

FACILITY NEEDS ASSESSMENTS
MILLER MIDDLE SCHOOL

2020 | FACILITIES MASTER PLAN



SITE DATA



6151 Rainbow Drive
San Jose, Ca

Site Size: 22 acres

Original Construction Date: 1959

Grades Served: 6-8

Modernization History:

- Modernization: 2015
- Roof Repairs: 2017

Number of Portable Classrooms: 15 plus 1 restroom portable

Principal Survey

Top Priorities:

1. Event Center
2. Drop-off area
3. Rubberized track and turf field
4. Outdoor lunch area with protection from the rain/sun

Input from Maintenance & Operations Trades

- Would like an IP-based bell/clock/intercom system
- Needs upgrade to wireless internet capacity (switches and access points)
- Needs a central IDF room
- Needs upgrade in site electrical capacity
- Switchgear may need to be replaced
- This is a top priority site for exterior paint
- This is a top priority site for kitchen and server improvements

Site Use and Functionality

Campus Organization / Classrooms

principal rating: 4/5 stars

Miller is primarily composed of single-loaded classroom wings organized around a central open space (Quad) and Library. A cluster of portable classrooms sit beyond the hardcourts, primarily serving 6th grade classrooms. The site would like the portable classrooms to be replaced with permanent construction.

Staff and Administrative Spaces

principal rating: 4/5 stars

The site expressed that Administration spaces need updated furniture and more, larger offices and conference spaces.

Student Services / Counseling

Student Counseling Services are found within the Administration front office and in a standard classroom shared with Math. The offices in the Administration building are small and have very limited access to conference spaces.

Food Service

principal rating: /5 stars

The kitchen and interior serveries are part of the Multi-Purpose Room (also referred to as the small Gym). Ideally these uses would not occupy the same space. The site does not have a covered eating area or shade structure. Student dining is spread all throughout campus. Indoor cafeteria tables at the MPR are not functional.

Spaces for Assembly / Library

principal rating: 3/5 stars

Assemblies occur by grade level within the Gym. The Library has a mix of flexible and lounge-style furniture. The site would like the Library updated to be more relevant to the way students use a Library space today.

Special Education

principal rating: 4/5 stars

There are two (2) Special Education classrooms dedicated to moderate/severe students and one (1) classroom dedicated to mild/moderate students.

Specialized Elective Spaces

Music utilizes (2) dedicated spaces on campus. For performances, music (Band and Choir) use the Gym. The site also has dedicated spaces for Digital Photography, Wood Shop, and a Culinary Arts / Sewing room. There is a room within the Library building that is used by the community. During school hours, classes use it as a Maker Space. Many materials have been collected over time resulting in the need for better storage and organization solutions.

SITE DATA, continued

Site Use and Functionality

PE and Athletics Spaces

principal rating: /5

The locker rooms were not included in the modernization and area largely underutilized. The Gymnasium does not have air conditioning. There is one (1) dedicated fitness room (the Mat room) and very limited storage for athletics. The track is decomposed granite and should be replaced with an all-weather track. The principal is happy with the amount of hardcourt space.

Restrooms

principal rating: 3/5

Restrooms in the Locker Rooms experience backups and are out of order regularly.

Site

Miller does not have an off-street drop-off lane. Curbside drop-off occurs along Rainbow and Di Napoli Drive. There are two (2) parking lots

SITE PHOTOS



Shade Structure



Drop-Off Lane



Site Identification and Announcements



Campus Grounds



Hardcourts



Administration Office



Playfields / Athletics



Quad



Conference Room

SITE PHOTOS



Typical Classroom



Special Education Classroom



Art Classroom



Science Lab / Classroom



Science Prep Room



Music Room



Wood Shop



Community Room



Culinary Arts

SITE PHOTOS



Mat Room



Multi-Purpose Room / Small Gym



Library



Faculty Work Room



Faculty Lounge



Gymnasium



Food Service: Serving

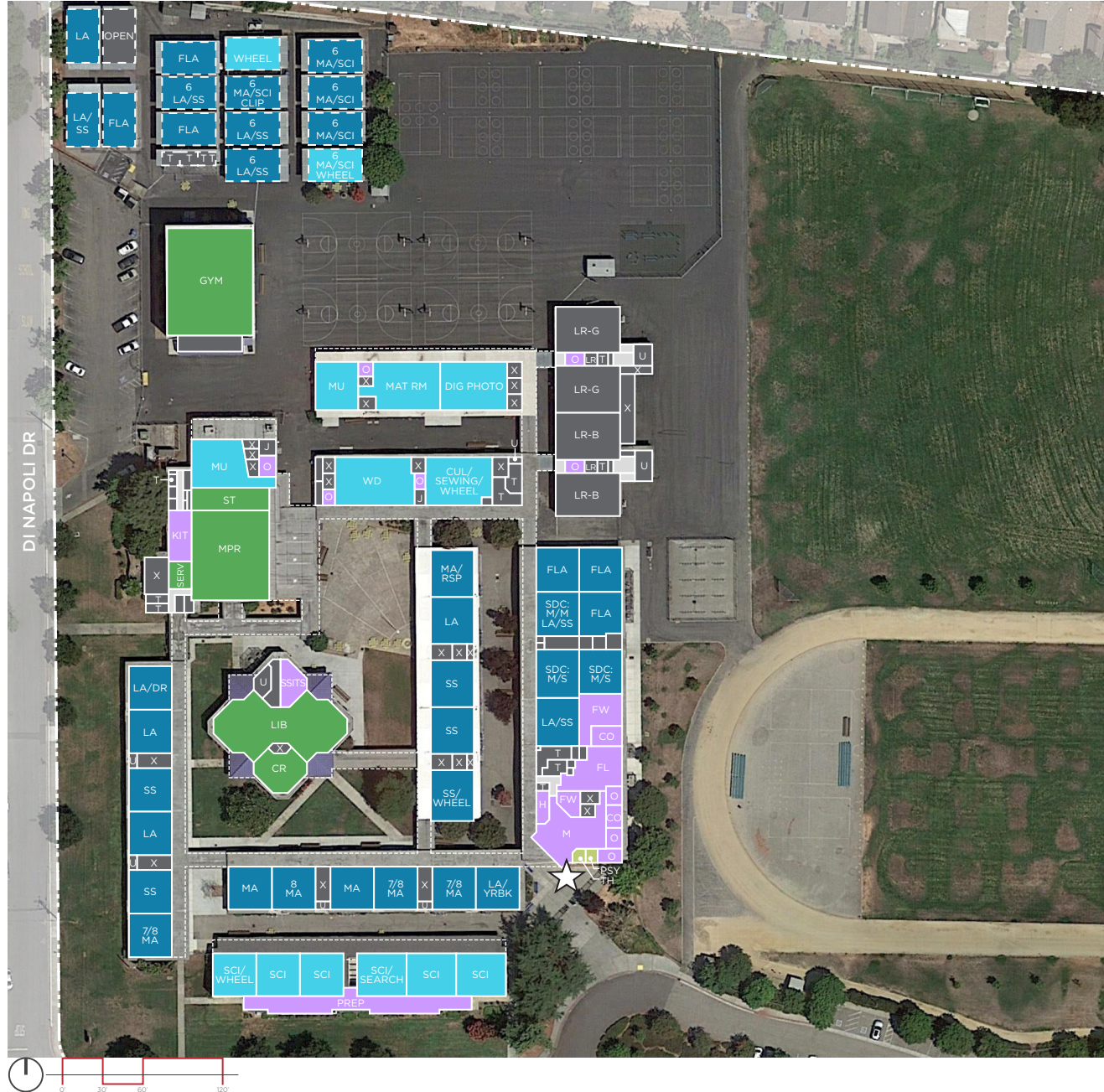


Food Service: Kitchen



Locker Rooms

EXISTING SITE PLAN



Classrooms, CR

#	Indicates Grade	SDC	Special Education
LA	Language Arts	M/M	Mild/Moderate
FLA	Foreign Language	M/S	Moderate/Severe
MA	Math	CAP	Comp. Autism
SS	Social Science		
TSDC	Therapeutic SDC		

