# **EAST CAROLINA UNIVERSITY**

# **MEDICAL PAVILIONS 1-10**

ASSET CODE: MEDP

**FACILITY CONDITION ANALYSIS** 

**DECEMBER 9, 2009** 





# EAST CAROLINA UNIVERSITY Facility Condition Analysis

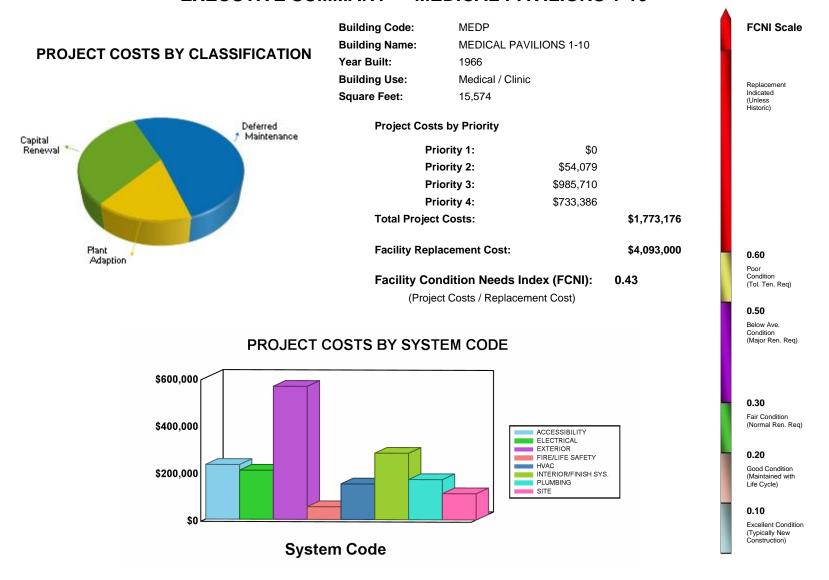
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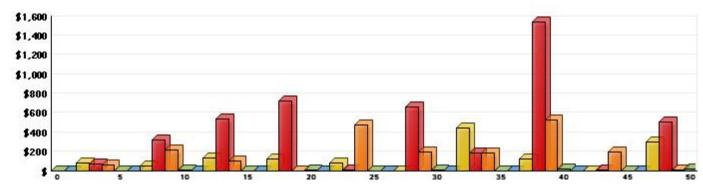


# **GENERAL ASSET INFORMATION**

# **EXECUTIVE SUMMARY - MEDICAL PAVILIONS 1-10**



#### LIFE CYCLE MODEL EXPENDITURE PROJECTIONS



**Future Year** 

Average Annual Renewal Cost Per SqFt \$4.68



#### **B. ASSET SUMMARY**

Built in 1966, Medical Pavilions 1-10 are single story medical clinic suites. There are nine office suites included in this report. Pavilion 8 is currently leased to an outside occupant and not under the purview of the University. The complex is constructed of concrete structures on slab-on-grade foundations. The exterior finishes consist of brick and wood facades and single ply membrane and built-up roof systems. Interior renovations have occurred in Pavilions 1, 5, and 6, with the remaining pavilions in older condition. Medical Pavilions 1-10 total 15,574 square feet and are located at the Health Science Campus of East Carolina University in Greenville, North Carolina.

The information in this report was gathered during a site visit that concluded on September 2, 2009.

#### SITE

Landscaping around the complex consists of ornamental shrubs and some mature trees. Landscaping is in average condition but should outlast the ten-year scope of this report with routine maintenance. Pedestrian paving systems are in overall poor condition and represent a liability to the owner. New systems, including excavation, grading, base compaction, and paving, are recommended. Vehicular paving systems are in poor condition and will need major upgrades.

#### **EXTERIOR STRUCTURE**

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

The exterior siding is failing and beyond repair. The installation of high quality, architecturally appropriate siding systems is recommended to restore the aesthetics and integrity of the building envelopes. Replacement of the substrates, insulation, and vapor barriers may also be necessary.

Replacements are recommended for the exterior door systems. This project includes the primary and secondary entrance and service doors. The replacement units should maintain the architectural design aspects of the facilities and be modern, energy-efficient applications.

It is recommended that the single pane window applications be upgraded to thermal pane systems. Such double pane systems will reduce the energy required to operate the pavilions. Repair or replacement of the windowsills and trim may also be necessary.

The built-up roofing system over Pavilions 7 and 10 appears to be a newer installation and should not require replacement over the next ten years. The single ply membrane roofing on the remaining pavilions is not expected to outlast the scope of this analysis. Future budget modeling should include a provision for the replacement of all failing roofing systems. Replace the roofs with similar applications.

# EAST CAROLINA UNIVERSITY Facility Condition Analysis

#### INTERIOR FINISHES / SYSTEMS

Interior floor finishes include carpet, vinyl tile, and sheet vinyl flooring. Wall finishes consist of vinyl wall covering or painted plaster or concrete, and ceiling finishes consist of lay-in acoustical or adhered tile. All of these applications vary in age and condition from suite to suite. Floor, wall, and ceiling finish upgrades should be considered as part of any future cosmetic improvements or major comprehensive renovation efforts.

While several pavilions have new interior doors, the condition of the remaining interior door systems is such that door system replacements are recommended as part of a comprehensive renovation effort. Complete demolition of existing door systems and replacement according to a code compliant plan to protect egress passages properly is recommended. Lever door hardware and Braille signage should be included in this effort.

#### **ACCESSIBILITY**

Section One

Access to each pavilion is provided by at-grade entrances around the complex. Once inside, there are no transitions in floor level to prevent access throughout the first floor of the pavilions. Select doors are equipped with knob hardware and non-compliant signage. Hardware and signage are recommended for upgrade as part of a complex-wide interior door upgrade. Several amenities are recommended for upgrade to meet modern accessibility legislation.

Current legislation related to accessibility requires that building entrances be wheelchair accessible. To comply with the intent of this legislation, it is recommended that compliant painted metal handrails be installed at the main entrance site stairs.

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

While several of the pavilions had been remodeled, including their restrooms, the remaining restroom fixtures and finishes are mostly original to the year of construction or previous major renovation. The fixtures are sound but dated and are spaced such that clearances are not ADA compliant. A comprehensive restroom renovation, including new fixtures, finishes, partitions, and accessories, is recommended. Restroom expansion may be necessary in order to meet modern minimum fixture counts and accessibility legislation.

#### **HEALTH**

There were no reports or evidence of any asbestos containing material or lead based paint. No other health related issues were noted during the inspection.

# EAST CAROLINA UNIVERSITY Facility Condition Analysis Section One



#### FIRE / LIFE SAFETY

The paths of egress in the pavilions are adequate in regard to fire rating. There are no compromises involving doors or partitions. No fire or life safety issues related to architectural features were observed during the inspection of this complex.

Fire and life safety protection within the structures is limited. No central fire alarm panel was observed throughout the various pavilions. Outdated opaque strobes and audible annunciator units were sporadically located throughout. Smoke detectors are lacking in the egress corridors or unoccupied rooms, such as mechanical / electrical / storage rooms, janitor's closets, etc. The installation of a comprehensive zoned fire alarm is recommended within the next year.

The pavilions are not protected by any form of automatic fire suppression. Manual, dry chemical fire extinguishers are available for immediate use. Due to the small building footprints, the installation of an automatic fire suppression system is not required or recommended.

A few emergency exit signs and battery backup emergency lighting units were observed in the renovated Pavilion 1. The emergency exits for the remaining pavilions are not properly identified, and the pavilions lack emergency egress lighting. To provide occupants safe passage, install battery pack emergency egress lighting units and battery backup LED exit signs.

#### **HVAC**

Heating and cooling for the pavilions are provided primarily by natural gas furnace split DX systems and a few rooftop package units. The majority of the equipment is original, with a few systems upgraded in the mid-1980s. Building ventilation is provided by centrifugal roof exhaust fans of various ages and conditions. It is anticipated the building mechanical systems will become maintenance intensive and inefficient with age. Two formal projects have been created for the replacement of the split DX systems and building exhaust fans.

#### **ELECTRICAL**

High voltage from the utility company is reduced to 120/208 volt, three-phase power via a service entrance transformer located on site. The related 225 amp main electrical panels in each pavilion have been in service for over forty years. The electrical distribution network supplies 120/208 volt power throughout the building. Aging components, such as the circuit breakers, serve as potential fire hazards if they fail to open a circuit in an overload or short circuit condition. Remove existing aged electrical components and branch circuitry. Install new power panels, switches, raceways, conductors, and devices. Provide molded case thermal magnetic circuit breakers and HACR circuit breakers for HVAC equipment. Redistribute the electrical loads to the appropriate areas to ensure safe and reliable power to building occupants. Provide ground fault circuit interrupter (GFCI) protection where required, and clearly label all panels for circuit identification. Budgetary consideration is allocated for the renewal of the pavilion electrical system within the next five years.

The current lighting configuration for the pavilions consists of lay-in and surface-mounted T8 and T12 fluorescent fixtures and aging incandescent fixtures. Based on life cycle depletion, replacement of

# EAST CAROLINA UNIVERSITY Facility Condition Analysis Section One



approximately 70 percent of the interior fixtures is recommended. Select lamps with the same color temperature and rendering index for lighting uniformity. Install occupancy sensors in select areas for additional energy conservation.

Nighttime illumination is provided by wall-mounted compact fluorescent lighting fixtures and parking lot HID fixtures. Based on the present location of the fixtures, there appears to be sufficient quantities. No exterior lighting upgrade is warranted at this time.

#### **PLUMBING**

Potable water is distributed throughout the pavilions via a copper piping network. Sanitary waste and storm water is conveyed by cast-iron, bell-and-spigot piping construction with copper runouts. The supply and drain piping networks are aged and should be replaced. Failure to undertake such upgrades will likely lead to leaks, drainage issues, and other problems that will require costly maintenance. The plumbing fixtures in the unrenovated pavilions are recommended for replacement. This action is detailed in the proposed restroom renovation.

Domestic hot water is served by four electric domestic hot water heaters of various capacities and ages. The units are in good condition. However, they will reach the end of its useful service life within the tenyear scope of this report and will require an upgrade.

Note: The deficiencies outlined in this report were noted from a visual inspection. ISES engineers and architects developed projects with related costs that are needed over the next ten-year period to bring the facility to "like-new" condition. The costs developed do not represent the cost of a complete facility renovation. Soft costs not represented in this report include telecommunications, furniture, window treatment, space change, program issues, relocation, swing space, contingency, or costs that could not be identified or determined from the visual inspection and available building information. However, existing fixed building components and systems were thoroughly inspected. The developed costs represent correcting existing deficiencies and anticipated life cycle failures (within a ten-year period) to bring the facility to modern standards without any anticipation of change to facility space layout or function. Please refer to Section Three of this report for recommended Specific Project Details.



#### **C. INSPECTION TEAM DATA**

**DATE OF INSPECTION:** September 2, 2009

#### **INSPECTION TEAM PERSONNEL:**

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

#### **FACILITY CONTACTS:**

NAME POSITION

William Bagwell Associate Vice Chancellor, Campus Operations

**REPORT DEVELOPMENT:** 

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Suite N

Stone Mountain, GA 30087

Contact: Kyle Thompson, Project Manager

770-879-7376



#### D. FACILITY CONDITION ANALYSIS - DEFINITIONS

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

#### 1. REPORT DESCRIPTION

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

Section 2: Detailed Project Summaries and Totals

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

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

FCNI = Deferred Maintenance / Modernization +

<u>Capital Renewal + Plant Adaption</u>

Plant / Facility Replacement Cost

Section 3: Specific Project Details Illustrating Description / Cost

Section 4: Drawings with Iconography

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

Section 5: Life Cycle Model Summary and Projections

Section 6: Photographic Log



#### 2. PROJECT CLASSIFICATION

- A. <u>Plant / Program Adaption</u>: Expenditures required to adapt the physical plant to the evolving needs of the institution and to changing codes or standards. These are expenditures beyond normal maintenance. Examples include compliance with changing codes (e.g. accessibility), facility alterations required by changed teaching or research methods, and improvements occasioned by the adoption of modern technology (e.g., the use of personal computer networks).
- B. <u>Deferred Maintenance</u>: Refers to expenditures for repairs which were not accomplished as a part of normal maintenance or capital repair which have accumulated to the point that facility deterioration is evident and could impair the proper functioning of the facility. Costs estimated for deferred maintenance projects should include compliance with applicable codes, even if such compliance requires expenditures beyond those essential to affect the needed repairs. Deferred maintenance projects represent catch up expenses.
- C. <u>Capital Renewal:</u> A subset of regular or normal facility maintenance which refers to major repairs or the replacement / rebuilding of major facility components (e.g., roof replacement at the end of its normal useful life is capital repair; roof replacement several years after its normal useful life is deferred maintenance).

#### 3. PROJECT SUBCLASS TYPE

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

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

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

#### Example:

	PRIORITY CLA	SS 1
CODE	PROJECT NO.	PRIORITY SEQUENCE
HV2C	0001HV04	01
PL1D	0001PL02	02
	DDIODITY OL A	00.0
	PRIORITY CLA	<u>55 2</u>
CODE	PROJECT NO.	PRIORITY SEQUENCE
IS1E	0001IS06	03
EL4C	0001EL03	04



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

#### PRIORITY 1 - Currently Critical (Immediate)

Projects in this category require immediate action to:

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

#### PRIORITY 2 - Potentially Critical (Year One)

Projects in this category, if not corrected expeditiously, will become critical within a year. Situations in this category include:

- a. intermittent interruptions
- b. rapid deterioration
- c. potential safety hazards

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

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

#### PRIORITY 4 - Recommended (Years Six to Ten)

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

#### 6. COST SUMMARIES AND TOTALS

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

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

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

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



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

#### Example:

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

0001 - Building Identification Number

EL - System Code, EL represents Electrical

- Sequential Assignment Project Number by Category / System

#### 8. PHOTO NUMBER (Shown in Section 6)

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

Example: 0001006e

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

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

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

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

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

# EAST CAROLINA UNIVERSITY

Facility Condition Analysis

Section One -



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

Refer to the following Category Code Report.

