EAST CAROLINA UNIVERSITY

JONES RESIDENCE HALL

ASSET CODE: JONE

FACILITY CONDITION ANALYSIS

DECEMBER 9, 2009

ISES CORPORATION

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FACILITY CONDITION ANALYSIS

SECTION 1

GENERAL ASSET INFORMATION

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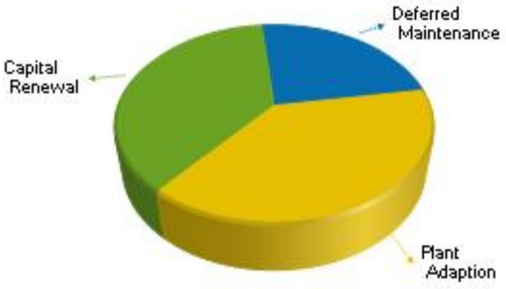
PROJECT COSTS BY CLASSIFICATION



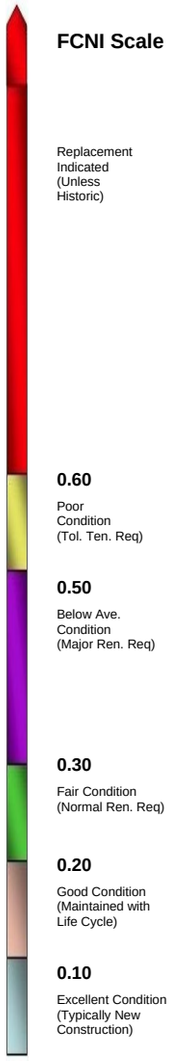
Building Code: JONE
Building Name: JONES RESIDENCE HALL
Year Built: 1958
Building Use: Dormitory / Apartments
Square Feet: 103,520

Project Costs by Priority

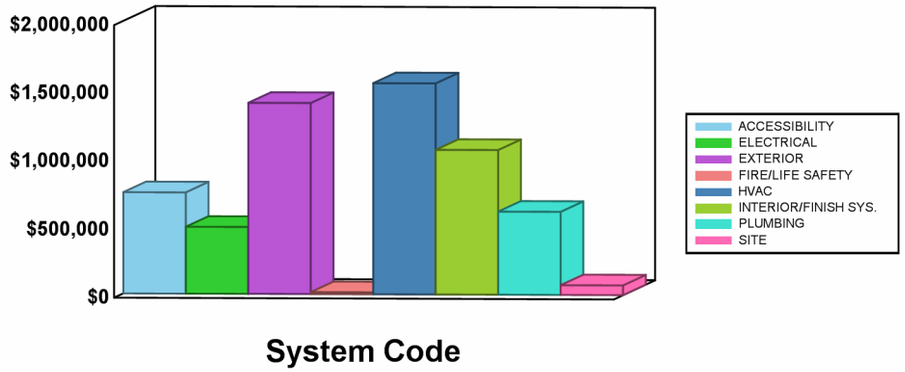
Priority 1:	$10,267
Priority 2:	$0
Priority 3:	$4,845,548
Priority 4:	$1,083,250
Total Project Costs:	**$5,939,065**

Facility Replacement Cost: **$32,154,000**

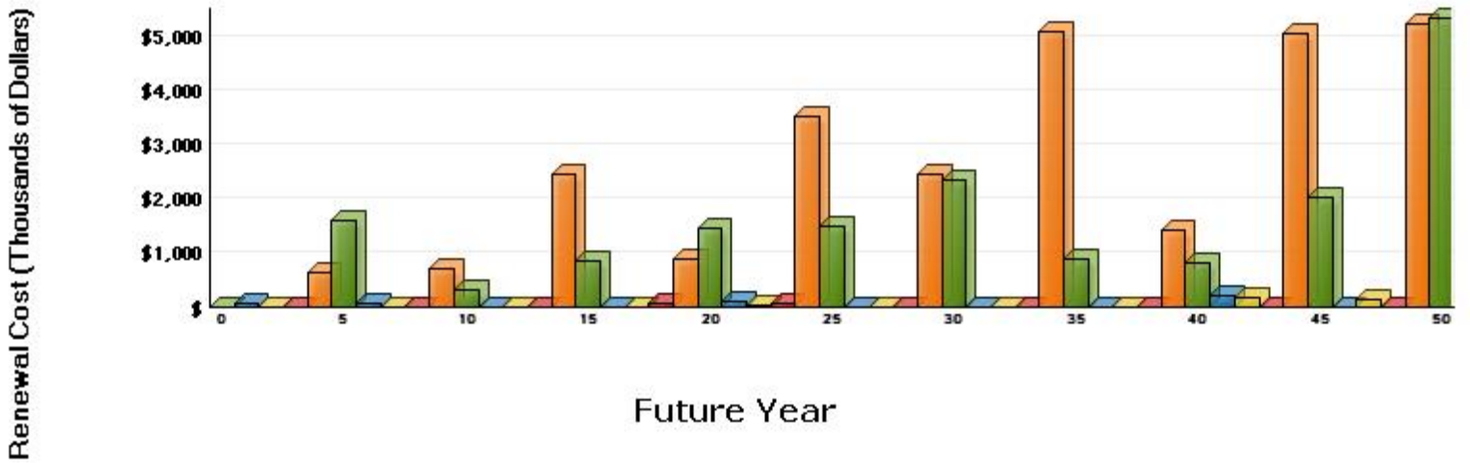
Facility Condition Needs Index (FCNI): **0.18**
(Project Costs / Replacement Cost)



PROJECT COSTS BY SYSTEM CODE



LIFE CYCLE MODEL EXPENDITURE PROJECTIONS



Average Annual Renewal Cost Per SqFt $3.54

B. ASSET SUMMARY

Built in 1958, Jones Residence Hall is a five-story dormitory. It has a concrete structure on a poured concrete foundation. The exterior finishes consist of brick facades and modified bitumen roofs. In 2002, the building received an addition to the ground floor. During this addition, several upgrades were made to the upper floors. The upper dormitory floors are H shaped, with an east and west wing connected by a central wing. The first through fourth floors have double occupancy dorm rooms, with bathrooms at the east and west wings. The first floor west wing houses the coordinator's apartment and office space. There are offices, a gym, a convenience store, and food service areas on the ground floor. Jones Residence Hall totals 103,520 gross square feet and is located at the main campus of East Carolina University in Greenville, North Carolina.

The information in this report was gathered during a site visit that concluded on September 9, 2009.

SITE

The landscaping consists of grassy lawns, ornamental shrubs, and some mature trees. It is in average condition but should outlast the ten-year scope of this report with routine maintenance. Pedestrian paving systems are in overall good condition and should not need replacement. Vehicular paving systems are in fair condition and will need moderate upgrades.

EXTERIOR STRUCTURE

Brick veneer is the primary exterior finish. While the brick is fundamentally sound, exposure to the elements has caused some deterioration of the mortar joints and expansion joints. Cleaning, surface preparation, selective repairs, and applied finish or penetrating sealant upgrades are recommended to restore the aesthetics and integrity of the building envelope.

While the ground floor windows have all been replaced, the upper floor glazing is still older single-pane units. It is recommended that the single-pane 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. Exterior doors are metal-framed glass units at the primary entrances and painted metal at secondary and emergency exits. The doors appear to be in good condition, with no upgrades needed in the next ten years.

The lower built-up roof was installed in 2002 with the addition to the ground floor level. The upper built-up roofing was installed in 1997 and is not expected to outlast the scope of this analysis. 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

Interior floor finishes include carpet, vinyl tile, concrete, and ceramic tile. Walls are painted plaster or concrete. Ceiling finishes include lay-in, acoustical tile and painted ceilings. The interior finish

applications vary in age and condition from area to area. Floor, wall, and ceiling finish upgrades should be considered as part of any future cosmetic improvements or major comprehensive renovation efforts. Interior doors were reportedly replaced building-wide in 2002 and are in good condition. They are equipped with lever hardware and Braille signage and should outlast the ten-year scope of this report.

ACCESSIBILITY

Access to the building is provided by at-grade entrances. Once inside, a single passenger elevator provides service to the upper floors. Several upgrades were made during the 2002 renovation and addition, including upgrades to stairwells and select drinking fountains and restrooms and the installation of Braille signage and lever door hardware. Still, a few modifications will be needed to bring the entire building into full compliance with modern regulations.

Current accessibility legislation requires that building amenities be generally accessible to all persons. The configurations of select break room kitchenettes and drinking fountains are barriers to accessibility. The installation of wheelchair accessible kitchenette cabinetry is recommended where applicable, along with dual level, refrigerated drinking fountains.

Restrooms on the ground and first floors are compliant with ADA legislation. Some modifications have been made to the upper floor restrooms, but they are still not fully compliant. A comprehensive restroom renovation, including new fixtures, finishes, partitions, and accessories, is recommended. Restroom expansion may be necessary in order to meet modern minimum fixture counts and accessibility legislation. Remove the step barrier at the entrance to each facility.

HEALTH

There were no reports or evidence of any asbestos-containing material or lead based paint. Freezers and refrigerators supporting the kitchen area were installed in the last five years. These mechanical systems appear to be in adequate condition and properly maintained. No projects are recommended for the freezers or refrigerators.

FIRE / LIFE SAFETY

Structural fire separations are not maintained according to code requirements for new construction in select areas of this facility. Primarily, data cabling has been routed with little regard for fire-rated separations. Intumescent passive firestopping and some minor structural separation repairs should be accomplished promptly.

The facility is served by a modern addressable fire alarm system that was manufactured by Notifier. The fire alarm panel was installed in 2008. The system utilizes pull stations, heat detectors, smoke detectors, and duct smoke detectors for activation, while audible / visible strobes are present for notification. The fire alarm system appears to be in good condition and provides adequate coverage. No upgrade recommendations are necessary at this time.

The facility is served by a wet-pipe sprinkler system that incorporates fast action sprinkler heads for fire suppression. A fire pump controller manufactured by Eaton and a fire pump are utilized in the system.

Additional coverage is provided by manual chemical-type fire extinguishers located in boxes and a wet chemical system serving the kitchen hoods and elevator machine room. The system appears to provide adequate coverage, and no recommendations are made for the extent of this report.

Exit signs are LED illuminated and connected to the emergency power network. Emergency lighting is available through standard interior light fixtures with battery backup ballasts. All egress lighting systems are adequate and in good condition. There are no related projects to recommend at this time.

HVAC

The facility is connected to the campus steam loop. Steam is supplied to heat exchangers in the main mechanical room that produce heating hot water. The hot water to heat the facility is then circulated by pumps to the associated HVAC equipment. The heat exchangers and pumps appear to be in good condition and should continue to provide adequate service over the next ten years.

A local air-cooled chiller generates chilled water for building cooling in select areas. This unit has a capacity of 190 tons and was manufactured by York. It is in good condition and, with proper maintenance, will outlast the scope of this analysis.

The upper floors are served by a hydronic heating system that is believed to be mostly original. There is no central cooling available, and minimal fresh air is introduced to the interior spaces. However, cooling is provided by window air conditioning units to each dorm room. These units are new and appear to be in good condition. The remainder of the facility is served by a forced-air HVAC system with multizone air handling units that have hot water heating coils and chilled water cooling coils. The air distribution network furnishes constant volume air to the occupied spaces. Hot water reheat coils are mounted in the duct. The controls for this system are a hybrid configuration with pneumatic temperature controls and direct digital utility modulation and monitoring. The direct digital controls were manufactured by Johnson Controls.

Considering the age of the hydronic system and the lack of a central air conditioning system on the upper floors, it is recommended that the HVAC system be retrofitted. Install a new modern HVAC system with variable air volume and constant volume air distribution as needed to heat and cool the upper floors of the facility. Specify direct digital controls for the new equipment. Install local water-cooled chilled water generation for building cooling. Include an associated cooling tower to perform heat rejection.

ELECTRICAL

Power is supplied to the facility from an oil-filled transformer located on-site. The unit is rated at 500 kVA and was installed in 2002. Power is then fed at a rate of 480/277 volts to the main switchgear device in the main electrical room. This unit was manufactured by Siemens and installed in 2002. The switchgear device provides an electrical service of 2,000 amps. The main incoming electrical service appears to be in good condition and should continue to provide adequate service over the scope of this report.

