



# Cambrian School District Facilities Needs Assessment & Master Plan

February 2021



### Board of Education

Mr. Jarod Middleton, President  
Mrs. Carol Presunka, Vice President  
Mr. Donald Rocha, Clerk  
Mr. Randy Scofield, Member  
Mrs. Janet Gillis, Member

### Administration

Dr. Carrie Andrews, Superintendent  
Penny Timboe, Chief Financial Officer  
Jim Browning, Director Building and Grounds

FEBRUARY 2021

*Prepared By:*

Sugimura Finney Architects, Inc  
2155 South Bascom Avenue, Suite 200  
Campbell, California 95008  
408.963.5703



*Cambrian School District*

*Facilities Needs Assessment & Master Plan 2021*

*Table of Contents*

Introduction.....4  
Executive Summary.....6  
Project Cost Summary.....19  
Bagby.....20  
Fammatre.....35  
Farnham.....50  
Price.....65  
Sartorette.....81  
Steindorf.....96  
District Office and MOT.....106  
Reference Material.....118



## Introduction

The Cambrian School District commissioned Sugimura Finney Architects, Inc., (SFA) to update and revise the Needs Assessment and Master Plan Report for the District. The objectives of this 2021 Needs Assessment and Master Plan Report are to reassess and update the needs at each of the school sites related to facilities and maintenance. This 2021 Needs Assessment identifies projects that have been completed, mentions projects currently under construction and highlights the successes of the past renovations as they relate to the funding that was made available by both Measures I and G. At the time of this report, the last Bond Measure I in 2014 funding is completely diminished. The current Bond Measure R was passed by the community November 3, 2020 in the amount of \$88,000,000.

SFA has been involved in most of the major construction projects over the last eight years and revisited all of the campuses, re-examined all past and current projects, and met with District personnel to develop an updated set of facility standards that further assists the District's facilities to meet a common goal. This updated Need Assessment attempts to evaluate and assess all campus buildings and site conditions in their current condition and create goals based on our observations and input from the community and administration.

In June 2014, voters approved Measure I, a 39-million-dollar bond measure. This significant amount of money was used for improvements to District infrastructure and school facilities and could not be used for salaries. The funding from this bond measure built Steindorf STEAM school, a contemporary K-8 school that reduced the overcrowding across all schools.

The Cambrian Board of Education agreed that there were additional needs for improvements related to going maintenance issues, site safety and security. Subsequently, Measure R was proposed before the voters in November 2020. This new bond measure will, at a minimum modernize classrooms, labs and technology at Price, Bagby, Fammatre, Farnham, Sartorette Schools and Steindorf schools; repair or replace deteriorating roofs, upgrade plumbing



## Introduction

infrastructure, replace heating ventilating and air conditioning systems, update low voltage and electrical systems, improved safety and security, and provide better access to students with disabilities.

The 2021 Needs Assessment Report will provide a synopsis of improvements still needed at many of the District's schools.

SFA, headed by Mark C. Finney, has been involved in many school renovation projects for the last twenty-nine years. SFA has received input from District staff and from the District's maintenance department. Based on the updated input and our own observations, we attempt to compile this document that will assist the District on best utilizing and prioritizing future funding toward updating, upgrading and maintaining existing facilities.

This 2021 Cambrian School District Needs Assessment will serve as a working tool guiding the District's future improvement projects that will supplement the past master plan and usage of the newly passed bond measure and any supplemental State Bond matching dollars that become available.



## Executive Summary

### **FACILITIES FUNDING OVERVIEW**

For the most part, funding for the construction and repair of school facilities is separate from funding for operations. The bulk of capital costs are paid for through the issuance of school construction bonds.

For many years, particularly through the 1990s, public schools in California faced a serious facilities crisis. The number of students were increasing, many schools were overcrowded, and an alarming number of buildings needed renovation and modernization.

#### **Major Sources of Facility Funds**

School districts rely on state and local G.O. bonds to raise money to build and remodel school buildings and purchase long-term equipment. Some districts also generate funds by levying developer fees and forming Mello-Roos Community facility districts.

#### **Special Facility Elections**

Since 1982, school districts with new residential and commercial development in their boundaries have been able to try to form a special "Mello-Roos Community Facilities District" to build new schools in the area. Two-thirds of the affected property owners who voted had to approve. Of the 64 Mello-Roos elections held since 1983, 31 succeeded. But this option is rarely used now. Of the five Mello-Roos elections held since 1999, only one has passed.

In 1998, a new law permitted the formation of School Facility Improvement Districts with a two-thirds vote, which was lowered to 55% (with some requirements) in July 2001. Through June 2014, 4 of 18 elections passed with a two-thirds vote, while 28 of the 36 under the 55% vote requirement passed.



## Executive Summary

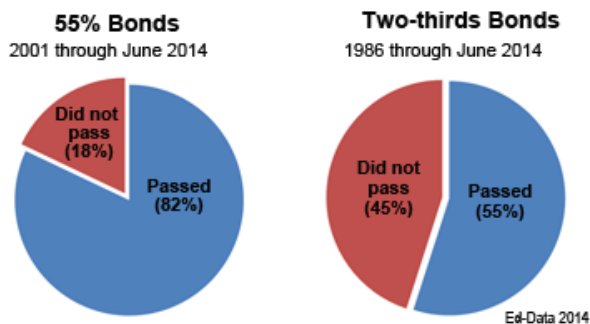
### **General Obligation Bond Elections**

California has a statewide school building program—the School Facilities Grant Program—supported by statewide bond measures. Statewide bond measures require a simple majority (50% plus one) to pass.

A 1986 voter-approved amendment to Proposition 13 permitted districts to seek approval for local general obligation bonds for school construction or renovation, to be repaid through property taxes. Until 2001, a two-thirds vote was required for passage.

In the November 2000 election, voters approved Proposition 39. It permits the voting threshold for general obligation bonds to be 55% if the school board so chooses. Then the district must abide by several administrative requirements, such as establishing a Citizens Bond Oversight Committee to oversee the use of the funds.

Based on the best available information, of the 796 elections held under this option from 2001 through June 2014, 655 (82.3%) succeeded. Of the 942 elections under the two-thirds requirement from 1986 through June 2014, 516 (54.8%) succeeded.



### **Developer Fees**

School districts also have the authority to levy developer fees on residential and commercial construction or reconstruction, but statewide these fees generate



## Executive Summary

significantly less money than bonds. The money may be used only for school facilities, including portable classrooms. These fees are charged both to developers of new properties and to property owners who remodel. They are based on the concept that new construction will lead to additional students. Individual school districts decide whether to levy the fees and at what rate up to the allowed maximum. Districts are required to substantiate the financial impact of the new development and show that they have used the revenues to address that impact.

In January 2020, the State Allocation Board (“SAB”), pursuant to Government Code Section 65995(b)(3), authorized an increase in the allowable amount of statutory school facilities fees (“Level I School Fees”) to \$4.08 per square foot of assessable space for residential development, and \$0.66 per square foot of chargeable covered and enclosed space for commercial/industrial development. Therefore, school districts are now able to assess Level I School Fees at the newly established \$4.08 and \$0.66 rates, provided such rates are properly justified pursuant to law.

### ***Maintenance Funding***

The ongoing maintenance of facilities comes out of district operating funds in ways that are partially determined by state law. Districts are required, for example, to maintain a Routine Restricted Maintenance Fund that dedicates 3% of their general fund budget to this purpose.

The routine cleaning and upkeep of facilities-custodial work-cannot be funded from the above sources.





## Executive Summary

### NEEDS ASSESSMENT OVERVIEW

The original purpose of the Facilities Needs Assessment and Master Plan Report and subsequent updates were prepared for the Cambrian School District with the intention of documenting critical modernization needs as originally funded from local General Obligation Bond issues. All the school campuses received construction upgrades or renovations. The needs to upgrade the campus District wide surpasses the ability of the community to fully fund all the needs at the time of each report based on the bonding capacity of the community. This 2021 Report will provide a fresh study for all District facilities. The Cambrian Board of Education requested this 2021 Needs Assessment and Master Plan Report to identify and verify the ongoing needs based on the original Needs Assessment and Master Plan Report prepared by Sugimura Finney Architects (SFA).

This 2021 Needs Assessment and Master Plan Report will review all the construction enhancements and modernization at existing campuses and document needs for all of the existing campuses. The previous report summarized a far-reaching assessment, out of reach of a realistic bond capacity within the District borders. Work was completed with many sacrifices focusing on updating and opening a new school in the District. Significant work needed at all of the campuses was not possible in the last bond.

Through many discussions with District and School administrators, parents, community and the Board of Education, priorities were established to fund past projects that were identified to be the greatest need to the District based on the priority Site Safety and Security.

SFA will again document existing conditions at all of the Districts campuses. SFA will then review the long-range design concepts and revise these plans based on work already completed and review as to whether redesign is needed. SFA will work alongside the District staff and school site staffs and the District program management team to ensure future design concepts are a reasonable solution.



## Executive Summary

The information contained in this 2021 Report is the result of a series of inspections of the sites performed by SFA, as well as many meetings between the SFA team and staff, the District program managers at both the District and site levels. The SFA team worked closely and reviewed all recommendations with District staff. SFA has been the Architect for most of the major and smaller projects over the last eight years.

While the past sources of money allowed for most of the improvement goals to be completed such as reopening the Steindorf campus, there are still some areas that need to be addressed. Addressing these unfinished items as well as establishing District-wide standards and providing solutions to bring all District facilities to these standards is the focus of this 2021 Update Report. Many infrastructure items had been upgraded from the original bond scope but many still remain.

These updated suggested goals would include, but not limited to:

### *Infrastructure*

- Underground utility replacement (water, sewer and gas): some systems are over 40 years old and should be replaced.
- Window replacement - existing single pane windows should be replaced with double pane glazing for energy efficiency.
- HVAC upgrades.
- Energy Management System (EMS) – goal is to ensure that all EMS systems are properly installed and functioning correctly.
- Expand parking and drop-off areas for student safety.
- Create more outdoor eating and learning areas.
- Upgrade fixtures to be touchless.
- Landscape and Irrigation improvements
- Upgrade parking lot lighting
- Administrative and student support upgrades.
- Additional solar.



## Executive Summary

### *Educational Program Issues/Campus Planning*

- Replace selected portable classrooms with new portable classrooms.
- Provide covered walkways to portable classrooms.
- New flexible furnishings.
- State of the Art Technology in the classroom.
- New STEAM classrooms.

### *Exterior Appearance*

- Provide architectural features to update the look of these 40-year-old facilities to make the facilities more pleasing to the neighborhood and establish a more effective sense of community and student pride.
- Replace cracked pavement and deteriorating stucco walls
- Stucco over wood exterior walls that show signs of wear

### *Site Security*

- Although there are several non-construction related issues that will be pursued as an on-going challenge to bring all of the schools to a higher level of safety and security, many additional construction related issues will be necessary to make all of the schools safer such updating fire alarm and intercom systems and installation of Closed-Circuit Visual Systems.

### *Other*

- Matching funds that would provide funding that may become available for existing school campuses that have not received funding from the state modernization bond funds that have exceeded twenty-five years in age or older. We have submitted applications seeking supplemental State matching funds of approximately \$4 million dollars.



## Executive Summary

### **PROCESS**

SFA employed the following process in preparing this Needs Assessment and Master Plan Report in 2021:

- Reviewed improvements from previous construction projects funded by other sources
- Visited each of the sites concerned and recorded our findings
- Met with the District Superintendent and other high-ranking District administration
- Drafted preliminary recommendations with the District's Program Manager.
- Reviewed preliminary recommendations with the District staff
- Prepared construction cost estimates
- Drafted Final Report

### **CRITERIA FOR EVALUATION**

The Cambrian's goal is that all sites should provide similar facilities for all of the District's students based on standards established by the past and current reports. In assessing each site, it is important to consider enrollment, staff size, and available space on the site, and special programs that may be offered which may affect the original and updated master plan.

### **SUMMARY OF OBSERVATIONS**

The following are some general observations of all of the District's facilities.

#### *Infrastructure*

Underground utilities at all the older sites are between 40 to 50 years old. Maintaining these systems has been an ongoing maintenance issue and will continue to be if not replaced. Some of the older sites have had some of the



## Executive Summary

infrastructure updated. Many of the older campuses will still need some attention to utility replacement including electrical upgrades.

Several of the older sites still have parking lots that are inadequate for the increasing number of staff and visitors, causing a significant impact on surrounding neighborhoods. Designated drop-off areas for students are also inadequate. A few of the campuses parking lots have been enlarged or modified to meet the drop off and pick-up loading requirements but most of the elementary schools have inadequate parking lots and drop off areas.

Many of the sites have major energy efficiency concerns including lack of insulation and single paned window systems. Replacing antiquated systems, adding insulation, changing window glazing to double glazing, and repairing or installing energy management systems would have a positive effect on energy usage. Most of the campuses need upgrades to windows and insulation.

### **Educational Program Issues/Campus Planning**

Classrooms though-out the Cambrian School District have received some upgrades which contribute toward a positive learning environment for students. The School Board is working feverishly to keep up with the ever-adjusting student population, affected by ongoing changes. It is difficult to predict the needs of each campus based on programmatic needs with constant changes.

Although most of the older campuses have had upgrades to floor, wall, ceiling finishes, and cabinetry, there is still a need for these items at some of the older campuses. Most of the campuses have had upgrades to door hardware.

Portable Classrooms older than 15 years need to be replaced. Ultimately replacing all of the portable classrooms older than 15 years would be desirable.

Several Portable Classrooms were added quickly to most of the school sites in the past which resulted in odd configurations that may not be desirable or



## Executive Summary

functional with the existing campus buildings. It appears that many of the Portable Classrooms were added at convenient locations, perhaps based on the location of existing utilities.

It is likely that Portable Classrooms were added to a campus without looking into the future for the possibility that more Portable Classrooms would be added to the site. Consequently, several of the existing campus sites have clusters of Portables in areas that become disjointed with the original permanent school buildings. The Master Plan includes suggested alterations to several of the existing campuses that include a combination of relocation and replacement of Portable Classrooms with more attention to the campus needs and with what we hope is a more thoughtful approach to site design. It would be ideal to create a new permanent classroom wing while keeping the old portable in place to avoid the cost for temporary housing to achieve this goal.

Student Support Areas (Administration Buildings) at many of the campuses have been renovated to meet the current District standards. Some sites still have inadequate facilities that need to be brought up to the new standards established by this report either through modernization or new construction. There are very few campuses that need updated student support areas as reflected in this Master Plan update.

With the change of administration at the District, the District's philosophy and goals are heading toward looking at teaching spaces in a new way. With the fast pace of technological changes, classrooms need to be more flexible to ever changing technology. Wi-Fi has made hard wired data jacks almost unnecessary. Fixed computer stations have changed to handheld devices moving about the campus. Library space may not be the norm. Classrooms will need to be simple in design with unlimited flexibility. Flexible furnishing and student storage will need to be incorporated.



## Executive Summary

### Exterior Appearance/Landscape

As with any building that is between 40 to 50 years old, some of the schools in the Cambrian School District are showing their age architecturally. These facilities can be upgraded significantly by adding architectural features such as expanded entries, signage, the addition of cement plaster coatings to currently “dated” textured exterior walls, re-painting walls with contemporary color schemes, replacing exterior windows, construction of new buildings, and upgrading landscaping around some of the campuses.

These upgrades will make the facilities more pleasing to the neighborhoods in which they reside and will have a positive impact on staff, students, and the surrounding community.

### UPDATED PROJECT COST

This report includes an estimated project summary cost for each site. Several components make up the Total Project Cost which includes the following:

- Construction Cost – estimated cost for construction
- Escalation – to cover increased construction
- Construction Contingency – to cover the cost of unforeseen items or design scope changes
- Soft Costs – Architects fees, Department of the State Architect plan check fees, Testing and Inspections, Project Management, Reports, Surveys, and Printing
- Interim Housing – Temporary Housing for students and staff displaced during the construction

## Project Cost Summary Per Site

		<i>Needs Assessment/ Master Plan Modernization</i>
<b>Campus</b>		
Bagby Elementary School		<b>\$36,381,097</b>
District Office and Maintenance Operations and Transportation		<b>\$26,653,781</b>
Fammatre Elementary School		<b>\$35,299,279</b>
Farnham Elementary School		<b>\$35,974,174</b>
Metzler (Roofing Only)		<b>\$1,680,000</b>
Price Middle		<b>\$65,075,295</b>
Sartorette Elementary School		<b>\$33,075,766</b>
Steindorf STEAM Magnet School		<b>\$3,836,026</b>
<b>SubTotal Amount</b>		<b>\$237,975,417</b>
Inflation to Midpoint of 5 years (4%)		<b>\$47,595,083</b>
<b>Total Amount</b>		<b>\$285,570,501</b>



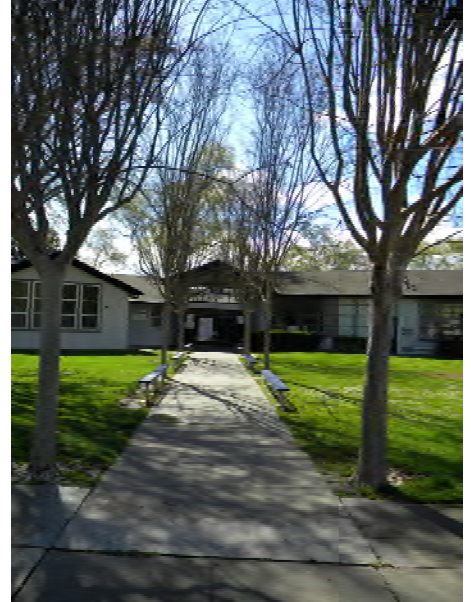


## **Bagby Elementary School - Master Planning Evaluation**

### **Evaluation Summary**

Originally built in 1956, Bagby Elementary School is situated on a 12.5 acre lot, making it the largest of the elementary campuses in the Cambrian School District. Like the other elementary schools, Bagby serves grades Kindergarten through 5<sup>th</sup>.

The Bagby Elementary School campus is laid out in a long linear series of classrooms with the Multi-Use Room (MUR) located on one end and the library on the other. Both the MUR and library would benefit from an expansion of their existing space or a move to larger new space. The MUR in particular is extremely undersized for the current student population. Bagby had the smallest MUR of all the elementary schools but the largest number of students to be served. Hence, a new Multi-purpose building was constructed at this site in 2018 to alleviate this on-going problem.



Bagby site committee members in the past raised concerns about campus organization at the front and back of the school. As mentioned in the general assessment for all the schools, there is not enough parking at the front with crowded and potentially dangerous drop-off conditions. In an effort to ameliorate both problems, the school has implemented a “Walk and Roll” program aimed at reducing the number of cars during busy drop-off and pickup times. The program has helped, but further measures to improve traffic flow at drop-off and parking areas are recommended at this campus.

The other issue with site organization is how the back area of the campus is laid out, with a couple relocatable classrooms and the staff parking lot inconveniently located behind, and blocked off by, the existing ATLC daycare program portable buildings. Occupants of these back relocatable classrooms are separated and remote from the rest of the campus, with two locked gates to negotiate and poor lighting conditions at night (which is a concern for the teachers in these classrooms). For all staff, the back area is an issue since their dedicated parking lot is cut off from the rest of the campus by the gates and the ATLC portables. Reorganizing this back area and providing better access to it would benefit the school as a whole.

### **Modernization History**

Several modernization projects have occurred at this campus. Restroom were upgraded in 2003, site exterior upgrades in 2004, media center alterations in 2005, and the entire campus was renovation in 2005. Solar canopies and decorative safety fencing were added to this campus in 2014. A new multi-purpose building was nonstructured and completed in 2018.



# Site

## 1. Parking and Traffic

The existing parking size and configuration at Bagby hasn't changed significantly in the last thirty years. The flow of traffic inefficiently designed with a separate buss drop off area that exists adjacent to the entrance of the main parking lot. The condition of the pavement is in good condition. The existing parking lot could be expanded and altered to be significantly more efficient.

It is recommended that the parking lot be altered and expanded combining the bus drop off area with the existing parking lot. The parking lot should be designed to have a dedicated drop off area for the parents that would allow them to pass as needed after dropping off or picking up their children.

## 2. Site ADA Compliance

Some flatwork and walkways were upgraded in previous modernizations. Most of the classrooms were modified to allow for flush entry by grading the inside of the classrooms during the 2004 and 2005 modernizations. There are locations where pavement has heaved or cracked in the ADA path of travel.

It is recommended that several portions of existing walkways in the ADA path of travel be repaired. The locations at each doorway should be replaced with concrete that matches the existing concrete.

## 3. Play Equipment

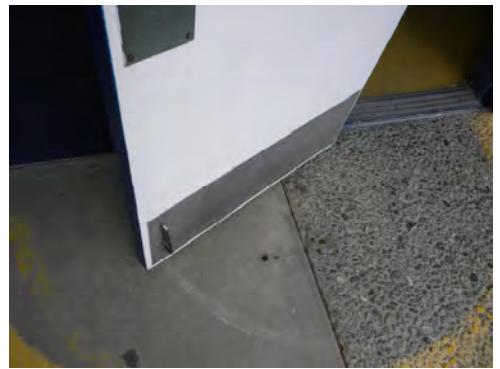
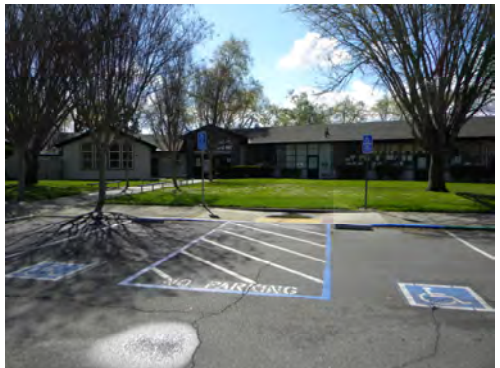
This kindergarten and the general play structures are in fair condition. The fall zone is a wood chip loose material which has to be replenished as the existing fiber gets kicked out, compacted, and floats away. The perimeter of the play structure fall material is raised and not designed to meet the intent of accessibility.

It is recommended that the Kindergarten and main play structures be replaced with new play structures in the next five years. The loose wood chip fall material should be replaced with a more desirable fall material such as poured in place matting with a flush concrete curb surrounding the new poured in place matting.

## 4. Paved Play Area

The paved play area at Bagby Elementary is in fair condition however there are several cracks in the pavement that need to be repaired.

It is recommended that the existing play area be overlaid with new AC pavement and slurry sealed with new striping.



## 5. Turf Play Area and Synthetic Track

The existing turf is in fair condition but has some uneven surfaces. The existing DG track tends to need ongoing maintenance.

It is recommended that the existing turf be upgraded to remove uneven surfaces with new sod or seed throughout. The existing track should be leveled and replaced with new decomposed granite material with new borders. It would be desirable to upgrade the track with a new low maintenance synthetic track.



## 6. Landscaping and Irrigation



This campus has a large amount of mature trees located at various locations throughout this campus which require ongoing trimming. Landscaping is in fair condition. The District would like to upgrade landscaping with drought tolerant native plants that require less water. Irrigation controls and valves are in need of replacement.

It is recommended that all mature trees be trimmed as required and that all plantings be replaced with drought tolerant natives. All valves and irrigation controls should be replaced.

## 7. Fencing and Security

New decorative fencing was added at the perimeter of the entire campus in 2014. The campus was modified to secure or lock down the campus in the event of an undesirable situation.

There is no known reason for additional fencing and security at this campus.



## 8. Trash Enclosure

The existing trash enclosure size and location appears to be adequate for this campus.

There is no need for additional trash enclosure modifications at this time.

## 9. Site Utilities

Some of the underground utilities supplying gas and water to the site are over 40 years in age. The existing sewer system is composed of an antiquated clay piping system which allows tree roots to grip and break existing underground piping. These underground utilities have surpassed their intended service life. Replacing the underground utilities will drastically reduce the need for ongoing maintenance of these systems.

Past modernizations and electrical upgrade routed new heavy electrical conduits on eaves, roofs and columns. The campus was not intended nor designed for these heavy conduits that blemish the campus. It has been reported that this campus may need additional seismic gas shut offs. The domestic backflow preventor is in need of replacement.





It is recommended that all existing underground utilities older than 40 years be replaced with new utility systems. Underground water, storm, sewer and gas lines should all be replaced entirely at this site. It is recommended that all existing electrical conduits be removed from the eaves, roofs and columns throughout the campus and rerouted underground. The cost estimate will assume some additional seismic gas shut offs be added to this campus. The domestic water backflow is recommended to be replaced.

**10. Main Electrical Service**

This site has adequate electrical service to this site.

There is no need for additional electrical upgrades to the service.



**11. Storm Drainage**

There are no known site drainage issues.

**12. Site Lighting**

Exterior lighting was is not ideal for nighttime security. The District maintenance is difficult as the pole lighting is very high.

It is recommended that pole lights and roof mounted lighting be replaced with new LED

lighting at the parking lot and throughout the campus.



**13. Concrete Walkways**

The existing concrete walkway system appears to handle foot traffic well at the site; however, several areas of the existing walkways have cracks and other signs of deterioration. There have been several trenching projects whereas the concrete has a lot of patching.

It is recommended that large cracked areas of the walkways be replaced to the nearest expansion joint. It is also recommended that entire walkways are removed where patching has occurred in the past. (Refer to Section 2 ADA).



**14. Basketball Backstops/Ball Walls/ Misc. Play Apparatus**

The existing basketball backstops, rims and chains are in good condition. There are currently no ball walls available at this site.

It is recommended that one ball wall be added to this campus.

**15. Quality of Exterior Siding/Material**

The exterior wall surfaces appear to be in fair condition.



There is no need for exterior siding upgrades at this time.

## 16. Outdoor Learning

Outdoor learning has become more desirable in San Jose as the weather is reasonably comfortable for about half the school year. This campus has one small outdoor covered eating area.

It is recommended that the existing outdoor eating structure be designed to allow for teachers the flexibility of choosing alternative learning based on program needs.



## Modernization

### 17. Existing Covered Eating Structure

This campus currently has a small covered eating structure fairly close to the cafeteria area and is in good condition.

There is no need to replace or modernize this existing covered eating area.

## 18. Existing Covered Walkways

The existing covered walkways and overhangs are in good condition.

There is no need for upgrades to the existing covered walkways or overhangs at this time.

## 19. Electrical Wiring

There appear to be a sufficient number of electrical devices in each classroom. There have not been complaints of electrical issues at this time.

There is no need for electrical wiring upgrades at this time.

## 20. Asbestos Abatement

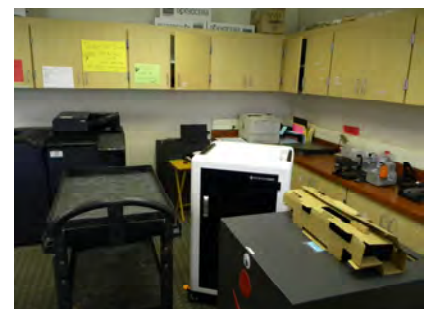
Independent reports provided by the School District indicate that all known and tested exposed asbestos has been removed or encapsulated.

It is recommended that any asbestos that becomes exposed in some manner in the future, either by accident or future construction be removed entirely.

## 21. Seismic Upgrade and Dry rot

A preliminary structural review of this campus was performed to determine if any structural upgrades might be necessary. Preliminary studies indicate that all buildings are seismically sufficient..

It is recommended that a more detailed structural analysis be performed to determine the extent of voluntary structural upgrades that should be



incorporated into the next phase of modernization for any building that is modernized.

## 22. Roofing

Based on the roofing report, all roofing is in good condition as it was reportedly installed in 2002. It was noted that some of the drains are clogged with debris and need ongoing maintenance. It was also noted that some the shingle roofs are in fair condition but some of the shingles area damaged. The roof penetrations are in good condition. The rusted metal pop up roof should be restored. Some ponding is present at the low sloped covered walkways.



It is recommended that additional maintenance be implemented toward cleaning roofs free of leaves and debris. It is also recommended that several damaged or missing shingles be replaced. It is also recommended that a waterproof coating be provided to coat the existing pop up rusted roof.

## 23. Exterior Painting

The existing exterior of this campus is in good condition.

There is no need for exterior painting at this site but is recommended that the campus be painted every seven years.



## 24. Building Insulation and Windows

The original campus buildings were constructed in an era when natural resources such as natural gas and electricity were inexpensive. Windows are single glazed throughout and insulation does not currently meet new construction standards. The window blinds have are older and need to be replaced.



It is recommended that insulation be added to all exterior walls and added to all ceiling cavities. Windows should be replaced with double glazed window systems retrofitted with new window blinds.

## 25. Exterior Doors and Hardware

The campus hardware and doors are in good condition, however the existing locking system does not currently meet the District's requirements for appropriate security. There are some doors that will need to be replaced due to heavy usage and damage over the years.

It is recommended that all hardware be replaced with District Standard secure hardware throughout this campus. It is assumed that several existing doors will need to be replaced to make



appropriate alterations for the new hardware installation. The cost estimate will make an assumption for the number of replacements needed.



## 26. Restrooms/Partitions/Fixtures



The existing bathrooms were renovated in 2003. There are a few small bathrooms that were not updated. The modernized bathrooms are in fair condition but will likely need to be upgraded in the next ten years. The bathrooms floors are in poor condition and will need to be upgraded in the next five years. The faucets are older and should be replaced. There are a select few fixtures that need to be replaced.

It is recommended that the bathroom floors be upgraded in the next five years. Toilet partitions should all be replaced in the next ten years. It would be desirable to replace all facets and flushometers with the District Standard touchless devices.

## 27. Flooring

Most of the flooring is in good condition. It is anticipated that all flooring will need to be replaced in the next ten years.

It is recommended that the entire campus flooring be replaced in the next ten years.



## 28. Tackable Walls

The existing vinyl wall coverings and tackable walls are in good condition.

There is no known reason to add or replace the existing tackable wall surfaces.

## 29. Interior Wall Finishes

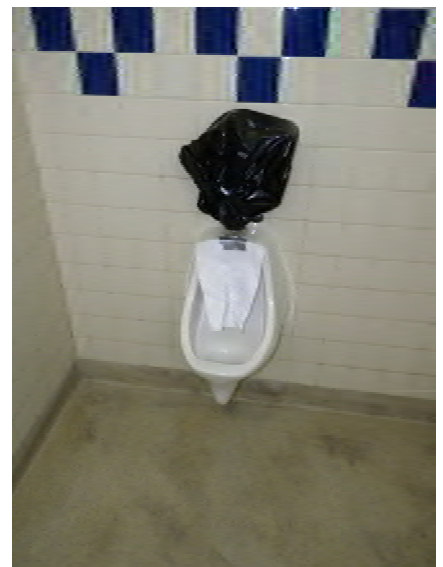


Interior wall finishes were upgraded in the 2005 modernization. Interior paint is in good condition.

It is recommended that all new interior wall finishes be repainted in the next five years.

## 30. Ceilings

There are no known issues with the existing ceilings at this campus.



## 31. Cabinetry



All cabinetry was replace in the modernization in 2004. Most of the casework is still in very good condition.

It is assumed that based on the existing condition of the cabinetry that no cabinetry will need to be replaced.

### 32. Drinking Fountains

Many of the exterior drinking fountains have been upgraded or replaced to meet the minimum ADA requirements as approved by the Division of the State Architect in the past. There are still a few drinking fountains that are not accessible. The District would like to see several bottle fillers at this campus.

It is recommended that a bottle filler drinking system be installed or updated in the gymnasium and the cafeteria building. It is also recommended that two of the exterior drinking fountains be updated or replaced to meet current ADA requirements.



### 33. Heating Ventilating and Air Conditioning

The existing HVAC system has been replaced at the entire campus during the 2005 modernization. HVAC units lifecycle is fifteen years. These HVAC units are now fifteen years old. The EMS is constantly requiring maintenance and needs to be upgraded.

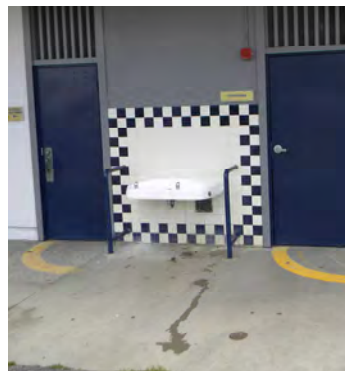
It is recommended that all HVAC systems and the EMS system at this entire campus be replaced in the next five years.



### 34. Interior Lighting

The existing fluorescent lighting throughout this campus is adequate, however, it is highly desirable to retrofit all classrooms with new LED technology to allow for additional electrical efficiency while allowing for the new option of dimming lights on demand.

It is recommended that all classrooms be retrofitted with new LED lights throughout the campus with new dimmable switching.



### 35. Electrical Power Distribution

Currently, the existing power distribution at the existing classrooms is adequate at this time. Although there are no known issues related to power distribution at this campus, the District would like to have each electrical inspected by an electrical contractor and replaced as needed.

There is no need for additional outlets. The cost estimate will make assumptions that some of the electrical panels will need to be upgraded.



### 36. Data Network

The IT department indicated that there is a need of upgrading student devices and classroom standardization of technology equipment.

It is recommended that new teaching apparatus and devices be purchased for the students, teachers and classroom facilities including laptops, flat panel displays, screen casting devices, doc camera, chrome





books, and iPads. Infrastructure improvements are recommend including upgraded wireless access points, backup power and switches.

### 37. Camera Surveillance

The District hasn't expressed the need for camera surveillance systems at this time. However, it is possible that security cameras will become an issue in the future.

