EAST CAROLINA UNIVERSITY

RAGSDALE HALL

ASSET CODE: RAGS

FACILITY CONDITION ANALYSIS

AUGUST 25, 2010

ISES CORPORATION

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FACILITY CONDITION ANALYSIS

SECTION 1

GENERAL ASSET INFORMATION

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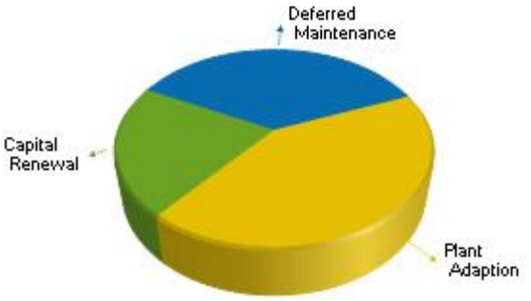
PROJECT COSTS BY CLASSIFICATION

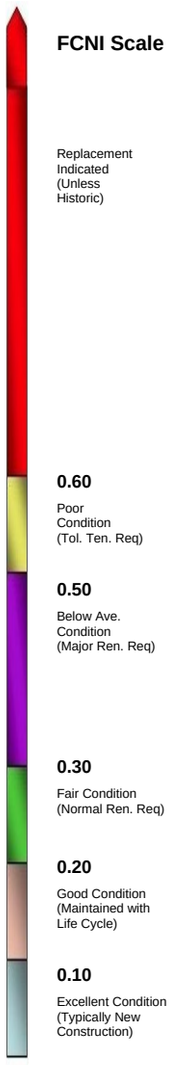


Building Code:	RAGS
Building Name:	RAGSDALE HALL
Year Built:	1923
Building Use:	Office / Administrative
Square Feet:	41,144

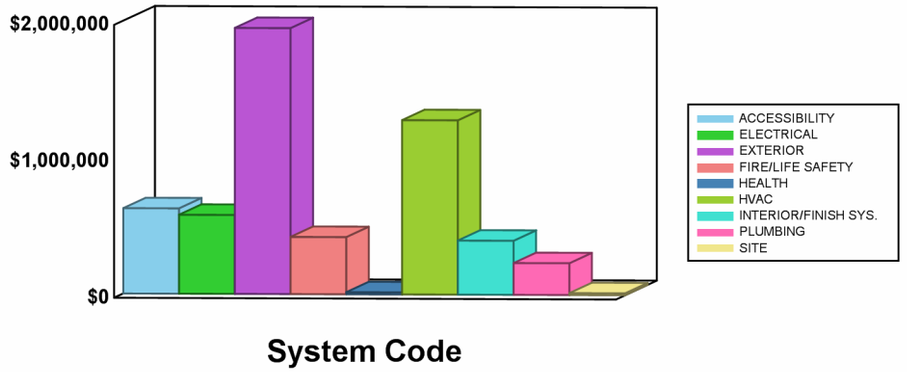
Project Costs by Priority

Priority 1:	$8,107	
Priority 2:	$1,991,544	
Priority 3:	$2,782,229	
Priority 4:	$718,984	
Total Project Costs:		**$5,500,865**
Facility Replacement Cost:		**$11,271,078**
Facility Condition Needs Index (FCNI):		**0.49**

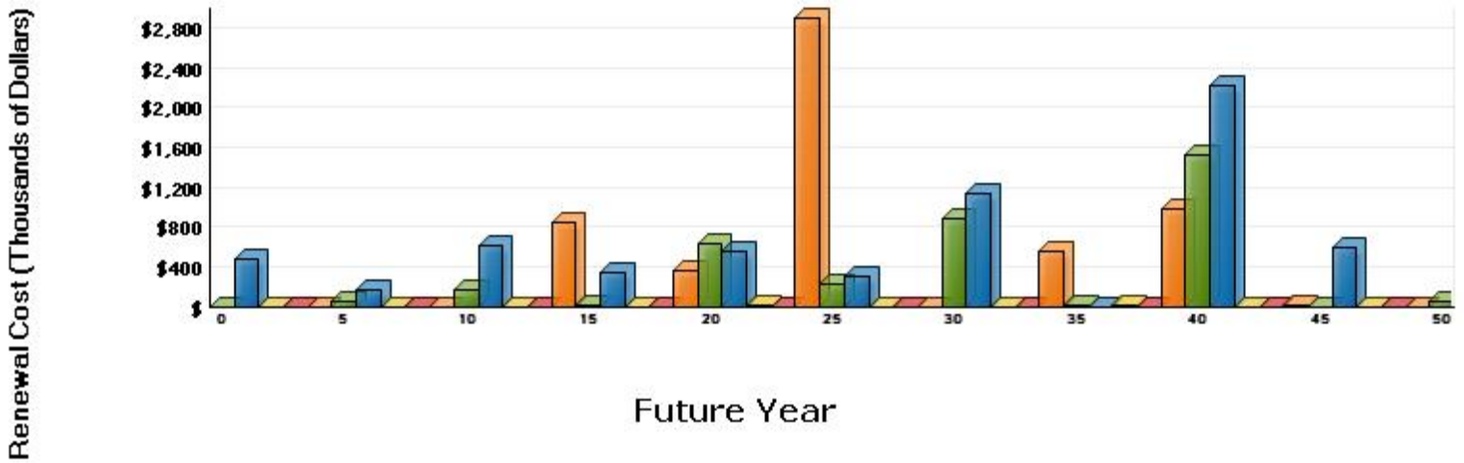
(Project Costs / Replacement Cost)



PROJECT COSTS BY SYSTEM CODE



LIFE CYCLE MODEL EXPENDITURE PROJECTIONS



Average Annual Renewal Cost Per SqFt $3.51

B. ASSET SUMMARY

Built in 1923, Ragsdale Hall is a three-wings, two-story office and classroom building with a pitched, clay tile roof. This block-U-shaped structure has a basement under the west wing and a small basement area beneath the south end of the east wing. A separate building, not a part of this review, was constructed across most of the south side of the central courtyard, essentially closing off most of the open end of the "U". This concrete and wood-framed structure is located near the middle of the north side of the northern portion of the East Carolina University campus in Greenville, North Carolina. It has a listed area of 41,144 gross square feet.

The information for this report was gathered during an inspection conducted on September 2, 2009.

SITE

The landscaping on this moderate-sized, relatively flat site consists of turf, shrubs, specimen trees, and foundation planting, all in overall fair condition. There is a water infiltration problem along the east wall of the west wing. The overall condition of the site is such that a moderate landscaping upgrade is warranted. This project will need to be coordinated with the separately proposed Exterior category project to eliminate a water infiltration problem along the east facade of the west wing, to minimize duplication of the work scope and funding.

EXTERIOR STRUCTURE

There is evidence of water infiltration through the basement foundation wall at the east side of the west wing. Excavation and waterproofing system upgrades are recommended. Improve the slope of grade away from the foundation prior to restoring the landscaping.

The windows are aging, wood-framed, single-hung, non-insulating units. It is recommended that they be upgraded to thermal-pane glazing systems, which will reduce the energy required to operate the building. Repair or replacement of the windowsills and trim may also be necessary. It was reported by the University that the exterior doors were recently replaced.

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

The clay tile roof is original and at the end of its service life. The original organic felts used during the time of construction have deteriorated and resulted in the loss of redundant waterproofing. The tile should be removed and new felts installed using non-ferrous fasteners when installing the underlayment and tile.

INTERIOR FINISHES / SYSTEMS

The interior of all three wings has a double-loaded central corridor with offices, and some classrooms, on both sides. All of the walls are floor-to-ceiling and painted. Ceilings in most spaces are lay-in, acoustical tile, with some painted ceilings. Most offices and some other spaces are carpeted, with corridors and some space having vinyl tile flooring.

Interior wall finish applications vary in age, type, and condition, and consist mostly of paint. Wall finish upgrades should be considered as part of any future cosmetic improvements or major comprehensive renovation efforts.

Interior floor finish applications vary in age, type, and condition. Approximately two thirds of the flooring is carpet, and most of the corridor flooring is aging vinyl floor tile, with indications of some subsurface objects telescoping through the finish face of many of the tiles. Floor finish upgrades should be considered as part of any future cosmetic improvements or major comprehensive renovation efforts. Ceramic floor tile replacement in the restrooms will need to be coordinated with the separately proposed Accessibility category project and Interior Finishes / Systems category project to upgrade the restrooms in order to minimize the possibility of a duplication of funding and work scope.

The entry floor men's and women's restroom fixtures and finishes have been upgraded recently and are accessible to persons with disabilities. The fixtures and finishes in these two restrooms are sound, but the finishes in both restrooms will need to be renewed within the next five years.

Ceiling finish applications vary in age, type, and condition, but consist primarily of acoustical tile. Ceiling finish upgrades should be considered as part of any future cosmetic improvements or major comprehensive renovation efforts.

ACCESSIBILITY

There is very little handicapped accessibility into or through this facility. There is a ramped entrance at the northeast corner, entry floor restrooms that are wheelchair accessible, some lever door hardware, and some ADA compliant signage. Many accessibility upgrades are recommended.

Accessibility legislation pertaining to handicapped access into buildings requires that goods, amenities, and services offered in buildings be generally accessible to all persons. Elevation changes at the southeast corner steps, the north entry steps, and the northwest corner site steps lack wheelchair accessibility. It is recommended that a ramp with associated compliant painted metal handrails be installed at all three locations.

This legislation also requires that entry steps have graspable handrails on both sides, that the rails have a specific end geometry, and that the handrails continue horizontally at the landings. The end geometry of the handrails at the five existing entry steps does not comply with the present legislation regarding handicapped accessibility into buildings. Painted metal, handrail extensions need to be added to the ends of all of these handrails.

Present ADA legislation further requires wheelchair access to all floors in a building over two stories in height. There is no wheelchair access to the upper floors or to the west basement of this building. The installation of an interior hydraulic elevator is proposed to serve these floor areas.

The current accessibility legislation requires that door hardware be designed for operation by people with little or no ability to grasp objects with their hands. To comply with the intent of this legislation, it is recommended that lever handle door hardware be installed on all doors that currently still have knob hardware.

Legislation regarding building accessibility by the handicapped requires that stairs have graspable handrails on both sides, that the rails have a specific end geometry, and that the handrails continue horizontally at the landings. The end geometry of the existing exit stair side handrails does not comply with the present legislation regarding handicapped accessibility within buildings. Metal handrail extensions, finished to match the existing handrails, need to be added to the ends of all of these existing handrails.

The present accessibility legislation requires that building amenities be generally accessible to all persons. The configuration of the base cabinets at the sinks are barriers to accessibility. Wheelchair-accessible modifications need to be made to these base cabinets.

Restroom fixtures and finishes are mostly original to the year of construction or latest major renovation. Except for the entry floor men's and women's restrooms, the remaining restrooms in this building have aging fixtures and finishes and are not wheelchair accessible. The entry floor public restroom fixtures and finishes have been upgraded recently and are accessible to persons with disabilities. A comprehensive renovation of all of the upper floor and basement restrooms, including new fixtures, finishes, and accessories, is recommended. Restroom expansion of the upper floor and basement floor restrooms may be necessary in order to meet modern minimum fixture counts and accessibility legislation. Toilet partition upgrades should be made, and the basement floor showers should be upgraded.

Accessibility legislation requires that building amenities such as the drinking fountains be generally accessible to all persons. The single-level configuration of the drinking fountains in this building is a barrier to wheelchair accessibility. The installation of a dual-level, refrigerated drinking fountain is recommended to replace these existing fountains.

This legislation has established signage requirements for all permanent spaces in buildings. Compliant signage should meet specific size, graphical, Braille, height, and location requirements. To comply with the intent of this legislation, it is recommended that all non-compliant signage be upgraded to conform to appropriate accessibility standards. The project scope includes directional signage.

HEALTH

Suspected asbestos-containing materials (ACM) are believed to be present in the facility, including the piping insulation, spray-on fireproofing, and multiple interior finish systems. Future renovation efforts will need to include provisions to test and abate any and all ACM. There was no evidence of a presence of infestations by vermin or insects in this building.

FIRE / LIFE SAFETY

Code requires that there be a guardrail where there is a change in floor level in excess of 36 inches, and that these guardrails be a minimum of 42 inches high. The guardrails must also prevent the passage of a

specific diameter sphere. The painted metal guardrail at the top of the southeast, northeast, north central, and northwest stairs has sufficient infill but is too low and the open design of the three northern stairs creates a guardrail condition down the entire length of all three of those stairs. The existing handrails at these three stairs cannot also act as a legal guardrail. A painted metal rail should be added above and parallel to all of these existing guardrails and handrails that are too low. The guardrail at the three sets of site steps in the courtyard is also too low, cannot act as a legal guardrail and handrails, and lack sufficient infill. The application of a galvanized, expanded metal lath to the existing guardrails at the top of the east stair is the most cost-effective method of complying with the sphere test, in addition to adding a painted metal rail above and parallel to the existing handrails and guardrails.

Code requires that all glazing in doors and sidelights be tempered, wire-glass, or otherwise safety-rated. It is not apparent that all of the door and sidelight glazing in this building is rated. It is recommended that all door and sidelight glazing be replaced with tempered glass where it cannot be determined that the existing glazing is safety-rated. This building appears to have been constructed in substantial compliance with building codes. The exits seem to be sufficient in number and location. No exit projects are proposed.

This facility is protected by a zoned central fire alarm system. The devices for this system include manual pull stations, audible / visible devices, and smoke detectors. The fire alarm panel was manufactured by Notifier and is located in mechanical room 014. There are no devices mounted in the restrooms. The fire alarm system is inadequate compared to the current campus standard. It is recommended that this system be replaced within the next year.

This facility is not protected by any form of automatic fire suppression system. Manual, dry chemical fire extinguishers are available. However, it is recommended that an automatic fire suppression system be retrofitted. Install an automatic fire sprinkler system in unprotected areas throughout the facility. This project will reduce overall liability and potential for loss.

The exit signs in this facility are illuminated with fluorescent lamps and are connected to the emergency power network. Emergency lighting is available through unitary fixtures with battery backup power. All egress lighting systems are adequate and in good condition. There are no related projects to recommend, at this time.

HVAC

This facility is on the campus steam loop. Hot water is circulated as the heating medium. This facility is served by a hydronic heating system. There is no central cooling for the main building and minimal fresh air is introduced to the interior spaces.

A local, air-cooled chiller generates chilled water for the Ragsdale Annex cooling only. This unit is of 10 tons capacity, and was manufactured by American Standard. This chiller is in good condition and, with proper maintenance, will outlast the purview of this analysis.

The Ragsdale Annex is served by a forced air HVAC system with a single-zone air handling unit. The air handling unit has hot water heating coils and chilled water cooling coils. The ventilation system delivers 100 percent outside air to specific interior spaces. The air distribution network furnishes constant volume air to the occupied spaces. The controls for this system are electronic. Supplemental HVAC for the main building is provided by split heat pump systems. They are also controlled with electronic thermostats.

The components of the overall HVAC system, in general, are approaching the ends of their expected life cycles. It should be anticipated that it will require renovation within the scope of this analysis. Install a new modern HVAC system with variable air volume (VAV) and constant volume air distribution as needed. Specify direct digital controls (DDC) for the new equipment. Install local, water-cooled chilled water generation for building cooling. Include an associated cooling tower to perform heat rejection. In conjunction with the proposed HVAC system upgrade, it is recommended that the split systems be removed and that the areas that they serve are included on the central HVAC system.

ELECTRICAL

An oil-filled transformer that is rated for 300 kVA service steps the incoming power from 12,470 volt down to 120/208 volt for building distribution. This unit was manufactured by S & C. It is then distributed by switchgear that is rated for 1,600 amp service and was manufactured by General Electric. It should be anticipated that the 120/208 volt main distribution panel and switchgear will require replacement within the outlook of this report.

A portion of the electrical distribution network was upgraded in this facility in 1989 and supplies 120/208 volt power throughout. The panels were manufactured predominantly by General Electric. The electrical devices in this facility are aged and visibly worn. The system is undersized to support the current needs of the occupants. It is recommended that minor deficiencies in the electrical distribution network be rectified. Such remedies include, but are not limited to, installing additional circuits, replacing worn switches and receptacles, replacing circuit breakers, and updating panel directories.