The secondary electrical system consists of panelboards and transformers located throughout the facility. Power is fed from panelboards at a rate 480/277 volts or stepped down through dry-type transformers to 120/208 volts for distribution. The electrical system is a combination of new and aged circuits, with select floors having been replaced in the last few years. However, original electrical components are still

present. It is recommended that the original or aged secondary electrical components (approximately 65 percent of the system) be replaced. This will ensure a reliable electrical system and allow expansion for the changing needs of the facility.

The interior lighting scheme consists of lay-in or surface-mount fluorescent fixtures that contain T8 bulbs. Additional lighting is incorporated into the scheme in the form of can fixtures that contain compact fluorescent bulbs. The fixtures appear to be in good condition, and light levels seem sufficient. The interior lighting scheme was replaced in the last six years and should continue to provide adequate service over the next ten years.

The exterior lighting consists of wall-mounted, eave-mounted, and roof-mounted fixtures. Additional lighting is provided by pole-mounted and indirect fixtures on-site. Overall, the exterior lighting scheme appears to be in good condition and provides adequate coverage. No upgrade is recommended.

Emergency power is produced by a diesel-fired Caterpillar emergency generator located on-site. Installed in 2002, the generator provides 480/277 volt power and has a capacity of 700 kW. Overall, the unit appears to be in good condition and is properly enclosed. It should remain a reliable source of stand-by power throughout scope of this report.

PLUMBING

The main incoming domestic water enters the facility on the ground level. Copper piping is then utilized to distribute water throughout the facility. The system appears to be in average condition, with a combination of new and aged piping. The ground floor and first floor were renovated in the last five years, while the upper floors are a combination of some limited replacement piping and original piping. An upgrade of approximately 65 percent of the piping is recommended. Additionally, install backflow preventers as needed to protect the water supply system.

The drain piping network is cast-iron with bell-and-spigot and no-hub connections. The piping network appears to be a combination of new and aged piping where selective renovations have taken place. An upgrade of approximately 65 percent of the drain piping is recommended. 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 appear to be in average condition. They are a combination of new and original fixtures that utilize manual controls, with some upgrades for ADA compliance. It is recommended that the original plumbing fixtures be upgraded. This action is detailed in the Accessibility section of this report.

Domestic hot water is produced by two Aerco heat exchangers and one Lochinvar natural gas water heater. Additional domestic hot water is produced by an electric water heater serving the coordinator's apartment. This unit has a capacity of 40 gallons and was manufactured in 1997. Overall, the domestic hot water equipment appears to be in good condition, so no upgrade is recommended.

VERTICAL TRANSPORTATION

The University commissioned an outside contractor to perform an elevator condition study in 2009. The aforementioned study did not identify any deficiencies requiring capital funding.

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 9, 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:
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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

JONE : JONES RESIDENCE HALL

System Code	System Description	Priority Classes 1	2	3	4	Subtotal
AC	ACCESSIBILITY	0	0	0	743,165	743,165
EL	ELECTRICAL	0	0	490,880	0	490,880
ES	EXTERIOR	0	0	1,271,403	130,549	1,401,952
FS	FIRE/LIFE SAFETY	10,267	0	0	0	10,267
HV	HVAC	0	0	1,549,228	0	1,549,228
IS	INTERIOR/FINISH SYS.	0	0	852,339	209,536	1,061,875
PL	PLUMBING	0	0	609,968	0	609,968
SI	SITE	0	0	71,730	0	71,730
	TOTALS	10,267	0	4,845,548	1,083,250	5,939,065

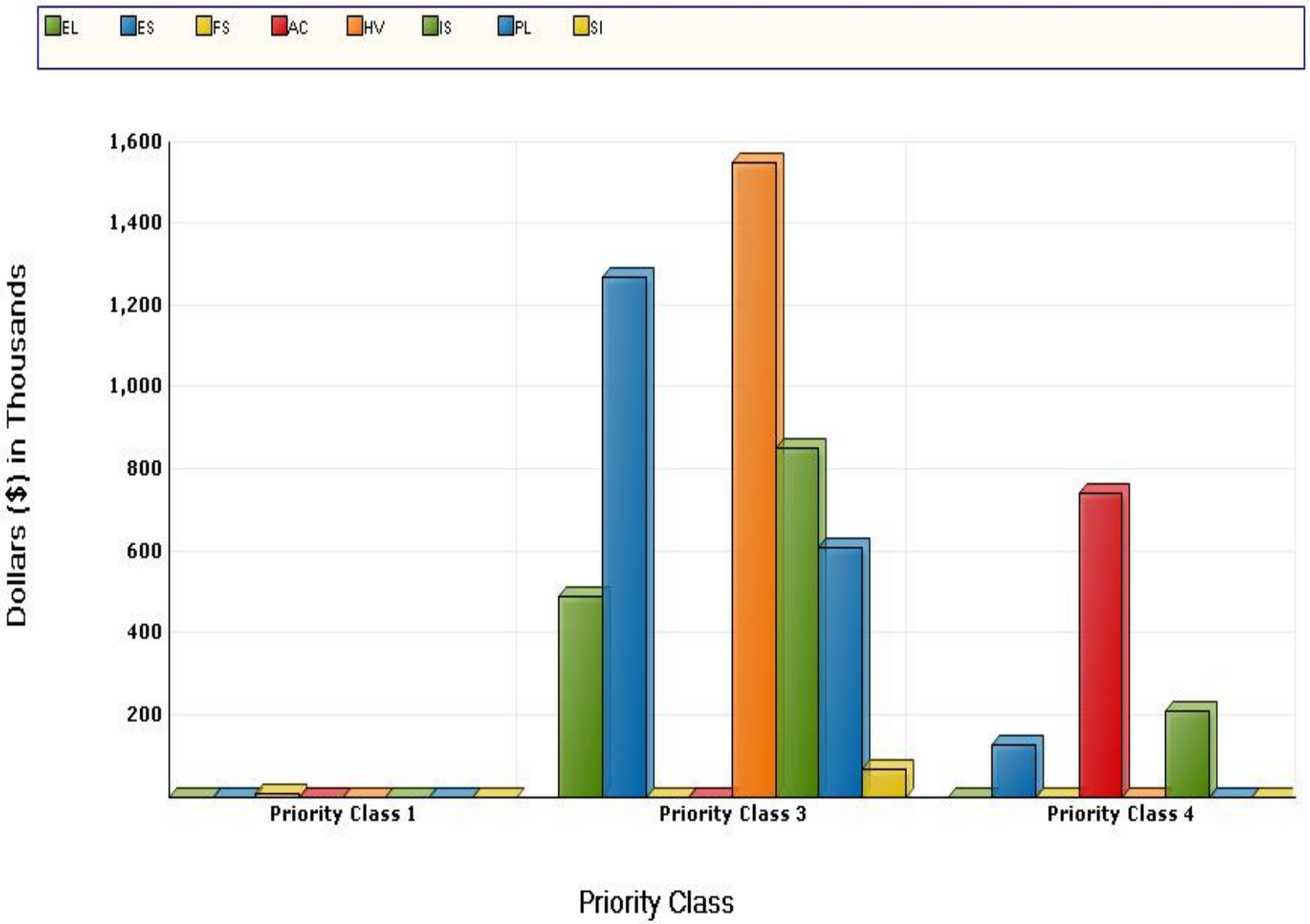
Facility Replacement Cost	$32,154,000
Facility Condition Needs Index	0.18

Gross Square Feet	103,520	**Total Cost Per Square Foot**	$57.37

FACILITY CONDITION ANALYSIS

System Code by Priority Class

JONE : JONES RESIDENCE HALL



Detailed Project Totals

Facility Condition Analysis

System Code by Project Class

JONE : JONES RESIDENCE HALL

System Code	System Description	Project Classes: Captial Renewal	Deferred Maintenance	Plant Adaption	Subtotal
AC	ACCESSIBILITY	0	0	743,165	743,165
EL	ELECTRICAL	0	490,880	0	490,880
ES	EXTERIOR	1,316,932	85,020	0	1,401,952
FS	FIRE/LIFE SAFETY	0	0	10,267	10,267
HV	HVAC	0	0	1,549,228	1,549,228
IS	INTERIOR/FINISH SYS.	829,789	232,086	0	1,061,875
PL	PLUMBING	0	609,968	0	609,968
SI	SITE	71,730	0	0	71,730
	TOTALS	2,218,451	1,417,954	2,302,660	5,939,065

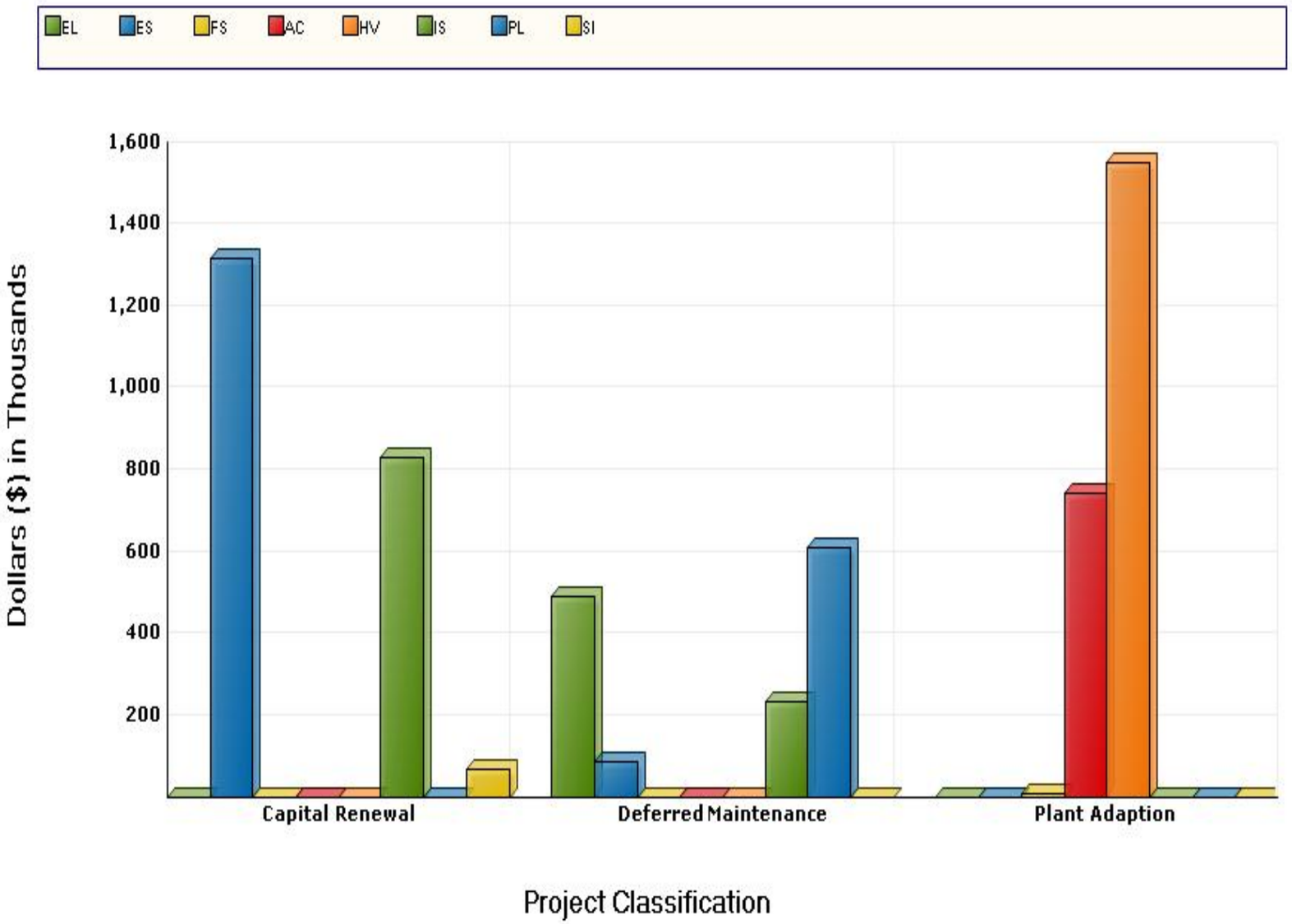
Facility Replacement Cost	$32,154,000
Facility Condition Needs Index	0.18

