



CHARLOTTESVILLE ALBEMARLE AIRPORT AUTHORITY **MECHANICAL SYSTEMS UPGRADE**

LOCATION MAP N.T.S.







ISSUED FOR BID

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	GENERAL MECHANIC	CAL SYMBOLS	HVAC SYMBOLS
		MBER - SHOWN ON PLANS	
	POINT WHER	E NEW CONNECTS TO EXISTING	16"Ø ROUND DUCT SIZE TAG (DIAMETER)
	DISCONNECT	SYMBOL	(E) EXISTING DUCT TAG
	XX NUMBER OF I	DETAIL ON SHEET SHEET WHERE DETAIL APPEARS	
			EA EXHAUST AIR EXHAUST AIR
E	CONTINUATIO	DN SYMBOL	
	Room ROOM NAME	AND NUMBER	DROP
	5		
	EXISTING CO	NSTRUCTION	
	AREA NOT IN	CONTRACT	DATA DEVICE TAGS SYMBOL
		PIPE SIZE TAG (DIAMETER) ABOVE GROUND PIPING	CARBON DIOXIDE SENSOR CO2 TH RTU-XX TEMPERATURE & HUMIDITY SENSOR
	1/8" / 12" SLOPE	- PIPE SLOPE TAG	CARBON MONOXIDE SENSOR CO TS VAV-XX TEMPERATURE SENSOR
	INVERT: -105' - 1"	BELOW GROUND PIPING PIPE INVERT ELEVATION TAG	NITROGEN DIOXIDE SENSOR NO2 T THERMOSTAT
	(E)	EXISTING PIPE TAG	HUMIDITY SENSOR HS MS MANUAL SWITCH
	ADDREVIAI	IUNS	
	(E) EXISTING ABV ABOVE	GAL GALLON GALV GALVANIZED	
	AC AIR CONDITIONING UNIT ACC AIR COOLED CONDENSER	GH GRAVITY HOOD GPM GALLONS PER MINUTE	
D	ACS AIR CONDITIONING SYSTEM ACU AIR CONDITIONING UNIT	GUV GRAVITY UNIT VENTILATOR H HUMIDIFIER	
	ADJ ADJUSTABLE AF AIRFOIL	HC HEATING COIL HP HORSEPOWER	
	AFD ADJUSTABLE FREQUENCY DRIVE AFF ABOVE FINISHED FLOOR	HRC HEAT RECOVERY UNIT HVAC HEATING VENTILATION AND AIR	
	AHU AIR HANDLING UNIT AMB AMBIENT	HVU HEATING AND VENTILATING UNIT HWC HOT WATER COIL	
	AS AIR SEPARATOR B BOILER	IN WC INCH OF WATER COLUMN IN WG INCH OF WATER GAUGE	
	BAS BUILDING AUTOMATION SYSTEM BD BELT DRIVE	IRH INFRARED HEATER ISOTR ISOLATION TRANSFORMER	
	BHPBRAKE HORSEPOWERBIBACKWARD INCLINED	KW KILOWATTS LAT LEAVING AIR TEMPERATURE	
	BLDG BUILDING BTUH BRITISH THERMAL UNIT/HOUR	LD LINEAR DIFFUSER LWT LEAVING WATER TEMPERATURE	
	C CONDENSATE CAV CONSTANT AIR VOLUME	MAX MAXIMUM MCA MINIMUM CIRCUIT AMP	
	CC COOLING COIL CD CONDENSATE DRAIN	MCC MOTOR CONTROL CENTER MD MOTORIZED DAMPER	
	CDL CONDENSATE DRAIN LINE CFF CAPPED FOR FUTURE	MIN MINIMUM MZ MULTI-ZONE	
	CFM CUBIC FEET PER MINUTE CH CHILLER	NC NOISE CRITERIA NEC NATIONAL ELECTRIC CODE (NFPA-70)	
	CHWP CHILLED WATER PUMP CHWR CHILLER WATER RETURN	No NUMBER OAHU OUTSIDE AIR HANDLING UNIT	
	CHWS CHILLED WATER SUPPLY CLG CEILING	OPNG OPENING P PUMP	
	CONC CONCRETE CONT CONTINUOUS	PBB PASSENGER BOARDING BRIDGE PD PRESSURE DROP	
	COP COEFFICIENT OF PERFORMANCE CP CONDENSATE PUMP	PF PRE-FILTER PH PREHEAT COIL	
C	CT CONTROL TRANSFORMER	PRV PRESSURE REDUCING VALVE	
	CUH CABINET UNIT HEATER	PSIG POUNDS PER SQUARE INCH GAUGE	
	CW COLD WATER CWR CONDENSOR WATER RETURN	RAF RETURN AIR FAN RELA RELIEF AIR	
	CWS CONDENSOR WATER SUPPLY DB DRYBULB	REQD REQUIRED RG RETURN AIR GRILLE	
	DD DIRECT DRIVE DIFF DIFFUSER	RH RELATIVE HUMIDITY RLA RUNNING LOAD AMP	
	DL DOOR LOUVER DMPR DAMPER	RPM REVOLUTIONS PER MINUTE RR RETURN REGISTER	
	DN DOWN DPS DIFFERENTIAL PRESSURE SWITCH	RS REFRIGERANT SENSOR RTS ROOM TEMPERATURE SENSOR	
	DPT DIFFERENTIAL PRESSURE TRANSMITTER DTS DUCT TEMPERATURE SENSOR	RTU ROOF TOP UNIT S SMOKE DETECTOR	
	DWDI DOUBLE WIDTH, DOUBLE INLET DWG DRAWING	SA SOUND ATTENUATOR SCHWP SECONDARY CHILLED WATER PUMP	
	DX DIRECT EXPANSION EA EACH	SF SUPPLY FAN SF SQUARE FEET	
	EAT ENTERING AIR TEMPERATURE EDH ELECTRIC DUCT HEATER	SHWP SECONDARY HOT WATER PUMP SP STATIC PRESSURE	
	EER ENERGY EFFICIENCY RATIO EF EXHAUST FAN	SR SUPPLY REGISTER SS STAINLESS STEEL	
	EF EXHAUST FAN EG EXHAUST GRILLE	STR STARTER SW SWITCH	
	ELEC ELECTRICAL ENT ENTERING	T TEMPERATURE SENSOR TA TRANSFER AIR	
	EQ EQUAL ERU ENERGY RECOVERY UNIT	TAO TRANSFER AIR OPENING TEFC TOTALLY ENCLOSED FAN COOLED	
в	ESP EXTERNAL STATIC PRESSURE ET EXPANSION TANK	TEMP TEMPERATURE TG TRANSFER GRILLE	
	EUHELECTRIC UNIT HEATEREWTENTERING WATER TEMPERATURE	TOAC TRANSFER OPENING ABOVE CEILING TSTAT THERMOSTAT	
	EXH EXHAUST FC FORWARD CURVED	TUX TERMINAL UNIT CONTROLLER TYP TYPICAL	
	FCUFAN COIL UNITFDFIRE DAMPER	UH UNIT HEATER UTR UP THROUGH ROOF	
	FF FINAL FILTER FG FLOOR GRILLE	V-PH-HZ VOLTS-PHASE-HERTZ VAF VENTILATION AIR FAN	
	FLAFULL LOAD AMPSFLEXFLEXIBLE CONNECTION	VAFC VENTILATION AIR FAN CONTROLLOR VAV VARIABLE AIR VOLUME	
	FLR FLOOR FOT FLAT ON TOP	VFD VARIABLE FREQUENCY DRIVE VP VACUUM PUMP	
	FPMFEET PER MINUTEFRFLOOR RETURN	VTR VENT THRU ROOF W WATTS	
	FT FAN TERMINAL FTR FINNED TUBE RADIATION	WB WET BULB WHP WATER SOURCE HEAT PUMP	
	FTU FAN POWERED VAV TERMINAL UNIT GA GAUGE	WPWEATHER PROOFWWFWOVEN WIRE FABRIC	



