PORTLAND STATE UNIVERSITY

SCHOOL OF BUSINESS ADMINISTRATION

BUILDING NUMBER: BA

FACILITY CONDITION ANALYSIS

APRIL 3, 2008

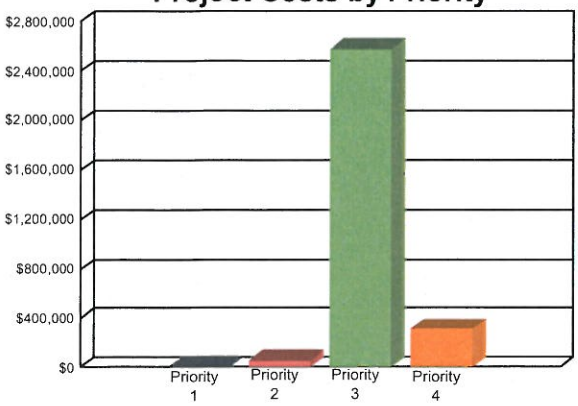
PORTLAND STATE UNIVERSITY
Facility Condition Analysis

TABLE OF CONTENTS

A. EXECUTIVE SUMMARY - SCHOOL OF BUSINESS ADMINISTRATION

Building Code: BA
Building Name: SCHOOL OF BUSINESS ADMINISTRATION
Year Built: 1987
Building Use: Classroom / Academic
Square Feet: 52,570

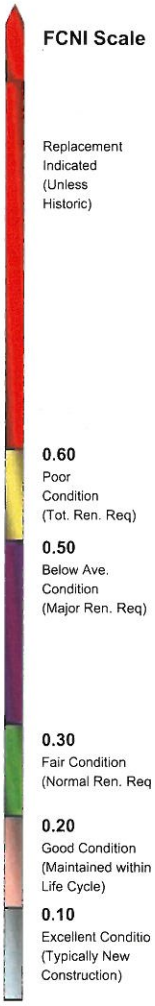
Project Costs by Priority



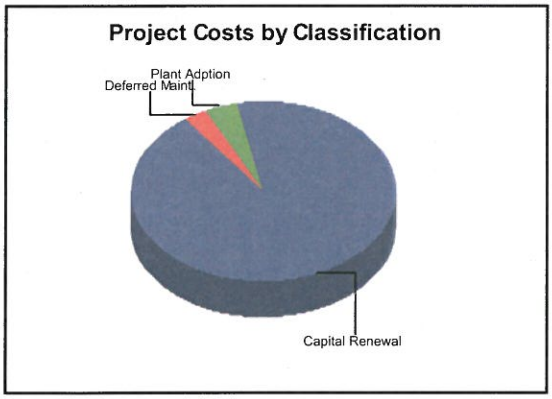
Project Costs by Priority

Priority 1:	$0
Priority 2:	$59,483
Priority 3:	$2,577,072
Priority 4:	$313,724
Total Project Costs:	**$2,950,279**
Facility Replacement Cost:	**$14,448,642**

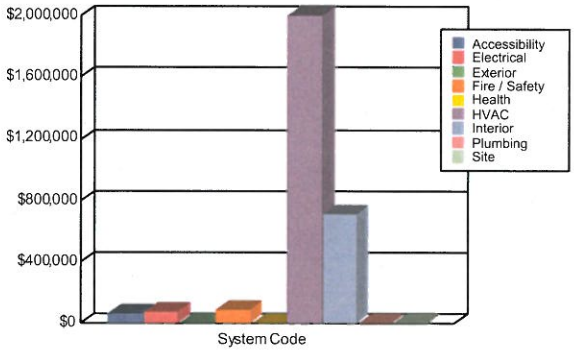
Facility Condition Needs Index (FCNI): **0.20**
(Project Costs / Replacement Cost)



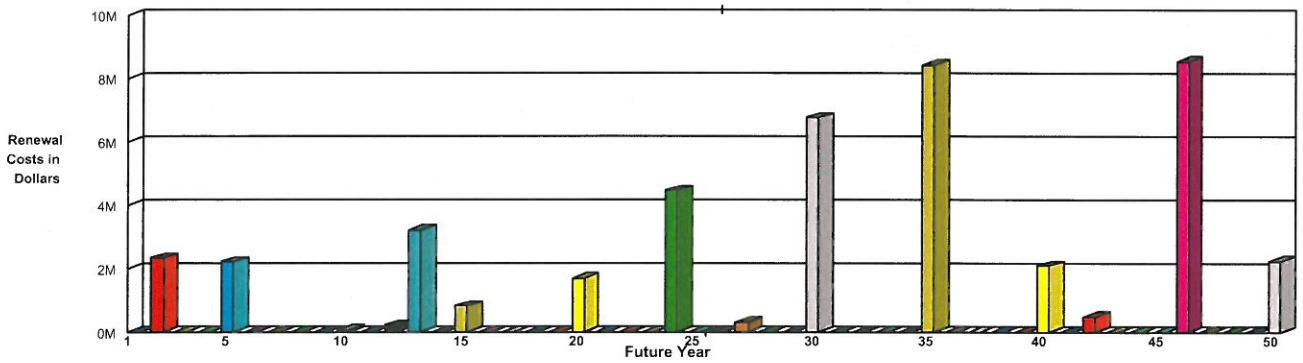
Project Costs by Classification



Project Costs by System Code



Life Cycle Model Expenditure Projections



Average Annual Renewal Cost per SqFt **$7.41**

B. ASSET SUMMARY

The School of Business Administration is located in the central portion of the Portland State University campus. This multi-story, rectangular structure is open on all occupied floors to the contiguous Graduate School of Education building to the west. The Business Administration building primarily contains offices, conference rooms, and classrooms, plus associated support facilities. Most public restrooms are provided in the contiguous structure. Constructed in 1987, this facility is reported to comprise 52,570 gross square feet.

Information for this report was gathered during a site visit on February 18, 2008.

SITE

Although adjacent construction has damaged existing landscaping, it is assumed that the grounds around this urban site will be adequately restored when construction is completed. Isolated damage to pedestrian walkways, especially at the south entrance to this facility, should be repaired as part of routine grounds maintenance. There is no dedicated parking directly associated with this building.

EXTERIOR STRUCTURE

The ballasted membrane roof on this 1987 structure appears to be in satisfactory condition at this time, with no reported roof leaks or visible signs of water infiltration. Exterior personnel doors also appear to be in good working order, and exterior fixed and operable double pane glazing is energy efficient. In addition, no significant damage was visible to exterior masonry, although minor discoloration had occurred due to leaching salts.

The exterior balconies on the east elevation are unsightly due to flaking guardrail paint and accumulated algae, dirt, and debris. As part of routine building maintenance, it is recommended that balcony guardrails be repainted and balcony floors be cleaned.

INTERIOR FINISHES / SYSTEMS

Interior paint finishes are still in good overall condition, although cyclical repainting should continue as part of routine building maintenance. The typical acoustical lay-in ceiling finishes are also adequate but timeworn, and some ceiling panels are damaged or missing. To maintain a reasonable interior aesthetic, it is recommended that new acoustical ceiling grids be installed on a low priority basis.

The built-in cabinetry in work rooms and break areas is currently in satisfactory condition for its age. Most interior doors also appear to be in good working order, although a small percentage of damaged doors are recommended for upgrade as needed as part of an Accessibility category project. Those doors that are still equipped with non-compliant knob hardware are also recommended for hardware upgrades as part of accessibility recommendations detailed below.

The vinyl tile flooring in corridors, some classrooms, etc. is still in good overall condition. Although newer carpeting is still in acceptable condition, the older carpeting in offices and some classrooms is stained or damaged. Since all of these carpeted floors will continue to deteriorate, the general interior appearance of this building should be improved by installing new commercial-grade carpeting within the next five years.

ACCESSIBILITY

This facility is served by two elevators in the contiguous structure. The newer passenger elevator is fully accessible, but the older elevator was not in service at the time of the site visit and could not be assessed. Small areas of this building have been upgraded with lever hardware and / or accessible signage, but the remainder of the facility should also be updated. Create and install a new signage package to identify permanent spaces, and add accessible lever hardware where it is lacking. New signage should be mounted at the correct height and in the correct location. It should also contain such code-required elements as Braille, pictograms, and high contrast raised lettering. Stairwell handrails on the central stairs are graspable and have adequate extensions. It should be noted that accessible restroom facilities are provided in the contiguous Graduate School of Education.

HEALTH

No significant health hazards were identified during the walk-through of this facility.

FIRE / LIFE SAFETY

No major architecture-related fire / life safety violations were noted during the inspection of this building. This facility is monitored by an addressable Silent Knight fire alarm system that features xenon strobes, audible annunciators, smoke / heat detectors, duct smoke detectors, and fire pulls. The main fire alarm panel resides in the Graduate School of Education building in electrical room 104. The fire alarm system and devices appear to have been installed in approximately 2004 and are in good condition. However, there is an inadequate amount of visual / audible fire alarm devices, especially in egress corridors. To comply with current NFPA codes, the installation of additional xenon strobes and audible annunciators is recommended.

Additional protection is provided by a wet-pipe fire sprinkler system. The building fire sprinkler system is equipped with 1980s vintage fusible link sprinkler heads. Replacement of the sprinkler head is recommended every twenty years. Scale and debris build-up within the sprinkler head can potentially facilitate a sprinkler head malfunction. The scheduled replacement of the sprinkler head is recommended within the next five years.

Emergency exits are indicated by original incandescent / compact fluorescent exit signs, and the path of egress is illuminated by select interior light fixtures. Both the exit signs and emergency egress lighting are connected to the emergency power network. During the daytime inspection, the assessment of the emergency egress illumination level was not easily accomplished. It is assumed that there is sufficient emergency egress lighting, since no deficiencies were reported. However, additional exit signs are

required, especially in the second, fourth, fifth, and sixth floor office areas. Replace the original exit signs, and install additional units within the next five years. LED-type exit signs are recommended because they are energy efficient and require little maintenance.

HVAC

The primary heating medium is steam supplied from the central plant. It enters the attached Graduate School of Education building in first floor mechanical room 102. New heat exchangers convert the low pressure steam to heating hot water. The cooling media is chilled water supplied from the central plant, and it enters at the same location as the steam piping. The central heating and cooling equipment was assessed as part of the Graduate School of Education report.

A standalone Trane liquid air cooled chiller located on the roof provides supplemental cooling for air handler ASU-3. This unit is timeworn and anticipated to become maintenance intensive with age. Budgetary consideration is allocated for its replacement within the next five year.

Air distribution within the facility is provided by a 1980s PACE variable volume rooftop air handling unit, ASU-2. A smaller air handler, ASU-3, serves the third floor computer area. The air handling units are equipped with a central preheat and chilled water coils. The hot water reheat coils provide comfort heating. The air handler return and supply fans were originally equipped with inlet veins. In approximately 2003, the air handler's supply and return fan motors were replaced. The supply and return fans inlet veins were locked in place, and motor speed control was accomplished by ABB variable frequency drives (VFDs). Building automation is accomplished by an outdated pneumatic hybrid system. The air distribution equipment is outdated and anticipated to become maintenance intensive and inefficient with age. A complete redesign and replacement of the HVAC system is recommended. Demolish and dispose of existing equipment. Install a new modern HVAC system with variable air volume (VAV) and constant volume air distribution as needed. This includes new air handlers, ductwork, terminal units, piping, controls, and electrical connections. Specify direct digital controls (DDCs) for the new equipment. Incorporate VFDs into the new HVAC design as applicable.

ELECTRICAL

Primary service is supplied from the switchboard located in the electrical room of the adjoining Graduate School of Education building. Emergency power is supplied from the Onan emergency generator located on the roof. The building electrical network is distributed in a vertical riser configuration. The 120/208 volt, three-phase, four-wire bus duct and related breaker panels are in good condition and should remain serviceable for the next ten years. However, electrical devices have a shorter service life. Aging devices, including wall switches and receptacles, are potential shock and fire hazards. Replace all worn or damaged switches, receptacles, and cover plates. Install ground fault circuit interrupter (GFCI) receptacles where required by code. Test power panels for proper operation, replacing faulty breakers as needed. Update power panel directories for circuit identification.

Interior lighting applications consist of acrylic lens, 1x4 T8 fluorescent fixtures. Compact fluorescent indirect lighting was observed in the library area. Interior illumination levels appear to be adequate. Nighttime illumination is provided by recessed compact fluorescent and pole-mounted street lighting. No interior or exterior lighting deficiencies were noted or reported.

PLUMBING

Domestic potable water is fed to the building through copper piping that is good condition. Sanitary and storm drainage is conveyed by cast-iron no-hub piping. No leaks or issues with the drainage piping were observed or reported. Both piping systems are serviceable for the next ten years. The assessment of the plumbing fixtures and domestic hot water equipment is addressed in the Graduate School of Education report.