Example: Category Code = EL5A

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

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



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



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



Frestanding police stacks.		CATEGORY CODE REPORT					
SYSTEM DESCRIPTION: FIRE / LIFE SAFETY  FS1A LIGHTING  ECRESS LIGHTING/EXIT SIGNAGE  FS2A DETECTIONALARM  GENERAL  Repair or replacement of fire altern/detection systemic components including alterns, pull box section-flowed detectors, amountained predictors, services detectors, remote detectors, and section-flowed detectors, and sect	CODE			DEFINITION			
FS1A LIGHTING  EGRESS LIGHTING/EXIT  FS2A DETECTIONALARM  GENERAL  Repair or replacement of fire absenviotencion system/comproments including stamms, pull box annowaheast decicios, annumidator panells, central fire control stations, sense clinicians, etc.  FS2A SUPPRESSION  SPRINKLERS  Repair or implacement of fire absenviotencion system/comproments including stamms, pull box annowaheast decicios, annumidator panells, central fire control stations, sense clinicians, sense control fire suppressions including with pipe A dry pipe annowaheast programments. Southwestern principles and property of the station of the principles and property of the principles and princi	ES6E	GENERAL	OTHER	Any exterior work not specifically categorized elsewhere including finish and structural work on freestanding boiler stacks.			
FS2A DETECTIONALARM GENERAL Repair or replacement of fire alarm/detection system/components including alarms, pull box shows heat offsetoss, annunciator pends, central fire control distons, freends distins, fire alarm/detection system/components including alarms, pull box shows an annual components including alarms, pull box shows an annual components including alarms, pull box shows an annual components including alarms, pull box shows a suppression including way pipe & dry piles of the pumping systems, finess, papin, deflectors, valves, associated fire pump, etc.  FS3B SUPPRESSION STANDPIPENOSE Repair or including alarms, pull box systems, finess, papin, deflectors, valves, associated fire pump, etc.  FS3D SUPPRESSION EXTINGUISHERS Repairs or upgrades to F.E. cabinets/vall fasterings and handheld extinguisher testing/replacement.  FS3D SUPPRESSION OTHER Other or including the blankes, carb discised automatic systems, blanch systems, development including fire blankes, carb discise automatic systems, blanch systems, development including fire blankes, carb discise automatic systems, blanch systems, development including fire blankes, carb discise automatic systems, blanch systems, development including fire blankes, carb discise automatic systems, blanch systems, development including fire blankes, carb discise automatic systems, blanch systems, development including emirate or otherwise deapers are material/stepling including veneral including emirate or otherwise deapers are material/stepling including component including emirate or otherwise deapers including including and property of particular department including emirate or otherwise access part of particular disgrammatic emorgancy everwalsh acting systems, dec.  FS4D EGRESS PATH DESIGNATION Installation, elocation or repair of posted diagrammatic emorgancy everwalsh acting systems, dec.  FS5D EGRESS PATH SEPARATION RATING Restoration of equaled fire producing windisher glazing, transmitted including labeled fire doors, fire shute department or property	SYSTEM DI	ESCRIPTION: FIRE / LIFE SAFE	TY				
smoke/head detectors, annunciator panels, central fire control stations, remote daters, fire stati communications, etc.  FS3A SUPPRESSION SPRINKLERS Regal or installation of water sprinkles type automatic fire suppressions including wet pipe & dry pipers, from the pipers of the purple, etc.  FS3B SUPPRESSION STANDPIPE/HOSE Repair or installation of distandpipe system or components including hardware, hoses, cabinets, nozzi necessary fire pumping system, etc.  FS3C SUPPRESSION EXTINGUISHERS Repairs or upgrades to F.E. cabinets/wall fasterings and handheld extinguisher testing/replacement.  FS3D SUPPRESSION OTHER OTHER SUPPRESSION EXTINGUISHERS Repairs or upgrades to F.E. cabinets/wall fasterings and handheld extinguisher testing/replacement.  FS4A HAZARDOUS MATERIALS STORAGE ENVIRONMENT distances and specifically categorized elevatives including fire blankets, cate dioxide automatic systems, dry chemical systems, etc.  FS4B HAZARDOUS MATERIALS USER SAFETY Installation or repair of special storage environments of selectically categorized elevatives including personal distances and company or capital storage crons. Selection of the pair of selection distances are selected and company or capital storage crons in selection or capital storage crons in selection distances and company or capital storage crons in selection distances and company or capital storage crons in selection distances and company or capital storage crons in selection distances and company or capital storage crons in selection or capital storage crons and company or capital storage crons in selection or capital storage crons including selection or capital storage crons or capital storage crons including selection or capital storage crons or capital storage crons including selection or capital storage crons including selection or capital storage crons or capital storage crons including selection or capital storage crons including selection or capital storage crons including selection or capital storage crons or capital storage crons including selec	FS1A	LIGHTING		R & R work on exit signage and packaged AC/DC emergency lighting.			
systems, heads, pining, deflectors, valves, monitors, associated fire pump, etc.  FS3B SUPPRESSION STANDPIPE-HOSE Repair or installation of standpipe system or components including hardware, hoses, cabinets, nozzinecessary fire pumping system, etc.  FS3D SUPPRESSION EXTINGUISHERS Repairs or upgrades to F.E. cabinets/wall fasternings and handheld extinguisher testing/replacement.  FS3D SUPPRESSION OTHER Other fire suppression items not specifically categorized elsewhere including fire blankets, carb diode automatic systems, labor systems, device including fire blankets, carb diode automatic systems, labor systems, etc.  FS4A HAZARDOUS MATERIALS STORAGE ENVIRONMENT Installation or repair of special storage environment for the safe holding of flammable or otherw dangerous materials/supplies including vented flammables storage cabinets, holding presision captures, files and the chief storage control installation or repair of special storage control. Files and the chief flammables storage cabinets, holding presision captures, files and the chief storage control installation or repair of special storage control. Excluding vented flammables storage cabinets, holding presision captures and storage torons, captures, installation, or resting of user safety equipment including emergency evacuation routes.  FS5B EGRESS PATH DESIGNATION Installation, relocation or repair of posted diagrammatic emergency evacuation routes.  FS5B EGRESS PATH DISTANCE/ Work involving remediation of legists routing problems including elimination of dead end confidence storage of the chief protective banduring valuation instruction and stating instruction and stating instruction and stating in protective stating instruction and stating instruction and stating instruction and stating instruction and stating instructions and operation and stating instructions and stating instructions and confidence in protective stating of stating heights/generative, etc.  FS5D EGRESS PATH STARS RAILING Retroit of statinghold in protective and protective and stati	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.			
FSSC SUPPRESSION EXTINGUISHERS Repairs or upgrades to F.E. cabitatival frasterings and handheld extinguisher testing/replacement.  FS3D SUPPRESSION OTHER Other fire suppression items not specifically categorized elsewhere including fire blankets, carb 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 otherwidengerous materials/supprises including vented flammables storage cabinets, holding persiston dangerous materials/supprises including vented flammables storage cabinets, holding persiston dangerous materials/supprises including vented flammables corage cabinets, holding persiston dangerous materials/supprises including vented flammables corage cabinets, holding persiston dangerous materials/supprises including vented flammables corage cabinets, holding persiston dangers, fire after demonstrative storage environment for the safe holding of themselved th	FS3A	SUPPRESSION	SPRINKLERS	Repair or installation of water sprinklers type automatic fire suppressions including wet pipe & dry pipe systems, heads, piping, deflectors, valves, monitors, associated fire pump, etc.			
FS3D SUPPRESSION OTHER COTHER suppression items not specifically categorized elsewhere including fire blankets, carb dioxide automatic systems, Halon systems, dry chemical systems including fire blankets, carb dioxide automatic systems, Experimentally systems, etc.  FS4A HAZARDOUS MATERIALS STORAGE ENVIRONMENT Installation or repair of special storage environment for the safe holding of flammable or otherw diagestous materials/supplies including vented flammables storage cabinets, holding pens'room cages, fire safe chemical storage rooms, etc.  FS4B HAZARDOUS MATERIALS USER SAFETY Improvements, repaired systems, etc.  FS5A EGRESS PATH DESIGNATION Installation, relocation or repair of posted diagrammatic emergency evacuation routes.  FS5B EGRESS PATH DESIGNATION Installation, relocation or repair of posted diagrammatic emergency evacuation routes.  FS5C EGRESS PATH DISTANCE/ GEOMETRY Work involving remediation of agrees routing problems including elimination of dead end corrido excessive egress distance modifications and egress routing inadequacies.  FS5C EGRESS PATH SEARATION 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 STAIRS RAILING Restoration of required fire protective barriers including wall rating compromises, fire rated construction of stairchanding configurations/structure, railing heights/geometries, etc.  FS5G EGRESS PATH FIRE DOORS/ Installation/replacement/repair of fire doors and hardware including labeled fire doors, fire shutte ciosers, magnetic holders, panie and hardware including labeled fire doors, fire shutte ciosers, magnetic holders, panie hardware, etc.  FS5G EGRESS PATH FIRE DOORS/ Installation/replacement/repair of fire doors and hardware including labeled fire doors, fire shutte ciosers, magnetic holders, panie hardware, etc.  FS5G EGRESS PATH FIRE CONTROL EQUIPMENT AND ENCLOSURES Temperature control chambers (both hol and co	FS3B	SUPPRESSION	STANDPIPE/HOSE	Repair or installation of standpipe system or components including hardware, hoses, cabinets, nozzles, necessary fire pumping system, etc.			
FS4A HAZARDOUS MATERIALS STORAGE ENVIRONMENT Installation or repair of special storage environment for the safe holding of flammable or otherw diagestous materials/supplies including vented flammables storage cabinets, holding pens/room cages, fire safe chemical storage rooms, etc.  FS4B HAZARDOUS MATERIALS USER SAFETY Improvements pair storage cabinets holding pens/room cages, fire safe chemical storage rooms, etc.  FS5A EGRESS PATH DESIGNATION Installation, relocation or repair of posted diagrammatic emergency evacuation routes.  FS5B EGRESS PATH DISTANCE/ GEOMETRY Work involving remediation of agrees routing problems including elimination of dead end comido excessive egress distance modifications and geross routing problems including elimination of dead end comido excessive egress distance modifications and geross routing inadequacies.  FS5C EGRESS PATH SEPARATION RATING Restoration of required fire protective barriers including wall rating compromises, fire rated construction of the standard protective barriers including wall rating compromises, fire rated construction of the standard protective barriers including wall rating compromises, fire rated construction of the standard protective barriers including wall rating compromises, fire rated constructions of the standard protective barriers including wall rating compromises, fire rated constructions of the standard protective barriers including wall rating compromises, fire rated constructions of the standard protective barriers including wall rating compromises, fire rated constructions from the standard protective barriers including wall rating compromises, fire rated constructions from the standard protective barriers including wall rating compromises, fire rated constructions from the standard protective barriers including wall rating compromises, and the standard protective barriers including wall rating compromises, and the standard protective barriers including wall rating compromises.  FS5G EGRESS PATH STANDARY FORTAGE Includes all fire docided pro	FS3C	SUPPRESSION	EXTINGUISHERS	Repairs or upgrades to F.E. cabinets/wall fastenings and handheld extinguisher testing/replacement.			
dangerous materials/supplies including vented flammables storage cabinets, holding pene/roor cages, fite safe chemical storegorous, etc.  FS4B HAZARDOUS MATERIALS USER SAFETY Improvements, repairs, installation, or testing of user safety equipment including emergency eyewash 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 corrido excessive egress distance motions and egress routing inadequacies.  FS5C EGRESS PATH SEPARATION RATING Restoration of required fire protective barriers including vall rating compromises, fire rated construction structural fire proofing, wind/safety glazing, transom retrofitting, etc.  FS5D EGRESS PATH OBSTRUCTION Cicarance 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/ Installation/replacement/repair of fire doors and hardware including labeled fire doors, fire shutte 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.  FS6G EGRESS PATH FINISH/FURNITURE RATINGS Remediation of improper fire/smoke ratings of finishes and furniture along egress routes.  SYSTEM DESCRIPTION: HEALTH  HE1A ENVIRONMENTAL CONTROL EQUIPMENT AND ENCLOSURES associated mechanical equipment.  HE1B ENVIRONMENTAL CONTROL GENERAL Includes all measures necessary to control and destroy insects, rodents and other pests.  HE3A REFUSE GENERAL Includes all measures necessary to control and destroy insects, rodents and other pests.  HE4A SANITATION EQUIPMENT LABORATORY AND PROCESS Includes autoclaives, sage washers, steam cleaners, etc.	FS3D	SUPPRESSION	OTHER	Other fire suppression items not specifically categorized elsewhere including fire blankets, carbon dioxide automatic systems, Halon systems, dry chemical systems, etc.			
Safety showers, emergency panic/shut-down system, etc.  FSSA EGRESS PATH DESIGNATION Installation, relocation or repair of posted diagrammatic emergency evacuation routes.  FSSB EGRESS PATH DISTANCE/ GEOMETRY Work involving remediation of egress routing problems including elimination of dead end corrido excessive egress distance modifications and egress routing inadequacies.  FSSC EGRESS PATH SEPARATION RATING Restoration of required fire protein; protective barriers including wall rating compromises, fire rated constructive structural fire proteing, wind/safety glazing, transom retrofitting, etc.  FSSD EGRESS PATH OBSTRUCTION Clearance of items restricting the required egress routes.  FSSE EGRESS PATH STAIRS RAILING Retrofit of stair/landing configurations/structure, railing heights/geometries, etc.  FSSF EGRESS PATH FIRE DOORS/ Installation/eplacement/repair of fire doors and hardware including labeled fire doors, fire shutte closers, magnetic holders, panic hardware, etc.  FSSG EGRESS PATH FINISH/FURNITURE RATINGS Remediation of improper fire/smoke ratings of finishes and furniture along egress routes.  FSSG GENERAL OTHER Life/fire safety items not specifically categorized elsewhere.  SYSTEM DESCRIPTION: HEALTH  HE1A ENVIRONMENTAL CONTROL EQUIPMENT AND ENCLOSURES Temperature control chambers (both hot and cold) for non-food storage. Includes both chamber and associated mechanical equipment.  HE1B ENVIRONMENTAL CONTROL GENERAL Includes all measures necessary to control and destroy insects, rodents and other pests.  HE2A PEST CONTROL GENERAL Includes all measures necessary to control and destroy insects, rodents and other pests.  HE3A REFUSE GENERAL Includes autoclaves, cage washers, steam cleaners, etc.  HE5A FOOD SERVICE KITCHEN EQUIPMENT Includes ranges, grilles, cookers, sculleries, 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.			
FS5B EGRESS PATH DISTANCE/ GEOMETRY Work involving remediation of egress routing problems including elimination of dead end corrido 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 constructive structural fire protective barriers including wall rating compromises, fire rated constructive structural fire protective barriers including wall rating compromises, fire rated constructive structural fire protective barriers including wall rating compromises, fire rated constructive structural fire protective barriers including wall rating compromises, fire rated constructive structural fire protective barriers including wall rating compromises, fire rated constructive structural fire protective barriers including wall rating compromises, fire rated constructive structural fire protective barriers including wall rating compromises, fire rated constructive structural fire protective barriers including wall rating compromises, fire rated constructive structural fire protective barriers including wall rating compromises, fire rated constructive structural fire protective barriers including wall rating compromises, fire rated constructive structural fire protective barriers including wall rating compromises, fire rated constructive structural fire protective barriers including wall rating compromises, fire rated constructive structural fire protective barriers including all retards or retroil plants for fire doors and hardware retroil plants/structure, railing heights/geometries, etc.  FS5E EGRESS PATH FIRE DOORS/ HARDWARE Includes allation of interpretations for including and disposal for non-food storage and plants and structure, railing heights/geometries, etc.  FS5G EGRESS PATH FIRE DOORS/ HARDWARE Includes autoclave, cage washers, steam cleaners, etc.  HE5A FO0D SERVICE KITCHEN EQUIPMENT Includes autoclaves, cage washers, steam cleaners, 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.			
FS5C EGRESS PATH SEPARATION RATING Restoration of required fire protective barriers including wall rating compromises, fire rated construction structural fire protective barriers including wall rating compromises, fire rated construction structural fire proteins, wind/safety glazing, transom retrolitting, etc.  FS5D EGRESS PATH OBSTRUCTION Clearance of items restricting the required egress routes.  FS5E EGRESS PATH STAIRS RAILING Retrolit of stair/landing configurations/structure, railing heights/geometries, etc.  FS5F EGRESS PATH FIRE DOORS/ Installation/replacement/replacem	FS5A	EGRESS PATH	DESIGNATION	Installation, relocation or repair of posted diagrammatic emergency evacuation routes.			
structural fire proofing, wind/safety glazing, transom retrofitting, etc.  FSSD EGRESS PATH OBSTRUCTION Clearance of items restricting the required egress routes.  FSSE EGRESS PATH STARS RAILING Retrofit of stair/landing configurations/structure, railing heights/geometries, etc.  FSSF EGRESS PATH FIRE DOORS/ Installation/replacement/repair of fire doors and hardware including labeled fire doors, fire shutte closers, magnetic holders, panic hardware, etc.  FSSG EGRESS PATH FINISH/FURNITURE RATINGS Remediation of improper fire/smoke ratings of finishes and furniture along egress routes.  FS6A GENERAL OTHER Life/fire safety items not specifically categorized elsewhere.  SYSTEM DESCRIPTION: HEALTH  HE1A ENVIRONMENTAL CONTROL EQUIPMENT AND ENCLOSURES Temperature control chambers (both hot and cold) for non-food storage. Includes both chamber and 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.	FS5B	EGRESS PATH		Work involving remediation of egress routing problems including elimination of dead end corridors, excessive egress distance modifications and egress routing inadequacies.			
FSSE EGRESS PATH STAIRS RAILING Retrofit of stair/landing configurations/structure, railing heights/geometries, etc.  FSSF EGRESS PATH FIRE DOORS/ HARDWARE Installation/replacement/repair of fire doors and hardware including labeled fire doors, fire shutte closers, magnetic holders, panic hardware, etc.  FSSG EGRESS PATH FINISH/FURNITURE RATINGS Remediation of improper fire/smoke ratings of finishes and furniture along egress routes.  FS6A GENERAL OTHER Life/fire safety items not specifically categorized elsewhere.  SYSTEM DESCRIPTION: HEALTH  HE1A ENVIRONMENTAL CONTROL EQUIPMENT AND ENCLOSURES Temperature control chambers (both hot and cold) for non-food storage. Includes both chamber and 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.	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.			
FSSF EGRESS PATH FIRE DOORS/ HARDWARE Installation/replacement/repair of fire doors and hardware including labeled fire doors, fire shutter closers, magnetic holders, panic hardware, etc.  FSSG EGRESS PATH FINISH/FURNITURE RATINGS Remediation of improper fire/smoke ratings of finishes and furniture along egress routes.  FS6A GENERAL OTHER Life/fire safety items not specifically categorized elsewhere.  SYSTEM DESCRIPTION: HEALTH  HE1A ENVIRONMENTAL CONTROL EQUIPMENT AND ENCLOSURES Temperature control chambers (both hot and cold) for non-food storage. Includes both chamber and 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.	FS5D	EGRESS PATH	OBSTRUCTION	Clearance of items restricting the required egress routes.			
HARDWARE closers, magnetic holders, panic hardware, etc.  FS5G EGRESS PATH FINISH/FURNITURE RATINGS Remediation of improper fire/smoke ratings of finishes and furniture along egress routes.  FS6A GENERAL OTHER Life/fire safety items not specifically categorized elsewhere.  SYSTEM DESCRIPTION: HEALTH  HE1A ENVIRONMENTAL CONTROL EQUIPMENT AND ENCLOSURES Temperature control chambers (both hot and cold) for non-food storage. Includes both chamber and 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.	FS5E	EGRESS PATH	STAIRS RAILING	Retrofit of stair/landing configurations/structure, railing heights/geometries, etc.			
FS6A GENERAL OTHER Life/fire safety items not specifically categorized elsewhere.  SYSTEM DESCRIPTION: HEALTH  HE1A ENVIRONMENTAL CONTROL EQUIPMENT AND ENCLOSURES Temperature control chambers (both hot and cold) for non-food storage. Includes both chamber and 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.	FS5F	EGRESS PATH		Installation/replacement/repair of fire doors and hardware including labeled fire doors, fire shutters, closers, magnetic holders, panic hardware, etc.			
SYSTEM DESCRIPTION: HEALTH  HE1A ENVIRONMENTAL CONTROL EQUIPMENT AND ENCLOSURES Temperature control chambers (both hot and cold) for non-food storage. Includes both chamber and 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.	FS5G	EGRESS PATH	FINISH/FURNITURE RATINGS	Remediation of improper fire/smoke ratings of finishes and furniture along egress routes.			
HE1A ENVIRONMENTAL CONTROL EQUIPMENT AND ENCLOSURES  Temperature control chambers (both hot and cold) for non-food storage. Includes both chamber and 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.	FS6A	GENERAL	OTHER	Life/fire safety items not specifically categorized elsewhere.			
ENCLOSURES 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.	SYSTEM DI	ESCRIPTION: HEALTH					
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.	HE1A	ENVIRONMENTAL CONTROL		Temperature control chambers (both hot and cold) for non-food storage. Includes both chamber and all associated mechanical equipment.			
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.	HE1B	ENVIRONMENTAL CONTROL	OTHER	General environmental control problems not catalogued elsewhere.			
HE4A SANITATION EQUIPMENT LABORATORY AND PROCESS Includes autoclaves, cage washers, steam cleaners, etc.  HE5A FOOD SERVICE KITCHEN EQUIPMENT Includes ranges, grilles, cookers, sculleries, etc.	HE2A	PEST CONTROL	GENERAL	Includes all measures necessary to control and destroy insects, rodents and other pests.			
HE5A FOOD SERVICE KITCHEN EQUIPMENT Includes ranges, grilles, cookers, sculleries, etc.	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.			
USED FOOD SERVICE COLD STORAGE	HE5A	FOOD SERVICE	KITCHEN EQUIPMENT	Includes ranges, grilles, cookers, sculleries, etc.			
TEDB   FOOD SERVICE   COLD STORAGE   Includes the cold storage room and all associated retrigeration equipment.	HE5B	FOOD SERVICE	COLD STORAGE	Includes the cold storage room and all associated refrigeration equipment.			



