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1100 – Roads

Item:	Years	Item:	Years
Roads			
Culvert - Plastic	100		
Culvert – Concrete	35	Guard Rail – Steel	25
Culvert – Metal	25	Guard Rail – Wood	15
Paved Surface (Bituminous)	20	Curb & Gutter - Concrete	35
Paved Surface (Concrete)	40		
Pavement Markings (Water Born)	3		
Pavement Markings (Epoxy)	5		
Pavement Markings (Thermoplastic)	7		
Other Systems			
Fencing/Gates – Wood	10	Signage - Metal	20
Fencing/Gates – Metal	20	Signage - Concrete	30
Fencing/Gates – Concrete	30	Signage - Masonry/Stone	30
Fencing/Gates -Masonry/Stone	33		
Signage – Wood	10		

1300 – Parking Areas

Item:	Years	Item:	Years
Parking Lots			
Paved Surface – Bituminous	20	Gravel Surfaced Parking Lots	5
Paved Surface – Concrete	20 – 40	Curb and Gutter – Concrete	35
Pavement Markings – Water Based	3	Pavement Markings – Epoxy	5
Pavement Markings – Thermoplastic	7		
Guard Rail – Steel	25	Guard Rail – Wood	15
Fencing/Gates - Wood	10	Fencing/Gates - Concrete	30
Fencing/Gates - Metal	20	Fencing/Gates - Masonry/Stone	33
Signage - Wood	10	Signage – Concrete	30
Signage – Metal	20	Signage – Masonry/Stone	30

1700 – Road Bridges

2200 – Trail Bridges

Item:	Years	Item:	Years
Abutments - Concrete	50	Pier	50
Deck - Concrete	20	Piles	50
Deck - Steel	20	Railing - Concrete	20
Deck - Timber	20	Railing - Steel	20
Drainage Device	20	Railing - Timber	20
Parapet	20	Superstructure - Steel	50
		Superstructure - Timber	30

1800 – Road Tunnels

2300 – Trail Tunnels

Item:	Years	Item:	Years
Tunnels			
Tunnel Structure	50-100 *	Drainage – Pumps	20
Drainage – Gravity Flow System	50	Light Fixtures	20
Drainage – Pump System	50		
* Note: It is not uncommon to find brick masonry linings in rail and waste water conveyance tunnels with service life longer than 50 to 100 years. Although many of these linings are in excellent condition, there are instances when they must be reevaluated.			

2100 – Trails

Hiker trails

Item:	Years	Item:	Years
Bench (wood)	20	Fencing/Gates – Metal	20
Bridge - Footlog	20	Fencing/Gates – Wood	10
Bridge - Abutment (rock)		Paved Surface (Bituminous)	20
Bridge - Abutment (wood)		Paved Surface (Concrete)	40
Bridge - Footlog (handrail)	10	Puncheons	20
Bridge – Deck (wood)	20	Retaining Wall (rock)	40
Bridge - Railing (wood)	20	Retaining Wall (concrete)	50
Cable Handrail	30	Signage – Concrete	30
Checks (rock)	45	Signage - Masonry/Stone	30
Checks (wood)	20	Signage – Metal	20
Crib wall (log)		Signage – Wood	10
Crib wall (rock)		Steps (steel rung)	
Culvert - Closed (metal)	25	Swale	10
Culvert - Closed (rock)	30	Trailhead Kiosk	20
Culvert - Open (rock)	30	Turnpikes (wood)	20
Fencing/Gates – Concrete	30	Turnpikes (rock)	45
Fencing/Gates - Masonry/Stone	35	Waterbars (rock)	45
		Waterbars (wood)	25

Horse Trails

Item:	Years	Item:	Years
Bench (wood)	20	Fencing/Gates – Metal	20
Bridge - Abutment (rock)		Fencing/Gates – Wood	10
Bridge - Abutment (wood)		Hitch racks (wood)	15
Bridge - Deck (wood)	20	Horse stalls	20
Bridge - Railing (wood)	20	Paved Surface (Bituminous)	20
Bridge-Trail Bridge (steel stringers)	50	Paved Surface (Concrete)	40
Bridge- Trail Bridge (wood stringers)	20	Puncheons	20
Causeways (rock)		Retaining Wall (rock)	40
Checks (rock)	45	Retaining Wall (concrete)	50
Checks (wood)	20	Signage – Concrete	30
Crib wall (log)		Signage - Masonry/Stone	30
Crib wall (rock)		Signage – Metal	20

Culvert - Closed (metal)	25	Signage – Wood	16
Culvert - Closed (rock)	30	Swale	10
		Trailhead Kiosk	20
Culvert - Open (rock)	30	Turnpikes (wood)	20
		Turnpike (rock)	45
Fencing/Gates – Concrete	30	Waterbars (rock)	45
Fencing/Gates - Masonry/Stone	35	Waterbars (wood)	25

3100 – Maintained Landscapes

3700 – Picnic Areas

Item:	Years	Item:	Years
Bench (wood)	20	Shade Structures (wood)	
Bench (metal)		Shade Structures (metal)	
Fencing/Gates (concrete)	30	Picnic Table pads (concrete)	
Fencing/Gates (masonry/stone)	33	Signage (concrete)	30
Fencing/Gates (metal)	20	Signage (masonry/stone)	30
Fencing/Gates (wood)	10	Signage (metal)	20
Paved Surfaces (concrete)		Signage (wood)	10
Grills (metal)		Water fountains	
Food locker (metal)			
Picnic tables (wood)	15		
Picnic tables (metal)			
Dumpsters and Trash Receptacles			

3800 – Boundary

4100 – Buildings / 4300 – Housing

A – Structures

SUBSTRUCTURES			
Item:	**Years**	**Item:**	**Years**
Concrete Foundation Walls and Piers	40	Stone Foundation Walls and Piers	40
CMU Block Foundation Walls and Piers	30	Wood Foundation Walls and Piers	25
Brick Foundation Walls and Piers	30	Slab on Grade	40

B – Shell

Component Renewal Life-Cycle Estimates:

FLOOR CONSTRUCTION			
Item:	**Years**	**Item:**	**Years**
Concrete	75	Parquet	40

Terrazzo	75	Hardwood Strip	40
2" X 6" Floor Joist	125	Wood Gym Floor	40
2" X 8" Floor Joist	125	Wood Plank	40
2" X 10" Floor Joist	125	Steel Decking	30
2" X 12" Floor Joist	125	Steel Grating	30
Bridging X Type at Floor Joists	125	Galvanized Steel Grating	25
Plywood Subflooring	125	Aluminum Grating	35
Blanket Insulation	50		
ROOF CONSTRUCTION			
Item:	**Years**	**Item:**	**Years**
Plywood Roof Sheathing	125	2" X 8" Roof Joist	125
Wood Roof Decking	125	2" X 10" Roof Joist	125
Steel Roof Decking	125	2" X 10" Roof Joist	125
2" X 6" Roof Joist	125		
EXTERIOR WALLS			
Item:	**Years**	**Item:**	**Years**
Stucco	100	Soffit Board	25
EIFS	100	Exterior Fascia Board	25
Metal Coping	30	Wood Cornice	25
Wood Lattice	25	Wall Wood Trim	25
Aluminum Skirt Siding	35	Wall Metal Trim/Flashing	45
Wood Skirt Siding	25	Galvanized Wall Drip Edge	30
Fiberglass Insulation	50	Aluminum Wall Drip Edge	35
Batt Insulation	50	Rigid Polystyrene / Blueboard Insulation	50
Brick	75	Molded Bead-board Insulation	50
CMU	60	Fiberboard Insulation	50
Adobe	75	Decorative Wood Columns	40
Terra Cotta	50	Structural Wood Columns	40
Glass Block	75	Masonry Columns	100
Vinyl Siding	70	Cut/Point Masonry Columns	25
Aluminum Siding	35	Sill Plate (UP TO 2" X 8")	125
Wood Sheet Siding	25	2" X 4" Wood Stud	125
Wood Clapboard Siding	25	2" X 6" Wood Stud	125
Wood Shingle Siding	40	2" X 8" Wood Stud	125
Galvanized Corrugated Siding	30	2" X 4" Wood Framing	125
Insulated Steel Sandwich Siding	45	2" X 6" Wood Framing	125
Masonite Hard Board Siding	12	Wall Sheathing Plywood	125
Fiberglass Panel Siding	9	Wall Sheathing Wood Fiberboard	125

