Fire Station 207

Built in 1963 the facility is located on Duke St and has very limited parking at the rear of the facility. The fire station construction is brick masonry construction. Roofing consists of EPDM construction with a mansard style slate roof over the vehicle bay area. A video study of the sanitary line should be conducted to determine the extent of sewer issues at the facility.

Spalling masonry

Kitchen remodel needed

Water penetration

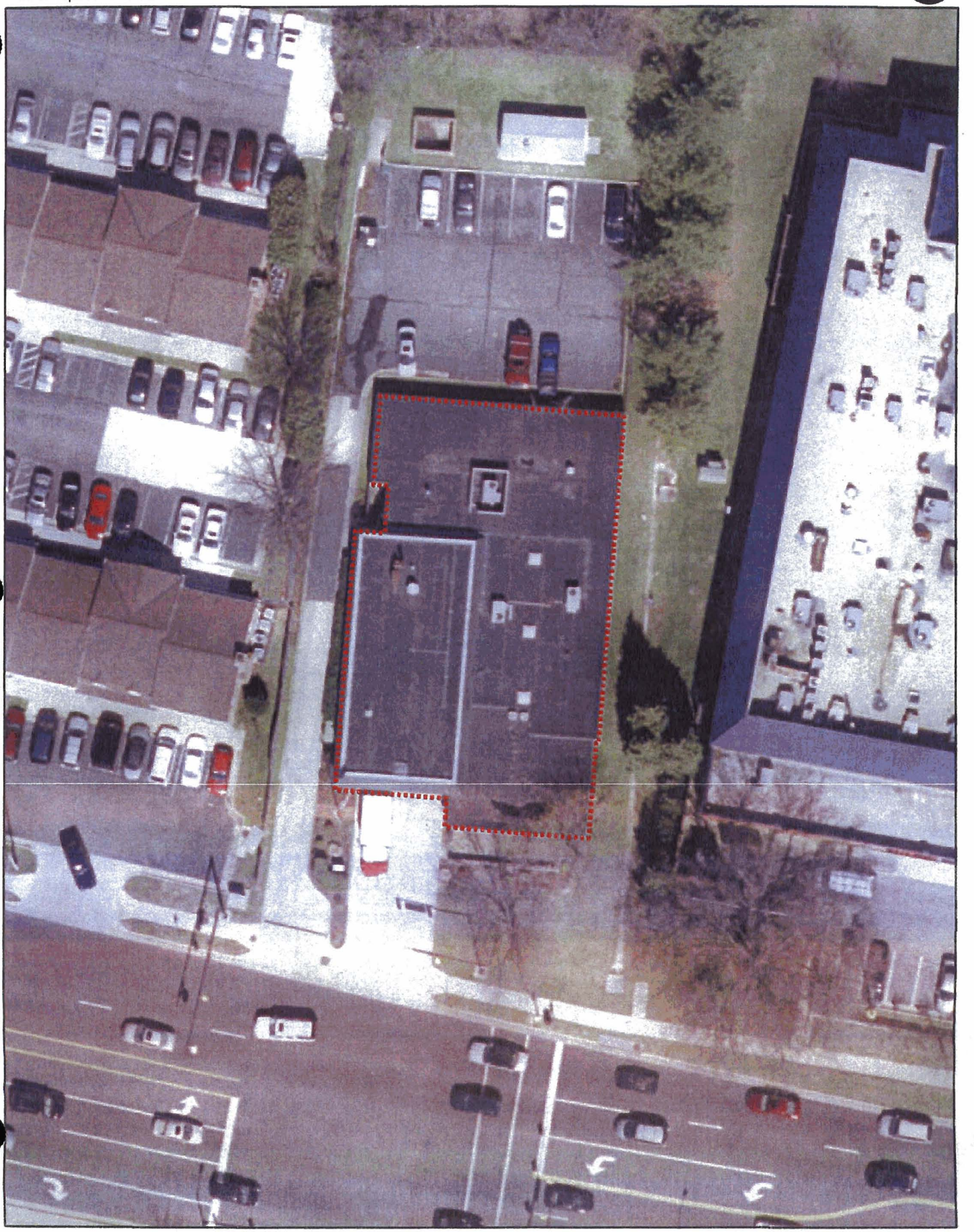
Roof ponding conditions

Facility Outlook

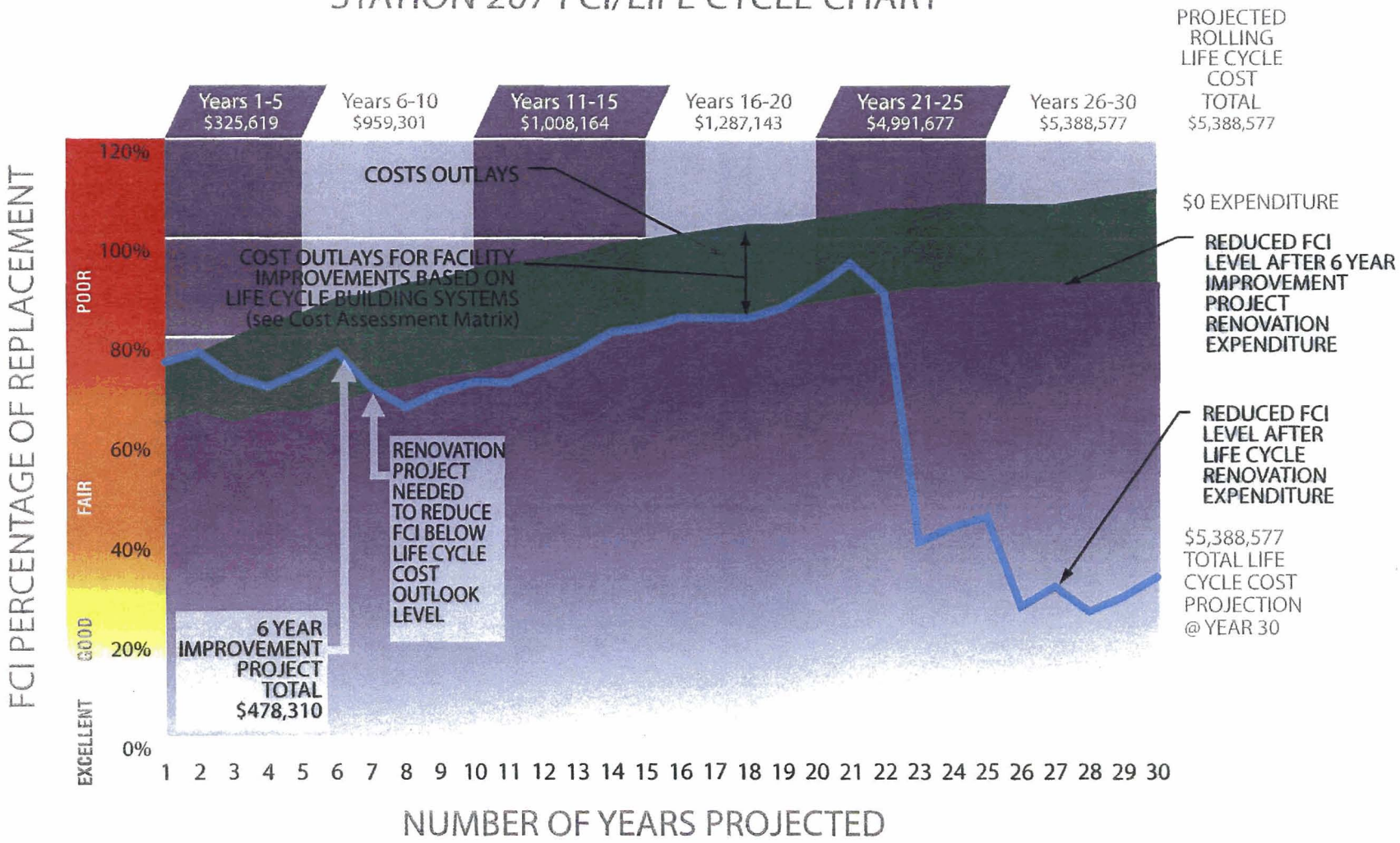
The following charts depict the life cycle costs and FCI values over a 30 year outlook, including a six year building renovations improvement project cost matrix.

Station 207

1 inch equals 35 feet



STATION 207 FCI/LIFE CYCLE CHART



NOTE:

1. Facility Condition Index is the ratio of costs to renovate or repair vs. to replace with new as calculated below.

$$(FCI) = \frac{\text{Deferred Maintenance + Capital Renewal}}{\text{Current Replacement Value}}$$

2. Life cycle costs are based upon the value to replace the system that once the life of that system is over.
   Example: 20 year life span of a roof system and the cost to replace it in 20 years.

