



DESIGN CONDITIONS:	
OSA	5 degree F
Wind Speed	10 mph
Surface Temp	38 degree F
Propylene Glycol	45 %
Supply Temperature	132 degree F

hePEX tubing
3/4" 9' on center

ZONE A	Installation Area (sqft)	BTUH/sqft	Total Btuh	Amt of Tubing (ft) (area x 1.33)	# of loops @300' / loop	Active Loop Length (ft)	Total Loop Length (25ft leader length)	GPM/loop (0.0083gpm/ft) @ gpm per loop	Pressure Loss (ft H2O/foot)	Head Loss Per loop (ft H2O)	MANIFOLD LOCATION
LOOP 1	200	136	27200	266	1	266	291	2.4	0.04	12	ZONE A
LOOP 2	200	136	27200	266	1	266	291	2.4	0.04	12	
LOOP 3	200	136	27200	266	1	266	291	2.4	0.04	12	
LOOP 4	200	136	27200	266	1	266	291	2.4	0.04	12	
LOOP 5	200	136	27200	266	1	266	291	2.4	0.04	12	
TOTAL	1000		136000	1330	5		1455	12.1			

ZONE F2	Installation Area (sqft)	BTUH/sqft	Total Btuh	Amt of Tubing (ft) (area x 1.33)	# of loops @300' / loop	Active Loop Length (ft)	Total Loop Length (25ft leader length)	GPM/loop (0.0083gpm/ft) @ gpm per loop	Pressure Loss (ft H2O/foot)	Head Loss Per loop (ft H2O)	MANIFOLD LOCATION
LOOP 1	210	136	28560	279	1	279	304	2.6	0.042	13	ZONE F2
TOTAL	210	136	28560	279	1		304	2.6			

CONTRACTOR TO PROVIDE A FULL SUBMITTAL PACKAGE, INCLUDING THE PEX PIPING LOOP LAYOUT FOR THE SNOW MELT ZONE.

CONTRACTOR SHALL FLUSH ALL SNOW MELT PIPING AND REFILL THE SYSTEM WITH A 45% MIXTURE OF NOT TOXIC POLYPROPYLENE ANTIFREEZE (WITH CORROSION INHIBITOR) PROVIDING FREEZE PROTECTION TO -16F AND BURST PROTECTION TO -51F.

AREA OF NEW SNOW MELT AREA: ZONE A
SEE 2 3
M6.02 M6.02

NEW SNOW-MELT ZONE VALVE BOX "ZONE A".
SEE 1
M6.02 FOR DETAIL.

1-1/2" HWS/HWR
PRE-INSULATED PEX
BURIED BELOW GRADE.
COORDINATE ROUTING WITH
(E)LANDSCAPING.

SEE 6
M6.02 FOR STEM WALL
PENETRATION DETAIL.

AREA OF NEW SNOW MELT AREA: ZONE F2
SEE 2 3
M6.02 M6.02

1" HWS/HWR
PRE-INSULATED PEX
BURIED BELOW GRADE.
COORDINATE ROUTING WITH
(E)LANDSCAPING.

NEW SNOW-MELT ZONE VALVE BOX FOR "ZONE F2"
SEE 1
M6.02 FOR DETAIL.

HWS/HWR DN THRU SLAB
TO TUNNEL FOR BUILDING
A SERVICE.

(E)2" SMS/SWR
TO (E)ZONE F

(E) SNOW MELT
AREA (ZONE F)

(E)SNOW-MELT ZONE F
VAULT.

SEE 4
M6.02 FOR HE-1, PUMP, AND
SNOW MELT PIPING DETAIL IN
BOILER ROOM.

(E)HWP-1&2

(E)HWS/HWR TO BUILDING
F SERVICE.

- KEYED NOTES:
- CONNECT (N)2-1/2"HWS/HWR (GLYCOL) TO (E)2"HWS/HWR (GLYCOL) MAINS.
 - (E)SMP-1 WITH NEW 7.6" IMPELLARS.
 - CONNECT (N)2"HWS/HWR TO (E) MAINS.
 - RELOCATED CHEM FEEDER FOR (E)BOILER SYSTEM. SEE 6/M6.03 FOR DETAIL.
 - CONNECT (N)3/4"HWS/HWR TO (E)MAINS AND ROUTE TO RELOCATED CHEM FEEDER.
 - REMOVE (E)NEUTRALIZER AND REPLACE WITH (3)AERCO CONDENSATE NEUTRALIZER KIT, 89025-2, FOR EACH BOILER.

City Of Bend Approval Stamp:

Revision Schedule		
#	Date	Description
3	3/15/18	PLAN REVIEW COMMENTS
2	3/13/18	ADDENDUM 1
1	2/19/18	DISTRICT REVIEW COMMENTS

PERMIT & CONSTRUCTION SET

PILOT BUTTE MIDDLE SCHOOL - BLDGS E&F
1501 NE Neff Road,
Bend OR 97701

BLRB architects

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BLRB.com			

Drawing Title:
MECHANICAL SNOWMELT SYSTEM

Date : 02.19.2018	Drawn By : TB
Revised Date :	Project No. 17.34B
Stamp	Sheet No.

M2.01

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