

**REPORT OF THE
DEPARTMENT OF GENERAL SERVICES**

The Structural and Building Systems Condition in the Supreme Court of Virginia Building

**TO THE GOVERNOR AND
THE GENERAL ASSEMBLY OF VIRGINIA**



HOUSE DOCUMENT NO. 65

**COMMONWEALTH OF VIRGINIA
RICHMOND
2005**



COMMONWEALTH of VIRGINIA

Department of General Services

James T. Roberts
Director

September 30, 2005

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The Honorable John H. Chichester, Chairman
Senate Finance Committee

The Honorable Vincent F. Callahan, Jr., Chairman
House Appropriations Committee

Dear Senator Chichester and Delegate Callahan:

Item C-3.50 of Chapter 951 of the 2005 Acts of Assembly (2004-2006 Appropriation Act) directs the Department of General Services to conduct a study of the structural and building systems condition in the Supreme Court of Virginia building.

This report is attached.

If you have any questions I hope you will feel free to contact me. As always, I look forward to working with you on these and other matters of mutual concern.

Sincerely,

A handwritten signature in black ink, appearing to read "James T. Roberts".

James T. Roberts

Enclosures

Facility Condition Assessment

Final Report

**Virginia Department of General Services
Richmond Capitol Square
Supreme Court Main and Annex Building
Rose and Lafoon Building
Richmond, Virginia**



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September 28, 2005





**Virginia Department of General Services
Supreme Court Main and Annex Building
Rose and Lafoon Building**

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A c k n o w l e d g e m e n t a n d d i s c l a i m e r

VFA, Inc. extends our appreciation to the Virginia Department of General Services. We wish to acknowledge the time and effort put forth by everyone who assisted with the Facility Condition Assessment project.

We would like to thank John Mitchell and Chinh Vu for their guidance and assistance during the project and in helping to contribute to its success.

The members of the project team went to great lengths to assure that the information they collected was accurate and concise, and of the utmost value to the Virginia Department of General Services.

There are other members who undoubtedly participated in this project, though may not have been mentioned in this acknowledgement. To those, we express our appreciation for your help and input.

Report Disclaimer

VFA has produced this document under an agreement between VFA and the Virginia Department of General Services. Other than to Client, VFA disclaims any obligation to any other person with respect to any material presented in this document and no person may rely upon this document without advance and express written consent from VFA and such person's written agreement to be bound by the limitations, qualifications, terms, conditions, and indemnities to VFA set forth in that agreement. VFA specifically states that its review of the property in question is subject to monetary restraints and scope limitations. Given those limitations and conditions, VFA has made what, in its opinion, is a reasonable investigation, limited to visual observations. Design analysis of systems including structural systems has not been performed. VFA has also relied upon interviews and documents with the understanding that independent verification of their factual content is beyond the scope of VFA's work.

The materials presented in this document are "to VFA's knowledge" where such phrase means to VFA's actual knowledge of the subject matter after such inquiry as VFA considered reasonable in light of the qualifications and limitations upon the scope of work. Assumptions regarding the overall condition of the properties have been developed based upon inspection of "representative" areas of the facilities. As such, the development of schematic methods and associated costs for the correction of identified deficiencies is based upon the overview inspection and is also limited with respect to completeness.

Investigation for the presence of asbestos containing materials (ACM), PCB's, CFC's, radon and other environmentally hazardous materials is not part of this Agreement. In addition, a review and certification that the buildings have been designed to meet current seismic requirements is not part of this review.

% Deficient

The portion of a system that is deficient. This field in the system's condition section of the Asset record, if enabled on your site, is used to calculate the asset's backlog.

% Used

The portion of a system's life that is used at the time of inspection. This value establishes the system's condition, and is used to calculate the year that the next system renewal is expected to be required. For example, a 20-year roof that is 75% used is projected for replacement in 5 years.

Action

A strategy for correcting a requirement, including information about what work is going to be done and an estimate of the construction cost.

Adjustment Factor

A number assigned to an action signifying the complexity and/or resources required to fix a requirement. The adjustment factor is multiplied against the line items for the total action cost.

Assembly

A component of an asset, such as a window or roofing.

Asset

A free-standing structure, a portion of a structure, or any part of facility infrastructure that is distinguishable from its surroundings by date of construction, construction type, and/or the systems that serve it.

Asset System

An assembly, finish, fixture, piece of equipment, or other component that makes up an asset. Also called a *component*.

Asset Type

The role that the asset has in the facility. For example, an asset can be a building, a utility, or an outdoor structure. The Asset Type field allows the asset record to be customized to capture information about a variety of buildings and infrastructure that can exist in a facility.

Backlog

Maintenance or renewal of asset systems that has been deferred.

Backlog Deterioration Rate

The increase in cost from year to year of delaying the remedy of a requirement, independent of any inflationary increases in construction costs.

Campus

A grouping of assets that are generally adjacent to one another on a contiguous site. A campus is bounded on all sides by property lines, which may or may not coalesce with physical features of the site, like roads or bodies of water.

Campus Code

A unique alphanumeric identifier assigned to each campus. This identifier can be changed at any time as long as the new identifier remains unique and is not shared by another campus.

Campus Map Coordinate

An identifier for the location of an asset on a campus map or site plan.

Capital Improvement

A change to an asset's assemblies, finishes, fixtures, equipment, systems, and/or program that is not required for its most basic function. In addition, a change that is required to bring an asset into conformance with existing codes is considered an improvement as long as it is grandfathered in its existing condition.

City Cost Index (CCI)

A factor used to adjust RSMean Construction Data to a specific city. The appropriate CCI can be selected from a list compiled by RSMean that includes most major U.S. and Canadian cities.

Commission Date

The date that an asset becomes current.

Component

An assembly, finish, fixture, equipment, or other system that makes up an asset.

Component Renewal

The replacement of an asset system as it reaches or exceeds the end of its useful life.

Computer Aided Design (CAD)

A program for creating and manipulating electronic drawings stored in a computer.

Construction Type

The type of construction relative to structural elements and their fire protection.

Cost Model

The relevant cost information for each system in an asset. In a cost model, each asset system is identified along with its projected lifetime in years, the cost, the cost as a % of CRV, and the % renewed at the end of its lifetime. Cost models calculate an asset's cost per unit of measurement, which determines the CRV.

CSV

A spreadsheet file. CSV (Comma-Separated Values) files can be opened in Microsoft Excel. You can then extract or format the raw data to suit the needs of your organization.

Current Replacement Value (CRV)

The cost required to replace a building or system in kind, determined by multiplying the appropriate cost model's cost/unit of measurement by the gross area. This cost usually excludes "soft" costs.

Decommission Date

The date that an asset is no longer current.

Deferred Maintenance

Maintenance or renewal of components that has been deferred on a planned or unplanned basis.

Estimator

The actual person who estimates the cost of an action for a requirement.

Extended

In an action, the total calculated for each line item (quantity multiplied by unit price), including the Overhead and Profit for the given trade.

Facility Condition Index (FCI)

An index that measures the relative condition of assets. The total value of a set of requirements divided by the current replacement value (CRV) for the asset produces the FCI. Generally, the higher the FCI, the poorer the condition of the facility. An Administrator may configure FCI to exclude requirements based on their assigned category. See also *Requirements Index*.

Facility Renewal Forecast

A forecast that models the estimated renewal costs for all asset components as they approach the end of their useful lives.

Field

One cell of information in a record, such as the name of a campus.

Fiscal Plan

A financial schedule for the correction of requirements.

Fiscal Year

An accounting period lasting 365 days (or 366 days) that does not necessarily mirror the calendar year. In VFA *facility*, forecasts and FCI calculations are reset at the beginning of each fiscal year. Administrators can specify the beginning date of the fiscal year. See [Set the Fiscal Year](#).

Floor

All the contiguous occupiable space within an asset that shares the same elevation or floor level.

Funding Distribution Curve

The distribution of component renewal costs over a specified renewal period. The distribution of component renewal costs over the specified Renewal Period. The costs of repairing different types of systems are distributed differently across time. Some systems require no repair and are just replaced. Others are continually repaired. Some systems fail fairly predictably at their expected end of life; others vary considerably. The funding distribution curve specifies the shape of the distribution around the estimated end of life of the system. The percentage specifies how much variation is expected around the expected end of life. For example, a system that is expected to be replaced very close to the expected end of life, with little repair costs along the way, would best be represented by Spiky 25%, indicating that all costs would occur very close to the expected end of life. Systems with unpredictable life times and distributed costs might use Bell 50%, giving the broadest distribution of costs.

Funding Scenario

A strategy for expending funds to remedy physical plant requirements, expressed as a statement of how much is to be funded in each future year; these amounts can vary from year to year.

Historical Category

The historical significance of an asset.

Inflation Rate

The rate of increase in the price of goods and services. In VFA *facility*, the annual inflation rate is 4.7% unless it is changed.

Infrastructure

The elements and systems that comprise a facility. A piece of facility infrastructure is entered into VFA *facility* as an asset. When an asset record is created, the specified asset type identifies the type of infrastructure, and customizes the asset record's fields in order to collect type-appropriate data.

Inspector

The actual person who observed and investigated a requirement.

Lifetime

The number of years an asset system is expected to be useful (*its useful life*).

Line Item

A discrete cost in an action. It includes the class, the code, the description, the number of units, the unit of measurement, a cost per unit and a total, which includes Overhead and Profit for the given trade.

List

A list of records in rows and attributes in columns. A record and an attribute intersect in a field, or cell. You can access records by selecting them from the list.

Logical Campus

A campus that contains only specific assets based on proximity, like East or West, or other criteria.

Net Present Value (NPV)

An approach used in capital budgeting that compares the current value of a dollar versus the value of that same dollar in the future after discounting. NPV is calculated by removing the accumulated inflation over the funding period.

OPTotal

In an action, the total calculated for each unit in a line, including the Overhead and Profit for the given trade (under the heading "Each").

Physical Campus

A campus that contains all of the assets within its boundaries.

Prime Action

The action chosen above the other methods of action. The prime action's cost is the total cost of a requirement.

Prime System

The single construction assembly or mechanical system that contributes to a requirement. See the list of [Prime Systems](#).

Priority

The severity of a requirement and the time frame during which it should be scheduled for correction. See the list of [Requirement Priorities](#).

Region

The first level of division for facility management. Regions are divided into campuses.

RSMeans CCI

See *City Cost Index*.

Record

A collection of data about your facility. It contains all the information for an item, such as a campus or asset.

Renewal Cost

The cost of replacing an asset system as it reaches or exceeds the end of its useful life.

Replacement Cost

The current cost of replacing an asset, a set of assets or an entire campus in total dollars adjusted annually for inflation.

Resource

The appropriate type of labor for a specific campus. The labor rates for each RSMeans line item within an action are affected by the Resource type selected.

Requirement

An asset need, including deferred maintenance, code issues, vulnerability and functional requirements. A requirement can affect an assembly, fixture, piece of equipment, or any other asset system.

Requirement Category

Information about the type of issues that must be addressed for a requirement. See the list of [Requirement Categories](#).

Requirements Index (RI)

A condition index identical to the FCI, except RI uses **all** requirement categories in calculating an asset's relative condition. See also *Facility Condition Index*.

Size

The gross area of an asset in the appropriate unit of measurement. The accuracy of the size calculation affects the asset's replacement value.

Symmetrical Distribution

A distribution curve in which some of the renewal costs occur before the end of a component's useful life and some occur after.

Term of a Forecast

The number of years projected in the forecast. See [Funding Module](#).

Uniformat 2 Categories

Four levels of classifications of asset systems. See the list of [Uniformat 2 Categories](#).

Unit of Measurement

The method in which an asset's size is measured.

Year Offset

A number of years added to a requirement's inspection date in order to determine the recommended action date. Each priority has a Year Offset that should reflect the respective severity of the requirement.

The Virginia Department of General Services – Bureau of Facilities Management (DGS-BFM) hired VFA to perform a facilities condition assessment of the Supreme Court Main and Annex Building and the Rose and Lafoon Building located in Richmond Capitol Square to include approximately 262,000 gross building square feet. The primary intent of the project was:

- 1) To conduct a baseline condition assessment of the Supreme Court Main and Annex Building and the Rose and Lafoon Building in order to provide the DGS-BFM with detailed information needed to create a 5-year investment plan.
- 2) To provide the DGS-BFM with long term funding requirements to maintain the physical condition of the building system and make strategic decisions.
- 3) To provide decision support capabilities with VFA's facility web based information management software system to support the goals mentioned in the previous paragraphs.

The facilities analyses include the following; all based on detailed on-site assessments of the building systems and site elements within 5 feet of the buildings perimeter performed by VFA's facilities assessment professionals:

- *Current conditions analyses* - existing facility requirements including deferred maintenance, deferred renewal, near-term anticipated renewal, recommended discretionary improvements, and code non-compliance issues.
- *Anticipated capital renewal analyses* - projections of ongoing degradation of facilities' components and costs associated with renewal or replacement of these components as they reach the end of their useful lives.
- *Capital funding analyses* - scenario comparisons showing various funding levels and the effect of each on the condition and value of the building; an optimal funding plan is identified.

Current conditions analyses -

The assessment team identified and estimated requirements requiring action within the next five years (Priorities 1-3) for the systems in the building totaling \$8,491,775. Summarizing VFA's condition findings, the present condition as evidenced by a Facility

Condition Index (FCI) of 0.20 indicates that the building systems and infrastructure are in poor condition. Taking functionality and grand-fathered code issues into account (Priorities 4 and 5), the estimated cost escalates to \$8,914,490 resulting in an FCI of 0.21. Both of these FCI are well above the optimum level of 0.05. A priority is defined as the severity of a requirement and the time frame during which it should be scheduled for correction. The FCI is an index created to measure the relative condition of assets. The total value of a set of requirements divided by the current replacement value for the asset produces the FCI. The higher the FCI, the poorer the condition the facility is. For other terms and their definitions, please see the Glossary at the beginning of this report. For this analysis, Priority 1 requirements are meant to be addressed immediately, priority 2 requirements within the next year, priority 3 requirements within the next 2 years, and priority 4 requirements within the next 6 years. Priority 5 requirements have not been scheduled for any particular year and it is assumed that they will be addressed when funding is available and/or when currently grandfathered code issues are required to be acted upon.

The results of the current condition analysis are as follows:

Current Replacement Value (CRV)	5 Year Requirement Correction Cost and FCI (Priorities 1-3)	Total Requirement Correction Cost and FCI (Priorities 1-5)
Supreme Court Main and Annex Bldg CRV= \$42,481,510	\$8,396,829 FCI (1-3) = 0.20	\$8,791,867 FCI (1-5) = 0.21
Rose and Lafoon Building CRV= \$744,838	\$94,946 FCI (1-3) = 0.13	\$122,623 FCI (1-5) = 0.16
Combined Total CRV= \$43,226,348	\$8,491,775 FCI (1-3) = 0.20	\$8,914,490 FCI (1-5) = 0.21

On a system by system basis, requirements associated with the Interior Construction and HVAC systems represent over 67% of the total backlog of \$8,914,490. Of these systems, requirements associated with aged distribution systems were the highest representing \$1,985,769 in correction costs or approximately 22% of the overall backlog. The majority of these requirements are attributed to aged ductwork and piping. Requirements associated with Lighting and Branch Wiring were second highest representing \$1,151,606 in correction costs or approximately 13% of the overall

backlog. The majority of these requirements are attributed to replacing interior lights and lamps.

Analyzing the requirement data by category shows that a total of \$6,345,116 or 71% of the total \$8,914,490 backlog is attributed to Building Integrity (Appearance, Reliability, Beyond Rated Life) issues. Building Integrity is defined as building systems or site infrastructure components that are broken, damaged or in poor condition. The condition of these systems affects the integrity of the building such as leaking roofs, outdated equipment, etc. A detailed review of the Building Integrity issues reveals that the majority of the cost is due to the replacement of many of the Interior Finishes such as ceilings, interior doors and bathroom finishes, rehab of existing exterior steel window assemblies, and the replacement of aged HVAC distribution piping.

The \$8,914,490 backlog separated by priority is as follows:

Priority 1 (Immediate):	\$408,849
Priority 2 (Within 12 months):	\$4,551,392
Priority 3 (Within 13-24 months):	\$3,531,534
Priority 4 (Within 25-72 months):	\$193,440
Priority 5 (Grandfathered code issues):	\$229,275

Anticipated capital renewal analyses -

In addition to management of deficient conditions, *VFA.facility* provides budgeting and management tools for facility capital renewal forecasting. Whereas deferred maintenance is concerned with existing conditions, capital renewal forecasting is concerned with the continuous deterioration of buildings and site infrastructure. From an accounting perspective, this is the cause for building depreciation.

VFA estimates *average* capital renewal requirements, averaged over a 20-year period, for the building to be approximately \$607,185 per year. It is important to note these values represent current dollar 20-year average costs. The profile of annual spending associated is non-linear and “spiky” as evidenced by the Facility Renewal Forecast graph included at the end of this report. The capital renewal forecasts represent only costs associated with building systems requiring replacement as they reach the end of

their useful lives and is adjusted for an assumed annual 4.7% inflation factor. Based on these systems reaching the end of their expected lifecycles, large capital expenditures are forecast for years 2019 and 2025. Current deferred maintenance backlog is not included in the \$607,185, however, the combination of capital renewal needs and deferred maintenance is addressed in the capital funding analyses below.

Capital funding analyses -

Multiple funding scenarios were executed to model the effects of various levels of funding on the condition and value of the building. This exercise is provided as an example of the analytical capabilities enabled as a result of this study. Additional analyses can be performed, or alternative scenarios can be analyzed, leading to a more optimal capital funding solution. The results are summarized in the chart that follows.

	Total Aggregate Funding in Net Present Dollars over 20 years	Condition at Year 20 as % of Building Replacement Value	Backlog at End of Model Duration
Option 1: Minimal Funding (1/2% CRV)	\$4,322,635	FCI = 50%	\$21,752,122
Option 2: Maintain Current Condition Level	\$16,530,965	FCI = 20%	\$8,491,775
Option 3: Attain Desired Condition in 20 Yrs.	\$21,025,590	FCI = 5%	\$2,161,317

In the chart above, CRV is defined as the cost required to replace a building or system in kind, determined by multiplying the appropriate cost model's cost/unit of measurement by the gross area. This cost usually excludes "soft" costs. Please see the Glossary at the beginning of this report for other terms and their definitions.

Based on the chart above, funding for option 2, averaged over a 20 year period, is approximately \$826,548 per year, and only maintains the buildings in poor condition. Considering Option 3, VFA estimates the capital renewal needs and deferred maintenance, averaged over a 20-year period, for the Supreme Court Main and Annex

Building and the Rose and Lafoon Building to be only slightly more at approximately \$1,051,279 per year, yet it improves the condition of the buildings to a very good level. Option 1, while appearing to be economical with an average annual investment of only \$216,132 over the 20 year period, would result in the buildings deteriorating to an FCI of 0.50, or extremely poor condition.

Attached reports -

The following reports are included as supporting data to the narrative above. These reports were produced from the project database and further explain, in tabular and graphic format, the results of the assessment.

Asset List Report

Details the replacement values of the building, the total correction costs for all requirements (priorities 1-5) for the building and the resulting FCI.

Complex Requirement Summary Reports

Requirement summary reports for the building relating requirement costs by system, category and priority are provided.

Facility Renewal Forecast

Building systems reaching the end of their useful lives require replacement. An important feature of *VFA.facility* is the ability to predict the annual facility renewal funding required to maintain a portfolio of buildings and or any subset thereof. This Facility Renewal Forecast report graphically presents the analysis of the building and the capital renewal forecast for the all the building's components.

Funding/FCI

The logic and methodology used during the analysis of the condition data is presented along with three funding scenarios that have been provided for illustrative purposes. The three scenarios represent different ends of the funding spectrum and their resultant effects on the facility over time.

Initial Project Setup

The assessment team met with representatives of the Supreme Court Main and Annex Building and the Rose and Lafoon Building and the Virginia Department of General Services – Bureau of Facilities Management at the start of the project to establish criteria to be used to evaluate the facility. Discussions were conducted to ascertain particular problems previously encountered, corrective solutions used and their effectiveness, and anticipated future projects. Existing building requirements and sensible improvements were noted.

Building Survey

The survey team consisting of an architect, a mechanical engineer and an electrical engineer inspected the Supreme Court Main and Annex Building and the Rose and Lafoon Building. In conjunction with the building surveys, the team met with representatives of the Buildings responsible for maintenance to get a more in depth viewpoint of problem areas.

The requirements were classified in several ways. In addition to detailed specific descriptions, each requirement was assigned a category, priority, and primary system association. This parallel differentiation allows for multiple queries of the database, facilitating analysis of the data. It is possible, for instance, to query the database for all Priority 1 requirements in the HVAC system or all Priority 1 and 2 building integrity issues in the exterior wall systems.

The criteria used to determine the priorities, categories and primary systems are as follows:

Priorities:**Priority One: Immediate / First Year**

Requirements requiring immediate action to:

- Return a facility to normal operation
- Stop accelerated deterioration
- Correct a cited safety hazard

Priority Two: Within the next 1-2 Years

Situations that, if not corrected expeditiously, will become critical within a year, including:

- Intermittent interruptions
- Rapid deterioration
- Potential safety hazards

Priority Three: Within the next 3-5 years

Conditions requiring appropriate attention to preclude predictable deterioration or potential downtime and the associated damage or higher costs if deferred further.

- Stop intermittent interruptions
- Correct rapid deterioration
- Correct functionality or aesthetic issues that are not critical
- Correct potential safety hazards

Priority Four:

Items that represent a sensible improvement to the existing conditions. These items are not required for the most basic function of a facility; however, Priority 4 projects will improve overall usability and/or reduce long term maintenance.

Priority Five:

Items that do not conform to existing codes, but are grandfathered in their existing condition. No immediate action is required, although the items will need to be addressed if any significant work is performed on the building. The amount of work that triggers code compliance is typically at least partially at the discretion of the local building official.

Requirement Categories

ADA/Accessibility

Violations of handicapped codes.

Aesthetics

Problems with the building's appearance which are not functional in nature. (Examples: painting, worn carpet)

Air/Water Quality

Conditions which affect the environmental quality of the water or air. (Examples: no backflow prevention, insufficient ventilation)

Building Code Compliance

Violations of building codes or other conditions which pose a hazard to building occupants. (Examples: emergency lighting, fire separations)

Building Integrity

Components or systems which are broken or in poor condition. The condition of these systems affects the integrity of the building. (Examples: leaking roofs, outdated equipment)

Energy

Conditions which adversely affect energy usage. (Examples: single pane windows, pipe insulation)

Functionality

Conditions which inhibit the current use of the space and do not necessarily affect the integrity of the building's systems. (Examples: poor temperature control, insufficient electrical service)

Hazardous Materials

Visible observations or client-supplied reporting indicating probable presence of hazardous materials. (*Subject to limitations outlined in contract*) (Examples: asbestos, lead based paint, CFC's, PCB's)

Life Safety

Violations of the Life Safety code or other conditions which pose a hazard to Life and Health. (Examples: Non compliant means of egress, missing guardrails)

Primary Systems (VFA's Classifications)

Site

- Vehicular Pavement
- Sidewalks
- Landscaping
- Utilities

Structure

- Structure

Exterior Structure

- Exterior Walls
- Roof
- Windows and Exterior Doors

Interior Structure

- Wall Surfaces
- Ceilings
- Flooring
- Furnishings & Equipment
- Stairs
- Elevators
- Interior Doors
- Fire Separation Assemblies

HVAC

- Boilers/Furnaces
- Air Handling Units
- Circulation Pumps
- Cooling Towers
- Chillers
- Ductwork
- HVAC Piping
- Terminal Devices
- Ventilation Systems
- Temperature Control

Plumbing

- Domestic Water
- Sanitary Waste
- Plumbing Fixtures
- Fire Suppression Systems

Electrical

- Electrical Service
- Electrical Distribution
- Lighting
- Fire Alarm
- Emergency Lighting and Exit Signs
- Telecommunications

For each requirement, one or more proposed corrections were established, and a recommended correction identified. The corrective work was then estimated using R.S. Means Estimating Data accessed directly by *VFA.facility*. For work not covered by R.S. Means, a lump sum figure was inserted and described in the text of the requirement.

Facility Condition Index

VFA has automated a standard process for assessing the relative condition of buildings, facilitating comparison both within and among institutions. For each building, the Facility Condition Index (FCI) is developed which measures the relative amount of current requirements in the building. The total value of existing requirements is divided by the current replacement value for the building; resulting in the FCI. The higher the FCI, the poorer the condition of the facility. For example, if a building with a replacement value of \$1,000,000 has \$100,000 of existing requirements, the FCI is $\$100,000/\$1,000,000$ or 0.10. This principle can be expanded to cover groups of buildings or an entire campus.

FCI is a standard measure used throughout the country; it is recommended by both the National Association of College Business Officers (NACUBO) and the Association of Higher Education Facility Officers (APPA).

To determine the current replacement value of the building, *VFA.facility* uses cost templates developed for each different building type. The cost templates include a square foot cost for

each building type that is derived from industry standard values and adjusted appropriately for geographic area.

Each building is assigned a cost template that reflects its use. The program multiplies the square foot cost with the gross area entered for each building and determines the replacement cost of that building. The program then aggregates all the buildings to determine the total replacement value of the plant.



Cost Model

by Uniformat II Code

COST MODEL: VADGS Supreme Court Main & Annex Bldg

Description

Supreme Court Building with Elevator, 8 Levels

Uniformat II Code	Uniformat Category	Name	Lifetime	\$/Unit	Percent Renewed
A	Substructure	-	75	16.72	5%
B10	Superstructure	-	75	25.28	5%
B2010	Exterior Walls	-	75	13.00	5%
B2020	Exterior Windows	-	30	6.43	100%
B2030	Exterior Doors	-	30	0.72	100%
B30	Roofing	-	20	8.67	100%
C1010	Partitions	-	50	3.72	65%
C1020	Interior Doors	-	50	2.38	65%
C1030	Fittings	-	15	0.74	100%
C20	Stairs	-	30	3.39	20%
C3010	Wall Finishes	Painted Finishes	10	2.05	100%
C3020	Floor Finishes	Tile	50	9.06	100%
C3030	Ceiling Finishes	Plaster	50	7.10	100%
D10	Conveying	-	25	4.89	75%
D20	Plumbing	-	30	4.00	50%
D2010	Plumbing Fixtures	-	30	3.20	50%
D3020	Heat Generating Systems	-	25	5.50	75%
D3030	Cooling Generating Systems	-	25	6.00	100%
D3040	Distribution Systems	-	30	9.50	75%
D3050	Terminal and Package Units	-	20	3.40	80%
D3060	Controls and Instrumentation	-	20	2.50	90%
D3090	Other HVAC Systems and Equipment	-	30	0.75	0%
D40	Fire Protection	-	30	3.25	25%
D5010	Electrical Service and Distribution	-	30	4.94	80%
D5020	Lighting and Branch Wiring	-	20	6.52	75%
D5030	Communications and Security	-	15	3.35	85%
D5090	Other Electrical Systems	-	25	3.53	85%
E	Equipment and Furnishings	-	25	5.63	100%
			Totals	166.22	

COST MODEL: VADGS Admin Offices - Rose Lafoon Bldg

Description

Multi Story with elevator

Uniformat II Code	Uniformat Category	Name	Lifetime	\$/Unit	Percent Renewed
A10	Foundations	-	75	7.08	5%
B10	Superstructure	-	75	17.24	5%
B2010	Exterior Walls	-	75	14.74	5%
B2020	Exterior Windows	-	30	9.09	100%
B2030	Exterior Doors	-	30	1.30	100%
B30	Roofing	-	20	4.17	100%
C1010	Partitions	-	50	3.54	65%
C1020	Interior Doors	-	50	3.05	65%
C3010	Wall Finishes	-	10	2.50	100%
C3020	Floor Finishes	-	10	2.91	100%
C3031	Ceiling Finishes	-	20	2.70	100%
D10	Conveying	-	25	4.50	75%
D20	Plumbing	-	40	5.42	100%
D3040	Distribution Systems	-	40	3.33	25%
D3050	Terminal and Package Units	-	15	2.08	80%
D3060	Controls and Instrumentation	-	20	2.71	85%
D3061	Heating Generating Systems	-	40	4.17	60%
D3062	Cooling Generating Systems	-	25	3.25	45%
D40	Fire Protection	-	40	2.50	30%
D5010	Electrical Service and Distribution	-	35	5.10	100%
D5020	Lighting and Branch Wiring	-	20	4.37	100%
D5030	Communications and Security	-	15	3.95	100%
D5090	Other Electrical Systems	-	25	1.46	100%
E10	Equipment	-	25	4.75	100%
			Totals	115.91	



Component Renewal Report

by Asset Name



AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Rose & Lafoon Building
ASSET NUMBER: 194-734
ASSET REPLACEMENT VALUE: \$744,838

Component	Uniformat CategoryII	System Lifetime Replacement (Years) Value	Percent Replaced at Renewal	Renewal Cost	Percent Used	Inspection Date	Year Next Replaced	
Ceiling Finishes	C3031	\$17,350	20	100%	\$25,054	60%	07-11-2005	2014
Communications and Security	D5030	\$25,383	15	100%	\$44,045	20%	07-20-2005	2018
Controls and Instrumentation	D3060	\$17,414	20	85%	\$20,415	65%	07-20-2005	2013
Conveying	D10	\$28,917	25	75%	\$37,634	50%	07-21-2005	2018
Cooling Generating Systems	D3062	\$20,884	25	45%	\$20,518	30%	07-20-2005	2023
Exterior Doors	B2030	\$8,354	30	100%	\$16,637	50%	07-11-2005	2021
Floor Finishes	C3020	\$18,700	10	100%	\$22,471	60%	07-11-2005	2010
					\$35,570			2020
Foundations	A10	\$45,496	75	5%	\$5,200	75%	07-11-2005	2024
Lighting and Branch Wiring	D5020	\$28,082	20	100%	\$55,927	25%	07-20-2005	2021
Other Electrical Systems	D5090	\$9,382	25	100%	\$20,483	30%	07-20-2005	2023
Roofing	B30	\$26,796	20	100%	\$38,695	60%	07-11-2005	2014
Superstructure	B10	\$110,784	75	5%	\$12,662	75%	07-11-2005	2024
Terminal and Package Units	D3050	\$13,366	15	80%	\$13,453	65%	07-20-2005	2011
					\$26,793			2026
Wall Finishes	C3010	\$16,065	10	100%	\$19,305	60%	07-11-2005	2010
					\$30,559			2020

Rose & Lafoon Building Total Renewal Costs : \$445,420



AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Supreme Court Main & Annex Building
ASSET NUMBER: 194-736
ASSET REPLACEMENT VALUE: \$42,481,510

Component	Uniformat CategoryII	System Replacement Value	Lifetime (Years)	Percent Replaced at Renewal	Renewal Cost	Percent Used	Inspection Date	Year Next Replaced
Communications and Security	D5030	\$856,173	15	85%	\$1,262,818	20%	07-20-2005	2018
Controls and Instrumentation	D3060	\$638,935	20	90%	\$1,093,837	30%	07-20-2005	2020
Cooling Generating Systems	D3030	\$1,533,444	25	100%	\$2,660,897	50%	07-20-2005	2018
Electrical Service and Distribution	D5010	\$1,262,536	30	80%	\$2,308,734	40%	07-20-2005	2024
Fire Protection	D40	\$830,615	30	25%	\$413,562	50%	07-20-2005	2021
Fittings	C1030	\$189,125	15	100%	\$343,602	10%	07-12-2005	2019
Heat Generating Systems	D3020	\$1,405,657	25	75%	\$2,301,623	30%	07-20-2005	2023
Lighting and Branch Wiring	D5020	\$1,666,342	20	75%	\$2,990,973	5%	07-20-2005	2025
Other Electrical Systems	D5090	\$902,176	25	85%	\$1,674,187	30%	07-20-2005	2023
Partitions	C1010	\$950,735	50	65%	\$1,548,484	60%	07-12-2005	2026
Plumbing Fixtures	D2010	\$817,837	30	50%	\$709,573	60%	07-20-2005	2018
Roofing	B30	\$2,215,827	20	100%	\$5,303,013	5%	07-11-2005	2025
Stairs	C20	\$866,396	30	20%	\$238,986	75%	07-12-2005	2013
Substructure	A	\$4,273,197	75	5%	\$425,523	80%	07-12-2005	2021
Superstructure	B10	\$6,460,911	75	5%	\$643,375	80%	07-12-2005	2021
Terminal and Package Units	D3050	\$868,952	20	80%	\$1,100,405	50%	07-20-2005	2016



Component	Uniformat CategoryII	System Replacement Value	Lifetime (Years)	Percent Replaced at Renewal	Renewal Cost	Percent Used	Inspection Date	Year Next Replaced
Wall Finishes (Painted Finishes)	C3010	\$523,927	10	100%	\$792,119	10%	07-12-2005	2015
					\$1,253,884			2025

Supreme Court Main & Annex Building Total Renewal Costs : \$27,065,594
Richmond Capitol Square Total Renewal Costs : \$27,511,014
Department of General Services (DGS) Total Renewal Costs : \$27,511,014



In addition to management of deficient conditions, *VFA.facility* provides budgeting and management tools for facility capital renewal forecasting. Whereas deferred maintenance is concerned with existing conditions, capital renewal forecasting is concerned with the continuous deterioration of buildings. From an accounting perspective, this is the cause for building depreciation. This section presents the findings of the capital renewal forecasting for the Supreme Court Main and Annex Building and the Rose and Lafoon Building.

Unlike the theoretical straight-line depreciation familiar to accountants, building deterioration occurs at a wide variety of rates for various building systems. As such, VFA has developed a methodology for predicting building deterioration and associated capital renewal funding requirements based on systematic analyses of the building's components, estimating renewal costs at the end of each component's useful life. In a typical assessment, each building system is modeled with a value represented as its percent of the total replacement cost of the facility, a lifetime, a percentage of the system to be replaced at the end of its lifetime, and a percent through its lifetime. The extent of detail shown represents VFA's standard approach; however, this listing is intended to be flexible, adjusting to each client's needs. Addition of more detail is not limited by the system.

Component Lifetime

Component lifetimes represent the anticipated serviceable duration of each building component. Lifetimes reflect the durability of the type of system present. For example, typical EPDM roofing has a standard lifetime of 20 years, while slate shingle roofing has a serviceable life of 50 to 100 years depending on the thickness and construction method used. As such, each component is analyzed and a life assigned. These figures are based on published standards as modified by VFA to reflect our professional experience. The lifetimes are further refined to reflect the owner's experience and approach to preventative maintenance as well as expected or historic wear on the buildings.

Percentage Replaced

At the time of renewal, many components are only partially renewed or replaced. For example, while a roof is generally totally replaced at the end of its life, elevators are not totally replaced, but have significant residual value. The shaft, piston, doors, etc. generally remain but the cab and electronics are replaced.

Percent Used

For each component, VFA professionals estimate the percent depletion relative to its lifetime. Field inspection results are used to determine the percent used, not simply the age of the component.

The following graph illustrates the results of the facilities renewal forecast process for the Supreme Court Main and Annex Building and the Rose and Lafoon Building. The annual costs associated with replacement of systems not currently deficient but anticipated to fail in the future are mapped to the graph. The time frame used was 20 years; additional analyses can be produced with other time frames.

The Renewal Forecast Report features a graph and a table that displays renewal costs in 4 different forecast options:

- **Annual** - An annual forecast of renewal costs, based on the accumulation of the data on the current condition and costs of the asset components (cost models). It shows the various annual costs projected for the renewal of asset systems. This forecast tends to be somewhat noisy (that is, it shows unexpected fluctuations from year to year).
- **Moving Average** - A moving 5-year average of renewal costs calculated for Net Present Value and then annually adjusted by the specified Inflation Rate. Each year is an average of forecasted costs that occur 2 years before and 2 years after the year. Because of this, the following forecast years project averages of less than 5 years and may display larger costs than expected:
 - The first year in the forecast is an average of 3 years (itself and 2 years following).
 - The second year in the forecast is an average of 4 years (the first year, itself, and 2 years following).
 - The second-to-last year in the forecast is an average of 4 years (two years preceding, itself, and the last year).
 - The last year in the forecast is an average of 3 years (two years preceding and itself).



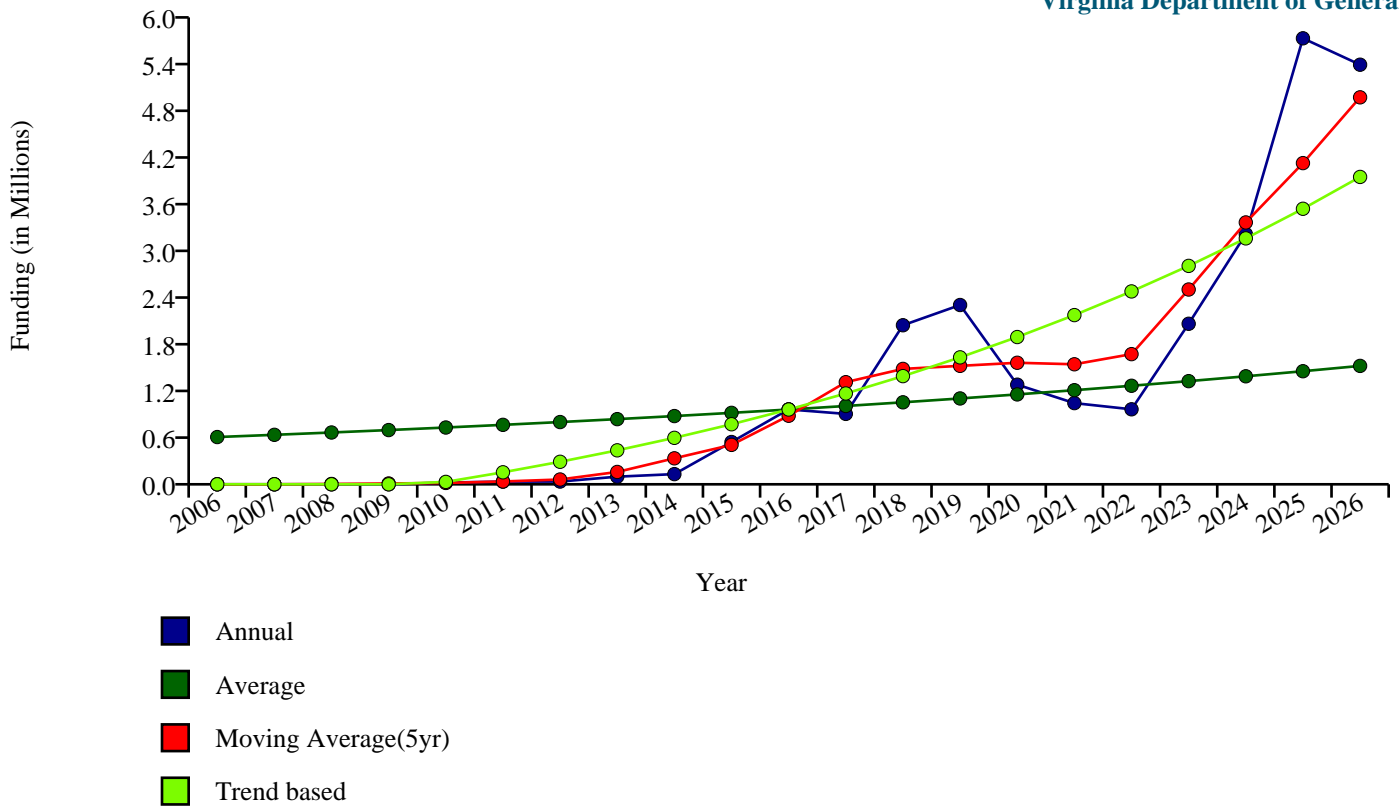
- **Trend Based** - A linear best-fit trend line of renewal costs calculated for NPV and then annually adjusted by the specified Inflation Rate.
- **Average** - An average of the years in the forecast term (specified in **Years** field). For example, if it is a 10-year forecast, then it is an average of the renewal costs incurred in 10 years. These costs are calculated for NPV and then annually adjusted by the specified Inflation Rate.

The results of this analysis are used in combination with the data collected on current deficiencies to produce the financial models presented and described in the next section, Funding Scenario Analyses.