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— NATURAL GAS

PIPING SYMBOLS

en III

PIPE ACCESSORY TAGS

4"、 >>>

HWR

HWS

G

CW

______ HW _____

PIPE TEE

HW-R

PIPE DROP

3	4
	· · · ·
YMBOLS	GENERAL NOTES
	1. PROVIDE COMPLETE PRODUCT DATA (SIZE, WEIGHT, OPERATING CHARACTERISTICS, WIRING DIAGRAMS, E
HEATING WATER RETURN HEATING WATER SUPPLY	2. ALL HVAC SYSTEMS MUST BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND NATION ELECTRICAL CODE 2017 AND VIRGINIA BUILDING CODE 2018.
NATURAL GAS	3. PROVIDE OFFSETS IN NEW PIPING SYSTEMS AS REQUIRED TO FACILITATE INSTALLATION OF NEW WORK A
DOMESTIC COLD WATER DOMESTIC HOT WATER DOMESTIC HOT WATER RECIRCULATION	 ALL NON-GALVANIZED SUPPORTS AND HANGERS FOR PIPING AND EQUIPMENT MUST BE CLEANED OF DEB IN ADDITION TO THE SPECIFICATION REQUIREMENTS AND PRIOR TO ORDERING EQUIPMENT AND INSTALLA PIPING AND EQUIPMENT LAYOUT. THIS SHOP DRAWING MUST ALSO INDICATE MAINTENANCE/SERVICE SPA CONCRETE PADS FOR MECHANICAL EQUIPMENT MUST BE SIZED, LOCATED AND PROVIDED BY DIVISION 23 MOUNTED ON GRADE OR FLOOR SLAB. VERIFY ALL EQUIPMENT WITH MANUFACTURER'S CERTIFIED DRAWINGS.FIELD VERIFY AND COORDINATE A UNLESS OTHERWISE INDICATED ALL DRAIN LINES FROM EACH PIECE OF EQUIPMENT MUST BE PIPED FULL
45 DEGREE TEE <u>ORY TAGS</u> 2" M-CNTRL MOTORIZED CONTROL VALVE	 ALL EQUIPMENT, PIPING, ETC., MUST BE SUPPORTED AS DETAILED AND SPECIFIED. ADDITIONAL SUPPORTS VFD's IF REQUIRED ARE INDICATED ON THE HVAC EQUIPMENT SCHEDULES AND ARE PROVIDED BY DIVISIO SERVES IS LOCATED. VFD'S MUST BE LOCATED SO THEY CAN EASILY BE ACCESSED, HAVE PROPER MAINT ACCORDANCE WITH NEC. VFD'S MUST NOT BE MOUNTED ON HVAC EQUIPMENT, UNLESS NOTED OTHERWIS ALL HEATING, VENTILATION AND AIR CONDITIONING SYSTEMS SHOWN ON THE CONTRACT DRAWINGS MUS SUBMIT COMPLETE SHOP DRAWINGS AND PRODUCT DATA FOR ALL EQUIPMENT AND DEVICES SPECIFIED (

COMPONENTS REQUIRED TO FACILITATE THE DEMOLITION AND INSTALLATION OF SUBJECT EQUIPMENT.

PROPERLY SEALED AND ALL CONTROL DEVICES MUST BE OPERATIONAL AND CALIBRATED.

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, ETC) FOR ALL EQUIPMENT AND DEVICES SPECIFIED ON THE DRAWINGS.

TIONAL CODE REQUIREMENTS, VIRGINIA MECHANICAL CODE 2018, VIRGINIA PLUMBING CODE 2018, NATIONAL

AT NO ADDITIONAL COST TO THE CONTRACT.

EBRIS AND RUST, PROPERLY PREPPED, PRIMED AND PAINTED.

LATION OF NEW WORK, SUBMIT A COMPOSITE SHOP DRAWING (1/4" MIN. SCALE PLAN AND SECTIONS) SHOWING SPACE FOR ALL EQUIPMENT.

8. PROVIDE 4" HIGH X UNIT LENGTH PLUS 4" X UNIT WIDTH PLUS 4" CONCRETE PADS FOR ALL HVAC EQUIPMENT

E ALL DIMENSIONS BEFORE FABRICATION.

LL SIZE OF DRAIN OUTLET, WITH P-TRAP TO FLOOR DRAIN OR JANITOR SINK.

RTS MUST BE PROVIDED AS REQUIRED TO PROPERLY SUPPORT ALL HVAC SYSTEM COMPONENTS. SION 23. UNLESS OTHERWISE NOTED, FIELD LOCATE EACH VFD IN THE SAME ROOM THAT THE EQUIPMENT IT INTENANCE SPACE AND COMPLY WITH THE NATIONAL ELECTRICAL CODE (NEC) REQUIREMENTS. GROUND VFD'S IN WISE OR FACTORY MOUNTED.

IUST BE NEW.

D ON THE HVAC DRAWINGS.

13. THIS PROJECT REQUIRES COORDINATION DRAWINGS. REFER TO SPECIFICATION SECTIONS 01040, 13000 AND 230050 FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

14. DISCREPANCIES AND CONFLICTS BETWEEN MECHANICAL SYSTEMS AND OTHER DISCIPLINE (ARCHITECTURAL, STRUCTURAL, ELECTRICAL, PLUMBING AND FIRE PROTECTION) DRAWINGS MUST BE BROUGHT TO THE ATTENTION OF THE A/E PRIOR TO CONSTRUCTION OF SUBJECT SYSTEMS. FAILURE TO NOTIFY A/E OF THE SUBJECT PROBLEMS MUST CONSTITUTE ACCEPTANCE OF ALL CONDITIONS AND ANY CORRECTIVE WORK REQUIRED, AS DIRECTED BY A/E. THE SUBJECT CORRECTIVE WORK MUST BE PERFORMED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.