### 38. Communication System

The existing Bogen system is analog and is very dated at this time. The District is unable to fully maintain this system.

It is recommended that the communications system be replaced completely with a new digital system.

### 39. Fire Alarm

The existing fire alarm system meets current code and local fire requirements, however there are often ongoing maintenance problems with the system. Should new modernization occur at this campus, it is likely that the fire alarm main panel will need to be replaced with a newer system that includes newly mandated sound systems which require different or additional wiring.

Although it is not required to be replaced, the cost estimate will included the cost to replace the entire fire alarm system.

### 40. Alteration of Existing Portable Buildings

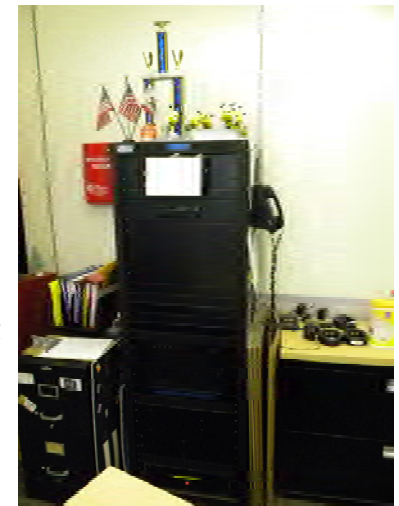
There is a cluster of portable classrooms that are in good condition at the southern portion of the campus. There is a very old large portable classroom in the middle of the campus.

There are no known reason for upgrades to the portable classrooms at the southern end of the campus. Refer to Sections 41 and 53 for replacement of portables.

### 41. Relocation of Existing Portable Buildings

Over the years, portable classrooms were added to this site with the expanding student population. Most of the portables were added to the campus at a location that seemed pertinent at the time, likely related to the most cost effective location for utility hook up with absence of planning. One of the portable classrooms at the center of the campus was placed awkwardly and poorly. The existing location not only separates the campus but was located in a place that limits options for fire authorities to access this site.

It is recommended that the large older portable classroom at the center of the campus be relocated to a new location that coordinates teaching, socialization and safety with its new location.



#### 42. Library

The current Library space appears to be adequate and functions well as a library for this campus. The overall condition of the library space is in fair condition.

There is no need for changes to the current library at this time. The finishes at the library should be upgraded.



#### 43. Work Room/Lounge

The current work room and lounge need to be modernized.

It is recommended that the existing administration support spaces be renovated and altered to meet the District current needs at this site.

#### 44. Cafeteria/Kitchen/Gymnasium/Music/ Wrestling Rooms

The cafeteria space is adequate but the finishes should be upgraded. The kitchen is older and is in need of renovation with new equipment.

It is recommended the Gymnasium skylight be replaced with a new skylight system. It is recommended that the cafeteria be upgraded with new finishes. The kitchen should be renovated with new kitchen equipment.



#### 45. Existing Storage

Although staff will argue that there is never enough storage, currently, there appears to be enough storage available.

There is no need for additional storage.

#### 46. Clocks

The current clock system is inadequate and does not meet the needs of the District.

It is recommended that the clock system be replaced with a new system.

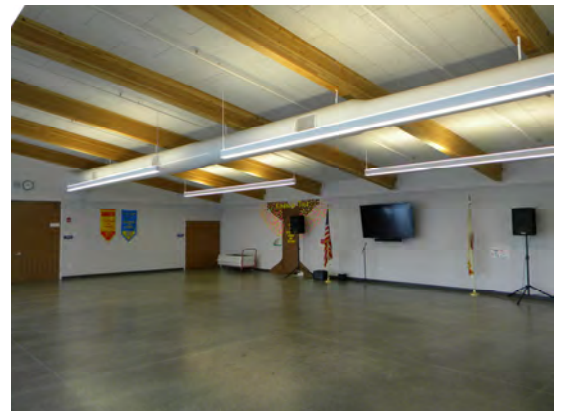
#### 47. Speakers/Bell /PA



Cambrian School District



Bagby Elementary 10



Sugimura Finney Architects, Inc.

The existing analog system is dated and should be updated.

It is recommended that the Bells and Speaker system be replaced.



### 48. Computer Lab/Art

Several classrooms have computer stations. Computer lab uses have changed over the years. The District is not in need of a computer lab at this time.



### 49. Renovation of Administration

The existing administrative spaces were renovated in 2005. The entry currently work fairly well for security purposes. The administration area is in need of modernization.

It is recommended that the existing administrative spaces be renovated.



### 50. STEAM Lab

There is not a dedicated contemporary space used in the manner of a STEAM lab.

It would be ideal to convert an existing classroom space into a STEAM lab.



## **New Construction**

### 51. Covered Walkways

The site has several areas where students can travel from some classrooms to other classrooms without getting wet from inclement weather. There are several isolated buildings at this campus where connected covered walkways would be desirable.

It is recommended that new covered walkways be added connecting isolated classrooms.



### 52. Restrooms

There appears to be an adequate number of restrooms at this campus located in relatively ideal locations.

There is no need to add restrooms facilities at this campus.

### 53. Portable or Modular Classrooms

Since the opening of Steindorf school, overpopulation at the other schools has settled whereas additional portable classrooms are not needed. However, the existing large portable in the middle of the campus is extremely old and should be replaced and relocated to a new location. The existing portable complex has exceeded its life expectancy.

It is recommended that the existing old portable building at the center of the campus be removed from the campus. If necessary, a new



permanent classroom building should be constructed elsewhere on this campus. The existing portable classrooms should be replaced with new permanent classrooms.



#### 54. Administration

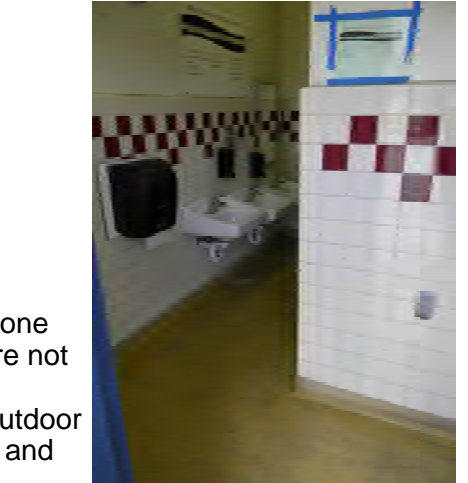
The existing administration space is inadequate in size.

It is recommended that the administration building be expanded with an addition at the front of the school.

#### 55. Library

The existing library space is fairly small in size is adequate to continue to function as a traditional library space.

There is no need to provide an additional space related to the library.



#### 56. Covered Eating Structure or Outdoor learning

There is a small metal shade structure adjacent to the cafeteria and a new one next to the Multi-use. The location of the existing photovoltaic structures are not located in an area allowing these to function as outdoor learning or eating structures. The existing space adjacent to the cafeteria could incorporate outdoor learning. It would be desirable to have one more covered outdoor learning and eating space strategically located.

It is recommended that one additional large covered metal shade structure be installed at a location on this campus equipped with wi-fi and outdoor furnishings.



#### 57. Storage

It appears that the existing storage is adequate.

There is not need for additional storage facilities at this campus.

#### 58. STEAM Lab

An existing classroom may be adequate to be converted to a STEAM lab in the future.

There is no need to create a new STEAM lab at this site.

#### 59. Alternative Energy Source

This campus was retrofitted to house new photovoltaic structures in 2014. The Cambrian School District will continue to look into alternative energy sources.

There is no need to add additional photovoltaics units at this site. It is desired to provide on-going cleaning of the photovoltaics as the District does



not have the manpower to maintain the panels at this time.

## 60. Campus Layout

It is desirable for this campus to study the existing locations of portable classrooms while considering new permanent classroom buildings replacing them; perhaps in a new location that better serves the educational needs at this campus. The existing older large portable classroom should be removed and constructed elsewhere on the campus (refer to Section 53).

It would be desirable to add two outdoor learning and eating spaces to the campus (refer to section 56).

It would be desirable to construct an addition to the existing administration area at the front of the campus (refer to Section 54).



## Bagby Elementary School Cost Estimate

<b>Construction Item</b>	<b>Quantity</b>	<b>Unit</b>	<b>Cost</b>	<b>Total Estimated Cost</b>
<b>Site</b>				
1. Parking and Traffic	38,000	sf	32.00	\$1,216,000
2. Site ADA Compliance	1	ls	70,000.00	\$70,000
3. Play Equipment	3	ea	65,000.00	\$195,000
4. Paved Play and Courtyard Area	47,000	sf	7.00	\$329,000
5. Turf Play Area and Synthetic Track	155,000	sf	5.00	\$775,000
6. Landscaping and Irrigation	51,000	sf	2.00	\$102,000
7. Fencing and Security	0	lf	300.00	\$0
8. Trash Enclosure	0	ls	65,000.00	\$0
9. Site Utilities	149,000	sf	20.00	\$2,980,000
10. Main Electrical Service	0	ls	100,000.00	\$0
11. Storm Drainage	0	sf	0.50	\$0
12. Site Lighting	100,000	sf	3.50	\$350,000
13. Concrete Walkways (refer to Section 2)	3,500	sf	35.00	\$122,500
14. Basketball Backstops/Ballwalls/Misc.	1	ea	30,000.00	\$30,000
15. Quality of Exterior Siding/Material	0	sf	0.00	\$0
16. Outdoor Learning	1	ls	20,000.00	\$20,000
<b>Total Site</b>				<b>\$6,189,500</b>
<b>Modernization</b>				
17. Existing Covered Eating Structure	0	ls	0.00	\$0
18. Existing Covered Walkways (see new covered walks)	0	ls	450,000.00	\$0
19. Electrical Wiring	0	sf	11.00	\$0
20. Asbestos Abatement	1	ls	25,000.00	\$25,000
21. Seismic Upgrade/Dry Rot	0	sf	35.00	\$0
22. Roofing (Based on Roofing Report)	1	ls	185,000.00	\$185,000
23. Exterior Painting	26,500	sf	8.00	\$212,000
24. Building Insulation and Windows	58,600	sf	40.00	\$2,344,000
25. Exterior Doors and Hardware	58,600	ea	5.00	\$293,000
26. Restrooms/Partitions/Fixtures	8	ea	25,000.00	\$200,000
26a. Restrooms/Partitions/Fixtures hands free	100	ea	850.00	\$85,000
27. Flooring	58,800	sf	9.00	\$529,200
28. Tackable Walls	0	sf	18.00	\$0
29. Interior Wall Finishes	58,800	sf	12.00	\$705,600
30. Ceilings	0	sf	4.50	\$0
31. Cabinetry	0	sf	45.00	\$0
32. Drinking Fountains	3	ea	6,500.00	\$19,500
33. Heating Ventilating & Air Conditioning	58,800	ea	25.00	\$1,470,000
34. Interior Lighting	58,800	ls	43.00	\$2,528,400
35. Electrical Power Distribution/Outlets	1	ls	25,000.00	\$25,000
36. Data Network	1	ea	165,000.00	\$165,000
37. Camera Surveillance	58,800	sf	0.35	\$20,580
38. Communication System	1	ls	125,000.00	\$125,000
39. Fire Alarm	58,800	sf	55.00	\$3,234,000

<b>Construction Item</b>	<b>Quantity</b>	<b>Unit</b>	<b>Cost</b>	<b>Total Estimated Cost</b>
40. Alteration of Existing Portable Buildings	0	sf	350.00	\$0
41. Relocation of Existing Portable Buildings (refer to line 53 below)	1	ea	135,000.00	\$135,000
42. Library	2,500	sf	350.00	\$875,000
43. Work Room/Lounge	2,000	sf	500.00	\$1,000,000
44. Cafeteria/Kitchen/Gym/Music/Wrestling Rooms	6,500	sf	350.00	\$2,275,000
45 Existing Storage	0	ls	35,000.00	\$0
46. Clocks	58,800	sf	1.75	\$102,900
47. Speakers	58,800	sf	1.50	\$88,200
48. Computer Lab	0	sf	550.00	\$0
49. Renovation of Administration	4,000	sf	500.00	\$2,000,000
50. STEAM Lab (See Computer Lab)	960	sf	600.00	\$576,000
<b>Total Modernization</b>				<b>\$19,218,380</b>
<b>New Construction</b>				
51. Covered Walkways	250	lf	450.00	\$112,500
52. Restrooms	0	sf	750.00	\$0
53. Portable or Modular Classrooms	6	ea	275,000.00	\$1,650,000
54. Administration	500	sf	850.00	\$425,000
55. Library	0	ea	0.00	\$0
56. Covered Eating Structure (see outdoor learning)	1	ea	210,000.00	\$210,000
57. Storage	0	ls	75,000.00	\$0
58. STEAM Lab (Music and Arts) - See Campus layout below	0	sf	750.00	\$0
59. Alternative Energy Source	1	ls	10,000.00	\$10,000
60. Campus Layout	0	sf	0.00	\$0
61. Furnishings and Equipment	53,300	ea	4.00	\$213,200
<b>Total New Construction</b>				<b>\$2,620,700</b>
<b>Subtotal Construction Costs</b>				<b>\$28,028,580</b>
<b>Construction Contingency 10%</b>				<b>\$2,802,858</b>
<b>Soft Costs 18%</b>				<b>\$5,549,659</b>
<b>Total Revised Master Planning Needs at Bagby Elementary School</b>				<b>\$36,381,097</b>



## Fammatre Elementary School - Master Planning Evaluation

### Evaluation Summary

Originally built in 1961, Fammatre Elementary School occupies an 8 acre lot adjacent to Price Middle School, making it the smallest of the elementary campuses in the Cambrian School District. However the school's location next door to Price allows for some sharing of spaces and programs which mitigates the smaller acreage. Like the other elementary schools, Fammatre serves grades Kindergarten through 5<sup>th</sup>.

Fammatre is laid out as a series of parallel classroom wings extending out from a large central landscaped quadrangle. The Multi-Use Room (MUR) fronts this quadrangle and is situated on axis with the main entrance to the school. Playgrounds were recently repaved and in good condition, but the main (back) playground and Kindergarten play area would benefit from expansion to accommodate all currently enrolled students. School site committee members commented that more trees in the turf play area would provide needed shade and visual appeal at the back of the campus.

Fammatre site committee members in the past, expressed concerns about campus organization at the front and back of their school. Drop-off conditions are crowded and potentially dangerous. Parking is limited and often shared with Price Middle School next door. While the proximity of the two schools has many advantages, controlling access between the sites and keeping them secure can be problematic, as are overlapping drop-off and parking times. The portable classrooms located at the back of the Fammatre campus, adjacent to the Cambrian Community Center, are disconnected from the rest of the campus. More lighting and covered walkways from the main campus out to the portables would be desirable. Other areas of the school would also benefit from improved site lighting at night.

Committee members were generally happy with the size, layout, and lighting inside their existing classrooms. The issue, as with all the Cambrian schools, is the student-to-teaching-station ratio which is higher than desired for optimal learning conditions. Fammatre would benefit from a reduction in this ratio to free up some of their classroom and flex spaces. Currently the school does not have flexible spaces for accommodating complementary educational programs like their Home and School Club and Art Vista, which require space for meetings and storage. Committee members suggested that these flexible space requirements could be met by allowing full-size classrooms to be temporarily partitioned into smaller spaces on an as-needed basis.

### Modernization History

Several modernization projects have occurred at this campus. Restroom were upgraded in 2003, site exterior upgrades in 2004, and the entire campus was renovated in 2005. Solar canopies and decorative safety fencing were added to this campus in 2014. The main electrical switchgear was upgraded in early 2001.





# Site

## 1. Parking and Traffic

The existing parking size and configuration at Fammatre hasn't changed significantly in the last thirty years. The flow of traffic is effected by the neighboring school. The condition of the pavement is in poor condition. The existing parking lot could be expanded and altered to house more parking.

It is recommended that the parking lot be altered and expanded utilizing the existing grass area between the street and the parking lot. The existing parking area should be resurfaced with a new slurry seal and striping.



## 2. Site ADA Compliance

There are locations where pavement has heaved or cracked in the ADA path of travel. Some concrete walkways should be widened or removed and replaced.

It is recommended that several portions of existing walkways in the ADA path of travel be repaired and new concrete walkways be widened and/or added.



## 3. Play Equipment

The kindergarten and the general play structures are in fair condition. The fall zone is composed of wood chip loose material which has to be replenished as the existing fiber material gets kicked out, compacted, and floats away. The perimeter of the play structure fall material is raised and not designed to meet the intent of accessibility.

It is recommended that the Kindergarten and main play structures be replaced with new play structures in the next five years. The loose wood chip fall material should be replaced with a more desirable fall material such as poured in place matting with a flush concrete curb surrounding the new poured in place matting.



## 4. Paved Play Area

The paved play area at Fammatre Elementary is in fair condition however there are several cracks in the pavement that need to be repaired.



It is recommended that the existing play area be overlaid with new AC pavement and slurry sealed with new striping.

## 5. Turf Play Area and Synthetic Track

The existing turf is in fair condition but has some uneven surfaces. There is no dedicated running track at this campus.

It is recommended that the existing turf be upgraded to remove uneven



surfaces with new sod or seed throughout. It would be desirable to create a new track composed of new decomposed granite material with new borders. It would be extremely desirable to create a track with a new low maintenance synthetic track.

6. Landscaping and Irrigation

This campus has a large amount of mature trees and shrubbery located at various locations throughout this campus which require ongoing trimming. Landscaping is in fair condition. The District would like to upgrade landscaping with drought tolerant native plants that require less water. Irrigation controls and valves are in need of replacement.



It is recommended that all mature trees be trimmed as required and that all plantings be replaced with drought tolerant natives. All valves and irrigation controls should be replaced.

7. Fencing and Security

New decorative fencing was added at the perimeter of the entire campus in 2014. The campus was modified to secure or lock down the campus in the event of an undesirable situation.

There is no known reason for additional fencing and security at this campus.

8. Trash Enclosure

The existing trash enclosure size and location appears to be adequate for this campus. The garbage enclosure is in need of exterior painting.

There is no need for additional trash enclosure modifications at this time but it

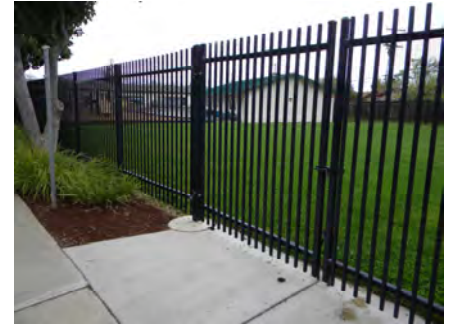


is recommended that the garbage enclosure be painted.



## 9. Site Utilities

Some of the underground utilities supplying gas and water to the site are over 40 years in age. The existing sewer system is composed of an antiquated clay piping system which allows tree roots to grip and break existing underground piping. These underground utilities have surpassed their intended service life. Replacing the underground utilities will drastically reduce the need for ongoing maintenance of these systems. In the past modernizations and electrical upgrades, conduits were routed along eaves, roofs, at the underside of vaulted ceilings and columns. The campus was not intended nor designed for these heavy conduits that blemish the campus. It has been reported that this campus may need additional seismic gas shut offs. Domestic backflow preventor is on need of replacement.



It is recommended that all existing underground utilities older than 40 years be replaced with new utility systems. Underground water, storm, sewer and gas lines should all be replaced entirely at this site. It is recommended that all existing electrical conduits be removed from the eaves, roofs and columns throughout the campus and rerouted underground. The cost estimate will assume some additional seismic gas shut offs be added to this campus. The domestic water backflow is recommended to be replaced.



## 10. Main Electrical Service

This site has adequate electrical service to this site.

There is no need for additional electrical upgrades to the service.

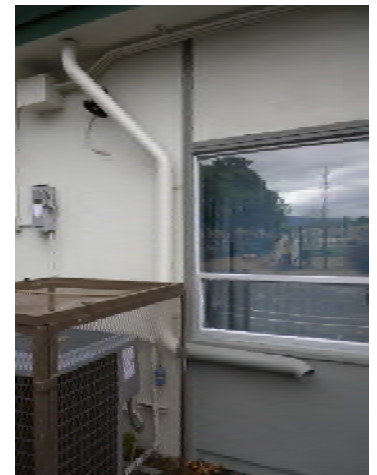
## 11. Storm Drainage

There are no known site drainage issues.

## 12. Site Lighting

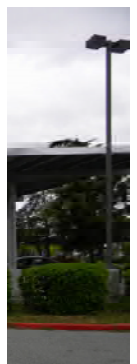
Exterior lighting is not ideal for nighttime security. The District maintenance is difficult as the pole lighting is very high.

It is recommended that pole lights and roof mounted lighting be replaced with new LED lighting at the parking lot and throughout the campus.



## 13. Concrete Walkways

The existing concrete walkway system appears to handle foot traffic well at the site; however, several areas of the existing walkways have cracks and other signs of deterioration. There have been several trenching projects whereas the concrete has a lot of patching. There is a new concrete walk needed at the front of the campus at the large grass area as pedestrians are currently using a desired line pathway on dirt. There are existing concrete walkways that need to be widened or added at egress locations.





It is recommended that large cracked areas of the walkways be replaced to the nearest expansion joint. It is also recommended that entire walkways are removed where patching has occurred in the past. New concrete walkways should be added for additional egress.

#### 14. Basketball Backstops/Ball Walls/ Misc. Play Apparatus

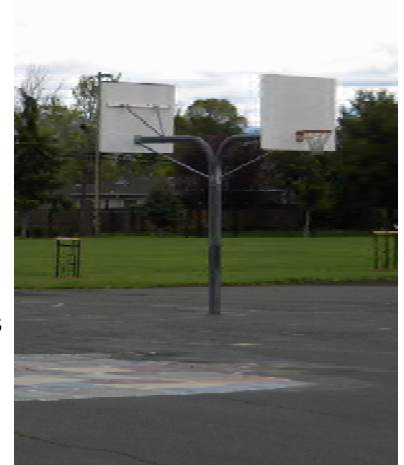
The existing basketball backstops, rims and chains are in good condition. There are currently no ball walls available at this site.

It is recommended that one ball wall be added to this campus.

#### 15. Quality of Exterior Siding/Material

The exterior wall surfaces appear to be in fair condition.

There is no need for exterior siding upgrades at this time to the permanent campus buildings.



#### 16. Outdoor Learning

Outdoor learning has become more desirable in San Jose as the weather is reasonably comfortable for about half the school year. This campus has one small outdoor covered eating area.

It is recommended that the existing outdoor eating structure be designed to allow for teachers the flexibility of choosing alternative learning based on program needs. (Refer to Section 56).



### Modernization

#### 17. Existing Covered Eating Structure

This campus currently has a small covered eating structure fairly close to the cafeteria area and is in good condition.

There is no need to replace or modernize this existing covered eating area. (Refer to Section 56).

#### 18. Existing Covered Walkways

The existing covered walkways and overhangs are in good condition.

There is no need for upgrades to the existing covered walkways or overhangs at this time.



## 19. Electrical Wiring

There appear to be a sufficient number of electrical devices in each classroom. There have not been complaints of electrical issues at this time. Routing of electrical conduits are exposed in the ceilings of the classrooms.

There is no need for electrical wiring upgrades at this time.

## 20. Asbestos Abatement

Although independent reports provided by the School District indicate that all known and tested exposed asbestos has been removed or encapsulated, there is some remaining encapsulated asbestos at various locations at this campus.

It is recommended that any asbestos that becomes exposed in some manner in the future, either by accident or future construction be removed entirely.

## 21. Seismic Upgrade and Dry rot

A preliminary structural review of this campus was performed to determine if any structural upgrades might be necessary. Preliminary studies indicate that all buildings are seismically sufficient..

It is recommended that a more detailed structural analysis be performed to determine the extent of voluntary structural upgrades that should be incorporated into the next phase of modernization for any building that is modernized.

## 22. Roofing

Based on the roofing report, all roofing is in good condition as it was reportedly installed in 2004. It was noted that leaves and debris have filled some gutters. The shingle roofs are in good condition, however, there are some damaged or missing shingles that should be replaced. Roof penetrations are in good condition. The perimeter membrane has begun to crack and deteriorate.

It is recommended maintenance toward cleaning roofs free of leaves and debris and replacing several damaged or missing shingles selectively throughout this campus.

## 23. Exterior Painting

The existing exterior of this campus is in good condition.

There is no need for exterior painting at this site but is recommended that the campus be painted every seven years.

## 24. Building Insulation and Windows

The original campus buildings were constructed in an era when natural resources such as natural gas and electricity were inexpensive. Windows are single glazed throughout and insulation does not currently meet new construction standards. The window blinds have are older and need to be replaced. The newer Modular classroom building



adjacent to the Kindergarten wing has double glazing and will not need to be upgraded.

It is recommended that insulation be added to all exterior walls, except the newer classroom wing, and added to all ceiling cavities. Windows should be replaced with double glazed window systems retrofitted with new window blinds at all campus buildings except the newer classroom wing.

## 25. Exterior Doors and Hardware

The campus hardware and doors are in good condition, however the existing locking system does not currently meet the District's requirements for appropriate security. There are some doors that will need to be replaced due to heavy usage and damage over the years.

It is recommended that all hardware be replaced with District Standard secure hardware throughout this campus. It is assumed that several existing doors will need to be replaced to make appropriate alterations for the new hardware installation. The cost estimate will make an assumption for the number of replacements needed.



## 26. Restrooms/Partitions/Fixtures

The existing bathrooms were renovated in 2003. There are a few small bathrooms that were not updated. The modernized bathrooms are in fair condition but will likely need to be upgraded in the next ten years. The bathroom floors are in poor condition



and will need to be upgraded in the next five years. The faucets are older and should be replaced. There are a select few fixtures that need to be replaced.

It is recommended that the bathroom floors be upgraded in the next five years. Toilet partitions should all be replaced in the next ten years. It would be desirable to replace all facets and flushometers with the District Standard touchless devices.



### 27. Flooring

Most of the flooring is in good condition except the Cafeteria building flooring indicates moisture damage as the tiles are separating.

It is recommended that the entire campus flooring be replaced in the next ten years. The cafeteria building should have new flooring installed in the next year.

### 28. Tackable Walls

The existing vinyl wall coverings and tackable walls are in good condition.

There is no known reason to add or replace the existing tackable wall surfaces.

### 29. Interior Wall Finishes

Interior wall finishes were upgraded in the 2005 modernization. Interior paint is in good condition.

It is recommended that all new interior wall finishes be repainted in the next five years.

### 30. Ceilings

The vaulted ceilings were designed without proper ventilation in the cavity of the ceiling system. When AC was added to the classrooms, condensations at the peak of the vault and beam began to show and drip, especially when the outside temperature greatly differed from the inside temperature.

The best solution would be to remove all roofing and ceilings stripping all finishes down to the roof structure, adding new ventilation in all blocking and allowing cavities to properly vent to a continuous roof vent. Unfortunately, the ideal solution is cost prohibitive. A less expensive solution would be to create a new sealed flat ceiling system in each classroom creating a new attic space above that can ventilate as a buffer.

### 31. Cabinetry

All of the cabinetry was upgraded in 2004. The existing cabinetry appears to be in good condition. The existing cabinetry may have to be modified to accommodate the new HVAC closets.

The existing cabinetry, being in good condition does not need to be replaced at this time.

### 32. Drinking Fountains

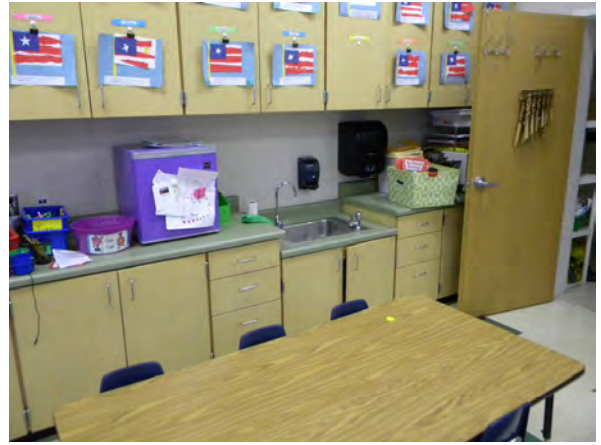
Exterior drinking fountains have been upgraded or replaced to meet the minimum ADA requirements as approved by the





Division of the State Architect in the past. There are still a few drinking fountains that are not accessible. The District would like to see several bottle fillers at this campus.

It is recommended that a bottle filler drinking system be installed or updated in the cafeteria building. It is also recommended that two of the exterior drinking fountains be updated or replaced to meet current ADA requirements.



### 33. Heating Ventilating and Air Conditioning

The existing HVAC system has been replaced at the entire campus during the 2005 modernization. HVAC units lifecycle is fifteen years. These HVAC units are now fifteen years old. The EMS is constantly requiring maintenance and needs to be upgraded.

It is recommended that all HVAC systems and the EMS system at this entire campus be replaced in the next five years.



### 34. Interior Lighting

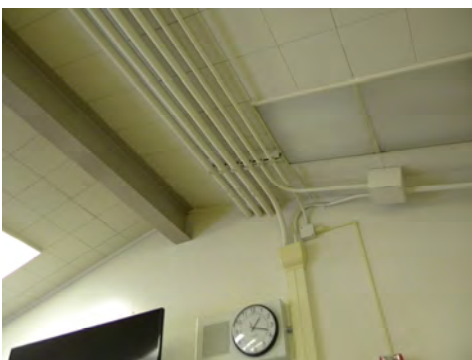
The existing fluorescent lighting throughout this campus is adequate, however, it is highly desirable to retrofit all classrooms with new LED technology to allow for additional electrical efficiency while allowing for the new option of dimming lights on demand.

It is recommended that all classrooms be retrofitted with new LED lights throughout the campus with new dimmable switching.



### 35. Electrical Power Distribution

Currently, the existing power distribution at the existing classrooms is adequate at this time. Although there are no known issues related to power distribution at this campus, the District would like to have each electrical inspected by an electrical contractor and replaced as needed.



The cost estimate will make assumptions that some of the electrical panels will need to be upgraded.

### 36. Data Network

The IT department indicated that there is a necessity to upgrade the current infrastructure at this campus. The District is also in need of upgrading student devices and classroom standardization of technology equipment.

It is recommended that new teaching apparatus and devices be purchased for the students, teachers and classroom facilities including laptops, flat panel displays, screen casting devices, doc camera, chrome books,



and iPads. Infrastructure improvements are recommend including upgraded wireless access points, backup power and switches.

### 37. Camera Surveillance

The District hasn't expressed the need for camera surveillance systems at this time. However, it is possible that security cameras will become an issue in the future.

### 38. Communication System

The existing Bogen system is analog and is very dated at this time. The District is finding it difficult to maintain this system.

It is recommended that the communications system be replaced completely.

### 39. Fire Alarm

The existing fire alarm system meets current code and local fire requirements, however there are often ongoing maintenance problems with the system. Should new modernization occur at this campus, it is likely that the fire alarm main panel will need to be replaced with a newer system that includes newly mandated sound systems which require different or additional wiring.

Although it is not required to be replaced, the cost estimate will included the cost to replace the entire fire alarm system.



### 40. Alteration of Existing Portable Buildings



There is a cluster of four portable classrooms that are in fair condition at the northwest portion of the campus as they are over twenty years old.

There are no known reasons for upgrades to the portable classrooms at this time. Refer to Sections 41 and 53 for replacement of portables.



### 41. Relocation of Existing Portable Buildings

Over twenty years ago, portable classrooms were added to this site with the expanding student population. The location of the existing portables were likely located based on the most cost effective location for utility hook up with absence of planning.

It is recommended that a design study be incorporated with coordination from the site and administration that will best relocate these portable classrooms with the recommendation that they be replaced. Refer to Section 53.

### 42. Library

The current Library space appears to be adequate and functions well as a



library for this campus. The overall condition of the library space is in fair condition.

There is no need for changes to the current library at this time. The finishes at the library should be upgraded.



43. Work Room/Lounge

The current work room and lounge need to be modernized.

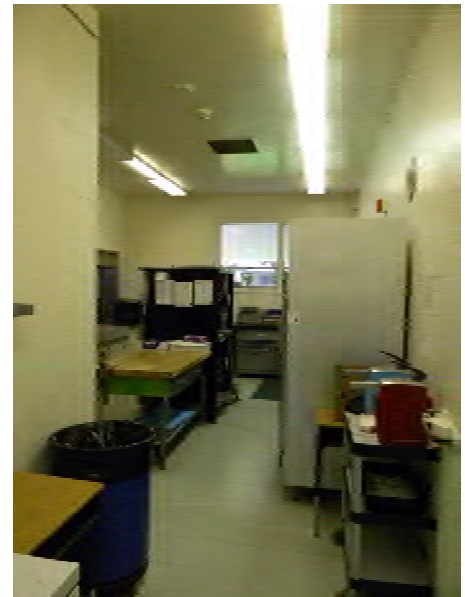
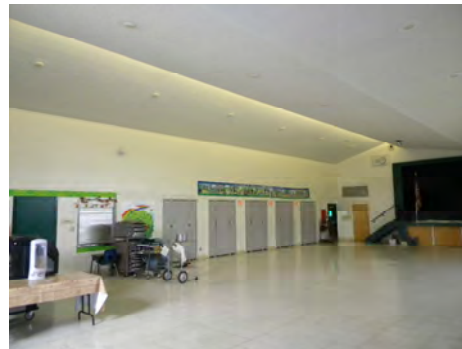
It is recommended that the existing administration support spaces be renovated and altered to meet the District current needs at this site.



44. Cafeteria/Kitchen/Gymnasium/Music/ Wrestling Rooms

The cafeteria space is adequate but the finishes should be upgraded. The kitchen is older and is in need of renovation with new equipment.

