### UNIVERSITY OF CALIFORNIA, SANTA BARBARA

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SANTA BARBARA • SANTA CRUZ

OFFICE OF DESIGN & CONSTRUCTION SERVICES and PHYSICAL FACILITIES

CONTRACTING SERVICES Building 439 Santa Barbara, California 93106-1030 Telephone (805) 893-3356 Fax (805) 893-8592

SENT VIA:	FAX ON THIS DATE
	HAND DELIVERY ON THIS DATE
	FEDERAL EXPRESS ON THIS DATE
	UNITED PARCEL SERVICE ON THIS DATE

### HOLDERS OF PLANS AND SPECIFICATIONS:

Biology II Boiler Replacement Project, Bldg. 571 Project No. FM100198S/137-12 **Addendum No. 02** 

September 27, 2010

Enclosed is **ADDENDUM NO. TWO** to the Construction Documents on the above-captioned project.

Bid date is Tuesday, October 5, 2010 at 2:30 PM to be held at:

### **CONTRACTING SERVICES**

Facilities Management, Bldg. 439, Door #E, Reception Counter University of California, Santa Barbara Santa Barbara, CA 93106-1030.

Late arrivals shall be disqualified. Please allow time for unforeseen traffic delays, securing a parking permit and potential parking problems.

Anna Galanis

Director, Contracting Services

### ADDENDUM NUMBER TWO

to the

### CONSTRUCTION DOCUMENTS SEPTEMBER 27, 2010

### **GENERAL**

The following changes, additions or deletions shall be made to the following document(s) as Indicated; all other conditions shall remain the same.

### I. <u>SPECIFICATIONS</u>

### Item No.

1. <u>Section 15555, Heating Hot Water boilers, Part 2, Products, 2.01 BOILERS, Paragraph E Power, Gas Fired Boilers, **DELETE** in it's entirety:</u>

### Item No.

2. <u>Section 15555, Heating Hot Water boilers, Part 2, Products, 2.02 LOW NOX</u> BURNER SYSTEM, Paragraph A, B, C, D, **DELETE** in it's entirety:

### II <u>DRAWINGS</u>

### Item No.

1. Sheet M1.0, LEGNEDS, SCHEDULES, SYMBOLS:

**CHANGE** Flow Meter table as shown on attached Addendum #2 Drawing, M1.0 ADD#2

### Item No.

2. <u>Sheet M1.0, LEGNEDS, SCHEDULES, SYMBOLS:</u>

**CHANGE** Industrial Hot Water Storage Tank and Heat Exchanger table as shown on attached Addendum #2 Drawing, M1.0 ADD#2

### Item No.

3. <u>Sheet M2.0, BASEMENT BOILER ROOM MECHANICAL DEMOLTIION</u> PLAN:

**CHANGE** reference Note #4 as shown on attached Addendum #2 Drawing, M2.0 ADD#2

### Item No.

4. <u>Sheet M2.0, BASEMENT BOILER ROOM MECHANICAL DEMOLTIION</u> PLAN:

**CHANGE** reference Note #14 as shown on attached Addendum #2 Drawing, M2.0 ADD#2

### Item No.

5. Sheet M2.0, BASEMENT BOILER ROOM MECHANICAL DEMOLTIION

**CHANGE** reference Note#19 as shown on attached Addendum #2 Drawing, M2.0 ADD#2

### Item No.

6. <u>Sheet M2.0, BASEMENT BOILER ROOM MECHANICAL DEMOLTIION</u> PLAN:

**ADD** BOILER DEMOLITION AND CONSTRUCTION SEQUENCE as shown on attached Addendum #2 Drawing, M2 & M3 ADD#2

### Item No.

7. Sheet M2.1, BASEMENT BOILER ROOM REMODEL PLAN:

ADD BOILER DEMOLITION AND CONSTRUCTION SEQUENCE as shown on attached Addendum #2 Drawing, M2 & M3 ADD#2

### END OF ADDENDUM NO. TWO

### ADDENDUM 70 SHEET M10, FLOW METER SCHEDULE:

CHANGE FLOW RATE (GPM) TO '6.2-2060' CHANGE FLOW METER TO 'FLOW METER SCHEDULE' TO 'ONICON, F-3100 SERIES'

FM OF	HARX
ONICON, F-3100 SERIES	W
ហ្វ	METER SIZE
6.2-2060	FLOW RATE (QPM)
ANSI CLASS 150 FLANGE	CONNECTION
CARBON STEEL/ PTFE	MATERIAL MATERIAL
90 TO 265 VAC, 45 TO 66 HZ, 35mA MAXIMUM. USE 18—22 AWG SHIELDED CABLE FOR ELECTRICAL CONNECTIONS AND REINFORCED NYLON NEMA 4X (IP65) ENCLOSURE.	N BODY BLECTRICAL OLINER MATERIAL REQUIREMENTS SK
ISOLATED 4-20mA ANALOG OUTPUT FOR FLOW RATE	SIGNALS
INSTALL WITH MIN. 3 PIPE SIZE DIAMETERS STRAUGHT PIPE UPSTREAM AND MIN. 2 PIPE DIAMETERS STRAUGHT PIPE DOWNSTREAM FROM CENTER LINE OF FLOW METER.	REMARKS