Facility Renewal Forecast

Virginia Department of General Services



Year	Annual	Average	Moving Average(5yr)	Trend based
2006	\$0	\$607,185	\$0	\$0
2007	\$0	\$635,722	\$22	\$0
2008	\$0	\$665,601	\$3,979	\$0
2009	\$96	\$696,885	\$10,487	\$0
2010	\$21,706	\$729,638	\$17,407	\$30,857
2011	\$34,647	\$763,931	\$36,071	\$154,245
2012	\$35,227	\$799,836	\$61,605	\$289,163
2013	\$97,813	\$837,428	\$158,647	\$436,422
2014	\$130,787	\$876,788	\$333,730	\$596,885
2015	\$543,330	\$917,997	\$506,393	\$771,468
2016	\$962,358	\$961,143	\$880,657	\$961,143
2017	\$904,722	\$1,006,316	\$1,312,381	\$1,166,943
2018	\$2,043,971	\$1,053,613	\$1,482,899	\$1,389,965
2019	\$2,303,984	\$1,103,133	\$1,522,023	\$1,631,373
2020	\$1,280,130	\$1,154,980	\$1,561,728	\$1,892,404
2021	\$1,043,223	\$1,209,265	\$1,542,311	\$2,174,368
2022	\$963,818	\$1,266,100	\$1,672,734	\$2,478,655
2023	\$2,062,887	\$1,325,607	\$2,503,183	\$2,806,743
2024	\$3,216,302	\$1,387,910	\$3,365,123	\$3,160,196
2025	\$5,731,419	\$1,453,142	\$4,127,554	\$3,540,673
2026	\$5,392,021	\$1,521,440	\$4,972,852	\$3,949,935

Forecast Parameters

Agency	Department of General Services (DGS)
Location	Richmond Capitol Square
Asset	Supreme Court Main Annex Building Rose Lafoon Building
Systems	All
Forecast Years	20
Inflation Rate	4.7%
Allocate renewal cost to single year	No



Facility Funding Scenario

VFA.facility integrates both deferred maintenance and capital renewal projection findings into comprehensive facility funding analyses. Various strategies can be comparatively analyzed including various funding levels, various distributions of funding and testing of assumption parameters. Using this tool, optimal facility investment strategies can be identified.

Three investment scenarios for the Supreme Court Main and Annex Building and the Rose and Lafoon Building are included at the end of this section. These models are based on long range planning discussions and illustrate compelling plant needs. These models do not include debt service as a renewal investment. The audit treats the original capital expenditure as a renewal investment. Adding the debt service counts the single investment twice.

The model integrates the current condition information and the annual renewal projections to analyze various funding schemes. Building replacement cost is annually adjusted by the inflation rate identified, in this case 4.7%. If the institution anticipates plant growth, this rate is reflected in both the replacement cost and the overall FCI, assuming that growth is via new construction with $FCI = 0$. Anticipated new deficiencies are estimated, as the further deterioration of current deficiencies not corrected, at the backlog deterioration rate identified as 2%, and the results of the renewal forecast. With these factors, various funding schemes can be analyzed and the effect on the building condition estimated. All figures are adjusted for inflation over the duration of the analysis; the discount rate used for net present value calculations is the inflation rate as well. Other discount rates can be used, to reflect the opportunity cost associated with a facility investment. The investment should be assumed to include major repair costs (other than those for custodial or routine maintenance needs) and any capital projects that substantially affect the condition of the plant, such as building or partial building renovations.

The graphs and tables that follow identify funding strategies and show the associated effects on building condition, in terms of the FCI (see section 2 for a discussion and definition of FCI). The Comparison of Funding Options presents key results such as change in plant value and FCI at end of funding period for the three scenarios. For the graphical presentation, bars indicate annual dollars invested in the building, as indicated on the left axis, and the lines indicate the effect of this funding on the FCI, as indicated on the right axis. The spreadsheets have been projected over 20 years for clarity; further extensions of the model are possible. The following scenarios are presented for the Supreme Court Main and Annex Building and the Rose and Lafoon Building.

Option One explores the effects of investing 1/2% of current replacement value (CRV). The present condition of the building is considered poor according to industry standards, with an overall FCI of **0.20**. Over 20 years the condition of the buildings steadily deteriorates with the FCI increasing to **0.50**. Total aggregated net present value of 20 years worth of deferred maintenance, at this funding level, has resulted in a backlog of work estimated at \$21,752,122 a significant increase from the current backlog of \$8,491,775.

Option Two explores the effects of setting funding levels to maintain the existing overall FCI. In this scenario, the condition remains stable with an overall FCI of **0.20**. Total aggregated net present value of 20 years worth of deferred maintenance, at this level of funding, has resulted in a backlog that remains at \$8,491,775 given the assumed zero plant growth. The total aggregated net present value of a 20 year building investment is \$16,530,965. This Option is useful as a benchmark for setting goals to improve plant condition and value.

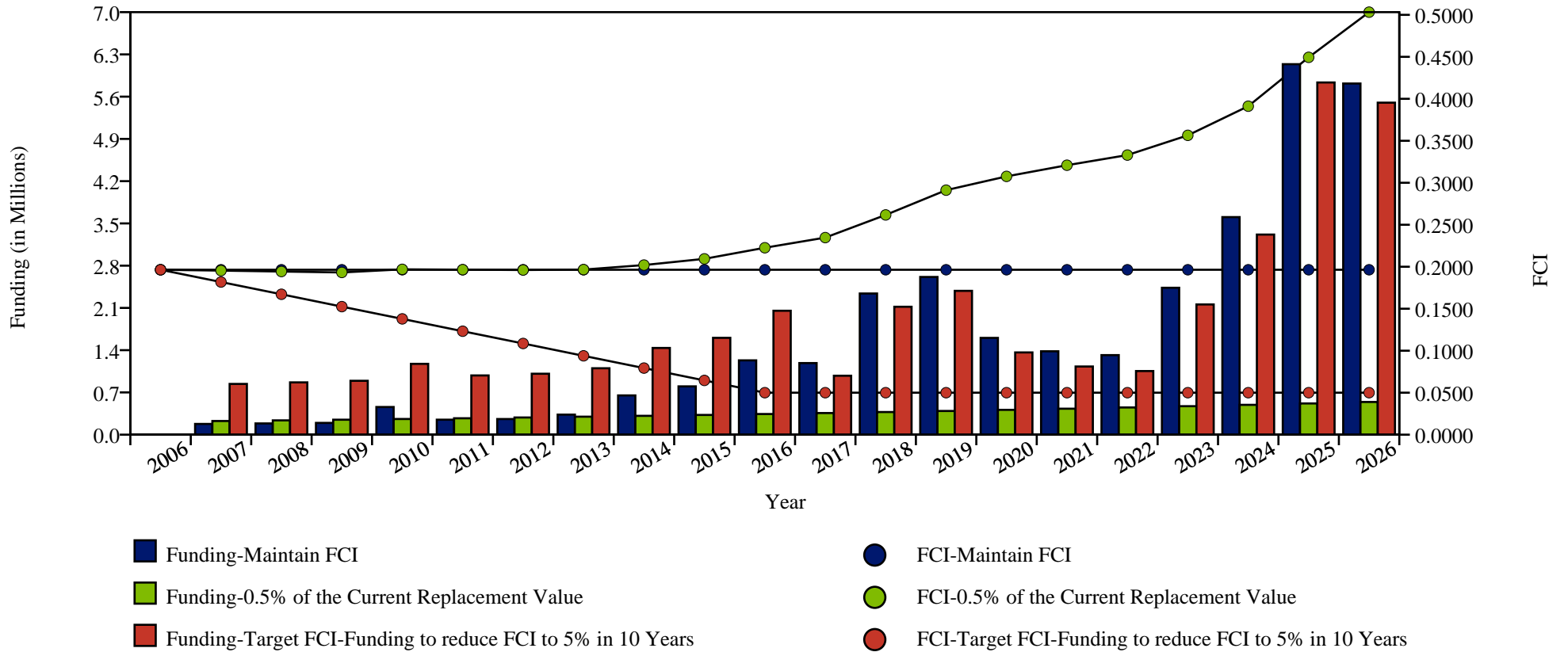
Option Three explores the effects of reducing the overall FCI to 0.05, which is considered good by industry standards. In this scenario, building improvements are distributed over a multi-year period bringing the FCI down to an efficient 0.05 in 10 years, and maintained at this level thereafter. This scenario implies continued use of the facility during renewal improvements. Total aggregated net present value of 20 year building investment is \$21,025,590. In this case, regular and adequate investment toward preventative maintenance has had dramatic results in reducing the backlog of work to be performed. Total aggregated net present value of 20 years worth of preventative maintenance has resulted in a backlog of work estimated at only \$2,161,317. At the end of the 20-year period, this backlog can be envisioned as a balloon payment of \$2,161,317 coming due to fix the deficiencies. Combining \$2,161,317 and the \$21,025,590 for a total 20 year investment of \$23,186,907 yields roughly an aggregate annual investment of \$1,159,345 into the facilities required to bring the plant up to good condition. This option yields much greater benefits than Option 2.

These options reflect only three of the many possible scenarios. Additional scenarios can be easily run on the data.



Funding/FCI Report

Virginia Department of General Services



Maintain FCI

Year	Replacement Cost	Renewal Cost	Backlog Deterioration	Total New Liability	New Backlog Total	Net Plant Value	Funding	Funding Reserve	FCI
2006	\$43,226,350	\$0	\$0	\$8,491,775	\$8,491,775	\$34,734,575	\$0	\$0	0.1964
2007	\$45,257,990	\$0	\$177,818	\$177,818	\$8,890,889	\$36,367,101	\$177,818	\$0	0.1964
2008	\$47,385,118	\$0	\$186,175	\$186,175	\$9,308,761	\$38,076,357	\$186,175	\$0	0.1964
2009	\$49,612,221	\$96	\$194,925	\$195,022	\$9,746,273	\$39,865,948	\$195,022	\$0	0.1964
2010	\$51,943,998	\$21,706	\$204,087	\$458,245	\$10,204,349	\$41,739,649	\$458,245	\$0	0.1964
2011	\$54,385,369	\$34,647	\$213,679	\$248,326	\$10,683,954	\$43,701,415	\$248,326	\$0	0.1964
2012	\$56,941,484	\$35,227	\$223,722	\$258,949	\$11,186,100	\$45,755,384	\$258,949	\$0	0.1964
2013	\$59,617,736	\$97,813	\$234,237	\$332,050	\$11,711,847	\$47,905,889	\$332,050	\$0	0.1964
2014	\$62,419,773	\$130,787	\$245,246	\$650,304	\$12,262,305	\$50,157,468	\$650,304	\$0	0.1964
2015	\$65,353,505	\$543,330	\$256,773	\$800,103	\$12,838,634	\$52,514,872	\$800,103	\$0	0.1964
2016	\$68,425,123	\$962,358	\$268,841	\$1,231,199	\$13,442,050	\$54,983,073	\$1,231,199	\$0	0.1964
2017	\$71,641,108	\$904,722	\$281,477	\$1,186,198	\$14,073,827	\$57,567,281	\$1,186,198	\$0	0.1964
2018	\$75,008,243	\$2,043,971	\$294,706	\$2,338,677	\$14,735,298	\$60,272,946	\$2,338,677	\$0	0.1964
2019	\$78,533,634	\$2,303,984	\$308,557	\$2,612,541	\$15,427,857	\$63,105,777	\$2,612,541	\$0	0.1964
2020	\$82,224,719	\$1,280,130	\$323,059	\$1,603,189	\$16,152,967	\$66,071,752	\$1,603,189	\$0	0.1964
2021	\$86,089,285	\$1,043,223	\$338,243	\$1,381,466	\$16,912,158	\$69,177,128	\$1,381,466	\$0	0.1964
2022	\$90,135,486	\$963,818	\$354,141	\$1,317,959	\$17,707,030	\$72,428,456	\$1,317,959	\$0	0.1964
2023	\$94,371,858	\$2,062,887	\$370,785	\$2,433,672	\$18,539,261	\$75,832,597	\$2,433,672	\$0	0.1964
2024	\$98,807,341	\$3,216,302	\$388,212	\$3,604,514	\$19,410,607	\$79,396,733	\$3,604,514	\$0	0.1964
2025	\$103,451,291	\$5,731,419	\$406,458	\$6,137,877	\$20,322,907	\$83,128,384	\$6,137,877	\$0	0.1964
2026	\$108,313,506	\$5,392,021	\$425,562	\$5,817,583	\$21,278,085	\$87,035,422	\$5,817,583	\$0	0.1964

0.5% of the Current Replacement Value

Year	Replacement Cost	Renewal Cost	Backlog Deterioration	Total New Liability	New Backlog Total	Net Plant Value	Funding	Funding Reserve	FCI
2006	\$43,226,350	\$0	\$0	\$8,491,775	\$8,491,775	\$34,734,575	\$0	\$0	0.1964
2007	\$45,257,990	\$0	\$177,818	\$177,818	\$8,842,417	\$36,415,574	\$226,290	\$0	0.1954
2008	\$47,385,118	\$0	\$185,160	\$185,160	\$9,206,245	\$38,178,873	\$236,926	\$0	0.1943
2009	\$49,612,221	\$96	\$192,779	\$192,875	\$9,583,753	\$40,028,468	\$248,061	\$0	0.1932
2010	\$51,943,998	\$21,706	\$200,684	\$454,842	\$10,229,312	\$41,714,686	\$259,720	\$0	0.1969
2011	\$54,385,369	\$34,647	\$214,202	\$248,849	\$10,687,012	\$43,698,357	\$271,927	\$0	0.1965
2012	\$56,941,484	\$35,227	\$223,786	\$259,013	\$11,163,608	\$45,777,876	\$284,707	\$0	0.1961
2013	\$59,617,736	\$97,813	\$233,766	\$331,579	\$11,721,788	\$47,895,948	\$298,089	\$0	0.1966
2014	\$62,419,773	\$130,787	\$245,454	\$650,512	\$12,611,126	\$49,808,646	\$312,099	\$0	0.202
2015	\$65,353,505	\$543,330	\$264,077	\$807,407	\$13,684,490	\$51,669,016	\$326,768	\$0	0.2094
2016	\$68,425,123	\$962,358	\$286,553	\$1,248,912	\$15,234,447	\$53,190,676	\$342,126	\$0	0.2226
2017	\$71,641,108	\$904,722	\$319,009	\$1,223,731	\$16,815,993	\$54,825,115	\$358,206	\$0	0.2347
2018	\$75,008,243	\$2,043,971	\$352,127	\$2,396,098	\$19,627,402	\$55,380,841	\$375,041	\$0	0.2617
2019	\$78,533,634	\$2,303,984	\$410,998	\$2,714,982	\$22,872,205	\$55,661,430	\$392,668	\$0	0.2912
2020	\$82,224,719	\$1,280,130	\$478,944	\$1,759,074	\$25,295,149	\$56,929,570	\$411,124	\$0	0.3076
2021	\$86,089,285	\$1,043,223	\$529,680	\$1,572,903	\$27,626,480	\$58,462,806	\$430,446	\$0	0.3209
2022	\$90,135,486	\$963,818	\$578,498	\$1,542,317	\$30,016,565	\$60,118,921	\$450,677	\$0	0.333
2023	\$94,371,858	\$2,062,887	\$628,547	\$2,691,434	\$33,646,919	\$60,724,939	\$471,859	\$0	0.3565
2024	\$98,807,341	\$3,216,302	\$704,567	\$3,920,869	\$38,655,158	\$60,152,182	\$494,037	\$0	0.3912
2025	\$103,451,291	\$5,731,419	\$809,439	\$6,540,858	\$46,495,554	\$56,955,736	\$517,256	\$0	0.4494
2026	\$108,313,506	\$5,392,021	\$973,617	\$6,365,638	\$54,504,918	\$53,808,589	\$541,568	\$0	0.5032

Target FCI-Funding to reduce FCI to 5% in 10 Years

Year	Replacement Cost	Renewal Cost	Backlog Deterioration	Total New Liability	New Backlog Total	Net Plant Value	Funding	Funding Reserve	FCI
2006	\$43,226,350	\$0	\$0	\$8,491,775	\$8,491,775	\$34,734,575	\$0	\$0	0.1964
2007	\$45,257,990	\$0	\$177,818	\$177,818	\$8,228,090	\$37,029,900	\$840,617	\$0	0.1818
2008	\$47,385,118	\$0	\$172,296	\$172,296	\$7,920,860	\$39,464,258	\$866,247	\$0	0.1672
2009	\$49,612,221	\$96	\$165,863	\$165,959	\$7,566,575	\$42,045,646	\$892,525	\$0	0.1525
2010	\$51,943,998	\$21,706	\$158,444	\$412,602	\$7,161,489	\$44,782,509	\$1,173,317	\$0	0.1379
2011	\$54,385,369	\$34,647	\$149,962	\$184,609	\$6,701,611	\$47,683,758	\$981,077	\$0	0.1232
2012	\$56,941,484	\$35,227	\$140,332	\$175,559	\$6,182,684	\$50,758,799	\$1,009,461	\$0	0.1086
2013	\$59,617,736	\$97,813	\$129,465	\$227,279	\$5,600,175	\$54,017,561	\$1,100,375	\$0	0.0939
2014	\$62,419,773	\$130,787	\$117,268	\$522,326	\$4,949,252	\$57,470,521	\$1,436,457	\$0	0.0793
2015	\$65,353,505	\$543,330	\$103,637	\$646,967	\$4,224,771	\$61,128,734	\$1,604,063	\$0	0.0646
2016	\$68,425,123	\$962,358	\$88,467	\$1,050,825	\$3,421,256	\$65,003,867	\$2,052,904	\$0	0.05
2017	\$71,641,108	\$904,722	\$71,641	\$976,363	\$3,582,055	\$68,059,052	\$976,363	\$0	0.05
2018	\$75,008,243	\$2,043,971	\$75,008	\$2,118,979	\$3,750,412	\$71,257,831	\$2,118,979	\$0	0.05
2019	\$78,533,634	\$2,303,984	\$78,534	\$2,382,518	\$3,926,682	\$74,606,953	\$2,382,518	\$0	0.05
2020	\$82,224,719	\$1,280,130	\$82,225	\$1,362,354	\$4,111,236	\$78,113,483	\$1,362,354	\$0	0.05
2021	\$86,089,285	\$1,043,223	\$86,089	\$1,129,312	\$4,304,464	\$81,784,821	\$1,129,312	\$0	0.05
2022	\$90,135,486	\$963,818	\$90,135	\$1,053,954	\$4,506,774	\$85,628,712	\$1,053,954	\$0	0.05
2023	\$94,371,858	\$2,062,887	\$94,372	\$2,157,259	\$4,718,593	\$89,653,265	\$2,157,259	\$0	0.05
2024	\$98,807,341	\$3,216,302	\$98,807	\$3,315,109	\$4,940,367	\$93,866,973	\$3,315,109	\$0	0.05
2025	\$103,451,291	\$5,731,419	\$103,451	\$5,834,870	\$5,172,565	\$98,278,726	\$5,834,870	\$0	0.05
2026	\$108,313,506	\$5,392,021	\$108,314	\$5,500,334	\$5,415,675	\$102,897,831	\$5,500,334	\$0	0.05

Forecast Parameters

Agency	Department of General Services (DGS)
Location	Richmond Capitol Square
Asset	Supreme Court Main Annex Building Rose Lafoon Building
Systems	All
Priority	All
Requirement Type	All
Forecast Years	20
Inflation Rate	4.7%
Backlog Deteriorate Rate	2.0%
Renewal Option	Annual
Allocate renewal cost to single year	No
FCI/RI Setting	FCI

Funding Option	Starting		Net Present Value				FCI
	Backlog	FCI	Applied Funding	Ending Backlog	Total Funding Requirement	Deferred Maintenance Penalty	Ending
Pay as you go	\$8,491,775	0.1964	\$21,626,028		\$21,626,028		0
Funding to reduce FCI to 5% in 10 years	\$8,491,775	0.1964	\$21,025,590	\$2,161,317	\$23,186,907	\$1,560,879	0.0500
0.5% of the current replacement value	\$8,491,775	0.1964	\$4,322,635	\$21,752,122	\$26,074,757	\$4,448,729	0.5032
Funding to maintain Constant FCI	\$8,491,775	0.1964	\$16,530,965	\$8,491,775	\$25,022,740	\$3,396,712	0.1964



Asset List Report

by Asset Name



AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET TYPE: Building

Number	Name	Use	Age	Size	Replacement Value	FCI Cost (in thousands)	FCI	RI Cost (in thousands)	RI	(RI-FCI) Cost (in thousands)
194-734	Rose & Lafoon Building	Business	55	6,426 SF	\$744,838	\$95	0.13	\$123	0.16	\$28
194-736	Supreme Court Main & Annex Building	Business	86	255,574 SF	\$42,481,510	\$8,397	0.20	\$8,792	0.21	\$395
Totals :				262,000	\$43,226,348	\$8,492	0.20	\$8,914	0.21	\$423



Crosstabs of Requirements

by Priority and System Group / Asset Name

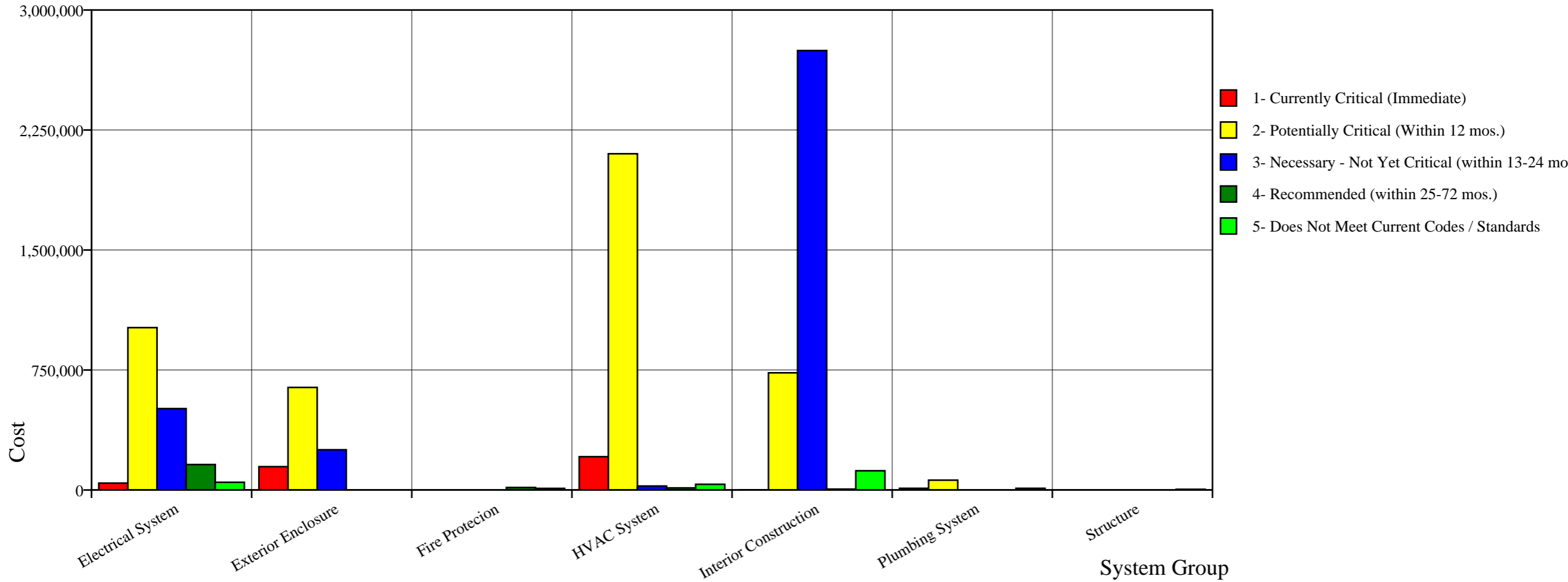


AGENCY:
Department of General Services (DGS)

LOCATION:
Richmond Capitol Square

ASSET NAME:
Rose & Lafoon Building, Supreme Court Main & Annex Building

Category - Priority	1- Currently Critical (Immediate)	2- Potentially Critical (Within 12 mos.)	3- Necessary - Not Yet Critical (within 13-24 mos.)	4- Recommended (within 25-72 mos.)	5- Does Not Meet Current Codes / Standards	Total
Electrical System	\$43,107	\$1,014,843	\$508,703	\$159,169	\$48,221	\$1,774,043
Exterior Enclosure	\$145,813	\$640,906	\$251,433	\$0	\$0	\$1,038,152
Fire Protecion	\$0	\$0	\$0	\$15,648	\$10,085	\$25,733
HVAC System	\$208,201	\$2,101,570	\$24,830	\$13,044	\$35,752	\$2,383,397
Interior Construction	\$1,148	\$732,451	\$2,746,568	\$5,579	\$120,230	\$3,605,976
Plumbing System	\$10,580	\$61,622	\$0	\$0	\$10,593	\$82,795
Structure	\$0	\$0	\$0	\$0	\$4,394	\$4,394
Total	\$408,849	\$4,551,392	\$3,531,534	\$193,440	\$229,275	\$8,914,490





Crosstabs of Requirements

by Category and System Group / Asset Name



AGENCY:

Department of General Services (DGS)

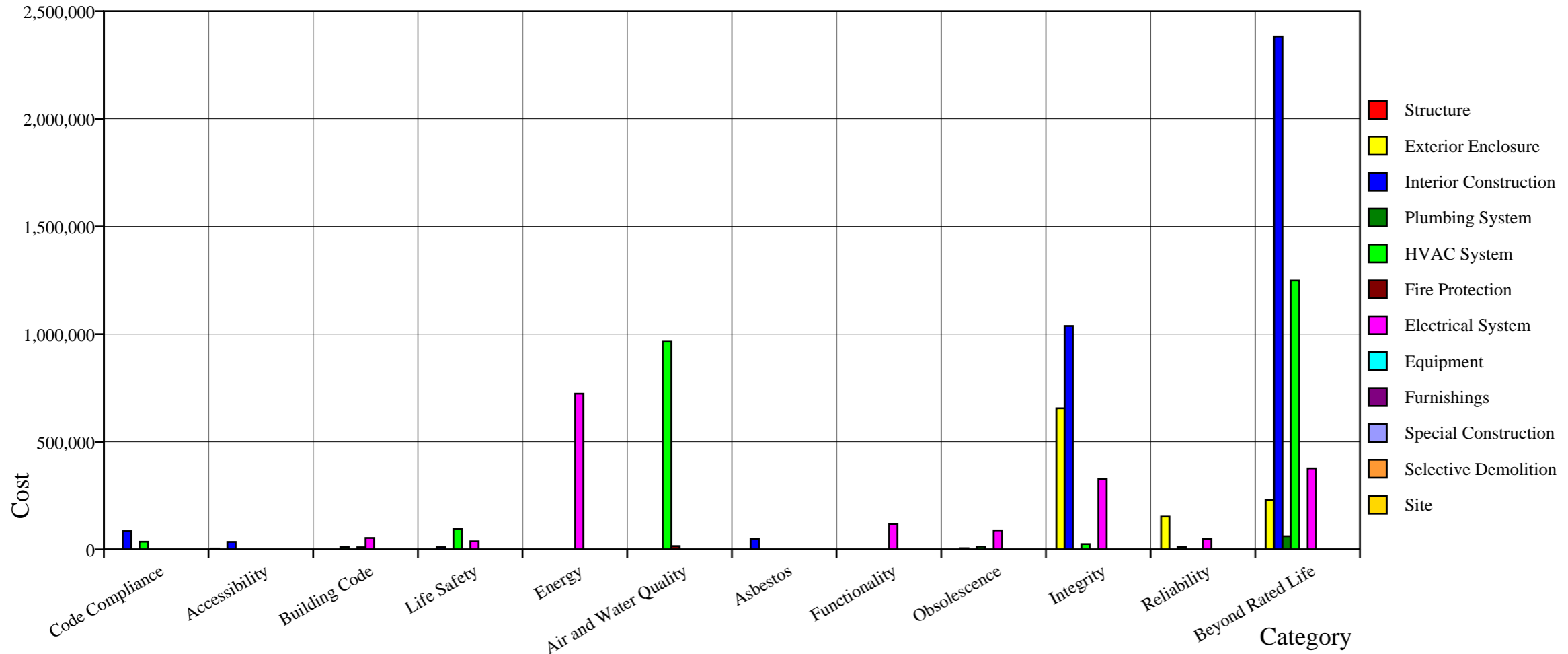
LOCATION:

Richmond Capitol Square

ASSET NAME:

Rose & Lafoon Building, Supreme Court Main & Annex Building

Category - System Group	Structure	Exterior Enclosure	Interior Construction	Plumbing System	HVAC System	Fire Protection	Electrical System	Equipment	Furnishings	Special Construction	Selective Demolition	Site	Total
Code Compliance	\$0	\$0	\$85,285	\$0	\$35,752	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$121,037
Accessibility	\$4,394	\$0	\$34,945	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$39,339
Building Code	\$0	\$0	\$0	\$10,593	\$0	\$10,085	\$53,624	\$0	\$0	\$0	\$0	\$0	\$74,302
Life Safety	\$0	\$0	\$10,317	\$0	\$94,966	\$0	\$37,704	\$0	\$0	\$0	\$0	\$0	\$142,987
Energy	\$0	\$0	\$0	\$0	\$0	\$0	\$723,595	\$0	\$0	\$0	\$0	\$0	\$723,595
Air and Water Quality	\$0	\$0	\$0	\$0	\$965,365	\$15,648	\$0	\$0	\$0	\$0	\$0	\$0	\$981,013
Asbestos	\$0	\$0	\$49,185	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$49,185
Functionality	\$0	\$0	\$0	\$0	\$0	\$0	\$117,782	\$0	\$0	\$0	\$0	\$0	\$117,782
Obsolescence	\$0	\$0	\$5,579	\$0	\$13,044	\$0	\$88,767	\$0	\$0	\$0	\$0	\$0	\$107,390
Integrity	\$0	\$655,782	\$1,038,045	\$0	\$24,830	\$0	\$326,710	\$0	\$0	\$0	\$0	\$0	\$2,045,367
Reliability	\$0	\$152,862	\$0	\$10,580	\$0	\$0	\$49,302	\$0	\$0	\$0	\$0	\$0	\$212,744
Beyond Rated Life	\$0	\$229,508	\$2,382,620	\$61,622	\$1,249,440	\$0	\$376,559	\$0	\$0	\$0	\$0	\$0	\$4,299,749
Total	\$4,394	\$1,038,152	\$3,605,976	\$82,795	\$2,383,397	\$25,733	\$1,774,043	\$0	\$0	\$0	\$0	\$0	\$8,914,490





Crosstabs of Requirements

by Category and Priority / Asset Name



AGENCY:

Department of General Services (DGS)

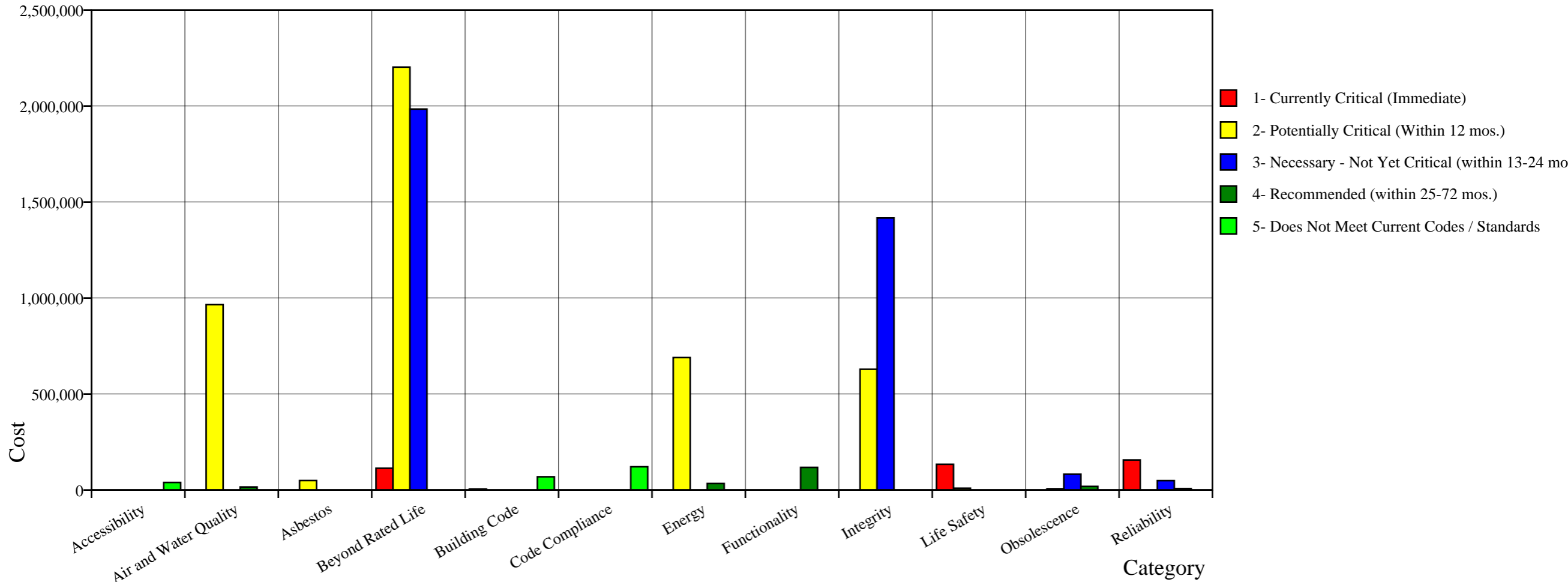
LOCATION:

Richmond Capitol Square

ASSET NAME:

Rose & Lafoon Building, Supreme Court Main & Annex Building

Category - Priority	1- Currently Critical (Immediate)	2- Potentially Critical (Within 12 mos.)	3- Necessary - Not Yet Critical (within 13-24 mos.)	4- Recommended (within 25-72 mos.)	5- Does Not Meet Current Codes / Standards	Total
Accessibility	\$0	\$0	\$0	\$0	\$39,339	\$39,339
Air and Water Quality	\$0	\$965,365	\$0	\$15,648	\$0	\$981,013
Asbestos	\$0	\$49,185	\$0	\$0	\$0	\$49,185
Beyond Rated Life	\$113,235	\$2,202,561	\$1,983,953	\$0	\$0	\$4,299,749
Building Code	\$5,403	\$0	\$0	\$0	\$68,899	\$74,302
Code Compliance	\$0	\$0	\$0	\$0	\$121,037	\$121,037
Energy	\$0	\$689,810	\$0	\$33,785	\$0	\$723,595
Functionality	\$0	\$0	\$0	\$117,782	\$0	\$117,782
Integrity	\$0	\$628,733	\$1,416,634	\$0	\$0	\$2,045,367
Life Safety	\$133,818	\$9,169	\$0	\$0	\$0	\$142,987
Obsolescence	\$0	\$6,569	\$82,198	\$18,623	\$0	\$107,390
Reliability	\$156,393	\$0	\$48,749	\$7,602	\$0	\$212,744
Total	\$408,849	\$4,551,392	\$3,531,534	\$193,440	\$229,275	\$8,914,490





Requirement List Report

by Asset Name and Priority.

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
Asset Name: Rose & Lafoon Building
Asset Number: 194-734

Priority: 1- Currently Critical (Immediate)

Requirement Name	Category	Prime System	Action Date	Finish Date	Cost
Electrical Distribution: Lacking Fire Stopping	Building Code	Electrical Service and Distribution	07/11/05		\$1,241
Plumbing: Drainage Pipe Blockage	Reliability	Plumbing	07/11/05		\$10,580
1- Currently Critical (Immediate) Totals:					\$11,821

Priority: 2- Potentially Critical (Within 12 mos.)

Requirement Name	Category	Prime System	Action Date	Finish Date	Cost
Exit Signs: Aged and Inefficient	Obsolescence	Emergency Light and Power Systems	07/11/06		\$6,569
Exterior Walls: Remedial repairs required.	Integrity	Exterior Walls	07/11/06		\$20,312
Exterior Windows: Replacement required.	Beyond Rated Life	Exterior Windows	07/11/06		\$10,878
Gutters and Downspouts: Replace existing gutter and rain leader.	Beyond Rated Life	Gutters and Downspouts	07/11/06		\$1,295
2- Potentially Critical (Within 12 mos.) Totals:					\$39,054

Priority: 3- Necessary - Not Yet Critical (within 13-24 mos.)

Requirement Name	Category	Prime System	Action Date	Finish Date	Cost
Ceiling Tiles: Replace water-stained ACT.	Integrity	Insulation	07/11/07		\$1,266
Electrical Branch Circuits: Aged	Beyond Rated Life	Lighting and Branch Wiring	07/11/07		\$12,372



Requirement List Report

by Asset Name and Priority.

Requirement Name	Category	Prime System	Action Date	Finish Date	Cost
Exterior Doors: Refinish existing doors, frames and sidelights.	Integrity	Exterior Doors	07/11/07		\$2,356
Exterior Windows: Repairs and upgrade of steel windows.	Reliability	Exterior Windows	07/11/07		\$7,049
Fire Alarm: System Ageing	Obsolescence	Communications and Security	07/11/07		\$14,127
Lighting: Aged and Inefficient (Interior)	Obsolescence	Lighting and Branch Wiring	07/11/07		\$5,610
Lighting: Exterior Fixtures Deteriorated	Integrity	Lighting and Branch Wiring	07/11/07		\$1,291

3- Necessary - Not Yet Critical (within 13-24 mos.) Totals: \$44,071

Priority: 4- Recommended (within 25-72 mos.)

Requirement Name	Category	Prime System	Action Date	Finish Date	Cost
Emergency Lighting: Not Identified	Reliability	Emergency Light and Power Systems	07/11/11		\$7,602
Lighting and Branch Wiring: Add Occupancy Sensors	Energy	Lighting and Branch Wiring	07/11/11		\$2,349

4- Recommended (within 25-72 mos.) Totals: \$9,951

Priority: 5- Does Not Meet Current Codes / Standards

Requirement Name	Category	Prime System	Action Date	Finish Date	Cost
Electrical Distribution: Miscellaneous Code Issues	Building Code	Electrical Service and Distribution	07/11/15		\$2,290
Electrical: Lack of As Built Drawings	Building Code	Other Electrical Systems	07/11/15		\$9,300
Fire Protection: Lack of Backflow Prevention or Double Check Valve	Building Code	Fire Protection	07/11/15		\$2,142
Fittings: Provide upgrades to HDCP bathroom.	Accessibility	Fittings	07/11/15		\$2,460



Requirement List Report

by Asset Name and Priority.

Requirement Name	Category	Prime System	Action Date	Finish Date	Cost
Plumbing: Lack of Backflow for Domestic Water	Building Code	Domestic Water Distribution	07/11/15		\$1,534
5- Does Not Meet Current Codes / Standards Totals:				\$17,726	
Rose & Lafoon Building Totals:				\$122,623	

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
Asset Name: Supreme Court Main & Annex Building
Asset Number: 194-736

Priority: 1- Currently Critical (Immediate)

Requirement Name	Category	Prime System	Action Date	Finish Date	Cost
Electrical Distribution: Lacking Fire Stopping	Building Code	Electrical Service and Distribution	07/12/05		\$4,162
Emergency Lighting: Insufficient Exit Signage	Life Safety	Emergency Light and Power Systems	07/12/05		\$37,704
Exterior Walls: Repoint exterior enclosure wall.	Reliability	Exterior Walls	07/13/05		\$145,813
HVAC Distribution: Fans Aged	Beyond Rated Life	Distribution Systems	07/12/05		\$113,235
HVAC Special Sys: Lack of Smoke Control	Life Safety	Other HVAC Systems and Equipment	07/12/05		\$94,966
Interior Doors: Replace existing metal door and frame at Room B117.	Life Safety	Interior Doors	07/13/05		\$1,148

1- Currently Critical (Immediate) Totals: \$397,028

Priority: 2- Potentially Critical (Within 12 mos.)

Requirement Name	Category	Prime System	Action Date	Finish Date	Cost
Boiler: Aged	Beyond Rated Life	Boilers	07/12/06		\$93,200
Domestic Water Distribution: Piping Aged	Beyond Rated Life	Distribution Systems	07/12/06		\$294,250
Electrical Distribution: Aged Equipment	Beyond Rated Life	Electrical Service and Distribution	07/12/06		\$318,464
Exterior Windows: Rehab of steel window assemblies.	Integrity	Exterior Windows	07/12/06		\$608,421



Requirement List Report

by Asset Name and Priority.

Requirement Name	Category	Prime System	Action Date	Finish Date	Cost
Floor Finishes: Remove VAT in Basement and Sub-Basement.	Asbestos	Floor Finishes	07/13/06		\$49,185
HVAC Distribution: Aged Ductwork	Air and Water Quality	Distribution Systems	07/12/06		\$965,365
HVAC Distribution: Piping Aged	Beyond Rated Life	Distribution Systems	07/12/06		\$612,919
Interior Doors: Replace doors and frames at Stair #__.	Life Safety	Interior Doors	07/12/06		\$9,169
Interior Doors: Replace doors, frames and hardware.	Beyond Rated Life	Interior Doors	07/12/06		\$674,097
Lighting Interior: Replace Fixtures and Lamps	Energy	Lighting and Branch Wiring	07/12/06		\$689,810
Plumbing: Aged DHW Converter	Beyond Rated Life	Domestic Water Distribution	07/12/06		\$61,622
Radiators: Aged	Beyond Rated Life	Heating Generating Systems	07/12/06		\$135,836
2- Potentially Critical (Within 12 mos.) Totals:					\$4,512,338

Priority: 3- Necessary - Not Yet Critical (within 13-24 mos.)

