Berryessa Union School District
Facilities Needs
and
Assessment Study

Prepared For

Berryessa Union School District

Executive Summary

Mission Statement

Berryessa Union School District provides all students the skills to become lifelong learners and successful 21st century global citizens.

In April of 2013, Berryessa Union School District requested that Sugimura Finney Architects prepare a District-wide survey to assess the current status of the District's facilities, and to help guide upcoming decisions related to facility utilization and improvement.

The Berryessa Union School District, located on the East side of the City of San Jose, serves approximatly 8,000 Kindergarten through 8th grade students at one of their ten elementary or three middle school sites.

The assessment process involved reviewing each of the District's school sites, as well as the District Office building, the Maintenance Operations and Transportation yard, and the Central Kitchen facility. The goal of the assessment process was to identify and evaluate the existing conditions of the various facilities along with the capacity and utilization rates of the schools, document these conditions, categorize and group them, and provide estimated costs for remedies as needed.

With rapid changes in technology and the proximity to the thriving Silicon Valley technology sector, the Berryessa Union School District focus is on providing students with an excellent technological foundation. Therefore, the 21st Century learning environment was one of the top priorities, and was apparent throughout the process.

Guidance from the District led to an extended period of data gathering, with a goal to include input from as many of the various staff members as possible. Initial meetings were held in May and June of 2013 at each of the sites. Typical attendees included the principal, a group of certificated staff members as representative of the various positions as possible, clerical and maintenance staff, parental representatives, and District facilities management. Using a standard checklist, a discussion was held to facilitate candid input from everyone involved regarding campus issues and ideas for resolving or mitigating them.

District Goals:

Ensure a safe learning environment.

Enhance proficiency in the 4 C's: communication, collaboration, critical thinking, creativity.

Enhance technology.

Provide professional development for all staff.

Increase parent and community involvement and education.

During the summer and fall of 2013, Sugimura Finney Architects, along with our consultants and the Director of Facili-

ties, visited the sites several more times, documenting the conditions in preparation for this report. Follow up meetings with the same stakeholders were held in the fall. Subsequent meetings were then held with consultants regarding the costs associated with the issues documented. Further discussions were held to facilitate dialog based on ideas and suggestions from the initial round of meetings. These highly productive sessions were influential in the creation of the final product.

At all times, the focus was on the following items:

1. Code, Safety, and Security
2. Technology and 21st Century Learning
3. Updated Classrooms and Student Support Services
4. Energy Conservation and Savings
5. Site Work

The estimated total cost for the Berryessa Union School District Facility Needs Assessment is $251,146,806. Adjustments were made to account for anticipated soft costs, including escalation of construction costs during the bond timeframe.

Sugimura Finney Architects and our consultants would like to thank the Berryessa Union School District for the opportunity to prepare this document for them, as well as thank the many staff members who were involved in helping us.

Acknowledgements

Berryessa Union School District

Administration:

Will Ector	Superintendant
Phuong Le	Assistant Superintendant of Business

Principals:

Joann Vaars	Brooktree Elementary School
LaKeisha Blackshire	Cherrywood Elementary School
Virginia Catbagan	Laneview Elementary School
Mya Duong	Majestic Way Elementary School
Anjanette Winkler	Morrill Middle School
Andrea Ortiz	Noble Elementary School
Mr. Barocio	Northwood Elementary School
Steve Hamm	Piedmont Middle School
Parisa Nunez	Ruskin Elementary School
Chris Mosley	Sierramont Middle School
Patty McDonald	Summerdale Elementary School
Maria Smith	Toyon Elementary School
Virginia Pender	Vinci Park Elementary School

Site and District Staff

Parents Group

Maintenance Operations and Transportation:

James Bakos	Director of Facilities
Nestor Campana	Supervisor
Kim Gomez	Administrative Secretary

Consultants:

John Cimino

Anthony Kanastab

Project Team

Sugimura Finney Architects

Mark Finney	Managing Principal
Brendan Kelly	Project Manager
Armando Lopez, Jr.	Job Captain

Peoples Associates Structural Engineers

Michael J. Deigert	Project Manager

Alfatech Consulting Engineers - Mechanical Electrical and Plumbing

Reza Zare	Project Manager

Pavement Engineers Inc. - Pavement

Troy Sisneros	Project Manager
Todd Rucker	
Bill Long	
Brett Long	

Gale Associates Inc. - Roofing

Alan Burnett	Associate
Jeff Calehuff	

Table of Contents

Will H. Ector, Jr.
Superintendent

1376 Piedmont Road
San Jose, CA 95132-2427

Phone: (408) 923-1800
Fax: (408) 923-0623

Brooktree Elementary School

1781 Olivetree Drive
San Jose, CA

Brooktree Elementary School Assessment

Statistics:

Enrollment (Nov. 2012):	487
Principal:	Joann Vaars
Site:	10.0 Acres
Building Area:	Approx. 45,000 SF
Permanent Classrooms:	19
Portable Buildings:	7 @ 960 SF
Total Size:	51,720 SF

Construction History:

1975	School Constructed
1992	Portable Restroom Building installed
1992	(4) Portable Classroom Buildings installed
1996	(2) Portable Classroom Buildings installed
2004	Modernization Projects
2007	Construction of Playground Equipment
2007	Site Work (Mech Yard); Alteration to Main Bldg (boiler and chiller replacement)
2007	Remove and replace roofing system

Brooktree Elementary School

Site Meeting Minutes

Needs Assessment Scope Categories
Berryessa School District

Brooktree Elementary School

May 23, 2013

(updated September 24, 2013)

Site

1. Parking lots, traffic control, and drop-off and pick-up areas
    a. Issues with pick-up and drop-off traffic interfering with bus loading zone.
    b. Issues with Special Ed bus loading also, possible separate loading zone needed.
    c. Insufficient staff parking available.
2. PE equipment (Basketball backboards, rims, play structures, matting)
    a. Request for a track.
    b. Equipment in otherwise reasonable condition.
3. Site (ADA) compliance, paved walkways (tripping hazards, level and clear pathways)
    a. No known issues. SFA to evaluate over the summer.
    b. Significant areas of puddles and drainage problems noted in the asphalt paving outside the portable classrooms. (9/24/13)
4. Paved Play Area (size, security, location, condition)
    a. Asphalt surface is in reasonably good condition, currently meeting site needs.
5. Turf play area, landscaping and irrigation
    a. Turf areas have gopher / ground squirrel problems.
6. Fencing and security
    a. Site fencing is inadequate for current security needs.
    b. Funneling visitors through the main office entrance prior to entry to the campus core is desired.
7. Trash enclosure
    a. Trash location is acceptable, needs screening from view.
8. Site Utilities (to the street and campus distribution - gas, water, sewer, storm, power)
    a. No known issues.
9. Site Lighting (LED)
    a. Motion sensors for exterior lights were requested to allow neighbors to know when someone is on site, as opposed to lights that are on until set times each night.
10. Covered Shade or Eating Structure
    a. Students currently eat indoors. An exterior covered eating area is desirable.
11. Roofing
    a. No known issues.
12. Covered walkways
    a. None currently. A covered path to the portables was requested.
13. Exterior Paint

12

a. Good condition.

14. Campus Layout and organization
    a. Better defined entry to main office requested.
15. Curb Appeal
    a. Request for improved landscaping at entry.
16. Portable classrooms/restrooms
    a. Request for additional restrooms near Kindergarten play area.
    b. No known issues at portable classrooms.
17. Storage
    a. Request for centralized custodial storage area.
    b. Additional storage was also requested at the pod areas. (9/24/13)
18. Drinking fountains
    a. Request for additional drinking fountains at play areas.
19. Signage
    a. District plans to replace all existing wayfinding signage.
    b. District plans to add marquee signage to each campus.

<u>Building</u>

a. Building Insulation, exterior surfaces
    a. No known issues.
b. Windows (Prep rooms/common areas, condition of windows and amount of natural light)
    a. Discussed infilling of lower windows
c. Exterior Doors and Hardware
    a. Door and hardware replacement will likely be district-wide.
d. Restrooms (Electric hand dryers, partitions, fixtures, re-seal flooring)
    a. Additional restrooms requested for staff and students.
e. Flooring (Carpeting, tiling, resilient, all locations)
    a. No known issues.
f. Tackable Walls surfaces and all other interior finishes
    a. Full-height, wall-to-wall tackable surfaces requested.
g. Ceilings
    a. No known issues.
h. Cabinetry (Teaching walls)
    a. Classroom cabinetry for storage requested. Teaching walls are desirable.
i. Classroom size/layout (21st Century Learning environment/classroom)
    a. Meeting to be held on 23JUN2013 with District representatives to discuss this item.
j. Backpack storage or location
    a. Request was made to look into providing storage for backpacks.
k. Interior lighting (LED)
    a. No known issues.
    b. Non-fluorescent lights requested for autism spectrum classrooms. (9/24/13)
l. Blinds

a. Window coverings to replace existing horizontal blinds was requested.

m. Markerboards
   a. Markerboards in the teaching wall cabinets would be sufficient.

n. Classroom electrical outlets
   a. Additional outlets spread throughout room requested.

o. IT/Data networking (Wi-fi, location, IDF and MDF)
   a. SFA will be meeting with District IT personnel to discuss district-wide implementations.

p. IT/Video network
   a. SFA will be meeting with District IT personnel to discuss district-wide implementations.

q. Communication system (Intercom, Clocks, Speakers)
   a. Intercom and clocks have no known issues.
   b. Request for additional PA speakers for the building exterior was made.

r. Intrusion Alarm
   a. No known issues.

s. Security cameras
   a. Security cameras are planned to be added to all sites as part of this process.

t. Heating and Ventilating and Air Conditioning (Chiller, mechanical equipment, FCU's)
   a. SFA will evaluate these systems over the summer. At this time there are no known issues.

u. Energy management system (Controls for HVAC/Lighting)
   a. No known issues.

Miscellaneous:

- Photovoltaic Installation (Solar)
  - Solar installation will occur where economically feasible.
- Multi-purpose/Cafeteria efficiency
  - New sound system for MPR requested.
  - MPR noted as being too small for full school assemblies. (9/24/13)
- Administration area functionality
  - Request was made to aggregate certain program spaces in the administration area that are currently remotely located. (RSP, Speech, Psych, etc.)
  - Larger, more private, conference room requested. (9/24/13)
  - Larger office space for principal, with room to meet with two parents at once. (9/24/13)
- Kitchen
  - SFA to meet with District Food Services personnel to discuss district-wide plan.
- Library/Media Center
  - Space for curriculum storage was requested.
- Specialty Rooms
  - No known issues.
  - Site has no permanent music room. (9/24/13)
- FFE (Furnishings, Fixtures, Equipment) Lunch tables, classroom furniture, etc.
  - Most furniture is original to the school, and appears in need of replacement.
- Any other creative thoughts/ideas

- Staff lounge has no natural light, a window was requested for this space.
- Site has no dedicated science lab.
- Site has no gym building.
- OT / Motor / Sensory space(s) requested.
- Request made to group all Special Ed rooms together in one area.
- Site would like atrium space captured and utilized as interior space. (9/24/13)

Grounds:

Security:

Observations:

- While significant portions of this site have a perimeter fence in place, the site is largely open in the front; and because the site abuts a city park, there is an unfenced boundary at the rear of the site also.
- Building exterior lighting is insufficient.
- There is direct access without intervening obstacles from the main entry to interior building spaces.
- Existing doors often have windows in them, and not all doors have modern security hardware.
- Not all classrooms have doors that can be secured, due to original open plan of site.
- This site has a handful of windows below door height.

Parking lot and Drop-Off / Pick-Up:

Observations:

- Parking lot is too small, with insufficient spaces for staff and visitors.
- Circulation through the parking lot during pick-up and drop-off is inadequate, and creates problems with traffic congestion.
- Pick-up / Drop-off location sees considerable congestion during peak times, and does not allow traffic to flow through.
- No bus drop-off area, so busses currently add to parking lot congestion.
- Existing accessible parking does not meet current requirements.

Landscaping:

Observations:

- The existing landscaping is dated, non-existent in some places, and overgrown in others. The bare areas face erosion issues, and the overgrown areas trap debris as well as providing a home to nuisance pests.
- The landscaping in the sloped planters adjacent to the building is causing moisture intrusion problems, as well as creating a security issue by assisting students in accessing the roof of the building.

Play Surface / Fields / Play Structures:

Observations:

- The existing asphaltic concrete play surfaces appears to be in reasonably good condition, although some repair work is needed.
- The existing sports fields have issues with ground squirrels and gophers. Some parts of the grass fields are bare and/or more weeds than grass.
- Existing play structures appear in good condition; however, the existing shredded rubber in the play structure boxes is depleted and in need of replacement.

Outdoor eating area:

Observations:

- Current outdoor eating area is the grassy amphitheater area, which has no little seating and no covered area.

Building:

Entry Visibility:

Observations:

- Building entry visibility is acceptable, but could be improved.

Administration Area:

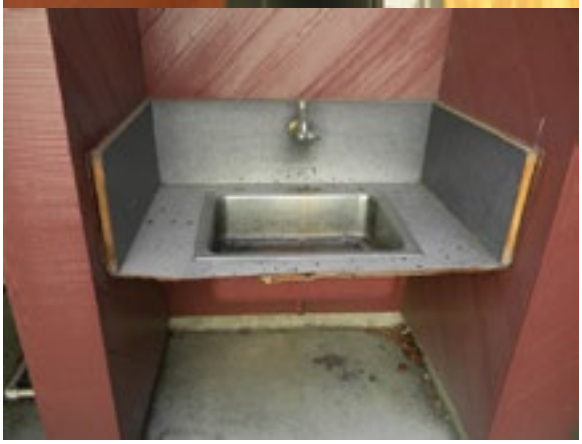
Observations:

- The principal's office is too small to permit a private conference with two parents and a child.
- Conference room too small to hold conferences with the door closed for privacy.
- Some specialty spaces (RSP, Psych, Speech Therapy) are located away from the administration area, and would be better served by being in the space general area as the main administration space.
- Entry has a brick floor that can allow dirt to be tracked in, and become slippery when wet.

Circulation Spaces:

Observations:

- Automatic fire door hardware has exceeded it's expected lifespan, and requires regular maintenance to keep in good operating condition.
- If the proposed doors to the now-open classroom spaces are added, an exit corridor will be required from each classroom "pod".
- Existing outdoor atria spaces are underutilized.

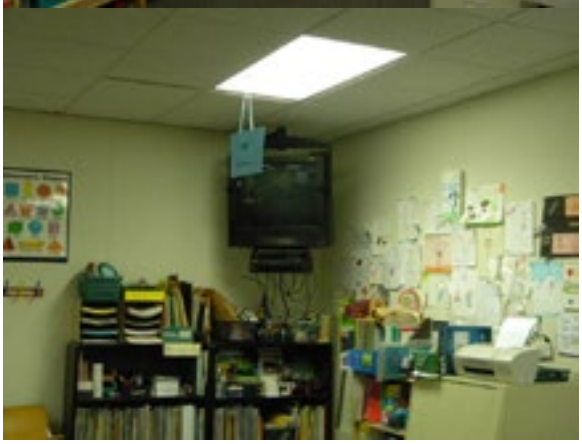


Classroom "Pod" Common Areas

Observations:

- Each of the six "pods" has a common area adjacent to an

exterior courtyard. Each has a sink and a stove that are original to the building. Some of these do not work.



Classrooms:

Observations:

- Classrooms are generally in good condition, although many of the finishes are faded and/or dirty.
- Many classrooms do not have doors, due to original school design's open plan. Partition walls have been added over the years, but doors were never added. This causes noise to easily travel between adjacent classrooms, and also presents a security risk.
- Existing classrooms typically have a CRT television mounted in a location that does not comply with current accessibility requirements.

Library:

Observations:

- Existing book stack capacity is insufficient for current needs.
- Existing clerestory windows are in need of replacement.
- Existing integral media center space is insufficient for current needs.

Multi-Purpose Room:

Observations:

- Most finishes appear in need of replacement.
- Existing clerestory windows are in need of replacement.

- Existing sound system is inadequate for current needs.
- Existing original folding cafeteria tables are in need of replacement.

Campus Circulation and Accessibility:

Observations:

- Occasional areas of concrete or asphalt paving that have heaved or cracked cause accessibility issues.
- Three pairs of the existing exit doors do not meet access requirements.

Specialty Classrooms:

Observations:

- Special Education classrooms are distributed around site due to lack of a centralized location.
- The site currently has no dedicated Science Lab.
- The existing Media Center / Computer Lab space is adjacent to the library in an open and unsecure area without sufficient infrastructure support for the program requirements.

Portable Classrooms:

Observations:

- Four (4) of the existing portable classrooms were placed on the site in 1992. Two (2) more portable classrooms were added in 1996. The portables appear to be in good condition.

Kitchen / Food Service

Observations:

- The existing kitchen layout and equipment do not meet current Department of Health requirements.
- Most existing built-in equipment (refrigerator, freezer, sinks, storage areas, etc.) are beyond their expected lifespan.

Staff Work Areas:

Observations:

- The staff work area appears to be in good condition. The existing casework appears to be aging, although still servicable, and an area of carpet under a drinking fountain needs to be addressed.

Staff Lounge:

Observations:

- The existing staff room finishes are worn and dated.
- The existing casework appears serviceable, although it is beyond it's expected lifespan.

Student Restrooms:

Observations:

- Two of the four pairs of student restrooms have previously been modernized to meet accessibility requirements. The remaining restrooms have not been upgraded, and do not comply with current accessibility standards.
- The existing portable restroom building is in poor condition.
- The existing fixture count (Boys – 6 water closets, 4 urinals, and 4 lavatories; Girls – 10 water closets, 4 lavatories; 2 Unisex water closets and 2 Unisex lavatories) serves the current population of approximately 650 students.

Staff Restrooms:

Observations:

- The existing fixture count (Men – 1 water closet, 1 urinal, and 1 lavatory; Women – 2 water closets, 1 lavatory) serves the current staff population.

Storage and Custodial Spaces:

Observations:

- Overall general storage capacity is good, with many built in cabinets available around the school for supplies and instructional material.
- Custodial spaces in general show signs of wear and tear.

Structural System:

Observations:

- The building at Brooktree Elementary School is one of three identical single-story buildings with a wood framed and concrete shear walls built in 1975. The other two schools are Majestic Elementary School and Summerdale Elementary School, evaluated in separate sections of this report. The building consists of multiple attached classrooms with centralized multi-purpose rooms. The building shape is fairly irregular with the room containing several discontinuities due to differing plate heights and openings in the roof diaphragm.
- The lateral force resisting system consists of a plywood-sheathed roof acting as a horizontal wood diaphragm spanning between vertical concrete shear walls. Seismic loads are resisted in both directions by way of the concrete shear walls located on the interior and exterior of the structure.
- See attached Structural Report (Appendix) for additional information.

Mechanical Systems:

Observations:

- New chiller, boiler, chemical treatment, and pumps were installed in the Equipment Yard in 2007.
- New temperature controls were installed in 2007.
- Existing air handling units, ductwork, and hot and chilled water piping are from original project.

Electrical Systems:

Observations:

- A 1000A, 277/480V, 3-phase, 4-wire switchboard with a 300KVA utility pad mounted transformer located in the electrical service yard provides power to the campus. The switchboard was of original build and in fair condition. According to PG&E record, the current peak usage on the system is of 228 amps.

Low Voltage Systems:

Observations:

- The existing fire alarm system is a manual/automatic system on a Gamewell 610 panel in the Administration building installed in 2003. The panel is in good and functioning condition. The notification devices were not adequate to meet the current code requirements.
- The existing Bogen Multicom 2000 Public Adress and Master Clock system located in the Multi-Purpose Room storage room is in good and functioning condition.

Roofing:

Observations:

- The existing roof is a multi-ply built-up-roofing system. Installed in 2007, it has a 20-year warranty, and has an estimated remaining life of 13-25 years.

Exterior Paint:

Observations:

- The existing exterior paint is generally in good condition, although it is aged, and shows many locations where re-painting has occurred over time.

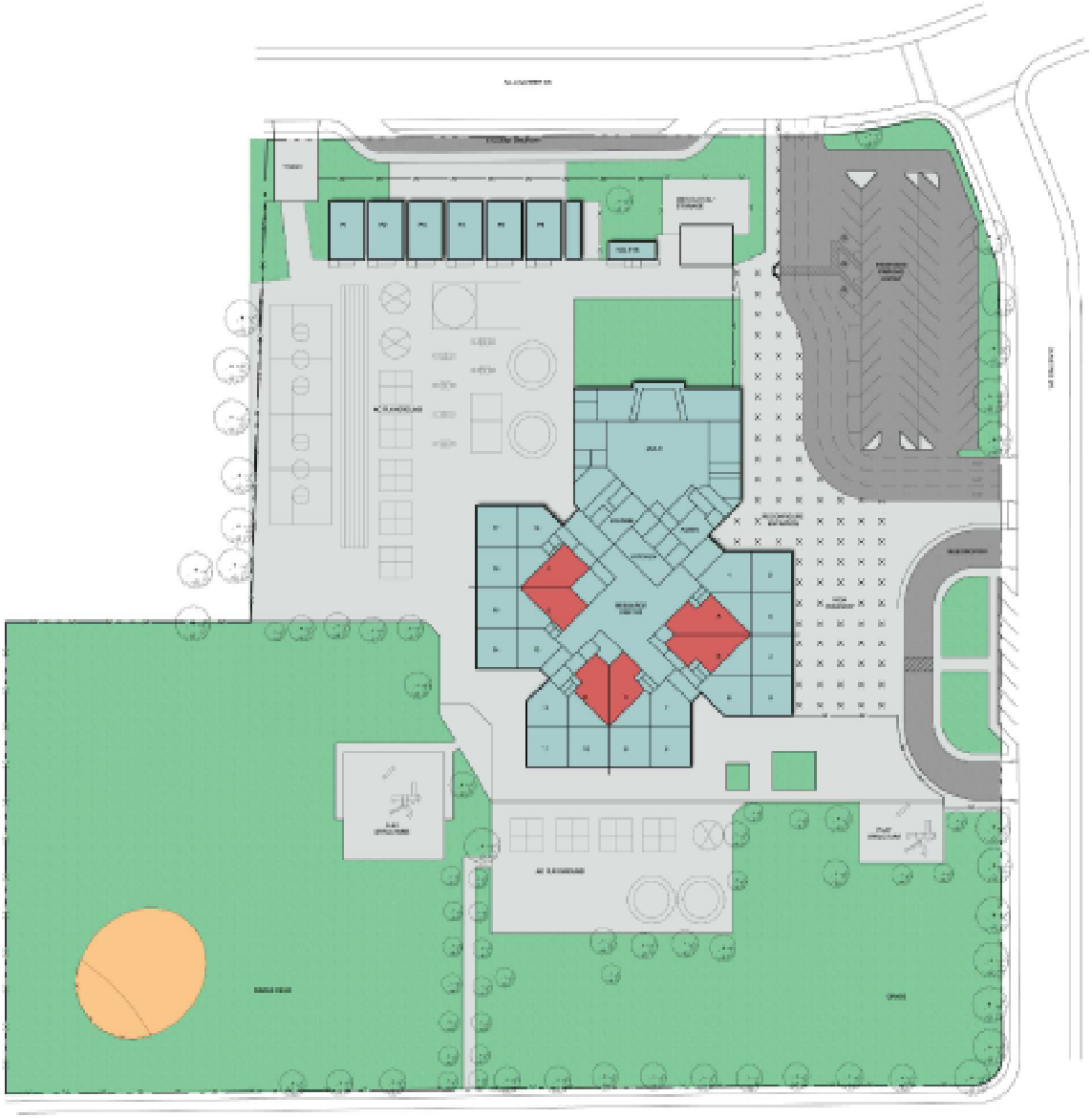
Brooktree Elementary School

Site Plans

EXISTING BUILDING

BROOKTREE ELEMENTARY SCHOOL

EXISTING CONDITIONS



EXISTING BUILDING
REMODEL

BROOKTREE ELEMENTARY SCHOOL

- Reconfigure parking adding stundent/bus drop off
- Incorporate outdoor spaces adjacent to classroom pods into building

Brooktree Elementary School

Paving Assessment Report

BROOKTREE SCHOOL

Summary School Report

Asphalt Surface Evaluation

School Name: Brooktree School

Area	Type	Use	Area (sq. ft.)	Defect Score	Recommendation	Cost	Year
A	EL	Park	29,870	53	Dig out/ Crack Fill/ Seal Coat	$15,475.26	2013
B	EL	Ped	2,504	29	Remove & Replace	$13,020.00	2015
C	EL	Road	4,029	13	Double application Emulsion Se	$1,208.70	2013
D	EL	Play	44,740	53	Dig out/ Crack Fill/ Seal Coat	$20,490.92	2013
E	EL	Road	1,764	13	Double application Emulsion Se	$629.20	2013
F	EL	Ped	1,940	20	Double application Emulsion Se	$582.00	2011
G	EL	Play	14,850	72	Crack Fill and Seal Coat	$7,811.10	2013
H	EL	Ped	984	76	Crack Fill and Seal Coat	$555.96	2011
					Total:	**$59,773.14**	

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Specializing in Pavement Rehabilitation
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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Brooktree School
Area (sf): 29,870
Area Notation: A
Buses: Yes
Surface Type: AC
Garbage Trucks: No
Use: Parking Lots or Areas
Defect Score: 53
Recommended Treatment: Dig out/ Crack Fill/ Seal Coat
Year: 2013
Visual Description: Pavement exhibits moderate raveling with a previous seal (approximately 4 years old) and moderate shrinkage cracking.
Miscellaneous: Slope = 1.8/ 1.0/ 3.3, ADA - 2 locations 1) nearest the main office complies 2) pavement slopes = 2.7%; ramp slope = 9.7%

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
600	0%	0.0%	0.148	M

Crack Width	1/8 - 1/4"

Cost Breakdown

AC Cost:	$10,454.50
CF Cost:	$4,420.76
DO Cost:	$0.00
Misc. Cost:	$600.00
Total Cost:	$15,475.26

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Brooktree School
Area (sf): 2,504
Area Notation: B
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Pedestrian Areas
Defect Score: 29
Recommended Treatment: Remove & Replace
Year: 2015
Visual Description: Pavement exhibits moderate shrinkage cracking, previously sealed, in fair condition, with some tree root damage.
Miscellaneous: Slope = 2.7, Bike rack area; pavement adjacent to sidewalk is uplifted and is a trip hazard.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.073	S

Crack Width	1/8 - 1/4"

Cost Breakdown

AC Cost:	$12,520.00
CF Cost:	$0.00
DO Cost:	$0.00
Misc. Cost:	$500.00
Total Cost:	$13,020.00

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Brooktree School **Area (sf):** 4,029

Area Notation: C **Buses:** No

Surface Type: AC **Garbage Trucks:** No

Use: Roadways, Alleyways, Bus Turnouts, etc.

Defect Score: 13

Recommended Treatment: Double application Emulsion Seal Coat

Year: 2013

Visual Description: Pavement exhibits slight raveling, previous seal (4 years old), and is in fair condition with no cracking.

Miscellaneous: Slope = 2.6/ 3.4, Pavement drains to planter area.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.000	S

Crack Width	0

Cost Breakdown

AC Cost:	$1,208.70
CF Cost:	$0.00
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$1,208.70

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Brooktree School
Area (sf): 44,740
Area Notation: D
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Playground
Defect Score: 53
Recommended Treatment: Dig out/ Crack Fill/ Seal Coat
Year: 2013
Visual Description: Pavement exhibits moderate raveling with a previous seal, fair condition, and some areas of expansion cracking adjacent to field sides
Miscellaneous: Slope = 1.8/ 2.8, Pavement sheet flows away from school to AC swale near park that drains to drop inlets.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.108	M

Crack Width	1/8 - 1/4"

Cost Breakdown

AC Cost:	$15,659.00
CF Cost:	$4,831.92
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$20,490.92

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Brooktree School
Area (sf): 1,764
Area Notation: E
Buses: No
Surface Type: AC
Garbage Trucks: Yes
Use: Roadways, Alleyways, Bus Turnouts, etc.
Defect Score: 13
Recommended Treatment: Double application Emulsion Seal Coat
Year: 2013
Visual Description: Pavement exhibits one small area of alligator cracking (5x5), slight raveling, previous seal (4 years old) in fair condition.
Miscellaneous: Slope = 8.5/ 2.0/ 3.0, Garbage truck access needs dumpster pad.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.000	S

Crack Width	0

Cost Breakdown

AC Cost:	$529.20
CF Cost:	$0.00
DO Cost:	$0.00
Misc. Cost:	$100.00
Total Cost:	$629.20

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Brooktree School
Area (sf): 1,940
Area Notation: F
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Pedestrian Areas
Defect Score: 20
Recommended Treatment: Double application Emulsion Seal Coat
Year: 2011
Visual Description: Pavement exhibits moderate raveling, previously sealed, in poor condition.
Miscellaneous: Slope = 0.9/ 3.2, Pavement drains to lawn area.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.000	M

Crack Width	0

Cost Breakdown

AC Cost:	$582.00
CF Cost:	$0.00
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$582.00

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Brooktree School
Area (sf): 14,850
Area Notation: G
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Playground
Defect Score: 72
Recommended Treatment: Crack Fill and Seal Coat
Year: 2013
Visual Description: Pavement exhibits moderate raveling and moderate shrinkage cracking, previously sealed, fair condition, one large patch (40x80)
Miscellaneous: Slope = 1.6/ 0.6, Pavement drains to lawn and one small utility box that has a solid lid.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.176	M

Crack Width	1/8 - 1/4"

Cost Breakdown

AC Cost:	$5,197.50
CF Cost:	$2,613.60
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$7,811.10

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Brooktree School **Area (sf):** 984

Area Notation: H **Buses:** No

Surface Type: AC **Garbage Trucks:** No

Use: Pedestrian Areas

Defect Score: 76

Recommended Treatment: Crack Fill and Seal Coat

Year: 2011

Visual Description: Pavement exhibits moderate raveling, previous seal (more than 5 years).

Miscellaneous: Slope = 1.0/ 0.5/ 1.4, Pavement drains to adjacent playground and lawn/ planter area.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.215	M

Crack Width	1/8 - 1/4"

Cost Breakdown

AC Cost:	$344.40
CF Cost:	$211.56
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$555.96

12/10/2010

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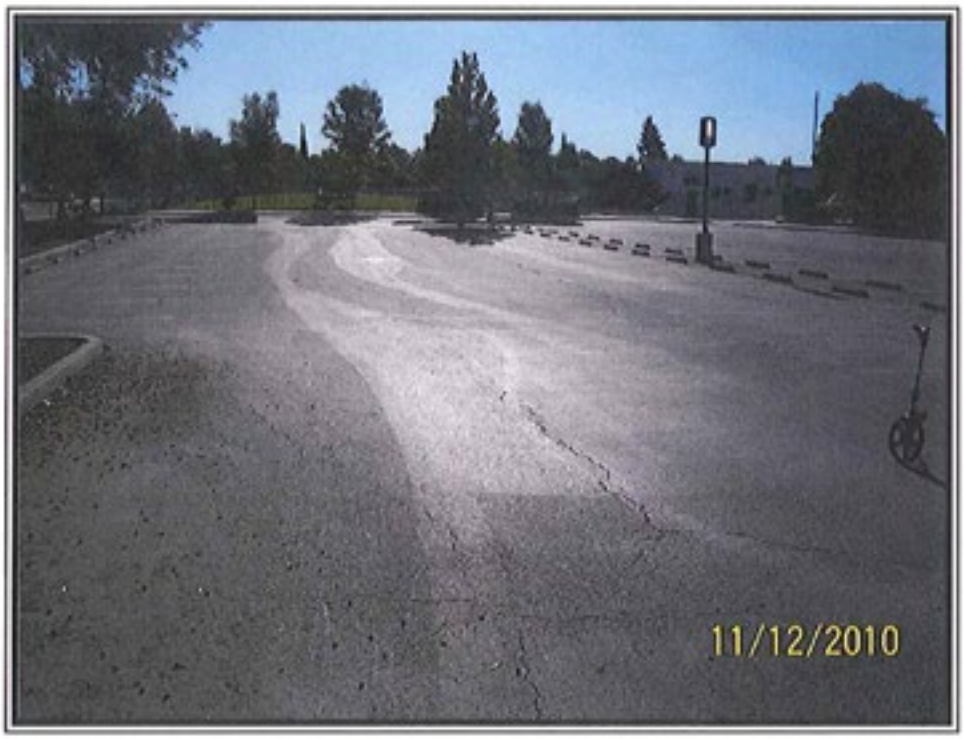
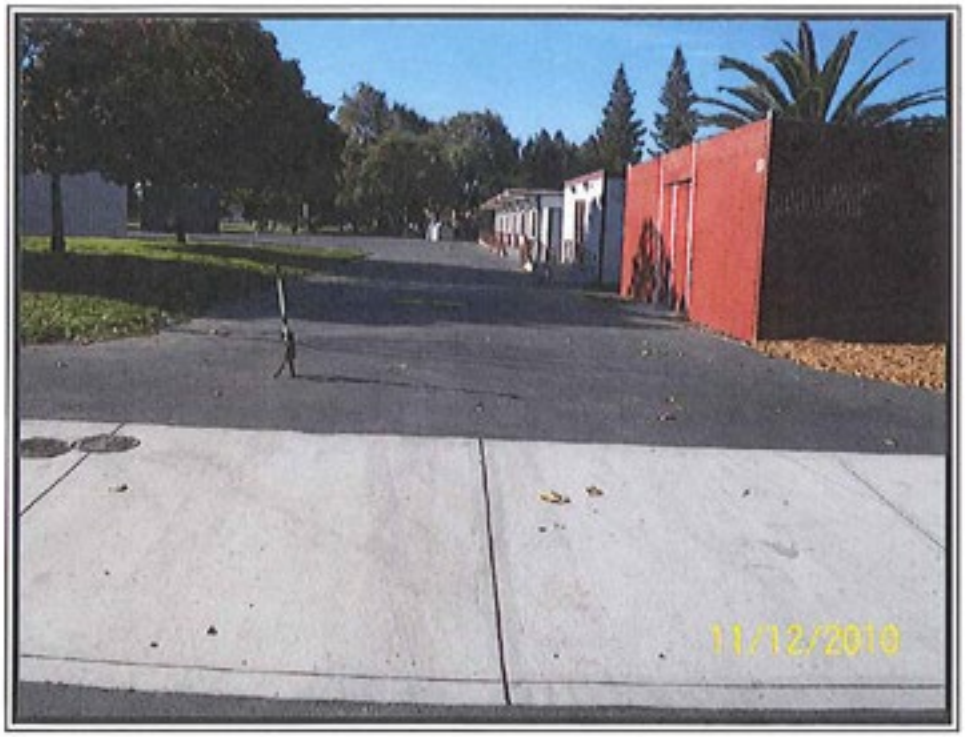


BROOKTREE SCHOOL - AREA A

BROOKTREE SCHOOL - AREA A

BROOKTREE SCHOOL - AREA B

BROOKTREE SCHOOL - AREA B



BROOKTREE SCHOOL - AREA C

BROOKTREE SCHOOL - AREA C

BROOKTREE SCHOOL - AREA D

BROOKTREE SCHOOL - AREA D

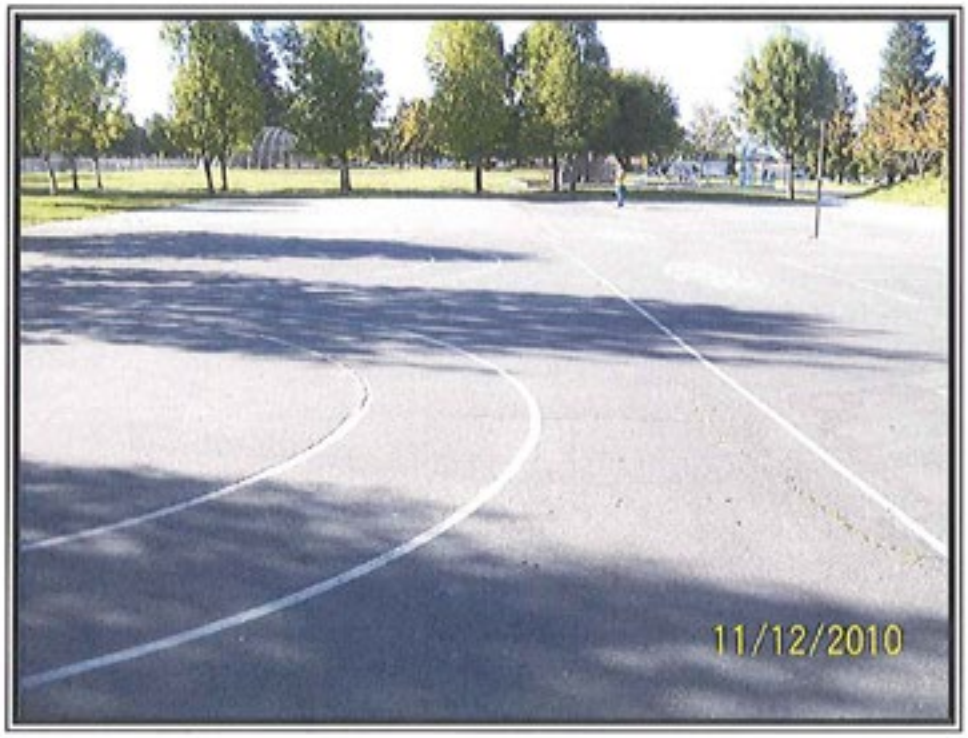
BROOKTREE SCHOOL - AREA E

BROOKTREE SCHOOL - AREA E

BROOKTREE SCHOOL - AREA F

BROOKTREE SCHOOL - AREA F

BROOKTREE SCHOOL - AREA G



BROOKTREE SCHOOL - AREA G

BROOKTREE SCHOOL - AREA H

BROOKTREE SCHOOL - AREA H

Brooktree Elementary School

Seismic Assessment Report

BROOKTREE ELEMENTARY SCHOOL

Key Plan (Photo taken from Google Maps)

Building Descriptions:

The building at Brooktree Elementary is one of three identical single story buildings with a wood framed and concrete shear walls built in 1974. The other two schools are Majestic Elementary School and Summerdale Elementary School, evaluated in separate sections of this report. The building consists of multiple attached classrooms with centralized multipurpose rooms. The building shape is fairly irregular with the roof containing several discontinuities due to differing plate heights and openings in the roof diaphragm.

The lateral force resisting system consists of a plywood sheathed roof acting as horizontal wood diaphragm spanning between vertical concrete shear walls. Seismic loads are resisted in both directions by way of the concrete shear walls located on the interior and exterior of the structure. Our evaluation of the lateral force resisting system revealed that the concrete shear walls appear to be adequately designed, however it is not clear if the as-built condition of the out of plane wall ties are adequate to resist modern day code level forces. We recommend that further evaluation

and investigation be conducted to determine the as-built condition as well as the capacity of the ties supporting the concrete walls out of plane.

Brooktree Elementary School receives a subjective rating of 2.5.

Brooktree Elementary School

Mechanical Systems Assessment Report

BROOKTREE ELEMENTARY SCHOOL
BERRYESSA UNIFIED SCHOOL DISTRICT

A. MECHANICAL BUILDING SYSTEMS

1. Existing Conditions:

a. New chiller, boiler, chemical treatment and pumps installed in the Equipment Yard in 2008.

b. New temperature controls installed in 2008.

c. Existing air handling units, ductwork and hot and chilled water piping are from original project.

2. Recommendations:

a. Remove all existing air handling units and replace with new air handling units.

b. Replace all existing exhaust fans.

c. Replace all insulated supply and return ductwork, diffusers and grilles within the building. Replace all exhaust ductwork within the building.

d. Replace all insulated underground hot and chilled water piping with pre-insulated piping manufactured to be buried below grade.

e. Replace all insulated hot and chilled water piping within the building.

3. General:

a. This report and comments to follow are based on observations of the general condition of the mechanical systems and noticeable code issues resulting from a review of the existing drawings and an on-site visit, when required.

b. Refer to Appendix A for Title 24 requirements and general code issues that should be considered.

BROOKTREE ELEMENTARY SCHOOL
BERRYESSA UNIFIED SCHOOL DISTRICT

APPENDIX-A

a. General

1. Comply requirements of California Mechanical Code (CMC) latest edition.

b. Possible Ventilation Code Issues

1. Corridors cannot be used as plenums for the purpose of supplying or exhausting air.

2. Corridors must have minimum two (2) air changes per hour for ventilation.

3. Minimum ventilation for occupied spaces should be 15 cfm/person or 0.15 cfm/sq. ft., whichever is greater.

4. Exhaust airflow from bathrooms should be based on minimum 10 air changes per hour.

c. Possible Fire Smoke Issues

1. Fire/smoke dampers in the system must be interlocked with fire alarm system.

2. Corridors, lobbies, and building entrances to have dedicated supply air.

3. Chemistry classrooms with occupancy separation shall have fire/smoke damper.

4. All air handling equipment supplying air flow in excess of 2,000 cubic feet per minute to have duct smoke detectors in the supply air duct.

d. Possible Title 24 Issues

1. Heating furnaces to have minimum 80% efficiency.

2. Heating & Ventilating and Air Conditioning systems in excess of 2,500 cfm and a total cooling over 75,000 BTU/h (6.25 Tons) must have an economizer. Economizer must be fully integrated into the cooling system so that depending on the weather conditions, economizer can provide partial/full cooling when additional mechanical cooling is required.

3. Interior supply and return air ductwork (heating & cooling) shall be insulated with minimum R-value of 4.2.

5. Hot and chilled water piping less than 50°F and over 110°F shall be insulated with pipe insulation minimum R-value of 4.2.

6. Heating, ventilating, and air conditioning systems to have control capability with night setback.

8. Heating, ventilating, and air conditioning equipment to be certified by the State of California to meet minimum energy requirements.

Brooktree Elementary School

Electrical and Low Voltage Systems Assessment Report

BROOKTREE ELEMENTARY SCHOOL
BERRYESSA UNION SCHOOL DISTRICT

B. Electrical

1. Power Systems:

A 1000A, 277/480V, 3 phase, 4 wire switchboard with a 300KVA utility pad mounted transformer located in the electrical service yard provides power to the campus. The switchboard was of original built and in fair condition. According to PG&E record, the current peak usage on the system is of 228 amp. There is a spare capacity of 77 amp approximately at the service for future usage. If additional power is needed, the PG&E transformer shall need to be upgraded.

2. Fire Alarm System:

The existing fire alarm system was of manual/automatic system on a Gamewell 610 panel in the administration office installed around 2003. The panel is in good and functioning condition. The notification devices were not adequate to meet the current code requirement.

Recommendations:

a. Provide new horn and strobes in areas required by ADA, NFPA, CEC and CFC.

3. Public Address and Clock Systems:

The existing Bogen Multicom 2000 PA and master clock system located in the multi-purpose building storage room is in good and functioning condition. Existing speaker and clock units are in good condition for reuse.

