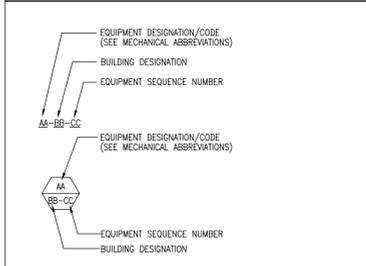


MECHANICAL ABBREVIATIONS											
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
Ø	AT	D	DRAIN	FLEX	FLEXIBLE	MD	MECHANICAL DECK / MOTORIZED DAMPER	RID	RING INJECTION DUMP	UCP	UNIT CONTROL PANEL
A	ANCHOR (PIPING)	DB	DRY BULB / DUCT BRACE	FM	FORCE MAIN, FLOW METER	MECH	MECHANICAL	RO	REVERSE OSMOSIS	UG	UNDERGROUND
AAV	AUTOMATIC AIR VENT	DBL	DOUBLE	FO	FALL-OPEN	MFR	MANUFACTURER	RM	ROOM	UH	UNIT HEATER
AC	AIR CONDITIONING UNIT	DC	DOUBLE CONTAINED	FOB	ECCENTRIC REDUCER (FLAT ON BOTTOM)	MH	MANHOLE	RBPB	REDUCED PRESSURE BACK FLOW PREVENTER	UL	UNDERWRITERS LABORATORIES
AD	AUTOMATIC DAMPER, ACCESS DOOR	DD	DESICCANT AIR DRYER	FP	FIRE PROTECTION	MHZ	MEGA HERTZ	RFM	REVOLUTIONS PER MINUTE	UNFN	UNFINISHED
AEX	ACID EXHAUST	DEG	DEGREE	FPB	FAN POWERED BOX	MIN	MINIMUM	RS	REFRIGERANT LEAK SENSOR	UT	UTILITY
AF	AFTER FILTER	DEPT	DEPARTMENT	FPM	FEET PER MINUTE	MISC	MISCELLANEOUS	RV	RELIEVE VENT	UR	URINAL
AFF	ABOVE FINISH FLOOR	DET	DETAIL	FPRF	FIRE PROOF	MS	MOISTURE SEPARATOR, MOTOR STARTER	RWL	RAIN WATER LEADER	V	VALVE, VENT
AFMS	AIR FLOW MEASURING STATION	DF	DRINKING FOUNTAIN	FPS	FEET PER SECOND	MTD	MOUNTED	S	SINK, SOUTH	VAC	VACUUM
AHU	AIR HANDLING UNIT	DH	DUCT HEATER	FPW	FIRE WATER	MUA	MAKE UP AIR HANDLING UNIT	SA	SUPPLY AIR	VAV	VARIABLE AIR VOLUME
AI	ANALOG INPUT	DI	DIGITAL INPUT	FRP	FIBER GLASS REINFORCED PLASTIC	N	NITROGEN, NORTH	SAN	SANITARY	VD	VOLUME DAMPER (MANUAL)
AL	ACOUSTIC LINING	DIA	DIAMETER	FS	FLOOR SINK	NC	NORMALLY CLOSED	SB	SCRUBBER	VENT.	VENTILATION
AM	ACTIVITY MONITOR	DIAG	DIAGONAL	FT	FEET, FLOW TRANSMITTER	NG	NATURAL GAS	SC	FIRE SCREEN	VERT	VERTICAL
AO	ANALOG OUTPUT	DIM	DIMENSION	FTR	FIN TUBE RADIATION	NO	NOT IN CONTRACT	SCC	SENSIBLE COOLING COIL	VFD	VARIABLE FREQUENCY DRIVE
AP	ACCESS PANEL	DIR	DIRECTION	FWD	FIRE WATER	NO	NORMALLY OPEN	SCR	SOLID STATE POWER CONTROLLER	VOL	VOLUME
APPD	APPROVED	DIS	DISCONNECT	G	GAS, GUIDE, GEAR OPERATOR	NR	NOT REQUIRED	SCH	SCHEDULE	VTR	VENT THRU ROOF
APPROX	APPROXIMATE	DIST	DISTRIBUTION	GAL	GALLON	NTS	NOT TO SCALE	SD	SMOKE DETECTOR, STORM DRAIN	W	WASTE, WEST, WIDTH
ARCH	ARCHITECTURAL	DL	DOOR LOUVER	GALV	GALVANIZED	OA	OUTSIDE AIR	SECT	SECTION	W/	WITH
AR	AIR RECEIVER	DN	DOWN	GCO	GROUND CLEANOUT	OAV	OUTSIDE AIR DAMPER	SEF	SMOKE EXHAUST FAN	W/O	WITHOUT
ARI	AMERICAN REFRIGERATION INSTITUTE	DO	DIGITAL OUTPUT	GEN	GENERAL	OAV	OXYGEN, AIR, VACUUM	SF	SUPPLY FAN / SAND FILTER	WB	WET BULB
AS	AIR SEPARATOR	DP	DIFFERENTIAL PRESSURE	GH	GROUND HYDRANT	OC	ON CENTER	SFD	SMOKE/FIRE DAMPER	WC	WATER CLOSET, WATER COLUMN
AUTO.	AUTOMATIC	DPS	DIFFERENTIAL PRESSURE SENSOR	GI	GALVANIZED IRON	OD	OVERFLOW DRAIN, OUTSIDE DIAMETER	SFWR	SAND FILTER WATER RETURN	WCO	WALL CLEANOUT