15. ALL FURNISHED EQUIPMENT MUST FIT THE ALLOCATED SPACE. PROVIDE ALL MODIFICATIONS TO THE OPENINGS, IN ROOF OR SLAB, STEEL SUPPORTS, ELECTRICAL REQUIREMENTS AND ANY OTHER BUILDING

16. PRIOR TO FINAL INSPECTION OF EQUIPMENT BY A/E, EACH PIECE OF MECHANICAL EQUIPMENT MUST BE CLEANED AND ALL FOREIGN MATERIALS REMOVED. ALL PENETRATIONS THRU UNIT CASINGS MUST BE

17. ALL FINISHES DAMAGED DURING THE INSTALLATION OF NEW HVAC SYSTEM MUST BE REPAIRED TO MATCH EXISTING ADJACENT FINISHES.

18. COORDINATE LOCATION OF HVAC EQUIPMENT AND SYSTEM ROUTINGS SO THAT HVAC EQUIPMENT AND PIPING ARE NOT LOCATED ABOVE ELECTRICAL EQUIPMENT, PANELS OR ELEVATOR EQUIPMENT.

19. FOR ALL THREE-PHASE MOTORS POWERING MECHANICAL EQUIPMENT IN CONSTANT SPEED APPLICATIONS: PROVIDE FULL VOLTAGE, COMBINATION MAGNETIC TYPE, THREE-PHASE POWER, MOTOR STARTER/CONTROLLERS WITH UNDER VOLTAGE RELEASE, MOTOR CIRCUIT PROTECTOR TYPE DISCONNECT WITH SHORT-CIRCUIT PROTECTION, HANDS-OFF-AUTOMATIC SWITCH AND GREEN PILOT LIGHT IN CONTROL PANEL COVER. PROVIDE THE APPROPRIATE NUMBER OF NORMAL OPEN (N.O.) AND NORMALLY CLOSED (N.C.) CONTACTS REQUIRED TO OPERATE AND CONTROL THE EQUIPMENT IN ACCORDANCE WITH THE SEQUENCES OF OPERATION AS SPECIFIED. REFER TO ELECTRICAL SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

20. FOR ALL SINGLE-PHASE MOTORS POWERING MECHANICAL EQUIPMENT: PROVIDE ELECTRICAL DISCONNECT AND THE APPROPRIATE NUMBER OF NORMALLY OPEN (N.O.) AND NORMALLY CLOSED (N.C.) CONTACTS REQUIRED TO OPERATE AND CONTROL THE EQUIPMENT IN ACCORDANCE WITH THE SEQUENCES OF OPERATION AS SPECIFIED. REFER TO ELECTRICAL SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

* NOTE * ALL OF GENERAL NOTES ON THIS SHEET ARE TO BE APPLIED TO ALL OTHER DRAWINGS IN THIS SET. THE SYMBOLS AND ABBREVIATIONS SHOWN ON THIS SHEET MAY OR MAY NOT BE USED IN THIS SET OF DRAWINGS.

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GENERAL SITE NOTES

NATURAL GAS PIPING SHALL BE ROUTED NO LESS THAN 36" BELOW GRADE, UNLESS OTHERWISE NOTED.

SCALE: 1" = 10'-0"





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MAIN TERMINAL BOILER ROOM DEMO PLAN

SCALE: 1/2" = 1'-0"

GENERAL DEMOLITION NOTES

NOTED.	
	BOILER ROOM DEMOLITION NOTES
MARK	DESCRIPTION
1	REMOVE EXISTING FUEL OIL SYSTEM COMPLETE TO POINT INDICATED. SEI INCLUDES PIPING, EQUIPMENT, SUPPORTS, CONTROLS, WIRING AND APPU PIPING BELOW FLOOR.
2	REMOVE EXISTING PROPANE SUPPLY SYSTEM COMPLETE. SEE IMAGE 1, T PIPING, EQUIPMENT, SUPPORTS, WIRING AND APPURTENANCES. CAP PIPIN ENTRANCE.
3	REMOVE EXISTING HEATING HOT WATER BOILER COMPLETE. INCLUDES CO SUPPORTS, AND APPURTENANCES.
4	REMOVE EXISTING HOT WATER PIPING COMPLETE TO POINT INDICATED. IN SUPPORTS, CONTROLS, WIRING AND APPURTENANCES.
5	REMOVE EXISTING DRAIN PIPING COMPLETE. INCLUDES SUPPORTS AND A
6	REMOVE EXISTING EXHAUST FLUE COMPLETE. INCLUDES ROOF STACK, IN: AND APPURTENANCES.
7	DISCONNECT EXISTING HWS AND HWR PIPING FROM EXISTING HWP. REMO INCLUDES SUPPORTS AND APPURTENANCES. SEE PHOTO 3, THIS SHEET.
8	EXISTING ROOF PENETRATION TO REMAIN FOR NEW WORK.
9	REMOVE EXISTING DOMESTIC HOT WATER HEATER COMPLETE. INCLUDES SUPPORTS, AND APPURTENANCES.



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NOTES:

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NATURAL GAS PIPING SHALL BE ROUTED NO LESS THAN 12" BELOW GRADE, UNLESS OTHERWISE NOTED.

GAS-FIRED BOILER SCHEDULE												
	L	OCATION			GAS	-FIRED HEAT EXCHAN	GER					
	GAS BURNER WATERSIDE				SIDE		1					
					FUEL		FLOW					UNIT
				[MAX PRESSURE					THERMAL	WEIGHT
MARK	NO.	NAME	INPUT (MBH)	OUTPUT (MBH)	TYPE	(PSI)	GPM	EWT (°F)	LWT (°F)	PD (FT)	EFF	(LBF)
B-1	164	BOILER ROOM	850	824	NATURAL GAS	14.0	82.4	160	180	5.7	96%	750
B-2	164	BOILER ROOM	850	824	NATURAL GAS	14.0	82.4	160	180	5.7	96%	750
ïES:												

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BASIS OF DESIGN: RBI ENCORE 850
 INSTALL AS INDICATED PER MANUFACTURERS RECOMMENDATIONS PROVIDED. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

GAS-FIRED DHW HEATER SCHEDULE											
LOCATION	LOCATION GAS-FIRED HEAT EXCHANGER										
	GAS BURNER				WATERSIDE						UNIT
			F	UEL	CAPACITY	EWT		TEMP RISE	RECOVERY	THERMAL	WEIGHT
NAME	INPUT (MBH)	OUTPUT (MBH)	TYPE	PRESSURE (PSI)	(GAL)	(°F)	LWT (°F)	(°F)	(GPH)	EFF	(LBF)
IT BOILER ROOM	300	288	NATURAL GAS	2.0	100	55	140	95	390	96%	523

1. BASIS OF DESIGN: AO SMITH MODEL BTH
 2. INSTALL AS INDICATED PER MANUFACTURERS RECOMMENDATIONS PROVIDED. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
 3. SET WATER TEMPERATURE TO 140°F.
 4. PROVIDE DRAIN PAN AND DRAIN PAN SENSOR. CONNECT TO BAS. SIGNAL ALARM AND CLOSE AUTOMATIC VALVES ON COLD WATER AND HOT WATER LINES UPON DETECTION OF WATER IN PAN.

