

### **ADDENDUM #1**

### 10/2/2024

# VERNON HILLS PARK DISTRICT 2024 TCW Lazy River Pump and Filter Replacement Bid

Prepared by WT Group

This Addendum forms a part of the Contract Documents and modifies the original bidding documents dated September 20, 2024, as noted below. BIDDERS MUST SIGN THE ADDENDUM AND SUBMIT IT WITH THEIR BIDS.

### CHANGES TO THE DRAWINGS

- 1. Drawing AQ0.2 PLUNGE POOL / LAZY RIVER EQUIPMENT LIST, "F" HEATER:
  - a. Add the following Note: "NOTE: HEATER IS PROVIDED BY OWNER AND INSTALLED BY CONTRACTOR. ALL HEATER CONNECTIONS SHALL BE MADE BY CONTRACTOR, INCLUDING GAS AND ELECTRIC."
- 2. Drawing AQ2.1 Chemical feed piping photo, bottom left corner photo.
  - a. Remove the note "REUSE EXISTING CHEMICAL PIPE PENETRATIONS AS NEEDED FOR NEW CHEMICAL SYSTEM" and replace with the following note: "NOTE: PROVIDE NEW CHEMICAL FEED PIPING FROM INSIDE THE MECHANICAL ROOM TO THE PIPE INJECTION CONNECTIONS. REUSE EXISTING PIPE PENETRATIONS. PROVIDE A WEATHER TIGHT SEAL BETWEEN THE EXISTING SLEEVES AND NEW PIPING."
- 3. Add the attached ELECTRICAL DRAWINGS to the Bid set.

### **CLARIFICATIONS**

COMMENT – Drawing There are (2) Special outlet shown on the schedule on E1.1. The breakers size is 90A/3P, Voltage is 480V. It looks like on the MDP schedule the draw is 52A.
 ANSWER – 52 is Full Load Amps, not starting amps. This is correct breaker sized per code. 40hp motor requires a 90A breaker.

- 2. QUESTION What receptacle type that is required for the new filtration pumps? A part number would be best.
  - ANSWER Not sure what this is, we do not show any new receptacles.
- 3. QUESTION Do you have a picture of the existing MDP so I can quote the correct breaker type? ANSWER See attached photo.
- 4. QUESTION I am assuming for this bid that the raceway we are going to install is galvanized rigid conduit, we are planning on mounting it to galvanized steel strut. Please confirm.

  ANSWER Correct.

BIDDER MUST SIGN THE	ADDENDUM AND	SUBMIT IT	WITH THEIR	BIDS

Company Name	
Contact Person	
Signature	•
Date	

CLIENT 08/05/24

CHECK: BZ DRAWN: CS JOB: A2400008 ED1.1
POWER & SYSTEMS
DEMOLITION PLAN

I. COORDINATE DEMOLITION AND PREPARATION WORK TO MINIMIZE DISTURBANCE TO THE OPERATION OF THE FACILITY. USE DIRECTIONAL SIGNAGE, BARRICADES, AND DUST PARTITIONS AS REQUIRED.

2. ITEMS REMOVED AND SALVAGED SHALL BE TURNED OVER TO OWNER AND TRANSPORTED TO A ROOM OR AREA ONSITE DESIGNATED BY THE OWNER.

3. ELECTRICAL DEMOLITION DRAWINGS HAVE BEEN ASSEMBLED UTILIZING AVAILABLE RECORD DRAWINGS AND VISUAL FIELD OBSERVATIONS. IT IS THE CONTRACTORS RESPONSIBILITY TO VISIT THE PROJECT JOBSITE PRIOR TO THE DELIVERY OF BIDS AND THOROUGHLY INVESTIGATE ALL EXISTING CONDITIONS CONCERNING ELECTRICAL DEMOLITION AND INCLUDE IN HIS PRICING ALL LABOR AND MATERIALS TO PERFORM ALL REMOVAL WORK NECESSARY TO ACCOMMODATE NEW CONSTRUCTION. WHERE EXISTING CIRCUITRY EXTENDS BEYOND THE REMODEL AREA, THE SUBCONTRACTOR SHALL PROVIDE ALL EXTENSIONS AND REVISIONS TO EXISTING CIRCUITRY TO MAINTAIN CONTINUITY OF AFFECTED BRANCH CIRCUITRY.

4. AT THE OPTION OF THE SUBCONTRACTOR, EXISTING IN PLACE BRANCH CIRCUITRY CONDUIT AND WIRE MAY BE UTILIZED AS LONG AS THE USE OF EXISTING SYSTEMS DOES NOT ADVERSELY AFFECT THE ORIGINAL DESIGN INTENT OF THE CONSTRUCTION DOCUMENTS.

