

Monte Gardens Elementary School

Items	Description	
Project Name	Monte Gardens Elementary School	
Property Type	Academic	
Full Address	3841 Larkspur Drive Concord, CA 94519	
Year Built	1952	
Gross Building Area (GSF)	38,231	
Current Replacement Value (CRV)	\$28,673,250	
CRV/GSF (\$/Sq Ft)	\$750	
Number of Classrooms	X	
Number of Portables	0	
Student population (2018/2019)	318	
Site Acreage	10.00	
Building Name	Gross Square Footage	Built/Renovated
A Wing (A1)	5,738	1952/2002/2015
B Wing (B1)	5,870	1952/2002/2015
C Wing (C1)	6,247	1952/2002/2015
D Wing (D1)	4,288	1952/2002/2015
M-U	5,410	1952/2002
Annex A (A2)	977	2007
Annex B (B2)	3,330	2007
Annex C (C2)	1,938	2002
Annex D (D2)	1,935	2007
Annex E (E1)	2,677	2007
Total SF	38,410	

The majority of the property is occupied by Mount Diablo United School District. About 7,000 square feet is occupied by a local daycare. The spaces are mostly a combination of offices and classrooms with supporting restrooms, multi- use facility, and mechanical and other utility spaces.

Monte Gardens Elementary School

OVERVIEW

Property Executive Summary

Monte Gardens Elementary School is a fully-occupied academic campus. It consists of ten single-story structures. There were several instances of exterior wall finishes in poor condition. There is an older boiler-based steam heating system in the M-U. Approximately two thirds of the windows are older, single-pane units that are thermally inefficient and beyond their useful lives. There is a substantial trip hazard in the asphalt sidewalk north of A Wing which must be repaired immediately.

Site Executive Summary

The buildings cover approximately 14% of the overall site. An additional 3% of the site is leased by a local daycare and is not included in this report. 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 campus and separating the kindergarten area from the remainder of the campus. There are multiple play areas including two with play structures on poured-in-place rubber surfaces. Parking is provided in one asphalt paved lot with a solar carport system. The pedestrian pavement throughout the property is constructed of asphalt and cast-in-place concrete. General site lighting is provided by building-mounted metal halide fixtures. The covered sidewalk is lit by LED and CFL soffit fixtures.

Architectural Structural Executive Summary

The foundation system was able to be partially observed. It appears to be a concrete slab-on-grade with integral perimeter footings. The building structural systems consist of conventional wood framing. Original buildings and Annex C roofs are flat and finished with modified bitumen. Annexes A, B, D, and E (Emily Buildings) roofs are gabled and finished with painted metal. The exterior walls of the original buildings are painted concrete. The annexes are finished with stucco. Older windows are single-glazed, wood-framed units in ribbons, and newer windows are double-glazed, aluminum-framed units in ribbons and punched openings. Doors are glazed steel, fiberglass, and steel utility units. The building interiors generally include painted and wallpapered gypsum board walls, wood paneling, painted plaster walls in utility areas, and ceramic tile in restrooms. The floor finishes consist of vinyl composition tile (VCT), carpet, and ceramic tile. The interior ceilings are finished with acoustic ceiling tile and plaster or gypsum board in some restrooms and utility spaces. A covered sidewalk connects the original buildings.

Mechanical/Electrical/Plumbing Executive Summary

Vertical conveyance in the M-U is provided by a wheelchair lift that serves the stage. Domestic hot water is provided to the kitchen by a gas-fired water heater in the M-U boiler room, to the front office by an electric water heater located in the copy room, and to the C Wing service sink by a small electric water heater. Heating is provided to the M-U by a steam boiler with cooling provided by window air conditioners. Heating and cooling is provided to the A, B, and C Wings by multi-zone ductless split systems and to the remaining buildings by furnaces with remote condensing units. Fire protection systems include a fire alarm system, smoke detectors, alarms with strobes, pull stations, extinguishers, emergency lighting, and appropriate egress signage. General interior lighting is provided by T-8 fluorescent fixtures with LED fixtures in accent locations. There is soffit lighting throughout the covered sidewalks. Electrical service is provided by three 600-amp switchboards feeding 800-amp switchboards through 225 kVA transformers served from a pad mounted transformer on the western edge of the property. A solar array and inverter are located on the adjacent Administration site. The electrical area beside Annex B is heavily cluttered, presenting a possible fire hazard.

