EAST CAROLINA UNIVERSITY

Facility Condition Assessment

Allied Health Sciences Building
Asset AHSB

Inspected April 20, 2016

ISES CORPORATION

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FACILITY CONDITION ASSESSMENT

SECTION 1

ASSET OVERVIEW

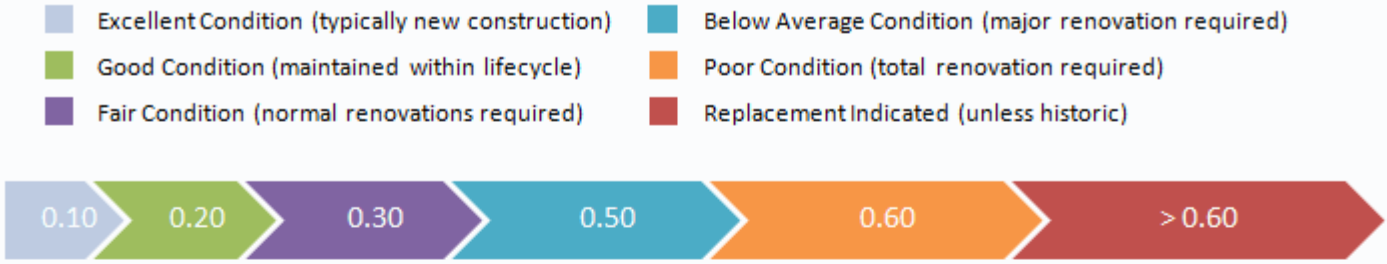
ASSET EXECUTIVE SUMMARY

All costs shown as Present Value

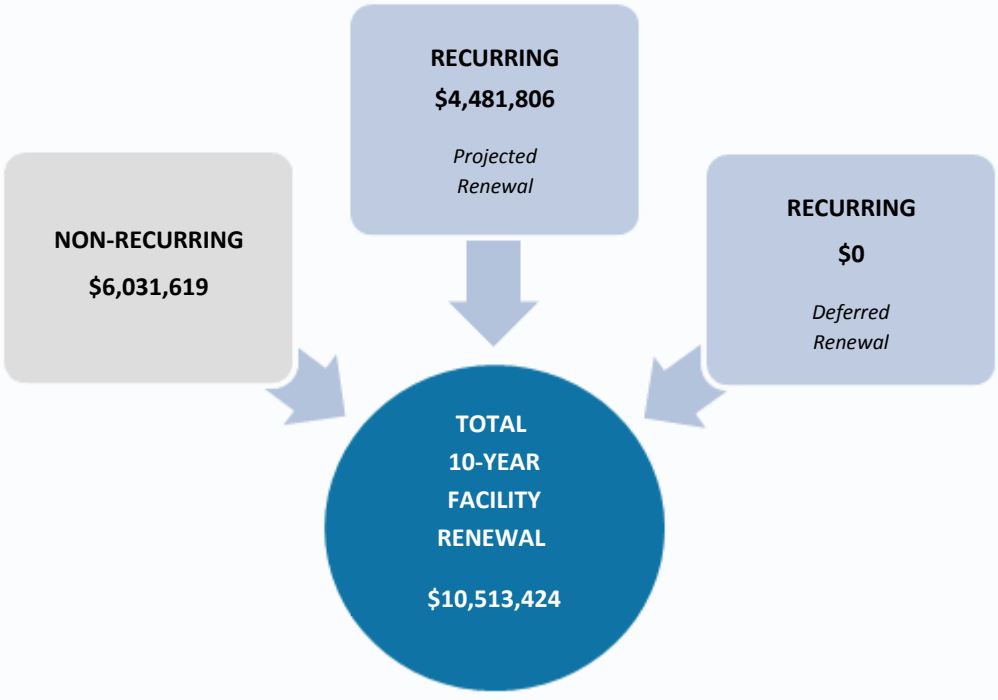
ASSET CODE	AHSB	**CURRENT REPLACEMENT VALUE**	$95,636,000
ASSET NAME	ALLIED HEALTH SCIENCES BUILDING	**FACILITY CONDITION NEEDS INDEX**	0.11
ASSET USE	Classroom / Academic	**FACILITY CONDITION INDEX**	0.00
YEAR BUILT	2006	**10-YEAR $/SF**	34.65
GSF	303,406		
INSPECTION DATE	04/20/2016		

FCNI Scale

The FCNI for this asset is **0.11**



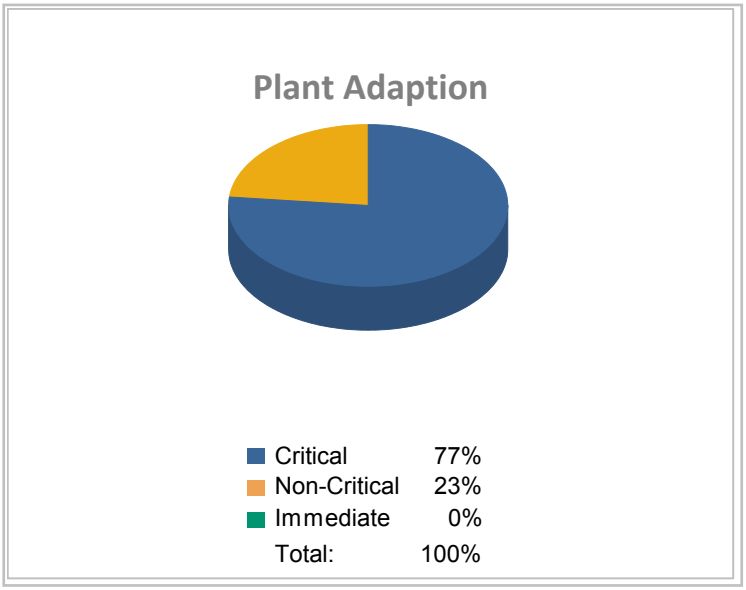
Total Facility Renewal Costs



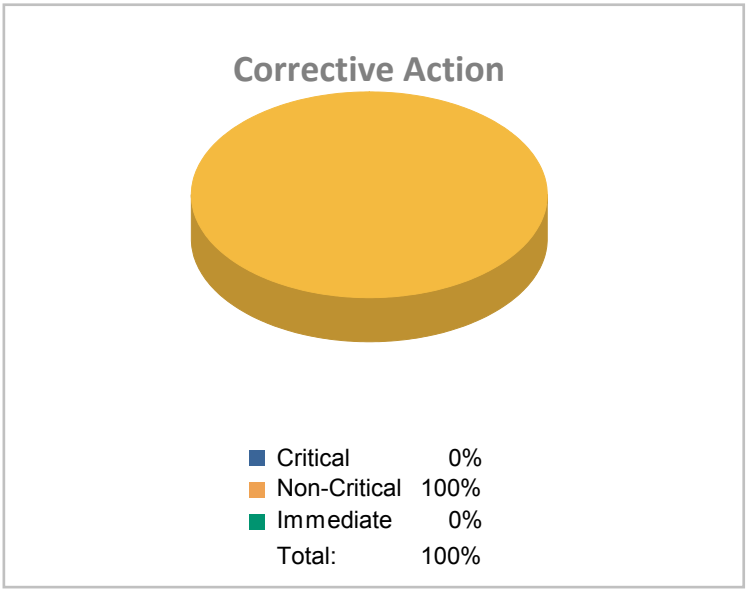
Non-Recurring Costs

Project Cost by Priority

PLANT ADAPTION	
1 - Immediate	**$0**
2 - Critical	**$77,227**
3 - Non-Critical	**$23,483**

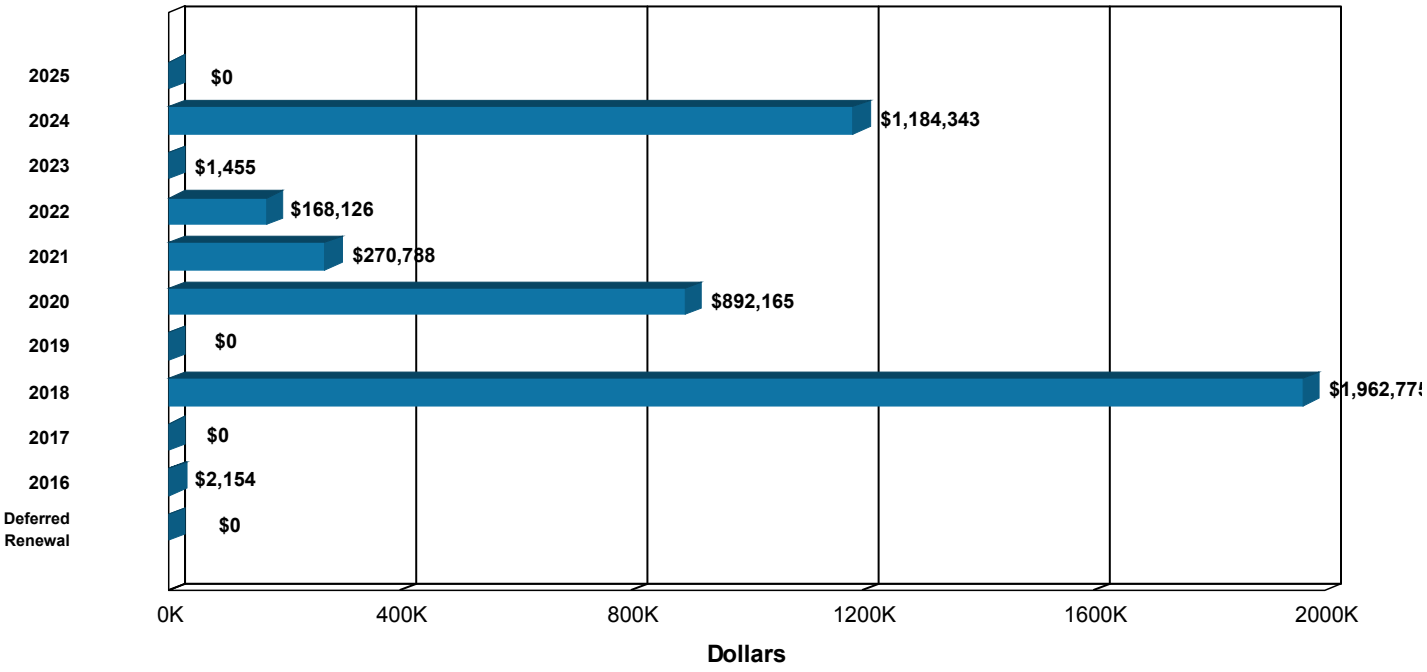


CORRECTIVE ACTION	
1 - Immediate	**$0**
2 - Critical	**$0**
3 - Non-Critical	**$5,930,909**

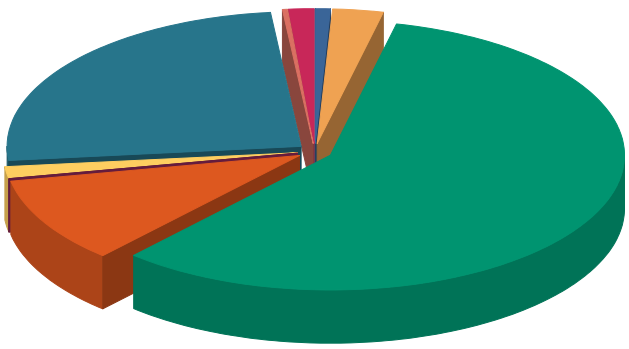


Recurring Costs

Component Replacement Cost by Year



Facilities Renewal Cost by System



Accessibility	$77,227	1%
Electrical	$309,702	3%
Exterior	$6,088,399	58%
Fire/Life Safety	$1,075,235	10%
Health	$8,585	0%
HVAC	$151,525	1%
Interiors	$2,636,283	25%
Plumbing	$25,108	0%
Site	$0	0%
Vert. Trans.	$141,360	1%
TOTAL	**$10,513,424**	

ASSET SUMMARY

The Allied Health Sciences Building is a four-story, irregular "Z" shaped, 303,406 gross square foot, reinforced concrete and steel framed structure built in 2006. The building is located in the northern section of the East Carolina University Health Sciences campus just west of the north end of Health Sciences Drive. The brick masonry veneer building has a combination of both flat membrane and pitched metal roof areas. The building foundation appears to be a slab on grade. There is no basement or subterranean level associated with this facility.

This medical school facility contains numerous administration and departmental office spaces, a medical library, a number of lecture halls, classrooms, hands-on teaching laboratories, and typical support areas such as a conference rooms, staff and student lounges, public restrooms, a first floor snack bar, mechanical/electrical spaces, and a northern rear shipping and receiving area. There is also a one-bedroom staff apartment located on the third floor of the D Wing with a full bathroom and kitchen.

Information for this report was gathered during a site inspection that concluded on April 20, 2016.

Site

Overall the site is well maintained and visually appealing. The site landscaping is adequate and appropriate for the existing building conditions. Generally the site hardscape, which includes the concrete sidewalks, curbs, and gutter, are in good condition. Several large asphalt parking lots lies adjacent to the north and east sides of the facility with ample parking and sufficient accessible spaces. This asphalt parking lot has surface cracks where if left unattended, will lead to premature failure of the pavement structure. Since these parking areas serve both university-owned and privately-owned medical facilities, they were not included within this facility condition assessment.

Exterior Structure

The existing brick masonry veneer exterior walls from the original 2006 construction exhibit significant moisture penetration around the windows and through the masonry. Numerous areas of the exterior were uncovered and found to have systematic deficiencies throughout. This appears to be a result of improper flashing installation and/or faulty design and construction of the internal wall drainage cavity. A major rehabilitation is recommended of the exterior envelope's vertical masonry walls, including any window resealing and re-gasketing as necessary to ensure a waterproof exterior envelope. This should include the removal and replacement of the existing deficient flashing within the wall structure at the existing openings and creation of an improved end-damn condition.

The building has a central pitched, blue/grey colored, standing seam metal roof system. There are also some flat perimeter roofs that hare covered with a white, TPO, single-ply membrane application. These flat areas house rooftop mechanical equipment and act as a large gutter to collect rainwater from the pitched roofs and divert it through internal drains. Both are original to 2006 in good condition. The

metal roof shouldn't require upgrades within the next ten years. The TPO single-ply membrane roof is expected to be near the end of its expected service life right around the end of the ten-year window of this assessment. The existing skylights need the flashing to be reworked. Leaks were apparent at numerous locations. Reflash and recaulk/reseal skylights as required, and water-test prior to completion.

The windows located in this facility are either large inoperable, tempered units or dual-pane windows. The windows are typically in good condition and not expected to need any replacements. However, some are exhibiting loose gasket seals and the seals should be repaired or replaced. This issue is addressed in the exterior masonry recommendation.

The building has several main entrances, with the library entrance to the south, and the main medical school entrance to the north, and numerous additional entrances located throughout the first floor for accessing the various wings of the facility. The exterior entrance doors are either aluminum and glass or hollow metal service type door applications. They appear to be original to the building construction and are in good condition. There is one overhead commercial garage door at the southern loading dock. It is also original and in good condition.

Interior Finishes/Systems

The interior finishes within this facility are typically original and generally in good condition. The office suites, lecture halls, conference rooms, and general classrooms within this facility are primarily finished with wall-to-wall carpeted floors, most of which are in good condition. It is anticipate that the carpeted floor areas will need renewal within the next ten years. Areas of higher traffic circulation will always need earlier and more frequent renewal. The laboratory areas have twelve-inch vinyl floor tile, and the training classrooms typically have sheet vinyl flooring. There is a premium slate floor application on the first floor and the second floor southern lobby to the library. There is also premium hardwood flooring in the Historic Collections Reading Room. These floor finishes should remain satisfactory through the next ten years. Painted and sealed concrete floors should be refinished during the next ten years.

The restroom facilities in this building are constructed of ceramic tiled floors and walls with fully accessible fixtures. All of the restrooms are in good condition requiring no upgrades.

Most of the interior walls are painted sheetrock partitions with some papered walls. All should outlast this assessment. There are some lobby areas within the first floor of this facility with premium slate tile wall applications that are also in good condition.

Most ceilings are finished with suspended grid acoustical tile drop ceiling finishes that are also original and in good. Some areas have painted sheetrock applications. All the ceilings should last beyond the timeframe covered by this report. The Historic Collections Reading Room on the fourth floor of the southern E Wing contains a premium ceiling finish with an inset of ceiling tiles molded to suggest a 19th century tin ceiling.

The interior doors are all properly rated and in good condition with accessible lever actuated hardware throughout. The interior glazing is all properly fire and safety rated. No upgrades are necessary for the doors.

The laboratory casework, including the metal casement, are in good condition and not expected to warrant significant improvements. The non-lab casework should also outlast the purview of this assessment. The classroom seating is in acceptable condition and should outlast this report.

Accessibility

The facility was constructed in 2006, years after the ADA legislation was approved into law. Being a public university and this facility being a hands-on classroom and laboratory teaching facility, accessibility was incorporated into the original design with significant access provided throughout the entire facility.

However, one issue was observed that can be improved upon to provide better access. Present legislation pertaining to access within buildings requires that goods and services be generally accessible to all persons. Even though wheelchair access has been provided at the front of the six terraced classrooms on the first floor, the existing stepped aisles along the outer walls do not have the wall rail required for stepped egresses. It is recommended that wall-mounted compliant railings be installed along the side aisles to improve the access to these classrooms.

Health

This facility is equipped with a cold room that supports the research and laboratory programs. The physical structure is in proper working condition, and no recommendations have been developed for this equipment. The refrigeration serving this area is also in proper working condition and has been well maintained. It will be necessary to remove and replace the mechanical equipment at or near the end of this ten-year planning scope.

Fire/Life Safety

Structural fire separations are maintained according to code requirements for new construction in all areas of this facility. The paths of egress in this building are adequate in regard to fire rating. There are no compromises involving doors, partitions, or stairs. No fire or life safety issues related to architectural features were observed during the inspection of this facility.

This facility is equipped with a fire alarm/detection system that utilize a relatively modern point-addressable control panel, manual pull stations, horn strobe signals, smoke/fire detection, and auto communication dialer. This system was in proper working condition at the time of inspection but will require an upgrade near the end of this ten-year planning horizon. At such time, it will be necessary to upgrade the main control panel and annunciator display.

The majority facility is protected with a complete, wet-pipe fire suppression system with a pre-action system serving area E. The stairwells, mechanical penthouses, and main mechanical rooms are equipped with the main fire risers and each landing is equipped with the proper safety valves with tamper switches. This majority of the system including the pre-action compressor, sprinkler heads, valves and tamper switches are in good condition and will require only routine maintenance to remain reliable well beyond the planning horizon of this assessment.

