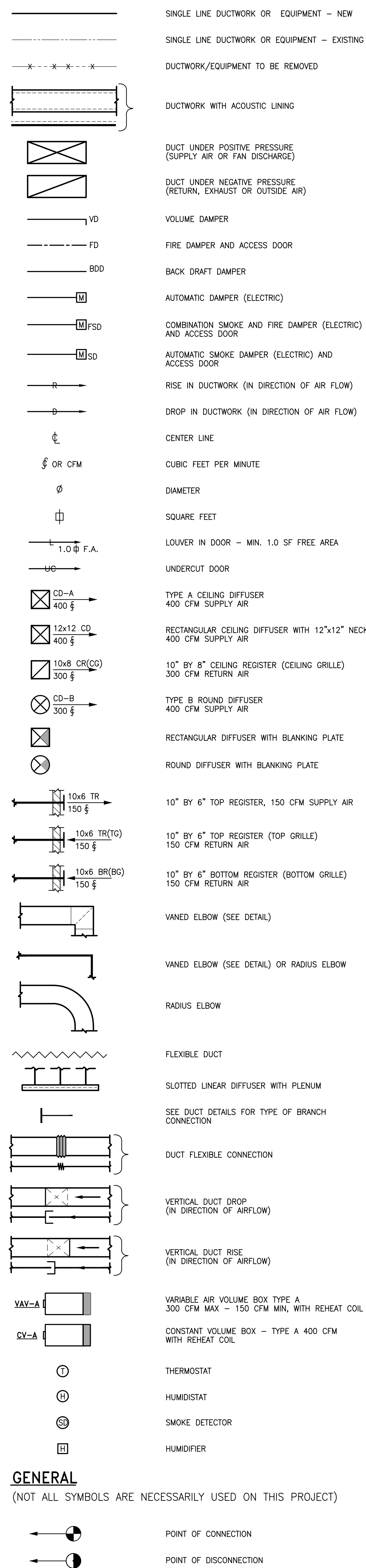
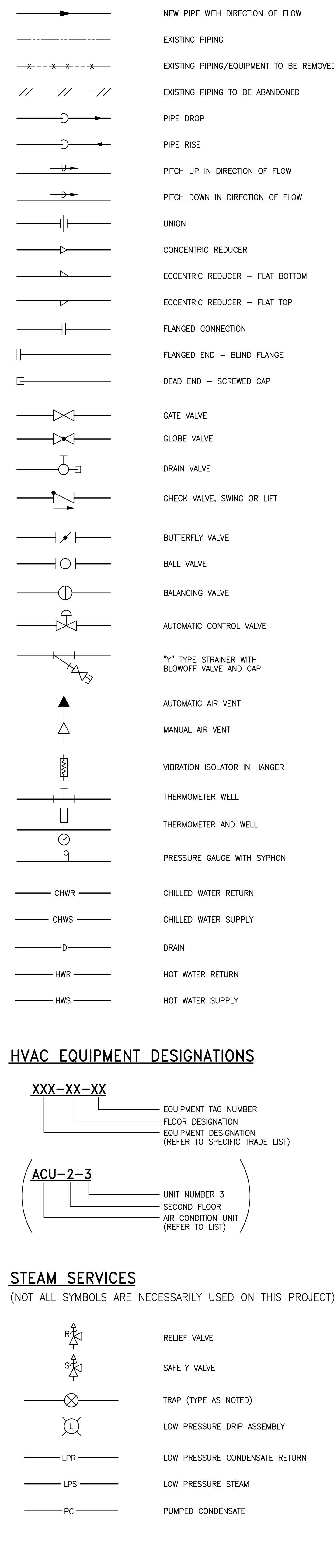


