# Sweet Home Mahler
# WRF Improvements Project

**ADDENDUM NO. 3**

**FOR**

**MAHLER WRF PHASE 1 BID DOCUMENTS**

To: All Prospective Bidders and Plan Holders of Record

The following clarifications, changes, additions and/or deletions are hereby made a part of the bid documents for the construction of the above referenced project as fully and completely as if the same were fully set forth therein.

This Addendum consists of 14 pages of changes, additions and/or deletions, including Attachments. Contractor shall contact City immediately if not all sheets are received.

## RESPONSES TO BIDDER QUESTIONS

The following questions have been submitted by Pre-Qualified Bidders. Owner responses are denoted with an "**R:**".

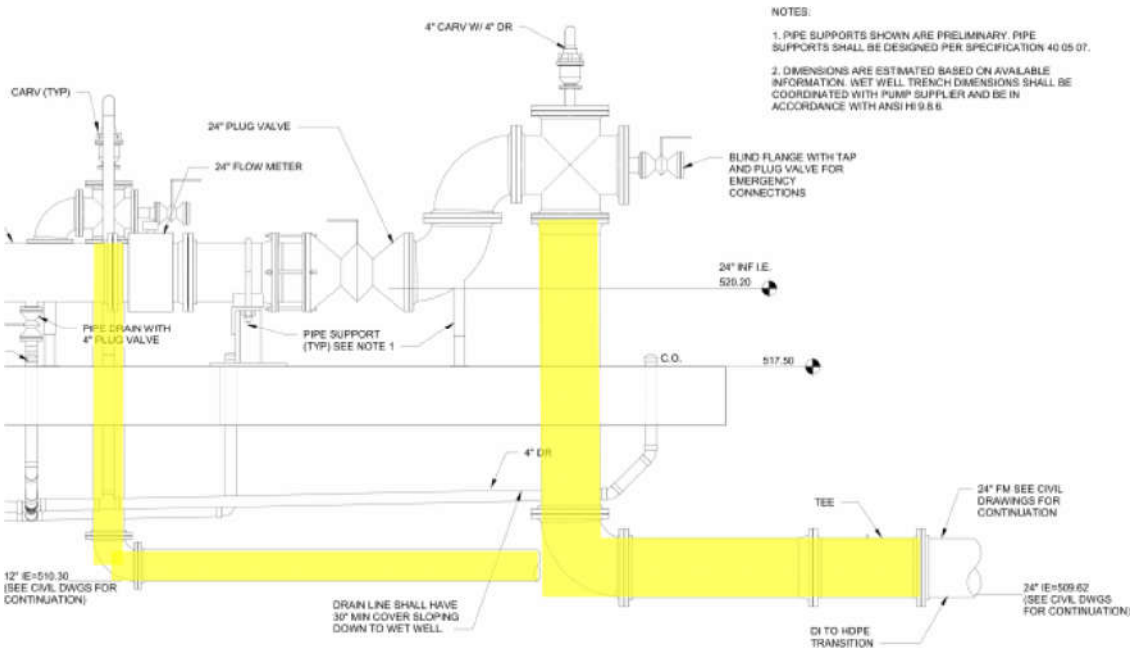
**Q1:** **Drawing C-061:** Note 6 on plan sheet C-061 calls for furnish and installation of an 18" DI 45 DEG HORIZ BEND MJ fitting. Please confirm the intent is to furnish and install a 10" DI 45 DEG HORIZ BEND MJ fitting in this location.

**R:** The correct size fitting is 10-inch.

**Q2:** **Drawing C-060/C-061:** Note 10 on plan sheet C-060 and C-061 calls for furnish and installation of a 10" blind flange. A blind flange will not bolt up to the 10" MJ TEE. Is the intent for this to be a 10" MJ plug in one side of the 10" MJ TEE in this location? Please confirm.

**R:** Yes. Install a MJ Plug instead of a blind flange at this location.

**Q3:** **Drawing M-111/M-114/C-061:** I'm trying to determine the design intent for the 12" and 24" dia. IPS FM piping and valve highlighted below. This connects the interior flanged piping to buried DI to HDPE transitions. These are from plan sheets C-061, M-111, and M-114. The pipe profiles are shown on plan sheet C-072. Is the intent for this piping also to be flanged ductile iron? Please advise.




**R:** Yes. The intent is to have ductile iron flanged pipe through the tee that connects the two force mains with valve.

**Q4:** **Drawing C-003/ Detail 4:** The EBAA 2100 Series and EBAA 2000PV Series called out in 4/C-003 are both only available up to size 12". What should be used for 24" diameter HDPE connections to flanges and/or M.J. fittings

**R:** The EBAA Products called out are available in 24-inch. This has been confirmed with the manufacturer.

**Q5:** **Specification 08 80 00 - Glazing:** Please provide a specification for glazing type GLZ-1 on the plans. This glass type isn't listed in the Glazing specification (Section 088000).

**R:** See changes to Specification 08 80 00 in the section below.

**Q6:** **Drawing A-100:** We are installing these new doors into this existing building. Have the existing doors been removed by someone else or does the contractor need to plan on removing and replacing existing doors?

**R:** Contractor to remove and replace existing doors.

**Q7:** **C-060, C-062 & M-111:** On page M-111 the hose bibs are fed off of utility water, but utility water is not in the pipe schedule, and the utility water line does not appear to tie into anything. C-062 does not show a connection point for this utility water line. Please confirm what material type this pipe system is to be and where it is routed from.

**R:** The IPS hose bibs will feed off the potable water system during Phase 1 until Phase 2 utility water system is constructed. Connect the utility water to the new potable water service installed near the IPS. Pipe material shall be PEX per Addendum #2.

**Q8:** **C-060:** the Gas line is not listed in the pipe schedule, what material does the 1" Gas line need to be?

**R:** Coordinate with gas utility.

**Q9:** **Section 09 91 13:** Are the interior CMU walls of the existing electrical building supposed to be painted?

**R:** Yes.

**Q10:** **Section 09 96 00:** In the high-performance coating spec there is a coating system for submerged concrete, system 5. In the finish schedule shown in the high-performance coating spec this system is not called out to be applied on the project. Will coating system 5 be used on the project?

