

FAC 3103 BIOSAFETY LEVEL 3 LABORATORY

FY22 SUC: \$16.38 / SF
Source: Calculated using R.S. Means CostWorks 2021 Qtr 3 component prices

FAC 3103 BIOSAFETY LEVEL 3 LABORATORY

SUC \$16.38

Release 2021 Qtr 3
Zip Code Prefix 222
Type MR

UM SF
Design Life 30
Average Size 7693.0

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 clay brick wall, 1st floor	25	105.60 S.F.	\$4,538.33	\$5,569.82	1.2000	1	1	\$5,569.82	\$5,569.82
Refinish steel louver, 1st floor	5	4.00 Ea.	\$388.15	\$481.62	6.0000	6	6	\$2,889.74	\$2,889.74
Replace glass - 1st floor (1% of glass) - alum. window fixed	1	5.40 S.F.	\$65.11	\$76.53	30.0000	30	30	\$2,295.80	\$2,295.80
Repair 2'-0" x 3'-0" aluminum window - 1st floor	20	36.00 Ea.	\$5,210.52	\$6,213.92	1.5000	1	1	\$6,213.92	\$6,213.92
Repair steel, painted, door	14	6.00 Ea.	\$3,750.45	\$4,464.03	2.1429	2	2	\$8,928.07	\$8,928.07
Refinish 3'-0" x 7'-0" steel, painted, door	4	6.00 Ea.	\$248.40	\$305.20	7.5000	7	7	\$2,136.38	\$2,136.38
Repair 12' x 12' steel roll-up door	10	1.00 Ea.	\$675.90	\$802.22	3.0000	3	3	\$2,406.65	\$2,406.65
Refinish 12' x 12' steel roll-up door	5	1.00 Ea.	\$203.45	\$249.19	6.0000	6	6	\$1,495.13	\$1,495.13
Replace brass door weatherstripping exterior	20	6.00 Ea.	\$1,455.68	\$1,771.33	1.5000	1	1	\$1,771.33	\$1,771.33
Total EPDM roof replacement	25	77.00 Sq.	\$46,543.04	\$55,208.56	1.2000	1	1	\$55,208.56	\$55,208.56
Replace aluminum downspout, 3" x 4", .024" thick	25	64.00 L.F.	\$506.73	\$613.48	1.2000	1	1	\$613.48	\$613.48
Repair 8" concrete block wall - (2% of walls) painted	25	14.90 C.S.F.	\$16,235.85	\$19,494.50	1.2000	1	1	\$19,494.50	\$19,494.50
Refinish concrete block wall painted	4	27.00 C.S.F.	\$2,724.80	\$3,317.98	7.5000	7	7	\$23,225.87	\$23,225.87
Replace glass block wall	75	0.36 C.S.F.	\$2,002.33	\$2,372.65	0.4000	0	0	\$0.00	\$0.00
Repair plate glass interior wall - (2% of total)	25	5.70 C.S.F.	\$65,913.57	\$75,705.92	1.2000	1	1	\$75,705.92	\$75,705.92
Repair steel painted interior door	14	16.00 Ea.	\$4,695.24	\$5,465.02	2.1429	2	2	\$10,930.05	\$10,930.05
Refinish 3'-0" x 7'-0" steel painted interior door	4	16.00 Ea.	\$841.36	\$1,036.58	7.5000	7	7	\$7,256.07	\$7,256.07
Safety glass replacement, (3% of glass) steel painted interior door	1	6.50 S.F.	\$117.12	\$139.60	30.0000	30	30	\$4,188.05	\$4,188.05
Repair solid core wood door, interior	11	9.00 Ea.	\$2,641.07	\$3,074.08	2.7273	2	2	\$6,148.15	\$6,148.15
Replace brass door closer	15	25.00 Ea.	\$5,696.25	\$6,700.64	2.0000	2	2	\$13,401.27	\$13,401.27
Replace shower stall, fiberglass, per stall	30	6.00 Ea.	\$6,667.99	\$7,766.96	1.0000	1	1	\$7,766.96	\$7,766.96
Repair medium weight vinyl wall covering - (2% of walls)	1	6.60 C.S.F.	\$1,794.38	\$2,135.18	30.0000	30	30	\$64,055.36	\$64,055.36
Repair fabric wall finish fabric interior	9	16.00 S.Y.	\$486.02	\$582.88	3.3333	3	3	\$1,748.64	\$1,748.64
Repair 5/8" drywall - (2% of walls)	20	233.00 S.F.	\$390.35	\$474.97	1.5000	1	1	\$474.97	\$474.97
Refinish drywall	4	3,520.00 S.F.	\$2,185.85	\$2,688.96	7.5000	7	7	\$18,822.75	\$18,822.75
Clean trap sink, iron enamel	3	6.00 Ea.	\$51.42	\$64.31	10.0000	10	10	\$643.11	\$643.11
Replace faucets sink, iron enamel	10	6.00 Ea.	\$1,090.36	\$1,312.53	3.0000	3	3	\$3,937.60	\$3,937.60
Unstop sink, iron enamel	2	6.00 Ea.	\$250.93	\$313.81	15.0000	15	15	\$4,707.21	\$4,707.21
Replace faucet washer sink, stainless steel	2	4.00 Ea.	\$51.11	\$63.66	15.0000	15	15	\$954.96	\$954.96
Clean trap sink, stainless steel	3	4.00 Ea.	\$34.28	\$42.87	10.0000	10	10	\$428.74	\$428.74
Replace faucets sink, stainless steel	10	4.00 Ea.	\$726.90	\$875.02	3.0000	3	3	\$2,625.06	\$2,625.06
Unstop sink, stainless steel	2	4.00 Ea.	\$167.29	\$209.21	15.0000	15	15	\$3,138.14	\$3,138.14
Replace faucet washer sink, laboratory	2	12.00 Ea.	\$153.32	\$190.99	15.0000	15	15	\$2,864.87	\$2,864.87
Replace faucets sink, laboratory	10	12.00 Ea.	\$2,180.71	\$2,625.06	3.0000	3	3	\$7,875.19	\$7,875.19

