DGS
GENERAL SERVICES

Alfred E. Alquist Building (470)

100 Paseo de San Antonio, San Jose, CA 95113

Facility Condition Assessment

September 2015

Prepared for the State of California Department of General Services

EMG
ENGINEERING PEACE OF MIND

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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 (RESD) 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 Alfred E. Alquist Building (470).

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 Alfred E. Alquist Building (470) 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 Alfred E. Alquist Building (470) on February 13, 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	$42,198,314
Immediate Repair Costs (12 months)	$753,700
1-5 Year Capital Needs	$3,411,948
6-10 Year Capital Needs	$2,090,986
Total 10-Year Capital Reserve Needs	$6,256,635

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

Current Year FCI

$$\text{Current FCI} = \frac{\$753,700}{\$42,198,314}$$

Ten-Year FCI

$$\text{Ten-Year FCI} = \frac{\$6,256,635}{\$42,198,314}$$

Current Year FCI	Ten-Year FCI
1.79 %= *Good Condition*	**14.83 %= *Poor Condition***

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

- A 2015 assessment report by Elevator Consulting Associates recommended elevator modernization work be undertaken during the next year.
- In 2012 direct digital controls were installed for the supply and return fans on the third floor. The controls for the chiller and associated pumps on the first floor were not included in the 2012 work and are recommended at this time.
- There is an emergency generator located in the lower level mechanical room. Secondary containment for the diesel fuel tank 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 Els Design Group from Berkeley designed this building named after the long-serving assemblyman and senator. Construction was completed in 1983 as part of central San Jose's redevelopment area along a pedestrian mall, located at 100 Paseo De San Antonio.

The three story building has a structural frame of cast-in-place concrete waffle slab supported on round concrete columns. The frame was in-filled with an insulated window wall system. The building's design includes two large and five small courtyards to maximize exterior wall area for daylighting to create an open and informal storefront access to state agencies. An exterior relief sculpture on the northeast façade by John Laddie Dill is a mixture of glass, cement, and polymer colors that flow together in a composition of triangular elements. The facility also houses Tom Holland's sculpture of geometric sheets of aluminum painted in vivid blues, reds, yellows, oranges, and greens.

The building has 300 occupants and includes a lunch room, an auditorium, and houses ten state agencies, including the Department of Industrial Relations, the Board of Equalization, and the California Department of Public Health. There is no parking on site, although a private parking facility is directly adjacent to the building. The gross SF is 108,561 with 91,513 of net usable SF. The ratio of net usable to gross building area is 84.2 percent.

BUILDING DESCRIPTION

The building structural system is concrete columns, beams, and floor slabs. There is a small amount of steel framing at the raised roof areas. The majority of the roof is flat with a white single-ply membrane. The raised roof areas have sloped metal roofing.

The exterior walls are exposed smooth finished concrete, ornamental masonry block, and painted metal curtain walls with single pane glazing. Lesser amounts of exterior insulation finish systems (EIFS) are located on the roof structures.

Interior wall finishes include painted drywall, ceramic tiles, and concrete. Floor finishes consist of commercial carpet tiles, vinyl composition tiles, ceramic tiles, and concrete. Ceilings are suspended acoustic tiles, painted drywall, and concrete.

The facility is served by two hydraulic passenger elevators and one hydraulic freight elevator.

Domestic hot water is supplied to the restrooms and break room areas by a gas-fired water heater. Heating and cooling are supplied by a central system with boiler, chiller, and cooling tower.

Life safety systems include a fire alarm system, smoke detectors, fire hydrants, fire extinguishers, and wet-pipe sprinkler system.

The building covers nearly the entire site, and the only landscaping consists of trees, shrubs, and lawn areas. Flower beds are located in the inner courts and the building perimeter. Landscaped areas are irrigated by an in-ground spray sprinkler system and drip irrigation system. There is no onsite parking with the exception of four tandem spaces for service vehicles at the loading dock. The sidewalks throughout the property are constructed of cast-in-place concrete.

Project Statistics

Item	Description
Project Name	Alfred E. Alquist Building
Building ID	470
Property Type	Administration
Year Built	1983
Number of Stories	3
Occupied	Yes
Land Area (acres)	1.64
Gross Square Feet (GSF)	108,561

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 E2018-08[1] 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

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

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.

SCOPE OF ASSESSMENT

The evaluation team conducted a walk-through survey of Alfred E. Alquist Building (470) on February 13, 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 Uniformat code. The Uniformat 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 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

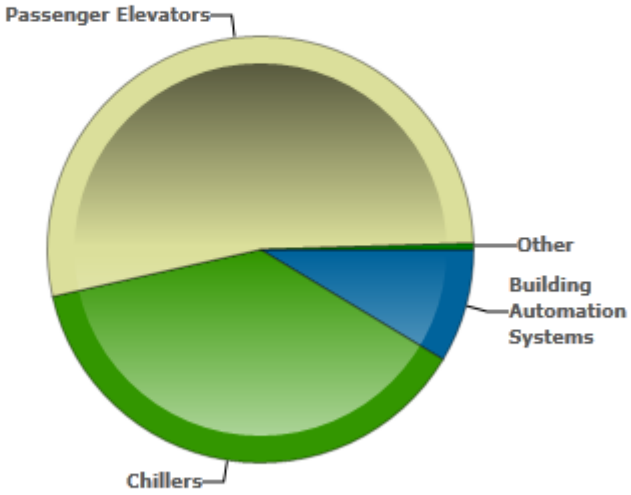
The four categories above are assigned a numerical value and the values are multiplied together for each cost observation. The resulting number is then assigned a priority by the capital planning software with

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.

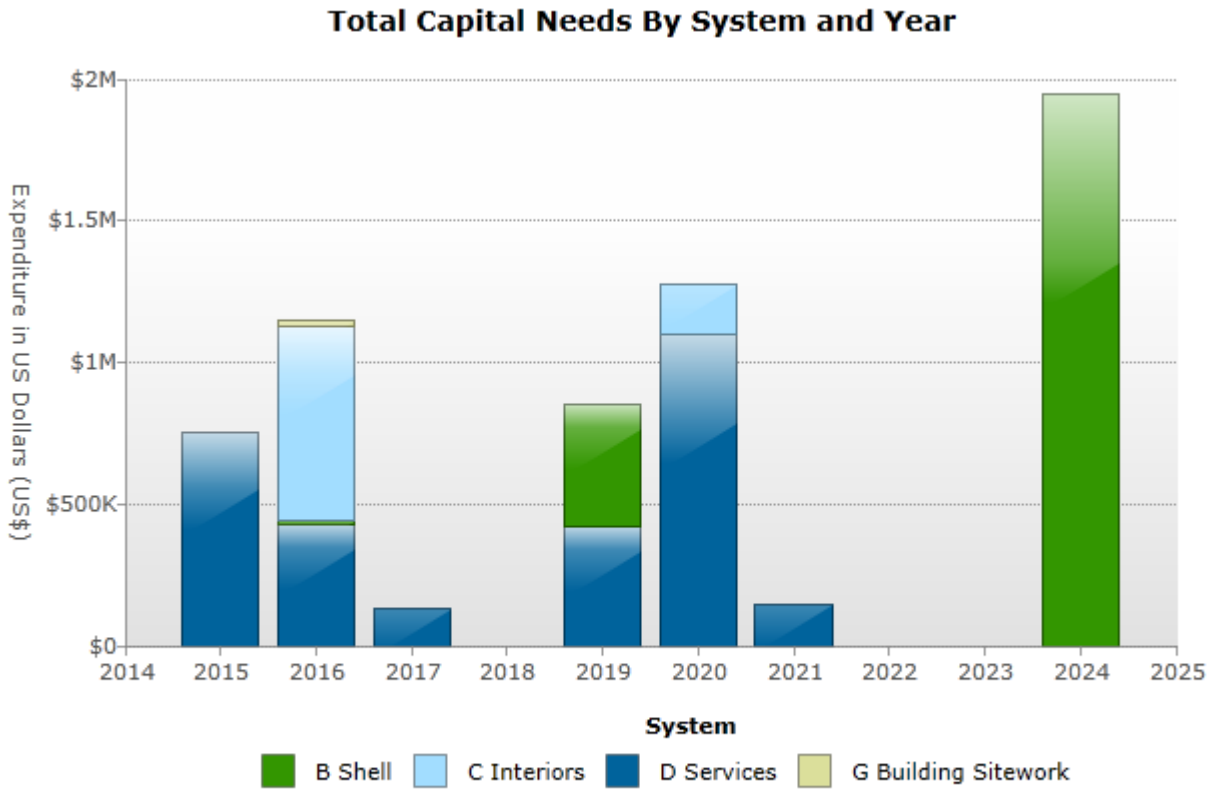
The physical condition of building systems and related components are typically defined as being in one of four conditions: Good, Fair, Poor, or Very Poor, or a combination thereof. For the purposes of this report, the following definitions are used:

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
D1011	Passenger Elevators	$400,000
D3031	Chillers	$285,200
D3068	Building Automation Systems	$65,000
D5092	Emergency Light & Power Systems	$3,500
	Total	**$753,700**



	Building System							
Year	A Sub-Structure	B Shell	C Interiors	D Services	E Equip. & Furnishings	F Spec. Const. & Demolition	G Bldg. Site Work	Total
2015	$0	$0	$0	$753,700	$0	$0	$0	**$753,700**
2016	$0	$15,584	$686,239	$428,263	$0	$0	$18,880	**$1,148,966**
2017	$0	$0	$0	$132,894	$0	$0	$0	**$132,894**
2019	$0	$434,712	$0	$419,706	$0	$0	$0	**$854,418**
2020	$0	$0	$175,956	$1,099,714	$0	$0	$0	**$1,275,670**
2021	$0	$0	$0	$143,176	$0	$0	$0	**$143,176**
2024	$0	$1,947,810	$0	$0	$0	$0	$0	**$1,947,810**
Total	**$0**	**$2,398,106**	**$862,195**	**$2,977,453**	**$0**	**$0**	**$18,880**	**$6,256,635**

CURRENT REPLACEMENT VALUE

The Current Replacement Value has been determined as $42,198,314 for the Alfred E. Alquist Building Building (470). 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
108,561 GSF	$389	$42,198,314

FACILITY CONDITION INDEX

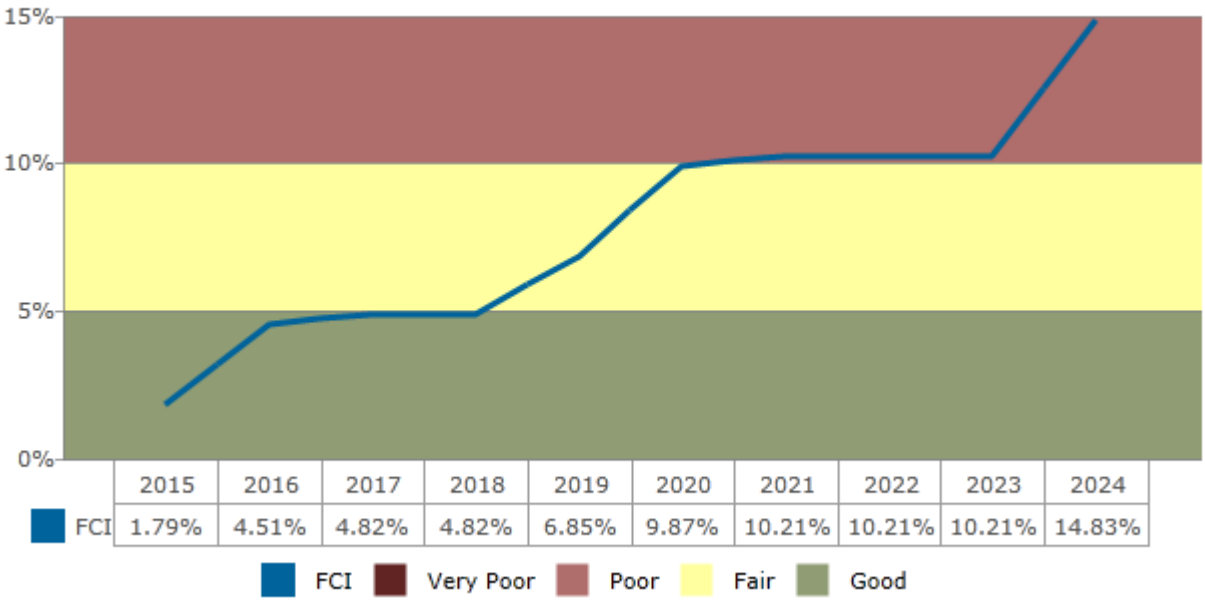
The FCI[1] is an indication of a building's current and future overall condition. According to industry standards an FCI ratio of 65 percent, or the "rule of two-thirds," is the threshold for identifying potential candidates for replacement or divestment.[2] Once the FCI ratio reaches 65 percent, or 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



APPENDICES

APPENDIX A: ACCESSIBILITY ISSUES

No accessibility issues were identified.