PUMP SCHEDULE												
	LOCATION PUMP MOTOR UNIT											
MARK	NO.	NAME	SERVES	TYPE	FLOW (GPM)	PRESSURE DROP (FT)	DRIVE	POWER (HP)	RPM	ECM	WEIGHT	NOTES
CP-1	164	BOILER ROOM	HEATING HOT WATER	CLOSE-COUPLED IN-LINE MOUNTED	85	15.0	DIRECT	0.75	1935	Yes	95	1,3,4,5
CP-2	164	BOILER ROOM	HEATING HOT WATER	CLOSE-COUPLED IN-LINE MOUNTED	85	15.0	DIRECT	0.75	1935	Yes	95	1,3,4,5
HWP-1	163	MECHANICAL ROOM	HEATING HOT WATER	BASE-MOUNTED	195	60.0	DIRECT	5.00	1760	Yes	256	2,3,4,5
HWP-2	163	MECHANICAL ROOM	HEATING HOT WATER	BASE-MOUNTED	195	60.0	DIRECT	5.00	1760	Yes	256	2,3,4,5
NOTES: 1. BASIS OF DESIGN: B&G MODEL 60 2. BASIS OF DESIGN: B&G MODEL e1510 3. INSTALL AS INDICATED PER MANUFACTURERS RECOMMENDATIONS PROVIDED. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS. 4. PROVIDE WITH VFD AND INVERTER RATED MOTOR.												

D5 PLUMBING RISER - MAIN TERMINAL NATURAL GAS SCALE: N.T.S.

- 1" G. SEE M101 FOR CONTINUATION.

