EAST CAROLINA UNIVERSITY

MAIL SERVICES / WAREHOUSE / TECH LAB A

ASSET CODE: B043

FACILITY CONDITION ANALYSIS

OCTOBER 29, 2009

ISES CORPORATION

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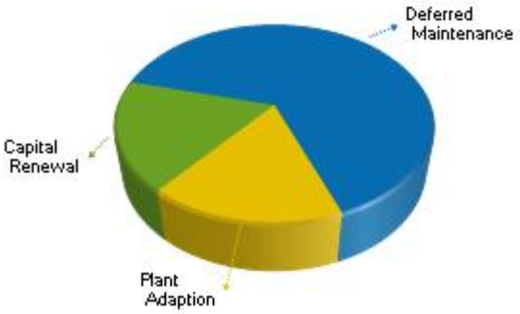
PROJECT COSTS BY CLASSIFICATION

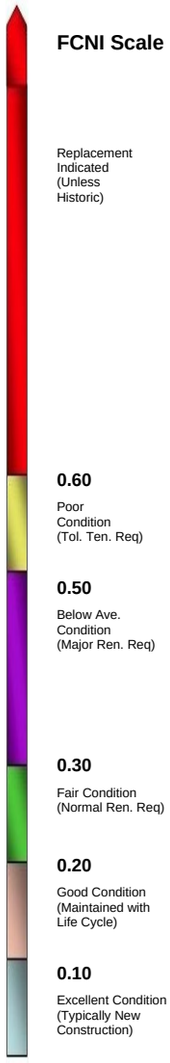


Building Code: B043
Building Name: MAIL SERVICES / WAREHOUSE / TECH LAB A
Year Built: 1951
Building Use: Warehouse/Storage/Utility
Square Feet: 24,932

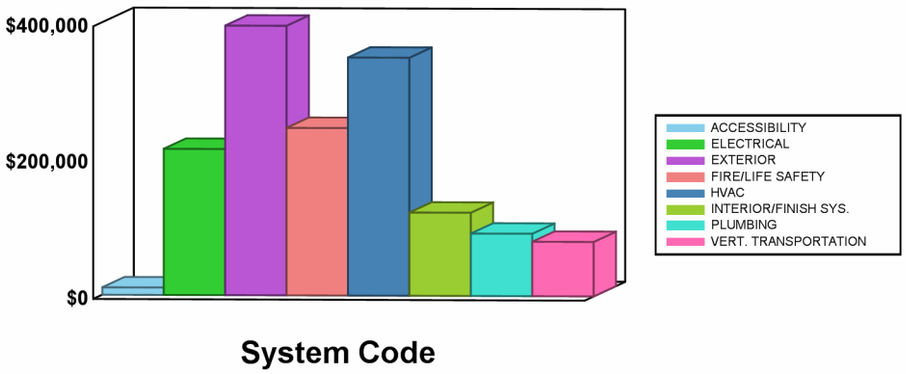
Project Costs by Priority

Priority 1:	$0	
Priority 2:	$325,874	
Priority 3:	$1,039,095	
Priority 4:	$145,433	
Total Project Costs:		**$1,510,402**
Facility Replacement Cost:		**$3,206,000**

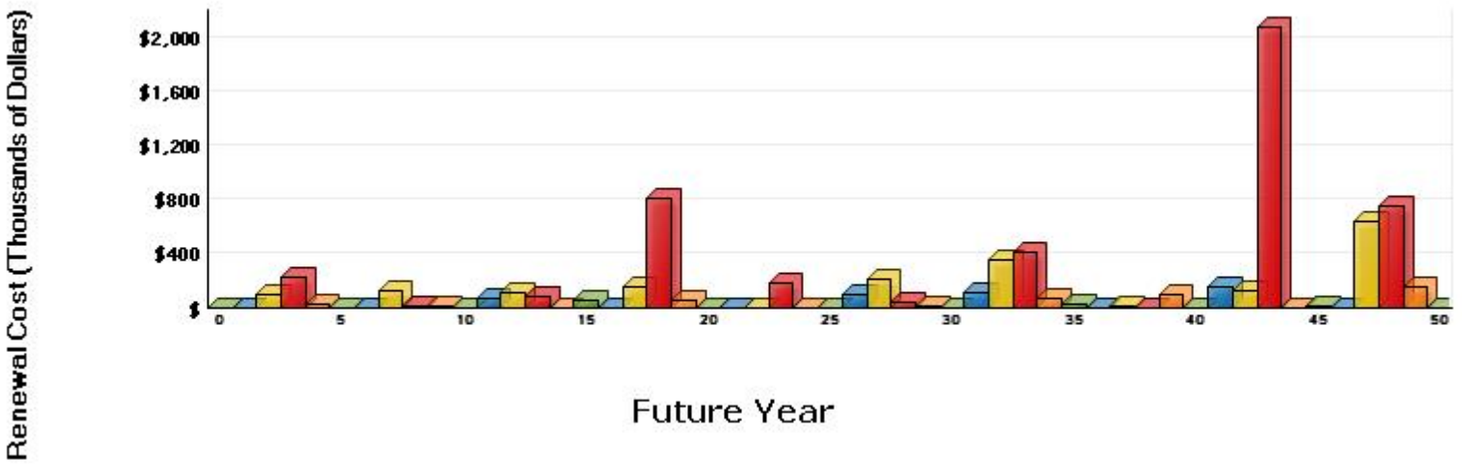
Facility Condition Needs Index (FCNI): **0.47**
(Project Costs / Replacement Cost)



PROJECT COSTS BY SYSTEM CODE



LIFE CYCLE MODEL EXPENDITURE PROJECTIONS



Average Annual Renewal Cost Per SqFt $2.41

B. ASSET SUMMARY

The Mail Services / Warehouse / Tech Lab A building was constructed in 1951 and is located in the central part of the main campus of East Carolina University. The building is shaped like two rectangles, a northeast wing and a southwestern wing, attached at the corner. From visual observations, it would appear that the southwest wing is original to 1951 and the northeast wing was built later. This building contains 24,932 square feet of area on two levels. It has offices, the campus post office, the Dive Program, housekeeping, and some storage space on the first floor, while the entire second floor is storage. This facility has a slab-on-grade foundation, with both levels above grade. The exterior is brick masonry, with a flat membrane roof.

The information for this report was gathered during a site visit that concluded on September 14, 2009.

SITE

The building sits on a slightly sloped parcel of land in a fairly congested campus setting. Landscaping is minimal and consists of some shrubbery, a few specimen trees, and areas of turf immediately surrounding the facility. Vehicular access is from the east via Founders Drive. A small asphalt parking lot on the southern side of the structure leads to a sidewalk system that serves all entrances. However, only the entrances on the western side of the building are wheelchair accessible. No site upgrades are deemed necessary at this time.

EXTERIOR STRUCTURE

Brick veneer is the primary exterior finish. While most of the brick is fundamentally sound, exposure to the elements has caused severe deterioration of a significant amount of the mortar joints, expansion joints, and the bricks themselves. Considerable displacement can be observed in several critical locations, such as building corners. Significant surface preparation, extensive repairs, and penetrating sealant upgrades are recommended to restore the aesthetics and integrity of the building envelope.

The metal exterior doors and frames appear to have been replacements for the original doors. They are generally in good condition require no upgrades. However, it is recommended that the original single-pane, metal-framed windows be upgraded to thermal-pane systems, which will reduce the energy required to operate the building. Repair or replacement of the windowsills and trim may also be necessary.

The black single-ply membrane roofing system is not expected to outlast the ten-year scope of this analysis. Ceiling stains indicate past leakage. Future budget modeling should include a provision for the replacement of all failing roofing systems. Replace this roof with a similar application.

INTERIOR FINISHES / SYSTEMS

The interior finishes vary in age and condition. While a few offices have carpeted flooring and some areas have vinyl and ceramic tile, most of the flooring is sealed or coated concrete slab. Walls are either

painted bearing load masonry block or painted partitions. Most of this facility has no formal ceiling system. Several of the offices that are more recently renovated have suspended grid, acoustical tile systems. However, most ceilings are the painted underside of the concrete second floor slab. Flooring, wall, and painted ceiling finish upgrades should be considered as part of any future cosmetic improvements or major comprehensive renovation efforts.

The restroom fixtures and finishes are mostly original to the year of construction or a subsequent renovation. The fixtures are somewhat sound but are aged and inefficient, and the finishes are outdated. A comprehensive restroom renovation, including new fixtures, finishes, partitions, and accessories, is recommended.

Interior doors are anticipated to provide satisfactory service over the next ten years. Furthermore, the doors contain accessible lever actuated door hardware and accessible room signage. Therefore, no door or hardware upgrades are recommended within the next ten years.

ACCESSIBILITY

Due to the age and use of the facility, handicapped access is limited. Therefore, several upgrades are recommended to improve accessibility. Current ADA legislation requires that building amenities be generally accessible to all persons. The configuration of the single level drinking water fountains is a barrier to accessibility. All single level drinking fountains should be replaced with dual level, refrigerated units.

Stairs are required to have graspable handrails on both sides, rails with a specific cross-sectional geometry, and handrails that continue horizontally at the landings. Although the stairs are compliant with the code enforced at the time of construction until a major renovation occurs, they are deficient in handrail design relative to current standards. The stairs in this building do not have handrails on both sides and the existing handrails do not have the required extensions. Future renovation efforts should include comprehensive stair railing upgrades.

HEALTH

Based on the date of original construction and latest renovations, it is highly possible that lead paint and/or asbestos-containing materials were used in the construction of this facility. However, no lead paint or suspected asbestos was observed during the inspection. The lead paint and asbestos health risks are minimal, but workers during any and all remodeling should be made aware of the potential hazards of working with such materials.

FIRE / LIFE SAFETY

The paths of egress in this building are adequate with regard to fire rating. There are no compromises involving doors, partitions, elevators lobbies, or stairs. No fire / life safety issues related to architectural features were observed during the inspection of this facility.

This facility is partially protected by a fire alarm system. The devices include manual pull stations, audible / visible devices, and smoke detectors. The fire alarm panel does not provide adequate coverage to the entire facility. It is recommended that this system be replaced and expanded to cover the entire building within the next year.

There is no automatic fire suppression in this building. Although manual, dry chemical fire extinguishers are available, it is recommended that an automatic fire suppression system be installed in unprotected areas of the facility. This installation will reduce overall liability and potential for loss.

Exit signs are LED illuminated and have battery backup power. Emergency lighting is available through unitary fixtures with battery backup power. All egress lighting systems are in good condition, but coverage is not complete. Install additional devices to properly mark the path of egress. An emergency shower / eyewash station serves a storage room. The unit is in good condition and properly marked, so no project is recommended.

HVAC

Steam is circulated as the heating medium and is supplied by the campus steam loop. This facility is served by a hydronic heating system that is considered to be original and is showing signs of age. It should be anticipated that this network will require replacement within the scope of this analysis. Install a new hydronic heating system, including piping, insulation, valves, radiators, unit heaters, condensate receiver, and controls.

Split heat pump systems provide heating and air conditioning to select areas of the facility. They are controlled with electronic thermostats. The split systems are currently in good condition, but scheduled replacement is recommended within the scope of this analysis. Additional cooling is provided by some window air conditioning units. These systems have served beyond their intended service lives and should be replaced. There is no central cooling available on the second floor, and minimal fresh air is introduced to these interior spaces. It is recommended that rooftop package units be installed to serve the second floor.

Facility exhaust is accomplished by two rooftop fans and two through-the-wall fans. The through-the-wall units are in fair condition, but the rooftop units are deteriorated. It is recommended that the exhaust fans be replaced to ensure a proper flow of air within the facility.

ELECTRICAL

Power is supplied to this facility at 480/277 volts through a main switchboard on the first floor. The switchboard provides a 400 amp electrical service for distribution through a dry-type transformer that steps power down to 120/208 volts. The switchboard was installed in 1996 by Cutler Hammer and appears to be in good condition. All of the main electrical distribution system components are serviceable and will likely remain so throughout the scope of this report.

The secondary electrical system is a combination of new and original panelboards located throughout the facility. Some Federal Pacific panelboards are present. Devices such as receptacles and switches appear aged. The secondary electrical has served beyond its intended life cycle and is recommended for replacement.

The interior spaces of this facility are illuminated by fixtures that utilize compact and T12 fluorescent lamps. Most of the fluorescent fixtures are pendant-mounted applications with acrylic lenses. Some fixtures are still fitted with inefficient incandescent lamps. The interior lighting has generally served beyond its expected life cycle and is recommended for replacement. Specify energy-efficient fixtures, and install occupancy sensors where possible.

The exterior areas adjacent to the building are illuminated by building-mounted light fixtures that are a combination of new and aged units. It is recommended that all aged exterior lighting be replaced. Additionally, no lighting was observed between this building and the adjacent cooling tower facility. It is recommended that exterior lighting be installed in this area to properly illuminate the site.

PLUMBING

The main incoming domestic water enters the facility on the first floor. No backflow preventer was observed on the system. Copper piping is utilized to distribute water throughout the facility, and the system appears to be in average condition. An upgrade is recommended to replace the original or aged domestic water piping.

The drain piping network is cast-iron with bell-and-spigot connections. The piping network appears to be a combination of new and aged piping, and repairs have taken place, indicating that the older piping is starting to fail. Remove the existing sanitary and storm drain piping. Install new cast-iron drain piping networks with copper run-outs to all fixtures. Also install new floor drains, roof drains, and traps as needed.

The plumbing fixtures are ceramic and stainless steel and utilize manual flush valves and faucets. The fixtures are aging and recommended for upgrade as part of a general restroom renovation. Domestic water for this facility is heated by a natural gas-fired, residential-grade water heater and an electric, residential-grade water heater. These units are approaching the end of their expected life cycle. It should be anticipated that they will require replacement within the scope of this analysis.

VERTICAL TRANSPORTATION

The University commissioned an outside contractor to perform an elevator condition study in 2009. The capital project recommendations from this study have been included as projects in the ISES database.

Note: The deficiencies outlined in this report were noted from a visual inspection. ISES engineers and architects developed projects with related costs that are needed over the next ten-year period to bring the facility to “like-new” condition. The costs developed do not represent the cost of a complete facility renovation. Soft costs not represented in this report include telecommunications, furniture, window treatment, space change, program issues, relocation, swing space, contingency, or costs that could not be identified or determined from the visual inspection and available building information. However, existing fixed building components and systems were thoroughly inspected. The developed costs represent correcting existing deficiencies and anticipated life cycle failures (within a ten-year period) to bring the facility to modern standards without any anticipation of change to facility space layout or function. Please refer to Section Three of this report for recommended Specific Project Details.

C. INSPECTION TEAM DATA

DATE OF INSPECTION: September 14, 2009

INSPECTION TEAM PERSONNEL:

NAME	POSITION	SPECIALTY
Thomas Ferguson, AIA, LEED® AP	Project Architect	Interior Finishes / Exterior / ADA-Handicapped Accessibility / Site / Fire Safety / Life Safety / Health
Rob Gasaway, Q.E.I.	Facility Analyst	Interior Finishes / Exterior / ADA-Handicapped Accessibility / Site / Fire Safety / Life Safety / Health
John Holder, Q.E.I.	Project Engineer	Mechanical / Electrical / Plumbing / Energy / Fire Safety / Life Safety / Health
Imelda Jordan	Project Engineer	Mechanical / Electrical / Plumbing / Energy / Fire Safety / Life Safety / Health
James Lewis	Project Engineer	Mechanical / Electrical / Plumbing / Energy / Fire Safety / Life Safety / Health
Carl Mason, PE, BSCP	Project Engineer	Interior Finishes / Exterior / ADA-Handicapped Accessibility / Site / Fire Safety / Life Safety / Health
Paul Southwell	Project Engineer	Mechanical / Electrical / Plumbing / Energy / Fire Safety / Life Safety / Health
Norm Teahan, RA, AIA, NCARB	Project Architect	Interior Finishes / Exterior / ADA-Handicapped Accessibility / Site / Fire Safety / Life Safety / Health

FACILITY CONTACTS:

NAME	POSITION
William Bagwell	Associate Vice Chancellor, Campus Operations

REPORT DEVELOPMENT:

Report Development by: ISES Corporation
2165 West Park Court
Suite N
Stone Mountain, GA 30087

Contact: Kyle Thompson, Project Manager
770-879-7376

D. FACILITY CONDITION ANALYSIS - DEFINITIONS

The following information is a clarification of Asset Report Sections using example definitions.

1. REPORT DESCRIPTION

Section 1: Asset Executive Summary, Asset Summary, and General Report Information

Section 2: Detailed Project Summaries and Totals

A. Detailed Project Totals – Matrix with FCNI Data and Associated Charts
B. Detailed Projects by Priority Class / Priority Sequence
C. Detailed Projects by Cost within range [$0 - < $100,000]
D. Detailed Projects by Cost within range [≥ $100,000 - < $500,000]
E. Detailed Projects by Cost within range [≥ $500,000]
F. Detailed Projects by Project Classification
G. Detailed Projects by Project Rating Type - Energy Conservation
H. Detailed Projects by Category / System Code

FCNI = Facility Condition Needs Index, Total Cost vs. Replacement Cost. The FCNI provides a life cycle cost comparison. Facility replacement cost is based on replacement with current construction standards for facility use type, and not original design parameters. This index gives the University a comparison within all buildings for identifying worst case / best case building conditions.

$$FCNI = \frac{\text{Deferred Maintenance / Modernization + Capital Renewal + Plant Adaption}}{\text{Plant / Facility Replacement Cost}}$$

Section 3: Specific Project Details Illustrating Description / Cost

Section 4: Drawings with Iconography

The drawings for this facility are marked with ICONS (see legend), denoting the specific location(s) for each project. Within each ICON is the last four characters of the respective project number (e.g., 0001IS01 is marked on plan by IS01). There is one set of drawings marked with ICONS representing all priority classes (1, 2, 3, and 4).

