11 and the unit shown on 530D101 under Bid Item 12.

Response: Demolition of the polymer unit located in Area 510 should be included under Bid Item 11L. Demolition of the polymer unit (as well as temporary unit/facilities, etc) in Area 530 should be under Bid Item 12L.

13. Question: Status of the existing sludge tank:

- a. During the site visit the existing sludge tank appeared to be empty with the manway open. Is the tank currently out of service? If so, will it remain out of service through construction?

Response: The existing sludge tank is currently in standby and able to be placed into service when needed. The existing sludge tank is placed in service intermittently to accommodate changes in solids flow, and to allow solids storage during incinerator maintenance. The tank must remain in-service/standby during construction until the new tank is commissioned per Specification Section 01_14_00 – Work Restrictions.

- b. Will the City turn the tank over to the Contractor drained and cleaned, or shall the Contractor include draining, cleaning and disposal of residual sludge and grit per 01_14_00, 1.08.P? If the Contractor is to clean it, what depth or volume of residual material should be assumed for bidding?

Response: The tank will be turned over in a drained, standby condition. City crews shall drain the tank and perform a hose based non-entry cleaning from the top of the tank. The contractor shall anticipate additional cleaning and disposal of residual sludge or grit (entry or non-entry) as required for tank demolition work. Volumes of residual sludge/grit material in this process unit are expected to be less than 2CY.

- c. If the tank is out of service, may it be demolished earlier in the sequence than shown in 01_14_00, 1.10.A, before the new Area 440 tanks are commissioned?

Response: No. The existing sludge tank must be available for plant operations use until the new tank is commissioned.

14. Question: RFI for City of Bellingham Post Point Resource Recovery Plant Q1. One-Line Drawings Request To perform the Arc Flash Study and produce compliant labels, we request complete electrical one-line drawings for all facilities included in the arc-flash scope. The one-lines must include power sources i.e. utility and generator (if any) and all motor loads. Please share complete One-line Diagram for the shown equipment 1- Drawing Sheet 320E001, Please share the one line diagram for SG-7401A & SG-7401B 2- Drawing Sheet 340E002, Please share the one line diagram for SG-7401B 3- Drawing Sheet 340E003, please share the one-line diagram for LB-3 4- Drawing Sheet 530E002, please share the one-line diagram for SG-73001.

Response: Requested information is not available prior to bid. Available plant-wide electrical information will be provided to the bidder after contract award.

15. Question: Extent of PVC-coated aluminum conduit inside the sludge storage tanks (Ref: 440E102 key notes 5, 7 and 9; 26_05_33) Key note 9 requires PVC-coated aluminum

conduit (PCA) for sludge storage tank interior exposed conduit, and key note 5 routes conduit along the interior tank wall and ceiling, but the interior routing is not dimensioned. Please identify which conduits run inside the tanks and the extent of PCA required.

Response: All exposed electrical conduit routed on the interior of the new sludge storage tanks shall be PVC-coated aluminum conduit (PCA). Raceway/conduit symbols and line types defined on Drawing 010E101 delineate where conduits change elevation, are exposed, and are exposed hidden (exposed but hidden by storage tank top slab in this case). Keynotes 5, 7, and 9 indicate which conduits route interior to the tanks and where the conduit transitions from exposed on tank exterior to concealed (exposed hidden) on tank interior (Keynote 5).

16. Question: Conduits on 440E102 not in the conduit schedule (Ref: 440E102; 26_06_03 (Conduit Schedule)) The following conduit tags appear on Drawing 440E102 but are not listed in the conduit schedule: C-440-032, C-440-044, C-440-045, L-440-331, N-440-030, N-440-300, N-440-330, N-440-331. Please provide the size, conductors/cables, and from/to for each.

Response: See Attachment B for updated Section 26_06_03 Conduit Schedule Area 440

17. Question: Enclosure type of disconnects for EDR-34033 and EDR-34034 (Ref: 050E102; 030E107 (disconnect schedule); 26_05_00 Table 1) Drawing 050E102 shows the local disconnects for electric valve actuators EDR-34033 and EDR-34034 as Type A (NEMA 4) per the disconnect schedule on 030E107. Specification 26_05_00 Table 1 lists the gallery (Area 050) as a damp/corrosive location requiring NEMA 4X enclosures. Please confirm whether these disconnects shall be NEMA 4 or NEMA 4X stainless steel.

Response: On Drawing 050E102 provide Type B NEMA 4X stainless steel disconnects for EDR-34033 and EDR-34034.

18. Question: RAS pump replacement - electrical work (Ref: Addendum 1 Attachment A (pre-bid slides 6 and 12); 340 drawings) The pre-bid presentation lists replacement of two RAS pumps and demolition of RAS pumps in Area 340. Please confirm the electrical work required for the RAS pumps (disconnection and reconnection of existing motors, or new motor feeders/controls), and identify the drawings showing it.

Response: All existing electrical associated with RAS pumps to remain in-place and be re-used after the RAS pump replacement. Contractor shall coordinate with Owner to electrically isolate specific RAS pump to facilitate replacement (RAS pump shutdown and sequence requirements in Section 01_14_00). No electrical upgrades anticipated as part of the pump replacement. Refer to Drawing 340M101 for additional details.

19. Question: Cathodic protection bid item (Ref: 26_60_01; 800TC002 details CP100-CP371 (Addendum 1); 030C102; Bid Proposal) Addendum 1 added cathodic protection details

CP100 through CP371 to the civil typical details (800TC002), referenced from civil sheet 030C102. Specification 26_60_01 is located in Division 26. Please confirm which bid item carries the cathodic protection system, including joint bonding, anodes and test stations.

Response: For convenience, Bid Item 13L – Electrical, Instrumentation, and Controls was setup to allow the General Contractor to put the EIC subcontractors efforts there. Physical (non-electrical/instrumentation work) associated with the cathodic protection work, should be included under Bid Item 6L - Site Civil Work.

20. Question: Building 420 electrical demolition drawings (Ref: 320DE001 general note 2) 320DE001 general note 2 refers to "Building 420 demolition plan drawings" for additional electrical demolition requirements. No Building 420 electrical demolition plan appears in the drawing index. Please identify which sheets govern Building 420 electrical demolition.

Response: See Drawings 420D101 and 102 for the physical assets in that building. Drawing 420D102 to supplement Drawing 320DE001 for area 420 electrical demolition. Refer to additional notes on Drawing 420D102

21. Question: Existing SCADA platform and existing controller capacity (Ref: 40_61_15; 40_96_15; 010N108) Please identify the plant SCADA/HMI software platform and version on which new screens are to be developed, and confirm that existing PLC-2 (Building 340) and RIO-53A (Building 530) have spare slot and processor capacity for the I/O added by this project.

Response: AVEVA InTouch 2020 R2 SP1. Please see Attachment D – PLC-2 Drawings. Existing PLC-2 and RIO-53A have the required spare I/O availability to incorporate this project.

22. Question: Fiber optic cable in N-420-001 (Ref: 010N109 key note 1; 26_06_02 (N-420-001)) 010N109 key note 1 states the fiber optic cable is provided and installed by the City, while the conduit schedule lists 12-strand fiber in N-420-001 (LCP-42020 to the Building 320 computer network cabinet). Please confirm who furnishes, installs, terminates and tests this fiber.

Response: Contractor to install all electrical conduit/raceway for new fiber cable and City to furnish, install, test and terminate new fiber optic cable.

23. Question: Thickened sludge pump VFD horsepower (Ref: 030E108; 530E001 (Addendum 1); 26_29_24) Please provide the motor horsepower and load type (constant or variable torque) for thickened sludge pumps PMP-53061 and PMP-53062 (VFD-53061 and VFD-53062, 60A-3P feeders on PP-53002). The horsepower is not shown on 530E001 issued in Addendum 1 or on other sheets.

Response: Please see Specification Section 43_23_58.13 – Single Lobe Rotary Lobe Pumps in the pump schedule (3.04). PMP-53061 and 62 are 30 HP VFD constant torque positive displacement driven pumps (minimum). Contractor is responsible to coordinate between suppliers to ensure compatibility.

24. Question: S-530-040 drawing reference (Ref: 26_06_04 (S-530-040)) The drawing column for S-530-040 is blank. Please confirm the drawing on which this conduit is shown.

Response: Conduit S-530-040 is shown on Drawing 530E101.

25. Question: PIT-53061 signal label (Ref: 26_06_04 (S-530-052 and downstream conduits)) S-530-052 carries the PIT-53061 signal but is labeled PIT-53062, and the same label repeats in S-530-055, S-530-105, S-530-035, S-530-037 and S-530-040. Please confirm.

Response: Conduit S-530-052 carries the PIT-53061 (not PIT-53062 as labeled in Section 26_06_04). Same label to be updated in conduits S-530-055, S-530-105, S-530-035, S-530-037 and S-530-040 (two unique pressure signals PIT-53061 and PIT-53062). See Attachment B for corrected conduit schedules.

26. Question: P-050-261 description (Ref: 26_06_01 (P-050-261)) P-050-261 is described as serving VFD-34044. Please confirm this should read VFD-34034 (WAS pump 2).

Response: Confirmed Section 26_06_01 Conduit P-050-261 should read VFD-34034 in lieu of VFD-34044 to match existing pump equipment loop number. See Attachment B for corrected conduit schedules.

27. Question: Fan running status tags on C-420-090 (Ref: 26_06_02 (C-420-090); 420E002) C-420-090 lists SF-42032 and EF-42033 running status. The one-line and power conduits show EF-42032 (exhaust fan) and SF-42033 (supply fan). Please confirm the correct tags.

Response: Correct tags are EF-42032 (exhaust fan) and SF-42033 (supply fan) per one-line drawing 420E002 and P&ID drawing 420N802. See Attachment B for corrected conduit schedules.

28. Question: Sludge storage pump 2 equipment tags (Ref: 420E002; 420E104; 420E106; 26_06_02) Pump 2 equipment is tagged P-42004 / VFD-42004 / LCP-42004 on Drawings 420E002, 420E104 and 420E106, but P-42002 / VFD-42002 / LCP-42002 in the conduit schedule. Please confirm the correct tags.

Response: Correct tags for Pump 2 are P-42004 / VFD-42004 / LCP-42004 per P&ID drawing 420N102.

29. Question: Conduits on 530E102 not in the conduit schedule; actuator vendor panels (Ref: 530E102; 26_06_04 (Conduit Schedule)) The following conduit tags appear on Drawing 530E102 but are not listed in the conduit schedule: C-530-055, C-530-057, C-530-071, C-530-073, C-530-078, C-530-079, L-530-013, P-530-052, P-530-062, P-530-082, P-530-084, P-530-086, P-530-088, P-530-090, P-530-092, P-530-094, P-530-096, P-530-098, P-530-099. Please provide the size, conductors/cables, and from/to for each. Most appear to serve vendor panels VCP-53010, VCP-53014, VCP-53015 and VCP-53016; please also confirm what equipment these panels serve and who furnishes them.

Response: See Attachment B for updated Section 26_06_03 Conduit Schedule Area 530.

30. Question: Unit heater EUH-42015 thermostat conduit (Ref: 420E104 key note 8; 23_83_01) Key note 8 requires conduit and wiring from the EUH-42015 thermostat to the heater, with the thermostat located per the mechanical drawings. This conduit is not in the conduit schedule. Please provide the thermostat location and the required conductors.

Response: See Attachment A for replaced Drawing 420H101 that shows the thermostat location.

31. Question: Conduits scheduled on 420E104 but not shown (Ref: 26_06_02; 420E104) The conduit schedule lists Drawing 420E104 for C-420-090, C-420-091 and L-420-091, but these conduits are not shown on 420E104 (they are shown on 420E102 and 420E106). Please confirm the intended routing.

Response: Conduits C-420-090, C-420-091 and L-420-091 are shown on Drawings 420E102 and 420E106. See Attachment B for updated conduit schedules.

32. Question: C-440-300 destination (Ref: 26_06_03 (C-440-300); 420E106; 420E104) The conduit schedule lists C-440-300 from VCP-44020 to MCC-42001. Drawings 420E106 and 420E104 show C-440-300 transitioning to the lower level at LCP-42020 (key note 1 group). Please confirm the correct destination.

Response: Correct destination for Section 26_06_03 conduit C-440-300 is LCP-42020 (not MCC-42001) as shown on Drawing 420E104. See Attachment B for updated conduit schedules.

33. Question: C-420-038 destination (Ref: 26_06_02 (C-420-038); 420E106) The conduit schedule lists C-420-038 (4 #14) from FACP-42001 to LP-42001. Drawing 420E106 shows C-420-038 routed from FACP-42001 to LCP-42020. Please confirm the correct destination.

Response: Correct destination for Section 26_06_02 conduit C-420-038 is LCP-42020 (not LP-42001) as shown on Drawing 420E106. See Attachment B for updated conduit schedules.

34. Question: AHU to outdoor unit interconnect conduits L-420-320 and L-420-321 (Ref: 420E106 key note 2; 420E102 key note 1) Key notes state to provide conduit and use manufacturer-provided cabling for the power interconnection between indoor units AHU-42030/42031 and outdoor units CDU-42030/42031. Please confirm the conduit size, and confirm whether the manufacturer-provided cable is furnished and installed by the mechanical (Division 23) contractor or installed by the electrical contractor.

Response: See Attachment B for updated Section 26_06_02 Conduit Schedule Area 420 with additional detail on conduits L-420-320 and L-420-321 (sizing and wiring contents). Contractor shall coordinate installation requirements with necessary subcontractors.

35. Question: Conduits shown on the drawings but not listed in the conduit schedules (Ref: 420E106; 420E104; Specs 26_06_02 and 26_06_03 (Conduit Schedules)) The following conduit tags appear on the drawings but are not listed in the conduit schedules. Please provide the size, conductors/cables, and from/to for each: (a) Drawing 420E106: C-420-120, S-420-120, C-420-320, P-420-066, L-420-320, L-420-321. (b) Drawing 420E104: C-440-080, C-440-081, L-420-029, L-440-332, N-440-300, P-420-056, P-440-301. (c) Drawing 420E104 also shows one conduit near FE-42003 with no tag; please identify it.

Response: See Attachment B for updated Section 26_06_02 Conduit Schedule Area 420 and Section 26_06_03 Conduit Schedule Area 440 with additional detail on referenced conduits. Unclear what conduit on Drawing 420E104 near FE-42003 is being referenced – please submit additional question to clarify as-needed.

36. Question: Does the City have a power study model and if so will they be willing to share that power study model or at least provide the Contractor with the report from a their previous power study model to the awarded contractor?

Response: Requested information is not available prior to bid. Available plant-wide electrical information will be provided to the bidder after contract award.

37. Question: Addendum 1 – Q&A 7 acknowledged that a contaminated cleanup site exists approximately 75 ft to the north of this project with a link to the RI/FS. Addendum 2 – Q&A 7 stated that the contractor shall identify all required treatment systems required to meet permit requirements. Should bidders carry costs associated with an on-site treatment system to handle the contaminants as detailed in the referenced RI/FS? If so, please provide the Department of Ecology Companion Order detailing Marine Water Parameters for allowable discharge so an appropriate treatment plant can be designed and priced to address known contaminants appropriately. Please also advise if batch or flow through sampling would be required in the event that a treatment system is required.

Response: The City is not aware of contaminated soils or groundwater at the location of project excavation. If contaminated groundwater or soils is encountered during construction, written notification of a Differing Site Condition shall be generated (Standard Specification 1-04.7), and further regulatory coordination would be required for discharge and/or disposal of contaminated material.

The above changes shall constitute a binding change to the contract documents for this project and shall become a part of any resulting contract awarded subsequent to the opening of bids for the project.

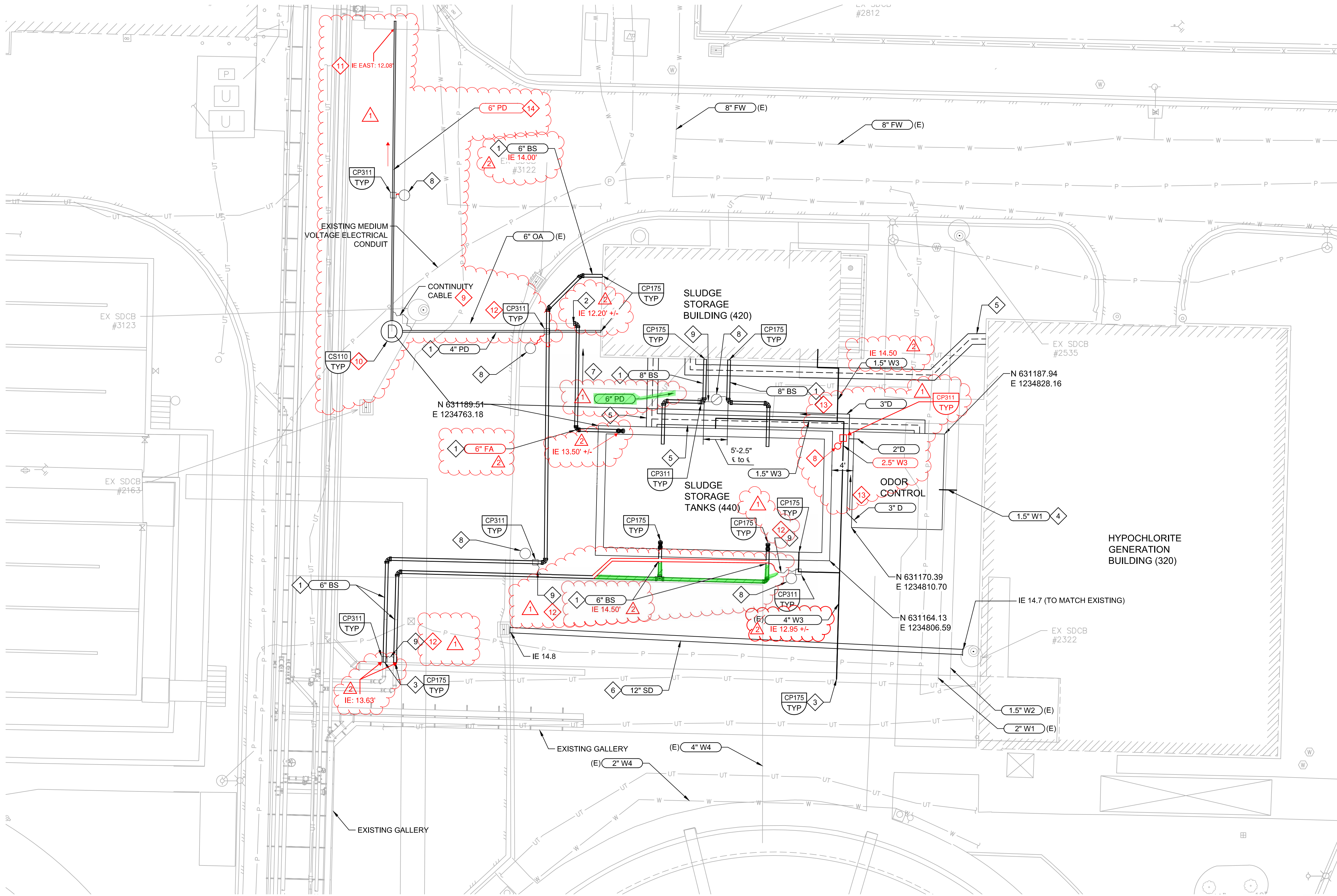
Remember that the bidder must acknowledge receipt on the signature page of the proposal, of all addenda issued during the bidding period. Failure to so acknowledge may result in the proposal being rejected as not responsive.



Stephen Day PE, SE
Project Engineer

Addendum 3 Attachments:

- Attachment A – Drawings
- Attachment B – Conduit Schedules
- Attachment C – Earth Pressure Diagram
- Attachment D – PLC-2 Drawings



YARD PIPING
B PLAN
SCALE: 1" = 10'
FILE: 202021030C102.DWG



	4			
	3			
10-14-26	2	ADDENDUM 3	MS	
10-6-26	1	ADDENDUM 2	MS	
Date	No	Revision	By	

PROJECT ENGINEER _____
DESIGNED/DRAWN JJC
INSPECTOR _____

DIRECTOR PUBLIC WORKS _____
CITY ENGINEER _____
ASSISTANT DIRECTOR _____

CITY OF BELLINGHAM, WASHINGTON
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

SCALE
Horizontal AS SHOWN
Vertical AS SHOWN

DATUM
H: NAD 83/98
V: NAVD 88

Job. No. EU194
Date JAN 2026
Field Bk. _____

POST POINT RESOURCE RECOVERY PLANT
CIVIL
YARD PIPING PLAN

DRAWING NO. 030C102
SHEET NO. 38 OF 198

GENERAL NOTES:

- ELEVATIONS OF PIPES ARE SHOWN WITH $\pm$ DUE TO UNCERTAINTY IN THE RECORD DRAWINGS AND SURVEY THAT THEY WERE GATHERED FROM. FIELD VERIFY PRIOR TO SUBMITTING SHOP DRAWINGS.
- CATHODIC PROTECTION NOTES:
A. DIP MUST BE JOINT BONDED PER CP150.
B. ENSURE DUCTILE IRON PIPES DO NOT COME IN CONTACT WITH REBAR.

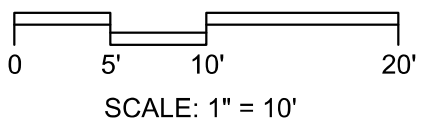
KEY NOTES:

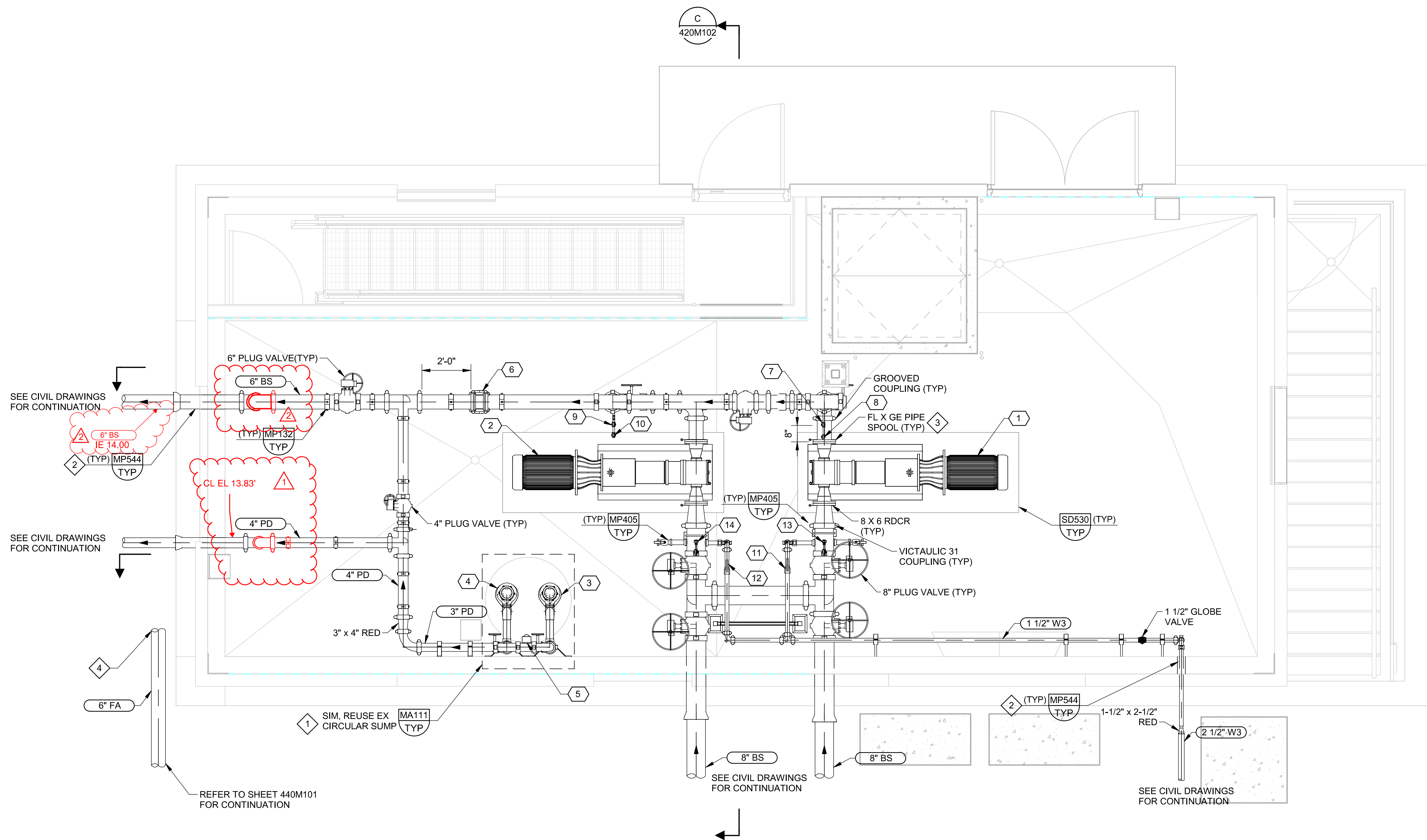
- INSTALL THE FIRST TWO MECHANICAL JOINTS FROM ALL STRUCTURE WALLS WITHIN 1' OF STRUCTURE AND AT 6' FROM FIRST JOINT. TYPICAL FOR EACH STRUCTURE.
- TRANSITION COUPLING FROM EXISTING 6" PVC PIPE TO NEW FRP PIPE WILL BE REQUIRED TO RETROFIT EX-6" OA PIPE.
- PIPE CONTINUES IN GALLERY. SEE AREA 050 DRAWINGS FOR CONTINUATION.
- ROUTE TO ODOR CONTROL MAKEUP WATER SYSTEM AS NECESSARY.
- SEE ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
- REPLACE EXISTING 12-INCH STORM DRAIN PIPING WITH NEW. INVERT ELEVATION TO MATCH EXISTING.
- SLOPE PIPE DOWNWARD WITH MINIMUM 2% SLOPE IN DIRECTION INDICATED.
- ANODE CONNECTED TO TEST STATION.
- CONTINUITY BOND ACROSS PIPES USING EXOTHERMIC WELDING PER DETAIL CP102/TYP.
- MH-SST
INSTALL 48" DIAMETER MH
RIM EL: 17.00
INVERT EL NORTH (6" PD): 13.17'
INVERT EL EAST (4" PD): 13.67'
INVERT EL SOUTHEAST (3" D): 13.25'
INVERT EL FLOOR: 13.00'
- CORE-DRILL RAW SEWAGE PUMP STATION WALL FOR NEW PIPE. MAINTAIN EXISTING INVERT FOR DEMOLISHED 4-INCH PIPE. SEAL OPENING WITH LINK-TYPE SEAL PER DETAIL MP544/TYP.
- BOTH PIPES BONDED INTO TEST STATION.
- SLOPE PIPE DOWNWARD WITH MINIMUM 1.6% SLOPE IN DIRECTION INDICATED.
- SLOPE PIPE DOWNWARD WITH MINIMUM 1.9% SLOPE IN DIRECTION INDICATED.



Know what's below.
Call before you dig.
usanorth811.org

SCALE





GENERAL NOTES:

- ALL 90 DEGREE ELBOWS ON BLENDED SLUDGE AND PRIMARY SLUDGE PIPING SHALL BE LONG RADIUS

KEY NOTES:

- FIELD MEASURE EXISTING SUMP AND CONFIRM PROPOSED PUMPS WILL FIT INTO THE EXISTING SUMP. SUBMIT MEASUREMENTS IN PUMP SUBMITTAL FOR ENGINEER APPROVAL.
- CORE-DRILL THROUGH WALL. LOCATE CORE DRILL SUCH THAT ONLY A MAXIMUM OF ONE REINFORCEMENT BAR IN EACH DIRECTION IS DAMAGED. LINK-SEAL AROUND PIPE.
- INSTALL FLANGE/GE SPOOL ON DISCHARGE AND SUCTION SIDE OF PUMP TO ALLOW FOR PUMP REMOVAL.
- TIE INTO EXISTING PVC ODOR CONTROL PIPING IN APPROXIMATE LOCATION. INSTALL PVC VANSTONE FLANGE ON EXISTING PIPE AND CONNECT TO NEW FRP CIRCULAR DUCT WITH EXPANSION JOINT.

KEY TAGS:

1	P-42001	SLUDGE STORAGE PUMP 1
2	P-42004	SLUDGE STORAGE PUMP 2
3	P-42010	SLUDGE STORAGE SUMP PUMP 1
4	P-42011	SLUDGE STORAGE SUMP PUMP 2
5	LE-42010	LEVEL FLOAT SWITCHES
6	FE-42003	MAGNETIC FLOW METER
7	PE1-42002	PRESSURE SWITCH HIGH
8	PE2-42002	PRESSURE TRANSDUCER
9	PE1-42005	PRESSURE SWITCH HIGH
10	PE2-42005	PRESSURE TRANSDUCER
11	SV-42001	SOLENOID VALVE
12	SV-42002	SOLENOID VALVE
13	PE-42001	PRESSURE SWITCH LOW
14	PE-42004	PRESSURE SWITCH LOW

A PLAN
SCALE: 3/8" = 1'-0"



Date	No	Revision	By
10-14-26	2	ADDENDUM 3	MS
10-6-26	1	ADDENDUM 2	MS

PROJECT ENGINEER MSS
DESIGNED/DRAWN NJ/DJL
INSPECTOR CC

DIRECTOR PUBLIC WORKS MAO
CITY ENGINEER MLW
ASSISTANT DIRECTOR MAO

CITY OF BELLINGHAM, WASHINGTON
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

SCALE
Horiz. AS SHOWN
Vert. AS SHOWN

DATUM
H: NAD 83/98
V: NAVD 88

Job. No. EU194
Date JAN 2026
Field Bk.

POST POINT RESOURCE RECOVERY PLANT
MECHANICAL
SLUDGE STORAGE BUILDING LOWER LEVEL PLAN

DRAWING NO. 420M101
SHEET NO. 69 OF 198

VERIFY SCALES

BAR IS ONE INCH ON ORIGINAL DRAWING

0 1"

IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY



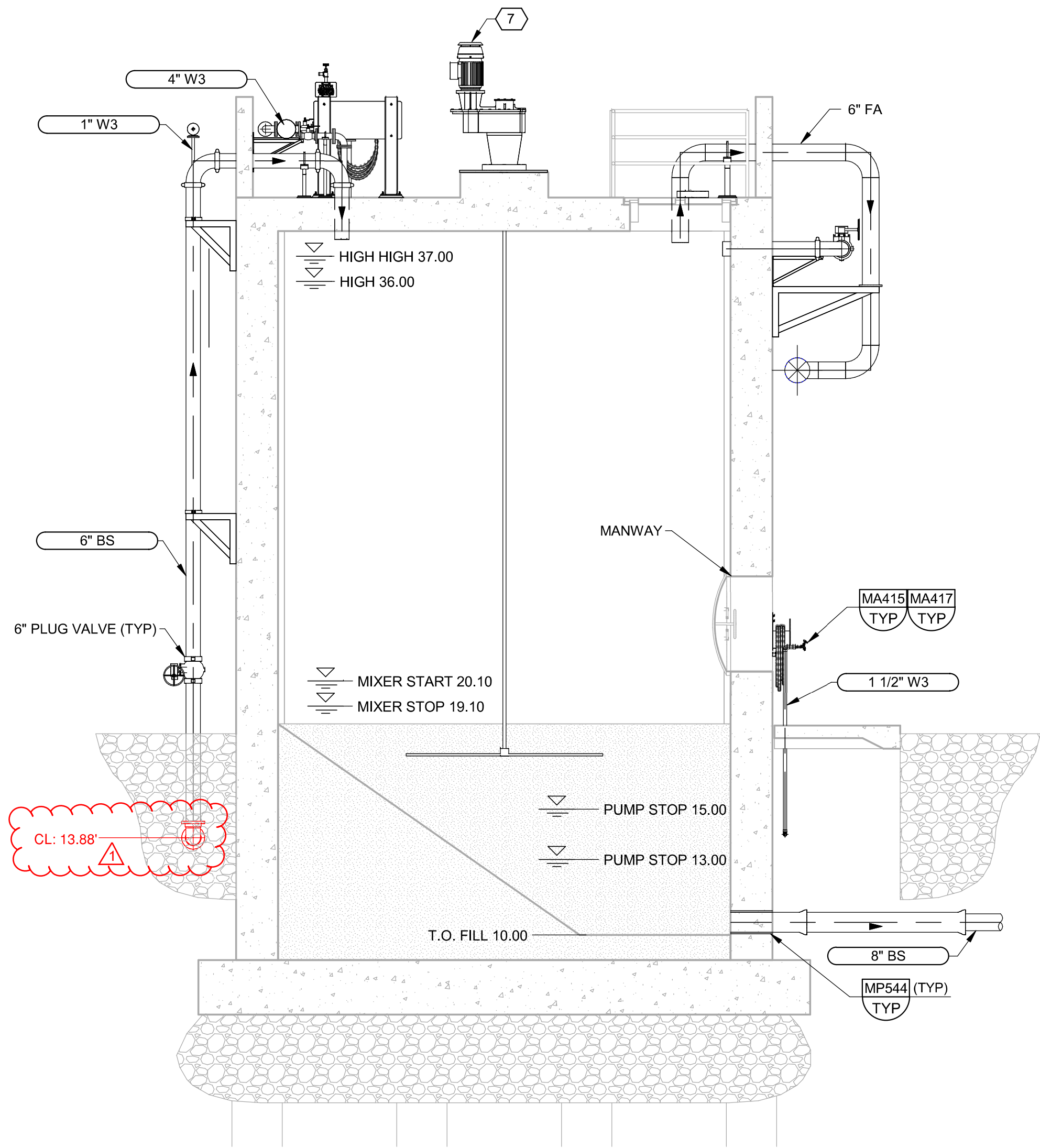
PLOT DATE: 6/25/2026 1:09:06 PM

CONTACT PERSON: STEPHEN DAY, PE SE

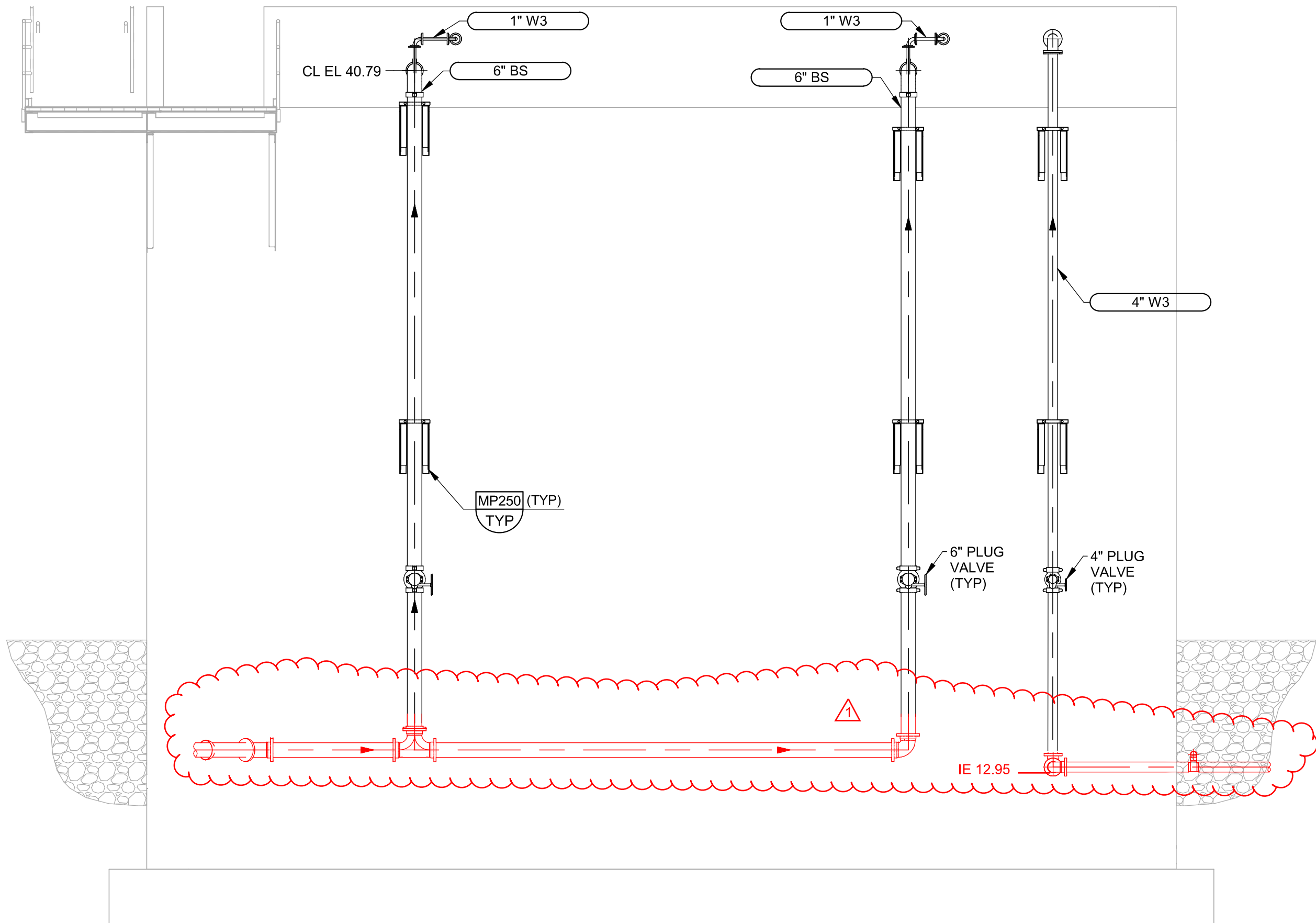
PROJECT ENGINEER AT 360-778-7944

FILE NAME: Autodesk Docs://Bellingham 202021-100000 Primary Sludge Tank Replacement/202021420M9801.rvt

- GENERAL NOTES:
1. ALL 90 DEGREE ELBOWS ON BLENDED SLUDGE AND PRIMARY SLUDGE PIPING SHALL BE LONG RADIUS
 2. ELEVATED SLAB PENETRATIONS FOR DUCT AND PIPE SHALL BE PER DETAIL MP514/TYP.
 3. INSULATE AND HEAT TRACE ALL EXPOSED W 3 PIPING



E SECTION
440M101 SCALE: 1/4" = 1'-0"



F SECTION
440M101 SCALE: 1/4" = 1'-0"



10-14-26	1	ADDENDUM 3	MS
Date	No	Revision	By

PROJECT ENGINEER	MSS
DESIGNED/DRAWN	NJ/DJL
INSPECTOR	CC

DIRECTOR PUBLIC WORKS	MAO
CITY ENGINEER	MLW
ASSISTANT DIRECTOR	MAO

CITY OF BELLINGHAM, WASHINGTON
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

SCALE
Horiz. AS SHOWN
Vert. AS SHOWN

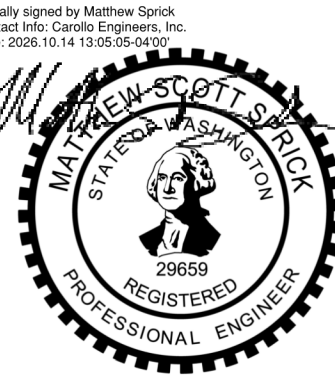
DATUM
H: NAD 83/98
V: NAVD 88

Job. No.	EU194
Date	AUG 2025
Field Bk.	

