

Facility Repair Proposal

Region: 4C
Fac ID: WV020
Date: 1/20/23

CSS # 88808
Maximo Work Order No.:

Asset ID: 6536

Original Work Request:
Boilers 1 & 3 are inoperable.

Description of Repairs Needed:
Labor and material to a.) install (2) Lochinvar FTX500 boilers with new boiler pumps b.) pipe the system to a true primary/secondary hydronic system for the new boilers design. c.) Provide the necessary piping, fittings and flue for the new boiler d.) insulate the new piping with fiberglass insulation e.) demo and properly dispose of the old boilers f.) drain and reuse the glycol from the hydronic loop g.) reconnect to the BAS system and reprogram for the new boilers

Parts List:

(2) Lochinvar FTX500 Boilers
Piping and fittings
Fiberglass insulation
Venting
Boiler Pumps

Equipment List:

Forklift

PM History:
11609

Cost Proposal:
See attached RS Means Estimate.

Total Cost: \$128,736.78

Estimate Name: CSS 88808 - WV020 Install Two Boilers

ESTIMATE INFORMATION

Client Name: 99
Estimate Address: 7605 US Route 19 North, Jane Lew, WV 26378
Type: Unit
Measurement System: US Standard
Notes:

COST DATA

Estimate Summary:

	Material	Labor	Equipment	Total*	
Base Total	\$ 17,951.84	\$ 23,211.74	\$ 2,428.18	\$ 59,014.46	
Total O&P	\$ 74,935.98	\$ 35,704.68	\$ 2,673.42	\$ 128,736.78	

*"Total" column values include the cost of Exception lines that may not be included in the Material, Labor and Equipment totals.

Catalog: Facilities and Commercial Renovation
Format: MasterFormat 2018
Release: Year 2022 Quarter 4
Labor Type: Repair & Remodeling
City Cost Index: WEST VIRGINIA / CLARKSBURG (263-264)

LEGEND

Line Source: U - User defined line item
A - Adjustment/Modifier
E - Exception lines