Electives / Labs

ART	Art Room (2D, 3D, Digital)	MT	Metal Shop
CL	Computer Lab	MU	Music
CUL	Culinary/Foods	P	Music Practice Rm
DR	Drama	SCI	Science
MKR	Maker/STEAM	WD	Wood Shop
MM	Multi-Media	WH	Wheel (6th Grade)
		YRKB	Yearbook

Student Services

ELD	Eng. Language Development	PSY	Psychologist
CO	Counselor	RSP	Resource Specialist
INT	Intervention	THER	Therapist
LC	Learning Center	WC	Wellness Center
OT	Occupational Therapy		

Shared Spaces

ASB	Student Leadership
CR	Community Room
GLC	Guided Learning Center
LIB	Library
MPR	Multi Purpose Room
SERV	Servory
ST	Stage

Admin / Faculty

CO	Conference	H	Health Office
O	Office	KIT	Kitchen
FL	Faculty Lounge	M	Main Office
FLEX	Flex Lab	SSITS	School Site IT
FW	Faculty Work		Specialist Office

Other

AS	After School Care
----	-------------------

Support Services

E	Elevator
J	Janitor
T	Toilets
U	Utility
X	Storage

Drop-Off

LS - Lunch Shelter

Main Entry

Portable Classrooms

Teaching Stations:

Core Required Courses	33
Science Labs	6
Electives	7
SDC mild/mod	1
SDC mod/sev	2
SDC CAP	0
Sub-Total:	49

Additional Spaces:

Computer Lab	0
Total:	49

EXISTING SITE PLAN



Classrooms, CR			
#	Indicates Grade	SDC	Special Education
LA	Language Arts	M/M	Mild/Moderate
FLA	Foreign Language	M/S	Moderate/Severe
MA	Math	CAP	Comp. Autism
SS	Social Science		
TSDC	Therapeutic SDC		

Electives / Labs			
ART	Art Room	MT	Metal Shop
	(2D, 3D, Digital)	MU	Music
CL	Computer Lab	P	Music Practice Rm
CUL	Culinary/Foods	SCI	Science
DR	Drama	WD	Wood Shop
MKR	Maker/STEAM	WH	Wheel (6th Grade)
MM	Multi-Media	YRBK	Yearbook

Student Services			
ELD	Eng. Language Development	PSY	Psychologist
CO	Counselor	RSP	Resource Specialist
INT	Intervention	THER	Therapist
LC	Learning Center	WC	Wellness Center
OT	Occupational Therapy		

Shared Spaces	
ASB	Student Leadership
CR	Community Room
GLC	Guided Learning Center
LIB	Library
MPR	Multi Purpose Room
SERV	Servery
ST	Stage

Admin / Faculty			
CO	Conference	H	Health Office
O	Office	KIT	Kitchen
FL	Faculty Lounge	M	Main Office
FLEX	Flex Lab	SSITS	School Site IT
FW	Faculty Work		Specialist Office

Other	
AS	After School Care

Support Services	
E	Elevator
J	Janitor
T	Toilets
U	Utility
X	Storage

Drop-Off	LS - Lunch Shelter
Main Entry	Portable Classrooms

Teaching Stations:	
Core Required Courses	33
Science Labs	6
Electives	7
SDC mild/mod	1
SDC mod/sev	2
SDC CAP	0
Sub-Total:	49
Additional Spaces:	
Computer Lab	0
Total:	49



A Bureau Veritas Group Company

FACILITY CONDITION ASSESSMENT

LPA, Inc.
60 South Market Street, Suite 150
San Jose, California 95113
Walter Estay



MILLER MIDDLE SCHOOL
6151 RAINBOW DRIVE
SAN JOSE, CALIFORNIA 95129

PREPARED BY:

EMG | A Bureau Veritas Company
10461 Mill Run Circle, Suite 1100
Owings Mills, Maryland 21117
800.733.0660
www.emgcorp.com

EMG CONTACT:

Matthew Anderson
Program Manager
800.733.0660 x7613

EMG PROJECT #:

136859.19R000-024.017

DATE OF REPORT:

January 31, 2020

ON SITE DATE:

October 15, 2019



engineering | environmental | capital planning | project management

A Bureau Veritas Group Company

www.EMGcorp.com | 800.733.0660



TABLE OF CONTENTS

1. Executive Summary	1
Campus Overview and Assessment Details	1
Plan Types.....	2
Campus Findings and Deficiencies	3
Facility Condition Index (FCI)	4
Immediate Needs.....	5
Key Findings	6
2. Classrooms	8
3. Gym.....	10
4. Library.....	12
5. Multipurpose	14
6. PE Building.....	16
7. Portables	18
8. Science Wing	20
9. Site Summary.....	22
10. Property Space Use and Observed Areas	23
11. ADA Accessibility	24
12. Purpose and Scope	28
13. Opinions of Probable Costs	30
Methodology	30
Definitions	30
14. Certification.....	32
15. Appendices	33

1. Executive Summary

Campus Overview and Assessment Details

General Information	
Property Type	Middle school campus
Main Address	6151 Rainbow Drive, San Jose, California 95129, Santa Clara County
Site Developed	1959
Number of Buildings	27
Current Occupants	Cupertino School district
Percent Utilization	100%
Date(s) of Visit	October 15, 2019
Management Point of Contact	Cupertino School District, Walter Estay 408.780.7225 phone westay@lpadesignstudios.com email
On-site Point of Contact (POC)	Eric Doller 408.828.7918
Assessment and Report Prepared By	Dirk Dykstra, Elton Colbert
Reviewed By	Alex Israel, Technical Report Reviewer for Matthew Anderson Program Manager manderson@emgcorp.com 800.733.0660 x7613

