

FAC 7146 Family Housing Attendant Facility

RUC: \$83.43 SF

Source: Composite of other FACs/CATCODES
In V12, Tri-Service and USACE PAX Newsletter values were updated while all other values were inflated only.

SUC: \$4.74 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 7146-Family Housing Attendant Facility
CostWorks 2008 Quarter 2

Design Life= 40
Average S.F= 4,334

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	206.300	S.F.	7,633.10	9,275.25	2008 Qtr 2	1	1	\$ 9,275.25
Replace brick wall - 2nd floor	75	2 Bric	2.060	C.S.F.	4,213.92	5,056.46	2008 Qtr 2	0	0	\$ -
Repair 3' x 4' aluminum window - 1st floor	20	1 Carp	34.000	Ea.	7,991.02	9,354.76	2008 Qtr 2	2	1	\$ 9,354.76
Replace 3' x 4' aluminum window - 1st floor	50	1 Carp	34.000	Ea.	25,532.98	29,543.62	2008 Qtr 2	0	0	\$ -
Replace glass - 1st flr. (1% of glass)	1	1 Carp	4.080	S.F.	36.92	43.33	2008 Qtr 2	40	40	\$ 1,733.18
Replace glass - 2nd flr. (1% of glass)	1	1 Carp	4.440	S.F.	57.59	68.55	2008 Qtr 2	40	40	\$ 2,742.14
Repair 3' x 4' aluminum window - 2nd floor	20	1 Carp	37.000	Ea.	10,129.86	11,964.32	2008 Qtr 2	2	1	\$ 11,964.32
Replace 3' x 4' aluminum window - 2nd floor	50	1 Carp	37.000	Ea.	29,219.27	33,934.18	2008 Qtr 2	0	0	\$ -
Repair aluminum storefront door	12	1 Carp	1.000	Ea.	413.94	490.68	2008 Qtr 2	3	3	\$ 1,472.04
Replace 3'-0" x 7'-0" aluminum storefront doors	50	1 Carp	1.000	Ea.	1,681.26	1,974.08	2008 Qtr 2	0	0	\$ -
Replace insulating glass - (3% of glass)	1	1 Carp	0.630	S.F.	22.98	26.92	2008 Qtr 2	40	40	\$ 1,076.80
Repair steel, painted, door	14	1 Carp	3.000	Ea.	1,747.32	2,059.08	2008 Qtr 2	2	2	\$ 4,118.16
Refinish 3'-0" x 7'-0" steel, painted, door	4	1 Pord	3.000	Ea.	98.73	120.93	2008 Qtr 2	10	10	\$ 1,209.30
Replace 3'-0" x 7'-0" steel, painted, door	45	1 Carp	3.000	Ea.	1,596.24	1,860.12	2008 Qtr 2	0	0	\$ -
Debris removal by hand & visual inspection,modified bitum/thermoplastc	1	2 Rofc	2.167	M.S.F.	63.58	76.60	2008 Qtr 2	40	40	\$ 3,064.14
Non-destructive moisture inspection,modified bitum/thermoplastic	5	2 Rofc	2.167	M.S.F.	196.72	237.94	2008 Qtr 2	8	8	\$ 1,903.49
