

Cambridge Elementary School

EXISTING SITE INFORMATION

Items		Description
Project Name		Cambridge Elementary School
Property Type		Academic
Full Address		1135 Lacey Lane Concord, CA 94520
Year Built		1957
Gross Building Area (GSF)		76,915
Current Replacement Value (CRV)		\$57,686,250
CRV/GSF (\$/Sq Ft)		\$750
Number of Classrooms		X
Number of Portables		0
Student population (2018/2019)		602
Site Acreage		X
Building Name	Gross Square Footage	Built/Renovated
Bldg 1-7	12,350	1957
Bldg 8-13	14,750	1957
Bldg 14-22	15,115	1958
Bldg 23-26	5,165	1990
Bldg 28-32	6,230	1990
Bldg 33-Music	3,880	1981
Bldg 34-35	3,015	1990
Bldg K1-K2	5,835	1960
Bldg K3	2,205	1960
Bldg M-U	8,370	1958, 1981
Total SF	76,915	

All 76,915 square feet of the property are occupied by Mount Diablo United School District. The spaces are mostly a combination of offices and classrooms with supporting restrooms, multi-use facility, and mechanical and other utility spaces.

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OVERVIEW

Property Executive Summary

Cambridge Elementary School is a fully occupied, single-story academic building.

Site Executive Summary

The building covers approximately half of the site. Landscaping consists of trees, shrubs, and lawn areas. Landscaped areas are irrigated by an in-ground sprinkler system. Fencing is located at the perimeter of the site with an automatic vehicle gate and security post. Parking is provided in one asphalt paved lot. There is no service vehicle access. The pedestrian pavement throughout the property is constructed of cast-in-place concrete. General site lighting is provided by ceiling mounted sodium vapor fixtures along the walkways. Building perimeter lighting is provided by wall-mounted sodium vapor fixtures.

Architectural Structural Executive Summary

The foundation system was not able to be directly observed. However, based on similar structures, it is assumed to be a continuous reinforced concrete spread footing system supporting concrete foundation walls. The building is a conventional wood-framed structure with concrete plank floors and light gauge metal truss roofs. The roof is flat and finished with modified bitumen. The exterior walls are finished with painted wood siding and precast concrete panels. Windows are single-glazed, aluminum-framed units in punched openings. There are no loading docks. The building interiors generally include painted gypsum board. The floor finishes consist of carpet and vinyl composition tile (VCT). The interior ceilings are finished with acoustic ceiling tile.

Mechanical/Electrical/Plumbing Executive Summary

Domestic hot water is provided to the cafetorium by a gas-fired water heater located in the mechanical room. Heating and cooling is provided by split systems. Fire protection systems include a fire alarm system, smoke detectors, alarms with strobes, pull stations, extinguishers, standpipes, and appropriate egress signage. General interior lighting is provided T-8 fluorescent fixtures with compact fluorescent (CFL) fixtures in accent locations. Electrical service is provided by a single 1200-amp panel served from a pad-mounted transformer.

SCHOOL SITE ENGAGEMENT

Principal Priorities:

1. Play structure on playground
2. Parking/drop-off
3. Food service area

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ASSESSMENT OF SITE

Historical Summary

The property is an elementary school campus which was developed in 1957, adding buildings in 1958, 1960, 1981, and 1990. The most recent renovation was completed in 1992. The electrical systems were upgraded in 2004. There was a significant HVAC upgrade in 2007. Solar panels were installed in 2014.

Site

The site parking and sidewalks have been periodically repaved or replaced as needed over the years, but it appears the parking lots have limited spaces. The playground and sport courts are generally in good condition.

Architectural

The original exterior structure is mostly original and has been refreshed on an as-needed basis. The interior finishes are replaced on an as-needed basis. The buildings roofs are in fair condition, without leaks or issues.

Mechanical, Electrical, Plumbing & Fire (MEPF)

Most of the MEPF systems have been updated since the original construction in 1957 and have been well maintained. The M-U building still has a boiler heating system that has been updated and is in good operating condition. The site does not have a fire sprinkler system and a full retrofit is recommended. The electrical system appears to have been updated in 2004.

Recommended Additional Studies

No additional studies are recommended.

Facility Condition Index

In this report we have calculated the Facility Condition Index (FCI) which is used in Facilities Management to provide a benchmark to compare the relative condition of a group of facilities. The FCI is primarily used to support asset management initiatives of federal, state, and local government facilities organizations.