The original electrical distribution network still supplies a portion of this facility and supplies 120/208 volt power throughout. The panels were manufactured predominantly by Square D. The electrical devices in this facility are aged and visibly worn. The system is undersized to support the current needs of the occupants. In order to maintain reliable service throughout the facility, it is recommended that the electrical distribution network is upgraded.

The interior spaces of this facility are illuminated by fixtures that utilize T12 fluorescent lamps. Most of the fluorescent lighting fixtures are recessed applications. Some fixtures are still fitted with inefficient, incandescent lamps. The lenses on the light fixtures are aged and present a dim aesthetic. Some lenses are worn or missing. The lighting system is currently sufficient. However, it should be anticipated that it will require replacement within the scope of this analysis. Specify energy-efficient light fixtures for the new interior lighting systems, and install occupancy sensors where possible. It is recommended that the unitary emergency lighting fixtures are removed and that their functionality is incorporated into the new interior lighting systems.

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

Emergency power for this facility is produced by a local diesel-fired emergency generator. This unit is of 90 kW capacity, generates 120/208 volt power, and was manufactured by Caterpillar. This generator is currently adequate and should remain a reliable source of stand-by power throughout the purview of this analysis.

PLUMBING

Potable water is distributed throughout this facility via a galvanized steel piping network. Sanitary waste and storm water piping is of cast-iron, bell-and-spigot construction with galvanized steel run-outs. The supply and drain piping networks are aged and should be replaced. Failure to undertake such upgrades will likely lead to leaks, drainage issues, and other problems that will require costly maintenance. The plumbing fixtures are recommended for replacement. This action is detailed in the proposed restroom renovation. Duplex sewage ejector systems facilitate the sanitary drainage process. These systems are in good working order. With proper maintenance, they will outlast the purview of this report.

Domestic water for this facility is heated by an electric, commercial-grade water heater. This unit is approaching the end of its expected life cycle. It should be anticipated that it will require replacement within the scope of this analysis.

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 2, 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
RAGS : RAGSDALE HALL

System Code	System Description	Priority Classes 1	2	3	4	Subtotal
AC	ACCESSIBILITY	0	0	0	625,617	625,617
EL	ELECTRICAL	0	0	527,466	51,227	578,693
ES	EXTERIOR	0	1,564,712	384,843	0	1,949,555
FS	FIRE/LIFE SAFETY	8,107	411,232	0	0	419,340
HE	HEALTH	0	15,599	0	0	15,599
HV	HVAC	0	0	1,278,092	0	1,278,092
IS	INTERIOR/FINISH SYS.	0	0	366,725	29,968	396,693
PL	PLUMBING	0	0	221,125	12,172	233,298
SI	SITE	0	0	3,978	0	3,978
	TOTALS	8,107	1,991,544	2,782,229	718,984	5,500,865

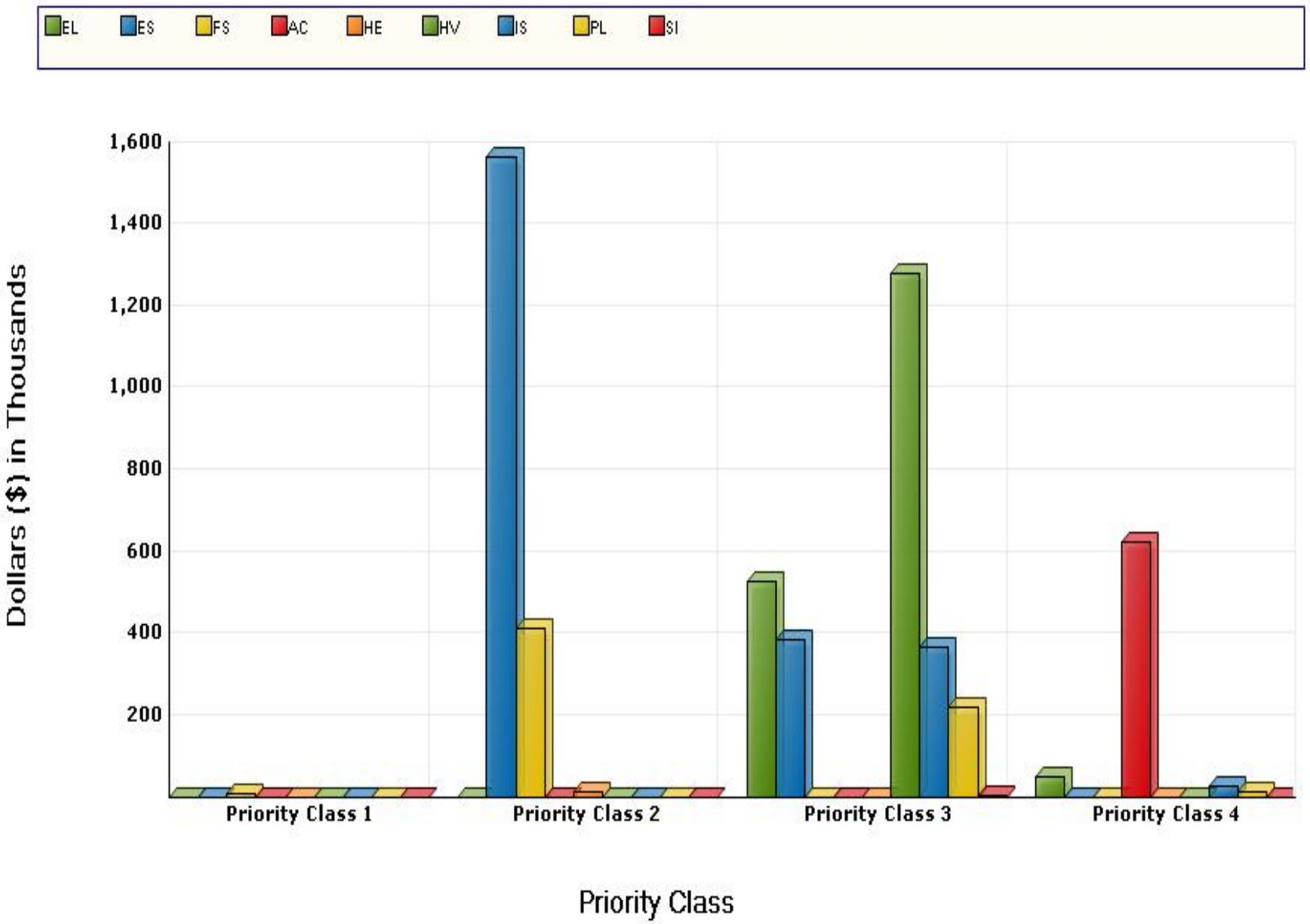
Facility Replacement Cost	$11,271,078
Facility Condition Needs Index	0.49

Gross Square Feet	41,144	**Total Cost Per Square Foot**	$133.70

FACILITY CONDITION ANALYSIS

System Code by Priority Class

RAGS : RAGSDALE HALL



Detailed Project Totals
Facility Condition Analysis
System Code by Project Class
RAGS : RAGSDALE HALL

System Code	System Description	Project Classes: Captial Renewal	Deferred Maintenance	Plant Adaption	Subtotal
AC	ACCESSIBILITY	0	0	625,617	625,617
EL	ELECTRICAL	378,677	200,016	0	578,693
ES	EXTERIOR	384,843	1,564,712	0	1,949,555
FS	FIRE/LIFE SAFETY	0	0	419,340	419,340
HE	HEALTH	0	15,599	0	15,599
HV	HVAC	0	0	1,278,092	1,278,092
IS	INTERIOR/FINISH SYS.	396,693	0	0	396,693
PL	PLUMBING	12,172	221,125	0	233,298
SI	SITE	3,978	0	0	3,978
	TOTALS	1,176,363	2,001,453	2,323,049	5,500,865

Facility Replacement Cost	$11,271,078
Facility Condition Needs Index	0.49

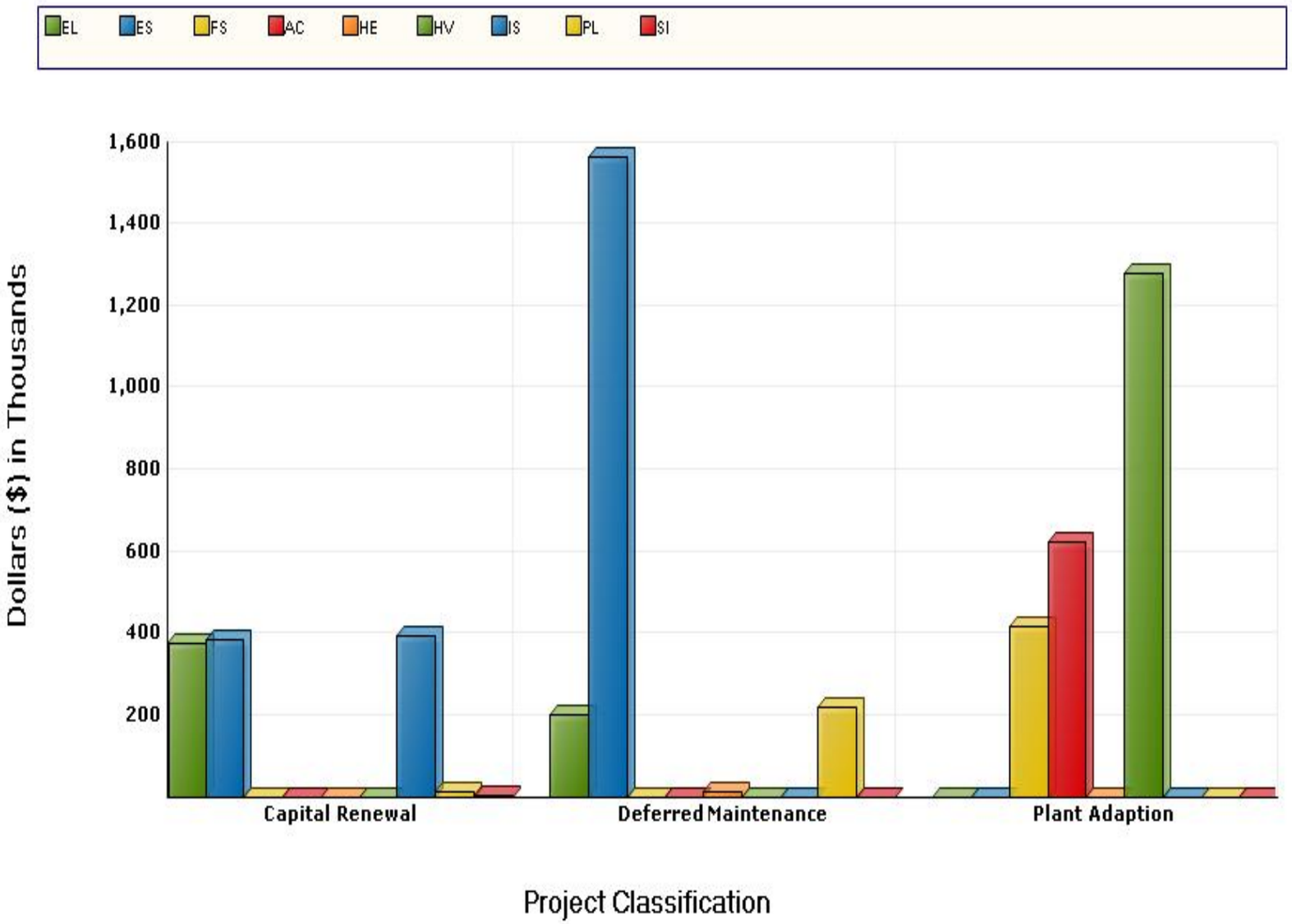
Gross Square Feet	41,144

Total Cost Per Square Foot	$133.70

FACILITY CONDITION ANALYSIS

System Code by Project Class

RAGS : RAGSDALE HALL



Detailed Project Summary
Facility Condition Analysis
Project Class by Priority Class
RAGS : RAGSDALE HALL

	Priority Classes				
Project Class	**1**	**2**	**3**	**4**	**Subtotal**
Capital Renewal	0	0	1,082,996	93,368	1,176,363
Deferred Maintenance	0	1,580,311	421,142	0	2,001,453
Plant Adaption	8,107	411,232	1,278,092	625,617	2,323,049
TOTALS	8,107	1,991,544	2,782,229	718,984	5,500,865

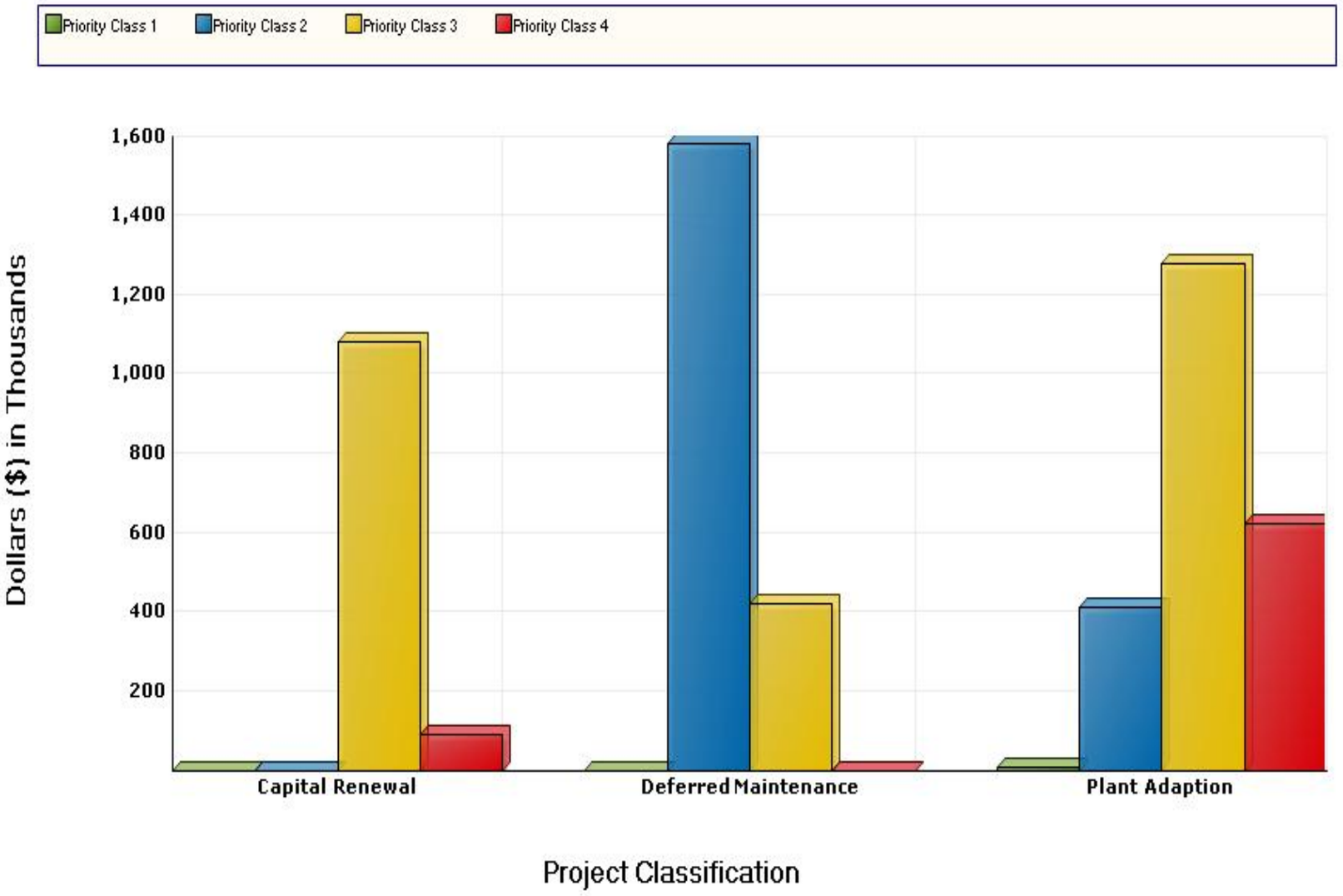
Facility Replacement Cost	$11,271,078
Facility Condition Needs Index	0.49