Section 5: Life Cycle Model Summary and Projections

Section 6: Photographic Log

2. PROJECT CLASSIFICATION

A. Plant / Program Adaption: Expenditures required to adapt the physical plant to the evolving needs of the institution and to changing codes or standards. These are expenditures beyond normal maintenance. Examples include compliance with changing codes (e.g. accessibility), facility alterations required by changed teaching or research methods, and improvements occasioned by the adoption of modern technology (e.g., the use of personal computer networks).

B. Deferred Maintenance: Refers to expenditures for repairs which were not accomplished as a part of normal maintenance or capital repair which have accumulated to the point that facility deterioration is evident and could impair the proper functioning of the facility. Costs estimated for deferred maintenance projects should include compliance with applicable codes, even if such compliance requires expenditures beyond those essential to affect the needed repairs. Deferred maintenance projects represent catch up expenses.

C. Capital Renewal: A subset of regular or normal facility maintenance which refers to major repairs or the replacement / rebuilding of major facility components (e.g., roof replacement at the end of its normal useful life is capital repair; roof replacement several years after its normal useful life is deferred maintenance).

3. PROJECT SUBCLASS TYPE

A. Energy Conservation: Projects with energy conservation opportunities, based on simple payback analysis.

4. PRIORITY SEQUENCE BY PRIORITY CLASS (Shown in Sections 2 and 3)

All projects are assigned both a Priority Sequence number and Priority Class number for categorizing and sorting projects based on criticality and recommended execution order.

Example:

PRIORITY CLASS 1

CODE	PROJECT NO.	PRIORITY SEQUENCE
HV2C	0001HV04	01
PL1D	0001PL02	02

PRIORITY CLASS 2

CODE	PROJECT NO.	PRIORITY SEQUENCE
IS1E	0001IS06	03
EL4C	0001EL03	04

5. PRIORITY CLASS (Shown in Sections 2 and 3)

PRIORITY 1 - Currently Critical (Immediate)

Projects in this category require immediate action to:
a. return a facility to normal operation
b. stop accelerated deterioration
c. correct a cited safety hazard

PRIORITY 2 - Potentially Critical (Year One)

Projects in this category, if not corrected expeditiously, will become critical within a year. Situations in this category include:
a. intermittent interruptions
b. rapid deterioration
c. potential safety hazards

PRIORITY 3 - Necessary - Not Yet Critical (Years Two to Five)

Projects in this category include conditions requiring appropriate attention to preclude predictable deterioration or potential downtime and the associated damage or higher costs if deferred further.

PRIORITY 4 - Recommended (Years Six to Ten)

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

6. COST SUMMARIES AND TOTALS

The cost summaries and totals are illustrated by Detailed Projects sorted in multiple formats (shown in Sections 2 and 3).

City Index material / labor cost factors: (shown in Sections 2 and 3)

Cost factors are based on the Greenville City Index and are adjusted for material and labor cost factors (2009). Refer to the project related labor report found later in this section.

Global Markup Percentages		R.S. MEANS
Local Labor Index:	51.3 %	of National Average
Local Materials Index:	100.7 %	of National average
General Contractor Markup:	20.0 %	Contractor profit & overhead, bonds & insurance
Professional Fees:	16.0 %	Arch. / Eng. Firm design fees and in-house design cost

7. PROJECT NUMBER (Shown in Sections 2 and 3)

Example:

Project Number = 0001-EL-04 (unique for each independent project)

0001	-	Building Identification Number
EL	-	System Code, EL represents Electrical
04	-	Sequential Assignment Project Number by Category / System

8. PHOTO NUMBER (Shown in Section 6)

A code shown on the Photographic Log identifies the building number, photo sequence, and architect, engineer, or vertical transportation.

Example: 0001006e

Building Number	Photo Sequence	Arch / Eng / VT
0001	006	e

9. LIFE CYCLE COST MODEL DESCRIPTION AND DEFINITIONS (Shown in Section 5)

Included in this report is a Life Cycle Cost Model. This model consists of two elements, one is the component listing (starting on page 5.1.1) and the other is the Life Cycle Cost Projections Graph (page 5.2.1). The component list is a summary of all major systems and components within the facility. Each indicated component has the following associated information:

Uniformat Code	This is the standard Uniformat Code that applies to the component
Component Description	This line item describes the individual component
Qty	The quantity of the listed component
Units	The unit of measure associated with the quantity
Unit Cost	The cost to replace each individual component unit (This cost is in today's dollars)
Total Cost	Unit cost multiplied by Quantity, also in today's dollars. Note that this is a one time renewal / replacement cost
Install Date	Year that the component was installed. Where this data is not available, it defaults to the year the asset was constructed
Life Exp	Average life expectancy for each individual component

The component listing forms the basis for the Life Cycle Cost Projections Graph shown on page 5.2.1. This graph represents a projection over a fifty-year period (starting from the date the report is run) of expected component renewals based on each individual item's renewal cost and life span. Some components might require renewal several times within the fifty-year model, while others might not occur at all. Each individual component is assigned a renewal year based on life cycles, and the costs for each item are inflated forward to the appropriate year. The vertical bars shown on the graph represent the accumulated (and inflated) total costs for each individual year. At the bottom of the graph, the average annual cost per gross square foot ($/GSF) is shown for the facility. In this calculation, all costs are not inflated. This figure can be utilized to assess the adequacy of existing capital renewal and repair budgets.

10. CATEGORY CODE (Shown in Sections 2 and 3)

Refer to the following Category Code Report.

Example: Category Code = EL5A

EL = System Description
5 = Component Description
A = Element Description

CATEGORY CODE			SYSTEM DESCRIPTION
AC1A	-	AC4B	ACCESSIBILITY
EL1A	-	EL8A	ELECTRICAL
ES1A	-	ES6E	EXTERIOR STRUCTURE
FS1A	-	FS6A	FIRE / LIFE SAFETY
HE1A	-	HE7A	HEALTH
HV1A	-	HV8B	HVAC
IS1A	-	IS6D	INTERIOR FINISHES / SYSTEMS
PL1A	-	PL5A	PLUMBING
SI1A	-	SI4A	SITE
SS1A	-	SS7A	SECURITY SYSTEMS
VT1A	-	VT7A	VERTICAL TRANSPORTATION

CATEGORY CODE REPORT			
CODE	**COMPONENT DESCRIPTION**	**ELEMENT DESCRIPTION**	**DEFINITION**
SYSTEM DESCRIPTION: ACCESSIBILITY			
AC1A	SITE	STAIR AND RAILINGS	Includes exterior stairs and railings which are not part of the building entrance points.
AC1B	SITE	RAMPS AND WALKS	Includes sidewalks, grade change ramps (except for a building entrance), curb ramps, etc.
AC1C	SITE	PARKING	Designated parking spaces including striping, signage, access aisles and ramps, etc.
AC1D	SITE	TACTILE WARNINGS	Raised tactile warnings located at traffic crossing and elevation changes.
AC2A	BUILDING ENTRY	GENERAL	Covers all aspects of entry into the building itself including ramps, lifts, doors and hardware, power operators, etc.
AC3A	INTERIOR PATH OF TRAVEL	LIFTS/RAMPS/ ELEVATORS	Interior lifts, ramps and elevators designed to accommodate level changes inside a building. Includes both installation and retrofitting.
AC3B	INTERIOR PATH OF TRAVEL	STAIRS AND RAILINGS	Upgrades to interior stairs and handrails for accessibility reasons.
AC3C	INTERIOR PATH OF TRAVEL	DOORS AND HARDWARE	Accessibility upgrades to the interior doors including widening, replacing hardware power, assisted operators, etc.
AC3D	INTERIOR PATH OF TRAVEL	SIGNAGE	Interior building signage upgrades for compliance with ADA.
AC3E	INTERIOR PATH OF TRAVEL	RESTROOMS/ BATHROOMS	Modifications to and installation of accessible public restrooms and bathrooms. Bathrooms, which are an integral part of residential suites, are catalogued under HC4A.
AC3F	INTERIOR PATH OF TRAVEL	DRINKING FOUNTAINS	Upgrading/replacing drinking fountains for reasons of accessibility.
AC3G	INTERIOR PATH OF TRAVEL	PHONES	Replacement/modification of public access telephones.
AC4A	GENERAL	FUNCTIONAL SPACE MODIFICATIONS	This category covers all necessary interior modifications necessary to make the services and functions of a building accessible. It includes installation of assistive listening systems, modification of living quarters, modifications to laboratory workstations, etc. Bathrooms, which are integral to efficiency suites, are catalogued here.
AC4B	GENERAL	OTHER	All accessibility issues not catalogued elsewhere.
SYSTEM DESCRIPTION: ELECTRICAL			
EL1A	INCOMING SERVICE	TRANSFORMER	Main building service transformer.
EL1B	INCOMING SERVICE	DISCONNECTS	Main building disconnect and switchgear.
EL1C	INCOMING SERVICE	FEEDERS	Incoming service feeders. Complete incoming service upgrades, including transformers, feeders, and main distribution panels are catalogued here.
EL1D	INCOMING SERVICE	METERING	Installation of meters to record consumption and/or demand.
EL2A	MAIN DISTRIBUTION PANELS	CONDITION UPGRADE	Main distribution upgrade due to deficiencies in condition.
EL2B	MAIN DISTRIBUTION PANELS	CAPACITY UPGRADE	Main distribution upgrades due to inadequate capacity.
EL3A	SECONDARY DISTRIBUTION	STEP DOWN TRANSFORMERS	Secondary distribution stepdown and isolation transformers.
EL3B	SECONDARY DISTRIBUTION	DISTRIBUTION NETWORK	Includes conduit, conductors, sub-distribution panels, switches, outlets, etc. Complete interior rewiring of a facility is catalogued here.
EL3C	SECONDARY DISTRIBUTION	MOTOR CONTROLLERS	Mechanical equipment motor starters and control centers.
EL4A	DEVICES AND FIXTURES	EXTERIOR LIGHTING	Exterior building lighting fixtures including supply conductors and conduit.
EL4B	DEVICES AND FIXTURES	INTERIOR LIGHTING	Interior lighting fixtures (also system wide emergency lighting) including supply conductors and conduits.
EL4C	DEVICES AND FIXTURES	LIGHTING CONTROLLERS	Motion sensors, photocell controllers, lighting contactors, etc.

CATEGORY CODE REPORT			
CODE	**COMPONENT DESCRIPTION**	**ELEMENT DESCRIPTION**	**DEFINITION**
EL4D	DEVICES AND FIXTURES	GFCI PROTECTION	Ground fault protection including GFCI receptacles and breakers.
EL4E	DEVICES AND FIXTURES	LIGHTNING PROTECTION	Lightning arrestation systems including air terminals and grounding conductors.
EL5A	EMERGENCY POWER SYSTEM	GENERATION/ DISTRIBUTION	Includes generators, central battery banks, transfer switches, emergency power grid, etc.
EL6A	SYSTEMS	UPS/DC POWER SUPPLY	Uninterruptible power supply systems and DC motor-generator sets and distribution systems.
EL7A	INFRASTRUCTURE	ABOVE GROUND TRANSMISSION	Includes poles, towers, conductors, insulators, fuses, disconnects, etc.
EL7B	INFRASTRUCTURE	UNDERGROUND TRANSMISSION	Includes direct buried feeders, ductbanks, conduit, manholes, feeders, switches, disconnects, etc.
EL7C	INFRASTRUCTURE	SUBSTATIONS	Includes incoming feeders, breakers, buses, switchgear, meters, CTs, PTs, battery systems, capacitor banks, and all associated auxiliary equipment.
EL7D	INFRASTRUCTURE	DISTRIBUTION SWITCHGEAR	Stand-alone sectionalizing switches, distribution switchboards, etc.
EL7F	INFRASTRUCTURE	AREA AND STREET LIGHTING	Area and street lighting systems including stanchions, fixtures, feeders, etc.
EL8A	GENERAL	OTHER	Electrical system components not catalogued elsewhere.
SYSTEM DESCRIPTION: EXTERIOR			
ES1A	FOUNDATION/FOOTING	STRUCTURE	Structural foundation improvements involving structural work on foundation wall/footing, piers, caissons, piles including crack repairs, shoring & pointing
ES1B	FOUNDATION/FOOTING	DAMPPROOFING/ DEWATERING	Foundation/footing waterproofing work including, damp proofing, dewatering, insulation, etc.
ES2A	COLUMNS/BEAMS/ WALLS	STRUCTURE	Structural work to primary load-bearing structural components aside from floors including columns, beams, bearing walls, lintels, arches, etc.
ES2B	COLUMNS/BEAMS/ WALLS	FINISH	Work involving restoration of the appearance and weatherproof integrity of exterior wall/structural envelope components including masonry/pointing, expansion joints, efflorescence & stain removal, grouting, surfacing, chimney repairs, etc.
ES3A	FLOOR	STRUCTURE	Work concerning the structural integrity of the load supporting floors both exposed and unexposed including deformation, delamination, spalling, shoring, crack repair, etc.
ES4A	ROOF	REPAIR	Work on waterproof horizontal finish (roof) involving repair and/or limited replacement (<40% total) including membrane patching, flashing repair, coping caulk/resetting, PPT wall parging/coating, walkpad installation, skylight and roof hatch R&R, etc.
ES4B	ROOF	REPLACEMENT	Work involving total refurbishment of roofing system including related component rehab.
ES5A	FENESTRATIONS	DOORS	Work on exterior exit/access door including storefronts, airlocks, air curtains, vinyl slat doors, all power/manual operating hardware (except handicapped), etc.
ES5B	FENESTRATIONS	WINDOWS	Work on exterior fenestration closure & related components including glass/metal/wood curtain walls, fixed or operable window sashes, glazing, frames, sills, casings, stools, seats, coatings, treatments, screens, storm windows, etc.
ES6A	GENERAL	ATTACHED STRUCTURE	Work on attached exterior structure components not normally considered in above categories including porches, stoops, decks, monumental entrance stairs, cupolas, tower, etc.
ES6B	GENERAL	AREAWAYS	Work on attached grade level or below structural features including subterranean light wells, areaways, basement access stairs, etc.
ES6C	GENERAL	TRIM	Work on ornamental exterior (generally non-structural) elements including beltlines, quoins, porticos, soffits, cornices, moldings, trim, etc.
ES6D	GENERAL	SUPERSTRUCTURE	Finish and structural work on non-standard structures with exposed load-bearing elements such as stadiums, bag houses, bleachers, freestanding towers, etc.

CATEGORY CODE REPORT			
CODE	**COMPONENT DESCRIPTION**	**ELEMENT DESCRIPTION**	**DEFINITION**
ES6E	GENERAL	OTHER	Any exterior work not specifically categorized elsewhere including finish and structural work on freestanding boiler stacks.
SYSTEM DESCRIPTION: FIRE / LIFE SAFETY			
FS1A	LIGHTING	EGRESS LIGHTING/EXIT SIGNAGE	R & R work on exit signage and packaged AC/DC emergency lighting.
FS2A	DETECTION/ALARM	GENERAL	Repair or replacement of fire alarm/detection system/components including alarms, pull boxes, smoke/heat detectors, annunciator panels, central fire control stations, remote dialers, fire station communications, etc.
FS3A	SUPPRESSION	SPRINKLERS	Repair or installation of water sprinklers type automatic fire suppressions including wet pipe & dry pipe systems, heads, piping, deflectors, valves, monitors, associated fire pump, etc.
FS3B	SUPPRESSION	STANDPIPE/HOSE	Repair or installation of standpipe system or components including hardware, hoses, cabinets, nozzles, necessary fire pumping system, etc.
FS3C	SUPPRESSION	EXTINGUISHERS	Repairs or upgrades to F.E. cabinets/wall fastenings and handheld extinguisher testing/replacement.
FS3D	SUPPRESSION	OTHER	Other fire suppression items not specifically categorized elsewhere including fire blankets, carbon dioxide automatic systems, Halon systems, dry chemical systems, etc.
FS4A	HAZARDOUS MATERIALS	STORAGE ENVIRONMENT	Installation or repair of special storage environment for the safe holding of flammable or otherwise dangerous materials/supplies including vented flammables storage cabinets, holding pens/rooms, cages, fire safe chemical storage rooms, etc.
FS4B	HAZARDOUS MATERIALS	USER SAFETY	Improvements, repairs, installation, or testing of user safety equipment including emergency eyewashes, safety showers, emergency panic/shut-down system, etc.
FS5A	EGRESS PATH	DESIGNATION	Installation, relocation or repair of posted diagrammatic emergency evacuation routes.
FS5B	EGRESS PATH	DISTANCE/ GEOMETRY	Work involving remediation of egress routing problems including elimination of dead end corridors, excessive egress distance modifications and egress routing inadequacies.
FS5C	EGRESS PATH	SEPARATION RATING	Restoration of required fire protective barriers including wall rating compromises, fire rated construction, structural fire proofing, wind/safety glazing, transom retrofitting, etc.
FS5D	EGRESS PATH	OBSTRUCTION	Clearance of items restricting the required egress routes.
FS5E	EGRESS PATH	STAIRS RAILING	Retrofit of stair/landing configurations/structure, railing heights/geometries, etc.
FS5F	EGRESS PATH	FIRE DOORS/ HARDWARE	Installation/replacement/repair of fire doors and hardware including labeled fire doors, fire shutters, closers, magnetic holders, panic hardware, etc.
FS5G	EGRESS PATH	FINISH/FURNITURE RATINGS	Remediation of improper fire/smoke ratings of finishes and furniture along egress routes.
FS6A	GENERAL	OTHER	Life/fire safety items not specifically categorized elsewhere.
SYSTEM DESCRIPTION: HEALTH			
HE1A	ENVIRONMENTAL CONTROL	EQUIPMENT AND ENCLOSURES	Temperature control chambers (both hot and cold) for non-food storage. Includes both chamber and all associated mechanical equipment.
HE1B	ENVIRONMENTAL CONTROL	OTHER	General environmental control problems not catalogued elsewhere.
HE2A	PEST CONTROL	GENERAL	Includes all measures necessary to control and destroy insects, rodents and other pests.
HE3A	REFUSE	GENERAL	Issues related to the collection, handling and disposal of refuse.
HE4A	SANITATION EQUIPMENT	LABORATORY AND PROCESS	Includes autoclaves, cage washers, steam cleaners, etc.
HE5A	FOOD SERVICE	KITCHEN EQUIPMENT	Includes ranges, grilles, cookers, sculleries, etc.
HE5B	FOOD SERVICE	COLD STORAGE	Includes the cold storage room and all associated refrigeration equipment.

