



Redding State Building (460)

2135 Civic Center Driver, Redding, CA 96001

Facility Condition Assessment

September 2015

Prepared for the State of California Department of General Services



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EXECUTIVE SUMMARY

BACKGROUND

This Facility Condition Assessment (FCA), prepared by EMG Corporation (EMG) in collaboration with the Department of General Services (DGS) Real Estate Services Division (RESA) and the consulting team of Hellmuth, Obata & Kassabaum, Inc. (HOK), is a component of a comprehensive long-range strategic asset management plan for DGS's portfolio of general-purpose office buildings. The goal is to determine the best course of action to address DGS's general-purpose office buildings' infrastructure deficiencies and space needs with a focus on controlling long-term costs.

The DGS portfolio comprises nearly 17 million gross square feet (GSF) of state-owned office facilities statewide, contained within 54 general-purpose state-owned office building sites. The FCA inventories and evaluates each of the DGS general purpose office buildings to benchmark current condition and establish a replacement value. This FCA assesses the infrastructure conditions for the Redding State Building (460).

The assessment methodology identifies infrastructure systems and components requiring immediate repair or replacement based on their useful life expectancy. In addition, the FCA projects the capital funding needs over a ten-year lifecycle horizon period of 2015 to 2024. The assessments evaluate envelope, structure, plumbing, heating, air conditioning, energy and lighting controls, electrical, data/communications, elevators, fire protection and suppression, security, and utility capacity and systems. The replacement value is determined by multiplying the existing building square footage (SF) by the cost per SF to construct a new, similar building on a similar site.

OBJECTIVE

The objective of the FCA is to identify the capital reserves for infrastructure lifecycle repair/replacement needs over the ten-year lifecycle. The FCA projections will become the basis for the Facility Condition Index (FCI). The FCI is the ratio of immediate repair costs or capital reserve needs to the current replacement value of the existing building. The FCI is a key performance indicator that is used to objectively quantify and evaluate the current condition of a building and can be used to compare the relative condition of the subject building with other buildings within the same portfolio and as a trending matrix for infrastructure "health" over time.

The Redding State Building (460) FCI ratio will be incorporated as a comparative factor in the overall DGS portfolio analysis, enabling DGS to accurately rank and prioritize building repair/replacement needs in the long-range strategic plan.

SCOPE OF ASSESSMENT

The EMG evaluation team, comprised of engineers and architects, visited the Redding State Building (460) on March 3, 2015. The evaluation team reviewed available engineering studies and construction documents to familiarize themselves with the physical conditions. The evaluation team conducted a walk-through of the building to observe building systems and components, identify physical deficiencies, and formulate recommendations to remedy any deficiencies.

SURVEY FINDINGS

One of the major goals of the FCA is to calculate the FCI, which gives an indication of a building’s overall condition. Two FCI ratios are calculated and presented – Current Year and Ten-Year. The Current Year FCI is the ratio of Immediate Repair Costs to the building’s Current Replacement Value. Similarly, the Ten-Year FCI is the ratio of anticipated Capital Reserve Needs over the next ten years to the Current Replacement Value.

The values are based on a scale from 0-100 percent. A lower FCI ratio indicates that the building’s infrastructure is in “Good” condition. Based on industry standards, a “Good” condition building will have an FCI ratio at or below five percent. A “Fair” condition building will have an FCI ratio between five and ten percent. A “Poor” condition building will have an FCI ratio between 10 and 65 percent. A building with an FCI ratio exceeding 65 percent is considered “Very Poor” and is a candidate for replacement or divestment.

The table below represents summary-level findings for the FCA. The deficiencies identified in this assessment can be combined with potential new construction requirements to develop an overall strategy that can serve as the basis for a portfolio-wide capital improvement funding strategy. Key findings from the assessment include:

Key Finding	Metric
Current Replacement Value	\$8,693,892
Immediate Repair Costs (12 months)	\$528,230
1-5 Year Capital Needs	\$1,246,731
6-10 Year Capital Needs	\$390,514
Total 10-Year Capital Reserve Needs	\$2,165,475

$$FCI = \frac{\text{Immediate Repair Costs or Ten-Year Capital Reserve Needs}}{\text{Current Replacement Value of Building}}$$

Current Year FCI

$$\text{Current FCI} = \frac{\$528,230}{\$8,693,892}$$

Ten-Year FCI

$$\text{Ten-Year FCI} = \frac{\$2,165,475}{\$8,693,892}$$

Current Year FCI	Ten-Year FCI
6.08 % = <i>Fair Condition</i>	24.91 % = <i>Poor Condition</i>

The major issues contributing to the Immediate Repair Costs and the Current Year FCI ratio are summarized below:

- The heating system boiler is original. It has far exceeded its expected useful life and is recommended for replacement with a high efficiency boiler.
- The cooling tower has far exceeded its expected life. Replacement is recommended.
- A basic DOS based system provides basic controls over the old boiler, chiller, and pumps. A separate 2003 York system monitors the newer chiller. A fully integrated direct digital control system is recommended.
- The fire alarm system appears adequate, but limited in function. An upgrade of reporting equipment in areas of the building other than the new DMV offices is recommended.

Further detail on the specific costs that make up the Immediate Repair Costs can be found in the cost tables in the appendices.

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INTRODUCTION

BUILDING BACKGROUND

The Redding Building (460), by Roy O. Swedin, is located at 2135 Civic Center Drive. The one-story concrete masonry building was completed in 1963 and sits on a 2.28 acre parcel. The stainless water sculpture by Roger Barr sits on the corner.

Six tenant agencies occupy the building, including The Department of Motor Vehicles, and Fish and Wildlife. The building offers 141 surface parking spaces.

The gross floor area is 24,000 SF with 19,371 net usable SF. The ratio of net usable to gross building area is 80.7 percent.

BUILDING DESCRIPTION

The building structural mainframe is concrete masonry units (CMU), load bearing walls, and steel-framed flat roof construction. An adjacent garage building is located at the northeast corner. A small wood-framed utility building is located on the east side of the main building.

The primary roofs are flat with built-up membranes. The new entrance for the DMV has a single-ply white roof finish. The utility building's sloped roof is covered with standard asphalt shingles.

Exterior walls are painted CMU with stucco wood fascia on the main building. The mechanical building has painted plywood siding. Windows are aluminum fixed units.

Interior walls are painted drywall, wood paneling, and ceramic tiles in restrooms. Floor finishes include carpet, vinyl tiles, and ceramic tiles. Ceiling finishes are suspended acoustic tiles and painted drywall.

Domestic hot water is provided to the restrooms and breakroom areas by a commercial grade on-demand gas-fired water heater.

Heating and cooling are provided by a central system with boiler, chiller, cooling tower, air handlers, split system condensers, and fan coils.

Life safety systems include a fire hydrant, smoke detectors, alarms, and extinguishers.

Planting beds for shrubs and small trees are located along the front and ends of the building. Decorative masonry retaining walls are located near the new customer entrance to the DMV. Asphalt paved parking is provided along the east and south sides of the property. Sidewalks are stone pavers and concrete.

Project Statistics

Item	Description
Project Name	Redding State Building
Building ID	460
Property Type	Administration
Year Built	1963
Number of Stories	1
Occupied	Yes
Land Area (acres)	2.28
Gross Square Feet (GSF)	24,000

FACILITY CONDITION ASSESSMENT

The goal of the FCA is to gather the data necessary to understand the existing building's condition, identify strategies to meet the building's lifecycle needs, and create the foundation for a long-range strategic plan.

COMPONENTS OF THE FCA

Current conditions analysis

The current condition analysis identifies the existing building's immediate requirements, including deferred maintenance, recommended discretionary improvements, and code non-compliance issues.

Anticipated building reserve analysis

The anticipated building reserve analysis projects the ongoing degradation of the building's components and costs associated with the reserve or replacement of these components as they reach the end of their useful lives.

Funding needs analysis

The funding needs analysis results in a summary report of deferred maintenance and systems reserve funding needs.

CALCULATION OF FUNDING NEEDS

Calculating probable funding needs involves identifying and quantifying the building's infrastructure systems or components that require immediate or future action over their lifecycle horizon. Funding needs are segregated into two categories, Immediate Repair Costs and Capital Reserve Needs. A Replacement Value is calculated and a Remaining Useful Life Estimate is determined as well as Opinions of Probable Cost in order to establish the FCI. The terms are defined as follows:

Immediate Repair Costs

Immediate Repair Costs are Opinions of Probable Cost that require immediate action as a result of: (1) material existing or potentially unsafe conditions, (2) material building or fire code violations, or (3) conditions that, if left un-remedied, have the potential to result in, or contribute to, critical element or system failure within **one year** that will likely result in a significant escalation of its remedial cost. Immediate Repair Costs are items which require action within year one.

Capital Reserve Needs

Capital Reserve Needs are recurring probable expenditures, which are not considered operation or maintenance expenses, that should be budgeted annually. In general, Capital Reserve Needs are reasonably predictable both in terms of frequency and cost. However, Capital Reserve Needs may also include components or systems that have an indeterminable life but nonetheless have a potential liability for failure within a ten-year period. The Capital Reserve Needs presented in the FCA represent average industry costs as of 2015, without inflation. The Ten-Year Expenditure Forecast table in Appendix G includes inflation by assuming a five percent annual inflation rate on Total Capital Needs by year.

Current Replacement Value

Current Replacement Value is determined by multiplying the existing building's SF by the Cost per SF to construct a new, similar building on a similar site. Current Replacement Value is not an appraised or market value for the purposes of a property sale. To estimate the cost per SF, EMG referenced Marshall & Swift's *Marshall Valuation Service*. This building cost data index is an industry standard, adjusted annually, and relied upon by the insurance industry, as well as other agencies and organizations. Cost per SF is calculated by adjusting Marshall & Swift's unit cost for a Government Office Building to account for factors related to building systems, class of construction, and location to reflect the estimated cost of construction at the subject building site.

Remaining Useful Life

Remaining Useful Life (RUL) estimate is based upon site observations, research, and judgment, along with reference to Expected Useful Life (EUL) tables from various industry sources. A sample copy of the EUL table is included in the appendices. EMG estimates when a system or component will likely need replacement based on a visual review of the current condition and the RUL estimate. Exposure to the elements, quality of installation, extent of use, and quality and amount of preventive maintenance exercised are factors that impact the effective age of a system or component. As a result, a system or component might have an effective age that is greater or less than its actual chronological age. The RUL of a system or component equals the EUL less its effective age.

Opinions of Probable Cost

Opinions of Probable Cost are estimates for individual repair or replacement and are a key consideration of this engagement. These estimates may be based on invoice or bid documents provided by the owner or building manager, cost estimates developed by construction resources (such as R.S. Means), or EMG's experience with similar properties, city cost indexes, and projections of economic conditions. Where quantities cannot be derived from building plans, lump sum costs or allowances are utilized.

Opinions of Probable Cost should only be construed as preliminary, order-of-magnitude budgets. Actual costs will likely vary from EMG's estimates depending on type and design of suggested remedy, quality of materials and installation, manufacturer and type of equipment or system selected, field conditions, whether a physical deficiency is repaired or replaced in whole, phasing of the work (if applicable), quality of contractor, market conditions, and whether competitive pricing is solicited. ASTM E2018-08¹ recognizes that certain Opinions of Probable Cost cannot be developed within the scope of an FCA without further study. Instances where a visual inspection is not possible and further study is recommended, EMG provides a cost estimate of the additional study in the FCA.

Facility Condition Index

The FCI gives an indication of a building's overall state of condition. The values are based on a 0-100 percent scale. The Current Year FCI is the ratio of Immediate Repair Costs to Current Replacement Value. The Ten-Year FCI is the ratio of Capital Reserve Needs (2015 – 2024) to Current Replacement Value. The Ten-Year FCI is calculated using uninflated 2015 dollars because the year of project implementation is likely unknown or subject to change. Since both the repair/replacement costs and Current Replacement Value will increase at the same inflation rate, the impacts of inflation do not significantly affect the FCI ratio.