EXTERIOR WINDOWS			
Item:	**Years**	**Item:**	**Years**
Glazing Compound in Window	20	Casement Aluminum	50
Neoprene Gaskets	20	Casement Steel	45
Double Hung Wood	40	Casement Vinyl Clad	60
Double Hung Aluminum	50	Awning Wood	40
Double Hung Steel	45	Awning Aluminum	50
Double Hung Vinyl Clad	60	Awning Steel	45
Casement Wood	40	Awning Vinyl Clad	60
EXTERIOR DOORS			
Item:	**Years**	**Item:**	**Years**
Replace Panic Hardware	25	Store Front, Aluminum	50
Replace Exterior Metal Door Frame	45	Revolving, Aluminum	25

Replace Exterior Wood Door Frame	30	Sliding, Patio Type	50
Replace Exterior Wood Door	30	Double Acting, Solid Core, Wood	30
Replace Exterior Steel Door	40	Garage, Hardboard	45
Replace Exterior Aluminum Door	50	Garage, Metal	50
Aluminum Overhead Door	75	Garage, Wood	60
Steel Rolling Door	75	Steel, Sectional	80
Motor Operator, Rolling Door	25	Wood Overhead Door	60
ROOF COVERINGS			
Item:	**Years**	**Item:**	**Years**
Built – Up	25	Fiberglass	20
Modified Bituminous	25	Copper	100
Single-Ply / Thermoset	20	Membrane Flashing	10
Roll Roofing	20	Modified Bituminous Flashing	20
Asphalt Shingle	20	Metal Flashing	20
Wood/Cedar	40	Metal Ridge Cap Flashing	30
Slate	70	Copper Counter Flashing	20
Clay Tile	70	Aluminum Counter Flashing	20
Metal Panel	30		

Recurring Maintenance Cycles:

EXTERIOR WALLS			
Item:	**Years**	**Item:**	**Years**
P/P Masonry /Concrete Wall	10	Cut/Point Brick Wall	25
P/P Stucco Wall	10	Cut/Point CMU Wall	25
P/P Wood Siding	20	Cut/Point Random Stone Wall	25
P/P Metal Siding	20	Cut/Point Cut Stone Wall	25
C/C Wall Vent Louvers	20	Cut/Point Coping Blocks	25
C/C Wall Joints	20		
C/C Seams	20		

EXTERIOR WINDOWS			
Item:	**Years**	**Item:**	**Years**
P/P Metal Window	5	C/C Around Exterior Window Frames	5
P/P Wood Window	5		
EXTERIOR DOORS			
Item:	**Years**	**Item:**	**Years**
P/P/ Refinish Exterior Wood Door	4	P/P Commercial Overhead Wood Door	4
P/P/Refinish Exterior Metal Door	4	P/P Residential Garage Metal Door	4
P/P Commercial Overhead Metal Door	4	P/P Residential Garage Wood Door	4
C/C Exterior Door	4		

C – Interiors

Component Renewal Life-Cycle Estimates:

INTERIOR PARTITIONS			
Item:	**Years**	**Item:**	**Years**
Drywall	75	Painted Terra Cotta Block Wall	75

Plaster	75	Glass Block Wall	75
Wood Paneling	30	Cut/Point Painted Brick Wall	25
Vinyl Wall Covering	15	Cut/Point Painted CMU Wall	25
Wallpaper	20	Water Closet Partition, Painted Metal	20
Acoustic Wall Tile	60	Water Closet Partition, Marble	50
Acoustic Carpet Wall Covering	10	Water Closet Partition, Stainless Steel	75
Cork	16	Base Cabinet, Hardwood	100
Ceramic Wall Tile	75	Base Cabinet, Wood	100
Marble	75	Wall Cabinets, Wood	100
Structural Facing Tile	75	Wardrobe, Plastic Laminate	70
Painted CMU Wall	75	Base Cabinet, Metal	20
Painted Brick Wall	75	Wall Cabinets, Metal	20
Bench, Wood	30	Countertop, Plastic	70
Bench, Aluminum	25	Countertop, Stainless	75
Bench, cast Iron	20	Bleachers, Aluminum	25
Bench, Wood Slats/Steel Pedestals	30	Bleachers, Wood	30
		Bench, Concrete	75
INTERIOR DOORS			
Item:	**Years**	**Item:**	**Years**
Replace Interior Solid Core Wood Door	40	Replace Interior Hollow Core Wood Door	30
Replace Interior Metal Door	60		
STAIRWAYS			
Item:	**Years**	**Item:**	**Years**
Concrete Stair Tread Inserts	30	Wood Stair Tread	40
Rubber/Vinyl Stair Tread	18	Metal Grate Tread	30
Rubber Stair Nosing	8	Stone Tread	50
Anti-slip Abrasive Tread Tape	8	Wood Railing	40
Brick Tread	50	Steel Pipe Railing	45
Terrazzo Tread	50	Wrought Iron Railing	45
Clay/Quarry Tile Tread	50		

INTERIOR FLOORS			
Item:	**Years**	**Item:**	**Years**
Parquet	40	Vinyl	18
Hardwood Strip	40	Rubber	18
Wood Gym Floor	40	Cork	16
Wood Plank	40	Ceramic Tile	50
Steel Decking	30	Natural Clay/Quarry Tile	50
Steel Grating	30	Marble Tile	50
Galvanized Steel Grating	25	Slate Tile	70
Aluminum Grating	35	Sheet Vinyl	18
Sealer/Hardener Silicone Base on Concrete	10	Floor Mat, in-laid Black Rubber	18
Epoxy Coat/Film to Concrete	15	Terrazzo	75
INTERIOR CEILINGS			
Item:	**Years**	**Item:**	**Years**
Suspended Acoustic	50	Sheetrock/Drywall	40
Suspended Mineral Fiber	50	Plaster	75
Hardboard Panels	50	Sprayed Acoustical	50
Plywood	50	Rolled Batt Insulation	50
Finished Wood Strip	50	Blown-in Fiberglass Insulation	50

Recurring Maintenance Cycle Estimates:

INTERIOR PARTITIONS			
Item:	**Years**	**Item:**	**Years**
P/P Walls and Ceilings (Concrete/Drywall/Plaster)	5	P/P Wood Water Closet Stall	4
P/P Metal Wall	5	P/P Refinish Interior Wood Trim	4
P/P Wood	10	P/P Refinish Wood Wainscot	4
P/P/Stain Cabinets and Casework	7	C/C At Wall and Counter Top	7
P/P Metal Water Closet Stall	4	C/C Plumbing Fixture	5
INTERIOR DOORS			
Item:	**Years**	**Item:**	**Years**
P/P/ Refinish Interior Wood Door	4	P/P/ Refinish Water Closet Wood Door	4
P/P/ Refinish Interior Metal Door	4	P/P Water Closet Metal Door	4
STAIRWAYS			
Item:	**Years**	**Item:**	**Years**
P/P Metal Stairs	7	P/P Wrought Iron Rail	7
P/P Concrete Stairs	7	P/P Metal Stair Railing	7
P/P Stain Wood Stairs	7	Rubber Stair Nosing	8
P/P Metal Pipe Rail	7	Anita -slip Abrasive Tread Tape	8
P/P Stain Wood Stair Rail	7	Carpet	8

INTERIOR FLOORS			
Item:	**Years**	**Item:**	**Years**
Sealer/Hardener Silicone Base On Concrete	10	Carpet	8
Epoxy Coat/Film to Concrete	15	Carpet Tile	10
P/P Concrete	10	Anti-Slip Tape	8
P/P Wood	10	P/P Stone	10
INTERIOR CEILINGS			
Item:	**Years**	**Item:**	**Years**
P/P Interior Ceiling Concrete/Drywall/ Plaster	6	P/P Metal Ceiling/Decking	6
P/P/Finish Interior Wood	6	P/P Interior Ceiling/ Pipes/Utilities/Girders	6

D – Services

CONVEYING SYSTEMS			
Item:	**Years**	**Item:**	**Years**
Hydraulic Elevator	25	Dumbwaiter	20
Traction Elevator	25	Belt Conveyor	5
Escalator	15		
PLUMBING			
Item:	**Years**	**Item:**	**Years**
Lavatory	40	Flush Valve	25
Sink	40	Electric To 50 Gallon, Hot Water Generator	10
Garbage Disposal	8	Electric 80 - 2000 Gal, Hot Water	15

		Generator	
Service Sink	35	Gas/Oil To 50 Gal, Hot Water Generator	10
Faucet	10	Gas/Oil 50 To 70 Gal, Hot Water Generator	12
Bathtub, Fiberglass	20	Gas/Oil Commercial, Hot Water Generator	20
Bathtub, PE On CI	40	Heat Exchanger, Shell/ Tube, Hot Water Generator	20
Bathtub, Enameled Steel	35	Storage Tank, Domestic Hot Water, Hot Water Generator	50
Shower, Enameled Steel	35	Air Compressor	25
Shower, Fiberglass	20	Refrigerated	15
Tub/Shower Mixing Valve	10	Vacuum Pump Unit	25
Wall Mounted, Water Cooler	10	Vacuum Pump Single Stage Compressor	25
Water Closet	35	Vacuum Pump Motor	25
Urinal	35		
HEATING			
Item:	**Years**	**Item:**	**Years**
Gas/Oil Fired, Boilers	30	Solar Panel	15
Electric, Boilers	15	Solar Storage Tank	20
Burner, Boilers	7	Centrifugal Pump/ Motor Set, Solar Energy	20
Burner Motor, Boilers	7	Shell & Tube, Heat Exchanger	30
Underground Fuel Oil Storage Unit, Boilers	20	Circulating (Set)	15
Gas/Oil, Furnaces	15	Motor, Circulating	10
Electric, Furnaces	15	Pump, Head(Excludes Motor), Circulating	15
Furnace Fan Motor	10	Fuel Oil Pump, Boiler	7
Steam/Hot Water, Radiant Heaters	50	Pump Seals	7
Fin Tube Steam/Hot Water, Radiant Heaters	20	Fan Coil Unit	15
Electric Baseboard, Radiant Heaters	20	Fan Motor	10
Gas Fired, Unit Heaters	15	DX Heat Pump, Air Handling Units	20
Steam/Hot Water, Unit Heaters	15	Hot Water Steam, Air Handling Units	15
Electric, Unit Heaters	20	Fan Motor, Air Handling Units	10
Gas Fired, Infrared Heaters	15	Cooling Coil, Air Handling Units	25
Electric, Infrared Heaters	15	Heating Coil, Air Handling Units	25
COOLING			
Item:	**Years**	**Item:**	**Years**
Pump-Down Compressor, Centrifugal Chiller	10	Fluid Cooler Circulating Pump, Air Cooled Condenser	14
Air Cooled, Reciprocating Chiller	20	Forced Draft, Cooling Tower	15
Water Cooled, Reciprocating Chiller	20	Fan Motor, Cooling Tower	10
Compressor, Reciprocating Chiller	10	Float Valve, Cooling Tower	10
Condenser Coil, Reciprocating Chiller	10	Air Conditioner, Window Unit	10
Condenser Fan Motor, Reciprocating Chiller	10	Evaporative Condenser	15
Air Cooled/Gas Fired, Absorption Chiller	20	Condenser Fan Motor	10
Water Cooled, Absorption Chiller	20	Circulating Pump	10
Burner Blower, Absorption Chiller	7	Evaporative Cooler	12
Circulating Pump, Absorption Chiller	14	DX Water/Glycol Cooled	20

DX Air Cooled, Split System	20	DX Compressor	10
DX, Compressor, Split System	10	Evaporator Fan Motor	10
Condenser Coil, Split System	10	Air Compressor	25
DX, Fan Motor, Split System	10	Air Compressor Motor	15
Package Unit, Horizontal, Self-Contained	15	Centrifugal Pump/ Motor Set	20
Package Unit, Free Standing, Water Cooled	15	Circulating Motor	15
DX Compressor, Rooftop Unit	10	Fan Coil Unit	15
Air Cooled Condenser Coil, Rooftop Unit	10	Fan Motor	10
Water Cooled Condenser, Rooftop Unit	10	Fan Motor	15
Fan Motor, Rooftop Unit	10	Cooling Coil, DX	10
Hot Water/Steam Heating Coil, Rooftop Unit	25	Cooling Coil, Chilled Water	25
Gas Furnace In Rooftop Package Unit	15	Heating Coil, Hot Water	25
Direct Drive, Air Cooled Condenser	15	System (Control Panel, Sensors, Chemical Pumps	15
Fan Motor, Air Cooled Condenser	10	Chemical Pumps	15
VENTILATION			
Item:	**Years**	**Item:**	**Years**
Relief Ventilator	20	Fan, Roof/Wall Exhaust	15
Fan Motor	10		
EXTINGUISHING SYSTEMS			
Item:	**Years**	**Item:**	**Years**
Dry Pipe/Deluge	100	Dry Chemical Expellant Cylinder	25
Wet Pipe	100	Wet Chemical Cylinder	25
Trim Package, And Retarding Valve	100	Commercial Kitchen Hood Fire Extinguishing System	25
Compressed Gas Cylinder, CO2	25	Air Compressor, Dry Pipe/Deluge	25

ELECTRICAL – SERVICE AND DISTRIBUTION			
Item:	**Years**	**Item:**	**Years**
Service Entrance, Cable	30	Ground Rod	25
1 Pole Molded Case, Circuit Breaker	50	3 ASCR, Overhead Service	30
2 Pole Molded Case, Circuit Breaker	50	Safety Switches	25
3 Pole Molded Case, Circuit Breaker	50	Switchboards	20
Electrical Metallic Tube, Conduit	50	Liquid Filled, Transformers	30
600 Amp, Fuses	25	Dry, Transformers	30
Electrical Service, Grounding	50	8" X 8", Wireway	20
Building Structure, Grounding	50	Motor Starter	18
Lightning Protection, Grounding	25		
ELECTRICAL – LIGHTING AND POWER			
Item:	**Years**	**Item:**	**Years**
Fluorescent Interior, Light Fixture	20	Metal Halide Ballast, Light Fixture	10
Fluorescent Ballast, Light Fixture	10	Quartz, Light Fixture	20
Incandescent, Light Fixture	20	Exit Light	20
Metal Halide, Light Fixture	20		
ELECTRICAL – SPECIAL SYSTEMS			
Item:	**Years**	**Item:**	**Years**
Pull Station	15	Generator Sets	25
Smoke Detector	15	Battery Charger, Generator Set	20
Heat Detector	15	Ups Battery, Generator Set	15
Annunciator Panel	15	Transfer Switch	18
Control Panel	15	Coil, Transfer Switch	5
Alarm Bell	20		