VERTICAL TRANSPORTATION

Vertical transportation is provided by elevators addressed in the Graduate School of Education report. No vertical transportation recommendations are required at this time.

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.

PORTLAND STATE UNIVERSITY
Facility Condition Analysis
Section One

C. INSPECTION TEAM DATA

DATE OF INSPECTION: February 18, 2008

INSPECTION TEAM PERSONNEL:

NAME	POSITION	SPECIALTY
Imelda Bacate	Project Engineer	Mechanical / Electrical / Plumbing / Energy / Fire Safety / Life Safety / Health
Richard Gadd	Facility Analyst	Interior Finishes / Exterior / ADA-Handicapped Accessibility / Site / Fire Safety / Life Safety / Health
Rob Gasaway	Facility Analyst	Interior Finishes / Exterior / ADA-Handicapped Accessibility / Site / Fire Safety / Life Safety / Health
Mike Sabo	Project Engineer	Mechanical / Electrical / Plumbing / Energy / Fire Safety / Life Safety / Health
Norm Teahan, AIA	Project Architect	Interior Finishes / Exterior / ADA-Handicapped Accessibility / Site / Fire Safety / Life Safety / Health

FACILITY CONTACTS:

NAME	POSITION
Ken Irwin	Plant Operations Manager

REPORT DEVELOPMENT:

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

Contact:
Michael Sabo, 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 college 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 Portland City Index and are adjusted for material and labor cost factors (2008). Refer to the project related labor report found later in this section.

Global Markup Percentages		R.S. MEANS
Local Labor Index:	102.7 %	of National Average
Local Materials Index:	101.8 %	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.
ES6E	GENERAL	OTHER	Any exterior work not specifically categorized elsewhere including finish and structural work on

CATEGORY CODE REPORT			
CODE	**COMPONENT DESCRIPTION**	**ELEMENT DESCRIPTION**	**DEFINITION**
			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.
HE6A	HAZARDOUS MATERIAL	STRUCTURAL ASBESTOS	Testing, abatement and disposal of structural and building finish materials containing asbestos.

CATEGORY CODE REPORT			
CODE	**COMPONENT DESCRIPTION**	**ELEMENT DESCRIPTION**	**DEFINITION**
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 UPGRADE	Replacement of HVAC control systems.

CATEGORY CODE REPORT			
CODE	**COMPONENT DESCRIPTION**	**ELEMENT DESCRIPTION**	**DEFINITION**
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			
PL1A	DOMESTIC WATER	PIPING NETWORK	Repair or replacement of domestic water supply piping network, insulation, hangers, etc.

CATEGORY CODE REPORT			
CODE	**COMPONENT DESCRIPTION**	**ELEMENT DESCRIPTION**	**DEFINITION**
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.
SS2A	SITE	FENCING	Perimeter campus fencing, individual building fencing, includes both pedestrian and vehicular control fences.

CATEGORY CODE REPORT			
CODE	**COMPONENT DESCRIPTION**	**ELEMENT DESCRIPTION**	**DEFINITION**
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
BA : SCHOOL OF BUSINESS ADMINISTRATION

System Code	System Description	Priority Classes 1	2	3	4	Subtotal
AC	ACCESSIBILITY	0	0	68,900	0	68,900
EL	ELECTRICAL	0	0	82,979	0	82,979
FS	FIRE/LIFE SAFETY	0	59,483	26,099	0	85,582
HV	HVAC	0	0	1,997,859	0	1,997,859
IS	INTERIOR/FINISH SYS.	0	0	401,234	313,724	714,958
	TOTALS	$0	$59,483	$2,577,072	$313,724	$2,950,279

Facility Replacement Cost	$14,448,642
Facility Condition Needs Index	0.20

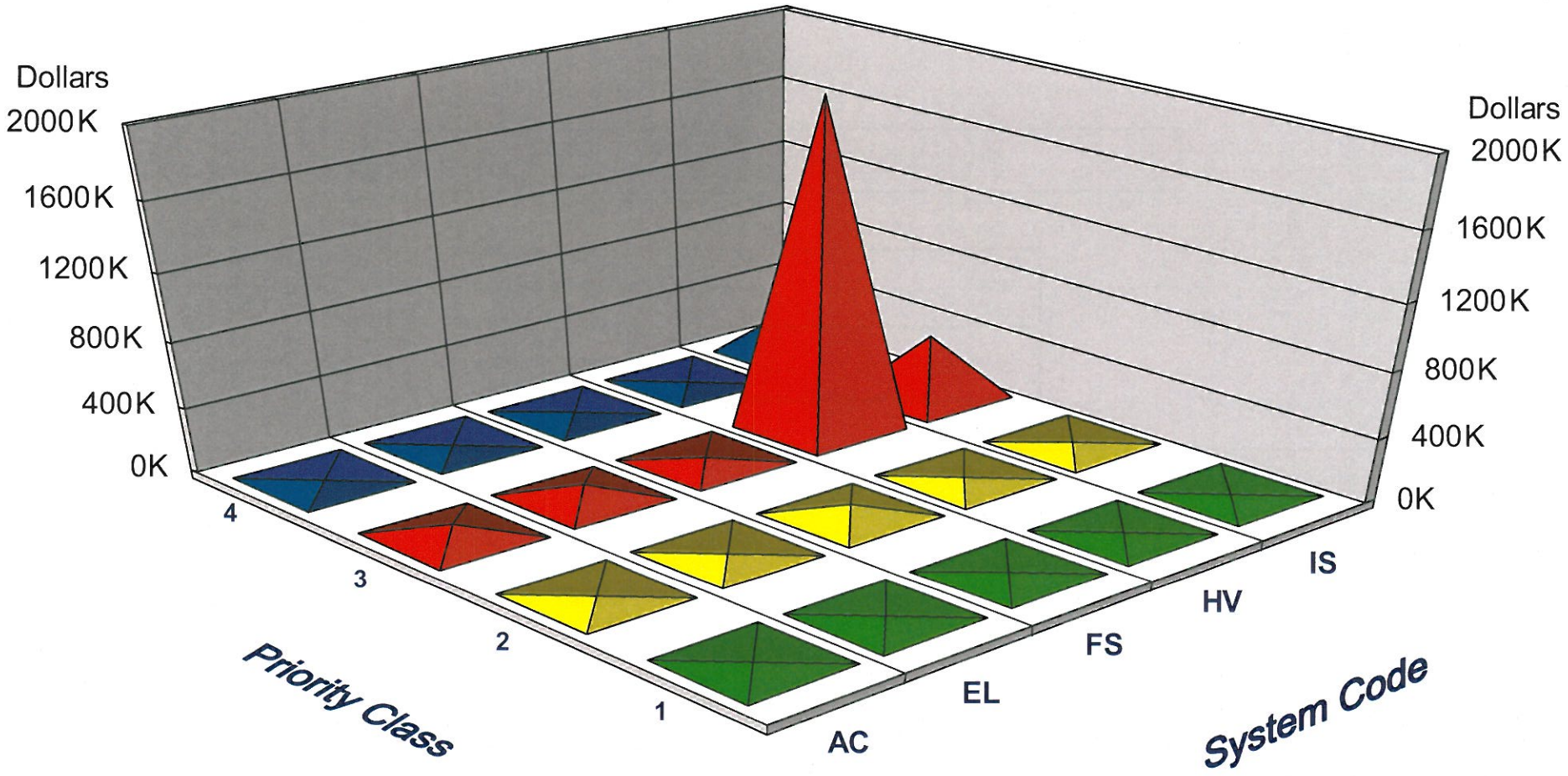
Gross Square Feet	52,570

Total Cost Per Square Foot	$56.12

FACILITY CONDITION ANALYSIS

System Code by Priority Class

BA : SCHOOL OF BUSINESS ADMINISTRATION



Detailed Project Totals
Facility Condition Analysis
System Code by Project Class
BA : SCHOOL OF BUSINESS ADMINISTRATION

System Code	System Description	Project Classes			
		Capital Renewal	Deferred Maintenance	Plant Adaption	Subtotal
AC	ACCESSIBILITY	0	0	68,900	68,900
EL	ELECTRICAL	0	82,979	0	82,979
FS	FIRE/LIFE SAFETY	36,930	0	48,652	85,582
HV	HVAC	1,997,859	0	0	1,997,859
IS	INTERIOR/FINISH SYS.	714,958	0	0	714,958
	TOTALS	$2,749,748	$82,979	$117,552	$2,950,279

Facility Replacement Cost	$14,448,642
Facility Condition Needs Index	0.20

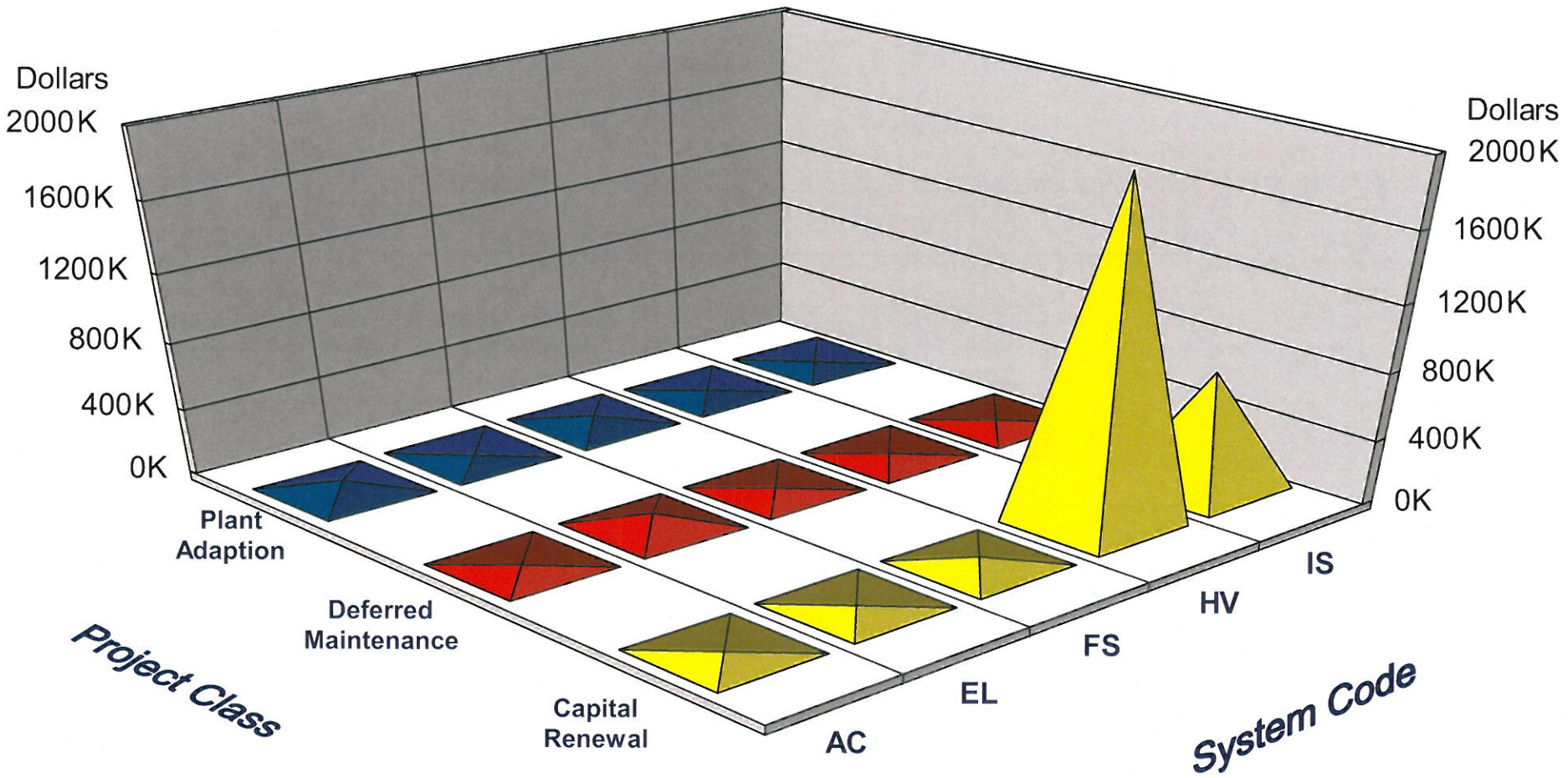
Gross Square Feet	52,570

Total Cost Per Square Foot	$56.12

FACILITY CONDITION ANALYSIS

System Code by Project Class

BA : SCHOOL OF BUSINESS ADMINISTRATION



Detailed Project Summary
Facility Condition Analysis
Project Class by Priority Class