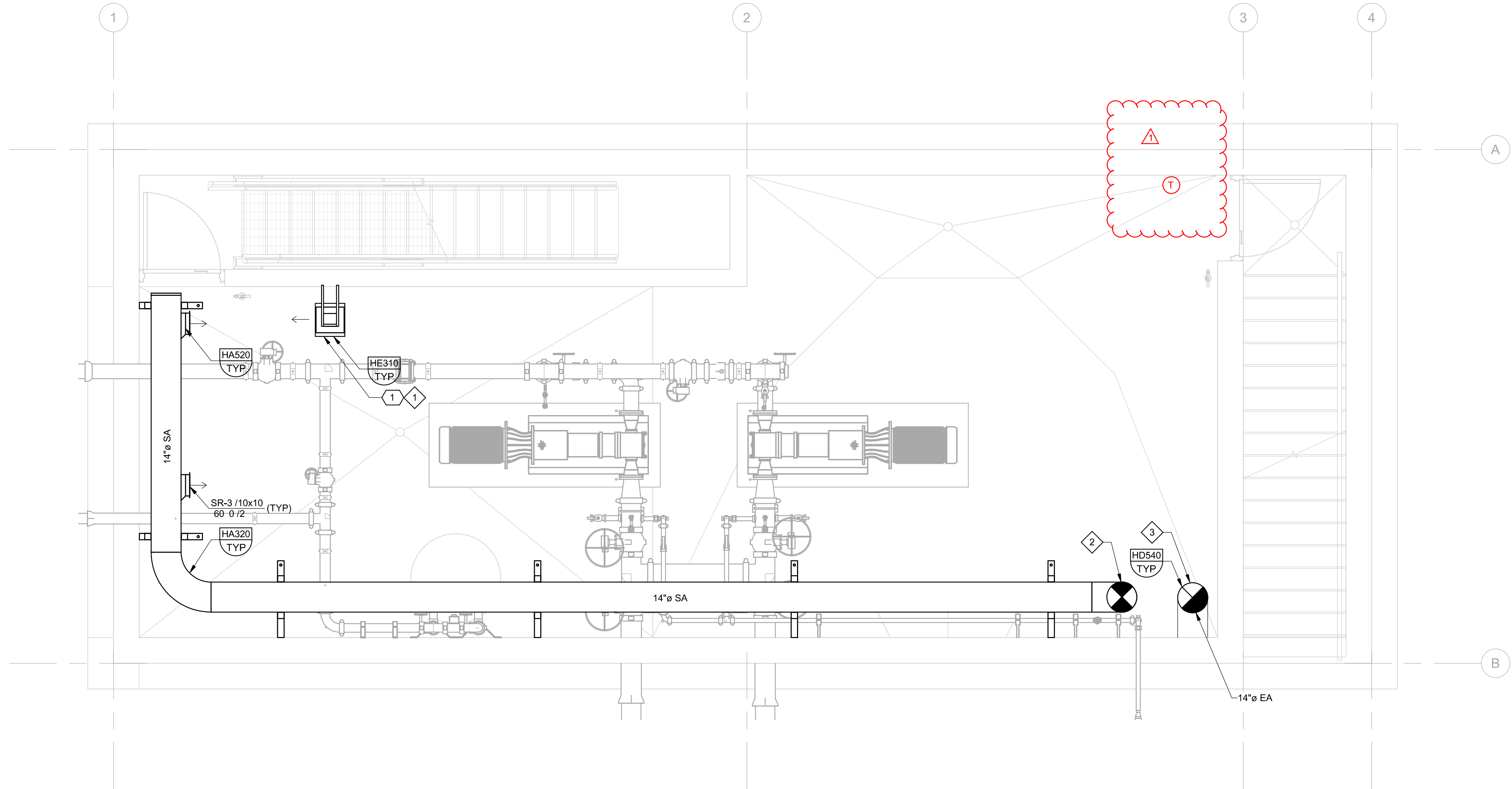
POST POINT RESOURCE RECOVERY PLANT
MECHANICAL
SLUDGE STORAGE TANKS SECTIONS 2

DRAWING NO.	440M104
SHEET NO.	74 OF 198

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY



PLOT DATE: 6/25/2025 1:15:51 PM



A PLAN
SCALE: 3/8" = 1'-0"

GENERAL NOTES:

- EXISTING CONDITIONS:
 - FIELD VERIFY ALL EXISTING DIMENSIONS, ELEVATIONS, AND CONDITIONS PRIOR TO DEMOLITION, SHOP DRAWING PREPARATION, AND FABRICATION.
 - NOTIFY ENGINEER IMMEDIATELY IF CONDITIONS NOT COVERED BY THESE DRAWINGS ARE EXPOSED DURING CONSTRUCTION INCLUDING, BUT NOT LIMITED TO:
 - ELEVATIONS, SIZES, OR DIMENSIONS DIFFERING FROM THE CONTRACT DOCUMENTS.
 - DAMAGE OR DETERIORATION TO MATERIALS AND COMPONENTS.
 - CONDITIONS OR DETAILS DIFFERENT FROM THOSE SHOWN ON THE DRAWINGS.
- MOUNT THERMOSTATS AT 48" AFF AND LABEL WITH ITS CONTROLLING DEVICE.
- DUCT SUPPORTS SHOWN FOR REFERENCE ONLY. REFER TO SPECIFICATION SECTION 23_31_13, TYPICAL DETAILS, AND SMACNA FOR ADDITIONAL REQUIREMENTS.
- DUCTWORK TO BE ALUMINUM PER SECTION 23_31_13. DO NOT ROUTE ABOVE ELECTRICAL EQUIPMENT.
- ALL DUCTWORK AND SUPPORTS SHALL BE CONSTRUCTED PER SMACNA.
- ALL SUPPLY AND RETURN REGISTERS SHALL HAVE OPPOSED BLADE BALANCING DAMPERS.
- DUCT SHALL BE FIELD ROUTED TO AVOID PROCESS EQUIPMENT, ELECTRICAL EQUIPMENT, AND OTHER TRADES AS NECESSARY.

KEY NOTES:

- WALL MOUNTED ELECTRIC UNIT HEATER. HEATER TO BE MOUNTED AT 9'-0" AFF.
- 14" SUPPLY AIR DUCT DOWN FROM STORAGE ROOM ABOVE.
- 14" EXHAUST AIR DUCT DOWN TO 12" AFF. TERMINATE OPENING WITH 1/2"x1/2" ALUMINUM MESH SCREEN IN REMOVABLE FRAME.

EQUIPMENT TAGS:

- HT-42015 ELECTRIC UNIT HEATER NO. 1



Date	No	Revision	By
10-14-26	1	ADDENDUM 3	MS

PROJECT ENGINEER SAW
DESIGNED/DRAWN JKA
INSPECTOR CAG

DIRECTOR PUBLIC WORKS MAO
CITY ENGINEER MLW
ASSISTANT DIRECTOR MAO

CITY OF BELLINGHAM, WASHINGTON
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

SCALE
Horiz. AS SHOWN
Vert. AS SHOWN

DATUM
H: NAD 83/98
V: NAVD 88

Job. No. EU194
Date JAN 2026
Field Bk.

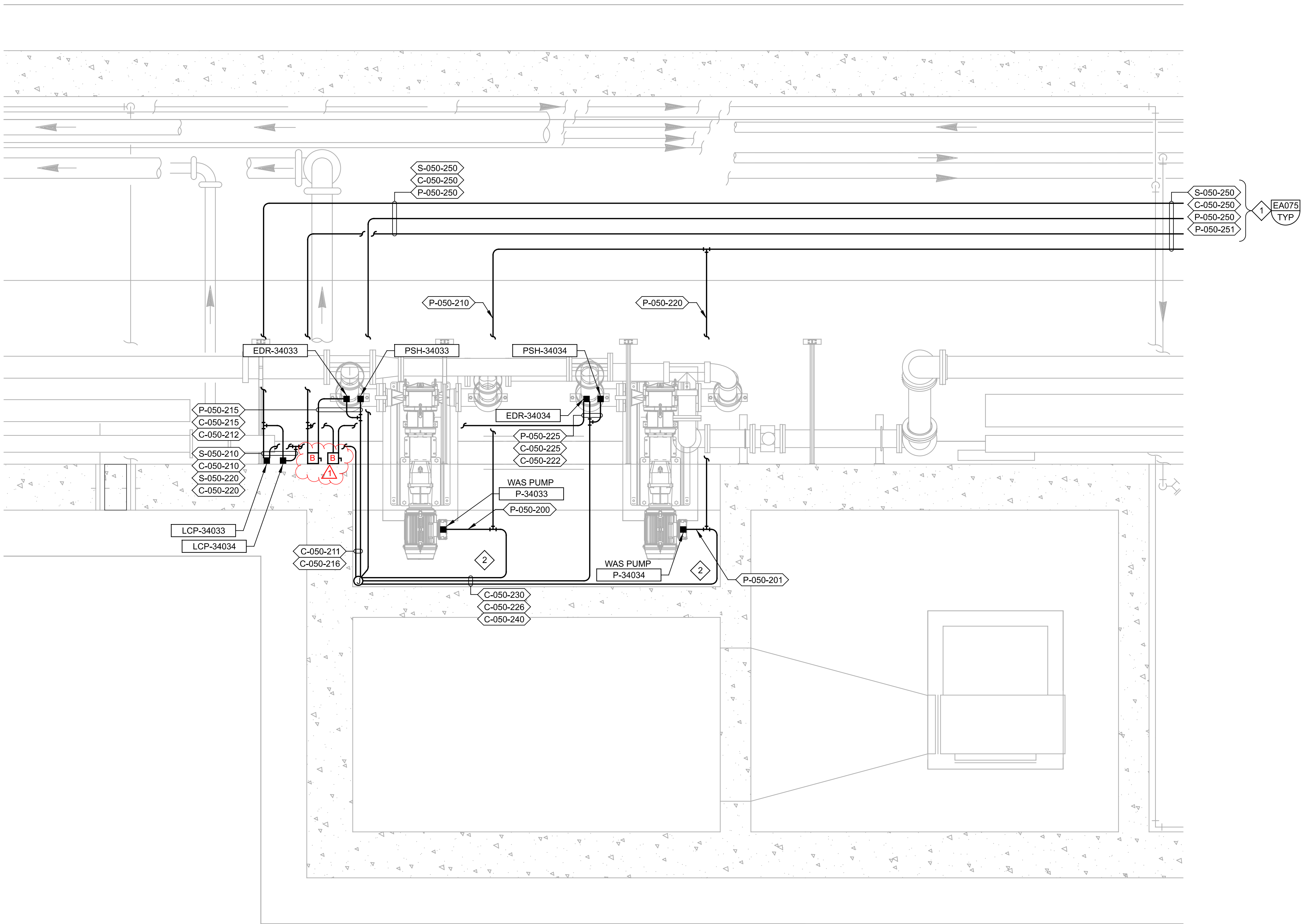
POST POINT RESOURCE RECOVERY PLANT
HVAC
SLUDGE STORAGE BUILDING
BASEMENT PLAN

DRAWING NO. 420H101
SHEET NO. 82 OF 198

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY



PLOT DATE: 6/25/2026 1:43:52 PM



A PLAN
SCALE: 1/2" = 1'-0"
FILE: 202021050E102

GENERAL NOTES:

- CONDUITS SHOWN OFFSET FROM WALL AND EACH OTHER FOR DRAWING CLARITY.

KEY NOTES:

- ROUTE CONDUIT ON EAST SIDE OF CEILING NEAR EAST WALL ABOVE PIPING. CONTRACTOR IS ENCOURAGED TO FIELD VERIFY EXISTING CONDITIONS PRIOR TO BIDDING. REFER TO 050E101 FOR GALLERY CONTINUATION.
- ROUTE CONDUIT OVERHEAD TO WEST WALL.



	4			
	3			
	2			
10-14-26	1	ADDENDUM 3	TT	
Date	No	Revision	By	

PROJECT ENGINEER MSS
DESIGNED/DRAWN MJP/LP
INSPECTOR CH

DIRECTOR PUBLIC WORKS _____
CITY ENGINEER _____
ASSISTANT DIRECTOR _____

CITY OF BELLINGHAM, WASHINGTON
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

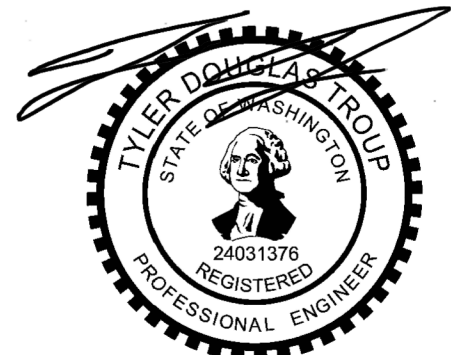
SCALE
Horiz. AS SHOWN
Vert. AS SHOWN

DATUM
H: NAD 83/98
V: NAVD 88

Job. No. EU194
Date JAN 2026
Field Bk. _____

POST POINT RESOURCE RECOVERY PLANT
ELECTRICAL
WAS PUMPS POWER AND CONTROL PLAN

DRAWING NO. **050E102**
SHEET NO. **95 OF 198**





KEY NOTES:

1. CONDUITS PENETRATE FLOOR AND CONTINUE TO LCP-42020.
2. CONDUITS PENETRATE FLOOR AND CONTINUE TO VFD-42004.
3. CONDUITS PENETRATE FLOOR AND CONTINUE TO VFD-42001.
4. CONDUITS PENETRATE FLOOR AND CONTINUE TO LP-42001 AND PP-42001.
5. DO NOT MOUNT CONDUITS, EQUIPMENT, OR DEVICES FROM EXISTING WOOD FRAME WALL WITHOUT WRITTEN APPROVAL FROM ENGINEER. UTILIZE CONCRETE CEILING, CONCRETE WALLS, AND FLOOR SUPPORTS FOR NEW CONDUIT, EQUIPMENT, AND DEVICES.
6. CONDUITS PENETRATE FLOOR AND CONTINUE TO ATS-42001.
7. WALL MOUNT CONDUITS FROM SUMP PUMP VENDOR CONTROL PANEL TO NEARBY SUMP WHERE EQUIPMENT/INSTRUMENTS ARE LOCATED. PROVIDE CABLE GLANDS ON CONDUIT SEGMENT TO TRANSITION SUBMERSIBLE CABLE TO SUMP.
8. LOCATE ELECTRIC UNIT HEATER THERMOSTAT AS REQUIRED BY MECHANICAL DRAWINGS. PROVIDE CONDUIT AND WIRING FROM THERMOSTAT TO ELECTRIC UNIT HEATER. REFER TO SECTION 23_83_01 FOR ADDITIONAL EQUIPMENT DETAILS.
9. CONDUITS PENETRATE FLOOR AND CONTINUE TO FACP-42001.
10. EXISTING LOCATION OF FATC-42000 IS WHERE NEW MCC-42001 IS TO BE LOCATED ON GROUND LEVEL. FIELD VERIFY LOCATION OF EXISTING CONDUIT WHICH CONTINUES FROM BUILDING 420 EXISTING FATC-42000 TO BUILDING 710. PROTECT IN PLACE IN PUMP ROOM/BASEMENT LEVEL BELOW, AND INTERCEPT TO REUSE RACEWAY PATH FROM EXISTING 420 BUILDING TO EXISTING 710 BUILDING MASTER FIRE ALARM CONTROL PANEL.

11. CONDUIT CONTINUES AN ADDITIONAL TWENTY FEET (INCLUDING ELEVATION CHANGES) TO ELECTRIC UNIT HEATER THERMOSTAT. REFER TO DRAWING 420H101 FOR THERMOSTAT LOCATION.

PUMP ROOM

D PLAN
420E101 SCALE: 3/4" = 1'-0"

CONTINUED ON
DWG 30E105

CONTINUED ON
DWG 30E105

VERIFY SCALES

BAR IS ONE INCH ON
ORIGINAL DRAWING

0 1"

IF NOT ONE INCH ON
THIS SHEET, ADJUST
SCALES ACCORDINGLY



Date	No	Revision	By
10-14-26	1	ADDENDUM 3	TT

PROJECT ENGINEER
DESIGNED/DRAWN TDT/BLS
INSPECTOR

DIRECTOR PUBLIC WORKS MAO
CITY ENGINEER MLW
ASSISTANT DIRECTOR MAO

CITY OF BELLINGHAM, WASHINGTON
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

SCALE
Horiz. AS SHOWN
Vert. AS SHOWN

DATUM
H: NAD 83/98
V: NAVD 88

Job. No. EU194
Date JAN 2026
Field Bk.

POST POINT RESOURCE RECOVERY PLANT
ELECTRICAL
SLUDGE STORAGE BUILDING LOWER LEVEL POWER AND CONTROL PLAN

DRAWING NO.
420E104
SHEET NO.
113 OF 198

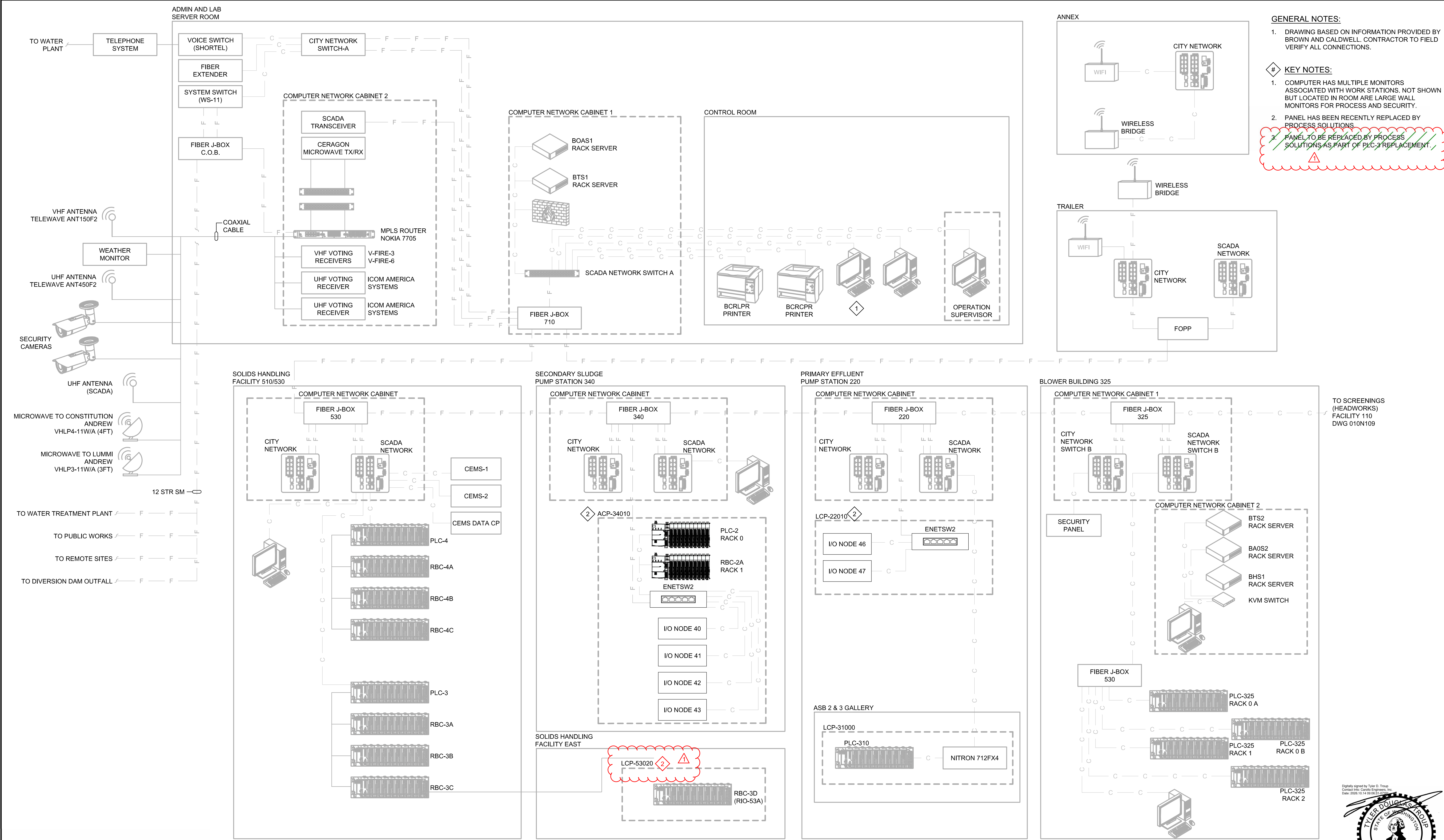
CONTACT PERSON: STEPHEN DAY, PE SE

PROJECT ENGINEER AT 360-778-7944

FILE NAME: Autodesk Docs://Bellingham 202021-100000 Primary Sludge Tank Replacement/202021420E9801.rvt

PLOT DATE: 6/25/2026 2:14:13 PM

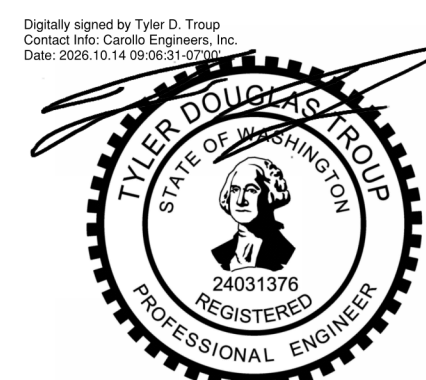
1/29/2026 10:07:28 AM



4		PROJECT ENGINEER	MSS	DIRECTOR PUBLIC WORKS		CITY OF BELLINGHAM, WASHINGTON PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION	SCALE Horiz. AS SHOWN Vert. AS SHOWN	DATUM H: NAD 83/98 V: NAVD 88	Job. No. EU194 Date JAN 2026 Field Bk.	POST POINT RESOURCE RECOVERY PLANT INSTRUMENTATION NETWORK BLOCK DIAGRAM 1	DRAWING NO. 010N108 SHEET NO. 130 OF 198
3		DESIGNED/DRAWN	JMR/LMB	CITY ENGINEER							
2		INSPECTOR	RG	ASSISTANT DIRECTOR							
1	ADDENDUM 3										
Date	No	Revision	By								

CONTACT PERSON: STEPHEN DAY, PE SE, PROJECT ENGINEER AT 360-778-7944

LAST SAVED BY: CROLLINS



SECTION 26_06_01

CONDUIT SCHEDULE AREA 50 & 340

PART 1 GENERAL

1.01 SUMMARY

- A. Conduit requirements:
 - 1. As defined in Section 26_05_00 and Section 26_05_33.
- B. Cable requirements and definitions:
 - 1. As defined in Section 26_05_00 and Section 26_05_19.
 - 2. 2/CS#16: 2 conductor, 16 gauge, twisted shielded pair.
 - 3. 3/CS#16: 3 conductor, 16 gauge, twisted shielded triplet.
 - 4. */C#Y: Multiconductor cable (* indicates number of conductors, Y indicates conductor size and insulation).
 - 5. VFD: Shielded VFD cable with integral ground.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

3.01 CONDUIT SCHEDULE

- A. Conduit Schedule is presented on the following pages.

CONDUIT SCHEDULE AREAS 50 AND 340

PRIMARY SLUDGE TANK REPLACEMENT PROJECT

AREA 50 TUNNEL AND AREA 340 SECONDARY SLUDGE PUMP STATION

ENGINEER

TDT

REVISION

AD3

DATE

10/13/26

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
C-050-210	050E102	0.75"	10	#14	XHHW-2	1	#14	XHHW-2	FR: LCP-34033 TO: CONDUIT TEE 8 #14 >> LCP-34033 CONTROL 2 #14 >> SPARE	C-050-211
C-050-211	050E102	1.5"	20	#14	XHHW-2	1	#14	XHHW-2	FR: CONDUIT TEE TO: JBOX 8 #14 >> LCP-34033 CONTROL 8 #14 >> LCP-34034 CONTROL 2 #14 >> SPARE 2 #14 >> SPARE	C-050-250 C-050-210 C-050-220 C-050-210 C-050-220
C-050-212	050E102	0.75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: PSH-34033 TO: CONDUIT TEE 2 #14 >> PSH-34033 CONTROL	C-050-216
C-050-215	050E102	0.75"	10	#14	XHHW-2	1	#14	XHHW-2	FR: EDR-34033 TO: CONDUIT TEE 8 #14 >> EDR-34033 CONTROL 2 #14 >> SPARE	C-050-216
C-050-216	050E102	1"	12	#14	XHHW-2	1	#14	XHHW-2	FR: CONDUIT TEE TO: JBOX 2 #14 >> PSH-34033 CONTROL 8 #14 >> EDR-34033 CONTROL 2 #14 >> SPARE	C-050-250 C-050-212 C-050-215 C-050-215
C-050-220	050E102	0.75"	10	#14	XHHW-2	1	#14	XHHW-2	FR: LCP-34034 TO: CONDUIT TEE 8 #14 >> LCP-34034 CONTROL 2 #14 >> SPARE	C-050-211
C-050-222	050E102	0.75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: PSH-34034 TO: CONDUIT TEE 2 #14 >> PSH-34034 CONTROL	C-050-226
C-050-225	050E102	0.75"	10	#14	XHHW-2	1	#14	XHHW-2	FR: EDR-34034 TO: CONDUIT TEE 8 #14 >> EDR-34034 CONTROL 2 #14 >> SPARE	C-050-226
C-050-226	050E102	1"	12	#14	XHHW-2	1	#14	XHHW-2	FR: CONDUIT TEE TO: JBOX 2 #14 >> PSH-34034 CONTROL 8 #14 >> EDR-34034 CONTROL 2 #14 >> SPARE	C-050-250 C-050-222 C-050-225 C-050-225
C-050-230	050E102	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: CONDUIT TEE TO: JBOX 4 #14 >> TSH/MWH-34033 CONTROL	C-050-250 P-050-200
C-050-240	050E102	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: CONDUIT TEE TO: JBOX 4 #14 >> TSH/MWH-34034 CONTROL	C-050-250 P-050-201
C-050-250	050E101 050E102 340E101	2"	52	#14	XHHW-2	1	#14	XHHW-2	FR: JBOX TO: CONDUIT TEE 8 #14 >> LCP-34033 CONTROL 8 #14 >> LCP-34034 CONTROL 2 #14 >> PSH-34033 CONTROL 8 #14 >> EDR-34033 CONTROL 2 #14 >> PSH-34034 CONTROL 8 #14 >> EDR-34034 CONTROL 4 #14 >> TSH/MWH-34033 CONTROL 4 #14 >> TSH/MWH-34034 CONTROL 2 #14 >> SPARE 2 #14 >> SPARE 2 #14 >> SPARE 2 #14 >> SPARE	C-050-211 C-050-211 C-050-216 C-050-216 C-050-226 C-050-226 C-050-230 C-050-240 C-050-211 C-050-211 C-050-216 C-050-226
C-050-255	340E101	1.5"	28	#14	XHHW-2	1	#14	XHHW-2	FR: CONDUIT TEE TO: VFD-34033 12 #14 >> LCP-34033 CONTROL 2 #14 >> PSH-34033 CONTROL 10 #14 >> EDR-34033 CONTROL 4 #14 >> TSH/MWH-34033 CONTROL	C-050-250 C-050-250 C-050-250 C-050-250
C-050-256	340E101	1.5"	28	#14	XHHW-2	1	#14	XHHW-2	FR: CONDUIT TEE TO: VFD-34034 12 #14 >> LCP-34034 CONTROL 2 #14 >> PSH-34034 CONTROL 10 #14 >> EDR-34034 CONTROL 4 #14 >> TSH/MWH-34034 CONTROL	C-050-250 C-050-250 C-050-250 C-050-250

CONDUIT SCHEDULE AREAS 50 AND 340

PRIMARY SLUDGE TANK REPLACEMENT PROJECT

AREA 50 TUNNEL AND AREA 340 SECONDARY SLUDGE PUMP STATION

ENGINEER

TDI

REVISION

AD3

DATE

10/13/26

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
C-050-260	340E102	1"	16	#14	XHHW-2	1	#14	XHHW-2	FR: VFD-34033 TO: CONDUIT TEE 14 #14 >> VFD-34033 CONTROL 2 #14 >> SPARE	C-050-262
C-050-261	340E102	1"	16	#14	XHHW-2	1	#14	XHHW-2	FR: VFD-34034 TO: CONDUIT TEE 14 #14 >> VFD-34034 CONTROL 2 #14 >> SPARE	C-050-262
C-050-262	340E102	1.5"	32	#14	XHHW-2	1	#14	XHHW-2	FR: CONDUIT TEE TO: ACP-3400 14 #14 >> VFD-34033 CONTROL 14 #14 >> VFD-34034 CONTROL 2 #14 >> SPARE 2 #14 >> SPARE	C-050-260 C-050-261 C-050-260 C-050-261
P-050-200	050E102	1.5"	1 4	3/C-#8:VFD #14	VFD XHHW-2	1	#14	XHHW-2	FR: P-34033 TO: CONDUIT TEE 1 3/C-#8:VFD >> P-34033 POWER 4 #14 >> TSH/MWH-34033 CONTROL	
P-050-201	050E102	1.5"	1 4	3/C-#8:VFD #14	VFD XHHW-2	1	#14	XHHW-2	FR: P-34034 TO: CONDUIT TEE 1 3/C-#8:VFD >> P-34034 POWER 4 #14 >> TSH/MWH-34034 CONTROL	
P-050-210	050E102	1.5"	1	3/C-#8:VFD	VFD			INTEGRAL	FR: CONDUIT TEE TO: CONDUIT TEE 1 3/C-#8:VFD >> P-34033 POWER	P-050-251 P-050-200
P-050-215	050E102	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: EDR-34033 TO: CONDUIT TEE(VIA DISC) 3 #12 >> EDR-34033 POWER	P-050-250
P-050-220	050E102	1.5"	1	3/C-#8:VFD	VFD			INTEGRAL	FR: CONDUIT TEE TO: CONDUIT TEE 1 3/C-#8:VFD >> P-34034 POWER	P-050-251 P-050-201
P-050-225	050E102	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: EDR-34034 TO: CONDUIT TEE(VIA DISC) 3 #12 >> EDR-34034 POWER	P-050-250
P-050-250	050E101 050E102 340E101	0.75"	6	#12	XHHW-2	1	#12	XHHW-2	FR: CONDUIT TEE TO: PP-34001 3 #12 >> EDR-34033 POWER 3 #12 >> EDR-34034 POWER	P-050-215 P-050-225
P-050-251	050E101 050E102 340E101	2"	2	3/C-#8:VFD	VFD			INTEGRAL	FR: CONDUIT TEE TO: CONDUIT TEE 1 3/C-#8:VFD >> P-34033 POWER 1 3/C-#8:VFD >> P-34034 POWER	P-050-210 P-050-220
P-050-255	340E101	1.5"	1	3/C-#8:VFD	VFD			INTEGRAL	FR: CONDUIT TEE TO: VFD-34033 1 3/C-#8:VFD >> P-34033 POWER	P-050-251
P-050-256	340E101	1.5"	1	3/C-#8:VFD	VFD			INTEGRAL	FR: CONDUIT TEE TO: VFD-34034 1 3/C-#8:VFD >> P-34034 POWER	P-050-251
P-050-260	340E102	0.75"	3	#8	XHHW-2	1	#10	XHHW-2	FR: VFD-34033 TO: SG-3401 3 #8 >> VFD-34033 POWER	
P-050-261	340E102	0.75"	3	#8	XHHW-2	1	#10	XHHW-2	FR: VFD-34034 TO: SG-3401 3 #8 >> VFD-34034 POWER	
S-050-210	050E102	0.75"	1	3/CS-#16		1	#14	XHHW-2	FR: LCP-34033 TO: CONDUIT TEE 1 3/CS-#16 >> LCP-34033 SIGNAL	S-050-250
S-050-220	050E102	0.75"	1	3/CS-#16		1	#14	XHHW-2	FR: LCP-34034 TO: CONDUIT TEE 1 3/CS-#16 >> LCP-34034 SIGNAL	S-050-250
S-050-250	050E101 050E102 340E102	0.75"	2	3/CS-#16		1	#14	XHHW-2	FR: CONDUIT TEE TO: CONDUIT TEE 1 3/CS-#16 >> LCP-34033 SIGNAL 1 3/CS-#16 >> LCP-34034 SIGNAL	S-050-210 S-050-220

CONDUIT SCHEDULE AREAS 50 AND 340

PRIMARY SLUDGE TANK REPLACEMENT PROJECT

AREA 50 TUNNEL AND AREA 340 SECONDARY SLUDGE PUMP STATION

ENGINEER

TDT

REVISION

AD3

DATE

10/13/26

CONDUIT			CONDUCTORS			GROUND			DESCRIPTION	CONNECTING SEGMENTS
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE		
S-050-251	340E102	0.75"	1	3/CS-#16		1	#14	XHHW-2	FR: CONDUIT TEE TO: VFD-34033 1 3/CS-#16 >> LCP-34033 SIGNAL	S-050-250
S-050-252	340E102	0.75"	1	3/CS-#16		1	#14	XHHW-2	FR: CONDUIT TEE TO: VFD-34034 1 3/CS-#16 >> LCP-34034 SIGNAL	S-050-250
S-050-260	340E102	0.75"	2	2/CS-#16		1	#14	XHHW-2	FR: VFD-34033 TO: CONDUIT TEE 2 2/CS-#16 >> VFD-34033 SIGNAL	S-050-262
S-050-261	340E102	0.75"	2	2/CS-#16		1	#14	XHHW-2	FR: VFD-34034 TO: CONDUIT TEE 2 2/CS-#16 >> VFD-34034 SIGNAL	S-050-262
S-050-262	340E102	1"	4	2/CS-#16		1	#14	XHHW-2	FR: CONDUIT TEE TO: ACP-3400 2 2/CS-#16 >> VFD-34033 SIGNAL 2 2/CS-#16 >> VFD-34034 SIGNAL	S-050-260 S-050-261
C-340-110	340E101	0.75"	10	#14	XHHW-2	1	#14	XHHW-2	FR: LCP-33088 TO: JBOX 7 #14 >> LCP-33088 CONTROL 3 #14 >> SPARE	C-340-115
C-340-111	340E101	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: FSL-33088 TO: JBOX 4 #14 >> FSL-33088 CONTROL	C-340-115
C-340-112	340E101	0.75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: SV-33088 TO: JBOX 2 #14 >> SV-33088 CONTROL	C-340-115
C-340-113	340E101	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: CONDUIT TEE TO: JBOX 4 #14 >> TSH/MWH-33088 CONTROL	C-340-115 P-340-100
C-340-114	340E101	0.75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: PSL-33088 TO: JBOX 2 #14 >> PSL-33088 CONTROL	C-340-115
C-340-115	340E101	1.5"	22	#14	XHHW-2	1	#14	XHHW-2	FR: JBOX TO: MCC-3401 7 #14 >> LCP-33088 CONTROL 4 #14 >> FSL-33088 CONTROL 2 #14 >> SV-33088 CONTROL 4 #14 >> TSH/MWH-33088 CONTROL 3 #14 >> SPARE 2 #14 >> PSL-33088 CONTROL	C-340-110 C-340-111 C-340-112 P-340-100 C-340-110 C-340-114
C-340-120	340E102	0.75"	7	#14	XHHW-2	1	#14	XHHW-2	FR: MCC-3401 TO: ACP-3400 5 #14 >> MCC-3401 CONTROL 2 #14 >> SPARE	
P-340-100	340E101	0.75"	3 4	#10 #14	XHHW-2 XHHW-2	1	#10	XHHW-2	FR: P-33088 TO: CONDUIT TEE 3 #10 >> P-33088 POWER 4 #14 >> TSH/MWH-33088 CONTROL	
P-340-110	340E101	0.75"	3	#10	XHHW-2	1	#10	XHHW-2	FR: CONDUIT TEE TO: MCC-3401 (VIA DISC) 3 #10 >> P-33088 POWER	P-340-100

END OF CONDUIT SCHEDULE

END OF SECTION

SECTION 26_06_02

CONDUIT SCHEDULE AREA 420

PART 1 GENERAL

1.01 SUMMARY

- A. Conduit requirements:
 - 1. As defined in Section 26_05_00 and Section 26_05_33.
- B. Cable requirements and definitions:
 - 1. As defined in Section 26_05_00 and Section 26_05_18.
 - 2. 2/CS#16: 2 conductor, 16 gauge, twisted shielded pair.
 - 3. 3/CS#16: 3 conductor, 16 gauge, twisted shielded triplet.
 - 4. */C#Y: Multiconductor cable (* indicates number of conductors, Y indicates conductor size and insulation).
 - 5. */FO: Fiber optic (* indicates strand count).
 - 6. CAT6: Category 6 Ethernet cable.
 - 7. MFR: Manufacturer or vendor furnished cable.
 - 8. PULL: Pull Rope.
 - 9. VFD: Shielded VFD cable with integral ground.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

3.01 CONDUIT SCHEDULE

- A. Conduit Schedule is presented on the following pages.

CONDUIT SCHEDULE AREA 420

PRIMARY SLUDGE TANK REPLACEMENT PROJECT

SLUDGE STORAGE BUILDING

ENGINEER

TDI

REVISION

AD3

DATE

10/13/26

CONDUIT			CONDUCTORS			GROUND			DESCRIPTION	CONNECTING SEGMENTS
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE		
C-420-001	420E106	1"	12	#14	XHHW-2	1	#14	XHHW-2	FR: ATS-42001 TO: LCP-42020 12 #14 >> ATS-42001 CONTROL	
C-420-003	420E106	1"	2	#14	XHHW-2	1	#14	XHHW-2	FR: SPD1-42001 TO: LCP-42020 2 #14 >> SPD1-42001 CONTROL/ALARM	
C-420-030	420E104	0.75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: SV-42001 TO: CONDUIT TEE 2 #14 >> SV-42001 CONTROL	C-420-035
C-420-033	420E104	0.75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: SV-42002 TO: CONDUIT TEE 2 #14 >> SV-42002 CONTROL	C-420-035
C-420-035	420E104 420E106	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: CONDUIT TEE TO: LCP-42020 2 #14 >> SV-42001 CONTROL 2 #14 >> SV-42002 CONTROL	C-420-030 C-420-033
C-420-038	420E106	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: FACP-42001 TO: LCP-42020 4 #14 >> FACP-42001 CONTROL	
C-420-039	420E104 420E106	2"	2	#14	XHHW-2	1	#14	XHHW-2	FR: FACP-42001 TO: EXISTING BUILDING 710 MASTER FACP 2 #14 >> FACP-42001 CONTROL	
C-420-040	420E104	0.75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: PSL-42001 TO: CONDUIT TEE 2 #14 >> PSL-42001 CONTROL	C-420-051
C-420-043	420E104	0.75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: PSL-42004 TO: CONDUIT TEE 2 #14 >> PSL-42004 CONTROL	C-420-044
C-420-044	420E104 420E106	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: CONDUIT TEE TO: VFD-42004 2 #14 >> PSL-42004 CONTROL 2 #14 >> PSH-42005 CONTROL	C-420-043 C-420-060
C-420-050	420E104	0.75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: PSH-42002 TO: CONDUIT TEE 2 #14 >> PSH-42002 CONTROL	C-420-051
C-420-051	420E104 420E106	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: CONDUIT TEE TO: VFD-42004 2 #14 >> PSL-42001 CONTROL 2 #14 >> PSH-42002 CONTROL	C-420-040 C-420-050
C-420-055	420E104	0.75"	2 2	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: P-42001 TO: VFD-42001 2 #14 >> TSH-42001 2 #12 >> MWH-42001	
C-420-056	420E104	1"	12	#14	XHHW-2	1	#14	XHHW-2	FR: LCP-42001 TO: VFD-42001 12 #14 >> LCP-42001 CONTROL	
C-420-057	420E106	1"	12	#14	XHHW-2	1	#14	XHHW-2	FR: VFD-42001 TO: LCP-42020 12 #14 >> VFD-42001 CONTROL	C-420-070
C-420-060	420E104	0.75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: PSH-42005 TO: CONDUIT TEE 2 #14 >> PSH-42005 CONTROL	C-420-044
C-420-065	420E104	0.75"	2 2	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: CONDUIT TEE TO: VFD-42004 2 #14 >> TSH-42004 2 #12 >> MWH-42004	
C-420-066	420E104	1"	12	#14	XHHW-2	1	#14	XHHW-2	FR: LCP-42004 TO: VFD-42004 12 #14 >> LCP-42004 CONTROL	
C-420-067	420E106	1"	12	#14	XHHW-2	1	#14	XHHW-2	FR: VFD-42004 TO: LCP-42020 12 #14 >> VFD-42004 CONTROL	C-420-070
C-420-070	420E106	1.5"	24	#14	XHHW-2	1	#14	XHHW-2	FR: CONDUIT TEE TO: LCP-42020 12 #14 >> VFD-42004 CONTROL 12 #14 >> VFD-42001 CONTROL	C-420-067 C-420-057

CONDUIT SCHEDULE AREA 420

PRIMARY SLUDGE TANK REPLACEMENT PROJECT

SLUDGE STORAGE BUILDING

ENGINEER

TDT

REVISION

AD3

DATE

10/13/26

CONDUIT			CONDUCTORS			GROUND			DESCRIPTION	CONNECTING SEGMENTS
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE		
C-420-080	420E104	0.75"	1	MFR	CABLE	1	#14	XHHW-2	FR: LE/LSL-42010 TO: VCP-42010 1 MFR >> LE/LSL-42010 CONTROL	
C-420-081	420E104	0.75"	1	MFR	CABLE	1	#14	XHHW-2	FR: LE/LS1-42010 TO: VCP-42010 1 MFR >> LE/LS1-42010 CONTROL	
C-420-082	420E104	0.75"	1	MFR	CABLE	1	#14	XHHW-2	FR: LE/LSH-42010 TO: VCP-42010 1 MFR >> LE/LSH-42010 CONTROL	
C-420-085	420E104 420E106	0.75"	10	#14	XHHW-2	1	#14	XHHW-2	FR: VCP-42010 TO: LCP-42020 10 #14 >> VCP-42010 CONTROL	
C-420-090	420E102 420E106	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: MCC-42001 TO: JUNCTION BOX 2 #14 >> SF-42033 RUNNING STATUS 2 #14 >> EF-42032 RUNNING STATUS	C-420-110
C-420-091	420E102 420E106	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: LCP-42021 TO: JUNCTION BOX 4 #14 >> LCP-42021 CONTROL	C-420-110
C-420-095	420E102	0.75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: XB31-42021 TO: CONDUIT TEE 2 #14 >> XB31-42021 CONTROL	C-420-097
C-420-096	420E102	0.75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: XB32-42021 TO: CONDUIT TEE 2 #14 >> XB32-42021 CONTROL	C-420-097
C-420-097	420E102	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: CONDUIT TEE TO: LCP-42021 2 #14 >> XB31-42021 CONTROL 2 #14 >> XB32-42021 CONTROL	C-420-095 C-420-096
C-420-100	420E102	0.75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: XB41-42021 TO: CONDUIT TEE 2 #14 >> XB41-42021 CONTROL	C-420-102
C-420-101	420E102	0.75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: XB42-42021 TO: CONDUIT TEE 2 #14 >> XB42-42021 CONTROL	C-420-102
C-420-102	420E102	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: CONDUIT TEE TO: JUNCTION BOX 2 #14 >> XB41-42021 CONTROL 2 #14 >> XB42-42021 CONTROL	C-420-110 C-420-100 C-420-101
C-420-105	420E104	0.75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: XB21-42021 TO: CONDUIT TEE 2 #14 >> XB21-42021 CONTROL	C-420-107
C-420-106	420E104	0.75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: XB22-42021 TO: CONDUIT TEE 2 #14 >> XB22-42021 CONTROL	C-420-107
C-420-107	420E104	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: CONDUIT TEE TO: JUNCTION BOX 2 #14 >> XB21-42021 CONTROL 2 #14 >> XB22-42021 CONTROL	C-420-110 C-420-105 C-420-106
C-420-110	420E102	1.5"	2 16	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: LCP-42021 TO: JUNCTION BOX 2 #12 >> LCP-42021 POWER 4 #14 >> LCP-42021 CONTROL 2 #14 >> XB21-42021 CONTROL 2 #14 >> XB22-42021 CONTROL 2 #14 >> SF-42033 RUNNING STATUS 2 #14 >> EF-42032 RUNNING STATUS 2 #14 >> XB41-42021 CONTROL 2 #14 >> XB42-42021 CONTROL	L-420-091 C-420-091 C-420-107 C-420-107 C-420-090 C-420-090 C-420-102 C-420-102
C-420-120	420E106	1"	12	#14	XHHW-2	1	#14	XHHW-2	FR: MCC-42001 TO: LCP-42020 6 #14 >> VFD-44001 CONTROL 6 #14 >> VFD-44005 CONTROL	
C-420-300	420E104	0.75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: EUH-42015 TO: EUH-42015 THERMOSTAT 2 #14 >> EUH-42015 CONTROL	