**R:** System 5 will not be used on this project.

**Q11:** **Sheet E-101:** Please confirm that the hatched lines are duct bank that are to be demolished completely, and not just pulling wire out of existing ductbank. If the existing ductbank needs to be completely demolished then trenches will need to be dug through the existing plant. will sidewalk and asphalt replacement over demolished ductbank be necessary?

**R:** Yes, demolish the ductbanks, completely.

**Q12:** **Sheet A-005:** Where does the foundation drain along the new electrical/blower building drain to? This drain is not show in the civil drawings. Can a detail be provided for the routing of this drain?

**R:** Daylight the foundation drain out of the slope east of the new MEB building.

**Q13:** **Sheet E-106:** Does the existing pad and slab under the old generator in the existing electrical building need to be demolished?

**R:** Yes, demo existing genset slab. Reference structural drawings for new concrete slab under MCC-300.

**Q14:** **Sheet S-100:** Where does the perforated drain along the retaining wall drain to? This drain is not shown in the civil drawings.

**R:** Daylight the perorated drain pipe on Wall 1/6 out of the slope east of the new MEB building. Daylight the drain pipe from the south wall onto the gravel roadway.

**Q15:** **Section 26 32 00:** What is the weight of the owner provided generator? Contractor will need to know the weight to properly coordinate setting the generator.

**R:** 7,670 lbs wet

**Q16:** **Section 26 32 00:** What is the fuel tank capacity of the owner provided generator?

**R:** 2,000 gal

**Q17:** **Sheet S-003:** Is the 4,000 psi mix only used in the IPS structure?

**R:** Use 4,000 psi strength mix for the IPS structure and the slab over the IPS Structure.

**Q18:** **Sheet S-003:** Does the Slab over the top of the IPS structure need to be the 4,000 psi mix as well?

**R:** Yes.

**Q19: Sheet S-003:** All other concrete on the job, including the building and generator slabs is to be the 3,000 psi mix?

**R:** Yes, unless noted otherwise. The slab on grade next to (not over) the IPS shall be 3,000 psi.

**Q20: Sheet C-007:** Please provide as-builts and weight or manufacturer and model number of the existing bathroom facility to be relocated so we can properly coordinate a safe pick plan.

**R:** Contractor may make a request to the City for As-builts per Section 00 20 00 Article 5 Item 5.02 Existing Site Conditions.

**Q21: Sheet I-112:** We cannot find details or information on this stilling well. Is there a detail for it and where is it located in the pump station?

**R:** The stilling well shown on I-112 shall be as follows:

- Still well shall be constructed of Schedule 80 PVC pipe
- Inside diameter of pipe shall be at least 1/2-inch larger than outside diameter of level instrument
- Pipe shall extend from 6-inches above bottom of wet well to 6-inches below mounting hardware at top of wet well
- 1/4-inch holes shall be drilled on both sides of pipes
- Pipe shall be supported from side of wet well with SS pipe clamps on SS unistrut, anchored into structure with two 3/8-inch SS epoxy anchors
- Any required bends in the pipe shall be of a long enough radius to pass the transducer
- Top of transducer cable shall be supported at top of wet well with a manufacturer provided mounting clamp, supported by a SS J-hook bracket anchored to wall with SS anchors.

**Q22: Section 26 32 00:** Who is responsible to provide the anchorage calculations on the owner provided generator?

**R:** The Contractor is responsible.

**Q23: Sheet E-101:** This page shows the OH powerline going over the railroad is to be removed, please confirm that this is correct.

**R:** Yes, existing OH power lines as shown on the drawings shall be demolished, including across the railway. Contractor to coordinate with power utility company.

**Q24: Section 01 12 16:** In order to bypass flows in the existing 18", 21" and 24" influent lines, we will need to draw out of upstream manholes. Where are the closest manholes located?

**R:** There is a manhole on the 21-inch influent sewer to the East as shown on the existing conditions plan. The manholes for the 18-inch and 24-inch are south of the railroad tracks.

**Q25: Section 01 12 16:** If these manhole are off the WTP property, will we be able to access them for bypassing, such as the two lines heading towards the railroad ROW?

**R:** See Section 01 12 16-3.03.C for Potential Work Sequence.

**Q26: Section 32 31 13 & Sheet C-002:** Specification 32 31 13 says knuckle finish top and bottom. Plan page C-002 says twisted and barbed top and bottom. Which is it?

**R:** Provide twisted and barbed finish at the top and bottom.

**Q27: Section 32 31 13 & Sheet C-002:** Spec Section 3.04 H. Razor Wire says, "install as indicated and per manufacturer's recommendations". Page C-002 says "sst barbed tape" but doesn't show it on the drawing or provide a specification for it. It is pointing to the barbed wire, but no razor wire is actually shown in detail. Does the fence have razor wire/barbed tape in addition to barbed wire?

**R:** Razor wire/bared tape is not required.

**Q28: Section 00 43 39:** Specification 00 43 39 for local business participation is not stated to be due with the bid. Please confirm if the Good Faith efforts documentation must be submitted with bid.

**R:** See Section 00 43 39 that states "Bidders shall submit forms as part of their proposal. The City reserves the right to take this information into consideration when evaluating bids for responsiveness."

**Q29: I**n**structions to bidders – Article 21:** article 21 of the instructions to bidders states that Federal Davis-Bacon wage rates apply in addition to BOLI rates. Which publication (building/heavy/highway) is applicable, for the Davis-Bacon rates.

**R:** Heavy Construction

**Q30: standard general conditions/ 00 73 43:** Paragraph 7.11 E 2 of the standard general conditions states the wage rates that apply to this contract are the BOLI wages from the January 1, 2021 publication date. Specification 00 73 43 states the wage rates are to be the BOLI wages published July 1 2022. Please confirm publication is the correct one to use.

**R:** Use current published Oregon BOLI wage rates for July 1, 2022.

**Q31: standard general conditions/ 00 73 43:** GC article 6.01 item F.11 requests our builders risk policy cover owner procured electrical gear for an insurance sublimit of $5,000,000. Builders risk policies are written based on the value of the item being covered. Please provide the value of the owner procured items the GC is required to extend coverage to so we can include in our BRI policy.

**R:** The expected value of the Owner procured items is in the range of 1.5-2 million.

**Q32: Section 03 30 00 - 1.03.D.a.5:** would ASTM C1293 be accepted over the use of C 1260?

**R:** No.

**Q33: Section 03 30 00 - 1.03.E.1:** who will be responsible for running the trial batches after design being accepted?

**R:** The Contractor.

**Q34: Section 03 30 00 - 1.03.E.2**: will field test data more distant than 45 days be allowed to be used in lieu of trail batches?