APPENDIX B: GENERAL ASSESSMENT INFORMATION

A Substructure Systems

A10 FOUNDATIONS

Item	Description
A1031 Standard Slab on Grade	A1031 Standard Concrete Slab
Condition	Good
Qty / UOM	16,000 / SF
RUL (years)	20
Location	Loading Zone

OBSERVATIONS/COMMENTS:

No further action is required.

Item	Description
A1032 Structural Slab on Grade	A1032 Structural Slab on Grade
Condition	Good
Qty / UOM	36,660 / SF
RUL (years)	35
Location	Building Foundation

OBSERVATIONS/COMMENTS:

No further action is required.

B Shell Systems

B10 SUPERSTRUCTURE

Item	Description
B1012 Upper Floors Construction	B1012 Concrete Columns, Beams, and Floor Slabs
Condition	Good
Qty / UOM	108,561 / SF
RUL (years)	35
Location	Entire Facility

OBSERVATIONS/COMMENTS:

No further action is required.

B20 EXTERIOR ENCLOSURE

Item	Description
B2011 Exterior Wall Construction	B2011 Concrete Exterior Walls
Condition	Good
Qty / UOM	25,200 / SF
RUL (years)	15
Location	Exterior Walls

OBSERVATIONS/COMMENTS:

No further action is required.

Item	Description
B2013 Exterior Louvers, Screens, and Fencing	B2013 Wood Louver
Condition	Fair
Qty / UOM	700 / SF
RUL (years)	4
Location	Exterior Walls

OBSERVATIONS/COMMENTS:

The wood louvers will require sanding and painting during remaining life.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost ($)	Plan Type	Priority	Year	Expenditures ($)
B2013	Replace B2013 Wood Louver	700.0 - SF	621.0	IN - Appearance	Priority 3	2019	434,712

Item	Description
B2015 Balcony Walls & Handrails	B2015 Steel Guardrails and Handrails
Condition	Fair
Qty / UOM	880 / LF
RUL (years)	15
Location	Entire Facility

OBSERVATIONS/COMMENTS:

Steel railings are structurally sound, but will require painting during the term.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost ($)	Plan Type	Priority	Year	Expenditures ($)
B2015	B2015 Paint handrails	400.0 - LF	8.0	IN - Appearance	Priority 1	2016	3,200

Item	Description
B2021 Windows	B2021 Aluminum Window Walls
Condition	Fair
Qty / UOM	22,000 / SF
RUL (years)	9
Location	Exterior Walls

OBSERVATIONS/COMMENTS:

Based on estimated RUL and condition, exterior window replacement is anticipated.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost ($)	Plan Type	Priority	Year	Expenditures ($)
B2021	Replace B2021 Aluminum Window Walls	22,000.0 - SF	85.0	IN - Beyond Rated Life	Priority 4	2024	1,869,771

Item	Description
B2031 Glazed Doors & Entrances	B2031 Glazed Entrance Doors
Condition	Fair
Qty / UOM	18 / EA
RUL (years)	9
Location	Exterior Walls

OBSERVATIONS/COMMENTS:

Based on the estimated RUL and condition, glazed door replacements are anticipated.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost ($)	Plan Type	Priority	Year	Expenditures ($)
B2031	Replace B2031 Glazed Entrance Doors	18.0 - EA	4335.5	IN - Beyond Rated Life	Priority 4	2024	78,039

Item	Description
B2034 Overhead Doors	B2034 Steel Rolling Overhead Door, Electric - 8’ to 12’
Condition	Fair
Qty / UOM	3 / EA
RUL (years)	15
Location	Exterior Walls

OBSERVATIONS/COMMENTS:

No further action is required.

COST SUMMARY:

Type	Year	Total Expenditures
B20 Exterior Enclosure	2016	$3,200
B20 Exterior Enclosure	2019	$434,712
B20 Exterior Enclosure	2024	$1,947,810

B30 ROOFING

Item	Description
B3011 Roof Finishes	B3011 Preformed Steel Roofing
Condition	Good
Qty / UOM	63 / SQ
RUL (years)	20
Location	Roof

OBSERVATIONS/COMMENTS:

Roof monitors are finished with preformed steel roofing panels. No further action is anticipated for roof surfaces; however, supporting steel framing and other roof mounted steel beams require painting, due to corrosion and peeling.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost ($)	Plan Type	Priority	Year	Expenditures ($)
B3011	B3011 Paint rooftop steel framing and trim at metal canopies	3,200.0 - SF	3.9	OP - Maintenance	Priority 2	2016	12,384

Item	Description
B3011 Roof Finishes	B3011 Single Ply TPO Roofing, 60 Mills
Condition	Fair
Qty / UOM	200 / SQ
RUL (years)	15
Location	Roof

OBSERVATIONS/COMMENTS:

The flat sections of the roof are fully-adhered single-ply TPO membranes. No further action is required.

COST SUMMARY:

Type	Year	Total Expenditures
B30 Roofing	2016	$12,384

C Interiors Systems

C10 Interior Construction

Item	Description
C1014 Site Built Toilet Partitions	C1014 Toilet Partitions
Condition	Good
Qty / UOM	12 / EA
RUL (years)	10
Location	Restrooms

OBSERVATIONS/COMMENTS:

No further action is required.

Item	Description
C1021 Interior Doors	C1021 Flush Steel Painted Door
Condition	Fair
Qty / UOM	60 / EA
RUL (years)	15
Location	Entire Facility

OBSERVATIONS/COMMENTS:

No further action is required.

Item	Description
C1021 Interior Doors	C1021 Aluminum Frame Glazed Interior Doors
Condition	Fair
Qty / UOM	22 / EA
RUL (years)	25
Location	Throughout 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	82,500 / SF
RUL (years)	5
Location	Entire Facility

OBSERVATIONS/COMMENTS:

Based on the estimated RUL and condition, the interior walls will require repainting.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost ($)	Plan Type	Priority	Year	Expenditures ($)
C3012	Replace C3012 Paint Interior Walls, Drywall	82,500.0 - SF	2.1	IN - Appearance	Priority 4	2020	175,956

Item	Description
C3012 Wall Finishes to Interior Walls	C3012 Ceramic Tile Walls
Condition	Fair
Qty / UOM	12,200 / SF
RUL (years)	25
Location	Restrooms

OBSERVATIONS/COMMENTS:

No further action is required.

Item	Description
C3024 Flooring	C3024 Ceramic Tile Flooring
Condition	Good
Qty / UOM	5,880 / SF
RUL (years)	20
Location	Restrooms

OBSERVATIONS/COMMENTS:

No further action is required.

Item	Description
C3024 Flooring	C3024 Vinyl Tile
Condition	Fair
Qty / UOM	1,538 / SY
RUL (years)	1
Location	Entire Facility

OBSERVATIONS/COMMENTS:

Based on estimated RUL and condition, vinyl tile replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost ($)	Plan Type	Priority	Year	Expenditures ($)
C3024	Replace C3024 Vinyl Tile	1,538.0 - SY	125.8	IN - Appearance	Priority 3	2016	193,450

Item	Description
C3025 Carpeting	C3025 Carpet Tiles - Standard
Condition	Fair
Qty / UOM	611 / SY
RUL (years)	1
Location	Throughout Facility

OBSERVATIONS/COMMENTS:

Based on the estimated RUL and condition, carpet tile replacement is required.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost ($)	Plan Type	Priority	Year	Expenditures ($)
C3025	Replace C3025 Carpet Tiles - Standard	611.0 - SY	96.6	IN - Appearance	Priority 3	2016	59,026

Item	Description
C3032 Suspended Ceilings	C3032 Acoustical Ceiling Tile
Condition	Fair
Qty / UOM	361 / CSF
RUL (years)	1
Location	Throughout interior

OBSERVATIONS/COMMENTS:

Based on estimated RUL and condition, acoustic ceiling tile replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost ($)	Plan Type	Priority	Year	Expenditures ($)
C3032	Replace C3032 Acoustical Ceiling Tile	361.0 - CSF	1201.6	IN - Appearance	Priority 3	2016	433,763

COST SUMMARY:

Type	Year	Total Expenditures
C30 Interior Finishes	2016	$686,239
C30 Interior Finishes	2020	$175,956

D Services Systems

D10 Conveying Systems

Item	Description
D1011 Passenger Elevators	D1011 Hydraulic Elevators, 2500 Lb
Condition	Poor - Fair
Qty / UOM	2 / EA
RUL (years)	0
Location	Elevators 1-2

OBSERVATIONS/COMMENTS:

A 2015 assessment report by Elevator Consulting Associates is included in the appendices and details the anticipated modernization cost included in the report. This includes the consultant's suggested additional costs for cab finishes, associated trades, and consulting fees.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost ($)	Plan Type	Priority	Year	Expenditures ($)
D1011	Replace D1011 Hydraulic Elevators, 2500 Lb	2.0 - EA	200000.0	IN - Beyond Rated Life	Priority 1	2015	400,000

Item	Description
D1011 Passenger Elevators	D1011 Freight Elevator, Hydraulic 4,000 Lb
Condition	Poor - Fair
Qty / UOM	1 / EA
RUL (years)	1
Location	Elevator 3

OBSERVATIONS/COMMENTS:

A 2015 assessment report by Elevator Consulting Associates is included in the appendices and details the anticipated modernization cost included in the report. This includes the consultant's suggested additional costs for cab finishes, associated trades, and consulting fees.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost ($)	Plan Type	Priority	Year	Expenditures ($)
D1011	Replace D1011 Freight Elevator, Hydraulic 4,000 Lb	1.0 - EA	225000.0	IN - Beyond Rated Life	Priority 1	2016	225,000

COST SUMMARY:

Type	Year	Total Expenditures
D10 Conveying Systems	2015	$400,000
D10 Conveying Systems	2016	$225,000

D20 PLUMBING

Item	Description
D2011 Water Closets	D2011 Commercial Water Closet - Standard
Condition	Fair
Qty / UOM	39 / EA
RUL (years)	2
Location	Restrooms throughout facility
Low Flow Toilet	Yes
System Grade	Commercial Grade

OBSERVATIONS/COMMENTS:

The water closets appear to be original equipment. The plumbing fixtures have exceeded their expected service life and should be budgeted for replacement.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost ($)	Plan Type	Priority	Year	Expenditures ($)
D2011	Replace D2011 Commercial Water Closet - Standard	39.0 - EA	1233.1	OP - Energy	Priority 2	2017	48,093

Item	Description
D2012 Urinals	D2012 Urinal - Standard
Condition	Fair
Qty / UOM	12 / EA
RUL (years)	2
Location	Restrooms throughout facility
Low Flow Toilet	Yes
System Grade	Commercial Grade

OBSERVATIONS/COMMENTS:

The urinals appear to be original equipment and have reached the end of EUL. Based on age and condition, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost ($)	Plan Type	Priority	Year	Expenditures ($)
D2012	Replace D2012 Urinal - Standard	12.0 - EA	2440.7	OP - Energy	Priority 2	2017	29,288

Item	Description
D2013 Lavatories	D2013 China Wall Hung Lavatory and Faucet
Condition	Fair
Qty / UOM	36 / EA
RUL (years)	2
Location	Restrooms throughout facility

OBSERVATIONS/COMMENTS:

Sinks and faucets appear to have fixtures original to the 1980 construction. The fixtures have reached their expected serviceable life. Replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost ($)	Plan Type	Priority	Year	Expenditures ($)
D2013	Replace D2013 China Wall Hung Lavatory and Faucet	36.0 - EA	1542.0	IN - Beyond Rated Life	Priority 2	2017	55,514

Item	Description
D2018 Drinking Fountains and Coolers	D2018 Drinking Fountain
Condition	Good
Qty / UOM	6 / EA
RUL (years)	5
Location	Throughout Facility

OBSERVATIONS/COMMENTS:

Based on estimated RUL, the drinking fountains will require replacement during the term.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost ($)	Plan Type	Priority	Year	Expenditures ($)
D2018	Replace D2018 Drinking Fountain	6.0 - EA	2876.6	IN - Beyond Rated Life	Priority 3	2020	17,260

Item	Description
D2022 Hot Water Service	D2020 Domestic Water Heater - Gas - 100 Gal
Condition	Good
Qty / UOM	1 / EA
RUL (years)	17
Location	Boiler Mechanical Room

OBSERVATIONS/COMMENTS:

The 100-gallon gas-fired commercial water heater was replaced in 2012. No further action is required.

COST SUMMARY:

Type	Year	Total Expenditures
D20 Plumbing	2017	$132,894
D20 Plumbing	2020	$17,260

D30 HVAC

Energy Supply	
Item	Description
Fuel Oil Type	N/A
Fuel Gas Type	N/A
Solid Fuel Type	N/A
District Heat Type	N/A
District Cooling Type	N/A
Solar Thermal	N/A
Fuel Tank Type	N/A
Fuel Tank Size (gallons)	N/A
Fuel Tank Location	N/A
Gas Meter Location	Mechanical Room
Electrical Meter Location	Electrical Room
Water Meter Location	Street Vault

Item	Description
D3021 Boilers	D3020 Water Boiler, Gas 100Kw
Condition	Good
Qty / UOM	1 / EA
RUL (years)	29
Location	Mechanical Boiler Room

OBSERVATIONS/COMMENTS:

The new HVAC boiler is a high efficiency hot water unit. No further action is required.

Item	Description
D3022.1 Circulating Pumps	D3022 HVAC Chilled Water Circ Pump 20 HP
Condition	Fair
Qty / UOM	1 / EA
RUL (years)	1
Location	Electrical - Chiller Room

OBSERVATIONS/COMMENTS:

The 20-hp chilled water distribution pump and motor appear to be original. Based on RUL and condition, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost ($)	Plan Type	Priority	Year	Expenditures ($)
D3022	Replace D3022 HVAC Chilled Water Circ Pump 20 HP	1.0 - EA	26054.9	IN - Beyond Rated Life	Priority 1	2016	26,055

Item	Description
D3022.1 Circulating Pumps	D3023 Condensate Return System 20 HP
Condition	Fair
Qty / UOM	1 / EA
RUL (years)	1
Location	Electrical - Chiller Room

OBSERVATIONS/COMMENTS:

The condensate return station has reached the end of its expected life. Based on estimated RUL and condition, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost ($)	Plan Type	Priority	Year	Expenditures ($)
D3022	Replace D3023 Condensate Return System 20 HP	1.0 - EA	26054.9	IN - Beyond Rated Life	Priority 1	2016	26,055

Item	Description
D3022.1 Circulating Pumps	D3023 HW Circulating 10-25 HP
Condition	Fair - Good
Qty / UOM	1 / EA
RUL (years)	1
Location	Mechanical Boiler Room

OBSERVATIONS/COMMENTS:

The hot water circulation pump appears to be a 2005 replacement. Based on the estimated RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost ($)	Plan Type	Priority	Year	Expenditures ($)
D3022	Replace D3023 HW Circulating 10-25 HP	1.0 - EA	24192.4	IN - Beyond Rated Life	Priority 1	2016	24,192

Item	Description
D3031.1 Chillers	D3031 Chiller, Water Cooled, 150 Ton
Condition	Fair
Qty / UOM	1 / EA
RUL (years)	0
Location	Mechanical Room South

OBSERVATIONS/COMMENTS:

The chiller is original and has far exceeded it expected service life. Replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost ($)	Plan Type	Priority	Year	Expenditures ($)
D3031	Replace D3031 Chiller, Water Cooled, 150 Ton	1.0 - EA	285200.0	IN - Beyond Rated Life	Priority 1	2015	285,200

Item	Description
D3031.2 Cooling Towers	D3031 Cooling Tower, Galvanized Steel, 170 Ton
Condition	Fair
Qty / UOM	1 / EA
RUL (years)	6
Location	Rooftop

OBSERVATIONS/COMMENTS:

The cooling tower was replaced in 2006. Based on EUL, replacement is anticipated.

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	137441.6	IN - Beyond Rated Life	Priority 3	2021	137,442

Item	Description
D3041.1 Air Handling Units	D3041 Return Air Fan - 500 CFM - 15HP
Condition	Good
Qty / UOM	6 / EA
RUL (years)	17
Location	3rd Floor Mechanical

OBSERVATIONS/COMMENTS:

The return air fans and variable frequency drives (VFDs) were replaced in 2012. No further action is required.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost ($)	Plan Type	Priority	Year	Expenditures ($)
D3041	D3041 Replace fan motors	1.0 - EA	2000.0	IN - Beyond Rated Life	Priority 3	2020	2,000

Item	Description
D3041.1 Air Handling Units	D3041 Supply Air Fan - 400 CFM - 25 HP
Condition	Good
Qty / UOM	6 / EA
RUL (years)	17
Location	3rd Floor Mechanical

OBSERVATIONS/COMMENTS:

The supply air fans and VFDs were replaced in 2012. No further action is required.

Item	Description
D3041.1 Air Handling Units	D3041 Coils for Heat and Cooling
Condition	Fair - Good
Qty / UOM	4 / EA
RUL (years)	5
Location	2nd Floor Air Handler Room

OBSERVATIONS/COMMENTS:

Air handlers with condenser coils are located in the second floor air handler room, and are reported to be original equipment. The coils should be replaced within the reserve term, as they have already exceeded their expected life.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost ($)	Plan Type	Priority	Year	Expenditures ($)
D3041	Replace D3041 Coils for Heat and Cooling	4.0 - EA	65769.6	IN - Beyond Rated Life	Priority 3	2020	263,078

Item	Description
D3041.2 Terminal Units VAV	D3041 VAV Boxes
Condition	Fair
Qty / UOM	75 / EA
RUL (years)	5
Location	Throughout Facility

OBSERVATIONS/COMMENTS:

The facility is heated and cooled by variable air volume (VAV) terminals supplied with conditioned air from the central system air handlers. The facility contact reported that the vast majority of VAV terminals are likely original to the 1980 construction. The controllers on approximately 50 percent of the terminals were upgraded in 2012. Based on age, replacements are anticipated for remaining original units.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost ($)	Plan Type	Priority	Year	Expenditures ($)
D3041	Replace D3041 VAV Boxes	75.0 - EA	2496.7	IN - Beyond Rated Life	Priority 3	2020	187,254

Item	Description
D3041.2 Terminal Units VAV	D3041 VAV Boxes with Coils
Condition	Fair - Good
Qty / UOM	75 / EA
RUL (years)	12
Location	Throughout Facility

OBSERVATIONS/COMMENTS:

The facility is heated and cooled by VAV terminals supplied from the central systems. The maintenance staff reported that the vast majority of VAV terminals are likely original to the 1980 construction. Approximately 50 percent have coils and were upgraded with new controllers in 2012. No further action is required.

Item	Description
D3042 Exhaust Ventilation Systems	D3042 Exhaust Fan < 15,000 CFM
Condition	Fair - Good
Qty / UOM	2 / EA
RUL (years)	5
Location	Rooftop

OBSERVATIONS/COMMENTS:

Most of the miscellaneous rooftop exhaust fans are original to the 1980 construction. The fans are reportedly running continuously. Early replacements are anticipated.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost ($)	Plan Type	Priority	Year	Expenditures ($)
D3042	Replace D3042 Exhaust Fan < 15,000 CFM	2.0 - EA	16594.2	IN - Beyond Rated Life	Priority 3	2020	33,188

Item	Description
D3042 Exhaust Ventilation Systems	D3042 Exhaust Fan 26,000 CFM
Condition	Good
Qty / UOM	1 / EA
RUL (years)	6
Location	Rooftop

OBSERVATIONS/COMMENTS:

The unit was replaced in 2005. Based on estimated remaining useful life (RUL), replacement is anticipated during the term.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost ($)	Plan Type	Priority	Year	Expenditures ($)
D3042	Replace D3042 Exhaust Fan 26,000 CFM	1.0 - EA	5734.3	IN - Beyond Rated Life	Priority 3	2021	5,734

Item	Description
D3068 Building Automation Systems	D3068 Direct Digital Control
Condition	Fair - Good
Qty / UOM	108,561 / SF
RUL (years)	12
Location	Maintenance Admin

OBSERVATIONS/COMMENTS:

A new direct digital control (DDC) system was added in 2012, when the supply and return fans were replaced. No further action is required.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost ($)	Plan Type	Priority	Year	Expenditures ($)
D3068	D3068 Upgrade from Pneumatic system	1.0 - SF	65000.1	IN - Reliability	Priority 1	2015	65,000

COST SUMMARY:

Type	Year	Total Expenditures
D30 HVAC	2015	$350,200
D30 HVAC	2016	$76,302
D30 HVAC	2020	$485,520
D30 HVAC	2021	$143,176

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	Yes
Smoke Detectors Power Supply	Hardwired Electric
Carbon Monoxide Detectors	Yes
Heat Detector	No
Central Fire Alarm Panel Location	Security Desk
Annunciator Panel Location	CHP Room
Fire Extinguishers	Yes
Fire Extinguisher Inspection Date	June 14, 2014
Distance to Nearest Fire Hydrant (ft)	20
Illuminated Exit Signs	Yes
Kitchen Suppression Systems	No
Halon Gas Systems	No
Smoke Evacuation Systems	No
Fire-rated Stairwells	Yes
Fire-rated Stairwell Finish	Masonry
Stairwell Discharge	Exterior of the building at Grade
Stairwell Pressurized	No
Fire-Rated Doors Observed	Yes
Location of Fire-Rated Doors	Office entrances
Fire Alarm Service Company	Siemens
Date of Last Fire Alarm Service	June 14, 2014
Are the individual office unit fire alarm systems monitored?	Yes
Are the common area fire alarm systems monitored?	N/A
Types of Common Areas Monitored	N/A
Fire Alarm Monitoring Company	Security Alert Systems

Item	Description
D4011 Sprinkler Water Supply	D4011 Sprinkler Heads
Condition	Good
Qty / UOM	108,561 / SF
RUL (years)	5
Location	Throughout Facility

OBSERVATIONS/COMMENTS:

The sprinkler riser and heads appear to have been upgraded in the mid 1990s. Sprinkler head replacements are recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost ($)	Plan Type	Priority	Year	Expenditures ($)
D4011	Replace D4011 Sprinkler Heads	108,561.0 - SF	2.2	CC - Life Safety	Priority 3	2020	240,832

Item	Description
D4011 Sprinkler Water Supply	D4011 Wet-Pipe Sprinkler System
Condition	Fair - Good
Qty / UOM	108,561 / SF
RUL (years)	10
Location	Throughout Facility

OBSERVATIONS/COMMENTS:

The facility has a wet pipe fire protection system with sprinklers, strobes, and pull down boxes. No further action is required.

