ROSEBURG REGIONAL AIRPORT

STANDBY POWER GENERATOR

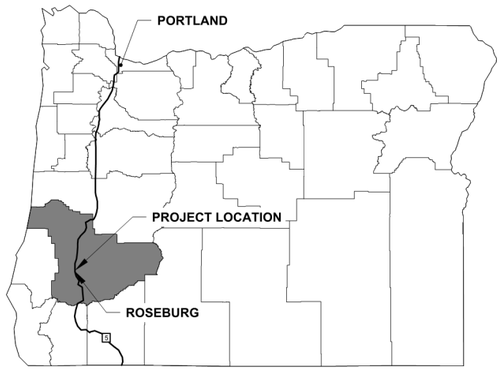
ROSEBURG, OREGON

CITY NO.: 22PW06

BIL NO.: 3-41-0054-031-2024

STATE NO.: COAR-2022-RBG-00033

SEPTEMBER 2023

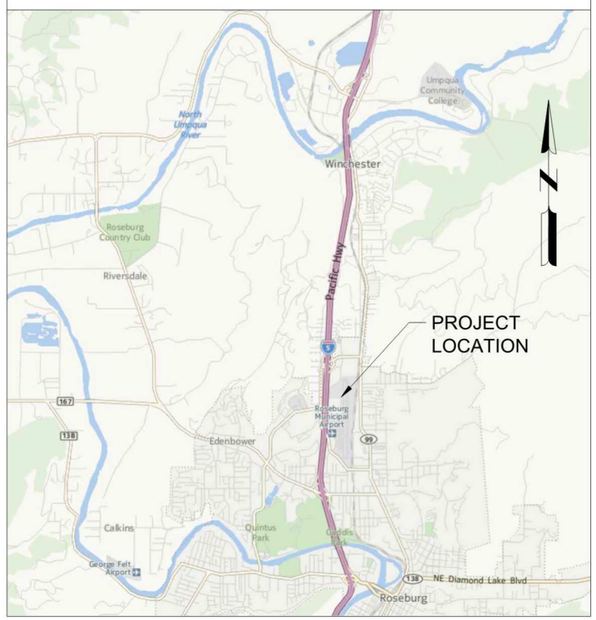


DOUGLAS COUNTY, OREGON

ISSUED FOR BID

SHEET INDEX

VICINITY MAP



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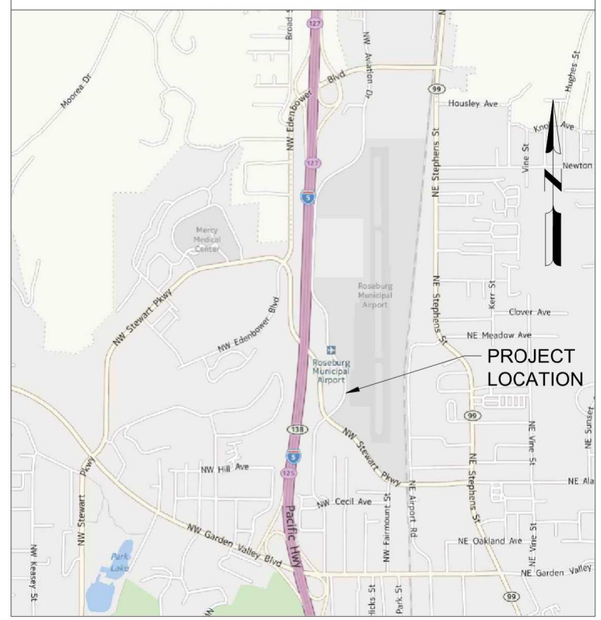
Know what's **below.**
Call before you dig.

ATTENTION:
OREGON LAW REQUIRES YOU TO FOLLOW RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OAR 952-001-0010 THROUGH 952-001-0100. YOU MAY OBTAIN COPIES OF THE RULES BY CALLING THE CENTER AT (800) 332-2344.

LOCATION MAP



REGISTERED PROFESSIONAL ENGINEER
86602PE
DIGITALLY SIGNED
OREGON
3/13/2012
RYAN J. BERGSTROM
EXPIRES: 12 / 31 / 23

Mead & Hunt

Mead and Hunt, Inc.
9600 NE Cascades Parkway,
Suite 100
Portland, OR 97220
phone: 503-548-1494
meadhunt.com

ROSEBURG REGIONAL AIRPORT
STANDBY POWER GENERATOR

2151 NW AVIATION DRIVE
ROSEBURG, OREGON

ISSUED
ISSUED FOR BID

M&H NO.: 1821200-212174.01
DATE: SEPTEMBER 2023
DESIGNED BY: RJB
DRAWN BY: JTH
CHECKED BY: RJB
DO NOT SCALE DRAWINGS

SHEET CONTENTS
COVER SHEET

SHEET NO. 1 of 7

G-001

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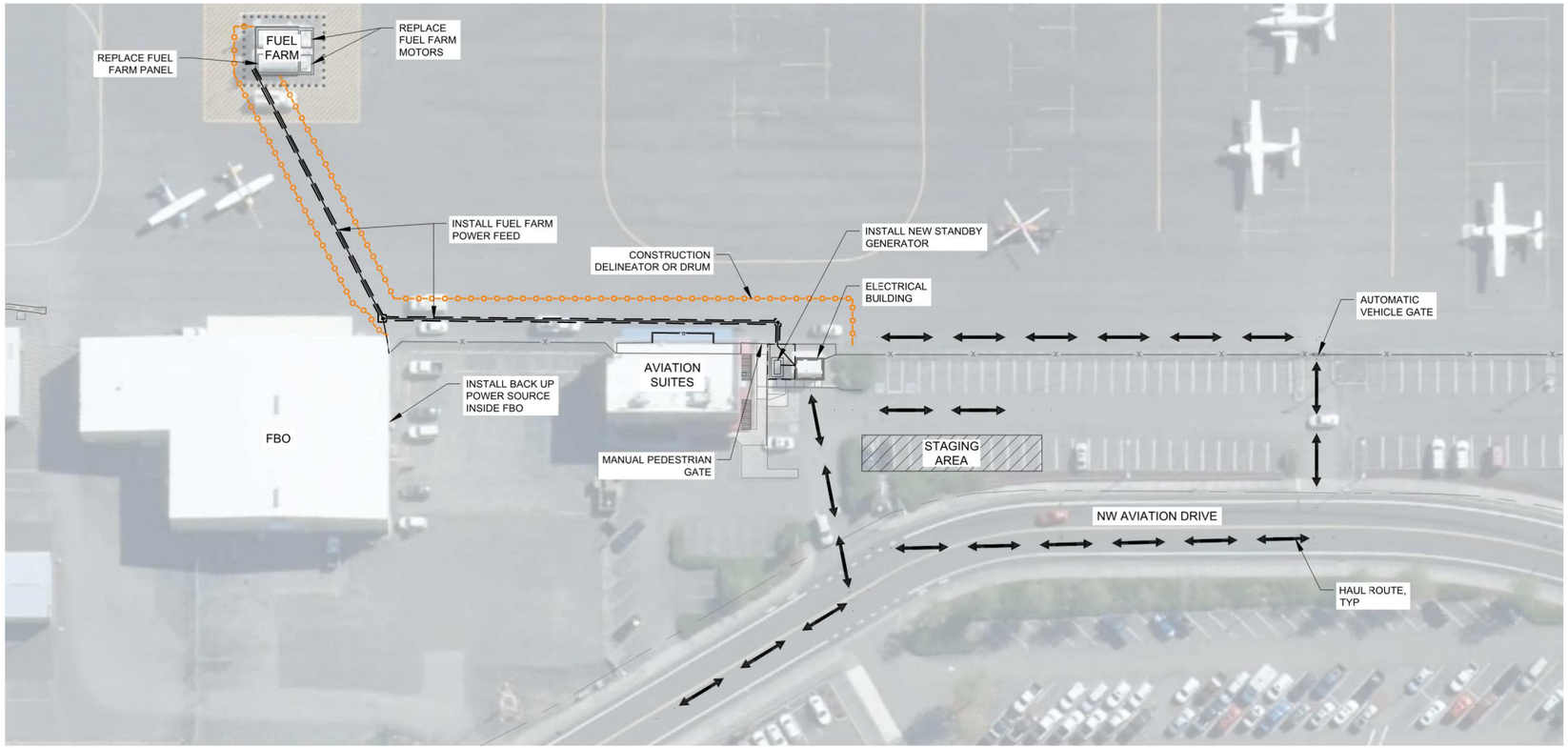
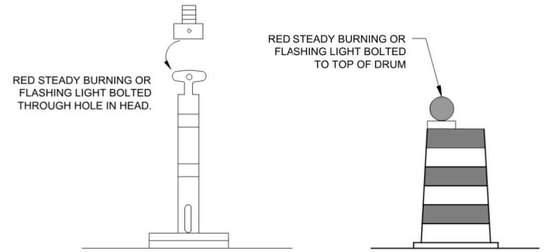