Suite 1512 is the primary data center for this facility. It is currently protected by the wet pipe fire suppression system. It is recommended that this area be equipped with an FM-200 or Inergen based fire suppression system.

The exit signage and egress lighting are a modern, efficient design that is currently in proper working condition. This equipment is connected to the emergency power network that is installed throughout this facility. The egress lighting is a combination of emergency lighting ballasts and twin-sealed fixtures with battery back-up. Statistically, the exit signage and egress lighting should outlast the purview of this report.

HVAC

This facility utilizes chilled water and steam that is provided from the HSC Central Utility Plant. The central steam pressure is reduced through the use of six pressure reducing stations installed in room 1510B. The steam is then converted into heating hot water for distribution throughout the facility via the use of a shell-and-tube heat exchanger. These pressure reducing valves and heat exchanger are well maintained and in proper working condition. With continued maintenance, this equipment will continue to operate reliably beyond the ten year planning phase of this report.

Seventeen air handlers of varying capacity that are equipped with heating and chilled water coils furnish conditioned air through a ducted forced air system that utilizes a variable air volume design. The air handlers are equipped with supply fans and inline/ axial return fan systems. The physical inspection revealed no major deficiencies to this equipment as the air handler and fans have been well maintained. There are no recommendations for the replacement or repair of this equipment at this time.

Four energy recovery units (ERU) with internal enthalpy wheels have been installed that recapture waste exhaust from the restroom facilities located throughout the building. These ERUs reduce energy consumption by acting as an air-to-air heat exchanger through the use of the heat wheel that combines restroom waste exhaust with equipment return air. Additional exhaust air fans are installed for use within the ERUs. This equipment is in good condition, and no recommendations have been developed at this time. Additional facility exhaust is achieved through the use of utility set exhaust fans that are all in proper working condition. There are no recommendations for the exhaust fans at this time.

Supplemental cooling is provided to this facility through the use of four computer room air conditioning units that were manufactured by Data-Air, Inc. and have a maximum supply capacity of 18 tons each. These units provide the conditioned air to the rare books area and main data center. They will reach the end of their statistical lifecycles within the next ten years and are recommended for replacement.

Electric pumps distribute heating and chilled water to the terminal units, air handlers, hydronic units, and computer room air conditioning units installed through the facility. The two heating water and three chilled water pumps identified as HWP-1, HWP-2, CHWP-1, CHWP-2 and PCHW-1 have been very well maintained and are in good working condition. Condensate is captured and redistributed to the central system through the use of a duplex, electric condensate return system and one vacuum condensate system with flash tank that are in good working condition. The vacuum system air compressor is also in proper working condition. With the continued attention to maintenance, these pump systems will remain reliable and serviceable beyond the planning horizon of this assessment.

The HVAC distribution system consisting of ductwork, heating water pipe, chilled water pipe and condensate return pipe is all in good working condition. The ductwork had no visible damage or leaks and the piping systems insulation was all primarily intact. Additionally, the expansion tanks installed to serve the HVAC distribution system are also in good working condition. There are no recommendations for this equipment.

The controls for the HVAC equipment are primarily a direct digital (DDC) design that was manufactured by Siemens. Some pneumatic actuators are in service that are provided control air from an air compressor and associated air dryers located in mechanical space 1510B. The control system and associated mechanical equipment are in proper working condition and should remain reliable and efficient beyond the planning scope of this assessment.

Nine fume hood systems are installed to support the research and laboratory programs within this facility. These fume hoods are in proper working condition and have been well maintained. With continued, diligent maintenance, these units will continue to work reliably beyond the planning horizon of this assessment.

Electrical

Primary electrical service is provided to this facility through the use of two exterior oil-filled transformers and associated pad-mounted selector switch. This equipment has been detailed as part of the High Voltage Utility Report.

Secondary electric power within this building consists of 480/277 and 208Y/120 distribution volt services. Thirty-four dry-type branch transformers of varying capacity reduce the 480 volt service to 120/208 volts. Located in room 1514 is a section of low-voltage switchgear that is installed in a main-tie-main configuration and has a maximum capacity of 3,200 amps. Low-voltage circuit breaker panelboards are installed throughout the building top service occupied spaces and for lighting and system controls. The majority of the HVAC equipment is connected to the 480/227 volt service. The secondary electrical system and main switchgear are all in good working condition and will require only routine operation and maintenance to remain reliable beyond the planning scope of this report. It may be necessary to replace some panelboard circuit breakers, light switches, and electrical outlets over the next ten years, but these small upgrades are more indicative of routine maintenance as opposed to budgeted formal recommendations.

Emergency power is provided to this facility from the central campus emergency power network. Installed within room 1514A are two automatic transfer switches that were manufactured by Cummins and transfer emergency power to the facility in the event of a loss of normal power. These units identified as ATS-EQ and ATS-LS, provide electrical service to life safety and critical equipment installed throughout the facility. These switches are currently in proper working condition and will require only routine maintenance and operation to remain reliable beyond the ten-year planning scope of this assessment.

The mechanical devices serving the HVAC system, including the supply, return, and exhaust fans, are equipped with variable frequency drives (VFDs). There are approximately fifty VFDs that are currently in service within this building. These drives are all currently in proper working condition but will reach the ends of their statistical lifecycles within the ten-year planning scope of this report. At such time, it is recommended that new VFDs be installed. It is also recommended that a staggered or phased replacement program be instituted to mitigate initial costs associated with the replacement of such a large amount of electrical and control equipment.

The interior lighting within this facility consists of a combination of surface-mounted, recessed, and pendent light fixtures that are equipped with T-8 fluorescent lamps, as well as some recessed and sconce fixtures that are equipped with compact fluorescent lamps. As a whole, the lighting system is in good condition and relatively energy efficient. It should outlast the purview of this assessment.

Exterior lighting is provided through the use of a combination of surface-mounted, pole-mounted, recessed, and scone fixtures. The majority of the surface-mounted, recessed, and sconce fixtures are equipped with CFL lamps, but there are some lamps that utilize HID lamps. These light sources will reach the end of their statistical service lives within the scope of this assessment and are recommended for replacement. The stanchion light fixtures are all in good working condition and should remain reliable beyond the ten-year planning scope of this assessment.

Plumbing

The domestic water supply system within this facility is a soldered copper design and in proper working condition. The wastewater piping system is constructed of cast iron or black steel and is also in proper working condition. No evidence of leaks were identified at the time of inspection, and these systems will require continued maintenance and inspection to remain serviceable beyond the scope of this assessment.

Six backflow preventers (BF) installed within this facility prevent cross-contamination of the domestic, chilled, and heating water systems within this facility and the municipal water service. The two main BF devices are sized at 4 inches and have developed minor calcification on the valve stems. All these devices are original to facility construction and have reached the end of their statistical lifecycles. It is recommended that this equipment be replaced within the planning horizon of this assessment.

Domestic hot water is generated through the use of an unfired heat exchanger and three electric-fired units. All of these water heaters are currently in proper working condition, and no visual damage was identified. The three electric units will require replacement within the scope of this assessment. The

domestic hot water is circulated throughout the building via the use of four circulating pumps. These pumps are in proper working condition, and no recommendations for their replacement have been developed at this time.

The unitary plumbing fixtures installed within men's and women's restrooms throughout this facility include porcelain counter-mounted lavatories with manual hardware, wall-mounted urinals with automatic hardware, and wall-mounted, tankless water closets with automatic hardware. Additionally, the facility is equipped with base-mounted service sinks, a bathtub, and a stainless steel kitchen sink. These plumbing fixtures are all in good working condition and will require only minimal maintenance and repair to remain serviceable beyond the planning scope of this report.

Emergency service equipment installed throughout the building includes eyewash stations, showers, drench hoses, and combination eyewash/shower fixtures. These fixtures are all equipped with dedicated mixing valves and are operated and tested regularly. With this continued dedication and aggressive maintenance practice, these fixtures will remain reliable and serviceable for the next ten years and beyond.

Additional plumbing systems utilized within the laboratory areas of this building include dedicated vacuum and compressed air systems. The duplex, vacuum pump system and air compressor are in good working condition. No recommendation for replacement of this equipment was developed at this time.

Vertical Transportation

This facility is served by four hydraulic elevator systems that were installed in 2006 and are in proper working condition. Passenger elevators C and D are rated for 3,500 pounds each and travel four stops. Passenger elevator B and freight elevator E have a rated capacity of 4,500 pounds each and travel five stops. The hydraulic machines and control systems will require only routine maintenance to remain reliable beyond the planning scope of this report. The passenger elevator cars will require an upgrade within the next ten-years.

Note: The renewal needs outlined in this report were identified from the visual inspection and staff interviews. Our professional architectural and engineering inspectors thoroughly examined the accessible equipment and various building components to determine what repairs or modifications may be necessary to restore the systems and asset to an acceptable condition, or to a level defined by the Client. The estimated costs represent correction of existing deficiencies and anticipated lifecycle failures within a ten-year period. These recommendations are to bring the facility to modern standards without any anticipation of change to facility space layout or function. The total costs include variable project delivery costs as determined by the Owner. The costs developed do not represent the cost of a complete facility renovation. Soft costs not represented in this report include telecommunications, security, 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.

INSPECTION TEAM DATA

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Date of Inspection

April 15, 2016

Inspection Team Personnel

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Carl Mason, PE, BSCP, M.ASCE	Senior Project Engineer	Interior Finishes, Exterior Structure, ADA Compliance, Site, Fire/Life Safety, Health

Client Contact

NAME	POSITION
Griffin L. Avin	Director of Facilities Services, Health Sciences Campus

DEFINITIONS

The following information is a clarification of the Facility Condition Assessment report using example definitions.

Overview

Recurring and Nonrecurring Facility Renewal Costs

Facility renewal costs are divided into two main categories – recurring and nonrecurring. Recurring costs are cyclical and consist primarily of major repairs to or replacement/rebuilding of facility systems and components (e.g., roof or HVAC system replacement at or past the end of its normal useful life). The tool for projecting the recurring renewal costs is the Asset Component Inventory, which is explained in detail below. Nonrecurring costs typically consist of modifications or repairs necessary to comply with fire/life safety or accessibility code requirements or to address isolated, nonrecurring deficiencies that could negatively affect the structure of the facility or the systems and components within. For these nonrecurring costs, projects have been developed and include estimated material and labor costs.

Facility Condition Needs Index (FCNI)

The FCNI provides a lifecycle cost comparison. It is a ratio of the sum of the recurring and nonrecurring renewal costs over ten years to the current replacement value of the asset. The current replacement value is based on replacement with current construction standards for the 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.

$$FCNI = \frac{\text{Nonrecurring Projects + 10-Year Recurring Component Renewal}}{\text{Current Replacement Value}}$$

Facility Condition Index (FCI)

The FCI is a ratio of the Deferred Renewal facilities renewal costs to the current replacement value.

$$FCI = \frac{\text{Deferred Renewal}}{\text{Current Replacement Value}}$$

Material and Labor Cost Factors and Additional Markups

The project costs are adjusted from the national averages to reflect conditions in Greenville, NC using the R. S. Means City Cost Index for material and labor cost factors. The percentage adjustment of the national average is shown in the table below. Typical general contractor fees (which could include profit, overhead, bonds, and insurance) and professional fees (architect or engineer design fees and in-house design costs) are also included in the renewal costs.

GLOBAL MARKUP	%
Local Labor Index	71.3
Local Materials Index	100.7
General Contractor Markup	20.0
Professional Fees	16.0

Recurring Costs

Asset Component Inventory and Cost Projections

The Asset Component Inventory (starting on page 4.1.1) is based on industry standard lifecycle expectancies applied to an inventory of major building systems and major components within a facility. This is a list of all major systems and components within the facility. Each indicated component has the following associated information:

CATEGORY	DEFINITION
Uniformat Code	The standard Uniformat Code that applies to the component
Component Description	This line item describes the individual component
Identifier	Unique identifying information entered for a component as necessary
Quantity	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)
Complexity Adjustment	A factor utilize to adjust component replacement costs accordingly when it is anticipated that the actual cost will deviate from the average for that component
Total Cost	Unit cost multiplied by quantity, in today's dollars. Note that this is a one-time renewal/replacement cost
Install Date	Year that the component was or is estimated to have been installed. When this data is not available, it defaults to the year the asset was constructed
Life Expectancy	Average life expectancy for each individual component
Life Expectancy Adjustment	Utilized to adjust the first lifecycle of the component and to express when the next replacement should occur

The component listing forms the basis of the Recurring Component Renewal Schedule, which provides a year-by-year list of projected recurring renewal costs over the next ten years. Each individual component is assigned a replacement year based on lifecycles, and the costs for each item are in future year dollars. For items that are already past the end of their lifecycle, the replacement year is shown as Deferred Renewal.

For a longer term perspective, the Recurring Component Expenditure Projections Graph presents recurring renewal cost projections over a 50-year period (starting from the date the report is run) based on each individual item's renewal cost and life span. Some components might require renewal several times within the 50-year model, while others might not occur at all. The vertical bars on the graph represent the accumulated total costs for each individual year. The average annual cost per gross square foot ($/GSF) is shown at the bottom of the graph. In this calculation, costs are not escalated. This figure can be utilized to assess the adequacy of existing capital renewal and repair budgets.

Recurring Cost Classifications

- Deferred Renewal
  Recurring repairs, generated by the Asset Component Inventory, that are past due for completion but have not yet been accomplished as part of normal maintenance or capital repair efforts. Further deferral of such renewal could impair the proper functioning of the facility. Costs estimated for Deferred Renewal projects should include compliance with applicable codes, even if such compliance requires expenditures beyond those essential to effect the needed repairs.

- Projected Renewal
  Recurring renewal efforts, generated by the Asset Component Inventory, that will be due within the scope of the assessment. These are regular or normal facility maintenance, repair, or renovation efforts that should be planned in the near future.

Nonrecurring Costs

As previously mentioned, modifications or repairs necessary to comply with fire/life safety or accessibility code requirements and those that address isolated, nonrecurring deficiencies that could negatively affect the structure of the facility or the systems and components within are not included in the Asset Component Inventory. For each such deficiency identified during the facility inspection, a project with an estimated cost to rectify said deficiency is recommended. These projects each have a unique identifier and are categorized by system type, priority, and classification, which are defined below. The costs in these projects are also indexed to local conditions and markups applied as the situation dictates.

Project Number

Each project has a unique number consisting of three elements, the asset identification number, system code, and a sequential number assigned by the FCA software. For example, the third fire/life safety project identified for asset 0001 would have a project number of 0001FS03 (0001 for the asset number, FS for fire/life safety, and 03 being the next sequential number for a fire/life safety project).

Project Classifications

- Plant/Program Adaption
  Nonrecurring expenditures, stored in the Projects module, 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).

- Corrective Action
  Nonrecurring expenditures, stored in the Projects module, for repairs needed to correct random and unpredictable deficiencies. Such projects are not related to aligning a building with codes or standards. Deficiencies classified as Corrective Action could have an effect on building aesthetics, safety, or usability.

Priority Classes

Recurring renewal needs do not receive individual prioritization, as the entire data set of needs in this category is year-based. Each separate component has a distinct need year, rendering further prioritization unnecessary. Each nonrecurring renewal project, however, has a priority assigned to indicate the criticality of the recommended work. The prioritization utilized for this subset of the data is as follows.

- Immediate

  Projects in this category require immediate action to:

  a. correct a cited safety hazard
  b. stop accelerated deterioration
  c. and/or return a facility to normal operation

- Critical

  Projects in this category include actions that must be addressed in the short-term:

  a. repairs to prevent further deterioration

  b. improvements to facilities associated with critical accessibility needs

  c. potential safety hazards

- Noncritical

  Projects in this category include:

  a. improvements to facilities associated with noncritical accessibility needs

  b. actions to bring a facility into compliance with current building codes as grandfather clauses expire

  c. actions to improve the usability of a facility following an occupancy or use change

Category Codes

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

Refer to the Category Code Report starting on page 1.5.1.

Example: **Category Code = EL5A**	
EL	System Description
5	Component Description
A	Element Description

Priority Sequence

A Priority Sequence number is automatically assigned to each project to rank the projects in order of relative criticality and show the recommended execution order. This number is calculated based on the Priority Class and identified system of each project.

Example:

Priority Class	Category Code	Project Number	Priority Sequence
1	HV2C	0001HV04	01
1	PL1D	0001PL02	02
2	IS1E	0001IS06	03
2	EL4C	0001EL03	04

Project Subclass Type

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

Drawings/Project Locations

The drawings for this facility are marked with icons (see legend on plans) denoting the specific location(s) for each project. Within each icon are the last four characters of the respective project number (e.g., 0001IS01 is marked on the plan as IS01).

Photographs

A code shown on the Photo Log identifies the asset number, photo sequence, and a letter designation for architect (a) or engineer (e).

Example: **Photo Number: 0001006e**	
0001	Asset Number
006	Photo Sequence
e	Engineering Photo

CATEGORY CODE REPORT

ACCESSIBILITY

CODE	COMPONENT DESCRIPTION	ELEMENT DESCRIPTION	DEFINITION
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 the ADA.
AC3E	Interior Path of Travel	Restrooms/ Bathrooms	Modifications to and installation of accessible public restrooms and bathrooms. Bathrooms that 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 that are integral to efficiency suites are catalogued here.
AC4B	General	Other	All accessibility issues not catalogued elsewhere.

ELECTRICAL

CODE	COMPONENT DESCRIPTION	ELEMENT DESCRIPTION	DEFINITION
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 step-down 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.
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, duct banks, 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.

EXTERIOR STRUCTURE

CODE	COMPONENT DESCRIPTION	ELEMENT DESCRIPTION	DEFINITION
ES1A	Foundation/ Footing	Structure	Structural foundation improvements involving structural work on foundation wall/footing, piers, caissons, and piles, including crack repairs, shoring, and 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 and 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, walk pad 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 and 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 lightwells, areaways, basement access stairs, etc.
ES6C	General	Trim	Work on ornamental exterior (generally nonstructural) elements, including beltlines, quoins, porticos, soffits, cornices, moldings, trim, etc.
ES6D	General	Superstructure	Finish and structural work on nonstandard 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 freestanding boiler stacks.

FIRE/LIFE SAFETY

CODE	COMPONENT DESCRIPTION	ELEMENT DESCRIPTION	DEFINITION
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 sprinkler type automatic fire suppressions, including wet-pipe and 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.