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Replace sink and fittings, polyethylene lab.	15	12.00 Ea.	\$27,004.71	\$31,485.38	2.0000	2	2	\$62,970.77	\$62,970.77
Check / minor repairs drinking fountain	1	5.00 Ea.	\$244.41	\$305.66	30.0000	30	30	\$9,169.89	\$9,169.89
Repair internal leaks drinking fountain	4	5.00 Ea.	\$225.40	\$281.89	7.5000	7	7	\$1,973.22	\$1,973.22
Correct water pressure drinking fountain	2	5.00 Ea.	\$209.11	\$261.51	15.0000	15	15	\$3,922.67	\$3,922.67
Replace refrigerant drinking fountain	2	5.00 Ea.	\$163.42	\$191.35	15.0000	15	15	\$2,870.19	\$2,870.19
Inspect and clean shower head emergency shower station	3	12.00 Ea.	\$592.71	\$741.25	10.0000	10	10	\$7,412.53	\$7,412.53
Replace shower emergency shower station	25	12.00 Ea.	\$11,303.59	\$13,549.38	1.2000	1	1	\$13,549.38	\$13,549.38
Inspect and clean spray heads, emergency eye wash	3	12.00 Ea.	\$592.71	\$741.25	10.0000	10	10	\$7,412.53	\$7,412.53
Replace eye wash station, emergency eye wash	25	12.00 Ea.	\$13,372.09	\$15,899.96	1.2000	1	1	\$15,899.96	\$15,899.96
Resolder joint pipe & fittings, copper	10	64.00 Ea.	\$2,853.96	\$3,537.88	3.0000	3	3	\$10,613.65	\$10,613.65
Replace pipe and fittings, copper 3/4"	20	763.00 L.F.	\$19,879.13	\$23,944.92	1.5000	1	1	\$23,944.92	\$23,944.92
Replace pipe and fittings, copper 1"	25	763.00 L.F.	\$23,248.63	\$27,892.26	1.2000	1	1	\$27,892.26	\$27,892.26
Replace threaded steel pipe and fittings, 3/4"	75	231.00 L.F.	\$4,528.70	\$5,567.66	0.4000	0	0	\$0.00	\$0.00
Remove old insulation & replace with new, pipe 3/4", wall 1"	15	231.00 L.F.	\$1,930.77	\$2,384.41	2.0000	2	2	\$4,768.82	\$4,768.82
Drain and flush water heater, electric, 120 gallon	7	3.00 Ea.	\$883.14	\$1,104.46	4.2857	4	4	\$4,417.85	\$4,417.85
Check operation water heater, electric, 120 gallon	3	3.00 Ea.	\$7.76	\$9.70	10.0000	10	10	\$97.00	\$97.00
Replace water heater, electric, 120 gallon	15	3.00 Ea.	\$43,897.73	\$50,210.67	2.0000	2	2	\$100,421.34	\$100,421.34
Refill expansion chamber	5	3.00 Ea.	\$8.60	\$10.76	6.0000	6	6	\$64.56	\$64.56
Remove old chamber, install new expansion chamber	10	3.00 Ea.	\$3,124.96	\$3,572.68	3.0000	3	3	\$10,718.04	\$10,718.04
Inspect/check pump/motor operation, lubricate circulation pump, bronze 1 HP	0.5	3.00 Ea.	\$24.08	\$30.12	60.0000	60	60	\$1,807.08	\$1,807.08
Replace pump / motor assembly circulation pump, bronze 1 HP	20	3.00 Ea.	\$17,305.44	\$19,841.37	1.5000	1	1	\$19,841.37	\$19,841.37
Replace old valve with new hose bibb	10	24.00 Ea.	\$1,495.32	\$1,830.73	3.0000	3	3	\$5,492.18	\$5,492.18
Overhaul water meter	13	1.00 Ea.	\$24.50	\$30.39	2.3077	2	2	\$60.78	\$60.78
Replace water softener	15	2.00 Ea.	\$3,066.69	\$3,615.43	2.0000	2	2	\$7,230.86	\$7,230.86
Unclog floor drain	10	14.00 Ea.	\$4,587.68	\$5,687.58	3.0000	3	3	\$17,062.75	\$17,062.75
Clean floor drain w/o bucket	4	14.00 Ea.	\$1,642.44	\$2,054.06	7.5000	7	7	\$14,378.39	\$14,378.39
General maintenance & repair distribution: gutters, pipe	1	0.19 M.L.F.	\$57.99	\$72.52	30.0000	30	30	\$2,175.73	\$2,175.73
Replace pipe or gutter distribution	20	154.00 L.F.	\$6,904.89	\$8,490.52	1.5000	1	1	\$8,490.52	\$8,490.52
General maintenance & repair drain: roof, scupper, area	1	6.00 Ea.	\$221.93	\$277.54	30.0000	30	30	\$8,326.26	\$8,326.26
Insp/chk pump/mtr oper, lub, chk align, rainwater sump pump	1	2.00 Ea.	\$23.90	\$29.89	30.0000	30	30	\$896.61	\$896.61
Replace rainwater sump pump / motor assembly	20	2.00 Ea.	\$1,264.86	\$1,494.18	1.5000	1	1	\$1,494.18	\$1,494.18