FIRE STATION #207

RENOVATION COST MATRIX

Alexandria Fire Department - Alexandria, Virginia

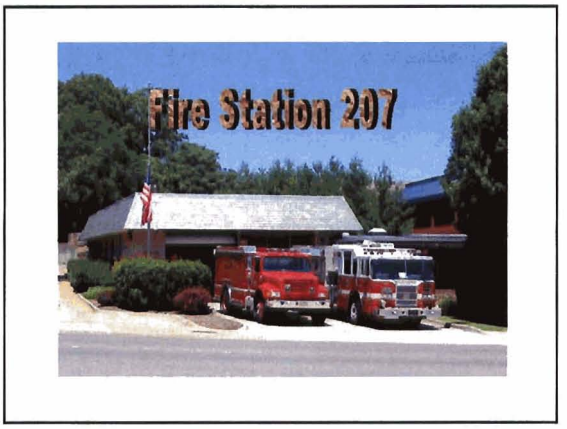
CAPITAL IMPROVEMENTS - SIX YEAR OUTLOOK

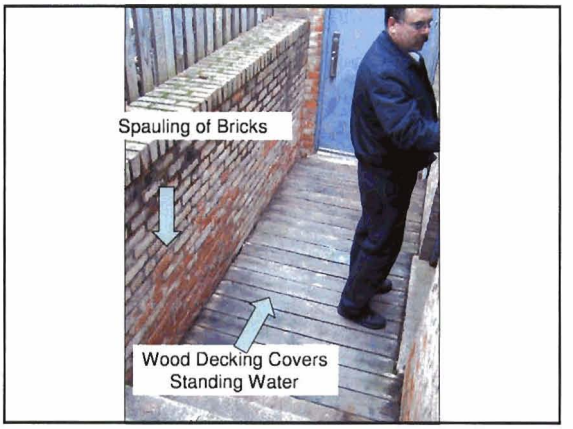
Project Description	Priority 1 - 5	UM	Qty	Unit $	Subtotal $	Total $ ESCALATED	SIX YEAR OUTLOOK 2009 1.00	2010 1.03	2011 1.06	2012 1.09	2013 1.12	2014 1.15	Defered	Remarks
BASE YEAR ESTIMATE						$ 478,310	$ 270,840	$ -	$ 119,567	$ -	$ 64,206	$ 23,697	$ -	
Repair Exterior Envelope - Water Penetration	4					$ 16,391	$ 16,391							
Power Wash Exterior Surfaces		SF	7,350	$ 0.75	$ 5,513									
Patch and Point Brick		SF	7,350	$ 0.98	$ 7,203									
Paint and Seal		SF	7,350	$ 0.50	$ 3,675									
Masonry Repair	4					$ 14,258	$ 14,258							
Replace Masonry - Partial		SF	2,500	$ 5.70	$ 14,258									
Replace Overhead Doors	4					$ 24,463			$ 25,931					
Demo		EA	2	$ 250.00	$ 500									
New Overhead Doors		EA	2	$11,981.70	$ 23,963									
Replace Exterior Windows	4					$ 30,199					$ 32,917			
Demo		EA	30	$ 50.00	$ 1,500									
New Windows		EA	30	$ 956.64	$ 28,699									
Replace Kitchen	3													
Replace Cabinets						$ 20,845			$ 22,096					
Demo		SF	250	$ 4.70	$ 1,175									
New Cabinets		SF	250	$ 78.68	$ 19,670									
Replace Appliances						$ 6,413			$ 6,798					
Demo		EA	6	$ 200.00	$ 1,200									
New Appliances		EA	6	$ 868.79	$ 5,213									
Replace Flooring						$ 4,558			4,831.32					
Demo		SF	300	$ 2.50	$ 750									
New Flooring		SF	300	$ 12.69	$ 3,808									
Paint interior walls/ceilings	3					$ 27,937					$ 31,289			
Walls		SF	7,350	$ 1.74	$ 12,775									
Ceilings		SF	7,350	$ 2.06	$ 15,161									
Replace sanitary sewer - Drain/Waste/Vent	3					$ 50,828			$ 53,878					
Demo		SF	7,350	$ 0.75	$ 5,513									
New Sanitary Sewer System		SF	7,350	$ 6.17	$ 45,316									
Replace all wiring	3					$ 189,451	$ 189,451							
Demo		SF	7,350	$ 2.50	$ 18,375									
New Wiring - Service & Distribution		SF	7,350	$ 10.95	$ 80,513									
New Wiring - Lighting & Branch Wiring		SF	7,350	$ 12.32	$ 90,563									
Install a new generator	5					$ 50,740	$ 50,740							
Demo		EA	1	$ 3,401.63	$ 3,402									
New Generator		EA	1	$47,338.75	$ 47,339									
Replace Concrete - Front ramp	1					$ 10,200						$ 11,730		
Demo		SF	1,200	$ 2.50	$ 3,000									
New Front ramp		SF	1,200	$ 6.00	$ 7,200									
Resurface Asphalt Parking Lot	1					$ 10,406						$ 11,967		
Resurface		SF	7,350	$ 1.42	$ 10,406									
Replace Sanitary Line	4					$ 5,691			$ 6,033					
Demo		SF	7,350	$ 0.50	$ 3,675									
New Sanitary Line		SF	7,350	$ 0.27	$ 2,016									

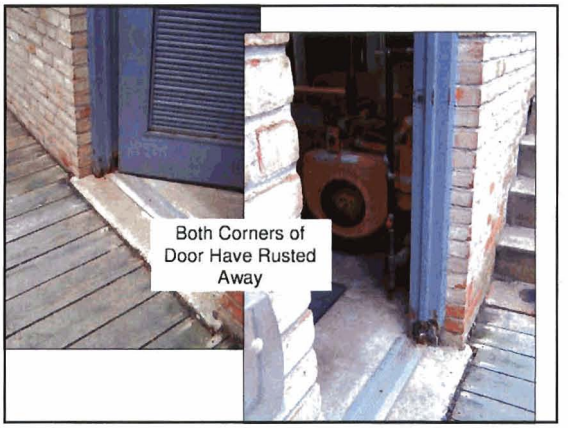
Notes:

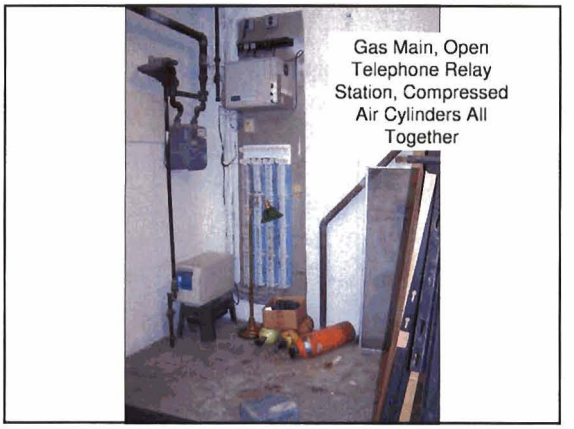
Cost estimate shows the following:
- Project Elements.
- Base Year Costs.
- Distribution of costs
- Differences are due to rounding.

Priority Rating 1 - 5
- 5- Life safety & building security.
- 4- Building exterior & primary systems.
- 3- Buiding interior finishes and secondary systems.
- 2- Supplemental systems.
- 1- Noncritical systems.

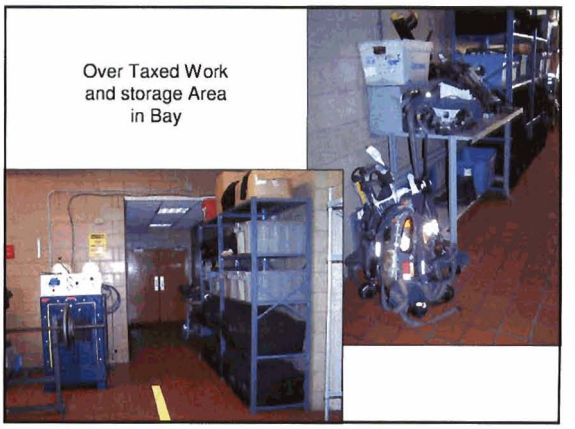

Fire Station 207

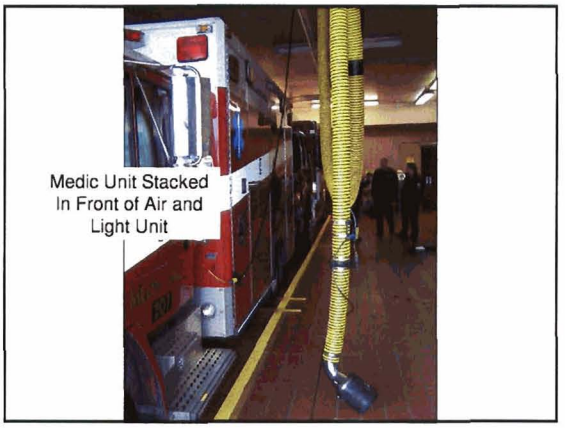

Spauling of Bricks
Wood Decking Covers Standing Water

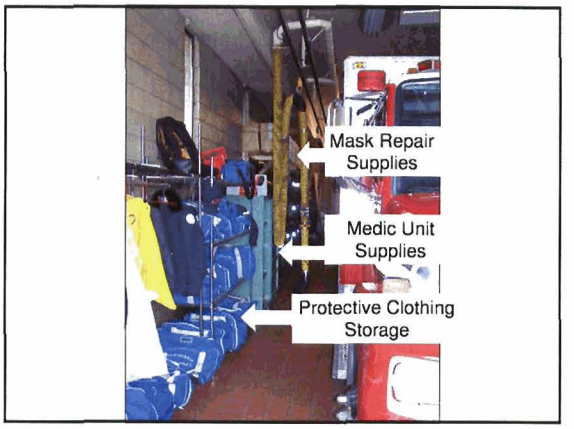

Both Corners of Door Have Rusted Away

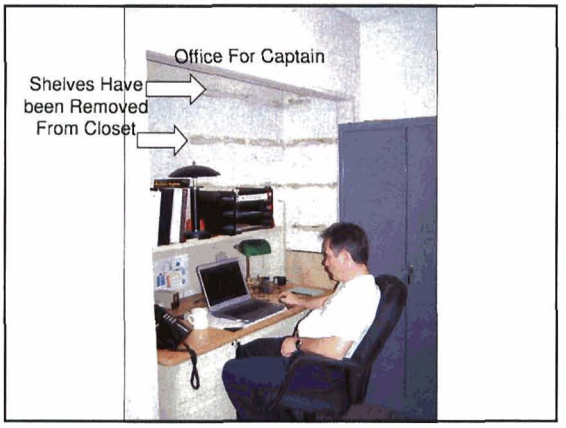

Gas Main, Open Telephone Relay Station, Compressed Air Cylinders All Together

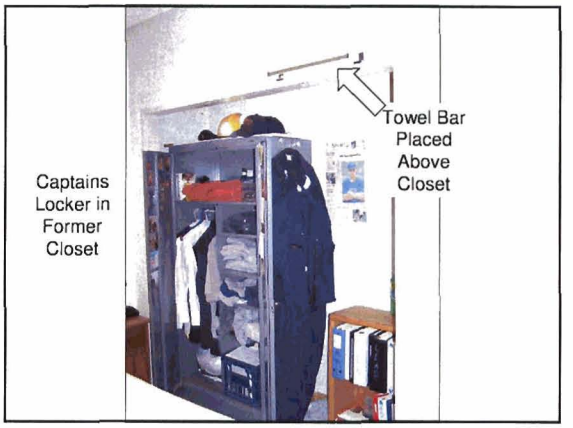

Hot Water Heater, Tactical Protective Clothing, Spreader, Buffers, Chairs and Hot Water all in one Small Area
MEDIC