Gross Square Feet	41,144	**Total Cost Per Square Foot**	$133.70

FACILITY CONDITION ANALYSIS

Project Class by Priority Class

RAGS : RAGSDALE HALL



Detailed Project Summary

Facility Condition Analysis

Priority Class - Priority Sequence

RAGS : RAGSDALE HALL

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Total Cost
FS5E	RAGSFS03	1	1	STAIR GUARDRAIL UPGRADES	4,524	724	5,248
FS5C	RAGSFS04	1	2	SAFETY GLASS INSTALLATION ALLOWANCE	2,465	394	2,860
				Totals for Priority Class 1	**6,989**	**1,118**	**8,107**
FS2A	RAGSFS01	2	3	FIRE ALARM SYSTEM REPLACEMENT	98,109	15,697	113,806
FS3A	RAGSFS02	2	4	FIRE SPRINKLER SYSTEM INSTALLATION	256,402	41,024	297,426
HE6F	RAGSHE01	2	5	INTERIOR ASBESTOS ABATEMENT	15,599	0	15,599
ES1B	RAGSES01	2	6	WATERPROOFING OF EXTERIOR FOUNDATION WALL	56,909	9,105	66,014
ES5B	RAGSES02	2	7	WINDOW REPLACEMENT	1,291,981	206,717	1,498,698
				Totals for Priority Class 2	**1,719,000**	**272,544**	**1,991,544**
ES2B	RAGSES04	3	8	RESTORE BRICK VENEER	20,527	3,284	23,811
ES4B	RAGSES05	3	9	PITCHED CLAY TILE ROOF REPLACEMENT	311,234	49,798	361,032
HV3A	RAGSHV01	3	10	HVAC SYSTEM INSTALLATION	926,967	148,315	1,075,282
HV2A	RAGSHV02	3	11	INSTALL CHILLED WATER GENERATION EQUIPMENT	174,836	27,974	202,810
EL3B	RAGSEL03	3	12	UPGRADE ELECTRICAL DISTRIBUTION NETWORK	172,428	27,588	200,016
EL4B	RAGSEL02	3	13	INTERIOR LIGHTING UPGRADE	270,343	43,255	313,598
EL4A	RAGSEL04	3	14	EXTERIOR LIGHTING REPLACEMENT	11,941	1,911	13,852
IS2B	RAGSIS01	3	15	REFINISH WALLS	63,338	10,134	73,472
IS1A	RAGSIS02	3	16	REFINISH FLOORING	252,804	40,449	293,253
PL1A	RAGSPL02	3	17	WATER SUPPLY PIPING REPLACEMENT	75,645	12,103	87,748
PL2A	RAGSPL03	3	18	DRAIN PIPING REPLACEMENT	114,981	18,397	133,378
SI2A	RAGSSI01	3	19	LANDSCAPING UPGRADE	3,430	549	3,978
				Totals for Priority Class 3	**2,398,474**	**383,756**	**2,782,229**
AC4B	RAGSAC01	4	20	INSTALL SITE RAMPS	50,240	8,038	58,278
AC1A	RAGSAC02	4	21	UPGRADE SITE HANDRAILS	1,498	240	1,738
AC3A	RAGSAC03	4	22	ELEVATOR INSTALLATION	167,247	26,759	194,006
AC3C	RAGSAC04	4	23	INSTALL LEVER-ACTION DOOR HARDWARE	66,521	10,643	77,164
AC3B	RAGSAC05	4	24	STAIR HANDRAIL UPGRADES	5,125	820	5,944
AC4A	RAGSAC06	4	25	MILLWORK ACCESSIBILITY UPGRADES	4,946	791	5,737
AC3E	RAGSAC07	4	26	RESTROOM RENOVATIONS	219,383	35,101	254,485

Detailed Project Summary

Facility Condition Analysis

Priority Class - Priority Sequence

RAGS : RAGSDALE HALL

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Total Cost
AC3F	RAGSAC08	4	27	DUAL-LEVEL DRINKING FOUNTAIN INSTALLATION	8,764	1,402	10,167
AC3D	RAGSAC09	4	28	SIGNAGE PACKAGE UPGRADE	15,601	2,496	18,097
EL2A	RAGSEL01	4	29	REPLACE 120/208 VOLT SWITCHGEAR	44,162	7,066	51,227
IS6D	RAGSIS03	4	30	ENTRY FLOOR RESTROOM RENOVATIONS	8,582	1,373	9,955
IS3B	RAGSIS04	4	31	REFINISH CEILINGS	17,252	2,760	20,013
PL1E	RAGSPL01	4	32	DOMESTIC WATER HEATER REPLACEMENT	10,493	1,679	12,172
				Totals for Priority Class 4	**619,814**	**99,170**	**718,984**
				Grand Total:	**4,744,277**	**756,588**	**5,500,865**

Detailed Project Summary

Facility Condition Analysis

Project Cost Range

RAGS : RAGSDALE HALL

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Total Cost
FS5E	RAGSFS03	1	1	STAIR GUARDRAIL UPGRADES	4,524	724	5,248
FS5C	RAGSFS04	1	2	SAFETY GLASS INSTALLATION ALLOWANCE	2,465	394	2,860
				Totals for Priority Class 1	**6,989**	**1,118**	**8,107**
ES1B	RAGSES01	2	6	WATERPROOFING OF EXTERIOR FOUNDATION WALL	56,909	9,105	66,014
HE6F	RAGSHE01	2	5	INTERIOR ASBESTOS ABATEMENT	15,599	0	15,599
				Totals for Priority Class 2	**72,508**	**9,105**	**81,614**
EL4A	RAGSEL04	3	14	EXTERIOR LIGHTING REPLACEMENT	11,941	1,911	13,852
PL1A	RAGSPL02	3	17	WATER SUPPLY PIPING REPLACEMENT	75,645	12,103	87,748
SI2A	RAGSSI01	3	19	LANDSCAPING UPGRADE	3,430	549	3,978
IS2B	RAGSIS01	3	15	REFINISH WALLS	63,338	10,134	73,472
ES2B	RAGSES04	3	8	RESTORE BRICK VENEER	20,527	3,284	23,811
				Totals for Priority Class 3	**174,880**	**27,981**	**202,861**
EL2A	RAGSEL01	4	29	REPLACE 120/208 VOLT SWITCHGEAR	44,162	7,066	51,227
PL1E	RAGSPL01	4	32	DOMESTIC WATER HEATER REPLACEMENT	10,493	1,679	12,172
AC4B	RAGSAC01	4	20	INSTALL SITE RAMPS	50,240	8,038	58,278
AC1A	RAGSAC02	4	21	UPGRADE SITE HANDRAILS	1,498	240	1,738
AC3C	RAGSAC04	4	23	INSTALL LEVER-ACTION DOOR HARDWARE	66,521	10,643	77,164
AC3B	RAGSAC05	4	24	STAIR HANDRAIL UPGRADES	5,125	820	5,944
AC4A	RAGSAC06	4	25	MILLWORK ACCESSIBILITY UPGRADES	4,946	791	5,737
AC3F	RAGSAC08	4	27	DUAL-LEVEL DRINKING FOUNTAIN INSTALLATION	8,764	1,402	10,167
AC3D	RAGSAC09	4	28	SIGNAGE PACKAGE UPGRADE	15,601	2,496	18,097
IS6D	RAGSIS03	4	30	ENTRY FLOOR RESTROOM RENOVATIONS	8,582	1,373	9,955
IS3B	RAGSIS04	4	31	REFINISH CEILINGS	17,252	2,760	20,013
				Totals for Priority Class 4	**233,184**	**37,309**	**270,493**
				Grand Totals for Projects < 100,000	**487,561**	**75,514**	**563,075**

Detailed Project Summary

Facility Condition Analysis

Project Cost Range

RAGS : RAGSDALE HALL

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Total Cost
FS2A	RAGSFS01	2	3	FIRE ALARM SYSTEM REPLACEMENT	98,109	15,697	113,806
FS3A	RAGSFS02	2	4	FIRE SPRINKLER SYSTEM INSTALLATION	256,402	41,024	297,426
				Totals for Priority Class 2	**354,511**	**56,722**	**411,232**
HV2A	RAGSHV02	3	11	INSTALL CHILLED WATER GENERATION EQUIPMENT	174,836	27,974	202,810
EL4B	RAGSEL02	3	13	INTERIOR LIGHTING UPGRADE	270,343	43,255	313,598
EL3B	RAGSEL03	3	12	UPGRADE ELECTRICAL DISTRIBUTION NETWORK	172,428	27,588	200,016
PL2A	RAGSPL03	3	18	DRAIN PIPING REPLACEMENT	114,981	18,397	133,378
IS1A	RAGSIS02	3	16	REFINISH FLOORING	252,804	40,449	293,253
ES4B	RAGSES05	3	9	PITCHED CLAY TILE ROOF REPLACEMENT	311,234	49,798	361,032
				Totals for Priority Class 3	**1,296,626**	**207,460**	**1,504,086**
AC3A	RAGSAC03	4	22	ELEVATOR INSTALLATION	167,247	26,759	194,006
AC3E	RAGSAC07	4	26	RESTROOM RENOVATIONS	219,383	35,101	254,485
				Totals for Priority Class 4	**386,630**	**61,861**	**448,491**
				Grand Totals for Projects >= 100,000 and < 500,000	**2,037,767**	**326,043**	**2,363,810**

Detailed Project Summary

Facility Condition Analysis

Project Cost Range

RAGS : RAGSDALE HALL

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Total Cost
ES5B	RAGSES02	2	7	WINDOW REPLACEMENT	1,291,981	206,717	1,498,698
				Totals for Priority Class 2	**1,291,981**	**206,717**	**1,498,698**
HV3A	RAGSHV01	3	10	HVAC SYSTEM INSTALLATION	926,967	148,315	1,075,282
				Totals for Priority Class 3	**926,967**	**148,315**	**1,075,282**
				Grand Totals for Projects >= 500,000	**2,218,948**	**355,032**	**2,573,980**
				Grand Totals For All Projects:	**4,744,277**	**756,588**	**5,500,865**

Detailed Project Summary

Facility Condition Analysis

Project Classification

RAGS : RAGSDALE HALL

Cat Code	Project Number	Pri. Seq.	Project Classification	Pri. Cls	Project Title	Total Cost
ES2B	RAGSES04	8	Capital Renewal	3	RESTORE BRICK VENEER	23,811
ES4B	RAGSES05	9	Capital Renewal	3	PITCHED CLAY TILE ROOF REPLACEMENT	361,032
EL4B	RAGSEL02	13	Capital Renewal	3	INTERIOR LIGHTING UPGRADE	313,598
EL4A	RAGSEL04	14	Capital Renewal	3	EXTERIOR LIGHTING REPLACEMENT	13,852
IS2B	RAGSIS01	15	Capital Renewal	3	REFINISH WALLS	73,472
IS1A	RAGSIS02	16	Capital Renewal	3	REFINISH FLOORING	293,253
SI2A	RAGSSI01	19	Capital Renewal	3	LANDSCAPING UPGRADE	3,978
EL2A	RAGSEL01	29	Capital Renewal	4	REPLACE 120/208 VOLT SWITCHGEAR	51,227
IS6D	RAGSIS03	30	Capital Renewal	4	ENTRY FLOOR RESTROOM RENOVATIONS	9,955
IS3B	RAGSIS04	31	Capital Renewal	4	REFINISH CEILINGS	20,013
PL1E	RAGSPL01	32	Capital Renewal	4	DOMESTIC WATER HEATER REPLACEMENT	12,172
					Totals for Capital Renewal	**1,176,363**
HE6F	RAGSHE01	5	Deferred Maintenance	2	INTERIOR ASBESTOS ABATEMENT	15,599
ES1B	RAGSES01	6	Deferred Maintenance	2	WATERPROOFING OF EXTERIOR FOUNDATION WALL	66,014
ES5B	RAGSES02	7	Deferred Maintenance	2	WINDOW REPLACEMENT	1,498,698
EL3B	RAGSEL03	12	Deferred Maintenance	3	UPGRADE ELECTRICAL DISTRIBUTION NETWORK	200,016
PL1A	RAGSPL02	17	Deferred Maintenance	3	WATER SUPPLY PIPING REPLACEMENT	87,748
PL2A	RAGSPL03	18	Deferred Maintenance	3	DRAIN PIPING REPLACEMENT	133,378
					Totals for Deferred Maintenance	**2,001,453**
FS5E	RAGSFS03	1	Plant Adaption	1	STAIR GUARDRAIL UPGRADES	5,248
FS5C	RAGSFS04	2	Plant Adaption	1	SAFETY GLASS INSTALLATION ALLOWANCE	2,860
FS2A	RAGSFS01	3	Plant Adaption	2	FIRE ALARM SYSTEM REPLACEMENT	113,806
FS3A	RAGSFS02	4	Plant Adaption	2	FIRE SPRINKLER SYSTEM INSTALLATION	297,426
HV3A	RAGSHV01	10	Plant Adaption	3	HVAC SYSTEM INSTALLATION	1,075,282
HV2A	RAGSHV02	11	Plant Adaption	3	INSTALL CHILLED WATER GENERATION EQUIPMENT	202,810
AC4B	RAGSAC01	20	Plant Adaption	4	INSTALL SITE RAMPS	58,278
AC1A	RAGSAC02	21	Plant Adaption	4	UPGRADE SITE HANDRAILS	1,738
AC3A	RAGSAC03	22	Plant Adaption	4	ELEVATOR INSTALLATION	194,006
AC3C	RAGSAC04	23	Plant Adaption	4	INSTALL LEVER-ACTION DOOR HARDWARE	77,164

Detailed Project Summary

Facility Condition Analysis

Project Classification

RAGS : RAGSDALE HALL

Cat Code	Project Number	Pri. Seq.	Project Classification	Pri. Cls	Project Title	Total Cost
AC3B	RAGSAC05	24	Plant Adaption	4	STAIR HANDRAIL UPGRADES	5,944
AC4A	RAGSAC06	25	Plant Adaption	4	MILLWORK ACCESSIBILITY UPGRADES	5,737
AC3E	RAGSAC07	26	Plant Adaption	4	RESTROOM RENOVATIONS	254,485
AC3F	RAGSAC08	27	Plant Adaption	4	DUAL-LEVEL DRINKING FOUNTAIN INSTALLATION	10,167
AC3D	RAGSAC09	28	Plant Adaption	4	SIGNAGE PACKAGE UPGRADE	18,097
					Totals for Plant Adaption	**2,323,049**
					Grand Total:	**5,500,865**

Detailed Project Summary

Facility Condition Analysis

Energy Conservation

RAGS : RAGSDALE HALL

Cat Code	Project Number	Pri Cls	Pri Seq	Project Title	Total Cost	Annual Savings	Simple Payback
ES5B	RAGSES02	2	7	WINDOW REPLACEMENT	1,498,698	2,900	516.79
				Totals for Priority Class 2	**1,498,698**	**2,900**	**516.79**
ES4B	RAGSES05	3	9	PITCHED CLAY TILE ROOF REPLACEMENT	361,032	1,600	225.64
EL4B	RAGSEL02	3	13	INTERIOR LIGHTING UPGRADE	313,598	12,590	24.91
EL4A	RAGSEL04	3	14	EXTERIOR LIGHTING REPLACEMENT	13,852	260	53.28
				Totals for Priority Class 3	**688,481**	**14,450**	**47.65**
				Grand Total:	**2,187,179**	**17,350**	**126.06**

Detailed Project Summary
Facility Condition Analysis
Category/System Code
RAGS : RAGSDALE HALL

