

LIST OF ABBREVIATIONS

A	AMMETER, AMPERE(S)	HPS	HIGH PRESSURE SODIUM	S	SWITCH
AC	ALTERNATING CURRENT	HV	HIGH VOLTAGE	SCH	SCHEDULE
AF	AMPERE FRAME	HVAC	HEATING, VENTILATING AND AIR CONDITIONING	SEC	SECOND/SECONDARY
A.F.F.	ABOVE FINISHED FLOOR			SECT	SECTION
APPD	APPROVED			SEQ	SEQUENCE
ASD	ADJUSTABLE SPEED DRIVE	IC	INTERRUPTING CAPACITY	SHT	SHEET
ASU	AIR SUPPLY UNIT	I & C	INSTRUMENTATION & CONTROL	SHTR	SPACE HEATER
ATS	AUTOMATIC TRANSFER SWITCH	INCAND	INCANDESCENT	S/N	SOLID NEUTRAL
AT	AMPERE TRIP	INST	INSTANTANEOUS/INSTRUMENT	SPD	SPEED
AUX	AUXILIARY	INSTR	INSTRUMENTATION	SPEC	SPECIFICATIONS
		ISOL	ISOLATION	SSTL	STAINLESS STEEL
BC	BARE COPPER			STD	STANDARD
BKR	BREAKER	J, J-BOX	JUNCTION BOX	STLT	STREET LIGHT
BLDG	BUILDING	KV	KILO VOLTS	STR	STARTER
		KVA	KILO VOLT-AMPERES	SV	SOLENOID VALVE
C	CONDUIT/CONTROL	KWH	KILOWATT HOUR	SW	SWITCH
CAB	CABINET			SWBD	SWITCHBOARD
CB	CIRCUIT BREAKER			SWGR	SWITCHGEAR
CC	CONTROL CABINET	L	LINE	SYM	SYMMETRICAL
CKT	CIRCUIT	LA	LIGHTNING ARRESTER		
CL2	CHLORINE	LC	LOAD CENTER	T	THERMOSTAT
CLG	CEILING	LOC	LOCATION	TB	TERMINAL BOARD
CO	CONDUIT ONLY	LS	LIMIT SWITCH	TC	TIME CLOSE
COMM	COMMUNICATIONS	LSC	LIMIT SWITCH-CLOSED	TD	TIME DELAY
COND	CONDUCTOR	LSO	LIMIT SWITCH-OPEN	TDR	TIME DELAY RELAY
CONT	CONTINUED	LT FLEX	LIQUID TIGHT FLEX CONDUIT	TEMP	TEMPERATURE
CPNL	CONTROL PANEL	LV	LOW VOLTAGE	TJ	TERMINAL JUNCTION BOX
CPT	CONTROL POWER TRANSFORMER			TO	TIME OPEN
CR	CONTROL RELAY	M	MAGNETIC CONTACTOR COIL/MAIN CONTACT	TPPM	THREE PHASE POWER MONITOR
CS	CONTROL STATION			TR	TIMING RELAY
CT	CURRENT TRANSFORMER	mA	MILLIAMPERES	TS	TEMPERATURE SWITCH
CORP	CORPORATION	MCB	MAIN CIRCUIT BREAKER	TSC	TORQUE SWITCH CLOSED
CPG	COUPLING	MCC	MOTOR CONTROL CENTER	TSD	TORQUE SWITCH OPEN
CU	COPPER	MCP	MOTOR CIRCUIT PROTECTOR	TSP	TWISTED SHIELDED PAIR TYPICAL
		MD	MOTORIZED DAMPER		
		MECH	MECHANICAL		
DC	DIRECT CURRENT	MFR	MANUFACTURER	UFC	UNIFORM FIRE CODE
D/I	DATA INPUT	MOV	MOTOR OPERATED VALVE	UH	UNIT HEATER
DISC	DISCONNECT	MS	MOTOR STARTER	UMC	UNIFORM MECHANICAL CODE
DIV	DIVISION	MT	MOUNT	UVR	UNDER VOLTAGE RELAY
		MTD	MOUNTED		
E	EMPTY/EXISTING	MTG	MOUNTING		
EF	EXHAUST FAN	MTR	MOTOR		
ELEC	ELECTRICAL	N	NEUTRAL	V	VOLT(S), VOLTMETER
ELEV	ELEVATION	NA	NON-AUTOMATIC	VAC	VOLT ALTERNATING CURRENT
EMER	EMERGENCY	NC	NORMALLY CLOSED	VDC	VOLT DIRECT CURRENT
ETM	ELAPSED TIME METER	N.E.C.	NATIONAL ELECTRICAL CODE		
		N.E.M.A.	NATIONAL ELECTRIC MANUFACTURERS ASSOCIATION		
FCP	FIRE CONTROL PANEL	NO	NORMALLY OPEN	W	WATT(S)
FDR	FEEDER	NPC	NEVADA POWER COMPANY	W/	WITH
F, FU	FUSE			WHD	WATT HOUR DEMAND
FLA	FULL LOAD AMPERES			WP	WEATHERPROOF
FLR	FLOOR			WWF	WELDED WIRE FABRIC
FLUOR	FLUORESCENT				
FREQ	FREQUENCY	OL	OVERLOAD RELAY	XFMR	TRANSFORMER
FVNR	FULL VOLTAGE NON-REVERSING	PP	POWER POLE	XFR	TRANSFER
		PB	PULL BOX	XMTR	TRANSMITTER
G	GREEN, GROUND	PC	PHOTOCELL	XP	POTENTIAL TRANSFORMER
GALV	GALVANIZED	PLC	PROGRAMMABLE LOGIC CONTROLLER	XTDR	EXPLOSION PROOF TRANSDUCER
GFI	GROUND FAULT INTERRUPTER	PS	POWER SWITCH	YD	YARD
GFR	GROUND FAULT RELAY	PT	POTENTIAL TRANSFORMER		
GRS	GALVANIZED RIGID STEEL CONDUIT	PVC	POLYVINYL CHLORIDE		
		PW	PART WINDING		
H	HAND SPEED	PWR	POWER		
HD	HANDHOLE	RECEPT	RECEPTACLE		
HP	HIGH INTENSITY DISCHARGE	REQ'D.	REQUIRED		
HP	HORSEPOWER	RL	RELAY		
HT	HEAT TAPE WITH INSULATION	RM	REMOTE MULTIPLEXER		
HTR	HEATER	RTD	RESISTANCE TEMPERATURE DETECTOR		
		RTU	REMOTE TERMINAL UNIT		

