

EAST CAROLINA UNIVERSITY

COTANCHE BUILDING

ASSET CODE: COTA

FACILITY CONDITION ANALYSIS

DECEMBER 7, 2009



EAST CAROLINA UNIVERSITY
Facility Condition Analysis

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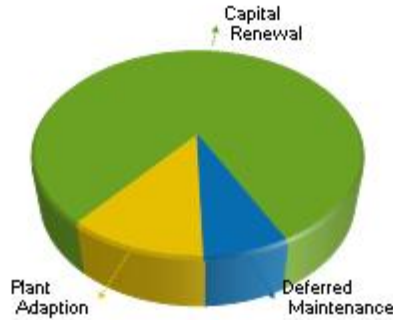
FACILITY CONDITION ANALYSIS

SECTION 1

GENERAL ASSET INFORMATION

EXECUTIVE SUMMARY - COTANCHE BUILDING

PROJECT COSTS BY CLASSIFICATION

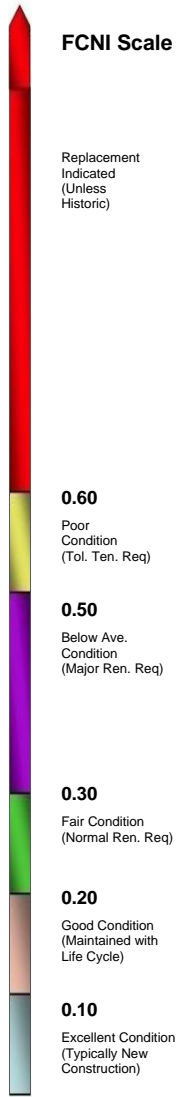


Building Code: COTA
Building Name: COTANCHE BUILDING
Year Built: 1955
Building Use: Office / Administrative
Square Feet: 29,137

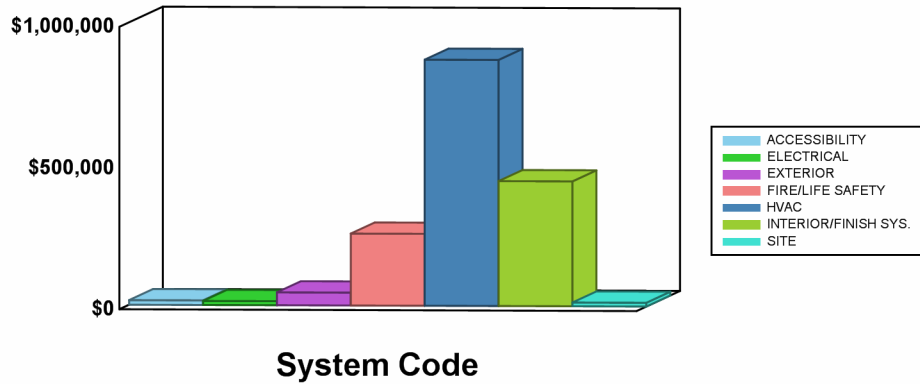
Project Costs by Priority

Priority 1:	\$1,012
Priority 2:	\$165,943
Priority 3:	\$348,440
Priority 4:	\$1,142,943
Total Project Costs:	\$1,658,337
Facility Replacement Cost:	\$7,740,000

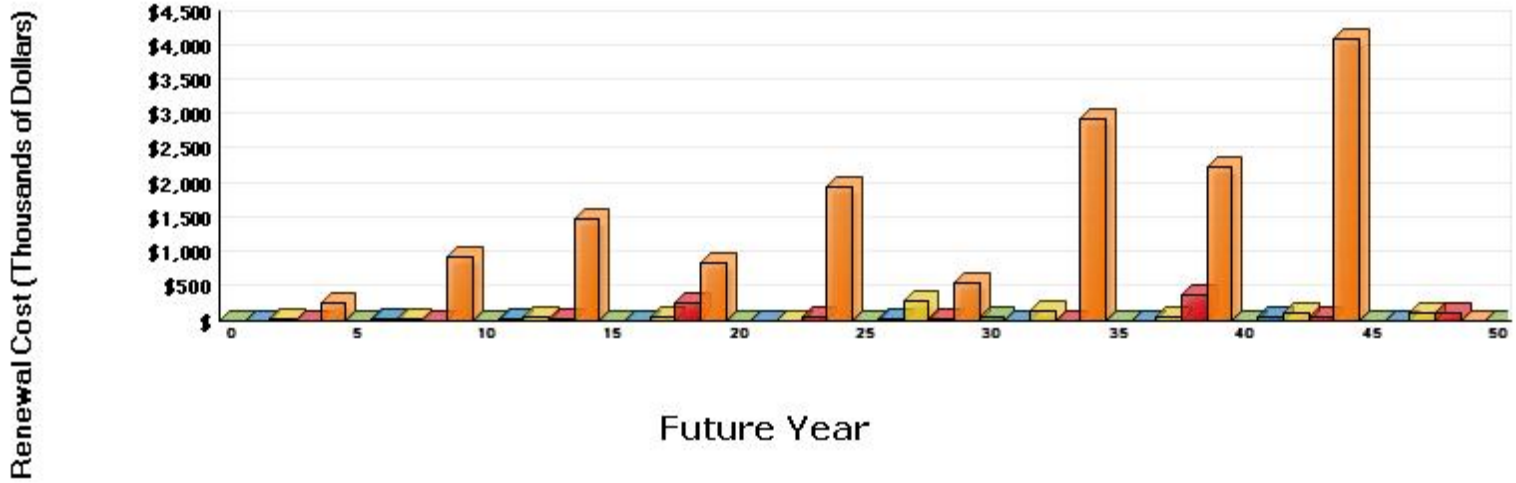
Facility Condition Needs Index (FCNI): 0.21
 (Project Costs / Replacement Cost)



PROJECT COSTS BY SYSTEM CODE



LIFE CYCLE MODEL EXPENDITURE PROJECTIONS



Average Annual Renewal Cost Per SqFt \$5.03

B. ASSET SUMMARY

The Cotanche Resources Building was reportedly originally constructed in 1955, with at least one subsequent addition of unknown date. The facility is located on the far northern section of the East Carolina University main campus in a commercial municipal area. The last major renovation was reportedly completed in 2002 and included the conversion of the former newspaper offices to the main data center for the university. This building contains 29,137 square feet of area and two levels of office and support space as well as the computer servers and data center. There is one level above grade. The reinforced cast-in-place concrete foundation supports a structural steel superstructure. The floor systems are corrugated metal deck and cast-in-place lightweight concrete applications.

The information for this report was gathered during a site visit that concluded on September 17, 2009.

SITE

The building is sited on a sloped parcel of land in an urban commercial and campus setting. Portions of the general site around this building are reasonably well landscaped, appear to be adequately maintained, and are in overall good condition. The site is predominantly planted with turf grasses, ornamental shrubbery, accent planting beds, and a few specimen and mature native trees.

Employee and visitor parking is on the south side of the building. The quantity of parking spaces associated with this facility appears to be adequate, and no vehicular parking issues have been reported by onsite facility personnel. A designated service vehicle and loading dock is located in the rear of the building on the northeast building corner and appears to be adequate for the service needs of the facility. There are ADA compliant parking spaces and a defined pedestrian walkway that leads to a sidewalk system and sloped ramp that serves the primary entrances. Pedestrian concrete paving systems are in overall fair to good condition but represent a potential liability to the owner in some areas, particularly on the south side of the building. New systems, including excavation, grading, base compaction, and pavements, are recommended. Vehicular paving systems in the parking areas are currently in good condition but will need minor upgrades, sealcoating, and graphics renewal as they age.

Storm water drainage systems around the building include graded swales, diversion curbs, underground collection and piping systems, and controlled surface runoff that appear to divert water away from the structure adequately. No significant storm water issues were observed during the onsite review that appear to have negatively impacted the building.

EXTERIOR STRUCTURE

The building structure is apparently supported by soil bearing spread footings that show no visible evidence of displacement or structural distress. The primary building structural frame includes structural steel and load bearing masonry, with the predominant building facade being comprised of brick masonry with limited areas of painted metal siding at the roof level.

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

There are minor areas, primarily at the roof level, where painted exterior siding is utilized on the building facade. The panels are expected to perform adequately throughout the term of this review period but will likely require a paint finish reapplication and interim associated flashing repairs to achieve full long-term life cycle performance. Minor interim repairs and a paint finish reapplication are recommended within the next ten years to restore and renew the aesthetics and the integrity of the building envelope.

The building window fenestration and exterior doors include integrated metal-framed and glass curtainwall systems with insulated pane glazing units, prefinished metal and glazed entrance doors, painted metal service doors, and additional egress pathway exit discharge doors. In general, the in-place fenestration and door systems are performing adequately, consistent with their age and service use. No major signs of deterioration were evident. Periodic cleaning, finish renewals, and routine maintenance appropriate to the various components should assure continued life cycle performance throughout the end of the review period.

The roofing systems include both flat and pitched roof areas. The predominant roof area includes multiple levels with a multi-ply, modified bituminous built-up roofing system that was reportedly installed in 2002. This flat roof assembly is currently in relatively good condition and expected to perform consistently with its life cycle through the end of the current review period. Interim inspections and routine maintenance of flashings, parapets, sealants, and other components will be required to achieve the full effective useful life of the roofing system.

It is anticipated that the pitched metal roof application, both the barrel and low slope sections, will reach the end of its expected service life cycle within the ten-year window of this facility assessment. Future budget modeling should include a provision for the replacement of all failing roofing systems. Replace the pitched roof systems with a similar type roof application.

INTERIOR FINISHES / SYSTEMS

The predominant interior finishes in this building are generally in a variety of conditions ranging from fair to relatively new. The predominant ceiling systems in the building include suspended acoustical tiles in the main corridors and office areas. The back-of-house service areas, mechanical and electrical rooms, and unoccupied storage areas have exposed open structure ceilings or painted gypsum board ceilings. There is a limited area with an older suspended metal slat ceiling in the main lobby.

Interior partitions are typically framed stud and gypsum board assemblies with an applied paint finish. There are also limited areas of exposed brick masonry in the main lobby. These finishes are performing consistently with their in-place age and use. The predominant flooring finishes in the building include limited tile pavers in prominent public areas, carpeting in circulation corridors, offices, and administrative areas, vinyl composition tile (VCT) in service rooms, raised panelized flooring with a VCT finish in the data center areas, and ceramic flooring in public restrooms. The back-of-house service areas, mechanical and electrical rooms, and unoccupied storage areas typically have either VCT or natural sealed concrete flooring surfaces.

In general, the existing ceiling, wall and partition, and floor finish systems in most areas of the building are well maintained and acceptable in appearance, but all will require ongoing refinishing and periodic replacements to maintain a quality institutional appearance.

The restroom fixtures and finishes are commonly highly utilized public areas and will need systematic renewal of finishes, partitions, and accessories in order to maintain a high quality work environment and appropriate institutional appearance. A comprehensive restroom renewal will likely be necessary and is recommended at the end of the current ten-year review period.

Interior doors in the building and newly renovated portions of the building are typically solid core, stained and painted wood applications in painted hollow metal frames. They are equipped with upgraded hardware, including ADA compliant lever action locksets that are in good working order.

ACCESSIBILITY

The building has accessible parking areas and designated accessible parking spaces located adjacent to the building that are generally compliant with applicable ADA standards. The primary building entrance provides grade-level access to the main lobby area. Current legislation related to accessibility requires that building entrances be wheelchair accessible. To comply with the intent of this legislation, it is recommended that powered door operators be installed at the main public entrance and the secondary employee entrance adjacent to the parking lot. In addition, the installation of handrails at the accessible main entry ramp is recommended.

The building is equipped with an elevator system connecting both floor levels for compliant access. The interior accessible routes generally have wall-mounted informational and directional signage designed for compliance with ADA accessibility standards. Interior doors and associated operable hardware throughout the accessible route are generally compliant with ADA accessibility standards, providing adequate maneuvering space at door jambs and graspable lever action hardware.

The drinking fountains located throughout the building are generally compliant with ADA standards and provide dual heights for public accommodation. The publicly accessible restroom facilities located on each floor are generally compliant with current accessibility standards, providing adequate wheelchair maneuvering areas, room layouts, and entry doors. The employee break room on the first floor is also generally designed and installed to provide public accommodation for the disabled.

