EAST CAROLINA UNIVERSITY

HARRIS BUILDING

ASSET CODE: HARS

FACILITY CONDITION ANALYSIS

DECEMBER 7, 2009

ISES CORPORATION

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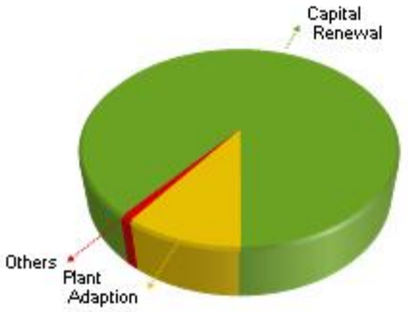
FACILITY CONDITION ANALYSIS

SECTION 1

GENERAL ASSET INFORMATION

EXECUTIVE SUMMARY - HARRIS BUILDING

PROJECT COSTS BY CLASSIFICATION



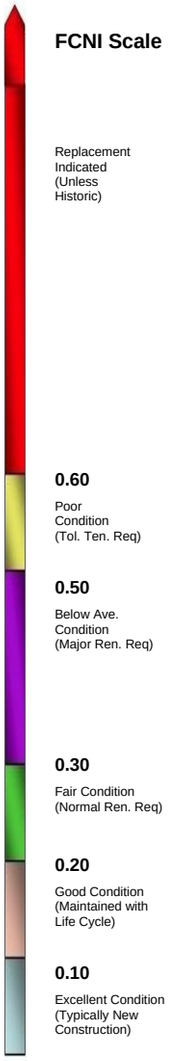
Building Code: HARS
Building Name: HARRIS BUILDING
Year Built: 1997
Building Use: Shops / Trade
Square Feet: 19,325

Project Costs by Priority

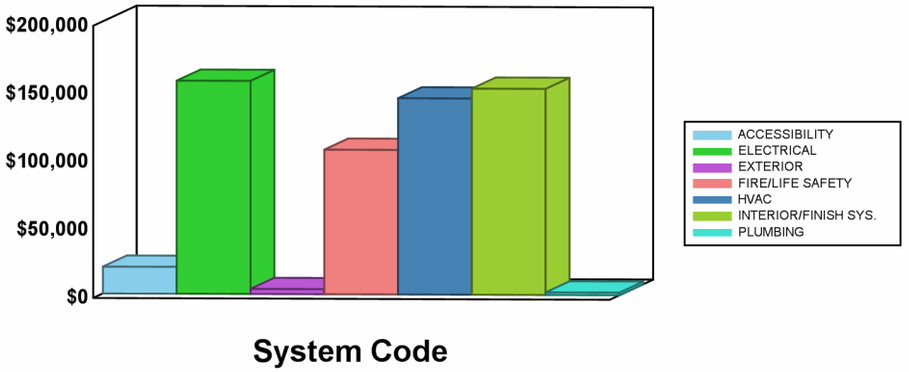
Priority 1:	$0
Priority 2:	$0
Priority 3:	$251,084
Priority 4:	$333,057
Total Project Costs:	**$584,141**

Facility Replacement Cost: **$5,133,000**

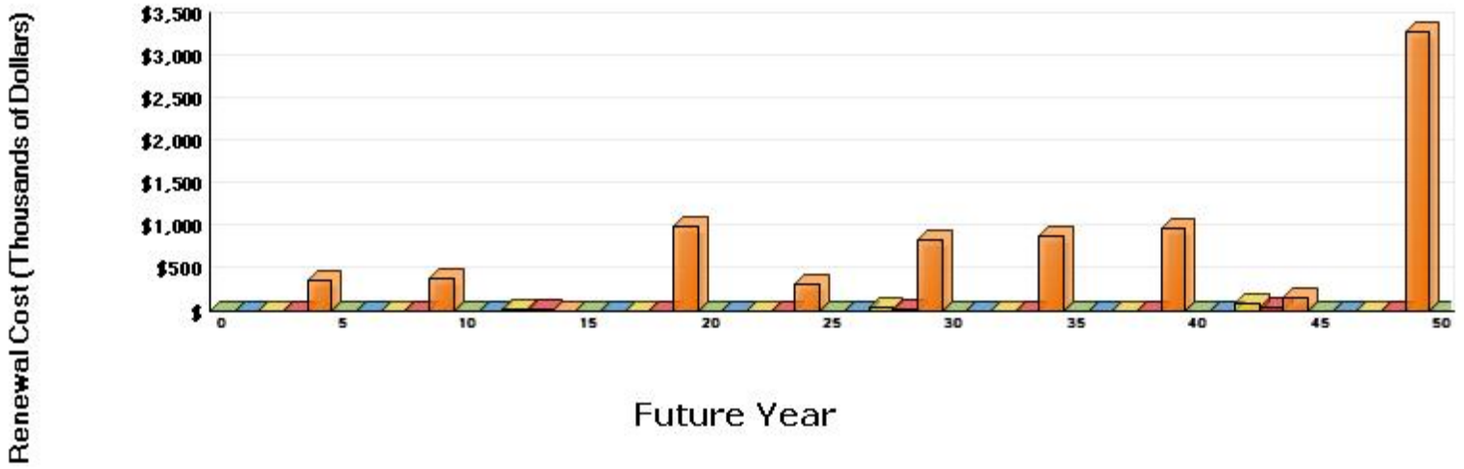
Facility Condition Needs Index (FCNI): **0.11**
(Project Costs / Replacement Cost)



PROJECT COSTS BY SYSTEM CODE



LIFE CYCLE MODEL EXPENDITURE PROJECTIONS



Average Annual Renewal Cost Per SqFt $3.34

B. ASSET SUMMARY

The Harris Building was originally constructed in 1997 and is the home of the printing department of East Carolina University. The building is located off-campus on the eastern side of Greenville and the campus. The building is generally rectangular in design, with a flat flanged metal roof application with a slight pitch to the west covering a brick masonry and metal sided exterior. This building contains 19,325 gross square feet of office and printing operations space on one level. This facility has a slab-on-grade foundation. The steel superstructure supports a corrugated metal roof deck and metal side panels. Handicapped access is through the main entrance on the western side of the facility, where accessible parking is conveniently located.

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 an urban campus setting. Landscaping is minimal, consisting of only a small area of turf on the eastern side of the facility. The asphalt parking lot occupies the entire western side of the site. Vehicular access is from the north off of Tenth Street. The parking lot has adequate accessible parking spaces. The building only has entrances on the western and southern sides of the structure.

EXTERIOR STRUCTURE

The exterior facade is a combination of brick masonry on the northern street side and western parking lot side, with metal siding on the rear eastern wall and southern rear walls. Brick veneer is the primary exterior finish of the sides seen by the public. While the brick is fundamentally sound, exposure to the elements has caused some staining and minor deterioration of the expansion joints. Cleaning and any necessary selective repairs are recommended to restore the aesthetics and integrity of the building envelope.

The exterior windows systems consist of nine fairly small, dual pane, thermally insulated units that are all in good condition. The main entrance doors are a glass storefront system, with the remaining doors either single metal personnel doors or the two metal overhead garage doors. All of the doors appear to be in good condition and need no improvements at this time.

INTERIOR FINISHES / SYSTEMS

The typical floor finish for the office space is carpet in the corridors and office areas and vinyl tile in the break room and restrooms. The rear printing room has a sealed concrete slab floor. In general, the floors are in good condition. However, floor finish upgrades should be considered as part of any long-range cosmetic improvements or major comprehensive renovation efforts.

Most walls within the facility are painted partitions. Wall paint finish upgrades are recommended as part of future cosmetic improvements or major comprehensive renovation efforts. The ceiling finish for the

office is mostly suspended grid acoustical tile applications that are in good condition. The large printing room at the rear of the facility has exposed ceilings to the underside of the metal roof decking insulation. No ceiling finish upgrades should be required over the next ten years. The interior doors are in good condition and are properly fire rated.

ACCESSIBILITY

As a result of the building having been constructed in 1997 and any later renovations to the facility, most accessibility improvements have been incorporated into the interior space. Restrooms, some door hardware, room signage, and a wheelchair ramp have all been incorporated into the existing design.

Even though there is a wheelchair ramp, handrails only exist on one side of the ramp. Current legislation related to accessibility requires that building entrances, both steps and those with wheelchair accessible ramps, have handrails on both sides of the steps or ramp. To comply with the intent of this legislation, it is recommended that compliant painted metal handrails be installed on the wall side of the wheelchair ramp as required.

Current accessibility legislation requires that building amenities be generally accessible to all persons. The configurations of the break room kitchenette and drinking fountain are barriers to accessibility. The installation of wheelchair-accessible kitchenette cabinetry is recommended where applicable. The single level drinking fountain should be replaced with a dual level, refrigerated unit.

While the interior doors are suitable for ten future years of service, the knob actuated door hardware on some of the doors presents a barrier to accessibility. Accessibility legislation requires that door hardware be designed for operation by people with little or no ability to grasp objects with their hands. To comply with the intent of this legislation, it is recommended that lever handle door hardware be installed on all doors that currently still have knobs.

HEALTH

Based on the date of the original construction and latest renovations, it is highly unlikely that lead paint or asbestos containing materials were used in the construction of this facility. No lead paint or suspected asbestos was observed during the inspection. The lead paint and asbestos health risks are extremely minimal, but workers present 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 in regard to fire rating. There are no compromises involving doors or partitions. No fire or life safety issues related to architectural features were observed during the inspection of this facility.