**R:** No.

**Q35: Section 03 30 00 - 1.04.C.3.b**: are 56-day strengths required for any submittal?

**R:** No.

**Q36: Section 03 30 00 - 1.04.C.3.d**: are drying shrinkage test reports required? Or is the use of an SRA sufficient in lieu of the C 157 data?

**R:** Tests are required.

**Q37: Section 03 30 00 - 2.02.B.1.e.2**: will Gsb SSD of 2.50 be allowed instead of the 2.60 requirement?

**R:** 2.5 will be allowed.

**Q38: Section 03 30 00 - 2.02.B.1.e.4&5**: will ASTM C1293 be accepted of the use of C 289 & 227?

**R:** No.

**Q39: Section 03 30 00 - 2.02.b.2.c.1&2**: will AASHTO T 96 be accepted over ASTM C131 & 535 per ODOT Specifications?

**R:** No.

**Q40: Section 03 30 00 - 2.02.b.2.c.6**: will ASTM C1293 be accepted of the use of C 289?

**R:** No.

**Q41: Section 03 30 00 - 2.03**: Is Silica Fume required for Type A and C, or is a water proofing additive sufficient to replace the use of Silica Fume?

**R:** Yes, pending submittal and approval of waterproofing additive.

**Q42: Section 03 30 00 - 2.03.D**: Is the use of a shrinkage reducing admixture sufficient in lieu of C 157 data?

**R:** No.

**Q43: Section 03 30 00 - 2.03.E**: air target is 4% +/- 1.5% - which of the listed designs will need air entrainment?

**R:** All concrete exposed to weather.

**Q44: Section 31 23 23.33 – 1.05.E.1**: Will ASTM D 6103 be used for acceptance/rejection of any concrete?

**R:** ASTM D 6103 applies to CLSM only.

**Q45: Section 31 23 23.33 – 2.01.A**: the use of Fly ash is unobtainable due to a shortage in the supply – will the use of slag be allowed?

**R:** Yes.

**Q46: Section 31 23 23.33 – 2.03.e.1&2**: will the use of air entrainment be allowed to meet the low PSI requirements?

**R:** Strength is minimum. Air is not desirable.

**Q47: Section 31 23 23.33 – 2.04.b**: will slump be measured in lieu of ASTM D 6103? Which will govern should one pass and one fail, but the adjustment of one affects the other?

**R:** ASTM D6103 governs for CLSM.

**Q48: Sheet S-003**: PSI and water/cement ratio requirements differ from the table in "Vol 2 – specs – 2.03 Concrete Mixes – Table" Which governs?

**R:** Sheet S-003 governs.

**Q49: Sheet S-003**: PSI and water/cement ratio requirements differ from the table in "Vol 2 – specs – 2.03 Concrete Mixes – Table" Which governs?

**R:** Sheet S-003.

**Q50: Sheet S-003**: Crystalline waterproofing admix is required – is this allowed to be used as an additive to an existing design for use of field data?

**R:** Yes.

**Q51: Sheet S-003**: Weather resistance: will the calcium nitrate corrosion inhibiter need to be placed during the batching process, or is this provided by the contractor after placement?

**R:** Place during batching process.

**Q52: Sheet E-051**: The Drawing shows a 12" and 24" flow meter, but the specs list a 8" and 24" meter.

**R:** 8-inch and 24-inch flow meters are the correct size meters. Refer to Sheet M-111.

**Q53: Section 31 00 00 3.07 A.** The specification states "The owner has identified a site for disposal of clean excess excavated earth materials…". Is this a City owned site? If not a City owned site, please provide contact for additional information. Is there a cost for disposal at this site? Is the contractor responsible for grading of pile at disposal site?

**R:** This is a City-Owned Site. There is no cost for disposal. Grading of the disposal pile is not required.

## CHANGES AND ADDITIONS AND/OR DELETIONS

Additions are shown in underline. Deletions are shown in strikeout.

## Changes to the Specifications:

Section 01 10 00 – SUMMARY OF WORK

PART 1 – GENERAL

Item 1.03 OTHER CONTRACTS, Number B.

Replace the existing paragraph with this one.

Electrical and Control System Integration: The Automation Group (TAG) is the Owner's Integrator-of-Record. TAG shall furnish ~~**and install**~~ the following: MCC-200, MCC-300, Network Interface Panel (NIP)-200, NIP-300, Main Network Panel (MNP)-100, Control Panel (CP)-300, (5) Influent Pump VFDs, (2) Harmonic filter feeder buckets, and Pump Disconnect Panels, PDP-110-1, PDP-110-2 and PDP-110-03. The Electrical contractor shall install the Owner-provided electrical and controls equipment listed and all wiring including Ethernet Cabling to the New PLC. The electrical contractor shall be present for and assist with the Process Control Equipment Startup and Commissioning. See Section 01 12 16 and the Drawings for detailed Contractor installation requirements related to Owner-supplied equipment.

Section 08 80 00 - GLAZING

1) Add to Section 88 00 00 Glazing, Part 2 - Products, 2.4 Insulating Glass Units:

C. Type GLZ-1 - Insulating Glass Units: Vision glass, double glazed.
    1. Applications: Exterior glazing unless otherwise indicated.
    2. Space between lites filled with air.
    3. Outboard Lite: Annealed float glass, 1/4 inch (6.4 mm) thick, minimum.
        a. Tint: Clear.
    4. Inboard Lite: Annealed float glass, 1/4 inch (6.4 mm) thick, minimum.
        a. Tint: Clear.
    5. Total Thickness: 1 inch (25.4 mm).
    6. Thermal Transmittance (U-Value), See Drawings.
    7. Visible Light Transmittance (VLT): See Drawings.
    8. Solar Heat Gain Coefficient (SHGC): See Drawings.
D. Type GLZ-1T - Insulating Glass Units: Safety glazing. Same as Type [GLZ-1] except use fully tempered float glass for both outboard and inboard lites.
    1. Applications:
        a. Glazed lites in exterior doors.
        b. Glazed sidelights and panels next to doors.
        c. Other locations required by applicable federal, state, and local codes and regulations.
    2. Glass Type: Same as Type GLZ-1 except use fully tempered float glass for both outboard and inboard lites.