5. EQUIPMENT SHOWN AS BOLD AND DASHED IN DEMOLITION FRAME IS EQUIPMENT SHALL BE REMOVED COMPLETELY,

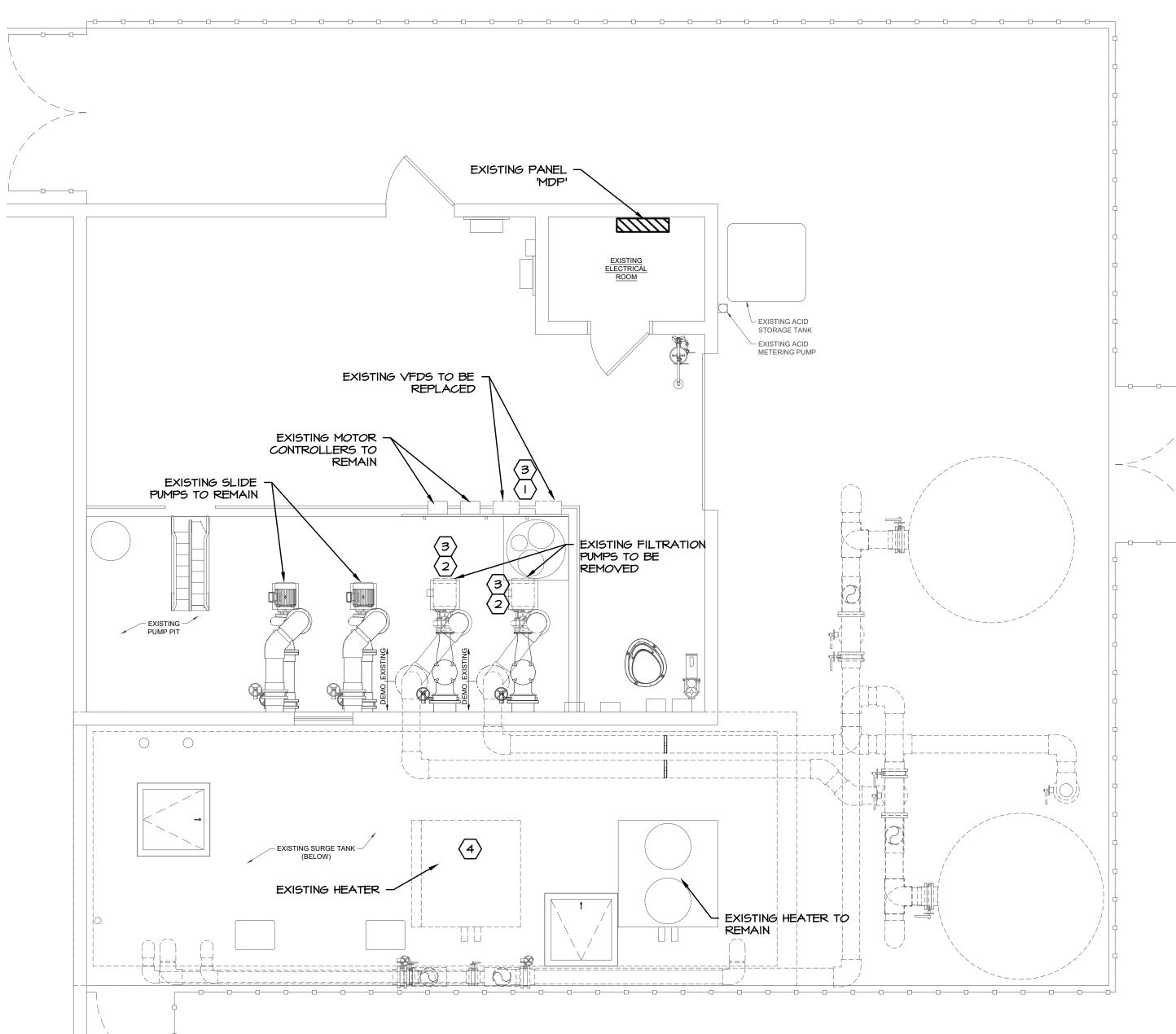
## **KEYED NOTES:**

DISCONNECT AND MAKE SAFE FEED TO EXISTING VFD. AFTER NEW VFD ARE INSTALLED RE-CONNECT EXISTING MOTOR FEED.

2) REMOVE EXISTING FILTRATION FEEDER FROM VFD TO

DISCONNECT EXISTING BONDING CABLE AND CONNECTIONS, RE-CONNECT EXISTING BONDING CABLES AFTER NEW EQUIPMENT IS INSTALLED.

