

FAC 3211 RDT&E Technical Service Facility

RUC: \$240.43 SF

Source: USACE PAX Newsletter 3.2.2 dated 20 Mar 09
CatCode 17135
Deflated to FY-09 using Appendix C of newsletter
In V12, Tri-Service and USACE PAX Newsletter values were updated while all other values were inflated only.

SUC: \$2.37 SF

Source: Cost Works model in \$FY-08, inflated to \$FY-09 using Green Book Table 5-6 (O&M less DHP)
In V12, values were inflated only.

Model follows:

Chart: A chart showing relative annual sustainment requirements follows:

FAC 3211 RDT&E Technical Service Facility
CostWorks 2008 Quarter 2

Description	Frequency	Crew	Qty	Unit	Total In-House	Total Incl. O&P	Release	Occurrences In Design Life	Adjusted Occurrences	Terminal Cutoff
Repair brick wall - 1st floor	25	1 Bric	699.500	S.F.	25,881.50	31,449.52	2008 Qtr 2	2	1	\$ 31,449.52
Replace glass - 1st floor (1% of glass)	1	1 Carp	4.800	S.F.	43.44	50.98	2008 Qtr 2	55	55	\$ 2,803.68
Repair 2'-0" x 3'-0" aluminum window - 1st floor	20	1 Carp	8.000	Ea.	919.68	1,089.60	2008 Qtr 2	2	2	\$ 2,179.20
Replace 2'-0" x 3'-0" aluminum window - 1st floor	50	1 Carp	80.000	Ea.	35,088.00	41,039.20	2008 Qtr 2	1	0	\$ -
Replace glass - 1st floor (1% of glass)	1	1 Carp	22.200	S.F.	200.91	235.76	2008 Qtr 2	55	55	\$ 12,967.02
Repair 3'-9" x 5'-5" steel frame window - 1st flr.	20	1 Carp	11.000	Ea.	2,893.11	3,379.31	2008 Qtr 2	2	2	\$ 6,758.62
Refinish 3'-9" x 5'-5" st. frame window - 1st flr.	12	1 Pord	110.000	Ea.	7,403.00	9,137.70	2008 Qtr 2	4	4	\$ 36,550.80
Replace 3'-9" x 5'-5" st. frame window - 1st flr.	50	1 Carp	110.000	Ea.	170,787.10	196,501.80	2008 Qtr 2	1	0	\$ -
Finish new 3'-9" x 5'-5" st. fr. window - 1st flr.	45	1 Pord	110.000	Ea.	6,431.70	7,929.90	2008 Qtr 2	1	1	\$ 7,929.90
Repair 12' x 12' steel roll-up door	10	1 Carp	0.200	Ea.	166.52	192.91	2008 Qtr 2	5	5	\$ 964.54
Refinish 12' x 12' steel roll-up door	12	1 Pord	2.000	Ea.	337.66	411.08	2008 Qtr 2	4	4	\$ 1,644.32
Replace 12' x 12' steel roll-up door	35	2 Carp	2.000	Ea.	6,650.54	7,699.10	2008 Qtr 2	1	1	\$ 7,699.10
Repair steel, painted, door	14	1 Carp	0.300	Ea.	174.73	205.91	2008 Qtr 2	3	3	\$ 617.72
Refinish 3'-0" x 7'-0" steel, painted, door	12	1 Pord	3.000	Ea.	98.73	120.93	2008 Qtr 2	4	4	\$ 483.72
Replace 3'-0" x 7'-0" steel, painted, door	45	1 Carp	3.000	Ea.	1,596.24	1,860.12	2008 Qtr 2	1	1	\$ 1,860.12
Debris removal and visual inspection built-up roofing	1	2 Rofc	14.100	M.S.F.	413.69	498.44	2008 Qtr 2	55	55	\$ 27,413.93