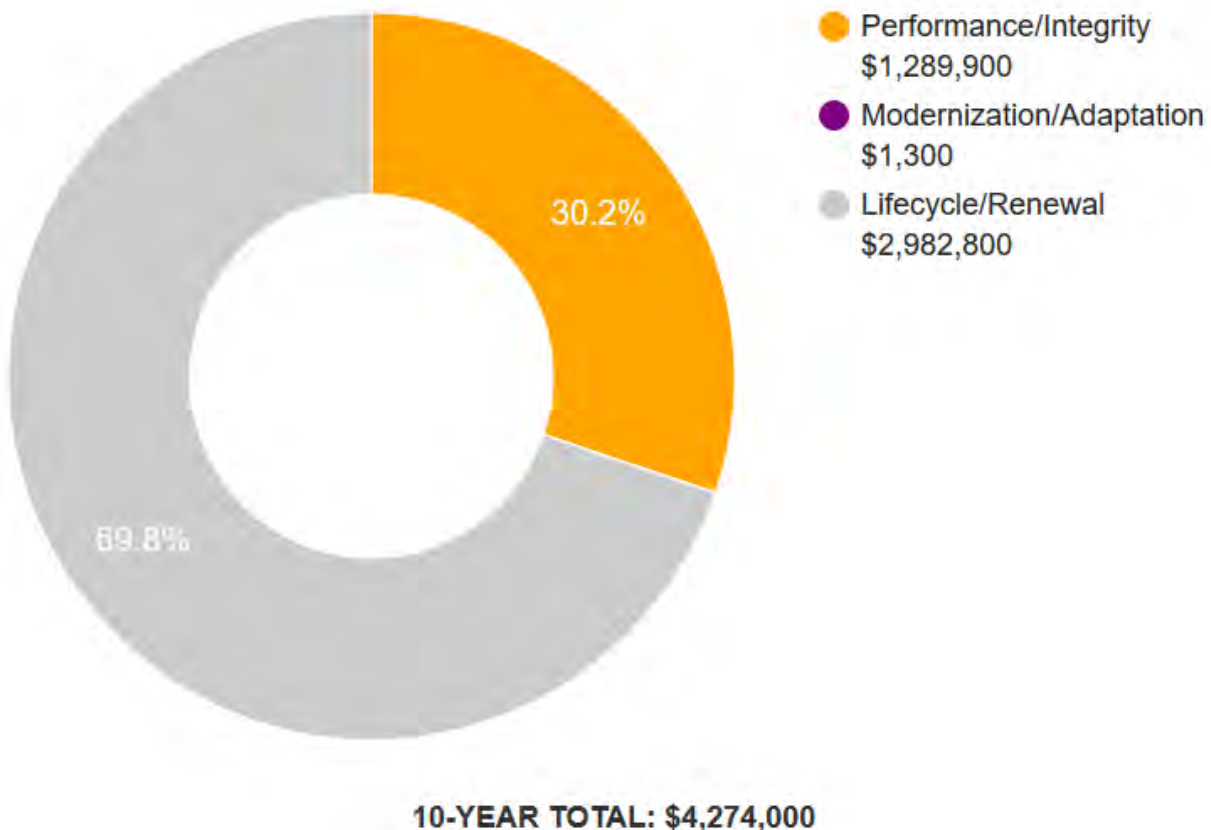
Plan Types

Each line item in the cost database is assigned a Plan Type, which is the primary reason or rationale for the recommended replacement, repair, or other corrective action. This is the “why” part of the equation. A cost or line item may commonly have more than one applicable Plan Type; however, only one Plan Type will be assigned based on the “best” fit, typically the one with the greatest significance.

Plan Type Descriptions

Safety	■	An observed or reported unsafe condition that if left unaddressed could result in injury; a system or component that presents potential liability risk.
Performance/Integrity	■	Component or system has failed, is almost failing, performs unreliably, does not perform as intended, and/or poses risk to overall system stability.
Accessibility	■	Does not meet ADA, UFAS, and/or other handicap accessibility requirements.
Environmental	■	Improvements to air or water quality, including removal of hazardous materials from the building or site.
Retrofit/Adaptation	■	Components, systems, or spaces recommended for upgrades in in order to meet current standards, facility usage, or client/occupant needs.
Lifecycle/Renewal	■	Any component or system that is not currently deficient or problematic but for which future replacement or repair is anticipated and budgeted.

Plan Type Distribution (by Cost)



Campus Findings and Deficiencies

Historical Summary

The site was developed as a middle school in 1959. Classrooms structures have been added over time. No major renovations have taken place. The occupancy has remained the same since construction.

Architectural

The original buildings are CMU, steel, or wood-framed structures on concrete slab-on-grade. The roof finishes vary and metal, asphalt shingle, or modified bitumen. The siding also varies and is either stucco or wood clapboard. Both the roofing and the siding are experiencing varying degrees of deterioration with several modified bitumen roofs and areas of stucco in need of replacement. The exterior doors are aluminum, some fully glazed. There is an overhead dock door that is at the end of its useful lifecycle. The exterior windows are a mix of storefront and metal-framed units. The buildings and interior spaces are a mixture of offices, classrooms, a library, restrooms, locker/shower rooms, a kitchen, and a multipurpose room. In all structures, lifecycle replacement of finishes and fixtures is anticipated.

The newer buildings are modular classrooms. They are wood structures with raised floors. The roofs are metal, and the siding is wood clapboard. The exterior doors and windows are metal. One of the modules also houses a pair of restrooms. In all structures, lifecycle replacement of finishes and fixtures is anticipated.

Mechanical, Electrical, Plumbing and Fire (MEPF)

The main buildings are heated and cooled by a mixture of grade- and roof-mounted packaged units of various sizes and ages. In addition, there are split systems with furnaces and remote condensing units throughout, and one ductless split system. A mix of gas-fired and electric domestic water heaters are located throughout. The buildings are not covered by fire suppression systems and very few fire extinguishers were observed. The fire alarm systems consist of smoke detectors, pull-stations, and visual and auditory alarms. Most exits are marked by a lighted exit sign, and the library is equipped with emergency lighting.

The modular classrooms are heated and cooled by wall-mounted heat pumps. The restroom modular is equipped with an electric domestic water heater. The buildings are not covered by fire suppression systems and no fire extinguishers were observed. The fire alarm systems consist smoke detectors, and visual and auditory alarms; no exit signs were observed.

All the MEP units continue to operate with no discernable or reported issues regardless of age or location. Interior lighting throughout each building consists of fluorescent fixtures. The exterior lighting is building mounted and has recently been upgraded to LED. The electrical service consists of a main switchboard which distributes power to secondary panels throughout; the switchboard is reportedly adequate to serve all facilities.

Site

There is minor alligator cracking and deteriorating asphalt throughout the site. The striping is worn but discernable. The site has large play fields, picnic tables, bench seating, and bicycle storage. There are several small, prefabricated storage structures located throughout the site.

Recommended Additional Studies

No additional studies are recommended.

Facility Condition Index (FCI)

One of the major goals of the FCA is to calculate each building's Facility Condition Index (FCI), which provides a theoretical objective indication of a building's overall condition. By definition, the FCI is defined as the ratio of the cost of current needs divided by current replacement value (CRV) of the facility. The chart below presents the industry standard ranges and cut-off points.