MECHANICAL SYMBOL LIST

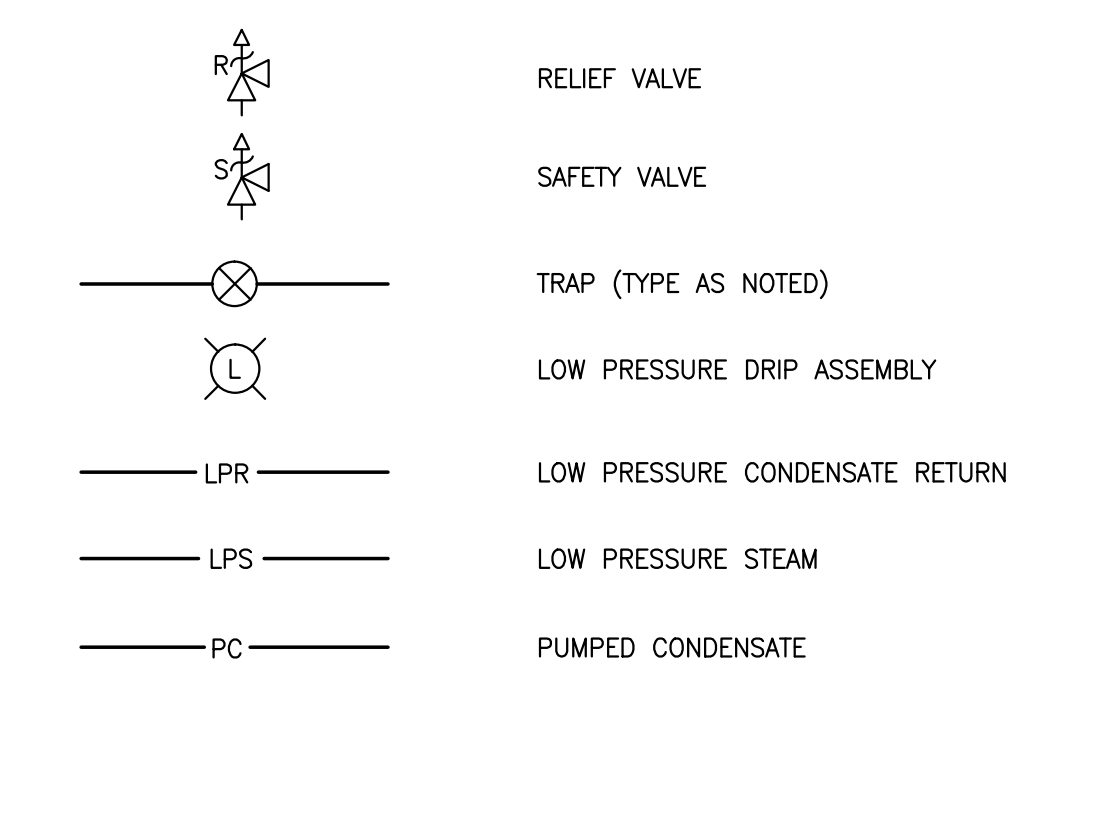
DUCTWORK (NOT ALL SYMBOLS ARE NECESSARILY USED ON THIS PROJECT)



PIPING (NOT ALL SYMBOLS ARE NECESSARILY USED ON THIS PROJECT)



STEAM SERVICES (NOT ALL SYMBOLS ARE NECESSARILY USED ON THIS PROJECT)



ABBREVIATIONS

(NOT ALL ABBREV. ARE NECESSARILY USED ON THIS PROJECT)