## Changes to the Drawings:

Replace the following drawings with those attached to this Addendum:

E-011

E-020

E-104

E-105

Add the following drawing attached to this Addendum:

I-900

**End of Addendum No. 3**

| | |
|---|---|
| Mr. Greg Springman, Public Works Director | September 16, 2022<br>Date |

EXISTING
PACIFIC POWER
UTILITY VAULT

P001

XFMR-1
NEW UTILITY
TRANSFORMER

P002

SERVICE ENTRANCE SWITCHBOARD, SMSB-1 (1)
480/277V, 3Ø, 4-WIRE, 2500-AMP, 65-KAIC, NEMA 3R

UTILITY METER
AVAILABLE
FAULT CURRENT
33,500 AMPS

M

2500AF
2500AT
LSIG/ARMS

(4)
POWER
MONITOR

CT
SECTION

MAIN
SECTION

G001

C001

P003

P004

DIESEL GENSET, GEN-1 (1)
480V, 3Ø, 4-WIRE
900kW, 1125kVA

(2)
1600A

G002

C004

PB
GEN-1
E-STOP

MAIN ELECTRICAL & BLOWER BUILDING

(2)

(1) ATS-1
2500A
480/277V, 3Ø
4-POLE
NEMA 1
WITH BYPASS
CONTACTOR
100KAIC

N
L
E

C002

P007

MAIN SWITCHBOARD, MSB-1(A) (1)
480/277V, 3Ø, 4-WIRE, 2500-AMP, 65-KAIC

400AF
400AT
LSIG

600AF
400AT
LSIG

1200AF
800AT
LSIG

1200AF
800AT
LSIG

1200AF
1200AT
LSIG

30AT
SPD

K

2500AF
2500AT
3P
LSIG/ARMS
NC

3

P007A

3

K

2500AF
2500AT
3P
LSIG/ARMS
NO

30AT
SPD

1200AF
800AT
LSIG

1200AF
800AT
LSIG

1200AF
1200AT
LSIG

400AF
400AT
LSIG

A-SIDE | MAIN | INCOMING | MAIN | B-SIDE

C006 P005 P100 P200 P300 P400 P201 P301 P401 C007 P006

ACTIVE
HARMONIC
FILTER
AHF-1 (1)

MCC-100
CONNECTION
SHEET: E-012

MCC-200
CONNECTION A
SHEET: E-013

MCC-300
CONNECTION A
SHEET: E-014

MCC-400
CONNECTION A
SHEET: E-015

MCC-200
CONNECTION B
SHEET: E-013

MCC-300
CONNECTION B
SHEET: E-014

MCC-400
CONNECTION B
SHEET: E-015

ACTIVE
HARMONIC
FILTER
AHF-2 (1)

(2)

## GENERAL SHEET NOTES

1. ATS-1 SHALL CONSIST OF AN AUTOMATIC TRANSFER SWITCH WITH BYPASS ISOLATION CONTRACTOR. THE BASIS OF DESIGN SHALL BE AN EATON BIC9F5 SERIES OR APPROVED EQUAL.
2. THE SWITCHBOARD MSB-1 BASIS OF DESIGN IS SIEMENS. ALTERNATE MANUFACTURERS AS DESCRIBED IN THE SPECIFICATIONS ARE STILL APPROVED.

## (1) SHEET KEY NOTES

1. EQUIPMENT IS OWNER FURNISHED, CONTRACTOR INSTALLED.
2. PROVIDE AMP SENTRY RELAY.
3. PROVIDE DOUBLE LUGS ON THE LINE SIDE OF THE MAIN BREAKER AND WIRING AS SHOWN ON P007A FOR BIDDING PURPOSES. P007A WIRING SHALL NOT BE REQUIRED IF THE OWNER'S APPROVED SWITCHBOARD MANUFACTURER PROVIDES A BUSSED SOLUTION AND DOES NOT REQUIRE THE DOUBLE LUGS AND CABLES.
4. PER SPECIFCATIONS, ALLEN BRADLEY PM-5000 OR APPROVED EQUAL.

| NO. | DATE | BY | REVISION |
|---|---|---|---|
| 1 | 09/2022 | BP | ADDENDUM NO. 2 |
| 2 | 09/2022 | BP | ADDENDUM NO. 3 |

