MONTANA STATE UNIVERSITY

FACILITIES PLANNING, DESIGN & CONSTRUCTION
Sixth Avenue and Grant Street • P.O. Box 172760 • Bozeman, Montana 59717-2760
Phone: (406) 994-5413 • Fax: (406) 994-5665

REQUEST FOR PROPOSAL

Project Title: Cooley Laboratory Renovation
Location: Montana State University

PPA No.: 10-0023
RFP No.: 6 **REVISED**
Date: 10/28/11**1/06/2012**

To: Dick Anderson Construction
4498 Jackrabbit Lane
Bozeman, MT 59718

Attention: Platisha

From: Cecilia Vaniman, Project Manager
Cooley Lab Renovation
Montana State University

Attention: _____

In order to expedite the Work and avoid or minimize delays in the Work the following proposal is requested. Please return a response by: 11/11/11-**01/19/2012**

Date Sent: 10/29/11 **01/06/2012**
Date Received: _____

RFP for Northwest Building Heating

Reference Drawings: M0.4, M0.5, M2.0.2, M2.2.1, M2.3.1, M3.3, M5.4

Reference Specifications: N/A

Add unit heaters to the custodial rooms in the basement, second, and third floors. Provide piping as indicated and noted on attached drawings and pipe unit according to detail 3, sheet M3.3 the same as for other unit heaters in the building.

The temperature control contractor shall provide two position hot water valve, a wall sensor with a wire (tamper-proof) cover and DDC controls for each unit. Control sequence shall be as noted on M5.4 for other unit heaters in the building. The units shall be displayed on the system graphics.

Provide 120V connections to three new unit heaters. Connect to spare 20A-1P circuit breaker (dedicated circuit) from nearest non-emergency panel on each floor for each unit via 2#12 and #12 G in ¾" conduit. Provide motor rated toggle disconnect for each new unit. Update changes on as-built drawings.

Attachment: CM-2, CM-3, CM-4, CM-6, & CM-7.

This RFP is for pricing purposes only. The contractor shall not proceed with the scope of work described within until pricing is approved by the owner in writing.

Distribution:
☐ Owner ☒ Architect ☐ Engineer
☐ Agency ☒ Contractor ☐ Other

UNIT/CABINET HEATER SCHEDULE

MARK	MFR	MODEL	SIZE	CFM	HEATING COIL RATINGS TYPE	HEATING COIL RATINGS MBH	HEATING COIL RATINGS GPM	HEATING COIL RATINGS P.D. (FT. H20)	MOTOR HP	MOTOR ELECT CHARA.	NOTES
UH 016	AIREDALE	WSC	18	330	W	12.6	1.3	–	1/60	120V/ 1ø	(1) BASEMENT CUSTODIAL UNIT HEATER.
UH 224	AIREDALE	WSC	18	330	W	12.6	1.3	–	1/60	120V/ 1ø	(1) 2ND FLOOR CUSTODIAL UNIT HEATER.
UH 318	AIREDALE	WSC	18	330	W	12.6	1.3	–	1/60	120V/ 1ø	(1) 3RD FLOOR CUSTODIAL UNIT HEATER.
UH 501	McQUAY	UH	47	730	W	29	2.9	0.3	1/12	120V/ 1ø	(1) PENTHOUSE UNIT HEATER.
UH 502	McQUAY	UH	47	730	W	29	2.9	0.3	1/12	120V/ 1ø	(1) PENTHOUSE UNIT HEATER.
UH 503	McQUAY	UH	47	730	W	29	2.9	0.3	1/12	120V/ 1ø	(1) PENTHOUSE UNIT HEATER.
UH 504	McQUAY	UH	47	730	W	29	2.9	0.3	1/12	120V/ 1ø	(1) PENTHOUSE UNIT HEATER.
CH 000	McQUAY	CHF	S03	300	W	11.6	1.0	0.7	1/12	120V/ 1ø	(2) WEST STAIRWELL
CH 004	McQUAY	CHF	S03	300	W	11.6	1.0	0.7	1/12	120V/ 1ø	(2) ENTRANCE
CH 100	McQUAY	CHF	S03	300	W	11.6	1.0	0.7	1/12	120V/ 1ø	(2) WEST STAIRWELL
CH 125	McQUAY	CHB	S04	400	W	20.2	1.0	–	1/12	120V/ 1ø	(3) 1ST FLOOR HALLWAY
CH 200	McQUAY	CHF	S03	300	W	11.6	1.0	0.7	1/12	120V/ 1ø	(2) WEST STAIRWELL
CH 201	McQUAY	CHF	S03	300	W	11.6	1.0	0.7	1/12	120V/ 1ø	(2) EAST STAIRWELL
CH 300	McQUAY	CHF	S03	300	W	11.6	1.0	0.7	1/12	120V/ 1ø	(2) WEST STAIRWELL
CH 301	McQUAY	CHF	S03	300	W	11.6	1.0	0.7	1/12	120V/ 1ø	(2) EAST STAIRWELL