HEALTH

No health-related issues were observed or reported by facility personnel at the time of the on-site review for this building. Therefore, no recommendations or assessment comment is included in this report.

FIRE / LIFE SAFETY

The facility appears to have adequate and reasonable egress paths consistent with its age and compliance with building codes at the time of construction / renovation. No apparent building egress deficiencies, obstructed egress pathways, or visible compromises to fire-rated assemblies in the egress corridors were observed during the limited onsite review of the building. However, structural fire

separations are not maintained according to code requirements for new construction in select areas of this facility. Primarily, data cabling has been routed with minor regard for fire-rated separations in some areas. Intumescent passive firestopping and some minor structural separation repairs should be accomplished promptly, particularly in the main data and electrical rooms.

Current legislation regarding building accessibility by the handicapped requires that stairs have graspable handrails on both sides, that the rails have a specific end geometry, and that the handrails continue horizontally at the landings. Although the stairs are compliant with the code enforced at the time of construction until a major renovation occurs, they are deficient in handrail and guardrail design relative to current standards. Future renovation efforts should include comprehensive stair railing upgrades.

This facility is protected by a central fire alarm system. The point addressable panel was manufactured by Notifier and is located in electrical room 137. The devices that serve this system include manual pull stations, audible / visible devices, and smoke detectors. The fire alarm system is well into its expected service life. It should be anticipated that it will require replacement within the scope of this analysis.

Except for data areas, this facility is not protected by any form of automatic fire suppression. Manual, dry chemical fire extinguishers are available. However, it is recommended that an automatic fire suppression system be retrofitted. Install an automatic fire sprinkler system in unprotected areas throughout the facility. This project will reduce overall liability and potential for loss. Data areas are equipped with a modern, environmentally friendly FM200 fire suppression system manufactured by Kidde. The system is complete with a Kidde control system and panel.

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

HVAC

Two 75 ton air-cooled chillers generate chilled water for data area cooling. Chilled water lines are routed in the under-floor spaces to computer room air conditioners and common area air handlers in the data center area. A 46 ton Liebert XDC Refrigerant Chilling Unit installed in 2006 provides horizontal DX cooling to cabinets in room 134. Computer room air conditioners CR-4 and CR-5 in the space remain operational but serve primarily to provide humidity control. These chillers are in good condition and, with proper maintenance, will last beyond the period of this report.

Fourteen of the Liebert computer room air conditioners distributed among the data area spaces were installed in 2002. Another unit, CR-21, was installed in room 145 in 2009. The 2002 models are expected to require life cycle replacement near the end of the report period.

Supplemental cooling in the electrical, mechanical, shipping and receiving, command center, and network operations areas is provided by split systems. The cooling systems use external condensing units to provide ducted or ductless cooling air. They are controlled with electronic thermostats and controllers. The split systems are currently in good condition. However, normal life cycles are expected to require replacement of these units within the timeframe addressed by this analysis.

Areas just described occupy the south end of the building. Most of the building area consists of offices and related spaces. HVAC for these areas is provided by rooftop air conditioners equipped with natural

gas heating. These packaged units were installed in 2002 and are in good condition. However, it should be expected that normal service life issues they will warrant their replacement within the period covered by this report.

ELECTRICAL

An external oil-filled transformer supplies 277/480 volt power to the 1,600 amp main switchboard. A 500 kW generator, soon to be joined by another 500 kW unit, provides emergency backup power at 277/480 volts. Beyond that, the arrangement of switchgear and distribution equipment, as compared with most dual voltage facilities (120/208 volt and 277/480 volt), is much more complex, owing to the special needs of computer systems housed in the facility. The additional complexity addresses the need for uninterrupted and sustained power for computer equipment and critical cooling equipment in addition to more frequently required emergency power requirements for fire emergency lighting, detection and alarm systems, the elevator, and selected HVAC system components. These additional needs are met through the addition of two major UPS systems and the automatic switching equipment necessary for them to power loads smoothly and without interruption to and from commercial, UPS, and generator power. Two Detroit Diesel automatic transfer switches and two Lake Shore Electric Corporation emergency UPS bypass switches implement the transfers. Too complex to describe in detail here, electrical connections among the main distribution panel, service disconnects, transfer switches, bypass switches, and several step-down transformers distribute commercial and emergency power to computer and building equipment switches and power and lighting panels throughout the building. Lighting fixtures use 277 volt power. Two of the three dry type transformers that provide 120/208 volts are rated 150 and 225 kVA. A third unit is rated at 30 or 45 kVA. A 75 kVA transformer, listed as 480/277 to 480/240 volts, serves the elevator.

Switches and electrical panels were typically manufactured by Square D and installed in or after 2002. All of the main electrical distribution system components are serviceable and will likely remain so throughout the scope of this report. After ten to fifteen years of service, however, many high-use circuit devices, such as light switches, convenience outlets, and switch and cover plates, are likely to have sustained sufficient wear and tear that, if left unchecked through selective replacement, can lead to fire and shock hazards. Likewise, over that time, user equipment, furnishings, organizational structure, and other determinants of power needs change, leading to changes in branch circuit arrangement and / or usage. Panel directories, required by electrical codes and for practical reasons to be kept current, can be expected to require updating or replacement to accurately and legibly reflect current usage. Selective replacements to circuit devices and updating of electrical panel markings and directories should be undertaken after several more years but within the period of this report to maintain appropriate levels of electrical service and safety.

The interior spaces of this facility are illuminated by fixtures that utilize compact and T8 fluorescent lamps. The fluorescent fixtures are predominantly lay-in units with open-cell parabolic diffusers. The interior lighting is in good condition. With proper care, it will outlast the purview of this report.

The exterior areas adjacent to the building are illuminated by building-mounted high intensity discharge (HID) fixtures. The exterior lighting systems are adequate and in good condition. Normal maintenance and relamping should suffice for the duration of this report. No projects are recommended.

PLUMBING

Potable water is distributed throughout this facility via a copper piping network. Sanitary waste and storm water piping is typically of cast-iron, no-hub construction. The supply and drain piping networks are adequate and in satisfactory condition. They will likely provide reliable service throughout the scope of this analysis. The requirement for domestic hot water is modest and is satisfied using point-of-use equipment for which normal in-house maintenance and replacements are appropriate. The plumbing fixtures are in good working order and make use of modern, hands-free valves. However, as previously mentioned, the renovation of the restroom finishes and fixtures is recommended towards the end of the ten-year timeframe of this report.

VERTICAL TRANSPORTATION

The University commissioned an outside contractor to perform an elevator condition study in 2009. The aforementioned study did not identify any deficiencies requiring capital funding.

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

C. INSPECTION TEAM DATA

DATE OF INSPECTION: September 17, 2009

INSPECTION TEAM PERSONNEL:

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

FACILITY CONTACTS:

<u>NAME</u>	<u>POSITION</u>
William Bagwell	Associate Vice Chancellor, Campus Operations

REPORT DEVELOPMENT:

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

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

D. FACILITY CONDITION ANALYSIS - DEFINITIONS

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

1. REPORT DESCRIPTION

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

Section 2: Detailed Project Summaries and Totals

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

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

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

Section 3: Specific Project Details Illustrating Description / Cost

Section 4: Drawings with Iconography

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

Section 5: Life Cycle Model Summary and Projections

Section 6: Photographic Log

2. PROJECT CLASSIFICATION

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

3. PROJECT SUBCLASS TYPE

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

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

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

Example:

	<u>PRIORITY CLASS 1</u>	
CODE	PROJECT NO.	PRIORITY SEQUENCE
HV2C	0001HV04	01
PL1D	0001PL02	02

	<u>PRIORITY CLASS 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:	51.3 %	of National Average
Local Materials Index:	100.7 %	of National average
General Contractor Markup:	20.0 %	Contractor profit & overhead, bonds & insurance
Professional Fees:	16.0 %	Arch. / Eng. Firm design fees and in-house design cost



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

Example:

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

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

8. PHOTO NUMBER (Shown in Section 6)

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

Example: 0001006e

<u>Building Number</u>	<u>Photo Sequence</u>	<u>Arch / Eng / VT</u>
0001	006	e

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

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

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

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

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

Refer to the following Category Code Report.

Example: Category Code = EL5A

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

CATEGORY CODE

AC1A - AC4B
EL1A - EL8A
ES1A - ES6E
FS1A - FS6A
HE1A - HE7A
HV1A - HV8B
IS1A - IS6D
PL1A - PL5A
SI1A - SI4A
SS1A - SS7A
VT1A - VT7A

SYSTEM DESCRIPTION

ACCESSIBILITY
ELECTRICAL
EXTERIOR STRUCTURE
FIRE / LIFE SAFETY
HEALTH
HVAC
INTERIOR FINISHES / SYSTEMS
PLUMBING
SITE
SECURITY SYSTEMS
VERTICAL TRANSPORTATION

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

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

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

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

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

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

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

FACILITY CONDITION ANALYSIS

SECTION 2

**DETAILED PROJECT SUMMARIES
AND TOTALS**

**Detailed Project Totals
 Facility Condition Analysis
 System Code by Priority Class
 COTA : COTANCHE BUILDING**

System Code	System Description	Priority Classes				Subtotal
		1	2	3	4	
AC	ACCESSIBILITY	0	0	0	16,413	16,413
EL	ELECTRICAL	0	0	0	14,410	14,410
ES	EXTERIOR	0	0	0	45,788	45,788
FS	FIRE/LIFE SAFETY	1,012	165,943	9,652	78,148	254,755
HV	HVAC	0	0	0	871,301	871,301
IS	INTERIOR/FINISH SYS.	0	0	325,348	116,882	442,230
SI	SITE	0	0	13,440	0	13,440
	TOTALS	1,012	165,943	348,440	1,142,943	1,658,337

Facility Replacement Cost	\$7,740,000
Facility Condition Needs Index	0.21

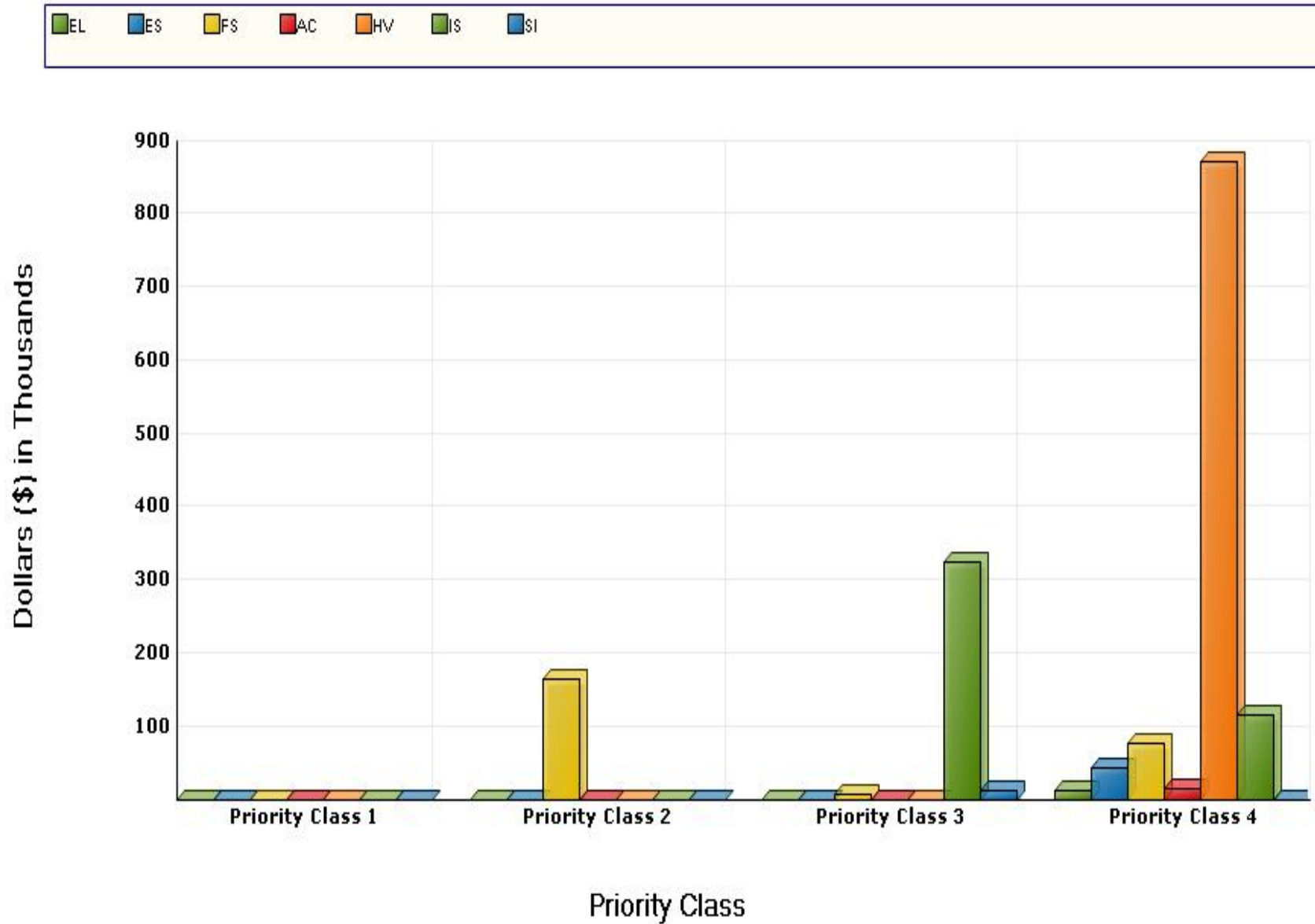
Gross Square Feet	29,137
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Total Cost Per Square Foot	\$56.92
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FACILITY CONDITION ANALYSIS