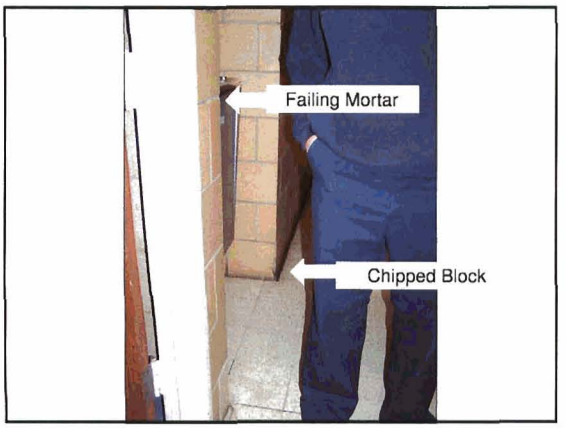

Over Taxed Work and storage Area in Bay

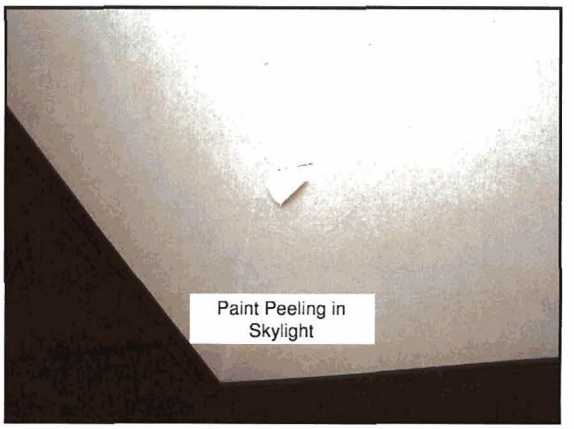

Medic Unit Stacked
In Front of Air and
Light Unit


Mask Repair
Supplies
Medic Unit
Supplies
Protective Clothing
Storage

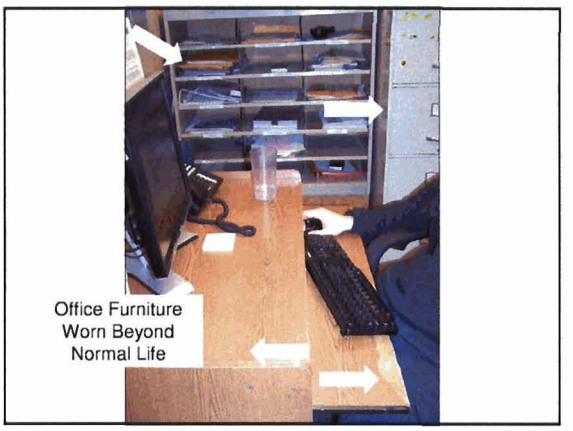

Office For Captain
Shelves Have
been Removed
From Closet

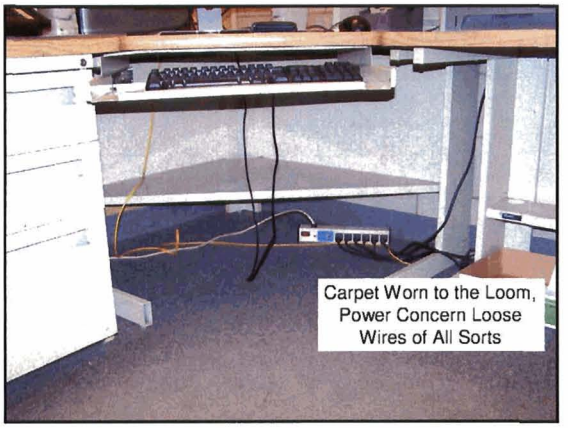

Towel Bar
Placed
Above
Closet
Captains
Locker in
Former
Closet

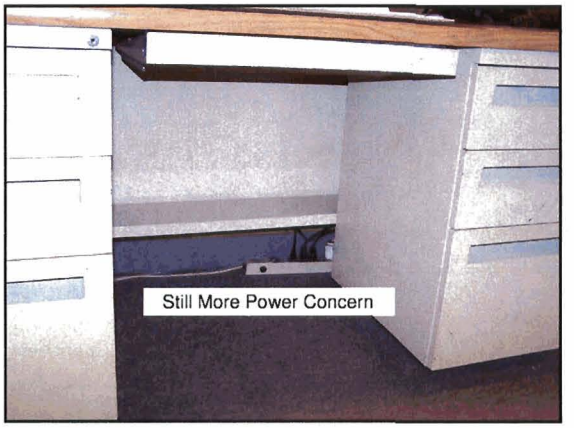

Failing Mortar
Chipped Block

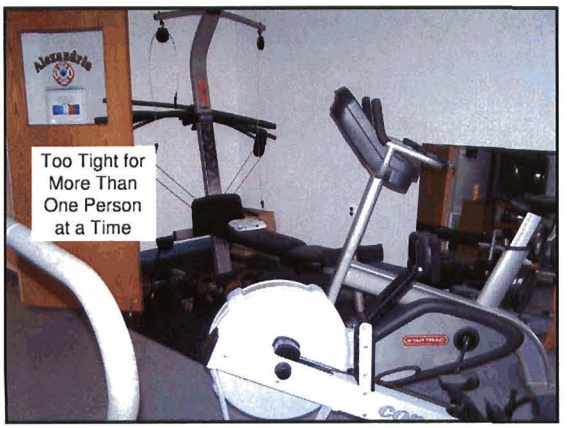

Paint Peeling in
Skylight

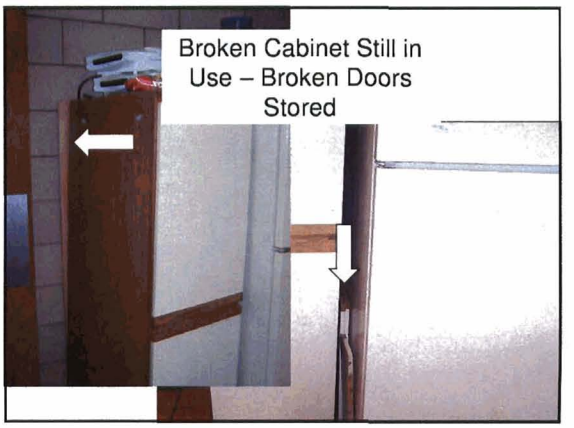

Threadbare Carpets,
Chipped and Damaged
File System, Mail in Corner

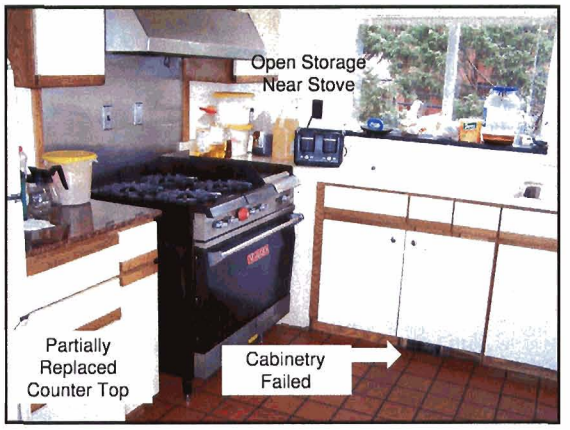

Office Furniture
Worn Beyond
Normal Life


Carpet Worn to the Loom,
Power Concern Loose
Wires of All Sorts


Still More Power Concern


Too Tight for
More Than
One Person
at a Time

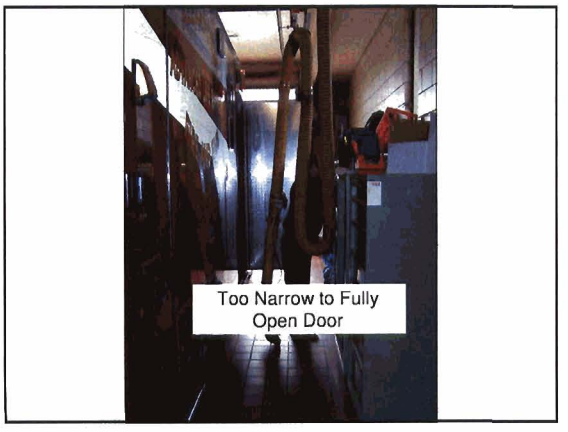

Broken Cabinet Still in
Use – Broken Doors
Stored


Open Storage
Near Stove
Partially
Replaced
Counter Top
Cabinetry
Failed


Broken Missing
Doors – Different
Colored Faces

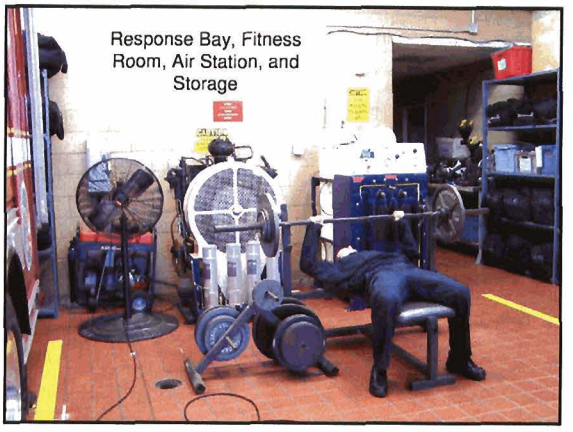