(4) DISCONNECT AND MAKE SAFE FEED TO EXISTING HEATER. AFTER NEW HEATER IS INSTALLED RE-CONNECT EXISTING



	DESCRIPTION	LOCATION	LO	AD	FED F	ROM	O.C.P. (A/P)	WIRING	DISCO	NNECT	JUNCT	DECEDI	NOTEO
$\Theta$	DESCRIPTION	LOCATION	VOLT/PH	HP	PANEL	CKT	SIZE/POLE	WIKING	SIZE/POLE		BOX	RECEPT.	NOTES
S1	PROPULSION TURBIN #1 LRE-2	EQUIPMENT ROOM	480/3	40	MDP	8	EXISTING	EXISTING	VFD	ı	-	-	4.
S2	PROPULSION TURBIN #2 LRE 3	EQUIPMENT ROOM	480/3	40	MDP	6	90/3	3-#4, I-#8GRD, I I/4"C	VFD	-	-	-	4.
S3													
S4													

- PROVIDE NEMA-3R DISCONNECT ADJACENT TO UNIT. PROVIDE FINAL CONNECTIONS TO UNIT
   PROVIDE NEMA-I DISCONNECT ADJACENT TO UNIT. PROVIDE FINAL CONNECTIONS TO UNIT.

- PROVIDE SINGLE CONNECTION TO UNIT. PROVIDE FLEXIBLE CONDUIT FOR FINAL 3'.
   PROVIDE ALL CONNECTIONS TO VENDOR SUPPLIED VFD AND DOWN STREAM TO ALL PUMPS.
   OUTDOOR CONDENSING UNIT POWER FEEDS INDOOR AC UNIT, PROVIDE CONDUIT AND CONDUCTORS BETWEEN THE TWO UNITS.

SYMBOL DENOTES SPECIAL OUTLET CONNECTION, NUMBER (SI) ADJACENT TO SYMBOL CORRESPONDS WITH TAG ON SCHEDULE. REFER TO SPECIAL OUTLET SCHEDULE ON THIS DRAWING.

