



State of Utah

GARY R. HERBERT
Governor

GREGORY S. BELL
Lt. Governor

Department of Administrative Services

KIMBERLY K. HOOD
Executive Director

Division of Facilities Construction and Management

DAVID G. BUXTON
Director

ADDENDUM NO. 1

Date: September 1, 2010

To: Contractors

From: Darrell Hunting - Project Manager

Reference: HVAC Upgrades – CDL Building
Uintah Basin ATC – Roosevelt, Utah
DFCM Project No. 10048250

Subject: **Addendum No. 1**

Pages	Addendum Cover Sheet	1 page
	<u>Engineer's Addendum and Electrical Drawings</u>	<u>5 pages</u>
	Total	6 pages

Note: This Addendum shall be included as part of the Contract Documents. Items in this Addendum apply to all drawings and specification sections whether referenced or not involving the portion of the work added, deleted, modified, or otherwise addressed in the Addendum. Acknowledge receipt of this Addendum in the space provided on the Bid Form. Failure to do so may subject the Bidder to Disqualification.

While we contend that SB220 should only be potentially applicable to a contract issued after the effective date of said bill, this is to clarify that for purposes of this contract, regardless of the execution or effective dates of this contract, the status of Utah Law and remedies available to the State of Utah and DFCM, as it relates to any matter referred to or affected by said SB220, shall be the Utah law in effect at the time of the issuance of this Addendum.

1.1 SCHEDULE CHANGES: There are no Project Schedule changes.

1.2 GENERAL ITEMS: See attached Engineer's Addendum dated August 30, 2010 and Electrical Drawings.

ADDENDUM

DATE: August 30, 2010
PROJECT NO: 10230
PROJECT: UBATC AG Building Upgrade

DIVISION - 15

DRAWINGS

SHEET - M001

1. Add condensate pump schedule. See attached.

SHEET - M101

1. Add condensate 1" condensate drain lines for each furnace F-1 and F-2. See attached sheet for piping layout. Condensate pumps CP-1 and CP-2 are to serve furnace F-1 and F-2 respectively.
2. Keyed note 2: Furnace noted to be removed shall be salvaged and returned to the owner.
3. Diffuser and Grille Clarification: All diffusers & grilles depicted on the mechanical plan in bold shall be new. All diffusers and grilles shown in grey are existing to remain.



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CONDENSATE PUMP SCHEDULE

ID	MANUFACTURER AND MODEL NUMBER	LOCATION	TYPE	FLUID		HEAD LOSS (FT)	AMPS	VOLT/PH/Hz	NOTES
				FLOW RATE (GPM) (2)	WORKING FLUID				
CP-1	DIVERSITECH CP-22	MEZZANINE	(1)	1.25	WATER	10	1.9	120/1/60	(1)(2)(3)
CP-2	DIVERSITECH CP-22	MEZZANINE	(1)	1.25	WATER	10	1.9	120/1/60	(1)(2)(3)

(1) CONDENSATE PUMP WITH INTEGRAL 1/2-GALLON RESERVOIR AND 10-FEET OF LIFT.

(2) RATED FLOW IS AT 10-FEET OF HEAD.

(3) CONDENSATE PUMP SHALL BE COMPLETE WITH THE FOLLOWING ACCESSORIES:

(A) STATUS INDICATOR LIGHTS INDICATING POWER, PUMP STATUS, AND HIGH ALARM.

(B) QTY (4) INLET HOLES.

(C) CHECK VALVE.

(D) OVERFLOW SAFETY SWITCHES WITH QTY (3) TERMINALS FOR SHUTTING DOWN THE FURNACES IN THE EVENT OF PUMP FAILURE.



