EAST CAROLINA UNIVERSITY

CLEMENT RESIDENCE HALL

ASSET CODE: CLEM

FACILITY CONDITION ANALYSIS

NOVEMBER 2, 2009

ISES CORPORATION

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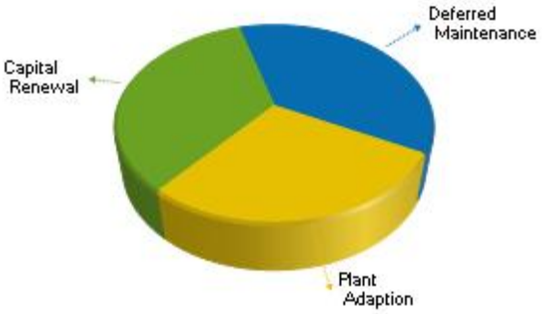
FACILITY CONDITION ANALYSIS

SECTION 1

GENERAL ASSET INFORMATION

EXECUTIVE SUMMARY - CLEMENT RESIDENCE HALL

PROJECT COSTS BY CLASSIFICATION



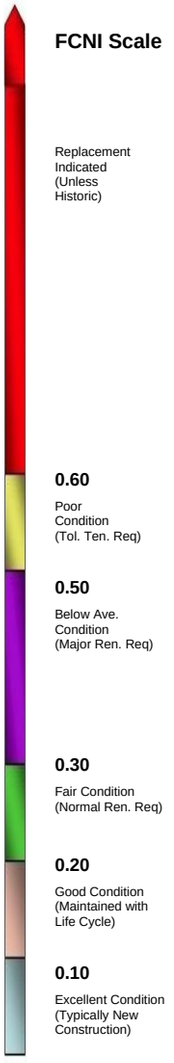
Building Code: CLEM
Building Name: CLEMENT RESIDENCE HALL
Year Built: 1969
Building Use: Dormitory / Apartments
Square Feet: 86,044

Project Costs by Priority

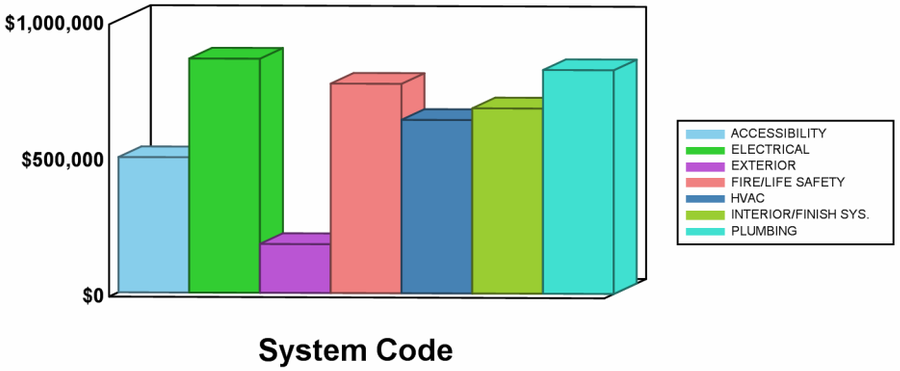
Priority 1:	$0
Priority 2:	$769,472
Priority 3:	$2,261,721
Priority 4:	$1,414,825
Total Project Costs:	**$4,446,018**

Facility Replacement Cost: **$26,726,000**

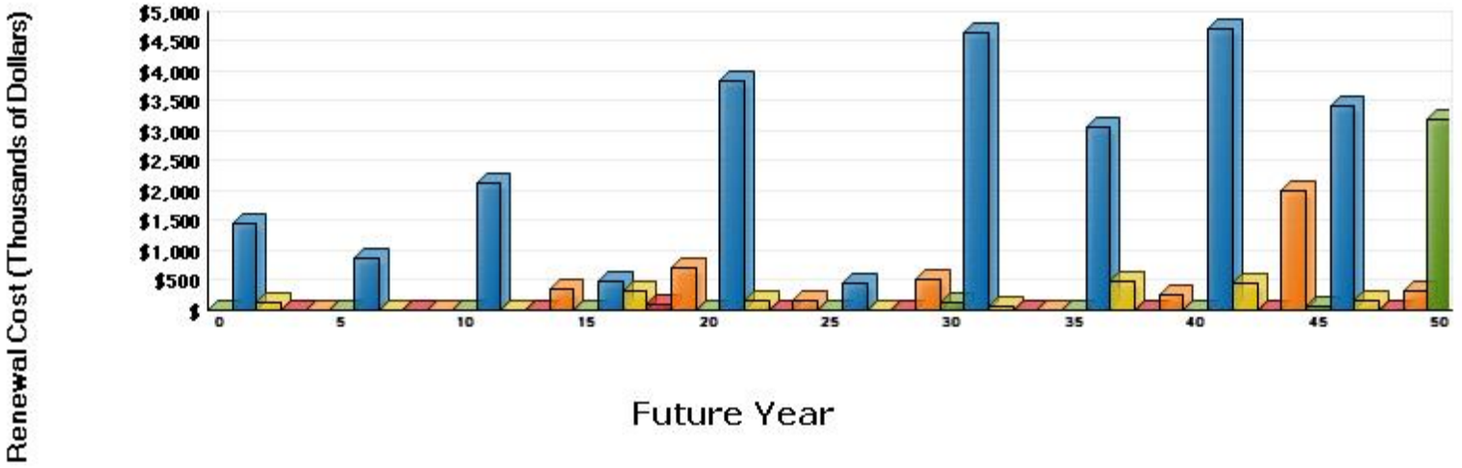
Facility Condition Needs Index (FCNI): **0.17**
(Project Costs / Replacement Cost)



PROJECT COSTS BY SYSTEM CODE



LIFE CYCLE MODEL EXPENDITURE PROJECTIONS



Average Annual Renewal Cost Per SqFt $3.41

B. ASSET SUMMARY

Clement Residence Hall was constructed in 1969 and is located on the western edge of the main East Carolina University campus, immediately adjacent to downtown Greenville and just east of the intersection of Reade Circle and Cotanche Street. This building contains 86,044 square feet of area on ten levels of dormitory and communal space. All ten levels are above grade. The cast-in-place concrete pier foundation supports a cast-in-place concrete structure. There are approximately 194 dormitory rooms, a coordinator's suite, and a visiting guest suite on floors two through ten. The first floor houses the coordinator's office, the living room, recreation room, vending room, a handicapped unisex restroom, the dorm mailroom, a former kitchen, and housekeeping.

The building has a brick masonry facade and a flat, built-up roof. All exterior windows on floors two through ten have been replaced with dual-pane, thermally insulated systems, and drip-less window air condition units were installed in each dorm room. The building is generally considered not to be handicapped accessible, because there is no nearby accessible parking, it has sloped sidewalks without compliant handrails, and very few building amenities have been made handicapped accessible.

The information for this report was gathered during a site visit that concluded on September 15, 2009.

SITE

The building sits on a sloped parcel of land in a small suburban campus setting. Landscaping consists of minimal ornamental planting beds, shrubbery, specimen trees, and areas of turf. Vehicular access is from the south on Seventh Street. Only service parking is near the facility. The adjacent sidewalks lead to a sidewalk system that serves all entrances and the entire campus. No site upgrades are deemed necessary at this time.

EXTERIOR STRUCTURE

Exterior brick masonry facade is in good condition, requiring no anticipated improvements over the next ten years. However, it is recommended that aged and inefficient primary glass storefront door systems be replaced. The replacement units should maintain the architectural design aspects of this facility and should be modern, energy-efficient applications. The remaining doors are satisfactory.

The original single-pane, aluminum-framed windows on the first floor should 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. As previously mentioned, the window systems on the second through the tenth floors have already been replaced with energy-efficient, dual-pane systems.

The rolled asphalt built-up roofing is not expected to outlast the scope of this analysis. Future budget modeling should include a provision for the replacement of the entire roof system in the next ten years. Replace this roof with a similar application or campus standard.

INTERIOR FINISHES / SYSTEMS

The common areas, such as the corridors, study lounges, social rooms, and the coordinator's office, are generally carpeted, with the exception of the first floor common areas and the living, recreation, and vending rooms, which are primarily terrazzo. The dorm rooms have vinyl floor tile, as do the laundry and housekeeping areas. Carpet and vinyl tile floor finish upgrades should be considered as part of any future cosmetic improvements or major comprehensive renovation efforts. The ceramic tile applications in the bathrooms appear sound and should provide satisfactory service over the next ten years.

The interior walls are all painted and constructed of either masonry block or sheetrock partitions. Wall finish upgrades should be considered as part of any future cosmetic improvements or major comprehensive renovation efforts.

Most of the ceilings are painted, although there are some suspended grid, acoustical tile systems in the first floor common areas. An upgrade of the painted ceilings is recommended. Also, there is an area of suspended ceiling in the first floor coordinator's office that should be replaced within the next ten years.

ACCESSIBILITY

Building entrances are required to be wheelchair accessible. There are several sidewalks immediately adjacent and leading to the building with slopes of sufficient grade to require the installation of handrails in accordance with handicapped accessibility guidelines. It is recommended that ADA compliant, painted metal handrails be installed at the main sidewalk / plaza leading to the facility from the east and the switchback sidewalk immediately to the north of the facility.

Current accessibility legislation requires that building amenities be generally accessible to all persons. The configurations of the kitchenette in the visiting guest suite and the drinking water fountains on each floor are barriers to accessibility. The installation of wheelchair accessible kitchenette cabinetry and refrigerated, dual level drinking fountains is recommended where applicable.

While the interior doors are suitable for ten future years of service, the knob actuated hardware is a barrier to accessibility. Accessibility legislation requires that door hardware be designed for operation by those with little or no ability to grasp objects with their hands. To comply with the intent of this legislation, it is recommended that lever handle door hardware be installed on all doors that currently still have knobs. In addition, the signage to the permanent spaces is not compliant. Upgrade all non-compliant signage to conform to appropriate accessibility standards, which includes specific size, graphical, Braille, height, and location requirements. This scope includes all directional signage.

The minimal accessibility features in this residential facility are primarily aimed at handicapped guests. There is a handicapped accessible unisex restroom on the first floor by the mailroom, and some minor modifications have been made in the bathrooms on each floor. Provisions for resident accessibility are recommended. These should include the installation of ADA compliant signage, a wheelchair accessible bathroom facility, accessible storage space, specialized alarms, lever door hardware, and the adaptation of a sleeping room. To comply with the intent of the current accessibility legislation, it is recommended that at least two residential units be converted for handicapped access.

The overall level of bathroom accessibility is good, but short of full compliance with modern accessibility legislation. While the clearances and clear floor spaces are adequate, the installation of compliant mirrors and new accessible plumbing fixtures is recommended.

Accessibility legislation requires that stairs have graspable handrails on both sides, rails with specific cross-sectional geometry, and handrails that extend horizontally at the landings. In addition, guardrails must prevent the passage of a 4 inch diameter sphere (6 inches in the triangle formed by the lower rail and tread / riser angle). Although the stairs are compliant with the code enforced at the time of construction until a major renovation occurs, they are deficient in handrail and guardrail design relative to current standards. Future renovation efforts should include comprehensive stair railing upgrades.

HEALTH

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

FIRE / LIFE SAFETY

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

This facility is protected by a central fire alarm system. The point addressable fire alarm control panel was manufactured by Notifier and is located on the ground floor. The devices that serve this system include manual pull stations, audible / visible devices, and smoke detectors. The fire alarm system is adequate and in good condition. With proper testing and maintenance, it will outlast the purview of this analysis.

This facility is not protected by any form of automatic fire suppression. Although manual, dry chemical fire extinguishers are available, it is recommended that an automatic fire suppression system be installed in unprotected areas throughout the facility. This will reduce overall liability and potential for loss. The installation of a fire pump will be necessary.

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.

HVAC

The facility is connected to the campus steam loop. Steam is supplied to a heat exchanger in the main mechanical room that produces heating hot water. The hot water is then circulated throughout the building by pumps to the associated HVAC equipment to heat the facility. The heat exchanger appears to be nearing the end of its intended life cycle. Replace the equipment to ensure a proper flow of heating and cooling media.

Heating and cooling for the common areas is provided by multizone air handling equipment with hot water coils for heating and DX refrigerant for cooling. The equipment is located on the roof and ground floor. The units were installed in 2004 and appear to be in good condition. No projects are recommended for the air handling equipment.

The facility has a hydronic system that heats the individual student rooms. This system is original, showing signs of age, and should be replaced. Cooling for the student rooms is provided by through-wall air conditioning units. Although these systems are currently in good working order, it should be anticipated that they will require replacement within the scope of this report.

ELECTRICAL

Power is supplied to the facility at a rate of 120/208 volts from an oil-filled transformer located on-site. The unit is rated at 750 kVA and was installed in 2004. Power is then distributed by a Cutler Hammer switchgear device rated for 2,000 amp service. All of the main electrical distribution system components are serviceable and will likely remain so throughout the scope of this report.

The secondary electrical system consists of panelboards located throughout the facility. Power is distributed from these panelboards in the form of mechanical, lighting, and general purpose loads. The secondary electrical system appears to be mostly original, with some upgrades where new circuits have been installed on each floor to handle the window air conditioner units in the student rooms. The electrical devices are aged and visibly worn. It should be anticipated that the electrical distribution network will no longer be able to support normal loads and expansion. Replace this network within the scope of this analysis.

The interior lighting is a combination of new and original fixtures. New lay-in or surface-mount fixtures that contain T8 bulbs are present in corridors and common spaces. These fixtures are in good condition, with no recommendations. Student rooms contain overhead surface-mount fixtures that are possibly original, with ballast upgrades. It is recommended that all original or aged student room lighting (approximately 60 percent of the system) be replaced with energy-efficient fixtures.

The exterior areas adjacent to the building are illuminated by building-mounted HID, compact fluorescent, and stanchion-mounted fixtures. These exterior lighting systems appear to be in good condition and provide adequate coverage. No projects are recommended for the exterior lighting.

Emergency power is produced by a local diesel-fired emergency generator. This unit has a capacity of 150 kW, generates 120/208 volt power, and was manufactured by Cummins. The generator is currently adequate and should remain a reliable source of stand-by power throughout the purview of this analysis.

PLUMBING

The main incoming domestic water enters the facility in the main mechanical room on the ground floor. 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. An upgrade of the original or aged domestic water piping is recommended. Additionally, no backflow preventer was observed on the system. Install backflow devices as needed to protect the water supply.

The drain piping network is cast-iron with bell-and-spigot and no-hub connections. The piping network is a combination of new and aged piping, with repairs that indicate the older piping is starting to fail. Remove the existing sanitary and storm drain piping. Install new cast-iron drain piping networks with copper run-outs to all fixtures. Also install new floor drains, roof drains, and traps as needed.

The plumbing fixtures are ceramic and stainless steel, with manual devices, and appear to be original. It is recommended that the plumbing fixtures be upgraded. This action is detailed in the Accessibility section of this report.

Domestic water is heated by a heat exchanger that utilizes steam. This unit has served beyond its expected life cycle, and the insulation is worn and showing signs of age. It is recommended that this unit be replaced.

A sump pump system facilitates the drainage of stormwater from this facility. This system has served beyond its statistical life cycle and should be replaced to preclude failure. A booster pump pack aids in the pressurization of the domestic water. This system is aged, and its continued reliability is a concern. Replace the booster pump pack to reduce the potential for high ongoing maintenance costs.