FCI Ranges and Description

0 – 5%	In new or well-maintained condition, with little or no visual evidence of wear or deficiencies.
5 – 10%	Subjected to wear but is still in a serviceable and functioning condition.
10 – 30%	Subjected to hard or long-term wear. Nearing the end of its useful or serviceable life.
30% and above	Has reached the end of its useful or serviceable life. Renewal is now necessary.

The deficiencies and lifecycle needs identified in this assessment provide the basis for a portfolio-wide capital improvement funding strategy. In addition to the current FCI, extended FCIs have been developed to provide owners the intelligence needed to plan and budget for the “keep-up costs” for their facilities. As such the 3-year, 5-year, and 10-year FCIs are calculated by dividing the anticipated needs of those respective time periods by current replacement value. As a final point, the FCIs ultimately provide more value when used to relatively compare facilities across a portfolio instead of being over-analyzed and scrutinized as stand-alone values. The table below summarizes the individual findings for this FCA:

Facility (year built)	Cost/SF	Total SF	Replacement Value	Current	3-Year	5-Year	10-Year
Miller Middle School / Classroom Buildings	\$740	47,475	\$35,131,500	0.0%	0.5%	0.6%	2.0%
Miller Middle School / Gym	\$740	6,050	\$4,477,000	0.0%	2.8%	2.9%	5.6%
Miller Middle School / Library	\$740	7,500	\$5,550,000	0.0%	6.1%	6.2%	8.6%
Miller Middle School / M/U	\$740	7,500	\$5,550,000	0.0%	9.8%	10.1%	15.0%
Miller Middle School / PE Building	\$740	8,000	\$5,920,000	0.0%	2.7%	2.7%	7.3%
Miller Middle School / Portables	\$380	14,415	\$5,477,700	0.0%	0.0%	0.0%	2.0%
Miller Middle School / Science Wing	\$740	9,500	\$7,030,000	0.0%	0.0%	0.0%	3.1%

Immediate Needs

Facility/Building	Total Items	Total Cost
Miller Middle School	2	\$287,855
Total	2	\$287,855

Miller Middle School

ID	Location	Location Description	UF Code	Description	Condition	Plan Type	Cost
1489182	Miller Middle School / Gym	Gym (Low Slope)	B3011	Roof, Modified Bituminous, Replace	Poor	Performance/Integrity	\$122,166
1489160	Miller Middle School / Classroom Buildings	CR 1-6, 13-33, 37-38	B3011	Roof, Modified Bituminous, Replace	Poor	Performance/Integrity	\$165,689
Total (2 items)							\$287,855

Key Findings



Exterior Wall in Poor condition.

Stucco, 1-2 Stories
PE Building Exterior

Uniformat Code: B2011
Recommendation: **Replace in 2021**

Plan Type:
Performance/Integrity

Cost Estimate: \$140,700

\$\$\$\$

Extensive cracking observed. - AssetCALC ID: 1489332



Roof in Poor condition.

Modified Bituminous
Classroom Buildings CR 1-6, 13-33, 37-38

Uniformat Code: B3011
Recommendation: **Replace in 2020**

Plan Type:
Performance/Integrity

Cost Estimate: \$165,700

\$\$\$\$

Heavily worn, vegetative growth observed - AssetCALC ID: 1489160



Roof in Poor condition.

Modified Bituminous
Library 920 (Low Slope)

Uniformat Code: B3011
Recommendation: **Replace in 2021**

Plan Type:
Performance/Integrity

Cost Estimate: \$39,500

\$\$\$\$

Signs of leaks, damaged membrane - AssetCALC ID: 1528293



Exterior Wall in Poor condition.

Stucco, 1-2 Stories
Library Building Exterior

Uniformat Code: B2011
Recommendation: **Replace in 2021**

Plan Type:
Performance/Integrity

Cost Estimate: \$277,700

\$\$\$\$

Cracking observed across stucco - AssetCALC ID: 1489199

**Roof in Poor condition.**

Modified Bituminous
Gym (Low Slope)

Uniformat Code: B3011
Recommendation: **Replace in 2020**

Plan Type:
Performance/Integrity

Cost Estimate: \$122,200

\$\$\$\$

Signs of leaks, vegetation growth, damaged membrane - AssetCALC ID: 1489182

**Roof in Poor condition.**

Modified Bituminous
M/U CR 31

Uniformat Code: B3011
Recommendation: **Replace in 2021**

Plan Type:
Performance/Integrity

Cost Estimate: \$81,400

\$\$\$\$

Heavily worn, vegetative growth observed - AssetCALC ID: 1489341

**Exterior Wall in Poor condition.**

Stucco, 1-2 Stories
M/U Building Exterior

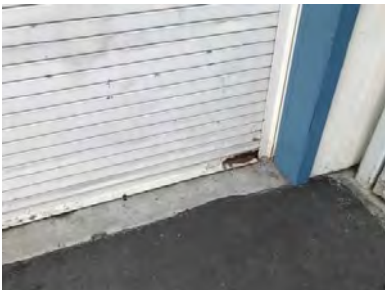
Uniformat Code: B2011
Recommendation: **Replace in 2021**

Plan Type:
Performance/Integrity

Cost Estimate: \$425,700

\$\$\$\$

Cracking observed across stucco - AssetCALC ID: 1489130

**Overhead/Dock Door in Poor condition.**

144 SF
PE Building Exterior

Uniformat Code: B2034
Recommendation: **Replace in 2021**

Plan Type:
Performance/Integrity

Cost Estimate: \$7,900

\$\$\$\$

Doors are rusted and dented. - AssetCALC ID: 1489174

2. Classrooms



Building Type 1: Systems Summary

Address	6151 Rainbow Drive, San Jose, California	
Constructed/Renovated	1959	
Building Size	47,475 SF	
Number of Stories	One	
<i>System</i>	<i>Description</i>	<i>Condition</i>
Structure	Wood-framed structure on concrete slabs	Fair
Façade	Wood siding with steel-framed windows	Fair
Roof	Primary: Flat construction with modified bituminous finish	Poor
Interiors	Interior finishes excluded from assessment	--
Elevators	None	--
Plumbing	Copper supply, cast iron waste and vent Gas and electric domestic water heaters Toilets, urinals, and sinks in all restrooms	Fair
HVAC	Packaged site and rooftop units, split systems Supplemental components: ductless Split system	Fair
Fire Suppression	None	--
Electrical	Source & Distribution: Sub panels with copper wiring fed from site switchboard with copper wiring Interior Lighting: T-8, T-5	Fair
Fire Alarm	Alarm panel, smoke detectors, alarms, strobes, pull stations, and exit signs	Good
Equipment/Special	None	--

Building Type 1: Systems Summary

Accessibility	Presently it does not appear an accessibility study is needed for this property.
Key Issues and Findings	Modified bituminous roof in need of replacement on most of the classrooms, no fire extinguishers, no emergency lighting

3. Gym



Building Type 2: Systems Summary

Address	6151 Rainbow Drive, San Jose, California	
Constructed/Renovated	1959	
Building Size	6,050 SF	
Number of Stories	One	
<i>System</i>	<i>Description</i>	<i>Condition</i>
Structure	Masonry bearing walls and wood-framed roofs on concrete slabs	Fair
Façade	Stucco with steel-framed windows	Fair
Roof	Primary: Flat construction with modified bituminous finish Secondary: Shed construction with metal finish	Poor
Interiors	Interior finishes excluded from assessment	--
Elevators	None	--
Plumbing	Copper supply, cast iron waste and vent No hot water	Fair
HVAC	Rooftop furnaces	Fair
Fire Suppression	None	--
Electrical	Source & Distribution: Sub panels with copper wiring fed from site switchboard with copper wiring Interior Lighting: T-8, T-5	Fair
Fire Alarm	Smoke detectors, alarms, strobes, pull stations, and exit signs	Good
Equipment/Special	Bleachers, scoreboard, basketball backstops	Fair
Accessibility	Presently it does not appear an accessibility study is needed for this property.	