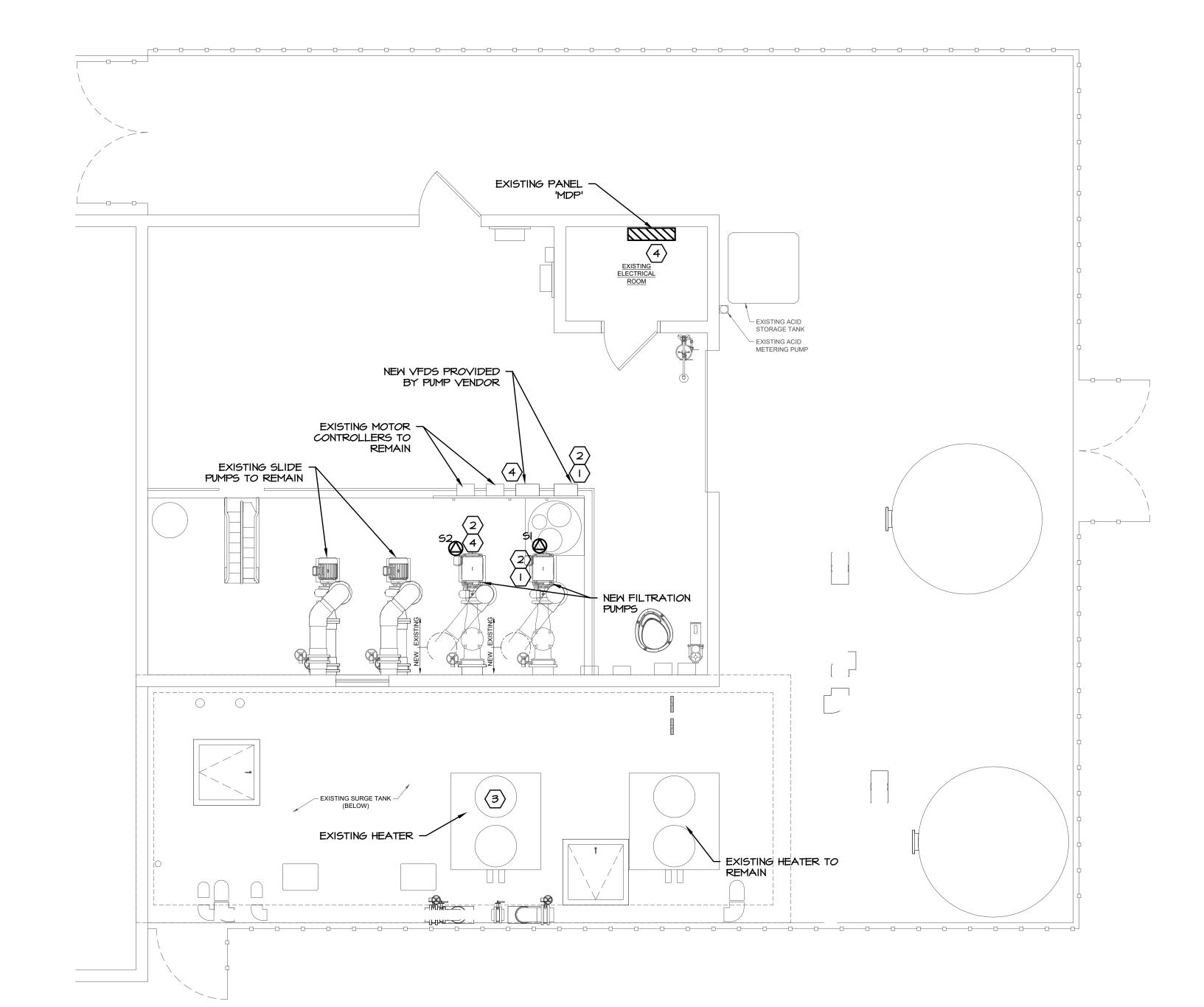
### **GENERAL NOTES:**

LEGEND

I. ALL BRANCH CIRCUITS SHOWN THAT ARE 120V, 20A, I POLE SHALL BE 2-#12, I-#12GRD, 3/4"C UNLESS OTHERWISE NOTED. CONTRACTOR MAY NETWORK CIRCUITS, IF NETWORKING IS CHOSEN CONTRACTOR MUST COMPLY WITH LATEST ACCEPTED VERSION OF THE NEC.

## **KEYED NOTES:**

- RE-CONNECT EXISTING FEEDER TO NEW VFD. ROUTE NEW CONDUCTORS AND FLEX TO NEW PUMPS.
- RE-CONNECT EXISTING BONDING CABLE AND CONNECTIONS, TO NEW EQUIPMENT. ROUTE NEW CABLING IF NEEDED.
- RE-CONNECT EXISTING POWER TO NEW WATER HEATER.
- REPLACE EXISTING TOA BREAKER PRESENTLY FEEDING TURBIN #2 WITH NEW 90A, 3-POLE BREAKER. REPLACE FEEDER CONDUCTORS WITH SIZE SHOWN ON SPECIAL OUTLET SCHEDULE. CONTRACTOR MAY RE-USE EXISTING CONDUIT IF IT IS PROPER SIZE.



480	0 / 277	V, <u>3</u>	_ PHA	SE, 4	WIRE	DISTRIBUTION <sup>™</sup> PANEL "MDP"				EXISTING	_ A.I.C. MINIMUM
CKT	POLE	TRIP	KVA	WIRE	GND	COND	HP	AMPS	D	ESCRIPTION	
<u> </u>	3	40	_	EX	EX	EX		20	BODY SIDE PUM	P 'PPE-2'	
2	3	20	_	_	_	_	_	_	SPARE		
3	3	_	_	_	_	_	-	_	SPARE		
4	3	40	-	EX	EX	EX	-	20	BODY SIDE PUM	P 'PPE-3'	
_5	3	90	-	EX	EX	EX	-	52	PROPULSION TUR	RBIN #4 'LRE-5'	
6	3	90	-	EX	EX	EX	-	52	PROPULSION TUR	RBIN #2 'LRE-3'	
7	3	100	_	EX	EX	EX	-	52	PROPULSION TUR	RBIN #3 'LRE-4'	
8	3	90	-	EX	EX	EX	-	52	PROPULSION TUR	RBIN #I 'LRE-2'	
9	3	300	_	#350	#1/0	3"	-	-	NEW SPLASH PA	D SERVICE 'SP' >	$\vdash$
10	_	_	_	-	_	-	-	_	SPAcE		
11	3	110	_	EX	EX	EX	-	50	SITE LIGHTING		
12	3	125	_	EX	EX	EX	-	50	TRANSFORMER	PANEL 'LPA'	
13	I	20	_	EX	EX	EX	_		SPARE		
14	I	20	_	EX	EX	EX	_		EM		
15	I	20	-	EX	EX	EX	-		GENERAL LIGHT	ING	
16	I	20	-	EX	EX	EX	-		EXIT LIGHTING		
17	I	20	-	EX	EX	EX	_	_	SPARE		
18	I	_	_	_	_	-	_	-	SPACE		
19	3	200	_	EX	EX	EX	_	100	HPB		
20	3	200	_	_	_	_	-	_	SPARE		
T <i>O</i> T	TAL CC	ONNEC	TED !	LOAD		-			TOTAL	ESTIMATED DE	MAND

**EQUIPMENT ROOM POWER & SYSTEMS DEMOLITION PLAN** 

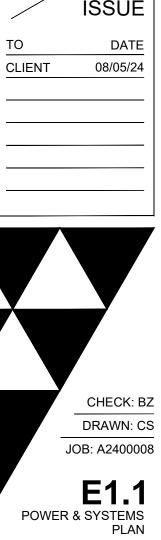


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NEC - NATIONAL ELECTRICAL CODE

EX - EXISTING

## ELECTRICAL SYMBOLS

LIGHT FIXTURE. TYPICAL SHADING OF ANY FIXTURE, AS SHOWN, INDICATES FIXTURE SHALL BE CIRCUITED TO EMERGENCY. SEE "LIGHTING FIXTURE SCHEDULE" FOR ADDITIONAL INFORMATION.

EXIT SIGN UNIVERSAL MOUNT SHADED AREA INDICATES FACE, ARROWS AS REQUIRED. SEE "LIGHTING FIXTURE SCHEDULE."