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 15, 2009

INSPECTION TEAM PERSONNEL:

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

FACILITY CONTACTS:

NAME	POSITION
William Bagwell	Associate Vice Chancellor, Campus Operations

REPORT DEVELOPMENT:

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

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

D. FACILITY CONDITION ANALYSIS - DEFINITIONS

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

1. REPORT DESCRIPTION

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

Section 2: Detailed Project Summaries and Totals

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

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

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

Section 3: Specific Project Details Illustrating Description / Cost

Section 4: Drawings with Iconography

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

Section 5: Life Cycle Model Summary and Projections

Section 6: Photographic Log

2. PROJECT CLASSIFICATION

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

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

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

3. PROJECT SUBCLASS TYPE

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

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

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

Example:

PRIORITY CLASS 1

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

PRIORITY CLASS 2

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

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

PRIORITY 1 - Currently Critical (Immediate)

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

PRIORITY 2 - Potentially Critical (Year One)

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

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

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

PRIORITY 4 - Recommended (Years Six to Ten)

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

6. COST SUMMARIES AND TOTALS

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

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

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

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

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

Example:

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

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

8. PHOTO NUMBER (Shown in Section 6)

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

Example: 0001006e

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

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

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

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

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

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

Refer to the following Category Code Report.

Example: Category Code = EL5A

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

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

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

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

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

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

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

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

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

FACILITY CONDITION ANALYSIS

SECTION 2

DETAILED PROJECT SUMMARIES AND TOTALS

Detailed Project Totals

Facility Condition Analysis

System Code by Priority Class

CLEM : CLEMENT RESIDENCE HALL

System Code	System Description	Priority Classes 1	2	3	4	Subtotal
AC	ACCESSIBILITY	0	0	0	496,893	496,893
EL	ELECTRICAL	0	0	860,132	0	860,132
ES	EXTERIOR	0	0	0	179,564	179,564
FS	FIRE/LIFE SAFETY	0	769,472	0	0	769,472
HV	HVAC	0	0	418,774	218,520	637,294
IS	INTERIOR/FINISH SYS.	0	0	635,239	45,321	680,561
PL	PLUMBING	0	0	347,576	474,527	822,103
	TOTALS	0	769,472	2,261,721	1,414,825	4,446,018

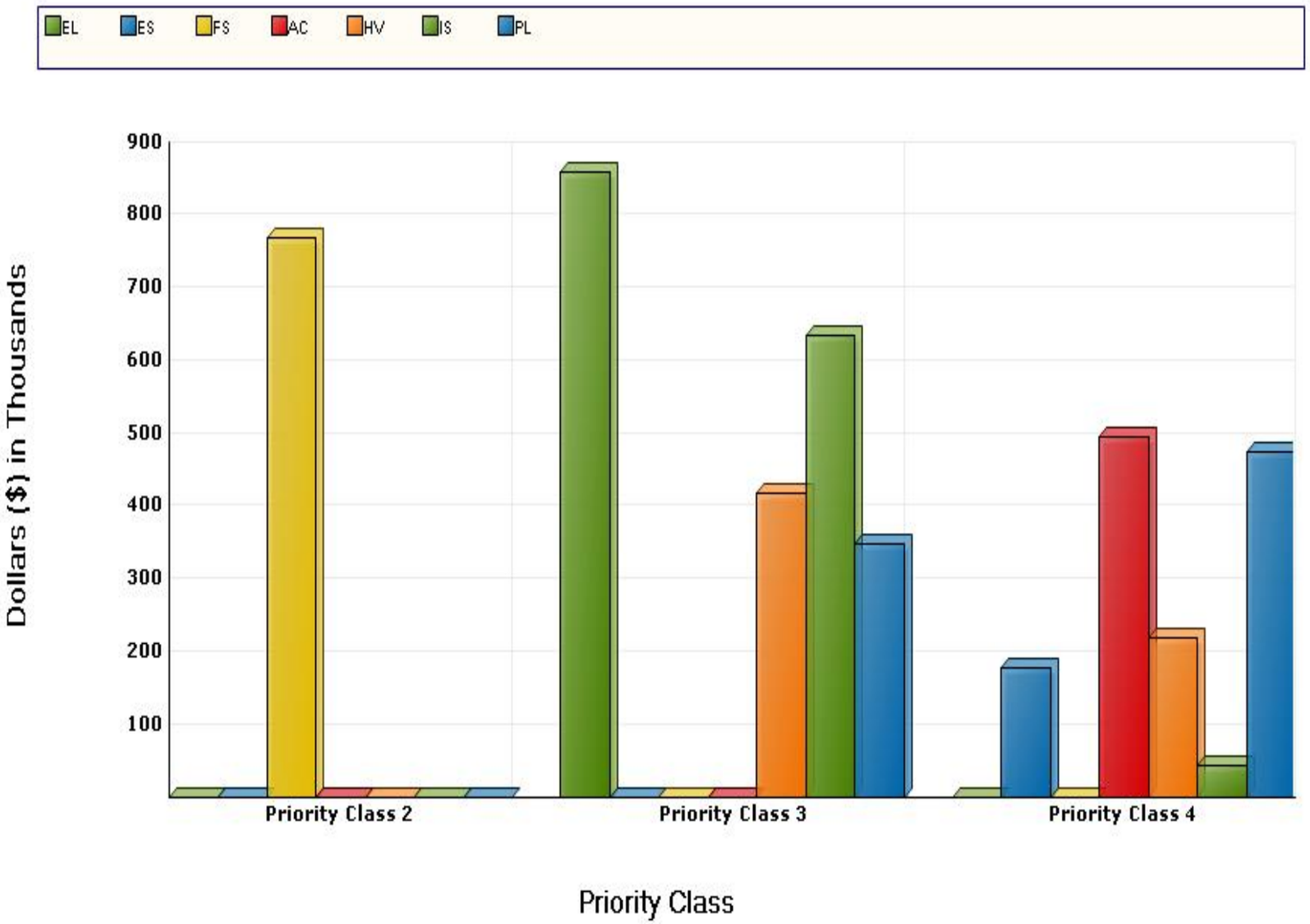
Facility Replacement Cost	$26,726,000
Facility Condition Needs Index	0.17

Gross Square Feet	86,044	**Total Cost Per Square Foot**	$51.67

FACILITY CONDITION ANALYSIS

System Code by Priority Class

CLEM : CLEMENT RESIDENCE HALL



Detailed Project Totals

Facility Condition Analysis

System Code by Project Class

CLEM : CLEMENT RESIDENCE HALL

System Code	System Description	Project Classes: Captial Renewal	Deferred Maintenance	FCAP	Plant Adaption	Subtotal
AC	ACCESSIBILITY	0	0	0	496,893	496,893
EL	ELECTRICAL	633,462	226,671	0	0	860,132
ES	EXTERIOR	179,564	0	0	0	179,564
FS	FIRE/LIFE SAFETY	0	0	0	769,472	769,472
HV	HVAC	0	637,294	0	0	637,294
IS	INTERIOR/FINISH SYS.	249,500	431,061	0	0	680,561
PL	PLUMBING	474,527	347,576	0	0	822,103
	TOTALS	1,537,052	1,642,601	0	1,266,365	4,446,018

Facility Replacement Cost	$26,726,000
Facility Condition Needs Index	0.17

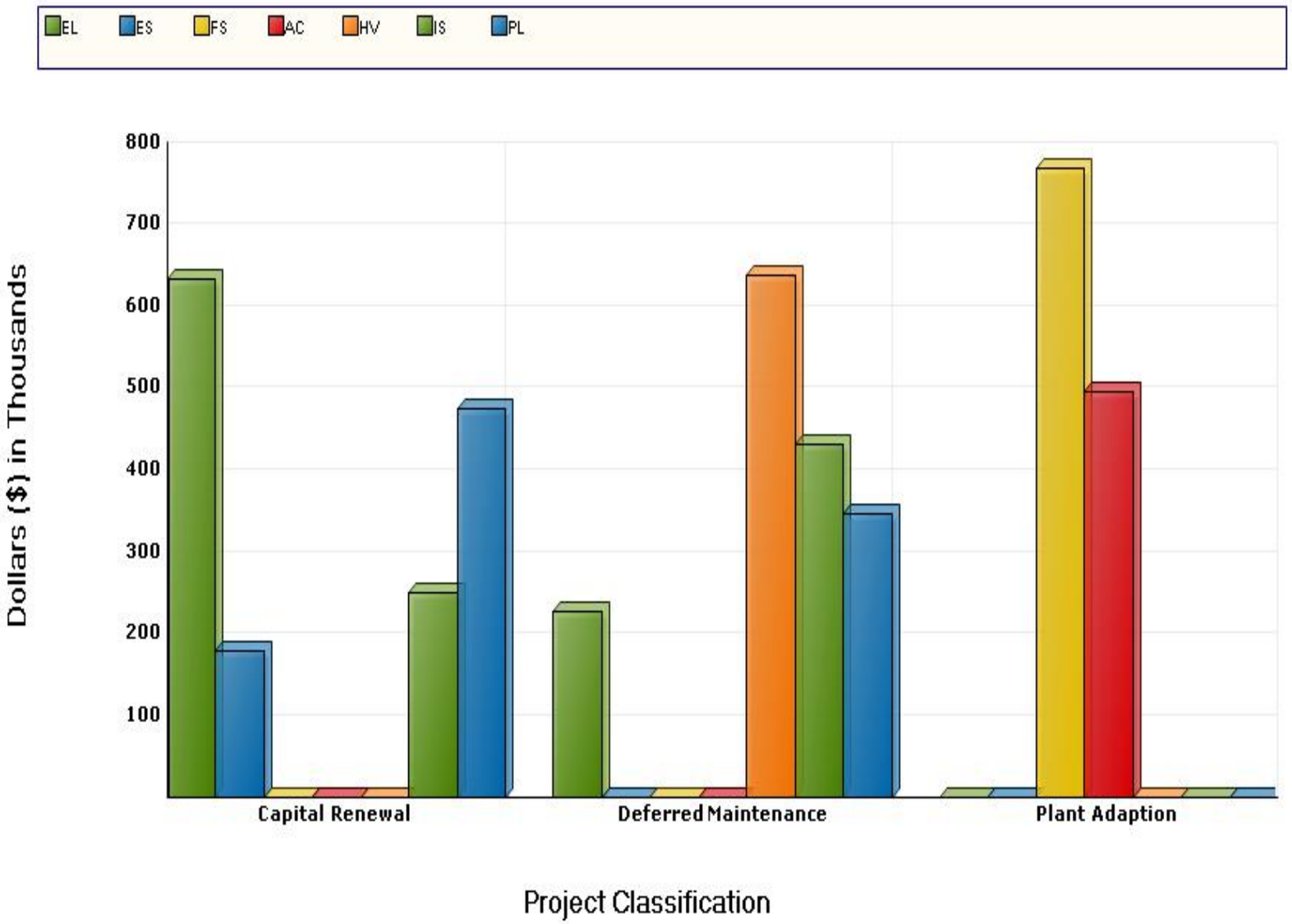
Gross Square Feet	86,044

Total Cost Per Square Foot	$51.67

FACILITY CONDITION ANALYSIS

System Code by Project Class

CLEM : CLEMENT RESIDENCE HALL



Detailed Project Summary
Facility Condition Analysis
Project Class by Priority Class
CLEM : CLEMENT RESIDENCE HALL

	Priority Classes				
Project Class	**1**	**2**	**3**	**4**	**Subtotal**
Capital Renewal	0	0	837,640	699,412	1,537,052
Deferred Maintenance	0	0	1,424,081	218,520	1,642,601
Plant Adaption	0	769,472	0	496,893	1,266,365
TOTALS	0	769,472	2,261,721	1,414,825	4,446,018

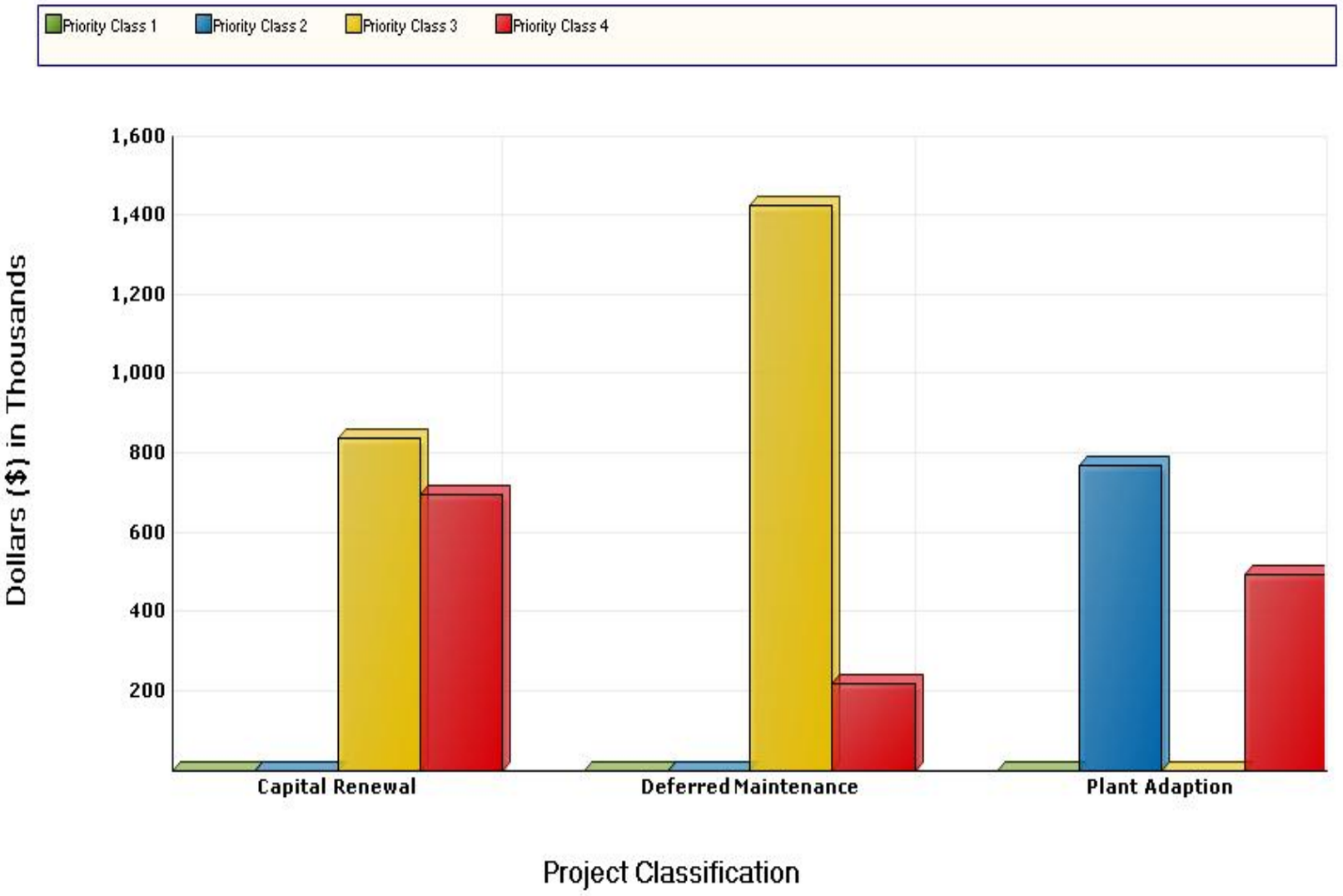
Facility Replacement Cost	$26,726,000
Facility Condition Needs Index	0.17