Requirement Name	Category	Prime System	Action Date	Finish Date	Cost
Branch Wiring: Aged	Integrity	Lighting and Branch Wiring	07/12/07		\$325,419
Ceiling Finishes: Replace existing ACT systems.	Beyond Rated Life	Ceiling Finishes	07/12/07		\$517,220
Ceiling Finishes: Repaint plaster/gypsum wallboard ceilings.	Integrity	Ceiling Finishes	07/12/07		\$122,890
Conveying: Aged Elevators	Beyond Rated Life	Elevators and Lifts	07/12/07		\$487,775
Electrical Distribution: Aged Panel Boards	Beyond Rated Life	Electrical Service and Distribution	07/12/07		\$26,040
Electrical Distribution: Panel Boards Lacking Capacity	Reliability	Electrical Service and Distribution	07/12/07		\$41,700
Emergency Lighting: Aged Exit Signs	Beyond Rated Life	Emergency Light and Power Systems	07/12/07		\$19,683



Requirement List Report

by Asset Name and Priority.

Requirement Name	Category	Prime System	Action Date	Finish Date	Cost
Exterior Doors: Refinish exterior bronze door assemblies.	Integrity	Exterior Doors	07/13/07		\$24,693
Exterior Doors: Replace existing exterior (service) doors.	Beyond Rated Life	Exterior Doors	07/13/07		\$19,976
Exterior Doors: Replacement of exterior doors and frames at roof access locations.	Beyond Rated Life	Exterior Doors	07/11/07		\$7,171
Exterior Enclosure: Exterior louvers.	Beyond Rated Life	Exterior Enclosure	07/11/07		\$9,067
Floor Finishes: Replace floor finishes in kind.	Beyond Rated Life	Floor Finishes	07/12/07		\$703,528
Interior Finishes: Rehab existing bathroom.	Integrity	Interior Finishes	07/12/07		\$592,600
Lighting System: Aged Exterior Lighting	Obsolescence	Lighting and Branch Wiring	07/12/07		\$9,287
Pneumatic HVAC Controls: Aged	Integrity	Controls and Instrumentation	07/12/07		\$23,564
Roofing: Replace existing roofing systems.	Beyond Rated Life	Roofing	07/11/07		\$181,121
Security CCTV System: Aged Recording Method	Obsolescence	Communications and Security	07/12/07		\$53,174
Wall Finishes: Repaint interior wall finishes.	Integrity	Wall Finishes	07/12/07		\$322,555

3- Necessary - Not Yet Critical (within 13-24 mos.) Totals: \$3,487,463

Priority: 4- Recommended (within 25-72 mos.)

Requirement Name	Category	Prime System	Action Date	Finish Date	Cost
Branch Wiring: Insufficient Receptacles	Functionality	Lighting and Branch Wiring	07/12/11		\$95,654
Conveying: Abandoned Equipment	Obsolescence	Elevators and Lifts	07/12/11		\$5,579

Requirement Name	Category	Prime System	Action Date	Finish Date	Cost
Electrical Distribution: Miscellaneous Maintenance Issues	Functionality	Electrical Service and Distribution	07/12/11		\$5,451
Fire Protection: Halon 1301 System Production Restriction	Air and Water Quality	Other Fire Protection Systems	07/12/11		\$15,648
Lighting and Branch Wiring: Add Occupancy Sensors	Energy	Lighting and Branch Wiring	07/12/11		\$31,436
Lightning Protection: Lacking	Functionality	Other Electrical Systems	07/12/11		\$16,677
Mechanical Equipment: Abandoned in Place	Obsolescence	Other HVAC Systems and Equipment	07/12/11		\$13,044
4- Recommended (within 25-72 mos.) Totals:					\$183,489

Priority: 5- Does Not Meet Current Codes / Standards

Requirement Name	Category	Prime System	Action Date	Finish Date	Cost
Domestic Water: Lack of Backflow	Building Code	Domestic Water Distribution	07/12/15		\$7,697
Electrical Distribution: Miscellaneous Code Issues	Building Code	Electrical Service and Distribution	07/12/15		\$12,516
Electrical: Lack of As Built Drawings	Building Code	Other Electrical Systems	07/12/15		\$24,115
Fire Protection: Lack of Backflow	Building Code	Sprinklers	07/12/15		\$5,996
Fire Protection: lacking FDC Signage	Building Code	Fire Protection	07/12/15		\$887
Fire Protection: lacking Tamper Switches	Building Code	Fire Protection	07/12/15		\$1,060
Gas Cylinders: Not Secured	Code Compliance	Other HVAC Systems and Equipment	07/12/15		\$283
HVAC Piping: Over Electrical Equipment	Code Compliance	Other HVAC Systems and Equipment	07/12/15		\$6,408
Interior Construction: Non-accessible public bathrooms.	Accessibility	Interior Construction	07/12/15		\$32,485



Requirement List Report

by Asset Name and Priority.

Requirement Name	Category	Prime System	Action Date	Finish Date	Cost
Plumbing: Lack of Vacuum Breakers	Building Code	Other Plumbing Systems	07/12/15		\$1,362
Ramps: Provide handrails.	Accessibility	Ramps	07/12/15		\$4,394
Stairs: Non-compliant handrails.	Code Compliance	Stairs	07/11/15		\$85,285
Ventilation: Lack of Ventilation in Electrical Room	Code Compliance	Exhaust Ventilation Systems	07/12/15		\$29,061

5- Does Not Meet Current Codes / Standards Totals: \$211,549

Supreme Court Main & Annex Building Totals: \$8,791,867

Richmond Capitol Square Totals: \$8,914,490

Department of General Services (DGS) Totals: \$8,914,490



Requirement Summary

by Asset Name and Priority.

AGENCY:

Department of General Services (DGS)

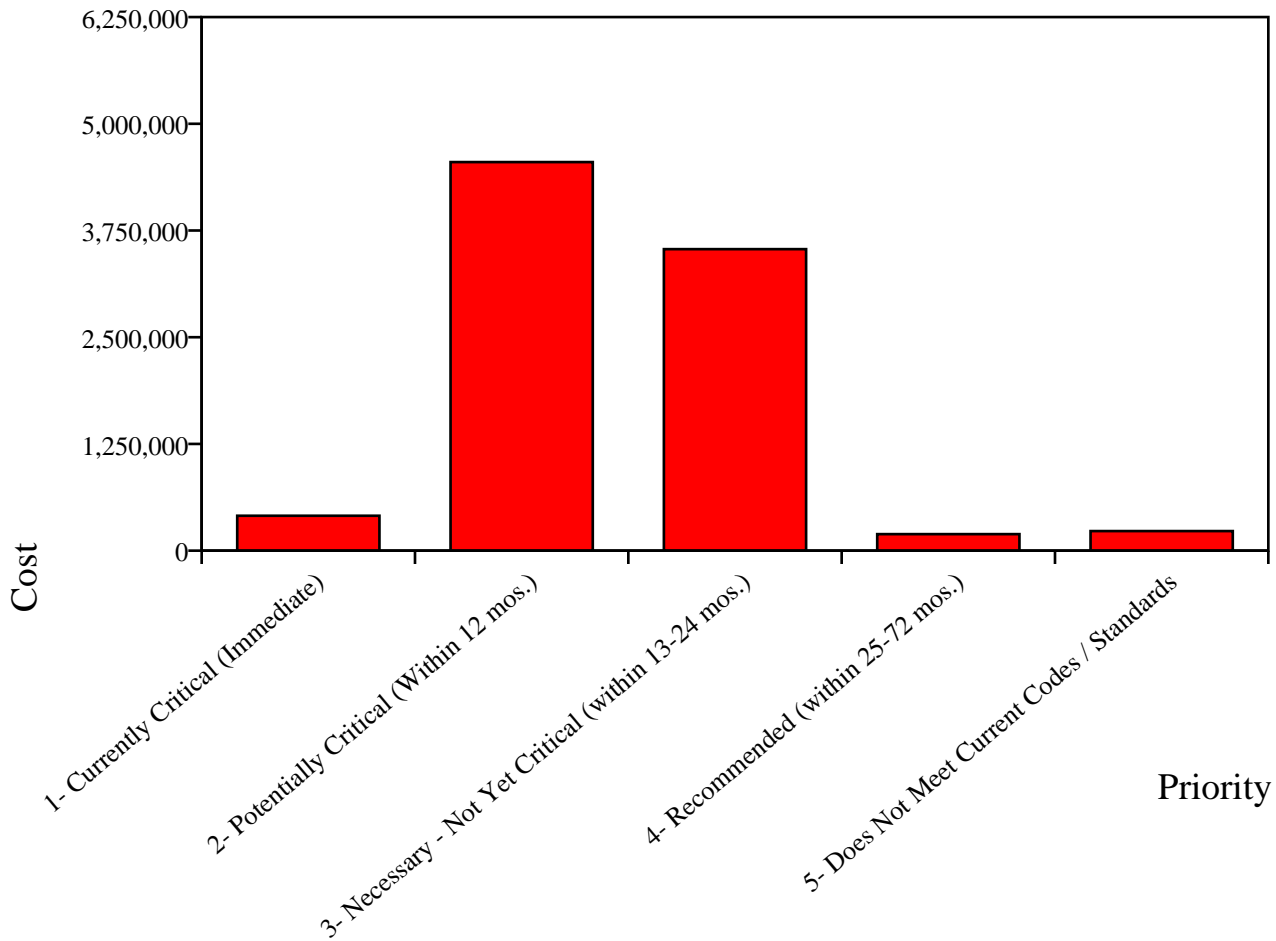
LOCATION:

Richmond Capitol Square

ASSET NAME:

Rose & Lafoon Building, Supreme Court Main & Annex Building

Priority	Cost
1- Currently Critical (Immediate)	\$ 408,849
2- Potentially Critical (Within 12 mos.)	\$ 4,551,392
3- Necessary - Not Yet Critical (within 13-24 mos.)	\$ 3,531,534
4- Recommended (within 25-72 mos.)	\$ 193,440
5- Does Not Meet Current Codes / Standards	\$ 229,275
Totals	\$ 8,914,490





Requirement List Report

by Asset Name and Category



AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
Asset Name: Rose & Lafoon Building
Asset Number: 194-734

Category: Accessibility

Table with 6 columns: Requirement Name, Prime System, Priority, Action Date, Finish Date, Cost. Row 1: Fittings: Provide upgrades to HDCP bathroom. Row 2: Accessibility Totals: \$2,460

Category: Beyond Rated Life

Table with 6 columns: Requirement Name, Prime System, Priority, Action Date, Finish Date, Cost. Rows: Electrical Branch Circuits: Aged, Exterior Windows: Replacement required, Gutters and Downspouts: Replace existing gutter and rain leader. Row 4: Beyond Rated Life Totals: \$24,545

Category: Building Code

Table with 6 columns: Requirement Name, Prime System, Priority, Action Date, Finish Date, Cost. Rows: Electrical Distribution: Lacking Fire Stopping, Electrical Distribution: Miscellaneous Code Issues, Electrical: Lack of As Built Drawings



Requirement List Report

by Asset Name and Category

Requirement Name	Prime System	Priority	Action Date	Finish Date	Cost
Fire Protection: Lack of Backflow Prevention or Double Check Valve	Fire Protection	5- Does Not Meet Current Codes / Standards	07/11/15		\$2,142
Plumbing: Lack of Backflow for Domestic Water	Domestic Water Distribution	5- Does Not Meet Current Codes / Standards	07/11/15		\$1,534
Building Code Totals:				\$16,507	

Category: Energy

Requirement Name	Prime System	Priority	Action Date	Finish Date	Cost
Lighting and Branch Wiring: Add Occupancy Sensors	Lighting and Branch Wiring	4- Recommended (within 25-72 mos.)	07/11/11		\$2,349
Energy Totals:				\$2,349	

Category: Integrity

Requirement Name	Prime System	Priority	Action Date	Finish Date	Cost
Ceiling Tiles: Replace water-stained ACT.	Insulation	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/11/07		\$1,266
Exterior Doors: Refinish existing doors, frames and sidelights.	Exterior Doors	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/11/07		\$2,356
Exterior Walls: Remedial repairs required.	Exterior Walls	2- Potentially Critical (Within 12 mos.)	07/11/06		\$20,312
Lighting: Exterior Fixtures Deteriorated	Lighting and Branch Wiring	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/11/07		\$1,291
Integrity Totals:				\$25,225	

Category: Obsolescence



Requirement List Report

by Asset Name and Category

Requirement Name	Prime System	Priority	Action Date	Finish Date	Cost
Exit Signs: Aged and Inefficient	Emergency Light and Power Systems	2- Potentially Critical (Within 12 mos.)	07/11/06		\$6,569
Fire Alarm: System Ageing	Communications and Security	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/11/07		\$14,127
Lighting: Aged and Inefficient (Interior)	Lighting and Branch Wiring	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/11/07		\$5,610
				Obsolescence Totals:	\$26,306

Category: Reliability

Requirement Name	Prime System	Priority	Action Date	Finish Date	Cost
Emergency Lighting: Not Identified	Emergency Light and Power Systems	4- Recommended (within 25-72 mos.)	07/11/11		\$7,602
Exterior Windows: Repairs and upgrade of steel windows.	Exterior Windows	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/11/07		\$7,049
Plumbing: Drainage Pipe Blockage	Plumbing	1- Currently Critical (Immediate)	07/11/05		\$10,580
				Reliability Totals:	\$25,231

Rose & Lafoon Building Totals: \$122,623



Requirement List Report

by Asset Name and Category

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
Asset Name: Supreme Court Main & Annex Building
Asset Number: 194-736

Category: Accessibility

Requirement Name	Prime System	Priority	Action Date	Finish Date	Cost
Interior Construction: Non-accessible public bathrooms.	Interior Construction	5- Does Not Meet Current Codes / Standards	07/12/15		\$32,485
Ramps: Provide handrails.	Ramps	5- Does Not Meet Current Codes / Standards	07/12/15		\$4,394
Accessibility Totals:				\$36,879	

Category: Air and Water Quality

Requirement Name	Prime System	Priority	Action Date	Finish Date	Cost
Fire Protection: Halon 1301 System Production Restriction	Other Fire Protection Systems	4- Recommended (within 25-72 mos.)	07/12/11		\$15,648
HVAC Distribution: Aged Ductwork	Distribution Systems	2- Potentially Critical (Within 12 mos.)	07/12/06		\$965,365
Air and Water Quality Totals:				\$981,013	

Category: Asbestos

Requirement Name	Prime System	Priority	Action Date	Finish Date	Cost
Floor Finishes: Remove VAT in Basement and Sub-Basement.	Floor Finishes	2- Potentially Critical (Within 12 mos.)	07/13/06		\$49,185
Asbestos Totals:				\$49,185	

Category: Beyond Rated Life



Requirement List Report

by Asset Name and Category

Requirement Name	Prime System	Priority	Action Date	Finish Date	Cost
Boiler: Aged	Boilers	2- Potentially Critical (Within 12 mos.)	07/12/06		\$93,200
Ceiling Finishes: Replace existing ACT systems.	Ceiling Finishes	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/12/07		\$517,220
Conveying: Aged Elevators	Elevators and Lifts	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/12/07		\$487,775
Domestic Water Distribution: Piping Aged	Distribution Systems	2- Potentially Critical (Within 12 mos.)	07/12/06		\$294,250
Electrical Distribution: Aged Equipment	Electrical Service and Distribution	2- Potentially Critical (Within 12 mos.)	07/12/06		\$318,464
Electrical Distribution: Aged Panel Boards	Electrical Service and Distribution	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/12/07		\$26,040
Emergency Lighting: Aged Exit Signs	Emergency Light and Power Systems	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/12/07		\$19,683
Exterior Doors: Replace existing exterior (service) doors.	Exterior Doors	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/13/07		\$19,976
Exterior Doors: Replacement of exterior doors and frames at roof access locations.	Exterior Doors	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/11/07		\$7,171
Exterior Enclosure: Exterior louvers.	Exterior Enclosure	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/11/07		\$9,067
Floor Finishes: Replace floor finishes in kind.	Floor Finishes	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/12/07		\$703,528
HVAC Distribution: Fans Aged	Distribution Systems	1- Currently Critical (Immediate)	07/12/05		\$113,235
HVAC Distribution: Piping Aged	Distribution Systems	2- Potentially Critical (Within 12 mos.)	07/12/06		\$612,919
Interior Doors: Replace doors, frames and hardware.	Interior Doors	2- Potentially Critical (Within 12 mos.)	07/12/06		\$674,097
Plumbing: Aged DHW Converter	Domestic Water Distribution	2- Potentially Critical (Within 12 mos.)	07/12/06		\$61,622
Radiators: Aged	Heating Generating Systems	2- Potentially Critical (Within 12 mos.)	07/12/06		\$135,836



Requirement List Report

by Asset Name and Category

Requirement Name	Prime System	Priority	Action Date	Finish Date	Cost
Roofing: Replace existing roofing systems.	Roofing	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/11/07		\$181,121

Beyond Rated Life Totals: \$4,275,204

Category: Building Code

Requirement Name	Prime System	Priority	Action Date	Finish Date	Cost
Domestic Water: Lack of Backflow	Domestic Water Distribution	5- Does Not Meet Current Codes / Standards	07/12/15		\$7,697
Electrical Distribution: Lacking Fire Stopping	Electrical Service and Distribution	1- Currently Critical (Immediate)	07/12/05		\$4,162
Electrical Distribution: Miscellaneous Code Issues	Electrical Service and Distribution	5- Does Not Meet Current Codes / Standards	07/12/15		\$12,516
Electrical: Lack of As Built Drawings	Other Electrical Systems	5- Does Not Meet Current Codes / Standards	07/12/15		\$24,115
Fire Protection: Lack of Backflow	Sprinklers	5- Does Not Meet Current Codes / Standards	07/12/15		\$5,996
Fire Protection: lacking FDC Signage	Fire Protection	5- Does Not Meet Current Codes / Standards	07/12/15		\$887
Fire Protection: lacking Tamper Switches	Fire Protection	5- Does Not Meet Current Codes / Standards	07/12/15		\$1,060
Plumbing: Lack of Vacuum Breakers	Other Plumbing Systems	5- Does Not Meet Current Codes / Standards	07/12/15		\$1,362

Building Code Totals: \$57,795

Category: Code Compliance

Requirement Name	Prime System	Priority	Action Date	Finish Date	Cost
Gas Cylinders: Not Secured	Other HVAC Systems and Equipment	5- Does Not Meet Current Codes / Standards	07/12/15		\$283

Requirement Name	Prime System	Priority	Action Date	Finish Date	Cost
HVAC Piping: Over Electrical Equipment	Other HVAC Systems and Equipment	5- Does Not Meet Current Codes / Standards	07/12/15		\$6,408
Stairs: Non-compliant handrails.	Stairs	5- Does Not Meet Current Codes / Standards	07/11/15		\$85,285
Ventilation: Lack of Ventilation in Electrical Room	Exhaust Ventilation Systems	5- Does Not Meet Current Codes / Standards	07/12/15		\$29,061
Code Compliance Totals:				\$121,037	

Category: Energy

Requirement Name	Prime System	Priority	Action Date	Finish Date	Cost
Lighting and Branch Wiring: Add Occupancy Sensors	Lighting and Branch Wiring	4- Recommended (within 25-72 mos.)	07/12/11		\$31,436
Lighting Interior: Replace Fixtures and Lamps	Lighting and Branch Wiring	2- Potentially Critical (Within 12 mos.)	07/12/06		\$689,810
Energy Totals:				\$721,246	

Category: Functionality

Requirement Name	Prime System	Priority	Action Date	Finish Date	Cost
Branch Wiring: Insufficient Receptacles	Lighting and Branch Wiring	4- Recommended (within 25-72 mos.)	07/12/11		\$95,654
Electrical Distribution: Miscellaneous Maintenance Issues	Electrical Service and Distribution	4- Recommended (within 25-72 mos.)	07/12/11		\$5,451
Lighting Protection: Lacking	Other Electrical Systems	4- Recommended (within 25-72 mos.)	07/12/11		\$16,677
Functionality Totals:				\$117,782	

Category: Integrity



Requirement List Report

by Asset Name and Category

Requirement Name	Prime System	Priority	Action Date	Finish Date	Cost
Branch Wiring: Aged	Lighting and Branch Wiring	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/12/07		\$325,419
Ceiling Finishes: Repaint plaster/gypsum wallboard ceilings.	Ceiling Finishes	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/12/07		\$122,890
Exterior Doors: Refinish exterior bronze door assemblies.	Exterior Doors	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/13/07		\$24,693
Exterior Windows: Rehab of steel window assemblies.	Exterior Windows	2- Potentially Critical (Within 12 mos.)	07/12/06		\$608,421
Interior Finishes: Rehab existing bathroom.	Interior Finishes	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/12/07		\$592,600
Pneumatic HVAC Controls: Aged	Controls and Instrumentation	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/12/07		\$23,564
Wall Finishes: Repaint interior wall finishes.	Wall Finishes	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/12/07		\$322,555
				Integrity Totals:	\$2,020,142

Category: Life Safety

Requirement Name	Prime System	Priority	Action Date	Finish Date	Cost
Emergency Lighting: Insufficient Exit Signage	Emergency Light and Power Systems	1- Currently Critical (Immediate)	07/12/05		\$37,704
HVAC Special Sys: Lack of Smoke Control	Other HVAC Systems and Equipment	1- Currently Critical (Immediate)	07/12/05		\$94,966
Interior Doors: Replace doors and frames at Stair #__.	Interior Doors	2- Potentially Critical (Within 12 mos.)	07/12/06		\$9,169
Interior Doors: Replace existing metal door and frame at Room B117.	Interior Doors	1- Currently Critical (Immediate)	07/13/05		\$1,148
				Life Safety Totals:	\$142,987

Category: Obsolescence



Requirement List Report

by Asset Name and Category

Requirement Name	Prime System	Priority	Action Date	Finish Date	Cost
Conveying: Abandoned Equipment	Elevators and Lifts	4- Recommended (within 25-72 mos.)	07/12/11		\$5,579
Lighting System: Aged Exterior Lighting	Lighting and Branch Wiring	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/12/07		\$9,287
Mechanical Equipment: Abandoned in Place	Other HVAC Systems and Equipment	4- Recommended (within 25-72 mos.)	07/12/11		\$13,044
Security CCTV System: Aged Recording Method	Communications and Security	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/12/07		\$53,174
Obsolescence Totals:				\$81,084	

Category: Reliability

Requirement Name	Prime System	Priority	Action Date	Finish Date	Cost
Electrical Distribution: Panel Boards Lacking Capacity	Electrical Service and Distribution	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/12/07		\$41,700
Exterior Walls: Repoint exterior enclosure wall.	Exterior Walls	1- Currently Critical (Immediate)	07/13/05		\$145,813
Reliability Totals:				\$187,513	

Supreme Court Main & Annex Building Totals: \$8,791,867

Richmond Capitol Square Totals: \$8,914,490

Department of General Services (DGS) Totals: \$8,914,490



Requirement Summary

by Asset Name and Category

AGENCY:

Department of General Services (DGS)

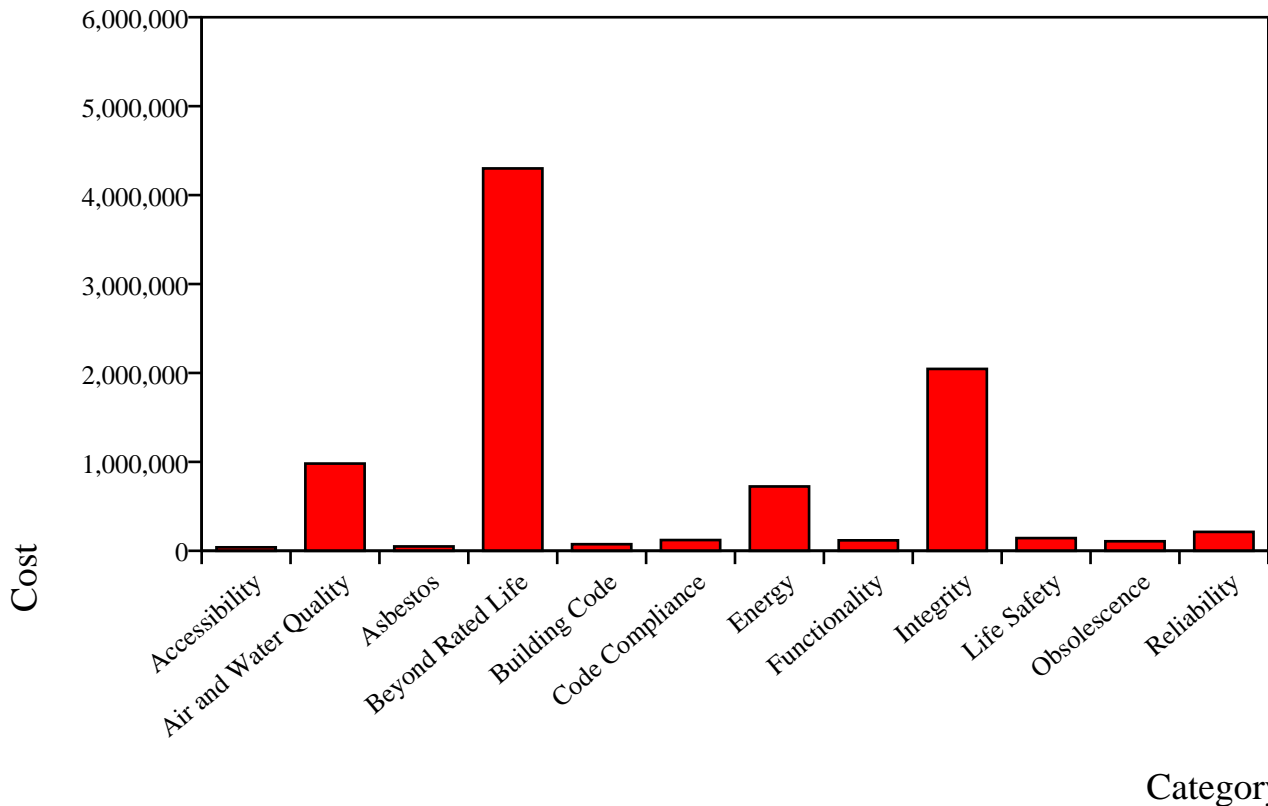
LOCATION:

Richmond Capitol Square

ASSET NAME:

Rose & Lafoon Building, Supreme Court Main & Annex Building

CATEGORY	Cost
Accessibility	\$ 39,339
Air and Water Quality	\$ 981,013
Asbestos	\$ 49,185
Beyond Rated Life	\$ 4,299,749
Building Code	\$ 74,302
Code Compliance	\$ 121,037
Energy	\$ 723,595
Functionality	\$ 117,782
Integrity	\$ 2,045,367
Life Safety	\$ 142,987
Obsolescence	\$ 107,390
Reliability	\$ 212,744
Totals	\$ 8,914,490





Requirement List Report

by Asset Name and Prime System

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
Asset Name: Rose & Lafoon Building
Asset Number: 194-734

Prime System: Communications and Security

Requirement Name	Category	Priority	Action Date	Finish Date	Cost
Fire Alarm: System Ageing	Obsolescence	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/11/07		\$14,127
Communications and Security Totals:				\$14,127	

Prime System: Domestic Water Distribution

Requirement Name	Category	Priority	Action Date	Finish Date	Cost
Plumbing: Lack of Backflow for Domestic Water	Building Code	5- Does Not Meet Current Codes / Standards	07/11/15		\$1,534
Domestic Water Distribution Totals:				\$1,534	

Prime System: Electrical Service and Distribution

Requirement Name	Category	Priority	Action Date	Finish Date	Cost
Electrical Distribution: Lacking Fire Stopping	Building Code	1- Currently Critical (Immediate)	07/11/05		\$1,241
Electrical Distribution: Miscellaneous Code Issues	Building Code	5- Does Not Meet Current Codes / Standards	07/11/15		\$2,290
Electrical Service and Distribution Totals:				\$3,531	

Prime System: Emergency Light and Power Systems



Requirement List Report

by Asset Name and Prime System

Requirement Name	Category	Priority	Action Date	Finish Date	Cost
Emergency Lighting: Not Identified	Reliability	4- Recommended (within 25-72 mos.)	07/11/11		\$7,602
Exit Signs: Aged and Inefficient	Obsolescence	2- Potentially Critical (Within 12 mos.)	07/11/06		\$6,569
Emergency Light and Power Systems Totals:				\$14,171	

Prime System: Exterior Doors

Requirement Name	Category	Priority	Action Date	Finish Date	Cost
Exterior Doors: Refinish existing doors, frames and sidelights.	Integrity	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/11/07		\$2,356
Exterior Doors Totals:				\$2,356	

Prime System: Exterior Walls

Requirement Name	Category	Priority	Action Date	Finish Date	Cost
Exterior Walls: Remedial repairs required.	Integrity	2- Potentially Critical (Within 12 mos.)	07/11/06		\$20,312
Exterior Walls Totals:				\$20,312	

Prime System: Exterior Windows

Requirement Name	Category	Priority	Action Date	Finish Date	Cost
Exterior Windows: Repairs and upgrade of steel windows.	Reliability	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/11/07		\$7,049
Exterior Windows: Replacement required.	Beyond Rated Life	2- Potentially Critical (Within 12 mos.)	07/11/06		\$10,878
Exterior Windows Totals:				\$17,927	

Prime System: Fire Protection



Requirement List Report

by Asset Name and Prime System

Requirement Name	Category	Priority	Action Date	Finish Date	Cost
Fire Protection: Lack of Backflow Prevention or Double Check Valve	Building Code	5- Does Not Meet Current Codes / Standards	07/11/15		\$2,142

Fire Protection Totals: \$2,142

Prime System: Fittings

Requirement Name	Category	Priority	Action Date	Finish Date	Cost
Fittings: Provide upgrades to HDCP bathroom.	Accessibility	5- Does Not Meet Current Codes / Standards	07/11/15		\$2,460

Fittings Totals: \$2,460

Prime System: Gutters and Downspouts

Requirement Name	Category	Priority	Action Date	Finish Date	Cost
Gutters and Downspouts: Replace existing gutter and rain leader.	Beyond Rated Life	2- Potentially Critical (Within 12 mos.)	07/11/06		\$1,295

Gutters and Downspouts Totals: \$1,295

Prime System: Insulation

Requirement Name	Category	Priority	Action Date	Finish Date	Cost
Ceiling Tiles: Replace water-stained ACT.	Integrity	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/11/07		\$1,266

Insulation Totals: \$1,266

Prime System: Lighting and Branch Wiring

Requirement Name	Category	Priority	Action Date	Finish Date	Cost
Electrical Branch Circuits: Aged	Beyond Rated Life	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/11/07		\$12,372
Lighting and Branch Wiring: Add Occupancy Sensors	Energy	4- Recommended (within 25-72 mos.)	07/11/11		\$2,349
Lighting: Aged and Inefficient (Interior)	Obsolescence	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/11/07		\$5,610
Lighting: Exterior Fixtures Deteriorated	Integrity	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/11/07		\$1,291

Lighting and Branch Wiring Totals: \$21,622

Prime System: Other Electrical Systems

Requirement Name	Category	Priority	Action Date	Finish Date	Cost
Electrical: Lack of As Built Drawings	Building Code	5- Does Not Meet Current Codes / Standards	07/11/15		\$9,300

Other Electrical Systems Totals: \$9,300

Prime System: Plumbing

Requirement Name	Category	Priority	Action Date	Finish Date	Cost
Plumbing: Drainage Pipe Blockage	Reliability	1- Currently Critical (Immediate)	07/11/05		\$10,580

Plumbing Totals: \$10,580

Rose & Lafoon Building Totals: \$122,623

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
Asset Name: Supreme Court Main & Annex Building
Asset Number: 194-736
Prime System: Boilers

Requirement Name	Category	Priority	Action Date	Finish Date	Cost
Boiler: Aged	Beyond Rated Life	2- Potentially Critical (Within 12 mos.)	07/12/06		\$93,200
Boilers Totals:				\$93,200	

Prime System: Ceiling Finishes

Requirement Name	Category	Priority	Action Date	Finish Date	Cost
Ceiling Finishes: Replace existing ACT systems.	Beyond Rated Life	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/12/07		\$517,220
Ceiling Finishes: Repaint plaster/gypsum wallboard ceilings.	Integrity	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/12/07		\$122,890
Ceiling Finishes Totals:				\$640,110	

Prime System: Communications and Security

Requirement Name	Category	Priority	Action Date	Finish Date	Cost
Security CCTV System: Aged Recording Method	Obsolescence	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/12/07		\$53,174
Communications and Security Totals:				\$53,174	

Prime System: Controls and Instrumentation



Requirement List Report

by Asset Name and Prime System

Requirement Name	Category	Priority	Action Date	Finish Date	Cost
Pneumatic HVAC Controls: Aged	Integrity	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/12/07		\$23,564
Controls and Instrumentation Totals:				\$23,564	

Prime System: Distribution Systems

Requirement Name	Category	Priority	Action Date	Finish Date	Cost
Domestic Water Distribution: Piping Aged	Beyond Rated Life	2- Potentially Critical (Within 12 mos.)	07/12/06		\$294,250
HVAC Distribution: Aged Ductwork	Air and Water Quality	2- Potentially Critical (Within 12 mos.)	07/12/06		\$965,365
HVAC Distribution: Fans Aged	Beyond Rated Life	1- Currently Critical (Immediate)	07/12/05		\$113,235
HVAC Distribution: Piping Aged	Beyond Rated Life	2- Potentially Critical (Within 12 mos.)	07/12/06		\$612,919
Distribution Systems Totals:				\$1,985,769	

Prime System: Domestic Water Distribution

Requirement Name	Category	Priority	Action Date	Finish Date	Cost
Domestic Water: Lack of Backflow	Building Code	5- Does Not Meet Current Codes / Standards	07/12/15		\$7,697
Plumbing: Aged DHW Converter	Beyond Rated Life	2- Potentially Critical (Within 12 mos.)	07/12/06		\$61,622
Domestic Water Distribution Totals:				\$69,319	

Prime System: Electrical Service and Distribution

Requirement Name	Category	Priority	Action Date	Finish Date	Cost
Electrical Distribution: Aged Equipment	Beyond Rated Life	2- Potentially Critical (Within 12 mos.)	07/12/06		\$318,464



Requirement List Report

by Asset Name and Prime System

Requirement Name	Category	Priority	Action Date	Finish Date	Cost
Electrical Distribution: Aged Panel Boards	Beyond Rated Life	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/12/07		\$26,040
Electrical Distribution: Lacking Fire Stopping	Building Code	1- Currently Critical (Immediate)	07/12/05		\$4,162
Electrical Distribution: Miscellaneous Code Issues	Building Code	5- Does Not Meet Current Codes / Standards	07/12/15		\$12,516
Electrical Distribution: Miscellaneous Maintenance Issues	Functionality	4- Recommended (within 25-72 mos.)	07/12/11		\$5,451
Electrical Distribution: Panel Boards Lacking Capacity	Reliability	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/12/07		\$41,700
Electrical Service and Distribution Totals:				\$408,333	

Prime System: Elevators and Lifts

Requirement Name	Category	Priority	Action Date	Finish Date	Cost
Conveying: Abandoned Equipment	Obsolescence	4- Recommended (within 25-72 mos.)	07/12/11		\$5,579
Conveying: Aged Elevators	Beyond Rated Life	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/12/07		\$487,775
Elevators and Lifts Totals:				\$493,354	

Prime System: Emergency Light and Power Systems

Requirement Name	Category	Priority	Action Date	Finish Date	Cost
Emergency Lighting: Aged Exit Signs	Beyond Rated Life	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/12/07		\$19,683
Emergency Lighting: Insufficient Exit Signage	Life Safety	1- Currently Critical (Immediate)	07/12/05		\$37,704
Emergency Light and Power Systems Totals:				\$57,387	

Prime System: Exhaust Ventilation Systems

Requirement Name	Category	Priority	Action Date	Finish Date	Cost
Ventilation: Lack of Ventilation in Electrical Room	Code Compliance	5- Does Not Meet Current Codes / Standards	07/12/15		\$29,061
Exhaust Ventilation Systems Totals:				\$29,061	

Prime System: Exterior Doors

Requirement Name	Category	Priority	Action Date	Finish Date	Cost
Exterior Doors: Refinish exterior bronze door assemblies.	Integrity	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/13/07		\$24,693
Exterior Doors: Replace existing exterior (service) doors.	Beyond Rated Life	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/13/07		\$19,976
Exterior Doors: Replacement of exterior doors and frames at roof access locations.	Beyond Rated Life	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/11/07		\$7,171
Exterior Doors Totals:				\$51,840	

Prime System: Exterior Enclosure

Requirement Name	Category	Priority	Action Date	Finish Date	Cost
Exterior Enclosure: Exterior louvers.	Beyond Rated Life	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/11/07		\$9,067
Exterior Enclosure Totals:				\$9,067	

Prime System: Exterior Walls

Requirement Name	Category	Priority	Action Date	Finish Date	Cost
Exterior Walls: Repoint exterior enclosure wall.	Reliability	1- Currently Critical (Immediate)	07/13/05		\$145,813

Exterior Walls Totals: \$145,813

Prime System: Exterior Windows

Requirement Name	Category	Priority	Action Date	Finish Date	Cost
Exterior Windows: Rehab of steel window assemblies.	Integrity	2- Potentially Critical (Within 12 mos.)	07/12/06		\$608,421

Exterior Windows Totals: \$608,421

Prime System: Fire Protection

Requirement Name	Category	Priority	Action Date	Finish Date	Cost
Fire Protection: lacking FDC Signage	Building Code	5- Does Not Meet Current Codes / Standards	07/12/15		\$887
Fire Protection: lacking Tamper Switches	Building Code	5- Does Not Meet Current Codes / Standards	07/12/15		\$1,060

Fire Protection Totals: \$1,947

Prime System: Floor Finishes

Requirement Name	Category	Priority	Action Date	Finish Date	Cost
Floor Finishes: Remove VAT in Basement and Sub-Basement.	Asbestos	2- Potentially Critical (Within 12 mos.)	07/13/06		\$49,185
Floor Finishes: Replace floor finishes in kind.	Beyond Rated Life	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/12/07		\$703,528

Floor Finishes Totals: \$752,713

Prime System: Heating Generating Systems



Requirement List Report

by Asset Name and Prime System

Requirement Name	Category	Priority	Action Date	Finish Date	Cost
Radiators: Aged	Beyond Rated Life	2- Potentially Critical (Within 12 mos.)	07/12/06		\$135,836

Heating Generating Systems Totals: \$135,836

Prime System: Interior Construction

Requirement Name	Category	Priority	Action Date	Finish Date	Cost
Interior Construction: Non-accessible public bathrooms.	Accessibility	5- Does Not Meet Current Codes / Standards	07/12/15		\$32,485

Interior Construction Totals: \$32,485

Prime System: Interior Doors

Requirement Name	Category	Priority	Action Date	Finish Date	Cost
Interior Doors: Replace doors, frames and hardware.	Beyond Rated Life	2- Potentially Critical (Within 12 mos.)	07/12/06		\$674,097

Interior Doors Totals: \$674,097

Prime System: Interior Doors

Requirement Name	Category	Priority	Action Date	Finish Date	Cost
Interior Doors: Replace doors and frames at Stair #__.	Life Safety	2- Potentially Critical (Within 12 mos.)	07/12/06		\$9,169
Interior Doors: Replace existing metal door and frame at Room B117.	Life Safety	1- Currently Critical (Immediate)	07/13/05		\$1,148

Interior Doors Totals: \$10,317

Prime System: Interior Finishes



Requirement List Report

by Asset Name and Prime System

Requirement Name	Category	Priority	Action Date	Finish Date	Cost
Interior Finishes: Rehab existing bathroom.	Integrity	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/12/07		\$592,600
Interior Finishes Totals:				\$592,600	

Prime System: Lighting and Branch Wiring

Requirement Name	Category	Priority	Action Date	Finish Date	Cost
Branch Wiring: Aged	Integrity	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/12/07		\$325,419
Branch Wiring: Insufficient Receptacles	Functionality	4- Recommended (within 25-72 mos.)	07/12/11		\$95,654
Lighting and Branch Wiring: Add Occupancy Sensors	Energy	4- Recommended (within 25-72 mos.)	07/12/11		\$31,436
Lighting Interior: Replace Fixtures and Lamps	Energy	2- Potentially Critical (Within 12 mos.)	07/12/06		\$689,810
Lighting System: Aged Exterior Lighting	Obsolescence	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/12/07		\$9,287
Lighting and Branch Wiring Totals:				\$1,151,606	

