



Van Nuys State Building (530)

6150 Van Nuys Boulevard, Van Nuys, CA 91401

Facility Condition Assessment

September 2015

Prepared for the State of California Department of General Services



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EXECUTIVE SUMMARY

BACKGROUND

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

The DGS portfolio comprises nearly 17 million gross square feet (GSF) of state-owned office facilities statewide, contained within 54 general-purpose state-owned office building sites. The FCA inventories and evaluates each of the DGS general purpose office buildings to benchmark current condition and establish a replacement value. This FCA assesses the infrastructure conditions for the Van Nuys State Building (530).

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 Van Nuys State Building (530) 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 Van Nuys State Building (530) on March 16-17, 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	\$66,700,011
Immediate Repair Costs (12 months)	\$4,009,267
1-5 Year Capital Needs	\$4,120,346
6-10 Year Capital Needs	\$832,072
Total 10-Year Capital Reserve Needs	\$8,961,684

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

Current Year FCI

$$\text{Current FCI} = \frac{\$4,009,267}{\$66,700,011}$$

Ten-Year FCI

$$\text{Ten-Year FCI} = \frac{\$8,961,684}{\$66,700,011}$$

Current Year FCI	Ten-Year FCI
6.01 % = <i>Fair Condition</i>	13.44 % = <i>Poor Condition</i>

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

- Passenger elevator repairs, including accessibility improvements, as identified in the elevator assessment report.
- Removal of the solar energy system.
- Replacement of the roofing membranes
- Plumbing and restroom fixture replacements.
- Building HVAC system control replacement.

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 Van Nuys State Building (530) is located at 6150 Van Nuys Boulevard, part of the Van Nuys Governmental Center. Designed by the Western Pacific Collaborative of Los Angeles and built in 1984, the office building reflects the architecture of its day with the “space frame” roof structure covering the courtyard. This courtyard houses the multi-element sculpture with holograms by Kristina Lucas.

The four-story building is steel framed construction with metal framing and stucco plaster exterior. The building has offices connected by balconies that overlook an open-air courtyard. The Delano Street entrance wall houses a three-dimensional wall relief of black aluminum flat shapes folded upon one another by John Keppelman. John Okulick’s Calvert Street walkway entrance wall sculptures contradict rules of perspective to trick the eye into seeing the piece as much deeper than the four inches it extends from the wall. Located to the left of the entrance on the lawn is De Wain Valentine’s glass sculpture, reflecting the building and passing traffic.

The building houses eight agencies including the Department of Industrial Relations, Department of Motor Vehicles and the Employment Development Department. Amenities include a 177-seat auditorium, cafeteria, and an adjacent parking garage with 236 spaces. The building holds 271 occupants.

The gross area is 147,495 SF with 109,113 net usable SF. The ratio of net usable to gross building area is 74 percent.

BUILDING DESCRIPTION

The building has a concrete foundation. The building’s structural system is steel superstructure with lightweight leveling concrete-topped metal floor decks. The roof structure is flat and covered with built-up roofing. The parking structure’s roof deck is unfinished concrete.

The exterior walls are finished with painted stucco.

The building’s interior walls are comprised of painted gypsum wallboards. The floor finishes are a combination of ceramic tiles, commercial carpet tiles, sealed concrete, and vinyl composition tiles. The interior ceilings are finished with acoustical ceiling tiles.

The building is served by hydraulic service and passenger elevators for vertical conveyance needs.

Domestic hot water is provided by natural gas-fired hot water heaters and storage tanks located in the third floor main mechanical room. The water is distributed to the building via inline recirculation pumps.

Heating and cooling are provided by a hydronic system in the third floor main mechanical room, with centrifugal chillers and natural gas-fired fired fin tube boilers.

Fire/life safety systems include fire hydrants located at the surrounding sites, fire sprinklers, smoke detectors, fire alarms and devices, handheld fire extinguishers, and dry standpipes.

The landscaping consists of trees, shrubs, and minor green lawn areas. Landscaped areas are irrigated by an in-ground overhead spray sprinkler system. The parking areas are exclusively within the parking garage structure located onsite. The sidewalks throughout the property are constructed of cast-in-place concrete with portions of brick pavers occurring at both the site and building entries.

Project Statistics

Item	Description
Project Name	Van Nuys State Building
Building ID	530
Property Type	Administration
Year Built	1984
Number of Stories	4
Occupied	Yes
Land Area (acres)	2.28
Gross Square Feet (GSF)	147,495

FACILITY CONDITION ASSESSMENT

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

COMPONENTS OF THE FCA

Current conditions analysis

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

Anticipated building reserve analysis

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

Funding needs analysis

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

CALCULATION OF FUNDING NEEDS

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

Immediate Repair Costs

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

Capital Reserve Needs

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

Current Replacement Value

Current Replacement Value is determined by multiplying the existing building's SF by the Cost per SF to construct a new, similar building on a similar site. Current Replacement Value is not an appraised or

market value for the purposes of a property sale. To estimate the cost per SF, EMG referenced Marshall & Swift's *Marshall Valuation Service*. This building cost data index is an industry standard, adjusted annually, and relied upon by the insurance industry, as well as other agencies and organizations. Cost per SF is calculated by adjusting Marshall & Swift's unit cost for a Government Office Building to account for factors related to building systems, class of construction, and location to reflect the estimated cost of construction at the subject building site.

Remaining Useful Life

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

Opinions of Probable Cost

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

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

Facility Condition Index

The FCI gives an indication of a building's overall state of condition. The values are based on a 0-100 percent scale. The Current Year FCI is the ratio of Immediate Repair Costs to Current Replacement

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 Van Nuys State Building (530) on March 16-17, 2015. The survey included analysis and observation of the building's interior and exterior, including the roofs. The evaluation team interviewed the building maintenance staff to inquire about the subject property's previous repairs and replacements and their costs, level of preventive maintenance exercised, pending repairs and improvements, and frequency of repairs and replacements. Opinions were developed based on the site evaluation, interviews with relevant maintenance providers and facilities managers, and previous experience with comparable properties. The evaluation team questioned those knowledgeable of the subject property's physical condition and operation (or knowledgeable of similar systems) to gain comparative information to use in evaluation of the subject property. In addition, the building staff provided documents and information to the evaluation team that were relevant to the subject property's physical improvements, extent, and type of use and assisted the team in identifying potential discrepancies between reported information and observed conditions.

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

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

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

PRIORITY RANKING

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

PRIORITY RANKING CATEGORIES

Building Mission Ranking

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

Remaining Useful Life Ranking

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

Asset Component Category

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

Functional Asset Categories

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

PRIORITY RATIO

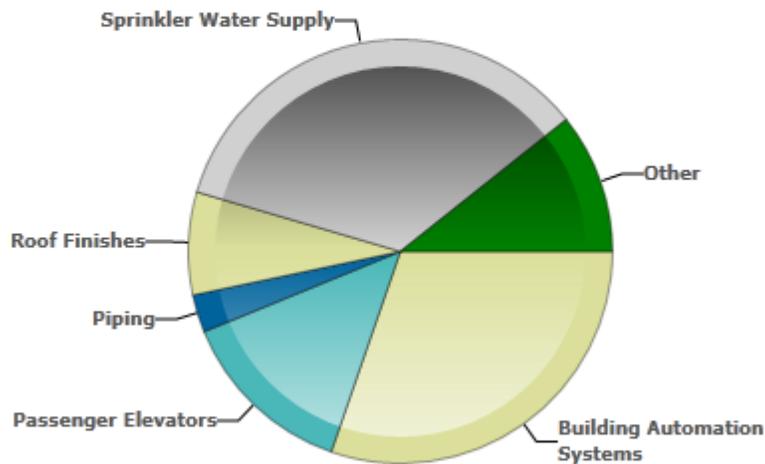
The four categories above are assigned a numerical value and the values are multiplied together for each cost observation. The resulting number is then assigned a priority by the capital planning software with

the lower range assigned Priority 1 and the higher range of numbers assigned among Priority 2, Priority 3, and Priority 4. Priority 5 is reserved for code issues that were permitted by the code at the time of construction but would be required only if a major renovation or code compliance project were to be undertaken.

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

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

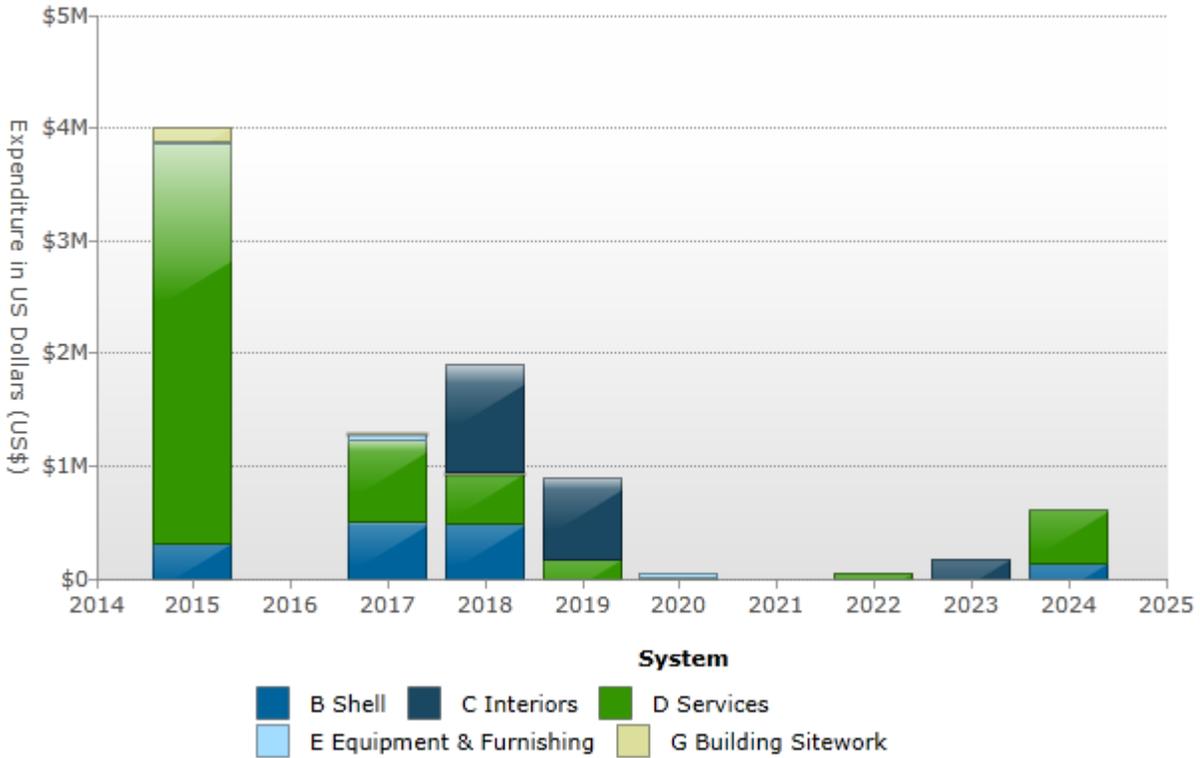
Distribution of Immediate Needs by Building System



Level	Building System	Estimated Cost
B3011	Roof Finishes	\$314,005
D1011	Passenger Elevators	\$542,653
D2014	Sinks	\$2,946
D2021	Cold Water Service	\$1,243
D2042	Roof Drains	\$54,917
D3016	Solar Energy System	\$14,285
D3022	Circulating Pumps	\$48,385
D3023	Auxiliary Equipment	\$7,408
D3042	Exhaust Ventilation Systems	\$35,668
D3051	Terminal Heat Pumps	\$7,174
D3068	Building Automation Systems	\$1,214,415
D3072	Air Systems Testing & Balancing	\$18,600
D4011	Sprinkler Water Supply	\$1,394,234
D4012	Sprinkler Pumping Equipment	\$69,687

Level	Building System	Estimated Cost
D5021	Branch Wiring Devices	\$52,373
D5022	Lighting Equipment	\$65,909
D5037	Fire Alarm Systems	\$20,929
E1019	Other Commercial Equipment	\$7,757
G2031	Paving & Surfacing	\$3,441
G3021	Piping	\$115,429
G4022	Poles	\$17,808
	Total	\$4,009,267

Total Capital Needs By System and Year



Year	Building System							Total
	A Sub-Structure	B Shell	C Interiors	D Services	E Equip. & Furnishings	F Spec. Const. & Demolition	G Bldg. Site Work	
2015	\$0	\$314,005	\$0	\$3,550,826	\$7,757	\$0	\$136,679	\$4,009,267
2017	\$0	\$508,179	\$0	\$728,194	\$36,382	\$0	\$7,273	\$1,280,028
2018	\$0	\$485,258	\$946,735	\$437,873	\$13,110	\$0	\$13,756	\$1,896,731
2019	\$0	\$0	\$725,152	\$174,750	\$0	\$0	\$0	\$899,902
2020	\$0	\$0	\$0	\$1,241	\$42,444	\$0	\$0	\$43,686
2022	\$0	\$0	\$0	\$50,111	\$0	\$0	\$0	\$50,111
2023	\$0	\$0	\$166,362	\$0	\$0	\$0	\$0	\$166,362
2024	\$0	\$140,650	\$0	\$474,950	\$0	\$0	\$0	\$615,599
Total	\$0	\$1,448,091	\$1,838,248	\$5,417,945	\$99,693	\$0	\$157,707	\$8,961,684

CURRENT REPLACEMENT VALUE

The Current Replacement Value has been determined as \$66,700,011 for the Van Nuys State Building Building (530). 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
147,495 GSF	\$452	\$66,700,011