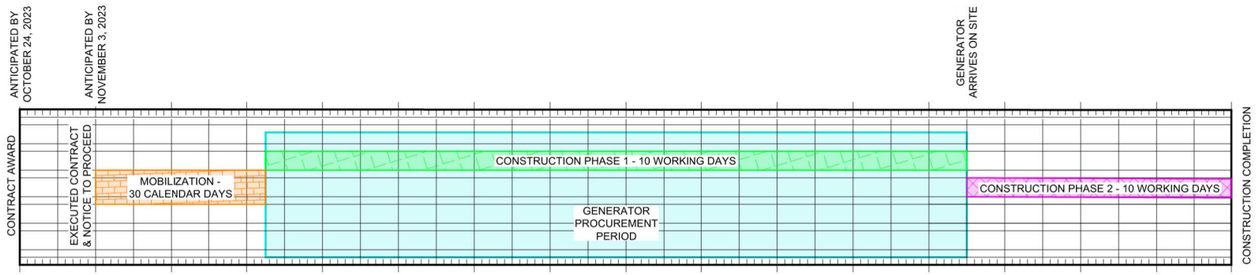


NOTES:

1. THE CONTRACTOR HAS THE OPTION TO USE DELINEATORS OR DRUMS WHERE IDENTIFIED IN THE PLANS.
2. CONSTRUCTION DELINEATORS OR DRUMS SHALL BE PROVIDED BY THE CONTRACTOR. CONTRACTOR SHALL SUPPLY A SUFFICIENT NUMBER OF DELINEATORS OR DRUMS FOR THE DURATION OF THE PROJECT. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE APPROPRIATE NUMBER OF DELINEATORS OR DRUMS AS IT RELATES TO THE CONTRACTOR'S WORK PLAN.
3. CONTRACTOR SHALL MAINTAIN ALL LIGHTS IN WORKING ORDER FOR THE DURATION OF THE PROJECT.
4. GAPS BETWEEN DELINEATOR/DRUMS SHALL BE NO MORE THAN 5 FEET.

1 CONSTRUCTION DELINEATOR OR DRUM
NOT TO SCALE

0 40 80



PROJECT PHASING - WORK TO BE COMPLETED

AIRPORT INFORMATION

AIRPORT REFERENCE CODE (ARC): B-II
TAXIWAY DESIGN GROUP (TDG): II
CRITICAL AIRCRAFT: CESSNA CITATION XLS
TAXIWAY OBJECT FREE AREA: 124 FEET (62 FEET FROM TAXIWAY C/L)
COMMON TRAFFIC ADVISORY FREQUENCY (CTAF): 122.8 MHz

MOBILIZATION ELEMENT - 30 CALENDAR DAYS

NOTICE TO PROCEED (NTP) FOR THE MOBILIZATION ELEMENT WILL BE GIVEN IMMEDIATELY AFTER CONTRACT EXECUTION. THE MOBILIZATION ELEMENT INCLUDES:

- PROVIDE ALL REQUIRED SUBMITTALS IDENTIFIED IN THE CONTRACT DOCUMENTS.
- PROVIDE CONTRACTOR'S PROPOSED WORK SCHEDULE.
- SUBMISSION OF AN APPROVED SAFETY PLAN COMPLIANCE DOCUMENT (SPCD) AS PROVIDED IN THE CSPP.

CONSTRUCTION ELEMENT - 20 WORKING DAYS

IT IS ANTICIPATED THERE WILL BE A LAPSE OF TIME BETWEEN THE MOBILIZATION ELEMENT AND CONSTRUCTION ELEMENT FOR THE CONTRACTOR TO PROCURE MATERIALS. ADDITIONALLY THE CONSTRUCTION ELEMENT HAS BEEN SPLIT INTO TWO PHASES TO ALLOW ELEMENTS OF CONSTRUCTION TO OCCUR PRIOR TO ARRIVAL OF THE STANDBY POWER GENERATOR.

NOTICE TO PROCEED FOR THE CONSTRUCTION ELEMENT WILL NOT BE ISSUED UNTIL THE MOBILIZATION ELEMENT IS COMPLETE. THE CONSTRUCTION ELEMENT SHALL BE COMPLETED AND READY FOR FINAL PAYMENT IN 20 WORKING DAYS AND SHALL BE PHASED AS OUTLINED BELOW.

PHASE 1 - 10 WORKING DAYS

- COMPLETE PLACEMENT OF CONCRETE FOUNDATION FOR STANDBY GENERATOR, INCLUDING ASSOCIATED CONDUIT ROUTING TO EXISTING ELECTRICAL BUILDING.
- COMPLETE THE REMOVAL, SALVAGE (AS REQUIRED), AND INSTALLATION OF 6-FOOT CHAIN-LINK FENCE.

PHASE 2 - 10 WORKING DAYS

- PHASE 2 MAY BEGIN ONCE THE CONCRETE PLACED UNDER PHASE 1 HAS CURED IN ACCORDANCE WITH ODOT 00540 STRUCTURAL CONCRETE CONCRETE STRUCTURES.
- COMPLETE INSTALLATION OF THE STANDBY GENERATOR AND AUTOMATIC TRANSFER SWITCH, INCLUDING ALL WIRING, CONNECTIONS, TESTING, INSPECTIONS, AND OTHER NECESSARY ITEMS TO PROVIDE A FULLY FUNCTIONAL STANDBY GENERATOR UNIT.
- COMPLETE INSTALLATION OF CONDUIT AND WIRING BETWEEN ELECTRICAL BUILDING AND FUEL FARM.
- COMPLETE THE REMOVAL AND REPLACEMENT OF EXISTING FUEL FARM PUMPS INCLUDING ALL WIRING, CONNECTIONS, TESTING, INSPECTIONS, AND OTHER NECESSARY ITEMS TO RE-ESTABLISH A FULLY FUNCTIONAL FUEL FARM.
- COMPLETE FBO WORK, FUEL FARM WORK, AND ELECTRICAL BUILDING WORK.

IMPACT ON AIRPORT OPERATIONS

1. ALL WORK ELEMENTS ARE OUTSIDE OF EXISTING RUNWAY AND TAXIWAY OBJECT FREE AREAS. RUNWAY 16/34 AND TAXIWAY A SHALL REMAIN OPERATIONAL AT ALL TIMES DURING CONSTRUCTION.
2. A TEMPORARY ONE-DAY POWER OUTAGE AT THE EXISTING ELECTRICAL BUILDING IS NECESSARY TO COMPLETE THE FINAL CONNECTIONS INSIDE THE ELECTRICAL BUILDING. THIS OUTAGE WILL IMPACT THE AIRPORT-OWNED RUNWAY 34 PAPI, RUNWAY 34 REILS, RUNWAY 16 REILS, PRIMARY AND SUPPLEMENTAL WINDCONES, RUNWAY AND TAXIWAY EDGE LIGHTING. THE TEMPORARY OUTAGE OF THE ELECTRICAL BUILDING MAY ONLY OCCUR FROM 30-MINUTES AFTER SUNRISE TO 90-MINUTES BEFORE SUNSET, AND SHALL BE APPROVED BY THE AIRPORT PRIOR TO SCHEDULING. A MINIMUM OF 5-DAYS' NOTICE SHALL BE PROVIDED BY THE CONTRACTOR TO SCHEDULE THE OUTAGE.
3. A TEMPORARY TWO-DAY POWER OUTAGE AT THE EXISTING FUEL FARM IS ALLOWED TO COMPLETE THE REPLACEMENT OF FUEL FARM MOTORS AND PERFORM FINAL ELECTRICAL CONNECTIONS AT THE FUEL FARM. THE TEMPORARY OUTAGE SHALL BE APPROVED BY THE FBO AND AIRPORT PRIOR TO SCHEDULING. A MINIMUM OF 5-DAYS' NOTICE SHALL BE PROVIDED BY THE CONTRACTOR TO SCHEDULE THE OUTAGE.
4. THE CONTRACTOR SHALL FOLLOW ALL REQUIREMENTS OF THE CONSTRUCTION SAFETY AND PHASING PLAN (CSPP). THE CONTRACTOR WILL BE REQUIRED TO SUBMIT A SAFETY PLAN COMPLIANCE DOCUMENT (SPCD), AS OUTLINED IN THE CSPP, AT THE PRE-CONSTRUCTION MEETING.
5. THE CONTRACTOR IS RESPONSIBLE FOR KEEPING THE AIRFIELD SECURE AT ALL TIMES. SECURITY GATES MUST BE CLOSED AND LOCKED WHEN NOT IN USE.
6. THE CONTRACTORS' MAXIMUM EQUIPMENT HEIGHT MAY NOT EXCEED 18 FEET, UNLESS OTHERWISE APPROVED BY THE AIRPORT.
7. CONTRACTOR SHALL PROVIDE ADEQUATE MARKING, BARRICADES, OR OTHER ACCEPTABLE MEANS TO PROTECT THE WORK BEING PERFORMED UNDER THIS CONTRACT.
8. CONTRACTOR SHALL ENSURE THAT ALL PAVED SURFACES ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.