Gross Square Feet	103,520	**Total Cost Per Square Foot**	$57.37

FACILITY CONDITION ANALYSIS

System Code by Project Class

JONE : JONES RESIDENCE HALL



Detailed Project Summary
Facility Condition Analysis
Project Class by Priority Class
JONE : JONES RESIDENCE HALL

	Priority Classes				
Project Class	**1**	**2**	**3**	**4**	**Subtotal**
Capital Renewal	0	0	1,878,366	340,085	2,218,451
Deferred Maintenance	0	0	1,417,954	0	1,417,954
Plant Adaption	10,267	0	1,549,228	743,165	2,302,660
TOTALS	10,267	0	4,845,548	1,083,250	5,939,065

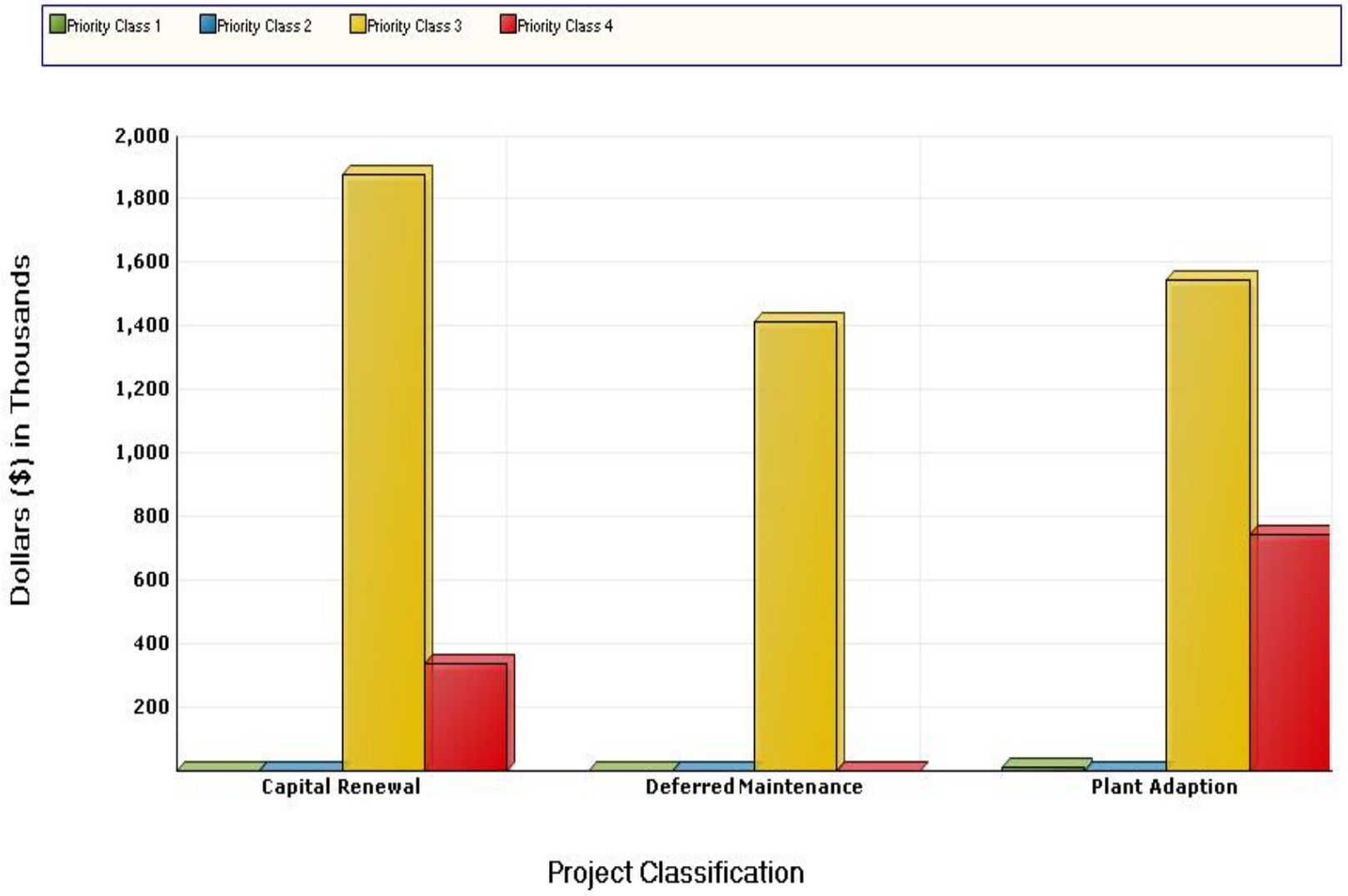
Facility Replacement Cost	$32,154,000
Facility Condition Needs Index	0.18

Gross Square Feet	103,520	**Total Cost Per Square Foot**	$57.37

FACILITY CONDITION ANALYSIS

Project Class by Priority Class

JONE : JONES RESIDENCE HALL



Detailed Project Summary

Facility Condition Analysis

Priority Class - Priority Sequence

JONE : JONES RESIDENCE HALL

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Total Cost
FS5C	JONEFS01	1	1	ELIMINATE FIRE RATING COMPROMISES	8,851	1,416	10,267
				Totals for Priority Class 1	**8,851**	**1,416**	**10,267**
ES2B	JONEES01	3	2	RESTORE BRICK VENEER	73,293	11,727	85,020
ES5B	JONEES02	3	3	WINDOW REPLACEMENT	1,022,744	163,639	1,186,383
HV3A	JONEHV01	3	4	HVAC SYSTEM INSTALLATION	1,127,163	180,346	1,307,510
HV2A	JONEHV02	3	5	INSTALL CHILLED WATER GENERATION EQUIPMENT	208,378	33,340	241,719
EL3B	JONEEL01	3	6	UPGRADE ELECTRICAL DISTRIBUTION NETWORK	423,173	67,708	490,880
IS2B	JONEIS02	3	7	REFINISH WALLS	200,074	32,012	232,086
IS1A	JONEIS01	3	8	REFINISH FLOORING	534,701	85,552	620,253
PL1A	JONEPL01	3	9	WATER SUPPLY PIPING REPLACEMENT	208,835	33,414	242,248
PL2A	JONEPL02	3	10	DRAIN PIPING REPLACEMENT	317,000	50,720	367,719
SI4A	JONESI01	3	11	SITE PAVING UPGRADES	61,836	9,894	71,730
				Totals for Priority Class 3	**4,177,196**	**668,351**	**4,845,548**
AC4A	JONEAC01	4	12	INTERIOR AMENITY ACCESSIBILITY UPGRADES	44,667	7,147	51,814
AC3E	JONEAC02	4	13	RESTROOM RENOVATION	595,992	95,359	691,351
ES4B	JONEES03	4	14	BUILT-UP ROOF REPLACEMENT	112,543	18,007	130,549
IS3B	JONEIS03	4	15	REFINISH CEILINGS	180,634	28,901	209,536
				Totals for Priority Class 4	**933,836**	**149,414**	**1,083,250**
				Grand Total:	**5,119,884**	**819,181**	**5,939,065**

Detailed Project Summary

Facility Condition Analysis

Project Cost Range

JONE : JONES RESIDENCE HALL

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Total Cost
FS5C	JONEFS01	1	1	ELIMINATE FIRE RATING COMPROMISES	8,851	1,416	10,267
				Totals for Priority Class 1	**8,851**	**1,416**	**10,267**
ES2B	JONEES01	3	2	RESTORE BRICK VENEER	73,293	11,727	85,020
SI4A	JONESI01	3	11	SITE PAVING UPGRADES	61,836	9,894	71,730
				Totals for Priority Class 3	**135,129**	**21,621**	**156,750**
AC4A	JONEAC01	4	12	INTERIOR AMENITY ACCESSIBILITY UPGRADES	44,667	7,147	51,814
				Totals for Priority Class 4	**44,667**	**7,147**	**51,814**
				Grand Totals for Projects < 100,000	**188,647**	**30,184**	**218,831**

Detailed Project Summary

Facility Condition Analysis

Project Cost Range

JONE : JONES RESIDENCE HALL

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Total Cost
HV2A	JONEHV02	3	5	INSTALL CHILLED WATER GENERATION EQUIPMENT	208,378	33,340	241,719
EL3B	JONEEL01	3	6	UPGRADE ELECTRICAL DISTRIBUTION NETWORK	423,173	67,708	490,880
PL1A	JONEPL01	3	9	WATER SUPPLY PIPING REPLACEMENT	208,835	33,414	242,248
PL2A	JONEPL02	3	10	DRAIN PIPING REPLACEMENT	317,000	50,720	367,719
IS2B	JONEIS02	3	7	REFINISH WALLS	200,074	32,012	232,086
				Totals for Priority Class 3	**1,357,459**	**217,193**	**1,574,652**
ES4B	JONEES03	4	14	BUILT-UP ROOF REPLACEMENT	112,543	18,007	130,549
IS3B	JONEIS03	4	15	REFINISH CEILINGS	180,634	28,901	209,536
				Totals for Priority Class 4	**293,177**	**46,908**	**340,085**
				Grand Totals for Projects >= 100,000 and < 500,000	**1,650,636**	**264,102**	**1,914,738**

Detailed Project Summary

Facility Condition Analysis

Project Cost Range

JONE : JONES RESIDENCE HALL

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Total Cost
HV3A	JONEHV01	3	4	HVAC SYSTEM INSTALLATION	1,127,163	180,346	1,307,510
ES5B	JONEES02	3	3	WINDOW REPLACEMENT	1,022,744	163,639	1,186,383
IS1A	JONEIS01	3	8	REFINISH FLOORING	534,701	85,552	620,253
				Totals for Priority Class 3	**2,684,608**	**429,537**	**3,114,145**
AC3E	JONEAC02	4	13	RESTROOM RENOVATION	595,992	95,359	691,351
				Totals for Priority Class 4	**595,992**	**95,359**	**691,351**
				Grand Totals for Projects >= 500,000	**3,280,601**	**524,896**	**3,805,497**
				Grand Totals For All Projects:	**5,119,884**	**819,181**	**5,939,065**

Detailed Project Summary

Facility Condition Analysis

Project Classification

JONE : JONES RESIDENCE HALL

Cat Code	Project Number	Pri. Seq.	Project Classification	Pri. Cls	Project Title	Total Cost
ES5B	JONEES02	3	Capital Renewal	3	WINDOW REPLACEMENT	1,186,383
IS1A	JONEIS01	8	Capital Renewal	3	REFINISH FLOORING	620,253
SI4A	JONESI01	11	Capital Renewal	3	SITE PAVING UPGRADES	71,730
ES4B	JONEES03	14	Capital Renewal	4	BUILT-UP ROOF REPLACEMENT	130,549
IS3B	JONEIS03	15	Capital Renewal	4	REFINISH CEILINGS	209,536
					Totals for Capital Renewal	**2,218,451**
ES2B	JONEES01	2	Deferred Maintenance	3	RESTORE BRICK VENEER	85,020
EL3B	JONEEL01	6	Deferred Maintenance	3	UPGRADE ELECTRICAL DISTRIBUTION NETWORK	490,880
IS2B	JONEIS02	7	Deferred Maintenance	3	REFINISH WALLS	232,086
PL1A	JONEPL01	9	Deferred Maintenance	3	WATER SUPPLY PIPING REPLACEMENT	242,248
PL2A	JONEPL02	10	Deferred Maintenance	3	DRAIN PIPING REPLACEMENT	367,719
					Totals for Deferred Maintenance	**1,417,954**
FS5C	JONEFS01	1	Plant Adaption	1	ELIMINATE FIRE RATING COMPROMISES	10,267
HV3A	JONEHV01	4	Plant Adaption	3	HVAC SYSTEM INSTALLATION	1,307,510
HV2A	JONEHV02	5	Plant Adaption	3	INSTALL CHILLED WATER GENERATION EQUIPMENT	241,719
AC4A	JONEAC01	12	Plant Adaption	4	INTERIOR AMENITY ACCESSIBILITY UPGRADES	51,814
AC3E	JONEAC02	13	Plant Adaption	4	RESTROOM RENOVATION	691,351
					Totals for Plant Adaption	**2,302,660**
					Grand Total:	**5,939,065**