Gross Square Feet	86,044	**Total Cost Per Square Foot**	$51.67

FACILITY CONDITION ANALYSIS

Project Class by Priority Class

CLEM : CLEMENT RESIDENCE HALL



Detailed Project Summary

Facility Condition Analysis

Priority Class - Priority Sequence

CLEM : CLEMENT RESIDENCE HALL

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Total Cost
FS3A	CLEMFS01	2	1	FIRE SPRINKLER SYSTEM INSTALLATION	663,338	106,134	769,472
				Totals for Priority Class 2	**663,338**	**106,134**	**769,472**
HV5A	CLEMHV01	3	2	REPLACE HYDRONIC HEATING SYSTEM	331,958	53,113	385,071
HV5A	CLEMHV02	3	3	HEAT EXCHANGER REPLACEMENT	29,054	4,649	33,703
EL4B	CLEMEL01	3	4	INTERIOR LIGHTING UPGRADE	195,406	31,265	226,671
EL3B	CLEMEL02	3	5	UPGRADE ELECTRICAL DISTRIBUTION NETWORK	546,088	87,374	633,462
IS1A	CLEMIS01	3	6	REFINISH FLOORING	371,604	59,457	431,061
IS2B	CLEMIS02	3	7	REFINISH WALLS	176,016	28,163	204,179
PL1A	CLEMPL02	3	8	WATER SUPPLY PIPING REPLACEMENT	269,493	43,119	312,612
PL1E	CLEMPL01	3	9	DOMESTIC HOT WATER HEAT EXCHANGER REPLACEMENT	15,039	2,406	17,445
PL1B	CLEMPL04	3	10	DOMESTIC WATER BOOSTER PUMP REPLACEMENT	7,817	1,251	9,067
PL2B	CLEMPL05	3	11	REPLACE SUMP PUMPS	7,286	1,166	8,452
				Totals for Priority Class 3	**1,949,760**	**311,962**	**2,261,721**
AC2A	CLEMAC01	4	12	BUILDING ENTRY ACCESSIBILITY UPGRADES	40,487	6,478	46,965
AC4A	CLEMAC02	4	13	INTERIOR AMENITY ACCESSIBILITY UPGRADES	24,141	3,863	28,004
AC3E	CLEMAC05	4	14	RESTROOM ACCESSIBILITY UPGRADES	42,346	6,775	49,122
AC4A	CLEMAC04	4	15	ACCESSIBILITY UPGRADES FOR RESIDENTIAL FACILITIES	39,324	6,292	45,616
AC3B	CLEMAC06	4	16	STAIR AND RAILING SAFETY UPGRADES	139,134	22,261	161,395
AC4B	CLEMAC03	4	17	INTERIOR SIGNAGE AND DOOR HARDWARE UPGRADES	142,924	22,868	165,792
ES5A	CLEMES01	4	18	EXTERIOR DOOR REPLACEMENT	14,483	2,317	16,801
ES4B	CLEMES03	4	19	BUILT-UP ROOF REPLACEMENT	68,831	11,013	79,844
ES5B	CLEMES02	4	20	WINDOW REPLACEMENT	71,482	11,437	82,919
HV2B	CLEMHV03	4	21	MODULAR COOLING EQUIPMENT REPLACEMENT	188,379	30,141	218,520
IS3B	CLEMIS03	4	22	REFINISH CEILINGS	45,321	0	45,321
PL2A	CLEMPL03	4	23	DRAIN PIPING REPLACEMENT	409,075	65,452	474,527
				Totals for Priority Class 4	**1,225,928**	**188,897**	**1,414,825**
				Grand Total:	**3,839,026**	**606,993**	**4,446,018**

Detailed Project Summary

Facility Condition Analysis

Project Cost Range

CLEM : CLEMENT RESIDENCE HALL

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Total Cost
HV5A	CLEMHV02	3	3	HEAT EXCHANGER REPLACEMENT	29,054	4,649	33,703
PL1E	CLEMPL01	3	9	DOMESTIC HOT WATER HEAT EXCHANGER REPLACEMENT	15,039	2,406	17,445
PL1B	CLEMPL04	3	10	DOMESTIC WATER BOOSTER PUMP REPLACEMENT	7,817	1,251	9,067
PL2B	CLEMPL05	3	11	REPLACE SUMP PUMPS	7,286	1,166	8,452
				Totals for Priority Class 3	**59,195**	**9,471**	**68,666**
AC2A	CLEMAC01	4	12	BUILDING ENTRY ACCESSIBILITY UPGRADES	40,487	6,478	46,965
AC4A	CLEMAC02	4	13	INTERIOR AMENITY ACCESSIBILITY UPGRADES	24,141	3,863	28,004
AC4A	CLEMAC04	4	15	ACCESSIBILITY UPGRADES FOR RESIDENTIAL FACILITIES	39,324	6,292	45,616
AC3E	CLEMAC05	4	14	RESTROOM ACCESSIBILITY UPGRADES	42,346	6,775	49,122
ES5A	CLEMES01	4	18	EXTERIOR DOOR REPLACEMENT	14,483	2,317	16,801
ES5B	CLEMES02	4	20	WINDOW REPLACEMENT	71,482	11,437	82,919
ES4B	CLEMES03	4	19	BUILT-UP ROOF REPLACEMENT	68,831	11,013	79,844
IS3B	CLEMIS03	4	22	REFINISH CEILINGS	45,321	0	45,321
				Totals for Priority Class 4	**346,416**	**48,175**	**394,591**
				Grand Totals for Projects < 100,000	**405,611**	**57,646**	**463,258**

Detailed Project Summary

Facility Condition Analysis

Project Cost Range

CLEM : CLEMENT RESIDENCE HALL

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Total Cost
HV5A	CLEMHV01	3	2	REPLACE HYDRONIC HEATING SYSTEM	331,958	53,113	385,071
EL4B	CLEMEL01	3	4	INTERIOR LIGHTING UPGRADE	195,406	31,265	226,671
PL1A	CLEMPL02	3	8	WATER SUPPLY PIPING REPLACEMENT	269,493	43,119	312,612
IS1A	CLEMIS01	3	6	REFINISH FLOORING	371,604	59,457	431,061
IS2B	CLEMIS02	3	7	REFINISH WALLS	176,016	28,163	204,179
				Totals for Priority Class 3	**1,344,477**	**215,116**	**1,559,593**
HV2B	CLEMHV03	4	21	MODULAR COOLING EQUIPMENT REPLACEMENT	188,379	30,141	218,520
PL2A	CLEMPL03	4	23	DRAIN PIPING REPLACEMENT	409,075	65,452	474,527
AC4B	CLEMAC03	4	17	INTERIOR SIGNAGE AND DOOR HARDWARE UPGRADES	142,924	22,868	165,792
AC3B	CLEMAC06	4	16	STAIR AND RAILING SAFETY UPGRADES	139,134	22,261	161,395
				Totals for Priority Class 4	**879,512**	**140,722**	**1,020,234**
				Grand Totals for Projects >= 100,000 and < 500,000	**2,223,989**	**355,838**	**2,579,827**

Detailed Project Summary

Facility Condition Analysis

Project Cost Range

CLEM : CLEMENT RESIDENCE HALL

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Total Cost
FS3A	CLEMFS01	2	1	FIRE SPRINKLER SYSTEM INSTALLATION	663,338	106,134	769,472
				Totals for Priority Class 2	**663,338**	**106,134**	**769,472**
EL3B	CLEMEL02	3	5	UPGRADE ELECTRICAL DISTRIBUTION NETWORK	546,088	87,374	633,462
				Totals for Priority Class 3	**546,088**	**87,374**	**633,462**
				Grand Totals for Projects >= 500,000	**1,209,426**	**193,508**	**1,402,934**
				Grand Totals For All Projects:	**3,839,026**	**606,993**	**4,446,018**

Detailed Project Summary

Facility Condition Analysis

Project Classification

CLEM : CLEMENT RESIDENCE HALL

Cat Code	Project Number	Pri. Seq.	Project Classification	Pri. Cls	Project Title	Total Cost
EL3B	CLEMEL02	5	Capital Renewal	3	UPGRADE ELECTRICAL DISTRIBUTION NETWORK	633,462
IS2B	CLEMIS02	7	Capital Renewal	3	REFINISH WALLS	204,179
ES5A	CLEMES01	18	Capital Renewal	4	EXTERIOR DOOR REPLACEMENT	16,801
ES4B	CLEMES03	19	Capital Renewal	4	BUILT-UP ROOF REPLACEMENT	79,844
ES5B	CLEMES02	20	Capital Renewal	4	WINDOW REPLACEMENT	82,919
IS3B	CLEMIS03	22	Capital Renewal	4	REFINISH CEILINGS	45,321
PL2A	CLEMPL03	23	Capital Renewal	4	DRAIN PIPING REPLACEMENT	474,527
					Totals for Capital Renewal	**1,537,052**
HV5A	CLEMHV01	2	Deferred Maintenance	3	REPLACE HYDRONIC HEATING SYSTEM	385,071
HV5A	CLEMHV02	3	Deferred Maintenance	3	HEAT EXCHANGER REPLACEMENT	33,703
EL4B	CLEMEL01	4	Deferred Maintenance	3	INTERIOR LIGHTING UPGRADE	226,671
IS1A	CLEMIS01	6	Deferred Maintenance	3	REFINISH FLOORING	431,061
PL1A	CLEMPL02	8	Deferred Maintenance	3	WATER SUPPLY PIPING REPLACEMENT	312,612
PL1E	CLEMPL01	9	Deferred Maintenance	3	DOMESTIC HOT WATER HEAT EXCHANGER REPLACEMENT	17,445
PL1B	CLEMPL04	10	Deferred Maintenance	3	DOMESTIC WATER BOOSTER PUMP REPLACEMENT	9,067
PL2B	CLEMPL05	11	Deferred Maintenance	3	REPLACE SUMP PUMPS	8,452
HV2B	CLEMHV03	21	Deferred Maintenance	4	MODULAR COOLING EQUIPMENT REPLACEMENT	218,520
					Totals for Deferred Maintenance	**1,642,601**
FS3A	CLEMFS01	1	Plant Adaption	2	FIRE SPRINKLER SYSTEM INSTALLATION	769,472
AC2A	CLEMAC01	12	Plant Adaption	4	BUILDING ENTRY ACCESSIBILITY UPGRADES	46,965
AC4A	CLEMAC02	13	Plant Adaption	4	INTERIOR AMENITY ACCESSIBILITY UPGRADES	28,004
AC3E	CLEMAC05	14	Plant Adaption	4	RESTROOM ACCESSIBILITY UPGRADES	49,122
AC4A	CLEMAC04	15	Plant Adaption	4	ACCESSIBILITY UPGRADES FOR RESIDENTIAL FACILITIES	45,616
AC3B	CLEMAC06	16	Plant Adaption	4	STAIR AND RAILING SAFETY UPGRADES	161,395
AC4B	CLEMAC03	17	Plant Adaption	4	INTERIOR SIGNAGE AND DOOR HARDWARE UPGRADES	165,792
					Totals for Plant Adaption	**1,266,365**
					Grand Total:	**4,446,018**

Detailed Project Summary

Facility Condition Analysis

Energy Conservation

CLEM : CLEMENT RESIDENCE HALL

Cat Code	Project Number	Pri Cls	Pri Seq	Project Title	Total Cost	Annual Savings	Simple Payback
EL4B	CLEMEL01	3	4	INTERIOR LIGHTING UPGRADE	226,671	7,900	28.69
				Totals for Priority Class 3	**226,671**	**7,900**	**28.69**
ES4B	CLEMES03	4	19	BUILT-UP ROOF REPLACEMENT	79,844	800	99.8
ES5B	CLEMES02	4	20	WINDOW REPLACEMENT	82,919	200	414.6
				Totals for Priority Class 4	**162,763**	**1,000**	**162.76**
				Grand Total:	**389,434**	**8,900**	**43.76**

Detailed Project Summary

Facility Condition Analysis

Category/System Code

CLEM : CLEMENT RESIDENCE HALL

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Total Cost
AC2A	CLEMAC01	4	12	BUILDING ENTRY ACCESSIBILITY UPGRADES	40,487	6,478	46,965
AC4A	CLEMAC02	4	13	INTERIOR AMENITY ACCESSIBILITY UPGRADES	24,141	3,863	28,004
AC3E	CLEMAC05	4	14	RESTROOM ACCESSIBILITY UPGRADES	42,346	6,775	49,122
AC4A	CLEMAC04	4	15	ACCESSIBILITY UPGRADES FOR RESIDENTIAL FACILITIES	39,324	6,292	45,616
AC3B	CLEMAC06	4	16	STAIR AND RAILING SAFETY UPGRADES	139,134	22,261	161,395
AC4B	CLEMAC03	4	17	INTERIOR SIGNAGE AND DOOR HARDWARE UPGRADES	142,924	22,868	165,792
				Totals for System Code: ACCESSIBILITY	**428,356**	**68,537**	**496,893**
EL4B	CLEMEL01	3	4	INTERIOR LIGHTING UPGRADE	195,406	31,265	226,671
EL3B	CLEMEL02	3	5	UPGRADE ELECTRICAL DISTRIBUTION NETWORK	546,088	87,374	633,462
				Totals for System Code: ELECTRICAL	**741,493**	**118,639**	**860,132**
ES5A	CLEMES01	4	18	EXTERIOR DOOR REPLACEMENT	14,483	2,317	16,801
ES4B	CLEMES03	4	19	BUILT-UP ROOF REPLACEMENT	68,831	11,013	79,844
ES5B	CLEMES02	4	20	WINDOW REPLACEMENT	71,482	11,437	82,919
				Totals for System Code: EXTERIOR	**154,796**	**24,767**	**179,564**
FS3A	CLEMFS01	2	1	FIRE SPRINKLER SYSTEM INSTALLATION	663,338	106,134	769,472
				Totals for System Code: FIRE/LIFE SAFETY	**663,338**	**106,134**	**769,472**
HV5A	CLEMHV01	3	2	REPLACE HYDRONIC HEATING SYSTEM	331,958	53,113	385,071
HV5A	CLEMHV02	3	3	HEAT EXCHANGER REPLACEMENT	29,054	4,649	33,703
HV2B	CLEMHV03	4	21	MODULAR COOLING EQUIPMENT REPLACEMENT	188,379	30,141	218,520
				Totals for System Code: HVAC	**549,391**	**87,903**	**637,294**
IS1A	CLEMIS01	3	6	REFINISH FLOORING	371,604	59,457	431,061
IS2B	CLEMIS02	3	7	REFINISH WALLS	176,016	28,163	204,179
IS3B	CLEMIS03	4	22	REFINISH CEILINGS	45,321	0	45,321
				Totals for System Code: INTERIOR/FINISH SYS.	**592,941**	**87,619**	**680,561**
PL1A	CLEMPL02	3	8	WATER SUPPLY PIPING REPLACEMENT	269,493	43,119	312,612
PL1E	CLEMPL01	3	9	DOMESTIC HOT WATER HEAT EXCHANGER REPLACEMENT	15,039	2,406	17,445
PL1B	CLEMPL04	3	10	DOMESTIC WATER BOOSTER PUMP REPLACEMENT	7,817	1,251	9,067
PL2B	CLEMPL05	3	11	REPLACE SUMP PUMPS	7,286	1,166	8,452
PL2A	CLEMPL03	4	23	DRAIN PIPING REPLACEMENT	409,075	65,452	474,527
				Totals for System Code: PLUMBING	**708,709**	**113,393**	**822,103**
				Grand Total:	**3,839,026**	**606,993**	**4,446,018**

FACILITY CONDITION ANALYSIS

SECTION 3

SPECIFIC PROJECT DETAILS ILLUSTRATING DESCRIPTION / COST

Specific Project Details

Facility Condition Analysis
Section Three
CLEM : CLEMENT RESIDENCE HALL

Project Description

Project Number:	CLEMFS01	**Title:**	FIRE SPRINKLER SYSTEM INSTALLATION
Priority Sequence:	1		
Priority Class:	2		
Category Code:	FS3A	**System:**	FIRE/LIFE SAFETY
		Component:	SUPPRESSION
		Element:	SPRINKLERS
Building Code:	CLEM		
Building Name:	CLEMENT RESIDENCE HALL		
Subclass/Savings:	Not Applicable		
Code Application:	NFPA 1, 13, 13R, 101		
Project Class:	Plant Adaption		
Project Date:	10/14/2009		
Project Location:	Floor-wide: Floor(s) 1, 10, 2, 3, 4, 5, 6, 7, 8, 9		

Project Description

Install an automatic fire sprinkler system in unprotected areas throughout the facility. This includes piping, valves, sprinkler heads, and piping supports. Install flow switches and sensors to interface with the fire alarm system. Cost has been included in this project for the installation of a fire pump, if necessary.