Prime System: Other Electrical Systems

Requirement Name	Category	Priority	Action Date	Finish Date	Cost
Electrical: Lack of As Built Drawings	Building Code	5- Does Not Meet Current Codes / Standards	07/12/15		\$24,115
Lighting Protection: Lacking	Functionality	4- Recommended (within 25-72 mos.)	07/12/11		\$16,677
Other Electrical Systems Totals:				\$40,792	

Prime System: Other Fire Protection Systems



Requirement List Report

by Asset Name and Prime System

Requirement Name	Category	Priority	Action Date	Finish Date	Cost
Fire Protection: Halon 1301 System Production Restriction	Air and Water Quality	4- Recommended (within 25-72 mos.)	07/12/11		\$15,648

Other Fire Protection Systems Totals: \$15,648

Prime System: Other HVAC Systems and Equipment

Requirement Name	Category	Priority	Action Date	Finish Date	Cost
Gas Cylinders: Not Secured	Code Compliance	5- Does Not Meet Current Codes / Standards	07/12/15		\$283
HVAC Piping: Over Electrical Equipment	Code Compliance	5- Does Not Meet Current Codes / Standards	07/12/15		\$6,408
HVAC Special Sys: Lack of Smoke Control	Life Safety	1- Currently Critical (Immediate)	07/12/05		\$94,966
Mechanical Equipment: Abandoned in Place	Obsolescence	4- Recommended (within 25-72 mos.)	07/12/11		\$13,044

Other HVAC Systems and Equipment Totals: \$114,701

Prime System: Other Plumbing Systems

Requirement Name	Category	Priority	Action Date	Finish Date	Cost
Plumbing: Lack of Vacuum Breakers	Building Code	5- Does Not Meet Current Codes / Standards	07/12/15		\$1,362

Other Plumbing Systems Totals: \$1,362

Prime System: Ramps

Requirement Name	Category	Priority	Action Date	Finish Date	Cost
Ramps: Provide handrails.	Accessibility	5- Does Not Meet Current Codes / Standards	07/12/15		\$4,394

Ramps Totals: \$4,394

Prime System: Roofing

Requirement Name	Category	Priority	Action Date	Finish Date	Cost
Roofing: Replace existing roofing systems.	Beyond Rated Life	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/11/07		\$181,121
Roofing Totals:				\$181,121	

Prime System: Sprinklers

Requirement Name	Category	Priority	Action Date	Finish Date	Cost
Fire Protection: Lack of Backflow	Building Code	5- Does Not Meet Current Codes / Standards	07/12/15		\$5,996
Sprinklers Totals:				\$5,996	

Prime System: Stairs

Requirement Name	Category	Priority	Action Date	Finish Date	Cost
Stairs: Non-compliant handrails.	Code Compliance	5- Does Not Meet Current Codes / Standards	07/11/15		\$85,285
Stairs Totals:				\$85,285	

Prime System: Wall Finishes

Requirement Name	Category	Priority	Action Date	Finish Date	Cost
Wall Finishes: Repaint interior wall finishes.	Integrity	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/12/07		\$322,555
Wall Finishes Totals:				\$322,555	

Supreme Court Main & Annex Building Totals: \$8,791,867



Requirement List Report

by Asset Name and Prime System

Richmond Capitol Square Totals: \$8,914,490

Department of General Services (DGS) Totals: \$8,914,490



Requirement Summary

by Asset Name and System Group

AGENCY:

Department of General Services (DGS)

LOCATION:

Richmond Capitol Square

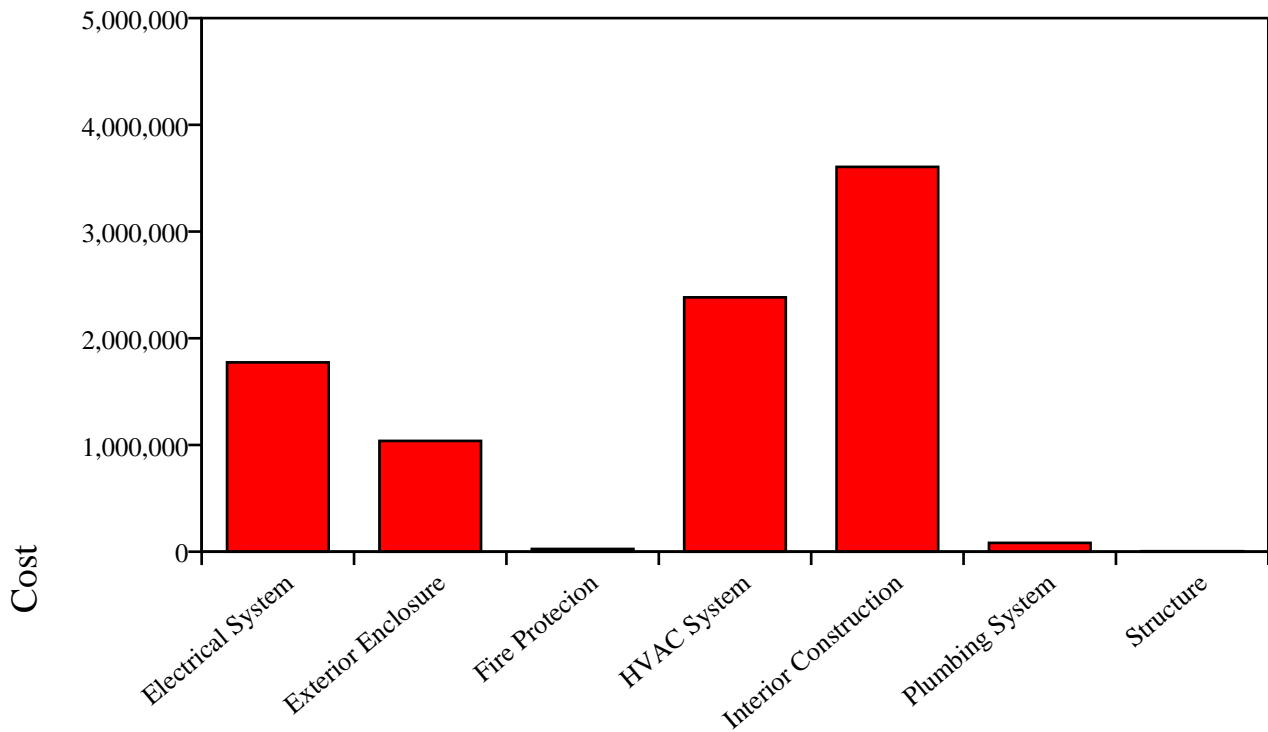
ASSET NAME:

Rose & Lafoon Building, Supreme Court Main & Annex Building

SYSTEM GROUP

Cost

Electrical System	\$ 1,774,043
Exterior Enclosure	\$ 1,038,152
Fire Protection	\$ 25,733
HVAC System	\$ 2,383,397
Interior Construction	\$ 3,605,976
Plumbing System	\$ 82,795
Structure	\$ 4,394
Totals	\$ 8,914,490



System Group



Asset Summary Report

by Asset Name

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square

Asset Name Supreme Court Main & Annex Building
Asset Number 194-736

STATISTICS

Requirements Index:	0.23
Facility Condition Index:	0.22
Total Requirements Cost:	\$9,602,614

Current Replacement Value	\$42,481,510	Address 1	100 N. Ninth Street
Size	255,574 SF	Address 2	-
Year Constructed	1919	City	Richmond
Year last Renovated	-	State/Province	VA
Commission Date	-	ZIP/Postal Code	23219
Decommission Date	-	Architect	Carneal & Johnston
Ownership	Agency Owned	Historical Category	On Register
Floors	8	Construction Type	IBC - Type 1B
		Use	Business

Description

ARCHITECTURAL

The Virginia Supreme Court Building, Main and Annex Structures (Facility-ID 736), is located at 100 North Ninth Street, at Franklin (Street), across from Capitol Square. The Supreme Court Building encompasses the entire block between Ninth and Eight Streets, and Franklin Street to the alleyway, south of Grace Street. The construction of these structures first began in 1919, as the Federal Reserve Bank of Richmond, Virginia. The construction began with the Main Structure at the corner of Ninth and Franklin Streets in 1919, shortly followed by a partial Annex Structure (along Franklin Street) in the early 1920s; both of these original structures (Main and Annex) were smaller than what exists today. The Ninth Street facade (of the Main Structure) was extended to the north (to the alleyway) in the late 1920s. In 1951, the Annex Structure was expanded along the Eighth Street facade, and the Main and Annex Structures were then linked together, joined at Floor Levels 2 through 6, to form (what is considered to be) a single building today; sometime later penthouse structures were added to both the Main and Annex Structures. The Supreme Court Building is designated as a registered national historic landmark by the U. S. Department of the Interior.

TENANT OCCUPANCY: The Supreme Court Building presently houses multiple Virginia State Agencies, which include: the Supreme Court of Virginia; the Court of Appeals of Virginia; the Virginia Criminal Sentencing Commission; the Department of General Services; and the Capitol Police for the State of Virginia.

CONSTRUCTION TYPE/USE AND OCCUPANCY CLASSIFICATION: The Virginia Supreme Court Building is comprised of approximately 255,574 gross square-feet, and is eight-story in height; including a basement and sub-basement level, and six upper floor levels; the building also has a partial sub-basement. The building has a Construction Classification of Type I-B (non-combustible) according to the International Building Code, 2000 Edition (i.e., IBC 2000), Section 602.2. The building has a Use and Occupancy Classification of Group B (Business), with some permitted accessory use areas according to Section 304, Business Group B, of the IBC 2000; most notably Assembly Group A (A-3), per Section 303, which are attributable to the court room functions.

SUBSTRUCTURE/SUPERSTRUCTURE/EXTERIOR WALLS: The substructure consists of a solid masonry foundation wall system with isolated footings and a concrete slab-on-grade. The superstructure consists of exterior load-bearing walls with a structural steel frame (i.e., columns, joists, girders); fireproofing of the structural steel members was not observed. The exterior walls are highly decorative, consisting of dressed-faced granite with highly decorative belt courses; water tables; engaged columns and column capitals; and pilasters. The exterior walls were reported to be some 3-feet thick at their base and are backed-up with solid masonry; creating load-bearing exterior walls. Building insulation, on the interior face of the exterior walls, was not observed.

BUILDING FENESTRATION: The building fenestration consists of original steel windows with single-glazed (operable and fixed) sash units; window types include mostly casement windows, with some double-hung window units. During a recent upgrade these window units were typically fitted with a fixed interior (polycarbonate) glazing unit to help with the thermal efficiency of the window assembly.

EXTERIOR DOORS: The exterior (primary) entrances consist of stately (original) bronze rail and stile doors with glazed lights and transom panels, some having divided lights (French doors); some having decorative bronze elements, including: grillage, entablatures and pilasters. The original entrance to the Main Courtroom, facing North Ninth Street (nearer Franklin Street), consists of highly-polished bronze revolving doors, protected by a pair of ornate monumental statuary bronze outer doors that were typically closed at the end of each business day. Other exterior door assemblies consist of mostly services doors, made of hollow-metal doors in metal frames or coiling overhead service doors for vehicles, which are located off the alleyway where the Main and Annex Structures are joined.

ROOFING ASSEMBLIES: The building is covered with a variety of different roofing systems. The main roof areas, covering the Main and Annex Structures, are mostly ballasted EPDM membrane roofing systems with small interlocking pavers located along service pathways. There are some smaller roof areas at these upper levels that are either tar and gravel roofing systems, or (torch-applied) rolled roofing systems; these are typically limited to the southwest corner and northeast corner, respectively. The lower roofing levels, which run the length of the north and south elevations of the Main Structure (at the Second Floor Level), are tar and gravel roofing systems. The upper roof level of the Main Structure also has three (3) glazed copper skylights along the southern section of the original building (i.e., Main Structure). The roof drainage system is collected and routed internally through the building envelope.

FLOOR FINISHES: The buildings floor finishes are comprised of a variety of finishes, including: marble at the primary entrances and elevator lobbies; terrazzo, with some marble, is utilized in large quantities on the upper floor levels at elevator lobbies, stairwells, and corridors; with carpet typically utilized in the newly configured corridors, office suites and offices. The bathrooms finishes vary from ceramic tile, to resilient tile (likely an asbestos-containing tile), to terrazzo flooring.

INTERIOR WALL/WALL FINISHES: The original interior walls are believed to be constructed of a hollow tile partition system with a plaster finish on both sides; the newer interior partitions consist of gypsum wallboard on metal framing. Wall finishes are (typically) painted plaster on the upper half of the wall, with a marble wainscot below, these finishes are typical at common circulation areas, including: elevator lobbies, stairwells and along the original corridors sections. There are some areas with unique finishes, most notably the Main Courtroom and its outer lobby, located directly off the North Ninth Street entrance. These areas are well preserved and consist of finely-dressed masonry (stone) walls, with decorative building elements made of marble, which included: Doric columns; cased openings and doorways; wainscot; entablatures; and cornices.

INTERIOR DOORS: Interior door types vary greatly based on their location (i.e., the level of prominence of the space). The doors flanking the elevator lobby at the North Ninth Street entrance are well maintained bronze rail and stile (French) doors with glazed lights. In more common areas, typical interior doors are mostly rail and stile doors (made of metal or wood) with inset panels. Newer sections typically consist of flush wood doors in metal frames, with some departmental office suites utilizing aluminum storefront-type entrances.

CEILING FINISHES: The ceiling finishes of the Supreme Court Building also vary greatly based on the level of prominence of the space. Primary entrance lobbies more typically consist of (hard) plaster ceilings with either plaster cornice moldings or coffer moldings. Similarly, older spaces original to the building plan, such as bathrooms, stairwells and services rooms, also have plaster ceilings. Whereas, more newly configured or renovated areas, have acoustical ceiling tiles and suspension grid systems.

MECHANICAL

COOLING GENERATION: Chilled water is generated by Two (2) 300-ton Trane centrifugal chillers that are located in the mechanical sub basement. Chilled water is circulated to air handling Units (AHUs) by two (2) 25 HP Primary pumps and two (2) 15 HP secondary pumps. While condenser water is circulated by two (2) 25 HP pump to two BAC cooling towers with a total of 900 tons having a common sump located on the roof.

HEATING GENERATION: Heating at the present time is generated by three (3) gas-fired Cleaver Brooks Steam Boilers that are located in the mechanical sub basement. Steam is delivered to the air handlers and perimeter radiator. Two of the 3 original boilers will be replaced before the next heating season.

DISTRIBUTION SYSTEMS: The building has approximately 12 AHUs with chilled water coils with return by ceiling plenums on each floor to mechanical shaft ways back to the air handlers. Outside air intakes are located at the AHU of the mechanical rooms. Air distribution is by vertical and horizontal ducts with take offs to each area and air flow regulated by a combination of constant and fan powered variable volume boxes (VAV).

The condenser water systems are monitored and chemically treated by automatic feed systems, while the chilled water system is treated via bypass feeder.

Restroom and general exhaust for the building is by roof fans located on the roof. The electrical and elevator rooms are exhausted by propeller fans with some exceptions.

CONTROLS AND INSTRUMENTATION: Operation of the buildings HVAC equipment is regulated by a mix of pneumatic and electric control systems. Compressed air is supplied by a duplex compressor and receiver set with a DX dryer to remove moisture from the system. The building has a Staefa energy management system (EMS).

PLUMBING: Natural gas is provided to the building by a 4-inch main with distribution to the boilers and emergency generator by black steel piping. Domestic water is supplied by a 4-inch main with distribution to the building with risers and drop legs for each floor. Domestic hot water is supplied to the building by two (2) steam converters with holding tanks for winter use and one (1) 100 gallon electric hot water heater for summer use. The sanitary system distribution is by cast iron piping to the city main. Storm water is removed from the peaked roofs by gravity to copper gutters and downspouts and recessed gutters at the roof perimeter that drain via internal cast iron risers to the city main.

PLUMBING FIXTURES: The mens and womens restrooms are multi-fixture restrooms. Lavatories are counter mounted, while water closets, and urinals are a mix of wall hung and floor mounted vitreous china fixtures. Janitors closets are located on each floor and equipped with enameled cast iron utility sinks. Drinking water is provided by DX cooled fountains and bottled water units located on each floor. Some office area break rooms have kitchenettes.

FIRE PROTECTION: The building is protected by a wet pipe fire sprinkler system, standpipes with 4-inch risers and 2.5-inch hose connections are provided throughout the building. Water pressure is provided by a 50 HP fire pump and maintained by a 1.5 HP jockey pump. The systems are monitored for anti-tamper with the exception of the valves at the fire pump. Handheld ABC fire type extinguishers are located on each floor and basement mechanical rooms.

ELECTRICAL

ELECTRICAL SERVICE & DISTRIBUTION: Electrical Service for the Supreme Court Building originates from an underground utility company service off Franklin Street. The incoming service conductors terminate in a 2500 ampere, 480Y/227 volt, 3 phase, 4 wire main disconnecting switch, MS14 that feeds West Switchboard SDS4 and South Main Building Switchboard SDS1 2500 ampere disconnect switches.

The distribution switchboards provide power to motor control centers, panel boards, and equipment throughout the building. Utility company electrical meters (2) are located within the same Main Electrical Room.

Panel boards are located throughout the building, typically in hallways or corridor electrical chases in each section of the building, east and west, and on every floor, and provide branch circuitry to mechanical/HVAC, lighting, receptacles, and

miscellaneous loads.

EMERGENCY LIGHTING & POWER SYSTEMS: The Supreme Court Building is supplied emergency power from a shared (with the Rose and Lafoon Building) 349kW, exterior, emergency diesel generator located at the rear of building, near the receiving dock. The emergency generator serves life safety, emergency lighting, legally required standby, and possibly optional standby loads within the building.

As stated by facilities staff emergency lighting is provided in common core areas with circuitry extending from the emergency panel board(s) served by the generator, although a quantity of stand alone emergency light battery units was observed. Exit signs are also served by emergency lighting circuitry, although a few integrated battery sign units were observed.

LIGHTING & BRANCH WIRING: Interior lighting system is a blend of recessed and surface mounted, 2x2, 1x4, 2x4, and 1x6 fluorescent fixtures with T12 lamps and magnetic ballasts. Various types of incandescent lamped fixtures are used throughout the building in bare lamp, down light, chandelier, and decorative pendant and chain configurations.

High intensity discharge (HID) lamped garage style fixtures are used in parking garage areas.

Exterior lighting is provided by HID wall pack lighting fixtures installed in the perimeter of the building and small wall mounted fluorescent lamped fixtures at roof level penthouse doors.

COMMUNICATIONS & SECURITY: The building is equipped with an existing aged fire alarm system with the control panel located in the Capitol Police Turret. The system includes annunciators, detectors, flow and tamper switches, pull stations and strobe/horn audiovisual notification devices distributed throughout the building. Installation of a new fire alarm system, design specifications dated March 26, 2004 that will completely supersede the existing system, was ongoing and proceeding during the assessment tour. Location of the new control panel will be the same as the existing.

The building is equipped with data/communication equipment including routers and network hubs utilizing both fiber optic and Cat 5 cables for connectivity to local hubs and/or data ports distributed throughout the building. Telecommunications closets are located on most floors and both east and west building sections.

Closed circuit television (CCTV) cameras are used within the building providing video security within the building with monitoring and video tape recording accomplished at the Capitol Police Turret location. Monitoring (only) is also accomplished at each building entrance (2) staffed by Capitol Police.

The building is equipped with an access-controlled system that utilizes proximity card sensors installed in strategically throughout the building.

Requirements

Name	Prime System	Category	Priority	Action Date	Cost
HVAC Distribution: Fans Aged	Distribution Systems	Beyond Rated Life	1- Currently Critical (Immediate)	07/12/05	\$113,235

Name	Prime System	Category	Priority	Action Date	Cost
Emergency Lighting: Insufficient Exit Signage	Emergency Light and Power Systems	Life Safety	1- Currently Critical (Immediate)	07/12/05	\$37,704
HVAC Special Sys: Lack of Smoke Control	Other HVAC Systems and Equipment	Life Safety	1- Currently Critical (Immediate)	07/12/05	\$94,966
Electrical Distribution: Lacking Fire Stopping	Electrical Service and Distribution	Building Code	1- Currently Critical (Immediate)	07/12/05	\$4,162
Interior Doors: Replace existing metal door and frame at Room B117.	Interior Doors	Life Safety	1- Currently Critical (Immediate)	07/13/05	\$1,148
Exterior Walls: Repoint exterior enclosure wall.	Exterior Walls	Reliability	1- Currently Critical (Immediate)	07/13/05	\$145,813
HVAC Distribution: Aged Ductwork	Distribution Systems	Air and Water Quality	2- Potentially Critical (Within 12 mos.)	07/12/06	\$965,365
HVAC Distribution: Piping Aged	Distribution Systems	Beyond Rated Life	2- Potentially Critical (Within 12 mos.)	07/12/06	\$612,919
Plumbing: Aged DHW Converter	Domestic Water Distribution	Beyond Rated Life	2- Potentially Critical (Within 12 mos.)	07/12/06	\$61,622
Electrical Distribution: Aged Equipment	Electrical Service and Distribution	Beyond Rated Life	2- Potentially Critical (Within 12 mos.)	07/12/06	\$318,464
Lighting Interior: Replace Fixtures and Lamps	Lighting and Branch Wiring	Energy	2- Potentially Critical (Within 12 mos.)	07/12/06	\$689,810
Exterior Windows: Rehab of steel window assemblies.	Exterior Windows	Integrity	2- Potentially Critical (Within 12 mos.)	07/12/06	\$608,421
Domestic Water Distribution: Piping Aged	Distribution Systems	Beyond Rated Life	2- Potentially Critical (Within 12 mos.)	07/12/06	\$294,250
Radiators: Aged	Heating Generating Systems	Beyond Rated Life	2- Potentially Critical (Within 12 mos.)	07/12/06	\$135,836
Boiler: Aged	Boilers	Beyond Rated Life	2- Potentially Critical (Within 12 mos.)	07/12/06	\$192,432
Interior Doors: Replace doors, frames and hardware.	Interior Doors	Beyond Rated Life	2- Potentially Critical (Within 12 mos.)	07/12/06	\$674,097

Name	Prime System	Category	Priority	Action Date	Cost
Interior Doors: Replace doors and frames at Stair #__.	Interior Doors	Life Safety	2- Potentially Critical (Within 12 mos.)	07/12/06	\$9,169
Floor Finishes: Remove VAT in Basement and Sub-Basement.	Floor Finishes	Asbestos	2- Potentially Critical (Within 12 mos.)	07/13/06	\$49,185
Pneumatic HVAC Controls: Aged	Controls and Instrumentation	Integrity	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/12/07	\$23,564
Electrical Distribution: Aged Panel Boards	Electrical Service and Distribution	Beyond Rated Life	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/12/07	\$26,040
Conveying: Aged Elevators	Elevators and Lifts	Beyond Rated Life	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/12/07	\$487,775
Branch Wiring: Aged	Lighting and Branch Wiring	Integrity	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/12/07	\$325,419
Emergency Lighting: Aged Exit Signs	Emergency Light and Power Systems	Beyond Rated Life	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/12/07	\$19,683
Electrical Distribution: Panel Boards Lacking Capacity	Electrical Service and Distribution	Reliability	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/12/07	\$41,700
Security CCTV System: Aged Recording Method	Communications and Security	Obsolescence	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/12/07	\$53,174
Lighting System: Aged Exterior Lighting	Lighting and Branch Wiring	Obsolescence	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/12/07	\$9,287
Ceiling Finishes: Replace existing ACT systems.	Ceiling Finishes	Beyond Rated Life	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/12/07	\$517,220
Roofing: Replace existing roofing systems.	Roofing	Beyond Rated Life	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/11/07	\$892,636

Name	Prime System	Category	Priority	Action Date	Cost
Exterior Enclosure: Exterior louvers.	Exterior Enclosure	Beyond Rated Life	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/11/07	\$9,067
Exterior Doors: Replacement of exterior doors and frames at roof access locations.	Exterior Doors	Beyond Rated Life	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/11/07	\$7,171
Interior Finishes: Rehab existing bathroom.	Interior Finishes	Integrity	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/12/07	\$592,600
Exterior Doors: Replace existing exterior (service) doors.	Exterior Doors	Beyond Rated Life	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/13/07	\$19,976
Wall Finishes: Repaint interior wall finishes.	Wall Finishes	Integrity	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/12/07	\$322,555
Ceiling Finishes: Repaint plaster/gypsum wallboard ceilings.	Ceiling Finishes	Integrity	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/12/07	\$122,890
Floor Finishes: Replace floor finishes in kind.	Floor Finishes	Beyond Rated Life	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/12/07	\$703,528
Exterior Doors: Refinish exterior bronze door assemblies.	Exterior Doors	Integrity	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/13/07	\$24,693
Lighting and Branch Wiring: Add Occupancy Sensors	Lighting and Branch Wiring	Energy	4- Recommended (within 25-72 mos.)	07/12/11	\$31,436
Lightning Protection: Lacking	Other Electrical Systems	Functionality	4- Recommended (within 25-72 mos.)	07/12/11	\$16,677
Conveying: Abandoned Equipment	Elevators and Lifts	Obsolescence	4- Recommended (within 25-72 mos.)	07/12/11	\$5,579
Branch Wiring: Insufficient Receptacles	Lighting and Branch Wiring	Functionality	4- Recommended (within 25-72 mos.)	07/12/11	\$95,654

Name	Prime System	Category	Priority	Action Date	Cost
Electrical Distribution: Miscellaneous Maintenance Issues	Electrical Service and Distribution	Functionality	4- Recommended (within 25-72 mos.)	07/12/11	\$5,451
Mechanical Equipment: Abandoned in Place	Other HVAC Systems and Equipment	Obsolescence	4- Recommended (within 25-72 mos.)	07/12/11	\$13,044
Fire Protection: Halon 1301 System Production Restriction	Other Fire Protection Systems	Air and Water Quality	4- Recommended (within 25-72 mos.)	07/12/11	\$15,648
Electrical: Lack of As Built Drawings	Other Electrical Systems	Building Code	5- Does Not Meet Current Codes / Standards	07/12/15	\$24,115
Fire Protection: Lack of Backflow	Sprinklers	Building Code	5- Does Not Meet Current Codes / Standards	07/12/15	\$5,996
Plumbing: Lack of Vacuum Breakers	Other Plumbing Systems	Building Code	5- Does Not Meet Current Codes / Standards	07/12/15	\$1,362
Electrical Distribution: Miscellaneous Code Issues	Electrical Service and Distribution	Building Code	5- Does Not Meet Current Codes / Standards	07/12/15	\$12,516
Ventilation: Lack of Ventilation in Electrical Room	Exhaust Ventilation Systems	Code Compliance	5- Does Not Meet Current Codes / Standards	07/12/15	\$29,061
Domestic Water: Lack of Backflow	Domestic Water Distribution	Building Code	5- Does Not Meet Current Codes / Standards	07/12/15	\$7,697
Fire Protection: lacking Tamper Switches	Fire Protection	Building Code	5- Does Not Meet Current Codes / Standards	07/12/15	\$1,060
Ramps: Provide handrails.	Ramps	Accessibility	5- Does Not Meet Current Codes / Standards	07/12/15	\$4,394
Fire Protection: lacking FDC Signage	Fire Protection	Building Code	5- Does Not Meet Current Codes / Standards	07/12/15	\$887
Gas Cylinders: Not Secured	Other HVAC Systems and Equipment	Code Compliance	5- Does Not Meet Current Codes / Standards	07/12/15	\$283
HVAC Piping: Over Electrical Equipment	Other HVAC Systems and Equipment	Code Compliance	5- Does Not Meet Current Codes / Standards	07/12/15	\$6,408

Name	Prime System	Category	Priority	Action Date	Cost
Stairs: Non-compliant handrails.	Stairs	Code Compliance	5- Does Not Meet Current Codes / Standards	07/11/15	\$85,285
Interior Construction: Non-accessible public bathrooms.	Interior Construction	Accessibility	5- Does Not Meet Current Codes / Standards	07/12/15	\$32,485
				Total	\$9,602,614



Requirement Description

by Asset Name and Category

Department of General Services (DGS)	1
Richmond Capitol Square	1
Supreme Court Main & Annex Building	1
Accessibility	1
Interior Construction: Non-accessible public bathrooms.	1
Ramps: Provide handrails.	2
Air and Water Quality	2
Fire Protection: Halon 1301 System Production Restriction	3
HVAC Distribution: Aged Ductwork	4
Asbestos	5
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HVAC Distribution: Piping Aged	23
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Plumbing: Aged DHW Converter	26
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Plumbing: Lack of Vacuum Breakers	39
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Ventilation: Lack of Ventilation in Electrical Room	43
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Lighting and Branch Wiring: Add Occupancy Sensors	45
Functionality	45
Branch Wiring: Insufficient Receptacles	46
Electrical Distribution: Miscellaneous Maintenance Issues	47
Lightning Protection: Lacking	49
Integrity	49
Branch Wiring: Aged	50
Ceiling Finishes: Repaint plaster/gypsum wallboard ceilings.	52
Exterior Doors: Refinish exterior bronze door assemblies.	53
Exterior Windows: Rehab of steel window assemblies.	54
Interior Finishes: Rehab existing bathroom.	55
Pneumatic HVAC Controls: Aged	57
Wall Finishes: Repaint interior wall finishes.	58
Life Safety	58
Emergency Lighting: Insufficient Exit Signage	59
HVAC Special Sys: Lack of Smoke Control	60
Interior Doors: Replace doors and frames at Stair #__.	62
Interior Doors: Replace existing metal door and frame at Room B117.	63
Obsolescence	63
Conveying: Abandoned Equipment	64
Lighting System: Aged Exterior Lighting	65
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Security CCTV System: Aged Recording Method	67
Reliability	67
Electrical Distribution: Panel Boards Lacking Capacity	68
Exterior Walls: Repoint exterior enclosure wall.	69

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Supreme Court Main & Annex Building
ASSET NUMBER: 194-736
CATEGORY: Accessibility

Requirement Name	Interior Construction: Non-accessible public bathrooms.	Inspection Date:	07/12/2005
Prime System	Interior Construction	Finish Date:	-
Priority	5- Does Not Meet Current Codes / Standards	Status:	Open
Inspector Name	Paradis	Actual Cost:	\$0
Action Date	07/12/2015	Total Estimated Cost:	\$32,485

Requirement Description

The public bathrooms located along the accessible route are non-compliant with the requirements of the IBC 2000, Chapter 11 - Accessibility or Appendix E - Supplementary Accessibility Requirements, nor the ADA/ABA AG 2004. According to the IBC 2000, Chapter 34, Section 3408 - Accessibility to Existing Structures, does not require compliance of such buildings unless undergoing a change of occupancy or additions and alterations to existing buildings, including those identified as historic buildings. That said, this requirement has been categorized as a Priority 5 requirement.

Action Description

Modify the interiors of two (2) of the larger bathrooms per floor (6-floors) to accommodate accessible toilet fixtures and access thereto. Coordinate work efforts with renovation of bathroom finishes and new toilet partitions.

Estimate		Adjustment Factor:	1.00	
Number	Description	Quantity Unit	Unit Cost	Total Cost
U154102003600	Supports/carr, lav, cncl arm, wl mtd, in std or mas, hi back fixt	12 Ea.	\$223.07	\$2,677
U154102008000	Supports/carr, wtr clo, for flr mtd back-outlet, dbl, 4" thd, 2" vent	12 Ea.	\$857.77	\$10,293
U154102009990	Minimum labor/equipment charge	96 Job	\$93.89	\$9,013
U154103000972	Faucets/ftg, fl vs, auto fl sensor & oper for, urinals or water clos	12 Ea.	\$435.65	\$5,228
U154103002810	Faucets/fittings, lav faucet, automatic sensor and oper, W/ faucet HD	12 Ea.	\$383.43	\$4,601
U154108001280	Toilet seats, solid plstc, wh, resi, W/ cov, open frt, elongated bowl	12 Ea.	\$56.04	\$672

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Supreme Court Main & Annex Building
ASSET NUMBER: 194-736
CATEGORY: Accessibility

Requirement Name	Ramps: Provide handrails.	Inspection Date:	07/12/2005
Prime System	Ramps	Finish Date:	-
Priority	5- Does Not Meet Current Codes / Standards	Status:	Open
Inspector Name	Paradis	Actual Cost:	\$0
Action Date	07/12/2015	Total Estimated Cost:	\$4,394

Requirement Description

An existing (corridor) ramp located off the Eighth Street entrance lobby, First Floor Level, leading to the Court Of Appeals Courtroom, does not provide any handrails. The slope exceeds the 1:20, therefore requires handrails per the ADA/ABA AG 2004. Chapter 4 - Accessible Routes, Section 405 - Ramps. According to the IBC 2000, Chapter 34, Section 3408 - Accessibility to Existing Structures, does not require compliance of such buildings unless undergoing a change of occupancy or additions and alterations to existing buildings, including those identified as historic buildings. That said, this requirement has been categorized as a Priority 5 requirement.

Action Description

Provide new custom handrails to existing (marble wainscot) corridors walls; access corridor leads to Court of Appeal Courtroom, First Floor Level, Annex Structure.

Estimate		Adjustment Factor:	1.00	
Number	Description	Quantity Unit	Unit Cost	Total Cost
U064305000100	Railing, custom design, architectural grade, hardwood, maximum	60 L.F.	\$57.82	\$3,469
U099106505100	Coatings and paints, varnish and stain, polyurethane, clear	1 Gal.	\$28.05	\$28
U099106505200	Coatings and paints, varnish and stain, primer sealer	1 Gal.	\$19.99	\$20
U099301009000	Varnish,min labor&equip charge	6 Job	\$52.35	\$314
LCARPJ	Carpenters	16 hour	\$35.16	\$563

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Supreme Court Main & Annex Building
ASSET NUMBER: 194-736
CATEGORY: Air and Water Quality

Requirement Name	Fire Protection: Halon 1301 System Production Restriction	Inspection Date:	07/12/2005
Prime System	Other Fire Protection Systems	Finish Date:	-
Priority	4- Recommended (within 25-72 mos.)	Status:	Open
Inspector Name	Bilton	Actual Cost:	\$0
Action Date	07/12/2011	Total Estimated Cost:	\$15,648

Requirement Description

In the computer room located on the 3rd floor is protected with a Halon extinguishing system. At the present time Halon 1301 is being phased out as indicated in NFPA -12A which states: Halon 1301 is included in the Montreal Protocol on Substances that Deplete the Ozone Layer signed September 16, 1987. The protocol permits continued availability of halogenated fire extinguishing agents at 1986 production levels. That protocol, and subsequent amendments, restrict the production of this agent. In addition, local jurisdictions within some countries (e.g., the EPA in the U.S.) have enacted further rules regulating the production, use, handling, and deposition of this agent. The user of this standard is advised to consult local authorities for current regulations. Halon 1301 fire extinguishing systems are useful within the limits of this standard in extinguishing fires in specific hazards or equipment and in occupancies where an electrically nonconductive medium is essential or desirable, or where cleanup of other media presents a problem.

Action Description

Recommend replacing the Halon system with an FM 200 System.

Estimate		Adjustment Factor:	1.00	
Number	Description	Quantity Unit	Unit Cost	Total Cost
U090601101250	Ceiling dml, suspended ceiling, on suspension system, incl system	1,200 S.F.	\$0.33	\$396
U095107001125	Susp acst clg bds, mnrl fbrlay-in, 2x2 or 2x4, 3/4" T, fine textured	1,200 S.F.	\$1.67	\$2,004
AD40909200820	Average FM200 system, minimum	9,600 C.F.	\$1.38	\$13,248

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Supreme Court Main & Annex Building
ASSET NUMBER: 194-736
CATEGORY: Air and Water Quality

Requirement Name	HVAC Distribution: Aged Ductwork	Inspection Date:	07/12/2005
Prime System	Distribution Systems	Finish Date:	-
Priority	2- Potentially Critical (Within 12 mos.)	Status:	Open
Inspector Name	Bilton	Actual Cost:	\$0
Action Date	07/12/2006	Total Estimated Cost:	\$965,365

Requirement Description

The ductwork in the Building is original to the building (1951) and shows signs of contamination and wear. This ductwork should be replaced as it exceeds its normal useful life.

Action Description

The ductwork is aged and contaminated. The supply diffusers are dirty, an indication of dirt and contaminants in the ductwork. According to the staff some of the HVAC duct work has been cleaned however this did not help the problem.

Estimate		Adjustment Factor:		1.00
Number	Description	Quantity Unit	Unit Cost	Total Cost
U022203200200	Disposal only, urban buildings w/ salvage value allowed, steel frame	300 C.Y.	\$7.95	\$2,385
U022203300100	Dump charges, typical urban city, fees only, bldg constr materials	20 Ton	\$63.28	\$1,266
U022203500840	Rubbish handling, dumpster, 40 c.y cap.(13 Tons), rent/wk, 1 dump/wk	10 Week	\$727.72	\$7,277
U150553001200	HVAC dml, ductwork, 10" high, 12" wide	2,000 L.F.	\$1.63	\$3,260
U150553001400	Hvac demo, ductwork, 18" high, 24" wide	1,500 L.F.	\$3.04	\$4,560
U150553001520	Hvac demo, ductwork, 30" high, 48" wide	1,000 L.F.	\$3.84	\$3,840
U150802003060	Insulation, duct, blanket fbgl, fire res liner, 1" thk, 1.5 lb dens	262,000 S.F.	\$2.02	\$529,240
U158101000160	Ductwork, fab rect, incl ftngs, alum, alloy 3003-h14, over 5,000 LB	39,200 Lb.	\$7.19	\$281,848
U158101006820	Duct, spiral preformed, stl, galv, reducing cplg, 8" x 6"	30 Ea.	\$19.07	\$572
U158101006860	Duct, spiral preformed, stl, galv, reducing cplg, 12" x 10"	30 Ea.	\$32.63	\$979
U158101006880	Duct, spiral preformed, stl, galv, reducing cplg, 14" x 12"	30 Ea.	\$44.14	\$1,324
U158101006920	Duct, spiral preformed, stl, galv, reducing cplg, 18" x 16"	30 Ea.	\$65.29	\$1,959
U158101006940	Duct, spiral preformed, stl, galv, reducing cplg, 20" x 18"	30 Ea.	\$73.63	\$2,209
U158203000360	Duct accessories, duct collar, spin-in type, w/o damper, round, 8"	750 Ea.	\$14.75	\$11,063
U158203001138	Exhaust vent damper OB, auto, 18"x8"	30 Ea.	\$115.75	\$3,473

Number	Description	Quantity	Unit	Unit Cost	Total Cost
U158203003160	Duct accessories, fire damper, curtain type, 1-1/2 hr, vertical, 36" x 10"	30	Ea.	\$71.77	\$2,153
U158203003480	Duct accessories, fire damper, curtain type, 1-1/2 hr, vertical, 26" x 24"	30	Ea.	\$94.90	\$2,847
U158203009446	Duct accessories, turning vane, set, 30"	12	L.F.	\$21.81	\$262
U158503000600	Diffusers, al, OB dmpr, clg, perf, 24"x24" lay-in pnl size, 18"x18"	750	Ea.	\$139.80	\$104,850

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Supreme Court Main & Annex Building
ASSET NUMBER: 194-736
CATEGORY: Asbestos

Requirement Name	Floor Finishes: Remove VAT in Basement and Sub-Basement.	Inspection Date:	07/13/2005
Prime System	Floor Finishes	Finish Date:	-
Priority	2- Potentially Critical (Within 12 mos.)	Status:	Open
Inspector Name	Paradis	Actual Cost:	\$0
Action Date	07/13/2006	Total Estimated Cost:	\$49,185

Requirement Description

The flooring tiles located in the Basement and Sub-Basement levels appears to be VAT (vinyl asbestos tiles); removal of such is recommended. Following demolition, replace (removed) flooring with VCT flooring.

Action Description

Provide removal (demo) of suspected VAT (vinyl asbestos tile) flooring at Basement and Sub-Basement Levels. Following removal, install VCT replacement flooring in locations where VAT removal occurred.