CATEGORY CODE REPORT			
CODE	**COMPONENT DESCRIPTION**	**ELEMENT DESCRIPTION**	**DEFINITION**
HE6A	HAZARDOUS MATERIAL	STRUCTURAL ASBESTOS	Testing, abatement and disposal of structural and building finish materials containing asbestos.
HE6B	HAZARDOUS MATERIAL	MECHANICAL ASBESTOS	Testing, abatement and disposal of mechanical insulation materials containing asbestos.
HE6C	HAZARDOUS MATERIAL	PCBs	Includes testing, demolition, disposal and cleanup of PCB contaminated substances.
HE6D	HAZARDOUS MATERIAL	FUEL STORAGE	Includes monitoring, removal and replacement of above and below ground fuel storage and distribution systems. Also includes testing and disposal of contaminated soils.
HE6E	HAZARDOUS MATERIAL	LEAD PAINT	Testing, removal and disposal of lead-based paint systems.
HE6F	HAZARDOUS MATERIAL	OTHER	Handling, storage, and disposal of other hazardous materials.
HE7A	GENERAL	OTHER	Health related issues not catalogued elsewhere.
SYSTEM DESCRIPTION: HVAC			
HV1A	HEATING	BOILERS/STACKS/ CONTROLS	Boilers for heating purposes including their related stacks, flues, and controls.
HV1B	HEATING	RADIATORS/ CONVECTORS	Including cast iron radiators, fin tube radiators, baseboard radiators, etc.
HV1C	HEATING	FURNACE	Furnaces and their related controls, flues, etc.
HV1D	HEATING	FUEL SUPPLY/STORAGE	Storage and/or distribution of fuel for heating purposes, including tanks and piping networks and related leak detection/monitoring.
HV2A	COOLING	CHILLERS/ CONTROLS	Chiller units for production of chilled water for cooling purposes, related controls (not including mods for CFC compliance).
HV2B	COOLING	HEAT REJECTION	Repair/replacement of cooling towers, dry coolers, air-cooling and heat rejection. (Includes connection of once-through system to cooling tower.)
HV3A	HEATING/COOLING	SYSTEM RETROFIT/ REPLACE	Replacement or major retrofit of HVAC systems.
HV3B	HEATING/COOLING	WATER TREATMENT	Treatment of hot water, chilled water, steam, condenser water, etc.
HV3C	HEATING/COOLING	PACKAGE/SELF-CONTAINED UNITS	Repair/replacement of self-contained/package type units including stand up units, rooftop units, window units, etc; both air conditioners and heat pumps.
HV3D	HEATING/COOLING	CONVENTIONAL SPLIT SYSTEMS	Repair, installation, or replacement of conventional split systems; both air conditioners and heat pumps including independent component replacements of compressors and condensers.
HV4A	AIR MOVING/ VENTILATION	AIR HANDLERS/ FAN UNITS	Includes air handlers & coils, fan coil units, unit ventilators, filtration upgrades, etc., not including package/self-contained units, split systems or other specifically categorized systems.
HV4B	AIR MOVING/ VENTILATION	EXHAUST FANS	Exhaust fan systems including fans, range and fume hoods, controls, and related ductwork.
HV4C	AIR MOVING/ VENTILATION	OTHER FANS	Supply, return, or any other fans not incorporated into a component categorized elsewhere.
HV4D	AIR MOVING/ VENTILATION	AIR DISTRIBUTION NETWORK	Repair, replacement, or cleaning of air distribution network including ductwork, terminal reheat/cool, VAV units, induction units, power induction units, insulation, dampers, linkages, etc.
HV5A	STEAM/HYDRONIC DISTRIBUTION	PIPING NETWORK	Repair/replacement of piping networks for heating and cooling systems including pipe, fittings, insulation, related components, etc.
HV5B	STEAM/HYDRONIC DISTRIBUTION	PUMPS	Repair or replacement of pumps used in heating and cooling systems, related control components, etc.
HV5C	STEAM/HYDRONIC DISTRIBUTION	HEAT EXCHANGERS	Including shell and tube heat exchangers and plate heat exchangers for heating and cooling.
HV6A	CONTROLS	COMPLETE SYSTEM	Replacement of HVAC control systems.

CATEGORY CODE REPORT			
CODE	**COMPONENT DESCRIPTION**	**ELEMENT DESCRIPTION**	**DEFINITION**
		UPGRADE	
HV6B	CONTROLS	MODIFICATIONS/ REPAIRS	Repair or modification of HVAC control system.
HV6C	CONTROLS	AIR COMPRESSORS/ DRYERS	Repair or modification of control air compressors and dryers.
HV7A	INFRASTRUCTURE	STEAM/HOT WATER GENERATION	Generation of central steam and/or hot water including boilers and related components.
HV7B	INFRASTRUCTURE	STEAM/HOT WATER DISTRIBUTION	Distribution system for central hot water and/or steam.
HV7C	INFRASTRUCTURE	CHILLED WATER GENERATION	Generation of central chilled water including chillers and related components.
HV7D	INFRASTRUCTURE	CHILLED WATER DISTRIBUTION	Distribution system for central chilled water.
HV7E	INFRASTRUCTURE	TUNNELS/ MANHOLES/ TRENCHES	Repairs, installation, replacement of utility system access chambers.
HV7F	INFRASTRUCTURE	OTHER	HVAC infrastructure issues not specifically categorized elsewhere.
HV8A	GENERAL	CFC COMPLIANCE	Chiller conversions/replacements for CFC regulatory compliance, monitoring, etc.
HV8B	GENERAL	OTHER	HVAC issues not catalogued elsewhere.
SYSTEM DESCRIPTION: INTERIOR FINISHES / SYSTEMS			
IS1A	FLOOR	FINISHES-DRY	R & R of carpet, hardwood strip flooring, concrete coating, vinyl linoleum & tile, marble, terrazzo, rubber flooring, underlayment in predominantly dry areas ("dry" includes non-commercial kitchens)
IS1B	FLOOR	FINISHES-WET	Flooring finish/underlayment work in predominantly "wet" areas including work with linoleum, rubber, terrazzo, concrete coating, quarry tile, ceramic tile, epoxy aggregate, etc.
IS2A	PARTITIONS	STRUCTURE	Structural work on full height permanent interior partitions including wood/metal stud & drywall systems, CMU systems, structural brick, tile, glass block, etc.
IS2B	PARTITIONS	FINISHES	Work on full height permanent interior partitions including R & R to gypsum board, plaster, lath, wood paneling, acoustical panels, wall coverings, column coverings, tile, paint, etc.
IS3A	CEILINGS	REPAIR	Repair of interior ceilings (<40% of total) including tiles, gypsum board, plaster, paint, etc.
IS3B	CEILINGS	REPLACEMENT	Major refurbishments (>40% of total) to interior ceiling systems including grid system replacements, structural framing, new suspended systems, paint, plastering, etc.
IS4A	DOORS	GENERAL	Any work on interior non-fire rated doors, roll-up counter doors, mechanical/plumbing access doors, and all door hardware (except for reasons of access improvement).
IS5A	STAIRS	FINISH	Any finish restorative work to stair tower walking surfaces including replacement of rubber treads, safety grips, nosings, etc. (except as required to accommodate disabled persons).
IS6A	GENERAL	MOLDING	R & R to interior trim/molding systems including rubber/vinyl/wood base, crown/chair/ornamental moldings, cased openings, etc.
IS6B	GENERAL	CABINETRY	R & R work to interior casework systems including cabinets, countertops, wardrobes, lockers, mail boxes, built-in bookcases, lab/work benches, reagent shelving, etc. (except as required for access by the disabled).
IS6C	GENERAL	SCREENING	Work on temporary or partial height partitioning systems including toilet partitions, urinal/vanity screens, etc.
IS6D	GENERAL	OTHER	Any work on interior elements not logically or specifically categorized elsewhere including light coves, phone booths, interior light wells, etc.
SYSTEM DESCRIPTION: PLUMBING			

CATEGORY CODE REPORT			
CODE	**COMPONENT DESCRIPTION**	**ELEMENT DESCRIPTION**	**DEFINITION**
PL1A	DOMESTIC WATER	PIPING NETWORK	Repair or replacement of domestic water supply piping network, insulation, hangers, etc.
PL1B	DOMESTIC WATER	PUMPS	Domestic water booster pumps, circulating pumps, related controls, etc.
PL1C	DOMESTIC WATER	STORAGE/ TREATMENT	Equipment or vessels for storage or treatment of domestic water.
PL1D	DOMESTIC WATER	METERING	Installation, repair, or replacement of water meters.
PL1E	DOMESTIC WATER	HEATING	Domestic water heaters including gas, oil, and electric water heaters, shell and tube heat exchangers, tank type and instantaneous.
PL1F	DOMESTIC WATER	COOLING	Central systems for cooling and distributing drinking water.
PL1G	DOMESTIC WATER	FIXTURES	Plumbing fixtures including sinks, drinking fountains, water closets, urinals, etc.
PL1H	DOMESTIC WATER	CONSERVATION	Alternations made to the water distribution system to conserve water.
PL1I	DOMESTIC WATER	BACKFLOW PROTECTION	Backflow protection devices including backflow preventers, vacuum breakers, etc.
PL2A	WASTEWATER	PIPING NETWORK	Repair or replacement of building wastewater piping network.
PL2B	WASTEWATER	PUMPS	Pump systems used to lift wastewater including sewage ejectors and other sump systems.
PL3A	SPECIAL SYSTEMS	PROCESS GAS/FLUIDS	Generation and/or distribution of process steam, compressed air, natural and LP gas, process water, vacuum, etc.
PL4A	INFRASTRUCTURE	POTABLE WATER STORAGE/ TREATMENT	Storage and treatment of potable water for distribution.
PL4B	INFRASTRUCTURE	INDUSTRIAL WATER DISTRIBUTION/ TREATMENT	Storage and treatment of industrial water for distribution.
PL4C	INFRASTRUCTURE	SANITARY WATER COLLECTION	Sanitary water collection systems, sanitary sewer systems; including combined systems.
PL4D	INFRASTRUCTURE	STORM WATER COLLECTION	Storm water collection systems, storm sewer systems; storm water only.
PL4E	INFRASTRUCTURE	POTABLE WATER DISTRIBUTION	Potable water distribution network.
PL4F	INFRASTRUCTURE	WASTEWATER TREATMENT	Wastewater treatment plants, associated equipment, etc.
PL5A	GENERAL	OTHER	Plumbing issues not categorized elsewhere.
SYSTEM DESCRIPTION: SITE			
SI1A	ACCESS	PEDESTRIAN	Paved pedestrian surfaces including walks, site stairs, step ramps, paths, pedestrian signage, sidewalk bridges/canopies, pedestrian plaza/mall areas, etc.
SI1B	ACCESS	VEHICULAR	Paved vehicular surfaces including roads, paths, curbs, guards, bollards, bridges, skyways, joints, shoulder work, culverts, ditches, vehicular signage, etc.
SI2A	LANDSCAPE	GRADE/FLORA	Landscape related work including new grass/turf refurbishment, grade improvements, catch basins, swales, berms, pruning, new ornamental flora, etc.
SI3A	HARDSCAPE	STRUCTURE	Permanent hard site features, predominantly ornamental, including terraces, fences, statues, freestanding signage, fountains, benches, etc.
SI4A	GENERAL	OTHER	Other site work not specifically categorized elsewhere.
SYSTEM DESCRIPTION: SECURITY SYSTEMS			
SS1A	LIGHTING	EXTERIOR	Fixtures, stanchions, foliage interference, cleanliness, locations, etc.

CATEGORY CODE REPORT			
CODE	**COMPONENT DESCRIPTION**	**ELEMENT DESCRIPTION**	**DEFINITION**
SS2A	SITE	FENCING	Perimeter campus fencing, individual building fencing, includes both pedestrian and vehicular control fences.
SS2B	SITE	GENERAL	Hidden areas due to foliage, fencing, parking, walls, etc.
SS3A	COMMUNICATIONS	EMERGENCY PHONES	Access, locations, visibility, function, reliability, etc.
SS4A	ACCESS CONTROL	DOORS	Access, locks, keys, two way speakers, reliability, redundancy, etc.
SS4B	ACCESS CONTROL	WINDOWS	Locks, screens, access, reliability, etc.
SS4C	ACCESS CONTROL	SYSTEMS	Card key, proximity devices, data control, data use, reliability, system design, etc.
SS5A	MONITORING	SYSTEMS	Cameras, audio communication, monitoring stations, locations, system design, etc.
SS6A	CIRCULATION	PEDESTRIAN	On campus as well as to and from off campus housing and class locations, etc.
SS6B	CIRCULATION	VEHICULAR	Guard gates, access, systems, data control and use, identification, etc.
SS7A	GENERAL	OTHER	General information/projects pertaining to security issues.
SYSTEM DESCRIPTION: VERTICAL TRANSPORTATION			
VT1A	MACHINE ROOM	GENERAL	Machine, worm gear, thrust bearing, brake, motors, sheaves, generator, controller, selector, governor, pump(s), valves, oil, access, lighting, ventilation, floor.
VT2A	CAR	GENERAL	Position indicator, lighting, floor, gate-doors, operation devices, safeties, safety shoe, light ray/detection, emergency light, fire fighter service, car top, door operator, stop switch, car frame, car guides, sheaves, phone, ventilation.
VT3A	HOISTWAY	GENERAL	Enclosure, fascia, interlock, doors, hangers, closers, sheaves, rails, hoistway switches, ropes, traveling cables, selector tape, weights, compensation.
VT4A	HALL FIXTURES	GENERAL	Operating panel, position indicator, hall buttons, lobby panel, hall lanterns, fire fighter service, audible signals, card/key access.
VT5A	PIT	GENERAL	Buffer(s), guards, sheaves, hydro packing, floor, lighting, safety controls.
VT6A	OPERATING CONDITIONS	GENERAL	Door open time, door close time, door thrust, acceleration, deceleration, leveling, dwell time, speed, OFR time, nudging.
VT7A	GENERAL	OTHER	General information/projects relating to vertical transportation system components.