Detailed Project Summary

Facility Condition Analysis

Energy Conservation

JONE : JONES RESIDENCE HALL

Cat Code	Project Number	Pri Cls	Pri Seq	Project Title	Total Cost	Annual Savings	Simple Payback
ES5B	JONEES02	3	3	WINDOW REPLACEMENT	1,186,383	2,400	494.33
				Totals for Priority Class 3	**1,186,383**	**2,400**	**494.33**
ES4B	JONEES03	4	14	BUILT-UP ROOF REPLACEMENT	130,549	2,400	54.4
				Totals for Priority Class 4	**130,549**	**2,400**	**54.4**
				Grand Total:	**1,316,932**	**4,800**	**274.36**

Detailed Project Summary

Facility Condition Analysis

Category/System Code

JONE : JONES RESIDENCE HALL

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Total Cost
AC4A	JONEAC01	4	12	INTERIOR AMENITY ACCESSIBILITY UPGRADES	44,667	7,147	51,814
AC3E	JONEAC02	4	13	RESTROOM RENOVATION	595,992	95,359	691,351
				Totals for System Code: ACCESSIBILITY	**640,659**	**102,506**	**743,165**
EL3B	JONEEL01	3	6	UPGRADE ELECTRICAL DISTRIBUTION NETWORK	423,173	67,708	490,880
				Totals for System Code: ELECTRICAL	**423,173**	**67,708**	**490,880**
ES2B	JONEES01	3	2	RESTORE BRICK VENEER	73,293	11,727	85,020
ES5B	JONEES02	3	3	WINDOW REPLACEMENT	1,022,744	163,639	1,186,383
ES4B	JONEES03	4	14	BUILT-UP ROOF REPLACEMENT	112,543	18,007	130,549
				Totals for System Code: EXTERIOR	**1,208,579**	**193,373**	**1,401,952**
FS5C	JONEFS01	1	1	ELIMINATE FIRE RATING COMPROMISES	8,851	1,416	10,267
				Totals for System Code: FIRE/LIFE SAFETY	**8,851**	**1,416**	**10,267**
HV3A	JONEHV01	3	4	HVAC SYSTEM INSTALLATION	1,127,163	180,346	1,307,510
HV2A	JONEHV02	3	5	INSTALL CHILLED WATER GENERATION EQUIPMENT	208,378	33,340	241,719
				Totals for System Code: HVAC	**1,335,542**	**213,687**	**1,549,228**
IS2B	JONEIS02	3	7	REFINISH WALLS	200,074	32,012	232,086
IS1A	JONEIS01	3	8	REFINISH FLOORING	534,701	85,552	620,253
IS3B	JONEIS03	4	15	REFINISH CEILINGS	180,634	28,901	209,536
				Totals for System Code: INTERIOR/FINISH SYS.	**915,409**	**146,465**	**1,061,875**
PL1A	JONEPL01	3	9	WATER SUPPLY PIPING REPLACEMENT	208,835	33,414	242,248
PL2A	JONEPL02	3	10	DRAIN PIPING REPLACEMENT	317,000	50,720	367,719
				Totals for System Code: PLUMBING	**525,834**	**84,133**	**609,968**
SI4A	JONESI01	3	11	SITE PAVING UPGRADES	61,836	9,894	71,730
				Totals for System Code: SITE	**61,836**	**9,894**	**71,730**
				Grand Total:	**5,119,884**	**819,181**	**5,939,065**

FACILITY CONDITION ANALYSIS

SECTION 3

SPECIFIC PROJECT DETAILS ILLUSTRATING DESCRIPTION / COST

Specific Project Details

Facility Condition Analysis
Section Three
JONE : JONES RESIDENCE HALL

Project Description

Project Number:	JONEFS01	**Title:**	ELIMINATE FIRE RATING COMPROMISES
Priority Sequence:	1		
Priority Class:	1		
Category Code:	FS5C	**System:**	FIRE/LIFE SAFETY
		Component:	EGRESS PATH
		Element:	SEPARATION RATING
Building Code:	JONE		
Building Name:	JONES RESIDENCE HALL		
Subclass/Savings:	Not Applicable		
Code Application:	IBC 711.3		
Project Class:	Plant Adaption		
Project Date:	10/16/2009		
Project Location:	Floor-wide: Floor(s) 1, 2, 3, 4, G		

Project Description

Structural fire separations are not maintained according to code requirements for new construction in select areas of this facility. Primarily, data cabling has been routed with little regard for fire-rated separations. Intumescent passive firestopping and some minor structural separation repairs should be accomplished promptly.

Specific Project Details

Facility Condition Analysis
Section Three
JONE : JONES RESIDENCE HALL

Project Cost

Project Number: JONEFS01

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Minor passive firestopping efforts	SF	103,520	$0.03	$3,106	$0.08	$8,282	$11,387
Project Totals:				**$3,106**		**$8,282**	**$11,387**

Material/Labor Cost		$11,387
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$7,376
General Contractor Mark Up at 20.0%	+	$1,475
Construction Cost		$8,851
Professional Fees at 16.0%	+	$1,416
Total Project Cost		**$10,267**

Specific Project Details

Facility Condition Analysis
Section Three
JONE : JONES RESIDENCE HALL

Project Description

Project Number:	JONEES01	**Title:**	RESTORE BRICK VENEER
Priority Sequence:	2		
Priority Class:	3		
Category Code:	ES2B	**System:**	EXTERIOR
		Component:	COLUMNS/BEAMS/WALLS
		Element:	FINISH
Building Code:	JONE		
Building Name:	JONES RESIDENCE HALL		
Subclass/Savings:	Not Applicable		
Code Application:	Not Applicable		
Project Class:	Deferred Maintenance		
Project Date:	10/16/2009		
Project Location:	Building-wide: Floor(s) 1		

Project Description

Brick veneer is the primary exterior finish. While the brick is fundamentally sound, exposure to the elements has caused some deterioration of the mortar joints and expansion joints. Cleaning, surface preparation, selective repairs, and applied finish or penetrating sealant upgrades are recommended to restore the aesthetics and integrity of the building envelope.

Project Cost

Project Number: JONEES01

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	44,630	$0.11	$4,909	$0.22	$9,819	$14,728
Selective mortar and / or sealant repairs (assumes 10 linear feet for every 100 square feet of envelope)	LF	4,463	$2.45	$10,934	$4.99	$22,270	$33,205
Applied finish or sealant	SF	44,630	$0.22	$9,819	$0.82	$36,597	$46,415
Project Totals:				**$25,662**		**$68,686**	**$94,348**

Material/Labor Cost		$94,348
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$61,078
General Contractor Mark Up at 20.0%	+	$12,216
Construction Cost		$73,293
Professional Fees at 16.0%	+	$11,727
Total Project Cost		**$85,020**

Specific Project Details

Facility Condition Analysis
Section Three
JONE : JONES RESIDENCE HALL

Project Description

Project Number:	JONEES02	**Title:**	WINDOW REPLACEMENT
Priority Sequence:	3		
Priority Class:	3		
Category Code:	ES5B	**System:**	EXTERIOR
		Component:	FENESTRATIONS
		Element:	WINDOWS
Building Code:	JONE		
Building Name:	JONES RESIDENCE HALL		
Subclass/Savings:	Energy Conservation $2,400		
Code Application:	Not Applicable		
Project Class:	Capital Renewal		
Project Date:	10/16/2009		
Project Location:	Building-wide: Floor(s) 1		

Project Description

While the ground floor windows have all been replaced, the upper floor glazing is still older single-pane units. It is recommended that the single-pane 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
JONE : JONES RESIDENCE HALL

Project Cost

Project Number: JONEES02

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	11,160	$57.27	$639,133	$36.45	$406,782	$1,045,915
Project Totals:				**$639,133**		**$406,782**	**$1,045,915**

Material/Labor Cost		$1,045,915
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$852,286
General Contractor Mark Up at 20.0%	+	$170,457
Construction Cost		$1,022,744
Professional Fees at 16.0%	+	$163,639
Total Project Cost		**$1,186,383**

Specific Project Details

Facility Condition Analysis
Section Three
JONE : JONES RESIDENCE HALL

Project Description

Project Number:	JONEHV01	**Title:**	HVAC SYSTEM INSTALLATION
Priority Sequence:	4		
Priority Class:	3		
Category Code:	HV3A	**System:**	HVAC
		Component:	HEATING/COOLING
		Element:	SYSTEM RETROFIT/REPLACE
Building Code:	JONE		
Building Name:	JONES RESIDENCE HALL		
Subclass/Savings:	Not Applicable		
Code Application:	ASHRAE 62-2004		
Project Class:	Plant Adaption		
Project Date:	10/12/2009		
Project Location:	Floor-wide: Floor(s) 2, 3, 4, R		

Project Description

It is recommended that a central HVAC system be installed to serve the upper floors of this facility. Install a new modern HVAC system with variable air volume and constant volume air distribution as needed. This includes new air handlers, exhaust fans, ductwork, terminal units, heat exchangers, pumps, piping, controls, and related electrical components. Coordinate this project with the proposed chilled water generation system installation. Specify direct digital controls for the new equipment. Incorporate variable frequency drives into the new HVAC design as applicable.

Specific Project Details

Facility Condition Analysis
Section Three
JONE : JONES RESIDENCE HALL

Project Cost

Project Number: JONEHV01

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Air handlers, exhaust fans, ductwork, VAVs, VFDs, DDCs, heat exchangers, pumps, piping, electrical connections, and demolition of existing equipment	SF	66,677	$8.62	$574,756	$10.54	$702,776	$1,277,531
Project Totals:				**$574,756**		**$702,776**	**$1,277,531**

Material/Labor Cost		$1,277,531
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$939,303
General Contractor Mark Up at 20.0%	+	$187,861
Construction Cost		$1,127,163
Professional Fees at 16.0%	+	$180,346
Total Project Cost		**$1,307,510**

Specific Project Details

Facility Condition Analysis
Section Three
JONE : JONES RESIDENCE HALL

Project Description

Project Number:	JONEHV02	**Title:**	INSTALL CHILLED WATER GENERATION EQUIPMENT
Priority Sequence:	5		
Priority Class:	3		
Category Code:	HV2A	**System:**	HVAC
		Component:	COOLING
		Element:	CHILLERS/CONTROLS
Building Code:	JONE		
Building Name:	JONES RESIDENCE HALL		
Subclass/Savings:	Not Applicable		
Code Application:	ASHRAE 15-2004		
Project Class:	Plant Adaption		
Project Date:	10/12/2009		
Project Location:	Item Only: Floor(s) G		

Project Description

In conjunction with the proposed HVAC system installation, it is recommended that local chilled water generation equipment be installed. This includes an appropriately sized chiller with an associated cooling tower. Specify new energy-efficient systems that contain the latest non-CFC refrigerant. This project cost includes electrical and piping connections and related controls and programming. Install refrigeration safety systems in accordance with the ASHRAE safety code for mechanical refrigeration. This includes refrigerant leak detection equipment and an interconnected emergency exhaust system. Specify a cooling tower with a galvanized steel enclosure. The project cost includes all piping, balancing valves, condenser control system, programming, and start-up.