NOTICE
0 ½ 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

MB DESIGNED
JL DRAWN
BP CHECKED

REGISTERED PROFESSIONAL ENGINEER
86683
Digitally Signed
OREGON
MAY 08, 2012
BENJAMIN E. PERRY
EXPIRES: 12-31-2022

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MAHLER WATER
RECLAMATION FACILITY
IMPROVEMENTS PROJECT
PHASE 1

SERVICE ENTRANCE ONE-LINE DIAGRAM

PROJECT NO.: 936-50-21-09 | SCALE: AS NOTED | DATE: SEPTEMBER 2022

SHEET
E-011
76 of 135

## SERVICE ENTRANCE POWER CONDUIT / CONDUCTOR SCHEDULE

| CONDUIT ID NO. | CONDUIT | | CONDUCTORS PER CONDUIT | | | | | FROM | TO | DESCRIPTION | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | QUANTITY | SIZE | UNGROUNDED | GROUNDED | GROUNDING | CABLE | SPARE | | | | |
| P001 | 1 | 6.0 INCH | - | - | - | - | - | EXISTING UTILITY VAULT | NEW UTILITY XFMR-1 | INSTALL PER UTILITY REQUIREMENTS | - |
| P002 | 6 | 6.0 INCH | - | - | - | - | - | NEW UTILITY XFMR-1 | SMSB-1 | INSTALL PER UTILITY REQUIREMENTS | - |
| P003 | 7 | 4.0 INCH | 3 - #500 | 1 - #500 | 1 - #350 | - | - | SMSB-1 | ATS-1 | - | - |
| P004 | 5 | 4.0 INCH | 3 - #500 | 1 - #500 | 1 - #4/0 | - | - | GENSET GEN-1 | ATS-1 | - | - |
| P005 | 2 | 2.5 INCH | 3 - #3/0 | - | 1 - #3 | - | - | MSB-1 | AHP-1 | - | - |
| P006 | 2 | 2.5 INCH | 3 - #3/0 | - | 1 - #3 | - | - | MSB-1 | AHP-2 | - | - |
| P007 | 7 | 4.0 INCH | 3 - #500 | 1 - #500 | 1-#350 | - | - | ATS-1 | MSB-1 (A) | - | - |
| P007A | 7 | | 3 - #500 | 1 - #500 | 1-#350 | - | - | ATS-1 | MSB-1 (B) | INSTALL CONDUCTORS ON MSB-1 (A) AND (B) IN DOULE LUG CONFIGURATION. INSTALL CABLES IN TRENCH BELOW MSB-1 (A) AND (B) | - |
| P100 | 2 | 2.5 INCH | - | - | - | - | - | MSB-1 | MCC-100 | STUB OUT CONDUIT OUTSIDE OF MAIN ELECTRICAL & BLOWER BUILDING CONCRETE PAD, SEE E-102 FOR SITE PLAN. | - |
| P200 | 4 | 2.5 INCH | 3 - #3/0 | - | 1 - #1/0 | - | - | MSB-1 | MCC-200 | - | - |
| P201 | 4 | 2.5 INCH | 3 - #3/0 | - | 1 - #1/0 | - | - | MSB-1 | MCC-200 | - | - |
| P300 | 4 | 2.5 INCH | 3 - #250 | - | 1 - #3/0 | - | - | MSB-1 | MCC-300 | - | - |
| P301 | 4 | 2.5 INCH | 3 - #250 | - | 1 - #3/0 | - | - | MSB-1 | MCC-300 | - | - |
| P400 | 4 | 3.0 INCH | - | - | - | - | - | MSB-1 | MCC-400 | STUB OUT CONDUIT OUTSIDE OF MAIN ELECTRICAL & BLOWER BUILDING CONCRETE PAD, SEE E-102 FOR SITE PLAN. | - |
| P401 | 4 | 3.0 INCH | - | - | - | - | - | MSB-1 | MCC-400 | STUB OUT CONDUIT OUTSIDE OF MAIN ELECTRICAL & BLOWER BUILDING CONCRETE PAD, SEE E-102 FOR SITE PLAN. | - |

NOTES:

## MCC-100 POWER CONDUIT / CONDUCTOR SCHEDULE

| CONDUIT ID NO. | CONDUIT | | CONDUCTORS PER CONDUIT | | | | | FROM | TO | DESCRIPTION | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | QUANTITY | SIZE | UNGROUNDED | GROUNDED | GROUNDING | CABLE | SPARE | | | | |
| P101 | 1 | 0.75 INCH | 3 - #12 | - | 1 - #12 | - | - | MCC-100 | RAW SEWAGE SCREEN NO.1<br>SCN-230-10 | - | 1 |
| P102 | 1 | 0.75 INCH | 3 - #12 | - | 1 - #12 | - | - | MCC-100 | RAW SEWAGE SCREEN NO.2<br>SCN-230-20 | - | 1 |
| P103 | 1 | 0.75 INCH | 3 - #12 | - | 1 - #12 | - | - | MCC-100 | SCREENINGS WASH PRESS<br>SWP-230-01 | - | 1 |
| P104 | 1 | 0.75 INCH | 3 - #12 | - | 1 - #10 | - | - | MCC-100 | GRIT PUMP<br>PMP-240-01 | - | 1 |
| P105 | 1 | 0.75 INCH | 3 - #12 | - | 1 - #12 | - | - | MCC-100 | GRIT BASIN DRIVE<br>MTR-240-01 | - | 1 |
| P106 | 1 | 0.75 INCH | 3 - #12 | - | 1 - #12 | - | - | MCC-100 | GRIT CLASSIFIER<br>CLS-240-01 | - | 1 |
| P107 | 1 | 0.75 INCH | 3 - #12 | - | 1 - #12 | - | - | MCC-100 | DEWATERING CONDITIONING TANK MIXER<br>MIX-250-01 | - | 1 |
| P108 | 1 | 0.75 INCH | 3 - #12 | - | 1 - #12 | - | - | MCC-100 | DEWATERING SCREW PRESS<br>DEW-250-02 | - | 1 |
| P109 | 1 | 0.75 INCH | 3 - #12 | - | 1 - #12 | - | - | MCC-100 | DEWATERING CONVEYOR 1 INCLINE<br>CON-250-03 | - | 1 |
| P110 | 1 | 0.75 INCH | 3 - #12 | - | 1 - #12 | - | - | MCC-100 | DEWATERING CONVEYOR 2 HORIZONTAL<br>CON-250-04 | - | 1 |
| P111 | 1 | 0.75 INCH | 3 - #12 | - | 1 - #12 | - | - | MCC-100 | DEWATERING CONVEYOR 3 LEVEL LODER<br>CON-250-05 | - | 1 |
| P112 | 1 | 0.75 INCH | 3 - #12 | - | 1 - #12 | - | - | MCC-100 | DEWATERING POLYMER FEED PUMP NO.1<br>POL-250-04 | - | 1 |
| P113 | 1 | 0.75 INCH | 3 - #12 | - | 1 - #12 | - | - | MCC-100 | DEWATERING POLYMER FEED PUMP NO.2<br>POL-250-05 | - | 1 |
| P114 | 1 | 1.5 INCH | 3 - #2 | - | 1 - #6 | - | - | MCC-100 | TRANSFORMER<br>T-ADMIN | - | 1 |
| P115 | 1 | 2.5 INCH | 3 - #3/0 | - | 1 - #6 | - | - | MCC-100 | PANEL<br>DP-100 | - | 1 |
| P116 | 2 | 2.0 INCH | 3 - #1/0 | - | 1 - #6 | - | - | TRANSFORMER<br>T-ADMIN | T-ADMIN DS | - | 1 |
| P117 | 1 | 1.25 INCH | 3 - #4 | - | 1 - #8 | - | - | PANEL<br>DP-100 | TRANSFORMER<br>T-100 | - | 1 |
| P118 | 1 | 0.75 INCH | 3 - #12 | - | 1 - #12 | - | - | PANEL<br>DP-100 | HEADWORKS SCREEN NO.1<br>INFLUENT GATE<br>SLG-230-01 | WIRE TO PANEL DP-100,<br>CIRCUIT #13,15,17 | 1 |
| P119 | 1 | 0.75 INCH | 3 - #12 | - | 1 - #12 | - | - | PANEL<br>DP-100 | HEADWORKS SCREEN NO.1<br>EFFLUENT GATE<br>SLG-230-02 | WIRE TO PANEL DP-100,<br>CIRCUIT #19,21,23 | 1 |
| P120 | 1 | 0.75 INCH | 3 - #12 | - | 1 - #12 | - | - | PANEL<br>DP-100 | HEADWORKS SCREEN NO.2<br>INFLUENT GATE<br>SLG-230-03 | WIRE TO PANEL DP-100,<br>CIRCUIT #25,27,29 | 1 |
| P121 | 1 | 0.75 INCH | 3 - #12 | - | 1 - #12 | - | - | PANEL<br>DP-100 | HEADWORKS SCREEN NO.2<br>EFFLUENT GATE<br>SLG-230-04 | WIRE TO PANEL DP-100,<br>CIRCUIT #20,22,24 | 1 |
| P122 | 1 | 0.75 INCH | 3 - #12 | - | 1 - #12 | - | - | PANEL<br>DP-100 | MAIN CHANNEL GATE<br>SLG-230-05 | WIRE TO PANEL DP-100,<br>CIRCUIT #26,28,30 | 1 |
| P123 | 1 | 0.75 INCH | 3 - #12 | - | 1 - #12 | - | - | PANEL<br>DP-100 | BYPASS CHANNEL GATE<br>SLG-230-06 | WIRE TO PANEL DP-100,<br>CIRCUIT #32,34,36 | 1 |
| P124 | 1 | 0.75 INCH | 3 - #12 | - | 1 - #12 | - | - | PANEL<br>DP-100 | MAIN GATE REMOVAL<br>BASIN EFFLUENT<br>CHANNEL GATE<br>SLG-240-04 | WIRE TO PANEL DP-100,<br>CIRCUIT #31,33,35 | 1 |
| P125 | 1 | 0.75 INCH | 3 - #12 | - | 1 - #12 | - | - | PANEL<br>DP-100 | RAW SEWAGE BYPASS<br>CHANNEL GATE<br>SLG-240-05 | WIRE TO PANEL DP-100,<br>CIRCUIT #37,39,41 | 1 |
| P126 | 2 | 2.0 INCH | 3 - #1/0 | - | 1 - #4 | - | - | T-ADMIN DS | PANEL<br>ADMIN | - | 1 |
| P127 | 1 | 2.5 INCH | 3 - #2/0 | - | 1 - #4 | - | - | TRANSFORMER<br>T-100 | PANEL<br>LP-100 | - | 1 |
| P128 | - | - | - | - | - | - | - | - | - | - | - |
| P129 | - | - | - | - | - | - | - | - | - | - | - |
| P130 | - | - | - | - | - | - | - | - | - | - | - |