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General maintenance pipe & fittings, industrial gas	2	1.70 M.L.F.	\$62.79	\$78.52	15.0000	15	15	\$1,177.82	\$1,177.82
Resolder joint pipe & fittings, anesthesia	12	32.00 Ea.	\$1,753.40	\$2,161.71	2.5000	2	2	\$4,323.42	\$4,323.42
Replace pipe and fittings, anesthesia	25	452.00 L.F.	\$11,717.45	\$14,111.25	1.2000	1	1	\$14,111.25	\$14,111.25
Replace pipe and fittings, oxygen	25	452.00 L.F.	\$11,717.45	\$14,111.25	1.2000	1	1	\$14,111.25	\$14,111.25
General maintenance pipe & fittings, compressed air	2	1.70 M.L.F.	\$62.79	\$78.52	15.0000	15	15	\$1,177.82	\$1,177.82
Check and adjust 10 H.P. compressor	1	4.00 Ea.	\$338.66	\$423.53	30.0000	30	30	\$12,705.80	\$12,705.80
Replace 10 H.P. compressor	25	4.00 Ea.	\$41,706.79	\$48,982.58	1.2000	1	1	\$48,982.58	\$48,982.58
Replace 275 gallon fuel oil storage tank	30	1.00 Ea.	\$945.38	\$1,121.95	1.0000	1	1	\$1,121.95	\$1,121.95
Preventive maintenance fuel level meter	5	1.00 Ea.	\$36.93	\$46.19	6.0000	6	6	\$277.13	\$277.13
Preventive maintenance oil filter	1	2.00 Ea.	\$12.38	\$14.95	30.0000	30	30	\$448.59	\$448.59
Install new 2" gasket, 1 per M.L.F. natural gas, steel/iron	30	3.00 Ea.	\$386.48	\$479.89	1.0000	1	1	\$479.89	\$479.89
Check gas pressure natural gas, pressure reducing valve	5	2.00 Ea.	\$19.34	\$24.18	6.0000	6	6	\$145.09	\$145.09
Replace pressure regulator 1" diam. pipe natural gas	14	6.00 Ea.	\$1,098.04	\$1,290.12	2.1429	2	2	\$2,580.24	\$2,580.24
Repair boiler, gas, 250 MBH	7	2.00 Ea.	\$4,062.11	\$4,780.90	4.2857	4	4	\$19,123.60	\$19,123.60
Replace boiler, gas, 250 MBH	30	2.00 Ea.	\$18,796.09	\$22,420.25	1.0000	1	1	\$22,420.25	\$22,420.25
Repair feed water supply pump	15	1.00 Ea.	\$3,564.85	\$4,131.07	2.0000	2	2	\$8,262.14	\$8,262.14
Replace metal flue, all fuel SS, 10" diameter metal flue / chimney	15	48.00 L.F.	\$6,960.69	\$8,078.33	2.0000	2	2	\$16,156.65	\$16,156.65
Replace fan coil, DX 2 ton, with heat	15	8.00 Ea.	\$13,419.39	\$15,807.66	2.0000	2	2	\$31,615.32	\$31,615.32
Repair fan, induced draft, 6700 CFM	10	2.00 Ea.	\$605.49	\$739.06	3.0000	3	3	\$2,217.18	\$2,217.18
Replace fan, induced draft, 6700 CFM	20	2.00 Ea.	\$10,435.76	\$12,056.15	1.5000	1	1	\$12,056.15	\$12,056.15
Replace fan & motor, propeller exhaust, 375 CFM exhaust fan	15	12.00 Ea.	\$6,987.61	\$8,287.70	2.0000	2	2	\$16,575.41	\$16,575.41
Inspect for leaks steam converter, commercial	2	1.00 Ea.	\$6.85	\$8.57	15.0000	15	15	\$128.58	\$128.58
Repair flash tank 24 gallon	5	2.00 Ea.	\$879.88	\$1,100.39	6.0000	6	6	\$6,602.32	\$6,602.32
Replace flanged steel pipe and fittings, 2"	75	560.00 L.F.	\$32,242.56	\$39,064.68	0.4000	0	0	\$0.00	\$0.00
Replace gate valve, partial, 3/8" - 1-1/2" valves	20	25.00 Ea.	\$9,912.46	\$11,548.54	1.5000	1	1	\$11,548.54	\$11,548.54
Repair terminal reheat, 12" x 24" coil	10	4.00 Ea.	\$356.30	\$445.59	3.0000	3	2	\$1,336.77	\$891.18
Replace terminal reheat, 12" x 24" coil	15	4.00 Ea.	\$7,029.84	\$8,067.38	2.0000	2	2	\$16,134.76	\$16,134.76
Repair multi-zone rooftop unit, 15 ton	10	1.00 Ea.	\$31,640.78	\$36,535.86	3.0000	3	2	\$109,607.57	\$73,071.71
Replace multi-zone rooftop unit, 15 ton	15	1.00 Ea.	\$89,470.12	\$102,998.47	2.0000	2	2	\$205,996.94	\$205,996.94
Repair single zone rooftop unit, 10 ton	10	2.00 Ea.	\$43,100.14	\$49,851.50	3.0000	3	3	\$149,554.49	\$149,554.49
Replace single zone rooftop unit, 10 ton	15	2.00 Ea.	\$32,481.45	\$38,207.60	2.0000	2	2	\$76,415.19	\$76,415.19
Rebuild 4" diameter reduced pressure backflow preventer	10	2.00 Ea.	\$1,329.34	\$1,559.57	3.0000	3	3	\$4,678.70	\$4,678.70