Non-destructive moisture inspection built-up roofing	5	2 Rofc	14.100	M.S.F.	1,280.00	1,548.18	2008 Qtr 2	11	11	\$ 17,029.98
Minor membrane repairs - (2% of roof area) built-up roofing	15	G5	2.800	Sq.	964.66	1,139.71	2008 Qtr 2	3	3	\$ 3,419.14
Flashing repairs - (2 S.F. per sq. repaired) built-up roofing	5	2 Rofc	5.600	S.F.	18.82	22.40	2008 Qtr 2	11	11	\$ 246.40
Minor membrane replacement - (25% of roof area) built-up roofing	20	G5	35.400	Sq.	21,042.82	25,101.43	2008 Qtr 2	2	2	\$ 50,202.86
Total roof replacement built-up roofing	28	G1	141.800	Sq.	80,936.60	95,849.71	2008 Qtr 2	1	1	\$ 95,849.71
Repair steel painted interior door	14	1 Carp	0.300	Ea.	50.33	59.44	2008 Qtr 2	3	3	\$ 178.33
Refinish 3'-0" x 7'-0" steel painted interior door	12	1 Pord	3.000	Ea.	148.20	182.46	2008 Qtr 2	4	4	\$ 729.84
Replace 3'-0" x 7'-0" steel painted interior door	60	1 Carp	3.000	Ea.	2,812.62	3,269.88	2008 Qtr 2	0	0	\$ -
Repair solid core wood door interior	11	1 Carp	0.700	Ea.	117.43	138.70	2008 Qtr 2	5	5	\$ 693.49
Refinish 3'-0" x 7'-0" solid core wood door interior	12	1 Pord	7.000	Ea.	295.54	363.86	2008 Qtr 2	4	4	\$ 1,455.44
Replace 3'-0" x 7'-0" solid core wood door interior	40	1 Carp	7.000	Ea.	2,566.90	2,975.84	2008 Qtr 2	1	1	\$ 2,975.84
Repair 8" concrete block wall - (2% of walls) painted	25	1 Bric	1.400	C.S.F.	1,415.69	1,699.63	2008 Qtr 2	2	1	\$ 1,699.63
Refinish concrete block wall painted	12	1 Pord	7.000	C.S.F.	680.19	826.91	2008 Qtr 2	4	4	\$ 3,307.64
Replace 8" concrete block wall painted	75	2 Bric	70.700	C.S.F.	76,201.17	91,640.63	2008 Qtr 2	0	0	\$ -
Repair 5/8" drywall - (2% of walls)	20	1 Carp	36.600	S.F.	58.19	69.91	2008 Qtr 2	2	2	\$ 139.81
Replace 5/8" drywall	75	2 Carp	1,832.000	S.F.	4,085.36	4,928.08	2008 Qtr 2	0	0	\$ -
Replace carpet	12	2 Tilf	140.100	S.Y.	6,322.71	7,304.81	2008 Qtr 2	4	4	\$ 29,219.26
Refinish concrete floor finished	25	2 Cefi	123.700	C.S.F.	43,225.73	52,039.35	2008 Qtr 2	2	1	\$ 52,039.35
Replace vinyl floor	18	1 Tilf	61.300	S.Y.	2,927.08	3,573.79	2008 Qtr 2	3	2	\$ 7,147.58
Acoustic tile repairs - (2% of ceilings)	9	1 Carp	0.300	C.S.F.	134.00	159.50	2008 Qtr 2	6	6	\$ 957.01
Replace acoustic tile ceiling, fire-rated	20	1 Carp	18.100	C.S.F.	7,297.02	8,669.90	2008 Qtr 2	2	2	\$ 17,339.80
Check / minor repairs drinking fountain	1	1 Plum	3.000	Ea.	112.74	142.02	2008 Qtr 2	55	55	\$ 7,811.10
Repair internal leaks drinking fountain	4	1 Plum	3.000	Ea.	105.42	130.29	2008 Qtr 2	13	13	\$ 1,693.77