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



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



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



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



# DETAILED PROJECT SUMMARIES AND TOTALS

# **Detailed Project Totals**

#### **Facility Condition Analysis**

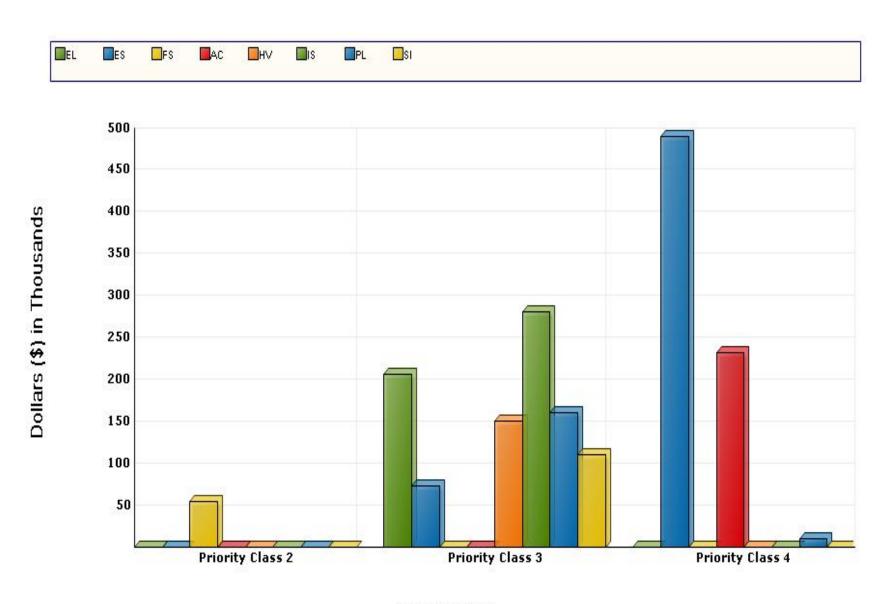
## **System Code by Priority Class**

Suctom			Pric	ority Classes		
System Code	System Description	1	2	3	4	Subtotal
AC	ACCESSIBILITY	0	0	0	232,117	232,117
EL	ELECTRICAL	0	0	207,993	0	207,993
ES	EXTERIOR	0	0	73,417	490,981	564,399
FS	FIRE/LIFE SAFETY	0	54,079	0	0	54,079
HV	HVAC	0	0	151,078	0	151,078
IS	INTERIOR/FINISH SYS.	0	0	281,929	0	281,929
PL	PLUMBING	0	0	160,225	10,288	170,513
SI	SITE	0	0	111,067	0	111,067
	TOTALS	0	54,079	985,710	733,386	1,773,176

Facility Replacement Cost	\$4,093,000
Facility Condition Needs Index	0.43

Gross Square Feet 15,57	Total Cost Per Square Foot \$113.85
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# **System Code by Priority Class**



**Priority Class** 

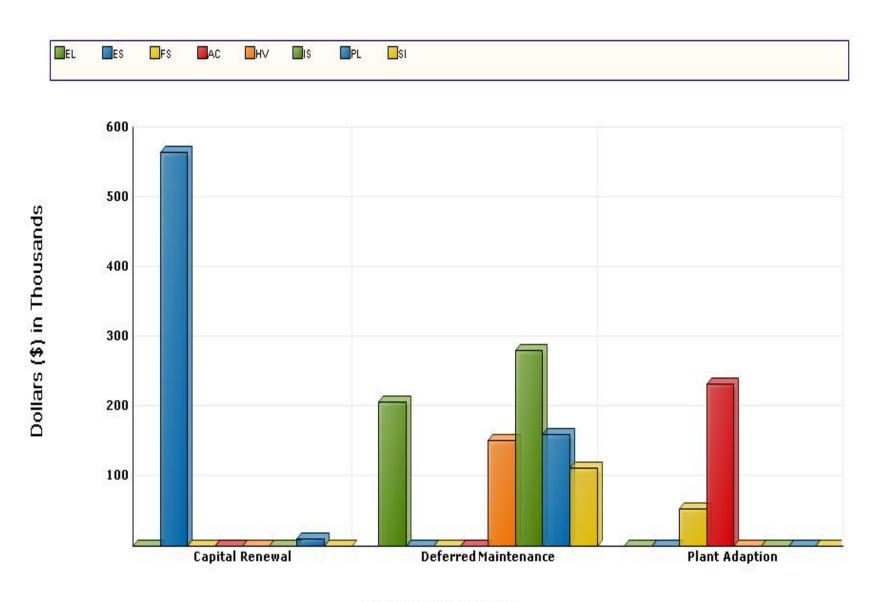
## Detailed Project Totals Facility Condition Analysis System Code by Project Class

		Project Classes				
System Code	System Description	Captial Renewal	Deferred Maintenance	Plant Adaption	Subtotal	
AC	ACCESSIBILITY	0	0	232,117	232,117	
EL	ELECTRICAL	0	207,993	0	207,993	
ES	EXTERIOR	564,399	0	0	564,399	
FS	FIRE/LIFE SAFETY	0	0	54,079	54,079	
HV	HVAC	0	151,078	0	151,078	
IS	INTERIOR/FINISH SYS.	0	281,929	0	281,929	
PL	PLUMBING	10,288	160,225	0	170,513	
SI	SITE	0	111,067	0	111,067	
	TOTALS	574,686	912,293	286,196	1,773,176	