E – Equipment and Furnishings

INSTITUTIONAL EQUIPMENT			
Item:	**Years**	**Item:**	**Years**
Remote condenser Unit	15	Condenser/Evaporative Fan Motor	10
Evaporative Unit	15		

F – Special Construction and Demolition

INTERIOR SWIMMING POOLS			
Item:	**Years**	**Item:**	**Years**
Surface – vinyl	20	Controls	15
Surface – concrete	30	Water heaters	15
Surface – gunite	30	Piping and fittings	30
Surface - metal	20	Valves	15
Surface – tile	30	Water filters	15
Surface – fiberglass	40	Chlorinators	15
Pumps	15	Underwater lights	10
Motors	15		

5100 – Water System

Item:	**Years**	**Item:**	**Years**
Water Supply			
Controls	15	Pumps	20
Hydrants	35	Tanks - Concrete	30
Manholes	30	Tanks - Metal	25
Mechanical Equipment	15	Valve Boxes - CMU	30
Meters	15	Valve Boxes - Concrete	40
Motors	15	Valve Boxes - Steel	20
Piping And Fittings	30	Valves	15
Other Systems			
Fencing/Gates - Wood	10	Signage - Metal	20
Fencing/Gates - Metal	20	Signage - Concrete	30
Fencing/Gates - Concrete	30	Signage - Masonry/Stone	30
Fencing/Gates - Masonry/Stone	33	Generator Sets	25
Signage - Wood	10		

5200 – Wastewater System

Item:	**Years**	**Item:**	**Years**
Waste Water System			
Aeration Tank – Concrete	40	Dry Well – Metal	25
Aeration Tank – Metal	25	Manholes/Cleanouts	30
Air Compressors - Reciprocating	15	Mechanical Equipment	15
Clarifier Tank - Concrete	40	Motors	15
Clarifier Tank - Metal	25	Piping And Fittings	30
Contact Tank - Concrete	40	Pumps	15

Contact Tank - Metal	25	Sewage Ejectors	15
Controls	15	Tanks – Sewage Collection	30
Disinfectant Injection System	15	Wet Well – Concrete	30
Dry Well – Concrete	40	Wet Well – Metal	25
Other Systems			
Fencing/Gates - Wood	10	Signage – Metal	20
Fencing/Gates - Metal	20	Signage – Concrete	30
Fencing/Gates - Concrete	30	Signage – Masonry/Stone	30
Fencing/Gates - Masonry/Stone	33	Generator Sets	25
Signage - Wood	10		

5300 – Heating & Cooling Plant

Item:	**Years**	**Item:**	**Years**
Heating			
Gas/Oil Fired, Boilers	30	Motor, Circulating	10
Electric, Boilers	15	Pump, Head (Excludes Motor), Circulating	15
Burner, Boilers	7	Fuel Oil Pump, Boiler	7
Burner Motor, Boilers	7	Pump Seals	7
Underground Fuel Oil Storage Unit, Boilers	20		
Circulating (Set)	15		
Cooling			
Pump-Down Compressor, Centrifugal Chiller	10	Condenser Fan Motor	10
Air Cooled, Reciprocating Chiller	20	Circulating Pump	10
Water Cooled, Reciprocating Chiller	20	Evaporative Cooler	12
Compressor, Reciprocating Chiller	10	DX Water/Glycol Cooled	20
Condenser Coil, Reciprocating Chiller	10	DX Compressor	10
Condenser Fan Motor, Reciprocating Chiller	10	Evaporator Fan Motor	10
Air Cooled/Gas Fired, Absorption Chiller	20	Air Compressor	25
Water Cooled, Absorption Chiller	20	Air Compressor Motor	15
Burner Blower, Absorption Chiller	7	Centrifugal Pump/ Motor Set	20
Circulating Pump, Absorption Chiller	14	Circulating Motor	15
Direct Drive, Air Cooled Condenser	15	Fan Coil Unit	15
Fan Motor, Air Cooled Condenser	10	Fan Motor	10
Fluid Cooler Circulating Pump, Air Cooled Condenser	14	Cooling Coil, DX	10
Forced Draft, Cooling Tower	15	Cooling Coil, Chilled Water	25
Fan Motor, Cooling Tower	10	Heating Coil, Hot Water	25
Float Valve, Cooling Tower	10	System (Control Panel, Sensors, Chemical Pumps	15
Evaporative Condenser	15	Chemical Pumps	15
Other Systems			
Fencing/Gates - Wood	10	Signage – Concrete	30
Fencing/Gates - Metal	20	Signage – Masonry/Stone	30
Fencing/Gates - Concrete	30		
Fencing/Gates - Masonry/Stone	33		
Foundations	50		
Signage - Wood	10		
Signage – Metal	20		

5400 – Electrical System

Item:	Years	Item:	Years
Site Electrical Utilities			
Air Terminals	25	Lighting Fixtures	20
Anchors and Guy Wires	50	Manholes	50
Battery (Nickel Alloy)	50	Meters	20
Battery (Lead Acid)	20	Motor Starters/Contactors	18
Bonding	50	Poles: Wood, Steel, Aluminum, Concrete and Fiberglass	50
Circuit Breakers	50	Power Regulators	18
Communication – Annunciator /Transmitter	20	Security - Alarm Devices	20
Communication – Remote Units	20	Security - Controller/Processor	20
Conductors (Bare)	50	Security - Entry Access Control	20
Conduit Systems	50	Security - Entry Sensors	20
Disconnect Switches	25	Security - Motion Sensors	20
Enclosures with Bus Bars	20	Security - TV Monitors/Cameras	20
Generator Sets	25	Steel Lattice Towers	50
Generator Set Battery Charger	20	Surge (Lightning) Arresters	60
Handholes	50	Transfer Switches	18
Insulators	60	Transformers	30
Lighting Controllers	15	Underground Electrical Utilities	50
Other Systems			
Fencing/Gates - Wood	10	Signage – Concrete	30
Fencing/Gates - Metal	20	Signage – Masonry/Stone	30
Fencing/Gates - Concrete	30	Tunnel - Structure	100
Fencing/Gates - Masonry/Stone	33	Tunnel Drainage – Gravity Flow System	50
Foundations	50	Tunnel Drainage – Pump System	50
Signage - Wood	10	Tunnel Drainage – Pump	20
Signage – Metal	20		

5500 – Radio System

Item:	Years	Item:	Years
Radio Systems			
Antenna	7	Pagers	5
Mobil data computers	7	Receivers	7
Transceivers	7	Transmission Towers	25
Transmitters	7		
Repeaters	7		
Translators	7		
Transponders	7		
Other Systems			
Fencing/Gates - Wood	10	Signage - Metal	20
Fencing/Gates - Metal	20	Signage - Concrete	30
Fencing/Gates - Concrete	30	Signage - Masonry/Stone	30
Fencing/Gates - Masonry/Stone	33	Generator Sets	25
Signage - Wood	10	Photovoltaic Power Supply	20