FACILITY CONDITION ANALYSIS

SECTION 2

DETAILED PROJECT SUMMARIES AND TOTALS

Detailed Project Totals

Facility Condition Analysis

System Code by Priority Class

B043 : MAIL SERVICES / WAREHOUSE / TECH LAB A

System Code	System Description	Priority Classes 1	2	3	4	Subtotal
AC	ACCESSIBILITY	0	0	0	10,945	10,945
EL	ELECTRICAL	0	0	214,526	0	214,526
ES	EXTERIOR	0	0	313,167	82,505	395,672
FS	FIRE/LIFE SAFETY	0	245,874	0	0	245,874
HV	HVAC	0	0	349,404	0	349,404
IS	INTERIOR/FINISH SYS.	0	0	70,276	51,984	122,260
PL	PLUMBING	0	0	91,721	0	91,721
VT	VERT. TRANSPORTATION	0	80,000	0	0	80,000
	TOTALS	0	325,874	1,039,095	145,433	1,510,402

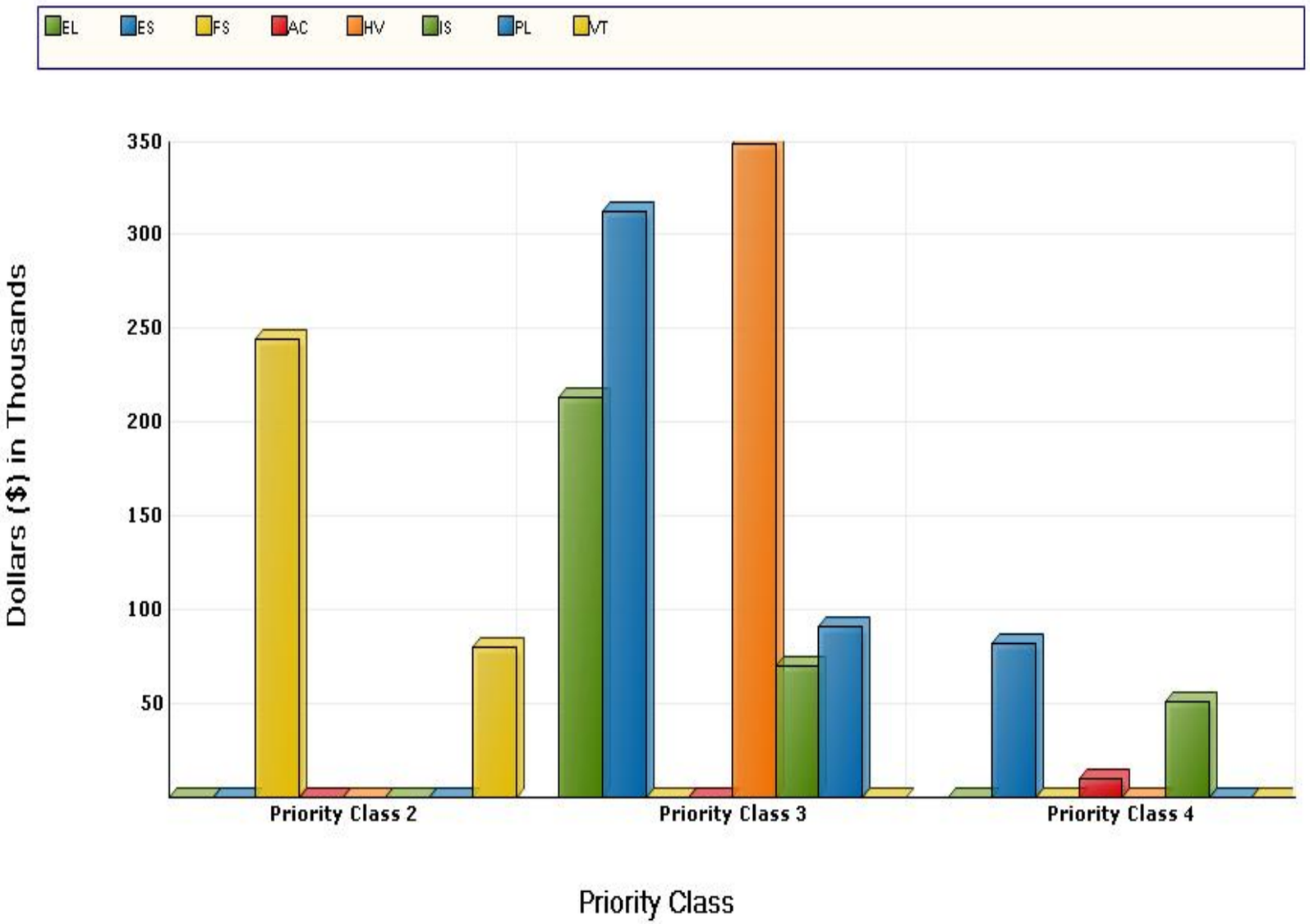
Facility Replacement Cost	$3,206,000
Facility Condition Needs Index	0.47

Gross Square Feet	24,932	**Total Cost Per Square Foot**	$60.58

FACILITY CONDITION ANALYSIS

System Code by Priority Class

B043 : MAIL SERVICES / WAREHOUSE / TECH LAB A



Detailed Project Totals

Facility Condition Analysis

System Code by Project Class

B043 : MAIL SERVICES / WAREHOUSE / TECH LAB A

		Project Classes				
System Code	System Description	Captial Renewal	Deferred Maintenance	FCAP	Plant Adaption	Subtotal
AC	ACCESSIBILITY	0	0	0	10,945	10,945
EL	ELECTRICAL	0	214,526	0	0	214,526
ES	EXTERIOR	82,505	313,167	0	0	395,672
FS	FIRE/LIFE SAFETY	0	0	0	245,874	245,874
HV	HVAC	131,223	218,181	0	0	349,404
IS	INTERIOR/FINISH SYS.	51,984	70,276	0	0	122,260
PL	PLUMBING	5,927	85,795	0	0	91,721
VT	VERT. TRANSPORTATION	0	80,000	0	0	80,000
	TOTALS	271,638	981,945	0	256,819	1,510,402

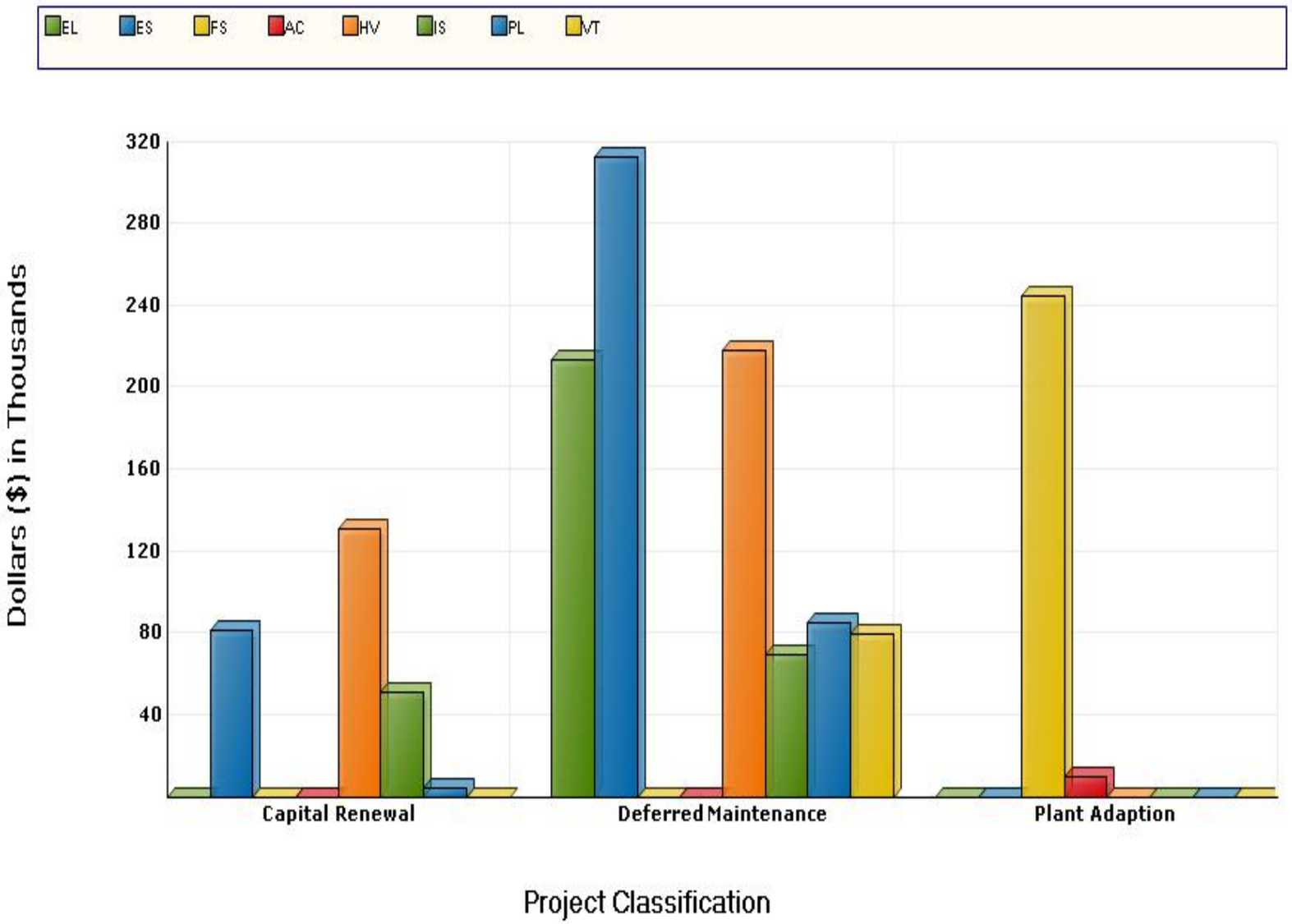
Facility Replacement Cost	$3,206,000
Facility Condition Needs Index	0.47

Gross Square Feet	24,932	**Total Cost Per Square Foot**	$60.58

FACILITY CONDITION ANALYSIS

System Code by Project Class

B043 : MAIL SERVICES / WAREHOUSE / TECH LAB A



Detailed Project Summary

Facility Condition Analysis

Project Class by Priority Class

B043 : MAIL SERVICES / WAREHOUSE / TECH LAB A

	Priority Classes				
Project Class	**1**	**2**	**3**	**4**	**Subtotal**
Capital Renewal	0	0	137,150	134,488	271,638
Deferred Maintenance	0	80,000	901,945	0	981,945
Plant Adaption	0	245,874	0	10,945	256,819
TOTALS	0	325,874	1,039,095	145,433	1,510,402

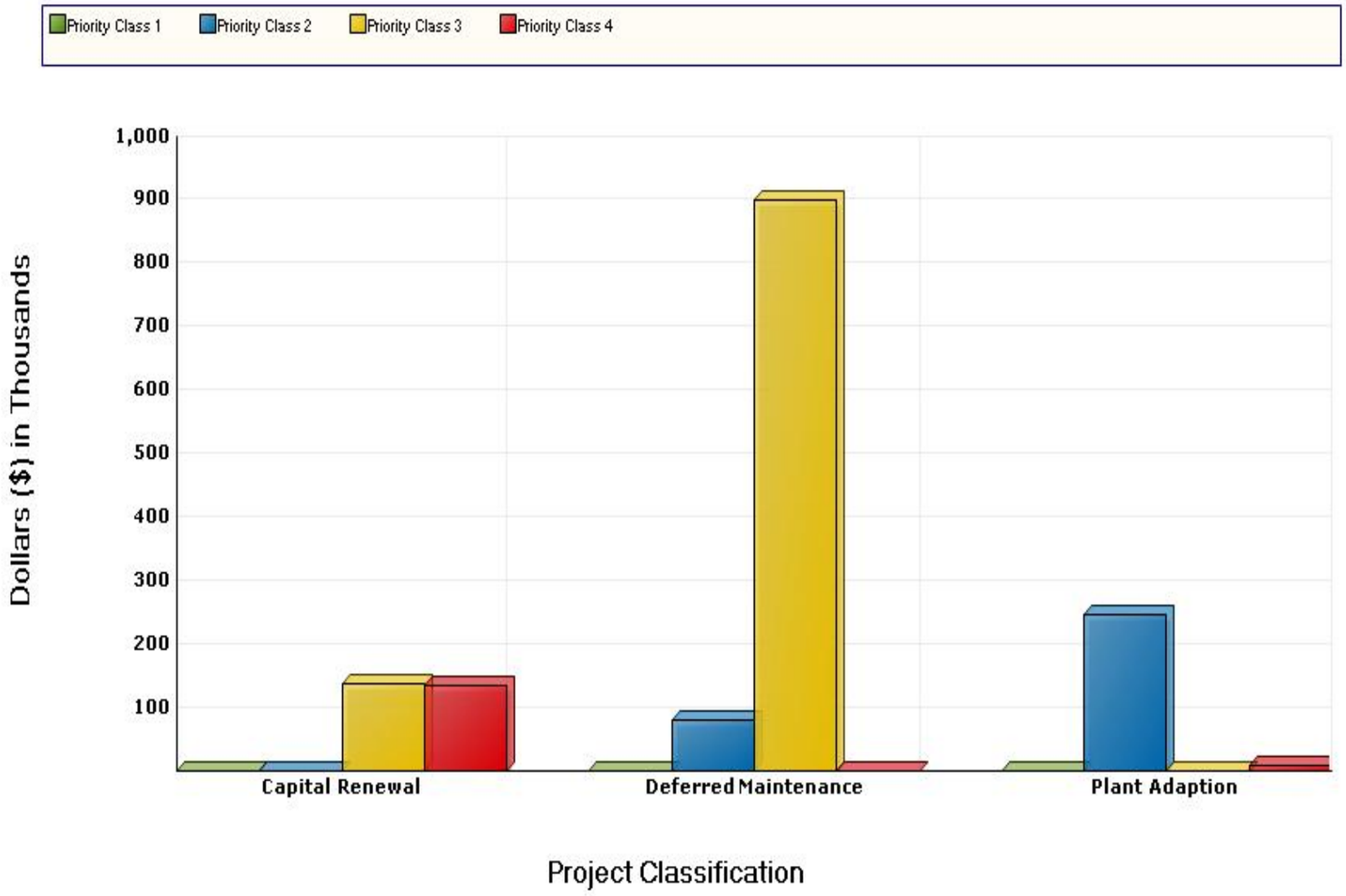
Facility Replacement Cost	$3,206,000
Facility Condition Needs Index	0.47

Gross Square Feet	24,932	**Total Cost Per Square Foot**	$60.58

FACILITY CONDITION ANALYSIS

Project Class by Priority Class

B043 : MAIL SERVICES / WAREHOUSE / TECH LAB A



Detailed Project Summary

Facility Condition Analysis

Priority Class - Priority Sequence

B043 : MAIL SERVICES / WAREHOUSE / TECH LAB A

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Total Cost
FS2A	B043FS01	2	1	FIRE ALARM SYSTEM REPLACEMENT	57,646	9,223	66,870
FS3A	B043FS02	2	2	FIRE SPRINKLER SYSTEM INSTALLATION	150,656	24,105	174,761
FS1A	B043FS03	2	3	INSTALL EMERGENCY LIGHTS AND EXIT SIGNS	3,658	585	4,243
VT7A	B043VT01	2	4	ELEVATOR NO. 1 UPGRADE	80,000	0	80,000
				Totals for Priority Class 2	**291,960**	**33,914**	**325,874**
ES5B	B043ES02	3	5	WINDOW REPLACEMENT	148,463	23,754	172,217
ES2B	B043ES01	3	6	REPAIR AND RESTORE BRICK VENEER	121,509	19,441	140,951
HV5A	B043HV02	3	7	REPLACE HYDRONIC HEATING SYSTEM	168,680	26,989	195,669
HV4B	B043HV03	3	8	EXHAUST FAN REPLACEMENT	19,407	3,105	22,512
HV3A	B043HV01	3	9	REPLACE UNITARY HVAC SYSTEMS	113,123	18,100	131,223
EL3B	B043EL02	3	10	UPGRADE ELECTRICAL DISTRIBUTION NETWORK	123,155	19,705	142,859
EL4B	B043EL01	3	11	INTERIOR LIGHTING UPGRADE	58,260	9,322	67,582
EL4A	B043EL03	3	12	EXTERIOR LIGHTING REPLACEMENT	3,521	563	4,085
IS1A	B043IS01	3	13	REFINISH FLOORING	53,542	8,567	62,109
IS3B	B043IS03	3	14	REFINISH CEILINGS	7,041	1,127	8,167
PL1A	B043PL02	3	15	WATER SUPPLY PIPING REPLACEMENT	29,377	4,700	34,078
PL2A	B043PL03	3	16	DRAIN PIPING REPLACEMENT	44,584	7,133	51,717
PL1E	B043PL01	3	17	DOMESTIC WATER HEATER REPLACEMENT	5,109	817	5,927
				Totals for Priority Class 3	**895,771**	**143,323**	**1,039,095**
AC4A	B043AC01	4	18	INTERIOR AMENITY ACCESSIBILITY UPGRADES	5,382	861	6,244
AC3B	B043AC02	4	19	STAIR SAFETY UPGRADES	4,053	648	4,701
ES4B	B043ES03	4	20	MEMBRANE ROOF REPLACEMENT	71,125	11,380	82,505
IS2B	B043IS02	4	21	REFINISH WALLS	10,561	1,690	12,251
IS6D	B043IS04	4	22	RESTROOM RENOVATION	34,252	5,480	39,733
				Totals for Priority Class 4	**125,373**	**20,060**	**145,433**
				Grand Total:	**1,313,105**	**197,297**	**1,510,402**

Detailed Project Summary

Facility Condition Analysis

Project Cost Range

B043 : MAIL SERVICES / WAREHOUSE / TECH LAB A

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Total Cost
VT7A	B043VT01	2	4	ELEVATOR NO. 1 UPGRADE	80,000	0	80,000
FS2A	B043FS01	2	1	FIRE ALARM SYSTEM REPLACEMENT	57,646	9,223	66,870
FS1A	B043FS03	2	3	INSTALL EMERGENCY LIGHTS AND EXIT SIGNS	3,658	585	4,243
				Totals for Priority Class 2	**141,304**	**9,809**	**151,113**
HV4B	B043HV03	3	8	EXHAUST FAN REPLACEMENT	19,407	3,105	22,512
EL4B	B043EL01	3	11	INTERIOR LIGHTING UPGRADE	58,260	9,322	67,582
EL4A	B043EL03	3	12	EXTERIOR LIGHTING REPLACEMENT	3,521	563	4,085
PL1E	B043PL01	3	17	DOMESTIC WATER HEATER REPLACEMENT	5,109	817	5,927
PL1A	B043PL02	3	15	WATER SUPPLY PIPING REPLACEMENT	29,377	4,700	34,078
PL2A	B043PL03	3	16	DRAIN PIPING REPLACEMENT	44,584	7,133	51,717
IS1A	B043IS01	3	13	REFINISH FLOORING	53,542	8,567	62,109
IS3B	B043IS03	3	14	REFINISH CEILINGS	7,041	1,127	8,167
				Totals for Priority Class 3	**220,842**	**35,335**	**256,176**
AC4A	B043AC01	4	18	INTERIOR AMENITY ACCESSIBILITY UPGRADES	5,382	861	6,244
ES4B	B043ES03	4	20	MEMBRANE ROOF REPLACEMENT	71,125	11,380	82,505
AC3B	B043AC02	4	19	STAIR SAFETY UPGRADES	4,053	648	4,701
IS2B	B043IS02	4	21	REFINISH WALLS	10,561	1,690	12,251
IS6D	B043IS04	4	22	RESTROOM RENOVATION	34,252	5,480	39,733
				Totals for Priority Class 4	**125,373**	**20,060**	**145,433**
				Grand Totals for Projects < 100,000	**487,519**	**65,203**	**552,722**