Space Concern for
People Eating

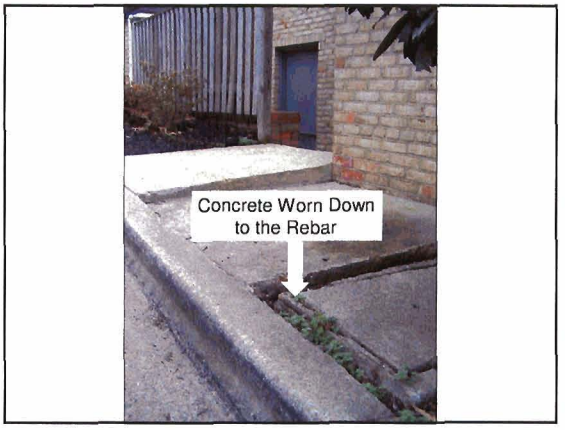

207
Very Narrow Access


Too Narrow to Fully
Open Door

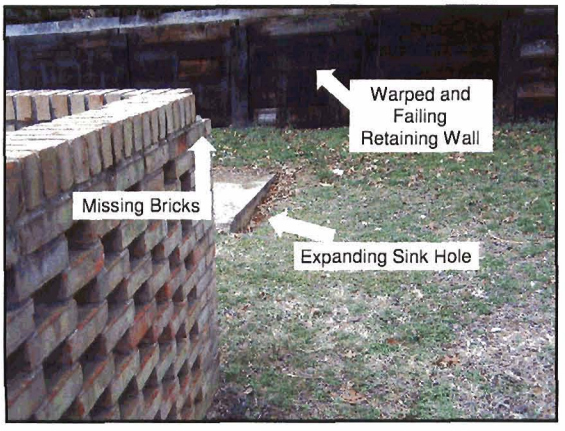

Hand Hazard
MEDIC UNIT
207
FIRE-EMS

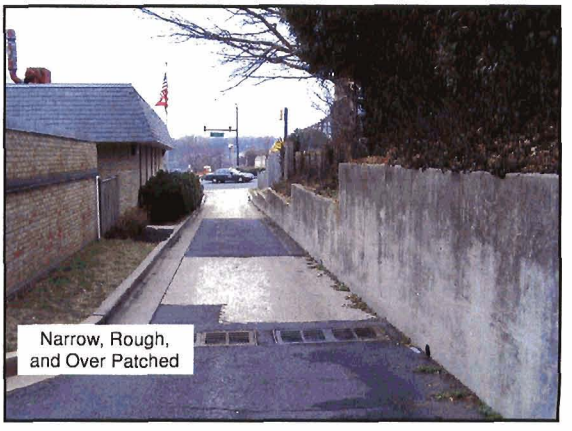

ALEXANDRIA
FIRE EMS
More Narrow Access


Response Bay, Fitness Room, Air Station, and Storage


Concrete Worn Down to the Rebar

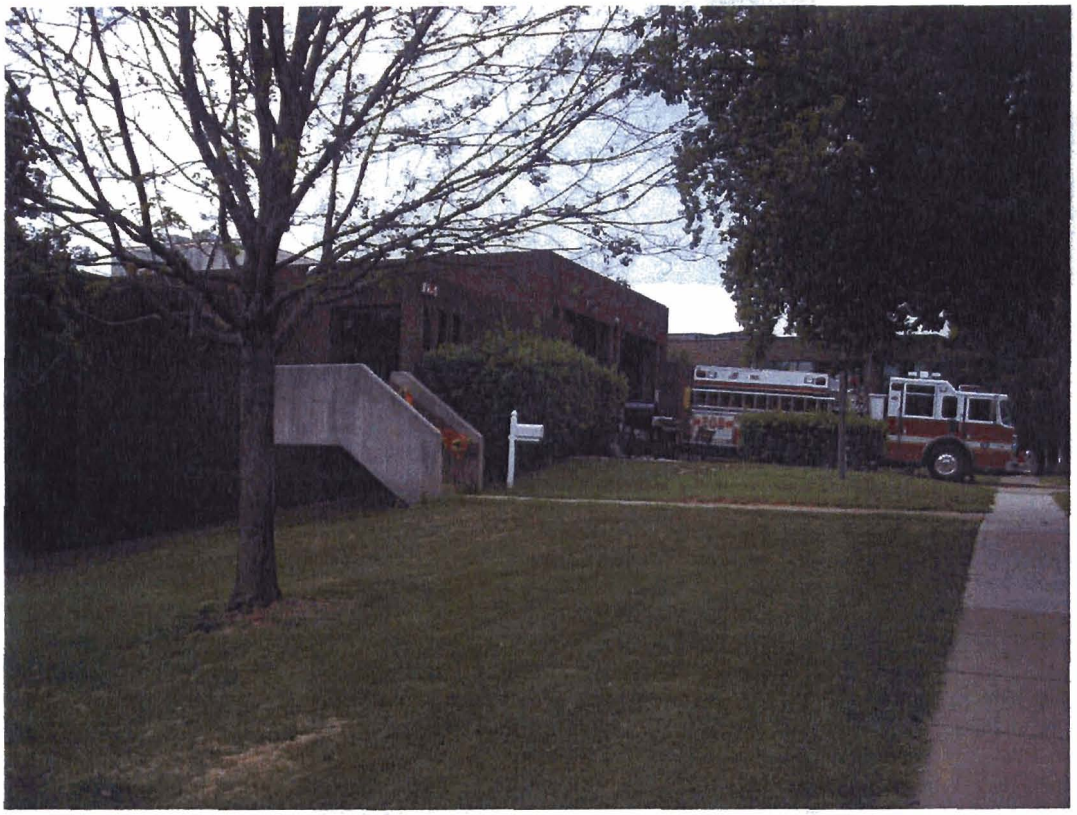

Repairs to the Patches are Lost – Original Concrete Decaying and Washing Away


Warped and Failing Retaining Wall
Missing Bricks
Expanding Sink Hole


Narrow, Rough, and Over Patched


Note Multiple Scrape Marks Along Length of Wall

Fire Station 208



Built in 1976 the facility is located on Duke St and has very limited parking at the rear of the facility. The fire station construction is brick masonry construction. Roofing consists flat built–up roof membrane construction.

Masonry decay

HVAC issues

Paving issues

Exterior decay

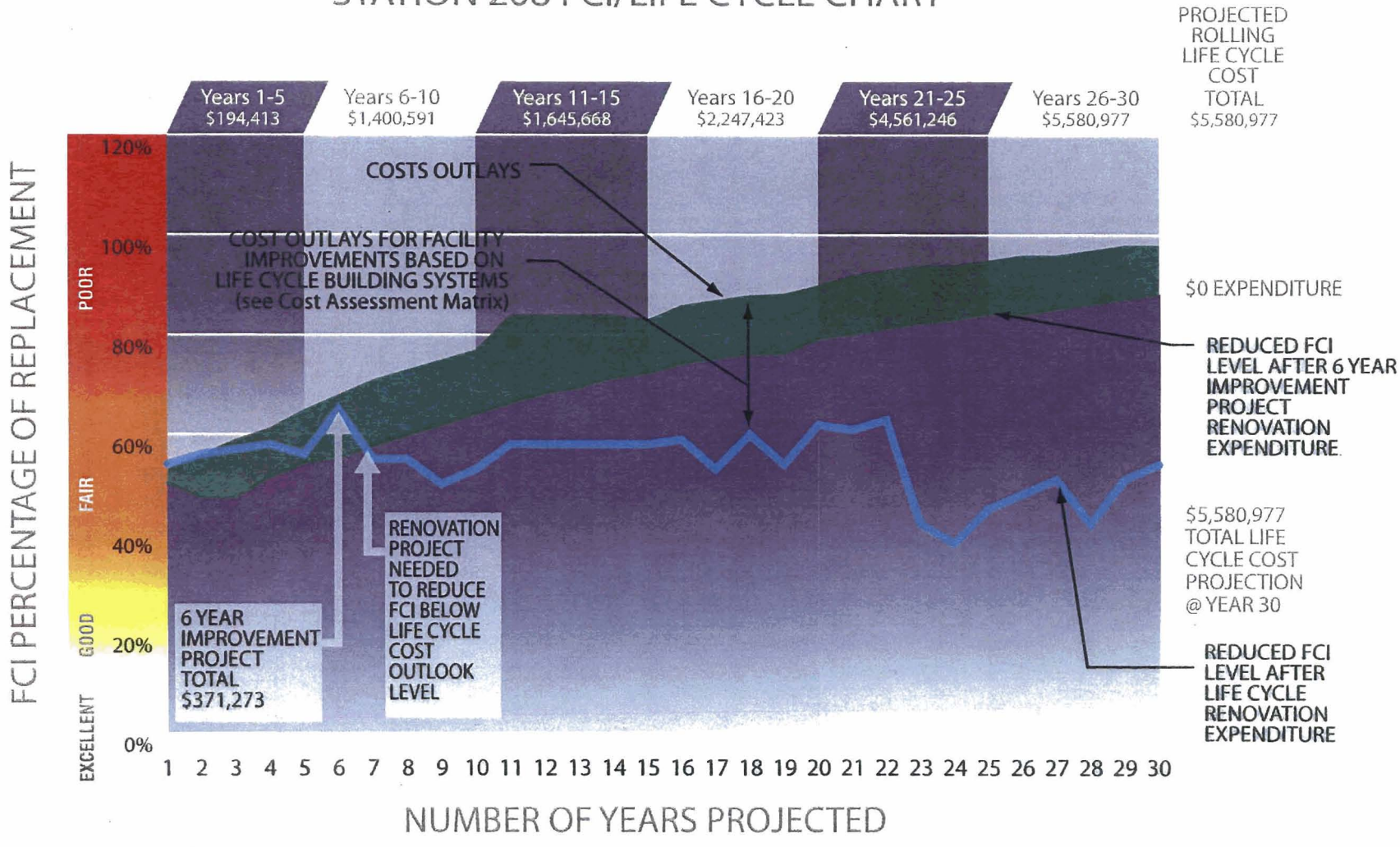
Facility Outlook

The following charts depict the life cycle costs and FCI values over a 30 year outlook, including a six year building renovations improvement project cost matrix.