Total roof replacement,modified bituminous / thermoplastic	25	G1	21.670	Sq.	10,549.82	12,471.30	2008 Qtr 2	1	1	\$ 12,471.30
Minor membrane repairs-(2% of roof area),modified bitum/thermoplastic	5	G5	0.433	Sq.	115.52	136.28	2008 Qtr 2	8	8	\$ 1,090.26
Flashing repairs-(2 S.F. per sq. repaired),modified bitum/thermoplastc	5	2 Rofc	0.866	S.F.	2.88	3.39	2008 Qtr 2	8	8	\$ 27.09
Membrane replacement-(25% of roof area),modified bitum/thermoplastic	20	G5	5.418	Sq.	3,449.91	4,090.05	2008 Qtr 2	2	1	\$ 4,090.05
Repair hollow core wood door interior	7	1 Carp	46.000	Ea.	7,716.50	9,114.44	2008 Qtr 2	5	5	\$ 45,572.20
Refinish 3'-0" x 7'-0" hollow core wood door interior	4	1 Pord	46.000	Ea.	1,942.12	2,391.08	2008 Qtr 2	10	10	\$ 23,910.80
Replace 3'-0" x 7'-0" hollow core wood door interior	30	1 Carp	46.000	Ea.	14,764.16	17,292.32	2008 Qtr 2	1	1	\$ 17,292.32
Repair solid core wood door interior	11	1 Carp	35.000	Ea.	5,871.25	6,934.90	2008 Qtr 2	3	3	\$ 20,804.70
Refinish 3'-0" x 7'-0" solid core wood door interior	4	1 Pord	35.000	Ea.	1,477.70	1,819.30	2008 Qtr 2	10	10	\$ 18,193.00
Replace 3'-0" x 7'-0" solid core wood door interior	40	1 Carp	35.000	Ea.	12,834.50	14,879.20	2008 Qtr 2	1	0	\$ -
Repair concrete steps	15	1 Cefi	52.000	S.F.	883.48	1,028.56	2008 Qtr 2	2	2	\$ 2,057.12
Replace concrete steps	100	2 Cefi	52.000	S.F.	2,574.52	3,124.68	2008 Qtr 2	0	0	\$ -
Replace metal stair railing interior	45	2 Sswk	34.000	L.F.	1,219.58	1,408.96	2008 Qtr 2	0	0	\$ -
Refinish drywall	4	1 Pord	6,000.000	S.F.	3,600.00	4,440.00	2008 Qtr 2	10	10	\$ 44,400.00
Replace 5/8" drywall	75	2 Carp	6,000.000	S.F.	13,380.00	16,140.00	2008 Qtr 2	0	0	\$ -
Repair 5/8" drywall - (2% of walls)	20	1 Carp	120.000	S.F.	190.80	229.20	2008 Qtr 2	2	1	\$ 229.20
Replace carpet	12	2 Tilf	419.000	S.Y.	18,909.47	21,846.66	2008 Qtr 2	3	3	\$ 65,539.98
Replace 2" x 2" thin set ceramic tile floor	50	1 Tilf	3.470	C.S.F.	4,663.30	5,613.00	2008 Qtr 2	0	0	\$ -
Ceramic tile floor repairs - (2% of floors)	15	1 Tilf	0.069	C.S.F.	42.64	53.12	2008 Qtr 2	2	2	\$ 106.24
Refinish concrete floor finished	25	2 Cefi	2.170	C.S.F.	758.28	912.90	2008 Qtr 2	1	1	\$ 912.90