Will H. Ector, Jr.
Superintendent

1376 Piedmont Road
San Jose, CA 95132-2427

Phone: (408) 923-1800
Fax: (408) 923-0623

Cherrywood Elementary School

2550 Greengate Drive
San Jose, CA

Cherrywood Elementary School Assessment

Statistics:

Enrollment (Nov. 2012):	479
Principal:	LaKeisha Blackshire
Site:	11.0 Acres
Building Area:	Approx. 40,000 SF
Permanent Classrooms:	23
Portable Classrooms:	8 @ 960 SF (plus Library & Daycare)
Total Size:	47,680 SF

Construction History:

1974	School Constructed
1996	Construction of (1) Portable Classroom
1998	Construction of Portable Daycare Building
1999	Construction of (1) Portable Classroom
2004	Modernization Projects
2004	Construction of (3) Portable Classrooms
2006	Construction of (3) Portable Classroom Buildings
2006	Alteration to Main Electrical Service
2006	Construction of Portable Library Building
2010	Alterations to HVAC (boiler and chiller replacement) and Roofing

Cherrywood Elementary School

Site Meeting Minutes

Needs Assessment Scope Categories
Berryessa School District

Cherrywood Elementary School

June 05, 2013

(updated September 17, 2013)

Site

1. Parking lots, traffic control, and drop-off and pick-up areas
    a. Issues with pick-up and drop-off traffic interfering with bus loading zone.
2. PE equipment (Basketball backboards, rims, play structures, matting)
    a. Equipment in reasonable condition.
3. Site (ADA) compliance, paved walkways (tripping hazards, level and clear pathways)
    a. No known issues. SFA to evaluate over the summer.
4. Paved Play Area (size, security, location, condition)
    a. Asphalt surface is in reasonably good condition, currently meeting site needs.
5. Turf play area, landscaping and irrigation
    a. Turf areas have gopher / ground squirrel problems.
6. Fencing and security
    a. Site fencing is inadequate for current security needs.
    b. Funneling visitors through the main office entrance prior to entry to the campus core is desired.
7. Trash enclosure
    a. Trash location is acceptable, needs screening from view.
8. Site Utilities (to the street and campus distribution - gas, water, sewer, storm, power)
    a. No known issues.
    b. Request to investigate source of discoloration in water. (9/17/13)
9. Site Lighting (LED)
    a. Lighting adjacent to buildings is acceptable.
    b. Additional lighting is needed in the parking lot.
    c. Additional exterior lighting is needed at the back of the campus.
10. Covered Shade or Eating Structure
    a. An exterior covered eating area is desirable.
11. Roofing
    a. No known issues.
12. Covered walkways
    a. None currently. A covered path to the portables was requested.
13. Exterior Paint
    a. Good condition.
14. Campus Layout and organization
    a. Better defined entry to main office requested.

b. Potential for re-location of portables. (9/17/13)
c. Lunch room area is way too small for current needs. (9/17/13)

15. Curb Appeal
    a. General landscaping improvements.
16. Portable classrooms/restrooms
    a. Request made for additional restrooms at/near portables.
17. Storage
    a. Request for additional storage around campus.
    b. Small storage building requested. (9/17/13)
18. Drinking fountains
    a. Request for additional drinking fountains at portables.
    b. Replace existing drinking fountains. (9/17/13)
19. Signage
    a. District plans to replace all existing wayfinding signage.
    b. District plans to add marquee signage to each campus.

<u>Building</u>

a. Building Insulation, exterior surfaces
    a. No known issues.
b. Windows (Prep rooms/common areas, condition of windows and amount of natural light)
    a. Discussed infilling of lower windows
c. Exterior Doors and Hardware
    a. Door and hardware replacement will likely be district-wide.
d. Restrooms (Electric hand dryers, partitions, fixtures, re-seal flooring)
    a. Additional restrooms requested for staff and students.
e. Flooring (Carpeting, tiling, resilient, all locations)
    a. No known issues.
    b. Replace VCT in MPR.
f. Tackable Walls surfaces and all other interior finishes
    a. Full-height, wall-to-wall tackable surfaces requested.
g. Ceilings
    a. No known issues.
h. Cabinetry (Teaching walls)
    a. Site indicated that they have casework in classrooms already, need whiteboards.
    b. Evaluate existing casework for replacement. (9/17/13)
i. Classroom size/layout (21st Century Learning environment/classroom)
    a. Meeting to be held on 23JUN2013 with District representatives to discuss this item.
j. Backpack storage or location
    a. Request was made to look into providing storage for backpacks.
k. Interior lighting (LED)
    a. No known issues.
l. Blinds
    a. Window coverings to replace existing blinds was requested.

m. Markerboards
    a. Markerboards in the teaching wall cabinets would be sufficient.
    b. Replace existing markerboards. (9/17/13)
n. Classroom electrical outlets
    a. Additional outlets spread throughout room requested.
o. IT/Data networking (Wi-fi, location, IDF and MDF)
    a. SFA will be meeting with District IT personnel to discuss district-wide implementations.
p. IT/Video network
    a. SFA will be meeting with District IT personnel to discuss district-wide implementations.
q. Communication system (Intercom, Clocks, Speakers)
    a. Intercom and clocks have no known issues.
    b. Request for additional PA speakers for the building exterior was made.
r. Intrusion Alarm
    a. No known issues.
s. Security cameras
    a. Security cameras are planned to be added to all sites as part of this process.
t. Heating and Ventilating and Air Conditioning (Chiller, mechanical equipment, FCU's)
    a. SFA will evaluate these systems over the summer. At this time there are no known issues.
u. Energy management system (Controls for HVAC/Lighting)
    a. No known issues.

Miscellaneous:

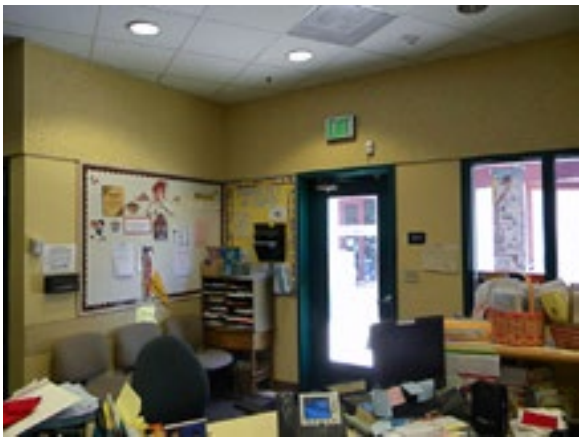
- Photovoltaic Installation (Solar)
    - Solar installation will occur where economically feasible.
- Multi-purpose/Cafeteria efficiency
    - Evaluate flooring and acoustics requested.
    - Increased size for both spaces requested. (9/17/13)
- Administration area functionality
    - Review layout, space utilization.
    - Increased size of conference room requested. (9/17/13)
    - Infill windows of principal's office. (9/17/13)
- Kitchen
    - SFA to meet with District Food Services personnel to discuss district-wide plan.
- Library/Media Center
    - No known issues.
    - Campus has no Media Center space. (9/17/13)
- Specialty Rooms
    - No known issues.
    - No dedicated Music Room space. (9/17/13)
    - No dedicated Science Room space. (9/17/13)
- FFE (Furnishings, Fixtures, Equipment) Lunch tables, classroom furniture, etc.
    - Most furniture is original to the school, and appears in need of replacement.

- Any other creative thoughts/ideas
    - Investigate the possibility of installing an elevator to the existing second floor, potential to re-capture existing upstairs space.
    - Request made for handwashing / sanitizing stations near cafeteria / eating areas.
    - Provide designation of space for kids to assemble near flagpole before and after school.

Grounds:

Security:

Observations:



- While significant portions of this site have a perimeter fence in place, the site is largely open in the front; in addition, there are existing access openings in the fence that need lockable gates added.
- Exterior lighting is insufficient.
- The current administration space is located adjacent to the entries to the main school building, with no direct access control.
- Existing doors often have windows in them, and not all doors have modern security hardware.
- This site has a several windows below head height.

Parking lot and Drop-Off / Pick-Up:

Observations:

- Circulation through the parking lot during pick-up and drop-off is inadequate, and creates problems with traffic congestion.
- Pick-up / Drop-off location sees considerable congestion during peak times, and does not allow traffic to flow through.

Landscaping:

Observations:

- The existing landscaping is dated, non-existent in some places, and overgrown in others. The bare areas face erosion issues, and the overgrown areas trap debris as well as providing a home to nuisance pests.

Play Surface / Fields / Play Structures:

Observations:

- The existing asphaltic concrete play surfaces appear to be in reasonably good condition, although some repair work is needed.
- The existing sports fields have issues with ground squirrels and gophers. Some parts of the grass fields are bare and/or more weeds than grass.
- Existing play structures appear in good condition; however, the existing shredded rubber in the play structure boxes is depleted.

Outdoor eating area:

Observations:

- Current outdoor eating area is an enclosed asphalt area, with some existing seating and no covered area.

Building:

Entry Visibility:

Observations:

- Building entry visibility is acceptable.

Administration Area:

Observations:

- The principal's office is too small to permit a private conference with two parents and a child.
- Conference room too small to hold conferences with the door

closed for privacy.

- Administration area is in a separate area from the main school building.
- Administration area is in a converted classroom pod, due to the necessity of relocating from the originally-designed upper floor location in the main building. This space is too small to house the full complement of administrative staff.

Circulation Spaces:

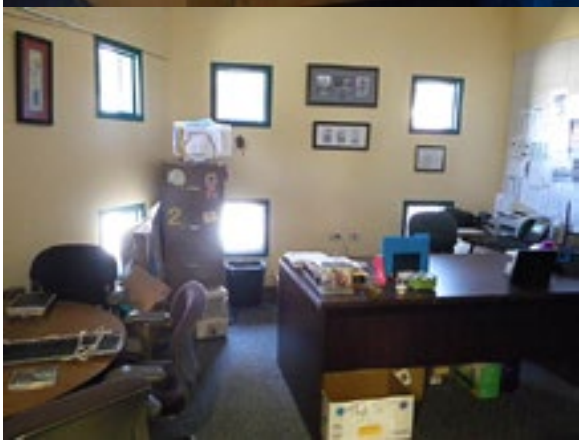
Observations:

- Circulation appears to be acceptable.

Common Area:

Observations:

- The center of the main building consists of a large common area with a very high ceiling space. This space is under-utilized; and with the high ceiling, takes considerable amounts of energy to heat and cool.



Classrooms:

Observations:

- Classrooms are generally in good condition, although many of the finishes are faded and/or dirty.
- Hexagonal-shaped classrooms have irregular ceiling heights.

Library:

Observations:

- The existing library is in a portable building adjacent to the main school building.
- Librarian desk is not accessible.

Multi-Purpose Room:

Observations:

- The existing Multi-Purpose Room space is significantly undersized for this school.
- The existing sound system is not adequate for use as a Multi-Purpose Space.

Campus Circulation and Accessibility:

Observations:

- There is currently no covered walkway to the Library, or the existing portable classrooms.
- Occasional areas of concrete or asphalt paving that have heaved or cracked cause accessibility issues.

Specialty Classrooms:

Observations:

- Special Education classrooms are distributed around site due to lack of a centralized location.
- The site currently has no dedicated Music Lab.
- The site currently has no dedicated Science Lab.
- The existing Media Center / Computer Lab space is in a converted classroom, which lacks the proper infrastructure for power and data distribution.

Portable Classrooms:

Observations:

- The existing portables are in various conditions, although all are still serviceable. The existing ramps are no longer compliant with current accessibility standards, and will need to be

replaced if the portable classroom is ever moved or replaced.

Kitchen / Food Service

Observations:

- The existing kitchen layout and equipment do not meet current Department of Health requirements.
- Most existing built-in equipment (refrigerator, freezer, sinks, storage areas, etc.) are beyond their expected lifespan.

Staff Work Areas:

Observations:

- The staff work area appears to be in good condition. The existing casework appears to be aging, although still serviceable.

Staff Lounge:

Observations:

- The existing staff room finishes are worn and dated.
- The existing casework appears serviceable, although it is beyond it's expected lifespan.

Student Restrooms:

Observations:

- Most of the existing restrooms are not accessible, due to constricted access and lack of suitable space to turn a wheelchair around.
- The existing fixture count of 24 (Boys – 6 water closets, 5 urinals, and 5 lavatories; Girls

– 9 water closets, 5 lavatories) serves the current population of approximately 480 students, and recommended changes to the restrooms to improve accessibility will likely reduce the fixture count as each remaining fixture is given more space.

Staff Restrooms:

Observations:

- The existing fixture count of four (7) (Men – 2 water closets, 2 urinals, and 2 lavatories; Women – 3 water closets, 2 lavatories) serves the current staff population.
- Restrooms do not comply with current accessibility standards.

Storage and Custodial Spaces:

Observations:

- Overall general storage capacity is limited, and existing built-in storage is worn.
- Custodial spaces in general show signs of wear and tear.

Structural System:

Observations:

- The Cherrywood Elementary School building is a tall, single story structure with a mezzanine level. Only a partial set of drawings was available for this building, and very little could be determined from the plans. The building roof appears to be comprised of an open-web truss system spanning between steel beams and concrete columns.
- The lateral force resisting system could not be ascertained from the available drawings.

Mechanical Systems:

Observations:

- New chiller, boiler, and pumps (with VFD's) were installed in the Equipment Yard in 2010.
- New exhaust fans were installed in 2010.
- New temperature controls were installed in 2010.
- Existing indoor air handling units in main building and Administration Building are original.
- Existing ductwork and air distribution in building is original.

Electrical Systems:

Observations:

- A 1600A, 277/480V, 3-phase, 4-wire switchboard with a 300KVA utility pad mounted transformer located at the mechanical chiller yard provides power to the campus. The switchboard was installed in 2006, and is in good and functioning condition. According to PG&E record, the current peak usage on the system is of 228 amps.

Low Voltage Systems:

Observations:

- The existing fire alarm system is a manual system on a Gamewell 610 panel in the Administration building installed around 2003. The panel is in good and functioning condition. The notification devices were not adequate to meet the current code requirements.
- The existing Bogen Multicom 2000 Public Address and Master Clock system located in the Multi-Purpose Room storage room is in good and functioning condition.

Roofing:

Observations:

- The existing roof is a multi-ply built-up-roofing system. Installed in 2010, it has a 20-year warranty, and has an estimated remaining life of 17-20 years.

Exterior Paint:

Observations:

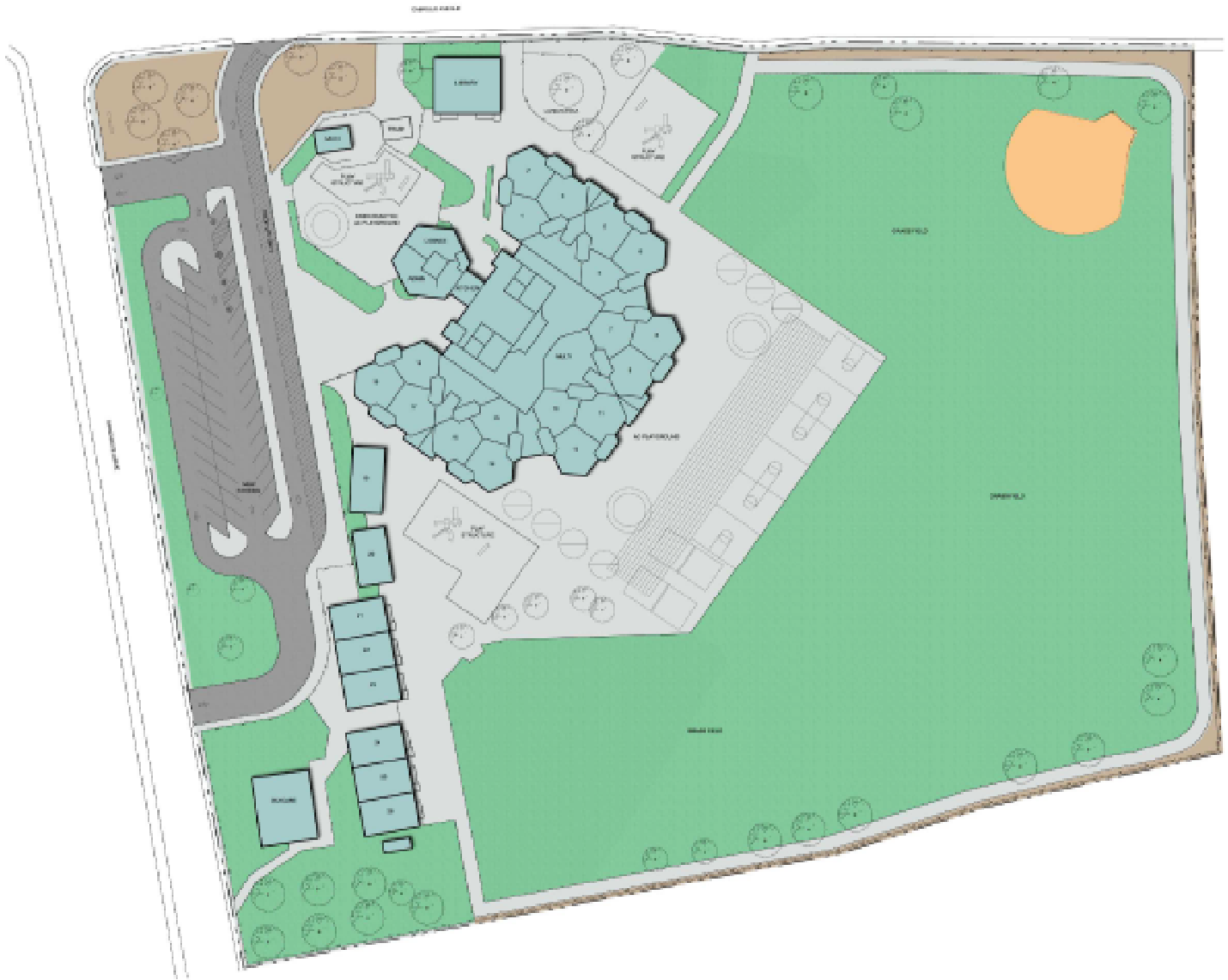
- The existing exterior paint is generally in good condition, although it is aged, and shows many locations where re-painting has occurred over time.

Cherrywood Elementary School

Site Plans

CHERRYWOOD ELEMENTARY SCHOOL

EXISTING CONDITIONS



CHERRYWOOD ELEMENTARY SCHOOL

EXISTING BUILDINGS

- Reconfigure parking to add additional student drop off area

Cherrywood Elementary School

Paving Assessment Report

CHERRYWOOD SCHOOL

Summary School Report

Asphalt Surface Evaluation

School Name: Cherrywood School

Area	Type	Use	Area (sq. ft.)	Defect Score	Recommendation	Cost	Year
A	EL	Park	22,596	44	Crack Fill and Seal Coat	$10,416.76	2011
B	EL	Ped	1,908	25	Crack Fill and Seal Coat	$1,278.46	2011
C	EL	Ped	24,210	10	Double application Emulsion Se	$7,263.00	2012
D	EL	Ped	13,050	19	Crack Fill and Seal Coat	$5,641.70	2012
E	EL	Play	36,026	33	Crack Fill and Seal Coat	$16,247.73	2012
F	EL	Play	4,950	34	Crack Fill and Seal Coat	$2,128.50	2012
G	EL	Road	1,490	44	Double application Emulsion Se	$4,447.00	2011
H	EL	Ped	8,994	23	Crack Fill and Seal Coat	$4,023.52	2011
					Total:	**$51,446.66**	

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Cherrywood School
Area (sf): 22,596
Area Notation: A
Buses: Yes
Surface Type: AC
Garbage Trucks: No
Use: Parking Lots or Areas
Defect Score: 44
Recommended Treatment: Crack Fill and Seal Coat
Year: 2011
Visual Description: Pavement exhibits moderate raveling and moderate block shrinkage cracking.
Miscellaneous: Slope = 0.1, ADA - needs signage and ramp needs to be replaced (8x25), pavement drains to curb and gutter.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.111	M

Crack Width	1/8 - 1/4"

Cost Breakdown

AC Cost:	$7,908.60
CF Cost:	$2,508.16
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$10,416.76

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Cherrywood School
Area (sf): 1,908
Area Notation: B
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Pedestrian Areas
Defect Score: 25
Recommended Treatment: Crack Fill and Seal Coat
Year: 2011
Visual Description: Pavement exhibits slight raveling, AC edge east of planter failing, needs headerboard.
Miscellaneous: Slope = 2.7/ 7.5, Drains to planters.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.058	S

Crack Width	1/8 - 1/4"

Cost Breakdown

AC Cost:	$667.80
CF Cost:	$110.66
DO Cost:	$0.00
Misc. Cost:	$500.00
Total Cost:	$1,278.46

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Cherrywood School
Area (sf): 24,210
Area Notation: C
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Pedestrian Areas
Defect Score: 10
Recommended Treatment: Double application Emulsion Seal Coat
Year: 2012
Visual Description: Pavement is newer with slight raveling and has never been sealed.
Miscellaneous: Slope = 3/ 3.8/ 9.3, Pavement drains to drop inlets located within the area.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.000	S

Crack Width	0

Cost Breakdown

AC Cost:	$7,263.00
CF Cost:	$0.00
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$7,263.00

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Cherrywood School
Area (sf): 13,050
Area Notation: D
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Pedestrian Areas
Defect Score: 19
Recommended Treatment: Crack Fill and Seal Coat
Year: 2012
Visual Description: Pavement exhibits slight raveling with slight expansion cracking.
Miscellaneous: Slope = 3.1/ 0.3, Drains to adjacent field and planters, minor tree root damage.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.044	S

Crack Width	<1/8"

Cost Breakdown

AC Cost:	$4,567.50
CF Cost:	$574.20
DO Cost:	$0.00
Misc. Cost:	$500.00
Total Cost:	$5,641.70

12/10/2010

Pavement Engineering Inc
Civil Engineers - Materials Testing
Specializing in Pavement Rehabilitation
San Luis Obispo Office (805) 781-2265

BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Cherrywood School
Area (sf): 36,026
Area Notation: E
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Playground
Defect Score: 33
Recommended Treatment: Crack Fill and Seal Coat
Year: 2012
Visual Description: Pavement exhibits slight raveling, previously sealed (approximately 4 years old), slight shrinkage cracking.
Miscellaneous: Pavement drains to the adjacent field.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.101	S

Crack Width	<1/8"

Cost Breakdown

AC Cost:	$12,609.10
CF Cost:	$3,638.63
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$16,247.73

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Cherrywood School
Area (sf): 4,950
Area Notation: F
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Playground
Defect Score: 34
Recommended Treatment: Crack Fill and Seal Coat
Year: 2012
Visual Description: Pavement exhibits slight raveling, previously sealed (3 years old).
Miscellaneous: Slope = 0.6/ 2.4, Pavement drains to drop inlets in area.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.080	S

Crack Width	1/8 - 1/4"

Cost Breakdown

AC Cost:	$1,732.50
CF Cost:	$396.00
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$2,128.50

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Cherrywood School **Area (sf):** 1,490

Area Notation: G **Buses:** No

Surface Type: AC **Garbage Trucks:** Yes

Use: Roadways, Alleyways, Bus Turnouts, etc.

Defect Score: 44

Recommended Treatment: Double application Emulsion Seal Coat

Year: 2011

Visual Description: Pavement exhibits moderate raveling and some trench settlement.

Miscellaneous: Slope - 4.2/ 2.1, Need dumpster pad.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.052	M

Crack Width	1/8 - 1/4"

Cost Breakdown

AC Cost:	$447.00
CF Cost:	$0.00
DO Cost:	$0.00
Misc. Cost:	$4,000.00
Total Cost:	$4,447.00

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Cherrywood School
Area (sf): 8,994
Area Notation: H
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Pedestrian Areas
Defect Score: 23
Recommended Treatment: Crack Fill and Seal Coat
Year: 2011
Visual Description: Pavement exhibits slight raveling and trenching in one area of alligator cracking (5x5).
Miscellaneous: Slope = 1.4/ 8.1, Pavement drains to drop inlets located within the area.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.064	S

Crack Width	<1/8"

Cost Breakdown

AC Cost:	$3,147.90
CF Cost:	$575.62
DO Cost:	$0.00
Misc. Cost:	$300.00
Total Cost:	$4,023.52

12/10/2010

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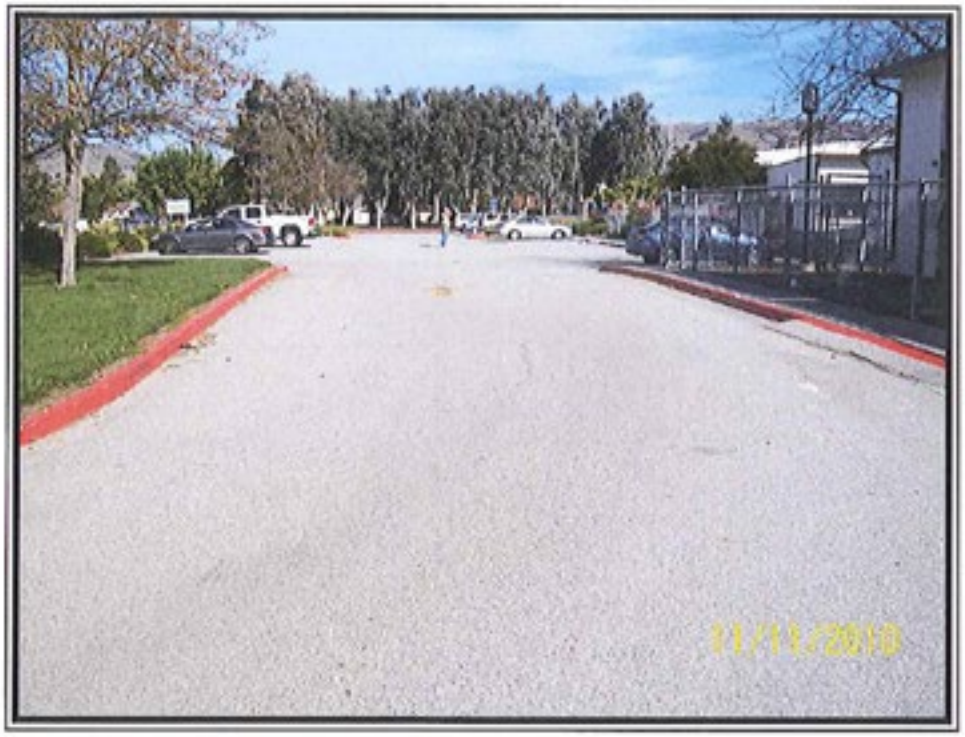


CHERRYWOOD SCHOOL - AREA A

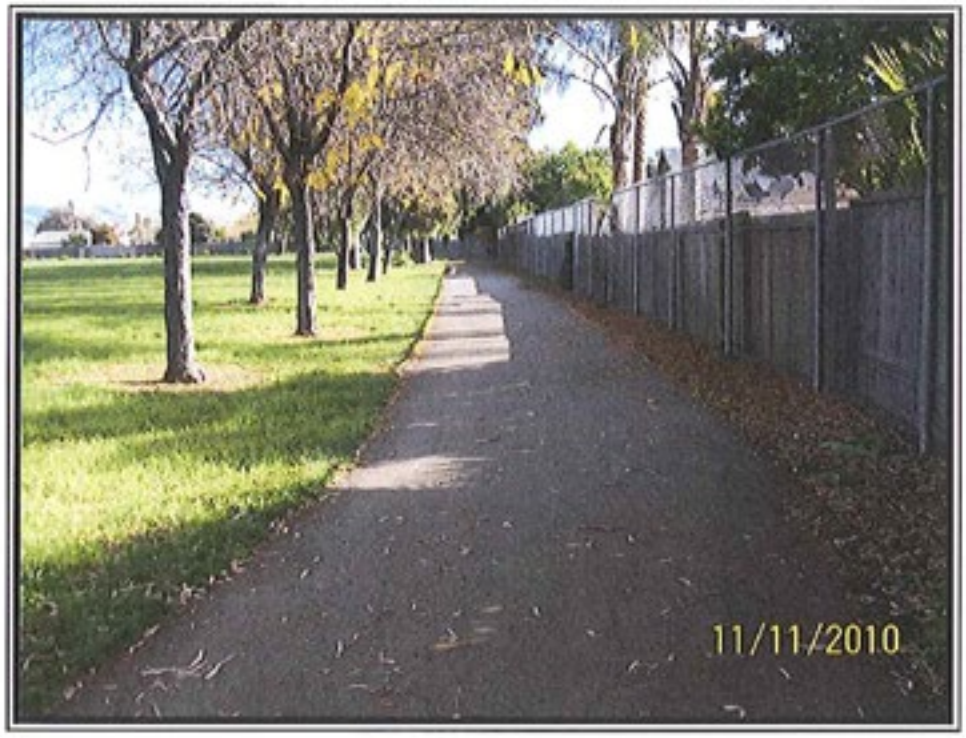
CHERRYWOOD SCHOOL - AREA A

CHERRYWOOD SCHOOL - AREA B

CHERRYWOOD SCHOOL - AREA B

CHERRYWOOD SCHOOL - AREA C

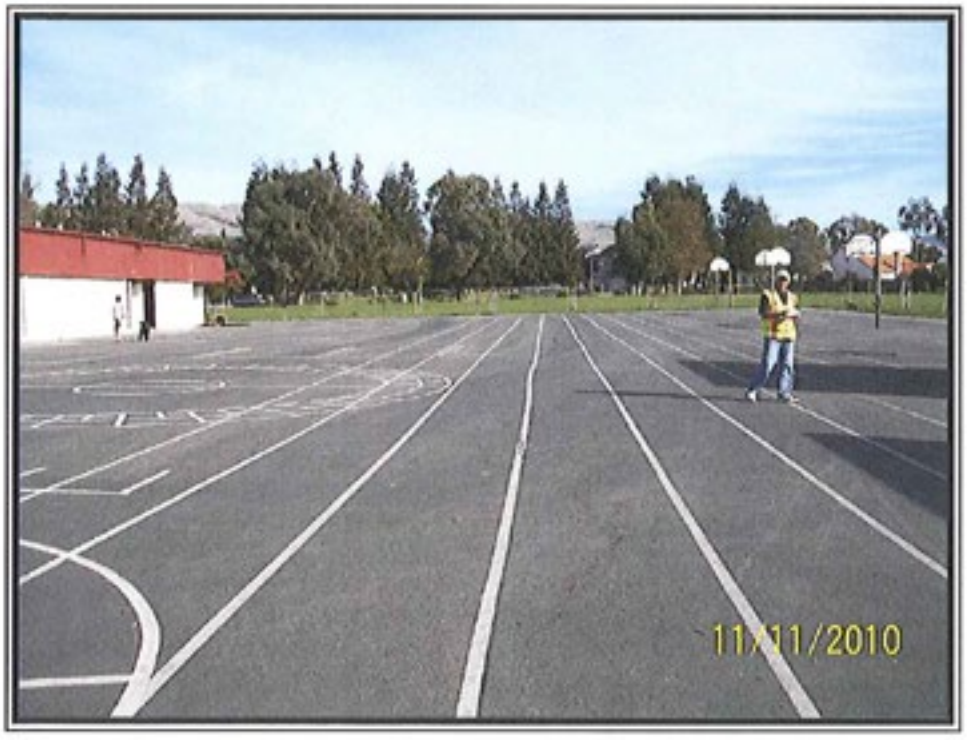
CHERRYWOOD SCHOOL - AREA C



CHERRYWOOD SCHOOL - AREA D

CHERRYWOOD SCHOOL - AREA D

CHERRYWOOD SCHOOL - AREA E



CHERRYWOOD SCHOOL - AREA E

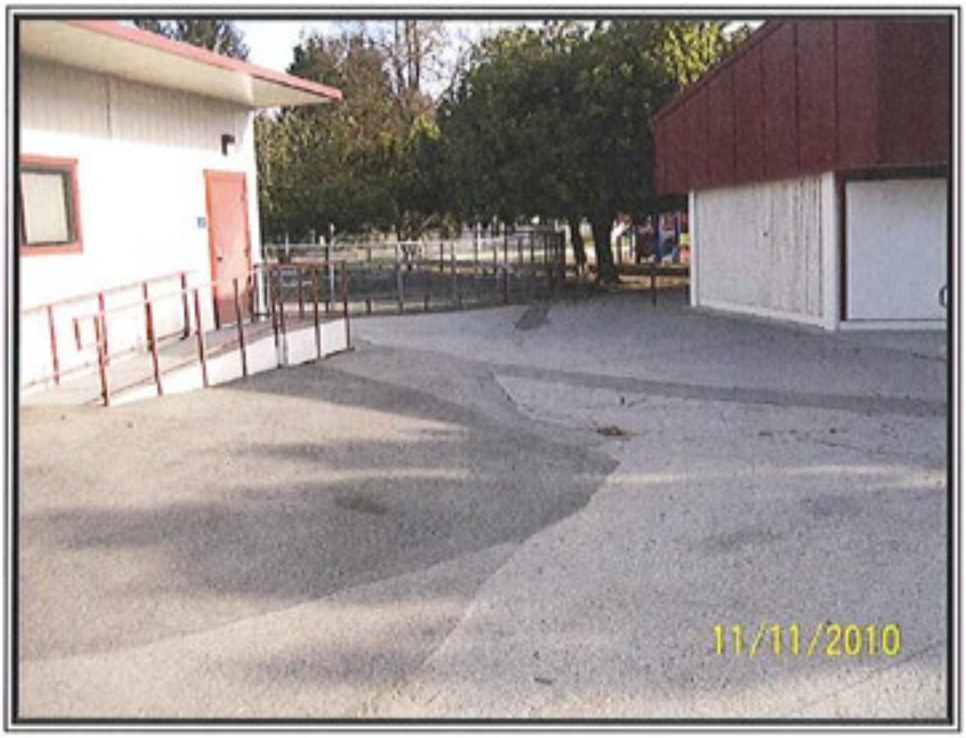
CHERRYWOOD SCHOOL - AREA F

CHERRYWOOD SCHOOL - AREA F

CHERRYWOOD SCHOOL - AREA G

CHERRYWOOD SCHOOL - AREA G

CHERRYWOOD SCHOOL - AREA H



CHERRYWOOD SCHOOL - AREA H

Cherrywood Elementary School

Seismic Assessment Report

CHERRYWOOD ELEMENTARY SCHOOL

Key Plan (Photo taken from Google Maps)

Building Description:

The Cherrywood Elementary School Building is a tall single story structure with a mezzanine level. The drawings provided at the time of this review were incomplete. Only a partial set of Architectural plans were available. Very little information could be concluded from the plans. The building roof appears to be comprised of an open web truss system spanning between steel beams and concrete columns. A lateral system for the structure could not be determined. Since structural drawings were not made available for the building design, we recommend that these drawings be located and reviewed or the existing buildings be visually observed, documented and reviewed.

Cherrywood Elementary School does not receive a subjective rating at this time.

Cherrywood Elementary School

Mechanical Systems Assessment Report

CHERRYWOOD ELEMENTARY SCHOOL
BERRYESSA UNIFIED SCHOOL DISTRICT

A. MECHANICAL BUILDING SYSTEMS

1. Existing Conditions:

a. New chillers, boilers and pumps (with VFD's) installed in the Equipment Yard in 2010.

b. New exhaust fans installed in 2010.

c. New temperature controls installed in 2010.

d. Existing indoor air handling units in main building and Administration building are original.

e. Existing ductwork and air distribution in building is original.

2. Recommendations:

a. Remove all existing air handling units and replace with new air handling units. Install the replacement units most matching the removed units to minimize the modifications to the duct connections and the unit supports.

b. Replace all insulated supply and return ductwork, diffusers and grilles within the building. Replace all exhaust ductwork within the building.

c. Replace all insulated underground hot and chilled water piping with pre-insulated piping manufactured to be buried below grade.

d. Replace all insulated hot and chilled water within the building.

3. General:

a. This report and comments to follow are based on observations of the general condition of the mechanical systems and noticeable code issues resulting from a review of the existing drawings and an on-site visit, when required.

b. Refer to Appendix A for Title 24 requirements and general code issues that should be considered.

APPENDIX-A

a. General

1. Comply requirements of California Mechanical Code (CMC) latest edition.

b. Possible Ventilation Code Issues

1. Corridors cannot be used as plenums for the purpose of supplying or exhausting air.

2. Corridors must have minimum two (2) air changes per hour for ventilation.

3. Minimum ventilation for occupied spaces should be 15 cfm/person or 0.15 cfm/sq. ft., whichever is greater.

4. Exhaust airflow from bathrooms should be based on minimum 10 air changes per hour.

c. Possible Fire Smoke Issues

1. Fire/smoke dampers in the system must be interlocked with fire alarm system.

2. Corridors, lobbies, and building entrances to have dedicated supply air.

3. Chemistry classrooms with occupancy separation shall have fire/smoke damper.

6. All air handling equipment supplying air flow in excess of 2,000 cubic feet per minute to have duct smoke detectors in the supply air duct.

d. Possible Title 24 Issues

1. Heating & Ventilating and Air Conditioning systems in excess of 2,500 cfm and a total cooling over 75,000 BTU/h (6.25 Tons) must have an economizer. Economizer must be fully integrated into the cooling system so that depending on the weather conditions, economizer can provide partial/full cooling when additional mechanical cooling is required.

2. Exterior supply and return air ductwork (heating & cooling) shall be insulated with minimum R-value of 8.0.

3. Interior supply and return air ductwork (heating & cooling) shall be insulated with minimum R-value of 4.2.

4. Hot and chilled water piping less than 50°F and over 110°F shall be insulated with pipe insulation minimum R-value of 4.2.

5. Heating, ventilating, and air conditioning systems to have control capability with night setback.

6. Heating, ventilating, and air conditioning equipment to be certified by the State of California to meet minimum energy requirements.

Cherrywood Elementary School

Electrical and Low Voltage Systems Assessment Report

B. Electrical

1. Power Systems:

A 1600A, 277/480V, 3 phase, 4 wire switchboard with a 300KVA utility pad mounted transformer located at the mechanical chiller yard provides power to the campus. The switchboard was installed around 2005 and is in good and functioning condition. According to PG&E record, the current peak usage on the system is of 228 amp. There is a spare capacity of 84 amp approximately at the service for future usage. If additional power is needed, the PG&E transformer shall need to be upgraded.

2. Fire Alarm System:

The existing fire alarm system was of manual system on a Gamewell 610 panel in the administration office storage room installed around 2003. The panel is in good and functioning condition. The initiation and notification devices were not adequate to meet the current code requirement.

Recommendations:

a. Provide new horn and strobes in areas required by ADA, NFPA, CEC and CFC.
b. Provide smoke detectors below ceiling and heat detector above accessible ceiling for a complete coverage automatic system with supervision and monitoring capability.

3. Public Address and Clock Systems:

The existing Bogen Multicom 2000 PA and master clock system located in the main office storage room is in good and functioning condition. Existing speaker and clock units are in good condition for reuse.

Will H. Ector, Jr.
Superintendent

1376 Piedmont Road
San Jose, CA 95132-2427

Phone: (408) 923-1800
Fax: (408) 923-0623

Laneview Elementary School

2095 Warmwood Lane
San Jose, CA

Laneview Elementary School Assessment

Statistics:

Enrollment (Nov. 2012):	484
Principal:	Virginia Catbagan
Site:	11.0 Acres
Building Area:	Approx. 35,000 SF
Permanent Classrooms:	28
Portable Classrooms:	5 @ 960 SF
Total Size:	39,800 SF

Construction History:

1968	School Constructed
1995	Construction of (2) Portable Classrooms
1998	Construction of (2) Portable Classrooms
1999	Repair Damage at (4) Canopies
2002	Modernization Projects
2006	Construction of (1) Portable Classroom
2008	Reconstruction of (1) Classroom Bldg Fire Damage Repair (Bldg C)
2009	HVAC Upgrade to (3) Classrooms, Multi-Purpose/Library/Administration
2009	Campus Fire Alarm Upgrade
2009	Roofing Removal and Replacement

Laneview Elementary School

Site Meeting Minutes

Needs Assessment Scope Categories
Berryessa School District

Laneview Elementary School

May 29, 2013

(updated September 26, 2013)

Site

1. Parking lots, traffic control, and drop-off and pick-up areas
    a. Issues with pick-up and drop-off area size and location.
    b. Insufficient staff parking available.
    c. This was identified as a major issue on this campus. (9/26/13)
    d. Side lot to be parking only, no drop-off. Front lot to be drop-off only, no parking. (9/26/13)
2. PE equipment (Basketball backboards, rims, play structures, matting)
    a. Equipment needs replacing.
    b. Site requested an additional play structure (for a total of three). (9/26/13)
3. Site (ADA) compliance, paved walkways (tripping hazards, level and clear pathways)
    a. Need an accessible ramp from the fields to campus.
    b. Some drains noted as being too low, with steep sides that cause a problem. (9/26/13)
4. Paved Play Area (size, security, location, condition)
    a. Asphalt surface is in reasonably good condition.
    b. Additional paved play surface area requested.
    c. Kindergarten asphalt noted as needing replacement. (9/26/13)
5. Turf play area, landscaping and irrigation
    a. Turf condition is acceptable.
    b. Gopher and squirrel problems noted. (9/26/13)
6. Fencing and security
    a. Site fencing is inadequate for current security needs.
    b. Funneling visitors through the main office entrance prior to entry to the campus core is desired.
    c. Site noted necessity of fencing the entire site, including the turf play area. (9/26/13)
7. Trash enclosure
    a. Trash location is acceptable, needs screening from view.
8. Site Utilities (to the street and campus distribution - gas, water, sewer, storm, power)
    a. Drainage problems were noted near the kindergarten area.
    b. Two drains were noted to have a bad odor coming from them. (9/26/13)
9. Site Lighting (LED)
    a. Lighting requested for stairs at rear of building.
    b. Exterior building lighting requested. (9/26/13)
    c. Play area lighting requested. (9/26/13)
    d. Lighting at portables requested. (9/26/13)
    e. Lighting issues were noted as being a significant need. (9/26/13)

10. Covered Shade or Eating Structure
    a. Students currently eat indoors.
11. Roofing
    a. No known issues.
12. Covered walkways
    a. None requested.
    b. Overhangs at building perimeters requested to facilitate dry travel from room to room. (9/26/13)
13. Exterior Paint
    a. Areas of graffiti need to be covered.
14. Campus Layout and organization
    a. Better defined entry to main office requested.
    b. Not enough space overall.
    c. Music room is too small.
15. Curb Appeal
    a. No issues noted.
    b. Updated landscaping discussed. (9/26/13)
16. Portable classrooms/restrooms
    a. No known issues at portable classrooms.
17. Storage
    a. Request for storage of PE equipment and maintenance supplies.
    b. Central custodial storage requested. (9/26/13)
18. Drinking fountains
    a. Need additional drinking fountains spread around campus.
    b. Existing drinking fountains do not work properly.
19. Signage
    a. District plans to replace all existing wayfinding signage.
    b. District plans to add marquee signage to each campus.

<u>Building</u>

a. Building Insulation, exterior surfaces
    a. No known issues.
    b. Remove existing free-air louvers, infill. (9/26/13)
b. Windows (Prep rooms/common areas, condition of windows and amount of natural light)
    a. Site prefers the open look of their school, window infill not desired.
c. Exterior Doors and Hardware
    a. Door and hardware replacement will likely be district-wide.
    b. Request made for locking system for special ed students to prevent “runners”. (9/26/13)
d. Restrooms (Electric hand dryers, partitions, fixtures, re-seal flooring)
    a. Additional restrooms requested for staff.
    b. Kindergarten restrooms noted as being inside classroom spaces. (9/26/13)
    c. Additional restrooms requested for students. (9/26/13)
e. Flooring (Carpeting, tiling, resilient, all locations)
    a. No known issues.

   b. Restroom tile noted as needing replacement. (9/26/13)

f. Tackable Walls surfaces and all other interior finishes
   a. Full-height, wall-to-wall tackable surfaces requested.
   b. Replace as necessary. (9/26/13)

g. Ceilings
   a. No known issues.

h. Cabinetry (Teaching walls)
   a. Concerns about size of potential teaching walls in this site's small classrooms.

i. Classroom size/layout (21st Century Learning environment/classroom)
   a. Meeting to be held on 23JUN2013 with District representatives to discuss this item.

j. Backpack storage or location
   a. Request was made to look into providing storage for backpacks.
   b. Exterior hooks requested (preferably under new overhangs). (9/26/13)

k. Interior lighting (LED)
   a. Lighting (and acoustics) in Music / MPR space need improvement.
   b. New stage lighting requested. (9/26/13)

l. Blinds
   a. Window coverings to replace existing horizontal blinds were requested.
   b. If blinds are provided, peepholes in the door were noted as necessary. (9/26/13)

m. Markerboards
   a. Wall mounted preferred, not in teaching wall cases.

n. Classroom electrical outlets
   a. Additional outlets spread throughout room requested.

o. IT/Data networking (Wi-fi, location, IDF and MDF)
   a. SFA will be meeting with District IT personnel to discuss district-wide implementations.

p. IT/Video network
   a. SFA will be meeting with District IT personnel to discuss district-wide implementations.

q. Communication system (Intercom, Clocks, Speakers)
   a. Intercom and clocks have no known issues.
   b. Request for additional PA speakers for the building exterior was made.

r. Intrusion Alarm
   a. No known issues.
   b. Issues noted with doors that swell/shrink under direct sun, causing faults on the security system. (9/26/13)

s. Security cameras
   a. Security cameras are planned to be added to all sites as part of this process.

t. Heating and Ventilating and Air Conditioning (Chiller, mechanical equipment, FCU's)
   a. SFA will evaluate these systems over the summer. At this time there are no known issues.

u. Energy management system (Controls for HVAC/Lighting)
   a. Request was made to remove supply registers from current low location on side walls.

Miscellaneous:

- Photovoltaic Installation (Solar)
  - Solar installation will occur where economically feasible.