AV	AIR VENT (MANUAL)	DRN	DRAIN	GL	GLASS	OFL	OVER FLOW LEADER	SFW	SAND FILTER WATER SUPPLY	WF	WALL FAUCET
B	HOT WATER BOILER	DS	DOWN SPOUT / DUCT SUPPORT	GR	GRADE	OPNG	OPENING	SH	STEAM HUMIDIFIER	WG	WATER GAGE
BC	BALANCE VALVE / CIRCUIT SETTER	DSD	DUCT SMOKE DETECTOR	GRND OR GRND	GROUND	OX	OXYGEN	SHT	SHEET	WH	WATER HEATER, WALL HYDRANT
BDCE	BEAM DUMP CONFINEMENT EXHAUST	DWG	DRAWING	GPM	GALLONS PER MINUTE	P	PUMP	SK	SINK	WHA	WATER HAMMER ARRESTOR
BDD	BACKDRAFT DAMPER	DX	DIRECT EXPANSION	GYP	GYPSONUM	PB	PIPE BRACE	SM	SHEET METAL	WP	WASTE PIPE, WEATHER PROOF
BFP	BACK FLOW PREVENTOR	E	EXISTING	HEV	HOOD EXHAUST VALVE	PCBP	PRESSURE CONTROL BYPASS	SMF	SMOKE MAKEUP FAN	WPF	WATER PROOF
BFV	BUTTERFLY VALVE	EA	EACH, EXHAUST AIR	H/O/V	HEATING/VENTILATING	PCE	PRIMARY CONFINEMENT EXHAUST	SM	SIMILAR	WS	WATER SUPPLY
BLDG	BUILDING	EAD	EXHAUST AIR DAMPER	HB	HOSE BIBB	PD	PROCESS DRAIN (HVAC COOLING DRAIN)	SOV	SHUTOFF VALVE	WT	WEIGHT
BOD	BOTTOM OF DUCT	EAT	ENTERING AIR TEMPERATURE	HC	HEATING COIL (HYDRONIC HOT WATER)	PF	PRE FILTER	SP	STATIC PRESSURE	YD	YARD
BOE	BOTTOM OF EQUIPMENT	EBH	ELECTRIC BASEBOARD HEATER	HH OR HF	HEPA FILTER	PH	PENTHOUSE (EXHAUST & INTAKE)	SPEC	SPECIFICATIONS		
BOG	BOTTOM OF GRILLE / DIFFUSER	EBH	ELECTRIC BASEBOARD HEATER	H/O/A	HAND/OFF/AUTO SWITCH	PHW	PROCESS HOT WATER	SQ	SQUARE		
BOI	BOTTOM OF INSULATION	EDH	ELECTRIC DUCT HEATER	HOG	HOT OFF GAS	PI	PRESSURE INDICATOR	SQ FT	SQUARE FEET		
BOP	BOTTOM OF PIPE	EE/SS	EMERGENCY EYEWASH AND SAFETY SHOWER	HP	HEAT PUMP, HORSEPOWER	PIV	POST INDICATING VALVE	SS	SANITARY SEWER, STAINLESS STEEL, SERVICE SINK		
BOS	BOTTOM OF STEEL	EF	EXHAUST FAN	HR	HOUR	PL	PLATE	STA	STATION		
BOT	BOTTOM	EG	EXHAUST GRILLE	HS	HAND SWITCH	PLB	PLUMBING	ST	STEAM, SOUND TRAP		
BTU	BRITISH THERMAL UNIT	EH	ELECTRIC HEATER	HTG	HEATING	PLY WD	PLYWOOD	STD	STANDARD		
BTUH	BTU PER HOUR	EJ	EXPANSION JOINT	HTR	HEATER	PNL	PANEL	STL	STEEL		
BV	BALL VALVE	EL	ELEVATION	HW	HOT WATER	POW	POLISHED WATER	STR	STRAWER		
BW	BUTT WELD (SHOWN ON PIPING TABLE)	ENCL	ENCLOSURE	HWH	HOT WATER HEATER	PPM	PARTS PER MILLION	STWY	STARWAY		
C	AIR COMPRESSOR	ENT	ENTRANCE	HWP	HOT WATER PUMP	PRFAB	PREFABRICATED	SUSP	SUSPENDED		
CL	CENTER LINE	EP	EXPLOSION PROOF	HWS	HOT WATER SUPPLY (HEATING)	PREFIN	PREFINISHED	SV	SOLENOID VALVE		
CA	COMPRESSED AIR (PLANT AIR)	EQ	EQUAL	HX	HEAT EXCHANGER	PROJ	PROJECT, PROJECTION	SW	SOCKET WELD		
CAP	CAPACITY (SHOWN ON PIPING TABLE)	EQU.	EQUIPMENT	HWYS/HYWR	HEAVY WATER SYSTEM	PRV	PRESSURE RELIEF VALVE	SWC	SANITARY WATER COLD (POTABLE DOMESTIC WATER)		
CB	CATCH BASIN	ES	EMERGENCY EYEWASH AND SHOWER	ID	INERT DIAMETER	PSW	PROCESS SECONDARY CONFINEMENT WASTE	SWHS	SANITARY WATER HOT (SUPPLY)		
CC	COOLING COIL	ESW	EE/SS WATER	IE	INERT ELEVATION	PSD	PUMP SUCTION DIFFUSER	SWHR	SANITARY WATER HOT (RETURN)		
