College of San Mateo

BUILDING 15 MODERNIZATION
1700 W. HILLSDALE BLVD., SAN MATEO CALIFORNIA

acco engineered systems

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HVAC LEGEND

DUCT SYMBOL LEGEND

SYMBOL	DESCRIPTION
(N) (E)	NEW(N) & EXISTING(E) RECTANGULAR SUPPLY AIR DUCT RISER
(N) (E)	NEW(N) & EXISTING(E) RECTANGULAR RETURN AIR DUCT RISER
(N) (E)	NEW(N) & EXISTING(E) RECTANGULAR EXHAUST AIR DUCT RISER
(N) (E)	NEW(N) & EXISTING(E) ROUND AIR DUCT RISER
	NEW SINGLE & DOUBLE LINE RECTANGULAR OR ROUND DUCT
	EXISTING SINGLE & DOUBLE LINE RECTANGULAR OR ROUND DUCT
	EXISTING DUCTWORK TO BE DEMOLISHED
	SINGLE & DOUBLE LINE DUCTWORK WITH TRANSITIONAL FITTING
SQUARE ROUND	SQUARE TO ROUND TRANSITIONAL FITTING
SQUARE OVAL	SQUARE TO OVAL TRANSITIONAL FITTING
① ②	90° RADIUS ELBOW ①, 90° SQUARE ELBOW WITH TURNING VANES ②
① ②	ROUND DUCT TURNING DOWN ①, RECT. DUCT TURNING DOWN ②
AT	AIR TIGHT (DOOR, SHAFT, ETC.) BY OTHERS.
	BACK DRAFT DAMPER
	CEILING OR DUCT ACCESS PANEL OR DOOR
℄	CENTER LINE
X/XXX	DETAIL NUMBER DETAIL CALL OUT SYMBOL SHEET NUMBER
	EXHAUST AIR GRILLE (NEW & EXISTING – 24x24 PANEL)
	EXHAUST AIR REGISTER (NEW & EXISTING – SURF. MTD.)
E	ELECT. CONN. LOCATION TO EQUIP. (APPROX.) BY ELECT. CONT'R.
EQ #	EQUIPMENT TAG LABEL
	FIRE DAMPER (SINGLE LINE AND DOUBLE LINE)
	FIRE/SMOKE DAMPER (SINGLE LINE AND DOUBLE LINE)
FD	FIRE DAMPER LABEL
FSD	FIRE/SMOKE DAMPER LABEL
	FLEXIBLE DUCT
	LINEAR DIFFUSER (SUPPLY OR RETURN)

DUCT SYMBOL LEGEND

SYMBOL	DESCRIPTION
	MANUAL VOLUME DAMPER
M	MECH. CONT'R. TO PROVIDE EQUIPMENT & INSTALLATION (U.N.O.)
	MOTORIZED DAMPER (ELECTRIC)
P	MOTORIZED DAMPER (PNEUMATIC)
	POINT OF CONNECTION
	RETURN AIR GRILLE (NEW & EXISTING – 24x24 PANEL)
	RETURN AIR REGISTER (NEW & EXISTING – SURF. MTD.)
	RETURN AIR GRILLE – 24x12 (NEW & EXISTING – T-BAR CEIL'G.)
	REVISION CLOUD
1	REVISION DELTA
	ROUND CEILING DIFFUSER (NEW & EXISTING)
X/XXX	SECTION NUMBER SECTION CALL OUT SYMBOL SHEET NUMBER
	SUPPLY AIR GRILLE (NEW & EXISTING – 24x24 PANEL)
	SUPPLY AIR REGISTER (NEW & EXISTING – SURF. MTD.)
S	SMOKE DETECTOR (AREA TYPE)
	SMOKE DETECTOR (DUCT TYPE)
	SIDE WALL REGISTER, GRILLE
$	WALL SWITCH
T	THERMOSTAT WITH ZONE NUMBER
	TRANSFER AIR GRILLE (NEW & EXISTING – SURF. MTD.)
	COOLING ONLY VAV BOX WITH SQUARE TO ROUND OUTLET
	REHEAT VAV BOX WITH SQUARE TO ROUND OUTLET
	COOLING ONLY VAV BOX WITH RECTANGULAR LINED S.M. PLENUM
	REHEAT VAV BOX WITH RECTANGULAR LINED S.M. PLENUM
12"ø-4W 250 CFM 12x12-4W 250 CFM	DIFFUSER NECK SIZE – AIR PATTERN – AIR VOLUME
	END CAP