CONDUIT SCHEDULE AREA 420

PRIMARY SLUDGE TANK REPLACEMENT PROJECT

SLUDGE STORAGE BUILDING

ENGINEER

TDT

REVISION

AD3

DATE

10/13/26

CONDUIT			CONDUCTORS			GROUND			DESCRIPTION	CONNECTING SEGMENTS
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE		
C-420-310	420E106	1"	1	MFR	CABLE	1	#14	XHHW-2	FR: AHU-42030 TO: TSHL-42030 1 MFR >> AHU-42030 CONTROL	
C-420-313	420E106	1"	1	MFR	CABLE	1	#14	XHHW-2	FR: AHU-42031 TO: TSHL-42031 1 MFR >> AHU-42031 CONTROL	
C-420-320	420E106	1.5"	20	#14	XHHW-2	1	#14	XHHW-2	FR: MCC-42001 TO: LCP-42020 10 #14 >> EF-42032 CONTROL 10 #14 >> SF-42033 CONTROL	
L-420-001	420E106	0.75"	4	#10	XHHW-2	1	#10	XHHW-2	FR: LCP-42020 TO: LP-42001 2 #10 >> LCP-42020 POWER 2 #10 >> LCP-42020 UPS POWER	
L-420-005	420E106	2"	4	#1/0	XHHW-2	1	#6	XHHW-2	FR: LP-42001 TO: XF-42001 4 #1/0 >> LP-42001 POWER	
L-420-020	420E106	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: FACP-42001 TO: LP-42001 2 #12 >> FACP-42001 POWER	
L-420-029	420E104	0.75"	1	MFR	CABLE	1	#14	XHHW-2	FR: FE-42003 TO: FIT-42003 1 MFR >> FE-42003 POWER	
L-420-030	420E104	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: FIT-42003 TO: LCP-42020 2 #12 >> FIT-42003 POWER	
L-420-091	420E102 420E106	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: LCP-42021 TO: JUNCTION BOX 2 #12 >> LCP-42021 POWER	C-420-110
L-420-310	420E102	0.75"	2	#8	XHHW-2	1	#10	XHHW-2	FR: CDU-42030 TO: DISC-42030 2 #8 >> CDU-42030 POWER	
L-420-311	420E102	0.75"	2	#8	XHHW-2	1	#10	XHHW-2	FR: DISC-42030 TO: CONDUIT TEE 2 #8 >> DISC-42030 POWER	L-420-315
L-420-313	420E102	0.75"	2	#8	XHHW-2	1	#10	XHHW-2	FR: CDU-42031 TO: DISC-42031 2 #8 >> CDU-42031 POWER	
L-420-314	420E102	0.75"	2	#8	XHHW-2	1	#10	XHHW-2	FR: DISC-42031 TO: CONDUIT TEE 2 #8 >> DISC-42031 POWER	L-420-315
L-420-315	420E102	1"	4	#8	XHHW-2	1	#10	XHHW-2	FR: CONDUIT TEE TO: LP-42001 2 #8 >> DISC-42030 POWER 2 #8 >> DISC-42031 POWER	L-420-311 L-420-314
L-420-320	420E102 420E106	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: AHU-42030 TO: CDU-42030 2 #12 >> AHU-42030 POWER	
L-420-321	420E102 420E106	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: AHU-42031 TO: CDU-42031 2 #12 >> AHU-42031 POWER	
N-420-001	420E104	2"	1		12/FO	1	#14	XHHW-2	FR: LCP-42020 TO: 320 COMPUTER NETWORK CABINET 1 12/FO >> LCP-42020 NETWORK	
N-420-003	420E106	1"	1		CAT6	1	#14	XHHW-2	FR: PQM-42001 TO: LCP-42020 1 CAT6 >> PQM-42001 NETWORK	
P-420-001	420E106	2"	3	#3/0	XHHW-2	1	#2	XHHW-2	FR: MCC-42001 TO: ATS-42001 3 #3/0 >> MCC-42001 POWER	
P-420-002	420E106	2"	3	#3/0	XHHW-2	1	#2	XHHW-2	FR: MCC-42001 TO: ATS-42001 3 #3/0 >> MCC-42001 POWER	

CONDUIT SCHEDULE AREA 420

PRIMARY SLUDGE TANK REPLACEMENT PROJECT

SLUDGE STORAGE BUILDING

ENGINEER

TDI

REVISION

AD3

DATE

10/13/26

CONDUIT			CONDUCTORS			GROUND			DESCRIPTION	CONNECTING SEGMENTS
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE		
P-420-005	420E106	1.5"	3	#1	XHHW-2	1	#6	XHHW-2	FR: XF-42001 TO: MCC-42001 3 #1 >> XF-42001 POWER	
P-420-010	420E106	1.5"	3	#1/0	XHHW-2	1	#6	XHHW-2	FR: PP-42001 TO: MCC-42001 3 #1/0 >> PP-42001 POWER	
P-420-020	420E104	3"	3	#4/0	XHHW-2	1	#2	XHHW-2	FR: ATS-42001 TO: SG-3201A 3 #4/0 >> ATS-42001 POWER	
P-420-021	420E104	3"	3	#4/0	XHHW-2	1	#2	XHHW-2	FR: ATS-42001 TO: SG-3201A 3 #4/0 >> ATS-42001 POWER	
P-420-025	420E104	3"	3	#4/0	XHHW-2	1	#2	XHHW-2	FR: ATS-42001 TO: SG-3201B 3 #4/0 >> ATS-42001 POWER	
P-420-026	420E104	3"	3	#4/0	XHHW-2	1	#2	XHHW-2	FR: ATS-42001 TO: SG-3201B 3 #4/0 >> ATS-42001 POWER	
P-420-050	420E106	1"	3	#6	XHHW-2	1	#10	XHHW-2	FR: VFD-42001 TO: MCC-42001 3 #6 >> VFD-42001 POWER	
P-420-055	420E104 420E106	1.5"	1	3/C-#8:VFD	VFD			INTEGRAL	FR: CONDUIT TEE TO: VFD-42001 1 3/C-#8:VFD >> P-42001 POWER	
P-420-056	420E106	1.5"	1 2 2	3/C-#8:VFD #12 #14	VFD XHHW-2 XHHW-2			INTEGRAL	FR: P-42001 TO: CONDUIT TEE 1 3/C-#8:VFD >> P-42001 POWER 2 #14 >> TSH-42001 2 #12 >> MWH-4201	
P-420-060	420E106	1"	3	#6	XHHW-2	1	#10	XHHW-2	FR: VFD-42004 TO: MCC-42001 3 #6 >> VFD-42004 POWER	
P-420-065	420E104 420E106	1.5"	1	3/C-#8:VFD	VFD			INTEGRAL	FR: CONDUIT TEE TO: VFD-42004 1 3/C-#8:VFD >> P-42004 POWER	
P-420-066	420E106	1.5"	1 2 2	3/C-#8:VFD #12 #14	VFD XHHW-2 XHHW-2			INTEGRAL	FR: P-42004 TO: CONDUIT TEE 1 3/C-#8:VFD >> P-42004 POWER 2 #14 >> TSH-42004 2 #12 >> MWH-42004	
P-420-080	420E104	1"	1	MFR	CABLE	1	#14	XHHW-2	FR: P-42010 TO: VCP-42010 1 MFR >> P-42010 POWER	
P-420-081	420E104	1"	1	MFR	CABLE	1	#14	XHHW-2	FR: P-42011 TO: VCP-42010 1 MFR >> P-42011 POWER	
P-420-085	420E104 420E106	0.75"	3	#10	XHHW-2	1	#10	XHHW-2	FR: VCP-42010 TO: PP-42001 3 #10 >> VCP-42010 POWER	
P-420-100	420E102	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: STORAGE ROOM MONORAIL TO: MONORAIL DISCONNECT 3 #12 >> STORAGE ROOM MONORAIL POWER	
P-420-101	420E102	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: MONORAIL DISCONNECT TO: PP-42001 3 #12 >> MONORAIL DISCONNECT POWER	
P-420-300	420E104	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: HT-42015 TO: DISC-42015 3 #12 >> HT-42015 POWER	
P-420-301	420E104	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: DISC-42015 TO: PP-42001 3 #12 >> EUH-42015 POWER	
P-420-320	420E102	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: EF-42032 TO: DISC-42032 3 #12 >> EF-42032 POWER	

CONDUIT SCHEDULE AREA 420

PRIMARY SLUDGE TANK REPLACEMENT PROJECT

SLUDGE STORAGE BUILDING

ENGINEER

TDT

REVISION

AD3

DATE

10/13/26

CONDUIT			CONDUCTORS			GROUND			DESCRIPTION	CONNECTING SEGMENTS
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE		
P-420-321	420E102	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: DISC-42032 TO: MCC-42001 3 #12 >> EF-42032 POWER	
P-420-325	420E102	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: SF-42033 TO: DISC-42033 3 #12 >> SF-42033 POWER	
P-420-326	420E102	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: DISC-42033 TO: MCC-42001 3 #12 >> DISC-42033 POWER	
S-420-030	420E104	0.75"	1	MFR	CABLE	1	#14	XHHW-2	FR: FE-42003 TO: FIT-42003 1 MFR >> FE-42003	
S-420-031	420E104	0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: FIT-42003 TO: LCP-42020 1 2/CS-#16 >> FIT-42003 SIGNAL	
S-420-033	420E106	0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: TIT-42033 TO: LCP-42020 1 2/CS-#16 >> TIT-42033 SIGNAL	
S-420-051	420E104	0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: PIT-42002 TO: CONDUIT TEE 1 2/CS-#16 >> PIT-42002 SIGNAL	S-420-054
S-420-053	420E104	0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: PIT-42005 TO: CONDUIT TEE 1 2/CS-#16 >> PIT-42005 SIGNAL	S-420-054
S-420-054	420E104 420E106	0.75"	2	2/CS-#16		1	#14	XHHW-2	FR: CONDUIT TEE TO: LCP-42020 1 2/CS-#16 >> PIT-42002 SIGNAL 1 2/CS-#16 >> PIT-42005 SIGNAL	S-420-051 S-420-053
S-420-056	420E104	0.75"	1	3/CS-#16		1	#14	XHHW-2	FR: LCP-42001 TO: VFD-42001 1 3/CS-#16 >> LCP-42001	
S-420-057	420E106	0.75"	2	2/CS-#16		1	#14	XHHW-2	FR: VFD-42001 TO: LCP-42020 2 2/CS-#16 >> VFD-42001 SIGNAL	S-420-070
S-420-066	420E104	0.75"	1	3/CS-#16		1	#14	XHHW-2	FR: LCP-42004 TO: VFD-42004 1 3/CS-#16 >> LCP-42004 SIGNAL	
S-420-067	420E106	0.75"	2	2/CS-#16		1	#14	XHHW-2	FR: VFD-42004 TO: LCP-42020 2 2/CS-#16 >> VFD-42004 SIGNAL	S-420-070
S-420-070	420E106	1"	4	2/CS-#16		1	#14	XHHW-2	FR: CONDUIT TEE TO: LCP-42020 2 2/CS-#16 >> VFD-42004 SIGNAL 2 2/CS-#16 >> VFD-42001 SIGNAL	S-420-067 S-420-057
S-420-120	420E106	1.5"	4	2/CS-#16		1	#14	XHHW-2	FR: MCC-42001 TO: LCP-42020 2 2/CS-#16 >> VFD-44001 SIGNAL 2 2/CS-#16 >> VFD-44005 SIGNAL	
X-420-020	420E104	2"	1	PULL	ROPE				FR: CAPPED IN 420 PUMP ROOM TO: CAPPED AT 320 1 PULL >> SPARE	
X-420-021	420E104	2"	1	PULL	ROPE				FR: CAPPED IN 420 PUMP ROOM TO: CAPPED AT 320 1 PULL >> SPARE	
X-420-022	420E104	2"	1	PULL	ROPE				FR: CAPPED IN 420 PUMP ROOM TO: CAPPED AT 320 1 PULL >> SPARE	

END OF CONDUIT SCHEDULE

END OF SECTION

SECTION 26_06_03

CONDUIT SCHEDULE AREA 440

PART 1 GENERAL

1.01 SUMMARY

- A. Conduit requirements:
 - 1. As defined in Section 26_05_00 and Section 26_05_33.
- B. Cable requirements and definitions:
 - 1. As defined in Section 26_05_00 and Section 26_05_18.
 - 2. 2/CS#16: 2 conductor, 16 gauge, twisted shielded pair.
 - 3. 3/CS#16: 3 conductor, 16 gauge, twisted shielded triplet.
 - 4. */C#Y: Multiconductor cable (* indicates number of conductors, Y indicates conductor size and insulation).
 - 5. CAT6: Category 6 Ethernet cable.
 - 6. PULL: Pull Rope.
 - 7. VFD: Shielded VFD cable with integral ground.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

3.01 CONDUIT SCHEDULE

- A. Conduit Schedule is presented on the following pages.

CONDUIT SCHEDULE AREA 440

PRIMARY SLUDGE TANK REPLACEMENT PROJECT

SLUDGE STORAGE TANKS

ENGINEER

TDT

REVISION

AD3

DATE

10/13/26

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
C-440-021	440E102	0.75"	10	#14	XHHW-2	1	#14	XHHW-2	FR: LCP-44001 TO: CONDUIT TEE 10 #14 >> LCP-44001 CONTROL	C-440-025
C-440-022	440E102	0.75"	10	#14	XHHW-2	1	#14	XHHW-2	FR: LCP-44005 TO: CONDUIT TEE 10 #14 >> LCP-44005 CONTROL	C-440-025
C-440-025	440E102	1.5"	20	#14	XHHW-2	1	#14	XHHW-2	FR: CONDUIT TEE TO: CONDUIT TEE 10 #14 >> LCP-44001 CONTROL 10 #14 >> LCP-44005 CONTROL	C-440-050 C-440-021 C-440-022
C-440-032	440E102	0.75"	2 2	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: LSH-44002 TO: CONDUIT TEE 2 #14 >> LSH-44002 CONTROL 2 #12 >> LSH-44002 POWER	C-440-045
C-440-044	440E102	0.75"	2 2	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: LSH-44006 TO: CONDUIT TEE 2 #14 >> LSH-44006 CONTROL 2 #12 >> LSH-44006 POWER	C-440-045
C-440-045	440E102	0.75"	4 4	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: CONDUIT TEE TO: SLUDGE TANK CONTROL J-BOX 2 #14 >> LSH-44002 CONTROL 2 #12 >> LSH-44002 POWER 2 #14 >> LSH-44006 CONTROL 2 #12 >> LSH-44006 POWER	C-440-060 C-440-032 C-440-032 C-440-044 C-440-044
C-440-050	440E102	2"	24	#14	XHHW-2	1	#14	XHHW-2	FR: SLUDGE TANK CONTROL J-BOX TO: CONDUIT TEE 10 #14 >> LCP-44001 CONTROL 10 #14 >> LCP-44005 CONTROL 2 #14 >> SV-44001 CONTROL 2 #14 >> SV-44005 CONTROL	C-440-060 C-440-025 C-440-025 C-440-055 C-440-055
C-440-051	440E102	0.75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: SV-44001 TO: CONDUIT TEE 2 #14 >> SV-44001 CONTROL	C-440-055
C-440-053	440E102	0.75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: SV-44005 TO: CONDUIT TEE 2 #14 >> SV-44005 CONTROL	C-440-055
C-440-055	440E102	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: CONDUIT TEE TO: CONDUIT TEE 2 #14 >> SV-44001 CONTROL 2 #14 >> SV-44005 CONTROL	C-440-050 C-440-051 C-440-053
C-440-060	440E102 420E106	2"	8 34	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: SLUDGE TANK CONTROL J-BOX TO: CONDUIT TEE 2 #14 >> HTC-44004 CONTROL 2 #14 >> LSH-44002 CONTROL 2 #12 >> LSH-44002 POWER 2 #14 >> LSH-44006 CONTROL 2 #12 >> LSH-44006 POWER 10 #14 >> LCP-44001 CONTROL 10 #14 >> LCP-44005 CONTROL 2 #14 >> SV-44001 CONTROL 2 #14 >> SV-44005 CONTROL 2 #12 >> MIX-44001 MWH 2 #14 >> MIX-44001 TSH 2 #12 >> MIX-44005 MWH 2 #14 >> MIX-44005 TSH	C-440-080 C-440-030 C-440-045 C-440-045 C-440-045 C-440-045 C-440-045 C-440-050 C-440-050 C-440-050 C-440-050 C-440-061 C-440-061 C-440-071 C-440-071
C-440-061	440E102	0.75"	2 2	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: CONDUIT TEE TO: SLUDGE TANK CONTROL J-BOX 2 #12 >> MIX-44001 MWH 2 #14 >> MIX-44001 TSH	C-440-060
C-440-071	440E102	0.75"	2 2	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: CONDUIT TEE TO: SLUDGE TANK CONTROL J-BOX 2 #12 >> MIX-44005 MWH 2 #14 >> MIX-44005 TSH	C-440-060
C-440-080	420E106	1.5"	4 24	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: CONDUIT TEE TO: MCC-42001 10 #14 >> LCP-44001 CONTROL 10 #14 >> LCP-44005 CONTROL 2 #12 >> MIX-44001 MWH 2 #14 >> MIX-44001 TSH 2 #12 >> MIX-44005 MWH 2 #14 >> MIX-44005 TSH	C-440-060 C-440-060 C-440-060 C-440-060 C-440-060 C-440-060

CONDUIT SCHEDULE AREA 440

PRIMARY SLUDGE TANK REPLACEMENT PROJECT

SLUDGE STORAGE TANKS

ENGINEER

TDI

REVISION

AD3

DATE

10/13/26

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
C-440-081	420E106	1"	4 10	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: CONDUIT TEE TO: LCP-44020 2 #14 >> HTC-44004 CONTROL C-440-060 2 #14 >> LSH-44002 CONTROL C-440-060 2 #12 >> LSH-44002 POWER C-440-060 2 #14 >> LSH-44006 CONTROL C-440-060 2 #12 >> LSH-44006 POWER C-440-060 2 #14 >> SV-44001 CONTROL C-440-060 2 #14 >> SV-44005 CONTROL C-440-060	
C-440-300	440E102 420E106	2"	14	#14	XHHW-2	1	#14	XHHW-2	FR: VCP-44020 TO: LCP-42020 10 #14 >> VCP-44020 CONTROL 4 #14 >> SPARES	
L-440-030	440E102	1"	3	#8	XHHW-2	1	#10	XHHW-2	FR: HTC-44004 TO: SLUDGE TANK POWER J-BOX L-440-060 3 #8 >> HTC-44004 POWER	
L-440-050	440E102	2"	4	#10	XHHW-2	1	#10	XHHW-2	FR: SLUDGE TANK POWER J-BOX TO: CONDUIT TEE L-440-060 2 #10 >> SLUDGE TANK LIGHTING 2 #10 >> SLUDGE TANK RECEPTACLES	
L-440-060	440E102 420E106	2"	7	#6	XHHW-2	1	#10	XHHW-2	FR: SLUDGE TANK POWER J-BOX TO: LP-42001 3 #6 >> HTC-44004 POWER L-440-030 2 #6 >> SLUDGE TANK LIGHTING L-440-050 2 #6 >> SLUDGE TANK RECEPTACLES L-440-050	
L-440-331	440E102	0.75"	2	#10	XHHW-2	1	#10	XHHW-2	FR: HTC-44021 TO: CONDUIT P-440-300 VIA VCP-44020 P-440-300 2 #10 >> HTC-44021 POWER	
L-440-332	420E104	0.75"	2	#10	XHHW-2	1	#10	XHHW-2	FR: CONDUIT TO: LP-42001 2 #10 >> HTC-44021 POWER	
N-440-030	440E102	1"	1		CAT6	1	#14	XHHW-2	FR: HTC-44004 TO: CONDUIT TEE N-440-331 1 CAT6 >> HTC-44004 NETWORK	
N-440-300	440E102 420E106	2"	3		CAT6	1	#14	XHHW-2	FR: CONDUIT TEE TO: LCP-42020 1 CAT6 >> VCP-44020 NETWORK N-440-301 1 CAT6 >> HTC-44004 NETWORK N-440-331 1 CAT6 >> HTC-44021 NETWORK N-440-331	
N-440-301	440E102	2"	1		CAT6	1	#14	XHHW-2	FR: VCP-44020 TO: CONDUIT TEE N-440-300 1 CAT6 >> VCP-44020 NETWORK	
N-440-330	440E102	1"	1		CAT6	1	#14	XHHW-2	FR: HTC-44021 TO: CONDUIT TEE N-440-331 1 CAT6 >> HTC-44021 NETWORK	
N-440-331	440E102	1"	2		CAT6	1	#14	XHHW-2	FR: CONDUIT TEE TO: CONDUIT N-440-300 VIA VCP-44020 N-440-300 1 CAT6 >> HTC-44004 NETWORK N-440-030 1 CAT6 >> HTC-44021 NETWORK N-440-330	
P-440-060	440E102	1.5"	1 2 2	3/C-#10:VFD #12 #14	VFD XHHW-2 XHHW-2			INTEGRAL	FR: MIX-44001 TO: CONDUIT TEE 1 3/C-#10:VFD >> MIX-44001 POWER 2 #12 >> MIX-44001 MWH 2 #14 >> MIX-44001 TSH	
P-440-061	440E102	1.5"	1	3/C-#10:VFD	VFD			INTEGRAL	FR: CONDUIT TEE TO: SLUDGE TANK POWER J-BOX P-440-065 1 3/C-#10:VFD >> MIX-44001 POWER	
P-440-065	440E102	2"	1	3/C-#8:VFD	VFD			INTEGRAL	FR: SLUDGE TANK POWER J-BOX TO: MCC-42001 1 3/C-#8:VFD >> MIX-44001 POWER P-440-061	
P-440-070	440E102	1.5"	1 2 2	3/C-#10:VFD #12 #14	VFD XHHW-2 XHHW-2			INTEGRAL	FR: MIX-44005 TO: CONDUIT TEE 1 3/C-#10:VFD >> MIX-44005 POWER 2 #12 >> MIX-44005 MWH 2 #14 >> MIX-44005 TSH	

CONDUIT SCHEDULE AREA 440

PRIMARY SLUDGE TANK REPLACEMENT PROJECT

SLUDGE STORAGE TANKS

ENGINEER

TDT

REVISION

AD3

DATE

10/13/26

CONDUIT			CONDUCTORS			GROUND			DESCRIPTION	CONNECTING SEGMENTS
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE		
P-440-071	440E102	1.5"	1	3/C-#10:VFD	VFD			INTEGRAL	FR: CONDUIT TEE TO: SLUDGE TANK POWER J-BOX 1 3/C-#10:VFD >> MIX-44005 POWER	P-440-075
P-440-075	440E102	2"	1	3/C-#8:VFD	VFD			INTEGRAL	FR: SLUDGE TANK POWER J-BOX TO: MCC-42001 1 3/C-#8:VFD >> MIX-44005 POWER	P-440-071
P-440-300	440E102 420E104	2"	3 2	#1/0 #10	XHHW-2 XHHW-2	1	#6	XHHW-2	FR: VCP-44020 TO: CONDUIT TEE 3 #1/0 >> VCP-44020 POWER 2 #10 >> HTC-44021 POWER	L-440-331
P-440-301	420E104	2"	3	#1	XHHW-2	1	#6	XHHW-2	FR: CONDUIT TEE TO: MCC-42001 3 #1 >> VCP-44020 POWER	
S-440-021	440E102	0.75"	1	3/CS-#16		1	#14	XHHW-2	FR: LCP-44001 TO: CONDUIT TEE 1 3/CS-#16 >> LCP-44001 SIGNAL	S-440-025
S-440-022	440E102	0.75"	1	3/CS-#16		1	#14	XHHW-2	FR: LCP-44005 TO: CONDUIT TEE 1 3/CS-#16 >> LCP-44005 SIGNAL	S-440-025
S-440-025	440E102	1"	2	3/CS-#16		1	#14	XHHW-2	FR: CONDUIT TEE TO: CONDUIT TEE 1 3/CS-#16 >> LCP-44001 SIGNAL 1 3/CS-#16 >> LCP-44005 SIGNAL	S-440-050 S-440-021 S-440-022
S-440-031	440E102	0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: LIT-44001 TO: CONDUIT TEE 1 2/CS-#16 >> LIT-44001 SIGNAL	S-440-038
S-440-038	440E102	0.75"	2	2/CS-#16		1	#14	XHHW-2	FR: CONDUIT TEE TO: CONDUIT TEE 1 2/CS-#16 >> LIT-44001 SIGNAL 1 2/CS-#16 >> LIT-44005 SIGNAL	S-440-050 S-440-031 S-440-043
S-440-043	440E102	0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: LIT-44005 TO: CONDUIT TEE 1 2/CS-#16 >> LIT-44005 SIGNAL	S-440-038
S-440-050	440E102	2"	2 2	3/CS-#16 2/CS-#16		1	#14	XHHW-2	FR: SLUDGE TANK SIGNAL J-BOX TO: CONDUIT TEE 1 2/CS-#16 >> LIT-44001 SIGNAL 1 2/CS-#16 >> LIT-44005 SIGNAL 1 3/CS-#16 >> LCP-44001 SIGNAL 1 3/CS-#16 >> LCP-44005 SIGNAL	S-440-060 S-440-038 S-440-038 S-440-025 S-440-025
S-440-060	440E102 420E106	2"	2 2	3/CS-#16 2/CS-#16		1	#14	XHHW-2	FR: CONDUIT TEE TO: SLUDGE TANK SIGNAL J-BOX 1 2/CS-#16 >> LIT-44001 SIGNAL 1 2/CS-#16 >> LIT-44005 SIGNAL 1 3/CS-#16 >> LCP-44001 SIGNAL 1 3/CS-#16 >> LCP-44005 SIGNAL	S-440-050 S-440-050 S-440-050 S-440-050
X-440-060	440E102 420E106	2"	1	PULL	ROPE				FR: CAPPED IN 420 PUMP ROOM TO: SLUDGE TANK SIGNAL J-BOX 1 PULL >> SPARE	
X-440-061	440E102 420E106	2"	1	PULL	ROPE				FR: CAPPED IN 420 PUMP ROOM TO: SLUDGE TANK CONTROL J-BOX 1 PULL >> SPARE	
X-440-063	440E102 420E106	2"	1	PULL	ROPE				FR: CAPPED IN 420 PUMP ROOM TO: SLUDGE TANK POWER J-BOX 1 PULL >> SPARE	
X-440-300	440E102 420E106	2"	1	PULL	ROPE				FR: VCP-44020 TO: CAPPED IN 420 PUMP ROOM 1 PULL >> SPARE	

END OF CONDUIT SCHEDULE

END OF SECTION

SECTION 26_06_04

CONDUIT SCHEDULE AREA 530

PART 1 GENERAL

1.01 SUMMARY

- A. Conduit requirements:
 - 1. As defined in Section 26_05_00 and Section 26_05_33.
- B. Cable requirements and definitions:
 - 1. As defined in Section 26_05_00 and Section 26_05_18.
 - 2. 2/CS#16: 2 conductor, 16 gauge, twisted shielded pair.
 - 3. 3/CS#16: 3 conductor, 16 gauge, twisted shielded triplet.
 - 4. */C#Y: Multiconductor cable (* indicates number of conductors, Y indicates conductor size and insulation).
 - 5. MFR: Manufacturer or vendor furnished cable.
 - 6. PULL: Pull Rope.
 - 7. VFD: Shielded VFD cable with integral ground.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

3.01 CONDUIT SCHEDULE

- A. Conduit Schedule is presented on the following pages.

CONDUIT SCHEDULE AREA 530

PRIMARY SLUDGE TANK REPLACEMENT PROJECT

SOLIDS HANDLING BUILDING EAST

ENGINEER

TDT

REVISION

AD3

DATE

10/13/26

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
C-530-022	530E101	1"	1	3/CS-#16		1	#14	XHHW-2	FR: CONDUIT TEE TO: LCP-53012 1 3/CS-#16 >> MIX-53012 RTD	
C-530-025	530E101	0.75"	10	#14	XHHW-2	1	#14	XHHW-2	FR: LCP-53012 TO: CONDUIT TEE 10 #14 >> LCP-53012 CONTROL	C-530-035
C-530-028	530E101	1"	12	#14	XHHW-2	1	#14	XHHW-2	FR: VFD-53061 TO: CONDUIT TEE 12 #14 >> VFD-53061 CONTROL	C-530-037
C-530-030	530E101	1"	12	#14	XHHW-2	1	#14	XHHW-2	FR: VFD-53062 TO: CONDUIT TEE 12 #14 >> VFD-53062 CONTROL	C-530-040
C-530-035	530E101	2"	4 64	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: CONDUIT TEE TO: CONDUIT TEE 8 #14 >> LCP-53012 CONTROL 2 #12 >> AIT-53011 POWER 2 #12 >> FIT-53011 POWER 2 #14 >> SV-53011 CONTROL 2 #14 >> SV-53001 CONTROL 2 #14 >> SV-53002 CONTROL 10 #14 >> EDR-53010 CONTROL 10 #14 >> EDR-53016 CONTROL 10 #14 >> EDR-53014 CONTROL 10 #14 >> EDR-53015 CONTROL 10 #14 >> VCP-53020 CONTROL	C-530-037 C-530-025 C-530-110 C-530-110 C-530-110 C-530-110 C-530-110 C-530-110 C-530-110 C-530-110 C-530-110 C-530-110 C-530-110
C-530-037	530E101	2"	4 76	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: CONDUIT TEE TO: CONDUIT TEE 12 #14 >> VFD-53061 CONTROL 8 #14 >> LCP-53012 CONTROL 2 #12 >> AIT-53011 POWER 2 #12 >> FIT-53011 POWER 2 #14 >> SV-53011 CONTROL 2 #14 >> SV-53001 CONTROL 2 #14 >> SV-53002 CONTROL 10 #14 >> EDR-53010 CONTROL 10 #14 >> EDR-53016 CONTROL 10 #14 >> EDR-53014 CONTROL 10 #14 >> EDR-53015 CONTROL 10 #14 >> VCP-53020 CONTROL	C-530-040 C-530-028 C-530-035 C-530-035 C-530-035 C-530-035 C-530-035 C-530-035 C-530-035 C-530-035 C-530-035 C-530-035 C-530-035
C-530-040	530E101	2.5"	4 88	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: CONDUIT TEE TO: LCP-53020 12 #14 >> VFD-53062 CONTROL 12 #14 >> VFD-53061 CONTROL 8 #14 >> LCP-53012 CONTROL 2 #12 >> AIT-53011 POWER 2 #12 >> FIT-53011 POWER 2 #14 >> SV-53011 CONTROL 2 #14 >> SV-53001 CONTROL 2 #14 >> SV-53002 CONTROL 10 #14 >> EDR-53010 CONTROL 10 #14 >> EDR-53016 CONTROL 10 #14 >> EDR-53014 CONTROL 10 #14 >> EDR-53015 CONTROL 10 #14 >> VCP-53020 CONTROL	C-530-030 C-530-037 C-530-037 C-530-037 C-530-037 C-530-037 C-530-037 C-530-037 C-530-037 C-530-037 C-530-037 C-530-037 C-530-037
C-530-050	530E102	0.75"	10	#14	XHHW-2	1	#14	XHHW-2	FR: LCP-53061 TO: CONDUIT TEE 10 #14 >> LCP-53061 CONTROL	C-530-052
C-530-051	530E102	0.75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: PSH-53061 TO: CONDUIT TEE 2 #14 >> PSH-53061 CONTROL	C-530-052
C-530-052	530E101 530E102	1"	12	#14	XHHW-2	1	#14	XHHW-2	FR: CONDUIT TEE TO: VFD-53061 10 #14 >> LCP-53061 CONTROL 2 #14 >> PSH-53061 CONTROL	C-530-050 C-530-051
C-530-055	530E101 530E102	0.75"	2 2	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: CONDUIT TEE TO: VFD-53061 2 #14 >> TSH-53061 CONTROL 2 #12 >> MWH-53061 POWER	
C-530-057	530E101 530E102	0.75"	2 2	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: CONDUIT TEE TO: VFD-53062 2 #14 >> TSH-53062 CONTROL 2 #12 >> MWH-53062 POWER	

CONDUIT SCHEDULE AREA 530

PRIMARY SLUDGE TANK REPLACEMENT PROJECT

SOLIDS HANDLING BUILDING EAST

ENGINEER

TDI

REVISION

AD3

DATE

10/13/26

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
C-530-060	530E102	0.75"	10	#14	XHHW-2	1	#14	XHHW-2	FR: LCP-53062 TO: CONDUIT TEE 10 #14 >> LCP-53062 CONTROL	C-530-063
C-530-062	530E102	0.75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: PSH-53062 TO: CONDUIT TEE 2 #14 >> PSH-53062 CONTROL	C-530-063
C-530-063	530E101 530E102	1"	12	#14	XHHW-2	1	#14	XHHW-2	FR: CONDUIT TEE TO: VFD-53062 10 #14 >> LCP-53062 CONTROL 2 #14 >> PSH-53062 CONTROL	C-530-060 C-530-062
C-530-070	530E102	0.75"	10	#14	XHHW-2	1	#14	XHHW-2	FR: EDR-53010 TO: CONDUIT TEE 10 #14 >> EDR-53010 CONTROL	C-530-072
C-530-071	530E102	1"	1	MFR	CABLE	1	#14	XHHW-2	FR: VCP-53010 TO: EDR-53010 1 MFR >> VCP-53010 CONTROL	
C-530-072	530E102	1.5"	20	#14	XHHW-2	1	#14	XHHW-2	FR: CONDUIT TEE TO: CONDUIT TEE 10 #14 >> EDR-53010 CONTROL 10 #14 >> EDR-53016 CONTROL	C-530-080 C-530-070 C-530-076
C-530-073	530E102	1"	1	MFR	CABLE	1	#14	XHHW-2	FR: VCP-53014 TO: EDR-53014 1 MFR >> VCP-53014 CONTROL	
C-530-074	530E102	0.75"	10	#14	XHHW-2	1	#14	XHHW-2	FR: EDR-53014 TO: CONDUIT TEE 10 #14 >> EDR-53014 CONTROL	C-530-077
C-530-075	530E102	0.75"	10	#14	XHHW-2	1	#14	XHHW-2	FR: EDR-53015 TO: CONDUIT TEE 10 #14 >> EDR-53015 CONTROL	C-530-077
C-530-076	530E102	0.75"	10	#14	XHHW-2	1	#14	XHHW-2	FR: EDR-53016 TO: CONDUIT TEE 10 #14 >> EDR-53016 CONTROL	C-530-072
C-530-077	530E102	1.5"	20	#14	XHHW-2	1	#14	XHHW-2	FR: CONDUIT TEE TO: CONDUIT TEE 10 #14 >> EDR-53014 CONTROL 10 #14 >> EDR-53015 CONTROL	C-530-080 C-530-074 C-530-075
C-530-078	530E102	1"	1	MFR	CABLE	1	#14	XHHW-2	FR: VCP-53016 TO: EDR-53016 1 MFR >> VCP-53016 CONTROL	
C-530-079	530E102	1"	1	MFR	CABLE	1	#14	XHHW-2	FR: VCP-53015 TO: EDR-53015 1 MFR >> VCP-53015 CONTROL	
C-530-080	530E102	1.5"	40	#14	XHHW-2	1	#14	XHHW-2	FR: CONDUIT TEE TO: CONDUIT TEE 10 #14 >> EDR-53010 CONTROL 10 #14 >> EDR-53016 CONTROL 10 #14 >> EDR-53014 CONTROL 10 #14 >> EDR-53015 CONTROL	C-530-081 C-530-072 C-530-072 C-530-077 C-530-077
C-530-081	530E102	2"	50	#14	XHHW-2	1	#14	XHHW-2	FR: CONDUIT TEE TO: CONTROL JUNCTION BOX 10 #14 >> EDR-53010 CONTROL 10 #14 >> EDR-53016 CONTROL 10 #14 >> EDR-53014 CONTROL 10 #14 >> EDR-53015 CONTROL 10 #14 >> VCP-53020 CONTROL	C-530-110 C-530-080 C-530-080 C-530-080 C-530-080 C-530-080 C-530-101
C-530-090	530E102	0.75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: SV-53011 TO: CONDUIT TEE 2 #14 >> SV-53011 CONTROL	C-530-096
C-530-091	530E102	0.75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: SV-53001 TO: CONDUIT TEE 2 #14 >> SV-53001 CONTROL	C-530-095
C-530-092	530E102	0.75"	2	#14	XHHW-2	1	#14	XHHW-2	FR: SV-53002 TO: CONDUIT TEE 2 #14 >> SV-53002 CONTROL	C-530-095

CONDUIT SCHEDULE AREA 530

PRIMARY SLUDGE TANK REPLACEMENT PROJECT

SOLIDS HANDLING BUILDING EAST

ENGINEER

TDT

REVISION

AD3

DATE

10/13/26

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
C-530-095	530E102	0.75"	4	#14	XHHW-2	1	#14	XHHW-2	FR: CONDUIT TEE TO: CONDUIT TEE 2 #14 >> SV-53001 CONTROL 2 #14 >> SV-53002 CONTROL	C-530-096 C-530-091 C-530-092
C-530-096	530E102	0.75"	6	#14	XHHW-2	1	#14	XHHW-2	FR: CONDUIT TEE TO: CONTROL JUNCTION BOX 2 #14 >> SV-53011 CONTROL 2 #14 >> SV-53001 CONTROL 2 #14 >> SV-53002 CONTROL	C-530-110 C-530-090 C-530-095 C-530-095
C-530-100	530E102	0.75"	6	#14	XHHW-2	1	#14	XHHW-2	FR: SUMP PUMP TERMINATION BOX TO: VCP-53020 2 #14 >> LSL-53020 2 #14 >> LSL-53020 2 #14 >> LSH-53020	
C-530-101	530E102	0.75"	10	#14	XHHW-2	1	#14	XHHW-2	FR: VCP-53020 TO: CONDUIT TEE 10 #14 >> VCP-53020 CONTROL	C-530-081
C-530-110	530E102	2"	4 56	#12 #14	XHHW-2 XHHW-2	1	#12	XHHW-2	FR: CONTROL JUNCTION BOX TO: LCP-53020 2 #12 >> AIT-53011 POWER 2 #12 >> FIT-53011 POWER 2 #14 >> SV-53011 CONTROL 2 #14 >> SV-53001 CONTROL 2 #14 >> SV-53002 CONTROL 10 #14 >> EDR-53010 CONTROL 10 #14 >> EDR-53016 CONTROL 10 #14 >> EDR-53014 CONTROL 10 #14 >> EDR-53015 CONTROL 10 #14 >> VCP-53020 CONTROL	C-530-035 L-530-015 L-530-015 C-530-096 C-530-096 C-530-096 C-530-081 C-530-081 C-530-081 C-530-081 C-530-081
L-530-012	530E102	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: AIT-53011 TO: CONDUIT TEE 2 #12 >> AIT-53011 POWER	L-530-015
L-530-013	530E102	1"	1	MFR	CABLE	1	#14	XHHW-2	FR: FE-53013 TO: FIT-53013 1 MFR >> FE-53013 POWER	
L-530-014	530E102	0.75"	2	#12	XHHW-2	1	#12	XHHW-2	FR: FIT-53011 TO: CONDUIT TEE 2 #12 >> FIT-53011 POWER	L-530-015
L-530-015	530E102	0.75"	4	#12	XHHW-2	1	#12	XHHW-2	FR: CONDUIT TEE TO: CONTROL JUNCTION BOX 2 #12 >> AIT-53011 POWER 2 #12 >> FIT-53011 POWER	C-530-110 L-530-012 L-530-014
P-530-005	530E101	3"	3	350	XHHW-2	1	#1	XHHW-2	FR: PP-53002 TO: SG-5301A 3 350 >> PP-53002 POWER	
P-530-006	530E101	3"	3	350	XHHW-2	1	#1	XHHW-2	FR: PP-53002 TO: SG-5301A 3 350 >> PP-53002 POWER	
P-530-020	530E101	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: LCP-53012 TO: PP-53002 3 #12 >> LCP-53012 POWER	
P-530-021	530E101	1"	5 1	#12 3/CS-#16	XHHW-2	1	#12	XHHW-2	FR: MIX-53012 TO: CONDUIT TEE 3 #12 >> MIX-53012 POWER 1 3/CS-#16 >> MIX-53012 RTD 2 #12 >> MIX-53012 MWH	
P-530-022	530E101	1"	5	#12	XHHW-2	1	#12	XHHW-2	FR: CONDUIT TEE TO: LCP-53012 3 #12 >> MIX-53012 POWER 2 #12 >> MWH-53012 POWER	
P-530-050	530E101	1"	3	#6	XHHW-2	1	#10	XHHW-2	FR: VFD-53061 TO: PP-53002 3 #6 >> VFD-53061 POWER	
P-530-051	530E101 530E102	1.5"	1	3/C-#8:VFD	VFD			INTEGRAL	FR: CONDUIT TEE TO: VFD-53061 1 3/C-#8:VFD >> P-53061 POWER	