(1) HORIZONTAL THROW PROPELLER TYPE HYDRONIC UNIT HEATER WITH OPTIONAL FOUR–WAY DISCHARGE LOUVERS. TOTALLY ENCLOSED MOTOR FOR VOLTAGE LISTED WITH THERMAL OVERLOAD PROTECTION. UNIT SHALL HAVE SIDE INLET AND OUTLET CONNECTIONS FOR HEATING WATER. PROVIDE UNIT WITH RUBBER–IN–SHEAR (RIS) VIBRATION ISOLATORS AND WALL MOUNTED THERMOSTAT.

(2) CEILING MOUNTED CABINET HEATER WITH FRONT DISCHARGE. PROVIDE UNIT WITH CEILING CONVERSION KIT. CABINET SHALL BE GALVANIZED STEEL AND BAKED–ON POWDER PAINT FINISH. FAN SHALL BE FORWARDLY CURVED, CENTRIFUGAL TYPE WITH A SINGLE SPEED PSC MOTOR WITH THERMAL OVERLOAD PROTECTION. COILS SHALL BE ALUMINUM FINS WITH COPPER TUBES WITH A FACTORY INSTALLED MANUAL AIR VENT.

(3) 3–SPEED CEILING MOUNTED RECESSED FAN COIL WITH FLUSH MOUNTED WALL (CEILING) PLATE. PROVIDE WITH PLENUM BACK WITH FILTER AND 1–ROW HEATING COIL ONLY (DELETE COOLING COIL AND DRAINPAN). WALL–MOUNTED SPEED SWITCH AND THERMOSTAT PROVIDED BY TEMPERATURE CONTROLS. UNIT SHALL BE SUPPLIED WITH THREE COMPLETE SETS OF 1" THROW–AWAY FILTERS. PROVIDE WITH UNIT MOUNTED DISCONNECT SWITCH.

HEATING COIL RATINGS ARE FOR WATER AT 180° F E.W.T. AND 60° F E.A.T., SEA LEVEL ELEVATION AND WATER WITH 35% GLYCOL AS THE HEATING FLUID.

REFERENCE UNIT/CABINET HEATER SCHEDULE ON SHEET M0.4.

GPD CONSULTING ENGINEERS, P.C.
524 FIRST AVENUE S
GREAT FALLS, MT 59401
PH 406.452.9558
FX 406.727.9720

2291 W BROADWAY
SUITE 4
MISSOULA, MT 59808
PH 406.721.5936
FX 406.721.8716

ADD CUSTODIAL UNIT HEATERS

MSU–COOLEY LAB RENOVATION
BOZEMAN, MONTANA

ISSUE:	
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DATE 1/6/2012
PROJECT NUMBER 100104
DRAWING NUMBER CM–2
OF

FLOW BALANCE DEVICE SCHEDULE (CONTINUED)

UNIT SERVED	DEVICE TYPE	MFR	RETURN DEVICE	SUPPLY DEVICE	BALANCE FLOW (GPM)	NOMINAL FLOW RANGE	NOTES
UH 016	AUTO	FLOW DESIGN	YR0075	YC075	1.3	2 –32 PSIG	(3)
UH 224	AUTO	FLOW DESIGN	YR0075	YC075	1.3	2 –32 PSIG	(3)
UH 318	AUTO	FLOW DESIGN	YR0075	YC075	1.3	2 –32 PSIG	(3)
CH 125	AUTO	FLOW DESIGN	YR0075	YC075	1.0	2 –32 PSIG	(3)

(3) AUTOMATIC FLOW BALANCE DEVICE FURNISHED WITH STAINLESS STEEL FLOW ELEMENT, DUAL TEMPERATURE/PRESSURE PORTS, AND OPTIONAL UNION. SEE COIL PIPING DETAILS. FURNISH WITH INDIVIDUAL COMPANION SUPPLY COMPONENTS SUCH AS STRAINER WITH BLOW DOWN VALVE AND CAP, T&P TEST PORT, AND UNION. SEE SPECIFICATION SECTION 15704. SCHEDULED DEVICE MODEL NUMBER MUST BE APPROVED BY OWNER FOR USE OVER INDIVIDUAL COMPONENTS.