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Total Cost
AC4B	RAGSAC01	4	20	INSTALL SITE RAMPS	50,240	8,038	58,278
AC1A	RAGSAC02	4	21	UPGRADE SITE HANDRAILS	1,498	240	1,738
AC3A	RAGSAC03	4	22	ELEVATOR INSTALLATION	167,247	26,759	194,006
AC3C	RAGSAC04	4	23	INSTALL LEVER-ACTION DOOR HARDWARE	66,521	10,643	77,164
AC3B	RAGSAC05	4	24	STAIR HANDRAIL UPGRADES	5,125	820	5,944
AC4A	RAGSAC06	4	25	MILLWORK ACCESSIBILITY UPGRADES	4,946	791	5,737
AC3E	RAGSAC07	4	26	RESTROOM RENOVATIONS	219,383	35,101	254,485
AC3F	RAGSAC08	4	27	DUAL-LEVEL DRINKING FOUNTAIN INSTALLATION	8,764	1,402	10,167
AC3D	RAGSAC09	4	28	SIGNAGE PACKAGE UPGRADE	15,601	2,496	18,097
				Totals for System Code: ACCESSIBILITY	**539,325**	**86,292**	**625,617**
EL3B	RAGSEL03	3	12	UPGRADE ELECTRICAL DISTRIBUTION NETWORK	172,428	27,588	200,016
EL4B	RAGSEL02	3	13	INTERIOR LIGHTING UPGRADE	270,343	43,255	313,598
EL4A	RAGSEL04	3	14	EXTERIOR LIGHTING REPLACEMENT	11,941	1,911	13,852
EL2A	RAGSEL01	4	29	REPLACE 120/208 VOLT SWITCHGEAR	44,162	7,066	51,227
				Totals for System Code: ELECTRICAL	**498,873**	**79,820**	**578,693**
ES1B	RAGSES01	2	6	WATERPROOFING OF EXTERIOR FOUNDATION WALL	56,909	9,105	66,014
ES5B	RAGSES02	2	7	WINDOW REPLACEMENT	1,291,981	206,717	1,498,698
ES2B	RAGSES04	3	8	RESTORE BRICK VENEER	20,527	3,284	23,811
ES4B	RAGSES05	3	9	PITCHED CLAY TILE ROOF REPLACEMENT	311,234	49,798	361,032
				Totals for System Code: EXTERIOR	**1,680,651**	**268,904**	**1,949,555**
FS5E	RAGSFS03	1	1	STAIR GUARDRAIL UPGRADES	4,524	724	5,248
FS5C	RAGSFS04	1	2	SAFETY GLASS INSTALLATION ALLOWANCE	2,465	394	2,860
FS2A	RAGSFS01	2	3	FIRE ALARM SYSTEM REPLACEMENT	98,109	15,697	113,806
FS3A	RAGSFS02	2	4	FIRE SPRINKLER SYSTEM INSTALLATION	256,402	41,024	297,426
				Totals for System Code: FIRE/LIFE SAFETY	**361,500**	**57,840**	**419,340**
HE6F	RAGSHE01	2	5	INTERIOR ASBESTOS ABATEMENT	15,599	0	15,599
				Totals for System Code: HEALTH	**15,599**		**15,599**
HV3A	RAGSHV01	3	10	HVAC SYSTEM INSTALLATION	926,967	148,315	1,075,282
HV2A	RAGSHV02	3	11	INSTALL CHILLED WATER GENERATION EQUIPMENT	174,836	27,974	202,810
				Totals for System Code: HVAC	**1,101,803**	**176,289**	**1,278,092**
IS2B	RAGSIS01	3	15	REFINISH WALLS	63,338	10,134	73,472
IS1A	RAGSIS02	3	16	REFINISH FLOORING	252,804	40,449	293,253

Detailed Project Summary

Facility Condition Analysis

Category/System Code

RAGS : RAGSDALE HALL

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Total Cost
IS6D	RAGSIS03	4	30	ENTRY FLOOR RESTROOM RENOVATIONS	8,582	1,373	9,955
IS3B	RAGSIS04	4	31	REFINISH CEILINGS	17,252	2,760	20,013
				Totals for System Code: INTERIOR/FINISH SYS.	**341,976**	**54,716**	**396,693**
PL1A	RAGSPL02	3	17	WATER SUPPLY PIPING REPLACEMENT	75,645	12,103	87,748
PL2A	RAGSPL03	3	18	DRAIN PIPING REPLACEMENT	114,981	18,397	133,378
PL1E	RAGSPL01	4	32	DOMESTIC WATER HEATER REPLACEMENT	10,493	1,679	12,172
				Totals for System Code: PLUMBING	**201,119**	**32,179**	**233,298**
SI2A	RAGSSI01	3	19	LANDSCAPING UPGRADE	3,430	549	3,978
				Totals for System Code: SITE	**3,430**	**549**	**3,978**
				Grand Total:	**4,744,277**	**756,588**	**5,500,865**

FACILITY CONDITION ANALYSIS

SECTION 3

SPECIFIC PROJECT DETAILS ILLUSTRATING DESCRIPTION / COST

Specific Project Details

Facility Condition Analysis
Section Three
RAGS : RAGSDALE HALL

Project Description

Project Number:	RAGSFS03	**Title:**	STAIR GUARDRAIL UPGRADES
Priority Sequence:	1		
Priority Class:	1		
Category Code:	FS5E	**System:**	FIRE/LIFE SAFETY
		Component:	EGRESS PATH
		Element:	STAIRS AND RAILING
Building Code:	RAGS		
Building Name:	RAGSDALE HALL		
Subclass/Savings:	Not Applicable		
Code Application:	IBC 1003.3		
Project Class:	Plant Adaption		
Project Date:	11/30/2009		
Project Location:	Item Only: Floor(s) 1, 2, G		

Project Description

Code requires that there be a guardrail where there is a change in floor level in excess of 36 inches, and that these guardrails be a minimum of 42 inches high. The guardrails must also prevent the passage of a specific diameter sphere. The painted metal guardrail at the top of the southeast, northeast, north central, and northwest stairs has sufficient infill but is too low and the open design of the three northern stairs creates a guardrail condition down the entire length of all three of those stairs. The existing handrails at these three stairs can not also act as a legal guardrail. A painted metal rail should be added above and parallel to all of these existing guardrails and handrails that are too low. The guardrail at the three sets of site steps in the courtyard is also too low, can not act as a legal guardrail and handrails, and lack sufficient infill. The application of a galvanized, expanded metal lath to the existing guardrails at the top of the east stair is the most cost-effective method of complying with the sphere test, in addition to adding a painted metal rail above and parallel to the existing handrails and guardrails.

Specific Project Details

Facility Condition Analysis
Section Three
RAGS : RAGSDALE HALL

Project Cost

Project Number: RAGSFS03

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Metal rail, galvanized expanded metal grillage, equipment rental, supplies, and paint (2 coats)	LOT	1	$2,000	$2,000	$3,200	$3,200	$5,200
Project Totals:				**$2,000**		**$3,200**	**$5,200**

Material/Labor Cost		$5,200
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$3,656
General Contractor Mark Up at 20.0%	+	$731
Inflation	+	$137
Construction Cost		$4,524
Professional Fees at 16.0%	+	$724
Total Project Cost		**$5,248**

Specific Project Details

Facility Condition Analysis
Section Three
RAGS : RAGSDALE HALL

Project Description

Project Number:	RAGSFS04	**Title:**	SAFETY GLASS INSTALLATION ALLOWANCE
Priority Sequence:	2		
Priority Class:	1		
Category Code:	FS5C	**System:**	FIRE/LIFE SAFETY
		Component:	EGRESS PATH
		Element:	SEPARATION RATING
Building Code:	RAGS		
Building Name:	RAGSDALE HALL		
Subclass/Savings:	Not Applicable		
Code Application:	IBC 2400		
Project Class:	Plant Adaption		
Project Date:	11/30/2009		
Project Location:	Undefined: Floor(s) 1		

Project Description

Code requires that all glazing in doors and sidelights be tempered, wire-glass, or otherwise safety-rated. It is not apparent that all of the door and sidelight glazing in this building is rated. It is recommended that all door and sidelight glazing be replaced with tempered glass where it can not be determined that the existing glazing is safety-rated.

Specific Project Details

Facility Condition Analysis
Section Three
RAGS : RAGSDALE HALL

Project Cost

Project Number: RAGSFS04

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Safety glass and disposal fee	LOT	1	$1,000	$1,000	$1,920	$1,920	$2,920
Project Totals:				**$1,000**		**$1,920**	**$2,920**

Material/Labor Cost		$2,920
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$1,992
General Contractor Mark Up at 20.0%	+	$398
Inflation	+	$75
Construction Cost		$2,465
Professional Fees at 16.0%	+	$394
Total Project Cost		**$2,860**

Specific Project Details

Facility Condition Analysis
Section Three
RAGS : RAGSDALE HALL

Project Description

Project Number:	RAGSFS01	**Title:**	FIRE ALARM SYSTEM REPLACEMENT
Priority Sequence:	3		
Priority Class:	2		
Category Code:	FS2A	**System:**	FIRE/LIFE SAFETY
		Component:	DETECTION ALARM
		Element:	GENERAL

Building Code:	RAGS	
Building Name:	RAGSDALE HALL	
Subclass/Savings:	Not Applicable	
Code Application:	ADAAG	702.1
	NFPA	1, 101
Project Class:	Plant Adaption	
Project Date:	10/20/2009	
Project Location:	Floor-wide: Floor(s) 1, 2, G	

Project Description

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

Specific Project Details

Facility Condition Analysis
Section Three
RAGS : RAGSDALE HALL

Project Cost

Project Number: RAGSFS01

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Fire alarm control panel(s), annunciator, smoke and heat detectors, manual pull stations, audible and visual alarms, wiring, raceways, cut and patching materials	SF	41,144	$1.46	$60,070	$0.89	$36,618	$96,688
Project Totals:				**$60,070**		**$36,618**	**$96,688**

Material/Labor Cost		$96,688
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$79,276
General Contractor Mark Up at 20.0%	+	$15,855
Inflation	+	$2,978
Construction Cost		$98,109
Professional Fees at 16.0%	+	$15,697
Total Project Cost		**$113,806**

Specific Project Details

Facility Condition Analysis
Section Three
RAGS : RAGSDALE HALL

Project Description

Project Number:	RAGSFS02	**Title:**	FIRE SPRINKLER SYSTEM INSTALLATION
Priority Sequence:	4		
Priority Class:	2		
Category Code:	FS3A	**System:**	FIRE/LIFE SAFETY
		Component:	SUPPRESSION
		Element:	SPRINKLERS
Building Code:	RAGS		
Building Name:	RAGSDALE HALL		
Subclass/Savings:	Not Applicable		

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

Project Class: Plant Adaption

Project Date: 10/20/2009

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

Project Description

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

Specific Project Details

Facility Condition Analysis
Section Three
RAGS : RAGSDALE HALL

Project Cost

Project Number: RAGSFS02

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	41,144	$3.08	$126,724	$3.77	$155,113	$281,836
Project Totals:				**$126,724**		**$155,113**	**$281,836**

Material/Labor Cost		$281,836
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$207,183
General Contractor Mark Up at 20.0%	+	$41,437
Inflation	+	$7,782
Construction Cost		$256,402
Professional Fees at 16.0%	+	$41,024
Total Project Cost		**$297,426**

Specific Project Details

Facility Condition Analysis
Section Three
RAGS : RAGSDALE HALL

Project Description

Project Number:	RAGSHE01	**Title:**	INTERIOR ASBESTOS ABATEMENT
Priority Sequence:	5		
Priority Class:	2		
Category Code:	HE6F	**System:**	HEALTH
		Component:	HAZARDOUS MATERIAL
		Element:	OTHER
Building Code:	RAGS		
Building Name:	RAGSDALE HALL		
Subclass/Savings:	Not Applicable		

Code Application:	EPA	40 CFR 61.M, 763
	OSHA	29 CFR 1910.1001, 1926.1101

Project Class:	Deferred Maintenance
Project Date:	11/30/2009
Project Location:	Undefined: Floor(s) 1

Project Description

Suspected asbestos-containing materials (ACM) are believed to be present in the facility, including the piping insulation, spray-on fireproofing, and multiple interior finish systems. Future renovation efforts will need to include provisions to test and abate any and all ACM.

Specific Project Details

Facility Condition Analysis
Section Three
RAGS : RAGSDALE HALL

Project Cost

Project Number: RAGSHE01

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Extensive asbestos remediation, including above-ceiling fireproofing, floor and wall mastic, and utility insulation	LOT	1	$8,500	$8,500	$12,800	$12,800	$21,300
Project Totals:				**$8,500**		**$12,800**	**$21,300**

Material/Labor Cost		$21,300
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$15,126
No GCM Required		
Inflation	+	$473
Construction Cost		$15,599
No Professional Fees Required		
Total Project Cost		**$15,599**

Specific Project Details

Facility Condition Analysis
Section Three
RAGS : RAGSDALE HALL

Project Description

Project Number:	RAGSES01	**Title:**	WATERPROOFING OF EXTERIOR FOUNDATION WALL
Priority Sequence:	6		
Priority Class:	2		
Category Code:	ES1B	**System:**	EXTERIOR
		Component:	FOUNDATION/FOOTING
		Element:	DAMPPROOFING/DEWATERING
Building Code:	RAGS		
Building Name:	RAGSDALE HALL		
Subclass/Savings:	Not Applicable		
Code Application:	Not Applicable		
Project Class:	Deferred Maintenance		
Project Date:	11/30/2009		
Project Location:	Area Wide: Floor(s) G		

Project Description

There is evidence of water infiltration through the basement foundation wall at the east side of the west wing. Excavation and waterproofing system upgrades are recommended. Improve the slope of grade away from the foundation prior to restoring the landscaping.

Specific Project Details

Facility Condition Analysis
Section Three
RAGS : RAGSDALE HALL

Project Cost

Project Number: RAGSES01

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Excavation and backfill to a depth of 10 feet	LF	150	$121	$18,150	$257	$38,550	$56,700
Landscape restoration 20 feet from building	LF	150	$11.49	$1,724	$8.62	$1,293	$3,017
Dampproofing application to a height of 10 feet	LF	150	$21.35	$3,203	$29.99	$4,499	$7,701
Project Totals:				**$23,076**		**$44,342**	**$67,418**

Material/Labor Cost		$67,418
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$45,985
General Contractor Mark Up at 20.0%	+	$9,197
Inflation	+	$1,727
Construction Cost		$56,909
Professional Fees at 16.0%	+	$9,105
Total Project Cost		**$66,014**

Specific Project Details

Facility Condition Analysis
Section Three
RAGS : RAGSDALE HALL

Project Description

Project Number:	RAGSES02	**Title:**	WINDOW REPLACEMENT
Priority Sequence:	7		
Priority Class:	2		
Category Code:	ES5B	**System:**	EXTERIOR
		Component:	FENESTRATIONS
		Element:	WINDOWS
Building Code:	RAGS		
Building Name:	RAGSDALE HALL		
Subclass/Savings:	Energy Conservation $2,900		
Code Application:	Not Applicable		
Project Class:	Deferred Maintenance		
Project Date:	11/30/2009		
Project Location:	Building-wide: Floor(s) 1		

Project Description

The existing windows are aging, wood-framed, single-hung, non-insulating units. It is recommended that these window applications be upgraded with thermal-pane glazing systems. Double-pane systems 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
RAGS : RAGSDALE HALL

Project Cost

Project Number: RAGSES02

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	13,670	$57.27	$782,881	$36.45	$498,272	$1,281,152
Project Totals:				**$782,881**		**$498,272**	**$1,281,152**

Material/Labor Cost		$1,281,152
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$1,043,974
General Contractor Mark Up at 20.0%	+	$208,795
Inflation	+	$39,212
Construction Cost		$1,291,981
Professional Fees at 16.0%	+	$206,717
Total Project Cost		**$1,498,698**

Specific Project Details

Facility Condition Analysis
Section Three
RAGS : RAGSDALE HALL

Project Description

Project Number:	RAGSES04	**Title:**	RESTORE BRICK VENEER
Priority Sequence:	8		
Priority Class:	3		
Category Code:	ES2B	**System:**	EXTERIOR
		Component:	COLUMNS/BEAMS/WALLS
		Element:	FINISH
Building Code:	RAGS		
Building Name:	RAGSDALE HALL		
Subclass/Savings:	Not Applicable		
Code Application:	Not Applicable		
Project Class:	Capital Renewal		
Project Date:	11/30/2009		
Project Location:	Building-wide: Floor(s) 1		

Project Description

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

Specific Project Details

Facility Condition Analysis
Section Three
RAGS : RAGSDALE HALL

Project Cost

Project Number: RAGSES04

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Cleaning and surface preparation	SF	12,120	$0.11	$1,333	$0.22	$2,666	$4,000
Selective mortar and / or sealant repairs (assumes 10 linear feet for every 100 square feet of envelope)	LF	1,212	$2.45	$2,969	$4.99	$6,048	$9,017
Applied finish or sealant	SF	12,120	$0.22	$2,666	$0.82	$9,938	$12,605
Project Totals:				**$6,969**		**$18,653**	**$25,622**

Material/Labor Cost		$25,622
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$16,587
General Contractor Mark Up at 20.0%	+	$3,317
Inflation	+	$623
Construction Cost		$20,527
Professional Fees at 16.0%	+	$3,284
Total Project Cost		**$23,811**

Specific Project Details

Facility Condition Analysis
Section Three
RAGS : RAGSDALE HALL

Project Description

Project Number:	RAGSES05	**Title:**	PITCHED CLAY TILE ROOF REPLACEMENT
Priority Sequence:	9		
Priority Class:	3		
Category Code:	ES4B	**System:**	EXTERIOR
		Component:	ROOF
		Element:	REPLACEMENT
Building Code:	RAGS		
Building Name:	RAGSDALE HALL		
Subclass/Savings:	Energy Conservation $1,600		
Code Application:	Not Applicable		
Project Class:	Capital Renewal		
Project Date:	11/30/2009		
Project Location:	Floor-wide: Floor(s) R		

Project Description

The clay tile roof is original and at the end of its service life. The original organic felts used during the time of construction have deteriorated and resulted in the loss of redundant waterproofing. The tile should be removed and new felts installed using non-ferrous fasteners when installing the underlayment and tile.