SELF CONTAINED EMERGENCY LIGHTING FIXTURE, WITH BATTERY BACK-UP AND SOLID STATE CHARGER

SINGLE POLE TOGGLE SWITCH, 48"AFF, SUBSCRIPT LETTER DENOTES SWITCH LEG, 20 AMP, 120 VOLT

THREE WAY TOGGLE SWITCH, 48"AFF, 20AMP, 120 VOLT

MANUAL SINGLE PHASE MOTOR STARTER WITH THERMAL OVERLOAD PROTECTION. 48"AFF UNLESS INDICATED OTHERWISE

FOUR WAY TOGGLE SWITCH, 48"AFF, 20AMP, 120 VOLT

DIMMER SWITCH, 48"AFF

OFF" 48"AFF

O CH

FAN SPEED SWITCH, 48"AFF

WALL MOUNTED VACANCY SENSOR SWITCH "MANUAL ON / AUTO OFF" 48"AFF

WALL MOUNTED OCCUPANCY SENSOR SWITCH "AUTO ON / AUTO

LOW VOLTAGE MOMENTARY CONTACT SWITCH, 48"AFF

LOW VOLTAGE MOMENTARY CONTACT DIMMER SWITCH, 48"AFF

SWITCH FURNISHED WITH PILOT LIGHT.

NON-FUSED DISCONNECT SWITCH (NFDS) RATED AS INDICATED FUSED DISCONNECT SMITCH (FDS) WITH SMITCH AND FUSE RATED AS INDICATED.

3-PHASE COMBINATION MAGNETIC STARTER WITH NEMA SIZE INDICATED BY E.C.

DUPLEX RECEPTACLE, NEMA 5-20R, 15"A.F.F.

FLOOR BOX RECEPTACLE, NEMA 5-20R

RECEPTACLE CROSS LINE DENOTES 6" ABOVE COUNTER OR

RECEPTACLE SHADING DENOTES GROUND FAULT CIRCUIT INTERRUPTER "GFCI". NEMA 5-20R

DOUBLE DUPLEX (QUAD) RECEPTACLE RECEPTACLE SHADING DENOTES SWITCHED OUTLET

DUPLEX RECEPTACLE WITH TWO (2) USB PORTS

CEILING-MOUNTED RECEPTACLE

SPECIAL PURPOSE RECEPTACLE NEMA CONFIGURATION AS REQUIRED BY MANUFACTURERS EQUIPMENT. VERIFY CONDUIT, CONDUCTOR AND DISCONNECT/CIRCUIT BREAKER REQUIREMENTS PRIOR TO ROUGH-IN

LIGHTING AND/OR POWER PANEL

DISTRIBUTION PANEL

MOTOR

PHOTO ELECTRIC CONTROL, ROOF MOUNTED, 120V OPERATION, 20A RATED

AUXILIARY JUNCTION BOX

CEILING.

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FLEXIBLE CONDUIT CONNECTION

TELEPHONE OUTLET, WITH 3/4" CONDUIT STUB ABOYE ACCESSIBLE CEILING.

ACCESSIBLE CEILING. DATA AND TELEPHONE OUTLET, WITH 3/4" CONDUIT STUB ABOVE

DATA SYSTEM OUTLET WITH 3/4" CONDUIT STUB ABOVE

ACCESSIBLE CEILING. TY OUTLET, WITH 3/4" CONDUIT STUB ABOVE ACCESSIBLE

CEILING MOUNTED OCCUPANCY SENSOR "AUTO ON / AUTO OFF"

CEILING MOUNTED VACANCY SENSOR "MANUAL ON / AUTO OFF" CEILING MOUNTED DAYLIGHT SENSOR

LIGHTING POWER PACK

## **ELECTRICAL SPECIFICATIONS**

THE GENERAL CONDITIONS AND SUPPLEMENTAL GENERAL CONDITIONS BY THE ARCHITECT SHALL GOVERN WHERE APPLICABLE.

THIS CONTRACTOR SHALL THOROUGHLY FAMILIARIZE HIMSELF WITH THE PLANS AND SHALL VERIFY EXISTING SITE CONDITIONS AT THE JOB SITE BEFORE SUBMITTING BID. FAILURE TO RECOGNIZE WORK REQUIRED SHALL BE AT THE EXPENSE OF THIS CONTRACTOR. NO CONSIDERATION SHALL BE GIVEN FOR ADDITIONAL COMPENSATION AFTER THE LETTING OF BIDS.

ENTIRE INSTALLATION SHALL BE PERFORMED IN A FIRST-CLASS WORKMANLIKE MANNER AND SHALL CONFORM TO ALL APPLICABLE CODES AND ORDINANCES. THE COMPLETED SYSTEMS SHALL BE FULLY OPERATIONAL; ACCEPTANCE BY THE OWNER SHALL BE A CONDITION OF THE CONTRACT. ALL WORK SHALL BE COORDINATED WITH OTHER TRADES IN ORDER TO AVOID INTERFERENCES, PRESERVE MAXIMUM HEADROOM, AND AVOID OMISSIONS. ALL MATERIALS, WORKMANSHIP AND EQUIPMENT SHALL BE GUARANTEED FOR ONE (I) YEAR AFTER SYSTEM ACCEPTANCE.

