

FAC 2192 FACILITY ENGINEER MAINTENANCE FACILITY

FY24 SUC: \$11,815.89 / EA
Source: Calculated using R.S. Means CostWorks 2023 Qtr 4 component prices

FAC 2192 FACILITY ENGINEER MAINTENANCE FACILITY

SUC \$11,815.89

Release 2023 Qtr 4
Zip Code Prefix 222
Type MR

UM EA
Design Life 50
Average Size 1.0

Adjusted Occurrences are the occurrences remaining after subtracting Repair/Replacement Overlaps. Overlap reduction removes a repair when it occurs the same year as a replacement.

Description	Frequency	Qty Unit	Total In-House	Total Incl OP	Design Life/Frequency	Occurrences in Design Life	Adjusted Occurrences	Life Cost	Adjusted Cost
Repair 12' x 12' steel roll-up door	10	3.00 Ea.	\$2,103.35	\$2,499.67	5.0000	5	5	\$12,498.35	\$12,498.35
Replace 12' x 12' steel roll-up door	35	3.00 Ea.	\$8,413.39	\$9,998.68	1.4286	1	1	\$9,998.68	\$9,998.68
Debris removal by hand & visual inspection,modified bitum/thermoplastc	1	1.50 M.S.F.	\$60.78	\$74.13	50.0000	50	50	\$3,706.73	\$3,706.73
Minor thermoplastic membrane repairs, 2% of roof area	1	0.15 Sq.	\$48.68	\$58.13	50.0000	50	50	\$2,906.68	\$2,906.68
Membrane replacement-(25% of roof area),modified bitum/thermoplastic	20	4.00 Sq.	\$3,389.87	\$4,047.70	2.5000	2	2	\$8,095.40	\$8,095.40
Total roof replacement, modified bituminous / thermoplastic	25	15.00 Sq.	\$10,229.39	\$12,142.80	2.0000	2	2	\$24,285.60	\$24,285.60
Replace vinyl box gutter, 5" wide	20	160.00 L.F.	\$1,471.75	\$1,780.18	2.5000	2	2	\$3,560.36	\$3,560.36
Replace copper downspouts, 2" x 3", 16 oz.	40	80.00 L.F.	\$1,559.60	\$1,813.51	1.2500	1	1	\$1,813.51	\$1,813.51
Replace skylight and structure, double glazed, 30 to 65 S.F.	40	6.00 S.F.	\$388.30	\$445.73	1.2500	1	1	\$445.73	\$445.73
Repair solid core wood door, interior	11	2.00 Ea.	\$557.98	\$651.36	4.5455	4	4	\$2,605.46	\$2,605.46
Refinish 3'-0" x 7'-0" solid core wood door, interior	4	2.00 Ea.	\$88.03	\$108.48	12.5000	12	12	\$1,301.71	\$1,301.71
Replace faucet washer sink, iron enamel	2	1.00 Ea.	\$13.45	\$16.77	25.0000	25	25	\$419.23	\$419.23
Clean trap sink, iron enamel	3	1.00 Ea.	\$9.01	\$11.27	16.6667	16	16	\$180.39	\$180.39
Replace faucets sink, iron enamel	10	1.00 Ea.	\$195.47	\$235.12	5.0000	5	5	\$1,175.61	\$1,175.61
Unstop sink, iron enamel	2	1.00 Ea.	\$44.01	\$55.09	25.0000	25	25	\$1,377.35	\$1,377.35
Replace sink, P.E.C.I. sink, iron enamel laundry	35	1.00 Ea.	\$1,044.26	\$1,221.11	1.4286	1	1	\$1,221.11	\$1,221.11
Inspect and clean shower head emergency shower station	3	1.00 Ea.	\$51.54	\$64.51	16.6667	16	16	\$1,032.22	\$1,032.22
Replace shower emergency shower station	25	1.00 Ea.	\$1,053.08	\$1,259.15	2.0000	2	2	\$2,518.30	\$2,518.30
Inspect and clean spray heads, emergency eye wash	3	1.00 Ea.	\$51.54	\$64.51	16.6667	16	16	\$1,032.22	\$1,032.22
Replace eye wash station, emergency eye wash	25	1.00 Ea.	\$785.91	\$955.55	2.0000	2	2	\$1,911.10	\$1,911.10
Overhaul water heater, gas / oil, 30 gallon	5	1.00 Ea.	\$123.53	\$154.64	10.0000	10	10	\$1,546.39	\$1,546.39
Clean and service water heater, gas / oil, 30 gallon	1	1.00 Ea.	\$206.10	\$258.00	50.0000	50	50	\$12,900.02	\$12,900.02
Replace water heater, gas / oil, 30 gallon	10	1.00 Ea.	\$2,957.73	\$3,432.65	5.0000	5	5	\$17,163.26	\$17,163.26
Replace old valve with new hose bibb	10	1.00 Ea.	\$71.62	\$87.16	5.0000	5	5	\$435.80	\$435.80
Clean floor drain w/o bucket	4	2.00 Ea.	\$246.89	\$309.06	12.5000	12	12	\$3,708.76	\$3,708.76
Replace floor drain w/o bucket	40	2.00 Ea.	\$5,460.24	\$6,256.88	1.2500	1	1	\$6,256.88	\$6,256.88
Replace axial flow fan, 6400 CFM exhaust fan	10	2.00 Ea.	\$6,497.79	\$7,602.42	5.0000	5	5	\$38,012.11	\$38,012.11
Maintenance and repair explosionproof industrial heater	2	2.00 Ea.	\$424.73	\$496.34	25.0000	25	25	\$12,408.48	\$12,408.48
Maintenance and inspection explosionproof industrial heater	0.5	2.00 Ea.	\$164.64	\$206.27	100.0000	100	100	\$20,626.64	\$20,626.64

