

ABBREVIATIONS

A	
A	AMPS, AIR (COMPRESSED)
AC	ALTERNATE CURRENT
AF	AMPERE FUSE, AIR FILTER
AFF	ABOVE FINISHED FLOOR
AHU	AIR HANDLING UNIT
AMP	AMPERE
ASHRAE	AMERICAN SOCIETY OF HEATING, REFRIGERATION AND AIR CONDITIONING ENGINEERS.
ASME	AMERICAN SOCIETY OF MECHANICAL ENGINEERS
ASTM	AMERICAN SOCIETY OF TESTING AND MATERIALS
ATS	AUTOMATIC TRANSFER SWITCH
AUX	AUXILIARY
AV	AIR VENT
AVG	AVERAGE
AWG	AMERICAN WIRE GAUGE
AWS	AMERICAN WELDING SOCIETY

B	
BD	BACK DRAFT DAMPER, BLOW DOWN
BFV	BUTTERFLY VALVE
BKR	BREAKER

C	
C	CONDUIT
CFM	CUBIC FEET PER MINUTE
CHWS	CHILLED WATER SUPPLY
CHWR	CHILLED WATER RETURN
CKT	CIRCUIT
C	CENTERLINE
CLG	CEILING
CMU	CONCRETE MASONRY UNIT
CO	CLEAN OUT
COL	COLUMN
CONC	CONCRETE, CONCENTRIC
CONT	CONTINUOUS, CONTINUATION
CU	COPPER, COOLING UNIT
CV	CHECK VALVE
CW	COLD WATER

D	
dB	DECIBEL
DB	DRY BULB
DC	DIRECT CURRENT
DEG	DEGREES
DET	DETAIL
DIA	DIAMETER
DIM	DIMENSION
DISC	DISCONNECT
DN	DOWN
DP	DISTRIBUTION PLAN
DS	DOWN SPOUT
DWG	DRAWING

E	
(E)	EXISTING
EA	EACH
EAT	ENTERING AIR TEMPERATURE
ECC	ECCENTRIC
EDB	ENTERING DRY BULB
EF	EXHAUST FAN
EJ	EXPANSION JOINTS
EL	ELEVATION
ELEC	ELECTRICAL
EMERG	EMERGENCY
ENCL	ENCLOSURE
EPO	EMERGENCY POWER OFF
EQUIP	EQUIPMENT
ESP	EXTERNAL STATIC PRESSURE
ETR	EXISTING TO REMAIN
EWB	ENTERING WET BULB
EWT	ENTERING WATER TEMPERATURE
EXH	EXHAUST
EXIST	EXISTING
EXT	EXTERNAL, EXTERIOR
EST	ESTIMATE

F	
°F	DEGREES FAHRENHEIT
FA	FIRE ALARM
FACP	FIRE ALARM CONTROL ALARM
FAV	FIRE ALARM VALVE
FBO	FURNISHED BY OTHERS
FCO	FLOOR CLEAN OUT
FCU	FAN COIL UNIT
FD	FIRE DEPARTMENT VALVE
FLEX	FLEXIBLE
FLR	FLOOR
FLOUR	FLUORESCENT
FPM	FEET PER MINUTE
FT	FLOW TRANSMITTER

G	
GA	GAUGE
GAL	GALLON
GALV	GALVANIZED
GC	GENERAL CONTRACTOR
GCO	GRADE CLEAN OUT
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GFR	GROUND FAULT RELAY
GND	GROUND
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
GRS	GALVANIZED RIGID STEEL
GWB	GYPSUM WALL BOARD

H	
HB	HOSE BIBB
HMD	HUMIDIFIER
HP	HORSEPOWER
HPS	HIGH PRESSURE SODIUM
HSTAT	HUMIDISTAT
HTG	HEATING
HTR	HEATER
HVAC	HEATING, VENTILATING AND AIR-CONDITIONING
HWR	HEATING WATER RETURN
HWS	HEATING WATER SUPPLY
HZ	HERTZ