Building Type 2: Systems Summary

Key Issues and Findings

Modified bituminous roof in need of replacement, no fire extinguishers, no emergency lighting

4. Library



Building Type 3: Systems Summary

Address	6151 Rainbow Drive, San Jose, California	
Constructed/Renovated	1959	
Building Size	7,500 SF	
Number of Stories	One	
<i>System</i>	<i>Description</i>	<i>Condition</i>
Structure	Wood-framed structure on concrete slabs	Fair
Façade	Stucco with steel-framed windows	Poor
Roof	Primary: Gable construction with metal finish Secondary: Flat construction with modified bituminous finish	Poor
Interiors	Interior finishes excluded from assessment	--
Elevators	None	--
Plumbing	Copper supply, cast iron waste and vent Electric domestic water heater Stainless countertop sink	Fair
HVAC	Split systems	Fair
Fire Suppression	None	--
Electrical	Source & Distribution: Sub panels with copper wiring fed from site switchboard with copper wiring Interior Lighting: T-8, T-5	Fair
Fire Alarm	Smoke detectors, alarms, strobes, pull stations, and exit signs	Good
Equipment/Special	None	--
Accessibility	Presently it does not appear an accessibility study is needed for this property.	

Building Type 3: Systems Summary

Key Issues and Findings

Stucco cracking and chipping, modified bituminous roof in need of replacement, no fire extinguishers, no emergency lighting

5. Multipurpose



Building Type 4: Systems Summary

Address	6151 Rainbow Drive, San Jose, California	
Constructed/Renovated	1959	
Building Size	7,500 SF	
Number of Stories	One	
<i>System</i>	<i>Description</i>	<i>Condition</i>
Structure	Steel- and wood-framed structure on concrete slabs	Fair
Façade	Stucco with steel-framed windows	Poor
Roof	Primary: Gable construction with modified bituminous finish Secondary: Gable construction with modified bituminous finish	Poor
Interiors	Interior finishes excluded from assessment	--
Elevators	None	--
Plumbing	Copper supply, cast iron waste and vent Gas-fired domestic water heaters Toilets, urinals, and sinks in all restrooms Stainless steel commercial and countertop sinks	Fair
HVAC	Packaged site and rooftop units, split systems	Fair
Fire Suppression	None	--
Electrical	Source & Distribution: Sub panels with copper wiring fed from site switchboard with copper wiring Interior Lighting: T-8, T-5	Fair
Fire Alarm	Smoke detectors, alarms, strobes, and exit signs	Good
Equipment/Special	Commercial kitchen equipment	Fair

Building Type 4: Systems Summary

Accessibility	Presently it does not appear an accessibility study is needed for this property.
Key Issues and Findings	Stucco cracking and chipping, a portion of the modified bituminous roof in need of replacement, no fire extinguishers, no emergency lighting

6. PE Building



Building Type 5: Systems Summary

Address	6151 Rainbow Drive, San Jose, California	
Constructed/Renovated	1959	
Building Size	8,000 SF	
Number of Stories	One	
<i>System</i>	<i>Description</i>	<i>Condition</i>
Structure	Wood-framed structure on concrete slabs	Fair
Façade	Stucco with steel-framed windows	Poor
Roof	Primary: Flat construction with modified bituminous finish	Poor
Interiors	Walls: Painted gypsum board, ceramic tile Floors: Terrazzo, epoxy finished concrete Ceilings: Painted gypsum board	Good
Elevators	None	--
Plumbing	Copper supply, cast iron waste and vent Gas-fired domestic water heaters Toilets, urinals, and sinks in all restrooms Wall-hung service sink	Fair
HVAC	Split system	Fair
Fire Suppression	One fire extinguisher	Fair
Electrical	Source & Distribution: Sub panels with copper wiring fed from site switchboard with copper wiring Interior Lighting: T-8, T-5	Fair
Fire Alarm	Smoke detectors, alarms, and strobes	Good

Building Type 5: Systems Summary

Equipment/Special	None	--
Accessibility	Presently it does not appear an accessibility study is needed for this property.	
Key Issues and Findings	Modified bituminous roof in need of replacement, only one fire extinguisher, no emergency lighting, no exit signs	

7. Portables



Building Type 6: Systems Summary

Address	6151 Rainbow Drive, San Jose, California	
Constructed/Renovated	1959	
Building Size	14,415 SF	
Number of Stories	One	
<i>System</i>	<i>Description</i>	<i>Condition</i>
Structure	Wood-framed structures with raised floors	Good
Façade	Wood siding with steel-framed windows	Good
Roof	Primary: Flat construction with metal finish	Good
Interiors	Interior finishes excluded from assessment	--
Elevators	None	--
Plumbing	Copper supply, cast iron waste and vent Electric domestic water heater Toilets, urinals, and sinks in all restrooms Stainless steel countertop sinks	Good
HVAC	Wall mounted packaged units	Good
Fire Suppression	None	--
Electrical	Source & Distribution: Sub panels with copper wiring fed from site switchboard with copper wiring Interior Lighting: T-8, T-5	Fair
Fire Alarm	Smoke detectors, alarms, and strobes	Good
Equipment/Special	None	--
Accessibility	Presently it does not appear an accessibility study is needed for this property.	

