

FAC 7346 Exchange Sales Facility

RUC: \$161.58 SF

Source: Tri-Service, deflated to FY-09 using Green Book, Table 5-6 (MCON)
In V12, Tri-Service and USACE PAX Newsletter values were updated while all
other values were inflated only.
Tri-Service Facility Unit costs for Military Construction prepared Nov 13,2009

SUC: \$3.02 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 7346-Exchange Sales Facility
CostWorks 2008 Quarter 2

Design Life= 50
Average S.F= 8,508

C.S.F=100 S.F; MSF=1000 S.F
Sq=100 S.F; M.L.F=1000 L.F

This spreadsheet was
exported from R.S Means
CostWorks

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

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	531.000	S.F.	19,647.00	23,873.76	2008 Qtr 2	2	1	\$ 23,873.76
Replace glass - 1st floor (1% of glass)	1	1 Carp	6.000	S.F.	54.30	63.72	2008 Qtr 2	50	50	\$ 3,186.00
Repair 2'-0" x 3'-0" aluminum window - 1st floor	20	1 Carp	100.000	Ea.	11,496.00	13,620.00	2008 Qtr 2	2	2	\$ 27,240.00
Replace 2'-0" x 3'-0" aluminum window - 1st floor	50	1 Carp	100.000	Ea.	43,860.00	51,299.00	2008 Qtr 2	1	0	\$ -
Repair aluminum storefront door	12	1 Carp	3.000	Ea.	1,241.82	1,472.04	2008 Qtr 2	4	3	\$ 4,416.12
Replace 3'-0" x 7'-0" aluminum storefront doors	50	1 Carp	3.000	Ea.	5,043.78	5,922.24	2008 Qtr 2	1	0	\$ -
Replace insulating glass - (3% of glass)	1	1 Carp	1.900	S.F.	69.29	81.19	2008 Qtr 2	50	50	\$ 4,059.35
Repair 12' x 12' steel roll-up door	10	1 Carp	1.000	Ea.	832.61	964.54	2008 Qtr 2	5	5	\$ 4,822.70
Refinish 12' x 12' steel roll-up door	5	1 Pord	1.000	Ea.	168.83	205.54	2008 Qtr 2	10	10	\$ 2,055.40
Replace 12' x 12' steel roll-up door	35	2 Carp	1.000	Ea.	3,325.27	3,849.55	2008 Qtr 2	1	1	\$ 3,849.55
Repair steel, painted, door	14	1 Carp	3.000	Ea.	1,747.32	2,059.08	2008 Qtr 2	3	3	\$ 6,177.24
Refinish 3'-0" x 7'-0" steel, painted, door	4	1 Pord	3.000	Ea.	98.73	120.93	2008 Qtr 2	12	12	\$ 1,451.16
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
Replace tempered glass - (3% of glass)	1	1 Carp	0.600	S.F.	11.58	13.78	2008 Qtr 2	50	50	\$ 688.80
Debris removal and visual inspection built-up roofing	1	2 Rofc	8.500	M.S.F.	249.39	300.48	2008 Qtr 2	50	50	\$ 15,023.75