FACILITY CONDITION INDEX

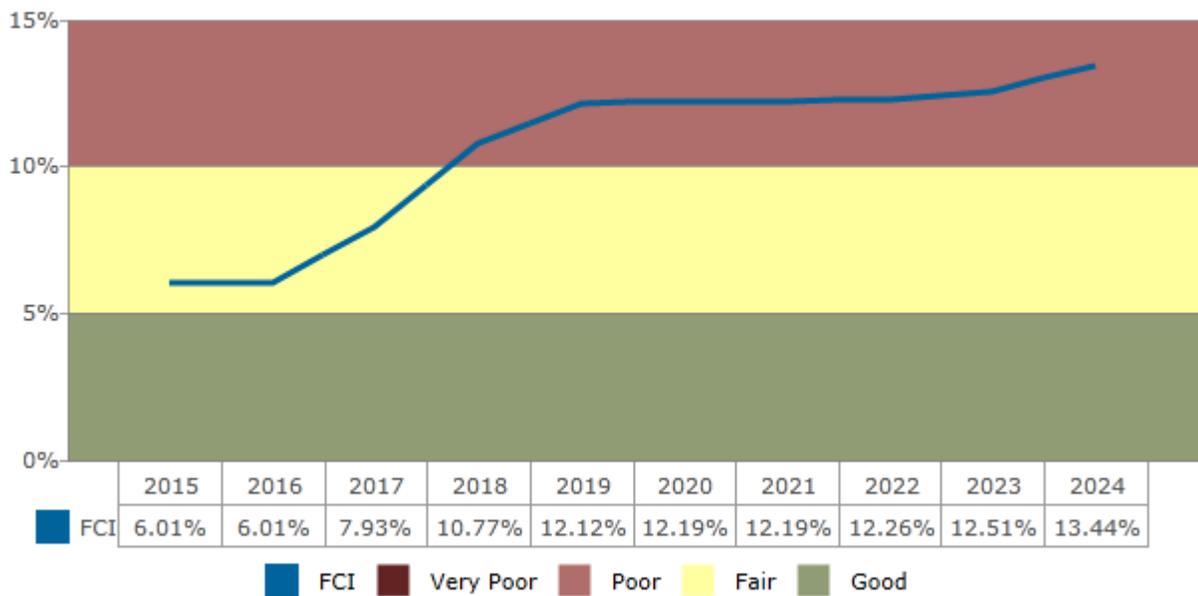
The FCI¹ is an indication of a building’s current and future overall condition. According to industry standards an FCI ratio of 65 percent, or the “rule of two-thirds,” is the threshold for identifying potential candidates for replacement or divestment.² Once the FCI ratio reaches 65 percent, or roughly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

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

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

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

Cumulative Effects of FCI over the Study Period



APPENDICES

APPENDIX A: ACCESSIBILITY ISSUES

Item	Description
D1011 Passenger Elevators	D1011 Elevators and Lifts remove call buttons
Condition	Poor
Qty / UOM	6 / EA
RUL (years)	0
Location	Elevators

Recommendations:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D1011	Replace D1011 Elevators and Lifts remove call buttons	6.0 - EA	8190.0	CC - Accessibility	Priority 1	2015	49,140

Cost Summary:

Year	Total Expenditures
2015	\$49,140

APPENDIX B: GENERAL ASSESSMENT INFORMATION

A Substructure Systems

A10 FOUNDATIONS

Item	Description
A1012 Column Foundations & Pile Caps	A1012 Structural concrete,in place, pile cap over 10 CY
Condition	Fair
Qty / UOM	36,873 / SF
RUL (years)	44
Location	Concrete Foundation

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, no further action is recommended.

B Shell Systems

B10 SUPERSTRUCTURE

Item	Description
B1031 Steel Frame Structure	B1031 Structural Steel Columns and Beams Frame
Condition	Fair
Qty / UOM	147,000 / SF
RUL (years)	19
Location	Throughout Facility

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, no further action is recommended.

Item	Description
B1032 Concrete frame Structure	B2031 Cast-in-Place Reinforced Concrete Structural Frame
Condition	Fair
Qty / UOM	134,000 / SF
RUL (years)	19
Location	Parking Garage Structure

OBSERVATIONS/COMMENTS:

Based on current condition and remaining useful life (RUL), no further action is recommended.

B20 EXTERIOR ENCLOSURE

Item	Description
B2011 Exterior Wall Construction	B2011 Stucco Exterior Walls paint
Condition	Good
Qty / UOM	42,000 / SF
RUL (years)	9
Location	Exterior Walls

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, repainting the exterior walls is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
B2011	Replace B2011 Stucco Exterior Walls paint	42,000.0 - SF	3.3	IN - Appearance	Priority 4	2024	140,650

Item	Description
B2021 Windows	B2021 Aluminum Windows
Condition	Fair
Qty / UOM	135 / EA
RUL (years)	3
Location	Exterior
Window Type	Slider
Windows Material	Aluminum
Windows Glazing	Single Glazed
Window Operation	Manual

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, replacement is recommended. This is a partial replacement of only those units which are in the most deteriorated conditions.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
B2021	Replace B2021 Aluminum Windows	135.0 - EA	3594.5	IN - Beyond Rated Life	Priority 2	2018	485,258

Item	Description
B2031 Glazed Doors & Entrances	B2031 Glazed Entrance Doors
Condition	Fair
Qty / UOM	20 / EA
RUL (years)	15
Location	Exterior

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, no further action is recommended.

COST SUMMARY:

Type	Year	Total Expenditures
B20 Exterior Enclosure	2018	\$485,258
B20 Exterior Enclosure	2024	\$140,650

B30 ROOFING

Item	Description
B3011 Roof Finishes	B3011 White Liquid-Applied Coating
Condition	Poor
Qty / UOM	22,000 / SF
RUL (years)	0
Location	Parking Garage Structure Roof

OBSERVATIONS/COMMENTS:

A significant amount of rainwater is infiltrating the parking structure through roof/upper level cracks. This entering water travels throughout the structure and ultimately pools at the lowest level. The moisture is also damaging exhaust fan ducting throughout. An elastomeric roof sealant should be applied to the roof/upper deck and along the open perimeters. Floor drains should be added along the perimeters to drain storm water appropriately (additional line item asset.) Based on the active water infiltration and condition, as well as zero years RUL, re-application is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
B3011	Replace B3011 White Liquid-Applied Coating	22,000.0 - SF	8.8	IN - Beyond Rated Life	Priority 1	2015	194,594

Item	Description
B3011 Roof Finishes	B3011 Balcony - White Liquid-Applied Elastomeric Coating
Condition	Poor
Qty / UOM	13,500 / SF
RUL (years)	0
Location	Exterior Balconies

OBSERVATIONS/COMMENTS:

Existing exterior balcony surface coatings do not provide a smooth accessible surface. Application of a smooth top coat is recommended. Based on current condition and zero years RUL, sealing with a smooth surface is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
B3011	Replace B3011 Balcony - White Liquid-Applied Elastomeric Coating	13,500.0 - SF	8.8	OP - Maintenance	Priority 1	2015	119,410

Item	Description
B3011 Roof Finishes	B3011 Built-Up Roofing
Condition	Fair
Qty / UOM	372 / SQ
RUL (years)	2
Location	Roof
Traffic Toppings and Pavings	Last layer appeared to be elastomeric

OBSERVATIONS/COMMENTS:

According to maintenance staff, roofing is likely original and has been overlaid with layers of fiberglass and elastomeric coatings over the years. Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
B3011	Replace B3011 Built-Up Roofing	372.0 - SQ	1366.1	IN - Beyond Rated Life	Priority 2	2017	508,179

COST SUMMARY:

Type	Year	Total Expenditures
B30 Roofing	2015	\$314,005
B30 Roofing	2017	\$508,179

C Interiors Systems

C10 INTERIOR CONSTRUCTION

Item	Description
C1021 Interior Doors	C1021 Interior Doors
Condition	Fair
Qty / UOM	230 / EA
RUL (years)	15
Location	Interior Doors

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, no further action is recommended.

C20 STAIRS

Item	Description
C2011 Regular Stairs	C2011 Concrete filled metal pan stairs Stairs
Condition	Fair
Qty / UOM	2,400 / SF
RUL (years)	19
Location	Interior Stairs

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, no further action is recommended.

C30 INTERIOR FINISHES

Item	Description
C3012 Wall Finishes to Interior Walls	C3012 Paint Interior Walls, Drywall
Condition	Fair
Qty / UOM	340,000 / SF
RUL (years)	4
Location	Interior Walls

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, repainting the interior walls is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
C3012	Replace C3012 Paint Interior Walls, Drywall	340,000.0 - SF	2.1	IN - Appearance	Priority 3	2019	725,152

Item	Description
C3024 Flooring	C3024 Vinyl Tile
Condition	Fair
Qty / UOM	1,020 / SY
RUL (years)	8
Location	Interior Flooring

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
C3024	Replace C3024 Vinyl Tile	1,020.0 - SY	163.1	IN - Appearance	Priority 4	2023	166,362

Item	Description
C3025 Carpeting	C3025 Carpet Tiles - Standard
Condition	Fair
Qty / UOM	9,800 / SY
RUL (years)	3
Location	Interior Flooring

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
C3025	Replace C3025 Carpet Tiles - Standard	9,800.0 - SY	96.6	IN - Appearance	Priority 3	2018	946,735

Item	Description
C3032 Suspended Ceilings	C3032 Acoustical Ceiling Tile
Condition	Fair
Qty / UOM	920 / CSF
RUL (years)	13
Location	Throughout interior

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, no further action is recommended.

COST SUMMARY:

Type	Year	Total Expenditures
C30 Interior Finishes	2018	\$946,735
C30 Interior Finishes	2019	\$725,152
C30 Interior Finishes	2023	\$166,362

D Services Systems

D10 CONVEYING SYSTEMS

Item	Description
D1011 Passenger Elevators	D1011 Elevators and Lifts remove call buttons
Condition	Poor
Qty / UOM	6 / EA
RUL (years)	0
Location	Elevators

OBSERVATIONS/COMMENTS:

Call buttons currently do not illuminate when pressed as required per accessibility guidelines. Based on current condition and zero years RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D1011	Replace D1011 Elevators and Lifts remove call buttons	6.0 - EA	8190.0	CC - Accessibility	Priority 1	2015	49,140

Item	Description
D1011 Passenger Elevators	D1011 Hydraulic Passenger Elevator 2500 lbs
Condition	Poor - Fair
Qty / UOM	2 / EA
RUL (years)	0
Location	Elevators No. 1 & 2

OBSERVATIONS/COMMENTS:

A 2015 assessment report by Elevator Consulting Associates is included in the appendix of this report, and details the recommended modernization costs for this asset. This includes the consultant's recommended associated costs for cab refinishes, associated trades costs, and consulting fees.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D1011	Replace D1011 Hydraulic Passenger Elevator 2500 lbs	2.0 - EA	42006.7	FN - Modernization	Priority 1	2015	84,013

Item	Description
D1011 Passenger Elevators	D1011 Hydraulic Service Elevator 4000 lbs
Condition	Poor
Qty / UOM	1 / EA
RUL (years)	0
Location	Elevator No. 3

OBSERVATIONS/COMMENTS:

A 2015 assessment report by Elevator Consulting Associates is included in the appendix of this report, and details the recommended modernization costs for this asset. This includes the consultant's recommended associated costs for cab refinishes, associated trades costs, and consulting fees.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D1011	Replace D1011 Hydraulic Service Elevator 4000 lbs	1.0 - EA	409500.0	FN - Modernization	Priority 1	2015	409,500

COST SUMMARY:

Type	Year	Total Expenditures
D10 Conveying Systems	2015	\$542,653

D20 PLUMBING

Item	Description
D2011 Water Closets	D2011 Water Closet, 1.6 GPF Unit
Condition	Fair
Qty / UOM	36 / EA
RUL (years)	4
Location	Restrooms
Low Flow Toilet	Yes
System Grade	Commercial Grade

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D2011	Replace D2011 Water Closet, 1.6 GPF Unit	36.0 - EA	1233.1	IN - Beyond Rated Life	Priority 3	2019	44,393

Item	Description
D2011 Water Closets	D2011 Automatic Flush Valve -Water Closet
Condition	Fair
Qty / UOM	36 / EA
RUL (years)	4
Location	Restrooms

OBSERVATIONS/COMMENTS:

The automatic flush valves for the water closets are recommended to be installed at the same time that the water closets are replaced. This asset is for a new installation of automatic water closet flush valves.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D2011	Replace D2011 Automatic Flush Valve - Water Closet	36.0 - EA	589.1	OP - Energy	Priority 3	2019	21,209

Item	Description
D2012 Urinals	D2012 Automatic Flush Valve- Urinals
Condition	Poor
Qty / UOM	10 / EA
RUL (years)	4
Location	Men's Restrooms

OBSERVATIONS/COMMENTS:

The automatic flush valves for the urinals are recommended to be installed at the same time that the urinals are replaced. This asset is for a new installation of automatic urinal flush valves.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D2012	Replace D2012 Automatic Flush Valve- Urinals	10.0 - EA	199.0	OP - Energy	Priority 3	2019	1,990

Item	Description
D2012 Urinals	D2012 Urinals
Condition	Fair
Qty / UOM	10 / EA
RUL (years)	4
Location	Men's Restrooms
Low Flow Toilet	Yes
System Grade	Commercial Grade

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D2012	Replace D2012 Urinals	10.0 - EA	2440.7	IN - Beyond Rated Life	Priority 3	2019	24,407

Item	Description
D2013 Lavatories	D2013 Automatic Faucet
Condition	Fair
Qty / UOM	36 / EA
RUL (years)	4
Location	Restrooms and Kitchens

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D2013	Replace D2013 Automatic Faucet	36.0 - EA	70.8	IN - Beyond Rated Life	Priority 3	2019	2,549

Item	Description
D2013 Lavatories	D2013 Lavatory sink
Condition	Fair
Qty / UOM	36 / EA
RUL (years)	4
Location	Restrooms

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D2013	Replace D2013 Lavatory sink	36.0 - EA	1667.8	IN - Beyond Rated Life	Priority 3	2019	60,042

Item	Description
D2014 Sinks	D2014 Sink and Faucet
Condition	Poor
Qty / UOM	1 / EA
RUL (years)	0
Location	Parking Garage

OBSERVATIONS/COMMENTS:

The sink in the parking garage is inoperable. The maintenance staff indicated that there is no planned future use of this sink. Based on current condition and zero years RUL, removal is recommended. Asset cost is for removal, hauling, and capping of the waste and supply lines.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D2014	Replace D2014 Sink and Faucet	1.0 - EA	2946.4	FN - Obsolescence	Priority 1	2015	2,946

Item	Description
D2014 Sinks	D2014 Sink and Faucet
Condition	Fair
Qty / UOM	7 / EA
RUL (years)	3
Location	Kitchen

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D2014	Replace D2014 Sink and Faucet	7.0 - EA	2946.4	IN - Beyond Rated Life	Priority 3	2018	20,625