Specific Project Details

Facility Condition Analysis
Section Three
RAGS : RAGSDALE HALL

Project Cost

Project Number: RAGSES05

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Roof replacement	SF	17,900	$10.06	$180,074	$7.64	$136,756	$316,830
Project Totals:				**$180,074**		**$136,756**	**$316,830**

Material/Labor Cost		$316,830
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$251,490
General Contractor Mark Up at 20.0%	+	$50,298
Inflation	+	$9,446
Construction Cost		$311,234
Professional Fees at 16.0%	+	$49,798
Total Project Cost		**$361,032**

Specific Project Details

Facility Condition Analysis
Section Three
RAGS : RAGSDALE HALL

Project Description

Project Number:	RAGSHV01	**Title:**	HVAC SYSTEM INSTALLATION
Priority Sequence:	10		
Priority Class:	3		
Category Code:	HV3A	**System:**	HVAC
		Component:	HEATING/COOLING
		Element:	SYSTEM RETROFIT/REPLACE
Building Code:	RAGS		
Building Name:	RAGSDALE HALL		
Subclass/Savings:	Not Applicable		
Code Application:	ASHRAE 62-2004		
Project Class:	Plant Adaption		
Project Date:	10/20/2009		
Project Location:	Floor-wide: Floor(s) 1, 2, G, R		

Project Description

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

Specific Project Details

Facility Condition Analysis
Section Three
RAGS : RAGSDALE HALL

Project Cost

Project Number: RAGSHV01

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Air handlers, exhaust fans, ductwork, VAVs, VFDs, DDCs, heat exchangers, pumps, piping, electrical connections, and demolition of existing equipment	SF	41,144	$11.14	$458,344	$13.62	$560,381	$1,018,725
Project Totals:				**$458,344**		**$560,381**	**$1,018,725**

Material/Labor Cost		$1,018,725
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$749,028
General Contractor Mark Up at 20.0%	+	$149,806
Inflation	+	$28,134
Construction Cost		$926,967
Professional Fees at 16.0%	+	$148,315
Total Project Cost		**$1,075,282**

Specific Project Details

Facility Condition Analysis
Section Three
RAGS : RAGSDALE HALL

Project Description

Project Number:	RAGSHV02	**Title:**	INSTALL CHILLED WATER GENERATION EQUIPMENT
Priority Sequence:	11		
Priority Class:	3		
Category Code:	HV2A	**System:**	HVAC
		Component:	COOLING
		Element:	CHILLERS/CONTROLS
Building Code:	RAGS		
Building Name:	RAGSDALE HALL		
Subclass/Savings:	Not Applicable		
Code Application:	ASHRAE 15-2004		
Project Class:	Plant Adaption		
Project Date:	10/20/2009		
Project Location:	Undefined: Floor(s) G		

Project Description

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

Specific Project Details

Facility Condition Analysis
Section Three
RAGS : RAGSDALE HALL

Project Cost

Project Number: RAGSHV02

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Air-cooled chiller, cooling tower, pumps, VFDs, electrical and mechanical connections	TON	130	$577	$74,965	$346	$44,966	$119,930
Install new galvanized cooling tower	TON	170	$177	$30,153	$142	$24,082	$54,235
Project Totals:				**$105,117**		**$69,048**	**$174,165**

Material/Labor Cost		$174,165
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$141,275
General Contractor Mark Up at 20.0%	+	$28,255
Inflation	+	$5,306
Construction Cost		$174,836
Professional Fees at 16.0%	+	$27,974
Total Project Cost		**$202,810**

Specific Project Details

Facility Condition Analysis
Section Three
RAGS : RAGSDALE HALL

Project Description

Project Number:	RAGSEL03	**Title:**	UPGRADE ELECTRICAL DISTRIBUTION NETWORK
Priority Sequence:	12		
Priority Class:	3		
Category Code:	EL3B	**System:**	ELECTRICAL
		Component:	SECONDARY DISTRIBUTION
		Element:	DISTRIBUTION NETWORK
Building Code:	RAGS		
Building Name:	RAGSDALE HALL		
Subclass/Savings:	Not Applicable		

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

Project Class: Deferred Maintenance

Project Date: 10/20/2009

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

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 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
RAGS : RAGSDALE HALL

Project Cost

Project Number: RAGSEL03

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	15,000	$4.88	$73,200	$7.32	$109,800	$183,000
Switches, receptacles, cover plates, breakers, and miscellaneous materials	SF	26,144	$0.20	$5,229	$0.30	$7,843	$13,072
Project Totals:				**$78,429**		**$117,643**	**$196,072**

Material/Labor Cost		$196,072
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$139,329
General Contractor Mark Up at 20.0%	+	$27,866
Inflation	+	$5,233
Construction Cost		$172,428
Professional Fees at 16.0%	+	$27,588
Total Project Cost		**$200,016**

Specific Project Details

Facility Condition Analysis
Section Three
RAGS : RAGSDALE HALL

Project Description

Project Number:	RAGSEL02	**Title:**	INTERIOR LIGHTING UPGRADE
Priority Sequence:	13		
Priority Class:	3		
Category Code:	EL4B	**System:**	ELECTRICAL
		Component:	DEVICES AND FIXTURES
		Element:	INTERIOR LIGHTING

Building Code:	RAGS	
Building Name:	RAGSDALE HALL	
Subclass/Savings:	Energy Conservation	$12,590

Code Application:	NEC	Articles 210, 410

Project Class:	Capital Renewal
Project Date:	10/20/2009
Project Location:	Floor-wide: Floor(s) 1, 2, G

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 temperatures and rendering indexes for lighting uniformity. Install occupancy sensors in select areas for additional energy conservation.

Specific Project Details

Facility Condition Analysis
Section Three
RAGS : RAGSDALE HALL

Project Cost

Project Number: RAGSEL02

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	41,144	$3.25	$133,718	$3.97	$163,342	$297,060
Project Totals:				**$133,718**		**$163,342**	**$297,060**

Material/Labor Cost		$297,060
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$218,448
General Contractor Mark Up at 20.0%	+	$43,690
Inflation	+	$8,205
Construction Cost		$270,343
Professional Fees at 16.0%	+	$43,255
Total Project Cost		**$313,598**

Specific Project Details

Facility Condition Analysis
Section Three
RAGS : RAGSDALE HALL

Project Description

Project Number:	RAGSEL04	**Title:**	EXTERIOR LIGHTING REPLACEMENT
Priority Sequence:	14		
Priority Class:	3		
Category Code:	EL4A	**System:**	ELECTRICAL
		Component:	DEVICES AND FIXTURES
		Element:	EXTERIOR LIGHTING
Building Code:	RAGS		
Building Name:	RAGSDALE HALL		
Subclass/Savings:	Energy Conservation $260		
Code Application:	NEC 410		
Project Class:	Capital Renewal		
Project Date:	10/20/2009		
Project Location:	Building-wide: Floor(s) G,1,2,R		

Project Description

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

Specific Project Details

Facility Condition Analysis
Section Three
RAGS : RAGSDALE HALL

Project Cost

Project Number: RAGSEL04

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
HID wall-mount fixture and demolition of existing fixture	EA	4	$406	$1,624	$190	$760	$2,384
Compact fluorescent, recessed exterior light and demolition of existing light	EA	10	$143	$1,430	$100	$1,000	$2,430
Replace lighting stanchion, including fixture, 30 foot	EA	1	$2,662	$2,662	$1,996	$1,996	$4,658
Replace lighting stanchion, including fixture, 12 foot	EA	1	$1,331	$1,331	$1,220	$1,220	$2,551
Project Totals:				**$7,047**		**$4,976**	**$12,023**

Material/Labor Cost		$12,023
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$9,649
General Contractor Mark Up at 20.0%	+	$1,930
Inflation	+	$362
Construction Cost		$11,941
Professional Fees at 16.0%	+	$1,911
Total Project Cost		**$13,852**

Specific Project Details

Facility Condition Analysis
Section Three
RAGS : RAGSDALE HALL

Project Description

Project Number:	RAGSIS01	**Title:**	REFINISH WALLS
Priority Sequence:	15		
Priority Class:	3		
Category Code:	IS2B	**System:**	INTERIOR/FINISH SYS.
		Component:	PARTITIONS
		Element:	FINISHES
Building Code:	RAGS		
Building Name:	RAGSDALE HALL		
Subclass/Savings:	Not Applicable		
Code Application:	Not Applicable		
Project Class:	Capital Renewal		
Project Date:	11/30/2009		
Project Location:	Floor-wide: Floor(s) 1, 2, G		

Project Description

Interior wall finish applications vary in age, type, and condition, and consist mostly of paint. 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
RAGS : RAGSDALE HALL

Project Cost

Project Number: RAGSIS01

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	87,230	$0.17	$14,829	$0.81	$70,656	$85,485
Project Totals:				**$14,829**		**$70,656**	**$85,485**

Material/Labor Cost		$85,485
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$51,180
General Contractor Mark Up at 20.0%	+	$10,236
Inflation	+	$1,922
Construction Cost		$63,338
Professional Fees at 16.0%	+	$10,134
Total Project Cost		**$73,472**

Specific Project Details

Facility Condition Analysis
Section Three
RAGS : RAGSDALE HALL

Project Description

Project Number:	RAGSIS02	**Title:**	REFINISH FLOORING
Priority Sequence:	16		
Priority Class:	3		
Category Code:	IS1A	**System:**	INTERIOR/FINISH SYS.
		Component:	FLOOR
		Element:	FINISHES-DRY
Building Code:	RAGS		
Building Name:	RAGSDALE HALL		
Subclass/Savings:	Not Applicable		
Code Application:	Not Applicable		
Project Class:	Capital Renewal		
Project Date:	11/30/2009		
Project Location:	Floor-wide: Floor(s) 1, 2, G		

Project Description

Interior floor finish applications vary in age, type, and condition. Approximately two thirds of the flooring is carpet, and most of the corridor flooring is aging vinyl floor tile with indications of some subsurface objects telescoping through the finish face of many of the tiles. Floor finish upgrades should be considered as part of any future cosmetic improvements or major comprehensive renovation efforts. Ceramic floor tile replacement in the restrooms will need to be coordinated with the separately proposed Accessibility category project and Interior Finishes / Systems category project to upgrade the restrooms, to minimize the possibility of a duplication of funding and work scope.

Specific Project Details

Facility Condition Analysis
Section Three
RAGS : RAGSDALE HALL

Project Cost

Project Number: RAGSIS02

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Carpet	SF	21,110	$5.36	$113,150	$2.00	$42,220	$155,370
Vinyl floor tile	SF	2,500	$3.53	$8,825	$2.50	$6,250	$15,075
Ceramic tile	SF	4,440	$7.24	$32,146	$10.63	$47,197	$79,343
Project Totals:				**$154,120**		**$95,667**	**$249,787**

Material/Labor Cost		$249,787
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$204,276
General Contractor Mark Up at 20.0%	+	$40,855
Inflation	+	$7,673
Construction Cost		$252,804
Professional Fees at 16.0%	+	$40,449
Total Project Cost		**$293,253**

Specific Project Details

Facility Condition Analysis
Section Three
RAGS : RAGSDALE HALL

Project Description

Project Number:	RAGSPL02	**Title:**	WATER SUPPLY PIPING REPLACEMENT
Priority Sequence:	17		
Priority Class:	3		
Category Code:	PL1A	**System:**	PLUMBING
		Component:	DOMESTIC WATER
		Element:	PIPING NETWORK
Building Code:	RAGS		
Building Name:	RAGSDALE HALL		
Subclass/Savings:	Not Applicable		

Code Application: IPC Chapter 6

Project Class: Deferred Maintenance

Project Date: 10/20/2009

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

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
RAGS : RAGSDALE HALL

Project Cost

Project Number: RAGSPL02

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	41,144	$0.65	$26,744	$1.62	$66,653	$93,397
Project Totals:				**$26,744**		**$66,653**	**$93,397**

Material/Labor Cost		$93,397
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$61,124
General Contractor Mark Up at 20.0%	+	$12,225
Inflation	+	$2,296
Construction Cost		$75,645
Professional Fees at 16.0%	+	$12,103
Total Project Cost		**$87,748**

Specific Project Details

Facility Condition Analysis
Section Three
RAGS : RAGSDALE HALL

Project Description

Project Number:	RAGSPL03	**Title:**	DRAIN PIPING REPLACEMENT
Priority Sequence:	18		
Priority Class:	3		
Category Code:	PL2A	**System:**	PLUMBING
		Component:	WASTEWATER
		Element:	PIPING NETWORK
Building Code:	RAGS		
Building Name:	RAGSDALE HALL		
Subclass/Savings:	Not Applicable		

Code Application: IPC Chapters 7-11

Project Class: Deferred Maintenance

Project Date: 10/20/2009

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

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.

Specific Project Details

Facility Condition Analysis
Section Three
RAGS : RAGSDALE HALL

Project Cost

Project Number: RAGSPL03

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	41,144	$1.03	$42,378	$2.38	$97,923	$140,301
Project Totals:				**$42,378**		**$97,923**	**$140,301**

Material/Labor Cost		$140,301
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$92,909
General Contractor Mark Up at 20.0%	+	$18,582
Inflation	+	$3,490
Construction Cost		$114,981
Professional Fees at 16.0%	+	$18,397
Total Project Cost		**$133,378**

Specific Project Details

Facility Condition Analysis
Section Three
RAGS : RAGSDALE HALL

Project Description

Project Number:	RAGSSI01	**Title:**	LANDSCAPING UPGRADE
Priority Sequence:	19		
Priority Class:	3		
Category Code:	SI2A	**System:**	SITE
		Component:	LANDSCAPE
		Element:	GRADE/FLORA
Building Code:	RAGS		
Building Name:	RAGSDALE HALL		
Subclass/Savings:	Not Applicable		
Code Application:	Not Applicable		
Project Class:	Capital Renewal		
Project Date:	11/30/2009		
Project Location:	Undefined: Floor(s) 1		

Project Description

The landscaping on this moderate-sized, relatively flat site consists of turf, shrubs, specimen trees, and foundation planting, all in overall fair condition. There is a water infiltration problem along the east wall of the west wing. The overall condition of the site is such that a moderate landscaping project is warranted. This project will need to be coordinated with the separately proposed Exterior category project to eliminate a water infiltration problem along the east facade of the west wing, to minimize a duplication of work scope and funding.