This building is protected by a central fire alarm system. The point addressable panel was manufactured by Notifier and is located at the front entrance. The devices that serve this system include manual pull

stations, audible / visible devices, and smoke detectors. The fire alarm system is approaching the end of its intended life cycle. It should be anticipated that it will require replacement within the scope of this analysis.

This facility is protected by a comprehensive, automatic, wet-pipe fire suppression system with glass bulb type sprinkler heads. The statistical life cycle for a sprinkler head is approximately twenty years. During this time, scale can accumulate inside the head and cause it to malfunction when needed. It is recommended that the aging sprinkler heads be replaced to ensure that proper protection is available.

Exit signs in the building are LED-illuminated and have battery backup power. Emergency lighting is available through unitary fixtures with battery backup power. 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.

An emergency shower and eyewash station is present in the printing area of the facility. The unit appears to be in good condition. However, the installation of additional units is recommended. Install emergency showers and eyewash fountains in areas where related hazards exist. These new fixtures should be permanent and connected to the water supply and drain networks. They need to be clearly identifiable and located in unobstructed areas for easy access.

HVAC

The facility is heated and cooled by rooftop package units. The equipment utilizes DX refrigerant and natural gas. Programmable thermostats are present to control the flow of air. The equipment was mostly installed in 1997, and a few units have been replaced within the last few years. Overall, the package units appear to be in good condition. However, it should be anticipated that the original equipment will require replacement within the scope of this analysis. Install equipment of the latest technology.

ELECTRICAL

Power is fed at a rate of 120/208 volts from a transformer located on site. A main distribution panel receives the power and supplies secondary panels within the facility. The main distribution panel supplies an electrical service of 1,000 amps. The electrical equipment was manufactured by Square D and installed in 1997. Overall, the electrical system appears to be in good condition, with no reported deficiencies or issues. However, it should be anticipated that the electrical distribution network will require minor repairs within the scope of this report. Such remedies include, but are not limited to, installing additional circuits, replacing worn switches and receptacles, replacing circuit breakers, and updating panel directories.

The interior spaces of this facility are illuminated by fixtures that utilize compact or T12 fluorescent lamps in office areas and high intensity discharge (HID) lamps in the main work area. The fluorescent fixtures are lay-in applications with acrylic lenses or fixtures suspended from the ceiling. The lighting system is currently sufficient. However, it should be anticipated that it will require replacement within the scope of this analysis. Specify energy-efficient light fixtures for the new interior lighting systems, and install occupancy sensors where possible

The exterior areas adjacent to the building are illuminated by building-mounted HID and stanchion-mounted fixtures. These exterior light fixtures are currently in good condition. However, the replacement of the building-mounted fixtures should be scheduled within the outlook of this report due to predictable wear. Install new energy-efficient fixtures, and place them on photocell activation.

PLUMBING

The main incoming domestic water is fed to the facility from a shutoff valve located on site. No backflow preventer was observed on the system. Copper piping is then utilized to distribute water throughout the facility. The system appears to be in good condition and is anticipated to provide service for an additional twenty-three years. The life cycle for this type of equipment is generally thirty-five years. Based on age, there are no recommendations for the extent of this report.

Sanitary waste and stormwater piping consists mainly of cast-iron, no-hub piping, with some plastic piping applications. The system appears to be in good condition, and no deterioration or leaks were observed or noted during the inspection. No projects are recommended for the sanitary waste and stormwater piping network within the scope of this report.

Domestic hot water is produced by an electric water heater with a capacity of 40 gallons. The equipment was manufactured by Ruud Corporation and was installed in 1997. The water heater appears to be in good condition. However, the life cycle for this type of equipment is generally eight to twelve years. To ensure a proper flow of domestic hot water, it is recommended that the water heater be replaced. Install a similar unit of the latest technology.

The plumbing fixtures consist of ceramic and stainless steel construction and utilize hand operated devices on restroom flush valves and faucets. The units appear to be in good condition, with no observed deterioration. The plumbing fixtures should continue to provide sufficient service within this report. No projects are recommended.

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

HARS : HARRIS BUILDING

System Code	System Description	Priority Classes 1	2	3	4	Subtotal
AC	ACCESSIBILITY	0	0	0	19,779	19,779
EL	ELECTRICAL	0	0	9,558	147,053	156,610
ES	EXTERIOR	0	0	3,771	0	3,771
FS	FIRE/LIFE SAFETY	0	0	91,554	14,716	106,270
HV	HVAC	0	0	144,241	0	144,241
IS	INTERIOR/FINISH SYS.	0	0	0	151,510	151,510
PL	PLUMBING	0	0	1,960	0	1,960
	TOTALS	0	0	251,084	333,057	584,141

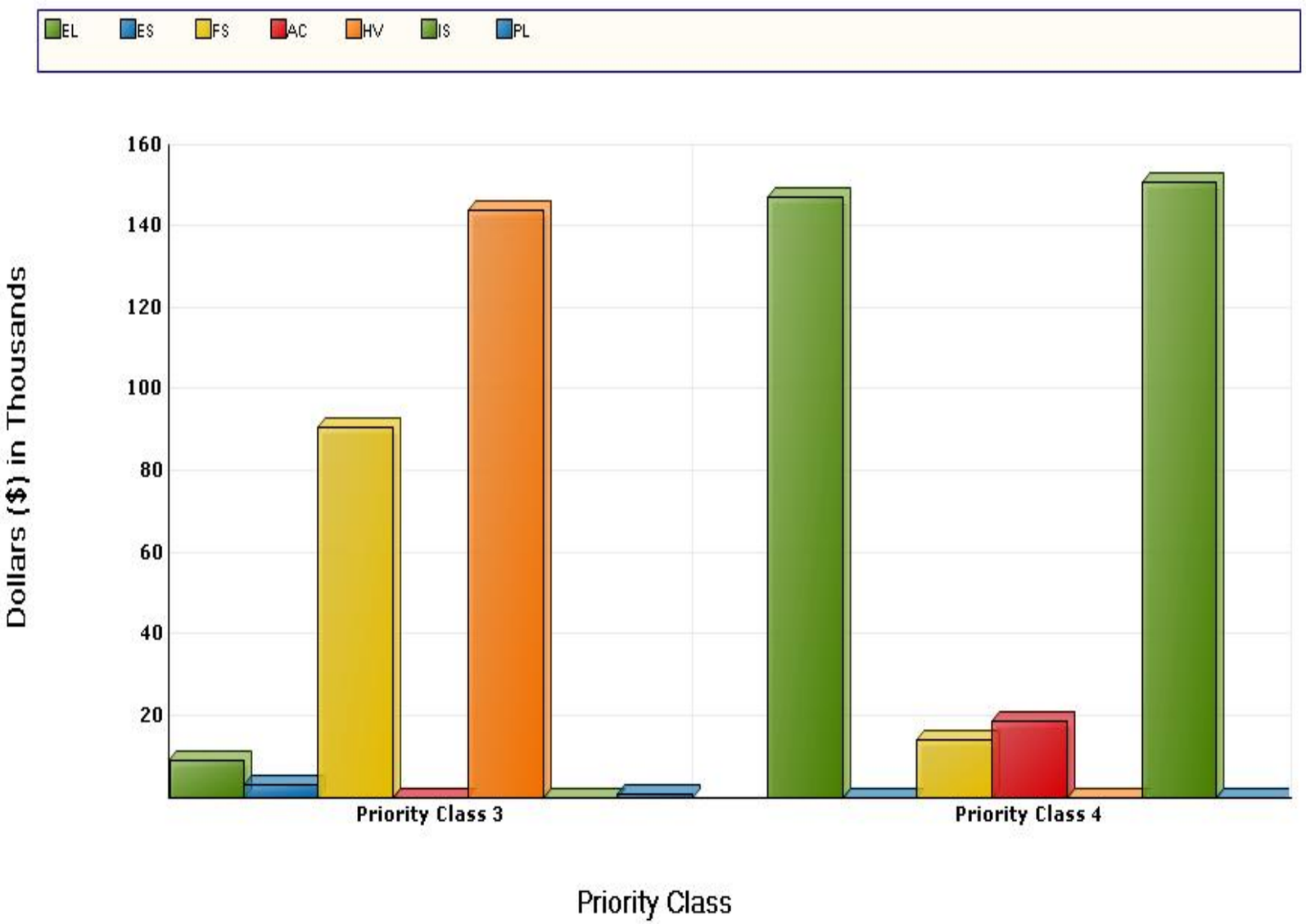
Facility Replacement Cost	$5,133,000
Facility Condition Needs Index	0.11

Gross Square Feet	19,325	**Total Cost Per Square Foot**	$30.23

FACILITY CONDITION ANALYSIS

System Code by Priority Class

HARS : HARRIS BUILDING



Detailed Project Totals
Facility Condition Analysis
System Code by Project Class
HARS : HARRIS BUILDING