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Inspect sprinkler system	1	1.00 Ea.	\$34.33	\$42.93	30.0000	30	30	\$1,287.86	\$1,287.86
Replace sprinkler head	20	156.00 Ea.	\$13,341.56	\$16,409.56	1.5000	1	1	\$16,409.56	\$16,409.56
Replace fire pump / electric motor assembly 100 H.P.	25	1.00 Ea.	\$44,139.08	\$50,910.34	1.2000	1	1	\$50,910.34	\$50,910.34
Repair 15 KV primary transformer, dry	15	1.00 Ea.	\$257.71	\$311.64	2.0000	2	2	\$623.28	\$623.28
Maintenance and inspection primary transformer, dry	0.5	1.00 Ea.	\$40.64	\$50.92	60.0000	60	60	\$3,055.29	\$3,055.29
Repair switchgear 1200 A mainframe	5	1.00 Ea.	\$1,904.54	\$2,227.57	6.0000	6	6	\$13,365.45	\$13,365.45
Maintenance and inspection switchgear, mainframe	1	1.00 Ea.	\$64.78	\$81.16	30.0000	30	30	\$2,434.68	\$2,434.68
Maintenance and inspection switchgear, indoor, less than 600 V	3	2.00 Ea.	\$81.29	\$101.84	10.0000	10	10	\$1,018.43	\$1,018.43
Repair switchboard meter	10	2.00 Ea.	\$3,137.79	\$3,660.37	3.0000	3	3	\$10,981.10	\$10,981.10
Maintenance and repair rectifier, up to 600 V	2	2.00 Ea.	\$1,373.59	\$1,636.36	15.0000	15	15	\$24,545.41	\$24,545.41
Maintenance and inspection lighting panel, indoor	3	6.00 Ea.	\$243.87	\$305.53	10.0000	10	10	\$3,055.29	\$3,055.29
Replace load center, 100 A	20	6.00 Ea.	\$6,564.99	\$8,021.26	1.5000	1	1	\$8,021.26	\$8,021.26
Replace wireway, 8" x 8"	20	264.00 L.F.	\$18,339.68	\$22,209.64	1.5000	1	1	\$22,209.64	\$22,209.64
Maintenance and repair breaker, molded case, 480 V, 1 pole	20	5.00 Ea.	\$358.81	\$449.54	1.5000	1	1	\$449.54	\$449.54
Maintenance and inspection circuit breaker, molded case, 480 V, 1 pole	0.5	5.00 Ea.	\$161.94	\$202.89	60.0000	60	60	\$12,173.41	\$12,173.41
Maintenance and repair breaker, molded case, 480 V, 3 pole	20	4.00 Ea.	\$287.05	\$359.63	1.5000	1	1	\$359.63	\$359.63
Maintenance and inspection circuit breaker, molded case, 480 V, 3 pole	0.5	4.00 Ea.	\$129.55	\$162.31	60.0000	60	60	\$9,738.73	\$9,738.73
Maintenance and inspection circuit breaker, molded case, 600 V, 3 pole	0.33	3.00 Ea.	\$97.17	\$121.73	90.9091	90	90	\$10,956.07	\$10,956.07
Maintenance and repair breaker, enclosed, 240 V, 1 pole	25	18.00 Ea.	\$1,291.73	\$1,618.35	1.2000	1	1	\$1,618.35	\$1,618.35
Maintenance and inspection circuit breaker, enclosed, 240 V, 1 pole	1	18.00 Ea.	\$582.99	\$730.40	30.0000	30	30	\$21,912.15	\$21,912.15
Maintenance and repair safety switch, 3 pole safety switch, heavy duty	8	2.00 Ea.	\$81.29	\$101.84	3.7500	3	3	\$305.53	\$305.53
Maintenance and repair safety switch general, 2 pole	8	6.00 Ea.	\$243.87	\$305.53	3.7500	3	3	\$916.59	\$916.59
Maintenance and repair receptacles and plugs	20	116.00 Ea.	\$4,900.24	\$6,117.68	1.5000	1	1	\$6,117.68	\$6,117.68
Maintenance and repair wiring devices, switches	10	42.00 Ea.	\$1,774.22	\$2,215.02	3.0000	3	3	\$6,645.06	\$6,645.06
Replace fluorescent light fixture ballast, 80 W	10	46.00 Ea.	\$5,734.75	\$6,956.91	3.0000	3	3	\$20,870.74	\$20,870.74
Replace smoke detector	15	18.00 Ea.	\$5,116.27	\$6,110.31	2.0000	2	2	\$12,220.63	\$12,220.63
Check and repair manual pull station	10	7.00 Ea.	\$613.88	\$754.81	3.0000	3	3	\$2,264.44	\$2,264.44
Minor repairs to annunciation panel	5	1.00 Ea.	\$149.71	\$182.27	6.0000	6	6	\$1,093.65	\$1,093.65
Replace fire alarm bell, 6"	20	8.00 Ea.	\$1,559.70	\$1,882.20	1.5000	1	1	\$1,882.20	\$1,882.20

