Clayton Valley High School

Items	Description
Project Name	Clayton Valley High School
Property Type	Academic
Full Address	1101 Alberta Way Concord, CA 94521
Year Built	1959
Gross Building Area (GSF)	160,950
Current Replacement Value (CRV)	$120,712,500
CRV/GSF ($/Sq Ft)	$750
Number of Classrooms	X
Number of Portables	0
Student population (2018/2019)	x
Site Acreage	39.00

Building Name	Gross Square Footage	Built/Renovated
Building - Office	5,800	1959
Building - M-U	9,000	1959
Building - Library	3,800	1959
Building – A Wing	13,000	1959
Building – B Wing	13,400	1959
Building – C Wing	13,400	1959
Building - D Wing	13,400	1959
Building - E Wing	13,400	1959
Building - F Wing	13,400	1959
Building - H 1-3	5,500	2000s
Building - H 4-9	2,900	2000s
Building – I 1-2	5,600	2000s
Building – J 1-4	1,800	2000s
Building – L 100-200	3,800	2000s
Building – Locker Rooms	3,200	1959
Building - Music	12,750	1959
Building - Gym	13,750	1959

Clayton Valley High School

Building – S 1-4	10,500	1959
Building – S 5-6	6,650	1959
Building – Snack Bar	2,100	2000s
Building – Boiler Room	1,500	1959
Total SF	**160.950**	

All 160,950 square feet of the property are occupied by Clayton Valley High School. The spaces are a combination of offices, classrooms, a gym, a multipurpose room, and a kitchen with supporting restrooms, administrative offices, and mechanical and other utility spaces.

OVERVIEW

Property Executive Summary

Clayton Valley High School is a fully-occupied academic campus. All structures are single story. There are areas of structural issues resulting in a stucco wall detaching from the wall supports. The HVAC, plumbing, and electrical systems will only require lifecycle component replacements. The exterior windows are older single-pane units that are thermally inefficient and beyond their useful lives.

Site Executive Summary

Onsite parking is provided in asphalt paved lots. Service vehicle access is provided by asphalt drive lanes to some of the buildings. The pedestrian pavement throughout the property is constructed of cast-in-place concrete. General site lighting is provided by pole- and building-mounted lamps.

Architectural Structural Executive Summary

The foundation system was not able to be directly observed. Based on similar structures, it is assumed to be concrete slab- on-grade with supporting grade beams. The building structural systems consist of wood-framed walls and roofs. The roofs are flat and finished with modified bitumen and pitched and finished with standing seam metal. The exterior walls are clad with stucco. Windows are single- or double-glazed, metal-framed units in punched openings. Doors are partially glazed, solid-core wood and steel utility units. The building interiors generally include painted gypsum board walls, vinyl wall covering, and acoustic tile with ceramic tile in the restrooms. The floor finishes consist of vinyl composition tile (VCT), carpet, ceramic tile, and quarry tile. The interior ceilings are finished with acoustic ceiling tile with gypsum board in the restrooms.

Mechanical/Electrical/Plumbing Executive Summary

Domestic hot water is provided to some restrooms by an electric water heater and by a gas-fired fired boiler in the boiler building. Heating and cooling is provided by split systems and package units. Conditioned air is provided to all areas by air handling units. Fire protection systems include a fire alarm system, smoke detectors, alarms with strobes, pull stations, extinguishers, and appropriate egress signage. General interior lighting is provided by T-8 fluorescent fixtures with compact fluorescent (CFL) fixtures in accent locations. Electrical service is provided by a single 2500-amp panel served from a pad mounted transformer. An automated FM radio station is present at the Music Building. There is an emergency generator for the football field. There is an automatic transfer switch for what appears to be stadium lighting equipment adjacent to the generator.

Clayton Valley High School

SITE ENGAGEMENT

Site Priorities:

1. X

ASESSMENT OF SITE

Historical Summary

The original buildings were constructed in 1959, and the campus has had buildings added in the 2000s. Currently it is occupied by a charter high school.

Site

The parking lots and sidewalks have been replaced and upgraded over the years and are well maintained. Site lighting appears to be adequate. The synthetic turf on the football field shows wear and deterioration. Otherwise, lifecycle replacements are budgeted and anticipated. *Originally constructed in 1959, Maintenance indicates deteriorating site utility infrastructure in need of replacement.*

Architectural

The buildings appear to be in good condition overall. Roof replacements will be required during the term. Isolated areas of roofing show accumulation of leaves or debris, and this material should be removed. Deteriorated wood and peeling paint were noted in multiple locations on the bottom of the awnings connecting most of the buildings. The stucco wall at the south side of the S 1-4 building is coming away from the building structure. Most of the building windows are original, single-pane glazing. The interior finishes have been periodically replaced as needed. Lifecycle interior and exterior finish replacements are budgeted and anticipated.

Mechanical, Electrical, Plumbing & Fire (MEPF)

The mechanical, electrical, plumbing, and fire systems were in good condition overall, and lifecycle interior and exterior replacements are budgeted and anticipated. The majority of the property lacks fire sprinklers and retrofitting the property with fire sprinklers is recommended. The HVAC systems were all reportedly upgraded in 2008 and are well maintained. Electrical systems have been upgraded since the property was built, and no problems were reported. Boiler in MU and Locker Room needs replacement.

