

Mt Diablo Elementary School

Items	Description	
Project Name	Mount Diablo Elementary School	
Property Type	Academic	
Full Address	5880 Mt Zion Drive Clayton, CA 94517	
Year Built	1955	
Gross Building Area (GSF)	53,982	
Current Replacement Value (CRV)	\$40,486,500	
CRV/GSF (\$/Sq Ft)	\$750	
Number of Classrooms	X	
Number of Portables	0	
Student population (2018/2019)	775	
Site Acreage	10.00	
Building Name	Gross Square Footage	Built/Renovated
1	1,200	2012
2-6	5,100	1955 / 2012
7	1,500	2012
8-9	2,100	2012
10-13	4,500	1955 / 2012
14-17	4,200	1955 / 2012
19-21	3,200	1955 / 2012
22-28	8,300	1955 / 2012
29-34	6,100	2012
35-40	4,900	2012
Admin-Library	5,700	1955 / 2012
M-U	5,700	1955 / 2012
RR	800	2012
Old RR	682	1955 / 2012
Total SF	53,982	

All 53,982 square feet of the property are occupied by Mount Diablo Unified School District. The spaces are mostly a combination of offices and classrooms with supporting restrooms, administrative offices, and mechanical and other utility spaces.

Mt Diablo Elementary School

OVERVIEW

Property Executive Summary

Mount Diablo Elementary School is a fully-occupied academic campus consisting of 14 single-story structures. Buildings 2- 6, 11-13, 14-17, 19-21, 22-28, Library/Administration, M-U, and old restroom building were constructed after 1955 and had limited renovation in 2012. Classroom Buildings 1, 7, 8-9, 29-34, 35-40 and the new restroom building were constructed in 2012.

Site Executive Summary

The buildings cover nearly the entire 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 for 38 vehicles in asphalt paved lots. 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 pole-mounted HID fixtures. Building perimeter lighting is provided by wall-mounted metal halide fixtures. Pedestrian areas and walkways are lit by metal halide lighting.

Architectural Structural Executive Summary

The foundation system was not able to be directly observed. However, based on similar structures and POC comments, it is assumed to be concrete bearing walls on concrete slabs. The original building roofs are flat and finished with modified bitumen. New building roofs are gabled with metal roofing systems. The exterior walls are painted stucco. Windows are single- and double-glazed, aluminum- and steel-framed units. The buildings interiors generally include painted gypsum board walls and exposed concrete. The floor finishes consist of carpet, vinyl composition tile (VCT), vinyl sheet, ceramic tile, wood, and concrete. The interior ceilings are finished with acoustic ceiling tile and painted gypsum board.

Mechanical/Electrical/Plumbing Executive Summary

Domestic hot water is provided to some restrooms and break room areas by individual electric and gas-fired water heaters located in the janitor closet adjacent to each area. Heating and cooling is provided by split systems. Supplemental cooling is provided to the communication rooms by ductless split systems. Fire protection systems include a fire alarm system, smoke detectors, alarms with strobes, pull stations, extinguishers, and appropriate egress signage. There is a fire sprinkler system in the M-U building. General interior lighting is provided by T-8 and T-12 fluorescent fixtures with compact fluorescent (CFL) and incandescent fixtures in accent locations. Electrical service is provided by a single 1600-amp panel served from a pad-mounted transformer.

SCHOOL SITE ENGAGEMENT

Principal Priorities:

1. Create STEM labs in available classrooms
2. Update and redesign the office to be more functional for staff, students, and parents (ie. actual conference room). Modernize the area
3. Increase landscaping, pulling weeds, etc.

Mt Diablo Elementary School

ASSESSMENT OF SITE

Historical Summary

The Buildings 2-6, 10-13, 14-17, 19-21, 22-28, M-U, Library/Administration, and old restrooms were constructed after 1955 and had limited renovation in 2012. Buildings 1, 7, 8-9, 29-34, 35-40, and the new restroom building were added in 2012.

Site

The asphalt playground and parking lot appear to be in fair condition. *Originally constructed in 1955, Maintenance indicates deteriorating site utility infrastructure in need of replacement.*

Architectural

During the construction of the new buildings in 2012, a carport solar system was added. Some Interior and exterior painting and some VCT replacement was completed in 2012. Lifecycle replacements of interior and exterior finishes are budgeted and anticipated.

Mechanical, Electrical, Plumbing & Fire (MEPF)

The MEPF systems and infrastructure vary significantly in age. Most HVAC equipment was replaced or upgraded between 2012 and 2017. Most piping is original. Some of the facility's electrical components were replaced in 2012.