COST SUMMARY:

Type	Year	Total Expenditures
D40 Fire Protection Systems	2020	$240,832

D50 ELECTRICAL SYSTEMS

Item	Description
D5012 Low Tension Service & Dist.	D5012 Secondary Dry Transformer 500 kVA
Condition	Fair
Qty / UOM	1 / EA
RUL (years)	5
Location	Electrical - Chiller Room

OBSERVATIONS/COMMENTS:

The step-down transformer is original equipment. Due to age, replacement of the transformer is anticipated.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost ($)	Plan Type	Priority	Year	Expenditures ($)
D5012	Replace D5012 Secondary Dry Transformer 500 kVA	1.0 - EA	72986.3	IN - Beyond Rated Life	Priority 3	2020	72,986

Item	Description
D5012 Low Tension Service & Dist.	D5012 Breaker Panel 225 Amps, 30 Circuits
Condition	Fair
Qty / UOM	36 / EA
RUL (years)	5
Location	Throughout Facility

OBSERVATIONS/COMMENTS:

The majority of the electrical panels are original 1980 panels. Due to the age of the components, replacement of the panels is anticipated.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost ($)	Plan Type	Priority	Year	Expenditures ($)
D5012	Replace D5012 Breaker Panel 225 Amps, 30 Circuits	36.0 - EA	7864.3	IN - Beyond Rated Life	Priority 3	2020	283,116

Item	Description
D5012 Low Tension Service & Dist.	D5010 Switchgear, Mainframe, 1600 Amps
Condition	Fair - Good
Qty / UOM	2 / EA
RUL (years)	15
Location	Electrical - Chiller Room

OBSERVATIONS/COMMENTS:

The main switchgear is original equipment. The electrical service is reportedly adequate for the facility's needs. No further action is required.

Item	Description
D5022 Lighting Equipment	D5022 Lighting Fixtures
Condition	Fair
Qty / UOM	290 / EA
RUL (years)	1
Location	Throughout Facility

OBSERVATIONS/COMMENTS:

Replace fluorescent lighting in conjunction with suspended ceiling replacement.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost ($)	Plan Type	Priority	Year	Expenditures ($)
D5022	Replace D5022 Lighting Fixtures	290.0 - EA	401.2	IN - Beyond Rated Life	Priority 1	2016	116,348

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

OBSERVATIONS/COMMENTS:

The fire alarm panel was reportedly upgraded in 2005. Based on expected useful life (EUL) and technology becoming obsolete, replacement is recommended in conjunction with upgrade of the current fire alarm system.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost ($)	Plan Type	Priority	Year	Expenditures ($)
D5037	Replace D5037 Fire Alarm Panel	1.0 - EA	35400.0	CC - Life Safety	Priority 2	2019	35,400

Item	Description
D5037 Fire Alarm Systems	D5037 Fire Alarm System
Condition	Fair
Qty / UOM	108,561 / SF
RUL (years)	4
Location	Throughout Facility

OBSERVATIONS/COMMENTS:

The fire alarm system was replaced in 2000 and appears comprehensive with strobes and an adequate number of modern devices placed throughout the spaces. A limited upgrade of the system is recommended in conjunction with panel replacement.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost ($)	Plan Type	Priority	Year	Expenditures ($)
D5037	Replace D5037 Fire Alarm System	108,561.0 - SF	3.5	CC - Life Safety	Priority 2	2019	384,306

Item	Description
D5092 Emergency Light & Power Systems	D5092 Emergency Transfer Switch
Condition	Good
Qty / UOM	1 / EA
RUL (years)	1
Location	Emergency Generator Room

OBSERVATIONS/COMMENTS:

The transfer switch associated with the emergency generator is original to the generator installation date. A conjunctive replacement is recommended when the generator is replaced.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost ($)	Plan Type	Priority	Year	Expenditures ($)
D5092	Replace D5092 Emergency Transfer Switch	1.0 - EA	10613.1	CC - Life Safety	Priority 1	2016	10,613

Item	Description
D5092 Emergency Light & Power Systems	D5092 Emergency Generator 30 kW
Condition	Fair
Qty / UOM	1 / EA
RUL (years)	10
Location	Emergency Generator Room

OBSERVATIONS/COMMENTS:

The 75 kW emergency generator is located in the lower level mechanical room. Secondary containment for the diesel fuel is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost ($)	Plan Type	Priority	Year	Expenditures ($)
D5092	D5092 Add/improve secondary containment for day tank	1.0 - EA	3500.0	EN - Air/ Water Quality	Priority 1	2015	3,500

COST SUMMARY:

Type	Year	Total Expenditures
D50 Electrical Systems	2015	$3,500
D50 Electrical Systems	2016	$126,961
D50 Electrical Systems	2019	$419,706
D50 Electrical Systems	2020	$356,102

G Building Sitework Systems

G20 Site Improvements

Site Information	
Item	**Description**
Main Ingress and Egress	Adjacent parking garage - no onsite parking
Access from	N
Additional Entrances	N/A
Access from	E
Parking Count: Open lot	0
Parking Count: Sheltered by carports	0
Parking Count: Private garages	0
Parking Count: Subterranean garage	0
Parking Count: Freestanding parking structure	0
Number of ADA Compliant Spaces	0
Number of ADA Compliant Spaces for Vans	0
Method of obtaining parking count	N/A
Property Identification Sign-Primary	Structure mounted
Property Identification Sign- Secondary	Structure mounted
Illuminated Identification Signage	No
Building Identification Sign	Yes
Illuminated Sign	No
Location of Property ID Sign	Front elevation of building
Trees Present	Yes
Shrubs Present	Yes
Grasses Present	Yes
Flower beds Present	Yes
Decorative Rocks Present	No
Lava Rocks Present	No
Ponds Present	No
Fountains Present	No
Topography	Flat

Item	Description
G2031 Paving & Surfacing	G2031 Concrete Walk, Small Areas
Condition	Good
Qty / UOM	700 / SF
RUL (years)	10
Location	Courtyard

OBSERVATIONS/COMMENTS:

No further action is required.

Item	Description
G2035 Exterior Steps & Ramps	G2035 Concrete Stairs
Condition	Good
Qty / UOM	2,000 / LF Nosing
RUL (years)	15
Location	Site

OBSERVATIONS/COMMENTS:

No further action is required.

Item	Description
G2053 Top Soil and Planting Beds	G2053 Landscaping Allowance, Large Area
Condition	Good
Qty / UOM	22,000 / SF
RUL (years)	10
Location	Courtyard

OBSERVATIONS/COMMENTS:

No further action is required.

G40 SITE ELECTRICAL UTILITIES

Item	Description
G4021 Fixtures & Transformers	G4021 Fixtures & Transformers
Condition	Poor - Fair
Qty / UOM	10 / EA
RUL (years)	1
Location	Exterior Courtyard

OBSERVATIONS/COMMENTS:

Courtyard lighting fixtures are damaged and not functional. Legacy fixtures and parts are unavailable through normal channels. Replacement is recommended.

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 2	2016	18,880

COST SUMMARY:

Type	Year	Total Expenditures
G40 Site Electrical Utilities	2016	$18,880

The weather at the time of the assessment was:

Item	Description
Approximate Outdoor Temperature (degrees F)	75
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	No
Boiler Certificates Reviewed	No
Document Year Built Information Obtained From	Original construction drawings and as-built drawings

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: 

Matthew Anderson, Program Manager

APPENDIX D: PHOTOS

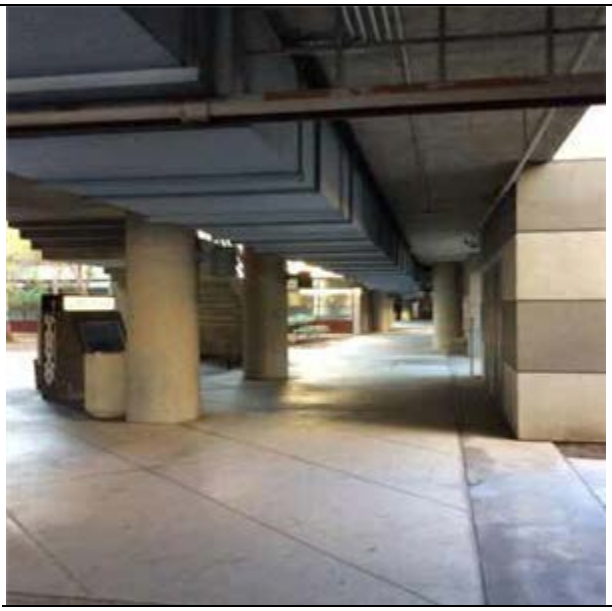
:- Front Elevation

:- Paseo De San Antonio Walk Elevation

:- Second Street Elevation

:- 3rd Street Elevation

A1031 Standard Concrete Slab



A1032 Structural Slab on Grade

B1012 Concrete Columns, Beams, and Floor Slabs

B2011 Concrete Exterior Walls

B2013 Wood Louver

B2013 Wood Louver

B2015 Steel Guardrails and Handrails

B2015 Steel Guardrails and Handrails

B2021 Aluminum Window Walls

B2021 Aluminum Window Walls

B2021 Aluminum Window Walls

B2021 Aluminum Window Walls

B2031 Glazed Entrance Doors

B2031 Glazed Entrance Doors

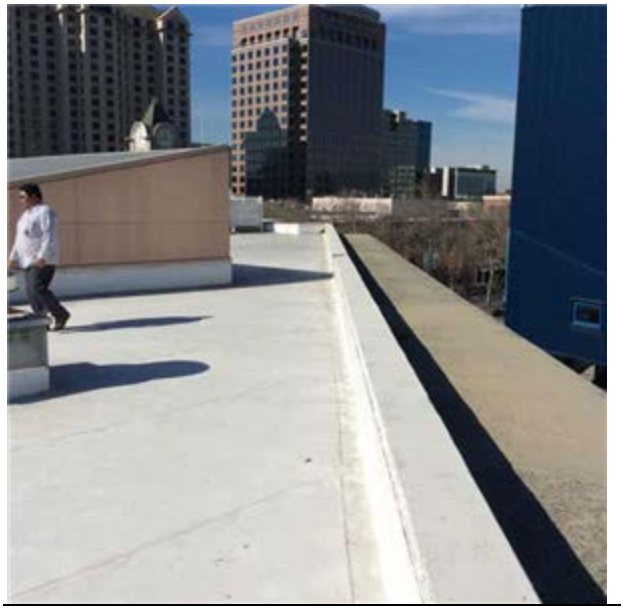
B2034 Steel Rolling Overhead Door, Electric - 8' to 12'