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CostWorks 2008 Quarter 2

CostWorks 2008 Quarter 2						Terminal Cutoff is the removal of a single task occurrence if that task occurs within 10% of the end of the design life and if the frequency of the task exceeds 20% of the design life. This prevents scheduling major work near the end of the design life.				
	Design Life= 55	C.S.F.=100 S.F; MSF=1000 S.F	This spreadsheet was							
	Average S.F= 14,184	Sq=100 S.F; M.L.F=1000 L.F	exported from R.S. Means							
Description	Frequency	Crew	Qty	Unit	Total In-House	Total Incl. O&P	Release	Occurrences In Design Life	Adjusted Occurrences	Terminal Cutoff
Correct water pressure drinking fountain	2	1 Plum	3.000	Ea.	96.63	121.50	2008 Qtr 2	27	27	\$ 3,280.50
Replace refrigerant drinking fountain	2	1 Plum	3.000	Ea.	47.52	56.58	2008 Qtr 2	27	27	\$ 1,527.66
Repair drain leak drinking fountain	4	1 Plum	3.000	Ea.	67.89	81.09	2008 Qtr 2	13	13	\$ 1,054.17
Replace fountain drinking fountain	10	2 Plum	3.000	Ea.	3,017.52	3,580.71	2008 Qtr 2	5	5	\$ 17,903.55
Inspect and clean spray heads, emergency eye wash	3	1 Plum	1.000	Ea.	37.80	47.44	2008 Qtr 2	18	18	\$ 853.92
Replace eye wash station, emergency eye wash	25	2 Plum	1.000	Ea.	573.92	695.88	2008 Qtr 2	2	1	\$ 695.88
Inspect and clean shower head emergency shower station	3	1 Plum	1.000	Ea.	37.80	47.44	2008 Qtr 2	18	18	\$ 853.92
Replace shower emergency shower station	25	2 Plum	1.000	Ea.	726.39	873.58	2008 Qtr 2	2	1	\$ 873.58
Replace washer in spud connection lavatory, vitreous china	7	1 Plum	17.000	Ea.	408.17	481.61	2008 Qtr 2	7	7	\$ 3,371.27
Replace washer in faucet lavatory, vitreous china	2	1 Plum	17.000	Ea.	167.45	208.93	2008 Qtr 2	27	27	\$ 5,641.11
Replace faucets lavatory, vitreous china	10	1 Plum	17.000	Ea.	2,099.33	2,534.02	2008 Qtr 2	5	5	\$ 12,670.10
Clean out strainer and P trap lavatory, vitreous china	2	1 Plum	17.000	Ea.	459.68	570.69	2008 Qtr 2	27	27	\$ 15,408.63
Replace lavatory, vitreous china	35	2 Plum	17.000	Ea.	9,013.23	10,806.90	2008 Qtr 2	1	1	\$ 10,806.90
Replace faucet washer sink, iron enamel	2	1 Plum	2.000	Ea.	19.58	24.38	2008 Qtr 2	27	27	\$ 658.26
Clean trap sink, iron enamel	3	1 Plum	2.000	Ea.	13.20	16.50	2008 Qtr 2	18	18	\$ 297.00
Unstop sink sink, iron enamel	2	1 Plum	2.000	Ea.	64.42	81.00	2008 Qtr 2	27	27	\$ 2,187.00