HEALTH

CODE	COMPONENT DESCRIPTION	ELEMENT DESCRIPTION	DEFINITION
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.
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.

HVAC

CODE	COMPONENT DESCRIPTION	ELEMENT DESCRIPTION	DEFINITION
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 and 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.
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, or 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.

INTERIOR FINISHES/SYSTEMS

CODE	COMPONENT DESCRIPTION	ELEMENT DESCRIPTION	DEFINITION
IS1A	Floor	Finishes-Dry	R&R of carpet, hardwood strip flooring, concrete coating, vinyl linoleum and tile, marble, terrazzo, rubber flooring, and 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 and 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 lightwells, etc.

PLUMBING

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 and sanitary sewer systems, including combined systems.
PL4D	Infrastructure	Stormwater Collection	Stormwater collection systems and 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.

SITE

CODE	COMPONENT DESCRIPTION	ELEMENT DESCRIPTION	DEFINITION
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.

SECURITY SYSTEMS

CODE	COMPONENT DESCRIPTION	ELEMENT DESCRIPTION	DEFINITION
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.
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.

VERTICAL TRANSPORTATION

CODE	Component Description	Element Description	DEFINITION
VT1A	Machine Room	General	Machine, worm gear, thrust bearing, brake, motors, sheaves, generator, controller, selector, governor, pump(s), valves, oil, access, lighting, ventilation, and 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, and ventilation.
VT3A	Hoistway	General	Enclosure, fascia, interlock, doors, hangers, closers, sheaves, rails, hoistway switches, ropes, traveling cables, selector tape, weights, and compensation.
VT4A	Hall Fixtures	General	Operating panel, position indicator, hall buttons, lobby panel, hall lanterns, fire fighter service, audible signals, and card/key access.
VT5A	Pit	General	Buffer(s), guards, sheaves, hydro packing, floor, lighting, and safety controls.
VT6A	Operating Conditions	General	Door open time, door close time, door thrust, acceleration, deceleration, leveling, dwell time, speed, OFR time, and nudging.
VT7A	General	Other	General information/projects relating to vertical transportation system components.

FACILITY CONDITION ASSESSMENT

SECTION 2

COST SUMMARIES AND TOTALS

RENEWAL COSTS MATRIX

All dollars shown as Present Value

CATEGORY	NON-RECURRING PROJECT NEEDS			RECURRING COMPONENT REPLACEMENT NEEDS											
	Immediate	Critical	Non-Critical	Deferred Renewal	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	TOTAL
ACCESSIBILITY	0	77,227	0	0	0	0	0	0	0	0	0	0	0	0	$77,227
EXTERIOR	0	0	5,930,909	0	0	0	0	0	0	0	0	0	157,491	0	$6,088,399
INTERIOR	0	0	0	0	0	0	1,711,495	0	892,165	32,623	0	0	0	0	$2,636,283
PLUMBING	0	0	0	0	2,154	0	0	0	0	21,499	0	1,455	0	0	$25,108
HVAC	0	0	0	0	0	0	0	0	0	151,525	0	0	0	0	$151,525
FIRE/LIFE SAFETY	0	0	23,483	0	0	0	0	0	0	33,484	0	0	1,018,268	0	$1,075,235
ELECTRICAL	0	0	0	0	0	0	109,919	0	0	31,657	168,126	0	0	0	$309,702
SITE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0
VERT. TRANS.	0	0	0	0	0	0	141,360	0	0	0	0	0	0	0	$141,360
HEALTH/EQUIP.	0	0	0	0	0	0	0	0	0	0	0	0	8,585	0	$8,585
SUBTOTAL	$0	$77,227	$5,954,392	$0	$2,154	$0	$1,962,775	$0	$892,165	$270,788	$168,126	$1,455	$1,184,343	$0	$10,513,424
TOTAL NON-RECURRING PROJECT NEEDS			$6,031,619	TOTAL RECURRING COMPONENT REPLACEMENT NEEDS										$4,481,806	

CURRENT REPLACEMENT VALUE	$95,636,000
FACILITY CONDITION NEEDS INDEX	0.11
FACILITY CONDITION INDEX	0.00

GSF	TOTAL 10-YEAR FACILITY RENEWAL NEEDS	10-YEAR NEEDS/SF
303,406	$10,513,424	$34.65

RENEWAL COSTS BY SYSTEM

All costs shown as Present Value

CATEGORY	NON-RECURRING ASSESSMENT RECOMENDATON	RECURRING COMPONENT REPLACEMENT COSTS	TOTAL 10-YEAR FACILITY RENEWAL COSTS
ACCESSIBILITY	$77,227	$0	$77,227
EXTERIOR	$5,930,909	$157,491	$6,088,399
INTERIOR	$0	$2,636,283	$2,636,283
PLUMBING	$0	$25,108	$25,108
HVAC	$0	$151,525	$151,525
FIRE/LIFE SAFETY	$23,483	$1,051,752	$1,075,235
ELECTRICAL	$0	$309,702	$309,702
SITE	$0	$0	$0
VERT. TRANS	$0	$141,360	$141,360
HEALTH	$0	$8,585	$8,585
TOTALS	**$6,031,619**	**$4,481,806**	**$10,513,424**

FACILITIES RENEWAL PLAN

NON-RECURRING PROJECT COST

All costs shown as Present Value

PROJECT NUMBER	PROJECT TITLE	UNI-FORMAT	PRIORITY CLASS	PROJECT CLASSIFICATION	PROJECT COST
AHSBAC01	TIERED CLASSROOM ACCESSIBILITY UPGRADES	C1010	2	Plant Adaption	77,227
AHSBFS01	INSTALL FM-200 OR INERGEN SYSTEM IN DATA CENTER		3	Plant Adaption	23,483
AHSBES01	EXTERIOR MASONRY AND CONCRETE VENEER RENEWAL	B2010	3	Corrective Action	5,918,937
AHSBES02	REFLASH AND RESEAL SKYLIGHTS	B2010	3	Corrective Action	11,971
				TOTAL	**$6,031,619**

FACILITIES RENEWAL PLAN

RECURRING COMPONENT REPLACEMENT COSTS

All costs shown as Present Value

ASSET CODE COMP CODE		COMPONENT	IDENTIFIER	UNI-FORMAT	REPLACEMENT YEAR	REPLACEMENT COST
AHSB	WH22	WATER HEATER - RESIDENTIAL, ELECTRIC (15-25 GAL)	TAN-001	D2020	2016	1,077
AHSB	WH22	WATER HEATER - RESIDENTIAL, ELECTRIC (15-25 GAL)	TAN-002	D2020	2016	1,077
AHSB	IF01	FLOORING - CARPET, TILE OR ROLL, STANDARD	OFC, HALL, CONF RM, CLASSRMS	C3020	2018	1,711,495
AHSB	VT04	ELEVATOR CAB RENOVATION - PASSENGER	ELEVATOR B	D1010	2018	47,120
AHSB	VT04	ELEVATOR CAB RENOVATION - PASSENGER	ELEVATOR C	D1010	2018	47,120
AHSB	VT04	ELEVATOR CAB RENOVATION - PASSENGER	ELEVATOR D	D1010	2018	47,120
AHSB	VF01	VARIABLE FREQUENCY DRIVE (<=5 HP)	RAF-1C	D5010	2018	1,239
AHSB	VF01	VARIABLE FREQUENCY DRIVE (<=5 HP)	RAF-1E	D5010	2018	1,859
AHSB	VF01	VARIABLE FREQUENCY DRIVE (<=5 HP)	ERU1-2	D5010	2018	3,099
AHSB	VF01	VARIABLE FREQUENCY DRIVE (<=5 HP)	ERU1-3	D5010	2018	3,099
AHSB	VF01	VARIABLE FREQUENCY DRIVE (<=5 HP)	ERU2-2	D5010	2018	3,099
AHSB	VF01	VARIABLE FREQUENCY DRIVE (<=5 HP)	ERU2-3	D5010	2018	3,099
AHSB	VF01	VARIABLE FREQUENCY DRIVE (<=5 HP)	ERU3-2	D5010	2018	3,099
AHSB	VF01	VARIABLE FREQUENCY DRIVE (<=5 HP)	ERU3-3	D5010	2018	3,099
AHSB	VF01	VARIABLE FREQUENCY DRIVE (<=5 HP)	ERU4-2	D5010	2018	3,099
AHSB	VF01	VARIABLE FREQUENCY DRIVE (<=5 HP)	ERU4-3	D5010	2018	3,099
AHSB	VF01	VARIABLE FREQUENCY DRIVE (<=5 HP)	RAF-3E	D5010	2018	3,099
AHSB	VF01	VARIABLE FREQUENCY DRIVE (<=5 HP)	RAF-4E	D5010	2018	3,099
AHSB	VF02	VARIABLE FREQUENCY DRIVE (5-7.5 HP)	RAF-3AB	D5010	2018	2,810
AHSB	VF02	VARIABLE FREQUENCY DRIVE (5-7.5 HP)	RAF-1AB	D5010	2018	2,810
AHSB	VF02	VARIABLE FREQUENCY DRIVE (5-7.5 HP)	RAF-2CD	D5010	2018	2,810
AHSB	VF02	VARIABLE FREQUENCY DRIVE (5-7.5 HP)	RAF-4CD	D5010	2018	2,810
AHSB	VF02	VARIABLE FREQUENCY DRIVE (5-7.5 HP)	RAF-3C	D5010	2018	2,810
AHSB	VF02	VARIABLE FREQUENCY DRIVE (5-7.5 HP)	RAF-1D1	D5010	2018	2,810
AHSB	VF02	VARIABLE FREQUENCY DRIVE (5-7.5 HP)	RAF-4D2	D5010	2018	2,810
AHSB	VF02	VARIABLE FREQUENCY DRIVE (5-7.5 HP)	RAF-3D	D5010	2018	2,810

FACILITIES RENEWAL PLAN

RECURRING COMPONENT REPLACEMENT COSTS

All costs shown as Present Value

ASSET CODE COMP CODE		COMPONENT	IDENTIFIER	UNI-FORMAT	REPLACEMENT YEAR	REPLACEMENT COST
AHSB	VF02	VARIABLE FREQUENCY DRIVE (5-7.5 HP)	RAF-2D2	D5010	2018	2,810
AHSB	VF02	VARIABLE FREQUENCY DRIVE (5-7.5 HP)	RAF-1DE	D5010	2018	2,810
AHSB	VF02	VARIABLE FREQUENCY DRIVE (5-7.5 HP)	EF-1	D5010	2018	4,496
AHSB	VF02	VARIABLE FREQUENCY DRIVE (5-7.5 HP)	RAF-2E	D5010	2018	4,496
AHSB	VF03	VARIABLE FREQUENCY DRIVE (7.5-10 HP)	RAF-4B	D5010	2018	3,749
AHSB	VF03	VARIABLE FREQUENCY DRIVE (7.5-10 HP)	RAF-2B	D5010	2018	4,687
AHSB	VF04	VARIABLE FREQUENCY DRIVE (10-15 HP)	SAF-1E	D5010	2018	5,425
AHSB	VF05	VARIABLE FREQUENCY DRIVE (15-20 HP)	EF-2	D5010	2018	4,977
AHSB	VF05	VARIABLE FREQUENCY DRIVE (15-20 HP)	HWP-1	D5010	2018	6,636
AHSB	VF05	VARIABLE FREQUENCY DRIVE (15-20 HP)	HWP-2	D5010	2018	6,636
AHSB	VF05	VARIABLE FREQUENCY DRIVE (15-20 HP)	SAF-4E	D5010	2018	6,636
AHSB	IW01	WALL FINISH - PAINT, STANDARD	THROUGHOUT	C3010	2020	892,165
AHSB	IF15	FLOORING - FLUID APPLIED, PAINT OR CLEAR SEAL	CONCRETE SLABS	C3020	2021	32,623
AHSB	BF01	BACKFLOW PREVENTER (<=1 INCH)	BFP-003	D2020	2021	928
AHSB	BF01	BACKFLOW PREVENTER (<=1 INCH)	BFP-005	D2020	2021	928
AHSB	BF02	BACKFLOW PREVENTER (1-2 INCHES)	BFP-006	D2020	2021	2,069
AHSB	BF02	BACKFLOW PREVENTER (1-2 INCHES)	BFP-004	D2020	2021	2,069
AHSB	BF04	BACKFLOW PREVENTER (3-4 INCHES)	BFP-001	D2020	2021	7,752
AHSB	BF04	BACKFLOW PREVENTER (3-4 INCHES)	BFP-002	D2020	2021	7,752
AHSB	AH41	COMPUTER ROOM AC UNIT - CHILLED WATER (10 -20 TON)	AC2	D3050	2021	37,881
AHSB	AH41	COMPUTER ROOM AC UNIT - CHILLED WATER (10 -20 TON)	AC3	D3050	2021	37,881
AHSB	AH41	COMPUTER ROOM AC UNIT - CHILLED WATER (10 -20 TON)	AC1	D3050	2021	37,881
AHSB	AH41	COMPUTER ROOM AC UNIT - CHILLED WATER (10 -20 TON)	AC4	D3050	2021	37,881
AHSB	FA01	FIRE ALARM PANEL, DIALER, BATTERY, & CHARGER	1514	D4030	2021	33,484
AHSB	LE03	LIGHTING - EXTERIOR, RECESSED (INC, CFL, LED)	CFL	D5020	2021	3,942
AHSB	LE07	LIGHTING - EXTERIOR, WALL FLOOD (SV, MH, ID, LED)	HID	D5020	2021	14,865

FACILITIES RENEWAL PLAN

RECURRING COMPONENT REPLACEMENT COSTS

All costs shown as Present Value

ASSET CODE COMP CODE		COMPONENT	IDENTIFIER	UNI-FORMAT	REPLACEMENT YEAR	REPLACEMENT COST
AHSB	LE08	LIGHTING - EXTERIOR, WALL LANTERN or FLOOD (INC, CFL, LED)	CFL	D5020	2021	12,851
AHSB	VF06	VARIABLE FREQUENCY DRIVE (20-25 HP)	SAF-1C	D5010	2022	6,277
AHSB	VF06	VARIABLE FREQUENCY DRIVE (20-25 HP)	SAF-4CD	D5010	2022	6,277
AHSB	VF06	VARIABLE FREQUENCY DRIVE (20-25 HP)	SAF-1D1	D5010	2022	6,277
AHSB	VF06	VARIABLE FREQUENCY DRIVE (20-25 HP)	SAF-4D2	D5010	2022	6,277
AHSB	VF06	VARIABLE FREQUENCY DRIVE (20-25 HP)	SAF-3C	D5010	2022	6,277
AHSB	VF06	VARIABLE FREQUENCY DRIVE (20-25 HP)	SAF-2D2	D5010	2022	6,277
AHSB	VF06	VARIABLE FREQUENCY DRIVE (20-25 HP)	SAF-1DE	D5010	2022	6,277
AHSB	VF06	VARIABLE FREQUENCY DRIVE (20-25 HP)	SAF-3E	D5010	2022	7,846
AHSB	VF07	VARIABLE FREQUENCY DRIVE (25-30 HP)	SAF-3AB	D5010	2022	7,548
AHSB	VF07	VARIABLE FREQUENCY DRIVE (25-30 HP)	SAF-4B	D5010	2022	7,548
AHSB	VF07	VARIABLE FREQUENCY DRIVE (25-30 HP)	CHWP-1	D5010	2022	9,057
AHSB	VF07	VARIABLE FREQUENCY DRIVE (25-30 HP)	SAF-2CD	D5010	2022	9,057
AHSB	VF07	VARIABLE FREQUENCY DRIVE (25-30 HP)	CHWP-2	D5010	2022	9,057
AHSB	VF07	VARIABLE FREQUENCY DRIVE (25-30 HP)	SAF-3D	D5010	2022	9,057
AHSB	VF07	VARIABLE FREQUENCY DRIVE (25-30 HP)	ERU1-1	D5010	2022	9,057
AHSB	VF07	VARIABLE FREQUENCY DRIVE (25-30 HP)	ERU2-1	D5010	2022	9,057
AHSB	VF07	VARIABLE FREQUENCY DRIVE (25-30 HP)	ERU3-1	D5010	2022	9,057
AHSB	VF07	VARIABLE FREQUENCY DRIVE (25-30 HP)	ERU4-1	D5010	2022	9,057
AHSB	VF07	VARIABLE FREQUENCY DRIVE (25-30 HP)	SAF-2E	D5010	2022	9,057
AHSB	VF08	VARIABLE FREQUENCY DRIVE (30-40 HP)	SAF-2B	D5010	2022	10,268
AHSB	VF09	VARIABLE FREQUENCY DRIVE (40-50 HP)	SAF-1AB	D5010	2022	9,463
AHSB	WH24	WATER HEATER - RESIDENTIAL, ELECTRIC (46-100 GAL)	WH-1	D2020	2023	1,455
AHSB	RR03	ROOF - 1-PLY, ADHERED (EPDM, PIB, CSPE, PVC)	FLAT	B3010	2024	157,491
AHSB	FA02	FIRE ALARM SYSTEM - DEVICES	ALL	D4030	2024	1,018,268
AHSB	CR02	REFRIGERATION SYSTEM - WALK-IN, 2 EVAP FANS, 6700 BTUH, CONDENSER	ROOM 3425B	E1020	2024	8,585

FACILITIES RENEWAL PLAN

RECURRING COMPONENT REPLACEMENT COSTS

All costs shown as Present Value

ASSET CODE COMP CODE	COMPONENT	IDENTIFIER	UNI-FORMAT	REPLACEMENT YEAR	REPLACEMENT COST
				TOTAL	**$4,481,806**

PROJECT LIST BY CLASSIFICATION

All costs shown as Present Value

CORRECTIVE ACTION				
PRI SEQ	PROJECT NUMBER	PROJECT TITLE	PRI CLS	TOTAL COST
3	AHSBES01	EXTERIOR MASONRY AND CONCRETE VENEER RENEWAL	3	5,918,937
4	AHSBES02	REFLASH AND RESEAL SKYLIGHTS	3	11,971
		TOTAL FOR CORRECTIVE ACTION		**5,930,909**

PLANT ADAPTION				
PRI SEQ	PROJECT NUMBER	PROJECT TITLE	PRI CLS	TOTAL COST
1	AHSBAC01	TIERED CLASSROOM ACCESSIBILITY UPGRADES	2	77,227
2	AHSBFS01	INSTALL FM-200 OR INERGEN SYSTEM IN DATA CENTER	3	23,483
		TOTAL FOR PLANT ADAPTION		**100,710**
		GRAND TOTAL:		**6,031,619**

PROJECT LIST BY CATEGORY CODE

All costs shown as Present Value

PRI SEQ	PROJECT NUMBER	PRI CLS	PROJECT CLASSIFICATION	PROJECT TITLE	TOTAL COST
1	AHSBAC01	2	Plant Adaption	TIERED CLASSROOM ACCESSIBILITY UPGRADES	77,227
				TOTAL FOR ACCESSIBILITY	**77,227**
3	AHSBES01	3	Corrective Action	EXTERIOR MASONRY AND CONCRETE VENEER RENEWAL	5,918,937
4	AHSBES02	3	Corrective Action	REFLASH AND RESEAL SKYLIGHTS	11,971
				TOTAL FOR EXTERIOR	**5,930,909**
2	AHSBFS01	3	Plant Adaption	INSTALL FM-200 OR INERGEN SYSTEM IN DATA CENTER	23,483
				TOTAL FOR FIRE/LIFE SAFETY	**23,483**
				GRAND TOTAL:	**6,031,619**

FACILITY CONDITION ASSESSMENT

SECTION 3

NONRECURRING PROJECT DETAILS

All costs shown as Present Value

TIERED CLASSROOM ACCESSIBILITY UPGRADES

Project Number:	AHSBAC01	**Category Code:** AC3B	
Priority Sequence:	1		
Priority Class:	Critical	**System:**	ACCESSIBILITY
Project Class:	Plant Adaption	**Component:**	INTERIOR PATH OF TRAVEL
Date Basis:	4/20/2016	**Element:**	STAIRS AND RAILINGS

Code Application:		Subclass/Savings:	Project Location:
ADAAG	505	Not Applicable	Room Only: Floor(s) 1

Description

Present legislation pertaining to handicapped access within buildings requires that goods and services offered be generally accessible to all persons. Even though wheelchair access has been provided at the front of the six terraced classrooms on the first floor, the existing stepped aisles along the outer walls do not have the wall rail required for stepped egresses. It is recommended that wall-mounted compliant railings be installed along the side aisles to improve the access to these classrooms.