UBATC AG BUILDING UPGRADE
ROOSEVELT, UTAH

ADDENDUM

PROJECT #: 10230
CHECKED BY: RDV
DRAWN BY: SCM
CURRENT/BID DATE: 08/19/10

SHEET CONTENTS

SHEET M-001
MECHANICAL
SCHEDULES

SD-01



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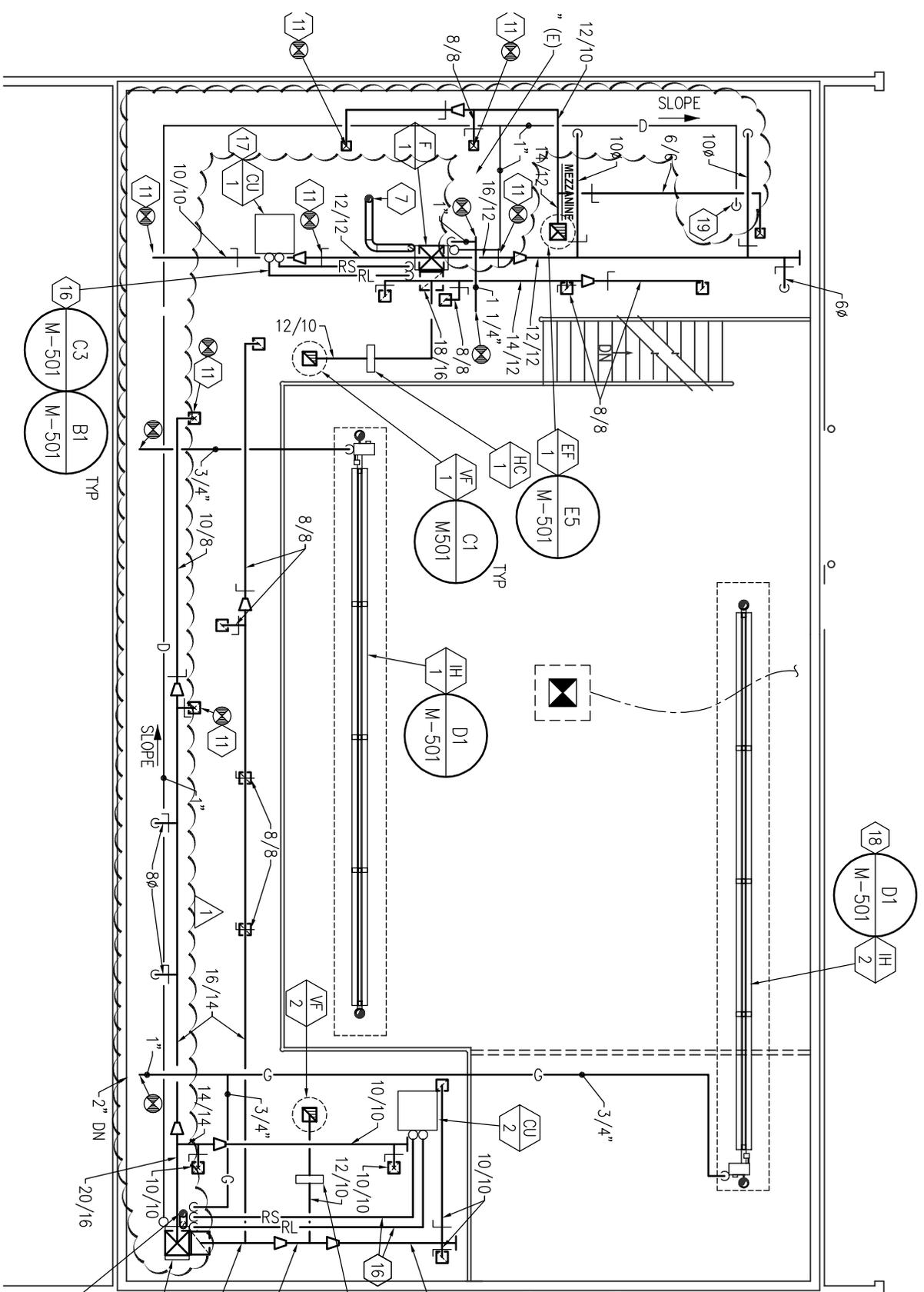
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UBATC AG BUILDING UPGRADE
ROOSEVELT, UTAH

ADDENDUM

PROJECT #:	10230
CHECKED BY:	RDV
DRAWN BY:	SCM
CURRENT/BD DATE:	08/19/10
SHEET CONTENTS	

SHEET M-101
MECHANICAL PLANS



KEYED NOTES

19 EXTEND FURNACE CONDENSATE LINE IN MEZZANINE SPACE TO JANITOR'S SINK. DROP LINE DOWN WALL & STUB OUT WITH AIR GAP ABOVE JANITOR'S SINK.