Item	Description
D2017 Showers	D2017 Stall Shower and Faucet
Condition	Fair
Qty / UOM	5 / EA
RUL (years)	2
Location	Showers

OBSERVATIONS/COMMENTS:

Roll-in-showers in the third floor custodial staff restrooms are in fair condition and generally ADA compliant. Only the women's shower rooms are currently utilized. The men's shower room door knob/handle has been removed to prevent the showers from being used, since past usage of the men's shower has caused floor leaks, according to maintenance staff. The staff also indicated there is no current or planned future usage of the men's showers. Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D2017	Replace D2017 Stall Shower and Faucet	5.0 - EA	4059.2	IN - Beyond Rated Life	Priority 2	2017	20,296

Item	Description
D2018 Drinking Fountains and Coolers	D2018 Drinking Fountain
Condition	Fair
Qty / UOM	7 / EA
RUL (years)	2
Location	Drinking Fountains

OBSERVATIONS/COMMENTS:

Drinking fountains are primarily located near restrooms, and although beyond their estimated useful life (EUL), were in fair condition. Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D2018	Replace D2018 Drinking Fountain	7.0 - EA	2876.6	IN - Beyond Rated Life	Priority 2	2017	20,136

Item	Description
D2021 Cold Water Service	D2021 3" Pressure Regulating Valve
Condition	Poor
Qty / UOM	1 / EA
RUL (years)	0
Location	1st Floor, Standpipe Room

OBSERVATIONS/COMMENTS:

The pressure relief valve is currently inoperable. The valve is in the city water pressure line. Based on current condition and zero years RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D2021	Replace D2021 3" Pressure Regulating Valve	1.0 - EA	1242.5	CC - Life Safety	Priority 1	2015	1,243

Item	Description
D2022 Hot Water Service	D2022 Electric water heater 50 Gal
Condition	Fair
Qty / UOM	1 / EA
RUL (years)	2
Location	1st Floor; Mechanical Room

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D2022	Replace D2022 Electric water heater 50 Gal	1.0 - EA	7696.0	IN - Beyond Rated Life	Priority 2	2017	7,696

Item	Description
D2023 Domestic Water Supply Equipment	D2022 DHW Storage Tank 175 Gal
Condition	Fair
Qty / UOM	1 / EA
RUL (years)	27
Location	3rd Floor; Hydronic Mechanical Room

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, no further action is recommended.

Item	Description
D2023 Domestic Water Supply Equipment	D2022 Water Heater Gas 700 MBH
Condition	Fair
Qty / UOM	1 / EA
RUL (years)	7
Location	3rd Floor; Hydronic Mechanical Room

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, replacement is recommended,

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D2023	Replace D2022 Water Heater Gas 700 MBH	1.0 - EA	50110.7	IN - Beyond Rated Life	Priority 4	2022	50,111

Item	Description
D2034 Sanitary Waste Equipment	D2034 Sump Pump, Large, 7 HP
Condition	Poor
Qty / UOM	2 / EA
RUL (years)	12
Location	Parking Garage

OBSERVATIONS/COMMENTS:

Two sump pumps in the lowest level of the parking garage structure remove accumulated storm water. These two pumps were replaced in 2007. Due to RUL and current condition no further action is recommended.

Item	Description
D2042 Roof Drains	D2042 Overflow Drains / Interior Leaders
Condition	Poor
Qty / UOM	650 / LF
RUL (years)	0
Location	Parking Garage Structure Roof

OBSERVATIONS/COMMENTS:

Installation of parking garage roof drains is recommended. See asset B3011 for full details.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D2042	Replace D2042 Overflow Drains / Interior Leaders	650.0 - LF	84.5	IN - Beyond Rated Life	Priority 1	2015	54,917

COST SUMMARY:

Type	Year	Total Expenditures
D20 Plumbing	2015	\$59,106
D20 Plumbing	2017	\$48,128
D20 Plumbing	2018	\$20,625
D20 Plumbing	2019	\$154,590
D20 Plumbing	2022	\$50,111

D30 HVAC

Energy Supply	
Item	Description
Fuel Oil Type	N/A
Fuel Gas Type	Natural Gas
Solid Fuel Type	N/A
District Heat Type	Site Physical Plant Hot Water
District Cooling Type	Site Physical Plant Chilled Water
Solar Thermal	Yes
Fuel Tank Type	AST
Fuel Tank Size (gallons)	30
Fuel Tank Location	N/A
Gas Meter Location	North Side of Building
Electrical Meter Location	Main Electrical Room at the First Floor
Water Meter Location	South Side of Building Near the Parking Garage Entrance

Item	Description
D3016 Solar Energy System	D3016 Solar Panels 3' x 8'
Condition	Poor
Qty / UOM	48 / EA
RUL (years)	0
Location	Parking Garage

OBSERVATIONS/COMMENTS:

The solar panels of the parking garage structure are original to the construction of the building and are defunct. Per the maintenance staff, the system was abandoned in 1984. Asset cost is for panel removal.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D3016	Remove D3016 non-working solar panels	48.0 - EA	297.6	FN - Obsolescence	Priority 1	2015	14,285

Item	Description
D3021 Boilers	D3021 Hydronic Gas Boilers (700 MBH)
Condition	Fair
Qty / UOM	2 / EA
RUL (years)	2
Location	3rd Floor; Hydronic Mechanical Room

OBSERVATIONS/COMMENTS:

Two hydronic copper fin tube heating boilers are each rated at 700 MBH and supply heated water to perimeter VAVs. The boilers are available at all times and are activated by demand as determined by EMS. Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D3021	Replace D3021 Hydronic Gas Boilers (700 MBH)	2.0 - EA	59279.0	IN - Beyond Rated Life	Priority 2	2017	118,558

Item	Description
D3022.1 Circulating Pumps	D3022.1 Heating Primary Water Circulation Pumps 3 HP
Condition	Fair
Qty / UOM	2 / EA
RUL (years)	12
Location	3rd Floor; Hydronic Mechanical Room

OBSERVATIONS/COMMENTS:

Primary hydronic distribution pumps for the boilers recirculate heating water to the variable air volume (VAV) terminals. Based on current condition and RUL, no further action is recommended.

Item	Description
D3022.1 Circulating Pumps	D3022.1 Chiller Distribution Pump 15 hp
Condition	Poor
Qty / UOM	2 / EA
RUL (years)	0
Location	3rd Floor; Hydronic Mechanical Room

OBSERVATIONS/COMMENTS:

Distribution pumps for the 200-ton chiller each have connected variable frequency drives (VFDs) and control the flow based on the energy management system (EMS). Based on current condition and zero years RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D3022	Replace D3022.1 Chiller Distribution Pump 15 hp	2.0 - EA	24192.4	IN - Reliability	Priority 1	2015	48,385

Item	Description
D3022.1 Circulating Pumps	D3022.1 Chiller Condenser Pump 10 hp
Condition	Good
Qty / UOM	2 / EA
RUL (years)	19
Location	3rd Floor; Hydronic Mechanical Room

OBSERVATIONS/COMMENTS:

Condenser pumps for the chiller supply chilled water to the cooling tower, to reject heat back to the chiller. This pump has a VFD and controls flow as determined by EMS. Based on current condition and RUL, no further action is recommended.

Item	Description
D3023 Auxiliary Equipment	D3023 Expansion Tank (24 Gal)
Condition	Poor
Qty / UOM	1 / EA
RUL (years)	0
Location	3rd Floor; Hydronic Mechanical Room

OBSERVATIONS/COMMENTS:

Expansion tank for the hydronic water closed loop system provides protection from excessive pressure. Based on current condition and zero years RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D3023	Replace D3023 Expansion Tank (24 Gal)	1.0 - EA	7407.8	IN - Beyond Rated Life	Priority 1	2015	7,408

Item	Description
D3031.1 Chillers	D3031.1 Water cooled chiller 200 ton
Condition	Fair
Qty / UOM	2 / EA
RUL (years)	15
Location	3rd Floor; Hydronic Mechanical Room

OBSERVATIONS/COMMENTS:

Two centrifugal chillers rated at 200 tons supply chilled water to the hydronic HVAC system. Based on current condition and RUL, no further action is recommended.

Item	Description
D3031.2 Cooling Towers	D3031.2 Packaged Filtration system
Condition	Good
Qty / UOM	1 / EA
RUL (years)	19
Location	3rd Floor; Hydronic Mechanical Room

OBSERVATIONS/COMMENTS:

Chemical feeder for cooling tower water eliminates biological life and algae growth, and removes dirt, sand, and light liquids. Based on current condition and RUL, no further action is recommended.

Item	Description
D3031.2 Cooling Towers	D3031.2 Cooling Towers
Condition	Good
Qty / UOM	2 / EA
RUL (years)	24
Location	3rd Floor; Hydronic Mechanical Room

OBSERVATIONS/COMMENTS:

Two cooling towers integral to the hydronic HVAC system are located in the central plant. They each have two 7.5 hp fan motors and VFD units. Based on current condition and RUL, no further action is recommended.

Item	Description
D3041.1 Air Handling Units	D3041.1 AHU 48130 CFM
Condition	Fair
Qty / UOM	1 / EA
RUL (years)	9
Location	Rooftop

OBSERVATIONS/COMMENTS:

Multiple air handlers supply the first through third floor VAV boxes located throughout perimeter. All AHUs are equipped with two-pipe CWS loop for cooling. Dampers on the air handlers are pneumatic. There are no VFDs. The vane axial fans have pneumatic actuated vane pitch control. Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D3041	Replace D3041.1 AHU 48130 CFM	1.0 - EA	51381.2	IN - Beyond Rated Life	Priority 4	2024	51,381

Item	Description
D3041.1 Air Handling Units	D3041.1 AHU2 31190 CFM
Condition	Fair
Qty / UOM	1 / EA
RUL (years)	9
Location	3rd Floor

OBSERVATIONS/COMMENTS:

Multiple air handlers supply the first through third floor VAV boxes located throughout perimeter. All AHUs are equipped with two-pipe CWS loop for cooling. Dampers on the air handlers are pneumatic. There are no VFDs. The vane axial fans have pneumatic actuated vane pitch control. Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D3041	Replace D3041.1 AHU2 31190 CFM	1.0 - EA	51381.2	IN - Beyond Rated Life	Priority 4	2024	51,381

Item	Description
D3041.1 Air Handling Units	D3041.1 AHU3A 19500 CFM
Condition	Fair
Qty / UOM	1 / EA
RUL (years)	9
Location	3rd Floor

OBSERVATIONS/COMMENTS:

Multiple air handlers supply the first through third floor VAV boxes located throughout perimeter. All AHUs are equipped with two-pipe CWS loop for cooling. Dampers on the air handlers are pneumatic. There are no VFDs. The vane axial fans have pneumatic actuated vane pitch control. Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D3041	Replace D3041.1 AHU3A 19500 CFM	1.0 - EA	35811.5	IN - Beyond Rated Life	Priority 4	2024	35,812

Item	Description
D3041.1 Air Handling Units	D3041.1 AHU3A Fan return motor 7.5 hp
Condition	Fair
Qty / UOM	1 / EA
RUL (years)	3
Location	3rd Floor

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D3041	Replace D3041.1 AHU3A Fan return motor 7.5 hp	1.0 - EA	3134.7	IN - Beyond Rated Life	Priority 2	2018	3,135

Item	Description
D3041.1 Air Handling Units	D3041.1 AHU2 Fan return motor 15 hp
Condition	Fair
Qty / UOM	1 / EA
RUL (years)	3
Location	3rd Floor

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D3041	Replace D3041.1 AHU2 Fan return motor 15 hp	1.0 - EA	5022.0	IN - Beyond Rated Life	Priority 2	2018	5,022

Item	Description
D3041.1 Air Handling Units	D3041.1 AHU2 Fan supply motor 30 hp
Condition	Fair
Qty / UOM	1 / EA
RUL (years)	3
Location	3rd Floor

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D3041	Replace D3041.1 AHU2 Fan supply motor 30 hp	1.0 - EA	7851.7	IN - Beyond Rated Life	Priority 2	2018	7,852

Item	Description
D3041.1 Air Handling Units	D3041.1 AHU4 Fan supply motor 20 hp
Condition	Fair
Qty / UOM	1 / EA
RUL (years)	3
Location	3rd Floor

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D3041	Replace D3041.1 AHU4 Fan supply motor 20 hp	1.0 - EA	6753.0	IN - Beyond Rated Life	Priority 2	2018	6,753

Item	Description
D3041.1 Air Handling Units	D3041.1 AHU3B Fan supply motor 15 hp
Condition	Fair
Qty / UOM	1 / EA
RUL (years)	3
Location	3rd Floor

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D3041	Replace D3041.1 AHU3B Fan supply motor 15 hp	1.0 - EA	5022.0	IN - Beyond Rated Life	Priority 2	2018	5,022

Item	Description
D3041.1 Air Handling Units	D3041.1 AHU Fan supply motor 50 hp
Condition	Fair
Qty / UOM	1 / EA
RUL (years)	3
Location	Rooftop

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D3041	Replace D3041.1 AHU Fan supply motor 50 hp	1.0 - EA	11799.8	IN - Beyond Rated Life	Priority 2	2018	11,800

Item	Description
D3041.1 Air Handling Units	D3041.1 AHU3B Fan return motor 5 hp
Condition	Fair
Qty / UOM	1 / EA
RUL (years)	3
Location	3rd Floor

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D3041	Replace D3041.1 AHU3B Fan return motor 5 hp	1.0 - EA	2326.2	IN - Beyond Rated Life	Priority 2	2018	2,326

Item	Description
D3041.1 Air Handling Units	D3041.1 AHU4 Fan return motor 7.5 hp
Condition	Fair
Qty / UOM	1 / EA
RUL (years)	3
Location	3rd Floor

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D3041	Replace D3041.1 AHU4 Fan return motor 7.5 hp	1.0 - EA	3134.7	IN - Beyond Rated Life	Priority 2	2018	3,135

Item	Description
D3041.1 Air Handling Units	D3041.1 AHU3A Fan supply motor 20 hp
Condition	Fair
Qty / UOM	1 / EA
RUL (years)	3
Location	3rd Floor

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D3041	Replace D3041.1 AHU3A Fan supply motor 20 hp	1.0 - EA	6753.0	IN - Beyond Rated Life	Priority 2	2018	6,753