System Code by Priority Class

COTA : COTANCHE BUILDING



**Detailed Project Totals
 Facility Condition Analysis
 System Code by Project Class
 COTA : COTANCHE BUILDING**

System Code	System Description	Project Classes			Subtotal
		Capital Renewal	Deferred Maintenance	Plant Adaption	
AC	ACCESSIBILITY	0	0	16,413	16,413
EL	ELECTRICAL	14,410	0	0	14,410
ES	EXTERIOR	45,788	0	0	45,788
FS	FIRE/LIFE SAFETY	78,148	0	176,606	254,755
HV	HVAC	871,301	0	0	871,301
IS	INTERIOR/FINISH SYS.	337,732	104,498	0	442,230
SI	SITE	0	13,440	0	13,440
	TOTALS	1,347,380	117,938	193,019	1,658,337

Facility Replacement Cost	\$7,740,000
Facility Condition Needs Index	0.21

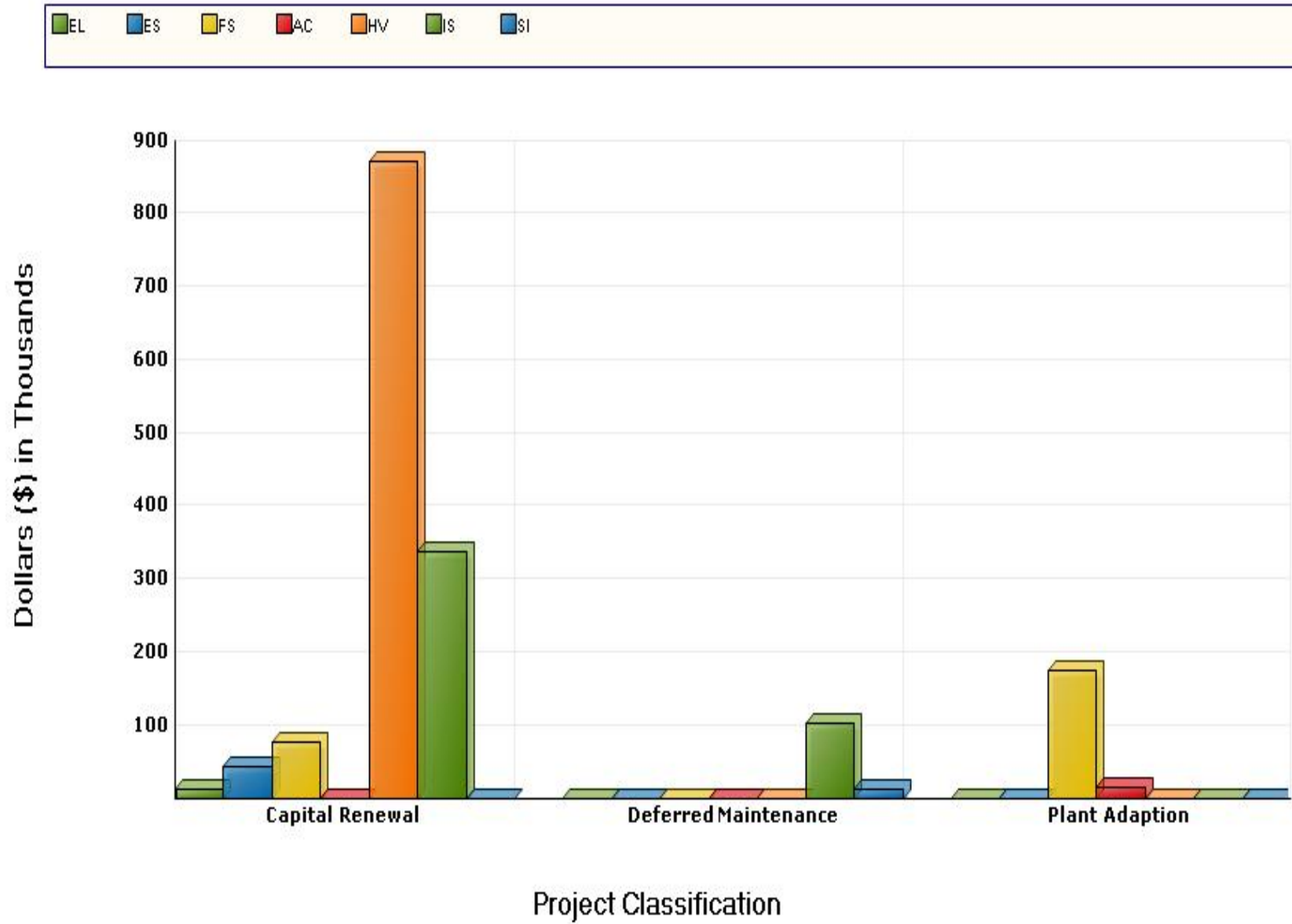
Gross Square Feet	29,137
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Total Cost Per Square Foot	\$56.92
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FACILITY CONDITION ANALYSIS

System Code by Project Class

COTA : COTANCHE BUILDING



Detailed Project Summary
Facility Condition Analysis
Project Class by Priority Class
COTA : COTANCHE BUILDING

Project Class	Priority Classes				Subtotal
	1	2	3	4	
Capital Renewal	0	0	220,850	1,126,530	1,347,380
Deferred Maintenance	0	0	117,938	0	117,938
Plant Adaption	1,012	165,943	9,652	16,413	193,019
TOTALS	1,012	165,943	348,440	1,142,943	1,658,337

Facility Replacement Cost	\$7,740,000
Facility Condition Needs Index	0.21

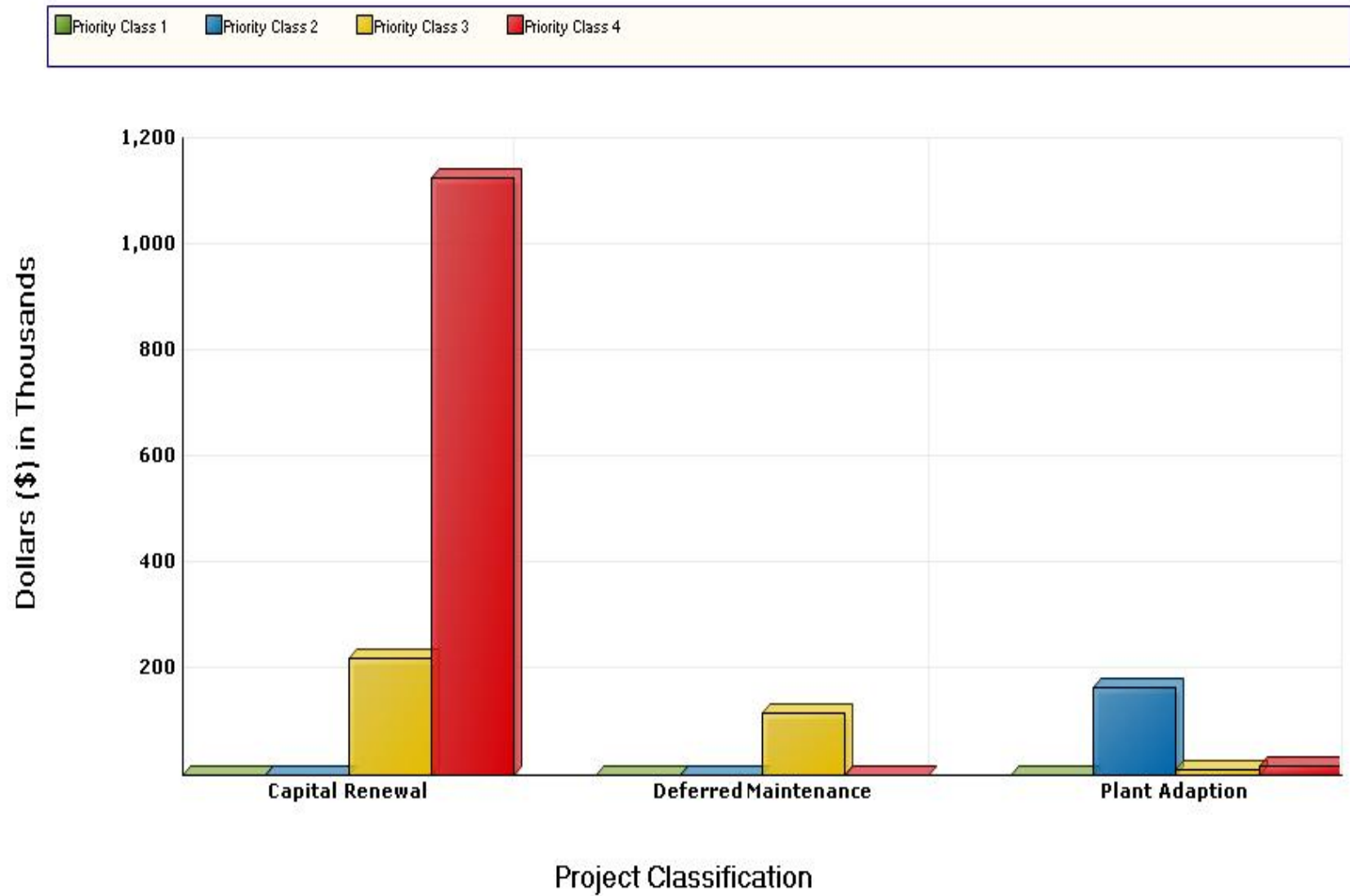
Gross Square Feet	29,137
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Total Cost Per Square Foot	\$56.92
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FACILITY CONDITION ANALYSIS

Project Class by Priority Class

COTA : COTANCHE BUILDING



Detailed Project Summary
Facility Condition Analysis
Priority Class - Priority Sequence
COTA : COTANCHE BUILDING

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Total Cost
FS5C	COTAFS01	1	1	ELIMINATE FIRE RATING COMPROMISES	872	140	1,012
Totals for Priority Class 1					872	140	1,012
FS3A	COTAFS04	2	2	FIRE SPRINKLER SYSTEM INSTALLATION	143,055	22,889	165,943
Totals for Priority Class 2					143,055	22,889	165,943
FS5E	COTAFS02	3	3	STAIR SAFETY UPGRADES	8,320	1,331	9,652
IS2B	COTAIS02	3	4	REFINISH WALLS	65,543	10,487	76,030
IS6D	COTAIS04	3	5	RESTROOM REFURBISHMENT	24,541	3,927	28,467
IS1A	COTAIS01	3	6	REFINISH FLOORING	190,388	30,462	220,850
SI4A	COTASI01	3	7	SITE PAVING UPGRADES	11,586	1,854	13,440
Totals for Priority Class 3					300,379	48,061	348,440
FS2A	COTAFS03	4	8	FIRE ALARM SYSTEM REPLACEMENT	67,369	10,779	78,148
AC2A	COTAAC01	4	9	BUILDING ENTRY ACCESSIBILITY UPGRADES	14,149	2,264	16,413
ES2B	COTAES01	4	10	RESTORE BRICK VENEER	22,334	3,574	25,908
ES4B	COTAES03	4	11	PITCHED METAL ROOF REPLACEMENT	12,788	2,046	14,834
ES2B	COTAES02	4	12	EXTERIOR METAL SIDING RENEWAL	4,350	696	5,046
HV3A	COTAHV01	4	13	REPLACE UNITARY HVAC SYSTEMS	159,115	25,458	184,573
HV3C	COTAHV02	4	14	COMPUTER ROOM AC UNIT REPLACEMENT	592,007	94,721	686,728
EL3B	COTAEL01	4	15	ELECTRICAL SYSTEM REPAIRS	12,423	1,988	14,410
IS3B	COTAIS03	4	16	REFINISH CEILINGS	100,760	16,122	116,882
Totals for Priority Class 4					985,295	157,647	1,142,943
Grand Total:					1,429,601	228,736	1,658,337