Estimate		Adjustment Factor:	1.00	
Number	Description	Quantity Unit	Unit Cost	Total Cost
U022203500725	Rubbish handling, dumpster, 20 C.Y. cap., (8 Tons), rent/week, 1 dump/week	2 Week	\$397.76	\$796
U090601200900	Flooring demo, resilient, VCT, 12" x 12"	19,600 S.F.	\$0.39	\$7,644
U096581007250	Resilient, vinyl composition tile, 12" x 12", 3/32" thick, marbled	19,600 S.F.	\$1.80	\$35,280
U096581009500	Resilient tile min labor/equip chrg	20 Job	\$62.85	\$1,257
U132811553000	Waste packaging handling & disposal, cart bags, 50' to dumpster	100 Ea.	\$1.75	\$175
U132811555000	Waste packaging handling & disposal, disposal charge, no haul, min	20 C.Y.	\$47.35	\$947
LASBEJ	Asbestos/Insulation Workers/Pipe Coverer	80 hour	\$38.58	\$3,086

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Supreme Court Main & Annex Building
ASSET NUMBER: 194-736
CATEGORY: Beyond Rated Life

Requirement Name	Boiler: Aged	Inspection Date:	07/12/2005
Prime System	Boilers	Finish Date:	-
Priority	2- Potentially Critical (Within 12 mos.)	Status:	Open
Inspector Name	Bilton	Actual Cost:	\$0
Action Date	07/12/2006	Total Estimated Cost:	\$192,432

Requirement Description

At the present time two (2) of the three (3) steam boilers are being replaced due to age and inefficiency. This requirement is for the third boiler to be replaced for the same reasons.

Action Description

Replace the steam boiler to match the two (2) new boilers.

The items listed below will impact the replcaement of the boiler:

1. Location of the boiler with respect to the closest point of access for removal of the old and subsequent entry of the new boilers
2. The limitation of floor loading along the path of removal
3. The need for stack replacement
4. Special riggin/hoisting
5. Abatement of hazardous materials

Estimate **Adjustment Factor:** 1.00

Number	Description	Quantity Unit	Unit Cost	Total Cost
U022203500840	Rubbish handling, dumpster, 40 c.y cap.(13 Tons), rent/wk, 1 dump/wk	3 Week	\$727.72	\$2,183
U132811200200	Bulk asbestos removal, boiler insulation	250 S.F.	\$6.34	\$1,585
U132811200300	Bulk asbestos removal, boiler breeching or flue insulation	200 S.F.	\$5.79	\$1,158
U132811200700	Bulk asbestos removal, pipe insul w/glove bag to 3" diameter pipe	200 L.F.	\$12.84	\$2,568
U132811200700	Bulk asbestos removal, pipe insul w/glove bag to 3" diameter pipe	200 L.F.	\$12.84	\$2,568
U132811201130	Bulk asbestos removal, pipe fitting insulation, over 16" diam pipe	100 S.F.	\$17.11	\$1,711
U132811202100	Bulk asbestos removal, scrape foam fireproofing from irregular surface	250 S.F.	\$2.51	\$628
U132811203100	Bulk asbestos removal, remove cementitious material from irregular surface	100 S.F.	\$2.15	\$215
U132811250320	Asbestos abat work area, separation barrier,2"x4"@16",1/2" ply ea side,16'H	500 S.F.	\$4.85	\$2,425

Number	Description	Quantity	Unit	Unit Cost	Total Cost
U132811250551	Asbestos abat work area, floors, each layer, 4mil	500	S.F.	\$2.45	\$1,225
U132811350460	Asbestos abat equip, personal rsprtr, P.A.P.R., full face, max	5	Ea.	\$770.00	\$3,850
U132811352500	Asbestos abat equip, respirator, single use	50	Ea.	\$11.55	\$578
U132811352550	Asbestos abat equip, respirator, cartridge for respirator	50	Ea.	\$12.87	\$644
U132811353050	Asbestos abat equip, HEPA vacuum for work area, maximum	5	Ea.	\$3,052.50	\$15,263
U132811356450	Asbestos abat equip, pressure sensitive caution lables, 11"x17"	200	Ea.	\$7.15	\$1,430
U132811356500	Asbestos abat equip, negative air machine, 1800 C.F.M.	2	Ea.	\$852.50	\$1,705
U146105002500	Material handling,hoists,elec ovhd,chain,hook hung,15' lift,5 ton cap	1	Ea.	\$5,500.00	\$5,500
U146105003100	Material handling, hoists, for lifts over 15', 5 ton, add	25	L.F.	\$44.00	\$1,100
U150553000380	HVAC dml, boiler, gas and or oil, 7100 thru 12,000 MBH	1	Ea.	\$7,180.02	\$7,180
U155504403777	Vent chimney, stack cap, 316 stainless steel only, 12" diameter	1	Ea.	\$264.60	\$265
U155504403785	Vent chimney, stack cap, 316 stainless steel only, 36" diameter	1	Ea.	\$843.56	\$844
AD30201381060	Boiler, cast iron, gas & oil, steam, 3770 MBH	1	Ea.	\$81,319.85	\$81,320
LSTPIJ	Steamfitters or Pipefitters	160	hour	\$40.56	\$6,490
N-	Building Modification Required for Removal of Boiler	1	LS	\$50,000.00	\$50,000

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Supreme Court Main & Annex Building
ASSET NUMBER: 194-736
CATEGORY: Beyond Rated Life

Requirement Name	Ceiling Finishes: Replace existing ACT systems.	Inspection Date:	07/12/2005
Prime System	Ceiling Finishes	Finish Date:	-
Priority	3- Necessary - Not Yet Critical (within 13-24 mos.)	Status:	Open
Inspector Name	Paradis	Actual Cost:	\$0
Action Date	07/12/2007	Total Estimated Cost:	\$517,220

Requirement Description

The existing acoustical ceiling tile (ACT) systems throughout the Main and Annex Structures, with few exceptions, have exceeded their useful life. These ACT assemblies should be replaced based on their age and condition, as observed during our assessment inspection.

Action Description

Demo, remove and replace existing acoustical ceiling tile (and suspension grid) systems throughout Main and Annex Structures. Coordinate work efforts with refinishing of interior wall and other associated interior upgrades as called for in this assessment report.

Estimate		Adjustment Factor:	1.00	
Number	Description	Quantity Unit	Unit Cost	Total Cost
U090601101200	Ceiling dml, suspended ceiling boards only, mineral fiber, 2x2 or 2x4	135,000 S.F.	\$0.26	\$35,100
U095107600830	Suspended clg,NO carr chan,mnrl fiber,9/16"Tbar susp,2'x4'x3/4"	135,000 S.F.	\$3.16	\$426,600
U095107609000	Suspens.ceiling complt.min labor/equip.charge	140 Job	\$122.49	\$17,149
LELECEJ	Electricians	960 hour	\$39.97	\$38,371

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Supreme Court Main & Annex Building
ASSET NUMBER: 194-736
CATEGORY: Beyond Rated Life

Requirement Name	Conveying: Aged Elevators	Inspection Date:	07/12/2005
Prime System	Elevators and Lifts	Finish Date:	-
Priority	3- Necessary - Not Yet Critical (within 13-24 mos.)	Status:	Open
Inspector Name	SSmith	Actual Cost:	\$0
Action Date	07/12/2007	Total Estimated Cost:	\$487,775

Requirement Description

Per facilities staff and observations made during the assessment tour, elevators 5, 7 and 11 are either original to the building, 1919, or aged, past their 25 year 2003 BOMA life expectancy. Also, elevator cabin and cabin controls are not compliant with ADAAG requirements.

Action Description

Replace elevators 5, 7 and 11 cabs, motors, generators, and ancillary controls.

Estimate		Adjustment Factor: 1.07		
Number	Description	Quantity Unit	Unit Cost	Total Cost
U022203300100	Dump charges, typical urban city, fees only, bldg constr materials	10 Ton	\$63.28	\$633
U022203500800	Rubbish handling, dumpster, 30 c.y cap.(10 Tons), rent/wk, 1 dump/wk	1 Week	\$601.16	\$601
U022203500910	Rubbish handling, delivery, average for all sizes	1 Ea.	\$47.01	\$47
U022203500920	Rubbish handling, haul, average for all sizes	1 Ea.	\$117.52	\$118
U142102001625	Elevators, elec pass, base unit, 2000 lb, 200 fpm, 4 stop, std finishes	3 Ea.	\$89,340.38	\$268,021
U142102002000	Elevators, electric passenger, for travel over 40 V.L.F., add	80 V.L.F.	\$226.06	\$18,085
U142102002025	Elevators, electric passenger, for number of stops over 4, add	20 Stop	\$5,555.72	\$111,114
U160553009000	Electrical demo, electrical fixtures min labor & equip	3 Job	\$84.42	\$253
U162209000190	Variable frequency drives enclosed (NEMA 1), 460 V, 50 HP motor size	3 Ea.	\$9,373.50	\$28,121
AD50201450920	Motor installation, three phase, 200V, to and incl 50 HP motor size	3 Ea.	\$7,751.97	\$23,256
AD50201700520	Motor connections, three phase, 200/230/460/575V, up to 50 HP	3 Ea.	\$212.55	\$638
LELE CJ	Electricians	80 hour	\$39.97	\$3,198
LELEV J	Elevator Constructors	40 Hour	\$44.52	\$1,781

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Supreme Court Main & Annex Building
ASSET NUMBER: 194-736
CATEGORY: Beyond Rated Life

Requirement Name	Domestic Water Distribution: Piping Aged	Inspection Date:	07/12/2005
Prime System	Distribution Systems	Finish Date:	-
Priority	2- Potentially Critical (Within 12 mos.)	Status:	Open
Inspector Name	Bilton	Actual Cost:	\$0
Action Date	07/12/2006	Total Estimated Cost:	\$294,250

Requirement Description

The domestic water piping has exceeded its normal useful service life. The piping should be replaced during the next planned renovation. Also include insulation.

Action Description

Replace all domestic water piping include fittings and valves. Estimate includes required piping, valves, and insulation. Coordinate with other HVAC system related projects.

Estimate		Adjustment Factor:		1.00
Number	Description	Quantity Unit	Unit Cost	Total Cost
U013107000140	Field personnel, field engineer, maximum	8 Week	\$1,521.00	\$12,168
U022203300100	Dump charges, typical urban city, fees only, bldg constr materials	2 Ton	\$63.28	\$127
U022203500800	Rubbish handling, dumpster, 30 c.y cap.(10 Tons), rent/wk, 1 dump/wk	8 Week	\$601.16	\$4,809
U150556002001	Plumbing demo, piping, metal, to 1-1/2" diameter	500 L.F.	\$1.02	\$510
U150556002050	Plumbing dml, piping, metal, 2" thru 3-1/2" dia	200 L.F.	\$2.00	\$400
U150806006880	Insulation, pipe coving, fbgl, W/all svce jkt, 1" wl, 1-1/4" IPS	500 L.F.	\$3.51	\$1,755
U150806006890	Insulation, pipe covering, fbgl, all svce jkt, 1" wall, 1.5" IPS	600 L.F.	\$3.58	\$2,148
U150806006900	Insulation, pipe covering, fbgl, all svce jkt, 1" wall, 2" IPS	500 L.F.	\$3.81	\$1,905
U151076203290	Pipe, st, flg, 150 LB wld neck, on yoke&roll hgrs, 10' OC, bk, 1" dia	2,000 L.F.	\$14.89	\$29,780
U151076203300	Pipe,st,flg,150 LB wld neck,on yoke&roll hgr,10' OC,bk,1-1/4" dia	1,000 L.F.	\$16.45	\$16,450
U151076203310	Pipe,st,flg,150 LB wld neck,on yoke&roll hgr,10' OC,bk,1-1/2" dia	600 L.F.	\$17.20	\$10,320
U151076203320	Pipe, st, flg, 150 LB wld neck, on yoke&roll hgrs, 10' OC, bk, 2" dia	2,000 L.F.	\$21.98	\$43,960
U151102002200	Valves, iron body, gate, 125 lb, N.R.S., flanged, 2" size	120 Ea.	\$412.12	\$49,454
U151107005500	Valves, steel, forged, ball valve, 800 lb., socket weld, 1" size	90 Ea.	\$113.94	\$10,255

Number	Description	Quantity	Unit	Unit Cost	Total Cost
U151107005510	Valves, steel, forged, ball valve, 800 lb., socket weld, 1-1/4" size	80	Ea.	\$144.80	\$11,584
U151107005520	Valves, steel, forged, ball valve, 800 lb., socket weld, 1-1/2" size	60	Ea.	\$183.93	\$11,036
U151107005560	Ball valve, steel, 150 lb, flanged, 4" size	30	Ea.	\$658.87	\$19,766
U159557001200	Nondestructive pneumatic pressure test, 1" - 4" pipe, 1000 - 2000 LF	21	Ea.	\$1,126.90	\$23,665
U159557001380	Nondestructive pneumatic pressure test, 6" - 10" pipe, 1000 - 2000 LF	6	Ea.	\$2,236.76	\$13,421
LPLASJ	Plasterers	120	hour	\$31.43	\$3,772
LPLUHJ	Plumber Helpers	240	hour	\$31.34	\$7,522
LPLUMJ	Plumbers	240	hour	\$40.46	\$9,710
LSTPIJ	Steamfitters or Pipefitters	240	Hour	\$40.56	\$9,734

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Supreme Court Main & Annex Building
ASSET NUMBER: 194-736
CATEGORY: Beyond Rated Life

Requirement Name	Electrical Distribution: Aged Equipment	Inspection Date:	07/12/2005
Prime System	Electrical Service and Distribution	Finish Date:	-
Priority	2- Potentially Critical (Within 12 mos.)	Status:	Open
Inspector Name	SSmith	Actual Cost:	\$0
Action Date	07/12/2006	Total Estimated Cost:	\$318,464

Requirement Description

Existing electrical distribution equipment, including, switchboards, motor control centers, automatic transfer switches, transformers and associated feeder cables appeared aged, past their 2003 BOMA life expectancy of 35 years.

Action Description

Replace existing electrical distribution equipment including switchboards, motor control centers, automatic transfer switches, and transformers and associated feeder cables with new equipment.

Estimate		Adjustment Factor:		1.07
Number	Description	Quantity Unit	Unit Cost	Total Cost
U022203300500	Dump charges, reclamation station, usual charge	8 Ton	\$76.84	\$615
U022203500700	Rubbish handling, dumpster, 10 c.y cap.(4 Tons), rent/week, 1 dump/week	2 Week	\$339.00	\$678
U022203500920	Rubbish handling, haul, average for all sizes	2 Ea.	\$117.52	\$235
U160553001550	Electrical demo, transformer, 3 phase to 600v, primary, 300 kVA	3 Ea.	\$528.61	\$1,586
U160553001860	Electrical demo, wire, THW-THWN-THHN, removed from, in place conduit, #8	120 C.L.F.	\$8.36	\$1,003
U160553001870	Electrical demo, wire, THW-THWN-THHN, removed from, in place conduit, #6	72 C.L.F.	\$10.36	\$746
U160553001910	Electrical demo, wire, THW-THWN-THHN, removed from, in place conduit, 1/0	60 C.L.F.	\$20.34	\$1,220
U160553001940	Electrical demo, wire, THW-THWN-THHN, removed from, in place conduit, 4/0	18 C.L.F.	\$30.70	\$553
U160553001950	Electrical demo, wire, THW-THWN-THHN, removed from conduit, 250 kcmil	72 C.L.F.	\$33.77	\$2,431
U160553001970	Electrical demo, wire, THW-THWN-THHN, removed from conduit, 350 kcmil	48 C.L.F.	\$37.52	\$1,801
U160553001990	Electrical demo, wire, THW-THWN-THHN, removed from conduit, 500 kcmil	54 C.L.F.	\$41.69	\$2,251
U160553009000	Electrical demo, electrical fixtures min labor & equip	2 Job	\$84.42	\$169
U160554000670	Electrical dml, transfer switches, enclosed, 600 A	1 Ea.	\$135.08	\$135
U161209003060	Wire, 600 volt, copper type XHHW, stranded, #8	120 C.L.F.	\$67.67	\$8,120
U161209003080	Wire, 600 volt, copper type XHHW, stranded, #6	72 C.L.F.	\$91.50	\$6,588
U161209003160	Wire, 600 volt, copper type XHHW, stranded, 1/0	60 C.L.F.	\$234.52	\$14,071

Number	Description	Quantity	Unit	Unit Cost	Total Cost
U161209003220	Wire, 600 volt, copper type XHHW, stranded, 4/0	18	C.L.F.	\$363.70	\$6,547
U161209003240	Wire, 600 volt, copper type XHHW, stranded, 250 kcmil	72	C.L.F.	\$424.56	\$30,568
U161209003280	Wire, 600 volt, copper type XHHW, stranded, 350 kcmil	48	C.L.F.	\$534.33	\$25,648
U161209003320	Wire, 600 volt, copper type XHHN, stranded, 500 kcmil	54	C.L.F.	\$704.05	\$38,019
U161209009000	Wire min labor/equip charge	2	Job	\$84.42	\$169
U162702004500	Dry type xfmr, 3 ph, 480 V pri 120/208 V sec, vent, 300 kVA	3	Ea.	\$9,937.52	\$29,813
U162702009000	Minimum labor/equipment charge	3	Job	\$337.70	\$1,013
U164156000800	Automatic transfer switches, switches, enclosed 480 volt, 3p, 600 amp	1	Ea.	\$11,022.82	\$11,023
U164406400100	Motor control center, strs, control XFMR, 10 HP, size 1, 12" hi	12	Ea.	\$1,371.10	\$16,453
U164406400200	Motor control center, strs, control XFMR, 25 HP, size 2, 18" hi	4	Ea.	\$1,577.40	\$6,310
U164406401700	Motor control center, for pilot lights, add per starter	40	Ea.	\$108.33	\$4,333
U164406401800	Motor control center, for push button, add per starter	40	Ea.	\$108.33	\$4,333
U164406401900	Motor control center, for auxilliary contacts, add per starter	40	Ea.	\$238.89	\$9,556
U164406600100	Starter, magnetic, FVNR, w/ encl & htr, NEMA 1, 480 V, 5 HP, size 0	20	Ea.	\$373.28	\$7,466
U164408000200	Dist sect,al bus bars,not incl brkr,120/208 or 277/480 V,4 W,600 A	1	Ea.	\$2,246.47	\$2,246
U164408000500	Distr sect,alum bus bars,not incl bkrs,120/208 or 277/480 V,4 W,1200 A	1	Ea.	\$3,782.24	\$3,782
U164408200420	Feeder section, circuit breakers, KA frame, 70 to 225 amp	6	Ea.	\$1,053.59	\$6,322
U164408200430	Feeder section, circuit breakers, LA frame, 125 to 400 amp	6	Ea.	\$2,286.74	\$13,720
U164408200460	Feeder section, circuit breakers, MA frame, 450 to 600 amp	6	Ea.	\$3,732.44	\$22,395
LCARPJ	Carpenters	40	hour	\$35.16	\$1,406
LELECA	Electricians	160	hour	\$31.97	\$5,115
LELECI	Electricians	8	hour	\$40.71	\$326
LELECI	Electricians	160	hour	\$39.97	\$6,395
LPLASJ	Plasterers	40	hour	\$31.43	\$1,257
LPORDJ	Painters, Ordinary	40	hour	\$30.31	\$1,212

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Supreme Court Main & Annex Building
ASSET NUMBER: 194-736
CATEGORY: Beyond Rated Life

Requirement Name	Electrical Distribution: Aged Panel Boards	Inspection Date:	07/12/2005
Prime System	Electrical Service and Distribution	Finish Date:	-
Priority	3- Necessary - Not Yet Critical (within 13-24 mos.)	Status:	Open
Inspector Name	SSmith	Actual Cost:	\$0
Action Date	07/12/2007	Total Estimated Cost:	\$26,040

Requirement Description

A quantity of branch circuit panel boards within the building appeared aged, past their 2003 BOMA life expectancy of 35 years.

Action Description

Replace existing aged panel boards with new panel boards rated at the correct voltage with 42, single pole circuit positions, and 225 amperes capacity. Estimate includes replacing feeder cables to the new panel boards.

Estimate		Adjustment Factor:		1.07
Number	Description	Quantity Unit	Unit Cost	Total Cost
U022203300500	Dump charges, reclamation station, usual charge	0 Ton	\$76.84	\$19
U022203500700	Rubbish handling, dumpster, 10 c.y cap.(4 Tons), rent/week, 1 dump/week	1 Week	\$339.00	\$339
U022203500920	Rubbish handling, haul, average for all sizes	1 Ea.	\$117.52	\$118
U160553001270	Electrical demo, panel board, 4 wire, 200 amps, to 42 circuits	3 Ea.	\$281.42	\$844
U160553001940	Electrical demo, wire, THW-THWN-THHN, removed from, in place conduit, 4/0	18 C.L.F.	\$30.70	\$553
U160553009000	Electrical demo, electrical fixtures min labor & equip	3 Job	\$84.42	\$253
U161209003220	Wire, 600 volt, copper type XHHW, stranded, 4/0	18 C.L.F.	\$363.70	\$6,547
U161209009000	Wire min labor/equip charge	3 Job	\$84.42	\$253
U164407000100	Panelboard&load center ckt brkr,bolt-on,10k AIC,120V,1 P,15 to 50A	90 Ea.	\$45.69	\$4,112
U164407003250	Panelboard & load center circuit bkrs, panelboard spacers, per pole	36 Ea.	\$12.02	\$433
U164407009000	Panelboard circuit breakers min labor/equip charge	3 Job	\$112.57	\$338
U164407201000	Panelboards, NQOD, 4 wire, 120/208 volts, 225 amp main lugs, 42 circs	3 Ea.	\$2,103.82	\$6,311
U164407209000	Panelboard min labor/equip charge	3 Job	\$337.70	\$1,013
LELECA	Electricians	40 hour	\$31.97	\$1,279
LELECI	Electricians	8 hour	\$40.71	\$326
LELECI	Electricians	40 hour	\$39.97	\$1,599

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Supreme Court Main & Annex Building
ASSET NUMBER: 194-736
CATEGORY: Beyond Rated Life

Requirement Name	Emergency Lighting: Aged Exit Signs	Inspection Date:	07/12/2005
Prime System	Emergency Light and Power Systems	Finish Date:	-
Priority	3- Necessary - Not Yet Critical (within 13-24 mos.)	Status:	Open
Inspector Name	SSmith	Actual Cost:	\$0
Action Date	07/12/2007	Total Estimated Cost:	\$19,683

Requirement Description

Existing emergency exit signs are aged, appearing to be past their 2003 BOMA life expectancy of 15 years, and are also utilize inefficient incandescent or compact fluorescent lamp types.

Action Description

Replace obsolete exit signs with new energy efficient LED type exit signs. Connect per 1999 edition of the NEC, Article 700, reuse of existing circuitry is expected. Estimated quantities are for budgetary purposes only.

Estimate		Adjustment Factor:	1.00	
Number	Description	Quantity Unit	Unit Cost	Total Cost
U022203500700	Rubbish handling, dumpster, 10 c.y cap.(4 Tons), rent/week, 1 dump/week	2 Week	\$339.00	\$678
U160553009000	Electrical demo, electrical fixtures min labor & equip	8 Job	\$84.42	\$675
U165303200240	Exit light clg or wall mount, L.E.D. battery unit, single face	35 Ea.	\$194.85	\$6,820
U165303200260	Exit light clg or wall mount, L.E.D. battery unit, double face	35 Ea.	\$204.69	\$7,164
LCLNRJ	Cleaner	16 hour	\$26.23	\$420
LELECA	Electricians	40 hour	\$31.97	\$1,279
LELECA	Electricians	40 hour	\$39.97	\$1,599
LHELPJ	Helpers Average (5 trades)	40 hour	\$26.20	\$1,048

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Supreme Court Main & Annex Building
ASSET NUMBER: 194-736
CATEGORY: Beyond Rated Life

Requirement Name	Exterior Doors: Replace existing exterior (service) doors.	Inspection Date:	07/13/2005
Prime System	Exterior Doors	Finish Date:	-
Priority	3- Necessary - Not Yet Critical (within 13-24 mos.)	Status:	Open
Inspector Name	Paradis	Actual Cost:	\$0
Action Date	07/13/2007	Total Estimated Cost:	\$19,976

Requirement Description

The Main and Annex Structures exterior (service) doors and frames have exceeded their useful life and should be replaced in their entirety.

Action Description

Replace all exterior (service) doors and frames at the Main and Annex Structures; this includes swinging and OH coiling doors.

Estimate		Adjustment Factor:	1.00	
Number	Description	Quantity Unit	Unit Cost	Total Cost
AB20302203500	Dr,steel 18 ga,hol metal,1 dr w/fr,no label,3'-6" x 7'-0" opening	4 Opng.	\$1,160.63	\$4,643
AB20302203700	Dr,steel 18 ga,hol metal,2 dr w/fr,no label,6'-0" x 7'-0" opening	2 Opng.	\$2,079.66	\$4,159
AB20302205200	Dr,steel,overhead,rolling,electric oper,14'-0" x 14'-0" opening	3 Opng.	\$3,724.84	\$11,175

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Supreme Court Main & Annex Building
ASSET NUMBER: 194-736
CATEGORY: Beyond Rated Life

Requirement Name	Exterior Doors: Replacement of exterior doors and frames at roof access locations.	Inspection Date:	07/11/2005
Prime System	Exterior Doors	Finish Date:	-
Priority	3- Necessary - Not Yet Critical (within 13-24 mos.)	Status:	Open
Inspector Name	Paradis	Actual Cost:	\$0
Action Date	07/11/2007	Total Estimated Cost:	\$7,171

Requirement Description

The existing exterior (service) doors and frames, providing access to roof areas and/or building service rooms at roof levels, are typically well beyond their useful life and require replacement.

Action Description

Demo (remove) and replace existing (service) doors and frames at roof level.

Estimate		Adjustment Factor:	1.00	
Number	Description	Quantity Unit	Unit Cost	Total Cost
RB20332204040	Replace 3'-0" x 7'-0" steel, insul. core, ptd. door	12 Ea.	\$597.62	\$7,171

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Supreme Court Main & Annex Building
ASSET NUMBER: 194-736
CATEGORY: Beyond Rated Life

Requirement Name	Exterior Enclosure: Exterior louvers.	Inspection Date:	07/11/2005
Prime System	Exterior Enclosure	Finish Date:	-
Priority	3- Necessary - Not Yet Critical (within 13-24 mos.)	Status:	Open
Inspector Name	Paradis	Actual Cost:	\$0
Action Date	07/11/2007	Total Estimated Cost:	\$9,067

Requirement Description

The exterior louvers located adjacent to the cooling tower on the main roof look to be original to the buildings construction and are in poor condition. Although largely aesthetic in nature, replacement is recommended.

Action Description

Remove existing louver panels (4) along north wall of cooling tower enclosure; replace with new louver panels of similar design and material.

Estimate		Adjustment Factor:	1.00	
Number	Description	Quantity Unit	Unit Cost	Total Cost
U050601102950	Framing demo, steel framing labor & equip min charge	1 Job	\$1,416.12	\$1,416
U102108000800	Louvers, aluminum with screen, triangle, large	80 Ea.	\$67.51	\$5,401
LCARPJ	Carpenters	64 hour	\$35.16	\$2,250

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Supreme Court Main & Annex Building
ASSET NUMBER: 194-736
CATEGORY: Beyond Rated Life

Requirement Name	Floor Finishes: Replace floor finishes in kind.	Inspection Date:	07/12/2005
Prime System	Floor Finishes	Finish Date:	-
Priority	3- Necessary - Not Yet Critical (within 13-24 mos.)	Status:	Open
Inspector Name	Paradis	Actual Cost:	\$0
Action Date	07/12/2007	Total Estimated Cost:	\$703,528

Requirement Description

The floor finishes throughout the Main and Annex Structures, with few exceptions, are worn and in need of replacement. Replace carpet and VCT where applicable, refinish marble and terrazzo flooring in primary lobbies, elevator lobbies, stairways and other locations as applicable.

Action Description

Replace carpet, VCT and resilient base where found throughout Main and Annex Structures; refinish marble and terrazzo flooring and base in primary lobbies, elevator lobbies, stairwell and other locations as applicable.

Estimate **Adjustment Factor:** 1.00

Number	Description	Quantity Unit	Unit Cost	Total Cost
RC30234100020	Replace vinyl floor	3,300 S.Y.	\$36.59	\$120,747
RC30234180010	Replace rubber cove base	55,200 L.F.	\$2.09	\$115,368
RC30234300100	Terrazzo floor repairs - (2% of floors)	400 S.F.	\$10.37	\$4,148
RC30234600020	Replace thinset marble floor	300 S.F.	\$27.09	\$8,127
RC30235100020	Replace carpet	13,200 S.Y.	\$33.79	\$446,028
LCLAMJ	Common Maintenance Laborer	480 hour	\$18.98	\$9,110

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Supreme Court Main & Annex Building
ASSET NUMBER: 194-736
CATEGORY: Beyond Rated Life

Requirement Name	HVAC Distribution: Fans Aged	Inspection Date:	07/12/2005
Prime System	Distribution Systems	Finish Date:	-
Priority	1- Currently Critical (Immediate)	Status:	Open
Inspector Name	Bilton	Actual Cost:	\$0
Action Date	07/12/2005	Total Estimated Cost:	\$113,235

Requirement Description

There are approximately twelve (12) HVAC distribution fans and exhaust systems located throughout the building that have exceeded their useful service life.

Action Description

Replace the HVAC air handling units (AHUs) throughout the building. Replace in kind with the exception of W-9 Lacy - Lemmons increase that AHU capacity by 30%.

Estimate	Adjustment Factor:	1.00		
Number	Description	Quantity Unit	Unit Cost	Total Cost
U013107000140	Field personnel, field engineer, maximum	2 Week	\$1,521.00	\$3,042
U022203500840	Rubbish handling, dumpster, 40 c.y cap.(13 Tons), rent/wk, 1 dump/wk	8 Week	\$727.72	\$5,822
U150802003060	Insulation, duct, blanket fbgl, fire res liner, 1" thk, 1.5 lb dens	2,000 S.F.	\$2.02	\$4,040
U157202003100	Central sta air-handling unit, chill water, pkgd, 4000 CFM, 10 ton	3 Ea.	\$3,046.18	\$9,139
U157202003250	Central sta air-handling unit, chill water, pkgd, 7000 CFM, 17.5 ton	4 Ea.	\$4,738.51	\$18,954
U157202003400	Central sta air-handling unit, chill water, pkgd, 12,000 CFM, 30 ton	5 Ea.	\$7,896.82	\$39,484
U158301009900	Fans, minimum labor/equipment charge	15 Job	\$70.35	\$1,055
U159551002700	Balancing, air,sub's quote incl matl&lab, AC, central sta, pkg unit	12 Ea.	\$206.58	\$2,479
LELECJ	Electricians	80 hour	\$39.97	\$3,198
LSHEEJ	Sheet Metal Workers	320 hour	\$40.76	\$13,043
LSTPIJ	Steamfitters or Pipefitters	320 hour	\$40.56	\$12,979

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Supreme Court Main & Annex Building
ASSET NUMBER: 194-736
CATEGORY: Beyond Rated Life

Requirement Name	HVAC Distribution: Piping Aged	Inspection Date:	07/12/2005
Prime System	Distribution Systems	Finish Date:	-
Priority	2- Potentially Critical (Within 12 mos.)	Status:	Open
Inspector Name	Bilton	Actual Cost:	\$0
Action Date	07/12/2006	Total Estimated Cost:	\$612,919

Requirement Description

The HVAC piping has exceeded its normal useful service life. This piping should be replaced during the next planned renovation of the HVAC systems. Also include insulation.

Action Description

Replace all HVAC mechanical piping, fitting and valves. Estimate includes required piping, valves, and insulation. Coordinate with other HVAC system related projects.

Estimate		Adjustment Factor:		1.00
Number	Description	Quantity Unit	Unit Cost	Total Cost
U013107000140	Field personnel, field engineer, maximum	6 Week	\$1,521.00	\$9,126
U022203300100	Dump charges, typical urban city, fees only, bldg constr materials	5 Ton	\$63.28	\$316
U022203500800	Rubbish handling, dumpster, 30 c.y cap.(10 Tons), rent/wk, 1 dump/wk	6 Week	\$601.16	\$3,607
U150556002001	Plumbing demo, piping, metal, to 1-1/2" diameter	1,200 L.F.	\$1.02	\$1,224
U150556002050	Plumbing dml, piping, metal, 2" thru 3-1/2" dia	5,000 L.F.	\$2.00	\$10,000
U150556002100	Plumbing dml, piping, metal, 4" thru 6" dia	4,000 L.F.	\$6.01	\$24,040
U150556002150	Plumbing dml, piping, metal, 8" thru 14" dia	300 L.F.	\$10.02	\$3,006
U150806006880	Insulation, pipe coving, fbgl, W/all svce jkt, 1" wl, 1-1/4" IPS	5,000 L.F.	\$3.51	\$17,550
U150806006890	Insulation, pipe covering, fbgl, all svce jkt, 1" wall, 1.5" IPS	600 L.F.	\$3.58	\$2,148
U150806006900	Insulation, pipe covering, fbgl, all svce jkt, 1" wall, 2" IPS	5,000 L.F.	\$3.81	\$19,050
U150806006960	Insulation, pipe covering, fbgl, all svce jkt, 1" wall, 6" IPS	500 L.F.	\$6.72	\$3,360
U150806006980	Insulation, pipe coving, fbgl, W/all svce jkt, 1" wl, 8" IPS	400 L.F.	\$8.61	\$3,444
U151076203290	Pipe, st, flg, 150 LB wld neck, on yoke&roll hgrs, 10' OC, bk, 1" dia	6,500 L.F.	\$14.89	\$96,785
U151076203300	Pipe, st, flg, 150 LB wld neck, on yoke&roll hgr, 10' OC, bk, 1-1/4" dia	4,500 L.F.	\$16.45	\$74,025
U151076203310	Pipe, st, flg, 150 LB wld neck, on yoke&roll hgr, 10' OC, bk, 1-1/2" dia	600 L.F.	\$17.20	\$10,320

Number	Description	Quantity	Unit	Unit Cost	Total Cost
U151076203320	Pipe, st, flg, 150 LB wld neck, on yoke&roll hgrs, 10' OC, bk, 2" dia	5,000	L.F.	\$21.98	\$109,900
U151076203380	Pipe, st, flg, 150 LB wld neck, on yoke&roll hgrs, 10' OC, bk, 6" dia	500	L.F.	\$77.64	\$38,820
U151076203390	Pipe, st, flngd, 150 LB wld neck, on yoke&roll hgrs, 10' OC, blk, 8" dia	400	L.F.	\$109.86	\$43,944
U151102000600	Valves, iron body, butterfly, lug type, pneumatic operator, 8" size	8	Ea.	\$649.05	\$5,192
U151102002200	Valves, iron body, gate, 125 lb, N.R.S., flanged, 2" size	120	Ea.	\$412.12	\$49,454
U151107005500	Valves, steel, forged, ball valve, 800 lb., socket weld, 1" size	60	Ea.	\$113.94	\$6,836
U151107005510	Valves, steel, forged, ball valve, 800 lb., socket weld, 1-1/4" size	90	Ea.	\$144.80	\$13,032
U151107005520	Valves, steel, forged, ball valve, 800 lb., socket weld, 1-1/2" size	60	Ea.	\$183.93	\$11,036
U151107005560	Ball valve, steel, 150 lb, flanged, 4" size	15	Ea.	\$658.87	\$9,883
U159557001200	Nondestructive pneumatic pressure test, 1" - 4" pipe, 1000 - 2000 LF	21	Ea.	\$1,126.90	\$23,665
U159557001380	Nondestructive pneumatic pressure test, 6" - 10" pipe, 1000 - 2000 LF	6	Ea.	\$2,236.76	\$13,421
LSTPIJ	Steamfitters or Pipefitters	240	Hour	\$40.56	\$9,734

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Supreme Court Main & Annex Building
ASSET NUMBER: 194-736
CATEGORY: Beyond Rated Life

Requirement Name	Interior Doors: Replace doors, frames and hardware.	Inspection Date:	07/12/2005
Prime System	Interior Doors	Finish Date:	-
Priority	2- Potentially Critical (Within 12 mos.)	Status:	Open
Inspector Name	Paradis	Actual Cost:	\$0
Action Date	07/12/2006	Total Estimated Cost:	\$674,097

Requirement Description

The interior doors, frames and hardware contained within the Main and Annex Structures have mostly, with some exceptions, exceeded their useful life and should be replaced.

Action Description

Replacement of interior doors, frames and hardware is recommended. Replacements doors and frames should be similar with regard to profile, type and ratings; hardware should be of the accessible type to accommodate the handicapped wherever practicable.

Estimate		Adjustment Factor:		1.00	
Number	Description	Quantity	Unit	Unit Cost	Total Cost
U087101502550	Average, door hdwe, school, single int, reg use, incl handicap lever	528	Door	\$381.35	\$201,353
U087101502600	Average, door hdwe, school, sgl int, hvy use, incl. lever and closer	65	Door	\$492.57	\$32,017
U087101503100	Average, door hardware, school, double exterior, with panic device	12	Pr.	\$985.15	\$11,822
U087101506020	Add for door holder, electro-magnetic	32	Ea.	\$150.75	\$4,824
U087107509000	Panc.dvice. minimum labor/equipment charge	24	Job	\$96.63	\$2,319
RC10231081040	Replace 3'-0" x 7'-0" fully glazed wood door	78	Ea.	\$744.18	\$58,046
RC10231101030	Replace 3'-0" x 7'-0" steel painted interior door	140	Ea.	\$587.66	\$82,272
RC10231102040	Replace 3'-0" x 7'-0" steel door w/ vision lite, & frame	65	Ea.	\$656.00	\$42,640
RC10231211030	Replace 3'-0" x 7'-0" solid core wood door interior	528	Ea.	\$297.10	\$156,869
RC10233260010	Replace brass door closer	118	Ea.	\$196.80	\$23,222
RC10233290010	Replace panic bar	92	Ea.	\$638.18	\$58,713

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Supreme Court Main & Annex Building
ASSET NUMBER: 194-736
CATEGORY: Beyond Rated Life

Requirement Name	Plumbing: Aged DHW Converter	Inspection Date:	07/12/2005
Prime System	Domestic Water Distribution	Finish Date:	-
Priority	2- Potentially Critical (Within 12 mos.)	Status:	Open
Inspector Name	Bilton	Actual Cost:	\$0
Action Date	07/12/2006	Total Estimated Cost:	\$61,622

Requirement Description

The two (2) domestic hot water stream converters are aged. They appear to be original to the building and have exceeded its normal useful service life.

Action Description

Remove the aged water heaters and install a new unit with a storage tank system. Estimate includes domestic hot water generation, storage, and circulating systems as well as piping, fittings, and insulation as required.

Estimate		Adjustment Factor:		1.00
Number	Description	Quantity Unit	Unit Cost	Total Cost
U022203300100	Dump charges, typical urban city, fees only, bldg constr materials	3 Ton	\$63.28	\$190
U022203500700	Rubbish handling, dumpster, 10 c.y cap.(4 Tons), rent/week, 1 dump/week	1 Week	\$339.00	\$339
U138382000510	Control components, aquastats, immersion, high/low limit, breaks cont	2 Ea.	\$213.20	\$426
U138382000518	Control components, aquastats, immersion, circ, contact w/temp rise	2 Ea.	\$181.30	\$363
U138382003014	Pressure gauge, steel case, 0 - 300 PSI, 4" dia dial	4 Ea.	\$69.80	\$279
U138382004600	Control cmpnt,thermometers,stem type,9" case,3-1/2" stem,3/4" NPT	4 Ea.	\$112.17	\$449
U150553003600	Hvac demo, mechanical equipment, heavy items	1 Ton	\$493.12	\$247
U150556006100	Plumbing demo, remove and reset fixtures, maximum	1 Ea.	\$75.15	\$75
U150806006900	Insulation, pipe covering, fbgl, all svce jkt, 1" wall, 2" IPS	20 L.F.	\$3.81	\$76
U151074201260	Pipe cu sldr jts, type K tubing, cplgs & clv hgrs 10' o.c., 2" dia	10 L.F.	\$18.46	\$185
U151076202070	Pipe, stl, wldd, sch. 40, on yoke & roll hgrs, 10' o.c., bl, 2" dia	10 L.F.	\$14.24	\$142
U151101602980	Valves, bronze, gate, N.R.S., soldered, 125 PSI, 2" size	4 Ea.	\$119.18	\$477
U151102002200	Valves, iron body, gate, 125 lb, N.R.S., flanged, 2" size	4 Ea.	\$412.12	\$1,648
U151207600140	Steam trap, CI body, threaded, inverted bucket, 2" pipe	2 Ea.	\$836.72	\$1,673

Number	Description	Quantity	Unit	Unit Cost	Total Cost
U151208401020	Strainers, Y type, iron body, flanged, 125 lb, 2" pipe size	2	Ea.	\$108.07	\$216
U154509002120	Water htr stor tk, 125 psi ASME, galv st, 240 gal., 30" dia x 86" LOA	2	Ea.	\$2,859.65	\$5,719
U154809001060	Heat xfr pkgs, compl, 200<F leaving, 15# stm, one P sys, 130 GPM	2	Ea.	\$21,587.02	\$43,174
AD50201450200	Motor installation, single phase, 115V, to & incl 1/3 HP motor size	2	Ea.	\$1,031.22	\$2,062
LELECJ	Electricians	16	Hour	\$39.97	\$640
LPLUMJ	Plumbers	40	Hour	\$40.46	\$1,618
LSTPIJ	Steamfitters or Pipefitters	40	Hour	\$40.56	\$1,622

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Supreme Court Main & Annex Building
ASSET NUMBER: 194-736
CATEGORY: Beyond Rated Life

Requirement Name	Radiators: Aged	Inspection Date:	07/12/2005
Prime System	Heating Generating Systems	Finish Date:	-
Priority	2- Potentially Critical (Within 12 mos.)	Status:	Open
Inspector Name	Bilton	Actual Cost:	\$0
Action Date	07/12/2006	Total Estimated Cost:	\$135,836

Requirement Description

The perimeter steam radiators have reached their service life.

