

FAC 7383 Air Raid / Fallout Shelter

RUC: \$228.75 SF

Source: USACE PAX Newsletter 3.2.2 dated 20 Mar 09
CatCode 62010
Deflated to FY-09 using Appendix C
In V12, Tri-Service and USACE PAX Newsletter values were updated while all other values were inflated only.

SUC: \$3.30 SF

Source: Cost Works model, 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 the relative annual sustainment requirements follows:

CostWorks 2008 - FAC 7383 Air Raid/Fallout Shelter

Design Life = 45
Area = 3,013.00

Description	Frequency	Crew	Qty	Unit	Total Incl. O&P	Zip Code Prefix	Type	Release	DL / F Trunc	Life Cost	Terminal Cutoff
Repair 8" concrete block wall - 1st floor	25	1 Bric	263.500	S.F.	6,389.88	200	FMR	2008	1	\$ 6,389.88	\$ 6,389.88
Replace 8" concrete block wall - 1st floor	60	2 Bric	26.300	C.S.F.	31,291.21	200	FMR	2008	0	\$ -	\$ -
Replace 8" concrete block wall - 2nd floor	60	2 Bric	24.400	C.S.F.	30,994.10	200	FMR	2008	0	\$ -	\$ -
Repair steel, painted, door	14	1 Carp	1.000	Ea.	681.52	200	FMR	2008	3	\$ 2,044.56	\$ 1,363.04
Refinish 3'-0" x 7'-0" steel, painted, door	12	1 Pord	1.000	Ea.	40.07	200	FMR	2008	3	\$ 120.21	\$ 120.21
Replace 3'-0" x 7'-0" steel, painted, door	45	1 Carp	1.000	Ea.	615.39	200	FMR	2008	1	\$ 615.39	\$ -
Debris removal and visual inspection built-up roofing	1	2 Rofc	3.000	M.S.F.	105.18	200	FMR	2008	45	\$ 4,733.10	\$ 4,733.10
Non-destructive moisture inspection built-up roofing	5	2 Rofc	3.000	M.S.F.	326.67	200	FMR	2008	9	\$ 2,940.03	\$ 2,940.03
Minor membrane repairs - (2% of roof area) built-up roofing	5	G5	0.600	Sq.	242.53	200	FMR	2008	9	\$ 2,182.79	\$ 2,182.79
Flashing repairs - (2 S.F. per sq. repaired) built-up roofing	5	2 Rofc	1.200	S.F.	4.76	200	FMR	2008	9	\$ 42.88	\$ 42.88
Minor membrane replacement - (25% of roof area) built-up roofing	20	G5	7.500	Sq.	5,281.58	200	FMR	2008	2	\$ 10,563.15	\$ 10,563.15
Total roof replacement built-up roofing	28	G1	30.100	Sq.	20,208.84	200	FMR	2008	1	\$ 20,208.84	\$ 20,208.84
Repair steel painted interior door	14	1 Carp	4.000	Ea.	782.00	200	FMR	2008	3	\$ 2,346.00	\$ 1,564.00
Refinish 3'-0" x 7'-0" steel painted interior door	12	1 Pord	4.000	Ea.	241.92	200	FMR	2008	3	\$ 725.76	\$ 725.76
Replace 3'-0" x 7'-0" steel painted interior door	60	1 Carp	4.000	Ea.	4,289.20	200	FMR	2008	0	\$ -	\$ -
Repair hollow core wood door interior	12	1 Carp	8.000	Ea.	1,564.00	200	FMR	2008	3	\$ 4,692.00	\$ 4,692.00
Refinish 3'-0" x 7'-0" hollow core wood door interior	12	1 Pord	8.000	Ea.	413.12	200	FMR	2008	3	\$ 1,239.36	\$ 1,239.36
Replace 3'-0" x 7'-0" hollow core wood door interior	30	1 Carp	8.000	Ea.	2,962.24	200	FMR	2008	1	\$ 2,962.24	\$ 2,962.24
Repair 8" concrete block wall - (2% of walls) painted	25	1 Bric	1.400	C.S.F.	1,684.24	200	FMR	2008	1	\$ 1,684.24	\$ 1,684.24
Refinish concrete block wall painted	12	1 Pord	7.300	C.S.F.	855.41	200	FMR	2008	3	\$ 2,566.24	\$ 2,566.24
