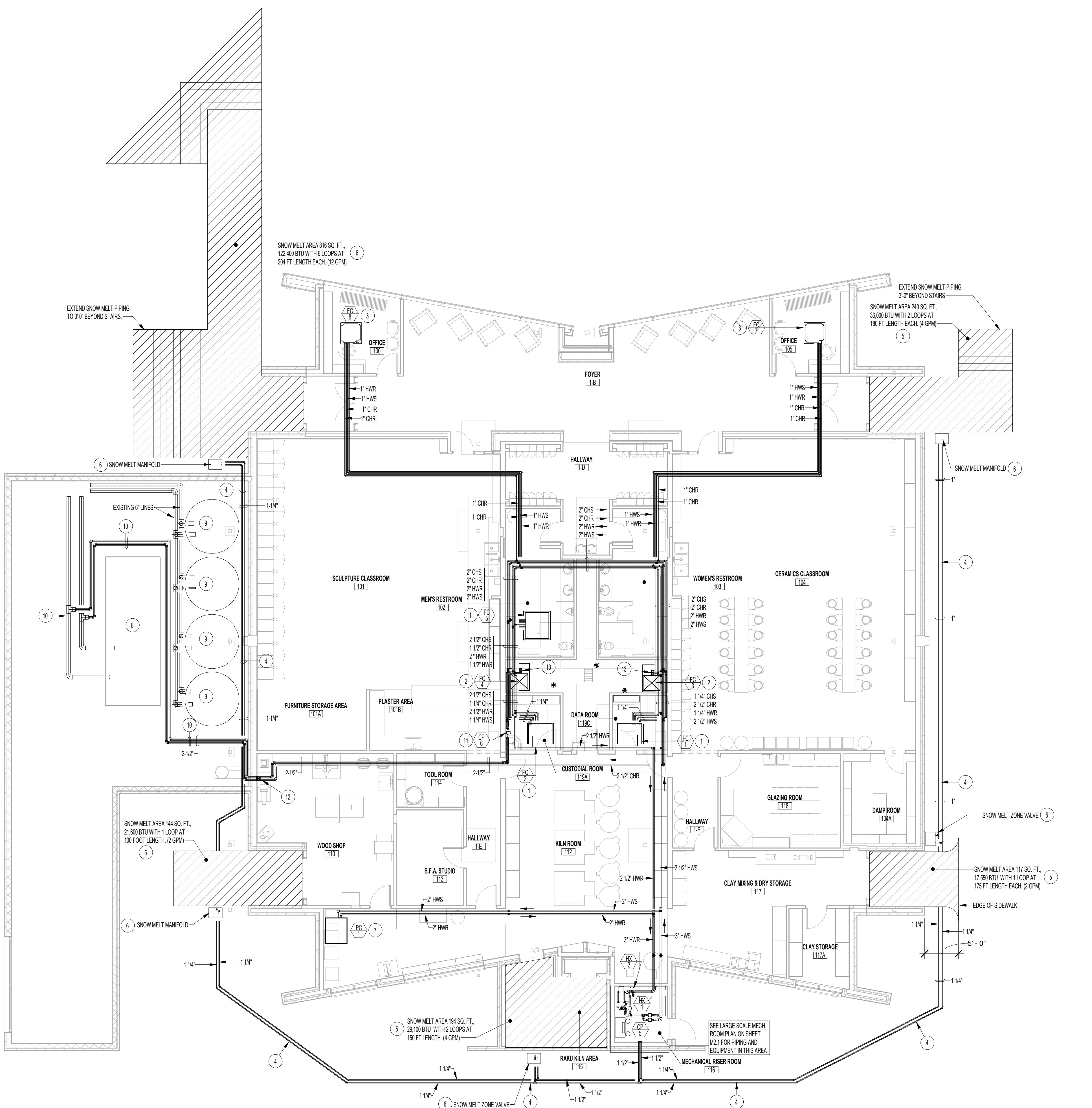


**PLAN NOTES:**

- 1 PROVIDE AND INSTALL NEW HORIZONTAL FAN COIL AS SPECIFIED, COMPLETE WITH CHILLED WATER AND HOT WATER COILS AND 3/4" SHEET METAL DRAIN PAN. SUPPORT FROM ROOF STRUCTURE. COORDINATE WITH PIPING AND BUILDING STRUCTURE. REFER TO HORIZONTAL FAN COIL PIPING DETAIL BM3.1 FOR TYPICAL INSTALLATION AND PIPING CONNECTIONS.
- 2 PROVIDE AND INSTALL NEW VERTICAL FAN COIL AS SPECIFIED, COMPLETE WITH CHILLED WATER AND HOT WATER COILS. MOUNT UNIT ON 14" HIGH RETURN AIR PLENUM BASE. REFER TO DETAIL GM3.1 FOR PLENUM BASE CONSTRUCTION AND TO TYPICAL FAN COIL PIPING DIAGRAM AM3.1 FOR TYPICAL INSTALLATION AND PIPING CONNECTIONS.
- 3 PROVIDE AND INSTALL FAN COIL UNIT AS SPECIFIED. MOUNT UNIT IN CEILING AS CALLED OUT IN EQUIPMENT SCHEDULE. CEILING MOUNTED UNITS TO BE COMPLETE WITH CONDENSATE PUMP, RISE 3/4" CONDENSATE DRAIN LINE UP WITH REFRIGERANT PIPING AND RUN AS SHOWN ON SHEET P1.1.
- 4 SNOW MELT SYSTEM PIPING TO BE RUN BELOW GRADE. USE UPON PRE-INSULATED PEX-A PIPING SYSTEM WITH ASTM F-190 FITTINGS. AVOID COUPLINGS IN PIPING. PROVIDE TEE FITTINGS ONLY WHERE NECESSARY.
- 5 PROVIDE LOOPS IN SIDEWALK AREAS AS CALLED OUT. MAXIMUM LOOP LENGTH NOT TO EXCEED 270'. AREAS MAY OR MAY NOT INCLUDE STEPS. ALL LOOPS TO BE PIPED WITH 3/8" PEX PIPING SPACED AT 9' CENTERS. REFER TO SITE PLAN AND ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS AND ELEVATIONS OF SNOW MELT AREAS. REFER TO DETAILS ON SHEET M3.3 FOR TYPICAL LOOP LAYOUTS IN SIDEWALKS AND CONCRETE STAIRS.
- 6 PROVIDE 24"X24" CONCRETE VAULT BOX IN GROUND FOR SNOW MELT MANIFOLD AND/OR ZONE VALVES. REFER TO DETAILS ON SHEET M3.3 FOR TYPICAL MANIFOLD PIPING AND VALVE BOX INSTALLATION.
- 7 PROVIDE AND INSTALL HOT WATER PRE-HEAT COIL AS SPECIFIED COMPLETE WITH FACE AND BY-PASS DAMPER. REFER TO DETAIL HM3.2 FOR TYPICAL HOT WATER PIPING AND VALVES.
- 8 EXISTING AIR COOLED CHILLER TO REMAIN. FIELD VERIFY EXISTING CONDITIONS AND CONNECT NEW CHILLED WATER PIPING TO EXISTING AS CALLED OUT. PROTECT EXISTING EQUIPMENT DURING CONSTRUCTION.