Specific Project Details

Facility Condition Analysis
Section Three
CLEM : CLEMENT RESIDENCE HALL

Project Cost

Project Number: CLEMFS01

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Install a wet-pipe sprinkler system, including valves, piping, sprinkler heads, piping supports, etc.	SF	86,044	$3.08	$265,016	$3.77	$324,386	$589,401
Fire pump, controls, piping, valves, and connections	GPM	1,000	$115	$115,410	$6.40	$6,400	$121,810
Project Totals:				**$380,426**		**$330,786**	**$711,211**

Material/Labor Cost		$711,211
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$552,782
General Contractor Mark Up at 20.0%	+	$110,556
Construction Cost		$663,338
Professional Fees at 16.0%	+	$106,134
Total Project Cost		**$769,472**

Specific Project Details

Facility Condition Analysis
Section Three
CLEM : CLEMENT RESIDENCE HALL

Project Description

Project Number:	CLEMHV01	**Title:**	REPLACE HYDRONIC HEATING SYSTEM
Priority Sequence:	2		
Priority Class:	3		
Category Code:	HV5A	**System:**	HVAC
		Component:	STEAM/HYDRONIC DISTRIB.
		Element:	PIPING NETWORK
Building Code:	CLEM		
Building Name:	CLEMENT RESIDENCE HALL		
Subclass/Savings:	Not Applicable		
Code Application:	Not Applicable		
Project Class:	Deferred Maintenance		
Project Date:	10/14/2009		
Project Location:	Floor-wide: Floor(s) 10, 2, 3, 4, 5, 6, 7, 8, 9		

Project Description

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

Specific Project Details

Facility Condition Analysis
Section Three
CLEM : CLEMENT RESIDENCE HALL

Project Cost

Project Number: CLEMHV01

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Replace hydronic heating system including piping, radiators, unit heaters, and demolition	SF	51,626	$3.10	$160,041	$4.36	$225,089	$385,130
Project Totals:				**$160,041**		**$225,089**	**$385,130**

Material/Labor Cost		$385,130
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$276,632
General Contractor Mark Up at 20.0%	+	$55,326
Construction Cost		$331,958
Professional Fees at 16.0%	+	$53,113
Total Project Cost		**$385,071**

Specific Project Details

Facility Condition Analysis
Section Three
CLEM : CLEMENT RESIDENCE HALL

Project Description

Project Number:	CLEMHV02	**Title:**	HEAT EXCHANGER REPLACEMENT
Priority Sequence:	3		
Priority Class:	3		
Category Code:	HV5A	**System:**	HVAC
		Component:	STEAM/HYDRONIC DISTRIB.
		Element:	PIPING NETWORK
Building Code:	CLEM		
Building Name:	CLEMENT RESIDENCE HALL		
Subclass/Savings:	Not Applicable		
Code Application:	Not Applicable		
Project Class:	Deferred Maintenance		
Project Date:	10/14/2009		
Project Location:	Item Only: Floor(s) 1		

Project Description

The hot water heating system is served by a heat exchanger that is approaching the end of its expected life cycle. Such systems become increasingly maintenance intensive and problematic after twenty years of service. Scheduled replacement of this critical system is recommended.

Specific Project Details

Facility Condition Analysis
Section Three
CLEM : CLEMENT RESIDENCE HALL

Project Cost

Project Number: CLEMHV02

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Heating water converter (60 gpm for each HP of circulating pump capacity)	GPM	360	$60.74	$21,866	$11.87	$4,273	$26,140
Project Totals:				**$21,866**		**$4,273**	**$26,140**

Material/Labor Cost		$26,140
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$24,212
General Contractor Mark Up at 20.0%	+	$4,842
Construction Cost		$29,054
Professional Fees at 16.0%	+	$4,649
Total Project Cost		**$33,703**

Specific Project Details

Facility Condition Analysis
Section Three
CLEM : CLEMENT RESIDENCE HALL

Project Description

Project Number:	CLEMEL01	**Title:**	INTERIOR LIGHTING UPGRADE
Priority Sequence:	4		
Priority Class:	3		
Category Code:	EL4B	**System:**	ELECTRICAL
		Component:	DEVICES AND FIXTURES
		Element:	INTERIOR LIGHTING

Building Code:	CLEM	
Building Name:	CLEMENT RESIDENCE HALL	
Subclass/Savings:	Energy Conservation	$7,900

Code Application:	NEC	Articles 210, 410

Project Class:	Deferred Maintenance
Project Date:	10/14/2009
Project Location:	Floor-wide: Floor(s) 10, 2, 3, 4, 5, 6, 7, 8, 9

Project Description

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

Specific Project Details

Facility Condition Analysis
Section Three
CLEM : CLEMENT RESIDENCE HALL

Project Cost

Project Number: CLEMEL01

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
High efficiency fluorescent fixtures, occupancy sensors, and demolition of existing lighting	SF	51,626	$1.93	$99,638	$2.36	$121,837	$221,476
Project Totals:				**$99,638**		**$121,837**	**$221,476**

Material/Labor Cost		$221,476
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$162,838
General Contractor Mark Up at 20.0%	+	$32,568
Construction Cost		$195,406
Professional Fees at 16.0%	+	$31,265
Total Project Cost		**$226,671**

Specific Project Details

Facility Condition Analysis
Section Three
CLEM : CLEMENT RESIDENCE HALL

Project Description

Project Number:	CLEMEL02	**Title:**	UPGRADE ELECTRICAL DISTRIBUTION NETWORK
Priority Sequence:	5		
Priority Class:	3		
Category Code:	EL3B	**System:**	ELECTRICAL
		Component:	SECONDARY DISTRIBUTION
		Element:	DISTRIBUTION NETWORK
Building Code:	CLEM		
Building Name:	CLEMENT RESIDENCE HALL		
Subclass/Savings:	Not Applicable		

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

Project Class: Capital Renewal

Project Date: 10/14/2009

Project Location: Floor-wide: Floor(s) 1, 10, 2, 3, 4, 5, 6, 7, 8, 9

Project Description

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

Specific Project Details

Facility Condition Analysis
Section Three
CLEM : CLEMENT RESIDENCE HALL

Project Cost

Project Number: CLEMEL02

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	86,044	$2.98	$256,411	$4.46	$383,756	$640,167
Project Totals:				**$256,411**		**$383,756**	**$640,167**

Material/Labor Cost		$640,167
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$455,073
General Contractor Mark Up at 20.0%	+	$91,015
Construction Cost		$546,088
Professional Fees at 16.0%	+	$87,374
Total Project Cost		**$633,462**

Specific Project Details

Facility Condition Analysis
Section Three
CLEM : CLEMENT RESIDENCE HALL

Project Description

Project Number:	CLEMIS01	**Title:**	REFINISH FLOORING
Priority Sequence:	6		
Priority Class:	3		
Category Code:	IS1A	**System:**	INTERIOR/FINISH SYS.
		Component:	FLOOR
		Element:	FINISHES-DRY
Building Code:	CLEM		
Building Name:	CLEMENT RESIDENCE HALL		
Subclass/Savings:	Not Applicable		
Code Application:	Not Applicable		
Project Class:	Deferred Maintenance		
Project Date:	10/20/2009		
Project Location:	Floor-wide: Floor(s) 1, 10, 2, 3, 4, 5, 6, 7, 8, 9		

Project Description

The common areas, such as the corridors, study lounges, social rooms, and the coordinator’s office, are generally carpeted, with the exception of the first floor common areas and the living, recreation, and vending rooms, which are primarily terrazzo. The dorm rooms have vinyl floor tile, as do the laundry and housekeeping areas. Carpet and vinyl tile floor finish upgrades should be considered as part of any future cosmetic improvements or major comprehensive renovation efforts.

Specific Project Details

Facility Condition Analysis
Section Three
CLEM : CLEMENT RESIDENCE HALL

Project Cost

Project Number: CLEMIS01

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Carpet	SF	27,500	$5.36	$147,400	$2.00	$55,000	$202,400
Vinyl floor tile	SF	27,500	$3.53	$97,075	$2.50	$68,750	$165,825
Project Totals:				**$244,475**		**$123,750**	**$368,225**

Material/Labor Cost		$368,225
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$309,670
General Contractor Mark Up at 20.0%	+	$61,934
Construction Cost		$371,604
Professional Fees at 16.0%	+	$59,457
Total Project Cost		**$431,061**

Specific Project Details

Facility Condition Analysis
Section Three
CLEM : CLEMENT RESIDENCE HALL

Project Description

Project Number:	CLEMIS02	**Title:**	REFINISH WALLS
Priority Sequence:	7		
Priority Class:	3		
Category Code:	IS2B	**System:**	INTERIOR/FINISH SYS.
		Component:	PARTITIONS
		Element:	FINISHES
Building Code:	CLEM		
Building Name:	CLEMENT RESIDENCE HALL		
Subclass/Savings:	Not Applicable		
Code Application:	Not Applicable		
Project Class:	Capital Renewal		
Project Date:	10/20/2009		
Project Location:	Floor-wide: Floor(s) 1, 10, 2, 3, 4, 5, 6, 7, 8, 9		

Project Description

The interior walls are all painted and constructed of either masonry block or sheetrock partitions. Wall finish upgrades should be considered as part of any future cosmetic improvements or major comprehensive renovation efforts.

Specific Project Details

Facility Condition Analysis
Section Three
CLEM : CLEMENT RESIDENCE HALL

Project Cost

Project Number: CLEMIS02

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	250,000	$0.17	$42,500	$0.81	$202,500	$245,000
Project Totals:				**$42,500**		**$202,500**	**$245,000**

Material/Labor Cost		$245,000
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$146,680
General Contractor Mark Up at 20.0%	+	$29,336
Construction Cost		$176,016
Professional Fees at 16.0%	+	$28,163
Total Project Cost		**$204,179**

Specific Project Details

Facility Condition Analysis
Section Three
CLEM : CLEMENT RESIDENCE HALL

Project Description

Project Number:	CLEMPL02	**Title:**	WATER SUPPLY PIPING REPLACEMENT
Priority Sequence:	8		
Priority Class:	3		
Category Code:	PL1A	**System:**	PLUMBING
		Component:	DOMESTIC WATER
		Element:	PIPING NETWORK
Building Code:	CLEM		
Building Name:	CLEMENT RESIDENCE HALL		
Subclass/Savings:	Not Applicable		
Code Application:	IPC Chapter 6		
Project Class:	Deferred Maintenance		
Project Date:	10/14/2009		
Project Location:	Floor-wide: Floor(s) 1, 10, 2, 3, 4, 5, 6, 7, 8, 9		

Project Description

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

Specific Project Details

Facility Condition Analysis
Section Three
CLEM : CLEMENT RESIDENCE HALL

Project Cost

Project Number: CLEMPL02

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	86,044	$1.14	$98,090	$2.85	$245,225	$343,316
Project Totals:				**$98,090**		**$245,225**	**$343,316**

Material/Labor Cost		$343,316
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$224,577
General Contractor Mark Up at 20.0%	+	$44,915
Construction Cost		$269,493
Professional Fees at 16.0%	+	$43,119
Total Project Cost		**$312,612**

Specific Project Details

Facility Condition Analysis
Section Three
CLEM : CLEMENT RESIDENCE HALL

Project Description

Project Number:	CLEMPL01	**Title:**	DOMESTIC HOT WATER HEAT EXCHANGER REPLACEMENT
Priority Sequence:	9		
Priority Class:	3		
Category Code:	PL1E	**System:**	PLUMBING
		Component:	DOMESTIC WATER
		Element:	HEATING
Building Code:	CLEM		
Building Name:	CLEMENT RESIDENCE HALL		
Subclass/Savings:	Not Applicable		
Code Application:	Not Applicable		
Project Class:	Deferred Maintenance		
Project Date:	10/14/2009		
Project Location:	Item Only: Floor(s) 1		

Project Description

Replacement of the domestic hot water converter is recommended. With age, heat exchanger efficiency is reduced by internal tube scaling. Internal wear will eventually lead to failure, allowing contaminates to enter the water system. Remove the existing system. Install a new heat exchanger, pumps, piping, and controls as needed.

Specific Project Details

Facility Condition Analysis
Section Three
CLEM : CLEMENT RESIDENCE HALL

Project Cost

Project Number: CLEMPL01

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Heat exchanger, pumps, piping, valves, controls, insulation, demolition	GPM	48	$183	$8,789	$150	$7,177	$15,966
Project Totals:				**$8,789**		**$7,177**	**$15,966**

Material/Labor Cost		$15,966
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$12,532
General Contractor Mark Up at 20.0%	+	$2,506
Construction Cost		$15,039
Professional Fees at 16.0%	+	$2,406
Total Project Cost		**$17,445**

Specific Project Details

Facility Condition Analysis
Section Three
CLEM : CLEMENT RESIDENCE HALL

Project Description

Project Number:	CLEMPL04	**Title:**	DOMESTIC WATER BOOSTER PUMP REPLACEMENT
Priority Sequence:	10		
Priority Class:	3		
Category Code:	PL1B	**System:**	PLUMBING
		Component:	DOMESTIC WATER
		Element:	PUMPS
Building Code:	CLEM		
Building Name:	CLEMENT RESIDENCE HALL		
Subclass/Savings:	Not Applicable		
Code Application:	Not Applicable		
Project Class:	Deferred Maintenance		
Project Date:	10/14/2009		
Project Location:	Item Only: Floor(s) 1		

Project Description

The domestic water booster pump system will require replacement within the scope of this analysis. This work includes all pumps, motors, controllers, and connections. Specify a high efficiency system, and incorporate variable frequency drives, if possible.

Project Cost

Project Number: CLEMPL04

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Domestic water booster pump system, includes demolition of existing equipment	SYS	1	$5,730	$5,730	$1,450	$1,450	$7,180
Project Totals:				**$5,730**		**$1,450**	**$7,180**

Material/Labor Cost		$7,180
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$6,514
General Contractor Mark Up at 20.0%	+	$1,303
Construction Cost		$7,817
Professional Fees at 16.0%	+	$1,251
Total Project Cost		**$9,067**

Specific Project Details

Facility Condition Analysis
Section Three
CLEM : CLEMENT RESIDENCE HALL

Project Description

Project Number:	CLEMPL05	**Title:**	REPLACE SUMP PUMPS
Priority Sequence:	11		
Priority Class:	3		
Category Code:	PL2B	**System:**	PLUMBING
		Component:	WASTEWATER
		Element:	PUMPS
Building Code:	CLEM		
Building Name:	CLEMENT RESIDENCE HALL		
Subclass/Savings:	Not Applicable		
Code Application:	IPC 712		
Project Class:	Deferred Maintenance		
Project Date:	10/14/2009		
Project Location:	Item Only: Floor(s) 1		

Project Description

Replacement of the sump pump system is recommended. Install a new duplex sump pump system, including pit, pumps, alternating controls, alarms, piping, and electrical connections.