¹ ASTM 2018-08 is the national guideline for preparing a Facility Condition Assessment published by the American Society for the Testing of Materials.

SCOPE OF ASSESSMENT

The evaluation team conducted a walk-through survey of Redding State Building (460) on March 3, 2015. The survey included analysis and observation of the building's interior and exterior, including the roofs. The evaluation team interviewed the building maintenance staff to inquire about the subject property's previous repairs and replacements and their costs, level of preventive maintenance exercised, pending repairs and improvements, and frequency of repairs and replacements. Opinions were developed based on the site evaluation, interviews with relevant maintenance providers and facilities managers, and previous experience with comparable properties. The evaluation team questioned those knowledgeable of the subject property's physical condition and operation (or knowledgeable of similar systems) to gain comparative information to use in evaluation of the subject property. In addition, the building staff provided documents and information to the evaluation team that were relevant to the subject property's physical improvements, extent, and type of use and assisted the team in identifying potential discrepancies between reported information and observed conditions.

The evaluation team made a visual assessment for compliance with the American with Disabilities Act (ADA) Accessibility Guidelines and the California Title 24 disabled access requirements. Items determined to be out of compliance are included in the repair/replacement costs. The assessments did not include detailed measurements to determine compliance under the regulations.

The data collected in the FCA are the basis of the projected ten-year Capital Reserve Needs. The goals of the FCA are:

- Benchmark current building condition with recommended corrections for deficiencies to establish the Immediate Repair Costs.
- Estimate life expectancy of various building systems and components to establish the Capital Reserve Needs for infrastructure lifecycle repair/replacement for the ten-year assessment period from 2015 to 2024.
- Provide estimates for corrections for Immediate Repairs Costs and projections for Capital Reserve Needs for lifecycle component replacement within the ten-year projection timeframe.
- Serve as a guide for future replacement, repairs, and improvements and assist DGS in prioritizing its capital budget and expenditures across its real estate portfolio.

PRIORITY RANKING

The recorded existing conditions, identified problems and deficiencies, documented corrective action, and quantities of recommended repairs and/or replacements are documented during the assessment process. Data are collected and entered directly into the assessment and capital planning database using tablet computers. Based on the discussions with the client and industry standards, a Priority Ranking is calculated for each cost observation. The Priority Ranking calculation is a function of four key categories.

PRIORITY RANKING CATEGORIES

Building Mission Ranking

A building can be ranked on a scale of one to ten based on conversations with the client regarding the importance of each building to the overall mission of the building. The properties reviewed during this assessment are all general-purpose office buildings and for the purposes of this study are all ranked the same for Building Mission.

Remaining Useful Life Ranking

The EUL projection of the component is calibrated against the RUL as estimated by the field assessor. This ratio is then utilized as a factor in the priority ranking. An RUL of zero years is given the highest priority and always results in ranking the component as Priority 1.

Asset Component Category

Each material or system (asset) evaluated is assigned a unique Unifomat code. The Unifomat designation is then associated with a ranking based on the overall importance to the operation of the building. An asset that is related to the building envelope, e.g. roof, window, or exterior siding, is assigned a higher ranking than a component such as a flooring, carpeting, or other finish material.

Functional Asset Categories

The cost associated with each asset or component evaluated is assigned to a category to include: Code Compliance, Facility Operations, Environmental Factors, Facility Functionality, and Integrity of the Facility. The Asset Categories are given a ranking based on their relative importance. For example, Code Compliance is ranked higher than Maintenance.

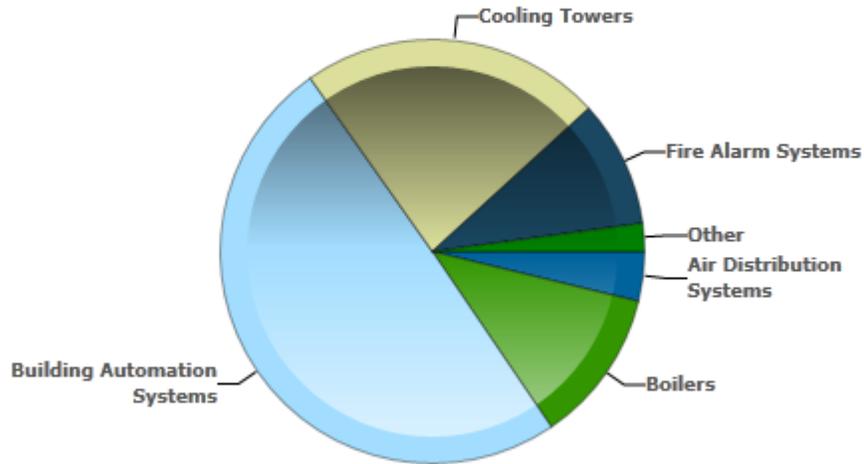
PRIORITY RATIO

The four categories above are assigned a numerical value and the values are multiplied together for each cost observation. The resulting number is then assigned a priority by the capital planning software with the lower range assigned Priority 1 and the higher range of numbers assigned among Priority 2, Priority 3, and Priority 4. Priority 5 is reserved for code issues that were permitted by the code at the time of construction but would be required only if a major renovation or code compliance project were to be undertaken.

The physical condition of building systems and related components are typically defined as being in one of four conditions: Good, Fair, Poor, or Very Poor, or a combination thereof. For the purposes of this report, the following definitions are used:

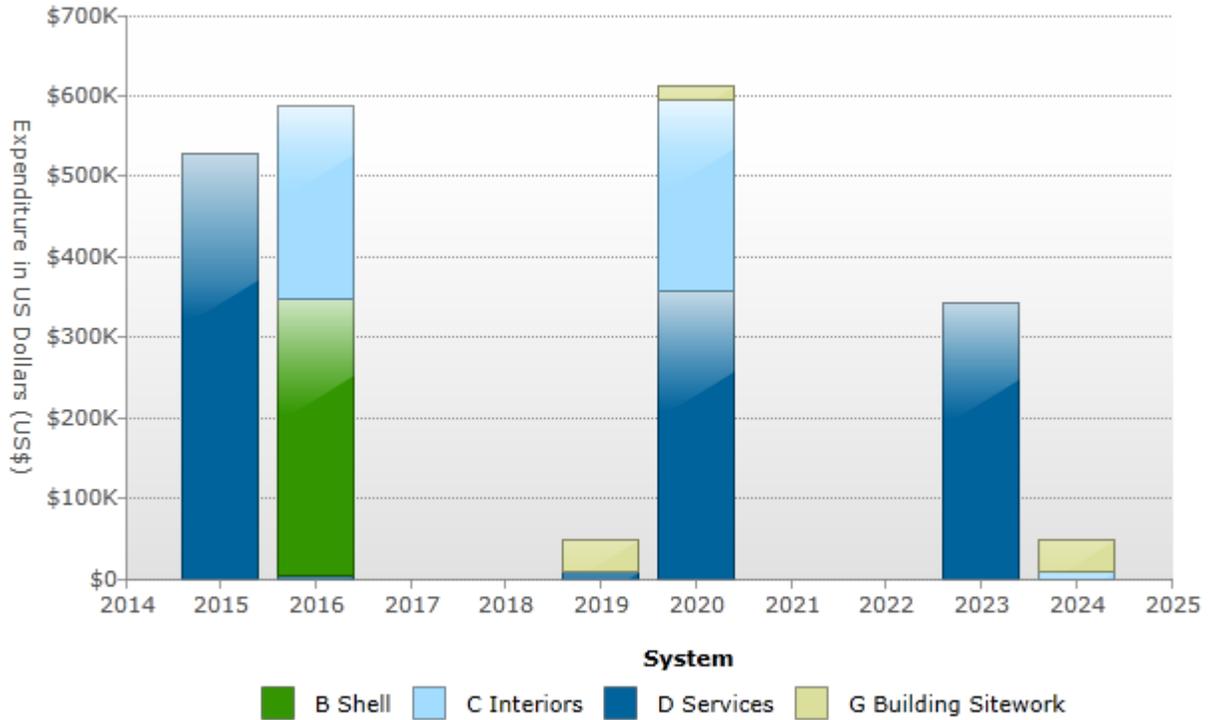
Condition	Definition
Good	In new or well-maintained condition, with no visual evidence of wear, soiling, or other deficiencies.
Fair	Subjected to wear and soiling but is still in a serviceable and functioning condition.
Poor	Subjected to hard or long-term wear. Nearing the end of its useful or serviceable life.
Very Poor	Subjected to hard or long-term wear. Has reached the end of its useful or serviceable life. Renewal is now necessary.

Distribution of Immediate Needs by Building System



Level	Building System	Estimated Cost
D3021	Boilers	\$62,000
D3031	Cooling Towers	\$121,396
D3041	Air Distribution Systems	\$19,974
D3068	Building Automation Systems	\$262,607
D5012	Low Tension Service & Dist.	\$11,278
D5037	Fire Alarm Systems	\$50,976
	Total	\$528,230

Total Capital Needs By System and Year



Year	Building System							Total
	A Sub-Structure	B Shell	C Interiors	D Services	E Equip. & Furnishings	F Spec. Const. & Demolition	G Bldg. Site Work	
2015	\$0	\$0	\$0	\$528,230	\$0	\$0	\$0	\$528,230
2016	\$0	\$343,757	\$239,891	\$3,000	\$0	\$0	\$0	\$586,647
2019	\$0	\$0	\$0	\$9,403	\$0	\$0	\$37,940	\$47,343
2020	\$0	\$0	\$235,387	\$358,474	\$0	\$0	\$18,880	\$612,741
2023	\$0	\$0	\$0	\$343,497	\$0	\$0	\$0	\$343,497
2024	\$0	\$0	\$9,077	\$0	\$0	\$0	\$37,940	\$47,017
Total	\$0	\$343,757	\$484,354	\$1,242,604	\$0	\$0	\$94,761	\$2,165,475

CURRENT REPLACEMENT VALUE

The Current Replacement Value has been determined as \$9,185,985 for the Redding State Building Building (460). The Current Replacement Value is the existing building SF multiplied by the Cost per SF to construct a new, similar building. As noted previously, the basis of the Cost per SF amount is the Marshall & Swift Cost Valuation system. A copy of the cost calculation is included in Appendix H of this report.

Building Area	Cost/SF	Current Replacement Value
24,000 GSF	\$374	\$8,693,892

FACILITY CONDITION INDEX

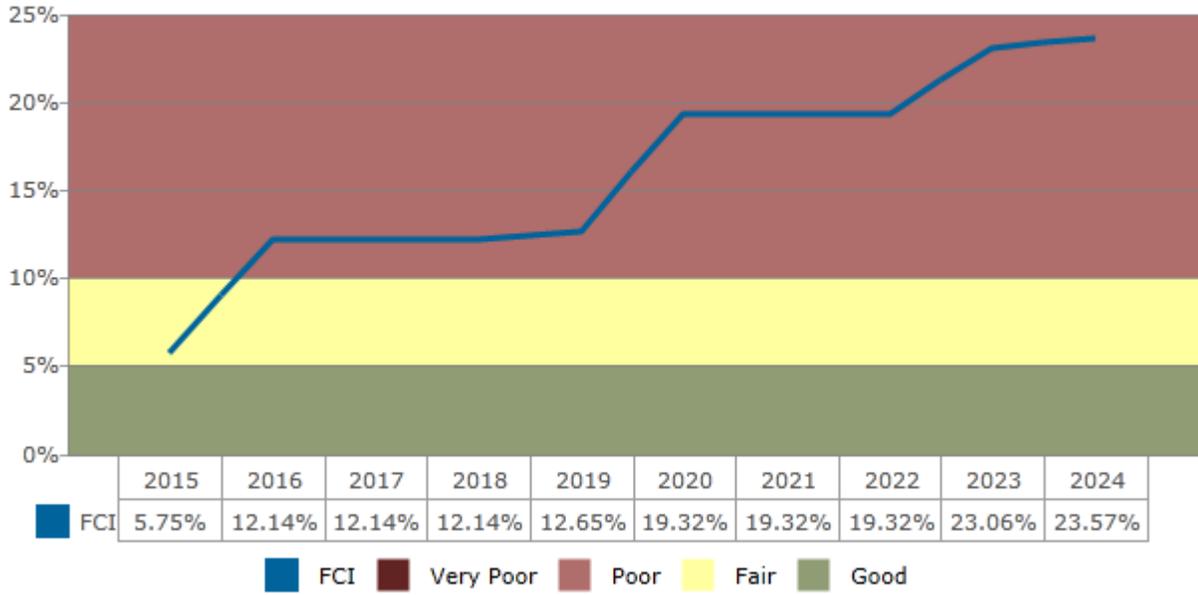
The FCI¹ is an indication of a building’s current and future overall condition. According to industry standards an FCI ratio of 65 percent, or the “rule of two-thirds,” is the threshold for identifying potential candidates for replacement or divestment.² Once the FCI ratio reaches 65 percent, or roughly two-thirds of the Current Replacement Value of the estimated cost to replace a building, it may not be prudent to continue to fund repairs. In cases where aggressive facilities planning is expected to be necessary, this threshold may be adjusted to address more pressing needs.