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20% of the design life. This prevents scheduling major work near the end of the
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Description	Frequency	Crew	Qty	Unit	Total In-House	Total Incl. O&P	Release	Occurrences in Design Life	Adjusted Occurrences	Terminal Cutoff
Refinish sheetrock ceiling	20	1 Pord	43.340	C.S.F.	5,446.54	6,730.27	2008 Qtr 2	2	1	\$ 6,730.27
Replace sheetrock ceiling	40	2 Carp	43.340	C.S.F.	15,530.02	18,961.68	2008 Qtr 2	1	0	\$ -
Repair sheetrock ceiling - (2% of ceilings)	20	1 Carp	0.866	C.S.F.	302.45	369.15	2008 Qtr 2	2	1	\$ 369.15
Check / minor repairs drinking fountain	1	1 Plum	2.000	Ea.	75.16	94.68	2008 Qtr 2	40	40	\$ 3,787.20
Repair internal leaks drinking fountain	4	1 Plum	2.000	Ea.	70.28	86.86	2008 Qtr 2	10	10	\$ 868.60
Correct water pressure drinking fountain	2	1 Plum	2.000	Ea.	64.42	81.00	2008 Qtr 2	20	20	\$ 1,620.00
Replace refrigerant drinking fountain	2	1 Plum	2.000	Ea.	31.68	37.72	2008 Qtr 2	20	20	\$ 754.40
Repair drain leak drinking fountain	4	1 Plum	2.000	Ea.	45.26	54.06	2008 Qtr 2	10	10	\$ 540.60
Replace fountain drinking fountain	10	2 Plum	2.000	Ea.	2,011.68	2,387.14	2008 Qtr 2	4	3	\$ 7,161.42
Replace washer in spud connection lavatory, vitreous china	7	1 Plum	5.000	Ea.	120.05	141.65	2008 Qtr 2	5	5	\$ 708.25
Replace washer in faucet lavatory, vitreous china	2	1 Plum	5.000	Ea.	49.25	61.45	2008 Qtr 2	20	20	\$ 1,229.00
Replace faucets lavatory, vitreous china	10	1 Plum	5.000	Ea.	617.45	745.30	2008 Qtr 2	4	3	\$ 2,235.90
Clean out strainer and P trap lavatory, vitreous china	2	1 Plum	5.000	Ea.	135.20	167.85	2008 Qtr 2	20	20	\$ 3,357.00
Replace lavatory, vitreous china	35	2 Plum	5.000	Ea.	2,650.95	3,178.50	2008 Qtr 2	1	1	\$ 3,178.50
Replace faucet washer sink, iron enamel	2	1 Plum	1.000	Ea.	9.79	12.19	2008 Qtr 2	20	20	\$ 243.80
Clean trap sink, iron enamel	3	1 Plum	1.000	Ea.	6.60	8.25	2008 Qtr 2	13	13	\$ 107.25
Replace faucets sink, iron enamel	10	1 Plum	1.000	Ea.	123.49	149.06	2008 Qtr 2	4	3	\$ 447.18
Unstop sink sink, iron enamel	2	1 Plum	1.000	Ea.	32.21	40.50	2008 Qtr 2	20	20	\$ 810.00
Replace sink, P.E.C.I. sink, iron enamel	35	2 Plum	1.000	Ea.	552.72	657.69	2008 Qtr 2	1	1	\$ 657.69
Replace flush valve diaphragm tankless water closet	10	1 Plum	6.000	Ea.	424.44	498.36	2008 Qtr 2	4	3	\$ 1,495.08
Rebuild flush valve tankless water closet	20	1 Plum	6.000	Ea.	791.88	960.06	2008 Qtr 2	2	1	\$ 960.06
Unplug clogged line tankless water closet	5	1 Plum	6.000	Ea.	1,009.56	1,261.08	2008 Qtr 2	8	8	\$ 10,088.64
Replace tankless water closet	35	2 Plum	6.000	Ea.	3,288.00	3,890.16	2008 Qtr 2	1	1	\$ 3,890.16
Replace tankless flush valve	25	1 Plum	6.000	Ea.	1,257.00	1,472.22	2008 Qtr 2	1	1	\$ 1,472.22
Replace wax ring gasket tankless water closet	5	1 Plum	6.000	Ea.	657.42	823.20	2008 Qtr 2	8	8	\$ 6,585.60
Inspect / clean shower head fiberglass	3	1 Plum	7.000	Ea.	264.60	332.08	2008 Qtr 2	13	13	\$ 4,317.04
Replace mixing valve barrel shower, fiberglass	2	1 Plum	7.000	Ea.	1,037.05	1,234.24	2008 Qtr 2	20	20	\$ 24,684.80
Replace mixing valve shower, fiberglass	10	1 Plum	7.000	Ea.	1,922.76	2,303.00	2008 Qtr 2	4	3	\$ 6,909.00
Replace shower and fittings, fiberglass	20	2 Plum	7.000	Ea.	6,836.55	8,061.06	2008 Qtr 2	2	1	\$ 8,061.06
Insp./chk. pump/mtr. oper., lub., chk. align. circulation pump, 1/2 HP	1	1 Plum	1.000	Ea.	9.21	11.50	2008 Qtr 2	40	40	\$ 460.00
Replace pump / motor assembly, partial circulation pump, 1/2 HP	20	2 Plum	1.000	Ea.	2,331.44	2,692.17	2008 Qtr 2	2	1	\$ 2,692.17
Resolder joint pipe & fittings, copper	10	1 Plum	2.000	Ea.	65.70	80.90	2008 Qtr 2	4	3	\$ 242.70
Replace pipe and fittings, copper 3/4"	20	2 Plum	16.000	L.F.	283.52	343.68	2008 Qtr 2	2	1	\$ 343.68
Replace pipe and fittings, copper 2"	25	2 Plum	16.000	L.F.	652.96	785.76	2008 Qtr 2	1	1	\$ 785.76
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	2	2	\$ 273.28
Remove old insulation & replace with new, pipe 1-1/2", wall 1"	15	1 Plum	16.000	L.F.	123.36	150.08	2008 Qtr 2	2	2	\$ 300.16