Specific Project Details

Facility Condition Analysis
Section Three
RAGS : RAGSDALE HALL

Project Cost

Project Number: RAGSSI01

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Trees, shrubs, planting soil, amendments, sand, fill, and sod	SF	1,500	$1.04	$1,560	$1.56	$2,340	$3,900
Project Totals:				**$1,560**		**$2,340**	**$3,900**

Material/Labor Cost		$3,900
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$2,771
General Contractor Mark Up at 20.0%	+	$554
Inflation	+	$104
Construction Cost		$3,430
Professional Fees at 16.0%	+	$549
Total Project Cost		**$3,978**

Specific Project Details

Facility Condition Analysis
Section Three
RAGS : RAGSDALE HALL

Project Description

Project Number:	RAGSAC01	**Title:**	INSTALL SITE RAMPS
Priority Sequence:	20		
Priority Class:	4		
Category Code:	AC4B	**System:**	ACCESSIBILITY
		Component:	GENERAL
		Element:	OTHER
Building Code:	RAGS		
Building Name:	RAGSDALE HALL		
Subclass/Savings:	Not Applicable		

Code Application: ADAAG 403.6, 405, 505

Project Class:	Plant Adaption
Project Date:	11/30/2009
Project Location:	Item Only: Floor(s) 1, G

Project Description

The present legislation pertaining to handicapped access into buildings requires that goods, amenities, and services offered in buildings be generally accessible to all persons. Elevation changes at the southeast corner steps, the north entry steps, and the northwest corner site steps lack wheelchair accessibility. It is recommended that a ramp with associated compliant painted metal handrails be installed at all three locations.

Specific Project Details

Facility Condition Analysis
Section Three
RAGS : RAGSDALE HALL

Project Cost

Project Number: RAGSAC01

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Ramp construction, including handrails	VFT	12	$1,770	$21,240	$1,999	$23,988	$45,228
Wall-mounted handrail system, painted (15 feet minimum)	LF	100	$50.50	$5,050	$35.40	$3,540	$8,590
Project Totals:				**$26,290**		**$27,528**	**$53,818**

Material/Labor Cost		$53,818
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$40,596
General Contractor Mark Up at 20.0%	+	$8,119
Inflation	+	$1,525
Construction Cost		$50,240
Professional Fees at 16.0%	+	$8,038
Total Project Cost		**$58,278**

Specific Project Details

Facility Condition Analysis
Section Three
RAGS : RAGSDALE HALL

Project Description

Project Number:	RAGSAC02	**Title:**	UPGRADE SITE HANDRAILS
Priority Sequence:	21		
Priority Class:	4		
Category Code:	AC1A	**System:**	ACCESSIBILITY
		Component:	SITE
		Element:	STAIR AND RAILINGS
Building Code:	RAGS		
Building Name:	RAGSDALE HALL		
Subclass/Savings:	Not Applicable		
Code Application:	ADAAG 505		
Project Class:	Plant Adaption		
Project Date:	11/30/2009		
Project Location:	Item Only: Floor(s) 1, G		

Project Description

Accessibility legislation regarding building access by the handicapped requires that entry steps have graspable handrails on both sides, that the rails have a specific end geometry, and that the handrails continue horizontally at the landings. The end geometry of the handrails at the five existing entry steps do not comply with the present legislation regarding handicapped accessibility into buildings. Painted metal handrail extensions need to be added to the ends of all of these handrails.

Specific Project Details

Facility Condition Analysis
Section Three
RAGS : RAGSDALE HALL

Project Cost

Project Number: RAGSAC02

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Handrail extensions, equipment rental, tools, and supplies	LOT	1	$550	$550	$1,280	$1,280	$1,830
Project Totals:				**$550**		**$1,280**	**$1,830**

Material/Labor Cost		$1,830
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$1,210
General Contractor Mark Up at 20.0%	+	$242
Inflation	+	$45
Construction Cost		$1,498
Professional Fees at 16.0%	+	$240
Total Project Cost		**$1,738**

Specific Project Details

Facility Condition Analysis
Section Three
RAGS : RAGSDALE HALL

Project Description

Project Number:	RAGSAC03	**Title:**	ELEVATOR INSTALLATION
Priority Sequence:	22		
Priority Class:	4		
Category Code:	AC3A	**System:**	ACCESSIBILITY
		Component:	INTERIOR PATH OF TRAVEL
		Element:	LIFTS/RAMPS/ELEVATORS
Building Code:	RAGS		
Building Name:	RAGSDALE HALL		
Subclass/Savings:	Not Applicable		

Code Application:	ASME	A17.1
	ADAAG	407

Project Class:	Plant Adaption
Project Date:	11/30/2009
Project Location:	Undefined: Floor(s) 1, 2, G

Project Description

The current accessibility legislation requires wheelchair access to all floors in a building over two stories in height. There is no wheelchair access to the upper floors, or to the west basement, of this building. The installation of an interior hydraulic elevator is proposed to serve these floor areas.

Specific Project Details

Facility Condition Analysis
Section Three
RAGS : RAGSDALE HALL

Project Cost

Project Number: RAGSAC03

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Elevator installation within the current building footprint (two stops)	SYS	1	$72,266	$72,266	$53,731	$53,731	$125,997
Each additional stop	FLR	1	$16,661	$16,661	$35,144	$35,144	$51,805
Project Totals:				**$88,927**		**$88,875**	**$177,802**

Material/Labor Cost		$177,802
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$135,142
General Contractor Mark Up at 20.0%	+	$27,028
Inflation	+	$5,076
Construction Cost		$167,247
Professional Fees at 16.0%	+	$26,759
Total Project Cost		**$194,006**

Specific Project Details

Facility Condition Analysis
Section Three
RAGS : RAGSDALE HALL

Project Description

Project Number:	RAGSAC04	**Title:**	INSTALL LEVER-ACTION DOOR HARDWARE
Priority Sequence:	23		
Priority Class:	4		
Category Code:	AC3C	**System:**	ACCESSIBILITY
		Component:	INTERIOR PATH OF TRAVEL
		Element:	DOORS AND HARDWARE
Building Code:	RAGS		
Building Name:	RAGSDALE HALL		
Subclass/Savings:	Not Applicable		

Code Application: ADAAG 309.4

Project Class: Plant Adaption

Project Date: 11/30/2009

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

Project Description

Accessibility legislation requires that door hardware be designed for operation by people with little or no ability to grasp objects with their hands. To comply with the intent of this legislation, it is recommended that lever handle door hardware be installed on all doors that currently still have knob hardware.

Project Cost

Project Number: RAGSAC04

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Lever actuated door hardware	EA	173	$273	$47,229	$69.77	$12,070	$59,299
Project Totals:				**$47,229**		**$12,070**	**$59,299**

Material/Labor Cost		$59,299
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$53,752
General Contractor Mark Up at 20.0%	+	$10,750
Inflation	+	$2,019
Construction Cost		$66,521
Professional Fees at 16.0%	+	$10,643
Total Project Cost		**$77,164**

Specific Project Details

Facility Condition Analysis
Section Three
RAGS : RAGSDALE HALL

Project Description

Project Number:	RAGSAC05	**Title:**	STAIR HANDRAIL UPGRADES
Priority Sequence:	24		
Priority Class:	4		
Category Code:	AC3B	**System:**	ACCESSIBILITY
		Component:	INTERIOR PATH OF TRAVEL
		Element:	STAIRS AND RAILINGS
Building Code:	RAGS		
Building Name:	RAGSDALE HALL		
Subclass/Savings:	Not Applicable		
Code Application:	ADAAG 505		
Project Class:	Plant Adaption		
Project Date:	11/30/2009		
Project Location:	Item Only: Floor(s) 1, 2, G		

Project Description

ADA legislation regarding building accessibility by the handicapped requires that stairs have graspable handrails on both sides, that the rails have a specific end geometry, and that the handrails continue horizontally at the landings. The end geometry of the existing exit stair side handrails does not comply with the present legislation regarding handicapped accessibility within buildings. Metal handrail extensions, finished to match the existing handrails, need to be added to the ends of all of these existing handrails.

Specific Project Details

Facility Condition Analysis
Section Three
RAGS : RAGSDALE HALL

Project Cost

Project Number: RAGSAC05

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Handrail extensions, equipment rental, supplies, tools	LF	60	$50.50	$3,030	$35.40	$2,124	$5,154
Project Totals:				**$3,030**		**$2,124**	**$5,154**

Material/Labor Cost		$5,154
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$4,141
General Contractor Mark Up at 20.0%	+	$828
Inflation	+	$156
Construction Cost		$5,125
Professional Fees at 16.0%	+	$820
Total Project Cost		**$5,944**

Specific Project Details

Facility Condition Analysis
Section Three
RAGS : RAGSDALE HALL

Project Description

Project Number:	RAGSAC06	**Title:**	MILLWORK ACCESSIBILITY UPGRADES
Priority Sequence:	25		
Priority Class:	4		
Category Code:	AC4A	**System:**	ACCESSIBILITY
		Component:	GENERAL
		Element:	FUNCTIONAL SPACE MOD.
Building Code:	RAGS		
Building Name:	RAGSDALE HALL		
Subclass/Savings:	Not Applicable		
Code Application:	ADAAG 804.1		
Project Class:	Plant Adaption		
Project Date:	11/30/2009		
Project Location:	Undefined: Floor(s) 1		

Project Description

Present accessibility legislation requires that building amenities be generally accessible to all persons. The configuration of the base cabinets at the sinks are barriers to accessibility. A wheelchair-accessible modifications need to be made to these base cabinets.

Project Cost

Project Number: RAGSAC06

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Base or wall cabinetry	LF	20	$156	$3,120	$83.30	$1,666	$4,786
Project Totals:				**$3,120**		**$1,666**	**$4,786**

Material/Labor Cost		$4,786
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$3,997
General Contractor Mark Up at 20.0%	+	$799
Inflation	+	$150
Construction Cost		$4,946
Professional Fees at 16.0%	+	$791
Total Project Cost		**$5,737**

Specific Project Details

Facility Condition Analysis
Section Three
RAGS : RAGSDALE HALL

Project Description

Project Number:	RAGSAC07	**Title:**	RESTROOM RENOVATIONS
Priority Sequence:	26		
Priority Class:	4		
Category Code:	AC3E	**System:**	ACCESSIBILITY
		Component:	INTERIOR PATH OF TRAVEL
		Element:	RESTROOMS/BATHROOMS
Building Code:	RAGS		
Building Name:	RAGSDALE HALL		
Subclass/Savings:	Not Applicable		

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

Project Class:	Plant Adaption
Project Date:	11/30/2009
Project Location:	Room Only: Floor(s) 2, G

Project Description

The restroom fixtures and finishes are mostly original to the year of construction or latest major renovation. Except for the entry floor men's restroom and women's restroom, the remaining restrooms in this building have aging fixtures and finishes, and are not wheelchair accessible. The entry floor public restroom fixtures and finishes have been upgraded recently and are accessible to persons with disabilities. A comprehensive renovation of all of the upper floor and basement restrooms, including new fixtures, finishes, and accessories, is recommended. Restroom expansion of the upper floor and basement floor restrooms may be necessary in order to meet modern minimum fixture counts and accessibility legislation. Toilet partition upgrades should be made, and the basement floor showers should be upgraded.

Specific Project Details

Facility Condition Analysis
Section Three
RAGS : RAGSDALE HALL

Project Cost

Project Number: RAGSAC07

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Major restroom renovation, including fixtures, finishes, partitions, accessories, and expansion if necessary (assumes 55 square feet of restroom area per fixture)	FIXT	18	$1,969	$35,442	$1,699	$30,582	$66,024
Shower, 125 square feet of locker room renovation, partitions, accessories and expansion if necessary	FIXT	9	$5,141	$46,269	$6,859	$61,731	$108,000
Toilet partition modification	SYS	12	$1,614	$19,368	$1,000	$12,000	$31,368
Roll-in shower	EA	4	$3,280	$13,120	$4,269	$17,076	$30,196
Project Totals:				**$114,199**		**$121,389**	**$235,588**

Material/Labor Cost		$235,588
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$177,271
General Contractor Mark Up at 20.0%	+	$35,454
Inflation	+	$6,658
Construction Cost		$219,383
Professional Fees at 16.0%	+	$35,101
Total Project Cost		**$254,485**

Specific Project Details

Facility Condition Analysis
Section Three
RAGS : RAGSDALE HALL

Project Description

Project Number:	RAGSAC08	**Title:**	DUAL-LEVEL DRINKING FOUNTAIN INSTALLATION
Priority Sequence:	27		
Priority Class:	4		
Category Code:	AC3F	**System:**	ACCESSIBILITY
		Component:	INTERIOR PATH OF TRAVEL
		Element:	DRINKING FOUNTAINS
Building Code:	RAGS		
Building Name:	RAGSDALE HALL		
Subclass/Savings:	Not Applicable		

Code Application:	ADAAG	211, 602

Project Class:	Plant Adaption
Project Date:	11/30/2009
Project Location:	Item Only: Floor(s) 1, 2, G

Project Description

ADA legislation requires that building amenities such as the drinking fountains be generally accessible to all persons. The single-level configuration of the drinking fountains in this building is a barrier to wheelchair accessibility. The installation of a dual-level, refrigerated drinking fountain is recommended to replace these existing fountains.

Specific Project Details

Facility Condition Analysis
Section Three
RAGS : RAGSDALE HALL

Project Cost

Project Number: RAGSAC08

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Dual-level drinking fountain	EA	5	$1,216	$6,080	$374	$1,870	$7,950
Project Totals:				**$6,080**		**$1,870**	**$7,950**

Material/Labor Cost		$7,950
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$7,082
General Contractor Mark Up at 20.0%	+	$1,416
Inflation	+	$266
Construction Cost		$8,764
Professional Fees at 16.0%	+	$1,402
Total Project Cost		**$10,167**

Specific Project Details

Facility Condition Analysis
Section Three
RAGS : RAGSDALE HALL

Project Description

Project Number:	RAGSAC09	**Title:**	SIGNAGE PACKAGE UPGRADE
Priority Sequence:	28		
Priority Class:	4		
Category Code:	AC3D	**System:**	ACCESSIBILITY
		Component:	INTERIOR PATH OF TRAVEL
		Element:	SIGNAGE
Building Code:	RAGS		
Building Name:	RAGSDALE HALL		
Subclass/Savings:	Not Applicable		

Code Application: ADAAG 703.1

Project Class:	Plant Adaption
Project Date:	11/30/2009
Project Location:	Floor-wide: Floor(s) 1, 2, G

Project Description

Legislation has established signage requirements for all permanent spaces in buildings. Compliant signage should meet specific size, graphical, Braille, height, and location requirements. To comply with the intent of this legislation, it is recommended that all non-compliant signage be upgraded to conform to appropriate accessibility standards. The project scope includes directional signage.

Specific Project Details

Facility Condition Analysis
Section Three
RAGS : RAGSDALE HALL

Project Cost

Project Number: RAGSAC09

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	205	$53.11	$10,888	$15.62	$3,202	$14,090
Project Totals:				**$10,888**		**$3,202**	**$14,090**

Material/Labor Cost		$14,090
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$12,606
General Contractor Mark Up at 20.0%	+	$2,521
Inflation	+	$474
Construction Cost		$15,601
Professional Fees at 16.0%	+	$2,496
Total Project Cost		**$18,097**

Specific Project Details

Facility Condition Analysis
Section Three
RAGS : RAGSDALE HALL

Project Description

Project Number:	RAGSEL01	**Title:**	REPLACE 120/208 VOLT SWITCHGEAR
Priority Sequence:	29		
Priority Class:	4		
Category Code:	EL2A	**System:**	ELECTRICAL
		Component:	MAIN DISTRIBUTION PANELS
		Element:	CONDITION UPGRADE
Building Code:	RAGS		
Building Name:	RAGSDALE HALL		
Subclass/Savings:	Not Applicable		
Code Application:	NEC Article 230		
Project Class:	Capital Renewal		
Project Date:	10/20/2009		
Project Location:	Item Only: Floor(s) G		

Project Description

The 120/208 volt switchgear is recommended for replacement. The existing aged circuit breakers could serve as fire hazards should they fail to interrupt a circuit in an overload or short circuit condition. The existing switchgear should be replaced in its entirety. New switchgear components should include a ground fault main circuit breaker, digital metering for remote control / monitoring, and transient surge protection.