System Code	System Description	Project Classes: Captial Renewal	Deferred Maintenance	Plant Adaption	Subtotal
AC	ACCESSIBILITY	0	0	19,779	19,779
EL	ELECTRICAL	156,610	0	0	156,610
ES	EXTERIOR	0	3,771	0	3,771
FS	FIRE/LIFE SAFETY	66,548	0	39,723	106,270
HV	HVAC	144,241	0	0	144,241
IS	INTERIOR/FINISH SYS.	151,510	0	0	151,510
PL	PLUMBING	0	1,960	0	1,960
	TOTALS	518,909	5,731	59,501	584,141

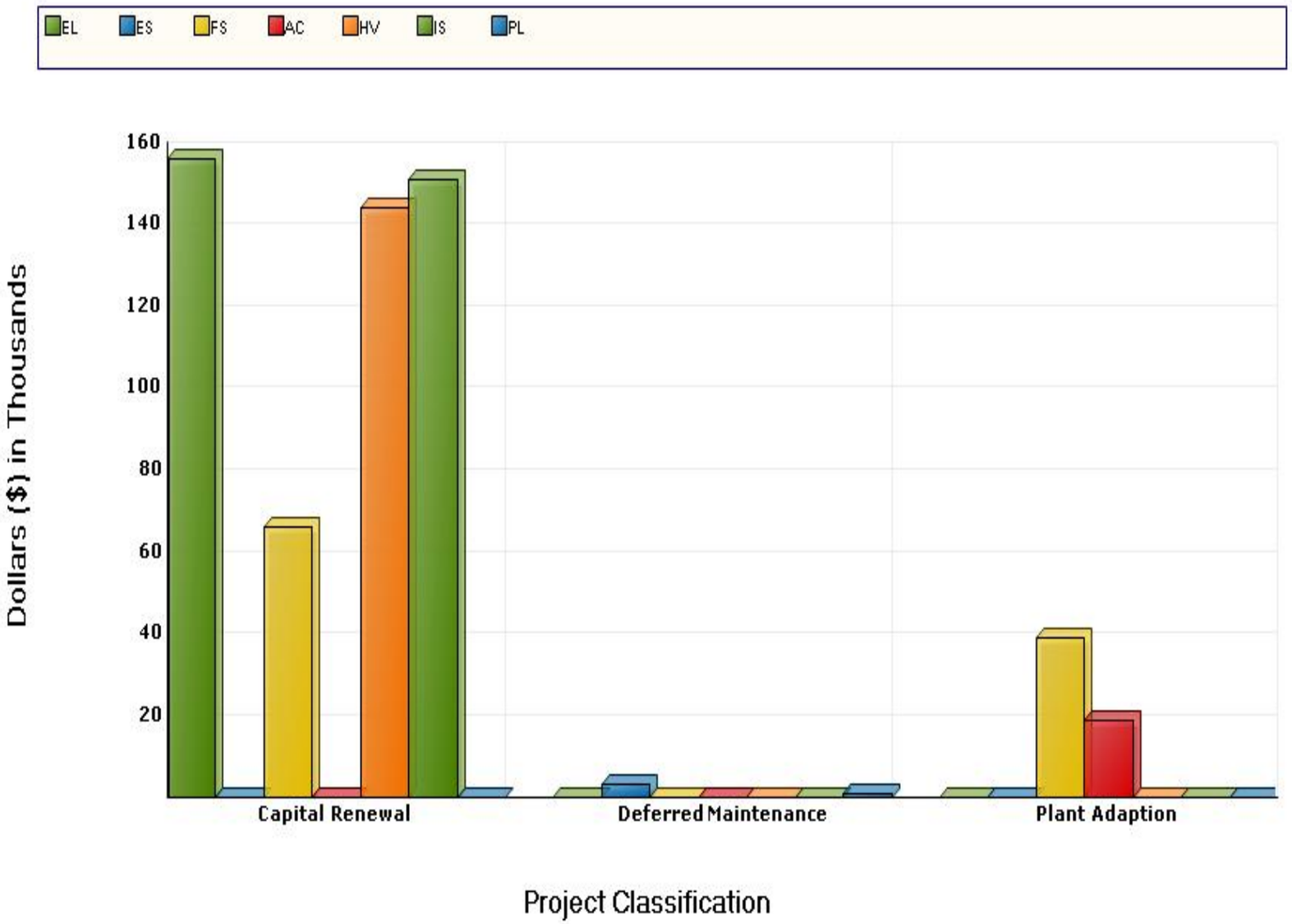
Facility Replacement Cost	$5,133,000
Facility Condition Needs Index	0.11

Gross Square Feet	19,325	**Total Cost Per Square Foot**	$30.23

FACILITY CONDITION ANALYSIS

System Code by Project Class

HARS : HARRIS BUILDING



Detailed Project Summary
Facility Condition Analysis
Project Class by Priority Class
HARS : HARRIS BUILDING

	Priority Classes				
Project Class	**1**	**2**	**3**	**4**	**Subtotal**
Capital Renewal	0	0	205,630	313,279	518,909
Deferred Maintenance	0	0	5,731	0	5,731
Plant Adaption	0	0	39,723	19,779	59,501
TOTALS	0	0	251,084	333,057	584,141

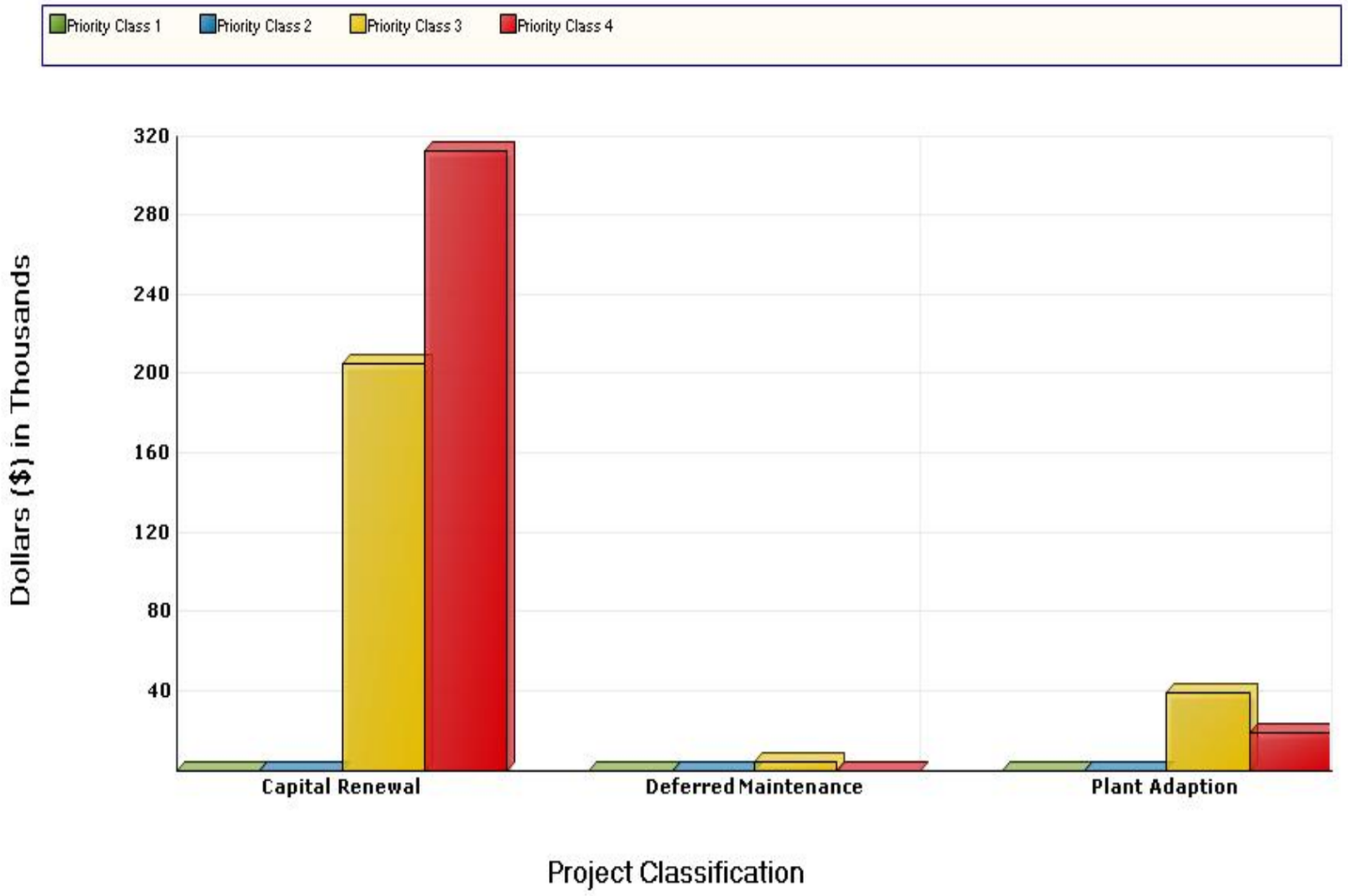
Facility Replacement Cost	$5,133,000
Facility Condition Needs Index	0.11