REFERENCE FLOW BALANCE DEVICE SCHEDULE ON SHEET M0.5.

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ADD CUSTODIAL UNIT HEATERS

MSU–COOLEY LAB RENOVATION
BOZEMAN, MONTANA

ISSUE:	
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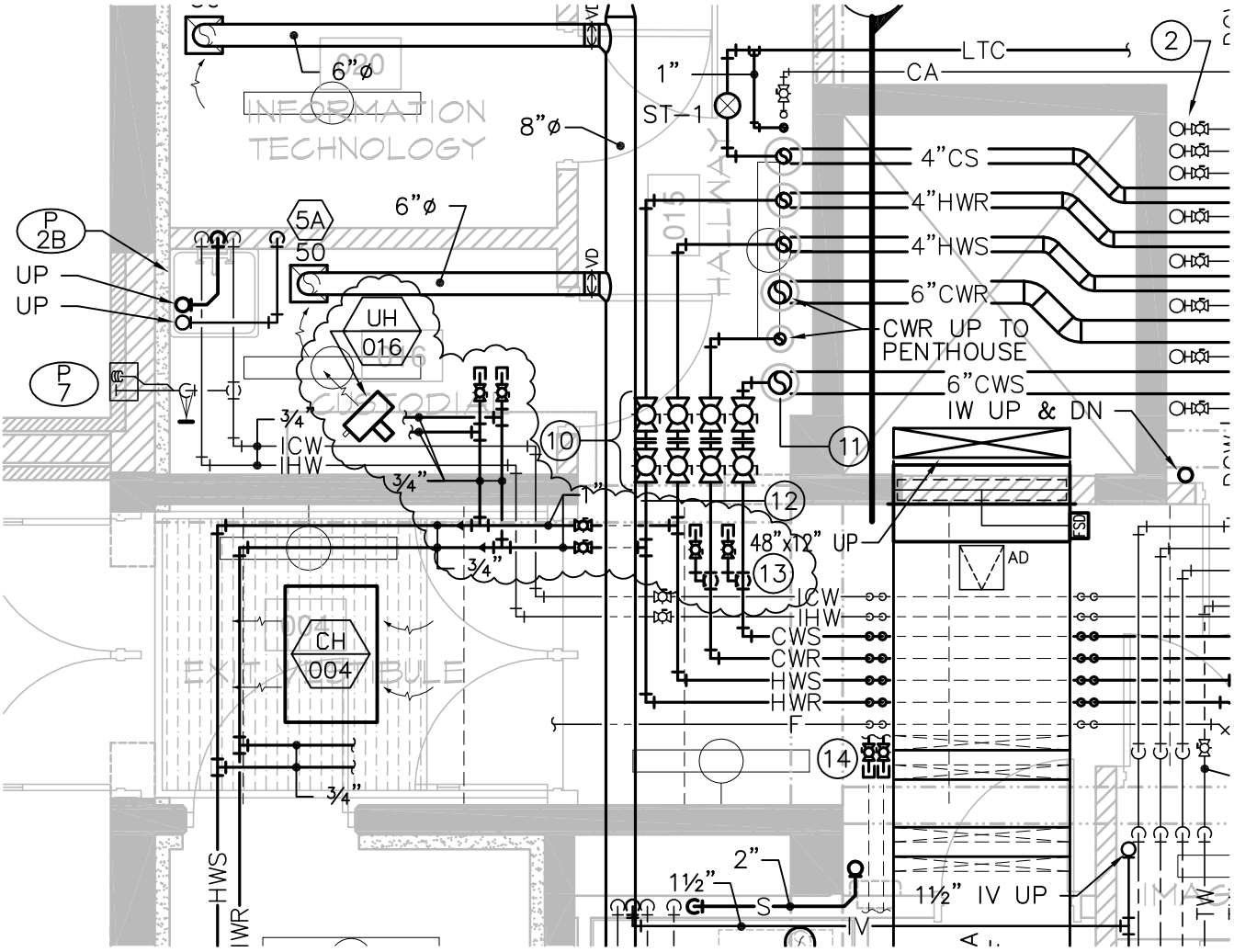
DATE 1/6/2012
PROJECT NUMBER 100104
DRAWING NUMBER CM–3 OF



(16) ¾" CHILLED WATER SUPPLY/RETURN PROVISIONS. PROVIDE WITH ISOLATION BALL VALVE AND CAP.