Specific Project Details

Facility Condition Analysis
Section Three
JONE : JONES RESIDENCE HALL

Project Cost

Project Number: JONEHV02

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Chiller and all connections	TON	210	$409	$85,829	$180	$37,762	$123,591
Install new galvanized cooling tower	TON	270	$177	$47,890	$142	$38,248	$86,138
Project Totals:				**$133,719**		**$76,010**	**$209,729**

Material/Labor Cost		$209,729
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$173,648
General Contractor Mark Up at 20.0%	+	$34,730
Construction Cost		$208,378
Professional Fees at 16.0%	+	$33,340
Total Project Cost		**$241,719**

Specific Project Details

Facility Condition Analysis
Section Three
JONE : JONES RESIDENCE HALL

Project Description

Project Number:	JONEEL01	**Title:**	UPGRADE ELECTRICAL DISTRIBUTION NETWORK
Priority Sequence:	6		
Priority Class:	3		
Category Code:	EL3B	**System:**	ELECTRICAL
		Component:	SECONDARY DISTRIBUTION
		Element:	DISTRIBUTION NETWORK
Building Code:	JONE		
Building Name:	JONES RESIDENCE HALL		
Subclass/Savings:	Not Applicable		

Code Application: NEC Articles 110, 210, 220, 230

Project Class: Deferred Maintenance

Project Date: 10/12/2009

Project Location: Floor-wide: Floor(s) 1, 2, 3, 4, G

Project Description

An upgrade of the original electrical system components 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
JONE : JONES RESIDENCE HALL

Project Cost

Project Number: JONEEL01

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	66,677	$2.98	$198,697	$4.46	$297,379	$496,077
Project Totals:				**$198,697**		**$297,379**	**$496,077**

Material/Labor Cost		$496,077
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$352,644
General Contractor Mark Up at 20.0%	+	$70,529
Construction Cost		$423,173
Professional Fees at 16.0%	+	$67,708
Total Project Cost		**$490,880**

Specific Project Details

Facility Condition Analysis
Section Three
JONE : JONES RESIDENCE HALL

Project Description

Project Number:	JONEIS02	**Title:**	REFINISH WALLS
Priority Sequence:	7		
Priority Class:	3		
Category Code:	IS2B	**System:**	INTERIOR/FINISH SYS.
		Component:	PARTITIONS
		Element:	FINISHES
Building Code:	JONE		
Building Name:	JONES RESIDENCE HALL		
Subclass/Savings:	Not Applicable		
Code Application:	Not Applicable		
Project Class:	Deferred Maintenance		
Project Date:	10/16/2009		
Project Location:	Floor-wide: Floor(s) 1, 2, 3, 4, G		

Project Description

Interior wall finishes are painted plaster or concrete. The applications vary in age and condition from area to area. 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
JONE : JONES RESIDENCE HALL

Project Cost

Project Number: JONEIS02

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	284,170	$0.17	$48,309	$0.81	$230,178	$278,487
Project Totals:				**$48,309**		**$230,178**	**$278,487**

Material/Labor Cost		$278,487
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$166,728
General Contractor Mark Up at 20.0%	+	$33,346
Construction Cost		$200,074
Professional Fees at 16.0%	+	$32,012
Total Project Cost		**$232,086**

Specific Project Details

Facility Condition Analysis
Section Three
JONE : JONES RESIDENCE HALL

Project Description

Project Number:	JONEIS01	**Title:**	REFINISH FLOORING
Priority Sequence:	8		
Priority Class:	3		
Category Code:	IS1A	**System:**	INTERIOR/FINISH SYS.
		Component:	FLOOR
		Element:	FINISHES-DRY
Building Code:	JONE		
Building Name:	JONES RESIDENCE HALL		
Subclass/Savings:	Not Applicable		
Code Application:	Not Applicable		
Project Class:	Capital Renewal		
Project Date:	10/16/2009		
Project Location:	Floor-wide: Floor(s) 1, 2, 3, 4, G		

Project Description

Interior floor finishes include carpet, vinyl tile, concrete, and ceramic tile. The applications vary in age and condition from area to area. Carpet and vinyl tile upgrades should be considered as part of any future cosmetic improvements or major comprehensive renovation efforts.

Specific Project Details

Facility Condition Analysis
Section Three
JONE : JONES RESIDENCE HALL

Project Cost

Project Number: JONEIS01

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Carpet	SF	66,250	$5.36	$355,100	$2.00	$132,500	$487,600
Vinyl floor tile	SF	4,140	$3.53	$14,614	$2.50	$10,350	$24,964
Project Totals:				**$369,714**		**$142,850**	**$512,564**

Material/Labor Cost		$512,564
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$445,584
General Contractor Mark Up at 20.0%	+	$89,117
Construction Cost		$534,701
Professional Fees at 16.0%	+	$85,552
Total Project Cost		**$620,253**

Specific Project Details

Facility Condition Analysis
Section Three
JONE : JONES RESIDENCE HALL

Project Description

Project Number:	JONEPL01	**Title:**	WATER SUPPLY PIPING REPLACEMENT
Priority Sequence:	9		
Priority Class:	3		
Category Code:	PL1A	**System:**	PLUMBING
		Component:	DOMESTIC WATER
		Element:	PIPING NETWORK
Building Code:	JONE		
Building Name:	JONES RESIDENCE HALL		
Subclass/Savings:	Not Applicable		
Code Application:	IPC Chapter 6		
Project Class:	Deferred Maintenance		
Project Date:	10/12/2009		
Project Location:	Floor-wide: Floor(s) 1, 2, 3, 4, G		

Project Description

Replacement of the non-renovated sections of the 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: JONEPL01

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	66,677	$1.14	$76,012	$2.85	$190,029	$266,041
Project Totals:				**$76,012**		**$190,029**	**$266,041**

Material/Labor Cost		$266,041
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$174,029
General Contractor Mark Up at 20.0%	+	$34,806
Construction Cost		$208,835
Professional Fees at 16.0%	+	$33,414
Total Project Cost		**$242,248**

Specific Project Details

Facility Condition Analysis
Section Three
JONE : JONES RESIDENCE HALL

Project Description

Project Number:	JONEPL02	**Title:**	DRAIN PIPING REPLACEMENT
Priority Sequence:	10		
Priority Class:	3		
Category Code:	PL2A	**System:**	PLUMBING
		Component:	WASTEWATER
		Element:	PIPING NETWORK
Building Code:	JONE		
Building Name:	JONES RESIDENCE HALL		
Subclass/Savings:	Not Applicable		
Code Application:	IPC Chapters 7-11		
Project Class:	Deferred Maintenance		
Project Date:	10/12/2009		
Project Location:	Floor-wide: Floor(s) 1, 2, 3, 4, G		

Project Description

Replacement of the non-renovated sections of the drain piping network 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.

Specific Project Details

Facility Condition Analysis
Section Three
JONE : JONES RESIDENCE HALL

Project Cost

Project Number: JONEPL02

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	66,677	$1.81	$120,685	$4.17	$278,043	$398,728
Project Totals:				**$120,685**		**$278,043**	**$398,728**

Material/Labor Cost		$398,728
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$264,166
General Contractor Mark Up at 20.0%	+	$52,833
Construction Cost		$317,000
Professional Fees at 16.0%	+	$50,720
Total Project Cost		**$367,719**

Specific Project Details

Facility Condition Analysis
Section Three
JONE : JONES RESIDENCE HALL

Project Description

Project Number:	JONESI01	**Title:**	SITE PAVING UPGRADES
Priority Sequence:	11		
Priority Class:	3		
Category Code:	SI4A	**System:**	SITE
		Component:	GENERAL
		Element:	OTHER
Building Code:	JONE		
Building Name:	JONES RESIDENCE HALL		
Subclass/Savings:	Not Applicable		
Code Application:	ADAAG 502		
Project Class:	Capital Renewal		
Project Date:	10/16/2009		
Project Location:	Undefined: Floor(s) 1		

Project Description

Pedestrian paving systems are in overall good condition and should not need replacement. Vehicular paving systems are in fair condition and will need moderate upgrades.

Specific Project Details

Facility Condition Analysis
Section Three
JONE : JONES RESIDENCE HALL

Project Cost

Project Number: JONESI01

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Vehicular paving wear course rehabilitation, sealcoat and striping allowance	SY	5,200	$7.91	$41,132	$3.79	$19,708	$60,840
Project Totals:				**$41,132**		**$19,708**	**$60,840**

Material/Labor Cost		$60,840
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$51,530
General Contractor Mark Up at 20.0%	+	$10,306
Construction Cost		$61,836
Professional Fees at 16.0%	+	$9,894
Total Project Cost		**$71,730**

Specific Project Details

Facility Condition Analysis
Section Three
JONE : JONES RESIDENCE HALL

Project Description

Project Number:	JONEAC01	**Title:**	INTERIOR AMENITY ACCESSIBILITY UPGRADES
Priority Sequence:	12		
Priority Class:	4		
Category Code:	AC4A	**System:**	ACCESSIBILITY
		Component:	GENERAL
		Element:	FUNCTIONAL SPACE MOD.
Building Code:	JONE		
Building Name:	JONES RESIDENCE HALL		
Subclass/Savings:	Not Applicable		

Code Application: ADAAG 211, 602, 804

Project Class: Plant Adaption

Project Date: 10/16/2009

Project Location: Floor-wide: Floor(s) 1, 2, 3, 4

Project Description

Current accessibility legislation requires that building amenities be generally accessible to all persons. The configurations of select break room kitchenettes and drinking fountains are barriers to accessibility. The installation of wheelchair accessible kitchenette cabinetry is recommended where applicable, along with dual level, refrigerated drinking fountains.

Specific Project Details

Facility Condition Analysis
Section Three
JONE : JONES RESIDENCE HALL

Project Cost

Project Number: JONEAC01

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	2	$4,894	$9,788	$1,999	$3,998	$13,786
Dual level drinking fountain	EA	6	$1,216	$7,296	$374	$2,244	$9,540
Alcove construction including finishes	EA	6	$877	$5,262	$3,742	$22,452	$27,714
Project Totals:				**$22,346**		**$28,694**	**$51,040**

Material/Labor Cost		$51,040
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$37,222
General Contractor Mark Up at 20.0%	+	$7,444
Construction Cost		$44,667
Professional Fees at 16.0%	+	$7,147
Total Project Cost		**$51,814**

Specific Project Details

Facility Condition Analysis
Section Three
JONE : JONES RESIDENCE HALL

Project Description

Project Number:	JONEAC02	**Title:**	RESTROOM RENOVATION
Priority Sequence:	13		
Priority Class:	4		
Category Code:	AC3E	**System:**	ACCESSIBILITY
		Component:	INTERIOR PATH OF TRAVEL
		Element:	RESTROOMS/BATHROOMS
Building Code:	JONE		
Building Name:	JONES RESIDENCE HALL		
Subclass/Savings:	Not Applicable		

Code Application:	ADAAG	604, 605, 606, 607, 608

Project Class:	Plant Adaption
Project Date:	10/16/2009
Project Location:	Floor-wide: Floor(s) 2, 3, 4

Project Description

Restrooms on the ground and first floors are compliant with ADA legislation. Some modifications have been made to the upper floor restrooms, but they are still not fully compliant. A comprehensive restroom renovation, including new fixtures, finishes, partitions, and accessories, is recommended. Restroom expansion may be necessary in order to meet modern minimum fixture counts and accessibility legislation. Remove the step barrier at the entrance to each facility.

Specific Project Details

Facility Condition Analysis
Section Three
JONE : JONES RESIDENCE HALL

Project Cost

Project Number: JONEAC02

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	174	$1,969	$342,606	$1,699	$295,626	$638,232
Project Totals:				**$342,606**		**$295,626**	**$638,232**

Material/Labor Cost		$638,232
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$496,660
General Contractor Mark Up at 20.0%	+	$99,332
Construction Cost		$595,992
Professional Fees at 16.0%	+	$95,359
Total Project Cost		**$691,351**

Specific Project Details

Facility Condition Analysis
Section Three
JONE : JONES RESIDENCE HALL

Project Description

Project Number:	JONEES03	**Title:**	BUILT-UP ROOF REPLACEMENT
Priority Sequence:	14		
Priority Class:	4		
Category Code:	ES4B	**System:**	EXTERIOR
		Component:	ROOF
		Element:	REPLACEMENT
Building Code:	JONE		
Building Name:	JONES RESIDENCE HALL		
Subclass/Savings:	Energy Conservation $2,400		
Code Application:	Not Applicable		
Project Class:	Capital Renewal		
Project Date:	10/16/2009		
Project Location:	Floor-wide: Floor(s) R		

Project Description

The lower built-up roof was installed in 2002 with the addition to the ground floor level. The upper built-up roofing was installed in 1997 and is not expected to outlast the scope of this analysis. 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
JONE : JONES RESIDENCE HALL

Project Cost

Project Number: JONEES03

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Built-up roof	SF	19,070	$3.06	$58,354	$3.58	$68,271	$126,625
Project Totals:				**$58,354**		**$68,271**	**$126,625**

Material/Labor Cost		$126,625
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$93,786
General Contractor Mark Up at 20.0%	+	$18,757
Construction Cost		$112,543
Professional Fees at 16.0%	+	$18,007
Total Project Cost		**$130,549**

Specific Project Details

Facility Condition Analysis
Section Three
JONE : JONES RESIDENCE HALL

Project Description

Project Number:	JONEIS03	**Title:**	REFINISH CEILINGS
Priority Sequence:	15		
Priority Class:	4		
Category Code:	IS3B	**System:**	INTERIOR/FINISH SYS.
		Component:	CEILINGS
		Element:	REPLACEMENT
Building Code:	JONE		
Building Name:	JONES RESIDENCE HALL		
Subclass/Savings:	Not Applicable		
Code Application:	Not Applicable		
Project Class:	Capital Renewal		
Project Date:	10/16/2009		
Project Location:	Floor-wide: Floor(s) 1, 2, 3, 4, G		

Project Description

Ceiling finishes include lay-in, acoustical tile and painted ceilings. The applications vary in age and condition from area to area. Ceiling finish upgrades should be considered as part of any future cosmetic improvements or major comprehensive renovation efforts.