- Multi-purpose/Cafeteria efficiency
    - Lighting and acoustics need to be addressed.
- Administration area functionality
    - Issues noted with usability, ventilation, and organization of existing space.
    - Site has no production room. (9/26/13)
    - Capture atrium space. (9/26/13)
    - Sky lights requested where little natural light is present. (9/26/13)
- Kitchen
    - SFA to meet with District Food Services personnel to discuss district-wide plan.
    - Request made to provide a salad bar with sneezeguard. (9/26/13)
- Library/Media Center
    - Requests for improvement to library space, better organization, possible increase in size, better storage.
    - Request for additional lighting. (9/26/13)
    - Request for additional electrical and data outlets. (9/26/13)
- Specialty Rooms
    - Staff room was noted as too small.
    - Site has no science space. (9/26/13)
    - Psychologist space needs to be soundproofed for privacy. (9/26/13)
    - Speech Room is too small. (9/26/13)
    - Conference room is too small. (9/26/13)
- FFE (Furnishings, Fixtures, Equipment) Lunch tables, classroom furniture, etc.
    - Most furniture is original to the school, and appears in need of replacement.
- Any other creative thoughts/ideas
    - Kids restrooms are not accessible.
    - Restrooms need privacy screens. (9/26/13)

Grounds:

Security:

Observations:

- While significant portions of this site have a perimeter fence in place, the site is largely open in the front and along the Warmwood Lane side; in addition, there are existing access openings in the fence that need lockable gates added.
- The campus core is secured with 4 double-door style gates. These gates are in poor condition, and are not compliant with current accessibility requirements.
- Exterior lighting is insufficient.

- The current administration space is located adjacent to the entries to the main school building, with no direct access control.
- Existing doors often have windows in them, and not all doors have modern security hardware.
- This site has a several windows below head height.

Parking lot and Drop-Off / Pick-Up:

Observations:

- Circulation through the parking lot during pick-up and drop-off is inadequate, and creates problems with traffic congestion.
- Pick-up / Drop-off location sees considerable congestion during peak times, and does not allow traffic to flow through.
- The proximity of the driveways to an intersection controlled by a stop sign adds to this conges-

tion as pedestrians and cars navigate the area.

- The circulation problems cause parents to park along the street, further adding to congestion. The streets are narrow, residential streets that already see many residents parking along the curb, further narrowing the street.

Landscaping:

Observations:

- The existing landscaping is dated, non-existent in some places, and overgrown in others. The bare areas face erosion issues, and the overgrown areas trap debris as well as providing a home to nuisance pests.

Play Surface / Fields / Play Structures:

Observations:

- The existing asphaltic concrete play surfaces appear to be in reasonably good condition, although some repair work is needed.
- The existing sports fields have issues with ground squirrels and gophers. Some parts of the grass fields are bare and/or more weeds than grass.
- Existing play structures appear in good condition; however, the existing shredded rubber in the play structure boxes is depleted and in need of replacement.

- The existing swing set takes up a significant amount of play box space for very few students.
- Access to the play area is limited due to a significant elevation change.

Outdoor eating area:

Observations:

- There are a few tables with benches in the grass area, but most of the students sit on the stepped concrete wall between the upper level of campus, and the lower field area.

Building:

Entry Visibility:

Observations:

- Building entry visibility is not ideal.

Administration Area:

Observations:

- Administration area is cramped.
- This site has no staff production room.
- Existing exterior louvered openings in various rooms cause discomfort and waste energy during hot or cold days.
- The existing Psychologist space does not have sufficient soundproofing.
- The existing staff room is too small for the staff to gather in.
- The existing Conference Room is too small to hold a conference with the necessary number of participants.

Circulation Spaces:

Observations:

- The courtyard areas have some issues with accessibility related to cross-slope and drain inlets.

Classrooms:

Observations:

- Classrooms are generally in good condition, although many of the finishes are faded and/or dirty.
- Several classrooms have multiple doors leading to other classrooms or ancillary spaces.

Library:

Observations:

- Existing library appears to be in good condition.
- Insufficient storage for curriculum and library books.
- Librarian desk is not accessible.

Multi-Purpose Room:

Observations:

- The finishes in the existing Multi-Purpose Room space are worn and dated.
- The existing sound system is not adequate for use as a Multi-Purpose Space.
- Lighting levels are too low for this space.

Campus Circulation and Accessibility:

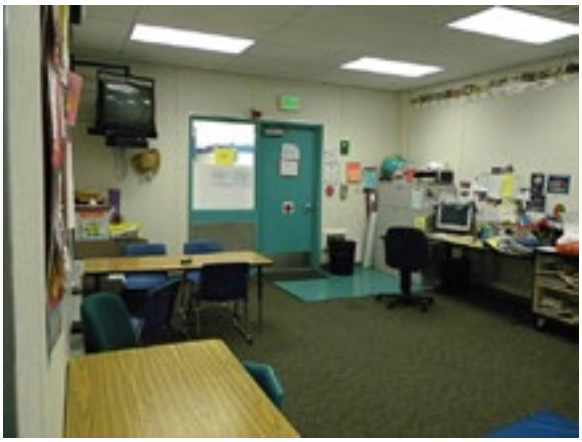
Observations:

- There is currently no covered walkway to any of the detached structures.
- Existing door thresholds are too high for current accessibility standards.
- Occasional areas of concrete or asphalt paving that have heaved or cracked cause accessibility issues.

Specialty Classrooms:

Observations:

- The Speech Therapy Classroom is too small for the program requirements.
- The site currently has no dedicated Science Lab.
- The existing Media Center / Computer Lab space lacks the proper infrastructure for power and data distribution.



Portable Classrooms:

Observations:

- The existing portable classrooms are in good condition. Interior finishes should be replaced as necessary.

Kitchen / Food Service

Observations:

- The existing kitchen layout and equipment do not meet current Department of Health requirements.
- Most existing built-in equipment (refrigerator, freezer, sinks, storage areas, etc.) are beyond their expected lifespan.

Staff Work Areas:

Observations:

- The staff work area is too small for the current staff to effectively work in.
- Existing finishes are worn and dated.

Staff Lounge:

Observations:

- The existing staff lounge finishes are worn and dated.

- The existing casework appears serviceable, although it is beyond it's expected lifespan.

Student Restrooms:

Observations:

- Some of the existing restrooms are not accessible, due to constricted access and lack of suitable space to turn a wheelchair around.
- The existing fixture count (Boys – 8 water closets, 10 urinals, and 6 lavatories; Girls – 8 water closets, 6 lavatories) serves the current population of approximately 480 students, and changes to the restrooms to improve accessibility will likely reduce the fixture count as each remaining fixture is given more space.

Staff Restrooms:

Observations:

- The existing fixture count of four (4) (Men – 1 water closets, 1 urinal, and 1 lavatory; Women – 2 water closets, 1 lavatory) is sufficient for the current staff population.

Storage and Custodial Spaces:

Observations:

- Overall general storage capacity is limited, and existing built-in storage is worn.
- Custodial spaces are cluttered and in general show signs of wear and tear.

Structural System:

Observations:

- Laneview Elementary School is comprised of four buildings. The main building containing the multipurpose room and offices is designated as Building B. The other three buildings are classrooms with Buildings A and C essentially being mirrors of each other. The roofs for Buildings A, B and C are tied together by covered walkways
- Buildings A & C: These buildings are single story wood structures with a roof joist system supported on interior bearing walls and glulams spanning between exterior walls. The roof consists of an upper and lower portion. The two buildings are mirrored each side of the main building. This building's lateral force resisting system consists of a plywood sheathed roof acting as a horizontal wood diaphragm spanning between vertical plywood shear walls. Seismic loads are resisted in both orthogonal directions by way of the wood shear walls located on the exterior of the building structure. A preliminary review of the building is that the building is comprised of numerous non-orthogonal shear walls that can handle the lateral load if the walls are in good condition.
- Building B: This building is a single story wood structure with a roof joist system supported on interior bearing walls and glulams spanning between bearing walls. The roof consists of an upper and lower portion. The upper roof also cantilevers out to cover a portion of walkway adjacent to the building on each side. This building's lateral force resisting system consists of a plywood sheathed roof acting as a horizontal wood diaphragm spanning between vertical plywood shear walls. Seismic loads are resisted in both orthogonal directions by way of the wood shear walls located on the exterior of the building structure. A preliminary review of the building is that the building is comprised of numerous non-orthogonal shear walls that can handle the lateral load if the walls are in good condition.

- Building D: This building is a single story wood structure with a single level roof joist system supported on bearing walls. This building's lateral force resisting system consists of a plywood sheathed roof acting as a horizontal wood diaphragm spanning between vertical plywood shear walls. Seismic loads are resisted in both orthogonal directions by way of the wood shear walls located on the ex-

terior of the building structure. Our review of the building is that the building is comprised of shear walls in each direction that can handle the lateral load of the structure if the shear walls are in good condition.

Mechanical Systems:

Observations:

- New rooftop condensing units & indoor furnaces with D/X coils installed in 2009.
- New exhaust fans were installed in 2009.
- New temperature controls were installed in 2009.
- Existing ductwork in ceiling space is original.

Electrical Systems:

Observations:

- A 2000A, 120/208V, 3-phase, 4-wire switchboard with a 300KVA utility pad mounted transformer located next to the kindergarten provides power to the campus. The switchboard was installed around 2002, and is in good and functioning condition. According to PG&E record, the current peak usage on the system is of 431 amps.

Low Voltage Systems:

Observations:

- The existing fire alarm system is a manual system on a Gamewell 602 panel in the Administration building installed in 2009. The panel is in good and functioning condition. The notification devices were not adequate to meet the current code requirements.
- The existing Bogen Multicom 2000 Public Address and Master Clock system located in the Main Office storage room is in good and functioning condition.

Roofing:

Observations:

- The existing roof is a multi-ply built-up-roofing system with shingled mansards. Installed in 2009, the built-up portion has a 20-year warranty, and the shingled portion

has a 40-year warranty. The roof system has an estimated remaining life of 15 years.

Exterior Paint:

Observations:

- The existing exterior paint is generally in good condition, although it is aged, and shows many locations where re-painting has occurred over time.

Laneview Elementary School

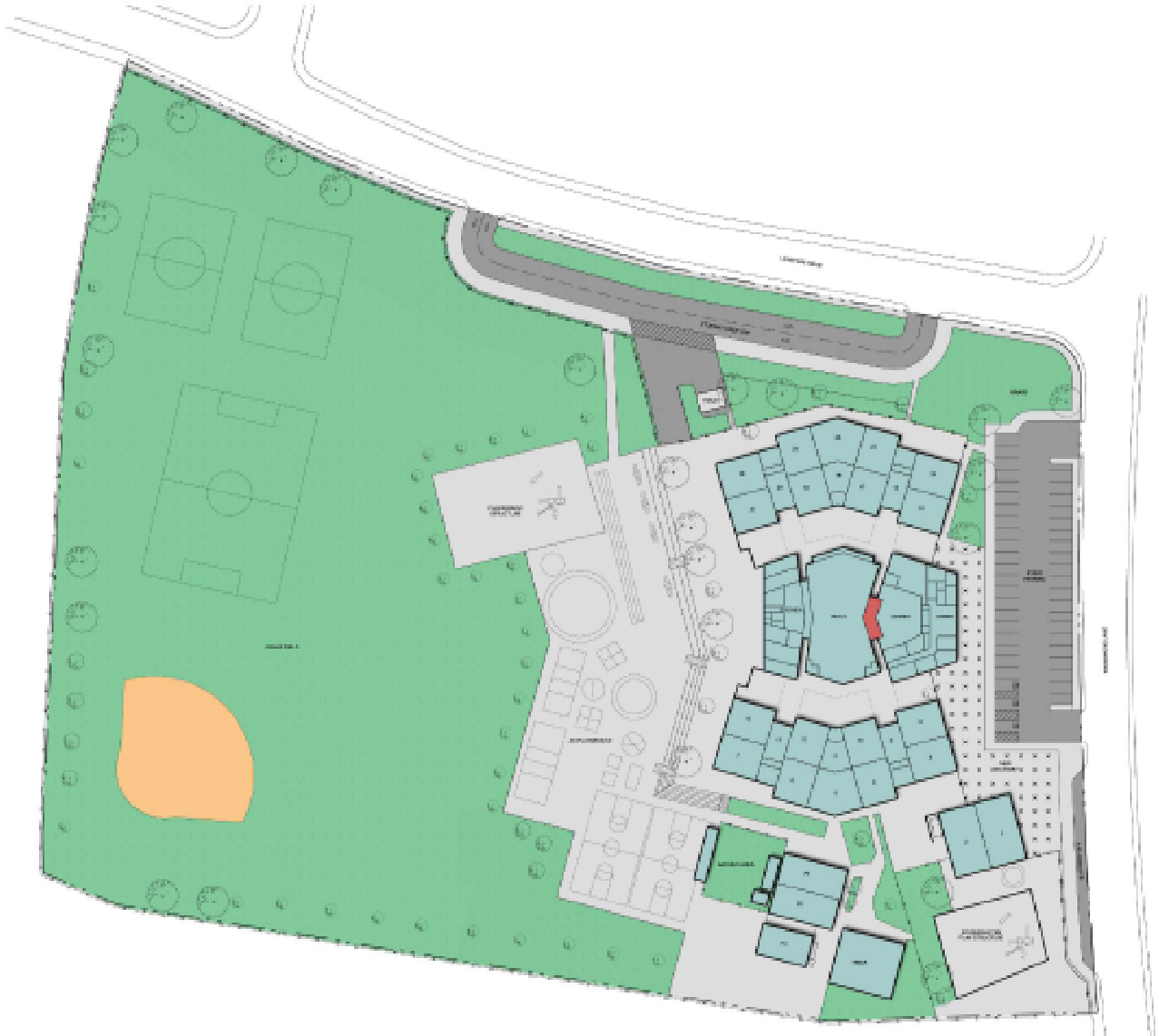
Site Plans

EXISTING BUILDING

7.5' 30' 90'
0 15' 60'

LANEVIEW ELEMENTARY SCHOOL

EXISTING CONDITIONS



LANEVIEW ELEMENTARY SCHOOL

- Incorporate outdoor space adjacent to Library into building
- New parking lot, student and bus drop off
- Redesign front facade/entrance

Laneview Elementary School

Paving Assessment Report

LANEVIEW SCHOOL

Summary School Report

Asphalt Surface Evaluation

School Name: Laneview School

Area	Type	Use	Area (sq. ft.)	Defect Score	Recommendation	Cost	Year
A	EL	Park	8,000	54	Crack Fill and Seal Coat	$5,016.00	2011
B	EL	Park	15,308	74	Dig out/ Crack Fill/ Seal Coat	$9,582.81	2011
C	EL	Ped	2,898	86	Dig out/ Crack Fill/ Seal Coat	$2,054.10	2011
D	EL	Road	1,550	170	Remove & Replace	$7,750.00	2011
E	EL	Play	35,740	58	Crack Fill and Seal Coat	$16,583.36	2011
F	EL	Ped	7,763	20	Crack Fill and Seal Coat	$2,717.05	2011
G	EL	Ped	2,173	40	Crack Fill and Seal Coat	$845.30	2011
H	EL	Play	1,684	41	Crack Fill and Seal Coat	$703.91	2011
					Total:	**$45,252.53**	

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Laneview School
Area (sf): 8,000
Area Notation: A
Buses: Yes
Surface Type: AC
Garbage Trucks: No
Use: Parking Lots or Areas
Defect Score: 54
Recommended Treatment: Crack Fill and Seal Coat
Year: 2011
Visual Description: Pavement exhibits moderate to severe raveling with moderate shrinkage cracking.
Miscellaneous: Slope = 0.5/ 2.3, Parking stall depth 15', no crosswalk for ADA unloading zone, signage needs to be upgraded, ramp slope 12.2%, wings not adequate, pavement drains to drop inlets located with the pavement area.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.152	M

Crack Width	1/8 - 1/4"

Cost Breakdown

AC Cost:	$2,800.00
CF Cost:	$1,216.00
DO Cost:	$0.00
Misc. Cost:	$1,000.00
Total Cost:	$5,016.00

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Laneview School
Area (sf): 15,308
Area Notation: B
Buses: No
Surface Type: AC
Garbage Trucks: Yes
Use: Parking Lots or Areas
Defect Score: 74
Recommended Treatment: Dig out/ Crack Fill/ Seal Coat
Year: 2011
Visual Description: Pavement exhibits moderate to severe raveling with moderate shrinkage cracking.
Miscellaneous: Slope = 2.2/ 3.5, Pavement drains to drop inlet at west driveway entrance, need dumpster pad, ADA stair access to school only, so signs, unloading zone in dumpster area.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	2.0%	0.176	M

Crack Width	1/8 - 1/4"

Cost Breakdown

AC Cost:	$5,357.80
CF Cost:	$2,694.21
DO Cost:	$1,530.80
Misc. Cost:	$0.00
Total Cost:	$9,582.81

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Laneview School
Area (sf): 2,898
Area Notation: C
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Pedestrian Areas
Defect Score: 86
Recommended Treatment: Dig out/ Crack Fill/ Seal Coat
Year: 2011
Visual Description: Pavement exhibits several areas of alligator cracking and base failure due to vehicle access.
Miscellaneous: Slope = 10.1/ 1.5/ 2.4, Pavement drains to adjacent pavement area and planter, some tree root damage as well.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	5%	2.0%	0.000	M

Crack Width	1/8 - 1/4"

Cost Breakdown

AC Cost:	$1,014.30
CF Cost:	$0.00
DO Cost:	$1,014.30
Misc. Cost:	$750.00
Total Cost:	$2,778.60

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Laneview School
Area (sf): 1,550
Area Notation: D
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Roadways, Alleyways, Bus Turnouts, etc.
Defect Score: 170
Recommended Treatment: Remove & Replace
Year: 2011
Visual Description: Pavement exhibits severe raveling and expansion cracking.
Miscellaneous: Slope = 0.7/ 1.5, Pavement drains to adjacent lawn and planter.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.387	V

Crack Width	1/8 - 1/4"

Cost Breakdown

AC Cost:	$7,750.00
CF Cost:	$0.00
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$7,750.00

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Laneview School
Area (sf): 35,740
Area Notation: E
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Playground
Defect Score: 58
Recommended Treatment: Crack Fill and Seal Coat
Year: 2011
Visual Description: Pavement exhibits severe raveling and moderate shrinkage cracking.
Miscellaneous: Slope = 1.3/ 0.5/ 1.9, Pavement drains to adjacent lawn/ field.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.114	V

Crack Width	<1/8"

Cost Breakdown

AC Cost:	$12,509.00
CF Cost:	$4,074.36
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$16,583.36

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Laneview School
Area (sf): 7,763
Area Notation: F
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Pedestrian Areas
Defect Score: 20
Recommended Treatment: Crack Fill and Seal Coat
Year: 2011
Visual Description: Pavement exhibits moderate raveling.
Miscellaneous: Slope = 1.6/ 0.3/ 3.6, Pavement drains to drop inlet near lawn area.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.000	M

Crack Width	0

Cost Breakdown

AC Cost:	$2,717.05
CF Cost:	$0.00
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$2,717.05

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Laneview School
Area (sf): 2,173
Area Notation: G
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Pedestrian Areas
Defect Score: 40
Recommended Treatment: Crack Fill and Seal Coat
Year: 2011
Visual Description: Pavement exhibits severe raveling with a large area of utility patching, slight shrinkage cracking.
Miscellaneous: Slope = 1.5, Pavement drains to adjacent planter.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.039	V

Crack Width	1/8 - 1/4"

Cost Breakdown

AC Cost:	$760.55
CF Cost:	$84.75
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$845.30

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Laneview School
Area (sf): 1,684
Area Notation: H
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Playground
Defect Score: 41
Recommended Treatment: Crack Fill and Seal Coat
Year: 2011
Visual Description: Pavement exhibits moderate raveling with moderate shrinkage cracking.
Miscellaneous: Slope = 0.7/ 3.0, Pavement drains to AC swale which drains to planter.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.068	M

Crack Width	1/8 - 1/4"

Cost Breakdown

AC Cost:	$589.40
CF Cost:	$114.51
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$703.91

12/10/2010

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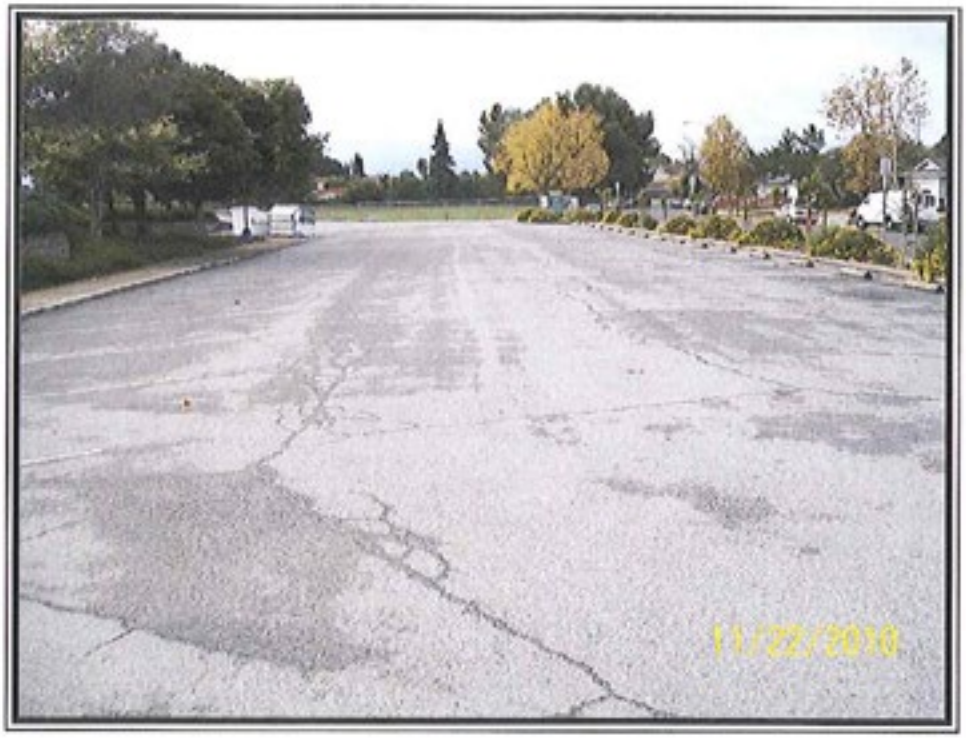
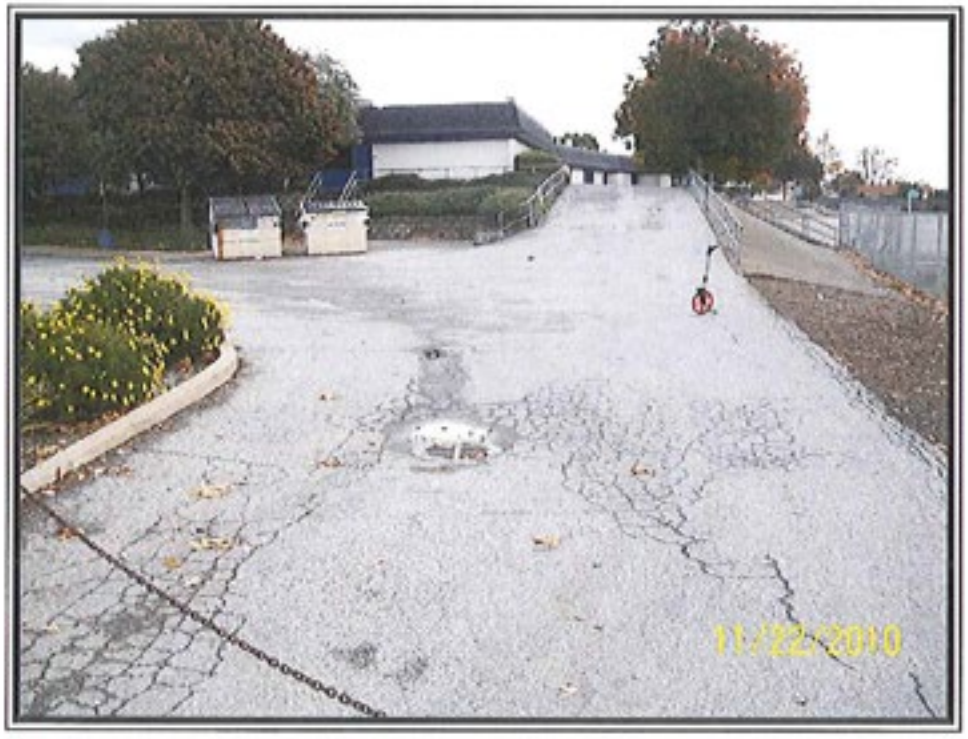
LANEVIEW SCHOOL - AREA A

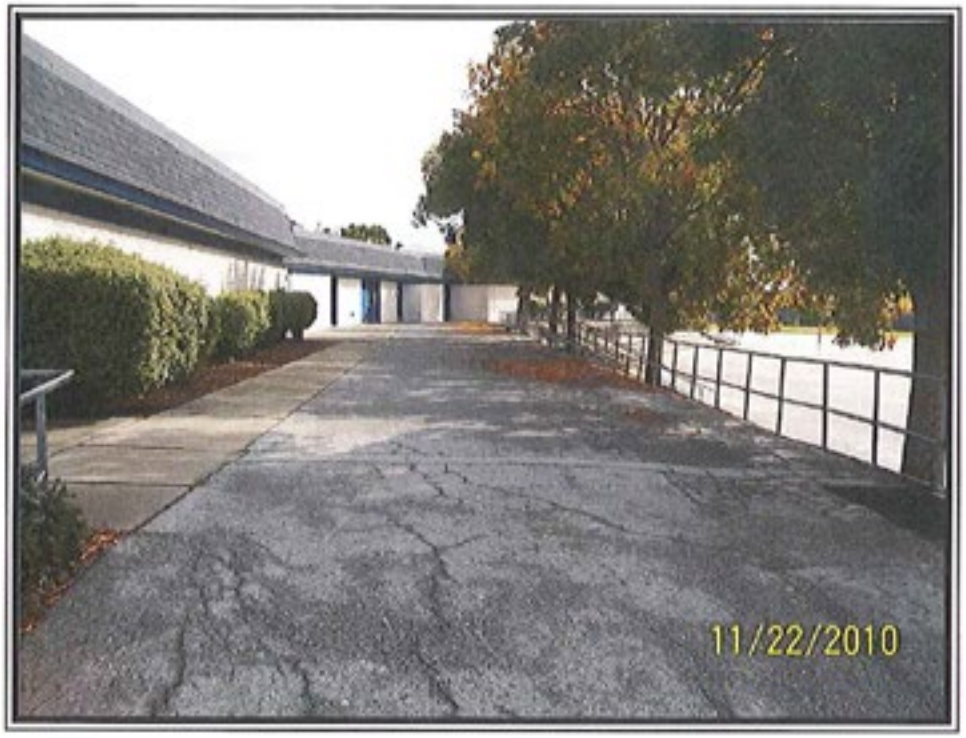
LANEVIEW SCHOOL - AREA A



LANEVIEW SCHOOL - AREA B



LANEVIEW SCHOOL - AREA B

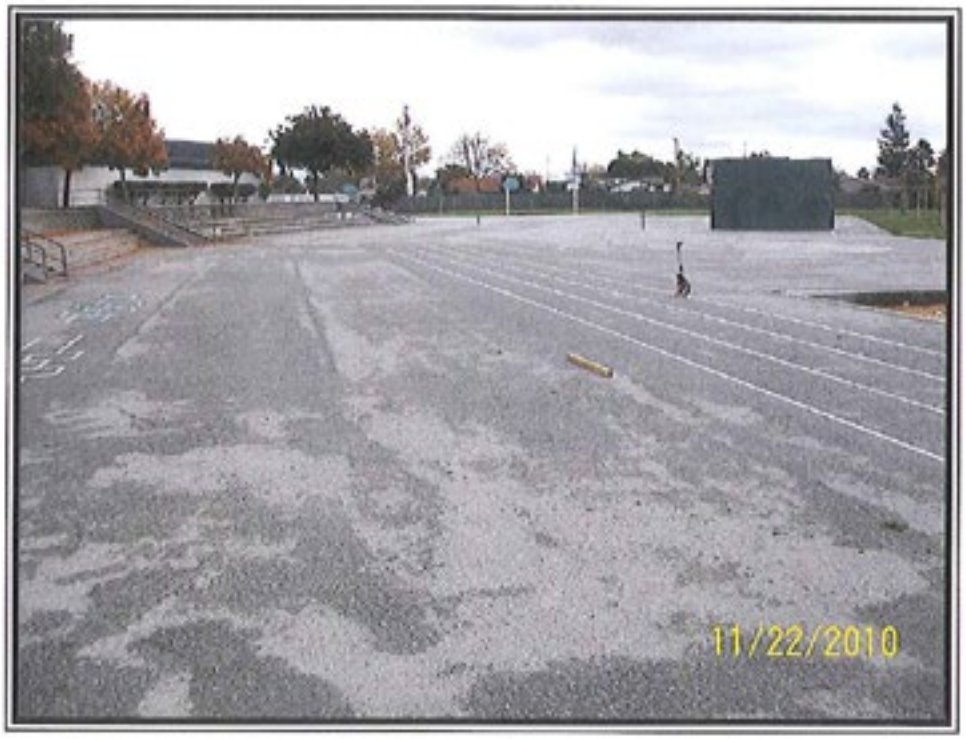


LANEVIEW SCHOOL - AREA C

LANEVIEW SCHOOL - AREA C

LANEVIEW SCHOOL - AREA D

LANEVIEW SCHOOL - AREA D



LANEVIEW SCHOOL - AREA E

LANEVIEW SCHOOL - AREA E

LANEVIEW SCHOOL - AREA F

LANEVIEW SCHOOL - AREA F

LANEVIEW SCHOOL - AREA G

LANEVIEW SCHOOL - AREA G

LANEVIEW SCHOOL - AREA H

LANEVIEW SCHOOL - AREA H

Laneview Elementary School

Seismic Assessment Report

LANEVIEW ELEMENTARY SCHOOL

Key Plan (Photo taken from Google Maps)

Building Descriptions:

Laneview Elementary School is comprised of four buildings. The main building containing the multipurpose room and offices is designated as Building B. The other three buildings are classrooms with Buildings A and C essentially being mirrors of each other. The roofs for Buildings A, B and C are tied together by covered walkways. Architectural and structural plans were available at the time of this review. From those plans the buildings, all built together at the same time, were built around 1967. Each building is referred to in this report as they are referenced on the Architectural plans. See the key plan for building labels.

Buildings A & C

These buildings are single story wood structures with a roof joist system supported on interior bearing walls and glulams spanning between exterior walls. The roof consists of an upper and lower portion. The two buildings are mirrored each side of the main building.

This building's lateral force resisting system consists of a plywood sheathed roof acting as a horizontal wood diaphragm spanning between vertical plywood shear walls. Seismic loads are resisted in both orthogonal directions by way of the wood shear walls located on the exterior of the building structure. A preliminary review of the building is that the building is comprised of numerous non-orthogonal shearwalls that can handle the lateral load if the walls are in good condition. During the review it was noted that not all shearwalls included tiedowns which although the loads at the time of design may not have required the tiedowns, the code mandated loads have increased significantly since then. Therefore we would recommend a further analysis be completed to determine if tiedowns need to be added. In general, the installation of tiedowns at the ends of shearwalls is recommended to ensure the desired performance of the lateral system during a significant seismic event. Additionally, we recommend further review of the connections between the low and high roofs to ensure adequate load transfer.

Laneview Elementary School Buildings A & C receive a subjective rating of 2.0.

Bldg. B

This building is a single story wood structure with a roof joist system supported on interior bearing walls and glulams spanning between bearing walls. The roof consists of an upper and lower portion. The upper roof also cantilevers out to cover a portion of walkway adjacent to the building on each side.

This building's lateral force resisting system consists of a plywood sheathed roof acting as a horizontal wood diaphragm spanning between vertical plywood shear walls. Seismic loads are resisted in both orthogonal directions by way of the wood shear walls located on the exterior of the building structure. A preliminary review of the building is that the building is comprised of numerous non-orthogonal shearwalls that can handle the lateral load if the walls are in good

condition. During the review it was noted that not all shear walls included tie downs at each end of the wall. In general, the installation of tie downs at the ends of shear walls improves the overall performance of the building during a major seismic event. We recommend further evaluation of the building be conducted to see if the addition of tie downs would significantly improve the performance of the building. Additionally, we recommend further review of the connections between the low and high roofs to ensure adequate load transfer.

Laneview Elementary School Building B receives a subjective rating of 2.0.

Bldg. D

This building is a single story wood structure with a single level roof joist system supported on bearing walls. This building's lateral force resisting system consists of a plywood sheathed roof acting as a horizontal wood diaphragm spanning between vertical plywood shear walls. Seismic loads are resisted in both orthogonal directions by way of the wood shear walls located on the exterior of the building structure. Our review of the building is that the building is comprised of shearwalls in each direction that can handle the lateral load of the structure if the shearwalls are in good condition. During the review it was noted that not all walls included tie downs at each end. We recommend further evaluation of the building be conducted to see if the addition of tie downs would significantly improve the performance of the building.

Laneview Elementary School Building D receives a subjective rating of 2.0.

Laneview Elementary School

Mechanical Systems Assessment Report

LANEVIEW ELEMENTARY SCHOOL
BERRYESSA UNIFIED SCHOOL DISTRICT

A. MECHANICAL BUILDING SYSTEMS

1. Existing Conditions:

a. New rooftop condensing units & indoor furnaces with D/X coils installed in 2009.

b. New exhaust fans installed in 2009.

c. New temperature controls installed in 2009.

d. Existing ductwork in ceiling space is original.

2. Recommendations:

a. Replace all insulated supply and return ductwork, diffusers and grilles within the building. Replace all exhaust ductwork within the building.

3. General:

a. This report and comments to follow are based on observations of the general condition of the mechanical systems and noticeable code issues resulting from a review of the existing drawings and an on-site visit, when required.

b. Refer to Appendix A for Title 24 requirements and general code issues that should be considered.

APPENDIX-A

a. General

1. Comply requirements of California Mechanical Code (CMC) latest edition.

b. Possible Ventilation Code Issues

1. Corridors cannot be used as plenums for the purpose of supplying or exhausting air.

2. Corridors must have minimum two (2) air changes per hour for ventilation.

3. Minimum ventilation for occupied spaces should be 15 cfm/person or 0.15 cfm/sq. ft., whichever is greater.

4. Exhaust airflow from bathrooms should be based on minimum 10 air changes per hour.

c. Possible Fire Smoke Issues

1. Fire/smoke dampers in the system must be interlocked with fire alarm system.

2. Corridors, lobbies, and building entrances to have dedicated supply air.

3. Chemistry classrooms with occupancy separation shall have fire/smoke damper.

6. All furnaces supplying air flow in excess of 2,000 cubic feet per minute to have duct smoke detectors in the supply air duct.

d. Possible Title 24 Issues

1. Heating furnaces to have minimum 80% efficiency.

2. Heating & Ventilating and Air Conditioning systems in excess of 2,500 cfm and a total cooling over 75,000 BTU/h (6.25 Tons) must have an economizer. Economizer must be fully integrated into the cooling system so that depending on the weather conditions, economizer can provide partial/full cooling when additional mechanical cooling is required.

3. Exterior supply and return air ductwork (heating & cooling) shall be insulated with minimum R-value of 8.0.

4. Interior supply and return air ductwork (heating & cooling) shall be insulated with minimum R-value of 4.2.

5. Heating, ventilating, and air conditioning systems to have control capability with night setback.

Laneview Elementary School

Electrical and Low Voltage Systems Assessment Report

B. Electrical

1. Power Systems:

A 2000A, 120/208V, 3 phase, 4 wire switchboard with a 300KVA utility pad mounted transformer located next to the kindergarten classroom building provides power to the campus. The switchboard was installed around 2002 and is in good and functioning condition. According to PG&E record, the current peak usage on the system is of 431 amp. There is a spare capacity of 295 amp approximately at the service for future usage. If additional power is needed, the PG&E transformer shall need to be upgraded.

2. Fire Alarm System:

The existing fire alarm system was of automatic system on a Gamewell 602 panel in the administration office installed in 2008. The panel is in good and functioning condition. The initiation and notification devices meet the current code requirement.

3. Public Address and Clock Systems:

The existing Bogen Multicom 2000 PA and master clock system located in the main office storage room is in good and functioning condition. Existing speaker and clock units are in good condition for reuse.

Will H. Ector, Jr.
Superintendent

1376 Piedmont Road
San Jose, CA 95132-2427

Phone: (408) 923-1800
Fax: (408) 923-0623

Majestic Way Elementary School

1855 Majestic Way
San Jose, CA

Majestic Way Elementary School Assessment

Statistics:

Enrollment (Nov. 2012):	555
Principal:	Mya Duong
Site:	10.0 Acres
Building Area:	Approx. 48,000 SF
Permanent Classrooms:	22
Portable Classrooms:	5 @ 960 SF
Total Size:	52,800 SF

Construction History

1975	School Constructed
1992	Construction of (2) Portable Classrooms
2004	Modernization Projects
2008	HVAC Upgrade (Boiler and Chiller Replacement)
2008	Construction of (3) Portable Classrooms
2008	Roofing Removal and Replacement

Majestic Way Elementary School

Site Meeting Minutes

Needs Assessment Scope Categories
Berryessa School District

Majestic Way Elementary School

May 31, 2013

(updated October 2, 2013)

Site

1. Parking lots, traffic control, and drop-off and pick-up areas
    a. Requested a new loading zone.
    b. Need a dedicated loading zone for three busses. (10/2/13)
    c. Additional play structure and box requested for a total of three structures on site. (10/2/13)
2. PE equipment (Basketball backboards, rims, play structures, matting)
    a. Some equipment needs replacing.
    b. Possible addition of lower / smaller basketball hoops for the younger kids requested.
3. Site (ADA) compliance, paved walkways (tripping hazards, level and clear pathways)
    a. SFA will evaluate over the summer.
    b. Some areas where potential tripping hazards are located were noted.
4. Paved Play Area (size, security, location, condition)
    a. Asphalt surface is in reasonably good condition.
5. Turf play area, landscaping and irrigation
    a. Issues with gophers / ground squirrels.
6. Fencing and security
    a. Site fencing does not fully restrict access to site.
    b. If site is fenced, additional access gates needed at kindergarten area due to different schedules. (10/2/13)
7. Trash enclosure
    a. Trash location is acceptable, needs screening from view.
8. Site Utilities (to the street and campus distribution - gas, water, sewer, storm, power)
    a. No issues noted.
    b. Facilities noted that they have a potential sewer line “belly” issue at this site which causes regular maintenance to be needed to keep the line clear. (10/2/13)
9. Site Lighting (LED)
    a. Lighting requested for AC play area.
10. Covered Shade or Eating Structure
    a. Students currently eat indoors. An exterior covered eating area is desirable.
11. Roofing
    a. No known issues.
12. Covered walkways
    a. Requested to portables.
13. Exterior Paint

a. No issues noted.

14. Campus Layout and organization
    a. No issues noted.
15. Curb Appeal
    a. No issues noted.
16. Portable classrooms/restrooms
    a. No known issues at portable classrooms.
    b. Additional restrooms requested at/near portables. (10/2/13)
17. Storage
    a. No issues noted.
    b. Classroom storage requested. (10/2/13)
18. Drinking fountains
    a. Need additional drinking fountains spread around campus.
19. Signage
    a. District plans to replace all existing wayfinding signage.
    b. District plans to add marquee signage to each campus.

<u>Building</u>

a. Building Insulation, exterior surfaces
    a. No known issues.
b. Windows (Prep rooms/common areas, condition of windows and amount of natural light)
    a. Site prefers the open look of their school, window infill not desired.
c. Exterior Doors and Hardware
    a. Door and hardware replacement will likely be district-wide.
    b. Interior fire barrier doors to pods need upgraded mechanism. Current mechanism requires constant maintenance to keep in working order. (10/2/13)
d. Restrooms (Electric hand dryers, partitions, fixtures, re-seal flooring)
    a. Additional restrooms requested for staff.
e. Flooring (Carpeting, tiling, resilient, all locations)
    a. No known issues.
f. Tackable Walls surfaces and all other interior finishes
    a. Full-height, wall-to-wall tackable surfaces requested.
g. Ceilings
    a. No known issues.
h. Cabinetry (Teaching walls)
    a. New teaching walls requested.
    b. Additional storage space requested.
i. Classroom size/layout (21st Century Learning environment/classroom)
    a. Meeting to be held on 23JUN2013 with District representatives to discuss this item.
j. Backpack storage or location
    a. Request was made to look into providing storage for backpacks.
k. Interior lighting (LED)
    a. No issues noted

l. Blinds
    a. Window coverings to replace existing horizontal blinds were requested.
m. Markerboards
    a. In teaching walls.
n. Classroom electrical outlets
    a. Additional outlets spread throughout room requested.
o. IT/Data networking (Wi-fi, location, IDF and MDF)
    a. SFA will be meeting with District IT personnel to discuss district-wide implementations.
p. IT/Video network
    a. SFA will be meeting with District IT personnel to discuss district-wide implementations.
q. Communication system (Intercom, Clocks, Speakers)
    a. Intercom and clocks have no known issues.
    b. Request for additional PA speakers for the building exterior was made.
r. Intrusion Alarm
    a. Request to replace / improve / upgrade existing security system, as there have been numerous break-ins.
s. Security cameras
    a. Security cameras are planned to be added to all sites as part of this process.
t. Heating and Ventilating and Air Conditioning (Chiller, mechanical equipment, FCU's)
    a. SFA will evaluate these systems over the summer.
    b. The Speech Room was noted as being excessively cold.
u. Energy management system (Controls for HVAC/Lighting)
    a. No issues noted.

Miscellaneous:

- Photovoltaic Installation (Solar)
    - Solar installation will occur where economically feasible.
- Multi-purpose/Cafeteria efficiency
    - Request made to clean / replace existing window, as well as shades.
    - New AV system in MPR requested.
    - New projection system in MPR requested. (10/2/13)
- Administration area functionality
    - Evaluate space use, possibly re-organize.
- Kitchen
    - SFA to meet with District Food Services personnel to discuss district-wide plan.
- Library/Media Center
    - No issues noted.
    - Storage for Library supplies requested. (10/2/13)
    - Curriculum storage space requested. (10/2/13)
- Specialty Rooms
    - No issues noted.
- FFE (Furnishings, Fixtures, Equipment) Lunch tables, classroom furniture, etc.
    - Most furniture is original to the school, and appears in need of replacement.

- Any other creative thoughts/ideas
    - No issues noted.
    - Staff lounge sink noted as not draining properly. (10/2/13)
    - Staff lounge needs to be modernized. (10/2/13)
    - Issue with water being too hot at the staff restroom. (10/2/13)
    - Speech room smells musty. (10/2/13)

Grounds:

Security:

Observations:

- While significant portions of this site have a perimeter fence in place, the site is largely open in the front; and because the site abuts a city park, there is an unfenced boundary at the rear of the site also.
- Building exterior lighting is insufficient.
- There is direct access without intervening obstacles from the main entry to interior building spaces.

- Existing doors often have windows in them, and not all doors have modern security hardware.
- Not all classrooms have doors that can be secured, due to original open plan of site.
- This site has a handful of windows below door height.

Parking lot and Drop-Off / Pick-Up:

Observations:

- Site often has three school busses in the parking lot at the same time for drop-off and pick-up.
- Circulation through the parking lot during pick-up and drop-off is narrow, and creates problems with traffic congestion.

- Pick-up / Drop-off location sees considerable congestion during peak times, and does not allow traffic to flow through.
- Existing accessible parking stalls are not accessible.

Landscaping:

Observations:

- The existing landscaping is dated, non-existent in some places, and overgrown in others. The bare areas face erosion issues, and the overgrown areas trap debris as well as providing a home to nuisance pests.
- The landscaping in the sloped planters adjacent to the building is causing moisture intrusion problems, as well as creating a security issue by assisting students in accessing the roof of the building.

Play Surface / Fields / Play Structures:

Observations:

- The existing asphaltic concrete play surfaces appears to be in moderately good condition, some repair work is needed.
- The existing sports fields have issues with ground squirrels and gophers. Some parts of the grass fields are bare and/or more weeds than grass.
- Existing play structures appear in good condition; however, the existing shredded rubber in the play structure boxes is depleted and in need of replacement.