Replace 8" concrete block wall painted	75	2 Bric	73.200	C.S.F.	94,048.82	200	FMR	2008	0	\$ -	\$ -
Refinish concrete floor finished	25	2 Cefi	30.100	C.S.F.	12,581.20	200	FMR	2008	1	\$ 12,581.20	\$ 12,581.20
Repair plaster ceiling - (2% of ceilings)	12	1 Plas	6.600	S.Y.	437.18	200	FMR	2008	3	\$ 1,311.55	\$ 1,311.55
Refinish plaster ceiling	10	1 Pord	334.700	S.Y.	4,528.49	200	FMR	2008	4	\$ 18,113.96	\$ 18,113.96
Replace plaster ceiling	75	2 Plas	334.700	S.Y.	24,533.51	200	FMR	2008	0	\$ -	\$ -
Check / minor repairs drinking fountain	1	1 Plum	1.000	Ea.	45.25	200	FMR	2008	45	\$ 2,036.25	\$ 2,036.25
Repair internal leaks drinking fountain	4	1 Plum	1.000	Ea.	41.52	200	FMR	2008	11	\$ 456.72	\$ 456.72
Correct water pressure drinking fountain	2	1 Plum	1.000	Ea.	38.72	200	FMR	2008	22	\$ 851.84	\$ 851.84
Replace refrigerant drinking fountain	2	1 Plum	1.000	Ea.	18.31	200	FMR	2008	22	\$ 402.82	\$ 402.82
Repair drain leak drinking fountain	4	1 Plum	1.000	Ea.	26.15	200	FMR	2008	11	\$ 287.65	\$ 287.65
Replace fountain drinking fountain	10	2 Plum	1.000	Ea.	1,161.94	200	FMR	2008	4	\$ 4,647.76	\$ 4,647.76
Replace washer in spud connection lavatory, vitreous china	7	1 Plum	4.000	Ea.	110.36	200	FMR	2008	6	\$ 662.16	\$ 662.16
Replace washer in faucet lavatory, vitreous china	2	1 Plum	4.000	Ea.	47.08	200	FMR	2008	22	\$ 1,035.76	\$ 1,035.76
Replace faucets lavatory, vitreous china	10	1 Plum	4.000	Ea.	575.56	200	FMR	2008	4	\$ 2,302.24	\$ 2,302.24
Clean out strainer and P trap lavatory, vitreous china	2	1 Plum	4.000	Ea.	128.36	200	FMR	2008	22	\$ 2,823.92	\$ 2,823.92
Replace lavatory, vitreous china	35	2 Plum	4.000	Ea.	2,463.00	200	FMR	2008	1	\$ 2,463.00	\$ 2,463.00
Replace faucet washer sink, iron enamel	2	1 Plum	1.000	Ea.	11.66	200	FMR	2008	22	\$ 256.52	\$ 256.52
Clean trap sink, iron enamel	3	1 Plum	1.000	Ea.	7.88	200	FMR	2008	15	\$ 118.20	\$ 118.20
Replace faucets sink, iron enamel	10	1 Plum	1.000	Ea.	143.89	200	FMR	2008	4	\$ 575.56	\$ 575.56
Unstop sink sink, iron enamel	2	1 Plum	1.000	Ea.	38.72	200	FMR	2008	22	\$ 851.84	\$ 851.84
Replace sink, P.E.C.I. sink, iron enamel	35	2 Plum	1.000	Ea.	638.36	200	FMR	2008	1	\$ 638.36	\$ 638.36
Inspect / clean shower head fiberglass	3	1 Plum	1.000	Ea.	45.35	200	FMR	2008	15	\$ 680.25	\$ 680.25
Replace mixing valve barrel shower, fiberglass	2	1 Plum	1.000	Ea.	171.03	200	FMR	2008	22	\$ 3,762.66	\$ 3,762.66
Replace mixing valve shower, fiberglass	10	1 Plum	1.000	Ea.	318.81	200	FMR	2008	4	\$ 1,275.24	\$ 1,275.24
Replace shower and fittings, fiberglass	20	2 Plum	1.000	Ea.	1,121.03	200	FMR	2008	2	\$ 2,242.06	\$ 2,242.06
Replace flush valve diaphragm tankless water closet	10	1 Plum	4.000	Ea.	324.80	200	FMR	2008	4	\$ 1,299.20	\$ 1,299.20
Rebuild flush valve tankless water closet	20	1 Plum	4.000	Ea.	618.44	200	FMR	2008	2	\$ 1,236.88	\$ 1,236.88