REGISTERED PROFESSIONAL ENGINEER
86602PE
DIGITALLY SIGNED
OREGON
31/13/2012
RYAN J. BERGSTROM
EXPIRES: 12 / 31 / 23

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2151 NW AVIATION DRIVE
ROSEBURG, OREGON

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DATE: SEPTEMBER 2023
DESIGNED BY: RJB
DRAWN BY: JTH
CHECKED BY: RJB
DO NOT SCALE DRAWINGS

SHEET CONTENTS
CONSTRUCTION SAFETY, PHASING AND SITE LAYOUT PLAN

SHEET NO. 2 of 7

G-081

X:\1821200\212174.01\TECH\CAD\DRAWINGS\G-081 CONSTRUCTION SAFETY, PHASING AND SITE LAYOUT PLAN.DWG
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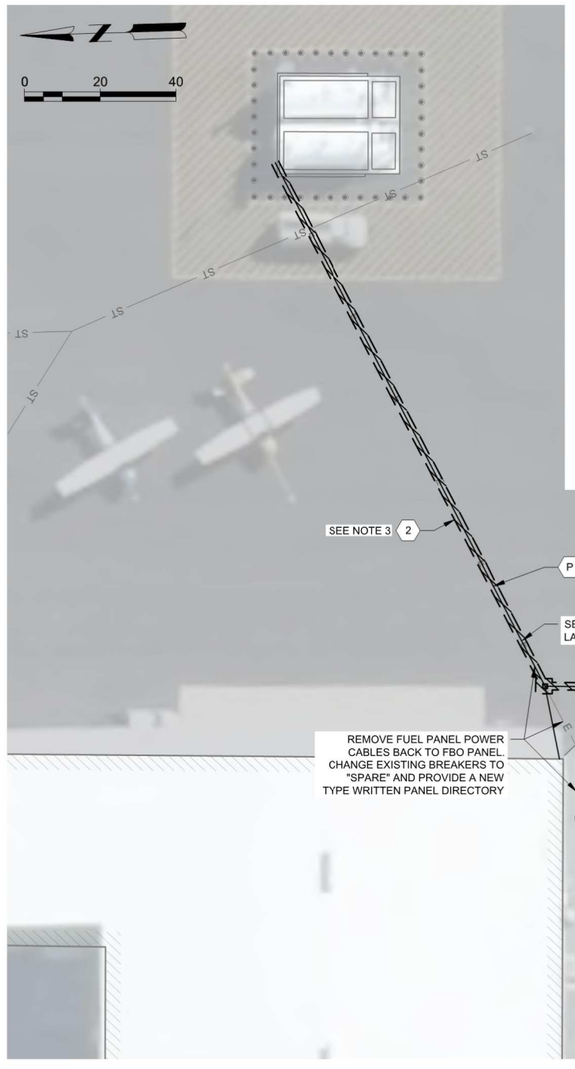
LEGEND

FEATURES

- (E) CATCH BASIN (CB)
- (E) SANITARY MANHOLE (MH)
- (E) STORM MANHOLE
- (N) AIRFIELD ELECTRICAL HANDHOLE
- (E) GATE
- REMOVE (E) AC AND REMOVE AND SALVAGE (E) AB
- (E) CONCRETE
- (N) ASPHALT
- (E) AGGREGATE BASE
- (E) GRASS

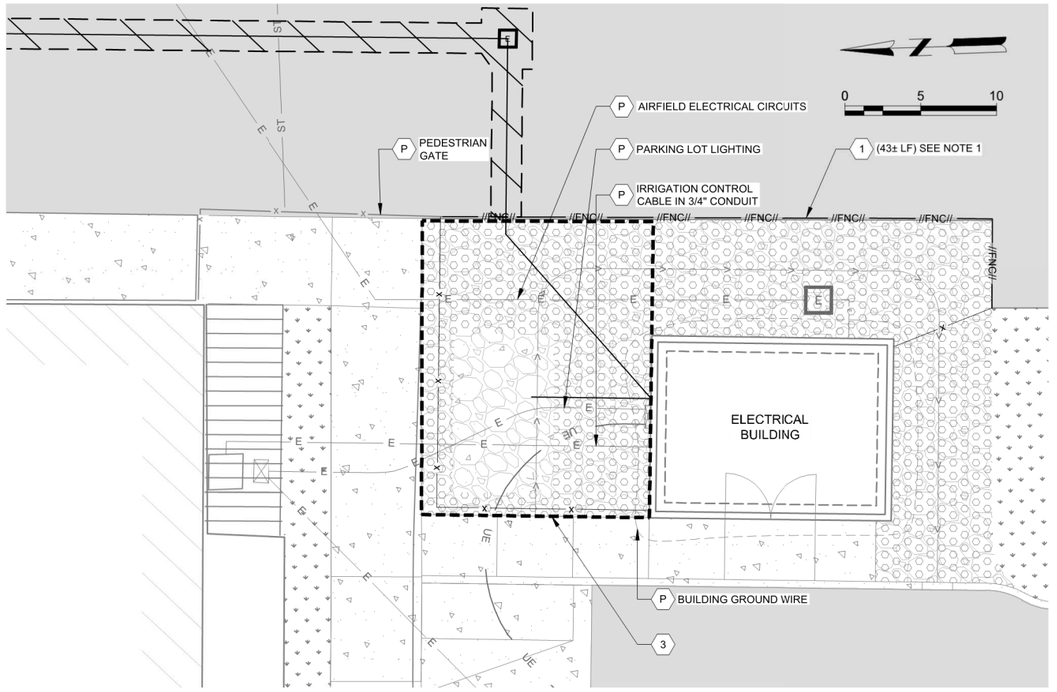
LINETYPES

- (E) AIRPORT ELEC CIRCUIT (UNDERGROUND)
- (E) POWER (UNDERGROUND)
- (N) CONDUIT
- (E) BARBED WIRE FENCE
- REMOVE AND SALVAGE FENCE
- (N) CHAIN-LINK FENCE
- (E) WATER LINE
- (E) STORM SEWER
- (E) EDGE OF PAVEMENT
- (E) HANDRAIL



EXISTING 10 HP

EXISTING 7.5 HP



DEMOLITION NOTES:

1. AT THE CONTRACTOR'S OPTION, 6-FOOT CHAIN-LINK FENCE MATERIALS REMOVED UNDER THIS PROJECT MAY BE SALVAGED AND REUSED TO CONSTRUCT 6-FOOT CHAIN-LINK FENCE CONTAINED UNDER OTHER ITEMS OF WORK. THESE MATERIALS ARE LIMITED TO CHAIN-LINK FENCE FABRIC, BARBED WIRE EXTENSION ARMS, TOP RAIL, AND GATE PANELS. SALVAGEABLE IS CONSIDERED FABRIC WITHOUT HOLES, TEARS, SNAGS, ETC.; EXTENSION ARMS WITHOUT KINKS OR BROKEN BRACKETS; TOP RAIL WITHOUT KINKS; AND GATE PANELS THAT, WHEN HUNG, PROVIDE THE FUNCTIONALITY OF A NEW GATE. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING ALL SALVAGED COMPONENTS ARE COMPATIBLE WITH THE NEW MATERIALS BEING PROVIDED.
2. THE EXISTING ELECTRICAL SERVICE TO THE ELECTRICAL BUILDING WILL BE UPGRADED FROM A 200A SINGLE-PHASE SERVICE TO A 400A SINGLE-PHASE SERVICE BY PACIFIC POWER. THE CITY WILL COORDINATE WITH THE CONTRACTOR REGARDING UPGRADE SCHEDULE ONCE KNOWN.
3. ASPHALT REMOVAL FOR UTILITY TRENCH IS SHOWN FOR GRAPHICAL PURPOSES ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE REMOVAL LIMITS NEEDED TO INSTALL THE CONDUIT AND HANDHOLES SHOWN ON SHEET E-201.
4. THE CONTRACTOR SHALL NOT BEGIN EXCAVATION UNTIL ALL EXISTING UNDERGROUND FACILITIES WITHIN THE AREA TO BE EXCAVATED HAVE BEEN MARKED IN THE FIELD BY THE CONTRACTOR. THE CONTRACTOR SHALL POTHOLE AND VERIFY THE DEPTH OF ALL UTILITIES WITHIN THE CONSTRUCTION ZONE BEFORE TRENCHING OR BEGINNING EXCAVATIONS OF ANY TYPE. CALL THE OREGON UTILITY NOTIFICATION CENTER 1-800-332-2344 OR 811. IN ACCORDANCE WITH OREGON LAW, FOLLOW RULES ADOPTED BY OREGON NOTIFICATION CENTER (OAR-952-001-0010 THROUGH OAR 952-001-0100). COPIES OF THE RULES MAY BE OBTAINED BY CALLING THE CENTER.
5. NO GUARANTEE IS EXPRESSED OR IMPLIED THAT ALL UNDERGROUND OBSTRUCTIONS ARE SHOWN ON THE PLANS. UNDERGROUND OBSTRUCTIONS NOT SHOWN MAY BE ENCOUNTERED. THOSE SHOWN ARE BASED ON THE BEST INFORMATION AVAILABLE AND THE CONTRACTOR IS CAUTIONED THAT THE ENGINEERS, AND THE CITY ASSUME NO RESPONSIBILITY FOR ANY OBSTRUCTIONS EITHER SHOWN OR NOT SHOWN ON THE PLANS.
6. ITEMS OF REMOVAL SHALL BE DEPOSED OF BY THE CONTRACTOR OFF SITE, UNLESS OTHERWISE SPECIFIED.
7. THE PROJECT DISTURBS LESS THAN ONE ACRE OF LAND AND IS NOT ANTICIPATED TO CREATE EROSION OR SEDIMENT RUNOFF DURING CONSTRUCTION. CONTRACTOR SHALL USE BEST MANAGEMENT PRACTICES (BMP) TO PREVENT EROSION OR SEDIMENT RUNOFF FROM LEAVING THE SITE.