Facility Replacement Cost	\$4,093,000
Facility Condition Needs Index	0.43

	Gross Square Feet	15,574	Total Cost Per Square Foot	\$113.85
- 1		1 1		

**System Code by Project Class** 



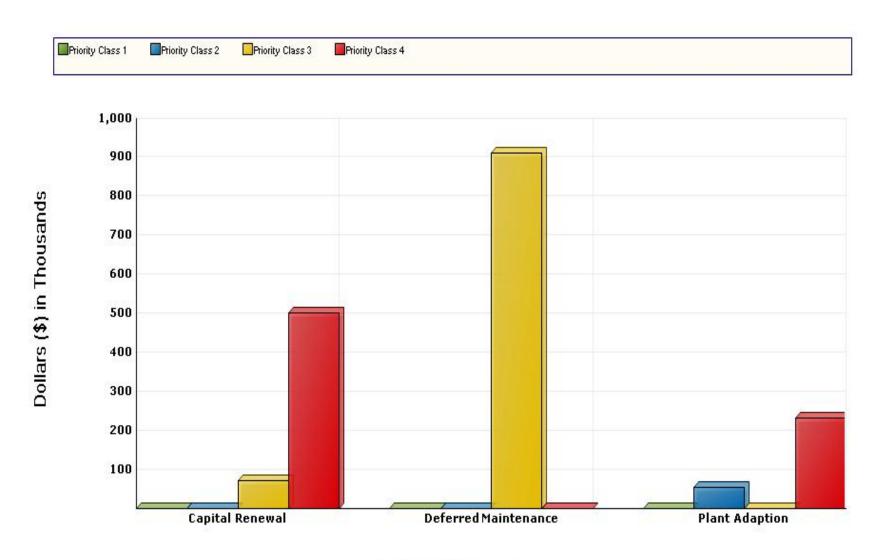
**Project Classification** 

# Detailed Project Summary Facility Condition Analysis Project Class by Priority Class

	Priority Classes						
Project Class	1	2	3	4	Subtotal		
Capital Renewal	0	0	73,417	501,269	574,686		
Deferred Maintenance	0	0	912,293	0	912,293		
Plant Adaption	0	54,079	0	232,117	286,196		
TOTALS	0	54,079	985,710	733,386	1,773,176		

Facility Replacement Cost	\$4,093,000
Facility Condition Needs Index	0.43

**Project Class by Priority Class** 



**Project Classification** 

#### Detailed Project Summary Facility Condition Analysis

#### **Priority Class - Priority Sequence**

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Total Cost
FS2A	MEDPFS01	2	1	FIRE ALARM SYSTEM REPLACEMENT	36,009	5,762	41,771
FS1A	MEDPFS02	2	2	INSTALL EMERGENCY LIGHTS AND EXIT SIGNS	10,611	1,698	12,308
				Totals for Priority Class 2	46,620	7,459	54,079
ES5A	MEDPES03	3	3	EXTERIOR DOOR REPLACEMENT	50,350	8,056	58,406
ES2B	MEDPES01	3	4	RESTORE BRICK VENEER	12,941	2,071	15,011
HV3A	MEDPHV01	3	5	REPLACE SPLIT DX SYSTEMS	75,536	12,086	87,622
HV4B	MEDPHV02	3	6	EXHAUST FAN REPLACEMENT	54,704	8,753	63,457
EL3B	MEDPEL02	3	7	UPGRADE ELECTRICAL DISTRIBUTION NETWORK	149,119	23,859	172,978
EL4B	MEDPEL01	3	8	INTERIOR LIGHTING UPGRADE	30,186	4,830	35,016
IS1A	MEDPIS01	3	9	REFINISH FLOORING	83,308	13,329	96,637
IS2B	MEDPIS02	3	10	REFINISH WALLS	35,527	5,684	41,211
IS3B	MEDPIS03	3	11	REFINISH CEILINGS	52,052	8,328	60,380
IS4A	MEDPIS04	3	12	REPLACE INTERIOR DOORS	72,155	11,545	83,700
PL1A	MEDPPL02	3	13	WATER SUPPLY PIPING REPLACEMENT	54,769	8,763	63,532
PL2A	MEDPPL03	3	14	DRAIN PIPING REPLACEMENT	83,357	13,337	96,694
SI4A	MEDPSI01	3	15	SITE PAVING UPGRADES	95,748	15,320	111,067
				Totals for Priority Class 3	849,750	135,960	985,710
AC2A	MEDPAC01	4	16	BUILDING ENTRY ACCESSIBILITY UPGRADES	4,141	663	4,803
AC4A	MEDPAC02	4	17	INTERIOR AMENITY ACCESSIBILITY UPGRADES	86,352	13,816	100,169
AC3E	MEDPAC03	4	18	RESTROOM RENOVATION	109,608	17,537	127,145
ES4B	MEDPES05	4	19	MEMBRANE ROOF REPLACEMENT	76,487	12,238	88,725
ES5B	MEDPES04	4	20	WINDOW REPLACEMENT	320,753	51,320	372,073
ES2B	MEDPES02	4	21	EXTERIOR SIDING REPLACEMENT	26,020	4,163	30,183
PL1E	MEDPPL01	4	22	DOMESTIC WATER HEATER REPLACEMENT	8,869	1,419	10,288
				Totals for Priority Class 4	632,230	101,157	733,386
				Grand Total:	1,528,600	244,576	1,773,176

#### Detailed Project Summary Facility Condition Analysis Project Cost Range

#### MEDP: MEDICAL PAVILIONS 1-10

Cat. Code Project Number Pri Pri Project Construction **Professional** Total Title Fee Cls Seq Cost Cost FS2A MEDPFS01 2 36,009 1 FIRE ALARM SYSTEM REPLACEMENT 5,762 41,771 FS1A MEDPFS02 2 2 INSTALL EMERGENCY LIGHTS AND EXIT SIGNS 10,611 1,698 12,308 **Totals for Priority Class 2** 46,620 7,459 54,079 ES2B MEDPES01 RESTORE BRICK VENEER 3 4 12,941 2,071 15,011 ES5A MEDPES03 3 3 EXTERIOR DOOR REPLACEMENT 50,350 8,056 58,406 IS1A MEDPIS01 3 9 REFINISH FLOORING 83,308 13,329 96,637 IS2B MEDPIS02 3 **REFINISH WALLS** 35,527 5,684 41,211 10 IS3B MEDPIS03 3 **REFINISH CEILINGS** 52,052 8,328 60,380 11 IS4A REPLACE INTERIOR DOORS MEDPIS04 3 72,155 11,545 83,700 12 HV3A MEDPHV01 3 5 REPLACE SPLIT DX SYSTEMS 75,536 12,086 87,622 HV4B MEDPHV02 3 6 **EXHAUST FAN REPLACEMENT** 54,704 8,753 63,457 EL4B MEDPEL01 3 8 INTERIOR LIGHTING UPGRADE 30,186 4,830 35,016 WATER SUPPLY PIPING REPLACEMENT PL1A MEDPPL02 3 13 54,769 8,763 63,532 PL2A MEDPPL03 3 14 DRAIN PIPING REPLACEMENT 83,357 13,337 96,694 **Totals for Priority Class 3** 604,884 96,781 701,665 AC2A MEDPAC01 4 16 **BUILDING ENTRY ACCESSIBILITY UPGRADES** 4,141 663 4,803 ES2B MEDPES02 21 EXTERIOR SIDING REPLACEMENT 26,020 4,163 30,183 ES4B MEMBRANE ROOF REPLACEMENT 12,238 MEDPES05 4 19 76,487 88,725 PL1E MEDPPL01 DOMESTIC WATER HEATER REPLACEMENT 4 22 8,869 1,419 10,288 **Totals for Priority Class 4** 115,516 18,483 133,999 Grand Totals for Projects < 100,000 767,020 122,723 889,743

#### **Detailed Project Summary Facility Condition Analysis Project Cost Range**

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Total Cost
SI4A	MEDPSI01	3	15	SITE PAVING UPGRADES	95,748	15,320	111,067
EL3B	MEDPEL02	3	7	UPGRADE ELECTRICAL DISTRIBUTION NETWORK	149,119	23,859	172,978
				Totals for Priority Class 3	244,867	39,179	284,045
AC4A	MEDPAC02	4	17	INTERIOR AMENITY ACCESSIBILITY UPGRADES	86,352	13,816	100,169
AC3E	MEDPAC03	4	18	RESTROOM RENOVATION	109,608	17,537	127,145
ES5B	MEDPES04	4	20	WINDOW REPLACEMENT	320,753	51,320	372,073
				Totals for Priority Class 4	516,713	82,674	599,387
				Grand Totals for Projects >= 100,000 and < 500,000	761,580	121,853	883,432
				Grand Totals For All Projects:	1,528,600	244,576	1,773,176

### Detailed Project Summary Facility Condition Analysis Project Classification

MEDP: MEDICAL PAVILIONS 1-10

Cat Code	Project Number	Pri. Seq.	Project Classification	Pri. Cls	Project Title	Total Cost
ES5A	MEDPES03	3	Capital Renewal	3	EXTERIOR DOOR REPLACEMENT	58,406
ES2B	MEDPES01	4	Capital Renewal	3	RESTORE BRICK VENEER	15,011
ES4B	MEDPES05	19	Capital Renewal	4	MEMBRANE ROOF REPLACEMENT	88,725
ES5B	MEDPES04	20	Capital Renewal	4	WINDOW REPLACEMENT	372,073
ES2B	MEDPES02	21	Capital Renewal	4	EXTERIOR SIDING REPLACEMENT	30,183
PL1E	MEDPPL01	22	Capital Renewal	4	DOMESTIC WATER HEATER REPLACEMENT	10,288
					Totals for Capital Renewal	574,686
HV3A	MEDPHV01	5	Deferred Maintenance	3	REPLACE SPLIT DX SYSTEMS	87,622
HV4B	MEDPHV02	6	Deferred Maintenance	3	EXHAUST FAN REPLACEMENT	63,457
EL3B	MEDPEL02	7	Deferred Maintenance	3	UPGRADE ELECTRICAL DISTRIBUTION NETWORK	172,978
EL4B	MEDPEL01	8	Deferred Maintenance	3	INTERIOR LIGHTING UPGRADE	35,016
IS1A	MEDPIS01	9	Deferred Maintenance	3	REFINISH FLOORING	96,637
IS2B	MEDPIS02	10	Deferred Maintenance	3	REFINISH WALLS	41,211
IS3B	MEDPIS03	11	Deferred Maintenance	3	REFINISH CEILINGS	60,380
IS4A	MEDPIS04	12	Deferred Maintenance	3	REPLACE INTERIOR DOORS	83,700
PL1A	MEDPPL02	13	Deferred Maintenance	3	WATER SUPPLY PIPING REPLACEMENT	63,532
PL2A	MEDPPL03	14	Deferred Maintenance	3	DRAIN PIPING REPLACEMENT	96,694
SI4A	MEDPSI01	15	Deferred Maintenance	3	SITE PAVING UPGRADES	111,067
					Totals for Deferred Maintenance	912,293
FS2A	MEDPFS01	1	Plant Adaption	2	FIRE ALARM SYSTEM REPLACEMENT	41,771
FS1A	MEDPFS02	2	Plant Adaption	2	INSTALL EMERGENCY LIGHTS AND EXIT SIGNS	12,308
AC2A	MEDPAC01	16	Plant Adaption	4	BUILDING ENTRY ACCESSIBILITY UPGRADES	4,803
AC4A	MEDPAC02	17	Plant Adaption	4	INTERIOR AMENITY ACCESSIBILITY UPGRADES	100,169
AC3E	MEDPAC03	18	Plant Adaption	4	RESTROOM RENOVATION	127,145
					Totals for Plant Adaption	286,196
					Grand Total:	1,773,176

# Detailed Project Summary Facility Condition Analysis

# **Energy Conservation**

MEDP: MEDICAL PAVILIONS 1-10

Cat Code	Project Number	Pri Cls	Pri Seq	Project Title	Total Cost	Annual Savings	Simple Payback
EL4B	MEDPEL01	3	8	INTERIOR LIGHTING UPGRADE	35,016	2,780	12.6
				Totals for Priority Class 3	35,016	2,780	12.6
ES4B	MEDPES05	4	19	MEMBRANE ROOF REPLACEMENT	88,725	1,200	73.94
ES5B	MEDPES04	4	20	WINDOW REPLACEMENT	372,073	700	531.53
				Totals for Priority Class 4	460,799	1,900	242.53
				Grand Total:	495,814	4,680	105.94

#### Detailed Project Summary Facility Condition Analysis Category/System Code

#### MEDP: MEDICAL PAVILIONS 1-10

Cat. **Project** Pri Pri Construction **Professional** Total Number Code Cls Seq Project Title Cost Fee Cost MEDPAC01 16 BUILDING ENTRY ACCESSIBILITY UPGRADES AC2A 4 4,141 663 4,803 AC4A MEDPAC02 17 INTERIOR AMENITY ACCESSIBILITY UPGRADES 86,352 13,816 100,169 AC3E MEDPAC03 18 RESTROOM RENOVATION 109,608 4 17,537 127,145 **Totals for System Code: ACCESSIBILITY** 200,101 32,016 232,117 EL3B MEDPEL02 3 UPGRADE ELECTRICAL DISTRIBUTION NETWORK 149,119 23,859 172,978 INTERIOR LIGHTING UPGRADE EL4B MEDPEL01 3 30,186 4,830 35,016 **Totals for System Code: ELECTRICAL** 179,305 28,689 207,993 ES5A MEDPES03 3 3 EXTERIOR DOOR REPLACEMENT 50,350 8,056 58,406 ES2B MEDPES01 RESTORE BRICK VENEER 2,071 3 12,941 15,011 ES4B MEDPES05 4 MEMBRANE ROOF REPLACEMENT 76,487 12,238 88,725 ES5B MEDPES04 WINDOW REPLACEMENT 320,753 51,320 372,073 4 ES2B MEDPES02 EXTERIOR SIDING REPLACEMENT 26.020 4,163 30,183 **Totals for System Code: EXTERIOR** 486,550 77,848 564,399 FS2A MEDPFS01 2 FIRE ALARM SYSTEM REPLACEMENT 36,009 41,771 5,762 2 **INSTALL EMERGENCY LIGHTS AND EXIT SIGNS** FS1A MEDPFS02 2 10,611 1,698 12,308 Totals for System Code: FIRE/LIFE SAFETY 46,620 7,459 54,079 HV3A MEDPHV01 3 REPLACE SPLIT DX SYSTEMS 75,536 12,086 87,622 HV4B MEDPHV02 3 EXHAUST FAN REPLACEMENT 54,704 8,753 63,457 **Totals for System Code: HVAC** 130,240 20,838 151,078 MEDPIS01 REFINISH FLOORING IS1A 3 9 83,308 13,329 96,637 IS2B MEDPIS02 **REFINISH WALLS** 35,527 3 10 5,684 41,211 IS3B MEDPIS03 **REFINISH CEILINGS** 52,052 8,328 60,380 3 IS4A MEDPIS04 3 12 REPLACE INTERIOR DOORS 72,155 11,545 83,700 Totals for System Code: INTERIOR/FINISH SYS. 243,042 38,887 281,929 MEDPPL02 WATER SUPPLY PIPING REPLACEMENT PI 1A 3 54,769 8,763 63,532 PL2A MEDPPL03 3 DRAIN PIPING REPLACEMENT 83,357 13,337 96,694 PL1E MEDPPL01 4 22 DOMESTIC WATER HEATER REPLACEMENT 8,869 1,419 10,288 **Totals for System Code: PLUMBING** 146,994 23,519 170,513 SI4A MEDPSI01 3 15 SITE PAVING UPGRADES 95,748 15.320 111.067 **Totals for System Code: SITE** 95,748 15,320 111,067 **Grand Total:** 1,528,600 244,576 1,773,176