GENERAL NOTES

- PRIOR TO BEGINNING EXCAVATION, VERIFY LOCATIONS OF EXISTING AND NEW UNDERGROUND UTILITIES, PIPING, ETC. PROVIDE EXCAVATION, BACKFILL, SUPPORT, SAWCUTTING, PATCHING, PAVING, ETC. AS REQUIRED. BACKFILL EXCAVATIONS TO 90 PERCENT COMPACTION AND PATCH TO MATCH EXISTING CONDITIONS.
- ALL DIRT AND DEBRIS SHALL BE REMOVED FROM ALL MANHOLES AND PULLBOXES. DISPOSE OF AS DIRECTED BY THE LAS VEGAS VALLEY WATER DISTRICT.
- DO NOT SCALE DRAWINGS. VERIFY DIMENSIONS IN FIELD PRIOR TO BEGINNING WORK.
- FINAL CONNECTIONS TO EQUIPMENT SHALL BE PER MANUFACTURER'S APPROVED WIRING DIAGRAMS, DETAILS AND INSTRUCTIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE MATERIALS AND EQUIPMENT COMPATIBLE WITH EQUIPMENT ACTUALLY SUPPLIED.
- CONTRACTOR SHALL VISIT JOB SITE PRIOR TO BID AND VERIFY THAT CONDITIONS ARE AS INDICATED. CONTRACTOR SHALL INCLUDE IN HIS BID COSTS, THE REQUIREMENTS TO MAKE HIS WORK MEET THE EXISTING CONDITIONS.
- THIS IS A STANDARD LEGEND SHEET. SOME SYMBOLS OR ABBREVIATIONS MAY APPEAR ON THIS SHEET AND NOT ON THE PLANS.

