

**FAC 1714 RESERVE TRAINING FACILITY**

FY22 SUC: \$6.38 / SF  
Source: Calculated using R.S. Means CostWorks 2021 Qtr 3  
component prices

**FAC 1714 RESERVE TRAINING FACILITY**

**SUC \$6.38**

Release 2021 Qtr 3  
Zip Code Prefix 222  
Type MR

UM SF  
Design Life 55  
Average Size 20859.0

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 steel painted interior door	14	14.00 Ea.	\$4,108.33	\$4,781.90	3.9286	3	3	\$14,345.69	\$14,345.69
Refinish 3'-0" x 7'-0" steel painted interior door	4	14.00 Ea.	\$736.19	\$907.01	13.7500	13	13	\$11,791.11	\$11,791.11
Repair solid core wood door, interior	11	27.00 Ea.	\$7,923.21	\$9,222.23	5.0000	5	5	\$46,111.14	\$46,111.14
Refinish 3'-0" x 7'-0" solid core wood door, interior	4	27.00 Ea.	\$1,170.85	\$1,437.74	13.7500	13	12	\$18,690.63	\$17,252.89
Replace 3'-0" x 7'-0" solid core wood door, interior	40	27.00 Ea.	\$13,214.54	\$15,276.87	1.3750	1	1	\$15,276.87	\$15,276.87
Replace metal lockers, single tier	20	110.00 Ea.	\$37,362.01	\$43,223.04	2.7500	2	2	\$86,446.09	\$86,446.09
Refinish drywall	4	12,727.00 S.F.	\$7,903.23	\$9,722.28	13.7500	13	13	\$126,389.70	\$126,389.70
Repair 4" x 4" thin set ceramic tile - (2% of walls)	10	13.20 C.S.F.	\$10,836.42	\$13,058.24	5.5000	5	5	\$65,291.20	\$65,291.20
Refinish concrete floor finished	25	38.20 C.S.F.	\$16,113.80	\$19,355.19	2.2000	2	2	\$38,710.37	\$38,710.37
Replace vinyl tile flooring	18	350.22 S.Y.	\$17,302.09	\$21,247.86	3.0556	3	3	\$63,743.59	\$63,743.59
Terrazzo floor repairs - (2% of floors)	15	4.20 S.F.	\$68.31	\$81.80	3.6667	3	3	\$245.40	\$245.40
Replace carpet	8	428.00 S.Y.	\$23,546.99	\$27,193.79	6.8750	6	6	\$163,162.77	\$163,162.77
Acoustic tile repairs - (2% of ceilings)	9	2.40 C.S.F.	\$2,178.49	\$2,531.81	6.1111	6	6	\$15,190.87	\$15,190.87
Replace acoustic tile ceiling, non fire-rated	20	120.00 C.S.F.	\$52,758.70	\$62,550.71	2.7500	2	2	\$125,101.43	\$125,101.43
Replace flush valve diaphragm tankless water closet	10	15.00 Ea.	\$393.30	\$488.04	5.5000	5	5	\$2,440.19	\$2,440.19
Rebuild flush valve tankless water closet	20	15.00 Ea.	\$2,706.51	\$3,261.86	2.7500	2	2	\$6,523.72	\$6,523.72
Unplug clogged line tankless water closet	5	15.00 Ea.	\$3,275.93	\$4,096.90	11.0000	11	11	\$45,065.93	\$45,065.93
Replace tankless water closet	35	15.00 Ea.	\$19,293.32	\$22,327.43	1.5714	1	1	\$22,327.43	\$22,327.43
Replace tankless flush valve	25	15.00 Ea.	\$3,783.23	\$4,441.66	2.2000	2	2	\$8,883.31	\$8,883.31
Replace wax ring gasket for tankless water closet	5	15.00 Ea.	\$2,122.79	\$2,652.40	11.0000	11	11	\$29,176.36	\$29,176.36
Replace flush valve diaphragm for a urinal	7	8.00 Ea.	\$209.76	\$260.29	7.8571	7	7	\$1,822.01	\$1,822.01
Rebuild flush valve for a urinal	20	8.00 Ea.	\$1,443.47	\$1,739.66	2.7500	2	2	\$3,479.31	\$3,479.31
Unplug line urinal	5	8.00 Ea.	\$1,160.57	\$1,451.42	11.0000	11	11	\$15,965.66	\$15,965.66
Replace wall-hung urinal	35	8.00 Ea.	\$7,750.90	\$9,352.85	1.5714	1	1	\$9,352.85	\$9,352.85
Replace washer in spud connection lavatory, vitreous china	7	20.00 Ea.	\$329.25	\$401.60	7.8571	7	7	\$2,811.20	\$2,811.20
Replace washer in faucet lavatory, vitreous china	2	20.00 Ea.	\$257.70	\$321.04	27.5000	27	27	\$8,667.98	\$8,667.98
Replace faucets lavatory, vitreous china	10	20.00 Ea.	\$3,634.52	\$4,375.11	5.5000	5	5	\$21,875.54	\$21,875.54
Clean out strainer and P trap lavatory, vitreous china	2	20.00 Ea.	\$697.39	\$872.16	27.5000	27	27	\$23,548.27	\$23,548.27
Replace lavatory, vitreous china	35	20.00 Ea.	\$13,451.49	\$16,164.42	1.5714	1	1	\$16,164.42	\$16,164.42
Replace faucet washer sink, service/utility	2	4.00 Ea.	\$51.11	\$63.66	27.5000	27	27	\$1,718.92	\$1,718.92
Clean trap	3	4.00 Ea.	\$34.28	\$42.87	18.3333	18	18	\$771.74	\$771.74
Replace faucets sink, service/utility	10	4.00 Ea.	\$726.90	\$875.02	5.5000	5	5	\$4,375.11	\$4,375.11