Condition	Definition	Value
Good	In new or well-maintained condition, with no visual evidence of wear, soiling or other deficiencies.	0% to 5%
Fair	Subjected to wear and soiling but is still in a serviceable and functioning condition.	Greater than 5% to 10%
Poor	Subjected to hard or long-term wear. Nearing the end of its useful or serviceable life.	Greater than 10% to 65%
Very Poor	Subjected to hard or long-term wear. Has reached the end of its useful or serviceable life. Renewal is now necessary.	Greater than 65%

² Sean C. Rush (1991). *Managing the Facilities Portfolio: a Practical Approach to Institutional Facility Renewal and Deferred Maintenance*. National Association of College and University Business Officers. pp. 26–66. ISBN 978-0-915164-59-2.

The chart below indicates the cumulative effects of the FCI ratio over the ten-year study period assuming the required funds are NOT provided to address the identified repairs and replacements for each year.

Cumulative Effects of FCI over the Study Period



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APPENDICES

APPENDIX A: ACCESSIBILITY ISSUES

No accessibility issues were observed

APPENDIX B: GENERAL ASSESSMENT INFORMATION

A Substructure Systems

A10 FOUNDATIONS

Item	Description
A1032 Structural Slab on Grade	A1032 Reinforced Concrete Slab Foundation
Condition	Good
Qty / UOM	24,000 / SF
RUL (years)	18
Location	Site

OBSERVATIONS/COMMENTS:

No further action is required.

B Shell Systems

B20 EXTERIOR ENCLOSURE

Item	Description
B2011 Exterior Wall Construction	B2011 Paint Exterior Masonry Walls
Condition	Fair
Qty / UOM	10,800 / SF
RUL (years)	1
Location	Exterior Walls

OBSERVATIONS/COMMENTS:

Exterior walls are painted concrete masonry units (CMU) with stucco fascia. Painting will be required during the term due to normal deterioration. Painting also is required for utility buildings.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
B2011	Replace B2011 Paint Exterior Masonry Walls	10,800.0 - SF	4.6	IN - Beyond Rated Life	Priority 1	2016	49,283

Item	Description
B2011 Exterior Wall Construction	B2010 Wood Exterior Walls
Condition	Good
Qty / UOM	320 / SF
RUL (years)	10
Location	Mechanical Building

OBSERVATIONS/COMMENTS:

Based on the condition and limited amount of wood only routine maintenance is anticipated.

Item	Description
B2021 Windows	B2021 Aluminum Windows
Condition	Fair
Qty / UOM	80 / EA
RUL (years)	1
Location	Exterior Walls

OBSERVATIONS/COMMENTS:

The windows are single pane and have far exceeded their expected useful life (EUL). Replacement is recommended due to extended age and condition.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
B2021	Replace B2021 Aluminum Windows	80.0 - EA	3227.8	IN - Beyond Rated Life	Priority 1	2016	258,222

Item	Description
B2031 Glazed Doors & Entrances	B2031 Glazed Entrance Doors
Condition	Fair
Qty / UOM	8 / EA
RUL (years)	1
Location	Exterior Walls

OBSERVATIONS/COMMENTS:

The exterior full vision doors have exceeded their expected serviceable life and are not energy efficient. Based on remaining useful life (RUL), replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
B2031	Replace B2031 Glazed Entrance Doors	8.0 - EA	4335.5	IN - Beyond Rated Life	Priority 1	2016	34,684

Item	Description
B2032 Solid Exterior Doors	B2032 Exterior Doors, steel louvered
Condition	Fair
Qty / UOM	1 / EA
RUL (years)	1
Location	Mechanical Room exterior

OBSERVATIONS/COMMENTS:

The mechanical room exterior steel doors with louvers show rust damage, and appear to be original to the construction date. Based on extended age and condition, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
B2032	Replace B2032 Exterior Doors, steel louvered	1.0 - EA	1568.4	IN - Beyond Rated Life	Priority 1	2016	1,568

COST SUMMARY:

Type	Year	Total Expenditures
B20 Exterior Enclosure	2016	\$343,757

B30 ROOFING

Item	Description
B3011 Roof Finishes	B3011 Roof Finishes, Asphalt Singles
Condition	Good
Qty / UOM	2 / SQ
RUL (years)	15
Location	Mechanical Shed

OBSERVATIONS/COMMENTS:

No further action is required.

Item	Description
B3011 Roof Finishes	B3011 TPO Roofing
Condition	Good
Qty / UOM	2 / SQ
RUL (years)	15
Location	DMV entrance addition

OBSERVATIONS/COMMENTS:

No further action is required.

Item	Description
B3011 Roof Finishes	B3011 Built-Up Roofing
Condition	Fair
Qty / UOM	257 / SF
RUL (years)	10
Location	Main building and utility building roofs

OBSERVATIONS/COMMENTS:

No further action is required.

C Interiors Systems

C10 INTERIOR CONSTRUCTION

Item	Description
C1021 Interior Doors	C1021 Interior Doors
Condition	Fair
Qty / UOM	200 / EA
RUL (years)	23
Location	Entire Facility

OBSERVATIONS/COMMENTS:

No further action is required.

C30 INTERIOR FINISHES

Item	Description
C3012 Wall Finishes to Interior Walls	C3012 Paint Interior Walls, Drywall
Condition	Fair
Qty / UOM	36,000 / SF
RUL (years)	5
Location	Throughout Interior

OBSERVATIONS/COMMENTS:

Based on RUL, the interior walls will require repainting during the assessment period.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
C3012	Replace C3012 Paint Interior Walls, Drywall	36,000.0 - SF	2.1	IN - Appearance	Priority 4	2020	76,781

Item	Description
C3024 Flooring	C3024 Vinyl Tile
Condition	Poor - Fair
Qty / UOM	1,600 / SY
RUL (years)	1
Location	Interior except DMV

OBSERVATIONS/COMMENTS:

Based on RUL and condition, vinyl tile replacement is anticipated during the assessment period, with the exception of the newly renovated DMV area.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
C3024	Replace C3024 Vinyl Tile	1,600.0 - SY	125.8	IN - Appearance	Priority 3	2016	201,248

Item	Description
C3025 Carpeting	C3025 Carpet Tiles - Standard
Condition	Fair
Qty / UOM	400 / SY
RUL (years)	1
Location	Interior except DMV

OBSERVATIONS/COMMENTS:

Based on RUL and condition, carpet tile replacement is anticipated during the assessment period, with the exception of the newly renovated DMV area.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
C3025	Replace C3025 Carpet Tiles - Standard	400.0 - SY	96.6	IN - Appearance	Priority 3	2016	38,642

Item	Description
C3031 Ceiling Finishes	C3031 Painted Drywall Ceilings
Condition	Good
Qty / UOM	2,000 / SF
RUL (years)	9
Location	Restrooms

OBSERVATIONS/COMMENTS:

Based on RUL, drywall ceilings in the restrooms with require repainting during the assessment term.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
C3031	Replace C3031 Painted Drywall Ceilings	2,000.0 - SF	4.5	IN - Appearance	Priority 4	2024	9,077

Item	Description
C3032 Suspended Ceilings	C3032 Acoustical Ceiling Tile
Condition	Fair
Qty / UOM	132 / CSF
RUL (years)	5
Location	Entire Facility

OBSERVATIONS/COMMENTS:

Based on RUL, acoustic tile ceiling replacement is anticipated during the assessment period in all areas of the building, except the newly renovated DMV customer area, offices, and restrooms.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
C3032	Replace C3032 Acoustical Ceiling Tile	132.0 - CSF	1201.6	IN - Appearance	Priority 4	2020	158,606

COST SUMMARY:

Type	Year	Total Expenditures
C30 Interior Finishes	2016	\$239,891
C30 Interior Finishes	2020	\$235,387
C30 Interior Finishes	2024	\$9,077

D Services Systems

D20 PLUMBING

Item	Description
D2011 Water Closets	D2011 Commercial Water Closet - Auto
Condition	Good
Qty / UOM	7 / EA
RUL (years)	25
Location	Restrooms
Low Flow Toilet	Yes
System Grade	Commercial Grade

OBSERVATIONS/COMMENTS:

Restrooms were upgraded in 2014. Automatic flush valves were observed. No further action is required.

Item	Description
D2012 Urinals	D2012 Urinal - Auto
Condition	Good
Qty / UOM	2 / EA
RUL (years)	20
Location	Restroom
Low Flow Toilet	Yes
System Grade	Commercial Grade

OBSERVATIONS/COMMENTS:

Restrooms were upgraded in 2014. Automatic flush valves were observed. No further action is required.

Item	Description
D2013 Lavatories	D2013 Wall Hung Lavatory and Faucet - Auto
Condition	Good
Qty / UOM	4 / EA
RUL (years)	34
Location	Restrooms

OBSERVATIONS/COMMENTS:

Restrooms were upgraded in 2014. Automatic faucets were observed. No further action is required.

Item	Description
D2022 Hot Water Service	D2020 Domestic Hot Water Heater - Electric - On Demand
Condition	Good
Qty / UOM	1 / EA
RUL (years)	14
Location	Mechanical Room

OBSERVATIONS/COMMENTS:

The instantaneous electric water heater was installed in 2014. No further action is required.