Specific Project Details

Facility Condition Analysis
Section Three
CLEM : CLEMENT RESIDENCE HALL

Project Cost

Project Number: CLEMPL05

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Sump pump system, including pit, pumps, controls, connections, and demolition of existing system	SYS	1	$4,440	$4,440	$3,120	$3,120	$7,560
Project Totals:				**$4,440**		**$3,120**	**$7,560**

Material/Labor Cost		$7,560
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$6,072
General Contractor Mark Up at 20.0%	+	$1,214
Construction Cost		$7,286
Professional Fees at 16.0%	+	$1,166
Total Project Cost		**$8,452**

Specific Project Details

Facility Condition Analysis
Section Three
CLEM : CLEMENT RESIDENCE HALL

Project Description

Project Number:	CLEMAC01	**Title:**	BUILDING ENTRY ACCESSIBILITY UPGRADES
Priority Sequence:	12		
Priority Class:	4		
Category Code:	AC2A	**System:**	ACCESSIBILITY
		Component:	BUILDING ENTRY
		Element:	GENERAL
Building Code:	CLEM		
Building Name:	CLEMENT RESIDENCE HALL		
Subclass/Savings:	Not Applicable		

Code Application: ADAAG 403.6, 505

Project Class:	Plant Adaption
Project Date:	10/20/2009
Project Location:	Undefined: Floor(s) 1

Project Description

Building entrances are required to be wheelchair accessible. There are several sidewalks immediately adjacent and leading to the building with slopes of sufficient grade to require the installation of handrails in accordance with handicapped accessibility guidelines. It is recommended that ADA compliant, painted metal handrails be installed at the main sidewalk / plaza leading to the facility from the east and the switchback sidewalk immediately to the north of the facility.

Specific Project Details

Facility Condition Analysis
Section Three
CLEM : CLEMENT RESIDENCE HALL

Project Cost

Project Number: CLEMAC01

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Freestanding handrail system, painted	LF	200	$91.11	$18,222	$150	$30,000	$48,222
Project Totals:				**$18,222**		**$30,000**	**$48,222**

Material/Labor Cost		$48,222
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$33,740
General Contractor Mark Up at 20.0%	+	$6,748
Construction Cost		$40,487
Professional Fees at 16.0%	+	$6,478
Total Project Cost		**$46,965**

Specific Project Details

Facility Condition Analysis
Section Three
CLEM : CLEMENT RESIDENCE HALL

Project Description

Project Number:	CLEMAC02	**Title:**	INTERIOR AMENITY ACCESSIBILITY UPGRADES
Priority Sequence:	13		
Priority Class:	4		
Category Code:	AC4A	**System:**	ACCESSIBILITY
		Component:	GENERAL
		Element:	FUNCTIONAL SPACE MOD.
Building Code:	CLEM		
Building Name:	CLEMENT RESIDENCE HALL		
Subclass/Savings:	Not Applicable		

Code Application:	ADAAG	211, 602, 804

Project Class:	Plant Adaption
Project Date:	10/20/2009
Project Location:	Floor-wide: Floor(s) 1, 10, 2, 3, 4, 5, 6, 7, 8, 9

Project Description

Current accessibility legislation requires that building amenities be generally accessible to all persons. The configurations of the kitchenette in the visiting guest suite and the drinking water fountains on each floor are barriers to accessibility. The installation of wheelchair accessible kitchenette cabinetry and refrigerated, dual level drinking fountains is recommended where applicable.

Specific Project Details

Facility Condition Analysis
Section Three
CLEM : CLEMENT RESIDENCE HALL

Project Cost

Project Number: CLEMAC02

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
ADA compliant kitchenette unit with base cabinetry, overhead cabinetry, and amenities	SYS	1	$4,894	$4,894	$1,999	$1,999	$6,893
Dual level drinking fountain	EA	10	$1,216	$12,160	$374	$3,740	$15,900
Project Totals:				**$17,054**		**$5,739**	**$22,793**

Material/Labor Cost		$22,793
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$20,117
General Contractor Mark Up at 20.0%	+	$4,024
Construction Cost		$24,141
Professional Fees at 16.0%	+	$3,863
Total Project Cost		**$28,004**

Specific Project Details

Facility Condition Analysis
Section Three
CLEM : CLEMENT RESIDENCE HALL

Project Description

Project Number:	CLEMAC05	**Title:**	RESTROOM ACCESSIBILITY UPGRADES
Priority Sequence:	14		
Priority Class:	4		
Category Code:	AC3E	**System:**	ACCESSIBILITY
		Component:	INTERIOR PATH OF TRAVEL
		Element:	RESTROOMS/BATHROOMS
Building Code:	CLEM		
Building Name:	CLEMENT RESIDENCE HALL		
Subclass/Savings:	Not Applicable		

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

Project Class:	Plant Adaption
Project Date:	10/20/2009
Project Location:	Floor-wide: Floor(s) 10, 2, 3, 4, 5, 6, 7, 8, 9

Project Description

The overall level of bathroom accessibility is good, but short of full compliance with modern accessibility legislation. While the clearances and clear floor spaces are adequate, the installation of compliant mirrors and new accessible plumbing fixtures is recommended.

Specific Project Details

Facility Condition Analysis
Section Three
CLEM : CLEMENT RESIDENCE HALL

Project Cost

Project Number: CLEMAC05

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Mirror	EA	9	$292	$2,628	$224	$2,016	$4,644
ADA compliant plumbing fixture	EA	27	$810	$21,870	$692	$18,684	$40,554
Project Totals:				**$24,498**		**$20,700**	**$45,198**

Material/Labor Cost		$45,198
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$35,289
General Contractor Mark Up at 20.0%	+	$7,058
Construction Cost		$42,346
Professional Fees at 16.0%	+	$6,775
Total Project Cost		**$49,122**

Specific Project Details

Facility Condition Analysis
Section Three
CLEM : CLEMENT RESIDENCE HALL

Project Description

Project Number:	CLEMAC04	**Title:**	ACCESSIBILITY UPGRADES FOR RESIDENTIAL FACILITIES
Priority Sequence:	15		
Priority Class:	4		
Category Code:	AC4A	**System:**	ACCESSIBILITY
		Component:	GENERAL
		Element:	FUNCTIONAL SPACE MOD.
Building Code:	CLEM		
Building Name:	CLEMENT RESIDENCE HALL		
Subclass/Savings:	Not Applicable		

Code Application:	ADAAG	224, 806.1, 603, 604, 605, 606, 607, 608

Project Class:	Plant Adaption
Project Date:	10/20/2009
Project Location:	Undefined: Floor(s) 1

Project Description

The minimal accessibility features in this residential facility are primarily aimed at handicapped guests. There is a handicapped accessible unisex restroom on the first floor by the mailroom, and some minor modifications have been made in the bathrooms on each floor. Provisions for resident accessibility are recommended. These should include the installation of ADA compliant signage, a wheelchair accessible bathroom facility, accessible storage space, specialized alarms, lever door hardware, and the adaptation of a sleeping room. To comply with the intent of the current accessibility legislation, it is recommended that at least two residential units be converted for handicapped access.

Specific Project Details

Facility Condition Analysis
Section Three
CLEM : CLEMENT RESIDENCE HALL

Project Cost

Project Number: CLEMAC04

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Sleeping room specialty alarms, etc.	SYS	2	$3,176	$6,352	$1,635	$3,270	$9,622
Bath accessibility upgrade	SYS	2	$8,420	$16,840	$7,542	$15,084	$31,924
Project Totals:				**$23,192**		**$18,354**	**$41,546**

Material/Labor Cost		$41,546
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$32,770
General Contractor Mark Up at 20.0%	+	$6,554
Construction Cost		$39,324
Professional Fees at 16.0%	+	$6,292
Total Project Cost		**$45,616**

Specific Project Details

Facility Condition Analysis
Section Three
CLEM : CLEMENT RESIDENCE HALL

Project Description

Project Number:	CLEMAC06	**Title:**	STAIR AND RAILING SAFETY UPGRADES
Priority Sequence:	16		
Priority Class:	4		
Category Code:	AC3B	**System:**	ACCESSIBILITY
		Component:	INTERIOR PATH OF TRAVEL
		Element:	STAIRS AND RAILINGS
Building Code:	CLEM		
Building Name:	CLEMENT RESIDENCE HALL		
Subclass/Savings:	Not Applicable		

Code Application:	IBC	1003.3
	ADAAG	505

Project Class:	Plant Adaption
Project Date:	10/20/2009
Project Location:	Floor-wide: Floor(s) 1, 10, 2, 3, 4, 5, 6, 7, 8, 9

Project Description

Accessibility legislation requires that stairs have graspable handrails on both sides, rails with specific cross-sectional geometry, and handrails that extend horizontally at the landings. In addition, guardrails must prevent the passage of a 4 inch diameter sphere (6 inches in the triangle formed by the lower rail and tread / riser angle). Although the stairs are compliant with the code enforced at the time of construction until a major renovation occurs, they are deficient in handrail and guardrail design relative to current standards. Future renovation efforts should include comprehensive stair railing upgrades.

Project Cost

Project Number: CLEMAC06

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Wall-mounted handrail system per floor	FLR	18	$573	$10,314	$521	$9,378	$19,692
Center handrail / guardrail system per floor	FLR	18	$1,297	$23,346	$833	$14,994	$38,340
Railing system up to 42 inches high with pickets at 4 1/2 inches on center	LF	550	$107	$58,850	$36.45	$20,048	$78,898
Project Totals:				**$92,510**		**$44,420**	**$136,930**

Material/Labor Cost		$136,930
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$115,945
General Contractor Mark Up at 20.0%	+	$23,189
Construction Cost		$139,134
Professional Fees at 16.0%	+	$22,261
Total Project Cost		**$161,395**

Specific Project Details

Facility Condition Analysis
Section Three
CLEM : CLEMENT RESIDENCE HALL

Project Description

Project Number:	CLEMAC03	**Title:**	INTERIOR SIGNAGE AND DOOR HARDWARE UPGRADES
Priority Sequence:	17		
Priority Class:	4		
Category Code:	AC4B	**System:**	ACCESSIBILITY
		Component:	GENERAL
		Element:	OTHER
Building Code:	CLEM		
Building Name:	CLEMENT RESIDENCE HALL		
Subclass/Savings:	Not Applicable		

Code Application: ADAAG 309.4, 703.1

Project Class: Plant Adaption

Project Date: 10/20/2009

Project Location: Floor-wide: Floor(s) 1, 10, 2, 3, 4, 5, 6, 7, 8, 9

Project Description

While the interior doors are suitable for ten future years of service, the knob actuated hardware is a barrier to accessibility. Accessibility legislation requires that door hardware be designed for operation by those with little or no ability to grasp objects with their hands. To comply with the intent of this legislation, it is recommended that lever handle door hardware be installed on all doors that currently still have knobs. In addition, the signage to the permanent spaces is not compliant. Upgrade all non-compliant signage to conform to appropriate accessibility standards, which includes specific size, graphical, Braille, height, and location requirements. This scope includes all directional signage.

Specific Project Details

Facility Condition Analysis
Section Three
CLEM : CLEMENT RESIDENCE HALL

Project Cost

Project Number: CLEMAC03

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
ADA compliant signage	EA	320	$53.11	$16,995	$15.62	$4,998	$21,994
Lever actuated door hardware	EA	320	$273	$87,360	$69.77	$22,326	$109,686
Project Totals:				**$104,355**		**$27,325**	**$131,680**

Material/Labor Cost		$131,680
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$119,103
General Contractor Mark Up at 20.0%	+	$23,821
Construction Cost		$142,924
Professional Fees at 16.0%	+	$22,868
Total Project Cost		**$165,792**

Specific Project Details

Facility Condition Analysis
Section Three
CLEM : CLEMENT RESIDENCE HALL

Project Description

Project Number:	CLEMES01	**Title:**	EXTERIOR DOOR REPLACEMENT
Priority Sequence:	18		
Priority Class:	4		
Category Code:	ES5A	**System:**	EXTERIOR
		Component:	FENESTRATIONS
		Element:	DOORS
Building Code:	CLEM		
Building Name:	CLEMENT RESIDENCE HALL		
Subclass/Savings:	Not Applicable		
Code Application:	Not Applicable		
Project Class:	Capital Renewal		
Project Date:	10/20/2009		
Project Location:	Building-wide: Floor(s) 1		

Project Description

It is recommended that aged and inefficient primary glass storefront door systems be replaced. The replacement units should maintain the architectural design aspects of this facility and should be modern, energy-efficient applications. The remaining doors are satisfactory.

Specific Project Details

Facility Condition Analysis
Section Three
CLEM : CLEMENT RESIDENCE HALL

Project Cost

Project Number: CLEMES01

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
High traffic door system	LEAF	4	$1,978	$7,912	$1,999	$7,996	$15,908
Project Totals:				**$7,912**		**$7,996**	**$15,908**

Material/Labor Cost		$15,908
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$12,069
General Contractor Mark Up at 20.0%	+	$2,414
Construction Cost		$14,483
Professional Fees at 16.0%	+	$2,317
Total Project Cost		**$16,801**

Specific Project Details

Facility Condition Analysis
Section Three
CLEM : CLEMENT RESIDENCE HALL

Project Description

Project Number:	CLEMES03	**Title:**	BUILT-UP ROOF REPLACEMENT
Priority Sequence:	19		
Priority Class:	4		
Category Code:	ES4B	**System:**	EXTERIOR
		Component:	ROOF
		Element:	REPLACEMENT
Building Code:	CLEM		
Building Name:	CLEMENT RESIDENCE HALL		
Subclass/Savings:	Energy Conservation $800		
Code Application:	Not Applicable		
Project Class:	Capital Renewal		
Project Date:	10/20/2009		
Project Location:	Floor-wide: Floor(s) R		

Project Description

The rolled asphalt built-up roofing is not expected to outlast the scope of this analysis. Future budget modeling should include a provision for the replacement of the entire roof system in the next ten years. Replace this roof with a similar application or campus standard.