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Replace EMS, Three Phase, 5 Meters	15	1.00 Ea.	\$15,802.46	\$18,399.79	2.0000	2	2	\$36,799.58	\$36,799.58
Replace EMS, Mech, BTU, 3 Meters, 3 Duct Sensors, 3 Space Sensors	20	1.00 Ea.	\$17,137.72	\$20,030.68	1.5000	1	1	\$20,030.68	\$20,030.68
Maintenance and repair electrical service ground	25	0.76 M.L.F.	\$66.80	\$83.44	1.2000	1	1	\$83.44	\$83.44
Replace electrical service ground	50	0.76 M.L.F.	\$2,863.15	\$3,522.39	0.6000	0	0	\$0.00	\$0.00
Maintenance and inspection generator, diesel, 750 KW	0.08	1.00 Ea.	\$64.78	\$81.16	375.0000	375	375	\$30,433.54	\$30,433.54
Replace diesel generator component, 750 KW	25	1.00 Ea.	\$227,966.93	\$261,102.57	1.2000	1	1	\$261,102.57	\$261,102.57
Maintenance and repair transfer switch	5	1.00 Ea.	\$357.05	\$430.82	6.0000	6	6	\$2,584.91	\$2,584.91
Replace transfer switch	18	1.00 Ea.	\$26,292.51	\$30,100.27	1.6667	1	1	\$30,100.27	\$30,100.27
Replace lamp emergency lighting fixture	2	7.00 Ea.	\$382.83	\$461.13	15.0000	15	15	\$6,916.94	\$6,916.94
Maintenance and repair exit light	20	7.00 Ea.	\$260.41	\$322.02	1.5000	1	1	\$322.02	\$322.02
Maintenance and inspection UPS battery	0.17	1.00 Ea.	\$64.78	\$81.16	176.4706	176	176	\$14,283.47	\$14,283.47
Replace motor generator UPS battery	15	1.00 Ea.	\$1,100.97	\$1,301.40	2.0000	2	2	\$2,602.81	\$2,602.81
Replace glove box gloves	5	12.00 Ea.	\$4,571.26	\$5,333.83	6.0000	6	6	\$32,002.98	\$32,002.98
Replace fume hood sash	20	12.00 Ea.	\$14,952.12	\$17,158.10	1.5000	1	1	\$17,158.10	\$17,158.10
Replace commercial dishwasher, 10 to 12 racks per hour	10	3.00 Ea.	\$15,868.58	\$18,333.20	3.0000	3	3	\$54,999.61	\$54,999.61
Remove and replace dishwasher pump	15	3.00 Ea.	\$3,895.97	\$4,457.56	2.0000	2	2	\$8,915.12	\$8,915.12
Remove and replace darkroom dryer fan	10	6.00 Ea.	\$2,135.52	\$2,471.42	3.0000	3	3	\$7,414.27	\$7,414.27
Remove and replace darkroom dryer heating element	15	6.00 Ea.	\$1,028.40	\$1,205.76	2.0000	2	2	\$2,411.52	\$2,411.52
Office painting, 10' x 12', 10' high walls	5	6.00 Ea.	\$1,325.92	\$1,626.38	6.0000	6	6	\$9,758.27	\$9,758.27
Repair 4" x 4" thin set ceramic tile - (2% of walls)	10	47.80 C.S.F.	\$39,240.96	\$47,286.66	3.0000	3	3	\$141,859.97	\$141,859.97
Replace epoxy flooring	15	43.50 C.S.F.	\$48,874.33	\$58,484.22	2.0000	2	2	\$116,968.43	\$116,968.43
Replace vinyl tile flooring	18	21.00 S.Y.	\$1,037.47	\$1,274.07	1.6667	1	1	\$1,274.07	\$1,274.07
Terrazzo floor repairs - (2% of floors)	15	640.00 S.F.	\$10,409.29	\$12,464.62	2.0000	2	2	\$24,929.25	\$24,929.25
Replace carpet	8	195.00 S.Y.	\$10,728.19	\$12,389.70	3.7500	3	3	\$37,169.09	\$37,169.09
Repair gypsum board ceiling - (2% of ceilings)	20	0.95 C.S.F.	\$344.07	\$422.39	1.5000	1	1	\$422.39	\$422.39
Refinish gypsum board ceiling, up to 12' high	20	17.60 C.S.F.	\$2,272.06	\$2,808.67	1.5000	1	1	\$2,808.67	\$2,808.67
Replace acoustic tile ceiling, fire-rated	20	3.20 C.S.F.	\$1,677.53	\$1,977.24	1.5000	1	1	\$1,977.24	\$1,977.24
Replace flush valve diaphragm tankless water closet	10	12.00 Ea.	\$314.64	\$390.43	3.0000	3	3	\$1,171.29	\$1,171.29
Rebuild flush valve tankless water closet	20	12.00 Ea.	\$2,165.21	\$2,609.49	1.5000	1	1	\$2,609.49	\$2,609.49
Unplug clogged line tankless water closet	5	12.00 Ea.	\$2,620.74	\$3,277.52	6.0000	6	6	\$19,665.13	\$19,665.13
Replace tankless flush valve	25	12.00 Ea.	\$3,026.58	\$3,553.33	1.2000	1	1	\$3,553.33	\$3,553.33
Replace flush valve diaphragm for a urinal	7	9.00 Ea.	\$235.98	\$292.82	4.2857	4	4	\$1,171.29	\$1,171.29
Rebuild flush valve for a urinal	20	9.00 Ea.	\$1,623.90	\$1,957.11	1.5000	1	1	\$1,957.11	\$1,957.11
Unplug line urinal	5	9.00 Ea.	\$1,305.65	\$1,632.85	6.0000	6	6	\$9,797.11	\$9,797.11