Project Cost

Project Number: RAGSEL01

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
120/208 volt switchgear, includes switchboard, circuit breakers, feeders, digital metering, transient surge protector, and demolition of existing equipment	AMP	1,600	$15.52	$24,832	$13.01	$20,816	$45,648
Project Totals:				**$24,832**		**$20,816**	**$45,648**

Material/Labor Cost		$45,648
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$35,684
General Contractor Mark Up at 20.0%	+	$7,137
Inflation	+	$1,340
Construction Cost		$44,162
Professional Fees at 16.0%	+	$7,066
Total Project Cost		**$51,227**

Specific Project Details

Facility Condition Analysis
Section Three
RAGS : RAGSDALE HALL

Project Description

Project Number:	RAGSIS03	**Title:**	ENTRY FLOOR RESTROOM RENOVATIONS
Priority Sequence:	30		
Priority Class:	4		
Category Code:	IS6D	**System:**	INTERIOR/FINISH SYS.
		Component:	GENERAL
		Element:	OTHER
Building Code:	RAGS		
Building Name:	RAGSDALE HALL		
Subclass/Savings:	Not Applicable		
Code Application:	Not Applicable		
Project Class:	Capital Renewal		
Project Date:	11/30/2009		
Project Location:	Room Only: Floor(s) 1		

Project Description

The entry floor men's restroom and women's restroom fixtures and finishes have been upgraded recently and are accessible to persons with disabilities. The fixtures and finishes in these two restrooms are sound, but the finishes in both restrooms will need to be renewed within the next five years.

Specific Project Details

Facility Condition Analysis
Section Three
RAGS : RAGSDALE HALL

Project Cost

Project Number: RAGSIS03

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Moderate restroom finish renovations	FIXT	11	$300	$3,300	$640	$7,040	$10,340
Project Totals:				**$3,300**		**$7,040**	**$10,340**

Material/Labor Cost		$10,340
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$6,935
General Contractor Mark Up at 20.0%	+	$1,387
Inflation	+	$260
Construction Cost		$8,582
Professional Fees at 16.0%	+	$1,373
Total Project Cost		**$9,955**

Specific Project Details

Facility Condition Analysis
Section Three
RAGS : RAGSDALE HALL

Project Description

Project Number:	RAGSIS04	**Title:**	REFINISH CEILINGS
Priority Sequence:	31		
Priority Class:	4		
Category Code:	IS3B	**System:**	INTERIOR/FINISH SYS.
		Component:	CEILINGS
		Element:	REPLACEMENT
Building Code:	RAGS		
Building Name:	RAGSDALE HALL		
Subclass/Savings:	Not Applicable		
Code Application:	Not Applicable		
Project Class:	Capital Renewal		
Project Date:	11/30/2009		
Project Location:	Floor-wide: Floor(s) 1, 2, G		

Project Description

Ceiling finish applications vary in age, type, and condition, but consist primarily of acoustical tile. Ceiling finish upgrades should be considered as part of any future cosmetic improvements or major comprehensive renovation efforts.

Specific Project Details

Facility Condition Analysis
Section Three
RAGS : RAGSDALE HALL

Project Cost

Project Number: RAGSIS04

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	2,500	$2.12	$5,300	$2.98	$7,450	$12,750
Painted ceiling finish application	SF	8,150	$0.17	$1,386	$0.81	$6,602	$7,987
Project Totals:				**$6,686**		**$14,052**	**$20,737**

Material/Labor Cost		$20,737
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$13,941
General Contractor Mark Up at 20.0%	+	$2,788
Inflation	+	$524
Construction Cost		$17,252
Professional Fees at 16.0%	+	$2,760
Total Project Cost		**$20,013**

Specific Project Details

Facility Condition Analysis
Section Three
RAGS : RAGSDALE HALL

Project Description

Project Number:	RAGSPL01	**Title:**	DOMESTIC WATER HEATER REPLACEMENT
Priority Sequence:	32		
Priority Class:	4		
Category Code:	PL1E	**System:**	PLUMBING
		Component:	DOMESTIC WATER
		Element:	HEATING
Building Code:	RAGS		
Building Name:	RAGSDALE HALL		
Subclass/Savings:	Not Applicable		

Code Application: IPC Chapters 5, 607

Project Class: Capital Renewal

Project Date: 10/20/2009

Project Location: Item Only: Floor(s) G

Project Description

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

Specific Project Details

Facility Condition Analysis
Section Three
RAGS : RAGSDALE HALL

Project Cost

Project Number: RAGSPL01

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Electric, commercial-grade water heater replacement, including demolition	GAL	80	$100	$8,034	$9.46	$757	$8,791
Project Totals:				**$8,034**		**$757**	**$8,791**

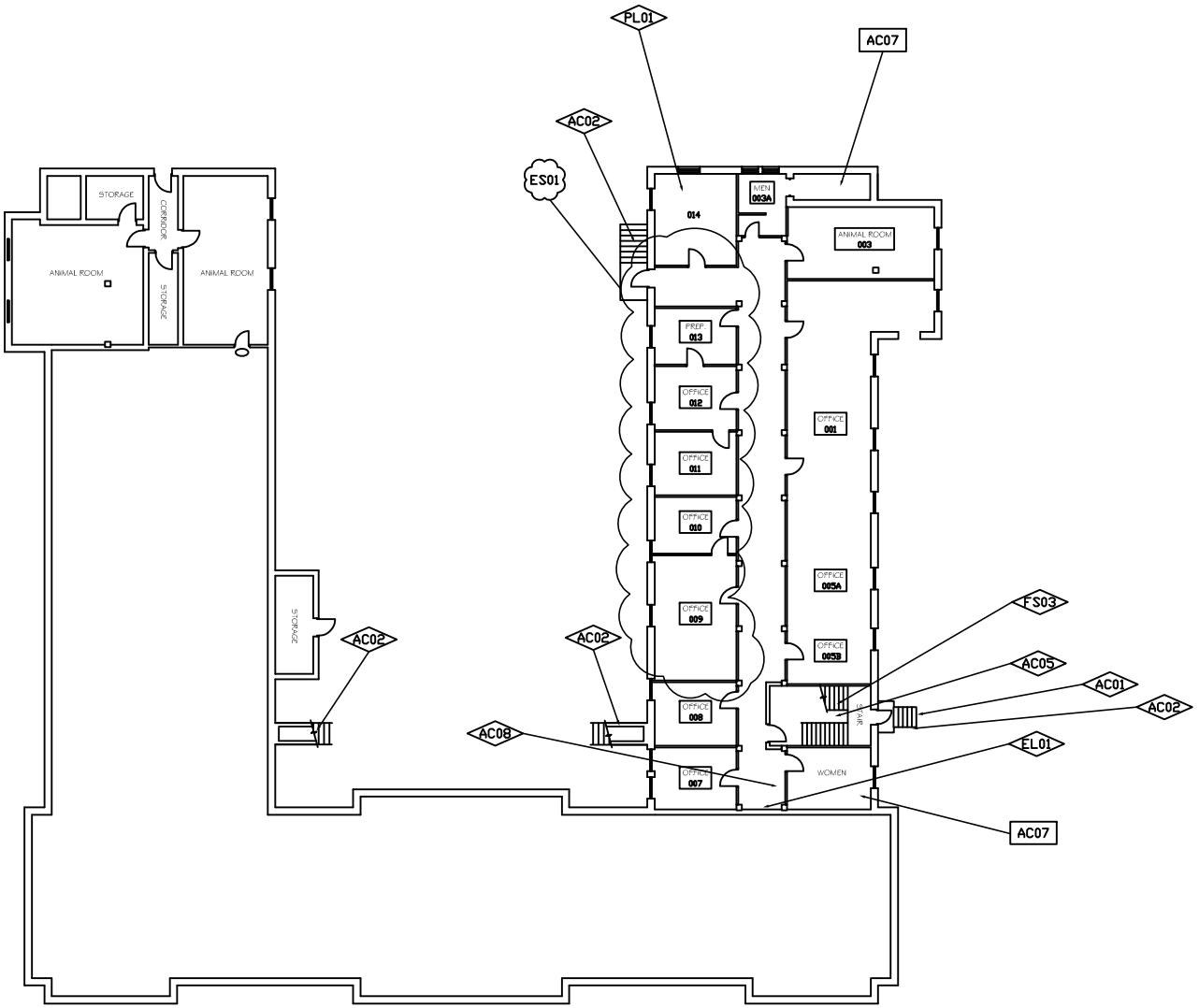
Material/Labor Cost		$8,791
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		$8,479
General Contractor Mark Up at 20.0%	+	$1,696
Inflation	+	$318
Construction Cost		$10,493
Professional Fees at 16.0%	+	$1,679
Total Project Cost		**$12,172**

FACILITY CONDITION ANALYSIS

SECTION 4

DRAWINGS AND PROJECT LOCATIONS

EAST CAROLINA UNIVERSITY



AC03 HV02

AC04 AC09 EL02 EL03 FS01 FS02

HV01 IS01 IS02 IS04 PL02 PL03

RAGSDALE HALL

BLDG NO. RAGS

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

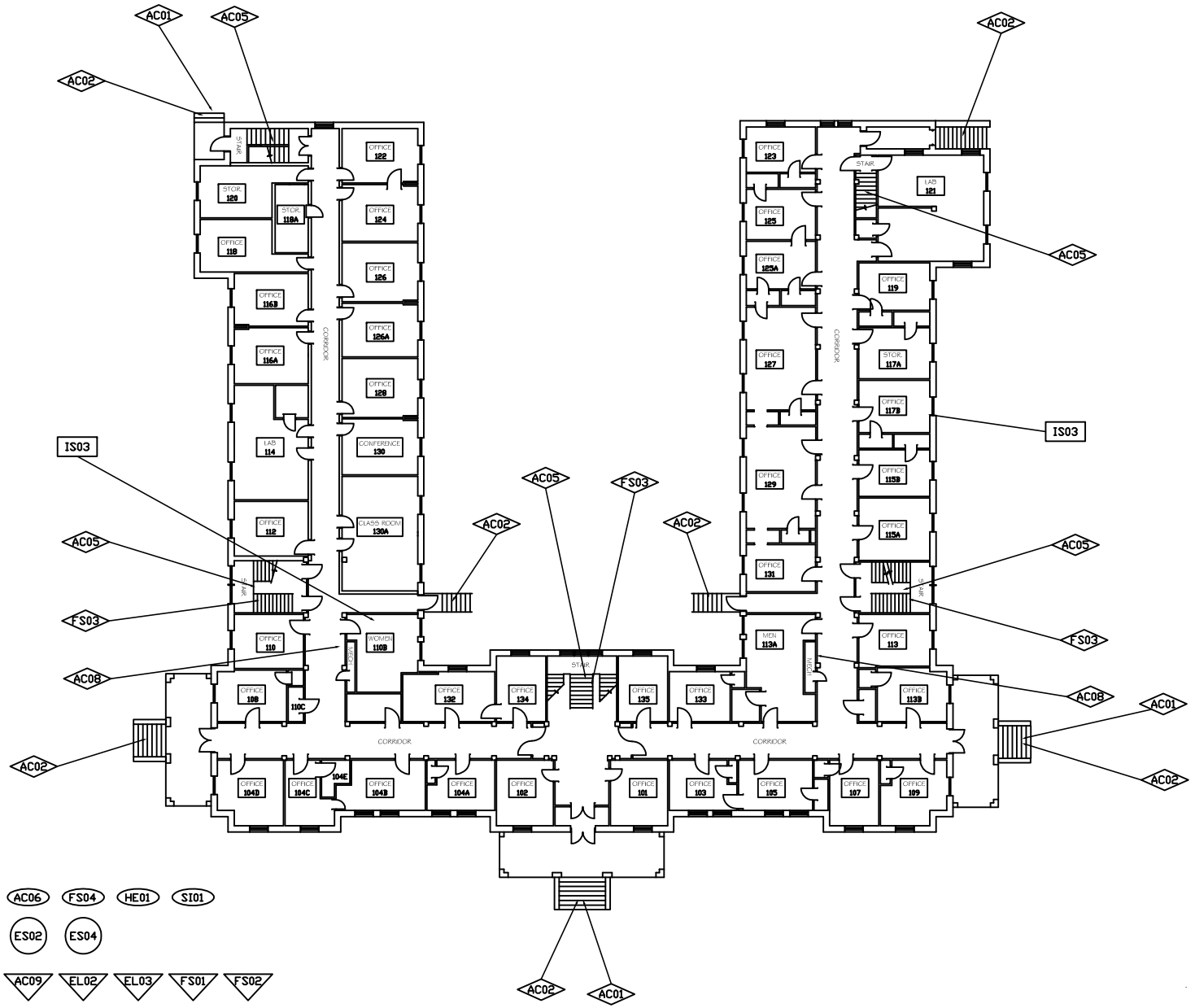
PROJECT NUMBER APPLIES TO AREA AS NOTED

Date: 12/09/09
Drawn by: J.T.V.
Project No. 09-041

GROUND FLOOR PLAN

Sheet No.
1 of 3

EAST CAROLINA UNIVERSITY



AC03 AC06 FS04 HE01 SI01

EL04 ES02 ES04

AC04 AC09 EL02 EL03 FS01 FS02

HV01 IS01 IS02 IS04 PL02 PL03

N

RAGSDALE HALL

BLDG NO. RAGS

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: 12/09/09
Drawn by: J.T.V.
Project No. 09-041

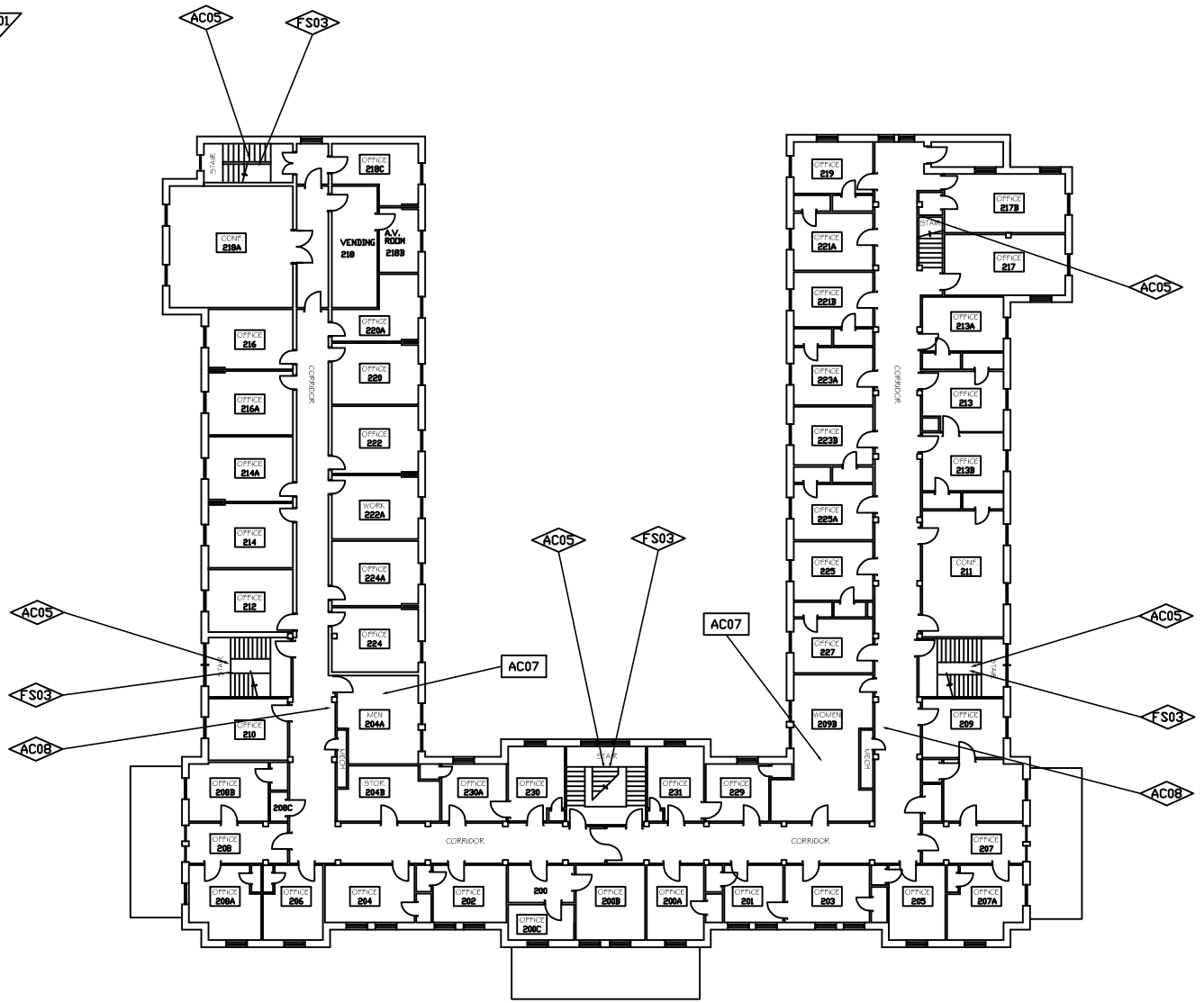
FIRST FLOOR PLAN

Sheet No.
2 of 3

EAST CAROLINA UNIVERSITY

ROOF

ES05 HV01



AC03

AC04 AC09 EL02 EL03 FS01 FS02

HV01 IS01 IS02 IS04 PL02 PL03

RAGSDALE HALL

BLDG NO. RAGS

ISES CORPORATION

FACILITY CONDITION ANALYSIS

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Date: 12/09/09

Drawn by: J.T.V.