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SCHOOL SITE ENGAGEMENT

Principal Priorities:

1. 21st Century Upgrades - furniture and equipment, flooring
2. Repairing and re-plastering/repainting of structures
3. Grounds - need more functional, appealing spaces to use outside; sprinkler systems need full repair/replacement of back doors needs to meet ADA requirements?

Monte Gardens Elementary School ASSESSMENT OF SITE

Historical Summary

The property is an elementary school campus which was originally developed in 1952 with buildings added in 2002 and 2004. The original buildings largely had their HVAC overhauled in 2015 with the exclusion of the M-U, which still utilizes a steam boiler last replaced in 1995. The leased daycare facility was added to the property in 2004.

Site

Site parking appears adequate, but the POC expressed concern with sufficient parking during school events that garner high attendance from parents. The play equipment and surfaces are adequate. There is a damaged portion of asphalt pedestrian pavement on the north side of A Wing that reportedly causes frequent tripping. Site lighting appears adequate. *Originally constructed in 1952, Maintenance indicates deteriorating site utility infrastructure in need of replacement.*

Architectural

The original structures' exteriors are largely original and have been retouched on an as-needed basis, but the paint on several walls are peeling, and refinishing is recommended. Interior finishes are replaced on an as-needed basis. The roofs appear to have last been replaced in 2002. They do not exhibit leaks, but isolated scuppers lack drain baskets.

Mechanical, Electrical, Plumbing & Fire (MEPF)

The annexes' HVAC systems are aging yet functional, and the original buildings' HVAC was recently replaced with VRF systems. Heating is provided to the M-U by a steam boiler system with some components original to the 1951 construction. The site lacks a fire sprinkler system, and a full retrofit is recommended. Electrical systems were renovated in 2002. Most lavatories have uninsulated exposed piping, and it is recommended to install pipe wraps for accessibility.

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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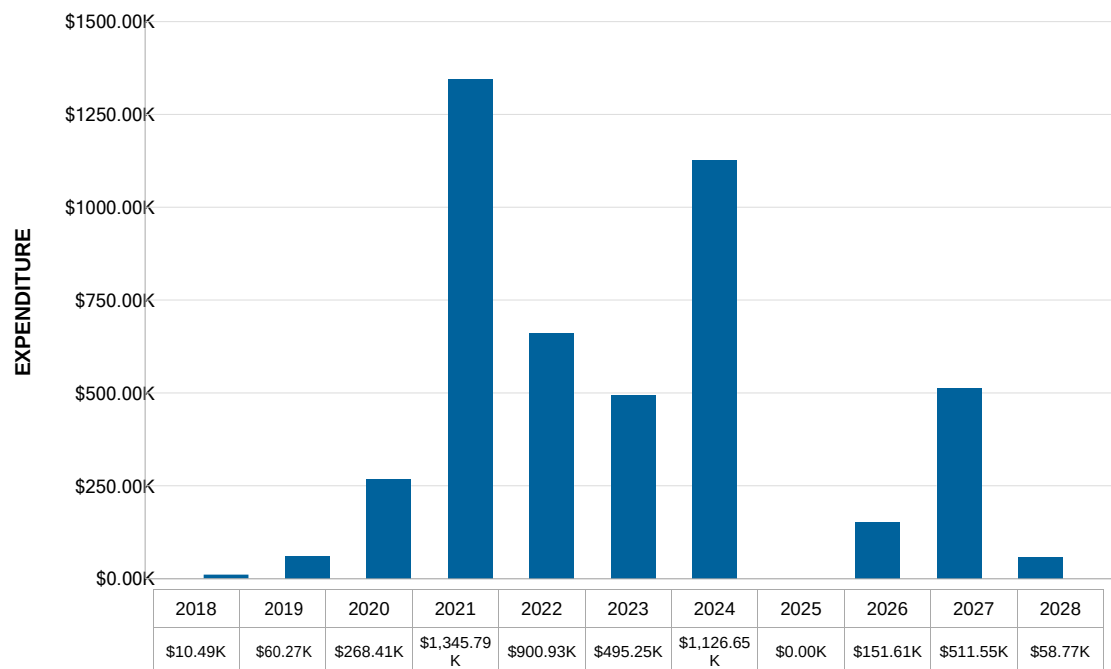
Summary of Findings