REFERENCE DETAIL 1/M2.0.2.

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MSU–COOLEY LAB RENOVATION
BOZEMAN, MONTANA

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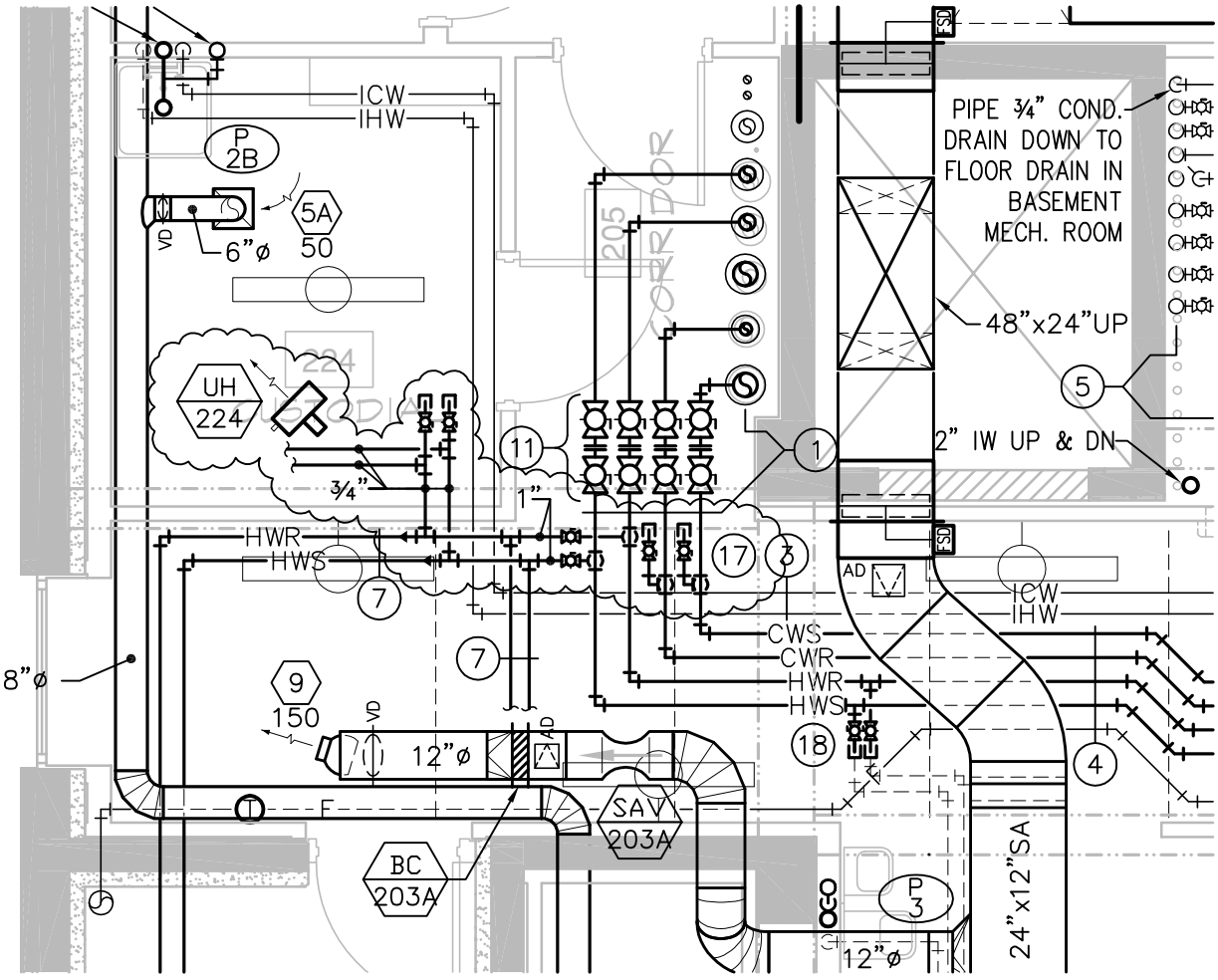
DATE 1/6/2012
PROJECT NUMBER 100104
DRAWING NUMBER CM–4
OF



(17) 3/4" CHILLED WATER SUPPLY/RETURN PROVISIONS. PROVIDE WITH ISOLATION BALL VALVE AND CAP.

REFERENCE DETAIL 1/M2.2.1.