A	AMPERES	LRA	LOCKED ROTOR AMPS
AAV	AUTOMATIC AIR VENT	LWB	LEAVING WET BULB TEMPERATURE
AC	AIR CONDITIONING	LWT	LEAVING WATER TEMPERATURE
ACCU	AIR COOLED CONDENSING UNIT	MAX	MAXIMUM
ACS	AUTOMATIC CONTROL SYSTEM	MB	MIXING BOX
ACU	AIR CONDITIONING UNIT	MBH	THOUSAND BTU PER HOUR
AD	ACCESS DOOR	MHP	MOTOR HORSEPOWER
AFF	ABOVE FINISHED FLOOR	MIN	MINIMUM
AHU	AIR HANDLING UNIT	MM	MILLIMETER
AL	ALUMINUM	MOT	MOTOR
BF	BOOSTER FAN	MOV	MOTOR OPERATED VALVE
BG	BOTTOM GRILLE	NC	NORMALLY CLOSED
BHP	BRAKE HORSEPOWER	NIC	NOT IN CONTRACT
BIDW	BACKWARD INCLINE DOUBLE WIDTH	N.O.	NORMALLY OPEN
BISW	BACKWARD INCLINE SINGLE WIDTH	NO.	NUMBER
BMS	BUILDING MANAGEMENT SYSTEM	NTS	NOT TO SCALE
BR	BOTTOM REGISTER	OA	OUTSIDE AIR
BT	BOTTOM THROAT	P	PUMP
BTU	BRITISH THERMAL UNIT	PD	PRESSURE DROP
BTUH	BTU PER HOUR	PHC	PREHEAT COIL
°C	DEGREES CENTIGRADE (CELSIUS)	PSI	POUNDS PER SQUARE INCH
CC	COOLING COIL	PSIA	PSI ABSOLUTE
CCW	COUNTER CLOCKWISE	PSIG	PSI GAUGE
CD	CEILING DIFFUSER	PVC	POLYVINYL CHLORIDE
CFFC	CAP FOR FUTURE CONNECTION	RA	RETURN AIR
CFM	CUBIC FEET PER MINUTE	(RE)	RELOCATED EXISTING
CG	CEILING GRILLE	RF	RETURN FAN
CLG	CEILING	RH	RELATIVE HUMIDITY
COND	CONDENSATE	RHC	REHEAT COIL
CP	CONDENSATE PUMP	RHPW	REHEAT WATER PUMP
CR	CHECK VALVE, SWING OR LIFT	RM	ROOM
CU IN	CUBIC INCHES	RPM	REVOLUTIONS PER MINUTE
CUH	CABINET UNIT HEATER	(RRO)	EXISTING TO BE REMOVED AND RETURN TO OWNER
CV	CONSTANT VOLUME	SA	SUPPLY AIR
CW	CLOCKWISE	SAU	SOUND ATTENUATION UNIT