Project Cost

Project Number: JONEIS03

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Acoustical tile ceiling system	SF	33,130	$2.12	$70,236	$2.98	$98,727	$168,963
Painted ceiling finish application	SF	49,690	$0.17	$8,447	$0.81	$40,249	$48,696
Project Totals:				**$78,683**		**$138,976**	**$217,659**

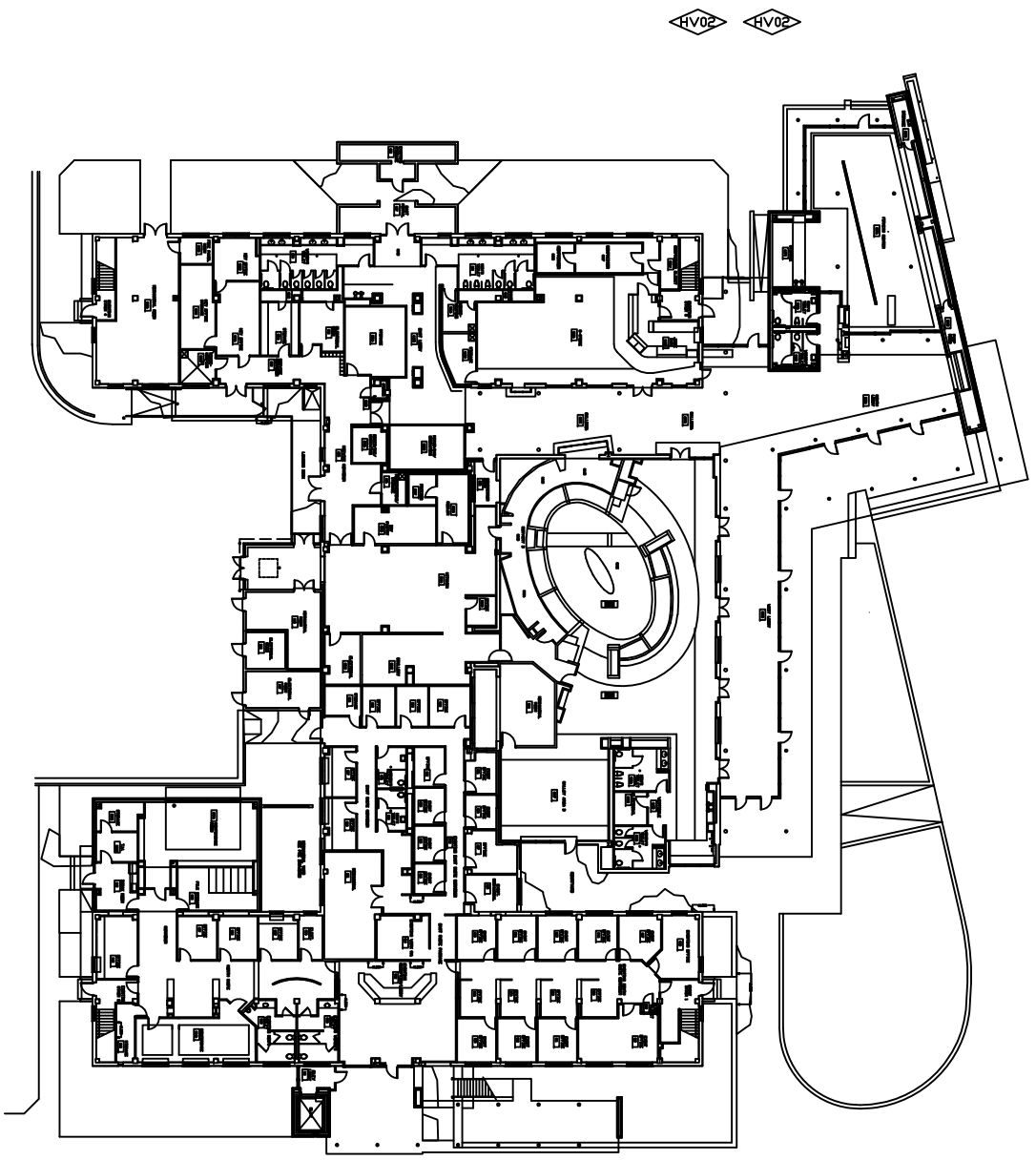
Material/Labor Cost		$217,659
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$150,529
General Contractor Mark Up at 20.0%	+	$30,106
Construction Cost		$180,634
Professional Fees at 16.0%	+	$28,901
Total Project Cost		**$209,536**