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ADD CUSTODIAL UNIT HEATERS

MSU–COOLEY LAB RENOVATION
BOZEMAN, MONTANA

ISSUE:	
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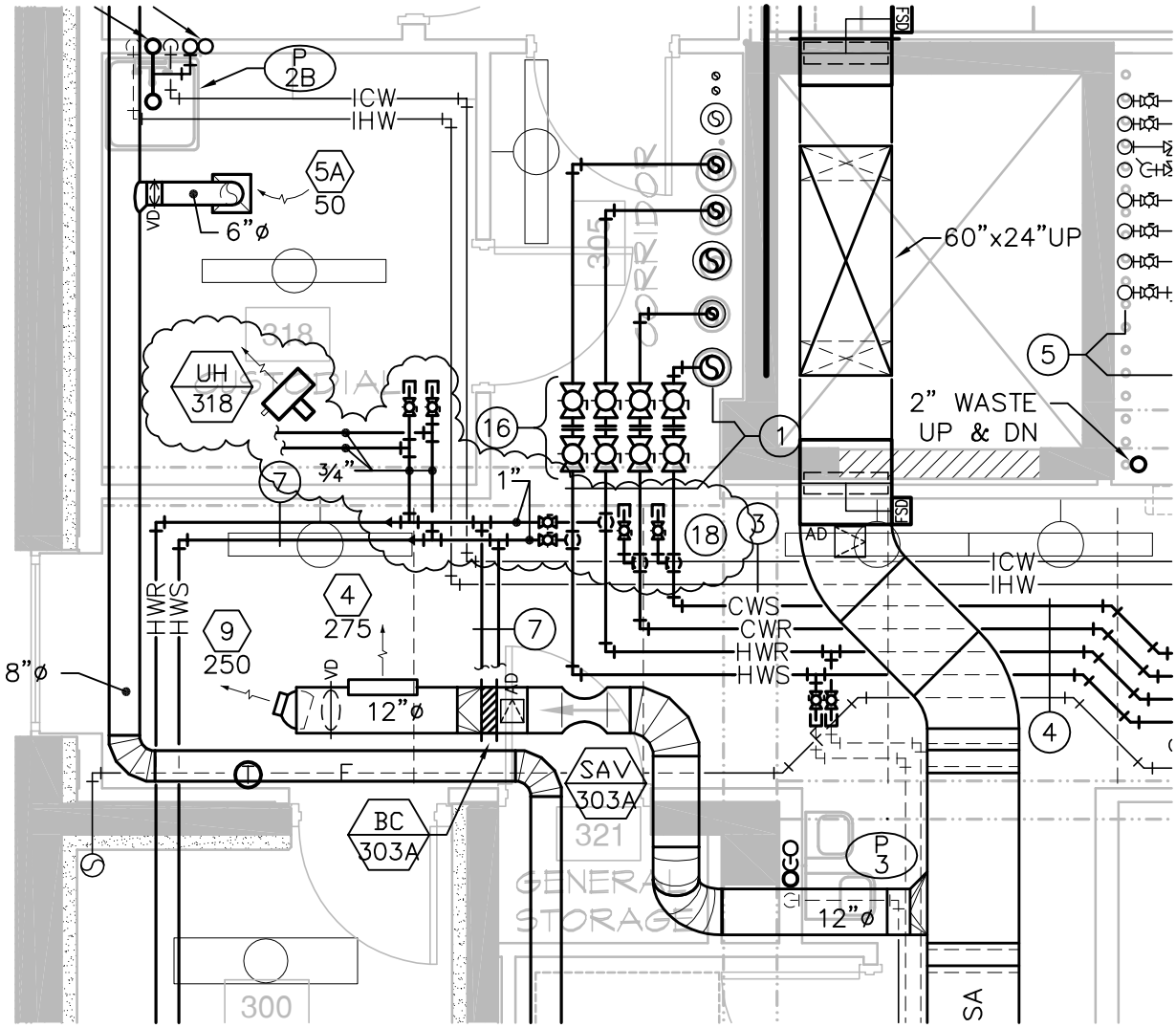
DATE 1/6/2012
PROJECT NUMBER 100104

DRAWING NUMBER CM–6
OF



(18) ¾" CHILLED WATER SUPPLY/RETURN PROVISIONS. PROVIDE WITH ISOLATION BALL VALVE AND CAP.

REFERENCE DETAIL 1/M2.3.1.

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BOZEMAN, MONTANA

ISSUE:	
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DATE 1/6/2012
PROJECT NUMBER 100104

DRAWING NUMBER CM–7
OF