Description	Frequency	Qty Unit	Total In-House	Total Incl OP	Design Life/Frequency	Occurrences in Design Life	Adjusted Occurrences	Life Cost	Adjusted Cost	
Replace washer in spud connection lavatory, vitreous china	7	12.00 Ea.	\$197.55	\$240.96	4.2857	4	4	\$963.84	\$963.84	
Replace washer in faucet lavatory, vitreous china	2	12.00 Ea.	\$154.62	\$192.62	15.0000	15	15	\$2,889.33	\$2,889.33	
Replace faucets lavatory, vitreous china	10	12.00 Ea.	\$2,180.71	\$2,625.06	3.0000	3	3	\$7,875.19	\$7,875.19	
Clean out strainer and P trap lavatory, vitreous china	2	12.00 Ea.	\$418.43	\$523.29	15.0000	15	15	\$7,849.42	\$7,849.42	
Replace faucet washer sink, iron enamel	2	6.00 Ea.	\$76.66	\$95.50	15.0000	15	15	\$1,432.44	\$1,432.44	
			\$1,332,164.81	\$1,561,412.79				MR Subtotal	\$2,734,096.79	
									MR Per Year	\$90,977.20
									PM Total	\$35,047.04
									Subtotal	\$126,024.24
									Total Per Unit	\$16.38