Description	Frequency	Qty Unit	Total In-House	Total Incl OP	Design Life/Frequency	Occurrences in Design Life	Adjusted Occurrences	Life Cost	Adjusted Cost
Unstop sink	2	4.00 Ea.	\$167.29	\$209.21	27.5000	27	27	\$5,648.65	\$5,648.65
Replace sink, P.E.C.I. service/utility	35	4.00 Ea.	\$6,268.99	\$7,331.85	1.5714	1	1	\$7,331.85	\$7,331.85
Inspect / clean shower head shower, terrazzo	3	12.00 Ea.	\$592.71	\$741.25	18.3333	18	18	\$13,342.55	\$13,342.55
Replace mixing valve barrel shower, terrazzo	2	12.00 Ea.	\$3,391.09	\$3,987.83	27.5000	27	27	\$107,671.48	\$107,671.48
Replace mixing valve shower, terrazzo	10	12.00 Ea.	\$3,310.59	\$4,026.66	5.5000	5	5	\$20,133.31	\$20,133.31
Replace terrazzo shower surface	30	12.00 Ea.	\$15,528.53	\$18,697.44	1.8333	1	1	\$18,697.44	\$18,697.44
Check / minor repairs drinking fountain	1	2.00 Ea.	\$97.76	\$122.27	55.0000	55	55	\$6,724.58	\$6,724.58
Repair internal leaks drinking fountain	4	2.00 Ea.	\$90.16	\$112.76	13.7500	13	13	\$1,465.82	\$1,465.82
Replace refrigerant drinking fountain	2	2.00 Ea.	\$65.37	\$76.54	27.5000	27	27	\$2,066.54	\$2,066.54
Repair drain leak drinking fountain	4	2.00 Ea.	\$67.83	\$81.07	13.7500	13	11	\$1,053.90	\$891.76
Replace fountain drinking fountain	10	2.00 Ea.	\$2,562.31	\$3,029.12	5.5000	5	5	\$15,145.59	\$15,145.59
Inspect for leaks steam converter, domestic hot water	1	2.00 Ea.	\$13.53	\$16.93	55.0000	55	55	\$930.98	\$930.98
Replace steam converter, domestic hot water	20	2.00 Ea.	\$7,000.31	\$8,036.80	2.7500	2	2	\$16,073.60	\$16,073.60
Replace storage tank, glass lined, P.E., 80 gal.	50	2.00 Ea.	\$9,540.22	\$10,870.20	1.1000	1	1	\$10,870.20	\$10,870.20
Inspect / check pump / motor operation, lubricate circulation pump, 1/12 HP	0.5	2.00 Ea.	\$16.06	\$20.08	110.0000	110	110	\$2,208.65	\$2,208.65
Replace pump / motor assembly circulation pump, 1/12 HP	10	2.00 Ea.	\$2,201.15	\$2,579.99	5.5000	5	5	\$12,899.95	\$12,899.95
Replace pipe or gutter distribution	20	330.00 L.F.	\$14,796.19	\$18,193.98	2.7500	2	2	\$36,387.96	\$36,387.96
General maintenance & repair drain: roof, scupper, area	1	8.00 Ea.	\$295.90	\$370.06	55.0000	55	55	\$20,353.08	\$20,353.08
Replace drain: roof, scupper, area	40	8.00 Ea.	\$6,295.46	\$7,298.88	1.3750	1	1	\$7,298.88	\$7,298.88
Repair boiler, gas, 250 MBH	7	2.00 Ea.	\$4,062.11	\$4,780.90	7.8571	7	7	\$33,466.31	\$33,466.31
Replace boiler, gas, 250 MBH	30	2.00 Ea.	\$18,796.09	\$22,420.25	1.8333	1	1	\$22,420.25	\$22,420.25
Repair cooling tower, 50 ton	10	1.00 Ea.	\$1,244.67	\$1,481.97	5.5000	5	4	\$7,409.84	\$5,927.87
Replace cooling tower, 50 ton	15	1.00 Ea.	\$16,033.09	\$18,465.51	3.6667	3	3	\$55,396.53	\$55,396.53
Repair reciprocating chiller, air cooled, 50 ton	10	1.00 Ea.	\$57,771.66	\$67,630.76	5.5000	5	5	\$338,153.79	\$338,153.79
Replace chiller, air cooled, 50 ton	20	1.00 Ea.	\$64,270.84	\$74,812.79	2.7500	2	2	\$149,625.58	\$149,625.58
Replace roof mounted exhaust fan, 8500 CFM exhaust fan	20	2.00 Ea.	\$7,879.67	\$9,146.83	2.7500	2	2	\$18,293.66	\$18,293.66
Repair circulator pump, 1/12 - 3/4 H.P.	5	3.00 Ea.	\$294.40	\$347.19	11.0000	11	8	\$3,819.13	\$2,777.55
Replace circulator pump, 1/12 - 3/4 H.P.	15	3.00 Ea.	\$11,466.91	\$13,206.68	3.6667	3	3	\$39,620.05	\$39,620.05
Repair terminal reheat, 36" x 36" coil	10	6.00 Ea.	\$977.65	\$1,222.65	5.5000	5	5	\$6,113.26	\$6,113.26
Replace terminal reheat, 36" x 36" coil	15	6.00 Ea.	\$20,654.80	\$24,001.52	3.6667	3	3	\$72,004.56	\$72,004.56
Repair single zone rooftop unit, 25 ton	10	2.00 Ea.	\$94,794.84	\$109,247.10	5.5000	5	4	\$546,235.50	\$436,988.40
Replace single zone rooftop unit, 25 ton	15	2.00 Ea.	\$102,686.34	\$119,171.04	3.6667	3	3	\$357,513.12	\$357,513.12