Non-destructive moisture inspection built-up roofing	5	2 Rofc	8.500	M.S.F.	771.63	933.30	2008 Qtr 2	10	10	\$ 9,333.00
Minor membrane repairs - (2% of roof area) built-up roofing	5	G5	1.700	Sq.	585.68	691.97	2008 Qtr 2	10	10	\$ 6,919.68
Flashing repairs - (2 S.F. per sq. repaired) built-up roofing	5	2 Rofc	3.400	S.F.	11.42	13.60	2008 Qtr 2	10	10	\$ 136.00
Minor membrane replacement - (25% of roof area) built-up roofing	20	G5	8.500	Sq.	5,052.66	6,027.18	2008 Qtr 2	2	2	\$ 12,054.36
Total roof replacement built-up roofing	28	G1	85.100	Sq.	48,573.38	57,523.35	2008 Qtr 2	1	1	\$ 57,523.35
Repair steel painted interior door	14	1 Carp	2.000	Ea.	335.50	396.28	2008 Qtr 2	3	3	\$ 1,188.84
Refinish 3'-0" x 7'-0" steel painted interior door	4	1 Pord	2.000	Ea.	98.80	121.64	2008 Qtr 2	12	12	\$ 1,459.68
Replace 3'-0" x 7'-0" steel painted interior door	60	1 Carp	2.000	Ea.	1,875.08	2,179.92	2008 Qtr 2	0	0	\$ -
Safety glass repl., (3% of glass) steel painted interior door	1	1 Carp	1.300	S.F.	22.01	26.17	2008 Qtr 2	50	50	\$ 1,308.45
Repair solid core wood door interior	11	1 Carp	45.000	Ea.	7,548.75	8,916.30	2008 Qtr 2	4	4	\$ 35,665.20
Refinish 3'-0" x 7'-0" solid core wood door interior	4	1 Pord	45.000	Ea.	1,899.90	2,339.10	2008 Qtr 2	12	12	\$ 28,069.20
Replace 3'-0" x 7'-0" solid core wood door interior	40	1 Carp	45.000	Ea.	16,501.50	19,130.40	2008 Qtr 2	1	1	\$ 19,130.40
Repair 8" concrete block wall - (2% of walls) painted	25	1 Bric	0.100	C.S.F.	101.12	121.40	2008 Qtr 2	2	1	\$ 121.40
Refinish concrete block wall painted	8	1 Pord	6.600	C.S.F.	641.32	779.66	2008 Qtr 2	6	6	\$ 4,677.95
Replace 8" concrete block wall painted	75	2 Bric	6.600	C.S.F.	7,113.55	8,554.85	2008 Qtr 2	0	0	\$ -
Repair 5/8" drywall - (2% of walls)	20	1 Carp	341.800	S.F.	543.46	652.84	2008 Qtr 2	2	2	\$ 1,305.68
Refinish drywall	8	1 Pord	17,090.000	S.F.	10,254.00	12,646.60	2008 Qtr 2	6	6	\$ 75,879.60
Replace 5/8" drywall	75	2 Carp	17,090.000	S.F.	38,110.70	45,972.10	2008 Qtr 2	0	0	\$ -
Replace carpet	12	2 Tilf	377.800	S.Y.	17,050.11	19,698.49	2008 Qtr 2	4	3	\$ 59,095.48
Refinish concrete floor finished	25	2 Cefi	4.300	C.S.F.	1,502.59	1,808.97	2008 Qtr 2	2	1	\$ 1,808.97
Terrazzo floor repairs - (2% of floors)	15	1 Mstz	93.600	S.F.	1,405.87	1,679.18	2008 Qtr 2	3	3	\$ 5,037.55