Building Type 6: Systems Summary

Key Issues and Findings No fire extinguishers, no emergency lighting, no exit signs

8. Science Wing



Building Type 7: Systems Summary

Address	6151 Rainbow Drive, San Jose, California	
Constructed/Renovated	1959	
Building Size	9,500 SF	
Number of Stories	One	
<i>System</i>	<i>Description</i>	<i>Condition</i>
Structure	Wood-framed structure on concrete slabs	Fair
Façade	Stucco with steel-framed windows	Fair
Roof	Primary: Flat construction with asphalt shingles Secondary: Shed construction with metal finish Tertiary: Flat construction with modified bituminous finish	Fair
Interiors	Interior finishes excluded from assessment	--
Elevators	None	--
Plumbing	Copper supply, cast iron waste and vent Gas-fired domestic water heater Toilets, urinals, and sinks in all restrooms Stainless steel countertop sinks	Fair
HVAC	Rooftop packaged units	Fair
Fire Suppression	None	--
Electrical	Source & Distribution: Sub panels with copper wiring fed from site switchboard with copper wiring Interior Lighting: T-8, T-5	Fair
Fire Alarm	Smoke detectors, alarms, pull stations and strobes	Good

Building Type 7: Systems Summary

Equipment/Special	None	--
Accessibility	Presently it does not appear an accessibility study is needed for this property.	
Key Issues and Findings	No fire extinguishers, no emergency lighting, no exit signs	

9. Site Summary



Site Information

Lot Size	21.2 acres (estimated)	
Parking Spaces	32 total spaces all in open lots; two of which are accessible	
<i>System</i>	<i>Description</i>	<i>Condition</i>
Pavement/Flatwork	Asphalt lots with areas of concrete and concrete sidewalks, curbs, and ramps	Fair
Site Development	Property entrance signage, chain link and metal tube fencing Limited park benches, picnic tables, trash receptacles Sports fields, sports equipment, bicycle storage, flagpole	Fair
Landscaping and Topography	Heavy landscaping features Irrigation present Low to moderate site slopes throughout	Fair
Utilities	Municipal water and sewer Local utility-provided electricity and natural gas	Fair
Site Lighting	Building-mounted: LED	Good
Ancillary Structures	Prefabricated storage sheds	Good
Accessibility	Presently it does not appear an accessibility study is needed for the exterior site areas. See Section 11.	
Key Issues and Findings	None	

10. Property Space Use and Observed Areas

Unit Allocation

All 100,440 square feet of the property are occupied by City of Cupertino. The spaces a combination of offices, classrooms, library, lockers/showers, gymnasium, and multipurpose, with supporting restrooms, and mechanical and other utility spaces.

Areas Observed

All of the interior spaces were observed in order to gain a clear understanding of the property's overall condition. Other areas accessed included the site within the property boundaries, the exterior of the property, and the roofs.

Key Spaces Not Observed

All key areas of the property were accessible and observed.

11. ADA Accessibility

Generally, Title II of the Americans with Disabilities Act (ADA) prohibits discrimination by entities to access and use of “areas of public accommodations” and “public facilities” on the basis of disability. Regardless of their age, these areas and facilities must be maintained and operated to comply with the Americans with Disabilities Act Accessibility Guidelines (ADAAG).

A public entity (i.e. city governments) shall operate each service, program, or activity so that the service, program, or activity, when viewed in its entirety, is readily accessible to and usable by individuals with disabilities.

However, this does not:

1. Necessarily require a public entity to make each of its existing facilities accessible to and usable by individuals with disabilities;
2. Require a public entity to take any action that would threaten or destroy the historic significance of an historic property; or
3. Require a public entity to take any action that it can demonstrate would result in a fundamental alteration in the nature of a service, program, or activity or in undue financial and administrative burdens. In those circumstances where personnel of the public entity believe that the proposed action would fundamentally alter the service, program, or activity or would result in undue financial and administrative burdens, a public entity has the burden of proving that compliance with 35.150(a) of this part would result in such alteration or burdens. The decision that compliance would result in such alteration or burdens must be made by the head of a public entity or his or her designee after considering all resources available for use in the funding and operation of the service, program, or activity, and must be accompanied by a written statement of the reasons for reaching that conclusion. If an action would result in such an alteration or such burdens, a public entity shall take any other action that would not result in such an alteration or such burdens but would nevertheless ensure that individuals with disabilities receive the benefits or services provided by the public entity.

During the FCA, EMG performed a limited high-level accessibility review of the facility non-specific to any local regulations or codes. The scope of the visual observation was limited to those areas and categories set forth in the tables throughout this report. It is understood by the Client that the limited observations described herein do not comprise a full ADA Compliance Survey, and that such a survey is beyond the scope of EMG’s undertaking. Only a representative sample of areas was observed and actual measurements were not taken to verify compliance.

Generally, Title III of the Americans with Disabilities Act (ADA) prohibits discrimination by entities to access and use of “areas of public accommodations” and “commercial facilities” on the basis of disability. Regardless of its age, these areas and facilities must be maintained and operated to comply with the Americans with Disabilities Act Accessibility Guidelines (ADAAG).

Buildings completed and occupied after January 26, 1992 are required to comply fully with the ADAAG. Existing facilities constructed prior to this date are held to the lesser standard of compliance to the extent allowed by structural feasibility and the financial resources available. As an alternative, a reasonable accommodation pertaining to barrier removal must be made.

During the FCA, EMG performed a limited high-level accessibility review of the facility non-specific to any local regulations or codes. The scope of the visual observation was limited to those areas and categories set forth in the tables throughout this report. It is understood by the Client that the limited observations described herein do not comprise a full ADA Compliance Survey, and that such a survey is beyond the scope of EMG’s undertaking. Only a representative sample of areas was observed and actual measurements were not taken to verify compliance.

The facility was originally constructed in 1959. The facility was not subsequently renovated. Complaints about accessibility issues have not been received by the property management. The property does not have associated prior or pending litigation related to existing barriers or previously removed barriers.

An accessibility study has not been performed at the site. Although no significant issues were identified, a comprehensive ADA Compliance Survey may reveal specific aspects of the property that are not in full compliance.

Removal of barriers to accessibility should be addressed from a liability standpoint in order to comply with federal law, but the barriers may or may not be building code violations. The Americans with Disabilities Act Accessibility Guidelines are part of the ADA federal civil rights law pertaining to the disabled and are not a construction code. State and local jurisdictions have adopted the ADA Guidelines or have adopted other standards for accessibility as part of their construction codes.

Classrooms: Accessibility Issues

	Major Issues (ADA study recommended)	Moderate Issues (ADA study recommended)	Minor/No Issues
Exterior Path of Travel	☐	☐	☒
Interior Path of Travel	☐	☐	☒
Public Use Restrooms	☐	☐	☒

Gymnasium: Accessibility Issues

	Major Issues (ADA study recommended)	Moderate Issues (ADA study recommended)	Minor/No Issues
Exterior Path of Travel	☐	☐	☒
Interior Path of Travel	☐	☐	☒

Library: Accessibility Issues

	Major Issues (ADA study recommended)	Moderate Issues (ADA study recommended)	Minor/No Issues
Exterior Path of Travel	☐	☐	☒
Interior Path of Travel	☐	☐	☒

Multipurpose: Accessibility Issues

	Major Issues (ADA study recommended)	Moderate Issues (ADA study recommended)	Minor/No Issues
Exterior Path of Travel	☐	☐	☒
Interior Path of Travel	☐	☐	☒
Public Use Restrooms	☐	☐	☒
Kitchen	☐	☐	☒

PE Building: Accessibility Issues

	Major Issues (ADA study recommended)	Moderate Issues (ADA study recommended)	Minor/No Issues
Exterior Path of Travel	☐	☐	☒
Interior Path of Travel	☐	☐	☒
Public Use Restrooms	☐	☐	☒

Portables: Accessibility Issues

	Major Issues (ADA study recommended)	Moderate Issues (ADA study recommended)	Minor/No Issues
Exterior Path of Travel	☐	☐	☒
Interior Path of Travel	☐	☐	☒
Public Use Restrooms	☐	☐	☒

Science Wing: Accessibility Issues

	Major Issues (ADA study recommended)	Moderate Issues (ADA study recommended)	Minor/No Issues
Exterior Path of Travel	☐	☐	☒
Interior Path of Travel	☐	☐	☒

Site: Accessibility Issues

	Major Issues (ADA study recommended)	Moderate Issues (ADA study recommended)	Minor/No Issues
Parking	☐	☐	☒
Exterior Path of Travel	☐	☐	☒

The table below is intended to be used as a general reference guide to help differentiate the orders of magnitude between some of the more commonly observed accessibility issues. The table is not intended to be all-inclusive, and boxes checked in the tables above do not necessarily mean those specific problems or shortcomings cited as examples below exist at the subject buildings and sites. Reference the photolog (in the appendix) and/or *Key Findings* section for visuals and/or more specifics about the subject site conditions.