Detailed Project Summary

Facility Condition Analysis

Project Cost Range

B043 : MAIL SERVICES / WAREHOUSE / TECH LAB A

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Total Cost
FS3A	B043FS02	2	2	FIRE SPRINKLER SYSTEM INSTALLATION	150,656	24,105	174,761
				Totals for Priority Class 2	**150,656**	**24,105**	**174,761**
HV3A	B043HV01	3	9	REPLACE UNITARY HVAC SYSTEMS	113,123	18,100	131,223
HV5A	B043HV02	3	7	REPLACE HYDRONIC HEATING SYSTEM	168,680	26,989	195,669
EL3B	B043EL02	3	10	UPGRADE ELECTRICAL DISTRIBUTION NETWORK	123,155	19,705	142,859
ES2B	B043ES01	3	6	REPAIR AND RESTORE BRICK VENEER	121,509	19,441	140,951
ES5B	B043ES02	3	5	WINDOW REPLACEMENT	148,463	23,754	172,217
				Totals for Priority Class 3	**674,930**	**107,989**	**782,919**
				Grand Totals for Projects >= 100,000 and < 500,000	**825,586**	**132,094**	**957,680**
				Grand Totals For All Projects:	**1,313,105**	**197,297**	**1,510,402**

Detailed Project Summary

Facility Condition Analysis

Project Classification

B043 : MAIL SERVICES / WAREHOUSE / TECH LAB A

Cat Code	Project Number	Pri. Seq.	Project Classification	Pri. Cls	Project Title	Total Cost
HV3A	B043HV01	9	Capital Renewal	3	REPLACE UNITARY HVAC SYSTEMS	131,223
PL1E	B043PL01	17	Capital Renewal	3	DOMESTIC WATER HEATER REPLACEMENT	5,927
ES4B	B043ES03	20	Capital Renewal	4	MEMBRANE ROOF REPLACEMENT	82,505
IS2B	B043IS02	21	Capital Renewal	4	REFINISH WALLS	12,251
IS6D	B043IS04	22	Capital Renewal	4	RESTROOM RENOVATION	39,733
					Totals for Capital Renewal	**271,638**
VT7A	B043VT01	4	Deferred Maintenance	2	ELEVATOR NO. 1 UPGRADE	80,000
ES5B	B043ES02	5	Deferred Maintenance	3	WINDOW REPLACEMENT	172,217
ES2B	B043ES01	6	Deferred Maintenance	3	REPAIR AND RESTORE BRICK VENEER	140,951
HV5A	B043HV02	7	Deferred Maintenance	3	REPLACE HYDRONIC HEATING SYSTEM	195,669
HV4B	B043HV03	8	Deferred Maintenance	3	EXHAUST FAN REPLACEMENT	22,512
EL3B	B043EL02	10	Deferred Maintenance	3	UPGRADE ELECTRICAL DISTRIBUTION NETWORK	142,859
EL4B	B043EL01	11	Deferred Maintenance	3	INTERIOR LIGHTING UPGRADE	67,582
EL4A	B043EL03	12	Deferred Maintenance	3	EXTERIOR LIGHTING REPLACEMENT	4,085
IS1A	B043IS01	13	Deferred Maintenance	3	REFINISH FLOORING	62,109
IS3B	B043IS03	14	Deferred Maintenance	3	REFINISH CEILINGS	8,167
PL1A	B043PL02	15	Deferred Maintenance	3	WATER SUPPLY PIPING REPLACEMENT	34,078
PL2A	B043PL03	16	Deferred Maintenance	3	DRAIN PIPING REPLACEMENT	51,717
					Totals for Deferred Maintenance	**981,945**
FS2A	B043FS01	1	Plant Adaption	2	FIRE ALARM SYSTEM REPLACEMENT	66,870
FS3A	B043FS02	2	Plant Adaption	2	FIRE SPRINKLER SYSTEM INSTALLATION	174,761
FS1A	B043FS03	3	Plant Adaption	2	INSTALL EMERGENCY LIGHTS AND EXIT SIGNS	4,243
AC4A	B043AC01	18	Plant Adaption	4	INTERIOR AMENITY ACCESSIBILITY UPGRADES	6,244
AC3B	B043AC02	19	Plant Adaption	4	STAIR SAFETY UPGRADES	4,701
					Totals for Plant Adaption	**256,819**
					Grand Total:	**1,510,402**

Detailed Project Summary

Facility Condition Analysis

Energy Conservation

B043 : MAIL SERVICES / WAREHOUSE / TECH LAB A

Cat Code	Project Number	Pri Cls	Pri Seq	Project Title	Total Cost	Annual Savings	Simple Payback
ES5B	B043ES02	3	5	WINDOW REPLACEMENT	172,217	300	574.06
EL4B	B043EL01	3	11	INTERIOR LIGHTING UPGRADE	67,582	2,540	26.61
EL4A	B043EL03	3	12	EXTERIOR LIGHTING REPLACEMENT	4,085	70	58.35
				Totals for Priority Class 3	**243,883**	**2,910**	**83.81**
ES4B	B043ES03	4	20	MEMBRANE ROOF REPLACEMENT	82,505	1,100	75
				Totals for Priority Class 4	**82,505**	**1,100**	**75**
				Grand Total:	**326,388**	**4,010**	**81.39**

Detailed Project Summary

Facility Condition Analysis

Category/System Code

B043 : MAIL SERVICES / WAREHOUSE / TECH LAB A

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Total Cost
AC4A	B043AC01	4	18	INTERIOR AMENITY ACCESSIBILITY UPGRADES	5,382	861	6,244
AC3B	B043AC02	4	19	STAIR SAFETY UPGRADES	4,053	648	4,701
				Totals for System Code: ACCESSIBILITY	**9,435**	**1,510**	**10,945**
EL3B	B043EL02	3	10	UPGRADE ELECTRICAL DISTRIBUTION NETWORK	123,155	19,705	142,859
EL4B	B043EL01	3	11	INTERIOR LIGHTING UPGRADE	58,260	9,322	67,582
EL4A	B043EL03	3	12	EXTERIOR LIGHTING REPLACEMENT	3,521	563	4,085
				Totals for System Code: ELECTRICAL	**184,936**	**29,590**	**214,526**
ES5B	B043ES02	3	5	WINDOW REPLACEMENT	148,463	23,754	172,217
ES2B	B043ES01	3	6	REPAIR AND RESTORE BRICK VENEER	121,509	19,441	140,951
ES4B	B043ES03	4	20	MEMBRANE ROOF REPLACEMENT	71,125	11,380	82,505
				Totals for System Code: EXTERIOR	**341,097**	**54,575**	**395,672**
FS2A	B043FS01	2	1	FIRE ALARM SYSTEM REPLACEMENT	57,646	9,223	66,870
FS3A	B043FS02	2	2	FIRE SPRINKLER SYSTEM INSTALLATION	150,656	24,105	174,761
FS1A	B043FS03	2	3	INSTALL EMERGENCY LIGHTS AND EXIT SIGNS	3,658	585	4,243
				Totals for System Code: FIRE/LIFE SAFETY	**211,960**	**33,914**	**245,874**
HV5A	B043HV02	3	7	REPLACE HYDRONIC HEATING SYSTEM	168,680	26,989	195,669
HV4B	B043HV03	3	8	EXHAUST FAN REPLACEMENT	19,407	3,105	22,512
HV3A	B043HV01	3	9	REPLACE UNITARY HVAC SYSTEMS	113,123	18,100	131,223
				Totals for System Code: HVAC	**301,210**	**48,194**	**349,404**
IS1A	B043IS01	3	13	REFINISH FLOORING	53,542	8,567	62,109
IS3B	B043IS03	3	14	REFINISH CEILINGS	7,041	1,127	8,167
IS2B	B043IS02	4	21	REFINISH WALLS	10,561	1,690	12,251
IS6D	B043IS04	4	22	RESTROOM RENOVATION	34,252	5,480	39,733
				Totals for System Code: INTERIOR/FINISH SYS.	**105,396**	**16,863**	**122,260**
PL1A	B043PL02	3	15	WATER SUPPLY PIPING REPLACEMENT	29,377	4,700	34,078
PL2A	B043PL03	3	16	DRAIN PIPING REPLACEMENT	44,584	7,133	51,717
PL1E	B043PL01	3	17	DOMESTIC WATER HEATER REPLACEMENT	5,109	817	5,927
				Totals for System Code: PLUMBING	**79,070**	**12,651**	**91,721**
VT7A	B043VT01	2	4	ELEVATOR NO. 1 UPGRADE	80,000	0	80,000
				Totals for System Code: VERT. TRANSPORTATION	**80,000**		**80,000**
				Grand Total:	**1,313,105**	**197,297**	**1,510,402**

FACILITY CONDITION ANALYSIS

SECTION 3

SPECIFIC PROJECT DETAILS ILLUSTRATING DESCRIPTION / COST

Specific Project Details

Facility Condition Analysis
Section Three
B043 : MAIL SERVICES / WAREHOUSE / TECH LAB A

Project Description

Project Number:	B043FS01	**Title:**	FIRE ALARM SYSTEM REPLACEMENT
Priority Sequence:	1		
Priority Class:	2		
Category Code:	FS2A	**System:**	FIRE/LIFE SAFETY
		Component:	DETECTION ALARM
		Element:	GENERAL

Building Code:	B043
Building Name:	MAIL SERVICES / WAREHOUSE / TECH LAB A
Subclass/Savings:	Not Applicable

Code Application:	ADAAG	702.1
	NFPA	1, 101

Project Class:	Plant Adaption
Project Date:	10/9/2009
Project Location:	Floor-wide: Floor(s) 1, 2

Project Description

Upgrade the existing fire alarm system with a modern application. Specify a point addressable supervised main fire alarm panel with an annunciator. This work includes pull stations, audible and visible alarms, smoke and heat detectors, and a wiring network. Install all devices in accordance with current NFPA and ADA requirements. The system should be monitored to report activation or trouble to an applicable receiving station.

Specific Project Details

Facility Condition Analysis
Section Three
B043 : MAIL SERVICES / WAREHOUSE / TECH LAB A

Project Cost

Project Number: B043FS01

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Fire alarm control panel(s), annunciator, smoke and heat detectors, manual pull stations, audible and visual alarms, wiring, raceways, cut and patching materials	SF	24,932	$1.46	$36,401	$0.89	$22,189	$58,590
Project Totals:				**$36,401**		**$22,189**	**$58,590**

Material/Labor Cost		$58,590
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$48,039
General Contractor Mark Up at 20.0%	+	$9,608
Construction Cost		$57,646
Professional Fees at 16.0%	+	$9,223
Total Project Cost		**$66,870**

Specific Project Details

Facility Condition Analysis
Section Three
B043 : MAIL SERVICES / WAREHOUSE / TECH LAB A

Project Description

Project Number:	B043FS02	**Title:**	FIRE SPRINKLER SYSTEM INSTALLATION
Priority Sequence:	2		
Priority Class:	2		
Category Code:	FS3A	**System:**	FIRE/LIFE SAFETY
		Component:	SUPPRESSION
		Element:	SPRINKLERS
Building Code:	B043		
Building Name:	MAIL SERVICES / WAREHOUSE / TECH LAB A		
Subclass/Savings:	Not Applicable		
Code Application:	NFPA 1, 13, 13R, 101		
Project Class:	Plant Adaption		
Project Date:	10/9/2009		
Project Location:	Floor-wide: Floor(s) 1, 2		

Project Description

Install an automatic fire sprinkler system in unprotected areas throughout the facility. This includes piping, valves, sprinkler heads, and piping supports. Install flow switches and sensors to interface with the fire alarm system.

Specific Project Details

Facility Condition Analysis
Section Three
B043 : MAIL SERVICES / WAREHOUSE / TECH LAB A

Project Cost

Project Number: B043FS02

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Install a wet-pipe sprinkler system, including valves, piping, sprinkler heads, piping supports, etc.	SF	24,932	$3.08	$76,791	$3.77	$93,994	$170,784
Project Totals:				**$76,791**		**$93,994**	**$170,784**

Material/Labor Cost		$170,784
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$125,547
General Contractor Mark Up at 20.0%	+	$25,109
Construction Cost		$150,656
Professional Fees at 16.0%	+	$24,105
Total Project Cost		**$174,761**

Specific Project Details

Facility Condition Analysis
Section Three
B043 : MAIL SERVICES / WAREHOUSE / TECH LAB A

Project Description

Project Number:	B043FS03	**Title:**	INSTALL EMERGENCY LIGHTS AND EXIT SIGNS
Priority Sequence:	3		
Priority Class:	2		
Category Code:	FS1A	**System:**	FIRE/LIFE SAFETY
		Component:	LIGHTING
		Element:	EGRESS LTG./EXIT SIGNAGE

Building Code:	B043
Building Name:	MAIL SERVICES / WAREHOUSE / TECH LAB A
Subclass/Savings:	Not Applicable

Code Application:	NFPA	101-47
	IBC	1011

Project Class:	Plant Adaption
Project Date:	10/9/2009
Project Location:	Floor-wide: Floor(s) 1, 2

Project Description

Replace the existing exit signage and emergency lighting throughout the building. Install new exit signs and emergency lights as needed. The new units should have individual battery packs for backup power. LED type exit signs are recommended, because they are energy efficient and require minimal maintenance.

Project Cost

Project Number: B043FS03

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Installation of new battery pack LED exit signs, including all connections	EA	5	$184	$920	$231	$1,155	$2,075
Installation of new battery pack emergency lights, including all connections	EA	5	$186	$930	$231	$1,155	$2,085
Project Totals:				**$1,850**		**$2,310**	**$4,160**

Material/Labor Cost		$4,160
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$3,048
General Contractor Mark Up at 20.0%	+	$610
Construction Cost		$3,658
Professional Fees at 16.0%	+	$585
Total Project Cost		**$4,243**

Specific Project Details

Facility Condition Analysis
Section Three
B043 : MAIL SERVICES / WAREHOUSE / TECH LAB A

Project Description

Project Number:	B043VT01	**Title:**	ELEVATOR NO. 1 UPGRADE
Priority Sequence:	4		
Priority Class:	2		
Category Code:	VT7A	**System:**	VERT. TRANSPORTATION
		Component:	GENERAL
		Element:	OTHER
Building Code:	B043		
Building Name:	MAIL SERVICES / WAREHOUSE / TECH LAB A		
Subclass/Savings:	Not Applicable		
Code Application:	Not Applicable		
Project Class:	Deferred Maintenance		
Project Date:	10/1/2009		
Project Location:	Item Only: Floor(s) 1, 2		

Project Description

This elevator has a single bottom cylinder which presents a safety issue for continued use. It is recommended to replace the entire elevator due to its poor condition if continued use is planned. The new elevator should be considered to be a “holeless” type elevator due to the expense of drilling a new hole.

Specific Project Details

Facility Condition Analysis
Section Three
B043 : MAIL SERVICES / WAREHOUSE / TECH LAB A

Project Cost

Project Number: B043VT01

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Client-reported cost to replace elevator	EA	1	$80,000	$80,000	$0.00	$	$80,000
Project Totals:				**$80,000**		**$**	**$80,000**

Material/Labor Cost	$80,000
Material Index	100.7%
Labor Index	51.3%
Material/Labor Indexed Cost	$80,000
No GCM Required	
Construction Cost	$80,000
No Professional Fees Required	
Total Project Cost	**$80,000**

Specific Project Details

Facility Condition Analysis
Section Three
B043 : MAIL SERVICES / WAREHOUSE / TECH LAB A

Project Description

Project Number:	B043ES02	**Title:**	WINDOW REPLACEMENT
Priority Sequence:	5		
Priority Class:	3		
Category Code:	ES5B	**System:**	EXTERIOR
		Component:	FENESTRATIONS
		Element:	WINDOWS

Building Code:	B043	
Building Name:	MAIL SERVICES / WAREHOUSE / TECH LAB A	
Subclass/Savings:	Energy Conservation	$300

Code Application: Not Applicable

Project Class: Deferred Maintenance

Project Date: 10/14/2009

Project Location: Building-wide: Floor(s) 1

Project Description

It is recommended that the original single-pane, metal-framed windows be upgraded to thermal-pane systems, which will reduce the energy required to operate the building. Repair or replacement of the windowsills and trim may also be necessary.