Station 208

1 inch equals 35 feet

STATION 208 FCI/LIFE CYCLE CHART



NOTE:

1. Facility Condition Index is the ratio of costs to renovate or repair vs. to replace with new as calculated below.

$$(FCI) = \frac{\text{Deferred Maintenance + Capital Renewal}}{\text{Current Replacement Value}}$$

2. Life cycle costs are based upon the value to replace the system that once the life of that system is over.
   Example: 20 year life span of a roof system and the cost to replace it in 20 years.

FIRE STATION #208

RENOVATION COST MATRIX

Alexandria Fire Department - Alexandria, Virginia

CAPITAL IMPROVEMENTS - SIX YEAR OUTLOOK

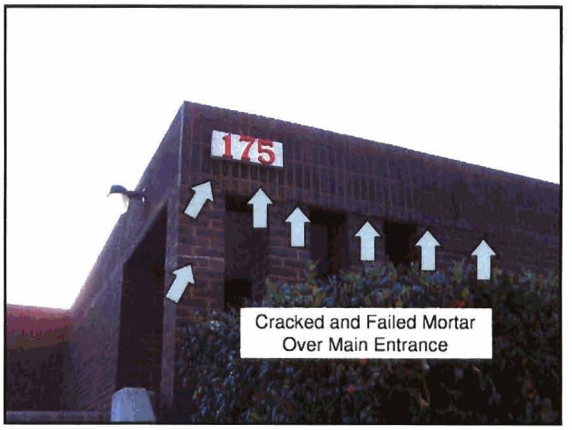
Project Description	Priority 1 - 5	UM	Qty	Unit $	Subtotal $	Total $ ESCALATED	2009 1.00	2010 1.03	2011 1.06	2012 1.09	2013 1.12	2014 1.15	Defered	Remarks
						BASE YEAR ESTIMATE	SIX YEAR OUTLOOK							
						$ 371,273	$ 118,099	$ 187,287	$ -	$ 6,053	$ 48,104	$ 11,730	$ -	
Repair Exterior Envelope - Water Penetration	4					**$ 25,199**	$ 25,199							
Power Wash Exterior Surfaces		SF	11,300	$ 0.75	$ 8,475									
Patch and Point Brick		SF	11,300	$ 0.98	$ 11,074									
Paint and Seal		SF	11,300	$ 0.50	$ 5,650									
Masonry Repair	4					**$ 14,258**	$ 14,258							
Replace Masonry - Partial		SF	2,500	$ 5.70	$ 14,258									
Paint interior walls/ceilings	3					**$ 42,950**					$ 48,104			
Walls		SF	11,300	$ 1.74	$ 19,641									
Ceilings		SF	11,300	$ 2.06	$ 23,309									
Replace Chiller	4					**$ 50,672**		$ 52,192						
Demo		SF	11,300	$ 0.75	$ 8,475									
New Chiller		SF	11,300	$ 3.73	$ 42,197									
Replace Fan Coil Units	3					**$ 101,112**		$ 104,145						
Demo		SF	11,300	$ 0.75	$ 8,475									
New Fan Coil Units		SF	11,300	$ 8.20	$ 92,637									
Replace Controls	3					**$ 30,049**		$ 30,951						
Demo		SF	11,300	$ 0.75	$ 8,475									
New Controls		SF	11,300	$ 1.91	$ 21,574									
Replace Exit Lights	5					**$ 2,461**	$ 2,461							
Demo		EA	8	$ 75.00	$ 600									
New Exit Lights		EA	8	$ 232.64	$ 1,861									
Repair service trough	4					**$ 2,500**				$ 2,725				
Repair trough		EA	1	$ 2,500.00	$ 2,500									
Replace bathroom/shower lights with flourescent fixtures	1					**$ 3,328**				$ 3,328				
Demo		EA	8	$ 75.00	$ 600									
New Bathroom Lights		EA	8	$ 341.00	$ 2,728									
Install a new generator	5					**$ 76,181**	$ 76,181							
Demo		EA	1	$ 3,401.63	$ 3,402									
New Generator		EA	1	$72,779.31	$ 72,779									
Replace Concrete Apron	2					**$ 10,200**						$ 11,730		
Demo		SF	1,200	$ 2.50	$ 3,000									
New Concrete Apron		SF	1,200	$ 6.00	$ 7,200									

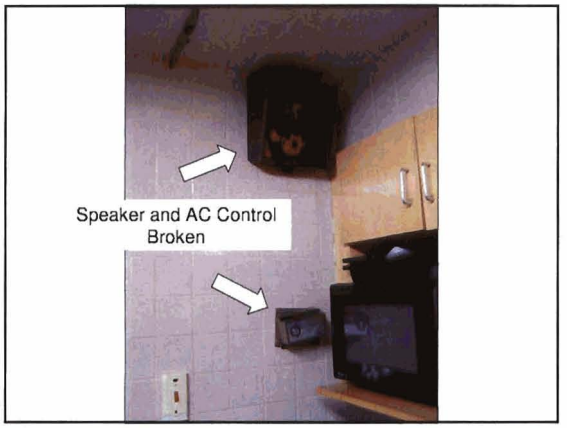
Notes:

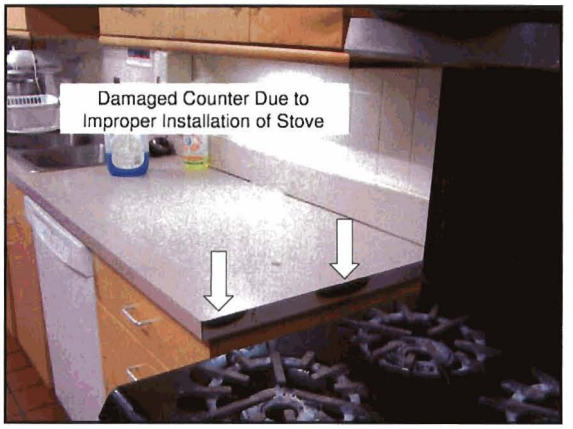
Cost estimate shows the following:
- Project Elements.
- Base Year Costs.
- Distribution of costs
- Differences are due to rounding.

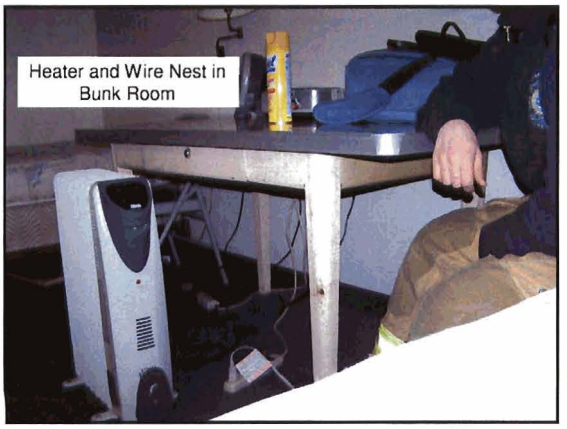
Priority Rating 1 - 5
- 5- Life safety & building security.
- 4- Building exterior & primary systems.
- 3- Buiding interior finishes and secondary systems.
- 2- Supplemental systems.
- 1- Noncritical systems.