Detailed Project Summary
Facility Condition Analysis
Project Cost Range
COTA : COTANCHE BUILDING

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Total Cost
FS5C	COTAFS01	1	1	ELIMINATE FIRE RATING COMPROMISES	872	140	1,012
Totals for Priority Class 1					872	140	1,012
FS5E	COTAFS02	3	3	STAIR SAFETY UPGRADES	8,320	1,331	9,652
IS2B	COTAIS02	3	4	REFINISH WALLS	65,543	10,487	76,030
IS6D	COTAIS04	3	5	RESTROOM REFURBISHMENT	24,541	3,927	28,467
SI4A	COTASI01	3	7	SITE PAVING UPGRADES	11,586	1,854	13,440
Totals for Priority Class 3					109,991	17,599	127,589
AC2A	COTAAC01	4	9	BUILDING ENTRY ACCESSIBILITY UPGRADES	14,149	2,264	16,413
ES2B	COTAES01	4	10	RESTORE BRICK VENEER	22,334	3,574	25,908
ES2B	COTAES02	4	12	EXTERIOR METAL SIDING RENEWAL	4,350	696	5,046
ES4B	COTAES03	4	11	PITCHED METAL ROOF REPLACEMENT	12,788	2,046	14,834
FS2A	COTAFS03	4	8	FIRE ALARM SYSTEM REPLACEMENT	67,369	10,779	78,148
EL3B	COTAEL01	4	15	ELECTRICAL SYSTEM REPAIRS	12,423	1,988	14,410
Totals for Priority Class 4					133,413	21,346	154,760
Grand Totals for Projects < 100,000					244,276	39,084	283,360

Detailed Project Summary
Facility Condition Analysis
Project Cost Range
 COTA : COTANCHE BUILDING

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Total Cost
FS3A	COTAFS04	2	2	FIRE SPRINKLER SYSTEM INSTALLATION	143,055	22,889	165,943
Totals for Priority Class 2					143,055	22,889	165,943
IS1A	COTAIS01	3	6	REFINISH FLOORING	190,388	30,462	220,850
Totals for Priority Class 3					190,388	30,462	220,850
IS3B	COTAIS03	4	16	REFINISH CEILINGS	100,760	16,122	116,882
HV3A	COTAHV01	4	13	REPLACE UNITARY HVAC SYSTEMS	159,115	25,458	184,573
Totals for Priority Class 4					259,875	41,580	301,455
Grand Totals for Projects >= 100,000 and < 500,000					593,318	94,931	688,249

Detailed Project Summary
Facility Condition Analysis
Project Cost Range
 COTA : COTANCHE BUILDING

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Total Cost
HV3C	COTAHV02	4	14	COMPUTER ROOM AC UNIT REPLACEMENT	592,007	94,721	686,728
				Totals for Priority Class 4	592,007	94,721	686,728
				Grand Totals for Projects >= 500,000	592,007	94,721	686,728
				Grand Totals For All Projects:	1,429,601	228,736	1,658,337

Detailed Project Summary
Facility Condition Analysis
Project Classification
COTA : COTANCHE BUILDING

Cat Code	Project Number	Pri. Seq.	Project Classification	Pri. Cls	Project Title	Total Cost
IS1A	COTAIS01	6	Capital Renewal	3	REFINISH FLOORING	220,850
FS2A	COTAFS03	8	Capital Renewal	4	FIRE ALARM SYSTEM REPLACEMENT	78,148
ES2B	COTAES01	10	Capital Renewal	4	RESTORE BRICK VENEER	25,908
ES4B	COTAES03	11	Capital Renewal	4	PITCHED METAL ROOF REPLACEMENT	14,834
ES2B	COTAES02	12	Capital Renewal	4	EXTERIOR METAL SIDING RENEWAL	5,046
HV3A	COTAHV01	13	Capital Renewal	4	REPLACE UNITARY HVAC SYSTEMS	184,573
HV3C	COTAHV02	14	Capital Renewal	4	COMPUTER ROOM AC UNIT REPLACEMENT	686,728
EL3B	COTAEL01	15	Capital Renewal	4	ELECTRICAL SYSTEM REPAIRS	14,410
IS3B	COTAIS03	16	Capital Renewal	4	REFINISH CEILINGS	116,882
Totals for Capital Renewal						1,347,380
IS2B	COTAIS02	4	Deferred Maintenance	3	REFINISH WALLS	76,030
IS6D	COTAIS04	5	Deferred Maintenance	3	RESTROOM REFURBISHMENT	28,467
SI4A	COTASI01	7	Deferred Maintenance	3	SITE PAVING UPGRADES	13,440
Totals for Deferred Maintenance						117,938
FS5C	COTAFS01	1	Plant Adaption	1	ELIMINATE FIRE RATING COMPROMISES	1,012
FS3A	COTAFS04	2	Plant Adaption	2	FIRE SPRINKLER SYSTEM INSTALLATION	165,943
FS5E	COTAFS02	3	Plant Adaption	3	STAIR SAFETY UPGRADES	9,652
AC2A	COTAAC01	9	Plant Adaption	4	BUILDING ENTRY ACCESSIBILITY UPGRADES	16,413
Totals for Plant Adaption						193,019
Grand Total:						1,658,337

Detailed Project Summary
Facility Condition Analysis
Energy Conservation
 COTA : COTANCHE BUILDING

Cat Code	Project Number	Pri Cls	Pri Seq	Project Title	Total Cost	Annual Savings	Simple Payback
ES4B	COTAES03	4	11	PITCHED METAL ROOF REPLACEMENT	14,834	100	148.34
Totals for Priority Class 4					14,834	100	148.34
Grand Total:					14,834	100	148.34

Detailed Project Summary
Facility Condition Analysis
Category/System Code
COTA : COTANCHE BUILDING

Cat. Code	Project Number	Pri Cls	Pri Seq	Project Title	Construction Cost	Professional Fee	Total Cost
AC2A	COTAAC01	4	9	BUILDING ENTRY ACCESSIBILITY UPGRADES	14,149	2,264	16,413
Totals for System Code: ACCESSIBILITY					14,149	2,264	16,413
EL3B	COTAEL01	4	15	ELECTRICAL SYSTEM REPAIRS	12,423	1,988	14,410
Totals for System Code: ELECTRICAL					12,423	1,988	14,410
ES2B	COTAES01	4	10	RESTORE BRICK VENEER	22,334	3,574	25,908
ES4B	COTAES03	4	11	PITCHED METAL ROOF REPLACEMENT	12,788	2,046	14,834
ES2B	COTAES02	4	12	EXTERIOR METAL SIDING RENEWAL	4,350	696	5,046
Totals for System Code: EXTERIOR					39,473	6,316	45,788
FS5C	COTAFS01	1	1	ELIMINATE FIRE RATING COMPROMISES	872	140	1,012
FS3A	COTAFS04	2	2	FIRE SPRINKLER SYSTEM INSTALLATION	143,055	22,889	165,943
FS5E	COTAFS02	3	3	STAIR SAFETY UPGRADES	8,320	1,331	9,652
FS2A	COTAFS03	4	8	FIRE ALARM SYSTEM REPLACEMENT	67,369	10,779	78,148
Totals for System Code: FIRE/LIFE SAFETY					219,616	35,139	254,755
HV3A	COTAHV01	4	13	REPLACE UNITARY HVAC SYSTEMS	159,115	25,458	184,573
HV3C	COTAHV02	4	14	COMPUTER ROOM AC UNIT REPLACEMENT	592,007	94,721	686,728
Totals for System Code: HVAC					751,121	120,179	871,301
IS2B	COTAIS02	3	4	REFINISH WALLS	65,543	10,487	76,030
IS6D	COTAIS04	3	5	RESTROOM REFURBISHMENT	24,541	3,927	28,467
IS1A	COTAIS01	3	6	REFINISH FLOORING	190,388	30,462	220,850
IS3B	COTAIS03	4	16	REFINISH CEILINGS	100,760	16,122	116,882
Totals for System Code: INTERIOR/FINISH SYS.					381,233	60,997	442,230
SI4A	COTASI01	3	7	SITE PAVING UPGRADES	11,586	1,854	13,440
Totals for System Code: SITE					11,586	1,854	13,440
Grand Total:					1,429,601	228,736	1,658,337

FACILITY CONDITION ANALYSIS

SECTION 3

SPECIFIC PROJECT DETAILS
ILLUSTRATING DESCRIPTION / COST

Specific Project Details
Facility Condition Analysis
Section Three
COTA : COTANCHE BUILDING

Project Description

Project Number:	COTAFS01	Title:	ELIMINATE FIRE RATING COMPROMISES
Priority Sequence:	1		
Priority Class:	1		
Category Code:	FS5C	System:	FIRE/LIFE SAFETY
		Component:	EGRESS PATH
		Element:	SEPARATION RATING
Building Code:	COTA		
Building Name:	COTANCHE BUILDING		
Subclass/Savings:	Not Applicable		
Code Application:	IBC	711.3	
Project Class:	Plant Adaption		
Project Date:	10/2/2009		
Project Location:	Floor-wide: Floor(s) 1, 2		

Project Description

Structural fire separations are not maintained according to code requirements for new construction in select areas of this facility. Primarily, data cabling has been routed with minor regard for fire-rated separations in some areas. Intumescent passive firestopping and some minor structural separation repairs should be accomplished promptly, particularly in the main data and electrical rooms.

Specific Project Details
Facility Condition Analysis
Section Three
COTA : COTANCHE BUILDING

Project Cost

Project Number: COTAFS01

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Minor passive firestopping efforts	SF	10,200	\$0.03	\$306	\$0.08	\$816	\$1,122
Project Totals:				\$306		\$816	\$1,122

Material/Labor Cost		\$1,122
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		\$727
General Contractor Mark Up at 20.0%	+	\$145
Construction Cost		\$872
Professional Fees at 16.0%	+	\$140
Total Project Cost		\$1,012

Specific Project Details
Facility Condition Analysis
Section Three
COTA : COTANCHE BUILDING

Project Description

Project Number:	COTAFS04	Title:	FIRE SPRINKLER SYSTEM INSTALLATION
Priority Sequence:	2		
Priority Class:	2		
Category Code:	FS3A	System:	FIRE/LIFE SAFETY
		Component:	SUPPRESSION
		Element:	SPRINKLERS
Building Code:	COTA		
Building Name:	COTANCHE BUILDING		
Subclass/Savings:	Not Applicable		
Code Application:	NFPA	1, 13, 13R, 101	
Project Class:	Plant Adaption		
Project Date:	10/23/2009		
Project Location:	Area Wide: Floor(s) 1, 2		

Project Description

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

Specific Project Details
Facility Condition Analysis
Section Three
COTA : COTANCHE BUILDING

Project Cost

Project Number: COTAFS04

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Install wet-pipe sprinkler system, including valves, piping, sprinkler heads, piping supports, etc.	SF	23,674	\$3.08	\$72,916	\$3.77	\$89,251	\$162,167
Project Totals:				\$72,916		\$89,251	\$162,167

Material/Labor Cost		\$162,167
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		\$119,212
General Contractor Mark Up at 20.0%	+	\$23,842
Construction Cost		\$143,055
Professional Fees at 16.0%	+	\$22,889
Total Project Cost		\$165,943

Specific Project Details
Facility Condition Analysis
Section Three
COTA : COTANCHE BUILDING

Project Description

Project Number:	COTAFS02	Title:	STAIR SAFETY UPGRADES
Priority Sequence:	3		
Priority Class:	3		
Category Code:	FS5E	System:	FIRE/LIFE SAFETY
		Component:	EGRESS PATH
		Element:	STAIRS AND RAILING
Building Code:	COTA		
Building Name:	COTANCHE BUILDING		
Subclass/Savings:	Not Applicable		
Code Application:	IBC	1003.3	
	ADAAG	505	
Project Class:	Plant Adaption		
Project Date:	10/2/2009		
Project Location:	Floor-wide: Floor(s) 1, 2		

Project Description

Current legislation regarding building accessibility by the handicapped requires that stairs have graspable handrails on both sides, that the rails have a specific end geometry, and that the handrails continue horizontally at the landings. Although the stairs are compliant with the code enforced at the time of construction until a major renovation occurs, they are deficient in handrail and guardrail design relative to current standards. Future renovation efforts should include comprehensive stair railing upgrades.