Action Description

Replace the perimeter steam radiators with new replace and or add thermostats.

Estimate		Adjustment Factor:	1.00	
Number	Description	Quantity Unit	Unit Cost	Total Cost
U022203500840	Rubbish handling, dumpster, 40 c.y cap.(13 Tons), rent/wk, 1 dump/wk	10 Week	\$727.72	\$7,277
U138322003266	Control ddc sys, incl m&l, SP, v.a.v. term box (incl SP temp. sensor)	150 Ea.	\$763.58	\$114,537
U150553003600	Hvac demo, mechanical equipment, heavy items	20 Ton	\$493.12	\$9,862
U157606003250	Hydronic htg, term units, adj brkts, 2 per wl radiator up to 30 sects	150 Ea.	\$27.73	\$4,160

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Supreme Court Main & Annex Building
ASSET NUMBER: 194-736
CATEGORY: Beyond Rated Life

Requirement Name	Roofing: Replace existing roofing systems.	Inspection Date:	07/11/2005
Prime System	Roofing	Finish Date:	-
Priority	3- Necessary - Not Yet Critical (within 13-24 mos.)	Status:	Open
Inspector Name	Paradis	Actual Cost:	\$0
Action Date	07/11/2007	Total Estimated Cost:	\$892,636

Requirement Description

The buildings primary roofing systems, all largely located above the Sixth Floor Level (with some located at the Third Floor Level of the Main Building), have exceeded (or nearly exceeded) their useful life; replacement of these systems is recommended. The torch-applied rolled roofing system, located in the northeast corner of the Main Structure, is more recently installed and is not included in this replacement scope. Replacement of these roofing systems should be completed prior to other interior upgrades as may be identified in this VFA Assessment Report.

Action Description

Replace of the existing roofing systems is recommended due to their age and condition; replacement excludes recent (torch-applied) rolled roofing system in NE corner of main roofing level, yet includes lower roof levels on north and south elevation of Main Building (3rd Floor Level).

The following conditions impact the cost of this action:

1. Abatement of hazardous materials
2. The use of tradesman certified for abatement
3. Extensive air monitoring required within the floor below dealing with this amount of abatement
4. The size of the cranes required to make the lifts to and from the building - multiple mobilization/demobilization
5. Special permits required from the City to stage cranes to make lifts and the need to do the work on weekends.

Estimate **Adjustment Factor:** 1.00

Number	Description	Quantity Unit	Unit Cost	Total Cost
E015906002760C	Rent crane truck mounted, hydraulic, 150 ton capacity	20 Ea./day	\$1,808.30	\$36,166
U022203500840	Rubbish handling, dumpster, 40 c.y cap.(13 Tons), rent/wk, 1 dump/wk	5 Week	\$727.72	\$3,639
U022203500950	Rubbish handling, disposal fee per ton, average for all sizes	240 Ton	\$42.49	\$10,198
U070601102500	Roofing & siding demo, roof accessories, plumbing vent flashing	150 Ea.	\$12.89	\$1,934
U070601103001	Roofing & siding demo, built-up 5 ply roof, including gravel	68,000 S.F.	\$1.03	\$70,040
U070601103400	Roofing & siding demo, built-up, roof insulation board	68,000 S.F.	\$0.23	\$15,640

Number	Description	Quantity	Unit	Unit Cost	Total Cost
U070601104500	Roofing & siding demo, roofing, skylight to 10 s.f	200	Ea.	\$22.56	\$4,512
U075308004800	Single-ply membrane, EPDM, 60 mil, 0.40 PSF, fully adhered w/adhesive	3,000	Sq.	\$133.60	\$400,800
U076506001900	Flashing, copper, 20 oz sheets, under 1000 lbs.	5,600	S.F.	\$6.51	\$36,456
U076506004800	Flashing, EPDM uncured	9,000	S.F.	\$2.02	\$18,180
U077208000620	Roof walkways, recycled rubber, 3' x 4' x 3/4"	3,000	L.F.	\$6.28	\$18,840
U077208009000	Walkway (roof), minimum labor/equipment charge	25	Job	\$79.30	\$1,983
U132811208300	Bulk asbestos removal, asbestos millboard	68,000	S.F.	\$0.79	\$53,720
U132811250550	Asbestos abat work area,cover surfaces w/polthn,floor, ea layer, 6 mil	34,000	S.F.	\$3.49	\$118,660
U132811350460	Asbestos abat equip, personal rsprtr, P.A.P.R., full face, max	14	Ea.	\$770.00	\$10,780
U132811352000	Asbestos abat eqpt, disposable worker prot, whole body suit, plastic	14	Ea.	\$6.05	\$85
U132811352500	Asbestos abat equip, respirator, single use	14	Ea.	\$11.55	\$162
U132811352550	Asbestos abat equip, respirator, cartridge for respirator	140	Ea.	\$12.87	\$1,802
U132811352570	Asbestos abat equip, glove bag, 7 mil, 50" x 64"	100	Ea.	\$9.35	\$935
U132811353050	Asbestos abat equip, HEPA vacuum for work area, maximum	14	Ea.	\$3,052.50	\$42,735
U132811356000	Asbestos abat equip, disposable polyethelene bags, 6 mil, 3 c.f	500	Ea.	\$1.26	\$630
LROFCJ	Roofers, Composition	480	hour	\$33.08	\$15,878
LROHEJ	Roofers, Helpers (Composition)	240	hour	\$24.25	\$5,820
LSHEEJ	Sheet Metal Workers	320	hour	\$40.76	\$13,043
N-	Special City Permits	1	LS	\$10,000.00	\$10,000

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Supreme Court Main & Annex Building
ASSET NUMBER: 194-736
CATEGORY: Building Code

Requirement Name	Domestic Water: Lack of Backflow	Inspection Date:	07/12/2005
Prime System	Domestic Water Distribution	Finish Date:	-
Priority	5- Does Not Meet Current Codes / Standards	Status:	Open
Inspector Name	Bilton	Actual Cost:	\$0
Action Date	07/12/2015	Total Estimated Cost:	\$7,697

Requirement Description

The incoming domestic water service is not equipped with a backflow prevention device as required by the 2003 International Plumbing Code section 608.1. Also the water meter is aged and past its service life.

Action Description

Install a reduced pressure backflow preventer to prevent cross contamination of the domestic water service and new water meter. Work to include re-piping of service as necessary.

Estimate		Adjustment Factor:	1.00	
Number	Description	Quantity Unit	Unit Cost	Total Cost
U013107000140	Field personnel, field engineer, maximum	0 Week	\$1,521.00	\$608
U150556002101	Plumbing demo, piping, metal, 4" thru 6" diameter	10 L.F.	\$2.03	\$20
U151076203380	Pipe, st, flg, 150 LB wld neck, on yoke&roll hgrs, 10' OC, bk, 6" dia	10 L.F.	\$77.64	\$776
U151209407340	Water supply meters, turbine, flanged, 4" diameter, to 650 GPM	1 Ea.	\$1,701.44	\$1,701
U151401005700	Backflow pvntr, OS&Y v,&4 tst cocks, rdcd press, flg, iron, 4" pipe	1 Ea.	\$2,792.87	\$2,793
LPLUHJ	Plumber Helpers	16 Hour	\$31.34	\$501
LPLUMJ	Plumbers	16 Hour	\$40.46	\$647
LSPRIJ	Sprinkler Installers	16 Hour	\$40.56	\$649

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Supreme Court Main & Annex Building
ASSET NUMBER: 194-736
CATEGORY: Building Code

Requirement Name	Electrical Distribution: Lacking Fire Stopping	Inspection Date:	07/12/2005
Prime System	Electrical Service and Distribution	Finish Date:	-
Priority	1- Currently Critical (Immediate)	Status:	Open
Inspector Name	SSmith	Actual Cost:	\$0
Action Date	07/12/2005	Total Estimated Cost:	\$4,162

Requirement Description

It was observed in electrical and telecommunications closets that floor, wall, and/or ceiling penetrations were not filled with an approved fire stopping material as required by the NEC - 1999 Edition Article 300.21.

Action Description

Provide and install an approved fire stopping material in all open penetrations in electrical and telecommunication closets. Estimated quantities are for budgetary purposes only. Electrician's labor has been added to identify all required locations.

Estimate		Adjustment Factor:		1.00
Number	Description	Quantity Unit	Unit Cost	Total Cost
U078401000110	Firestopping, metallic piping, non insul, through walls, 2" diameter	20 Ea.	\$21.88	\$438
U078401000120	Firestopping, metallic piping, non insul, through walls, 4" diameter	20 Ea.	\$28.87	\$577
U078401000130	Firestopping, metallic piping, non insul, through walls, 6" diameter	20 Ea.	\$36.48	\$730
U078401000150	Firestopping, metallic piping, non insul, through floors, 2" diameter	20 Ea.	\$12.02	\$240
U078401000160	Firestopping, metallic piping, non insul, through floors, 4" diameter	20 Ea.	\$15.55	\$311
U078401000170	Firestopping, metallic piping, non insul, through floors, 6" diameter	20 Ea.	\$19.40	\$388
LCLNRJ	Cleaner	16 Hour	\$26.23	\$420
LELECEJ	Electricians	16 Hour	\$39.97	\$640
LHELPJ	Helpers Average (5 trades)	16 hour	\$26.20	\$419

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Supreme Court Main & Annex Building
ASSET NUMBER: 194-736
CATEGORY: Building Code

Requirement Name	Electrical Distribution: Miscellaneous Code Issues	Inspection Date:	07/12/2005
Prime System	Electrical Service and Distribution	Finish Date:	-
Priority	5- Does Not Meet Current Codes / Standards	Status:	Open
Inspector Name	SSmith	Actual Cost:	\$0
Action Date	07/12/2015	Total Estimated Cost:	\$12,516

Requirement Description

This requirement covers miscellaneous electrical maintenance items that violate either the NEC, or Virginia State Building Code, including;

No receptacles located on the roof, ground fault circuit interrupter (GFCI) type, as required by the NEC - 1999 Edition Article 210.8 (b), (2).

Numerous junction boxes and pull boxes were observed missing covers exposing energized conductors, also panel boards were observed lacking blank circuit breaker covers exposing live energized bus bars, not in compliance with the NEC - 1999 Edition Article 110.12 (a).

A quantity of panel boards was observed with suspect, inaccurate, or lacking appropriate branch circuit directories, not in compliance with the NEC - 1999 Edition Article 384-13.

Action Description

Correct miscellaneous code issues listed in requirement. Electrician labor is included to allow for material and labor required.

Estimate		Adjustment Factor:		1.07
Number	Description	Quantity Unit	Unit Cost	Total Cost
U013107000140	Field personnel, field engineer, maximum	2 Week	\$1,521.00	\$3,042
U013107000220	Field personnel, project manager, maximum	1 Week	\$2,429.38	\$2,429
U161209003040	Wire, 600 volt, copper type XHHW, stranded, #10	24 C.L.F.	\$49.75	\$1,194
U161209009000	Wire min labor/equip charge	1 Job	\$84.42	\$84
U161322059990	Conduit to 15' high, minimum labor/equipment charge	1 Job	\$84.42	\$84
U161322100220	Conduit to 15' H, incl couplings only, elec metallic tubing, 3/4" dia	800 L.F.	\$2.31	\$1,848
U161366000060	Outlet boxes, pressed steel, octagon, covers, blank	12 Ea.	\$6.10	\$73
U161366000150	Outlet boxes, pressed steel, square, 4"	8 Ea.	\$19.20	\$154
U161366000250	Outlet boxes, pressed steel, square, 4" covers, blank	12 Ea.	\$6.21	\$75
U161366002200	Outlet boxes, abandonment plate	6 Ea.	\$40.89	\$245
U161366009000	Outlet boxes stl min labor/equip charge	1 Job	\$84.42	\$84

Number	Description	Quantity	Unit	Unit Cost	Total Cost
U161409102482	Wiring device, receptacle, duplex, ground fault interrupting, 20 amp	4	Ea.	\$46.64	\$187
U161409104980	Wiring devices, receptacle, cover plate, weatherproof NEMA 7-23	4	Ea.	\$34.34	\$137
U161409109000	Wiring device min labor/equip charge	1	Job	\$84.42	\$84
U164407003250	Panelboard & load center circuit bkers, panelboard spacers, per pole	12	Ea.	\$12.02	\$144
U164407009000	Panelboard circuit breakers min labor/equip charge	1	Job	\$112.57	\$113
RD50132800020	Maintenance and inspection lighting panel, indoor	6	Ea.	\$19.98	\$120
LELECJ	Electricians	40	Hour	\$39.97	\$1,599

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Supreme Court Main & Annex Building
ASSET NUMBER: 194-736
CATEGORY: Building Code

Requirement Name	Electrical: Lack of As Built Drawings	Inspection Date:	07/12/2005
Prime System	Other Electrical Systems	Finish Date:	-
Priority	5- Does Not Meet Current Codes / Standards	Status:	Open
Inspector Name	SSmith	Actual Cost:	\$0
Action Date	07/12/2015	Total Estimated Cost:	\$24,115

Requirement Description

At present there are no current "As Built" drawings available for use by facilities/site personnel, contractors, and workers as required per NFPA 70E Part II Section 5-1.1.3 that establishes that "A plan shall be developed based on the existing electrical equipment and system and shall utilize up-to-date diagrammatic drawing representation (s)". Current "As Built" drawings are essential for site personnel to perform repairs, renovations, additions, or troubleshooting.

Action Description

Perform a complete site survey tracing out all wiring and identifying circuits in their electrical panels. Update all panel directories. Make up a full set of electrical drawings with all updated information. This will assist with future changes, additions, renovations, etc. and be a time saver when producing plans. Keep a copy on file for future reference once completed, and keep one copy for noting future modifications.

Estimate		Adjustment Factor:	1.00	
Number	Description	Quantity Unit	Unit Cost	Total Cost
U013107000010	Field personnel clerk average	4 Week	\$422.50	\$1,690
U013107000140	Field personnel, field engineer, maximum	6 Week	\$1,521.00	\$9,126
U013107000220	Field personnel, project manager, maximum	2 Week	\$2,429.38	\$4,859
RD50132800020	Maintenance and inspection lighting panel, indoor	25 Ea.	\$19.98	\$500
LELECJ	Electricians	120 hour	\$39.97	\$4,796
LHELPJ	Helpers Average (5 trades)	120 hour	\$26.20	\$3,144

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Supreme Court Main & Annex Building
ASSET NUMBER: 194-736
CATEGORY: Building Code

Requirement Name	Fire Protection: Lack of Backflow	Inspection Date:	07/12/2005
Prime System	Sprinklers	Finish Date:	-
Priority	5- Does Not Meet Current Codes / Standards	Status:	Open
Inspector Name	Bilton	Actual Cost:	\$0
Action Date	07/12/2015	Total Estimated Cost:	\$5,996

Requirement Description

The incoming fire suppression/ Sprinkler/ Standpipe service is not equipped with a backflow prevention device as required by the 2003 International Plumbing Code section 608.1.

Action Description

Install a reduced pressure backflow preventer to prevent cross contamination of the domestic water service. Work to include re-piping of service as necessary.

Estimate		Adjustment Factor:	1.00	
Number	Description	Quantity Unit	Unit Cost	Total Cost
U013107000140	Field personnel, field engineer, maximum	0 Week	\$1,521.00	\$608
U150556002101	Plumbing demo, piping, metal, 4" thru 6" diameter	10 L.F.	\$2.03	\$20
U151076203380	Pipe, st, flg, 150 LB wld neck, on yoke&roll hgrs, 10' OC, bk, 6" dia	10 L.F.	\$77.64	\$776
U151401005700	Backflow pvntr, OS&Y v,&4 tst cocks, rdcd press, flg, iron, 4" pipe	1 Ea.	\$2,792.87	\$2,793
LPLUHJ	Plumber Helpers	16 Hour	\$31.34	\$501
LPLUMJ	Plumbers	16 Hour	\$40.46	\$647
LSPRIJ	Sprinkler Installers	16 Hour	\$40.56	\$649

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Supreme Court Main & Annex Building
ASSET NUMBER: 194-736
CATEGORY: Building Code

Requirement Name	Fire Protection: lacking FDC Signage	Inspection Date:	07/12/2005
Prime System	Fire Protection	Finish Date:	-
Priority	5- Does Not Meet Current Codes / Standards	Status:	Open
Inspector Name	Bilton	Actual Cost:	\$0
Action Date	07/12/2015	Total Estimated Cost:	\$887

Requirement Description

The fire department connections (FDC) on the outside of the building does have signage as required by NFPA- 8.16.2.4.7.1 each fire department connection to sprinkler systems shall be designated by a sign having raised or engraved letters at least 1 in. (25.4 mm) in height on plate or fitting reading service design for example, AUTOSPKR., OPEN SPKR., AND STANDPIPE.

Action Description

Install signage on the FDC located on the outside of the building.

Estimate		Adjustment Factor:	1.00	
Number	Description	Quantity Unit	Unit Cost	Total Cost
U028901000010	Signs stock, 24" x 24", no posts, .080" al reflectorized	4 Ea.	\$83.93	\$336
U104302009000	Signs, min labor&equip charge	5 Job	\$79.92	\$400
LCLAMJ	Common Maintenance Laborer	8 hour	\$18.98	\$152

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Supreme Court Main & Annex Building
ASSET NUMBER: 194-736
CATEGORY: Building Code

Requirement Name	Fire Protection: lacking Tamper Switches	Inspection Date:	07/12/2005
Prime System	Fire Protection	Finish Date:	-
Priority	5- Does Not Meet Current Codes / Standards	Status:	Open
Inspector Name	Bilton	Actual Cost:	\$0
Action Date	07/12/2015	Total Estimated Cost:	\$1,060

Requirement Description

The valves that service the fire pump are not equipped with tamper devices as required by the NFPA - A.6.1.1.

Action Description

Install tamper switches on valves where necessary.

Estimate		Adjustment Factor:	1.00	
Number	Description	Quantity Unit	Unit Cost	Total Cost
U139304006160	Tamper switch, (valve supervisory switch)	4 Ea.	\$103.90	\$416
LELECJ	Electricians	8 hour	\$39.97	\$320
LSPRIJ	Sprinkler Installers	8 Hour	\$40.56	\$324

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Supreme Court Main & Annex Building
ASSET NUMBER: 194-736
CATEGORY: Building Code

Requirement Name	Plumbing: Lack of Vacuum Breakers	Inspection Date:	07/12/2005
Prime System	Other Plumbing Systems	Finish Date:	-
Priority	5- Does Not Meet Current Codes / Standards	Status:	Open
Inspector Name	Bilton	Actual Cost:	\$0
Action Date	07/12/2015	Total Estimated Cost:	\$1,362

Requirement Description

The water service to the janitors sinks is not equipped with a backflow prevention device as required by the 2003 International Plumbing Code section 608.1.

Action Description

Install a vacuum breaker or reduced pressure backflow preventer to prevent cross contamination of the domestic water service. Work to include re-piping of service as necessary.

Estimate		Adjustment Factor:	1.00	
Number	Description	Quantity Unit	Unit Cost	Total Cost
U151406001060	Vacuum breakers, hot or cold water, anti-siphon, brass, 1/2" size	7 Ea.	\$30.51	\$214
LPLUHJ	Plumber Helpers	16 Hour	\$31.34	\$501
LPLUMJ	Plumbers	16 Hour	\$40.46	\$647

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Supreme Court Main & Annex Building
ASSET NUMBER: 194-736
CATEGORY: Code Compliance

Requirement Name	Gas Cylinders: Not Secured	Inspection Date:	07/12/2005
Prime System	Other HVAC Systems and Equipment	Finish Date:	-
Priority	5- Does Not Meet Current Codes / Standards	Status:	Open
Inspector Name	Bilton	Actual Cost:	\$0
Action Date	07/12/2015	Total Estimated Cost:	\$283

Requirement Description

The gas cylinders located in the sub-basement are not secured and capable of falling over creating a hazardous condition. The installation needs to comply with NFPA 18-3.2.6 (cylinders shall be secured in a manner so as not be easily overturned).

Action Description

Secure gas cylinders with chain or in cage type system.

Estimate	Adjustment Factor:	1.00		
Number	Description	Quantity Unit	Unit Cost	Total Cost
U055801500140	Alloy steel chain, clevis slip hook, 5/8"	2 Ea.	\$54.45	\$109
U160703205650	Hangers, channels, supports, u-support, small	4 Ea.	\$8.29	\$33
U160703205700	Hangers, channels, supports, u-support, large	4 Ea.	\$16.19	\$65
LCLAMJ	Common Maintenance Laborer	4 hour	\$18.98	\$76

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Supreme Court Main & Annex Building
ASSET NUMBER: 194-736
CATEGORY: Code Compliance

Requirement Name	HVAC Piping: Over Electrical Equipment	Inspection Date:	07/12/2005
Prime System	Other HVAC Systems and Equipment	Finish Date:	-
Priority	5- Does Not Meet Current Codes / Standards	Status:	Open
Inspector Name	Bilton	Actual Cost:	\$0
Action Date	07/12/2015	Total Estimated Cost:	\$6,408

Requirement Description

Piping is located over the electrical panel in the sub-basement B-117 electrical room. This is in violation of the National Electrical Code (NEC) section 110.26(F)(1) and should be relocated.

Action Description

Remove and relocate the piping in B-117 electrical room to comply with code.

Estimate		Adjustment Factor:	1.00	
Number	Description	Quantity Unit	Unit Cost	Total Cost
U150556002001	Plumbing demo, piping, metal, to 1-1/2" diameter	200 L.F.	\$1.02	\$204
AD20908104250	Pipe steel, schedule 40, threaded, galvanized, 1-1/2" diameter	100 L.F.	\$10.84	\$1,084
AD20908104260	Pipe steel, schedule 40, threaded, galvanized, 2" diameter	50 L.F.	\$13.79	\$690
AD20908104280	Pipe steel, schedule 40, threaded, galvanized, 3" diameter	50 L.F.	\$23.80	\$1,190
LPLUMJ	Plumbers	40 hour	\$40.46	\$1,618
LSTPIJ	Steamfitters or Pipefitters	40 hour	\$40.56	\$1,622

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Supreme Court Main & Annex Building
ASSET NUMBER: 194-736
CATEGORY: Code Compliance

Requirement Name	Stairs: Non-compliant handrails.	Inspection Date:	07/11/2005
Prime System	Stairs	Finish Date:	-
Priority	5- Does Not Meet Current Codes / Standards	Status:	Open
Inspector Name	Paradis	Actual Cost:	\$0
Action Date	07/11/2015	Total Estimated Cost:	\$85,285

Requirement Description

The existing stairwells, located throughout the Main and Annex Structures, are typically lacking code-compliant handrails; most do not have perimeter handrail and the interior handrails are non-continuous. Remedial upgrades to stairwell handrails to meet current code compliance, IBC 2000, Chapter 10 - Means of Egress, Section 1003.3.3.5, is recommended.

Action Description

Add second handrail to existing stairwells at perimeter wall in configuration that meets current code requirements. Retrofit existing interior handrail/guardrail with new continuous handrails that meets requirements of current code.

Estimate		Adjustment Factor:	1.00	
Number	Description	Quantity Unit	Unit Cost	Total Cost
U064305000010	Railing custom design, architectural grade, hardwood, minimum	3,500 L.F.	\$12.63	\$44,205
U099106500300	Coatings & paints, paint, exterior alkyd (oil base), gloss	50 Gal.	\$28.05	\$1,403
U099106505000	Coatings and paints, varnish and stain, alkyd, clear	25 Gal.	\$27.45	\$686
LCARPJ	Carpenters	840 hour	\$35.16	\$29,534
LPORDJ	Painters, Ordinary	312 hour	\$30.31	\$9,457

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Supreme Court Main & Annex Building
ASSET NUMBER: 194-736
CATEGORY: Code Compliance

Requirement Name	Ventilation: Lack of Ventilation in Electrical Room	Inspection Date:	07/12/2005
Prime System	Exhaust Ventilation Systems	Finish Date:	-
Priority	5- Does Not Meet Current Codes / Standards	Status:	Open
Inspector Name	Bilton	Actual Cost:	\$0
Action Date	07/12/2015	Total Estimated Cost:	\$29,061

Requirement Description

The electrical room located in the sub-basement has no ventilation system as required by The National Electrical Code Section 110-13(b) and Article 100A requires ventilation to be provided to the electrical rooms. Also, install ventilation in the lobby elevator machine room a higher than normal ambient temperature exist.

Action Description

Perform an engineering analysis on the cooling load of the elevator machine room. Install an auxiliary air conditioning system that are connected to the emergency power supply. Work to include installation, fit up, and electrical as required to install systems in compliance with ASME A17.1, as well as patching. Coordinate with other elevator and HVAC projects.

Estimate	Adjustment Factor:	1.07		
Number	Description	Quantity Unit	Unit Cost	Total Cost
U022203108500	Cutout demo, min labor/eq chg	1 Job	\$70.55	\$71
U022203300100	Dump charges, typical urban city, fees only, bldg constr materials	1 Ton	\$63.28	\$63
U022203500700	Rubbish handling, dumpster, 10 c.y cap.(4 Tons), rent/week, 1 dump/week	1 Week	\$339.00	\$339
U070601109000	Roofing & siding demo, labor/equip minimum charge	1 Job	\$90.25	\$90
U071305009000	Membrane waterproofing, minimum labor/equipment charge	1 Job	\$230.52	\$231
U138382005230	Thermostats, electric, low voltage, 3 wire	2 Ea.	\$60.54	\$121
U157309007040	Split ductless system, tube/wire kit, 35'	2 Ea.	\$122.07	\$244
U158203003200	Duct accessories, fire damper, curtain, 1-1/2 hr, vert, 24"x12"	2 Ea.	\$46.83	\$94
U158505001120	Grilles, aluminum, air return, 24" x 12"	2 Ea.	\$61.59	\$123
LCEFIJ	Cement Finishers	16 Hour	\$31.86	\$510
AD30501850580	Computer room unit, air cooled, includes remote condenser, 3 ton	2 Ea.	\$10,625.63	\$21,251
LELECJ	Electricians	40 Hour	\$39.97	\$1,599
LROFCJ	Roofers, Composition	24 Hour	\$33.08	\$794
LSHEEJ	Sheet Metal Workers	40 Hour	\$40.76	\$1,630

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Supreme Court Main & Annex Building
ASSET NUMBER: 194-736
CATEGORY: Energy

Requirement Name	Lighting Interior: Replace Fixtures and Lamps	Inspection Date:	07/12/2005
Prime System	Lighting and Branch Wiring	Finish Date:	-
Priority	2- Potentially Critical (Within 12 mos.)	Status:	Open
Inspector Name	SSmith	Actual Cost:	\$0
Action Date	07/12/2006	Total Estimated Cost:	\$689,810

Requirement Description

Existing interior lighting fixtures with older designs and components, including T12 fluorescent lamps and magnetic ballasts, and incandescent lamps, are not energy efficient and have passed their expected lifecycle. It is recommended that the fixtures be replaced with new fixtures complete with energy efficient T8 lamps and electronic ballasts to conserve energy and improve lighting levels.

Action Description

Remove all existing lighting fixtures and replace with new energy efficient fixtures with T8 fluorescent lamps and electronic ballasts to comply with the 1999 edition of the NEC, Article 220-3(b) general lighting loads, and ASHRAE/IES 90.1 -1999, lighting levels.

Estimate		Adjustment Factor:	1.00	
Number	Description	Quantity Unit	Unit Cost	Total Cost
U022203300500	Dump charges, reclamation station, usual charge	32 Ton	\$76.84	\$2,459
U022203500700	Rubbish handling, dumpster, 10 c.y cap.(4 Tons), rent/week, 1 dump/week	8 Week	\$339.00	\$2,712
U022203500910	Rubbish handling, delivery, average for all sizes	8 Ea.	\$47.01	\$376
U160553002260	Electrical demo, fluore fixt, surf mt, 2'x4', 4 lamp	3,500 Ea.	\$20.47	\$71,645
U160553009000	Electrical demo, electrical fixtures min labor & equip	8 Job	\$84.42	\$675
U165104400950	Intr fxtr, fluor, E.W. lamps, acryl lens, 2'w x 4'l, three 32 W	3,500 Ea.	\$150.43	\$526,505
U165104409000	Interior lighting fixtures min labor/equip charge	8 Job	\$112.57	\$901
U165856000180	Lamps, fluorescent, 4' long, T8, 32 W engy saver	105 C	\$640.68	\$67,271
LELECA	Electricians	240 Hour	\$31.97	\$7,673
LELECEJ	Electricians	240 Hour	\$39.97	\$9,593

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Supreme Court Main & Annex Building
ASSET NUMBER: 194-736
CATEGORY: Energy

Requirement Name	Lighting and Branch Wiring: Add Occupancy Sensors	Inspection Date:	07/12/2005
Prime System	Lighting and Branch Wiring	Finish Date:	-
Priority	4- Recommended (within 25-72 mos.)	Status:	Open
Inspector Name	SSmith	Actual Cost:	\$0
Action Date	07/12/2011	Total Estimated Cost:	\$31,436

Requirement Description

Install lighting occupancy sensors in all mechanical and electrical rooms, offices, public areas, conference rooms, and restrooms. Occupancy sensors strategically placed will shut off lighting in areas that are not being utilized saving energy and extending the life expectancy of the light fixtures.

Action Description

Furnish and install new wall switch mounted occupancy sensors in all areas throughout the building that currently do not have them.

Estimate **Adjustment Factor:** 1.00

Number	Description	Quantity Unit	Unit Cost	Total Cost
U165802000150	Automatic wall switches	300 Ea.	\$73.66	\$22,098
U165802000200	Remote power pack	100 Ea.	\$61.40	\$6,140
LELEECJ	Electricians	80 Hr.	\$39.97	\$3,198

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Supreme Court Main & Annex Building
ASSET NUMBER: 194-736
CATEGORY: Functionality

Requirement Name	Branch Wiring: Insufficient Receptacles	Inspection Date:	07/12/2005
Prime System	Lighting and Branch Wiring	Finish Date:	-
Priority	4- Recommended (within 25-72 mos.)	Status:	Open
Inspector Name	SSmith	Actual Cost:	\$0
Action Date	07/12/2011	Total Estimated Cost:	\$95,654

Requirement Description

Existing number of receptacles are not sufficient to provide power in an adequate manner to permanent equipment leading to the inappropriate use of extension cords, also, the lack of receptacles may lead to induced harmonics on overloaded neutral conductors.

Action Description

Install additional receptacles where required to avoid extension cord usage and reduce induced harmonics. Estimate includes costs for investigation of office spaces within the building and makes the assumption that 25 percent of office space within the building should be included.

Estimate		Adjustment Factor:		1.00
Number	Description	Quantity Unit	Unit Cost	Total Cost
U022102000100	Drilling, core, reinf conc slab to 6" tk,w/bit,layout&setup, 1" diam. core	10 Ea.	\$29.46	\$295
U164407001200	Panelboard & ld ctr circ bkrs, 14,000 A I.C., 277 V, 1 P, 15 - 30 A	100 Ea.	\$73.63	\$7,363
U164407201000	Panelboards, NQOD, 4 wire, 120/208 volts, 225 amp main lugs, 42 circs	3 Ea.	\$2,103.82	\$6,311
LCLNRJ	Cleaner	40 Hour	\$26.23	\$1,049
AD50102300280	Feeder installation 600 V, including RGS conduit and XHHW wire, 200 A	600 L.F.	\$28.82	\$17,292
AD50201250560	Receptacle duplex 120 V grnded, 20 A w/box, plate, 3/4" EMT & wire	300 Ea.	\$158.21	\$47,463
LELECJ	Electricians	240 Hour	\$39.97	\$9,593
LHELPJ	Helpers Average (5 trades)	240 hour	\$26.20	\$6,288

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Supreme Court Main & Annex Building
ASSET NUMBER: 194-736
CATEGORY: Functionality

Requirement Name	Electrical Distribution: Miscellaneous Maintenance Issues	Inspection Date:	07/12/2005
Prime System	Electrical Service and Distribution	Finish Date:	-
Priority	4- Recommended (within 25-72 mos.)	Status:	Open
Inspector Name	SSmith	Actual Cost:	\$0
Action Date	07/12/2011	Total Estimated Cost:	\$5,451

Requirement Description

A number of electrical maintenance issues that should be addressed were observed during the tour, they include the following;

A quantity of non ground fault circuit interrupter (GFCI) type receptacles were observed adjacent to and within six feet of a wet sink. Although not explicitly required by code the protection of receptacles adjacent to (Engineer to Define the Wet Areas) with GFCI falls under the NEC - 1999 Edition - Article 110-3(A)(8) that recommends that additional considerations shall be dedicated to other factors that contribute to the practical safeguarding of persons using or likely to come in contact with the equipment. A complete replacement is recommended.

An abandoned generator set was observed in the Sub-basement Mechanical Boiler Room, removal will allow space for future equipment and is therefore recommended

Action Description

Correct miscellaneous maintenance issues listed in requirement. Electrician labor is included to allow for material and labor required.

Estimate		Adjustment Factor:	1.07	
Number	Description	Quantity Unit	Unit Cost	Total Cost
E015904002020C	Rent forklift for brick 18ft 3000lb 2 wheel drive gasoline	2 Ea./day	\$142.08	\$284
U022203300500	Dump charges, reclamation station, usual charge	8 Ton	\$76.84	\$615
U022203500725	Rubbish handling, dumpster, 20 C.Y. cap., (8 Tons), rent/week, 1 dump/week	1 Week	\$397.76	\$398
U022203500910	Rubbish handling, delivery, average for all sizes	1 Ea.	\$47.01	\$47
U022203500920	Rubbish handling, haul, average for all sizes	1 Ea.	\$117.52	\$118
U160553001790	Electrical demo, pull boxes & cabs, recpts & switches, 15 to 30 amp	4 Ea.	\$2.50	\$10
U160553009000	Electrical demo, electrical fixtures min labor & equip	1 Job	\$84.42	\$84
U161409102482	Wiring device, receptacle, duplex, ground fault interrupting, 20 amp	4 Ea.	\$46.64	\$187
U161409102600	Wiring device, wall plates, sst, 1 gang	4 Ea.	\$6.17	\$25
U161409109000	Wiring device min labor/equip charge	1 Job	\$84.42	\$84

Number	Description	Quantity	Unit	Unit Cost	Total Cost
LCLABJ	Common Building Laborers	24	hour	\$27.38	\$657
LCLNRJ	Cleaner	8	Hour	\$26.23	\$210
LELECJ	Electricians	24	Hour	\$39.97	\$959
LEQLTJ	Equipment Operators, Light Equipment	24	hour	\$32.82	\$788
LHELPJ	Helpers Average (5 trades)	24	hour	\$26.20	\$629

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Supreme Court Main & Annex Building
ASSET NUMBER: 194-736
CATEGORY: Functionality

Requirement Name	Lightning Protection: Lacking	Inspection Date:	07/12/2005
Prime System	Other Electrical Systems	Finish Date:	-
Priority	4- Recommended (within 25-72 mos.)	Status:	Open
Inspector Name	SSmith	Actual Cost:	\$0
Action Date	07/12/2011	Total Estimated Cost:	\$16,677

Requirement Description

The building does not have a lightning protection system as indicated per NFPA 780. A lightning strike could cause severe damage to many of the electrical systems and sensitive electronic equipment systems such as alarm systems and computer equipment.

Action Description

Install Lightning Protection System on the roof of building, bond metallic structure on the rooftop to lightning grid.

Estimate		Adjustment Factor:	1.07	
Number	Description	Quantity Unit	Unit Cost	Total Cost
U023156202050	Excavating, chain trencher, 6" wide trench and backfill, 12" deep	650 L.F.	\$0.45	\$293
U131010550500	Lightning protection, air terminals, cu, 1/2" dia x 12" (over 75' hi)	70 Ea.	\$89.43	\$6,260
U131010552100	Lightning protection, cable, cu, 375 lb. per M ft. (over 75' hi)	1,100 L.F.	\$3.56	\$3,916
U131010553100	Lightning protection, arrestor, 650 volt AC to ground	4 Ea.	\$140.04	\$560
U160608000090	Grounding, rod, copper clad, 10' long, 5/8" dia	16 Ea.	\$96.71	\$1,547
U160608000160	Grounding, coupling, bronze, 5/8" diameter	16 Ea.	\$4.66	\$75
U160608000240	Grounding, clamp, bronze, 5/8" dia	16 Ea.	\$15.16	\$243
U160608002730	Grounding, Exothermic weld, 4/0 wire to 1" ground rod	8 Ea.	\$58.27	\$466
U160608002740	Grounding, exothermic weld, 4/0 wire to building steel	4 Ea.	\$56.21	\$225
U160608002760	Grounding, exothermic weld, 4/0 wire to 4/0 wire	4 Ea.	\$54.64	\$219
U160608002790	Grounding, exothermic weld, mold, reusable, for above	1 Ea.	\$99.68	\$100
U160608009000	Ground rods, min labor/equip charge	1 Job	\$84.42	\$84
LELECJ	Electricians	40 hour	\$39.97	\$1,599

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Supreme Court Main & Annex Building
ASSET NUMBER: 194-736
CATEGORY: Integrity

Requirement Name	Branch Wiring: Aged	Inspection Date:	07/12/2005
Prime System	Lighting and Branch Wiring	Finish Date:	-
Priority	3- Necessary - Not Yet Critical (within 13-24 mos.)	Status:	Open
Inspector Name	SSmith	Actual Cost:	\$0
Action Date	07/12/2007	Total Estimated Cost:	\$325,419

Requirement Description

On many floors of the building it was noted that branch circuit devices appeared aged, past their 20 year 2003 BOMA life expectancy, giving validation to the premise that branch circuit wiring is of the similar vintage and similar condition.

Action Description

Replace existing branch circuit wiring and devices. Receptacles for computers shall be equipped with surge protection. Receptacles within restrooms, mechanical rooms, roofs, and kitchens shall be equipped with ground fault circuit interrupter (GFCI).

Estimate **Adjustment Factor:** 1.07

Number	Description	Quantity Unit	Unit Cost	Total Cost
U022203300100	Dump charges, typical urban city, fees only, bldg constr materials	16 Ton	\$63.28	\$1,012
U022203500700	Rubbish handling, dumpster, 10 c.y cap.(4 Tons), rent/week, 1 dump/week	4 Week	\$339.00	\$1,356
U022203500910	Rubbish handling, delivery, average for all sizes	4 Ea.	\$47.01	\$188
U022203500920	Rubbish handling, haul, average for all sizes	4 Ea.	\$117.52	\$470
U160553001790	Electrical demo, pull boxes & cabs, recpts & switches, 15 to 30 amp	2,500 Ea.	\$2.50	\$6,250
U160553001840	Electrical demo, wire, THN-THWN-THHN, removed from, in place conduit, #12	3,750 C.L.F.	\$6.14	\$23,025
U160553009000	Electrical demo, electrical fixtures min labor & equip	8 Job	\$84.42	\$675
U161209003020	Wire, 600 volt, copper type XHHW, stranded, #12	3,750 C.L.F.	\$42.35	\$158,813
U161209009000	Wire min labor/equip charge	8 Job	\$84.42	\$675
U161409100500	Wiring devices, toggle switch, quiet type, single pole, 20 amp	300 Ea.	\$20.25	\$6,075
U161409102470	Wiring devices, receptacle, duplex, 120 volt, ground, 20 amp	1,500 Ea.	\$21.77	\$32,655
U161409102482	Wiring device, receptacle, duplex, ground fault interrupting, 20 amp	100 Ea.	\$46.64	\$4,664
U161409102530	Wiring device, receptacle, surge suppressor, duplex, 20 amp	400 Ea.	\$56.93	\$22,772
U161409102600	Wiring device, wall plates, sst, 1 gang	2,500 Ea.	\$6.17	\$15,425
U161409109000	Wiring device min labor/equip charge	8 Job	\$84.42	\$675

Number	Description	Quantity	Unit	Unit Cost	Total Cost
LCLNRJ	Cleaner	80	hour	\$26.23	\$2,098
AD50201350320	Miscellaneous power, 1.2 watts	130,000	S.F.	\$0.21	\$27,300

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Supreme Court Main & Annex Building
ASSET NUMBER: 194-736
CATEGORY: Integrity

Requirement Name	Ceiling Finishes: Repaint plaster/gypsum wallboard ceilings.	Inspection Date:	07/12/2005
Prime System	Ceiling Finishes	Finish Date:	-
Priority	3- Necessary - Not Yet Critical (within 13-24 mos.)	Status:	Open
Inspector Name	Paradis	Actual Cost:	\$0
Action Date	07/12/2007	Total Estimated Cost:	\$122,890

Requirement Description

The plaster/gypsum wallboard ceiling finishes throughout the Main and Annex Structures look aged, some areas more than others, repaint in their entirety. Coordinate work efforts with other interior improvements identified in this assessment report.