CWP	CONDENSER WATER PUMP	SD	SMOKE DAMPER
DB	DRY BULB	SF	SUPPLY FAN
DX	DIRECT EXPANSION	SP	STATIC PRESSURE
DIA	DIAMETER	T	THROAT
DMPR	DAMPER	TDH	TOTAL DYNAMIC HEAD
DN	DOWN	TEMP	TEMPERATURE
(E)	EXISTING TO REMAIN	TO	TOP GRILLE
EA	EACH	TR	TOP REGISTER
EAT	ENTERING AIR TEMPERATURE	TRD	TRANSFER DUCT
EDB	ENTERING DRY BULB TEMPERATURE	TRF	TRANSFER FAN
EF	EXHAUST FAN	TRG	TRANSFER GRILLE
ELEC	ELECTRIC	TT	TOP THROAT
EDH	ELECTRIC DUCT HEATER	TYP	TYPICAL
EQ	EQUAL	TX	TOILET EXHAUST
(ER)	EXISTING TO BE REMOVED	UGN	UNLESS OTHERWISE NOTED
(ERR)	EXISTING TO BE REMOVED & RELOCATED	UH	UNIT HEATER
EUH	ELECTRIC UNIT HEATER	V	VOLTS
EWB	ENTERING WET BULB	W	WIDTH
EWT	ENTERING WATER TEMPERATURE	W/	WITH
EXH	EXHAUST	W/O	WITHOUT
EXIST	EXISTING	WB	WET BULB
°F	DEGREES FAHRENHEIT	WG	WATER GAUGE
FA	FREE AREA (SQ.FT.)	WMS	WIRE MESH SCREEN
FC	FLEXIBLE CONNECTION	WSP	WORKING STEAM PRESSURE
FCU	FAN COIL UNIT		
FD	FIRE DAMPER		
FIN FL	FINISHED FLOOR		
FLA	FULL LOAD AMPERES		
FPM	FEET PER MINUTE		
FPS	FEET PER SECOND		
FR	FLOOR REGISTER		
FT	FEET		
FV	FACE VELOCITY		
GPM	GALLONS PER MINUTE		
GX	GENERAL EXHAUST		
H	HUMIDIFIER		
HALX	HALON EXHAUST		
HC	HEATING COIL		
HD	HEAD		
HR	HOUR		
HT	HEIGHT		
HWP	HOT WATER PUMP		
HV	HEATING AND VENTILATING		
HX	HEAT EXCHANGER		
IN	INCH OR INCHES		
IPS	IRON PIPE SIZE		
KW	KILOWATT		
L	LENGTH		
LAT	LEAVING AIR TEMPERATURE		
LBS	POUNDS		
LD	LINEAR DIFFUSER		
LDB	LEAVING DRY BULB TEMPERATURE		
LF, LIN.FT.	LINEAR FEET		
LR	LINEAR RETURN		