SD-02

PANEL B1		VOLTAGE 208Y/120		MOUNTING		FEED		MAINS		DIMS		SPECIAL EQUIPMENT									
EXISTING I-LINE		PHASE 3 WIRES 4		FLUSH		TOP		LUGS		20" W		SUB-FEED BRKR									
MAIN FLOOR		AIC ?		SURFACE		BOTTOM		BREAKER 35" H				NEMA 3R SURGE PROTECTOR									
LOCATION	AIC	?	AMPS																		
CIR	CIRCUIT	OUTLETS	BRKR	WIRE	CIRCUIT	COMBINED PHASES	CIRCUIT	WIRE	BRKR	OUTLETS	CIRCUIT	CIR									
NO.	DESCRIPTION	CODELTS	CO	MIS	P	AMP	SIZE	LOAD	A	B	C	LOAD	SIZE	AMP	P	MIS	CO	LTS	CODE	DESCRIPTION	NO.
1	UNIT HEATER	6		1	20	1000	2600					1800	10	25	1	1				F-2	2
3	SPARE			1	20							1060	10	15	1	1				VF-2	4
5	SPARE	6		2	20							1060	10	15	1	1				VF-2	4
7				-	-		938					938		-	-	-				CABINET HEATER	6
9	208V OUTLET	6		2	30	1000			6000			5000		-	-	-					10
11				-	-		1000					5000	50	3						208V OUTLET	12
13				-	-		6000	10000				5000		-	-	-				GROUND CONDUCTOR	14
15	208V OUTLET	6		3	50	5000			12500			7500		-	-	-					16
17				-	-		5000					12500	7500	100	3					BUS DUCT	18
19				-	-		7500	15000				7500		-	-	-					20
21	BUS DUCT	6		3	100	7500			19412			10912		-	-	-					22
23				-	-		7500					17880	10360	100	3					PANEL A1	24
25				-	-		9333	20513				11180		-	-	-					26
27	SAW DUST COLLECTOR	6		3	125	9333			10233			900		-	-	-					28
29				-	-		9333					900		-	-	-				PAINT BOOTH FAN	30
31	CU-1	1,3		1	2	45	2902	3802				10233	900	20	3						32
33				-	-		2902					4702	1800	25	2	1				HC-1	34
35	CU-2	1,3		1	2	45	2902					4702	1800								36
37				-	-		2902	4702				1800	25	2	1					HC-2	38
39				-	-							1800									40
41				-	-							0									42

NOTE: FIELD CONFIRM AIC RATING OF EXISTING BREAKERS AND PROVIDE NEW BREAKERS WITH THE SAME OR HIGHER AIC RATING.

VA 57555 54707 52283 165 KVA 1 = SEE DRAWINGS FOR CONDUIT & CONDUCTOR SIZE
 DIV 57555 54707 52283 AV. AMPS 2 = SHUNT-TRIP BREAKER 5 = GFCI BREAKER
 AMPS 480 456 435 457 A 3 = NEW BREAKER 6 = EXISTING CIRCUIT
 4 = PROVIDE LOCK OFF DEVICE