CostWorks 2008 - FAC 7383 Air Raid/Fallout Shelter

Design Life = 45
Area = 3,013.00

Description	Frequency	Crew	Qty	Unit	Total Incl. O&P	Zip Code Prefix	Type	Release	DL / F Trunc	Life Cost	Terminal Cutoff
Unplug clogged line tankless water closet	5	1 Plum	4.000	Ea.	803.68	200	FMR	2008	9	\$ 7,233.12	\$ 7,233.12
Replace tankless water closet	35	2 Plum	4.000	Ea.	2,529.96	200	FMR	2008	1	\$ 2,529.96	\$ 2,529.96
Replace tankless flush valve	25	1 Plum	4.000	Ea.	958.24	200	FMR	2008	1	\$ 958.24	\$ 958.24
Replace wax ring gasket tankless water closet	5	1 Plum	4.000	Ea.	524.84	200	FMR	2008	9	\$ 4,723.56	\$ 4,723.56
Replace flush valve diaphragm urinal	7	1 Plum	2.000	Ea.	162.40	200	FMR	2008	6	\$ 974.40	\$ 974.40
Rebuild flush valve urinal	20	1 Plum	2.000	Ea.	309.22	200	FMR	2008	2	\$ 618.44	\$ 618.44
Unplug line urinal	5	1 Plum	2.000	Ea.	267.50	200	FMR	2008	9	\$ 2,407.50	\$ 2,407.50
Replace wall-hung urinal	35	2 Plum	2.000	Ea.	1,950.58	200	FMR	2008	1	\$ 1,950.58	\$ 1,950.58
Repair circulator pump, 1/12 - 3/4 H.P.	5	1 Stpi	1.000	Ea.	82.01	200	FMR	2008	9	\$ 738.09	\$ 738.09
Replace circulator pump, 1/12 - 3/4 H.P.	15	Q1	1.000	Ea.	2,816.10	200	FMR	2008	3	\$ 8,448.30	\$ 5,632.20
Repair damaged pipe insulation, fiberglass 3/4"	5	Q14	4.000	Ea.	73.64	200	FMR	2008	9	\$ 662.76	\$ 662.76
Repair damaged pipe insulation, fiberglass 2"	5	Q14	2.000	Ea.	43.28	200	FMR	2008	9	\$ 389.52	\$ 389.52
Replace pipe insulation, fiberglass 3/4"	5	Q14	0.030	M.L.F.	220.83	200	FMR	2008	9	\$ 1,987.49	\$ 1,987.49
Replace pipe insulation, fiberglass 2"	5	Q14	0.010	M.L.F.	87.20	200	FMR	2008	9	\$ 784.79	\$ 784.79
Replace pipe and fittings, copper 3/4"	20	2 Plum	32.000	L.F.	663.36	200	FMR	2008	2	\$ 1,326.72	\$ 1,326.72
Replace pipe and fittings, copper 2"	25	2 Plum	16.000	L.F.	761.44	200	FMR	2008	1	\$ 761.44	\$ 761.44
Replace 275 gallon fuel oil storage tank	30	Q5	1.000	Ea.	790.29	200	FMR	2008	1	\$ 790.29	\$ 790.29
Install 10' section 1" type L copper per M.L.F. fuel oil storage	20	1 Plum	2.000	Ea.	438.92	200	FMR	2008	2	\$ 877.84	\$ 877.84
Replace 1000 L.F. of hung 4" diam steel pipe natural gas	75	Q15	0.500	M.L.F.	38,024.02	200	FMR	2008	0	\$ -	\$ -
Repair single zone rt. unit, 5 ton	10	2 Stpi	1.000	Ea.	2,243.35	200	FMR	2008	4	\$ 8,973.40	\$ 8,973.40
Replace single zone rt. unit, 5 ton	15	Q5	0.500	Ea.	4,180.09	200	FMR	2008	3	\$ 12,540.26	\$ 8,360.17
Inspect sprinkler system	1	1 Plum	1.000	Ea.	31.44	200	FMR	2008	45	\$ 1,414.80	\$ 1,414.80
Replace sprinkler head	20	1 Plum	32.000	Ea.	2,409.60	200	FMR	2008	2	\$ 4,819.20	\$ 4,819.20
Repair failed breaker, 3 pole circuit breaker	4	1 Elec	10.000	Ea.	5,931.60	200	FMR	2008	11	\$ 65,247.60	\$ 65,247.60
Maintenance and inspection C.B., 3 pole circuit breaker	0.33	1 Elec	10.000	Ea.	271.60	200	FMR	2008	136	\$ 36,937.60	\$ 36,937.60
Replace C.B. enclosed, 600 V, 3 pole circuit breaker	12	1 Elec	10.000	Ea.	11,298.50	200	FMR	2008	3	\$ 33,895.50	\$ 33,895.50
Maintenance and inspection lighting panel, indoor	3	1 Elec	5.000	Ea.	169.75	200	FMR	2008	15	\$ 2,546.25	\$ 2,546.25
Replace fluor. ballast for fluorescent lighting fixture, 80 W	10	1 Elec	46.000	Ea.	5,331.86	200	FMR	2008	4	\$ 21,327.44	\$ 21,327.44
Replace lamps (2 lamps) fluorescent lighting fixture, 80 W	10	1 Elec	46.000	Ea.	1,380.00	200	FMR	2008	4	\$ 5,520.00	\$ 5,520.00
Maintenance and repair receptacles and plugs	20	1 Elec	49.000	Ea.	1,812.51	200	FMR	2008	2	\$ 3,625.02	\$ 3,625.02
Replace receptacle/plug receptacles and plugs	20	1 Elec	49.000	Ea.	3,027.22	200	FMR	2008	2	\$ 6,054.44	\$ 6,054.44
Maintenance and repair wiring devices, switches	10	1 Elec	20.000	Ea.	739.80	200	FMR	2008	4	\$ 2,959.20	\$ 2,959.20
Replace switch wiring devices, switches	15	1 Elec	20.000	Ea.	1,194.80	200	FMR	2008	3	\$ 3,584.40	\$ 2,389.60