Item	Description
D3041.1 Air Handling Units	D3041.1 AHU Fan return motor 15 hp
Condition	Fair
Qty / UOM	1 / EA
RUL (years)	3
Location	Rooftop

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D3041	Replace D3041.1 AHU Fan return motor 15 hp	1.0 - EA	5022.0	IN - Beyond Rated Life	Priority 2	2018	5,022

Item	Description
D3041.1 Air Handling Units	D3041.1 AHU3B 13,460 CFM
Condition	Fair
Qty / UOM	1 / EA
RUL (years)	9
Location	3rd Floor

OBSERVATIONS/COMMENTS:

Multiple air handlers supply the first through third floor VAV boxes located throughout perimeter. All AHUs are equipped with two-pipe CWS loop for cooling. Dampers on the air handlers are digital and are controlled by EMS. There are VFDs for supply and return AHU motors controlled by EMS system, however, VFDs are pneumatic. Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D3041	Replace D3041.1 AHU3B 13,460 CFM	1.0 - EA	24777.4	IN - Beyond Rated Life	Priority 4	2024	24,777

Item	Description
D3041.1 Air Handling Units	D3041.1 AHU4 15150 CFM
Condition	Fair
Qty / UOM	1 / EA
RUL (years)	9
Location	3rd Floor

OBSERVATIONS/COMMENTS:

Multiple air handlers supply the first through third floor VAV boxes located throughout perimeter. All AHUs are equipped with two-pipe CWS loop for cooling. Dampers on the air handlers are digital and are controlled by EMS. There are VFDs for supply and return AHU motors controlled by EMS, however, VFDs are pneumatic. Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D3041	Replace D3041.1 AHU4 15150 CFM	1.0 - EA	24777.4	IN - Beyond Rated Life	Priority 4	2024	24,777

Item	Description
D3041.2 Terminal Units VAV	D3041 VAV Boxes
Condition	Fair
Qty / UOM	61 / EA
RUL (years)	3
Location	Throughout Facility

OBSERVATIONS/COMMENTS:

The facility is heated and cooled by VAV terminals supplied with conditioned air from the central system air handlers. They supply the multiple diffusers located in the office spaces throughout. VAVs placed at the exterior have reheat coils. The CFM range is from 180 to 785 for these VAV terminals. Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D3041	Replace D3041 VAV Boxes	61.0 - EA	2496.7	IN - Beyond Rated Life	Priority 2	2018	152,300

Item	Description
D3042 Exhaust Ventilation Systems	D3042 Exhaust Fan, Sidewall 35360 CFM
Condition	Poor
Qty / UOM	1 / EA
RUL (years)	0
Location	Parking Garage

OBSERVATIONS/COMMENTS:

Exhaust fan rated at 20 hp with VFDs located on the lowest level of the parking garage. This exhaust fan is connected to the CO monitor which notifies fan to engage when there are elevated levels of CO in the subterranean portions of the parking garage. Signs of rusting and deterioration were observed. Based on current condition and zero years RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D3042	Replace D3042 Exhaust Fan, Sidewall 35360 CFM	1.0 - EA	16594.2	IN - Beyond Rated Life	Priority 1	2015	16,594

Item	Description
D3042 Exhaust Ventilation Systems	D3042 Exhaust Fan, Sidewall 18840 CFM
Condition	Poor
Qty / UOM	1 / EA
RUL (years)	0
Location	Parking Garage

OBSERVATIONS/COMMENTS:

Exhaust fan rated at 10 hp with VFDs located on the lowest level of the parking garage. This exhaust fan is connected to the CO monitor which notifies fan to engage when there are elevated levels of CO in the subterranean portions of the parking garage. Signs of rusting and deterioration were observed. Based on current poor condition and zero years RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D3042	Replace D3042 Exhaust Fan, Sidewall 18840 CFM	1.0 - EA	16594.2	IN - Beyond Rated Life	Priority 1	2015	16,594

Item	Description
D3042 Exhaust Ventilation Systems	D3042 Exhaust fan 2 hp
Condition	Fair
Qty / UOM	1 / EA
RUL (years)	3
Location	Rooftop

OBSERVATIONS/COMMENTS:

Exhaust fan rated at 7,100 CFM is located on the roof and is connected to the restrooms. This exhaust fan exhausts air out of the building to keep the building's air equilibrium balanced. Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D3042	Replace D3042 Exhaust fan 2 hp	1.0 - EA	7679.9	IN - Beyond Rated Life	Priority 2	2018	7,680

Item	Description
D3042 Exhaust Ventilation Systems	D3042 Exhaust Fan 5500 CFM
Condition	Fair
Qty / UOM	1 / EA
RUL (years)	3
Location	Rooftop

OBSERVATIONS/COMMENTS:

Exhaust fan rated at 5,500 cfm with VFDs located on the roof is utilized to exhaust the kitchen. Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D3042	Replace D3042 Exhaust Fan 5500 CFM	1.0 - EA	3450.4	IN - Beyond Rated Life	Priority 2	2018	3,450

Item	Description
D3042 Exhaust Ventilation Systems	D3042 Exhaust fan 1/6 hp
Condition	Fair
Qty / UOM	2 / EA
RUL (years)	0
Location	Rooftop

OBSERVATIONS/COMMENTS:

Exhaust fans rated at 400 cfm located on the roof are connected to the defunct lab exhaust. Fans are recommended for removal.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D3042	Replace D3042 Exhaust fan 1/6 hp	2.0 - EA	1240.0	IN - Beyond Rated Life	Priority 1	2015	2,480

Item	Description
D3042 Exhaust Ventilation Systems	D3042 Exhaust fan 1/6 hp - Locker room
Condition	Fair
Qty / UOM	1 / EA
RUL (years)	3
Location	Rooftop

OBSERVATIONS/COMMENTS:

Exhaust fan rated at 400 cfm with VFDs located on the roof is utilized to exhaust the locker rooms. Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D3042	Replace D3042 Exhaust fan 1/6 hp - Locker room	1.0 - EA	1772.0	IN - Beyond Rated Life	Priority 2	2018	1,772

Item	Description
D3042 Exhaust Ventilation Systems	D3042 Exhaust fan 1/6 hp - Kitchen
Condition	Fair
Qty / UOM	1 / EA
RUL (years)	3
Location	Rooftop

OBSERVATIONS/COMMENTS:

Exhaust fan rated at 400 cfm with VFDs located on the roof is utilized to exhaust the kitchen. Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D3042	Replace D3042 Exhaust fan 1/6 hp - Kitchen	1.0 - EA	2734.5	IN - Beyond Rated Life	Priority 2	2018	2,734

Item	Description
D3051.1 Terminal Heat Pumps	D3051 Parking office 1.5 ton split unit heat pump
Condition	Poor
Qty / UOM	1 / EA
RUL (years)	0
Location	Parking Garage

OBSERVATIONS/COMMENTS:

Split system for the parking garage office. Based on current condition and zero years RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D3051	Replace D3051 Parking office 1.5 ton split unit heat pump	1.0 - EA	7173.9	IN - Beyond Rated Life	Priority 1	2015	7,174

Item	Description
D3063 Heating/Cooling Air Handling Units	D3041.1 Cooling Tower Fan motor VFD 7.5 hp
Condition	Fair
Qty / UOM	1 / EA
RUL (years)	15
Location	3rd Floor; Hydronic Mechanical Room

OBSERVATIONS/COMMENTS:

One cooling tower VFD motor replaced July, 2015, no further action is recommended.

Item	Description
D3063 Heating/Cooling Air Handling Units	D3063 AHU2 VFD 15-30 HP Motor, Pneumatic
Condition	Fair
Qty / UOM	2 / EA
RUL (years)	3
Location	3rd Floor

OBSERVATIONS/COMMENTS:

All VFDs are pneumatic and are to be replaced with DDC controls. Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D3063	Replace D3063 AHU2 VFD 15-30 HP Motor, Pneumatic	2.0 - EA	18592.6	IN - Beyond Rated Life	Priority 2	2018	37,185

Item	Description
D3063 Heating/Cooling Air Handling Units	D3063 AHU4 VFD 7.5-20 HP Motor, Pneumatic
Condition	Fair
Qty / UOM	2 / EA
RUL (years)	3
Location	3rd Floor

OBSERVATIONS/COMMENTS:

All VFDs are pneumatic and are to be replaced with DDC controls. Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D3063	Replace D3063 AHU4 VFD 7.5-20 HP Motor, Pneumatic	2.0 - EA	19730.9	IN - Beyond Rated Life	Priority 2	2018	39,462

Item	Description
D3063 Heating/Cooling Air Handling Units	D3063 AHU3A VFD 7.5-20 HP Motor, Pneumatic
Condition	Fair
Qty / UOM	2 / EA
RUL (years)	3
Location	3rd Floor

OBSERVATIONS/COMMENTS:

All VFDs are pneumatic and are to be replaced with DDC controls. Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D3063	Replace D3063 AHU3A VFD 7.5-20 HP Motor, Pneumatic	2.0 - EA	19730.9	IN - Beyond Rated Life	Priority 2	2018	39,462

Item	Description
D3063 Heating/Cooling Air Handling Units	D3063 Variable Frequency Drive, 50 HP Fan Motor, Pneumatic
Condition	Fair
Qty / UOM	1 / EA
RUL (years)	3
Location	Rooftop

OBSERVATIONS/COMMENTS:

All VFDs are pneumatic and are to be replaced with DDC controls. Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D3063	Replace D3063 Variable Frequency Drive, 50 HP Fan Motor, Pneumatic	1.0 - EA	21076.6	IN - Beyond Rated Life	Priority 2	2018	21,077

Item	Description
D3063 Heating/Cooling Air Handling Units	D3063 AHU3B VFD 5-15 HP Motor, Pneumatic
Condition	Fair
Qty / UOM	2 / EA
RUL (years)	3
Location	3rd Floor

OBSERVATIONS/COMMENTS:

All VFDs are pneumatic and are to be replaced with DDC controls. Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D3063	Replace D3063 AHU3B VFD 5-15 HP Motor, Pneumatic	2.0 - EA	18435.7	IN - Beyond Rated Life	Priority 2	2018	36,871

Item	Description
D3063 Heating/Cooling Air Handling Units	D3063 Variable Frequency Drive, 15 HP Motor, Pneumatic
Condition	Fair
Qty / UOM	1 / EA
RUL (years)	3
Location	Rooftop

OBSERVATIONS/COMMENTS:

All VFDs are pneumatic and are to be replaced with DDC controls. Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D3063	Replace D3063 Variable Frequency Drive, 15 HP Motor, Pneumatic	1.0 - EA	18435.7	IN - Beyond Rated Life	Priority 2	2018	18,436

Item	Description
D3068 Building Automation Systems	D3068 DDC Controls
Condition	Poor
Qty / UOM	147,495 / SF
RUL (years)	0
Location	Throughout

OBSERVATIONS/COMMENTS:

All building HVAC equipment, lighting controls, and pneumatic operations are tied into EMS. Most of the system is original to the building. There are issues with the system network compatibility and limited functionality. Additionally, there are many leaks associated with the pneumatic controls. Based on current condition and zero years RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D3068	Replace D3068 DDC Controls	147,495.0 - SF	8.2	FN - Modernization	Priority 1	2015	1,214,415

Item	Description
D3072 Air Systems Testing & Balancing	D3072 Air Systems Testing & Balancing
Condition	Poor
Qty / UOM	1 / EA
RUL (years)	0
Location	Throughout

OBSERVATIONS/COMMENTS:

There were significant building air balancing/equilibrium issues noted, especially on the fourth floor. Further study is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D3072	Replace D3072 Air Systems Testing & Balancing	1.0 - EA	18600.0	OP - Energy	Priority 1	2015	18,600

COST SUMMARY:

Type	Year	Total Expenditures
D30 HVAC	2015	\$1,345,934
D30 HVAC	2017	\$118,558
D30 HVAC	2018	\$417,248
D30 HVAC	2024	\$188,129

D40 FIRE PROTECTION SYSTEMS

Fire and Life Safety System	
Item	Description
Fire Alarm System Components Present	
Smoke detectors	Yes
Pull stations	Yes
Audible alarms	Yes
Strobe lights	Yes
Central fire alarm panel	Yes
Annunciator panel	N/A
Smoke Detectors Power Supply	Battery
Carbon Monoxide Detectors	No
Heat Detector	Yes
Central Fire Alarm Panel Location	Electrical Room
Annunciator Panel Location	N/A
Fire Extinguishers	Yes
Fire Extinguisher Inspection Date	May 16, 2014
Distance to Nearest Fire Hydrant (ft)	20
Illuminated Exit Signs	Yes
Kitchen Suppression Systems	N/A
Halon Gas Systems	N/A
Smoke Evacuation Systems	N/A
Fire-rated Stairwells	Yes
Fire-rated Stairwell Finish	N/A
Stairwell Discharge	Exterior of the building at Grade
Stairwell Pressurized	No
Fire-Rated Doors Observed	Yes
Location of Fire-Rated Doors	Other
Fire Alarm Service Company	N/A
Date of Last Fire Alarm Service	March 28, 2013
Are the individual office unit fire alarm systems monitored?	N/A
Are the common area fire alarm systems monitored?	N/A
Types of Common Areas Monitored	N/A
Fire Alarm Monitoring Company	N/A

Item	Description
D4011 Sprinkler Water Supply	D4011 Wet-Pipe Sprinkler System
Condition	Poor
Qty / UOM	147,945 / SF
RUL (years)	0
Location	Throughout

OBSERVATIONS/COMMENTS:

The office facility lacks an overhead fire suppression sprinkler system. It is recommended that a facility-wide fire suppression sprinkler system be installed.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D4011	Replace D4011 Wet-Pipe Sprinkler System	147,945.0 - SF	9.4	CC - Life Safety	Priority 1	2015	1,394,234

Item	Description
D4011 Sprinkler Water Supply	D4011 Wet-Pipe Sprinkler System
Condition	Fair
Qty / UOM	72,000 / SF
RUL (years)	2
Location	Throughout the parking structure

OBSERVATIONS/COMMENTS:

Wet sprinkler fire suppression system is located throughout the parking structure. Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D4011	Replace D4011 Wet-Pipe Sprinkler System	72,000.0 - SF	6.4	CC - Life Safety	Priority 1	2017	458,640