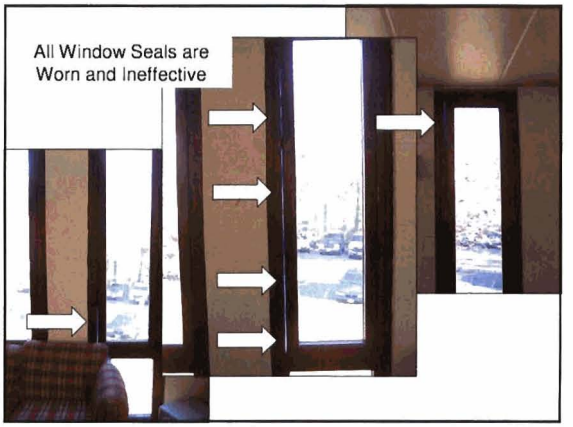

Fire Station 208


175
Cracked and Failed Mortar
Over Main Entrance


Speaker and AC Control
Broken

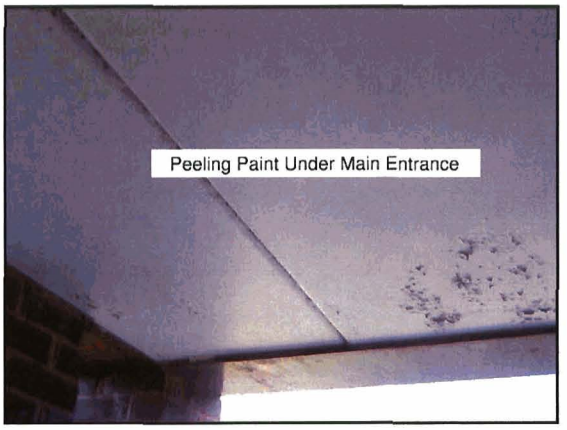

Damaged Counter Due to
Improper Installation of Stove


Heater and Wire Nest in
Bunk Room


All Window Seals are
Worn and Ineffective

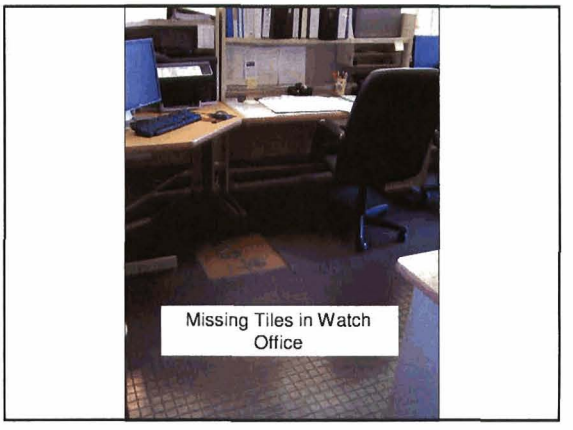

Difficult Lawn Maintenance
and Broken Sprinkler Head

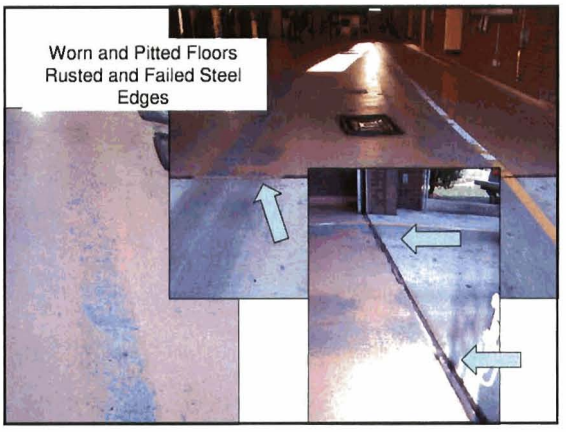

Undermining of Front Stairs With Peeling Paint

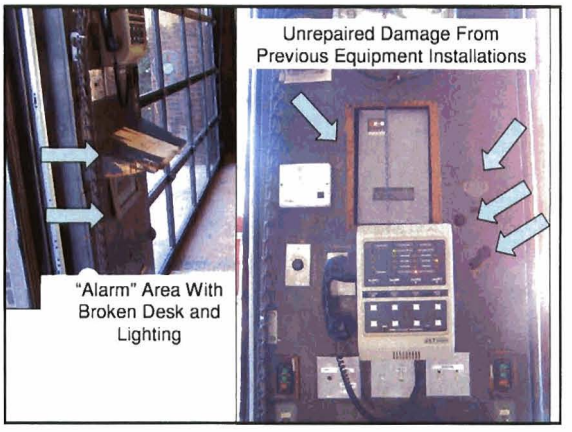

Peeling Paint Under Main Entrance

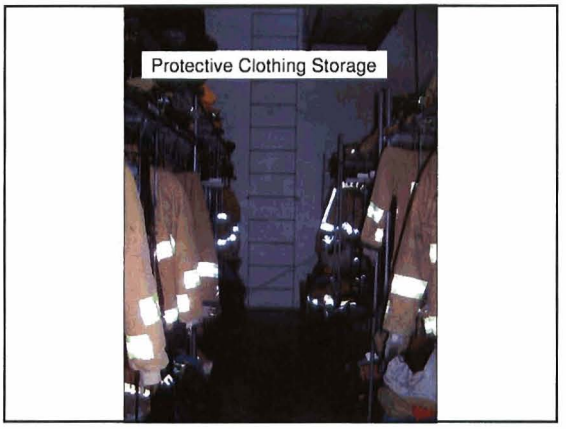

Light and Air Flow Through
Closed Door


Office Space for Ten People

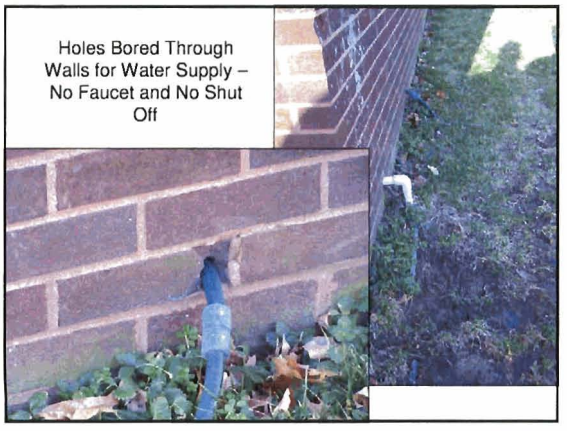

Missing Tiles in Watch
Office

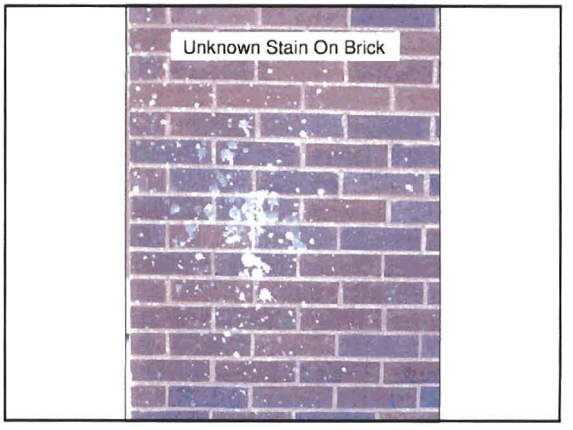

Worn and Pitted Floors
Rusted and Failed Steel
Edges

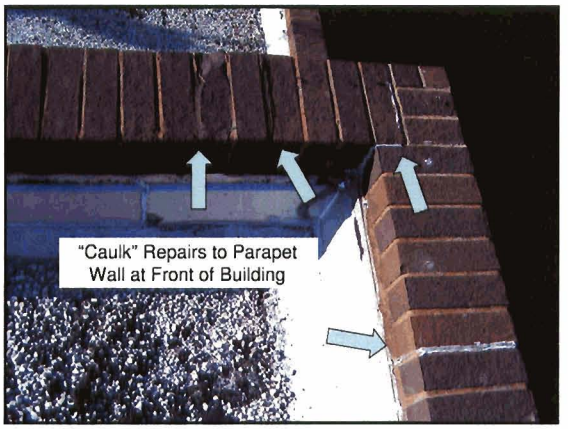

Unrepaired Damage From
Previous Equipment Installations
"Alarm" Area With
Broken Desk and
Lighting