FACILITY CONDITION ANALYSIS

SECTION 4

DRAWINGS AND PROJECT LOCATIONS

EAST CAROLINA UNIVERSITY



EL01 FS01 IS01 IS02 IS03 PL01
PL02

JONES
RESIDENCE HALL

BLDG NO. JONE

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

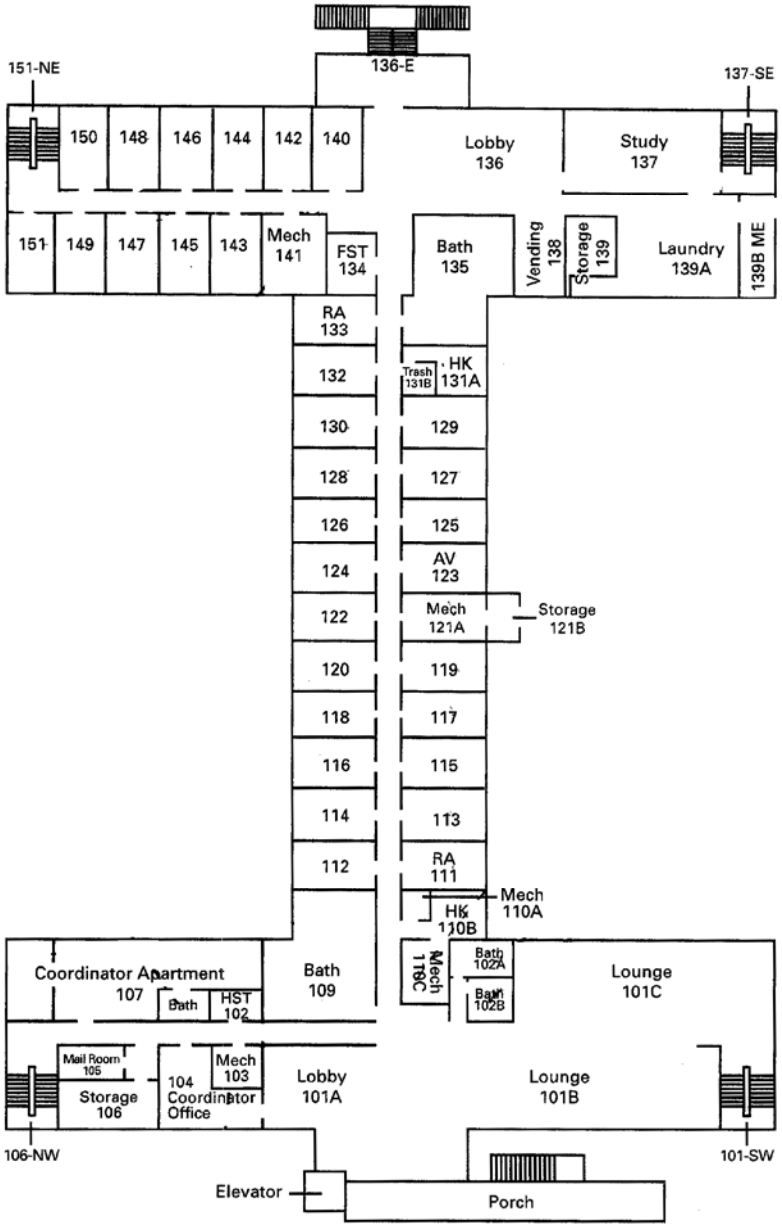
PROJECT NUMBER APPLIES TO AREA AS NOTED

Date: 10/28/09
Drawn by: J.T.V.
Project No. 09-041

GROUND
FLOOR
PLAN

Sheet No.
1 of 5

EAST CAROLINA UNIVERSITY



SI01 ES01 ES02

AC01 EL01 FS01 IS01 IS02 IS03

PL01 PL02

JONES
RESIDENCE HALL

BLDG NO. JONE

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

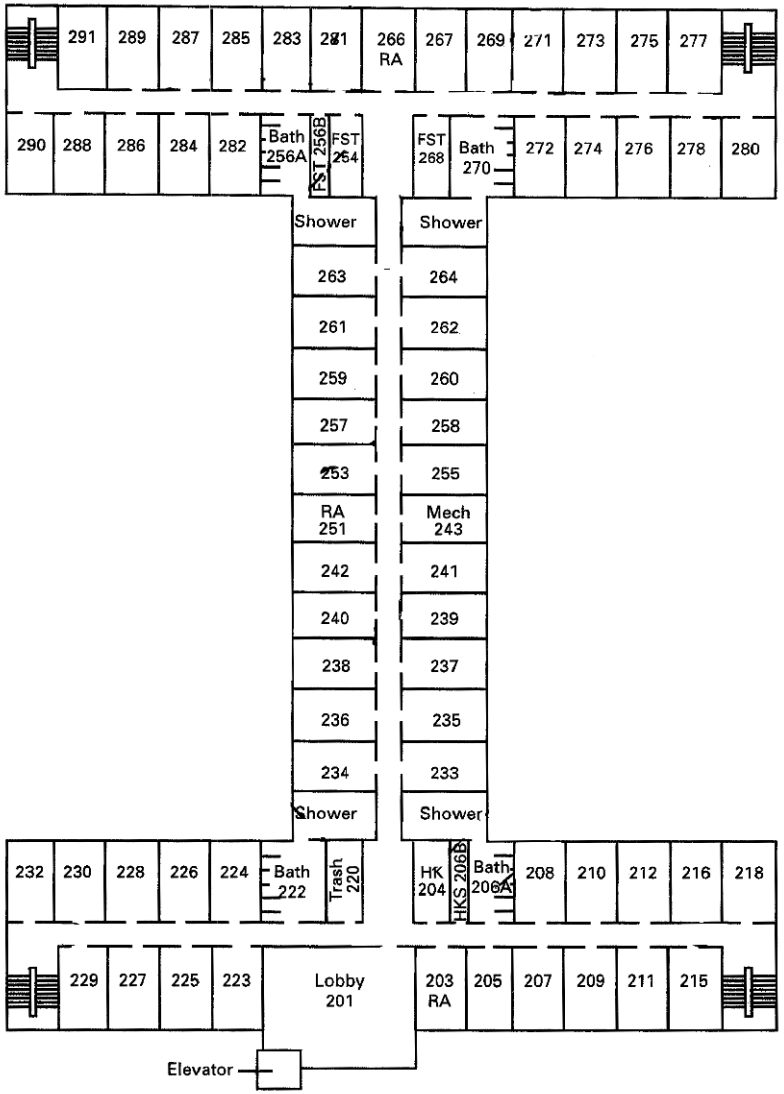
PROJECT NUMBER APPLIES TO AREA AS NOTED

Date: 10/28/09
Drawn by: J.T.V.
Project No. 09-041

FIRST FLOOR PLAN

Sheet No.
2 of 5

EAST CAROLINA UNIVERSITY



AC01 AC02 EL01 FS01 HV01 IS01
IS02 IS03 PL01 PL02

JONES
RESIDENCE HALL

BLDG NO. JONE

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

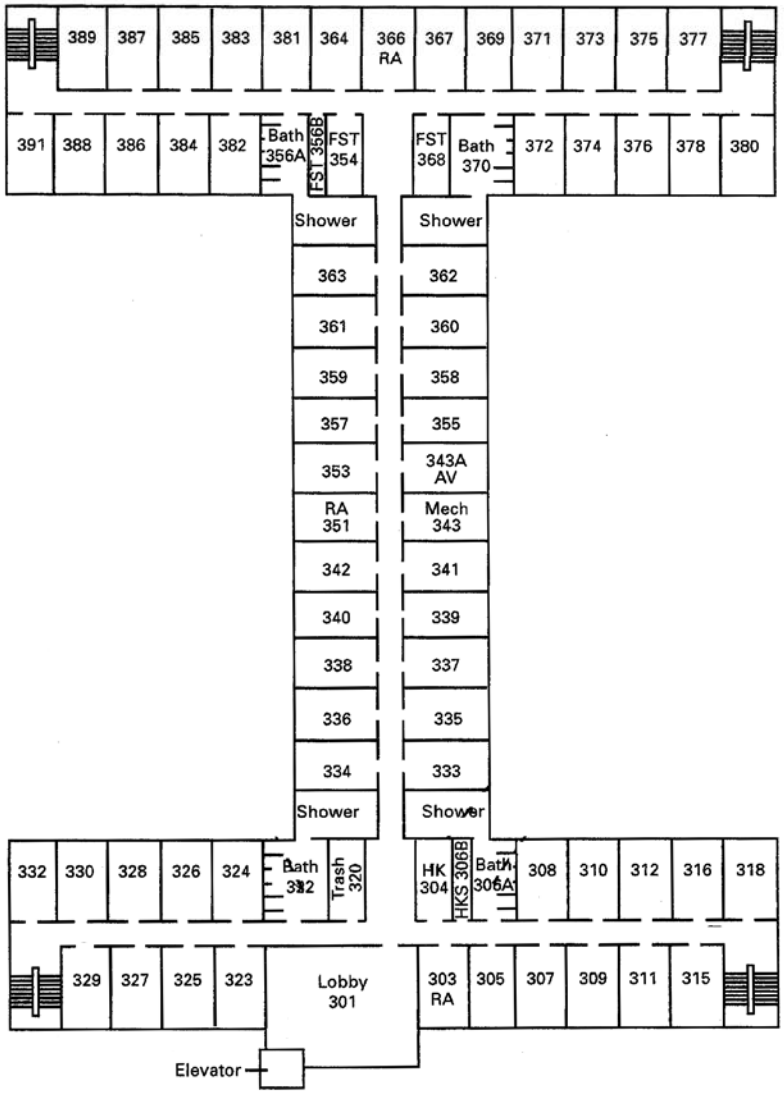
PROJECT NUMBER APPLIES TO AREA AS NOTED

Date: 10/28/09
Drawn by: J.T.V.
Project No. 09-041

SECOND FLOOR PLAN

Sheet No.
3 of 5

EAST CAROLINA UNIVERSITY



AC01 AC02 EL01 FS01 HV01 IS01
IS02 IS03 PL01 PL02

JONES
RESIDENCE HALL

BLDG NO. JONE

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

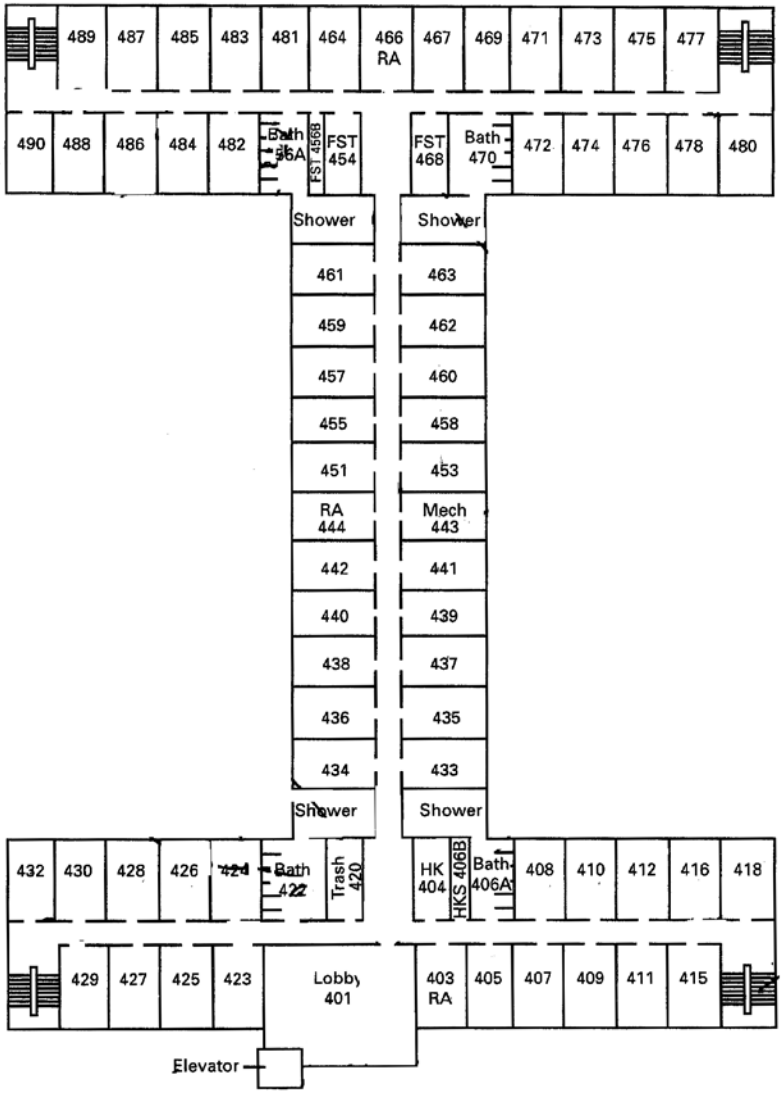
Date: 10/28/09
Drawn by: J.T.V.
Project No. 09-041

THIRD FLOOR PLAN

Sheet No.
4 of 5

EAST CAROLINA UNIVERSITY

ROOF
ES03 HV01



AC01 AC02 EL01 FS01 HV01 IS01
IS02 IS03 PL01 PL02

N

JONES
RESIDENCE HALL

BLDG NO. JONE

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: 10/28/09
Drawn by: J.T.V.
Project No. 09-041

FOURTH FLOOR PLAN

Sheet No.
5 of 5

FACILITY CONDITION ANALYSIS

SECTION 5

LIFE CYCLE MODEL SUMMARY AND PROJECTIONS

Life Cycle Model

Building Component Summary

JONE : JONES RESIDENCE HALL

Uniformat Code	Component Description	Qty	Units	Unit Cost	Complx Adj	Total Cost	Install Date	Life Exp
B2010	EXTERIOR FINISH RENEWAL	44,630	SF	$1.30	.31	$18,036	1958	10
B2020	STANDARD GLAZING AND CURTAIN WALL	11,160	SF	$104.04		$1,161,048	1958	55
B2020	STANDARD GLAZING AND CURTAIN WALL	3,720	SF	$104.04		$387,016	2002	55
B2030	OVERHEAD GARAGE DOOR	1	EA	$7,425.74		$7,426	2002	30
B2030	HIGH TRAFFIC EXTERIOR DOOR SYSTEM	18	LEAF	$4,311.24		$77,602	2002	20
B2030	LOW TRAFFIC EXTERIOR DOOR SYSTEM	11	LEAF	$2,863.29		$31,496	2002	40
B3010	BUILT-UP ROOF	8,170	SF	$6.70		$54,760	2002	20
B3010	BUILT-UP ROOF	19,070	SF	$6.70		$127,819	1997	20
B3020	SKYLIGHT	200	SF	$104.04		$20,807	2002	30
C1020	RATED DOOR AND FRAME INCLUDING HARDWARE	400	LEAF	$1,489.06		$595,624	2002	35
C1020	INTERIOR DOOR HARDWARE	400	EA	$423.04		$169,217	2002	15
C3010	STANDARD WALL FINISH (PAINT, WALL COVERING, ETC.)	284,170	SF	$0.80		$227,632	1958	10
C3020	CARPET	66,250	SF	$8.75		$579,453	2002	10
C3020	VINYL FLOOR TILE	4,140	SF	$6.59		$27,274	2002	15
C3020	CERAMIC FLOOR TILE	4,140	SF	$17.36		$71,880	2002	20
C3020	RESURFACE AND SEAL CONCRETE OR TERRAZZO	8,280	SF	$5.85		$48,411	2002	50
C3030	ACOUSTICAL TILE CEILING SYSTEM	33,130	SF	$4.99		$165,418	2002	15
C3030	PAINTED CEILING FINISH APPLICATION	49,690	SF	$0.80		$39,804	2002	15
D1010	ELEVATOR MODERNIZATION - HYDRAULIC	1	EA	$158,628.64		$158,629	2002	25
D1010	ELEVATOR CAB RENOVATION - PASSENGER	1	EA	$26,616.80		$26,617	2002	12
D2010	PLUMBING FIXTURES - DORMITORY / APARTMENTS	66,677	SF	$4.99		$332,539	1958	35
D2010	PLUMBING FIXTURES - DORMITORY / APARTMENTS	36,843	SF	$4.99		$183,747	2002	35
D2020	WATER PIPING - DORMITORY / APARTMENTS	66,677	SF	$3.55		$236,789	1958	35
D2020	WATER PIPING - DORMITORY / APARTMENTS	36,843	SF	$3.55		$130,840	2002	35
D2020	WATER HEATER (COMMERCIAL, GAS)	390	GPH	$66.28		$25,851	2007	20
D2020	WATER HEATER (RES., ELEC.)	40	GAL	$47.95		$1,918	1996	10
D2020	WATER HEATER, SHELL AND TUBE HEAT EXCHANGER	96	GPM	$355.69		$34,146	2007	24
D2030	DRAIN PIPING - DORMITORY / APARTMENTS	66,677	SF	$5.40		$360,131	1958	40
D2030	DRAIN PIPING - DORMITORY / APARTMENTS	36,843	SF	$5.40		$198,994	2002	40
D2050	AIR COMPRESSOR PACKAGE (AVERAGE SIZE)	1	SYS	$6,456.49		$6,456	2002	25