Action Description

Repaint all plaster/gypsum wallboards ceilings throughout Main and Annex Structures. Coordinate work efforts with other interior improvements identified in this assessment report.

Estimate **Adjustment Factor:** 1.00

Number	Description	Quantity Unit	Unit Cost	Total Cost
RC30331050010	Repair plaster ceiling - (2% of ceilings)	1,000 S.Y.	\$39.79	\$39,790
RC30331050030	Refinish plaster ceiling	10,000 S.Y.	\$8.31	\$83,100

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Supreme Court Main & Annex Building
ASSET NUMBER: 194-736
CATEGORY: Integrity

Requirement Name	Exterior Doors: Refinish exterior bronze door assemblies.	Inspection Date:	07/13/2005
Prime System	Exterior Doors	Finish Date:	-
Priority	3- Necessary - Not Yet Critical (within 13-24 mos.)	Status:	Open
Inspector Name	Paradis	Actual Cost:	\$0
Action Date	07/13/2007	Total Estimated Cost:	\$24,693

Requirement Description

The primary entry door assemblies to the Main and Annex Structures, located on Ninth, Eighth and Franklins Streets, are in need of professional refinishing.

Action Description

Repair/refinish existing bronze door assemblies at primary entrances. Replace door hardware as necessary with matching bronze elements suitable to historical designation criteria.

Estimate		Adjustment Factor:	1.00	
Number	Description	Quantity Unit	Unit Cost	Total Cost
U087107502200	Panic device, narrow stile, rim mtd, bar and vertical rod, exit only	17 Ea.	\$641.52	\$10,906
U087107509000	Panc.dvice. minimum labor/equipment charge	17 Job	\$96.63	\$1,643
LSKWKJ	Skilled Workers Average (35 trades)	340 hour	\$35.72	\$12,145

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Supreme Court Main & Annex Building
ASSET NUMBER: 194-736
CATEGORY: Integrity

Requirement Name	Exterior Windows: Rehab of steel window assemblies.	Inspection Date:	07/12/2005
Prime System	Exterior Windows	Finish Date:	-
Priority	2- Potentially Critical (Within 12 mos.)	Status:	Open
Inspector Name	Paradis	Actual Cost:	\$0
Action Date	07/12/2006	Total Estimated Cost:	\$608,421

Requirement Description

The existing steel windows units are in poor condition, particularly with respect to their operable sash (i.e., non-functioning). Rehab of the existing windows is required, replacement is not permitted per order of the historic landmark designation on the Building. Coordinate window upgrades (rehab) to coincide with building envelope (repainting) and remedial interior upgrades caused by water infiltration to interior of building.

Action Description

Repair/restore integrity of existing (historical) steel windows, including their operability. Remove and recaulk perimeter of window units at exterior of building envelope. Install new (operable) interior storm window units.

Estimate		Adjustment Factor: 1.00		
Number	Description	Quantity Unit	Unit Cost	Total Cost
U015407800710	Swing staging, 24' l, powered, electric or air, to 150'high, rent/month	16 Ea.	\$1,291.21	\$20,659
U015407802200	Swing staging, move swing staging (setup and remove)	28 Move	\$758.49	\$21,238
U049102001100	Caulking masonry, no scaf, 1/2" x 1/2" jt, cut out/re-caulk, polyurethane	5,400 L.F.	\$2.06	\$11,124
U085809001740	Storm wndw alum double hung combo custom anod 4'-0"x6'-0"	480 Ea.	\$235.42	\$113,002
RB20231023010	Replace glass - 3rd floor (1% of glass)	3,560 S.F.	\$15.08	\$53,685
RB20231023020	Repair 3'-9" x 5'-5" steel frame window - 3rd flr.	865 Ea.	\$267.98	\$231,803
RB20231023030	Refinish 3'-9" x 5'-5" steel frame window - 3rd flr.	865 Ea.	\$122.74	\$106,170
LBRICJ	Bricklayers	480 hour	\$35.39	\$16,987
LCARPJ	Carpenters	960 hour	\$35.16	\$33,754

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Supreme Court Main & Annex Building
ASSET NUMBER: 194-736
CATEGORY: Integrity

Requirement Name	Interior Finishes: Rehab existing bathroom.	Inspection Date:	07/12/2005
Prime System	Interior Finishes	Finish Date:	-
Priority	3- Necessary - Not Yet Critical (within 13-24 mos.)	Status:	Open
Inspector Name	Paradis	Actual Cost:	\$0
Action Date	07/12/2007	Total Estimated Cost:	\$592,600

Requirement Description

The existing bathroom finishes, more specifically floors, wall and ceiling finishes, have exceeded their useful life and require replacement.

Action Description

Replace interior finishes in bathrooms, including: ceramic tile flooring and wall tiles. Provide new bathroom accessories and toilet partitions.

Estimate		Adjustment Factor: 1.00			
Number	Description	Quantity	Unit	Unit Cost	Total Cost
U101601003000	Partitions, toilet, cubicles, wall hung partitions, painted metal	94	Ea.	\$668.84	\$62,871
U101601006800	Partitions, toilet, urinal screen, wall hung, brkt supported, ptd met	24	Ea.	\$352.13	\$8,451
U101601009000	Partitions, toilet, min labor&equip charge	94	Job	\$127.87	\$12,020
U108101000510	Bathroom access,disp units,soap&towel disps,mir&shelf,flush mtd	102	Ea.	\$394.97	\$40,287
U108101001000	Bathroom accessories, grab bar, straight, 1-1/4" dia, SS, 30" long	12	Ea.	\$37.63	\$452
U108101001105	Bathroom accessories, grab bar, straight, 1-1/4" dia, SS, 42" long	12	Ea.	\$38.53	\$462
U108101002300	Bathroom accessories, hand dryer, surface mtd, elec, 115 volt, 20 amp	18	Ea.	\$613.42	\$11,042
U108101002700	Bathroom accessories, hat and coat strip, SS, 6 hook, 60" long	18	Ea.	\$108.38	\$1,951
U108101003200	Bathroom accessories, mir with stainless steel, 3/4" sq FR, 48" x 24"	18	Ea.	\$206.87	\$3,724
U108101004200	Bathroom accessories, napkin/tampon dispenser, recessed	9	Ea.	\$362.31	\$3,261
U108101004400	Bathroom accessories, robe hook, single, hvy dty, concealed mounting	35	Ea.	\$21.09	\$738
U108101009000	Bathroom accessories, min labor&equip charge	102	Job	\$63.93	\$6,521
RC30132200020	Replace 4" x 4" thin set ceramic tile	330	C.S.F.	\$595.31	\$196,452
RC30234200020	Replace 2" x 2" thin set ceramic tile floor	140	C.S.F.	\$930.46	\$130,264
RC30234280020	Replace ceramic trim	11,700	L.F.	\$9.69	\$113,373

Number	Description	Quantity	Unit	Unit Cost	Total Cost
RC30234600020	Replace thinset marble floor	27	S.F.	\$27.09	\$731

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Supreme Court Main & Annex Building
ASSET NUMBER: 194-736
CATEGORY: Integrity

Requirement Name	Pneumatic HVAC Controls: Aged	Inspection Date:	07/12/2005
Prime System	Controls and Instrumentation	Finish Date:	-
Priority	3- Necessary - Not Yet Critical (within 13-24 mos.)	Status:	Open
Inspector Name	Bilton	Actual Cost:	\$0
Action Date	07/12/2007	Total Estimated Cost:	\$23,564

Requirement Description

The HVAC system has a mix of pneumatic and DDC, not converted are control valves at units and room thermostats. These controls should be converted to DDC, this would provide improved control and will reduce maintenance costs.

Action Description

Replace pneumatic controls to DDC. Add to existing energy management system (EMS).

Estimate		Adjustment Factor:	1.00	
Number	Description	Quantity Unit	Unit Cost	Total Cost
U138322000120	Control ddc,incl m&l,analog input,sensors(avg 150' in cnd),duct temp	12 Ea.	\$334.98	\$4,020
U138322000130	DDC sys cmpnt,(incl matl&L),anlg input,sensor(50' 1/2"EMT),space temp	24 Ea.	\$236.75	\$5,682
U151205800120	Mixing valve, automatic water tempering, 1-1/4" size	6 Ea.	\$925.18	\$5,551
U151205800160	Mixing valve, automatic water tempering, 2" size	6 Ea.	\$1,385.17	\$8,311

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Supreme Court Main & Annex Building
ASSET NUMBER: 194-736
CATEGORY: Integrity

Requirement Name	Wall Finishes: Repaint interior wall finishes.	Inspection Date:	07/12/2005
Prime System	Wall Finishes	Finish Date:	-
Priority	3- Necessary - Not Yet Critical (within 13-24 mos.)	Status:	Open
Inspector Name	Paradis	Actual Cost:	\$0
Action Date	07/12/2007	Total Estimated Cost:	\$322,555

Requirement Description

The interior wall finishes of the Main and Annex Structures appear to be well worn and, with few exceptions, require re-painting. Work efforts should be coordinated with new ceilings, doors and frames as called for under separate requirements in this assessment report.

Action Description

Repaint interior wall surfaces throughout Main and Annex Structures; work scope include remedial repairs to interior side of exterior walls damaged by water infiltration from sub-standard steel windows. Coordinate work efforts with exterior building envelope upgrades (i.e., re-roofing, repointing and window restoration), as well as other interior finishes work.

Estimate		Adjustment Factor:		1.00
Number	Description	Quantity Unit	Unit Cost	Total Cost
U090601303420	Walls & partitions demo, plaster, gypsum or perlite, on metal lath	6,500 S.F.	\$0.65	\$4,225
U092101000600	Gypsum plaster, 2 coats on and incl. 3/8" gyp lath on steel, on walls	700 S.Y.	\$22.05	\$15,435
RC30131060020	Replace medium weight vinyl wall covering	285 C.S.F.	\$222.79	\$63,495
RC30132140010	Repair 5/8" drywall - (2% of walls)	12,000 S.F.	\$1.14	\$13,680
RC30132140030	Refinish drywall	513,000 S.F.	\$0.44	\$225,720

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Supreme Court Main & Annex Building
ASSET NUMBER: 194-736
CATEGORY: Life Safety

Requirement Name	Emergency Lighting: Insufficient Exit Signage	Inspection Date:	07/12/2005
Prime System	Emergency Light and Power Systems	Finish Date:	-
Priority	1- Currently Critical (Immediate)	Status:	Open
Inspector Name	SSmith	Actual Cost:	\$0
Action Date	07/12/2005	Total Estimated Cost:	\$37,704

Requirement Description

Exit signage within the building, marking emergency egresses, appears to be lacking in areas, insufficient to meet the required egress marking as required by NFPA Life Safety 101, Section 7.10 Marking of Means of Egress , including corridor/hallways and tenant occupied spaces.

Action Description

Provide new additional exit signage to mark emergency egresses throughout the building. Estimate includes costs associated with a design study to correctly identify areas and signage quantities, a quantity of 50 signs are used for budgeting purposes.

Estimate		Adjustment Factor:		1.00
Number	Description	Quantity Unit	Unit Cost	Total Cost
U013107000140	Field personnel, field engineer, maximum	2 Week	\$1,521.00	\$3,042
U013107000220	Field personnel, project manager, maximum	2 Week	\$2,429.38	\$4,859
U022203500700	Rubbish handling, dumpster, 10 c.y cap.(4 Tons), rent/week, 1 dump/week	2 Week	\$339.00	\$678
U022203500910	Rubbish handling, delivery, average for all sizes	2 Ea.	\$47.01	\$94
U161209003040	Wire, 600 volt, copper type XHHW, stranded, #10	75 C.L.F.	\$49.75	\$3,731
U161322059990	Conduit to 15' high, minimum labor/equipment charge	8 Job	\$84.42	\$675
U161322100220	Conduit to 15' H, incl couplings only, elec metallic tubing, 3/4" dia	2,500 L.F.	\$2.31	\$5,775
U161366000150	Outlet boxes, pressed steel, square, 4"	100 Ea.	\$19.20	\$1,920
U161366000250	Outlet boxes, pressed steel, square, 4" covers, blank	50 Ea.	\$6.21	\$311
U165303200240	Exit light clg or wall mount, L.E.D. battery unit, single face	25 Ea.	\$194.85	\$4,871
U165303200260	Exit light clg or wall mount, L.E.D. battery unit, double face	25 Ea.	\$204.69	\$5,117
U165303209000	Exit light min labor/equip charge	8 Job	\$84.42	\$675
LCARPJ	Carpenters	32 Hour	\$35.16	\$1,125
LCLNRJ	Cleaner	16 Hour	\$26.23	\$420
LELE CJ	Electricians	80 Hour	\$39.97	\$3,198
LPORDJ	Painters, Ordinary	40 Hour	\$30.31	\$1,212

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Supreme Court Main & Annex Building
ASSET NUMBER: 194-736
CATEGORY: Life Safety

Requirement Name	HVAC Special Sys: Lack of Smoke Control	Inspection Date:	07/12/2005
Prime System	Other HVAC Systems and Equipment	Finish Date:	-
Priority	1- Currently Critical (Immediate)	Status:	Open
Inspector Name	Bilton	Actual Cost:	\$0
Action Date	07/12/2005	Total Estimated Cost:	\$94,966

Requirement Description

The building does not have a smoke exhaust system as required by the IBC Section 403 buildings 75 feet high is considered a high rise and need to follow section 909 smoke control systems, 909.20.5 stair pressurization alternative. The International Building Code sections 403.1 and 405.5.1 and .2 requires a smoke proof enclosure serving occupied floors located more than 75 feet above the lowest level of fire department vehicle access. A mechanical pressurization system with a two hour fire rated duct chase assembly, floor smoke and detectors and electrical services, but not including the legally required standby power system.

Action Description

Perform an engineering analysis of the smoke generation rate and exhaust requirements for the space and install an appropriate system following the guidelines of IBC section 403 Guide for Smoke Management Systems.

Install a smoke control system following the guidelines of NFPA 92B and NFPA 101 Section 13.4.5.5. Work to include ventilation fan, relief louver, fan, fire department controls, both normal and standby power, and connection to the building fire alarm. Coordinate with other HVAC, Fire Protection, Architectural, and Electrical projects.

Since comprehensive evaluation and engineering design is out of scope for this survey, general rules are applied from NYC BC.

For atriums 55 ft or less in height with a volume of 600,000 cubic feet or less, a smoke exhaust system of 40,000 cfm shall be installed at the ceiling. If the volume is greater, than airflow shall be at four air changes per hour. Supply air inlets are to be located at the lowest level and be sized to provide 75 percent of the exhaust.

For atriums greater than 55 ft in height, the supply air shall be introduced from the floor of the atrium and directed vertically to the exhaust outlet above. Supply capacity shall be 75 percent of the exhaust.

Estimate		Adjustment Factor:		1.07
Number	Description	Quantity Unit	Unit Cost	Total Cost
U013107000120	Field personnel, field engineer, average	2 Week	\$1,309.75	\$2,620
U022203108500	Cutout demo, min labor/eq chg	4 Job	\$70.55	\$282
U022203300100	Dump charges, typical urban city, fees only, bldg constr materials	2 Ton	\$63.28	\$127
U022203500800	Rubbish handling, dumpster, 30 c.y cap.(10 Tons), rent/wk, 1 dump/wk	2 Week	\$601.16	\$1,202
U022203600820	Saw cutting, concrete walls, rod reinforcing, per inch of depth	400 L.F.	\$7.36	\$2,944

Number	Description	Quantity	Unit	Unit Cost	Total Cost
U070601109000	Roofing & siding demo, labor/equip minimum charge	4	Job	\$90.25	\$361
U137200654175	Detection sys, fire, spklr & standpipe, addressable interface device	2	Ea.	\$275.63	\$551
U137200655240	Detection systems, smoke detector (addressable type)	14	Ea.	\$225.57	\$3,158
U137200658400	Detect sys, fire sprnklr & stndpipe alarm, alarm device	1	Ea.	\$182.93	\$183
U137200658600	Detect sys, fire sprnklr & stndpipe alarm, actuating device	1	Ea.	\$364.43	\$364
U138382000910	Control components, control panel readout, panel up to 12 indicators	1	Ea.	\$461.34	\$461
U139304002060	Sprinkler sys, release, thermostatic, for hyd or pneu release line	1	Ea.	\$348.44	\$348
U139602003000	Automatic fire suppression systems, electro/mechanical release	2	Ea.	\$320.33	\$641
U158301004260	Fans, centrifugal, double width wheel, 40,980 CFM, 25 HP	2	Ea.	\$12,224.38	\$24,449
U158505000620	Grilles, aluminum, air supply, single deflection, adj, 36" x 30"	14	Ea.	\$179.02	\$2,506
U158508005860	Ventilators, rlf vent, rect, alum, galv curb, 40,000 CFM, 96"x120"	2	Ea.	\$7,488.45	\$14,977
U158508007600	Ventilators,rlf,pwr open,spring ret dmpr,mot for ea SF throat area	80	S.F.	\$57.42	\$4,594
U161205003400	Mineral insulated cable, 600 volt, 4 conductor, #8	2	C.L.F.	\$1,377.86	\$2,756
U161207502100	Special ws & ftngs, fire alarm FEP teflon 150 V to 200< C, #18, 10 pr	2	C.L.F.	\$594.72	\$1,189
U161209000050	Wire, 600 volt, type THW, copper, stranded #14	2	C.L.F.	\$31.07	\$62
U161322051750	Cond to 15' H,incl 2 termn,2 elb&11 bm CLP per 100',galv stl,1/2" dia	1,000	L.F.	\$6.57	\$6,570
U161366000020	Outlet boxes, pressed steel, octagon, 4"	6	Ea.	\$18.86	\$113
U161366000060	Outlet boxes, pressed steel, octagon, covers, blank	6	Ea.	\$6.10	\$37
U161366000152	Steel outlet box 4" square	6	Ea.	\$21.08	\$126
U162209000160	Variable frequency drives enclosed (NEMA 1), 460 V, 25 HP motor size	2	Ea.	\$5,152.44	\$10,305
U164406400200	Motor control center, strs, control XFMR, 25 HP, size 2, 18" hi	2	Ea.	\$1,577.40	\$3,155
LELECJ	Electricians	40	Hour	\$39.97	\$1,599
LROFCJ	Roofers, Composition	24	Hour	\$33.08	\$794
LSHEEJ	Sheet Metal Workers	40	Hour	\$40.76	\$1,630
LSPRIJ	Sprinkler Installers	16	Hour	\$40.56	\$649

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Supreme Court Main & Annex Building
ASSET NUMBER: 194-736
CATEGORY: Life Safety

Requirement Name	Interior Doors: Replace doors and frames at Stair #__.	Inspection Date:	07/12/2005
Prime System	Interior Doors	Finish Date:	-
Priority	2- Potentially Critical (Within 12 mos.)	Status:	Open
Inspector Name	Paradis	Actual Cost:	\$0
Action Date	07/12/2006	Total Estimated Cost:	\$9,169

Requirement Description

The existing exit stairwell doors and frames located on the south-side of the Annex Structure, adjacent to Elevators 1-2-3, have improper swing for egress purposes. The present condition requires the building occupants to go around the door (swing) when exiting from the office suites located along the Franklin Street side of the Annex Structure. In the event of an emergency such a swing may compromise a safe egress from the floor level, jeopardizing the life safety of the occupants. Replacement is recommended.

Action Description

Replacement of door and frames to the Exit Stairwell adjacent to Elevators 1-2-3. Door and frame assembly to be have B-label fire-rating and window light of less than 100 square-inches.

Estimate		Adjustment Factor:	1.00	
Number	Description	Quantity Unit	Unit Cost	Total Cost
U081102500100	Door frs,st chans W/ahr&bar stops,6" chan @ 8.2#/LF,3'x7' dr,wt 150#	5 Ea.	\$285.54	\$1,428
U081103000080	Fire door, st, fl, "B" lbl, 90 min, full pnl, 20 Ga., 3'-0" x 7'-0"	5 Ea.	\$271.10	\$1,356
U087101502250	Average, dr hdwe, school, sgl ext, incl lever, not incl panic device	5 Door	\$418.42	\$2,092
U087103000400	Door closer, adj backcheck, 4 way mount, non sized, regular arm	5 Ea.	\$227.76	\$1,139
U087107500700	Panic device, for rim locks, sgl dr, touch bar & vert rod, exit only	5 Ea.	\$630.93	\$3,155

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Supreme Court Main & Annex Building
ASSET NUMBER: 194-736
CATEGORY: Life Safety

Requirement Name	Interior Doors: Replace existing metal door and frame at Room B117.	Inspection Date:	07/13/2005
Prime System	Interior Doors	Finish Date:	-
Priority	1- Currently Critical (Immediate)	Status:	Open
Inspector Name	Paradis	Actual Cost:	\$0
Action Date	07/13/2005	Total Estimated Cost:	\$1,148

Requirement Description

The existing metal door and frame at Room B117, Main Electrical Switchgear Room, does not have fire-rating labels to indicate that it is a fire-rated door and frame assembly. Such an assembly, used in this location, should have a B-label (or 90min. rating) as per the IBC 2000, Section 714, Opening Protectives.

Action Description

Replace the existing door and frame to Room B-117, Electrical Switchgear Room; door and frame not labeled, assembly requires B-label (90-min).

Estimate		Adjustment Factor:	1.00	
Number	Description	Quantity Unit	Unit Cost	Total Cost
U080601102950	Door demo, door frame min labor/equip chg	1 Job	\$47.03	\$47
U081102500100	Door frs,st chans W/ahr&bar stops,6" chan @ 8.2#/LF,3'x7' dr,wt 150#	1 Ea.	\$285.54	\$286
U081102509000	Door frames, minimum labor/equipment charge	1 Job	\$364.28	\$364
U081103000180	Fire door, st, fl, "B" lbl, 90 min, full pnl, 18 Ga., 3'-0" x 7'-0"	1 Ea.	\$296.14	\$296
U087101503600	Average, door hardware, toilet, public, single interior	1 Door	\$154.66	\$155

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Supreme Court Main & Annex Building
ASSET NUMBER: 194-736
CATEGORY: Obsolescence

Requirement Name	Conveying: Abandoned Equipment	Inspection Date:	07/12/2005
Prime System	Elevators and Lifts	Finish Date:	-
Priority	4- Recommended (within 25-72 mos.)	Status:	Open
Inspector Name	SSmith	Actual Cost:	\$0
Action Date	07/12/2011	Total Estimated Cost:	\$5,579

Requirement Description

Elevator machine rooms B-45 and 54 contain abandoned obsolete elevator equipment that is currently not in service. Removal of all related equipment is recommended to allow the use of the space.

Action Description

Remove abandoned related elevator equipment. Reconditioning of space is not considered in this estimation.

Estimate		Adjustment Factor:	1.07	
Number	Description	Quantity Unit	Unit Cost	Total Cost
U022203300100	Dump charges, typical urban city, fees only, bldg constr materials	8 Ton	\$63.28	\$506
U022203500725	Rubbish handling, dumpster, 20 C.Y. cap., (8 Tons), rent/week, 1 dump/week	1 Week	\$397.76	\$398
U022203500910	Rubbish handling, delivery, average for all sizes	1 Ea.	\$47.01	\$47
LCLAMJ	Common Maintenance Laborer	40 hour	\$18.98	\$759
LCLNRJ	Cleaner	40 hour	\$26.23	\$1,049
LELECJ	Electricians	16 hour	\$39.97	\$640
LELEVJ	Elevator Constructors	24 hour	\$44.52	\$1,068
LWRCKJ	*Wrecking	24 hour	\$31.10	\$746

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Supreme Court Main & Annex Building
ASSET NUMBER: 194-736
CATEGORY: Obsolescence

Requirement Name	Lighting System: Aged Exterior Lighting	Inspection Date:	07/12/2005
Prime System	Lighting and Branch Wiring	Finish Date:	-
Priority	3- Necessary - Not Yet Critical (within 13-24 mos.)	Status:	Open
Inspector Name	SSmith	Actual Cost:	\$0
Action Date	07/12/2007	Total Estimated Cost:	\$9,287

Requirement Description

Existing exterior lighting at and around the perimeter of the roof mounted cooling tower appeared aged, past it's 2003 BOMA life expectancy of 20 years

Action Description

Replace all aged light fixtures on or at the roof mounted cooling tower with new high intensity discharge (HID) metal halide lamped fixtures..

Estimate		Adjustment Factor:	1.07	
Number	Description	Quantity Unit	Unit Cost	Total Cost
U022203300100	Dump charges, typical urban city, fees only, bldg constr materials	1 Ton	\$63.28	\$32
U022203500700	Rubbish handling, dumpster, 10 c.y cap.(4 Tons), rent/week, 1 dump/week	1 Week	\$339.00	\$339
U160553002660	Electrical demo, exterior fixtures, incandescent, quartz, 1500 watt	10 Ea.	\$25.01	\$250
U160553009000	Electrical demo, electrical fixtures min labor & equip	1 Job	\$84.42	\$84
U165203002000	Exterior fixts, floodlights w/blst&lamp, P mtd P not incld, mh, 400 W	10 Ea.	\$532.72	\$5,327
LELECJ	Electricians	40 hour	\$39.97	\$1,599
LHELPI	Helpers Average (5 trades)	40 hour	\$26.20	\$1,048

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Supreme Court Main & Annex Building
ASSET NUMBER: 194-736
CATEGORY: Obsolescence

Requirement Name	Mechanical Equipment: Abandoned in Place	Inspection Date:	07/12/2005
Prime System	Other HVAC Systems and Equipment	Finish Date:	-
Priority	4- Recommended (within 25-72 mos.)	Status:	Open
Inspector Name	Bilton	Actual Cost:	\$0
Action Date	07/12/2011	Total Estimated Cost:	\$13,044

Requirement Description

Obsolete, mechanical equipment is currently not in service. Removal of all related equipment is recommended to allow the use of the space. Should the abandoned equipment be left to deteriorate, it may potentially pose a hazard to the working environment or the building itself.

Action Description

Remove abandoned exhaust fan located in room P-5 and related equipment, the enamel water fountains on each floor, equipment on the mezzanine floor, the generator in the sub-basement also the radiator in the drive thru on the street level. the air compressors in the sub-basement, other abandoned equipment in the sub-basement. Remove the three oil tanks in the sub-basement one (1) contains diesel fuel and the other two tanks contained # 6 fuel oil, the tanks are above ground encased in cinder block the fuel lines are still existing. Reconditioning of space is not considered in this estimation.

Estimate		Adjustment Factor:		1.07
Number	Description	Quantity Unit	Unit Cost	Total Cost
U022203300100	Dump charges, typical urban city, fees only, bldg constr materials	15 Ton	\$63.28	\$949
U022203500840	Rubbish handling, dumpster, 40 c.y cap.(13 Tons), rent/wk, 1 dump/wk	4 Week	\$727.72	\$2,911
U022203500910	Rubbish handling, delivery, average for all sizes	10 Ea.	\$47.01	\$470
U130052010530	Demo,steel tank only,single wall,above ground, 5000 thru 10000 gallon	3 Ea.	\$893.76	\$2,681
LCLAMJ	Common Maintenance Laborer	40 hour	\$18.98	\$759
LCLNRJ	Cleaner	40 hour	\$26.23	\$1,049
LELECJ	Electricians	8 hour	\$39.97	\$320
LSKWKJ	Skilled Workers Average (35 trades)	40 hour	\$35.72	\$1,429
LSTPIJ	Steamfitters or Pipefitters	40 hour	\$40.56	\$1,622

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Supreme Court Main & Annex Building
ASSET NUMBER: 194-736
CATEGORY: Obsolescence

Requirement Name	Security CCTV System: Aged Recording Method	Inspection Date:	07/12/2005
Prime System	Communications and Security	Finish Date:	-
Priority	3- Necessary - Not Yet Critical (within 13-24 mos.)	Status:	Open
Inspector Name	SSmith	Actual Cost:	\$0
Action Date	07/12/2007	Total Estimated Cost:	\$53,174

Requirement Description

Currently, closed circuit television (CCTV) security cameras are in used within the building with aged video tape recording at the Turret Security Control Room.

Action Description

Provide new, state of the art, digital recording of all CCTV cameras utilized within the building for an accurate, easily managed recording system.

Estimate		Adjustment Factor:	1.00	
Number	Description	Quantity Unit	Unit Cost	Total Cost
U168506003800	TV systems, educational TV studio, E & electronic equip. only, min	4 Total	\$12,631.85	\$50,527
LELECJ	Electricians	40 hour	\$39.97	\$1,599
LHELPJ	Helpers Average (5 trades)	40 hour	\$26.20	\$1,048

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Supreme Court Main & Annex Building
ASSET NUMBER: 194-736
CATEGORY: Reliability

Requirement Name	Electrical Distribution: Panel Boards Lacking Capacity	Inspection Date:	07/12/2005
Prime System	Electrical Service and Distribution	Finish Date:	-
Priority	3- Necessary - Not Yet Critical (within 13-24 mos.)	Status:	Open
Inspector Name	SSmith	Actual Cost:	\$0
Action Date	07/12/2007	Total Estimated Cost:	\$41,700

Requirement Description

A quantity of branch circuit panel boards within the building have no spare circuit breakers or space for future branch circuits, creating a situation where existing circuits may become overloaded as additional electrical loads are applied.

Action Description

Provide additional panel boards to supplement existing panel boards with no spare branch circuit capacity. Estimate includes feeder wire and conduit to the panel boards.

Estimate	Adjustment Factor:	1.07		
Number	Description	Quantity Unit	Unit Cost	Total Cost
U160553009000	Electrical demo, electrical fixtures min labor & equip	4 Job	\$84.42	\$338
U161209003220	Wire, 600 volt, copper type XHHW, stranded, 4/0	24 C.L.F.	\$363.70	\$8,729
U161209009000	Wire min labor/equip charge	4 Job	\$84.42	\$338
U161322059990	Conduit to 15' high, minimum labor/equipment charge	4 Job	\$84.42	\$338
U161322100300	Conduit to 15' H, incl couplings only, elec metallic tubing, 2" dia	800 L.F.	\$6.92	\$5,536
U164407000100	Panelboard&load center ckt brkr,bolt-on,10k AIC,120V,1 P,15 to 50A	120 Ea.	\$45.69	\$5,483
U164407003250	Panelboard & load center circuit bkrs, panelboard spacers, per pole	48 Ea.	\$12.02	\$577
U164407009000	Panelboard circuit breakers min labor/equip charge	4 Job	\$112.57	\$450
U164407201000	Panelboards, NQOD, 4 wire, 120/208 volts, 225 amp main lugs, 42 circs	4 Ea.	\$2,103.82	\$8,415
U164407209000	Panelboard min labor/equip charge	4 Job	\$337.70	\$1,351
U164408200420	Feeder section, circuit breakers, KA frame, 70 to 225 amp	4 Ea.	\$1,053.59	\$4,214
LELECA	Electricians	40 hour	\$31.97	\$1,279
LELECI	Electricians	8 hour	\$40.71	\$326
LELECI	Electricians	40 hour	\$39.97	\$1,599

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Supreme Court Main & Annex Building
ASSET NUMBER: 194-736
CATEGORY: Reliability

Requirement Name	Exterior Walls: Repoint exterior enclosure wall.	Inspection Date:	07/13/2005
Prime System	Exterior Walls	Finish Date:	-
Priority	1- Currently Critical (Immediate)	Status:	Open
Inspector Name	Paradis	Actual Cost:	\$0
Action Date	07/13/2005	Total Estimated Cost:	\$145,813

Requirement Description

The exterior masonry (stone) enclosure wall is in need of repointing. Infiltration of moisture and water was evident during our inspection and confirmed by the facilities personnel.

Action Description

Provide selective repointing of exterior wall enclosure of Main and Annex structures. Coordinate work efforts to allow this work occur concurrent with roofing work, and before interior improvements take place.

Estimate		Adjustment Factor:	1.00	
Number	Description	Quantity Unit	Unit Cost	Total Cost
U015407800710	Swing staging,24' l, powered, electric or air, to 150'high, rent/month	8 Ea.	\$1,291.21	\$10,330
U015407802200	Swing staging, move swing staging (setup and remove)	24 Move	\$758.49	\$18,204
U049107201000	Pointing masonry, repoint, mask and grout method, running bond	18,000 S.F.	\$2.64	\$47,520
U049302200270	Masonry cleaning, chemical cleaning, brush and wash, average	56,000 S.F.	\$1.06	\$59,360
U049302204000	Masonry cleaning, add for masking doors and windows	20,000 S.F.	\$0.52	\$10,400



Asset Summary Report

by Asset Name

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square

Asset Name Rose & Lafoon Building
Asset Number 194-734

STATISTICS

Requirements Index:	0.16
Facility Condition Index:	0.13
Total Requirements Cost:	\$122,623

Current Replacement Value	\$744,838	Address 1	109 North Eighth Street
Size	6,426 SF	Address 2	-
Year Constructed	1950	City	Richmond
Year last Renovated	1991	State/Province	VA
Commission Date	-	ZIP/Postal Code	23219
Decommission Date	-	Architect	Unknown
Ownership	Agency Owned	Historical Category	On Register
Floors	3	Construction Type	IBC - Type 1B
		Use	Business

Photo Description

ARCHITECTURAL

The Rose and Lafoon Building (Facility-ID 734), is located at 109 North Eight Street adjacent to the alleyway between Franklin and Grace Streets. This structure was constructed in 1950, prior to the Eighth Street Addition to the Supreme Court Annex Structure. The building, as part of the Virginia Supreme Court facility, has been designated as a registered national historical landmark by the U. S. Department of the Interior.

TENANT OCCUPANCY: The Rose and Lafoon Building presently houses the administrative operations of the Court of Appeals of Virginia.

BUILDING AREA: The Rose and Lafoon Building is comprised of approximately 6,426 gross square-feet on three (3) floors; two (2) floor levels above-grade and a basement level.

CONSTRUCTION TYPE/USE AND OCCUPANCY CLASSIFICATION: The building has a Construction Classification of Type I-B (non-combustible) according to the International Building Code, 2000 Edition (i.e., IBC 2000), Section 602.2. The building has a Use and Occupancy Classification of Group B (Business), per the IBC 2000, Section 304.

SUBSTRUCTURE/SUPERSTRUCTURE/EXTERIOR WALLS: The substructure consists of a solid masonry foundation wall system with continuous footings and a concrete slab-on-grade. The superstructure consists of exterior load-bearing masonry walls with structural steel framing (i.e., columns, joists, girders); fireproofing of the structural steel members was not observed. The exterior walls consist of (brick) masonry on the north and west elevations and a modestly decorative dressed masonry (stone) at the south (entry) elevation, fronting on Eighth Street. Building insulation, on the interior face of the exterior walls, was not observed.

BUILDING FENESTRATION: The building fenestration consists of original steel windows with single-glazed (operable and fixed) sash units on the south (entry) facade and metal replacement windows, with both operable and fixed panels, on the north and west elevations.

EXTERIOR DOORS: The exterior entrance doors consist of wood rail and stile doors with glazed lights, three-quarter height sidelights and transom panels. The egress door at the rear of the building is a flush hollow-metal door in a metal frame.

ROOFING: The building is covered with a fully-adhered EPDM membrane roofing system, with (adhered) rubber runners located along service pathways. The interior perimeter face of the parapet wall is covered with a full-height elastomeric (membrane) flashing. The roof drainage method is external, with the roof sloping towards the rear of the building, collecting into a single gutter and routed to a conductor pipe at-grade by way of a rain leader.

FLOOR FINISHES: The buildings floor finishes are largely comprised on broadloom carpeting throughout the office areas and corridors. Other areas, such as the break room, bathrooms and service areas (i.e., file room and exit stairwell) consist of VCT (vinyl composition tiles).

INTERIOR WALLS: The interior of the Rose and Lafoon Building, which is believed to have been renovated in 1991, consist of interior walls constructed of gypsum wallboard on metal framing. Wall finishes are typically painted gypsum wallboard throughout, including the perimeter walls.

INTERIOR DOORS, DOOR FRAMES AND HARDWARE: The interior doors are typically solid-core (flush) wood doors in metal frames, many with an integral metal-frame sidelight. Service doors are typically hollow-metal doors in metal frames. Door hardware (i.e., locksets and latchsets) throughout are of the lever-type.

CEILING FINISHES: The ceiling finishes are typically made up of two-by-two (2 x 2) or two-by-four (2 x 4) lay-in acoustic ceiling tiles in a acoustical suspension (grid) system. Service areas such as bathrooms, closets and the exit stairwell have gypsum wallboard ceilings.

MECHANICAL

COOLING GENERATION: Cooling is generated by three (3) York package units that are located on the roof.

HEATING GENERATION: The three York units provide electric heating to the building.

DISTRIBUTION SYSTEMS: The three (3) package units serve the building one for each floor. Outside air intakes are located at the package unit on the roof. Air distribution is by vertical and horizontal ducts with take offs to each floor.

Restroom and general exhaust for the building are by fans located on the roof. The electrical and elevator rooms are exhausted by propeller fans.

CONTROLS AND INSTRUMENTATION: Operation of the buildings HVAC equipment is regulated by electric controls.

PLUMBING: Domestic water is supplied by the city to the building with risers and drop legs for each floor. Domestic hot water is supplied to the building by an electric hot water heater. The sanitary system distribution is by cast iron piping to the city main. Storm water is removed from the roof by roof drains that drain via internal cast iron risers to the city main.

PLUMBING FIXTURES: The mens and womens restrooms are multi-fixture restrooms. Lavatories are wall mount, water closets, and urinals wall hung vitreous china fixtures. Janitors closets are located on each floor and equipped with enameled cast iron utility sinks. Drinking water is provided by DX cooled fountains and bottled water units located on each floor.

FIRE PROTECTION: The building is protected by a wet pipe fire sprinkler system, standpipes with 4-inch risers and 2.5-inch hose connections are provided throughout the building. The systems are monitored for anti-tamper. Handheld ABC fire type extinguishers are located on each floor.

ELECTRICAL

ELECTRICAL SERVICE & DISTRIBUTION: Electrical Service for the Rose and Lafoon Building originates from a utility company service off Franklin Street. The incoming service conductors terminate in a 400 ampere, 208Y/120 volt, 3 phase, 4 wire main disconnecting switch, and switchboard. The switchboard distribution section provides power to panel boards and equipment throughout the building. A utility company electrical meter is located ahead of the building main disconnect switch.

Panel boards are located throughout the building, typically in hallways or corridors, and provide branch circuitry to lighting, receptacles, and miscellaneous loads.

EMERGENCY LIGHTING & POWER SYSTEMS: The Rose and Lafoon Building is supplied emergency power from a shared (with the Supreme Court Building) 349 kW, exterior, emergency diesel generator located at the rear of building. The emergency generator serves life safety, emergency lighting, and legally required standby loads within the building.

As stated by facilities staff emergency lighting is provided in common core areas with circuitry extending from the emergency panel board(s) served by the generator. Exit signs are also served by emergency lighting circuitry.

LIGHTING & BRANCH WIRING: Interior lighting system is typically recessed fluorescent fixtures 2 x 2 and 2 x 4 with T8 lamps and electronic ballasts. Some recessed mounted down light fixtures with fluorescent lamps are installed in the lobby.

Exterior lighting is provided by HID wall pack lighting fixtures installed in the perimeter of the building.

COMMUNICATIONS & SECURITY: The building is equipped with a fire alarm system with the control panel located in the basement Main Electrical Room. The system includes annunciators, detectors, flow and tamper switches, pull stations and strobe/horn audiovisual notification devices distributed throughout the building.

The building is equipped with data/communication equipment which enters the building from Franklin Street and supplies connectivity to local hubs and/or data ports distributed throughout the building.

Closed circuit television (CCTV) cameras are used within the building providing video security within the building with monitoring and recording accomplished at the Supreme Court Building Capitol Police Turret location.