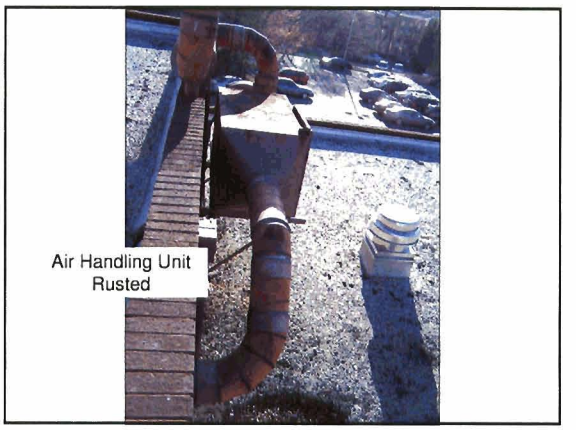

Protective Clothing Storage


Worn and Listing Dayroom Seating

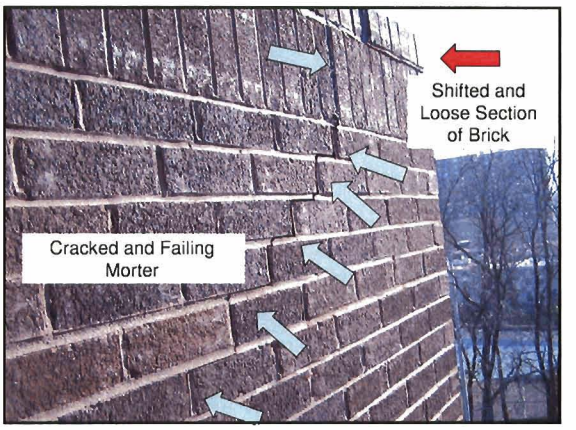

Holes Bored Through
Walls for Water Supply –
No Faucet and No Shut
Off

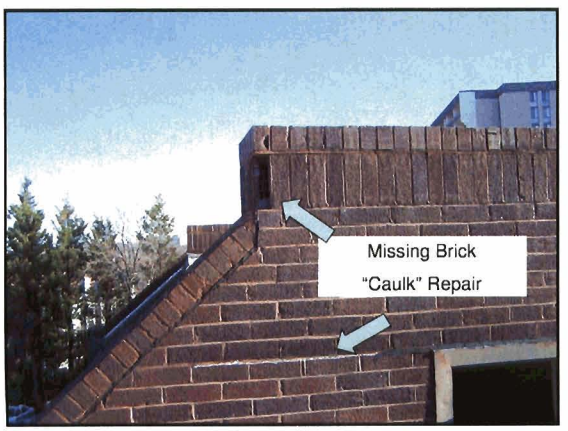

Unknown Stain On Brick

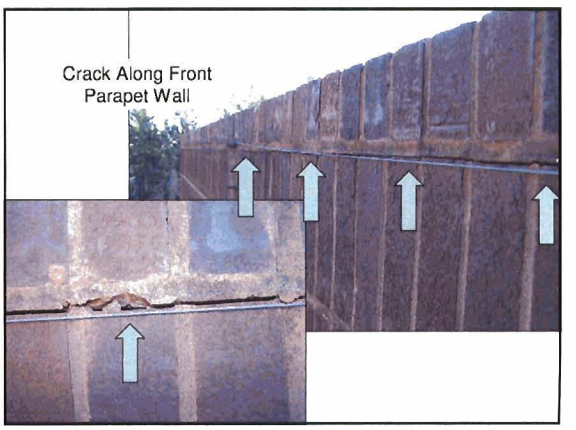

"Caulk" Repairs to Parapet
Wall at Front of Building

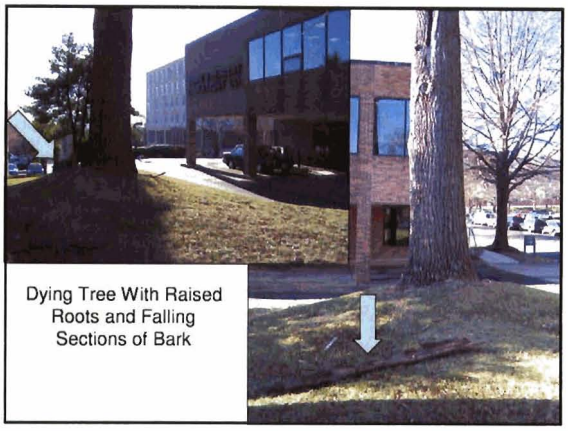

Air Handling Unit
Rusted

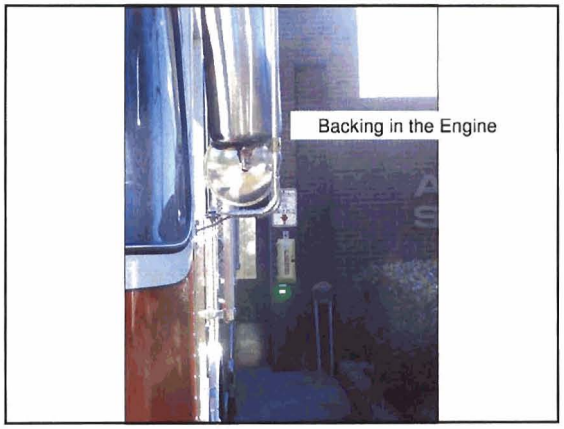

"Caulk" Repairs and Missing Bricks at
Rear of Building

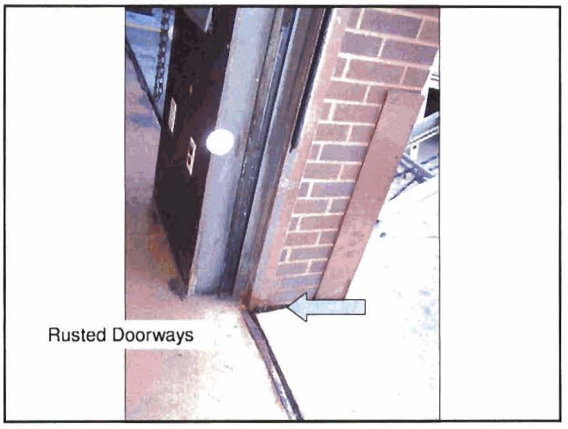

Shifted and
Loose Section
of Brick
Cracked and Failing
Morter

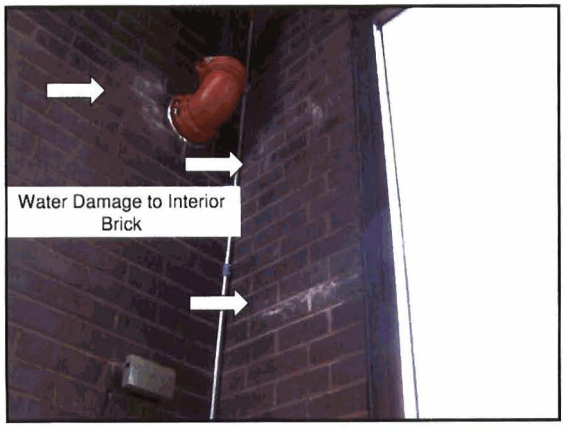

Missing Brick
"Caulk" Repair

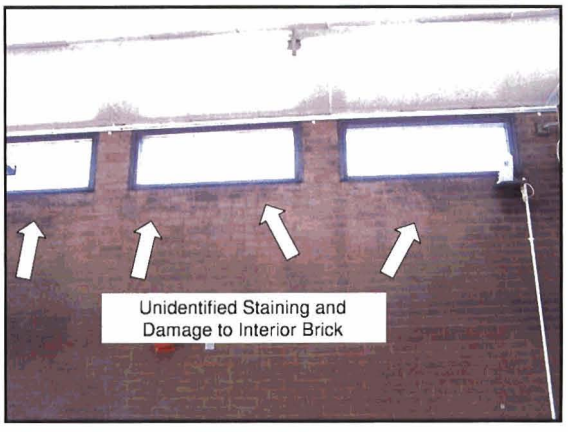

Crack Along Front
Parapet Wall

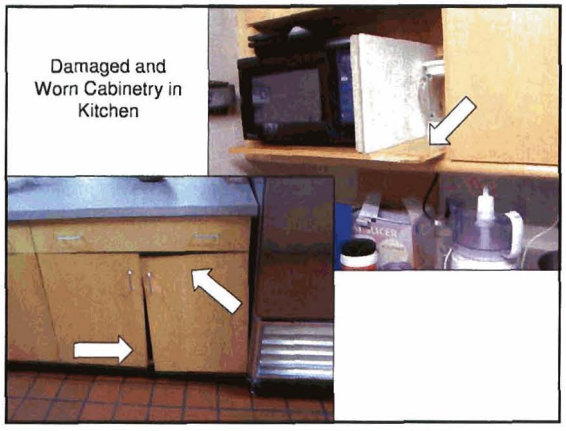

Dying Tree With Raised
Roots and Falling
Sections of Bark

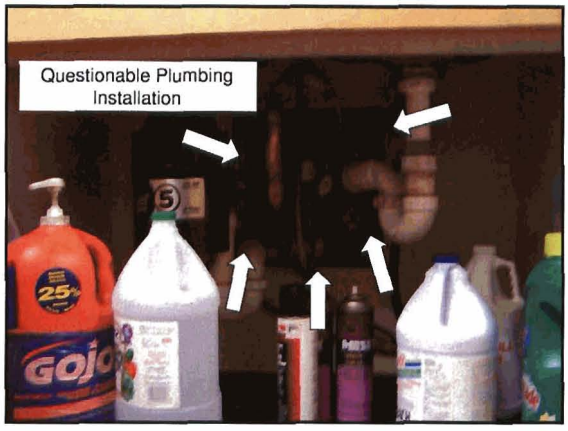

Backing in the Engine

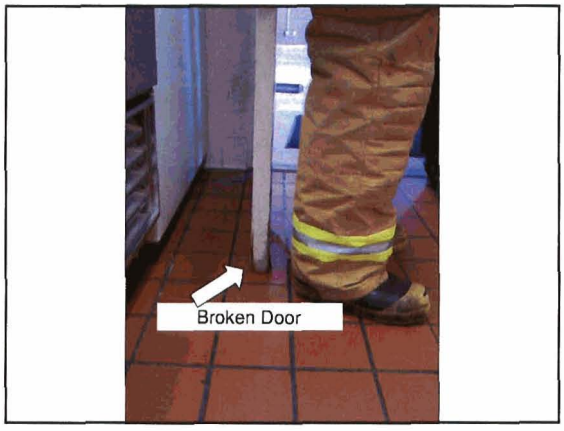

Rusted Doorways

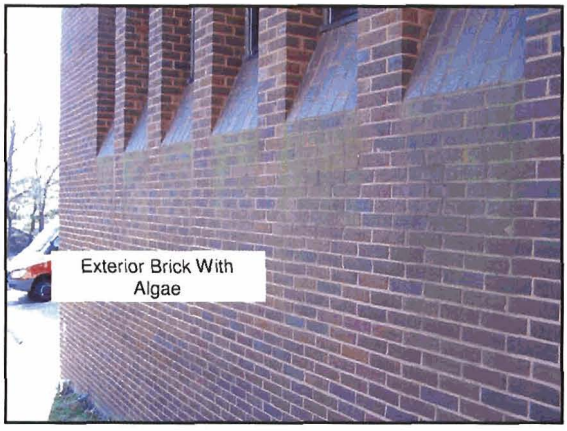

Water Damage to Interior
Brick

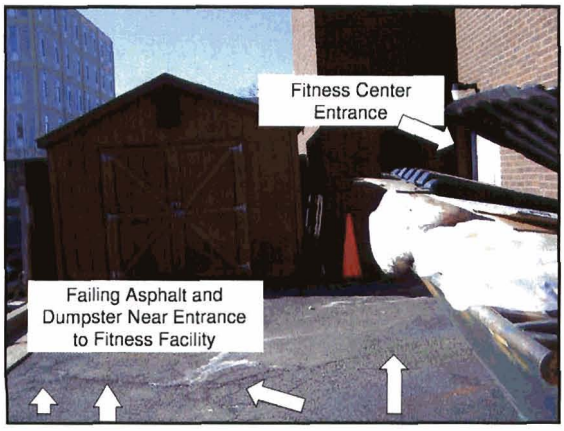

Unidentified Staining and
Damage to Interior Brick

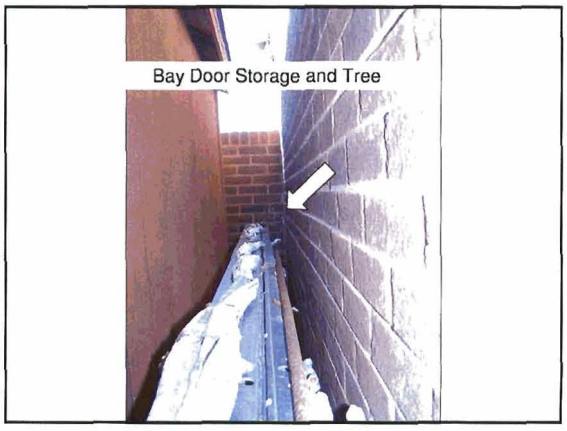

Damaged and
Worn Cabinetry in
Kitchen

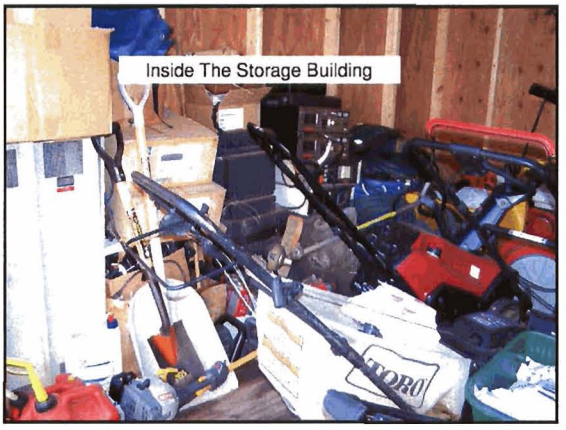

Questionable Plumbing
Installation
Gojo

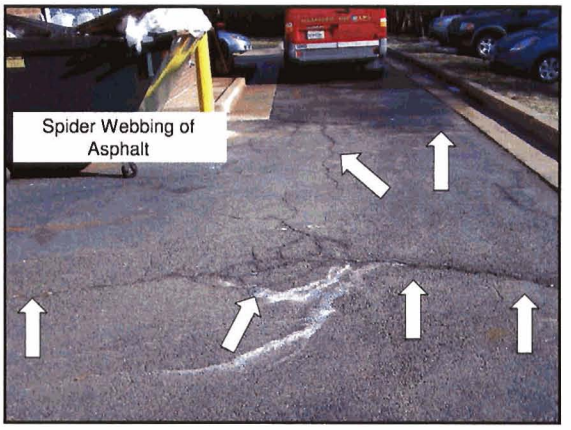

Broken Door


Exterior Brick With
Algae

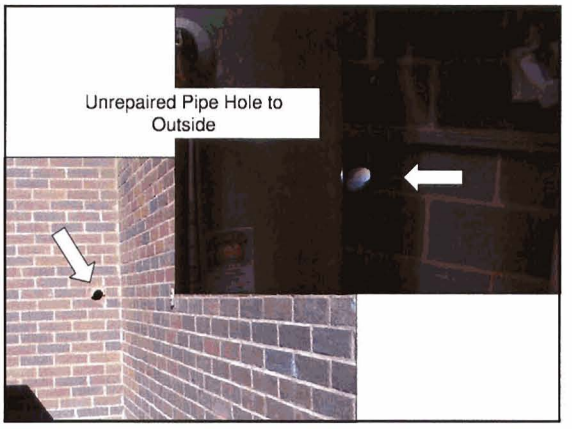

Fitness Center
Entrance
Failing Asphalt and
Dumpster Near Entrance
to Fitness Facility

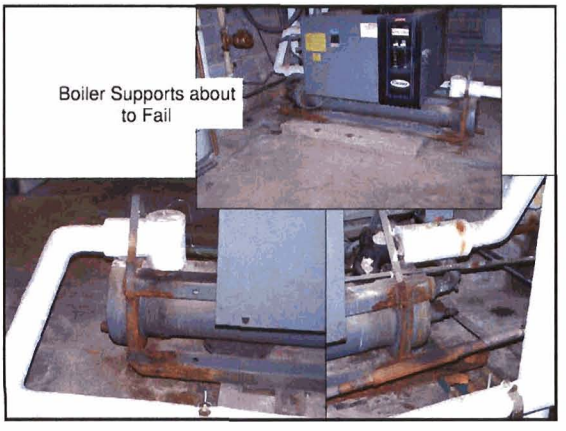

Bay Door Storage and Tree


Inside The Storage Building


Spider Webbing of Asphalt


Partial Wall Around Gear Cleaning Area