SHEET KEYNOTES:

- 1 — REMOVE AND SALVAGE 6-FOOT CHAIN-LINK FENCE WITH 3 STRAND BARBED WIRE
- 2 — SAWCUT AND REMOVE EXISTING 4" ASPHALT AND SALVAGE 7" AGGREGATE BASE
- 3 — REMOVE AND SALVAGE LANDSCAPE ROCK (3" THICK)
- P — PROTECT IN PLACE

REGISTERED PROFESSIONAL ENGINEER
86602PE
DIGITALLY SIGNED
OREGON
31/13/2012
RYAN J. BERGSTROM
EXPIRES: 12 / 31 / 23

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STANDBY POWER GENERATOR

2151 NW AVIATION DRIVE
ROSEBURG, OREGON

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ISSUED FOR BID

M&H NO.: 1821200-212174.01
DATE: SEPTEMBER 2023
DESIGNED BY: RJB
DRAWN BY: JTH
CHECKED BY: RJB
DO NOT SCALE DRAWINGS

SHEET CONTENTS
DEMOLITION PLAN

SHEET NO. 3 of 7

CE-051

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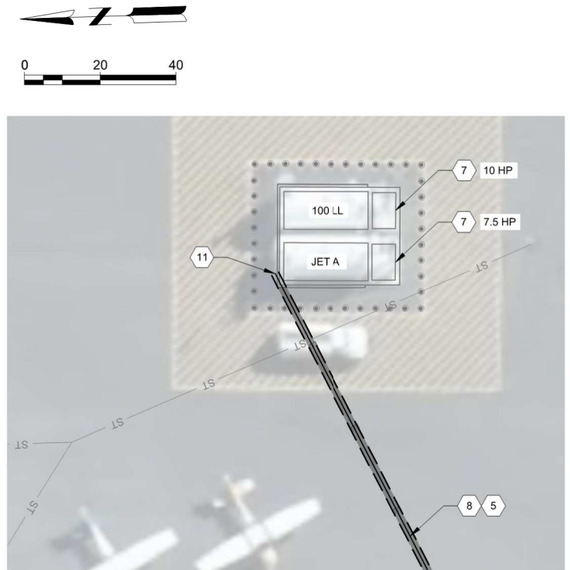
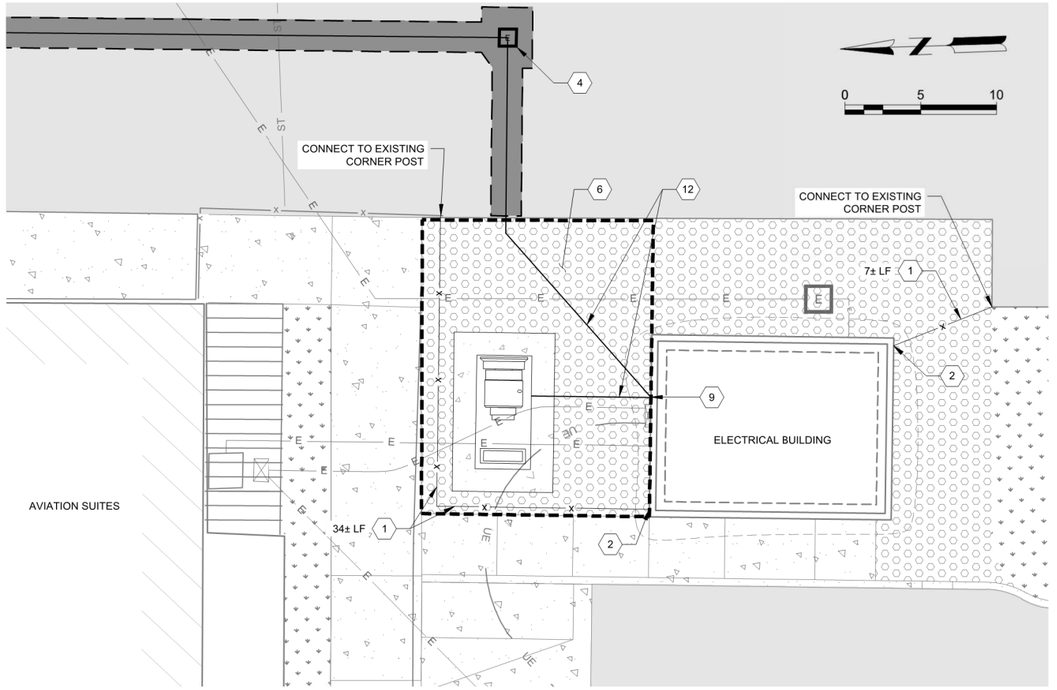
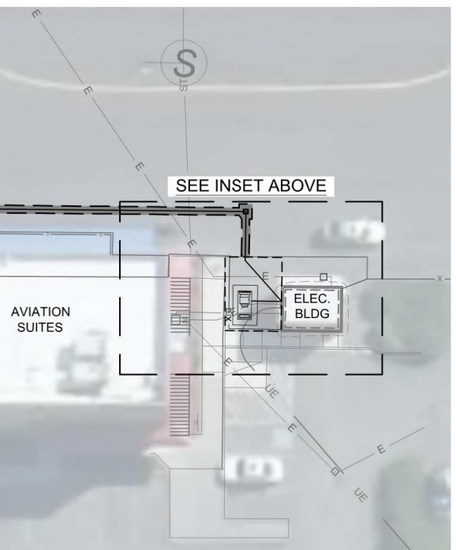




SEE INSET BELOW

SEE INSET ABOVE



SHEET KEYNOTES:

1. INSTALL 6-FOOT CHAIN-LINK FENCE WITH BARBED WIRE. SEE DETAIL 1/CE-301
2. CONNECT FENCE TO BUILDING. SEE DETAIL 4/CE-301
3. INTERCEPT EXISTING FUEL FARM CONDUIT AND INSTALL ELECTRICAL HANDHOLE. PROVIDE SEAL OFFS FOR ALL CONDUITS FROM FUEL FARM AREA. SEE DETAIL 7/CE-301
4. INSTALL ELECTRICAL HANDHOLE. SEE DETAIL 7/CE-301
5. INSTALL CONCRETE ENCASED CONDUIT. SEE DETAIL 6/CE-301
6. DISTRIBUTE SALVAGED LANDSCAPE ROCK EVENLY AROUND PERIMETER OF GENERATOR PAD AND SURROUNDING AREA
7. REPLACE EXISTING 3-PHASE MOTOR WITH NEW SINGLE-PHASE MOTOR
8. REMOVE AND REPLACE POWER CABLES IN EXISTING CONDUIT. PROTECT IN PLACE THE COMM. CABLES.
9. PENETRATE BUILDING WALL WITH NEW CONDUIT
10. INSTALL BATTERY BACK UP UNIT (UPS) IN FBO
11. REPLACE EXISTING FUEL PANEL WITH NEW PANEL. CONNECT NEW POWER CABLES TO PANEL. REUSE EXISTING E-STOP AND CONDUITS.
12. INSTALL NON-ENCASED CONDUIT. SEE DETAIL 5/CE-301

REGISTERED PROFESSIONAL ENGINEER
92254PE
DIGITALLY SIGNED
OREGON
5/9/2017
CHRISTOPHER M. HUNTER
EXPIRES: 6 / 30 / 25

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DRAWN BY: JTH
CHECKED BY: RJB
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SHEET CONTENTS
SITE AND ELECTRICAL LAYOUT PLAN