B3011 Preformed Steel Roofing

B3011 Single Ply TPO Roofing, 60 Mills

B3011 Single Ply TPO Roofing, 60 Mills

B3011 Single Ply TPO Roofing, 60 Mills

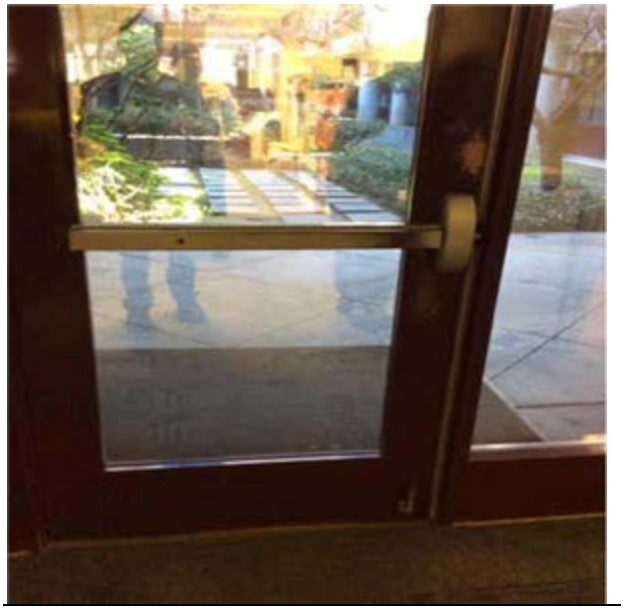


B3011 Single Ply TPO Roofing, 60 Mills

C1014 Toilet Partitions

C1021 Flush Steel Painted Door

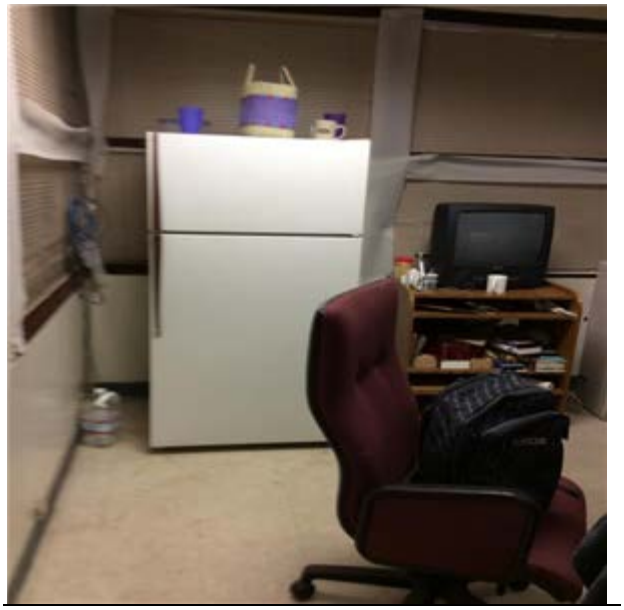
C1021 Aluminum Frame Glazed Interior Doors



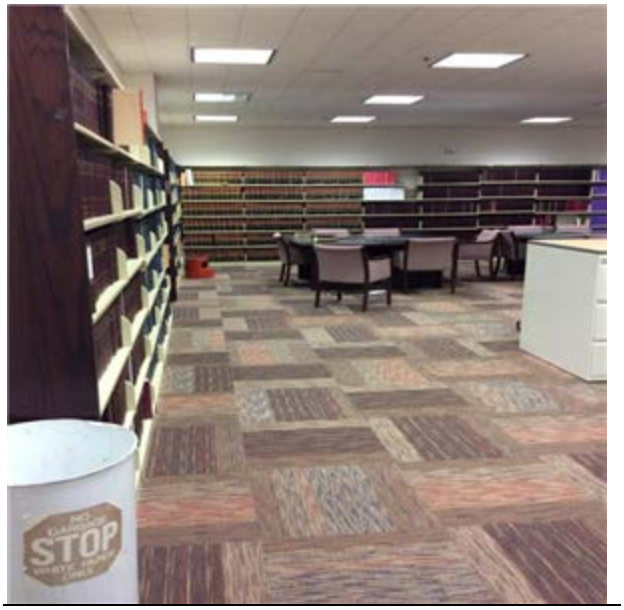
C1021 Aluminum Frame Glazed Interior Doors

C3012 Ceramic Tile Walls

C3024 Ceramic Tile Flooring



C3024 Vinyl Tile



C3025 Carpet Tiles - Standard

C3032 Acoustical Ceiling Tile

D2011 Commercial Water Closet - Standard

D2012 Urinal - Standard

D2013 China Wall Hung Lavatory and Faucet

D2018 Drinking Fountain

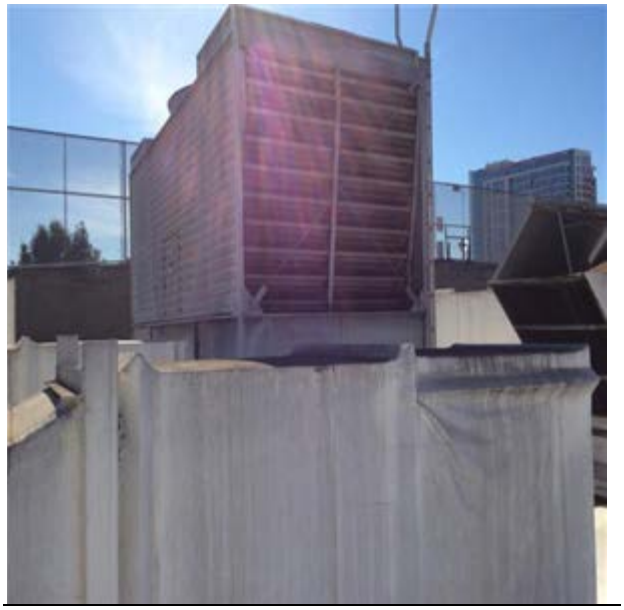
D2020 Domestic Water Heater - Gas - 100 Gal