It is recommended that the cafeteria be upgraded with new finishes. The kitchen should be renovated with new kitchen equipment.



45. Existing Storage

Although staff will argue that there is never enough storage, currently, there appears to be enough storage available.

There is no need for additional storage.

46. Clocks

The current clock system is inadequate and does not meet the needs of the District.

It is recommended that the clock system be replaced with a new system.



47. Speakers/Bell /PA

The existing analog system is dated and should be updated.

It is recommended that the Bells and Speaker system be replaced.

48. Computer Lab/Art

Several classrooms have computer stations. Computer labs uses have



changed over the years. The District is not in need of a computer lab at this time.

#### 49. Renovation of Administration

The existing administrative spaces were renovated in 2005. The entry currently work fairly well for security purposes. The administration area is in need of modernization.

It is recommended that the existing administrative spaces be renovated.

#### 50. STEAM Lab

There is not a dedicated contemporary space used in the manner of a STEAM lab.

It would be ideal to convert an existing classroom space into a STEAM lab.

### **New Construction**

#### 51. Covered Walkways

The site has several areas where students can travel from some classrooms to other classrooms without getting wet from inclement weather. There are several isolated portable buildings at this campus where connected covered walkways would be desirable.

It is recommended that new covered walkways be added connecting isolated classrooms and the portable classroom cluster.

#### 52. Restrooms

There appears to be an adequate number of restrooms at this campus located in relatively ideal locations.

There is no need to add restrooms facilities at this campus.

#### 53. Portable or Modular Classrooms

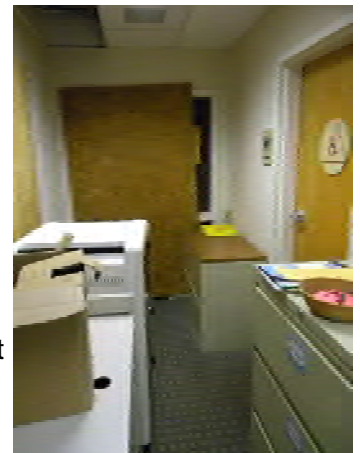
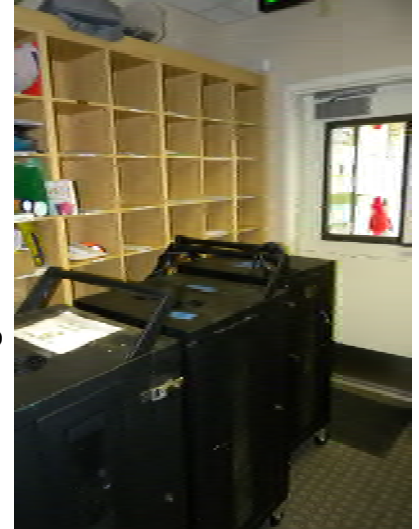
Since the opening of Steindorf school, overpopulation at this school has settled whereas additional portable classrooms are no longer needed. The existing portable classrooms at this campus have outlasted their intended lifecycle and are extremely old and should be replaced and relocated to a new location.

It is recommended that the existing old portable buildings at this campus be removed from the campus. If necessary, a new permanent classroom building should be constructed at a location best suited for this campus.

#### 54. Administration

The existing administration space is inadequate in size.

It is recommended that the administration building be expanded with an addition at the front of the school.



### 55. Library

The existing library space is fairly small in size but is adequate to continue to function as a traditional library space.

There is no need to provide an additional space related to the library.



### 56. Covered Eating Structure or Outdoor learning

The only existing covered area is a small metal shade structure adjacent to the cafeteria. The location of the existing photovoltaic structures are not located allowing these to function as outdoor learning nor eating structures. It would be desirable to have one or two more covered outdoor learning and eating spaces strategically located throughout this campus.

It is recommended that two large covered metal shade structures at other locations on this campus equipped with wi-fi and outdoor furnishings be installed at this campus.



### 57. Storage

It appears that the existing storage is adequate.

There is no need for additional storage facilities at this campus.

### 58. STEAM Lab

An existing classroom may be adequate to be converted to a STEAM lab in the future.

There is no need to create a new STEAM lab at this site.



### 59. Alternative Energy Source

This campus was retrofitted to house new photovoltaic structures in 2014. The Cambrian School District will continue to look into alternative energy sources.

There is no need to add additional photovoltaics units at this site. It is desired to provide on-going cleaning of the photovoltaics as the District does not have the manpower to maintain the panels at this time.



### 60. Campus Layout



It is desirable for this campus to remove the older portable classroom while considering new permanent classroom building replacing them, perhaps in a new location that better serves the educational needs at this campus (refer to Section 53).

It would be desirable to add two outdoor learning and eating spaces to the campus (refer to section 56).

## Fammatre Elementary School Cost Estimate

<b>Construction Item</b>	<b>Quantity</b>	<b>Unit</b>	<b>Cost</b>	<b>Total Estimated Cost</b>
<b>Site</b>				
1. Parking and Traffic	32,000	sf	32.00	\$1,024,000
2. Site ADA Compliance	1	ls	35,000.00	\$35,000
3. Play Equipment	3	ea	65,000.00	\$195,000
4. Paved Play and Courtyard Area	40,000	sf	7.00	\$280,000
5. Turf Play Area and Synthetic Track	125,000	sf	5.00	\$625,000
6. Landscaping and Irrigation	45,000	sf	2.00	\$90,000
7. Fencing and Security	0	lf	300.00	\$0
8. Trash Enclosure	1	ls	3,500.00	\$3,500
9. Site Utilities	152,000	sf	20.00	\$3,040,000
10. Main Electrical Service	0	ls	100,000.00	\$0
11. Storm Drainage	0	sf	0.50	\$0
12. Site Lighting	60,000	sf	3.50	\$210,000
13. Concrete Walkways (refer to Section 2)	3,500	sf	35.00	\$122,500
14. Basketball Backstops/Ballwalls/Misc.	1	ea	30,000.00	\$30,000
15. Quality of Exterior Siding/Material	0	sf	0.00	\$0
16. Outdoor Learning	1	ls	20,000.00	\$20,000
<b>Total Site</b>				<b>\$5,675,000</b>
<b>Modernization</b>				
17. Existing Covered Eating Structure	0	ls	0.00	\$0
18. Existing Covered Walkways (see new covered walks)	0	ls	450,000.00	\$0
19. Electrical Wiring	0	sf	11.00	\$0
20. Asbestos Abatement	1	ls	25,000.00	\$25,000
21. Seismic Upgrade/Dry Rot	0	sf	35.00	\$0
22. Roofing (Based on Roofing Report)	1	ls	0.00	\$0
23. Exterior Painting	28,000	sf	8.00	\$224,000
24. Building Insulation and Windows	51,800	sf	40.00	\$2,072,000
25. Exterior Doors and Hardware	51,800	ea	5.00	\$259,000
26. Restrooms/Partitions/Fixtures	8	ea	25,000.00	\$200,000
26a. Restrooms/Partitions/Fixtures hands free	100	ea	850.00	\$85,000
27. Flooring	51,800	sf	9.00	\$466,200
28. Tackable Walls	0	sf	18.00	\$0
29. Interior Wall Finishes	51,800	sf	12.00	\$621,600
30. Ceilings	51,800	sf	10.00	\$518,000
31. Cabinetry	0	sf	45.00	\$0
32. Drinking Fountains	3	ea	6,500.00	\$19,500
33. Heating Ventilating & Air Conditioning	51,800	ea	25.00	\$1,295,000
34. Interior Lighting	51,800	ls	43.00	\$2,227,400
35. Electrical Power Distribution/Outlets	1	ls	25,000.00	\$25,000
36. Data Network	1	ea	165,000.00	\$165,000
37. Camera Surveillance	51,800	sf	0.35	\$18,130
38. Communication System	1	ls	125,000.00	\$125,000
39. Fire Alarm	51,800	sf	55.00	\$2,849,000

<b>Construction Item</b>	<b>Quantity</b>	<b>Unit</b>	<b>Cost</b>	<b>Total Estimated Cost</b>
40. Alteration of Existing Portable Buildings	0	sf	350.00	\$0
41. Relocation of Existing Portable Buildings (refer to line 53 below)	0	ea	110,000.00	\$0
42. Library	2,000	sf	350.00	\$700,000
43. Work Room/Lounge	1,800	sf	500.00	\$900,000
44. Cafeteria/Kitchen/Gym/Music/Wrestling Rooms	8,000	sf	350.00	\$2,800,000
45 Existing Storage	0	ls	35,000.00	\$0
46. Clocks	51,800	sf	1.75	\$90,650
47. Speakers	51,800	sf	1.50	\$77,700
48. Computer Lab	0	sf	550.00	\$0
49. Renovation of Administration	3,500	sf	500.00	\$1,750,000
50. STEAM Lab (See Computer Lab)	960	sf	600.00	\$576,000
<b>Total Modernization</b>				<b>\$18,089,180</b>
<b>New Construction</b>				
51. Covered Walkways	375	lf	450.00	\$168,750
52. Restrooms	0	sf	750.00	\$0
53. Portable or Modular Classrooms	8	ea	275,000.00	\$2,200,000
54. Administration	500	sf	850.00	\$425,000
55. Library	0	ea	0.00	\$0
56. Covered Eating Structure (see outdoor learning)	2	ea	210,000.00	\$420,000
57. Storage	0	ls	75,000.00	\$0
58. STEAM Lab (Music and Arts) - See Campus layout below	0	sf	750.00	\$0
59. Alternative Energy Source	1	ls	10,000.00	\$10,000
60. Campus Layout	0	sf	0.00	\$0
61. Furnishings and Equipment	51,800	sf	4.00	\$207,200
<b>Total New Construction</b>				<b>\$3,430,950</b>
<b>Subtotal Construction Costs</b>				<b>\$27,195,130</b>
<b>Construction Contingency 10%</b>				<b>\$2,719,513</b>
<b>Soft Costs 18%</b>				<b>\$5,384,636</b>
<b>Total Revised Master Planning Needs at Fammatre Elementary School</b>				<b>\$35,299,279</b>



## **Farnham Elementary School - Master Planning Evaluation**

### **Evaluation Summary**

Originally built in 1956, Farnham Elementary School is located on a 10.7 acre lot. Like the other elementary schools, Farnham serves grades Kindergarten through 5<sup>th</sup>.

At Farnham, the permanent classrooms are clustered around two landscaped quadrangles with the Multi-Use Room (MUR), covered eating structure, administration building, staff rooms, and library situated at the intersection of the two quadrangles. This centralized arrangement provides easy access to shared programs. Play areas for all non-Kindergarten grades are split between upper and lower grades and located at the back of the campus. As at the other school campuses, the MUR at Farnham is not large enough to sufficiently house the student population at lunchtime. More covered eating structures would help to alleviate this lunchtime congestion. The library, which is housed in an oversized relocatable building, was renovated several years ago and is well-maintained.

Previous school site committee members noted that all the parking at this campus is consolidated into one lot next to the student drop-off lane. They cautioned that people are using the parking lot for drop-off as well, which creates a congested and dangerous situation in this combined lot. One suggestion put forth by committee members, in the past, was to relocate the staff lot away from the front of the school in order to separate parking and drop-off functions.

Entry points are fairly well-defined and supervised at Farnham. Committee members suggested that further definition may be desirable by separating entrances by grade clusters to streamline traffic flow through the campus. The front of the campus was altered in the past to create a supervised pass-through condition for people entering and exiting the campus. Entry areas would also benefit from the addition of overhangs and covered walkways to provide shade and protection during inclement weather.

### **Modernization History**

Several modernization projects have occurred at this campus. Restroom were upgraded in 2003, site exterior upgrades in 2004, media center alterations in 2005, and the entire campus was renovated in 2005. a new 30' x 32' portable classroom was added to this campus in 2006 and two more adjacent were added in 2007. A special re-roofing project to the entire permanent buildings occurred in 2005. Solar canopies and decorative safety fencing were added to this campus in 2014.



# Site

## 1. Parking and Traffic

The existing parking size and configuration at Farnham hasn't changed significantly in the last thirty years. The flow of traffic inefficiently designed with a separate buss drop off area that exists adjacent to the entrance of the main parking lot. The condition of the pavement is in fair condition. The existing parking lot could be expanded and altered to be significantly more efficient.

It is recommended that the parking lot be altered and expanded combining the bus drop off area with the existing parking lot. The parking lot should be designed to have a dedicated drop off area for the parents that would allow them to pass as needed after dropping off or picking up their children. The existing parking area should be resurfaced with a new slurry seal and striping.



## 2. Site ADA Compliance

Some flatwork and walkways were upgraded in previous modernizations. There are locations where pavement has heaved or cracked in the ADA path of travel.

It is recommended that several portions of existing walkways in the ADA path of travel be repaired.



## 3. Play Equipment

This kindergarten and the general play structures are in fair condition. The fall zone is composed of wood chip loose material which has to be replenished as the existing fiber material gets kicked out, compacted, and floats away. The perimeter of the play structure fall material is raised and not designed to meet the intent of accessibility.

It is recommended that the Kindergarten and main play structures be replaced with new play structures in the next five years. The loose wood chip fall material should be replaced with a more desirable fall material such as poured in place matting with a flush concrete curb surrounding the new poured in place matting.

## 4. Paved Play Area

The paved play area at Farnham Elementary is in fair condition however there are several cracks in the pavement that need to be repaired.

It is recommended that the existing play area be overlaid with new AC pavement and slurry sealed with new striping.





## 5. Turf Play Area and Synthetic Track

The existing turf is in fair condition but has some uneven surfaces. The existing DG track tends to need ongoing maintenance.

It is recommended that the existing turf be upgraded to remove uneven surfaces with new sod or seed throughout. The existing track should be leveled and replaced with new decomposed granite material with new borders. It would be desirable to upgrade the track with a new low maintenance synthetic track.



## 6. Landscaping and Irrigation

This campus has a large amount of mature trees located at various locations throughout this campus which require ongoing trimming. Landscaping is in fair condition. The District would like to upgrade landscaping with drought tolerant native plants that require less water. Irrigation controls and valves are in need of replacement.

It is recommended that all mature trees be trimmed as required and that all plantings be replaced with drought tolerant natives. All valves and irrigation controls should be replaced.



## 7. Fencing and Security

New decorative fencing was added at the perimeter of the entire campus in 2014. The campus was modified to secure or lock down the campus in the event of an undesirable situation. It has been reported that the outdoor area off the staff lounge lack an egress gate. Farnham has reported to us that there is an desire to change the security fencing to create an outdoor classroom space in the south-east corner of the property (park area) along the driveway to the back fields.

It is recommended that the an new form of egress be created near the outdoor area near the staff lounge and a new layout to create a dedicated outdoor learning area.



## 8. Trash Enclosure

The existing trash enclosure size and location appears to be adequate for this campus.

There is no need for additional trash enclosure modifications at this time.



## 9. Site Utilities

Some of the underground utilities supplying gas to the site are over 40 years in age. The water lines were replaced to this campus except underground water under the kitchen. The existing sewer system is composed of an antiquated clay piping system which allows tree roots to grip and break existing underground piping. These underground utilities have surpassed their intended service life. Replacing the underground utilities will drastically reduce the need for ongoing maintenance of these systems. Past modernizations and electrical upgrade routed new heavy electrical conduits on eaves, roofs, at the underside of vaulted ceilings



and columns. The campus was not intended nor designed for these heavy conduits that blemish the campus. It has been reported that this campus may need additional seismic gas shut offs. Domestic backflow preventor is on need of replacement.

It is recommended that all existing underground utilities older than 40 years be replaced with new utility systems. Underground storm, sewer and gas lines and the water lines under the kitchen should all be replaced at this site. It is recommended that all existing electrical conduits be removed from the eaves, roofs and columns throughout the campus and rerouted underground. The cost estimate will assume some additional seismic gas shut offs be added to this campus. The domestic water backflow is recommended to be replaced.

### 10. Main Electrical Service

This site has adequate electrical service to this site.

There is no need for additional electrical upgrades to the service.

### 11. Storm Drainage

There are no known site drainage issues.

### 12. Site Lighting

Exterior lighting was is not ideal for nighttime security. The District maintenance is difficult as the pole lighting is very high.

It is recommended that pole lights and roof mounted lighting be replaced with new LED lighting at the parking lot and throughout the campus.



### 13. Concrete Walkways

The existing concrete walkway system appears to handle foot traffic well at the site; however, several areas of the existing walkways have cracks and other signs of deterioration. There have been several trenching projects whereas the concrete has a lot of patching. There is a new concrete walk needed at the front of the campus at the large grass area as pedestrians are currently using a desired line pathway on dirt.

It is recommended that large cracked areas of the walkways be replaced to the nearest expansion joint. It is also recommended that entire walkways are removed where patching has occurred in the past. A new concrete walkway should be installed at the front area of the school next to the large grass area. (Refer to Section 2 ADA).

### 14. Basketball Backstops/Ball Walls/ Misc. Play Apparatus

The existing basketball backstops, rims and chains are in good condition. There are currently no ball walls available at this site.

It is recommended that one ball wall be added to this campus.



## 15. Quality of Exterior Siding/Material

The exterior wall surfaces appear to be in fair condition.

There is no need for exterior siding upgrades at this time to the permanent campus buildings.



## 16. Outdoor Learning

Outdoor learning has become more desirable in San Jose as the weather is reasonably comfortable for about half the school year. This campus has one small outdoor covered eating area.

It is recommended that the existing outdoor eating structure be designed to allow for teachers the flexibility of choosing alternative learning based on program needs. (Refer to Section 56).



## **Modernization**

### 17. Existing Covered Eating Structure

This campus currently has a small covered eating structure fairly close to the cafeteria area and is in good condition.

There is no need to replace or modernize this existing covered eating area. (Refer to Section 56).

### 18. Existing Covered Walkways

The existing covered walkways and overhangs are in good condition.

There is no need for upgrades to the existing covered walkways or overhangs at this time.



### 19. Electrical Wiring

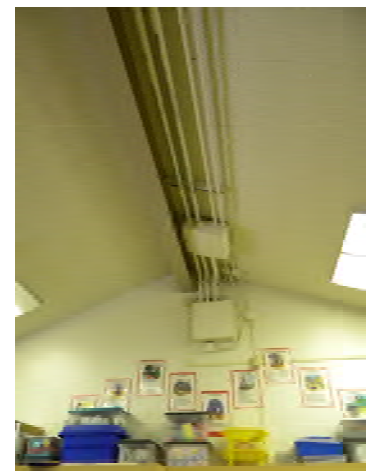
There appear to be a sufficient number of electrical devices in each classroom. There have not been complaints of electrical issues at this time. Routing of electrical conduits are exposed in the ceilings of the classrooms.

There is no need for electrical wiring upgrades at this time.

### 20. Asbestos Abatement

Although independent reports provided by the School District indicate that all known and tested exposed asbestos has been removed or encapsulated, there is some remaining encapsulated asbestos at various locations at this campus.

It is recommended that any asbestos that becomes exposed in some manner in the future, either by accident or future construction be removed entirely.



### 21. Seismic Upgrade and Dry rot

A preliminary structural review of this campus was

performed to determine if any structural upgrades might be necessary. Preliminary studies indicate that all buildings are seismically sufficient..

It is recommended that a more detailed structural analysis be performed to determine the extent of voluntary structural upgrades that should be incorporated into the next phase of modernization for any building that is modernized.

## 22. Roofing

Based on the roofing report, all roofing is in good condition as it was reportedly installed in 2005. It was noted that leaves and debris have filled some gutters. The shingle roofs are in good condition, however, there are some damaged or missing shingles that should be replaced. A metal chimney cap is rusted. Portable classroom #18 has had recent leaks.



It is recommended maintenance toward cleaning roofs free of leaves and debris and replacing several damaged or missing shingles selectively throughout this campus. It is also recommend to restore Portable #18 metal roof and the rusted chimney roof.

## 23. Exterior Painting

The existing exterior of this campus is in good condition.

There is no need for exterior painting at this site but is recommended that the campus be painted every seven years.



## 24. Building Insulation and Windows

The original campus buildings were constructed in an era when natural resources such as natural gas and electricity were inexpensive. Windows are single glazed throughout and insulation does not currently meet new construction standards. The window blinds have are older and need to be replaced.

It is recommended that insulation be added to all exterior walls and added to all ceiling cavities. Windows should be replaced with double glazed window systems retrofitted with new window blinds.



## 25. Exterior Doors and Hardware

The campus hardware and doors are in good condition, however the existing locking system does not currently meet the District's requirements for appropriate security. There are some doors that will need to be replaced due to heavy usage and damage over the years.

It is recommended that all hardware be replaced with District Standard secure hardware throughout this campus. It is assumed that several existing doors will need to be replaced to make appropriate alterations for the new hardware installation. The cost estimate will make an assumption for the number of replacements needed.

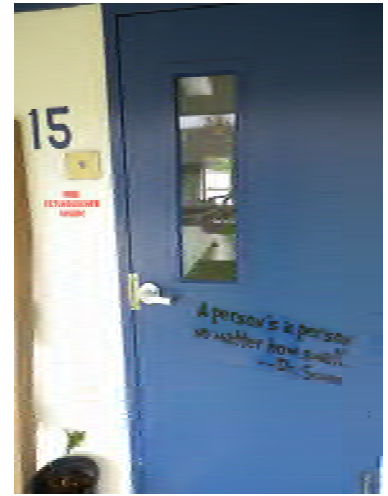


## 26. Restrooms/Partitions/Fixtures

The existing bathrooms were renovated in 2003. There are a few small bathrooms that were not updated. The modernized bathrooms are in fair condition but will likely need to be upgraded in the next ten years. The bathrooms floors are in poor condition and will need to be upgraded in the next five years. The faucets are older and should be replaced. There are a select few fixtures that need to be replaced.



It is recommended that the bathroom floors be upgraded in the next five years. Toilet partitions should all be replaced in the next ten years. It would be desirable to replace all facets and flushometers with the District Standard touchless devices.

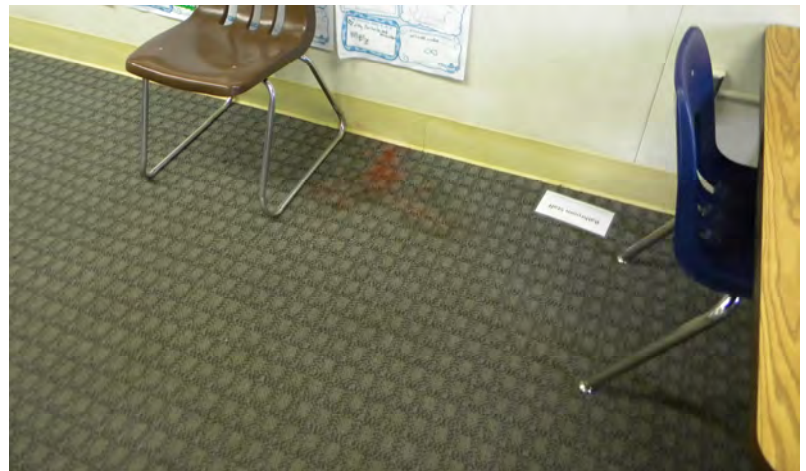


## 27. Flooring

Most of the flooring is in good condition.

It is recommended that the entire campus flooring be replaced in the next ten years.

## 28. Tackable Walls



The existing vinyl wall coverings and tackable walls are in good condition.

There is no known reason to add or replace the existing tackable wall surfaces.

## 29. Interior Wall Finishes

Interior wall finishes were upgraded in the 2005 modernization. Interior paint is in good condition.

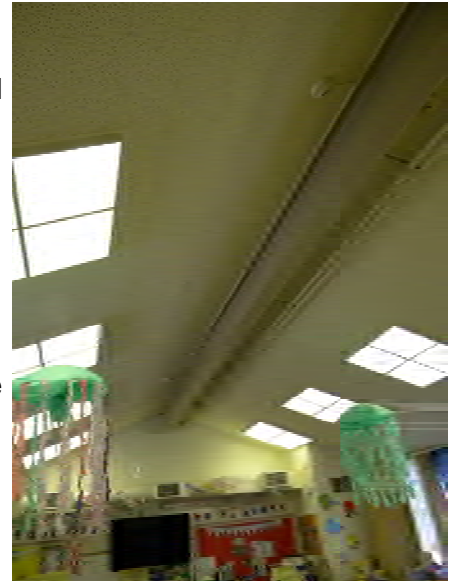
It is recommended that all new interior wall finishes be repainted in the next five years.

## 30. Ceilings

The vaulted ceilings were designed without proper ventilation in the cavity of the ceiling system. When AC was added to the classrooms, condensations at the peak of the vault and beam began to show and drip, especially when the outside temperature greatly differed from the inside temperature.



The best solution would be to remove all roofing and ceilings stripping all finishes down to the roof structure, adding new ventilation in all blocking and allowing cavities to properly vent to a continuous roof vent. Unfortunately, the ideal solution is cost prohibitive. Another solution would be to create a new sealed flat ceiling system in each classroom creating a new attic space above that can buffer between the conditioned space and the outside.



### 31. Cabinetry

The cabinetry was upgraded in 2004 and appear to be in good condition. Some of the cabinetry is in need of repair at the portable classrooms. Some of the cabinetry may need to be altered for the new HVAC closets in the future.

The existing cabinetry is in good condition at will not need to be replaced at this time.

### 32. Drinking Fountains

Exterior drinking fountains have been upgraded or replaced to meet the minimum ADA requirements as approved by the Division of the State Architect in the past. There are still a few drinking fountains that do not accessible. The District would like to see several bottle fillers at this campus.



It is recommended that a bottle filler drinking system be installed or updated in the cafeteria building. It is also recommended that two of the exterior drinking fountains be updated or replaced to meet current ADA requirements.

### 33. Heating Ventilating and Air Conditioning

The existing HVAC system has been replaced at the entire campus during the 2005 modernization. HVAC units lifecycle is fifteen years. These HVAC units are now fifteen years old. The EMS is constantly requiring maintenance and needs to be upgraded.

It is recommended that all HVAC systems and the EMS system at this entire campus be replaced in the next five years.

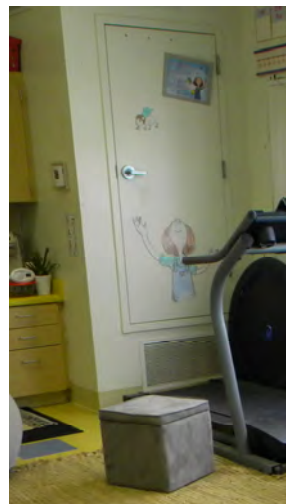
### 34. Interior Lighting

The existing fluorescent lighting throughout this campus is adequate, however, it is highly desirable to retrofit all classrooms with new LED technology to allow for additional electrical efficiency while allowing for the new option of dimming lights on demand.

It is recommended that all classrooms be retrofitted with new LED lights throughout the campus with new dimmable switching.

### 35. Electrical Power Distribution

Currently, the existing power distribution at the existing classrooms is adequate at this time. Although there are no known issues related to power distribution at this campus, the District would like to have each electrical inspected by



an electrical contractor and replaced as needed.

The cost estimate will make assumptions that some of the electrical panels will need to be upgraded.

### 36. Data Network

The IT department indicated that there is a necessity to upgrade the current infrastructure at this campus. The District is also in need of upgrading student devices and classroom standardization of technology equipment.



It is recommended that new teaching apparatus and devices be purchased for the students, teachers and classroom facilities including laptops, flat panel displays, screen casting devices, doc camera, chrome books, and iPads. Infrastructure improvements are recommend including upgraded wireless access points, backup power and switches.

### 37. Camera Surveillance

The District hasn't expressed the need for camera surveillance systems at this time. However, it is possible that security cameras will become an issue in the future.

### 38. Communication System

The existing Bogen system is analog and is very dated at this time.

It is recommended that the communications system be replaced completely.

### 39. Fire Alarm

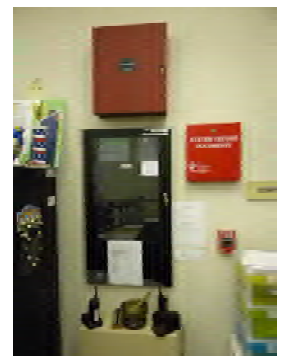
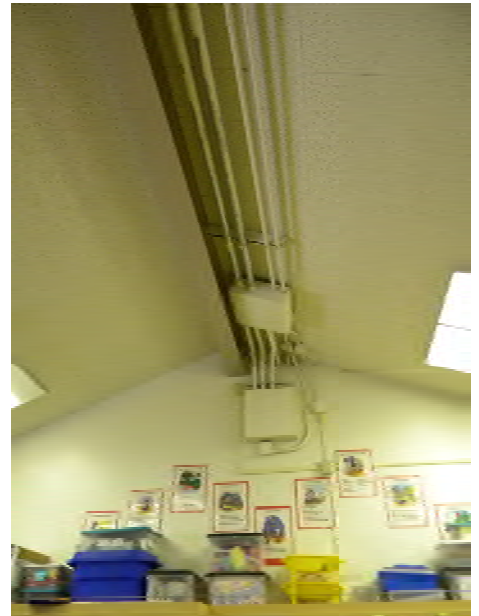
The existing fire alarm system meets current code and local fire requirements, however there are often ongoing maintenance problems with the system. Should new modernization occur at this campus, it is likely that the fire alarm main panel will need to be replaced with a newer system that includes newly mandated sound systems which require different or additional wiring.

Although it is not required to be replaced, the cost estimate will included the cost to replace the entire fire alarm system.

### 40. Alteration of Existing Portable Buildings

There is a cluster of portable classrooms that are in good condition at the northwest portion of the campus. There is an older cluster of portable classrooms at the southeast portion of the campus, on portable was removed recently and another portable was taken back from a long lease tenant.

There are no known reason for upgrades to the portable classrooms at the northwest end of the campus. The cluster of portable classrooms at the southeast campus should be completely replaced with new buildings. Refer to Sections 41 and 53 for replacement of portables.





#### 41. Relocation of Existing Portable Buildings

Over the years, portable classrooms were added to this site with the expanding student population. The northwest portable cluster is located in fairly reasonable location at this campus, however the other cluster at the southeastern portion of the campus appears to be located, likely related to the most cost effective location for utility hook up with absence of planning.

It is recommended that the southeastern portable cluster be replaced with new permanent classrooms located in a location that coordinates teaching, socialization and safety with its new location.

#### 42. Library

The current Library space appears to be adequate and functions well as a library for this campus. The overall condition of the library space is in fair condition.

There is no need for changes to the current library at this time. The finishes at the library should be upgraded.

#### 43. Work Room/Lounge

The current work room and lounge need to be modernized.

It is recommended that the existing administration support spaces be renovated and altered to meet the District current needs at this site.

#### 44. Cafeteria/Kitchen/Gymnasium/Music/ Wrestling Rooms

The cafeteria space is adequate but the finishes should be upgraded. The kitchen is older and is in need of renovation with new equipment.

It is recommended that the cafeteria be upgraded with new finishes. The kitchen should be renovated with new kitchen equipment.

#### 45. Existing Storage

Although staff will argue that there is never enough storage, currently, there appears to be enough storage available.





There is no need for additional storage.

#### 46. Clocks

The current clock system is inadequate and does not meet the needs of the District.

It is recommended that the clock system be replaced with a new system.

#### 47. Speakers/Bell /PA

The existing analog system is dated and should be updated.

It is recommended that the Bells and Speaker system be replaced.

#### 48. Computer Lab/Art

Several classrooms have computer stations. Computer labs uses have changed over the years. The District is no in need of a computer lab at this time.

#### 49. Renovation of Administration

The existing administrative spaces were renovated in 2005. The entry currently work fairly well for security purposes. The administration area is in need of modernization.

It is recommended that the existing administrative spaces be renovated.

#### 50. STEAM Lab

There is not a dedicated contemporary space used in the manner of a STEAM lab.



It would be ideal to convert an existing classrooms space into a STEAM lab.

### **New Construction**

#### 51. Covered Walkways

The site has several areas where students can travel from some classrooms to other classrooms without getting wet from inclement weather.

There are several isolated portable buildings at this campus where connected covered walkways would be desirable.

It is recommended that new covered walkways be added connecting isolated classrooms.

#### 52. Restrooms

There appears to be an adequate number of restrooms at this campus located in relatively ideal locations.

There is no need to add restrooms facilities at this campus.



### 53. Portable or Modular Classrooms

Since the opening of Steindorf school, overpopulation at this school has settled whereas additional portable classrooms are not needed. The existing portable classrooms at the southeastern portion of the campus are have outlasted their intended Lifecycle and are extremely old and should be replaced and relocated to a new location.

It is recommended that the existing old portable buildings at the southeast portion of the campus be removed from the campus. If necessary, a new permanent classroom building should be constructed elsewhere on this campus.



### 54. Administration

The existing administration space is inadequate in size.

It is recommended that the administration building be expanded with an addition at the front of the school.

### 55. Library

The existing library space is fairly small in size is adequate to continue to function as a traditional library space.

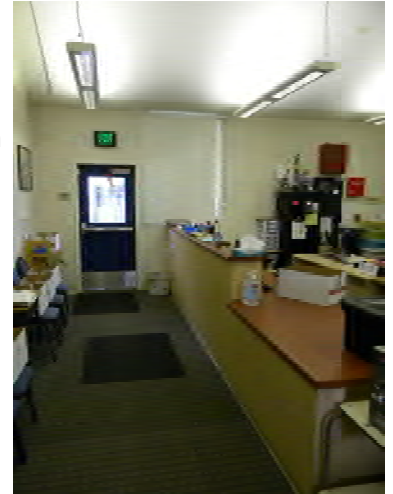
There is no need to provide an additional space related to the library.