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)	0.04 %
Current Replacement Value (CRV)	\$28,673,250
Immediate Capital Needs (Current Year or Year 0)	\$10,491
Short Term Capital Needs (Year 1 to 5)	\$3,070,651
Long Term Capital Needs (Year 6 to 10)	\$1,848,578
TOTAL Capital Needs (Year 0 to Year 10)	\$4,929,720
Average Capital Needs Per Year	\$492,972

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 Westwood 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 \$4,702,723.

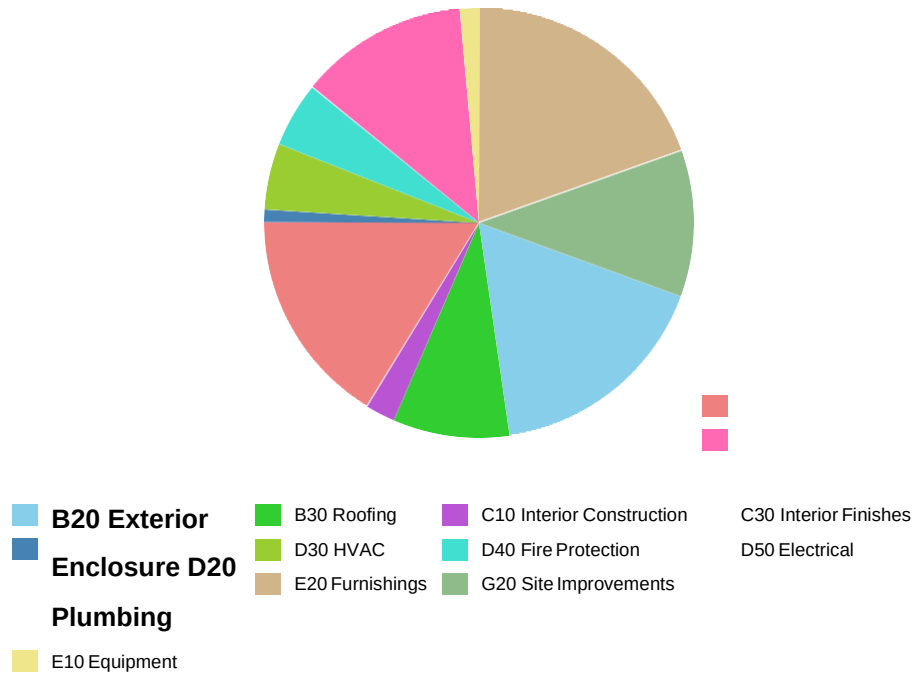
Expenditure Forecast Over Study Period



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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
B20 Exterior Enclosure	\$843,880	17.15 %
B30 Roofing	\$431,865	8.78 %
C10 Interior Construction	\$109,511	2.23 %
C30 Interior Finishes	\$804,052	16.35 %
D20 Plumbing	\$46,674	0.95 %
D30 HVAC	\$244,847	4.98 %
D40 Fire Protection	\$240,063	4.88 %
D50 Electrical	\$624,524	12.70 %
E10 Equipment	\$72,607	1.48 %
E20 Furnishings	\$959,365	19.50 %
G20 Site Improvements	\$541,842	11.01 %
Total	\$4,919,229	100 %