Specific Project Details

Facility Condition Analysis
Section Three
CLEM : CLEMENT RESIDENCE HALL

Project Cost

Project Number: CLEMES03

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	8,700	$4.00	$34,800	$5.00	$43,500	$78,300
Project Totals:				**$34,800**		**$43,500**	**$78,300**

Material/Labor Cost		$78,300
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$57,359
General Contractor Mark Up at 20.0%	+	$11,472
Construction Cost		$68,831
Professional Fees at 16.0%	+	$11,013
Total Project Cost		**$79,844**

Specific Project Details

Facility Condition Analysis
Section Three
CLEM : CLEMENT RESIDENCE HALL

Project Description

Project Number:	CLEMES02	**Title:**	WINDOW REPLACEMENT
Priority Sequence:	20		
Priority Class:	4		
Category Code:	ES5B	**System:**	EXTERIOR
		Component:	FENESTRATIONS
		Element:	WINDOWS
Building Code:	CLEM		
Building Name:	CLEMENT RESIDENCE HALL		
Subclass/Savings:	Energy Conservation $200		
Code Application:	Not Applicable		
Project Class:	Capital Renewal		
Project Date:	10/20/2009		
Project Location:	Building-wide: Floor(s) 1		

Project Description

The original single-pane, aluminum-framed windows on the first floor should 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
CLEM : CLEMENT RESIDENCE HALL

Project Cost

Project Number: CLEMES02

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	780	$57.27	$44,671	$36.45	$28,431	$73,102
Project Totals:				**$44,671**		**$28,431**	**$73,102**

Material/Labor Cost		$73,102
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$59,568
General Contractor Mark Up at 20.0%	+	$11,914
Construction Cost		$71,482
Professional Fees at 16.0%	+	$11,437
Total Project Cost		**$82,919**

Specific Project Details

Facility Condition Analysis
Section Three
CLEM : CLEMENT RESIDENCE HALL

Project Description

Project Number:	CLEMHV03	**Title:**	MODULAR COOLING EQUIPMENT REPLACEMENT
Priority Sequence:	21		
Priority Class:	4		
Category Code:	HV2B	**System:**	HVAC
		Component:	COOLING
		Element:	HEAT REJECTION
Building Code:	CLEM		
Building Name:	CLEMENT RESIDENCE HALL		
Subclass/Savings:	Not Applicable		
Code Application:	Not Applicable		
Project Class:	Deferred Maintenance		
Project Date:	10/14/2009		
Project Location:	Floor-wide: Floor(s) 10, 2, 3, 4, 5, 6, 7, 8, 9		

Project Description

Replacement of the existing through-wall air conditioners is recommended. Remove the existing units. Install new units of the latest energy-efficient design.

Specific Project Details

Facility Condition Analysis
Section Three
CLEM : CLEMENT RESIDENCE HALL

Project Cost

Project Number: CLEMHV03

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Through-wall air conditioner, connections, and demolition	TON	140	$843	$118,020	$531	$74,340	$192,360
Project Totals:				**$118,020**		**$74,340**	**$192,360**

Material/Labor Cost		$192,360
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$156,983
General Contractor Mark Up at 20.0%	+	$31,397
Construction Cost		$188,379
Professional Fees at 16.0%	+	$30,141
Total Project Cost		**$218,520**

Specific Project Details

Facility Condition Analysis
Section Three
CLEM : CLEMENT RESIDENCE HALL

Project Description

Project Number:	CLEMIS03	**Title:**	REFINISH CEILINGS
Priority Sequence:	22		
Priority Class:	4		
Category Code:	IS3B	**System:**	INTERIOR/FINISH SYS.
		Component:	CEILINGS
		Element:	REPLACEMENT
Building Code:	CLEM		
Building Name:	CLEMENT RESIDENCE HALL		
Subclass/Savings:	Not Applicable		
Code Application:	Not Applicable		
Project Class:	Capital Renewal		
Project Date:	10/20/2009		
Project Location:	Floor-wide: Floor(s) 1, 10, 2, 3, 4, 5, 6, 7, 8, 9		

Project Description

Most of the ceilings are painted, although there are some suspended grid, acoustical tile systems in the first floor common areas. An upgrade of the painted ceilings is recommended. Also, there is an area of suspended ceiling in the first floor coordinator's office that should be replaced within the next ten years.

Specific Project Details

Facility Condition Analysis
Section Three
CLEM : CLEMENT RESIDENCE HALL

Project Cost

Project Number: CLEMIS03

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	700	$2.12	$1,484	$2.98	$2,086	$3,570
Painted ceiling finish application	SF	60,000	$0.17	$10,200	$0.81	$48,600	$58,800
Project Totals:				**$11,684**		**$50,686**	**$62,370**

Material/Labor Cost		$62,370
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$37,768
General Contractor Mark Up at 20.0%	+	$7,554
Construction Cost		$45,321
No Professional Fees Required		
Total Project Cost		**$45,321**

Specific Project Details

Facility Condition Analysis
Section Three
CLEM : CLEMENT RESIDENCE HALL

Project Description

Project Number:	CLEMPL03	**Title:**	DRAIN PIPING REPLACEMENT
Priority Sequence:	23		
Priority Class:	4		
Category Code:	PL2A	**System:**	PLUMBING
		Component:	WASTEWATER
		Element:	PIPING NETWORK
Building Code:	CLEM		
Building Name:	CLEMENT RESIDENCE HALL		
Subclass/Savings:	Not Applicable		

Code Application: IPC Chapters 7-11

Project Class:	Capital Renewal
Project Date:	10/14/2009
Project Location:	Floor-wide: Floor(s) 1, 10, 2, 3, 4, 5, 6, 7, 8, 9

Project Description

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

Project Cost

Project Number: CLEMPL03

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	86,044	$1.81	$155,740	$4.17	$358,803	$514,543
Project Totals:				**$155,740**		**$358,803**	**$514,543**

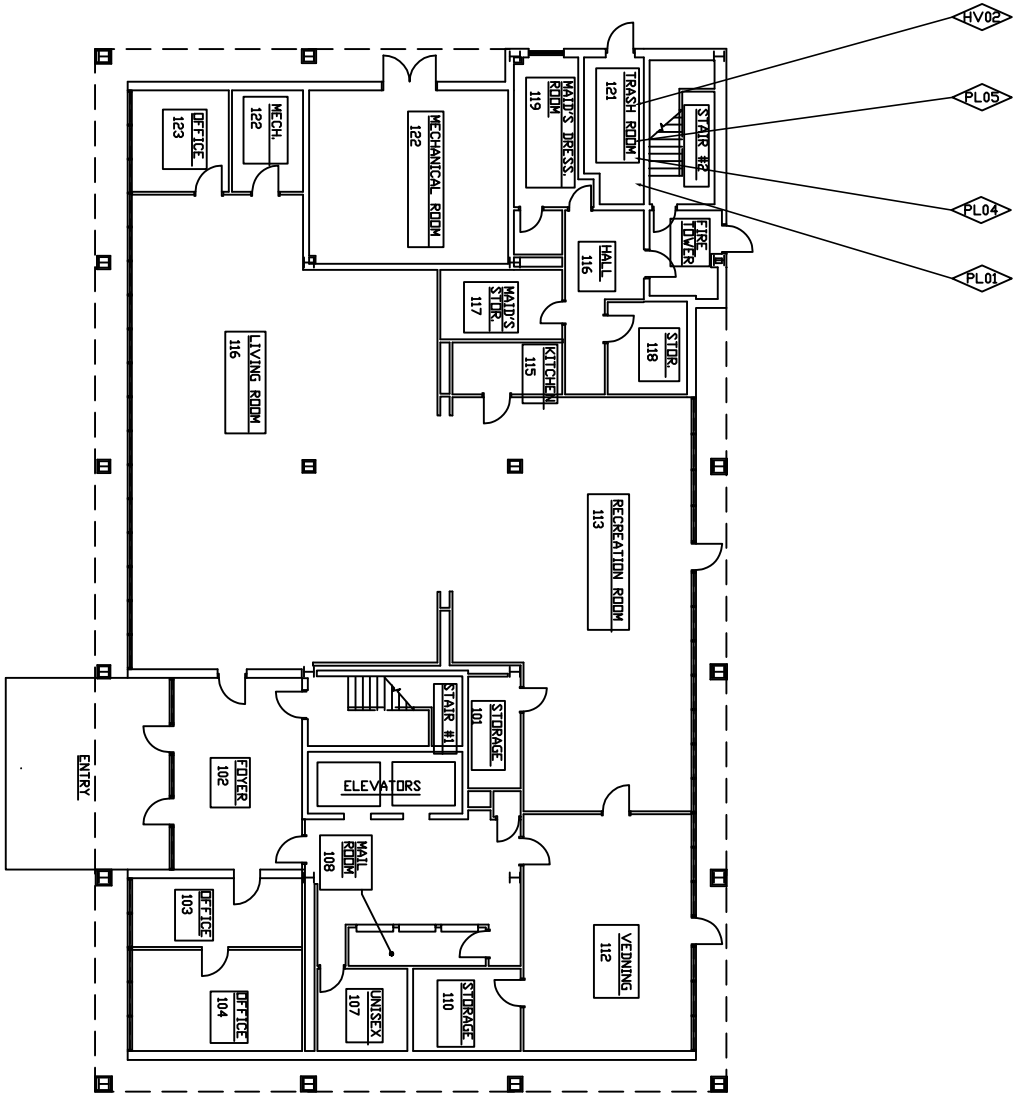
Material/Labor Cost		$514,543
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$340,896
General Contractor Mark Up at 20.0%	+	$68,179
Construction Cost		$409,075
Professional Fees at 16.0%	+	$65,452
Total Project Cost		**$474,527**