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	ELECTRICAL A	BBREV	IATIONS				ELECTRICAL SYMBOLS	
A AM A/C AIR		HP HVAC	HORSE POWER HEATING VENTILATING & AIR CONDITIONING	DEMOLIT	ON LEGEND		POWER SYSTEMS	
AC ABC	OVE COUNTER COMPRESSOR	IC IG	INTERCOM ISOLATED GROUND	XD = EXISTING MUST BE REMOVED				
ACCU AIR	R COOLED CONDENSER UNITNING	IMC		XM = EXISTING MUST BE MOVED TO NEW LOCATI	ON			
ACU AIR	R CONDITIONING UNIT	ITC		XN = EXISTING MUST BE REPLACED WITH NEW D	EVICE IN NEW LOCATION			
ADAAG AM	IERICANS WITH DISABILITIES ACT IERICANS WITH DISABILITIES ACT ACCESSIBILITY	JB	JUNCTION BOX	XP = EXISTING IN RELOCATED POSITION		-0	SIMPLEX RECEPTACLE	1 ILLUMINATE
AF AM	IP FUSE	KAIC Kcmil	(THOUSAND) AMPERE INTERRUPTING CAPACITY THOUSANDS OF CIRCULAR MILS	XX = EXISTING MUST REIMAIN	EVICE IN SAME LOCATION	₩	DUPLEX RECEPTACLE ABOVE COUNTER	
AFCI ARI	C FAULT CIRCUIT INTERRUPTER JUSTABLE FREQUENCY DRIVE	KO KVA	KNOCK OUT KILOVOLT-AMPERES	NOTE 1: EXISTING ITEMS NOT SHOWN MUST REM	IAIN .		DUPLEX RECEPTACLE AUTOMATICALLY CONTROLLED	1d DESIGNATIO
AFF ABC AFG ABC	OVE FINISHED FLOOR OVE FINISHED GRADE	KW LBS	KILOWATT LOAD BREAK SWITCH					
ahu air Aic am	R HANDLING UNIT IPS INTERRUPTING CURRENT	LC						SINGLE POL
IR AM		LSI	LONG TIME, SHORT TIME, INSTANTANEOUS				DUFLEX OF OF NEOLF FACLE	
AMP AM		LSIG	FAULT			₩	DUPLEX RECEPTACLE MOUNTED @ SPECIFIC HEIGHT	RECESSED
P AC	CESS MANAGEMENT SYSTEM CESS PANEL	LTG	LIGHT				DUPLEX RECEPTACLE ON EMERGENCY CIRCUIT	
.PU AU .S AIR	XILIARY POWER UNIT R COOLED CONDENSER UNITNING	MAX MCA	MAXIMUM MINIMUM CIRCUIT AMPACITY				DOUBLE DUPLEX RECEPTACLE	
Γ/FP AN [·] ΓR ALL	TITERRORISM/FORCE PROTECTION L THREADED ROD	MCB MCC	MAIN CIRCUIT BREAKER MOTOR CONTROL CENTER			-⊕2	DOUBLE DUPLEX RECEPTACLE ABOVE COUNTER	
ATS AU' AWG AM	TOMATIC TRANSFER SWITCH IERICAN WIRE GAUGE	MH MIN	MANHOLE MINIMUM				DOUBLE DUPLEX RECEPTACLE AUTOMATICALLY CONTROLLED	FOR TRANS
S BUI		MLO	MAIN LUGS ONLY MASS NOTIFICATION SYSTEM			+48 [™] 16-30R	SPECIAL RECEPTACLE MOUNTED @ SPECIFIC HEIGHT & NEMA TYPE	
CT BUI		MTD					DUPLEX RECEPTACLE IN FLOOR BOX	XX-1 ADJACENT
S BA	GGAGE HANDLING SYSTEM	MUFID	MULTI-USER FLIGHT INFORMATION DISPLAY				DOUBLE DUPLEX RECEPTACLE IN FLOOR BOX	GRA
BA(BE/	GGAGE INFORMATION DISPLAY AM TRANSPORT SYSTEM	N N	NEUTRAL NORTH			SUNG	DUPLEX RECEPTACLE CEILING MOUNTED	
CO CA	NDUIT TEGORY 6 ETHERNET CABLE	N/A NAC	NOT APPLICABLE NOTIFICATION APPLIANCE CIRCUIT			₩ ₩	SINGLE POLE MANUAL MOTOR SWITCH	
V CO CIF	MMUNITY ANTENNA TELEVISION RCUIT BREAKER	NE NEC	NORTH ENTRANCE NATIONAL ELECTRICAL CODE			ب ب	SINGLE POLE THERMAL ELEMENT SWITCH	
CR.	ANE CONTROL		NATIONAL ELECTRICAL MANUFACTURERS ASSOC			9		
TV CLC		NIC	NOT IN CONTRACT			CLN	JUNCTION BOX CEILING MOUNTED	
;I CO		NL	NUMBER			н	JUNCTION BOX WALL MOUNTED	
CO CH	IILLER	NTS O.C.	NOT TO SCALE ON CENTER			\Box	JUNCTION BOX IN FLOOR	
CIR CO	RCUIT NNCRETE LIGHT POLE	OAE OAHU	OR APPROVED EQUAL OUTSIDE AIR HANDLING UNIT			4	DATA RECEPTACLE	
H CO	MMUNICATIONS MANHOLE	OH OS	OVERHEAD OCCUPANCY SENSOR				DATA RECEPTACLE IN FLOOR BOX	
RL CO		P					DISCONNECT SWITCH FUSED	
IM CO	MUDITIONLY MMUNICATION	PBB PBX	PASSENGER BOARDING BRIDGE PRIVATE BRANCH EXCHANGE			占	DISCONNECT SWITCH NON-FUSED	
C CO CO	NCRETE INSOLIDATION POINT	PCHWP PIV	PRIMARY CHILLED WATER PUMP POST INDICATOR VALVE			7	COMBINATION MOTOR STARTER FUSED	
CAI J CO	RD READER MPUTER ROOM UNIT	PNEU PNL	PNEUMATIC PANELBOARD					
CO CU	OOLING TOWER IRRENT TRANSFORMER	PNL POE	PANEL POWER OVER ETHERNET				POSH BUTTON START/STOP	
VP CO	OOLING TOWER WATER PUMP	PP	POWER PANEL PRESSURE SWITCH			E PUSF	HBUTTON	
CEI	NTRAL UTILITIES BUILDING	PT	POTENTIAL TRANSFORMER			R	LIGHTING RELAY	
	GITAL ALARM COMMUNICATOR TRANSMITTER STRIBUTED ANTENNA SYSTEM	PVC RAF	POLYVINYLCHLORIDE RETURN AIR FAN			ТА	DISTRIBUTION TRANSFORMER	
DIR J DU	RECT CURRENT ICTLESS SPLIT AIR CONDITIONING OUTDOOR UNIT	RECP REF	RECEPTACLE REFRIGERATOR				AUTOMATIC TRANSFER SWITCH	
DIR DO	RECT DIGITAL CONTROL PANEL DOR HOLDER	RGS RM	RIGID GALVANIZED STEEL ROOM				SURGE PROTECTIVE DEVICE	
DA` DIS	YLIGHT HARVESTING ZONE SCONNECT	RMC RTU	RIGID METAL CONDUIT ROOF TOP UNIT			нĢ	ELECTRONIC WALL CLOCK	
DO		S						
EXI	ISTING	SCCR	SHORT CIRCUIT CURRENT RATING					
EA	ECTRICAL CONTRACTOR	SCHWP SD	SUB-DISTRIBUTION CABINET				RECEPTACLE ON CORD REEL	
ELE	ECTRIC DUCT HEATER HAUST FAN	SE SEC	SOUTH ENTRANCE SECURITY					
ELE EM	EVATION IERGENCY LIGHT	SEGB SF	SERVICE ENTRANCE GROUND BAR SUPPLY FAN					
ELE EM	ECTRIC/ELECTRICAL IERGENCY	SHWP SIM	SECONDARY HOT WATER PUMP SIMILAR					
EN		SLC	SIGNAL LINE CIRCUIT					
ELE		SPD	SURGE PROTECTIVE DEVICE					
ELE	GINEER OF RECORD	SPEC	SPECIFICATION SINGLE POLE SINGLE THROW					
EM EQ	IERGENCY POWER-OFF IUAL	SQ SS	SQUARE STAINLESS STEEL					
EXI ENI	ISTING TO BE REMOVED ERGY RECOVERY UNIT	SSF ST	SIDE STREAM FILTER SHUNT TRIP COIL					
ENI FLF	ERGY SELECTION SYSTEM ECTRONIC TRAP SEAL PRIMER	STC STR	SECURITY TERMINAL CABINET					
ELE	ECTRIC UNIT HEATER	STS	STAINLESS STEEL					
ELE	ECTRIC WATER COOLER ECTRIC WATER HEATER	SW	STATIC TRANSFER SWITCH SWITCH					
EXI EXI	ISTING TO REMAIN	SWBD SWGR	SWITCHBOARD SWITCHGEAR					
FA) FIR	X / PRINTER RE ALARM	SYM T	SYMMETRICAL TRANSFORMER					
	RE ALARM AUDIO AMPLIFIER RE ALARM ANNUNCIATOR PANFI	TB TE	TELEPHONE BACKBOARD THERMAL ELEMENT					
P FIR	RE ALARM CONTROL PANEL	TEFC	TOTALLY ENCLOSED FAN COOLED TELEPHONE					
		TGB	TELECOMMUNICATIONS GROUNDING BUS BAR					
ro FIR TC FIR		TR	TELECOMINIONICATIONS MAIN GROUNDING BUS BAR TAMPER RESISTANT					
CU FAN D FLI	N COIL UNIT IGHT INFORMATION DISPLAY	TS TTB	TAMPER SWITCH TELEPHONE TERMINAL BOARD					
LA FUI LR FU	LL LOAD AMPS OOR	TV TYP	TELEVISION TYPICAL					
O FIB		UDS						
		UGC						
S FLO SPC FLU	UW SWITCH USH/FAUCET SENSOR POWER CONVERTER	UH UL	UNIT HEATER UNDERWRITERS LABORATORIES					
ru fan G GR	N POWERED VAV TERMINAL UNIT ROUND	UNSW UON	UNSWITCHED UNLESS OTHERWISE NOTED					
C GE DF GA	NERAL CONTRACTOR IS DUCT FURNACE	UT UTR	UTILITY UP THROUGH ROOF	MOUNTI	NG HEIGHTS			
: GR FCI GP	COUND FAULT	V VAV	VOLTS VARIABLE AIR VOLUME (HVAC)	ABOVE COUNTER DEVICES	6" TO BOTTOM WITHOUT BACKSPLASH			
-GI GO		VFD		WALL LUMINAIRES	4" TO BOTTOM WITH BACKSPLASH SEE LUMINAIRE SCHEDUI F OR KEYNOTE			
, GR D GA		VT	VOLTAGE TRANSFORMER	EXTERIOR SPEAKERS	10'-0" TO CENTER OF BOX, UON			
ru GR R GR	COUND POWER UNIT	W W	WIRE WALL MOUNTED	FIRE ALARM HORNS/SPEAKERS HIGH BAY	80" TO BOTTOM OF BOX			
C GA	LVANIZED RIGID CONDUIT S UNIT HEATER	W W	WATTS WEST					
VH GA	S WATER HEATER GH BAY	WP WR	WEATHERPROOF WEATHER-RESISTANT	FIRE ALARM STROBES	80" TO CENTER OF DEVICE			
HAI		Y 7	WYE (CONNECTED)	FIRE ALARM PULL STATIONS HIGH BAY	48" TO CENTER OF DEVICE			
		Z	IMPEDANCE		48" TO CENTER OF DEVICE			
				RECEPTACLES IN INDUSTRIAL AREAS	48" AFF TO CENTER LINE, UON	—		
				RECEPTACLES	18" AFF TO CENTER LINE, UON			
				SWITCHES	48" AFF TO CENTER OF BOX, UON			
				GROUND BAR EMERGENCY PHONF	18" AFF TO BOTTOM OF BAR OR BOX, UON 54" AFF TO CENTER LINE LION			
				CARD READER	48" AFF TO CENTER LINE, UON			
				EPO SWITCHES	54" AFF TO CENTER LINE, UON			I
					′			