Reference Guide

	Major Issues (ADA study recommended)	Moderate Issues (ADA study recommended)	Minor/No Issues
Parking	- Needs full reconstruction - Excessive slopes over 3% require major re-grading - No level locations to add required spaces	- No or non-compliant curb cuts - Moderate difficulty to add required accessible spaces - Slopes close to compliant	- Painting of markings needed - Signage height non-compliant - Signage missing
Exterior Path of Travel	- Large areas of sidewalks with excessive slopes - No ramp when needed - Ramps with excessive slopes	- Ramps need rails - Ramps need rail extensions - Need significant # of lever handles - All or most entrance door exterior maneuvering clearance areas with excessive slopes	- One entrance door exterior maneuvering clearance area with excessive slope - A few door knobs instead of lever handles - Non-compliant signage

Reference Guide

	Major Issues (ADA study recommended)	Moderate Issues (ADA study recommended)	Minor/No Issues
Interior Path of Travel	- All or most interior doors appear less than 32" wide - Corridors less than 36" wide - No ramp when needed - Ramps with excessive slopes - Non-compliant treads/risers at means of egress stairways	- Single height drinking fountains - Drinking fountain too high or protrudes into accessible route - Ramps need rails - Ramps need rail extensions - Need significant # of lever handles - Non-compliant rail extensions at egress stairways - All/most door thresholds high	- One door threshold too high - A few door knobs instead of lever handles - Non-compliant door pressures - Non-compliant signage - Switches not within reach range
Public Use Restrooms	- No ADA RR on each accessible floor - Restroom(s) too small - Entire restroom(s) requires renovation - Water closet clearance requires moving walls	- Interior doors appear less than 32" wide - Missing or non-compliant grab bars - Easily fixable clearance issues	- Minor height adjustments required - Non-compliant door pressures - Missing a visual strobe (only required if audible fire alarm already present) - Missing lavatory pipe wraps - Signage not compliant
Elevators	- No elevator present when required - Elevator cab too small	- Panel control buttons not at compliant height - No hands-free emergency communication system - Elevator only has mechanical stops	- Audible/visual signals at every floor may be lacking - Minor signage / Braille issues
Kitchens/Kitchenettes	- Clear space for each appliance not present - Clearance between opposing counters too narrow	- Sink and counter too high - Sink knee and toe clearance not provided where required (built-in) - Less than 50% of cabinetry within reach range	- Dispensers not within reach range - Switches not within reach range - Missing sink pipe wraps if knee and toe clearance required

12. Purpose and Scope

Purpose

EMG was retained by the client to render an opinion as to the Property's current general physical condition on the day of the site visit.

Based on the observations, interviews and document review outlined below, this report identifies significant deferred maintenance issues, existing deficiencies, and material code violations of record, which affect the Property's use. Opinions are rendered as to its structural integrity, building system condition and the Property's overall condition. The report also notes building systems or components that have realized or exceeded their typical expected useful lives.

The physical condition of building systems and related components are typically defined as being in one of five condition ratings. For the purposes of this report, the following definitions are used:

Condition Ratings	
Excellent	New or very close to new; component or system typically has been installed within the past year, sound and performing its function. Eventual repair or replacement will be required when the component or system either reaches the end of its useful life or fails in service.
Good	Satisfactory as-is. Component or system is sound and performing its function, typically within the first third of its lifecycle. However, it may show minor signs of normal wear and tear. Repair or replacement will be required when the component or system either reaches the end of its useful life or fails in service.
Fair	Showing signs of wear and use but still satisfactory as-is, typically near the median of its estimated useful life. Component or system is performing adequately at this time but may exhibit some signs of wear, deferred maintenance, or evidence of previous repairs. Repair or replacement will be required due to the component or system's condition and/or its estimated remaining useful life.
Poor	Component or system is significantly aged, flawed, functioning intermittently or unreliably; displays obvious signs of deferred maintenance; shows evidence of previous repair or workmanship not in compliance with commonly accepted standards; has become obsolete; or exhibits an inherent deficiency. The present condition could contribute to or cause the deterioration of contiguous elements or systems. Either full component replacement is needed or repairs are required to restore to good condition, prevent premature failure, and/or prolong useful life.
Failed	Component or system has ceased functioning or performing as intended. Replacement, repair, or other significant corrective action is recommended or required.
Not Applicable	Assigning a condition does not apply or make logical sense, most commonly due to the item in question not being present.

Scope

The standard scope of the Facility Condition Assessment includes the following:

- Visit the Property to evaluate the general condition of the building and site improvements, review available construction documents in order to familiarize ourselves with, and be able to comment on, the in-place construction systems, life safety, mechanical, electrical, and plumbing systems, and the general built environment.
- Identify those components that are exhibiting deferred maintenance issues and provide cost estimates for Immediate Costs and Replacement Reserves based on observed conditions, maintenance history and industry standard useful life estimates. This will include the review of documented capital improvements completed within the last five-year period and work currently contracted for, if applicable.
- Provide a full description of the Property with descriptions of in-place systems and commentary on observed conditions.
- Provide a high-level categorical general statement regarding the subject Property's compliance to Title III of the Americans with Disabilities Act. This will not constitute a full ADA survey, but will help identify exposure to issues and the need for further review.
- Obtain background and historical information about the facility from a building engineer, property manager, maintenance staff, or other knowledgeable source. The preferred methodology is to have the client representative or building occupant complete a Pre-Survey Questionnaire (PSQ) in advance of the site visit. Common alternatives include a verbal interview just prior to or during the walk-through portion of the assessment.
- Review maintenance records and procedures with the in-place maintenance personnel.
- Observe a representative sample of the interior spaces/units, including vacant spaces/units, to gain a clear understanding of the property's overall condition. Other areas to be observed include the exterior of the property, the roofs, interior common areas, and the significant mechanical, electrical and elevator equipment rooms.
- Provide recommendations for additional studies, if required, with related budgetary information.
- Provide an Executive Summary at the beginning of this report, which highlights key findings and includes a Facility Condition Index as a basis for comparing the relative conditions of the buildings within the portfolio.

13. Opinions of Probable Costs

Cost estimates are attached throughout this report, with the Replacement Reserves in the appendix.