D30 HVAC

Energy Supply	
Item	Description
Fuel Oil Type	N/A
Fuel Gas Type	N/A
Solid Fuel Type	N/A
District Heat Type	Site Physical Plant Hot Water
District Cooling Type	Site Physical Plant Chilled Water
Solar Thermal	No
Fuel Tank Type	N/A
Fuel Tank Size (gallons)	N/A
Fuel Tank Location	N/A
Gas Meter Location	Northeast exterior corner of building
Electrical Meter Location	Northeast exterior corner of building
Water Meter Location	Street vault

Item	Description
D3021 Boilers	D3020 Water Boiler, Gas 1300 MBH
Condition	Poor
Qty / UOM	1 / EA
RUL (years)	0
Location	Mechanical Room

OBSERVATIONS/COMMENTS:

The heating boiler is original and has far exceeded EUL. It is recommended for replacement with a high efficiency hot water unit.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D3021	Replace D3020 Water Boiler, Gas 1300 MBH	1.0 - EA	62000.0	IN - Beyond Rated Life	Priority 1	2015	62,000

Item	Description
D3022.1 Circulating Pumps	D3023 HW Circulating Pump -1 HP
Condition	Good
Qty / UOM	1 / EA
RUL (years)	8
Location	Chiller Building

OBSERVATIONS/COMMENTS:

Based on RUL, the hot water circulation pump will require replacement during the term.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D3022	Replace D3023 HW Circulating Pump -1 HP	1.0 - EA	3144.2	IN - Beyond Rated Life	Priority 4	2023	3,144

Item	Description
D3022.1 Circulating Pumps	D3022 Chilled Water Circ Pump 2 HP
Condition	Good
Qty / UOM	1 / EA
RUL (years)	8
Location	Chiller Building

OBSERVATIONS/COMMENTS:

Based on RUL, the chilled water circulation pump will require replacement during the term.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D3022	Replace D3022 Chilled Water Circ Pump 2 HP	1.0 - EA	12202.8	IN - Beyond Rated Life	Priority 4	2023	12,203

Item	Description
D3022.1 Circulating Pumps	D3023 Condensate Return Pump 2 HP
Condition	Good
Qty / UOM	1 / EA
RUL (years)	8
Location	Chiller Building

OBSERVATIONS/COMMENTS:

Based on RUL, the hot water condensate return pump will require replacement during the term.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D3022	Replace D3023 Condensate Return Pump 2 HP	1.0 - EA	12202.8	IN - Beyond Rated Life	Priority 4	2023	12,203

Item	Description
D3031.1 Chillers	D3031 Chiller, Water Cooled, 75 Ton
Condition	Good
Qty / UOM	1 / EA
RUL (years)	8
Location	Chiller Building

OBSERVATIONS/COMMENTS:

The additional chiller was added in 2003. Based on RUL, replacement is anticipated.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D3031	Replace D3031 Chiller, Water Cooled, 75 Ton	1.0 - EA	315947.0	IN - Beyond Rated Life	Priority 4	2023	315,947

Item	Description
D3031.1 Chillers	D3031 Chiller, Water Cooled, 75 Ton
Condition	Fair
Qty / UOM	1 / EA
RUL (years)	5
Location	Mechanical Room

OBSERVATIONS/COMMENTS:

The original chiller remains online, but is a backup unit and remains operational.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D3031	Replace D3031 Chiller, Water Cooled, 75 Ton	1.0 - EA	315947.0	IN - Beyond Rated Life	Priority 3	2020	315,947

Item	Description
D3031.2 Cooling Towers	D3031 Cooling Tower, Galvanized Steel,170 Ton
Condition	Fair
Qty / UOM	1 / EA
RUL (years)	0
Location	Pad Mount

OBSERVATIONS/COMMENTS:

The cooling tower has far exceeded its expected life, but is still functioning. Prompt replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D3031	Replace D3031 Cooling Tower, Galvanized Steel,170 Ton	1.0 - EA	121396.0	IN - Beyond Rated Life	Priority 1	2015	121,396

Item	Description
D3041 Air Distribution Systems	D3041 VAV Boxes
Condition	Fair
Qty / UOM	8 / EACH
RUL (years)	0
Location	Mechanical Room

OBSERVATIONS/COMMENTS:

The variable air volume (VAV) boxes and controls have exceeded EUL and are recommended for replacement.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D3041	Replace D3041 VAV Boxes	8.0 - EACH	2496.7	IN - Beyond Rated Life	Priority 1	2015	19,974

Item	Description
D3041.1 Air Handling Units	D3041 Interior AHU
Condition	Fair
Qty / UOM	2 / EA
RUL (years)	5
Location	Mechanical Room

OBSERVATIONS/COMMENTS:

The air handling unit (AHU) is original. One 15 hp motor was recently replaced. Based on estimated RUL, replacements will be required.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D3041	D3041 Add VFD to 15 HP fan motors	1.0 - EA	3000.0	IN - Beyond Rated Life	Priority 1	2016	3,000

Item	Description
D3042 Exhaust Ventilation Systems	D3042 Exhaust Fan 450 CFM
Condition	Good
Qty / UOM	2 / EA
RUL (years)	15
Location	Rooftop

OBSERVATIONS/COMMENTS:

The rooftop exhaust fans were upgraded during the 2014 DMV remodel.

Item	Description
D3052 Package Units	D3052 Single Zone Rooftop Unit 10-Ton
Condition	Good
Qty / UOM	1 / EA
RUL (years)	14
Location	Rooftop

OBSERVATIONS/COMMENTS:

The rooftop packaged unit was installed during the 2014 DMV remodel. No further action is required.

Item	Description
D3052 Package Units	D3052 Split System for DMV, 1.5Ton
Condition	Good
Qty / UOM	18 / EA
RUL (years)	15
Location	DMV

OBSERVATIONS/COMMENTS:

The split system fan coils are new to the 2014 remodel of DMV. No further action is required.

Item	Description
D3052 Package Units	D3052 Split System for DMV AC, 22 Tons
Condition	Good
Qty / UOM	2 / EA
RUL (years)	14
Location	Rooftop

OBSERVATIONS/COMMENTS:

The split system roof-mounted unit provides air conditioning to the DMV. No further action is required.

Item	Description
D3068 Building Automation Systems	D3068 Direct Digital Control- Install
Condition	Poor
Qty / UOM	24,000 / SF
RUL (years)	0
Location	Maintenance Administrative

OBSERVATIONS/COMMENTS:

A basic "SEIB Environmental" DOS-based system provides basic controls for the old boiler, chiller, and pumps. The 2003 York system monitors the newer chiller system. An integrated direct digital control (DDC) system should be considered.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D3068	Replace D3068 Direct Digital Control- Install	24,000.0 - SF	8.2	FN - Modernization	Priority 1	2015	197,606
D3068	D3068 Upgrade from Pneumatic system	1.0 - SF	65000.1	OP - Maintenance	Priority 2	2015	65,000

Item	Description
D3068 Building Automation Systems	D3068 DDC Controls - Basic
Condition	Fair
Qty / UOM	24,000 / SF
RUL (years)	15
Location	Throughout Facility

OBSERVATIONS/COMMENTS:

DDC controls for the chiller were installed in 2003. The SEIB Environmental DOS-based system controls the chiller, pumps, and cooling tower of the original mechanical room equipment. Extensive system upgrades should be considered.

COST SUMMARY:

Type	Year	Total Expenditures
D30 HVAC	2015	\$465,976
D30 HVAC	2016	\$3,000
D30 HVAC	2020	\$315,947
D30 HVAC	2023	\$343,497

D40 FIRE PROTECTION SYSTEMS

Fire and Life Safety System	
Item	Description
Fire Alarm System Components Present	
Smoke detectors	Yes
Pull stations	Yes
Audible alarms	Yes
Strobe lights	Yes
Central fire alarm panel	Yes
Annunciator panel	N/A
Smoke Detectors Power Supply	Hardwired Electric
Carbon Monoxide Detectors	N/A
Heat Detector	Yes
Central Fire Alarm Panel Location	Security Desk
Annunciator Panel Location	N/A
Fire Extinguishers	N/A
Fire Extinguisher Inspection Date	March 3, 2015
Distance to Nearest Fire Hydrant (ft)	20
Illuminated Exit Signs	Yes
Kitchen Suppression Systems	N/A
Halon Gas Systems	N/A
Smoke Evacuation Systems	N/A
Fire-rated Stairwells	N/A
Fire-rated Stairwell Finish	N/A
Stairwell Discharge	N/A
Stairwell Pressurized	N/A
Fire-Rated Doors Observed	N/A
Location of Fire-Rated Doors	Boiler Room
Fire Alarm Service Company	Major Alarm Inc
Date of Last Fire Alarm Service	March 3, 2015
Are the individual office unit fire alarm systems monitored?	N/A
Are the common area fire alarm systems monitored?	N/A
Types of Common Areas Monitored	Halls and DMV
Fire Alarm Monitoring Company	Major Alarm Inc

Item	Description
D4032 Fire Extinguisher Cabinets	D4090 Other Fire Protection Systems
Condition	Good
Qty / UOM	8 / EA
RUL (years)	13
Location	Throughout interior

OBSERVATIONS/COMMENTS:

No further action is required.

D50 ELECTRICAL SYSTEMS

Item	Description
D5012 Low Tension Service & Dist.	D5010 Switchgear, Mainframe, 1000 Amps
Condition	Poor
Qty / UOM	1 / EA
RUL (years)	0
Location	Outdoor Electical Area

OBSERVATIONS/COMMENTS:

The main switchgear is original equipment and has far exceeded EUL. Based on condition and age, the switchgear should be replaced.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D5012	Replace D5010 Switchgear, Mainframe, 1000 Amps	1.0 - EA	11277.7	IN - Beyond Rated Life	Priority 1	2015	11,278

Item	Description
D5012 Low Tension Service & Dist.	D5012 Breaker Panel 225 Amps, 30 Circuits
Condition	Fair
Qty / UOM	4 / EA
RUL (years)	15
Location	Utility Areas/Closets

OBSERVATIONS/COMMENTS:

No further action is recommended.

Item	Description
D5012 Low Tension Service & Dist.	D5012 Breaker Panel 225 Amps, 30 Circuits
Condition	Good
Qty / UOM	2 / EA
RUL (years)	39
Location	Utility Areas/Closets

OBSERVATIONS/COMMENTS:

The breaker panel was added during the 2014 DMV remodel. No further action is required.

Item	Description
D5012 Low Tension Service & Dist.	D5010 Switchgear, Mainframe, 800 Amps
Condition	Good
Qty / UOM	1 / EA
RUL (years)	39
Location	Outdoor Electrical Area

OBSERVATIONS/COMMENTS:

The panel was added during the 2014 DMV remodel. No further action is required.

Item	Description
D5022 Lighting Equipment	D5020 Interior Lighting, Suspended Ceilings
Condition	Fair
Qty / UOM	106 / EA
RUL (years)	5
Location	Administrative areas outside DMV

OBSERVATIONS/COMMENTS:

Ceiling fluorescent lighting should be replaced in conjunction with replacement of suspended ceilings outside the DMV area.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D5022	Replace D5020 Interior Lighting, Suspended Ceilings	106.0 - EA	401.2	FN - Modernization	Priority 3	2020	42,527

Item	Description
D5037 Fire Alarm Systems	D5037 Fire Alarm Panel
Condition	Fair
Qty / UOM	1 / EA
RUL (years)	4
Location	Communication Room

OBSERVATIONS/COMMENTS:

Based on RUL, the fire alarm panel will require replacement during the assessment term.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D5037	Replace D5037 Fire Alarm Panel	1.0 - EA	9402.5	CC - Life Safety	Priority 2	2019	9,403

Item	Description
D5037 Fire Alarm Systems	D5037 Fire Alarm System
Condition	Fair
Qty / UOM	14,400 / SF
RUL (years)	0
Location	Throughout Facility

OBSERVATIONS/COMMENTS:

The fire alarm system appears adequate, but limited in function. An upgrade of reporting equipment is recommended in areas of the building other than the new DMV offices.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D5037	Replace D5037 Fire Alarm System	14,400.0 - SF	3.5	CC - Life Safety	Priority 1	2015	50,976

COST SUMMARY:

Type	Year	Total Expenditures
D50 Electrical Systems	2015	\$62,254
D50 Electrical Systems	2019	\$9,403
D50 Electrical Systems	2020	\$42,527

G Building Sitework Systems

G20 SITE IMPROVEMENTS

Site Information	
Item	Description
Main Ingress and Egress	Civic Center Drive
Access from	W
Additional Entrances	Locust Street
Access from	N
Parking Count: Open lot	141
Parking Count: Sheltered by carports	N/A
Parking Count: Private garages	N/A
Parking Count: Subterranean garage	N/A
Parking Count: Freestanding parking structure	N/A
Number of ADA Compliant Spaces	5
Number of ADA Compliant Spaces for Vans	1
Method of obtaining parking count	Physical count
Property Identification Sign-Primary	Structure mounted
Property Identification Sign- Secondary	Monument Sign
Illuminated Identification Signage	No
Building Identification Sign	Yes
Illuminated Sign	No
Location of Property ID Sign	Main entrance drive
Trees Present	Yes
Shrubs Present	Yes
Grasses Present	Yes
Flower beds Present	Yes
Decorative Rocks Present	Yes
Lava Rocks Present	Yes
Ponds Present	No
Fountains Present	No
Topography	Flat