Unrepaired Pipe Hole to Outside


Boiler Supports about to Fail

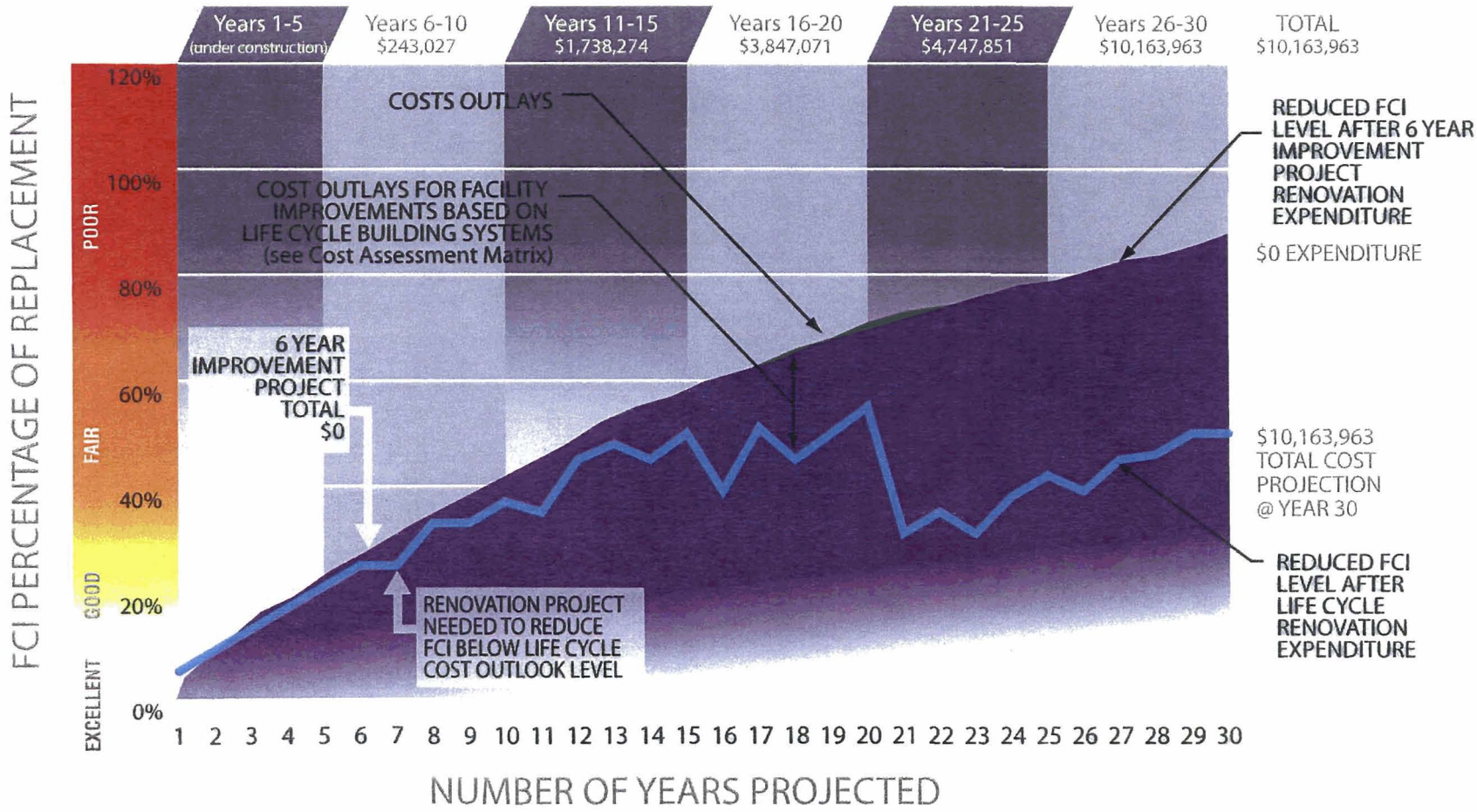
Fire Station 209

Fire station 209 is a 5 bay fire station that occupies the first floor of a multi use building that is under construction. Construction is estimated to be completed in 2009.

Facility Outlook

The following charts depict the life cycle costs and FCI values over a 30 year outlook, including a six year building renovations improvement project cost matrix.

STATION 209 FCI/LIFE CYCLE CHART



NOTE:

1. Facility Condition Index is the ratio of costs to renovate or repair vs. to replace with new as calculated below.

$$(FCI) = \frac{\text{Deferred Maintenance + Capital Renewal}}{\text{Current Replacement Value}}$$

2. Life cycle costs are based upon the value to replace the system that once the life of that system is over.
   Example: 20 year life span of a roof system and the cost to replace it in 20 years.

FIRE STATION #209

RENOVATION COST MATRIX

Alexandria Fire Department - Alexandria, Virginia

CAPITAL IMPROVEMENTS - SIX YEAR OUTLOOK											
BASE YEAR ESTIMATE			SIX YEAR OUTLOOK								
Project Description	Priority 1 - 5	Total $ ESCALATED	2009 1.00	2010 1.03	2011 1.06	2012 1.09	2013 1.12	2014 1.15	Defered	Remarks
		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	
(New Building-No Improvement Projects Required)										

Notes:

Cost estimate shows the following:
- Project Elements.
- Base Year Costs.
- Distribution of costs
- Differences are due to rounding.

Priority Rating 1 - 5
- 5- Life safety & building security.
- 4- Building exterior & primary systems.
- 3- Buiding interior finishes and secondary systems.
- 2- Supplemental systems.
- 1- Noncritical systems.