FAC 3103 BIOSAFETY LEVEL 3 LABORATORY

SUC \$16.38

Release 2021 Qtr 3

UM SF

Zip Code Prefix 222

Design Life 30

Type PM

Average Size 7693.0

Description	Qty	Labor Hours	Bare Mat	Bare Labor	Bare Equip	Bare Total	Total In-House	Total Incl OP
Door, emergency egress, swinging, annually	6.00	0.39	\$29.25	\$16.12	\$0.00	\$45.37	\$53.13	\$62.36
Door, overhead, electric, roll up, to 24' high x 25' wide, annualized	1.00	4.07	\$40.96	\$168.81	\$0.00	\$209.77	\$264.51	\$321.30
Fire doors, swinging, annualized	4.00	1.57	\$57.28	\$58.23	\$0.00	\$115.52	\$138.71	\$164.77
Urinals, annualized	9.00	2.05	\$56.87	\$103.08	\$0.00	\$159.95	\$196.56	\$236.01
Toilet (vacuum breaker type), annualized	12.00	2.12	\$101.30	\$106.78	\$0.00	\$208.08	\$250.24	\$297.47
Lavatories, annualized	12.00	4.18	\$71.58	\$248.44	\$0.00	\$320.02	\$401.71	\$486.98
Showers, annually	6.00	0.34	\$77.34	\$20.40	\$0.00	\$97.75	\$111.60	\$129.32
Drink fountain, annualized	5.00	3.10	\$103.63	\$156.38	\$0.00	\$260.00	\$317.28	\$379.74
Valve, check, above 4", annually	12.00	3.08	\$70.37	\$155.41	\$0.00	\$225.77	\$279.43	\$336.61
Valve, ball, above 4", annualized	14.00	2.32	\$82.09	\$117.17	\$0.00	\$199.27	\$242.63	\$290.09
Valve, pressure relief, above 4", annually	6.00	0.89	\$33.67	\$44.67	\$0.00	\$78.33	\$95.10	\$113.55
Boiler, steam, oil, gas, or comb. fired, 120 to 500 MBH, annually	2.00	9.87	\$150.64	\$590.27	\$0.00	\$740.91	\$933.05	\$1,132.73
Deaerator tank, annualized	2.00	3.01	\$49.54	\$181.49	\$0.00	\$231.02	\$290.42	\$352.30
Pump, condensate return, over 1 H.P., annually	4.00	2.25	\$274.99	\$135.67	\$0.00	\$410.67	\$478.87	\$560.82
Air handling unit, over 50 tons, annualized	4.00	13.10	\$1,597.38	\$658.99	\$0.00	\$2,256.37	\$2,613.80	\$3,051.11
Fan coil unit, annualized	6.00	20.03	\$679.39	\$1,009.63	\$0.00	\$1,689.02	\$2,059.84	\$2,464.64
Air filter, electrostatic, annualized	6.00	45.61	\$60.96	\$2,299.41	\$0.00	\$2,360.37	\$3,056.29	\$3,755.26
VAV Boxes, annualized	8.00	7.47	\$76.84	\$451.07	\$0.00	\$527.91	\$670.91	\$817.76
Fire dampers, annualized	4.00	4.63	\$36.60	\$278.40	\$0.00	\$314.99	\$402.17	\$491.18
Fan, axial, 5,000 to 10,000 CFM, annually	2.00	1.29	\$49.54	\$65.19	\$0.00	\$114.73	\$139.25	\$166.23
Hood and blower, annualized	12.00	27.82	\$649.06	\$1,395.50	\$0.00	\$2,044.57	\$2,528.12	\$3,044.13
Heat exchanger, steam, annualized	2.00	1.85	\$45.49	\$93.39	\$0.00	\$138.88	\$171.45	\$206.29
Package unit, air cooled, 3 thru 24 ton, annually	4.00	4.00	\$432.71	\$239.63	\$0.00	\$672.34	\$787.50	\$924.30
Controls, central system, electro/pneumatic, annualized	1.00	1.92	\$70.77	\$115.41	\$0.00	\$186.18	\$227.88	\$273.12
Air compressor, gas engine powered, annualized	2.00	33.15	\$341.72	\$1,982.25	\$0.00	\$2,323.97	\$2,952.81	\$3,598.75
Steam humidification system, annualized	2.00	5.08	\$51.56	\$304.83	\$0.00	\$356.39	\$452.99	\$552.17
Dehumidifier, desiccant wheel, annualized	2.00	10.12	\$146.59	\$507.46	\$0.00	\$654.05	\$820.95	\$995.17
Extinguishing system, wet pipe, annualized	1.00	11.34	\$68.24	\$678.37	\$0.00	\$746.61	\$956.95	\$1,170.70
Fire pump, electric motor driven, annually	1.00	1.41	\$17.59	\$84.14	\$0.00	\$101.73	\$128.73	\$156.61
Switchboard, annualized	6.00	4.21	\$23.94	\$276.61	\$0.00	\$300.55	\$385.93	\$472.50
Circuit breaker, high voltage air, annually	2.00	0.94	\$30.31	\$62.16	\$0.00	\$92.47	\$114.15	\$137.35
Switch, automatic transfer, annually	1.00	0.44	\$15.16	\$29.53	\$0.00	\$44.68	\$55.06	\$66.19
Transformer, dry type 500 KVA and over, annually	1.00	0.77	\$15.16	\$50.76	\$0.00	\$65.92	\$82.66	\$100.17
Panelboard, 225 A and above, annually	8.00	3.53	\$185.58	\$232.06	\$0.00	\$417.64	\$505.82	\$603.28
Motor control center, over 400 A, annualized	4.00	1.56	\$92.79	\$103.60	\$0.00	\$196.39	\$236.75	\$281.75
Emergency diesel or gas generator, up to 15 KVA, annually	1.00	1.49	\$111.35	\$87.54	\$0.00	\$198.89	\$236.29	\$279.25
Uninterrupted power system, up to 200 KVA, annualized	1.00	22.92	\$280.43	\$1,346.80	\$0.00	\$1,627.23	\$2,059.32	\$2,505.42
Light, emergency, hardwired system, annually	9.00	1.12	\$52.89	\$66.67	\$0.00	\$119.56	\$144.85	\$172.78
Dishwasher, electric, annually	3.00	3.54	\$115.17	\$120.20	\$0.00	\$235.37	\$282.95	\$336.28
Oven, convection, gas / electric, annualized	4.00	44.97	\$165.02	\$1,530.88	\$0.00	\$1,695.90	\$2,171.67	\$2,655.69
Refrigerator display, walk-in w/ external condenser case, annualized	1.00	2.38	\$207.43	\$81.33	\$0.00	\$288.75	\$333.89	\$389.41
Refrigerated unit, display case, freezer w/ ext. condenser annualized	1.00	2.99	\$207.43	\$102.26	\$0.00	\$309.68	\$361.10	\$422.90
Vacuum, annualized	1.00	1.23	\$20.51	\$41.86	\$0.00	\$62.37	\$76.98	\$92.62
						\$23,445.96	\$29,070.32	\$35,047.04