Item	Description
G2012 Paving & Surfacing	G2012 Asphalt Seal Coat
Condition	Fair
Qty / UOM	49,350 / SF
RUL (years)	4
Location	Site

OBSERVATIONS/COMMENTS:

The asphalt pavement will require periodic crack filling, seal coating, and restriping during the assessment period.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
G2012	Replace G2012 Asphalt Seal Coat	49,350.0 - SF	0.8	IN - Beyond Rated Life	Priority 3	2019	37,940
G2012	Replace G2012 Asphalt Seal Coat	49,350.0 - SF	0.8	IN - Beyond Rated Life	Priority 3	2024	37,940

COST SUMMARY:

Type	Year	Total Expenditures
G20 Site Improvements	2019	\$37,940
G20 Site Improvements	2024	\$37,940

G40 SITE ELECTRICAL UTILITIES

Item	Description
G4021 Fixtures & Transformers	G4021 Fixtures & Transformers
Condition	Fair - Good
Qty / UOM	10 / EA
RUL (years)	5
Location	Site

OBSERVATIONS/COMMENTS:

Exterior site lighting fixtures are a combination of original and upgrades, and should be replaced.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
G4021	Replace G4021 Fixtures & Transformers	10.0 - EA	1888.0	IN - Beyond Rated Life	Priority 3	2020	18,880

COST SUMMARY:

Type	Year	Total Expenditures
G40 Site Electrical Utilities	2020	\$18,880

The weather at the time of the assessment was:

Item	Description
Approximate Outdoor Temperature (degrees F)	70
Weather Conditions	Clear
Snow Covering Ground	No
Wind Conditions	Little to no wind

The documentation provided at the time of the assessment is as:

Item	Description
Site Plan Reviewed	Yes
Floor Plan Reviewed	Yes
Construction Drawings Reviewed	Yes
Termite Inspection Report Reviewed	
Boiler Certificates Reviewed	
Document Year Built Information Obtained From	

APPENDIX C: CERTIFICATION

EMG has completed a FCA of the subject property listed on the cover page. The FCA was performed at the Client's request using methods and procedures consistent with good commercial and customary practice conforming with ASTM E2018-08, Standard Guide for Property Condition Assessments: Baseline Property Condition Assessment Process. Within this Property Condition Report (PCR), EMG's reference to the Client follows the ASTM guide's definition of User, that is, the party that retains EMG for the preparation of a baseline FCA of the subject property.

This report is exclusively for the use and benefit of the Client identified on the first page of this report. The purpose for which this report shall be used shall be limited to the use as stated in the contract between the client and EMG.

The opinions EMG expresses in this report were formed utilizing the degree of skill and care ordinarily exercised by any prudent architect or engineer in the same community under similar circumstances. EMG assumes no responsibility or liability for the accuracy of information contained within this report that has been obtained from the Client or the Client's representatives, from other interested parties, or from the public domain. The conclusions presented represent EMG's professional judgment based on information obtained during the course of this assignment. EMG's evaluations, analyses, and opinions are not representations regarding the building design, structural soundness, or actual value of the property. Factual information regarding operations, conditions, and test data provided by the Client or the Client's representative has been assumed to be correct and complete. The conclusions presented within this report are based on the data provided, observations made, and conditions that existed specifically on the date of the assessment. EMG certifies that EMG has no undisclosed interest in the subject property, that EMG's relationship with the Client is at arms-length, and that EMG's employment and compensation are not contingent upon the findings or estimated costs to remedy any noted deficiencies due to deferred maintenance and/or any noted component or system replacements.

EMG's FCA cannot wholly eliminate the uncertainty regarding the presence of physical deficiencies and/or the performance of a subject property's building systems. Preparation of a FCA in accordance with ASTM E2018-08 is intended to reduce, but not eliminate, the uncertainty regarding the potential for component or system failure and to reduce the potential that such component or system failure may not be initially observed. This FCA was prepared recognizing the inherent subjective nature of EMG's opinions as to such issues as workmanship, quality of original installation, and estimating the remaining useful life of any given component or system. It should be understood that EMG's suggested remedy may be determined under time constraints or may be formed without the aid of engineering calculations, testing, exploratory probing, the removal of materials, or design. Furthermore, there may be other alternate or more appropriate schemes or methods to remedy the noted physical deficiencies. EMG's opinions are generally formed without detailed knowledge from individuals familiar with the performance of noted components or systems.

Any questions regarding this report should be directed to the Program Manager.

Prepared By: Geoffrey Straniere, Field Observer

Reviewed By: 
Matt Anderson, Program Manager

APPENDIX D: PHOTOS



:- Front Elevation



:- North End



:- South End



:- East Side



B2021 Aluminum Windows



B2031 Glazed Entrance Doors



B3011 Built-Up Roofing



C1021 Interior Doors



C3012 Paint Interior Walls, Drywall



C3024 Vinyl Tile



C3025 Carpet Tiles - Standard



C3032 Acoustical Ceiling Tile



D2011 Commercial Water Closet - Auto



D2012 Urinal - Auto



D2013 Wall Hung Lavatory and Faucet - Auto



D2020 Domestic Hot Water Heater - Electric - On Demand



D3020 Water Boiler, Gas 1300 MBH



D3022 Chilled Water Circ Pump 2 HP



D3023 HW Circulating Pump -1 HP



D3031 Chiller, Water Cooled, 75 Ton



D3031 Chiller, Water Cooled, 75 Ton



D3031 Cooling Tower, Galvanized Steel, 170 Ton



D3041 VAV Boxes



D3041 Interior AHU



D3042 Exhaust Fan 450 CFM



D3052 Split System for DMV AC, 22 Tons



D3052 Split System for DMV, 1.5Ton



D3052 Single Zone Rooftop Unit 10-Ton



D3068 Direct Digital Control- Install



D3068 DDC Controls - Basic



D5010 Switchgear, Mainframe, 1000 Amps



D5010 Switchgear, Mainframe, 800 Amps



D5012 Breaker Panel 225 Amps, 30 Circuits



D5012 Breaker Panel 225 Amps, 30 Circuits



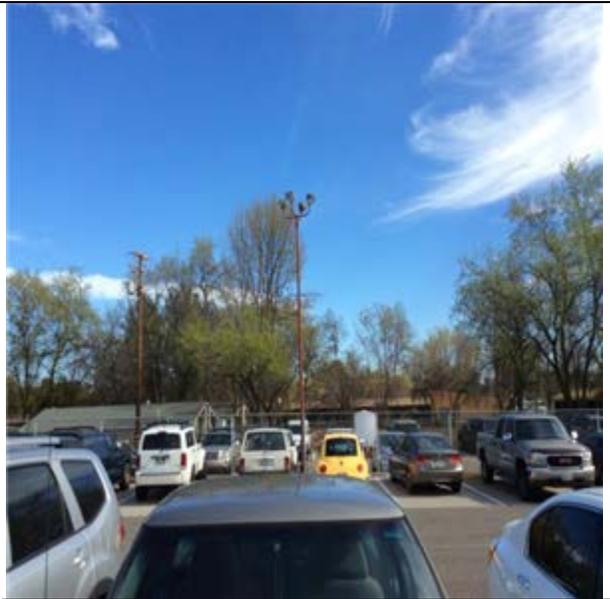
D5037 Fire Alarm System



D5037 Fire Alarm Panel



G2012 Asphalt Seal Coat



G4021 Fixtures & Transformers

APPENDIX E: TERMINOLOGY AND ABBREVIATIONS

TERMINOLOGY and ABBREVIATIONS	
Actual Knowledge	Information or observations known first hand by EMG.
ADA	The Americans with Disabilities Act
AHU	Air Handling Unit
Ancillary Structures	Structures that are not the primary improvements of the Property but which may have been constructed to provide support uses.
ASTM	American Society for Testing and Materials
Baseline	A minimum scope level of observation, inquiry, research, documentation review, and cost estimating for conducting a Property Condition Assessment as normally conducted by EMG.
BOMA	Building Owners & Managers Association
Building	Referring to the primary building or buildings on the Property, which are within the scope of the FCA.
Building Codes	A compilation of rules adopted by the municipal, county and/or state governments having jurisdiction over the Property that govern the property's design &/or construction of buildings.
Building Department Records	Information concerning the Property's compliance with applicable Building, Fire and Zoning Codes that is readily available for use by EMG within the time frame required for production of the Property Condition Assessment.
Building Systems	Interacting or interdependent components that comprise a building such as structural, roofing, side wall, plumbing, HVAC, water, sanitary sewer and electrical systems.
BUR	Built Up Roof
CBC	California Building Code
Component	A piece of equipment or element in its entirety that is part of a system.
CFM	Cubic Feet per Minute, usually referring to air flow in a heating or cooling system.
Dangerous or Adverse Conditions	Situations which may pose a threat or possible injury to the Project Manager, or those situations which may require the use of special protective clothing, safety equipment, access equipment, or any precautionary measures.
Deferred Maintenance	Deficiencies that result from postponed maintenance, or repairs that have been put off until a later time and that require repair or replacement to an acceptable condition relative to the age of the system or property.
DHW	Domestic Hot Water
DDC	Direct Digital Controls, for HVAC systems
Dismantle	To take apart; disassemble; tear down any component, device or piece of equipment that is bolted, screwed, secured, or fastened by other means.
DWV	Drainage Waste Ventilation
EPDM	Ethylene propylene diene terpolymer, a single ply roofing material, usually black
EIFS	Exterior Insulation and Finish System
EMS	Energy Management System
Engineering	Analysis or design work requiring extensive formal education, preparation and experience in the use of mathematics, chemistry, physics, and the engineering sciences as provided by a Professional Engineer licensed to practice engineering by any state of the 50 states.
Expected Useful Life (EUL)	The average amount of time in years that a system or component is estimated to function when installed new.

TERMINOLOGY and ABBREVIATIONS	
FEMA	Federal Emergency Management Agency
Fire Department Records	Information generated or acquired by the Fire Department having jurisdiction over the Property, and that is readily available to EMG within the time frame required for production of the FCA.
FIRM	Flood Insurance Rate Maps
FM	Factory Mutual
FRT	Fire Retardant Treated
Guide	A series of options or instructions that do not recommend a specific course of action.
HP	Horse Power, a unit of measure for pumps and motors.
HVAC	Heating, Ventilating & Air Conditioning
IAQ	Indoor Air Quality
Immediate Repairs	Physical deficiencies that require immediate action as a result of: (i) existing or potentially material unsafe conditions, (ii) significant negative conditions impacting tenancy/marketability, (iii) material building code violations, or (iv) poor or deteriorated condition of critical element or system, or (v) a condition that if left "as is", with an extensive delay in addressing same, has the potential to result in or contribute to critical element or system failure within one (1) year.
Interviews	Interrogatory with those knowledgeable about the Property.
kVA	Kilo Volt Amps, a measurement used for electrical devices where Amps is the plural of Amperage, a measure of electrical force.
kW	One thousand Watts, a measure of electrical output.
Material	Having significant importance or great consequence to the asset's intended use or physical condition.
MEP	Mechanical, Electrical, and Plumbing
NFPA	National Fire Protection Association
Observations	The results of the Project Manager's Walk-through Survey.
Observe	The act of conducting a visual, unaided survey of items, systems or conditions that are readily accessible and easily visible on a given day as a result of the Project Manager's walk-through.
Obvious	That which is plain or evident; a condition that is readily accessible and can be easily seen by the Project Manager as a result of his Walk-through without the removal of materials, moving of chattel, or the aid of any instrument, device, or equipment.
Owner	The entity holding the deed to the Property that is the subject of the FCA.
Physical Deficiency	Patent, conspicuous defects, or significant deferred maintenance of the Property's material systems, components, or equipment as observed during the Project Manager's Walk-through Survey. Material systems, components, or equipment that are approaching, have realized, or have exceeded their typical Expected Useful Life (EUL); or, that have exceeded their useful life result of abuse, excessive wear and tear, exposure to the elements, or lack of proper or adequate maintenance. This definition specifically excludes deficiencies that may be remedied with routine maintenance, miscellaneous repairs, normal operating maintenance, and conditions that do not present a material deficiency to the Property.
PVC	Poly Vinyl Chloride