All costs shown as Present Value

Project Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Wall-mounted handrail system, painted (15 feet minimum)	LF	650	$56.65	$36,823	$39.70	$25,805	$62,628
Base Material/Labor Costs				**$36,823**		**$25,805**	
Indexed Material/Labor Costs				**$37,080**		**$18,399**	**$55,479**
General Contractor Mark Up at 20.0%							**$11,096**
Original Construction Cost							**$66,575**
Date of Original Estimate: 4/20/2016						**Inflation**	**$0**
Current Year Construction Cost							**$66,575**
Professional Fees at 16.0%							**$10,652**
TOTAL PROJECT COST							**$77,227**

All costs shown as Present Value

INSTALL FM-200 OR INERGEN SYSTEM IN DATA CENTER

Project Number:	AHSBFS01	**Category Code:** FS3D	
Priority Sequence:	2		
Priority Class:	Non-Critical	**System:**	FIRE/LIFE SAFETY
Project Class:	Plant Adaption	**Component:**	SUPPRESSION
Date Basis:	7/26/2016	**Element:**	OTHER

Code Application:		Subclass/Savings:	Project Location:
NFPA	2001	Not Applicable	Room Only: Floor(s) 1
IBC	904		

Description

Room 1512 is the main data center for this facility and is currently protected by the wet-pipe fire suppression system. It is recommended that this area be equipped with a an FM-200 or Inergen based fire suppression system that would protect the data center equipment in the event of a fire.

All costs shown as Present Value

Project Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Install FM200 or Inergen fire suppression system	CF	6,000	$1.90	$11,400	$1.26	$7,560	$18,960
			Base Material/Labor Costs	**$11,400**		**$7,560**	
			Indexed Material/Labor Costs	**$11,480**		**$5,390**	**$16,870**
						General Contractor Mark Up at 20.0%	**$3,374**
						Original Construction Cost	**$20,244**
Date of Original Estimate: 7/26/2016						**Inflation**	**$0**
						Current Year Construction Cost	**$20,244**
						Professional Fees at 16.0%	**$3,239**
						TOTAL PROJECT COST	**$23,483**

All costs shown as Present Value

EXTERIOR MASONRY AND CONCRETE VENEER RENEWAL

Project Number:	AHSBES01
Priority Sequence:	3
Priority Class:	Non-Critical
Project Class:	Corrective Action
Date Basis:	4/20/2016

Category Code: ES2B

System:	EXTERIOR
Component:	COLUMNS/BEAMS/WALLS
Element:	FINISH

Code Application:	Subclass/Savings:	Project Location:
Not Applicable	Not Applicable	Building-wide: Floor(s) 1

Description

The existing brick masonry exterior envelope has water infiltration throughout the structure. Numerous areas of the exterior were uncovered and found to have systematic deficiencies throughout. This appears to be a result of improper flashing installation and/or faulty design and construction of the internal wall drainage cavity. Remove and replace the existing deficient flashing at the existing openings, and create an improved end-damn condition.

All costs shown as Present Value

Project Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Repair brick exterior wall, average bond	SF	91,000	$11.00	$1,001,000	$40.00	$3,640,000	$4,641,000
General exterior wall surface clean and pressure wash with light chemical	SF	20,000	$0.23	$4,600	$1.60	$32,000	$36,600
Window flashing replacement	LF	7,900	$25.00	$197,500	$75.00	$592,500	$790,000
			Base Material/Labor Costs	**$1,203,100**		**$4,264,500**	
			Indexed Material/Labor Costs	**$1,211,522**		**$3,040,589**	**$4,252,110**
					General Contractor Mark Up at 20.0%		**$850,422**
					Original Construction Cost		**$5,102,532**
Date of Original Estimate:	4/20/2016				**Inflation**		**$0**
					Current Year Construction Cost		**$5,102,532**
					Professional Fees at 16.0%		**$816,405**
					TOTAL PROJECT COST		**$5,918,937**

All costs shown as Present Value

REFLASH AND RESEAL SKYLIGHTS

Project Number:	AHSBES02	**Category Code:** ES4A	
Priority Sequence:	4		
Priority Class:	Non-Critical	**System:**	EXTERIOR
Project Class:	Corrective Action	**Component:**	ROOF
Date Basis:	4/20/2016	**Element:**	REPAIR

Code Application:	Subclass/Savings:	Project Location:
Not Applicable	Not Applicable	Area Wide: Floor(s) 2

Description

The existing skylights need the flashing reworked. Leaks were apparent at numerous locations. Reflash and recaulk/reseal skylights as required, and water-test prior to completion.

All costs shown as Present Value

Project Cost Estimate

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Reflash and recaulk/reseal the existing skylights	LOT	1	$5,000	$5,000	$5,000	$5,000	$10,000
			Base Material/Labor Costs	**$5,000**		**$5,000**	
			Indexed Material/Labor Costs	**$5,035**		**$3,565**	**$8,600**
					General Contractor Mark Up at 20.0%		**$1,720**
					Original Construction Cost		**$10,320**
Date of Original Estimate: 4/20/2016					**Inflation**		**$0**
					Current Year Construction Cost		**$10,320**
					Professional Fees at 16.0%		**$1,651**
					TOTAL PROJECT COST		**$11,971**

FACILITY CONDITION ASSESSMENT

SECTION 4

LIFECYCLE COMPONENT SUMMARY

ASSET COMPONENT SUMMARY

UNI-FORMAT	COMPONENT DESCRIPTION	IDENTIFIER	QTY	UNITS	UNIT COST	CMPLX ADJ	TOTAL COST	INSTALL DATE	USEFUL LIFE	USEFUL LIFE ADJ
B2010	WALL, EXTERIOR, STUCCO OR CONCRETE RESTORE	CONCRETE VENEER	7,500	SF	$8.54	1.27	$81,341	2006	30	
B2010	GLASS, WINDOW, ALUMINUM OR WOOD, STANDARD	DUAL PANE	20,000	SF	$135.41	1.27	$3,439,438	2006	40	
B2010	GLASS, WINDOW, ALUMINUM OR WOOD, CUSTOM	ATRIUMS	2,690	SF	$186.22	1.27	$636,173	2006	40	
B2030	DOOR AND FRAME, EXTERIOR, SWINGING, ALUMINUM AND GLASS	ENTRY	35	LEAF	$2,552.34		$89,332	2006	25	
B2030	DOOR AND FRAME, EXTERIOR, SWINGING, HOLLOW METAL	EMERG. EXIT/SERVICE	20	LEAF	$1,796.58		$35,932	2006	40	
B2030	DOOR, EXTERIOR, OVERHEAD ROLLING METAL, LOCK	SO. LOADING DOCK	160	SF	$86.82		$13,891	2006	30	
B2030	DOOR OPERATOR, OVERHEAD DOOR, COMMERCIAL, PADS	SO. LOADING DOCK	1	EA	$1,879.84		$1,880	2006	15	6
B3010	ROOF - 1-PLY, ADHERED (EPDM, PIB, CSPE, PVC)	FLAT	26,400	SF	$5.97		$157,491	2006	20	-2
B3010	ROOF - PANEL, ALUMINUM OR GALVANIZED, STANDING SEAM	PITCHED	72,000	SF	$17.47		$1,258,056	2006	40	
B3020	ROOF SKYLIGHT - GLASS WITH ALUMINUM FRAME	FLAT	600	SF	$240.50		$144,297	2006	35	
C1020	DOOR AND FRAME, INTERIOR, NON-RATED	NON RATED	250	LEAF	$1,914.90		$478,726	2006	40	
C1020	DOOR AND FRAME, INTERIOR, FIRE-RATED	RATED	500	LEAF	$3,307.34		$1,653,671	2006	40	
C1020	DOOR LOCK, COMMERCIAL-GRADE	NOT RATED DOORS	250	EA	$658.73		$164,683	2006	20	
C1020	DOOR LOCK, COMMERCIAL-GRADE	FIRE RATED DOORS	500	EA	$658.73		$329,366	2006	20	
C1020	DOOR PANIC HARDWARE	ENTRY	35	EA	$1,077.73		$37,721	2006	20	
C1020	DOOR PANIC HARDWARE	EMERG. EXIT/SERVICE	20	EA	$1,077.73		$21,555	2006	20	

ASSET COMPONENT SUMMARY

UNI-FORMAT	COMPONENT DESCRIPTION	IDENTIFIER	QTY	UNITS	UNIT COST	CMPLX ADJ	TOTAL COST	INSTALL DATE	USEFUL LIFE	USEFUL LIFE ADJ
C1030	CASEWORK - WOOD BASE AND WALL, TOP, STANDARD	NON-LAB	150	LF	$477.05		$71,557	2006	20	5
C1030	KITCHENETTE UNIT WITH CABINETRY AND AMENITIES	3RD FLR- SM. APT-KITCHEN	1	EA	$10,992.79		$10,993	2006	20	2
C1030	CASEWORK - LABORATORY, INCLUDES REAGENT SHELF AND TOP	TEACHING LAB	20,330	SF	$132.73		$2,698,317	2006	40	
C1030	CASEWORK - LABORATORY, INCLUDES REAGENT SHELF AND TOP	WET LAB	10,010	SF	$132.73		$1,328,586	2006	40	
C3010	WALL FINISH - PAINT, STANDARD	THROUGHOUT	450,640	SF	$1.98		$892,165	2006	12	2
C3010	WALL FINISH - TILE, CERAMIC / STONE, STANDARD	CERAMIC RR	8,540	SF	$33.95		$289,916	2006	30	
C3010	WALL FINISH - TILE, CERAMIC / STONE, PREMIUM	SLATE	950	SF	$88.10		$83,694	2006	40	
C3010	WALL FINISH - WALL COVERING, ROLL	WALLPAPER	23,720	SF	$4.61		$109,316	2006	20	
C3020	FLOORING - CARPET, TILE OR ROLL, STANDARD	OFC, HALL, CONF RM, CLASSRMS	158,000	SF	$10.83		$1,711,495	2006	12	
C3020	FLOORING - VINYL COMPOSITION TILE, STANDARD	LABS	61,000	SF	$5.67		$345,826	2006	20	3
C3020	FLOORING - VINYL SHEET, STANDARD	TEACHING LABS	24,270	SF	$9.45		$229,290	2006	15	6
C3020	FLOORING - TILE, CERAMIC / STONE / QUARRY STANDARD	CERAMIC RR	8,500	SF	$28.13		$239,113	2006	30	
C3020	FLOORING - HARDWOOD STRIP, PREMIUM	HISTORIC COLLECTIONS RM	1,200	SF	$31.46		$37,750	2006	50	
C3020	FLOORING - FLUID APPLIED, PAINT OR CLEAR SEAL	CONCRETE SLABS	12,000	SF	$2.72		$32,623	2006	10	5
C3020	FLOORING - SLATE	LOBBIES/1ST FLR CORRIDORS	6,000	SF	$58.65		$351,920	2006	50	

ASSET COMPONENT SUMMARY

UNI-FORMAT	COMPONENT DESCRIPTION	IDENTIFIER	QTY	UNITS	UNIT COST	CMPLX ADJ	TOTAL COST	INSTALL DATE	USEFUL LIFE	USEFUL LIFE ADJ
C3030	CEILING FINISH - SUSPENDED ACOUSTICAL TILE, STANDARD	THROUGHOUT	196,610	SF	$8.93		$1,755,209	2006	30	
C3030	CEILING FINISH - SUSPENDED ACOUSTICAL TILE, PREMIUM	HISTORICAL COLLECTIONS RM	21,850	SF	$11.07		$241,851	2006	30	
C3030	CEILING FINISH - PAINTED OR STAINED, STANDARD	THROUGHOUT	24,270	SF	$1.98		$48,049	2006	24	
D1010	ELEVATOR MODERNIZATION - HYDRAULIC	ELEVATOR D	1	EA	$267,217.03		$267,217	2006	25	
D1010	ELEVATOR MODERNIZATION - HYDRAULIC	ELEVATOR C	1	EA	$267,217.03		$267,217	2006	25	
D1010	ELEVATOR MODERNIZATION - HYDRAULIC	ELEVATOR B	1	EA	$267,217.03		$267,217	2006	25	
D1010	ELEVATOR MODERNIZATION - HYDRAULIC	ELEVATOR E	1	EA	$267,217.03		$267,217	2006	25	
D1010	ELEVATOR CAB RENOVATION - PASSENGER	ELEVATOR B	1	EA	$47,120.09		$47,120	2006	12	
D1010	ELEVATOR CAB RENOVATION - PASSENGER	ELEVATOR C	1	EA	$47,120.09		$47,120	2006	12	
D1010	ELEVATOR CAB RENOVATION - PASSENGER	ELEVATOR D	1	EA	$47,120.09		$47,120	2006	12	
D2010	PLUMBING FIXTURE - LAVATORY, COUNTER	ALL	94	EA	$1,165.93		$109,597	2006	35	
D2010	PLUMBING FIXTURE - SINK, KITCHEN	STAFF APARTMENT	1	EA	$1,910.44		$1,910	2006	35	
D2010	PLUMBING FIXTURE - SINK, SERVICE/LAUNDRY/UTILITY	ALL	16	EA	$1,585.76		$25,372	2006	35	
D2010	PLUMBING FIXTURE - BATHTUB WITH FIXTURES	STAFF APARTMENT	1	EA	$5,923.65		$5,924	2006	35	
D2010	PLUMBING FIXTURE - URINAL	ALL	30	EA	$1,873.57		$56,207	2006	35	
D2010	PLUMBING FIXTURE - WATER CLOSET, TANKLESS	ALL	137	EA	$1,723.71		$236,148	2006	35	

ASSET COMPONENT SUMMARY

UNI-FORMAT	COMPONENT DESCRIPTION	IDENTIFIER	QTY	UNITS	UNIT COST	CMPLX ADJ	TOTAL COST	INSTALL DATE	USEFUL LIFE	USEFUL LIFE ADJ
D2010	PLUMBING FIXTURE - EMERGENCY SHOWER	SHOWERS	4	EA	$1,334.81		$5,339	2006	35	
D2010	PLUMBING FIXTURE - EMERGENCY EYEWASH	EYEWASH	11	EA	$4,144.90		$45,594	2006	35	
D2010	PLUMBING FIXTURE - EMERGENCY EYEWASH	DRENCH HOSE	6	EA	$4,144.90		$24,869	2006	35	
D2010	PLUMBING FIXTURE - EMERGENCY COMBINATION SHOWER/EYEWASH	COMBINATION	5	EA	$7,125.26		$35,626	2006	35	
D2020	BACKFLOW PREVENTER (<=1 INCH)	BFP-003	1	EA	$928.01		$928	2006	10	5
D2020	BACKFLOW PREVENTER (<=1 INCH)	BFP-005	1	EA	$928.01		$928	2006	10	5
D2020	BACKFLOW PREVENTER (1-2 INCHES)	BFP-006	1	EA	$2,069.32		$2,069	2006	10	5
D2020	BACKFLOW PREVENTER (1-2 INCHES)	BFP-004	1	EA	$2,069.32		$2,069	2006	10	5
D2020	BACKFLOW PREVENTER (3-4 INCHES)	BFP-001	1	EA	$7,752.34		$7,752	2006	10	5
D2020	BACKFLOW PREVENTER (3-4 INCHES)	BFP-002	1	EA	$7,752.34		$7,752	2006	10	5
D2020	SUPPLY PIPING SYSTEM - CLASSROOM	COOPER	303,406	SF	$8.60	0.93	$2,426,889	2006	35	
D2020	WATER HEATER - RESIDENTIAL, ELECTRIC (15-25 GAL)	TAN-001	20	GAL	$53.84		$1,077	2006	10	
D2020	WATER HEATER - RESIDENTIAL, ELECTRIC (15-25 GAL)	TAN-002	20	GAL	$53.84		$1,077	2006	10	
D2020	WATER HEATER - RESIDENTIAL, ELECTRIC (46-100 GAL)	WH-1	50	GAL	$29.10		$1,455	2013	10	
D2020	WATER HEATER - SHELL & TUBE (45-93 GPM)	DWH-1	48	GPM	$1,043.01		$50,065	2006	30	
D2030	DRAIN PIPING SYSTEM - CLASSROOM	CAST IRON OR BLACK STEEL	303,406	SF	$12.99	0.93	$3,665,435	2006	40	