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%

Mt Diablo Elementary School

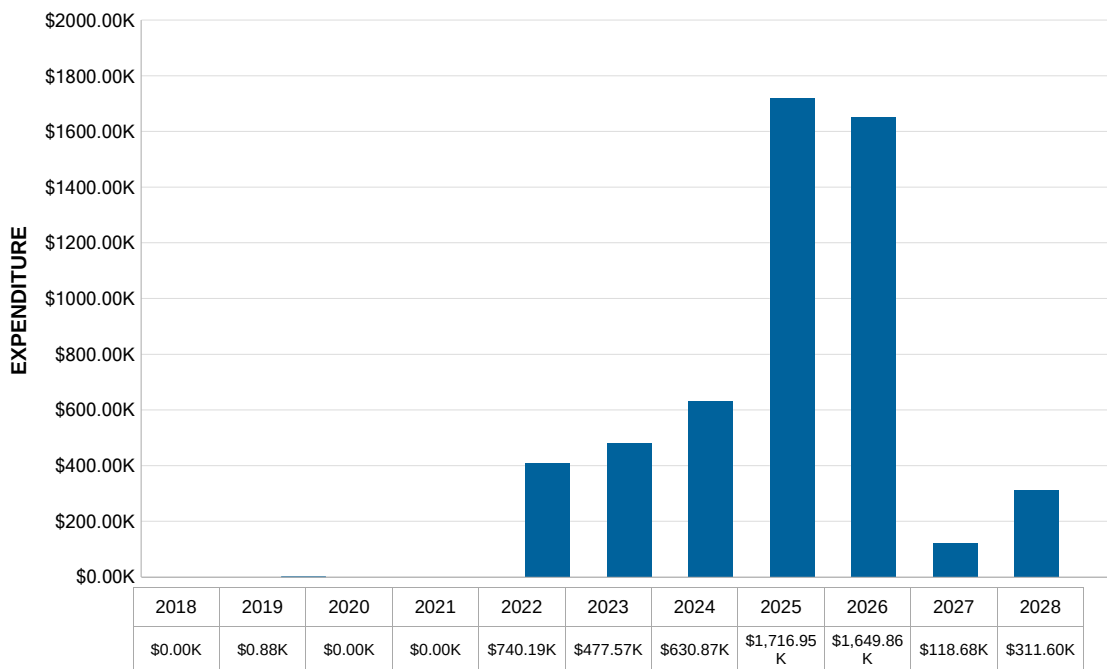
Summary of Findings

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)	0.00 %
Current Replacement Value (CRV)	\$40,486,500
Immediate Capital Needs (Current Year or Year 0)	\$0
Short Term Capital Needs (Year 1 to 5)	\$1,218,642
Long Term Capital Needs (Year 6 to 10)	\$4,427,962
TOTAL Capital Needs (Year 0 to Year 10)	\$5,646,604
Average Capital Needs Per Year	\$564,660

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 Mount Diablo 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 \$5,646,604.