Item	Description
D4012 Sprinkler Pumping Equipment	D4012 Fire Hose Cabinet and Rack, 30" X 44" X 8", Steel, 100 Ft. Hose with Nozzle
Condition	Poor
Qty / UOM	23 / EA
RUL (years)	0
Location	Throughout

OBSERVATIONS/COMMENTS:

Hose cabinet and hose were noted to be leaking. Based on current condition and zero years RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D4012	Replace D4012 Fire Hose Cabinet and Rack, 30" X 44" X 8", Steel, 100 Ft. Hose with Nozzle	23.0 - EA	3029.9	CC - Life Safety	Priority 1	2015	69,687

Item	Description
D4031 Fire Extinguishers	D4031 Fire Extinguishers 5 Lb, Install
Condition	Fair
Qty / UOM	67 / EA
RUL (years)	4
Location	Throughout

OBSERVATIONS/COMMENTS:

Fire extinguishers are throughout the building and parking garage. These units were last inspected on May 16, 2014. Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D4031	Replace D4031 Fire Extinguishers 5 Lb, Install	67.0 - EA	300.9	CC - Life Safety	Priority 2	2019	20,160

D4031	Replace D4031 Fire Extinguishers 5 Lb, Install	67.0 - EA	300.9	CC - Life Safety	Priority 2	2024	20,160
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COST SUMMARY:

Type	Year	Total Expenditures
D40 Fire Protection Systems	2015	\$1,463,921
D40 Fire Protection Systems	2017	\$458,640
D40 Fire Protection Systems	2019	\$20,160
D40 Fire Protection Systems	2024	\$20,160

D50 ELECTRICAL SYSTEMS

Item	Description
D5012 Low Tension Service & Dist.	D5012 Switchgear 1000 Amps
Condition	Fair
Qty / UOM	1 / EA
RUL (years)	9
Location	Main Electrical Room

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D5012	Replace D5012 Switchgear 1000 Amps	1.0 - EA	18526.0	IN - Reliability	Priority 4	2024	18,526

Item	Description
D5012 Low Tension Service & Dist.	D5012 Main Switchgear 3000 Amps
Condition	Fair
Qty / UOM	1 / EA
RUL (years)	9
Location	Main Electrical Room

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D5012	Replace D5012 Main Switchgear 3000 Amps	1.0 - EA	23128.0	IN - Reliability	Priority 4	2024	23,128

Item	Description
D5012 Low Tension Service & Dist.	D5012 Emergency Switchgear 200 Amps
Condition	Fair
Qty / UOM	1 / EA
RUL (years)	9
Location	Main Electrical Room

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D5012	Replace D5012 Emergency Switchgear 200 Amps	1.0 - EA	9116.1	CC - Life Safety	Priority 4	2024	9,116

Item	Description
D5012 Low Tension Service & Dist.	D5012 Breaker Panel 50-400 Amps
Condition	Fair
Qty / UOM	32 / EA
RUL (years)	31
Location	Electrical Rooms

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, no further action is recommended.

Item	Description
D5012 Low Tension Service & Dist.	D5012 Dry Transformer 300 kVA
Condition	Fair
Qty / UOM	1 / EA
RUL (years)	9
Location	Main Electrical Room

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D5012	Replace D5012 Dry Transformer 300 kVA	1.0 - EA	79249.8	IN - Reliability	Priority 4	2024	79,250

Item	Description
D5012 Low Tension Service & Dist.	D5012 Dry Transformer 150 kVA
Condition	Fair
Qty / UOM	1 / EA
RUL (years)	9
Location	Main Electrical Room

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D5012	Replace D5012 Dry Transformer 150 kVA	1.0 - EA	29688.3	IN - Reliability	Priority 4	2024	29,688

Item	Description
D5012 Low Tension Service & Dist.	D5012 Dry Transformer 25 kVA
Condition	Fair
Qty / UOM	1 / EA
RUL (years)	9
Location	Parking Garage

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D5012	Replace D5012 Dry Transformer 25 kVA	1.0 - EA	12043.4	IN - Reliability	Priority 4	2024	12,043

Item	Description
D5012 Low Tension Service & Dist.	D5012 Dry Transformer 30 kVA
Condition	Fair
Qty / UOM	1 / EA
RUL (years)	9
Location	Main Electrical Room

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D5012	Replace D5012 Dry Transformer 30 kVA	1.0 - EA	12043.4	IN - Reliability	Priority 4	2024	12,043

Item	Description
D5012 Low Tension Service & Dist.	D5012 Distribution Panel 1200 Amps
Condition	Fair
Qty / UOM	1 / EA
RUL (years)	9
Location	Parking Garage

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D5012	Replace D5012 Distribution Panel 1200 Amps	1.0 - EA	26479.2	IN - Reliability	Priority 4	2024	26,479

Item	Description
D5012 Low Tension Service & Dist.	D5012 Breaker Panel 200 Amps
Condition	Fair
Qty / UOM	3 / EA
RUL (years)	9
Location	Main Electrical Room

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D5012	Replace D5012 Breaker Panel 200 Amps	3.0 - EA	18795.4	IN - Reliability	Priority 4	2024	56,386

Item	Description
D5021 Branch Wiring Devices	D5021 Lighting control unit
Condition	Poor
Qty / UOM	147,945 / SF
RUL (years)	0
Location	Lighting Controls Throughout

OBSERVATIONS/COMMENTS:

Lighting is controlled by unit located on the first floor of the building. This unit is tied into EMS and only controls two rows of fixtures around the interior perimeter of the building. Upgrade of lighting controls recommended to be tied into EMS. Removal of the defunct control box also recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D5021	Replace D5021 Lighting control unit	147,945.0 - SF	0.4	OP - Security	Priority 1	2015	52,373

Item	Description
D5022 Lighting Equipment	D5022 Wall Pack 23W CFL
Condition	Fair
Qty / UOM	4 / EA
RUL (years)	5
Location	Rooftop

OBSERVATIONS/COMMENTS:

Lighting wallpacks around the roof were in fair condition. These units are all controlled by central control. Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D5022	Replace D5022 Wall Pack 23W CFL	4.0 - EA	310.3	OP - Security	Priority 3	2020	1,241

Item	Description
D5022 Lighting Equipment	D5022 Wallpacks 150 W HPS
Condition	Poor
Qty / UOM	12 / EA
RUL (years)	0
Location	Lighting

OBSERVATIONS/COMMENTS:

Lighting wallpacks around the property were in poor condition. These units are all controlled by central control. Replacement with lower wattage, more efficient lighting is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D5022	Replace D5022 Wallpacks 150 W HPS	12.0 - EA	890.7	OP - Security	Priority 1	2015	10,688

Item	Description
D5022 Lighting Equipment	D5022 Pole lamps 150 W HPS
Condition	Poor
Qty / UOM	16 / EA
RUL (years)	0
Location	Exterior Lighting

OBSERVATIONS/COMMENTS:

Exterior pole lighting around the property was in poor condition. These units are all controlled by central control. Replacement with lower wattage, more efficient lighting is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D5022	Replace D5022 Pole lamps 150 W HPS	16.0 - EA	890.7	OP - Security	Priority 1	2015	14,251

Item	Description
D5022 Lighting Equipment	D5022 Wallpacks 150 W HPS
Condition	Poor
Qty / UOM	14 / EA
RUL (years)	0
Location	Lighting

OBSERVATIONS/COMMENTS:

Lighting wallpacks around the property were in poor condition. These units are all controlled by central control. Replacement with lower wattage, more efficient lighting is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D5022	Replace D5022 Wallpacks 150 W HPS	14.0 - EA	890.7	OP - Security	Priority 1	2015	12,469

Item	Description
D5022 Lighting Equipment	D5022 Wallpacks 150 W HPS
Condition	Poor
Qty / UOM	6 / EA
RUL (years)	0
Location	Lighting

OBSERVATIONS/COMMENTS:

Lighting wallpacks around the property were in poor condition. These units are all controlled by central control. Replacement with lower wattage, more efficient lighting is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D5022	Replace D5022 Wallpacks 150 W HPS	6.0 - EA	890.7	OP - Security	Priority 1	2015	5,344

Item	Description
D5022 Lighting Equipment	D5022 Bollards 150 W HPS
Condition	Poor
Qty / UOM	9 / EA
RUL (years)	0
Location	Exterior Lighting

OBSERVATIONS/COMMENTS:

Exterior lighting wallpacks around the property were in poor condition. These units are all controlled by central control. Replacement with lower wattage, more efficient lighting is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D5022	Replace D5022 Bollards 150 W HPS	9.0 - EA	890.7	OP - Security	Priority 1	2015	8,016

Item	Description
D5022 Lighting Equipment	D5022 Uplighting 150 W HPS
Condition	Poor
Qty / UOM	17 / EA
RUL (years)	0
Location	Lighting

OBSERVATIONS/COMMENTS:

Lighting wallpacks around the property were in poor condition. These units are all controlled by central control. Replacement with lower wattage, more efficient lighting is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D5022	Replace D5022 Uplighting 150 W HPS	17.0 - EA	890.7	OP - Security	Priority 1	2015	15,141

Item	Description
D5037 Fire Alarm Systems	D5037 Fire Alarm Panel
Condition	Good
Qty / UOM	1 / EA
RUL (years)	13
Location	Main Electrical Room

OBSERVATIONS/COMMENTS:

The main fire alarm central panel is located in the main electrical room and was inspected in March 2013. This panel monitors the fire devices throughout the building and notifies the central computer room panel and monitoring company upon signal. Based on current condition and RUL, no further action is recommended.

Item	Description
D5037 Fire Alarm Systems	D5037 Strobe and Horn
Condition	Poor
Qty / UOM	40 / EA
RUL (years)	0
Location	Throughout Interiors

OBSERVATIONS/COMMENTS:

Based on current condition and zero years RUL, replacement is recommended. This asset only includes older strobe and horn units not previously replaced.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D5037	Replace D5037 Strobe and Horn	40.0 - EA	523.2	CC - Life Safety	Priority 1	2015	20,929

Item	Description
D5092 Emergency Light & Power Systems	D5092 Diesel Generator 100 kW
Condition	Fair
Qty / UOM	1 / EA
RUL (years)	2
Location	Main Electrical Room
Generator Fuel	Diesel

OBSERVATIONS/COMMENTS:

The emergency generator serves all the facility's backup emergency services. Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
D5092	Replace D5092 Diesel Generator 100 kW	1.0 - EA	102868.0	CC - Life Safety	Priority 2	2017	102,868

COST SUMMARY:

Type	Year	Total Expenditures
D50 Electrical Systems	2015	\$139,211
D50 Electrical Systems	2017	\$102,868
D50 Electrical Systems	2020	\$1,241
D50 Electrical Systems	2024	\$266,660

E Equipment & Furnishing Systems

E10 EQUIPMENT

Item	Description
E1016 Laundry & Dry Cleaning Equipment	E1016 Commercial Washers 30 Lb
Condition	Fair
Qty / UOM	1 / EA
RUL (years)	5
Location	1st Floor Janitor's Closet/Room

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
E1016	Replace E1016 Commercial Washers 30 Lb	1.0 - EA	31417.6	IN - Beyond Rated Life	Priority 4	2020	31,418

Item	Description
E1016 Laundry & Dry Cleaning Equipment	E1016 Commercial Dryers Electric 50Lb
Condition	Fair
Qty / UOM	1 / EA
RUL (years)	5
Location	1st Floor Janitor's Closet/Room

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
E1016	Replace E1016 Commercial Dryers Electric 50Lb	1.0 - EA	11026.5	IN - Beyond Rated Life	Priority 4	2020	11,027

Item	Description
E1019 Other Commercial Equipment	E1019 Woodshop Sander
Condition	Fair
Qty / UOM	1 / EA
RUL (years)	10
Location	3rd Floor; Hydronic Mechanical Room

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, no further action is recommended.

Item	Description
E1019 Other Commercial Equipment	E1019 Air Compressor 5 hp motor
Condition	Poor
Qty / UOM	1 / EA
RUL (years)	0
Location	3rd Floor; Hydronic Mechanical Room

OBSERVATIONS/COMMENTS:

According to maintenance staff, the air compressor provides the pneumatics for the entire facility. Based on current condition and zero years RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
E1019	Replace E1019 Air Compressor 5 hp motor	1.0 - EA	7757.3	IN - Beyond Rated Life	Priority 2	2015	7,757

Item	Description
E1033 Loading Dock Equipment	E1033 Loading Platforms
Condition	Fair - Good
Qty / UOM	1 / EA
RUL (years)	3
Location	Exterior

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
E1033	Replace E1033 Loading Platforms	1.0 - EA	13109.5	IN - Beyond Rated Life	Priority 3	2018	13,110

Item	Description
E1039 Other Vehicular Equipment	E1039 Electric charging station
Condition	Fair
Qty / UOM	3 / EA
RUL (years)	2
Location	Parking Garage

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
E1039	Replace E1039 Electric charging station	3.0 - EA	12127.2	FN - Modernization	Priority 3	2017	36,382

COST SUMMARY:

Type	Year	Total Expenditures
E10 Equipment	2015	\$7,757
E10 Equipment	2017	\$36,382
E10 Equipment	2018	\$13,110
E10 Equipment	2020	\$42,444

G Building Sitework Systems

G20 SITE IMPROVEMENTS

Site Information	
Item	Description
Main Ingress and Egress	Calvert Street
Access from	S
Additional Entrances	Delano St
Access from	N
Parking Count: Open lot	N/A
Parking Count: Sheltered by carports	N/A
Parking Count: Private garages	N/A
Parking Count: Subterranean garage	N/A
Parking Count: Freestanding parking structure	337
Number of ADA Compliant Spaces	25
Number of ADA Compliant Spaces for Vans	4
Method of obtaining parking count	Site plan
Property Identification Sign-Primary	Structure mounted
Property Identification Sign- Secondary	N/A
Illuminated Identification Signage	Yes
Building Identification Sign	Yes
Illuminated Sign	No
Location of Property ID Sign	N/A
Trees Present	Yes
Shrubs Present	Yes
Grasses Present	Yes
Flower beds Present	No
Decorative Rocks Present	No
Lava Rocks Present	No
Ponds Present	No
Fountains Present	No
Topography	Flat

Item	Description
G2031 Paving & Surfacing	G2031 Brick Pavers, Grouted
Condition	Poor
Qty / UOM	75 / SF
RUL (years)	0
Location	Site Walkway

OBSERVATIONS/COMMENTS:

Brick pavers at the south entry into the facility are cracked/heaved and present trip hazards. Replacement of pavers is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
G2031	Replace G2031 Brick Pavers, Grouted	75.0 - SF	45.9	CC - Life Safety	Priority 1	2015	3,441

Item	Description
G2057 Irrigation Systems	G2050 Sprinkler System, Backflow Preventer, 2"
Condition	Fair
Qty / UOM	2 / EA
RUL (years)	21
Location	Exterior

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, no further action is recommended.