FACILITY CONDITION ANALYSIS

SECTION 4

DRAWINGS AND PROJECT LOCATIONS

EAST CAROLINA UNIVERSITY



AC01 AC04 ES01 ES02

AC02 AC03 AC06 EL02 FS01 IS01

IS02 IS03 PL02 PL03

N

CLEMENT
RESIDENCE
HALL

BLDG NO. CLEM

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

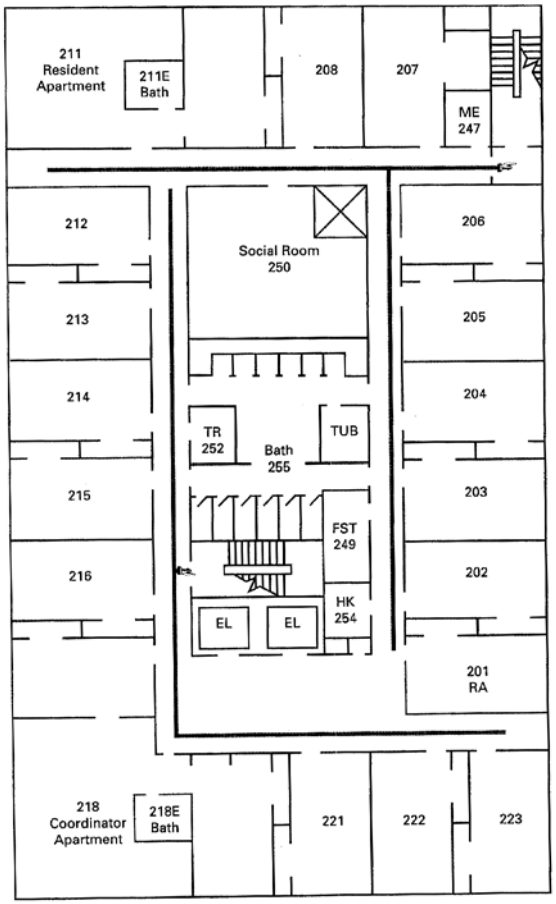
PROJECT NUMBER APPLIES TO AREA AS NOTED

Date: 10/30/09
Drawn by: J.T.V.
Project No. 09-041

FIRST
FLOOR
PLAN

Sheet No.
1 of 10

EAST CAROLINA UNIVERSITY



AC02 AC03 AC05 AC06 EL01 EL02
FS01 HV01 HV03 IS01 IS02 IS03
PL02 PL03

CLEMENT
RESIDENCE
HALL

BLDG NO. CLEM

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

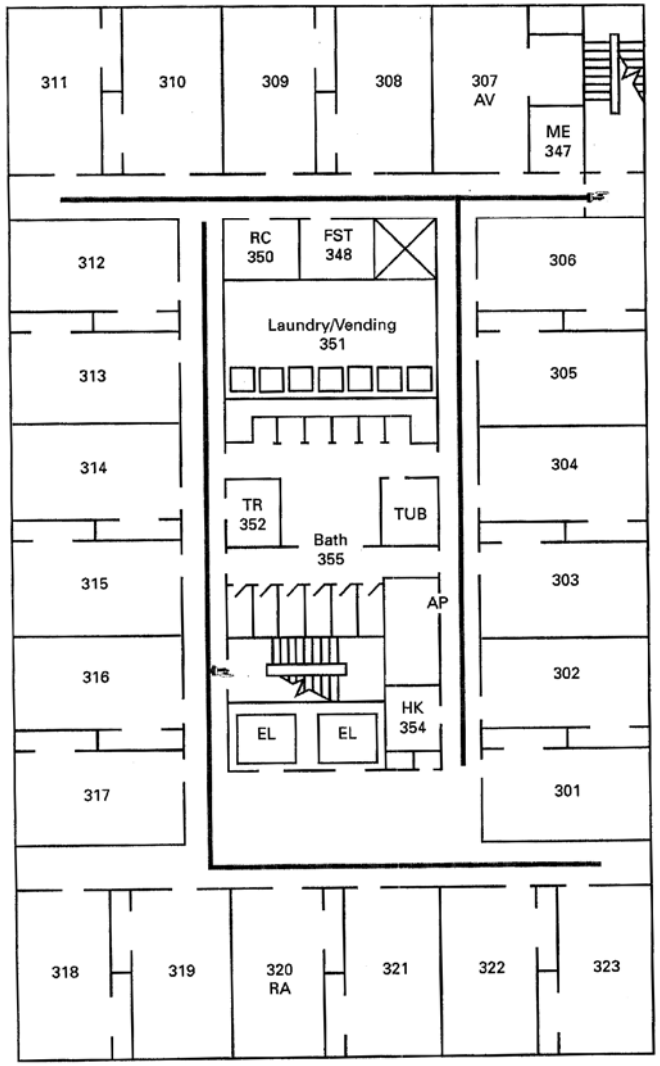
PROJECT NUMBER APPLIES TO AREA AS NOTED

Date: 10/30/09
Drawn by: J.T.V.
Project No. 09-041

SECOND
FLOOR
PLAN

Sheet No.
2 of 10

EAST CAROLINA UNIVERSITY



AC02 AC03 AC05 AC06 EL01 EL02
FS01 HV01 HV03 IS01 IS02 IS03
PL02 PL03

CLEMENT
RESIDENCE
HALL

BLDG NO. CLEM

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

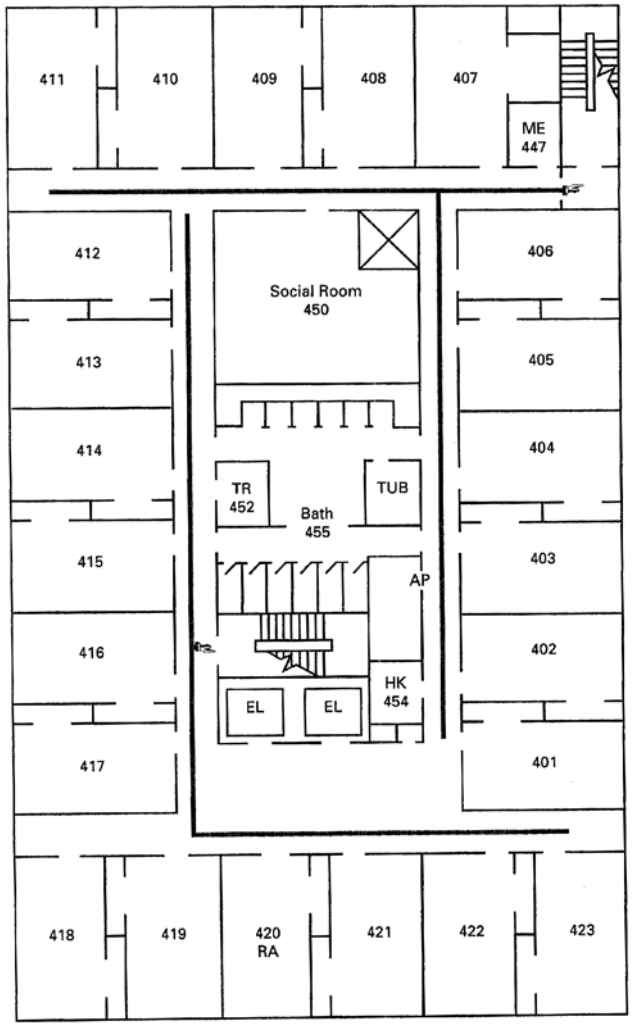
PROJECT NUMBER APPLIES TO AREA AS NOTED

Date: 10/30/09
Drawn by: J.T.V.
Project No. 09-041

THIRD
FLOOR
PLAN

Sheet No.
3 of 10

EAST CAROLINA UNIVERSITY



AC02 AC03 AC05 AC06 EL01 EL02
FS01 HV01 HV03 IS01 IS02 IS03
PL02 PL03

CLEMENT
RESIDENCE
HALL

BLDG NO. CLEM

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

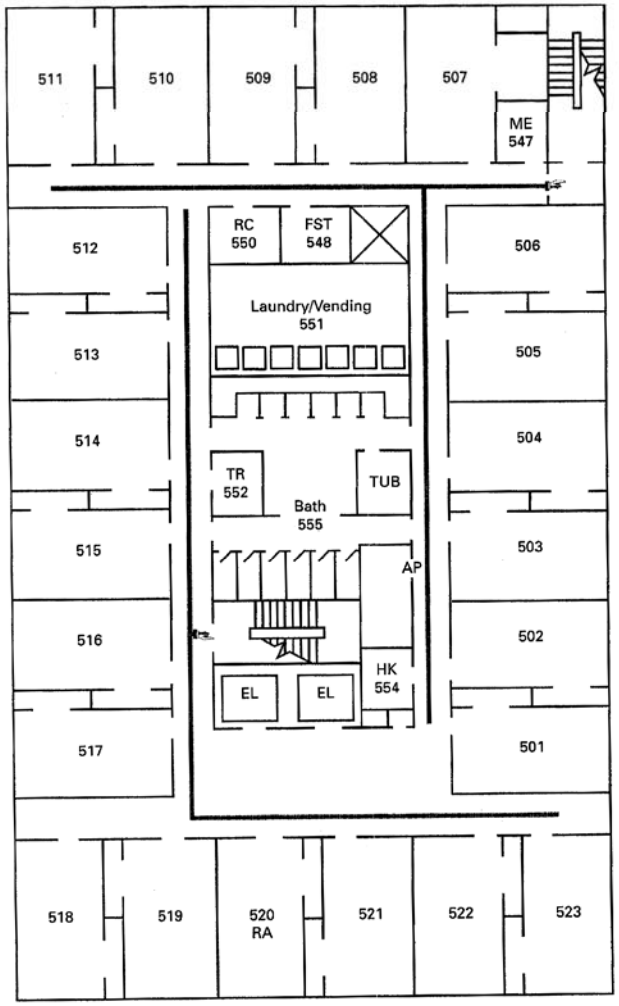
PROJECT NUMBER APPLIES TO AREA AS NOTED

Date: 10/30/09
Drawn by: J.T.V.
Project No. 09-041

FOURTH FLOOR PLAN

Sheet No.
4 of 10

EAST CAROLINA UNIVERSITY



AC02 AC03 AC05 AC06 EL01 EL02
FS01 HV01 HV03 IS01 IS02 IS03
PL02 PL03

CLEMENT
RESIDENCE
HALL

BLDG NO. CLEM

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

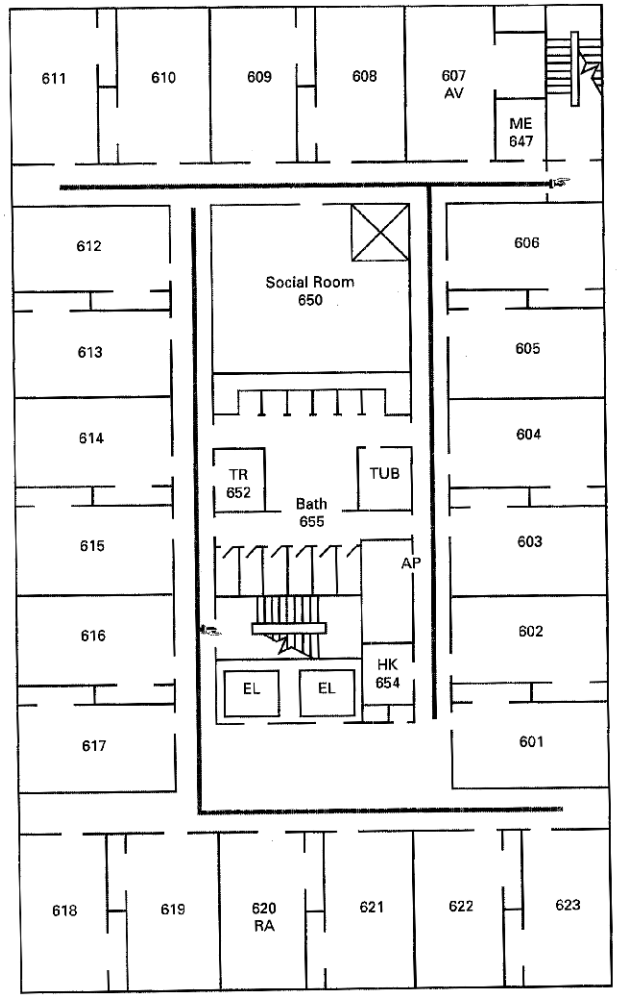
PROJECT NUMBER APPLIES TO AREA AS NOTED

Date: 10/30/09
Drawn by: J.T.V.
Project No. 09-041

FIFTH
FLOOR
PLAN

Sheet No.
5 of 10

EAST CAROLINA UNIVERSITY



AC02 AC03 AC05 AC06 EL01 EL02
FS01 HV01 HV03 IS01 IS02 IS03
PL02 PL03

CLEMENT
RESIDENCE
HALL

BLDG NO. CLEM

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

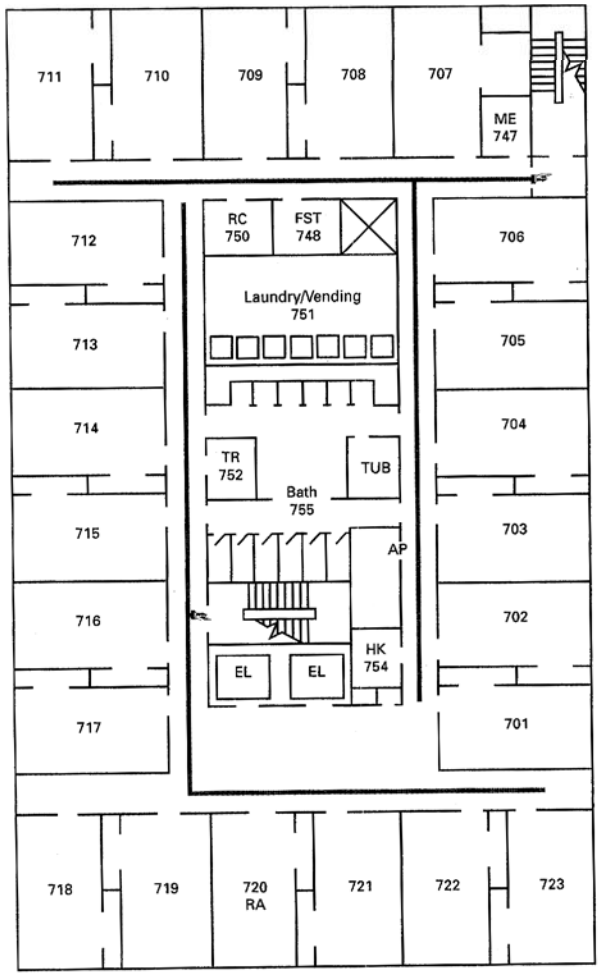
PROJECT NUMBER APPLIES TO AREA AS NOTED

Date: 10/30/09
Drawn by: J.T.V.
Project No. 09-041

SIXTH
FLOOR
PLAN

Sheet No.
6 of 10

EAST CAROLINA UNIVERSITY



AC02 AC03 AC05 AC06 EL01 EL02
FS01 HV01 HV03 IS01 IS02 IS03
PL02 PL03

CLEMENT
RESIDENCE
HALL

BLDG NO. CLEM

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

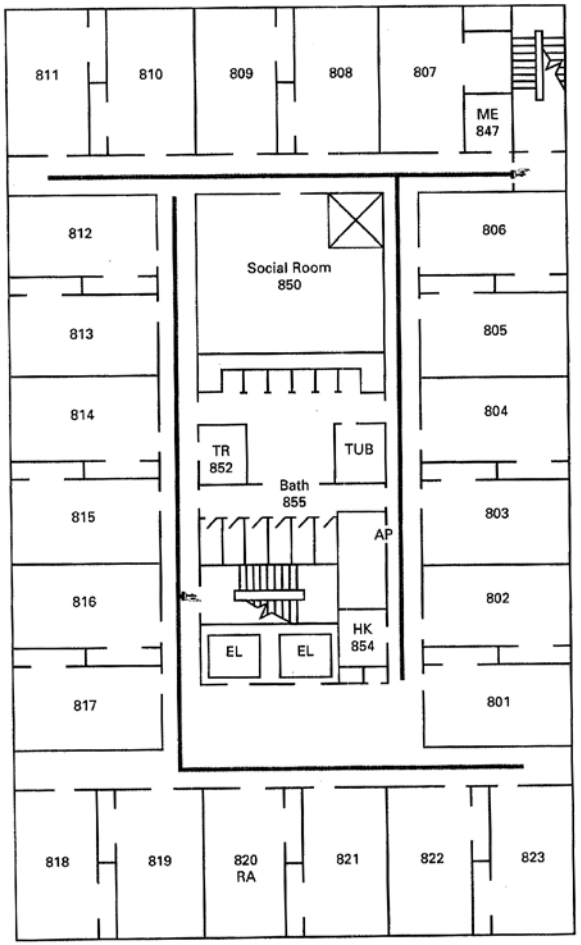
PROJECT NUMBER APPLIES TO AREA AS NOTED

Date: 10/30/09
Drawn by: J.T.V.
Project No. 09-041

SEVENTH
FLOOR
PLAN

Sheet No.
7 of 10

EAST CAROLINA UNIVERSITY



AC02 AC03 AC05 AC06 EL01 EL02
FS01 HV01 HV03 IS01 IS02 IS03
PL02 PL03

CLEMENT
RESIDENCE
HALL

BLDG NO. CLEM

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

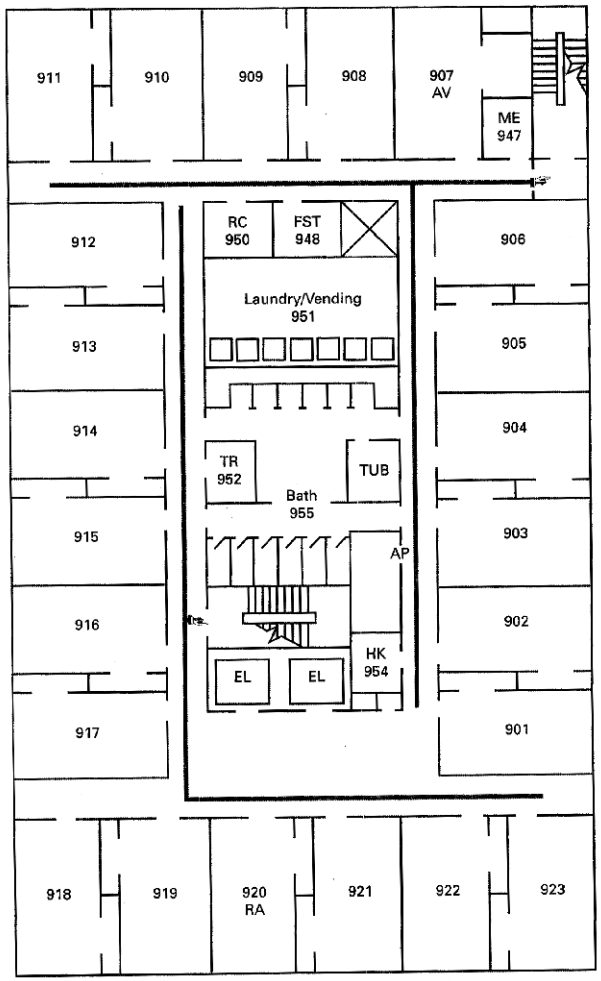
PROJECT NUMBER APPLIES TO AREA AS NOTED

Date: 10/30/09
Drawn by: J.T.V.
Project No. 09-041

EIGHTH
FLOOR
PLAN

Sheet No.
8 of 10

EAST CAROLINA UNIVERSITY



AC02 AC03 AC05 AC06 EL01 EL02
FS01 HV01 HV03 IS01 IS02 IS03
PL02 PL03

CLEMENT
RESIDENCE
HALL

BLDG NO. CLEM

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

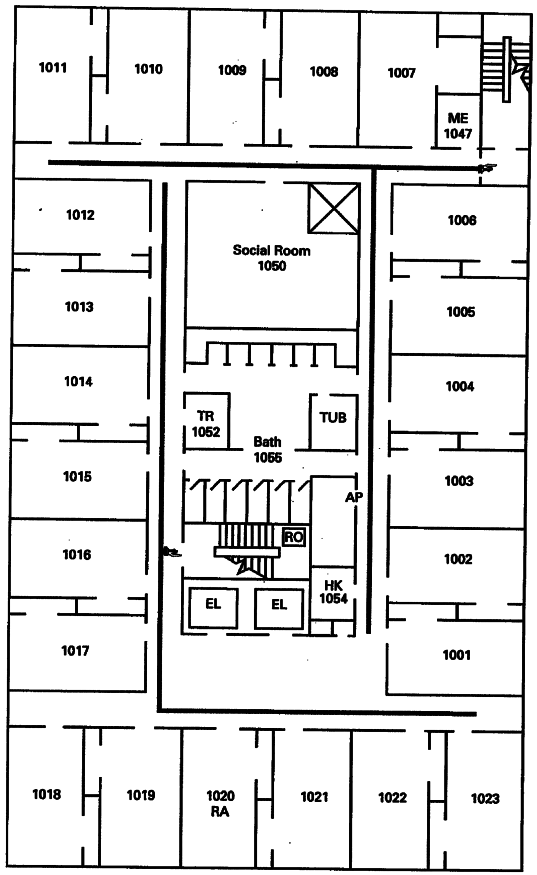
Date: 10/30/09
Drawn by: J.T.V.
Project No. 09-041

NINTH
FLOOR
PLAN

Sheet No.
9 of 10

EAST CAROLINA UNIVERSITY

ROOF
ES03



AC02 AC03 AC05 AC06 EL01 EL02
FS01 HV01 HV03 IS01 IS02 IS03
PL02 PL03

CLEMENT
RESIDENCE
HALL

BLDG NO. CLEM

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: 10/30/09
Drawn by: J.T.V.
Project No. 09-041