SYMBOL LEGEND

PLANS	POWER DIAGRAM	CONTROL DIAGRAM	DESCRIPTION	PLANS	POWER DIAGRAM	CONTROL DIAGRAM	DESCRIPTION	PLANS	POWER DIAGRAM	CONTROL DIAGRAM	DESCRIPTION
			120V. PHOTOELECTRIC EYE MOUNTED ATOP W.P. J-BOX				METER WITH SWITCH - SCALE RANGE AS SHOWN				CONDUCTORS - NOT CONNECTED
			NEW BRANCH CIRCUIT, FEEDER OR DUCT EXPOSED				PANEL, LETTER INDICATES FOLLOWING CP - CONTROL PANEL				CONDUCTORS - CONNECTED
			BRANCH CIRCUIT, FEEDER OR DUCT CONCEALED OR BELOW GRADE				CIRCUIT BREAKER, MAGNETIC TRIP ONLY, FRAME SIZE SHOWN, 3 POLE UNLESS INDICATED OTHERWISE.				CIRCUIT CLOSING - (MAKE) SWITCH, PUSHBUTTON, MOMENTARY (SPRING RETURN)
			HOMERUN TO PANEL, CIRCUIT NUMBER INDICATED ON DWG. CROSSHATCH INDICATES NO. OF CONDUCTORS. FORWARD SLASH INDICATES NEUTRAL. NO MARKS INDICATES TWO CONDUCTORS OR AS INDICATED ON WIRE SCHEDULES. SLASH W/ "G" INDICATES GROUND. NO. OF ARROWS INDICATES NO. OF HOMERUNS IN CONDUIT.				CIRCUIT BREAKER, THERMAL MAGNETIC TRIP SHOWN, 3 POLE UNLESS INDICATED OTHERWISE.				NORMALLY OPEN LIMIT SWITCH
			GROUND				DRAWOUT AIR CIRCUIT BREAKER				NORMALLY CLOSED
			EXISTING WIRING AND TEXT				CIRCUIT BREAKER, RATING, NUMBER OF POLES AND AMPERE TRIPS INDICATED WHERE SHOWN. DASHED LINE INDICATES INTERLOCK FEATURE				TIME DELAY ACTION OF CONTACT, ARROW INDICATES DIRECTION OF DELAY IN SWITCH ACTION - NORMALLY OPEN CONTACT SHOWN.
			EXISTING EQUIPMENT, CONDUIT AND WIRING TO BE REMOVED				SOLID STATE REDUCED VOLTAGE STARTER				TIME DELAY ACTION OF CONTACT, ARROW INDICATES DIRECTION OF DELAY IN SWITCH ACTION - NORMALLY CLOSED CONTACT SHOWN.
			REFERS TO CONDUIT AND WIRE SCHEDULE. NUMBER INDICATES CIRCUIT NAME.				FUSE - AMPERE OR TYPE AS SHOWN				CLOSES ON RISING PRESSURE PRESSURE OR VACUUM ACTUATED SWITCH
			CEILING MOUNTED LIGHT FIXTURE				DISCONNECT SWITCH, - RATING AS SHOWN LETTER F INDICATES FUSIBLE				OPENS ON RISING PRESSURE
			FLOURESCENT LIGHT FIXTURE				DRAWOUT FUSED SWITCH, MEDIUM VOLTAGE				OPENS ON RISING TEMPERATURE TEMPERATURE ACTUATED SWITCH
			WALL MOUNTED LIGHT FIXTURE				THERMAL OVERLOAD HEATER OR MOTOR OVERCURRENT RELAY				HAND - OFF - AUTO SELECTOR SWITCH - MAINTAINED CONTACT
			FLOOD LIGHTS				COMBINATION MOTOR CIRCUIT PROTECTOR/MAGNETIC STARTER.				SWITCH, SELECTOR, POSITION AND FUNCTION SHOWN ON DRAWINGS. (OFF - AS SHOWN HERE)