PIPING SYMBOL LEGEND

SYMBOL	DESCRIPTION
	AUTOMATIC AIR VENT
	BALL VALVE
	BUTTERFLY VALVE
	BLIND FLANGE
	CHECK VALVE
	CIRCUIT SETTER
	DRAIN (ROOF, FLOOR)
	END CAP
	FLOW SWITCH
	GATE VALVE
	FLEXIBLE CONNECTION
	FLOW CONTROL
	PETE'S PLUG
	PIPE (NEW)
	PIPE (EXISTING)
	PRESSURE GAUGE WITH COCK
	REDUCER
X/X	WATER SYSTEM TYPE PIPE RISER CALL OUT SYMBOL RISER NUMBER
	SCHRAEDER VALVE
	STRAINER
	STRAINER W/DRAIN VALVE AND HOSE ADAPTER
	TEMPERATURE SENSOR WELL
	THERMOMETER
	TRIPLE DUTY VALVE
	UNION
	VENT
	VICTAULIC COUPLING (3)
	WATER FLOW DIRECTION

ABBREVIATIONS

ABBRV.	DESCRIPTION
ABV.	ABOVE
A/C	AIR CONDITIONING
A.D.	ACCESS DOOR
A.F.F.	ABOVE FINISHED FLOOR
A.P.	ACCESS PANEL
APPROX.	APPROXIMATE
&	AND
@	AT
BD.	BOARD
B.D.D.	BACKDRAFT DAMPER
B.F.	BOTTOM FLAT
BF.V.	BUTTERFLY VALVE
B.O.D.	BOTTOM OF DUCT
B.O.P.	BOTTOM OF PIPE
B.V.	BALL VALVE
BLDG.	BUILDING
BTM.	BOTTOM
CLG	CEILING
CFM	CUBIC FEET PER MINUTE
CH.V.	CHECK VALVE
CHWR	CHILLED WATER RETURN
CHWS	CHILLED WATER SUPPLY
CMU	CONCRETE MASONRY UNIT
CONC.	CONCRETE
CONN.	CONNECTION
CONT'R.	CONTRACTOR
CWR	CONDENSER WATER RETURN
CWS	CONDENSER WATER SUPPLY
COND.	CONDENSATE
DMP'R.	DAMPER
DET.	DETAIL
D/L	DOOR LOUVER
DN.	DOWN
DWG	DRAWING
(E)	EXISTING
EA.	EACH
E.A.	EXHAUST AIR
EAG	EXHAUST AIR GRILLE
EAR	EXHAUST AIR REGISTER
EL.	ELEVATION
ELB	ELBOW
ELECT.	ELECTRICAL
ELEV.	ELEVATOR
EQUIP.	EQUIPMENT
EXH	EXHAUST
EXP	EXPANSION
EXT.	EXTERIOR
(F)	FUTURE
F.C.	FLEXIBLE CONNECTION
FD	FIRE DAMPER
FIN.	FINISH
FLEX	FLEXIBLE
FLR	FLOOR
FSD	FIRE SMOKE DAMPER
FT.	FOOT (FEET)