Specific Project Details

Facility Condition Analysis
Section Three
B043 : MAIL SERVICES / WAREHOUSE / TECH LAB A

Project Cost

Project Number: B043ES02

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Typical standard glazing applications	SF	1,620	$57.27	$92,777	$36.45	$59,049	$151,826
Project Totals:				**$92,777**		**$59,049**	**$151,826**

Material/Labor Cost		$151,826
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$123,719
General Contractor Mark Up at 20.0%	+	$24,744
Construction Cost		$148,463
Professional Fees at 16.0%	+	$23,754
Total Project Cost		**$172,217**

Specific Project Details

Facility Condition Analysis
Section Three
B043 : MAIL SERVICES / WAREHOUSE / TECH LAB A

Project Description

Project Number:	B043ES01	**Title:**	REPAIR AND RESTORE BRICK VENEER
Priority Sequence:	6		
Priority Class:	3		
Category Code:	ES2B	**System:**	EXTERIOR
		Component:	COLUMNS/BEAMS/WALLS
		Element:	FINISH
Building Code:	B043		
Building Name:	MAIL SERVICES / WAREHOUSE / TECH LAB A		
Subclass/Savings:	Not Applicable		
Code Application:	Not Applicable		
Project Class:	Deferred Maintenance		
Project Date:	10/14/2009		
Project Location:	Building-wide: Floor(s) 1		

Project Description

Brick veneer is the primary exterior finish. While most of the brick is fundamentally sound, exposure to the elements has caused severe deterioration of a significant amount of the mortar joints, expansion joints, and the bricks themselves. Considerable displacement can be observed in several critical locations, such as building corners. Significant surface preparation, extensive repairs, and penetrating sealant upgrades are recommended to restore the aesthetics and integrity of the building envelope.

Specific Project Details

Facility Condition Analysis
Section Three
B043 : MAIL SERVICES / WAREHOUSE / TECH LAB A

Project Cost

Project Number: B043ES01

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Cleaning and surface preparation	SF	15,000	$0.11	$1,650	$0.22	$3,300	$4,950
Selective mortar and / or sealant repairs (assumes 10 linear feet for every 100 square feet of envelope)	LF	10,000	$2.45	$24,500	$4.99	$49,900	$74,400
Applied finish or sealant	SF	15,000	$0.22	$3,300	$0.82	$12,300	$15,600
Slab repairs / stabilization	LOT	1	$25,000	$25,000	$25,000	$25,000	$50,000
Project Totals:				**$54,450**		**$90,500**	**$144,950**

Material/Labor Cost		$144,950
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$101,258
General Contractor Mark Up at 20.0%	+	$20,252
Construction Cost		$121,509
Professional Fees at 16.0%	+	$19,441
Total Project Cost		**$140,951**

Specific Project Details

Facility Condition Analysis
Section Three
B043 : MAIL SERVICES / WAREHOUSE / TECH LAB A

Project Description

Project Number:	B043HV02	**Title:**	REPLACE HYDRONIC HEATING SYSTEM
Priority Sequence:	7		
Priority Class:	3		
Category Code:	HV5A	**System:**	HVAC
		Component:	STEAM/HYDRONIC DISTRIB.
		Element:	PIPING NETWORK
Building Code:	B043		
Building Name:	MAIL SERVICES / WAREHOUSE / TECH LAB A		
Subclass/Savings:	Not Applicable		
Code Application:	Not Applicable		
Project Class:	Deferred Maintenance		
Project Date:	10/9/2009		
Project Location:	Floor-wide: Floor(s) 1, 2		

Project Description

Remove the existing hydronic heating system. Install a new hydronic heating system, including piping, insulation, valves, radiators, unit heaters, condensate receiver, and controls.

Specific Project Details

Facility Condition Analysis
Section Three
B043 : MAIL SERVICES / WAREHOUSE / TECH LAB A

Project Cost

Project Number: B043HV02

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Replace hydronic heating system including piping, radiators, unit heaters, and demolition	SF	24,932	$3.10	$77,289	$4.36	$108,704	$185,993
Replace the duplex condensate receiver	SYS	1	$6,480	$6,480	$870	$870	$7,350
Project Totals:				**$83,769**		**$109,574**	**$193,343**

Material/Labor Cost		$193,343
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$140,567
General Contractor Mark Up at 20.0%	+	$28,113
Construction Cost		$168,680
Professional Fees at 16.0%	+	$26,989
Total Project Cost		**$195,669**

Specific Project Details

Facility Condition Analysis
Section Three
B043 : MAIL SERVICES / WAREHOUSE / TECH LAB A

Project Description

Project Number:	B043HV03	**Title:**	EXHAUST FAN REPLACEMENT
Priority Sequence:	8		
Priority Class:	3		
Category Code:	HV4B	**System:**	HVAC
		Component:	AIR MOVING/VENTILATION
		Element:	EXHAUST FANS
Building Code:	B043		
Building Name:	MAIL SERVICES / WAREHOUSE / TECH LAB A		
Subclass/Savings:	Not Applicable		
Code Application:	ASHRAE 62-2004		
Project Class:	Deferred Maintenance		
Project Date:	10/9/2009		
Project Location:	Floor-wide: Floor(s) 1, 2, R		

Project Description

The exhaust fans are recommended for replacement. The statistical life cycle for an exhaust fan is approximately twenty years. At or beyond this time, exhaust fans can incur high maintenance costs that justify replacement. Replace the existing fans with new units, to include all electrical connections. Modify existing ductwork, as necessary, to accommodate the new fans.

Specific Project Details

Facility Condition Analysis
Section Three
B043 : MAIL SERVICES / WAREHOUSE / TECH LAB A

Project Cost

Project Number: B043HV03

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Replace centrifugal roof exhauster (medium size, belt-driven)	EA	2	$1,350	$2,700	$1,300	$2,600	$5,300
Replace propeller exhaust fan ((medium size, belt-driven)	EA	2	$810	$1,620	$350	$700	$2,320
Replace exhaust system ductwork	CFM	4,000	$2.26	$9,040	$0.50	$2,000	$11,040
Project Totals:				**$13,360**		**$5,300**	**$18,660**

Material/Labor Cost		$18,660
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$16,172
General Contractor Mark Up at 20.0%	+	$3,234
Construction Cost		$19,407
Professional Fees at 16.0%	+	$3,105
Total Project Cost		**$22,512**

Specific Project Details

Facility Condition Analysis
Section Three
B043 : MAIL SERVICES / WAREHOUSE / TECH LAB A

Project Description

Project Number:	B043HV01	**Title:**	REPLACE UNITARY HVAC SYSTEMS
Priority Sequence:	9		
Priority Class:	3		
Category Code:	HV3A	**System:**	HVAC
		Component:	HEATING/COOLING
		Element:	SYSTEM RETROFIT/REPLACE
Building Code:	B043		
Building Name:	MAIL SERVICES / WAREHOUSE / TECH LAB A		
Subclass/Savings:	Not Applicable		
Code Application:	ASHRAE 62-2004		
Project Class:	Capital Renewal		
Project Date:	10/9/2009		
Project Location:	Floor-wide: Floor(s) 1, 2, R		

Project Description

This facility is served by unitary HVAC systems that include split systems or through-the-wall air conditioners. These systems are recommended for replacement. For the split systems, project cost includes the condensing unit, evaporator fan unit, refrigeration piping, controls, and connections. Additionally, install new package units to serve the second floor. The project cost includes controls, related ductwork, electrical connections, and testing and balancing of the downstream air distribution system for the package units.

Specific Project Details

Facility Condition Analysis
Section Three
B043 : MAIL SERVICES / WAREHOUSE / TECH LAB A

Project Cost

Project Number: B043HV01

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Rooftop package unit, controls, all connections, demolition of existing unit	TON	20	$1,200	$24,000	$1,090	$21,800	$45,800
Air distribution system test and balance	SF	1,000	$0.06	$60	$0.35	$350	$410
Replace split DX heat pump system	TON	35	$1,201	$42,037	$723	$25,307	$67,345
Through-the-wall air conditioning unit	TON	3	$843	$2,529	$531	$1,593	$4,122
Project Totals:				**$68,626**		**$49,050**	**$117,677**

Material/Labor Cost		$117,677
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$94,269
General Contractor Mark Up at 20.0%	+	$18,854
Construction Cost		$113,123
Professional Fees at 16.0%	+	$18,100
Total Project Cost		**$131,223**

Specific Project Details

Facility Condition Analysis
Section Three
B043 : MAIL SERVICES / WAREHOUSE / TECH LAB A

Project Description

Project Number:	B043EL02	**Title:**	UPGRADE ELECTRICAL DISTRIBUTION NETWORK
Priority Sequence:	10		
Priority Class:	3		
Category Code:	EL3B	**System:**	ELECTRICAL
		Component:	SECONDARY DISTRIBUTION
		Element:	DISTRIBUTION NETWORK
Building Code:	B043		
Building Name:	MAIL SERVICES / WAREHOUSE / TECH LAB A		
Subclass/Savings:	Not Applicable		
Code Application:	NEC Articles 110, 210, 220, 230		
Project Class:	Deferred Maintenance		
Project Date:	10/9/2009		
Project Location:	Floor-wide: Floor(s) 1, 2		

Project Description

An upgrade of the building electrical system is recommended. Aging components, such as the circuit breakers, could serve as fire hazards if they fail to open a circuit in an overload or short circuit condition. Remove existing aged electrical components and branch circuitry. Install new power panels, switches, raceways, conductors, and devices. Provide molded case thermal magnetic circuit breakers and HACR circuit breakers for HVAC equipment. Redistribute the electrical loads to the appropriate areas to ensure safe and reliable power to building occupants. Provide ground fault circuit interrupter (GFCI) protection where required, and clearly label all panels for circuit identification.

Specific Project Details

Facility Condition Analysis
Section Three
B043 : MAIL SERVICES / WAREHOUSE / TECH LAB A

Project Cost

Project Number: B043EL02

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Power panels, conductors, raceways, devices, demolition, and cut and patching materials	SF	24,932	$2.32	$57,842	$3.47	$86,514	$144,356
Project Totals:				**$57,842**		**$86,514**	**$144,356**

Material/Labor Cost		$144,356
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$102,629
General Contractor Mark Up at 20.0%	+	$20,526
Construction Cost		$123,155
Professional Fees at 16.0%	+	$19,705
Total Project Cost		**$142,859**

Specific Project Details

Facility Condition Analysis
Section Three
B043 : MAIL SERVICES / WAREHOUSE / TECH LAB A

Project Description

Project Number:	B043EL01	**Title:**	INTERIOR LIGHTING UPGRADE
Priority Sequence:	11		
Priority Class:	3		
Category Code:	EL4B	**System:**	ELECTRICAL
		Component:	DEVICES AND FIXTURES
		Element:	INTERIOR LIGHTING
Building Code:	B043		
Building Name:	MAIL SERVICES / WAREHOUSE / TECH LAB A		
Subclass/Savings:	Energy Conservation $2,540		
Code Application:	NEC Articles 210, 410		
Project Class:	Deferred Maintenance		
Project Date:	10/9/2009		
Project Location:	Floor-wide: Floor(s) 1, 2		

Project Description

An interior lighting upgrade is recommended. Replace existing aged and / or inefficient light fixtures with modern fixtures of the latest energy-efficient design. Select lamps with the same color temperature and rendering index for lighting uniformity. Install occupancy sensors in select areas for additional energy conservation.

Specific Project Details

Facility Condition Analysis
Section Three
B043 : MAIL SERVICES / WAREHOUSE / TECH LAB A

Project Cost

Project Number: B043EL01

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
High efficiency fluorescent fixtures, occupancy sensors, and demolition of existing lighting	SF	24,932	$1.19	$29,669	$1.46	$36,401	$66,070
Project Totals:				**$29,669**		**$36,401**	**$66,070**

Material/Labor Cost		$66,070
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$48,550
General Contractor Mark Up at 20.0%	+	$9,710
Construction Cost		$58,260
Professional Fees at 16.0%	+	$9,322
Total Project Cost		**$67,582**

Specific Project Details

Facility Condition Analysis
Section Three
B043 : MAIL SERVICES / WAREHOUSE / TECH LAB A

Project Description

Project Number:	B043EL03	**Title:**	EXTERIOR LIGHTING REPLACEMENT
Priority Sequence:	12		
Priority Class:	3		
Category Code:	EL4A	**System:**	ELECTRICAL
		Component:	DEVICES AND FIXTURES
		Element:	EXTERIOR LIGHTING
Building Code:	B043		
Building Name:	MAIL SERVICES / WAREHOUSE / TECH LAB A		
Subclass/Savings:	Energy Conservation $70		
Code Application:	NEC 410		
Project Class:	Deferred Maintenance		
Project Date:	10/9/2009		
Project Location:	Building-wide: Floor(s) 1, 2, R		

Project Description

The exterior areas adjacent to the building are illuminated by building-mounted light fixtures that are a combination of new and aged units. It is recommended that all aged exterior lighting be replaced. Additionally, no lighting was observed between this building and the adjacent cooling tower facility. It is recommended that exterior lighting be installed in this area to properly illuminate the site.

Specific Project Details

Facility Condition Analysis
Section Three
B043 : MAIL SERVICES / WAREHOUSE / TECH LAB A

Project Cost

Project Number: B043EL03

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
HID wall-mount fixture	EA	3	$406	$1,218	$190	$570	$1,788
Compact fluorescent, wall-mount exterior light and demolition of existing light	EA	7	$131	$917	$137	$959	$1,876
Project Totals:				**$2,135**		**$1,529**	**$3,664**

Material/Labor Cost		$3,664
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$2,934
General Contractor Mark Up at 20.0%	+	$587
Construction Cost		$3,521
Professional Fees at 16.0%	+	$563
Total Project Cost		**$4,085**

Specific Project Details

Facility Condition Analysis
Section Three
B043 : MAIL SERVICES / WAREHOUSE / TECH LAB A

Project Description

Project Number:	B043IS01	**Title:**	REFINISH FLOORING
Priority Sequence:	13		
Priority Class:	3		
Category Code:	IS1A	**System:**	INTERIOR/FINISH SYS.
		Component:	FLOOR
		Element:	FINISHES-DRY

Building Code:	B043
Building Name:	MAIL SERVICES / WAREHOUSE / TECH LAB A
Subclass/Savings:	Not Applicable
Code Application:	Not Applicable
Project Class:	Deferred Maintenance
Project Date:	10/14/2009
Project Location:	Floor-wide: Floor(s) 1, 2

Project Description

Interior floor finish applications vary in age, type, and condition. While a few offices have carpeted flooring and some areas have vinyl and ceramic tile, most of the flooring is sealed or coated concrete slab. Floor finish upgrades should be considered as part of any future cosmetic improvements or major comprehensive renovation efforts.

Specific Project Details

Facility Condition Analysis
Section Three
B043 : MAIL SERVICES / WAREHOUSE / TECH LAB A

Project Cost

Project Number: B043IS01

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Carpet	SF	950	$5.36	$5,092	$2.00	$1,900	$6,992
Vinyl floor tile	SF	1,890	$3.53	$6,672	$2.50	$4,725	$11,397
Ceramic tile	SF	950	$7.24	$6,878	$10.63	$10,099	$16,977
Epoxy floor finish application	SF	5,680	$2.00	$11,360	$2.00	$11,360	$22,720
Project Totals:				**$30,002**		**$28,084**	**$58,085**

Material/Labor Cost		$58,085
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$44,619
General Contractor Mark Up at 20.0%	+	$8,924
Construction Cost		$53,542
Professional Fees at 16.0%	+	$8,567
Total Project Cost		**$62,109**

Specific Project Details

Facility Condition Analysis
Section Three
B043 : MAIL SERVICES / WAREHOUSE / TECH LAB A

Project Description

Project Number:	B043IS03	**Title:**	REFINISH CEILINGS
Priority Sequence:	14		
Priority Class:	3		
Category Code:	IS3B	**System:**	INTERIOR/FINISH SYS.
		Component:	CEILINGS
		Element:	REPLACEMENT
Building Code:	B043		
Building Name:	MAIL SERVICES / WAREHOUSE / TECH LAB A		
Subclass/Savings:	Not Applicable		
Code Application:	Not Applicable		
Project Class:	Deferred Maintenance		
Project Date:	10/14/2009		
Project Location:	Floor-wide: Floor(s) 1		

Project Description

Most of this facility has no formal ceiling system. Several of the offices that are more recently renovated have suspended grid, acoustical tile systems. However, most ceilings are the painted underside of the concrete second floor slab. Painted ceiling finish upgrades should be considered as part of any future cosmetic improvements or major comprehensive renovation efforts.

Specific Project Details

Facility Condition Analysis
Section Three
B043 : MAIL SERVICES / WAREHOUSE / TECH LAB A

Project Cost

Project Number: B043IS03

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Painted ceiling finish application	SF	10,000	$0.17	$1,700	$0.81	$8,100	$9,800
Project Totals:				**$1,700**		**$8,100**	**$9,800**

Material/Labor Cost		$9,800
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$5,867
General Contractor Mark Up at 20.0%	+	$1,173
Construction Cost		$7,041
Professional Fees at 16.0%	+	$1,127
Total Project Cost		**$8,167**

Specific Project Details

Facility Condition Analysis
Section Three
B043 : MAIL SERVICES / WAREHOUSE / TECH LAB A

Project Description

Project Number:	B043PL02	**Title:**	WATER SUPPLY PIPING REPLACEMENT
Priority Sequence:	15		
Priority Class:	3		
Category Code:	PL1A	**System:**	PLUMBING
		Component:	DOMESTIC WATER
		Element:	PIPING NETWORK
Building Code:	B043		
Building Name:	MAIL SERVICES / WAREHOUSE / TECH LAB A		
Subclass/Savings:	Not Applicable		
Code Application:	IPC Chapter 6		
Project Class:	Deferred Maintenance		
Project Date:	10/9/2009		
Project Location:	Floor-wide: Floor(s) 1, 2		

Project Description

Replacement of the aging water piping network is recommended. Failure to replace the water piping will result in frequent leaks and escalating maintenance costs. Remove the existing water supply network. Install new copper water supply piping with fiberglass insulation. Install isolation valves, pressure regulators, shock absorbers, backflow preventers, and vacuum breakers as needed.