RECEPTACLES AND SWITCHES SHALL BE THE TYPE AS SHOWN ON THE DRAWINGS AND SHALL BE SPECIFICATION GRADE.

MINIMUM BRANCH WIRE SIZE SHALL BE #12 AWG COPPER EXCEPT FOR CONTROL AND SIGNAL CIRCUITS. INSULATION (INTERIOR) SHALL BE SOLID TYPE THHN OR THWN SIZES #12 THROUGH #10. SIZES #8 THROUGH 750 MCM SHALL BE STRANDED TYPE THHN OR THWN AT THE CONTRACTOR'S OPTION.

MINIMUM OUTLET BOXES SHALL BE 4" SQUARE, UNLESS OTHERWISE SPECIFIED.

CONTRACTOR SHALL NOT SCALE DRAWINGS FOR DIMENSIONS BUT SHALL CONTACT THE PROJECT ARCHITECT FOR ALL DIMENSIONAL DATA AND SHALL VERIFY EXACT LOCATION AND MOUNTING HEIGHTS OF ALL OUTLETS WITH ARCHITECT AND/OR OWNER PRIOR TO INSTALLATION.

GROUNDING AND BONDING SHALL COMPLY WITH REQUIREMENTS OF ALL APPLICABLE CODES.

ALL MATERIALS USED SHALL BE NEW AND BEAR THE U/L LABEL AND BE OF THE APPROPRIATE NEMA STANDARD.

THIS CONTRACTOR SHALL ALLOW IN HIS INITIAL BID THE COST OF SERVICES ON ALL EQUIPMENT INSTALLED UNDER HIS CONTRACT FOR A PERIOD OF ONE (I) YEAR FROM DATE OF FINAL ACCEPTANCE OF THE WORK.

LAYOUT IS DIAGRAMMATIC AND WORK SHALL BE INSTALLED TO MEET FIELD CONDITIONS AND EQUIPMENT SELECTED. PROVIDE SHOP DRAWINGS AS REQUIRED AND VERIFY ALL EQUIPMENT.

PANELBOARDS SHALL BE DEAD FRONT WITH BOLT-ON TYPE CIRCUIT BREAKERS AND COPPER BUS. PROVIDE A TYPED LEGEND, UNDER A CLEAR PLEXIGLASS COVER FOR CIRCUIT IDENTIFICATION. LOAD CENTER TYPE PANELS ARE PERMISSIBLE WITHIN DWELLING UNITS.

CONTRACTOR SHALL INCLUDE ALL MISCELLANEOUS ITEMS REQUIRED TO COMPLETE THE WORK.

CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS AND REQUIRED INSPECTION FEES.

IT SHALL BE THE RESPONSIBILITY OF THIS CONTRACTOR TO COORDINATE AND REVIEW THE ELECTRICAL CHARACTERISTICS, AMPACITY AND OTHER REQUIREMENTS OF ALL EQUIPMENT PRIOR TO INSTALLATION.

IT SHALL BE THE RESPONSIBILITY OF THIS CONTRACTOR TO COORDINATE THE LOCATIONS OF CONDUIT ROUTING, EQUIPMENT, LIGHTING, ETC. WITH ALL OTHER TRADES IN THE FIELD PRIOR TO INSTALLATION.

THE ENTIRE INSTALLATION OF ALL COMPONENTS OF THIS PROJECT SHALL COMPLY WITH ALL FEDERAL ADA REQUIREMENTS. VERIFY EXACT LOCATIONS AND HEIGHTS OF ALL FIXTURES AND OUTLETS BEFORE INSTALLATION TO INSURE COMPLIANCE WITH FEDERAL REGULATIONS.

FOR CLARITY OF ALL PLANS, SOME CONDUIT AND WIRE HAS NOT BEEN SHOWN. IT IS THE RESPONSIBILITY OF THIS CONTRACTOR TO FURNISH AND INSTALL COMPLETE AND OPERATING SYSTEMS INCLUDING ALL CONDUIT AND

THIS CONTRACTOR SHALL MAINTAIN THE FIRE RATED INTEGRITY OF ALL FLOORS, CEILINGS AND WALLS. ALL PENETRATIONS THROUGH FIRE RATED BUILDING ELEMENTS SHALL BE EFFECTIVELY SEALED USING APPROVED MATERIALS AND METHODS. ALL LIGHTING FIXTURES MOUNTED IN FIRE RATED CEILINGS SHALL MAINTAIN THE INTEGRITY OF THE FIRE RATED CEILINGS USING APPROVED MATERIALS AND METHODS. REFER TO ARCHITECTURAL DRAWINGS FOR FIRE RATINGS.