SHEET NO. 4 of 7

CE-201

X:\1821200\212174.01\TECHCAD\DRAWINGS\E-501 ELECTRICAL ONE-LINE DIAGRAMS AND PANEL SCHEDULES.DWG
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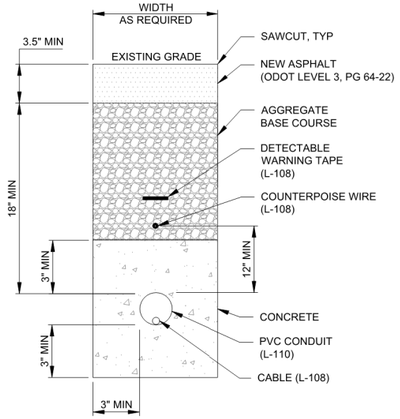
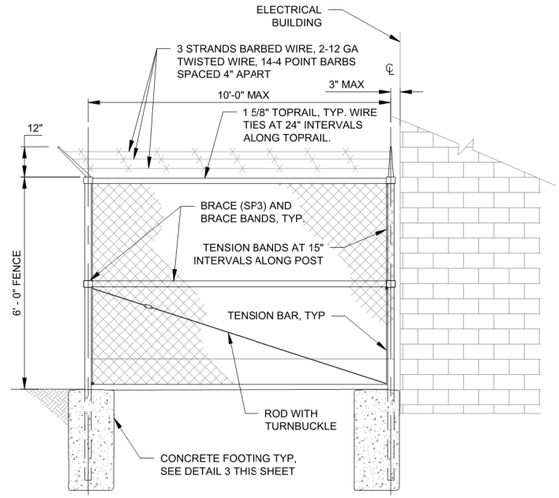


NOTE:

1. COUNTERPOISE SHALL BE INSTALLED 12" MINIMUM ABOVE THE CONCRETE ENCASED CONDUIT FOR THE ENTIRE LENGTH OF CONDUIT INSTALLED.

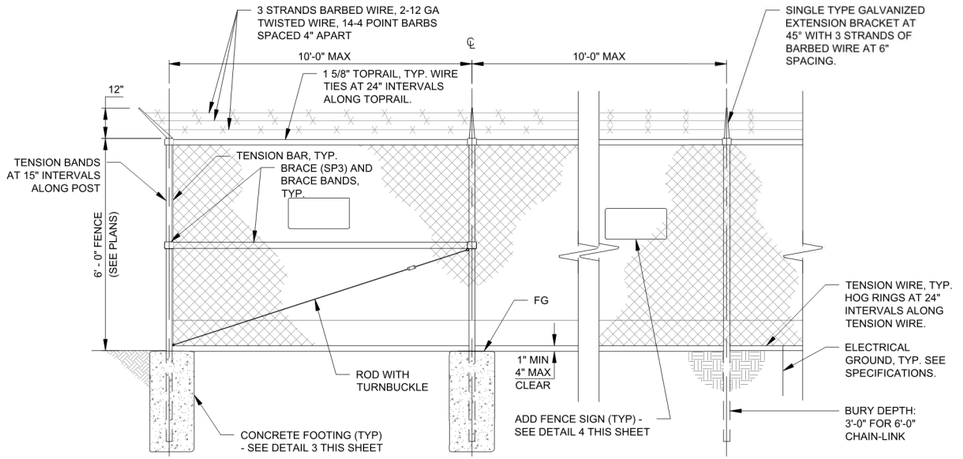
6 CONCRETE ENCASED CONDUIT INSTALLATION
NOT TO SCALE



TERMINAL POST-SP4, TYP

TERMINAL POST-SP4, TYP

4 FENCE TO BUILDING CONNECTION DETAIL
NOT TO SCALE



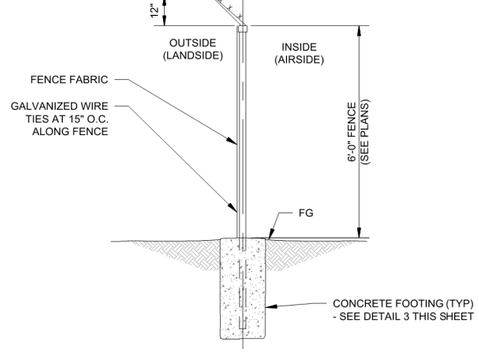
TERMINAL POST-SP4, TYP

BRACE POST-SP3, TYP

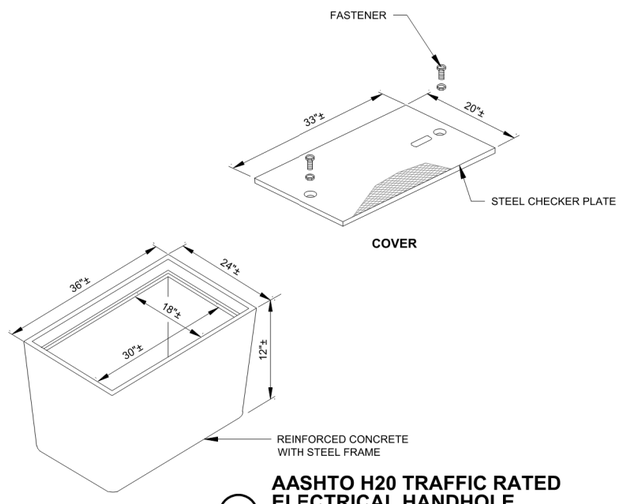
LINE POST IN SOIL-SP3, TYP

SELVAGE
TOP: TWIST (BARB)
BOTTOM: TWIST (BARB)

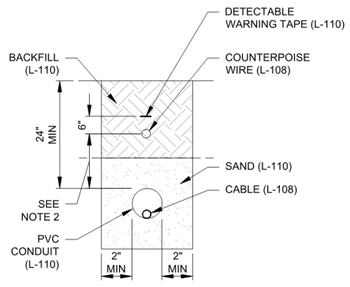
1 CHAIN-LINK FENCE
NOT TO SCALE



2 CHAIN-LINK FENCE SECTION
NOT TO SCALE



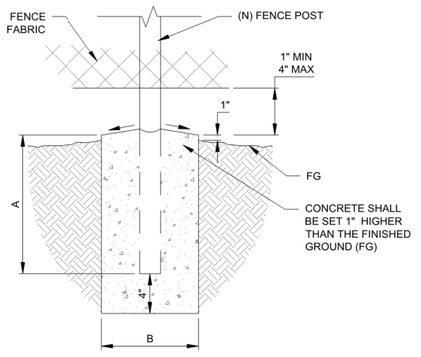
7 AASHTO H20 TRAFFIC RATED ELECTRICAL HANDHOLE
NOT TO SCALE



NOTES:

1. THE COUNTERPOISE TO BE ABOVE CABLES ONLY WHERE THE CABLES ARE NOT ADJACENT TO PAVEMENT.
2. COUNTERPOISE TO BE PLACED 4" ABOVE CONDUIT.

5 NON-ENCASED CONDUIT INSTALLATION
NOT TO SCALE



FENCE FOOTING AND MATERIALS NOTES:

1. CONCRETE FOOTING DEPTH (A)
   6' - 0" CHAIN-LINK FENCE
   - TERMINAL POSTS & GATE POSTS - 3'-6"
   - BRACE POSTS - 3'-0"
2. CONCRETE FOOTING WIDTH (B)
   - TERMINAL POSTS & GATE POSTS - 18"
   - BRACE POSTS - 12"
3. CONCRETE SHALL BE OF A COMMERCIAL GRADE WITH MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3,000 PSI.
4. POSTS, RAILS AND BRACING SIZES SHALL CONFORM TO THE SIZES LISTED IN THE TABLE BELOW OF FED SPEC RR-F-191/3. ALL OTHER FENCING MATERIALS SHALL CONFORM TO THE RELEVANT FED SPEC FOR THAT MATERIAL.
5. CONCRETE TO HAVE A SMOOTH FINISH.