Gross Square Feet	19,325	**Total Cost Per Square Foot**	$30.23

FACILITY CONDITION ANALYSIS

Project Class by Priority Class

HARS : HARRIS BUILDING



Detailed Project Summary

Facility Condition Analysis

Priority Class - Priority Sequence

HARS : HARRIS BUILDING

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Total Cost
FS4B	HARSFS04	3	1	EMERGENCY SHOWER AND EYEWASH REPLACEMENT	34,244	5,479	39,723
FS2A	HARSFS01	3	2	FIRE ALARM SYSTEM REPLACEMENT	44,682	7,149	51,831
ES2B	HARSES01	3	3	RESTORE BRICK VENEER	3,251	520	3,771
HV3A	HARSHV01	3	4	REPLACE PACKAGED HVAC UNITS	124,346	19,895	144,241
EL3B	HARSEL02	3	5	ELECTRICAL SYSTEM REPAIRS	8,239	1,318	9,558
PL1E	HARSPL01	3	6	DOMESTIC WATER HEATER REPLACEMENT	1,689	270	1,960
				Totals for Priority Class 3	**216,451**	**34,632**	**251,084**
FS3A	HARSFS02	4	7	REPLACE SPRINKLER HEADS	6,265	1,002	7,268
FS1A	HARSFS03	4	8	REPLACE EXIT SIGNS AND EMERGENCY LIGHTS	6,421	1,027	7,448
AC2A	HARSAC01	4	9	BUILDING ENTRY ACCESSIBILITY UPGRADES	3,313	530	3,843
AC4A	HARSAC02	4	10	INTERIOR AMENITY ACCESSIBILITY UPGRADES	12,207	0	12,207
AC3C	HARSAC03	4	11	INTERIOR DOOR UPGRADES	3,728	0	3,728
EL4B	HARSEL01	4	12	INTERIOR LIGHTING UPGRADE	123,124	19,700	142,824
EL4A	HARSEL03	4	13	EXTERIOR LIGHTING REPLACEMENT	3,645	583	4,229
IS2B	HARSIS02	4	14	REFINISH WALLS	17,602	2,816	20,418
IS1A	HARSIS01	4	15	REFINISH FLOORING	113,011	18,082	131,092
				Totals for Priority Class 4	**289,317**	**43,741**	**333,057**
				Grand Total:	**505,768**	**78,373**	**584,141**

Detailed Project Summary

Facility Condition Analysis

Project Cost Range

HARS : HARRIS BUILDING

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Total Cost
FS2A	HARSFS01	3	2	FIRE ALARM SYSTEM REPLACEMENT	44,682	7,149	51,831
FS4B	HARSFS04	3	1	EMERGENCY SHOWER AND EYEWASH REPLACEMENT	34,244	5,479	39,723
EL3B	HARSEL02	3	5	ELECTRICAL SYSTEM REPAIRS	8,239	1,318	9,558
PL1E	HARSPL01	3	6	DOMESTIC WATER HEATER REPLACEMENT	1,689	270	1,960
ES2B	HARSES01	3	3	RESTORE BRICK VENEER	3,251	520	3,771
				Totals for Priority Class 3	**92,106**	**14,737**	**106,843**
FS3A	HARSFS02	4	7	REPLACE SPRINKLER HEADS	6,265	1,002	7,268
FS1A	HARSFS03	4	8	REPLACE EXIT SIGNS AND EMERGENCY LIGHTS	6,421	1,027	7,448
EL4A	HARSEL03	4	13	EXTERIOR LIGHTING REPLACEMENT	3,645	583	4,229
AC2A	HARSAC01	4	9	BUILDING ENTRY ACCESSIBILITY UPGRADES	3,313	530	3,843
AC4A	HARSAC02	4	10	INTERIOR AMENITY ACCESSIBILITY UPGRADES	12,207	0	12,207
AC3C	HARSAC03	4	11	INTERIOR DOOR UPGRADES	3,728	0	3,728
IS2B	HARSIS02	4	14	REFINISH WALLS	17,602	2,816	20,418
				Totals for Priority Class 4	**53,182**	**5,959**	**59,141**
				Grand Totals for Projects < 100,000	**145,288**	**20,696**	**165,984**

Detailed Project Summary

Facility Condition Analysis

Project Cost Range

HARS : HARRIS BUILDING

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Total Cost
HV3A	HARSHV01	3	4	REPLACE PACKAGED HVAC UNITS	124,346	19,895	144,241
				Totals for Priority Class 3	**124,346**	**19,895**	**144,241**
EL4B	HARSEL01	4	12	INTERIOR LIGHTING UPGRADE	123,124	19,700	142,824
IS1A	HARSIS01	4	15	REFINISH FLOORING	113,011	18,082	131,092
				Totals for Priority Class 4	**236,135**	**37,782**	**273,916**
				Grand Totals for Projects >= 100,000 and < 500,000	**360,480**	**57,677**	**418,157**
				Grand Totals For All Projects:	**505,768**	**78,373**	**584,141**

Detailed Project Summary

Facility Condition Analysis

Project Classification

HARS : HARRIS BUILDING

Cat Code	Project Number	Pri. Seq.	Project Classification	Pri. Cls	Project Title	Total Cost
FS2A	HARSFS01	2	Capital Renewal	3	FIRE ALARM SYSTEM REPLACEMENT	51,831
HV3A	HARSHV01	4	Capital Renewal	3	REPLACE PACKAGED HVAC UNITS	144,241
EL3B	HARSEL02	5	Capital Renewal	3	ELECTRICAL SYSTEM REPAIRS	9,558
FS3A	HARSFS02	7	Capital Renewal	4	REPLACE SPRINKLER HEADS	7,268
FS1A	HARSFS03	8	Capital Renewal	4	REPLACE EXIT SIGNS AND EMERGENCY LIGHTS	7,448
EL4B	HARSEL01	12	Capital Renewal	4	INTERIOR LIGHTING UPGRADE	142,824
EL4A	HARSEL03	13	Capital Renewal	4	EXTERIOR LIGHTING REPLACEMENT	4,229
IS2B	HARSIS02	14	Capital Renewal	4	REFINISH WALLS	20,418
IS1A	HARSIS01	15	Capital Renewal	4	REFINISH FLOORING	131,092
					Totals for Capital Renewal	**518,909**
ES2B	HARSES01	3	Deferred Maintenance	3	RESTORE BRICK VENEER	3,771
PL1E	HARSPL01	6	Deferred Maintenance	3	DOMESTIC WATER HEATER REPLACEMENT	1,960
					Totals for Deferred Maintenance	**5,731**
FS4B	HARSFS04	1	Plant Adaption	3	EMERGENCY SHOWER AND EYEWASH REPLACEMENT	39,723
AC2A	HARSAC01	9	Plant Adaption	4	BUILDING ENTRY ACCESSIBILITY UPGRADES	3,843
AC4A	HARSAC02	10	Plant Adaption	4	INTERIOR AMENITY ACCESSIBILITY UPGRADES	12,207
AC3C	HARSAC03	11	Plant Adaption	4	INTERIOR DOOR UPGRADES	3,728
					Totals for Plant Adaption	**59,501**
					Grand Total:	**584,141**

Detailed Project Summary

Facility Condition Analysis

Energy Conservation

HARS : HARRIS BUILDING

Cat Code	Project Number	Pri Cls	Pri Seq	Project Title	Total Cost	Annual Savings	Simple Payback
FS1A	HARSFS03	4	8	REPLACE EXIT SIGNS AND EMERGENCY LIGHTS	7,448	80	93.1
EL4B	HARSEL01	4	12	INTERIOR LIGHTING UPGRADE	142,824	5,910	24.17
EL4A	HARSEL03	4	13	EXTERIOR LIGHTING REPLACEMENT	4,229	390	10.84
				Totals for Priority Class 4	**154,501**	**6,380**	**24.22**
				Grand Total:	**154,501**	**6,380**	**24.22**

Detailed Project Summary

Facility Condition Analysis

Category/System Code

HARS : HARRIS BUILDING

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Total Cost
AC2A	HARSAC01	4	9	BUILDING ENTRY ACCESSIBILITY UPGRADES	3,313	530	3,843
AC4A	HARSAC02	4	10	INTERIOR AMENITY ACCESSIBILITY UPGRADES	12,207	0	12,207
AC3C	HARSAC03	4	11	INTERIOR DOOR UPGRADES	3,728	0	3,728
				Totals for System Code: ACCESSIBILITY	**19,249**	**530**	**19,779**
EL3B	HARSEL02	3	5	ELECTRICAL SYSTEM REPAIRS	8,239	1,318	9,558
EL4B	HARSEL01	4	12	INTERIOR LIGHTING UPGRADE	123,124	19,700	142,824
EL4A	HARSEL03	4	13	EXTERIOR LIGHTING REPLACEMENT	3,645	583	4,229
				Totals for System Code: ELECTRICAL	**135,009**	**21,601**	**156,610**
ES2B	HARSES01	3	3	RESTORE BRICK VENEER	3,251	520	3,771
				Totals for System Code: EXTERIOR	**3,251**	**520**	**3,771**
FS4B	HARSFS04	3	1	EMERGENCY SHOWER AND EYEWASH REPLACEMENT	34,244	5,479	39,723
FS2A	HARSFS01	3	2	FIRE ALARM SYSTEM REPLACEMENT	44,682	7,149	51,831
FS3A	HARSFS02	4	7	REPLACE SPRINKLER HEADS	6,265	1,002	7,268
FS1A	HARSFS03	4	8	REPLACE EXIT SIGNS AND EMERGENCY LIGHTS	6,421	1,027	7,448
				Totals for System Code: FIRE/LIFE SAFETY	**91,612**	**14,658**	**106,270**
HV3A	HARSHV01	3	4	REPLACE PACKAGED HVAC UNITS	124,346	19,895	144,241
				Totals for System Code: HVAC	**124,346**	**19,895**	**144,241**
IS2B	HARSIS02	4	14	REFINISH WALLS	17,602	2,816	20,418
IS1A	HARSIS01	4	15	REFINISH FLOORING	113,011	18,082	131,092
				Totals for System Code: INTERIOR/FINISH SYS.	**130,612**	**20,898**	**151,510**
PL1E	HARSPL01	3	6	DOMESTIC WATER HEATER REPLACEMENT	1,689	270	1,960
				Totals for System Code: PLUMBING	**1,689**	**270**	**1,960**
				Grand Total:	**505,768**	**78,373**	**584,141**