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Repair central station A.H.U., 5400 CFM	10	1.00 Ea.	\$827.08	\$970.82	5.5000	5	4	\$4,854.11	\$3,883.28
Replace central station A.H.U., 5400 CFM	15	1.00 Ea.	\$23,424.06	\$27,083.63	3.6667	3	3	\$81,250.90	\$81,250.90
Inspect sprinkler system	1	1.00 Ea.	\$34.33	\$42.93	55.0000	55	55	\$2,361.08	\$2,361.08
Replace sprinkler head	20	104.00 Ea.	\$8,894.37	\$10,939.71	2.7500	2	2	\$21,879.42	\$21,879.42
Maintenance and repair motor starter, up to 600 V	5	7.00 Ea.	\$1,957.47	\$2,363.19	11.0000	11	11	\$25,995.05	\$25,995.05
Replace starter motor starter, up to 600 V	18	7.00 Ea.	\$5,637.18	\$6,706.52	3.0556	3	3	\$20,119.56	\$20,119.56
Replace transformer 112.5 KVA	30	1.00 Ea.	\$8,947.19	\$10,428.10	1.8333	1	1	\$10,428.10	\$10,428.10
Maintenance and inspection lighting panel, indoor	3	15.00 Ea.	\$609.67	\$763.82	18.3333	18	18	\$13,748.80	\$13,748.80
Maintenance and repair breaker, molded case, 480 V, 1 pole	20	15.00 Ea.	\$1,076.44	\$1,348.62	2.7500	2	2	\$2,697.25	\$2,697.25
Replace circuit breaker molded case, 480 V, 1 pole circuit breaker	50	15.00 Ea.	\$8,224.33	\$9,580.58	1.1000	1	1	\$9,580.58	\$9,580.58
Replace fluorescent light fixture ballast, 80 W	10	112.00 Ea.	\$13,962.87	\$16,938.57	5.5000	5	5	\$84,692.85	\$84,692.85
Replace lamps (2 lamps), 4', 34 W energy saver	10	355.00 Ea.	\$8,950.98	\$11,210.52	5.5000	5	5	\$56,052.61	\$56,052.61
Replace fluorescent lighting fixture, strip, surface mtd, 8', two 75 W	20	79.00 Ea.	\$17,399.59	\$21,042.48	2.7500	2	2	\$42,084.96	\$42,084.96
Replace fluorescent lighting fixture, strip, pendent mtd, 8', two 75 W	20	79.00 Ea.	\$24,618.86	\$29,789.73	2.7500	2	2	\$59,579.45	\$59,579.45
Replace metal halide ballast, 175 W	10	32.00 Ea.	\$4,751.51	\$5,705.63	5.5000	5	5	\$28,528.16	\$28,528.16
Replace metal halide fixture lamp, 175 W	5	32.00 Ea.	\$1,599.59	\$1,956.92	11.0000	11	11	\$21,526.09	\$21,526.09
Repair smoke detector	10	35.00 Ea.	\$1,973.57	\$2,439.99	5.5000	5	4	\$12,199.96	\$9,759.97
Check operation smoke detector	1	35.00 Ea.	\$566.80	\$710.12	55.0000	55	55	\$39,056.37	\$39,056.37
Replace smoke detector	15	35.00 Ea.	\$9,948.31	\$11,881.17	3.6667	3	3	\$35,643.50	\$35,643.50
Repair heat detector	10	26.00 Ea.	\$1,595.82	\$1,960.00	5.5000	5	5	\$9,799.99	\$9,799.99
Check operation heat detector	1	26.00 Ea.	\$421.05	\$527.51	55.0000	55	55	\$29,013.30	\$29,013.30
Replace heat detector	15	26.00 Ea.	\$4,445.07	\$5,435.06	3.6667	3	3	\$16,305.18	\$16,305.18
Check and repair manual pull station	10	6.00 Ea.	\$526.18	\$646.98	5.5000	5	4	\$3,234.91	\$2,587.93
Replace manual pull station	15	6.00 Ea.	\$1,220.81	\$1,469.65	3.6667	3	3	\$4,408.94	\$4,408.94
Minor repairs to fire alarm control panel	5	1.00 Ea.	\$149.71	\$182.27	11.0000	11	11	\$2,005.02	\$2,005.02
Replace fire alarm control panel	15	1.00 Ea.	\$1,953.46	\$2,391.92	3.6667	3	3	\$7,175.76	\$7,175.76
Minor repairs to annunciation panel	5	1.00 Ea.	\$149.71	\$182.27	11.0000	11	11	\$2,005.02	\$2,005.02
Maintenance and inspection annunciation panel	0.5	1.00 Ea.	\$43.18	\$54.10	110.0000	110	110	\$5,951.45	\$5,951.45
Replace annunciation panel	15	1.00 Ea.	\$1,126.52	\$1,354.55	3.6667	3	3	\$4,063.66	\$4,063.66
Replace fire alarm bell, 6"	20	8.00 Ea.	\$1,559.70	\$1,882.20	2.7500	2	2	\$3,764.41	\$3,764.41
Maintenance and repair of general wiring lightning protection system	1	2.20 M.L.F.	\$212.79	\$263.62	55.0000	55	55	\$14,499.01	\$14,499.01
Replace lightning protection general wiring system	25	2.20 M.L.F.	\$24,220.07	\$28,811.18	2.2000	2	2	\$57,622.36	\$57,622.36
Maintenance and repair lightning ground rod	1	8.00 Ea.	\$703.11	\$878.30	55.0000	55	53	\$48,306.35	\$46,549.75
Replace lightning ground rod	25	8.00 Ea.	\$1,808.72	\$2,242.32	2.2000	2	2	\$4,484.65	\$4,484.65