THIS PANEL, ALL OF ITS LUGS, BREAKERS, ETC. SHALL BE RATED FOR 75°C

PANEL A1		VOLTAGE 208Y/120		MOUNTING		FEED		MAINS		DIMS		SPECIAL EQUIPMENT									
EXISTING NQOD		PHASE 3 WIRES 4		FLUSH		TOP		LUGS		20" W		SUB-FEED BRKR									
MAIN FLOOR		AIC ?		SURFACE		BOTTOM		BREAKER 35" H				NEMA 3R SURGE PROTECTOR									
LOCATION	AIC	?	AMPS																		
CIR	CIRCUIT	OUTLETS	BRKR	WIRE	CIRCUIT	COMBINED PHASES	CIRCUIT	WIRE	BRKR	OUTLETS	CIRCUIT	CIR									
NO.	DESCRIPTION	CODELTS	CO	MIS	P	AMP	SIZE	LOAD	A	B	C	LOAD	SIZE	AMP	P	MIS	CO	LTS	CODE	DESCRIPTION	NO.
1	EXISTING LOAD	6		1	20	1000	2400					1200	20	1						EXISTING LOAD	2
3	EXISTING LOAD	6		1	20	1000						2400								EXISTING LOAD	4
5	EXISTING LOAD	6		1	20	1800						2600	1000	20	1					EXISTING LOAD	6
7	EXISTING LOAD	6		1	20	760	1760					1000	20	1						EXISTING LOAD	8
9	EXISTING LOAD	6		1	20	500						600	100	20	1					EXISTING LOAD	10
11	EXISTING LOAD	6		1	20	1000						1000	20	1						SPARE	12
13	EXISTING LOAD	6		1	20	1000	2000					1000	20	1						EXISTING LOAD	14
15	EXISTING LOAD	6		1	20	1000						1000	20	1						EXISTING LOAD	16
17	EXISTING LOAD	6		1	20	1000						2000	1000	20	1					EXISTING LOAD	18
19	EXISTING LOAD	6		2	1	12	1152	2152				1000	20	1						EXISTING LOAD	20
21	EXISTING LOAD	6		1	20	1000						1000	20	1						EXISTING LOAD	22
23	EXISTING LOAD	6		1	20	1000						2000	1000	20	1					EXISTING LOAD	24
25	F-1	3		1	1	25	10	1600	2600			1000	20	1						EXISTING LOAD	26
27	EXISTING LOAD	6		1	20	500						3380	2880	20	2					AIR COMP.	28
29	VF-1	3		1	1	15	12	700				3380	2880								30
31				-	-		0					0									32
33				-	-		0					0									34
35				-	-		0					0									36
37				-	-		0					0									38
39				-	-		0					0									40
41				-	-		0					0									42

NOTE: FIELD CONFIRM AIC RATING OF EXISTING BREAKERS AND PROVIDE NEW BREAKERS WITH THE SAME OR HIGHER AIC RATING.

VA 10912 10380 11180 32 KVA 1 = SEE DRAWINGS FOR CONDUIT & CONDUCTOR SIZE
 DIV 10912 10380 11180 AV. AMPS 2 = SHUNT-TRIP BREAKER 5 = GFCI BREAKER
 AMPS 91 87 93 92 A 3 = NEW BREAKER 6 = EXISTING CIRCUIT
 4 = PROVIDE LOCK OFF DEVICE

THIS PANEL, ALL OF ITS LUGS, BREAKERS, ETC. SHALL BE RATED FOR 75°C

MECHANICAL EQUIPMENT SCHEDULE										
ELECTRICAL										
MARK	DESCRIPTION	V/PH	LOAD (KW)	HP	FLA	MCA	MOCP	DISCONNECT SIZE/POLE	FUSE SIZE	NOTES
EF-1	ROOF DOME EXHAUST	120/1		0.25						2.8
VF-1	ROOF DOME SUPPLY	120/1		0.25						3.8
VF-2	ROOF DOME SUPPLY	120/1		0.25						4.8
HC-1	ELECTRIC COIL	208/1	3.6					30/2	N/A	6
HC-2	ELECTRIC COIL	208/1	3.6					30/2	N/A	6
F-1	GAS FURNACE	115/1		0.75						7
F-2	GAS FURNACE	115/1		0.75						7
CU-1	CONDENSING UNIT ON ROOF	208/1			27.9	45	60/2	45	1.5	1.5
CU-2	CONDENSING UNIT ON ROOF	208/1			27.9	45	60/2	45	1.5	1.5
IH-1	INFRARED HEATER	120/1			4.8					7
IH-2	INFRARED HEATER	120/1			4.8					7