ASSET COMPONENT SUMMARY

UNI-FORMAT	COMPONENT DESCRIPTION	IDENTIFIER	QTY	UNITS	UNIT COST	CMPLX ADJ	TOTAL COST	INSTALL DATE	USEFUL LIFE	USEFUL LIFE ADJ
D2090	VACUUM PUMP - OIL RING SEAL (5-10 HP), WITH TRAP	LAB	6	HP	$6,438.72		$38,632	2006	20	5
D2090	AIR COMPRESSOR - UTILITY (< =5 HP)	FLOOR E PREACTION	1	HP	$2,055.54		$2,056	2006	25	
D2090	COMPRESSED AIR STORAGE TANK	TAN-008	1	EA	$8,292.83	0.70	$5,805	2006	20	10
D3020	EXPANSION TANK (41-60 GAL)	TAN-003	50	GAL	$161.73		$8,087	2006	25	
D3020	EXPANSION TANK (41-60 GAL)	TAN-004	50	GAL	$161.73		$8,087	2006	25	
D3020	EXPANSION TANK (41-60 GAL)	TAN-005	50	GAL	$161.73		$8,087	2006	25	
D3020	EXPANSION TANK (41-60 GAL)	TAN-007	50	GAL	$161.73		$8,087	2006	25	
D3020	CONDENSATE STORAGE TANK	FLASH TANK	1	EA	$14,396.06	0.45	$6,478	2006	20	10
D3040	AIR HANDLING UNIT - INDOOR (12-17 HP)	AHU-1E	15	HP	$6,099.73		$91,496	2006	25	5
D3040	AIR HANDLING UNIT - INDOOR (17-23 HP)	AHU-1C	20	HP	$5,761.76		$115,235	2006	25	5
D3040	AIR HANDLING UNIT - INDOOR (17-23 HP)	AHU-1D1	20	HP	$5,761.76		$115,235	2006	25	
D3040	AIR HANDLING UNIT - INDOOR (17-23 HP)	AHU-1DE	20	HP	$5,761.76		$115,235	2006	25	
D3040	AIR HANDLING UNIT - INDOOR (17-23 HP)	AHU-4E	20	HP	$5,761.76		$115,235	2006	25	5
D3040	AIR HANDLING UNIT - INDOOR (17-23 HP)	AHU-4CD	20	HP	$5,761.76		$115,235	2006	25	
D3040	AIR HANDLING UNIT - INDOOR (17-23 HP)	AHU-4D2	20	HP	$5,761.76		$115,235	2006	25	
D3040	AIR HANDLING UNIT - INDOOR (17-23 HP)	AHU-2D2	20	HP	$5,761.76		$115,235	2006	25	
D3040	AIR HANDLING UNIT - INDOOR (17-23 HP)	AHU-3C	20	HP	$5,761.76		$115,235	2006	25	

ASSET COMPONENT SUMMARY

UNI-FORMAT	COMPONENT DESCRIPTION	IDENTIFIER	QTY	UNITS	UNIT COST	CMPLX ADJ	TOTAL COST	INSTALL DATE	USEFUL LIFE	USEFUL LIFE ADJ
D3040	AIR HANDLING UNIT - INDOOR (23-27 HP)	AHU-4B	25	HP	$5,079.76		$126,994	2006	25	
D3040	AIR HANDLING UNIT - INDOOR (23-27 HP)	AHU-3AB	25	HP	$5,079.76		$126,994	2006	25	
D3040	AIR HANDLING UNIT - INDOOR (23-27 HP)	AHU-3E	25	HP	$5,079.76		$126,994	2006	25	
D3040	AIR HANDLING UNIT - INDOOR (27-35 HP)	AHU-2E	30	HP	$5,430.77		$162,923	2006	25	
D3040	AIR HANDLING UNIT - INDOOR (27-35 HP)	ERU-4	30	HP	$5,430.77		$162,923	2006	25	
D3040	AIR HANDLING UNIT - INDOOR (27-35 HP)	AHU-2CD	30	HP	$5,430.77		$162,923	2006	25	
D3040	AIR HANDLING UNIT - INDOOR (27-35 HP)	ERU-1	30	HP	$5,430.77		$162,923	2006	25	
D3040	AIR HANDLING UNIT - INDOOR (27-35 HP)	ERU-2	30	HP	$5,430.77		$162,923	2006	25	
D3040	AIR HANDLING UNIT - INDOOR (27-35 HP)	AHU-3D	30	HP	$5,430.77		$162,923	2006	25	
D3040	AIR HANDLING UNIT - INDOOR (27-35 HP)	ERU-3	30	HP	$5,430.77		$162,923	2006	25	
D3040	AIR HANDLING UNIT - INDOOR (35-45 HP)	AHU-1AB	40	HP	$5,080.65		$203,226	2006	25	
D3040	AIR HANDLING UNIT - INDOOR (35-45 HP)	AHU-2AB	40	HP	$5,080.65		$203,226	2006	25	
D3040	ENTHALPY WHEEL, ENERGY RECOVERY, AIR TO AIR (20000-50000 CFM)	ERU-4	8,000	CFM	$2.28		$18,203	2006	25	
D3040	ENTHALPY WHEEL, ENERGY RECOVERY, AIR TO AIR (20000-50000 CFM)	ERU-1	8,000	CFM	$2.28		$18,203	2006	25	
D3040	ENTHALPY WHEEL, ENERGY RECOVERY, AIR TO AIR (20000-50000 CFM)	ERU-2	8,000	CFM	$2.28		$18,203	2006	25	
D3040	ENTHALPY WHEEL, ENERGY RECOVERY, AIR TO AIR (20000-50000 CFM)	ERU-3	8,000	CFM	$2.28		$18,203	2006	25	

ASSET COMPONENT SUMMARY

UNI-FORMAT	COMPONENT DESCRIPTION	IDENTIFIER	QTY	UNITS	UNIT COST	CMPLX ADJ	TOTAL COST	INSTALL DATE	USEFUL LIFE	USEFUL LIFE ADJ
D3040	FAN - AXIAL, RETURN, 1.5" SP (<=3 HP) 9,200 CFM	RAF-1C	2	HP	$3,183.45		$6,367	2006	20	5
D3040	FAN - AXIAL, RETURN, 1.5" SP (<=3 HP) 9,200 CFM	RAF-1E	3	HP	$3,183.45		$9,550	2006	20	5
D3040	FAN - AXIAL, RETURN, 1.5" SP (3-5 HP) 13,200 CFM	RAF-3AB	5	HP	$2,148.60		$10,743	2006	20	5
D3040	FAN - AXIAL, RETURN, 1.5" SP (3-5 HP) 13,200 CFM	RAF-1AB	5	HP	$2,148.60		$10,743	2006	20	5
D3040	FAN - AXIAL, RETURN, 1.5" SP (3-5 HP) 13,200 CFM	RAF-4E	5	HP	$2,148.60		$10,743	2006	20	5
D3040	FAN - AXIAL, RETURN, 1.5" SP (3-5 HP) 13,200 CFM	RAF-2CD	5	HP	$2,148.60		$10,743	2006	20	5
D3040	FAN - AXIAL, RETURN, 1.5" SP (3-5 HP) 13,200 CFM	RAF-4CD	5	HP	$2,148.60		$10,743	2006	20	
D3040	FAN - AXIAL, RETURN, 1.5" SP (3-5 HP) 13,200 CFM	RAF-3C	5	HP	$2,148.60		$10,743	2006	20	5
D3040	FAN - AXIAL, RETURN, 1.5" SP (3-5 HP) 13,200 CFM	RAF-3D	5	HP	$2,148.60		$10,743	2006	20	5
D3040	FAN - AXIAL, RETURN, 1.5" SP (3-5 HP) 13,200 CFM	RAF-2D2	5	HP	$2,148.60		$10,743	2006	20	5
D3040	FAN - AXIAL, RETURN, 1.5" SP (3-5 HP) 13,200 CFM	RAF-1DE	5	HP	$2,148.60		$10,743	2006	20	5
D3040	FAN - AXIAL, RETURN, 1.5" SP (3-5 HP) 13,200 CFM	RAF-1D1	5	HP	$2,148.60		$10,743	2006	20	5
D3040	FAN - AXIAL, RETURN, 1.5" SP (3-5 HP) 13,200 CFM	RAF-4D2	5	HP	$2,148.60		$10,743	2006	20	5
D3040	FAN - AXIAL, RETURN, 1.5" SP (3-5 HP) 13,200 CFM	RAF-3E	5	HP	$2,148.60		$10,743	2006	20	5
D3040	FAN - AXIAL, RETURN, 1.5" SP (5-7.5 HP) 16,500 CFM	RAF-2E	8	HP	$1,770.95		$14,168	2006	20	5
D3040	FAN - AXIAL, RETURN, 1.5" SP (5-7.5 HP) 16,500 CFM	RAF-4B	8	HP	$1,770.95		$14,168	2006	20	5
D3040	FAN - AXIAL, RETURN, 1.5" SP (7.5-10 HP) 19,500 CFM	RAF-2AB	10	HP	$1,697.24		$16,972	2006	20	5

ASSET COMPONENT SUMMARY

UNI-FORMAT	COMPONENT DESCRIPTION	IDENTIFIER	QTY	UNITS	UNIT COST	CMPLX ADJ	TOTAL COST	INSTALL DATE	USEFUL LIFE	USEFUL LIFE ADJ
D3040	FAN - INLINE CENTRIFUGAL AIRFOIL, SUPPLY, 2.5" SP (<=30 HP)	EAF-SF-1	5	HP	$1,240.44		$6,202	2006	20	5
D3040	FAN - UTILITY SET, 1/4" SP (4-12 HP)	EAF-ERU4	5	HP	$2,014.94		$10,075	2006	20	5
D3040	FAN - UTILITY SET, 1/4" SP (4-12 HP)	EAF-ERU1	5	HP	$2,014.94		$10,075	2006	20	5
D3040	FAN - UTILITY SET, 1/4" SP (4-12 HP)	EAF-EF-1	8	HP	$2,014.94		$16,120	2006	20	5
D3040	FAN - UTILITY SET, 1/4" SP (4-12 HP)	EAF-ERU2	5	HP	$2,014.94		$10,075	2006	20	5
D3040	FAN - UTILITY SET, 1/4" SP (4-12 HP)	EAF-ERU3	5	HP	$2,014.94		$10,075	2006	20	5
D3040	FAN - UTILITY SET, 1/4" SP >12-17 HP)	EAF-EF-2	15	HP	$1,401.47		$21,022	2006	20	5
D3040	HOOD, FUME	9 UNITS	36	LF	$2,097.68		$75,516	2006	20	5
D3040	HVAC DISTRIBUTION NETWORKS - CLASSROOM	ALL	303,406	SF	$28.40	0.93	$8,014,140	2006	40	
D3040	HEAT EXCHANGER - SHELL & TUBE STEAM TO WATER (>85 GPM)	PHE-1	800	GPM	$130.08		$104,061	2006	35	
D3040	PRESSURE REDUCING VALVE, STEAM SYSTEM (2")	PRV-001	1	EA	$3,950.83	0.65	$2,568	2006	20	5
D3040	PRESSURE REDUCING VALVE, STEAM SYSTEM (2")	PRV-113	1	EA	$3,950.83		$3,951	2006	20	5
D3040	PRESSURE REDUCING VALVE, STEAM SYSTEM (2")	PRV-109	1	EA	$3,950.83		$3,951	2006	20	5
D3040	PRESSURE REDUCING VALVE, STEAM SYSTEM (2")	PRV-111	1	EA	$3,950.83		$3,951	2006	20	5
D3040	PRESSURE REDUCING VALVE, STEAM SYSTEM (2")	PRV-112	1	EA	$3,950.83		$3,951	2006	20	5
D3040	PRESSURE REDUCING VALVE, STEAM SYSTEM (4")	PRV-002	1	EA	$8,690.27		$8,690	2006	20	5
D3040	PUMP - ELECTRIC (<=10 HP)	PMP-001	3	HP	$1,455.41		$4,366	2006	25	

ASSET COMPONENT SUMMARY

UNI-FORMAT	COMPONENT DESCRIPTION	IDENTIFIER	QTY	UNITS	UNIT COST	CMPLX ADJ	TOTAL COST	INSTALL DATE	USEFUL LIFE	USEFUL LIFE ADJ
D3040	PUMP - ELECTRIC (<=10 HP)	DW-CP-01	1	HP	$1,455.41		$1,455	2006	25	
D3040	PUMP - ELECTRIC (<=10 HP)	DW-CP-02	1	HP	$1,455.41		$1,455	2006	25	
D3040	PUMP - ELECTRIC (<=10 HP)	DW-CP-03	1	HP	$1,455.41		$1,455	2006	25	
D3040	PUMP - ELECTRIC (<=10 HP)	PCHW-1	1	HP	$1,455.41		$1,455	2006	25	
D3040	PUMP - ELECTRIC (15 - 20 HP)	HWP-1	20	HP	$943.85		$18,877	2006	25	
D3040	PUMP - ELECTRIC (15 - 20 HP)	HWP-2	20	HP	$943.85		$18,877	2006	25	
D3040	PUMP - ELECTRIC (25 - 30 HP)	CHWP-1	30	HP	$833.59		$25,008	2006	25	
D3040	PUMP - ELECTRIC (25 - 30 HP)	CHWP-2	30	HP	$833.59		$25,008	2006	25	
D3040	CONDENSATE RECEIVER, ELECTRIC, 2 PUMPS	P-4 118/119	2	HP	$6,578.83		$13,158	2006	20	5
D3040	CONDENSATE RECEIVER, PNEUMATIC (30-100 GPM)	PMP-VP-001	48	GPM	$1,050.10		$50,405	2006	20	5
D3050	COMPUTER ROOM AC UNIT - CHILLED WATER (10 -20 TON)	AC2	18	TON	$2,104.52		$37,881	2006	15	
D3050	COMPUTER ROOM AC UNIT - CHILLED WATER (10 -20 TON)	AC3	18	TON	$2,104.52		$37,881	2006	15	
D3050	COMPUTER ROOM AC UNIT - CHILLED WATER (10 -20 TON)	AC1	18	TON	$2,104.52		$37,881	2006	15	
D3050	COMPUTER ROOM AC UNIT - CHILLED WATER (10 -20 TON)	AC4	18	TON	$2,104.52		$37,881	2006	15	
D3060	AIR COMPRESSOR SYSTEM - HVAC CONTROLS (<=6 TOTAL HP)	CONDENSATE	2	HP	$1,587.17		$3,174	2006	20	2
D3060	AIR COMPRESSOR SYSTEM - HVAC CONTROLS (>10 TOTAL HP)	AIR-001	15	HP	$1,667.08		$25,006	2006	20	2

ASSET COMPONENT SUMMARY

UNI-FORMAT	COMPONENT DESCRIPTION	IDENTIFIER	QTY	UNITS	UNIT COST	CMPLX ADJ	TOTAL COST	INSTALL DATE	USEFUL LIFE	USEFUL LIFE ADJ
D3060	AIR DRYER - REFRIGERATED - 51-75 CFM	AIR DRYER #1	1	EA	$3,664.99	1.75	$6,414	2006	15	5
D3060	AIR DRYER - REFRIGERATED - 51-75 CFM	AIR DRYER #2	1	EA	$3,664.99	1.75	$6,414	2006	15	5
D3060	HVAC CONTROLS SYSTEM - CLASSROOM	ALL	303,406	SF	$4.39	0.93	$1,237,333	2006	18	5
D4010	FIRE SPRINKLER SYSTEM	WET PIPE	303,406	SF	$11.11	0.93	$3,133,669	2006	80	
D4030	EXIT SIGN - CENTRAL POWER	ALL	270	EA	$304.20		$82,135	2006	20	
D4030	EMERGENCY LIGHT - UNITARY WITH BATTERY BACK-UP	EMERGENCY BALLASTS	300	EA	$528.05		$158,416	2006	20	
D4030	EMERGENCY LIGHT - UNITARY WITH BATTERY BACK-UP	UNITARY FIXTURES	11	EA	$528.05		$5,809	2006	20	
D4030	FIRE ALARM PANEL, DIALER, BATTERY, & CHARGER	1514	1	EA	$33,484.08		$33,484	2006	15	
D4030	FIRE ALARM SYSTEM - DEVICES	ALL	303,406	SF	$3.61	0.93	$1,018,268	2006	18	
D5010	ELECTRICAL DISTRIBUTION NETWORK - CLASSROOM	THROUGHOUT	303,406	SF	$19.47	0.93	$5,493,572	2006	40	
D5010	MAIN SWITCHBOARD W/BREAKERS (>2500 AMP)	MSB1/MSB2/TIE	3,200	AMP	$75.23	3.15	$758,300	2006	20	5
D5010	VARIABLE FREQUENCY DRIVE (<=5 HP)	RAF-1C	2	HP	$619.72		$1,239	2006	12	
D5010	VARIABLE FREQUENCY DRIVE (<=5 HP)	ERU1-2	5	HP	$619.72		$3,099	2006	12	
D5010	VARIABLE FREQUENCY DRIVE (<=5 HP)	ERU1-3	5	HP	$619.72		$3,099	2006	12	
D5010	VARIABLE FREQUENCY DRIVE (<=5 HP)	ERU2-2	5	HP	$619.72		$3,099	2006	12	
D5010	VARIABLE FREQUENCY DRIVE (<=5 HP)	ERU2-3	5	HP	$619.72		$3,099	2006	12	
D5010	VARIABLE FREQUENCY DRIVE (<=5 HP)	RAF-4E	5	HP	$619.72		$3,099	2006	12	