COST SUMMARY:

Type	Year	Total Expenditures
G20 Site Improvements	2015	\$3,441

G30 SITE CIVIL/MECHANICAL UTILITIES

Item	Description
G3021 Piping	G3021 Drain pipe 5"
Condition	Poor
Qty / UOM	1,600 / LF
RUL (years)	0
Location	Parking Garage

OBSERVATIONS/COMMENTS:

Storm water drainage pipe for the floors of the garage was noted to be rusting. Based on current condition and zero years RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
G3021	Replace G3021 Drain pipe 5"	1,600.0 - LF	72.1	IN - Beyond Rated Life	Priority 1	2015	115,429

Item	Description
G3063 Fuel Storage Tanks	G3063 Diesel Tank, 50 Gallon
Condition	Fair
Qty / UOM	1 / EA
RUL (years)	2
Location	Main Electrical Room

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
G3063	Replace G3063 Diesel Tank, 50 Gallon	1.0 - EA	7272.6	EN - Air/ Water Quality	Priority 2	2017	7,273

COST SUMMARY:

Type	Year	Total Expenditures
G30 Site Civil/Mechanical Utilities	2015	\$115,429
G30 Site Civil/Mechanical Utilities	2017	\$7,273

G40 SITE ELECTRICAL UTILITIES

Item	Description
G4021 Fixtures & Transformers	G4021 Landscape Ground Mounted Uplight Fixture 250w
Condition	Fair
Qty / UOM	8 / EA
RUL (years)	3
Location	Rooftop

OBSERVATIONS/COMMENTS:

Based on current condition and RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
G4021	Replace G4021 Landscape Ground Mounted Uplight Fixture 250w	8.0 - EA	1719.5	IN - Beyond Rated Life	Priority 3	2018	13,756

Item	Description
G4022 Poles	G4021 Pole Lamps 150 W
Condition	Poor
Qty / UOM	4 / EA
RUL (years)	0
Location	Parking Garage

OBSERVATIONS/COMMENTS:

All lighting fixtures on the roof deck of the parking garage utilize high pressure sodium (HPS) fixtures. Based on current condition and zero years RUL, replacement is recommended.

COST RECOMMENDATIONS:

Type	Component Description	Qty / UOM	Unit Cost (\$)	Plan Type	Priority	Year	Expenditures (\$)
G4022	Replace G4021 Pole Lamps 150 W	4.0 - EA	4452.1	OP - Security	Priority 1	2015	17,808

COST SUMMARY:

Type	Year	Total Expenditures
G40 Site Electrical Utilities	2015	\$17,808
G40 Site Electrical Utilities	2018	\$13,756

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	Client and Construction 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.

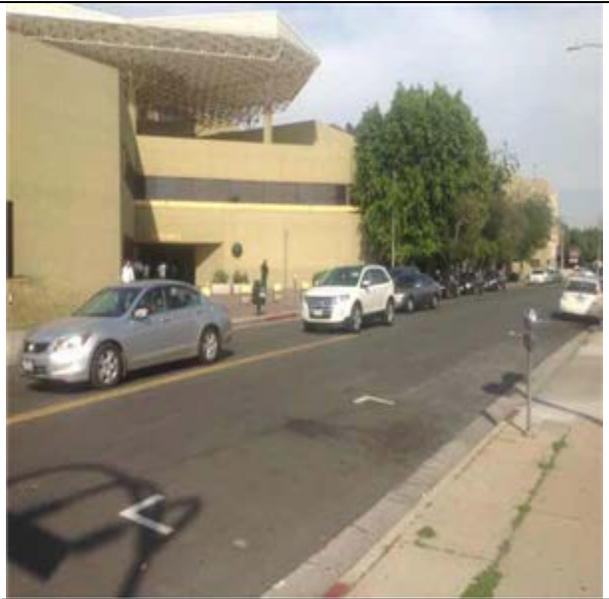
Prepared By: Timothy Harder, Field Observer

Reviewed By: 
Matt Anderson, Program Manager

APPENDIX D: PHOTOS



:- Typical elevation



:- Typical elevation



:- Typical elevation



:- Typical elevation



A1012 Structural concrete,in place, pile cap over 10 CY



A1012 Structural concrete,in place, pile cap over 10 CY



B1031 Structural Steel Columns and Beams Frame



B1031 Structural Steel Columns and Beams Frame



B1031 Structural Steel Columns and Beams Frame



B2031 Cast-in-Place Reinforced Concrete Structural Frame



B2031 Cast-in-Place Reinforced Concrete Structural Frame



B2011 Stucco Exterior Walls paint



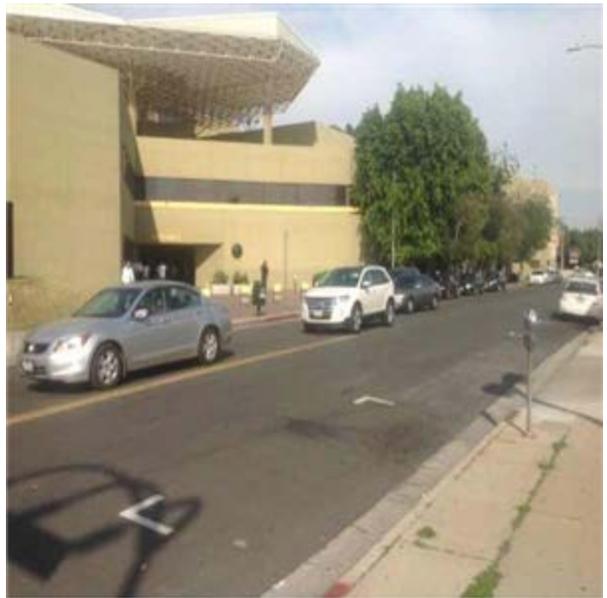
B2011 Stucco Exterior Walls paint



B2011 Stucco Exterior Walls paint



B2021 Aluminum Windows



B2021 Aluminum Windows



B2021 Aluminum Windows



B2031 Glazed Entrance Doors



B3011 Balcony - White Liquid-Applied Elastomeric Coating



B3011 Balcony - White Liquid-Applied Elastomeric Coating



B3011 Built-Up Roofing



B3011 Built-Up Roofing



B3011 Built-Up Roofing



B3011 Built-Up Roofing



B3011 White Liquid-Applied Coating



B3011 White Liquid-Applied Coating



B3011 White Liquid-Applied Coating



C1021 Interior Doors



C1021 Interior Doors



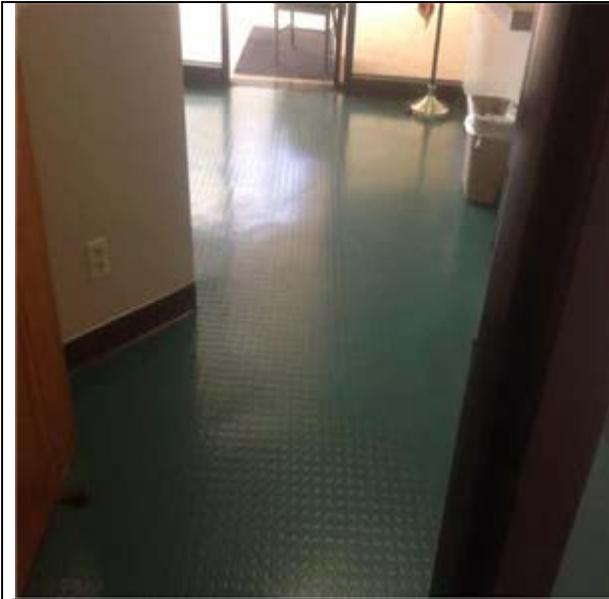
C2011 Concrete filled metal pan stairs Stairs



C2011 Concrete filled metal pan stairs Stairs



C3012 Paint Interior Walls, Drywall



C3024 Vinyl Tile



C3024 Vinyl Tile



C3024 Vinyl Tile



C3025 Carpet Tiles - Standard



C3025 Carpet Tiles - Standard



C3025 Carpet Tiles - Standard



C3032 Acoustical Ceiling Tile



D1011 Hydraulic Service Elevator 4000 lbs



D1011 Elevators and Lifts remove call buttons



D1011 Elevators and Lifts remove call buttons



D1011 Hydraulic Passenger Elevator 2500 lbs



D2011 Water Closet, 1.6 GPF Unit



D2012 Urinals



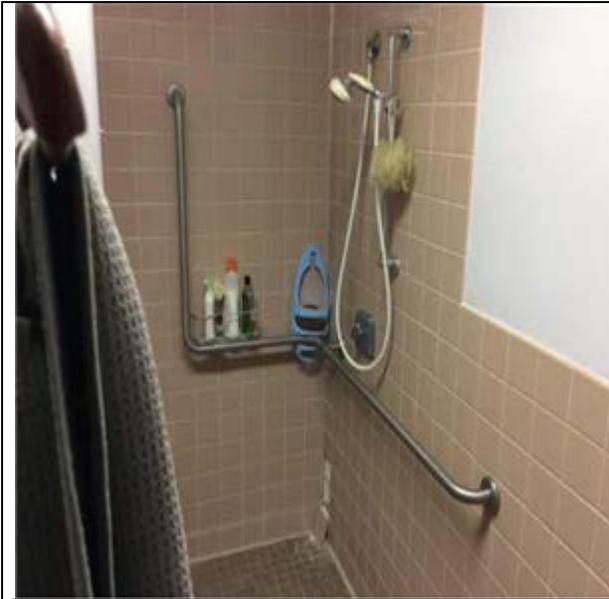
D2013 Lavatory sink



D2014 Sink and Faucet



D2014 Sink and Faucet



D2017 Stall Shower and Faucet



D2018 Drinking Fountain



D2021 3" Pressure Regulating Valve



D2022 Electric water heater 50 Gal



D2022 DHW Storage Tank 175 Gal



D2022 Water Heater Gas 700 MBH



D2034 Sump Pump, Large, 7 HP



D2034 Sump Pump, Large, 7 HP



D2042 Overflow Drains / Interior Leaders



D3016 Solar Panels 3' x 8'



D3021 Hydronic Gas Boilers (700 MBH)



D3022.1 Heating Primary Water Circulation Pumps 3 HP



D3022.1 Chiller Distribution Pump 15 hp



D3022.1 Chiller Distribution Pump 15 hp



D3022.1 Chiller Condenser Pump 10 hp



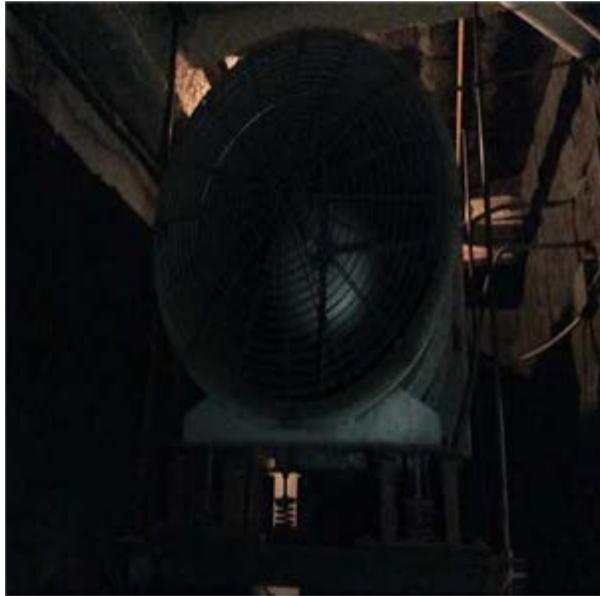
D3031.1 Water cooled chiller 200 ton



D3031.2 Cooling Towers



D3031.2 Packaged Filtration system



D3041.1 AHU2 31190 CFM



D3041.1 AHU3A 19500 CFM



D3041.1 AHU3B 13,460 CFM



D3041.1 AHU4 15150 CFM



D3041.1 AHU 48130 CFM



D3041 VAV Boxes



D3042 Exhaust fan 1/6 hp



D3042 Exhaust fan 2 hp



D3042 Exhaust Fan, Sidewall 35360 CFM



D3042 Exhaust Fan, Sidewall 35360 CFM



D3042 Exhaust fan 1/6 hp - Locker room



D3042 Exhaust fan 1/6 hp - Kitchen



D3042 Exhaust Fan 5500 CFM



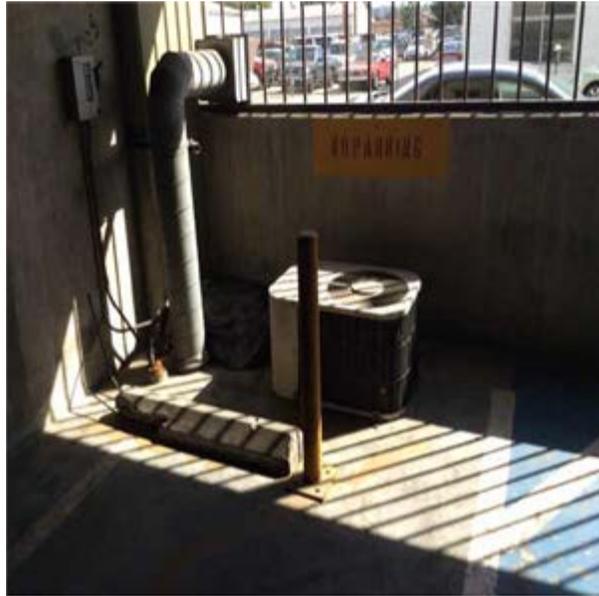
D3042 Exhaust Fan 5500 CFM



D3042 Exhaust Fan, Sidewall 18840 CFM



D3042 Exhaust Fan, Sidewall 18840 CFM



D3051 Parking office 1.5 ton split unit heat pump



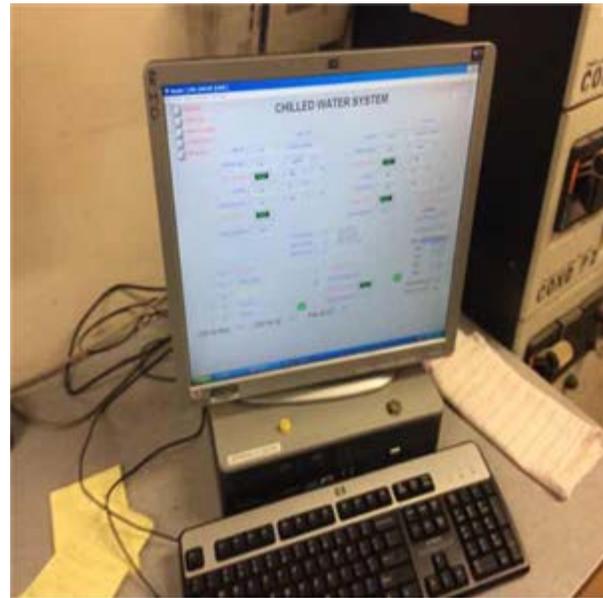
D3063 Variable Frequency Drive, 15 HP Motor, Pneumatic