The FCI is the ratio of accumulated Total Cost (TC) (Deferred Maintenance, Capital Renewal and Plant Adaptation) to the Current Replacement Value (CRV) for a constructed asset calculated by dividing the TC by the CRV. The range is from zero for a newly constructed asset, to one for a constructed asset with a TC value equal to its CRV. Acceptable ranges vary by "Asset Type", but as a general guideline the FCI scoring system is as follows:

Condition	Definition	Percentage Value
GOOD	In a new or well-maintained condition, with no visual evidence of wear, soiling or other deficiencies.	0% to 5%
FAIR	Subject to wear and soiling but is still in a serviceable and functioning condition.	5% to 10%
POOR	Subjected to hard or long-term wear. Nearing the end of its useful or serviceable life.	Greater than 10%
V-POOR	Subjected to hard or long-term wear. Has reached the end of its useful or serviceable life. Renewal now necessary.	Greater than 60%

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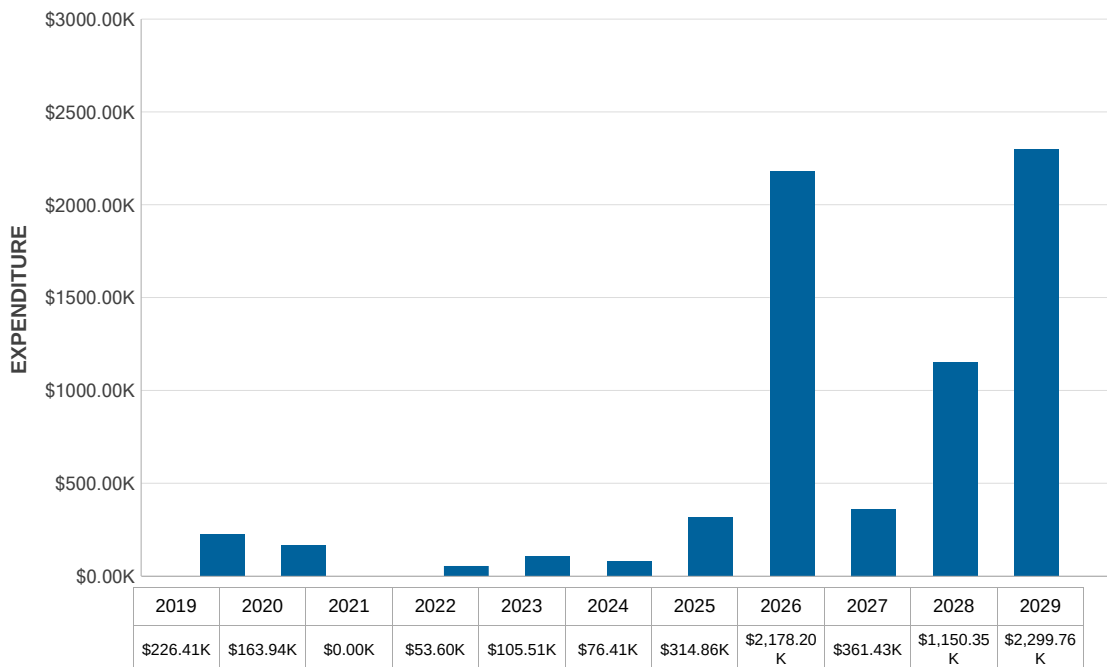
Property Condition

This report represents summary-level findings for the Property Condition Assessment. The deficiencies identified in this assessment can be combined with potential new construction requirements to develop an overall Long Term Capital Needs Plan that can be the basis for a facility wide capital improvement funding strategy. Key findings from the Assessment include:

Key Findings	Metric
Facility Condition Index (FCI)	0.39 %
Current Replacement Value (CRV)	\$57,686,250
Immediate Capital Needs (Current Year or Year 0)	\$226,407
Short Term Capital Needs (Year 1 to 5)	\$399,462
Long Term Capital Needs (Year 6 to 10)	\$6,304,608
TOTAL Capital Needs (Year 0 to Year 10)	\$6,930,477
Average Capital Needs Per Year	\$693,048