# **FACILITY CONDITION ANALYSIS**



# SPECIFIC PROJECT DETAILS ILLUSTRATING DESCRIPTION / COST

# Facility Condition Analysis Section Three

MEDP: MEDICAL PAVILIONS 1-10

#### **Project Description**

Project Number: MEDPFS01 Title: FIRE ALARM SYSTEM REPLACEMENT

Priority Sequence: 1

Priority Class: 2

Category Code: FS2A System: FIRE/LIFE SAFETY

Component: DETECTION ALARM

Element: GENERAL

Building Code: MEDP

Building Name: MEDICAL PAVILIONS 1-10

Subclass/Savings: Not Applicable

Code Application: ADAAG 702.1

NFPA 1, 101

Project Class: Plant Adaption

**Project Date:** 10/21/2009

Project

Location: Floor-wide: Floor(s) 1

### **Project Description**

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

# Facility Condition Analysis Section Three

MEDP: MEDICAL PAVILIONS 1-10

# **Project Cost**

Project Number: MEDPFS01

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Fire alarm control panel(s), annunciator, smoke and heat detectors, manual pull stations, audible and visual alarms, wiring, raceways, and cut and patching materials	SF	15,574	\$1.46	\$22,738	\$0.89	\$13,861	\$36,599
Project Totals	i:			\$22,738		\$13,861	\$36,599

Material/Labor Cost		\$36,599
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		\$30,008
General Contractor Mark Up at 20.0%	+	\$6,002
Construction Cost		\$36,009
Professional Fees at 16.0%	+	\$5,762
Total Project Cost		\$41,771

# Facility Condition Analysis Section Three

MEDP: MEDICAL PAVILIONS 1-10

#### **Project Description**

Project Number: MEDPFS02 Title: INSTALL EMERGENCY LIGHTS AND EXIT

**SIGNS** 

Priority Sequence: 2

Priority Class: 2

Category Code: FS1A System: FIRE/LIFE SAFETY

Component: LIGHTING

Element: EGRESS LTG./EXIT SIGNAGE

Building Code: MEDP

Building Name: MEDICAL PAVILIONS 1-10

Subclass/Savings: Not Applicable

Code Application: NFPA 101-47

IBC 1011

Project Class: Plant Adaption

**Project Date:** 10/21/2009

Project

**Location**: Floor-wide: Floor(s) 1

#### **Project Description**

Replace the existing exit signage and emergency lighting throughout the pavilions. Install new exit signs and emergency lights as needed. The new units should have individual battery packs for backup power. LED type exit signs are recommended because they are energy efficient and require minimal maintenance.

# Facility Condition Analysis Section Three

MEDP: MEDICAL PAVILIONS 1-10

# **Project Cost**

Project Number: MEDPFS02

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Installation of new battery pack LED exit signs, including all connections	EA	13	\$184	\$2,392	\$231	\$3,003	\$5,395
Installation of new battery pack emergency lights, including all connections	EA	16	\$186	\$2,976	\$231	\$3,696	\$6,672
Project Totals	:			\$5,368		\$6,699	\$12,067

Material/Labor Cost		\$12,067
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		\$8,842
General Contractor Mark Up at 20.0%	+	\$1,768
Construction Cost		\$10,611
Professional Fees at 16.0%	+	\$1,698
Total Project Cost		\$12,308

# Facility Condition Analysis Section Three

MEDP: MEDICAL PAVILIONS 1-10

#### **Project Description**

Project Number: MEDPES03 Title: EXTERIOR DOOR REPLACEMENT

Priority Sequence: 3

Priority Class: 3

Category Code: ES5A System: EXTERIOR

Component: FENESTRATIONS

Element: DOORS

Building Code: MEDP

Building Name: MEDICAL PAVILIONS 1-10

Subclass/Savings: Not Applicable

Code Application: Not Applicable

Project Class: Capital Renewal

**Project Date:** 10/8/2009

Project

**Location:** Building-wide: Floor(s) 1

### **Project Description**

Replacements are recommended for the exterior door systems. This project includes the primary and secondary entrance and service doors. The replacement units should maintain the architectural design aspects of the facilities and be modern, energy-efficient applications.

# Facility Condition Analysis Section Three

MEDP: MEDICAL PAVILIONS 1-10

# **Project Cost**

Project Number: MEDPES03

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
High traffic door system	LEAF	5	\$1,978	\$9,890	\$1,999	\$9,995	\$19,885
Low traffic door system	LEAF	16	\$1,031	\$16,496	\$1,250	\$20,000	\$36,496
Proje	ect Totals:			\$26,386		\$29,995	\$56,381

Material/Labor Cost		\$56,381
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		\$41,958
General Contractor Mark Up at 20.0%	+	\$8,392
Construction Cost		\$50,350
Professional Fees at 16.0%	+	\$8,056
Total Project Cost		\$58,406

# Facility Condition Analysis Section Three

MEDP: MEDICAL PAVILIONS 1-10

#### **Project Description**

Project Number: MEDPES01 Title: RESTORE BRICK VENEER

Priority Sequence: 4

Priority Class: 3

Category Code: ES2B System: EXTERIOR

Component: COLUMNS/BEAMS/WALLS

Element: FINISH

Building Code: MEDP

Building Name: MEDICAL PAVILIONS 1-10

Subclass/Savings: Not Applicable

Code Application: Not Applicable

Project Class: Capital Renewal

**Project Date:** 10/8/2009

Project

**Location:** Building-wide: Floor(s) 1

### **Project Description**

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

# Facility Condition Analysis Section Three

MEDP: MEDICAL PAVILIONS 1-10

# **Project Cost**

Project Number: MEDPES01

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Cleaning and surface preparation	SF	7,880	\$0.11	\$867	\$0.22	\$1,734	\$2,600
Selective mortar and / or sealant repairs (assumes 10 linear feet for every 100 square feet of envelope)	LF	788	\$2.45	\$1,931	\$4.99	\$3,932	\$5,863
Applied finish or sealant	SF	7,880	\$0.22	\$1,734	\$0.82	\$6,462	\$8,195
Project Totals	:	1	1	\$4,531	1	\$12,127	\$16,658

Material/Labor Cost		\$16,658
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		\$10,784
General Contractor Mark Up at 20.0%	+	\$2,157
Construction Cost		\$12,941
Professional Fees at 16.0%	+	\$2,071
Total Project Cost		\$15,011

# Facility Condition Analysis Section Three

MEDP: MEDICAL PAVILIONS 1-10

#### **Project Description**

Project Number: MEDPHV01 Title: REPLACE SPLIT DX SYSTEMS

Priority Sequence: 5

Priority Class: 3

Category Code: HV3A System: HVAC

Component: HEATING/COOLING

Element: SYSTEM RETROFIT/REPLACE

Building Code: MEDP

Building Name: MEDICAL PAVILIONS 1-10

Subclass/Savings: Not Applicable

Code Application: ASHRAE 62-2004

Project Class: Deferred Maintenance

**Project Date:** 10/21/2009

Project

Location: Floor-wide: Floor(s) 1, R

### **Project Description**

Remove the existing split DX air conditioning systems, including condensing units, evaporator fan units, refrigeration piping, controls, and connections. Install new split DX systems of the latest energy-efficient design.

# Facility Condition Analysis Section Three

MEDP: MEDICAL PAVILIONS 1-10

# **Project Cost**

Project Number: MEDPHV01

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Replace split DX air conditioning system	TON	40	\$1,196	\$47,836	\$720	\$28,804	\$76,639
Project Totals		\$47,836		\$28,804	\$76,639		

Total Project Cost		\$87,622
Professional Fees at 16.0%	+	\$12,086
Construction Cost		\$75,536
General Contractor Mark Up at 20.0%	+	\$12,589
Material/Labor Indexed Cost		\$62,947
Labor Index		51.3%
Material Index		100.7%
Material/Labor Cost		\$76,639

# Facility Condition Analysis Section Three

MEDP: MEDICAL PAVILIONS 1-10

#### **Project Description**

Project Number: MEDPHV02 Title: EXHAUST FAN REPLACEMENT

Priority Sequence: 6

Priority Class: 3

Category Code: HV4B System: HVAC

Component: AIR MOVING/VENTILATION

Element: EXHAUST FANS

Building Code: MEDP

Building Name: MEDICAL PAVILIONS 1-10

Subclass/Savings: Not Applicable

Code Application: ASHRAE 62-2004

Project Class: Deferred Maintenance

**Project Date:** 10/21/2009

Project

Location: Floor-wide: Floor(s) R

### **Project Description**

The exhaust fans are recommended for replacement. The statistical life cycle for an exhaust fan is approximately twenty years. At or beyond this time, exhaust fans can incur high maintenance costs that justify replacement. Replace the existing fans with new units to include all electrical connections. Modify existing ductwork, as necessary, to accommodate the new fans.

# Facility Condition Analysis Section Three

MEDP: MEDICAL PAVILIONS 1-10

# **Project Cost**

Project Number: MEDPHV02

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Replace centrifugal roof exhauster (medium size, belt-driven)	EA	10	\$1,350	\$13,500	\$1,300	\$13,000	\$26,500
Replace exhaust system ductwork	CFM	10,000	\$2.26	\$22,600	\$0.50	\$5,000	\$27,600
Project Totals:				\$36,100		\$18,000	\$54,100

Material/Labor Cost		\$54,100
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		\$45,587
General Contractor Mark Up at 20.0%	+	\$9,117
<b>Construction Cost</b>		\$54,704
Professional Fees at 16.0%	+	\$8,753
Total Project Cost		\$63,457

# Facility Condition Analysis Section Three

MEDP: MEDICAL PAVILIONS 1-10

#### **Project Description**

Project Number: MEDPEL02 Title: UPGRADE ELECTRICAL DISTRIBUTION

**NETWORK** 

Priority Sequence: 7

Priority Class: 3

Category Code: EL3B System: ELECTRICAL

Component: SECONDARY DISTRIBUTION

Element: DISTRIBUTION NETWORK

Building Code: MEDP

Building Name: MEDICAL PAVILIONS 1-10

Subclass/Savings: Not Applicable

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

Project Class: Deferred Maintenance

**Project Date:** 10/21/2009

Project

**Location**: Floor-wide: Floor(s) 1

#### **Project Description**

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

# Facility Condition Analysis Section Three

MEDP: MEDICAL PAVILIONS 1-10

# **Project Cost**

Project Number: MEDPEL02

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Power panels, conductors, raceways, devices, demolition, and cut and patching materials	SF	15,574	\$4.49	\$69,927	\$6.74	\$104,969	\$174,896
Project Totals:				\$69.927		\$104.969	\$174.896

Material/Labor Cost		\$174,896
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		\$124,266
General Contractor Mark Up at 20.0%	+	\$24,853
Construction Cost		\$149,119
Professional Fees at 16.0%	+	\$23,859
Total Project Cost		\$172,978

# Facility Condition Analysis Section Three

MEDP: MEDICAL PAVILIONS 1-10

#### **Project Description**

Project Number: MEDPEL01 Title: INTERIOR LIGHTING UPGRADE

Priority Sequence: 8

Priority Class: 3

Category Code: EL4B System: ELECTRICAL

Component: DEVICES AND FIXTURES

Element: INTERIOR LIGHTING

Building Code: MEDP

Building Name: MEDICAL PAVILIONS 1-10

**Subclass/Savings:** Energy Conservation \$2,780

Code Application: NEC Articles 210, 410

Project Class: Deferred Maintenance

**Project Date:** 10/21/2009

Project

Location: Floor-wide: Floor(s) 1

### **Project Description**

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

# Facility Condition Analysis Section Three

MEDP: MEDICAL PAVILIONS 1-10

# **Project Cost**

Project Number: MEDPEL01

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
High efficiency fluorescent fixtures, occupancy sensors, and demolition of existing lighting	SF	10,902	\$1.41	\$15,372	\$1.73	\$18,860	\$34,232
Project Total	ls:			\$15.372		\$18.860	\$34.232

Material/Labor Cost		\$34,232
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		\$25,155
General Contractor Mark Up at 20.0%	+	\$5,031
Construction Cost		\$30,186
Professional Fees at 16.0%	+	\$4,830
Total Project Cost		\$35,016

# Facility Condition Analysis Section Three

MEDP: MEDICAL PAVILIONS 1-10

#### **Project Description**

Project Number: MEDPIS01 Title: REFINISH FLOORING

Priority Sequence: 9

Priority Class: 3

Category Code: IS1A System: INTERIOR/FINISH SYS.