ESTIMATE

Quantity	LineNumber	Line Source	SubContracted Ind.	Description	Crew	Daily Output	Labor Hours	Unit	Material	Labor	Equipment	Total	Ext. Mat.	Ext. Labor	Ext. Equip.	Ext. Total	Mat. O&P	Labor O&P	Equip. O&P	Total O&P	Ext. Mat. O&P	Ext. Labor O&P	Ext. Equip. O&P	Ext. Total O&P	Labor Type	Notes
3.0	015433402055	U		Rent forklift,pnm tire,all terr,tele boom, 6600 lb, 29' reach, 42' lift, Incl. Hourly Oper. Cost.	A3P		0	0 Day	\$ -	\$ 334.32	\$ 628.04	\$ 962.36	\$ -	\$ 1,002.96	\$ 1,884.12	\$ 2,887.08	\$ -	\$ 497.56	\$ 690.84	\$ 1,188.40	\$ -	\$ 1,492.68	\$ 2,072.52	\$ 3,565.20	USER	
4.0	015436501300	U		Mobilization or demobilization, delivery charge for equipment, hauled on 3-ton capacity towed trailer	A3Q		0	0 Ea.	\$ -	\$ 155.10	\$ 89.11	\$ 244.21	\$ -	\$ 620.40	\$ 356.44	\$ 976.84	\$ -	\$ 241.26	\$ 98.49	\$ 339.75	\$ -	\$ 965.04	\$ 393.96	\$ 1,359.00	USER	Mob/demob of forklift Deliver new boilers to the facility Remove old boilers from facility for disposal
1.0	024119190700	E		Selective demolition, rubbish handling, dumpster, 10 C.Y., 3 ton capacity, weekly rental, includes one dump per week, cost to be added to demolition cost			0	0 Week	\$ 480.00	\$ -	\$ -	\$ 480.00	\$ 480.00	\$ -	\$ -	\$ 480.00	\$ 530.00	\$ -	\$ -	\$ 530.00	\$ 530.00	\$ -	\$ -	\$ 530.00	RR	
12.0	220719104524			Insulation, pipe fittings (price copper tube one size less than I.P.S.), cellular glass, all service jacket, sealant, 0 water vapor transmission, working temperature (-450 Deg.F to +900 Deg.F), 2" wall, 2-1/2" iron pipe size, includes fabric & mastic	ASBE		30	0.267 Ea.	\$ 47.84	\$ 15.59	\$ -	\$ 63.43	\$ 574.08	\$ 187.08	\$ -	\$ 761.16	\$ 52.68	\$ 24.59	\$ -	\$ 77.27	\$ 632.16	\$ 295.08	\$ -	\$ 927.24	RR	
200.0	220719105180			Insulation, pipe covering (price copper tube one size less than I.P.S.), calcium silicate, 1" wall, 2-1/2" iron pipe size, includes 8 oz. canvas cover	Q14		160	0.1 L.F.	\$ 6.67	\$ 5.29	\$ -	\$ 11.96	\$ 1,334.00	\$ 1,058.00	\$ -	\$ 2,392.00	\$ 7.31	\$ 8.31	\$ -	\$ 15.62	\$ 1,462.00	\$ 1,662.00	\$ -	\$ 3,124.00	RR	
200.0	221113440610			Pipe, steel, black, threaded, 2" diameter, schedule 40, Spec. A-53, includes coupling and clevis hanger assembly sized for covering, 10' OC	Q1		64	0.25 L.F.	\$ 8.70	\$ 14.59	\$ -	\$ 23.29	\$ 1,740.00	\$ 2,918.00	\$ -	\$ 4,658.00	\$ 9.58	\$ 22.30	\$ -	\$ 31.88	\$ 1,916.00	\$ 4,460.00	\$ -	\$ 6,376.00	RR	
6.0	221113473100			Elbow, 90 Deg., steel, carbon steel, black, long radius, butt weld, standard weight, 2" pipe size, includes 1 weld per joint and weld machine	Q15		10	1.6 Ea.	\$ 24.22	\$ 93.83	\$ 5.82	\$ 123.87	\$ 145.32	\$ 562.98	\$ 34.92	\$ 743.22	\$ 26.97	\$ 144.00	\$ 6.43	\$ 177.40	\$ 161.82	\$ 864.00	\$ 38.58	\$ 1,064.40	RR	
6.0	221113473260			Elbow, 45 Deg., steel, carbon steel, black, long radius, butt weld, standard weight, 2" pipe size, includes 1 weld per joint and weld machine	Q15		10	1.6 Ea.	\$ 23.67	\$ 93.83	\$ 5.82	\$ 123.32	\$ 142.02	\$ 562.98	\$ 34.92	\$ 739.92	\$ 26.42	\$ 144.00	\$ 6.43	\$ 176.85	\$ 158.52	\$ 864.00	\$ 38.58	\$ 1,061.10	RR	