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TRICAL SYMBOL NOTES	GENERAL NOTES					
	 ALL ELECTRICAL WORK MUST COMPLY WITH NATIONAL ELECTRICAL CODE, NFPA 70, THE NATIONAL FIRE CODES, THE AMERICANS WITH DISABILITIES ACT, AND VIRGINIA BUILDING CODES. 					
	2. THOROUGHLY REVIEW THE PROJECT TO ENSURE THAT ALL WORK MUST MEET OR EXCEED THE ABOVE REQUIREMENTS. ANY ALLEGED DISCREPANCIES MUST BE BROUGHT TO THE ENGINEER'S ATTENTION.					
DICATES WALL MOUNTING. NO STEM INDICATES CEILING MOUNTING. TES ILLUMINATED FACE(S). ARROW INDICATES DIRECTIONAL ARROW ON . THE CIRCUIT DESIGNATION IS INDICATED BY A NUMBER.	 OBTAIN COPIES OF ALL RELATED PLANS, SPECIFICATIONS, SHOP DRAWINGS AND ADDENDA TO COORDINATE THE RELATED WORK AND SCHEDULING. THE ELECTRICAL SERVICE TO AND FOR MECHANICAL AND OTHER EQUIPMENT IS BASED ON EQUIPMENT DESIGN DATA. THE ACTUAL VALUES MAY DIFFER DEPENDING UPON THE EQUIPMENT TO BE FURNISHED. ANY MODIFICATION TO THE ELECTRICAL INSTALLATION, BASED UPON ACTUAL EQUIPMENT SELECTION, MUST RESULT IN NO ADDITIONAL COST TO THE OWNER. 					
T DESIGNATION IS INDICATED BY A NUMBER. THE SWITCH CATED BY A LOWER CASE LETTER.	5. THOROUGHLY REVIEW THE ARCHITECTURAL AND MECHANICAL PLANS TO ASSURE THAT ELECTRICAL SERVICE FOR ALL ITEMS AND/OR EQUIPMENT REQUIRING ELECTRICAL SERVICE IS INCLUDED. ANY ITEM AND/OR EQUIPMENT NOT FURNISH AND INSTALLED WITH ELECTRICAL SERVICE, REQUIRING ELECTRICAL SERVICE, MUST BE BROUGHT TO THE ENGINEER'S ATTENTION.					
E DESIGNATION IS INDICATED BY A LOWER CASE LETTER. EXAMPLE: "d" TO CONTROL LIGHTING FIXTURES INDICATED BY "d". ELBOARD DOORS MAY BE SHOWN TO INDICATE OPENING SIDE OF	6. MECHANICAL, FIRE PROTECTION AND ELECTRICAL EQUIPMENT HAVE BEEN LOCATED AND ARRANGED TO MINIMIZE THE INTERFERENCES OF EQUIPMENT AND STRUCTURE. THOROUGHLY FAMILIARIZE ONESELF WITH THE WORK TO BE PERFORMED BY OTHER TRADES AND THE PHYSICAL CHARACTERISTICS OF THE STRUCTURE IN ORDER TO SCHEDULE AND INSTALL EQUIPMENT AND TO MINIMIZE POSSIBLE INTERFERENCE. FAILURE TO PROPERLY COMMUNICATE AND SCHEDULE WORK WITH OTHER TRADES THAT RESULTS IN ADDITIONAL WORK AND MATERIAL, MUST BE THE RESPONSIBILITY OF THE CONTRACTOR. THE MODIFICATIONS REQUIRED TO RESOLVE THE CONFLICT MUST BE DECIDED BY THE ENGINEER.					
ARDS. SEE PANELBOARD IDENTIFICATION FOR DESIGNATION CODES.	7. ALL PANELBOARDS MUST BE FURNISH AND INSTALLED WITH A TYPEWRITTEN SCHEDULE SHOWING CIRCUIT NUMBERS AND A COMPLETE DESCRIPTION OF EACH CIRCUIT, INCLUDING OFFICIAL ROOM NUMBER.					
REA	8. ALL LIGHT SWITCHES AND DUPLEX RECEPTACLES MUST BE RATED FOR 20 AMPERES AT 120/277 VOLTS AC. WIRING DEVICES MUST BE SPECIFICATION GRADE.					
	9. ALL ELECTRICAL WIRING DEVICES INDICATED TO BE INSTALLED IN MASONRY WALLS OR FLOORS MUST BE FLUSH MOUNTED, INCLUDING BRANCH CIRCUIT PANELBOARDS, UON. THE CONDUITS TO ASSOCIATED ELECTRICAL EQUIPMENT MUST BE CONCEALED IN WALLS OR FLOOR.					
ATING.	10. ALL CONDUIT RUNS MUST BE CONCEALED, UON.					
	11. FURNISH THE AIR CONDITIONING SUBCONTRACTOR AND THE CEILING SUBCONTRACTOR COPIES OF APPROVED LUMINAIRE SHOP DRAWINGS.					
S: THE MOTOR IS INDICATED BY A NUMBER WITHIN OR CHARACTERS TOR SYMBOL. SEE THE MOTOR AND EQUIPMENT SCHEDULE FOR THE AND ELECTRICAL REQUIREMENTS.	12. ALL SPECIAL PURPOSE OUTLETS MUST BE FURNISHED AND INSTALLED TO MATCH EQUIPMENT TO BE SUPPLIED.					
PRESENTATION OF PHASING, TYPICAL FOR ALL SYMBOLS	13. ALL CONDUITS MUST INCLUDE A SEPARATE GREEN EQUIPMENT GROUNDING CONDUCTOR.					
	14. ANY EXISTING UTILITIES LOCATED IN THE AREA OF CONSTRUCTION THAT REQUIRE RELOCATION OR TIE-IN MUST BE COORDINATED WITH THE OWNER'S REPRESENTATIVE. PROVIDE 72 HOUR ADVANCE NOTICE.					
	15. ALL DISCONNECT SWITCHES MUST BE THE HEAVY DUTY TYPE, FUSED DISCONNECTS MUST HAVE LITTLEFUSE TIME DELAY, CLASS RK5 AND INDICATING CLASS RK5.					
	16. CHECK THE ARCHITECTURAL DRAWINGS FOR EXACT LOCATION AND/OR DIMENSIONS FOR INSTALLATION OF ALL ELECTRICAL ITEMS. ALL QUESTIONABLE LOCATIONS MUST BE APPROVED BY OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION.					
	17. ALL EMPTY CONDUITS MUST CONTAIN JET LINE #232 POLYOLEFIN 200 LB. TEST PULL STRING.					
	18. ALL WORK SHOWN ON THE ELECTRICAL PLANS MUST BE PERFORMED BY THE CONTRACTOR, UON.					
	19. ALL SURGE PROTECTED OUTLETS MUST BE EQUAL TO HUBBELL #5352.					
	20. EQUIPMENT INSTALLED WITHIN CONCEALED SPACES MUST HAVE REASONABLE ACCESS PANELS FURNISH AND INSTALLED NEARBY FOR INSPECTION, TESTING, AND SERVICE CONSIDERATIONS. LOCATION OF ACCESS PANELS PER APPROVAL OF ARCHITECT.					
	21. WHERE CABLES OR CONDUITS ARE REQUIRED TO PASS THROUGH A FIRE RATED WALL, FLOOR, OR CEILING THEY MUST BE SEALED WITH FIRESTOP. THE APPROVED FIRESTOP METHOD MUST COMPLY WITH ARTICLES 300.21 OF NEC AND MUST BE UL LISTED UNDER "THROUGH-PENETRATION FIRESTOP SYSTEM (XHEZ)" IN UL FIRE RESISTANCE DIRECTORY. ALL UNSPRINKLERED FACILITIES MUST BE CONSIDERED TO HAVE INTERIOR CORRIDORS WITH FIRE RATED WALLS, UNO. ANY PENETRATION THROUGH THESE WALLS AND OTHER FIRE RATED WALLS MUST BE SEALED WITH FIRESTOP. FURNISH AND INSTALL MINIMUM 1" EMT THROUGH WALL PENETRATIONS.					
	22. SPARE CONDUITS, WIREWAYS, AND CABLE TRAYS MUST BE SUPPORTED FROM BUILDING STRUCTURE AND NOT FROM OTHER PIPES, DUCTS, OR EXISTING RACKS, UON.					
	23. EXTERIOR BURIED CONDUIT RUNS MUST BE MINIMUM 24" BELOW FINISHED GRADE. FURNISH AND INSTALL CAUTION TAPE 12" BELOW GRADE. FURNISH AND INSTALL (1) SPARE WITH EACH UNDERGROUND RUN. DUCT BANKS MUST BE CONCRETE ENCASED WITH LOCATION PLAQUES PLACED EVERY 50' AND BEFORE AND AFTER EVERY TURN, UON. SUBMIT SHOP DRAWINGS BEFORE DIGGING.					