FACILITY CONDITION ANALYSIS

SECTION 3

SPECIFIC PROJECT DETAILS ILLUSTRATING DESCRIPTION / COST

Specific Project Details

Facility Condition Analysis
Section Three
HARS : HARRIS BUILDING

Project Description

Project Number:	HARSFS04	**Title:**	EMERGENCY SHOWER AND EYEWASH REPLACEMENT
Priority Sequence:	1		
Priority Class:	3		
Category Code:	FS4B	**System:**	FIRE/LIFE SAFETY
		Component:	HAZARDOUS MATERIALS
		Element:	USER SAFETY
Building Code:	HARS		
Building Name:	HARRIS BUILDING		
Subclass/Savings:	Not Applicable		

Code Application:	ANSI	Z358.1
	OSHA	29 CFR 1910.151C

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

Project Description

Install emergency showers and eyewash fountains in areas where related hazards exist. These new fixtures should be permanent and connected to the water supply and drain networks. They need to be clearly identifiable and located in unobstructed areas for easy access. Install specifically designed point-of-use water heaters to maintain the supplied water temperature between 60 and 100 degrees Fahrenheit, as per ANSI Z358.1.

Specific Project Details

Facility Condition Analysis
Section Three
HARS : HARRIS BUILDING

Project Cost

Project Number: HARSFS04

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Eyewash fountain, drain, and rough-in	EA	9	$1,906	$17,154	$525	$4,725	$21,879
Emergency shower, drain, and rough-in	EA	2	$556	$1,112	$525	$1,050	$2,162
Point-of-use water heater installation	EA	11	$422	$4,642	$444	$4,884	$9,526
Project Totals:				**$22,908**		**$10,659**	**$33,567**

Material/Labor Cost		$33,567
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$28,536
General Contractor Mark Up at 20.0%	+	$5,707
Construction Cost		$34,244
Professional Fees at 16.0%	+	$5,479
Total Project Cost		**$39,723**

Specific Project Details

Facility Condition Analysis
Section Three
HARS : HARRIS BUILDING

Project Description

Project Number:	HARSFS01	**Title:**	FIRE ALARM SYSTEM REPLACEMENT
Priority Sequence:	2		
Priority Class:	3		
Category Code:	FS2A	**System:**	FIRE/LIFE SAFETY
		Component:	DETECTION ALARM
		Element:	GENERAL
Building Code:	HARS		
Building Name:	HARRIS BUILDING		
Subclass/Savings:	Not Applicable		

Code Application:	ADAAG	702.1
	NFPA	1, 101

Project Class:	Capital Renewal
Project Date:	10/9/2009
Project Location:	Floor-wide: Floor(s) 1

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
HARS : HARRIS BUILDING

Project Cost

Project Number: HARSFS01

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, and cut and patching materials	SF	19,325	$1.46	$28,215	$0.89	$17,199	$45,414
Project Totals:				**$28,215**		**$17,199**	**$45,414**

Material/Labor Cost		$45,414
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$37,235
General Contractor Mark Up at 20.0%	+	$7,447
Construction Cost		$44,682
Professional Fees at 16.0%	+	$7,149
Total Project Cost		**$51,831**

Specific Project Details

Facility Condition Analysis
Section Three
HARS : HARRIS BUILDING

Project Description

Project Number:	HARSES01	**Title:**	RESTORE BRICK VENEER
Priority Sequence:	3		
Priority Class:	3		
Category Code:	ES2B	**System:**	EXTERIOR
		Component:	COLUMNS/BEAMS/WALLS
		Element:	FINISH
Building Code:	HARS		
Building Name:	HARRIS BUILDING		
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

The exterior facade is a combination of brick masonry on the northern street side and western parking lot side, with metal siding on the rear eastern wall and southern rear walls. Brick veneer is the primary exterior finish of the sides seen by the public. While the brick is fundamentally sound, exposure to the elements has caused some staining and minor deterioration of the expansion joints. Cleaning and any necessary selective repairs are recommended to restore the aesthetics and integrity of the building envelope.

Specific Project Details

Facility Condition Analysis
Section Three
HARS : HARRIS BUILDING

Project Cost

Project Number: HARSES01

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	3,730	$0.11	$410	$0.22	$821	$1,231
Selective mortar and / or sealant repairs (assumes 10 linear feet for every 100 square feet of envelope)	LF	373	$2.45	$914	$4.99	$1,861	$2,775
Project Totals:				**$1,324**		**$2,682**	**$4,006**

Material/Labor Cost		$4,006
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$2,709
General Contractor Mark Up at 20.0%	+	$542
Construction Cost		$3,251
Professional Fees at 16.0%	+	$520
Total Project Cost		**$3,771**

Specific Project Details

Facility Condition Analysis
Section Three
HARS : HARRIS BUILDING

Project Description

Project Number:	HARSHV01	**Title:**	REPLACE PACKAGED HVAC UNITS
Priority Sequence:	4		
Priority Class:	3		
Category Code:	HV3A	**System:**	HVAC
		Component:	HEATING/COOLING
		Element:	SYSTEM RETROFIT/REPLACE
Building Code:	HARS		
Building Name:	HARRIS BUILDING		
Subclass/Savings:	Not Applicable		

Code Application: ASHRAE 62-2004

Project Class: Capital Renewal

Project Date: 10/9/2009

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

Project Description

Remove the existing packaged HVAC systems. Install new units of the latest energy-efficient design. The project cost includes controls, related ductwork, and electrical connections. Test and balance the downstream air distribution system upon completion.

Project Cost

Project Number: HARSHV01

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, and demolition of existing unit	TON	56	$1,200	$67,200	$1,090	$61,040	$128,240
Air distribution system test and balance	SF	19,325	$0.06	$1,160	$0.35	$6,764	$7,923
Project Totals:				**$68,360**		**$67,804**	**$136,163**

Material/Labor Cost		$136,163
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$103,621
General Contractor Mark Up at 20.0%	+	$20,724
Construction Cost		$124,346
Professional Fees at 16.0%	+	$19,895
Total Project Cost		**$144,241**

Specific Project Details

Facility Condition Analysis
Section Three
HARS : HARRIS BUILDING

Project Description

Project Number:	HARSEL02	**Title:**	ELECTRICAL SYSTEM REPAIRS
Priority Sequence:	5		
Priority Class:	3		
Category Code:	EL3B	**System:**	ELECTRICAL
		Component:	SECONDARY DISTRIBUTION
		Element:	DISTRIBUTION NETWORK
Building Code:	HARS		
Building Name:	HARRIS BUILDING		
Subclass/Savings:	Not Applicable		

Code Application: NEC Articles 100, 210, 410

Project Class: Capital Renewal

Project Date: 10/9/2009

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

Project Description

Aging devices, including wall switches and receptacles, are potential shock and fire hazards. Replace all worn or damaged switches, receptacles, and cover plates. Install ground fault circuit interrupter (GFCI) receptacles where required by code. Test power panels for proper operation, replacing faulty breakers as needed. Update power panel directories for circuit identification.

Specific Project Details

Facility Condition Analysis
Section Three
HARS : HARRIS BUILDING

Project Cost

Project Number: HARSEL02

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Switches, receptacles, cover plates, breakers, and miscellaneous materials	SF	19,325	$0.20	$3,865	$0.30	$5,798	$9,663
Project Totals:				**$3,865**		**$5,798**	**$9,663**

Material/Labor Cost		$9,663
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$6,866
General Contractor Mark Up at 20.0%	+	$1,373
Construction Cost		$8,239
Professional Fees at 16.0%	+	$1,318
Total Project Cost		**$9,558**

Specific Project Details

Facility Condition Analysis
Section Three
HARS : HARRIS BUILDING

Project Description

Project Number:	HARSPL01	**Title:**	DOMESTIC WATER HEATER REPLACEMENT
Priority Sequence:	6		
Priority Class:	3		
Category Code:	PL1E	**System:**	PLUMBING
		Component:	DOMESTIC WATER
		Element:	HEATING
Building Code:	HARS		
Building Name:	HARRIS BUILDING		
Subclass/Savings:	Not Applicable		

Code Application: IPC Chapters 5, 607

Project Class:	Deferred Maintenance
Project Date:	10/9/2009
Project Location:	Item Only: Floor(s) 1

Project Description

The 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 current needs of this facility.