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Replace computer ground system	50	1.00 M.L.F.	\$1,865.81	\$2,278.85	1.1000	1	1	\$2,278.85	\$2,278.85
Maintenance and inspection generator, diesel, 750 KW	0.08	1.00 Ea.	\$64.78	\$81.16	687.5000	687	687	\$55,754.24	\$55,754.24
Replace diesel generator component, 750 KW	25	1.00 Ea.	\$227,966.93	\$261,102.57	2.2000	2	2	\$522,205.15	\$522,205.15
Maintenance and repair transfer switch	5	1.00 Ea.	\$357.05	\$430.82	11.0000	11	11	\$4,739.00	\$4,739.00
Maintenance and inspection transfer switch	0.5	2.00 Ea.	\$81.29	\$101.84	110.0000	110	110	\$11,202.72	\$11,202.72
Replace transfers switch	18	2.00 Ea.	\$52,585.01	\$60,200.55	3.0556	3	3	\$180,601.64	\$180,601.64
Replace lamp emergency lighting fixture	2	20.00 Ea.	\$1,093.79	\$1,317.51	27.5000	27	27	\$35,572.86	\$35,572.86
Replace emergency lighting fixture	20	20.00 Ea.	\$12,047.36	\$14,195.23	2.7500	2	2	\$28,390.46	\$28,390.46
Maintenance and repair exit light	20	6.00 Ea.	\$223.21	\$276.02	2.7500	2	2	\$552.04	\$552.04
Replace lamp exit light	5	6.00 Ea.	\$101.08	\$119.78	11.0000	11	11	\$1,317.59	\$1,317.59
Replace lighting fixture exit light	20	6.00 Ea.	\$1,146.21	\$1,378.56	2.7500	2	2	\$2,757.13	\$2,757.13
Replace commercial dishwasher, 10 to 12 racks per hour	10	2.00 Ea.	\$10,579.05	\$12,222.14	5.5000	5	5	\$61,110.68	\$61,110.68
Remove and replace dishwasher pump	15	2.00 Ea.	\$2,597.31	\$2,971.71	3.6667	3	3	\$8,915.12	\$8,915.12
Minor chain link fence repairs, per 10 LF	1	12.00 Ea.	\$323.70	\$398.20	55.0000	55	55	\$21,900.89	\$21,900.89
Minor repairs to concrete floor unfinished	15	340.00 S.F.	\$13,392.07	\$16,243.07	3.6667	3	3	\$48,729.22	\$48,729.22
Refinish metal hand rail	7	12.00 L.F.	\$24.76	\$30.51	7.8571	7	7	\$213.59	\$213.59
Repair 8" concrete block wall, 1st floor	25	3,400.00 S.F.	\$82,330.38	\$100,718.98	2.2000	2	2	\$201,437.96	\$201,437.96
Waterproof concrete block wall, 1st floor	10	65.00 C.S.F.	\$14,755.17	\$17,550.54	5.5000	5	5	\$87,752.72	\$87,752.72
Repair clay brick wall, 1st floor	25	2,200.00 S.F.	\$94,548.55	\$116,037.83	2.2000	2	2	\$232,075.65	\$232,075.65
Point clay brick wall, 1st floor	25	32.00 C.S.F.	\$25,859.65	\$31,909.99	2.2000	2	2	\$63,819.98	\$63,819.98
Replace glass - 2nd floor (1% of glass) - steel frame window	1	6.80 S.F.	\$722.12	\$891.28	55.0000	55	55	\$49,020.40	\$49,020.40
Repair 3'-9" x 5'-5" steel frame window - 2nd floor.	20	24.00 Ea.	\$8,277.27	\$9,798.36	2.7500	2	2	\$19,596.72	\$19,596.72
Replace 3'-9" x 5'-5" steel frame window - 2nd floor.	45	24.00 Ea.	\$40,882.58	\$47,174.82	1.2222	1	1	\$47,174.82	\$47,174.82
Replace glass - 1st floor. (1% of glass) - alum. window	1	0.96 S.F.	\$11.58	\$13.60	55.0000	55	55	\$748.26	\$748.26
Repair 2'-0" x 3'-0" aluminum window - 1st floor	20	40.00 Ea.	\$5,789.47	\$6,904.36	2.7500	2	2	\$13,808.72	\$13,808.72
Replace 2'-0" x 3'-0" aluminum window - 1st floor	50	40.00 Ea.	\$19,525.27	\$23,140.97	1.1000	1	1	\$23,140.97	\$23,140.97
Repair aluminum storefront door	12	2.00 Ea.	\$926.84	\$1,109.03	4.5833	4	4	\$4,436.12	\$4,436.12
Replace 3'-0" x 7'-0" aluminum storefront doors	50	2.00 Ea.	\$4,091.53	\$4,838.20	1.1000	1	1	\$4,838.20	\$4,838.20
Replace insulating glass - (3% of glass) aluminum storefront door	1	2.50 S.F.	\$129.73	\$151.75	55.0000	55	55	\$8,346.11	\$8,346.11
Repair aluminum frame and door	12	3.00 Ea.	\$1,875.22	\$2,232.02	4.5833	4	4	\$8,928.07	\$8,928.07
Replace 3'-0" x 7'-0" aluminum door, including vision lite	50	3.00 Ea.	\$5,632.74	\$6,465.79	1.1000	1	1	\$6,465.79	\$6,465.79
Repair steel, painted, door	14	3.00 Ea.	\$1,875.22	\$2,232.02	3.9286	3	3	\$6,696.05	\$6,696.05
Refinish 3'-0" x 7'-0" steel, painted, door	4	4.00 Ea.	\$165.60	\$203.46	13.7500	13	13	\$2,645.04	\$2,645.04
Replace 3'-0" x 7'-0" steel, painted, door	45	4.00 Ea.	\$2,820.26	\$3,278.92	1.2222	1	1	\$3,278.92	\$3,278.92