BA : SCHOOL OF BUSINESS ADMINISTRATION

Project Class	Priority Classes 1	2	3	4	Subtotal
Capital Renewal	0	10,831	2,425,193	313,724	2,749,748
Deferred Maintenance	0	0	82,979	0	82,979
Plant Adaption	0	48,652	68,900	0	117,552
TOTALS	$0	$59,483	$2,577,072	$313,724	$2,950,279

Facility Replacement Cost	$14,448,642
Facility Condition Needs Index	0.20

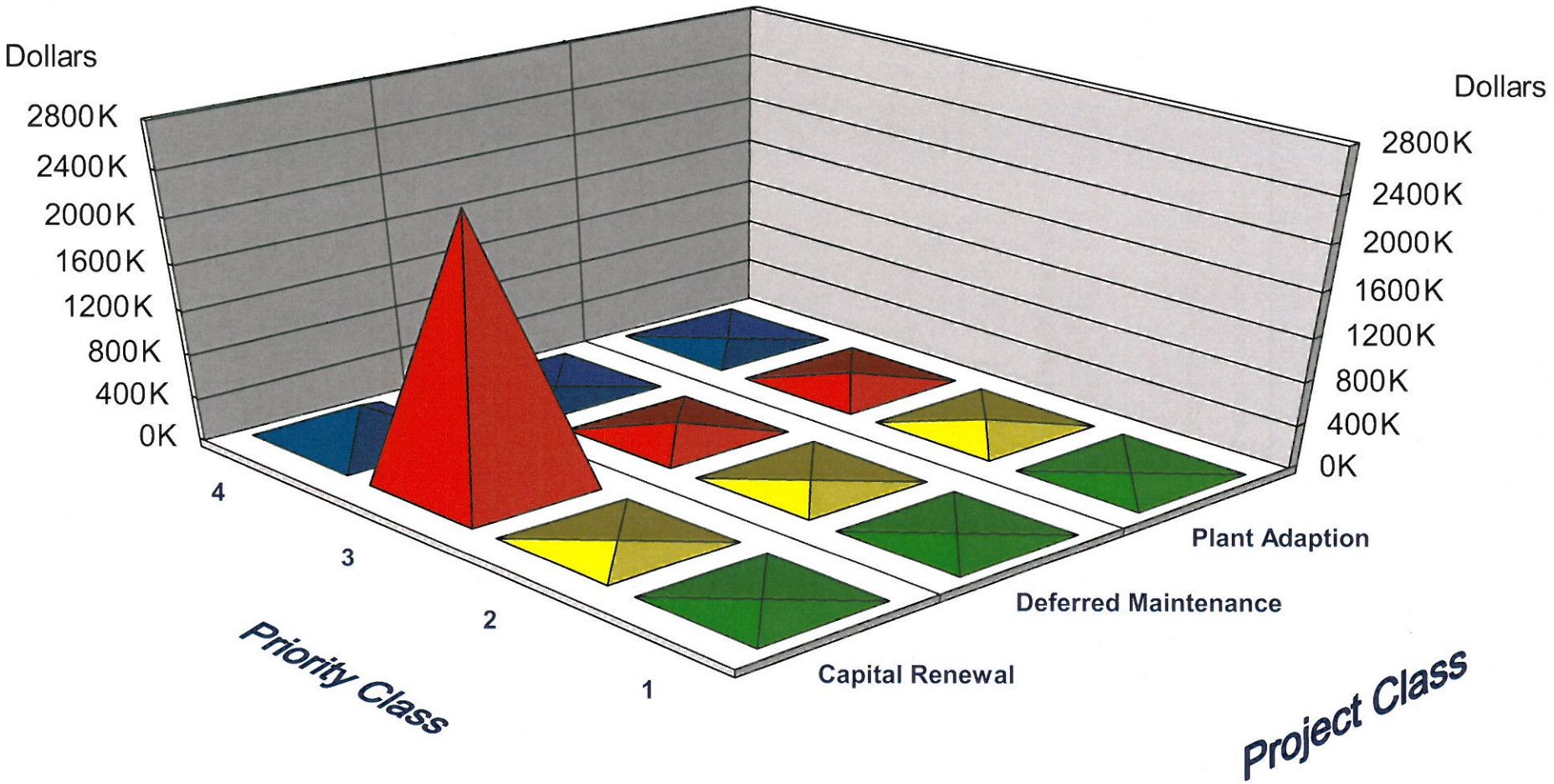
Gross Square Feet	52,570

Total Cost Per Square Foot	$56.12

FACILITY CONDITION ANALYSIS

Project Class by Priority Class

BA : SCHOOL OF BUSINESS ADMINISTRATION



Detailed Project Summary

Facility Condition Analysis

Section Two

Priority Class - Priority Sequence

BA : SCHOOL OF BUSINESS ADMINISTRATION

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Total Cost
FS2A	BAFS03	2	1	INSTALL ADDITIONAL FIRE ALARM DEVICES	41,941	6,711	48,652
FS1A	BAFS02	2	2	REPLACE EXIT SIGNS AND INSTALL ADDITIONAL UNITS	9,337	1,494	10,831
				Totals for Priority Class 2	**51,278**	**8,205**	**59,483**
FS3A	BAFS01	3	3	FIRE SPRINKLER HEAD RENEWAL	22,500	3,600	26,099
AC3C	BAAC01	3	4	UPGRADE NON-ACCESSIBLE DOOR HARDWARE	49,702	7,952	57,655
AC3D	BAAC02	3	5	INSTALL ACCESSIBLE SIGNAGE	9,695	1,551	11,246
HV3A	BAHV01	3	6	HVAC MODERNIZATION	1,669,438	267,110	1,936,548
HV2A	BAHV02	3	7	LIQUID AIR COOLED CHILLER RENEWAL	52,855	8,457	61,311
EL3B	BAEL01	3	8	ELECTRICAL SYSTEM REPAIRS	71,533	11,445	82,979
IS1A	BAIS01	3	9	REPLACE CARPET	345,891	55,343	401,234
				Totals for Priority Class 3	**2,221,614**	**355,458**	**2,577,072**
IS3B	BAIS02	4	10	UPGRADE TIMEWORN CEILINGS	270,452	43,272	313,724
				Totals for Priority Class 4	**270,452**	**43,272**	**313,724**
				Grand Total:	**2,543,344**	**406,935**	**2,950,279**

Detailed Project Summary

Facility Condition Analysis

Section Two

Priority Class - Priority Sequence - Projects < 100,000

BA : SCHOOL OF BUSINESS ADMINISTRATION

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Total Cost
FS2A	BAFS03	2	1	INSTALL ADDITIONAL FIRE ALARM DEVICES	41,941	6,711	48,652
FS1A	BAFS02	2	2	REPLACE EXIT SIGNS AND INSTALL ADDITIONAL UNITS	9,337	1,494	10,831
				Totals for Priority Class 2	**51,278**	**8,205**	**59,483**
FS3A	BAFS01	3	3	FIRE SPRINKLER HEAD RENEWAL	22,500	3,600	26,099
AC3C	BAAC01	3	4	UPGRADE NON-ACCESSIBLE DOOR HARDWARE	49,702	7,952	57,655
AC3D	BAAC02	3	5	INSTALL ACCESSIBLE SIGNAGE	9,695	1,551	11,246
HV2A	BAHV02	3	7	LIQUID AIR COOLED CHILLER RENEWAL	52,855	8,457	61,311
EL3B	BAEL01	3	8	ELECTRICAL SYSTEM REPAIRS	71,533	11,445	82,979
				Totals for Priority Class 3	**206,285**	**33,006**	**239,290**
				Grand Totals For Projects < 100,000	**257,563**	**41,210**	**298,773**

Detailed Project Summary

Facility Condition Analysis

Section Two

Priority Class - Priority Sequence - Projects >= 100,000 and < 500,000

BA : SCHOOL OF BUSINESS ADMINISTRATION

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Total Cost
IS1A	BAIS01	3	9	REPLACE CARPET	345,891	55,343	401,234
				Totals for Priority Class 3	**345,891**	**55,343**	**401,234**
IS3B	BAIS02	4	10	UPGRADE TIMEWORN CEILINGS	270,452	43,272	313,724
				Totals for Priority Class 4	**270,452**	**43,272**	**313,724**
				Grand Totals For Projects >= 100,000 and < 500,000	**616,343**	**98,615**	**714,958**

Detailed Project Summary

Facility Condition Analysis

Section Two

Priority Class - Priority Sequence - Projects >= 500,000

BA : SCHOOL OF BUSINESS ADMINISTRATION

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Total Cost
HV3A	BAHV01	3	6	HVAC MODERNIZATION	1,669,438	267,110	1,936,548
				Totals for Priority Class 3	**1,669,438**	**267,110**	**1,936,548**
				Grand Totals For Projects >= 500,000	**1,669,438**	**267,110**	**1,936,548**
				Grand Total for All Projects:	**2,543,344**	**406,935**	**2,950,279**

Detailed Project Summary

Facility Condition Analysis

Section Two

Project Classification

BA : SCHOOL OF BUSINESS ADMINISTRATION

Cat. Code	Project Number	Priority Sequence	Project Classification	Priority Class	Project Title	Total Cost
FS1A	BAFS02	2	Capital Renewal	2	REPLACE EXIT SIGNS AND INSTALL ADDITIONAL UNITS	10,831
FS3A	BAFS01	3	Capital Renewal	3	FIRE SPRINKLER HEAD RENEWAL	26,099
HV3A	BAHV01	6	Capital Renewal	3	HVAC MODERNIZATION	1,936,548
HV2A	BAHV02	7	Capital Renewal	3	LIQUID AIR COOLED CHILLER RENEWAL	61,311
IS1A	BAIS01	9	Capital Renewal	3	REPLACE CARPET	401,234
IS3B	BAIS02	10	Capital Renewal	4	UPGRADE TIMEWORN CEILINGS	313,724
			Totals for Capital Renewal			**2,749,748**
EL3B	BAEL01	8	Deferred Maintenance	3	ELECTRICAL SYSTEM REPAIRS	82,979
			Totals for Deferred Maintenance			**82,979**
FS2A	BAFS03	1	Plant Adaption	2	INSTALL ADDITIONAL FIRE ALARM DEVICES	48,652
AC3C	BAAC01	4	Plant Adaption	3	UPGRADE NON-ACCESSIBLE DOOR HARDWARE	57,655
AC3D	BAAC02	5	Plant Adaption	3	INSTALL ACCESSIBLE SIGNAGE	11,246
			Totals for Plant Adaption			**117,552**
			Grand Total:			**2,950,279**

Detailed Project Summary

Facility Condition Analysis

Section Two

Energy Conservation

BA : SCHOOL OF BUSINESS ADMINISTRATION

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Total Cost	Annual Savings	Simple Payback
FS1A	BAFS02	2	2	REPLACE EXIT SIGNS AND INSTALL ADDITIONAL UNITS	10,831	427	25.35
				Totals for Priority Class 2	**10,831**	**427**	25.35
				Grand Total:	**10,831**	**427**	25.35

Detailed Project Summary

Facility Condition Analysis

Section Two

Category/System Code

BA : SCHOOL OF BUSINESS ADMINISTRATION

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Total Cost
AC3C	BAAC01	3	4	UPGRADE NON-ACCESSIBLE DOOR HARDWARE	49,702	7,952	57,655
AC3D	BAAC02	3	5	INSTALL ACCESSIBLE SIGNAGE	9,695	1,551	11,246
	Totals for System Code			**ACCESSIBILITY**	**59,397**	**9,504**	**68,900**
EL3B	BAEL01	3	8	ELECTRICAL SYSTEM REPAIRS	71,533	11,445	82,979
	Totals for System Code			**ELECTRICAL**	**71,533**	**11,445**	**82,979**
FS2A	BAFS03	2	1	INSTALL ADDITIONAL FIRE ALARM DEVICES	41,941	6,711	48,652
FS1A	BAFS02	2	2	REPLACE EXIT SIGNS AND INSTALL ADDITIONAL UNITS	9,337	1,494	10,831
FS3A	BAFS01	3	3	FIRE SPRINKLER HEAD RENEWAL	22,500	3,600	26,099
	Totals for System Code			**FIRE/LIFE SAFETY**	**73,778**	**11,804**	**85,582**
HV3A	BAHV01	3	6	HVAC MODERNIZATION	1,669,438	267,110	1,936,548
HV2A	BAHV02	3	7	LIQUID AIR COOLED CHILLER RENEWAL	52,855	8,457	61,311
	Totals for System Code			**HVAC**	**1,722,293**	**275,567**	**1,997,859**
IS1A	BAIS01	3	9	REPLACE CARPET	345,891	55,343	401,234
IS3B	BAIS02	4	10	UPGRADE TIMEWORN CEILINGS	270,452	43,272	313,724
	Totals for System Code			**INTERIOR/FINISH SYS.**	**616,343**	**98,615**	**714,958**
	Grand Total:				**2,543,344**	**406,935**	**2,950,279**

FACILITY CONDITION ANALYSIS

SECTION 3

SPECIFIC PROJECT DETAILS ILLUSTRATING DESCRIPTION / COST

Specific Project Details

Facility Condition Analysis

Section Three

Project Description

Project Number:	BAFS03	**Title:**	INSTALL ADDITIONAL FIRE ALARM DEVICES
Priority Sequence:	1		
Priority Class:	2		
Category Code:	FS2A	**System:**	FIRE/LIFE SAFETY
		Component:	DETECTION ALARM
		Element:	GENERAL
Building Code:	BA		
Building Name:	SCHOOL OF BUSINESS ADMINISTRATION		
Subclass/Savings:	Not Applicable		
Code Application:	NFPA 72 ADAAG 702.1 IBC 907		
Project Class:	Plant Adaption		
Project Date:	03/31/2008		
Project Location:	Floor-wide: Floor(s) 1, 2, 3, 4, 5, 6, 7		

Project Description

The Silent Knight addressable fire alarm system is in good condition. However, it is lacking xenon strobes and audible annunciators, primarily in the egress corridors. The installation of additional fire alarm devices is recommended. Coordinate installation with other recommended interior finish upgrade projects.