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CostWorks 2008 Quarter 2

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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

Description	Frequency	Crew	Qty	Unit	Total In-House	Total Incl. O&P	Release	Occurrences in Design Life	Adjusted Occurrences	Terminal Cutoff
Replace terrazzo floor	75	2 Mstz	46.800	C.S.F.	67,389.19	79,806.64	2008 Qtr 2	0	0	\$ -
Replace acoustic tile ceiling, fire-rated	20	1 Carp	68.100	C.S.F.	27,454.52	32,619.90	2008 Qtr 2	2	2	\$ 65,239.80
Repair sheetrock ceiling - (2% of ceilings)	20	1 Carp	0.340	C.S.F.	118.75	144.93	2008 Qtr 2	2	2	\$ 289.86
Refinish sheetrock ceiling	20	1 Pord	17.000	C.S.F.	2,136.39	2,639.93	2008 Qtr 2	2	2	\$ 5,279.86
Replace sheetrock ceiling	40	2 Carp	17.000	C.S.F.	6,091.61	7,437.67	2008 Qtr 2	1	1	\$ 7,437.67
Check / minor repairs drinking fountain	1	1 Plum	1.000	Ea.	37.58	47.34	2008 Qtr 2	50	50	\$ 2,367.00
Repair internal leaks drinking fountain	4	1 Plum	1.000	Ea.	35.14	43.43	2008 Qtr 2	12	12	\$ 521.16
Correct water pressure drinking fountain	2	1 Plum	1.000	Ea.	32.21	40.50	2008 Qtr 2	25	25	\$ 1,012.50
Replace refrigerant drinking fountain	2	1 Plum	1.000	Ea.	15.84	18.86	2008 Qtr 2	25	25	\$ 471.50
Repair drain leak drinking fountain	4	1 Plum	1.000	Ea.	22.63	27.03	2008 Qtr 2	12	12	\$ 324.36
Replace fountain drinking fountain	10	2 Plum	1.000	Ea.	1,005.84	1,193.57	2008 Qtr 2	5	5	\$ 5,967.85
Replace washer in spud connection lavatory, vitreous china	7	1 Plum	7.000	Ea.	168.07	198.31	2008 Qtr 2	7	7	\$ 1,388.17
Replace washer in faucet lavatory, vitreous china	2	1 Plum	7.000	Ea.	68.95	86.03	2008 Qtr 2	25	25	\$ 2,150.75
Replace faucets lavatory, vitreous china	10	1 Plum	7.000	Ea.	864.43	1,043.42	2008 Qtr 2	5	5	\$ 5,217.10
Clean out strainer and P trap lavatory, vitreous china	2	1 Plum	7.000	Ea.	189.28	234.99	2008 Qtr 2	25	25	\$ 5,874.75
Replace lavatory, vitreous china	35	2 Plum	7.000	Ea.	3,711.33	4,449.90	2008 Qtr 2	1	1	\$ 4,449.90
Replace faucet washer	2	1 Plum	1.000	Ea.	9.79	12.19	2008 Qtr 2	25	25	\$ 304.75
Clean trap	3	1 Plum	1.000	Ea.	6.60	8.25	2008 Qtr 2	16	16	\$ 132.00
Replace faucets	10	1 Plum	1.000	Ea.	123.49	149.06	2008 Qtr 2	5	5	\$ 745.30
Unstop sink	2	1 Plum	1.000	Ea.	32.21	40.50	2008 Qtr 2	25	25	\$ 1,012.50
Replace sink, P.E.C.I.	35	1 Plum	1.000	Ea.	925.46	1,090.57	2008 Qtr 2	1	1	\$ 1,090.57
Replace flush valve diaphragm tankless water closet	10	1 Plum	7.000	Ea.	495.18	581.42	2008 Qtr 2	5	5	\$ 2,907.10
Rebuild flush valve tankless water closet	20	1 Plum	7.000	Ea.	923.86	1,120.07	2008 Qtr 2	2	2	\$ 2,240.14
Unplug clogged line tankless water closet	5	1 Plum	7.000	Ea.	1,177.82	1,471.26	2008 Qtr 2	10	10	\$ 14,712.60
Replace tankless water closet	35	2 Plum	7.000	Ea.	3,836.00	4,538.52	2008 Qtr 2	1	1	\$ 4,538.52
Replace tankless flush valve	25	1 Plum	7.000	Ea.	1,466.50	1,717.59	2008 Qtr 2	2	1	\$ 1,717.59
Replace wax ring gasket tankless water closet	5	1 Plum	7.000	Ea.	766.99	960.40	2008 Qtr 2	10	10	\$ 9,604.00
Replace flush valve diaphragm urinal	7	1 Plum	2.000	Ea.	141.48	166.12	2008 Qtr 2	7	7	\$ 1,162.84
Rebuild flush valve urinal	20	1 Plum	2.000	Ea.	263.96	320.02	2008 Qtr 2	2	2	\$ 640.04
Unplug line urinal	5	1 Plum	2.000	Ea.	224.28	279.82	2008 Qtr 2	10	10	\$ 2,798.20
Replace wall-hung urinal	35	2 Plum	2.000	Ea.	1,683.26	2,013.14	2008 Qtr 2	1	1	\$ 2,013.14
Resolder joint pipe & fittings, copper	10	1 Plum	1.000	Ea.	32.85	40.45	2008 Qtr 2	5	5	\$ 202.25
Replace pipe and fittings, copper 2"	25	2 Plum	16.000	L.F.	652.96	785.76	2008 Qtr 2	2	1	\$ 785.76
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
Remove old insulation & replace with new, pipe 3/4", wall 1"	15	1 Plum	16.000	L.F.	112.16	136.64	2008 Qtr 2	3	3	\$ 409.92
Minor repairs, adjustments water heater, gas / oil, 1150 GPH	2	2 Plum	1.000	Ea.	75.64	94.18	2008 Qtr 2	25	25	\$ 2,354.50