Project No. 09-041

SECOND FLOOR PLAN

Sheet No.
3 of 3

FACILITY CONDITION ANALYSIS

SECTION 5

LIFE CYCLE MODEL SUMMARY AND PROJECTIONS

Life Cycle Model
Building Component Summary
RAGS : RAGSDALE HALL

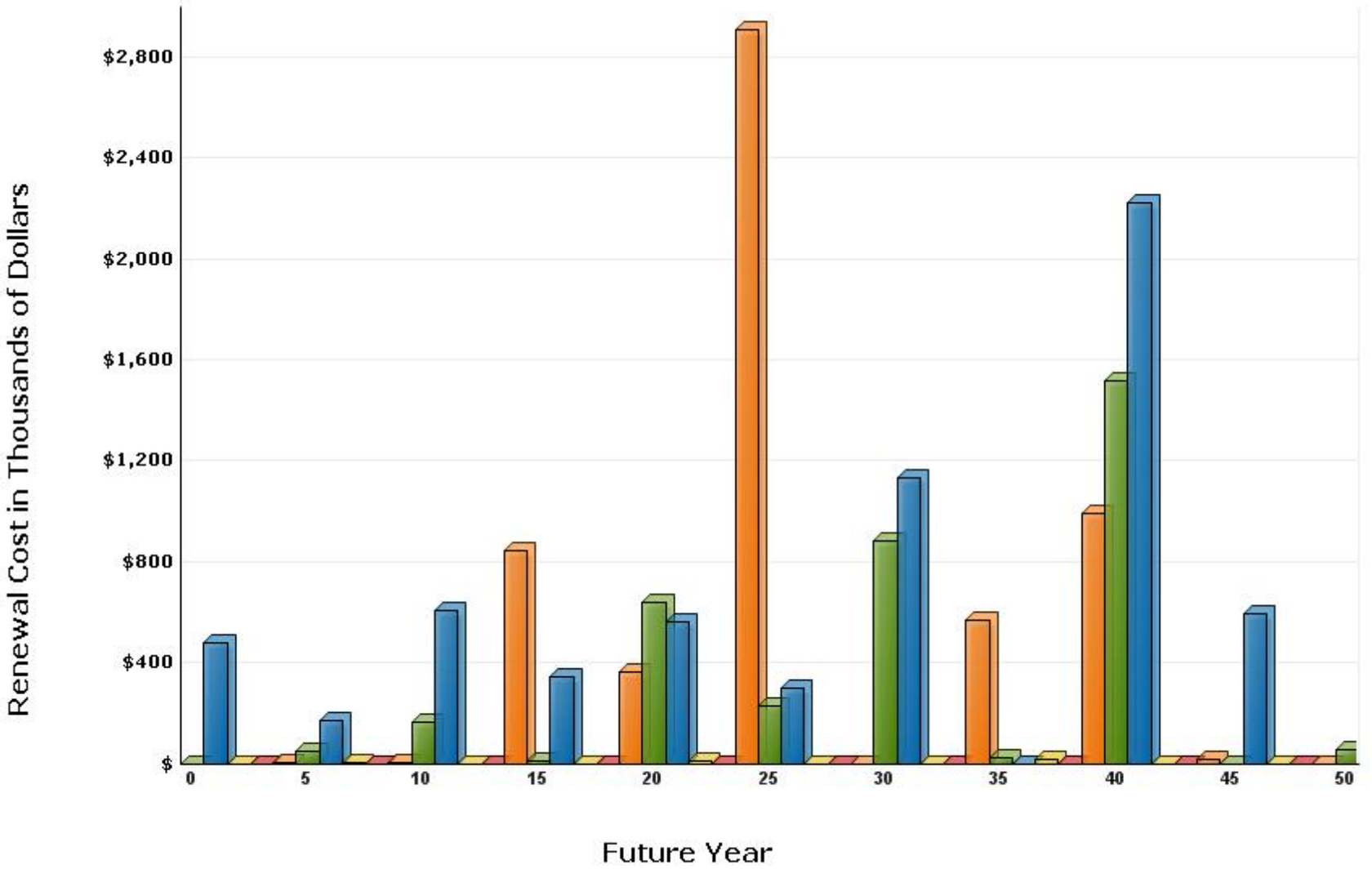
Uniformat Code	Component Description	Qty	Units	Unit Cost	Complx Adj	Total Cost	Install Date	Life Exp
B2010	EXTERIOR FINISH RENEWAL	12,120	SF	$1.30	.31	$4,898	1923	10
B2020	STANDARD GLAZING AND CURTAIN WALL	13,670	SF	$104.04		$1,422,180	1923	55
B2030	HIGH TRAFFIC EXTERIOR DOOR SYSTEM	6	LEAF	$4,311.24		$25,867	1970	20
B2030	HIGH TRAFFIC EXTERIOR DOOR SYSTEM	3	LEAF	$4,311.24		$12,934	1990	20
B2030	HIGH TRAFFIC EXTERIOR DOOR SYSTEM	2	LEAF	$4,311.24		$8,622	1990	20
B2030	LOW TRAFFIC EXTERIOR DOOR SYSTEM	4	LEAF	$2,863.29		$11,453	1970	40
B3010	TILE ROOF	17,900	SF	$19.15		$342,719	1923	70
C1020	STANDARD DOOR AND FRAME INCLUDING HARDWARE	182	LEAF	$783.68		$142,629	1980	35
C1020	STANDARD DOOR AND FRAME INCLUDING HARDWARE	1	LEAF	$783.68		$784	1980	35
C1020	INTERIOR DOOR HARDWARE	182	EA	$423.04		$76,994	1980	15
C1020	INTERIOR DOOR HARDWARE	1	EA	$423.04		$423	1980	15
C3010	STANDARD WALL FINISH (PAINT, WALL COVERING, ETC.)	87,230	SF	$0.80		$69,875	1990	10
C3020	CARPET	21,110	SF	$8.75		$184,638	1990	10
C3020	VINYL FLOOR TILE	11,480	SF	$6.59		$75,629	1980	15
C3020	CERAMIC FLOOR TILE	4,440	SF	$17.36		$77,089	1923	20
C3030	ACOUSTICAL TILE CEILING SYSTEM	28,140	SF	$4.99		$140,503	1990	15
C3030	PAINTED CEILING FINISH APPLICATION	8,150	SF	$0.80		$6,528	2001	15
D2010	PLUMBING FIXTURES - OFFICE / ADMINISTRATION	41,144	SF	$2.85		$117,401	1923	35
D2020	WATER PIPING - OFFICE / ADMINISTRATION	41,144	SF	$2.03		$83,521	1923	35
D2020	WATER HEATER (COMMERCIAL, ELECTRIC)	80	GAL	$144.38		$11,550	1999	20
D2030	DRAIN PIPING - OFFICE / ADMINISTRATION	41,144	SF	$3.08		$126,805	1923	40
D2030	SUMP PUMP SYS (2 PUMPS, CONTROLS)	2	SYS	$8,276.49		$16,553	2000	20
D3020	HEATING SYSTEM, STEAM OR HYDRONIC	41,144	SF	$7.30		$300,429	1923	25
D3030	CHILLER - AIR COOLED (UP TO 60 TONS)	10	TON	$1,818.80		$18,188	2000	20
D3040	EXHAUST FAN - CENTRIFUGAL ROOF EXHAUSTER OR SIMILAR	1	EA	$2,768.62		$2,769	1988	20
D3040	HVAC SYSTEM - OFFICE / ADMINISTRATION	1,690	SF	$24.80		$41,916	1989	25
D3040	BASE MTD. PUMP - UP TO 15 HP	2	HP	$3,175.77		$6,352	1988	20
D3050	SPLIT DX SYSTEM	2	TON	$2,143.89		$4,288	1988	15
D3050	SPLIT DX SYSTEM	2	TON	$2,143.89		$4,288	2004	15

Life Cycle Model
Building Component Summary
RAGS : RAGSDALE HALL

Uniformat Code	Component Description	Qty	Units	Unit Cost	Complx Adj	Total Cost	Install Date	Life Exp
D3050	THRU-WALL AC UNIT	1	TON	$1,528.27		$1,528	1999	10
D5010	ELECTRICAL SYSTEM - OFFICE / ADMINISTRATION	26,144	SF	$11.82		$308,925	1989	50
D5010	ELECTRICAL SYSTEM - OFFICE / ADMINISTRATION	15,000	SF	$11.82		$177,244	1923	50
D5010	ELECTRICAL SWITCHGEAR 120/208V	1,600	AMP	$32.96		$52,742	1989	20
D5020	EMERGENCY LIGHT (BATTERY)	18	EA	$283.62		$5,105	2004	20
D5020	EXIT SIGNS (CENTRAL POWER)	22	EA	$163.78		$3,603	2004	20
D5020	EXTERIOR LIGHT (HID)	4	EA	$689.58		$2,758	1989	20
D5020	LIGHTING - OFFICE / ADMINISTRATION	41,144	SF	$7.24		$297,732	1989	20
D5030	FIRE ALARM SYSTEM, POINT ADDRESSABLE	41,144	SF	$2.61		$107,575	1989	15
D5040	GENERATOR, DIESEL (50-100KW)	90	KW	$717.93		$64,614	2000	25
E2010	STANDARD BASE OR WALL CABINETRY	40	LF	$272.50		$10,900	1980	20
						$4,370,551		

Life Cycle Model Expenditure Projections

RAGS : RAGSDALE HALL



Average Annual Renewal Cost Per SqFt $3.51

FACILITY CONDITION ANALYSIS

SECTION 6

PHOTOGRAPHIC LOG

Photo Log - Facility Condition Analysis

RAGS : RAGSDALE HALL

Photo ID No	Description	Location	Date
RAGS001a	Painted metal guardrail that is too low and painted metal handrail beyond lacking recommended end geometry	Second floor, southeast exit stair	9/2/2009
RAGS001e	Notifer fire alarm control panel	Mechanical room 014	9/2/2009
RAGS002a	Typically aging wood double-hung window	Second floor, conference room 218A	9/2/2009
RAGS002e	Caterpillar 90kW emergency generator, diesel fueled	Exterior building,outside room 130	9/2/2009
RAGS003a	Typical toilet and shower partitioning and curb at shower	Second floor, men’s room 204A	9/2/2009
RAGS003e	Mitsubishi 2 ton split system, air handler	Room 218	9/2/2009
RAGS004a	View looking south down west corridor showing single-level drinking fountain, knob hardware on doors, and panel doors with transom above	Second floor, west corridor	9/2/2009
RAGS004e	Radiant heat unit	Second floor, hallway	9/2/2009
RAGS005a	View looking south along west corridor showing scuff marks above telescoping portion of vinyl tile floor	First floor, west corridor	9/2/2009
RAGS005e	Air-cooled chiller / air-cooled condenser	Exterior building,outside room 128	9/2/2009
RAGS006a	Typical water damage in corridor and office wall beyond	Ground floor, office 012	9/2/2009
RAGS006e	Mitsubishi 2 ton split system, air-cooled condenser	Exterior building,outside room 128	9/2/2009
RAGS007a	Lack of wheelchair access to abandoned-in-place sink and cabinetry	Ground floor, break room 001	9/2/2009
RAGS007e	Incoming steam service	Mechanical room 014	9/2/2009
RAGS008a	Aging exit door recommended for replacement and granite steps lacking handrails at southeast corner	Exterior detail	9/2/2009
RAGS008e	Hot water circulation pump	Mechanical room 014	9/2/2009
RAGS009a	View of southwest corner, southeast wing	Exterior elevation	9/2/2009
RAGS009e	Trane air handler, chill / hot water coils	Crawl space adjacent to room 002	9/2/2009
RAGS010a	View of southeast corner, southwest wing	Exterior elevation	9/2/2009
RAGS010e	2' x 4' recess fluorescent T-12 light fixtures	Second floor, hallway	9/2/2009
RAGS011a	Painted metal guardrail lacking sufficient infill, painted metal handrail lacking recommended end geometry one side only, southeast corner, southwest wing	Site detail	9/2/2009
RAGS011e	General Electric distribution panelboards	Second floor, hallway	9/2/2009
RAGS012a	South facade, north wing	Exterior elevation	9/2/2009
RAGS012e	Original Square D electrical distribution panelboard	Second floor, hallway	9/2/2009
RAGS013a	View looking southeast along west facade, southeast wing	Exterior elevation	9/2/2009
RAGS013e	Original Square D electrical distribution panelboard	Second floor, hallway	9/2/2009

Photo Log - Facility Condition Analysis

RAGS : RAGSDALE HALL

Photo ID No	Description	Location	Date
RAGS014a	View looking southwest along east facade, west wing	Exterior elevation	9/2/2009
RAGS014e	2' x 4' recess fluorescent T-12 light fixtures	First floor, hallway	9/2/2009
RAGS015a	One of two courtyard exit stairs with painted metal guardrail that is too low and lacks sufficient infill, painted metal handrail lacking recommended end geometry, and lack of guardrail along length of handrails	Exterior detail	9/2/2009
RAGS015e	General Electric 1,600 amp main breaker switchboard	Basement, west end of hallway	9/2/2009
RAGS016a	View looking northeast along south facade, west wing	Exterior elevation	9/2/2009
RAGS016e	400 amp Asco ATS and emergency distribution panels	Basement, room 007	9/2/2009
RAGS017a	Exit stairs from southwest corner, west wing with painted metal handrails lacking recommended end geometry	Exterior detail	9/2/2009
RAGS017e	Two HID 20 foot pole lights	Inner area of building grounds	9/2/2009
RAGS018a	West facade porch at north end, west wing	Exterior elevation	9/2/2009
RAGS018e	300 kVA transformer, primary 12,470V, secondary 480V	Inner area of building grounds	9/2/2009
RAGS019a	View looking southeast along west facade, west wing	Exterior elevation	9/2/2009
RAGS019e	One original converted HID 20 foot pole light	East side, main entrance	9/2/2009
RAGS020a	View looking southeast across north facade	Exterior elevation	9/2/2009
RAGS020e	80 gallon electric hot water heater	Mechanical room 014	9/2/2009
RAGS021a	View looking southeast across north facade, east half	Exterior elevation	9/2/2009
RAGS021e	Duplex sanitary sewer lift station	North side of the facility	9/2/2009
RAGS022a	View looking southwest across north facade, west half	Exterior elevation	9/2/2009
RAGS023a	View looking southwest along east facade, east wing	Exterior elevation	9/2/2009
RAGS024a	View looking northwest along east facade, east wing, showing southeast corner exit steps lacking handrails	Exterior elevation	9/2/2009
RAGS025a	View looking southeast along west facade and roof, west wing	Exterior elevation	9/2/2009

Facility Condition Analysis - Photo Log

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RAGS001E.jpg

RAGS002A.jpg

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RAGS003A.jpg

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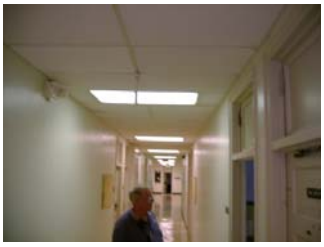

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