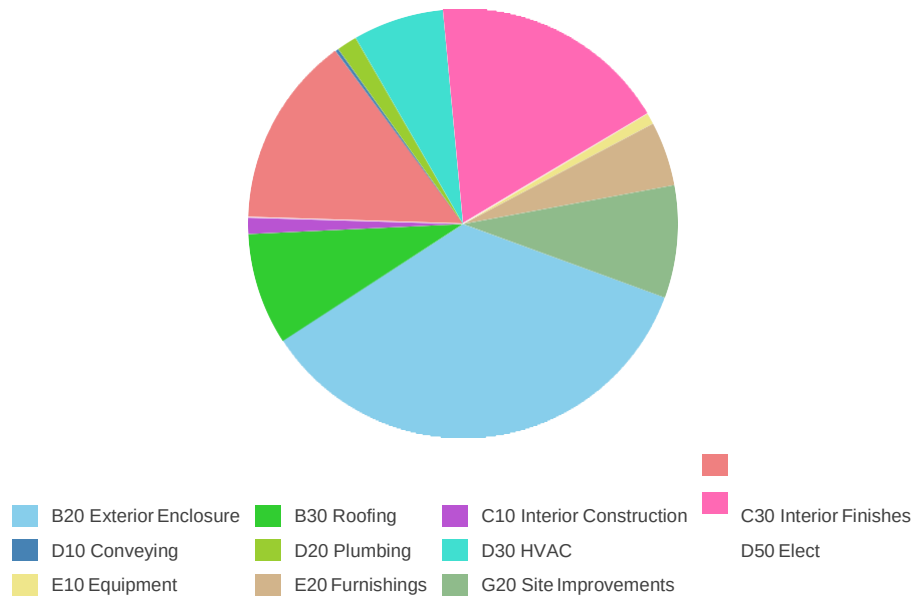
The building expenditure summary section provides an executive overview of the findings from the assessment. The chart below provides a summary of yearly anticipated expenditures over the study period for the Cambridge Elementary School building. In addition, we have scheduled key findings highlighting key items of greater than \$5,000 and their anticipated failure year. Further details of these expenditures are included within each respective report section and within the expenditure forecast, in Appendix A of this report. The results illustrate a total anticipated expenditure over the study period of approximately \$6,930,477.

Expenditure Forecast Over Study Period



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Distribution of Future (Year 1-Year 10) Needs by Building System



Building System	Estimated Cost	Percentage of Total Cost
B20 Exterior Enclosure	\$2,365,655	35.29 %
B30 Roofing	\$564,477	8.42 %
C10 Interior Construction	\$81,793	1.22 %
C30 Interior Finishes	\$965,997	14.41 %
D10 Conveying	\$16,653	0.25 %
D20 Plumbing	\$102,488	1.53 %
D30 HVAC	\$457,940	6.83 %
D50 Electrical	\$1,201,712	17.93 %
E10 Equipment	\$56,131	0.84 %
E20 Furnishings	\$324,000	4.83 %
G20 Site Improvements	\$567,224	8.46 %
Total	\$6,704,070	100 %

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Building Type 1 Information



Building Type 1 Information		
Building Locations	Buildings 1-7, 8-13, 14-22, 23-26, 28-32, 33-Music, 34-35, K1-K2, K3, M-U	
Constructed/ Renovated	1957, 1958, 1960, 1981, 1990, 1992	
Total Area	76,915 SF	
Number of Stories	1	
<i>System</i>	<i>Description</i>	<i>Condition</i>
Structure	Conventional wood-framed structure on concrete slabs	Fair
Façade	Painted CMU with metal-framed windows	Fair
Roof	Primary: Flat construction with modified bituminous finish Secondary: Flat construction with metal finish	Fair
Interiors	Walls: Painted gypsum board Floors: Carpet, VCT Ceilings: Painted gypsum board, ACT	Fair
Elevators	None	--
Plumbing	Copper supply, cast iron waste and vent No hot water	Fair
HVAC	Individual VRF systems	Fair
Fire Suppression	Fire extinguishers	Good
Electrical	Source & Distribution: Main switchboard, panel with copper wiring Interior Lighting: T-8 Emergency: None	Good
Fire Alarm	Alarm panel, smoke detectors, alarms, strobes, pull stations, back-up emergency lights, and exit signs	Fair
Equipment/Special	Commercial kitchen equipment	Fair
Key Issues & Findings	No major findings	

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Site Summary Information



Site Information		
Lot Size	8.2 acres (estimated)	
Parking Spaces	45 total spaces all in open lots; 2 of which are accessible 2 accessible (included in total above), 2 van-accessible	
<i>System</i>	<i>Description</i>	<i>Condition</i>
Pavement/Flatwork	Asphalt lots with areas of asphalt and concrete sidewalks, curbs	Good
Site Development	Building-mounted signage, chain link fencing, chain link dumpster enclosures Playgrounds and sports courts with fencing Limited park benches, picnic tables, trash receptacles	Fair
Landscaping & Topography	Limited landscaping features Irrigation not present No retaining walls Low to moderate site slopes throughout	Fair
Draining Systems and Erosion Control	Surface flow, underground piping, municipal system Soil erosion not observed Ponding not observed	Fair
Utilities	Municipal water and sewer Local utility-provided electric and natural gas	Fair
Site Lighting	Building-mounted: LED, metal halide Pedestrian walkway CFL and LED lighting	Fair
Ancillary Structures	Solar carports, covered sidewalks	Good
Key Issues & Findings	No major findings	