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Clean & service water heater, gas / oil, 1150 GPH	2	2 Plum	1.000	Ea.	453.84	566.08	2008 Qtr 2	25	25	\$ 14,152.00
Replace water heater, gas / oil, 1150 GPH	20	2 Plum	1.000	Ea.	26,100.80	30,172.40	2008 Qtr 2	2	2	\$ 60,344.80
Unclog main drain pipe & fittings, cast iron	10	1 Plum	1.000	Ea.	35.62	44.41	2008 Qtr 2	5	5	\$ 222.05
Unclog floor drain, PVC	20	1 Plum	1.000	Ea.	37.09	45.87	2008 Qtr 2	2	2	\$ 91.74
Repair joint pipe and fittings, PVC	10	1 Plum	1.000	Ea.	115.94	144.14	2008 Qtr 2	5	5	\$ 720.70
Unclog main drain pipe, PVC	10	1 Plum	0.300	M.L.F.	10.69	13.32	2008 Qtr 2	5	5	\$ 66.62
Replace pipe, 4" pipe and fittings, PVC	30	2 Plum	16.000	L.F.	947.20	1,171.04	2008 Qtr 2	1	1	\$ 1,171.04
General maintenance & repair drain: roof, scupper, area	1	1 Plum	1.000	Ea.	28.35	35.67	2008 Qtr 2	50	50	\$ 1,783.50
Replace drain: roof, scupper, area	40	1 Plum	1.000	Ea.	398.34	468.14	2008 Qtr 2	1	1	\$ 468.14
Repair air conditioner, DX, 20 ton	10	Q6	0.500	Ea.	12,064.54	14,009.81	2008 Qtr 2	5	5	\$ 70,049.03
Replace air conditioner, DX, 20 ton	20	Q7	1.000	Ea.	18,029.20	20,838.20	2008 Qtr 2	2	2	\$ 41,676.40
Minor repairs to fire alarm control panel	5	1 Elec	1.000	Ea.	107.84	130.97	2008 Qtr 2	10	10	\$ 1,309.70
Maintenance and inspection fire alarm control panel	0.5	1 Elec	1.000	Ea.	30.54	38.17	2008 Qtr 2	100	100	\$ 3,817.00
Replace fire alarm control panel	15	1 Elec	1.000	Ea.	2,615.62	3,107.84	2008 Qtr 2	3	3	\$ 9,323.52
Inspect sprinkler system	1	1 Plum	1.000	Ea.	26.55	32.89	2008 Qtr 2	50	50	\$ 1,644.50
Replace sprinkler head	20	1 Plum	100.000	Ea.	6,368.00	7,846.00	2008 Qtr 2	2	2	\$ 15,692.00
Rebuild double check 3" backflow preventer sprinkler system	5	1 Plum	1.000	Ea.	598.06	715.83	2008 Qtr 2	10	10	\$ 7,158.30
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 gen., 2 pole	8	1 Elec	1.000	Ea.	28.50	35.63	2008 Qtr 2	6	6	\$ 213.78
Maintenance and inspection safety switch, 2 pole	1	1 Elec	1.000	Ea.	28.50	35.63	2008 Qtr 2	50	50	\$ 1,781.50
Replace safety switch 240 V, 2 pole	25	2 Elec	1.000	Ea.	353.98	421.38	2008 Qtr 2	2	1	\$ 421.38
Repair switchgear 1200 A mainframe	5	1 Elec	1.000	Ea.	1,694.09	1,975.10	2008 Qtr 2	10	10	\$ 19,751.00
Maintenance and inspection switchgear, mainframe	1	1 Elec	1.000	Ea.	45.81	57.01	2008 Qtr 2	50	50	\$ 2,850.50
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	6.000	Ea.	324.00	384.84	2008 Qtr 2	25	25	\$ 9,621.00
Replace emergency lighting fixture	20	1 Elec	6.000	Ea.	5,059.50	5,829.60	2008 Qtr 2	2	2	\$ 11,659.20
Maintenance and repair exit light	20	1 Elec	6.000	Ea.	196.98	239.22	2008 Qtr 2	2	2	\$ 478.44
Replace lamp exit light	5	1 Elec	6.000	Ea.	74.10	87.72	2008 Qtr 2	10	10	\$ 877.20
Replace lighting fixture exit light	20	1 Elec	6.000	Ea.	753.84	907.44	2008 Qtr 2	2	2	\$ 1,814.88
Replace fluor. ballast for fluorescent lighting fixture, 80 W	10	1 Elec	133.000	Ea.	13,244.14	15,970.64	2008 Qtr 2	5	5	\$ 79,853.20
Replace lamps (2 lamps) fluorescent lighting fixture, 80 W	10	1 Elec	133.000	Ea.	3,383.52	4,146.94	2008 Qtr 2	5	5	\$ 20,734.70
Maintenance and repair receptacles and plugs	20	1 Elec	125.000	Ea.	3,886.25	4,841.25	2008 Qtr 2	2	2	\$ 9,682.50
Replace receptacle/plug receptacles and plugs	20	1 Elec	125.000	Ea.	6,595.00	8,052.50	2008 Qtr 2	2	2	\$ 16,105.00
Maintenance and repair wiring devices, switches	10	1 Elec	31.000	Ea.	963.79	1,200.63	2008 Qtr 2	5	5	\$ 6,003.15
Replace switch wiring devices, switches	15	1 Elec	31.000	Ea.	1,587.51	1,932.85	2008 Qtr 2	3	3	\$ 5,798.55
Minor repairs to annunciation panel	5	1 Elec	1.000	Ea.	107.84	130.97	2008 Qtr 2	10	10	\$ 1,309.70