Recommended Additional Studies

Additional investigation is currently taking place to address specific AB-300 requirements and potential independent structural system review for the MU, Music, Large Gym, Shops, and Boiler buildings.

Clayton Valley High School

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%

Clayton Valley High School

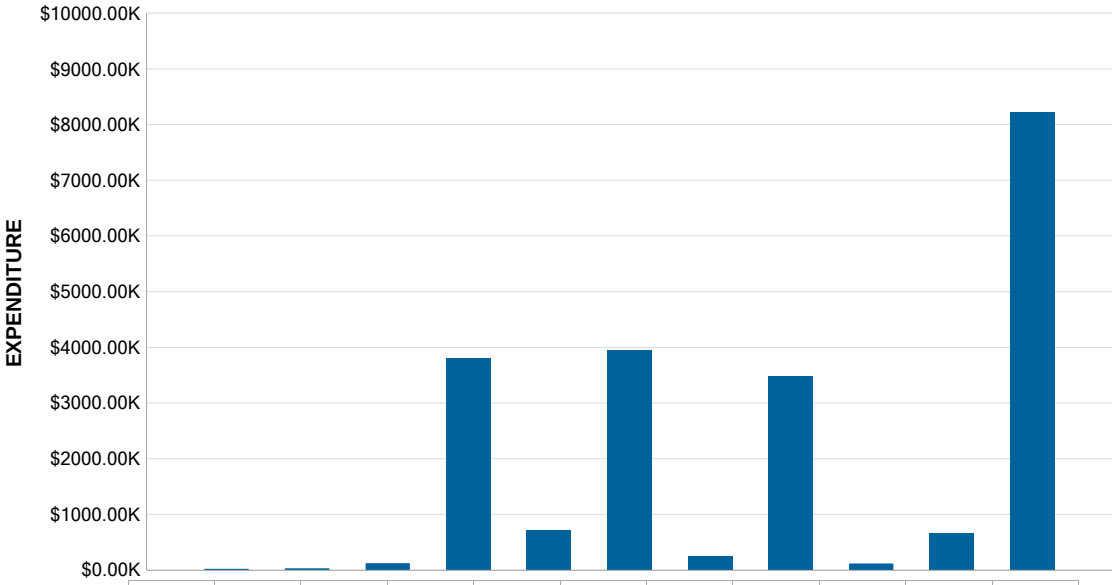
Summary of Findings

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)	0.02 %
Current Replacement Value (CRV)	$120,712,500
Immediate Capital Needs (Current Year or Year 0)	$21,670
Short Term Capital Needs (Year 1 to 5)	$8,609,155
Long Term Capital Needs (Year 6 to 10)	$12,712,796
TOTAL Capital Needs (Year 0 to Year 10)	**$21,343,621**
Average Capital Needs Per Year	**$2,134,362**

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 Clayton Valley High 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 $21,343,621.

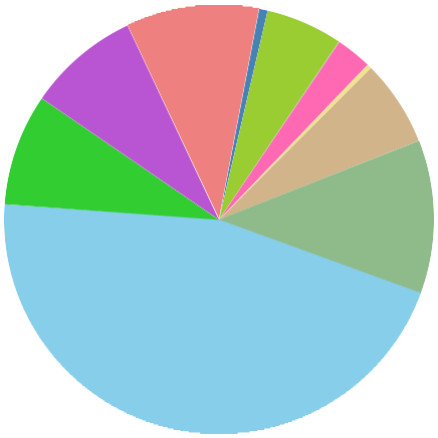
Expenditure Forecast Over Study Period



2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
$21.67K	$31.28K	$122.02K	$3,800.29 K	$710.63K	$3,944.95 K	$245.63K	$3,476.32 K	$117.13K	$658.50K	$8,215.21 K

Clayton Valley High School

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



B20 Exterior Enclosure | B30 Roofing | C10 Interior Construction | C30 Interior Finishes
D20 Plumbing | D30 HVAC | D40 Fire Protection | D50 Electrical
E10 Equipment | E20 Furnishings | G20 Site Improvements

Building System	Estimated Cost	Percentage of Total Cost
B20 Exterior Enclosure	$9,723,546	45.60 %
B30 Roofing	$1,792,855	8.41 %
C10 Interior Construction	$1,797,072	8.43 %
C30 Interior Finishes	$2,132,253	10.00 %
D20 Plumbing	$137,533	0.65 %
D30 HVAC	$1,234,256	5.79 %
D40 Fire Protection	$4,256	0.02 %
D50 Electrical	$578,286	2.71 %
E10 Equipment	$70,564	0.33 %
E20 Furnishings	$1,385,641	6.50 %
G20 Site Improvements	$2,465,690	11.56 %
Total	**$21,321,951**	**100 %**