5510 – Phone System

Phone Systems			
Item:	**Years**	**Item:**	**Years**
Telephone Terminals	15	Line Amplifiers	15
Phone Switching / Processing Equipment:	15	Poles	35
Annunciator Unit	15	Cables	25
Optical Receiver / Regenerator/ Transmitter	15	UPS	15
		Surge Protection	15

5520 – I.T. Systems (i.e. LAN)

I.T. Systems			
Item:	**Years**	**Item:**	**Years**
Back up Data Systems	12	Servers	12
Power Conditioner /Surge Protection	10	Monitors	12
Internet Connections	10	Cables	25
Network Devices (Routers, Switches, Other)	12	UPS	10
Work Stations	10	Generator	20

5700 – Fuel System

Item:	**Years**	**Item:**	**Years**
Fuel Systems			
PUMPS	15	VALVES	25
STORAGE TANKS	20	CATHODIC PROTECTION	20
Other Systems			
Fencing/Gates - Wood	20	Signage – Concrete	30
Fencing/Gates - Metal	20	Signage – Masonry/Stone	30
Fencing/Gates - Concrete	30		
Fencing/Gates - Masonry/Stone	33		
Foundations	50		
Signage - Wood	20		
Signage – Metal	20		

5800 – Solid Waste / Recycling System

Item:	Years	Item:	Years
Solid Waste/Recycling Equipment			
Stationary Containers	25	Mobile Equipment - Trailers	10
Pond Liners	20	Compactors/Balers	20
Controls	15	Pumps	20
Hydrants	35	Tanks – Concrete	30
Manholes	30	Tanks – Metal	25
Mechanical Equipment	15	Valve Boxes - CMU	30
Meters	15	Valve Boxes - Concrete	40
Motors	15	Valve Boxes - Steel	20
Piping And Fittings	30	Valves	15
Other Systems			
Fencing/Gates - Wood	10	Signage – Metal	20
Fencing/Gates - Metal	20	Signage – Concrete	30
Fencing/Gates - Concrete	30	Signage – Masonry/Stone	30
Fencing/Gates - Masonry/Stone	33	Signage – Wood	10

6100 – Dam/Levee/Dike

Item:	Years	Item:	Years
Roads			
Paved Surface (Bituminous)	20	Guard Rail – Steel	25
Paved Surface (Concrete)	40	Guard Rail – Wood	15
Pavement Markings (Water Born)	3	Curb & Gutter - Concrete	35
Pavement Markings (Epoxy)	5		
Pavement Markings (Thermoplastic)	7		
Item:	**Years**	**Item:**	**Years**
Sidewalks			
Paved Surface (Bituminous)	20	Pavement Markings (Epoxy)	5
Paved Surface (Concrete)	40	Pavement Markings (Thermoplastic)	7
Pavement Markings (Water Born)	3	Railing – Timber	20
Item:	**Years**	**Item:**	**Years**
Abutments – Concrete	50	Pier	50
Deck – Concrete	20	Piles	50
Deck – Steel	20	Railing - Concrete	20
Deck – Timber	20	Railing - Steel	20
Drainage Device	20	Railing - Timber	20
Item:	**Years**	**Item:**	**Years**
Fence - Chain Link	10	Steel Pipe Gate	25
Fence - Wood	20	Signage	10
Fence – Pipe Rail	25		
Item:	**Years**	**Item:**	**Years**
Roads			

Culvert – Plastic	100	Pavement Markings (Water Born)	3
Culvert – Concrete	35	Pavement Markings (Epoxy)	5
Culvert – Metal	25	Pavement Markings (Thermoplastic)	7
Paved Surface (Bituminous)	20	Guard Rail – Steel	25
Paved Surface (Concrete)	40	Guard Rail – Wood	15
Curb & Gutter - Concrete	35		
Item:	**Years**	**Item:**	**Years**
Steel Pipe Gate	25		
Item:	**Years**	**Item:**	**Years**
Signage	10		

6200 – Constructed Waterway

Item:	**Years**	**Item:**	**Years**
Constructed Waterway			
Grassed Waterway	100	Concrete Channel with Grassed Floodway	100
Surface Drains (waterways w/o grass)	100	Vegetated Waterway with Concrete Invert	100
Surface Culverts	100	Vegetated Waterway with Earth Invert	100
Subsurface Drains (field tile)	75	Stabilized Natural Stream	100
Open Ditches	100	Navigable Channel	100
Concrete Channel	100	Navigable Lake	100

6300 – Marina/Waterfront System

Item:	**Years**	**Item:**	**Years**
Marina / Waterfront Systems			
Boot Jacks	30	Motors	15
Breakwater	75	Pier	75
Caisson Seats	15	Piles – Concrete	40
Capstans	30	Piles – Steel	25
Chain Pulls	50	Piles – Treated Wood	50
Concrete Stairs	80	Piles – Untreated Wood	30
Concrete Track Supports	80	Piping and Fittings	30
Coping Surfaces	35	Pumps	15
Cradle Roller Trains	33	Quaywall	100
Cradle Wheels	25	Reinforced Concrete Groundway	80
Docking Winch Assembly	30	Seawall	100
Dolphins, treated piles	50	Steel Caissons	30
Dolphins, untreated piles	30	Steel Catwalks	50
Fenders, Bearing Blocks	15	Steel Chain Path Wearing Plate	10
Fixed Directly Mounted Fender Unit	15	Steel Cradle Tracks	100
Fixed Hung Fender - Treated Wood	50	Steel Frame and Deck Cradles	50

Fixed Hung Fender - Untreated Wood	30	Steel Frame, Wood Deck Cradles	50
Floating Camels and Separators - Metal Framed	25	Steel sheet piling, coated	30
Floating Crib Camels and Separators	15	Steel sheet piling, treated	30
Floating Fender - Foam-Filled	15	Steel Stairs/Ladders	50
Floating Fender - Pneumatic	15	Steel Track Supports	50
Floating Log Camels - Wood	15	Steel Walkway Framing	50
Groins - Timber sheet pilings, coated	30	Steel Walkway Railing, Ladders and Draft Gauges	50
Groins - Wood piles, treated	50	Valves	15
Groins - Wood piles, untreated	30	Walkway Fittings	30
Hoist Assembly	30	Wharf	100
Inhaul and Outhaul Cables	50	Wood Chain Paths and Guides	30
Inhaul and Outhaul Chain/Cable Sheaves and Shackles	50	Wood Frame and Deck Cradles	30
Inhaul and Outhaul Chains	50	Wood Track Supports	30
Keel and Bilge Blocks	15	Wood Walkway Decking	30
Keel and Bilge Blocks	15	Wood Walkway Framing	30
Marine Hardware	80	Wood Walkway Railing, Ladders and Draft Gauges	30
Motor Controls	15	Wood, Rubber, Vinyl, Rope Fenders Walkway Fittings	15
Other Systems			
Fencing/Gates - Wood	10	Signage - Wood	10
Fencing/Gates - Metal	20	Signage – Metal	20
Fencing/Gates - Concrete	30	Signage – Concrete	30
Fencing/Gates - Masonry/Stone	33	Signage – Masonry/Stone	30

6400 – Aviation System

Item:	Years	Item:	Years
Aviation Systems			
Pavement-Concrete	25	Weather Reporting Equipment	10
Pavement-Asphalt	15	Crash and Rescue Equipment	10
Lighting	15	Wind Indicator	50
Communications Equipment	5		