Description	Frequency	Qty Unit	Total In-House	Total Incl OP	Design Life/Frequency	Occurrences in Design Life	Adjusted Occurrences	Life Cost	Adjusted Cost	
Repair air conditioner, thru-the-wall, 2 ton	8	1.00 Ea.	\$113.23	\$138.85	6.2500	6	6	\$833.11	\$833.11	
Replace air conditioner, thru-the-wall, 2 ton	10	1.00 Ea.	\$3,209.62	\$3,694.54	5.0000	5	5	\$18,472.68	\$18,472.68	
Rebuild 4" diameter reduced pressure backflow preventer	10	1.00 Ea.	\$921.17	\$1,072.81	5.0000	5	5	\$5,364.06	\$5,364.06	
Inspect sprinkler system	1	1.00 Ea.	\$36.17	\$45.28	50.0000	50	50	\$2,264.22	\$2,264.22	
Replace sprinkler head	20	8.00 Ea.	\$701.18	\$865.22	2.5000	2	2	\$1,730.43	\$1,730.43	
Maintenance and repair rectifier, up to 600 V	2	1.00 Ea.	\$670.93	\$802.03	25.0000	25	23	\$20,050.76	\$18,446.69	
Replace rectifier, up to 600 V	20	1.00 Ea.	\$1,191.35	\$1,374.64	2.5000	2	2	\$2,749.29	\$2,749.29	
Maintenance and repair secondary transformer, dry	10	2.00 Ea.	\$508.21	\$607.25	5.0000	5	5	\$3,036.25	\$3,036.25	
Replace transformer 15 KVA	30	2.00 Ea.	\$6,282.87	\$7,514.80	1.6667	1	1	\$7,514.80	\$7,514.80	
Maintenance and inspection lighting panel, indoor	3	1.00 Ea.	\$42.34	\$53.05	16.6667	16	16	\$848.82	\$848.82	
Maintenance and repair breaker, molded case, 480 V, 1 pole	20	21.00 Ea.	\$1,592.65	\$1,995.36	2.5000	2	2	\$3,990.71	\$3,990.71	
Maintenance and repair breaker, molded case, 480 V, 2 pole	20	10.00 Ea.	\$758.40	\$950.17	2.5000	2	2	\$1,900.34	\$1,900.34	
Maintenance and repair safety switch general, 2 pole	8	1.00 Ea.	\$42.34	\$53.05	6.2500	6	6	\$318.31	\$318.31	
Replace metal halide ballast, 175 W	10	10.00 Ea.	\$1,668.87	\$1,997.64	5.0000	5	5	\$9,988.22	\$9,988.22	
Replace metal halide fixture lamp, 175 W	5	10.00 Ea.	\$570.97	\$694.92	10.0000	10	10	\$6,949.16	\$6,949.16	
Repair smoke detector	10	2.00 Ea.	\$116.02	\$143.67	5.0000	5	5	\$718.33	\$718.33	
Check operation smoke detector	1	2.00 Ea.	\$34.00	\$42.60	50.0000	50	50	\$2,129.96	\$2,129.96	
Repair heat detector	10	2.00 Ea.	\$125.21	\$154.10	5.0000	5	5	\$770.52	\$770.52	
Check operation heat detector	1	2.00 Ea.	\$34.00	\$42.60	50.0000	50	50	\$2,129.96	\$2,129.96	
Check and repair manual pull station	10	2.00 Ea.	\$179.77	\$221.49	5.0000	5	5	\$1,107.47	\$1,107.47	
Replace fire alarm bell, 6"	20	4.00 Ea.	\$722.42	\$879.09	2.5000	2	2	\$1,758.17	\$1,758.17	
Maintenance and repair building structure ground	7	1.00 M.L.F.	\$92.28	\$115.32	7.1429	7	7	\$807.25	\$807.25	
			\$67,326.68	\$79,765.39				MR Subtotal	\$288,972.83	
									MR Per Year	\$5,779.46
									PM Total	\$6,036.43
									Subtotal	\$11,815.89
									Total Per Unit	\$11,815.89