Clayton Valley High School

Building Main Office, A-F Wings, Library Information

Building Main Office, A-F Wings, Library Information		
Building Locations	Classroom Building, Administration, Restroom	
Constructed/ Renovated	1959	
Total Area	109,170 SF	
Number of Stories	1	
System	*Description*	*Condition*
Structure	Conventional wood-framed structure on concrete slabs with wood-framed roofs	Good
Façade	Stucco with steel windows	Fair
Roof	Primary: Flat construction with modified bituminous finish	Fair
Interiors	Walls: Painted gypsum board, ceramic tile, vinyl Floors: Carpet, VCT, ceramic tile Ceilings: Painted gypsum board, ACT	Fair
Elevators	None	--
Plumbing	Copper supply, cast iron waste and vent	Fair
HVAC	Individual package, heat pump, split-system units Supplemental components: ductless split-systems	Fair
Fire Suppression	Hydrants, fire extinguishers	Fair
Electrical	Source & Distribution: Main switchboard with copper wiring Interior Lighting: T-8 Emergency: None	Fair
Fire Alarm	Alarm panel, smoke detectors, alarms, strobes, pull stations, and exit signs	Fair
Equipment/Special	None	--
Key Issues & Findings	Stucco wall failure at S 1-4 building.	

Clayton Valley High School

Building M-U, Gym, Locker Room, Music, Boiler Information

Building M-U, Gym, Locker Room, Music, Boiler Information		
Building Locations	Multipurpose, Gymnasium, Locker Room, Music, Boiler	
Constructed/ Renovated	1959	
Total Area	42,700 SF	
Number of Stories	1	
System	*Description*	*Condition*
Structure	Conventional wood-framed structure on concrete slabs with wood-framed roofs	Fair
Façade	Stucco with steel windows	Fair
Roof	Primary: Flat construction with modified bituminous finish	Fair
Interiors	Walls: Painted gypsum board, ceramic tile, ACT, unfinished Floors: VCT, ceramic tile, unfinished Ceilings: Painted gypsum board, ACT, unfinished/exposed	Fair
Elevators	Wheelchair lifts	Fair
Plumbing	Copper supply, cast iron waste and vent Boiler Building: Gas-fired domestic boilers with storage tanks	Fair
HVAC	Central system with boilers feeding fan coil units Individual package, heat pump, split-system units Supplemental components: ductless split-systems, suspended gas unit heaters	Fair
Fire Suppression	Hydrants, fire extinguishers	Fair
Electrical	Source & Distribution: Main switchboard with copper wiring Interior Lighting: T-8, CFL Emergency: None	Fair
Fire Alarm	Alarm panel, smoke detectors, alarms, strobes, pull stations, and exit signs	Fair
Equipment/Special	Commercial kitchen equipment	Fair
Key Issues & Findings	One dual convection oven has failed	

Clayton Valley High School

Building H 1-3, H 4-9, I 1-2, J 1-4, L 100-200 Information

Building H 1-3, H 4-9, I 1-2, J 1-4, L 100-200 Information		
Building Locations	Classroom Buildings	
Constructed/ Renovated	2000s	
Total Area	19,400 SF	
Number of Stories	1	
System	*Description*	*Condition*
Structure	Conventional wood-framed structure on concrete slabs with wood-framed roofs	--
Façade	Stucco with aluminum windows	--
Roof	Gable construction with asphalt shingles	--
Interiors	Walls: Painted gypsum board, vinyl Floors: Carpet, VCT, Unfinished Ceilings: Painted gypsum board, ACT	--
Elevators	None	--
Plumbing	Copper supply, cast iron waste and vent No hot water	Fair
HVAC	Individual heat pump, split-system units Supplemental components: ductless split-systems	Fair
Fire Suppression	Wet-pipe sprinkler system (L building only); hydrants, fire extinguishers,	Fair
Electrical	Source & Distribution: Main panel with copper wiring Interior Lighting: T-8, CFL Emergency: None	Fair
Fire Alarm	Alarm panel, smoke detectors, alarms, strobes, pull stations, and exit signs	Fair
Equipment/Special	None	--
Key Issues & Findings	None noted	

Clayton Valley High School

Site Summary Information

Site Information		
Lot Size	39 acres (estimated)	
Parking Spaces	377 total spaces all in open lots; 15 of which are accessible 15 accessible (included in total above), 5 van-accessible	
System	*Description*	*Condition*
Pavement/Flatwork	Asphalt lots with areas of concrete and concrete sidewalks, curbs, ramps, and stairs	--
Site Development	Property entrance signage, Chain-link fencing, CMU dumpster enclosures sports courts with bleachers, fencing, and site lights Heavily furnished park benches, picnic tables, trash receptacles	--
Landscaping & Topography	Moderate landscaping features Irrigation present No retaining walls Low to moderate site slopes throughout	--
Draining Systems and Erosion Control	Surface flow, Inlets, underground piping, municipal system	--
Utilities	Municipal water and sewer	--
Site Lighting	Pole-mounted: metal halide Building-mounted: LED, CFL	--
Ancillary Structures	Pre-fabricated storage sheds, Gazebo, Storage trailers	--
Key Issues & Findings	Alligator cracking in parking lots, synthetic turf at football field is worn	