- 9 EXISTING ICE BANKS AND PIPING TO REMAIN. PROTECT DURING CONSTRUCTION.
- 10 CONNECT NEW 2 1/2" CHILLED WATER SUPPLY AND RETURN LINES TO EXISTING 6" CORRESPONDING LINES. PROVIDE SHUT-OFF VALVE IN EACH LINE AT POINT OF CONNECTION. WRAP ALL EXPOSED PIPING WITH FIBERGLASS PIPE INSULATION AND METAL SKIN. SEE SPECIFICATIONS.
- 11 PROVIDE AND INSTALL IN-LINE PUMP AS SPECIFIED. CONNECT TO CHILLED WATER PIPING. REFER TO CHILLED WATER PIPING DIAGRAM GM3.2.
- 12 RISE CHILLED WATER LINES UP IN WOOD SHOP. PIPING TO BE INSULATED WITH FIBERGLASS PIPE INSULATION. COVER VERTICAL LINES WITH SHEET METAL SKIN UP TO 10'-0" ABOVE FLOOR.
- 13 DROP 1 1/4" HOT WATER AND CHILLED WATER LINES DOWN AND CONNECT TO CORRESPONDING COILS BELOW.



**BRIGHAM YOUNG  
UNIVERSITY - IDAHO**

**HYDRONIC  
PIPING PLAN**

**M1.2**

**CIVIL ENGINEER**

Cooper Engineering  
1150 Harrison Dr.  
Idaho Falls, ID 83401

Contact: Blake Jolley  
bjolley@connectengr.com  
(208) 681-3590

**LANDSCAPE DESIGNER**  
Weaver & Associates  
1635 South Woodruff Avenue  
Idaho Falls, ID 83404  
Contact: Dave Weaver  
weaverlandscape@gmail.com

**STRUCTURAL ENGINEER**  
Tanner Barfuss Structural Engineering  
2331 125th Street  
Benton City, WA 99320  
Contact: Don Barfuss  
dbarfuss@tbsse.us  
(509) 298-6795

**ARCHITECTURAL**  
Brigham Young University - Idaho  
525 South Center Street  
132 University Operations Building  
REXBURG, ID 83460-8205  
Contact: Chad Allredge  
allredge@byui.edu  
(208) 496-2659

**MECHANICAL ENGINEER**

Engineering Systems Associates  
1335 E. 10th Street  
Pocatello, ID 83204  
Contact: Dwayne Sudweeks  
dcs@engsys.com  
(208) 233-3501

**ELECTRICAL ENGINEER**  
Payne Engineering Inc.  
1625 Elm Street  
Pocatello, ID 83201  
Contact: Todd Payne  
payneengineering@gmail.com  
(208) 232-4439

*Dwayne C. Sudweeks*  
11/27/19

ES4 JOB #: 19043  
DRAWN BY: M. THIEL

CHECKED BY: D. SUDWEEKS

DOCUMENT STATUS  
STATUS DATE

REVISION SCHEDULE  
NO. DESCRIPTION DATE

PROJECT NAME:

PROJECT NO.:

SHEET NAME:

SHEET NUMBER:

**M1.2**