Replace sink, P.E.C.I. sink, iron enamel	35	2 Plum	2.000	Ea.	1,105.44	1,315.38	2008 Qtr 2	1	1	\$ 1,315.38
Replace flush valve diaphragm tankless water closet	10	1 Plum	10.000	Ea.	707.40	830.60	2008 Qtr 2	5	5	\$ 4,153.00
Rebuild flush valve tankless water closet	20	1 Plum	10.000	Ea.	1,319.80	1,600.10	2008 Qtr 2	2	2	\$ 3,200.20
Unplug clogged line tankless water closet	5	1 Plum	10.000	Ea.	1,682.60	2,101.80	2008 Qtr 2	11	11	\$ 23,119.80
Replace tankless water closet	35	2 Plum	10.000	Ea.	5,480.00	6,483.60	2008 Qtr 2	1	1	\$ 6,483.60
Replace tankless flush valve	25	1 Plum	10.000	Ea.	2,095.00	2,453.70	2008 Qtr 2	2	1	\$ 2,453.70
Replace wax ring gasket tankless water closet	5	1 Plum	10.000	Ea.	1,095.70	1,372.00	2008 Qtr 2	11	11	\$ 15,092.00
Replace flush valve diaphragm urinal	7	1 Plum	4.000	Ea.	282.96	332.24	2008 Qtr 2	7	7	\$ 2,325.68
Rebuild flush valve urinal	20	1 Plum	4.000	Ea.	527.92	640.04	2008 Qtr 2	2	2	\$ 1,280.08
Unplug line urinal	5	1 Plum	4.000	Ea.	448.56	559.64	2008 Qtr 2	11	11	\$ 6,156.04
Replace wall-hung urinal	35	2 Plum	4.000	Ea.	3,366.52	4,026.28	2008 Qtr 2	1	1	\$ 4,026.28
Repair circulator pump, 1/12 - 3/4 H.P.	5	1 Stpi	2.000	Ea.	141.98	168.50	2008 Qtr 2	11	11	\$ 1,853.50
Replace circulator pump, 1/12 - 3/4 H.P.	15	Q1	2.000	Ea.	4,968.88	5,740.94	2008 Qtr 2	3	3	\$ 17,222.82
Repair damaged pipe insulation, fiberglass 3/4"	5	Q14	2.000	Ea.	31.44	38.36	2008 Qtr 2	11	11	\$ 421.96
Repair damaged pipe insulation, fiberglass 2"	5	Q14	2.000	Ea.	36.92	45.06	2008 Qtr 2	11	11	\$ 495.66
Replace pipe insulation, fiberglass 3/4"	5	Q14	0.010	M.L.F.	62.89	76.61	2008 Qtr 2	11	11	\$ 842.74
Replace pipe insulation, fiberglass 2"	5	Q14	0.010	M.L.F.	74.26	90.69	2008 Qtr 2	11	11	\$ 997.60
Replace pipe and fittings, copper 3/4"	20	2 Plum	16.000	L.F.	283.52	343.68	2008 Qtr 2	2	2	\$ 687.36
Replace pipe and fittings, copper 2"	25	2 Plum	16.000	L.F.	652.96	785.76	2008 Qtr 2	2	1	\$ 785.76
Drain and flush water heater, electric, 120 gallon	7	1 Plum	1.000	Ea.	226.43	283.04	2008 Qtr 2	7	7	\$ 1,981.28
Check operation water heater, electric, 120 gallon	3	1 Plum	1.000	Ea.	1.98	2.48	2008 Qtr 2	18	18	\$ 44.64
Replace water heater, electric, 120 gallon	15	2 Plum	1.000	Ea.	9,192.45	10,543.79	2008 Qtr 2	3	3	\$ 31,631.37
Repair joint pipe and fittings, PVC	10	1 Plum	2.000	Ea.	231.88	288.28	2008 Qtr 2	5	5	\$ 1,441.40