\$344,728.91

M&R Subtotal	\$ 376,578.41	\$ 366,308.51
M&R Per Year	\$ 8,368.41	\$ 8,140.19
PM	\$2,140.84	\$2,140.84
Total Per SF	\$ 3.49	\$ 3.41

CostWorks 2009 Quarter 1 - FAC 7383 Air Raid/Fallout Shelter

Qty	Assembly Number	Description	Total In-House	Total Incl. O&P	Zip Code Prefix	Type	Release
1.000	D3045 160 1950	VAV Boxes, annualized	58.85	72.92	200	FMR	2008
12.000	C1025 110 1950	Fire doors, swinging, annualized	295.92	355.08	200	FMR	2008
1.000	D2015 800 1950	Drink fountain, annualized	47.86	57.36	200	FMR	2008
4.000	D2015 100 4950	Lavatories, annualized	95.20	116.00	200	FMR	2008
1.000	D2015 100 5950	Showers, annualized	19.23	23.04	200	FMR	2008
4.000	D2015 100 2950	Toilet (vacuum breaker type), annualized	49.44	61.76	200	FMR	2008
2.000	D2015 100 1950	Urinals, annualized	24.72	30.88	200	FMR	2008
1.000	D5015 220 1950	Circuit breaker, high voltage air, annualized	25.70	32.01	200	FMR	2008
1.000	D5015 260 1950	Panelboard, 225 A and above, annualized	55.28	65.67	200	FMR	2008
1.000	D5095 210 2950	Emergency diesel or gas generator, over 15 KVA, a	1,025.58	1,269.05	200	FMR	2008
1.000	B2035 225 1950	Door, emergency egress, swinging, annualized	49.13	57.07	200	FMR	2008
			\$1,746.91	\$2,140.84			

FAC 7383 Sustainment by Year - Terminal Cutoff Applied