Component: FLOOR

Element: FINISHES-DRY

Building Code: MEDP

Building Name: MEDICAL PAVILIONS 1-10

Subclass/Savings: Not Applicable

Code Application: Not Applicable

Project Class: Deferred Maintenance

**Project Date:** 10/8/2009

**Project** 

Location: Floor-wide: Floor(s) 1

#### **Project Description**

Interior floor finishes include carpet, vinyl tile, and sheet vinyl flooring. The applications vary in age and condition from suite to suite. Floor finish upgrades should be considered as part of any future cosmetic improvements or major comprehensive renovation efforts.

# Facility Condition Analysis Section Three

MEDP: MEDICAL PAVILIONS 1-10

# **Project Cost**

Project Number: MEDPIS01

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Carpet	SF	7,690	\$5.36	\$41,218	\$2.00	\$15,380	\$56,598
Vinyl floor tile	SF	4,140	\$3.53	\$14,614	\$2.50	\$10,350	\$24,964
	Project Totals:			\$55,833		\$25,730	\$81,563

Material/Labor Cost		\$81,563
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		\$69,423
General Contractor Mark Up at 20.0%	+	\$13,885
Construction Cost		\$83,308
Professional Fees at 16.0%	+	\$13,329
Total Project Cost		\$96,637

# Facility Condition Analysis Section Three

MEDP: MEDICAL PAVILIONS 1-10

#### **Project Description**

Project Number: MEDPIS02 Title: REFINISH WALLS

Priority Sequence: 10

Priority Class: 3

Category Code: IS2B System: INTERIOR/FINISH SYS.

Component: PARTITIONS

Element: FINISHES

Building Code: MEDP

Building Name: MEDICAL PAVILIONS 1-10

Subclass/Savings: Not Applicable

Code Application: Not Applicable

Project Class: Deferred Maintenance

**Project Date:** 10/8/2009

Project

Location: Floor-wide: Floor(s) 1

### **Project Description**

Interior wall finishes consist of vinyl wall covering or painted plaster or concrete. The applications vary in age and condition from suite to suite. Wall finish upgrades should be considered as part of any future cosmetic improvements or major comprehensive renovation efforts.

# Facility Condition Analysis Section Three

MEDP: MEDICAL PAVILIONS 1-10

# **Project Cost**

Project Number: MEDPIS02

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Standard wall finish (paint, wall covering, etc.)	SF	50,460	\$0.17	\$8,578	\$0.81	\$40,873	\$49,451
Project Totals		-		\$8,578		\$40,873	\$49,451

Material/Labor Cost		\$49,451
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		\$29,606
General Contractor Mark Up at 20.0%	+	\$5,921
Construction Cost		\$35,527
Professional Fees at 16.0%	+	\$5,684
Total Project Cost		\$41,211

# Facility Condition Analysis Section Three

MEDP: MEDICAL PAVILIONS 1-10

#### **Project Description**

Project Number: MEDPIS03 Title: REFINISH CEILINGS

Priority Sequence: 11

Priority Class: 3

Category Code: IS3B System: INTERIOR/FINISH SYS.

Component: CEILINGS

Element: REPLACEMENT

Building Code: MEDP

Building Name: MEDICAL PAVILIONS 1-10

Subclass/Savings: Not Applicable

Code Application: Not Applicable

Project Class: Deferred Maintenance

**Project Date:** 10/8/2009

Project

Location: Floor-wide: Floor(s) 1

### **Project Description**

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

# Facility Condition Analysis Section Three

MEDP: MEDICAL PAVILIONS 1-10

# **Project Cost**

Project Number: MEDPIS03

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Acoustical tile ceiling system	SF	11,840	\$2.12	\$25,101	\$2.98	\$35,283	\$60,384
Project T	otals:			\$25,101		\$35,283	\$60,384

Total Project Cost		\$60,380
Professional Fees at 16.0%	+	\$8,328
Construction Cost		\$52,052
General Contractor Mark Up at 20.0%	+	\$8,675
Material/Labor Indexed Cost		\$43,377
Labor Index		51.3%
Material Index		100.7%
Material/Labor Cost		\$60,384

# Facility Condition Analysis Section Three

MEDP: MEDICAL PAVILIONS 1-10

#### **Project Description**

Project Number: MEDPIS04 Title: REPLACE INTERIOR DOORS

Priority Sequence: 12

Priority Class: 3

Category Code: IS4A System: INTERIOR/FINISH SYS.

Component: DOORS

Element: GENERAL

Building Code: MEDP

Building Name: MEDICAL PAVILIONS 1-10

Subclass/Savings: Not Applicable

Code Application: Not Applicable

Project Class: Deferred Maintenance

**Project Date:** 10/8/2009

Project

Location: Floor-wide: Floor(s) 1

### **Project Description**

While several pavilions have new interior doors, the condition of the remaining interior door systems is such that door system replacements are recommended as part of a comprehensive renovation effort. Complete demolition of existing door systems and replacement according to a code compliant plan to protect egress passages properly is recommended. Lever door hardware and Braille signage should be included in this effort.

# Facility Condition Analysis Section Three

MEDP: MEDICAL PAVILIONS 1-10

# **Project Cost**

Project Number: MEDPIS04

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Rated door and rated metal frame, including all hardware and accessible signage	EA	55	\$672	\$36,960	\$812	\$44,660	\$81,620
Project Tota	ls:		_	\$36,960		\$44,660	\$81,620

Material/Labor Cost		\$81,620
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		\$60,129
General Contractor Mark Up at 20.0%	+	\$12,026
Construction Cost		\$72,155
Professional Fees at 16.0%	+	\$11,545
Total Project Cost		\$83,700

# Facility Condition Analysis Section Three

MEDP: MEDICAL PAVILIONS 1-10

#### **Project Description**

Project Number: MEDPPL02 Title: WATER SUPPLY PIPING REPLACEMENT

Priority Sequence: 13

Priority Class: 3

Category Code: PL1A System: PLUMBING

Component: DOMESTIC WATER

Element: PIPING NETWORK

Building Code: MEDP

Building Name: MEDICAL PAVILIONS 1-10

Subclass/Savings: Not Applicable

Code Application: IPC Chapter 6

Project Class: Deferred Maintenance

**Project Date:** 10/21/2009

Project

Location: Floor-wide: Floor(s) 1

### **Project Description**

Replace water supply and process piping as needed throughout the pavilions. Remove the aging water supply and process piping. Install new copper water supply piping with fiberglass insulation. Provide isolation valves, pressure regulators, shock absorbers, and backflow prevention devices in appropriate areas. Install new process piping as needed such as gas lines, vacuum lines, compressed air lines, purified water lines, process steam lines, etc., along with related isolation valves and gas cocks. Clearly label exposed piping for identification of the conveyed fluids and gases.

# Facility Condition Analysis Section Three

MEDP: MEDICAL PAVILIONS 1-10

# **Project Cost**

Project Number: MEDPPL02

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Water and specialty pipe and fittings, valves, backflow prevention devices, insulation, hangers, labels, demolition, and cut and patching materials	SF	15,574	\$1.28	\$19,935	\$3.20	\$49,837	\$69,772
Project Tota	ls:	_	-	\$19,935		\$49,837	\$69,772

Material/Labor Cost		\$69,772
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		\$45,641
General Contractor Mark Up at 20.0%	+	\$9,128
Construction Cost		\$54,769
Professional Fees at 16.0%	+	\$8,763
Total Project Cost		\$63,532

# Facility Condition Analysis Section Three

MEDP: MEDICAL PAVILIONS 1-10

#### **Project Description**

Project Number: MEDPPL03 Title: DRAIN PIPING REPLACEMENT

Priority Sequence: 14

Priority Class: 3

Category Code: PL2A System: PLUMBING

Component: WASTEWATER

Element: PIPING NETWORK

Building Code: MEDP

Building Name: MEDICAL PAVILIONS 1-10

Subclass/Savings: Not Applicable

Code Application: IPC Chapters 7-12

Project Class: Deferred Maintenance

**Project Date:** 10/21/2009

Project

Location: Floor-wide: Floor(s) 1

### **Project Description**

The replacement of the aging drain piping is recommended throughout the pavilions. Failure to replace the old drain piping systems will result in frequent leaks and escalating maintenance costs. Remove sanitary and storm drain piping as needed. Install new castiron drain piping networks with copper runouts to the fixtures to convey normal wastes. Install corrosion resistant pipe and fittings for acid wastes. Install new floor drains, roof drains, and traps.

# Facility Condition Analysis Section Three

MEDP: MEDICAL PAVILIONS 1-10

# **Project Cost**

Project Number: MEDPPL03

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Cast-iron, copper, and corrosion resistant pipe and fittings, hangers, floor / roof drains, traps, demolition, and cut and patching materials	SF	15,574	\$2.04	\$31,771	\$4.69	\$73,042	\$104,813
Project Totals:				\$31,771		\$73,042	\$104,813

Material/Labor Cost		\$104,813
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		\$69,464
General Contractor Mark Up at 20.0%	+	\$13,893
Construction Cost		\$83,357
Professional Fees at 16.0%	+	\$13,337
Total Project Cost		\$96,694

# Facility Condition Analysis Section Three

MEDP: MEDICAL PAVILIONS 1-10

#### **Project Description**

Project Number: MEDPSI01 Title: SITE PAVING UPGRADES

Priority Sequence: 15

Priority Class: 3

Category Code: SI4A System: SITE

Component: GENERAL

Element: OTHER

Building Code: MEDP

Building Name: MEDICAL PAVILIONS 1-10

Subclass/Savings: Not Applicable

Code Application: Not Applicable

Project Class: Deferred Maintenance

**Project Date:** 10/8/2009

Project

Location: Undefined: Floor(s) 1

### **Project Description**

Pedestrian paving systems are in overall poor condition and represent a liability to the owner. New systems, including excavation, grading, base compaction, and paving, are recommended. Vehicular paving systems are in poor condition and will need major upgrades.

# Facility Condition Analysis Section Three

MEDP: MEDICAL PAVILIONS 1-10

# **Project Cost**

Project Number: MEDPSI01

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Concrete pedestrian paving (1000 sf minimum)	SF	7,000	\$2.97	\$20,790	\$3.64	\$25,480	\$46,270
Asphalt vehicular paving system replacement	SY	2,600	\$12.82	\$33,332	\$9.16	\$23,816	\$57,148
Project Tota	ıls:			\$54,122		\$49,296	\$103,418

Material/Labor Cost		\$103,418
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		\$79,790
General Contractor Mark Up at 20.0%	+	\$15,958
Construction Cost		\$95,748
Professional Fees at 16.0%	+	\$15,320
Total Project Cost		\$111,067

# Facility Condition Analysis Section Three

MEDP: MEDICAL PAVILIONS 1-10

#### **Project Description**

Project Number: MEDPAC01 Title: BUILDING ENTRY ACCESSIBILITY

**UPGRADES** 

Priority Sequence: 16

Priority Class: 4

Category Code: AC2A System: ACCESSIBILITY

Component: BUILDING ENTRY

Element: GENERAL

Building Code: MEDP

Building Name: MEDICAL PAVILIONS 1-10

Subclass/Savings: Not Applicable

Code Application: ADAAG 403.6, 505

Project Class: Plant Adaption

**Project Date:** 10/8/2009

Project

Location: Undefined: Floor(s) 1

#### **Project Description**

Current legislation related to accessibility requires that building entrances be wheelchair accessible. To comply with the intent of this legislation, it is recommended that compliant painted metal handrails be installed at the main entrance site stairs.

# Facility Condition Analysis Section Three

MEDP: MEDICAL PAVILIONS 1-10

### **Project Cost**

Project Number: MEDPAC01

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	50	\$50.50	\$2,525	\$35.40	\$1,770	\$4,295
Project Total:	 s:			\$2.525		\$1.770	\$4.295

Material/Labor Cost		\$4,295
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		\$3,451
General Contractor Mark Up at 20.0%	+	\$690
Construction Cost		\$4,141
Professional Fees at 16.0%	+	\$663
Total Project Cost		\$4,803

# Facility Condition Analysis Section Three

MEDP: MEDICAL PAVILIONS 1-10

#### **Project Description**

Project Number: MEDPAC02 Title: INTERIOR AMENITY ACCESSIBILITY

**UPGRADES** 

Priority Sequence: 17

Priority Class: 4

Category Code: AC4A System: ACCESSIBILITY

Component: GENERAL

Element: FUNCTIONAL SPACE MOD.

Building Code: MEDP

Building Name: MEDICAL PAVILIONS 1-10

Subclass/Savings: Not Applicable

Code Application: ADAAG 211, 602, 804

Project Class: Plant Adaption

**Project Date:** 10/8/2009

Project

**Location**: Floor-wide: Floor(s) 1

#### **Project Description**

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

# Facility Condition Analysis Section Three

MEDP: MEDICAL PAVILIONS 1-10

### **Project Cost**

Project Number: MEDPAC02

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
ADA compliant kitchenette unit with base cabinetry, overhead cabinetry, and amenities	SYS	5	\$4,894	\$24,470	\$1,999	\$9,995	\$34,465
Dual level drinking fountain	EA	10	\$1,216	\$12,160	\$374	\$3,740	\$15,900
Alcove construction, including finishes	EA	10	\$877	\$8,770	\$3,742	\$37,420	\$46,190
Project Totals		,		\$45,400		\$51,155	\$96,555

Material/Labor Cost		\$96,555
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		\$71,960
General Contractor Mark Up at 20.0%	+	\$14,392
Construction Cost		\$86,352
Professional Fees at 16.0%	+	\$13,816
Total Project Cost		\$100,169

# Facility Condition Analysis Section Three

MEDP: MEDICAL PAVILIONS 1-10

#### **Project Description**

Project Number: MEDPAC03 Title: RESTROOM RENOVATION

Priority Sequence: 18

Priority Class: 4

Category Code: AC3E System: ACCESSIBILITY

Component: INTERIOR PATH OF TRAVEL

Element: RESTROOMS/BATHROOMS

Building Code: MEDP

Building Name: MEDICAL PAVILIONS 1-10

Subclass/Savings: Not Applicable

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

Project Class: Plant Adaption

**Project Date:** 10/8/2009

Project

Location: Floor-wide: Floor(s) 1

### **Project Description**

While several of the pavilions had been remodeled, including their restrooms, the remaining restroom fixtures and finishes are mostly original to the year of construction or previous major renovation. The fixtures are sound but dated and are spaced such that clearances are not ADA compliant. A comprehensive restroom renovation, including new fixtures, finishes, partitions, and accessories, is recommended. Restroom expansion may be necessary in order to meet modern minimum fixture counts and accessibility legislation.