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Building Type 1 Information



Building Type 1 Information		
Building Locations	M-U, A Wing, B Wing, C Wing, D Wing	
Constructed/ Renovated	1952/2002/2014	
Building Size	4,288-6,247 SF	
Number of Stories	1	
<i>System</i>	<i>Description</i>	<i>Condition</i>
Structure	Conventional wood-framed structure on concrete slabs	Good
Façade	Painted concrete with wood-framed windows	Fair
Roof	Primary: Flat construction with modified bituminous finish	Fair
Interiors	Walls: Painted gypsum board, wallpaper, wood paneling Floors: Carpet, VCT, ceramic tile Ceilings: Painted gypsum board, ACT	Fair
Elevators	Wheelchair lift	Fair
Plumbing	Copper supply, cast iron waste and vent Gas and electric water heaters	Fair
HVAC	Central system with boiler feeding cabinet heaters VRF systems	Fair
Fire Suppression	Fire extinguishers	Good
Electrical	Source & Distribution: Switchboards, transformers, and panels with copper wiring Interior Lighting: T-8, LED Emergency: None	Good
Fire Alarm	Alarm panel, smoke detectors, alarms, strobes, pull stations, back-up emergency lights, and exit signs	Good
Equipment/Special	Commercial kitchen equipment	Fair
Key Issues & Findings	Antiquated HVAC components and infrastructure in M-U, building lacks fire suppression, possible ACM flooring	

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Building Type 2 Information



Building Type 2 Information		
Building Locations	Annex C	
Constructed/ Renovated	2002	
Building Size	1,938 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	Fair
Roof	Primary: Flat construction with modified bituminous finish	Fair
Interiors	Walls: Painted gypsum board, wallpaper 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 split systems	Good
Fire Suppression	Fire extinguishers	Good
Electrical	Source & Distribution: Fed from electrical area beside B Annex with copper wiring Interior Lighting: T-8, LED Emergency: None	Good
Fire Alarm	Alarm panel, smoke detectors, alarms, strobes, pull stations, back-up emergency lights, and exit signs	Good
Equipment/Special	None	--
Key Issues & Findings	None	

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Building Type 3 Information



Building Type 3 Information		
Building Locations	Annexes A, B, D, E	
Constructed/ Renovated	2007	
Building Size	977 – 3,330 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	Fair
Roof	Primary: Gable construction with metal finish	Fair
Interiors	Walls: Painted gypsum and wallpaper Floors: VCT, Carpet Ceilings: ACT	Good
Elevators	None	--
Plumbing	Copper supply, cast iron waste and vent No hot water	Fair
HVAC	Individual split systems	Fair
Fire Suppression	Fire extinguishers	Good
Electrical	Source & Distribution: Main switchboards, transformers, and panels 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	Good
Equipment/Special	None	--
Key Issues & Findings	None	

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Site Summary Information



Site Information		
Lot Size	6.21 acres (estimated)	
Parking Spaces	29 total spaces all in open lots; 2 of which are accessible 2 accessible (included in total above), 1 van-accessible	
<i>System</i>	<i>Description</i>	<i>Condition</i>
Pavement/Flatwork	Asphalt lots with areas of asphalt and concrete sidewalks, curbs	Fair
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 present One retaining wall Low to moderate site slopes throughout	Fair
Draining Systems and Erosion Control	Surface flow, underground piping, municipal system Significant 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: metal halide and LED Pedestrian walkway CFL and LED lighting	Fair
Ancillary Structures	Solar carports, pre-fabricated storage sheds, covered sidewalk	Fair
Key Issues & Findings	Minor alligator cracking in parking lots and sidewalks, major cracks and trip hazards in pedestrian pavement north of A Wing.	