D3020 Water Boiler, Gas 100Kw

D3023 Condensate Return System 20 HP

D3023 HW Circulating 10-25 HP

D3031 Chiller, Water Cooled, 150 Ton



D3031 Cooling Tower, Galvanized Steel, 170 Ton

D3041 Return Air Fan - 500 CFM - 15HP

D3041 Coils for Heat and Cooling

D3041 Supply Air Fan - 400 CFM - 25 HP

D3041 VAV Boxes

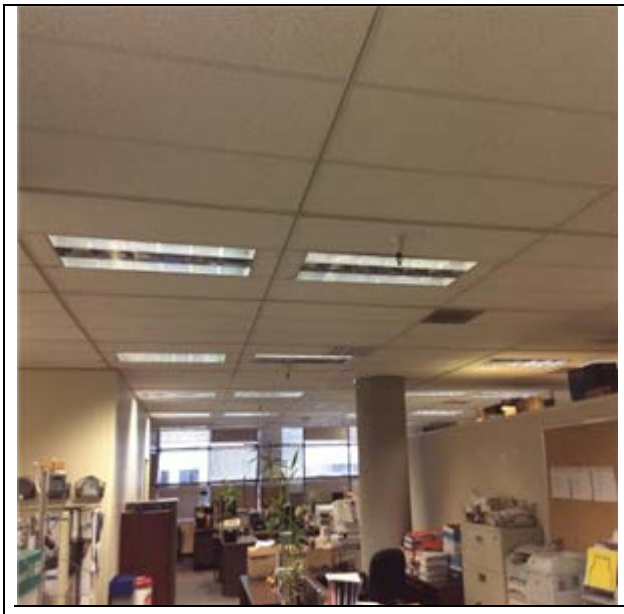
D3041 VAV Boxes with Coils

D3042 Exhaust Fan < 15,000 CFM

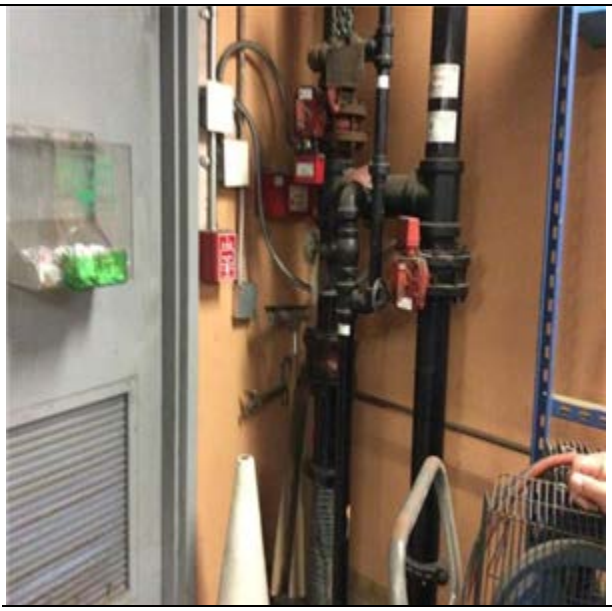
D3042 Exhaust Fan 26,000 CFM

D3068 Direct Digital Control

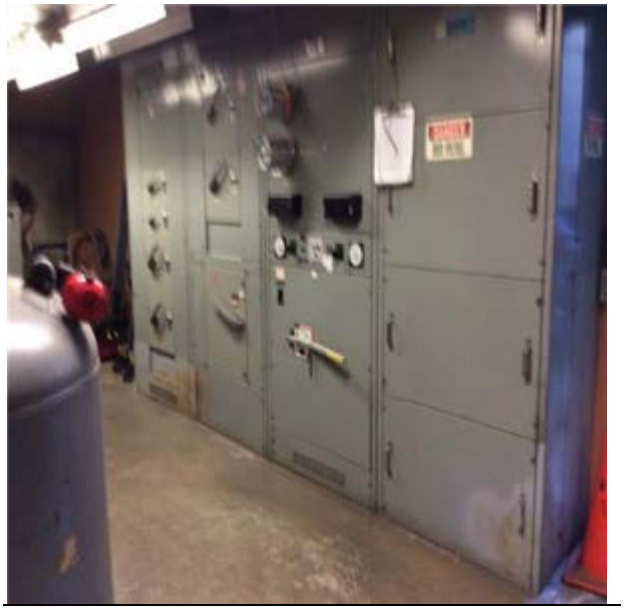
D3068 Direct Digital Control



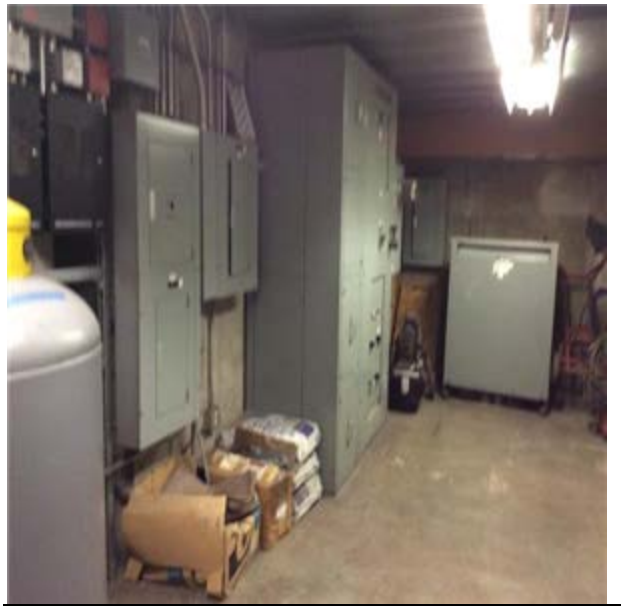
D4011 Sprinkler Heads



D4011 Wet-Pipe Sprinkler System



D5010 Switchgear, Mainframe, 1600 Amps



D5012 Secondary Dry Transformer 500 kVA

D5012 Breaker Panel 225 Amps, 30 Circuits

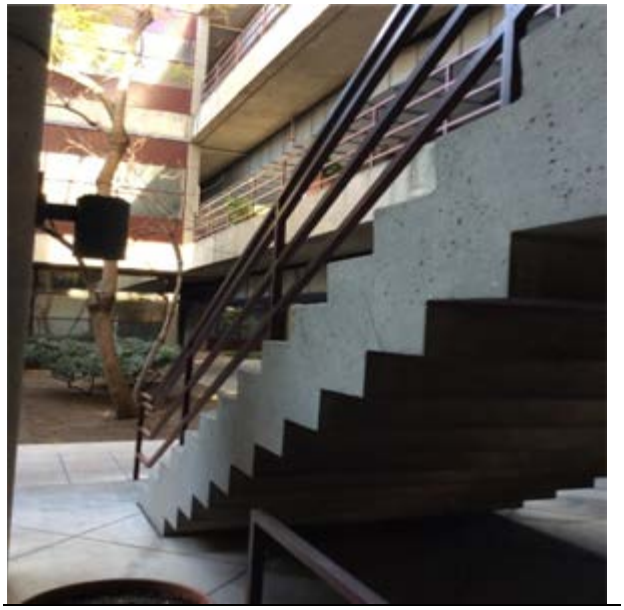
D5037 Fire Alarm System

D5037 Fire Alarm Panel

D5092 Emergency Transfer Switch

D5092 Emergency Generator 30 kW

G2031 Concrete Walk, Small Areas



G2035 Concrete Stairs

G2053 Landscaping Allowance, Large Area

G2053 Landscaping Allowance, Large Area

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)	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. 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.
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 *Means* and *Dodge*, 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 employee 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

SAN JOSE - ALFRED E. ALQUIST BUILDING FACT SHEET

100 Paseo de San Antonio
San Jose
Santa Clara County
Category 3 - Low Priority - Special Repairs and Maintenance

BUILDING INFORMATION

- Age: 34 years (completed in 1980)
- Size:* 3-story, featuring 2 large and 5 small courtyards
  108,561 GSF 91,513 NUSF 91,513 Assigned SF
  1.64 Acre Parcel
  No parking
  Capacity - 300 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)

SPI Structure #: 2760
Real Property #: 662
BPM #: 470

- LEED Status: Certified Silver LEED-EB, 2010
- Tenants: 10 Agencies, larger tenants include Department of Industrial Relations (24,461 SF), Board of Equalization (20,966 SF), Department of Public Health (13,428 SF), and Department of Rehabilitation (12,279 SF)

COMPLETED STUDIES AND SIGNIFICANT FINDINGS

A. 2003 Infrastructure Study

Identified critical building needs and capital renovations that would be required with estimated cost of $7.9 million. Replacement value of the structure at the time was estimated by the consultants at $26 million to $32.5 million. Structural review included in the study concluded that the building meets the Division of State Architect's Risk Level III performance, "the building should perform well in a major earthquake and resist seismic forces without collapse".

B. 2010 American Disability Act Accessibility Compliance Survey

The building was upgraded to the 2001 California Building Code, however, the 2007 Code is currently in effect. The differences in the requirements are not significant, so only minor issues were anticipated. No deficiencies were found that require extensive corrective work with the exception of signage. It was noted at the time of the inspection that some ADA work was under way.

C. 2012 Access Compliance Conceptual Budget/Evaluation

In 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 building has had some water ponding, HVAC, elevator and landscape irrigation issues. These have been and are continuing to be addressed through special repair projects and ongoing maintenance/repair. The external landscaping/planters have been remodeled and upgraded through the City of San Jose Downtown Association.

CURRENT UTILIZATION PROJECTS

High Speed Rail took occupancy of 1,170 sf of "as is" space vacated by Senate Rules on 2/15/13.
Project in study phase for BOE to expand into DOR 3rd Floor space and allow DOR to downsize / relocate and consolidate other leased space locations in San Jose area.

RECENTLY COMPLETED PROJECTS

Cost

TBD

ACTIVE PROJECTS

Cost

TBD

* Source: Statewide Property Inventory

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 for this building at this time.

APPENDIX G: COST TABLES

10 YEAR EXPENDITURE FORECAST

Alfred E. Alquist Building
100 Paseo De San Antonia
San Jose

Useful Life[1]: Estimated Useful Life | Remaining Useful Life

Plan Type[2]: **OP:** Operations | **CC:** Code Compliance | **EN:** Environmental | **FN:** Functionality | **IN:** Integrity