### 56. Covered Eating Structure or Outdoor learning



The only existing covered area is a small metal shade structure adjacent to the cafeteria. The location of the existing photovoltaic structures are not located allowing these to function as outdoor learning nor eating structures. The existing space adjacent to the cafeteria could incorporate outdoor learning. It would be desirable to have one or two more covered outdoor learning and eating spaces strategically located throughout this campus.

It is recommended that two large covered metal shade structures at other locations on this campus equipped with wi-fi and outdoor furnishings be installed at this campus.



### 57. Storage

It appears that the existing storage is adequate.

There is no need for additional storage facilities at this campus.

### 58. STEAM Lab

An existing classroom may be adequate to be converted to a STEAM lab in the future.

There is no need to create a new STEAM lab at this site.



## 59. Alternative Energy Source

This campus was retrofitted to house new photovoltaic structures in 2014. The Cambrian School District will continue to look into alternative energy sources.

There is no need to add additional photovoltaics units at this site. It is desired to provide on-going cleaning of the photovoltaics as the District does not have the manpower to maintain the panels at this time.



## 60. Campus Layout

It is desirable for this campus to remove the older portable classroom while considering new permanent classroom building replacing them, perhaps in a new location that better serves the educational needs at this campus (refer to Section 53).

It would be desirable to add two outdoor learning and eating spaces to the campus (refer to section 56).

It would be desirable to construct an addition to the existing administration area at the front of the campus (refer to Section 54).



## Farnham Elementary School Cost Estimate

<b>Construction Item</b>	<b>Quantity</b>	<b>Unit</b>	<b>Cost</b>	<b>Total Estimated Cost</b>
<b>Site</b>				
1. Parking and Traffic	40,000	sf	32.00	\$1,280,000
2. Site ADA Compliance	1	ls	35,000.00	\$35,000
3. Play Equipment	3	ea	65,000.00	\$195,000
4. Paved Play and Courtyard Area	82,000	sf	7.00	\$574,000
5. Turf Play Area and Synthetic Track	155,000	sf	5.00	\$775,000
6. Landscaping and Irrigation	92,000	sf	2.00	\$184,000
7. Fencing and Security	40	lf	300.00	\$12,000
8. Trash Enclosure	0	ls	65,000.00	\$0
9. Site Utilities	108,000	sf	18.00	\$1,944,000
10. Main Electrical Service	0	ls	100,000.00	\$0
11. Storm Drainage	0	sf	0.50	\$0
12. Site Lighting	100,000	sf	3.50	\$350,000
13. Concrete Walkways (refer to Section 2)	3,500	sf	35.00	\$122,500
14. Basketball Backstops/Ballwalls/Misc.	1	ea	30,000.00	\$30,000
15. Quality of Exterior Siding/Material	0	sf	0.00	\$0
16. Outdoor Learning	1	ls	20,000.00	\$20,000
<b>Total Site</b>				<b>\$5,521,500</b>
<b>Modernization</b>				
17. Existing Covered Eating Structure	0	ls	0.00	\$0
18. Existing Covered Walkways (see new covered walks)	0	ls	450,000.00	\$0
19. Electrical Wiring	0	sf	11.00	\$0
20. Asbestos Abatement	1	ls	25,000.00	\$25,000
21. Seismic Upgrade/Dry Rot	0	sf	35.00	\$0
22. Roofing (Based on Roofing Report)	1	ls	13,800.00	\$13,800
23. Exterior Painting	28,000	sf	8.00	\$224,000
24. Building Insulation and Windows	53,300	sf	40.00	\$2,132,000
25. Exterior Doors and Hardware	53,300	ea	5.00	\$266,500
26. Restrooms/Partitions/Fixtures	8	ea	25,000.00	\$200,000
26a. Restrooms/Partitions/Fixtures hands free	100	ea	850.00	\$85,000
27. Flooring	53,300	sf	9.00	\$479,700
28. Tackable Walls	0	sf	18.00	\$0
29. Interior Wall Finishes	53,300	sf	12.00	\$639,600
30. Ceilings	53,300	sf	10.00	\$533,000
31. Cabinetry	53,300	sf	45.00	\$2,398,500
32. Drinking Fountains	3	ea	6,500.00	\$19,500
33. Heating Ventilating & Air Conditioning	53,300	ea	25.00	\$1,332,500
34. Interior Lighting	53,300	ls	43.00	\$2,291,900
35. Electrical Power Distribution/Outlets	1	ls	25,000.00	\$25,000
36. Data Network	1	ea	165,000.00	\$165,000
37. Camera Surveillance	53,300	sf	0.35	\$18,655
38. Communication System	1	ls	125,000.00	\$125,000
39. Fire Alarm	53,300	sf	55.00	\$2,931,500

<b>Construction Item</b>	<b>Quantity</b>	<b>Unit</b>	<b>Cost</b>	<b>Total Estimated Cost</b>
40. Alteration of Existing Portable Buildings	0	sf	350.00	\$0
41. Relocation of Existing Portable Buildings (refer to line 53 below)	0	ea	110,000.00	\$0
42. Library	2,000	sf	350.00	\$700,000
43. Work Room/Lounge	1,800	sf	500.00	\$900,000
44. Cafeteria/Kitchen/Gym/Music/Wrestling Rooms	5,700	sf	350.00	\$1,995,000
45 Existing Storage	0	ls	35,000.00	\$0
46. Clocks	53,300	sf	1.75	\$93,275
47. Speakers	53,300	sf	1.50	\$79,950
48. Computer Lab	0	sf	550.00	\$0
49. Renovation of Administration	3,100	sf	500.00	\$1,550,000
50. STEAM Lab (See Computer Lab)	960	sf	600.00	\$576,000
<b>Total Modernization</b>				<b>\$19,800,380</b>
<b>New Construction</b>				
51. Covered Walkways	500	lf	450.00	\$225,000
52. Restrooms	0	sf	750.00	\$0
53. Portable or Modular Classrooms	4	ea	275,000.00	\$1,100,000
54. Administration	500	sf	850.00	\$425,000
55. Library	0	ea	0.00	\$0
56. Covered Eating Structure (see outdoor learning)	2	ea	210,000.00	\$420,000
57. Storage	0	ls	75,000.00	\$0
58. STEAM Lab (Music and Arts) - See Campus layout below	0	sf	750.00	\$0
59. Alternative Energy Source	1	ls	10,000.00	\$10,000
60. Campus Layout	0	sf	0.00	\$0
61. Furnishings and Equipment	53,300	ea	4.00	\$213,200
<b>Total New Construction</b>				<b>\$2,393,200</b>
<b>Subtotal Construction Costs</b>				<b>\$27,715,080</b>
<b>Construction Contingency 10%</b>				<b>\$2,771,508</b>
<b>Soft Costs 18%</b>				<b>\$5,487,586</b>
<b>Total Revised Master Planning Needs at Farnham Elementary School</b>				<b>\$35,974,174</b>



## Ida Price Charter Middle School - Master Planning Evaluation

### Evaluation Summary

Originally built in 1960, Price Middle School occupies a 22 acre lot adjacent to Fammatre Elementary School. As the District's sole middle school serving grade levels 6<sup>th</sup> through 8<sup>th</sup>, Price was the largest of the Cambrian school campuses, with almost twice the number of classrooms as one of the typical elementary schools back in 2012. As a result of this overcrowding, the District opened and expanded the old Steindorf campus to help offset the upper grade capacity.

Due to the proximity of their campuses, Price experiences some of the same issues with drop-off, parking, entry definition, and security as its neighbor Fammatre Elementary. More so than at any other campus, a clearly defined and secured entry point with controlled foot traffic is needed at this site. The middle school campus is substantially larger than the elementary schools and has correspondingly greater needs and acreage to be covered by fencing and site lighting.

Shared programs are located at three different areas of the campus. Constructed in the year 2000, the Cambrian Community Center (CCC) houses a large gymnasium, locker rooms, two regular classrooms, space for the music program, an activity room, offices, and ancillary spaces. In addition to daily use by Price, the CCC is used regularly by the elementary schools as well as other city and community programs. The gymnasium and locker rooms are in good condition. The media center was also recently renovated and expanded as part of the previous bond measure. It is our understanding that the staff and students feel that this space is undersized for a middle school and does not function optimally as a media center. The existing Multi-Use Room (MUR) cafeteria is too small to house students at lunchtime. As with the other campuses, more covered eating structures would help to alleviate this lunchtime congestion.



School site committee members at Price generally deemed their existing classrooms to be in good shape, though there is overcrowding due to some classes being oversubscribed. At classrooms with high vaulted ceilings, there are ongoing problems with roof leakage and condensation which have compromised the ceiling finish. Existing casework in most classrooms is in poor shape and should be replaced. Specialized programs such as technology and music require more dedicated casework for their rooms, as well as overall space and security. Both these programs are well-established on campus and very popular with students.

## Modernization History

Several modernization projects have occurred at this campus. The interior classrooms were retrofitted with new LED lighting in the year 2015, new science classrooms were added in 2001, restroom upgrades in 2003, site exterior upgrades in 2004, media center alterations in 2005, and the entire campus was renovation in 2005. Solar canopies and decorative safety fencing were added to this campus in 2014.

## **Site**

### 1. Parking and Traffic

The existing parking size and configuration at Price Charter hasn't changed significantly in the last thirty years. The flow of traffic is awkward and confusing. The apparent design layout was to stack parent drop off in a manner as to avoid backup into the street. The condition of the pavement is in good condition. There is not much available area to expand or modify the existing parking area at the front of the school.



It is recommended that the parking lot be maintained with overlay and slurry with striping in the next five to seven years.

### 2. Site ADA Compliance

Some flatwork and walkways were upgraded in previous modernizations. Most of the classrooms were modified to allow for flush entry by grading the inside of the classrooms during the 2004 and 2005 modernizations. Several classrooms have metal ramps that complied with code at that time fifteen years ago and are "grandfathered" in. There are locations where pavement has heaved or cracked in the ADA path of travel.



It is recommended that several concrete walkways be removed and replaced with ADA compliant level concrete walkways. A new concrete walk will need to replace the existing concrete walkway along the existing doorways where existing metal ramps are currently installed.



### 3. Play Equipment

This campus has older students that do not use play structures normally used by smaller children. There are play apparatus facilities available for middle school children.

There is no need for special play apparatus for this charter school.

#### 4. Paved Play Area

The paved play area at Ida Price is in fair condition however there are several cracks in the pavement that need to be repaired.

It is recommended that the existing play area and courtyard be overlaid with new AC pavement and slurry sealed with new striping.



#### 5. Turf Play Area and Synthetic Track

This campus has a sophisticated based ball field and snack bar and a large turf area with a decomposed granite track. The existing track is uneven and is in need of ongoing maintenance. The existing turf is in fair condition but has some uneven surfaces and requires a large amount of maintenance. Many of the planter areas are in need of new ground covering.

It is recommended that the track be replaced with a new synthetic track with synthetic grass. New fiber and ground covering should be added to the existing planting area.



#### 6. Landscaping and Irrigation

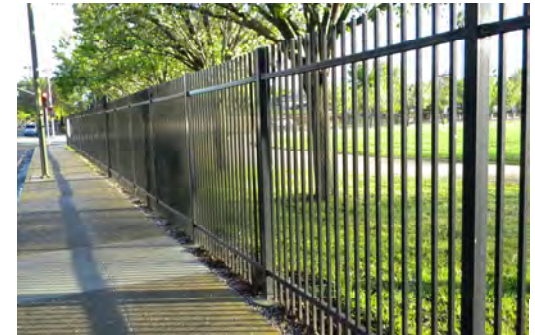
This campus has a large amount of mature trees located at various locations throughout this campus which require ongoing trimming. Landscaping is in fair condition. The District would like to upgrade landscaping with drought tolerant native plants that require less water. Irrigation controls and valves are in need of replacement.



It is recommended that all mature trees be trimmed as required and that all plantings be replaced with drought tolerant natives. All valves and irrigation controls should be replaced.

#### 7. Fencing and Security

New decorative fencing was added at the perimeter of the entire campus in 2014. The campus was modified to secure or lock down the campus in the event of an undesirable situation.



There is no known reason for additional fencing and security at this campus.

#### 8. Trash Enclosure

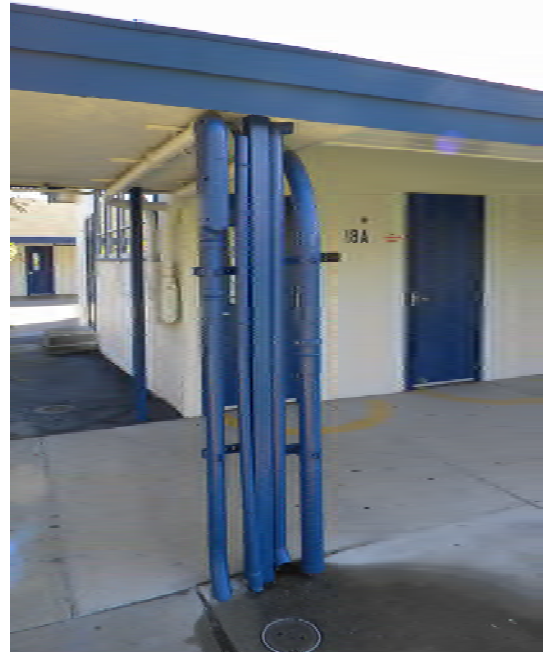
The existing trash enclosure size and location appears to be adequate for this campus.



There is no need for additional trash enclosure modifications at this time.

## 9. Site Utilities

Some of the underground utilities supplying gas and water to the site are over 40 years in age. Some of the underground water was replaced. The existing sewer system is composed of an antiquated clay piping system which allows tree roots to grip and break existing underground piping. These underground utilities have surpassed their intended service life. Replacing the underground utilities will drastically reduce the need for ongoing maintenance of these systems. Past modernizations and electrical upgrade routed new heavy electrical conduits on eaves, roofs and columns. The campus was not intended nor designed for these heavy conduits that blemish the campus. It has been reported that this campus may need additional seismic gas shut offs. Domestic backflow preventor is on need of replacement.



It is recommended that all existing underground utilities older than 40 years be replaced with new utility systems. Underground water, storm, sewer and gas lines should all be replaced entirely at this site. It is recommended that all existing electrical conduits be removed from the eaves, roofs and columns throughout the campus and rerouted underground. The cost estimate will assume some additional seismic gas shut offs be added to this campus. The domestic water backflow is recommended to be replaced.



## 10. Main Electrical Service

This site has adequate electrical service to this site.



There is no need for additional electrical upgrades to the service.

## 11. Storm Drainage

There are no known site drainage issues.

## 12. Site Lighting

Exterior lighting is not ideal for nighttime security. The District maintenance is difficult as the pole lighting is very high.

It is recommended that pole lights and roof mounted lighting be replaced with new LED lighting at the parking lot and throughout the campus.



## 13. Concrete Walkways

The existing concrete walkway system appears to handle foot traffic well at the site; however, several areas of the existing walkways have cracks and other signs of deterioration. There have been several trenching



projects whereas the concrete has a lot of patching.

It is recommended that large cracked areas of the walkways be replaced to the nearest expansion joint. It is also recommended that entire walkways are removed where patching has occurred in the past. (Refer to Section 2 ADA).

#### 14. Basketball Backstops/Ball Walls/ Misc. Play Apparatus

The existing basketball backstops, rims and chains are in good condition. There are currently no ball walls available at this site.

There is no recommendation for additional upgrades at this time.

#### 15. Quality of Exterior Siding/Material

This campus was upgraded with new cement plaster to replace of wood siding at select locations except at the cafeteria area. The exterior paint is in good condition.

There is no need for exterior siding upgrades at this time.

#### 16. Outdoor Learning

Outdoor learning has become more desirable in San Jose as the weather is reasonably comfortable for about half the school year. This campus has one small outdoor covered eating area.

There are no recommendations to upgrade the existing outdoor learning area at this time.



## Modernization

### 17. Existing Covered Eating Structure

This campus currently has a small covered eating structure fairly close to the cafeteria area and is in good condition.

There is no need to replace or modernize this existing covered eating area.

### 18. Existing Covered Walkways

The existing covered walkways and overhangs are in good condition.

There is no need for upgrades to the existing covered walkways or overhangs at this time.



### 19. Electrical Wiring

There appear to be a sufficient number of electrical devices in each classroom. There have not been complaints of electrical issues at this time.

There is no need for electrical wiring upgrades at this time.

### 20. Asbestos Abatement

Although independent reports provided by the School District indicate that all known and tested exposed asbestos has been removed or encapsulated, there is some remaining encapsulated asbestos at various locations at Ide Price Charter School.

It is recommended that any asbestos that becomes exposed in some manner in the future, either by accident or future construction be removed entirely.

### 21. Seismic Upgrade and Dry rot

A preliminary structural review of this campus was performed to determine if any structural upgrades might be necessary. Preliminary studies indicate that all buildings are seismically sufficient..

It is recommended that a more detailed structural analysis be performed to determine the extent of voluntary structural upgrades that should be incorporated into the next phase of modernization for any building that is modernized.

### 22. Roofing

Based on the roofing report, all roofing is in good condition. It was noted that some of the drains are clogged with debris and need ongoing maintenance. It was also noted that some blistering occurred in between the layers of felt and roofing membranes. Some UV damage has occurred in the perimeter flashing at the shingle roofing area.





It is recommended that repairs and maintenance be made at the classroom wings and kitchen roof including clean roofs free of leaves and debris, adding 3 course repair to blisters and BUR penetration seams. It is also recommend to coat the expansion cap covers, restore the deteriorating BUR perimeter and replace missing drain screens.

### 23. Exterior Painting

The existing exterior of this campus is in good condition.

There is no need for exterior painting at this site but is recommended that the campus be painted every seven years.

### 24. Building Insulation and Windows

The original campus buildings were constructed in an era when natural resources such as natural gas and electricity were inexpensive. Windows are single glazed throughout and insulation does not currently meet new construction standards. The window blinds have are older and need to be replaced. The skylights in the Gymnasium have exceeded their intended life. The existing thickened lamination system is discolored and decaying. The walls and windows for the gymnasium and the science buildings are newer and do not need to be upgraded.

It is recommended that insulation be added to all exterior walls and added to all ceiling cavities. Windows should be replaced with double glazed window systems retrofitted with new window blinds. It is recommended that the skylight system in the Gymnasium be replaced with a new system.



### 25. Exterior Doors and Hardware



The campus hardware and doors are in good condition, however the existing locking system does not currently meet the District's requirements for appropriate security. There are some doors that will need to be replaced due to heavy usage and damage over the years.

It is recommended that all hardware be replaced with District Standard secure hardware throughout this campus. It is assumed that several existing doors will need to be replaced to make appropriate alterations for the new hardware installation. The cost estimate will make an assumption for the number of replacements needed.

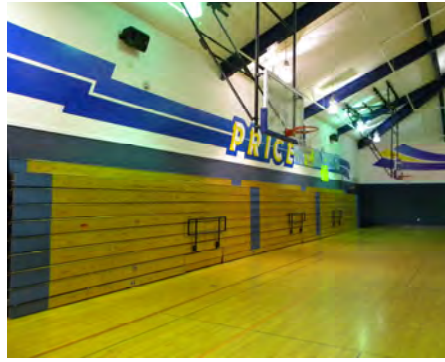
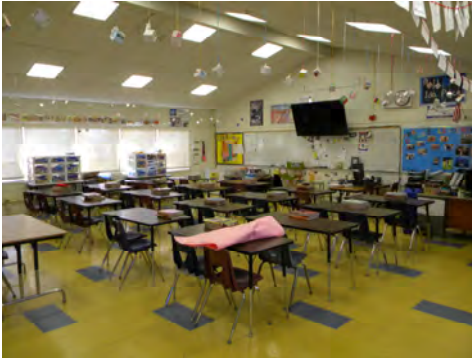


### 26. Restrooms/Partitions/Fixtures

The existing bathrooms were renovated in 2003. There are a few small bathrooms that were not updated. The modernized bathrooms are in good condition but will likely need to be upgraded in the next ten years. The bathrooms floors are in good condition but will need to be replaced in the next five years. The faucets are older and should be replaced.

It is recommended that the bathroom floors be replaced in the next five



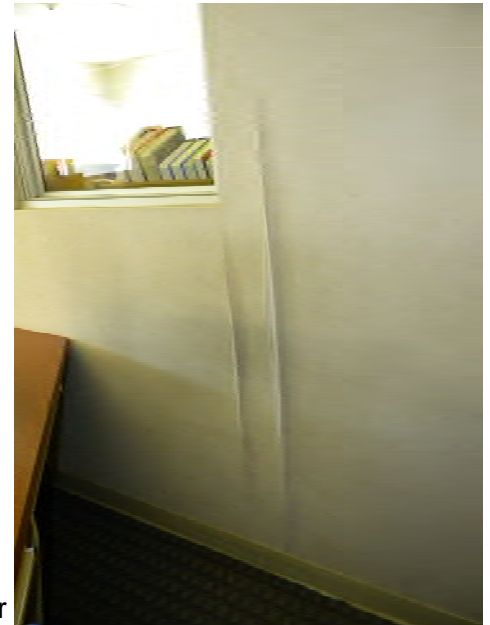


years. Toilet partitions should all be replaced in the next ten years. It would be desirable to replace all facets and flushometers with the District Standard touchless devices.

### 27. Flooring

Most of the flooring is in good condition. The Cafeteria floor needs to be replaced now.

It is recommended that the cafeteria floor be replaced as soon as possible.



### 28. Tackable Walls



The existing vinyl wall coverings and tackable walls are in good condition.

There is no known reason to add or replace the existing tackable wall surfaces.

### 29. Interior Wall Finishes

Interior wall finishes were upgraded in the 2005 modernization. Interior paint is in good condition.

It is recommended that all new interior wall finishes be repainted in the next five years.



### 30. Ceilings

All suspended ceilings were upgraded when the ceiling lighting system was upgraded to LED lighting.

There is no need to upgrade the ceilings at this time.

### 31. Cabinetry

The Price campus did not upgrade cabinetry other than replace the countertops in 2004. There are signs of abuse, vandalism and heavy wear as these cabinets are original.

It is recommended that all cabinetry be replaced entirely throughout the campus.

### 32. Drinking Fountains

Exterior drinking fountains have been upgraded or replaced to meet the minimum ADA requirements as approved by the Division of the State Architect in the past. There are still a few drinking fountains that do not accessible. The District would like to see several bottle fillers at this campus.

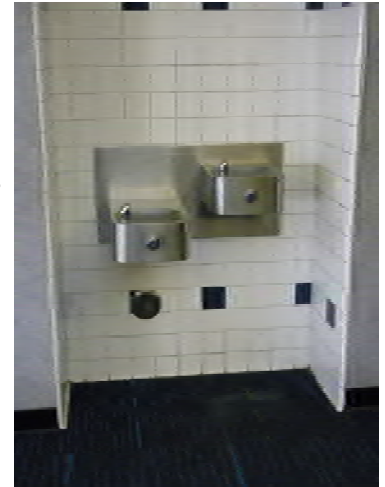
It is recommended that a bottle filler drinking system be installed or updated in the gymnasium and the cafeteria building. It is also recommended that two of the exterior drinking fountains be updated or replaced to meet current ADA requirements.



### 33. Heating Ventilating and Air Conditioning

The existing HVAC system has been replaced at the entire campus during the 2005 modernization. There are no known issue at this time related to the existing systems at this campus. HVAC units lifecycle is fifteen years. These HVAC units are now fifteen years old. The EMS is constantly requiring maintenance and needs to be upgraded.

It is recommended that all HVAC systems and the EMS system at this entire campus, except the heat pump units in the Science Classrooms, be replaced in the next five years.



### 34. Interior Lighting

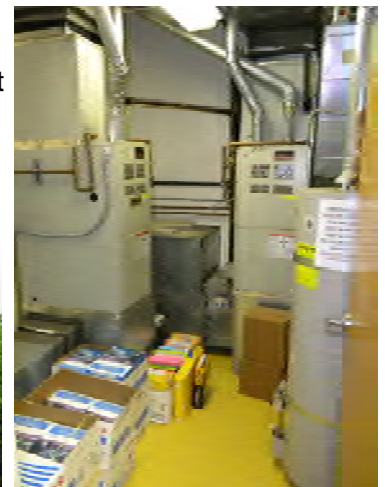
The current interior lighting was replaced with LED light fixtures with dimmable light switching in 2015. The existing science classrooms have fairly new fluorescent light fixtures.

There is no need for changes to the interior lighting system.

### 35. Electrical Power Distribution/Outlets

Currently, the existing power distribution at the existing classrooms is adequate at this time. Although there are no known issues related to power distribution at this campus, the District would like to have each electrical inspected by an electrical contractor and replaced as needed.

There is no need for additional outlets. The cost estimate will make assumptions that some of the electrical panels will need to be upgraded.



### 36. Data Network

The District is in need of upgrading student devices



and classroom standardization of technology equipment.

It is recommended that new teaching apparatus and devices be purchased for the students, teachers and classroom facilities including laptops, flat panel displays, screen casting devices, doc camera, chrome books, and iPads. Improvement include upgrading wireless access points, backup power and switches.

### 37. Camera Surveillance

The District hasn't expressed the need for camera surveillance systems at this time. However, it is possible that security cameras will become an issue in the future.



### 38. Communication System

The existing communication system is adequate at this time.

### 39. Fire Alarm

The existing fire alarm system meets current code and local fire requirements, however there are often ongoing maintenance problems with the system. Should new modernization occur at this campus, it is likely that the fire alarm main panel will need to be replaced with a newer system that includes newly mandated sound systems which require different or additional wiring.

Although it is not required to be replaced, the cost estimate will included the cost to replace the entire fire alarm system.

### 40. Alteration of Existing Portable Buildings

Two of the portable classrooms have surpassed their anticipated lifecycle. Portable classrooms were designed for occupancy for an average of fifteen years. The Science classrooms were installed as modular classrooms, slab on grade and should last 50 to 100 years with proper maintenance.

It is recommended that all portable classrooms be replaced with new permanent classrooms.

### 41. Relocation of Existing Portable Buildings

Over the years, portable classrooms were added to this site with the expanding student population. Most of the portables were added to the campus at a location that seemed pertinent at the time, likely related to the most cost effective location for utility hook up with absence of planning. Once a portable classroom was added out of necessity, several other portables were added next to the initially installed portable.



It is recommended that the campus layout be designed to replace the portable classrooms to a location that might be better suited to the overall flow of the teaching environment.

### 42. Library

The current Library space was expanded in 2005 with a small addition. The addition was a compromised design that best suited the needs at the time with a minimal budget. The use of



the library space has changed and evolved and hard print books is becoming less used and heading for extinction. New library or media centers have evolved into a more collaborate social environment that can double up as many usages including training, social gatherings, collaboration amongst student, and small group learning.

It is recommended that the existing library be redesigned to become a more contemporary media center or collaborate student learning center including small break out rooms, conference rooms and furnished with new flexible furnishings.



#### 43. Work Room/Lounge

The current work room and lounge need to be modernized.

It is recommended that the existing administration support spaces be renovated and altered to meet the District current needs at this site.



#### 44. Cafeteria/Kitchen/Gymnasium/Music/ Wrestling Rooms

The existing Music room and Wrestling Rooms are in satisfactory condition, except that there is no AC in the wrestling room. The Gymnasium is in satisfactory condition other than the older skylight system which is decaying and discoloring. The cafeteria is adequate but should be the finishes should be upgraded. The kitchen is older and is in need of renovation with new equipment.

It is recommended the Gymnasium skylight be replaced with a new skylight system. It is recommended that the cafeteria be upgraded with new finishes. The kitchen should be renovated with new kitchen equipment. It is recommended that AC be added to the Wrestling room.



#### 45. Existing Storage

Although staff will argue that there is never enough storage, currently, there appears to be enough storage available.

There is no need for additional storage.

#### 46. Clocks

The current clock system is inadequate and does not meet the needs of the District.

It is recommended that the clock system be replaced with a new system.

#### 47. Speakers/Bell /PA

The existing Bells and Speaker system is inadequate and does not meet the needs of the District.

It recommended that the Bells and Speaker system be replaced.





## 48. Computer Lab/Art

There is a computer lab in the library space. There are Art facilities and industrial art facilities at this campus. Many of these classroom functions have evolved into spaces conducive STEAM labs and other collaborate ventures.

It is recommended that the computer lab in the library be converted into the new media center space and that the industrial arts and art spaces be converted into a more contemporary STEAM lab setup with flexible furnishings.



## 49. Renovation of Administration

The existing administrative spaces were renovated in 2005. The entry to the administration area is not defined architecturally and instead is not a friendly entry as it is bound by fencing.

It is recommended that the existing administrative spaces be renovated in a manner that allows for a main frontal formal entryway that allows the campus to still be secure.



## 50. STEAM Lab

There is not a dedicated contemporary space used in the manner of a STEAM lab.

As recommended in the Computer Lab/Art section above, the existing Industrial Art and Art rooms should be converted to STEAM labs with flexible uses and flexible furnishings. Refer to Section 48 in the cost estimate for this recommendation.

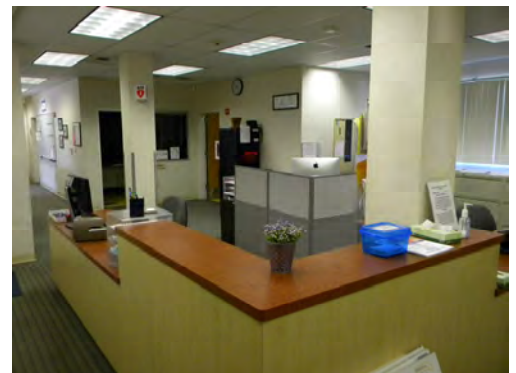


## **New Construction**

### 51. Covered Walkways

The site has several areas where students can travel from some classrooms to other classrooms without getting wet from inclement weather. There are several isolated buildings at this campus where connected covered walkways would be desirable.

It is recommended that new covered walkways be added connecting isolated classrooms.



### 52. Restrooms

There appears to be an adequate number of restrooms at this campus located in relatively ideal locations.

There is no need to add restrooms facilities at this campus.

### 53. Portable or Modular Classrooms

Since the opening of Steindorf school, overpopulation at this school has settled whereas additional portable

classrooms are not needed.

#### 54. Administration

The existing administration space is adequate in size.

It is not likely that expansion to the administration area is required. Refer to Section 49 for alterations to the Administration area.



#### 55. Library

The existing library space is fairly small in size but should the computer lab space be utilized for the library, expansion of this space may not be necessary. (Refer to Section 48).

There is no need to provide an additional space related to the library.



#### 56. Covered Eating Structure or Outdoor learning

The only existing covered area is a small metal shade structure adjacent to the cafeteria. The location of the existing photovoltaic structures are not located allowing these to function as outdoor learning nor eating structures. The existing space adjacent to the cafeteria could incorporate outdoor learning. It would be desirable to have two more covered outdoor learning spaces strategically located throughout this campus.

It is recommended that two large covered metal shade structures at other locations on this campus equipped with wi-fi and outdoor furnishings be installed at this campus.



#### 57. Storage

The existing is adequate.

There is not need for additional storage facilities at this campus.



#### 58. STEAM Lab

There is a need for a STEAM lab at this campus.

It is recommended that a new STEAM classroom be constructed adjacent to the new modular classrooms.



#### 59. Alternative Energy Source

This campus was retrofitted to house new photovoltaic structures in 2014. The Cambrian School District will continue to look into alternative energy sources.

There is no need to add additional photovoltaics units at this site. It is desired to provide on going cleaning of the photovoltaics as the District does not have the manpower to maintain the panels at this time.

## 60. Campus Layout

It is desirable for this campus to study to existing locations of portable classrooms while considering new permanent classroom building replacing them, perhaps in a new location that better serves the educational needs at this campus (refer to Section 40). A new STEAM lab should be constructed at the same time as the replacement permanent classrooms.

It would be desirable to add two outdoor learning and eating spaces to the campus (refer to section 56).

The entry to the campus is difficult to navigate. The existing entry is dark and enclosed by fencing. It would be desirable to create a new formalized entry that highlights the main area to enter the campus especially when the campus is in session with all gates locked (refer to Section 49).