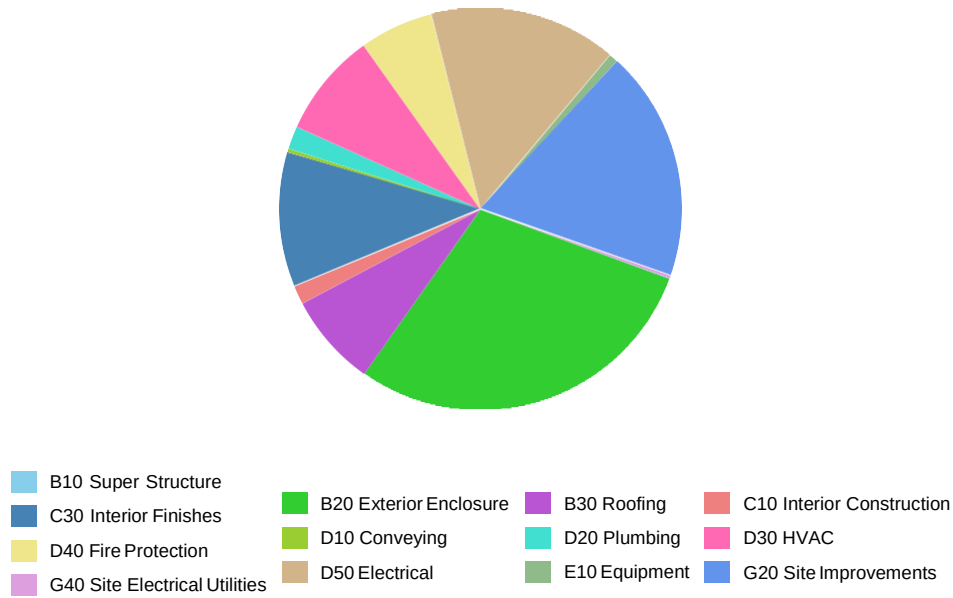
Expenditure Forecast Over Study Period



Mt Diablo Elementary School

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

Distribution of Capital Needs by Building System



Building System	Estimated Cost	Percentage of Total Cost
B10 Super Structure	\$5,166	0.09 %
B20 Exterior Enclosure	\$1,645,410	29.14 %
B30 Roofing	\$422,569	7.48 %
C10 Interior Construction	\$84,511	1.50 %
C30 Interior Finishes	\$611,729	10.83 %
D10 Conveying	\$16,653	0.29 %
D20 Plumbing	\$103,357	1.83 %
D30 HVAC	\$474,987	8.41 %
D40 Fire Protection	\$334,928	5.93 %
D50 Electrical	\$849,461	15.04 %
E10 Equipment	\$40,604	0.72 %
G20 Site Improvements	\$1,044,018	18.49 %
G40 Site Electrical Utilities	\$13,212	0.23 %
Total	\$5,646,604	100 %

Mt Diablo Elementary School

Building Type 1 Information



Building Type 1 Information		
Building Locations	Library / Administration building, 2-6, 10-13, 14-17, 19-21, 22-28, M-U and old restroom building	
Constructed/ Renovated	1955 / 2012	
Total Area	35,582 SF	
Number of Stories	1	
<i>System</i>	<i>Description</i>	<i>Condition</i>
Structure	Concrete bearing walls on concrete slabs	Fair
Façade	Stucco with steel-framed windows	Fair
Roof	Primary: Flat construction with modified bituminous finish	Fair
Interiors	Walls: Painted gypsum board and unfinished concrete Floors: Carpet, VCT, ceramic tile Ceilings: Painted gypsum board, ACT	Fair
Elevators	Wheelchair lift at M-U building	Fair
Plumbing	Copper supply, cast iron waste and vent Gas water heater	Fair
HVAC	Split systems, multi-zone ductless split systems Supplemental components: ductless split-systems	Fair
Fire Suppression	Hydrants, fire extinguishers, hose cabinets Fire sprinklers at M-U stage area only	Fair
Electrical	Source & Distribution: Main switchboard and distribution panels Interior Lighting: T-8, T-12, incandescent Emergency: None	Fair
Fire Alarm	Alarm panel, smoke detectors, alarms, strobes, pull stations,	Fair
Equipment/Special	Commercial kitchen equipment	Fair
Key Issues & Findings	Buildings lack fire suppression except M-U stage	

Mt Diablo Elementary School

Building Type 2 Information



Building Type 2 Information		
Building Locations	Building 1, 7, 8-9, 29-34, 35-40 and RRbuilding	
Constructed/ Renovated	2012	
Total Area	18,400 SF	
Number of Stories	1	
<i>System</i>	<i>Description</i>	<i>Condition</i>
Structure	Conventional wood-framed structure on concrete slabs	Good
Façade	Stucco with aluminum-framed windows	Good
Roof	Primary: Gable construction with metal finish	Good
Interiors	Walls: Painted gypsum board Floors: Carpet, VCT, ceramic tile Ceilings: Painted gypsum board, ACT	Good
Elevators	None	--
Plumbing	Copper supply, cast iron waste and vent Electric water heater	Fair
HVAC	Split systems	Fair
Fire Suppression	Hydrants, fire extinguishers, hose cabinets	Fair
Electrical	Source & Distribution: Main switchboard and distribution panels Interior Lighting: T-8, T-12, incandescent Emergency: None	Fair
Fire Alarm	Alarm panel, smoke detectors, alarms, strobes, pull stations	Fair
Equipment/Special	None	Good
Key Issues & Findings	None	

Mt Diablo Elementary School

Site Summary Information



Site Information		
Lot Size	9.00 acres (estimated)	
Parking Spaces	38 total spaces all in open lots; 2 of which are accessible 1 accessible (included in total above), 1 van-accessible	
<i>System</i>	<i>Description</i>	<i>Condition</i>
Pavement/Flatwork	Asphalt lots with areas of concrete and concrete sidewalks, curbs, ramps, and stairs	Fair
Site Development	Property entrance signage, chain link fencing, chain link dumpster enclosures Sports courts, fencing, and site lights	Fair
Landscaping & Topography	Moderate landscaping features Irrigation present No retaining walls Low to moderate site slopes throughout	Fair
Draining Systems and Erosion Control	Surface flow, inlets, swales, underground piping	Fair
Utilities	Municipal water and sewer Local utility-provided electric and natural gas	Fair
Site Lighting	Pole-mounted: metal halide Building-mounted: metal halide	Fair
Ancillary Structures	Steel-framed carports for solar system.	Good
Key Issues & Findings	The field is currently being renovated	