Life Cycle Model

Building Component Summary

JONE : JONES RESIDENCE HALL

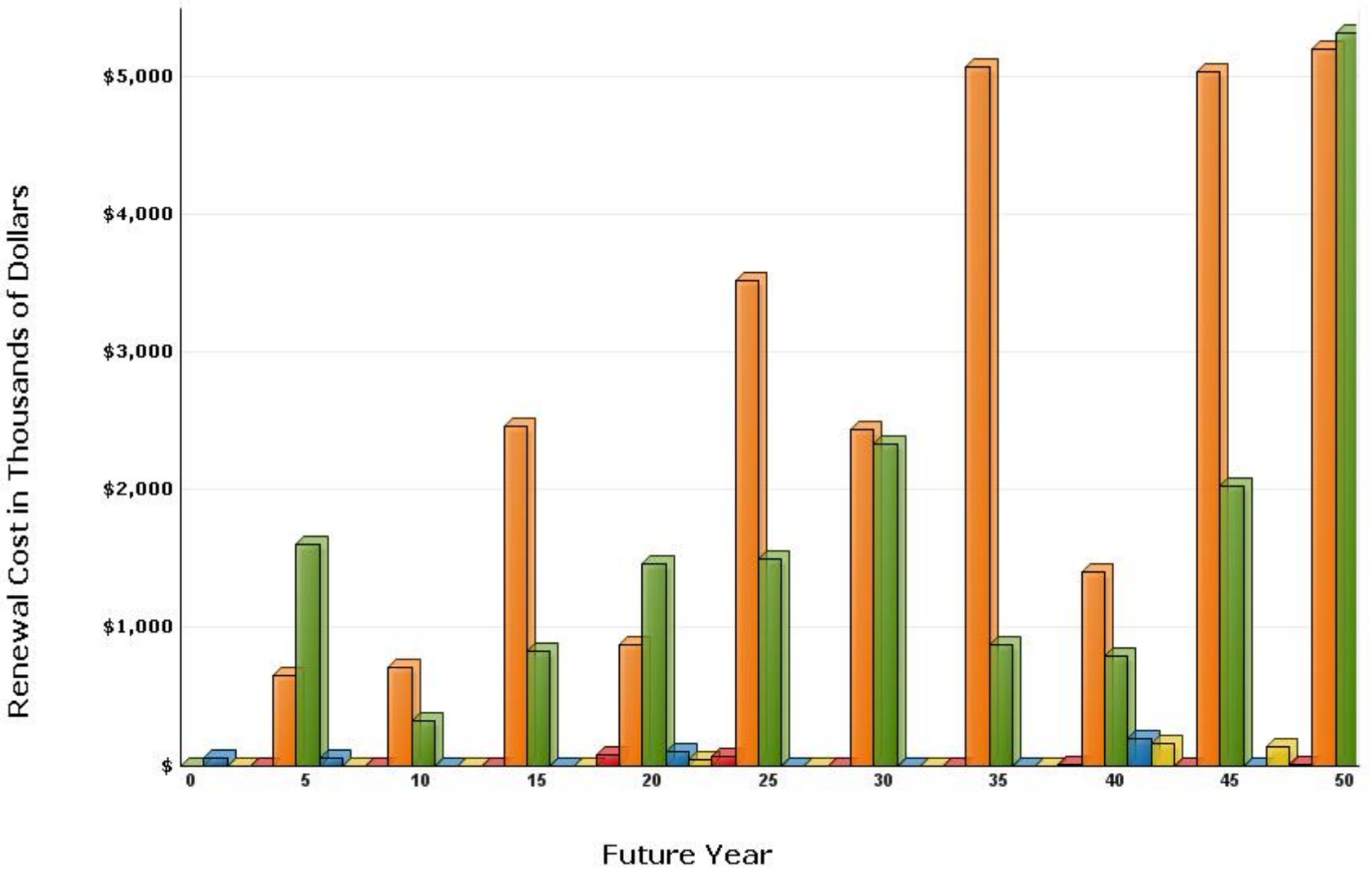
Uniformat Code	Component Description	Qty	Units	Unit Cost	Complx Adj	Total Cost	Install Date	Life Exp
D3020	HEATING SYSTEM, STEAM OR HYDRONIC	66,677	SF	$7.30		$486,868	1958	25
D3030	COLD BOX REFRIGERATION SYSTEM	4	SYS	$6,324.50		$25,298	2008	15
D3030	COLD BOX REFRIGERATION SYSTEM	2	SYS	$6,324.50		$12,649	2008	15
D3030	CHILLER - AIR COOLED (OVER 100 TONS)	190	TON	$1,173.39		$222,944	2002	20
D3040	CONDENSATE RECEIVER	2	SYS	$9,504.01		$19,008	2002	15
D3040	EXHAUST FAN - CENTRIFUGAL ROOF EXHAUSTER OR SIMILAR	9	EA	$2,768.62		$24,918	2002	20
D3040	EXHAUST FAN - PROPELLER TYPE OR SIMILAR	2	EA	$1,357.34		$2,715	2002	20
D3040	HVAC SYSTEM - DORMITORY / APARTMENTS	36,843	SF	$19.20		$707,346	2007	25
D3040	BASE MTD. PUMP - UP TO 15 HP	10	HP	$3,175.77		$31,758	2002	20
D3040	BASE MTD. PUMP - 15 HP TO 50 HP	30	HP	$1,142.19		$34,266	2002	20
D3050	THRU-WALL AC UNIT	150	TON	$1,528.27		$229,241	2003	10
D4010	FIRE SPRINKLER SYSTEM	103,520	SF	$6.86		$710,260	2002	80
D4010	FIRE SPRINKLER HEADS	103,520	SF	$0.38		$39,043	2002	20
D4020	FIRE PUMP - ELECTRIC (750 GPM PLUS)	1,000	GPM	$60.46		$60,464	2002	25
D4040	HALON - FM200 - INERGEN FIRE SUPPRESSION	2,400	CF	$3.48		$8,353	2002	25
D5010	ELECTRICAL SYSTEM - DORMITORY / APARTMENTS	66,777	SF	$7.21		$481,293	1958	50
D5010	ELECTRICAL SYSTEM - DORMITORY / APARTMENTS	36,843	SF	$7.21		$265,544	2002	50
D5010	ELECTRICAL SWITCHGEAR 277/480V	2,000	AMP	$39.56		$79,127	2002	20
D5010	TRANSFORMER, OIL, 5-15KV (500-1500 KVA)	500	KVA	$47.02		$23,510	2000	30
D5010	VARIABLE FREQUENCY DRIVE (UP TO 10 HP)	10	HP	$1,020.08		$10,201	2002	12
D5010	VARIABLE FREQUENCY DRIVE (10 - 50 HP)	30	HP	$388.17		$11,645	2002	12
D5020	EXIT SIGNS (CENTRAL POWER)	60	EA	$163.78		$9,827	2002	20
D5020	EXTERIOR LIGHT (HID)	3	EA	$689.58		$2,069	2002	20
D5020	LIGHTING - DORMITORY / APARTMENTS	90,000	SF	$4.30		$387,024	2002	20
D5020	LIGHTING - DORMITORY / APARTMENTS	13,520	SF	$4.30		$58,140	2009	20
D5030	FIRE ALARM SYSTEM, POINT ADDRESSABLE	103,520	SF	$2.61		$270,662	2008	15
D5040	GENERATOR, DIESEL (OVER 500KW)	700	KW	$348.71		$244,095	2002	25
E2010	KITCHENETTE UNIT WITH CABINETRY AND AMENITIES	2	LOT	$5,940.22		$11,880	2002	20
F1020	ENVIRONMENTAL CHAMBER	320	SF	$139.02		$44,485	2008	35

Life Cycle Model
Building Component Summary
JONE : JONES RESIDENCE HALL

Uniformat Code	Component Description	Qty	Units	Unit Cost	Complx Adj	Total Cost	Install Date	Life Exp
F1020	ENVIRONMENTAL CHAMBER	280	SF	$139.02		$38,925	2008	35
						$10,060,937		

Life Cycle Model Expenditure Projections

JONE : JONES RESIDENCE HALL



Average Annual Renewal Cost Per SqFt $3.54

FACILITY CONDITION ANALYSIS

SECTION 6

PHOTOGRAPHIC LOG

Photo Log - Facility Condition Analysis

JONE : JONES RESIDENCE HALL

Photo ID No	Description	Location	Date
JONE001a	Corridor finishes	Fourth floor	9/9/2009
JONE001e	Fan coil unit	Fourth floor, lobby	9/9/2009
JONE002a	Door hardware and signage	Fourth floor	9/9/2009
JONE002e	Exit signage and fire alarm strobe	Fourth floor, lobby	9/9/2009
JONE003a	Single level drinking fountain	Fourth floor	9/9/2009
JONE003e	Lavatories	Fourth floor, restroom	9/9/2009
JONE004a	Step into bathroom	Fourth floor	9/9/2009
JONE004e	Drain piping	Fourth floor, restroom	9/9/2009
JONE005a	Window detail	Fourth floor	9/9/2009
JONE005e	Urinals	Fourth floor, restroom	9/9/2009
JONE006a	Stairwell design	Fourth floor	9/9/2009
JONE006e	Radiator	Fourth floor, restroom	9/9/2009
JONE007a	Stairwell design	Fourth floor	9/9/2009
JONE007e	Water closet	Fourth floor, restroom	9/9/2009
JONE008a	Roof detail	Roof	9/9/2009
JONE008e	Interior lighting	Fourth floor, restroom	9/9/2009
JONE009a	Roof detail	Roof	9/9/2009
JONE009e	Shower components	Fourth floor, restroom	9/9/2009
JONE010a	Roof detail	Roof	9/9/2009
JONE010e	Sprinkler head	Fourth floor, restroom	9/9/2009
JONE011a	Lower roof detail	Roof	9/9/2009
JONE011e	Secondary electrical panel	Fourth floor, corridor	9/9/2009
JONE012a	Lower roof detail	Roof	9/9/2009
JONE012e	Interior lighting and exit signage	Fourth floor, corridor	9/9/2009
JONE013a	Corridor finishes	Fourth floor	9/9/2009
JONE013e	Interior lighting	Stairway	9/9/2009
JONE014a	Dual level drinking fountain	First floor	9/9/2009
JONE014e	Exhaust fans	Roof	9/9/2009
JONE015a	Lobby finishes	First floor	9/9/2009
JONE015e	Service sink and lavatory	Third floor, room 304	9/9/2009
JONE016a	Window detail	First floor, lobby	9/9/2009
JONE016e	Water closet	Third floor, room 304	9/9/2009
JONE017a	Laundry room finishes	First floor	9/9/2009

Photo Log - Facility Condition Analysis

JONE : JONES RESIDENCE HALL

Photo ID No	Description	Location	Date
JONE017e	Interior lighting and drain piping	Third floor, restroom	9/9/2009
JONE018a	Fire penetrations in telecom room	First floor	9/9/2009
JONE018e	Supply piping	Third floor, restroom	9/9/2009
JONE019a	Lower roof detail	Roof	9/9/2009
JONE019e	Electrical receptacle	Second floor, corridor	9/9/2009
JONE020a	Skylight detail	Roof	9/9/2009
JONE020e	Supply and drain piping	Second floor, room 254	9/9/2009
JONE021a	Apartment sink	First floor	9/9/2009
JONE021e	Transformers and drain piping	First floor, room 141	9/9/2009
JONE022a	Lounge finishes	First floor	9/9/2009
JONE022e	Air handling equipment	First floor, room 139C	9/9/2009
JONE023a	Office suite finishes	Ground floor	9/9/2009
JONE023e	HVAC controls	First floor, room 139C	9/9/2009
JONE024a	Office suite finishes	Ground floor	9/9/2009
JONE024e	Unit heater	First floor, room 139C	9/9/2009
JONE025a	Break room sink	Ground floor	9/9/2009
JONE025e	Make-up air unit	Roof	9/9/2009
JONE026a	Office suite finishes	Ground floor	9/9/2009
JONE026e	Water heater	First floor, room 107	9/9/2009
JONE027a	Kitchen finishes	Ground floor	9/9/2009
JONE027e	Air handling equipment	Ground, room 31	9/9/2009
JONE028a	Corridor finishes	Ground floor	9/9/2009
JONE028e	Electrical distribution equipment	Ground, room 47	9/9/2009
JONE029a	Corridor finishes	Ground floor	9/9/2009
JONE029e	Condensate return system	Ground, room 45	9/9/2009
JONE030a	East facade	Exterior elevation	9/9/2009
JONE030e	Water heating equipment	Ground, room 45	9/9/2009
JONE031a	North facade	Exterior elevation	9/9/2009
JONE031e	Boiler	Ground, room 45	9/9/2009
JONE032a	North facade	Exterior elevation	9/9/2009
JONE032e	Ansul fire suppression system	Ground, kitchen	9/9/2009
JONE033a	North facade	Exterior elevation	9/9/2009
JONE033e	Refrigeration equipment	Ground, kitchen	9/9/2009

Photo Log - Facility Condition Analysis

JONE : JONES RESIDENCE HALL

Photo ID No	Description	Location	Date
JONE034a	North facade	Exterior elevation	9/9/2009
JONE034e	Heat exchanger	Ground, room 48A	9/9/2009
JONE035a	North facade	Exterior elevation	9/9/2009
JONE035e	Pump equipment	Ground, room 48A	9/9/2009
JONE036a	West facade	Exterior elevation	9/9/2009
JONE036e	Fire alarm panels	Ground, room 48B	9/9/2009
JONE037a	West entry doors	Exterior elevation	9/9/2009
JONE037e	Exterior lighting	Site	9/9/2009
JONE038a	South facade	Exterior elevation	9/9/2009
JONE038e	Exterior lighting	Exterior	9/9/2009
JONE039a	South facade	Exterior elevation	9/9/2009
JONE039e	Emergency generator	Site	9/9/2009
JONE040a	South facade	Exterior elevation	9/9/2009
JONE040e	Air-cooled chiller	Site	9/9/2009
JONE041a	South facade	Exterior elevation	9/9/2009
JONE041e	Fire pump	Storage building	9/9/2009
JONE042a	East facade	Exterior elevation	9/9/2009
JONE042e	Unit heater	Storage building	9/9/2009
JONE043a	East facade	Exterior elevation	9/9/2009
JONE043e	Fire pump controller	Storage building	9/9/2009

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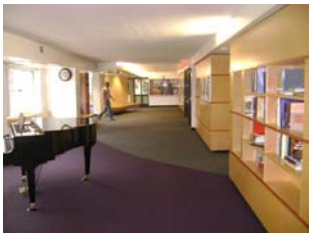

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