CONDUIT SCHEDULE AREA 530

PRIMARY SLUDGE TANK REPLACEMENT PROJECT

SOLIDS HANDLING BUILDING EAST

ENGINEER

TDI

REVISION

AD3

DATE

10/13/26

CONDUIT			CONDUCTORS			GROUND			DESCRIPTION	CONNECTING SEGMENTS
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE		
P-530-052	530E101	1.5"	1 2 2	3/C-#8:VFD #12 #14	VFD XHHW-2 XHHW-2			INTEGRAL	FR: P-53061 TO: CONDUIT TEE 1 3/C-#8:VFD >> P-53061 POWER 2 #12 >> MWH-53061 POWER 2 #14 >> TSH-53061 CONTROL	
P-530-060	530E101	1"	3	#6	XHHW-2	1	#10	XHHW-2	FR: VFD-53062 TO: PP-53002 3 #6 >> VFD-53062 POWER	
P-530-061	530E101 530E102	1.5"	1	3/C-#8:VFD	VFD			INTEGRAL	FR: CONDUIT TEE TO: VFD-53062 1 3/C-#8:VFD >> P-53062 POWER	
P-530-062	530E102	1.5"	1 2 2	3/C-#8:VFD #12 #14	VFD XHHW-2 XHHW-2			INTEGRAL	FR: P-53062 TO: CONDUIT TEE 1 3/C-#8:VFD >> P-53062 POWER 2 #12 >> MWH-53062 POWER 2 #14 >> TSH-53062 CONTROL	
P-530-070	530E102	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: EDR-53010 TO: CONDUIT TEE 3 #12 >> EDR-53010 POWER	P-530-077
P-530-074	530E102	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: EDR-53014 TO: CONDUIT TEE 3 #12 >> EDR-53014 POWER	P-530-078
P-530-075	530E102	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: EDR-53015 TO: CONDUIT TEE 3 #12 >> EDR-53015 POWER	P-530-078
P-530-076	530E102	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: EDR-53016 TO: CONDUIT TEE 3 #12 >> EDR-53016 POWER	P-530-077
P-530-077	530E101	0.75"	6	#12	XHHW-2	1	#12	XHHW-2	FR: CONDUIT TEE TO: CONDUIT TEE 3 #12 >> EDR-53010 POWER 3 #12 >> EDR-53016 POWER	P-530-070 P-530-076
P-530-078	530E102	0.75"	6	#12	XHHW-2	1	#12	XHHW-2	FR: CONDUIT TEE TO: CONDUIT TEE 3 #12 >> EDR-53014 POWER 3 #12 >> EDR-53015 POWER	P-530-074 P-530-075
P-530-080	530E102	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: WATER HEATER TO: PP-53002 3 #12 >> WATER HEATER POWER	
P-530-082	530E102	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: CONDUIT TEE TO: DISC-53010 3 #12 >> EDR-53010 POWER	
P-530-084	530E102	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: CONDUIT TEE TO: DISC-53016 3 #12 >> EDR-53016 POWER	
P-530-086	530E102	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: DISC-53010 TO: CONDUIT TEE 3 #12 >> DISC-53010 POWER	P-530-090
P-530-088	530E102	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: DISC-53016 TO: CONDUIT TEE 3 #12 >> DISC-53016 POWER	P-530-090
P-530-090	530E101 530E102	0.75"	6	#12	XHHW-2	1	#12	XHHW-2	FR: CONDUIT TEE TO: PP-53002 3 #12 >> DISC-53010 POWER 3 #12 >> DISC-53016 POWER	P-530-086 P-530-088
P-530-092	530E102	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: CONDUIT TEE TO: DISC-53014 3 #12 >> EDR-53014 POWER	
P-530-094	530E102	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: CONDUIT TEE TO: DISC-53015 3 #12 >> EDR-53015 POWER	
P-530-096	530E102	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: DISC-53014 TO: CONDUIT TEE 3 #12 >> DISC-53014 POWER	P-530-099

CONDUIT SCHEDULE AREA 530

PRIMARY SLUDGE TANK REPLACEMENT PROJECT

SOLIDS HANDLING BUILDING EAST

ENGINEER

TDT

REVISION

AD3

DATE

10/13/26

CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
P-530-098	530E102	0.75"	3	#12	XHHW-2	1	#12	XHHW-2	FR: DISC-53015 TO: CONDUIT TEE 3 #12 >> DISC-53015 POWER	P-530-099
P-530-099	530E102	0.75"	6	#12	XHHW-2	1	#12	XHHW-2	FR: CONDUIT TEE TO: PP-53002 3 #12 >> DISC-53014 POWER 3 #12 >> DISC-53015 POWER	P-530-096 P-530-098
P-530-100	530E102	1"	6	#10	XHHW-2	1	#10	XHHW-2	FR: SUMP PUMP TERMINATION BOX TO: VCP-53020 3 #10 >> P-53020 POWER 3 #10 >> P-53021 POWER	
P-530-102	530E102	0.75"	3	#10	XHHW-2	1	#10	XHHW-2	FR: VCP-53020 TO: PP-53002 3 #10 >> VCP-53020 POWER	
S-530-011	530E102	1"	1	MFR	CABLE	1	#14	XHHW-2	FR: AE-53011 TO: AIT-53011 1 MFR >> AE-53011 SIGNAL	
S-530-012	530E102	0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: AIT-53011 TO: CONDUIT TEE 1 2/CS-#16 >> AIT-53011 SIGNAL	S-530-015
S-530-013	530E102	1"	1	MFR	CABLE	1	#14	XHHW-2	FR: FE-53013 TO: FIT-53013 1 MFR >> FE-53013 SIGNAL	
S-530-014	530E102	0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: FIT-53013 TO: CONDUIT TEE 1 2/CS-#16 >> FIT-53013 SIGNAL	S-530-015
S-530-015	530E102	0.75"	2	2/CS-#16		1	#14	XHHW-2	FR: CONDUIT TEE TO: SIGNAL JUNCTION BOX 1 2/CS-#16 >> AIT-53011 SIGNAL 1 2/CS-#16 >> FIT-53013 SIGNAL	S-530-105 S-530-012 S-530-014
S-530-025	530E101	0.75"	2	2/CS-#16		1	#14	XHHW-2	FR: LCP-53012 TO: CONDUIT TEE 2 2/CS-#16 >> LCP-53012 SIGNAL	S-530-035
S-530-028	530E101	0.75"	2	2/CS-#16		1	#14	XHHW-2	FR: VFD-53061 TO: CONDUIT TEE 2 2/CS-#16 >> VFD-53061 SIGNAL	S-530-037
S-530-030	530E101	0.75"	2	2/CS-#16		1	#14	XHHW-2	FR: VFD-53062 TO: CONDUIT TEE 2 2/CS-#16 >> VFD-53062 SIGNAL	S-530-040
S-530-035	530E101	1.5"	6	2/CS-#16		1	#14	XHHW-2	FR: CONDUIT TEE TO: CONDUIT TEE 2 2/CS-#16 >> LCP-53012 SIGNAL 1 2/CS-#16 >> AIT-53011 SIGNAL 1 2/CS-#16 >> FIT-53013 SIGNAL 1 2/CS-#16 >> PIT-53062 SIGNAL 1 2/CS-#16 >> PIT-53062 SIGNAL	S-530-037 S-530-025 S-530-105 S-530-105 S-530-105 S-530-105
S-530-037	530E101	1.5"	8	2/CS-#16		1	#14	XHHW-2	FR: CONDUIT TEE TO: CONDUIT TEE 2 2/CS-#16 >> VFD-53061 SIGNAL 2 2/CS-#16 >> LCP-53012 SIGNAL 2 2/CS-#16 >> AIT-53011 SIGNAL 1 2/CS-#16 >> FIT-53013 SIGNAL 1 2/CS-#16 >> PIT-53062 SIGNAL 1 2/CS-#16 >> PIT-53062 SIGNAL	S-530-040 S-530-028 S-530-035 S-530-035 S-530-035 S-530-035 S-530-035
S-530-040		2"	10	2/CS-#16		1	#14	XHHW-2	FR: CONDUIT TEE TO: LCP-53020 2 2/CS-#16 >> VFD-53062 SIGNAL 2 2/CS-#16 >> VFD-53061 SIGNAL 2 2/CS-#16 >> LCP-53012 SIGNAL 1 2/CS-#16 >> AIT-53011 SIGNAL 1 2/CS-#16 >> FIT-53013 SIGNAL 1 2/CS-#16 >> PIT-53062 SIGNAL 1 2/CS-#16 >> PIT-53062 SIGNAL	S-530-030 S-530-037 S-530-037 S-530-037 S-530-037 S-530-037 S-530-037
S-530-050	530E102	0.75"	1	3/CS-#16		1	#14	XHHW-2	FR: LCP-53061 TO: CONDUIT TEE 1 3/CS-#16 >> LCP-53061 SIGNAL	S-530-065

CONDUIT SCHEDULE AREA 530

PRIMARY SLUDGE TANK REPLACEMENT PROJECT

SOLIDS HANDLING BUILDING EAST

ENGINEER

TDI

REVISION

AD3

DATE

10/13/26

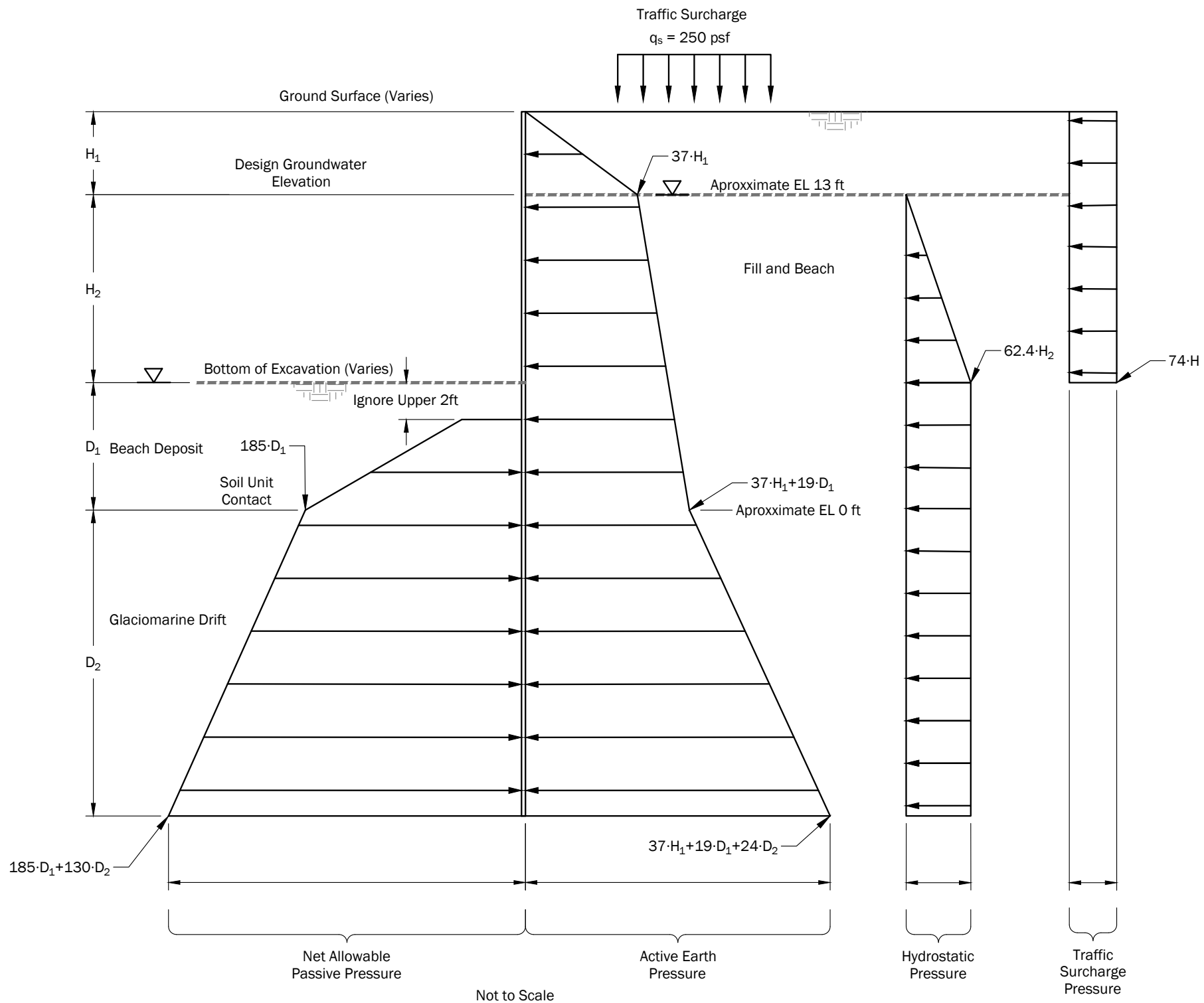
CONDUIT			CONDUCTORS			GROUND				
NUMBER	DWG	SIZE	#	SIZE	TYPE	#	SIZE	TYPE	DESCRIPTION	CONNECTING SEGMENTS
S-530-051	530E101 530E102	0.75"	1	3/CS-#16		1	#14	XHHW-2	FR: CONDUIT TEE TO: VFD-53061 1 3/CS-#16 >> LCP-53061 SIGNAL	
S-530-052	530E102	0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: PIT-53061 TO: CONDUIT TEE 1 2/CS-#16 >> PIT-53062 SIGNAL	S-530-055
S-530-055	530E102	0.75"	2	2/CS-#16		1	#14	XHHW-2	FR: CONDUIT TEE TO: SIGNAL JUNCTION BOX 1 2/CS-#16 >> PIT-53062 SIGNAL 1 2/CS-#16 >> PIT-53062 SIGNAL	S-530-105 S-530-052 S-530-062
S-530-060	530E102	0.75"	1	3/CS-#16		1	#14	XHHW-2	FR: LCP-53062 TO: CONDUIT TEE 1 3/CS-#16 >> LCP-53062 SIGNAL	S-530-065
S-530-061	530E101 530E102	0.75"	1	3/CS-#16		1	#14	XHHW-2	FR: CONDUIT TEE TO: VFD-53062 1 3/CS-#16 >> LCP-53062 SIGNAL	
S-530-062	530E102	0.75"	1	2/CS-#16		1	#14	XHHW-2	FR: PIT-53062 TO: CONDUIT TEE 1 2/CS-#16 >> PIT-53062 SIGNAL	S-530-055
S-530-065	530E102	2"	2	3/CS-#16		1	#14	XHHW-2	FR: CONDUIT TEE TO: CONDUIT TEE 1 3/CS-#16 >> LCP-53061 SIGNAL 1 3/CS-#16 >> LCP-53062 SIGNAL	S-530-050 S-530-060
S-530-105	530E102	1"	4	2/CS-#16		1	#14	XHHW-2	FR: SIGNAL JUNCTION BOX TO: LCP-53020 1 2/CS-#16 >> AIT-53011 SIGNAL 1 2/CS-#16 >> FIT-53013 SIGNAL 1 2/CS-#16 >> PIT-53062 SIGNAL 1 2/CS-#16 >> PIT-53062 SIGNAL	S-530-035 S-530-015 S-530-015 S-530-055 S-530-055
X-530-105	530E102	1.5"	1	PULL	ROPE				FR: SIGNAL JUNCTION BOX TO: CAPPED EXPOSED ABOVE GROUND LEVEL FLOOR SLAB 1 PULL >>	
X-530-110	530E102	1.5"	1	PULL	ROPE				FR: CONTROL JUNCTION BOX TO: CAPPED EXPOSED ABOVE GROUND LEVEL FLOOR SLAB 1 PULL >>	

END OF CONDUIT SCHEDULE

END OF SECTION

THIS PAGE INTENTIONALLY LEFT BLANK

Temporary Cantilever Sheetpile Shoring



Note(s):

1. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. can not guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Disclaimer: This figure was created for a specific purpose and project. Any use of this figure for any other project or purpose shall be at the user's sole risk and without liability to GeoEngineers. The locations of features shown may be approximate. GeoEngineers makes no warranty or representation as to the accuracy, completeness, or suitability of the figure, or data contained therein. The file containing this figure is a copy of a master document, the original of which is retained by GeoEngineers and is the official document of record.

- Legend**
- ▽ Design Groundwater Elevation
- H_1 = Height of excavation above design groundwater elevation
- H_2 = Height of excavation below design groundwater elevation
- D_1 = Depth of sheet pile embedment between bottom of excavation and soil unit contact
- D_2 = Depth of sheet pile embedment soil unit contact and bottom of sheet pile

Earth Pressure Diagram
Temporary Cantilever Sheet Pile Wall

Post Point Sludge Tank Improvements
Bellingham, Washington



Figure 7

PROCESS SOLUTIONS DRAWING NUMBER	SHT	DRAWING SHEET TITLE	DATE	REV	CURRENT REVISION DESCRIPTION
647674E001	1	ELECTRICAL DRAWING LIST	10/13/25	3	UPDATED TO SHOW CURRENT REVISION
647674E002	2	ELECTRICAL DRAWING LIST	10/13/25	3	UPDATED TO SHOW CURRENT REVISION
647674E003	3	ELECTRICAL DRAWING LIST	10/13/25	3	UPDATED TO SHOW CURRENT REVISION
647674E004	4	SPARE	02/05/24	0	
647674E005	5	GENERAL NOTES	05/21/24	2	PER START-UP
647674E006	6	SPARE	02/05/24	0	
647674E007	7	CONTROLLOGIX RACK LAYOUT	10/13/25	2	PER START-UP
647674E008	8	SPARE	02/05/24	0	
647674E009	9	FLEX I/O RACK LAYOUT	10/13/25	2	PER START-UP
647674E010	10	SPARE	10/13/25	1	PER START-UP
647674E011	11	NETWORK COMMUNICATION DIAGRAM	05/21/24	2	PER START-UP
647674E012	12	ANNUNCIATOR WINDOW LAYOUT	05/21/24	1	PER START-UP
647674E013	13	SPARE	02/05/24	0	
647674E014	14	CONTROL SCHEMATIC	03/29/24	1	AS-BUILT
647674E015	15	CONTROL SCHEMATIC	05/21/24	1	PER START-UP
647674E016	16	SPARE	02/05/24	0	
647674E017	17	SPARE	02/05/24	0	
647674E018	18	CONTROL SCHEMATIC – CONTROLNET ADAPTER MODULE – NODE 40	10/13/25	2	PER START-UP
647674E019	19	CONTROL SCHEMATIC – 115VAC DIGITAL INPUT – NODE 40, SLOT 0	10/13/25	2	PER START-UP
647674E020	20	CONTROL SCHEMATIC – 115VAC DIGITAL INPUT – NODE 40, SLOT 1	10/13/25	2	PER START-UP
647674E021	21	CONTROL SCHEMATIC – 115VAC DIGITAL INPUT – NODE 40, SLOT 2	10/13/25	2	PER START-UP
647674E022	22	CONTROL SCHEMATIC – 115VAC DIGITAL INPUT – NODE 40, SLOT 3	10/13/25	2	PER START-UP
647674E023	23	CONTROL SCHEMATIC – 115VAC DIGITAL INPUT – NODE 40, SLOT 4	10/13/25	3	PER START-UP
647674E024	24	CONTROL SCHEMATIC – 115VAC DIGITAL INPUT – NODE 40, SLOT 5	10/13/25	2	PER START-UP
647674E025	25	CONTROL SCHEMATIC – 115VAC DIGITAL INPUT – NODE 40, SLOT 6	10/13/25	2	PER START-UP
647674E026	26	CONTROL SCHEMATIC – 115VAC DIGITAL INPUT – NODE 40, SLOT 7	10/13/25	2	PER START-UP
647674E027	27	SPARE	02/05/24	0	
647674E028	28	SPARE	02/05/24	0	
647674E029	29	CONTROL SCHEMATIC – CONTROLNET ADAPTER MODULE – NODE 41	10/13/25	2	PER START-UP
647674E030	30	CONTROL SCHEMATIC – 115VAC DIGITAL INPUT – NODE 41, SLOT 0	10/13/25	2	PER START-UP

NOTES:		DESIGNED BY DREW HANDY DRAWN BY NICHOLAS WALKER CHECKED BY SCALE NONE DATE 10/13/25		ELECTRICAL DRAWING LIST — PLC2 CONTROL PANEL – ACP-34010 POST POINT WWTP CITY OF BELLINGHAM		DRAWING NO. 647674E001 SALES ORDER NUMBER Q647674		REV 3 SHEET 1	
		PROCESS SOLUTIONS, INC. ARLINGTON, WASHINGTON THIS DRAWING IS SENT TO YOU SUBJECT TO RETURN UPON DEMAND, AND WITH THE UNDERSTANDING THAT IT IS NOT TO BE USED IN ANY WAY DETRIMENTAL TO OUR INTERESTS. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.		BELLINGHAM, WA					

PROCESS SOLUTIONS DRAWING NUMBER	SHT	DRAWING SHEET TITLE	DATE	REV	CURRENT REVISION DESCRIPTION
647674E031	31	CONTROL SCHEMATIC – 115VAC DIGITAL INPUT – NODE 41, SLOT 1	10/13/25	2	PER START-UP
647674E032	32	CONTROL SCHEMATIC – 115VAC DIGITAL INPUT – NODE 41, SLOT 2	10/13/25	2	PER START-UP
647674E033	33	CONTROL SCHEMATIC – 115VAC DIGITAL INPUT – NODE 41, SLOT 3	10/13/25	2	PER START-UP
647674E034	34	CONTROL SCHEMATIC – 115VAC DIGITAL INPUT – NODE 41, SLOT 4	10/13/25	3	PER START-UP
647674E035	35	CONTROL SCHEMATIC – RELAY OUTPUT – NODE 41, SLOT 5	10/13/25	3	PER START-UP
647674E036	36	SPARE	02/05/24	0	
647674E037	37	SPARE	02/05/24	0	
647674E038	38	CONTROL SCHEMATIC – CONTROLNET ADAPTER MODULE – NODE 42	10/13/25	2	PER START-UP
647674E039	39	CONTROL SCHEMATIC – RELAY OUTPUT – NODE 42, SLOT 0	10/13/25	2	PER START-UP
647674E040	40	CONTROL SCHEMATIC – RELAY OUTPUT – NODE 42, SLOT 1	10/13/25	2	PER START-UP
647674E041	41	CONTROL SCHEMATIC – RELAY OUTPUT – NODE 42, SLOT 2	10/13/25	2	PER START-UP
647674E042	42	CONTROL SCHEMATIC – RELAY OUTPUT – NODE 42, SLOT 3	10/13/25	2	PER START-UP
647674E043	43	CONTROL SCHEMATIC – RELAY OUTPUT – NODE 42, SLOT 4	10/13/25	3	PER START-UP
647674E044	44	CONTROL SCHEMATIC – RELAY OUTPUT – NODE 42, SLOT 5	10/13/25	2	PER START-UP
647674E045	45	CONTROL SCHEMATIC – RELAY OUTPUT – NODE 42, SLOT 6	10/13/25	2	PER START-UP
647674E046	46	CONTROL SCHEMATIC – RELAY OUTPUT – NODE 42, SLOT 7	10/13/25	2	PER START-UP
647674E047	47	SPARE	02/05/24	0	
647674E048	48	SPARE	02/05/24	0	
647674E049	49	CONTROL SCHEMATIC – CONTROLNET ADAPTER MODULE – NODE 43	10/13/25	2	PER START-UP
647674E050	50	CONTROL SCHEMATIC – ANALOG INPUT – NODE 43, SLOT 0	10/13/25	2	PER START-UP
647674E051	51	CONTROL SCHEMATIC – ANALOG INPUT – NODE 43, SLOT 0 (CONTD.)	10/13/25	2	PER START-UP
647674E052	52	CONTROL SCHEMATIC – ANALOG INPUT – NODE 43, SLOT 1	10/13/25	2	PER START-UP
647674E053	53	CONTROL SCHEMATIC – ANALOG INPUT – NODE 43, SLOT 1 (CONTD.)	10/13/25	3	PER START-UP
647674E054	54	CONTROL SCHEMATIC – ANALOG INPUT – NODE 43, SLOT 2	10/13/25	2	PER START-UP
647674E055	55	CONTROL SCHEMATIC – ANALOG INPUT – NODE 43, SLOT 2 (CONTD.)	10/13/25	2	PER START-UP
647674E056	56	CONTROL SCHEMATIC – ANALOG INPUT – NODE 43, SLOT 3	10/13/25	2	PER START-UP
647674E057	57	CONTROL SCHEMATIC – ANALOG INPUT – NODE 43, SLOT 3 (CONTD.)	10/13/25	3	PER START-UP
647674E058	58	CONTROL SCHEMATIC – ANALOG OUTPUT – NODE 43, SLOT 4	10/13/25	2	PER START-UP
647674E059	59	CONTROL SCHEMATIC – ANALOG OUTPUT – NODE 43, SLOT 4 (CONTD.)	10/13/25	2	PER START-UP
647674E060	60	CONTROL SCHEMATIC – ANALOG OUTPUT – NODE 43, SLOT 5	10/13/25	2	PER START-UP

NOTES:		PROCESS SOLUTIONS, INC. ARLINGTON, WASHINGTON THIS DRAWING IS SENT TO YOU SUBJECT TO RETURN UPON DEMAND, AND WITH THE UNDERSTANDING THAT IT IS NOT TO BE USED IN ANY WAY DETRIMENTAL TO OUR INTERESTS. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.		DESIGNED BY DREW HANDY DRAWN BY NICHOLAS WALKER CHECKED BY SCALE NONE DATE 10/13/25		ELECTRICAL DRAWING LIST — PLC2 CONTROL PANEL – ACP-34010 POST POINT WWTP CITY OF BELLINGHAM		BELLINGHAM, WA	
						DRAWING NO.		647674E002	
						SALES ORDER NUMBER		Q647674	
								REV 3	
								SHEET 2	

PROCESS SOLUTIONS DRAWING NUMBER	SHT	DRAWING SHEET TITLE	DATE	REV	CURRENT REVISION DESCRIPTION
647674E061	61	CONTROL SCHEMATIC – ANALOG OUTPUT – NODE 43, SLOT 5 (CONTD.)	10/13/25	2	PER START–UP
647674E062	62	SPARE	02/05/24	0	
647674E063	63	SPARE	02/05/24	0	
647674E064	64	SPARE	02/05/24	0	
647674E065	65	SPARE	02/05/24	0	
647674E066	66	SPARE	02/05/24	0	
647674E067	67	SPARE	02/05/24	0	
647674E068	68	SPARE	05/21/24	2	PER START–UP
647674E069	69	SPARE	02/05/24	0	
647674E070	70	SPARE	05/21/24	2	PER START–UP
647674E071	71	SPARE	02/05/24	0	
647674E072	72	PANEL LAYOUT	02/05/24	0	
647674E073	73	BACKPANEL LAYOUT	05/21/24	2	PER START–UP
647674E074	74	NAMEPLATE LIST	02/05/24	0	
647674E075	75	BILL OF MATERIALS	05/21/24	2	PER START–UP

NOTES:	PROCESS SOLUTIONS, INC. ARLINGTON, WASHINGTON THIS DRAWING IS SENT TO YOU SUBJECT TO RETURN UPON DEMAND, AND WITH THE UNDERSTANDING THAT IT IS NOT TO BE USED IN ANY WAY DETRIMENTAL TO OUR INTERESTS. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.	DESIGNED BY DREW HANDY DRAWN BY NICHOLAS WALKER CHECKED BY	ELECTRICAL DRAWING LIST — PLC2 CONTROL PANEL — ACP-34010 POST POINT WWTP CITY OF BELLINGHAM BELLINGHAM, WA	DRAWING NO.	REV
	SCALE			647674E003	3
	DATE	10/13/25		SALES ORDER NUMBER	SHEET
				Q647674	3

NOTES: UNLESS OTHERWISE SPECIFIED

- 1) NOMINAL SYSTEM VOLTAGES SHOULD BE WITHIN THE FOLLOWING TOLERANCES PER ANSI C84.1-1982[2] AND ANSI/NEMA MG1-1987[8]; NOMINAL VOLTAGE: +5.8%, -8.3%.
- 2) ELECTRICAL INSTALLATION TO BE PERFORMED IN ACCORDANCE WITH THE CURRENT REVISION OF THE NATIONAL ELECTRICAL CODE (NEC), STATE AND LOCAL REQUIREMENTS.
- 3) ENCLOSURE GROUND WIRING IS TO BE GREEN AND ATTACHED TO THE COMMON GROUND LUG.
- 4) LOCKOUT / TAGOUT PROCEDURES MUST BE FOLLOWED AT ALL TIMES PRIOR TO OPENING OR SERVICING THE ENCLOSURE AND/OR EQUIPMENT.
- 5) THIS INDUSTRIAL CONTROL PANEL SHALL BE BUILT TO NFPA 79 (2018) STANDARDS.
- 6) FIELD INTERCONNECTING WIRING TO BE FURNISHED BY CUSTOMER.
- 7) ALL 120VAC/1Ø/60HZ POWER SOURCES TO BE FURNISHED BY CUSTOMER.
- 8) THIS INDUSTRIAL CONTROL PANEL SHALL BE UL LABELED TO UL508A STANDARDS.
- 9) DO NOT RUN AC & DC WIRING IN THE SAME CONDUIT.
- 10) CONDUCTOR COLORS LABEL TO BE INSTALLED IN ENCLOSURE.
- 11) LOW LEVEL DC SIGNAL WIRING SHOULD BE SHIELDED, GROUNDED AT ONE END AND HAVE MOISTURE PROOF INSULATION.
- 12) CONDUIT IS TO BE RUN INTO THE BOTTOM OR SIDES OF ENCLOSURES, NOT INTO THE TOP.
- 13) ALL ANALOG WIRING MUST BE 18 OR 20 AWG WIRES, TWISTED PAIR, AND SHIELDED.
- 14) ETHERNET SWITCHES REQUIRE A #10AWG GROUND WIRE.
- 15) UPON INSTALLATION TIGHTEN ALL TERMINALS TO MFR TORQUE SETTINGS.
- 16) VERIFY UPON INSTALLATION THAT ALL CONNECTION HAVE NOT COME LOOSE DURING TRANSIT.
- 17) SHOP NOTE: PRE-WIRE I/O WITH 50' WHIPS

LEGEND:

- FACTORY & EXISTING CONTROL PANEL WIRING
- FIELD WIRING BETWEEN ACP-34000 & ACP-34010
- EXISTING FIELD WIRING
- ⊙ TERMINALS LOCATED IN EXISTING PLC2 CONTROL PANEL - ACP-34000
- ⊗ TERMINALS LOCATED IN PLC2 CONTROL PANEL - ACP-34010 (647674-05)
- △ X DESIGNATES NOTE SPECIFIC TO ITEM ON A GIVEN SHEET (LOCAL NOTE FLAG)
- ◇ XX DESIGNATES NOTE TO REFERENCE ON GENERAL NOTES SHEET (GLOBAL NOTE FLAG)

REFERENCE NOTATIONS: XX-XX

SHEET # ———

LINE # ———

⊙ ——— DESIGNATES CONTROL PANEL

⊗ ——— DESIGNATES TERMINAL/WIRE NUMBER

XX ——— DESIGNATES WIRE NUMBER

NOTES:

PROCESS SOLUTIONS, INC.
ARLINGTON, WASHINGTON

THIS DRAWING IS SENT TO YOU SUBJECT TO RETURN UPON DEMAND,
AND WITH THE UNDERSTANDING THAT IT IS NOT TO BE USED IN
ANY WAY DETRIMENTAL TO OUR INTERESTS.

ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.

DESIGNED BY
DREW HANDY

DRAWN BY
NICHOLAS WALKER

CHECKED BY

SCALE
NONE

DATE
05/21/24

GENERAL NOTES

—

PLC2 CONTROL PANEL - ACP-34010

POST POINT WWTP

CITY OF BELLINGHAM

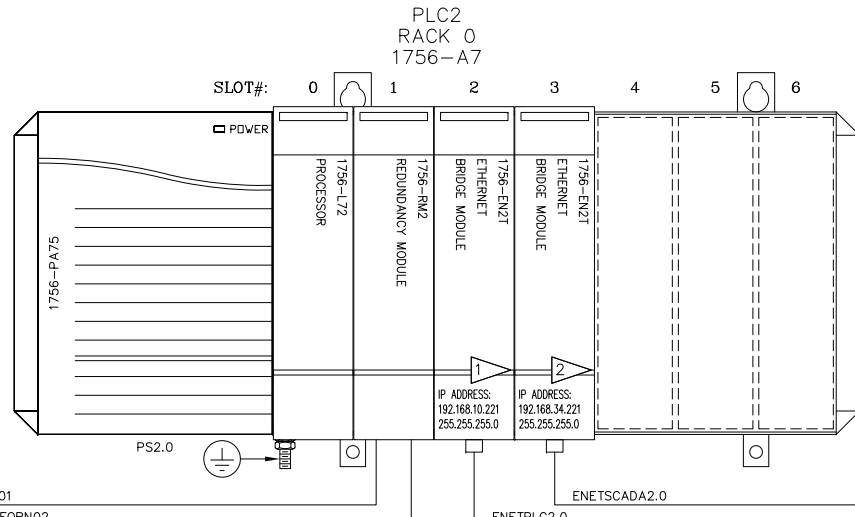
BELLINGHAM, WA

DRAWING NO.
647674E005

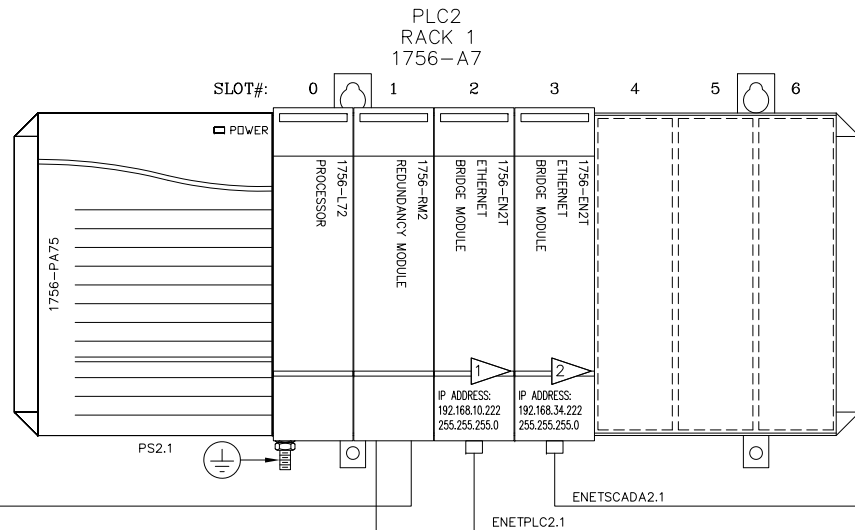
SALES ORDER NUMBER
Q647674

REV
2

SHEET
5



TO SCADA ETHERNET SWITCH - ENETSW2
REF. DWG 647674E011

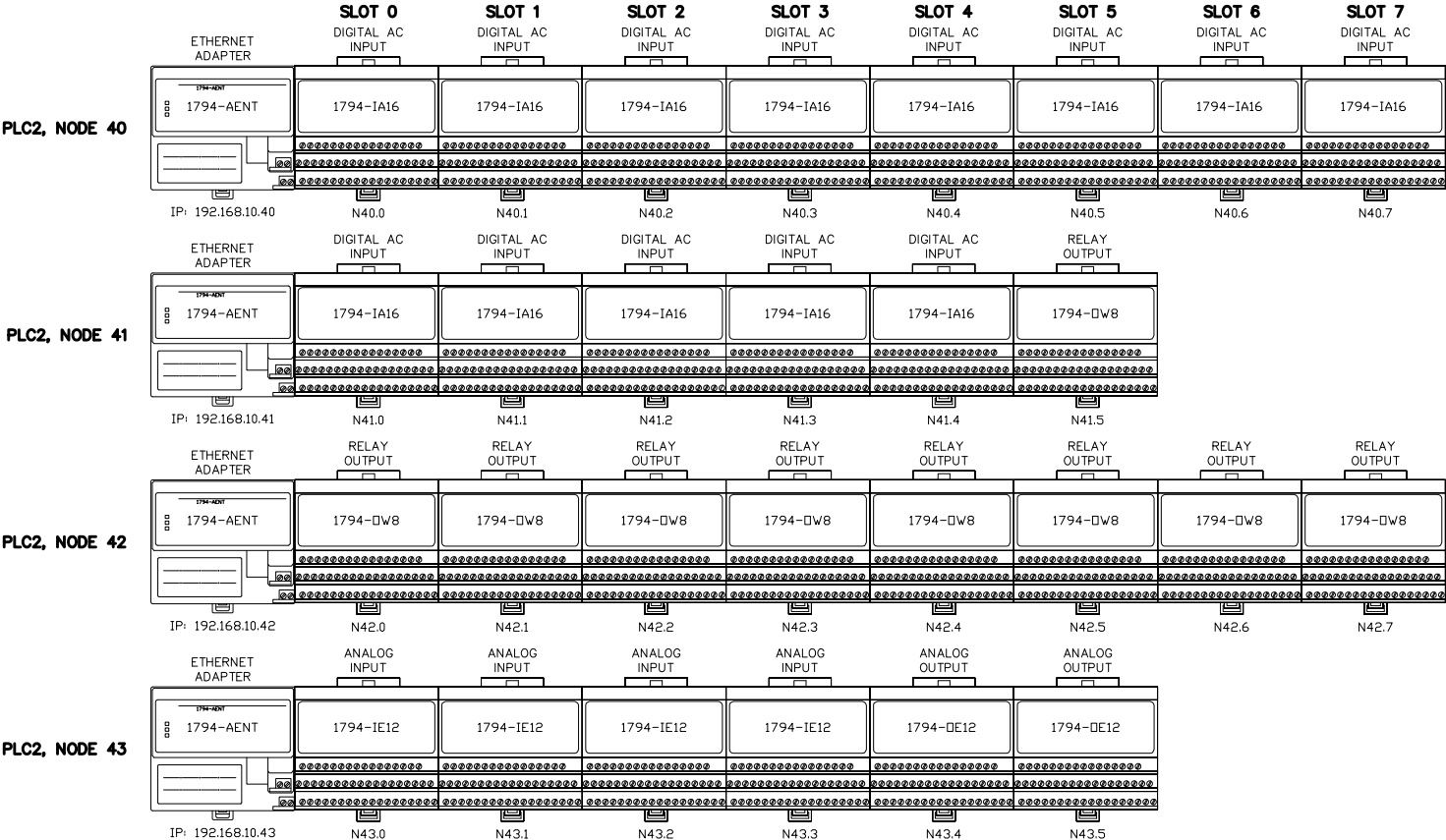


TO PLC2 ETHERNET SWITCH - ENETSW1
REF. DWG 647674E011

- 1 THE IP OF THE SECONDARY I/O ETHERNET MODULE MUST BE THE NEXT ADDRESS UP FROM THE PRIMARY
- 2 THE IP OF THE SECONDARY SCADA ETHERNET MODULE MUST BE THE NEXT ADDRESS UP FROM THE PRIMARY

NOTES:	PROCESS SOLUTIONS, INC. ARLINGTON, WASHINGTON		DESIGNED BY DREW HANDY	CONTROLLOGIX RACK LAYOUT		DRAWING NO.	REV
	THIS DRAWING IS SENT TO YOU SUBJECT TO RETURN UPON DEMAND, AND WITH THE UNDERSTANDING THAT IT IS NOT TO BE USED IN ANY WAY DETRIMENTAL TO OUR INTERESTS.		DRAWN BY NICHOLAS WALKER	PLC2 CONTROL PANEL – ACP–34010 POST POINT WWTP		647674E007	2
			CHECKED BY				
			SCALE NONE				
	ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.	DATE 10/13/25	CITY OF BELLINGHAM	BELLINGHAM, WA	SALES ORDER NUMBER Q647674	SHEET 7	

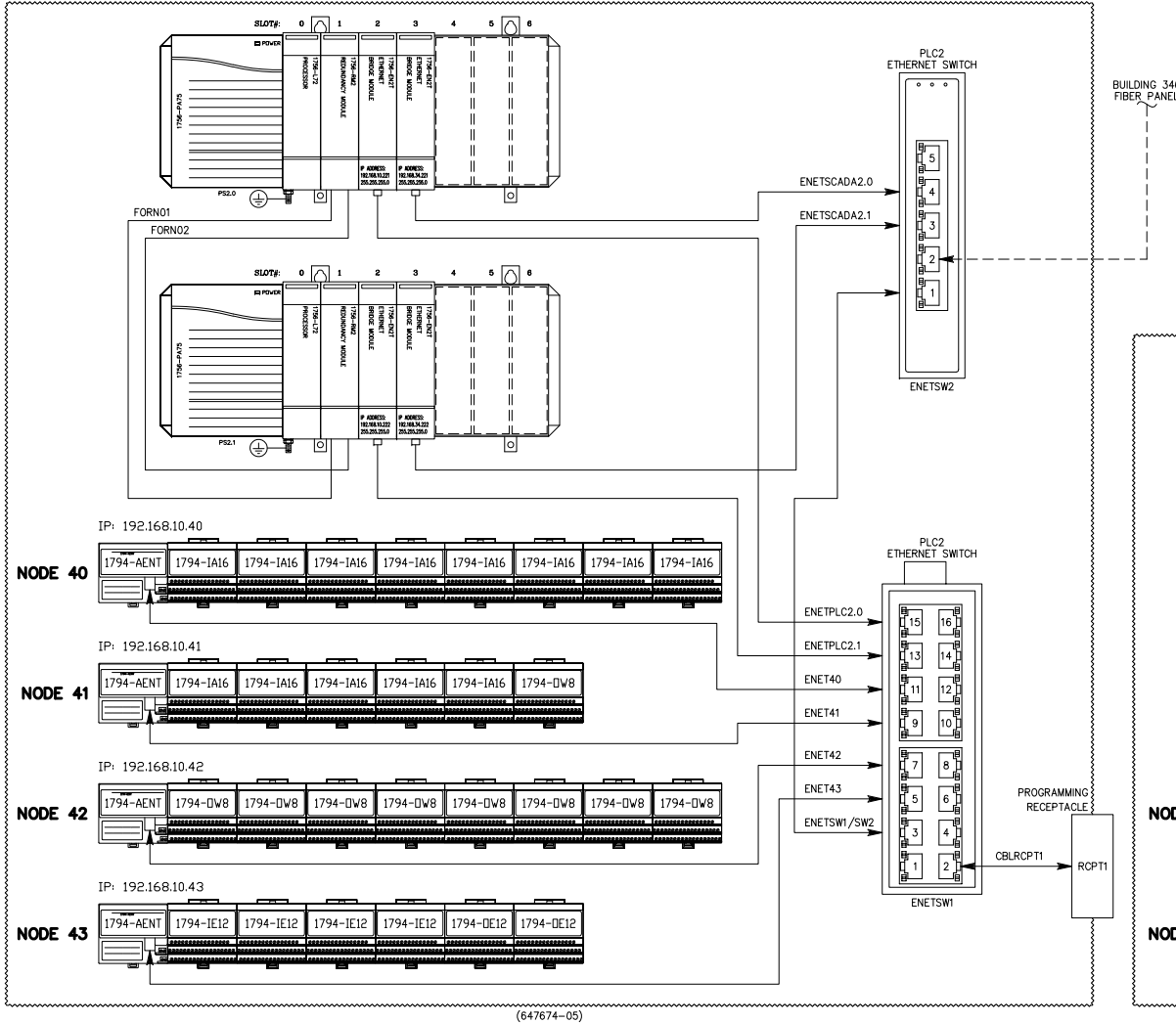
FLEX I/O LAYOUT



INTENTIONALLY
LEFT BLANK

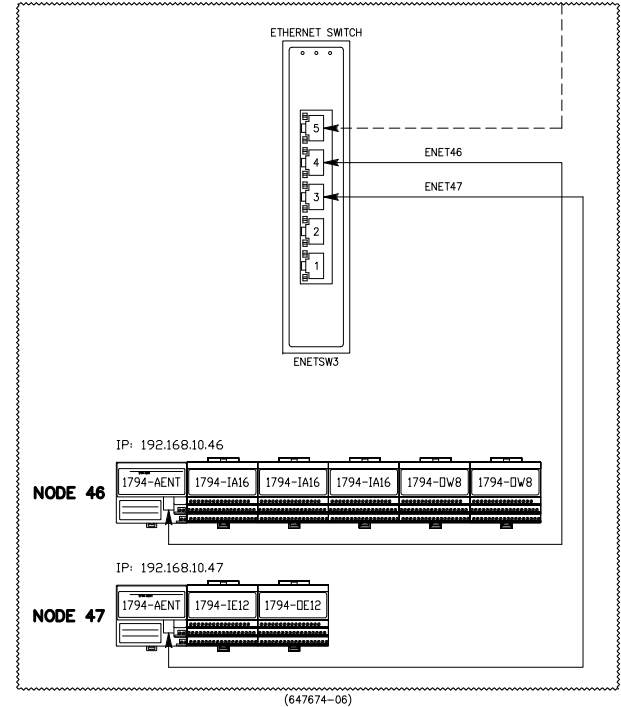
NOTES:	PROCESS SOLUTIONS, INC. ARLINGTON, WASHINGTON THIS DRAWING IS SENT TO YOU SUBJECT TO RETURN UPON DEMAND, AND WITH THE UNDERSTANDING THAT IT IS NOT TO BE USED IN ANY WAY DETRIMENTAL TO OUR INTERESTS. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.	DESIGNED BY DREW HANDY	PROTECTION INSTALL & WIRING PROCEDURE — PLC2 CONTROL PANEL — ACP-34010 POST POINT WWTP CITY OF BELLINGHAM BELLINGHAM, WA	DRAWING NO. 647674E010	REV 1
		DRAWN BY NICHOLAS WALKER		SALES ORDER NUMBER Q647674	SHEET 10
		CHECKED BY			
		SCALE NONE			
		DATE 02/05/24			

PLC2 CONTROL PANEL – ACP-34010



(647674-05)

PLC2 REMOTE I/O PANEL – LCP-22010



(647674-06)

NOTES:

PROCESS SOLUTIONS, INC.
ARLINGTON, WASHINGTON

THIS DRAWING IS SENT TO YOU SUBJECT TO RETURN UPON DEMAND,
AND WITH THE UNDERSTANDING THAT IT IS NOT TO BE USED IN
ANY WAY DETRIMENTAL TO OUR INTERESTS.

ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.

DESIGNED BY
DREW HANDY
DRAWN BY
NICHOLAS WALKER
CHECKED BY

SCALE
NONE
DATE
05/21/24

NETWORK COMMUNICATION DIAGRAM

PLC2 CONTROL PANEL – ACP-34010
POST POINT WWTP

CITY OF BELLINGHAM

BELLINGHAM, WA

DRAWING NO.

647674E011

SALES ORDER NUMBER

Q647674

REV

2

SHEET

11

EXISTING PLC2 CONTROL PANEL – ACP-34000

WINDOW NUMBER
(DO NOT ENGRAVE)

1-1 RAW SEWAGE PUMP STATION HIGH LEVEL	2-1 RAW SEWAGE PUMP NO. 1 FAIL	3-1 IN-PLANT PUMP NO. 1 FAIL	4-1 PRIM. CLAR. NO. 1 HIGH TORQUE	5-1 SPARE
1-2 RAW SEWAGE PUMP STATION LOW LEVEL	2-2 RAW SEWAGE PUMP NO. 2 FAIL	3-2 IN-PLANT PUMP NO. 2 FAIL	4-2 PRIM. CLAR. NO. 2 HIGH TORQUE	5-2 SPARE
1-3 IN-PLANT PUMP STATION HIGH LEVEL	2-3 RAW SEWAGE PUMP NO. 3 FAIL	3-3 IN-PLANT PUMP NO. 3 FAIL	4-3 PRIM. EFFL. WETWELL HIGH LEVEL	5-3 SEC. CLAR. NO. 3 HIGH TORQUE
1-4 IN-PLANT PUMP STATION LOW LEVEL	2-4 SPARE	3-4 SPARE	4-4 PRIM. EFFL. WETWELL LOW LEVEL	5-4 SPARE

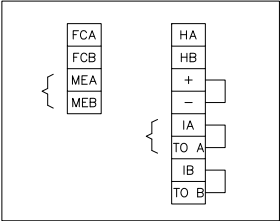
ANNUNCIATOR 1 ENGRAVING

WINDOW NUMBER
(DO NOT ENGRAVE)

1-1 SPARE	2-1 SPARE	3-1 SPARE	4-1 SPARE	5-1 RAW SEWAGE PUMP STATION HIGH LEL
1-2 SPARE	2-2 SPARE	3-2 SPARE	4-2 PRIM. EFFL. WETWELL HIGH LEL	5-2 IN-PLANT PUMP STATION HIGH LEL
1-3 SEC. CLAR. NO. 1 HIGH TORQUE	2-3 SPARE	3-3 PLANT AIR DISCHARGE LOW PRESSURE	4-3 PIPE GALLERY HIGH LEL	5-3 SPARE
1-4 SEC. CLAR. NO. 2 HIGH TORQUE	2-4 SPARE	3-4 W3 WATER LOW PRESSURE	4-4 SPARE	5-4 SPARE

ANNUNCIATOR 2 ENGRAVING

WINDOW TERMINAL WIRING



NOTES:

PROCESS SOLUTIONS, INC.
ARLINGTON, WASHINGTON

THIS DRAWING IS SENT TO YOU SUBJECT TO RETURN UPON DEMAND,
AND WITH THE UNDERSTANDING THAT IT IS NOT TO BE USED IN
ANY WAY DETRIMENTAL TO OUR INTERESTS.

ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.

DESIGNED BY
DREW HANDY
DRAWN BY
NICHOLAS WALKER
CHECKED BY

SCALE
NONE
DATE
05/21/24

ANNUNCIATOR WINDOW LAYOUT
—
PLC2 CONTROL PANEL – ACP-34010
POST POINT WWTP
CITY OF BELLINGHAM
BELLINGHAM, WA

DRAWING NO.
647674E012

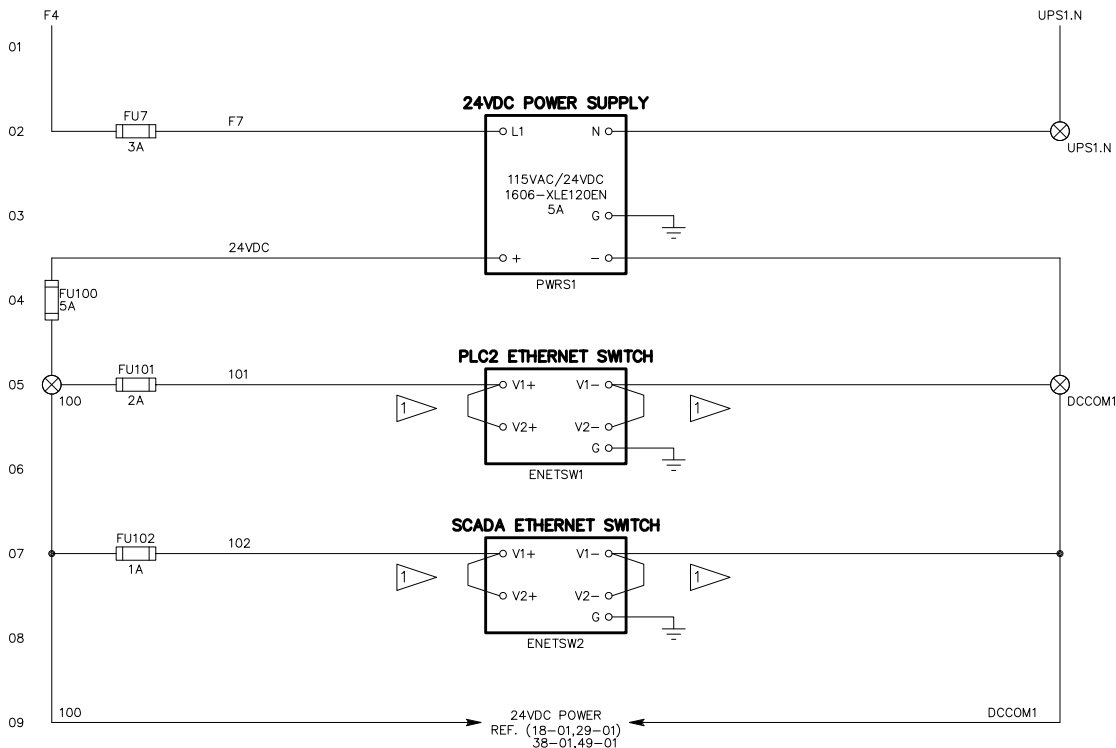
SALES ORDER NUMBER
Q647674

REV

1

SHEET

12



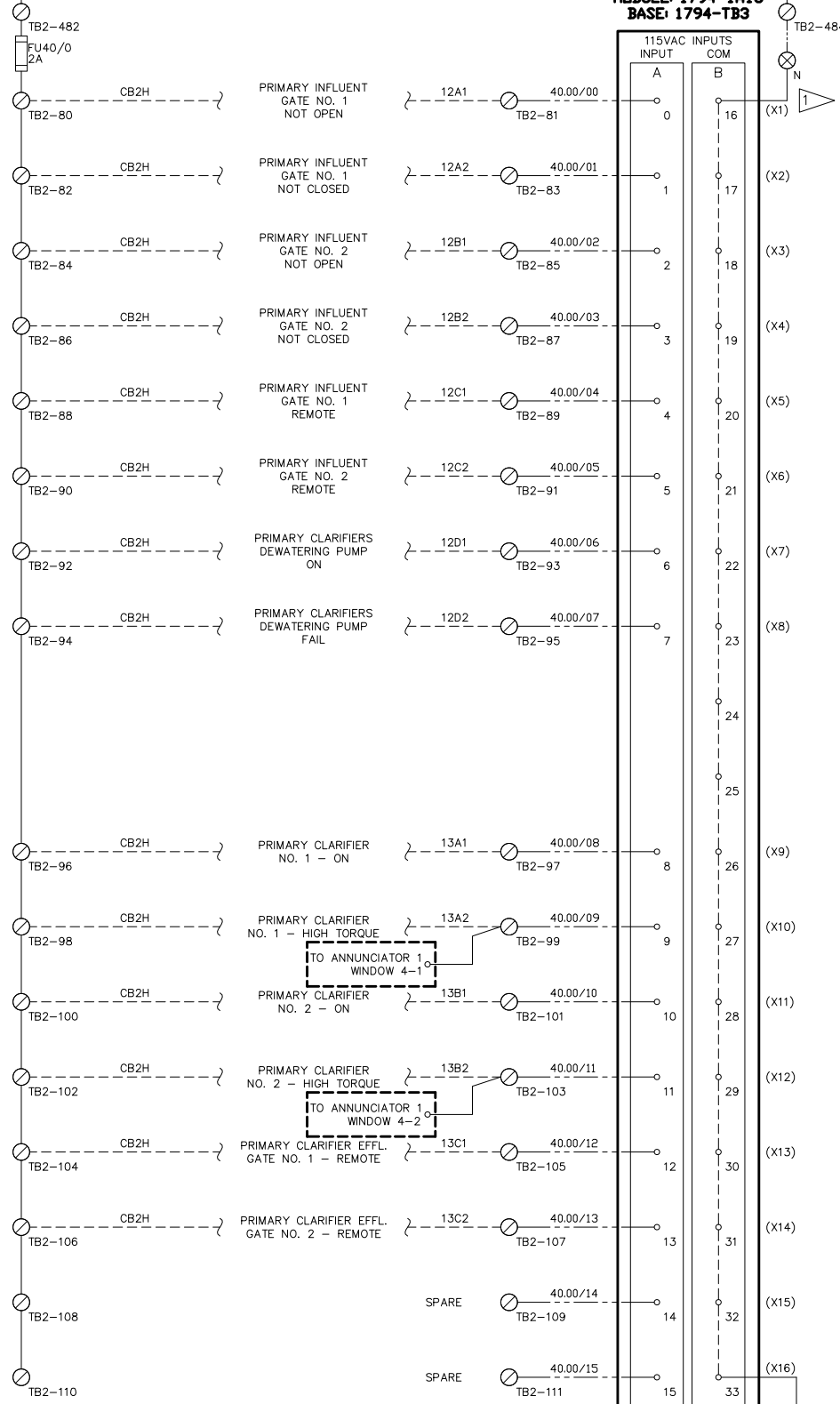
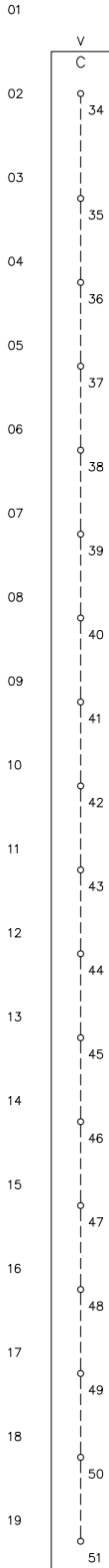
1 TO BE WIRED IN 18AWG

NOTES:	PROCESS SOLUTIONS, INC. ARLINGTON, WASHINGTON THIS DRAWING IS SENT TO YOU SUBJECT TO RETURN UPON DEMAND, AND WITH THE UNDERSTANDING THAT IT IS NOT TO BE USED IN ANY WAY DETRIMENTAL TO OUR INTERESTS. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.	DESIGNED BY DREW HANDY		CONTROL SCHEMATIC	DRAWING NO. 647674E015	REV 1
		DRAWN BY NICHOLAS WALKER				
		CHECKED BY				
		SCALE NONE				
		DATE 05/21/24				
		CITY OF BELLINGHAM, WA				
		PLC2 CONTROL PANEL – ACP-34010 POST POINT WWTP		SALES ORDER NUMBER Q647674		SHEET 15

LOCATED IN
ACP-34000
CB2H

MODULE: 1794-1A16
BASE: 1794-TB3

LOCATED IN
ACP-34000



- 1 AC CIRCUIT, WHITE W/ ORANGE, WIRE INDICATES FOREIGN SOURCE OF POWER.
- 2 REFERENCE DRAWING JMP-201-7 FOR FIELD DEVICE INFORMATION. (ACP-34000)
- 3 WIRE NUMBERS IN PARENTHESES INDICATE AN ALIAS TAG THAT MAY STILL BE IN USE.
- 4 (X###) INDICATES OLD SYSTEM ADDRESS THAT CAN BE USED IN PLC LOGIC SEARCHES.

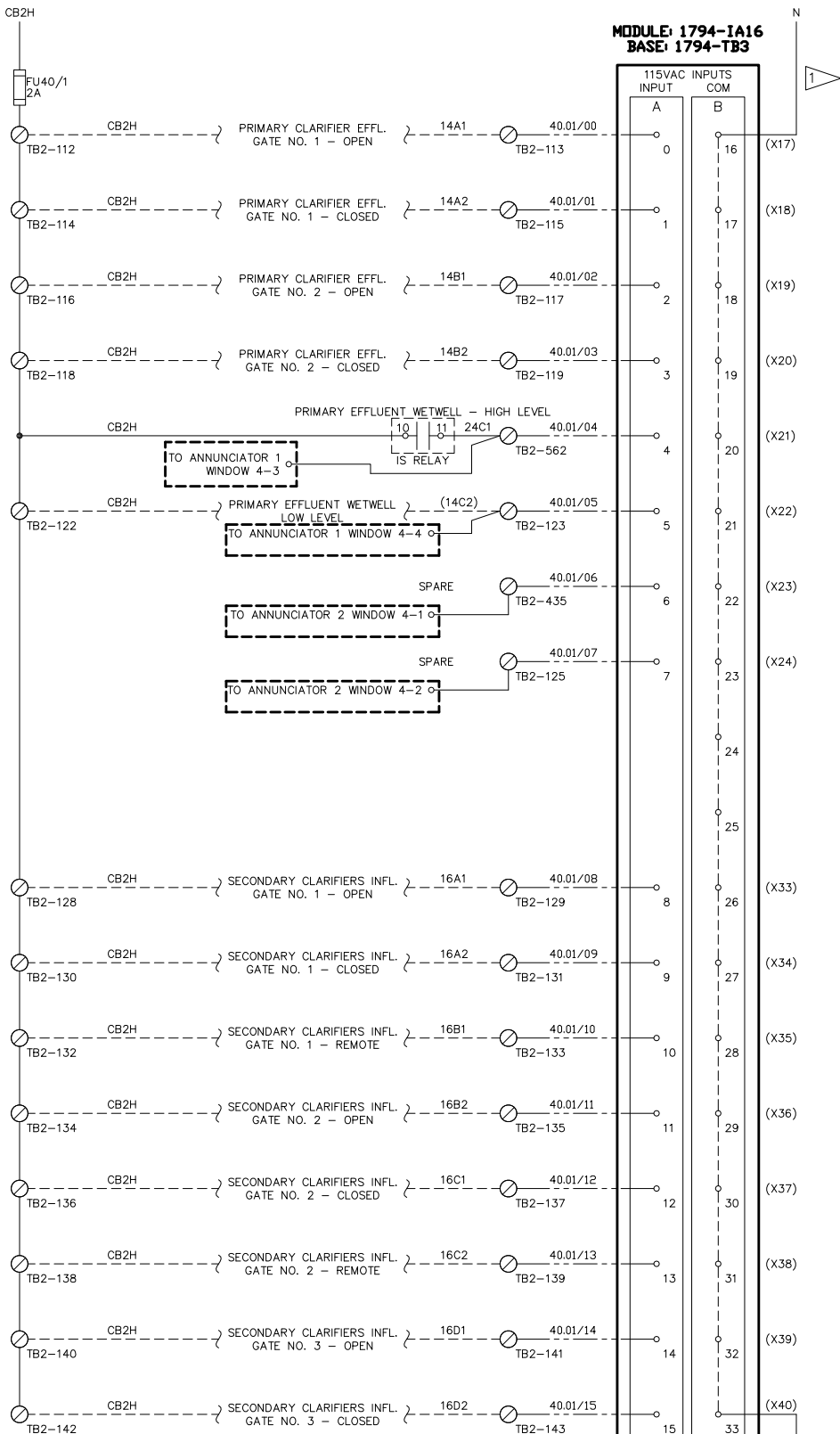
PLC2
NODE 40
SLOT 0

REV	2	SHEET	19
DRAWING NO.	647674E019		
SALES ORDER NUMBER	Q647674		
CONTROL SCHEMATIC			
115VAC DIGITAL INPUT - NODE 40, SLOT 0			
PLC2 CONTROL PANEL - ACP-34010			
POST POINT WWTP			
CITY OF BELLINGHAM, WA			
DESIGNED BY	DREW HANDY	DRAWN BY	NICHOLAS WALKER
CHECKED BY	NONE	SCALE	NONE
DATE	10/13/25		
PROCESS SOLUTIONS, INC. ARLINGTON, WASHINGTON			
THIS DRAWING IS SENT TO YOU SUBJECT TO RETURN UPON DEMAND, AND WITH THE UNDERSTANDING THAT IT IS NOT TO BE USED IN ANY WAY DETRIMENTAL TO OUR INTERESTS.			
ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.			

MODULE: 1794-1A16
BASE: 1794-TB3

PLC2
NODE 40
SLOT 1

01
02
03
04
05
06
07
08
09
10
11
12
13
14
15
16
17
18
19
20



- 1 AC CIRCUIT, WHITE W/ ORANGE, WIRE INDICATES FOREIGN SOURCE OF POWER.
- 2 REFERENCE DRAWING JWP-201-8A FOR FIELD DEVICE INFORMATION. (ACP-34000)
- 3 WIRE NUMBERS IN PARENTHESES INDICATE AN ALIAS TAG THAT MAY STILL BE IN USE.
- 4 (X###) INDICATES OLD SYSTEM ADDRESS THAT CAN BE USED IN PLC LOGIC SEARCHES.

NOTES:

PROCESS SOLUTIONS, INC.
ARLINGTON, WASHINGTON

THIS DRAWING IS SENT TO YOU SUBJECT TO RETURN UPON DEMAND,
AND WITH THE UNDERSTANDING THAT IT IS NOT TO BE USED IN
ANY WAY DETRIMENTAL TO OUR INTERESTS.
ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.

DESIGNED BY
DREW HANDY

DRAWN BY
NICHOLAS WALKER

CHECKED BY
NONE

SCALE
DATE 10/13/25

CONTROL SCHEMATIC

115VAC DIGITAL INPUT - NODE 40, SLOT 1

PLC2 CONTROL PANEL - ACP-34010

POST POINT WWTP

CITY OF BELLINGHAM, WA

DRAWING NO.

647674E020

SALES ORDER NUMBER

Q647674

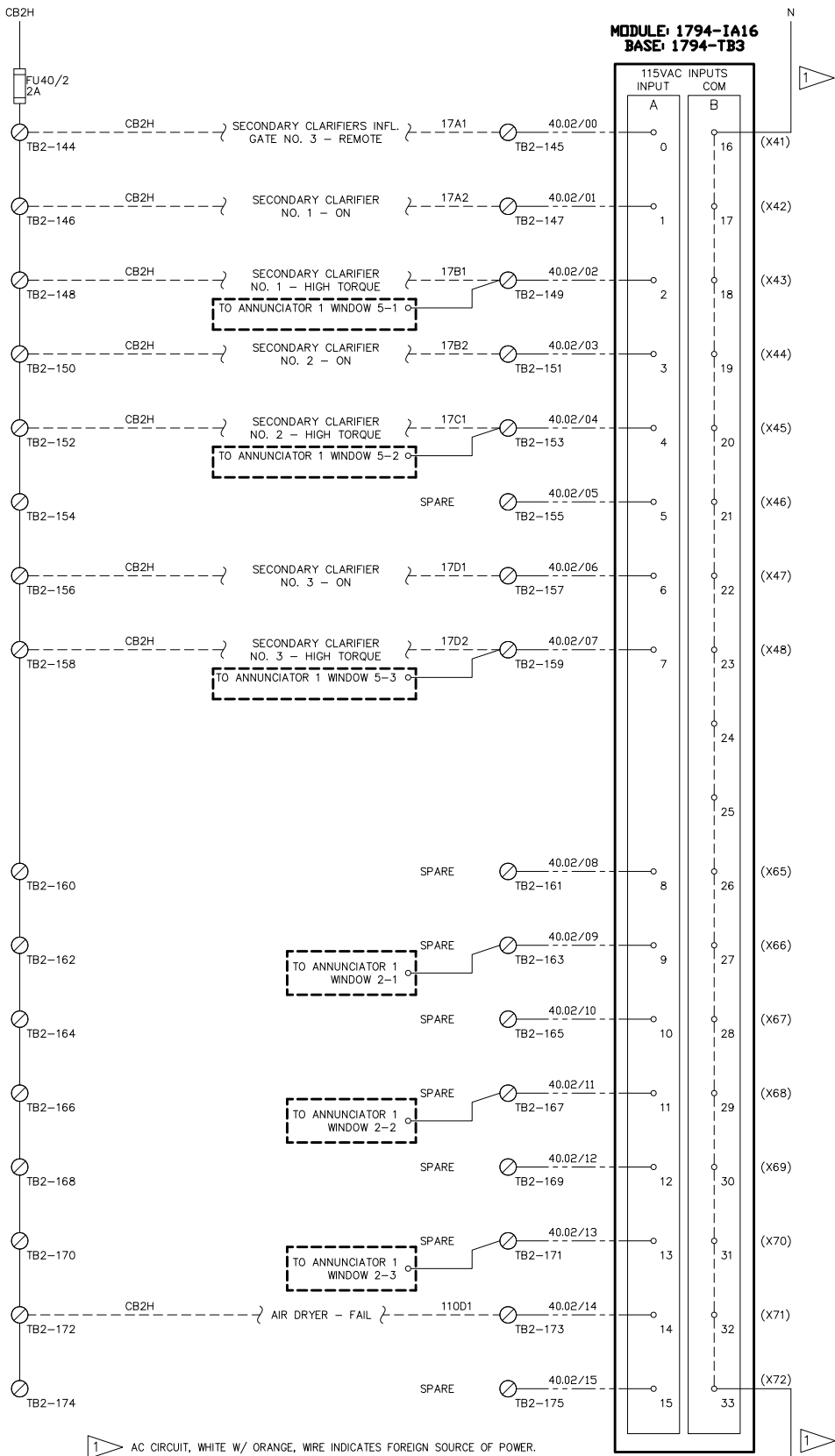
REV

2

SHEET

20

01
02
03
04
05
06
07
08
09
10
11
12
13
14
15
16
17
18
19
20



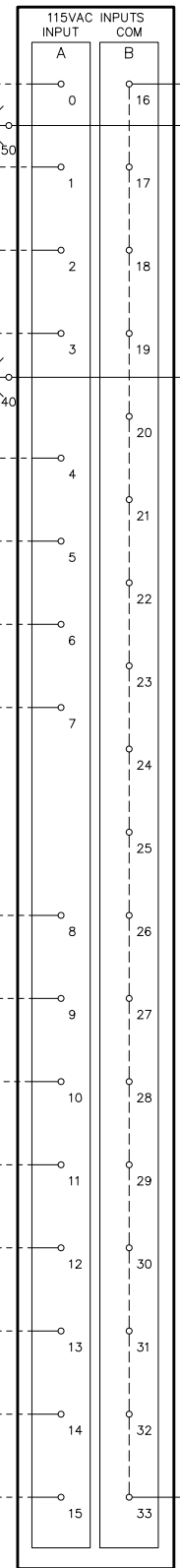
MODULE: 1794-1A16
BASE: 1794-TB3

PLC2
NODE 40
SLOT 2

- 1 AC CIRCUIT, WHITE W/ ORANGE, WIRE INDICATES FOREIGN SOURCE OF POWER.
- 2 REFERENCE DRAWING JWP-201-9 FOR FIELD DEVICE INFORMATION. (ACP-34000)
- 3 WIRE NUMBERS IN PARENTHESES INDICATE AN ALIAS TAG THAT MAY STILL BE IN USE.
- 4 (X###) INDICATES OLD SYSTEM ADDRESS THAT CAN BE USED IN PLC LOGIC SEARCHES.

REV	2	SHEET	21
DRAWING NO.	647674E021		
SALES ORDER NUMBER	Q647674		
CONTROL SCHEMATIC			
115VAC DIGITAL INPUT - NODE 40, SLOT 2			
PLC2 CONTROL PANEL - ACP-34010			
POST POINT WWTP			
CITY OF BELLINGHAM, WA			
DESIGNED BY	DREW HANDY	CHECKED BY	NONE
DRAWN BY	NICHOLAS WALKER	SCALE	
DATE	10/13/25		
PROCESS SOLUTIONS, INC.			
ARLINGTON, WASHINGTON			
THIS DRAWING IS SENT TO YOU SUBJECT TO RETURN UPON DEMAND, AND WITH THE UNDERSTANDING THAT IT IS NOT TO BE USED IN ANY WAY DETRIMENTAL TO OUR INTERESTS.			
ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.			

MODULE: 1794-1A16
BASE: 1794-TB3

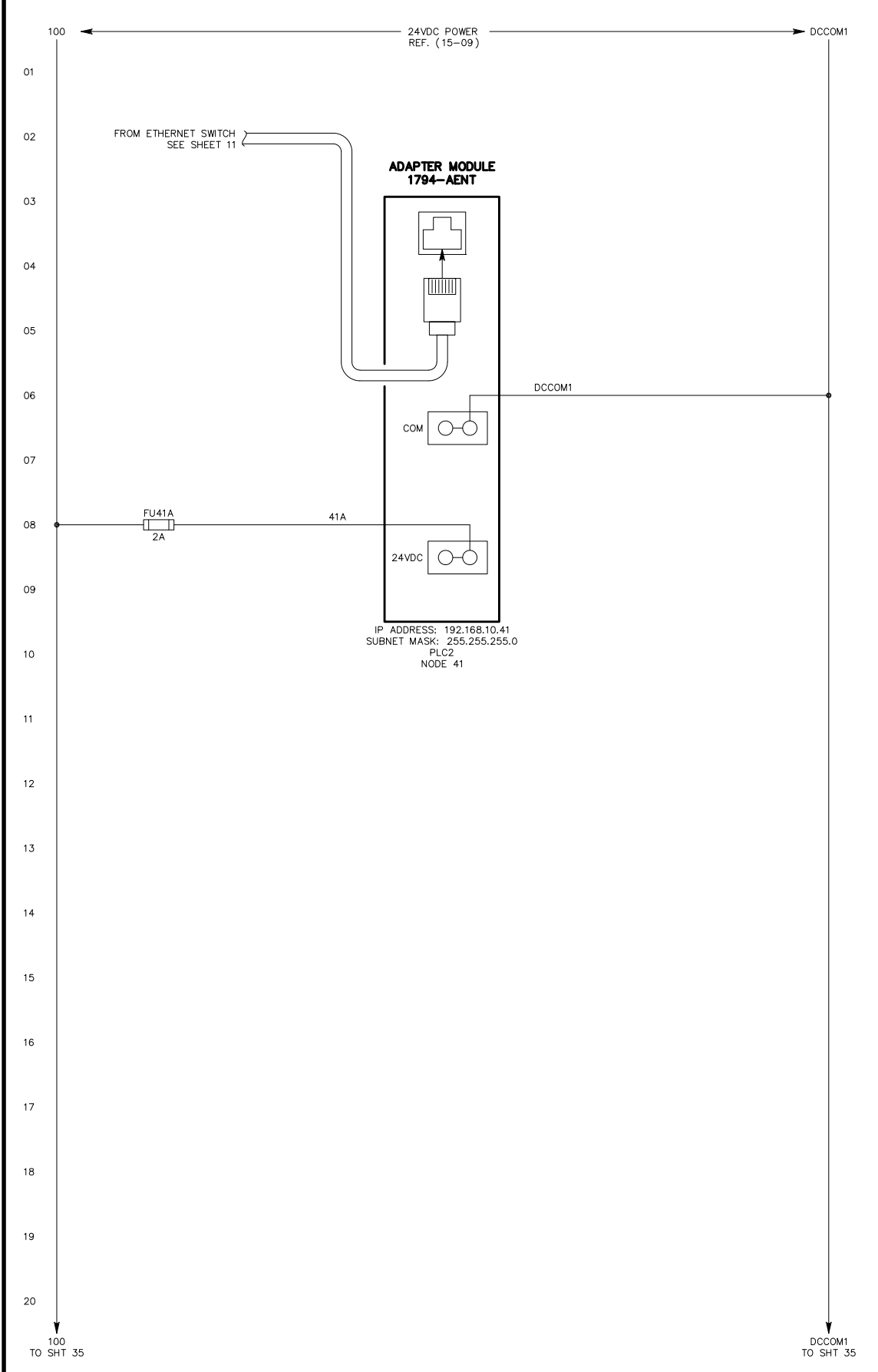


REV	2	SHEET	25
DRAWING NO.	647674E025	SALES ORDER NUMBER	Q647674
DESIGNED BY	DREW HANDY	CHECKED BY	NICHOLAS WALKER
DRAWN BY	NICHOLAS WALKER	SCALE	NONE
DATE	10/13/25		
CONTROL SCHEMATIC 115VAC DIGITAL INPUT - NODE 40, SLOT 6 PLC2 CONTROL PANEL - ACP-34010 POST POINT WWTP CITY OF BELLINGHAM, WA			
PROCESS SOLUTIONS, INC. ARLINGTON, WASHINGTON THIS DRAWING IS SENT TO YOU SUBJECT TO RETURN UPON DEMAND, AND WITH THE UNDERSTANDING THAT IT IS NOT TO BE USED IN ANY WAY DETRIMENTAL TO OUR INTERESTS. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.			

- 1 AC CIRCUIT, WHITE W/ ORANGE, WIRE INDICATES FOREIGN SOURCE OF POWER.
- 2 REFERENCE DRAWING JWP-201-16 FOR FIELD DEVICE INFORMATION. (ACP-34000)
- 3 WIRE NUMBERS IN PARENTHESES INDICATE AN ALIAS TAG THAT MAY STILL BE IN USE.
- 4 (X###) INDICATES OLD SYSTEM ADDRESS THAT CAN BE USED IN PLC LOGIC SEARCHES.

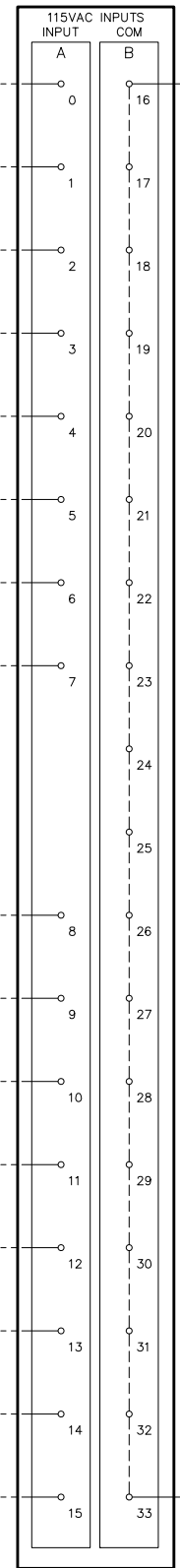
PLC2
NODE 40
SLOT 6

NOTES:



NOTES:	PROCESS SOLUTIONS, INC. ARLINGTON, WASHINGTON THIS DRAWING IS SENT TO YOU SUBJECT TO RETURN UPON DEMAND, AND WITH THE UNDERSTANDING THAT IT IS NOT TO BE USED IN ANY WAY DETRIMENTAL TO OUR INTERESTS. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.	DESIGNED BY	DREW HANDY	CONTROL SCHEMATIC CONTROLNET ADAPTER MODULE – NODE 41 PLC2 CONTROL PANEL – ACP–34010 POST POINT WWTP CITY OF BELLINGHAM, WA	REV	2
		DRAWN BY	NICHOLAS WALKER		DRAWING NO.	647674E029
		CHECKED BY			SALES ORDER NUMBER	Q647674
		SCALE	NONE			
		DATE	10/13/25			

**MODULE: 1794-1A16
BASE: 1794-TB3**



- 1 AC CIRCUIT, WHITE W/ ORANGE, WIRE INDICATES FOREIGN SOURCE OF POWER.
- 2 REFERENCE DRAWING JWP-201-22 FOR FIELD DEVICE INFORMATION. (ACP-34000)
- 3 WIRE NUMBERS IN PARENTHESES INDICATE AN ALIAS TAG THAT MAY STILL BE IN USE.
- 4 (X###) INDICATES OLD SYSTEM ADDRESS THAT CAN BE USED IN PLC LOGIC SEARCHES.

PLC2
NODE 41
SLOT 1

NOTES:

PROCESS SOLUTIONS, INC.
ARLINGTON, WASHINGTON

THIS DRAWING IS SENT TO YOU SUBJECT TO RETURN UPON DEMAND,
AND WITH THE UNDERSTANDING THAT IT IS NOT TO BE USED IN
ANY WAY DETRIMENTAL TO OUR INTERESTS.
ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.

DESIGNED BY
DREW HANDY
DRAWN BY
NICHOLAS WALKER
CHECKED BY
SCALE
NONE
DATE
10/13/25

CONTROL SCHEMATIC
115VAC DIGITAL INPUT - NODE 41, SLOT 1
PLC2 CONTROL PANEL - ACP-34010
POST POINT WWTP
CITY OF BELLINGHAM, WA

DRAWING NO.