## Ida Price Charter Middle Cost Estimate

<b>Construction Item</b>	<b>Quantity</b>	<b>Unit</b>	<b>Cost</b>	<b>Total Estimated Cost</b>
<b>Site</b>				
1. Parking and Traffic	76,500	sf	7.00	\$535,500
2. Site ADA Compliance	1	ls	150,000.00	\$150,000
3. Play Equipment	0	ls	55,000.00	\$0
4. Paved Play and Courtyard Area	150,000	sf	7.00	\$1,050,000
5. Turf Play Area and Synthetic Track	350,000	sf	5.00	\$1,750,000
6. Landscaping and Irrigation	75,000	sf	2.00	\$150,000
7. Fencing and Security	0	lf	300.00	\$0
8. Trash Enclosure	0	ls	65,000.00	\$0
9. Site Utilities	335,000	sf	20.00	\$6,700,000
10. Main Electrical Service	0	ls	100,000.00	\$0
11. Storm Drainage	0	sf	0.50	\$0
12. Site Lighting	335,000	ls	1.00	\$335,000
13. Concrete Walkways (refer to Section 2)	5,000	sf	35.00	\$175,000
14. Basketball Backstops/Ballwalls/Misc.	0	ea	30,000.00	\$0
15. Quality of Exterior Siding/Material	0	sf	0.00	\$0
16. Outdoor Learning	1	ls	20,000.00	\$20,000
<b>Total Site</b>				<b>\$10,865,500</b>
<b>Modernization</b>				
17. Existing Covered Eating Structure	0	ls	0.00	\$0
18. Existing Covered Walkways (see new covered walks)	0	ls	450,000.00	\$0
19. Electrical Wiring	0	sf	11.00	\$0
20. Asbestos Abatement	1	ls	40,000.00	\$40,000
21. Seismic Upgrade/Dry Rot	0	sf	35.00	\$0
22. Roofing (Based on Roofing Report)	1	ls	28,500.00	\$28,500
23. Exterior Painting	104,000	sf	8.00	\$832,000
24. Building Insulation and Windows	104,000	sf	40.00	\$4,160,000
25. Exterior Doors and Hardware	113,000	ea	5.00	\$565,000
26. Restrooms/Partitions/Fixtures	12	ea	25,000.00	\$300,000
26a. Restrooms/Partitions/Fixtures hands free	135	ea	850.00	\$114,750
27. Flooring	4,500	sf	9.00	\$40,500
28. Tackable Walls	0	sf	18.00	\$0
29. Interior Wall Finishes	113,000	sf	8.00	\$904,000
30. Ceilings	0	sf	4.50	\$0
31. Cabinetry	113,000	sf	45.00	\$5,085,000
32. Drinking Fountains	4	ea	6,500.00	\$26,000
33. Heating Ventilating & Air Conditioning	113,000	ea	25.00	\$2,825,000
34. Interior Lighting	0	ls	43.00	\$0
35. Electrical Power Distribution/Outlets	1	ls	40,000.00	\$40,000
36. Data Network	1	ea	250,000.00	\$250,000
37. Camera Surveillance	113,000	sf	0.35	\$39,550
38. Communication System	0	ls	225,000.00	\$0
39. Fire Alarm	113,000	sf	55.00	\$6,215,000

<b>Construction Item</b>	<b>Quantity</b>	<b>Unit</b>	<b>Cost</b>	<b>Total Estimated Cost</b>
40. Alteration of Existing Portable Buildings	4,800	sf	350.00	\$1,680,000
41. Relocation of Existing Portable Buildings (refer to line 53 below)	0	ea	110,000.00	\$0
42. Library	4,800	sf	350.00	\$1,680,000
43. Work Room/Lounge	2,000	sf	500.00	\$1,000,000
44. Cafeteria/Kitchen/Gym/Music/Wrestling Rooms	45,000	sf	65.00	\$2,925,000
45 Existing Storage	0	ls	35,000.00	\$0
46. Clocks	113,000	sf	1.75	\$197,750
47. Speakers	113,000	sf	1.50	\$169,500
48. Computer Lab	3,000	sf	550.00	\$1,650,000
49. Renovation of Administration	6,000	sf	500.00	\$3,000,000
50. STEAM Lab (See Computer Lab)	0	sf	600.00	\$0
<b>Total Modernization</b>				<b>\$33,767,550</b>
<b>New Construction</b>				
51. Covered Walkways	600	lf	450.00	\$270,000
52. Restrooms	0	sf	750.00	\$0
53. Portable or Modular Classrooms	12	ea	275,000.00	\$3,300,000
54. Administration	0	ls	750,000.00	\$0
55. Library	0	ea	0.00	\$0
56. Covered Eating Structure (see outdoor learning)	2	ea	210,000.00	\$420,000
57. Storage	0	ls	75,000.00	\$0
58. STEAM Lab (Music and Arts) - See Campus layout below	1,400	sf	750.00	\$1,050,000
59. Alternative Energy Source	1	ls	10,000.00	\$10,000
60. Campus Layout	0	sf	0.00	\$0
61. Furnishings and Equipment	113,000	ea	4.00	\$452,000
<b>Total New Construction</b>				<b>\$5,502,000</b>
<b>Subtotal Construction Costs</b>				<b>\$50,135,050</b>
<b>Construction Contingency 10%</b>				<b>\$5,013,505</b>
<b>Soft Costs 18%</b>				<b>\$9,926,740</b>
<b>Total Revised Master Planning Needs at Ida Price Charter Middle School</b>				<b>\$65,075,295</b>



## Sartorette Elementary School - Master Planning Evaluation

### Evaluation Summary

Originally built in 1959, Sartorette Elementary School is situated on a 10 acre lot. Farnham and Sartorette. Like the other elementary schools, Sartorette serves grades Kindergarten through 5<sup>th</sup>.

The layout of the Sartorette campus closely matches that at Farnham. Permanent classrooms are clustered around two landscaped quadrangles with the Multi-Use Room (MUR), covered eating structure, administration building, and staff rooms situated at the intersection of the two quadrangles. This arrangement provides easy access to most shared programs, with the exception of the library which is tucked away in a converted classroom on one end of campus. All the in-wall tables in the cafeteria (MUR) were recently replaced and the building seems to be adequate for the uses it currently serves. The library on the other hand is extremely undersized for an elementary school. It lacks adequate space for books and does not have a computer lab or media center component.

Situated in a low-density residential community, school site committee members commented that Sartorette has great street front presence and curb appeal. The school would like to preserve this appeal. Generally committee members felt that the campus was well-organized. Playgrounds for all non-Kindergarten grades are split between upper and lower grades and located at the back of the campus. However the back play area bounded by eight older portables is not well-lit at night. There are no covered walkways to this part of the campus, which is inconvenient. Other issues with these existing portable classrooms include leaking and flooding during the rainy season and lack of accommodations for backpacks and storage.

### Modernization History

Several modernization projects have occurred at this campus. Restroom were upgraded in 2003, site exterior upgrades in 2004, and the entire campus was renovated in 2005. A small renovation creating a new library space, converting two classrooms into one larger space was constructed in 2020. Solar canopies and decorative safety fencing were added to this campus in 2014. This campus originally had two portable classrooms located in the back of the campus prior to 1992 and then three more added prior to 2000. A sixth portable was added in 2001 and then another added in 2003 and the last portable added in 2004 making a total of eight portable classrooms.



## Site

### 1. Parking and Traffic

The existing parking size and configuration at Sartorette has had some changes over the last thirty years. The flow of traffic inefficiently designed with a separate bus drop off area that exists adjacent to the entrance of the main parking lot. The condition of the pavement is in fair condition. The existing parking lot could be expanded and altered to be significantly more efficient.

The parking lot should be designed to have a better flow of traffic and a better dedicated drop off area for the parents that would allow them to pass as needed after dropping off or picking up their children. The existing parking area should be resurfaced with a new slurry seal and striping.



### 2. Site ADA Compliance

Some flatwork and walkways were upgraded in previous modernizations. There are locations where pavement has heaved or cracked in the ADA path of travel.

It is recommended that several portions of existing walkways in the ADA path of travel be repaired.

### 3. Play Equipment

This kindergarten and the general play structures are in fair condition. The fall zone is composed of wood chip loose material which has to be replenished as the existing fiber material gets kicked out, compacted, and



floats away. The perimeter of the play structure fall material is raised and not designed to meet the intent of accessibility.

It is recommended that the Kindergarten and main play structures be replaced with new play structures in the next five years. The loose wood chip fall material should be replaced with a more desirable fall material such as poured in place matting with a flush concrete curb surrounding the new poured in place matting.

#### 4. Paved Play Area

The paved play area at Sartorette Elementary is in fair condition however there are several cracks in the pavement that need to be repaired.

It is recommended that the existing play area be overlaid with new AC pavement and slurry sealed with new striping.

#### 5. Turf Play Area and Synthetic Track

The existing turf is in fair condition but has some uneven surfaces. The existing DG track tends to need ongoing maintenance. The existing track has concrete curbing.

It is recommended that the existing turf be upgraded to remove uneven surfaces with new sod or seed throughout. The existing track should be leveled and replaced with new decomposed granite material reusing the existing borders. It is desirable for the District to replace the existing DG track with a new low maintenance synthetic track.

#### 6. Landscaping and Irrigation

This campus has a large amount of mature trees located at various locations throughout this campus which require ongoing trimming. Landscaping is in fair condition. The District would like to upgrade landscaping with drought tolerant native plants that require less water. Irrigation controls and valves are in need of replacement.

It is recommended that all mature trees be trimmed as required and that all plantings be replaced with drought tolerant natives. All valves and irrigation controls should be replaced.

#### 7. Fencing and Security

New decorative fencing was added at the perimeter of the entire campus in 2014. The campus was modified to secure or lock down the campus in the event of an undesirable situation. It has been reported that the outdoor area off the staff lounge lack an egress gate.

It is recommended that the an new form of egress be created near the outdoor area near the staff lounge.

#### 8. Trash Enclosure

The existing trash enclosure size and location appears to be adequate for this campus.

There is no need for additional trash enclosure modifications at this time.





## 9. Site Utilities

Some of the underground utilities supplying gas and water to the site have been replaced. The existing sewer system is composed of an antiquated clay piping system which allows tree roots to grip and break existing underground piping. Some of the underground utilities have surpassed their intended service life. Replacing the underground utilities will drastically reduce the need for ongoing maintenance of these systems. Past modernizations and electrical upgrade routed new heavy electrical conduits on eaves, roofs, at the underside of vaulted ceilings and columns. The campus was not intended nor designed for these heavy conduits that blemish the campus.

It has been reported that this campus may need additional seismic gas shut offs. Domestic backflow preventor is on need of replacement.

It is recommended that all underground storm, sewer and some water lines under the existing kitchen be replaced at this site. It is recommended that all existing electrical conduits be removed from the eaves, roofs and columns throughout the campus and rerouted underground. The cost estimate will assume some additional seismic gas shut offs be added to this campus. The domestic water backflow is recommended to be replaced.



## 10. Main Electrical Service

This site has adequate electrical service.

There is no need for additional electrical upgrades to the service.

## 11. Storm Drainage

There are no known site drainage issues.

## 12. Site Lighting

Exterior lighting is not ideal for nighttime security. The District maintenance is difficult as the pole lighting is very high.

It is recommended that pole lights and roof mounted lighting be replaced with new LED lighting at the parking lot and throughout the campus.

## 13. Concrete Walkways

The existing concrete walkway system appears to handle foot traffic well at the site; however, several areas of the existing walkways have cracks and other signs of deterioration. There have been several trenching projects whereas the concrete has a lot of patching. There is a new concrete walk needed at the front of the campus at the large grass area as pedestrians are currently using a desired line pathway on dirt.

It is recommended that large cracked areas of the walkways be replaced to the nearest expansion joint. It is also recommended that entire walkways are removed where patching has occurred in the past. A new concrete walkway should be installed at the front area of the school next to the large grass area. (Refer to Section 2 ADA).

## 14. Basketball Backstops/Ball Walls/ Misc. Play Apparatus

The existing basketball backstops, rims and chains are in good condition. There are currently no ball walls available at this site.





There are no known upgrades needed for the play apparatus at this campus.

### 15. Quality of Exterior Siding/Material

The exterior wall surfaces appear to be in fair condition.

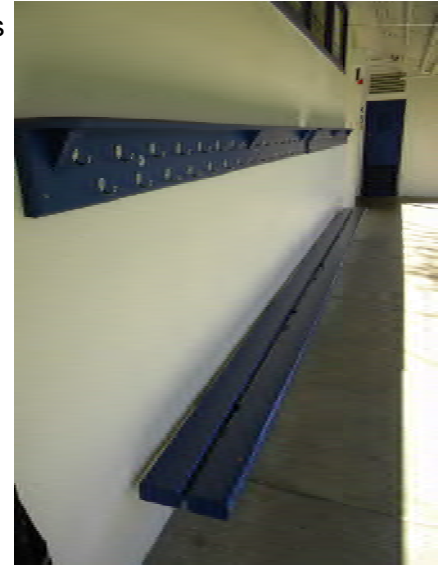
There is no need for exterior siding upgrades at this time to the permanent campus buildings.

### 16. Outdoor Learning

Outdoor learning has become more desirable in San Jose as the weather is reasonably comfortable for about half the

school year. This campus has one small outdoor covered eating area. The structure and finishes appear to be in good condition.

There are no needed upgrades to the existing outdoor shade structure at this time. (Refer to Section 56).



## Modernization

### 17. Existing Covered Eating Structure

This campus currently has a small covered eating structure fairly close to the cafeteria area and is in good condition.

There is no need to replace or modernize this existing covered eating area. (Refer to Section 56).



### 18. Existing Covered Walkways

The existing covered walkways and overhangs are in good condition.



There is no need for upgrades to the existing covered walkways or overhangs at this time.

### 19. Electrical Wiring

There appear to be a sufficient number of electrical devices in each classroom. There have not been complaints of electrical issues at this time. Routing of electrical conduits are exposed in the ceilings of the classrooms.

There is no need for electrical wiring upgrades at this time.

## 20. Asbestos Abatement

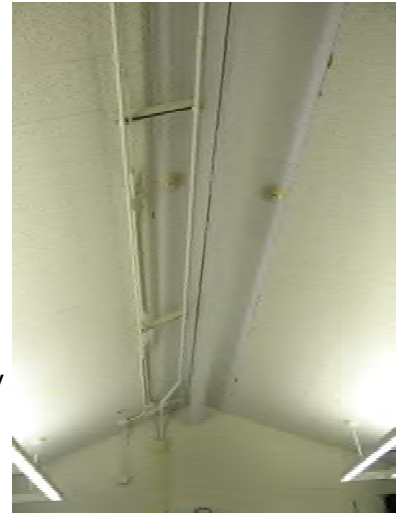
Although independent reports provided by the School District indicate that all known and tested exposed asbestos has been removed or encapsulated, there is some remaining encapsulated asbestos at various locations at this campus.

It is recommended that any asbestos that becomes exposed in some manner in the future, either by accident or future construction be removed entirely.

## 21. Seismic Upgrade and Dry rot

A preliminary structural review of this campus was performed to determine if any structural upgrades might be necessary. Preliminary studies indicate that all buildings are seismically sufficient..

It is recommended that a more detailed structural analysis be performed to determine the extent of voluntary structural upgrades that should be incorporated into the next phase of modernization for any building that is modernized.



## 22. Roofing



Based on the roofing report, all roofing is in good condition as it was reportedly installed in 2006. It was noted that leaves and debris have filled some gutters. The shingle roofs are in good condition, however, there are some damaged or missing shingles that should be replaced. A metal chimney cap is rusted. Portable classroom #18 has had recent leaks. It was noted that there were rusted gutters that need to be monitored.

It is recommended maintenance toward cleaning roofs free of leaves and debris and replacing several damaged or missing shingles selectively throughout this campus. Seams should be sealed with a recommended bonding product and caps should be coated with a recommended bonding urethane product as recommended in the roofing report.

## 23. Exterior Painting

The existing exterior of this campus is in good condition.

There is no need for exterior painting at this site but is recommended that the campus be painted every seven years.



## 24. Building Insulation and Windows

The original campus buildings were constructed in an era when natural resources such as natural gas and electricity were inexpensive. Windows are single glazed throughout and insulation does not currently meet new construction standards. The window blinds have are older and need to be replaced.

It is recommended that insulation be added to all exterior walls and added to all ceiling cavities. Windows should be replaced with double glazed window systems retrofitted with new window blinds.



## 25. Exterior Doors and Hardware

The campus hardware and doors are in good condition, however the existing locking system does not currently meet the District's requirements for appropriate security. There are some doors that will need to be replaced due to heavy usage and damage over the years.

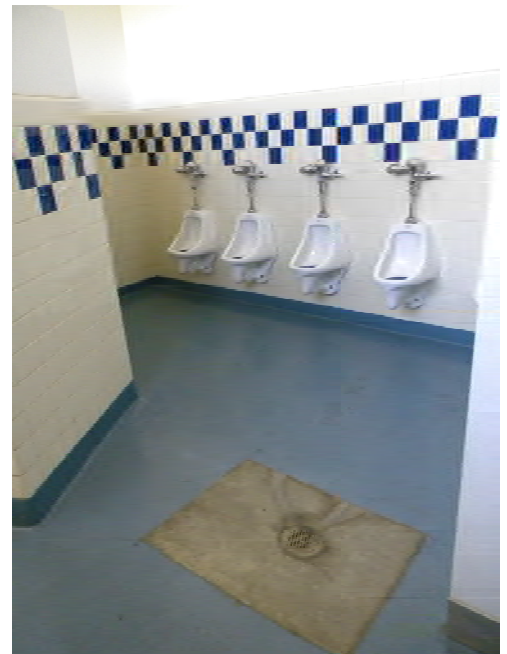
It is recommended that all hardware be replaced with District Standard secure hardware throughout this campus. It is assumed that several existing doors will need to be replaced to make appropriate alterations for the new hardware installation. The cost estimate will make an assumption for the number of replacements needed.



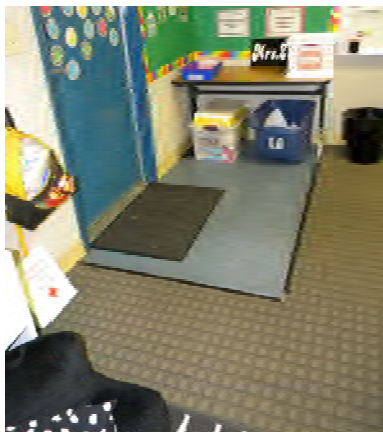
## 26. Restrooms/Partitions/Fixtures

The existing bathrooms were renovated in 2003. There are a few small bathrooms that were not updated. The modernized bathrooms are in fair condition but will likely need to be upgraded in the next ten years. The bathrooms floors are in poor condition and will need to be upgraded in the next five years. The faucets are older and should be replaced. There are a select few fixtures that need to be replaced.

It is recommended that the bathroom floors be upgraded in the next five years. Toilet partitions should all be replaced in the next ten years. It would be desirable to replace all facets and flushometers with the District Standard touchless devices. It is desirable to modify or add hands free fixtures alterations at this campus.



## 27. Flooring



Most of the flooring is in good condition.

It is recommended that the entire campus flooring be replaced in the next ten years.

## 28. Tackable Walls

The existing vinyl wall coverings and tackable walls are in good condition.

There is no known reason to add or replace the existing tackable wall surfaces.

## 29. Interior Wall Finishes

Interior wall finishes were upgraded in the 2005 modernization. Interior paint is in good condition.

It is recommended that all new interior wall finishes be repainted in the next five years.

## 30. Ceilings

The vaulted ceilings were designed without proper ventilation in the cavity of the ceiling system. When AC was added to the classrooms, condensations at the peak of the vault and beam began to show and drip, especially when the outside temperature greatly differed from the inside temperature. Some of the ceiling tile has been noted to be missing from the ceiling.

The best solution would be to remove all roofing and ceilings stripping all finishes down to the roof structure, adding new ventilation in all blocking and allowing cavities to properly vent to a continuous roof vent. Unfortunately, the ideal solution is cost prohibitive. Another solution would be to create a new suspended flat ceiling system in each classroom creating a new attic space above that can buffer the conditioned space from the outside air.

## 31. Cabinetry

The cabinetry was upgraded in 2004 and is still in good condition.

There is no known reason for replacing the cabinetry at this time.

## 32. Drinking Fountains

Exterior drinking fountains have been upgraded or replaced to meet the minimum ADA requirements as approved by the Division of the State Architect in the past. There are still a few drinking fountains that do not accessible. The District would like to see several bottle fillers at this campus.

It is recommended that a bottle filler drinking system be installed or updated in the cafeteria building. It is also recommended that two of the exterior drinking fountains be updated or replaced to meet current ADA requirements.

## 33. Heating Ventilating and Air Conditioning

The existing HVAC system has been replaced at the entire campus during the 2003 modernization. HVAC units lifecycle is fifteen years. These HVAC units are now fifteen years old. The EMS is constantly requiring maintenance and needs to be upgraded.



It is recommended that all HVAC systems and the EMS system at this entire campus be replaced in the next five years.

### 34. Interior Lighting

The existing fluorescent lighting throughout this campus is adequate, however, it is highly desirable to retrofit all classrooms with new LED technology to allow for additional electrical efficiency while allowing for the new option of dimming lights on demand.

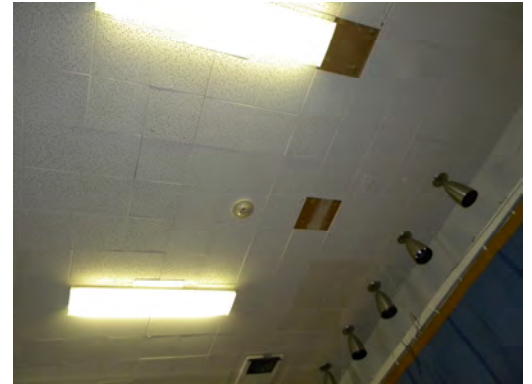
It is recommended that all classrooms be retrofitted with new LED lights throughout the campus with new dimmable switching.



### 35. Electrical Power Distribution/Outlets

Currently, the existing power distribution at the existing classrooms is adequate at this time. Although there are no known issues related to power distribution at this campus, the District would like to have each electrical inspected by an electrical contractor and replaced as needed.

The cost estimate will make assumptions that some of the electrical panels will need to be upgraded.



### 36. Data Network

The District is in need of upgrading student devices and classroom standardization of technology equipment.

It is recommended that new teaching apparatus and devices be purchased for the students, teachers and classroom facilities including laptops, flat panel displays, screen casting devices, doc camera, chrome books, and iPads. Upgrades to wireless access points, backup power and switches are also recommended.



### 37. Camera Surveillance

The District hasn't expressed the need for camera surveillance systems at this time. However, it is possible that security cameras will become an issue in the future.

### 38. Communication System

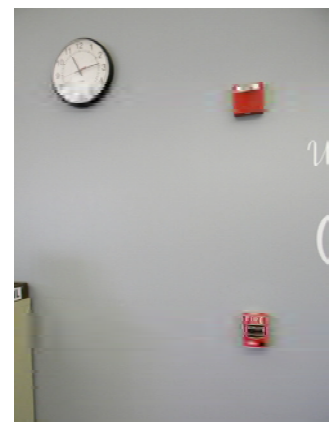
The existing Bogen system is analog and is very dated at this time.

It is recommended that the communications system be replaced completely.

### 39. Fire Alarm

The existing fire alarm system meets current code and local fire requirements, however there are often ongoing maintenance problems with the system. Should new modernization occur at this campus, it is likely that the fire alarm main panel will need to be replaced with a newer system that includes newly mandated sound systems which require different or additional wiring.

Although it is not required to be replaced, the cost estimate will included the cost to replace the entire fire alarm system.



#### 40. Alteration of Existing Portable Buildings

There is a cluster of eight portable classrooms that are in poor condition at the rear of the campus. Two of the portables are thirty years old. Four of the portable classrooms are twenty years old and on two are fifteen years old.

The anticipated lifecycle of a portable classroom is fifteen years old. It is recommended that these portable classroom be replaced.

#### 41. Relocation of Existing Portable Buildings

Over the years, portable classrooms were added to this site with the expanding student population. The northwest portable cluster is located in fairly reasonable location at this campus, however the other cluster at the southeastern portion of the campus appears to be located, likely related to the most cost effective location for utility hook up with absence of planning. This campus originally had two portable classrooms located in the back of the campus prior to 1992 and then three more added prior to 2000. A sixth portable was added in 2001 and then another added in 2003 and the last portable added in 2004 making a total of eight portable classrooms.

It is recommended that the southeastern portable cluster be replaced with new permanent classrooms located in a location that coordinates teaching, socialization and safety with its new location.



#### 42. Library

The library space was created in 2020 using two existing classrooms and is in excellent condition. The old library space will need to be converted back to a regular classroom.

It is recommended that the old library space be converted to a regular classroom.



#### 43. Work Room/Lounge

The current work room and lounge need to be modernized.

It is recommended that the existing administration support spaces be renovated and altered to meet the District current needs at this site.



#### 44. Cafeteria/Kitchen/Gymnasium/Music/ Wrestling Rooms

The cafeteria space is adequate but the finishes should be upgraded. The kitchen is older and is in need of renovation with new equipment.

It is recommended that the cafeteria be upgraded with new finishes. The kitchen should be renovated with new kitchen equipment.

## 45. Existing Storage

Although staff will argue that there is never enough storage, currently, there appears to be enough storage available.

There is no need for additional storage.

## 46. Clocks

The current clock system is inadequate and does not meet the needs of the District.

It is recommended that the clock system be replaced with a new system.

## 47. Speakers/Bell /PA

The existing analog system is dated and should be updated.

It recommended that the Bells and Speaker system be replaced.

## 48. Computer Lab/Art

Several classrooms have computer stations. Computer labs uses have changed over the years. The District is not in need of a computer lab at this time.

## 49. Renovation of Administration

The existing administrative spaces were renovated in 2005. The entry currently work fairly well for security purposes. The administration area is in need of modernization.

It is recommended that the existing administrative spaces be renovated.

## 50. STEAM Lab

There is not a dedicated contemporary space used in the manner of a STEAM lab.

It would be ideal to add a new STEAM lab to this campus (refer to section 58).

## **New Construction**

### 51. Covered Walkways

The site has several areas where students can travel from some classrooms to other classrooms without getting wet from inclement weather. There are several isolated portable buildings at this campus where connected covered walkways would be desirable.

It is recommended that new covered walkways be added connecting isolated classrooms.

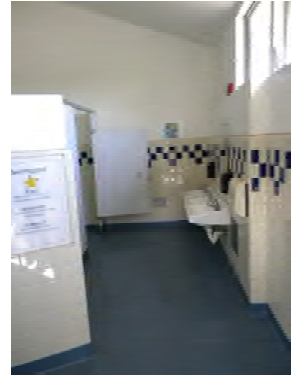




## 52. Restrooms

There appears to be an adequate number of restrooms at this campus located in relatively ideal locations.

There is no need to add restrooms facilities at this campus.



## 53. Portable or Modular Classrooms

Since the opening of Steindorf school, overpopulation at this school has settled whereas additional portable classrooms are not needed. The existing portable classrooms at this campus have outlasted their intended Lifecycle, are extremely old and should be replaced and relocated to a new location.

It is recommended that the existing old portable buildings be removed from the campus and a new permanent classroom building be constructed at a thoughtful location on this campus.



## 54. Administration

The existing administration space is inadequate in size.

It is recommended that the administration building be expanded with an addition at the front of the school.

## 55. Library

The existing library space is fairly small in size is adequate to continue to function as a traditional library space.

There is no need to provide an additional space related to the library.



## 56. Covered Eating Structure or Outdoor learning

The only existing covered area is a small metal shade structure adjacent to the cafeteria. The location of the existing photovoltaic structures are not located allowing these to function as outdoor learning nor eating structures. The existing space adjacent to the cafeteria could incorporate outdoor learning. It would be desirable to have one or two more covered outdoor learning and eating spaces strategically located throughout this campus.

It is recommended that two large covered metal shade structures at other locations on this campus equipped with wi-fi and outdoor furnishings be installed at this campus.

## 57. Storage

It appears that the existing storage is adequate.

There is no need for additional storage facilities at this campus.

## 58. STEAM Lab

An existing classroom may be adequate to be converted to a STEAM lab in the future.

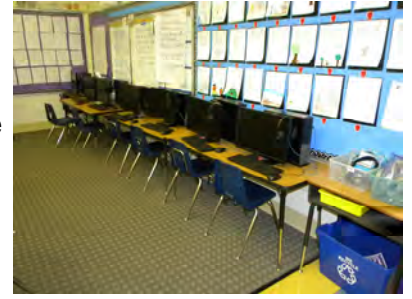
There is no need to create a new STEAM lab at this site.



## 59. Alternative Energy Source

This campus was retrofitted to house new photovoltaic structures in 2014. The Cambrian School District will continue to look into alternative energy sources.

There is no need to add additional photovoltaics units at this site. It is desired to provide on-going cleaning of the photovoltaics as the District does not have the manpower to maintain the panels at this time.



## 60. Campus Layout

It is desirable for this campus to remove the older portable classroom while considering new permanent classroom building replacing them, perhaps in a new location that better serves the educational needs at this campus (refer to Section 53). A new STEAM lab could be created in a new modular permanent classroom.



It would be desirable to add two outdoor learning and eating spaces to the campus (refer to section 56).

It would be desirable to construct an addition to the existing administration area at the front of the campus (refer to Section 54).



## Sartorette Elementary School Cost Estimate

<b>Construction Item</b>	<b>Quantity</b>	<b>Unit</b>	<b>Cost</b>	<b>Total Estimated Cost</b>
<b>Site</b>				
1. Parking and Traffic	33,000	sf	32.00	\$1,056,000
2. Site ADA Compliance	1	ls	35,000.00	\$35,000
3. Play Equipment	3	ea	65,000.00	\$195,000
4. Paved Play and Courtyard Area	57,000	sf	7.00	\$399,000
5. Turf Play Area and Synthetic Track	47,000	sf	5.00	\$235,000
6. Landscaping and Irrigation	48,000	sf	2.00	\$96,000
7. Fencing and Security	40	lf	300.00	\$12,000
8. Trash Enclosure	0	ls	65,000.00	\$0
9. Site Utilities	105,000	sf	10.00	\$1,050,000
10. Main Electrical Service	0	ls	100,000.00	\$0
11. Storm Drainage	0	sf	0.50	\$0
12. Site Lighting	85,000	ls	3.50	\$297,500
13. Concrete Walkways (refer to Section 2)	3,500	sf	35.00	\$122,500
14. Basketball Backstops/Ballwalls/Misc.	0	ea	30,000.00	\$0
15. Quality of Exterior Siding/Material	0	sf	0.00	\$0
16. Outdoor Learning	1	ls	20,000.00	\$20,000
<b>Total Site</b>				<b>\$3,518,000</b>
<b>Modernization</b>				
17. Existing Covered Eating Structure	0	ls	0.00	\$0
18. Existing Covered Walkways (see new covered walks)	0	ls	450,000.00	\$0
19. Electrical Wiring	0	sf	11.00	\$0
20. Asbestos Abatement	1	ls	25,000.00	\$25,000
21. Seismic Upgrade/Dry Rot	0	sf	35.00	\$0
22. Roofing (Based on Roofing Report)	1	ls	9,000.00	\$9,000
23. Exterior Painting	23,000	sf	8.00	\$184,000
24. Building Insulation and Windows	46,000	sf	40.00	\$1,840,000
25. Exterior Doors and Hardware	46,000	ea	5.00	\$230,000
26. Restrooms/Partitions/Fixtures	8	ea	25,000.00	\$200,000
26a. Restrooms/Partitions/Fixtures hands free	100	ea	850.00	\$85,000
27. Flooring	46,000	sf	9.00	\$414,000
28. Tackable Walls	0	sf	18.00	\$0
29. Interior Wall Finishes	46,000	sf	12.00	\$552,000
30. Ceilings	46,000	sf	10.00	\$460,000
31. Cabinetry	0	sf	45.00	\$0
32. Drinking Fountains	3	ea	6,500.00	\$19,500
33. Heating Ventilating & Air Conditioning	46,000	ea	25.00	\$1,150,000
34. Interior Lighting	46,000	ls	43.00	\$1,978,000
35. Electrical Power Distribution/Outlets	1	ls	25,000.00	\$25,000
36. Data Network	1	ea	165,000.00	\$165,000
37. Camera Surveillance	46,000	sf	0.35	\$16,100
38. Communication System	1	ls	125,000.00	\$125,000
39. Fire Alarm	46,000	sf	55.00	\$2,530,000

<b>Construction Item</b>	<b>Quantity</b>	<b>Unit</b>	<b>Cost</b>	<b>Total Estimated Cost</b>
40. Alteration of Existing Portable Buildings	7,680	sf	350.00	\$2,688,000
41. Relocation of Existing Portable Buildings (refer to line 53 below)	0	ea	110,000.00	\$0
42. Library (renovate old library space)	1,000	sf	250.00	\$250,000
43. Work Room/Lounge	1,800	sf	500.00	\$900,000
44. Cafeteria/Kitchen/Gym/Music/Wrestling Rooms	5,700	sf	350.00	\$1,995,000
45 Existing Storage	0	ls	35,000.00	\$0
46. Clocks	46,000	sf	1.75	\$80,500
47. Speakers	46,000	sf	1.50	\$69,000
48. Computer Lab	0	sf	550.00	\$0
49. Renovation of Administration	3,100	sf	500.00	\$1,550,000
50. STEAM Lab (See Computer Lab)	0	sf	600.00	\$0
<b>Total Modernization</b>				<b>\$17,540,100</b>
<b>New Construction</b>				
51. Covered Walkways	300	lf	450.00	\$135,000
52. Restrooms	0	sf	750.00	\$0
53. Portable or Modular Classrooms	8	ea	275,000.00	\$2,200,000
54. Administration	500	sf	850.00	\$425,000
55. Library	0	ea	0.00	\$0
56. Covered Eating Structure (see outdoor learning)	2	ea	210,000.00	\$420,000
57. Storage	0	ls	75,000.00	\$0
58. STEAM Lab (Music and Arts) - See Campus layout below	1,400	sf	750.00	\$1,050,000
59. Alternative Energy Source	1	ls	10,000.00	\$10,000
60. Campus Layout	0	sf	0.00	\$0
61. Furnishings and Equipment	46,000	ea	4.00	\$184,000
<b>Total New Construction</b>				<b>\$4,424,000</b>
<b>Subtotal Construction Costs</b>				<b>\$25,482,100</b>
<b>Construction Contingency 10%</b>				<b>\$2,548,210</b>
<b>Soft Costs 18%</b>				<b>\$5,045,456</b>
<b>Total Revised Master Planning Needs at Sartorette Elementary School</b>				<b>\$33,075,766</b>



# Steindorf STEAM Magnet School - Master Planning Evaluation

## Evaluation Summary

Originally built in mostly in 1954, this K-8 Steindorf STEAM Magnet School is situated on a 10 acre lot. This school closed in 1979 due to student population decline in the District boundaries. This campus was then leased out to small tenants over fifty years.