POST SIZES PER FED SPEC RR-F-191/3,

FED SPEC SIZE	OUTSIDE DIAMETER	MIN WALL THICKNESS
SP2	1.900"	0.120"
SP3	2.375"	0.130"
SP4	2.875"	0.160"
SP5	4.000"	0.226"
SP6	6.625	0.280

3 TYPICAL FENCE POST FOOTING
NOT TO SCALE

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3/13/2012
RYAN J. BERGSTROM
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SHEET CONTENTS
FENCING AND ELECTRICAL DETAILS

SHEET NO. 5 of 7

CE-301

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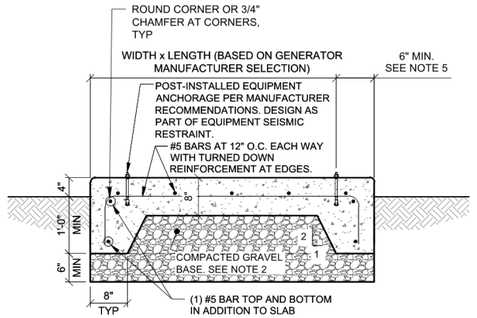
EQUIPMENT SCHEDULE

ITEM (#)	DESCRIPTION
1	METER SOCKET, 250 A, TO BE REMOVED (COORDINATE WITH UTILITY).
2	BARD 2 TON HEAT PUMP, 240V, 1ϕ, WITH 4KW HEATER STRIP AND CLIMATE CONTROL
3	PANELBOARD, 200A, 240/120V, 1ϕ, 3W, 42 SP, WITH 200A MAIN, 10,000 AIC, EXISTING TO REMAIN, REFEED FROM NEW 400A PANEL.
4	DISCONNECT, 200A, 240V, NEMA 3R, SOLID NEUTRAL TO BE REMOVED (COORDINATE WITH UTILITY). CONTRACTOR TO RESEAL WALL PENETRATION.
5	TVSS, 200,000 kA RATING
6	PHOTOELECTRIC CONTROL, 120V, 20A CONTACTS
7	NOT USED
8	CONTROL CABINET, NEMA 1, 36"X36"X8"
9	TRANSFER RELAY , ELECTRICALLY HELD, CONTACTS AS REQUIRED
10	TIME DELAY (On) RELAY, SOLID STATE, 120V, 0-60 SEC., OCTAL BASE (SET TO 1 SEC)
11	METAL LAY-IN WIREWAY, 8"X8", NEMA 1, WITH BARRIER DIVIDER
12	PULL BOX, 30"x24"X8", NEMA 1
13	CONSTANT CURRENT REGULATOR (CCR), 20 kW, 240V INPUT, 6.6A, OUT PUT, 3 BRIGHTNESS STEPS, L-828, TYPE I, CLASS 1, STYLE 1, FERRORESONANT
14	PILOT CONTROL RADIO, VHF BAND (118-136 MHZ), PROGRAMMABLE TO OPERATE IN ANY FREQUENCY, WITH OUTPUT RELAYS FOR 3, 5, AND 7 CLICKS, ADJUSTABLE SENSITIVITY FROM 1-20 MILES
15	LIGHTING CONTACTOR, 2P, 30A, WITH 120V COIL AND ROTARY HOA SWITCH SUITABLE FOR TRANSFORMER SWITCHING, IN A NEMA 1 ENCLOSURE
16	SERIES PLUG CUTOUT, "SCO" TYPE, W/ THREE WORKING POSITIONS
17	NOT USED
18	LIGHTNING ARRESTER, SECONDARY CLASS, FOR PROTECTION OF 120/240 CKTS
19	DISCONNECT, 30A, 600V, NEMA 1
20	DRY-TYPE TRANSFORMER, 1ϕ, 3 kVA, 480VP/240/120V S, 60 HZ, NEMA 1.
21	ELECTRICAL ENCLOSURE, 48"X24"X12"
22	1-1/4"X1/4" COPPER GROUND BUSS INSTALLED ON 1" STAND-OFFS
23	50 POINT TERMINAL STRIP,SQUARE D CLASS 9080, SUITABLE FOR #22 TO #10 AWG WIRE
24	2 - 2 LAMP FLUORESCENT FIXTURES
25	80kW GENERATOR SET WITH OUTDOOR ENCLOSURE, SUBBASE, TANK AND CONCRETE FOUNDATION. 120/240V, 400A 1P-3W
26	ATS, 400A, 120/240V, 1P-3W, WITH LOST PHASE AND PHASE REVERSAL DETECTION, NEMA 3R CABINET. PROVIDE COMMUNICATION WIRING TO ATS AS REQUIRED BY GENERATOR MANUFACTURER.
27	HEAVY DUTY, SERVICE RATED. 240V, 400A, 1P-3W FUSED DISCONNECT SWITCH
28	UTILITY APPROVED 400A, 120/240V, 1P-3W METER SOCKET AND METERING CABINET
29	NEW 400A, 120/240V, 1P-3W, NEMA 1, SERVICE RATED MAIN PANEL WITH SPD

GENERAL NOTES:

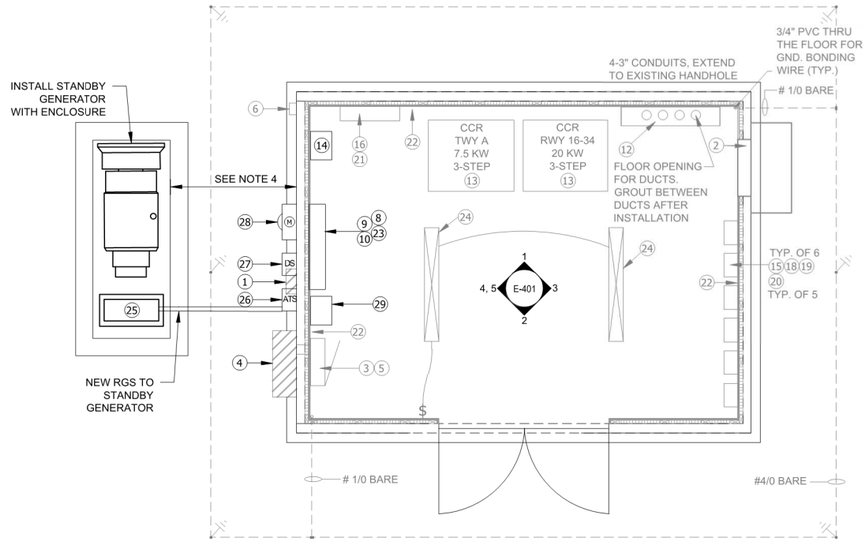
1. ITEMS SHOWN IN GRAYSCALE ARE EXISTING AND ARE FOR REFERENCE ONLY. NEW WORK IS SHOWN IN BOLD.
2. ALL WORK SHALL BE DONE IN A WORKMANLIKE MANNER.
3. ALL WORK SHALL CONFORM TO THE 2023 EDITION OF THE NEC AND LOCAL CODES.
4. ALL METAL CABINETS SHALL BE GROUNDED TO GROUND BUS AS PER THE REQUIREMENTS OF THE NEC.
5. CONTRACTOR SHALL COORDINATE ALL PERMITTING AND INSPECTIONS REQUIRED TO PLACE THE STANDBY GENERATOR INTO SERVICE.
6. ALL EQUIPMENT INSTALLED UNDER THIS PROJECT SHALL MEET BUY AMERICAN REQUIREMENTS. CONTRACTOR SHALL PROVIDE PROOF WITH EACH SUBMITTAL SHEET SUBMITTED FOR APPROVAL.
7. FINAL CONNECTION TO EQUIPMENT SUBJECT TO VIBRATION SHALL BE THROUGH FLEXIBLE METALLIC CONDUIT.
8. CONTRACTOR/INSTALLER SHALL TRAIN THE CITY MAINTENANCE STAFF ON THE OPERATION AND MAINTENANCE OF THE GENERATOR SET, INCLUDING RUNNING THE GENERATOR SET WITH LOAD TO PREVENT WET STACKING.
9. AIRPORT OWNED EDGE LIGHTING AND NAVIGATIONAL AIDS POWERED FROM THE EXISTING ELECTRICAL BUILDING MUST REMAIN OPERATIONAL FROM 90 MINUTES BEFORE SUNSET TO 30 MINUTES AFTER SUNRISE. CONTRACTOR SHALL COORDINATE NECESSARY ELECTRICAL OUTAGES WITH PACIFIC POWER AND THE CITY OF ROSEBURG.
10. ALL GROUND RODS ARE 3/4" X 10' COPPER CLAD.
11. THIS DRAWINGS ARE DIAGRAMMATIC IN NATURE AND DEPICT THE GENERAL DESIGN CONCEPT. MINOR CHANGES TO THE LAYOUT OR DESIGN TO MAKE THE VARIOUS COMPONENTS FIT ARE ACCEPTABLE AND SHALL NOT BE CONSIDERED A JUSTIFIABLE CAUSE FOR ADDITIONAL COMPENSATION.
12. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FAMILIARIZE THEMSELVES OF THE SITE CONDITIONS AND TO BRING TO THE CITY'S ATTENTION ANY DISCREPANCIES BETWEEN THE SITE CONDITIONS AND THE CONTRACT DOCUMENTS PRIOR TO SUBMITTING A BID PRICE FOR THE WORK. NO ADDITIONAL COMPENSATION SHALL BE MADE FOR SMALL DIFFERENCES BETWEEN THE SITE CONDITIONS AND CONTRACT DOCUMENTS.
13. AFTER EXISTING METER SOCKET AND DISCONNECT SWITCH ARE REMOVED, CONTRACTOR SHALL REPAIR EXISTING WALL PENETRATION.
14. CONTRACTOR SHALL VERIFY IF THE NEUTRAL-GROUND BOND IS PRESENT IN THE EXISTING PANEL. IF SO, REMOVE THIS BOND AS PER NEC.