D3041.1 Cooling Tower Fan motor VFD 7.5 hp



D3063 AHU2 VFD 15-30 HP Motor, Pneumatic



D3068 DDC Controls



D3072 Air Systems Testing & Balancing



D4011 Wet-Pipe Sprinkler System



D4012 Fire Hose Cabinet and Rack, 30" X 44" X 8", Steel, 100 Ft. Hose with Nozzle



D4031 Fire Extinguishers 5 Lb, Install



D5012 Switchgear 1000 Amps



D5012 Distribution Panel 1200 Amps



D5012 Breaker Panel 50-400 Amps



D5012 Main Switchgear 3000 Amps



D5012 Breaker Panel 200 Amps



D5012 Dry Transformer 25 kVA



D5012 Dry Transformer 30 kVA



D5012 Dry Transformer 150 kVA



D5012 Dry Transformer 300 kVA



D5012 Emergency Switchgear 200 Amps



D5021 Lighting control unit



D5022 Uplighting 150 W HPS



D5022 Wallpacks 150 W HPS



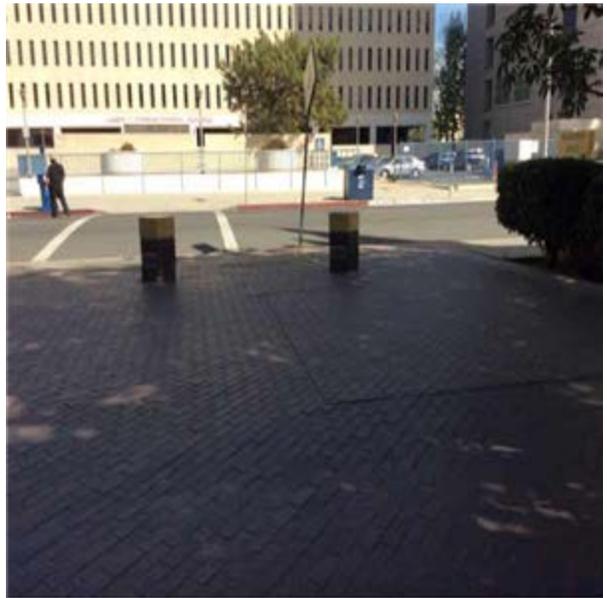
D5022 Wallpacks 150 W HPS



D5022 Wall Pack 23W CFL



D5022 Wallpacks 150 W HPS



D5022 Bollards 150 W HPS



D5022 Pole lamps 150 W HPS



D5037 Strobe and Horn



D5037 Fire Alarm Panel



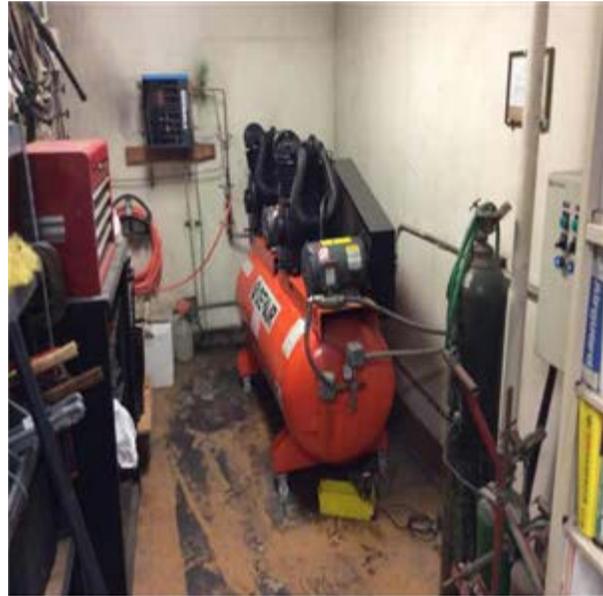
D5092 Diesel Generator 100 kW



E1016 Commercial Washers 30 Lb



E1016 Commercial Dryers Electric 50Lb



E1019 Air Compressor 5 hp motor



E1019 Woodshop Sander



E1033 Loading Platforms



E1039 Electric charging station



G2031 Brick Pavers, Grouted



G2031 Brick Pavers, Grouted



G2050 Sprinkler System, Backflow Preventer, 2"



G3021 Drain pipe 5"



G3063 Diesel Tank, 50 Gallon



G4021 Landscape Ground Mounted Uplight Fixture
250w



G4021 Pole Lamps 150 W

APPENDIX E: TERMINOLOGY AND ABBREVIATIONS

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

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

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

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

APPENDIX F: BUILDING FACT SHEET

APPENDIX G: COST TABLES

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

Total Cost (Inflated @ 5% per Yr.)											\$4,009,267	\$0	\$1,411,230	\$2,195,703	\$1,093,837	\$55,753	\$0	\$70,511	\$245,792	\$954,996		Total ¹	\$8,961,684
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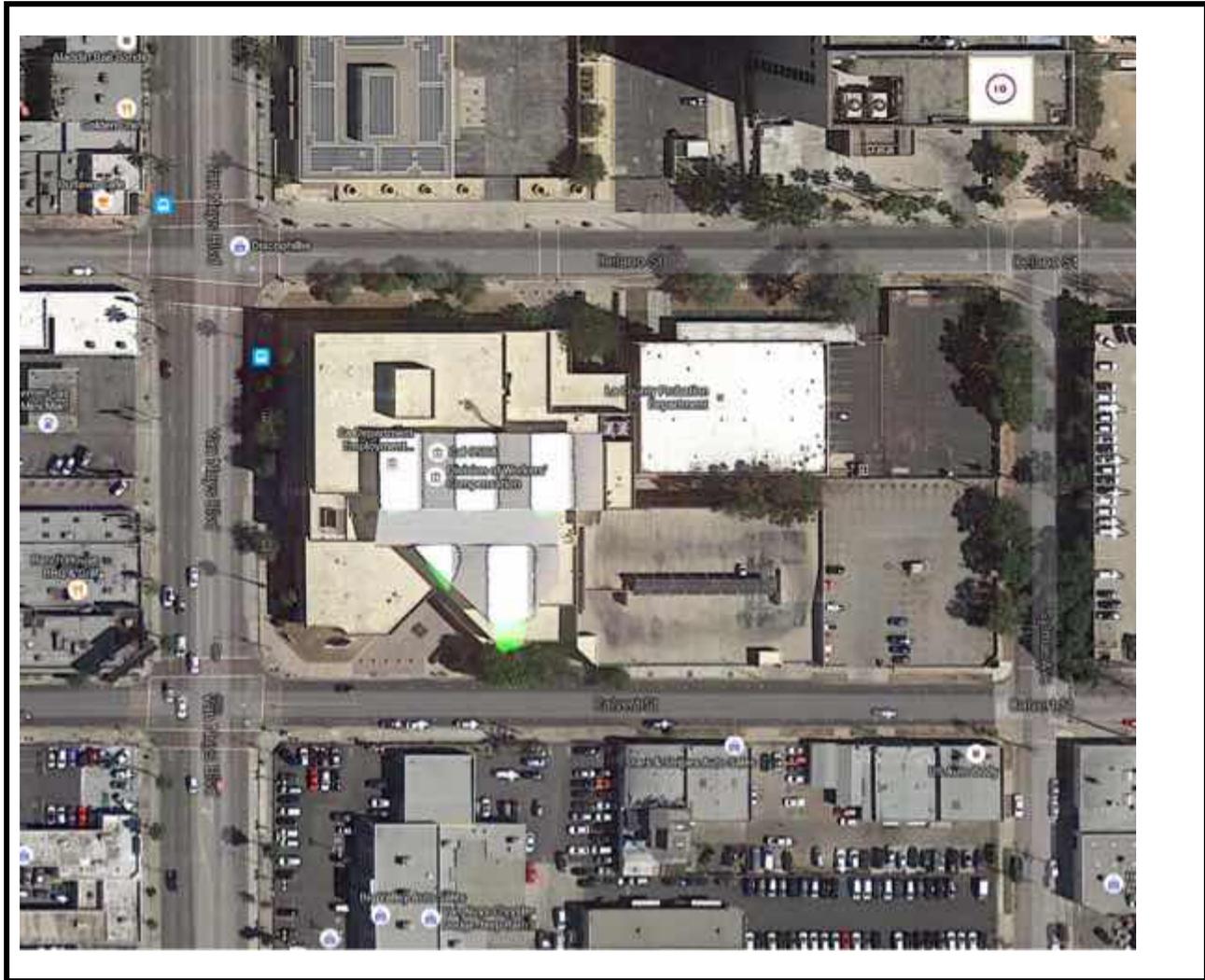
* - Present Value Currency

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

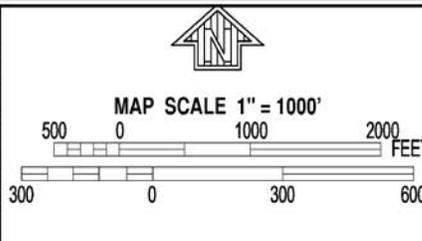
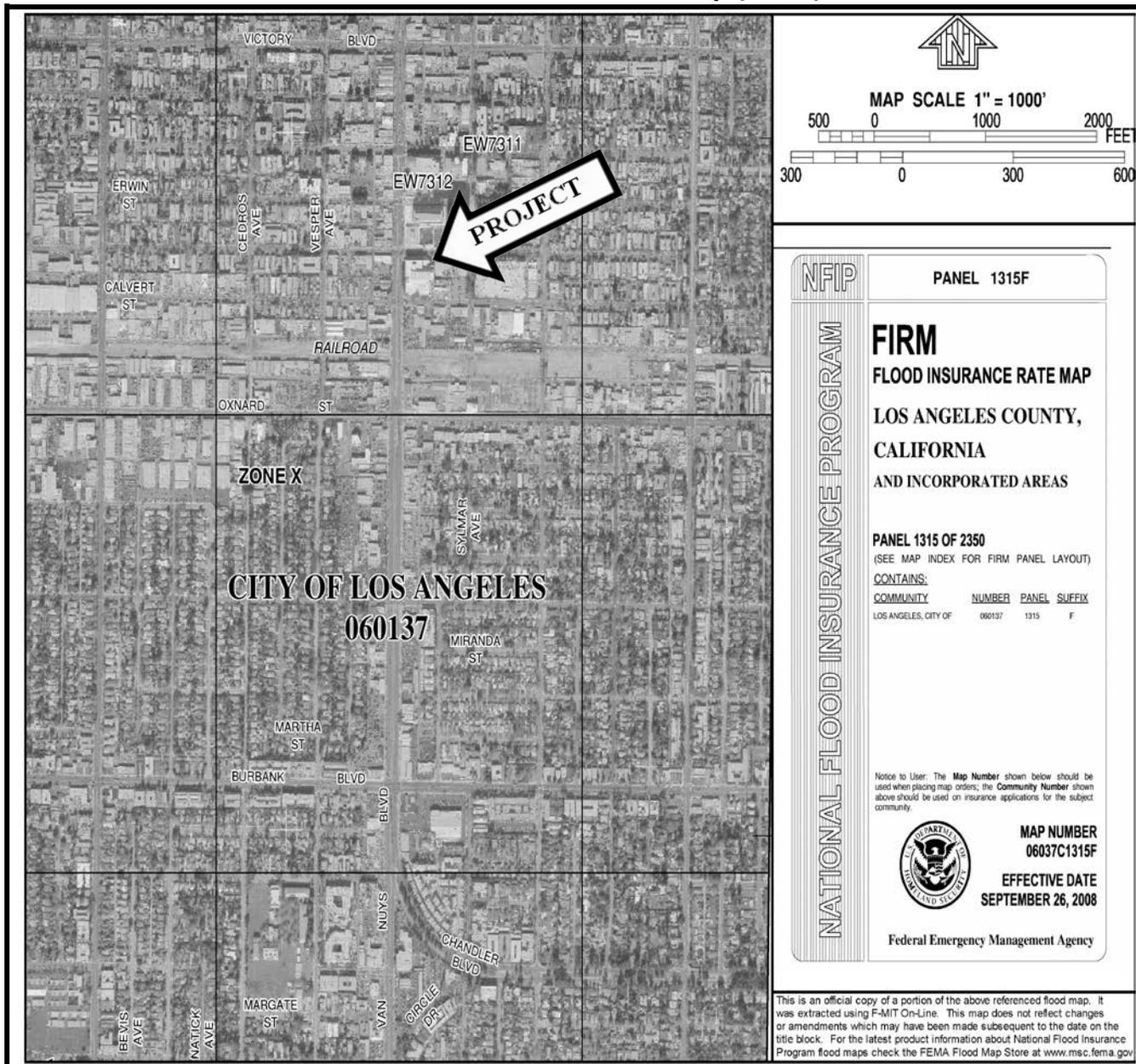
Current Repl.Value \$66,700,011

APPENDIX H: SUPPORTING DOCUMENTATION



	<p>Source:</p> <p>The north arrow indicator is an approximation of 0° North.</p>	<p>Project Number:</p> <p>111326.14R-046.305</p> <p>Project Name:</p> <p>Van Nuys State Building</p>
		<p>On-Site Date:</p> <p>March 16-17, 2015</p>

FEMA Flood Insurance Rate Map (FIRM)



NFP PANEL 1315F

FIRM
FLOOD INSURANCE RATE MAP
LOS ANGELES COUNTY,
CALIFORNIA
AND INCORPORATED AREAS

PANEL 1315 OF 2350
 (SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
LOS ANGELES, CITY OF	060137	1315	F

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

MAP NUMBER
 06037C1315F

EFFECTIVE DATE
 SEPTEMBER 26, 2008

Federal Emergency Management Agency

NATIONAL FLOOD INSURANCE PROGRAM

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov



Source:
FEMA

Subject Property is located in Flood Zone **X** and within Community and Panel Number **06037C1315F**, effective September 26, 2008. Flood Zone X, is an area identified as having a minimal flood hazard risk

Not drawn to scale. The north arrow indicator is an approximation of 0° North.