Outdoor eating area:

Observations:

- Current outdoor eating area is the grassy amphitheater area, which has no little seating and no covered area.

Building:

Entry Visibility:

Observations:

- Building entry visibility is acceptable, but could be improved.

Administration Area:

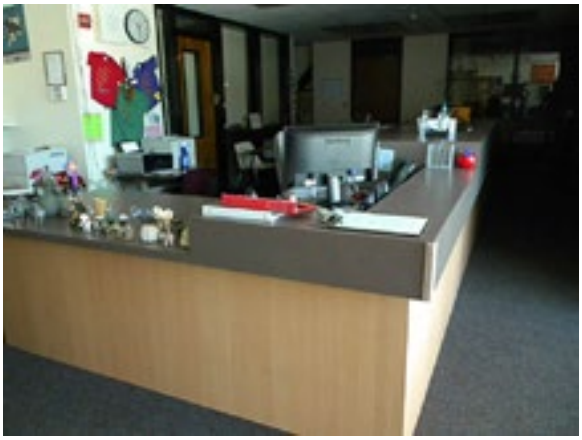
Observations:

- The principal's office is too small to permit a private conference with two parents and a child.
- Conference room too small to hold conferences with the door closed for privacy.
- Some specialty spaces (RSP, Psych, Speech Therapy) are located away from the administration area, and would be better served by being in the space general area as the main administration space.

Circulation Spaces:

Observations:

- Automatic fire door hardware has exceeded it's expected lifespan, and requires regular maintenance to keep in good operating condition.
- If the proposed doors to the now-open classroom spaces are added, an exit corridor will be required from each classroom "pod".
- Existing outdoor atria spaces are underutilized.



Classroom "Pod" Common Areas

Observations:

- Each of the six "pods" has a common area adjacent to an exterior courtyard. Each has a sink and a stove that are original to the building. Some of these do not work.

Classrooms:

Observations:

- Classrooms are generally in good condition, although many of the finishes are faded and/or dirty.
- Many classrooms do not have doors, due to original school design's open plan. Partition walls have been added over the years, but doors were never added. This causes noise to easily travel between adjacent classrooms, and also presents a security risk.
- Some classrooms have a CRT television mounted in a location that does not comply with current accessibility requirements.

Library:

Observations:

- Existing book stack capacity is insufficient for current needs.
- Existing clerestory windows are in need of replacement.
- Existing integral media center space is insufficient for current needs.

Multi-Purpose Room:

Observations:

- Most finishes appear in need of replacement.
- Existing clerestory windows are in need of replacement.
- Existing sound system is inadequate for current needs.
- Existing original folding cafeteria tables are in need of replacement.

Campus Circulation and Accessibility:

Observations:

- There is currently no covered walkway to the portable classrooms.
- Existing door thresholds are too high for current accessibility standards.

- Occasional areas of concrete or asphalt paving that have heaved or cracked cause accessibility issues.
- Three pairs of the existing exit doors do not meet access requirements.

Specialty Classrooms:

Observations:

- Special Education classrooms are distributed around site due to lack of a centralized location.
- The site is currently utilizing the Multi-Purpose Room for the school Music Program.
- The site currently has no dedicated Science Lab.
- The existing Media Center / Computer Lab space is adjacent to the library in an open and unsecure area without sufficient infrastructure support for the program requirements.

Portable Classrooms:

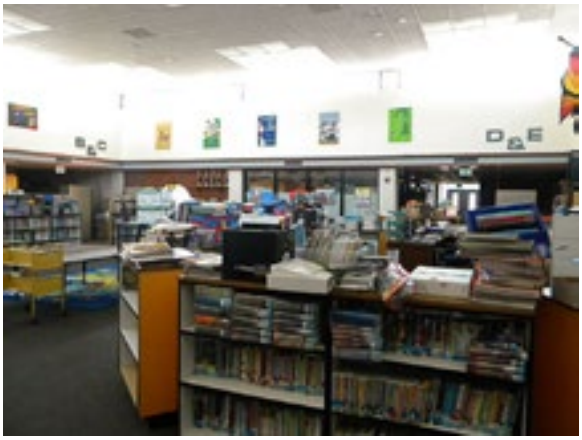
Observations:

- The existing portables appear to be in good condition.
- The County Office of Education (COE) has two portables on this site, used for their programs, that are owned and maintained by the COE.

Kitchen / Food Service

Observations:

- The existing kitchen layout and equipment do not meet current Department of Health requirements.
- Most existing built-in equipment (refrigerator, freezer, sinks, storage areas, etc.) are beyond their expected lifespan.



Staff Work Areas:

Observations:

- The staff work area appears to be in good condition. The existing casework appears to be aging, although still servicable, and an area of carpet under a drinking fountain needs to be addressed.

Staff Lounge:

Observations:

- The existing staff room finishes are worn and dated.
- The existing casework appears serviceable, although it is beyond it's expected lifespan.

Student Restrooms:

Observations:

- Two of the four pairs of student restrooms have previously been modernized to meet accessibility requirements. The remaining restrooms have not been upgraded, and do not comply with current accessibility standards.
- The existing fixture count of 23 (Boys – 8 water closets, 4 urinals, and 5 lavatories; Girls – 11 water closets, 4 lavatories) serves the current population of approximately 560 students.

Staff Restrooms:

Observations:

- The existing fixture count of four (4) (Men – 1 water closet, 1 urinal, and 1 lavatory; Women – 2 water closets, 1 lavatory) serves the current staff population.

Storage and Custodial Spaces:

Observations:

- Overall general storage capac-

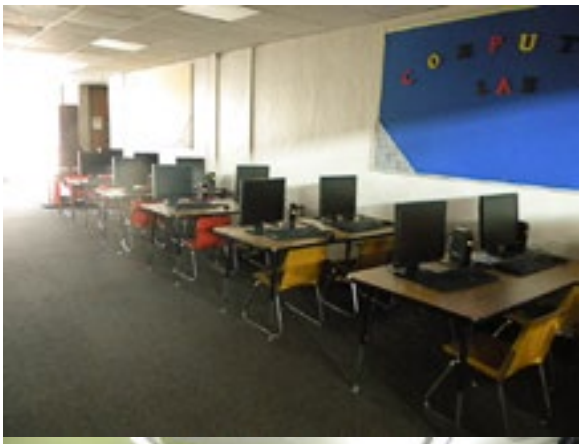
ity is good, with many built in cabinets available around the school for supplies and instructional material.

- Custodial spaces are cluttered and in general show signs of wear and tear.

Structural System:

Observations:

- The building at Majestic Way Elementary School is one of three identical single-story buildings with a wood framed and concrete shear walls built in 1974. The other two schools are Brooktree Elementary School and Summerdale Elementary School, evaluated in separate sections of this report. The building consists of multiple attached classrooms with centralized multi-purpose rooms. The building shape is fairly irregular with the room containing several discontinuities due to differing plate heights and openings in the roof diaphragm.
- The lateral force resisting system consists of a plywood-sheathed roof acting as a horizontal wood diaphragm spanning between vertical concrete shear walls. Seismic loads are resisted in both directions by way of the concrete shear walls located on the interior and exterior of the structure.



Mechanical Systems:

Observations:

- New chillers, boilers and pumps installed in 2008.
- New exhaust fans installed in 2008.
- New temperature controls were installed in 2008.
- Existing above ceiling ductwork and air distribution is original.
- Existing indoor air handling units are original.

Electrical Systems:

Observations:

- A 1000A, 277/480V, 3-phase, 4-wire switchboard with a 300KVA utility pad mounted transformer located in the electrical service yard provides power to the campus. The switchboard was of original build and in fair condition. According to PG&E record,

the current peak usage on the system is of 261 amps.

Low Voltage Systems:

Observations:

- The existing fire alarm system is a manual/automatic system on a Gamewell 610 panel in the Administration building installed in 2004. The panel is in good and functioning condition. The notification devices were not adequate to meet the current code requirements.
- The existing Bogen Multicom 2000 Public Adress and Master Clock system located in the Multi-Purpose Room storage room is in good and functioning condition.

Roofing:

Observations:

- The existing roof is a multi-ply built-up-roofing system. Installed in 2008, it has a 20-year warranty, and an estimated remaining life of 13-15 years.

Exterior Paint:

Observations:

- The existing exterior paint is generally in good condition, although it is aged, and shows many locations where re-painting has occurred over time.

Majestic Way Elementary School

Site Plans

MAJESTIC WAY ELEMENTARY SCHOOL

EXISTING CONDITIONS

MAJESTIC WAY ELEMENTARY SCHOOL

- Expand parking and redesign entrance into school
- Incorporate outdoor spaces adjacent to classroom pods into building

Majestic Way Elementary School

Paving Assessment Report

MAJESTIC WAY SCHOOL

Summary School Report

Asphalt Surface Evaluation

School Name: Majestic Way School

Area	Type	Use	Area (sq. ft.)	Defect Score	Recommendation	Cost	Year
A	EL	Park	36,556	74	Dig out/ Crack Fill/ Seal Coat	$20,763.81	2011
B	EL	Ped	5,305	18	Double application Emulsion Se	$2,591.50	2011
C	EL	Ped	800	44	Crack Fill and Seal Coat	$376.80	2011
D	EL	Play	41,335	86	Dig out/ Crack Fill/ Seal Coat	$23,767.62	2011
E	EL	Play	11,333	60	Crack Fill and Seal Coat	$5,043.18	2011
F	EL	Ped	995	99	Dig out/ Crack Fill/ Seal Coat	$948.74	2011
G	EL	Ped	599	63	Crack Fill and Seal Coat	$339.63	2011
					Total:	**$53,831.29**	

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Majestic Way School
Area (sf): 36,556
Area Notation: A
Buses: Yes
Surface Type: AC
Garbage Trucks: Yes
Use: Parking Lots or Areas
Defect Score: 74
Recommended Treatment: Dig out/ Crack Fill/ Seal Coat
Year: 2011
Visual Description: Pavement exhibits moderate to severe raveling and doesn't appear to have ever been seal coated, sub-surface moisture was observed
Miscellaneous: Slope = 3.0/ 2.4/ 4.7/ 0.7, Pavement drains to drop inlet in pavement area, ADA pavement slope is 1.4% and looks good, unloading zones need to be relocated, signage needs to be adjusted.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	1.0%	0.168	V

Crack Width	1/8 - 1/4"

Cost Breakdown

AC Cost:	$12,794.60
CF Cost:	$6,141.41
DO Cost:	$1,827.80
Misc. Cost:	$0.00
Total Cost:	$20,763.81

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Majestic Way School
Area (sf): 5,305
Area Notation: B
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Pedestrian Areas
Defect Score: 18
Recommended Treatment: Double application Emulsion Seal Coat
Year: 2011
Visual Description: Pavement exhibits slight raveling, settlement trenches, one area of alligator cracking (20x20).
Miscellaneous: Slope = 1.2/ 1.0/ 2.5, Pavement drains to lawn area and standing water was observed.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	1.0%	0.000	S

Crack Width	0

Cost Breakdown

AC Cost:	$1,591.50
CF Cost:	$0.00
DO Cost:	$0.00
Misc. Cost:	$1,000.00
Total Cost:	$2,591.50

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Majestic Way School
Area (sf): 800
Area Notation: C
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Pedestrian Areas
Defect Score: 44
Recommended Treatment: Crack Fill and Seal Coat
Year: 2011
Visual Description: Pavement exhibits moderate raveling and moderate shrinkage cracking.
Miscellaneous: Slope = 1.5/ 2.3, Pavement drains to adjacent planter.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.121	M

Crack Width	<1/8"

Cost Breakdown

AC Cost:	$280.00
CF Cost:	$96.80
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$376.80

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Majestic Way School
Area (sf): 41,335
Area Notation: D
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Playground
Defect Score: 86
Recommended Treatment: Dig out/ Crack Fill/ Seal Coat
Year: 2011
Visual Description: Pavement exhibits sever raveling and moderate shrinkage cracking.
Miscellaneous: Slope = 1.1/ 4.2/ 2.3, Pavement drains to adjacent field and planters.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	2.0%	0.125	V

Crack Width	1/8 - 1/4"

Cost Breakdown

AC Cost:	$14,467.25
CF Cost:	$5,166.88
DO Cost:	$4,133.50
Misc. Cost:	$0.00
Total Cost:	$23,767.62

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Majestic Way School
Area (sf): 11,333
Area Notation: E
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Playground
Defect Score: 60
Recommended Treatment: Crack Fill and Seal Coat
Year: 2011
Visual Description: Pavement adjacent to sidewalk is uplifted and has developed a trip hazard.
Miscellaneous: Slope = 3.1/ 0.7/ 3.2/ 1.3, Pavement flows to adjacent field.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.095	V

Crack Width	1/8 - 1/4"

Cost Breakdown

AC Cost:	$3,966.55
CF Cost:	$1,076.63
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$5,043.18

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Majestic Way School
Area (sf): 995
Area Notation: F
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Pedestrian Areas
Defect Score: 99
Recommended Treatment: Dig out/ Crack Fill/ Seal Coat
Year: 2011
Visual Description: Pavement exhibits moderate raveling, severe expansion cracking, and moderate tree root damage.
Miscellaneous: Slope = 5.2/ 0.5/ 2.5/ 7.7, Pavement drains to lawn area.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.302	M

Crack Width	1/8 - 1/4"

Cost Breakdown

AC Cost:	$348.25
CF Cost:	$300.49
DO Cost:	$0.00
Misc. Cost:	$300.00
Total Cost:	$948.74

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Majestic Way School
Area (sf): 599
Area Notation: G
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Pedestrian Areas
Defect Score: 63
Recommended Treatment: Crack Fill and Seal Coat
Year: 2011
Visual Description: Pavement exhibits moderate raveling with slight shrinkage.
Miscellaneous: Slope = 1.9/ 0.9, Pavement drains to planter or lawn.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.217	M

Crack Width	<1/8"

Cost Breakdown

AC Cost:	$209.65
CF Cost:	$129.98
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$339.63

12/10/2010

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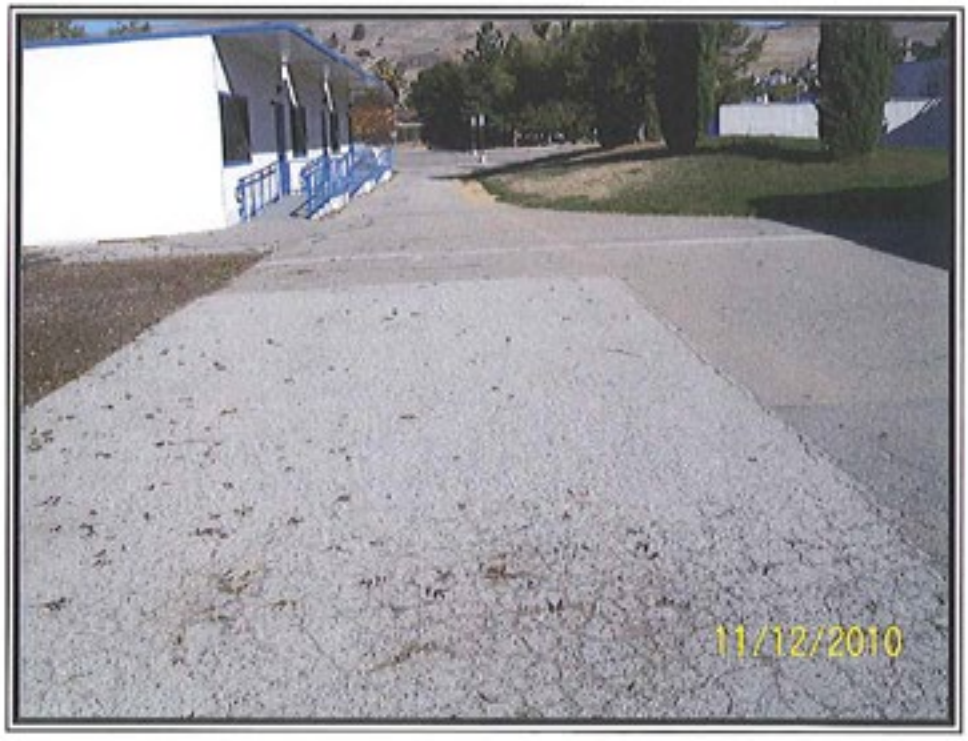
MAJESTIC WAY SCHOOL - AREA A

MAJESTIC WAY SCHOOL - AREA A

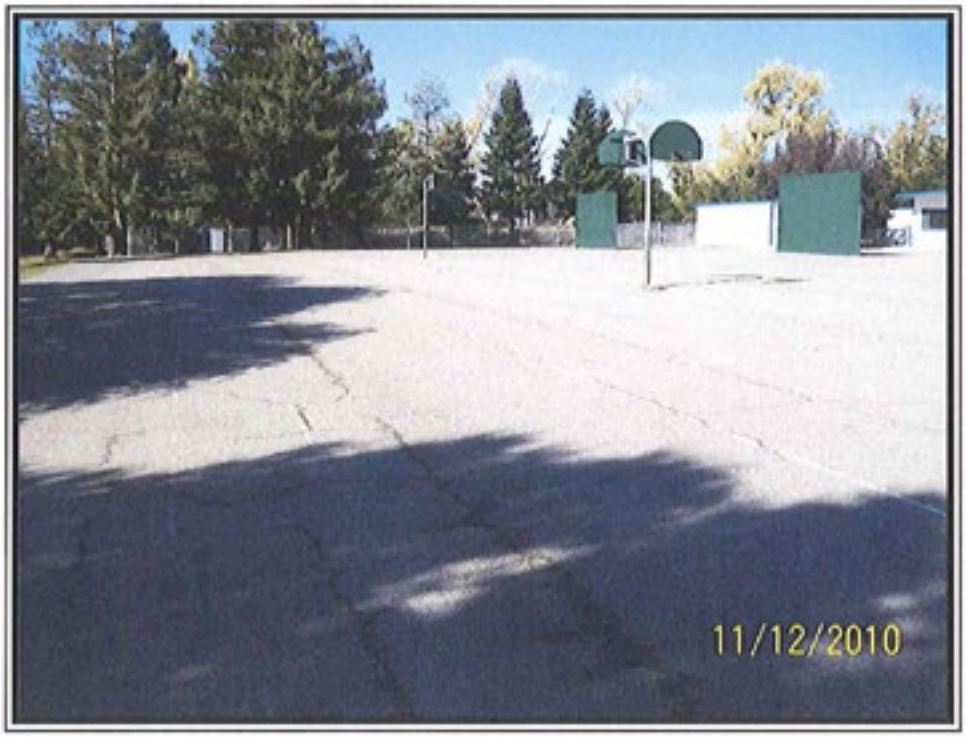
MAJESTIC WAY SCHOOL - AREA B



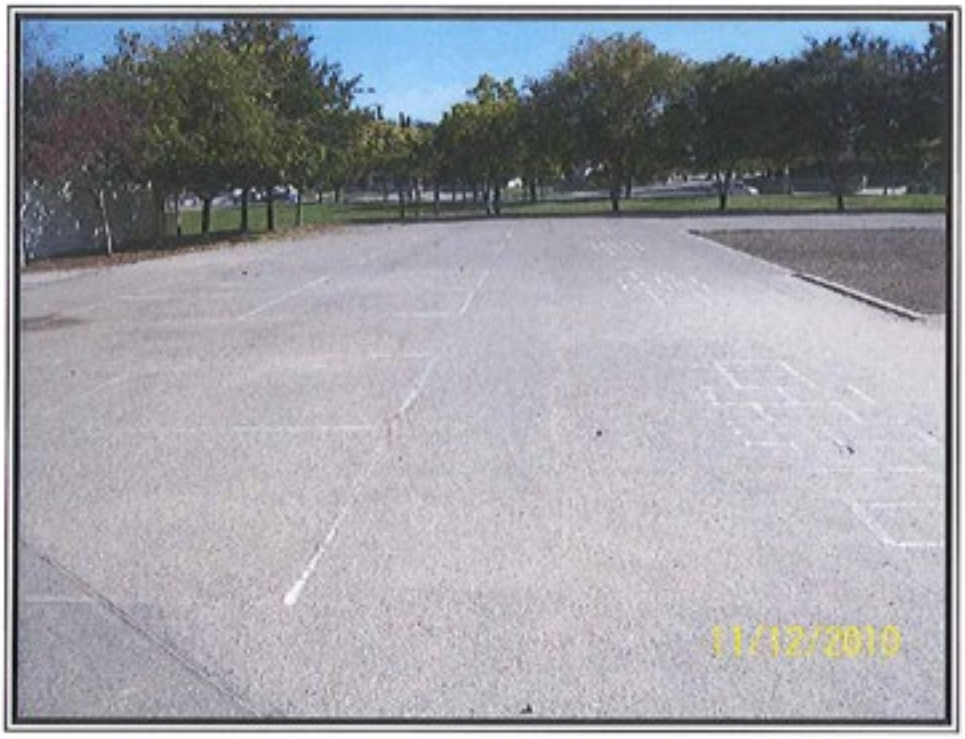
MAJESTIC WAY SCHOOL - AREA B

MAJESTIC WAY SCHOOL - AREA C

MAJESTIC WAY SCHOOL - AREA D



MAJESTIC WAY SCHOOL - AREA D



MAJESTIC WAY SCHOOL - AREA E

MAJESTIC WAY SCHOOL - AREA E

MAJESTIC WAY SCHOOL - AREA F

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MAJESTIC WAY SCHOOL - AREA G

MAJESTIC WAY SCHOOL - AREA G

Majestic Way Elementary School

Seismic Assessment Report

MAJESTIC WAY ELEMENTARY SCHOOL

Key Plan (Photo taken from Google Maps)

Building Description:

The building is one of three identical single story building with a wood framed roof with concrete walls built in 1974. Please refer to the evaluation written for Brooktree Elementary for specific recommendations for this building type.

Majestic Elementary School receives a subjective rating of 2.5.

Majestic Way Elementary School

Mechanical Systems Assessment Report

MAJESTIC WAY ELEMENTARY SCHOOL
BERRYESSA UNIFIED SCHOOL DISTRICT

A. MECHANICAL BUILDING SYSTEMS

1. Existing Conditions:

a. New chillers, boilers and pumps installed in 2008.

b. New exhaust fans installed in 2010.

c. New temperature controls installed in 2008.

d. Existing above ceiling ductwork and air distribution is original.

e. Existing indoor air handling units are original.

2. Recommendations:

a. Remove all existing indoor air handling units and replace with new air handling units. Install the replacement units most matching the removed units to minimize the modifications to the duct connections and the unit supports.

b. Remove all existing exhaust fans and replace with new exhaust fans to match the performance of the existing fans.

c. Replace all insulated supply and return ductwork, diffusers and grilles within the building. Replace all exhaust ductwork within the building.

d. Replace all insulated hot and chilled water within the building.

3. General:

a. This report and comments to follow are based on observations of the general condition of the mechanical systems and noticeable code issues resulting from a review of the existing drawings and an on-site visit, when required.

b. Refer to Appendix A for Title 24 requirements and general code issues that should be considered.

MAJESTIC WAY ELEMENTARY SCHOOL
BERRYESSA UNIFIED SCHOOL DISTRICT

APPENDIX-A

a. General

1. Comply requirements of California Mechanical Code (CMC) latest edition.

b. Possible Ventilation Code Issues

1. Corridors cannot be used as plenums for the purpose of supplying or exhausting air.

2. Corridors must have minimum two (2) air changes per hour for ventilation.

3. Minimum ventilation for occupied spaces should be 15 cfm/person or 0.15 cfm/sq. ft., whichever is greater.

4. Exhaust airflow from bathrooms should be based on minimum 10 air changes per hour.

c. Possible Fire Smoke Issues

1. Fire/smoke dampers in the system must be interlocked with fire alarm system.

2. Corridors, lobbies, and building entrances to have dedicated supply air.

3. Chemistry classrooms with occupancy separation shall have fire/smoke damper.

6. All air handling equipment supplying air flow in excess of 2,000 cubic feet per minute to have duct smoke detectors in the supply air duct.

d. Possible Title 24 Issues

1. Heating furnaces to have minimum 80% efficiency.

2. Heating & Ventilating and Air Conditioning systems in excess of 2,500 cfm and a total cooling over 75,000 BTU/h (6.25 Tons) must have an economizer. Economizer must be fully integrated into the cooling system so that depending on the weather conditions, economizer can provide partial/full cooling when additional mechanical cooling is required.

3. Interior supply and return air ductwork (heating & cooling) shall be insulated with minimum R-value of 4.2.

5. Hot and chilled water piping less than 50°F and over 110°F shall be insulated with pipe insulation minimum R-value of 4.2.

6. Boiler controls to have hot water reset based on outdoor air temperature.

7. Heating, ventilating, and air conditioning systems to have control capability with night setback.

Majestic Way Elementary School

Electrical and Low Voltage Systems Assessment Report

B. Electrical

1. Power Systems:

A 1000A, 277/480V, 3 phase, 4 wire switchboard with a 300KVA utility pad mounted transformer located in the electrical service yard provides power to the campus. The switchboard was of original built and in fair condition. According to PG&E record, the current peak usage on the system is of 261 amp. There is a spare capacity of 35 amp approximately at the service for future usage. If additional power is needed, the PG&E transformer shall need to be upgraded.

2. Fire Alarm System:

The existing fire alarm system was of manual/automatic system on a Gamewell 610 panel in the administration office installed around 2003. The panel is in good and functioning condition. The notification devices were not adequate to meet the current code requirement.

Recommendations:

a. Provide new horn and strobes in areas required by ADA, NFPA, CEC and CFC.

3. Public Address and Clock Systems:

The existing Bogen Multicom 2000 PA and master clock system located in the multi-purpose building storage room is in good and functioning condition. Existing speaker and clock units are in good condition for reuse.

Will H. Ector, Jr.
Superintendent

1376 Piedmont Road
San Jose, CA 95132-2427

Phone: (408) 923-1800
Fax: (408) 923-0623

Noble Elementary School

3466 Grossmont Drive
San Jose, CA

Noble Elementary School Assessment

Statistics:

Enrollment (Nov. 2012):	602
Principal:	Andrea Ortiz
Site:	11.4 Acres
Building Area:	Approx. 43,000 SF
Permanent Classrooms:	25
Portable Classrooms:	3 @ 960 SF
Total Size:	45,880 SF

Construction History:

1962	School Constructed
1994	Construction of New Administration Building and Covered Walkways
1997	Construction of (2) Portable Classrooms
2002	Modernization Projects
2006	Construction of (1) Portable Day Care Facility
2008	Roofing Removal and Replacement
2012	New HVAC Packaged Units Installed
2012	Fire Alarm Upgrade

Noble Elementary School

Site Meeting Minutes

Needs Assessment Scope Categories
Berryessa School District

Noble Elementary School

June 06, 2013

(updated September 13, 2013)

Site

1. Parking lots, traffic control, and drop-off and pick-up areas
    a. Issues with pick-up and drop-off area size and location.
    b. Insufficient staff parking available.
2. PE equipment (Basketball backboards, rims, play structures, matting)
    a. Basketball hoops noted to be in poor condition.
    b. Ball walls likely need replacement. (9/13/13)
    c. Tetherball poles likely need replacement. (9/13/13)
3. Site (ADA) compliance, paved walkways (tripping hazards, level and clear pathways)
    a. Door thresholds are too high.
    b. Various areas of campus need to be evaluated for potential trip hazards.
4. Paved Play Area (size, security, location, condition)
    a. Asphalt surface is in reasonably good condition.
    b. Additional paved play surface area requested.
5. Turf play area, landscaping and irrigation
    a. Turf condition is poor due to ground squirrels and gophers.
6. Fencing and security
    a. Site fencing is inadequate for current security needs.
    b. Funneling visitors through the main office entrance prior to entry to the campus core is desired.
7. Trash enclosure
    a. Trash location is acceptable, needs screening from view.
8. Site Utilities (to the street and campus distribution - gas, water, sewer, storm, power)
    a. No issues noted.
9. Site Lighting (LED)
    a. Pole mounted lights at parking lot requested.
    b. Lights requested at the back of campus play area. (9/13/13)
10. Covered Shade or Eating Structure
    a. Students currently eat indoors. An exterior covered eating area is desirable.
11. Roofing
    a. No known issues.
    b. Tie downspouts that drain onto the sidewalk into the underground storm drain system. (9/13/13)
    c. Gutters overflow during rain. Perhaps clogged or undersized. (9/13/13)

12. Covered walkways
    a. Covered walkways requested to portable area.
13. Exterior Paint
    a. Paint condition is acceptable.
14. Campus Layout and organization
    a. No major deficiencies noted.
15. Curb Appeal
    a. No issues noted.
16. Portable classrooms/restrooms
    a. No known issues at portable classrooms.
17. Storage
    a. Request for more distributed storage spaces.
18. Drinking fountains
    a. Need additional drinking fountains spread around campus.
    b. Existing drinking fountains do not work properly.
19. Signage
    a. District plans to replace all existing wayfinding signage.
    b. District plans to add marquee signage to each campus.

Building

a. Building Insulation, exterior surfaces
    a. No known issues.
b. Windows (Prep rooms/common areas, condition of windows and amount of natural light)
    a. Existing windows in poor condition.
c. Exterior Doors and Hardware
    a. Door and hardware replacement will likely be district-wide.
d. Restrooms (Electric hand dryers, partitions, fixtures, re-seal flooring)
    a. Additional restrooms requested for staff.
e. Flooring (Carpeting, tiling, resilient, all locations)
    a. No known issues.
    b. New flooring requested in MPR, Admin area, and Classrooms. (9/13/13)
f. Tackable Walls surfaces and all other interior finishes
    a. Full-height, wall-to-wall tackable surfaces requested.
g. Ceilings
    a. No known issues.
h. Cabinetry (Teaching walls)
    a. Interest was expressed in exploring teaching wall-style cabinetry.
i. Classroom size/layout (21st Century Learning environment/classroom)
    a. Meeting to be held on 23JUN2013 with District representatives to discuss this item.
j. Backpack storage or location
    a. Request was made to look into providing storage for backpacks.

k. Interior lighting (LED)
    a. Site would prefer incandescent lighting in the nurses office.
l. Blinds
    a. Window coverings to replace existing horizontal blinds were requested.
m. Markerboards
    a. Would prefer inside teaching walls.
n. Classroom electrical outlets
    a. Additional outlets spread throughout room requested.
    b. Exterior power outlets requested.
o. IT/Data networking (Wi-fi, location, IDF and MDF)
    a. SFA will be meeting with District IT personnel to discuss district-wide implementations.
p. IT/Video network
    a. SFA will be meeting with District IT personnel to discuss district-wide implementations.
q. Communication system (Intercom, Clocks, Speakers)
    a. Intercom has no known issues.
    b. New clocks were requested.
r. Intrusion Alarm
    a. No known issues.
s. Security cameras
    a. Security cameras are planned to be added to all sites as part of this process.
t. Heating and Ventilating and Air Conditioning (Chiller, mechanical equipment, FCU's)
    a. SFA will evaluate these systems over the summer.
    b. Potential system balancing issues were noted.
u. Energy management system (Controls for HVAC/Lighting)
    a. SFA to evaluate.

Miscellaneous:

- Photovoltaic Installation (Solar)
    - Solar installation will occur where economically feasible.
- Multi-purpose/Cafeteria efficiency
    - New AV system requested.
    - MPR too small to hold all students at once. (9/13/13)
- Administration area functionality
    - Currently acceptable.
    - SFA to evaluate potential for space optimization.
- Kitchen
    - SFA to meet with District Food Services personnel to discuss district-wide plan.
- Library/Media Center
    - Requests for increased library size.
    - Request for a Media Room
- Specialty Rooms
    - No music room.

  - No science room.
- FFE (Furnishings, Fixtures, Equipment) Lunch tables, classroom furniture, etc.
  - Most furniture is original to the school, and appears in need of replacement.
- Any other creative thoughts/ideas
  - Request for curriculum storage space.
  - Lunch area as shown on proposed drawing is too close to existing classroom spaces. Would prefer to relocate baseball backstop to allow installation of lunch area near revised parking lot. (9/13/13)

Grounds:

Security:

Observations:

- While significant portions of this site have a perimeter fence in place, the site is largely open in the front.
- Building exterior lighting is insufficient.
- Existing doors often have windows in them, and not all doors have modern security hardware.
- This site has a handful of windows below door height.

Parking lot and Drop-Off / Pick-Up:

Observations:

- Existing parking lot circulation is poor, both in the small parking lot in front of the school entry, and also in the adjacent larger parking lot.
- Because of the difficulty circulating through the parking lot at peak times, traffic backs up onto Grossmont Drive in front of the school.
- Pick-up / Drop-off location sees considerable congestion during peak times, and does not allow traffic to flow through.
- Existing accessible parking does not meet current requirements.

Landscaping:

Observations:

- The existing landscaping is generally in good condition, although some areas of original plantings have potential for trapping debris and creating places for nuisance pests to nest.

Play Surface / Fields / Play Structures:

Observations:

- The existing asphaltic concrete play surfaces appears to be in moderately good condition, some repair work is recommended.
- The existing sports fields have issues with ground squirrels and gophers. Some parts of the grass fields are bare and/or more weeds than grass.
- Existing play structures appear in good condition; however, the existing shredded rubber in the play structure boxes is depleted and in need of replacement.
- The existing swing set is past it's anticipated lifespan, and takes up considerable space for the number of students it serves.

Outdoor eating area:

Observations:

- Current outdoor eating area is under a row of trees between the large parking lot and the play fields.
- The tables here are sitting on dirt, and have no protection from rain or tree debris.

Building:

Entry Visibility:

Observations:

- Campus entry visibility is good.

Administration Area:

Observations:

- The administration building was constructed in 1994, and is in good condition.

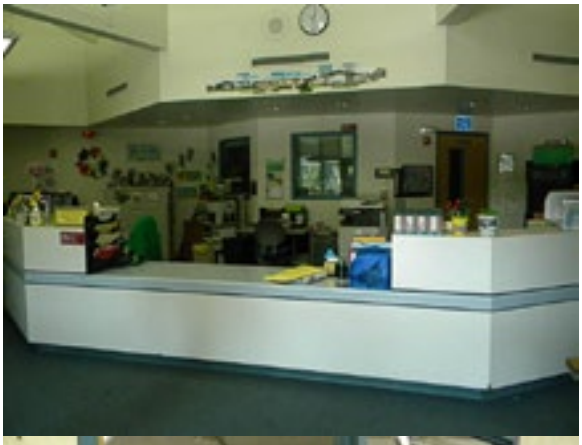
Circulation Spaces:

Observations:

- Circulation occurs primarily outdoors.
- Accessibility is generally good.
- Door thresholds are approximately 1" high.
- The two grassy spaces between classrooms are underused.

Classrooms:

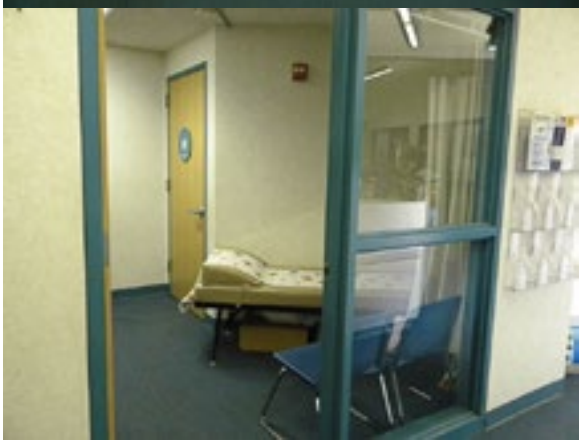
Observations:



- Classrooms are generally in good condition, although many of the finishes are faded and/or dirty.
- Many of the existing windows are in poor condition.

Library:

Observations:



- The existing library is housed in the administration building, and is too small for current needs.
- Insufficient curriculum and library book storage available.
- Existing book stacks do not provide sufficient display space.

Multi-Purpose Room:

Observations:

- Current Multi-Purpose Room is too small to assemble the entire student body when necessary.
- Most finishes appear in need of replacement.
- Existing windows are in need of replacement.
- Existing sound system is inadequate for current needs.
- There is a large CRT TV mounted on the wall adjacent to the stage.

Campus Circulation and Accessibility:

Observations:

- There is currently no covered walkway to the portable classrooms.
- Existing door thresholds are too high for current accessibility standards.
- Occasional areas of concrete or asphalt paving that have heaved or cracked cause accessibility issues.

Specialty Classrooms:

Observations:

- Special Education classrooms are distributed around site due to lack of a centralized location.
- The site is currently utilizing the Multi-Purpose Room for the school Music Program.
- No dedicated media lab space.

Portable Classrooms:

Observations:

- The existing portable classrooms appear to be in good condition.

Kitchen / Food Service

Observations:

- The existing kitchen layout and equipment do not meet current Department of Health requirements.
- Most existing built-in equipment (refrigerator, freezer, sinks, storage areas, etc.) are beyond their expected lifespan.

Staff Work Areas:

Observations:

- The staff work area appears to be in good condition.

Staff Lounge:

Observations:

- The existing staff room appears to be in good condition..

Student Restrooms:

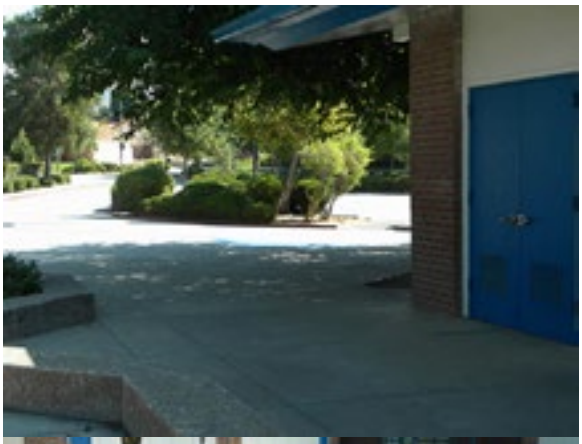
Observations:

- Existing restrooms meet current requirements for accessibility.
- The existing fixture count (Boys – 11 water closets, 13 urinals, and 8 lavatories; Girls – 21 water closets, 8 lavatories) serves the current population of approximately 600 students.

Staff Restrooms:

Observations:

- The existing fixture count (Men – 1 water closet, 2 urinals, and 2 lavatories; Women – 3 water closets, 2 lavatories) serves the current staff population.



Storage and Custodial Spaces:

Observations:

- Overall general storage capacity is limited.
- Custodial spaces in general show signs of wear and tear.

Structural System:

Observations:

- Noble Elementary School consists of multiple buildings oriented in a "hub" configuration. Structural drawings were not made available for the original construction; however, it is assumed to be early 1960s. Structural drawings were available for the design of Unit D, Unit E, Stage 3 and the Administration Building.
- Since structural drawings were not made available for the original campus design it is recommended that these drawings be located and reviewed or the existing buildings be visually observed, documented and reviewed.
- It was also noted that there are several covered walkways connected to adjacent buildings. These covered walkways should be reviewed for susceptibility to damage due to differential movement between adjacent structures in an earthquake.
- Units D and E were of nearly identical design, each consisting of two separate buildings, and were built in 1963. The lateral force resisting system for each building consists of a plywood sheathed roof acting as a horizontal wood diaphragm spanning between vertical plywood shear walls. Seismic loads are resisted in both orthogonal directions by way of wood shear walls located on the exterior and interior of the buildings.
- All four building structures were designed with long windows just below the roof line. These windows create a discontinuity between the roof diaphragms and shear walls in many locations. 3x6 mullions were provided as a transfer mechanism but should be reviewed in greater detail.

- One of the buildings in Unit D includes a low roof surrounded by wood shear walls. According to the details there may not be adequate strapping between the upper and lower shear walls. Additionally, there does not appear to be a direct transfer mechanism between the upper and lower roof for diaphragm shear loads.

- The majority of the roof diaphragms have diaphragm aspect ratios (i.e. length to width ratio) very near 2.0. Straight-sheathed diaphragms are flexible and generally have lower capacity than other types of wood diaphragms. As such, the diaphragm aspect ratio is generally limited during design. Additionally, these diaphragms appear to be unblocked.

- The Stage 3 building was built in 1968 and is of similar construction to Units D and E, however this building did not have the full length clerestory window condition. The lateral force resisting system for each building consists of a plywood sheathed roof acting as a horizontal wood diaphragm spanning between vertical plywood shear walls. Seismic loads are resisted in both orthogonal directions by way of wood shear walls located on the exterior and interior of the buildings.

- The roof diaphragm aspect ratio (i.e. length to width ratio) is very near 2.0. Straight-sheathed diaphragms are flexible and generally have lower capacity than other types of wood diaphragms. As such, the diaphragm aspect ratio is generally limited during design. Additionally, these diaphragms appear to be unblocked.

- The Administration Building was built in 1994 and consists of a wood panelized roof diaphragm with plywood sheathed shear walls. The building was constructed to relatively recent code standards with no notable, structural deficiencies.

Mechanical Systems:

Observations:

- New packaged gas heat / electric cool rooftop units and exhaust fans installed in 2008.
- New temperature controls were installed in 2008.
- New ductwork on the roof was provided in 2008.
- Existing above ceiling ductwork and air distribution is original.
- Existing Administration Building HVAC Unit is original.

Electrical Systems:

Observations:

- A 2000A, 120/208V, 3-phase, 4-wire switchboard with a 150KVA utility pad mounted transformer located next to the kindergarten classroom provides power to the campus. The switchboard was installed around 2002 and is in good and functioning condition. According to PG&E record, the current peak usage on the system is of 461 amps.

Low Voltage Systems:

Observations:

- The existing fire alarm system is a manual/automatic system on a Gamewell 602 panel in Building A installed in 2012. The panel is in good and functioning condition. The initiation and notification devices meet the current code requirements.
- The existing Bogen Multicom 2000 Public Adress and Master Clock system located in the Multi-Purpose Room storage room is in good and functioning condition.

Roofing:

Observations:

- The existing roof is a multi-ply built-up-roofing system. Installed in 2008, it has a 20-year warranty, and an estimated remaining life of 13-15 years.

Exterior Paint:

Observations:

- The existing exterior paint is generally in good condition, although it is aged, and shows many locations where re-painting has occurred over time.