Specific Project Details

Facility Condition Analysis

Section Three

Project Cost

Project Number: BAFS03

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Install visual and audible fire alarm devices, includes rough-in	SF	52,570	$0.30	$15,771	$0.35	$18,400	$34,171
	Project Totals:			**$15,771**		**$18,400**	**$34,171**

Material/Labor Cost		$34,171
Material Index		101.8%
Labor Index		102.7%
Material/Labor Indexed Cost		$34,951
General Contractor Mark Up at 20.0%	+	$6,990
Inflation	+	$0
Construction Cost		$41,941
Professional Fees at 16.0%	+	$6,711
Total Project Cost		**$48,652**

Specific Project Details

Facility Condition Analysis

Section Three

Project Description

Project Number:	BAFS02	**Title:**	REPLACE EXIT SIGNS AND INSTALL ADDITIONAL UNITS
Priority Sequence:	2		
Priority Class:	2		
Category Code:	FS1A	**System:**	FIRE/LIFE SAFETY
		Component:	LIGHTING
		Element:	EGRESS LTG./EXIT SIGNAGE
Building Code:	BA		
Building Name:	SCHOOL OF BUSINESS ADMINISTRATION		
Subclass/Savings:	Energy Conservation	$427.28	
Code Application:	NFPA 101-47 IBC 1003.2.10		
Project Class:	Capital Renewal		
Project Date:	03/31/2008		
Project Location:	Floor-wide: Floor(s) 1, 2, 3, 4, 5, 6, 7		

Project Description

The original incandescent / compact fluorescent exit signs are timeworn, and their scheduled replacement is recommended. Additionally, office suites on the second, fourth, fifth, and sixth floors require additional exit signs. Replace the existing exit signs, and install additional signs as required by code. LED exit signs are recommended because they require little maintenance and are energy efficient. New exit signs should be connected to the emergency circuit.

Specific Project Details

Facility Condition Analysis

Section Three

Project Cost

Project Number: BAFS02

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Replacement of existing exit signs with LED units	EA	18	$84.00	$1,512	$74.00	$1,332	$2,844
Installation of new LED exit signs, including all connections	EA	14	$118	$1,652	$222	$3,108	$4,760
	Project Totals:			**$3,164**		**$4,440**	**$7,604**

Material/Labor Cost		$7,604
Material Index		101.8%
Labor Index		102.7%
Material/Labor Indexed Cost		$7,781
General Contractor Mark Up at 20.0%	+	$1,556
Inflation	+	$0
Construction Cost		$9,337
Professional Fees at 16.0%	+	$1,494
Total Project Cost		**$10,831**

Specific Project Details

Facility Condition Analysis

Section Three

Project Description

Project Number:	BAFS01	**Title:**	FIRE SPRINKLER HEAD RENEWAL
Priority Sequence:	3		
Priority Class:	3		
Category Code:	FS3A	**System:**	FIRE/LIFE SAFETY
		Component:	SUPPRESSION
		Element:	SPRINKLERS
Building Code:	BA		
Building Name:	SCHOOL OF BUSINESS ADMINISTRATION		
Subclass/Savings:	Not Applicable		
Code Application:	NFPA 13 IBC 903		
Project Class:	Capital Renewal		
Project Date:	03/31/2008		
Project Location:	Floor-wide: Floor(s) 1, 2, 3, 4, 5, 6, 7		

Project Description

The fusible link sprinkler heads appear to have been in service for over twenty years. The statistical life cycle for a sprinkler head is approximately twenty years. Scale can accumulate inside the head and cause it to malfunction when needed. It is recommended that the sprinkler heads be replaced to ensure that proper protection is available.

Specific Project Details

Facility Condition Analysis

Section Three

Project Cost

Project Number: BAFS01

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Fire sprinkler head replacement	SF	52,570	$0.04	$2,103	$0.31	$16,297	$18,400
	Project Totals:			**$2,103**		**$16,297**	**$18,400**

Material/Labor Cost		$18,400
Material Index		101.8%
Labor Index		102.7%
Material/Labor Indexed Cost		$18,750
General Contractor Mark Up at 20.0%	+	$3,750
Inflation	+	$0
Construction Cost		$22,500
Professional Fees at 16.0%	+	$3,600
Total Project Cost		**$26,099**

Specific Project Details

Facility Condition Analysis

Section Three

Project Description

Project Number:	BAAC01	**Title:**	UPGRADE NON-ACCESSIBLE DOOR HARDWARE
Priority Sequence:	4		
Priority Class:	3		
Category Code:	AC3C	**System:**	ACCESSIBILITY
		Component:	INTERIOR PATH OF TRAVEL
		Element:	DOORS AND HARDWARE
Building Code:	BA		
Building Name:	SCHOOL OF BUSINESS ADMINISTRATION		
Subclass/Savings:	Not Applicable		
Code Application:	ADAAG 404		
Project Class:	Plant Adaption		
Project Date:	03/27/2008		
Project Location:	Area Wide: Floor(s) 1, 2, 3, 4, 5, 6		

Project Description

Only a percentage of the interior doors have been fitted with accessible lever hardware. In addition, there are a few damaged doors that should be upgraded. To facilitate handicapped use of this structure, install lever door hardware where it is lacking. Also replace damaged doors and frames with new doors fitted with accessible hardware.

Specific Project Details

Facility Condition Analysis

Section Three

Project Cost

Project Number: BAAC01

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Accessible lever hardware	EA	80	$262	$20,960	$67.00	$5,360	$26,320
Rated interior door and frame	EA	10	$645	$6,450	$780	$7,800	$14,250
	Project Totals:			**$27,410**		**$13,160**	**$40,570**

Material/Labor Cost		$40,570
Material Index		101.8%
Labor Index		102.7%
Material/Labor Indexed Cost		$41,419
General Contractor Mark Up at 20.0%	+	$8,284
Inflation	+	$0
Construction Cost		$49,702
Professional Fees at 16.0%	+	$7,952
Total Project Cost		**$57,655**

Specific Project Details

Facility Condition Analysis

Section Three

Project Description

Project Number:	BAAC02	**Title:**	INSTALL ACCESSIBLE SIGNAGE
Priority Sequence:	5		
Priority Class:	3		
Category Code:	AC3D	**System:**	ACCESSIBILITY
		Component:	INTERIOR PATH OF TRAVEL
		Element:	SIGNAGE
Building Code:	BA		
Building Name:	SCHOOL OF BUSINESS ADMINISTRATION		
Subclass/Savings:	Not Applicable		
Code Application:	ADAAG 703.1		
Project Class:	Plant Adaption		
Project Date:	03/27/2008		
Project Location:	Floor-wide: Floor(s) 1, 2, 3, 4, 5, 6		

Project Description

Only a small percentage of this facility has been updated with accessible signage. Current legislation requires that permanent spaces in public buildings be identified with ADA-compliant signage. Create and install a new signage package that meets these requirements.

Specific Project Details

Facility Condition Analysis

Section Three

Project Cost

Project Number: BAAC02

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
ADA signage	EA	120	$51.00	$6,120	$15.00	$1,800	$7,920
	Project Totals:			**$6,120**		**$1,800**	**$7,920**

Material/Labor Cost		$7,920
Material Index		101.8%
Labor Index		102.7%
Material/Labor Indexed Cost		$8,079
General Contractor Mark Up at 20.0%	+	$1,616
Inflation	+	$0
Construction Cost		$9,695
Professional Fees at 16.0%	+	$1,551
Total Project Cost		**$11,246**

Specific Project Details

Facility Condition Analysis

Section Three

Project Description

Project Number:	BAHV01	**Title:**	HVAC MODERNIZATION
Priority Sequence:	6		
Priority Class:	3		
Category Code:	HV3A	**System:**	HVAC
		Component:	HEATING/COOLING
		Element:	SYSTEM RETROFIT/REPLACE
Building Code:	BA		
Building Name:	SCHOOL OF BUSINESS ADMINISTRATION		
Subclass/Savings:	Not Applicable		
Code Application:	ASHRAE 62-2004 IMC Chapters M1-M6, M12		
Project Class:	Capital Renewal		
Project Date:	03/31/2008		
Project Location:	Floor-wide: Floor(s) 1, 2, 3, 4, 5, 6, 7, R		

Project Description

The 1980s PACE variable volume air handling unit ASU-2 has been in service for over twenty years. Although the supply and return fan motors were recently upgraded in approximately 2003, the chilled water cooling coil, hot water preheat coil, and ductwork are timeworn. New ABB VFDs are utilized. The smaller air handling unit, ASU-3, was added a few years later to serve the third floor computer lab area. Building automation is accomplished through a hybrid control system. Based on historical life cycle data, the mechanical equipment is anticipated to become inefficient and maintenance intensive with age. A complete redesign and replacement of the HVAC system is recommended. Demolish and dispose of existing equipment. Install a new modern HVAC system with VAV and constant volume air distribution as needed. This includes new air handlers, ductwork, terminal units, piping, controls, and electrical connections. Specify DDCs for the new equipment. Incorporate VFDs into the new HVAC design as applicable.

Specific Project Details

Facility Condition Analysis

Section Three

Project Cost

Project Number: BAHV01

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Air handlers, ductwork, VAVs, VFDs, DDCs, piping, electrical connections, and demolition of existing equipment	SF	52,570	$11.64	$611,915	$14.23	$748,071	$1,359,986
	Project Totals:			**$611,915**		**$748,071**	**$1,359,986**

Material/Labor Cost		$1,359,986
Material Index		101.8%
Labor Index		102.7%
Material/Labor Indexed Cost		$1,391,198
General Contractor Mark Up at 20.0%	+	$278,240
Inflation	+	$0
Construction Cost		$1,669,438
Professional Fees at 16.0%	+	$267,110
Total Project Cost		**$1,936,548**

Specific Project Details

Facility Condition Analysis

Section Three

Project Description

Project Number:	BAHV02	**Title:**	LIQUID AIR COOLED CHILLER RENEWAL
Priority Sequence:	7		
Priority Class:	3		
Category Code:	HV2A	**System:**	HVAC
		Component:	COOLING
		Element:	CHILLERS/CONTROLS
Building Code:	BA		
Building Name:	SCHOOL OF BUSINESS ADMINISTRATION		
Subclass/Savings:	Not Applicable		
Code Application:	ASHRAE 15-2004 IMC Chapter 11		
Project Class:	Capital Renewal		
Project Date:	04/01/2008		
Project Location:	Item Only: Floor(s) R		

Project Description

The Trane liquid air cooled chiller has been in service for over twenty years. It is timeworn, and its scheduled replacement is recommended. Remove the existing chiller. Install a new chiller along with electrical connections and related controls and programming.