V/PH = VOLTAGE / PHASE / HERTZ
 MCA = MINIMUM CIRCUIT AMPACITY
 MOCP = MAXIMUM OVER CURRENT PROTECTION LISTED BY THE MANUFACTURER

NOTES:
 (1) PROVIDE FUSED DISCONNECT WITH FUSE SIZED TO THE MAX. LISTED BY THE MANUFACTURER.
 (2) SEE DRAWINGS FOR SWITCHING.
 (3) INTERLOCK UNIT TO RUN WITH F-1
 (4) INTERLOCK UNIT TO RUN WITH F-2
 (5) PROVIDE A NEMAR DISCONNECT SWITCH.
 (6) PROVIDE A NON-FUSED DISCONNECT AT THE UNIT.
 (7) PROVIDE A HORSE POWER RATED TOGGLE SWITCH AT THE UNIT.
 (8) UNIT FURNISHED WITH DISCONNECT ON THE UNIT.

ELECTRICAL SYMBOL SCHEDULE		
SYMBOL	DEVICE/FIXTURE DESCRIPTION	NOTES
⊕	SINGLE POLE SWITCH	
⊕	DUPLEX CONVENIENCE OUTLET - GF	
⊕	DISCONNECT SWITCH	
⊕	FUSED DISCONNECT SWITCH	
---	WIRING IN CND IN CEILING OR WALL	
---	CONDUIT TURNED UP	
---	CIRCUIT HOME RUN TO PANEL. 3 CONDUCTORS INCLUDING THE EQUIPMENT GROUND CONDUCTOR.	
---	CIRCUIT HOME RUN TO PANEL. NUMBER OF ARROW HEADS INDICATE NUMBER OF CIRCUITS. SLASH MARKS INDICATE NUMBER OF CONDUCTORS. EX. TWO CIRCUITS, FOUR CONDUCTORS, COMMON NEUTRAL AND THREE CIRCUITS WITH 7 CONDUCTORS (SEPERATE NEUTRAL PER CIRCUIT). BOTH EX. INCLUDE AN EQUIP. GROUND.	
---	WIRING IN CND IN GROUND OR FLOOR	
---	CONDUIT TURNED DOWN	
---	INSTALL CONDUIT AS DRAWN ON THE PLANS. THE ONLY EXCEPTIONS ARE THOSE AUTHORIZED IN WRITING BY THE ENGINEER. ALL CONDUITS SHALL INCLUDE AN EQUIPMENT GROUND CONDUCTOR SIZED PER NEC.	

NOTES/ABBREVIATIONS
 AFF - ABOVE FINISHED FLOOR, AFG - ABOVE FINISHED GRADE,
 AIC - AMPS INTERRUPTING CAPACITY, BC - BARE COPPER, BFC - BELOW FINISHED CEILING,
 BFD - BELOW FINISHED GRADE, CND, OR C. - CONDUIT, CLC - INSTALLED IN CEILING,
 CT - CURRENT TRANSFORMER, DFA - DROP FROM ABOVE, EC - ELECTRICAL CONTRACTOR,
 EV - ELECTRO VOICE, GC - GENERAL CONTRACTOR, GND - GROUND,
 MC - MECHANICAL CONTRACTOR, MCA - MINIMUM CIRCUIT AMPS,
 P.C. - PLUMBING CONTRACTOR, POC - POINT OF CONNECTION, POS - POINT OF VAULT,
 RMC - RIGID METAL CONDUIT, SCA - SHORT CIRCUIT AMPERES,
 TC - TEMP. CONTROL CONTRACTOR, UNO - UNLESS NOTED OTHERWISE, VA - VOLT/AMPS,
 VF - VERIFY IN FIELD, WP - WEATHER PROOF/NEMA 3R