Noble Elementary School

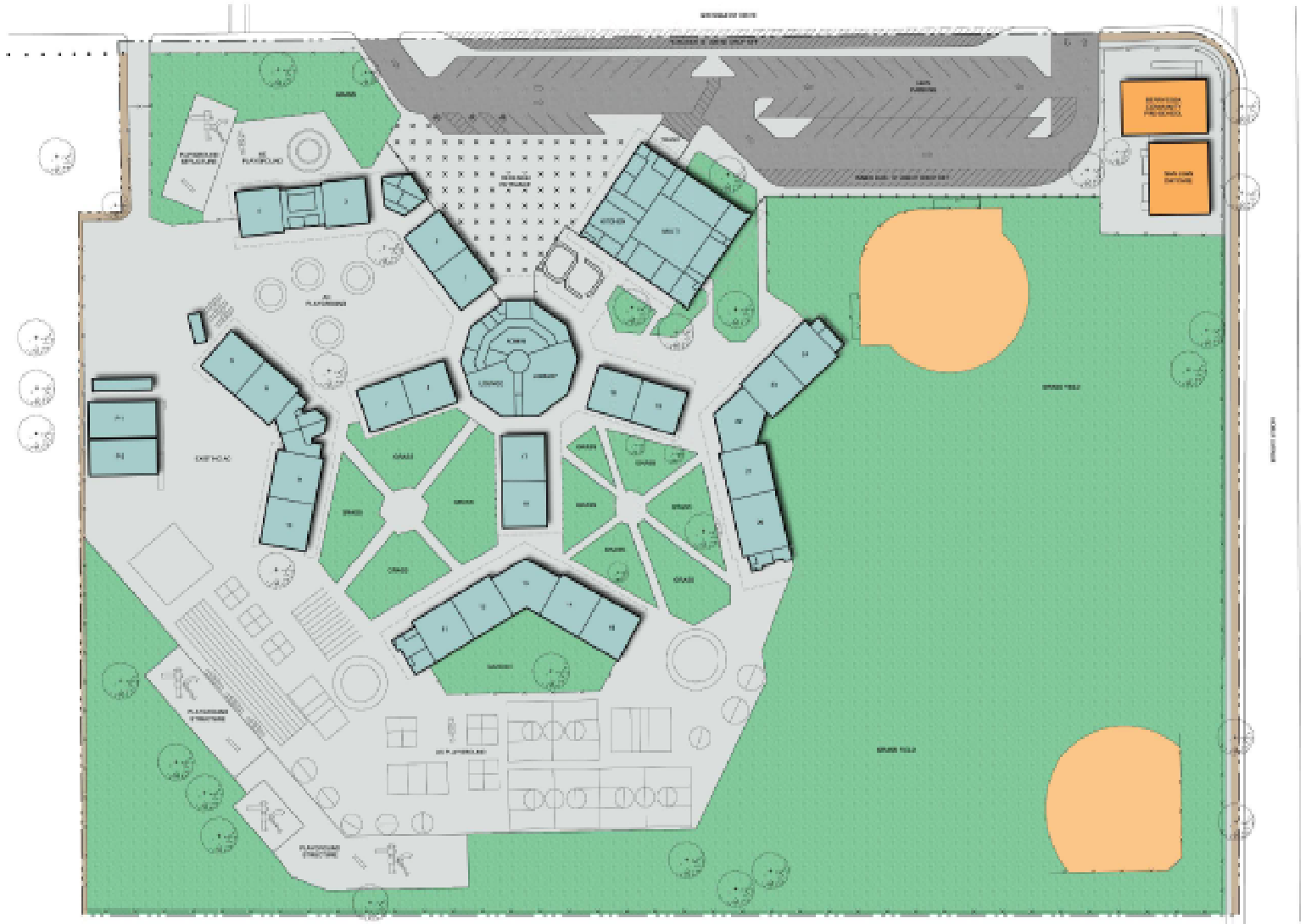
Site Plans

EXISTING BUILDINGS
NON-SCHOOL BUILDINGS

0 15' 30' 60' 90'

NOBLE ELEMENTARY SCHOOL

EXISTING CONDITIONS



NOBLE ELEMENTARY SCHOOL

EXISTING BUILDINGS
NON-SCHOOL BUILDINGS

- Expand parking lot to incorporate student & bus drop off areas
- Reconfigure / redesign main entrance

Noble Elementary School

Paving Assessment Report

NOBLE SCHOOL

Summary School Report

Asphalt Surface Evaluation

School Name: Noble School

Area	Type	Use	Area (sq. ft.)	Defect Score	Recommendation	Cost	Year
A	EL	Park	15,600	37	Dig out/ Crack Fill/ Seal Coat	$8,458.00	2011
B	EL	Ped	7,572	20	Double application Emulsion Se	$2,271.60	2011
C	EL	Park	10,220	49	Crack Fill and Seal Coat	$4,936.26	2011
D	EL	Play	3,615	63	Crack Fill and Seal Coat	$1,814.73	2015
E	EL	Play	10,590	60	Crack Fill and Seal Coat	$5,538.57	2013
F	EL	Ped	13,989	36	Dig out/ Crack Fill/ Seal Coat	$6,309.04	2015
G	EL	Play	47,286	66	Dig out/ Crack Fill/ Seal Coat	$26,622.02	2015
					Total:	**$55,950.22**	

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Noble School
Area (sf): 15,600
Area Notation: A
Buses: No
Surface Type: AC
Garbage Trucks: Yes
Use: Parking Lots or Areas
Defect Score: 37
Recommended Treatment: Dig out/ Crack Fill/ Seal Coat
Year: 2011
Visual Description: Pavement exhibits moderate raveling and slight shrinkage cracking, three areas of aligator cracking (5x5) and (3x25)(10x15).
Miscellaneous: Slope = 3.6/ 2.5/ 0.2, Pavement drains to drop inlate located in pavement area, ADA - pavement slope 3.0, ramp does not meet ADA requirements, update signage, need dumpster pad.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.080	M

Crack Width	1/8 - 1/4"

Cost Breakdown

AC Cost:	$5,460.00
CF Cost:	$1,248.00
DO Cost:	$0.00
Misc. Cost:	$1,750.00
Total Cost:	$8,458.00

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Noble School
Area (sf): 7,572
Area Notation: B
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Pedestrian Areas
Defect Score: 20
Recommended Treatment: Double application Emulsion Seal Coat
Year: 2011
Visual Description: Pavement exhibits moderate raveling and has never been sealed.
Miscellaneous: Slope = 0.5/ 4.5, Settled trench, pavement drains to adjacent lawn area.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.000	M

Crack Width	0

Cost Breakdown

AC Cost:	$2,271.60
CF Cost:	$0.00
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$2,271.60

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Noble School
Area (sf): 10,220
Area Notation: C
Buses: Yes
Surface Type: AC
Garbage Trucks: No
Use: Parking Lots or Areas
Defect Score: 49
Recommended Treatment: Crack Fill and Seal Coat
Year: 2011
Visual Description: Pavement exhibits moderate raveling with moderate shrinkage cracking, previous maintenance was an overlay leaving a 3-4 inch curb height
Miscellaneous: Slope = 2.5/ 3.0/ 0.6, ADA - need to update signage, pavement slope is 0.6.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.133	M

Crack Width	1/8 - 1/4"

Cost Breakdown

AC Cost:	$3,577.00
CF Cost:	$1,359.26
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$4,936.26

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Noble School
Area (sf): 3,615
Area Notation: D
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Playground
Defect Score: 63
Recommended Treatment: Crack Fill and Seal Coat
Year: 2015
Visual Description: Pavement was recently seal coated, in good condition.
Miscellaneous: Slope = 0.5/ 2.3, Pavement drains to drop inlet in lawn area.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	1.0%	0.152	S

Crack Width	1/8 - 1/4"

Cost Breakdown

AC Cost:	$1,265.25
CF Cost:	$549.48
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$1,814.73

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Noble School
Area (sf): 10,590
Area Notation: E
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Playground
Defect Score: 60
Recommended Treatment: Crack Fill and Seal Coat
Year: 2013
Visual Description: Pavement exhibits slight raveling and moderate shrinkage cracking, previously sealed, in fair condition.
Miscellaneous: Slope = 0.5/ 3.3/ 5.3, Pavement drains to drop inlet located within the pavement area.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.173	S

Crack Width	1/8 - 1/4"

Cost Breakdown

AC Cost:	$3,706.50
CF Cost:	$1,832.07
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$5,538.57

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Noble School
Area (sf): 13,989
Area Notation: F
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Pedestrian Areas
Defect Score: 36
Recommended Treatment: Dig out/ Crack Fill/ Seal Coat
Year: 2015
Visual Description: Pavement was recently sealed, in good condition, slight shrinkage.
Miscellaneous: Slope = 3.7/ 5.0/ 2.8/ 2.1, Pavement drains to adjacent planters and pavement areas.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.101	S

Crack Width	1/8 - 1/4"

Cost Breakdown

AC Cost:	$4,896.15
CF Cost:	$1,412.89
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$6,309.04

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Noble School
Area (sf): 47,286
Area Notation: G
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Playground
Defect Score: 66
Recommended Treatment: Dig out/ Crack Fill/ Seal Coat
Year: 2015
Visual Description: Pavement was recently sealed, in good condition.
Miscellaneous: Slope = 1.4/ 2.0/ 0.3/ 6.4/ 11.6, Pavement drains away from school to adjacent fields, playgrounds, and planters.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	1.0%	0.163	S

Crack Width	1/8 - 1/4"

Cost Breakdown

AC Cost:	$16,550.10
CF Cost:	$7,707.62
DO Cost:	$2,364.30
Misc. Cost:	$0.00
Total Cost:	$26,622.02

12/10/2010

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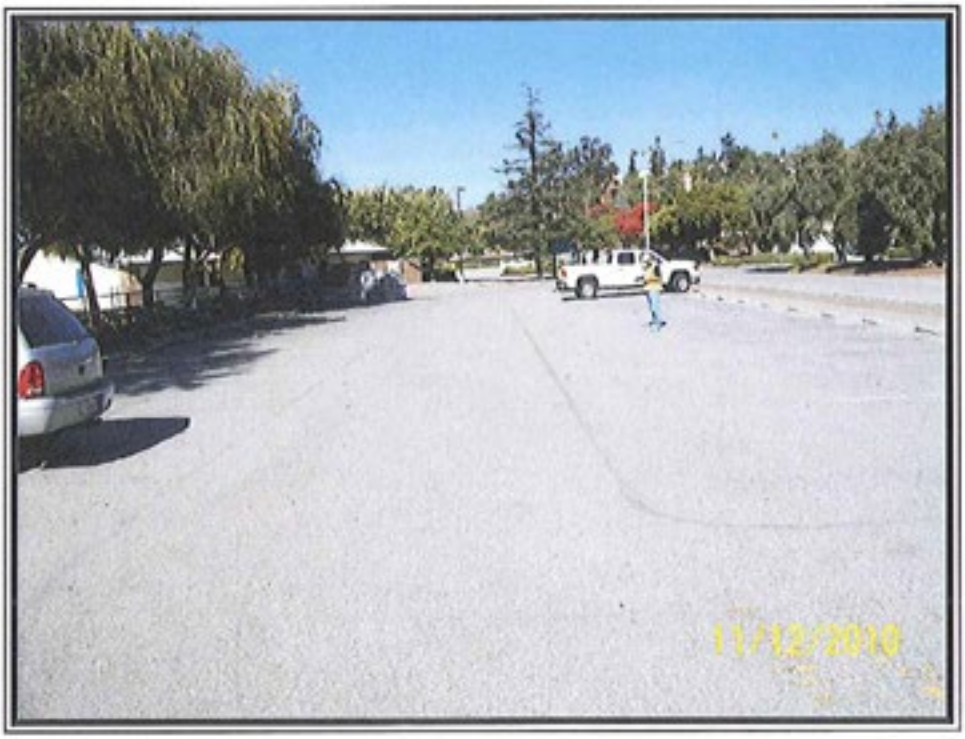
NOBLE SCHOOL - AREA A



NOBLE SCHOOL - AREA A

NOBLE SCHOOL - AREA B

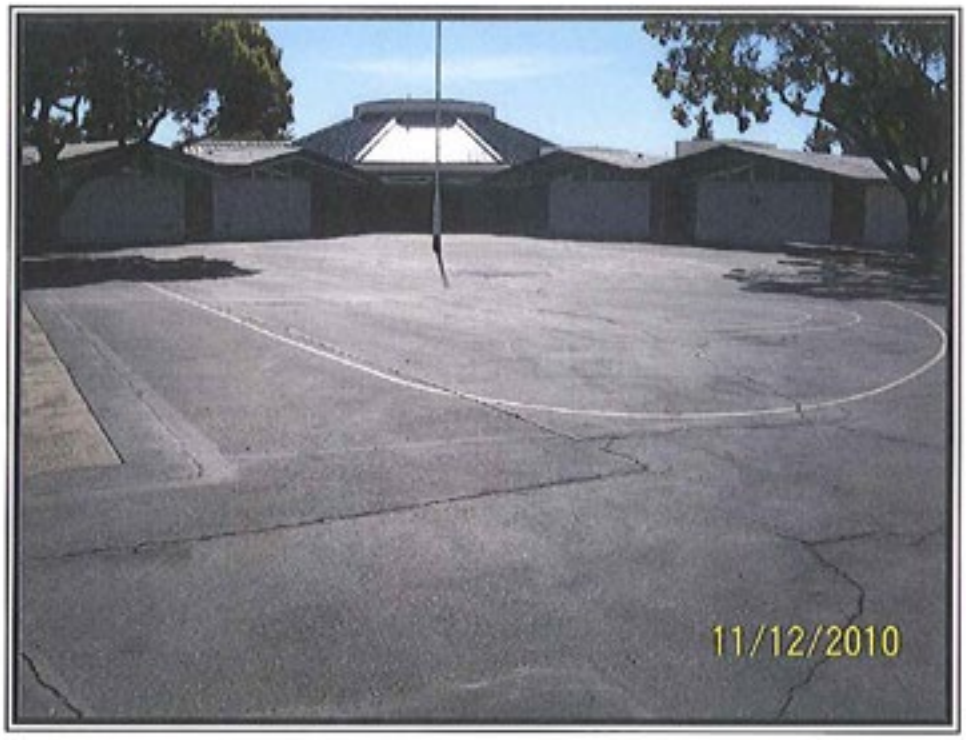
NOBLE SCHOOL - AREA B

NOBLE SCHOOL - AREA C

NOBLE SCHOOL - AREA C

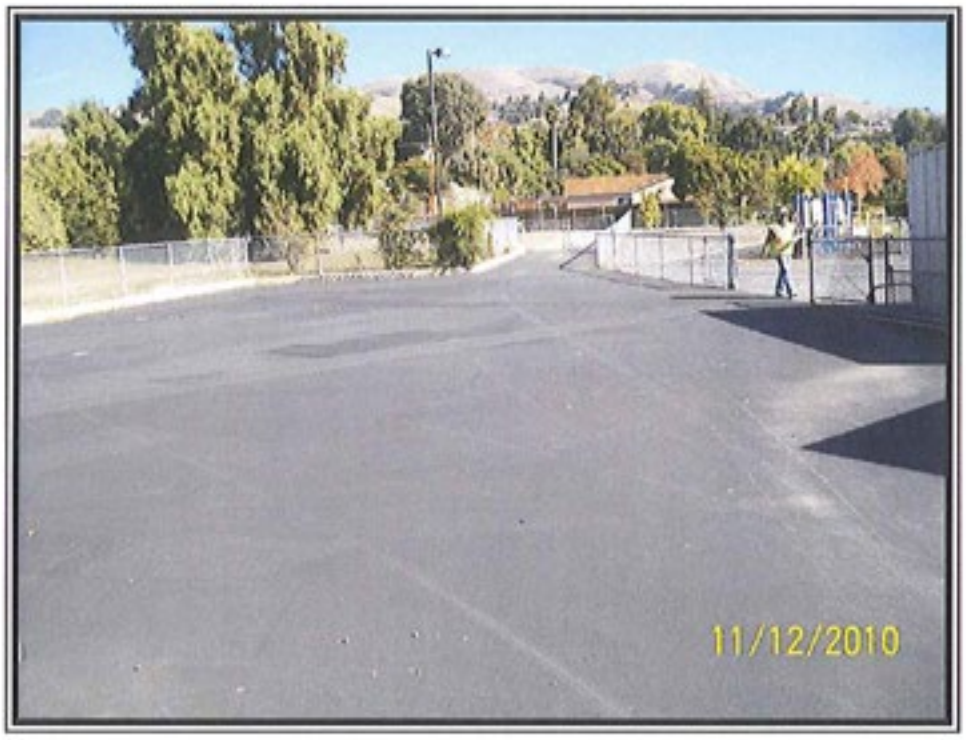
NOBLE SCHOOL - AREA D

NOBLE SCHOOL - AREA D



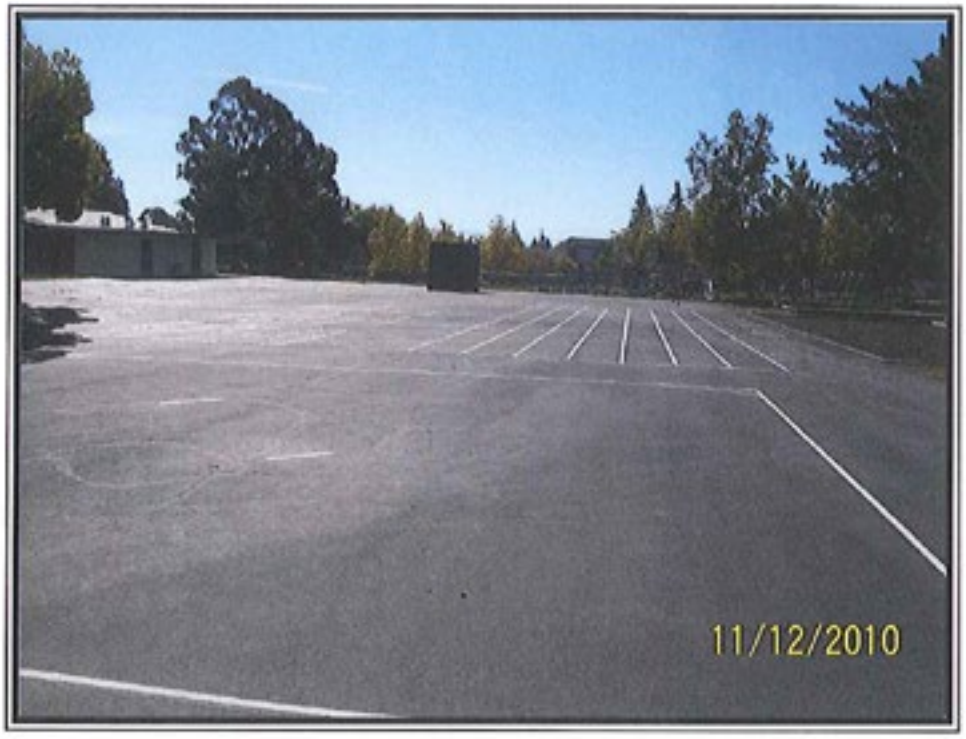
NOBLE SCHOOL - AREA E

NOBLE SCHOOL - AREA E

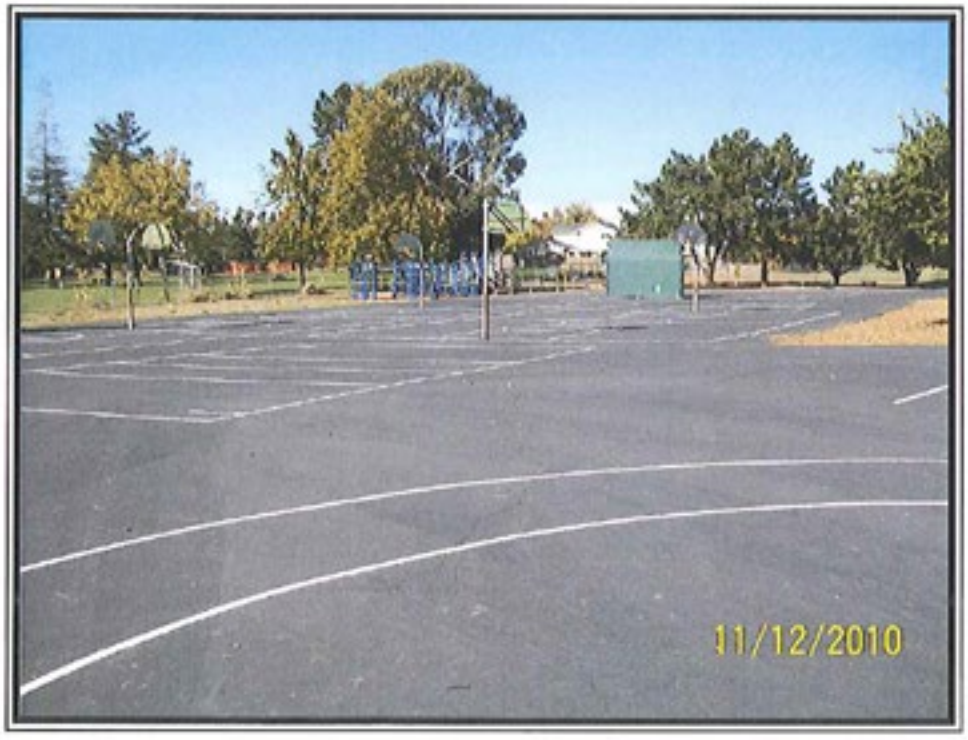


NOBLE SCHOOL - AREA F

NOBLE SCHOOL - AREA F



NOBLE SCHOOL - AREA G



NOBLE SCHOOL - AREA G

Noble Elementary School

Seismic Assessment Report

NOBLE ELEMENTARY SCHOOL

Key Plan (Photo taken from Google Maps)

Building Descriptions:

Noble Elementary School consists of multiple buildings oriented in a "hub" configuration. Structural drawings were not made available for the original construction; however, it is assumed to be early 1960s. Structural drawings were available for the design of Unit D, Unit E, Stage 3 and the Administration Building.

Since structural drawings were not made available for the original campus design it is recommended that these drawings be located and reviewed or the existing buildings be visually observed, documented and reviewed.

It was also noted that there are several covered walkways connected to adjacent buildings. These covered walkways should be reviewed for susceptibility to damage due to differential movement between adjacent structures in an earthquake.

Units D and E

Units D and E were of nearly identical design, each consisting of two separate buildings, and were built in 1963. The lateral force resisting system for each building consists of a plywood sheathed roof acting as a horizontal wood diaphragm spanning between vertical plywood shear walls. Seismic loads are resisted in both orthogonal directions by way of wood shear walls located on the exterior and interior of the buildings.

All four building structures were designed with long windows just below the roof line. These windows create a discontinuity between the roof diaphragms and shear walls in many locations. 3x6 mullions were provided as a transfer mechanism but should be reviewed in greater detail. One of the buildings in Unit D includes a low roof surrounded by wood shear walls. According to the details there may not be adequate strapping between the upper and lower shear walls. Additionally, there does not appear to be a direct transfer mechanism between the upper and lower roof for diaphragm shear loads.

The majority of the roof diaphragms have diaphragm aspect ratios (i.e. length to width ratio) very near 2.0. Straight-sheathed diaphragms are flexible and generally have lower capacity than other types of wood diaphragms. As such, the diaphragm aspect ratio is generally limited during design. Additionally, these diaphragms appear to be unblocked.

We recommend that further investigation be performed to verify adequate diaphragm capacity at diaphragms with higher aspect ratios, verify if adequate load transfer can be obtained between the diaphragm and shear walls and to determine if adequate load transfer can be obtained between the high and low roofs.

Noble Elementary School Units D and E receive a subjective rating of 2.5.

227

Stage 3

The Stage 3 building was built in 1968 and is of similar construction to Units D and E, however this building did not have the full length clerestory window condition. The lateral force resisting system for each building consists of a plywood sheathed roof acting as a horizontal wood diaphragm spanning between vertical plywood shear walls. Seismic loads are resisted in both orthogonal directions by way of wood shear walls located on the exterior and interior of the buildings.

The roof diaphragm aspect ratio (i.e. length to width ratio) is very near 2.0. Straight-sheathed diaphragms are flexible and generally have lower capacity than other types of wood diaphragms. As such, the diaphragm aspect ratio is generally limited during design. Additionally, these diaphragms appear to be unblocked.

We recommend that further investigation be performed to verify adequate diaphragm capacity at diaphragms with higher aspect ratios, verify if adequate load transfer can be obtained between the diaphragm and shear walls and to determine if adequate load transfer can be obtained between the high and low roofs.

Noble Elementary School Stage 3 receives a subjective rating of 2.0.

Administration Building

The Administration Building was built in 1992 and consists of a wood panelized roof diaphragm with plywood sheathed shear walls. The building was constructed to relatively recent code standards with no notable, structural deficiencies.

Noble Elementary School Administration Building receives a subjective rating of 1.5.

Noble Elementary School

Mechanical Systems Assessment Report

NOBLE ELEMENTARY SCHOOL
BERRYESSA UNIFIED SCHOOL DISTRICT

A. MECHANICAL BUILDING SYSTEMS

1. Existing Conditions:

a. New packaged gas heat / electric cool rooftop units and exhaust fans installed in 2008.

b. New temperature controls installed in 2008.

c. New ductwork on the roof was provided in 2008.

d. Existing above ceiling ductwork and air distribution is original.

2. Recommendations:

a. Replace all insulated supply and return ductwork, diffusers and grilles within the building.

b. Replace all exhaust ductwork within the building.

3. General:

a. This report and comments to follow are based on observations of the general condition of the mechanical systems and noticeable code issues resulting from a review of the existing drawings and an on-site visit, when required.

b. Refer to Appendix A for Title 24 requirements and general code issues that should be considered.

APPENDIX-A

a. General

1. Comply requirements of California Mechanical Code (CMC) latest edition.

b. Possible Ventilation Code Issues

1. Corridors cannot be used as plenums for the purpose of supplying or exhausting air.
2. Corridors must have minimum two (2) air changes per hour for ventilation.
3. Minimum ventilation for occupied spaces should be 15 cfm/person or 0.15 cfm/sq. ft., whichever is greater.
4. Exhaust airflow from bathrooms should be based on minimum 10 air changes per hour.

c. Possible Fire Smoke Issues

1. Fire/smoke dampers in the system must be interlocked with fire alarm system.
2. Corridors, lobbies, and building entrances to have dedicated supply air.
3. Chemistry classrooms with occupancy separation shall have fire/smoke damper.
4. All air handling equipment supplying air flow in excess of 2,000 cubic feet per minute to have duct smoke detectors in the supply air duct.

d. Possible Title 24 Issues

1. Interior supply and return air ductwork (heating & cooling) shall be insulated with minimum R-value of 4.2.
2. Heating, ventilating, and air conditioning systems to have control capability with night setback.
3. Heating, ventilating, and air conditioning equipment to be certified by the State of California to meet minimum energy requirements.

Noble Elementary School

Electrical and Low Voltage Systems Assessment Report

B. Electrical

1. Power Systems:

A 2000A, 120/208V, 3 phase, 4 wire switchboard with a 150KVA utility pad mounted transformer located next to the kindergarten classroom building provides power to the campus. The switchboard was installed around 2002 and is in good and functioning condition. According to PG&E record, the current peak usage on the system is of 461 amp which exceeds the PG&E transformer capacity. If additional power is needed, the PG&E transformer shall need to be upgraded.

2. Fire Alarm System:

The existing fire alarm system was of automatic system on a Gamewell 602 panel in building A installed in 2011. The panel is in good and functioning condition. The initiation and notification devices meet the current code requirement.

3. Public Address and Clock Systems:

The existing Bogen Multicom 2000 PA and master clock system located in the main office is in good and functioning condition. Existing speaker and clock units are in good condition for reuse.

Will H. Ector, Jr.
Superintendent

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Northwood Elementary School

2760 East Trimble Road
San Jose, CA

Northwood Elementary School Assessment

Statistics:

Enrollment:	464
Principal:	Mr. Barocio
Site:	9.2 Acres
Building Area:	Approx. 49,000 SF
Permanent Classrooms:	26
Portable Classrooms:	5 @ 960 SF
Total Size:	53,800 SF

Construction History:

1965	School Constructed
1968	Construction of (1) Portable Classroom
1989	Construction of (1) Portable Classroom
1996	Construction of (1) Portable Day Care Building
2002	Modernization Projects
2002	Construction of Lunch Cover Structure
2007	Construction of Play Structure
2007	Construction of (1) Portable Classroom
2008	Construction of (1) Portable Classroom
2010	HVAC Upgrade
2010	Roofing Removal and Replacement
2010	Fire Alarm Upgrade

Northwood Elementary School

Site Meeting Minutes

Needs Assessment Scope Categories
Berryessa School District

Northwood Elementary School

May 29, 2013

(updated September 25, 2013)

Site

1. Parking lots, traffic control, and drop-off and pick-up areas
    a. Insufficient staff parking spaces.
    b. At least one drop-off zone needed, would prefer two.
2. PE equipment (Basketball backboards, rims, play structures, matting)
    a. Generally in good condition.
3. Site (ADA) compliance, paved walkways (tripping hazards, level and clear pathways)
    a. SFA to investigate.
4. Paved Play Area (size, security, location, condition)
    a. Asphalt condition is poor.
5. Turf play area, landscaping and irrigation
    a. Issues noted with squirrels and gophers.
6. Fencing and security
    a. Secure perimeter fence was requested, particularly at playground area.
    b. Install fence at property line between city park and school site. (9/25/13)
7. Trash enclosure
    a. Enclosure requested.
8. Site Utilities (to the street and campus distribution - gas, water, sewer, storm, power)
    a. Issues noted with hot water supply to staff lounge.
    b. Water ponding issue noted near Building E.
    c. Water occasionally brown after standing for the weekend. (9/24/13)
    d. Sewer gas smell noted in staff lounge restroom. (9/24/13)
9. Site Lighting (LED)
    a. Additional pole-mounted lighting requested throughout campus.
10. Covered Shade or Eating Structure
    a. Shade structures requested, eating areas not needed.
11. Roofing
    a. No known issues.
12. Covered walkways
    a. None currently.
13. Exterior Paint
    a. Good condition.

14. Campus Layout and organization
    a. More prominent entry requested.
15. Curb Appeal
    a. General landscaping improvements.
16. Portable classrooms/restrooms
    a. There are existing portables in need of replacement.
17. Storage
    a. No issues noted.
18. Drinking fountains
    a. Replace existing drinking fountains.
    b. Provide additional drinking fountains.
19. Signage
    a. District plans to replace all existing wayfinding signage.
    b. District plans to add marquee signage to each campus.

Building

a. Building Insulation, exterior surfaces
    a. No issues noted.
b. Windows (Prep rooms/common areas, condition of windows and amount of natural light)
    a. Replace polycarbonate with glass.
c. Exterior Doors and Hardware
    a. Door and hardware replacement will likely be district-wide.
    b. Some interior doors still need ability to lock from inside classroom. (9/24/13)
d. Restrooms (Electric hand dryers, partitions, fixtures, re-seal flooring)
    a. Kindergarten restrooms are located inside classrooms.
e. Flooring (Carpeting, tiling, resilient, all locations)
    a. Flooring appears to be in need of replacement.
    b. Replace as required. (9/24/13)
    c. MPR flooring (VCT) to be removed and replaced. (9/24/13)
f. Tackable Walls surfaces and all other interior finishes
    a. Existing surfaces need to be replaced with new.
    b. PTA requested shelves and tackable wall panels in the PTA room. (9/24/13)
g. Ceilings
    a. No issues noted.
h. Cabinetry (Teaching walls)
    a. Request for teaching walls.
    b. Revised request not to have teaching walls due to space constraints. (9/25/13)
i. Classroom size/layout (21st Century Learning environment/classroom)
    a. Meeting to be held on 23JUN2013 with District representatives to discuss this item.
j. Backpack storage or location
    a. No current backpack storage solution.
k. Interior lighting (LED)
    a. No known issues.
    b. Site has requested better control over classroom lighting. (9/25/13)

l. Blinds
    a. Acceptable.
m. Markerboards
    a. Markerboards in the teaching wall cabinets would be sufficient.
n. Classroom electrical outlets
    a. More, better distributed.
o. IT/Data networking (Wi-fi, location, IDF and MDF)
    a. SFA will be meeting with District IT personnel to discuss district-wide implementations.
p. IT/Video network
    a. SFA will be meeting with District IT personnel to discuss district-wide implementations.
q. Communication system (Intercom, Clocks, Speakers)
    a. Additional exterior speakers requested.
r. Intrusion Alarm
    a. No issues noted.
s. Security cameras
    a. Security cameras are planned to be added to all sites as part of this process.
t. Heating and Ventilating and Air Conditioning (Chiller, mechanical equipment, FCU's)
    a. SFA will evaluate these systems over the summer.
    b. Re-commissioning and re-balancing requested for HVAC system. (9/25/13)
u. Energy management system (Controls for HVAC/Lighting)
    a. No known issues.

Miscellaneous:

- Photovoltaic Installation (Solar)
    - Solar installation will occur where economically feasible.
- Multi-purpose/Cafeteria efficiency
    - No issues noted.
    - MPR noted as being too small. (9/25/13)
    - New doors to kitchen requested. (9/25/13)
    - Investigate if possible to expand MPR into adjacent unused kitchen space. (9/25/13)
    - Adjacent storage area could be removed and added back into the MPR space. (9/25/13)
- Administration area functionality
    - Space utilization study needed.
    - Larger conference room space needed. (9/25/13)
- Kitchen
    - SFA to meet with District Food Services personnel to discuss district-wide plan.
- Library/Media Center
    - ~~AV Lab storage space requested.~~ Storage space deemed acceptable after summer purge. (9/25/13)
    - Remove sink and shelves from Library space. (9/25/13)
    - Remove existing power poles that impede room utilization. (9/25/13)
- Specialty Rooms
    - No music room.
    - No science room

- Existing music program occurs on stage in MPR, causing difficulties for other users of the MPR space. (9/25/13)

- FFE (Furnishings, Fixtures, Equipment) Lunch tables, classroom furniture, etc.
  - Most furniture is original to the school, and appears in need of replacement.
- Any other creative thoughts/ideas
  - No additional issues noted.

Grounds:

Security:

Observations:

- While significant portions of this site have a perimeter fence in place, the site is largely open in the front.
- The site is also open in the back, where it abuts a city park.
- Building exterior lighting is insufficient.
- Existing doors often have windows in them, and not all doors have modern security hardware.
- This site has a handful of windows below door height.

Parking lot and Drop-Off / Pick-Up:

Observations:

- Existing parking lot circulation is poor.
- Because of the difficulty circulating through the parking lot at peak times, traffic backs up onto Trimble Road in front of the school.
- Pick-up and drop-off area is insufficient.
- Insufficient parking for staff and guests.
- Existing accessible parking does not meet current requirements.

Landscaping:

Observations:

- The existing landscaping is generally in good condition, although some areas of original plantings have potential for trapping debris and creating

places for nuisance pests to nest.

Play Surface / Fields / Play Structures:

Observations:

- The existing asphaltic concrete play surfaces appears to be in moderately good condition, some repair work is recommended.
- The existing sports fields have issues with ground squirrels and gophers. Some parts of the grass fields are bare and/or more weeds than grass.
- Existing play structures appear in good condition; however, the existing shredded rubber in the play structure boxes is depleted and in need of replacement.

Outdoor eating area:

Observations:

- This site has covered eating for students already that is in good and functional condition.

Building:

Entry Visibility:

Observations:

- Campus entry visibility is poor.

Administration Area:

Observations:

- The administration area is congested.
- The existing wall and casework finishes are worn.

- Several large windows face out of the office.

Circulation Spaces:

Observations:

- Circulation occurs primarily outdoors, without covered walkways.
- Accessibility is generally good.
- Door thresholds are approximately 1" high in places.

Classrooms:

Observations:

- Classrooms are generally in good condition, although many of the finishes are faded and/or dirty.
- Many of the existing windows are in poor condition.

Library:

Observations:

- The existing library finishes are showing signs of wear.
- There is an existing sink and countertop casework in the library space that is not needed, and poses a risk of damage if not capped and removed.
- Existing librarian desk is not accessible.

Multi-Purpose Room:

Observations:

- Current Multi-Purpose Room is too small to assemble the entire student body when necessary.
- Most finishes appear in need of replacement.
- Existing sliding doors are in need of replacement.
- Existing sound system is inadequate for current needs.

Campus Circulation and Accessibility:

Observations:

- There is currently no covered walkway to the various buildings.
- Some existing door thresholds are too high for current accessibility standards.
- Occasional areas of concrete or asphalt paving that have heaved or cracked cause accessibility issues.

Specialty Classrooms:

Observations:

- The site is currently utilizing the Multi-Purpose Room for the school Music Program. There is no dedicated music classroom. Use of the Multi-Purpose Room causes difficulties due to lack of acoustical insulation.
- No dedicated media lab space.
- No dedicated science lab

Portable Classrooms:

Observations:

- The existing portables appear to be in good and functional condition, with the excep-

tion of the 1968 portable, which is in poor shape.

- The 900 Building sewer utilizes a pump-driven lift station to transfer waste to the site sanitary sewer system due to an error during the 1989 installation. The existing pump system is in poor condition, regularly requiring maintenance.

Kitchen / Food Service

Observations:

- The existing kitchen layout and equipment do not meet current Department of Health requirements.
- Most existing built-in equipment (refrigerator, freezer, sinks, storage areas, etc.) are beyond their expected lifespan.

Staff Work Areas:

Observations:

- The staff work area appears to be in good condition.

Staff Lounge:

Observations:

- The existing staff room finishes are worn and dated.
- The existing furniture is in poor condition.

Student Restrooms:

Observations:

- Some existing restrooms do not meet current requirements for accessibility, primarily due to lack of space for wheelchair turnarounds.

- The existing fixture count (Boys – 6 water closets, 10 urinals, and 6 lavatories; Girls – 11 water closets,6 lavatories) serves the current population of approximately 475 students.

Staff Restrooms:

Observations:

- The existing fixture count (Men – 1 water closet, 2 urinals, and 2 lavatories; Women – 3 water closets, 2 lavatories) serves the current staff population.

Storage and Custodial Spaces:

Observations:

- Overall general storage capacity is acceptable.
- Custodial spaces are cluttered and in general show signs of wear and tear.

Structural System:

Observations:

- Northwood Elementary School is comprised of six buildings. Architectural drawings were not available at the time of review for this campus. Based on the structural drawings that were available, all the buildings are estimated to be constructed at the same time roughly around the mid-1960s.
- Unit 100: This unit is a single story wood framed building with a plywood roof supported on steel and glue lam beams spanning between concrete columns and exterior walls. The building footprint is regular in shape, but the roof diaphragm is discontinuous due to differing plate heights.
- Unit 100: This building's lateral force resisting system consists of a plywood sheathed roof acting as a horizontal wood diaphragm spanning between cantilevered concrete columns. Seismic loads are resisted in both orthogonal directions by way of the concrete columns located on the interior of the building structure.

- Unit 200: This unit is a single story wood framed building with a plywood roof supported on glue lam beams spanning between exterior walls.

- Unit 200: This building's lateral force resisting system consists of a plywood sheathed roof acting as a horizontal wood diaphragm spanning between vertical plywood shear walls. Seismic loads are resisted in both orthogonal directions by way of the wood shear walls located on the exterior of the building structure. A preliminary review of the building is that the building is comprised of numerous shearwalls that can adequately handle the lateral load if the walls are in good condition. During the review it was noted that not all shear walls included tie downs at each end of the wall.

- Units 300, 400 & 500: These units are single story wood building with a panelized roof system supported on steel beams and glulams spanning between exterior walls.

- Units 300, 400 & 500: This building's lateral force resisting system consists of a plywood sheathed roof acting as a horizontal wood diaphragm spanning between vertical plywood shear walls. Seismic loads are resisted in both orthogonal directions by way of the wood shear walls located on the exterior of the building structure. A preliminary review of the building is that the building is comprised of numerous shear walls that can adequately handle the lateral load if the walls are in good condition. During the review it was noted that not all shear walls included tie downs at each end of the wall.

- Unit 600: This unit is a small single story wood building with a wood joist roof system supported on a sawn lumber beam spanning between exterior walls.

- Unit 600: This building's lateral force resisting system consists of a plywood sheathed roof acting as a horizontal wood diaphragm spanning between vertical plywood shear walls. Seismic loads are resisted on three sides by way of the wood shear walls located on the exterior of the building structure. A preliminary review of the building is that the building is comprised of numerous shearwalls that can adequately handle the lateral load if the walls are in good condition. During the review it was noted that not all shear walls included tie downs at each end of the wall.

Mechanical Systems:

Observations:

- New rooftop air conditioning units (gas heat / electric cool) were installed in 2010.
- New ductwork on the roof was installed in 2010.
- New exhaust fans were installed in 2010.
- New temperature controls were installed in 2010.
- Existing above ceiling ductwork and air distribution is original.

Electrical Systems:

Observations:

- A 2000A, 120/208V, 3-phase, 4-wire switchboard with a 300KVA utility pad mounted transformer located next to the kindergarten classroom provides power to the campus. The switchboard was installed around 2002 and is in good and functioning condition. According to PG&E record, the current peak usage on the system is of 461 amps.

Low Voltage Systems:

Observations:

- The existing fire alarm system is a manual/automatic system on a Gamewell 602 panel in main office MDF room installed in 2010. The panel is in good and functioning condition. The initiation and notification devices meet the current code requirements.
- The existing Bogen Multicom 2000 Public Adress and Master Clock system located in the main office conference room is in good and functioning condition.

Roofing:

Observations:

- The existing roof is a multi-ply built-up-roofing system. Installed in 2010, it has a 20-year warranty, and an estimated remaining life of 17-20 years.

Exterior Paint:

Observations:

- The existing exterior paint is generally in good condition, although it is aged, and shows many locations where re-painting has occurred over time.