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Description	Frequency	Crew	Qty	Unit	Total In-House	Total Incl. O&P	Release	Occurrences in Design Life	Adjusted Occurrences	Terminal Cutoff
Overhaul water heater, gas / oil, 70 gallon	5	1 Plum	1.000	Ea.	126.58	158.02	2008 Qtr 2	8	8	\$ 1,264.16
Clean & service water heater, gas / oil, 70 gallon	1	1 Plum	1.000	Ea.	151.28	188.37	2008 Qtr 2	40	40	\$ 7,534.80
Replace water heater, gas / oil, 70 gallon	12	2 Plum	1.000	Ea.	2,468.08	2,857.11	2008 Qtr 2	3	3	\$ 8,571.33
Unclog main drain pipe & fittings, cast iron	10	1 Plum	1.000	Ea.	35.62	44.41	2008 Qtr 2	4	3	\$ 133.23
Unclog floor drain, PVC	20	1 Plum	1.000	Ea.	37.09	45.87	2008 Qtr 2	2	1	\$ 45.87
Repair joint pipe and fittings, PVC	10	1 Plum	1.000	Ea.	115.94	144.14	2008 Qtr 2	4	3	\$ 432.42
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
Replace pipe & fittings, cast iron	40	2 Plum	16.000	L.F.	670.40	811.20	2008 Qtr 2	1	0	\$ -
Install new 4" gasket, 1 per M.L.F. natural gas, steel/iron	30	1 Stpi	1.000	Ea.	157.52	195.63	2008 Qtr 2	1	1	\$ 195.63
Replace 10' of buried 4" diam steel pipe/M.L.F. natural gas	12	B35	1.000	Ea.	796.82	957.19	2008 Qtr 2	3	3	\$ 2,871.57
Replace roof mounted exhaust fan, 8500 CFM exhaust fan	20	Q20	1.000	Ea.	2,619.48	3,050.64	2008 Qtr 2	2	1	\$ 3,050.64
Repair single zone rt. unit, 5 ton	10	2 Stpi	1.000	Ea.	1,929.71	2,314.56	2008 Qtr 2	4	3	\$ 6,943.68
Replace single zone rt. unit, 5 ton	15	Q5	2.000	Ea.	14,553.76	17,177.20	2008 Qtr 2	2	2	\$ 34,354.40
Repair fan coil unit, 1 ton	10	1 Stpi	2.000	Ea.	738.44	882.04	2008 Qtr 2	4	3	\$ 2,646.12
Replace fan coil unit, 1 ton	15	Q5	2.000	Ea.	2,196.60	2,591.12	2008 Qtr 2	2	2	\$ 5,182.24
Minor repairs to fire alarm control panel	5	1 Elec	1.000	Ea.	107.84	130.97	2008 Qtr 2	8	8	\$ 1,047.76
Maintenance and inspection fire alarm control panel	0.5	1 Elec	1.000	Ea.	30.54	38.17	2008 Qtr 2	80	80	\$ 3,053.60
Replace fire alarm control panel	15	1 Elec	1.000	Ea.	2,615.62	3,107.84	2008 Qtr 2	2	2	\$ 6,215.68
Replace sprinkler head	20	1 Plum	22.000	Ea.	1,400.96	1,726.12	2008 Qtr 2	2	1	\$ 1,726.12
Inspect sprinkler system	1	1 Plum	1.000	Ea.	26.55	32.89	2008 Qtr 2	40	40	\$ 1,315.60
Rebuild double check 3" backflow preventer sprinkler system	5	1 Plum	1.000	Ea.	598.06	715.83	2008 Qtr 2	8	8	\$ 5,726.64
Replace fire alarm bell, 6"	20	1 Elec	2.000	Ea.	284.56	343.02	2008 Qtr 2	2	1	\$ 343.02
Repair failed breaker, 3 pole circuit breaker	10	1 Elec	1.000	Ea.	342.23	400.69	2008 Qtr 2	4	3	\$ 1,202.07
Maintenance and inspection C.B., 3 pole circuit breaker	0.33	1 Elec	1.000	Ea.	22.91	28.50	2008 Qtr 2	121	121	\$ 3,448.50
Replace C.B. molded case, 600 V, 3 pole circuit breaker	50	1 Elec	1.000	Ea.	3,157.74	3,611.55	2008 Qtr 2	0	0	\$ -
Maintenance and inspection lighting panel, indoor	3	1 Elec	2.000	Ea.	57.00	71.26	2008 Qtr 2	13	13	\$ 926.38
Maintenance and repair motor starter, up to 600 V	5	1 Elec	1.000	Ea.	170.75	207.50	2008 Qtr 2	8	8	\$ 1,660.00
Maintenance and inspection motor starter, up to 600 V	0.5	1 Elec	1.000	Ea.	38.17	47.85	2008 Qtr 2	80	80	\$ 3,828.00
Replace starter motor starter, up to 600 V	18	1 Elec	1.000	Ea.	528.18	630.41	2008 Qtr 2	2	2	\$ 1,260.82
Replace fluor. ballast for fluorescent lighting fixture, 80 W	10	1 Elec	41.000	Ea.	4,082.78	4,923.28	2008 Qtr 2	4	3	\$ 14,769.84
Replace lamps (2 lamps) fluorescent lighting fixture, 80 W	10	1 Elec	41.000	Ea.	1,043.04	1,278.38	2008 Qtr 2	4	3	\$ 3,835.14
Maintenance and repair receptacles and plugs	20	1 Elec	104.000	Ea.	3,233.36	4,027.92	2008 Qtr 2	2	1	\$ 4,027.92
Replace receptacle/plug receptacles and plugs	20	1 Elec	104.000	Ea.	5,487.04	6,699.68	2008 Qtr 2	2	1	\$ 6,699.68
Maintenance and repair wiring devices, switches	10	1 Elec	42.000	Ea.	1,305.78	1,626.66	2008 Qtr 2	4	3	\$ 4,879.98
Replace switch wiring devices, switches	15	1 Elec	42.000	Ea.	2,150.82	2,618.70	2008 Qtr 2	2	2	\$ 5,237.40
Check and repair manual pull station	10	1 Elec	3.000	Ea.	207.63	254.61	2008 Qtr 2	4	3	\$ 763.83