CONDUIT/CONDUCTOR SCHEDULE						
MARK	AMPS	CONDUIT CABLE	CONDUCTOR	REMARKS		
<20>	30	3/4"	2	10	(1)	(2)
NOTE:						
(1)		THHN/THWN-2.				
(2)		ALL CONDUIT SHALL CONTAIN A SEPARATE EQUIPMENT GROUNDING CONDUCTOR SIZED IN ACCORDANCE WITH THE NEC. ACCOUNT FOR PARALLEL RUNS.				
SUFFIX:		"A" INDICATES ALUMINUM CONDUCTORS "Y" INDICATES YELLOW ISOLATED GROUND CONDUCTOR IN ADDITION TO THE GROUND CONDUCTOR IN NOTE ABOVE.				

- ### GENERAL NOTES
- THE ELECTRICAL SYSTEMS DEFINED BY THESE PLANS AND SPECIFICATIONS ARE TO BE CONSTRUCTED AS COMPLETE AND OPERABLE SYSTEMS AND SHALL BE BID WITH THIS INTENT. THE CONTRACTOR SHALL VISIT THE SITE, READ ALL THE RELEVANT DOCUMENTS AND BECOME FAMILIAR WITH THE TYPE OF CONSTRUCTION AND WORK TO BE ACCOMPLISHED. SHOULD ANY ERROR, OMISSION OR CONFLICT EXIST IN EITHER THE PLANS OR SPECIFICATIONS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING BEFORE SUBMITTING HIS BID PRICE SO A CHANGE CAN BE ISSUED IN A PRE-BID ADDENDUM. OTHERWISE, THE CONTRACTOR AND/OR EQUIPMENT SUPPLIER SHALL SUPPLY THE PROPER MATERIALS AND LABOR TO INSTALL COMPLETE AND OPERABLE SYSTEMS AT THEIR OWN EXPENSE. WHEN EACH ELECTRICAL SYSTEM IS COMPLETE, THE CONTRACTOR SHALL TEST AND CONFIRM IT'S PROPER OPERATION. ANY INCOMPLETE SYSTEM SHALL BE MADE COMPLETE AND OPERABLE.
 - THE ARCHITECTURAL AND MECHANICAL PLANS ARE CONSIDERED A PART OF THE ELECTRICAL DOCUMENTS SO FAR AS ANY ELECTRICAL ITEMS THEY MAY CONTAIN. THE ELECTRICAL CONTRACTOR SHALL REFER TO AND COORDINATE WITH THEM. NO EXTRA COST SHALL BE ALLOWED FOR FAILURE TO COORDINATE THE CONTRACT DOCUMENTS WITH OTHER TRADES AND/OR IF EQUIPMENT DIMENSIONS ARE GREATER THAN SPECIFIED AND/OR DIMENSIONED ON THE PLANS.
 - NO ADDITIONS TO THE CONTRACTOR BID WILL BE ALLOWED FOR CHANGES MADE NECESSARY BY INTERFERENCE WITH OTHER WORK.
 - THE ELECTRICAL CONTRACTOR SHALL PROVIDE EQUIPMENT, MATERIALS AND LABOR FOR THE CONNECTIONS OF ALL EQUIPMENT SHOWN ON THE MECHANICAL PLANS.
 - THIS PROJECT IS TO BE INSTALLED IN STRICT ACCORDANCE WITH LOCAL AND STATE CODES AND THE NEC. IF AT ANY TIME DURING CONSTRUCTION, OR AFTER, SOMETHING IS FOUND TO BE INSTALLED IN VIOLATION OF THE CODES LISTED ABOVE, IT SHALL BE CORRECTED AT THE CONTRACTORS EXPENSE.
 - THE EC SHALL INSTALL A SEPARATE EQUIPMENT GROUNDING CONDUCTOR IN EACH CONDUIT RUN. CONDUIT SHALL NOT BE USED AS AN EQUIPMENT GROUNDING CONDUCTOR. THE EC SHALL GROUND THE ELECTRICAL SYSTEM IN ACCORDANCE WITH LOCAL AND NATIONAL CODES.