Due to focused community efforts resulting in the passage of a construction Bond Measure, the vision for reopening this campus as a STEAM magnet K-8 school became a reality. There are an average of slightly under 500 students at this campus.

Because this campus is only four years old at the date of this report, this summary of observations and recommendations will be abbreviated based on the items that were not constructed due to budget restraints or items that were discovered after occupancy.

## Modernization History

There were no significant modernizations at this campus since its original construction in 1954. The little league added fields over thirty years ago and have updated the fields over the years. In 2016, this campus opened with all new finishes, and expanded parking lot, new buildings, new playgrounds, roofing, windows, exterior finishes, all new site features. Very little is needed at this campus at this time.

## **Site**

### 1. Parking and Traffic

The existing parking lot was expanded greatly at this campus. The pavement and striping is in need of an overlay in the next few years.

It is recommended that the existing parking area be resurfaced with a new slurry seal and striping.



### 2. Site ADA Compliance

The only known issues at Bagby is that the DA lift at the stage area of the existing Multi-purpose room is not functioning and is in need of repair.

It is recommended that the DA lift be repaired.



### 3. Play Equipment

The play equipment is in good condition. No need for upgrades at this time.

### 4. Paved Play Area

The paved play area is in good condition however there are minor cracks in and normal decay in the pavement that need to be updated soon.

It is recommended that the existing play area be overlaid with new AC pavement and slurry sealed with new striping.

### 5. Turf Play Area and Synthetic Track

The existing turf is in fair condition. There is no need for upgrades to the existing turf area at this time.

It is desirable for the District to replace the existing AC track with a new low maintenance synthetic track.

### 6. Landscaping and Irrigation

This campus has a large amount of mature trees located at various locations throughout this campus which require ongoing trimming. Landscaping is in good condition. The existing landscaping is in good condition. There is no need for upgrades at this time.

### 7. Fencing and Security

New decorative fencing was added at the perimeter of the entire campus in 2016. The campus was modified to secure or lock down the campus in the event of an undesirable situation. There is not known reason for upgrades to the fencing at this time.

### 8. Trash Enclosure

The existing trash enclosure size and location appears to be adequate for this campus.

There is no need for additional trash enclosure modifications at this time.

### 9. Site Utilities

All underground utilities were upgraded to this campus. There are no known reasons for updating underground utilities at this time.

### 10. Main Electrical Service

This site has adequate electrical service.

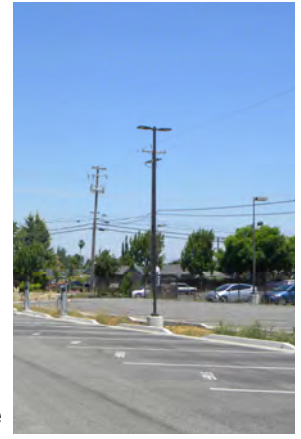
There is no need for additional electrical upgrades to the service.



## 11. Storm Drainage

The conflict between designing ground level entries for wheelchair access and hard rainfall conflicts as the rain does not appear to move toward the site drainage switch enough during downpours.

It is recommended that additional ground drainage be added to this campus to avoid ongoing ponding and reverse water flow.



## 12. Site Lighting

The existing lighting was upgraded in 2016. There is no known reason for additional site lighting at this time.

## 13. Concrete Walkways

The existing concrete walkway system appears to be adequate at this time.



## 14. Basketball Backstops/Ball Walls/ Misc. Play Apparatus

The existing basketball backstops, rims and chains are in good condition. There are currently no ball walls available at this site.

It is recommended that one ball wall be added to this campus.



## 15. Quality of Exterior Siding/Material

The exterior wall surfaces appear to be in good condition.

There is no need for exterior siding upgrades at this time.

## 16. Outdoor Learning

Outdoor learning has become more desirable in San Jose as the weather is reasonably comfortable for about half the school year. This campus has one a dedicated outdoor eating area and a fairly large amphitheater. There is no covered area.

It is recommended that a new shade structure be added over the amphitheater and another located in the eating area.



## **Modernization**

### 17. Existing Covered Eating Structure

This campus does not currently have a covered structure.

### 18. Existing Covered Walkways

The existing covered walkways and overhangs are in good condition.

There is no need for upgrades to the existing covered walkways or overhangs at this time.



## 19. Electrical Wiring

There appear to be a sufficient number of electrical devices in each classroom. There have not been complaints of electrical issues at this time.

There is no need for electrical wiring upgrades at this time.

## 20. Asbestos Abatement

It is our understanding that all known required abatement has been implemented prior to construction in 2016.

## 21. Seismic Upgrade and Dry rot

A structural engineer designed voluntary structural upgrades to this campus which were reviewed and accepted by the Division of the State Architect for the new modernization of this campus.

## 22. Roofing

The roofing is new and does not require attention for at least ten years other than normal ongoing maintenance.

## 23. Exterior Painting

The existing exterior of this campus is in good condition.

There is no need for exterior painting at this site but is recommended that the campus be painted every seven years.

## 24. Building Insulation and Windows

All existing buildings and new buildings comply with California Title 24 requirements for glazing and insulation.



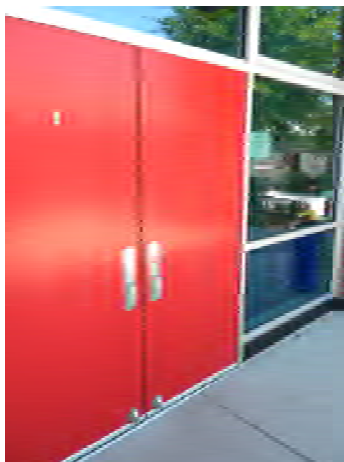
## 25. Exterior Doors and Hardware

There is no known need for upgrades to doors and hardware at this campus.

## 26. Restrooms/Partitions/Fixtures

The bathrooms are in excellent condition. None of the fixtures are hands free.

It is desirable to modify or add hands free fixtures alterations at this campus.



## 27. Flooring

There is no need for upgrades to flooring at this time.

## 28. Tackable Walls

Existing classroom walls meet the needs of the District at this time.

## 29. Interior Wall Finishes

Interior wall finishes were upgraded in the 2016 modernization. Interior paint is in good condition.



It is recommended that all new interior wall finishes be repainted in the next seven years.

### 30. Ceilings

All ceilings are in good condition. There is no known need to upgrade ceilings at this time.

### 31. Cabinetry

Although the cabinetry was upgraded in 2016. There is no need for upgrades to Cabinetry at this time.

### 32. Drinking Fountains

All drinking fountains meet the needs of the District at this time.

### 33. Heating Ventilating and Air Conditioning

The existing HVAC system has been replaced at the entire campus during the 2016 modernization. There is no need for upgrades to the HVAC at this time.

### 34. Interior Lighting

All lighting was upgraded at this campus in 2016. There is no need for upgrades at this time.

### 35. Electrical Power Distribution

All power distribution meets the needs of the District at this time.

### 36. Data Network

The IT department indicated that there is a necessity to upgrade the current infrastructure at this campus. The District is also in need of upgrading student devices and classroom standardization of technology equipment.

It is recommended that new teaching apparatus and devices be purchased for the students, teachers and classroom facilities including laptops, flat panel displays, screen casting devices, doc camera, chrome books, and iPads. Infrastructure improvements are recommend including upgraded wireless access points, backup power and switches.

### 37. Camera Surveillance

The District hasn't expressed the need for camera surveillance systems at this time. However, it is possible that security cameras will become an issue in the future.



### 38. Communication System

The existing communication system meets the needs of the District at this time.

### 39. Fire Alarm

The existing fire alarm is new and does not need upgrades at this time.



#### 40. Alteration of Existing Portable Buildings

This campus does not have portable classrooms.

#### 41. Relocation of Existing Portable Buildings

This campus does not have portable classrooms.

#### 42. Library

The current Library space appears to be adequate and functions well as a library for this campus. The overall condition of the library space is in good condition.

There is no need for changes to the current library at this time.



#### 43. Work Room/Lounge

The work room and lounge meet the needs of the District at this time.



#### 44. Cafeteria/Kitchen/ Gymnasium/Music/ Wrestling Rooms

The cafeteria and kitchen were



#### 45. Existing Storage

Although staff will argue that there is never enough storage, currently, there appears to be enough storage available.

There is no need for additional storage.

#### 46. Clocks

The existing clock system meets the needs of the District.

#### 47. Speakers/Bell /PA

The existing speaker, bell and PA system meets the needs of the District.

#### 48. Computer Lab/Art

This campus has embraced a STEAM program and has been designed to house the latest requirements that meet the needs of the District. The rooms dedicated for these events are in good condition and do not need upgrades at this time.

#### 49. Renovation of Administration

The existing administrative spaces are housed in a new building at this campus. The administration meets the needs of the District at this time.



## 50. STEAM Lab

This campus has embraced a STEAM program and has been designed to house the latest requirements that meet the needs of the District.

## **New Construction**

### 51. Covered Walkways

There is only one building that does not have a covered walkway connected to the rest of the campus.

It is recommended that a new covered walkway be added to connect the STEAM wing to the rest of the campus.

### 52. Restrooms

There appears to be an adequate number of restrooms at this campus located in relatively ideal locations.

There is no need to add restrooms facilities at this campus.

### 53. Portable or Modular Classrooms

Although this campus is very popular in the community, there is no need for additional classrooms at this time.

### 54. Administration

The existing administration space is adequate in size.

There is no need for additional administrative spaces at this time.

### 55. Library

The existing library space meets the needs of the District at this time.

### 56. Covered Eating Structure or Outdoor learning

There are no current shade structures at this campus.

It is recommended that a new shade structure be installed at the existing amphitheater area and one or two more shade structures be added to other locations at this campus.

### 57. Storage

It appears that the existing storage is adequate.

There is no need for additional storage facilities at this campus.

### 58. STEAM Lab

The existing STEAM labs meet the needs of the District at this time.



## 59. Alternative Energy Source

Photovoltaic systems were added to the existing roofs at various buildings at this campus. The amount of solar panels installed does not meet the needs of the District.

It is recommended that additional photovoltaics be installed at this campus.

## 60. Campus Layout

This campus has achieved its goal of being a magnet campus in the bay area. There are no significant additions to this campus needed at this time.



## Steindorf STEAM Magnet Cost Estimate

<b>Construction Item</b>	<b>Quantity</b>	<b>Unit</b>	<b>Cost</b>	<b>Total Estimated Cost</b>
<b>Site</b>				
1. Parking and Traffic	65,000	sf	7.00	\$455,000
2. Site ADA Compliance	0	ls	150,000.00	\$0
3. Play Equipment	0	ls	55,000.00	\$0
4. Paved Play and Courtyard Area	57,000	sf	7.00	\$399,000
5. Turf Play Area and Synthetic Track	15,000	sf	5.00	\$75,000
6. Landscaping and Irrigation	75,000	sf	3.00	\$225,000
7. Fencing and Security	0	lf	300.00	\$0
8. Trash Enclosure	0	ls	65,000.00	\$0
9. Site Utilities	0	sf	20.00	\$0
10. Main Electrical Service	0	ls	100,000.00	\$0
11. Storm Drainage	0	sf	0.50	\$0
12. Site Lighting	0	ls	1.00	\$0
13. Concrete Walkways (refer to Section 2)	0	sf	35.00	\$0
14. Basketball Backstops/Ballwalls/Misc.	0	ea	30,000.00	\$0
15. Quality of Exterior Siding/Material	0	sf	0.00	\$0
16. Outdoor Learning	0	ls	20,000.00	\$0
<b>Total Site</b>				<b>\$1,154,000</b>
<b>Modernization</b>				
17. Existing Covered Eating Structure	0	ls	0.00	\$0
18. Existing Covered Walkways (see new covered walks)	0	ls	450,000.00	\$0
19. Electrical Wiring	0	sf	11.00	\$0
20. Asbestos Abatement	0	ls	40,000.00	\$0
21. Seismic Upgrade/Dry Rot	0	sf	35.00	\$0
22. Roofing (Based on Roofing Report)	0	ls	28,500.00	\$0
23. Exterior Painting	21,360	sf	8.00	\$170,880
24. Building Insulation and Windows	0	sf	40.00	\$0
25. Exterior Doors and Hardware	0	ea	5.00	\$0
26. Restrooms/Partitions/Fixtures	0	ea	25,000.00	\$0
26a. Restrooms/Partitions/Fixtures hands free	100	ea	850.00	\$85,000
27. Flooring	0	sf	9.00	\$0
28. Tackable Walls	0	sf	18.00	\$0
29. Interior Wall Finishes	0	sf	12.00	\$0
30. Ceilings	0	sf	4.50	\$0
31. Cabinetry	0	sf	45.00	\$0
32. Drinking Fountains	0	ea	6,500.00	\$0
33. Heating Ventilating & Air Conditioning	0	ea	25.00	\$0
34. Interior Lighting	0	ls	43.00	\$0
35. Electrical Power Distribution/Outlets	0	ls	40,000.00	\$0
36. Data Network	1	ea	250,000.00	\$250,000
37. Camera Surveillance	44,160	sf	0.35	\$15,456
38. Communication System	0	ls	225,000.00	\$0
39. Fire Alarm	0	sf	55.00	\$0

<b>Construction Item</b>	<b>Quantity</b>	<b>Unit</b>	<b>Cost</b>	<b>Total Estimated Cost</b>
40. Alteration of Existing Portable Buildings	0	sf	350.00	\$0
41. Relocation of Existing Portable Buildings (refer to line 53 below)	0	ea	110,000.00	\$0
42. Library	0	sf	350.00	\$0
43. Work Room/Lounge	0	sf	500.00	\$0
44. Cafeteria/Kitchen/Gym/Music/Wrestling Rooms	0	sf	65.00	\$0
45 Existing Storage	0	ls	35,000.00	\$0
46. Clocks	0	sf	1.75	\$0
47. Speakers	0	sf	1.50	\$0
48. Computer Lab	0	sf	550.00	\$0
49. Renovation of Administration	0	sf	500.00	\$0
50. STEAM Lab (See Computer Lab)	0	sf	600.00	\$0
<b>Total Modernization</b>				<b>\$521,336</b>
<b>New Construction</b>				
51. Covered Walkways	400	lf	450.00	\$180,000
52. Restrooms	0	sf	750.00	\$0
53. Portable or Modular Classrooms	0	ea	275,000.00	\$0
54. Administration	0	ls	750,000.00	\$0
55. Library	0	ea	0.00	\$0
56. Covered Eating Structure (see outdoor learning)	2	ea	400,000.00	\$800,000
57. Storage	0	ls	75,000.00	\$0
58. STEAM Lab (Music and Arts) - See Campus layout below	0	sf	750.00	\$0
59. Alternative Energy Source	1	ls	300,000.00	\$300,000
60. Campus Layout	0	sf	0.00	\$0
61. Furnishings and Equipment	0	ea	4.00	\$0
<b>Total New Construction</b>				<b>\$1,280,000</b>
<b>Subtotal Construction Costs</b>				<b>\$2,955,336</b>
<b>Construction Contingency 10%</b>				<b>\$295,534</b>
<b>Soft Costs 18%</b>				<b>\$585,157</b>
<b>Total Revised Master Planning Needs at Steindorf STEAM Magnet School</b>				<b>\$3,836,026</b>



## **School District Student Support Facilities - Master Planning Evaluation**

### **Evaluation Summary**

According to the Cambrian Community Council as republished on Facebook “Home of Values of Cambrian Park”, the term Cambrian began with the first school built in 1881, in the Cambrian Area, named Cambrian School in honor of the homeland, Wales.

The location of the current District Office and Maintenance Facilities are have been located at the old Norman Houge School since 1985. The Norman Houge school was originally constructed in 1961 and was no longer used as a school due to the declining student population in the Cambrian area. There are no known alterations to this older campus other than the district facilities changes described in the Modernization History section below.

This school district facility and Maintenance Yard are located at an old school campus whereas the frontage building complex was converted to a District Office containing administrative spaces approximately thirty five years ago. A Maintenance Building and a Maintenance yard were located into the old Multi-purpose space and another smaller space. The existing classroom wings were left to be leased at the rest of the campus. According to the office of the accessor, the large portion surrounding the old school campus has been owned and maintained by the City of San Jose since 1982.

### **Modernization History**

This complex of scattered Student support services has a District office at the front area that was originally altered in 1985. This area known as the District Office has had only one facility upgrade whereas the HVAC system was upgraded in 2007. The Maintenance yard consisting of two warehouse spaced was originally altered and/or constructed in 1985 as well. Since that time, there was one modernization where the storage facilities was relocated into another space in 2016. The original MOT area has no record of renovation since its creation in 1985. Photovoltaics were added to this site in 2014. A new training facilities that is also used for large gathering events such as Board meetings and teacher training was constructed in 2016. Some of the leased spaces at the older campus buildings were altered and renovated to house some of the relocated tenants that were originally at Steindorf school in 2016.



# Site

## 1. Parking and Traffic

The existing parking lot was reconfigured and updated with new striping when the Photovoltaic Canopies were installed in 2014. The parking lot is too small for large events. Many visitors park in the street. The MOT area has AC pavement that is in need of an overlay.

It is recommended that the front parking lot be altered and combined with the existing smaller parking lot. The front parking lot should be widened toward the street to allow for double-loaded parking. It is recommended that the MOT parking area receive a slurry seal and restriping.



## 2. Site ADA Compliance

Some flatwork and walkways were upgraded at the back area where the new Teacher Training Building was installed. The parking lots were updated to meet ADA requirements in 2016.

There are no known severe ADA compliance issues at this site.

## 3. Play Equipment

This is an adult only facility and does not require play equipment.

## 4. Paved Play Area

There is no paved play area but has a paved courtyard. The existing AC pavement is in fair condition.

It is recommended that the existing AC pavement be overlaid with new AC pavement and slurry sealed.

## 5. Turf Play Area and Synthetic Track

The existing turf is in fair condition but has some uneven surfaces.

It is recommended that the existing turf be upgraded to remove uneven surfaces with new sod or seed throughout.

## 6. Landscaping and Irrigation

This facility has a large amount of mature trees located at various locations throughout this older site which require ongoing trimming. Landscaping is in fair condition. The District would like to upgrade landscaping with drought tolerant native plants that require less water. Irrigation controls and valves are in need of replacement.

It is recommended that all mature trees be trimmed as required and that all plantings be replaced with drought tolerant natives. All valves and irrigation controls should be replaced.





## 7. Fencing and Security

New decorative fencing was added at the perimeter of the entire site in 2014.

There is no known reason for upgrades to the perimeter fencing at this time.

## 8. Trash Enclosure

The existing trash enclosure size and location appears to be adequate for this facility.

There is no need for additional trash enclosure modifications at this time.

## 9. Site Utilities

Some of the underground utilities supplying gas and water to the site are over 60 years in age. The existing sewer system is composed of an antiquated clay piping system which allows tree roots to grip and break existing underground piping. These underground utilities have surpassed their intended service life. Replacing the underground utilities will drastically reduce the need for ongoing maintenance of these systems. Past modernizations and electrical upgrade routed new heavy electrical conduits on eaves, roofs, at the underside of vaulted ceilings and columns. The campus was not intended nor designed for these heavy conduits that blemish the campus.

It has been reported that this campus may need additional seismic gas shut offs. Domestic backflow preventor is on need of replacement.

It is recommended that all existing underground utilities older than 40 years be replaced with new utility systems. Underground water, storm, sewer and gas lines should all be replaced entirely at this site. It is recommended that all existing electrical conduits be removed from the eaves, roofs and columns throughout the campus and rerouted underground. The cost estimate will assume some additional seismic gas shut offs be added to this campus. The domestic water backflow is recommended to be replaced.

## 10. Main Electrical Service

This site has adequate electrical service.

There is no need for additional electrical upgrades to the service.



## 11. Storm Drainage

There are no known site drainage issues.

## 12. Site Lighting

There are no known issue concerning site lighting.



### 13. Concrete Walkways

The existing concrete walkway system appears to handle foot traffic well at the site; however, several areas of the existing walkways have cracks and other signs of deterioration.

It is recommended that large cracked areas of the walkways be replaced to the nearest expansion joint. It is also recommended that entire walkways are removed where patching has occurred in the past.



### 14. Basketball Backstops/Ball Walls/ Misc. Play Apparatus

There is no need for basketball or play apparatus at this facility.

### 15. Quality of Exterior Siding/Material

The exterior wall surfaces appear to be in fair condition.

There is no need for exterior siding upgrades at this time to this facility.



### 16. Outdoor Learning

There is currently no outdoor facility. There has been no recent request for an outdoor facility.

## **Modernization**

### 17. Existing Covered Eating Structure

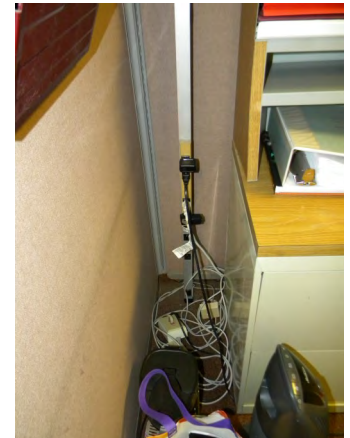
There is currently no outdoor eating structure no have there been recent requests for an outdoor eating structure.

### 18. Existing Covered Walkways

None of the existing building are connected with covered walkways.

### 19. Electrical Wiring

There are no known issues with wiring at this facility.



### 20. Asbestos Abatement

Although independent reports provided by the School District indicate that all known and tested exposed asbestos has been removed or encapsulated, there is some remaining encapsulated asbestos at various locations at this campus.

It is recommended that any asbestos that becomes exposed in some manner in the future, either by accident or future construction be removed entirely.

## 21. Seismic Upgrade and Dry rot

A preliminary structural review of this campus was performed to determine if any structural upgrades might be necessary. Preliminary studies indicate that all buildings are seismically sufficient.

It is recommended that a more detailed structural analysis be performed to determine the extent of voluntary structural upgrades that should be incorporated into the next phase of modernization for any building that is modernized.



## 22. Roofing

Based on the roofing report, all roofing is in good condition as it was reportedly installed in 2007. It was noted that leaves and debris have filled some gutters. The whirly birds are in need of replacement.

It is recommended maintenance toward cleaning roofs free of leaves and debris and replacing several damaged or missing shingles selectively throughout this campus. All whirly birds are recommended to be replaced.



## 23. Exterior Painting

The existing exterior of this campus is in good condition.

There is no need for exterior painting at this site but is recommended that the campus be painted every seven years.

## 24. Building Insulation and Windows

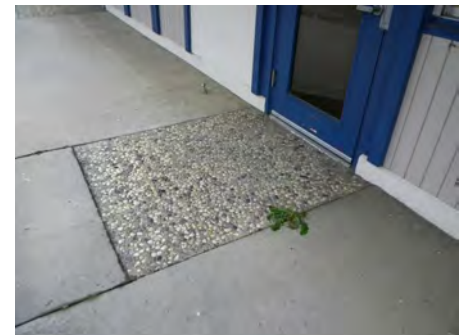
The original campus buildings were constructed in an era when natural resources such as natural gas and electricity were inexpensive. Windows are single glazed throughout and insulation does not currently meet new construction standards. The window blinds have are older and need to be replaced.

It is recommended that insulation be added to all exterior walls and added to all ceiling cavities. Windows should be replaced with double glazed window systems retrofitted with new window blinds.

## 25. Exterior Doors and Hardware

The campus hardware and doors are in good condition, however the existing locking system does not currently meet the District's requirements for appropriate security. There are some doors that will need to be replaced due to heavy usage and damage over the years.

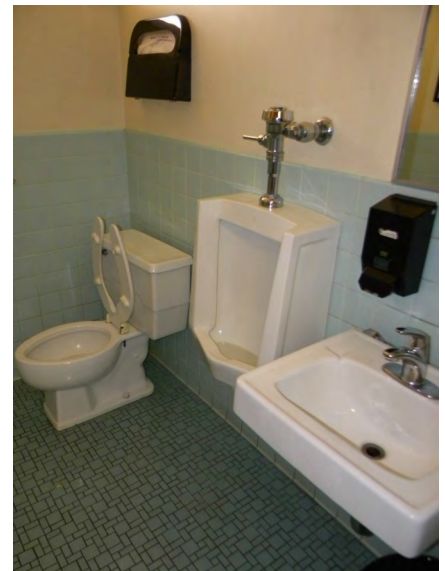
It is recommended that all hardware be replaced with District Standard secure hardware throughout this campus. It is assumed that several existing doors will need to be replaced to make appropriate alterations for the new hardware installation. The cost estimate will make an assumption for the number of replacements needed.



## 26. Restrooms/Partitions/Fixtures

All of the bathrooms are in need of enlarging and expanding as most have not been renovated for 35 years. None of the bathrooms in the administrative area comply with ADA requirements. A person requiring special needs would need to use the bathrooms in the newer Training Center at the center of the facility.

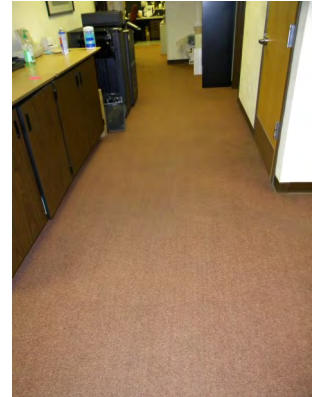
It is recommended that the bathroom floors be upgraded and expanded. It would be desirable to replace all facets and flushometers with the District Standard touchless devices.



## 27. Flooring

Most of the flooring is in fair condition.

It is recommended that the entire facility flooring be replaced in the next five years.



## 28. Tackable Walls

This facility does not require tackable walls.

## 29. Interior Wall Finishes

Interior wall finishes are in poor condition.

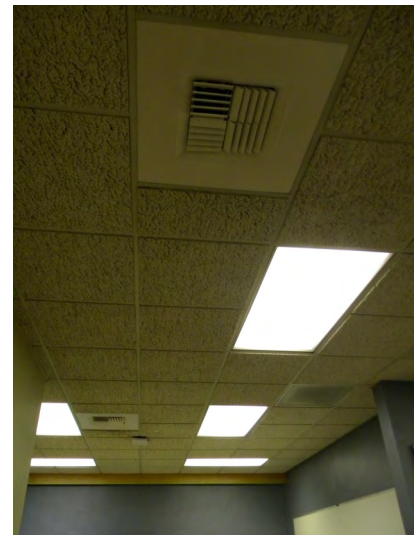
It is recommended that all interior wall finishes be repainted and refinished as soon as possible.



## 30. Ceilings

The existing suspended ceiling system appears to be in fair condition. There are staining from previous roof leaks and the grid is in need of paint.

It is recommended that most of the ceiling tile be replaced and the ceiling grid be painted.



## 31. Cabinetry

The existing cabinetry is 35 years old and not only has outlasted its anticipated lifecycle, but administrative services have progressed to require different kinds of storage.

It is recommended that all cabinetry be replaced and upgraded entirely throughout the facility.

## 32. Drinking Fountains

There is one drinking fountain that is accessible to the community during a community event which complies

with ADA requirements.

There is no need for additional drinking fountains at this facility.

### 33. Heating Ventilating and Air Conditioning

The existing HVAC system has been replaced in 2007. HVAC units lifecycle is fifteen years. These HVAC units are now approaching their anticipated life span. The EMS is constantly requiring maintenance and needs to be upgraded.

It is recommended that all HVAC systems and the EMS system at this entire facility be replaced in the next five years.

### 34. Interior Lighting

The existing fluorescent lighting throughout this campus is adequate, however, it is highly desirable to retrofit this facility with new LED technology to allow for additional electrical efficiency while allowing for the new option of dimming lights on demand.

It is recommended that the facility be retrofitted with new LED lights throughout the buildings with new dimmable switching.

### 35. Electrical Power Distribution/ Outlets

There is no known power distribution issues at this facility. There are a limited number of electrical outlets at the District office and student support areas.

It is recommended that new wiring be added to allow for new electrical outlets throughout this facility.

### 36. Data Network

The IT department has noted that improvements to the current infrastructure is needed.

It is recommended that wireless access points, switches and back up power be upgraded at this facility.

### 37. Camera Surveillance

The District hasn't expressed the need for camera surveillance systems at this time. However, it is possible that security cameras will become an issue in the future.

### 38. Communication System

There are no known communication system issues at this facility.

### 39. Fire Alarm

The fire alarm system is over sixty years old. It is unknown whether this facility requires a fire alarm similar to a school campus as this facility has leased rooms and consists of administrative offices.



Although it may not be required to be replaced, the cost estimate will include the cost to replace the entire fire alarm system.

#### 40. Alteration of Existing Portable Buildings

There are no portable buildings at this facility.

#### 41. Relocation of Existing Portable Buildings

There are no portable buildings at this facility.

#### 42. Library

There is no library at this facility.

#### 43. Work Room/Lounge

The work room and lounge have not been renovated for 35 years.

It is recommended that the work room and lounge be altered and renovated.

#### 44. Cafeteria/Kitchen/Gymnasium/Music/ Wrestling Rooms

This facility does not have these spaces.

#### 45. Existing Storage

It appears that this facility is in need of additional storage.

It is recommended that additional storage be provided at this facility (refer to Section 57).

#### 46. Clocks

There is no known reason to upgrade the clocks at this facility.

#### 47. Speakers/Bell /PA

There are no bell/speaker/PA system at this facility.

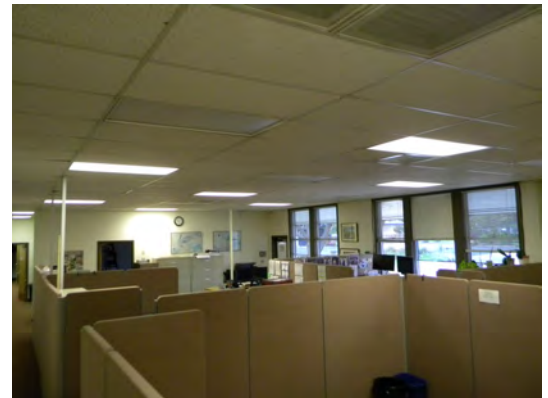
#### 48. Computer Lab/Art

This facility does not have a Computer, Lab or Art room.

#### 49. Renovation of Administration

The existing administrative spaces were created in 1985. The function of the administrative spaces have changed over the last thirty five years. The entire district administrative spaces should be altered and renovated.

It is recommended that the existing administrative spaces be expanded and renovated.



## 50. STEAM Lab

There is no need for a STEAM lab at this facility.

## **New Construction**

### 51. Covered Walkways

There are several isolated buildings at this facility where connected covered walkways would be desirable.

It is recommended that new covered walkways be added connecting all facility buildings.

### 52. Restrooms

The existing restrooms are small and old. The existing restrooms do not comply with ADA requirements. There are not enough bathrooms to meet the loading requirements of this facility.

It is recommended that existing bathrooms be enlarged and renovated to meet the Uniform Plumbing Code.

### 53. Portable or Modular Classrooms

There is no known reason to add portable buildings at this facility.

### 54. Administration

The existing administration space is not adequate in size.

It is recommended that the administration building be expanded with an addition to the existing building.

### 55. Library

There is no need for a library at this facility.

### 56. Covered Eating Structure or Outdoor learning

There is no need for a covered eating structure at this facility.

### 57. Storage

It appears that the existing storage is inadequate.

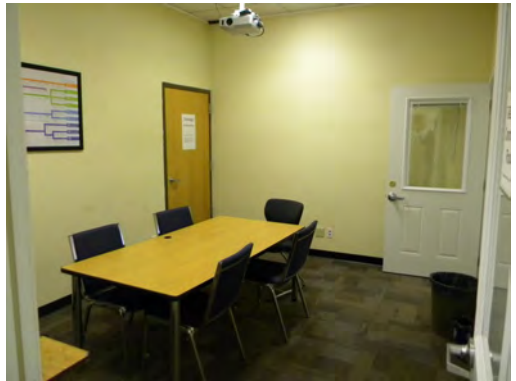
It is recommended that existing storage be added to this facility.

### 58. STEAM Lab

There is no need for a STEAM lab at this facility.

### 59. Alternative Energy Source

This facility was retrofitted to house new photovoltaic structures in 2014. The Cambrian School District will continue to look into alternative energy sources.