647674E031

SALES ORDER NUMBER

Q647674

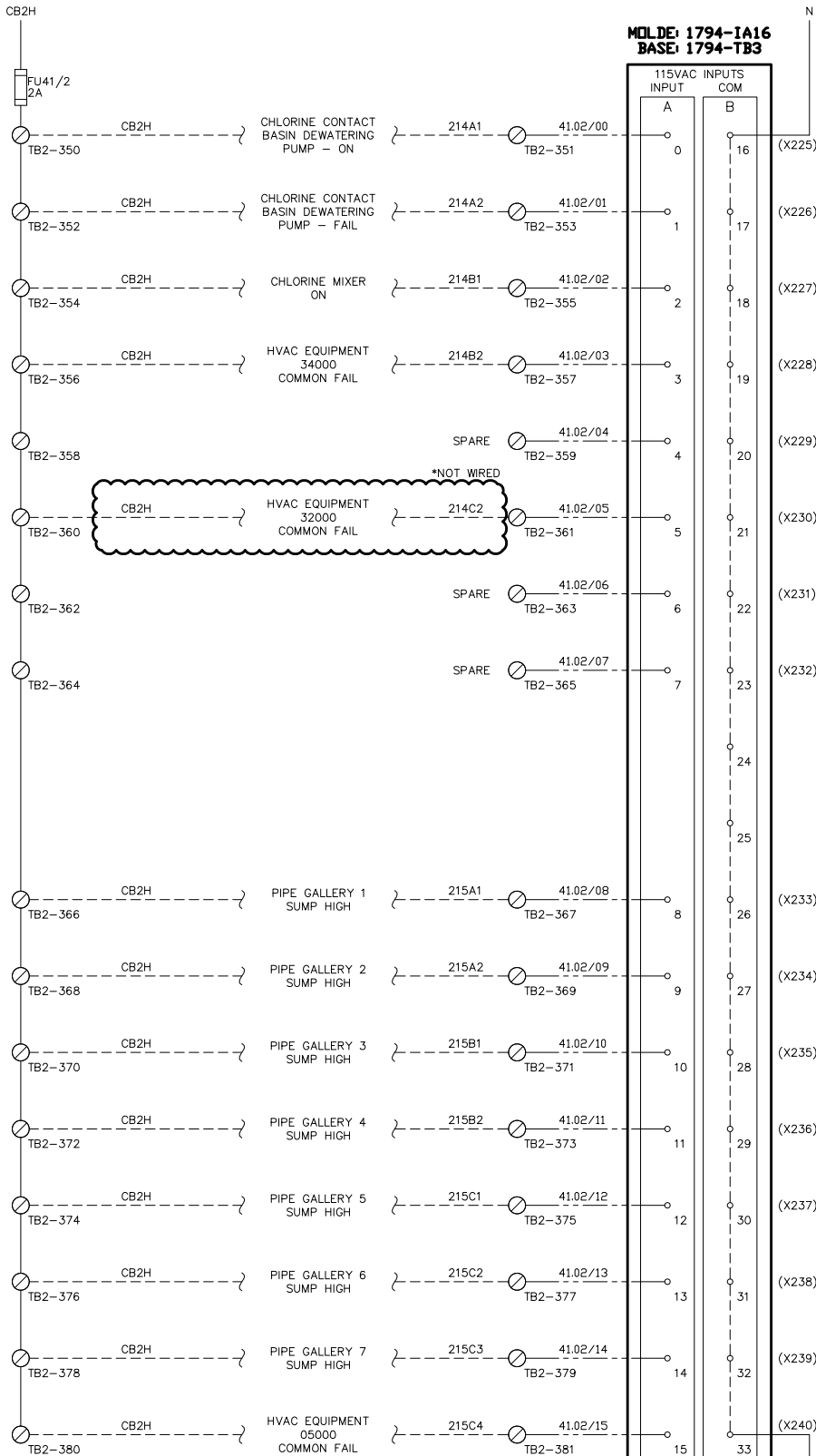
REV

2

SHEET

31

01
02
03
04
05
06
07
08
09
10
11
12
13
14
15
16
17
18
19
20

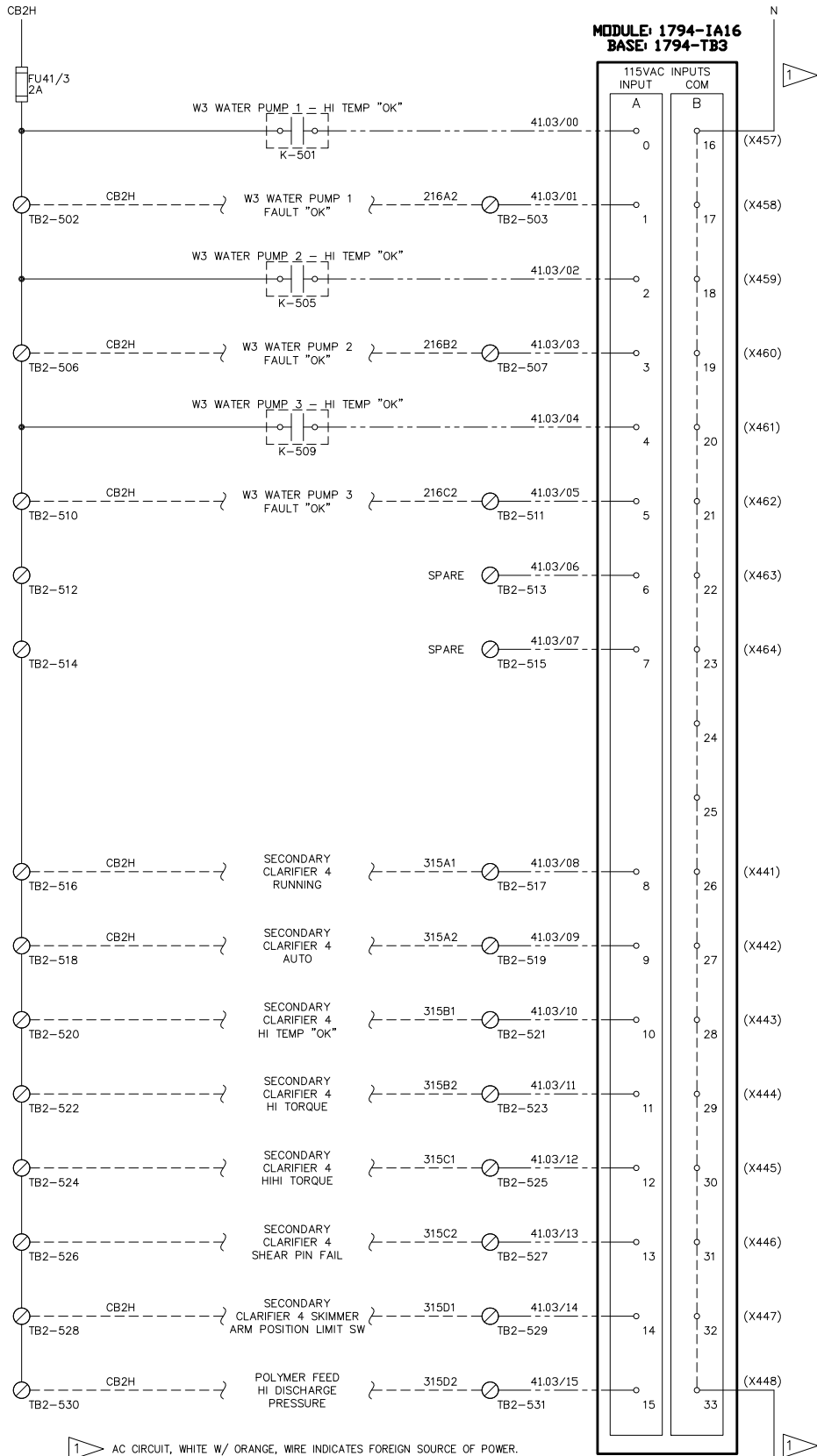


- 1 AC CIRCUIT, WHITE W/ ORANGE, WIRE INDICATES FOREIGN SOURCE OF POWER.
- 2 REFERENCE DRAWING JWP-201-24 FOR FIELD DEVICE INFORMATION. (ACP-34000)
- 3 WIRE NUMBERS IN PARENTHESES INDICATE AN ALIAS TAG THAT MAY STILL BE IN USE.
- 4 (X###) INDICATES OLD SYSTEM ADDRESS THAT CAN BE USED IN PLC LOGIC SEARCHES.

MOLDE-1794-1A16
BASE: 1794-TB3

REV	2	SHEET	32
DRAWING NO.	647674E032		
SALES ORDER NUMBER	Q647674		
DESIGNED BY	DREW HANDY		
DRAWN BY	NICHOLAS WALKER		
CHECKED BY	NONE		
SCALE	NONE		
DATE	10/13/25		
NOTES:	PROCESS SOLUTIONS, INC. ARLINGTON, WASHINGTON THIS DRAWING IS SENT TO YOU SUBJECT TO RETURN UPON DEMAND, AND WITH THE UNDERSTANDING THAT IT IS NOT TO BE USED IN ANY WAY DETRIMENTAL TO OUR INTERESTS. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.		
CONTROL SCHEMATIC	115VAC DIGITAL INPUT - NODE 41, SLOT 2		
PLC2 CONTROL PANEL - ACP-34010	POST POINT WWTP		
CITY OF BELLINGHAM, WA			

01
02
03
04
05
06
07
08
09
10
11
12
13
14
15
16
17
18
19
20



MODULE: 1794-1A16
BASE: 1794-TB3

PLC2
NODE 41
SLOT 3

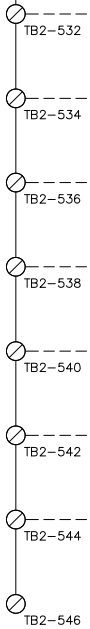
- 1 AC CIRCUIT, WHITE W/ ORANGE, WIRE INDICATES FOREIGN SOURCE OF POWER.
- 2 REFERENCE DRAWING JWP-201-24 FOR FIELD DEVICE INFORMATION. (ACP-34000)
- 3 WIRE NUMBERS IN PARENTHESES INDICATE AN ALIAS TAG THAT MAY STILL BE IN USE.
- 4 (X###) INDICATES OLD SYSTEM ADDRESS THAT CAN BE USED IN PLC LOGIC SEARCHES.

REV	2	SHEET	33
DRAWING NO.	647674E033		
SALES ORDER NUMBER	Q647674		
CONTROL SCHEMATIC			
115VAC DIGITAL INPUT - NODE 41, SLOT 3			
PLC2 CONTROL PANEL - ACP-34010			
POST POINT WWTP			
CITY OF BELLINGHAM, WA			
DESIGNED BY	DREW HANDY	DRAWN BY	NICHOLAS WALKER
CHECKED BY	NICHOLAS WALKER	SCALE	NONE
DATE	10/13/25		
PROCESS SOLUTIONS, INC. ARLINGTON, WASHINGTON			
THIS DRAWING IS SENT TO YOU SUBJECT TO RETURN UPON DEMAND, AND WITH THE UNDERSTANDING THAT IT IS NOT TO BE USED IN ANY WAY DETRIMENTAL TO OUR INTERESTS.			
ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.			

01
02
03
04
05
06
07
08
09
10
11
12
13
14
15
16
17
18
19
20



CB2H



CB2H

SECONDARY CLARIFIER NO. 4
RAS VALVE FULL OPEN

SECONDARY CLARIFIER NO. 4
RAS VALVE FULL CLOSED

SECONDARY CLARIFIER NO. 4
RAS VALVE REMOTE

POLYMER FEED SYSTEM
REMOTE

POLYMER FEED SYSTEM
RUNNING

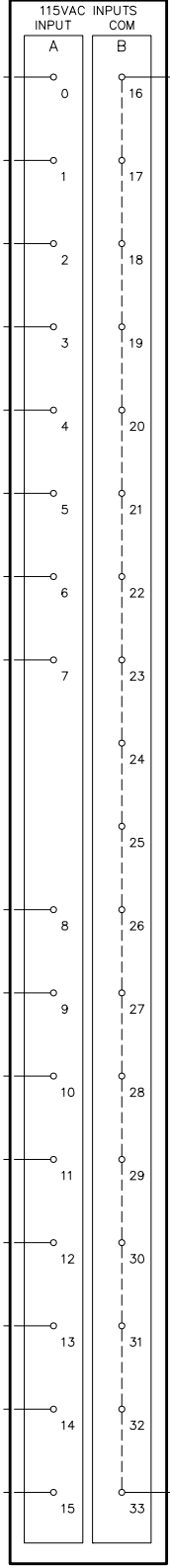
POLYMER FEED SYSTEM
FAILURE

POLYMER FEED SYSTEM
LOW FLOW



FLEX I/O 1794-IA16

MODULE 1794-IA16
BASE 1794-TB3



N

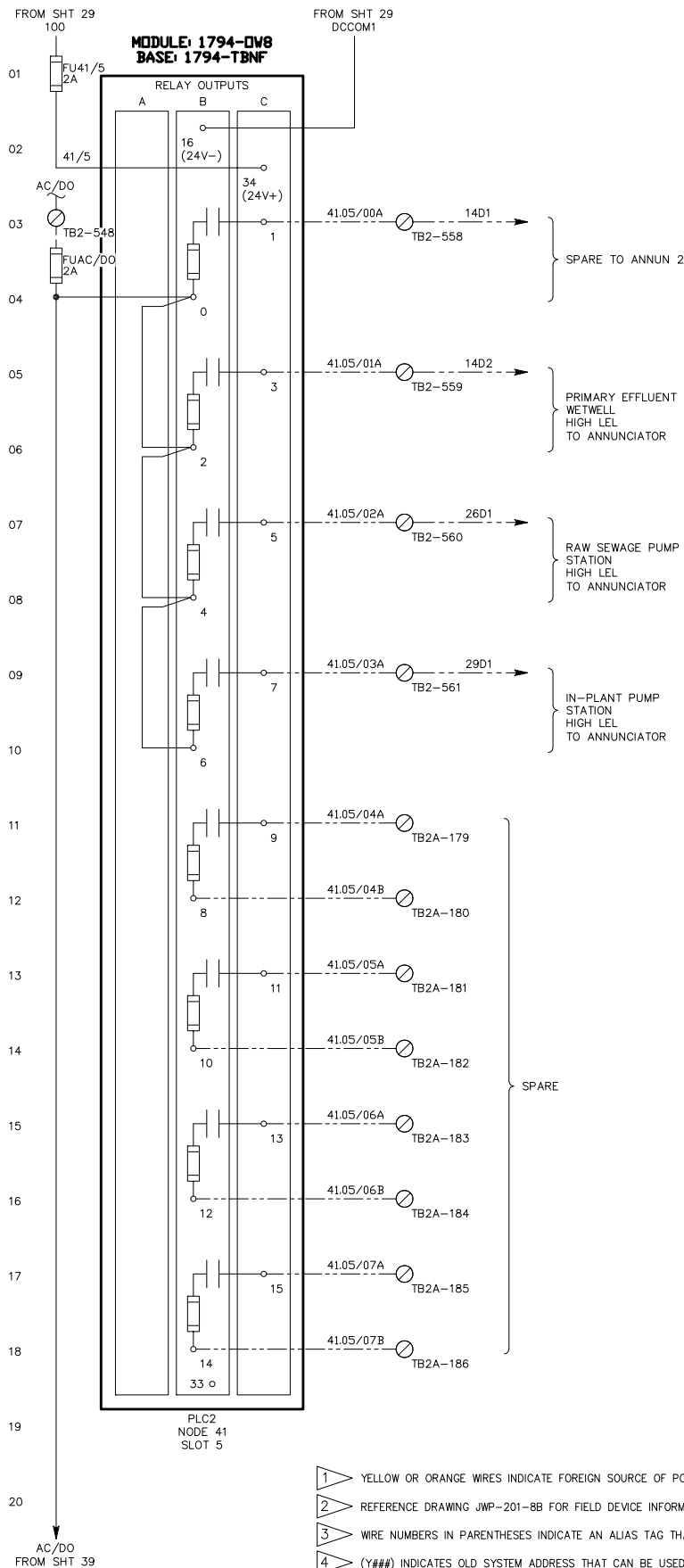


TO SHT 42

- 1 AC CIRCUIT, WHITE W/ ORANGE, WIRE INDICATES FOREIGN SOURCE OF POWER.
- 2 REFERENCE DRAWING JWP-201-24B FOR FIELD DEVICE INFORMATION. (ACP-34000)
- 3 WIRE NUMBERS IN PARENTHESES INDICATE AN ALIAS TAG THAT MAY STILL BE IN USE.
- 4 (X###) INDICATES OLD SYSTEM ADDRESS THAT CAN BE USED IN PLC LOGIC SEARCHES.

PLC2
NODE 41
SLOT 4

REV	3	SHEET	34
DRAWING NO.	647674E034		
SALES ORDER NUMBER	Q647674		
CONTROL SCHEMATIC			
115VAC DIGITAL INPUT - NODE 41, SLOT 4			
PLC2 CONTROL PANEL - ACP-34010			
POST POINT WWTP			
CITY OF BELLINGHAM, WA			
DESIGNED BY	DREW HANDY	CHECKED BY	NICHOLAS WALKER
DRAWN BY	NICHOLAS WALKER	SCALE	NONE
DATE	10/13/25		
PROCESS SOLUTIONS, INC. ARLINGTON, WASHINGTON			
THIS DRAWING IS SENT TO YOU SUBJECT TO RETURN UPON DEMAND, AND WITH THE UNDERSTANDING THAT IT IS NOT TO BE USED IN ANY WAY DETRIMENTAL TO OUR INTERESTS.			
ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.			



- 1 YELLOW OR ORANGE WIRES INDICATE FOREIGN SOURCE OF POWER.
- 2 REFERENCE DRAWING JWP-201-BB FOR FIELD DEVICE INFORMATION. (ACP-34000)
- 3 WIRE NUMBERS IN PARENTHESES INDICATE AN ALIAS TAG THAT MAY STILL BE IN USE.
- 4 (Y###) INDICATES OLD SYSTEM ADDRESS THAT CAN BE USED IN PLC LOGIC SEARCHES.

NOTES:

PROCESS SOLUTIONS, INC.
ARLINGTON, WASHINGTON

THIS DRAWING IS SENT TO YOU SUBJECT TO RETURN UPON DEMAND,
AND WITH THE UNDERSTANDING THAT IT IS NOT TO BE USED IN
ANY WAY DETRIMENTAL TO OUR INTERESTS.

ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.

DESIGNED BY
DREW HANDY

DRAWN BY
NICHOLAS WALKER

CHECKED BY

SCALE
NONE

DATE
10/13/25

CONTROL SCHEMATIC

RELAY OUTPUT - NODE 41, SLOT 5

PLC2 CONTROL PANEL - ACP-34010

POST POINT WWTP

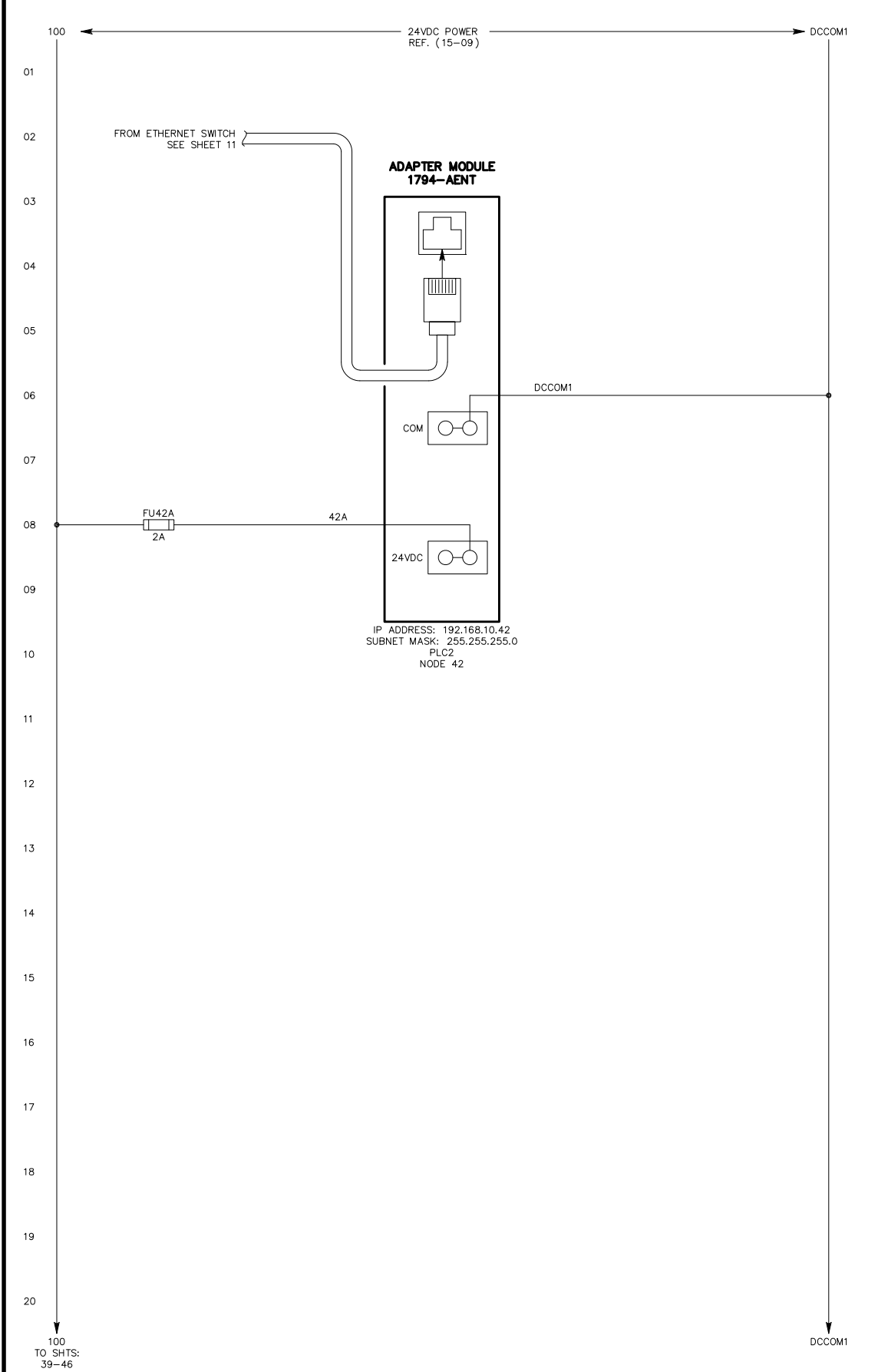
CITY OF BELLINGHAM, WA

DRAWING NO.
647674E035

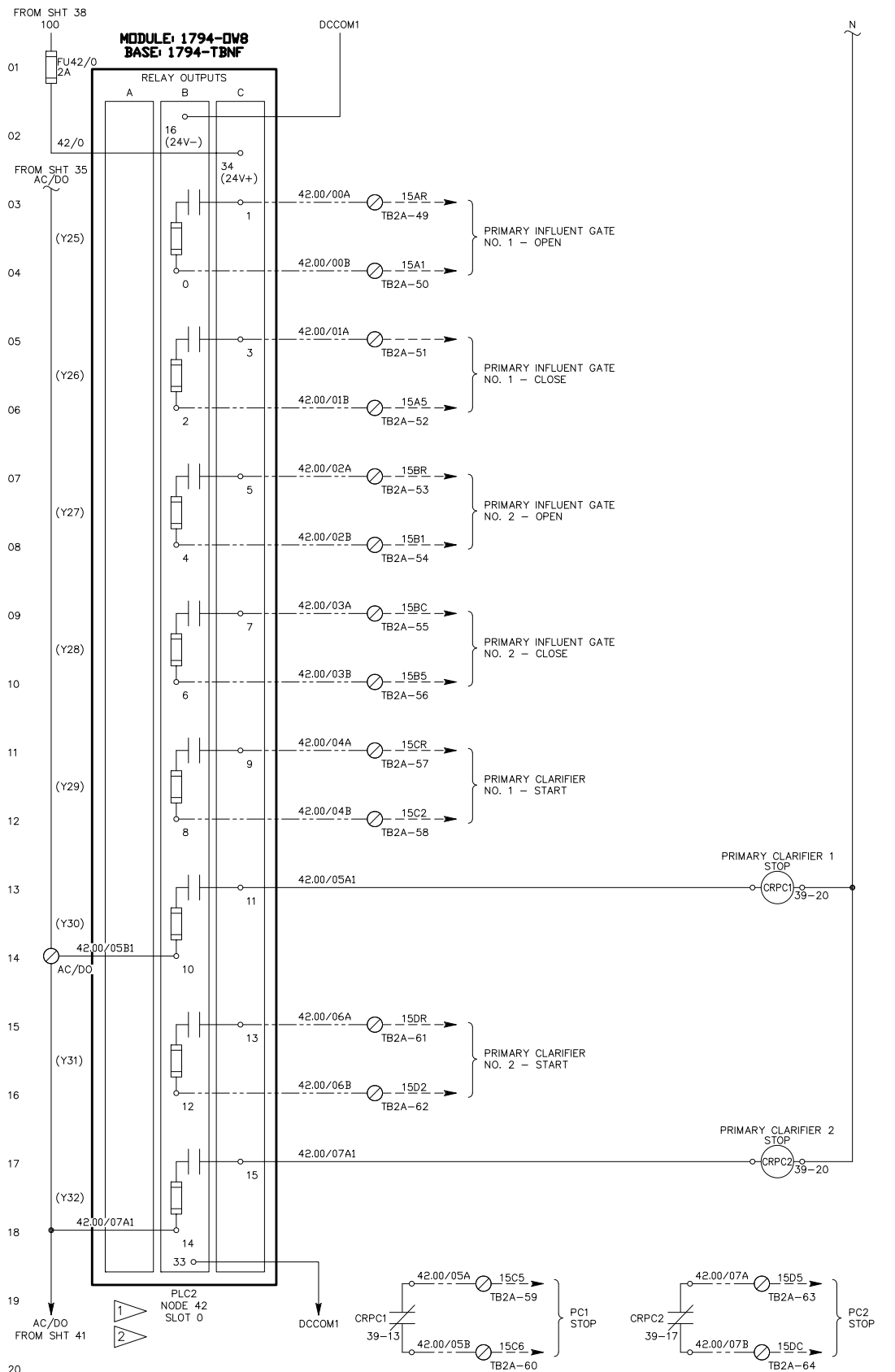
REV
3

SHEET
35

SALES ORDER NUMBER
Q647674



NOTES:	PROCESS SOLUTIONS, INC.				CONTROL SCHEMATIC				REV
	ARLINGTON, WASHINGTON				CONTROLNET ADAPTER MODULE – NODE 42				2
	THIS DRAWING IS SENT TO YOU SUBJECT TO RETURN UPON DEMAND, AND WITH THE UNDERSTANDING THAT IT IS NOT TO BE USED IN ANY WAY DETRIMENTAL TO OUR INTERESTS. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.				PLC2 CONTROL PANEL – ACP–34010				SHEET
					POST POINT WWTP				
					CITY OF BELLINGHAM, WA				
					DRAWING NO.				
					647674E038				
					SALES ORDER NUMBER				
					Q647674				
								38	



NOTES:

DESIGNED BY
DREW HANDY

DRAWN BY
NICHOLAS WALKER

CHECKED BY

SCALE

DATE

PROCESS SOLUTIONS, INC.
ARLINGTON, WASHINGTON

THIS DRAWING IS SENT TO YOU SUBJECT TO RETURN UPON DEMAND,
AND WITH THE UNDERSTANDING THAT IT IS NOT TO BE USED IN
ANY WAY DEPREMIAL TO OUR INTERESTS.
ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.

DRAWING NO.

647674E039

REV

2

SHEET

39

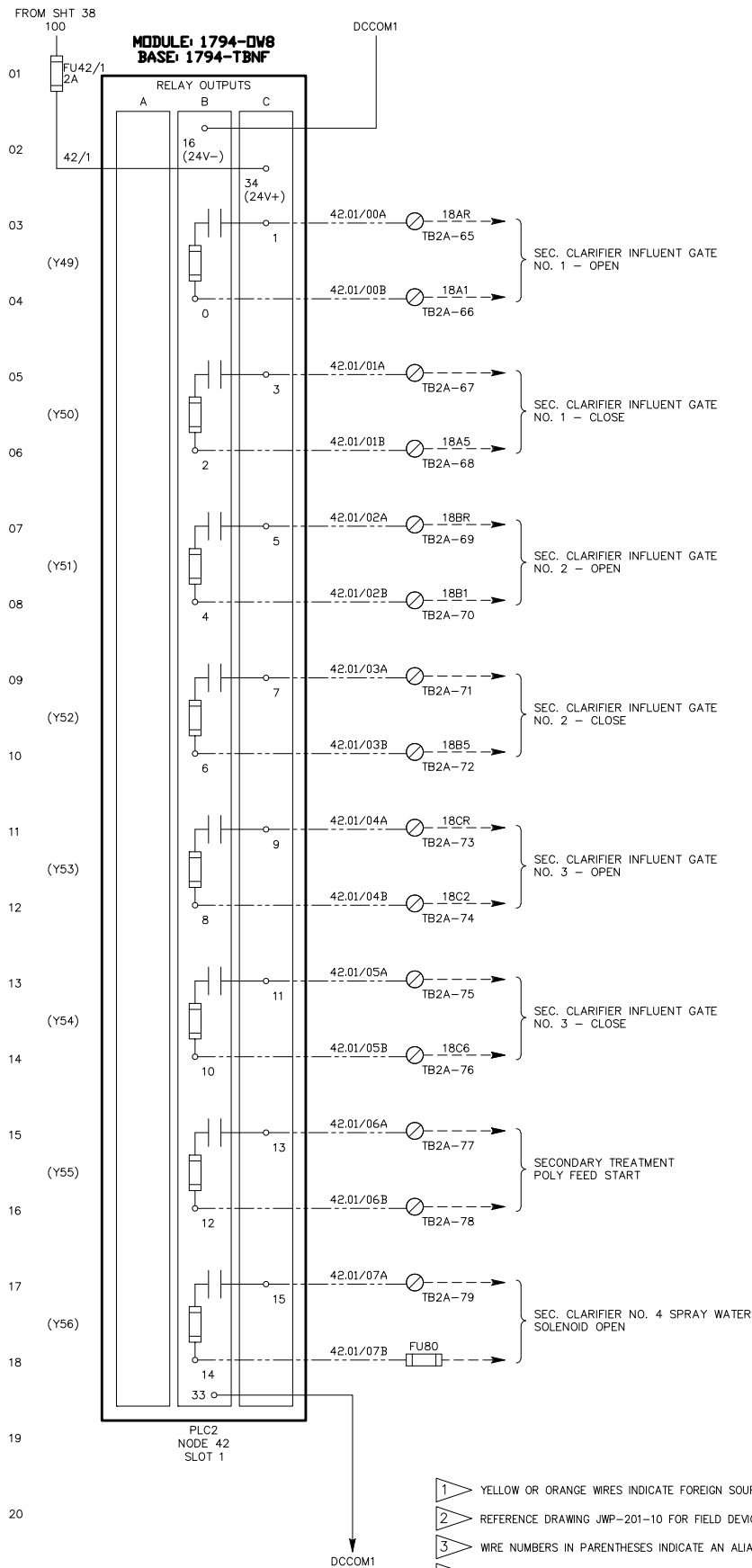
CONTROL SCHEMATIC

RELAY OUTPUT - NODE 42, SLOT 0

PLC2 CONTROL PANEL - ACP-34010

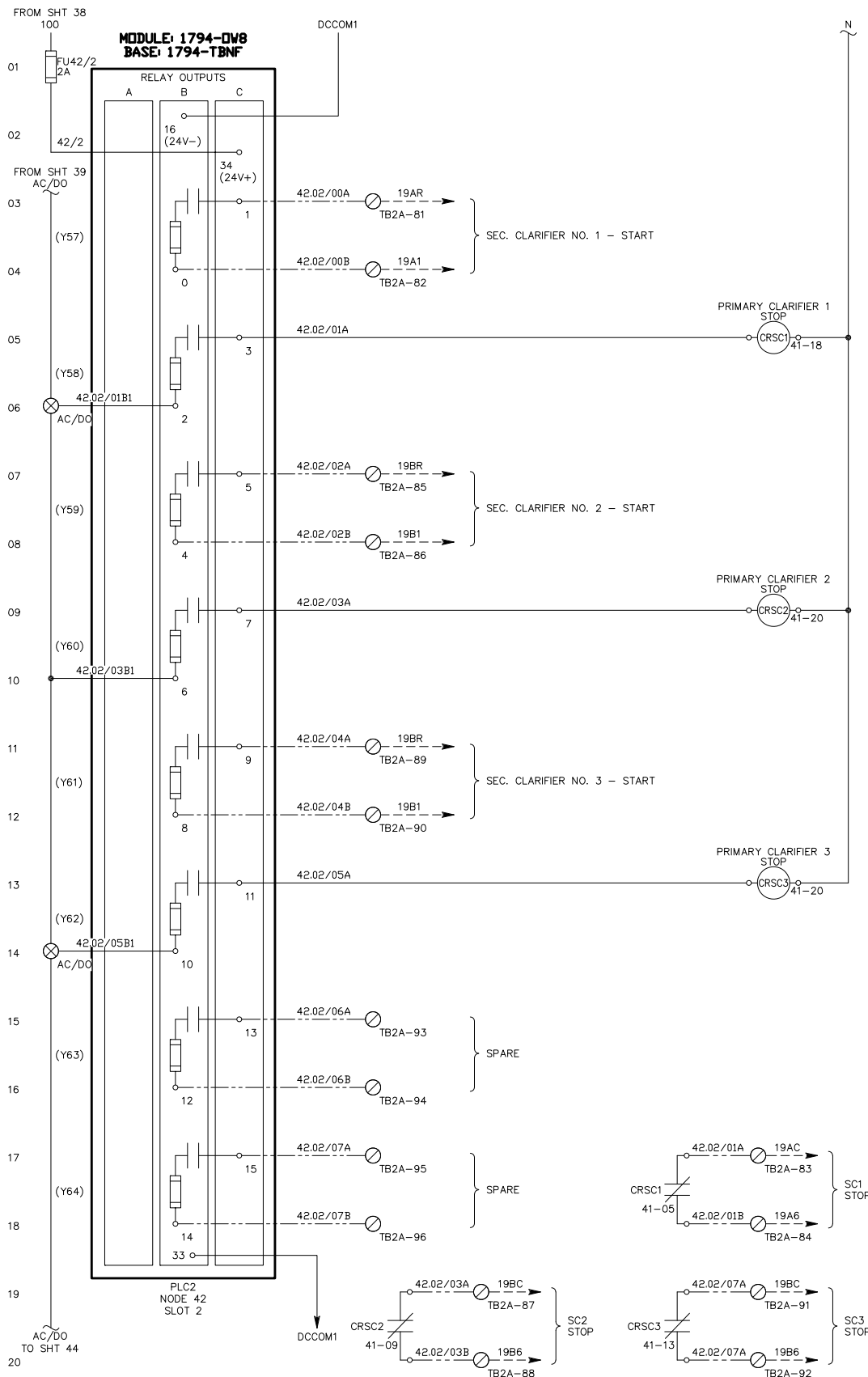
POST POINT WWTP

CITY OF BELLINGHAM, WA



- 1 YELLOW OR ORANGE WIRES INDICATE FOREIGN SOURCE OF POWER.
- 2 REFERENCE DRAWING JWP-201-10 FOR FIELD DEVICE INFORMATION. (ACP-34000)
- 3 WIRE NUMBERS IN PARENTHESES INDICATE AN ALIAS TAG THAT MAY STILL BE IN USE.
- 4 (Y###) INDICATES OLD SYSTEM ADDRESS THAT CAN BE USED IN PLC LOGIC SEARCHES.

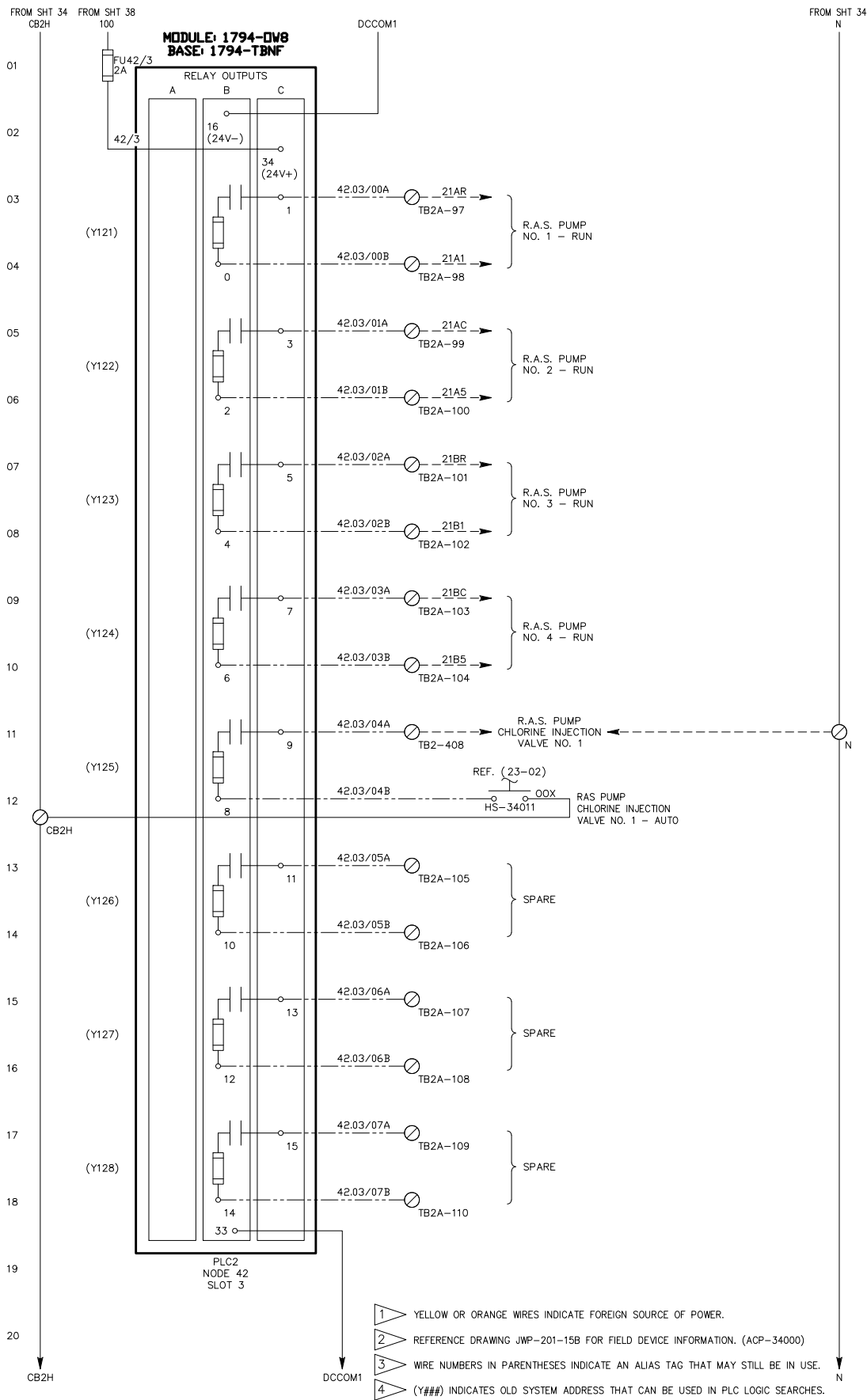
REV	2	SHEET	40
DRAWING NO.	647674E040	SALES ORDER NUMBER	Q647674
CONTROL SCHEMATIC RELAY OUTPUT - NODE 42, SLOT 1 PLC2 CONTROL PANEL - ACP-34010 POST POINT WWTP CITY OF BELLINGHAM, WA			
DESIGNED BY	DREW HANDY	CHECKED BY	NONE
DRAWN BY	NICHOLAS WALKER	SCALE	10/13/25
PROCESS SOLUTIONS, INC. ARLINGTON, WASHINGTON THIS DRAWING IS SENT TO YOU SUBJECT TO RETURN UPON DEMAND, AND WITH THE UNDERSTANDING THAT IT IS NOT TO BE USED IN ANY WAY DETRIMENTAL TO OUR INTERESTS. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.			
NOTES:			



1 YELLOW OR ORANGE WIRES INDICATE FOREIGN SOURCE OF POWER.
2 REFERENCE DRAWING JWP-201-11 FOR FIELD DEVICE INFORMATION. (ACP-34000)

3 WIRE NUMBERS IN PARENTHESES INDICATE AN ALIAS TAG THAT MAY STILL BE IN USE.
4 (Y###) INDICATES OLD SYSTEM ADDRESS THAT CAN BE USED IN PLC LOGIC SEARCHES.

REV	2	SHEET	41
DRAWING NO.	647674E041	SALES ORDER NUMBER	Q647674
CONTROL SCHEMATIC RELAY OUTPUT - NODE 42, SLOT 2 PLC2 CONTROL PANEL - ACP-34010 POST POINT WWTP			
CITY OF BELLINGHAM, WA			
DESIGNED BY	DREW HANDY	CHECKED BY	NONE
DRAWN BY	NICHOLAS WALKER	SCALE	10/13/25
DATE			
PROCESS SOLUTIONS, INC. ARLINGTON, WASHINGTON THIS DRAWING IS SENT TO YOU SUBJECT TO RETURN UPON DEMAND, AND WITH THE UNDERSTANDING THAT IT IS NOT TO BE USED IN ANY WAY DEPENDENT TO OUR INTERESTS. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.			
NOTES:			



REV	2	DRAWING NO. 647674E042	SALES ORDER NUMBER Q647674
SHEET	42		

CONTROL SCHEMATIC
RELAY OUTPUT - NODE 42, SLOT 3
PLC2 CONTROL PANEL - ACP-34010
POST POINT WWTP
CITY OF BELLINGHAM, WA

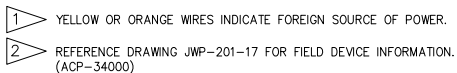
DESIGNED BY DREW HANDY	CHECKED BY NICHOLAS WALKER	SCALE NONE	DATE 10/13/25
---------------------------	-------------------------------	---------------	------------------

PROCESS SOLUTIONS, INC.
ARLINGTON, WASHINGTON

THIS DRAWING IS SENT TO YOU SUBJECT TO RETURN UPON DEMAND,
AND WITH THE UNDERSTANDING THAT IT IS NOT TO BE USED IN
ANY WAY DETRIMENTAL TO OUR INTERESTS.
ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.

NOTES:

- 1 YELLOW OR ORANGE WIRES INDICATE FOREIGN SOURCE OF POWER.
- 2 REFERENCE DRAWING JWP-201-15B FOR FIELD DEVICE INFORMATION. (ACP-34000)
- 3 WIRE NUMBERS IN PARENTHESES INDICATE AN ALIAS TAG THAT MAY STILL BE IN USE.
- 4 (Y###) INDICATES OLD SYSTEM ADDRESS THAT CAN BE USED IN PLC LOGIC SEARCHES.



NOTES:

DESIGNED BY

PROCESS SOLUTIONS, INC.
ARLINGTON, WASHINGTON

THIS DRAWING IS SENT TO YOU SUBJECT TO RETURN UPON DEMAND,
AND WITH THE UNDERSTANDING THAT IT IS NOT TO BE USED IN
ANY WAY DETRIMENTAL TO OUR INTERESTS.

ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.

CONTROL SCHEMATIC

RELAY OUTPUT - NODE 42, SLOT 4

CONTROL PANEL - AC

CITY OF BELLINGHAM

DRAWING NO.