Specific Project Details
Facility Condition Analysis
Section Three
COTA : COTANCHE BUILDING

Project Cost

Project Number: COTAFS02

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Center handrail / guardrail system per floor	FLR	4	\$1,297	\$5,188	\$833	\$3,332	\$8,520
Project Totals:				\$5,188		\$3,332	\$8,520

Material/Labor Cost		\$8,520
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		\$6,934
General Contractor Mark Up at 20.0%	+	\$1,387
Construction Cost		\$8,320
Professional Fees at 16.0%	+	\$1,331
Total Project Cost		\$9,652

Specific Project Details
Facility Condition Analysis
Section Three
COTA : COTANCHE BUILDING

Project Description

Project Number:	COTAIS02	Title:	REFINISH WALLS
Priority Sequence:	4		
Priority Class:	3		
Category Code:	IS2B	System:	INTERIOR/FINISH SYS.
		Component:	PARTITIONS
		Element:	FINISHES

Building Code:	COTA
Building Name:	COTANCHE BUILDING
Subclass/Savings:	Not Applicable

Code Application: Not Applicable

Project Class:	Deferred Maintenance
Project Date:	10/2/2009

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

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

Specific Project Details
Facility Condition Analysis
Section Three
COTA : COTANCHE BUILDING

Project Cost

Project Number: COTAIS02

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Standard wall finish (paint, wall covering, etc.)	SF	56,830	\$0.17	\$9,661	\$0.81	\$46,032	\$55,693
Premium wall finish (epoxy, tile, wood panel, etc.)	SF	4,940	\$2.28	\$11,263	\$3.92	\$19,365	\$30,628
Project Totals:				\$20,924		\$65,397	\$86,321

Material/Labor Cost		\$86,321
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		\$54,619
General Contractor Mark Up at 20.0%	+	\$10,924
Construction Cost		\$65,543
Professional Fees at 16.0%	+	\$10,487
Total Project Cost		\$76,030

Specific Project Details
Facility Condition Analysis
Section Three
COTA : COTANCHE BUILDING

Project Description

Project Number:	COTAIS04	Title:	RESTROOM REFURBISHMENT
Priority Sequence:	5		
Priority Class:	3		
Category Code:	IS6D	System:	INTERIOR/FINISH SYS.
		Component:	GENERAL
		Element:	OTHER
Building Code:	COTA		
Building Name:	COTANCHE BUILDING		
Subclass/Savings:	Not Applicable		
Code Application:	Not Applicable		
Project Class:	Deferred Maintenance		
Project Date:	10/2/2009		
Project Location:	Floor-wide: Floor(s) 1, 2		

Project Description

The restroom fixtures and finishes are commonly highly utilized public areas and will need systematic renewal of finishes, partitions, and accessories in order to maintain a high quality work environment and appropriate institutional appearance. A comprehensive restroom renewal will likely be necessary and is recommended at the end of the current ten-year review period.

Specific Project Details
Facility Condition Analysis
Section Three
COTA : COTANCHE BUILDING

Project Cost

Project Number: COTAIS04

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Public restroom renewal, including lavatory fittings, finishes, partitions, accessories, and fixtures if needed	FIXT	21	\$585	\$12,285	\$750	\$15,750	\$28,035
Project Totals:				\$12,285		\$15,750	\$28,035

Material/Labor Cost		\$28,035
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		\$20,451
General Contractor Mark Up at 20.0%	+	\$4,090
Construction Cost		\$24,541
Professional Fees at 16.0%	+	\$3,927
Total Project Cost		\$28,467

Specific Project Details
Facility Condition Analysis
Section Three
COTA : COTANCHE BUILDING

Project Description

Project Number:	COTAIS01	Title:	REFINISH FLOORING
Priority Sequence:	6		
Priority Class:	3		
Category Code:	IS1A	System:	INTERIOR/FINISH SYS.
		Component:	FLOOR
		Element:	FINISHES-DRY
Building Code:	COTA		
Building Name:	COTANCHE BUILDING		
Subclass/Savings:	Not Applicable		
Code Application:	Not Applicable		
Project Class:	Capital Renewal		
Project Date:	10/2/2009		
Project Location:	Floor-wide: Floor(s) 1, 2		

Project Description

Interior floor finish applications vary in age, type, and condition. Floor finish upgrades should be considered as part of any future cosmetic improvements or major comprehensive renovation efforts.

Specific Project Details
Facility Condition Analysis
Section Three
COTA : COTANCHE BUILDING

Project Cost

Project Number: COTAIS01

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Carpet	SF	20,450	\$5.36	\$109,612	\$2.00	\$40,900	\$150,512
Vinyl floor tile	SF	3,434	\$3.53	\$12,122	\$2.50	\$8,585	\$20,707
Partial renewal / replacement of raised flooring panels	SF	800	\$6.76	\$5,408	\$4.50	\$3,600	\$9,008
Resurface and seal concrete or terrazzo	SF	790	\$0.26	\$205	\$7.86	\$6,209	\$6,415
Project Totals:				\$127,347		\$59,294	\$186,642

Material/Labor Cost		\$186,642
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		<u>\$158,657</u>
General Contractor Mark Up at 20.0%	+	<u>\$31,731</u>
Construction Cost		<u>\$190,388</u>
Professional Fees at 16.0%	+	<u>\$30,462</u>
Total Project Cost		<u>\$220,850</u>

Specific Project Details
Facility Condition Analysis
Section Three
COTA : COTANCHE BUILDING

Project Description

Project Number:	COTASI01	Title:	SITE PAVING UPGRADES
Priority Sequence:	7		
Priority Class:	3		
Category Code:	SI4A	System:	SITE
		Component:	GENERAL
		Element:	OTHER
Building Code:	COTA		
Building Name:	COTANCHE BUILDING		
Subclass/Savings:	Not Applicable		
Code Application:	ADAAG	502	
Project Class:	Deferred Maintenance		
Project Date:	10/2/2009		
Project Location:	Undefined: Floor(s) 1		

Project Description

Pedestrian concrete paving systems are in overall fair to good condition but represent a potential liability to the owner in some areas, particularly on the south side of the building. New systems, including excavation, grading, base compaction, and pavements, are recommended. Vehicular paving systems in the parking areas are currently in good condition but will need minor upgrades, sealcoating, and graphics renewal as they age.

Specific Project Details
Facility Condition Analysis
Section Three
COTA : COTANCHE BUILDING

Project Cost

Project Number: COTASI01

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Concrete pedestrian paving (1,000 sf minimum)	SF	1,000	\$2.97	\$2,970	\$3.64	\$3,640	\$6,610
Vehicular paving sealcoat and striping allowance	SY	3,120	\$0.89	\$2,777	\$1.25	\$3,900	\$6,677
Project Totals:				\$5,747		\$7,540	\$13,287

Material/Labor Cost		\$13,287
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		\$9,655
General Contractor Mark Up at 20.0%	+	\$1,931
Construction Cost		\$11,586
Professional Fees at 16.0%	+	\$1,854
Total Project Cost		\$13,440

Specific Project Details
Facility Condition Analysis
Section Three
COTA : COTANCHE BUILDING

Project Description

Project Number:	COTAFS03	Title:	FIRE ALARM SYSTEM REPLACEMENT
Priority Sequence:	8		
Priority Class:	4		
Category Code:	FS2A	System:	FIRE/LIFE SAFETY
		Component:	DETECTION ALARM
		Element:	GENERAL
Building Code:	COTA		
Building Name:	COTANCHE BUILDING		
Subclass/Savings:	Not Applicable		
Code Application:	ADAAG	702.1	
	NFPA	1, 101	
Project Class:	Capital Renewal		
Project Date:	10/23/2009		
Project Location:	Floor-wide: Floor(s) 1, 2		

Project Description

Upgrade the existing Notifier fire alarm system with modern replacement components. 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.

Specific Project Details
Facility Condition Analysis
Section Three
COTA : COTANCHE BUILDING

Project Cost

Project Number: COTAFS03

Task Cost Estimate

Task Description	Unit	Qty	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	29,137	\$1.46	\$42,540	\$0.89	\$25,932	\$68,472
Project Totals:				\$42,540		\$25,932	\$68,472

Material/Labor Cost		\$68,472
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		\$56,141
General Contractor Mark Up at 20.0%	+	\$11,228
Construction Cost		\$67,369
Professional Fees at 16.0%	+	\$10,779
Total Project Cost		\$78,148

Specific Project Details
Facility Condition Analysis
Section Three
COTA : COTANCHE BUILDING

Project Description

Project Number:	COTAAC01	Title:	BUILDING ENTRY ACCESSIBILITY UPGRADES
Priority Sequence:	9		
Priority Class:	4		
Category Code:	AC2A	System:	ACCESSIBILITY
		Component:	BUILDING ENTRY
		Element:	GENERAL
Building Code:	COTA		
Building Name:	COTANCHE BUILDING		
Subclass/Savings:	Not Applicable		
Code Application:	ADAAG	703.1, 309, 403.6, 505	
Project Class:	Plant Adaption		
Project Date:	10/2/2009		
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 powered door operators be installed at the main public entrance and the secondary employee entrance adjacent to the parking lot. In addition, the installation of handrails at the accessible main entry ramp is recommended.

Specific Project Details
Facility Condition Analysis
Section Three
COTA : COTANCHE BUILDING

Project Cost

Project Number: COTAAC01

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Door operator, signage, and controls	SYS	2	\$2,830	\$5,660	\$1,333	\$2,666	\$8,326
Painted, freestanding handrail system at accessible entry ramp	LF	28	\$91.11	\$2,551	\$150	\$4,200	\$6,751
Project Totals:				\$8,211		\$6,866	\$15,077

Material/Labor Cost		\$15,077
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		\$11,791
General Contractor Mark Up at 20.0%	+	\$2,358
Construction Cost		\$14,149
Professional Fees at 16.0%	+	\$2,264
Total Project Cost		\$16,413

Specific Project Details
Facility Condition Analysis
Section Three
COTA : COTANCHE BUILDING

Project Description

Project Number:	COTAES01	Title:	RESTORE BRICK VENEER
Priority Sequence:	10		
Priority Class:	4		
Category Code:	ES2B	System:	EXTERIOR
		Component:	COLUMNS/BEAMS/WALLS
		Element:	FINISH
Building Code:	COTA		
Building Name:	COTANCHE BUILDING		
Subclass/Savings:	Not Applicable		
Code Application:	Not Applicable		
Project Class:	Capital Renewal		
Project Date:	10/2/2009		
Project Location:	Building-wide: Floor(s) 1		

Project Description

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

Specific Project Details
Facility Condition Analysis
Section Three
COTA : COTANCHE BUILDING

Project Cost

Project Number: COTAES01

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Cleaning and surface preparation	SF	13,600	\$0.11	\$1,496	\$0.22	\$2,992	\$4,488
Selective mortar and / or sealant repairs (assumes 10 linear feet for every 100 square feet of envelope)	LF	1,360	\$2.45	\$3,332	\$4.99	\$6,786	\$10,118
Applied finish or sealant	SF	13,600	\$0.22	\$2,992	\$0.82	\$11,152	\$14,144
Project Totals:				\$7,820		\$20,930	\$28,750

Material/Labor Cost		\$28,750
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		\$18,612
General Contractor Mark Up at 20.0%	+	\$3,722
Construction Cost		\$22,334
Professional Fees at 16.0%	+	\$3,574
Total Project Cost		\$25,908

Specific Project Details
Facility Condition Analysis
Section Three
COTA : COTANCHE BUILDING

Project Description

Project Number:	COTAES03	Title:	PITCHED METAL ROOF REPLACEMENT
Priority Sequence:	11		
Priority Class:	4		
Category Code:	ES4B	System:	EXTERIOR
		Component:	ROOF
		Element:	REPLACEMENT
Building Code:	COTA		
Building Name:	COTANCHE BUILDING		
Subclass/Savings:	Energy Conservation	\$100	
Code Application:	Not Applicable		
Project Class:	Capital Renewal		
Project Date:	10/2/2009		
Project Location:	Floor-wide: Floor(s) R		

Project Description

It is anticipated that the pitched metal roof application, both the barrel and low slope sections, will reach the end of its expected service life cycle within the ten-year window of this facility assessment. Future budget modeling should include a provision for the replacement of all failing roofing systems. Replace the pitched roof systems with a similar type roof application.