AND PANEL JOINT LOCATIONS.

CIRCUIT BREAKERS.

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AS, BALLAST OR SWITCH MODE POWER SUPPLIES (I.E. PERSONAL COMPUTERS AND SERVERS).

30. ALL EXISTING ELECTRICAL DEVICES THAT ARE NOT SHOWN ARE EXISTING TO REMAIN, UON.

32. BEFORE INITIATING ANY UNDERGROUND WORK, LOCATE ALL UTILITIES.

ENVIRONMENTS, SUCH AS COASTAL AREAS, ALUMINUM, STAINLESS STEEL, OR PVC COATED RACEWAYS MUST BE REQUIRED.

INFORMATION. FURNISH AND INSTALL DISCONNECTS FOR THOSE DEVICES THAT DO NOT COME WITH FACTORY INSTALLED DISCONNECTS.

TAPE IDENTIFYING THE ORIGIN AND DESTINATION (ROOM NAME AND NUMBER), CIRCUIT NUMBER AND SYSTEM NAME.

24. FURNISH AND INSTALL GROUND STRAP ACROSS ALL CABLE TRAY JOINTS. GROUND CABLE TRAY TO SERVICE GROUND WITH #1/0 AWG BARE COPPER.

25. DO NOT LOCATE ELECTRICAL OUTLETS AND DEVICES ON WALL PANEL JOINTS. REFER TO ARCHITECTURAL BUILDING ELEVATIONS FOR WALL PANEL LAYOUT

26. FURNISH AND INSTALL A SEPARATE NEUTRAL FOR EACH PHASE CONDUCTOR OF SINGLE POLE BRANCH CIRCUITS THAT SERVE HIGH HARMONIC LOADS, SUCH

27. RACEWAYS INSTALLED IN OUTDOOR LOCATIONS MUST BE HOT DIPPED GALVANIZED, AT MINIMUM, FOR CORROSION RESISTANCE. FOR HIGHLY CORROSIVE

28. POWER CHANGE EXPENSES RESULTING FROM EQUIPMENT SUBSTITUTIONS THAT DIFFER FROM ITEMS CALLED FOR IN DRAWINGS OR SPECIFICATIONS MUST BE BORNE BY THE CONTRACTOR OR THEIR SUB. THESE MUST INCLUDE CHANGES IN VOLTAGE OR FULL LOAD AMPS RESULTING IN LARGER FEEDERS AND OR

29. COORDINATE FINAL ELECTRICAL DEVICE AND LUMINAIRE LOCATIONS WITH FINAL SPRINKLER HEAD LOCATIONS TO COMPLY WITH NFPA REQUIREMENTS.