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Maintenance and inspection annunciation panel	0.5	1 Elec	1.000	Ea.	30.54	38.17	2008 Qtr 2	100	100	\$ 3,817.00
Replace annunciation panel	15	1 Elec	1.000	Ea.	844.71	1,008.28	2008 Qtr 2	3	3	\$ 3,024.84
Check and repair manual pull station	10	1 Elec	6.000	Ea.	415.26	509.22	2008 Qtr 2	5	5	\$ 2,546.10
Replace manual pull station	15	1 Elec	6.000	Ea.	754.44	911.34	2008 Qtr 2	3	3	\$ 2,734.02
Repair smoke detector	10	1 Elec	17.000	Ea.	649.23	799.00	2008 Qtr 2	5	5	\$ 3,995.00
Check operation smoke detector	1	1 Elec	17.000	Ea.	193.80	243.10	2008 Qtr 2	50	50	\$ 12,155.00
Replace smoke detector	15	1 Elec	17.000	Ea.	3,222.35	3,858.83	2008 Qtr 2	3	3	\$ 11,576.49
					\$488,759.70	\$579,970.67				
									MR Subtotal	\$ 1,046,267.72
									MR Per Year	\$ 20,925.35
									PM Per Year	\$ 5,584.39
									Subtotal	\$ 26,509.74
									Total Per Unit	\$ 3.12

CostWorks 2009 Quarter 1 - FAC 7346-Exchange Sales Facility

Qty	Assembly Number	Description	Total In-House	Total Incl. O&P	Zip Code Prefix	Type	Release
1.000	C1025 110 3950	Fire doors, overhead, annualized	183.71	219.69	200	FMR	2008 Qtr 2
3.000	B2035 225 1950	Door, emergency egress, swinging, annualized	148.53	172.53	200	FMR	2008 Qtr 2
2.000	C1025 110 1950	Fire doors, swinging, annualized	49.78	59.72	200	FMR	2008 Qtr 2
45.000	B2035 225 1950	Door, emergency egress, swinging, annualized	2,227.95	2,587.95	200	FMR	2008 Qtr 2
7.000	D2015 100 4950	Lavatories, annualized	172.76	210.56	200	FMR	2008 Qtr 2
2.000	D2015 100 1950	Urinals, annualized	25.86	32.30	200	FMR	2008 Qtr 2
1.000	D2015 800 1950	Drink fountain, annualized	49.50	59.36	200	FMR	2008 Qtr 2
1.000	D3055 210 1950	Package unit, air cooled, 3 thru 24 ton, annualized	207.71	251.03	200	FMR	2008 Qtr 2
1.000	D4015 150 1950	Extinguishing system, wet pipe, annualized	806.79	983.35	200	FMR	2008 Qtr 2
1.000	D5035 710 1950	Fire alarm annunciator system, annualized	811.57	990.03	200	FMR	2008 Qtr 2
1.000	D5095 250 1950	Light, emergency, hardwired system, annualized	14.25	17.87	200	FMR	2008 Qtr 2
			\$4,698.41	\$5,584.39			

FAC 7346 Sustainment by Year - Terminal Cutoff Applied