Project Cost

Project Number: B043PL02

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Copper pipe and fittings, valves, backflow prevention devices, insulation, hangers, demolition, and cut and patching materials	SF	24,932	$0.43	$10,721	$1.07	$26,677	$37,398
Project Totals:				**$10,721**		**$26,677**	**$37,398**

Material/Labor Cost		$37,398
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$24,481
General Contractor Mark Up at 20.0%	+	$4,896
Construction Cost		$29,377
Professional Fees at 16.0%	+	$4,700
Total Project Cost		**$34,078**

Specific Project Details

Facility Condition Analysis
Section Three
B043 : MAIL SERVICES / WAREHOUSE / TECH LAB A

Project Description

Project Number:	B043PL03	**Title:**	DRAIN PIPING REPLACEMENT
Priority Sequence:	16		
Priority Class:	3		
Category Code:	PL2A	**System:**	PLUMBING
		Component:	WASTEWATER
		Element:	PIPING NETWORK
Building Code:	B043		
Building Name:	MAIL SERVICES / WAREHOUSE / TECH LAB A		
Subclass/Savings:	Not Applicable		

Code Application: IPC Chapters 7-11

Project Class: Deferred Maintenance

Project Date: 10/9/2009

Project Location: Floor-wide: Floor(s) 1, 2

Project Description

Replacement of the aging drain piping is recommended throughout the facility. Failure to replace the old piping will result in frequent leaks and escalating maintenance costs. Remove sanitary and storm drain piping as needed. Install new cast-iron drain piping networks with copper run-outs to the fixtures. Install new floor drains, roof drains, and traps.

Project Cost

Project Number: B043PL03

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Cast-iron drain piping and fittings, copper pipe and fittings, floor / roof drains, traps, hangers, demolition, and cut and patching materials	SF	24,932	$0.68	$16,954	$1.57	$39,143	$56,097
Project Totals:				**$16,954**		**$39,143**	**$56,097**

Material/Labor Cost		$56,097
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$37,153
General Contractor Mark Up at 20.0%	+	$7,431
Construction Cost		$44,584
Professional Fees at 16.0%	+	$7,133
Total Project Cost		**$51,717**

Specific Project Details

Facility Condition Analysis
Section Three
B043 : MAIL SERVICES / WAREHOUSE / TECH LAB A

Project Description

Project Number:	B043PL01	**Title:**	DOMESTIC WATER HEATER REPLACEMENT
Priority Sequence:	17		
Priority Class:	3		
Category Code:	PL1E	**System:**	PLUMBING
		Component:	DOMESTIC WATER
		Element:	HEATING
Building Code:	B043		
Building Name:	MAIL SERVICES / WAREHOUSE / TECH LAB A		
Subclass/Savings:	Not Applicable		
Code Application:	IPC Chapters 5, 607		
Project Class:	Capital Renewal		
Project Date:	10/9/2009		
Project Location:	Item Only: Floor(s) 1		

Project Description

Replacement of the domestic water heating equipment is recommended to maintain a reliable supply of domestic hot water. Remove old water heating equipment and related piping. Install new water heating equipment to meet the present needs of this facility.

Project Cost

Project Number: B043PL01

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Gas-fired, residential-grade water heater replacement, including demolition	GAL	50	$34.14	$1,707	$30.37	$1,519	$3,226
Electric, residential-grade water heater replacement, including demolition	GAL	50	$22.87	$1,144	$23.71	$1,186	$2,329
Project Totals:				**$2,851**		**$2,704**	**$5,555**

Material/Labor Cost		$5,555
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$4,258
General Contractor Mark Up at 20.0%	+	$852
Construction Cost		$5,109
Professional Fees at 16.0%	+	$817
Total Project Cost		**$5,927**

Specific Project Details

Facility Condition Analysis
Section Three
B043 : MAIL SERVICES / WAREHOUSE / TECH LAB A

Project Description

Project Number:	B043AC01	**Title:**	INTERIOR AMENITY ACCESSIBILITY UPGRADES
Priority Sequence:	18		
Priority Class:	4		
Category Code:	AC4A	**System:**	ACCESSIBILITY
		Component:	GENERAL
		Element:	FUNCTIONAL SPACE MOD.
Building Code:	B043		
Building Name:	MAIL SERVICES / WAREHOUSE / TECH LAB A		
Subclass/Savings:	Not Applicable		
Code Application:	ADAAG 211, 602		
Project Class:	Plant Adaption		
Project Date:	10/14/2009		
Project Location:	Floor-wide: Floor(s) 1, 2		

Project Description

Current ADA legislation requires that building amenities be generally accessible to all persons. The configuration of the single level drinking water fountains is a barrier to accessibility. All single level drinking fountains should be replaced with dual level, refrigerated units.

Specific Project Details

Facility Condition Analysis
Section Three
B043 : MAIL SERVICES / WAREHOUSE / TECH LAB A

Project Cost

Project Number: B043AC01

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Dual level drinking fountain	EA	2	$1,216	$2,432	$374	$748	$3,180
Alcove construction including finishes	EA	1	$877	$877	$1,500	$1,500	$2,377
Project Totals:				**$3,309**		**$2,248**	**$5,557**

Material/Labor Cost		$5,557
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$4,485
General Contractor Mark Up at 20.0%	+	$897
Construction Cost		$5,382
Professional Fees at 16.0%	+	$861
Total Project Cost		**$6,244**

Specific Project Details

Facility Condition Analysis
Section Three
B043 : MAIL SERVICES / WAREHOUSE / TECH LAB A

Project Description

Project Number:	B043AC02	**Title:**	STAIR SAFETY UPGRADES
Priority Sequence:	19		
Priority Class:	4		
Category Code:	AC3B	**System:**	ACCESSIBILITY
		Component:	INTERIOR PATH OF TRAVEL
		Element:	STAIRS AND RAILINGS

Building Code:	B043
Building Name:	MAIL SERVICES / WAREHOUSE / TECH LAB A
Subclass/Savings:	Not Applicable

Code Application:	IBC	1003.3
	ADAAG	505

Project Class:	Plant Adaption
Project Date:	10/14/2009
Project Location:	Floor-wide: Floor(s) 1, 2

Project Description

Stairs are required to have graspable handrails on both sides, rails with a specific cross-sectional geometry, and handrails that continue horizontally at the landings. Although the stairs are compliant with the code enforced at the time of construction until a major renovation occurs, they are deficient in handrail design relative to current standards. The stairs in this building do not have handrails on both sides and the existing handrails do not have the required extensions. Future renovation efforts should include comprehensive stair railing upgrades.

Specific Project Details

Facility Condition Analysis
Section Three
B043 : MAIL SERVICES / WAREHOUSE / TECH LAB A

Project Cost

Project Number: B043AC02

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Wall-mounted handrail system per floor	FLR	4	$573	$2,292	$521	$2,084	$4,376
Project Totals:				**$2,292**		**$2,084**	**$4,376**

Material/Labor Cost		$4,376
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$3,377
General Contractor Mark Up at 20.0%	+	$675
Construction Cost		$4,053
Professional Fees at 16.0%	+	$648
Total Project Cost		**$4,701**

Specific Project Details

Facility Condition Analysis
Section Three
B043 : MAIL SERVICES / WAREHOUSE / TECH LAB A

Project Description

Project Number:	B043ES03	**Title:**	MEMBRANE ROOF REPLACEMENT
Priority Sequence:	20		
Priority Class:	4		
Category Code:	ES4B	**System:**	EXTERIOR
		Component:	ROOF
		Element:	REPLACEMENT

Building Code:	B043	
Building Name:	MAIL SERVICES / WAREHOUSE / TECH LAB A	
Subclass/Savings:	Energy Conservation	$1,100

Code Application: Not Applicable

Project Class: Capital Renewal

Project Date: 10/14/2009

Project Location: Floor-wide: Floor(s) R

Project Description

The black single-ply membrane roofing system is not expected to outlast the ten-year scope of this analysis. Ceiling stains indicate past leakage. Future budget modeling should include a provision for the replacement of all failing roofing systems. Replace this roof with a similar application.

Specific Project Details

Facility Condition Analysis
Section Three
B043 : MAIL SERVICES / WAREHOUSE / TECH LAB A

Project Cost

Project Number: B043ES03

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Membrane roof	SF	12,600	$3.79	$47,754	$1.73	$21,798	$69,552
Project Totals:				**$47,754**		**$21,798**	**$69,552**

Material/Labor Cost		$69,552
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$59,271
General Contractor Mark Up at 20.0%	+	$11,854
Construction Cost		$71,125
Professional Fees at 16.0%	+	$11,380
Total Project Cost		**$82,505**

Specific Project Details

Facility Condition Analysis
Section Three
B043 : MAIL SERVICES / WAREHOUSE / TECH LAB A

Project Description

Project Number:	B043IS02	**Title:**	REFINISH WALLS
Priority Sequence:	21		
Priority Class:	4		
Category Code:	IS2B	**System:**	INTERIOR/FINISH SYS.
		Component:	PARTITIONS
		Element:	FINISHES
Building Code:	B043		
Building Name:	MAIL SERVICES / WAREHOUSE / TECH LAB A		
Subclass/Savings:	Not Applicable		
Code Application:	Not Applicable		
Project Class:	Capital Renewal		
Project Date:	10/14/2009		
Project Location:	Floor-wide: Floor(s) 1		

Project Description

Walls are either painted bearing load masonry block or painted partitions. Wall finish upgrades should be considered as part of any future cosmetic improvements or major comprehensive renovation efforts.

Specific Project Details

Facility Condition Analysis
Section Three
B043 : MAIL SERVICES / WAREHOUSE / TECH LAB A

Project Cost

Project Number: B043IS02

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Standard wall finish (paint, wall covering, etc.)	SF	15,000	$0.17	$2,550	$0.81	$12,150	$14,700
Project Totals:				**$2,550**		**$12,150**	**$14,700**

Material/Labor Cost		$14,700
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$8,801
General Contractor Mark Up at 20.0%	+	$1,760
Construction Cost		$10,561
Professional Fees at 16.0%	+	$1,690
Total Project Cost		**$12,251**

Specific Project Details

Facility Condition Analysis
Section Three
B043 : MAIL SERVICES / WAREHOUSE / TECH LAB A

Project Description

Project Number:	B043IS04	**Title:**	RESTROOM RENOVATION
Priority Sequence:	22		
Priority Class:	4		
Category Code:	IS6D	**System:**	INTERIOR/FINISH SYS.
		Component:	GENERAL
		Element:	OTHER
Building Code:	B043		
Building Name:	MAIL SERVICES / WAREHOUSE / TECH LAB A		
Subclass/Savings:	Not Applicable		
Code Application:	Not Applicable		
Project Class:	Capital Renewal		
Project Date:	10/14/2009		
Project Location:	Floor-wide: Floor(s) 1, 2		

Project Description

The restroom fixtures and finishes are mostly original to the year of construction or a subsequent renovation. The fixtures are somewhat sound but are aged and inefficient, and the finishes are outdated. A comprehensive restroom renovation, including new fixtures, finishes, partitions, and accessories, is recommended.

Specific Project Details

Facility Condition Analysis
Section Three
B043 : MAIL SERVICES / WAREHOUSE / TECH LAB A

Project Cost

Project Number: B043IS04

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Major restroom renovation, including fixtures, finishes, partitions, accessories, and expansion if necessary (assumes 55 square feet of restroom area per fixture)	FIXT	10	$1,969	$19,690	$1,699	$16,990	$36,680
Project Totals:				**$19,690**		**$16,990**	**$36,680**

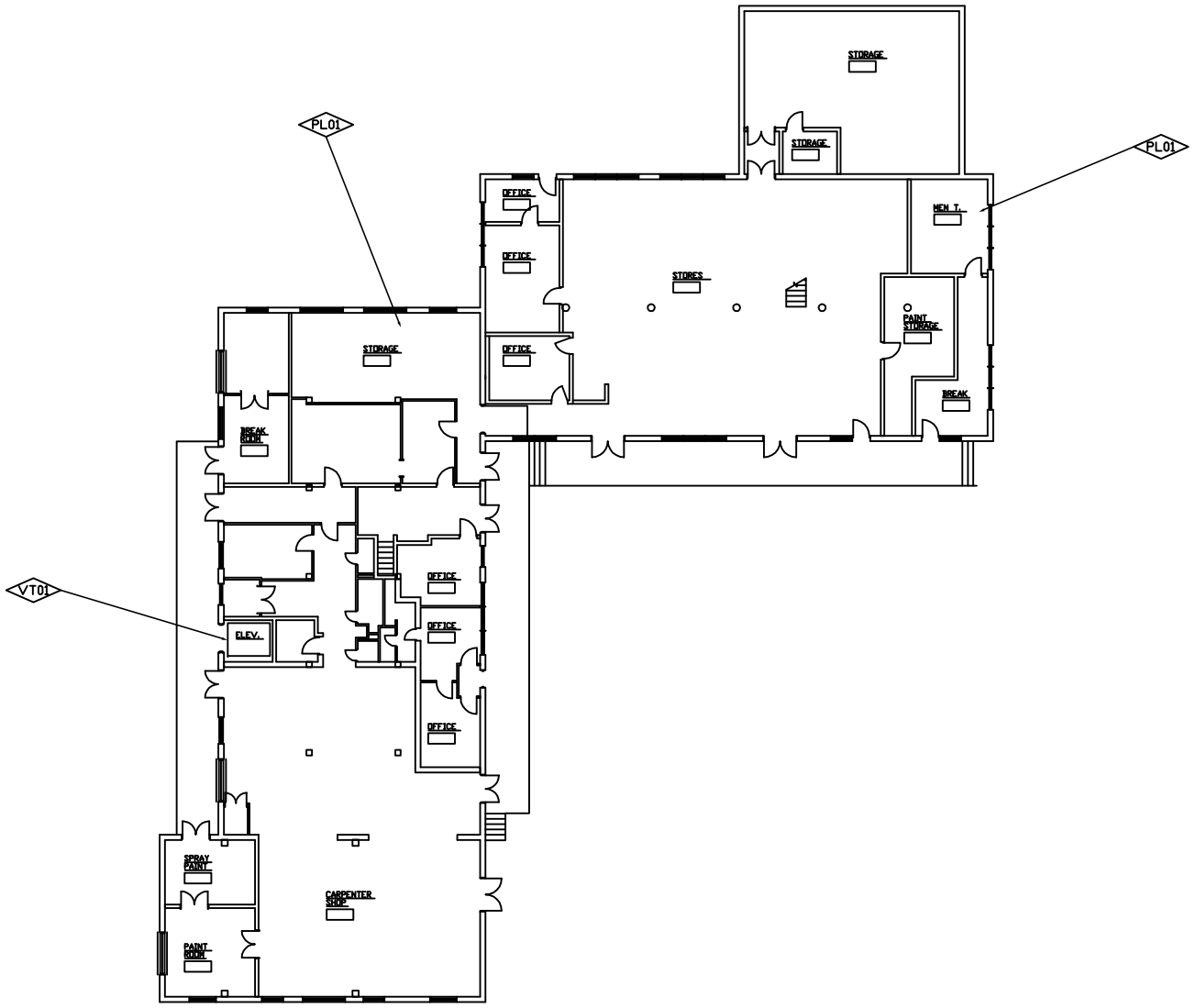
Material/Labor Cost		$36,680
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$28,544
General Contractor Mark Up at 20.0%	+	$5,709
Construction Cost		$34,252
Professional Fees at 16.0%	+	$5,480
Total Project Cost		**$39,733**