I	
ID	INSIDE DIAMETER
IE	INVERT ELEVATION
INSUL	INSULATION
IN WC	IN OF WATER COLUMN

J	
J-BOX	JUNCTION BOX

K	
KOMIL	1,000 CIRCULAR MILS
KV	KILOVOLT
KW	KILOWATT
KWH	KILOWATT-HOUR

L	
LAT	LEAVING AIR TEMPERATURE
LB	POUNDS
LDB	LEAVING DRY BULB
LF	LINEAR FEET
LTC	LIGHTING
LWB	LEAVING WET BULB
LWT	LEAVING WATER TEMPERATURE

M	
MRV	MANUAL RELIEF VALVE
MAX	MAXIMUM
MBH	1,000 BTU PER HOUR
MCA	MINIMUM CIRCUIT AMPACITY
MCB	MAIN CIRCUIT BREAKER
MCC	MAIN CONTROL CENTER
MD	MOTORIZED DAMPER
MDP	MAIN DISTRIBUTION PANEL
MECH	MECHANICAL
MFR	MANUFACTURER

N	
N/A	NOT APPLICABLE
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NIC	NOT IN CONTRACT
NO	NORMALLY OPEN
NTS	NOT TO SCALE
(N)	NEW

O	
OA	OUTSIDE AIR
OB	OPPOSED BLADE DAMPER
OC	ON CENTER
OD	OUTSIDE DIAMETER
OS&Y	OUTSIDE STEM & YOKE
OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

P	
PD	PRESSURE DROP
PDU	PRESSURE DISTRIBUTION UNIT
PG	PRESSURE GAUGE
PH	PHASE
PNEU	PNEUMATIC
PNL	PANEL
PRV	PRESSURE REDUCING VALVE
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PSIG	POUNDS PER SQUARE IN GAUGE
PT	PRESSURE TRANSMITTER
PV	PLUG VALVE
PVC	POLYVINYL CHLORIDE

Q	
QTY	QUALITY

R	
R	RELIEF
RA	RETURN AIR
RCP	REFLECTED CEILING PLAN, REINFORCED CONCRETE PIPE
RD	ROOF DRAIN
RE	REFERENCE, REFER
RECIRC	RECALCULATE
REINF	REINFORCING
REQD	REQUIRED
REV	REVISION, REVISE
RG	RETURN GRILLE
RLA	RUNNING LOAD AMPS
RM	ROOM
RPM	REVOLUTIONS PER MINUTE
RV	RELIEF VALVE

S	
SA	SUPPLY AIR
SD	SMOKE DAMPER, STORM DRAIN
SECT	SECTION
SF	SQUARE FEET
SIM	SIMILAR
SMACNA	SHEET METAL AND AIR-CONDITIONING CONTRACTORS NATIONAL ASSOCIATION
SP	STATIC PRESSURE
SPEC	SPECIFICATION

T	
TSTAT	THERMOSTAT
TYP	TYPICAL

U	
UL	UNDERWRITERS LABORATORIES, INC.
UON	UNLESS OTHERWISE NOTED
UPS	UNINTERRUPTED POWER SUPPLY

V	
V	VOLT
VA	VOLT-AMPERE
VAC	VOLTS ALTERNATING CURRENT
VAV	VARIABLE AIR VOLUME
VD	VOLUME DAMPER
VEL	VELOCITY
VERT	VERTICAL
VTR	VENT THROUGH ROOF
VVD	VARIABLE VOLUME TERMINAL

W	
W	WATT, WIDTH
W/	WITH
W/O	WITHOUT
WB	WET BULB
WCO	WALL CLEAN OUT
WDP	WATER DISTRIBUTION POINT
WPD	WATER PRESSURE DROP
WT	WATERTIGHT, WEIGHT

X	
XFMR	TRANSFORMER

0	ISSUED FOR CONSTRUCTION	12-5-03	DK2	RAC
Sym.	Description	Date	Drawn By	Appr. By

PH: (800) 889-WRMS
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Walnut Creek, CA
Seattle, WA
Boston, MA

Drawn By:
CU

Designed By:
RAS

Date:
9/10/03

Proj. No.:
02-242

ALLEN TELESCOPE ARRAY
HAT CREEK RADIO OBSERVATORY
HAT CREEK, CA

GENERAL
ABBREVIATIONS

One Inch at Full Scale
0 1.5 1.0

Dwg. No:
G002

Rev.:
0