Specific Project Details

Facility Condition Analysis
Section Three
HARS : HARRIS BUILDING

Project Cost

Project Number: HARSPL01

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Electric, residential-grade water heater replacement, including demolition	GAL	40	$22.87	$915	$23.71	$948	$1,863
Project Totals:				**$915**		**$948**	**$1,863**

Material/Labor Cost		$1,863
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$1,408
General Contractor Mark Up at 20.0%	+	$282
Construction Cost		$1,689
Professional Fees at 16.0%	+	$270
Total Project Cost		**$1,960**

Specific Project Details

Facility Condition Analysis
Section Three
HARS : HARRIS BUILDING

Project Description

Project Number:	HARSFS02	**Title:**	REPLACE SPRINKLER HEADS
Priority Sequence:	7		
Priority Class:	4		
Category Code:	FS3A	**System:**	FIRE/LIFE SAFETY
		Component:	SUPPRESSION
		Element:	SPRINKLERS
Building Code:	HARS		
Building Name:	HARRIS BUILDING		
Subclass/Savings:	Not Applicable		

Code Application: NFPA 1, 13, 13D, 101

Project Class:	Capital Renewal
Project Date:	10/9/2009
Project Location:	Floor-wide: Floor(s) 1

Project Description

The sprinkler heads are recommended for replacement. The statistical life cycle for a sprinkler head is approximately twenty years. During this time, scale can accumulate inside the head and cause it to malfunction when needed. It is recommended that the aging sprinkler heads be replaced to ensure that proper protection is available.

Specific Project Details

Facility Condition Analysis
Section Three
HARS : HARRIS BUILDING

Project Cost

Project Number: HARSFS02

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Fire sprinkler head replacement	SF	19,325	$0.09	$1,739	$0.35	$6,764	$8,503
Project Totals:				**$1,739**		**$6,764**	**$8,503**

Material/Labor Cost		$8,503
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$5,221
General Contractor Mark Up at 20.0%	+	$1,044
Construction Cost		$6,265
Professional Fees at 16.0%	+	$1,002
Total Project Cost		**$7,268**

Specific Project Details

Facility Condition Analysis
Section Three
HARS : HARRIS BUILDING

Project Description

Project Number:	HARSFS03	**Title:**	REPLACE EXIT SIGNS AND EMERGENCY LIGHTS
Priority Sequence:	8		
Priority Class:	4		
Category Code:	FS1A	**System:**	FIRE/LIFE SAFETY
		Component:	LIGHTING
		Element:	EGRESS LTG./EXIT SIGNAGE
Building Code:	HARS		
Building Name:	HARRIS BUILDING		
Subclass/Savings:	Energy Conservation $80		

Code Application:	NFPA	101-47
	IBC	1011

Project Class:	Capital Renewal
Project Date:	10/9/2009
Project Location:	Floor-wide: Floor(s) 1

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.

Specific Project Details

Facility Condition Analysis
Section Three
HARS : HARRIS BUILDING

Project Cost

Project Number: HARSFS03

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Replacement of existing exit signs with new battery pack LED exit signs	EA	10	$132	$1,320	$142	$1,420	$2,740
Installation of new battery pack LED exit signs, including all connections	EA	4	$184	$736	$231	$924	$1,660
Replacement of existing battery pack emergency lights	EA	10	$134	$1,340	$142	$1,420	$2,760
Project Totals:				**$3,396**		**$3,764**	**$7,160**

Material/Labor Cost		$7,160
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$5,351
General Contractor Mark Up at 20.0%	+	$1,070
Construction Cost		$6,421
Professional Fees at 16.0%	+	$1,027
Total Project Cost		**$7,448**

Specific Project Details

Facility Condition Analysis
Section Three
HARS : HARRIS BUILDING

Project Description

Project Number:	HARSAC01	**Title:**	BUILDING ENTRY ACCESSIBILITY UPGRADES
Priority Sequence:	9		
Priority Class:	4		
Category Code:	AC2A	**System:**	ACCESSIBILITY
		Component:	BUILDING ENTRY
		Element:	GENERAL
Building Code:	HARS		
Building Name:	HARRIS BUILDING		
Subclass/Savings:	Not Applicable		

Code Application:	ADAAG	403.6, 505

Project Class:	Plant Adaption
Project Date:	10/14/2009
Project Location:	Undefined: Floor(s) 1

Project Description

Even though there is a wheelchair ramp, handrails only exist on one side of the ramp. Current legislation related to accessibility requires that building entrances, both steps and those with wheelchair accessible ramps, have handrails on both sides of the steps or ramp. To comply with the intent of this legislation, it is recommended that compliant painted metal handrails be installed on the wall side of the wheelchair ramp as required.

Specific Project Details

Facility Condition Analysis
Section Three
HARS : HARRIS BUILDING

Project Cost

Project Number: HARSAC01

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, painted (15 feet minimum)	LF	40	$50.50	$2,020	$35.40	$1,416	$3,436
Project Totals:				**$2,020**		**$1,416**	**$3,436**

Material/Labor Cost		$3,436
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$2,761
General Contractor Mark Up at 20.0%	+	$552
Construction Cost		$3,313
Professional Fees at 16.0%	+	$530
Total Project Cost		**$3,843**

Specific Project Details

Facility Condition Analysis
Section Three
HARS : HARRIS BUILDING

Project Description

Project Number:	HARSAC02	**Title:**	INTERIOR AMENITY ACCESSIBILITY UPGRADES
Priority Sequence:	10		
Priority Class:	4		
Category Code:	AC4A	**System:**	ACCESSIBILITY
		Component:	GENERAL
		Element:	FUNCTIONAL SPACE MOD.
Building Code:	HARS		
Building Name:	HARRIS BUILDING		
Subclass/Savings:	Not Applicable		

Code Application:	ADAAG	211, 602, 804

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

Project Description

Current accessibility legislation requires that building amenities be generally accessible to all persons. The configurations of the break room kitchenette and drinking fountain are barriers to accessibility. The installation of wheelchair-accessible kitchenette cabinetry is recommended where applicable. The single level drinking fountain should be replaced with a dual level, refrigerated unit.

Specific Project Details

Facility Condition Analysis
Section Three
HARS : HARRIS BUILDING

Project Cost

Project Number: HARSAC02

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
ADA compliant kitchenette unit with base cabinetry, overhead cabinetry, and amenities	SYS	1	$4,894	$4,894	$1,999	$1,999	$6,893
Dual level drinking fountain	EA	1	$1,216	$1,216	$374	$374	$1,590
Alcove construction, including finishes	EA	1	$877	$877	$3,742	$3,742	$4,619
Project Totals:				**$6,987**		**$6,115**	**$13,102**

Material/Labor Cost		$13,102
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$10,173
General Contractor Mark Up at 20.0%	+	$2,035
Construction Cost		$12,207
No Professional Fees Required		
Total Project Cost		**$12,207**

Specific Project Details

Facility Condition Analysis
Section Three
HARS : HARRIS BUILDING

Project Description

Project Number:	HARSAC03	**Title:**	INTERIOR DOOR UPGRADES
Priority Sequence:	11		
Priority Class:	4		
Category Code:	AC3C	**System:**	ACCESSIBILITY
		Component:	INTERIOR PATH OF TRAVEL
		Element:	DOORS AND HARDWARE
Building Code:	HARS		
Building Name:	HARRIS BUILDING		
Subclass/Savings:	Not Applicable		

Code Application: ADAAG 309.4

Project Class: Plant Adaption

Project Date: 10/14/2009

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

Project Description

While the interior doors are suitable for ten future years of service, the knob actuated door hardware on some of the doors presents a barrier to accessibility. Accessibility legislation requires that door hardware be designed for operation by people with little or no ability to grasp objects with their hands. To comply with the intent of this legislation, it is recommended that lever handle door hardware be installed on all doors that currently still have knobs.

Specific Project Details

Facility Condition Analysis
Section Three
HARS : HARRIS BUILDING

Project Cost

Project Number: HARSAC03

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Lever actuated door hardware	EA	10	$273	$2,730	$69.77	$698	$3,428
Project Totals:				**$2,730**		**$698**	**$3,428**

Material/Labor Cost		$3,428
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$3,107
General Contractor Mark Up at 20.0%	+	$621
Construction Cost		$3,728
No Professional Fees Required		
Total Project Cost		**$3,728**

Specific Project Details

Facility Condition Analysis
Section Three
HARS : HARRIS BUILDING

Project Description

Project Number:	HARSEL01	**Title:**	INTERIOR LIGHTING UPGRADE
Priority Sequence:	12		
Priority Class:	4		
Category Code:	EL4B	**System:**	ELECTRICAL
		Component:	DEVICES AND FIXTURES
		Element:	INTERIOR LIGHTING
Building Code:	HARS		
Building Name:	HARRIS BUILDING		
Subclass/Savings:	Energy Conservation $5,910		
Code Application:	NEC Articles 210, 410		
Project Class:	Capital Renewal		
Project Date:	10/9/2009		
Project Location:	Floor-wide: Floor(s) 1		

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
HARS : HARRIS BUILDING

Project Cost

Project Number: HARSEL01

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	19,325	$3.25	$62,806	$3.97	$76,720	$139,527
Project Totals:				**$62,806**		**$76,720**	**$139,527**

Material/Labor Cost		$139,527
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$102,603
General Contractor Mark Up at 20.0%	+	$20,521
Construction Cost		$123,124
Professional Fees at 16.0%	+	$19,700
Total Project Cost		**$142,824**

Specific Project Details

Facility Condition Analysis
Section Three
HARS : HARRIS BUILDING

Project Description

Project Number:	HARSEL03	**Title:**	EXTERIOR LIGHTING REPLACEMENT
Priority Sequence:	13		
Priority Class:	4		
Category Code:	EL4A	**System:**	ELECTRICAL
		Component:	DEVICES AND FIXTURES
		Element:	EXTERIOR LIGHTING

Building Code:	HARS	
Building Name:	HARRIS BUILDING	
Subclass/Savings:	Energy Conservation	$390

Code Application:	NEC	410

Project Class:	Capital Renewal
Project Date:	10/9/2009
Project Location:	Building-wide: Floor(s) 1, R

Project Description

Exterior lighting upgrades are recommended. Replace exterior light fixtures as needed. Specify high efficiency fixtures with photocells for lighting control.