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Average S.F= 14,184		Sq=100 S.F; M.L.F=1000 L.F		exported from R.S. Means		10% of the end of the design life and if the frequency of the task exceeds 20% of the design life. This prevents scheduling major work near the end of the design life.				
Description	Frequency	Crew	Qty	Unit	Total In-House	Total Incl. O&P	Release	Occurrences In Design Life	Adjusted Occurrences	Terminal Cutoff
Unclog floor drain, PVC	20	1 Plum	1.000	Ea.	37.09	45.87	2008 Qtr 2	2	2	\$ 91.74
Replace pipe, 4" pipe and fittings, PVC	30	2 Plum	300.000	L.F.	17,760.00	21,957.00	2008 Qtr 2	1	1	\$ 21,957.00
General maintenance & repair drain: roof, scupper, area	1	1 Plum	4.000	Ea.	113.40	142.68	2008 Qtr 2	55	55	\$ 7,847.40
Replace drain: roof, scupper, area	40	1 Plum	4.000	Ea.	1,593.36	1,872.56	2008 Qtr 2	1	1	\$ 1,872.56
Replace roof mounted exhaust fan, 2000 CFM exhaust fan	20	Q20	1.000	Ea.	1,154.75	1,360.26	2008 Qtr 2	2	2	\$ 2,720.52
Repair single zone rooftop unit, 60 ton	10	Q6	1.000	Ea.	39,670.17	46,952.35	2008 Qtr 2	5	5	\$ 234,761.75
Replace single zone rooftop unit, 60 ton	15	Q7	0.500	Ea.	35,405.00	41,446.30	2008 Qtr 2	3	3	\$ 124,338.90
Inspect sprinkler system	1	1 Plum	1.000	Ea.	26.55	32.89	2008 Qtr 2	55	55	\$ 1,808.95
Replace sprinkler head	20	1 Plum	83.000	Ea.	5,285.44	6,512.18	2008 Qtr 2	2	2	\$ 13,024.36
Replace fire alarm bell, 6"	20	1 Elec	2.000	Ea.	284.56	343.02	2008 Qtr 2	2	2	\$ 686.04
Maintenance and repair safety switch, 3 pole safety switch, heavy duty	8	1 Elec	3.000	Ea.	85.50	106.89	2008 Qtr 2	6	6	\$ 641.34
Maintenance and inspection safety switch, 3 pole, heavy duty	1	1 Elec	3.000	Ea.	85.50	106.89	2008 Qtr 2	55	55	\$ 5,878.95
Replace safety switch, heavy duty	25	2 Elec	3.000	Ea.	1,741.44	2,042.13	2008 Qtr 2	2	1	\$ 2,042.13
Repair switchgear 1200 A mainframe	5	1 Elec	1.000	Ea.	1,694.09	1,975.10	2008 Qtr 2	11	11	\$ 21,726.10
Maintenance and inspection switchgear, mainframe	1	1 Elec	1.000	Ea.	45.81	57.01	2008 Qtr 2	55	55	\$ 3,135.55
Replace switchgear 1200 A mainframe	20	3 Elec	1.000	Ea.	4,052.28	4,808.24	2008 Qtr 2	2	2	\$ 9,616.48
Replace lamp emergency lighting fixture	2	1 Elec	10.000	Ea.	540.00	641.40	2008 Qtr 2	27	27	\$ 17,317.80
Replace emergency lighting fixture	20	1 Elec	10.000	Ea.	8,432.50	9,716.00	2008 Qtr 2	2	2	\$ 19,432.00
Maintenance and repair exit light	20	1 Elec	10.000	Ea.	328.30	398.70	2008 Qtr 2	2	2	\$ 797.40
Replace lamp exit light	5	1 Elec	10.000	Ea.	123.50	146.20	2008 Qtr 2	11	11	\$ 1,608.20
Replace lighting fixture exit light	20	1 Elec	10.000	Ea.	1,256.40	1,512.40	2008 Qtr 2	2	2	\$ 3,024.80
Maintenance and inspection battery, dry	1	1 Elec	30.000	Ea.	855.00	1,068.90	2008 Qtr 2	55	55	\$ 58,789.50
Replace battery, dry	5	1 Elec	30.000	Ea.	5,431.80	6,247.20	2008 Qtr 2	11	11	\$ 68,719.20
Replace fluor. ballast for fluorescent lighting fixture, 80 W	10	1 Elec	378.000	Ea.	37,641.24	45,390.24	2008 Qtr 2	5	5	\$ 226,951.20
Replace lamps (2 lamps) fluorescent lighting fixture, 80 W	10	1 Elec	378.000	Ea.	9,616.32	11,786.04	2008 Qtr 2	5	5	\$ 58,930.20
Maintenance and repair receptacles and plugs	20	1 Elec	135.000	Ea.	4,197.15	5,228.55	2008 Qtr 2	2	2	\$ 10,457.10
Replace receptacle/plug receptacles and plugs	20	1 Elec	135.000	Ea.	7,122.60	8,696.70	2008 Qtr 2	2	2	\$ 17,393.40
Maintenance and repair wiring devices, switches	10	1 Elec	34.000	Ea.	1,057.06	1,316.82	2008 Qtr 2	5	5	\$ 6,584.10
Replace switch wiring devices, switches	15	1 Elec	34.000	Ea.	1,741.14	2,119.90	2008 Qtr 2	3	3	\$ 6,359.70
Check and repair manual pull station	10	1 Elec	2.000	Ea.	138.42	169.74	2008 Qtr 2	5	5	\$ 848.70
Replace manual pull station	15	1 Elec	2.000	Ea.	251.48	303.78	2008 Qtr 2	3	3	\$ 911.34
Repair smoke detector	10	1 Elec	50.000	Ea.	1,909.50	2,350.00	2008 Qtr 2	5	5	\$ 11,750.00
Check operation smoke detector	1	1 Elec	50.000	Ea.	570.00	715.00	2008 Qtr 2	55	55	\$ 39,325.00
Replace smoke detector	15	1 Elec	50.000	Ea.	9,477.50	11,349.50	2008 Qtr 2	3	3	\$ 34,048.50
					\$762,478.64	\$902,907.95				
									MR Subtotal	\$ 1,676,951.37
									MR Per Year	\$ 30,490.02