TERMINOLOGY and ABBREVIATIONS	
Practically Reviewable	Information that is practically reviewable means that the information is provided by the source in a manner and form that, upon examination, yields information relevant to the property without the need for extraordinary analysis of irrelevant data.
Practice	A definitive procedure for performing one or more specific operations or functions that does not produce a test result.
Primary Improvements	The site and building improvements that are of fundamental importance with respect to the Property.
Project Manager	The individual Professional Engineer, Contractor, or Registered Architect having a general, well rounded knowledge of all pertinent site and building systems and components that conducts the on site visit and walk-through observation.
Property	The site and building improvements, which are specifically within the scope of the FCA to be prepared in accordance with the agreement between the Client and EMG.
Readily Accessible	Those areas of the Property that are promptly made available for observation by the Project Manager without the removal of materials or chattel, or the aid of any instrument, device, or equipment at the time of the Walk-through Survey.
Reasonably Ascertainable	Information that is publicly available, provided to EMG's offices from either its source or an information research/retrieval concern, practically reviewable, and available at a nominal cost for either retrieval, reproduction or forwarding.
Recreational Facilities	Spas, saunas, steam baths, swimming pools, tennis courts, playground equipment, and other exercise, entertainment, or athletic facilities.
Remaining Useful Life (RUL)	<p>The consultant's professional opinion of the number of years before a system or component will require replacement or reconditioning. The estimate is based upon observation, available maintenance records, and accepted EUL's for similar items or systems.</p> <p>Inclement weather, exposure to the elements, demand on the system, quality of installation, extent of use, and the degree and quality of preventive maintenance exercised are all factors that could impact the RUL of a system or component. As a result, a system or component may have an effective age greater or less than its actual age. The RUL may be greater or less than its Expected Useful Life (EUL) less actual age.</p>
Replacement Costs	Costs to replace the system or component "in kind" based on Invoices or Bid Documents provided by the current owner or the client, construction costs developed by construction resources such as <i>Means</i> and <i>Dodge</i> , EMG's experience with past costs for similar properties, or the current owner's historical incurred costs.
RTU	Rooftop Unit
Shut-Down	Equipment or systems that are not operating at the time of the Project Manager's Walk-through Survey. Equipment or systems may be considered shutdown if it is not in operation as a result of seasonal temperatures.
Significant	Important, material, and/or serious.
Site Visit	The visit to the property by EMG's Project Manager including walk-through visual observations of the Property, interviews of available project personnel and tenants (if appropriate), review of available documents and interviews of available municipal personnel at municipal offices, all in accordance with the agreement for the Property Condition Assessment.

TERMINOLOGY and ABBREVIATIONS	
Specialty Consultants	Practitioners in the fields of engineering, architecture; or, building system mechanics, specialized service personnel or other specialized individuals that have experience in the maintenance and repair of a particular building component, equipment, or system that have acquired detailed, specialized knowledge in the design, assessment, operation, repair, or installation of the particular component, equipment, or system.
Structural Component	A component of the building, which supports non-variable forces or weights (dead loads) and variable forces or weights (live loads).
Suggested Remedy	A preliminary opinion as to a course of action to remedy or repair a physical deficiency. There may be alternate methods that may be more commensurate with the Client's requirements. Further investigation might make other schemes more appropriate or the suggested remedy unworkable. The suggested remedy may be to conduct further research or testing, or to employ Specialty Consultants to gain a better understanding of the cause, extent of a deficiency (whether observed or highly probable), and the appropriate remedy.
Survey	Observations as the result of a walk-through scan or reconnaissance to obtain information by EMG of the Property's readily accessible and easily visible components or systems.
System	A combination of interacting or interdependent components assembled to carry out one or more functions.
Technically Exhaustive	The use of measurements, instruments, testing, calculations, exploratory probing or discover, and/or other means to discover and/or troubleshoot Physical Deficiencies, develop scientific or Engineering findings, conclusions, and recommendations.
Term	Reserve Term: The number of years that Capital Reserves are projected for as specified in the Expenditure Forecast.
TPO	Thermoplastic polyolefin, a white single ply roofing material, usually white
Timely Access	Entry provided to the Project Manager at the time of his site visit.
UST	Underground Storage Tank
Walk-through Survey	The Project Manager's site visit of the Property consisting of his visual reconnaissance and scan of readily accessible and easily visible components and systems. This definition connotes that such a survey should not be considered in depth, and is to be conducted without the aid of special protective clothing, exploratory probing, removal of materials, testing, or the use of special equipment such as ladders, scaffolding, binoculars, moisture meters, air flow meters, or metering/testing equipment or devices of any kind. It is literally the Project Manager's walk of the Property and observations.

APPENDIX F: BUILDING FACT SHEET

REDDING BUILDING FACT SHEET
 2135 Civic Center Drive
 Redding
 Shasta County
Category 3 - Low Priority - No Capital Outlay Required

BUILDING INFORMATION

- Age: 51 years (completed in 1963)
- Size:* 1-story, plus detached storage building with restroom
 24,000 GSF 19,371 NUSF 19,371 Assigned SF
 2.28 Acre Parcel
 141 surface parking spaces
 Capacity - 88 occupants
- Financial: No Encumbrances
 BRA Rate - \$1.64/month per SF, FY 2013-14 (DGS Price Book)
 \$1.69/month per SF, FY 2014-15 (Proposed DGS Price Book)
- LEED Status: Certification not being pursued.
- Tenants: 5 Agencies, larger tenants include Department of Industrial Relations (7,814 SF) and Department of Motor Vehicles (6,280 SF). DIR to vacate and Fish and Wildlife to backfill during 2014.



SPI Structure #: 2111
 Real Property #: 670
 BPM #: 460

COMPLETED STUDIES AND SIGNIFICANT FINDINGS

A. 2005 Infrastructure Study

The HVAC unit is considered inadequate to properly regulate temperature on the south side of the building. Electrical usage is nearing maximum capacity and may require a new panel. These conditions should be remedied during the current DMV Remodel project.

B. 2010 American Disability Act Accessibility Compliance Survey

Many access barriers were identified in this survey. As a result, this building has substantial accessibility deficiencies, some requiring major retrofit, while others only minor alterations to achieve full compliance.

C. 2012 Access Compliance Conceptual Budget/Evaluation

Follow up to the 2010 American Disability Act Accessibility Compliance Survey this report provides the Conceptual Cost and Path of Travel Plans. ADA upgrades have been proposed for this building as part of DGS's ten year ADA Compliance Upgrades and Deferred Special Repairs Program.

ADDITIONAL BUILDING ISSUES

The presence of asbestos containing materials and lead-based paint throughout the building lead to a reduced ability to maintain existing HVAC, plumbing, telecommunications, and other building infrastructure.

CURRENT UTILIZATION PROJECTS

The Department of Fish and Wildlife will backfill all of DIR space once DIR relocates to leased space.

RECENTLY COMPLETED PROJECTS

Cost

TBD

ACTIVE PROJECTS

Cost

TBD

PLANNED SPECIAL REPAIRS BY FISCAL YEAR

Estimated Cost

TBD

DGS STRATEGY: Continue to operate/maintain the building as-is through the special repair/maintenance process; no capital outlay work is required at this location at this time.

* Source: Statewide Property Inventory

APPENDIX G: COST TABLES

10 YEAR EXPENDITURE FORECAST



Redding State Building
2135 Civic Center Drive
Redding

Useful Life ¹	Estimated Useful Life	Plan Type ²	OP: Operations	CC: Code Compliance	Legend
	Remaining Useful Life		EN: Environmental	FN: Functionality	
			IN: Integrity		Deferred
					Scheduled

Element #	Component Description	Asset	Location	Action	EUL (Yrs)	RUL (Yrs)	Qty.	Unit of Meas.	Unit Cost	Plan Type	Priority ²	2015 Year 0	2016 Year 1	2017 Year 2	2018 Year 3	2019 Year 4	2020 Year 5	2021 Year 6	2022 Year 7	2023 Year 8	2024 Year 9	Total - Deferred	Total - Scheduled
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A. SUBSTRUCTURE																																
Substructure Subtotal												\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

B. SHELL																																
B20 EXTERIOR ENCLOSURE																																
B2011	Concrete Block Masonry	B2011 Paint Exterior Masonry Walls	Exterior Walls	Replace B2011 Paint Exterior Masonry Walls	10	1	10,800.00	SF	\$4.56	IN - Beyond Rated Life	Priority 1	\$0	\$49,283	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$49,283									
B2021	Aluminum Window, 4-0 X 6-0, First Floor	B2021 Aluminum Windows	Exterior Walls	Replace B2021 Aluminum Windows	25	1	80.00	EA	\$3,227.77	IN - Beyond Rated Life	Priority 1	\$0	\$258,222	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$258,222									
B2031	Aluminum 3'-0" X 7'-0"	B2031 Glazed Entrance Doors	Exterior Walls	Replace B2031 Glazed Entrance Doors	30	1	8.00	EA	\$4,335.51	IN - Beyond Rated Life	Priority 1	\$0	\$34,684	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$34,684									
B2032	3'-0" X 7'-0" Steel, Painted, Door	B2032 Exterior Doors, steel louvered	Mechanical Room exterior	Replace B2032 Exterior Doors, steel louvered	45	1	1.00	EA	\$1,568.35	IN - Beyond Rated Life	Priority 1	\$0	\$1,568	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,568									
Shell Subtotal												\$0	\$343,757	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$343,757

C. INTERIORS																																		
C30 INTERIOR FINISHES																																		
C3012	Paint Interior Walls, Drywall	C3012 Paint Interior Walls, Drywall	Throughout Interior	Replace C3012 Paint Interior Walls, Drywall	10	5	36,000.00	SF	\$2.13	IN - Appearance	Priority 4	\$0	\$0	\$0	\$0	\$0	\$76,781	\$0	\$0	\$0	\$0	\$0	\$76,781											
C3024	Vinyl Tile	C3024 Vinyl Tile	Interior except DMV	Replace C3024 Vinyl Tile	18	1	1,600.00	SY	\$125.78	IN - Appearance	Priority 3	\$0	\$201,248	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$201,248											
C3025	Carpet, Standard Commercial, Medium Traffic	C3025 Carpet Tiles - Standard	Interior except DMV	Replace C3025 Carpet Tiles - Standard	10	1	400.00	SY	\$96.61	IN - Appearance	Priority 3	\$0	\$38,642	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$38,642											
C3031	Drywall - Painted Finished Ceilings	C3031 Painted Drywall Ceilings	Restrooms	Replace C3031 Painted Drywall Ceilings	10	9	2,000.00	SF	\$4.54	IN - Appearance	Priority 4	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9,077	\$9,077												
C3032	Acoustical Tile With Exposed Grid System	C3032 Acoustical Ceiling Tile	Entire Facility	Replace C3032 Acoustical Ceiling Tile	20	5	132.00	CSF	\$1,201.56	IN - Appearance	Priority 4	\$0	\$0	\$0	\$0	\$0	\$158,606	\$0	\$0	\$0	\$0	\$0	\$158,606											
Interiors Subtotal												\$0	\$239,891	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9,077	\$484,354