Description	Frequency	Qty Unit	Total In-House	Total Incl OP	Design Life/Frequency	Occurrences in Design Life	Adjusted Occurrences	Life Cost	Adjusted Cost	
Repair steel, insulated core, painted door	14	2.00 Ea.	\$1,163.21	\$1,387.36	3.9286	3	3	\$4,162.07	\$4,162.07	
Refinish 3'-0" x 7'-0" steel, insulated core, painted door	4	2.00 Ea.	\$160.16	\$198.00	13.7500	13	13	\$2,574.05	\$2,574.05	
Replace 3'-0" x 7'-0" steel, insulated core, door	45	2.00 Ea.	\$2,338.13	\$2,730.45	1.2222	1	1	\$2,730.45	\$2,730.45	
Repair 12' x 12' steel roll-up door	10	2.00 Ea.	\$1,351.79	\$1,604.43	5.5000	5	5	\$8,022.17	\$8,022.17	
Replace 12' x 12' steel roll-up door	35	2.00 Ea.	\$5,407.17	\$6,417.73	1.5714	1	1	\$6,417.73	\$6,417.73	
Replace door panic device	25	8.00 Ea.	\$9,579.22	\$10,997.64	2.2000	2	2	\$21,995.28	\$21,995.28	
Repair metal wire mesh door	15	2.00 Ea.	\$1,075.05	\$1,327.87	3.6667	3	3	\$3,983.60	\$3,983.60	
Debris removal and visual inspection of built-up roofing	0.5	19.00 M.S.F.	\$715.53	\$872.74	110.0000	110	110	\$96,000.99	\$96,000.99	
Minor BUR membrane repairs, 2% of roof area	1	0.40 Sq.	\$193.65	\$229.80	55.0000	55	55	\$12,639.23	\$12,639.23	
BUR flashing repairs, 2 S.F. per sq. repaired	1	24.00 S.F.	\$83.99	\$101.97	55.0000	55	55	\$5,608.56	\$5,608.56	
Total BUR roof replacement	28	190.00 Sq.	\$148,133.51	\$175,176.65	1.9643	1	1	\$175,176.65	\$175,176.65	
Replace aluminum gutter, enameled, 5" K type, .027 " thick	40	520.00 L.F.	\$4,989.82	\$6,028.67	1.3750	1	1	\$6,028.67	\$6,028.67	
Replace aluminum downspout, 3" x 4", .024" thick	25	123.00 L.F.	\$973.88	\$1,179.04	2.2000	2	2	\$2,358.08	\$2,358.08	
Repair glass skylight glazing single unit	6	140.00 S.F.	\$8,784.04	\$10,360.40	9.1667	9	9	\$93,243.61	\$93,243.61	
Replace galvanized smoke hatch single unit 4' x 4'	40	6.00 Ea.	\$13,168.72	\$15,104.56	1.3750	1	1	\$15,104.56	\$15,104.56	
			\$1,746,106.59	\$2,057,419.72				MR Subtotal	\$5,864,074.66	
									MR Per Year	\$106,532.61
									PM Total	\$26,651.50
									Subtotal	\$133,184.11
									Total Per Unit	\$6.38