CD	CEILING DIFFUSER	ET	EXPANSION TANK	IN.	INCH	PSF	POUNDS/SQUARE FOOT	T	THERMOSTAT		
CFH	CUBIC FEET PER HOUR	EWC	ELECTRIC WATER COOLER	IN.	INCH	PSI	POUNDS/SQUARE INCH	TB	THERMAL UNIT		
CFM	CUBIC FEET PER MINUTE	EWH	ELECTRIC WATER HEATER	INSUL	INSULATION	PV	PROCESS WASTE VENT THROUGH ROOF	TCV	TEMPERATURE CONTROL VALVE		
CH	CABINET HEATER, CHILLER	EWV	ELECTRIC WATER VALVE	INT.	INTERIOR	PW	PROCESS WATER (NON-POTABLE)	TCBP	TEMPERATURE CONTROL BYPASS		
Ch	CRYOGENIC HELIUM	EXH	EXHAUST	IP	IRON PIPE	QT	QUENCH TANK	TE	TEMPERATURE		
CHK	CHECK VALVE	EXIST.	EXISTING	JCT	JUNCTION	RA	DI WATER RESISTIVITY	TEMP	TEMPERATURE		
CI	CAST IRON	EXP	EXPOSED	JMB	JANITORS MOP BASIN	RA	RETURN AIR	TG	TRANSFER GRILLE		
CIR	CIRCULAR	EXT	EXTERIOR	JST	JOIST	RF	RETURN FAN	THK	THICK		
CLG	CEILING	F	FAHRENHEIT, FIRELINE, FAN	JT	JOINT	RAG	RETURN AIR DAMPER	TI	TEMPERATURE INDICATOR		
CMU	CONCRETE MASONRY UNITS	FACP	FIRE ALARM CONTROL PANEL	LAB	LABORATORY	RAG	RETURN AIR GRILLE	TK	TANK		
CO	CLEANOUT	FBH	FILTER BANK-HOT OFF GAS	LEX	LABORATORY EXHAUST	RAR	RETURN AIR REGISTER	TOD	TOP OF DUCT		
COL	COLUMN	FBP	FILTER BANK-PRIMARY CONFINEMENT EXHAUST	LAT	LEAVING AIR TEMPERATURE	RC	REHEAT COIL, REMOTE CONTROL	TOIL	TOILET		
COMB	COMBUSTION	FBS	FILTER BANK-SECONDARY CONFINEMENT EXHAUST	LAV	LAVATORY	RD	ROOF DRAIN	TOP	TOP OF PIPE		
CONC	CONCRETE	FC	FAN COIL, FLEXIBLE CONNECTION, FAIL-CLOSE	LBS	POUNDS	REF	REFERENCE	TOS	TOP OF STEEL SUPPORT		
CONN	CONNECTION	FCD	FLOOR CLEANOUT	LD	LINEAR DIFFUSER	REFR	REFRIGERATION	TP	TRAP PRIMER		
CONSTR	CONSTRUCTION	FCV	FLOW CONTROL VALVE / FAN COIL UNIT (VERTICAL CONFIGURATION)	LV	LOUVER	REG	REGISTER	TPV	TRAP PRIMER VALVE		
CONT	CONTINUOUS	FD	FIRE DAMPER W/ ACCESS DOOR, FLOOR DRAIN	LLLW	LOW LEVEL LIQUID WASTE (PROCESS WATER DRAIN)	REIN	REINFORCEMENT	TS	TEMPERATURE SENSOR		
CS	CARBON STEEL (SHOWN ON PIPING TABLE)	FF	FINAL FILTER / FLANGE FACE.	LWT	LEAVING WATER TEMPERATURE	REM	REMOVABLE	TT	TEMPERATURE TRANSMITTER		
COTG	CLEANOUT TO GRADE	FI	FLOW INDICATOR	M	MOTOR (ELECTRIC)	REQD	REQUIRED	TWR	TOWER WATER RETURN (TECH. EQUIP. COOLING)		
CT	COOLING TOWER	FIN	FINISH	MAT OR MATL.	MATERIAL	RESIL	RESILIENT	TWS	TOWER WATER SUPPLY (TECH. EQUIP. COOLING)		
CU	CONDENSING UNIT	FL OR FLR	FLOOR	MAX	MAXIMUM	REV	REVISIONS, ROOM EXHAUST VALVE.	TYP	TYPICAL		
CU YD	CUBIC YARDS	FLG	FLANGE	MBD	MIXED BED DEIONIZER	RH	RELATIVE HUMIDITY	UC	UNIT COOLER		
CNDR	CONDENSER WATER RETURN (HVAC)			MBH	THOUSAND BTUH	RHC	REHEAT COIL				
CNDS	CONDENSER WATER SUPPLY (HVAC)										
CHWR	CHILLED WATER RETURN (COOLING)										
CHWS	CHILLED WATER SUPPLY (COOLING)										
CHWR (1)	CHILLED WATER RETURN, (55F SENSIBLE COOLING LOOP, TARGET)										
CHWS (1)	CHILLED WATER SUPPLY (55F SENSIBLE COOLING LOOP, TARGET)										