Specific Project Details

Facility Condition Analysis
Section Three
HARS : HARRIS BUILDING

Project Cost

Project Number: HARSEL03

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 and demolition of existing fixture	EA	6	$406	$2,436	$190	$1,140	$3,576
Project Totals:				**$2,436**		**$1,140**	**$3,576**

Material/Labor Cost		$3,576
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$3,038
General Contractor Mark Up at 20.0%	+	$608
Construction Cost		$3,645
Professional Fees at 16.0%	+	$583
Total Project Cost		**$4,229**

Specific Project Details

Facility Condition Analysis
Section Three
HARS : HARRIS BUILDING

Project Description

Project Number:	HARSIS02	**Title:**	REFINISH WALLS
Priority Sequence:	14		
Priority Class:	4		
Category Code:	IS2B	**System:**	INTERIOR/FINISH SYS.
		Component:	PARTITIONS
		Element:	FINISHES
Building Code:	HARS		
Building Name:	HARRIS BUILDING		
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

Most walls within the facility are painted partitions. Wall paint finish upgrades are recommended as part of future cosmetic improvements or major comprehensive renovation efforts.

Specific Project Details

Facility Condition Analysis
Section Three
HARS : HARRIS BUILDING

Project Cost

Project Number: HARSIS02

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	25,000	$0.17	$4,250	$0.81	$20,250	$24,500
Project Totals:				**$4,250**		**$20,250**	**$24,500**

Material/Labor Cost		$24,500
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$14,668
General Contractor Mark Up at 20.0%	+	$2,934
Construction Cost		$17,602
Professional Fees at 16.0%	+	$2,816
Total Project Cost		**$20,418**

Specific Project Details

Facility Condition Analysis
Section Three
HARS : HARRIS BUILDING

Project Description

Project Number:	HARSIS01	**Title:**	REFINISH FLOORING
Priority Sequence:	15		
Priority Class:	4		
Category Code:	IS1A	**System:**	INTERIOR/FINISH SYS.
		Component:	FLOOR
		Element:	FINISHES-DRY
Building Code:	HARS		
Building Name:	HARRIS BUILDING		
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

The typical floor finish for the office space is carpet in the corridors and office areas and vinyl tile in the break room and restrooms. The rear printing room has a sealed concrete slab floor. In general, the floors are in good condition. However, floor finish upgrades should be considered as part of any long-range cosmetic improvements or major comprehensive renovation efforts.

Project Cost

Project Number: HARSIS01

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Carpet	SF	6,090	$5.36	$32,642	$2.00	$12,180	$44,822
Vinyl floor tile	SF	1,305	$3.53	$4,607	$2.50	$3,263	$7,869
Epoxy floor finish application	SF	8,700	$3.20	$27,840	$4.64	$40,368	$68,208
Project Totals:				**$65,089**		**$55,811**	**$120,900**

Material/Labor Cost		$120,900
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$94,175
General Contractor Mark Up at 20.0%	+	$18,835
Construction Cost		$113,011
Professional Fees at 16.0%	+	$18,082
Total Project Cost		**$131,092**

FACILITY CONDITION ANALYSIS

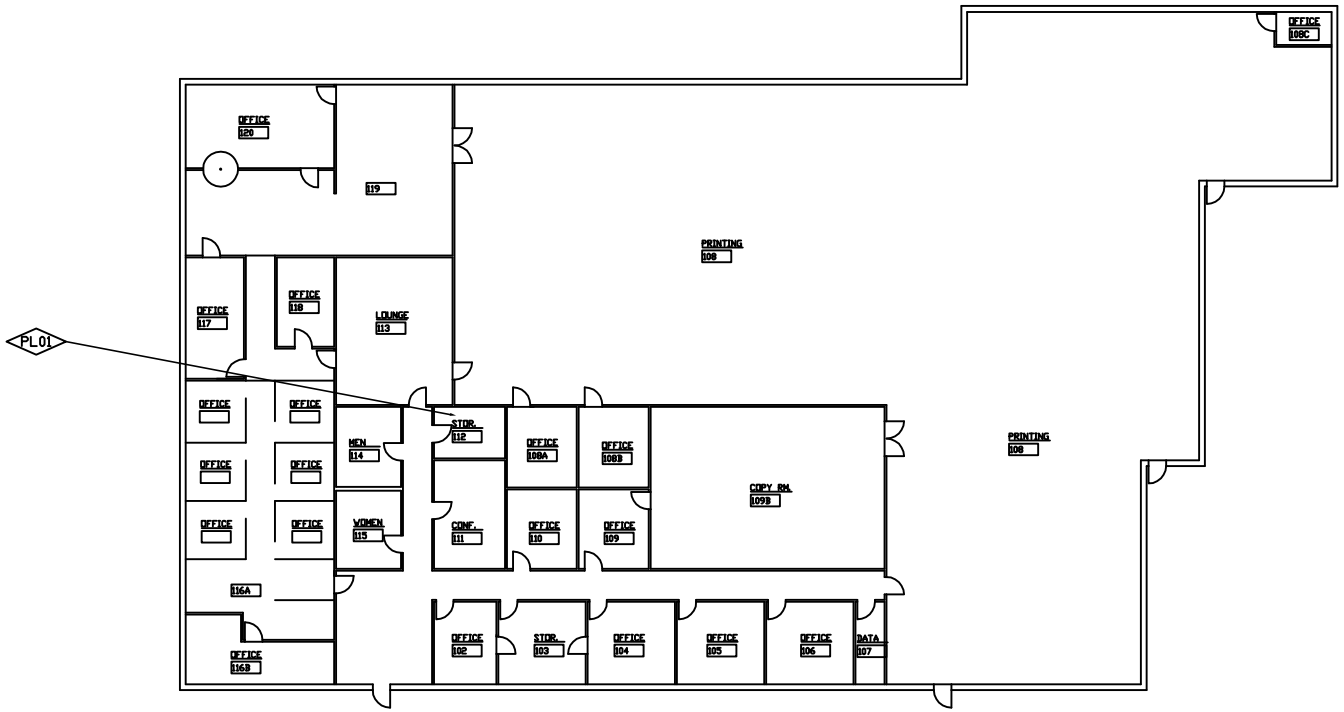
SECTION 4

DRAWINGS AND PROJECT LOCATIONS

EAST CAROLINA UNIVERSITY

ROOF

HV01



AC01 EL03 ES01

AC02 AC03 EL01 EL02 FS01 FS02

FS03 FS04 IS01 IS02

N

HARRIS BUILDING

BLDG NO. HARS

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: 10/15/09
Drawn by: J.T.V.
Project No. 09-041