Project Number:
 111326.14R-046.305

Project Name:
 Van Nuys State Building

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

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

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

PLAN TYPE DEFINITION

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

Code Compliance (CC)

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

Operations (OP)

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

Environmental (EN)

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

Functionality (FN)

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

Integrity (IN)

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

Estimate of Structures Cost Using Marshall Cost Systems

Van Nuys			
Site Calculation			
Estimate of Unusual Land Improvements Cost (Estimators Data Cost Base):			
Description	Cost	Estimated \$/ SF	Unusual Land Total
			\$0
Total			\$0
Estimate of Unusual Land Improvements Cost (Estimators Cost Data Base):			
Estimate of Structure Cost :			
Building Type	Cost per SF	Number of SF	Building Type Total
Main Building	\$321.22	147,495	\$47,378,632
	\$0.00	0	\$0
	\$0.00	0	\$0
	\$0.00	0	\$0
	\$0.00	0	\$0
	Total	147,495	\$47,378,632
Estimate of Adjustments for Fees:			
Description	% increase		
Soft Costs	25.00%		
	0.00%		
	0.00%		
Total Fees/ Interest included in Marshall System			25.00%
Total Structure Estimate:			
Description	Unit	Fee Adjust	Adjusted Totals
Main Building	\$47,378,632	25.00%	\$59,223,290
0	\$0	25.00%	\$0
	\$0	25.00%	\$0
	\$0	25.00%	\$0
	\$0	25.00%	\$0
Cost Per SF	\$401.53	Total Estimate	\$59,223,290

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: Lawrence Snipes

Building name: Van Nuys State Building (530)

What is your association with this property? Building Manager

What is the length of your association with this property? 18yrs

Phone number: 818/901-5425

Please provide information about inspections relating to the following items

Inspections	Date Last Inspected	List Name & Contact for Maintenance Contractor, if any.
1. Elevators	6/13/2014	Fujitec - 310/464-8270
2. HVAC, Mechanical, Electric, Plumbing	monthly	building staff
3. Life-Safety/Fire	5/2/14	Price Fire Protection - 323/353-3427
4. Roofs		

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

passenger elevator modernization

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

fire alarm replacement

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

resurfaced 2004

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

All if damaged by contractor during work in building

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				parking structure - pooling of rain water - must be "squeegeed" over to floor drains

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				into exhaust ducting of parking structure - lower levels
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?					stucco
22. Are there any problems with the utilities, such as inadequate capacities?		x			
23. Are there any problems with the landscape irrigation systems?		x			
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?					
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 530 – Van Nuys State Building
6150 Van Nuys Boulevard
Van Nuys, California**

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<u>Appendix E – Modernization Recommendations</u>	Page 6

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# 77106, 77105)	1	150 fpm	2,500 pounds	1-4	1984	2012	20+ years	Inground Hydraulic	Boremax	Solid State	MCE	42”x 84” Center Opening	GAL
	2	150 fpm	2,500 pounds	1-4	1984	2012	20+ years	Inground Hydraulic	Boremax	Solid State	MCE	42”x 84” Center Opening	GAL
Elevator 3 (Simplex – ID# 77104)	3	150 fpm	4,000 pounds	B2, 1, 1A, 2, 3, 4, 4A*	1984	N/A	1-2 years	Inground Hydraulic	Montgomery	EM Starter	Montgomery	48”x 84” Side Opening	MAC

*Elevator 3 has rear openings at B2, 1A, 4A

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	3/28/14	Current	No Tag	Unknown	Not Required	Not Required	Last Entry 10/2014	None	Average	Low
2	3/28/14	Current	No Tag	Unknown	Not Required	Not Required	Last Entry 10/2014	None	Average	Low
3	2/22/13	Past Due	1/19/10	Past Due	Not Required	Not Required	Last Entry 10/2014	None	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 530 – Van Nuys State Building				
Current Items			These Columns For Use by Contractor and in Future ECA Visits	
Item #	Item Description	Units Affected	Item Complete	Comments
1	5-year tests not tagged – perform tests and properly tag equipment	1-2		
2	5-year test past due – perform test and properly tag equipment	3		
3	Roller guides very brittle – replace all rollers and adjust for smooth ride	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 530 – Van Nuys State Building				
Current Items			These Columns For Use by Contractor and in Future ECA Visits	
Item #	Item Description	Units Affected	Item Complete	Comments
1	Fire service logs past due – ensure monthly testing and logging is performed	1-3		
2	Organize machine room	1-3		
3	Clean machine room	3		
4	Check motor belts – repair as needed	3		
5	Adjust to eliminate sway in car ride	1-3		
6	Adjust for smooth take offs	1-3		
7	Clean top of car	3		
8	Clean door operators	3		
9	Clean pit	3		

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 530 – Van Nuys State 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 elevator has expired. If a new certificate has been received, post in elevator as soon as possible.	3		

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, elevators 1-2 were modernized in 2012, and should operate for another 20+ years before further modernization, assuming an ongoing program of preventive maintenance is followed.

Elevator 3, however, was not modernized, and is thus 31 years old. This elevator presumably had the same equipment as the other two, and certainly would have been due for modernization at the same time. This was likely a budgetary consideration, but the fact remains that the elevator remains original and is now well overdue for modernization. We are therefore recommending a modernization occur 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	Standard
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 \$160,000. If you choose to refurbish the cab interiors (floors, side and back walls and ceiling), we would recommend a budget of \$25,000. 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.

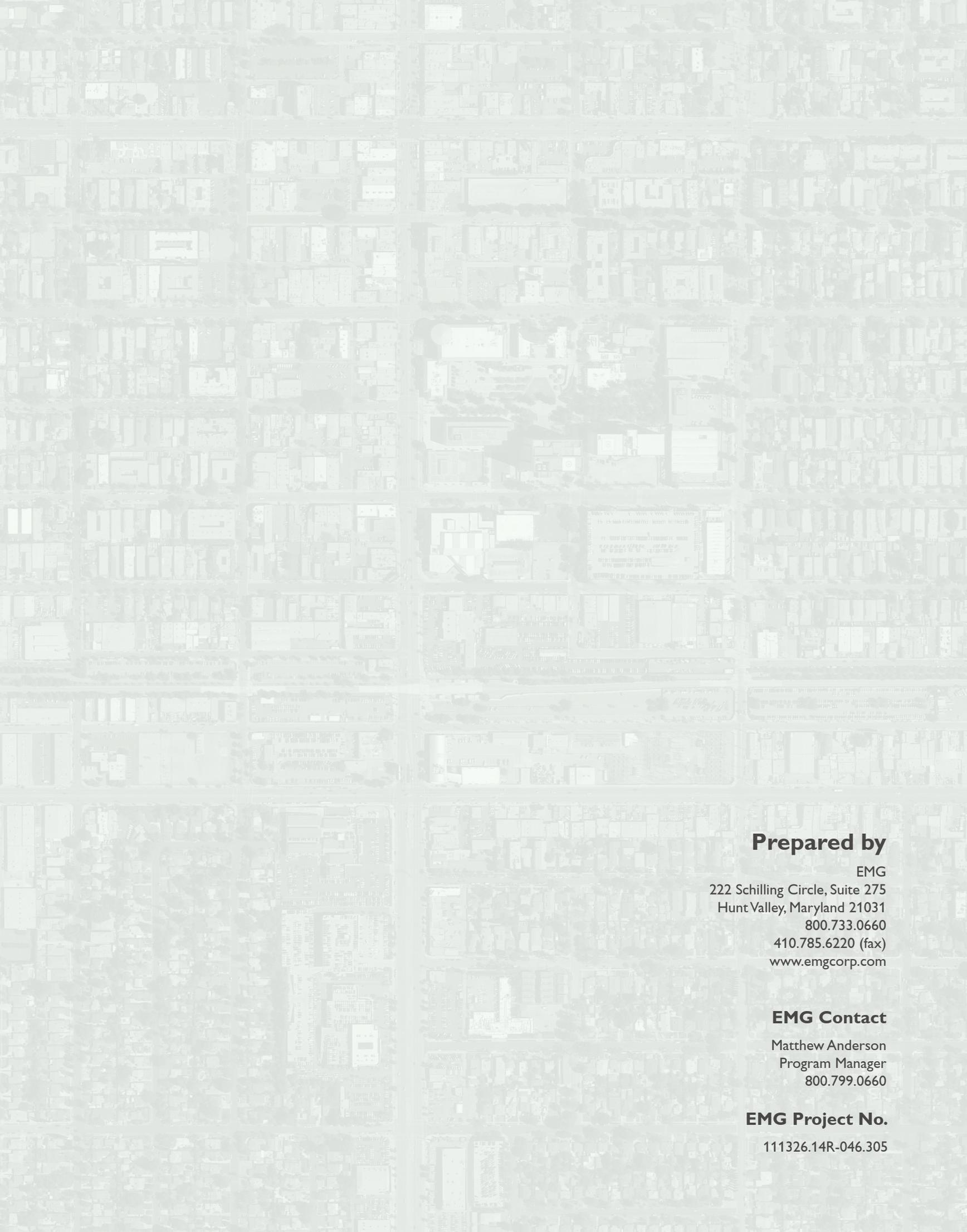
Please note that the given budget is in 2015 dollars. For each year after 2015 that the modernization is budgeted, we recommend adding 5-7% to our budget numbers. This is to account both for increases in union labor and also for continued recovery in the elevator modernization market, which has been 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 \$25,000. 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 \$15,000 to the budget for that purpose.

The total budget for the recommended modernization project is \$200,000. 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 \$25,000 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.



Prepared by

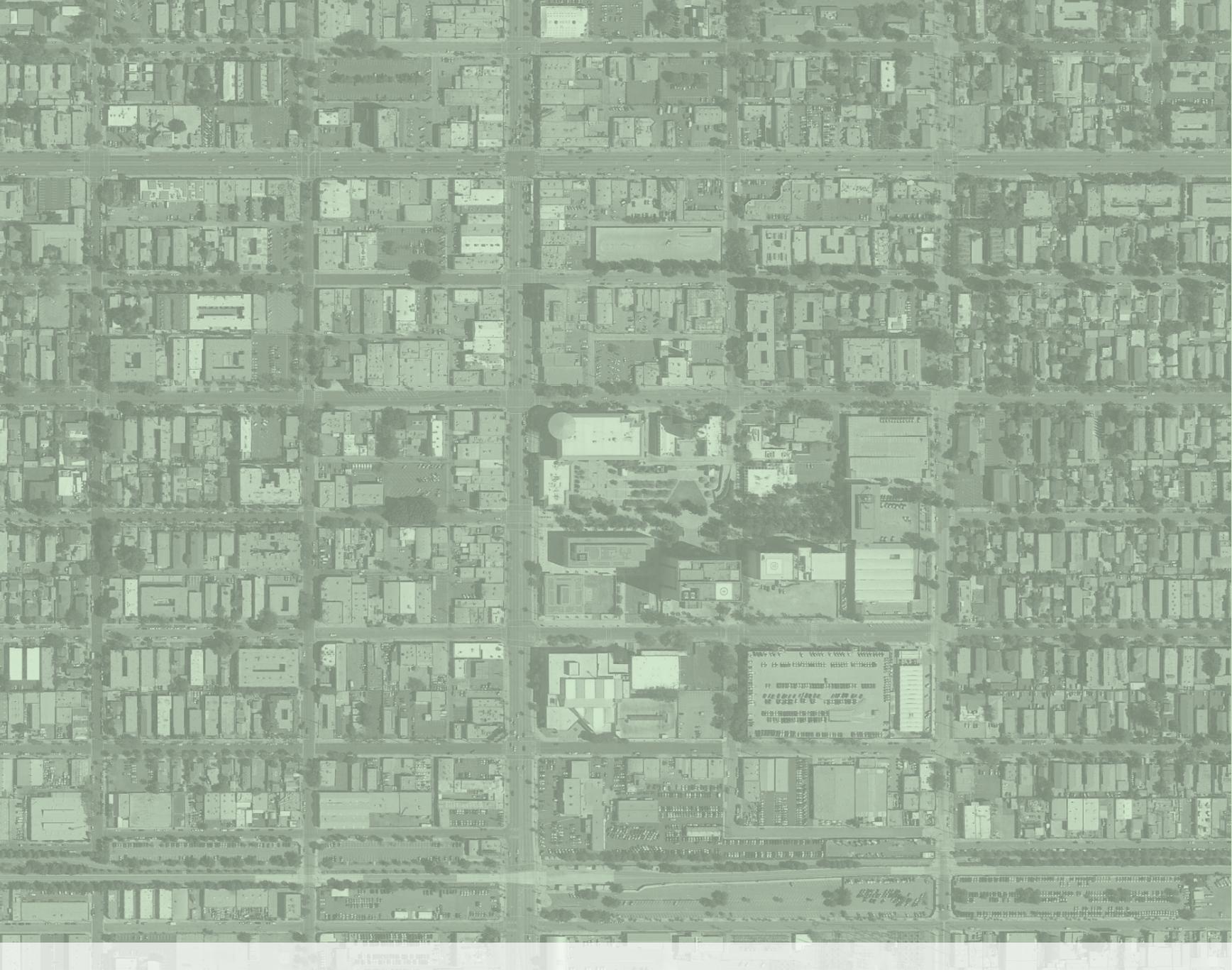
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