FAC 3103 BIOSAFETY LEVEL 3 LABORATORY

Modeled Component List CostWorks Release 2021 Qtr 3

B30 Roofing	
EPDM Roof	77.0 Sq.
C10 Interior Construction	
Concrete Block, Painted	27.0 C.S.F.
Door Closer, Brass	25.0 Ea.
Fire Doors, Swinging, annualized	4.0 Each
D20 Plumbing	
Emergency Shower Station	12.0 Ea.
Emergency Eye Wash	12.0 Ea.
Water Heater, Electric, 120 Gallon	3.0 Ea.
Circulation Pump, Bronze 1 HP	3.0 Ea.
Hose Bibb	24.0 Ea.
Water Meter	1.0 Ea.
Rainwater Sump Pump	2.0 Ea.
Compressed Air Systems, Compressors, 10 H.P.	4.0 Ea.
D30 HVAC	
Fuel Oil Storage Tank, 275 Gallon	1.0 Ea.
Boiler, Gas, 250 MBH	2.0 Ea.
Fan Coil, DX Air Conditioner W/ Heat, 2 ton	8.0 Ea.
Draft Fan, 6700 CFM	2.0 Ea.
Exhaust Fan, propeller exh., 4700 CFM	12.0 Ea.
Terminal Reheat Coil, 12" x 24"	4.0 Ea.
Single Zone Air Conditioner, 10 ton	2.0 Ea.
VAV Box	8.0 Each
D40 Fire Protection	
Backflow Preventer	2.0 Ea.
Sprinkler System, Fire Supression, sprinkler head	156.0 Ea.
Fire Pump Electric Motor	1.0 Ea.
D50 Electrical	
Load Center, 100 A, maintenance & inspection	6.0 Ea.
Load Center, 100 A, replacement	6.0 Ea.
Smoke Detector	18.0 Ea.
Fire Alarm Bell	8.0 Ea.
Electrical Service Ground	0.76 M.L.F.
Generator, Diesel, 750 KW	1.0 Ea.
Transfer Switch	1.0 Ea.
UPS Battery, maintenance & inspection	1.0 Ea.
UPS Battery, replace motor	1.0 Ea.
UPS, up to 200 KVA, annualized	1.0 Each
E10 Equipment	
Dishwasher	3.0 Ea.
Refrigerator display, walk-in, annualized	1.0 Each
C30 Interior Finishes	
Epoxy Flooring	43.5 C.S.F.
Vinyl	21.0 S.Y.
Carpet	195.0 S.Y.
Acoustic Tile, fire-rated	3.2 C.S.F.

FAC 3103 BIOSAFETY LEVEL 3 LABORATORY
Sustainment by Year
CostWorks Release 2021 Qtr 3