# Facility Condition Analysis Section Three

MEDP: MEDICAL PAVILIONS 1-10

### **Project Cost**

Project Number: MEDPAC03

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Major restroom renovation, including fixtures, finishes, partitions, accessories, and expansion if necessary (assumes 55 square feet of restroom area per fixture)		32	\$1,969	\$63,008	\$1,699	\$54,368	\$117,376
Project Totals	s:	-		\$63,008	_	\$54,368	\$117,376

Material/Labor Cost		\$117,376
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		\$91,340
General Contractor Mark Up at 20.0%	+	\$18,268
Construction Cost		\$109,608
Professional Fees at 16.0%	+	\$17,537
Total Project Cost		\$127,145

# Facility Condition Analysis Section Three

MEDP: MEDICAL PAVILIONS 1-10

#### **Project Description**

Project Number: MEDPES05 Title: MEMBRANE ROOF REPLACEMENT

Priority Sequence: 19

Priority Class: 4

Category Code: ES4B System: EXTERIOR

Component: ROOF

Element: REPLACEMENT

Building Code: MEDP

Building Name: MEDICAL PAVILIONS 1-10

Subclass/Savings: Energy Conservation \$1,200

Code Application: Not Applicable

Project Class: Capital Renewal

**Project Date:** 10/8/2009

**Project** 

Location: Floor-wide: Floor(s) R

### **Project Description**

The single ply membrane roofing is not expected to outlast the scope of this analysis. Future budget modeling should include a provision for the replacement of all failing roofing systems. Replace the roofs with similar applications.

# Facility Condition Analysis Section Three

MEDP: MEDICAL PAVILIONS 1-10

### **Project Cost**

Project Number: MEDPES05

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Membrane roof	SF	13,550	\$3.79	\$51,355	\$1.73	\$23,442	\$74,796
	Project Totals:			\$51,355		\$23,442	\$74,796

Material/Labor Cost		\$74,796
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		\$63,739
General Contractor Mark Up at 20.0%	+	\$12,748
Construction Cost		\$76,487
Professional Fees at 16.0%	+	\$12,238
Total Project Cost		\$88,725

# Facility Condition Analysis Section Three

MEDP: MEDICAL PAVILIONS 1-10

#### **Project Description**

Project Number: MEDPES04 Title: WINDOW REPLACEMENT

Priority Sequence: 20

Priority Class: 4

Category Code: ES5B System: EXTERIOR

Component: FENESTRATIONS

Element: WINDOWS

Building Code: MEDP

Building Name: MEDICAL PAVILIONS 1-10

Subclass/Savings: Energy Conservation \$700

Code Application: Not Applicable

Project Class: Capital Renewal

**Project Date:** 10/8/2009

**Project** 

**Location:** Building-wide: Floor(s) 1

### **Project Description**

It is recommended that the single pane window applications be upgraded to thermal pane systems. Such double pane systems will reduce the energy required to operate the pavilions. Repair or replacement of the windowsills and trim may also be necessary.

# Facility Condition Analysis Section Three

MEDP: MEDICAL PAVILIONS 1-10

### **Project Cost**

Project Number: MEDPES04

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Typical standard glazing applications	SF	3,500	\$57.27	\$200,445	\$36.45	\$127,575	\$328,020
Project Tota	ıls:			\$200,445		\$127,575	\$328,020

Total Project Cost		\$372,073
Professional Fees at 16.0%	+	\$51,320
Construction Cost		\$320,753
General Contractor Mark Up at 20.0%	+	\$53,459
Material/Labor Indexed Cost		\$267,294
Labor Index		51.3%
Material Index		100.7%
Material/Labor Cost		\$328,020

# Facility Condition Analysis Section Three

MEDP: MEDICAL PAVILIONS 1-10

#### **Project Description**

Project Number: MEDPES02 Title: EXTERIOR SIDING REPLACEMENT

Priority Sequence: 21

Priority Class: 4

Category Code: ES2B System: EXTERIOR

Component: COLUMNS/BEAMS/WALLS

Element: FINISH

Building Code: MEDP

Building Name: MEDICAL PAVILIONS 1-10

Subclass/Savings: Not Applicable

Code Application: Not Applicable

Project Class: Capital Renewal

**Project Date:** 10/8/2009

Project

**Location:** Building-wide: Floor(s) 1

### **Project Description**

The exterior siding is failing and beyond repair. The installation of high quality, architecturally appropriate siding systems is recommended to restore the aesthetics and integrity of the building envelopes. Replacement of the substrates, insulation, and vapor barriers may also be necessary.

# Facility Condition Analysis Section Three

MEDP: MEDICAL PAVILIONS 1-10

### **Project Cost**

Project Number: MEDPES02

Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Substrate, insulation, and vapor barrier	SF	2,630	\$1.34	\$3,524	\$2.58	\$6,785	\$10,310
Quality lap, shingle or tongue and groove siding with applied finish	SF	2,630	\$3.49	\$9,179	\$4.01	\$10,546	\$19,725
Project Totals:				\$12,703		\$17,332	\$30,035

Material/Labor Cost		\$30,035
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		\$21,683
General Contractor Mark Up at 20.0%	+	\$4,337
Construction Cost		\$26,020
Professional Fees at 16.0%	+	\$4,163
Total Project Cost		\$30,183

# Facility Condition Analysis Section Three

MEDP: MEDICAL PAVILIONS 1-10

### **Project Description**

Project Number: MEDPPL01 Title: DOMESTIC WATER HEATER REPLACEMENT

Priority Sequence: 22

Priority Class: 4

Category Code: PL1E System: PLUMBING

Component: DOMESTIC WATER

Element: HEATING

Building Code: MEDP

Building Name: MEDICAL PAVILIONS 1-10

Subclass/Savings: Not Applicable

Code Application: IPC Chapters 5, 607

Project Class: Capital Renewal

**Project Date:** 10/21/2009

**Project** 

Location: Item Only: Floor(s) 1

### **Project Description**

The replacement of the domestic water heating equipment is recommended to maintain a reliable supply of domestic hot water. Remove old water heating equipment and related piping. Install new water heating equipment to meet the current needs of the pavilions.

# Facility Condition Analysis Section Three

MEDP: MEDICAL PAVILIONS 1-10

### **Project Cost**

Project Number: MEDPPL01

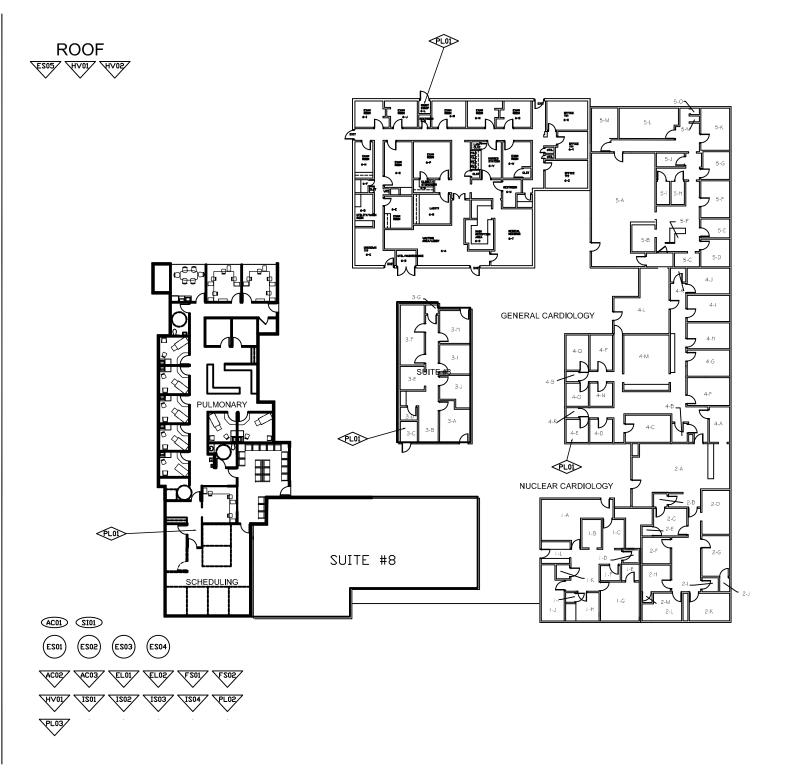
Task Description	Unit	Qnty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Electric, residential-grade water heater replacement, including demolition	GAL	210	\$22.87	\$4,803	\$23.71	\$4,979	\$9,782
Project Totals	s:			\$4,803		\$4,979	\$9,782

Material/Labor Cost		\$9,782
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		\$7,391
General Contractor Mark Up at 20.0%	+	\$1,478
Construction Cost		\$8,869
Professional Fees at 16.0%	+	\$1,419
Total Project Cost		\$10,288

### **FACILITY CONDITION ANALYSIS**

SECTION 4

DRAWINGS AND PROJECT LOCATIONS



MEDICAL **PAVILIONS** 1-10

BLDG NO. MEDP



CORPORATION

FACILITY CONDITION ANALYSIS

2165 West Park Court Suite N Stone Mountain GA 30087 770.879.7376

PROJECT NUMBER APPLIES TO ONE ROOM ONLY

PROJECT NUMBER ONE ITEM ONLY

PROJECT NUMBER ENTIRE BUILDING

PROJECT NUMBER APPLIES TO ENTIRE FLOOR

PROJECT NUMBER APPLIES TO A SITUATION OF UNDEFINED EXTENTS



PROJECT NUMBER APPLIES TO AREA AS NOTED

Date: 12/10/09 Drawn by: J.T.V.

Project No. 09-041

FIRST FLOOR PLAN

Sheet No.

1 of 1

**FACILITY CONDITION ANALYSIS** 

SECTION 5

LIFE CYCLE MODEL SUMMARY AND PROJECTIONS

### Life Cycle Model

### **Building Component Summary**

Uniformat Code	Component Description	Qty	Units	Unit Cost	Complx Adj	Total Cost	Install Date	Life Exp
B2010	EXTERIOR FINISH RENEWAL	7,880	SF	\$1.30	.31	\$3,184	1966	10
B2010	QUALITY LAP, SHINGLE OR T&G SIDING	2,630	SF	\$11.23		\$29,542	1966	50
B2020	STANDARD GLAZING AND CURTAIN WALL	3,500	SF	\$104.04		\$364,128	1966	55
B2030	HIGH TRAFFIC EXTERIOR DOOR SYSTEM	5	LEAF	\$4,311.24		\$21,556	1966	20
B2030	LOW TRAFFIC EXTERIOR DOOR SYSTEM	16	LEAF	\$2,863.29		\$45,813	1966	40
B3010	BUILT-UP ROOF	2,020	SF	\$6.70		\$13,539	2002	20
B3010	MEMBRANE ROOF	13,550	SF	\$6.41		\$86,812	2002	15
B3020	SKYLIGHT	144	SF	\$104.04		\$14,981	2002	30
C1020	RATED DOOR AND FRAME INCLUDING HARDWARE	55	LEAF	\$1,489.06		\$81,898	1966	35
C1020	RATED DOOR AND FRAME INCLUDING HARDWARE	55	LEAF	\$1,489.06		\$81,898	2002	35
C1020	INTERIOR DOOR HARDWARE	55	EA	\$423.04		\$23,267	1966	15
C1020	INTERIOR DOOR HARDWARE	55	EA	\$423.04		\$23,267	2002	15
C3010	STANDARD WALL FINISH (PAINT, WALL COVERING, ETC.)	25,230	SF	\$0.80		\$20,210	1966	10
C3010	STANDARD WALL FINISH (PAINT, WALL COVERING, ETC.)	25,230	SF	\$0.80		\$20,210	2002	10
C3020	CARPET	3,845	SF	\$8.75		\$33,630	1966	10
C3020	CARPET	3,845	SF	\$8.75		\$33,630	2002	10
C3020	VINYL FLOOR TILE	2,070	SF	\$6.59		\$13,637	1966	15
C3020	VINYL FLOOR TILE	2,070	SF	\$6.59		\$13,637	2002	15
C3030	ACOUSTICAL TILE CEILING SYSTEM	5,920	SF	\$4.99		\$29,559	1966	15
C3030	ACOUSTICAL TILE CEILING SYSTEM	5,920	SF	\$4.99		\$29,559	2002	15
D2010	PLUMBING FIXTURES - MEDICAL / CLINIC	15,574	SF	\$5.61		\$87,381	1966	35
D2020	WATER / PROCESS PIPING - MEDICAL / CLINIC	15,574	SF	\$3.99		\$62,123	1966	35
D2020	WATER HEATER (RES., ELEC.)	40	GAL	\$47.95		\$1,918	2008	10
D2020	WATER HEATER (RES., ELEC.)	65	GAL	\$47.95		\$3,117	2008	10
D2020	WATER HEATER (RES., ELEC.)	65	GAL	\$47.95		\$3,117	2001	10
D2020	WATER HEATER (RES., ELEC.)	40	GAL	\$47.95		\$1,918	2007	10
D2030	DRAIN PIPING - MEDICAL / CLINIC	15,574	SF	\$6.06		\$94,415	1966	40
D3040	EXHAUST FAN - CENTRIFUGAL ROOF EXHAUSTER OR SIMILAR	10	EA	\$2,768.62		\$27,686	1966	20
D3050	SPLIT DX SYSTEM	5	TON	\$2,143.89		\$10,719	2002	15