Specific Project Details

Facility Condition Analysis

Section Three

Project Cost

Project Number: BAHV02

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Air cooled chiller, all connections, controls, and demolition of existing unit	TON	30	$960	$28,800	$478	$14,340	$43,140
	Project Totals:			**$28,800**		**$14,340**	**$43,140**

Material/Labor Cost		$43,140
Material Index		101.8%
Labor Index		102.7%
Material/Labor Indexed Cost		$44,046
General Contractor Mark Up at 20.0%	+	$8,809
Inflation	+	$0
Construction Cost		$52,855
Professional Fees at 16.0%	+	$8,457
Total Project Cost		**$61,311**

Specific Project Details

Facility Condition Analysis

Section Three

Project Description

Project Number:	BAEL01	**Title:**	ELECTRICAL SYSTEM REPAIRS
Priority Sequence:	8		
Priority Class:	3		
Category Code:	EL3B	**System:**	ELECTRICAL
		Component:	SECONDARY DISTRIBUTION
		Element:	DISTRIBUTION NETWORK
Building Code:	BA		
Building Name:	SCHOOL OF BUSINESS ADMINISTRATION		
Subclass/Savings:	Not Applicable		
Code Application:	NEC Chapters 1-4		
Project Class:	Deferred Maintenance		
Project Date:	03/31/2008		
Project Location:	Floor-wide: Floor(s) 1, 2, 3, 4, 5, 6, 7		

Project Description

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

Specific Project Details

Facility Condition Analysis

Section Three

Project Cost

Project Number: BAEL01

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Switches, receptacles, cover plates, breakers, and miscellaneous materials	SF	52,570	$0.44	$23,131	$0.67	$35,222	$58,353
	Project Totals:			**$23,131**		**$35,222**	**$58,353**

Material/Labor Cost		$58,353
Material Index		101.8%
Labor Index		102.7%
Material/Labor Indexed Cost		$59,611
General Contractor Mark Up at 20.0%	+	$11,922
Inflation	+	$0
Construction Cost		$71,533
Professional Fees at 16.0%	+	$11,445
Total Project Cost		**$82,979**

Specific Project Details

Facility Condition Analysis

Section Three

Project Description

Project Number:	BAIS01	**Title:**	REPLACE CARPET
Priority Sequence:	9		
Priority Class:	3		
Category Code:	IS1A	**System:**	INTERIOR/FINISH SYS.
		Component:	FLOOR
		Element:	FINISHES-DRY
Building Code:	BA		
Building Name:	SCHOOL OF BUSINESS ADMINISTRATION		
Subclass/Savings:	Not Applicable		
Code Application:	Not Applicable		
Project Class:	Capital Renewal		
Project Date:	03/27/2008		
Project Location:	Floor-wide: Floor(s) 1, 2, 3, 4, 5, 6		

Project Description

The carpeting in this building varies in age and condition, with older carpeting in offices and high traffic spaces being in the worst condition. Since these floor finishes will continue to deteriorate over time, they are recommended for moderate priority upgrade. To maintain a reasonable interior aesthetic, replace stained or damaged carpeting with new commercial-grade carpeting.

Specific Project Details

Facility Condition Analysis

Section Three

Project Cost

Project Number: BAIS01

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Carpet replacement	SF	39,953	$5.15	$205,758	$1.92	$76,710	$282,468
	Project Totals:			**$205,758**		**$76,710**	**$282,468**

Material/Labor Cost		$282,468
Material Index		101.8%
Labor Index		102.7%
Material/Labor Indexed Cost		$288,243
General Contractor Mark Up at 20.0%	+	$57,649
Inflation	+	$0
Construction Cost		$345,891
Professional Fees at 16.0%	+	$55,343
Total Project Cost		**$401,234**

Specific Project Details

Facility Condition Analysis

Section Three

Project Description

Project Number:	BAIS02	**Title:**	UPGRADE TIMEWORN CEILINGS
Priority Sequence:	10		
Priority Class:	4		
Category Code:	IS3B	**System:**	INTERIOR/FINISH SYS.
		Component:	CEILINGS
		Element:	REPLACEMENT
Building Code:	BA		
Building Name:	SCHOOL OF BUSINESS ADMINISTRATION		
Subclass/Savings:	Not Applicable		
Code Application:	Not Applicable		
Project Class:	Capital Renewal		
Project Date:	03/27/2008		
Project Location:	Floor-wide: Floor(s) 6,5,4,3,2,1		

Project Description

The ceilings in this 1987 structure are beginning to show their age. In some locations, ceiling tiles are damaged or missing. To maintain a reasonable interior aesthetic, schedule these timeworn ceilings for low priority upgrade.

Specific Project Details

Facility Condition Analysis

Section Three

Project Cost

Project Number: BAIS02

Task Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Acoustical ceiling replacement	SF	44,950	$2.04	$91,698	$2.86	$128,557	$220,255
	Project Totals:			**$91,698**		**$128,557**	**$220,255**

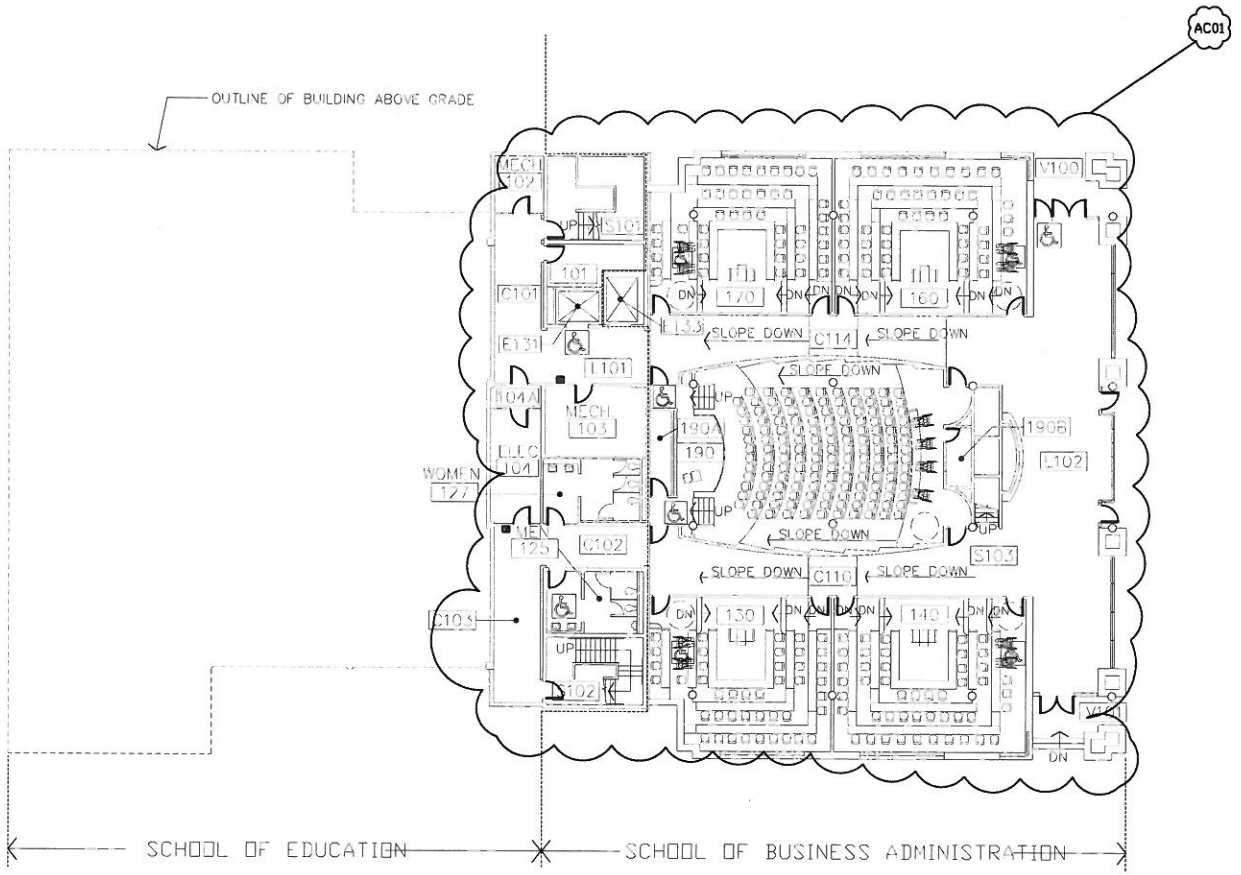
Material/Labor Cost		$220,255
Material Index		101.8%
Labor Index		102.7%
Material/Labor Indexed Cost		$225,377
General Contractor Mark Up at 20.0%	+	$45,075
Inflation	+	$0
Construction Cost		$270,452
Professional Fees at 16.0%	+	$43,272
Total Project Cost		**$313,724**

FACILITY CONDITION ANALYSIS

SECTION 4

DRAWINGS AND PROJECT LOCATIONS

PORTLAND STATE UNIVERSITY



AC02 EL01 FS01 FS02 FS03 HV01
IS01 IS02

N

SCHOOL OF BUSINESS ADMINISTRATION

BLDG NO. BA

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

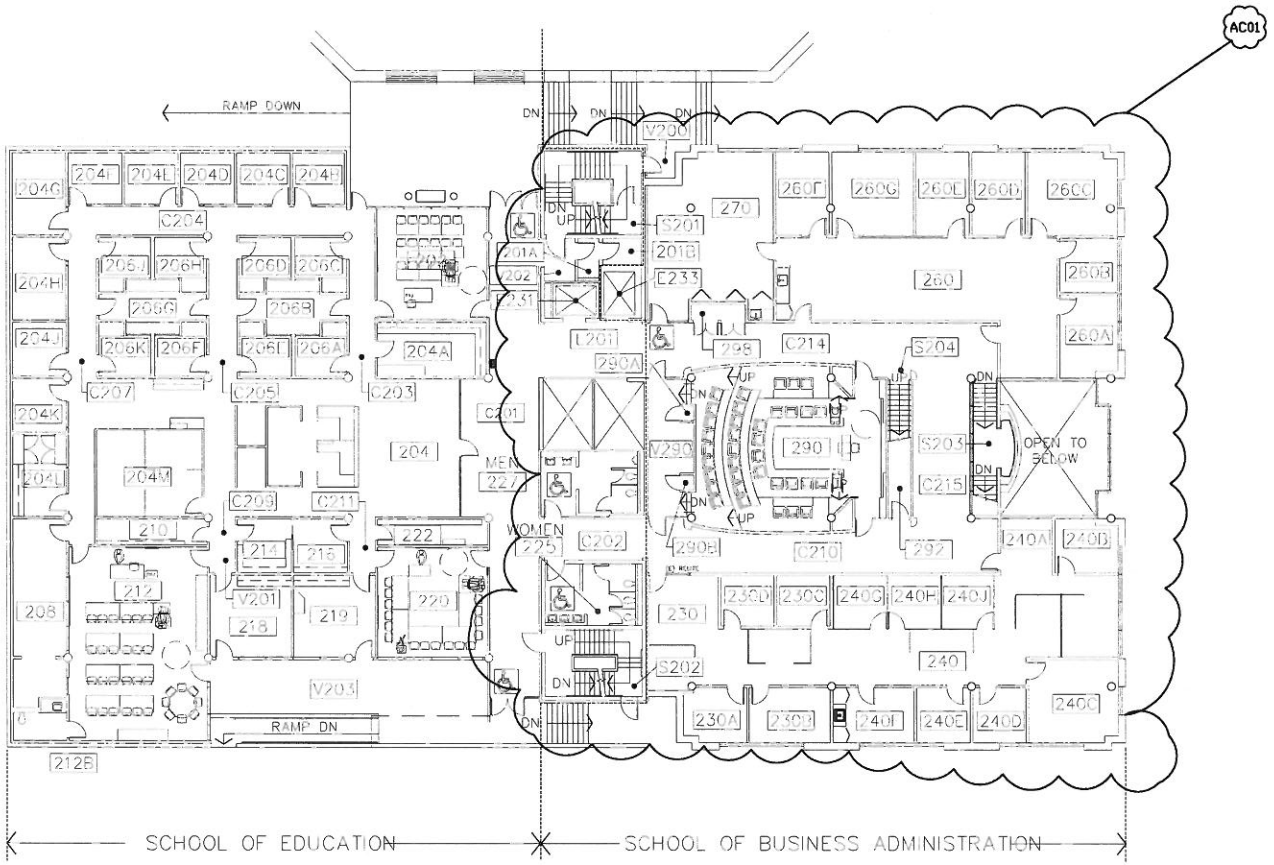
PRIORITY LAYERS			
SI1	SI2	SI3	SI4
ES1	ES2	ES3	ES4
IS1	IS2	IS3	IS4
AC1	AC2	AC3	AC4
HE1	HE2	HE3	HE4
FS1	FS2	FS3	FS4
HV1	HV2	HV3	HV4
PL1	PL2	PL3	PL4
EL1	EL2	EL3	EL4
VT1	VT2	VT3	VT4
SS1	SS2	SS3	SS4

Date: 04/02/06
Drawn: J.T.V.
Project No. 06-005
Drawing: PS_BA_F01

FIRST FLOOR PLAN

Sheet No.
1 of 8

PORTLAND STATE UNIVERSITY



AC02 EL01 FS01 FS02 FS03 HV01
IS01 IS02

N

SCHOOL OF BUSINESS ADMINISTRATION

BLDG NO. BA

ISES CORPORATION

FACILITY CONDITION ANALYSIS
2165 West Park Court Suite N
Stone Mountain, GA 30087
(770) 879-7276