D. SERVICES																																		
D30 HVAC																																		
D3021	Boiler, Gas-Fired, Water, Cast Iron, 5,000 to 5,500 MBH	D3020 Water Boiler, Gas 1300 MBH	Mechanical Room	Replace D3020 Water Boiler, Gas 1300 MBH	35	0	1.00	EA	\$62,000.00	IN - Beyond Rated Life	Priority 1	\$62,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$62,000	\$0										
D3022.1	In-Line Centrifugal Hydronic Pump, 1/4 to 1/3 HP, Cast Iron, Flanged	D3023 HW Circulating Pump -1 HP	Chiller Building	Replace D3023 HW Circulating Pump -1 HP	15	8	1.00	EA	\$3,144.22	IN - Beyond Rated Life	Priority 4	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,144	\$0	\$0	\$0	\$3,144										
D3022.1	Circulation Pump 1.5 HP	D3023 Condensate Return Pump 2 HP	Chiller Building	Replace D3023 Condensate Return Pump 2 HP	15	8	1.00	EA	\$12,202.79	IN - Beyond Rated Life	Priority 4	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$12,203	\$0	\$12,203											
D3022.1	Circulation Pump 1.5 HP	D3022 Chilled Water Circ Pump 2 HP	Chiller Building	Replace D3022 Chilled Water Circ Pump 2 HP	15	8	1.00	EA	\$12,202.79	IN - Beyond Rated Life	Priority 4	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$12,203	\$0	\$12,203											
D3031.1	Water Cooled Chillers Centrifugal 100 Ton	D3031 Chiller, Water Cooled, 75 Ton	Mechanical Room	Replace D3031 Chiller, Water Cooled, 75 Ton	20	5	1.00	EA	\$315,947.04	IN - Beyond Rated Life	Priority 3	\$0	\$0	\$0	\$0	\$0	\$315,947	\$0	\$0	\$0	\$0	\$0	\$315,947											
D3031.1	Water Cooled Chillers Centrifugal 100 Ton	D3031 Chiller, Water Cooled, 75 Ton	Chiller Building	Replace D3031 Chiller, Water Cooled, 75 Ton	20	8	1.00	EA	\$315,947.04	IN - Beyond Rated Life	Priority 4	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$315,947	\$0	\$0	\$315,947											
D3031.2	Galvanized Steel Cooling Tower 100 to 120 Ton	D3031 Cooling Tower, Galvanized Steel, 170 Ton	Pad Mount	Replace D3031 Cooling Tower, Galvanized Steel, 170 Ton	20	0	1.00	EA	\$121,396.00	IN - Beyond Rated Life	Priority 1	\$121,396	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$121,396	\$0										
D3041	VAV Boxes	D3041 VAV Boxes	Mechanical Room	Replace D3041 VAV Boxes	30	0	8.00	EACH	\$2,496.72	IN - Beyond Rated Life	Priority 1	\$19,974	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$19,974	\$0										
D3041.1	Air Handler 3600-3800 CFM	D3041 Interior AHU	Mechanical Room	D3041 Add VFD to 15 HP fan motors	0	1	1.00	EA	\$3,000.00	IN - Beyond Rated Life	Priority 1	\$0	\$3,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,000	\$0										
D3068	Direct Digital Controls (DDC) Extensive	D3068 Direct Digital Control- Install	Maintenance Administrative	D3068 Upgrade from Pneumatic system	0	0	1.00	SF	\$65,000.10	OP - Maintenance	Priority 2	\$65,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$65,000	\$0										
D3068	Direct Digital Controls (DDC) Extensive	D3068 Direct Digital Control- Install	Maintenance Administrative	Replace D3068 Direct Digital Control- Install	20	0	24,000.00	SF	\$8.23	FN - Modernization	Priority 1	\$197,606	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$197,606	\$0										
D50 ELECTRICAL SYSTEMS												\$528,230	\$3,000	\$0	\$0	\$0	\$9,403	\$358,474	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$528,230	\$714,374
D5012	Switchgear, Mainframe, 1200 Amps	D5010 Switchgear, Mainframe, 1000 Amps	Outdoor Electrical Area	Replace D5010 Switchgear, Mainframe, 1000 Amps	30	0	1.00	EA	\$11,277.73	IN - Beyond Rated Life	Priority 1	\$11,278	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$11,278	\$0										
D5022	T12 Lamps, with T8 Lamps and Add Instant Start Electronic Ballasts	D5020 Interior Lighting, Suspended Ceilings	Administrative areas outside DMV	Replace D5020 Interior Lighting, Suspended Ceilings	20	5	106.00	EA	\$401.20	FN - Modernization	Priority 3	\$0	\$0	\$0	\$0	\$0	\$42,527	\$0	\$0	\$0	\$0	\$0	\$42,527	\$0										
D5037	Fire Alarm System, Install New	D5037 Fire Alarm System	Throughout Facility	Replace D5037 Fire Alarm System	25	0	14,400.00	SF	\$3.54	CC - Life Safety	Priority 1	\$50,976	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50,976	\$0										
D5037	Fire Alarm Panel	D5037 Fire Alarm Panel	Communication Room	Replace D5037 Fire Alarm Panel	15	4	1.00	EA	\$9,402.52	CC - Life Safety	Priority 2	\$0	\$0	\$0	\$0	\$9,403	\$0	\$0	\$0	\$0	\$0	\$0	\$9,403	\$0										

E. EQUIPMENT & FURNISHING																																		
Equipment & Furnishing Subtotal												\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

F. SPECIAL CONSTRUCTION AND DEMOLITION																																		
Special Construction And Demolition Subtotal												\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

G. BUILDING SITWORK																																			
G20 SITE IMPROVEMENTS																																			
G2012	Asphalt Seal Coat- Roadways	G2012 Asphalt Seal Coat	Site	Replace G2012 Asphalt Seal Coat	5	4	49,350.00	SF	\$0.77	IN - Beyond Rated Life	Priority 3	\$0	\$0	\$0	\$0	\$37,940	\$0	\$0	\$0	\$0	\$0	\$37,940	\$0	\$75,881											
G40 SITE ELECTRICAL UTILITIES																																			
G4021	G4021 Fixtures & Transformers	G4021 Fixtures & Transformers	Site	Replace G4021 Fixtures & Transformers	25	5	10.00	EA	\$1,888.00	IN - Beyond Rated Life	Priority 3	\$0	\$0	\$0	\$0	\$0	\$18,880	\$0	\$0	\$0	\$0	\$0	\$18,880	\$0											
Building Sitework Subtotal												\$0	\$0	\$0	\$0	\$0	\$37,940	\$18,880	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$37,940	\$94,761

Z. GENERAL																																		
General Subtotal												\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Expenditure Totals per Year	\$528,230	\$586,647	\$0	\$0	\$47,343	\$612,741	\$0	\$0	\$343,497	\$47,017	\$528,230	\$1,637,245
Total Cost (Inflated @ 5% per Yr.)	\$528,230	\$615,979	\$0	\$0	\$57,545	\$782,030	\$0	\$0	\$507,501	\$72,939	Total *	\$2,165,475

* - Present Value Currency

Footnotes

- Detailed descriptions for Useful Life and Plan Type can be found in the Appendices of the Facility Condition
- Detailed Descriptions of the Priorities can be found in the Appendices of the Facility Condition Assessment

Current Repl.Value \$9,185,985

APPENDIX H: SUPPORTING DOCUMENTATION



	<p>Source:</p> <p>The north arrow indicator is an approximation of 0° North.</p>	<p>Project Number:</p> <p>111326.14R-041.305</p> <p>Project Name:</p> <p>Redding State Building</p>
		<p>On-Site Date:</p> <p>March 3, 2015</p>

Estimate of Structures Cost Using Marshall Cost Systems

Redding State Building

Site Calculation

Estimate of Unusual Land Improvements Cost (Estimators Data Cost Base):

Description	Cost	Estimated \$/ SF	Unusual Land Total
			\$0
Total			\$0

Estimate of Unusual Land Improvements Cost (Estimators Cost Data Base):

Estimate of Structure Cost :

Building Type	Cost per SF	Number of SF	Building Type Total
main building	\$298.80	24,000	\$7,171,114
	\$0.00	0	\$0
	\$0.00	0	\$0
	\$0.00	0	\$0
	\$0.00	0	\$0
Total		24,000	\$7,171,114

Estimate of Adjustments for Fees:

Description	% increase	
Soft Costs	25.00%	
	0.00%	
	0.00%	
Total Fees/ Interest included in Marshall System		25.00%

Total Structure Estimate:

Description	Unit	Fee Adjust	Adjusted Totals
main building	\$7,171,114	25.00%	\$8,963,892
	\$0	25.00%	\$0
	\$0	25.00%	\$0
	\$0	25.00%	\$0
	\$0	25.00%	\$0
Cost Per SF	\$373.50	Total Estimate	\$8,963,892

Expected Useful Life (EUL) Table	
SITE SYSTEM ITEMS	
ROADWAYS/ PARKING/ WALKWAYS	
Asphalt pavement	25
Asphalt seal coat	5
Concrete pavement	50
Curbing, asphalt	25
Curbing, concrete	50
Parking, stall striping	5
Parking, gravel surfaced	15
Security gate- rolling gate	10
Security gate- lift arm	10
Sidewalk, asphalt	25
Sidewalk, brick paver	30
Sidewalk, concrete	50
STORM SEWER, DRAINAGE AND EROSION CONTROL	
Catch basins, inlets, culverts	50
Earthwork, grading and erosion control	50
Storm drain lines	40
LANDSCAPING, TOPOGRAPHY AND FENCING	
Fencing, chain-link (4' height)	40
Fencing, dumpster enclosure (wood)	12
Fencing, Tennis Court (10' height)-Chain link	40
Fencing, wood privacy (6' height)	15
Fencing, wrought iron (4-6' height and decorative)	50
Fencing, concrete masonry unit (CMU)	30
Irrigation System	30
Retaining walls, 80 lb block type	50
Retaining walls, concrete masonry unit (CMU) with brick face	40
Fencing, PVC (6' height)	25
Retaining walls, timber (railroad tie)	25
SITE SYSTEM ITEMS	
GENERAL SITE IMPROVEMENTS	
Lighting (pole mounted)	25
Mail kiosk	10
Pool deck	15
Pool/ spa plaster liner	8
Signage, monument	20
Signage, roadway/ parking	10
Tennis court / basketball court surface (paint markings)	5

GENERAL SITE IMPROVEMENTS	
Tennis court Surface (acrylic emulsion)	10
Tot-lot (playground equipment)	10
SITE SANITARY AND WATER	
Domestic Hot Water (DHW) - supply / return	30
Lift station	50
Sanitary lines	50
Sanitary treatment	40
Water main	40
Water supply lines	50
Water tower	50
SITE MECHANICAL / ELECTRICAL	
Compactors	15
Dumpsters	10
Electrical distribution center	40
Electric main	40
Emergency Generator	25
Gas lines	40
Gas main	40
Heating supply/ return	40
Power distribution	40
Transformer	30
BUILDING ARCHITECTURAL ITEMS	
Wood Decks	20
Storage Sheds	30
Carports	40
Garages	50
Basement Stairs	50
Building mounted exterior lighting	10
Building mounted High Intensity Discharge (HID) lighting	10
Bulkhead	10
Canopy, concrete	50
Canopy, wood / metal	40
Ceilings, open or exterior	30
Chimney	40
Common area doors, interior (solid wood/ metal clad)	30
Common area floors, ceramic / quarry tile, terrazzo	50+
Common area floors, wood (strip or parquet)	30
Common area floors, resilient tile or sheet	15
Common area floors, carpet	8
Common area floors, concrete	50+