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Replace manual pull station	15	1 Elec	3.000	Ea.	377.22	455.67	2008 Qtr 2	2	2	\$ 911.34
Repair smoke detector	10	1 Elec	10.000	Ea.	381.90	470.00	2008 Qtr 2	4	3	\$ 1,410.00
Check operation smoke detector	1	1 Elec	10.000	Ea.	114.00	143.00	2008 Qtr 2	40	40	\$ 5,720.00
Replace smoke detector	15	1 Elec	10.000	Ea.	1,895.50	2,269.90	2008 Qtr 2	2	2	\$ 4,539.80

\$301,729.37 \$357,466.29

MR Subtotal \$ 571,924.61

MR Per Year \$ 14,298.12

PM Per Year \$ 6,935.77

Subtotal \$ 21,233.89

Total Per Unit \$ 4.90

CostWorks 2009 Quarter 1 - FAC 7146-Family Housing Attendant Facility

Qty	Assembly Number	Description	Total In-House	Total Incl. O&P	Zip Code Prefix	Type	Release
39.000	B2035 225 1950	Door, emergency egress, swinging, annualized	1,930.89	2,242.89	200	FMR	2008 Qtr 2
46.000	C1025 110 1950	Fire doors, swinging, annualized	1,144.94	1,373.56	200	FMR	2008 Qtr 2
6.000	D2015 100 2950	Toilet (vacuum breaker type), annualized	77.58	96.90	200	FMR	2008 Qtr 2
5.000	D2015 100 4950	Lavatories, annualized	123.40	150.40	200	FMR	2008 Qtr 2
7.000	D2015 100 5950	Showers, annualized	138.95	166.60	200	FMR	2008 Qtr 2
2.000	D2015 800 1950	Drink fountain, annualized	99.00	118.72	200	FMR	2008 Qtr 2
2.000	D3045 120 1950	Fan coil unit, annualized	431.42	533.20	200	FMR	2008 Qtr 2
4.000	D3045 160 1950	VAV Boxes, annualized	245.24	304.00	200	FMR	2008 Qtr 2
1.000	D3045 210 1950	Fan, axial, up to 5,000 CFM, annualized	70.55	86.20	200	FMR	2008 Qtr 2
2.000	D3055 210 1950	Package unit, air cooled, 3 thru 24 ton, annualized	415.42	502.06	200	FMR	2008 Qtr 2
1.000	D4015 100 1950	Backflow prevention device, up to 4", annualized	18.89	23.42	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	D5015 220 1950	Circuit breaker, high voltage air, annualized	26.98	33.59	200	FMR	2008 Qtr 2
1.000	D5015 280 1950	Motor control center, over 400 A, annualized	53.91	64.15	200	FMR	2008 Qtr 2
1.000	D5015 260 1950	Panelboard, 225 A and above, annualized	56.96	67.71	200	FMR	2008 Qtr 2
1.000	D2025 260 1950	Water heater, gas, to 120 gal., annualized	156.50	189.02	200	FMR	2008 Qtr 2
			\$5,797.42	\$6,935.77			

FAC 7146 Sustainment by Year - Terminal Cutoff Applied