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Average S.F= 14,184		Sq=100 S.F; M.L.F=1000 L.F		exported from R.S. Means		10% of the end of the design life and if the frequency of the task exceeds 20% of the				
						design life. This prevents scheduling major work near the end of the design life.				
Description	Frequency	Crew	Qty	Unit	Total In-House	Total Incl. O&P	Release	Occurrences In Design Life	Adjusted Occurrences	Terminal Cutoff
								PM Per Year	\$	4,254.07
								Subtotal	\$	34,744.09
								Total Per Unit	\$	2.45

CostWorks 2008 Quarter 2 - FAC 3211 RDT&E Technical Service Facility

Qty	Description	Bare Total	Total In-House	Total Incl. O&P	Zip Code Prefix	Type	Release
10.000	VAV Boxes, annualized	501.50	613.10	760.00	200	FMR	2008 Qtr 2
3.000	Door, emergency egress, swinging, annualized	129.24	148.53	172.53	200	FMR	2008 Qtr 2
2.000	Door, overhead, manual, up to 24' high x 25' wide,	212.90	269.48	325.10	200	FMR	2008 Qtr 2
10.000	Fire doors, swinging, annualized	199.50	248.90	298.60	200	FMR	2008 Qtr 2
3.000	Drink fountain, annualized	120.36	148.50	178.08	200	FMR	2008 Qtr 2
17.000	Lavatories, annualized	335.24	419.56	511.36	200	FMR	2008 Qtr 2
10.000	Toilet (vacuum breaker type), annualized	103.90	129.30	161.50	200	FMR	2008 Qtr 2
4.000	Urinals, annualized	41.56	51.72	64.60	200	FMR	2008 Qtr 2
10.000	Light, emergency, hardwired system, annualized	116.10	142.50	178.70	200	FMR	2008 Qtr 2
20.000	Light, emergency, dry cell, annualized	1,200.40	1,367.60	1,603.60	200	FMR	2008 Qtr 2
		\$2,960.70	\$3,539.19	\$4,254.07			

FAC 3211 Sustainment by Year - Terminal Cutoff Applied