Specific Project Details
Facility Condition Analysis
Section Three
COTA : COTANCHE BUILDING

Project Cost

Project Number: COTAES03

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Painted metal roof	SF	990	\$5.87	\$5,811	\$9.46	\$9,365	\$15,177
Project Totals:				\$5,811		\$9,365	\$15,177

Material/Labor Cost		\$15,177
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		<u>\$10,656</u>
General Contractor Mark Up at 20.0%	+	<u>\$2,131</u>
Construction Cost		<u>\$12,788</u>
Professional Fees at 16.0%	+	<u>\$2,046</u>
Total Project Cost		<u>\$14,834</u>

Specific Project Details
Facility Condition Analysis
Section Three
COTA : COTANCHE BUILDING

Project Description

Project Number:	COTAES02	Title:	EXTERIOR METAL SIDING RENEWAL
Priority Sequence:	12		
Priority Class:	4		
Category Code:	ES2B	System:	EXTERIOR
		Component:	COLUMNS/BEAMS/WALLS
		Element:	FINISH
Building Code:	COTA		
Building Name:	COTANCHE BUILDING		
Subclass/Savings:	Not Applicable		
Code Application:	Not Applicable		
Project Class:	Capital Renewal		
Project Date:	10/2/2009		
Project Location:	Building-wide: Floor(s) 1		

Project Description

There are minor areas, primarily at the roof level, where painted exterior siding is utilized on the building facade. The panels are expected to perform adequately throughout the term of this review period but will likely require a paint finish reapplication and interim associated flashing repairs to achieve full long-term life cycle performance. Minor interim repairs and a paint finish reapplication are recommended within the next ten years to restore and renew the aesthetics and the integrity of the building envelope.

Specific Project Details
Facility Condition Analysis
Section Three
COTA : COTANCHE BUILDING

Project Cost

Project Number: COTAES02

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Minor flashing and siding repairs	LOT	1	\$1,875	\$1,875	\$2,485	\$2,485	\$4,360
Paint reapplication over metal panel siding	SF	720	\$0.22	\$158	\$0.82	\$590	\$749
Project Totals:				\$2,033		\$3,075	\$5,109

Material/Labor Cost		\$5,109
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		\$3,625
General Contractor Mark Up at 20.0%	+	\$725
Construction Cost		\$4,350
Professional Fees at 16.0%	+	\$696
Total Project Cost		\$5,046

Specific Project Details
Facility Condition Analysis
Section Three
COTA : COTANCHE BUILDING

Project Description

Project Number:	COTAHV01	Title:	REPLACE UNITARY HVAC SYSTEMS
Priority Sequence:	13		
Priority Class:	4		
Category Code:	HV3A	System:	HVAC
		Component:	HEATING/COOLING
		Element:	SYSTEM RETROFIT/REPLACE
Building Code:	COTA		
Building Name:	COTANCHE BUILDING		
Subclass/Savings:	Not Applicable		
Code Application:	ASHRAE	62-2004	
Project Class:	Capital Renewal		
Project Date:	10/23/2009		
Project Location:	Floor-wide: Floor(s) 1, 2, R		

Project Description

This facility is served by unitary HVAC systems that include split systems and packaged units. These systems are recommended for replacement. Replace them with new systems that are of the latest energy-efficient design. The project cost includes controls, related ductwork, electrical connections, and testing and balancing of the downstream air distribution system for the packaged units. For split systems, the project cost includes the condensing unit, evaporator fan unit, refrigeration piping, controls, and connections.

Specific Project Details
Facility Condition Analysis
Section Three
COTA : COTANCHE BUILDING

Project Cost

Project Number: COTAHV01

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Rooftop package unit, controls, all connections, and demolition of existing unit	TON	45	\$1,200	\$54,000	\$1,090	\$49,050	\$103,050
Air distribution system test and balance	SF	17,800	\$0.06	\$1,068	\$0.35	\$6,230	\$7,298
Replace split DX air conditioning system	TON	31	\$1,196	\$37,073	\$720	\$22,323	\$59,395
Project Totals:				\$92,141		\$77,603	\$169,743

Material/Labor Cost		\$169,743
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		\$132,596
General Contractor Mark Up at 20.0%	+	\$26,519
Construction Cost		\$159,115
Professional Fees at 16.0%	+	\$25,458
Total Project Cost		\$184,573

Specific Project Details
Facility Condition Analysis
Section Three
COTA : COTANCHE BUILDING

Project Description

Project Number:	COTAHV02	Title:	COMPUTER ROOM AC UNIT REPLACEMENT
Priority Sequence:	14		
Priority Class:	4		
Category Code:	HV3C	System:	HVAC
		Component:	HEATING/COOLING
		Element:	PKG./SELF CONTAINED UNITS
Building Code:	COTA		
Building Name:	COTANCHE BUILDING		
Subclass/Savings:	Not Applicable		
Code Application:	ASHRAE	15-2004	
Project Class:	Capital Renewal		
Project Date:	10/23/2009		
Project Location:	Floor-wide: Floor(s) 1, 2		

Project Description

The computer room air conditioning (CRAC) systems are recommended for replacement. Air conditioning failure in computer server rooms can cause damage or failure to expensive computer equipment and loss of data. Remove the existing CRAC units. Install new units of the latest design and efficiency.

Specific Project Details
Facility Condition Analysis
Section Three
COTA : COTANCHE BUILDING

Project Cost

Project Number: COTAHV02

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Computer-grade package air conditioner, refrigerant or glycol type, and demolition of existing unit	TON	122	\$3,657	\$446,160	\$704	\$85,878	\$532,038
Project Totals:				\$446,160		\$85,878	\$532,038

Material/Labor Cost		\$532,038
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		\$493,339
General Contractor Mark Up at 20.0%	+	\$98,668
Construction Cost		\$592,007
Professional Fees at 16.0%	+	\$94,721
Total Project Cost		\$686,728

Specific Project Details
Facility Condition Analysis
Section Three
COTA : COTANCHE BUILDING

Project Description

Project Number:	COTAEL01	Title:	ELECTRICAL SYSTEM REPAIRS
Priority Sequence:	15		
Priority Class:	4		
Category Code:	EL3B	System:	ELECTRICAL
		Component:	SECONDARY DISTRIBUTION
		Element:	DISTRIBUTION NETWORK
Building Code:	COTA		
Building Name:	COTANCHE BUILDING		
Subclass/Savings:	Not Applicable		
Code Application:	NEC	Articles 100, 210, 410	
Project Class:	Capital Renewal		
Project Date:	10/23/2009		
Project Location:	Floor-wide: Floor(s) 1, 2		

Project Description

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

Specific Project Details
Facility Condition Analysis
Section Three
COTA : COTANCHE BUILDING

Project Cost

Project Number: COTAEL01

Task Cost Estimate

Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Switches, receptacles, cover plates, breakers, and miscellaneous materials	SF	29,137	\$0.20	\$5,827	\$0.30	\$8,741	\$14,569
Project Totals:				\$5,827		\$8,741	\$14,569

Material/Labor Cost		\$14,569
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		\$10,352
General Contractor Mark Up at 20.0%	+	\$2,070
Construction Cost		\$12,423
Professional Fees at 16.0%	+	\$1,988
Total Project Cost		\$14,410

Specific Project Details
Facility Condition Analysis
Section Three
COTA : COTANCHE BUILDING

Project Description

Project Number:	COTAIS03	Title:	REFINISH CEILINGS
Priority Sequence:	16		
Priority Class:	4		
Category Code:	IS3B	System:	INTERIOR/FINISH SYS.
		Component:	CEILINGS
		Element:	REPLACEMENT

Building Code:	COTA
Building Name:	COTANCHE BUILDING
Subclass/Savings:	Not Applicable

Code Application: Not Applicable

Project Class:	Capital Renewal
Project Date:	10/2/2009

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

Project Description

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

Specific Project Details
Facility Condition Analysis
Section Three
COTA : COTANCHE BUILDING

Project Cost

Project Number: COTAIS03

Task Cost Estimate

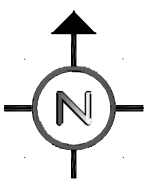
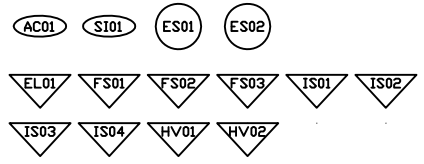
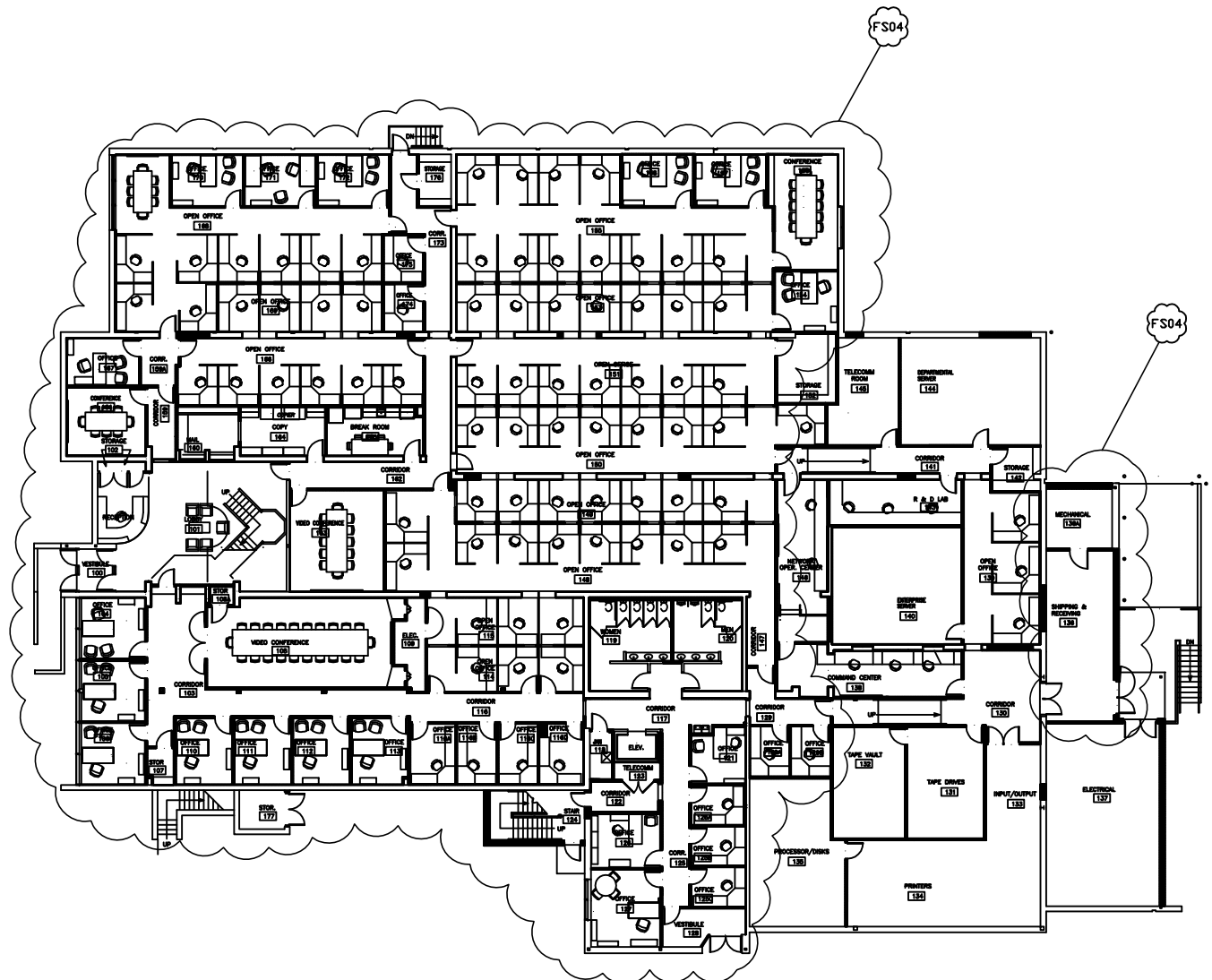
Task Description	Unit	Qty	Material Unit Cost	Total Material Cost	Labor Unit Cost	Total Labor Cost	Total Cost
Acoustical tile ceiling system	SF	22,290	\$2.12	\$47,255	\$2.98	\$66,424	\$113,679
Painted ceiling finish application	SF	3,930	\$0.17	\$668	\$0.81	\$3,183	\$3,851
Project Totals:				\$47,923		\$69,608	\$117,530