7 EXTERIOR GENERATOR PAD
NOT TO SCALE

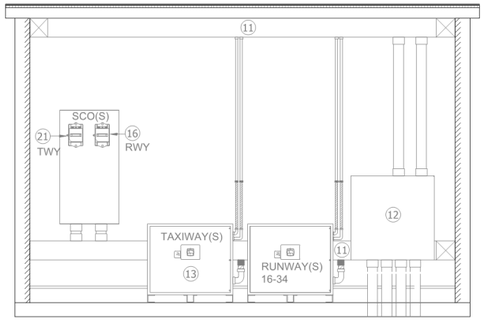
EXTERIOR GENERATOR PAD NOTES:

1. REMOVE ALL LANDSCAPE ROCK, AND EXCAVATE TO BOTTOM OF GRAVEL BASE ELEVATION. EXCAVATED MATERIAL SHALL BE DISPOSED BY THE CONTRACTOR OFFSITE.
2. PROVIDE GRAVEL BASE MEETING THE MATERIAL AND CONSTRUCTION REQUIREMENTS OF ODOT 00759.11 AGGREGATE BASE (3/4"-0).
3. TOP OF GENERATOR PAD SHALL BE AT THE SAME ELEVATION AS THE FINISHED FLOOR ELEVATION OF THE ADJACENT ELECTRICAL BUILDING.
4. DISTANCE FROM GENERATOR PAD TO BUILDING FOUNDATION SHALL BE AS RECOMMENDED BY THE MANUFACTURER BUT IN NO CASE BE LESS THAN 5-FEET.
5. CONCRETE PAD SHALL EXTEND A MINIMUM OF 6-INCHES BEYOND THE OUTSIDE EDGE OF THE GENERATOR ENCLOSURE, OR GREATER IF RECOMMENDED BY THE MANUFACTURER.
6. CONCRETE MIX AND REINFORCING STEEL SHALL MEET THE REQUIREMENTS OF ODOT 02001-CONCRETE AND 02510-REINFORCEMENT.
7. STRUCTURAL CONCRETE MEETING ODOT 02001 SHALL BE PLACED, CURED, AND FINISHED IN ACCORDANCE WITH ODOT 00540 STRUCTURAL CONCRETE.

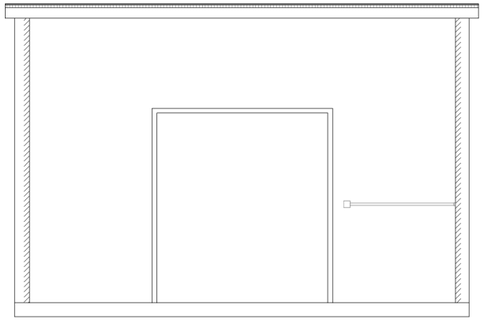


6 VALUT EQUIPMENT LAYOUT
SCALE: 3/8"=1'

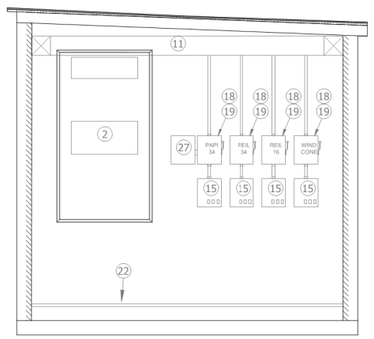
TRUE NORTH



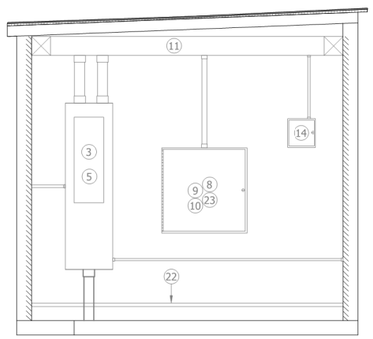
1 EAST INTERIOR ELEVATION (EXISTING)
SCALE: 3/8"=1'



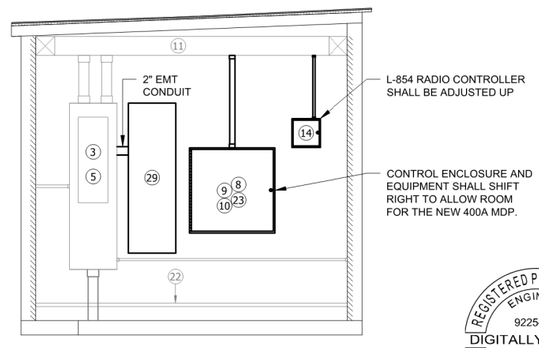
2 WEST INTERIOR ELEVATION (EXISTING)
SCALE: 3/8"=1'



3 SOUTH INTERIOR ELEVATION (EXISTING)
SCALE: 3/8"=1'



4 NORTH INTERIOR ELEVATION (EXISTING)
SCALE: 3/8"=1'



5 NORTH INTERIOR ELEVATION (FUTURE)
SCALE: 3/8"=1'

REGISTERED PROFESSIONAL ENGINEER
92254PE
DIGITALLY SIGNED
OREGON
5/9/20 17
CHRISTOPHER M. HUNTER
EXPIRES: 6 / 30 / 25

Mead & Hunt
Mead and Hunt, Inc.
9600 NE Cascades Parkway, Suite 100
Portland, OR 97220
phone: 503-548-1494
meadhunt.com

ROSEBURG REGIONAL AIRPORT STANDBY POWER GENERATOR

2151 NW AVIATION DRIVE
ROSEBURG, OREGON

ISSUED
ISSUED FOR BID

M&H NO.: 1821200-212174.01
DATE: SEPTEMBER 2023
DESIGNED BY: CMH
DRAWN BY: JTH
CHECKED BY: RJB
DO NOT SCALE DRAWINGS

SHEET CONTENTS
ELECTRICAL BUILDING EQUIPMENT LAYOUT

SHEET NO. 6 of 7

E-401

PANEL SCHEDULE:		MDP							1 PHASE			3 WIRE			VOLTAGE LL:	240			VOLTAGE LG:	120	
OC DEVICES:	MCB		DEVICE FAMILY:						MOUNTING:			Surface			ENCLOSURE:				NEMA	12	
COMMENTS:									BUS RATING:			400A			AVAILABLE FAULT DUTY:					10000A	

CKT NO	DESCRIPTION/ LOCATION	LOAD TYPE	CRITERIA EA	QTY	DEM	TOTAL VA	REMARKS	DEVICE AMPS	P	H	DEVICE AMPS	P	REMARKS	TOTAL VA	LOAD TYPE	CRITERIA EA	QTY	DEM	DESCRIPTION/ LOCATION	CKT NO
1	BUILDING PANEL		#REF!	1	1	#REF!		200	2	A	30	2		0		0	1	0	SPD	2
3	---		24311	1	1	24311			--	B		--		0		0	1	0	---	4
5	FUEL PANEL		9300	1	1	9300		150	2	A				0						6
7	---		9600	1	1	9600			--	B				0						8
9	GEN SET BATT CHARGER		1500	1	1	1500		30	2	A				0						10
11	---		1500	1	1	1500			--	B				0						12
13	GEN SET HEATER		1000	1	5	1000		20	2	A				0						14
15	---		1000	1	5	1000			--	B				0						16
17	GEN SET LIGHTING		100	1	2	100		20	1	A				0						18
19						0				B				0						20
21						0				A				0						22
23						0				B				0						24
25						0				A				0						26
27						0				B				0						28
29						0				A				0						30

ENDUSE LOADS:	PHASE "A" KVA =	####		PHASE "B" KVA =	36		
TOTAL LOADS:	CONNECTED KVA =	####		DEMAND KVA =	###	DESIGN KVA =	#REF!
	CONNECTED FLA =	####		DEMAND FLA =	###	DESIGN FLA =	#REF!