These estimates are based on Invoice or Bid Document/s provided either by the Owner/facility and construction costs developed by construction resources such as *R.S. Means*, *CBRE Whitestone*, and *Marshall & Swift*, EMG's experience with past costs for similar properties, city cost indexes, and assumptions regarding future economic conditions.

Opinions of probable costs should only be construed as preliminary, order of magnitude budgets. Actual costs most probably will vary from the consultant's opinions of probable costs depending on such matters as 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 or bundling of the work (if applicable), quality of contractor, quality of project management exercised, market conditions, use of subcontractors, and whether competitive pricing is solicited, etc. Certain opinions of probable costs cannot be developed within the scope of this guide without further study. Opinions of probable cost for further study should be included in the FCA.

Methodology

Based upon site observations, research, and judgment, along with referencing Expected Useful Life (EUL) tables from various industry sources, EMG opines as to when a system or component will most probably necessitate replacement. Accurate historical replacement records, if provided, are typically the best source of information. Exposure to the elements, initial quality and installation, extent of use, the quality and amount of preventive maintenance exercised, etc., are all factors that impact the effective age of a system or component. As a result, a system or component may have an effective age that is greater or less than its actual chronological age. The Remaining Useful Life (RUL) of a component or system equals the EUL less its *effective age*, whether explicitly or implicitly stated. Projections of Remaining Useful Life (RUL) are based primarily on age and condition with the presumption of continued use and maintenance of the Property similar to the observed and reported past use and maintenance practices, in conjunction with the professional judgment of EMG's assessors. Significant changes in occupants and/or usage may affect the service life of some systems or components.

Where quantities could not be or were not derived from an actual construction document take-off or facility walk-through, and/or where systemic costs are more applicable or provide more intrinsic value, budgetary square foot and gross square foot costs are used. Estimated costs are based on professional judgment and the probable or actual extent of the observed defect, inclusive of the cost to design, procure, construct and manage the corrections.

Definitions

Immediate Needs

Immediate Needs are line items that require immediate action as a result of: (1) material existing or potential unsafe conditions, (2) failed or imminent failure of mission critical building systems or components, or (3) conditions that, if not addressed, have the potential to result in, or contribute to, critical element or system failure within one year or will most probably result in a significant escalation of its remedial cost.

For database and reporting purposes the line items with RUL=0, and commonly associated with *Safety* or *Performance/Integrity* Plan Types, are considered Immediate Needs.

Replacement Reserves

Cost line items traditionally called Replacement Reserves (equivalently referred to as Lifecycle/Renewals) are for recurring probable renewals or expenditures, which are not classified as operation or maintenance expenses. The replacement reserves should be budgeted for in advance on an annual basis. Replacement Reserves are reasonably predictable both in terms of frequency and cost. However, Replacement Reserves may also include components or systems that have an indeterminable life but, nonetheless, have a potential for failure within an estimated time period.

Replacement Reserves generally exclude systems or components that are estimated to expire after the reserve term and are not considered material to the structural and mechanical integrity of the subject property. Furthermore, systems and components that are not deemed to have a material effect on the use of the Property are also excluded. Costs that are caused by acts of God, accidents, or other occurrences that are typically covered by insurance, rather than reserved for, are also excluded.

Replacement costs are solicited from ownership/property management, EMG's discussions with service companies, manufacturers' representatives, and previous experience in preparing such schedules for other similar facilities. Costs for work performed by the ownership's or property management's maintenance staff are also considered.

EMG's reserve methodology involves identification and quantification of those systems or components requiring capital reserve funds within the assessment period. The assessment period is defined as the effective age plus the reserve term. Additional information concerning system's or component's respective replacement costs (in today's dollars), typical expected useful lives, and remaining useful lives were estimated so that a funding schedule could be prepared. The Replacement Reserves Schedule presupposes that all required remedial work has been performed or that monies for remediation have been budgeted for items defined as Immediate Needs.

For the purposes of 'bucketizing' the System Expenditure Forecasts in this report, the Replacement Reserves have been subdivided and grouped as follows: Short Term (years 1-3), Near Term (years 4-5), Medium Term (years 6-10), and Long Term (years 11-20).

Key Findings

In an effort to highlight the most significant cost items and not be overwhelmed by the Replacement Reserves report in its totality, a subsection of Key Findings is included within the Executive Summary section of this report. Key Findings typically include repairs or replacements of deficient items within the first five-year window, as well as the most significant high-dollar line items that fall anywhere within the ten-year term. Note that while there is some subjectivity associated with identifying the Key Findings, the Immediate Needs are always included as a subset.

Exceedingly Aged

A fairly common scenario encountered during the assessment process, and a frequent source of debate, occurs when classifying and describing "very old" systems or components that are still functioning adequately and do not appear nor were reported to be in any way deficient. To help provide some additional intelligence on these items, such components will be tagged in the database as Exceedingly Aged. This designation will be reserved for mechanical or electrical systems or components that have aged well beyond their industry standard lifecycles, typically at least 15 years beyond and/or twice their Estimated Useful Life (EUL). In tandem with this designation, these items will be assigned a Remaining Useful Life (RUL) not less than two years but not greater than 1/3 of their standard EUL. As such the recommended replacement time for these components will reside outside the typical Short Term window but will not be pushed 'irresponsibly' (too far) into the future.

14. Certification

LPA, Inc. retained EMG to perform this Facility Condition Assessment in connection with its continued operation of Joaquin Miller Middle School, 6151 Rainbow Drive, San Jose, California 95129, the "Property". It is our understanding that the primary interest of the Client is to locate and evaluate materials and building system defects that might significantly affect the value of the property and to determine if the present Property has conditions that will have a significant impact on its continued operations.

The conclusions and recommendations presented in this report are based on the brief review of the plans and records made available to our Project Manager during the site visit, interviews of available property management personnel and maintenance contractors familiar with the Property, appropriate inquiry of municipal authorities, our Project Manager's walk-through observations during the site visit, and our experience with similar properties.

No testing, exploratory probing, dismantling or operating of equipment or in-depth studies were performed unless specifically required under the *Purpose and Scope* section of this report. This assessment did not include engineering calculations to determine the adequacy of the Property's original design or existing systems. Although walk-through observations were performed, not all areas may have been observed (see Section 1 for specific details). There may be defects in the Property, which were in areas not observed or readily accessible, may not have been visible, or were not disclosed by management personnel when questioned. The report describes property conditions at the time that the observations and research were conducted.

This report has been prepared on behalf of and exclusively for the use of the Client for the purpose stated within the *Purpose and Scope* section of this report. The report, or any excerpt thereof, shall not be used by any party other than the Client or for any other purpose than that specifically stated in our agreement or within the *Purpose and Scope* section of this report without the express written consent of EMG.

Any reuse or distribution of this report without such consent shall be at the Client and the recipient's sole risk, without liability to EMG.

Prepared by: Dirk Dykstra, Elton Colbert
Project Managers

Reviewed by:



Alex Israel,
Technical Report Reviewer for
Matthew Anderson
Program Manager
mfanderson@emgcorp.com
800.733.0660 x7613