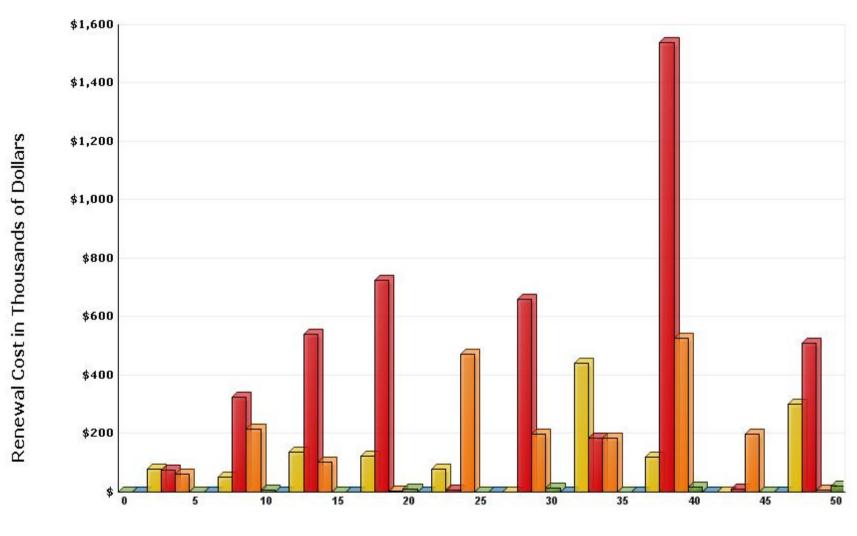
### Life Cycle Model

### **Building Component Summary**

Uniformat Code	Component Description	Qty	Units	Unit Cost	Complx Adj	Total Cost	Install Date	Life Exp
D3050	SPLIT DX SYSTEM	35	TON	\$2,143.89		\$75,036	1980	15
D5010	ELECTRICAL SYSTEM - MEDICAL / CLINIC	15,574	SF	\$10.88		\$169,403	1966	50
D5020	LIGHTING - MEDICAL / CLINIC	10,902	SF	\$20.54		\$223,927	1966	20
D5020	LIGHTING - MEDICAL / CLINIC	4,672	SF	\$20.54		\$95,963	2000	20
D5030	FIRE ALARM SYSTEM, POINT ADDRESSABLE	15,574	SF	\$2.61		\$40,720	1985	15
E2010	KITCHENETTE UNIT WITH CABINETRY AND AMENITIES	5	LOT	\$5,940.22		\$29,701	1966	20
						\$1,911,101		

# **Life Cycle Model Expenditure Projections**

**MEDP: MEDICAL PAVILIONS 1-10** 



**Future Year** 

**Average Annual Renewal Cost Per SqFt \$4.68** 

### **FACILITY CONDITION ANALYSIS**

SECTION 6

# PHOTOGRAPHIC LOG

Photo ID No	Description	Location	Date
MEDP001a	Exterior door	Pavilion 1	9/2/2009
MEDP001e	Opaque strobe	Pavilion 2	9/2/2009
MEDP002a	Interior finishes	Pavilion 1	9/2/2009
MEDP002e	Smoke and heat detector	Pavilion 2	9/2/2009
MEDP003a	Interior finishes	Pavilion 1	9/2/2009
MEDP003e	Original split DX gas furnace systems	Pavilion 2	9/2/2009
MEDP004a	Interior finishes	Pavilion 1	9/2/2009
MEDP004e	Original surface-mounted fluorescent fixture	Pavilion 2	9/2/2009
MEDP005a	Interior finishes	Pavilion 1	9/2/2009
MEDP005e	Missing exit sign	Pavilion 2	9/2/2009
MEDP006a	Window detail	Pavilion 1	9/2/2009
MEDP006e	Original main breaker panel	Pavilion 2	9/2/2009
MEDP007a	Restroom design	Pavilion 1	9/2/2009
MEDP007e	Original surface-mounted fluorescent fixture	Pavilion 1	9/2/2009
MEDP008a	Roof detail	Pavilion 1	9/2/2009
MEDP008e	Battery backup emergency lighting	Pavilion 1	9/2/2009
MEDP009a	Exterior facade	Pavilion 1	9/2/2009
MEDP009e	Original main breaker panel	Pavilion 1	9/2/2009
MEDP010a	Interior finishes	Pavilion 2	9/2/2009
MEDP010e	Original main breaker panel	Pavilion 4	9/2/2009
MEDP011a	Interior finishes	Pavilion 2	9/2/2009
MEDP011e	Outdated smoke and heat detector	Pavilion 4	9/2/2009
MEDP012a	Interior finishes	Pavilion 2	9/2/2009
MEDP012e	Typical surface-mounted T8 lighting	Pavilion 4	9/2/2009
MEDP013a	Interior finishes	Pavilion 2	9/2/2009
MEDP013e	Missing exit sign	Pavilion 4	9/2/2009
MEDP014a	Interior finishes	Pavilion 2	9/2/2009
MEDP014e	Outdated Carrier thermostat	Pavilion 4	9/2/2009
MEDP015a	Single level drinking fountain	Pavilion 2	9/2/2009
MEDP015e	Under floor register	Pavilion 4	9/2/2009
MEDP016a	Interior finishes	Pavilion 2	9/2/2009
MEDP016e	Aging condensing unit	Pavilion 4 roof	9/2/2009
MEDP017a	Window detail	Pavilion 2	9/2/2009

Photo ID No	Description	Location	Date
MEDP017e	Aging condensing unit	Pavilion 2 roof	9/2/2009
MEDP018a	Interior finishes	Pavilion 2	9/2/2009
MEDP018e	Original exhaust fan	Pavilion 2 roof	9/2/2009
MEDP019a	Restroom design	Pavilion 2	9/2/2009
MEDP019e	Original exhaust fan	Pavilion 4 roof	9/2/2009
MEDP020a	Void	Void	9/2/2009
MEDP020e	Rusting condensing units	Pavilion 5 roof	9/2/2009
MEDP021a	Roof detail	Pavilion 2	9/2/2009
MEDP021e	Original exhaust fan	Pavilion 5 roof	9/2/2009
MEDP022a	Exterior facade	Pavilion 2	9/2/2009
MEDP022e	Condensing unit	Pavilion 3 roof	9/2/2009
MEDP023a	Roof detail	Pavilion 3	9/2/2009
MEDP023e	York condensing unit	Pavilion 7 roof	9/2/2009
MEDP024a	Break room sink	Pavilion 3	9/2/2009
MEDP024e	York condensing unit	Pavilion 10 roof	9/2/2009
MEDP025a	Restroom design	Pavilion 3	9/2/2009
MEDP025e	Trane rooftop package unit	Pavilion 1 roof	9/2/2009
MEDP026a	Interior finishes	Pavilion 3	9/2/2009
MEDP026e	Gas furnace, split DX system	Pavilion 5	9/2/2009
MEDP027a	Interior finishes	Pavilion 3	9/2/2009
MEDP027e	New battery backup and emergency lighting unit	Pavilion 5	9/2/2009
MEDP028a	Interior finishes	Pavilion 3	9/2/2009
MEDP028e	Gas furnace, split DX system	Pavilion 5	9/2/2009
MEDP029a	Exterior facade	Pavilion 3	9/2/2009
MEDP029e	Smoke detector	Pavilion 5	9/2/2009
MEDP030a	Exterior facade	Pavilion 3	9/2/2009
MEDP030e	T12 fluorescent lighting	Pavilion 5	9/2/2009
MEDP031a	Exterior facade	Pavilion 3	9/2/2009
MEDP031e	Original GE main panelboard	Pavilion 5	9/2/2009
MEDP032a	Exterior facade	Pavilion 3	9/2/2009
MEDP032e	T12 fluorescent lighting	Pavilion 3	9/2/2009
MEDP033a	Break room sink	Pavilion 4	9/2/2009
MEDP033e	Outdated smoke and heat detector	Pavilion 3	9/2/2009

Photo ID No	Description	Location	Date
MEDP034a	Interior finishes	Pavilion 4	9/2/2009
MEDP034e	Opaque strobe	Pavilion 3	9/2/2009
MEDP035a	Interior finishes	Pavilion 4	9/2/2009
MEDP035e	Outdated thermostat	Pavilion 3	9/2/2009
MEDP036a	Interior finishes	Pavilion 4	9/2/2009
MEDP036e	Window air conditioner	Pavilion 7	9/2/2009
MEDP037a	Interior finishes	Pavilion 4	9/2/2009
MEDP037e	Outdated thermostat	Pavilion 7	9/2/2009
MEDP038a	Interior finishes	Pavilion 4	9/2/2009
MEDP038e	T8 fluorescent lighting	Pavilion 7	9/2/2009
MEDP039a	Interior finishes	Pavilion 4	9/2/2009
MEDP039e	Original breaker panel	Pavilion 7	9/2/2009
MEDP040a	Single level drinking fountain	Pavilion 4	9/2/2009
MEDP040e	Domestic hot water heater and split system	Pavilion 3	9/2/2009
MEDP041a	Void	Void	9/2/2009
MEDP041e	2007 domestic hot water heater	Pavilion 4	9/2/2009
MEDP042a	Roof detail	Pavilion 4	9/2/2009
MEDP042e	Split system	Pavilion 4	9/2/2009
MEDP043a	Roof detail	Pavilion 4	9/2/2009
MEDP043e	Typical surface-mounted T8 lighting	Pavilion 10	9/2/2009
MEDP044a	Exterior facade	Pavilion 4	9/2/2009
MEDP044e	Gas furnace and split DX system (1996)	Pavilion 9	9/2/2009
MEDP045a	Exterior facade	Pavilion 4	9/2/2009
MEDP045e	Original GE main panelboard	Pavilion 9	9/2/2009
MEDP046a	Exterior facade	Pavilions 4 and 5	9/2/2009
MEDP046e	Outdated thermostat	Pavilion 9	9/2/2009
MEDP047a	Roof detail	Pavilion 5	9/2/2009
MEDP047e	Smoke detector and incandescent lighting	Pavilion 9	9/2/2009
MEDP048a	Interior finishes	Pavilion 5	9/2/2009
MEDP048e	T12 fluorescent lighting	Pavilion 9	9/2/2009
MEDP049a	Interior finishes	Pavilion 5	9/2/2009
MEDP049e	Under floor register	Pavilion 9	9/2/2009
MEDP050a	Interior finishes	Pavilion 5	9/2/2009

Photo ID No	Description	Location	Date
MEDP051a	Restroom design	Pavilion 5	9/2/2009
MEDP052a	Single level drinking fountain	Pavilion 5	9/2/2009
MEDP053a	Break room sink	Pavilion 5	9/2/2009
MEDP054a	Void	Void	9/2/2009
MEDP055a	Roof detail	Pavilion 6	9/2/2009
MEDP056a	Interior finishes	Pavilion 6	9/2/2009
MEDP057a	Interior finishes	Pavilion 6	9/2/2009
MEDP058a	Interior finishes	Pavilion 6	9/2/2009
MEDP059a	Interior finishes	Pavilion 6	9/2/2009
MEDP060a	Restroom design	Pavilion 6	9/2/2009
MEDP061a	Single level drinking fountain	Pavilion 6	9/2/2009
MEDP062a	Break room sink	Pavilion 6	9/2/2009
MEDP063a	Exterior facade	Pavilion 6	9/2/2009
MEDP064a	Exterior facade	Pavilion 6	9/2/2009
MEDP065a	Exterior facade	Pavilion 6	9/2/2009
MEDP066a	Exterior facade	Pavilion 6	9/2/2009
MEDP067a	Roof detail	Pavilions 7 and 10	9/2/2009
MEDP068a	Interior finishes	Pavilion 7	9/2/2009
MEDP069a	Single level drinking fountain	Pavilion 7	9/2/2009
MEDP070a	Interior finishes	Pavilion 7	9/2/2009
MEDP071a	Interior finishes	Pavilion 7	9/2/2009
MEDP072a	Restroom design	Pavilion 7	9/2/2009
MEDP073a	Interior finishes	Pavilion 9	9/2/2009
MEDP074a	Restroom design	Pavilion 9	9/2/2009
MEDP075a	Interior finishes	Pavilion 9	9/2/2009
MEDP076a	Interior finishes	Pavilion 9	9/2/2009
MEDP077a	Exterior facade	Pavilion 9	9/2/2009
MEDP078a	Void	Void	9/2/2009
MEDP079a	Interior finishes	Pavilion 10	9/2/2009
MEDP080a	Interior finishes	Pavilion 10	9/2/2009
MEDP081a	Restroom design	Pavilion 10	9/2/2009
MEDP082a	Interior finishes	Pavilion 10	9/2/2009
MEDP083a	Interior finishes	Pavilion 10	9/2/2009

Photo ID No	Description	Location	Date
MEDP084a	Exterior facade	Pavilion 10	9/2/2009
MEDP085a	Exterior facade	Pavilion 10	9/2/2009
MEDP086a	Exterior facade	Pavilion 10	9/2/2009



MEDP001A.jpg



MEDP001E.jpg



MEDP002A.jpg



MEDP002E.jpg



MEDP003A.jpg



MEDP003E.jpg



MEDP004A.jpg



MEDP004E.jpg



MEDP005A.jpg



MEDP005E.jpg



MEDP006A.jpg



MEDP006E.jpg



MEDP007A.jpg



MEDP007E.jpg



MEDP008A.jpg



MEDP008E.jpg



MEDP009A.jpg



MEDP009E.jpg



MEDP010A.jpg



MEDP010E.jpg



MEDP011A.jpg



MEDP011E.jpg



MEDP012A.jpg



MEDP012E.jpg



MEDP013A.jpg



MEDP013E.jpg



MEDP014A.jpg



MEDP014E.jpg



MEDP015A.jpg



MEDP015E.jpg



MEDP016A.jpg



MEDP016E.jpg



MEDP017A.jpg



MEDP017E.jpg



MEDP018A.jpg



MEDP018E.jpg



MEDP019A.jpg



MEDP019E.jpg



MEDP020E.jpg



MEDP021A.jpg









MEDP021E.jpg

MEDP022A.jpg

MEDP022E.jpg

MEDP023A.jpg









MEDP023E.jpg

MEDP024A.jpg

MEDP024E.jpg

MEDP025A.jpg









MEDP025E.jpg

MEDP026A.jpg

MEDP026E.jpg

MEDP027A.jpg









MEDP027E.jpg

MEDP028A.jpg

MEDP028E.jpg

MEDP029A.jpg









MEDP029E.jpg

MEDP030A.jpg

MEDP030E.jpg

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MEDP031E.jpg



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