6.0	221113473410			Tee, steel, carbon steel, black, straight, butt weld, standard weight, 2" pipe size, includes 1 weld per joint and weld machine	Q15		6	2.667 Ea.	\$ 53.95	\$ 156.07	\$ 9.71	\$ 219.73	\$ 323.70	\$ 936.42	\$ 58.26	\$ 1,318.38	\$ 58.90	\$ 239.68	\$ 10.69	\$ 309.27	\$ 353.40	\$ 1,438.08	\$ 64.14	\$ 1,855.62	RR	
6.0	221113473502			Cap, steel, carbon steel, black, butt weld, standard weight, 2" pipe size, includes 1 weld per joint and weld machine	Q15		22	0.727 Ea.	\$ 25.32	\$ 42.27	\$ 2.65	\$ 70.24	\$ 151.92	\$ 253.62	\$ 15.90	\$ 421.44	\$ 28.08	\$ 65.49	\$ 2.92	\$ 96.49	\$ 168.48	\$ 392.94	\$ 17.52	\$ 578.94	RR	
6.0	221113473570			Elbow, 90 Deg., steel, carbon steel, black, long, butt weld, extra strong, 2" pipe size, includes 1 weld per joint and weld machine	Q15		8	2 Ea.	\$ 29.18	\$ 117.05	\$ 7.27	\$ 153.50	\$ 175.08	\$ 702.30	\$ 43.62	\$ 921.00	\$ 32.48	\$ 180.23	\$ 8.02	\$ 220.73	\$ 194.88	\$ 1,081.38	\$ 48.12	\$ 1,324.38	RR	
4.0	230505100340	U		Boiler, gas and or oil or solid, up thru 150 MBH, selective demolition	Q7		0	0 Ea.	\$ -	\$ 904.80	\$ -	\$ 904.80	\$ -	\$ 3,619.20	\$ -	\$ 3,619.20	\$ -	\$ 1,392.00	\$ -	\$ 1,392.00	\$ -	\$ 5,568.00	\$ -	\$ 5,568.00	USER	Demo four existing boilers
4.0	230523805410			Valves, steel, forged, ball, threaded, 1,500 psi, 2"	PLUM		11	0.727 Ea.	\$ 413.88	\$ 47.33	\$ -	\$ 461.21	\$ 1,655.52	\$ 189.32	\$ -	\$ 1,844.84	\$ 456.88	\$ 72.85	\$ -	\$ 529.73	\$ 1,827.52	\$ 291.40	\$ -	\$ 2,118.92	RR	
4.0	230923108050	E		Control components/DDC system, applications software, basic maintenance manager software, excl. database entry			0	0 Ea.	\$ -	\$ -	\$ -	\$ 1,985.10	\$ -	\$ -	\$ -	\$ 7,940.40	\$ -	\$ -	\$ -	\$ 1,985.10	\$ -	\$ -	\$ -	\$ 7,940.40	RR	
6.0	230923108200	E		Control components/DDC system, applications software, boiler optimization			0	0 Ea.	\$ -	\$ -	\$ -	\$ 1,247.05	\$ -	\$ -	\$ -	\$ 7,482.30	\$ -	\$ -	\$ -	\$ 1,247.05	\$ -	\$ -	\$ -	\$ 7,482.30	RR	
4.0	232123133090			Pump, circulating, cast iron, high head, bronze impeller, flanged joints, 1-1/2 H.P., 2" size	Q1		4	4 Ea.	\$ 2,807.55	\$ 233.18	\$ -	\$ 3,040.73	\$ 11,230.20	\$ 932.72	\$ -	\$ 12,162.92	\$ 3,082.80	\$ 357.67	\$ -	\$ 3,440.47	\$ 12,331.20	\$ 1,430.68	\$ -	\$ 13,761.88	RR	
2.0	235223203220	U		Boiler, gas fired, natural or propane, Lochinvar Model FTX500 Condensing Boiler, 500 MBH	Q7		0	0 Ea.	\$ -	\$ 3,984.18	\$ -	\$ 3,984.18	\$ -	\$ 7,968.36	\$ -	\$ 7,968.36	\$ 27,600.00	\$ 6,129.50	\$ -	\$ 33,729.50	\$ 55,200.00	\$ 12,259.00	\$ -	\$ 67,459.00	USER	
2.0	235226409000	U		Boiler, oil fired, minimum labor/equipment charge	Q6		0	0 Job	\$ -	\$ 848.70	\$ -	\$ 848.70	\$ -	\$ 1,697.40	\$ -	\$ 1,697.40	\$ -	\$ 1,320.20	\$ -	\$ 1,320.20	\$ -	\$ 2,640.40	\$ -	\$ 2,640.40	USER	Drain boiler loop, reuse the glycol from the hydronic loop. Pipe system to true primary/secondary hydronic system for the new boilers design. Start up

Grand Total \$ 14,947.68 \$ 17,951.84 \$ 23,211.74 \$ 2,428.18 \$ 59,014.46 \$ 46,807.71 \$ 74,935.98 \$ 35,704.68 \$ 2,673.42 \$ 128,736.78

Boiler 1