**FAC 1714 RESERVE TRAINING FACILITY**

SUC \$6.38

Release 2021 Qtr 3

UM SF

Zip Code Prefix 222

Design Life 55

Type PM

Average Size 20859.0

Description	Qty	Labor Hours	Bare Mat	Bare Labor	Bare Equip	Bare Total	Total In-House	Total Incl OP
Door, emergency egress, swinging, annualized	4.00	1.04	\$58.37	\$43.00	\$0.00	\$101.37	\$120.10	\$141.76
Door, overhead, manual, up to 24' high x 25' wide, annualized	2.00	4.39	\$23.76	\$181.68	\$0.00	\$205.44	\$262.32	\$320.38
Fire doors, swinging, annualized	6.00	2.35	\$85.93	\$87.34	\$0.00	\$173.27	\$208.07	\$247.16
Urinals, annualized	8.00	1.82	\$50.55	\$91.62	\$0.00	\$142.17	\$174.72	\$209.79
Toilet (vacuum breaker type), annualized	15.00	2.65	\$126.63	\$133.47	\$0.00	\$260.10	\$312.80	\$371.84
Lavatories, annualized	20.00	6.96	\$119.30	\$414.07	\$0.00	\$533.37	\$669.52	\$811.63
Showers, annualized	12.00	2.74	\$154.68	\$163.34	\$0.00	\$318.02	\$382.49	\$454.69
Drink fountain, annualized	2.00	1.24	\$41.45	\$62.55	\$0.00	\$104.00	\$126.91	\$151.90
Valve, check, above 4", annualized	2.00	0.51	\$11.73	\$25.90	\$0.00	\$37.63	\$46.57	\$56.10
Water heater, gas, to 120 gal., annualized	2.00	3.44	\$117.28	\$173.56	\$0.00	\$290.83	\$354.63	\$424.29
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	1.00	1.51	\$24.77	\$90.74	\$0.00	\$115.51	\$145.21	\$176.15
Water cooling tower, up to 50 tons, annualized	1.00	4.55	\$26.29	\$273.11	\$0.00	\$299.40	\$383.96	\$469.83
Chiller, recip., air cooled, over 25 tons, annualized	1.00	12.89	\$91.50	\$775.28	\$0.00	\$866.78	\$1,108.51	\$1,354.82
Air handling unit, 25 thru 50 tons, annualized	1.00	1.94	\$379.12	\$97.79	\$0.00	\$476.92	\$544.17	\$630.37
Fan coil unit, annualized	6.00	20.03	\$679.39	\$1,009.63	\$0.00	\$1,689.02	\$2,059.84	\$2,464.64
VAV Boxes, annualized	12.00	11.21	\$115.25	\$676.61	\$0.00	\$791.86	\$1,006.37	\$1,226.64
Fire dampers, annualized	4.00	4.63	\$36.60	\$278.40	\$0.00	\$314.99	\$402.17	\$491.18
Fan, axial, up to 5,000 CFM, annualized	1.00	1.24	\$11.73	\$62.55	\$0.00	\$74.28	\$94.22	\$114.74
Package unit, air cooled, 25 thru 50 ton, annualized	2.00	6.50	\$353.85	\$391.16	\$0.00	\$745.01	\$897.75	\$1,068.17
Controls, central system, electro/pneumatic, annualized	2.00	3.84	\$141.54	\$230.82	\$0.00	\$372.36	\$455.76	\$546.24
Backflow prevention device, up to 4", annualized	1.00	0.33	\$13.40	\$19.82	\$0.00	\$33.22	\$40.50	\$48.46
Extinguishing system, wet pipe, annualized	1.00	11.34	\$68.24	\$678.37	\$0.00	\$746.61	\$956.95	\$1,170.70
Extinguishing system, CO2, annualized	1.00	9.47	\$616.71	\$475.74	\$0.00	\$1,092.45	\$1,296.84	\$1,532.07
Switch, automatic transfer, annualized	1.00	5.32	\$15.16	\$352.24	\$0.00	\$367.40	\$474.58	\$582.53
Transformer, dry type 500 KVA and over, annualized	1.00	0.77	\$15.16	\$50.76	\$0.00	\$65.92	\$82.66	\$100.17
Panelboard, 225 A and above, annualized	5.00	2.21	\$115.99	\$145.04	\$0.00	\$261.03	\$316.14	\$377.05
Motor control center, over 400 A, annualized	3.00	1.17	\$69.59	\$77.70	\$0.00	\$147.29	\$177.56	\$211.31
Central clock systems, annualized	1.00	1.32	\$12.11	\$78.22	\$0.00	\$90.33	\$115.01	\$140.29
Fire alarm annunciator system, annualized	1.00	11.05	\$179.39	\$652.68	\$0.00	\$832.07	\$1,045.82	\$1,268.53
Security, intrusion alarm system, annualized	1.00	3.83	\$162.90	\$226.88	\$0.00	\$389.78	\$474.14	\$566.64
Emergency diesel or gas generator, over 15 KVA, annualized	1.00	16.15	\$86.09	\$953.12	\$0.00	\$1,039.21	\$1,333.75	\$1,632.60
Light, emergency, hardwired system, annualized	20.00	5.00	\$154.65	\$295.26	\$0.00	\$449.91	\$553.95	\$665.73
Coffee maker / urn, gas / electric / steam, annualized	2.00	9.30	\$143.25	\$318.14	\$0.00	\$461.39	\$571.15	\$688.08
Cooker, gas, annually	4.00	3.74	\$41.03	\$127.97	\$0.00	\$169.00	\$211.49	\$256.04
Deep fat fryer, pressurized broaster, gas / electric, annualized	2.00	7.49	\$87.10	\$254.75	\$0.00	\$341.84	\$426.98	\$516.47
Dishwasher, steam, annually	2.00	2.37	\$76.78	\$80.73	\$0.00	\$157.51	\$189.41	\$225.15
Ice machine, flake or cube, annualized	2.00	7.17	\$614.26	\$243.98	\$0.00	\$858.24	\$992.86	\$1,158.19
Oven, convection, gas / electric, annualized	2.00	22.48	\$82.51	\$765.44	\$0.00	\$847.95	\$1,085.84	\$1,327.84
Refrigerator display, walk-in w/ external condenser case, annualized	2.00	4.75	\$414.85	\$162.66	\$0.00	\$577.51	\$667.79	\$778.81
Refrigerator freezer, walk-in box w/external condenser, annualized	1.00	1.47	\$207.43	\$50.23	\$0.00	\$257.66	\$293.47	\$339.65
Storage tank, ground level, annualized	1.00	0.72	\$18.38	\$35.27	\$0.00	\$53.65	\$66.07	\$79.41
Water flow meter, turbine, annualized	1.00	0.59	\$18.96	\$28.47	\$0.00	\$47.44	\$57.88	\$69.26
Pump, sump, up to 1 H.P., annually	1.00	0.52	\$8.53	\$25.50	\$0.00	\$34.03	\$42.53	\$51.46
						\$17,974.67	\$22,162.52	\$26,651.50