THIS CONTRACTOR SHALL INSPECT THE COMPLETE SET OF DRAWINGS AND SPECIFICATIONS TO DETERMINE HIS ENTIRE SCOPE OF WORK. THIS CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH THE EXISTING CONDITIONS AND EXTENT OF DEMOLITION AND NEW WORK FOR THIS PROJECT PRIOR TO SUBMITTING HIS BID.

THE ELECTRICAL INSTALLATION IS TO BE IN STRICT ACCORDANCE WITH THE APPLICABLE RULES AND REGULATIONS OF ALL LOCAL, STATE AND FEDERAL ELECTRICAL CODES AND THE LOCAL UTILITY COMPANY REQUIREMENTS OR ANY OTHER AUTHORITIES HAVING LAWFUL JURISDICTION.

ALL SITE UNDERGROUND BRANCH CIRCUIT WIRING IN CONDUIT SHALL BE TYPE THWN OR XHHW.

ALL UNDERFLOOR OR EXPOSED TO THE WEATHER CONDUIT SHALL BE HEAVY-WALL, GALVANIZED RIGID STEEL 'RGS', INTERMEDIATE METAL CONDUIT 'IMC', OR RIGID PVC SCHEDULE #40 CONDUIT, WHERE ALLOWED, MINIMUM SIZE 3/4".

ALL WIRE SHALL BE INSTALLED IN THINWALL, ELECTRICAL METALLIC TUBING (EMT) CONDUIT UNLESS OTHERWISE NOTED. MINIMUM SIZE SHALL BE 3/4" FOR BRANCH CIRCUIT WIRING, DROPS TO SWITCHES AND BRANCH DEVICES MAY BE I/2" UNLESS OTHERWISE NOTED ON DRAWINGS. ALL THINWALL FITTINGS SHALL BE OF THE STEEL COMPRESSION GLAND TYPE PER ALL APPLICABLE CODE REQUIREMENTS. ALL CONDUITS SHALL BE CONCEALED WHERE POSSIBLE. WHERE EXPOSED, THIS CONTRACTOR SHALL RUN CONDUITS IN STRAIGHT LINES PARALLEL AND/OR PERPENDICULAR TO THE BUILDING CONSTRUCTION. CONDUITS INSTALLED IN AREAS SUBJECT TO MECHANICAL DAMAGE SHALL BE RIGID GALVANIZED, OR INTERMEDIATE METAL TYPE.

THIS CONTRACTOR SHALL PROVIDE ALL TEMPORARY WIRING FOR ALL TRADES FOR CONSTRUCTION EQUIPMENT (IE: HAND TOOLS, WELDERS, PIPE BENDERS, ETC.) AND CONSTRUCTION LIGHTING PER THE LATEST OSHA STANDARDS. INCLUDE ALL COSTS IN THE BASE BID. THIS CONTRACTOR SHALL ESTABLISH SAFE WORKING PROCEDURES FOR THE PROTECTION OF THE WORKMEN IN ALL PHASES OF WORK, COMPLYING WITH THE APPLICABLE PROVISIONS OF ALL CITY, STATE AND FEDERAL SAFETY LAWS (OSHA).