Material/Labor Cost		\$117,530
Material Index		100.7%
Labor Index		51.3%
Material/Labor Indexed Cost		<u>\$83,967</u>
General Contractor Mark Up at 20.0%	+	<u>\$16,793</u>
Construction Cost		<u>\$100,760</u>
Professional Fees at 16.0%	+	<u>\$16,122</u>
Total Project Cost		<u>\$116,882</u>

FACILITY CONDITION ANALYSIS

SECTION 4

**DRAWINGS
AND PROJECT LOCATIONS**



COTANCHE BUILDING

BLDG NO. COTA



FACILITY CONDITION ANALYSIS

2165 West Park Court
Suite N
Stone Mountain GA 30087
770.879.7376

PROJECT NUMBER APPLIES TO ONE ROOM ONLY

PROJECT NUMBER APPLIES TO ONE ITEM ONLY

PROJECT NUMBER APPLIES TO ENTIRE BUILDING

PROJECT NUMBER APPLIES TO ENTIRE FLOOR

PROJECT NUMBER APPLIES TO A SITUATION OF UNDEFINED EXTENTS

PROJECT NUMBER APPLIES TO AREA AS NOTED

Date: 12/04/09

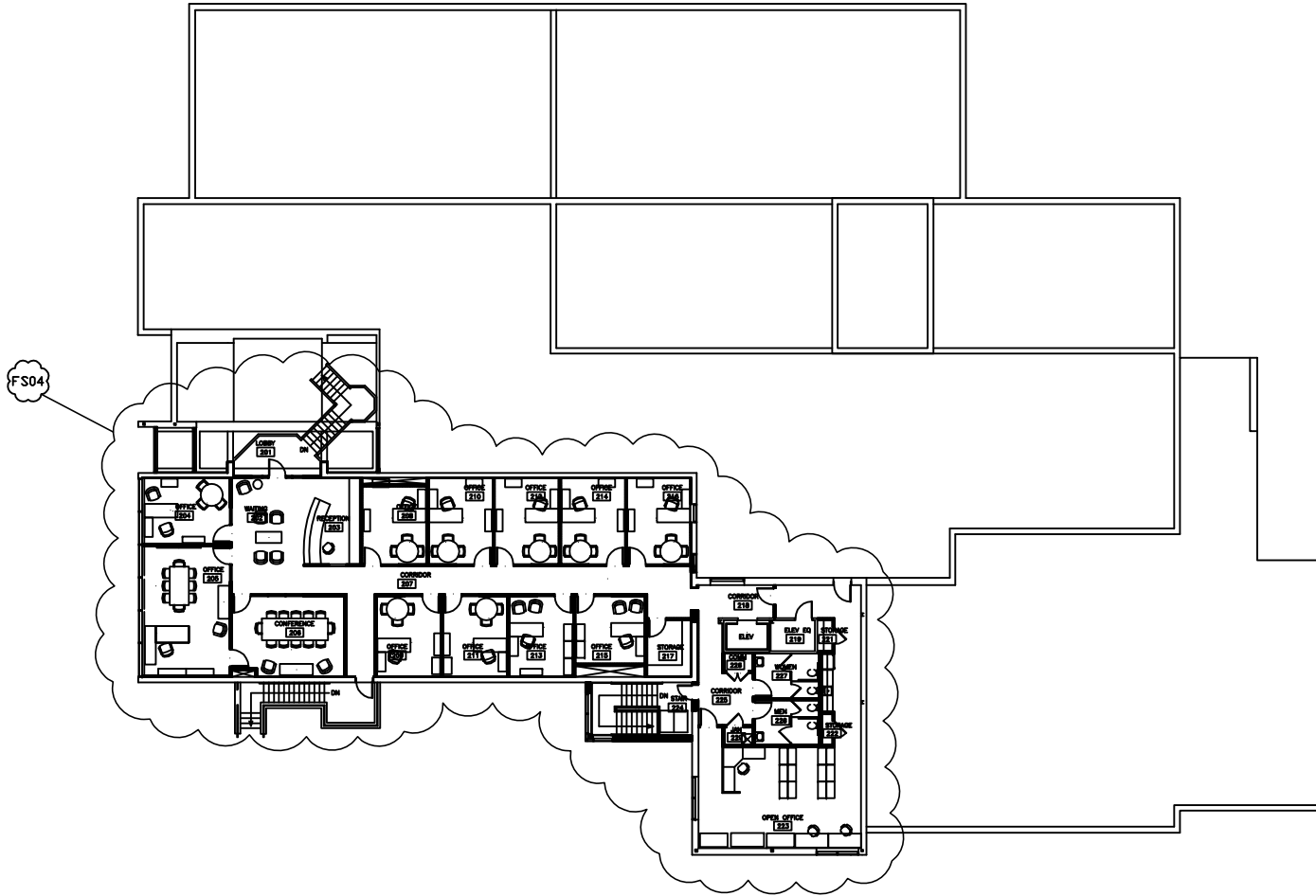
Drawn by: J.T.V.

Project No. 09-041

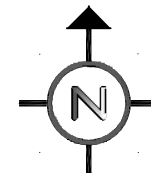
FIRST FLOOR PLAN

Sheet No. 1 of 2

ROOF
 ES03 HV01



EL01 FS01 FS02 FS03 IS01 IS02
 IS03 IS04 HV01 HV02



COTANCHE
 BUILDING

BLDG NO. COTA



FACILITY
 CONDITION
 ANALYSIS

2165 West Park Court
 Suite N
 Stone Mountain GA 30087
 770.879.7376

PROJECT NUMBER
 APPLIES TO
 ONE ROOM ONLY

PROJECT NUMBER
 APPLIES TO
 ONE ITEM ONLY

PROJECT NUMBER
 APPLIES TO
 ENTIRE BUILDING

PROJECT NUMBER
 APPLIES TO
 ENTIRE FLOOR

PROJECT NUMBER
 APPLIES TO A SITUATION
 OF UNDEFINED EXTENTS

PROJECT NUMBER
 APPLIES TO AREA
 AS NOTED

Date: 12/04/09

Drawn by: J.T.V.

Project No. 09-041

SECOND
 FLOOR
 PLAN

Sheet No.
 2 of 2

FACILITY CONDITION ANALYSIS

SECTION 5

LIFE CYCLE MODEL SUMMARY
AND PROJECTIONS

Life Cycle Model
Building Component Summary
COTA : COTANCHE BUILDING

Unifomat Code	Component Description	Qty	Units	Unit Cost	Complex Adj	Total Cost	Install Date	Life Exp
B2010	EXTERIOR FINISH RENEWAL	5,440	SF	\$1.30	.31	\$2,198	1955	10
B2010	EXTERIOR FINISH RENEWAL	8,160	SF	\$1.30	.31	\$3,298	1980	10
B2010	PAINTED METAL SIDING	720	SF	\$7.36		\$5,300	1980	35
B2020	STANDARD GLAZING AND CURTAIN WALL	1,250	SF	\$104.04		\$130,046	1980	55
B2030	HIGH TRAFFIC EXTERIOR DOOR SYSTEM	11	LEAF	\$4,311.24		\$47,424	2002	20
B2030	LOW TRAFFIC EXTERIOR DOOR SYSTEM	5	LEAF	\$2,863.29		\$14,316	2002	40
B3010	BUILT-UP ROOF	15,400	SF	\$6.70		\$103,221	2002	20
B3010	PAINTED METAL ROOF	990	SF	\$7.07	2.25	\$15,754	1985	30
B3010	PAINTED METAL ROOF	170	SF	\$7.07		\$1,202	2002	30
C1020	STANDARD DOOR AND FRAME INCLUDING HARDWARE	69	LEAF	\$783.68		\$54,074	2002	35
C1020	RATED DOOR AND FRAME INCLUDING HARDWARE	25	LEAF	\$1,489.06		\$37,226	2002	35
C1020	INTERIOR DOOR HARDWARE	25	EA	\$423.04		\$10,576	2002	15
C1020	INTERIOR DOOR HARDWARE	69	EA	\$423.04		\$29,190	2002	15
C3010	STANDARD WALL FINISH (PAINT, WALL COVERING, ETC.)	56,830	SF	\$0.80		\$45,523	2002	10
C3010	PREMIUM WALL FINISH (EPOXY, TILE, WOOD PANEL, ETC.)	4,940	SF	\$5.87		\$28,978	1980	20
C3020	CARPET	20,450	SF	\$8.75		\$178,865	2002	10
C3020	VINYL FLOOR TILE	3,434	SF	\$6.59		\$22,623	2002	15
C3020	VINYL FLOOR TILE	1,026	SF	\$6.59	3.5	\$23,657	2002	15
C3020	CERAMIC FLOOR TILE	520	SF	\$17.36		\$9,028	2002	20
C3020	RESURFACE AND SEAL CONCRETE OR TERRAZZO	790	SF	\$5.85		\$4,619	1955	50
C3030	ACOUSTICAL TILE CEILING SYSTEM	20,061	SF	\$4.99		\$100,165	2002	15
C3030	ACOUSTICAL TILE CEILING SYSTEM	2,229	SF	\$4.99	2.25	\$25,041	1980	15
C3030	PAINTED CEILING FINISH APPLICATION	3,930	SF	\$0.80		\$3,148	2002	15
D1010	ELEVATOR MODERNIZATION - HYDRAULIC	1	EA	\$158,628.64		\$158,629	2002	25
D1010	ELEVATOR CAB RENOVATION - PASSENGER	1	EA	\$26,616.80		\$26,617	2002	12
D2010	PLUMBING FIXTURES - OFFICE / ADMINISTRATION	29,137	SF	\$2.85		\$83,140	2002	35
D2020	WATER PIPING - OFFICE / ADMINISTRATION	29,137	SF	\$2.03		\$59,147	2002	35
D2020	WATER HEATER (ELECTRIC, INSTANTANEOUS)	2	EA	\$469.64		\$939	2002	10
D2030	DRAIN PIPING - OFFICE / ADMINISTRATION	29,137	SF	\$3.08		\$89,800	2002	40