# FAC 1714 RESERVE TRAINING FACILITY

## Modeled Component List

### CostWorks Release 2021 Qtr 3

#### C10 Interior Construction

Solid Core Interior Doors	27.0 Ea.
Metal Lockers	110.0 Ea.
Fire Doors, Swinging, annualized	6.0 Each

#### C30 Interior Finishes

Concrete, Finished	38.2 C.S.F.
Vinyl	350.22 S.Y.
Carpet	428.0 S.Y.
Acoustic Tile, non fire-rated	120.0 C.S.F.

#### D20 Plumbing

Tankless Water Closet	15.0 Ea.
Urinal	8.0 Ea.
Lavatory, Vitreous China	20.0 Ea.
Service/Utility Sink	4.0 Ea.
Shower, Terrazzo	12.0 Ea.
Drinking Fountain	2.0 Ea.
Steam Converter, Domestic Hot Water	2.0 Ea.
Storage Tank, Domestic Hot Water	2.0 Ea.
Circulation Pump, 1/12 HP	2.0 Ea.
Drain: Roof, Scupper, Area	8.0 Ea.

#### D30 HVAC

Boiler, Gas, 250 MBH	2.0 Ea.
Cooling Tower, 50 ton	1.0 Ea.
Chiller, Air Cooled, Reciprocating, 50 ton	1.0 Ea.
Exhaust Fan, roof mounted exhaust fan, 8500 CFM exhaust	2.0 Ea.
Circulator Pump, 1/12 - 3/4 H.P.	3.0 Ea.
Terminal Reheat Coil, 36" x 36"	6.0 Ea.
Single Zone Air Conditioner, 25 ton	2.0 Ea.
Central Station Air Conditioning Air Handling Unit, 5400 CFM	1.0 Ea.
VAV Box	12.0 Each

#### D40 Fire Protection

Sprinkler System, Fire Suppression, sprinkler head	104.0 Ea.
Extinguishing system, CO2, annualized	1.0 Each