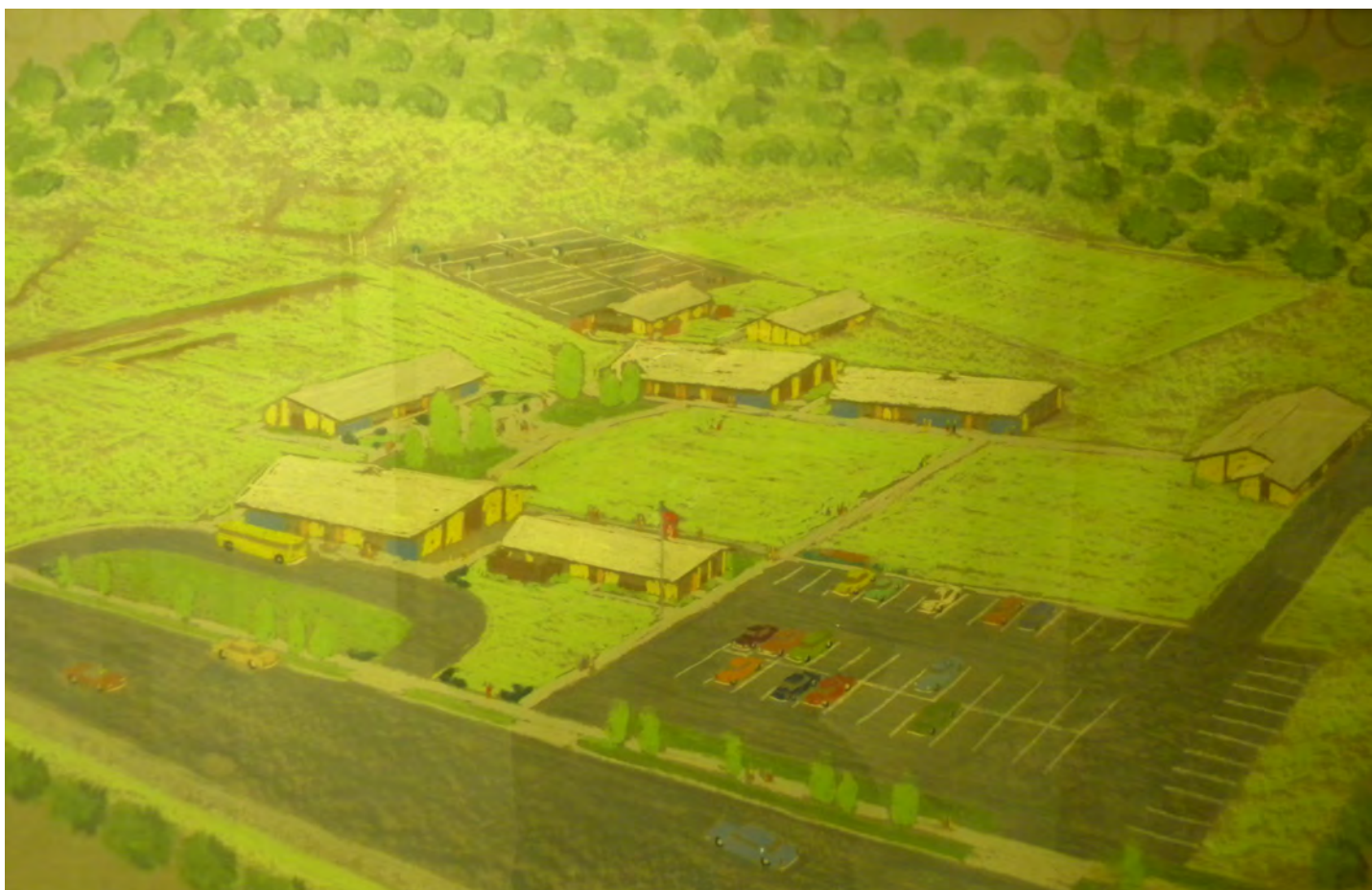
There is no need to add additional photovoltaics units at this site. It is desired to provide on-going cleaning of the photovoltaics as the District does not have the manpower to maintain the panels at this time.

## 60. Campus Layout

It is desirable to enlarge the storage capacity at this site (refer to section 57).

It would be desirable to construct an addition to the existing administration area at the front of the campus (refer to Section 54).

There may be a need construct an addition to the existing administrative area for more or larger restrooms (refer to Section 52).





## District Office and MOT Cost Estimate

<b>Construction Item</b>	<b>Quantity</b>	<b>Unit</b>	<b>Cost</b>	<b>Total Estimated Cost</b>
<b>Site</b>				
1. Parking and Traffic	53,000	sf	32.00	\$1,696,000
1a. MOT Parking Area	15,000	sf	8.00	\$120,000
2. Site ADA Compliance	1	ls	5,000.00	\$5,000
3. Play Equipment	0	ea	65,000.00	\$0
4. Paved Play and Courtyard Area	5,000	sf	7.00	\$35,000
5. Turf Play Area and Synthetic Track	6,800	sf	5.00	\$34,000
6. Landscaping and Irrigation	35,000	sf	2.00	\$70,000
7. Fencing and Security	0	lf	300.00	\$0
8. Trash Enclosure	0	ls	65,000.00	\$0
9. Site Utilities	85,000	sf	20.00	\$1,700,000
10. Main Electrical Service	0	ls	100,000.00	\$0
11. Storm Drainage	0	sf	0.50	\$0
12. Site Lighting	0	sf	1.00	\$0
13. Concrete Walkways (refer to Section 2)	0	sf	35.00	\$0
14. Basketball Backstops/Ballwalls/Misc.	0	ea	30,000.00	\$0
15. Quality of Exterior Siding/Material	0	sf	0.00	\$0
16. Outdoor Learning	0	ls	20,000.00	\$0
<b>Total Site</b>				<b>\$3,660,000</b>
<b>Modernization</b>				
17. Existing Covered Eating Structure	0	ls	0.00	\$0
18. Existing Covered Walkways (see new covered walks)	0	ls	450,000.00	\$0
19. Electrical Wiring	0	sf	11.00	\$0
20. Asbestos Abatement	1	ls	10,000.00	\$10,000
21. Seismic Upgrade/Dry Rot	0	sf	35.00	\$0
22. Roofing (Based on Roofing Report)	0	ls	185,000.00	\$0
23. Exterior Painting	20,500	sf	8.00	\$164,000
24. Building Insulation and Windows	58,600	sf	40.00	\$2,344,000
25. Exterior Doors and Hardware	18,000	ea	5.00	\$90,000
26. Restrooms/Partitions/Fixtures	4	ea	25,000.00	\$100,000
27. Flooring	12,000	sf	9.00	\$108,000
28. Tackable Walls	0	sf	18.00	\$0
29. Interior Wall Finishes	18,000	sf	12.00	\$216,000
30. Ceilings	12,000	sf	4.50	\$54,000
31. Cabinetry	12,000	sf	45.00	\$540,000
32. Drinking Fountains	2	ea	6,500.00	\$13,000
33. Heating Ventilating & Air Conditioning	18,000	ea	25.00	\$450,000
34. Interior Lighting	18,000	ls	43.00	\$774,000
35. Electrical Power Distribution/Outlets	12,000	sf	10.00	\$120,000
36. Data Network	1	ea	50,000.00	\$50,000
37. Camera Surveillance	18,000	sf	0.50	\$9,000
38. Communication System	0	ls	125,000.00	\$0
39. Fire Alarm	25,000	sf	55.00	\$1,375,000

<b>Construction Item</b>	<b>Quantity</b>	<b>Unit</b>	<b>Cost</b>	<b>Total Estimated Cost</b>
40. Alteration of Existing Portable Buildings	0	sf	350.00	\$0
41. Relocation of Existing Portable Buildings (refer to line 53 below)	0	ea	135,000.00	\$0
42. Library	0	sf	350.00	\$0
43. Work Room/Lounge	1,300	sf	500.00	\$650,000
44. Cafeteria/Kitchen/Gym/Music/Wrestling Rooms	0	sf	350.00	\$0
45 Existing Storage	0	ls	35,000.00	\$0
46. Clocks	0	sf	1.75	\$0
47. Speakers	0	sf	1.50	\$0
48. Computer Lab	0	sf	550.00	\$0
49. Renovation of Administration	12,000	sf	500.00	\$6,000,000
50. STEAM Lab (See Computer Lab)	960	sf	600.00	\$576,000
<b>Total Modernization</b>				<b>\$13,643,000</b>
<b>New Construction</b>				
51. Covered Walkways	650	lf	450.00	\$292,500
52. Restrooms	500	sf	750.00	\$375,000
53. Portable or Modular Classrooms	6	ea	275,000.00	\$1,650,000
54. Administration	1,000	sf	850.00	\$850,000
55. Library	0	ea	0.00	\$0
56. Covered Eating Structure (see outdoor learning)	0	ea	210,000.00	\$0
57. Storage	0	ls	75,000.00	\$0
58. STEAM Lab (Music and Arts) - See Campus layout below	0	sf	750.00	\$0
59. Alternative Energy Source	1	ls	10,000.00	\$10,000
60. Campus Layout	0	sf	0.00	\$0
61. Furnishings and Equipment	18,000	ea	3.00	\$54,000
<b>Total New Construction</b>				<b>\$3,231,500</b>
<b>Subtotal Construction Costs</b>				<b>\$20,534,500</b>
<b>Construction Contingency 10%</b>				<b>\$2,053,450</b>
<b>Soft Costs 18%</b>				<b>\$4,065,831</b>
<b>Total Revised Master Planning Needs at the District Office and MOT</b>				<b>\$26,653,781</b>

The Garland Company, Inc.

Roof Asset Management Program



---

## Cambrian School District Roof Assessment & Budgets 2020

Prepared By  
Tom Chapman

September 11, 2020

## Table of Contents

<b><i>Cambrian School District / Client Data</i></b> .....	<b>4</b>
<b><i>Bagby Elementary School / Facility Summary</i></b> .....	<b>5</b>
<b><i>Bagby Elementary School / Entire Campus / Construction Details</i></b> .....	<b>6</b>
<b><i>Bagby Elementary School / Entire Campus / Roof Section Photo</i></b> .....	<b>7</b>
<b><i>Bagby Elementary School / Entire Campus / Inspection: Feb 5, 2019</i></b> .....	<b>8</b>
<b><i>Bagby Elementary School / Entire Campus / Solution: Sep 11, 2020</i></b> .....	<b>15</b>
<b><i>DO/MOT / Facility Summary</i></b> .....	<b>16</b>
<b><i>DO/MOT / Entire Campus / Construction Details</i></b> .....	<b>17</b>
<b><i>DO/MOT / Entire Campus / Roof Section Photo</i></b> .....	<b>18</b>
<b><i>DO/MOT / Entire Campus / Inspection: Feb 5, 2019</i></b> .....	<b>19</b>
<b><i>Fammatre Elementary School / Facility Summary</i></b> .....	<b>22</b>
<b><i>Fammatre Elementary School / Entire Campus / Construction Details</i></b> .....	<b>23</b>
<b><i>Fammatre Elementary School / Entire Campus / Roof Section Photo</i></b> .....	<b>24</b>
<b><i>Fammatre Elementary School / Entire Campus / Inspection: Feb 5, 2019</i></b> .....	<b>25</b>
<b><i>Farnham Elementary School / Facility Summary</i></b> .....	<b>29</b>
<b><i>Farnham Elementary School / Entire Campus / Construction Details</i></b> .....	<b>30</b>
<b><i>Farnham Elementary School / Entire Campus / Roof Section Photo</i></b> .....	<b>31</b>
<b><i>Farnham Elementary School / Entire Campus / Inspection: Feb 5, 2019</i></b> .....	<b>32</b>
<b><i>Farnham Elementary School / Entire Campus / Solution: Sep 11, 2020</i></b> .....	<b>36</b>
<b><i>Metzler Elementary School / Facility Summary</i></b> .....	<b>37</b>
<b><i>Metzler Elementary School / Entire Campus / Construction Details</i></b> .....	<b>38</b>
<b><i>Metzler Elementary School / Entire Campus / Roof Section Photo</i></b> .....	<b>39</b>
<b><i>Metzler Elementary School / Entire Campus / Inspection: Nov 28, 2016</i></b> .....	<b>40</b>
<b><i>Metzler Elementary School / Entire Campus / Solution: Sep 11, 2020</i></b> .....	<b>46</b>
<b><i>Price Middle School / Facility Summary</i></b> .....	<b>47</b>
<b><i>Price Middle School / Entire Campus / Construction Details</i></b> .....	<b>48</b>
<b><i>Price Middle School / Entire Campus / Roof Section Photo</i></b> .....	<b>49</b>
<b><i>Price Middle School / Entire Campus / Inspection: Feb 5, 2019</i></b> .....	<b>50</b>
<b><i>Price Middle School / Entire Campus / Solution: Sep 11, 2020</i></b> .....	<b>57</b>
<b><i>Price Middle School / Price Community Center / Construction Details</i></b> .....	<b>58</b>
<b><i>Price Middle School / Price Community Center / Roof Section Photo</i></b> .....	<b>59</b>
<b><i>Price Middle School / Price Community Center / Photo Report: Jun 13, 2018 - Roof Inspection</i></b> .....	<b>60</b>

**Price Middle School / Price Community Center / Solution: Sep 11, 2020** ..... 64

**Price Middle School / Price Community Center / Prog. Report: Oct 29, 2018** ..... 65

**Sartorette Elementary School / Facility Summary** ..... 67

**Sartorette Elementary School / Entire Campus / Construction Details** ..... 68

**Sartorette Elementary School / Entire Campus / Roof Section Photo** ..... 69

**Sartorette Elementary School / Entire Campus / Inspection: Feb 5, 2019** ..... 70

**Sartorette Elementary School / Entire Campus / Solution: Sep 11, 2020** ..... 75

**Steindorf K-8 STEAM School / Facility Summary** ..... 76

**Steindorf K-8 STEAM School / Entire Campus / Construction Details** ..... 77

**Steindorf K-8 STEAM School / Entire Campus / Roof Section Photo** ..... 78

**Steindorf K-8 STEAM School / Entire Campus / Photo Report: Feb 5, 2019 - Visual Inspection**  
..... 79

**Priority Summary** ..... 81

**Yearly Budget Summary** ..... 82



# Client Data

Client: Cambrian School District

## Client Data

<b>Name</b>	Cambrian School District		
<b>Address 1</b>	4115 Jacksol Dr		
<b>City</b>	San Jose	<b>State</b>	California
<b>ZIP</b>	95124	<b>Country</b>	United States

## Contact Info

<b>Contact Person</b>	Jim Browning	<b>Title</b>	Director of Buildings and Grounds
<b>Mobile Phone:</b>	408-315-1530	<b>Office Phone:</b>	408-377-2103 x-127
<b>Email:</b>	browningj@cambriansd.com		



# Facility Summary

**Client:** Cambrian School District

**Facility:** Bagby Elementary School



## Facility Data

<b>Address 1</b>	1840 Harris Ave
<b>City</b>	San Jose
<b>State</b>	California
<b>ZIP</b>	95124
<b>Type of Facility</b>	School
<b>Contact Person</b>	Jim Browning

## Asset Information

Name	Date Installed	Square Footage	Roof Access
Entire Campus	2002	75,000	Ladder Needed
Office and Room 12 Leaks		-	Ladder Needed
Snack Shack	Pre 2000	1,200	Ladder Needed
Teacher's Lounge		1,150	Ladder Needed



# Construction Details

**Client:** Cambrian School District

**Facility:** Bagby Elementary School

**Roof Section:** Entire Campus



## Information

<b>Year Installed</b>	2002	<b>Square Footage</b>	75,000
<b>Slope Dimension</b>	Varies	<b>Eave Height</b>	Varies
<b>Roof Access</b>	Ladder Needed	<b>System Type</b>	Other

## Notes

Shingles Roofs. Classroom wings, installed 2002. 62,125 sq.ft.

BUR (Orange Outline). Aged membranes, installed prior to 2002. 5,505 sq.ft.

Metal (Blue Outline). Rusted metal panels. 50 sq.ft.







# Inspection Report

**Client:** Cambrian School District

**Facility:** Bagby Elementary School

**Report Date:** 02/05/2019

**Roof Section:** Entire Campus

## Inspection Information

<b>Inspection Date</b>	02/05/2019	<b>Core Data</b>	No
<b>Inspection Type</b>	Visual Inspection	<b>Leakage</b>	No
<b>Deck Conditions</b>	Unknown		

## Flashing Conditions

<b>Perimeter</b>	Poor	<b>Wall</b>	Good
<b>Projections</b>	Fair	<b>Counterflashing</b>	Good

## Miscellaneous Details

<b>Reglets</b>	Fair	<b>Debris</b>	Yes
<b>Control Expansion Joints</b>	N/A	<b>Ponding Water</b>	Minor
<b>Parapet Wall</b>	N/A	<b>Coping Joints</b>	N/A

## Perimeter

<b>Rating</b>	Fair
<b>Condition</b>	Leaves and debris have filled the gutters in some areas. The gutters should be cleared to prevent the downspouts from clogging.

## Field

<b>Rating</b>	Poor
<b>Condition</b>	<p>The BUR roofs are in poor condition. The surface granules have deteriorated exposing the membrane and felts within.</p> <p>The shingle roofs are in fair condition. Some damaged shingles are present and should be replaced.</p>

## Penetrations

<b>Rating</b>	Good
<b>Condition</b>	The roof penetrations are in good condition. However, the rusted metal pop up roof should be restored and coated with White Knight Plus WC urethane.

## Drainage

<b>Rating</b>	Fair
<b>Condition</b>	Some ponding is present on the low sloped covered walkways. Leaves and debris are threatening to clog the drains and downspouts.

## Overall

<b>Rating</b>	Fair
<b>Condition</b>	The shingle roofs are in fair condition as they were installed in 2002. Some minor shingle repairs are recommended. The BUR walkway roofs are in poor condition and should be replaced.



*Photo 1*

Overview of shingle roof classroom wings.



*Photo 2*

Overview of shingle roof classroom wings.



*Photo 3*

Lichen growth due to prolonged shade and moisture.



*Photo 4*

Lichen growth in shaded areas.



*Photo 5*

**Shingle Deterioration:** As organic three-tab shingles are exposed to the elements they become brittle and shrink. This in turn causes the shingle to "crumble" and "curl". Once the mineral surfacing "crumbles" apart it exposes the underlying organic felt, which rapidly deteriorate when exposed to freeze/thaw cycles. This in turn allows ice and water to enter the building causing internal damage and leaks.



*Photo 6*

Shingle damage. Exposed nails can lead to thermal bridging and leaks.



*Photo 7*

Missing shingles. Exposed nails fasteners.



*Photo 8*

Overview of BUR covered walkway.



*Photo 9*

Debris and moss build up leads to prolonged moisture increasing the rate of deterioration.



*Photo 10*

**Ponding:** Ponding water occurs when moisture collects in large pools on the surface of a roof system. These pools begin to form because of two reasons: 1) roof drains are blocked or clogged with debris, 2) the insulation package has lost dimensional stability and has reduced in thickness, 3) poor slope to drain design via overbuilt crickets or tapered insulation system, 4) roof drains are built along side building support columns which maintain a consistent height under load while the balance of the roof system is applied over a live deck which tends to move and deflect under normal seasonal load. In all cases, roof depressions that collect and hold water will tend to grow in size as the added weight of the ponding water will continue to deflect the roof deck even further.

This condition can damage the roof in a number of ways. Additional structural loads create more movement of the roof assembly creating more tear stress and of course a potential for structural failure. UV intensity also increases under ponding conditions as the sun's rays are increased to the point where it accelerates deterioration in most all roof systems. In asphalt based assemblies the natural waterproofing oils in the asphalt will separate from the membrane if the system remains submerged under water for sustained periods. Single ply roof system rot and burn out when the ponding area is exposed to sunlight. The added weight can crush insulation increasing the ponding condition and creating a condition where the insulation becomes a useless thermal barrier. This condition then affects the mechanical system and the cost of heating and cooling the building. In the winter ponding water will expand as it freezes. This expansion will weaken small imperfections in the roof system. Small cracks and tears will widen until they rupture to allow water into the building. And finally, a negatively deflected deck becomes a structural concern.



*Photo 11*

Aged BUR covered walkway.



*Photo 12*

**Mineral Roof Granule Deterioration:** It is very common for mineral finished roofs to experience bare felts as early as five years after installation. Manufacturing quality control issues as well as weather "washing off" the factory applied mineral coating causes these areas. Typically this is indicated by accumulations of mineral where ponding is present. Bare felts cause exposure of the membrane to the sun/UV rays, which cause rapid membrane deterioration. Therefore, it is extremely important to coat these areas as soon as they appear.



*Photo 13*

**Bare or Exposed Felts:** Weathering causes the roofs surfacing materials to oxidize and wear away after a period of time. Loss of protection from the surfacing material results in accelerated deterioration of the primary waterpoofer asphalt, along with the systems reinforcement plies which provide the strength for the system. Heat and UV rays dry out unprotected asphalt which then leave the bare reinforcement plies exposed to the elements. The exposed reinforcement will begin to absorb and wick moisture into the built up layers of the roof system. This condition leads to accelerated damage via blisters and interlayer delamination. Roof system damage occurs when these weakened areas of the roof system are affected by thermal shock, typical roof traffic and normal seasonal conditions.



*Photo 14*

**Debris - Leafs and Pine Needles:** Pine needles and other leaves build up on the roof membrane causing plugged drains and scuppers thereby causing ponding water and structural weight loading. As the leaves and pine needles rot a "compost effect" occurs, this in effect causes soil to form on top of the roof membrane. This soil creates a perfect medium for plant and weed growth. When seeds take hold the roots will often penetrate through the membrane causing immediate leaks and damage internally.



*Photo 15*

The gutters have filled with leaves clogging the downspouts.



*Photo 16*

Rusted metal roof section.



*Photo 17*

Restored metal roof section. The rust was treated with Rust-Go-Primer. The seams have been wrapped with Unibond adhesive tape. And the metal panels were coated with White Knight Plus WC urethane.



*Photo 18*

Staff room roof replaced with new BUR, flood coated with White Star and gravel. New roof looks good.



*Photo 19*

New roofs look good.





# Solution Options

**Client:** Cambrian School District

**Facility:** Bagby Elementary School

**Roof Section:** Entire Campus

## Restore Options

<b>Solution Option:</b>	Restore	<b>Action Year:</b>	2020
<b>Square Footage:</b>	75,000	<b>Expected Life (Years):</b>	15
<b>Budget:</b>	\$88,000.00		

Restore 5,505 sq.ft. of BUR covered walkways. Power wash and clean roof. Repair all seams and splits. Prime roof with Garla-Block. Flood coat with White Star and Gravel. 10 year warranty.

## Replace Options

<b>Solution Option:</b>	Replace 	<b>Action Year:</b>	2020
<b>Square Footage:</b>	75,000	<b>Expected Life (Years):</b>	30
<b>Budget:</b>	\$152,100.00		

Replace 5,505 sq.ft. of BUR covered walkway roofs. Install Garland's 2 ply Stress Ply E (Environmental) flood coated with White Star and Garvel. 30 year warranty.



# Facility Summary

**Client:** Cambrian School District

**Facility:** DO/MOT



## Facility Data

<b>Address 1</b>	4115 Jacksol Dr
<b>City</b>	San Jose
<b>State</b>	California
<b>ZIP</b>	95124
<b>Type of Facility</b>	School
<b>Contact Person</b>	Jim Browning

## Asset Information

Name	Date Installed	Square Footage	Roof Access
Entire Campus	2007	50,000	Ladder Needed



# Construction Details

**Client:** Cambrian School District

**Facility:** DO/MOT

**Roof Section:** Entire Campus



## Information

<b>Year Installed</b>	2007	<b>Square Footage</b>	50,000
<b>Slope Dimension</b>	4:12	<b>Eave Height</b>	Varies
<b>Roof Access</b>	Ladder Needed	<b>System Type</b>	Shingles





# Inspection Report

**Client:** Cambrian School District

**Facility:** DO/MOT

**Report Date:** 02/05/2019

**Roof Section:** Entire Campus

## Inspection Information

<b>Inspection Date</b>	02/05/2019	<b>Core Data</b>	No
<b>Inspection Type</b>	Visual Inspection	<b>Leakage</b>	No
<b>Deck Conditions</b>	Unknown		

## Flashing Conditions

<b>Perimeter</b>	Good	<b>Wall</b>	N/A
<b>Projections</b>	Fair	<b>Counterflashing</b>	Good

## Miscellaneous Details

<b>Reglets</b>	N/A	<b>Debris</b>	No
<b>Control Expansion Joints</b>	N/A	<b>Ponding Water</b>	None
<b>Parapet Wall</b>	N/A	<b>Coping Joints</b>	N/A

## Perimeter

<b>Rating</b>	Good
<b>Condition</b>	The perimeter is in good condition.

## Field

<b>Rating</b>	Good
<b>Condition</b>	The shingle roofs are in good condition.

## Penetrations

<b>Rating</b>	Fair
<b>Condition</b>	The whirly bids on the DO should be replaced.

## Drainage

<b>Rating</b>	Good
<b>Condition</b>	All gutters should be cleared free of leaves and debris.

## Overall

<b>Rating</b>	Good
<b>Condition</b>	These roof are in good condition. The DO whirly bids should be replaced with low rise vents. No other recommendations at this time.



*Photo 1*

District Office campus overview.



*Photo 2*



*Photo 3*

Shingle roof overview.



*Photo 4*

Shingle roofs look good.



*Photo 5*

MOT skylights and penetrations look good.



*Photo 6*

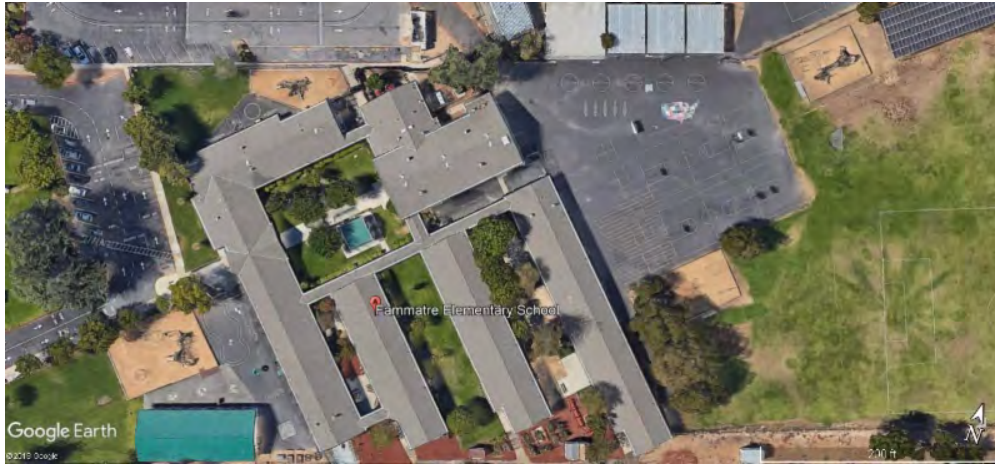
DO whirly birds leak. Should be replaced with low rise vents.



# Facility Summary

**Client:** Cambrian School District

**Facility:** Fammatre Elementary School



## Facility Data

<b>Address 1</b>	2800 New Jersey Ave
<b>City</b>	San Jose
<b>State</b>	California
<b>ZIP</b>	95124
<b>Type of Facility</b>	School
<b>Contact Person</b>	Jim Browning

## Asset Information

Name	Date Installed	Square Footage	Roof Access
Entire Campus	2004	46,000	Ladder Needed



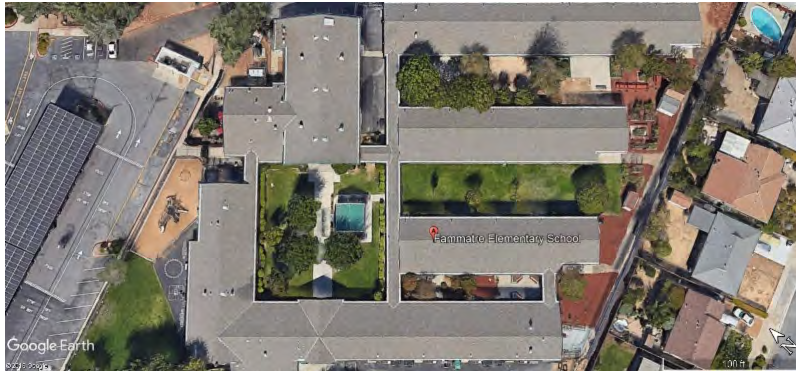


# Construction Details

**Client:** Cambrian School District

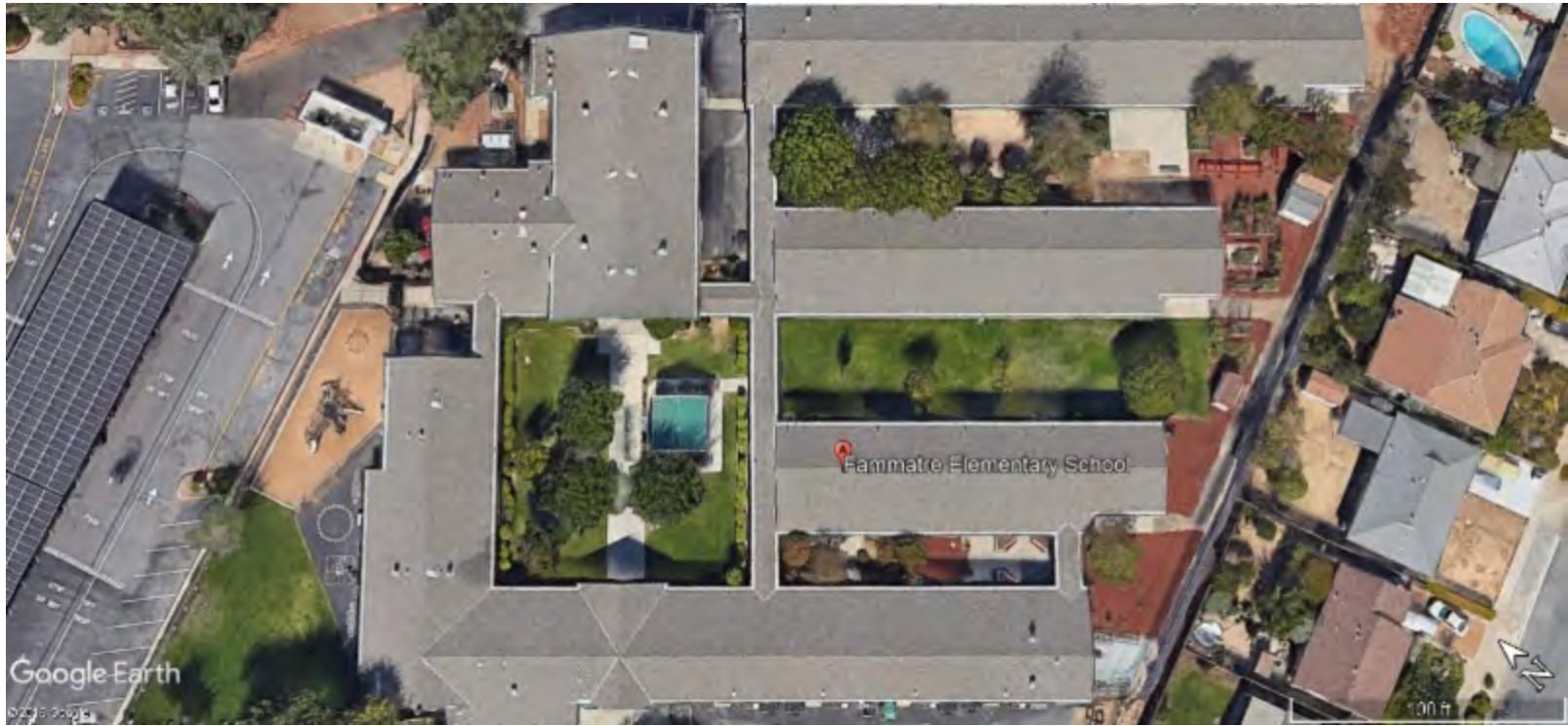
**Facility:** Fammatre Elementary School

**Roof Section:** Entire Campus



## Information

<b>Year Installed</b>	2004	<b>Square Footage</b>	46,000
<b>Slope Dimension</b>	4:12	<b>Eave Height</b>	Varies
<b>Roof Access</b>	Ladder Needed	<b>System Type</b>	Shingles





# Inspection Report

**Client:** Cambrian School District

**Facility:** Fammatre Elementary School

**Report Date:** 02/05/2019

**Roof Section:** Entire Campus

## Inspection Information

<b>Inspection Date</b>	02/05/2019	<b>Core Data</b>	No
<b>Inspection Type</b>	Visual Inspection	<b>Leakage</b>	No
<b>Deck Conditions</b>	Unknown		

## Flashing Conditions

<b>Perimeter</b>	Fair	<b>Wall</b>	N/A
<b>Projections</b>	Good	<b>Counterflashing</b>	Good

## Miscellaneous Details

<b>Reglets</b>	Good	<b>Debris</b>	Yes
<b>Control Expansion Joints</b>	N/A	<b>Ponding Water</b>	None
<b>Parapet Wall</b>	N/A	<b>Coping Joints</b>	N/A

## Perimeter

<b>Rating</b>	Fair
<b>Condition</b>	The perimeter membrane has begun to crack and deteriorate. Restoring the perimeter is recommend before replacement is required.

## Field

<b>Rating</b>	Good
<b>Condition</b>	The shingle roofs are in good condition.

## Penetrations

<b>Rating</b>	Good
<b>Condition</b>	The roof penetrations are in good condition.

## Drainage

**Rating** Fair

**Condition** Leaves and debris have collected around the perimeter and drains. Drains screens should be installed to prevent the downspouts from clogging.

## Overall

**Rating** Good

**Condition** The shingle roofs are in good condition. The perimeter membrane has begun to deteriorate. A restoration coating would extend it's life preventing further deterioration.



*Photo 1*

Shingle roof overview.



*Photo 2*

Shingle roofs overview.



*Photo 3*

Shingle walkway overview.



*Photo 4*

Perimeter membrane cracking due to UV deterioration.



*Photo 5*

Missing drain screen.



*Photo 6*

**Debris - Leafs and Pine Needles:** Pine needles and other leaves build up on the roof membrane causing plugged drains and scuppers thereby causing ponding water and structural weight loading. As the leaves and pine needles rot a "compost effect" occurs, this in effect causes soil to form on top of the roof membrane. This soil creates a perfect medium for plant and weed growth. When seeds take hold the roots will often penetrate through the membrane causing immediate leaks and damage internally.



*Photo 7*

Leaves and debris threatening to clog the downspout.