Legend: Deferred | Scheduled

Element #	Component Description	Asset	Location	Action	EUL (Yrs)	RUL (Yrs)	Qty.	Unit of Meas.	Unit Cost	Plan Type	Priority[3]	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
A. SUBSTRUCTURE																							
Substructure Subtotal												$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
B. SHELL																							
B20	**EXTERIOR ENCLOSURE**																						
B2013	Wood Louver	B2013 Wood Louver	Exterior Walls	Replace B2013 Wood Louver	20	4	700.00	SF	$621.02	IN - Appearance	Priority 3	$0	$0	$0	$0	$434,712	$0	$0	$0	$0	$0	$0	$434,712
B2015	Metal Guardrail and Handrail, 3'-6" High	B2015 Steel Guardrails and Handrails	Entire Facility	B2015 Paint handrails	10	1	400.00	LF	$8.00	IN - Appearance	Priority 1	$0	$3,200	$0	$0	$0	$0	$0	$0	$0	$0	$0	$3,200
B2021	Aluminum Storefront 10' Tall w/O Door	B2021 Aluminum Window Walls	Exterior Walls	Replace B2021 Aluminum Window Walls	25	9	22,000.00	SF	$84.99	IN - Beyond Rated Life	Priority 4	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1,869,771	$0	$1,869,771
B2031	Aluminum 3'-0" X 7'-0"	B2031 Glazed Entrance Doors	Exterior Walls	Replace B2031 Glazed Entrance Doors	30	9	18.00	EA	$4,335.51	IN - Beyond Rated Life	Priority 4	$0	$0	$0	$0	$0	$0	$0	$0	$0	$78,039	$0	$78,039
B30	**ROOFING**																						
B3011	Corrugated Steel (26 GA)	B3011 Preformed Steel Roofing	Roof	B3011 Paint rooftop steel framing and trim at metal canopies	10	1	3,200.00	SF	$3.87	OP - Maintenance	Priority 2	$0	$12,384	$0	$0	$0	$0	$0	$0	$0	$0	$0	$12,384
Shell Subtotal												$0	$15,584	$0	$0	$434,712	$0	$0	$0	$0	$1,947,810	$0	$2,398,106
C. INTERIORS																							
C30	**INTERIOR FINISHES**																						
C3012	Paint Interior Walls, Drywall	C3012 Paint Interior Walls, Drywall	Entire Facility	Replace C3012 Paint Interior Walls, Drywall	10	5	82,500.00	SF	$2.13	IN - Appearance	Priority 4	$0	$0	$0	$0	$0	$175,956	$0	$0	$0	$0	$0	$175,956
C3024	Vinyl Tile	C3024 Vinyl Tile	Entire Facility	Replace C3024 Vinyl Tile	18	1	1,538.00	SY	$125.78	IN - Appearance	Priority 3	$0	$193,450	$0	$0	$0	$0	$0	$0	$0	$0	$0	$193,450
C3025	Carpet Tiles - Standard	C3025 Carpet Tiles - Standard	Throughout Facility	Replace C3025 Carpet Tiles - Standard	10	1	611.00	SY	$96.61	IN - Appearance	Priority 3	$0	$59,026	$0	$0	$0	$0	$0	$0	$0	$0	$0	$59,026
C3032	Acoustical Tile With Concealed Grid System Lay	C3032 Acoustical Ceiling Tile	Throughout interior	Replace C3032 Acoustical Ceiling Tile	20	1	361.00	CSF	$1,201.56	IN - Appearance	Priority 3	$0	$433,763	$0	$0	$0	$0	$0	$0	$0	$0	$0	$433,763
Interiors Subtotal												$0	$686,239	$0	$0	$0	$175,956	$0	$0	$0	$0	$0	$862,195
D. SERVICES																							
D10	**CONVEYING SYSTEMS**																						
D1011	Freight Elevator, Hydraulic Equipment, 4,000 Lb	D1011 Freight Elevator, Hydraulic 4,000 Lb	Elevator 3	Replace D1011 Freight Elevator, Hydraulic 4,000 Lb	25	1	1.00	EA	$225,000.00	IN - Beyond Rated Life	Priority 1	$0	$225,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$225,000
D1011	Elevator Hydraulic System, 2,500 Lb Capacity	D1011 Hydraulic Elevators, 2500 Lb	Elevators 1-2	Replace D1011 Hydraulic Elevators, 2500 Lb	25	0	2.00	EA	$200,000.00	IN - Beyond Rated Life	Priority 1	$400,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$400,000	$0
D20	**PLUMBING**																						
D2011	Flush Valve & Water Closet	D2011 Commercial Water Closet - Standard	Restrooms throughout facility	Replace D2011 Commercial Water Closet - Standard	25	2	39.00	EA	$1,233.15	OP - Energy	Priority 2	$0	$0	$48,093	$0	$0	$0	$0	$0	$0	$0	$0	$48,093
D2012	Urinal	D2012 Urinal - Standard	Restrooms throughout facility	Replace D2012 Urinal - Standard	35	2	12.00	EA	$2,440.66	OP - Energy	Priority 2	$0	$0	$29,288	$0	$0	$0	$0	$0	$0	$0	$0	$29,288
D2013	China Wall Hung Lavatory and Faucet	D2013 China Wall Hung Lavatory and Faucet	Restrooms throughout facility	Replace D2013 China Wall Hung Lavatory and Faucet	35	2	36.00	EA	$1,542.05	IN - Beyond Rated Life	Priority 2	$0	$0	$55,514	$0	$0	$0	$0	$0	$0	$0	$0	$55,514
D2018	Drinking Fountain	D2018 Drinking Fountain	Throughout Facility	Replace D2018 Drinking Fountain	10	5	6.00	EA	$2,876.60	IN - Beyond Rated Life	Priority 3	$0	$0	$0	$0	$0	$17,260	$0	$0	$0	$0	$0	$17,260
D30	**HVAC**																						
D3022.1	Circulation Pump 30 HP	D3022 HVAC Chilled Water Circ Pump 20 HP	Electrical - Chiller Room	Replace D3022 HVAC Chilled Water Circ Pump 20 HP	20	1	1.00	EA	$26,054.88	IN - Beyond Rated Life	Priority 1	$0	$26,055	$0	$0	$0	$0	$0	$0	$0	$0	$0	$26,055
D3022.1	Circulation Pump 30 HP	D3023 Condensate Return System 20 HP	Electrical - Chiller Room	Replace D3023 Condensate Return System 20 HP	20	1	1.00	EA	$26,054.88	IN - Beyond Rated Life	Priority 1	$0	$26,055	$0	$0	$0	$0	$0	$0	$0	$0	$0	$26,055
D3022.1	Circulation Pump, 7 to 10 HP	D3023 HW Circulating 10-25 HP	Mechanical Boiler Room	Replace D3023 HW Circulating 10-25 HP	20	1	1.00	EA	$24,192.40	IN - Beyond Rated Life	Priority 1	$0	$24,192	$0	$0	$0	$0	$0	$0	$0	$0	$0	$24,192
D3031.1	Chiller, Water Cooled, Centrifugal, 160 Ton	D3031 Chiller, Water Cooled, 150 Ton	Mechanical Room South	Replace D3031 Chiller, Water Cooled, 150 Ton	25	0	1.00	EA	$285,200.00	IN - Beyond Rated Life	Priority 1	$285,200	$0	$0	$0	$0	$0	$0	$0	$0	$0	$285,200	$0
D3031.2	Galvanized Steel Cooling Tower 100 to 120 Ton	D3031 Cooling Tower, Galvanized Steel, 170 Ton	Rooftop	Replace D3031 Cooling Tower, Galvanized Steel, 170 Ton	15	6	1.00	EA	$137,441.60	IN - Beyond Rated Life	Priority 3	$0	$0	$0	$0	$0	$0	$137,442	$0	$0	$0	$0	$137,442
D3041.1	Chilled Water Coil Within Fan Coil Unit,	D3041 Coils for Heat and Cooling	2nd Floor Air Handler Room	Replace D3041 Coils for Heat and Cooling	20	5	4.00	EA	$65,769.60	IN - Beyond Rated Life	Priority 3	$0	$0	$0	$0	$0	$263,078	$0	$0	$0	$0	$0	$263,078
D3041.1	Central Ahu Fan Motor,	D3041 Return Air Fan - 500 CFM - 15HP	3rd Floor Mechanical	D3041 Replace fan motors	0	5	1.00	EA	$2,000.00	IN - Beyond Rated Life	Priority 3	$0	$0	$0	$0	$0	$2,000	$0	$0	$0	$0	$0	$2,000
D3041.2	Vav Box , 270 to 600 CFM	D3041 VAV Boxes	Throughout Facility	Replace D3041 VAV Boxes	30	5	75.00	EA	$2,496.72	IN - Beyond Rated Life	Priority 3	$0	$0	$0	$0	$0	$187,254	$0	$0	$0	$0	$0	$187,254
D3042	Exhaust Fan, Centrifugal, Belt-Drive, Aluminum Housing, 2050 Through 3500 CFM	D3042 Exhaust Fan 26,000 CFM	Rooftop	Replace D3042 Exhaust Fan 26,000 CFM	20	6	1.00	EA	$5,734.31	IN - Beyond Rated Life	Priority 3	$0	$0	$0	$0	$0	$0	$5,734	$0	$0	$0	$0	$5,734
D3042	Exhaust Fan, Sidewall 11,250 CFM	D3042 Exhaust Fan < 15,000 CFM	Rooftop	Replace D3042 Exhaust Fan < 15,000 CFM	20	5	2.00	EA	$16,594.18	IN - Beyond Rated Life	Priority 3	$0	$0	$0	$0	$0	$33,188	$0	$0	$0	$0	$0	$33,188
D3068	Direct Digital Controls (DDC) Extensive	D3068 Direct Digital Control	Maintenance Admin	D3068 Upgrade from Pneumatic system	0	0	1.00	SF	$65,000.10	IN - Reliability	Priority 1	$65,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$65,000	$0
D40	**FIRE PROTECTION SYSTEMS**																						
D4011	Sprinkler Head	D4011 Sprinkler Heads	Throughout Facility	Replace D4011 Sprinkler Heads	25	5	108,561.00	SF	$2.22	CC - Life Safety	Priority 3	$0	$0	$0	$0	$0	$240,832	$0	$0	$0	$0	$0	$240,832
D50	**ELECTRICAL SYSTEMS**																						
D5012	Breaker Panel 225 Amps, 30 Circuits	D5012 Breaker Panel 225 Amps, 30 Circuits	Throughout Facility	Replace D5012 Breaker Panel 225 Amps, 30 Circuits	40	5	36.00	EA	$7,864.32	IN - Beyond Rated Life	Priority 3	$0	$0	$0	$0	$0	$283,116	$0	$0	$0	$0	$0	$283,116
D5012	Secondary Dry Transformer 500 kVA	D5012 Secondary Dry Transformer 500 kVA	Electrical - Chiller Room	Replace D5012 Secondary Dry Transformer 500 kVA	40	5	1.00	EA	$72,986.30	IN - Beyond Rated Life	Priority 3	$0	$0	$0	$0	$0	$72,986	$0	$0	$0	$0	$0	$72,986
D5022	T12 Lamps, with T8 Lamps and Add Instant Start Electronic Ballasts	D5022 Lighting Fixtures	Throughout Facility	Replace D5022 Lighting Fixtures	20	1	290.00	EA	$401.20	IN - Beyond Rated Life	Priority 1	$0	$116,348	$0	$0	$0	$0	$0	$0	$0	$0	$0	$116,348
D5037	Fire Alarm Panel	D5037 Fire Alarm Panel	Security Room	Replace D5037 Fire Alarm Panel	15	4	1.00	EA	$35,400.00	CC - Life Safety	Priority 2	$0	$0	$0	$0	$35,400	$0	$0	$0	$0	$0	$0	$35,400
D5037	Fire Alam System, Install New	D5037 Fire Alarm System	Throughout Facility	Replace D5037 Fire Alarm System	20	4	108,561.00	SF	$3.54	CC - Life Safety	Priority 2	$0	$0	$0	$0	$384,306	$0	$0	$0	$0	$0	$0	$384,306
D5092	Transfer Switch	D5092 Emergency Transfer Switch	Emergency Generator Room	Replace D5092 Emergency Transfer Switch	25	1	1.00	EA	$10,613.06	CC - Life Safety	Priority 1	$0	$10,613	$0	$0	$0	$0	$0	$0	$0	$0	$0	$10,613
D5092	Diesel Generator 75 kW	D5092 Emergency Generator 30 kW	Emergency Generator Room	D5092 Add/improve secondary containment for day tank	0	0	1.00	EA	$3,500.00	EN - Air/ Water Quality	Priority 1	$3,500	$0	$0	$0	$0	$0	$0	$0	$0	$0	$3,500	$0
Services Subtotal												$753,700	$428,263	$132,894	$0	$419,706	$1,099,714	$143,176	$0	$0	$0	$753,700	$2,223,753
E. EQUIPMENT & FURNISHING																							
Equipment & Furnishing Subtotal												$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
G. BUILDING SITEWORK																							
G40	**SITE ELECTRICAL UTILITIES**																						
G4021	G4021 Fixtures & Transformers	G4021 Fixtures & Transformers	Exterior Courtyard	Replace G4021 Fixtures & Transformers	30	1	10.00	EA	$1,888.00	IN - Beyond Rated Life	Priority 2	$0	$18,880	$0	$0	$0	$0	$0	$0	$0	$0	$0	$18,880
Building Sitework Subtotal												$0	$18,880	$0	$0	$0	$0	$0	$0	$0	$0	$0	$18,880

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

Expenditure Totals per Year	$753,700	$1,148,966	$132,894	$0	$854,418	$1,275,670	$143,176	$0	$0	$1,947,810	$753,700	$5,502,934
Total Cost (Inflated @ 5% per Yr.)	$753,700	$1,206,415	$146,516	$0	$1,038,550	$1,628,114	$191,869	$0	$0	$3,021,693	Total *	$6,256,635

* - Present Value Currency

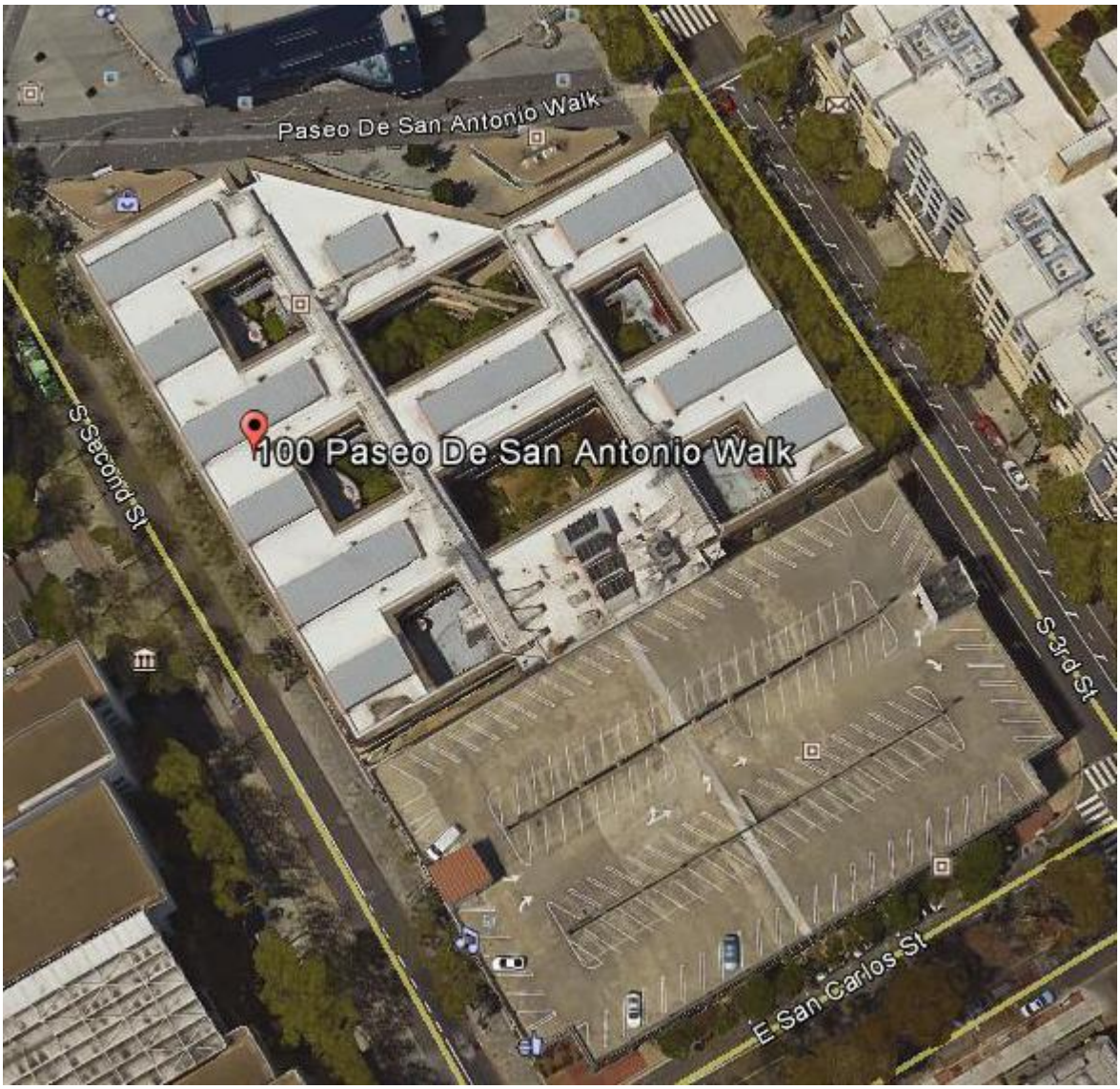
Footnotes

1 Detailed descriptions for Useful Life and Plan Type can be found in the Appendices of the Facility Condition

2 Detailed Descriptions of the Priorities can be found in the Appendices of the Facility Condition Assessment

Current Repl.Value $42,198,314

APPENDIX H: SUPPORTING DOCUMENTATION



EMG	**Source:** **The north arrow indicator is an approximation of 0° North.**	**Project Number:** 111326.14R-034.305 **Project Name:** Alfred E. Alquist Building
N		**On-Site Date:** February 13, 2015