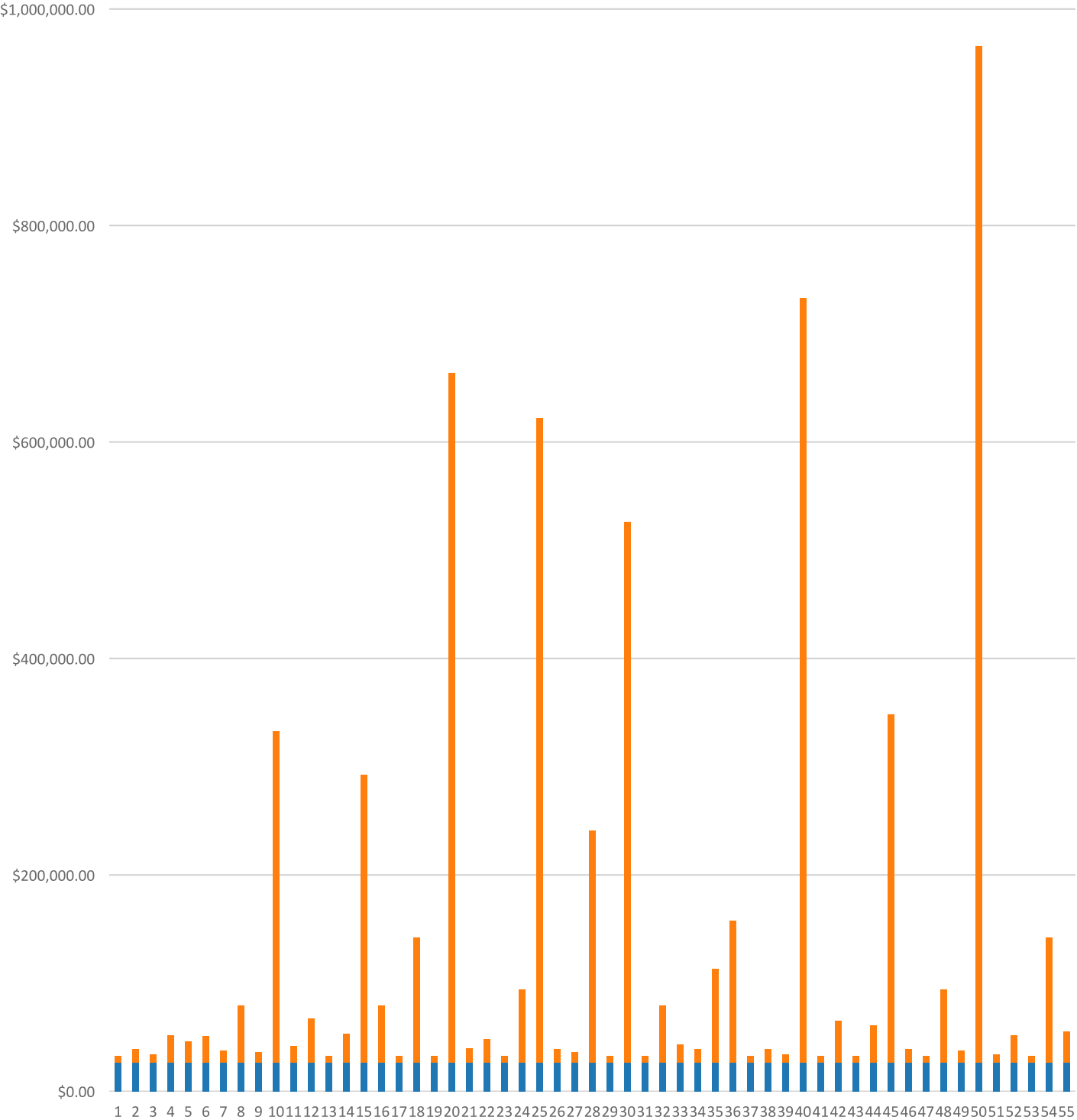
#### D50 Electrical

Motor Starter, Up To 600 V	7.0 Ea.
Secondary Transformer, Dry, 112.5 KVA	1.0 Ea.
Load Center, 100 A, maintenance & inspection	15.0 Ea.
Circuit Breaker, molded case, 480 V, 1 pole	15.0 Ea.
Smoke Detector	35.0 Ea.
Heat Detector	26.0 Ea.
Manual Pull Station	6.0 Ea.
Fire Alarm Control Panel	1.0 Ea.
Annunciation Panel	1.0 Ea.
Fire Alarm Bell	8.0 Ea.
Lightning Protection System	2.2 M.L.F.
Lightning Ground Rod	8.0 Ea.
Computer Ground System	1.0 M.L.F.
Generator, Diesel, 750 KW	1.0 Ea.
Transfer Switch	2.0 Ea.
Emergency Lighting Fixture	20.0 Ea.
Exit Light	6.0 Ea.

#### E10 Equipment

Dishwasher	2.0 Ea.
Refrigerator display, walk-in, annualized	2.0 Each
Refrigerator freezer, walk-in, annualized	1.0 Each
B20 Exterior Enclosure	
Steel Frame, Operating, 2nd floor	24.0 Ea.
Aluminum Window, Fixed, 1st floor	40.0 Ea.
Glazed Aluminum	2.0 Ea.
Steel, Painted	4.0 Ea.
Steel Single, Roll-Up	2.0 Ea.
B30 Roofing	
Built-Up Roofing	190.0 Sq.
Aluminum Gutter	520.0 L.F.
G30 Site Mechanical Utilities	
Storage Tank Ground Level, annualized	1.0 Each
Water Flow Meter, Turbine, annualized	1.0 Each

FAC 1714 RESERVE TRAINING FACILITY  
Sustainment by Year  
CostWorks Release 2021 Qtr 3



PM Cost  
MR Cost