FIRST FLOOR PLAN

Sheet No.
1 of 1

FACILITY CONDITION ANALYSIS

SECTION 5

LIFE CYCLE MODEL SUMMARY AND PROJECTIONS

Life Cycle Model
Building Component Summary
HARS : HARRIS BUILDING

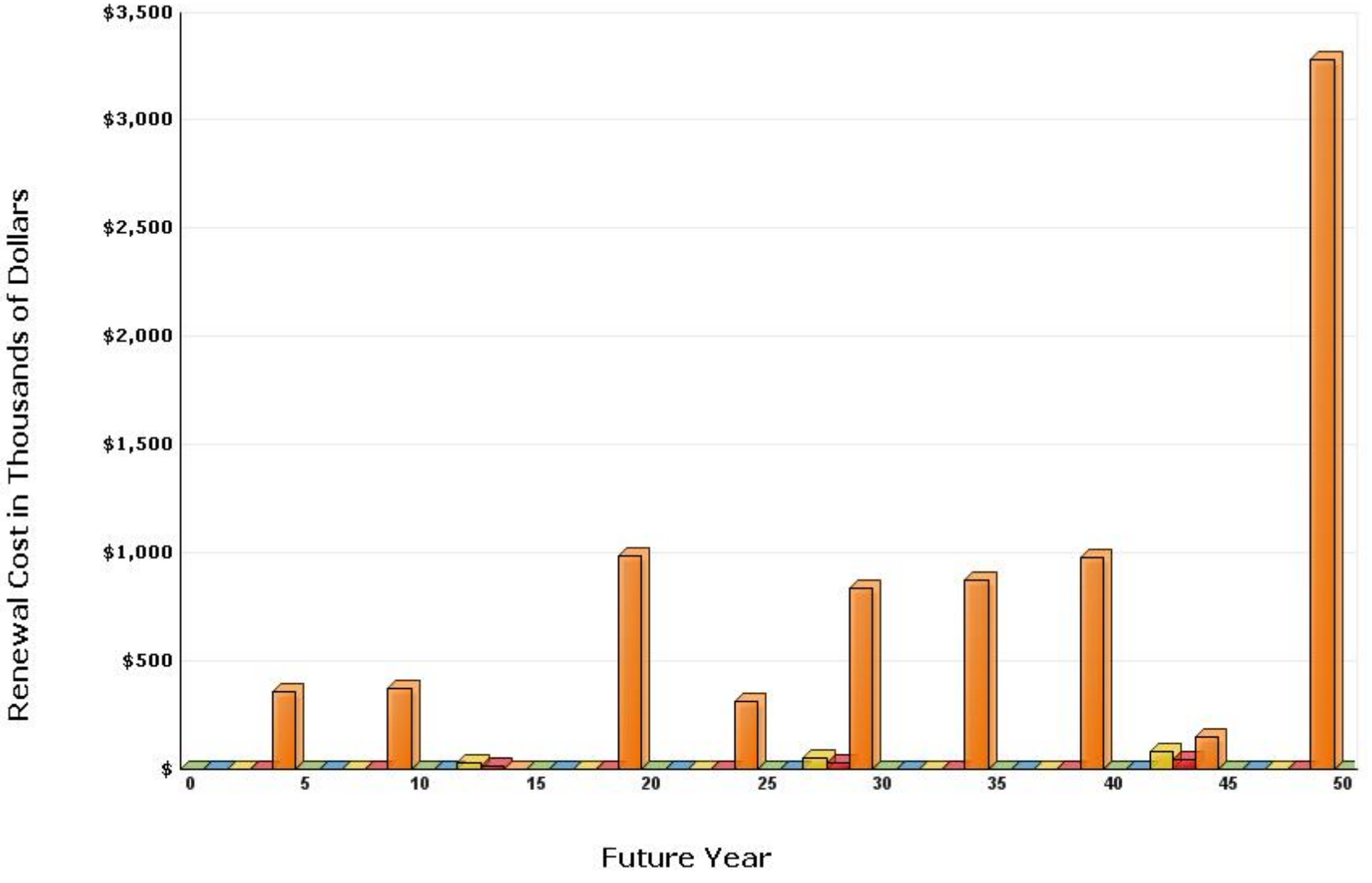
Uniformat Code	Component Description	Qty	Units	Unit Cost	Complx Adj	Total Cost	Install Date	Life Exp
B2010	EXTERIOR FINISH RENEWAL	3,730	SF	$1.30	.31	$1,507	1997	10
B2010	PAINTED METAL SIDING	3,730	SF	$7.36		$27,455	1997	35
B2020	STANDARD GLAZING AND CURTAIN WALL	390	SF	$104.04		$40,574	1997	55
B2030	OVERHEAD GARAGE DOOR	3	EA	$7,425.74		$22,277	1997	30
B2030	HIGH TRAFFIC EXTERIOR DOOR SYSTEM	1	LEAF	$4,311.24		$4,311	1997	20
B2030	LOW TRAFFIC EXTERIOR DOOR SYSTEM	3	LEAF	$2,863.29		$8,590	1997	40
B3010	PAINTED METAL ROOF	19,400	SF	$7.07		$137,208	1997	30
B3010	STANDARD METAL GUTTER SYSTEM	540	LF	$9.80		$5,292	1997	30
C1020	STANDARD DOOR AND FRAME INCLUDING HARDWARE	25	LEAF	$783.68		$19,592	1997	35
C1020	RATED DOOR AND FRAME INCLUDING HARDWARE	10	LEAF	$1,489.06		$14,891	1997	35
C1020	INTERIOR DOOR HARDWARE	10	EA	$423.04		$4,230	1997	15
C1020	INTERIOR DOOR HARDWARE	25	EA	$423.04		$10,576	1997	15
C3010	STANDARD WALL FINISH (PAINT, WALL COVERING, ETC.)	30,730	SF	$0.80		$24,616	1997	10
C3020	CARPET	6,090	SF	$8.75		$53,266	1997	10
C3020	VINYL FLOOR TILE	1,305	SF	$6.59		$8,597	1997	15
C3020	VINYL FLOOR TILE	1,305	SF	$6.59		$8,597	2005	15
C3020	EPOXY FLOOR FINISH APPLICATION	8,700	SF	$7.64		$66,449	1997	15
C3030	ACOUSTICAL TILE CEILING SYSTEM	8,700	SF	$4.99		$43,439	1997	15
D2010	PLUMBING FIXTURES - OFFICE / ADMINISTRATION	19,325	SF	$2.85		$55,142	1997	35
D2020	WATER PIPING - OFFICE / ADMINISTRATION	19,325	SF	$2.03		$39,229	1997	35
D2020	WATER HEATER (RES., ELEC.)	40	GAL	$47.95		$1,918	1997	10
D2030	DRAIN PIPING - OFFICE / ADMINISTRATION	19,325	SF	$3.08		$59,559	1997	40
D3030	ROOFTOP HVAC UNIT	5	TON	$2,415.23		$12,076	2006	15
D3030	ROOFTOP HVAC UNIT	6	TON	$2,415.23		$14,491	2005	15
D3030	ROOFTOP HVAC UNIT	56	TON	$2,415.23		$135,253	1997	15
D4010	FIRE SPRINKLER SYSTEM	19,325	SF	$6.86		$132,591	1997	80
D4010	FIRE SPRINKLER HEADS	19,325	SF	$0.38		$7,288	1997	20
D5010	ELECTRICAL SYSTEM - OFFICE / ADMINISTRATION	19,325	SF	$11.82		$228,350	1997	50
D5010	ELECTRICAL SWITCHGEAR 120/208V	1,200	AMP	$32.96		$39,556	1997	20
D5020	EMERGENCY LIGHT (BATTERY)	10	EA	$283.62		$2,836	1997	20

Life Cycle Model
Building Component Summary
HARS : HARRIS BUILDING

Uniformat Code	Component Description	Qty	Units	Unit Cost	Complx Adj	Total Cost	Install Date	Life Exp
D5020	EXIT SIGNS (BATTERY)	10	EA	$280.76		$2,808	1997	20
D5020	EXTERIOR LIGHT (HID)	6	EA	$689.58		$4,138	1997	20
D5020	LIGHTING - OFFICE / ADMINISTRATION	19,325	SF	$7.24		$139,842	1997	20
D5030	FIRE ALARM SYSTEM, POINT ADDRESSABLE	19,325	SF	$2.61		$50,527	1997	15
E2010	KITCHENETTE UNIT WITH CABINETRY AND AMENITIES	1	LOT	$5,940.22		$5,940	1997	20
						$1,433,013		

Life Cycle Model Expenditure Projections

HARS : HARRIS BUILDING



Average Annual Renewal Cost Per SqFt $3.34

FACILITY CONDITION ANALYSIS

SECTION 6

PHOTOGRAPHIC LOG

Photo Log - Facility Condition Analysis

HARS : HARRIS BUILDING

Photo ID No	Description	Location	Date
HARS001a	Loading docks, roof access ladder, and metal siding	South end of building	9/14/2009
HARS001e	Fire alarm panel	Lobby	9/14/2009
HARS002a	Metal siding on masonry block lower wall	South end of building	9/14/2009
HARS002e	Thermostat	Lobby	9/14/2009
HARS003a	Sealed concrete slab floors	Printing room	9/14/2009
HARS003e	Interior lighting and fire alarm devices	Corridor	9/14/2009
HARS004a	Single level water fountain	Printing room	9/14/2009
HARS004e	Sprinkler head	Data room 107	9/14/2009
HARS005a	Staining and discoloration of vinyl floor tile	Men's restroom	9/14/2009
HARS005e	Main electrical disconnect panel	Printing room 108	9/14/2009
HARS006a	Break room countertop and cabinetry	Break room	9/14/2009
HARS006e	Sprinkler standpipe	Printing room 108	9/14/2009
HARS007a	Stained brick and metal facade	North side	9/14/2009
HARS007e	Interior lighting	Printing room 108	9/14/2009
HARS008a	Stained brick facade	North side	9/14/2009
HARS008e	Exit signage	Printing room 108	9/14/2009
HARS009a	Brick masonry and metal siding exterior envelope	East side	9/14/2009
HARS009e	Emergency shower and eyewash station	Printing room 108	9/14/2009
HARS010a	Main entrance and adjacent parking lot	West side	9/14/2009
HARS010e	Ductwork	Printing room 108	9/14/2009
HARS011a	Wheelchair ramp needing additional handrail	West side	9/14/2009
HARS011e	Urinals	Restroom	9/14/2009
HARS012e	Lavatories	Restroom	9/14/2009
HARS013e	Water closet	Restroom	9/14/2009
HARS014e	Drain piping	Restroom	9/14/2009
HARS015e	Water heater	Storage room 112	9/14/2009
HARS016e	Exterior lighting	Exterior	9/14/2009
HARS017e	Package air conditioning unit	Roof	9/14/2009
HARS018e	Package air conditioning unit	Roof	9/14/2009
HARS019e	Exterior lighting	Exterior	9/14/2009
HARS020e	Exterior lighting	Exterior	9/14/2009

Facility Condition Analysis - Photo Log

HARS001A.jpg

HARS001E.jpg

HARS002A.jpg

HARS002E.jpg

HARS003A.jpg

HARS003E.jpg

HARS004A.jpg

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HARS005A.jpg

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Facility Condition Analysis - Photo Log

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