NOTES:
[1] EQUIPMENT IS PART OF PHASE 2, NOT PART OF THIS SCOPE.

| NO. | DATE | BY | REVISION |
|---|---|---|---|
| 1 | 09/2022 | BP | ADDENDUM NO. 2 |
| 2 | 09/2022 | BP | ADDENDUM NO. 3 |

NOTICE
0 ½ 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

MB DESIGNED
JL DRAWN
BP CHECKED

REGISTERED PROFESSIONAL ENGINEER
86683
Digitally Signed
OREGON
MAY 08, 2012
BENJAMIN E. PERRY
EXPIRES: 12-31-2022

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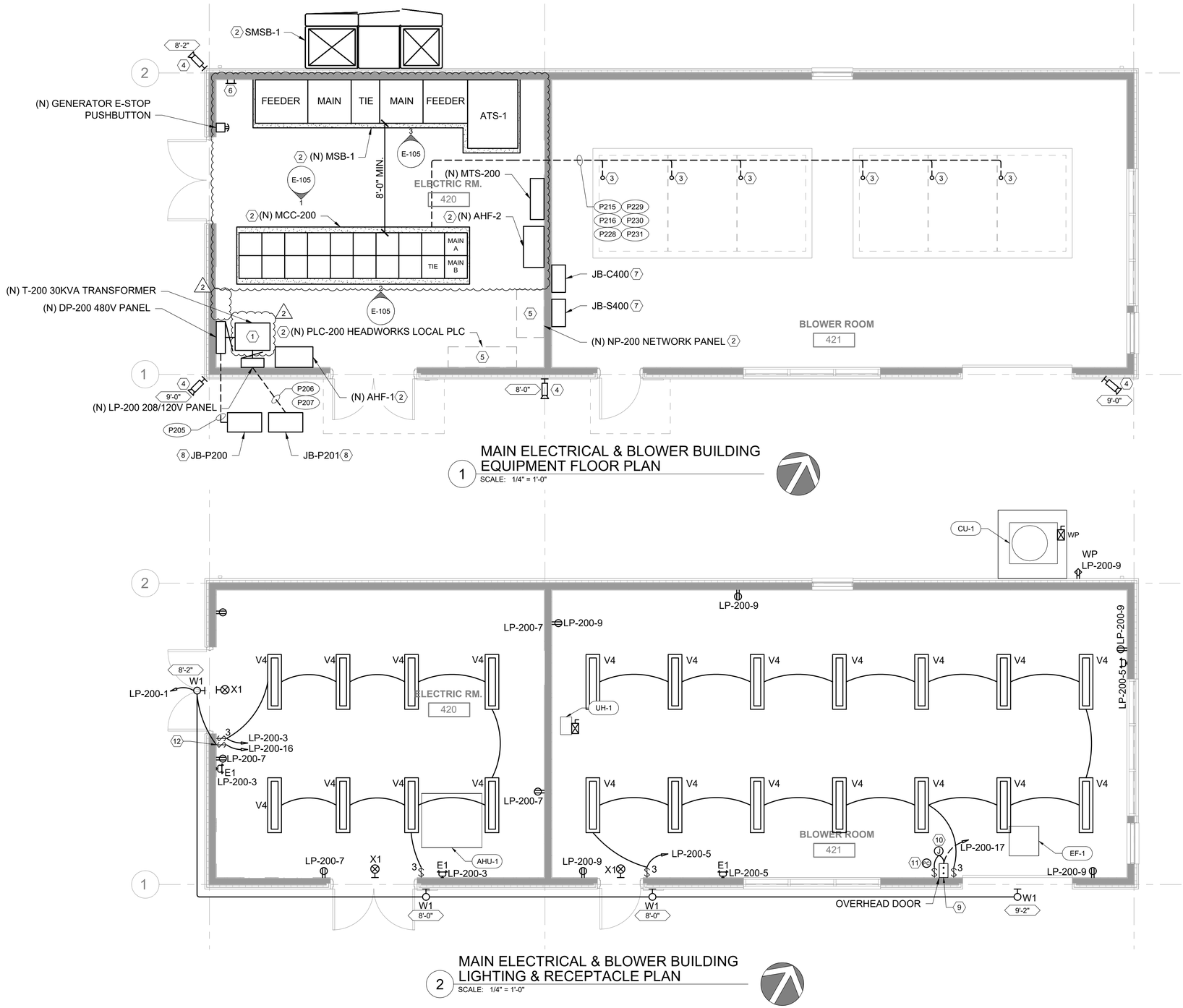
MAHLER WATER RECLAMATION FACILITY IMPROVEMENTS PROJECT PHASE 1