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 UNSPECIFIED EXTENTS
PROJECT NUMBER APPLIES TO AREA AS NOTED

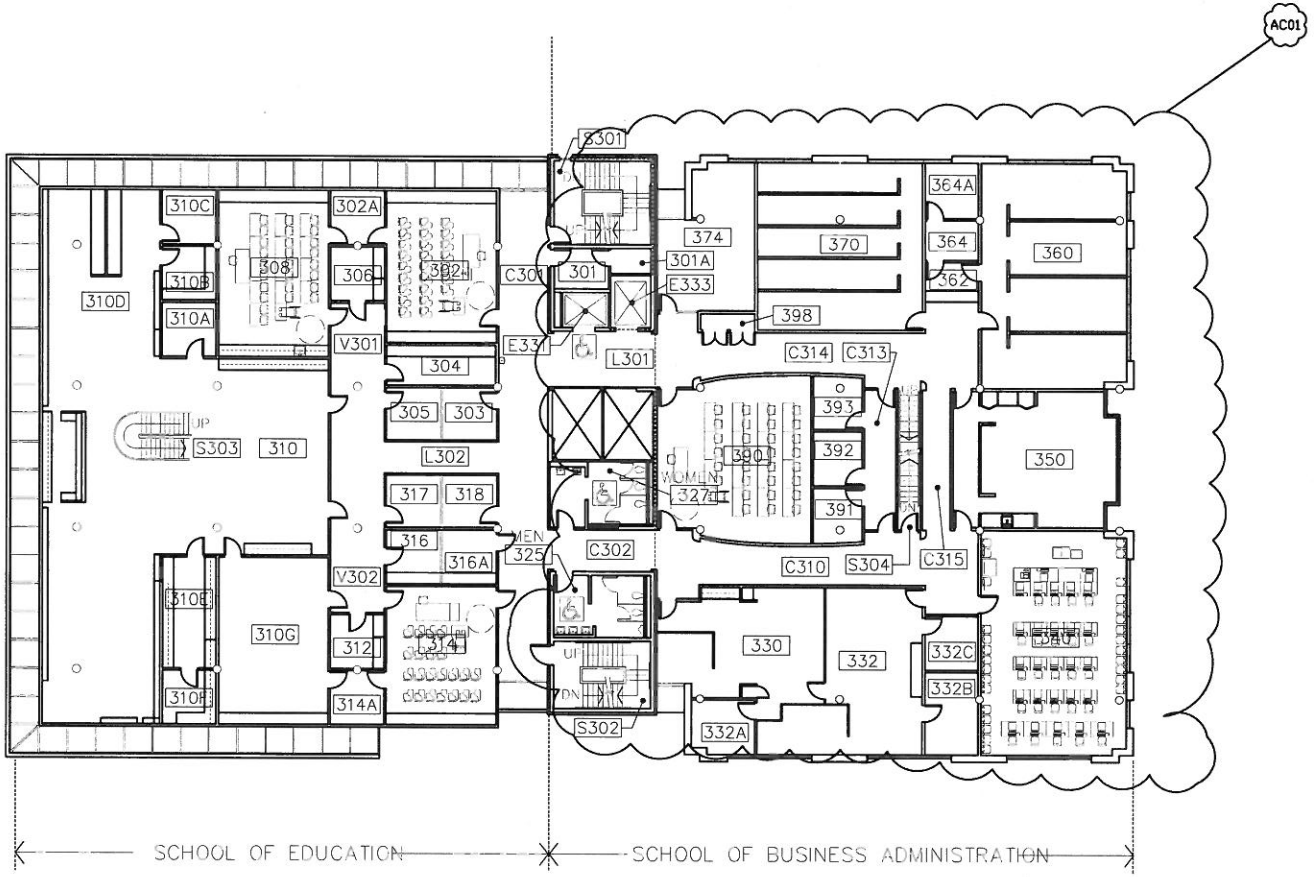
PRIORITY LAYERS			
SI1	SI2	SI3	SI4
ES1	ES2	ES3	ES4
IS1	IS2	IS3	IS4
AC1	AC2	AC3	AC4
HE1	HE2	HE3	HE4
FS1	FS2	FS3	FS4
HV1	HV2	HV3	HV4
PL1	PL2	PL3	PL4
EL1	EL2	EL3	EL4
VT1	VT2	VT3	VT4
SS1	SS2	SS3	SS4

Date: 04/02/08
Drawn: J.T.V.
Project No. 06-005
Drawing: PS_BA_F02

SECOND FLOOR PLAN

Sheet No.
2 of 8

PORTLAND STATE UNIVERSITY



AC02 EL01 FS01 FS02 FS03 HV01
IS01 IS02

N

SCHOOL OF BUSINESS ADMINISTRATION

BLDG NO. BA

ISES CORPORATION

FACILITY CONDITION ANALYSIS

2165 West Park Court Suite N
Stone Mountain, GA 30087
(770) 879-7576

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

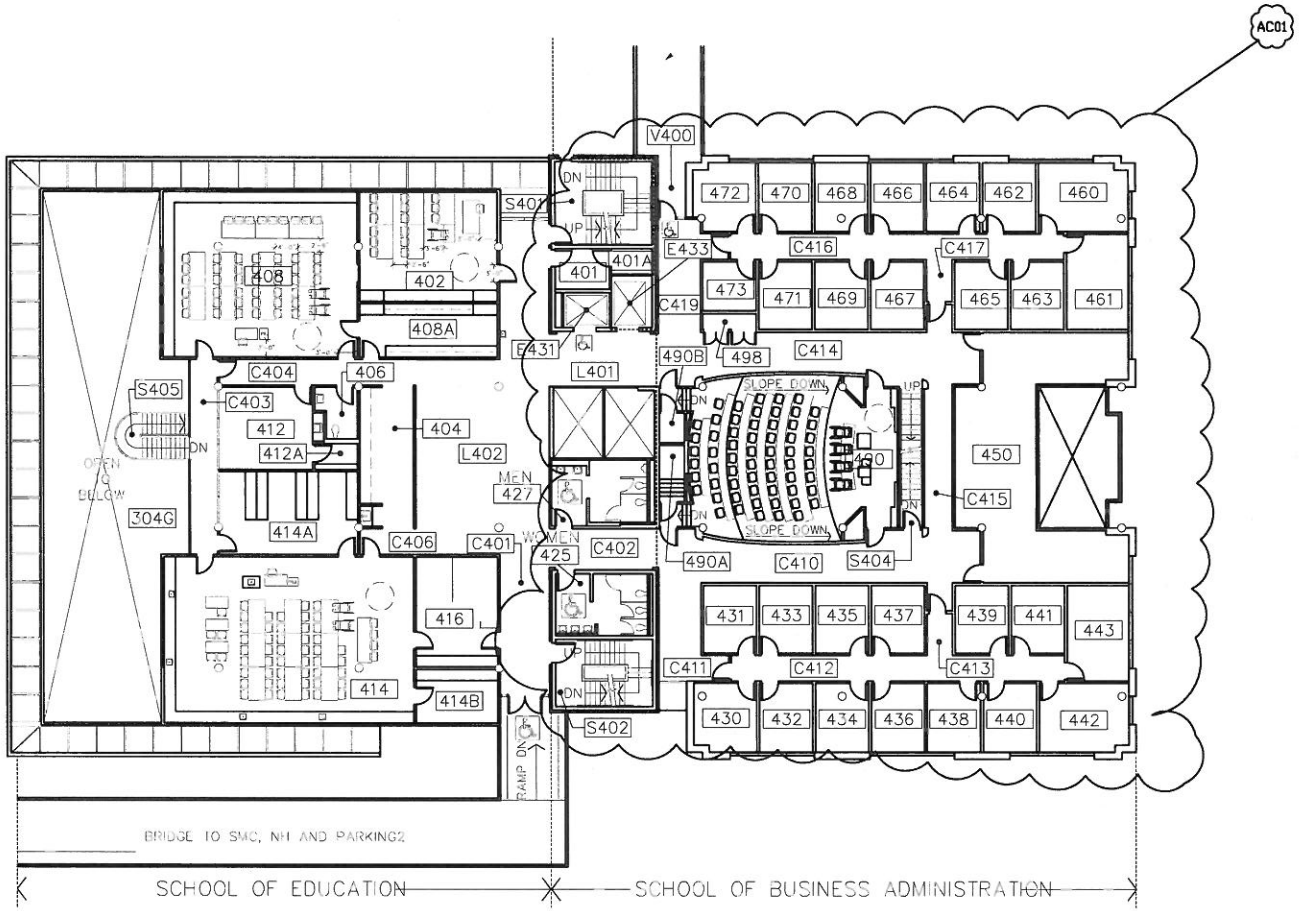
PRIORITY LAYERS			
SI1	SI2	SI3	SI4
ES1	ES2	ES3	ES4
IS1	IS2	IS3	IS4
AC1	AC2	AC3	AC4
HE1	HE2	HE3	HE4
FS1	FS2	FS3	FS4
HV1	HV2	HV3	HV4
PL1	PL2	PL3	PL4
EL1	EL2	EL3	EL4
VT1	VT2	VT3	VT4
SS1	SS2	SS3	SS4

Date: 04/02/08
Drawn: J.T.V.
Project No. 08-005
Drawing: PS_BA_F03

THIRD FLOOR PLAN

Sheet No.
3 of 8

PORTLAND STATE UNIVERSITY



AC02 EL01 FS01 FS02 FS03 HV01 IS01 IS02

N

SCHOOL OF BUSINESS ADMINISTRATION

BLDG NO. BA

ISES CORPORATION

FACILITY CONDITION ANALYSIS

2105 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 UNSPECIFIED EXTENTS

PROJECT NUMBER APPLIES TO AREA AS NOTED

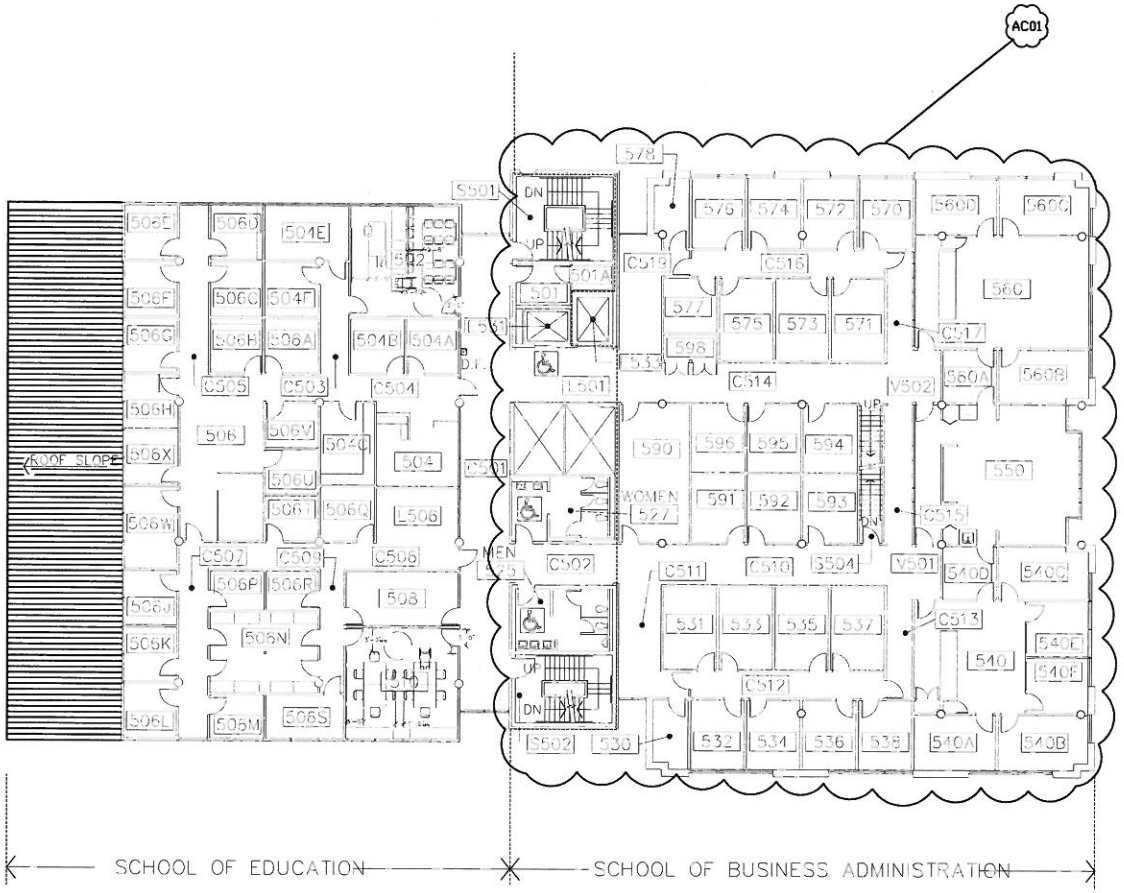
PRIORITY LAYERS			
SI1	SI2	SI3	SI4
ES1	ES2	ES3	ES4
IS1	IS2	IS3	IS4
AC1	AC2	AC3	AC4
HE1	HE2	HE3	HE4
FS1	FS2	FS3	FS4
HV1	HV2	HV3	HV4
PL1	PL2	PL3	PL4
EL1	EL2	EL3	EL4
VT1	VT2	VT3	VT4
SS1	SS2	SS3	SS4