**Life Cycle Model
Building Component Summary
COTA : COTANCHE BUILDING**

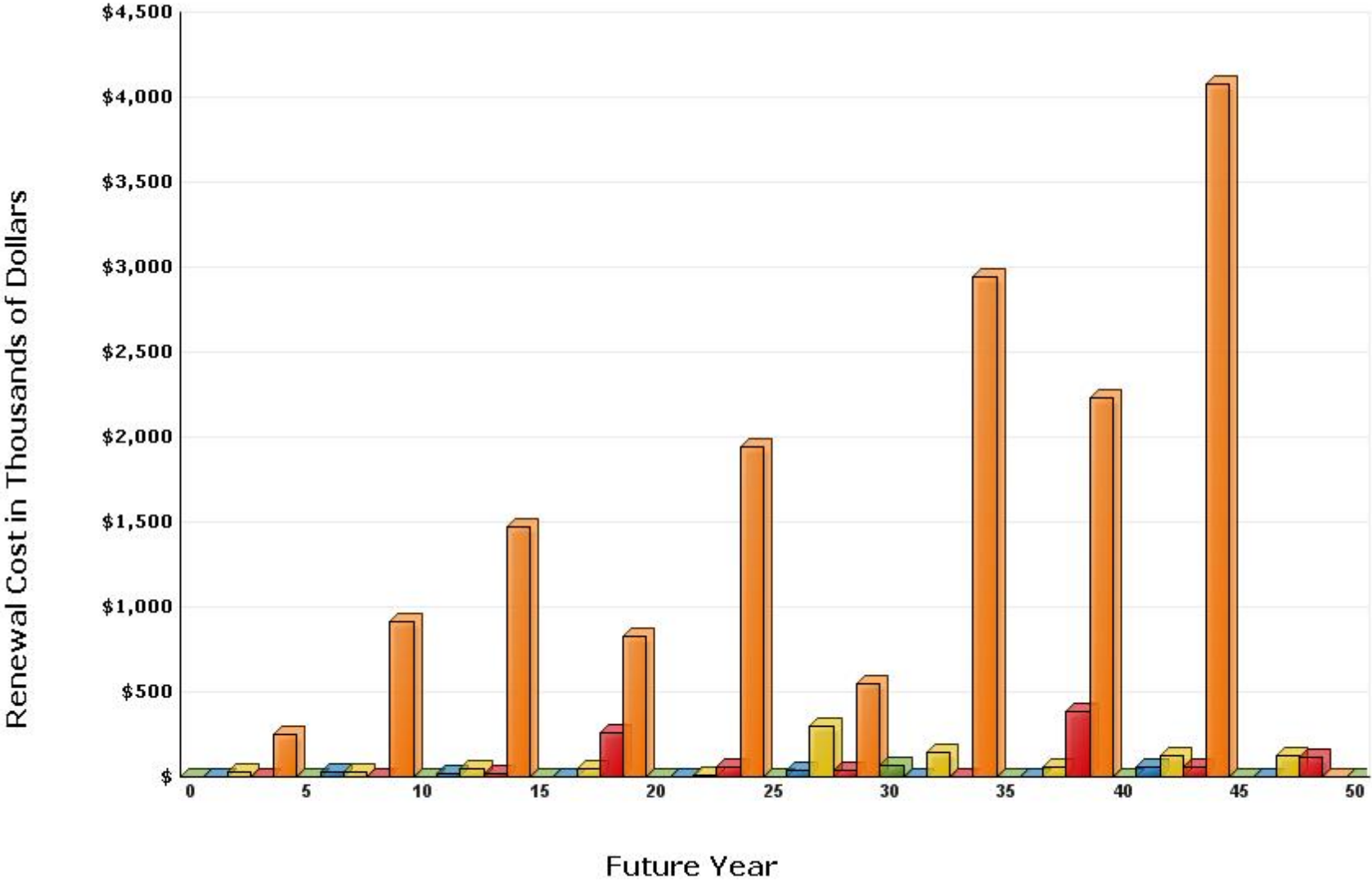
Unifomat Code	Component Description	Qty	Units	Unit Cost	Complex Adj	Total Cost	Install Date	Life Exp
D3030	CHILLER - AIR COOLED (UP TO 60 TONS)	46	TON	\$1,818.80	1.5	\$125,497	2006	20
D3030	CHILLER - AIR COOLED (60-100 TONS)	150	TON	\$1,260.62		\$189,093	2002	20
D3030	ROOFTOP HVAC UNIT	3	TON	\$2,415.23		\$7,246	2004	15
D3030	ROOFTOP HVAC UNIT	2	TON	\$2,415.23		\$4,830	2006	15
D3030	ROOFTOP HVAC UNIT	42	TON	\$2,415.23		\$101,440	2002	15
D3040	EXHAUST FAN - CENTRIFUGAL ROOF EXHAUSTER OR SIMILAR	5	EA	\$2,768.62		\$13,843	2002	20
D3040	HVAC SYSTEM - OFFICE / ADMINISTRATION	940	SF	\$24.80	1.2	\$27,977	2006	25
D3040	BASE MTD. PUMP - UP TO 15 HP	10	HP	\$3,175.77		\$31,758	2002	20
D3040	COMPUTER PACKAGE UNIT - CHILLED WATER	122	TON	\$2,263.63		\$276,163	2002	15
D3040	COMPUTER PACKAGE UNIT - CHILLED WATER	5	TON	\$2,263.63		\$11,318	2006	15
D3050	SPLIT DX SYSTEM	8	TON	\$2,143.89		\$17,151	2002	15
D3050	SPLIT DX SYSTEM	4	TON	\$2,143.89		\$8,576	2004	15
D3050	SPLIT DX SYSTEM	4	TON	\$2,143.89		\$8,576	2002	15
D3050	SPLIT DX SYSTEM	8	TON	\$2,143.89		\$17,151	2002	15
D3050	SPLIT DX SYSTEM	8	TON	\$2,143.89		\$17,151	2002	15
D4040	HALON - FM200 - INERGEN FIRE SUPPRESSION	35,880	CF	\$3.48		\$124,877	2002	25
D5010	ELECTRICAL SYSTEM - OFFICE / ADMINISTRATION	29,137	SF	\$11.82	1.2	\$413,149	2002	50
D5010	ELECTRICAL SWITCHGEAR 120/208V	600	AMP	\$32.96		\$19,778	2002	20
D5010	ELECTRICAL SWITCHGEAR 120/208V	800	AMP	\$32.96	1.1	\$29,008	2002	20
D5010	ELECTRICAL SWITCHGEAR 277/480V	60	AMP	\$39.56		\$2,374	2002	20
D5010	ELECTRICAL SWITCHGEAR 277/480V	1,600	AMP	\$39.56		\$63,302	2002	20
D5010	TRANSFORMER, DRY, 480-208V (30-150 KVA)	262	KVA	\$96.00		\$25,151	2002	30
D5020	EMERGENCY LIGHT (BATTERY)	2	EA	\$283.62		\$567	2002	20
D5020	EXIT SIGNS (CENTRAL POWER)	16	EA	\$163.78		\$2,620	2002	20
D5020	EXTERIOR LIGHT (HID)	12	EA	\$689.58		\$8,275	2002	20
D5020	LIGHTING - OFFICE / ADMINISTRATION	29,137	SF	\$7.24		\$210,845	2002	20
D5030	FIRE ALARM SYSTEM, POINT ADDRESSABLE	29,137	SF	\$2.61		\$76,181	2002	15
D5040	GENERATOR, DIESEL (200-500 KW)	500	KW	\$377.78		\$188,892	2002	25
E2010	KITCHENETTE UNIT WITH CABINETRY AND AMENITIES	1	LOT	\$5,940.22		\$5,940	2002	20

Life Cycle Model
Building Component Summary
COTA : COTANCHE BUILDING

Unifomat Code	Component Description	Qty	Units	Unit Cost	Complex Adj	Total Cost	Install Date	Life Exp
E2010	STANDARD BASE OR WALL CABINERY	40	LF	\$272.50		<u>\$10,900</u>	2002	20
						\$3,353,374		

Life Cycle Model Expenditure Projections

COTA : COTANCHE BUILDING



Average Annual Renewal Cost Per SqFt \$5.03

FACILITY CONDITION ANALYSIS

SECTION 6

PHOTOGRAPHIC LOG

**Photo Log - Facility Condition
Analysis**

COTA : COTANCHE BUILDING

Photo ID No	Description	Location	Date
COTA001a	Main building entrance	East elevation	9/17/2009
COTA001e	Emergency generator	Southeast exterior	9/17/2009
COTA002a	Built-up membrane roofing system	Main roof	9/17/2009
COTA002e	Three condensing units	Southeast exterior	9/17/2009
COTA003a	Built-up membrane roofing system	Main roof	9/17/2009
COTA003e	Kidde FM200 system control panels	Electrical room 137	9/17/2009
COTA004a	Built-up membrane roofing system	Main roof	9/17/2009
COTA004e	Trane rooftop air handling unit	Roof over first floor	9/17/2009
COTA005a	Built-up membrane roofing system	Main roof	9/17/2009
COTA005e	Two Trane rooftop air handling units	Higher-level roof over first floor	9/17/2009
COTA006a	Abandoned and rusting equipment supports	Main roof	9/17/2009
COTA006e	Kidde FM200 fire suppression agent discharge nozzle	Room 135	9/17/2009
COTA007a	Poorly flashed base flashing inside corner	Main roof	9/17/2009
COTA007e	FM200 suppression agent tanks	Room 136	9/17/2009
COTA008a	Built-up membrane roofing system	Main roof	9/17/2009
COTA008e	FM200 suppression agent tanks	Room 136A	9/17/2009
COTA009a	Painted metal siding at roof pop ups	Main roof	9/17/2009
COTA009e	Two condensing units for ductless air conditioning systems	Northeast exterior	9/17/2009
COTA010a	Metal roofing system over lobby	Main roof	9/17/2009
COTA011a	Metal roofing system over lobby	Main roof	9/17/2009
COTA012a	Failing flashing sealants, metal roof to membrane	Main roof	9/17/2009
COTA013a	Built-up membrane roofing system	Upper roof	9/17/2009
COTA014a	Failing flashing sealants, metal roof to ductwork	Upper roof	9/17/2009
COTA015a	Failing flashing sealants, metal roof to membrane	Upper roof	9/17/2009
COTA016a	Base flashing at metal roofing intersection	Upper roof	9/17/2009
COTA017a	Missing fire safing at conduit penetration	Electrical, 137	9/17/2009
COTA018a	Building facade	West elevation	9/17/2009
COTA019a	Building facade	West elevation	9/17/2009
COTA020a	Main building entry	West elevation	9/17/2009
COTA021a	Building facade	East elevation	9/17/2009
COTA022a	Building facade at generator yard	Southeast building corner	9/17/2009
COTA023a	Secondary building entry	South elevation	9/17/2009

**Photo Log - Facility Condition
Analysis**

COTA : COTANCHE BUILDING

Photo ID No	Description	Location	Date
COTA024a	Building facade	South elevation	9/17/2009
COTA025a	Building facade	South elevation	9/17/2009
COTA026a	Building facade	North elevation	9/17/2009
COTA027a	Building facade	North elevation	9/17/2009
COTA028a	Service loading dock	East site	9/17/2009
COTA029a	Mechanical equipment yard	Northeast building corner	9/17/2009
COTA030a	Generator, exterior yard	Southeast building corner	9/17/2009
COTA031a	Service loading dock	East site	9/17/2009
COTA032a	Onsite parking lot	South site	9/17/2009
COTA033a	Onsite parking lot	South site	9/17/2009
COTA034a	Poorly draining condensate sump	South exterior	9/17/2009
COTA035a	Typical interior corridor	Second floor	9/17/2009
COTA036a	Reception desk	Second floor	9/17/2009
COTA037a	ADA compliant dual level drinking fountains	Interior	9/17/2009
COTA038a	Non-compliant railing systems	Stair 224	9/17/2009
COTA039a	Data center blade center room	Room 134	9/17/2009
COTA040a	Data center processor room	Room 135	9/17/2009
COTA041a	Data center fire suppression cylinders	Room 136	9/17/2009
COTA042a	ADA compliant break room kitchenette	Room 165	9/17/2009
COTA043a	Missing handrailing	Main building entry ramp	9/17/2009

Facility Condition Analysis - Photo Log



COTA001A.jpg



COTA001E.jpg



COTA002A.jpg



COTA002E.jpg



COTA003A.jpg



COTA003E.jpg



COTA004A.jpg



COTA004E.jpg



COTA005A.jpg



COTA005E.jpg



COTA006A.jpg



COTA006E.jpg



COTA007A.jpg



COTA007E.jpg



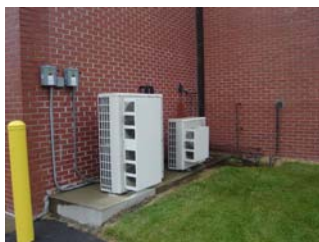
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Facility Condition Analysis - Photo Log



COTA012A.jpg



COTA013A.jpg



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Facility Condition Analysis - Photo Log



COTA032A.jpg



COTA033A.jpg



COTA034A.jpg



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