6500 – Railroad System

7100 – Monuments/Memorial/Large Interpretive Objects

Item	Years	Item	Years
Bench, Aluminum	25	Manholes	30
Bench, Cast Iron	20	Meters	15
Bench, Concrete	75	Motors	15
Bench, Wood	30	Panel Boards – Electric	50
Bench, Wood/Slats/Steel Pedestals	30	Picnic Table – Metal	25

Bench, Stone/Granite	25	Picnic Table – Pads (Concrete)	40
Bile Rack - Metal	25	Picnic Table – Wood	15
Circuit Breaker – 1 Pole Molded Case	50	Picnic Table (Metal)	10
Controls	15	Picnic Table (Wood)	15
Coverings – Patina	50	Piping and Fittings	30
Coverings – Gold Leaf	50	Plaques – Metal	35
Electrical Service - Grounding	50	Pumps	20
Fencing / Gates (Concrete)	30	Retaining Wall – Rock	40
Fencing / Gates (Masonry/Stone)	33	Retaining Wall – Wood	25
Fencing / Gates (Metal)	20	Sculpture Base – Glass	75
Fencing / Gates (Wood)	10	Sculpture Base – Metal	35
Flag Pole (Metal)	10	Sculpture Base – Stone	50
Food Locker (Metal)	10	Sculpture – Glass	75
Fountains and Pools – Bronze	50	Sculpture – Metal	35
Fountains and Pools - Granite	100	Sculpture – Stone	25
Garden Structures – Grave Markers	50	Security Structures – Vehicular Barrier Systems – Concrete	60
Garden Structures – Wood	25	Security Structures – Turnstile (Metal)	25
Hydrants	35	Signage (Concrete)	30
Inscription Stones – Granite	100	Signage (Masonry/Stone)	30
Inscription Stones – Marble	75	Signage (Metal)	20
Irrigation System (Valves)	10	Signage (Wood)	10
Irrigation System (Motors)	15	Surfaces (Asphalt)	10
Irrigation System (Pumps)	20	Surfaces (concrete)	40
Irrigation System (Sprinklers)	20	Surfaces (Concrete)	25
Lettering – Metal	30	Surfaces (Dirt)	10
Light Posts – Metal	10	Surfaces (Granite)	100
Light Posts – Wood	10	Surfaces (Gravel)	10
Lighted Bollards (Log)	10	Tanks – Concrete	30
Lighted Bollards (Metal)	10	Tanks – Metal	25
Lighting – Ballasts	10	Trash Receptacle (Fixed)	8
Lighting Fixtures – Fluorescent	20	Water Fountains	10
Lighting Protection - Grounding	25	Wrought Iron Railing	45

7200 – Ruins / Archeological Sites

7300 – Fortifications

A – Structures

SUBSTRUCTURES			
Item:	**Years**	**Item:**	**Years**
Concrete Foundation Walls and Piers	40	Stone Foundation Walls and Piers	40
CMU Block Foundation Walls and Piers	30	Wood Foundation Walls and Piers	25
Brick Foundation Walls and Piers	30	Slab on Grade	40

B – Shell

Component Renewal Life-Cycle Estimates:

FLOOR CONSTRUCTION			
Item:	**Years**	**Item:**	**Years**
Concrete	75	Parquet	40
Terrazzo	75	Hardwood Strip	40
2" X 6" Floor Joist	125	Wood Gym Floor	40
2" X 8" Floor Joist	125	Wood Plank	40
2" X 10" Floor Joist	125	Steel Decking	30
2" X 12" Floor Joist	125	Steel Grating	30
Bridging X Type at Floor Joists	125	Galvanized Steel Grating	25
Plywood Subflooring	125	Aluminum Grating	35
Blanket Insulation	50		
ROOF CONSTRUCTION			
Item:	**Years**	**Item:**	**Years**
Plywood Roof Sheathing	125	2" X 8" Roof Joist	125
Wood Roof Decking	125	2" X 10" Roof Joist	125
Steel Roof Decking	125	2" X 10" Roof Joist	125
2" X 6" Roof Joist	125		
EXTERIOR WALLS			
Item:	**Years**	**Item:**	**Years**
Stucco	100	Soffit Board	25
EIFS	100	Exterior Fascia Board	25
Metal Coping	30	Wood Cornice	25
Wood Lattice	25	Wall Wood Trim	25
Aluminum Skirt Siding	35	Wall Metal Trim/Flashing	45
Wood Skirt Siding	25	Galvanized Wall Drip Edge	30
Fiberglass Insulation	50	Aluminum Wall Drip Edge	35
Batt Insulation	50	Rigid Polystyrene / Blueboard Insulation	50
Brick	75	Molded Bead-board Insulation	50
CMU	60	Fiberboard Insulation	50
Adobe	75	Decorative Wood Columns	40
Terra Cotta	50	Structural Wood Columns	40
Glass Block	75	Masonry Columns	100
Vinyl Siding	70	Cut/Point Masonry Columns	25
Aluminum Siding	35	Sill Plate (UP TO 2" X 8")	125
Wood Sheet Siding	25	2" X 4" Wood Stud	125
Wood Clapboard Siding	25	2" X 6" Wood Stud	125
Wood Shingle Siding	40	2" X 8" Wood Stud	125
Galvanized Corrugated Siding	30	2" X 4" Wood Framing	125
Insulated Steel Sandwich Siding	45	2" X 6" Wood Framing	125
Masonite Hard Board Siding	12	Wall Sheathing Plywood	125
Fiberglass Panel Siding	9	Wall Sheathing Wood Fiberboard	125

EXTERIOR WINDOWS			
Item:	**Years**	**Item:**	**Years**
Glazing Compound in Window	20	Casement Aluminum	50
Neoprene Gaskets	20	Casement Steel	45
Double Hung Wood	40	Casement Vinyl Clad	60
Double Hung Aluminum	50	Awning Wood	40

Double Hung Steel	45	Awning Aluminum	50
Double Hung Vinyl Clad	60	Awning Steel	45
Casement Wood	40	Awning Vinyl Clad	60
EXTERIOR DOORS			
Item:	**Years**	**Item:**	**Years**
Replace Panic Hardware	25	Store Front, Aluminum	50
Replace Exterior Metal Door Frame	45	Revolving, Aluminum	25
Replace Exterior Wood Door Frame	30	Sliding, Patio Type	50
Replace Exterior Wood Door	30	Double Acting, Solid Core, Wood	30
Replace Exterior Steel Door	40	Garage, Hardboard	45
Replace Exterior Aluminum Door	50	Garage, Metal	50
Aluminum Overhead Door	75	Garage, Wood	60
Steel Rolling Door	75	Steel, Sectional	80
Motor Operator, Rolling Door	25	Wood Overhead Door	60
ROOF COVERINGS			
Item:	**Years**	**Item:**	**Years**
Built – Up	25	Fiberglass	20
Modified Bituminous	25	Copper	100
Single-Ply / Thermoset	20	Membrane Flashing	10
Roll Roofing	20	Modified Bituminous Flashing	20
Asphalt Shingle	20	Metal Flashing	20
Wood/Cedar	40	Metal Ridge Cap Flashing	30
Slate	70	Copper Counter Flashing	20
Clay Tile	70	Aluminum Counter Flashing	20
Metal Panel	30		

Recurring Maintenance Cycles:

EXTERIOR WALLS			
Item:	**Years**	**Item:**	**Years**
P/P Masonry /Concrete Wall	10	Cut/Point Brick Wall	25
P/P Stucco Wall	10	Cut/Point CMU Wall	25
P/P Wood Siding	20	Cut/Point Random Stone Wall	25
P/P Metal Siding	20	Cut/Point Cut Stone Wall	25
C/C Wall Vent Louvers	20	Cut/Point Coping Blocks	25
C/C Wall Joints	20		
C/C Seams	20		

EXTERIOR WINDOWS			
Item:	**Years**	**Item:**	**Years**
P/P Metal Window	5	C/C Around Exterior Window Frames	5
P/P Wood Window	5		
EXTERIOR DOORS			
Item:	**Years**	**Item:**	**Years**
P/P/ Refinish Exterior Wood Door	4	P/P Commercial Overhead Wood Door	4
P/P/Refinish Exterior Metal Door	4	P/P Residential Garage Metal Door	4
P/P Commercial Overhead Metal Door	4	P/P Residential Garage Wood Door	4
C/C Exterior Door	4		

C – Interiors

Component Renewal Life-Cycle Estimates:

INTERIOR PARTITIONS			
Item:	**Years**	**Item:**	**Years**
Drywall	75	Painted Terra Cotta Block Wall	75
Plaster	75	Glass Block Wall	75
Wood Paneling	30	Cut/Point Painted Brick Wall	25
Vinyl Wall Covering	15	Cut/Point Painted CMU Wall	25
Wallpaper	20	Water Closet Partition, Painted Metal	20
Acoustic Wall Tile	60	Water Closet Partition, Marble	50
Acoustic Carpet Wall Covering	10	Water Closet Partition, Stainless Steel	75
Cork	16	Base Cabinet, Hardwood	100
Ceramic Wall Tile	75	Base Cabinet, Wood	100
Marble	75	Wall Cabinets, Wood	100
Structural Facing Tile	75	Wardrobe, Plastic Laminate	70
Painted CMU Wall	75	Base Cabinet, Metal	20
Painted Brick Wall	75	Wall Cabinets, Metal	20
Bench, Wood	30	Countertop, Plastic	70
Bench, Aluminum	25	Countertop, Stainless	75
Bench, cast Iron	20	Bleachers, Aluminum	25
Bench, Wood Slats/Steel Pedestals	30	Bleachers, Wood	30
		Bench, Concrete	75
INTERIOR DOORS			
Item:	**Years**	**Item:**	**Years**
Replace Interior Solid Core Wood Door	40	Replace Interior Hollow Core Wood Door	30
Replace Interior Metal Door	60		
STAIRWAYS			
Item:	**Years**	**Item:**	**Years**
Concrete Stair Tread Inserts	30	Wood Stair Tread	40
Rubber/Vinyl Stair Tread	18	Metal Grate Tread	30
Rubber Stair Nosing	8	Stone Tread	50
Anti-slip Abrasive Tread Tape	8	Wood Railing	40
Brick Tread	50	Steel Pipe Railing	45
Terrazzo Tread	50	Wrought Iron Railing	45
Clay/Quarry Tile Tread	50		

INTERIOR FLOORS			
Item:	**Years**	**Item:**	**Years**
Parquet	40	Vinyl	18
Hardwood Strip	40	Rubber	18
Wood Gym Floor	40	Cork	16
Wood Plank	40	Ceramic Tile	50
Steel Decking	30	Natural Clay/Quarry Tile	50
Steel Grating	30	Marble Tile	50
Galvanized Steel Grating	25	Slate Tile	70
Aluminum Grating	35	Sheet Vinyl	18
Sealer/Hardener Silicone Base on Concrete	10	Floor Mat, in-laid Black Rubber	18
Epoxy Coat/Film to Concrete	15	Terrazzo	75

INTERIOR CEILINGS			
Item:	**Years**	**Item:**	**Years**
Suspended Acoustic	50	Sheetrock/Drywall	40
Suspended Mineral Fiber	50	Plaster	75
Hardboard Panels	50	Sprayed Acoustical	50
Plywood	50	Rolled Batt Insulation	50
Finished Wood Strip	50	Blown-in Fiberglass Insulation	50

Recurring Maintenance Cycle Estimates:

INTERIOR PARTITIONS			
Item:	**Years**	**Item:**	**Years**
P/P Walls and Ceilings (Concrete/Drywall/Plaster)	5	P/P Wood Water Closet Stall	4
P/P Metal Wall	5	P/P Refinish Interior Wood Trim	4
P/P Wood	10	P/P Refinish Wood Wainscot	4
P/P/Stain Cabinets and Casework	7	C/C At Wall and Counter Top	7
P/P Metal Water Closet Stall	4	C/C Plumbing Fixture	5
INTERIOR DOORS			
Item:	**Years**	**Item:**	**Years**
P/P/ Refinish Interior Wood Door	4	P/P/ Refinish Water Closet Wood Door	4
P/P/ Refinish Interior Metal Door	4	P/P Water Closet Metal Door	4
STAIRWAYS			
Item:	**Years**	**Item:**	**Years**
P/P Metal Stairs	7	P/P Wrought Iron Rail	7
P/P Concrete Stairs	7	P/P Metal Stair Railing	7
P/P Stain Wood Stairs	7	Rubber Stair Nosing	8
P/P Metal Pipe Rail	7	Anita -slip Abrasive Tread Tape	8
P/P Stain Wood Stair Rail	7	Carpet	8

INTERIOR FLOORS			
Item:	**Years**	**Item:**	**Years**
Sealer/Hardener Silicone Base On Concrete	10	Carpet	8
Epoxy Coat/Film to Concrete	15	Carpet Tile	10
P/P Concrete	10	Anti-Slip Tape	8
P/P Wood	10	P/P Stone	10
INTERIOR CEILINGS			
Item:	**Years**	**Item:**	**Years**
P/P Interior Ceiling Concrete/Drywall/ Plaster	6	P/P Metal Ceiling/Decking	6
P/P/Finish Interior Wood	6	P/P Interior Ceiling/ Pipes/Utilities/Girders	6

D – Services

CONVEYING SYSTEMS			
Item:	**Years**	**Item:**	**Years**
Hydraulic Elevator	25	Dumbwaiter	20
Traction Elevator	25	Belt Conveyor	5
Escalator	15		
PLUMBING			
Item:	**Years**	**Item:**	**Years**
Lavatory	40	Flush Valve	25
Sink	40	Electric To 50 Gallon, Hot Water Generator	10
Garbage Disposal	8	Electric 80 - 2000 Gal, Hot Water Generator	15
Service Sink	35	Gas/Oil To 50 Gal, Hot Water Generator	10
Faucet	10	Gas/Oil 50 To 70 Gal, Hot Water Generator	12
Bathtub, Fiberglass	20	Gas/Oil Commercial, Hot Water Generator	20
Bathtub, PE On CI	40	Heat Exchanger, Shell/ Tube, Hot Water Generator	20
Bathtub, Enameled Steel	35	Storage Tank, Domestic Hot Water, Hot Water Generator	50
Shower, Enameled Steel	35	Air Compressor	25
Shower, Fiberglass	20	Refrigerated	15
Tub/Shower Mixing Valve	10	Vacuum Pump Unit	25
Wall Mounted, Water Cooler	10	Vacuum Pump Single Stage Compressor	25
Water Closet	35	Vacuum Pump Motor	25
Urinal	35		
HEATING			
Item:	**Years**	**Item:**	**Years**
Gas/Oil Fired, Boilers	30	Solar Panel	15
Electric, Boilers	15	Solar Storage Tank	20
Burner, Boilers	7	Centrifugal Pump/ Motor Set, Solar Energy	20
Burner Motor, Boilers	7	Shell & Tube, Heat Exchanger	30
Underground Fuel Oil Storage Unit, Boilers	20	Circulating (Set)	15
Gas/Oil, Furnaces	15	Motor, Circulating	10
Electric, Furnaces	15	Pump, Head(Excludes Motor), Circulating	15
Furnace Fan Motor	10	Fuel Oil Pump, Boiler	7
Steam/Hot Water, Radiant Heaters	50	Pump Seals	7
Fin Tube Steam/Hot Water, Radiant Heaters	20	Fan Coil Unit	15
Electric Baseboard, Radiant Heaters	20	Fan Motor	10
Gas Fired, Unit Heaters	15	DX Heat Pump, Air Handling Units	20
Steam/Hot Water, Unit Heaters	15	Hot Water Steam, Air Handling Units	15
Electric, Unit Heaters	20	Fan Motor, Air Handling Units	10
Gas Fired, Infrared Heaters	15	Cooling Coil, Air Handling Units	25
Electric, Infrared Heaters	15	Heating Coil, Air Handling Units	25