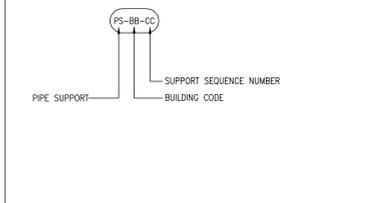
BUILDING DESIGNATION

SYMBOL	DESCRIPTION
CL	CENTRAL LAB OFFICE BUILDING
CU	CENTRAL UTILITY BUILDING
CE	CENTRAL EXHAUST BUILDING
CY	CRYOGENICS BUILDING
FE	FRONT END BUILDING
HE	HEBT
HS	HEBT SERVICE AREA
KL	KLYSTRON BUILDING
LN	LNAC
RG	RING
RN	RING SERVICE BUILDING
RT	RTBT
RS	RTBT SERVICE BUILDING
ST	SITE
TA	TARGET
TB	TARGET SERVICE BUILDING
TS	TECHNICAL SERVICE SUPPORT SHOPS

EQUIPMENT NAMING CONVENTION



PIPING SUPPORT TAG



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MECHANICAL ABBREVIATIONS

REV	DATE	DESCRIPTION	DSN	CHK	DEPT	DATE	PE	DATE	PJ	DATE	REQ	DATE	UTB	DATE	RPE	RPE NO	DATE	ST	CV	EC	EE	EM	IE	M	PD	SE	AR	REV	DATE	UTB	JRL
0		CERTIFIED FOR CONSTRUCTION - 12/9/02	JG	BMJ																											

1	48	49	50	PLANT	BLDG	FL	SH.	OF	TYPE	CLASS
3	H	X	X	8	8610		1	1	g	U

A/E DRAWING NUMBER: **H0.00.02**

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