PANEL SCHEDULE:		EXISTING BUILDING PANEL							1 PHASE			3 WIRE			VOLTAGE LL:	240			VOLTAGE LG:	120	
OC DEVICES:	MCB		DEVICE FAMILY:						MOUNTING:			Surface			ENCLOSURE:				NEMA	12	
COMMENTS:									BUS RATING:			200A			AVAILABLE FAULT DUTY:					6240A	

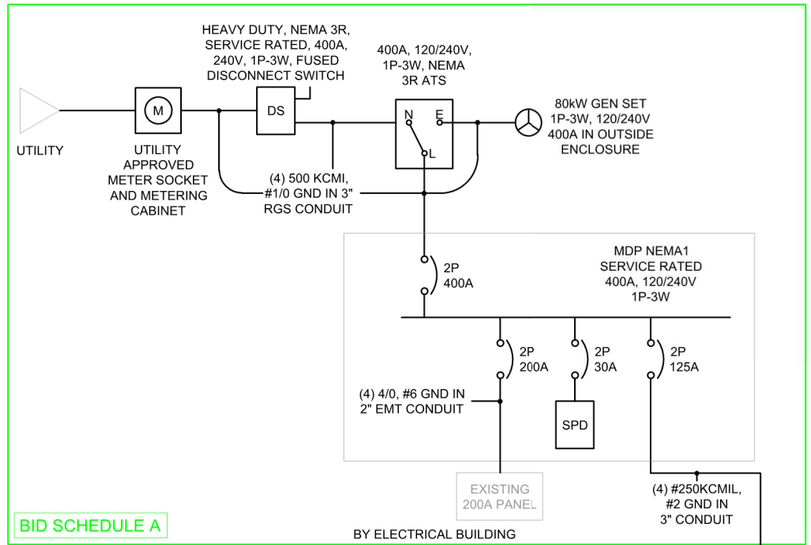
CKT NO	DESCRIPTION/ LOCATION	LOAD TYPE	CRITERIA EA	QTY	DEM	TOTAL VA	REMARKS	DEVICE AMPS	P	H	DEVICE AMPS	P	REMARKS	TOTAL VA	LOAD TYPE	CRITERIA EA	QTY	DEM	DESCRIPTION/ LOCATION	CKT NO
1	CONTROL		100	1	6	100		20	1	A	50	2		4200		4200	1	2	TAXIWAY CCR	2
3	LIGHTS		400	1	2	400		20	1	B		--		4200		4200	1	2	---	4
5	OUTLETS		720	1	3	720		20	1	A	20	2		2000		2000	1	2	SOUTH PARKING LOT	6
7	SPRINKLER CONTROL		1200	1	6	1200		20	1	B		--		2000		2000	1	2	---	8
9	HVAC		3600	1	5	3600		50	2	A	20	2		900		900	1	2	PAPI 34	10
11	---		3600	1	5	3600			--	B		--		900		900	1	2	---	12
13	SPARE		0	1	0	0		100	2	A	20	2		300		300	1	2	REIL 34	14
15	--		0	1	0	0			--	B		--		300		300	1	2	---	16
17	WINDCONE		300	1	2	300		20	2	A	20	2		300		300	1	2	REIL 16	18
19	---		300	1	2	300			--	B		--		300		300	1	2	---	20
21	HVAC SERVICE RCPT			1	3	0		50	2	A	20	2		0		0	1	0	SPARE	22
23	---			1	3	0			--	B		--		0		0	1	0	---	24
25	SPARE		0	1	0	0		20	1	A	30	2		0		0	1	0	SPARE	26
27	SPARE		0	1	0	0		30	2	B		--		0		0	1	0	--	28
29	---		0	1	0	0			--	A				0					SPACE	30
31	RUNWAY CCR		11111	1	2	11111	subfeed breaker	125	2	B									SPACE	32
33	--		11111	1	2	11111			--	A									SPACE	34

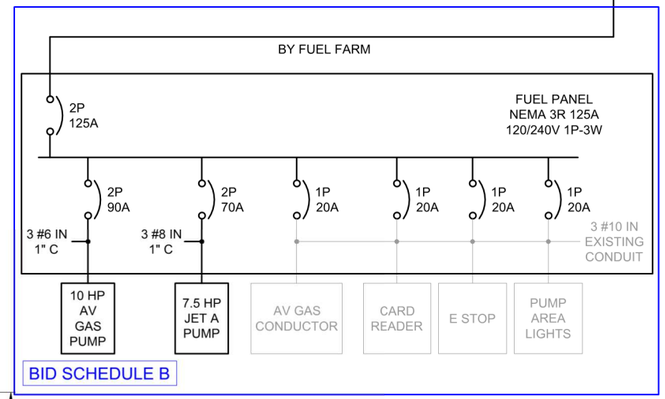
ENDUSE LOADS:	PHASE "A" KVA =	24		PHASE "B" KVA =	24		
TOTAL LOADS:	CONNECTED KVA =	48		DEMAND KVA =	46	DESIGN KVA =	57
	CONNECTED FLA =	199		DEMAND FLA =	192	DESIGN FLA =	238

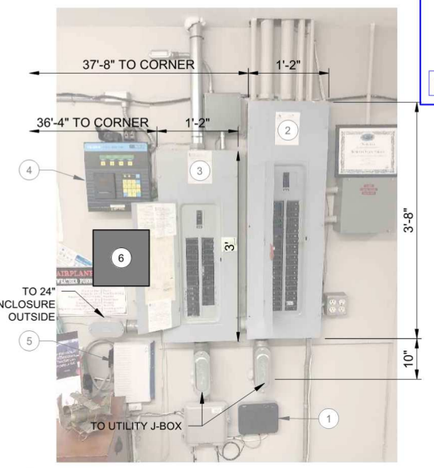
PANEL SCHEDULE:		FUEL PANEL							1 PHASE			3 WIRE			VOLTAGE LL:	240			VOLTAGE LG:	120	
OC DEVICES:	MCB		DEVICE FAMILY:						MOUNTING:			Surface			ENCLOSURE:				NEMA	3R	
COMMENTS:									BUS RATING:			200A			AVAILABLE FAULT DUTY:					10000A	

CKT NO	DESCRIPTION/ LOCATION	LOAD TYPE	CRITERIA EA	QTY	DEM	TOTAL VA	REMARKS	DEVICE AMPS	P	H	DEVICE AMPS	P	REMARKS	TOTAL VA	LOAD TYPE	CRITERIA EA	QTY	DEM	DESCRIPTION/ LOCATION	CKT NO
1	10 HP AV GAS MOTOR		5500	1	10	5500		90	2	A				0						2
3	---		5500	1	10	5500			--	B				0						4
5	7.5 HP JET A MOTOR		3600	1	9	3600		70	2	A				0						6
7	---		3600	1	9	3600			--	B				0						8
9	AV GAS CONTACTOR		100	1		100		15	1	A				0						10
11	CARDREADER		100	1		100		20	1	B				0						12
13	E-STOP		100	1		100		20	1	A				0						14
15	PUMP LIGHTS		400	1		400		20	1	B				0						16
17						0				A				0						18
19						0				B				0						20
21						0				A				0						22
23						0				B				0						24
25						0				A				0						26
27						0				B				0						28
29						0				A				0						30

ENDUSE LOADS:	PHASE "A" KVA =	9		PHASE "B" KVA =	10		
TOTAL LOADS:	CONNECTED KVA =	19		DEMAND KVA =	12	DESIGN KVA =	13
	CONNECTED FLA =	79		DEMAND FLA =	48	DESIGN FLA =	55

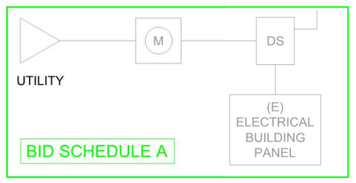




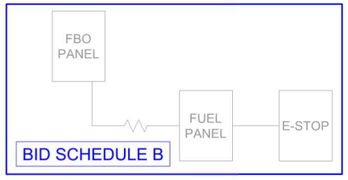


1 FBO SOUTH INTERIOR ELEVATION
NOT TO SCALE

4 PROPOSED PARTIAL ONE-LINE DIAGRAM
NOT TO SCALE



2 EXISTING ELECTRICAL BUILDING PARTIAL ONE LINE
NOT TO SCALE



3 EXISTING FUEL PANEL PARTIAL ONE LINE
NOT TO SCALE

EQUIPMENT SCHEDULE

ITEM (#)	DESCRIPTION
1	CABLE MODEM
2	PANELBOARD, 200A, 240/120V, 1ϕ, 3W, 42 SP, WITH 200A MAIN, 10,000 AIC,
3	PANELBOARD, 200A, 240/120V, 1ϕ, 3W, 42 SP, WITH 200A MAIN, 10,000 AIC,
4	TS-504 TANK SENTINEL MONITOR
5	DOUGLAS FAST NET (DFN) WIRELESS ROUTER
6	UNINTERRUPTED POWER SOURCE (UPS). COORDINATE EXACT LOCATION WITH OWNER. CONNECT TO DFN WIRELESS ROUTER, CABLE MODEM AND TS-504 TANK SENTINEL MONITOR

REGISTERED PROFESSIONAL ENGINEER 92254PE DIGITALLY SIGNED OREGON 5/9/2017 CHRISTOPHER M. HUNTER
EXPIRES: 6 / 30 / 25

Mead & Hunt
Mead and Hunt, Inc.
9600 NE Cascades Parkway, Suite 100
Portland, OR 97220
phone: 503-548-1494
meadhunt.com

ROSEBURG REGIONAL AIRPORT STANDBY POWER GENERATOR

2151 NW AVIATION DRIVE
ROSEBURG, OREGON

ISSUED
ISSUED FOR BID

M&H NO.: 1821200-212174.01
DATE: SEPTEMBER 2023
DESIGNED BY: CMH
DRAWN BY: JTH
CHECKED BY: RJB
DO NOT SCALE DRAWINGS

SHEET CONTENTS
ELECTRICAL ONE-LINE DIAGRAMS AND PANEL SCHEDULES

SHEET NO. 7 of 7

E-501

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