Date: 04/02/08
Drawn: J.T.V.
Project No. 06-005
Drawing: PS_BA_F04

FOURTH FLOOR PLAN

Sheet No.
4 of 8

PORTLAND STATE UNIVERSITY



AC02 EL01 FS01 FS02 FS03 HV01
IS01 IS02

N

SCHOOL OF BUSINESS ADMINISTRATION

BLDG NO. BA

ISES CORPORATION

FACILITY CONDITION ANALYSIS

2165 West Park Court Suite N
Stone Mountain, GA 30087
(770) 879-7676

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

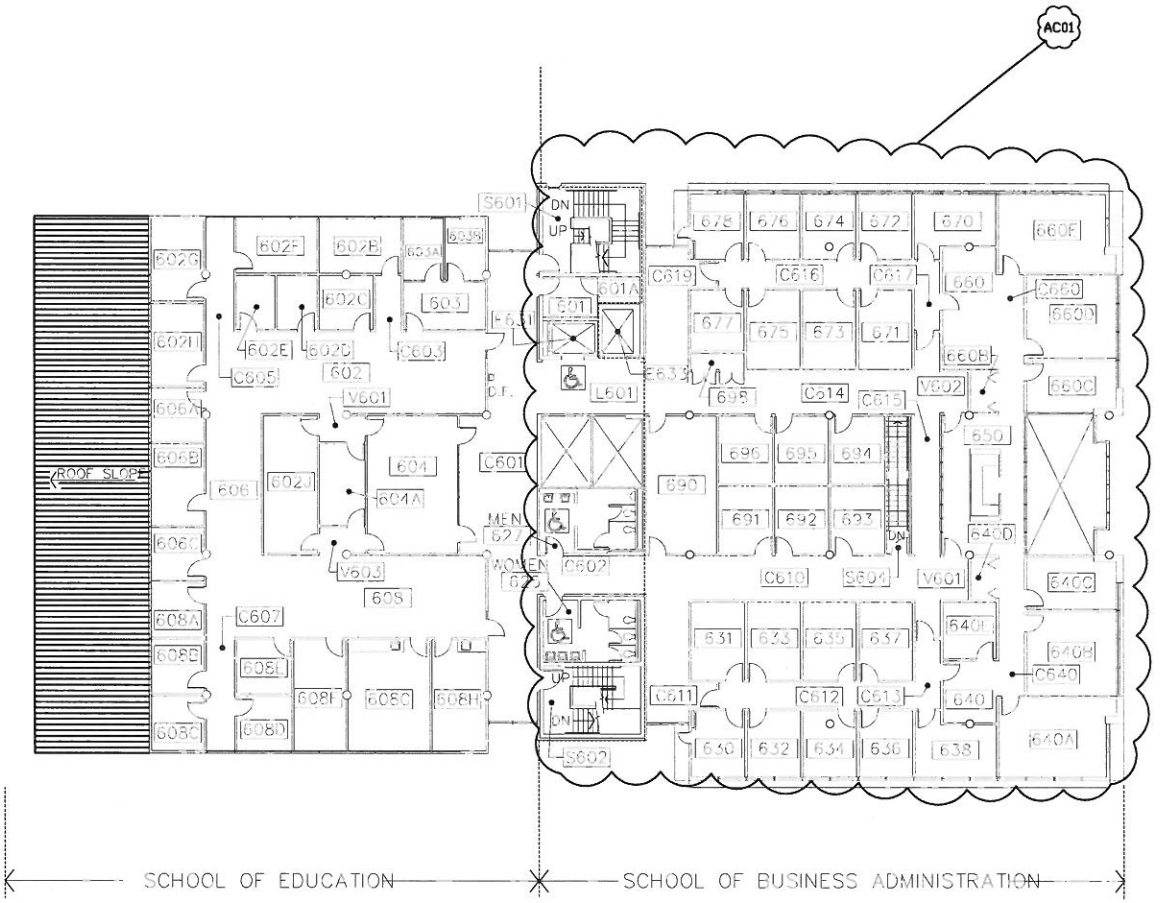
PRIORITY LAYERS			
SI1	SI2	SI3	SI4
ES1	ES2	ES3	ES4
IS1	IS2	IS3	IS4
AC1	AC2	AC3	AC4
HE1	HE2	HE3	HE4
FS1	FS2	FS3	FS4
HV1	HV2	HV3	HV4
PL1	PL2	PL3	PL4
EL1	EL2	EL3	EL4
VT1	VT2	VT3	VT4
SS1	SS2	SS3	SS4

Date: 04/02/08
Drawn: J.T.V.
Project No. 08-005
Drawing: PS_BA_F05

FIFTH FLOOR PLAN

Sheet No.
5 of 8

PORTLAND STATE UNIVERSITY



AC02 EL01 FS01 FS02 FS03 HV01
IS01 IS02

N

SCHOOL OF BUSINESS ADMINISTRATION

BLDG NO. BA

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

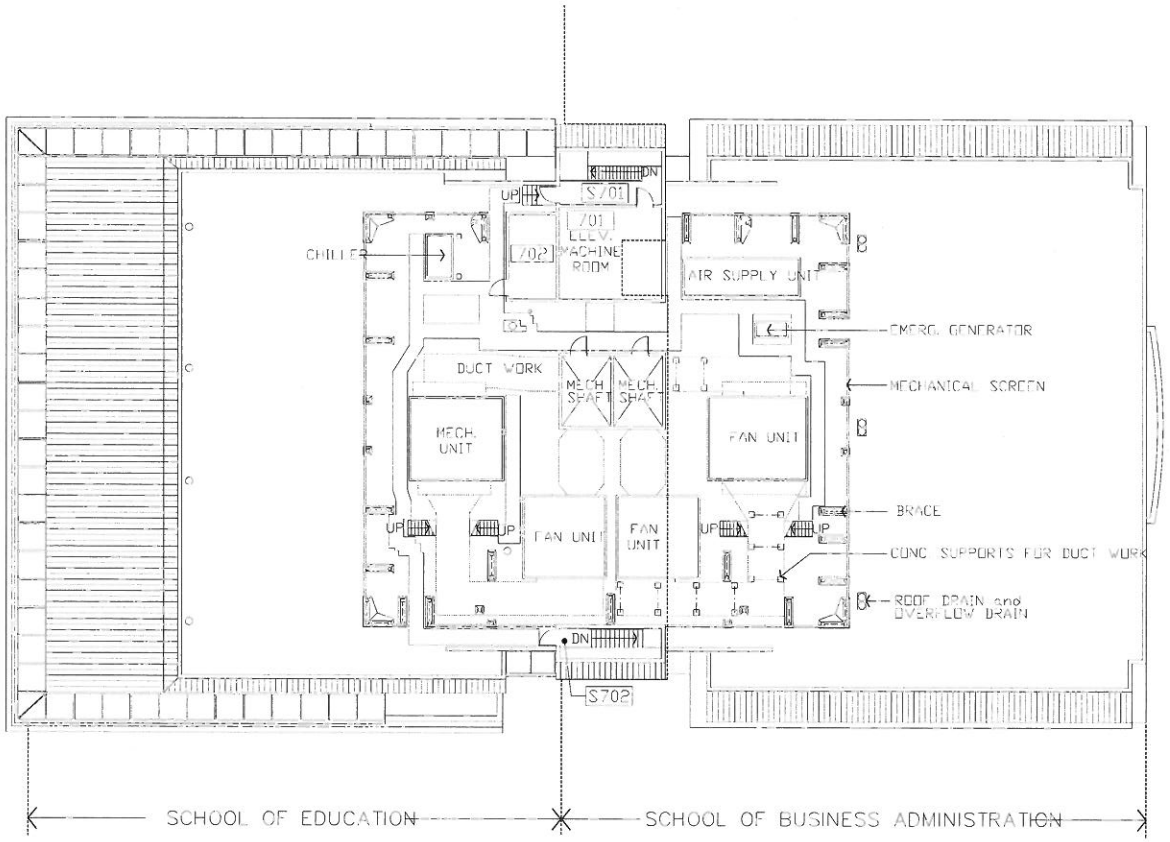
PRIORITY LAYERS			
SI1	SI2	SI3	SI4
ES1	ES2	ES3	ES4
IS1	IS2	IS3	IS4
AC1	AC2	AC3	AC4
HE1	HE2	HE3	HE4
FS1	FS2	FS3	FS4
HV1	HV2	HV3	HV4
PL1	PL2	PL3	PL4
EL1	EL2	EL3	EL4
VT1	VT2	VT3	VT4
SS1	SS2	SS3	SS4

Date: 04/02/08
Drawn: J.T.V.
Project No. 06-005
Drawing: PS_BA_F06

SIXTH FLOOR PLAN

Sheet No.
6 of 8

PORTLAND STATE UNIVERSITY



EL01 FS01 FS02 FS03 HV01

N

SCHOOL OF BUSINESS ADMINISTRATION

BLDG NO. BA

ISES CORPORATION

FACILITY CONDITION ANALYSIS

2165 West Park Court Suite N
Stone Mountain, GA 30087
(770) 879-7576

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

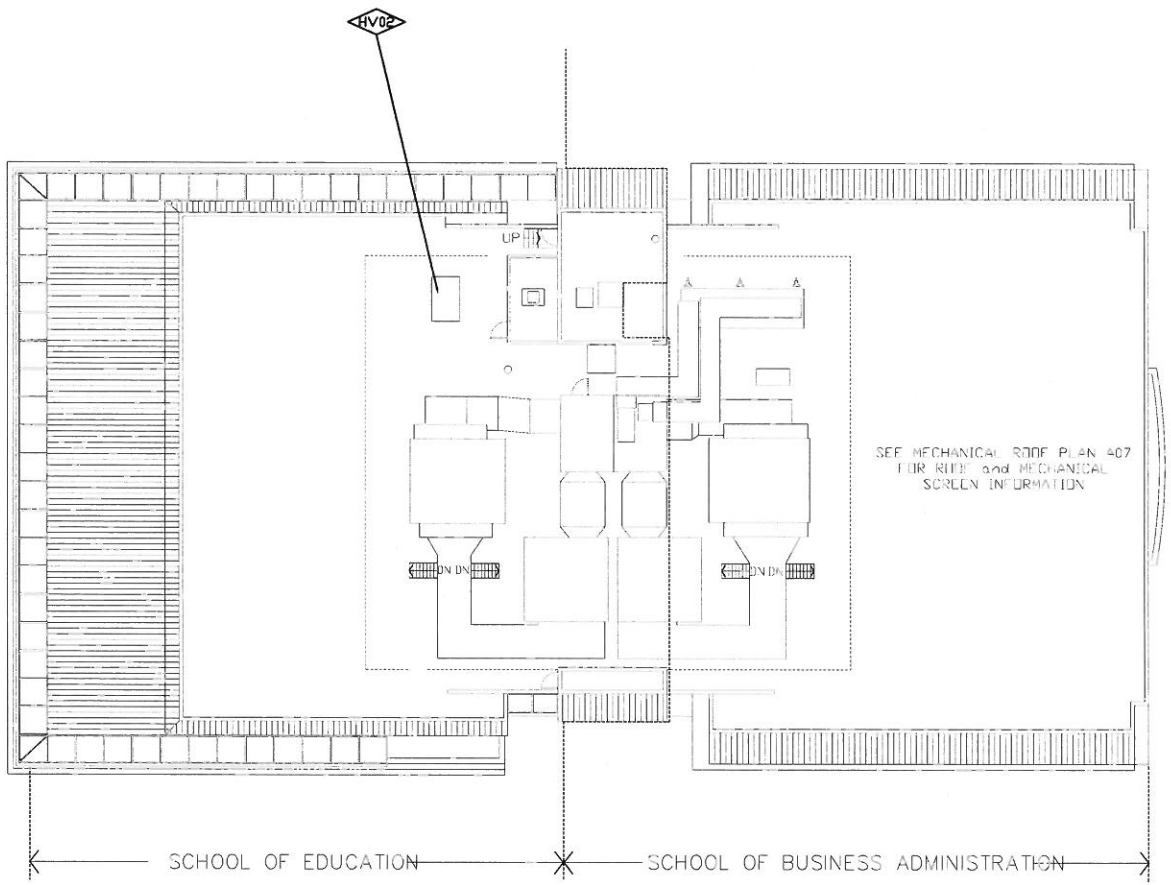
PRIORITY LAYERS			
SI1	SI2	SI3	SI4
ES1	ES2	ES3	ES4
IS1	IS2	IS3	IS4
AC1	AC2	AC3	AC4
HE1	HE2	HE3	HE4
FS1	FS2	FS3	FS4
HV1	HV2	HV3	HV4
PL1	PL2	PL3	PL4
EL1	EL2	EL3	EL4
VT1	VT2	VT3	VT4
SS1	SS2	SS3	SS4