647674E043

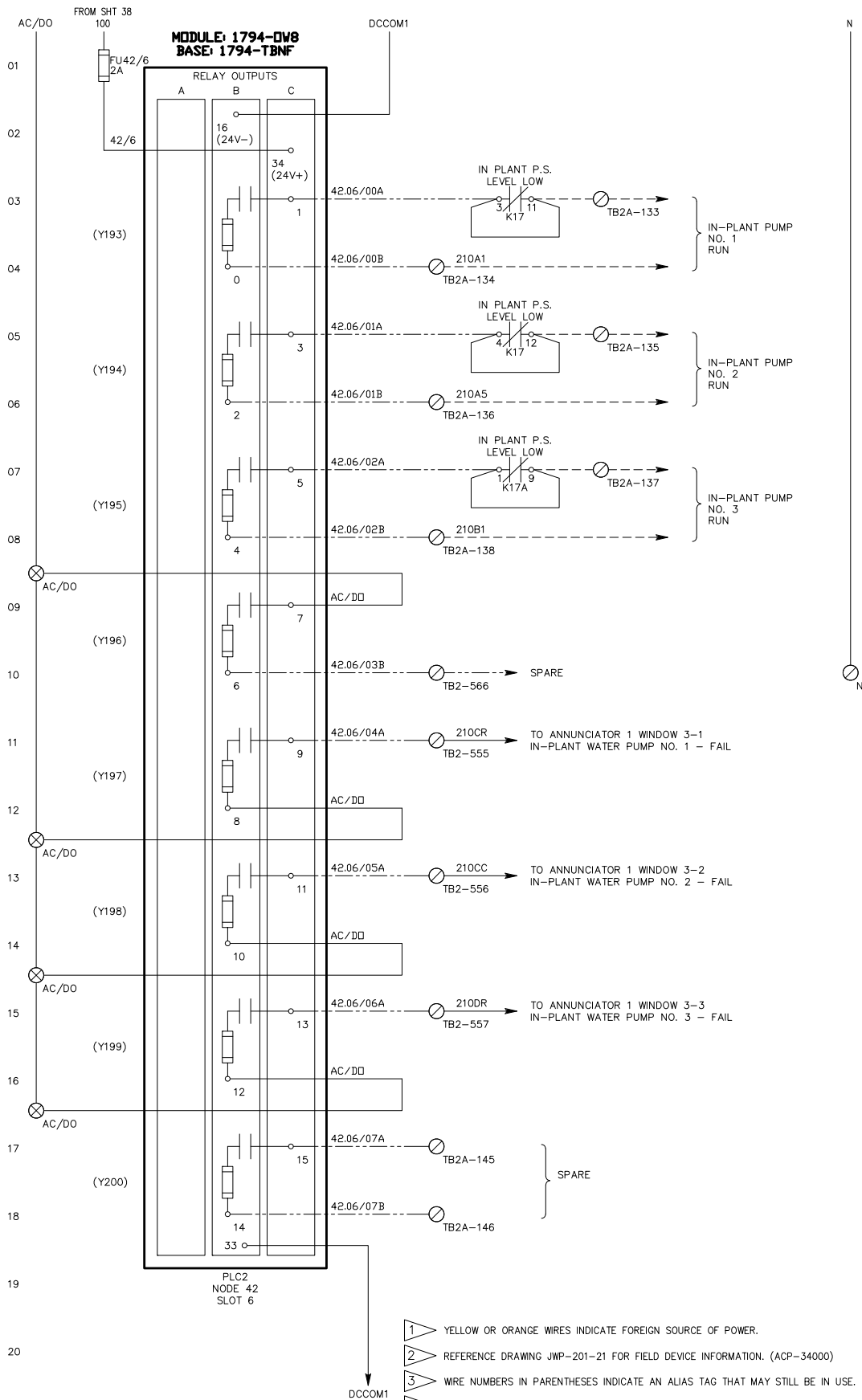
SALES ORDER NUMBER

TABLE A

REV

3

SHEET



- 1 YELLOW OR ORANGE WIRES INDICATE FOREIGN SOURCE OF POWER.
- 2 REFERENCE DRAWING JWP-201-21 FOR FIELD DEVICE INFORMATION. (ACP-34000)
- 3 WIRE NUMBERS IN PARENTHESES INDICATE AN ALIAS TAG THAT MAY STILL BE IN USE.
- 4 (Y###) INDICATES OLD SYSTEM ADDRESS THAT CAN BE USED IN PLC LOGIC SEARCHES.

NOTES:

PROCESS SOLUTIONS, INC.
ARLINGTON, WASHINGTON

THIS DRAWING IS SENT TO YOU SUBJECT TO RETURN UPON DEMAND,
AND WITH THE UNDERSTANDING THAT IT IS NOT TO BE USED IN
ANY WAY DETRIMENTAL TO OUR INTERESTS.

ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.

DESIGNED BY
DREW HANDY

DRAWN BY
NICHOLAS WALKER

CHECKED BY

SCALE
NONE

DATE
10/13/25

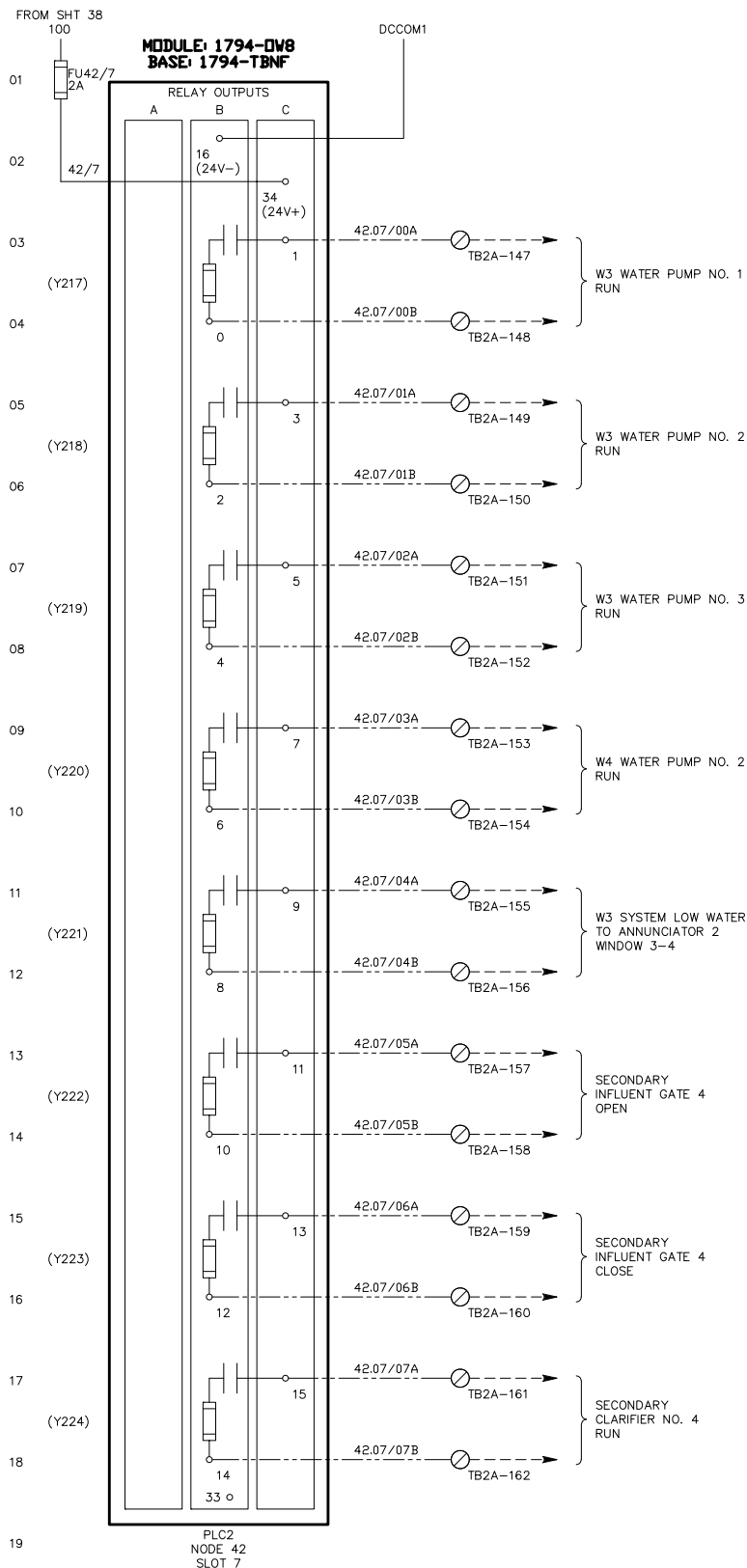
CONTROL SCHEMATIC
RELAY OUTPUT - NODE 42, SLOT 6
PLC2 CONTROL PANEL - ACP-34010
POST POINT WWTP
CITY OF BELLINGHAM, WA

DRAWING NO.
647674E045

REV
2

SHEET
45

SALES ORDER NUMBER
Q647674



- 1 YELLOW OR ORANGE WIRES INDICATE FOREIGN SOURCE OF POWER.
- 2 REFERENCE DRAWING JWP-201-23 FOR FIELD DEVICE INFORMATION. (ACP-34000)
- 3 WIRE NUMBERS IN PARENTHESES INDICATE AN ALIAS TAG THAT MAY STILL BE IN USE.
- 4 (Y###) INDICATES OLD SYSTEM ADDRESS THAT CAN BE USED IN PLC LOGIC SEARCHES.

NOTES:

PROCESS SOLUTIONS, INC.
ARLINGTON, WASHINGTON

THIS DRAWING IS SENT TO YOU SUBJECT TO RETURN UPON DEMAND,
AND WITH THE UNDERSTANDING THAT IT IS NOT TO BE USED IN
ANY WAY DETRIMENTAL TO OUR INTERESTS.

ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.

DESIGNED BY
DREW HANDY

DRAWN BY
NICHOLAS WALKER

CHECKED BY

SCALE
NONE

DATE
10/13/25

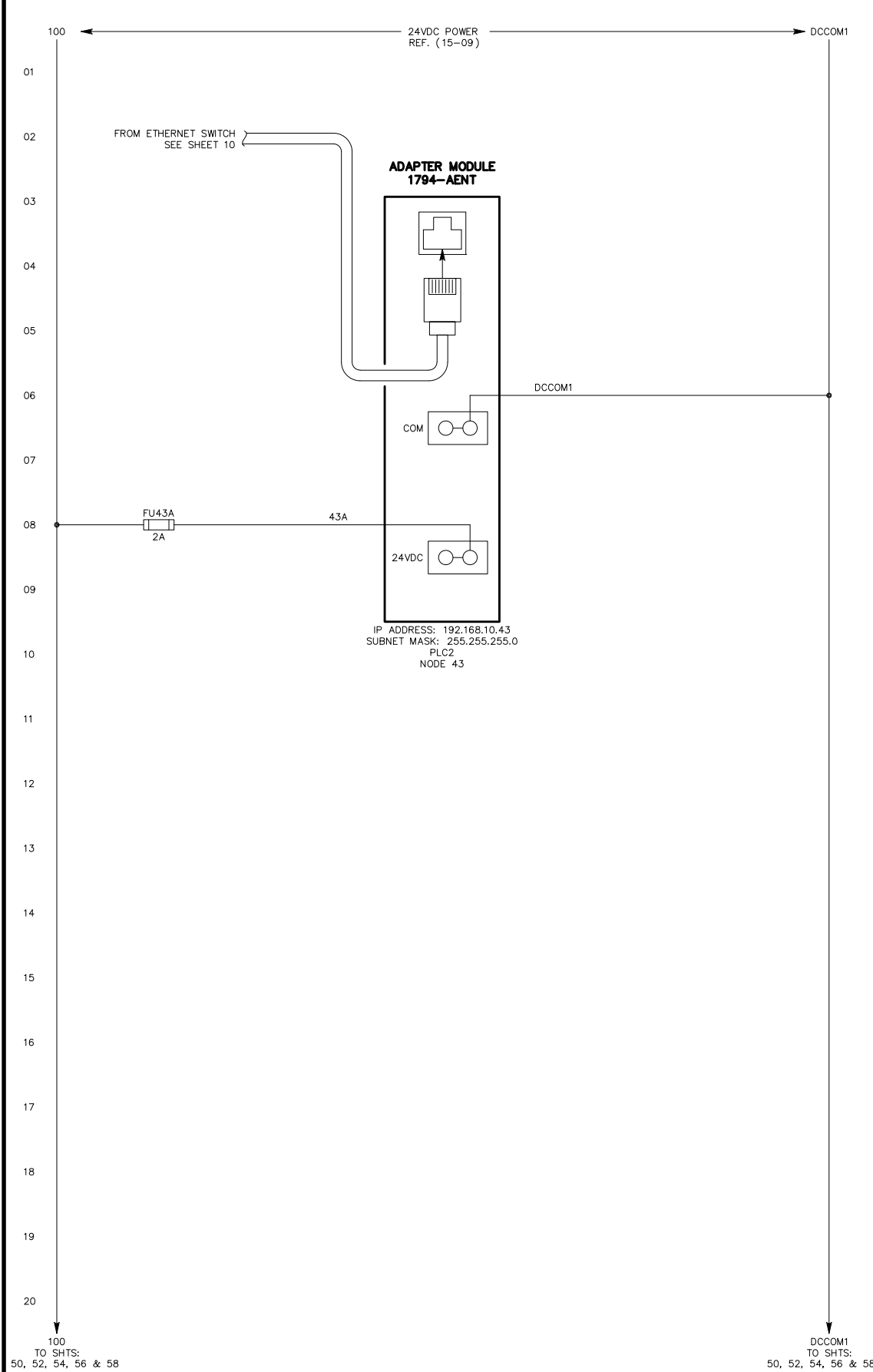
CONTROL SCHEMATIC
RELAY OUTPUT - NODE 42, SLOT 7
PLC2 CONTROL PANEL - ACP-34010
POST POINT WWTP
CITY OF BELLINGHAM, WA

DRAWING NO.
647674E046

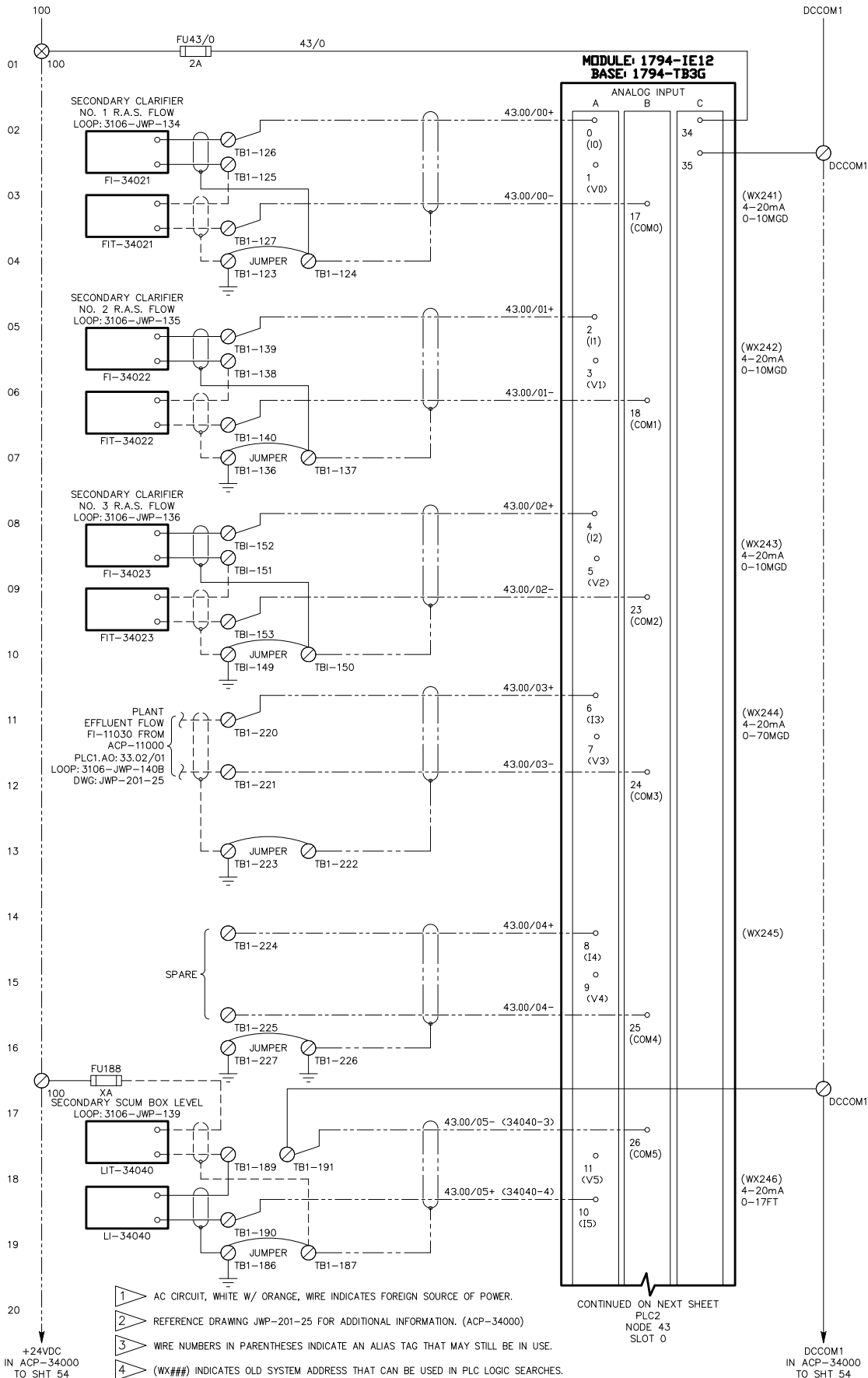
REV
2

SHEET
46

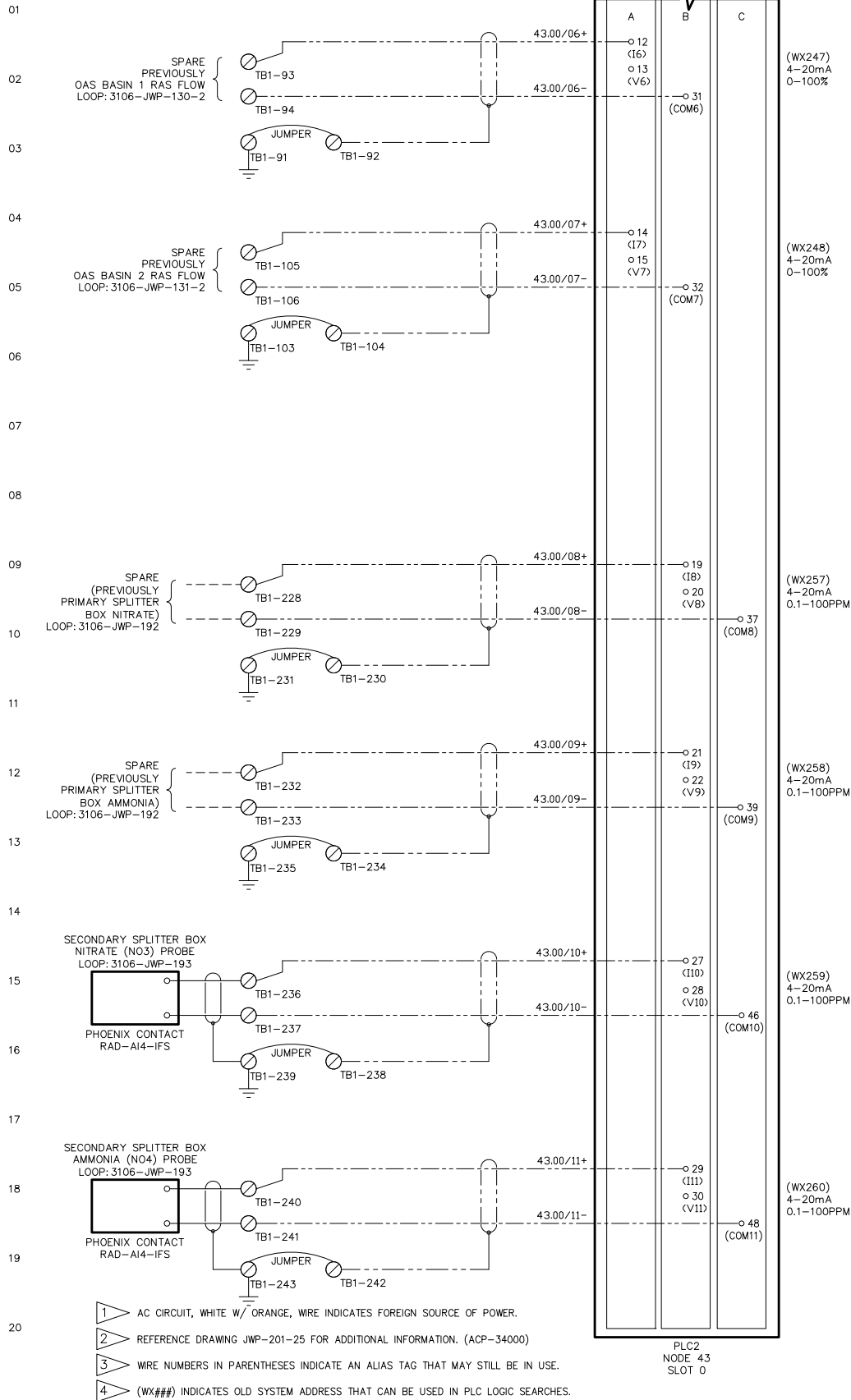
SALES ORDER NUMBER
Q647674



REV	2	DRAWING NO.	647674E049	CONTROL SCHEMATIC CONTROLNET ADAPTER MODULE - NODE 43 PLC2 CONTROL PANEL - ACP-34010 POST POINT WWTP CITY OF BELLINGHAM, WA	DESIGNED BY DREW HANDY DRAWN BY NICHOLAS WALKER CHECKED BY NONE SCALE DATE 10/13/25	PROCESS SOLUTIONS, INC. ARLINGTON, WASHINGTON THIS DRAWING IS SENT TO YOU SUBJECT TO RETURN UPON DEMAND, AND WITH NO OBLIGATION TO BE USED IN ANY WAY DETRIMENTAL TO OUR INTERESTS. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.	NOTES:
	SHEET 49		SALES ORDER NUMBER Q647674				



REV	2	SHEET	50
DRAWING NO.	647674E050		
SALES ORDER NUMBER	Q647674		
CONTROL SCHEMATIC ANALOG INPUT - NODE 43, SLOT 0 PLC2 CONTROL PANEL - ACP-34010 POST POINT WWTP CITY OF BELLINGHAM, WA			
DESIGNED BY	DREW HANDY	CHECKED BY	NONE
DRAWN BY	NICHOLAS WALKER	SCALE	10/13/25
PROCESS SOLUTIONS, INC. ARLINGTON, WASHINGTON THIS DRAWING IS SENT TO YOU SUBJECT TO RETURN UPON DEMAND, AND WITH THE UNDERSTANDING THAT IT IS NOT TO BE USED IN ANY WAY DETRIMENTAL TO OUR INTERESTS. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.			



FROM SHT 49

100

100

FU43/1

2A

43/1

FROM SHT 49

DCCOM1

MODULE: 1794-IE12
BASE: 1794-TB3G

ANALOG INPUT

A

B

C

34

35

(WX261)

SPARE

TB1-252

TB1-253

JUMPER

TB1-255

TB1-254

43.01/00+

43.01/00-

0

(I0)

1

(V0)

17

(COM0)

(WX262)

SPARE

TB1-256

TB1-257

JUMPER

TB1-259

TB1-258

43.01/01+

43.01/01-

2

(I1)

3

(V1)

18

(COM1)

(WX262)

SPARE

TB1-260

TB1-261

JUMPER

TB1-263

TB1-262

43.01/02+

43.01/02-

4

(I2)

5

(V2)

23

(COM2)

(WX263)

SPARE

TB1-264

TB1-265

JUMPER

TB1-267

TB1-266

43.01/03+

43.01/03-

6

(I3)

7

(V3)

24

(COM3)

(WX264)

SPARE

TB1-268

TB1-269

JUMPER

TB1-271

TB1-270

43.01/04+

43.01/04-

8

(I4)

9

(V4)

25

(COM4)

(WX273)

SPARE

TB1-272

TB1-273

JUMPER

TB1-275

TB1-274

43.01/05+

43.01/05-

10

(I5)

11

(V5)

26

(COM5)

(WX274)

1

AC CIRCUIT, WHITE W/ ORANGE, WIRE INDICATES FOREIGN SOURCE OF POWER.

2

REFERENCE DRAWING JWP-201-26 FOR ADDITIONAL INFORMATION. (ACP-34000)

3

WIRE NUMBERS IN PARENTHESES INDICATE AN ALIAS TAG THAT MAY STILL BE IN USE.

4

(WX###) INDICATES OLD SYSTEM ADDRESS THAT CAN BE USED IN PLC LOGIC SEARCHES.

CONTINUED ON NEXT SHEET

PLC2

NODE 43

SLOT 1

NOTES:

DESIGNED BY
DREW HANDYDRAWN BY
NICHOLAS WALKERCHECKED BY
NICHOLAS WALKERSCALE
NONEDATE
10/13/25PROCESS SOLUTIONS, INC.
ARLINGTON, WASHINGTONTHIS DRAWING IS SENT TO YOU SUBJECT TO RETURN UPON DEMAND,
AND WITH THE UNDERSTANDING THAT IT IS NOT TO BE USED IN
ANY WAY DETRIMENTAL TO OUR INTERESTS.
ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.

DRAWING NO.

647674E052

CONTROL SCHEMATIC
ANALOG INPUT - NODE 43, SLOT 1

PLC2 CONTROL PANEL - ACP-34010

POST POINT WWTP

CITY OF BELLINGHAM, WA

REV

2

SHEET

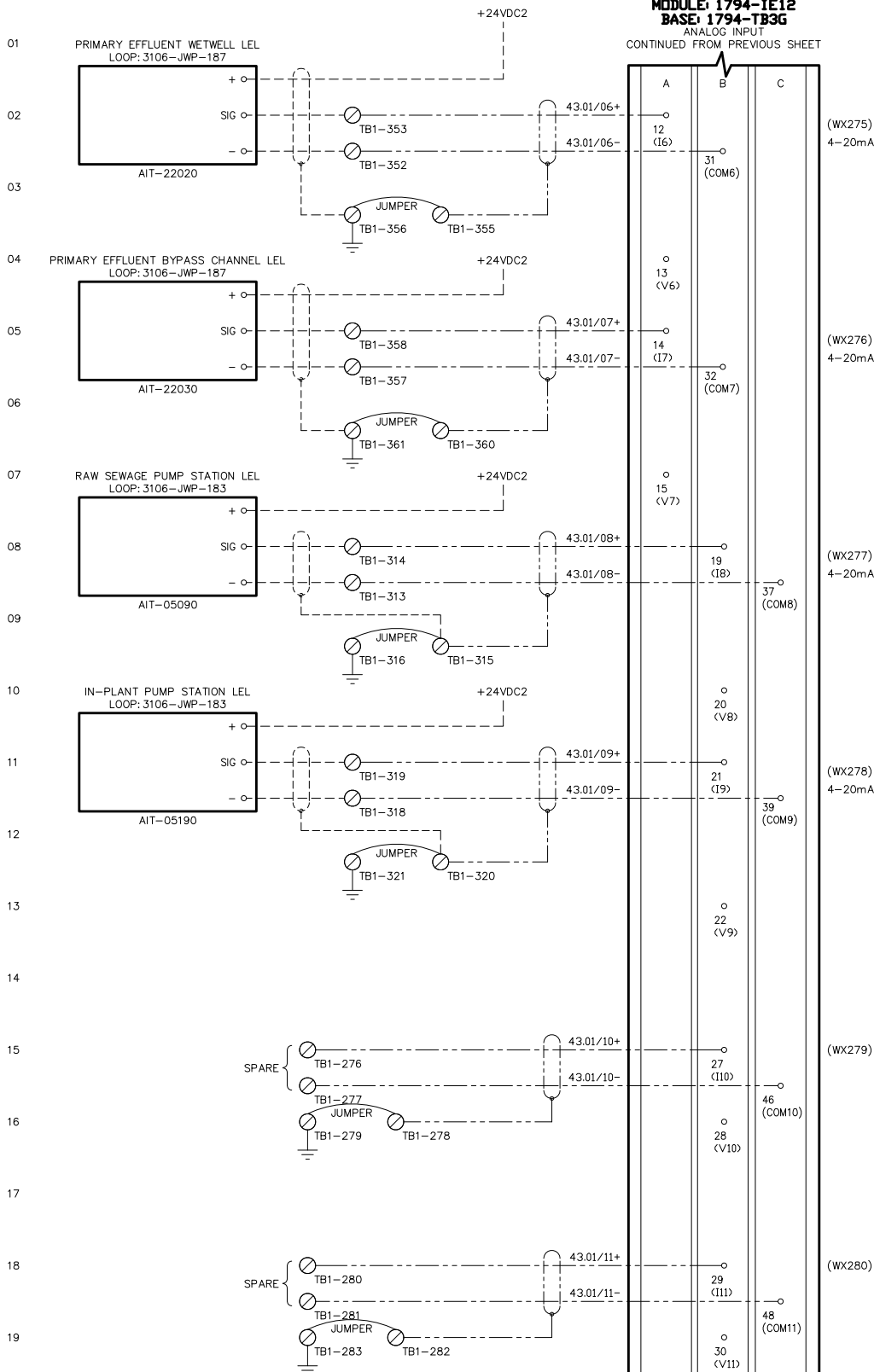
52

SALES ORDER NUMBER

Q647674

**MODULE 1794-1E12
BASE 1794-TB3G**

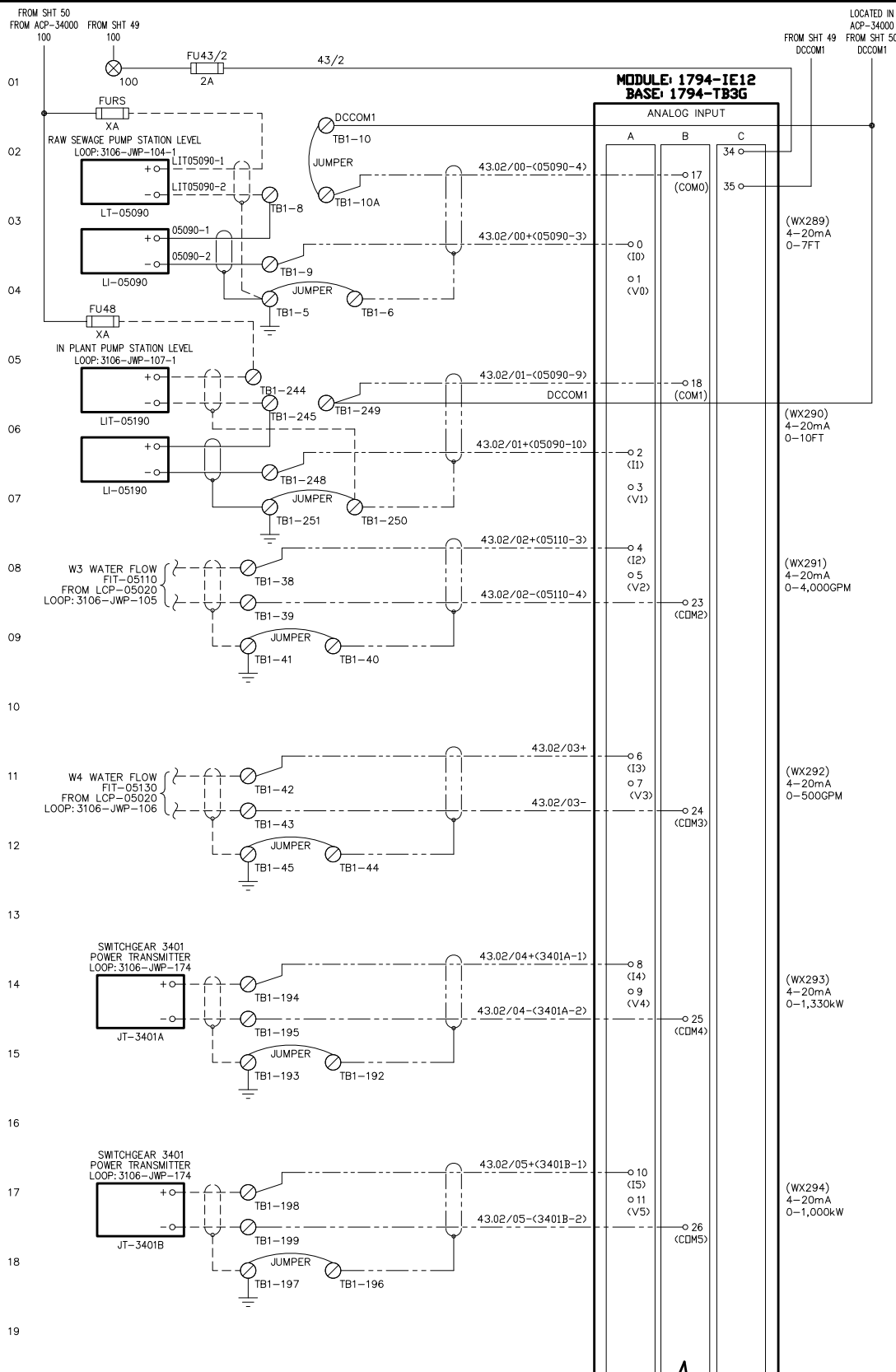
ANALOG INPUT
CONTINUED FROM PREVIOUS SHEET



- 1 AC CIRCUIT, WHITE W/ ORANGE, WIRE INDICATES FOREIGN SOURCE OF POWER.
- 2 REFERENCE DRAWING JWP-201-26 FOR ADDITIONAL INFORMATION. (ACP-34000)
- 3 WIRE NUMBERS IN PARENTHESES INDICATE AN ALIAS TAG THAT MAY STILL BE IN USE.
- 4 (WX###) INDICATES OLD SYSTEM ADDRESS THAT CAN BE USED IN PLC LOGIC SEARCHES.

PLC2
NODE 43
SLOT 1

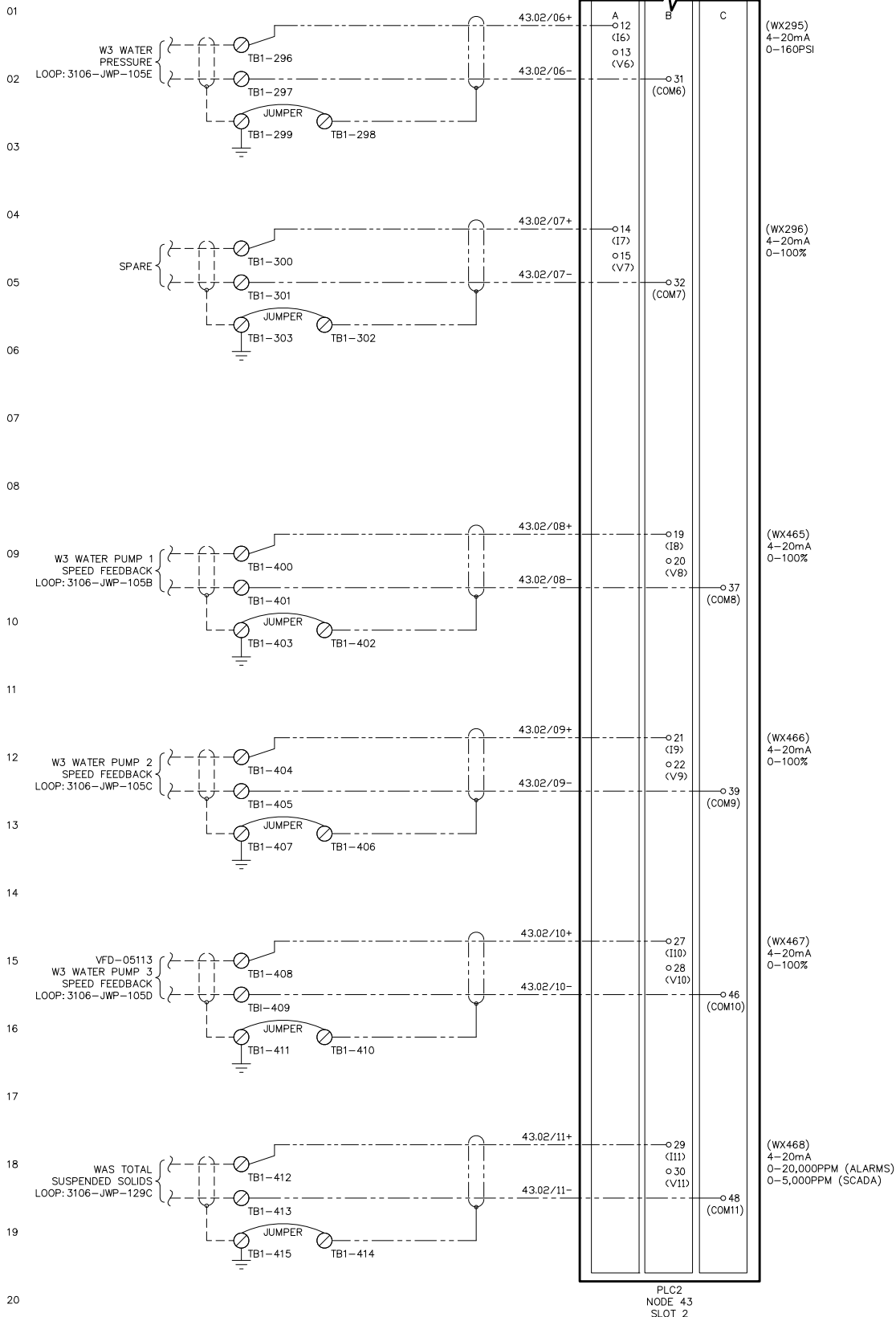
REV	3	SHEET	53
DRAWING NO.	647674E053		
SALES ORDER NUMBER	Q647674		
DESIGNED BY	DREW HANDY		
DRAWN BY	NICHOLAS WALKER		
CHECKED BY	NONE		
SCALE	10/13/25		
DATE	10/13/25		
PROCESS SOLUTIONS, INC. ARLINGTON, WASHINGTON THIS DRAWING IS SENT TO YOU SUBJECT TO RETURN UPON DEMAND, AND WITH THE UNDERSTANDING THAT IT IS NOT TO BE USED IN ANY WAY DETRIMENTAL TO OUR INTERESTS. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.			
CONTROL SCHEMATIC ANALOG INPUT - NODE 43, SLOT 1 (CONT'D.) PLC2 CONTROL PANEL - ACP-34010 POST POINT WWTP CITY OF BELLINGHAM, WA			



- 1 AC CIRCUIT, WHITE W/ ORANGE, WIRE INDICATES FOREIGN SOURCE OF POWER.
- 2 REFERENCE DRAWING JWP-201-27 FOR ADDITIONAL INFORMATION. (ACP-34000)
- 3 WIRE NUMBERS IN PARENTHESES INDICATE AN ALIAS TAG THAT MAY STILL BE IN USE.
- 4 (WX###) INDICATES OLD SYSTEM ADDRESS THAT CAN BE USED IN PLC LOGIC SEARCHES.

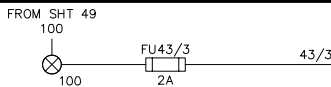
CONTINUED ON NEXT SHEET
PLC2
NODE 43
SLOT 2

REV	2	SHEET	54
DRAWING NO.	647674E054		
SALES ORDER NUMBER	Q647674		
CONTROL SCHEMATIC ANALOG INPUT - NODE 43, SLOT 2 PLC2 CONTROL PANEL - ACP-34010 POST POINT WWTP CITY OF BELLINGHAM, WA			
DESIGNED BY	DREW HANDY	CHECKED BY	NONE
DRAWN BY	NICHOLAS WALKER	SCALE	10/13/25
PROCESS SOLUTIONS, INC. ARLINGTON, WASHINGTON THIS DRAWING IS SENT TO YOU SUBJECT TO RETURN UPON DEMAND, AND WITH THE UNDERSTANDING THAT IT IS NOT TO BE USED IN ANY WAY DETRIMENTAL TO OUR INTERESTS. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.			
NOTES:			



REV	2	SHEET	55
DRAWING NO.	647674E055		
SALES ORDER NUMBER	Q647674		
CONTROL SCHEMATIC ANALOG INPUT - NODE 43, SLOT 2 (CONTD.) PLC2 CONTROL PANEL - ACP-34010 POST POINT WWTP CITY OF BELLINGHAM, WA			
DESIGNED BY	DREW HANDY	CHECKED BY	NONE
DRAWN BY	NICHOLAS WALKER	SCALE	DATE
		10/13/25	
PROCESS SOLUTIONS, INC. ARLINGTON, WASHINGTON THIS DRAWING IS SENT TO YOU SUBJECT TO RETURN UPON DEMAND, AND WITH THE UNDERSTANDING THAT IT IS NOT TO BE USED IN ANY WAY DETRIMENTAL TO OUR INTERESTS. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.			
NOTES:			

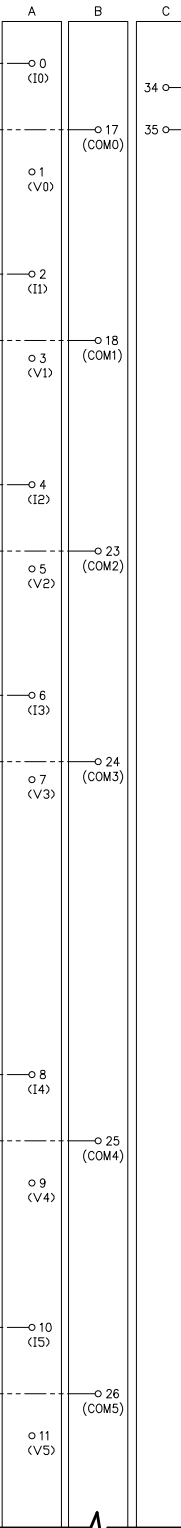
- | | | | |
|---|--|---|--|
| 1 | AC CIRCUIT, WHITE W/ ORANGE, WIRE INDICATES FOREIGN SOURCE OF POWER. | 3 | WIRE NUMBERS IN PARENTHESES INDICATE AN ALIAS TAG THAT MAY STILL BE IN USE. |
| 2 | REFERENCE DRAWING JWP-201-27 FOR ADDITIONAL INFORMATION. (ACP-34000) | 4 | (WX###) INDICATES OLD SYSTEM ADDRESS THAT CAN BE USED IN PLC LOGIC SEARCHES. |



FROM SHT 49
DCCOM1

**MODULE 1794-1E12
BASE 1794-TB3G**

ANALOG INPUT



(WX469)
4-20mA
0-500GPM

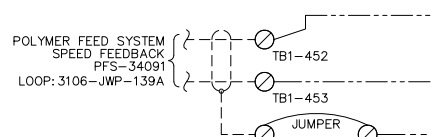
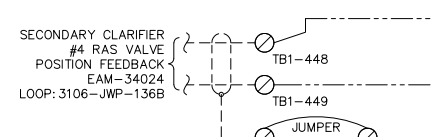
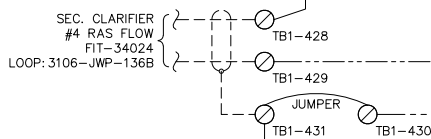
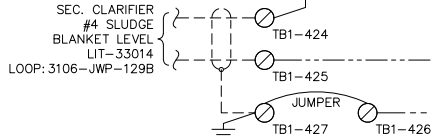
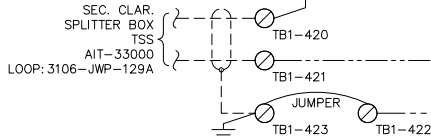
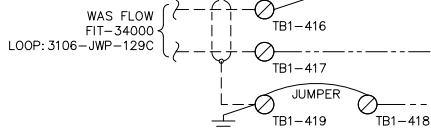
(WX470)
4-20mA
0-5,000PPM

(WX471)
4-20mA
0-4FT

(WX472)
4-20mA
0-5.04MGD

(WX425)
4-20mA
0-100%
OPEN

(WX426)
4-20mA
0-100%



CONTINUED ON NEXT SHEET
PLC2
NODE 43
SLOT 3

REV	2	SHEET	56
DRAWING NO.	647674E056	SALES ORDER NUMBER	Q647674
CONTROL SCHEMATIC ANALOG INPUT - NODE 43, SLOT 3 PLC2 CONTROL PANEL - ACP-34010 POST POINT WWTP CITY OF BELLINGHAM, WA			
DESIGNED BY	DREW HANDY	CHECKED BY	NONE
DRAWN BY	NICHOLAS WALKER	SCALE	
DATE	10/13/25		
PROCESS SOLUTIONS, INC. ARLINGTON, WASHINGTON THIS DRAWING IS SENT TO YOU SUBJECT TO RETURN UPON DEMAND, AND WITH THE UNDERSTANDING THAT IT IS NOT TO BE USED IN ANY WAY DETRIMENTAL TO OUR INTERESTS. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.			
NOTES:			

- 1 AC CIRCUIT, WHITE W/ ORANGE, WIRE INDICATES FOREIGN SOURCE OF POWER.
- 2 REFERENCE DRAWING JWP-201-28 FOR ADDITIONAL INFORMATION. (ACP-34000)

- 3 WIRE NUMBERS IN PARENTHESES INDICATE AN ALIAS TAG THAT MAY STILL BE IN USE.
- 4 (WX###) INDICATES OLD SYSTEM ADDRESS THAT CAN BE USED IN PLC LOGIC SEARCHES.