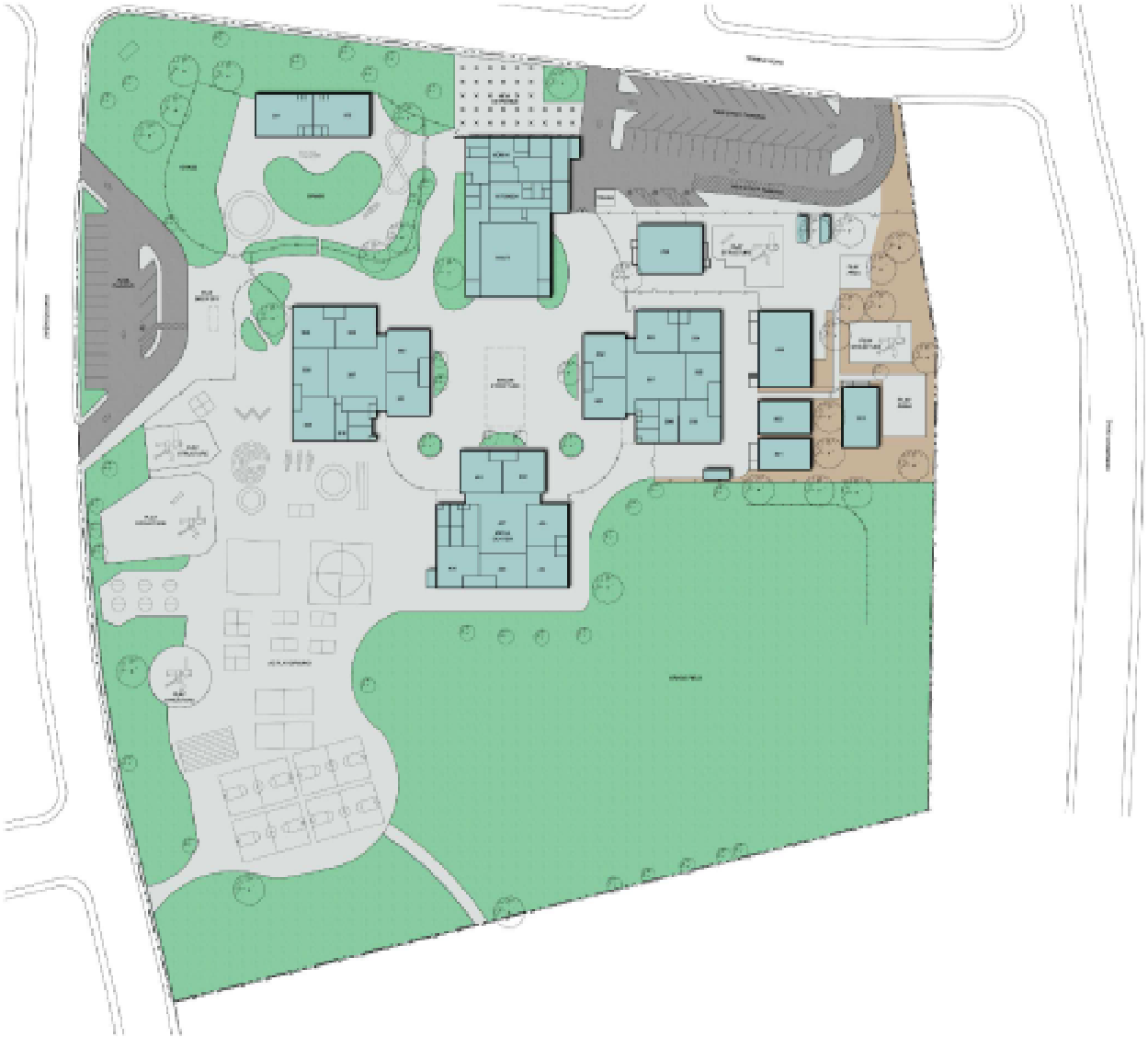
Northwood Elementary School

Site Plans

NORTHWOOD ELEMENTARY SCHOOL

EXISTING BUILDING

EXISTING CONDITIONS



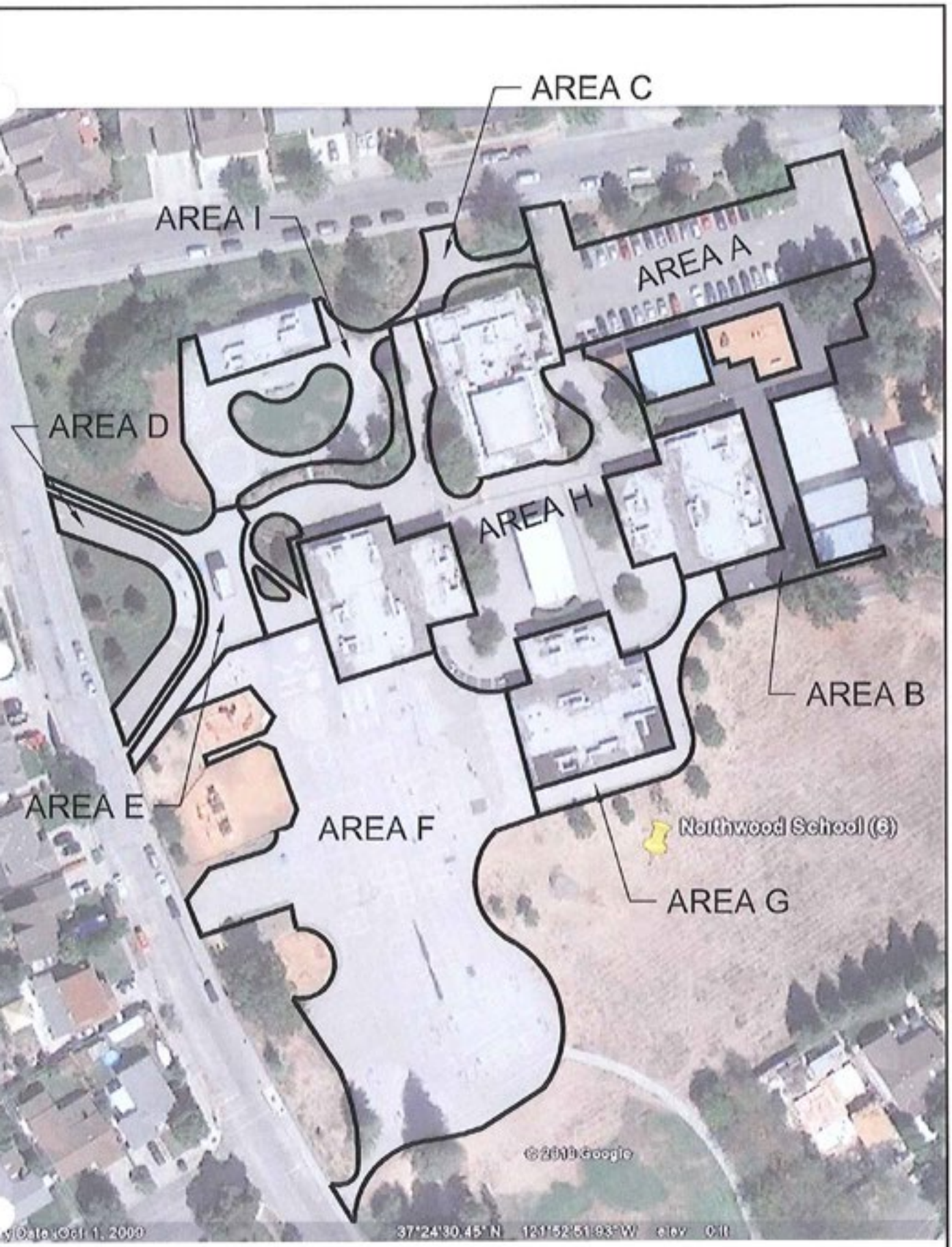
NORTHWOOD ELEMENTARY SCHOOL

EXISTING BUILDING

- Renovate entrance facade
- Redesign/expand parking lot with new student and bus drop off

Northwood Elementary School

Paving Assessment Report



NORTHWOOD SCHOOL

Summary School Report

Asphalt Surface Evaluation

School Name: Northwood School

Area	Type	Use	Area (sq. ft.)	Defect Score	Recommendation	Cost	Year
A	EL	Park	18,179	125	Reconstruct	$133,297.75	2011
B	EL	Ped	15,131	25	Dig out/ Crack Fill/ Seal Coat	$6,730.67	2015
C	EL	Ped	2,530	107	Reconstruct	$18,342.50	2011
D	EL	Road	3,696	94	Reconstruct	$35,546.00	2011
E	EL	Ped	6,320	56	Dig out/ Crack Fill/ Seal Coat	$3,090.48	2011
F	EL	Play	64,426	63	Dig out/ Crack Fill/ Seal Coat	$31,826.44	2011
G	EL	Ped	5,292	38	Dig out/ Crack Fill/ Seal Coat	$2,712.06	2011
H	EL	Ped	30,534	66	Dig out/ Crack Fill/ Seal Coat	$17,801.32	2011
I	EL	Play	10,831	87	Remove & Replace	$54,155.00	2012
					Total:	**$303,502.23**	

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Civil Engineers - Materials Testing
Specializing in Pavement Rehabilitation
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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Northwood School
Area (sf): 18,179
Area Notation: A
Buses: No
Surface Type: AC
Garbage Trucks: Yes
Use: Parking Lots or Areas
Defect Score: 125
Recommended Treatment: Reconstruct
Year: 2011
Visual Description: Pavement exhibits tree root damage, severe raveling and alligator cracking, no previous maintenance has been performed.
Miscellaneous: Slope = 3.9/ 3.1/ 0.9, Pavement drains to drop inlet in the area, ADA - no acess to building.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	10.0%	0.110	V

Crack Width	1/8 - 1/4"

Cost Breakdown

AC Cost:	$131,797.75
CF Cost:	$0.00
DO Cost:	$0.00
Misc. Cost:	$1,500.00
Total Cost:	$133,297.75

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Northwood School
Area (sf): 15,131
Area Notation: B
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Pedestrian Areas
Defect Score: 25
Recommended Treatment: Dig out/ Crack Fill/ Seal Coat
Year: 2015
Visual Description: Pavement exhibits slight raveling, recently sealed, in good condition.
Miscellaneous: Slope = 0.2/ 3.0/ 1.5, Pavement drains to slot drains and small area drains, some tree root damage is evident, areas of standing water, there is a large inlet at the far end near the baseball field which is full of debris.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.075	S

Crack Width	<1/8"

Cost Breakdown

AC Cost:	$5,295.85
CF Cost:	$1,134.83
DO Cost:	$0.00
Misc. Cost:	$300.00
Total Cost:	$6,730.67

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Northwood School
Area (sf): 2,530
Area Notation: C
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Pedestrian Areas
Defect Score: 107
Recommended Treatment: Reconstruct
Year: 2011
Visual Description: Pavement exhibits moderate raveling with some expansion cracking.
Miscellaneous: Slope = 4.7/ 2.2/ 5.4, Pavement drains to planter and lawn area.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.336	M

Crack Width	1/8 - 1/4"

Cost Breakdown

AC Cost:	$18,342.50
CF Cost:	$0.00
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$18,342.50

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Northwood School
Area (sf): 3,696
Area Notation: D
Buses: Yes
Surface Type: AC
Garbage Trucks: No
Use: Roadways, Alleyways, Bus Turnouts, etc.
Defect Score: 94
Recommended Treatment: Reconstruct
Year: 2011
Visual Description: Pavement exhibits severe raveling, there is a section of concrete (17.5x50) that is part of the roadway and in need of replacement, severe expansion cracking
Miscellaneous: Slope = 1.2/ 2.8/ 2.4, Curb and gutter on one side which drains to drop inlet and AC berm on other side which is falling apart.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	2.0%	0.100	V

Crack Width	1/8 - 1/4"

Cost Breakdown

AC Cost:	$26,796.00
CF Cost:	$0.00
DO Cost:	$0.00
Misc. Cost:	$8,750.00
Total Cost:	$35,546.00

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Northwood School
Area (sf): 6,320
Area Notation: E
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Pedestrian Areas
Defect Score: 56
Recommended Treatment: Dig out/ Crack Fill/ Seal Coat
Year: 2011
Visual Description: Pavement exhibits moderate raveling with moderate shrinkage cracking and severe expansion cracking adjacent to planter.
Miscellaneous: Slope = 6.3/ 2.1/ 4.4, Pavement sheet flows to area D.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.139	M

Crack Width	1/8 - 1/4"

Cost Breakdown

AC Cost:	$2,212.00
CF Cost:	$878.48
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$3,090.48

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Northwood School
Area (sf): 64,426
Area Notation: F
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Playground
Defect Score: 63
Recommended Treatment: Dig out/ Crack Fill/ Seal Coat
Year: 2011
Visual Description: Pavement exhibits moderate raveling with severe shrinkage cracking and severe expansion cracking at lawn edges.
Miscellaneous: Slope = 2.6/ 3.4/ 2.3/ 1.0, Pavement drains to playground and planters.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.144	M

Crack Width	1/8 - 1/4"

Cost Breakdown

AC Cost:	$22,549.10
CF Cost:	$9,277.34
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$31,826.44

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Northwood School
Area (sf): 5,292
Area Notation: G
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Pedestrian Areas
Defect Score: 38
Recommended Treatment: Dig out/ Crack Fill/ Seal Coat
Year: 2011
Visual Description: Pavement exhibits moderate raveling with slight shrinkage cracking and severe expansion cracking along lawn edges, some previous patching along lawn edge.
Miscellaneous: Slope = 3.6/ 2.5/ 1.1/ 0.6, Pavement drains away from school to adjacent lawn area.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.068	M

Crack Width	1/8 - 1/4"

Cost Breakdown

AC Cost:	$1,852.20
CF Cost:	$359.86
DO Cost:	$0.00
Misc. Cost:	$500.00
Total Cost:	$2,712.06

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Northwood School
Area (sf): 30,534
Area Notation: H
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Pedestrian Areas
Defect Score: 66
Recommended Treatment: Dig out/ Crack Fill/ Seal Coat
Year: 2011
Visual Description: Pavement exhibits moderate raveling and slight shrinkage cracking, expansion cracking adjacent to planters.
Miscellaneous: Slope = 1.3/ 2.4/ 4.5, Pavement sheet flows to drop inlets located within the pavement area, numerous utility trenches throughout the area, settled AC around drop inlet.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	3.0%	0.083	M

Crack Width	1/8 - 1/4"

Cost Breakdown

AC Cost:	$10,686.90
CF Cost:	$2,534.32
DO Cost:	$4,580.10
Misc. Cost:	$0.00
Total Cost:	$17,801.32

12/10/2010

Pavement Engineering Inc
Civil Engineers - Materials Testing
Specializing in Pavement Rehabilitation
San Luis Obispo Office (805) 781-2265

BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Northwood School
Area (sf): 10,831
Area Notation: I
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Playground
Defect Score: 87
Recommended Treatment: Remove & Replace
Year: 2012
Visual Description: Pavement exhibits moderate raveling, severe expansion cracking adjacent to lawn area, and moderate shrinkage cracking.
Miscellaneous: Slope = 1.3/ 2.1/ 3.5, Pavement drains to drop inlet in area, tree root damage, observed areas of ponding water.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	3.0%	0.117	M
	Crack Width	1/4 - 1/2"		

Cost Breakdown

AC Cost:	$54,155.00
CF Cost:	$0.00
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$54,155.00

12/10/2010

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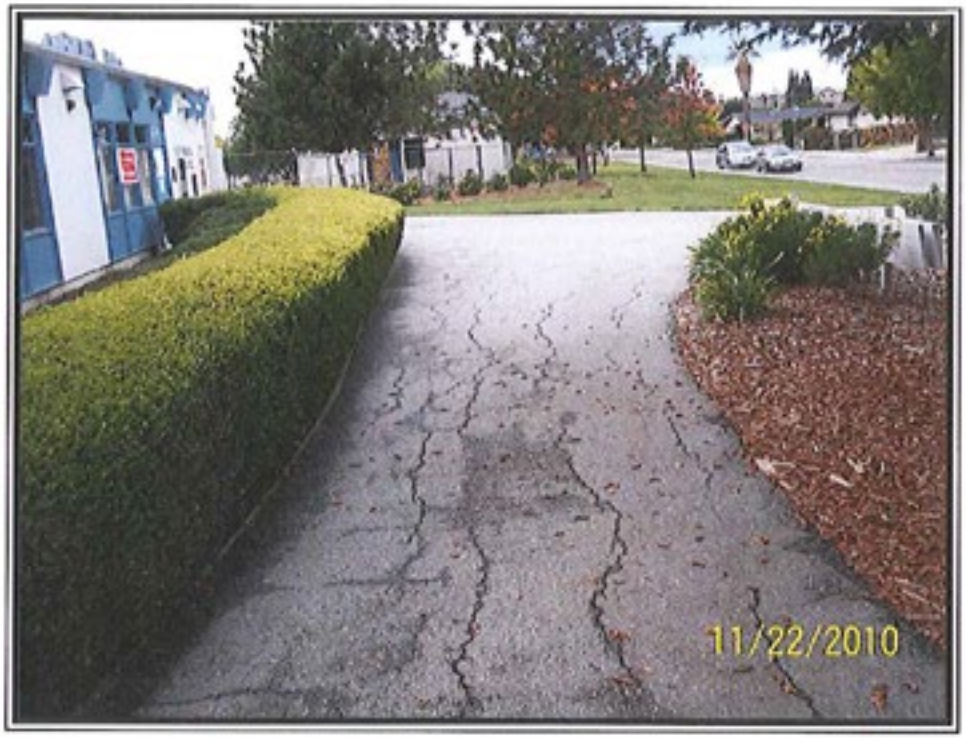
NORTHWOOD SCHOOL - AREA A

NORTHWOOD SCHOOL - AREA A

NORTHWOOD SCHOOL - AREA B

NORTHWOOD SCHOOL - AREA B



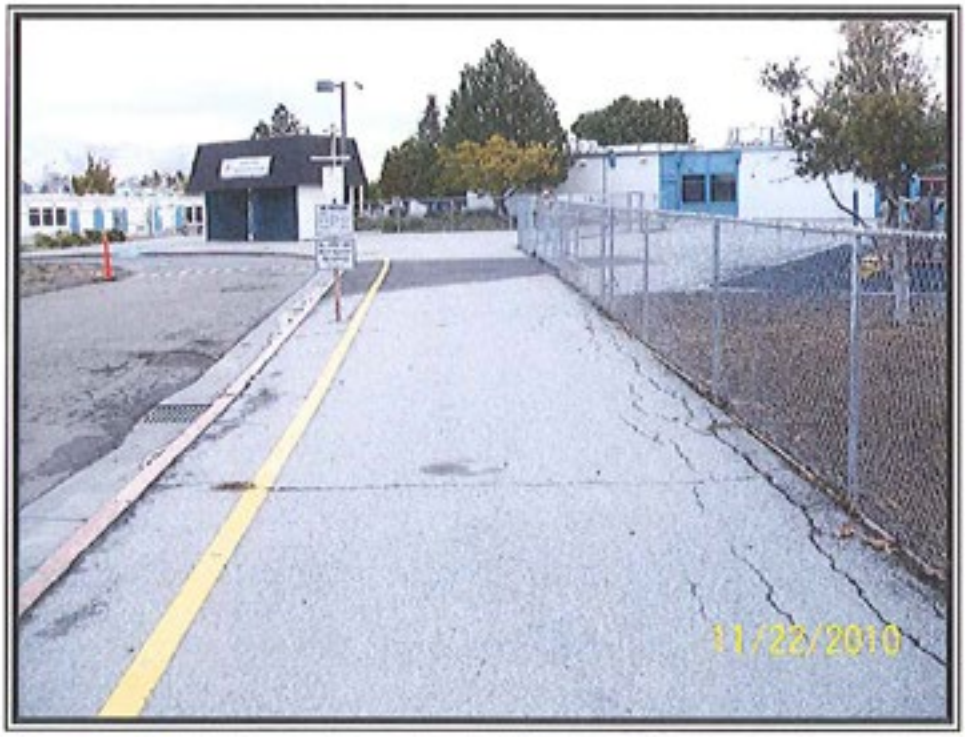
NORTHWOOD SCHOOL - AREA C

NORTHWOOD SCHOOL - AREA C

NORTHWOOD SCHOOL - AREA D

NORTHWOOD SCHOOL - AREA D

NORTHWOOD SCHOOL - AREA E

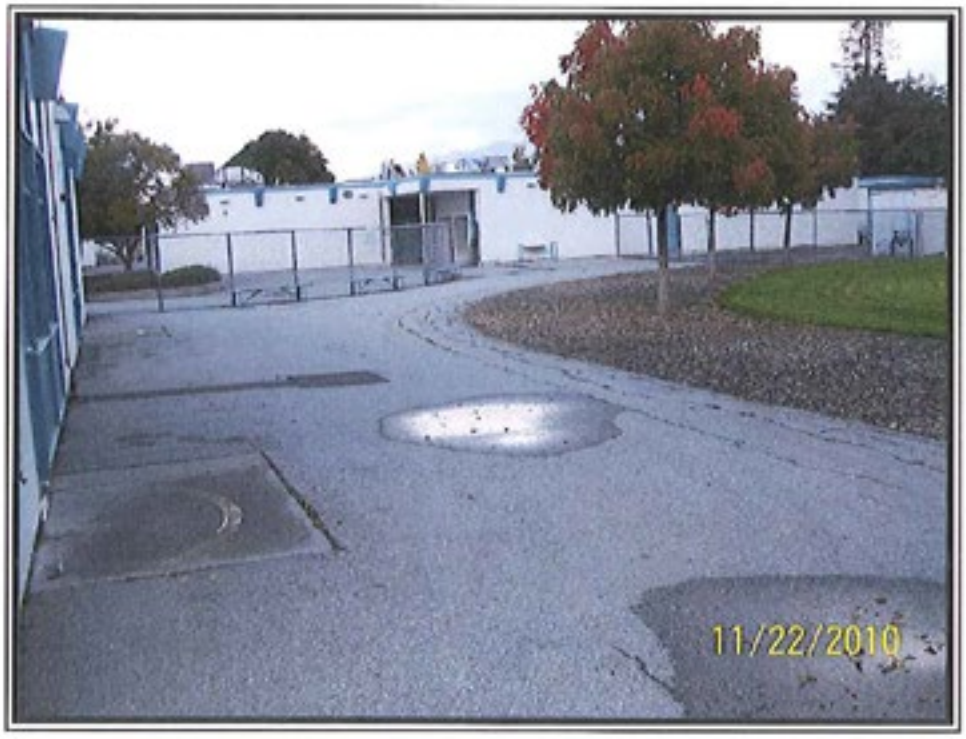


NORTHWOOD SCHOOL - AREA E

NORTHWOOD SCHOOL - AREA F

NORTHWOOD SCHOOL - AREA F

NORTHWOOD SCHOOL - AREA G



NORTHWOOD SCHOOL - AREA G

NORTHWOOD SCHOOL - AREA H

NORTHWOOD SCHOOL - AREA H

NORTHWOOD SCHOOL - AREA H

NORTHWOOD SCHOOL - AREA H

Northwood Elementary School

Seismic Assessment Report

NORTHWOOD ELEMENTARY SCHOOL
(FORMERLY LAKEWOOD ELEMENTARY)

Key Plan (Photo taken from Google Maps)

Building Descriptions:

Northwood Elementary School is comprised of six buildings. Architectural drawings were not available at the time of review for this campus. Based on the structural drawings that were available, all the buildings are estimated to be constructed at the same time roughly around the mid-1960s. The breakdown of each building corresponds to the structural plan designations and will be referenced in that way. See the key plan for building labels.

Unit 100

This unit is a single story wood framed building with a plywood roof supported on steel and glue lam beams spanning between concrete columns and exterior walls. The building footprint is regular in shape, but the roof diaphragm is discontinuous due to differing plate heights.

This building's lateral force resisting system consists of a plywood sheathed roof acting as a horizontal wood diaphragm spanning between cantilevered concrete columns. Seismic loads are resisted in both orthogonal directions by way of the concrete columns located on the interior of the building structure. This lateral system is not a type that is typically used for this type of structure. We recommend a more thorough investigation of this system to determine the adequacy of the design. Additionally, the structure appears to have a discontinuity at the high roof diaphragm that does not appear to be tied back into the lower roof in a manner consistent with current code standards.

Northwood Elementary School Unit 100 receives a subjective rating of 3.0.

Unit 200

This unit is a single story wood framed building with a plywood roof supported on glue lam beams spanning between exterior walls.

This building's lateral force resisting system consists of a plywood sheathed roof acting as a horizontal wood diaphragm spanning between vertical plywood shear walls. Seismic loads are resisted in both orthogonal directions by way of the wood shear walls located on the exterior of the building structure. A preliminary review of the building is that the building is comprised of numerous shearwalls that can adequately handle the lateral load if the walls are in good condition. During the review it was noted that not all shear walls included tie downs at each end of the wall. We recommend further evaluation of the building be conducted to see if the addition of tie downs would significantly improve the performance of the building.

Northwood Elementary School Unit 200 receives a subjective rating of 2.0.

277

Units 300, 400 & 500

These units are single story wood building with a panelized roof system supported on steel beams and glulams spanning between exterior walls.

This building's lateral force resisting system consists of a plywood sheathed roof acting as a horizontal wood diaphragm spanning between vertical plywood shear walls. Seismic loads are resisted in both orthogonal directions by way of the wood shear walls located on the exterior of the building structure. A preliminary review of the building is that the building is comprised of numerous shearwalls that can adequately handle the lateral load if the walls are in good condition. During the review it was noted that not all shear walls included tie downs at each end of the wall. We recommend further evaluation of the building be conducted to see if the addition of tie downs would significantly improve the performance of the building.

Northwood Elementary School Units 300-500 receive a subjective rating of 2.0.

Unit 600

This unit is a small single story wood building with a wood joist roof system supported on a sawn lumber beam spanning between exterior walls.

This building's lateral force resisting system consists of a plywood sheathed roof acting as a horizontal wood diaphragm spanning between vertical plywood shear walls. Seismic loads are resisted on three sides by way of the wood shear walls located on the exterior of the building structure. A preliminary review of the building is that the building is comprised of numerous shearwalls that can adequately handle the lateral load if the walls are in good condition. During the review it was noted that not all shear walls included tie downs at each end of the wall. We recommend further evaluation of the building be conducted to see if the addition of tie downs would significantly improve the performance of the building.

Northwood Elementary School Unit 600 receives a subjective rating of 2.0.

278

Northwood Elementary School

Mechanical Systems Assessment Report

A. MECHANICAL BUILDING SYSTEMS

1. Existing Conditions:

a. New rooftop air conditioning units (gas heat / electric cool).

b. New ductwork on roof.

c. New exhaust fans.

d. New temperature controls.

e. Existing above ceiling ductwork and air distribution is original.

2. Recommendations:

a. Replace all insulated supply and return ductwork, diffusers and grilles within the building. Replace all exhaust ductwork within the building.

3. General:

a. This report and comments to follow are based on observations of the general condition of the mechanical systems and noticeable code issues resulting from a review of the existing drawings and an on-site visit, when required.

b. Refer to Appendix A for Title 24 requirements and general code issues that should be considered.

APPENDIX-A

a. General

1. Comply requirements of California Mechanical Code (CMC) latest edition.

b. Possible Ventilation Code Issues

1. Corridors cannot be used as plenums for the purpose of supplying or exhausting air.

2. Corridors must have minimum two (2) air changes per hour for ventilation.

3. Minimum ventilation for occupied spaces should be 15 cfm/person or 0.15 cfm/sq. ft., whichever is greater.

4. Exhaust airflow from bathrooms should be based on minimum 10 air changes per hour.

c. Possible Fire Smoke Issues

1. Fire/smoke dampers in the system must be interlocked with fire alarm system.

2. Corridors, lobbies, and building entrances to have dedicated supply air.

3. Chemistry classrooms with occupancy separation shall have fire/smoke damper.

4. All air handling equipment supplying air flow in excess of 2,000 cubic feet per minute to have duct smoke detectors in the supply air duct.

d. Possible Title 24 Issues

1. Interior supply and return air ductwork (heating & cooling) shall be insulated with minimum R-value of 4.2.

Northwood Elementary School

Electrical and Low Voltage Systems Assessment Report

B. Electrical

1. Power Systems:

A 2000A, 120/208V, 3 phase, 4 wire switchboard with a 300KVA utility pad mounted transformer located next to the kindergarten classroom building provides power to the campus. The switchboard was installed around 2002 and is in good and functioning condition. According to PG&E record, the current peak usage on the system is of 461 amp. There is a spare capacity of 257 amp available at the service for future need. If additional power is needed, the PG&E transformer shall need to be upgraded.

2. Fire Alarm System:

The existing fire alarm system was of automatic system on a Gamewell 602 panel in main office MDF room installed in 2009. The panel is in good and functioning condition. The initiation and notification devices meet the current code requirement.

3. Public Address and Clock Systems:

The existing Bogen Multicom 2000 PA and master clock system located in the main office conference room is in good and functioning condition. Existing speaker and clock units are in good condition for reuse. The main unit is suggested to be relocated to the MDF room to clear usage in the conference room.

Will H. Ector, Jr.
Superintendent

1376 Piedmont Road
San Jose, CA 95132-2427

Phone: (408) 923-1800
Fax: (408) 923-0623

Ruskin Elementary School

1401 Turlock Lane
San Jose, CA

Ruskin Elementary School Assessment

Statistics:

Enrollment (Nov. 2012):	668
Principal:	Parisa Nunez
Site:	10.6 Acres
Building Area:	Approx. 33,000 SF
Permanent Classrooms:	28
Portable Classrooms:	2 @960 SF
Total Size:	34,980 SF

Construction History:

1969	School Constructed
1997	Construction of Science / Computer Building
2002	Modernization Projects
2003	Construction of (1) Portable Classroom
2005	Alteration to Multi-Purpose Bldg (HVAC Upgrade)
2005	Roofing Removal and Replacement
2010	Fire Alarm Upgrade
2012	Construction of (1) Portable Classroom

Ruskin Elementary School

Site Meeting Minutes

Needs Assessment Scope Categories
Berryessa School District

Ruskin School

May 21, 2013

(updated October 1, 2013)

Site

1. Parking lots, traffic control, and drop-off and pick-up areas
    a. Insufficient parking available.
    b. No stop signs at the nearby corner to control traffic flow.
    c. Pedestrians currently conflict with vehicle traffic.
2. PE equipment (Basketball backboards, rims, play structures, matting)
    a. Replace as necessary.
    b. Replace shredded tire material in play areas.
3. Site (ADA) compliance, paved walkways (tripping hazards, level and clear pathways)
    a. Currently there is a restroom upstairs.
4. Paved Play Area (size, security, location, condition)
    a. Asphalt surface is in reasonably good condition.
5. Turf play area, landscaping and irrigation
    a. Turf condition is poor due to squirrels and gophers.
6. Fencing and security
    a. Site fencing is inadequate for current security needs.
    b. Funneling visitors through the main office entrance prior to entry to the campus core is desired.
7. Trash enclosure
    a. Lockable screened enclosure requested.
8. Site Utilities (to the street and campus distribution - gas, water, sewer, storm, power)
    a. Gutters noted as overflowing sometimes.
    b. Water quality issues were noted (brown water after weekends/vacations). (10/1/13)
9. Site Lighting (LED)
    a. Lighting requested at parking lot.
    b. Additional lighting at portables requested. (10/1/13)
    c. Exterior lights on motion sensors when site is not occupied. (10/1/13)
10. Covered Shade or Eating Structure
    a. An exterior covered eating area is desirable.
    b. Provide lights at any shade structure. (10/1/13)
11. Roofing
    a. No known issues.
12. Covered walkways
    a. None currently, would like covered walkway to portables.

13. Exterior Paint
    a. No issues noted.
14. Campus Layout and organization
    a. Kids cut through MPR space.
    b. Better defined entry.
    c. Overall layout can be confusing.
    d. Administration area is too small.
    e. Possible resolution to kids cutting through MPR space would be to add overhangs to allow for protected exterior pathways. (10/1/13)
    f. Covered walkway to proposed new eating area requested. (10/1/13)
15. Curb Appeal
    a. General landscaping issues to be addressed.
    b. General facelift for campus requested.
16. Portable classrooms/restrooms
    a. Request to evaluate number of restrooms.
17. Storage
    a. No issues noted.
    b. Curriculum storage space requested. (10/1/13)
    c. General storage space requested. (10/1/13)
18. Drinking fountains
    a. Replace existing drinking fountains.
19. Signage
    a. District plans to replace all existing wayfinding signage.
    b. District plans to add marquee signage to each campus.

<u>Building</u>

a. Building Insulation, exterior surfaces
    a. No known issues.
b. Windows (Prep rooms/common areas, condition of windows and amount of natural light)
    a. Infill existing lower windows, keep upper windows.
    b. Replace plexiglass glazing with glass.
c. Exterior Doors and Hardware
    a. Door and hardware replacement will likely be district-wide.
    b. Need door closers in some locations.
    c. Glass doors are a security problem.
d. Restrooms (Electric hand dryers, partitions, fixtures, re-seal flooring)
    a. Additional restrooms requested.
e. Flooring (Carpeting, tiling, resilient, all locations)
    a. Repair/replace as necessary.
f. Tackable Walls surfaces and all other interior finishes
    a. Full-height, wall-to-wall tackable surfaces acceptable.
g. Ceilings
    a. No known issues.

h. Cabinetry (Teaching walls)
    a. Concerns about size of potential teaching walls in this site's small classrooms.
    b. Office cabinets need to be replaced.
i. Classroom size/layout (21st Century Learning environment/classroom)
    a. Meeting to be held on 23JUN2013 with District representatives to discuss this item.
j. Backpack storage or location
    a. Request was made to look into providing storage for backpacks.
k. Interior lighting (LED)
    a. Better control of existing lights.
l. Blinds
    a. Window coverings to replace existing horizontal blinds was requested.
m. Markerboards
    a. Wall mounted preferred, not in teaching wall cases.
n. Classroom electrical outlets
    a. Additional outlets spread throughout room requested.
o. IT/Data networking (Wi-fi, location, IDF and MDF)
    a. SFA will be meeting with District IT personnel to discuss district-wide implementations.
p. IT/Video network
    a. SFA will be meeting with District IT personnel to discuss district-wide implementations.
q. Communication system (Intercom, Clocks, Speakers)
    a. Bells and speakers are not loud enough.
r. Intrusion Alarm
    a. No known issues.
s. Security cameras
    a. Security cameras are planned to be added to all sites as part of this process.
t. Heating and Ventilating and Air Conditioning (Chiller, mechanical equipment, FCU's)
    a. SFA will evaluate these systems over the summer. At this time there are no known issues.
u. Energy management system (Controls for HVAC/Lighting)
    a. No issues noted.

Miscellaneous:

- Photovoltaic Installation (Solar)
    - Solar installation will occur where economically feasible.
- Multi-purpose/Cafeteria efficiency
    - Traffic flow through MPR causes issues.
    - MPR noted as too small. (10/1/13)
    - Request to replace stage sound system. (10/1/13)
    - Request to upgrade electrical system to prevent blowing breakers. (10/1/13)
- Administration area functionality
    - Issues noted with usability and organization of existing space.
- Kitchen
    - SFA to meet with District Food Services personnel to discuss district-wide plan.

- Library/Media Center
    - No issues noted.
- Specialty Rooms
    - Staff room was noted as too small.
- FFE (Furnishings, Fixtures, Equipment) Lunch tables, classroom furniture, etc.
    - Most furniture is original to the school, and appears in need of replacement.
- Any other creative thoughts/ideas
    - DG pathways need attention.

Grounds:

Security:

Observations:

- While significant portions of this site have a perimeter fence in place, the site is largely open in the front. Existing fence has access points that are not securable.
- Building exterior lighting is insufficient.
- Existing doors often have windows in them.
- This site has many windows below door height.

Parking lot and Drop-Off / Pick-Up:

Observations:

- Existing parking lot circulation is poor in both lots.
- Because of the difficulty circulating through the parking lots at peak times, traffic backs up onto Turlock Road in front of the school.
- Pick-up and drop-off area is insufficient.
- Insufficient parking for staff and guests.
- Existing accessible parking does not meet current requirements.
- Tulare Drive at the Tulare / Turlock intersection adjacent to the school does not have a stop sign to facilitate student crossing.

Landscaping:

Observations:

- The existing landscaping is generally in good condition, although some areas of original

plantings have potential for trapping debris and creating places for nuisance pests to nest.

Play Surface / Fields / Play Structures:

Observations:

- The existing asphaltic concrete play surfaces appears to be in moderately good condition, some repair work is needed.
- The existing sports fields have issues with ground squirrels and gophers. Some parts of the grass fields are bare and/or more weeds than grass.
- Existing play structures appear in good condition; however, the existing shredded rubber in the play structure boxes is depleted and in need of replacement.
- Existing swing set appears in good condition.

Outdoor eating area:

Observations:

- The current outdoor eating location is on a sloped section of asphalt paving adjacent to the fence between the school and the neighboring properties. While there are a few trees, the area is otherwise unprotected from sun and rain.

Building:

Entry Visibility:

Observations:

- Campus entry visibility is good.

Administration Area:

Observations:

- The administration area is very small.
- Nurses restroom is not compliant with current accessibility requirements.
- There is no space for any support staff offices in the administration area other than the principal and the nurse.

Circulation Spaces:

Observations:

- Circulation occurs both indoor and outdoor, with covered walkways available.
- Accessibility is generally good.
- Door thresholds are approximately 1" high in places.

Classrooms:

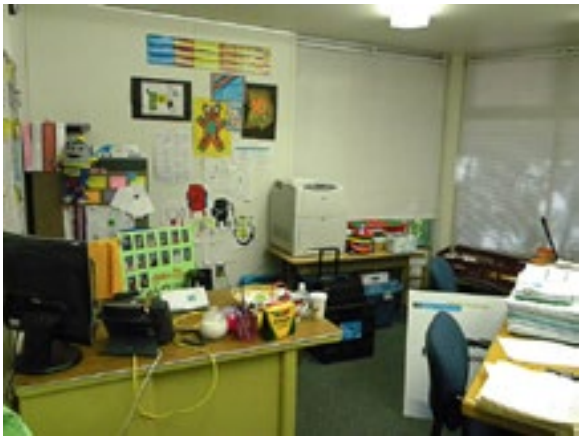
Observations:

- Classrooms are generally in good condition.
- Some finishes (paint, carpet) appear close to being in need of replacement.

Library:

Observations:

- The existing library is in good condition.
- Existing librarian desk is not accessible.



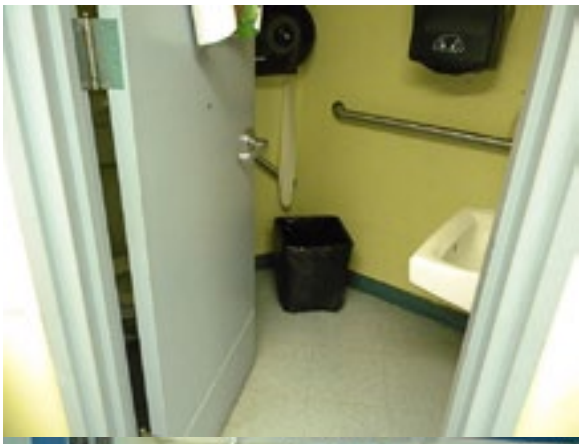
Multi-Purpose Room:

Observations:

- Current Multi-Purpose Room is too small to assemble the entire

student body when necessary.

- Floor, wall, and ceiling finishes appear in need of replacement.
- Existing sound system is inadequate for current needs.
- Traffic through Multi-Purpose Room is distracting, and occurs due to circulation pattern in building.



Campus Circulation and Accessibility:

Observations:

- Some existing door thresholds are too high for current accessibility standards.
- Occasional areas of concrete or asphalt paving that have heaved or cracked cause accessibility issues.
- Many of the outdoor circulation spaces do not meet accessibility requirements for flatness, although other accessible paths of travel are available.

Specialty Classrooms:

Observations:

- The site is currently utilizing the Multi-Purpose Room for the school Music Program. There is no dedicated music classroom. Use of the Multi-Purpose Room causes difficulties due to lack of acoustic cal insulation.

Portable Classrooms:

Observations:

- The portables appear to be in good and functional condition.

Kitchen / Food Service

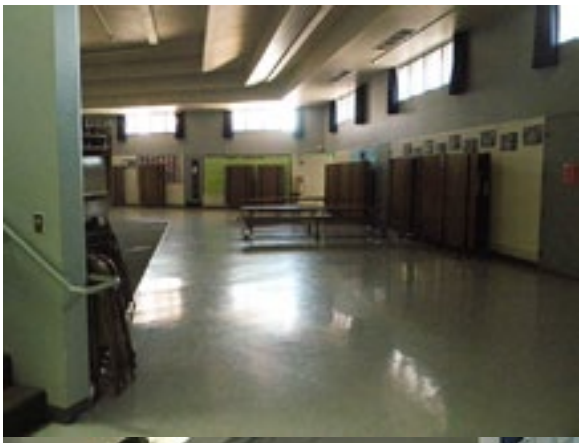
Observations:

- The existing kitchen layout and equipment do not meet current Department of Health requirements.
- Most existing built-in equipment (refrigerator, freezer, sinks, storage areas, etc.) are beyond their expected lifespan.

Staff Work Areas:

Observations:

- The staff work area appears to be in good condition.



Staff Lounge:

Observations:

- The existing staff room finishes are worn and dated.
- The existing furniture is in poor condition.

Student Restrooms:

Observations:

- The existing fixture count (Boys – 7 water closets, 4 urinals, and 6 lavatories; Girls – 13 water closets, 6 lavatories) serves the current population of approximately 670 students.

Staff Restrooms:

Observations:

- The existing fixture count (Men – 2 water closet, 1 urinals, and 2 lavatories; Women – 2 water closets, 2 lavatories) serves the current staff population.

Storage and Custodial Spaces:

Observations:

- Overall general storage capacity is acceptable.
- Custodial spaces are cluttered and in general show signs of wear and tear.

Structural System:

Observations:

- Ruskin Elementary School was constructed in 1968 and consists of multiple hexagonal shaped elements connected together via covered, exterior corridors. The main building's layout has multiple classrooms that surround an auditorium and lunchroom. Additionally, the auditorium has a mezzanine level that serves as a teachers lounge.

- The lateral force resisting system consists of a plywood sheathed roof acting as horizontal wood diaphragm spanning between vertical plywood shear walls. Seismic loads are resisted in multiple directions by way of the wood shear walls located at the exterior and interior of each hexagonal building. In our evaluation of the buildings overall lateral system we noted a potential deficiency in the lateral force resisting system of the mezzanine structure, in that one side of the mezzanine did not appear to have adequate length of shear wall to resist the anticipated seismic forces.

- Additionally, we noted that the perimeter shear walls at the auditorium lacked the vertical continuity at the low roof level.

Mechanical Systems:

Observations:

- New packaged gas heat / electric cool rooftop units, and exhaust fans installed in 2005.

- New temperature controls installed in 2005.
- New ductwork on the roof was provided in 2005.
- Existing above ceiling ductwork and air distribution is original.

Electrical Systems:

Observations:

- A 1000A, 277/480V, 3-phase, 4-wire switchboard with a 300KVA utility pad mounted transformer located next to the portable classroom buildings provides power to the campus. The switchboard was installed around 2002 and is in good and functioning condition. According to PG&E record, the current peak usage on the system is of 219 amps.

Low Voltage Systems:

Observations:

- The existing fire alarm system is of automatic system on a Gamewell 602 panel in main office hallway installed in 2009. The panel is in good and functioning condition. The initiation and notification devices meet the current code requirements.
- The existing Bogen Multicom 2000 Public Adress and Master Clock system located in the Building D mezzanine is in good and functioning condition.

Roofing:

Observations:

- The existing roof is a multi-ply built-up-roofing system with shingled mansards. Installed in 2005, it has a 20-year warranty, and an estimated remaining life of 10-12 years.

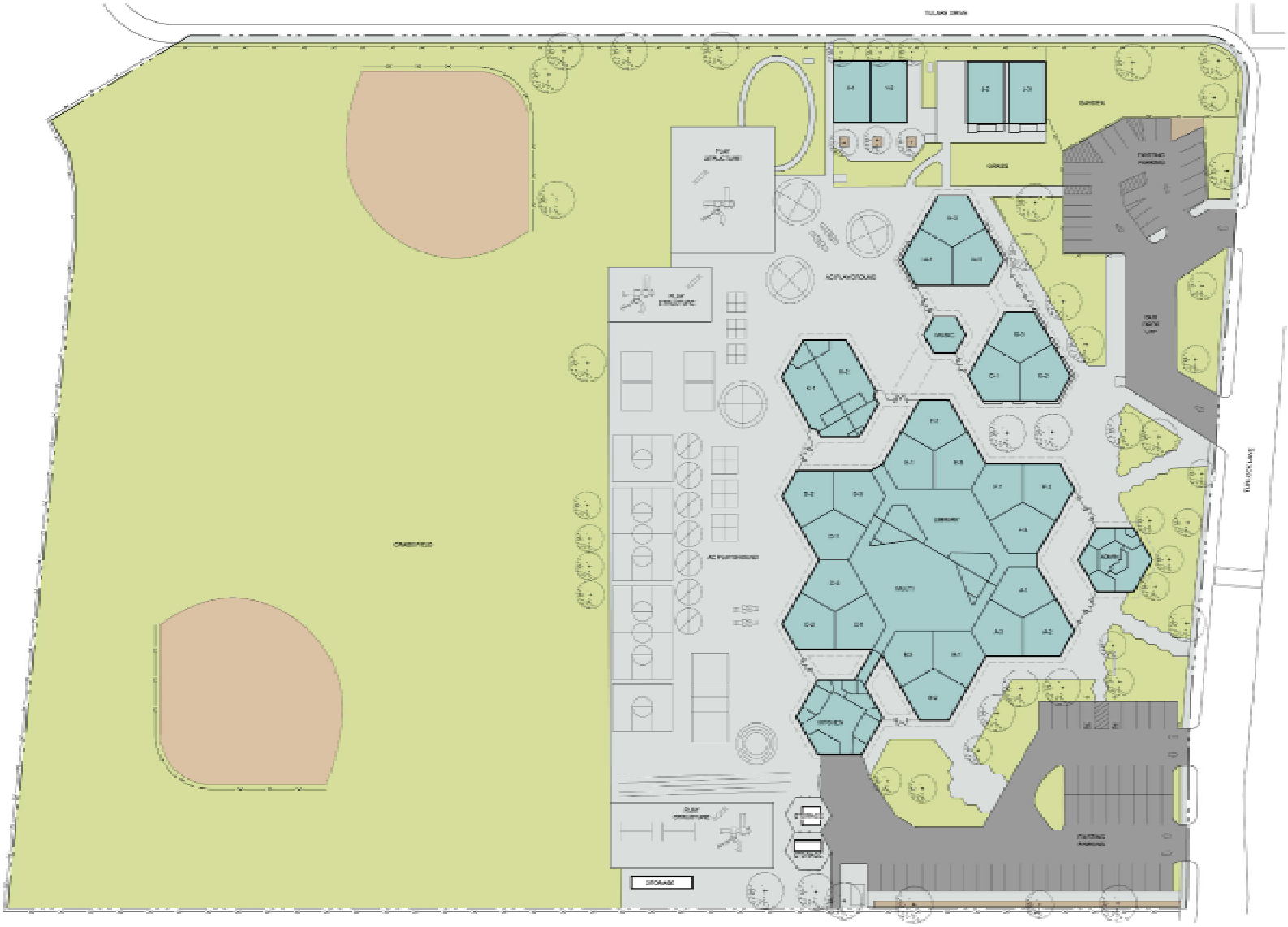
Exterior Paint:

Observations:

- The existing exterior paint is generally in good condition, although it is aged, and shows many locations where re-painting has occurred over time.