BUILDING ARCHITECTURAL ITEMS	
Common area railing	20
Common area ceiling, concrete	50+
Common area ceiling, acoustic tile (drop ceiling),	15
Common area countertop and sink	20
Common area dishwasher	15
Common area disposal	5
Common area kitchen cabinets, wood	15
Common area wall coverings	15
Caps, copings (aluminum/ terra-cotta) - Parapet	25
Exterior common door, aluminum and glass	30
Exterior common door, solid core wood or metal clad	25
Exterior stairs, wood	15
Exterior stairs, metal pan- concrete filled	30
Exterior stairs, concrete	50
Exterior unit door, solid wood/ metal clad	25
EXTERIOR CLADDING	
Aluminum Siding	40
Brick or block	40
Brownstone or stone veneer	40
Exterior Insulation Finishing Systems (EIFS)	20
Glass block	40
Granite block	40
Metal/ glass curtain wall	30
Precast concrete panel (tilt-up)	40
Vinyl siding	25
Wood shingle/ clapboard/ plywood, stucco, composite wood	20
Cement-board siding (Hardi-plank)/ non integral color	45
Fire Escapes	40
Foundations	50+
Roof hatch	30
Roof skylight	30
Insulation, wall	50+
Interior lighting	15
Interior railings	20
Mail facility, interior	20
Parapet wall,	50+
Penthouse	50
Railing, roof	25

INTERIORS	
Public bathroom accessories	7
Public bathroom fixtures	15
Refrigerator, common area	10
BUILDING ARCHITECTURAL ITEMS	
ROOF COVERINGS	
Built-up roof - Ethylene Propylene Diene Monomer (EPDM) / Thermoplastic Polyolefin (TPO)	20
Asphalt shingle (3-tab)	20
Wood shingles (cedar shake)	25
Slate, clay, concrete tile	40
Metal	40
Roof drainage exterior (gutter/ downspout)	10
Roof drainage interior (drain covers)	30
Roof structure	50+
Slab	50+
Service door	25
Soffits (wood/ stucco)	20
Soffits (aluminum or vinyl)	25
Stair structures	50+
Storm/ screen doors	7
Storm/ screen windows	10
Waterproofing (foundations)	50+
Windows (frames and glazing), vinyl or aluminum	30
Wood floor frame	50+
BOILER ROOM EQUIPMENT	
Blowdown and Water Treatment	25
Boiler Room Pipe Insulation	Included in boiler
Boiler Room Piping	Included in boiler
Boiler Room Valves	15
Boiler Temperature Controls	Included in boiler
Oil-fired, sectional	22
Gas/ dual fuel, sectional	25
Oil/ gas/ dual fired, low MBH	30
BOILERS	
Oil/ gas/ dual fired, high MBH	40
Gas fired atmospheric	25
Electric	20

BUILDING HEATING WATER TEMPERATURE CONTROLS	
Common area	15
Buzzer/Intercom, central panel	20
Central Unit Exhaust, roof mounted	15
Chilled Water Distribution	50+
Chilling Plant	15
Cooling Tower	25
Combustion Air, Duct with fixed louvers	30
Combustion Air, Motor louver and duct	25
CONDENSATE, FEEDWATER, WATER	
Feedwater only (hydronic)	10
Cooling Tower	25
DHW Circulating Pumps	by size
Tank only, dedicated fuel	10
Exchanger in storage tank	15
Exchanger in boiler	15
External tankless	15
Instantaneous (tankless type)	10
Domestic Hot Water Storage Tanks, Small (up to 150 gallons)	15
Domestic Hot Water Storage Tanks, Large (over 150 gallons)	15
Domestic Cold Water Pumps	15
ELECTRICAL & ELEVATOR	
Electrical Switchgear	50+
Electrical Wiring	30
Elevator, Controller, dispatcher	15
Elevator, Cab	15
Elevator, Machinery	30
Elevator, Shaft-way Doors	20
Elevator, Shaft-way Hoist rails, cables, traveling	25
Elevator, Shaft-way Hydraulic piston and leveling	25
EMERGENCY ALARM AND FIRE PROTECTION	
Call station	10
Emergency Generator	25
Emergency Lights	8
Evaporative Cooler	15
Fire Extinguisher	10
Fire Pumps	20
Fire Suppression	50+
Flue Exhaust	w/boiler
Free Standing Chimney	50+
Fuel Oil Storage	25

EMERGENCY ALARM AND FIRE PROTECTION	
Fuel Transfer System	25
Gas Distribution	50+
Heat Sensors	15
Heat Exchanger	35
Heating Risers and Distribution	50+
MECHANICAL – ELECTRIC – PLUMBING ITEMS	
Heating Water Circulating Pumps	by size
Heating Water Controller	15
Hot and Cold Water Distribution	50
HVAC	
Pad/ roof condenser	20
A/C window unit or through wall	10
Fan coil unit, electric	20
Fan coil unit, hydronic	30
Furnace (electric heat with A/C)	20
Furnace (electric heat with A/C)	20
Furnace (gas heat with A/C)	20
Packaged terminal air conditioner (PTAC)	15
Packaged HVAC (roof top units)	20
Heat pump condensing component	20
Heater, electric baseboard	25
Heater, wall mounted electric or gas	20
Hydronic heat/ electric A/C	20
Line Dryers	15
Master TV System	10
Motorized Valves	12
Outdoor Temperature Sensor	10
Pneumatic lines and Controls	30
POWER VENTILATOR	
Purchased Steam Supply Station	50+
Sanitary Waste and Vent System	50+
Sewage Ejectors	50
Smoke and Fire Detection System, central panel	15
Solar Hot Water	20
SUMP PUMP	
Commercial Sump Pump	15
Water Softening and Filtration	15
Water Tower	50+

PLAN TYPE DEFINITION

Within the report text a Plan Type is assigned to the various cost categories. The following is a brief description of the Plan Types that may be used in the report.

Code Compliance (CC)

- **Accessibility:** Conditions that are not in conformance with the American Disabilities Act Accessibility Guidelines
- **Building Code:** Conditions that are not in conformance with the Building codes
- **Life Safety:** Conditions that are not in conformance with the NFPA 101 Life Safety Code

Operations (OP)

- **Energy:** Conditions that adversely affect energy use or will decrease water or energy usage
- **Maintenance:** Components or systems that can usually be accomplished by the current maintenance staff
- **Security:** Conditions that compromise the protection of the asset or its occupants

Environmental (EN)

- **Air/ Water Quality:** Conditions that affect air or water quality
- **Asbestos:** Reported or suspected asbestos-containing material(ACM)
- **Lead:** Reported lead based paint
- **PCB:** Reported PCB containing equipment

Functionality (FN)

- **Mission:** Components which do not meet the mission of the organization
- **Modernization:** Conditions that need to be upgraded in appearance or function
- **Plant Adaptation:** Components or systems that must change to fit a new or adapted use
- **Obsolescence:** Components or systems that are or are becoming obsolete
- **Capacity:** Components or system which cannot meet demand load

Integrity (IN)

- **Appearance:** Problems with the material or system appearance that are not functional in nature
- **Reliability:** Components or systems which cannot be depended on to function as designed
- **Beyond Rated Life:** A component or system that has exceeded its rated life

**REDDING MANAGEMENT UNIT
BUILDING AND PROPERTY MANAGEMENT BRANCH
BPM SPECIAL REPAIR PROJECT FIVE YEAR PLAN**

Management Unit/Building Manager

2014 THROUGH 2019

Date Submitted: 03/01/2014

Budget Prep. FY: 2014/15

FY	BLD NO.	BLD NAME	PROJECT	AMOUNT	ADD/ DELETE
14/15	460	Redding	No Special Repairs submitted		
15/16	460	Redding	Repair, seal and re-stripe parking lot	\$25,000	Moved to 2015
15/16	460	Redding	Replace Chain Link fence	\$50,000	Moved to 2015
15/16	460	Redding	Add Electrical Panel	\$30,000	ADD
16/17	460	Redding	Replace roof	\$700,000	Moved to 2016
17/18	460	Redding	Install Photovoltaic System	\$500,000	Moved to 2017
18/19	460	Redding	Install Boiler	\$93,000	Moved to 2018

APPENDIX I: PRE-SURVEY QUESTIONNAIRE

Property Condition Assessment: Pre-Survey Questionnaire

This questionnaire should be completed by someone knowledgeable about the subject property. The completed form should be presented to EMG's Field Observer on the day of the site visit. If the form is not completed, EMG's Project Manager will require additional time during the on-site visit with such a knowledgeable person in order to complete the questionnaire. During the site visit, EMG's Field Observer may ask for details associated with selected questions. This questionnaire will be utilized as an exhibit in EMG's final Property Condition Report.

Name of person completing questionnaire: Doug Evans

Building name: Redding State Building (460)

What is your association with this property? Building Manager

What is the length of your association with this property? 3 years

Phone number: 530-225-2175

Please provide information about inspections relating to the following items

Inspections	Date Last Inspected	List Name & Contact for Maintenance Contractor, if any.
1. Elevators	N/A	
2. HVAC, Mechanical, Electric, Plumbing	October 2014	JM Mack Construction
3. Life-Safety/Fire	October 2014	JM Mack Construction
4. Roofs	October 2014	JM Mack Construction

5. List any major capital improvements within the last three years.

Renovated .25% of Facility for DMV renovation.

6. Are there any other major capital expenditures planned in the near term?

Yes, install an Energy Management System, Replace A/C units, replace Boiler.

7. What is the age of the roof(s)?

Unknown

8. What building systems (HVAC, roof, interior/exterior finishes, paving etc.) are the responsibilities of contractors to repair or replace?

In house maintenance, replacement would be put out for bid by contractors.

Mark the column corresponding to the appropriate response. Please provide additional details in the Comments column, or backup documentation for any Yes responses. Note: N/A indicates "Not Applicable", Unk indicates "Unknown"

Question	Y	N	N/A	Unk	Comments
9. Are there any unresolved building, or fire code issues?				x	
10. Are there any "down" or unusable units?		x			
11. Are there any problems with erosion, storm-water drainage or areas of paving that do not drain?	x				Water from roof drains ponds into the paking areas.

Question	Y	N	N/A	Unk	Comments
12. Is the property served by a private water well?		x			
13. Is the property served by a private septic system or other waste treatment systems?		x			
14. Are there any problems with foundations or structures?				x	
15. Is there any water infiltration in basements or crawl spaces?		x			
16. Are there any wall, or window leaks?		x			
17. Are there any roof leaks?		x			
18. Is the roofing covered by a warranty or bond?		x			
19. Are there any poorly insulated areas?	x				Single pane windows. Office walls lacking insulation.
20. Is Fire Retardant Treated (FRT) plywood used?		x			
21. Is exterior insulation and finish system (EIFS) or a synthetic stucco finish used?		x			Concrete cinder block.
22. Are there any problems with the utilities, such as inadequate capacities?		x			
23. Are there any problems with the landscape irrigation systems?	x				Irrigation system is antiquated.
24. Has a termite/wood boring insect inspection been performed within the last year?		x			
25. Do any of the HVAC systems use R-11, 12, or 22 refrigerants?	x				Main chiller uses R-22
26. Has any part of the property ever contained visible suspect mold growth?		x			
27. Is there a mold Operations and Maintenance Plan?		x			
28. Have there been indoor air quality or mold related complaints from tenants?		x			

Question	Y	N	N/A	Unk	Comments
29. Is polybutylene piping used?					
30. Are there any plumbing leaks or water pressure problems?					
31. Are there any leaks or pressure problems with natural gas service?					
32. Does any part of the electrical system use aluminum wiring?					
33. Are there transformers inside the building?					
34. Do any Commercial units have less than 200-Amp service?					
35. Are there any recalled fire sprinkler heads (Star, GEM, Central, Omega)?					
36. Is there any pending litigation concerning the property?					
37. Has the State previously completed an ADA or 'Title 24 review?					
38. Have any ADA or Title 24 improvements been made to the property?					
39. Does a Barrier Removal Plan exist for the property?					
40. Has the Barrier Removal Plan been approved by a credentialed third party?					
41. Have there been any ADA or Title 24 related complaints?					
42. Have there been any complaints about the elevators or wait times?					
43. Are there any problems with exterior lighting?					
44. Are there any other significant issues/hazards with the property?					
45. Are there any unresolved construction defects at the property?					



Prepared by

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