ASSET COMPONENT SUMMARY

UNI-FORMAT	COMPONENT DESCRIPTION	IDENTIFIER	QTY	UNITS	UNIT COST	CMPLX ADJ	TOTAL COST	INSTALL DATE	USEFUL LIFE	USEFUL LIFE ADJ
D5010	VARIABLE FREQUENCY DRIVE (<=5 HP)	ERU4-2	5	HP	$619.72		$3,099	2006	12	
D5010	VARIABLE FREQUENCY DRIVE (<=5 HP)	ERU4-3	5	HP	$619.72		$3,099	2006	12	
D5010	VARIABLE FREQUENCY DRIVE (<=5 HP)	ERU3-2	5	HP	$619.72		$3,099	2006	12	
D5010	VARIABLE FREQUENCY DRIVE (<=5 HP)	ERU3-3	5	HP	$619.72		$3,099	2006	12	
D5010	VARIABLE FREQUENCY DRIVE (<=5 HP)	RAF-3E	5	HP	$619.72		$3,099	2006	12	
D5010	VARIABLE FREQUENCY DRIVE (<=5 HP)	RAF-1E	3	HP	$619.72		$1,859	2006	12	
D5010	VARIABLE FREQUENCY DRIVE (5-7.5 HP)	RAF-2E	8	HP	$561.96		$4,496	2006	12	
D5010	VARIABLE FREQUENCY DRIVE (5-7.5 HP)	RAF-1DE	5	HP	$561.96		$2,810	2006	12	
D5010	VARIABLE FREQUENCY DRIVE (5-7.5 HP)	RAF-1D1	5	HP	$561.96		$2,810	2006	12	
D5010	VARIABLE FREQUENCY DRIVE (5-7.5 HP)	RAF-4D2	5	HP	$561.96		$2,810	2006	12	
D5010	VARIABLE FREQUENCY DRIVE (5-7.5 HP)	EF-1	8	HP	$561.96		$4,496	2006	12	
D5010	VARIABLE FREQUENCY DRIVE (5-7.5 HP)	RAF-3D	5	HP	$561.96		$2,810	2006	12	
D5010	VARIABLE FREQUENCY DRIVE (5-7.5 HP)	RAF-2D2	5	HP	$561.96		$2,810	2006	12	
D5010	VARIABLE FREQUENCY DRIVE (5-7.5 HP)	RAF-2CD	5	HP	$561.96		$2,810	2006	12	
D5010	VARIABLE FREQUENCY DRIVE (5-7.5 HP)	RAF-4CD	5	HP	$561.96		$2,810	2006	12	
D5010	VARIABLE FREQUENCY DRIVE (5-7.5 HP)	RAF-3C	5	HP	$561.96		$2,810	2006	12	
D5010	VARIABLE FREQUENCY DRIVE (5-7.5 HP)	RAF-3AB	5	HP	$561.96		$2,810	2006	12	

ASSET COMPONENT SUMMARY

UNI-FORMAT	COMPONENT DESCRIPTION	IDENTIFIER	QTY	UNITS	UNIT COST	CMPLX ADJ	TOTAL COST	INSTALL DATE	USEFUL LIFE	USEFUL LIFE ADJ
D5010	VARIABLE FREQUENCY DRIVE (5-7.5 HP)	RAF-1AB	5	HP	$561.96		$2,810	2006	12	
D5010	VARIABLE FREQUENCY DRIVE (7.5-10 HP)	RAF-4B	8	HP	$468.67		$3,749	2006	12	
D5010	VARIABLE FREQUENCY DRIVE (7.5-10 HP)	RAF-2B	10	HP	$468.67		$4,687	2006	12	
D5010	VARIABLE FREQUENCY DRIVE (10-15 HP)	SAF-1E	15	HP	$361.69		$5,425	2006	12	
D5010	VARIABLE FREQUENCY DRIVE (15-20 HP)	SAF-4E	20	HP	$331.79		$6,636	2006	12	
D5010	VARIABLE FREQUENCY DRIVE (15-20 HP)	HWP-1	20	HP	$331.79		$6,636	2006	12	
D5010	VARIABLE FREQUENCY DRIVE (15-20 HP)	HWP-2	20	HP	$331.79		$6,636	2006	12	
D5010	VARIABLE FREQUENCY DRIVE (15-20 HP)	EF-2	15	HP	$331.79		$4,977	2006	12	
D5010	VARIABLE FREQUENCY DRIVE (20-25 HP)	SAF-1DE	20	HP	$313.85		$6,277	2006	16	
D5010	VARIABLE FREQUENCY DRIVE (20-25 HP)	SAF-3C	20	HP	$313.85		$6,277	2006	16	
D5010	VARIABLE FREQUENCY DRIVE (20-25 HP)	SAF-2D2	20	HP	$313.85		$6,277	2006	16	
D5010	VARIABLE FREQUENCY DRIVE (20-25 HP)	SAF-4D2	20	HP	$313.85		$6,277	2006	16	
D5010	VARIABLE FREQUENCY DRIVE (20-25 HP)	SAF-1D1	20	HP	$313.85		$6,277	2006	16	
D5010	VARIABLE FREQUENCY DRIVE (20-25 HP)	SAF-4CD	20	HP	$313.85		$6,277	2006	16	
D5010	VARIABLE FREQUENCY DRIVE (20-25 HP)	SAF-1C	20	HP	$313.85		$6,277	2006	16	
D5010	VARIABLE FREQUENCY DRIVE (20-25 HP)	SAF-3E	25	HP	$313.85		$7,846	2006	16	
D5010	VARIABLE FREQUENCY DRIVE (25-30 HP)	SAF-2E	30	HP	$301.90		$9,057	2006	16	

ASSET COMPONENT SUMMARY

UNI-FORMAT	COMPONENT DESCRIPTION	IDENTIFIER	QTY	UNITS	UNIT COST	CMPLX ADJ	TOTAL COST	INSTALL DATE	USEFUL LIFE	USEFUL LIFE ADJ
D5010	VARIABLE FREQUENCY DRIVE (25-30 HP)	ERU4-1	30	HP	$301.90		$9,057	2006	16	
D5010	VARIABLE FREQUENCY DRIVE (25-30 HP)	ERU1-1	30	HP	$301.90		$9,057	2006	16	
D5010	VARIABLE FREQUENCY DRIVE (25-30 HP)	SAF-4B	25	HP	$301.90		$7,548	2006	16	
D5010	VARIABLE FREQUENCY DRIVE (25-30 HP)	SAF-2CD	30	HP	$301.90		$9,057	2006	16	
D5010	VARIABLE FREQUENCY DRIVE (25-30 HP)	CHWP-2	30	HP	$301.90		$9,057	2006	16	
D5010	VARIABLE FREQUENCY DRIVE (25-30 HP)	CHWP-1	30	HP	$301.90		$9,057	2006	16	
D5010	VARIABLE FREQUENCY DRIVE (25-30 HP)	SAF-3AB	25	HP	$301.90		$7,548	2006	16	
D5010	VARIABLE FREQUENCY DRIVE (25-30 HP)	SAF-3D	30	HP	$301.90		$9,057	2006	16	
D5010	VARIABLE FREQUENCY DRIVE (25-30 HP)	ERU3-1	30	HP	$301.90		$9,057	2006	16	
D5010	VARIABLE FREQUENCY DRIVE (25-30 HP)	ERU2-1	30	HP	$301.90		$9,057	2006	16	
D5010	VARIABLE FREQUENCY DRIVE (30-40 HP)	SAF-2B	40	HP	$256.69		$10,268	2006	16	
D5010	VARIABLE FREQUENCY DRIVE (40-50 HP)	SAF-1AB	40	HP	$236.58		$9,463	2006	16	
D5020	LIGHTING - EXTERIOR, RECESSED (INC, CFL, LED)	CFL	19	EA	$207.45		$3,942	2006	15	
D5020	LIGHTING - EXTERIOR, STANCHION LUMINAIRE, 12-FOOT	POLE-MOUNTED	25	EA	$1,930.60		$48,265	2006	15	8
D5020	LIGHTING - EXTERIOR, WALL FLOOD (SV, MH, ID, LED)	HID	17	EA	$874.39		$14,865	2006	15	
D5020	LIGHTING - EXTERIOR, WALL LANTERN or FLOOD (INC, CFL, LED)	CFL	35	EA	$367.16		$12,851	2006	15	
D5020	LIGHTING SYSTEM, INTERIOR - CLASSROOM	THROUGHOUT	303,406	SF	$8.97	0.93	$2,529,901	2006	20	

ASSET COMPONENT SUMMARY

UNI-FORMAT	COMPONENT DESCRIPTION	IDENTIFIER	QTY	UNITS	UNIT COST	CMPLX ADJ	TOTAL COST	INSTALL DATE	USEFUL LIFE	USEFUL LIFE ADJ
D5090	SWITCH - AUTO TRANSFER, 480 V (100-400 AMP)	ATS LS	300	AMP	$36.37		$10,911	2006	25	
D5090	SWITCH - AUTO TRANSFER, 480 V (>400 AMP)	ATS EQ	600	AMP	$25.64		$15,381	2006	25	
E1020	REFRIGERATION SYSTEM - WALK-IN, 2 EVAP FANS, 6700 BTUH, CONDENSER	ROOM 3425B	1	EA	$8,584.71		$8,585	2006	10	8
E2010	SEATING, FIXED, FOLDING, STANDARD	TIERED CLASSROOMS	444	EA	$311.79		$138,433	2006	40	
						Grand Total:	**$53,875,712**			

COMPONENT RENEWAL COST BY YEAR

All costs shown as Future Value using a 3% average inflation rate

No Projected Component Replacement Cost for Asset No. AHSB for DR

2016						
UNI-FORMAT	COMPONENT DESCRIPTION	IDENTIFIER	QTY	UNITS	REPLACEMENT COST	YEAR
D2020	WATER HEATER - RESIDENTIAL, ELECTRIC (15-25 GAL)	TAN-001	20	GAL	$1,077	2016
D2020	WATER HEATER - RESIDENTIAL, ELECTRIC (15-25 GAL)	TAN-002	20	GAL	$1,077	2016
	2016	PROJECTED COMPONENT REPLACEMENT COST			$2,154	

No Projected Component Replacement Cost for Asset No. AHSB for 2017

2018						
UNI-FORMAT	COMPONENT DESCRIPTION	IDENTIFIER	QTY	UNITS	REPLACEMENT COST	YEAR
C3020	FLOORING - CARPET, TILE OR ROLL, STANDARD	OFC, HALL, CONF RM, CLASSRMS	158,000	SF	$1,815,725	2018
D5010	VARIABLE FREQUENCY DRIVE (7.5-10 HP)	RAF-2B	10	HP	$4,972	2018
D5010	VARIABLE FREQUENCY DRIVE (5-7.5 HP)	RAF-3AB	5	HP	$2,981	2018
D5010	VARIABLE FREQUENCY DRIVE (5-7.5 HP)	RAF-1AB	5	HP	$2,981	2018
D5010	VARIABLE FREQUENCY DRIVE (7.5-10 HP)	RAF-4B	8	HP	$3,978	2018
D5010	VARIABLE FREQUENCY DRIVE (<=5 HP)	RAF-1C	2	HP	$1,315	2018
D5010	VARIABLE FREQUENCY DRIVE (5-7.5 HP)	RAF-2CD	5	HP	$2,981	2018

COMPONENT RENEWAL COST BY YEAR

All costs shown as Future Value using a 3% average inflation rate

D5010	VARIABLE FREQUENCY DRIVE (5-7.5 HP)	RAF-4CD	5	HP	$2,981	2018
D5010	VARIABLE FREQUENCY DRIVE (5-7.5 HP)	RAF-3C	5	HP	$2,981	2018
D5010	VARIABLE FREQUENCY DRIVE (5-7.5 HP)	RAF-1D1	5	HP	$2,981	2018
D5010	VARIABLE FREQUENCY DRIVE (5-7.5 HP)	RAF-4D2	5	HP	$2,981	2018
D5010	VARIABLE FREQUENCY DRIVE (15-20 HP)	EF-2	15	HP	$5,280	2018
D5010	VARIABLE FREQUENCY DRIVE (5-7.5 HP)	EF-1	8	HP	$4,769	2018
D5010	VARIABLE FREQUENCY DRIVE (5-7.5 HP)	RAF-3D	5	HP	$2,981	2018
D5010	VARIABLE FREQUENCY DRIVE (5-7.5 HP)	RAF-2D2	5	HP	$2,981	2018
D5010	VARIABLE FREQUENCY DRIVE (5-7.5 HP)	RAF-1DE	5	HP	$2,981	2018
D5010	VARIABLE FREQUENCY DRIVE (<=5 HP)	ERU1-2	5	HP	$3,287	2018
D5010	VARIABLE FREQUENCY DRIVE (<=5 HP)	ERU1-3	5	HP	$3,287	2018
D5010	VARIABLE FREQUENCY DRIVE (<=5 HP)	ERU2-2	5	HP	$3,287	2018
D5010	VARIABLE FREQUENCY DRIVE (<=5 HP)	ERU2-3	5	HP	$3,287	2018
D5010	VARIABLE FREQUENCY DRIVE (<=5 HP)	ERU3-2	5	HP	$3,287	2018
D5010	VARIABLE FREQUENCY DRIVE (<=5 HP)	ERU3-3	5	HP	$3,287	2018
D5010	VARIABLE FREQUENCY DRIVE (<=5 HP)	ERU4-2	5	HP	$3,287	2018
D5010	VARIABLE FREQUENCY DRIVE (<=5 HP)	ERU4-3	5	HP	$3,287	2018
D5010	VARIABLE FREQUENCY DRIVE (15-20 HP)	HWP-1	20	HP	$7,040	2018
D5010	VARIABLE FREQUENCY DRIVE (15-20 HP)	HWP-2	20	HP	$7,040	2018
D5010	VARIABLE FREQUENCY DRIVE (<=5 HP)	RAF-3E	5	HP	$3,287	2018
D5010	VARIABLE FREQUENCY DRIVE (5-7.5 HP)	RAF-2E	8	HP	$4,769	2018

COMPONENT RENEWAL COST BY YEAR

All costs shown as Future Value using a 3% average inflation rate

D5010	VARIABLE FREQUENCY DRIVE (<=5 HP)	RAF-4E	5	HP	$3,287	2018
D5010	VARIABLE FREQUENCY DRIVE (15-20 HP)	SAF-4E	20	HP	$7,040	2018
D5010	VARIABLE FREQUENCY DRIVE (10-15 HP)	SAF-1E	15	HP	$5,756	2018
D5010	VARIABLE FREQUENCY DRIVE (<=5 HP)	RAF-1E	3	HP	$1,972	2018
D1010	ELEVATOR CAB RENOVATION - PASSENGER	ELEVATOR B	1	EA	$49,990	2018
D1010	ELEVATOR CAB RENOVATION - PASSENGER	ELEVATOR C	1	EA	$49,990	2018
D1010	ELEVATOR CAB RENOVATION - PASSENGER	ELEVATOR D	1	EA	$49,990	2018
	2018	**PROJECTED COMPONENT REPLACEMENT COST**			**$2,082,307**	

No Projected Component Replacement Cost for Asset No. AHSB for 2019

2020

UNI-FORMAT	COMPONENT DESCRIPTION	IDENTIFIER	QTY	UNITS	REPLACEMENT COST	YEAR
C3010	WALL FINISH - PAINT, STANDARD	THROUGHOUT	450,640	SF	$1,004,140	2020
	2020	**PROJECTED COMPONENT REPLACEMENT COST**			**$1,004,140**	

2021

UNI-FORMAT	COMPONENT DESCRIPTION	IDENTIFIER	QTY	UNITS	REPLACEMENT COST	YEAR
C3020	FLOORING - FLUID APPLIED, PAINT OR CLEAR SEAL	CONCRETE SLABS	12,000	SF	$37,819	2021
D5020	LIGHTING - EXTERIOR, RECESSED (INC, CFL, LED)	CFL	19	EA	$4,569	2021

COMPONENT RENEWAL COST BY YEAR

All costs shown as Future Value using a 3% average inflation rate

D5020	LIGHTING - EXTERIOR, WALL FLOOD (SV, MH, ID, LED)	HID	17	EA	$17,232	2021
D5020	LIGHTING - EXTERIOR, WALL LANTERN or FLOOD (INC, CFL, LED)	CFL	35	EA	$14,897	2021
D4030	FIRE ALARM PANEL, DIALER, BATTERY, & CHARGER	1514	1	EA	$38,817	2021
D3050	COMPUTER ROOM AC UNIT - CHILLED WATER (10 -20 TON)	AC2	18	TON	$43,915	2021
D3050	COMPUTER ROOM AC UNIT - CHILLED WATER (10 -20 TON)	AC3	18	TON	$43,915	2021
D3050	COMPUTER ROOM AC UNIT - CHILLED WATER (10 -20 TON)	AC1	18	TON	$43,915	2021
D3050	COMPUTER ROOM AC UNIT - CHILLED WATER (10 -20 TON)	AC4	18	TON	$43,915	2021
D2020	BACKFLOW PREVENTER (<=1 INCH)	BFP-003	1	EA	$1,076	2021
D2020	BACKFLOW PREVENTER (1-2 INCHES)	BFP-006	1	EA	$2,399	2021
D2020	BACKFLOW PREVENTER (3-4 INCHES)	BFP-001	1	EA	$8,987	2021
D2020	BACKFLOW PREVENTER (3-4 INCHES)	BFP-002	1	EA	$8,987	2021
D2020	BACKFLOW PREVENTER (1-2 INCHES)	BFP-004	1	EA	$2,399	2021
D2020	BACKFLOW PREVENTER (<=1 INCH)	BFP-005	1	EA	$1,076	2021
	2021	**PROJECTED COMPONENT REPLACEMENT COST**			**$313,918**	

2022

UNI-FORMAT	COMPONENT DESCRIPTION	IDENTIFIER	QTY	UNITS	REPLACEMENT COST	YEAR
D5010	VARIABLE FREQUENCY DRIVE (25-30 HP)	CHWP-1	30	HP	$10,815	2022
D5010	VARIABLE FREQUENCY DRIVE (30-40 HP)	SAF-2B	40	HP	$12,260	2022
D5010	VARIABLE FREQUENCY DRIVE (25-30 HP)	SAF-3AB	25	HP	$9,012	2022
D5010	VARIABLE FREQUENCY DRIVE (20-25 HP)	SAF-1C	20	HP	$7,495	2022

COMPONENT RENEWAL COST BY YEAR

All costs shown as Future Value using a 3% average inflation rate

D5010	VARIABLE FREQUENCY DRIVE (25-30 HP)	SAF-4B	25	HP	$9,012	2022
D5010	VARIABLE FREQUENCY DRIVE (25-30 HP)	SAF-2CD	30	HP	$10,815	2022
D5010	VARIABLE FREQUENCY DRIVE (25-30 HP)	CHWP-2	30	HP	$10,815	2022
D5010	VARIABLE FREQUENCY DRIVE (20-25 HP)	SAF-4CD	20	HP	$7,495	2022
D5010	VARIABLE FREQUENCY DRIVE (20-25 HP)	SAF-1D1	20	HP	$7,495	2022
D5010	VARIABLE FREQUENCY DRIVE (20-25 HP)	SAF-4D2	20	HP	$7,495	2022
D5010	VARIABLE FREQUENCY DRIVE (20-25 HP)	SAF-3C	20	HP	$7,495	2022
D5010	VARIABLE FREQUENCY DRIVE (20-25 HP)	SAF-2D2	20	HP	$7,495	2022
D5010	VARIABLE FREQUENCY DRIVE (25-30 HP)	SAF-3D	30	HP	$10,815	2022
D5010	VARIABLE FREQUENCY DRIVE (20-25 HP)	SAF-1DE	20	HP	$7,495	2022
D5010	VARIABLE FREQUENCY DRIVE (40-50 HP)	SAF-1AB	40	HP	$11,299	2022
D5010	VARIABLE FREQUENCY DRIVE (25-30 HP)	ERU1-1	30	HP	$10,815	2022
D5010	VARIABLE FREQUENCY DRIVE (25-30 HP)	ERU2-1	30	HP	$10,815	2022
D5010	VARIABLE FREQUENCY DRIVE (25-30 HP)	ERU3-1	30	HP	$10,815	2022
D5010	VARIABLE FREQUENCY DRIVE (25-30 HP)	ERU4-1	30	HP	$10,815	2022
D5010	VARIABLE FREQUENCY DRIVE (20-25 HP)	SAF-3E	25	HP	$9,369	2022
D5010	VARIABLE FREQUENCY DRIVE (25-30 HP)	SAF-2E	30	HP	$10,815	2022
	2022	**PROJECTED COMPONENT REPLACEMENT COST**			**$200,751**	