Ruskin Elementary School

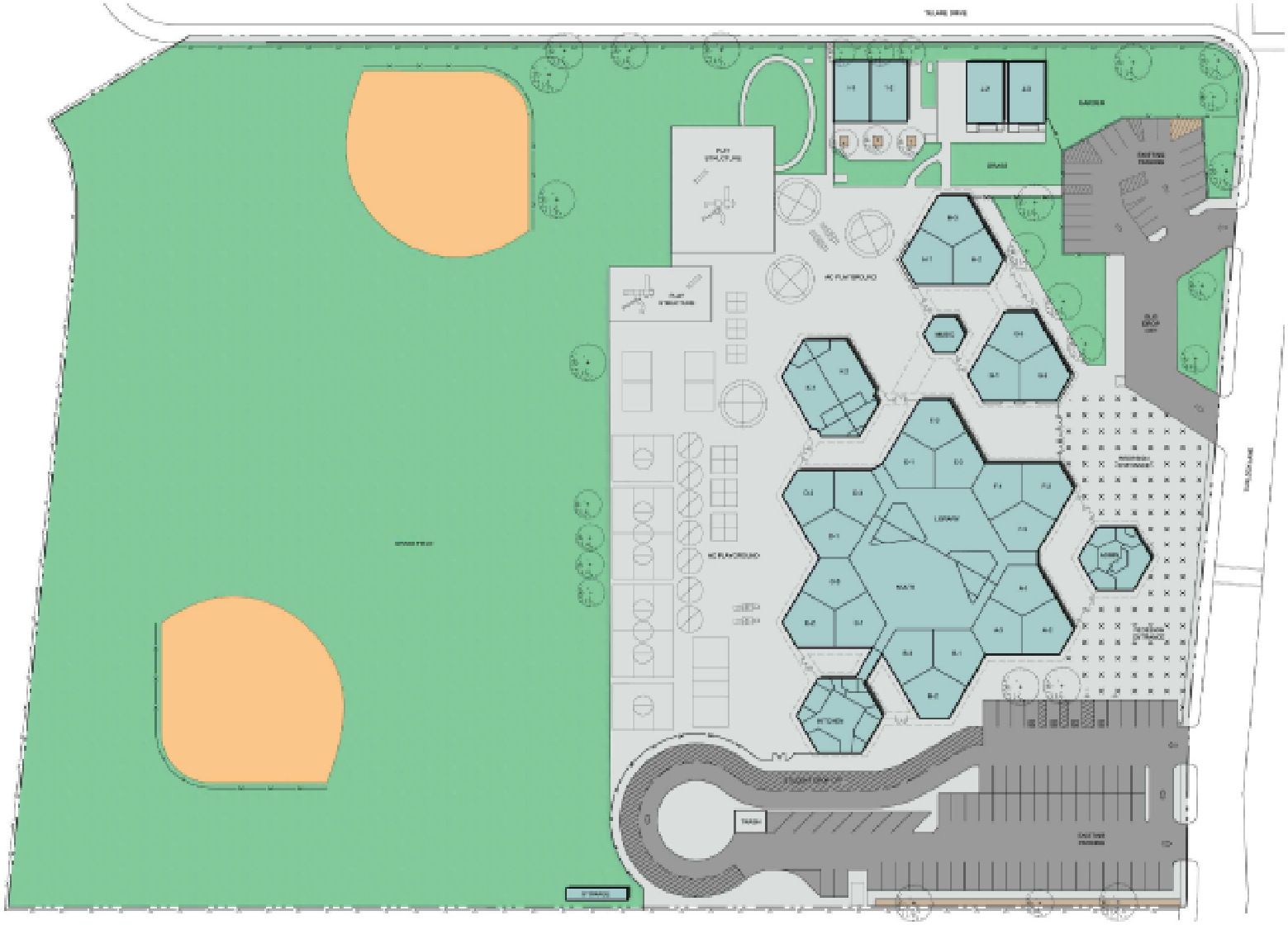
Site Plans



RUSKIN ELEMENTARY SCHOOL

EXISTING BUILDINGS

EXISTING CONDITIONS



RUSKIN ELEMENTARY SCHOOL

EXISTING BUILDINGS

- Enlarge parking lot with separate student drop off
- Redesign main entrance into campus

Ruskin Elementary School

Paving Assessment Report

RUSKIN SCHOOL

Summary School Report

Asphalt Surface Evaluation

School Name: Ruskin School

Area	Type	Use	Area (sq. ft.)	Defect Score	Recommendation	Cost	Year
A	EL	Park	20,691	68	Dig out/ Crack Fill/ Seal Coat	$12,828.42	2011
B	EL	Ped	5,369	39	Dig out/ Crack Fill/ Seal Coat	$3,265.72	2011
C	EL	Play	63,168	49	Crack Fill and Seal Coat	$28,172.93	2011
D	EL	Ped	1,765	30	Double application Emulsion Se	$529.50	2011
E	EL	Ped	558	86	Remove & Replace	$3,290.00	2011
F	EL	Park	7,663	16	Crack Fill and Seal Coat	$2,927.27	2012
G	EL	Road	5,550	32	Crack Fill and Seal Coat	$2,075.70	2011
H	EL	Ped	1,056	0	Double application Emulsion Se	$316.80	2015
					Total:	**$53,406.33**	

Pavement Engineering Inc
Civil Engineers - Materials Testing
Specializing in Pavement Rehabilitation
San Luis Obispo Office (805) 781-2265

BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Ruskin School
Area (sf): 20,691
Area Notation: A
Buses: No
Surface Type: AC
Garbage Trucks: Yes
Use: Parking Lots or Areas
Defect Score: 68
Recommended Treatment: Dig out/ Crack Fill/ Seal Coat
Year: 2011
Visual Description: Pavement exhibits moderate raveling, majority of alligator cracking in path toward dumpster (25x60).
Miscellaneous: Slope = 3.1/ 5.0/ 0.5, Pavement drains to drop inlet located within pavement area, ADA - ok.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	3.0%	0.120	M

Crack Width	1/8 - 1/4"

Cost Breakdown

AC Cost:	$7,241.85
CF Cost:	$2,482.92
DO Cost:	$3,103.65
Misc. Cost:	$0.00
Total Cost:	$12,828.42

12/10/2010

Pavement Engineering Inc
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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Ruskin School
Area (sf): 5,369
Area Notation: B
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Pedestrian Areas
Defect Score: 39
Recommended Treatment: Dig out/ Crack Fill/ Seal Coat
Year: 2011
Visual Description: Pavement exhibits moderate raveling and severe tree root damage.
Miscellaneous: Slope = 10.8/ 1.3, Pavement drains to drop inlet.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.072	M

Crack Width	1/8 - 1/4"

Cost Breakdown

AC Cost:	$1,879.15
CF Cost:	$386.57
DO Cost:	$0.00
Misc. Cost:	$1,000.00
Total Cost:	$3,265.72

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Ruskin School
Area (sf): 63,168
Area Notation: C
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Playground
Defect Score: 49
Recommended Treatment: Crack Fill and Seal Coat
Year: 2011
Visual Description: Pavement exhibits moderate raveling with moderate shrinkage cracking.
Miscellaneous: Slope = 1.6/ 2.5/ 4.2, Pavement drains to drop inlets in the area.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.096	M

Crack Width	1/8 - 1/4"

Cost Breakdown

AC Cost:	$22,108.80
CF Cost:	$6,064.13
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$28,172.93

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Ruskin School
Area (sf): 1,765
Area Notation: D
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Pedestrian Areas
Defect Score: 30
Recommended Treatment: Double application Emulsion Seal Coat
Year: 2011
Visual Description: Pavement exhibits severe raveling.
Miscellaneous: Slope = 0.6/ 3.8, Pavement drains to planter.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.000	V

Crack Width	0

Cost Breakdown

AC Cost:	$529.50
CF Cost:	$0.00
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$529.50

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Ruskin School
Area (sf): 558
Area Notation: E
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Pedestrian Areas
Defect Score: 86
Recommended Treatment: Remove & Replace
Year: 2011
Visual Description: Pavement exhibits severe raveling and shrinkage cracking.
Miscellaneous: Slope = 1.9/ 5.4, Pavement drains to lawn area, some tree root damage.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.215	V

Crack Width	1/8 - 1/4"

Cost Breakdown

AC Cost:	$2,790.00
CF Cost:	$0.00
DO Cost:	$0.00
Misc. Cost:	$500.00
Total Cost:	$3,290.00

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Ruskin School
Area (sf): 7,663
Area Notation: F
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Parking Lots or Areas
Defect Score: 16
Recommended Treatment: Crack Fill and Seal Coat
Year: 2012
Visual Description: Pavement exhibits slight raveling, previously sealed (4 years old), small areas of patching.
Miscellaneous: Slope = 0.5/ 2.1, Pavement drains to lawn.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.032	S

Crack Width	1/8 - 1/4"

Cost Breakdown

AC Cost:	$2,682.05
CF Cost:	$245.22
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$2,927.27

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Ruskin School **Area (sf):** 5,550

Area Notation: G **Buses:** Yes

Surface Type: AC **Garbage Trucks:** No

Use: Roadways, Alleyways, Bus Turnouts, etc.

Defect Score: 32

Recommended Treatment: Crack Fill and Seal Coat

Year: 2011

Visual Description: Pavement exhibits moderate raveling.

Miscellaneous: Slope = 0.9/ 3.3, Pavement drains to curb and gutter to drop inlet.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.024	M

Crack Width	<1/8"

Cost Breakdown

AC Cost:	$1,942.50
CF Cost:	$133.20
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$2,075.70

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Ruskin School
Area (sf): 1,056
Area Notation: H
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Pedestrian Areas
Defect Score: 0
Recommended Treatment: Double application Emulsion Seal Coat
Year: 2015
Visual Description: New pavement
Miscellaneous: Slope = 2/ 12

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.000	N

Crack Width	0

Cost Breakdown

AC Cost:	$316.80
CF Cost:	$0.00
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$316.80

12/10/2010

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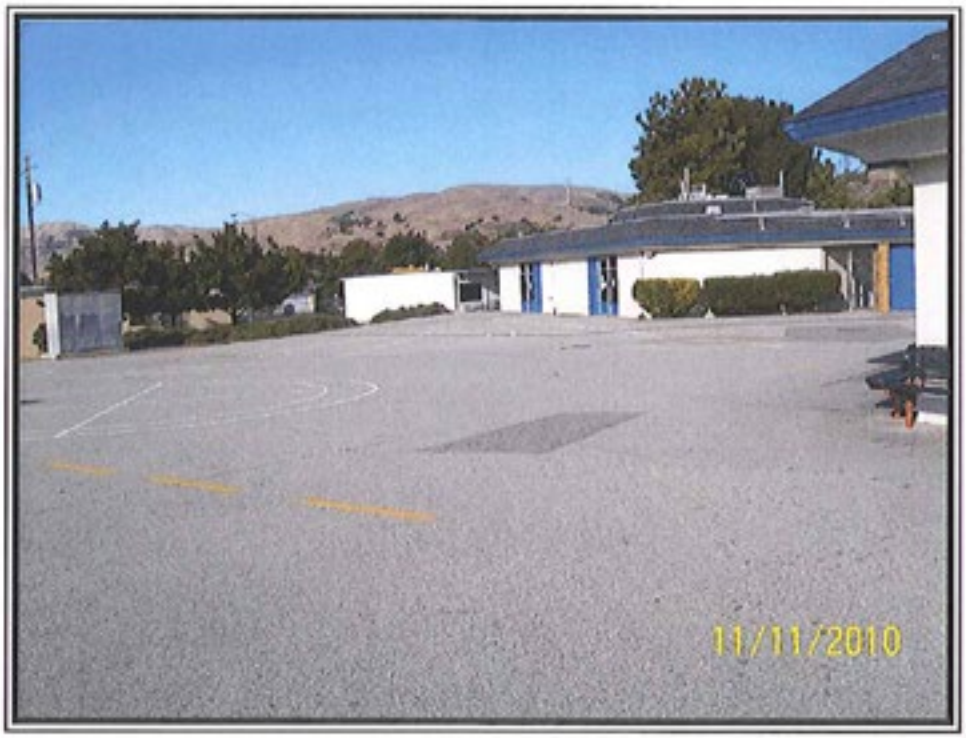
RUSKIN SCHOOL - AREA A

RUSKIN SCHOOL - AREA A

RUSKIN SCHOOL - AREA B

RUSKIN SCHOOL - AREA B

RUSKIN SCHOOL - AREA C



RUSKIN SCHOOL - AREA C

RUSKIN SCHOOL - AREA D

RUSKIN SCHOOL - AREA D

RUSKIN SCHOOL - AREA E

RUSKIN SCHOOL - AREA E

RUSKIN SCHOOL - AREA F

RUSKIN SCHOOL - AREA F

RUSKIN SCHOOL - AREA G

RUSKIN SCHOOL - AREA G

RUSKIN SCHOOL - AREA H

RUSKIN SCHOOL - AREA H

Ruskin Elementary School

Seismic Assessment Report

RUSKIN ELEMENTARY SCHOOL

Key Plan (Photo taken from Google Maps)

Building Descriptions:

This building was constructed in 1968 and consists of multiple hexagonal shaped elements connected together via covered, exterior corridors. The main building's layout has multiple classrooms that surround an auditorium and lunchroom. Additionally, the auditorium has a mezzanine level that serves as a teachers lounge.

The lateral force resisting system consists of a plywood sheathed roof acting as horizontal wood diaphragm spanning between vertical plywood shear walls. Seismic loads are resisted in multiple

directions by way of the wood shear walls located at the exterior and interior of each hexagonal building. In our evaluation of the buildings overall lateral system we noted a potential deficiency in the lateral force resisting system of the mezzanine structure, in that one side of the mezzanine did not appear to have adequate length of shear wall to resist the anticipated seismic forces. Additionally, we noted that the perimeter shear walls at the auditorium lacked the vertical continuity at the low roof level.

We recommend that further investigation be performed to confirm that the as-built mezzanine has a viable lateral force resisting system. Additionally, we recommend reviewing the as-built condition of the apparent vertical discontinuity at perimeter walls of the auditorium and adding vertical straps as necessary to resolve any discontinuity that may exist.

NOTE: The two auxiliary buildings on the north end of campus were not reviewed, as structural drawings were not available at the time of our review.

Ruskin Elementary School receives a subjective rating of 2.5.

Ruskin Elementary School

Mechanical Systems Assessment Report

A. MECHANICAL BUILDING SYSTEMS

1. Existing Conditions:

a. New packaged gas heat / electric cool rooftop units, and exhaust fans installed in 2006.

b. New temperature controls installed in 2006.

c. New ductwork on the roof was provided in 2006.

d. Existing ductwork and air distribution in building is original.

2. Recommendations:

a. Replace all insulated supply and return ductwork, diffusers and grilles within the building.

b. Replace all exhaust ductwork within the building.

3. General:

a. This report and comments to follow are based on observations of the general condition of the mechanical systems and noticeable code issues resulting from a review of the existing drawings and an on-site visit, when required.

b. Refer to Appendix A for Title 24 requirements and general code issues that should be considered.

APPENDIX-A

a. General

1. Comply requirements of California Mechanical Code (CMC) latest edition.

b. Possible Ventilation Code Issues

1. Corridors cannot be used as plenums for the purpose of supplying or exhausting air.

2. Corridors must have minimum two (2) air changes per hour for ventilation.

3. Minimum ventilation for occupied spaces should be 15 cfm/person or 0.15 cfm/sq. ft., whichever is greater.

4. Exhaust airflow from bathrooms should be based on minimum 10 air changes per hour.

c. Possible Fire Smoke Issues

1. Fire/smoke dampers in the system must be interlocked with fire alarm system.

2. Corridors, lobbies, and building entrances to have dedicated supply air.

3. Chemistry classrooms with occupancy separation shall have fire/smoke damper.

4. All air handling equipment supplying air flow in excess of 2,000 cubic feet per minute to have duct smoke detectors in the supply air duct.

d. Possible Title 24 Issues

1. Interior supply and return air ductwork (heating & cooling) shall be insulated with minimum R-value of 4.2.

2. Heating, ventilating, and air conditioning systems to have control capability with night setback.

3. Heating, ventilating, and air conditioning equipment to be certified by the State of California to meet minimum energy requirements.

Ruskin Elementary School

Electrical and Low Voltage Systems Assessment Report

B. Electrical

1. Power Systems:

A 1000A, 277/480V, 3 phase, 4 wire switchboard with a 300KVA utility pad mounted transformer located next to the portable classroom buildings provides power to the campus. The switchboard was installed around 2002 and is in good and functioning condition. According to PG&E record, the current peak usage on the system is of 219 amp. There is a spare capacity of 87 amp available at the service for future need. If additional power is needed, the PG&E transformer shall need to be upgraded.

2. Fire Alarm System:

The existing fire alarm system was of automatic system on a Gamewell 602 panel in main office hall way installed in 2009. The panel is in good and functioning condition. The initiation and notification devices meet the current code requirement.

3. Public Address and Clock Systems:

The existing Bogen Multicom 2000 PA and master clock system located in the building D mezzanine is in good and functioning condition. Existing speaker and clock units are in good condition for reuse.

Will H. Ector, Jr.
Superintendent

1376 Piedmont Road
San Jose, CA 95132-2427

Phone: (408) 923-1800
Fax: (408) 923-0623

Summerdale Elementary School

1100 Summerdale Drive
San Jose, CA

Summerdale Elementary School Assessment

Statistics:

Enrollment (Nov. 2012):	487
Principal:	Patty McDonald
Site:	10.0 Acres
Building Area:	Approx. 48,000 SF
Permanent Classrooms:	22
Portable Classrooms:	7 @ 960 SF
Total Size:	54,720 SF

Construction History:

1975	School Constructed
1994	Construction of (2) Portable Classrooms
1996	Construction of (1) Portable Classroom
2004	Modernization Projects
2005	Construction of (4) Portable Classrooms
2008	Alteration to Main Bldg (HVAC Replacement of Boiler, Chiller, Pumps)
2008	Roofing Removal and Replacement

Summerdale Elementary School

Site Meeting Minutes

Needs Assessment Scope Categories
Berryessa School District

Summerdale Elementary School

June 04, 2013

(updated September 16, 2013)

Site

1. Parking lots, traffic control, and drop-off and pick-up areas
    a. Issues with pick-up and drop-off area size and location.
    b. No bus lane.
    c. Separate drop-off lane requested. (9/16/13)
2. PE equipment (Basketball backboards, rims, play structures, matting)
    a. Basketball courts lost to portable move, could be replaced.
3. Site (ADA) compliance, paved walkways (tripping hazards, level and clear pathways)
    a. Various areas of campus need to be evaluated for potential trip hazards.
4. Paved Play Area (size, security, location, condition)
    a. Asphalt surface is in reasonably good condition.
5. Turf play area, landscaping and irrigation
    a. Turf condition is poor due to ground squirrels and gophers.
6. Fencing and security
    a. Site fencing is inadequate for current security needs.
    b. Funneling visitors through the main office entrance prior to entry to the campus core is desired.
    c. Need to add/replace fence at kindergarten area.
7. Trash enclosure
    a. Trash location is acceptable, needs screening from view.
8. Site Utilities (to the street and campus distribution - gas, water, sewer, storm, power)
    a. No issues noted.
9. Site Lighting (LED)
    a. Pole mounted lights at parking lot requested.
    b. Building mounted exterior lights requested.
10. Covered Shade or Eating Structure
    a. Students currently eat indoors. An exterior covered eating area is desirable.
11. Roofing
    a. No known issues.
12. Covered walkways
    a. A covered drop-off area was requested.
13. Exterior Paint
    a. Paint condition is acceptable.

14. Campus Layout and organization
    a. A new main office layout was requested that could screen and admit visitors to the rest of the campus upon approval.
    b. Request made to add a buzzer for access control rather than attempt to make any changes to the administration area layout. (9/16/13)
    c. It was noted that recent new parents have appreciated the existing atrium spaces. (9/16/13)
15. Curb Appeal
    a. No issues noted.
16. Portable classrooms/restrooms
    a. Request made for additional restroom on kindergarten side of campus.
17. Storage
    a. No issues noted.
    b. Curriculum storage requested adjacent to library. (9/16/13)
18. Drinking fountains
    a. Need additional drinking fountains spread around campus.
    b. Existing drinking fountains do not work properly.
19. Signage
    a. District plans to replace all existing wayfinding signage.
    b. District plans to add marquee signage to each campus.

<u>Building</u>

a. Building Insulation, exterior surfaces
    a. No known issues.
b. Windows (Prep rooms/common areas, condition of windows and amount of natural light)
    a. Existing window infill discussed.
c. Exterior Doors and Hardware
    a. Door and hardware replacement will likely be district-wide.
d. Restrooms (Electric hand dryers, partitions, fixtures, re-seal flooring)
    a. Additional restrooms requested for staff.
e. Flooring (Carpeting, tiling, resilient, all locations)
    a. No known issues.
f. Tackable Walls surfaces and all other interior finishes
    a. Full-height, wall-to-wall tackable surfaces requested.
g. Ceilings
    a. No known issues.
h. Cabinetry (Teaching walls)
    a. Interest was expressed in exploring teaching wall-style cabinetry.
i. Classroom size/layout (21st Century Learning environment/classroom)
    a. Meeting to be held on 23JUN2013 with District representatives to discuss this item.
j. Backpack storage or location
    a. Request was made to look into providing storage for backpacks.
k. Interior lighting (LED)
    a. No issues noted.

l. Blinds
    a. Window coverings to replace existing horizontal blinds were requested.
m. Markerboards
    a. Would prefer inside teaching walls.
n. Classroom electrical outlets
    a. Additional outlets spread throughout room requested.
o. IT/Data networking (Wi-fi, location, IDF and MDF)
    a. SFA will be meeting with District IT personnel to discuss district-wide implementations.
p. IT/Video network
    a. SFA will be meeting with District IT personnel to discuss district-wide implementations.
q. Communication system (Intercom, Clocks, Speakers)
    a. No issues noted.
r. Intrusion Alarm
    a. No issues noted.
s. Security cameras
    a. Security cameras are planned to be added to all sites as part of this process.
t. Heating and Ventilating and Air Conditioning (Chiller, mechanical equipment, FCU's)
    a. SFA will evaluate these systems over the summer.
    b. ~~Potential new boiler needed.~~ (9/16/13)
    c. Boiler noted as acceptable. (9/16/13)
u. Energy management system (Controls for HVAC/Lighting)
    a. SFA to evaluate.

Miscellaneous:

- Photovoltaic Installation (Solar)
    - Solar installation will occur where economically feasible.
- Multi-purpose/Cafeteria efficiency
    - Music program has been moved to a portable location.
    - Music program has been returned to the MPR, the space is not appropriate for both music and athletics. (9/16/13)
    - New sound system requested. (9/16/13)
    - MPR noted as not adequately sized to hold events. (9/16/13)
- Administration area functionality
    - Need space for psychologists office.
    - SFA to evaluate potential for space optimization.
    - Conference space with room to hold 10 people requested. (9/16/13)
- Kitchen
    - SFA to meet with District Food Services personnel to discuss district-wide plan.
- Library/Media Center
    - No issues noted.
    - Request made for taller cases for library book storage. (9/16/13)
    - Request made for new/revised desk area at library. (9/16/13)

- Specialty Rooms
  - No issues noted.
  - Campus has no music room. (9/16/13)
  - Campus has no science room. (9/16/13)
- FFE (Furnishings, Fixtures, Equipment) Lunch tables, classroom furniture, etc.
  - Most furniture is original to the school, and appears in need of replacement.
- Any other creative thoughts/ideas
  - No issues noted.
  - Need centralized, secure space to store laptop/iPad carts. (9/16/13)

Grounds:

Security:

Observations:

- While significant portions of this site have a perimeter fence in place, the site is largely open in the front; and because the site abuts a city park, there is an unfenced boundary at the rear of the site also.
- Building exterior lighting is insufficient.
- There is direct access without intervening obstacles from the main entry to interior building spaces.
- Existing doors often have windows in them, and not all doors have modern security hardware.
- Not all classrooms have doors that can be secured, due to original open plan of site.
- This site has a handful of windows below door height.

Parking lot and Drop-Off / Pick-Up:

Observations:

- Site has no bus lane for drop-off or pick-up.
- Circulation through the parking lot during pick-up and drop-off is inadequate, and creates problems with traffic congestion.
- Pick-up / Drop-off location sees considerable congestion during peak times, and does not allow traffic to flow through.
- Existing accessible parking does not meet current requirements.

Landscaping:

Observations:

- The existing landscaping is dated, non-existent in some places, and overgrown in others. The bare areas face erosion issues, and the overgrown areas trap debris as well as providing a home to nuisance pests.
- The landscaping in the sloped planters adjacent to the building is causing moisture intrusion problems, as well as creating a security issue by assisting students in accessing the roof of the building.

Play Surface / Fields / Play Structures:

Observations:

- One of the two main asphalt play surfaces is in good condition. The other is in relatively poor condition.
- The existing sports fields have issues with ground squirrels and gophers. Some parts of the grass fields are bare and/or more weeds than grass.
- Existing play structures appear in good condition; however, the existing shredded rubber in the play structure boxes is depleted and in need of replacement.

Outdoor eating area:

Observations:

- Current outdoor eating area is the paved play area, which has little seating and no covered area.

Building:

Entry Visibility:

Observations:

- Building entry visibility is acceptable, but could be improved.

Administration Area:

Observations:

- The principal's office is too small to permit a private conference with two parents and a child.
- Conference room too small to hold conferences with the door closed for privacy.
- Some specialty spaces (RSP, Psych, Speech Therapy) are located away from the administration area, and would be better served by being in the space general area as the main administration space.

Circulation Spaces:

Observations:

- Automatic fire door hardware has exceeded it's expected lifespan, and requires regular maintenance to keep in good operating condition.
- If the proposed doors to the now-open classroom spaces are added, an exit corridor will be required from each classroom "pod".
- Existing outdoor atria spaces are underutilized.

Classroom "Pod" Common Areas

Observations:

- Each of the six "pods" has a common area adjacent to an exterior courtyard. Each has a sink and a stove that are original to the building. Some of these do not work.

Classrooms:

Observations:

- Classrooms are generally in good condition, although many of the finishes are faded and/or dirty.
- Many classrooms do not have doors, due to original school design's open plan. Partition walls have been added over the years, but doors were never added. This causes noise to easily travel between adjacent classrooms, and also presents a security risk.
- Some classrooms have a CRT television mounted in a location that does not comply with current accessibility requirements.

Library:

Observations:

- Existing book stack capacity is insufficient for current needs.
- Existing clerestory windows are in need of replacement.
- Existing integral media center space is insufficient for current needs.
- Librarian desk is not accessible.

Multi-Purpose Room:

Observations:

- Most finishes appear in need of replacement.
- Existing clerestory windows are in need of replacement.
- Existing sound system is inadequate for current needs.

Campus Circulation and Accessibility:

Observations:

- There is currently no covered walkway to the portable classrooms.
- Existing door thresholds are too high for current accessibility standards.
- Occasional areas of concrete or asphalt paving that have heaved or cracked cause accessibility issues.

- Three pairs of the existing exit doors do not meet access requirements.

Specialty Classrooms:

Observations:

- Special Education classrooms are distributed around site due to lack of a centralized location.
- The site is currently utilizing the Multi-Purpose Room for the school Music Program.
- The site currently has no dedicated Science Lab.

Portable Classrooms:

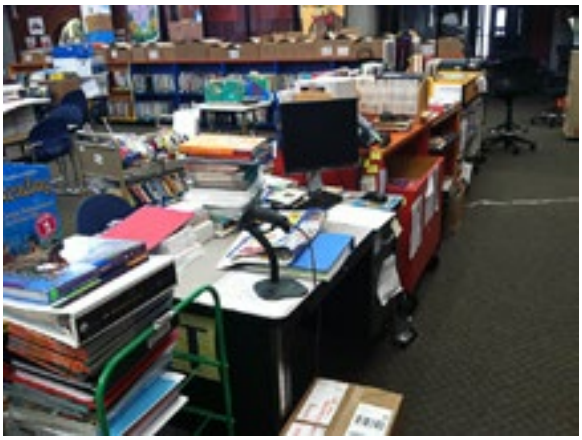
Observations:

- The existing portables appear to be in good condition.

Kitchen / Food Service:

Observations:

- The existing kitchen layout and equipment do not meet current Department of Health requirements.
- Most existing built-in equipment (refrigerator, freezer, sinks, storage areas, etc.) are beyond their expected lifespan.



Staff Work Areas:

Observations:

- The staff work area appears to be in good condition. The existing casework appears to be aging, although still servicable, and an area of carpet under a drinking fountain needs to be addressed.

Staff Lounge:

Observations:

- The existing staff room finishes are worn and dated.
- The existing casework appears serviceable, although it is beyond it's expected lifespan.

Student Restrooms:

Observations:

- Two of the four pairs of student restrooms have previously been modernized to meet accessibility requirements. The remaining restrooms have not been upgraded, and do not comply with current accessibility standards.
- The existing fixture count (Boys – 7 water closets, 2 urinals, and 3 lavatories; Girls – 7 water closets, 3 lavatories, Unisex – 2 water closets, 2 lavatories) serves the current population of approximately 490 students.

Staff Restrooms:

Observations:

- The existing fixture count of four (4) (Men – 1 water closet, 1 urinal, and 1 lavatory; Women – 2 water closets, 1 lavatory) serves the current staff population.

Storage and Custodial Spaces:

Observations:

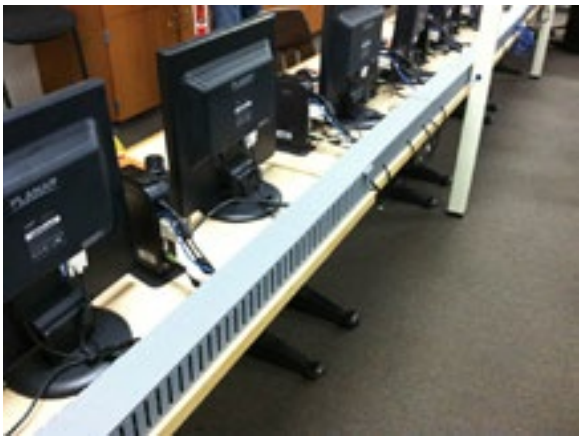
- Overall general storage capacity is good, with many built in cabinets available around the school for supplies and instructional material.
- Custodial spaces in general show signs of wear and tear.

Structural System:

Observations:

- The building at Summerdale Elementary School is one of three identical single-story buildings with a wood framed and concrete shear walls built in 1974. The other two schools are Brooktree Elementary School and Majestic Way Elementary School, evaluated in separate sections of this report. The building consists of multiple attached classrooms with centralized multi-purpose rooms. The building shape is fairly irregular with the room containing several discontinuities due to differing plate heights and openings in the roof diaphragm.

- The lateral force resisting system consists of a plywood-sheathed roof acting as a horizontal wood diaphragm spanning between vertical concrete shear walls. Seismic loads are resisted in both directions by way of the concrete shear walls located on the interior and exterior of the structure.



Mechanical Systems:

Observations:

- New chiller, cooling tower (with new water treatment system), boiler and pumps provided in 2008.
- New temperature controls installed in 2008.
- Existing fan coil units are original.
- Existing ductwork and air distribution in building is original.
- Existing hot and chilled water are original.

Electrical Systems:

Observations:

- A 1000A, 277/480V, 3-phase, 4-wire switchboard with a 300KVA utility pad mounted transformer located in the electrical service yard provides power to the campus. The switchboard was of original build and in fair condition. According to PG&E record, the current peak usage on the system is of 227 amps.

Low Voltage Systems:

Observations:

- The existing fire alarm system is a manual/automatic system on a Gamewell 610 panel in the Administration building installed around 2003. The panel is in good and

functioning condition. The notification devices were not adequate to meet the current code requirements.

- The existing Bogen Multicom 2000 Public Adress and Master Clock system located in the Multi-Purpose Room storage room is in good and functioning condition.

Roofing:

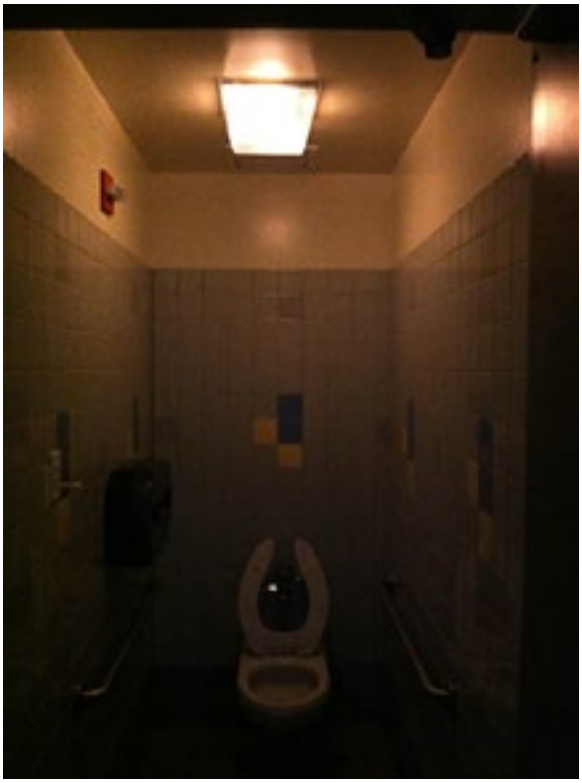
Observations:

- The existing roof is a multi-ply built-up-roofing system. Installed in 2008, it has a 20-year warranty, and an estimated remaining life of 10-12 years.

Exterior Paint:

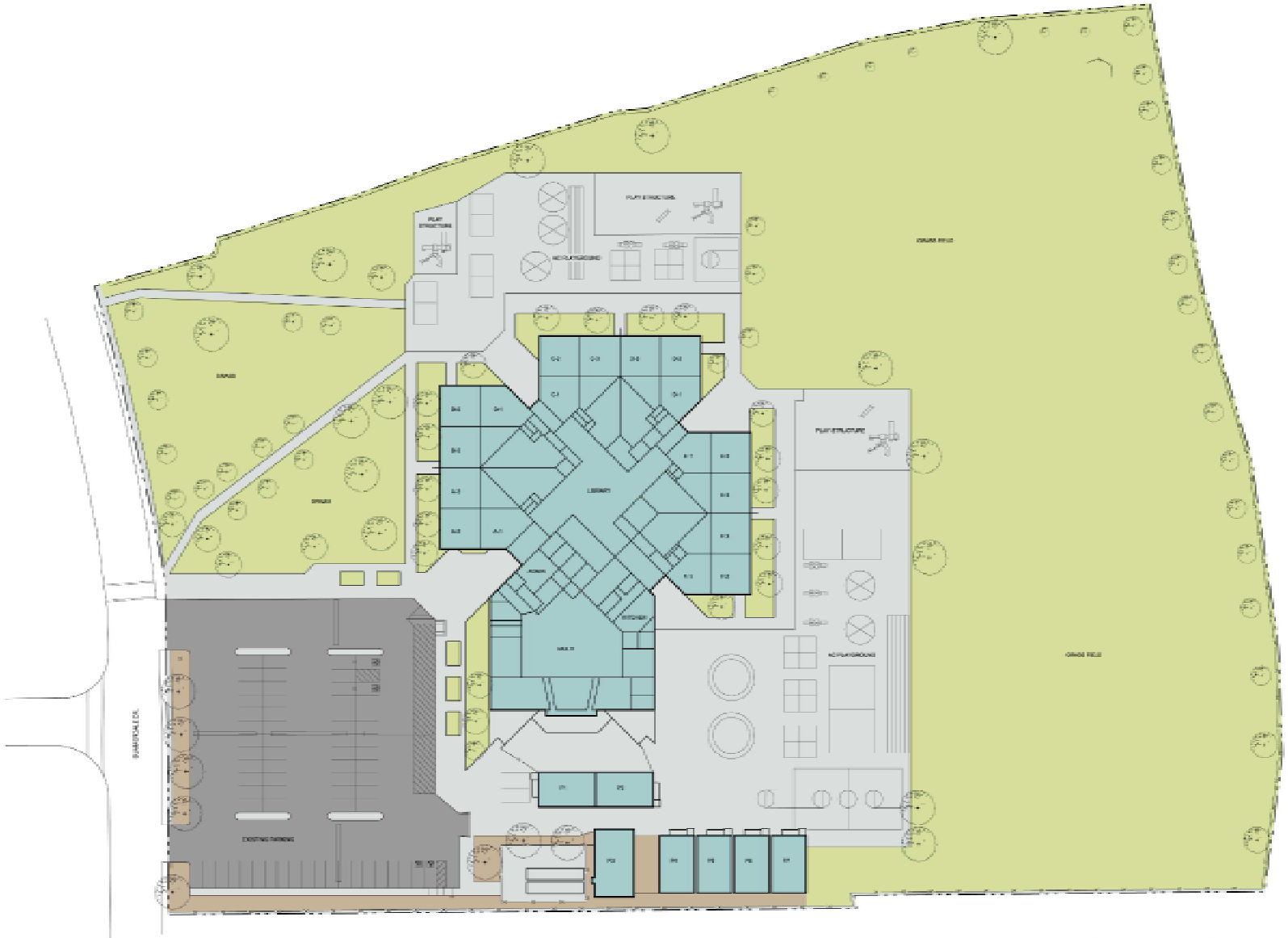
Observations:

- The existing exterior paint is generally in good condition, although it is aged, and shows many locations where re-painting has occurred over time.



Summerdale Elementary School

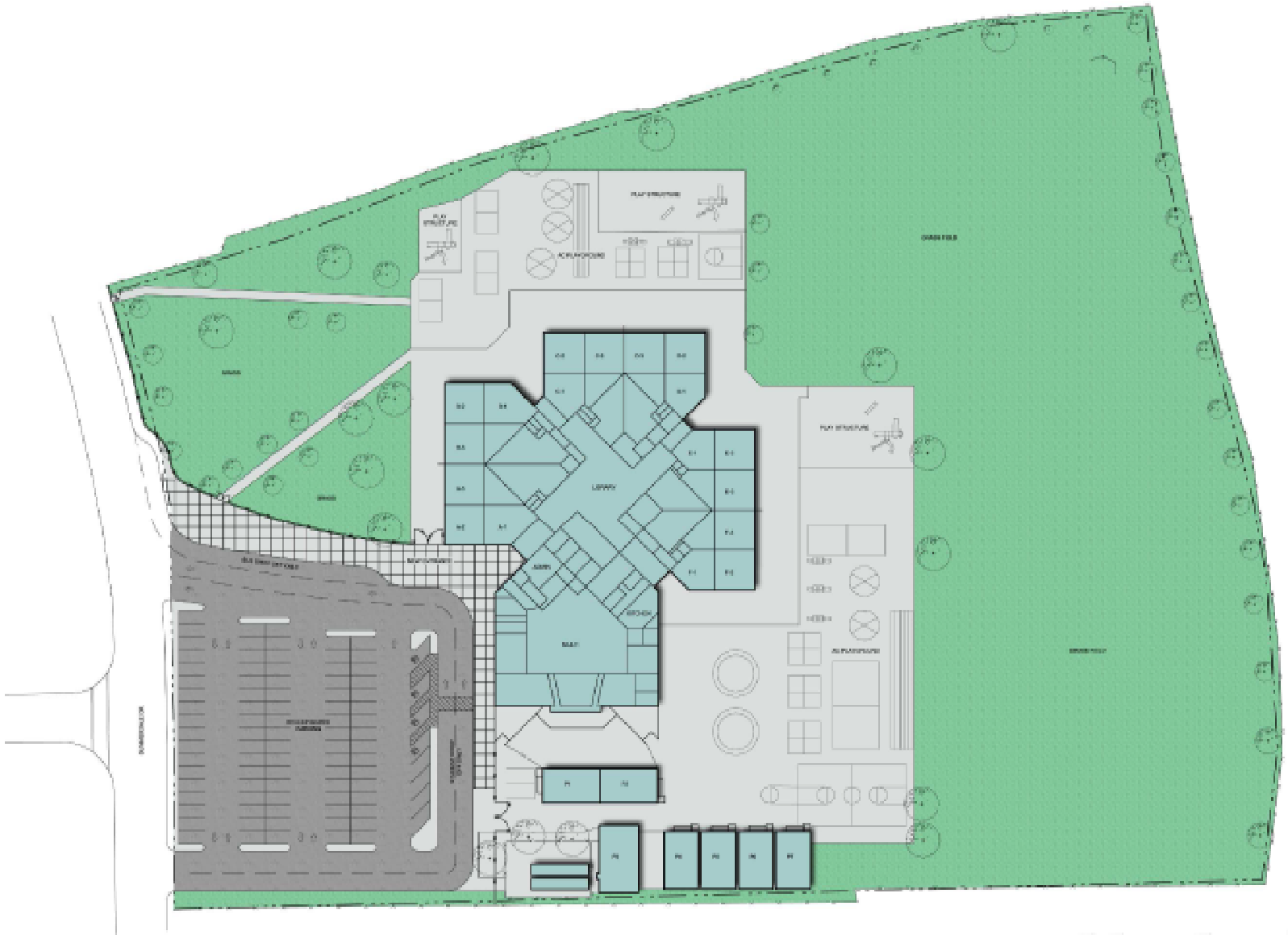
Site Plans



SUMMERDALE ELEMENTARY SCHOOL

EXISTING BUILDING

EXISTING CONDITIONS



SUMMERDALE ELEMENTARY SCHOOL

EXISTING BUILDING

- Redesign parking along with renovating entrance into school

Summerdale Elementary School

Paving Assessment Report

SUMMERDALE SCHOOL

Summary School Report

Asphalt Surface Evaluation

School Name: Summerdale School

Area	Type	Use	Area (sq. ft.)	Defect Score	Recommendation	Cost	Year
A	EL	Park	34,696	63	Reconstruct	$258,546.00	2013
B	EL	Play	14,544	35	Crack Fill and Seal Coat	$6,835.68	2015
C	EL	Play	33,725	79	Reconstruct	$245,006.25	2013
D	EL	Ped	5,808	14	Crack Fill and Seal Coat	$2,148.96	2013
E	EL	Ped	2,435	38	Crack Fill and Seal Coat	$1,073.83	2013
					Total:	**$513,610.72**	

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Summerdale School
Area (sf): 34,696
Area Notation: A
Buses: Yes
Surface Type: AC
Garbage Trucks: Yes
Use: Parking Lots or Areas
Defect Score: 63
Recommended Treatment: Reconstruct
Year: 2013
Visual Description: Pavement exhibits severe raveling and shrinkage cracking and has recently been sealed, in good condition.
Miscellaneous: Slope = 2.4/ 4.0/ 5.0/ 0.5, Pavement flows to drop inlets in area, ADA - stall slope near main office is 2.7%, no crosswalk to ramp from stall, ramp is 10.4%, landing is 2.5%, one stall wrong location, fross slope exceeds 2%, ramp landing 2.2%

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
1000	0%	0.0%	0.152	V

Crack Width	1/8 - 1/4"

Cost Breakdown

AC Cost:	$251,546.00
CF Cost:	$0.00
DO Cost:	$0.00
Misc. Cost:	$7,000.00
Total Cost:	$258,546.00

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Summerdale School
Area (sf): 14,544
Area Notation: B
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Playground
Defect Score: 35
Recommended Treatment: Crack Fill and Seal Coat
Year: 2015
Visual Description: Pavement exhibits slight alligator cracking and moderate shrinkage cracking and has recently been sealed.
Miscellaneous: Slope = 1.5/ 2.4/ 3.5, Pavement drains to adjacent playgrounds and planters.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	1.0%	0.120	N

Crack Width	<1/8"

Cost Breakdown

AC Cost:	$5,090.40
CF Cost:	$1,745.28
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$6,835.68

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Summerdale School
Area (sf): 33,725
Area Notation: C
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Playground
Defect Score: 79
Recommended Treatment: Reconstruct
Year: 2013
Visual Description: Pavement exhibits severe shrinkage cracking progressing to block cracking and has previously been sealed (1-2 years old), in fair condition
Miscellaneous: Slope = 2.5/ 2.6/ 1.4, Pavement flows away from school toward field and there doesn't appear to be any drain system, one area of tree root damage.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	1.0%	0.208	S

Crack Width	1/8 - 1/4"

Cost Breakdown

AC Cost:	$244,506.25
CF Cost:	$0.00
DO Cost:	$0.00
Misc. Cost:	$500.00
Total Cost:	$245,006.25

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Summerdale School
Area (sf): 5,808
Area Notation: D
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Pedestrian Areas
Defect Score: 14
Recommended Treatment: Crack Fill and Seal Coat
Year: 2013
Visual Description: Pavement exhibits slight raveling and was recently sealed, in good condition.
Miscellaneous: Slope = 5.3/ 1.6/ 2.7, Pavement flows to drop inlets in the area.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.020	S

Crack Width	<1/8"

Cost Breakdown

AC Cost:	$2,032.80
CF Cost:	$116.16
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$2,148.96

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Summerdale School
Area (sf): 2,435
Area Notation: E
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Pedestrian Areas
Defect Score: 38
Recommended Treatment: Crack Fill and Seal Coat
Year: 2013
Visual Description: Pavement exhibits moderate shrinkage cracking.
Miscellaneous: Slope - 0.5/ 1.7, Pavement drains to planters.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.091	M

Crack Width	<1/8"

Cost Breakdown

AC Cost:	$852.25
CF Cost:	$221.58
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$1,073.83

12/10/2010

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SUMMERDALE SCHOOL - AREA A

SUMMERDALE SCHOOL - AREA A

SUMMERDALE SCHOOL - AREA B

SUMMERDALE SCHOOL - AREA B

SUMMERDALE SCHOOL - AREA C

SUMMERDALE SCHOOL - AREA C

SUMMERDALE SCHOOL - AREA D

SUMMERDALE SCHOOL - AREA D

SUMMERDALE SCHOOL - AREA E

SUMMERDALE SCHOOL - AREA E

Summerdale Elementary School

Seismic Assessment Report

SIERRAMONT MIDDLE SCHOOL

Key Plan (Photo taken from Google Maps)

Building Descriptions:

Sierramont Middle School consists of two buildings, both built in 1978. The main building contains the educational portion of the school with classrooms and admin offices, while the second building contains the gymnasium.