## N ADDENDUM TO SHEET M1.0, INDUSTRILAL HOT WATER STOAGE TANK AND HEAT EXCHANGER SCHEDULE:

EXCHANGER SCHEDULE' CHANGE INDUSTRIAL HOT WATER STORAGE TANK AND HEAT EXCHANGER TO 'INDUSTRIAL HOT WATER STORAGE TANK AND HEAT

CHANGE MODEL NO. TO TANK NO.

REVISE SIZE COLUMN TO 'T-6-36-2A WITH EXTENDED NOZZLES' REVISE CAPACITY (SQ.FT) COLUMN TO '12.8'

REVISED REMARKS COLUMN. ADDED COLUMNS UNDER NEW HEADING 'INTEGRAL HEAT EXCHANGER'

### HOT WATER STORAGE TANK X AND HEAT EXCHANGER SCHEDULE

MARK MFG. TANK TOWN. CAPACITY RESSURE NO. (MAL)			DO IN				0100	5			{					NUUS INIAE NOI WATER OF CRACE FAIR AND THE PROPERTY OF THE PRO
CAPACITY   PRESSURE   MFG.   SIZE   CAP.   RLETT   OUTLET   FLOW   PRESS. WEIGHT		į		7		A COLUMN		2	TEGRAL I		CHANGE			,		REMARKS
PARKER 15V 3060 WITH LINING 1220 125 THRUSH-SW WITH LINING NOZZLES 12.8 2 180° F 166° F 20 GPM 0.2 FT. 1155		F	ŀ	DIA. X HT.	CAPACITY (QAL)	PRESSURE	- 1		CAP.	NET!	MET/		FLO₩	PRESS.	HIDEL	PROVIDE ASME VERTICAL STORAGE TANK WITH HEAT EXCHANGER PER
PARKER 15V 3060 WITH 1220 125 THRUSH-SW WITH LINING 1155 NOZZLES T-6-36-2A NOZZLES 12.8 2 180° F 20 GPM 0.2 FT. 1155				2		RATING	HOOM	,	(SQ. FIJ	\ <u>\</u>				5		SPECIFICATION SECTION 15260.
PARKER 15V 3060 WITH 220 125 THRUSH-SW WITH 12.8 2 180 F 166 F 20 GPM 0.2 FT. 1155 EXTENDED NOZZLES	)			30"X60"		50/	145			1						PROVIDE ADDITION TANK WELLS AS
NOZZLES NOZZLES		PARKER	TSV 3060	NSTUTILE WITH WITH	220			T-6-36-2A		<b>ა</b>	180° F	55 57 TI	20 GPM	0.2 FT.		REQUIRED FOR CONTROLS, MAINTENANCE AND MONITORING.
	· · · · · · · · · · · · · · · · · · ·			LINING	-		inkoon-or	NOZZLES		ı		•	!			TANK WATER TEMPERATURE MAINTAINED AT 140° WITH 60° MAKE UP WATER.

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### ADDENDUM

BOILER REPLACEMENT PROJECT, BUILDING 571 FM# 1001198S/137-12, DWG.# 571-186

ADDENDUM TO SHEET M1.0, FLOW METER SCHEDULE ADDENDUM TO SHEET M1.0, INDUSTRIAL HOT WATER STORAGE TANK AND HEAT

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## ADDENDUM TO SHEET M2.0, REFERENCE NOTE #4 AT GRID LINES

REFERENCE NOTE #4 BETWEEN GRID LINES C AND D, NORTH OF GRID LINE 4 TO REMAIN AS WRITTEN: REMOVE (E) BOILER VENT TO POINT OF DISCONNECT (POD) TO READ AS FOLLOWS: CAP AND REMOVE (E) ICW SERVING (E) BOILERS AT POD.