2023						
UNI-FORMAT	**COMPONENT DESCRIPTION**	**IDENTIFIER**	**QTY**	**UNITS**	**REPLACEMENT COST**	**YEAR**

COMPONENT RENEWAL COST BY YEAR

All costs shown as Future Value using a 3% average inflation rate

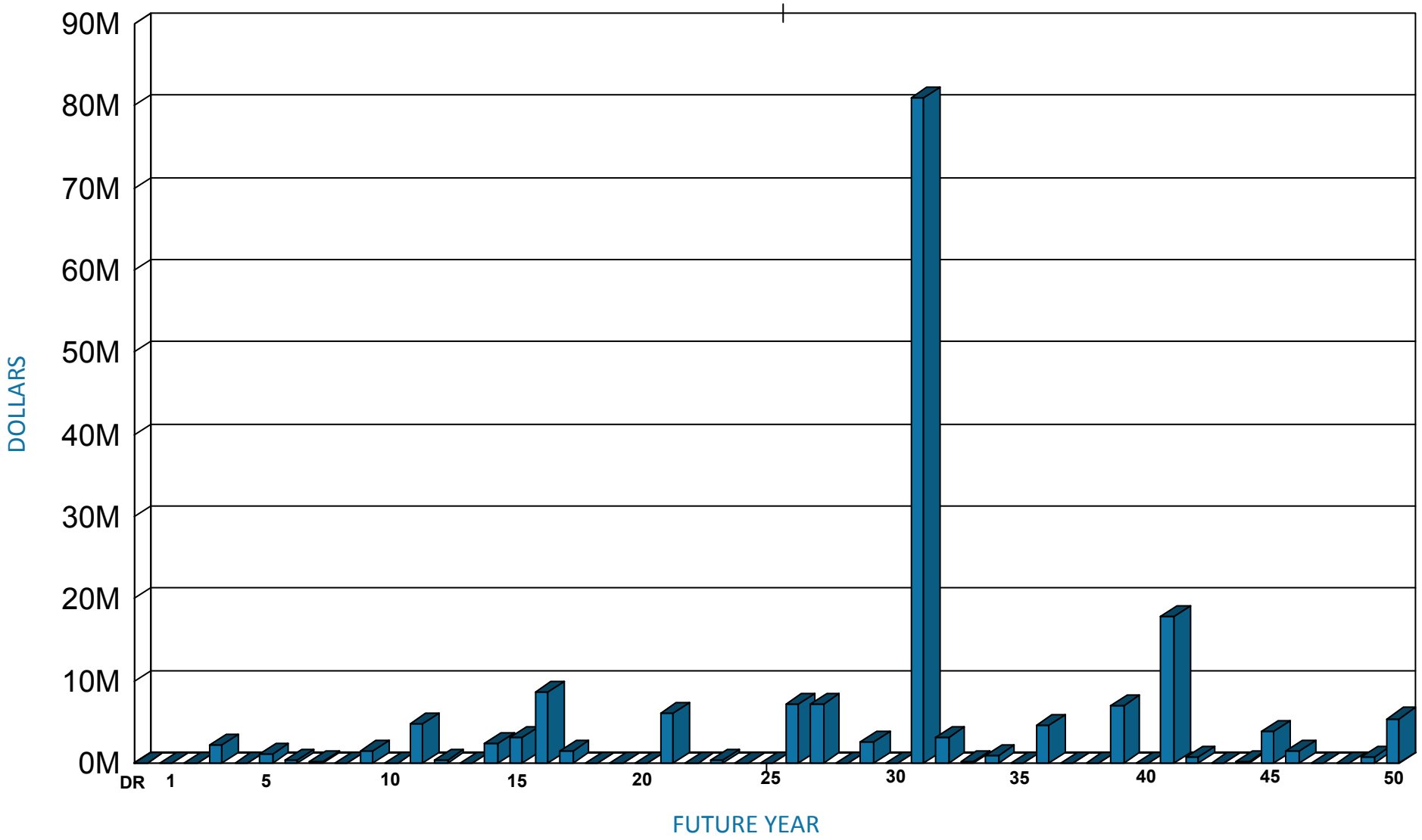
D2020	WATER HEATER - RESIDENTIAL, ELECTRIC (46-100 GAL)	WH-1	50	GAL	$1,789	2023
	2023	**PROJECTED COMPONENT REPLACEMENT COST**			**$1,789**	

2024

UNI-FORMAT	COMPONENT DESCRIPTION	IDENTIFIER	QTY	UNITS	REPLACEMENT COST	YEAR
B3010	ROOF - 1-PLY, ADHERED (EPDM, PIB, CSPE, PVC)	FLAT	26,400	SF	$199,504	2024
D4030	FIRE ALARM SYSTEM - DEVICES	ALL	303,406	SF	$1,289,911	2024
E1020	REFRIGERATION SYSTEM - WALK-IN, 2 EVAP FANS, 6700 BTUH, CONDENSER	ROOM 3425B	1	EA	$10,875	2024
	2024	**PROJECTED COMPONENT REPLACEMENT COST**			**$1,500,290**	

No Projected Component Replacement Cost for Asset No. AHSB for 2025

RECURRING COMPONENT EXPENDITURE PROJECTIONS



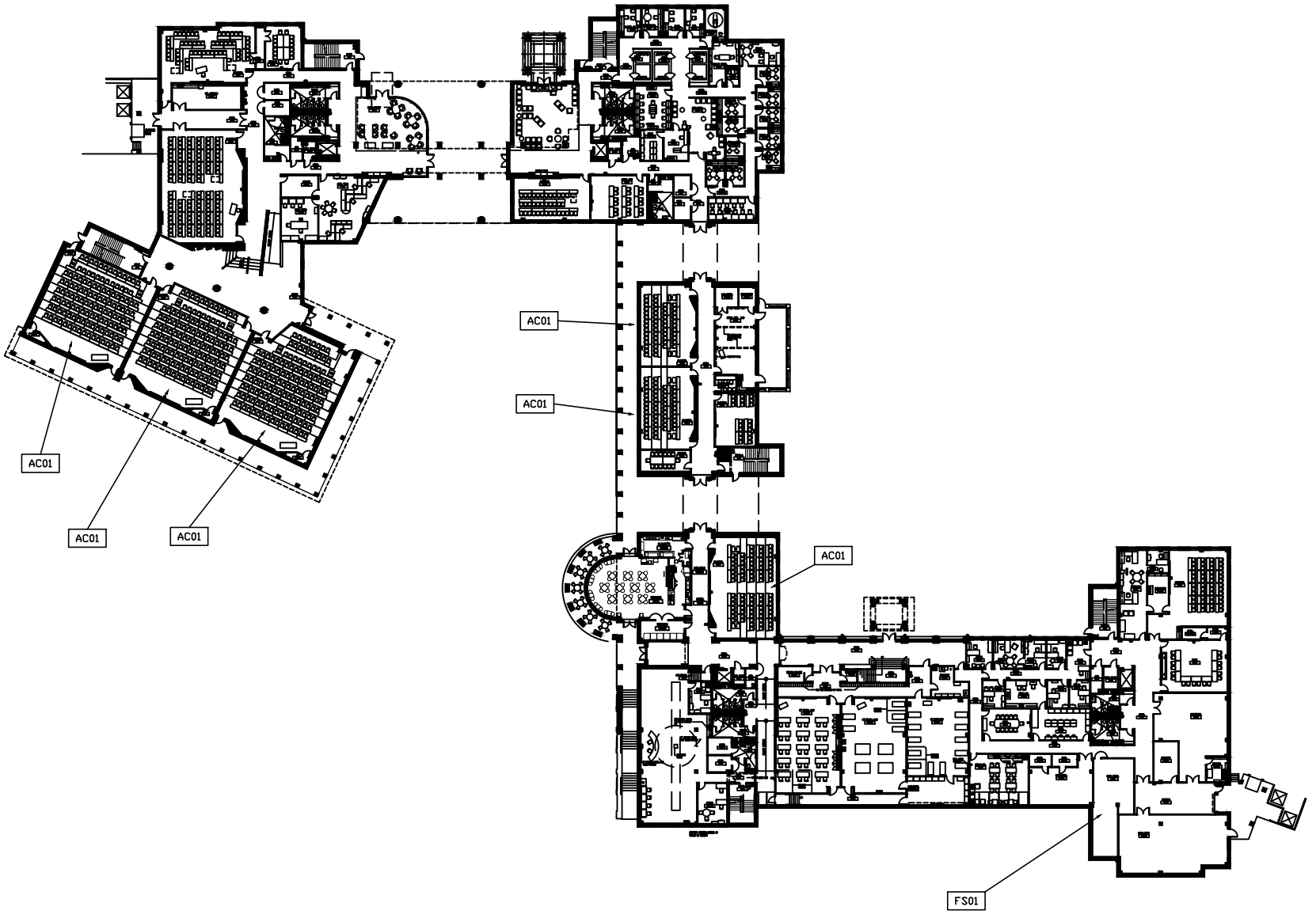
Average Annual Renewal Cost per SF $4.87

FACILITY CONDITION ASSESSMENT

SECTION 5

DRAWINGS/PROJECT LOCATIONS

EAST CAROLINA UNIVERSITY



ALLIED HEALTH SCIENCES BUILDING

BLDG NO. AHSB

ESS CORPORATION

FACILITY CONDITION ASSESSMENT

3100 Breckinridge Boulevard
Suite 400, Duluth GA 30096
770.879-7825

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

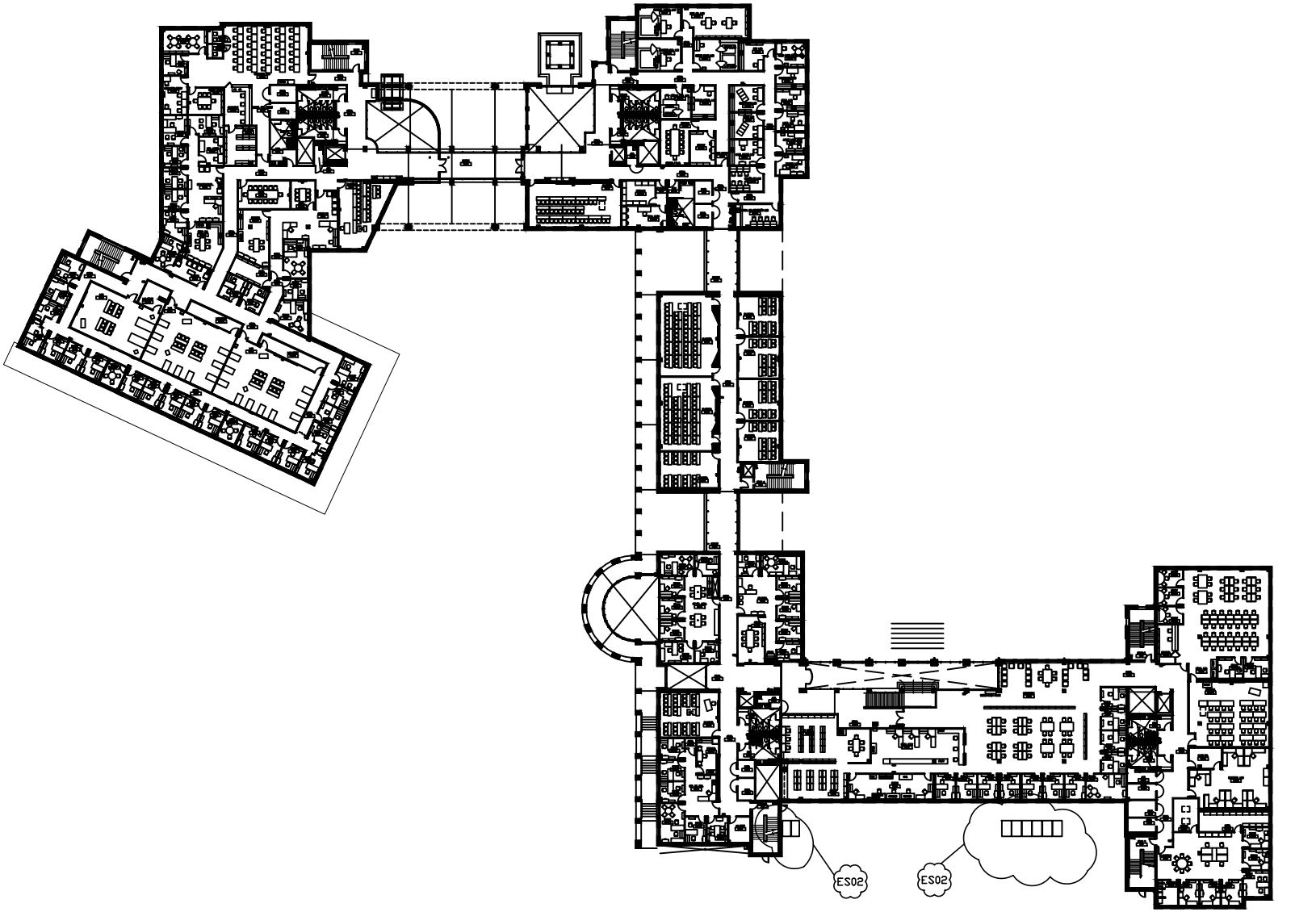
Date:	8/11/2016
Drawn by:	A.W.
Project No.	15-124

FIRST FLOOR PLAN

Sheet No.

1 of 4

EAST CAROLINA UNIVERSITY



ALLIED HEALTH SCIENCES BUILDING

BLDG NO. AHSB

ISES CORPORATION

FACILITY CONDITION ASSESSMENT

3100 Breckinridge Boulevard
Suite 400, Duluth GA 30096
770.879-7825

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

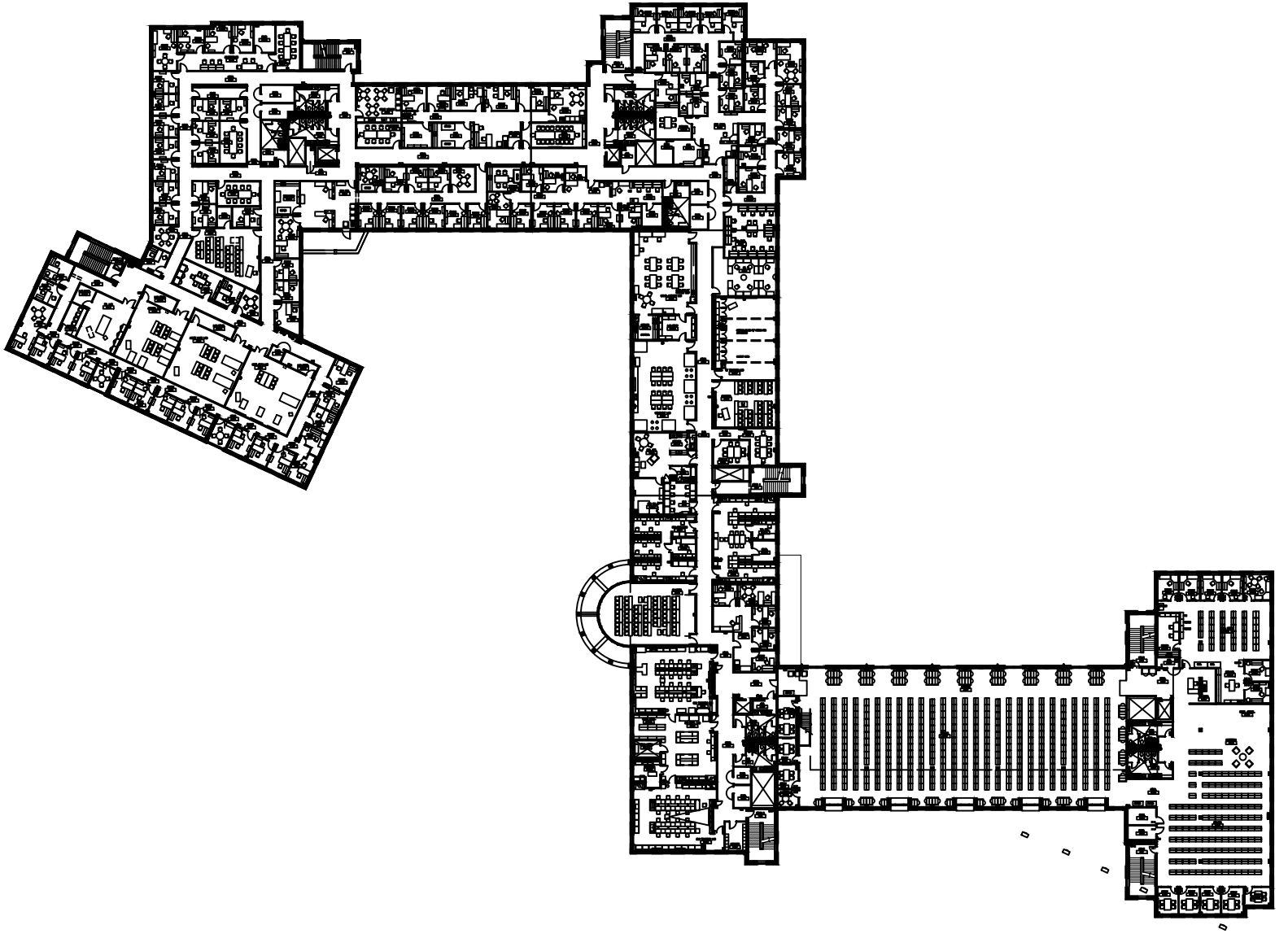
Date:	8/11/2016
Drawn by:	A.W.
Project No.	15-124

SECOND FLOOR PLAN

Sheet No.