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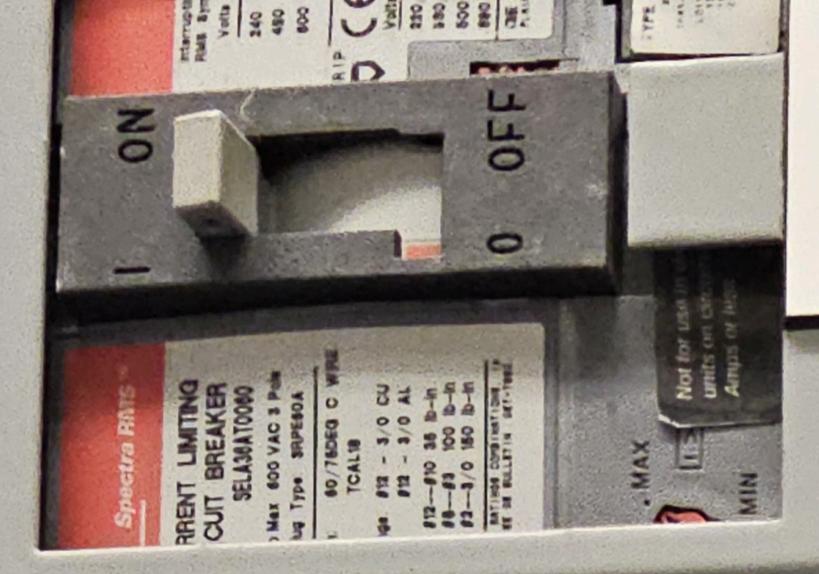
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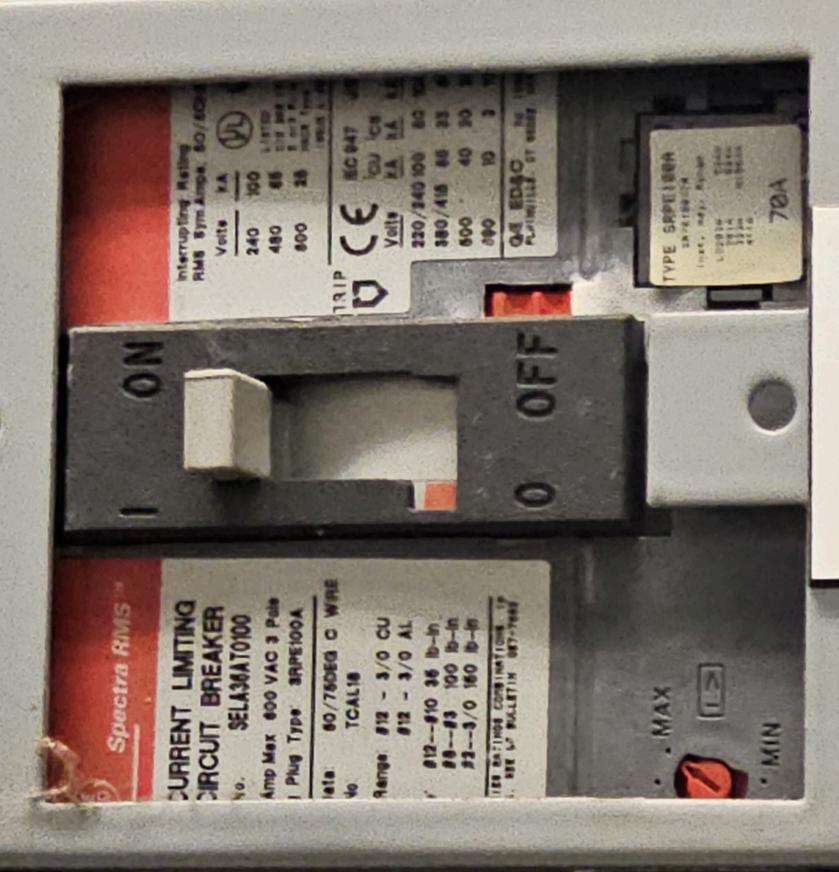
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YMBOLS, ABBREVIATIONS & SPECIFICATIONS



BODY SIDE PUMP PPE - 3

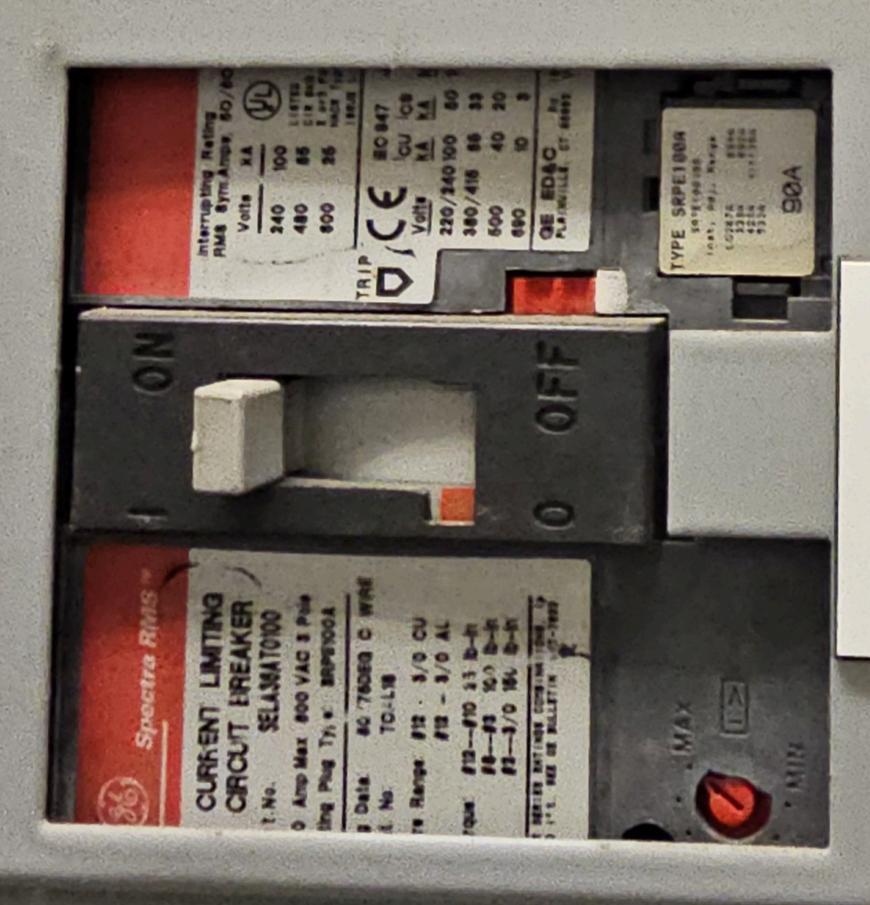






PROPULSION TURBIN #2 LRE - 3







PROPULSION TURBIN #1 LRE - 2