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 ARCHTECTURAL 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

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: David Omosheyin

Building name: Alfred E. Alquist Building (470)

What is your association with this property? Building Manager

What is the length of your association with this property? 6 years

Phone number: 415-703-2936

Please provide information about inspections relating to the following items

Inspections	Date Last Inspected	List Name & Contact for Maintenance Contractor, if any.
1. Elevators	12/2/14	Thyssen Krupp Elevator Service
2. HVAC, Mechanical, Electric, Plumbing	Chiller - 1/31/14, Electric (Switch Gear Load Test) 1/18/14	Power System Testing Co. 510-783-5096
3. Life-Safety/Fire	2/17/15	Siemens Industry 866-728-7767
4. Roofs		

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

Boiler Replacement. HVAC controls upgrade

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

Replace Lighting Controls, ADA Upgrades

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

9 years

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

Roof, HVAC, Concrete Walks

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**			

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				Elevator Pits and Electrical Trenches along the courtyard
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			
20. Is Fire Retardant Treated (FRT) plywood used?		x			
21. Is exterior insulation and finish system (EIFS) or a synthetic stucco finish used?		x			
22. Are there any problems with the utilities, such as inadequate capacities?		x			
23. Are there any problems with the landscape irrigation systems?	x				Some underground leaks.
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			
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?		x			
30. Are there any plumbing leaks or water pressure problems?		x			
31. Are there any leaks or pressure problems with natural gas service?		x			
32. Does any part of the electrical system use aluminum wiring?		x			
33. Are there transformers inside the building?	x				
34. Do any Commercial units have less than 200-Amp service?		x			
35. Are there any recalled fire sprinkler heads (Star, GEM, Central, Omega)?		x			
36. Is there any pending litigation concerning the property?		x			
37. Has the State previously completed an ADA or 'Title 24 review?	x				
38. Have any ADA or Title 24 improvements been made to the property?		x			
39. Does a Barrier Removal Plan exist for the property?	x				
40. Has the Barrier Removal Plan been approved by a credentialed third party?				x	
41. Have there been any ADA or Title 24 related complaints?	x				
42. Have there been any complaints about the elevators or wait times?	x				
43. Are there any problems with exterior lighting?	x				
44. Are there any other significant issues/hazards with the property?		x			
45. Are there any unresolved construction defects at the property?		x			

APPENDIX J: ELEVATOR REPORT

Elevator Assessment

Building 470 – Alfred E. Alquist Building
100 Paseo De San Antonio
San Jose, CA

Table of Contents

Elevator Consulting Associates, Inc. – 103 Soukup Ct., Folsom, CA 95630
O: 916-983-1035 – C: 916-337-3572 – F: 916-983-1028
sean.colgan@elevatorconsultingassociates.com

Appendix A – Elevator Equipment Summary

The following chart provides an "at a glance" summary of all of the elevator equipment at the subject property.

Bank/Elevator Description	Elevator Number	Speed	Capacity	Floors Served	Date of Original Install	Date of Last Mod	Next Mod Due	Elevator Type	Power Unit Manuf.	Motor Control	Control Manuf.	Door Size/ Style	Door Equip. Manuf.
Elevators 1-2 (Duplex - ID# 74107-74108)	1	125 fpm	2,500 pounds	1-3	1982	N/A	1-2 years	Inground Hydraulic	Dover	EM Starter	Dover	42"x 84" Side Opening	Dover
	2	125 fpm	2,500 pounds	1-3	1982	N/A	1-2 years	Inground Hydraulic	Dover	EM Starter	Dover	42"x 84" Side Opening	Dover
Elevator 3 (Simplex - ID# 74106)	3	75 fpm	4,000 pounds	1F, 1R, 2-3	1982	N/A	1-2 years	Inground Hydraulic	Dover	EM Starter	Dover	48"x 92" Center Opening	Dover

Elevator Number	State Inspection Date	State Inspection Status	5-Year Test Date	5-Year Test Status	Annual Test Date	Annual Test Status	Fire Service Testing Logs	Machine Room Maintenance Logs	Overall Level of Maintenance	Modernization Priority
1	Temp 11/25/14	Current (Temp)	2/22/13	Current	Not Required	Not Required	Missed 2/2014 – Otherwise Current	None	Slightly Below Average	High
2	12/5/12	Expired	2/22/13	Current	Not Required	Not Required	Missed 2/2014 – Otherwise Current	Last Entry April, 2014	Slightly Below Average	High
3	Temp 12/2/14	Current (Temp)	2/22/13	Current	Not Required	Not Required	Missed 2/2014 – Otherwise Current	None	Slightly Below Average	High

Appendix B – Repair Items

The following chart details items that must be scheduled for repair prior to the end of the current maintenance contract. Contractor shall provide a schedule to Owner and Consultant within two weeks of receipt of this report.

Building 470 – San Jose State Office Building				
Current Items			These Columns For Use by Contractor and in Future ECA Visits	
Item #	**Item Description**	**Units Affected**	**Item Complete**	**Comments**
1	Clean oil and rags out from under tanks – then identify and repair leaks	1-3		

Appendix C – Maintenance Corrections

The following chart details minor maintenance items (cleaning, lubrication, adjustments, etc.) which should be addressed to the greatest extent possible prior to the building walkthroughs for the elevator maintenance bid process, projected to take place the first two weeks of April, 2015.

Building 470 – San Jose State Office Building				
Current Items			These Columns For Use by Contractor and in Future ECA Visits	
Item #	**Item Description**	**Units Affected**	**Item Complete**	**Comments**
1	Remove gloves, parts, fuses, etc. from inside elevator controls	1-3		
2	Wipe down machine room equipment	1-3		
3	Clean top of car	1-3		
4	Clean pit and pit equipment	3		
5	Make 1R door open even with jamb	3		
6	Clean and service car and hall door equipment	1-3		
7	Rear door clutch scraping fascia when coming down into floor 1 - adjust	3		
8	Front return very loose – affix if possible	1-2		
9	Pit can tipped over due to water in pit – perhaps leave enough oil in it to stay upright until water intrusion is repaired?	1-2		
10	Car door scrapes on sill on open and close - adjust	1		

Appendix D – Owner's Maintenance Items

The following items are not part of your elevator contract, and thus are typically corrected by building engineering or another non-elevator sub-contractor. ECA is happy to discuss any of these items at any time. Please feel free to call or e-mail Matt Ensley or Sean Colgan with any questions you may have.

Sean Colgan: 916-337-3572 – sean.colgan@elevatorconsultingassociates.com

Matt Ensley: 213-247-8992 – matt.ensley@elevatorconsultingassociates.com

Building 470 – San Jose State Office Building				
Current Items			These Columns For Use by University and in Future ECA Visits	
Item #	**Item Description**	**Units Affected**	**Item Complete**	**Comments**
1	The annual inspection certificates in the elevators have expired. If new certificates have been received, post in elevators as soon as possible.	1-3		
2	Properly label machine room door – "Elevator Equipment Room – Authorized Personnel Only"	1-3		
3	Pits have 4-5 inches of water – it appears to be coming in from the back wall – seal pit or otherwise prevent water intrusion	1-3		
4	Cover machine room light switch	1-3		
5	Replace cover on electrical box in machine room	1-3		
6	Relamp one cab light	2		

Appendix E – Modernization Recommendation

It is commonly held in the industry that elevator equipment should be modernized every 20-25 years. While this is a valid generalization, the actual time for modernization can vary greatly from property to property, depending on the type of equipment installed, its age, the level of usage, etc. In this case, your equipment was installed in 1982 (33 years ago). The Dover equipment installed is becoming more and more difficult to maintain, as Dover was purchased by ThyssenKrupp many years ago and parts availability is becoming more and more challenging. We are aware that a modernization is currently planned for this equipment, and we would agree with that course of action. We recommend therefore budgeting to complete the planned modernization in the next 1-2 years.

The following table shows the scope of the modernization based on our current observations. Note that the scope may change slightly by the time the elevators are modernized based on the condition of the equipment at that time, changes in code or ADA, etc.

Elevator Modernization Plan	
Item	**Action**
Elevator Control	New Solid State
Solid State Starter	New
Dispatching	Duplex/Simplex
Battery Lowering Operation	New
Power Unit	New
Car Button Station	New
Car Position Indicator	New
In-Car Communication (ADA Phone)	New
Car/Hall Lanterns	New
Hall Button Stations	New
Alarm Bells	New
Hoistway Limits	New
Wiring	New
Car Guides	Refurbish
Guide Rails	Retain
Door Operation	New Closed Loop
Car and Hall Door Equipment	New/Refurbish as needed
Door Restrictor	New
Door Detector Edge	New
Pit Switch	New
Pit Springs/Buffers	Retain
Piston and Casing	Replace
Compliance with then-current elevator code	Included
Compliance with ADA	Included

Cab Interiors	Optional

The total recommended budget for the elevator portion of this modernization without cab interiors is $470,000 ($150,000 each for elevators 1, 2; $170,000 for elevator 5). If you choose to refurbish the cab interiors (floors, side and back walls and ceiling), we would recommend a budget of $75,000 ($25,000 per elevator). This budget assumes fairly standard finishes for the cab interiors. If you feel that you may want custom or "better than average" cabs, you may wish to add a contingency of 20% to this budget. Note that we are including in our budget the replacement of the pistons/cylinders. These units are not always replaced in a hydraulic modernization, but at 33+ years old, we feel that it would be prudent to replace the cylinders proactively, especially considering the known water issues in the pits for cars 1-2. The new cylinders would have PVC liners and cathodic monitoring, along with double-bulkhead bottoms to comply with all current codes. Replacing the cylinders at this time will make it very unlikely that any leaks will develop for quite a long time. Retaining the 33 year-old cylinders is an option, but there would of course be a greater chance for a leak to develop at some point, causing unplanned downtime as well as oil in the ground that would have to be cleaned out when the cylinder is then replaced.

Please note that the given budget is in 2015 dollars. For each year after 2015 that the modernization is budgeted, we recommend adding 5-7% to our budget numbers. This is to account both for increases in union labor and also for continued recovery in the elevator modernization market, which has been on the upswing for the past few years.

Not included in the above is work by other trades. When an elevator modernization occurs, it often precipitates the requirement for work in other related areas, either due to code changes since installation, different requirements for the new control systems, desired changes in look of the systems, etc. The most common required work is electrical work (new or modified disconnects in the machine room, increase in lighting, etc.), fire and life safety work (addition of smoke detectors in elevator areas, addition or removal of sprinklers, etc.), general contracting (modifications for access to machine areas, cutting and patching for new fixtures, etc.) and potentially other areas. It is difficult for ECA to provide accurate budgets at this time, as our expertise is in the area of elevators and not necessarily in these other areas. However, we can estimate in this case that the required work by other trades will be roughly $50,000. We think this is a fairly conservative estimate and, combined with our other budgets should provide you a placeholder to allocate the proper funds (we don't want this work to be a surprise for you down the road).

Finally, as the State typically employs an elevator consultant for assistance with elevator modernization projects, we would recommend adding $30,000 to the budget for that purpose.

The total budget for the recommended modernization project is $550,000. This includes the elevator contractor's portion of the work, work by other trades, and elevator consulting. It does not include cab interior refurbishment, which would add $75,000 to the total project cost.

We would be happy to discuss this modernization recommendation or any other aspect of this report at any time. Please contact Sean Colgan at 916-337-3572, or by email at sean.colgan@elevatorconsultingassociates.com.

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