POWER CONDUIT SCHEDULE 1

PROJECT NO.: 936-50-21-09 | SCALE: AS NOTED | DATE: SEPTEMBER 2022

SHEET
E-020




## GENERAL SHEET NOTES

1. REFERENCE MECHANICAL CONNECTION SCHEDULE E-027 FOR HVAC LOADS AND CIRCUITING.
2. ALL EXIT SIGNS AND EMERGENCY LIGHT SHALL BE WIRED TO LOCAL LIGHTING BRANCH CIRCUIT, AHEAD OF ALL SWITCHING.

## SHEET KEY NOTES

1. CONTRACTOR SHALL MOUNT TRANSFORMER T-200 ABOVE LP-200.
2. OWNER FURNISHED, CONTRACTOR INSTALLED EQUIPMENT.
3. COORDINATE FINAL LOCATION WITH OWNER. STUB UP CONDUIT AND CAP. LFAC CONDUIT SHALL EXTEND TO BLOWER AS PART OF PHASE 2.
4. PROVIDE 0.75" CONDUIT FOR FUTURE CAMERAS AND ROUTE UNDERGROUND TO FUTURE LOCATION OF NIP-200. REFERENCE SECTION 260533 FOR REQUIREMENTS ON SPARE CONDUIT.
5. EQUIPMENT IS PART OF PHASE 2, NOT PART OF THIS SCOPE.
6. MAIN GROUNDING BUS BAR.
7. PROVIDE 24"H X 24"W X 12"D JUNCTION BOX.
8. PROVIDE 17"W X 30"L IN-GROUND JUNCTION BOX.
9. OVERHEAD DOOR PUSHBUTTONS STATION. PROVIDE 0.75" CONDUIT FROM DOOR CONTROLLER TO PUSHBUTTON STATION. INSTALL PER MANUFACTURER'S INSTRUCTIONS.
10. OVERHEAD DOOR CONTROLLER (2 - #12, 1 - #12G IN 0.75" CONDUIT). COORDINATE LOCATION WITH ARCHITECT PRIOR TO INSTALLATION.
11. OVERHEAD DOOR CONTROLLER PHOTO EYE. PROVIDE 0.75" CONDUIT FROM DOOR CONTROLLER TO PHOTO EYES. INSTALL PHOTO EYE PER MANUFACTURER'S INSTRUCTIONS.
12. PROVIDE SWITCH FOR ENTRY GATE LIGHT.

| NO. | DATE | BY | REVISION |
|---|---|---|---|
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| 2 | 09/2022 | BP | ADDENDUM NO. 3 |

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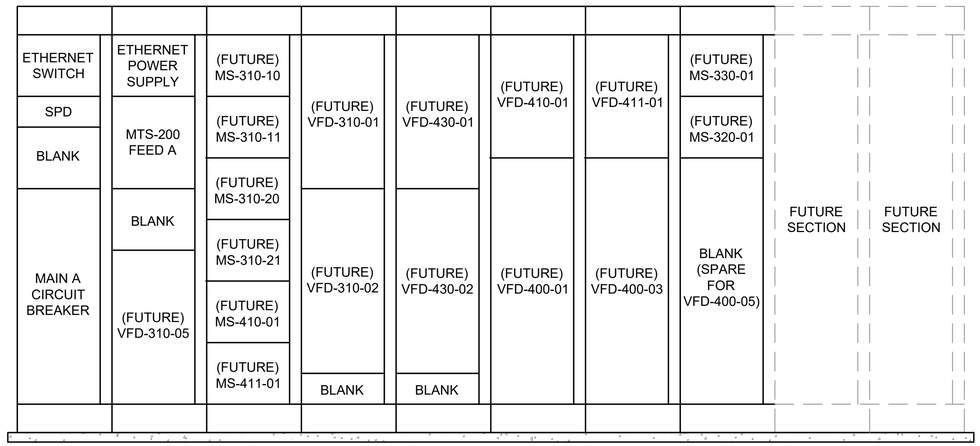
MAHLER WATER RECLAMATION FACILITY IMPROVEMENTS PROJECT PHASE 1

MAIN ELECTRICAL & BLOWER BUILDING FLOOR PLAN

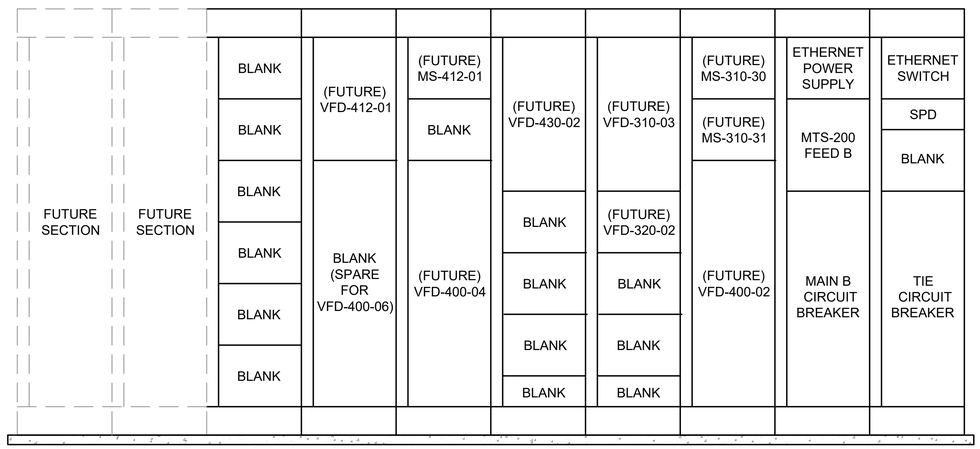
PROJECT NO.: 936-50-21-09 | SCALE: AS NOTED | DATE: SEPTEMBER 2022