			LUMINAIRE AND POLE				PICK-UP SETTING				CIRCUIT INTERLOCK - REFERENCE NOTES ON DRAWING FOR CIRCUIT SHOWN.
			EMERGENCY LIGHT UNIT				TIME CURRENT CHARACTERISTIC				NORMALLY OPEN CONTACT, NO TIME DELAY ACTION OF CONTACT.
			EXIT LIGHTS				GROUND FAULT INTERRUPT PROTECTION FEATURE (CIRCUIT BREAKERS).				NORMALLY CLOSED CONTACT. NO TIME DELAY ACTION OF CONTACT.
			CONVENIENCE RECEPTACLE - DUPLEX SUBSCRIPT WP = WEATHERPROOF, GF = GROUND FAULT CIRCUIT INTERRUPTER				CURRENT TRANSFORMER, RATIO AND NUMBER OF CT'S AS INDICATED				CR = CONTROL RELAY, LC = LIGHTING CONTACTOR, TD = TIME DELAY RELAY, M = MOTOR CONTROLLER COIL. NUMBER INDICATES TYPE OF FUNCTION.
			WALL SWITCH - NUMBER AND LETTER SUBSCRIPT INDICATE FOLLOWING: 2 = DOUBLE POLE 3 = 3-WAY 4 = 4-WAY P = WITH PILOT LIGHT WP = OUTDOOR WEATHERPROOF, K = KEY OPERATOR, M = MANUAL MOTOR STARTER				LIGHTNING ARRESTER				ELAPSED TIME METER, DISPLAYS CUMULATIVE HOURS
			JUNCTION BOX				CAPACITOR - KVAR AS INDICATED				INDICATING LIGHT, R = RED G = GREEN A = AMBER B = BLUE W = WHITE C = CLEAR
			MOTOR CONTROL CENTER OR MAJOR ELECTRICAL COMPONENT OR DEVICE - NAME OR IDENTIFYING SYMBOL AS SHOWN.				LIGHTING CONTACTOR, CURRENT RATING INDICATED, NEMA 12 ENCLOSURE UNLESS INDICATED OTHERWISE. SEE CONTROL DIAGRAM FOR NUMBER OF POLES.				TERMINAL IN PLC
			BRANCH CIRCUIT PANELBOARD, LIGHTING OR POWER PANEL				STARTER MAGNETIC, NEMA SIZE INDICATED, NEMA 12 ENCLOSURE UNLESS INDICATED OTHERWISE. SEE CONTROL DIAGRAM.				TERMINAL AT FIELD DEVICE
			ELECTRICAL SERVICE METERING EQUIPMENT				COMBINATION (FUSE OR CIRCUIT BREAKER AS INDICATED) MAGNETIC STARTER, NEMA SIZE INDICATED, NEMA 12 ENCLOSURE UNLESS INDICATED OTHERWISE. SEE CONTROL DIAGRAM.				TERMINAL IN RELAY PANEL
			TRANSFORMER SIZE AND RATING SHOWN ON POWER DIAGRAM. SIZE AND RATING AS REQUIRED BY APPLICATION ON CONTROL DIAGRAM				MOTOR, NUMBER INDICATES DESIGN (NOMINAL) HORSEPOWER. LETTER 'M' INDICATES FRACTIONAL HORSEPOWER MOTOR SIZES				TERMINAL IN RTU
							GENERATOR				TERMINAL IN MOTOR STARTER

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EQUIP WELL NOS. 102 AND 105

SYMBOL LEGEND AND
GENERAL NOTES



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SHEET 10 OF 31