*Photo 8*

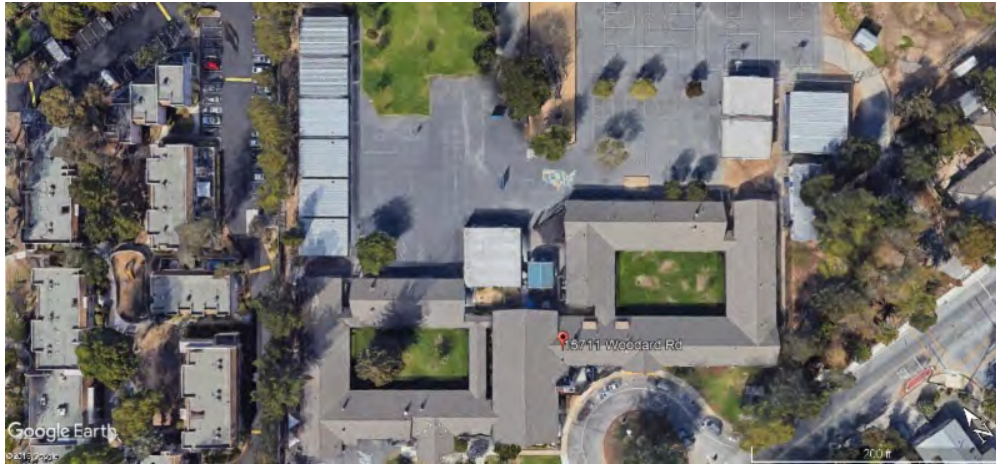
Metal roofs look good.



# Facility Summary

**Client:** Cambrian School District

**Facility:** Farnham Elementary School



## Facility Data

<b>Address 1</b>	15711 Woodard Rd
<b>City</b>	San Jose
<b>State</b>	California
<b>ZIP</b>	95124
<b>Type of Facility</b>	School
<b>Contact Person</b>	Jim Browning

## Asset Information

Name	Date Installed	Square Footage	Roof Access
Entire Campus	2005	54,000	Ladder Needed

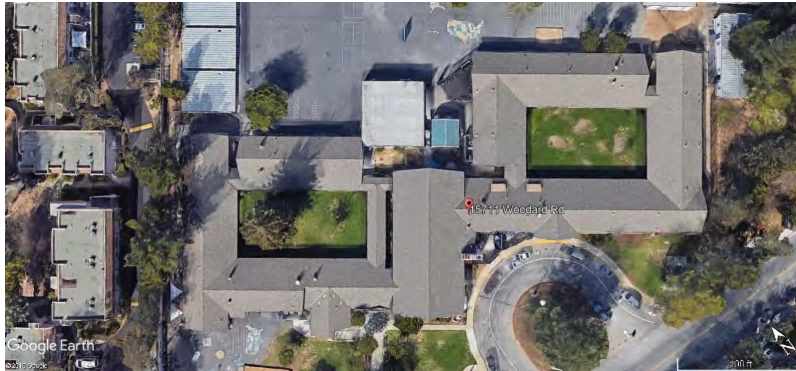


# Construction Details

**Client:** Cambrian School District

**Facility:** Farnham Elementary School

**Roof Section:** Entire Campus



## Information

<b>Year Installed</b>	2005	<b>Square Footage</b>	54,000
<b>Slope Dimension</b>	4:12	<b>Eave Height</b>	Varies
<b>Roof Access</b>	Ladder Needed	<b>System Type</b>	Shingles







# Inspection Report

**Client:** Cambrian School District

**Facility:** Farnham Elementary School

**Report Date:** 02/05/2019

**Roof Section:** Entire Campus

## Inspection Information

<b>Inspection Date</b>	02/05/2019	<b>Core Data</b>	No
<b>Inspection Type</b>	Visual Inspection	<b>Leakage</b>	No
<b>Deck Conditions</b>	Unknown		

## Flashing Conditions

<b>Perimeter</b>	Fair	<b>Wall</b>	N/A
<b>Projections</b>	Good	<b>Counterflashing</b>	Good

## Miscellaneous Details

<b>Reglets</b>	Good	<b>Debris</b>	Yes
<b>Control Expansion Joints</b>	N/A	<b>Ponding Water</b>	None
<b>Parapet Wall</b>	N/A	<b>Coping Joints</b>	N/A

## Perimeter

<b>Rating</b>	Good
<b>Condition</b>	The roofs perimeter is in good condition.

## Field

<b>Rating</b>	Good
<b>Condition</b>	The shingle roofs are in good condition. Some damaged/missing shingles are present and should be replaced.

## Penetrations

<b>Rating</b>	Fair
<b>Condition</b>	The chimney roof cap is rusted and deteriorating. The metal cap should be restored or replaced.

## Drainage

<b>Rating</b>	Fair
<b>Condition</b>	Leaves and debris have filled some gutters. The gutters should be cleared to prevent the downspouts from clogging.

## Overall

<b>Rating</b>	Fair
<b>Condition</b>	The shingle roofs are in good condition. Some damaged/missing shingles are present and should be replaced. The metal chimney cap is rusted, and portable 18 has recently leaked. A restoration coating is recommend to provide long term solutions.



*Photo 1*

Shingle roof overview.



*Photo 2*

Shingle roofs in good condition.



*Photo 3*

Wood fascia deterioration. A metal fascia cover would protect the wood substrate and eliminate maintenance and repainting.



*Photo 4*

Damaged shingles. Exposed nail fasteners may cause leaks.



*Photo 5*

Exposed nail fasteners.



*Photo 6*

**Debris - Leafs and Pine Needles:** Pine needles and other leaves build up on the roof membrane causing plugged drains and scuppers thereby causing ponding water and structural weight loading. As the leaves and pine needles rot a "compost effect" occurs, this in effect causes soil to form on top of the roof membrane. This soil creates a perfect medium for plant and weed growth. When seeds take hold the roots will often penetrate through the membrane causing immediate leaks and damage internally.



*Photo 7*

The gutter has filled with leaves and may clog the downspout.



*Photo 8*

Chimney cap overview.



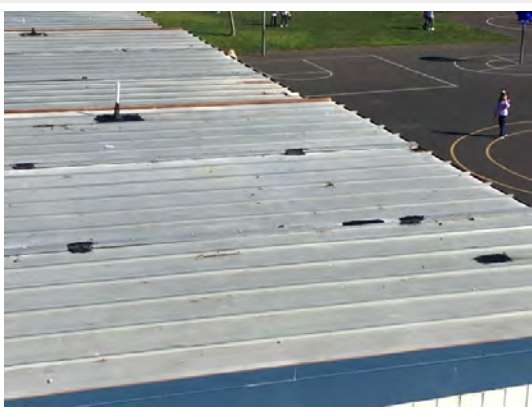
*Photo 9*

Rusted chimney metal should be restored or replaced.



*Photo 10*

Portable 18 roof leaks.



*Photo 11*

Black mastic repairs are not a long term solution for metal roofs. The leaking seams should be sealed with Unibond adhesive tape and coated with White Knight Plus WC urethane.




# Solution Options

**Client:** Cambrian School District

**Facility:** Farnham Elementary School

**Roof Section:** Entire Campus

## Restore Options

<b>Solution Option:</b>	Restore 	<b>Action Year:</b>	2019
<b>Square Footage:</b>	54,000	<b>Expected Life (Years):</b>	10
<b>Budget:</b>	\$13,800.00		

Restore portable 18 metal roof, and the rusted metal chimney cap. Clean roofs, remove old mastic, treat rust with a wire brush and Rust-Go-Primer. Prime portable roof with White Knight Metal Primer. Seal all seams with Unibond ST adhesive tape. Coat entire roof area with White Knight Plus WC urethane. 10 year warranty.



# Facility Summary

**Client:** Cambrian School District

**Facility:** Metzler Elementary School



## Facility Data

<b>Address 1</b>	1975 Cambrianna Dr
<b>City</b>	San Jose
<b>State</b>	California
<b>ZIP</b>	95124
<b>Type of Facility</b>	School
<b>Square Footage</b>	44,925
<b>Contact Person</b>	Steve Bettencourt

## Asset Information

Name	Date Installed	Square Footage	Roof Access
Entire Campus	Pre 1993	44,925	Ladder Needed

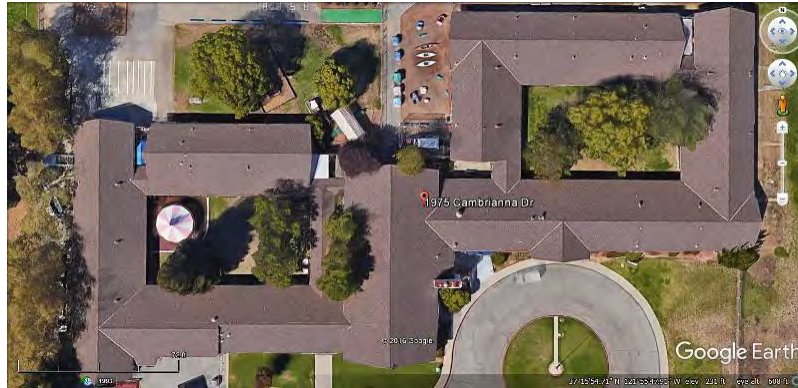


# Construction Details

**Client:** Cambrian School District

**Facility:** Metzler Elementary School

**Roof Section:** Entire Campus



## Information

<b>Year Installed</b>	Pre 1993	<b>Square Footage</b>	44,925
<b>Slope Dimension</b>	4:12	<b>Eave Height</b>	15
<b>Roof Access</b>	Ladder Needed	<b>System Type</b>	Shingles







# Inspection Report

**Client:** Cambrian School District

**Facility:** Metzler Elementary School

**Report Date:** 11/28/2016

**Roof Section:** Entire Campus

## Inspection Information

<b>Inspection Date</b>	11/28/2016	<b>Core Data</b>	No
<b>Inspection Type</b>	Visual Inspection	<b>Leakage</b>	No
<b>Deck Conditions</b>	Unknown		

## Flashing Conditions

<b>Perimeter</b>	Poor	<b>Wall</b>	N/A
<b>Projections</b>	Fair	<b>Counterflashing</b>	Fair

## Miscellaneous Details

<b>Reglets</b>	Fair	<b>Debris</b>	Yes
<b>Control Expansion Joints</b>	N/A	<b>Ponding Water</b>	None
<b>Parapet Wall</b>	N/A	<b>Coping Joints</b>	N/A

## Perimeter

<b>Rating</b>	Fair
<b>Condition</b>	The gutters have filled with leaves and debris threatening to clog the downspouts and spill over. Some rust corrosion is also evident. Proper maintenance of the gutters ensuring the downspouts are clear is necessary to prevent heavy weight loads and gutter failure.

## Field

<b>Rating</b>	Poor
<b>Condition</b>	The shingles have become brittle and developed cracks. Surface mineral loss has began and will increase the rate of deterioration. UV rays and weathering will continue to break down the shingles. A new roof system is needed to create a long term solution.

## Penetrations

<b>Rating</b>	Good
<b>Condition</b>	The roof penetrations are in good condition. However, nail punctures are present on the ridges. Nail punctures should be sealed properly to prevent thermal expansion and contraction. Moisture may enter the roof system and these location causing leaks and internal damage.

## Drainage

<b>Rating</b>	Fair
<b>Condition</b>	These roofs have adequate slope promoting the proper flow of water. However, some vegetation growth has developed in the shaded areas suggesting prolonged moisture.

## Overall

<b>Rating</b>	Poor
<b>Condition</b>	These roofs are near the end of their lives. The shingles have developed cracks and become brittle. Surface mineral loss has also accelerating the rate of deterioration due to UV damage. Rust corrosion has began to spread along the metal panels. And, leaves and debris have collected in the gutters threatening to clog the downspouts and cause further deterioration. Roof replacement will be required within the next few years. A new standing seam metal roof system would provide a low maintenance long term solution.



*Photo 1*



*Photo 2*

Overview of shingle roof system.



*Photo 3*

Overview of shingle roof system.



*Photo 4*

Overview of shingle roof system and penetrations.



*Photo 5*

Overview of shingle roof system and penetrations.



*Photo 6*

**Shingle Deterioration:** As shingles are exposed to the elements they become brittle and shrink. This in turn causes the shingle to "crumble" and "curl". Once the mineral surfacing "crumbles" apart it exposes the underlying felt, which rapidly deteriorate when exposed to UV rays. This in turn allows water to enter the building causing internal damage and leaks.



*Photo 7*

Shingle deterioration and cracking.



*Photo 8*

Cracking and surface mineral loss throughout the shingle roofs.



*Photo 9*

Shingle deterioration and surface mineral loss.



*Photo 10*

Nail penetrations in shingle.



*Photo 11*

Roof punctures allow direct water entry points.



*Photo 12*

**Debris - Leafs and Pine Needles:** Pine needles and other leaves build up on the roof membrane causing plugged drains and scuppers thereby causing ponding water and structural weight loading. As the leaves and pine needles rot a "compost effect" occurs, this in effect causes soil to form on top of the roof membrane. This soil creates a perfect medium for plant and weed growth. When seeds take hold the roots will often penetrate through the membrane causing immediate leaks and damage internally.



*Photo 13*

The gutters have filled with leaves threatening to clog the downspouts.



*Photo 14*

Leaves and debris.



*Photo 15*

**Vegetation Growth:** Vegetation often occurs when dirt and debris collect on roof systems. Over time this creates a perfect medium for plant and weed growth. When seeds take hold the roots will often penetrate through the membrane causing immediate leaks and damage internally.



*Photo 16*

**Metal Panel Corrosion:** This condition is typically instigated by outside contaminants or geographic conditions such as proximity to salt water. Panel corrosion is a structural issue for the roof system and needs to be remedied at the earliest time possible to avoid roof failure and interior damage.



*Photo 17*

Rust stains along wall due to gutter leak.



# Solution Options

**Client:** Cambrian School District

**Facility:** Metzler Elementary School


**Roof Section:** Entire Campus

## Replace Options

<b>Solution Option:</b>	Replace	<b>Action Year:</b>	2021
<b>Square Footage:</b>	44,925	<b>Expected Life (Years):</b>	30
<b>Budget:</b>	\$1,199,800.00		

Install a new shingle roof system. Tear off the shingle roofs to the wood deck. Install 1 layer of R-mer Seal self adhering underlayment. Install 1 ply Dimensional, 40 year shingles on the steep roof sections. Install proper ridge venting as required by code. Install 120 MPR rated shingles as per CBC. Install New aluminum R-Mer Span metal roof system and gutters on the tower roof.

## Replace Options

<b>Solution Option:</b>	Replace 	<b>Action Year:</b>	2021
<b>Square Footage:</b>	44,925	<b>Expected Life (Years):</b>	30
<b>Budget:</b>	\$1,398,000.00		

These roofs are ideal for a metal roof system. Install Garland's R-Mer Span standing seam metal roof panels. Tear off roof to the deck, inspect and repair any dry rot in kind. Install R-Mer Seal self adhering underlayment and new 22g steel R-Mer Span standing seam roof system with new R-Mer Edge gutters. Install proper ridge venting as required by code. This options comes with a 30 year warranty.





# Facility Summary

**Client:** Cambrian School District

**Facility:** Price Middle School



## Facility Data

<b>Address 1</b>	2650 New Jersey Ave
<b>City</b>	San Jose
<b>State</b>	California
<b>ZIP</b>	95124
<b>Type of Facility</b>	School
<b>Contact Person</b>	Jim Browning

## Asset Information

Name	Date Installed	Square Footage	Roof Access
Entire Campus	2006	100,000	Ladder Needed
Price Community Center	Pre 2000	40,000	Internal Roof Hatch



# Construction Details

**Client:** Cambrian School District

**Facility:** Price Middle School

**Roof Section:** Entire Campus



## Information

<b>Year Installed</b>	2006	<b>Square Footage</b>	100,000
<b>Slope Dimension</b>	Varies	<b>Eave Height</b>	Varies
<b>Roof Access</b>	Ladder Needed	<b>System Type</b>	Other

## Notes

Shingle roofs. Installed 2006.

Metal roofs. Installed 2003.





# Inspection Report

**Client:** Cambrian School District

**Facility:** Price Middle School

**Report Date:** 02/05/2019

**Roof Section:** Entire Campus

## Inspection Information

<b>Inspection Date</b>	02/05/2019	<b>Core Data</b>	No
<b>Inspection Type</b>	Visual Inspection	<b>Leakage</b>	No
<b>Deck Conditions</b>	Unknown		

## Flashing Conditions

<b>Perimeter</b>	Poor	<b>Wall</b>	N/A
<b>Projections</b>	Fair	<b>Counterflashing</b>	Fair

## Miscellaneous Details

<b>Reglets</b>	N/A	<b>Debris</b>	Yes
<b>Control Expansion Joints</b>	Fair	<b>Ponding Water</b>	None
<b>Parapet Wall</b>	N/A	<b>Coping Joints</b>	N/A

## Perimeter

<b>Rating</b>	Poor
<b>Condition</b>	The perimeter BUR membrane has developed a few blisters. Leaves and debris have also collected prolonging moisture and accelerating deterioration.

## Field

<b>Rating</b>	Good
<b>Condition</b>	The shingle and metal roofs are in good condition. Minor repairs are needed for missing/damaged shingles.

## Penetrations

<b>Rating</b>	Fair
<b>Condition</b>	The penetrations on the kitchen roof should be resealed. Constant vibration causes the seams to separate. Caulking deterioration has begun to develop.

## Drainage

**Rating** Fair

**Condition** Leaves and debris have collected along the perimeter. The leaves are threatening to clog the downspouts. New drain screens are recommended.

## Overall

**Rating** Fair

**Condition** The shingle and metal roofs are in good condition. Minor repairs are needed to replace missing shingles. The perimeter BUR membrane is in need of preventative maintenance.



*Photo 1*

Overview of shingle roofs and penetrations.



*Photo 2*

Overview of shingle roofs and penetrations.



*Photo 3*

Shingle roof damage. Exposed nail fasteners can cause leaks.



*Photo 4*

Overview of expansion joint cover.



*Photo 5*

Expansion joint cover secure.



*Photo 6*

**Debris - Leafs and Pine Needles:** Pine needles and other leaves build up on the roof membrane causing plugged drains and scuppers thereby causing ponding water and structural weight loading. As the leaves and pine needles rot a "compost effect" occurs, this in effect causes soil to form on top of the roof membrane. This soil creates a perfect medium for plant and weed growth. When seeds take hold the roots will often penetrate through the membrane causing immediate leaks and damage internally.



*Photo 7*

Leaves along drainage prolong moisture and increase the rate of membrane deterioration.



*Photo 8*

**Perimeter Flashing Deterioration:** Most roof failures start at perimeter and penetration locations. Metal edge conditions that are poorly designed and improperly installed fail due to the extreme expansion and contraction that is typical with metal. Perimeter wall flashings can also be damaged due to normal seasonal building movement and thermal shock. Additional damage can also be seen from UV degradation as well. At all of these deteriorated or failed points, moisture can gain direct access to the roof system insulation and the buildings interior.



*Photo 9*

**Blisters:** Soft spongy pockets or swellings in the roofing material. They occur between layers of felt or between the roof membrane and substrate. Air or moisture vapor entrapped within a blister expands as the roof and outside air temperatures rise. This results in sufficient pressure to push the roofing felts upwards and apart. Blisters may be ruptured by roof traffic, expanding frozen water, or hail (especially during colder weather). Some blisters may become so large as to affect drainage, which may then cause ponding water. Laps could also be pulled apart, resulting in leakage. A ruptured blister will immediately allow water to penetrate and damage the roof system.



*Photo 10*

Screen caps should be installed to keep leaves from clogging the drains.



*Photo 11*

Screen caps should be installed to keep leaves from clogging the drains.



*Photo 12*

Overview of kitchen roof.



*Photo 13*

HVAC unit open and exposed.



*Photo 14*

Perimeter flashing seams should be sealed properly.



*Photo 15*

Mastic and caulking deterioration around penetration. Penetration should be sealed properly.





*Photo 16*

Hole in caulking may cause leaks.



*Photo 17*

Drain cap missing.



*Photo 18*

Overview of standing seam metal roofs.



*Photo 19*

Metal roofs look good.



*Photo 20*

Metal roofs look good.




# Solution Options

**Client:** Cambrian School District

**Facility:** Price Middle School

**Roof Section:** Entire Campus

## Repair Options

<b>Solution Option:</b>	Repair 	<b>Action Year:</b>	2020
<b>Square Footage:</b>	100,000	<b>Expected Life (Years):</b>	5
<b>Budget:</b>	\$18,500.00		

Perform the necessary repairs and maintenance along the classroom wings and kitchen roof. Clean roofs free of leaves and debris. 3 course repair all blisters and BUR penetration seams with Silver-Flash and Gar-mesh. Coat the expansion cap covers with White Knight Plus WC. Restore deteriorated BUR perimeter primed with Garla-Block and coated with White Knight Plus WC. Replace missing drain screens.



# Construction Details

**Client:** Cambrian School District

**Facility:** Price Middle School

**Roof Section:** Price Community Center



## Information

<b>Year Installed</b>	Pre 2000	<b>Square Footage</b>	40,000
<b>Slope Dimension</b>	Varies	<b>Eave Height</b>	30
<b>Roof Access</b>	Internal Roof Hatch	<b>System Type</b>	Other





# Photo Report

**Client:** Cambrian School District

**Facility:** Price Middle School

**Roof Section:** Price Community Center

**Report Date:** 06/13/2018

**Title:** Roof Inspection

Signs of weathering and wear are evident throughout the BUR sections. The duct unit seams have become exposed due to seam tape deterioration. Curb flashings and seams have also become loose due to building movement. The black Henry's previous repairs will continue to deteriorate due to UV damage. Reflective mastics/coatings along with a reinforcement fabric is recommended. This 3 course repair method will effectively seal the seams resulting in a long term solution.



*Photo 1*

Overview of duct units.



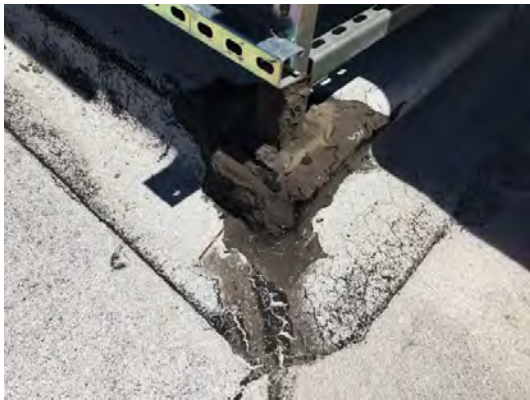
*Photo 2*

Duct seam tape deterioration.



*Photo 3*

Seam tape deterioration. Water may enter the duct seams and leak into the vents and building below.



*Photo 4*

**Curb Flashing Deterioration:** The flashing on curbs and units is often the first area on a roof needing assistance. The inherent nature of an air handler unit running can cause tremendous vibration and movement in this area. This area should be monitored and checked frequently as it can allow water to enter buildings if not inspected frequently. Further, this area is often left exposed to the elements and not covered by the final surfacing material due to it being a vertical rise. Coating these areas is often a necessary solution for long term building envelope performance.



*Photo 5*

Overview of base flashing deterioration.



*Photo 6*

Loose seams along the base flashing.



*Photo 7*

Loose seam laps along base flashing.



*Photo 8*

Open seam lap along curb.



*Photo 9*

The previous repair mastic has cracked along the curb seam.





*Photo 10*

Debris in sump drain should be cleared regularly to prevent clogging.



*Photo 11*

Henry mastic repairs along field seams. Proper repair is recommended if leaks persist. A reflective 3 course repair or membrane patch would result in a long term solution.




# Solution Options

**Client:** Cambrian School District

**Facility:** Price Middle School

**Roof Section:** Price Community Center

## Repair Options

<b>Solution Option:</b>	Repair 	<b>Action Year:</b>	2020
<b>Square Footage:</b>	40,000	<b>Expected Life (Years):</b>	5
<b>Budget:</b>	\$9,850.00		

Perform the necessary repairs and maintenance on the BUR sections at Price Community Center. Clean roof free of debris and old mastic repairs. 3 course all curb and penetration seams with Silver-Flash and GarMesh. Seal all deteriorated duct seams with Unibond ST adhesive tape coated with White Knight Plus WC urethane. Restore all deteriorated base flashings and membrane seam laps with White Star and polyester fabric for reinforcement.



# Progress Report

**Client:** Cambrian School District

**Facility:** Price Middle School

**Report Date:** 10/29/2018

**Roof Section:** Price Community Center

## Report Data

Title
Shingle Replacement



*Photo 1*

Overview of shingle replacement.



*Photo 2*

Overview of shingle replacement.



*Photo 3*

The loose shingles need to be adhered properly.



*Photo 4*

New shingles need to be adhered properly.



*Photo 5*

Replace shingles need to be adhered properly.



*Photo 6*

Perimeter shingles need to be adhered properly.



# Facility Summary

**Client:** Cambrian School District

**Facility:** Sartorette Elementary School



## Facility Data

<b>Address 1</b>	3850 Woodford Dr
<b>City</b>	San Jose
<b>State</b>	California
<b>ZIP</b>	95124
<b>Type of Facility</b>	School
<b>Contact Person</b>	Jim Browning

## Asset Information

Name	Date Installed	Square Footage	Roof Access
Entire Campus	2006	46,000	Ladder Needed



# Construction Details

**Client:** Cambrian School District

**Facility:** Sartorette Elementary School

**Roof Section:** Entire Campus



## Information

<b>Year Installed</b>	2006	<b>Square Footage</b>	46,000
<b>Slope Dimension</b>	4:12	<b>Eave Height</b>	Varies
<b>Roof Access</b>	Ladder Needed	<b>System Type</b>	Shingles





# Inspection Report

**Client:** Cambrian School District

**Facility:** Sartorette Elementary School

**Report Date:** 02/05/2019

**Roof Section:** Entire Campus

## Inspection Information

<b>Inspection Date</b>	02/05/2019	<b>Core Data</b>	No
<b>Inspection Type</b>	Visual Inspection	<b>Leakage</b>	No
<b>Deck Conditions</b>	Unknown		

## Flashing Conditions

<b>Perimeter</b>	Fair	<b>Wall</b>	N/A
<b>Projections</b>	Good	<b>Counterflashing</b>	Good

## Miscellaneous Details

<b>Reglets</b>	N/A	<b>Debris</b>	Yes
<b>Control Expansion Joints</b>	N/A	<b>Ponding Water</b>	None
<b>Parapet Wall</b>	N/A	<b>Coping Joints</b>	N/A

## Perimeter

<b>Rating</b>	Good
<b>Condition</b>	The roofs perimeter is in good condition. Rusted gutters should be monitored and restored to prevent further decay.

## Field

<b>Rating</b>	Good
<b>Condition</b>	Some missing and damaged shingles are present. Replacement shingles are recommend.

## Penetrations

<b>Rating</b>	Good
<b>Condition</b>	The roof penetrations are in good condition. However the chimney cap is rusted and decaying. A new replacement cap or restoration coating is recommend.



## Drainage

<b>Rating</b>	Fair
<b>Condition</b>	Leaves and debris have filled some gutter sections. The gutters should be cleared to prevent the drains from clogging.

## Overall

<b>Rating</b>	Good
<b>Condition</b>	The shingle roofs are in good condition. Some damage/missing shingles are present. These areas should be repaired properly with replacement shingles. Metal corrosion has also developed on the chimney cap. A restoration coating or replacement panels are recommend.



*Photo 1*

Shingle roof overview.



*Photo 2*

Shingle roof overview.



*Photo 3*

Missing shingles. Exposed nails may cause leaks.



*Photo 4*

Damaged/missing shingles. Exposed nail fasteners may cause leaks.



*Photo 5*

Mastic repairs over shingles should be replaced with new shingles.



*Photo 6*

Lichen growth in shaded areas.



*Photo 7*

**Debris - Leafs and Pine Needles:** Pine needles and other leaves build up on the roof membrane causing plugged drains and scuppers thereby causing ponding water and structural weight loading. As the leaves and pine needles rot a "compost effect" occurs, this in effect causes soil to form on top of the roof membrane. This soil creates a perfect medium for plant and weed growth. When seeds take hold the roots will often penetrate through the membrane causing immediate leaks and damage internally.



*Photo 8*

Gutter full of leaves and debris.



*Photo 9*

Leaves and debris will cause the downspouts to clog increasing the weight load in the gutter.



*Photo 10*

Rust corrosion on chimney cap will continue to spread. The rust should be treated with a rust prohibitive primer and coated with a protective urethane to avoid further decay.



*Photo 11*

Rust corrosion in gutter will continue to spread.




# Solution Options

**Client:** Cambrian School District

**Facility:** Sartorette Elementary School

**Roof Section:** Entire Campus

## Repair Options

<b>Solution Option:</b>	Repair 	<b>Action Year:</b>	2020
<b>Square Footage:</b>	46,000	<b>Expected Life (Years):</b>	5
<b>Budget:</b>	\$8,800.00		

Replace the damaged/missing shingles. Restore the metal chimney cap. Clean the chimney cap and treat with a wire brush and Rust-go-Primer. Seal all seams with Unibond St adhesive tape. Coat cap with White Knight Plus WC urethane.



# Facility Summary

**Client:** Cambrian School District

**Facility:** Steindorf K-8 STEAM School



## Facility Data

<b>Address 1</b>	3001 Ross Ave
<b>City</b>	San Jose
<b>State</b>	California
<b>ZIP</b>	95124
<b>Type of Facility</b>	School
<b>Contact Person</b>	Jim Browning

## Asset Information

Name	Date Installed	Square Footage	Roof Access
Entire Campus	2018	40,000	Ladder Needed



# Construction Details

**Client:** Cambrian School District

**Facility:** Steindorf K-8 STEAM School

**Roof Section:** Entire Campus



## Information

<b>Year Installed</b>	2018	<b>Square Footage</b>	40,000
<b>Slope Dimension</b>	Varies	<b>Eave Height</b>	Varies
<b>Roof Access</b>	Ladder Needed	<b>System Type</b>	Shingles







# Photo Report

**Client:** Cambrian School District

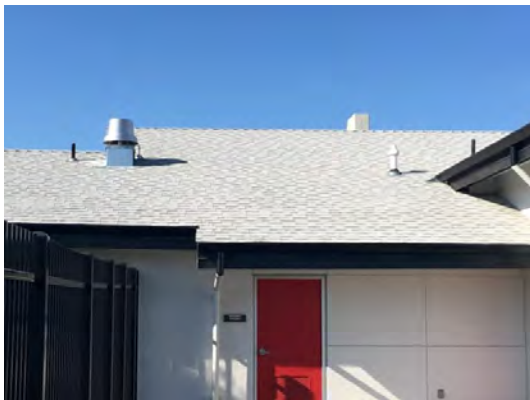
**Facility:** Steindorf K-8 STEAM School

**Report Date:** 02/05/2019

**Title:** Visual Inspection

**Roof Section:** Entire Campus

New school built in 2018. Roofs in new condition.



*Photo 1*

All roofs in new condition.



*Photo 2*

All roofs in new condition.



*Photo 3*

All roofs in new condition.



*Photo 4*

All roofs in new condition.



*Photo 5*

All roofs in new condition.



*Photo 6*

All roofs in new condition.



# Priority Summary

Client: Cambrian School District

Facility *	Asset *	System Type	Age(years)	Leakage	Rating
<b>Good</b>					
DO/MOT	Entire Campus	Shingles	13	No	Good
Fammatre Elementary School	Entire Campus	Shingles	16	No	Good
Sartorette Elementary School	Entire Campus	Shingles	14	No	Good
<b>Fair</b>					
Bagby Elementary School	Entire Campus	Other	18	No	Fair
Farnham Elementary School	Entire Campus	Shingles	15	No	Fair
Price Middle School	Entire Campus	Other	14	No	Fair
<b>Poor</b>					
Metzler Elementary School	Entire Campus	Shingles	N/A	No	Poor
<b>Failed</b>					
Bagby Elementary School	Teacher's Lounge	Built Up Roof (BUR)	N/A	Yes	Failed



# Yearly Budget Summary

Client: Cambrian School District

Facility *	Asset Type	Asset *	Recommendation	Cost	Expected Life
<b>Year: 2017</b>					
Bagby Elementary School	Roof Section	Teacher's Lounge	Replace	\$28,370.00	40 Year(s)
<b>Total for 2017:</b>				<b>\$28,370.00</b>	
<b>Year: 2019</b>					
Farnham Elementary School	Roof Section	Entire Campus	Restore	\$13,800.00	10 Year(s)
<b>Total for 2019:</b>				<b>\$13,800.00</b>	
<b>Year: 2020</b>					
Bagby Elementary School	Roof Section	Entire Campus	Replace	\$152,100.00	30 Year(s)
Price Middle School	Roof Section	Entire Campus	Repair	\$18,500.00	5 Year(s)
Price Middle School	Roof Section	Price Community Center	Repair	\$9,850.00	5 Year(s)
Sartorette Elementary School	Roof Section	Entire Campus	Repair	\$8,800.00	5 Year(s)
<b>Total for 2020:</b>				<b>\$189,250.00</b>	
<b>Year: 2021</b>					

Facility *	Asset Type	Asset *	Recommendation	Cost	Expected Life
Metzler Elementary School	Roof Section	Entire Campus	Replace	\$1,398,000.00	30 Year(s)
<b>Total for 2021:</b>				<b>\$1,398,000.00</b>	

**\*\*Note:** This report may contain numbers which have been derived as an average from a budget range. Please refer to solution reports to see the full budget range and details.