Date: 04/02/08
Drawn: J.T.V.
Project No. 08-005
Drawing: PS_BA_P07

SEVENTH FLOOR PLAN

Sheet No.
7 of 8

PORTLAND STATE UNIVERSITY



HV01

N

SCHOOL OF BUSINESS ADMINISTRATION

BLDG NO. BA

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

PRIORITY LAYERS			
SI1	SI2	SI3	SI4
ES1	ES2	ES3	ES4
IS1	IS2	IS3	IS4
AC1	AC2	AC3	AC4
HE1	HE2	HE3	HE4
FS1	FS2	FS3	FS4
HV1	HV2	HV3	HV4
PL1	PL2	PL3	PL4
EL1	EL2	EL3	EL4
VT1	VT2	VT3	VT4
SS1	SS2	SS3	SS4

Date: 04/02/08
Drawn: J.T.V.
Project No. 08-005
Drawing: PS_BA_FOR

ROOF FLOOR PLAN

Sheet No.
8 of 8

FACILITY CONDITION ANALYSIS

SECTION 5

LIFE CYCLE MODEL SUMMARY AND PROJECTIONS

Life Cycle Model

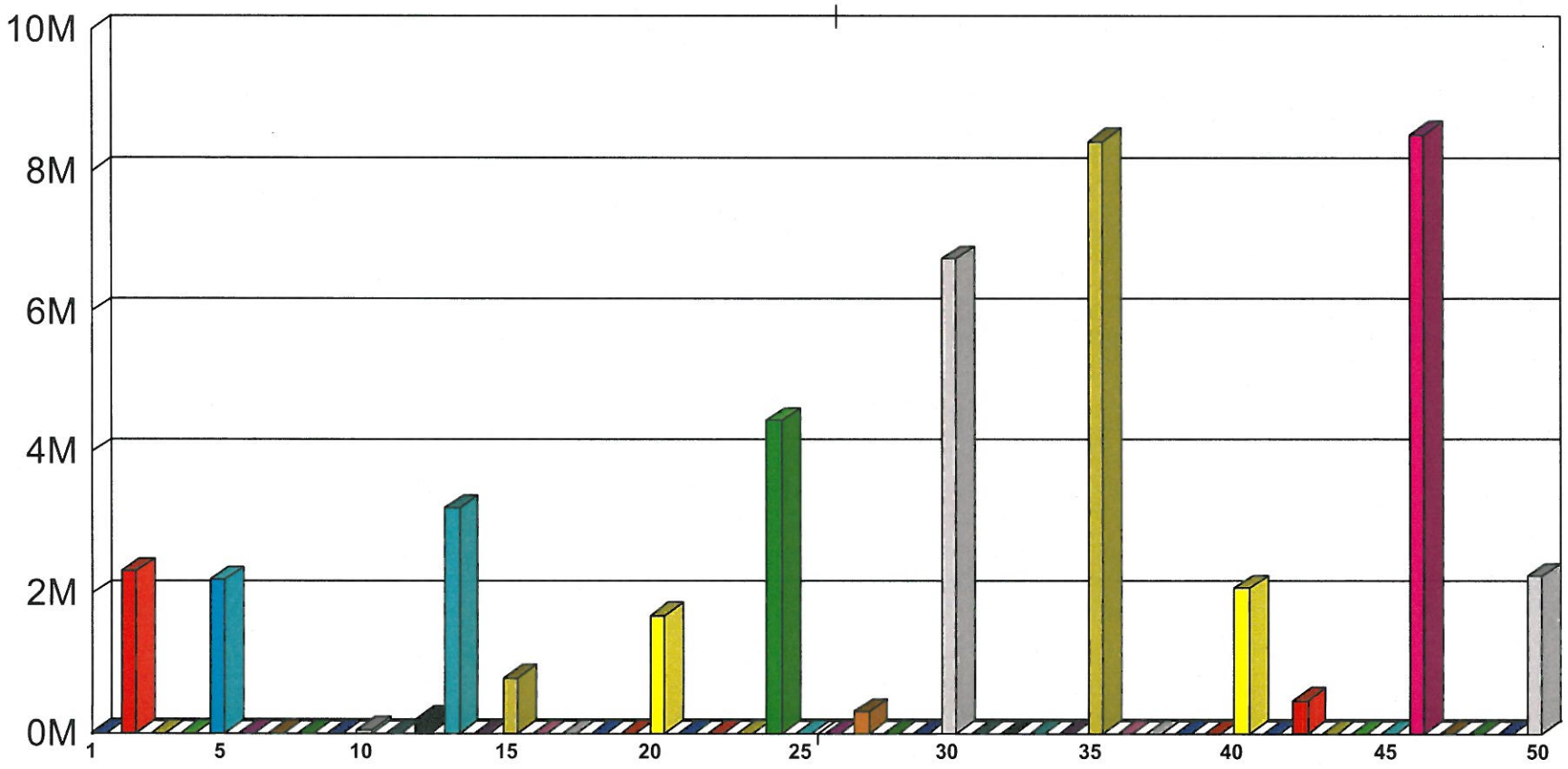
Building Component Summary

BA : SCHOOL OF BUSINESS ADMINISTRATION

Uniformat Code	Component Description	Qty	Units	Unit Cost	Cmplx Adj	Total Cost	Install Date	Life Exp
B2010	BRICK MASONRY SURFACES	16,485	SF	$34.22		$564,117	1987	55
B2020	WINDOW REPLACEMENT (OPERABLE)	2,961	SF	$82.13		$243,187	1987	55
B2030	EXTERIOR METAL DOORS INCL. HARDWARE	12	EA	$3,661.44		$43,937	1987	30
B3010	BALLASTED SINGLE-PLY ROOFING SYSTEM	8,762	SF	$7.35		$64,401	1987	20
C3010	INTERIOR FINISH - CLASSROOM / ACADEMIC	52,570	SF	$41.60		$2,186,912	1987	11
D2010	PLUMBING FIXTURES - CLASSROOM / ACADEMIC	52,570	SF	$5.37		$282,301	1987	35
D2020	WATER PIPING - CLASSROOM / ACADEMIC	52,570	SF	$4.38		$230,257	1987	35
D2030	DRAIN PIPING - CLASSROOM / ACADEMIC	52,570	SF	$6.59		$346,436	1987	40
D3030	CHILLER - AIR COOLED (UP TO 60 TONS)	30	TON	$1,996.04		$59,881	1987	20
D3040	HVAC SYSTEM - CLASSROOM / ACADEMIC	52,570	SF	$36.00		$1,892,520	1987	25
D4010	FIRE SPRINKLER SYSTEM	52,570	SF	$6.09		$320,151	1987	80
D4010	FIRE SPRINKLER HEADS	52,570	SF	$0.50		$26,285	1987	20
D5010	ELECTRICAL SYSTEM - CLASSROOM / ACADEMIC	52,570	SF	$16.91		$888,959	1987	50
D5020	EXIT SIGNS (CENTRAL POWER)	19	EA	$235.36		$4,472	1987	20
D5020	LIGHTING - CLASSROOM / ACADEMIC	52,570	SF	$8.28		$435,280	1987	20
D5030	FIRE ALARM SYSTEM	52,570	SF	$2.63		$138,259	2004	15
						$7,727,354		

Life Cycle Model Expenditure Projections

BA : SCHOOL OF BUSINESS ADMINISTRATION



Average Annual Renewal Cost per SqFt **$7.41**

FACILITY CONDITION ANALYSIS

SECTION 6

PHOTOGRAPHIC LOG

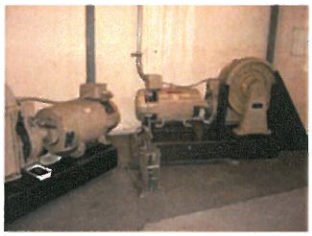
Photo Log - Facility Condition Analysis
BA : SCHOOL OF BUSINESS ADMINISTRATION

Photo ID No.	Description	Location
BA001a	Ballasted roof	Roof
BA001e	Traction elevator	Elevator room
BA002a	Mechanical screen	Roof
BA002e	Control air compressor	Penthouse
BA003a	Exterior glazing and general level of finish	Sixth floor, conference room
BA003e	Liquid air cooled chiller	Roof
BA004a	Window detail	Sixth floor, conference room
BA004e	Original rooftop air handling unit	Roof
BA005a	Disco treads and handrail	Center stairwell
BA005e	ABB variable frequency drive	Inside air handling ASU1
BA006a	Flaking paint on guardrail	Fifth floor, balcony
BA006e	Original supply fan unit	Roof
BA007a	Damaged finishes on door and jamb	Fifth floor
BA007e	Onan generator	Roof
BA008a	General level of finish and glazing	Fourth floor
BA008e	Void	Void
BA009a	Vinyl tile floor and lay-in ceiling	Third floor, corridor
BA009e	Concrete slop sink	Janitor's closet
BA010a	Stained carpeting	Third floor
BA010e	Original exit sign	Sixth floor, exit
BA011a	Missing and damaged ceiling tile	Third floor, cross corridor
BA011e	Typical fusible link sprinkler head	Office 602
BA012a	Built-in cabinetry	Second floor, kitchenette
BA012e	Pneumatic thermostat	Room 502
BA013a	Brick pattern tile and exterior glazing	First floor, east side
BA013e	Typical lighting fixture	Third floor
BA014a	Lever hardware and lay-in ceiling	First floor, corridor, past classrooms
BA014e	Void	Void
BA015a	Detail of cracked pavement	South entry
BA015e	Void	Void
BA016a	Exterior facade and nearby construction	Southeast end of building
BA016e	Vertical bus duct	Room 398
BA017a	Balconies and exterior glazing	East elevation

Photo ID No.	Description	Location
BA017e	Typical fire pull	North lobby
BA018a	Exterior facade and perimeter landscaping	North elevation
BA018e	Void	Void
BA019e	Void	Void
BA020e	Void	Void
BA021e	Void	Void
BA022e	Void	Void
BA023e	Backflow preventer on domestic water main	Stairwell S102
BA024e	Backflow preventer on fire water main	Stairwell S102
BA025e	Fire alarm annunciator	Near room 190
BA026e	New heat exchanger	Mechanical room M103
BA027e	Chilled water pumps	Mechanical room M103
BA028e	Hot water pumps	Mechanical room M103
BA029e	Original domestic hot water heater	Mechanical room M103

Facility Condition Analysis - Photo Log

BA001A.jpg

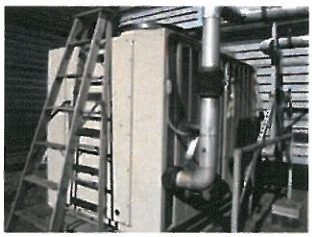


BA001E.jpg

BA002A.jpg

BA002E.jpg

BA003A.jpg



BA003E.jpg

BA004A.jpg

BA004E.jpg

BA005A.jpg

BA005E.jpg

BA006A.jpg

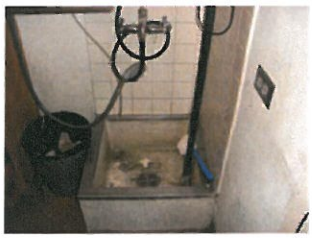
BA006E.jpg

BA007A.jpg

BA007E.jpg

BA008A.jpg

BA009A.jpg



BA009E.jpg

BA010A.jpg

BA010E.jpg

BA011A.jpg

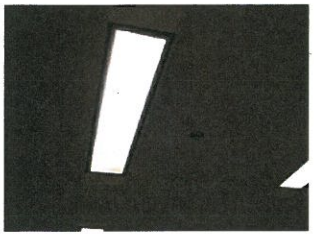
Facility Condition Analysis - Photo Log

BA011E.jpg

BA012A.jpg

BA012E.jpg

BA013A.jpg



BA013E.jpg

BA014A.jpg

BA015A.jpg

BA016A.jpg

BA016E.jpg

BA017A.jpg

BA017E.jpg

BA018A.jpg

BA023E.jpg

BA024E.jpg

BA025E.jpg

BA026E.jpg

BA027E.jpg

BA028E.jpg

BA029E.jpg