GENERAL NOTES

- GENERAL NOTES, SYMBOL LIST AND DETAILS ARE APPLICABLE TO ALL HVAC/MECHANICAL DRAWINGS.
- DRAWINGS ARE DIAGRAMMATIC. DETERMINE LOCATIONS OF SYSTEMS AND COMPONENTS IN FIELD. RELOCATE EXISTING WORK THAT INTERFERES WITH WORK OF THIS CONTRACT.
- COORDINATE THIS WORK WITH THAT OF OTHER TRADES.
- DIMENSIONS SHOWN ON PLAN ARE HORIZONTAL. DIMENSIONS SHOWN IN ELEVATION ARE VERTICAL EXCEPT IN WAY OF STRUCTURAL STEEL. DIMENSIONS ARE MEASURED PERPENDICULAR TO FLANGE.
- NEITHER ACCURACY NOR COMPLETION OF SERVICES AND UTILITY LOCATIONS SHOWN ON DRAWINGS IS GUARANTEED. DETERMINE EXACT LOCATIONS OF EXISTING SERVICES AND UTILITIES IN FIELD, WHETHER OR NOT SHOWN ON DRAWINGS. EXERCISE CAUTION AND IDENTIFY LOCATIONS OF UNMARKED UTILITY LINES AS NECESSARY TO PERFORM WORK OF THIS SECTION.
- MANUFACTURERS MODEL NUMBERS ARE SPECIFIED SOLELY TO ESTABLISH STANDARDS OF QUALITY FOR PERFORMANCE AND MATERIALS.
- PRODUCT INSTALLATION SHALL ADHERE TO MANUFACTURERS RECOMMENDATIONS.
- PROVIDE ACCESS PANELS FOR EQUIPMENT THAT REQUIRES PERIODIC SERVICE.
- PROVIDE HANGERS, INSERTS, ANCHORS, SUPPLEMENTAL STEEL & SUPPORTS AS REQUIRED TO SUPPORT DUCTWORK, PIPING AND EQUIPMENT FROM STRUCTURE.
- SCHEDULE WORK OF THIS SECTION TO AVOID INTERFERING WITH EXISTING OPERATIONS IN THE FACILITY.
- COORDINATE ROOFING WORK WITH WORK OF OTHER SECTIONS AND WITH FLASHING REQUIREMENTS. MECHANICAL CONTRACTOR TO NOTIFY OWNER PRIOR TO STARTING WORK TO VERIFY COMPLIANCE WITH BOND AND WARRANTY OF EXISTING ROOF.
- RUN DUCTS AND PIPING CONCEALED, UNLESS OTHERWISE SPECIFIED AND CLEAR OF CEILING INSERTS.
- INSTALL THERMOSTATS 4'-6" ABOVE FINISHED FLOOR OR AS DIRECTED OTHERWISE BY ARCHITECT.
- STRUCTURAL WELDING SHALL BE CONTINUOUS 1/4" FILLET UNLESS REQUIRED OTHERWISE.
- AIR SYSTEMS REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LOCATIONS OF AIR DEVICES.
- INTERNAL AIRFLOW DIMENSIONS ARE SHOWN FOR DUCTS. INCREASE DUCT SIZE AS NECESSARY TO MAINTAIN FREE FLOW AREA INDICATED.
- USE FLAT TRANSVERSE SEAM FOR DUCTWORK WHERE SPACE AVAILABLE DICTATES.
- DIFFUSER SIZES SHOWN ARE NECK SIZES. REGISTERS AND GRILLE SIZES ARE NOMINAL.
- PROVIDE VOLUME DAMPERS OR OTHER APPROVED BALANCING DEVICES AT DUCT BRANCHES AND RUN OUTS, AND AT REGISTER GRILLE AND DIFFUSER NECKS IN SUPPLY, RETURN AND EXHAUST DUCTWORK WHETHER SHOWN OR NOT.
- PROVIDE 36" CLEARANCE IN FRONT OF ALL ELECTRIC CONTROL PANELS PER N.E.C. AND MFG. REQUIREMENTS.
- PROVIDE DUCT TRANSITIONS FROM VAV BOX INLET/OUTLET DUCT WORK AT SIZES INDICATED TO VAV BOX INLET/OUTLET UNIT CONNECTIONS.
- VAV DUCT INLET SIZE SHALL BE AS SCHEDULED OR AS INDICATED ON THE FLOOR PLANS. PROVIDE TRANSITION FROM DUCT SIZE INDICATED ON THE FLOOR PLANS TO SCHEDULED SIZE MINIMUM 3'-0" FROM VAV BOX INLETS.