## ADDENDUM TO SHEET M2.0, REFERENCE NOTE #14 AT GRID LINES D-4:

REFERENCE NOTE #14 AT GRID LINES C-4 TO REMAIN AS WRITTEN: (E) 5" LPS TO UP IN SHAFT, TO REMAIN. TO READ AS FOLLOWS: REMOVE (E) 5" LPS TO POINT OF DISCONNECTION AND CAP

### 5. ADDENDUM TO SHEET M2.0, REFERENCE NOTE #19:

OMIT A B

# ADDENDUM TO SHEETS M2.0 AND M2.1, BOILER DEMOLITION AND CONSTRUCTION SEQUENCE.

- 1) ISOLATE AND SHUT DOWN EXISTING STEAM BOILER (B-1).
- REMOVE AND ABATE ASBESTOS FROM EXISTING STEAM BOILER, B-1. PROVIDE NEGATIVE PRESSURE ENCLOSURE AS PRESCRIBED IN ASBESTOS REMOVAL SPECIFICATION, AS REQUIRED.
- DISCONNECT GAS PIPING, BOILER VENT, ICW (INDUSTRIAL COLD WATER), DRAINS, (BOILER FEED WATER), BOILER CONTROLS, AND ELECTRICAL CONNECTIONS SERVING EXISTING BOILER, B-1. SEE SHEET M2.0. ALL ELECTRICAL CONNECTIONS, CONTROLS AND UTILITIES TO REMAIN CONNECTED TO EXISTING STEAM BOILER B-2 UNTIL NEW HOT WATER BOILERS B-3 AND B-4 ARE OPERATIONAL.
- ဂ DISCONNECT EXISTING BOILER, B-1, FLUE CONNECTION TO MAIN FLUE WITHOUT EFFECTING OPERATION OF REMAINING STEAM BOILERS. RECONSTRUCT NEW BOILER FLUE CONNECTIONS FOR NEW HOT WATER BOILERS B-3 AND B-4. CAP CONNECTIONS AT MAIN FLUE READY TO ACCEPT NEW FLUES FROM NEW HOT WATER BOILERS, B-3 AND B-4. SEE SHEET M2.0. 7
- ö REMOVE EXISTING STEAM PIPING FROM EXISTING BOILER, B-1 TO STEAM HEADER
- Φ FLANGES CONNECTIONS FOR NEW BOILERS, B-1, B-2, B-3 AND B-4. CONSTRUCT NEW 5" STEEL HOT WATER PIPING HEADERS PER SHEET M2.1. PROVIDE BLIND
- CONSTRUCT NEW CONCRETE BOILER PUMP PADS PER SHEET M2.1 FOR ALL HOT WATER

### PALT+WAYTEK+ASSOCIATES MECHANICAL ENGINEERING & CONSULTING (S) (S)

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### ADDENDUM

BOILER REPLACEMENT PROJECT, BUILDING 571 FM# 1001198S/137-12, DWG.# 571-186

ADDENDUM TO SHEET M2.0, REFERENCE. NOTES ADDENDUM TO SHEETS M2.0 AND M2.1, BOILER DEMOLITION AND CONSTRUCTION SEQUENCE

DATE: 9-21-10

SHEET:

2 OF

# ADDENDUM TO SHEETS M2.0 AND M2.1, BOLLER DEMOLITION AND CONSTRUCTION SEQUENCE, CONTINUED.

- g, MOUNT NEW HOT WATER BOILERS B-3 AND B-4 ON EXSISTING PADS.
- INSTALL AND LEVEL NEW HOT WATER PUMPS, P-3 AND P-4 FOR NEW BOILERS B-3 AND B-4.
- CONSTRUCT PIPING SYSTEMS, FLOW METER, VALVES AND APPURTENANCES PER SHEET M2.1 TO CONNECTION NEW BOILERS B-3 AND B-4 TO EXISTING UNIVERSITY HOT WATER SYSTEM. CONNECT NEW FLUES FROM NEW BOILERS, B-3 AND B-4 TO MAIN BUILDING FLUE PER SHEET M2.1.
- CONNECT ELECTRICAL POWER, CONTROLS AND INTERFACE SYSTEM TO CAMPUS METASYS
- k. TEST PIPING SYSTEMS, INCLUDING NEW PUMPS, P-3 AND P-4.
- I. TEST ELECTRICAL AND CONTROL SYSTEMS.
- ₽ INFORM THE UNIVERSITY OF INTENT TO START NEW BOILERS, B-3 AND B-4.
- $_{
  m n}$ . WITH UNIVERSITY REVIEW, RUN TEST FOR NEW BOILERS, B-3 AND B-4.
- MAKE NECESSARY ADJUSTMENTS TO CONTROLS, NEW BOILERS AND SYSTEMS
- p. RUN NEW BOILERS, B-3 AND B-4 ON AUTOMATIC.
- FOLLOW SIMILAR DEMOLITION PROCEDURE FOR SECOND EXISTING STEAM BOILER B-2 NEW HOT WATER BOILERS B-3 AND B-4 ARE OPERATIONAL. AFTER

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Job no. 08008

### ADDENDUM

BOILER REPLACEMENT PROJECT, BUILDING 571 FM# 1001198S/137-12, DWG.# 571-186

ADDENDUM TO SHEETS M2.0 AND M2.1, BOILER DEMOLITION AND CONSTRUCTION SEQUENCE, CONT'D. ADDENDUM TO SPECIFICATION SECTION 15555

5	SHEET:	DATE: 9-21-10	JOB NO. 09006
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