 - ELECTRICAL CONTRACTOR SHALL CONFIRM MINIMUM CODE (NEC) WORKING CLEARANCE BEFORE INSTALLING ANY ELECTRICAL PANELS OR CABINETS AND SHALL MOVE THE PANELS AT HIS EXPENSE IF REJECTED BY AN INSPECTOR. IF CLEARANCE IS NOT POSSIBLE, THE DESIGNER SHALL BE NOTIFIED IMMEDIATELY IN WRITING.
 - THE CONTRACTOR SHALL ALLOW THE MOVEMENT, BEFORE ROUGH-IN, OF ANY ELECTRICAL PANEL, DEVICE, LUMINAIRE, ETC. A DISTANCE OF 10 FEET WITHOUT REQUIRING ADDITIONAL COST TO THE PROJECT.
 - THE ELECTRICAL CONTRACTOR SHALL SECURE ALL CONDUIT TO THE STRUCTURE AS IT IS SET IN PLACE USING INDUSTRY STANDARD METHODS AND PRACTICES.
 - TO ASSURE ALL DEVICES ARE RIGIDLY SET, THE ELECTRICAL CONTRACTOR SHALL SECURE ALL DEVICE BOXES WITH BRACKETS, HANGERS, ETC. DESIGNED FOR THE APPLICATION. ANY DEVICE BOXES NOT SECURED WILL BE MADE SECURE AT THE CONTRACTORS EXPENSE.
 - BEFORE ANY ELECTRICAL CONDUIT, BOXES, ETC. ARE COVERED (FLOOR, CEILINGS, WALLS, ETC.), THEY SHALL BE APPROVED BY THE INSPECTING OFFICER (INSPECTOR). THE UNCOVERING AND REPLACEMENT OF ELECTRICAL WORK FOR THE INSPECTION PURPOSES WILL BE AT THE COST OF THE ELECTRICAL CONTRACTOR.
 - DURING CONSTRUCTION, THE ELECTRICAL CONTRACTOR SHALL REMOVE, REROUTE, AND/OR RELOCATE ANY EXISTING ELECTRICAL EQUIPMENT THAT CONFLICTS WITH THE REMODEL OR ADDITION. ALL SYSTEMS SHALL BE OPERABLE AT THE COMPLETION OF THE PROJECT. EQUIPMENT THAT IS NOT REUSED, AND NOT WANTED BY THE OWNER IN WRITING, BECOMES THE PROPERTY OF THE ELECTRICAL CONTRACTOR AND SHALL BE REMOVED FROM THE PREMISES.
 - THE ELECTRICAL CONTRACTOR SHALL MAINTAIN ELECTRICAL CONTINUITY TO REMAINING EQUIPMENT WHEN ANY EXISTING ELECTRICAL EQUIPMENT IS REMOVED.
 - ALL COSTS FROM THE USE OF THE EXISTING PANEL SHALL BE INCLUDED IN THE CONTRACTOR'S BASE BID, I.E. CHANGE IN BREAKER SIZE, ETC.
 - ELECTRICAL CONTRACTOR SHALL COORDINATE WITH THE EQUIPMENT SUPPLIER ON THE EXACT LOCATIONS OF ALL EQUIPMENT AND ELECTRICAL CONNECTIONS PRIOR TO ROUGH-IN. THE EC SHALL MAKE THE FINAL CONNECTION TO ALL EQUIPMENT.
 - AFTER THE FACILITY IS COMPLETE AND BEEN IN FULL OPERATION FOR TWO WEEKS THE ELECTRICAL CONTRACTOR SHALL OBTAIN THE UTILITY DEMAND, THE SYSTEM VOLTAGE (PHASE TO PHASE AND PHASE TO GROUND) AND AN AMMETER READING (EACH PHASE) ON THE MAIN FEEDERS. THESE READINGS SHALL BE OBTAINED DURING NORMAL OPERATING HOURS FOR THE FACILITY AND SHALL BE RECORDED AND A COPY SENT TO THE ENGINEER.



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