DEMOLITION NOTES

- GENERAL
 - THIS CONTRACTOR SHALL VISIT THE SITE AND ADJOINING AREAS AND EXAMINE THE EXISTING CONDITIONS TO BECOME FAMILIAR WITH THEM AND TO DETERMINE THE DIFFICULTIES WHICH WILL AFFECT THE EXECUTION OF THE WORK OF THIS CONTRACT. THIS CONTRACTOR SHALL PERFORM THIS PRIOR TO THE SUBMISSION OF HIS PROPOSAL. SUBMISSION OF A PROPOSAL WILL BE CONSTRUED AS EVIDENCE THAT SUCH AN EXAMINATION HAS BEEN MADE AND LATER CLAIMS WILL NOT BE RECOGNIZED FOR EXTRA LABOR, EQUIPMENT OR MATERIALS REQUIRED BECAUSE OF DIFFICULTIES ENCOUNTERED WHICH COULD HAVE BEEN FORESEEN HAD SUCH AN EXAMINATION BEEN MADE.
 - THE DEMOLITION WORK SHALL INCLUDE, PROVIDING ALL MATERIALS, ALL NECESSARY EXTENSIONS, CONNECTIONS, CUTTING, REPAIRING, ADAPTING AND OTHER MECHANICAL WORK REQUIRED, TOGETHER WITH ANY REQUIRED TEMPORARY CONNECTIONS TO MAINTAIN SERVICE PENDING THE COMPLETION OF THE PERMANENT WORK. NOTES AND GRAPHIC REPRESENTATION SHALL NOT LIMIT THE EXTENT OF DEMOLITION REQUIRED. EXTENT OF DEMOLITION WORK SHALL BE COORDINATED WITH THE ARCHITECT AND BUILDING MANAGEMENT.
 - REFER TO ARCHITECTS PLANS FOR AREA OF WORK.
- SCOPE OF WORK
 - EXISTING WORK INTERFERING WITH NEW.
 - ALL EXISTING WORK REQUIRED TO REMAIN BUT INTERFERING WITH PROPOSED NEW MECHANICAL (AS WELL AS ELECTRICAL AND GENERAL CONSTRUCTION WORK) SHALL BE RELOCATED AND RECONNECTED USING MATERIALS CONFORMING TO STANDARDS OF THIS CONTRACT.
 - REMOVAL OF MECHANICAL EQUIPMENT DUCTWORK AND PIPING.
 - REMOVE TERMINAL BOXES AND ALL ASSOCIATED DUCTWORK, DIFFUSERS, GRILLES, PIPING, CONTROLS HANGERS AND ACCESSORIES.
 - REMOVE PENTHOUSE AIR HANDLING UNIT AND ALL ASSOCIATED CHILLED WATER PIPING, STEAM PIPING, DUCTWORK AND CONTROLS BACK TO MAINS.
 - REMOVE RETURN FAN AND ALL ASSOCIATED DUCTWORK AND CONTROLS BACK TO MAINS.
 - REMOVE ALL PIPING, VALVING AND HANGERS ASSOCIATED WITH PIPING TO BE REMOVED BACK TO MAINS. IDENTIFY ALL PIPING BY SERVICE TYPE AND CAP AT MAINS.
 - REMOVE HOT WATER REHEAT COILS AND ALL ASSOCIATED PIPING AND CONTROLS BACK TO MAINS.
 - CONTRACTOR TO CONTACT BUILDING MANAGEMENT AND TENANT REGARDING DUCTWORK REMOVAL SCOPE OF WORK TO ENSURE THAT OTHER TENANTS THAT ARE TO STAY OPERATIONAL ARE NOT AFFECTED BY REMOVALS OF THE BASE BUILDING DUCTWORK.
 - ALL EXISTING BUILDING FIRE DAMPERS, FIRE/SMOKE DAMPERS, DUCT MOUNTED SMOKE DETECTORS AT SUPPLY AND RETURN AIR SHAFTS TO REMAIN.
- PERIMETER SERVICES
 - REMOVE PERIMETER HEATING ELEMENTS, AS NOTED. REMOVE PIPING, FITTINGS, VALVES, AND INSULATION FOR ALL EQUIPMENT TO BE REMOVED BACK TO MAN AND CAP. PATCH AND CAP EXISTING AS REQUIRED FOR CONTINUED OPERATION.
- CONTRACTOR TO REPLACE/PATCH WALLS AND FLOORS TO MATCH EXISTING.
- PROVIDE ADDITIONAL SUPPORT FOR ALL EXISTING DUCTS AND PIPING TO REMAIN WHICH ARE AFFECTED BY DEMOLITION OF EXISTING CEILING AND PARTITIONS.
- EQUIPMENT REQUIRED TO BE TURNED OVER TO THE OWNER SHALL BE PLACED IN A MUTUALLY ACCEPTABLE LOCATION. ALL MATERIALS AND EQUIPMENT REMOVED AS A RESULT OF DEMOLITION SHALL BE TAKEN FROM THE SITE AND DISPOSED OF IN ACCORDANCE WITH APPLICABLE LAWS AND ENVIRONMENTAL REGULATIONS.
- CONTRACTOR SHALL IDENTIFY ALL EXISTING WORK TO REMAIN BY ACCEPTABLE IDENTIFICATION MEANS TO CONFIRM PROPER SCOPE PRIOR TO COMMENCEMENT OF DEMOLITION.