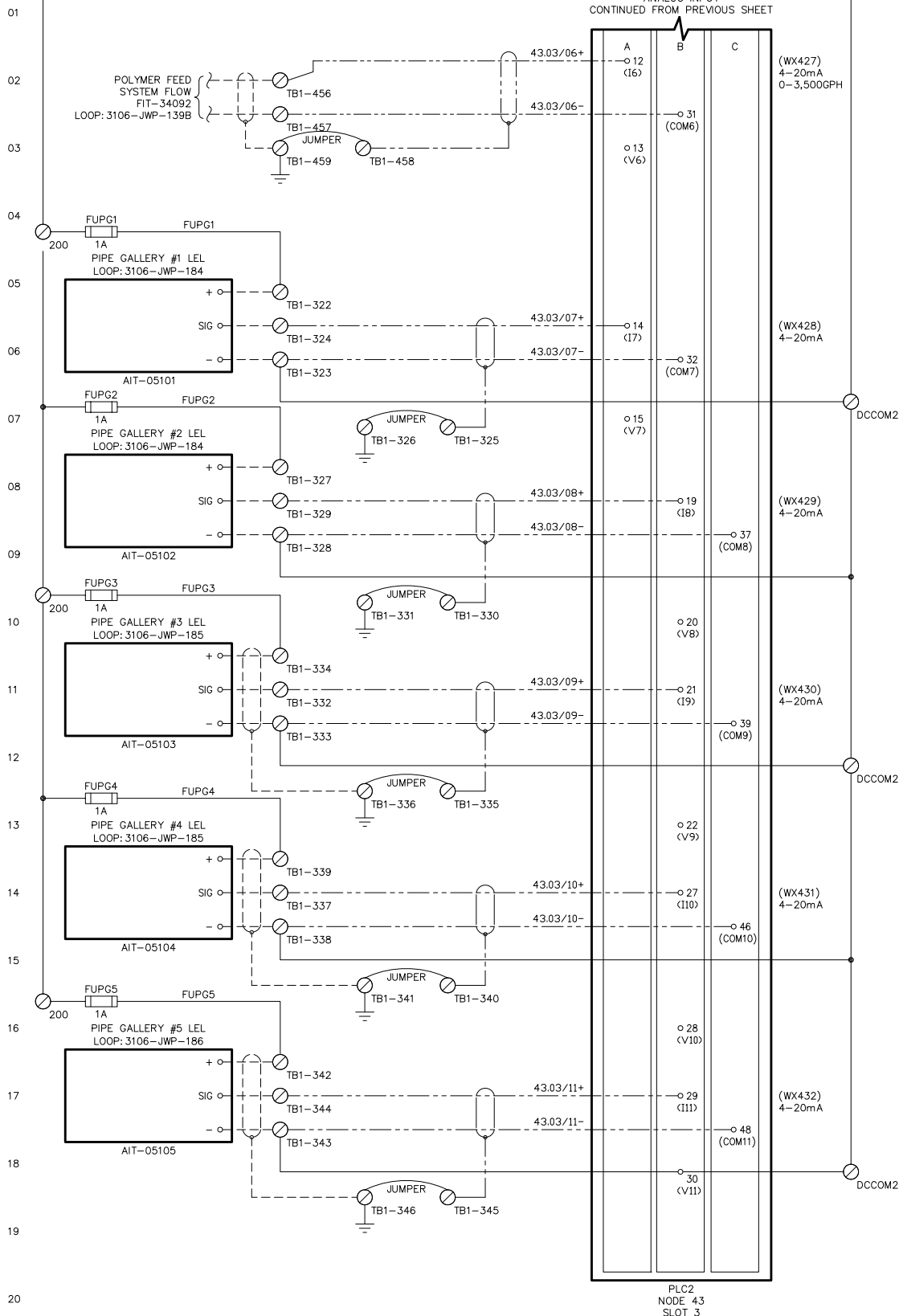
LOCATED IN
ACP-34000
200

+24VDC
FROM FU200
REF. JWP-201-1

LOCATED IN
ACP-34000
DCCOM2

**MODULE: 1794-1E12
BASE: 1794-TB3G**

ANALOG INPUT
CONTINUED FROM PREVIOUS SHEET



- 1 AC CIRCUIT, WHITE W/ ORANGE, WIRE INDICATES FOREIGN SOURCE OF POWER.
- 2 REFERENCE DRAWING JWP-201-28B FOR ADDITIONAL INFORMATION. (ACP-34000)

- 3 WIRE NUMBERS IN PARENTHESES INDICATE AN ALIAS TAG THAT MAY STILL BE IN USE.
- 4 (WX###) INDICATES OLD SYSTEM ADDRESS THAT CAN BE USED IN PLC LOGIC SEARCHES.

NOTES:

PROCESS SOLUTIONS, INC.
ARLINGTON, WASHINGTON

THIS DRAWING IS SENT TO YOU SUBJECT TO RETURN UPON DEMAND,
AND WITH THE UNDERSTANDING THAT IT IS NOT TO BE USED IN
ANY WAY DETRIMENTAL TO OUR INTERESTS.

ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.

DESIGNED BY
DREW HANDY

DRAWN BY
NICHOLAS WALKER

CHECKED BY

SCALE
NONE

DATE
10/13/25

CONTROL SCHEMATIC
ANALOG INPUT - NODE 43, SLOT 3 (CONT.)
PLC2 CONTROL PANEL - ACP-34010
POST POINT WWTP

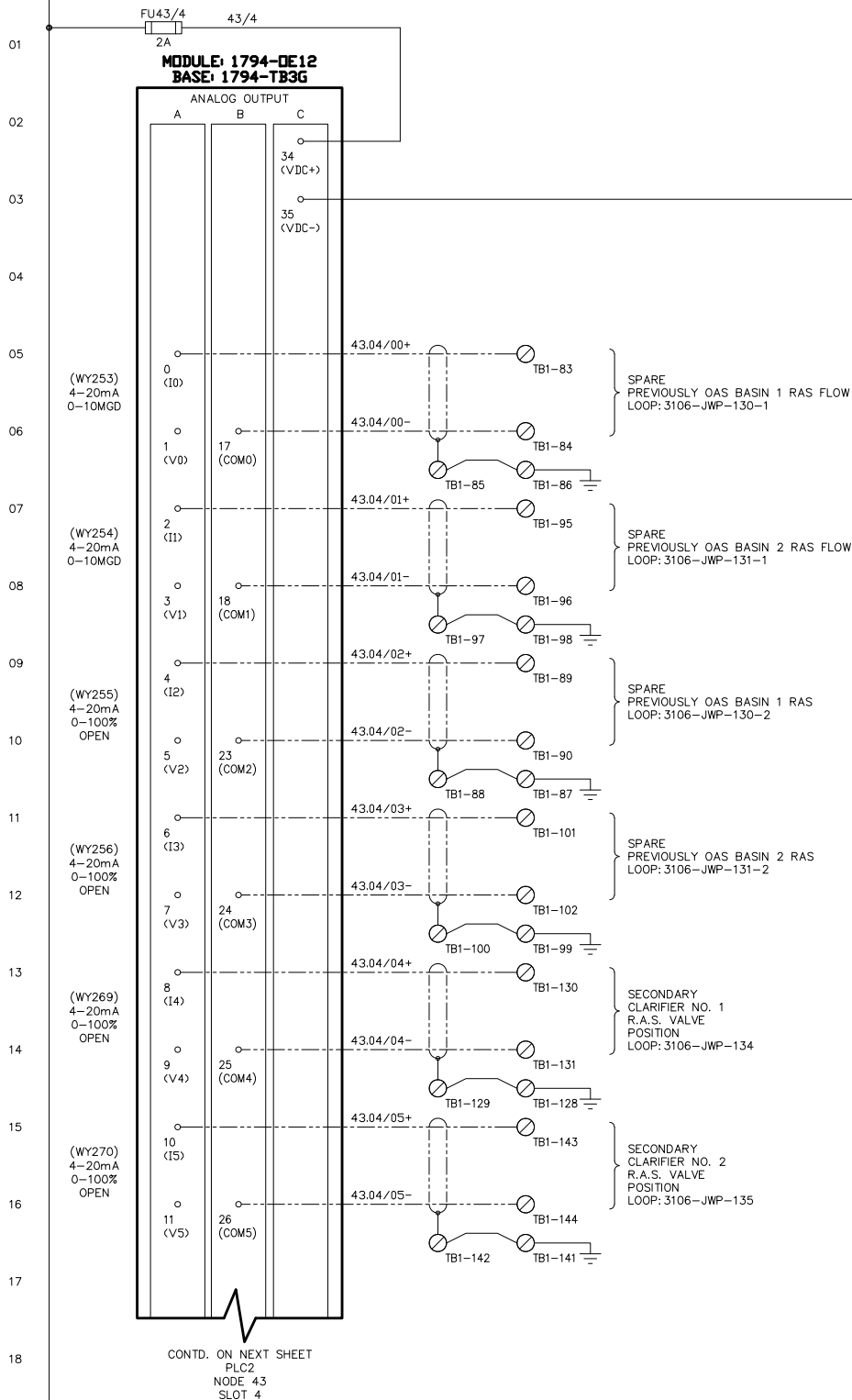
CITY OF BELLINGHAM, WA

DRAWING NO.
647674E057

SALES ORDER NUMBER
Q647674

REV
3

SHEET
57



- 1 YELLOW OR ORANGE WIRES INDICATE FOREIGN SOURCE OF POWER.
- 2 REFERENCE DRAWING JWP-201-28A FOR ADDITIONAL INFORMATION. (ACP-34000)
- 3 WIRE NUMBERS IN PARENTHESES INDICATE AN ALIAS TAG THAT MAY STILL BE IN USE.
- 4 (WY###) INDICATES OLD SYSTEM ADDRESS THAT CAN BE USED IN PLC LOGIC SEARCHES.

DCCOM1
TO SHT 60

NOTES:

CONTROL SCHEMATIC
ANALOG OUTPUT - NODE 43, SLOT 4
PLC2 CONTROL PANEL - ACP-34010
POST POINT WWTP
CITY OF BELLINGHAM, WA

DESIGNED BY
DREW HANDY

DRAWN BY
NICHOLAS WALKER

CHECKED BY

SCALE
NONE

DATE
10/13/25

PROCESS SOLUTIONS, INC.
ARLINGTON, WASHINGTON

THIS DRAWING IS SENT TO YOU SUBJECT TO RETURN UPON DEMAND,
AND WITH THE UNDERSTANDING THAT IT IS NOT TO BE USED IN
ANY WAY DETRIMENTAL TO OUR INTERESTS.

ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.

MODULE: 1794-DE12
 BASE: 1794-TB3G
 CONTD. FROM PREVIOUS SHEET
 ANALOG OUTPUT

01
02
03
04
05
06
07
08
09
10
11
12
13
14
15
16
17
18
19
20

(WY271)
4-20mA
0-100%
OPEN

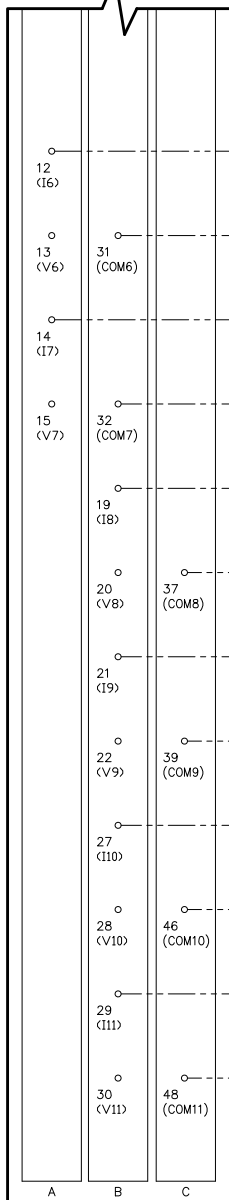
(WY272)
4-20mA
0-100%

(WY285)
4-20mA
0-100%

(WY286)
4-20mA
0-100%

(WY287)
4-20mA
0-100%

(WY288)
4-20mA
0-100%



PLC2
 NODE 43
 SLOT 4

- 1 YELLOW OR ORANGE WIRES INDICATE FOREIGN SOURCE OF POWER.
- 2 REFERENCE DRAWING JWP-201-28A FOR ADDITIONAL INFORMATION. (ACP-34000)
- 3 WIRE NUMBERS IN PARENTHESES INDICATE AN ALIAS TAG THAT MAY STILL BE IN USE.
- 4 (WY###) INDICATES OLD SYSTEM ADDRESS THAT CAN BE USED IN PLC LOGIC SEARCHES.

REV	2	SHEET	59
DRAWING NO.	647674E059	SALES ORDER NUMBER	Q647674
CONTROL SCHEMATIC ANALOG OUTPUT - NODE 43, SLOT 4 (CONTD.) PLC2 CONTROL PANEL - ACP-34010 POST POINT WWTP CITY OF BELLINGHAM, WA			
DESIGNED BY	DREW HANDY	CHECKED BY	NICHOLAS WALKER
DRAWN BY	NICHOLAS WALKER	SCALE	NONE
DATE	10/13/25		
PROCESS SOLUTIONS, INC. ARLINGTON, WASHINGTON THIS DRAWING IS SENT TO YOU SUBJECT TO RETURN UPON DEMAND, AND WITH THE UNDERSTANDING THAT IT IS NOT TO BE USED IN ANY WAY DETRIMENTAL TO OUR INTERESTS. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.			
NOTES:			

FROM SHT 58
100FROM SHT 58
DCCOM1

FU43/5

43/5

MODULE: 1794-DE12
BASE: 1794-TB3G

ANALOG OUTPUT

A

B

C

34
(VDC+)35
(VDC-)(WY301)
4-20mA
0-100%(WY302)
4-20mA
0-100%(WY303)
4-20mA
0-100%(WY304)
4-20mA
0-100%(WY437)
4-20mA
0-100%
OPEN(WY438)
4-20mA
0-100%CONTD. ON NEXT SHEET
PLC2
NODE 43
SLOT 5

- 1 YELLOW OR ORANGE WIRES INDICATE FOREIGN SOURCE OF POWER.
- 2 REFERENCE DRAWING JWP-201-28B FOR ADDITIONAL INFORMATION. (ACP-34000)
- 3 WIRE NUMBERS IN PARENTHESES INDICATE AN ALIAS TAG THAT MAY STILL BE IN USE.
- 4 (WY###) INDICATES OLD SYSTEM ADDRESS THAT CAN BE USED IN PLC LOGIC SEARCHES.

REV 2
SHEET 60

DRAWING NO.

647674E060

SALES ORDER NUMBER

Q647674

CONTROL SCHEMATIC

ANALOG OUTPUT - NODE 43, SLOT 5

PLC2 CONTROL PANEL - ACP-34010

POST POINT WWTP

CITY OF BELLINGHAM, WA

DESIGNED BY

DREW HANDY

DRAWN BY

NICHOLAS WALKER

CHECKED BY

NONE

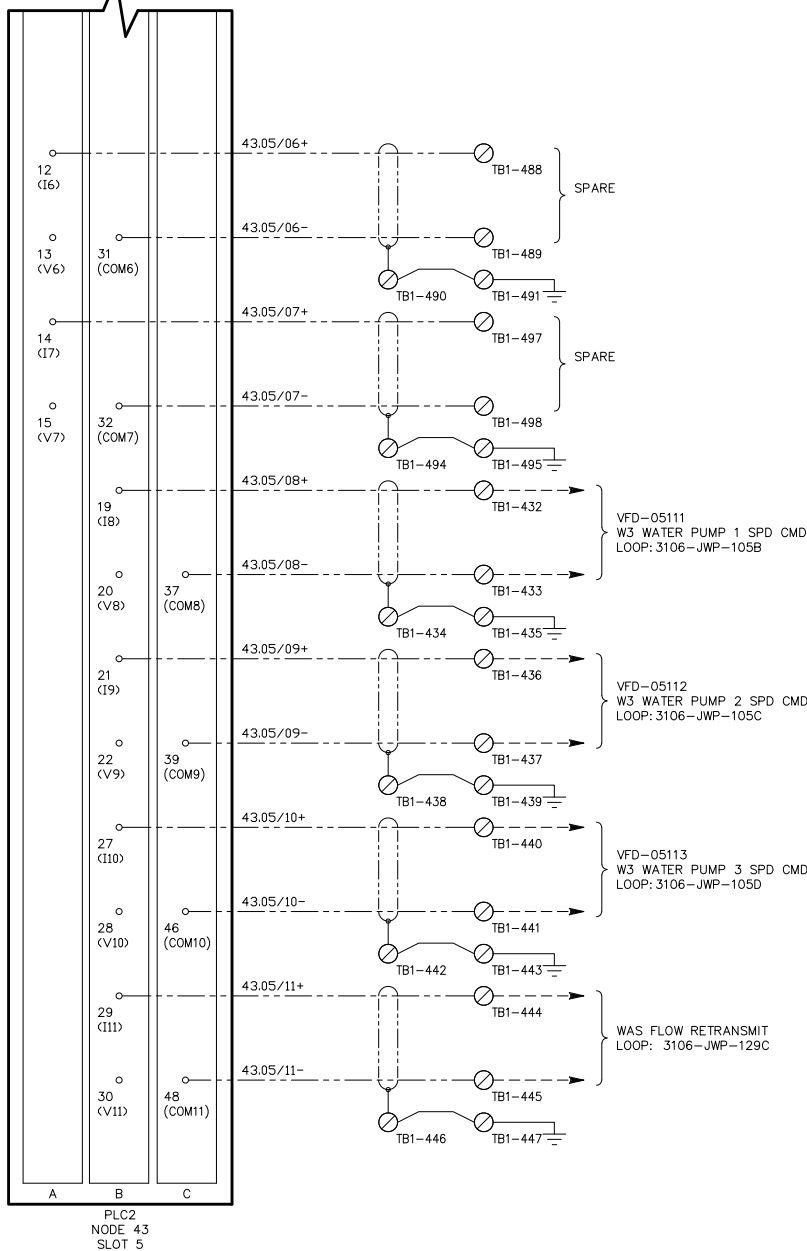
SCALE

DATE

10/13/25

PROCESS SOLUTIONS, INC.
ARLINGTON, WASHINGTONTHIS DRAWING IS SENT TO YOU SUBJECT TO RETURN UPON DEMAND,
AND WITH THE UNDERSTANDING THAT IT IS NOT TO BE USED IN
ANY WAY DETRIMENTAL TO OUR INTERESTS.
ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.

CONTD. FROM PREVIOUS SHEET
ANALOG OUTPUT



- 1 YELLOW OR ORANGE WIRES INDICATE FOREIGN SOURCE OF POWER.
- 2 REFERENCE DRAWING JWP-201-28B FOR ADDITIONAL INFORMATION. (ACP-34000)
- 3 WIRE NUMBERS IN PARENTHESES INDICATE AN ALIAS TAG THAT MAY STILL BE IN USE.
- 4 (WY###) INDICATES OLD SYSTEM ADDRESS THAT CAN BE USED IN PLC LOGIC SEARCHES.

DRAWING NO.	REV
-------------	-----

CONTROL SCHEMATIC
ANALOG OUTPUT - NODE 43, SLOT 5 (CONTD.)
PLC2 CONTROL PANEL - ACP-34010
POST POINT WWTP
CITY OF BELLINGHAM
BELLINGHAM, WA

DESIGNED BY DREW HANDY	SCALE NONE
DRAWN BY NICHOLAS WALKER	DATE 10/13/25
CHECKED BY	

PROCESS SOLUTIONS, INC.
ARLINGTON, WASHINGTON

THIS DRAWING IS SENT TO YOU SUBJECT TO RETURN UPON DEMAND,
AND WITH THE UNDERSTANDING THAT IT IS NOT TO BE USED IN
ANY WAY DETRIMENTAL TO OUR INTERESTS.

ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.

01

02

03

04

05

06

07

08

09

10

11

12

13

14

15

16

17

18

19

20

INTENTIONALLY
LEFT BLANK

NOTES:	PROCESS SOLUTIONS, INC. ARLINGTON, WASHINGTON THIS DRAWING IS SENT TO YOU SUBJECT TO RETURN UPON DEMAND, AND WITH THE UNDERSTANDING THAT IT MAY BE USED IN ANY WAY DETRIMENTAL TO OUR INTERESTS. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.	DESIGNED BY	CONTROL SCHEMATIC		DRAWING NO.	REV
		DREW HANDY	ANNUNCIATOR 1			
		DRAWN BY	PLC2 CONTROL PANEL – ACP-34010		SALES ORDER NUMBER	SHEET
		NICHOLAS WALKER	POST POINT WWTP			
		CHECKED BY	CITY OF BELLINGHAM, WA		Q647674	68
		SCALE				
		DATE	02/05/24			

INTENTIONALLY
LEFT BLANK

01
02
03
04
05
06
07
08
09
10
11
12
13
14
15
16
17
18
19
20

NOTES:

PROCESS SOLUTIONS, INC.
ARLINGTON, WASHINGTON

THIS DRAWING IS SENT TO YOU SUBJECT TO RETURN UPON DEMAND,
AND WITH THE UNDERSTANDING THAT IT IS NOT TO BE USED IN
ANY WAY DETRIMENTAL TO OUR INTERESTS.

ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.

DESIGNED BY
DREW HANDY

DRAWN BY
NICHOLAS WALKER

CHECKED BY

SCALE
NONE

DATE
03/29/24

CONTROL SCHEMATIC
ANNUNCIATOR 2

PLC2 CONTROL PANEL – ACP-34010

POST POINT WWTP

CITY OF BELLINGHAM, WA

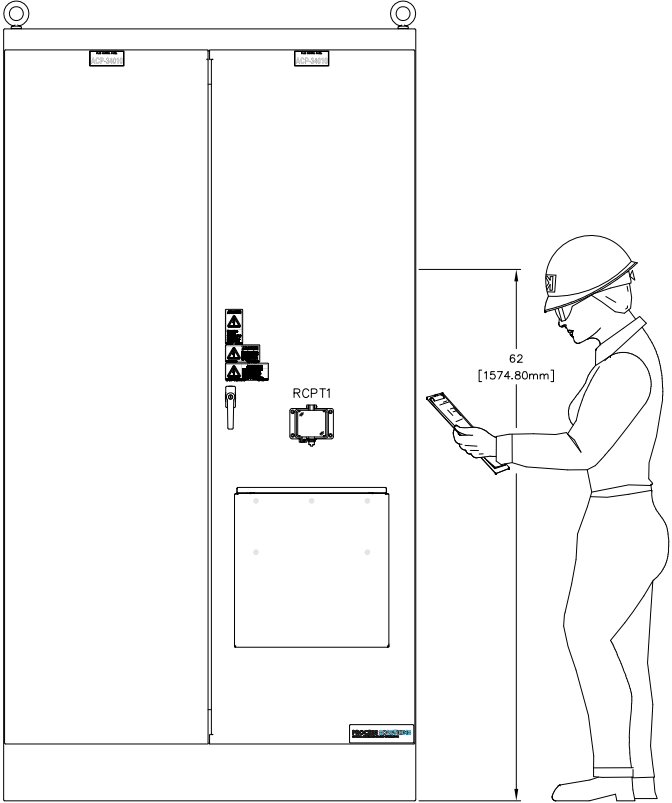
DRAWING NO.
647674E070

SALES ORDER NUMBER
Q647674

REV
1

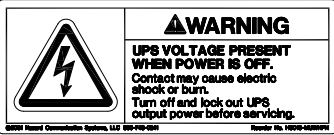
SHEET
70

PLC2 CONTROL PANEL – ACP-34010



(647674-05)
90"H x 48"W x 20"D
FREE STANDING
NEMA 12
MILD STEEL

PLC2 CONTROL PANEL
ACP-34010



PROCESS SOLUTIONS
CONTROL SYSTEM DESIGN AND INTEGRATION

CONTROL ARRANGEMENT & PANEL LABELING

NOTES:

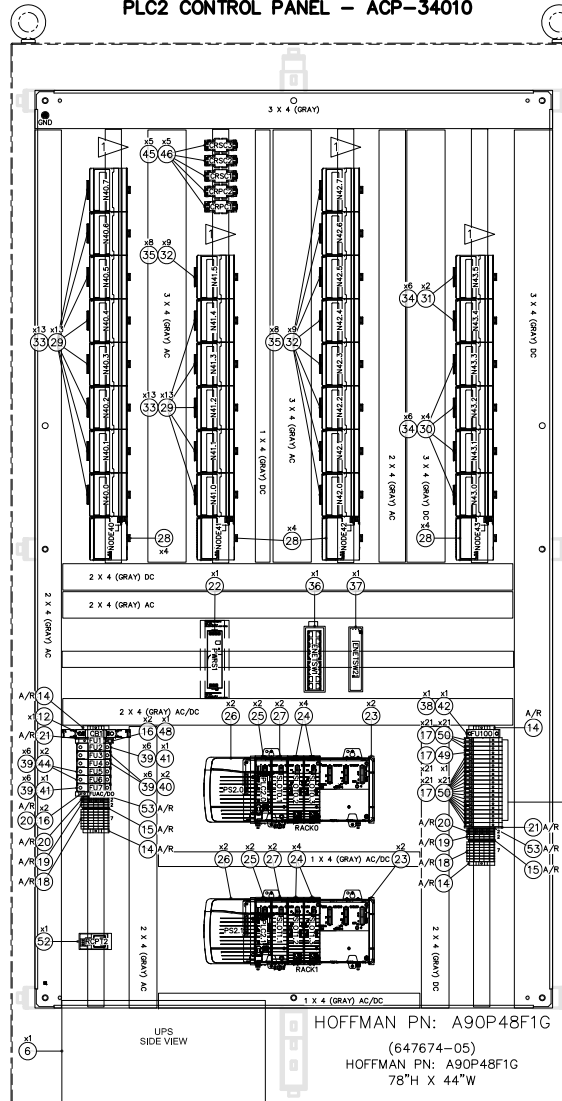
PROCESS SOLUTIONS, INC.
ARLINGTON, WASHINGTON
THIS DRAWING IS SENT TO YOU SUBJECT TO RETURN UPON DEMAND,
AND WITH THE UNDERSTANDING THAT IT IS NOT TO BE USED IN
ANY WAY DETRIMENTAL TO OUR INTERESTS.
ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.

DESIGNED BY
DREW HANDY
DRAWN BY
NICHOLAS WALKER
CHECKED BY
SCALE
NONE
DATE
02/05/24

PANEL LAYOUT
—
PLC2 CONTROL PANEL – ACP-34010
POST POINT WWTP
CITY OF BELLINGHAM BELLINGHAM, WA

DRAWING NO.
647674E072
SALES ORDER NUMBER
Q647674
REV
0
SHEET
72

PLC2 CONTROL PANEL – ACP-34010



1 USE PHOENIX CONTACT HIGH RISE DIN RAIL – PN: 5604187

NOTES:

PROCESS SOLUTIONS, INC.
ARLINGTON, WASHINGTON

THIS DRAWING IS SENT TO YOU SUBJECT TO RETURN UPON DEMAND,
AND WITH THE UNDERSTANDING THAT IT IS NOT TO BE USED IN
ANY WAY DETRIMENTAL TO OUR INTERESTS.

ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.

DESIGNED BY
DREW HANDY
DRAWN BY
NICHOLAS WALKER
CHECKED BY

SCALE
NONE
DATE
05/21/24

BACKPANEL LAYOUT

PLC2 CONTROL PANEL – ACP-34010
POST POINT WWTP

CITY OF BELLINGHAM

BELLINGHAM, WA

DRAWING NO.

647674E073

SALES ORDER NUMBER

Q647674

REV

2

SHEET

73

NAMEPLATE LIST
PLC2 CONTROL PANEL – ACP-34010 (647674-05)

ITEM	CODE	QTY	MFR.	PART# / SIZE	LINE1	LINE2	LINE2-1	LINE2-2	LINE3	LINE3-1	LINE3-2	LINE4-1	LINE4-2	DEVICE
1	12	2	LAMACOID	4.00" x 1.75"	PLC2 CONTROL PANEL	ACP-34010								ACP-34010

NOTES:

PROCESS SOLUTIONS, INC.
ARLINGTON, WASHINGTON

THIS DRAWING IS SENT TO YOU SUBJECT TO RETURN UPON DEMAND,
AND WITH THE UNDERSTANDING THAT IT IS NOT TO BE USED IN
ANY WAY DETRIMENTAL TO OUR INTERESTS.

ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.

DESIGNED BY DREW HANDY
DRAWN BY NICHOLAS WALKER
CHECKED BY
SCALE NONE
DATE 02/05/24

NAMEPLATE LIST

—

PLC2 CONTROL PANEL – ACP-34010
POST POINT WWTP

CITY OF BELLINGHAM

BELLINGHAM, WA

DRAWING NO. 647674E074	REV 0
SALES ORDER NUMBER Q647674	SHEET 74

BILL OF MATERIALS
PLC2 CONTROL PANEL – ACP-34010, SERIAL NUMBER 647674-05
ENCLOSURE

ITEM	QTY	MANUFACTURER	PART NUMBER	DESCRIPTION	DEVICE	RECOMMENDED SPARES
1	1	HOFFMAN	A904820FSDG	ENCLOSURE, 90"H x 48"W x 20"D, FREE STANDING, MILD STEEL, TYPE 12	ACP-34010	
2	1	HOFFMAN	AA61SHLF1818	FOLDING SHELF, 18"Wx18"D, TYPE 4, GRAY	(ACP-34010)	
3	2	HOFFMAN	ALF5WD	REMOTE DOOR SWITCH	DSW1, DSW2	
4	2	HOFFMAN	LED41S35	PANEL LIGHT, LED, 90-260VAC	L11, L12	
5	1	CYBERPOWER	MSPI5A6	BYPASS PDU FOR UPS, 120VAC	BYP51	
6	1	APC	SMIT500C	UNIVERSAL POWER SUPPLY, 1500VA, 120VAC, SURGE PROTECTION	UPS1	
7	1	GRACE ENGINEERING	P-R2-K3RFO	GFCI RECEPTACLE AND ETHERNET PORT, THROUGH DOOR, TYPE 4	RCPT1	
8	1	HCS	H6010-MUWHPH	LABEL: WARNING-UPS VOLTAGE PRESENT WHEN POWER IS OFF. Contact may cause electric shock or burn.	(ACP-34010)	
9	1	HCS	H6010-PDPVPK	LABEL: DANGER-Hazardous Voltage. Danger of electrical shock or burn. Disconnect power before servicing. (LARGE)	(ACP-34010)	
10	1	HCS	H6010-SBDHPK	LABEL: DANGER-Hazardous Voltage. Multiple power sources may be present. Lockout/tagout before servicing. (LARGE)	(ACP-34010)	

BACKPAN

ITEM	QTY	MANUFACTURER	PART NUMBER	DESCRIPTION	DEVICE	RECOMMENDED SPARES
11	1	HOFFMAN	A90P48F1C	BACKPAN, 78"Hx44"W CONDUCTIVE METAL (GALVANIZED STEEL)	(ACP-34010)	
12	1	ALLEN-BRADLEY	1489-MIC200	CIRCUIT BREAKER, MINIATURE, 20A, 1-POLE, 277VAC, BRANCH RATED	CB1	
13	A/R	ALLEN-BRADLEY	1492-CJ45-10	TERMINAL JUMPER BAR, YELLOW	(A/R)	
14	A/R	ALLEN-BRADLEY	1492-EAJ35	TERMINAL END ANCHOR, GREY	(A/R)	
15	A/R	ALLEN-BRADLEY	1492-EBJ3	TERMINAL END COVER, SINGLE TIER, GREY	(A/R)	
16	2	ALLEN-BRADLEY	1492-H4	FUSE HOLDER, LED INDICATOR, 100-300V AC/DC, 12A	FU1, FUAC/DO	
17	21	ALLEN-BRADLEY	1492-H5	FUSE HOLDER, LED INDICATOR, 10-57V AC/DC, 12A	FU101, FU102, FU40A – FU43A, FU41/5 FU42/0 – FU42/7, FU43/0 – FU43/5	
18	A/R	ALLEN-BRADLEY	1492-J4	TERMINALS, IEC, FEED THROUGH, 600V AC/DC, 35A	A/R	
19	A/R	ALLEN-BRADLEY	1492-JG3	GROUND TERMINAL, SINGLE TIER, GREEN/YELLOW	GND	
20	A/R	ALLEN-BRADLEY	1492-JG4	GROUND TERMINAL, SINGLE TIER, GREEN/YELLOW	GND	
21	A/R	ALLEN-BRADLEY	1492-N37	FUSE HOLDER TERMINAL END BARRIER	(A/R)	
22	1	ALLEN-BRADLEY	1606-XL120EN	POWER SUPPLY, 24-28V DC, 5A, 120V AC INPUT VOLTAGE	PWR51	
23	2	ALLEN-BRADLEY	1756-L7	CONTROLLOGIX 17 SLOT CHASSIS	CRACKO, RACK1	
24	4	ALLEN-BRADLEY	1756-EN2T	CONTROLLOGIX ETHERNET/IP COMMUNICATION MODULE, SINGLE-PORT RJ-45, 128TCP/IP CONNECTIONS	SLOT0.2, SLOT0.3, SLOT1.2, SLOT1.3	
25	2	ALLEN-BRADLEY	1756-L72	CONTROLLOGIX 5572 PROCESSOR, 4MB RAM	PLC2.0, PLC2.1	
26	2	ALLEN-BRADLEY	1756-PA75	CONTROLLOGIX POWER SUPPLY, 120V/220V AC, 1.5A@1.2V DC & 4A@3.3V DC & 13A@5V DC & 2.8A@24V DC	PS2.0, PS2.1	
27	2	ALLEN-BRADLEY	1756-RM2	REDUNDANCY MODULE	SLOT0.1, SLOT1.1	
28	4	ALLEN-BRADLEY	1794-AENT	FLEX I/O, ADAPTER MODULE, ETHERNET	N0DE40 – N0DE43	
29	13	ALLEN-BRADLEY	1794-IAI6	FLEX I/O, DIGITAL INPUT MODULE, 16 POINT, 120V AC	N40.0 – N40.7, N41.0 – N41.4	
30	4	ALLEN-BRADLEY	1794-IE12	FLEX I/O, ANALOG INPUT MODULE, 12 CHANNEL	N43.0 – N43.3	
31	2	ALLEN-BRADLEY	1794-OE12	FLEX I/O, ANALOG OUTPUT MODULE, 12 POINT, SINGLE ENDED	N43.4, N43.5	
32	9	ALLEN-BRADLEY	1794-OW8	FLEX I/O, RELAY CONTACT OUTPUT, 8 PT, ISOLATED	N41.5, N42.0 – N42.7	
33	13	ALLEN-BRADLEY	1794-TB3	FLEX I/O, TERMINAL BASE, 3-WIRE, CAGE CLAMP	N40.0 – N40.7, N41.0 – N41.4	
34	6	ALLEN-BRADLEY	1794-TB3G	FLEX I/O TERMINAL BASE W/ROUND CABLES	N43.0 – N43.5	
35	8	ALLEN-BRADLEY	1794-TBNF	FLEX I/O, TERMINAL BASE, NEMA, SCREW CLAMP, FUSED	(N41.5, N42.0 – N42.7)	
36	1	ANTAIRA	LNx-1600	16 PORT, UNMANAGED ETHERNET SWITCH	ENETSW1	
37	1	ANTAIRA	LNx-500A	5 PORT, UNMANAGED ETHERNET SWITCH	ENETSW2	
38	1	BUSSMANN	CHCCDI-48U	FUSE HOLDER, CLASS CC, 1-POLE, 30A, DC, WITH INDICATOR	(FU100)	
39	6	BUSSMANN	CHCCDIU	FUSE HOLDER, CLASS CC, 1-POLE, 30A, AC, WITH INDICATOR	(FU2 – FU7)	
40	2	BUSSMANN	LP-CC-12	FUSE, 12A, CLASS CC, DUAL ELEMENT TIME DELAY	FU3, FU4	
41	1	BUSSMANN	LP-CC-6	FUSE, 6A, CLASS CC, DUAL ELEMENT TIME DELAY	FU2	
42	1	BUSSMANN	LP-CC-5	FUSE, 5A, CLASS CC, DUAL ELEMENT TIME DELAY	FU100	
43	1	BUSSMANN	LP-CC-3	FUSE, 3A, CLASS CC, DUAL ELEMENT TIME DELAY	FU7	
44	2	BUSSMANN	LP-CC-2	FUSE, 2A, CLASS CC, DUAL ELEMENT TIME DELAY	FU5, FU6	
45	5	IDEC	RH2B-ULCAC120V	CONTROL RELAY, DPDT, 120VAC COIL, 10A	CRPC1, CRPC2, CRSC1 – CRSC3	
46	5	IDEC	SH2B-OSC	RELAY BASE, FINGER SAFE, DPDT, 300V, 10A	(CRPC1, CRPC2, CRSC1 – CRSC3)	
47	2	L-COM	FODLC-PL-01	FIBER CABLE, LC-LC, 1 METER	FORNOT, FORNO2	
48	1	LITTELFUSE	314.500	FUSE, 0.5A, FAST ACTING, CERAMIC MINIATURE	FU1	
49	1	LITTELFUSE	314001	FUSE, 1A, FAST ACTING, CERAMIC MINIATURE	FU102	
50	21	LITTELFUSE	314002	FUSE, 2A, FAST ACTING, CERAMIC MINIATURE	FUAC/DO, FU101, FU40A – FU43A, FU41/5 FU42/0 – FU42/7, FU43/0 – FU43/5	
51	1	MCMMASTER-CARR	70355K35	POWER CORD, FLYING LEADS, 14 AWG, 6 ft	CSLYSPST01T1	
52	1	WEIDMULLER	9915480000	SINGLE RECEPTACLE, DIN RAIL MOUNT	RCPT12	
53	A/R	WEIDMULLER	WAP 2.5-10 GN	TERMINAL COVER, SINGLE TIER, GREEN	(GND)	

SHIP LOOSE

ITEM	QTY	MANUFACTURER	PART NUMBER	DESCRIPTION	DEVICE	RECOMMENDED SPARES
54	2	ALLEN-BRADLEY	1492-EAJ35	TERMINAL END ANCHOR, GREY	(A/R)	
55	13	ALLEN-BRADLEY	1492-H4	FUSE HOLDER, LED INDICATOR, 100-300V AC/DC, 12A	FU40/0 – FU40/7, FU41/0 – FU41/4	
56	1	ALLEN-BRADLEY	1492-N37	FUSE HOLDER TERMINAL END BARRIER	(A/R)	
57	13	LITTELFUSE	314002	FUSE, 2A, FAST ACTING, CERAMIC MINIATURE	FU40/0 – FU40/7, FU41/0 – FU41/4	

NOTES:

PROCESS SOLUTIONS, INC.
ARLINGTON, WASHINGTON

THIS DRAWING IS SENT TO YOU SUBJECT TO RETURN UPON DEMAND,
AND WITH THE UNDERSTANDING THAT IT IS NOT TO BE USED IN
ANY WAY DETRIMENTAL TO OUR INTERESTS.

ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.

DESIGNED BY DREW HANDY	
DRAWN BY NICHOLAS WALKER	
CHECKED BY	
SCALE NONE	
DATE 05/21/24	

BILL OF MATERIALS

—

PLC2 CONTROL PANEL – ACP-34010
POST POINT WWTP

CITY OF BELLINGHAM

BELLINGHAM, WA

DRAWING NO. 647674E075	REV 2
SALES ORDER NUMBER Q647674	SHEET 75