FACILITY CONDITION ANALYSIS

SECTION 4

DRAWINGS AND PROJECT LOCATIONS

EAST CAROLINA UNIVERSITY



EL03 ES01 ES02

AC01 AC02 EL01 EL02 FS01 FS02

FS03 HV01 HV02 HV03 IS01 IS02

IS03 IS04 PL02 PL03

MAIL SERVICES/
WAREHOUSE/
TECH LAB A

BLDG NO. B043

ISES CORPORATION

FACILITY
CONDITION
ANALYSIS

2165 West Park Court
Suite N
Stone Mountain GA 30087
770.879.7376

PROJECT NUMBER APPLIES TO ONE ROOM ONLY

PROJECT NUMBER APPLIES TO ONE ITEM ONLY

PROJECT NUMBER APPLIES TO ENTIRE BUILDING

PROJECT NUMBER APPLIES TO ENTIRE FLOOR

PROJECT NUMBER APPLIES TO A SITUATION OF UNDEFINED EXTENTS

PROJECT NUMBER APPLIES TO AREA AS NOTED

Date: 10/20/09
Drawn by: J.T.V.
Project No. 09-041

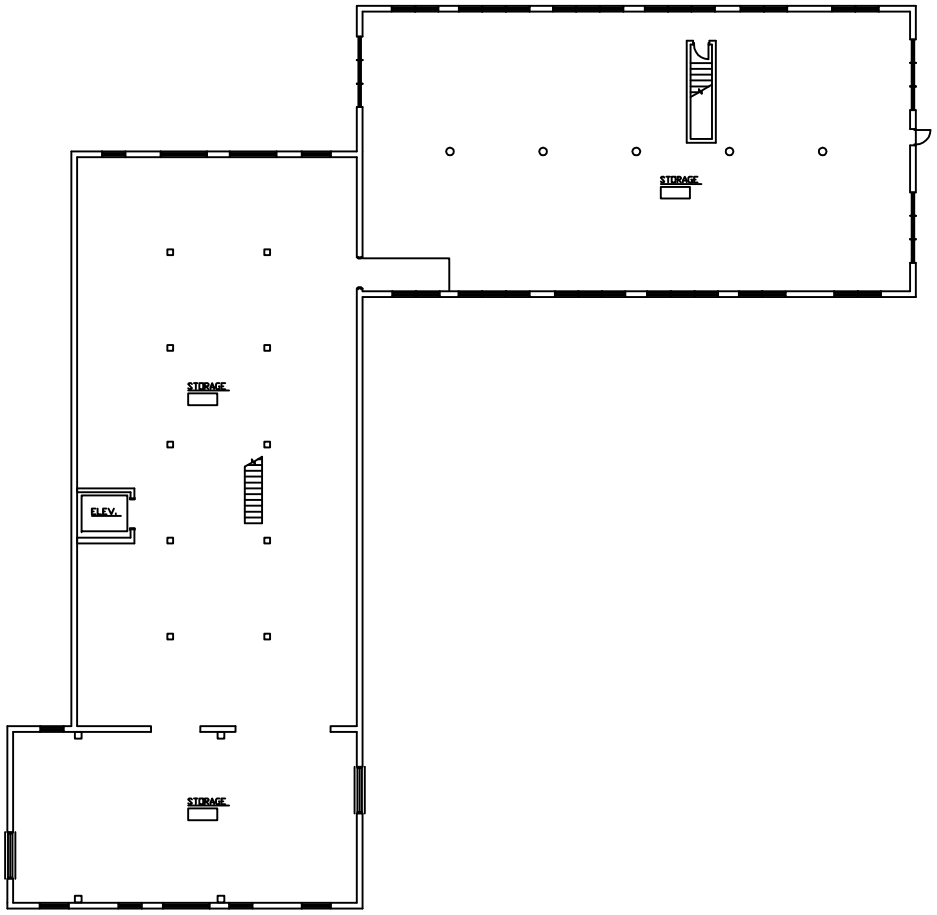
FIRST FLOOR PLAN

Sheet No.
1 of 2

EAST CAROLINA UNIVERSITY

ROOF

ES03 HV01 HV03



AC01 AC02 EL01 EL02 FS01 FS02
FS03 HV01 HV02 HV03 IS01 IS04
PL02 PL03

MAIL SERVICES/
WAREHOUSE/
TECH LAB A

BLDG NO. B043

ISES CORPORATION

FACILITY
CONDITION
ANALYSIS

2165 West Park Court
Suite N
Stone Mountain GA 30087
770.879.7376

PROJECT NUMBER APPLIES TO ONE ROOM ONLY

PROJECT NUMBER APPLIES TO ONE ITEM ONLY

PROJECT NUMBER APPLIES TO ENTIRE BUILDING

PROJECT NUMBER APPLIES TO ENTIRE FLOOR

PROJECT NUMBER APPLIES TO A SITUATION OF UNDEFINED EXTENTS

PROJECT NUMBER APPLIES TO AREA AS NOTED

Date: 10/20/09
Drawn by: J.T.V.
Project No. 09-041

SECOND FLOOR PLAN

Sheet No.
2 of 2

FACILITY CONDITION ANALYSIS

SECTION 5

LIFE CYCLE MODEL SUMMARY AND PROJECTIONS

Life Cycle Model

Building Component Summary

B043 : MAIL SERVICES / WAREHOUSE / TECH LAB A

Uniformat Code	Component Description	Qty	Units	Unit Cost	Complx Adj	Total Cost	Install Date	Life Exp
B2010	EXTERIOR FINISH RENEWAL	9,180	SF	$1.30	.31	$3,710	1951	10
B2020	STANDARD GLAZING AND CURTAIN WALL	1,620	SF	$104.04		$168,539	1951	55
B2030	HIGH TRAFFIC EXTERIOR DOOR SYSTEM	10	LEAF	$4,311.24		$43,112	2000	20
B2030	LOW TRAFFIC EXTERIOR DOOR SYSTEM	14	LEAF	$2,863.29		$40,086	1980	40
B3010	MEMBRANE ROOF	12,600	SF	$6.41		$80,726	1995	15
C1020	STANDARD DOOR AND FRAME INCLUDING HARDWARE	10	LEAF	$783.68		$7,837	1980	35
C1020	RATED DOOR AND FRAME INCLUDING HARDWARE	20	LEAF	$1,489.06		$29,781	1980	35
C1020	INTERIOR DOOR HARDWARE	20	EA	$423.04		$8,461	1980	15
C1020	INTERIOR DOOR HARDWARE	10	EA	$423.04		$4,230	1980	15
C3010	STANDARD WALL FINISH (PAINT, WALL COVERING, ETC.)	10,390	SF	$0.80		$8,323	1951	10
C3020	CARPET	950	SF	$8.75		$8,309	1951	10
C3020	VINYL FLOOR TILE	1,890	SF	$6.59		$12,451	1951	15
C3020	CERAMIC FLOOR TILE	950	SF	$17.36		$16,494	1951	20
C3020	RESURFACE AND SEAL CONCRETE OR TERRAZZO	9,470	SF	$5.85		$55,368	1951	50
C3020	EPOXY FLOOR FINISH APPLICATION	5,680	SF	$7.64		$43,383	1951	15
C3030	ACOUSTICAL TILE CEILING SYSTEM	500	SF	$4.99		$2,497	2000	15
C3030	PAINTED CEILING FINISH APPLICATION	2,500	SF	$0.80		$2,003	1951	15
D1010	ELEVATOR MODERNIZATION - HYDRAULIC	1	EA	$158,628.64		$158,629	1951	25
D1010	ELEVATOR CAB RENOVATION - PASSENGER	1	EA	$26,616.80		$26,617	1951	12
D2010	PLUMBING FIXTURES - WAREHOUSE / STORAGE / UTILITY	24,932	SF	$1.88		$46,755	2004	35
D2020	WATER PIPING - WAREHOUSE / STORAGE / UTILITY	24,932	SF	$1.33		$33,235	1951	35
D2020	WATER HEATER (RES., GAS)	50	GAL	$68.06		$3,403	2001	10
D2020	WATER HEATER (RES., ELEC.)	50	GAL	$47.95		$2,397	2003	10
D2030	DRAIN PIPING - WAREHOUSE / STORAGE / UTILITY	24,932	SF	$2.03		$50,720	1951	40
D3020	HEATING SYSTEM, STEAM OR HYDRONIC	24,932	SF	$7.30		$182,051	1951	25
D3040	CONDENSATE RECEIVER	1	SYS	$9,504.01		$9,504	1951	15
D3040	EXHAUST FAN - CENTRIFUGAL ROOF EXHAUSTER OR SIMILAR	2	EA	$2,768.62		$5,537	1951	20
D3040	EXHAUST FAN - PROPELLER TYPE OR SIMILAR	2	EA	$1,357.34		$2,715	1997	20
D3050	SPLIT DX SYSTEM	22	TON	$2,143.89		$47,166	2004	15

Life Cycle Model

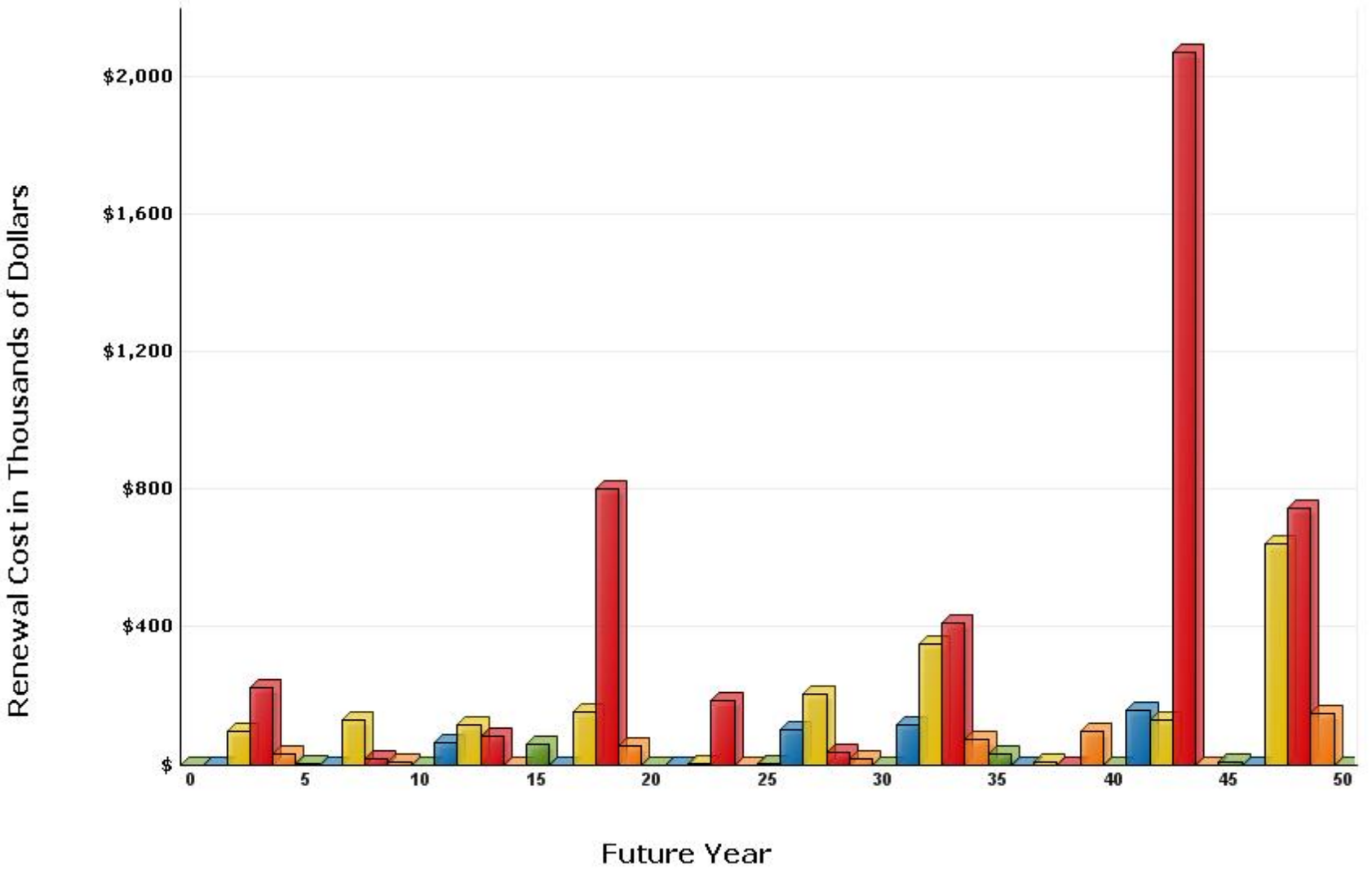
Building Component Summary

B043 : MAIL SERVICES / WAREHOUSE / TECH LAB A

Uniformat Code	Component Description	Qty	Units	Unit Cost	Complx Adj	Total Cost	Install Date	Life Exp
D3050	SPLIT DX SYSTEM	13	TON	$2,143.89		$27,871	1997	15
D3050	THRU-WALL AC UNIT	3	TON	$1,528.27		$4,585	1997	10
D5010	ELECTRICAL SYSTEM - WAREHOUSE / STORAGE / UTILITY	24,932	SF	$5.60		$139,711	1951	50
D5010	ELECTRICAL SWITCHGEAR 277/480V	400	AMP	$39.56		$15,825	1996	20
D5020	EMERGENCY LIGHT (BATTERY)	8	EA	$283.62		$2,269	2003	20
D5020	EXIT SIGNS (BATTERY)	24	EA	$280.76		$6,738	2003	20
D5020	EXTERIOR LIGHT (HID)	1	EA	$689.58		$690	1975	20
D5020	LIGHTING - WAREHOUSE / STORAGE / UTILITY	24,932	SF	$2.66		$66,376	1975	20
D5030	FIRE ALARM SYSTEM, POINT ADDRESSABLE	24,932	SF	$2.61		$65,187	1951	15
						$1,433,289		

Life Cycle Model Expenditure Projections

B043 : MAIL SERVICES / WAREHOUSE / TECH LAB A



Average Annual Renewal Cost Per SqFt $2.41

FACILITY CONDITION ANALYSIS

SECTION 6

PHOTOGRAPHIC LOG

Photo Log - Facility Condition Analysis

B043 : MAIL SERVICES / WAREHOUSE / TECH LAB A

Photo ID No	Description	Location	Date
B043001a	Single-ply membrane roof	Roof	9/14/2009
B043001e	Exhaust fans	Roof	9/14/2009
B043002a	Single-ply membrane roof	Roof	9/14/2009
B043002e	Condensing units	Site	9/14/2009
B043003a	Single-ply membrane roof	Roof	9/14/2009
B043003e	Interior lighting and drain piping	Second floor, storage room	9/14/2009
B043004a	Single-ply membrane roof	Roof	9/14/2009
B043004e	Secondary electrical panel	Second floor, storage room	9/14/2009
B043005a	Single-ply membrane roof	Roof	9/14/2009
B043005e	Condensate return system	First floor, mechanical room	9/14/2009
B043006a	Single-ply membrane roof	Roof	9/14/2009
B043006e	Air handling unit	First floor, mechanical room	9/14/2009
B043007a	Single-ply membrane roof	Roof	9/14/2009
B043007e	Emergency lighting and fire alarm device	First floor, corridor	9/14/2009
B043008a	Crack in masonry block exterior wall	Second floor warehouse	9/14/2009
B043008e	Water closet and urinal	First floor, restroom	9/14/2009
B043009a	Stains in corner from past leakage	Second floor warehouse	9/14/2009
B043009e	Electrical equipment	First floor, mailroom	9/14/2009
B043010a	Stairs needing additional handrails	First floor	9/14/2009
B043010e	Interior lighting and emergency lighting	First floor, mailroom	9/14/2009
B043011a	Single level water fountain	First floor	9/14/2009
B043011e	Secondary electrical panel	First floor, mailroom	9/14/2009
B043012a	Restrooms modified for handicapped accessibility	Men's restroom	9/14/2009
B043012e	Elevator machine	First floor, elevator machine room	9/14/2009
B043013a	Stained and scarred sealed concrete floor	First floor	9/14/2009
B043013e	Radiator	First floor, dive shop	9/14/2009
B043014a	Cracking and settling of masonry block exterior wall	First floor, post office	9/14/2009
B043014e	Electric water heater	First floor, dive shop	9/14/2009
B043015a	Cracked and deteriorated ceramic tile	First floor, dive studies area	9/14/2009
B043015e	Exit signage and emergency lighting	First floor, dive shop	9/14/2009
B043016a	Stained and scarred sealed concrete floor	First floor, dive studies area	9/14/2009
B043016e	Air conditioning blower	First floor, dive shop	9/14/2009

Photo Log - Facility Condition Analysis

B043 : MAIL SERVICES / WAREHOUSE / TECH LAB A

Photo ID No	Description	Location	Date
B043017a	Single level water fountain	Break room	9/14/2009
B043017e	Electrical receptacles	First floor, dive shop	9/14/2009
B043018a	Brick masonry facade	East side of north wing	9/14/2009
B043018e	Lavatory and air conditioning blower	First floor, break room	9/14/2009
B043019a	Previous brick masonry repairs	Northern side	9/14/2009
B043019e	Water heater, lavatory, and wash basin	First floor, mechanical room	9/14/2009
B043020a	Brick masonry facade	Northern side	9/14/2009
B043020e	Window air conditioner and unit heater	First floor, mechanical room	9/14/2009
B043021a	Cracked brick exterior	Western side	9/14/2009
B043021e	Window air conditioner and condensing unit	Exterior	9/14/2009
B043022a	Cracked brick exterior with strain gauge	Western side	9/14/2009
B043022e	Exterior lighting	Exterior	9/14/2009
B043023a	Entrances into the facility	Western side	9/14/2009
B043023e	Condensing units and exhaust fan	Site	9/14/2009
B043024a	Original single-pane, metal-framed windows	Western side	9/14/2009
B043024e	Exterior lighting	Exterior	9/14/2009
B043025a	Previous brick masonry repairs	Southern side	9/14/2009
B043026a	Brick masonry facade	Southern side	9/14/2009
B043027a	Cracking and settling of brick masonry exterior wall	Southern side	9/14/2009
B043028a	Loading dock side of post office area	Eastern side	9/14/2009
B043029a	Loading dock for warehouse area	Southern side	9/14/2009
B043030a	Loading dock side of post office area	Eastern side	9/14/2009

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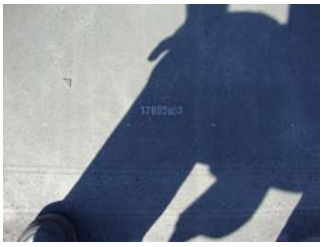

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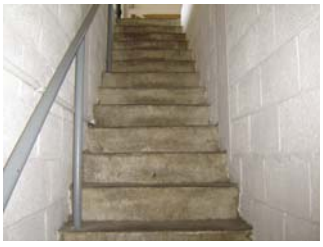

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Facility Condition Analysis - Photo Log

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Facility Condition Analysis - Photo Log

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