TENTH
FLOOR
PLAN

Sheet No.
10 of 10

FACILITY CONDITION ANALYSIS

SECTION 5

LIFE CYCLE MODEL SUMMARY AND PROJECTIONS

Life Cycle Model

Building Component Summary

CLEM : CLEMENT RESIDENCE HALL

Uniformat Code	Component Description	Qty	Units	Unit Cost	Complx Adj	Total Cost	Install Date	Life Exp
B2010	EXTERIOR FINISH RENEWAL	15,410	SF	$1.30		$20,088	1969	10
B2010	EXTERIOR FINISH RENEWAL	28,620	SF	$1.30	.31	$11,566	1969	10
B2020	STANDARD GLAZING AND CURTAIN WALL	780	SF	$104.04		$81,149	1969	55
B2020	STANDARD GLAZING AND CURTAIN WALL	6,990	SF	$104.04		$727,216	2003	55
B2030	HIGH TRAFFIC EXTERIOR DOOR SYSTEM	4	LEAF	$4,311.24		$17,245	1969	20
B2030	LOW TRAFFIC EXTERIOR DOOR SYSTEM	8	LEAF	$2,863.29		$22,906	1969	40
B3010	BUILT-UP ROOF	8,700	SF	$6.70		$58,313	1990	20
C1020	STANDARD DOOR AND FRAME INCLUDING HARDWARE	20	LEAF	$783.68		$15,674	1969	35
C1020	STANDARD DOOR AND FRAME INCLUDING HARDWARE	200	LEAF	$783.68		$156,736	1969	35
C1020	RATED DOOR AND FRAME INCLUDING HARDWARE	300	LEAF	$1,489.06		$446,718	1969	35
C1020	INTERIOR DOOR HARDWARE	300	EA	$423.04		$126,913	1969	15
C1020	INTERIOR DOOR HARDWARE	20	EA	$423.04		$8,461	1969	15
C1020	INTERIOR DOOR HARDWARE	200	EA	$423.04		$84,608	1969	15
C3010	STANDARD WALL FINISH (PAINT, WALL COVERING, ETC.)	293,290	SF	$0.80		$234,937	1969	10
C3020	CARPET	27,500	SF	$8.75		$240,528	1969	10
C3020	VINYL FLOOR TILE	27,500	SF	$6.59		$181,166	1969	15
C3020	CERAMIC FLOOR TILE	8,300	SF	$17.36		$144,108	1969	20
C3020	RESURFACE AND SEAL CONCRETE OR TERRAZZO	5,500	SF	$5.85		$32,157	1969	50
C3030	ACOUSTICAL TILE CEILING SYSTEM	688	SF	$4.99		$3,435	1969	15
C3030	ACOUSTICAL TILE CEILING SYSTEM	6,192	SF	$4.99		$30,917	1995	15
C3030	PAINTED CEILING FINISH APPLICATION	61,950	SF	$0.80		$49,624	1969	15
D1010	ELEVATOR MODERNIZATION - TRACTION - HIGH RISE	2	EA	$160,245.86		$320,492	2002	25
D1010	ELEVATOR CAB RENOVATION - PASSENGER	2	EA	$26,616.80		$53,234	2002	12
D2010	PLUMBING FIXTURES - DORMITORY / APARTMENTS	86,044	SF	$4.99		$429,128	1969	35
D2020	WATER PIPING - DORMITORY / APARTMENTS	86,044	SF	$3.55		$305,567	1969	35
D2020	DOMESTIC WATER PRESSURE BOOSTER SYSTEM	1	SYS	$8,868.58		$8,869	1969	20
D2020	WATER HEATER, SHELL AND TUBE HEAT EXCHANGER	48	GPM	$355.69		$17,073	1981	24
D2030	DRAIN PIPING - DORMITORY / APARTMENTS	86,044	SF	$5.40		$464,735	1969	40
D2030	SUMP PUMP SYS (2 PUMPS, CONTROLS)	1	SYS	$8,276.49		$8,276	1969	20

Life Cycle Model

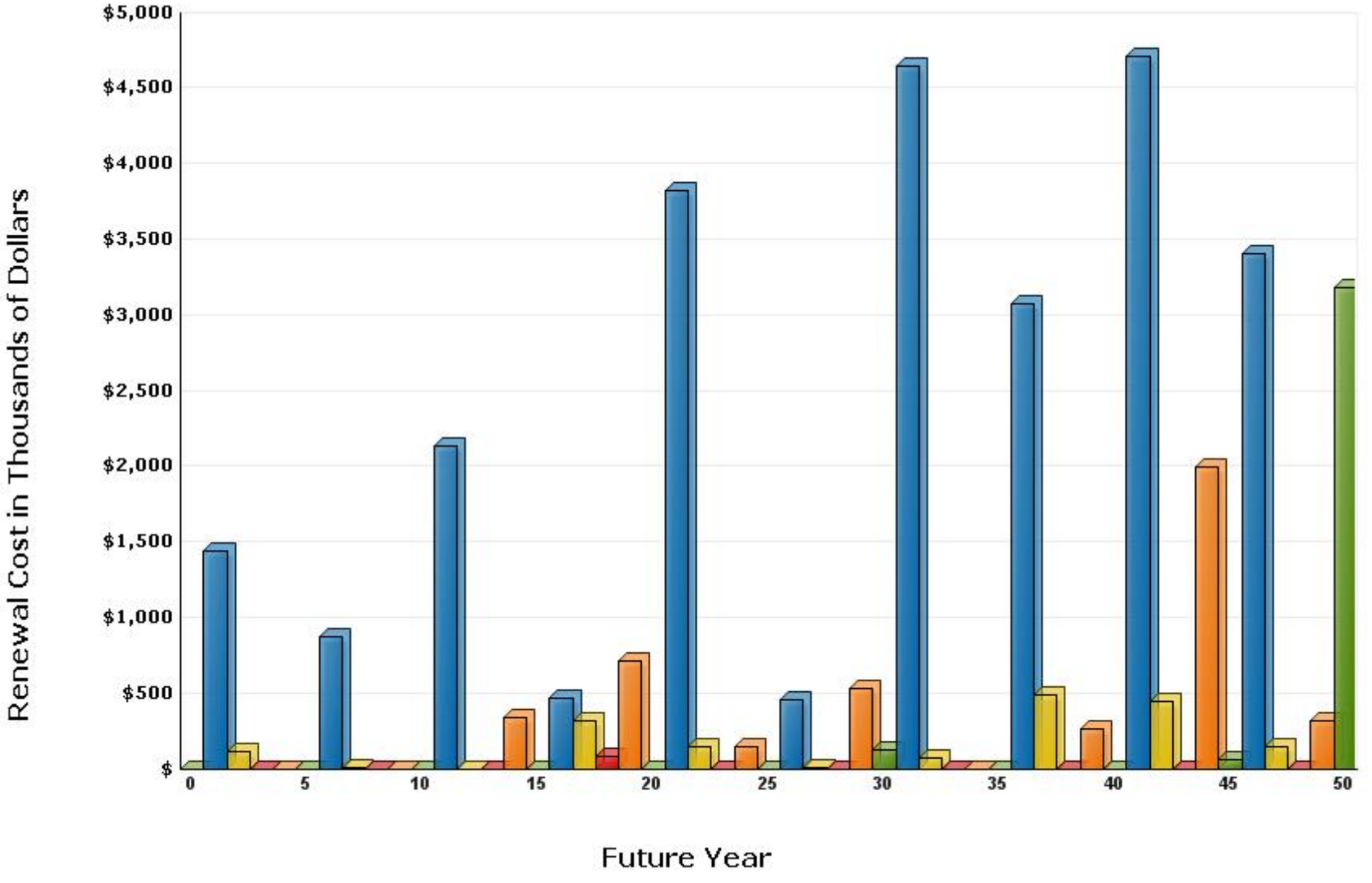
Building Component Summary

CLEM : CLEMENT RESIDENCE HALL

Uniformat Code	Component Description	Qty	Units	Unit Cost	Complx Adj	Total Cost	Install Date	Life Exp
D2050	AIR COMPRESSOR PACKAGE (AVERAGE SIZE)	1	SYS	$6,456.49		$6,456	1969	25
D3020	HEATING SYSTEM, STEAM OR HYDRONIC	51,626	SF	$7.30		$376,967	1969	25
D3040	CONDENSATE RECEIVER	1	SYS	$9,504.01		$9,504	1969	15
D3040	EXHAUST FAN - CENTRIFUGAL ROOF EXHAUSTER OR SIMILAR	3	EA	$2,768.62		$8,306	2007	20
D3040	EXHAUST FAN - UTILITY SET OR SIMILAR	3	EA	$3,660.81		$10,982	2007	20
D3040	HVAC SYSTEM - DORMITORY / APARTMENTS	34,418	SF	$19.20		$660,789	2004	25
D3040	BASE MTD. PUMP - UP TO 15 HP	6	HP	$3,175.77		$19,055	1990	20
D3050	THRU-WALL AC UNIT	140	TON	$1,528.27		$213,958	2004	10
D5010	ELECTRICAL SYSTEM - DORMITORY / APARTMENTS	86,044	SF	$7.21		$620,159	1969	50
D5010	ELECTRICAL SWITCHGEAR 120/208V	2,000	AMP	$32.96		$65,927	2007	20
D5020	EXIT SIGNS (CENTRAL POWER)	92	EA	$163.78		$15,068	2005	20
D5020	EXTERIOR LIGHT (HID)	3	EA	$689.58		$2,069	1969	20
D5020	LIGHTING - DORMITORY / APARTMENTS	51,626	SF	$4.30		$222,006	1969	20
D5020	LIGHTING - DORMITORY / APARTMENTS	34,418	SF	$4.30		$148,007	2005	20
D5030	FIRE ALARM SYSTEM, POINT ADDRESSABLE	86,044	SF	$2.61		$224,970	2007	15
D5040	GENERATOR, DIESEL (100-200 KW)	150	KW	$493.93		$74,089	2007	25
E2010	KITCHENETTE UNIT WITH CABINETRY AND AMENITIES	1	LOT	$5,940.22		$5,940	1969	20
E2010	KITCHENETTE UNIT WITH CABINETRY AND AMENITIES	1	LOT	$5,940.22		$5,940	1995	20
						$6,992,030		

Life Cycle Model Expenditure Projections

CLEM : CLEMENT RESIDENCE HALL



Average Annual Renewal Cost Per SqFt $3.41

FACILITY CONDITION ANALYSIS

SECTION 6

PHOTOGRAPHIC LOG

Photo Log - Facility Condition Analysis

CLEM : CLEMENT RESIDENCE HALL

Photo ID No	Description	Location	Date
CLEM001a	Rolled asphalt built-up roof application	Roof	9/15/2009
CLEM001e	Air handling equipment	Roof	9/15/2009
CLEM002a	Rolled asphalt built-up roof application	Roof	9/15/2009
CLEM002e	Exhaust fan	Roof	9/15/2009
CLEM003a	Non-compliant handrails without extensions and no guardrail protection	Stairwell	9/15/2009
CLEM003e	Exhaust fans	Roof	9/15/2009
CLEM004a	Typical door hardware and signage	Tenth floor	9/15/2009
CLEM004e	Air handling equipment	Roof	9/15/2009
CLEM005a	Sinks and ceramic finish	Bathrooms	9/15/2009
CLEM005e	Service sink	Tenth floor, room 1054	9/15/2009
CLEM006a	Typical corridor with carpeted floors and painted walls and ceilings	Tenth floor	9/15/2009
CLEM006e	Lavatories	Tenth floor, restroom	9/15/2009
CLEM007a	Single level water fountain	Typical of every floor	9/15/2009
CLEM007e	Shower components	Tenth floor, restroom	9/15/2009
CLEM008a	Dorm room converted to AV communications room with vinyl floor tile and painted walls and ceilings	Ninth floor 907	9/15/2009
CLEM008e	Water closet	Tenth floor, restroom	9/15/2009
CLEM009a	Typical dorm room cabinetry in converted AV room	Ninth floor 907	9/15/2009
CLEM009e	Lavatories	Tenth floor, restroom	9/15/2009
CLEM010a	Old kitchenette with baked enamel finish	Visiting guest suite 211	9/15/2009
CLEM010e	Drain piping	Tenth floor, restroom	9/15/2009
CLEM011a	Falling suspended grid ceiling system	Room 103	9/15/2009
CLEM011e	Bath tub	Tenth floor, restroom	9/15/2009
CLEM012a	Single pane metal framed original windows	First floor 116	9/15/2009
CLEM012e	Interior lighting	Ninth floor, laundry	9/15/2009
CLEM013a	Terrazzo flooring with suspended ceilings	Recreation room 113	9/15/2009
CLEM013e	Exit signage and fire alarm devices	Ninth floor, corridor	9/15/2009
CLEM014a	Crack in terrazzo flooring	Recreation room 113	9/15/2009
CLEM014e	Secondary electrical panel	Ninth floor, room 947	9/15/2009
CLEM015a	Brick masonry facade with new dual pane window systems	Southern side of the building	9/15/2009
CLEM015e	Drain piping	Ninth floor, pipe chase	9/15/2009
CLEM016a	Brick masonry facade with new dual pane window syste	Southeast corner of building	9/15/2009

Photo Log - Facility Condition Analysis

CLEM : CLEMENT RESIDENCE HALL

Photo ID No	Description	Location	Date
CLEM016e	Interior lighting	Ninth floor, corridor	9/15/2009
CLEM017a	Brick masonry facade with new dual pane window systems	East side and main entrance	9/15/2009
CLEM017e	Secondary electrical panel	Ninth floor, corridor	9/15/2009
CLEM018a	Sloped concrete walkway without handrails	Eastern side grounds	9/15/2009
CLEM018e	Radiator	Second floor, room 218	9/15/2009
CLEM019a	Glass and aluminum storefront entranceway	Eastern side	9/15/2009
CLEM019e	Lavatory and water closet	Second floor, room 218	9/15/2009
CLEM020a	Brick masonry facade with new dual pane window systems	Northern side	9/15/2009
CLEM020e	Fire alarm panels	First floor, room 104	9/15/2009
CLEM021a	Exterior sloped sidewalk without handrails	Northern side	9/15/2009
CLEM021e	Air handling equipment	First floor, room 114	9/15/2009
CLEM022a	Exterior sloped sidewalk without handrails	Northern side	9/15/2009
CLEM022e	Electrical panels and automatic transfer switch	First floor, room 121-OS	9/15/2009
CLEM023a	Brick masonry facade with new dual pane window systems	Western side	9/15/2009
CLEM023e	Main electrical distribution equipment	First floor, room 121-OS	9/15/2009
CLEM024e	Sump	First floor, room 122-OS	9/15/2009
CLEM025e	Heat exchanger	First floor, room 122-OS	9/15/2009
CLEM026e	Aged electrical distribution equipment	First floor, room 122-OS	9/15/2009
CLEM027e	Pump equipment	First floor, room 122-OS	9/15/2009
CLEM028e	Condensate return system	First floor, room 122-OS	9/15/2009
CLEM029e	Booster pump system	First floor, room 122-OS	9/15/2009
CLEM030e	Pump equipment	First floor, room 122-OS	9/15/2009
CLEM031e	Compressor	First floor, room 122-OS	9/15/2009
CLEM032e	Exhaust fan	First floor, room 122-OS	9/15/2009
CLEM033e	Transformer and condensing unit	Site	9/15/2009
CLEM034e	Window air conditioning units	Exterior	9/15/2009
CLEM035e	Exterior lighting	Exterior	9/15/2009
CLEM036e	Exterior lighting	Exterior	9/15/2009

Facility Condition Analysis - Photo Log

CLEM001A.jpg

CLEM001E.jpg

CLEM002A.jpg

CLEM002E.jpg

CLEM003A.jpg

CLEM003E.jpg

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CLEM009A.jpg

CLEM009E.jpg

CLEM010A.jpg

CLEM010E.jpg

Facility Condition Analysis - Photo Log

CLEM011A.jpg

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CLEM012A.jpg

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