ABBRV.	DESCRIPTION
GA.	GAUGE
G.C.	GENERAL CONTRACTOR
G.I.	GALVANIZED IRON
G.V.	GATE VALVE
GEN.	GENERAL
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
H.O.A.	HAND-OFF-AUTO
HR.	HOUR
HWR	HOT WATER RETURN
HWS	HOT WATER SUPPLY
I.D.	INSIDE DIMENSION
IN. / "	INCH
(L)	LINED
L	LONG
LBS.	POUNDS
L.D.	LINEAR DIFFUSER
M.A.	MIXED AIR
MAX.	MAXIMUM
M.D.	MOTORIZED DAMPER
MECH.	MECHANICAL
MFR.	MANUFACTURER
MIN.	MINIMUM
MISC.	MISCELLANEOUS
M.U.A.	MAKE UP AIR
M.V.D.	MANUAL VOLUME DAMPER
(N)	NEW
N/A	NOT APPLICABLE
NC	NORMALLY CLOSED
N.I.C.	NOT IN CONTRACT
NO	NORMALLY OPEN
NO.	NUMBER
N.R.	NOT RATED
NTS	NOT TO SCALE
O.C.	ON CENTER
O.D.	OUTSIDE DIMENSION
OPN'G.	OPENING
O.S.A.	OUTSIDE AIR
P.O.C.	POINT OF CONNECTION
PLUMB'G.	PLUMBING
P.S.I.	POUNDS PER SQUARE INCH
(R)	RELOCATE
R	RADIUS
R.A.	RETURN AIR
RAG	RETURN AIR GRILLE
RAR	RETURN AIR REGISTER
RND.	ROUND
REQD	REQUIRED
REV.	REVISION
RF.	ROOF
RM.	ROOM

ABBRV.	DESCRIPTION
S.A.	SUPPLY AIR
SAG	SUPPLY AIR GRILLE
SAR	SUPPLY AIR REGISTER
S.D.	SMOKE DETECTOR
SHT.	SHEET
S.I.	SOUND INSULATION
S.M.	SHEET METAL
SQ.	SQUARE
S.S.	STAINLESS STEEL
STD.	STANDARD
STRUCT.	STRUCTURAL
SUSP	SUSPENDED
SW	SWITCH
SWG	SIDE WALL GRILLE
SWR	SIDE WALL REGISTER
TAG	TRANSFER AIR GRILLE
T.F.	TOP FLAT
T.O.D.	TOP OF DUCT
T.O.P.	TOP OF PIPE
TRANS.	TRANSFER
T'STAT	THERMOSTAT
TYP.	TYPICAL
UBC	UNIFORM BUILDING CODE
U.C.	UNDER CUT
U.G.	UNDER GROUND
UMC	UNIFORM MECHANICAL CODE
U.N.O.	UNLESS NOTED OTHERWISE
U.T.R.	UP THROUGH ROOF

ABBRV.	DESCRIPTION
V.	VENT
VAV	VARIABLE AIR VOLUME
VLV.	VALVE
VSD	VARIABLE SPEED DRIVE
VOL.	VOLUME
WMS	WIRE MESH SCREEN
WT.	WEIGHT

HVAC DRAWING INDEX

SHEET NO.	DESCRIPTION
AC0.00	COVER SHEET, HVAC LEGEND AND DRAWING INDEX
AC0.01	TITLE 24, MADATORY MEASURES AND GENERAL NOTES
AC0.02	TITLE 24
AC0.03	EQUIPMENT SCHEDULES AND DETAILS
AC1.01D	HVAC – FIRST FLOOR DEMO PLAN
AC1.01	HVAC – FIRST FLOOR PLAN
AC1.02	HVAC – ROOF PLAN AND ROOF COORDINATION PLAN
AC6.01	HVAC – PIPING AND WIRING DIAGRAMS

ARCHITECT OF RECORD

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3/06/09

IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT

APPLICATION NUMBER 01 XXXXX
AC _____ FLS _____ SS
DATE

LICENSED ARCHITECT Christopher Noll REN. 12/31/09 NO. C15916 STATE OF CALIFORNIA

DSA SUBMITTAL

COLLEGE OF SAN MATEO
BUILDING 15
MODERNIZATION

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SHEET TITLE

COVER SHT, HVAC LEGEND & DWG. INDEX

REVISIONS

NO.	DATE	DESCRIPTION
–	03.09.09	DSA SUBMITTAL

DATE	MARCH 9, 2009
DRAWN	LA/RG
CHECKED	CR
SCALE	NONE
ACCO JOB NO.:	628985

SHEET NUMBER

AC0.00