FAC 2192 FACILITY ENGINEER MAINTENANCE FACILITY

SUC \$11,815.89

Release 2023 Qtr 4

UM EA

Zip Code Prefix 222

Design Life 50

Type PM

Average Size 1.0

Description	Qty	Labor Hours	Bare Mat	Bare Labor	Bare Equip	Bare Total	Total In-House	Total Incl OP
Door, overhead, electric, roll up, to 24' high x 25' wide, annualized	3.00	12.21	\$129.23	\$539.90	\$0.00	\$669.13	\$844.03	\$1,025.38
Fan, axial, up to 5,000 CFM, annualized	4.00	4.98	\$33.19	\$266.83	\$0.00	\$300.03	\$383.39	\$468.42
Hood and blower, annualized	1.00	2.32	\$50.60	\$123.82	\$0.00	\$174.42	\$216.63	\$261.37
Unit heater, gas infrared, annualized	6.00	9.03	\$379.50	\$481.34	\$0.00	\$860.84	\$1,043.20	\$1,244.53
Air compressor, centrifugal, to 40 H.P., annualized	1.00	3.41	\$59.71	\$216.26	\$0.00	\$275.96	\$346.81	\$420.64
Backflow prevention device, up to 4", annualized	1.00	0.33	\$14.02	\$20.93	\$0.00	\$34.94	\$42.62	\$51.01
Extinguishing system, wet pipe, annualized	1.00	11.34	\$49.59	\$710.68	\$0.00	\$760.27	\$978.43	\$1,199.07
Crane, electric bridge, up to 5 ton, annualized	1.00	2.92	\$206.82	\$107.79	\$0.00	\$314.61	\$367.63	\$430.99
Transformer, dry type 500 KVA and over, annualized	1.00	0.77	\$13.83	\$53.61	\$0.00	\$67.44	\$84.91	\$103.07
Panelboard, 225 A and above, annualized	1.00	0.44	\$22.00	\$30.41	\$0.00	\$52.42	\$63.74	\$76.16
Light, emergency, dry cell, annualized	10.00	3.56	\$314.30	\$226.82	\$0.00	\$541.12	\$640.60	\$755.79
						\$4,051.19	\$5,011.99	\$6,036.43

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Modeled Component List CostWorks Release 2023 Qtr 4

B20 Exterior Enclosure	
Steel Single, Roll-Up	3.0 Ea.
B30 Roofing	
Modified Bituminous / Thermoplastic	15.0 Sq.
Vinyl Downspout, gutter, 5" wide	160.0 L.F.
D20 Plumbing	
Emergency Shower Station	1.0 Ea.
Emergency Eye Wash	1.0 Ea.
Water Heater, Gas / Oil, 30 Gallon	1.0 Ea.
Hose Bibb	1.0 Ea.
Floor Drain W/O Bucket	2.0 Ea.
D30 HVAC	
Exhaust Fan, axial flow, 6400 CFM	2.0 Ea.
Air Conditioner, Thru-the-Wall	1.0 Ea.
D40 Fire Protection	
Backflow Preventer	1.0 Ea.
Sprinkler System, Fire Supression, sprinkler head	8.0 Ea.
D50 Electrical	
Rectifier, Up To 600 V	1.0 Ea.
Secondary Transformer, Dry, 15 KVA	2.0 Ea.
Load Center, 100 A, maintenance & inspection	1.0 Ea.
Fire Alarm Bell	4.0 Ea.
E10 Equipment	
Crane, Electric, up to 5 ton, annualized	1.0 Each

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Sustainment by Year
CostWorks Release 2023 Qtr 4