2 of 4

EAST CAROLINA UNIVERSITY



ALLIED HEALTH SCIENCES BUILDING

BLDG NO. AHSB

ISES CORPORATION

FACILITY CONDITION ASSESSMENT

3100 Breckinridge Boulevard
Suite 400, Duluth GA 30096
770.879-7825

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

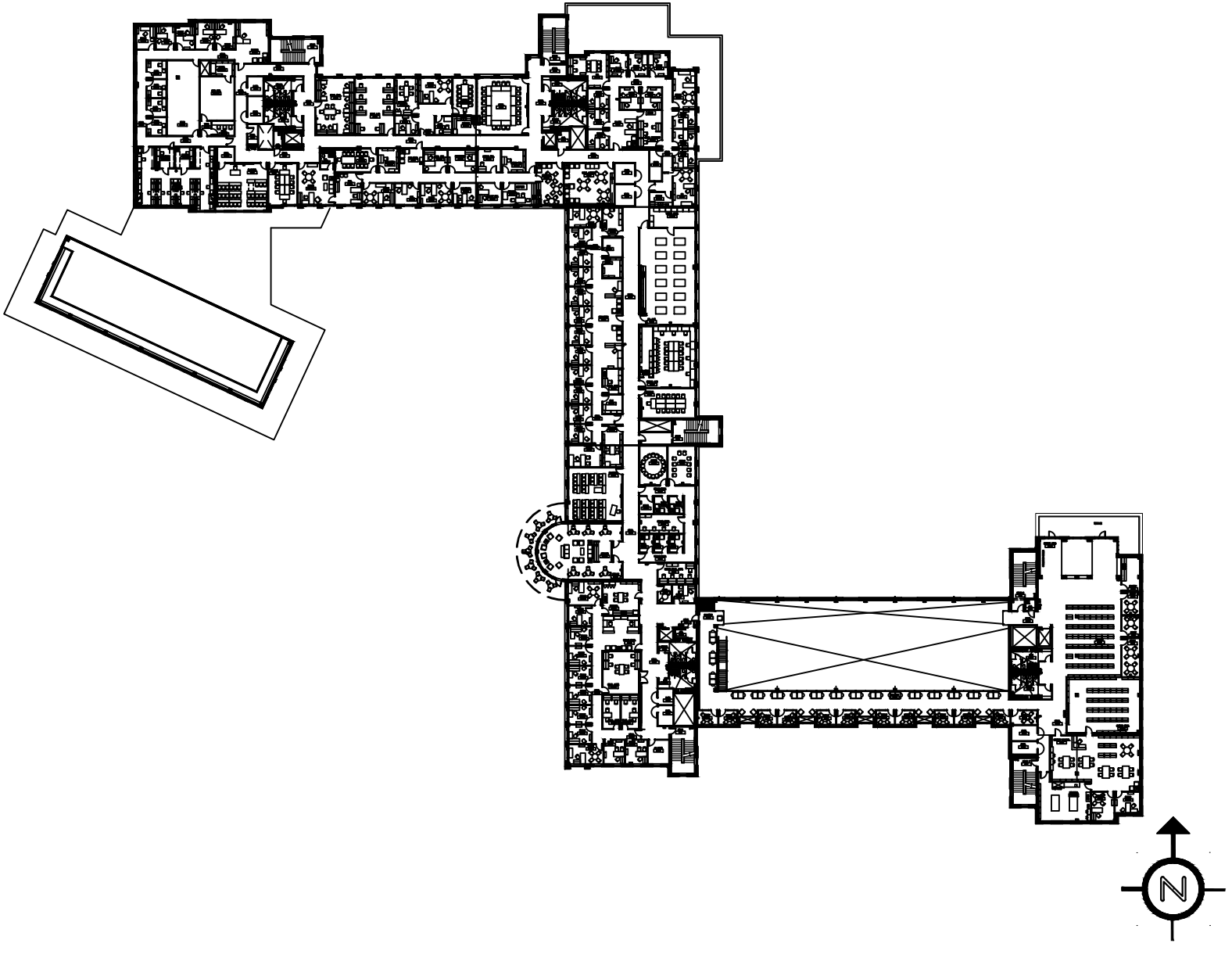
PROJECT NUMBER APPLIES TO AREA AS NOTED

Date: 8/11/2016
Drawn by: A.W.
Project No. 15-124

THIRD FLOOR PLAN

Sheet No.
3 of 4

EAST CAROLINA UNIVERSITY



ALLIED HEALTH SCIENCES BUILDING

BLDG NO. AHSB

ISES CORPORATION

FACILITY CONDITION ASSESSMENT

3100 Breckinridge Boulevard
Suite 400, Duluth GA 30096
770.879-7825

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: 8/11/2016
Drawn by: A.W.
Project No. 15-124

FOURTH FLOOR PLAN

Sheet No.
4 of 4

SECTION 6

PHOTOGRAPHS

AHSB001a 4/20/2016
Single-ply TPO, flat roof
Lower level roof

AHSB001e 4/20/2016
Interior light fixture
East penthouse

AHSB002a 4/20/2016
Single-ply TPO, flat roof with drain
Mid level roof

AHSB002e 4/20/2016
Typical exit signage
East penthouse

AHSB003a 4/20/2016
Single-ply TPO, flat roof and pitched standing seam metal roof
Upper level roof

AHSB003e 4/20/2016
Duct-mounted smoke detector
East penthouse

AHSB004a 4/20/2016
Single-ply TPO, flat roof and pitched standing seam metal roof
Upper level roof

AHSB004e 4/20/2016
Hydronic unit heater
East penthouse

AHSB005a 4/20/2016
Pitched standing seam metal roof
Upper level roof

AHSB005e 4/20/2016
Inline return air fan RAF-3E
East penthouse

AHSB006a 4/20/2016
Typical stairwell with compliant handrails and guardrailing
Stairwell

AHSB006e 4/20/2016
Variable frequency drive AHU-3E
East penthouse

AHSB007a 4/20/2016
Adhered acoustical tile ceiling
Library

AHSB007e 4/20/2016
Fire alarm system device with visual and audible annunciation
East penthouse

AHSB008a 4/20/2016
Compliant dual-level drinking fountain
Fourth floor

AHSB008e 4/20/2016
Air handler AHU-3E
East penthouse

AHSB009a 4/20/2016
Exterior patio/roof
Fourth floor

AHSB009e 4/20/2016
18 ton computer room air conditioner
East penthouse

AHSB010a 4/20/2016
Suspended grid acoustical tile ceilings, painted walls, and carpeted floors
Fourth floor

AHSB010e 4/20/2016
One-inch backflow preventer
East penthouse

AHSB011a 4/20/2016
Ceramic tiled lower walls and floors and accessible fixtures
Typical restrooms

AHSB011e 4/20/2016
Energy recovery unit ERU-4
East Penthouse

AHSB012a 4/20/2016
Ceramic tiled lower walls and floors and accessible fixtures
Typical restrooms

AHSB012e 4/20/2016
Heating water supply and return and waste water piping
East penthouse

AHSB013a 4/20/2016
Lavatories
Typical restrooms

AHSB013e 4/20/2016
Pneumatic control system piping
East penthouse

AHSB014a 4/20/2016
Heart of pine floors, replica tin ceiling panels, and chandeliers
Historic Collections Reading Room

AHSB014e 4/20/2016
Various direct digital and pneumatic control panels
East penthouse

AHSB015a 4/20/2016
Heart of pine floors, painted walls, and fire rated glazing
Historic Collections Reading room

AHSB015e 4/20/2016
Preaction fire system air compressor
East penthouse

AHSB016a 4/20/2016
Vinyl tiled floors and suspended grid ceilings
Preservation lab

AHSB016e 4/20/2016
Fire riser with tamper switch and control valves
Fifth floor, stairwell 6

AHSB017a 4/20/2016
Hand-built wooden cabinetry
Historic Collections Reading room

AHSB017e 4/20/2016
Recessed, 1x4 fluorescent lighting with T8 lamps
Fourth floor, common space near 4508

AHSB018a 4/20/2016
Exterior exhausted fume hood
Preservation Lab

AHSB018e 4/20/2016
Various elegant, sconce, and recessed lighting
Fourth floor, common space near terrace

AHSB019a 4/20/2016
Laminated wooden lab cabinetry
Preservation lab

AHSB019e 4/20/2016
Exterior sconce fixture with CFL lamp
Fourth floor, terrace

AHSB020a 4/20/2016
High bay ceiling with carpeted floors
Library

AHSB020e 4/20/2016
Recessed, 2x4 foot fluorescent lighting with T8 lamps
Room 4508

AHSB021a 4/20/2016
Suspended grid acoustical tile ceilings with painted walls and carpeted floors
Third floor

AHSB021e 4/20/2016
Typical glass bulb fire system sprinkler head
Room 4508

AHSB022a 4/20/2016
Suspended grid acoustical tile ceilings, painted walls, and carpeted floors
First floor

AHSB022e 4/20/2016
Secondary electric system transformers and panelboards
Room 4520

AHSB023a 4/20/2016
Vinyl tiled floors, suspended grid ceilings, and built-in cabinetry
First floor, break room

AHSB023e 4/20/2016
Pressure reducing valve systems
Room 1510B

AHSB024a 4/20/2016
First floor skylight
First floor, break room

AHSB024e 4/20/2016
Steam trap
Room 1510B

AHSB025a 4/20/2016
Vinyl tiled floors, suspended grid ceilings, and built-in cabinetry
First floor

AHSB025e 4/20/2016
Flash tank #1
Room 1510B

AHSB026a 4/20/2016
Slate tiled floor
First floor

AHSB026e 4/20/2016
Unfired domestic water heating skid DWH-1
Room 1510B

AHSB027a 4/20/2016
Slate tiled floor and staircase
First floor, southern entrance

AHSB027e 4/20/2016
Twin, sealed emergency light fixture
Room 1510B

AHSB028a 4/20/2016
Vinyl flooring, painted walls, and suspended grid ceiling
First floor

AHSB028e 4/20/2016
Vacuum condensate return skid
Room 1510B

AHSB029a 4/20/2016
Suspended grid acoustical tile ceilings, painted walls, and carpeted floors
Fourth floor, lounge

AHSB029e 4/20/2016
Heating water pumps HWP-1 and HWP-2
Room 1510B

AHSB030a 4/20/2016
Built-in cabinetry
Fourth floor, kitchen

AHSB030e 4/20/2016
Shell-and-tube heat exchanger PHE-1
Room 1510B

AHSB031a 4/20/2016
Vinyl tiled floors and suspended grid ceilings
Fourth floor, teaching lab

AHSB031e 4/20/2016
Various condensate return piping systems
Room 1510B

AHSB032a 4/20/2016
Vinyl tiled floors, suspended grid ceilings, and lab cabinetry
Fourth floor, northern lab

AHSB032e 4/20/2016
Chilled water pumps CHWP-1 and CHWP-2
Room 1510B

AHSB033a 4/20/2016
Vinyl tiled floors, suspended grid ceilings, and metal lab cabinetry
Fourth floor, northern lab

AHSB033e 4/20/2016
Two double-check, domestic water backflow preventers
Room 1510B

AHSB034a 4/20/2016
Vinyl tiled floors and suspended grid ceilings
Third floor, teaching lab

AHSB034e 4/20/2016
Minor calcification of the DW BFP valve stem
Room 1510B

AHSB035a 4/20/2016
Vinyl tiled floors, suspended grid ceilings, and built-in cabinetry
Third floor, multi-activity lab

AHSB035e 4/20/2016
Wet-pipe fire system risers #1 and #2
Room 1510B

AHSB036a 4/20/2016
Ceiling tile water stained from fire suppression system
Second floor

AHSB036e 4/20/2016
Combination emergency shower and eyewash station
Room 1510B

AHSB037a 4/20/2016
Slate tiled floor
First floor, northeastern lobby

AHSB037e 4/20/2016
Pumped condensate air compressor
Room 1510B

AHSB038a 4/20/2016
Slate tiled floor
First floor, northwestern lobby

AHSB038e 4/20/2016
Air dryers #1 and #2
Room 1510B

AHSB039a 4/20/2016
Accessible service counter
Second floor, north

AHSB039e 4/20/2016
Laboratory duplex vacuum pump system
Room 1510B

AHSB040a 4/20/2016
Terraced classroom without handrails along the outer wall
First floor, north

AHSB040e 4/20/2016
Control systems air compressor
Room 1510B

AHSB041a 4/20/2016
Terraced classroom without handrails along the outer wall
First floor, north

AHSB041e 4/20/2016
Point addressable fire alarm control panel
Room 1514

AHSB042a 4/20/2016
Slate floor tile and wall tile
First floor, north

AHSB042e 4/20/2016
3,200 amp low-voltage circuit breaker switchgear
Room 1514

AHSB043a 4/20/2016
Chipped slate floor tile
First floor, north

AHSB043e 4/20/2016
Power circuit breaker main MSB1
Room 1514

AHSB044a 4/20/2016
Painted and suspended ceilings
First floor, snack bar

AHSB044e 4/20/2016
Automatic transfer switch ATS EQ
Room 1514

AHSB045a 4/20/2016
Stained exterior brick masonry
Exterior envelope

AHSB045e 4/20/2016
Automatic transfer switch ATS LS
Room 1514

AHSB046a 4/20/2016
Stained and deficient exterior brick masonry
Exterior envelope

AHSB046e 4/20/2016
Hydraulic elevator machine D
Room 1427

AHSB047a 4/20/2016
Stained and deficient exterior brick masonry
Exterior envelope

AHSB047e 4/20/2016
Fume hood FH-4165-1
Room 4165B

AHSB048a 4/20/2016
Stained and deficient exterior brick masonry
Exterior envelope

AHSB048e 4/20/2016
Utility set exhaust fan EF-1
Penthouse B

AHSB049a 4/20/2016
Stained and deficient exterior brick masonry
Exterior envelope

AHSB049e 4/20/2016
Two electric water heaters
Penthouse B

AHSB050a 4/20/2016
Stained and deficient exterior brick masonry
Exterior envelope

AHSB050e 4/20/2016
Surface-mounted exterior light fixture
Roof

AHSB051a 4/20/2016
Previous masonry repair
Exterior envelope

AHSB051e 4/20/2016
Variable air volume terminal
Penthouse D

AHSB052a 4/20/2016
Deficient exterior brick masonry and a previous repair
Exterior envelope

AHSB052e 4/20/2016
Updated electric domestic water heater WH-1
Penthouse D

AHSB053a 4/20/2016
Deficient exterior brick masonry and a previous repair
Exterior envelope

AHSB053e 4/20/2016
Dedicated mixing valve for emergency plumbing fixture
Penthouse D

AHSB054a 4/20/2016
Deficient exterior brick masonry and a previous repair
Exterior envelope

AHSB054e 4/20/2016
Various lighting systems
Room 1120

AHSB055a 4/20/2016
Deficient exterior brick masonry and a previous repair
Exterior envelope

AHSB055e 4/20/2016
Surface-mounted exterior light fixtures
Exterior

AHSB056a 4/20/2016
Deficient exterior brick masonry and a previous repair
Exterior envelope

AHSB056e 4/20/2016
Hydraulic dock leveler
Exterior, loading dock

AHSB057a 4/20/2016
Brick masonry, dual-pane or tempered glazing, and standing seam metal roof
North elevation, E wing

AHSB058a 4/20/2016
Brick masonry, dual-pane or tempered glazing, and standing seam metal roof
East elevation, D wing

AHSB059a 4/20/2016
Deficient exterior brick masonry and a previous repair
Exterior envelope

AHSB060a 4/20/2016
Brick masonry, dual-pane or tempered glazing, and standing seam metal roof
North elevation, C wing

AHSB061a 4/20/2016
Concrete panel exterior veneer
North elevation, C wing

AHSB062a 4/20/2016
Deficient exterior brick masonry and a previous repair
Exterior envelope

AHSB063a 4/20/2016
Deficient exterior brick masonry and a previous repair
Exterior envelope

AHSB064a 4/20/2016
Stained and deficient exterior brick masonry
Exterior envelope

AHSB065a 4/20/2016
Aluminum-framed glass entrance doors
Exterior envelope

AHSB066a 4/20/2016
Brick masonry and dual-pane or tempered glazing
North main entrance

AHSB067a 4/20/2016
Brick masonry, dual-pane or tempered glazing, and standing seam metal roof
North elevation, B and C wings

AHSB068a 4/20/2016
Brick masonry, dual-pane or tempered glazing, and standing seam metal roof
East side A and B wings

AHSB069a 4/20/2016
Deficient exterior brick masonry and a previous repair
Exterior envelope

AHSB070a 4/20/2016
Stained and deficient exterior brick masonry
Exterior envelope

AHSB071a 4/20/2016
Deficient exterior brick masonry and a previous repair
Exterior envelope

AHSB072a 4/20/2016
Brick masonry, dual-pane or tempered glazing, and standing seam metal roof
West elevation, A wing

AHSB073a 4/20/2016
Rubber gasket seal coming out in interior
West elevation, A wing

AHSB074a 4/20/2016
Brick masonry, dual-pane or tempered glazing, and standing seam metal roof
East elevation, A wing

AHSB075a 4/20/2016
Deficient exterior brick masonry and a previous repair
Exterior envelope

AHSB076a 4/20/2016
Brick masonry, dual-pane or tempered glazing, and standing seam metal roof
West elevation, D wing

AHSB077a 4/20/2016
Brick masonry, dual-pane or tempered glazing, and standing seam metal roof
West elevation, D wing

AHSB078a 4/20/2016
Aluminum-framed glass entrance doors
Exterior envelope

AHSB079a 4/20/2016
Aluminum-framed glass entrance doors
Exterior envelope

AHSB080a 4/20/2016
Corrosion stain on exterior concrete veneer
Exterior envelope

AHSB081a 4/20/2016
Rubber gasket seal coming out in interior
South elevation, E wing

AHSB082a 4/20/2016
Brick masonry, dual-pane or tempered glazing, and concrete veneer crown
South elevation, E wing

AHSB083a 4/20/2016
Deficient exterior brick masonry and a previous weep repair
Exterior envelope

AHSB084a 4/20/2016
Hollow metal service door
Exterior envelope

AHSB085a 4/20/2016
Deficient exterior brick masonry and a previous repair
Exterior envelope

AHSB086a 4/20/2016
Brick masonry, dual-pane or tempered glazing, and standing seam metal roof
Southeastern view