COOLING			
Item:	**Years**	**Item:**	**Years**
Pump-Down Compressor, Centrifugal Chiller	10	Fluid Cooler Circulating Pump, Air Cooled Condenser	14
Air Cooled, Reciprocating Chiller	20	Forced Draft, Cooling Tower	15
Water Cooled, Reciprocating Chiller	20	Fan Motor, Cooling Tower	10
Compressor, Reciprocating Chiller	10	Float Valve, Cooling Tower	10
Condenser Coil, Reciprocating Chiller	10	Air Conditioner, Window Unit	10
Condenser Fan Motor, Reciprocating Chiller	10	Evaporative Condenser	15
Air Cooled/Gas Fired, Absorption Chiller	20	Condenser Fan Motor	10
Water Cooled, Absorption Chiller	20	Circulating Pump	10
Burner Blower, Absorption Chiller	7	Evaporative Cooler	12
Circulating Pump, Absorption Chiller	14	DX Water/Glycol Cooled	20
DX Air Cooled, Split System	20	DX Compressor	10
DX, Compressor, Split System	10	Evaporator Fan Motor	10
Condenser Coil, Split System	10	Air Compressor	25
DX, Fan Motor, Split System	10	Air Compressor Motor	15
Package Unit, Horizontal, Self-Contained	15	Centrifugal Pump/ Motor Set	20
Package Unit, Free Standing, Water Cooled	15	Circulating Motor	15
DX Compressor, Rooftop Unit	10	Fan Coil Unit	15
Air Cooled Condenser Coil, Rooftop Unit	10	Fan Motor	10
Water Cooled Condenser, Rooftop Unit	10	Fan Motor	15
Fan Motor, Rooftop Unit	10	Cooling Coil, DX	10
Hot Water/Steam Heating Coil, Rooftop Unit	25	Cooling Coil, Chilled Water	25
Gas Furnace In Rooftop Package Unit	15	Heating Coil, Hot Water	25
Direct Drive, Air Cooled Condenser	15	System (Control Panel, Sensors, Chemical Pumps	15
Fan Motor, Air Cooled Condenser	10	Chemical Pumps	15
VENTILATION			
Item:	**Years**	**Item:**	**Years**
Relief Ventilator	20	Fan, Roof/Wall Exhaust	15
Fan Motor	10		
EXTINGUISHING SYSTEMS			
Item:	**Years**	**Item:**	**Years**
Dry Pipe/Deluge	100	Dry Chemical Expellant Cylinder	25
Wet Pipe	100	Wet Chemical Cylinder	25
Trim Package, And Retarding Valve	100	Commercial Kitchen Hood Fire Extinguishing System	25
Compressed Gas Cylinder, CO2	25	Air Compressor, Dry Pipe/Deluge	25

ELECTRICAL – SERVICE AND DISTRIBUTION			
Item:	**Years**	**Item:**	**Years**
Service Entrance, Cable	30	Ground Rod	25
1 Pole Molded Case, Circuit Breaker	50	3 ASCR, Overhead Service	30
2 Pole Molded Case, Circuit Breaker	50	Safety Switches	25
3 Pole Molded Case, Circuit Breaker	50	Switchboards	20
Electrical Metallic Tube, Conduit	50	Liquid Filled, Transformers	30
600 Amp, Fuses	25	Dry, Transformers	30
Electrical Service, Grounding	50	8" X 8", Wireway	20
Building Structure, Grounding	50	Motor Starter	18
Lightning Protection, Grounding	25		
ELECTRICAL – LIGHTING AND POWER			

Item:	Years	Item:	Years
Fluorescent Interior, Light Fixture	20	Metal Halide Ballast, Light Fixture	10
Fluorescent Ballast, Light Fixture	10	Quartz, Light Fixture	20
Incandescent, Light Fixture	20	Exit Light	20
Metal Halide, Light Fixture	20		
ELECTRICAL – SPECIAL SYSTEMS			
Item:	**Years**	**Item:**	**Years**
Pull Station	15	Generator Sets	25
Smoke Detector	15	Battery Charger, Generator Set	20
Heat Detector	15	Ups Battery, Generator Set	15
Annunciator Panel	15	Transfer Switch	18
Control Panel	15	Coil, Transfer Switch	5
Alarm Bell	20		

E – Equipment and Furnishings

INSTITUTIONAL EQUIPMENT			
Item:	**Years**	**Item:**	**Years**
Remote condenser Unit	15	Condenser/Evaporative Fan Motor	10
Evaporative Unit	15		

F – Special Construction and Demolition

INTERIOR SWIMMING POOLS			
Item:	**Years**	**Item:**	**Years**
Surface – vinyl	20	Controls	15
Surface – concrete	30	Water heaters	15
Surface – gunite	30	Piping and fittings	30
Surface - metal	20	Valves	15
Surface – tile	30	Water filters	15
Surface – fiberglass	40	Chlorinators	15
Pumps	15	Underwater lights	10
Motors	15		

7400 – Towers/Missile Silos

Item:	Years	Item:	Years
Towers & Missile Silos			
Data Transmission Tower	60	Soft Site – Liquid Fuel Silo	10
Utility Tower	60	Semi-Hard Site – Liquid Fuel Silo	10
Observation Tower	60	Hard Site – Liquid Fuel Silo	10
		Hard Site – Solid Fuel Silo	10

7900 – Amphitheater

Site Improvements			
Item:	**Years**	**Item:**	**Years**
Bench (wood/log)	20	Fire Rings	
Bench (Stone/Granite)	25	Irrigation System (Valves)	10

Cabinet-Storage (wood)	30	Non-Historic Presentation Platform (Wood)	30
Cabinet-Storage (metal)	30	Non-Historic Presentation Platform (Stone)	25
Culvert –Closed (metal)	30	Signage (Concrete)	30
Culvert –Closed (rock)	30	Fencing/Gates (metal)	20
Culvert –Open (rock)	25	Signage (Masonry/Stone)	30
Drinking Fountain	10	Signage (Metal)	20
Fencing/Gates (concrete)	30	Speaker Poles	20
Fencing/Gates (wood)	10	Trash Receptacle (Fixed)	8
Flagpole	10		
Culvert - Plastic	100		
Culvert – Concrete	35	Guard Rail – Steel	25
Culvert – Metal	25	Guard Rail – Wood	15
Circuit Breaker – 1 Pole Molded Case	50	Lighting Protection – Grounding	25
Electrical Service - Grounding	50	Panel Boards - Electric	50