Requirements

Name	Prime System	Category	Priority	Action Date	Cost
Electrical Distribution: Lacking Fire Stopping	Electrical Service and Distribution	Building Code	1- Currently Critical (Immediate)	07/11/05	\$1,241
Plumbing: Drainage Pipe Blockage	Plumbing	Reliability	1- Currently Critical (Immediate)	07/11/05	\$10,580
Exit Signs: Aged and Inefficient	Emergency Light and Power Systems	Obsolescence	2- Potentially Critical (Within 12 mos.)	07/11/06	\$6,569

Name	Prime System	Category	Priority	Action Date	Cost
Exterior Walls: Remedial repairs required.	Exterior Walls	Integrity	2- Potentially Critical (Within 12 mos.)	07/11/06	\$20,312
Exterior Windows: Replacement required.	Exterior Windows	Beyond Rated Life	2- Potentially Critical (Within 12 mos.)	07/11/06	\$10,878
Gutters and Downspouts: Replace existing gutter and rain leader.	Gutters and Downspouts	Beyond Rated Life	2- Potentially Critical (Within 12 mos.)	07/11/06	\$1,295
Fire Alarm: System Ageing	Communications and Security	Obsolescence	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/11/07	\$14,127
Lighting: Aged and Inefficient (Interior)	Lighting and Branch Wiring	Obsolescence	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/11/07	\$5,610
Lighting: Exterior Fixtures Deteriorated	Lighting and Branch Wiring	Integrity	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/11/07	\$1,291
Ceiling Tiles: Replace water-stained ACT.	Insulation	Integrity	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/11/07	\$1,266
Electrical Branch Circuits: Aged	Lighting and Branch Wiring	Beyond Rated Life	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/11/07	\$12,372
Exterior Windows: Repairs and upgrade of steel windows.	Exterior Windows	Reliability	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/11/07	\$7,049
Exterior Doors: Refinish existing doors, frames and sidelights.	Exterior Doors	Integrity	3- Necessary - Not Yet Critical (within 13-24 mos.)	07/11/07	\$2,356
Emergency Lighting: Not Identified	Emergency Light and Power Systems	Reliability	4- Recommended (within 25-72 mos.)	07/11/11	\$7,602
Lighting and Branch Wiring: Add Occupancy Sensors	Lighting and Branch Wiring	Energy	4- Recommended (within 25-72 mos.)	07/11/11	\$2,349
Electrical: Lack of As Built Drawings	Other Electrical Systems	Building Code	5- Does Not Meet Current Codes / Standards	07/11/15	\$9,300

Name	Prime System	Category	Priority	Action Date	Cost
Fire Protection: Lack of Backflow Prevention or Double Check Valve	Fire Protection	Building Code	5- Does Not Meet Current Codes / Standards	07/11/15	\$2,142
Plumbing: Lack of Backflow for Domestic Water	Domestic Water Distribution	Building Code	5- Does Not Meet Current Codes / Standards	07/11/15	\$1,534
Electrical Distribution: Miscellaneous Code Issues	Electrical Service and Distribution	Building Code	5- Does Not Meet Current Codes / Standards	07/11/15	\$2,290
Fittings: Provide upgrades to HDCP bathroom.	Fittings	Accessibility	5- Does Not Meet Current Codes / Standards	07/11/15	\$2,460
				Total	\$122,623



Requirement Description

by Asset Name and Category

Department of General Services (DGS)	1
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Rose & Lafoon Building	1
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Fittings: Provide upgrades to HDCP bathroom.	1
Beyond Rated Life	1
Electrical Branch Circuits: Aged	2
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AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Rose & Lafoon Building
ASSET NUMBER: 194-734
CATEGORY: Accessibility

Requirement Name	Fittings: Provide upgrades to HDCP bathroom.	Inspection Date:	07/11/2005
Prime System	Fittings	Finish Date:	-
Priority	5- Does Not Meet Current Codes / Standards	Status:	Open
Inspector Name	Paradis	Actual Cost:	\$0
Action Date	07/11/2015	Total Estimated Cost:	\$2,460

Requirement Description

The unisex bathrooms, located on the First and Second Floor Levels, look as though they were intended to meet handicapped (HDCP) accessibility requirements, yet they are lacking a few (compliant) accessibility elements. Such requirements (i.e., upgrades) are not required for an 'Existing Building' w/o a change of occupancy per Section 3408 (i.e., applicable only to buildings undergoing a 'change of occupancy' or 'additions and alterations'); that said, such upgrades are recommended in an effort to increase the accessibility of the facility.

Action Description

Provide upgrades to (HDCP) design elements meeting current code requirements.

Estimate		Adjustment Factor:	1.00	
Number	Description	Quantity Unit	Unit Cost	Total Cost
U108101000610	Bathroom accessories, towel disp and waste receptacle, 18 gallon cap	2 Ea.	\$313.57	\$627
U108101001100	Bathroom accessories, grab bar, straight, 1-1/4" dia, SS, 36" long	1 Ea.	\$37.71	\$38
U108101001105	Bathroom accessories, grab bar, straight, 1-1/4" dia, SS, 42" long	1 Ea.	\$38.53	\$39
U108101003600	Bathroom accessories, mir with 5" SS shelf, 3/4" sq. FR, 36" x 24"	2 Ea.	\$198.41	\$397
U108101005000	Bathroom accessories, soap disp, chrome, rec stainless steel, liq	2 Ea.	\$189.27	\$379
U108101009000	Bathroom accessories, min labor&equip charge	8 Job	\$63.93	\$511
U154103002900	Faucets/ftg, medical, faucet, gooseneck spout, wrist handles, grid dr	2 Ea.	\$152.76	\$306
U154103009000	Faucets/fittings min labor/equip charge	2 Job	\$82.15	\$164

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Rose & Lafoon Building
ASSET NUMBER: 194-734
CATEGORY: Beyond Rated Life

Requirement Name	Electrical Branch Circuits: Aged	Inspection Date:	07/11/2005
Prime System	Lighting and Branch Wiring	Finish Date:	-
Priority	3- Necessary - Not Yet Critical (within 13-24 mos.)	Status:	Open
Inspector Name	SSmith	Actual Cost:	\$0
Action Date	07/11/2007	Total Estimated Cost:	\$12,372

Requirement Description

Branch circuit devices and wiring appeared aged, past their 2003 BOMA life expectancy of 20 years have reached the end of their life expectancy.

Action Description

Replace existing branch circuit wiring and devices including receptacles and switches. Receptacles for computers shall be equipped with surge protection. Receptacles within restrooms, roofs, and kitchens shall be equipped with ground fault circuit interrupters.

Estimate		Adjustment Factor:	1.00	
Number	Description	Quantity Unit	Unit Cost	Total Cost
U022203500700	Rubbish handling, dumpster, 10 c.y cap.(4 Tons), rent/week, 1 dump/week	1 Week	\$339.00	\$339
U160553009000	Electrical demo, electrical fixtures min labor & equip	3 Job	\$84.42	\$253
U161209002940	Wire, 600 volt, copper type XHHW, solid, #10	100 C.L.F.	\$47.04	\$4,704
U161209009000	Wire min labor/equip charge	3 Job	\$84.42	\$253
U161409100500	Wiring devices, toggle switch, quiet type, single pole, 20 amp	20 Ea.	\$20.25	\$405
U161409102470	Wiring devices, receptacle, duplex, 120 volt, ground, 20 amp	80 Ea.	\$21.77	\$1,742
U161409102482	Wiring device, receptacle, duplex, ground fault interrupting, 20 amp	10 Ea.	\$46.64	\$466
U161409102530	Wiring device, receptacle, surge suppressor, duplex, 20 amp	10 Ea.	\$56.93	\$569
U161409102600	Wiring device, wall plates, sst, 1 gang	120 Ea.	\$6.17	\$740
U161409109000	Wiring device min labor/equip charge	3 Job	\$84.42	\$253
LELE CJ	Electricians	40 hour	\$39.97	\$1,599
LHELPJ	Helpers Average (5 trades)	40 hour	\$26.20	\$1,048

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Rose & Lafoon Building
ASSET NUMBER: 194-734
CATEGORY: Beyond Rated Life

Requirement Name	Exterior Windows: Replacement required.	Inspection Date:	07/11/2005
Prime System	Exterior Windows	Finish Date:	-
Priority	2- Potentially Critical (Within 12 mos.)	Status:	Open
Inspector Name	Paradis	Actual Cost:	\$0
Action Date	07/11/2006	Total Estimated Cost:	\$10,878

Requirement Description

The exterior windows located along the north and west are approaching the end of their useful life and should be replaced; replacement of these should not (necessarily) be an issue with the Historical Landmark designation. Work effort (i.e., replacement) should be coordinated with remedial repairs to exterior masonry walls as specified with VFA Assessment Report.

Action Description

Replacement of existing window units along north and west elevations; coordinate efforts with remedial repairs to exterior face of masonry walls.

Estimate **Adjustment Factor:** 1.00

Number	Description	Quantity Unit	Unit Cost	Total Cost
RB20231102030	Replace 3' x 4' aluminum window - 2nd floor	6 Ea.	\$612.97	\$3,678
RB20231103030	Replace 3' x 4' aluminum window - 3rd floor	10 Ea.	\$644.22	\$6,442
RC30132140010	Repair 5/8" drywall - (2% of walls)	480 S.F.	\$1.14	\$547
RC30132140030	Refinish drywall	480 S.F.	\$0.44	\$211

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Rose & Lafoon Building
ASSET NUMBER: 194-734
CATEGORY: Beyond Rated Life

Requirement Name	Gutters and Downspouts: Replace existing gutter and rain leader.	Inspection Date:	07/11/2005
Prime System	Gutters and Downspouts	Finish Date:	-
Priority	2- Potentially Critical (Within 12 mos.)	Status:	Open
Inspector Name	Paradis	Actual Cost:	\$0
Action Date	07/11/2006	Total Estimated Cost:	\$1,295

Requirement Description

Replace existing gutter and rain leader, along north elevation, with copper replacement units. Existing (aluminum) copper and gutter are badly corroded, some due to lack of separation of dissimilar metals.

Action Description

Replace existing gutter and rain leader; replacement components should be copper for compatibility and longevity of drainage system.

Estimate		Adjustment Factor:	1.00	
Number	Description	Quantity Unit	Unit Cost	Total Cost
U070601109000	Roofing & siding demo, labor/equip minimum charge	10 Job	\$90.25	\$903
U077104001800	Downspouts, copper, round, 16 oz, stock, 4" dia	25 L.F.	\$7.07	\$177
U077106501000	Gutters, copper, half round, 16 oz, stock units, 6" wide	24 L.F.	\$8.98	\$216

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Rose & Lafoon Building
ASSET NUMBER: 194-734
CATEGORY: Building Code

Requirement Name	Electrical Distribution: Lacking Fire Stopping	Inspection Date:	07/11/2005
Prime System	Electrical Service and Distribution	Finish Date:	-
Priority	1- Currently Critical (Immediate)	Status:	Open
Inspector Name	SSmith	Actual Cost:	\$0
Action Date	07/11/2005	Total Estimated Cost:	\$1,241

Requirement Description

It was observed in electrical and telecommunications closets that floor, wall, and/or ceiling penetrations were not filled with an approved fire stopping material as required by the NEC - 1999 Edition Article 300.21.

Action Description

Provide and install an approved fire stopping material in all open penetrations in electrical and telecommunication closets. Estimated quantities are for budgetary purposes only. Electrician's labor has been added to identify all required locations.

Estimate	Adjustment Factor:	1.00		
Number	Description	Quantity Unit	Unit Cost	Total Cost
U078401000110	Firestopping, metallic piping, non insul, through walls, 2" diameter	6 Ea.	\$21.88	\$131
U078401000120	Firestopping, metallic piping, non insul, through walls, 4" diameter	6 Ea.	\$28.87	\$173
U078401000130	Firestopping, metallic piping, non insul, through walls, 6" diameter	6 Ea.	\$36.48	\$219
U078401000150	Firestopping, metallic piping, non insul, through floors, 2" diameter	4 Ea.	\$12.02	\$48
U078401000160	Firestopping, metallic piping, non insul, through floors, 4" diameter	4 Ea.	\$15.55	\$62
U078401000170	Firestopping, metallic piping, non insul, through floors, 6" diameter	4 Ea.	\$19.40	\$78
LCLNRJ	Cleaner	8 Hour	\$26.23	\$210
LELECJ	Electricians	8 Hour	\$39.97	\$320

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Rose & Lafoon Building
ASSET NUMBER: 194-734
CATEGORY: Building Code

Requirement Name	Electrical Distribution: Miscellaneous Code Issues	Inspection Date:	07/11/2005
Prime System	Electrical Service and Distribution	Finish Date:	-
Priority	5- Does Not Meet Current Codes / Standards	Status:	Open
Inspector Name	SSmith	Actual Cost:	\$0
Action Date	07/11/2015	Total Estimated Cost:	\$2,290

Requirement Description

This requirement covers miscellaneous electrical maintenance items that violate either the NEC, Virginia State Building Code, or OSHA requirements, including;

Roof mounted receptacles are not ground fault circuit interrupter (GFCI) type as required by the NEC - 1999 Edition Article 210.8 (b), (2).

Improper lock out, tag out methods were observed in use on panel boards within the building not in compliance with OSHA Section 1910.333 procedures.

Action Description

Correct miscellaneous code issues listed in requirement. Electrician labor is included to allow for material and labor required.

Estimate	Adjustment Factor:	1.07		
Number	Description	Quantity Unit	Unit Cost	Total Cost
U064102305040	Cabinet hardware, cabinet locks, maximum	12 Ea.	\$32.38	\$389
U160553001790	Electrical demo, pull boxes & cabs, recpts & switches, 15 to 30 amp	4 Ea.	\$2.50	\$10
U160553009000	Electrical demo, electrical fixtures min labor & equip	1 Job	\$84.42	\$84
U161409102482	Wiring device, receptacle, duplex, ground fault interrupting, 20 amp	4 Ea.	\$46.64	\$187
U161409104980	Wiring devices, receptacle, cover plate, weatherproof NEMA 7-23	4 Ea.	\$34.34	\$137
U161409109000	Wiring device min labor/equip charge	1 Job	\$84.42	\$84
LCLNRJ	Cleaner	8 Hour	\$26.23	\$210
RD50132800020	Maintenance and inspection lighting panel, indoor	4 Ea.	\$19.98	\$80
LELECJ	Electricians	24 Hour	\$39.97	\$959

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Rose & Lafoon Building
ASSET NUMBER: 194-734
CATEGORY: Building Code

Requirement Name	Electrical: Lack of As Built Drawings	Inspection Date:	07/11/2005
Prime System	Other Electrical Systems	Finish Date:	-
Priority	5- Does Not Meet Current Codes / Standards	Status:	Open
Inspector Name	SSmith	Actual Cost:	\$0
Action Date	07/11/2015	Total Estimated Cost:	\$9,300

Requirement Description

At present there are no current "As Built" drawings available for use by facilities/site personnel, contractors, and workers as required per NFPA 70E Part II Section 5-1.1.3 that establishes that "A plan shall be developed based on the existing electrical equipment and system and shall utilize up-to-date diagrammatic drawing representation (s)". Current "As Built" drawings are essential for site personnel to perform repairs, renovations, additions, or troubleshooting.

Action Description

Perform a complete site survey tracing out all wiring and identifying circuits in their electrical panels. Update all panel directories. Make up a full set of electrical drawings with all updated information. This will assist with future changes, additions, renovations, etc. and be a time saver when producing plans. Keep a copy on file for future reference once completed, and keep one copy for noting future modifications.

Estimate **Adjustment Factor:** 1.00

Number	Description	Quantity Unit	Unit Cost	Total Cost
U013107000010	Field personnel clerk average	2 Week	\$422.50	\$845
U013107000140	Field personnel, field engineer, maximum	2 Week	\$1,521.00	\$3,042
RD50132800020	Maintenance and inspection lighting panel, indoor	6 Ea.	\$19.98	\$120
LELECJ	Electricians	80 hour	\$39.97	\$3,198
LHELPJ	Helpers Average (5 trades)	80 hour	\$26.20	\$2,096

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Rose & Lafoon Building
ASSET NUMBER: 194-734
CATEGORY: Building Code

Requirement Name	Fire Protection: Lack of Backflow Prevention or Double Check Valve	Inspection Date:	07/11/2005
Prime System	Fire Protection	Finish Date:	-
Priority	5- Does Not Meet Current Codes / Standards	Status:	Open
Inspector Name	Bilton	Actual Cost:	\$0
Action Date	07/11/2015	Total Estimated Cost:	\$2,142

Requirement Description

The incoming fire water service is not equipped with a backflow prevention device as required by the 2003 International Plumbing Code section 608.1.

Action Description

Install a reduced pressure backflow preventer or double check valve. Work to include re-piping of service as necessary. Coordinate with other domestic water service correction projects.

Estimate		Adjustment Factor:	1.00	
Number	Description	Quantity Unit	Unit Cost	Total Cost
U013107000140	Field personnel, field engineer, maximum	0 Week	\$1,521.00	\$608
U150556002000	Plumbing dml, piping, metal, up thru 1-1/2" dia	10 L.F.	\$1.50	\$15
U151076203310	Pipe,st,flg,150 LB wld neck,on yoke&roll hgr,10' OC,bk,1-1/2" dia	10 L.F.	\$17.20	\$172
U151401004160	Backflo pvntr, ball valves, reduced press,thrdded,1-1/2" pipe	1 Ea.	\$448.06	\$448
LPLUHJ	Plumber Helpers	8 Hour	\$31.34	\$251
LPLUMJ	Plumbers	8 Hour	\$40.46	\$324
LSPRIJ	Sprinkler Installers	8 Hour	\$40.56	\$324

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Rose & Lafoon Building
ASSET NUMBER: 194-734
CATEGORY: Building Code

Requirement Name	Plumbing: Lack of Backflow for Domestic Water	Inspection Date:	07/11/2005
Prime System	Domestic Water Distribution	Finish Date:	-
Priority	5- Does Not Meet Current Codes / Standards	Status:	Open
Inspector Name	Bilton	Actual Cost:	\$0
Action Date	07/11/2015	Total Estimated Cost:	\$1,534

Requirement Description

The incoming water service is not equipped with a backflow prevention device as required by the 2003 International Plumbing Code section 608.1.

Action Description

Install a reduced pressure backflow preventer. Work to include re-piping as necessary. Coordinate with other water service correction projects.

Estimate		Adjustment Factor:	1.00	
Number	Description	Quantity Unit	Unit Cost	Total Cost
U150556002000	Plumbing dml, piping, metal, up thru 1-1/2" dia	10 L.F.	\$1.50	\$15
U151076203310	Pipe,st,flg,150 LB wld neck,on yoke&roll hgr,10' OC,bk,1-1/2" dia	10 L.F.	\$17.20	\$172
U151401004160	Backflo pvntr, ball valves, reduced press,thrdded,1-1/2" pipe	1 Ea.	\$448.06	\$448
LPLUHJ	Plumber Helpers	8 Hour	\$31.34	\$251
LPLUMJ	Plumbers	8 Hour	\$40.46	\$324
LSPRIJ	Sprinkler Installers	8 Hour	\$40.56	\$324

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Rose & Lafoon Building
ASSET NUMBER: 194-734
CATEGORY: Energy

Requirement Name	Lighting and Branch Wiring: Add Occupancy Sensors	Inspection Date:	07/11/2005
Prime System	Lighting and Branch Wiring	Finish Date:	-
Priority	4- Recommended (within 25-72 mos.)	Status:	Open
Inspector Name	SSmith	Actual Cost:	\$0
Action Date	07/11/2011	Total Estimated Cost:	\$2,349

Requirement Description

Install lighting occupancy sensors in all mechanical and electrical rooms, offices, public areas, conference rooms, and restrooms. Occupancy sensors strategically placed will shut off lighting in areas that are not being utilized saving energy and extending the life expectancy of the light fixtures.

Action Description

Furnish and install new occupancy sensors in all areas. Electrician labor is used to remove existing light switches.

Estimate		Adjustment Factor:	1.00	
Number	Description	Quantity Unit	Unit Cost	Total Cost
U160553001790	Electrical demo, pull boxes & cabs, recpts & switches, 15 to 30 amp	20 Ea.	\$2.50	\$50
U160553009000	Electrical demo, electrical fixtures min labor & equip	3 Job	\$84.42	\$253
U161409109000	Wiring device min labor/equip charge	3 Job	\$84.42	\$253
U165802000150	Automatic wall switches	20 Ea.	\$73.66	\$1,473
LELECJ	Electricians	8 Hr.	\$39.97	\$320

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Rose & Lafoon Building
ASSET NUMBER: 194-734
CATEGORY: Integrity

Requirement Name	Ceiling Tiles: Replace water-stained ACT.	Inspection Date:	07/11/2005
Prime System	Insulation	Finish Date:	-
Priority	3- Necessary - Not Yet Critical (within 13-24 mos.)	Status:	Open
Inspector Name	Bilton	Actual Cost:	\$0
Action Date	07/11/2007	Total Estimated Cost:	\$1,266

Requirement Description

Several acoustical ceiling tiles (ACT), located throughout the building, are water-stained due to condensation from piping, and or HVAC duct work, located above the ceiling. Replacement of (stained) ceiling tiles is needed; coordinate work effort with repairs to insulation of piping and duct work.

Action Description

Repair insulation and replace damaged tiles.

Estimate		Adjustment Factor: 1.00		
Number	Description	Quantity Unit	Unit Cost	Total Cost
U090601101200	Ceiling dml, suspended ceiling boards only, mineral fiber, 2x2 or 2x4	200 S.F.	\$0.26	\$52
U095107001130	Susp acst clg bds, mnrl fbr lay-in, 2x2 or 2x4, 3/4"T,rough textured	200 S.F.	\$1.99	\$398
U095109009000	Ceiling tile min.labor/equip.charge	5 Job	\$61.25	\$306
U150802003060	Insulation, duct, blanket fbgl, fire res liner, 1" thk, 1.5 lb dens	20 S.F.	\$2.02	\$40
U150806007350	Insulation, pipe covering, fbgl, all svce jkt, 2" wall, 1" IPS	10 L.F.	\$5.37	\$54
U150806007350	Insulation, pipe covering, fbgl, all svce jkt, 2" wall, 1" IPS	10 L.F.	\$5.37	\$54
U150806007370	Insulation, pipe covering, fbgl, all svce jkt, 2" wall, 1.5" IPS	10 L.F.	\$5.84	\$58
LCLAMJ	Common Maintenance Laborer	16 hour	\$18.98	\$304

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Rose & Lafoon Building
ASSET NUMBER: 194-734
CATEGORY: Integrity

Requirement Name	Exterior Doors: Refinish existing doors, frames and sidelights.	Inspection Date:	07/11/2005
Prime System	Exterior Doors	Finish Date:	-
Priority	3- Necessary - Not Yet Critical (within 13-24 mos.)	Status:	Open
Inspector Name	Paradis	Actual Cost:	\$0
Action Date	07/11/2007	Total Estimated Cost:	\$2,356

Requirement Description

Refinish existing (historical) doors, transom, hardware, sidelights and railings at primary entrance (Eighth Street). Refinish rear exit discharge door at rear of building (north elevation).

Action Description

Rehab existing (historical) doors, frames, hardware, sidelights, transom and railings at primary entrance to Rose and Lafoon Building. Refinish existing (egress) door and frame at rear of building (i.e., egress doorway).

Estimate		Adjustment Factor:		1.00
Number	Description	Quantity Unit	Unit Cost	Total Cost
U059105006230	Metal cleaning, brush-off blast (SSPC-SP7)	750 S.F.	\$0.36	\$270
U099103000140	Door frames & trim, only, brushwork, exterior latex, primer & 2 coats	125 L.F.	\$0.99	\$124
U099103000440	Windows, /ext side, based on 15 S.F. 1 to 6 lit, brshwrk, ext latx primer &	3 Ea.	\$28.13	\$84
U099103100300	Doors, louvrd, bth sides, incl. frm & trm,roll & brush,latx,primer & 2cts	2 Ea.	\$82.57	\$165
U099103100510	Windows,/int side,based on 15 S.F. 1 to 6 lite,brushwork,enml primer &2cts	3 Ea.	\$37.42	\$112
U099106500300	Coatings & paints, paint, exterior alkyd (oil base), gloss	5 Gal.	\$28.05	\$140
U099106500400	Coatings & paints, paint, exterior alkyd (oil base), primer	5 Gal.	\$27.45	\$137
U099106501400	Coatings & paints, interior, alkyd (oil), gloss	5 Gal.	\$31.63	\$158
U099106501500	Coatings & paints, interior, alkyd (oil), primer sealer	5 Gal.	\$22.92	\$115
U099909000040	Surface prep., ext., doors, comm., scrape & sand, wood, detail	1,250 S.F.	\$0.42	\$525
U099909100050	Surface preparation, interior, doors, commercial, wood, detail	1,250 S.F.	\$0.42	\$525
RB20332202030	Prepare and refinish 3'-0" x 7'-0" steel ptd. door	0 Ea.	\$47.44	\$0

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Rose & Lafoon Building
ASSET NUMBER: 194-734
CATEGORY: Integrity

Requirement Name	Exterior Walls: Remedial repairs required.	Inspection Date:	07/11/2005
Prime System	Exterior Walls	Finish Date:	-
Priority	2- Potentially Critical (Within 12 mos.)	Status:	Open
Inspector Name	Paradis	Actual Cost:	\$0
Action Date	07/11/2006	Total Estimated Cost:	\$20,312

Requirement Description

The exterior masonry walls require remedial repairs to masonry (north and west elevations), evidence of cracks in masonry originating at masonry openings. Similarly, this occurs along the west elevation, although less obvious due to a surface treatment (parging material) that has been applied to the entire (west) elevation; additional cracking also occurs extending from grade through to the top of the parapet wall. Investigation, repairs and resurfacing will be required.

Action Description

Repair/repoint exterior masonry walls; North and West Elevations. Remove existing parging material on West Elevation in its entirety, complete remedial repairs, repoint and treat masonry as recommended by investigative study.

Estimate		Adjustment Factor:	1.00	
Number	Description	Quantity Unit	Unit Cost	Total Cost
U011077000100	Surveying, conventional, topographical, maximum	2 Acre	\$2,068.22	\$4,136
U040607700020	Surface bonding, CMU walls, fiberglass mortar, gray or white	2,400 S.F.	\$0.57	\$1,368
U049107200320	Pointing masonry, cut and repoint brick, hard mortar, common bond	3,000 S.F.	\$3.10	\$9,300
U049108000520	Toothing masonry, brickwork, hard mortar	600 V.L.F.	\$5.63	\$3,378
U049302200240	Masonry cleaning, chemical cleaning, brush and wash, maximum	3,000 S.F.	\$0.71	\$2,130

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Rose & Lafoon Building
ASSET NUMBER: 194-734
CATEGORY: Integrity

Requirement Name	Lighting: Exterior Fixtures Deteriorated	Inspection Date:	07/11/2005
Prime System	Lighting and Branch Wiring	Finish Date:	-
Priority	3- Necessary - Not Yet Critical (within 13-24 mos.)	Status:	Open
Inspector Name	SSmith	Actual Cost:	\$0
Action Date	07/11/2007	Total Estimated Cost:	\$1,291

Requirement Description

Exterior wall pack fixtures at the rear of the building appeared aged, with dirty faded lenses and aged fixture bodies, exceeding their recommended design life per BOMA 2003 standard of twenty years.

Action Description

Replace existing aged wall pack light fixtures at rear of building.

Estimate		Adjustment Factor:	1.00	
Number	Description	Quantity Unit	Unit Cost	Total Cost
U160553002720	Electrical demo, exterior fixtures, wall pack, mercury vapor, 250 watt	2 Ea.	\$27.02	\$54
U160553009000	Electrical demo, electrical fixtures min labor & equip	1 Job	\$84.42	\$84
U165203001190	Exterior fixtures, with lamps, wall pack, metal halide, 250 watt	2 Ea.	\$371.55	\$743
U165203009000	Exterior fixtures min labor/equip charge	1 Job	\$90.05	\$90
LELECJ	Electricians	8 hour	\$39.97	\$320

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Rose & Lafoon Building
ASSET NUMBER: 194-734
CATEGORY: Obsolescence

Requirement Name	Exit Signs: Aged and Inefficient	Inspection Date:	07/11/2005
Prime System	Emergency Light and Power Systems	Finish Date:	-
Priority	2- Potentially Critical (Within 12 mos.)	Status:	Open
Inspector Name	SSmith	Actual Cost:	\$0
Action Date	07/11/2006	Total Estimated Cost:	\$6,569

Requirement Description

Exit signs within the building are aged, past their intended useful life of twenty years per 2003 BOMA standard, and use inefficient fluorescent or incandescent lamps.

Action Description

Replace existing exit signs within the building, consider adding signage as needed to comply with section 1003.2.10.1 of the 2000 Virginia Uniform State-wide Building Code.

Estimate		Adjustment Factor:		1.00
Number	Description	Quantity Unit	Unit Cost	Total Cost
U022203300100	Dump charges, typical urban city, fees only, bldg constr materials	0 Ton	\$63.28	\$16
U160553002480	Electrical demo, interior floure fixt, surf mount, 75 watt	6 Ea.	\$10.89	\$65
U160553009000	Electrical demo, electrical fixtures min labor & equip	3 Job	\$84.42	\$253
U160553009000	Electrical demo, electrical fixtures min labor & equip	3 Job	\$84.42	\$253
U161209003020	Wire, 600 volt, copper type XHHW, stranded, #12	6 C.L.F.	\$42.35	\$254
U161322050500	Conduit to 15' H,incl 2 termn,2 elb&11 bm CLP per 100',alum 3/4" dia	200 L.F.	\$6.41	\$1,282
U161366000021	Box, 4" octagon pressed steel	4 Ea.	\$20.73	\$83
U161366000060	Outlet boxes, pressed steel, octagon, covers, blank	2 Ea.	\$6.10	\$12
U165303200240	Exit light clg or wall mount, L.E.D. battery unit, single face	4 Ea.	\$194.85	\$779
U165303200260	Exit light clg or wall mount, L.E.D. battery unit, double face	4 Ea.	\$204.69	\$819
LCLNRJ	Cleaner	4 Hour	\$26.23	\$105
LELECJ	Electricians	40 hour	\$39.97	\$1,599
LHELPJ	Helpers Average (5 trades)	40 hour	\$26.20	\$1,048

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Rose & Lafoon Building
ASSET NUMBER: 194-734
CATEGORY: Obsolescence

Requirement Name	Fire Alarm: System Ageing	Inspection Date:	07/11/2005
Prime System	Communications and Security	Finish Date:	-
Priority	3- Necessary - Not Yet Critical (within 13-24 mos.)	Status:	Open
Inspector Name	SSmith	Actual Cost:	\$0
Action Date	07/11/2007	Total Estimated Cost:	\$14,127

Requirement Description

The existing fire alarm system is in functional condition but appeared aged, with the system reaching the end of its 15 year life expectancy per 2003 BOMA. Also, spare parts may be unavailable or become obsolete.

Action Description

Replace existing fire alarm system with a new complete fire alarm system including smoke, duct and heat detectors, pull stations (or break glass stations), and ADAAG compliant audio visual alarms. The new system should be installed and tested per the requirements of NFPA 70 and 72 and the Virginia Statewide Building Code 2000 edition.

Estimate		Adjustment Factor: 1.00			
Number	Description	Quantity	Unit	Unit Cost	Total Cost
U022203300100	Dump charges, typical urban city, fees only, bldg constr materials	1	Ton	\$63.28	\$63
U137200653800	Detection systems, fire alarm control panel, 8 zone	1	Ea.	\$2,266.83	\$2,267
U137200654200	Detection systems, fire, battery and rack	1	Ea.	\$849.85	\$850
U137200654400	Detection systems, fire, automatic charger	1	Ea.	\$534.93	\$535
U137200655000	Detection systems, fire, detector, rate of rise	4	Ea.	\$82.28	\$329
U137200655200	Detection sys, fire, smoke detector, ceiling type	6	Ea.	\$141.12	\$847
U137200655400	Detection systems, fire, smoke detector, duct type	4	Ea.	\$388.57	\$1,554
U137200655610	Detection systems, fire, strobe and horn (ADA type)	10	Ea.	\$173.07	\$1,731
U137200655620	Detection systems, fire, visual alarm (ADA type)	4	Ea.	\$106.49	\$426
U137200656600	Detection systems, drill switch	1	Ea.	\$140.58	\$141
U137200657000	Detection systems, break glass station	4	Ea.	\$100.43	\$402
U137200658200	Detection systems, remote annunciator, 16 zone lamp	1	Ea.	\$660.38	\$660
U137200659410	Detection systems, min labor/equip charge	3	Job	\$90.85	\$273
U160553009000	Electrical demo, electrical fixtures min labor & equip	3	Job	\$84.42	\$253
U161207501950	Special ws & ftngs, fire alarm FEP teflon 150 V to 200< C, #18, 4 pr	6	C.L.F.	\$315.23	\$1,891
U161322050300	Conduit to 15' H,incl 2 termn,2 elb&11 bm CLP per 100',alum 1/2" dia	200	L.F.	\$5.36	\$1,072
U161366000151	Steel outlet box 4" square	24	Ea.	\$21.08	\$506

Number	Description	Quantity	Unit	Unit Cost	Total Cost
U161366000250	Outlet boxes, pressed steel, square, 4" covers, blank	12	Ea.	\$6.21	\$75
U161366009000	Outlet boxes stl min labor/equip charge	3	Job	\$84.42	\$253

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Rose & Lafoon Building
ASSET NUMBER: 194-734
CATEGORY: Obsolescence

Requirement Name	Lighting: Aged and Inefficient (Interior)	Inspection Date:	07/11/2005
Prime System	Lighting and Branch Wiring	Finish Date:	-
Priority	3- Necessary - Not Yet Critical (within 13-24 mos.)	Status:	Open
Inspector Name	SSmith	Actual Cost:	\$0
Action Date	07/11/2007	Total Estimated Cost:	\$5,610

Requirement Description

Fluorescent lighting that serves some utility spaces, i.e., mechanical and electrical rooms, and other service areas are with equipped energy inefficient T/12 lamps and magnetic ballasts and appeared aged, at the end of their life expectancy per 2003 BOMA Building System Useful Life

Action Description

Replace existing aged and inefficient fluorescent fixtures with new fixtures utilizing energy efficient T/8 lamps and electronic ballast. Provide adequate lamp and ballast disposal. Replace all incandescent lamps within the building with energy efficient fluorescent lamps.

Estimate		Adjustment Factor:		1.00
Number	Description	Quantity Unit	Unit Cost	Total Cost
U018323602518	Electrical maint, fluorescent fixture, clean (area)	3 Ea.	\$7.35	\$22
U018323602530	Electrical maint, remove/replace lamp (incad or fluor)	4 Ea.	\$8.15	\$33
U021103001260	Hazardous W cln/pu/dspl, transp to dspl site, tl=80drums/25cy/18ton, min	10 Mile	\$2.26	\$23
U021103006020	Hazardous W cln/pu/dspl, dumpsite disposal charge, max	1 Ton	\$397.76	\$398
U160553002260	Electrical demo, fluore fixt, surf mt, 2'x4', 4 lamp	12 Ea.	\$20.47	\$246
U160553009000	Electrical demo, electrical fixtures min labor & equip	3 Job	\$84.42	\$253
U165104400950	Intr fxtr, fluor, E.W. lamps, acryl lens, 2'w x 4'l, three 32 W	12 Ea.	\$150.43	\$1,805
U165104409000	Interior lighting fixtures min labor/equip charge	3 Job	\$112.57	\$338
U165856000180	Lamps, fluorescent, 4' long, T8, 32 W engy saver	1 C	\$640.68	\$641
U165856009000	Lamps min labor/equip charge	3 Job	\$84.42	\$253
LELECEJ	Electricians	40 hour	\$39.97	\$1,599

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Rose & Lafoon Building
ASSET NUMBER: 194-734
CATEGORY: Reliability

Requirement Name	Emergency Lighting: Not Identified	Inspection Date:	07/11/2005
Prime System	Emergency Light and Power Systems	Finish Date:	-
Priority	4- Recommended (within 25-72 mos.)	Status:	Open
Inspector Name	SSmith	Actual Cost:	\$0
Action Date	07/11/2011	Total Estimated Cost:	\$7,602

Requirement Description

Existing emergency light fixtures are supplied power from emergency branch circuits and are required to provide illumination of emergency egresses. Emergency fixtures are not identified for maintenance to the fixtures assuring illumination of egresses in emergency situations.

Action Description

Identify existing emergency light fixtures throughout the building and mark with unique methods to guarantee proper maintenance is performed on the fixtures, assuring integrity of illuminating emergency egress routes.

Estimate		Adjustment Factor:	1.00	
Number	Description	Quantity Unit	Unit Cost	Total Cost
U013107000140	Field personnel, field engineer, maximum	1 Week	\$1,521.00	\$1,521
U013107000220	Field personnel, project manager, maximum	1 Week	\$2,429.38	\$2,429
U018323602518	Electrical maint, fluorescent fixture, clean (area)	12 Ea.	\$7.35	\$88
U018323602540	Elec facl maint, remove/replace ballast electronic type for two tubes	12 Ea.	\$77.88	\$935
RD50232600010	Replace fluor. ballast for fluorescent lighting fixture, 80 W	12 Ea.	\$79.58	\$955
RD50232600020	Replace lamps (2 lamps) fluorescent lighting fixture, 80 W	12 Ea.	\$19.60	\$235
LELECA	Electricians	20 hour	\$31.97	\$639
LELECEJ	Electricians	20 hour	\$39.97	\$799

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Rose & Lafoon Building
ASSET NUMBER: 194-734
CATEGORY: Reliability

Requirement Name	Exterior Windows: Repairs and upgrade of steel windows.	Inspection Date:	07/11/2005
Prime System	Exterior Windows	Finish Date:	-
Priority	3- Necessary - Not Yet Critical (within 13-24 mos.)	Status:	Open
Inspector Name	Paradis	Actual Cost:	\$0
Action Date	07/11/2007	Total Estimated Cost:	\$7,049

Requirement Description

The south elevation, fronting on Eighth Street, contains steel window units at the First and Second Floor Levels. Remedial repairs are required, including restoring their operation, as well as providing new operable (where applicable) interior storm units. These upgrades would typically be in-line with repairs permitted by Historical Designation on the building.

Action Description

Rehab/repair existing (historical) steel window units inclusive of (non-functioning) operable lights. Provide new (operable) interior storm units at interior of building per 'historical requirements' of authority having jurisdiction.

Estimate		Adjustment Factor:	1.00	
Number	Description	Quantity Unit	Unit Cost	Total Cost
U085809004020	Storm wndw alum picture 1 lite white/bronz 4'-6"x4'-6"	2 Ea.	\$135.85	\$272
U085809006460	Storm wndw sliding 3 lite white or bronze 6'-0"x6'-0"	5 Ea.	\$318.15	\$1,591
U085809009410	Storm windows, minimum labor/equipment charge	7 Job	\$60.39	\$423
RB20231022020	Repair 3'-9" x 5'-5" steel frame window - 2nd flr.	2 Ea.	\$236.73	\$473
RB20231022030	Refinish 3'-9" x 5'-5" steel frame window - 2nd flr.	4 Ea.	\$95.79	\$383
RB20231023020	Repair 3'-9" x 5'-5" steel frame window - 3rd flr.	10 Ea.	\$267.98	\$2,680
RB20231023030	Refinish 3'-9" x 5'-5" steel frame window - 3rd flr.	10 Ea.	\$122.74	\$1,227

AGENCY: Department of General Services (DGS)
LOCATION: Richmond Capitol Square
ASSET NAME: Rose & Lafoon Building
ASSET NUMBER: 194-734
CATEGORY: Reliability

Requirement Name	Plumbing: Drainage Pipe Blockage	Inspection Date:	07/11/2005
Prime System	Plumbing	Finish Date:	-
Priority	1- Currently Critical (Immediate)	Status:	Open
Inspector Name	Bilton	Actual Cost:	\$0
Action Date	07/11/2005	Total Estimated Cost:	\$10,580

Requirement Description

According to the maintenance staff the underground piping located in the corridor with a clean-out next to the filing system needs to be cleaned every week to maintain flow otherwise the pipe would clog.

Action Description

Dig up concrete floor and repair piping to prevent clogging and replace flooring.

Estimate		Adjustment Factor:	1.00	
Number	Description	Quantity Unit	Unit Cost	Total Cost
U040602000050	Cement, gypsum, 80 lb. bag, L.T.L. lots	20 Bag	\$25.50	\$510
LCEFIJ	Cement Finishers	16 hour	\$31.86	\$510
LCLABJ	Common Building Laborers	16 hour	\$27.38	\$438
AG30101104150	Water distr piping,excav & backf excl,cu tubing,type K,6" diam	75 L.F.	\$113.00	\$8,475
LPLUMJ	Plumbers	16 hour	\$40.46	\$647

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