SHEET
E-104
93 of 135

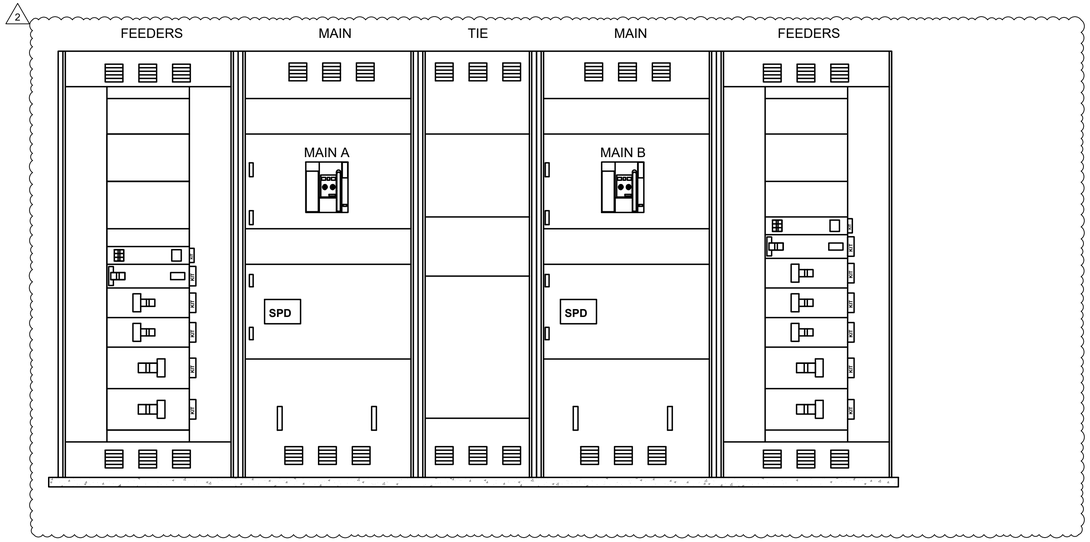
G:\PROJECTS\103 - West Yost Associates\1032109 - Sweet Home Wwtp Phase 1 Design\Design\(2) Drawings\Current\sweet Home Wwtp Phase 1 Design\Sheets\E-104 Main Electrical & Blower Building Floor Plan.dwg E-104 Main Electrical & Blower Building Floor Plan 9/15/2022 5:11 PM JLUTE 24.1s (LMS Tech)




1 MCC-200 NORTH ELEVATION - A-SIDE
SCALE: 3/4" = 1'-0"




2 MCC-200 SOUTH ELEVATION - B-SIDE
SCALE: 3/4" = 1'-0"




3 MSB-1 ELEVATION
SCALE: 3/4" = 1'-0"

| NO. | DATE | BY | REVISION |
|---|---|---|---|
| 1 | 09/2022 | BP | ADDENDUM NO. 2 |
| 2 | 09/2022 | BP | ADDENDUM NO. 3 |
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| 4 | | | |
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MAHLER WATER RECLAMATION FACILITY IMPROVEMENTS PROJECT PHASE 1

MAIN ELECTRICAL & BLOWER BUILDING
MCC-200 & MSB-1 ELEVATIONS

PROJECT NO.: 936-50-21-09 | SCALE: AS NOTED | DATE: SEPTEMBER 2022

SHEET
E-105

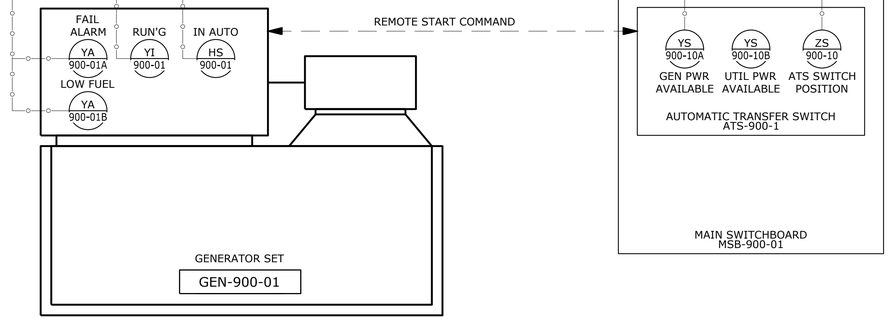
SCADA

CP-200

GEN LOW FUEL ALARM — YA 900-01A
GEN RUN'G — YI 900-01
GEN FAIL ALARM — YA 900-01B
GEN NOT IN AUTO — HS 900-01

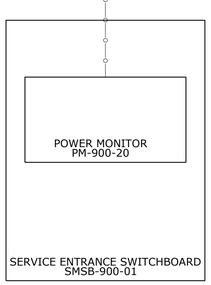
ATS NORMAL POWER AVAILABLE — YI 900-10A
ATS GENERATOR POWER AVAILABLE — YI 900-10B
ATS ON UTIL POWER — ZS 900-10A
ATS ON GEN POWER — ZS 900-10B

VOLTAGE INDICATOR — EI 900-20
AMPERAGE INDICATOR FAIL ALARM — OC 900-20
PHASE LOSS ALARM — ZI 900-20




REMOTE START COMMAND




C:\Users\aaron\AppData\Local\Autodesk\AutoCAD Plant 3D\CollaborationCache\SweetHome-P3D\PID DWG\Sheets\Phase 1\I-900.dwg I-900 9/15/2022 4:26 PM AARON 24.1s (LMS Tech)

| NO. | DATE | BY | REVISION |
|---|---|---|---|

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MAHLER WATER RECLAMATION FACILITY IMPROVEMENTS PROJECT PHASE 1

GENERATOR SET

PROJECT NO.: 936-50-21-09 | SCALE: AS SHOWN | DATE: SEPT 2022

SHEET
I-900
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