31. COORDINATE WITH DIVISION 23 FOR DISCONNECT REQUIREMENTS ON MECHANICAL EQUIPMENT. REFER TO MECHANICAL EQUIPMENT SCHEDULES FOR

33. RAMP LEVEL CONDUIT INSTALLED IN UNCONDITIONED AIR SPACE MUST BE RMC WITH COMPRESSION FITTINGS. CONDUIT LEAVING TENANT SPACE MUST BE 1) LABELED BEFORE AND AFTER THE WALL PENETRATED BY THE CONDUIT. 2) LABELED EVERY 50' OR ON EVERY 90 DEGREE TURN. LABEL MUST BE 1 1/2" LABEL

SCALE: 1" = 1'-0"

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DEMOLITION LEGEND

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XD = EXISTING MUST BE REMOVED

XM = EXISTING MUST BE MOVED TO NEW LOCATION

- XN = EXISTING MUST BE REPLACED WITH NEW DEVICE IN NEW LOCATION
- XP = EXISTING IN RELOCATED POSITION

XR = EXISTING MUST REMAIN

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XS = EXISTING MUST BE REPLACED WITH NEW DEVICE IN SAME LOCATION NOTE 1: EXISTING ITEMS NOT SHOWN MUST REMAIN .

- 1 UON , REMOVE JUNCTION BOX, DISCONNECT SWITCH AND ASSOCIATED CONDUIT AND WIRE BACK TO THE SOURCE (PANEL P12) . TYP
- 2 CIRCUITBREAKER TO PANEL PM
- 3 MAINTAIN EXISTING BRANCH CIRCUIT TO RP 1.
- 4 DISCONECT THE EXISTING BRANCH CIRCUIT. REUSE FOR NEW PUMP.

1 UNISTRUT SUPPORT BOLTED TO THE CONCRETE FLOOR.

NEMA SIZE 1 STARTER, 30 AMP SWITCH, 30AF SAFTEY SWITCH.
EXTENDED EXISTING CIRCUIT IN LIQUID-TIGHT FLEXIBLE CONDUIT.

3 EXTENDED EXISTING CIRCUIT IN LIQUID-TIGHT FLEXIBLE C
4 3#10, 1#10GND - 3/4"C (LIQUID-TIGHT FLEXIBLE).

SCALE: 1/2" = 1'-0"

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C	D	
(C	

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208Y	/120 VAC		
3 PH/	ASE 4 WIF	RE	
			LOAD CLAS
1			
3	20 A	2	BOILER ROOM
5	20 A	1	SPARE
7	20 A	1	SPARE
9	20.4	2	MOTOR MAIN
11	20 A	2	BOILER ROOM
13	20 A	1	SPARE
15	20 A	1	SPARE
17	20 A	2	PUMP MAIN T
19			
21	20 A	2	PUMP MAIN I
25	20 4	1	
27	20 A	1	SPARE
29	20 A		SPARE
31	20 A	1	SPARE
33	20 A	1	SPARE
35	20 A	1	SPARE
37	20 A	1	SPARE
39	20 A	1	SPARE
41	20 A	1	SPARE
GEN	ERAL NOT	ES	:
ALL C		AR	E TO REMAIN
	DRANCH	CIF	CULIS ARE 27

GENERAL NOTES:
ALL CIRCUITS ARE TO REMAII NEW BRANCH CIRCUITS ARE
NOTES:
I.REPLACE 2 SPARE CIRCUIT

208Y	/120 VAC					PANELBOARD P12 (XR)						200 A BUS W/ 200 A MCB				
3 PH	ASE 4 WI	RE			LOCATION BOILER ROOM 164					10 kA SCCR, BOTTOM FEED, RECESSED MOUNT						
CKT NO	CKT BREAKER NO TRIP / POLE		LOAD CLASS & LOCATION	ID	NOTES	L1	L2	L3 L1	L2	L3	NOTES	ID	LOAD CLASS & LOCATION	BREAKER CI TRIP / POLE N		
1	00.4		MOTOR MAIN TERMINAL BOILER ROOM / NEW	B2	1	458		0								2
3	20 A	2					458		0				PSO OFFICE DUCT HEATER	3	40 A	4
5	20 A	1	SPARE					0		0						6
7	20 A	1	SPARE			0		0					SPARE	1	20 A	8
9	20.4	2	MOTOR MAIN TERMINAL BOILER ROOM / NEW	B1	1		458		0				SPARE	1	20 A	10
11	20 A	2						458		0			GATE 4 TICKET COUNTER	1	20 A	12
13	20 A	1	SPARE			0		0					GATE 4 TICKET COUNTER	1	20 A	14
15	20 A	1	SPARE				0		0				QUAD ON WALL PSO OFFICE	1	20 A	16
17	20 A	2	PUMP MAIN TERMINAL BOILER	CP1	1			562		0			SPARE	1	20 A	18
19	20 A	2	ROOM / NEW			562		0					SPARE	1	20 A	20
21	20 4	2	PUMP MAIN TERMINAL BOILER	CP2	1		562		0				CANOPY LIGHT	1	20 A	22
23	20 A	2	ROOM / NEW		I			562		0			LIGHT	1	20 A	24
25	20 A	1	CONVINENCE OUTLET		NEW	180		2005								26
27	20 A	1	SPARE				0		2005		2	HWP - 1	WATER PUMP	3	30 A	28
29	20 A	1	SPARE					0		2005						30
31	20 A	1	SPARE			0		2005								32
33	20 A	1	SPARE				0		2005		2	HWP - 2	IWP - 2 WATER PUMP		30 A	34
35	20 A	1	SPARE					0		2005						36
37	20 A	1	SPARE			0		0					SPARE	1	20 A	38
39	20 A	1	SPARE				0		0				SPARE	1	20 A	40
41	20 A	1	SPARE					0		0			UV LIGHT	1	20 A	42
						L1		L2	L3							
				CONNECTER	D LOAD:	5210) kVA	5488 kVA	5592 kVA				CODE LOAD TOTALS			
													NONCONTINUOUS:		0 VA	
											CONTINUOUS:		0 VA			
												NONCON	TINUOUS + 125% CONTINUOUS	:	0 VA	
												NONCONTINUOUS + 125% CONTINUOUS: 0 A				
GEN		TES	3:													
ALL		AR	E TO REMAIN UNLESS NOTED (OTHERWISE												
NEW	BRANCH		RCUITS ARE 2#12, 1# 12 GND - 3	/4"C UNLESS	NOTED	OTHER	WISE									

1.REPLACE 2 SPARE CIRCUIT BREAKERS 20A, 1 POLE WITH 2 CICUIT BREAKER 20A, 2POLE. 2. REPLACE 3 SPARE CIRCUIT BREAKERS 20A, 1 POLE WITH 1 CIRCUIT BREAKER 30A, 3POLE.BRANCH CIRCUIT SHOULD BE 3#10, 1# 10 GND - 3/4"C

SCALE: 1/2" = 1'-0"