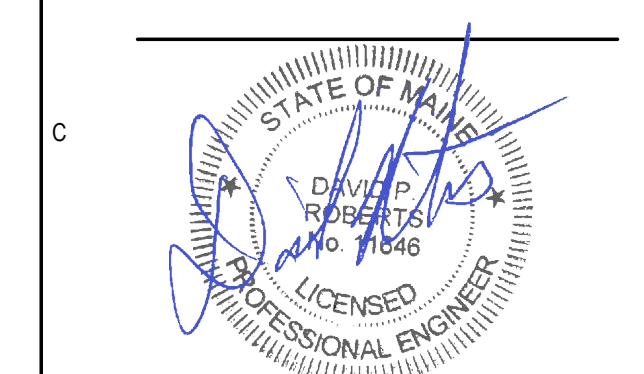
MECHANICAL DRAWING LIST

DRAWING NO.	DRAWING TITLE
M00-01	MECHANICAL COVER SHEET
M00-10	MECHANICAL SCHEDULES
M00-11	MECHANICAL RTU SCHEDULES
M00-20	MECHANICAL DETAILS
M00-21	MECHANICAL DETAILS
M00-22	MECHANICAL DETAILS
M00-30	MECHANICAL SPECIFICATIONS (NOT INCLUDED IN PERMIT SET)
M00-31	MECHANICAL SPECIFICATIONS (NOT INCLUDED IN PERMIT SET)
M00-32	MECHANICAL SPECIFICATIONS (NOT INCLUDED IN PERMIT SET)
M00-33	MECHANICAL SPECIFICATIONS (NOT INCLUDED IN PERMIT SET)
M01-01	RICHARDS 7 - MECHANICAL DUCTWORK DEMO PLAN - WEST
M01-02	RICHARDS 8 - MECHANICAL DUCTWORK DEMO PLAN - WEST
M01-03	RICHARDS 8 - MECHANICAL DUCTWORK DEMO PLAN - EAST
M01-04	RICHARDS 9 - MECHANICAL DUCTWORK DEMO PLAN - WEST
M01-05	RICHARDS 9 - MECHANICAL DUCTWORK DEMO PLAN - EAST
M01-06	RICHARDS ROOF - MECHANICAL DUCTWORK DEMO PLAN - EAST
M02-01	RICHARDS 7 - MECHANICAL PIPING DEMOLITION PLAN - WEST
M02-02	RICHARDS 8 - MECHANICAL PIPING DEMOLITION PLAN - WEST
M02-03	RICHARDS 8 - MECHANICAL PIPING DEMOLITION PLAN - EAST
M02-04	RICHARDS 9 - MECHANICAL PIPING DEMOLITION PLAN - WEST
M02-05	RICHARDS ROOF - MECHANICAL PIPING DEMOLITION PLAN - EAST
M03-01	RICHARDS 7 - MECHANICAL DUCTWORK DEMO PLAN - WEST
M03-02	RICHARDS 8 - MECHANICAL DUCTWORK DEMO PLAN - WEST
M03-03	RICHARDS 8 - MECHANICAL DUCTWORK DEMO PLAN - EAST
M03-04	RICHARDS 9 - MECHANICAL DUCTWORK DEMO PLAN - WEST
M03-05	RICHARDS 9 - MECHANICAL DUCTWORK DEMO PLAN - EAST
M03-06	RICHARDS ROOF - MECHANICAL DUCTWORK DEMO PLAN - EAST
M04-01	RICHARDS 7 - MECHANICAL PIPING DEMO PLAN - WEST
M04-02	RICHARDS 8 - MECHANICAL PIPING DEMO PLAN - WEST
M04-03	RICHARDS 8 - MECHANICAL PIPING DEMO PLAN - EAST
M04-04	RICHARDS 9 - MECHANICAL PIPING DEMO PLAN - WEST
M04-05	RICHARDS ROOF - MECHANICAL PIPING DEMO PLAN - EAST

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Maine Medical Center
MaineHealth

MAINE MEDICAL CENTER
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Portland, Maine 04102

06.24.2016
ISSUE CHART

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Job Number	B160089-000	
Checked	DPR	
Approved	DPR	

TITLE
MECHANICAL COVER SHEET

SHEET NUMBER
M00-01

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