Main Building

The main building's lateral force resisting system consists of a plywood sheathed roof acting as horizontal wood diaphragm spanning between vertical plywood shear walls. Seismic loads are resisted in both orthogonal directions by way of the wood shear walls located on the exterior and interior of building structure. During our review we noticed that a section of this building has a high roof section, surrounded by plywood shear walls. From our review of the available drawings, it is not evident if sufficient shear transfer is provided for between these two elements. Additionally, we noted that a portion of the shear walls that were considered to be part of the main lateral force resisting system had height to width aspect ratios that were grater that what is allowed today. We recommend that further evaluation be completed to determine the effects of the potential deficiencies noted above.

Sierramont Middle School Main Building receives a subjective rating of 2.5.

Second Building

The second building is a single story building and has a high roof section similar to the main building. The entire building consists of a plywood sheathed roof acting as a horizontal wood diaphragm. The lower roof contains vertical plywood shear walls to resist lateral forces while the high roof consists of both plywood shear walls and steel brace frames. Our review of the available structural drawings revealed that the plywood shear walls are discontinuous between the high and low roof similar to the main building. We also noted that the steel brace frames were constructed in a "K" configuration. These types of structures have not performed well in the past, when subject to major seismic events.

We recommend that further investigation be performed on both buildings to verify the capacity of the slender shear walls as well as if the apparent discontinuous shear walls require retrofit measures to resolve the discontinuity. Additionally we recommend analyzing the brace frames in the second building to determine if the current configurations of the brace frames are adequate to resist the anticipated lateral forces.

Sierramont Middle School Second Building receives a subjective rating of 2.5.

SUMMERDALE ELEMENTARY SCHOOL

Key Plan (Photo taken from Google Maps)

Building Description:

The building is one of three identical single story building with a wood framed roof with concrete walls built in 1974. Please refer to the evaluation written for Brooktree Elementary for specific recommendations for this building type.

Summerdale Elementary School receives a subjective rating of 2.5.

Summerdale Elementary School

Mechanical Systems Assessment Report

SUMMERDALE ELEMENTARY SCHOOL
BERRYESSA UNIFIED SCHOOL DISTRICT

A. MECHANICAL BUILDING SYSTEMS

1. Existing Conditions:

a. New chiller, cooling tower (with new water treatment system), boiler and pumps provided in 2009.

b. New temperature controls installed in 2009.

c. Existing fan coil units are original.

d. Existing ductwork and air distribution in building is original.

e. Existing hot and chilled water are original.

2. Recommendations:

a. Demolish all existing air fan coil units (above ceiling) and replace with new fan coil units. Install the replacement units most matching the removed units to minimize the modifications to the existing above ceiling installation and the unit supports.

b. Replace all insulated supply and return ductwork, diffusers and grilles within the building. Replace all exhaust ductwork within the building.

c. Replace all insulated hot and chilled water within the building.

d. Replace all exhaust fans.

3. General:

a. This report and comments to follow are based on observations of the general condition of the mechanical systems and noticeable code issues resulting from a review of the existing drawings and an on-site visit, when required.

b. Refer to Appendix A for Title 24 requirements and general code issues that should be considered.

SUMMERDALE ELEMENTARY SCHOOL
BERRYESSA UNIFIED SCHOOL DISTRICT

APPENDIX-A

a. General

1. Comply requirements of California Mechanical Code (CMC) latest edition.

b. Possible Ventilation Code Issues

1. Corridors cannot be used as plenums for the purpose of supplying or exhausting air.

2. Corridors must have minimum two (2) air changes per hour for ventilation.

3. Minimum ventilation for occupied spaces should be 15 cfm/person or 0.15 cfm/sq. ft., whichever is greater.

4. Exhaust airflow from bathrooms should be based on minimum 10 air changes per hour.

c. Possible Fire Smoke Issues

1. Fire/smoke dampers in the system must be interlocked with fire alarm system.

2. Corridors, lobbies, and building entrances to have dedicated supply air.

3. Chemistry classrooms with occupancy separation shall have fire/smoke damper.

6. All air handling equipment supplying air flow in excess of 2,000 cubic feet per minute to have duct smoke detectors in the supply air duct.

d. Possible Title 24 Issues

1. Heating & Ventilating and Air Conditioning systems in excess of 2,500 cfm and a total cooling over 75,000 BTU/h (6.25 Tons) must have an economizer. Economizer must be fully integrated into the cooling system so that depending on the weather conditions, economizer can provide partial/full cooling when additional mechanical cooling is required.

2. Interior supply and return air ductwork (heating & cooling) shall be insulated with minimum R-value of 4.2.

3. Hot and chilled water piping less than 50°F and over 110°F shall be insulated with pipe insulation minimum R-value of 4.2.

4. Heating, ventilating, and air conditioning systems to have control capability with night setback.

5. Heating, ventilating, and air conditioning equipment to be certified by the State of California to meet minimum energy requirements.

Summerdale Elementary School

Electrical and Low Voltage Systems Assessment Report

B. Electrical

1. Power Systems:

A 1000A, 277/480V, 3 phase, 4 wire switchboard with a 300KVA utility pad mounted transformer located in the electrical service yard provides power to the campus. The switchboard was of original built and in fair condition. According to PG&E record, the current peak usage on the system is of 227 amp. There is a spare capacity of 78 amp approximately at the service for future usage. If additional power is needed, the PG&E transformer shall need to be upgraded.

2. Fire Alarm System:

The existing fire alarm system was of manual/automatic system on a Gamewell 610 panel in the administration office installed around 2003. The panel is in good and functioning condition. The notification devices were not adequate to meet the current code requirement.

Recommendations:

a. Provide new horn and strobes in areas required by ADA, NFPA, CEC and CFC.

3. Public Address and Clock Systems:

The existing Bogen Multicom 2000 PA and master clock system located in the multi-purpose building storage room is in good and functioning condition. Existing speaker and clock units are in good condition for reuse.

Will H. Ector, Jr.
Superintendent

1376 Piedmont Road
San Jose, CA 95132-2427

Phone: (408) 923-1800
Fax: (408) 923-0623

Toyon Elementary School

995 Bard Street
San Jose, CA

Toyon Elementary School Assessment

Statistics:

Enrollment (Nov. 2012):	342
Principal:	Maria Smith
Site:	10.3 Acres
Building Area:	Approx. 42,500 SF
Permanent Classrooms:	20
Portable Classrooms:	4 @ 960 SF
Total Size:	46,340 SF

Construction History:

1955	School Constructed
Unknown	Construction of (2) Portable Classrooms
1996	Construction of (1) Portable Classroom
2002	Modernization
2006	Construction of (1) Portable Classroom
2008	HVAC Upgrade (Boiler and Chiller Replacement)
2008	Roofing Removal and Replacement
2009	Replacement of Campus Fire Alarm System

Toyon Elementary School

Site Meeting Minutes

Needs Assessment Scope Categories

Berryessa School District

Toyon Elementary School

June 03, 2013

Site

1. Parking lots, traffic control, and drop-off and pick-up areas
    a. Additional parking requested.
2. PE equipment (Basketball backboards, rims, play structures, matting)
    a. Generally in good condition.
3. Site (ADA) compliance, paved walkways (tripping hazards, level and clear pathways)
    a. SFA to investigate.
4. Paved Play Area (size, security, location, condition)
    a. Asphalt condition is poor.
5. Turf play area, landscaping and irrigation
    a. Issues noted with squirrels and gophers.
6. Fencing and security
    a. Open campus with multiple programs.
    b. Needs a secure perimeter.
7. Trash enclosure
    a. Enclosure requested.
8. Site Utilities (to the street and campus distribution - gas, water, sewer, storm, power)
    a. No issues noted.
9. Site Lighting (LED)
    a. Additional pole-mounted lighting requested in parking lot areas.
10. Covered Shade or Eating Structure
    a. Shade structures requested for main site and also for transitional kindergarten.
11. Roofing
    a. No known issues.
12. Covered walkways
    a. None currently.

Needs Assessment Scope Categories

Berryessa School District

Toyon Elementary School

June 03, 2013

Site

1. Parking lots, traffic control, and drop-off and pick-up areas
    a. Additional parking requested.
2. PE equipment (Basketball backboards, rims, play structures, matting)
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Needs Assessment Scope Categories

Berryessa School District

Toyon Elementary School

June 03, 2013

Site

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    a. Additional pole-mounted lighting requested in parking lot areas.
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    a. Shade structures requested for main site and also for transitional kindergarten.
11. Roofing
    a. No known issues.
12. Covered walkways
    a. None currently.

Grounds:

Security:

Observations:

- This site is largely fenced in, although access from the front is still available. Some of the existing fence is less than 6'-0" high, and some openings in the fence exist.
- Building exterior lighting is insufficient.
- Existing doors often have windows in them.
- This site has a numerous windows below door height.

Parking lot and Drop-Off / Pick-Up:

Observations:

- Circulation through the parking lot during pick-up and drop-off is inadequate, and creates problems with traffic congestion.
- Pick-up / Drop-off location sees considerable congestion during peak times, and does not allow traffic to flow through.
- Existing accessible parking does not meet current requirements.
- Delivery trucks arriving and departing from the attached District Central Kitchen conflict with traffic in parking lot.

Landscaping:

Observations:

- The existing landscaping is dated, non-existent in some places, and overgrown in others. The bare areas face erosion issues, and the overgrown areas

trap debris as well as providing a home to nuisance pests.

Play Surface / Fields / Play Structures:

Observations:

- One of the three main asphalt play surfaces is in good condition. The other two are in relatively poor condition.
- The existing sports fields have issues with ground squirrels and gophers. Some parts of the grass fields are bare and/or more weeds than grass.
- Existing play structures appear in good condition; however, the existing shredded rubber in the play structure boxes is depleted and in need of replacement.

Outdoor eating area:

Observations:

- Current outdoor eating area is an asphalt area adjacent to the street. No covered seating is available.
- Two existing French drains located in the outdoor eating area vicinity flood during heavy rain.

Building:

Entry Visibility:

Observations:

- Building entry visibility is poor.

Administration Area:

Observations:

- The principal's office is too small to permit a private conference.
- Conference room too small to hold conferences with the door closed for privacy.
- The existing finishes are show signs of wear and tear.
- Existing counters are too high for comfortable use. Counter is not compliant with current accessibility requirements.

Classrooms:

Observations:

- Classrooms are generally in good condition, although some of the finishes are faded and/or dirty.
- Some classrooms have a CRT television mounted in a location that does not comply with current accessibility requirements.
- Enrollment at this site is the lowest in the District by a significant amount. Many spaces at this site are underutilized.
- Current enrollment projections do not indicate that an increase in enrollment at this campus is likely in the forseeable future.

Library:

Observations:

- Existing book stack capacity is insufficient for current needs.
- Many existing book stacks are mobile carts.
- Librarian desk is not accessible.

Multi-Purpose Room:

Observations:

- Most finishes appear in need of replacement.
- Existing windows are in need of replacement.
- Existing sound system is inadequate for current needs.

Campus Circulation and Accessibility:

Observations:

- There is an existing asphalt pathway from the play surface to Gridley Street that is in poor condition.
- Existing door thresholds are too high for current accessibility standards.
- Occasional areas of concrete or asphalt paving that have heaved or cracked cause accessibility issues.

Specialty Classrooms:

Observations:

- Computer lab is currently located in a portable classroom.
- The site is currently utilizing the Multi-Purpose Room for the school Music Program.
- The site currently has no dedicated Science Lab.

Portable Classrooms:

Observations:

- The existing portable classrooms are generally in good condition, with the exception of Room 21 and Room 22, which are in poor condition.
- The County Office of Education (COE) has two portables on this site, used for their programs,

that are owned and maintained by the COE.

Kitchen / Food Service

Observations:

- The existing kitchen layout and equipment do not meet current Department of Health requirements.
- Most existing built-in equipment (refrigerator, freezer, sinks, storage areas, etc.) are beyond their expected lifespan.
- The District Central Kitchen is located on this site. See separate assessment.

Staff Work Areas:

Observations:

- The staff work area appears to be in acceptable condition. The existing casework appears to be aging, although still servicable, finishes in general are worn and faded.

Staff Lounge:

Observations:

- The existing staff room finishes are worn and dated.
- The existing casework appears serviceable, although it is beyond it's expected lifespan.

Student Restrooms:

Observations:

- Restrooms are generally in good condition.
- Existing lavatories with automatic sensors for water flow require significant amounts of work to keep operational.
- The existing fixture count (Boys – 9 water closets, 11 urinals, and 7 lavatories; Girls – 16 water closets, 7 lavatories) serve the current population of approximately 340 students.

- Kindergarten classrooms do not have restrooms adjacent to them.

Staff Restrooms:

Observations:

- The existing fixture count of (Men – 2 water closet, 1 urinal, and 2 lavatories; Women – 3 water closets, 3 lavatories) serve the current staff population.

Storage and Custodial Spaces:

Observations:

- Overall general storage capacity is good.
- Custodial spaces in general show signs of wear and tear.
- Custodial spaces are not accessible.

Structural System:

Observations:

- Building F: The plans for this building indicate that this building was built around 1956. The building is a single story structure containing several classrooms. The framing consists of wood roof joists spanning between bearing walls. The building also features a clerestory window which runs nearly the entire length of the structure.
- The lateral force resisting system for the building consists of a sloped roof with diagonal sheathing acting as a horizontal wood diaphragm spanning between vertical plywood shear walls. It appears that the vertical load path to the shear walls below is insufficient due to the large clerestory window that spans nearly the entire length of the structure. Additionally, it appears that the transverse shear walls do not have tie-downs restraining them from uplift.
- The structural plans also indicated covered walkways at the corridors of buildings C, D and E. The gravity as well as lateral support for the walkways are standard 3”

diameter steel pipe columns. Our preliminary evaluation of these columns is that they would not perform at a level consistent with "Life Safety" when subjected a major seismic event.

- Buildings C, D and E appear to be similar construction and therefore the recommendations would most likely be consist with those made for Building F.

Mechanical Systems:

Observations:

- New chiller, pumps (w/ VFD's), boiler and exterior piping installed in 2008 for Buildings G&H.
- New exhaust fans installed in 2008 for Buildings G & H. All other buildings have original exhaust fans.
- New temperature controls installed in 2008.
- New air handling units and ductwork on the roof was provided for Buildings G & H in 2008. All other buildings have original vertical baseboard fan coil units, which are in poor condition.
- Existing hot and chilled water is original.

Electrical Systems:

Observations:

- A 1200A, 120/208V, 3-phase, 4-wire switchboard with a 300KVA utility pad mounted transformer located next to Building C Electrical Room provides power to the campus. The switchboard was installed around 1996 and in good and functioning condition. According to PG&E record, the current peak usage on the system is of 256 amps.

Low Voltage Systems:

Observations:

- The existing fire alarm system was of automatic system on a Gamewell 602 panel in the Administration building installed around 2009. The panel is in good and functioning condition. The initiation and notification devices meet the current code requirements.
- The existing Bogen Multicom 2000 Public Adress and Master Clock system located in the Building E storage room is in good and functioning condition.

Roofing:

Observations:

- The existing roof is a multi-ply built-up-roofing system and shingles. Installed in 2008, the built-up roofing has a 20-year warranty, and the shingles have a 40-year warranty. The roof system has an estimated remaining life of 13-15 years.

Exterior Paint:

Observations:

- The existing exterior paint is generally in good condition, although it is aged, and shows many locations where re-painting has occurred over time.

Toyon Elementary School

Site Plans

EXISTING BUILDINGS

TOYON ELEMENTARY SCHOOL

EXISTING CONDITIONS

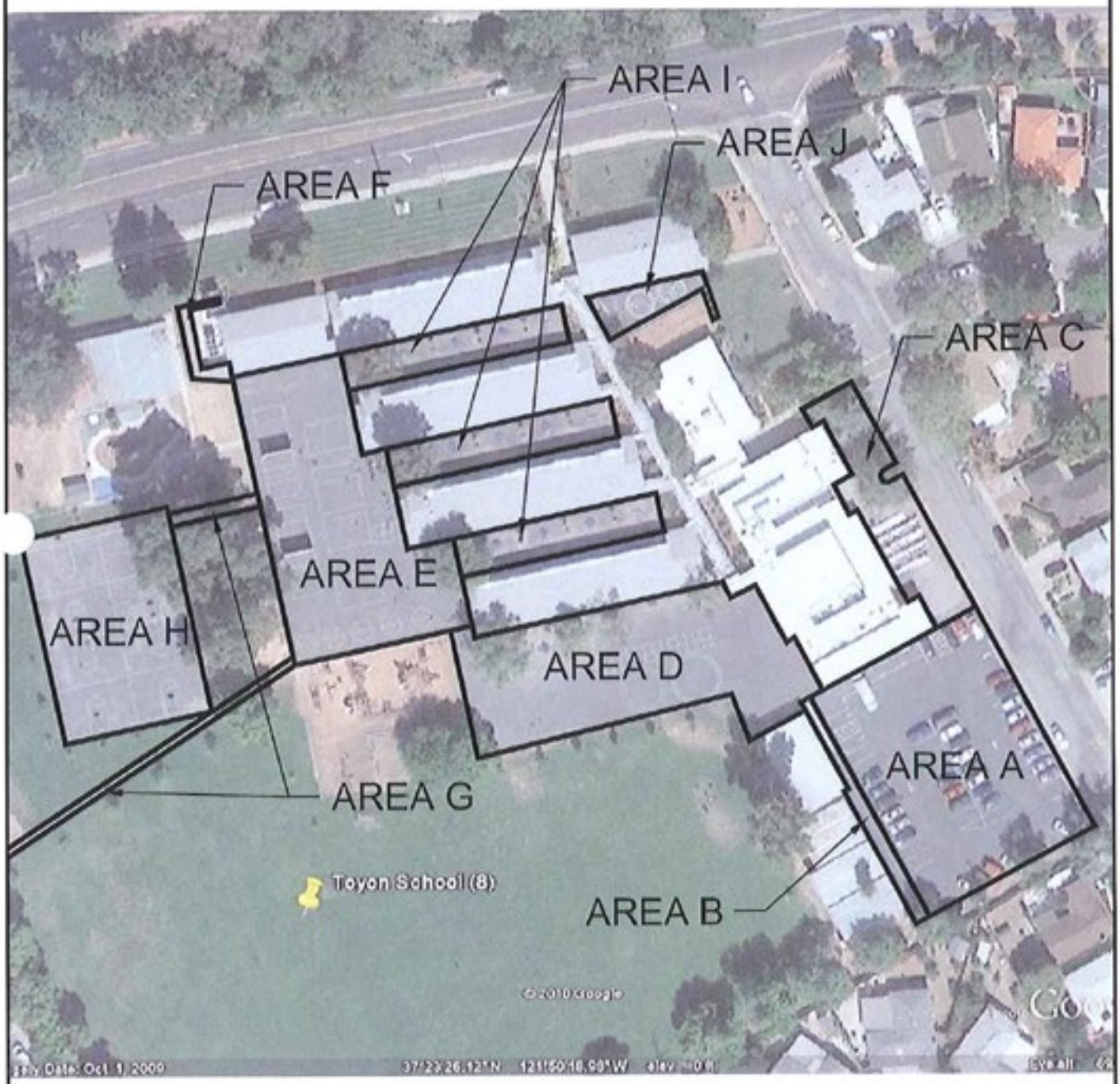
TOYON ELEMENTARY SCHOOL

EXISTING BUILDINGS

10' 40' 120'
0 20' 80'

Toyon Elementary School

Paving Assessment Report



TOYON SCHOOL

Summary School Report

Asphalt Surface Evaluation

School Name: Toyon School

Area	Type	Use	Area (sq. ft.)	Defect Score	Recommendation	Cost	Year
A	EL	Park	21,336	82	Reconstruct	$154,686.00	2012
B	EL	Ped	1,909	24	Remove & Replace	$9,545.00	2015
C	EL	Ped	4,644	898	Reconstruct	$33,669.00	2011
D	EL	Play	17,479	22	Crack Fill and Seal Coat	$6,117.65	2015
E	EL	Play	19,556	94	Reconstruct	$141,781.00	2011
F	EL	Ped	1,087	83	Crack Fill and Seal Coat	$645.68	2011
G	EL	Ped	2,145	100	Remove & Replace	$10,725.00	2011
H	EL	Play	14,140	60	Reconstruct	$102,515.00	2011
I	EL	Ped	9,089	0	Crack Fill and Seal Coat	$3,181.15	2015
J	EL	Play	1,970	26	Remove & Replace	$9,850.00	2011
					Total:	**$472,715.48**	

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Toyon School
Area (sf): 21,336
Area Notation: A
Buses: No
Surface Type: AC
Garbage Trucks: Yes
Use: Parking Lots or Areas
Defect Score: 82
Recommended Treatment: Reconstruct
Year: 2012
Visual Description: Pavement exhibits moderate raveling, previously sealed, in poor condition, several areas of alligator cracking and moderate shrinkage cracking
Miscellaneous: Slope = 2.1/ 5.3/ 1.2, Pavement drains to a drop inlet located within the pavement area, ADA - slopes exceed 2% and there is no designated path of travel to building.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
600	0%	5.0%	0.120	M

Crack Width	1/8 - 1/4"

Cost Breakdown

AC Cost:	$154,686.00
CF Cost:	$0.00
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$154,686.00

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Toyon School
Area (sf): 1,909
Area Notation: B
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Pedestrian Areas
Defect Score: 24
Recommended Treatment: Remove & Replace
Year: 2015
Visual Description: Pavement exhibits slight raveling, previously sealed, in fair condition.
Miscellaneous: Slopes=0.6/5.0/3.6; No AC under portable building ramps; old PCC post bases are a trip fall hazard ad should be removed.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.055	S

Crack Width	1/8 - 1/4"

Cost Breakdown

AC Cost:	$9,545.00
CF Cost:	$0.00
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$9,545.00

12/10/2010

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Specializing in Pavement Rehabilitation
San Luis Obispo Office (805) 781-2265

BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Toyon School
Area (sf): 4,644
Area Notation: C
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Pedestrian Areas
Defect Score: 1,600
Recommended Treatment: Reconstruct
Year: 2011
Visual Description: Pavement exhibits severe alligator cracking, previously sealed, in poor condition.
Miscellaneous: Slope = 11.4/ 4.4/ 1.4, Pavement drains to drop inlets, one drop inlet is completely blocked and has created a huge pond, tree root damage evident.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	100.0%	3.000	M

Crack Width	1/8 - 1/4"

Cost Breakdown

AC Cost:	$33,669.00
CF Cost:	$0.00
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$33,669.00

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Toyon School
Area (sf): 17,479
Area Notation: D
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Playground
Defect Score: 22
Recommended Treatment: Crack Fill and Seal Coat
Year: 2015
Visual Description: Pavement exhibits moderate raveling, previously sealed, in fair condition.
Miscellaneous: Slope = 3.8/ 4.0, Pavement drains to field.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.000	M

Crack Width	0

Cost Breakdown

AC Cost:	$6,117.65
CF Cost:	$0.00
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$6,117.65

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Toyon School
Area (sf): 19,556
Area Notation: E
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Playground
Defect Score: 94
Recommended Treatment: Reconstruct
Year: 2011
Visual Description: Pavement exhibits severe block cracking and moderate raveling, previously sealed, in poor condition.
Miscellaneous: Slope = 1.5/ 1.6/ 2.1, Pavement sheet flows to field and planter.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.253	M

Crack Width	1/8 - 1/4"

Cost Breakdown

AC Cost:	$141,781.00
CF Cost:	$0.00
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$141,781.00

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Toyon School
Area (sf): 1,087
Area Notation: F
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Pedestrian Areas
Defect Score: 83
Recommended Treatment: Crack Fill and Seal Coat
Year: 2011
Visual Description: Pavement exhibits moderate raveling, previously sealed, in poor condition.
Miscellaneous: Slope = 6.1/ 12.6.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.244	M

Crack Width	1/8 - 1/4"

Cost Breakdown

AC Cost:	$380.45
CF Cost:	$265.23
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$645.68

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Toyon School
Area (sf): 2,145
Area Notation: G
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Pedestrian Areas
Defect Score: 100
Recommended Treatment: Remove & Replace
Year: 2011
Visual Description: Pavement exhibits severe block cracking, previously sealed, in poor condition.
Miscellaneous: Slope = 5.3/ 6.3, Tree root damage and ponding observed, pavement adjacent to planter and field.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.233	V

Crack Width	1/4 - 1/2"

Cost Breakdown

AC Cost:	$10,725.00
CF Cost:	$0.00
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$10,725.00

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Toyon School
Area (sf): 14,140
Area Notation: H
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Playground
Defect Score: 60
Recommended Treatment: Reconstruct
Year: 2011
Visual Description: Pavement exhibits moderate raveling, previously sealed, in poor condition.
Miscellaneous: Slope = 0.5/ 1.1/ 2.3, Numerous areas of ponding and tree root damage.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.133	M

Crack Width	1/8 - 1/4"

Cost Breakdown

AC Cost:	$102,515.00
CF Cost:	$0.00
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$102,515.00

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Toyon School
Area (sf): 9,089
Area Notation: I
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Pedestrian Areas
Defect Score: 0
Recommended Treatment: Crack Fill and Seal Coat
Year: 2015
Visual Description: Newer pavement, good condition.
Miscellaneous: Slope = 0.5/ 1.2/ 2.2, Ponding and tree root damage observed, roof drains are bubble-up in pavement.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.000	N

Crack Width	0

Cost Breakdown

AC Cost:	$3,181.15
CF Cost:	$0.00
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$3,181.15

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Toyon School
Area (sf): 1,970
Area Notation: J
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Playground
Defect Score: 26
Recommended Treatment: Remove & Replace
Year: 2011
Visual Description: Pavement exhibits severe block cracking, previously sealed, in fair condition.
Miscellaneous: Slope = 0.3/ 1.5/ 3.6/ 4.8, Pavement drains to drop inlet in pavement area.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.053	S

Crack Width	1/8 - 1/4"

Cost Breakdown

AC Cost:	$9,850.00
CF Cost:	$0.00
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$9,850.00

12/10/2010

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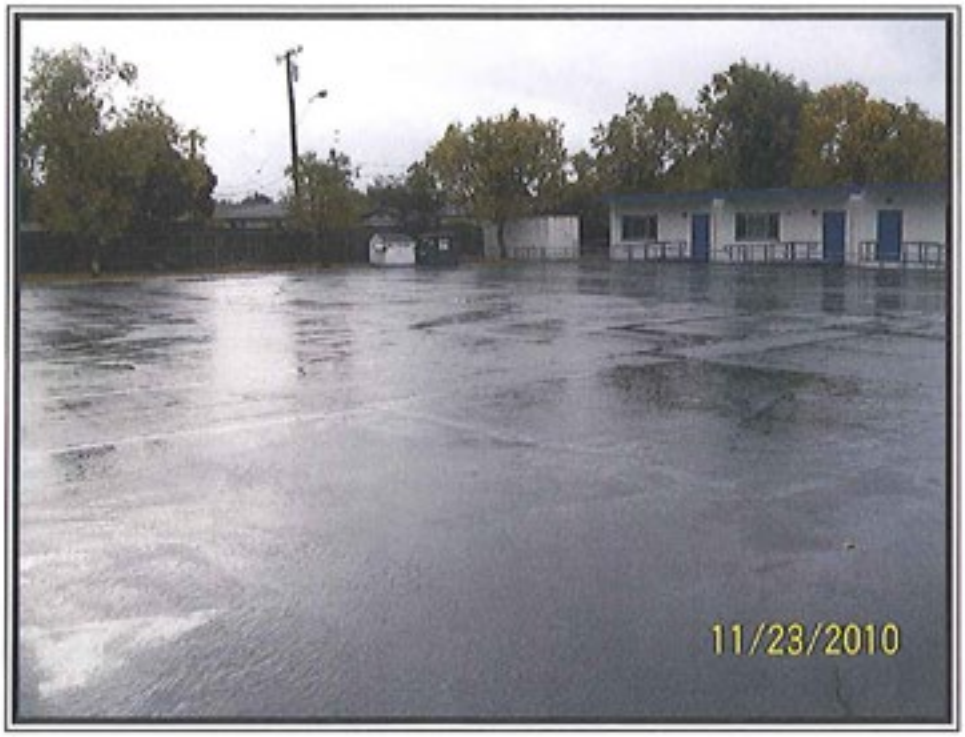
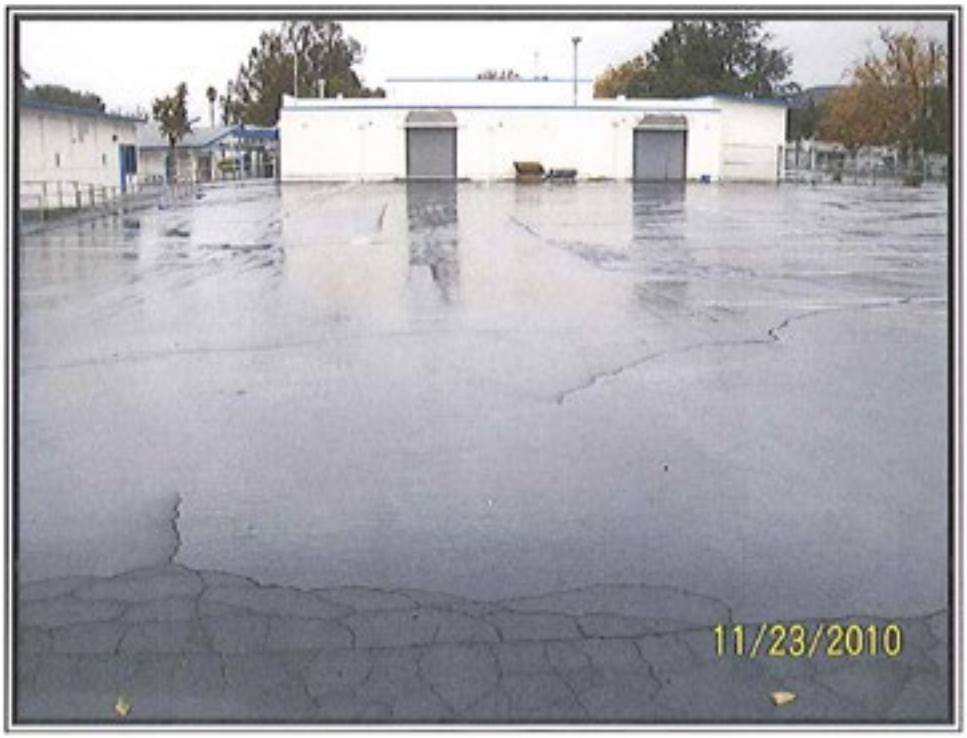


TOYON SCHOOL - AREA A



TOYON SCHOOL - AREA A

TOYON SCHOOL - AREA B

TOYON SCHOOL - AREA B

TOYON SCHOOL - AREA C

TOYON SCHOOL - AREA C

TOYON SCHOOL - AREA D

TOYON SCHOOL - AREA D

TOYON SCHOOL - AREA E

TOYON SCHOOL - AREA E

TOYON SCHOOL - AREA F

TOYON SCHOOL - AREA F

TOYON SCHOOL - AREA G

TOYON SCHOOL - AREA G

TOYON SCHOOL - AREA H

TOYON SCHOOL - AREA H

TOYON SCHOOL - AREA I

TOYON SCHOOL - AREA I

TOYON SCHOOL - AREA I

TOYON SCHOOL - AREA J

TOYON SCHOOL - AREA J

Toyon Elementary School

Seismic Assessment Report

TOYON ELEMENTARY SCHOOL

Key Plan (Photo taken from Google Maps)

Building Descriptions:

Toyon Elementary School is comprised of nine buildings. The buildings were originally constructed and renovated in several different phases over the years. The buildings are labeled according to the Architectural plans that were the basis of this review. Not all buildings had Architectural and/or Structural plans to serve as the basis of this review as noted in the sections below.

<u>Buildings A, B, C, D, E, J, H, G</u>

The drawings that were available for these buildings for our review, was limited to a select few Architectural plan sheets. No structural plans were available for any of the buildings listed above. Therefore, we recommend that construction drawings be located and/or a site observation be conducted so that a seismic evaluation can be performed on the subject buildings. 413

These buildings do not receive a subjective rating at this time.

Bldg. F

The plans for this building indicate that this building was built around 1956. The building is a single story structure containing several classrooms. The framing consists of wood roof joists spanning between bearing walls. The building also features a clerestory window which runs nearly the entire length of the structure.

The lateral force resisting system for the building consists of a sloped roof with diagonal sheathing acting as a horizontal wood diaphragm spanning between vertical plywood shear walls. It appears that the vertical load path to the shear walls below is insufficient due to the large clerestory window that spans nearly the entire length of the structure. Additionally, it appears that the transvers shear walls do not have tie-downs restraining them from uplift. We recommend a more in depth review of the buildings lateral force resisting system be conducted to determine what, if any retrofit measure would be necessary to increase the buildings anticipated performance to a "Life Safety" level.

The structural plans also indicated covered walkways at the corridors of buildings C, D and E. The gravity as well as lateral support for the walkways are standard 3" diameter steel pipe columns. Our preliminary evaluation of these columns is that they would not perform at a level consistent with "Life Safety" when subjected a major seismic event.

Buildings C, D and E appear to be similar construction and therefore the recommendations would most likely be consist with those made for Building F.

Toyon Elementary School Building F receives a subjective rating of 2.5.

Bldg. H

The original plans for the design of Bldg H were not available at the time of this review. Architectural and Structural plans for the 1979 library addition were available but did not provide adequate information to review the building as a whole. We recommend that an effort

be put forth to locate the original approved set of construction documents so that a full seismic evaluation can be completed for this structure. In the absence of reviewing the original drawings, we would recommend that a site observation be conducted to verify as-built conditions with the expectations that some destructive demolition be required to expose key elements of the lateral force resisting system. Upon the evaluation of either of the above methods, retrofit measures can be made, as necessary, to up-grade the existing structure to an acceptable level of performance.

Toyon Elementary School Building H does not receive a subjective rating at this time.

Toyon Elementary School

Mechanical Systems Assessment Report

A. MECHANICAL BUILDING SYSTEMS

1. Existing Conditions:

a. New chiller, pumps (w/ VFD's), boiler and exterior piping installed in 2008 for Buildings G & H.

b. New exhaust fans installed in 2008 for Buildings G & H. All other buildings have original exhaust fans.

c. New temperature controls installed in 2008.

d. New air handling units and ductwork on the roof was provided for Buildings G & H in 2008. All other buildings have original vertical baseboard fan coil units.

e. All hot and chilled water is original.

2. Recommendations:

a. Remove all existing exposed, vertical baseboard fan coil units and replace with new vertical gas fired furnaces with split DX cooling with controlled outside air intake, EC motors and new ductwork with diffusers and grilles.

b. Replace all insulated supply and return ductwork, diffusers and grilles within the building. Replace all exhaust ductwork within the building.

c. Replace all insulated underground hot and chilled water piping with pre-insulated piping manufactured to be buried below grade.

d. Replace all insulated hot and chilled water pipe installed within the building.

e. Replace all insulated hot and chilled water pipes installed on the covered walkway canopy.

3. General:

This report and comments to follow are based on observations of the general condition of the mechanical systems and noticeable code issues resulting from a review of the existing drawings and an on-site visit, when required.

Refer to Appendix A for Title 24 requirements and general code issues that should be considered.

APPENDIX-A

a. General

1. Comply requirements of California Mechanical Code (CMC) latest edition.

b. Possible Ventilation Code Issues

1. Corridors cannot be used as plenums for the purpose of supplying or exhausting air.

2. Corridors must have minimum two (2) air changes per hour for ventilation.

3. Minimum ventilation for occupied spaces should be 15 cfm/person or 0.15 cfm/sq. ft., whichever is greater.

4. Exhaust airflow from bathrooms should be based on minimum 10 air changes per hour.

c. Possible Fire Smoke Issues

1. Fire/smoke dampers in the system must be interlocked with fire alarm system.

2. Corridors, lobbies, and building entrances to have dedicated supply air.

3. Chemistry classrooms with occupancy separation shall have fire/smoke damper.

6. All air handling equipment supplying air flow in excess of 2,000 cubic feet per minute to have duct smoke detectors in the supply air duct.

d. Possible Title 24 Issues

1. Heating furnaces to have minimum 80% efficiency.

2. Heating & Ventilating and Air Conditioning systems in excess of 2,500 cfm and a total cooling over 75,000 BTU/h (6.25 Tons) must have an economizer. Economizer must be fully integrated into the cooling system so that depending on the weather conditions, economizer can provide partial/full cooling when additional mechanical cooling is required.

3. Interior supply and return air ductwork (heating & cooling) shall be insulated with minimum R-value of 4.2.

4. Hot and chilled water piping less than 50°F and over 110°F shall be insulated with pipe insulation minimum R-value of 4.2.

5. Heating, ventilating, and air conditioning systems to have control capability with night setback.

6. Heating, ventilating, and air conditioning equipment to be certified by the State of California to meet minimum energy requirements.

Toyon Elementary School

Electrical and Low Voltage Systems Assessment Report

B. Electrical

1. Power Systems:

A 1200A, 120/208V, 3 phase, 4 wire switchboard with a 300KVA utility pad mounted transformer located next building C electrical room provides power to the campus. The switchboard was installed around 1996 and is in good and functioning condition. According to PG&E record, the current peak usage on the system is of 256 amp. There is a spare capacity of 514 amp approximately at the service for future usage. If additional power is needed, the PG&E transformer shall need to be upgraded.

2. Fire Alarm System:

The existing fire alarm system was of automatic system on a Gamewell 602 panel in the administration office installed in 2008. The panel is in good and functioning condition. The initiation and notification devices meet the current code requirement.

3. Public Address and Clock Systems:

The existing Bogen Multicom 2000 PA and master clock system located in the building E storage room is in good and functioning condition. Existing speaker and clock units are in good condition for reuse.

Will H. Ector, Jr.
Superintendent

1376 Piedmont Road
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Vinci Park Elementary School

1311 Vinci Park Way
San Jose, CA

Vinci Park Elementary School Assessment

Statistics:

Enrollment (Nov. 2012):	630
Principal:	Virginia Pender
Site:	9.8 Acres
Building Area:	Approx. 51,000 SF
Permanent Classrooms:	32
Portable Classrooms:	7 @ 960 SF
Total Size:	57,720 SF

Construction History:

1973	School Constructed
1996	Construction of (2) Portable Classroom buildings
2002	Construction of (1) Portable Music Room
2004	Modernization Projects
2005	Construction of (1) Portable Classroom building
2006	Roofing Removal and Replacement
2006	Construction of (1) Portable Classroom building
2006	Replacement of Existing Boiler and Chiller
2007	Construction of (2) Portable Classroom buildings

Vinci Park Elementary School

Site Meeting Minutes

Needs Assessment Scope Categories
Berryessa School District

Vinci Park School

May 22, 2013

(updated September 23, 2013)

Site

1. Parking lots, traffic control, and drop-off and pick-up areas
    a. Parking for kindergarten area requested.
    b. Better traffic flow through parking lot requested.
2. PE equipment (Basketball backboards, rims, play structures, matting)
    a. Generally in good condition.
    b. Site noted that they have no swings.
    c. Drainage issues are present at edges of paved area.
3. Site (ADA) compliance, paved walkways (tripping hazards, level and clear pathways)
    a. Areas with paving issues were noted.
4. Paved Play Area (size, security, location, condition)
    a. Drainage is a problem at edges of paving.
    b. Asphalt condition is generally acceptable.
5. Turf play area, landscaping and irrigation
    a. Issues noted with squirrels and gophers.
    b. Request for artificial turf for safety. (9/23/13)
6. Fencing and security
    a. Secure perimeter fence was requested.
7. Trash enclosure
    a. Enclosure requested.
8. Site Utilities (to the street and campus distribution - gas, water, sewer, storm, power)
    a. Phone system noted as not functioning properly during rainy weather.
    b. It is believed that water is entering the underground conduits and causing a short. (9/23/13)
9. Site Lighting (LED)
    a. Additional pole-mounted lighting requested throughout campus.
10. Covered Shade or Eating Structure
    a. Separate shade structures for kindergarteners, rest of kids.
11. Roofing
    a. No known issues.
12. Covered walkways
    a. None currently.
13. Exterior Paint
    a. Good condition.

14. Campus Layout and organization
    a. Entry security review requested.
    b. Additional restroom facilities needed near existing portables.
15. Curb Appeal
    a. General landscaping improvements.
16. Portable classrooms/restrooms
    a. Site would prefer permanent building in lieu of existing portables.
17. Storage
    a. No issues noted.
    b. Existing exterior storage containers noted to be in need of replacement. (9/23/13)
    c. Additional interior storage requested. (9/23/13)
18. Drinking fountains
    a. Replace existing drinking fountains.
    b. Provide additional drinking fountains.
19. Signage
    a. District plans to replace all existing wayfinding signage.
    b. District plans to add marquee signage to each campus.

Building

a. Building Insulation, exterior surfaces
    a. No issues noted.
    b. Insulation needed at Music Room. (9/23/13)
b. Windows (Prep rooms/common areas, condition of windows and amount of natural light)
    a. Replace polycarbonate with glass.
c. Exterior Doors and Hardware
    a. Door and hardware replacement will likely be district-wide.
d. Restrooms (Electric hand dryers, partitions, fixtures, re-seal flooring)
    a. No issues noted.
e. Flooring (Carpeting, tiling, resilient, all locations)
    a. Flooring appears acceptable.
f. Tackable Walls surfaces and all other interior finishes
    a. Full-height, wall-to-wall tackable surfaces acceptable.
g. Ceilings
    a. No issues noted.
h. Cabinetry (Teaching walls)
    a. Request for teaching walls.
i. Classroom size/layout (21st Century Learning environment/classroom)
    a. Meeting to be held on 23JUN2013 with District representatives to discuss this item.
j. Backpack storage or location
    a. No current backpack storage solution.
k. Interior lighting (LED)
    a. No known issues.
    b. Request for additional control over lighting in classrooms.

l. Blinds
    a. Acceptable.
m. Markerboards
    a. Markerboards in the teaching wall cabinets would be sufficient.
n. Classroom electrical outlets
    a. More, better distributed.
o. IT/Data networking (Wi-fi, location, IDF and MDF)
    a. SFA will be meeting with District IT personnel to discuss district-wide implementations.
p. IT/Video network
    a. SFA will be meeting with District IT personnel to discuss district-wide implementations.
q. Communication system (Intercom, Clocks, Speakers)
    a. No issues noted.
r. Intrusion Alarm
    a. No issues noted.
s. Security cameras
    a. Security cameras are planned to be added to all sites as part of this process.
t. Heating and Ventilating and Air Conditioning (Chiller, mechanical equipment, FCU's)
    a. SFA will evaluate these systems over the summer.
    b. Issues with system balance were noted. (9/23/13)
    c. MPR space does not cool down when full. (9/23/13)
u. Energy management system (Controls for HVAC/Lighting)
    a. No known issues.

Miscellaneous:

- Photovoltaic Installation (Solar)
    - Solar installation will occur where economically feasible.
- Multi-purpose/Cafeteria efficiency
    - No issues noted.
    - MPR noted as being too small for full school assemblies. (9/23/13)
- Administration area functionality
    - Request for larger conference room.
- Kitchen
    - SFA to meet with District Food Services personnel to discuss district-wide plan.
- Library/Media Center
    - No issues noted.
- Specialty Rooms
    - No issues noted.
    - Site has no dedicated testing, science or music spaces. (9/23/13)
- FFE (Furnishings, Fixtures, Equipment) Lunch tables, classroom furniture, etc.
    - Most furniture is original to the school, and appears in need of replacement.
- Any other creative thoughts/ideas
    - Soundproofing between classrooms and restrooms is necessary.

Grounds:

Security:

Observations:

- This site is largely fenced in, although access from the front is still available. Some of the existing fence is less than 6'-0" high, and some openings in the fence exist.
- Building exterior lighting is insufficient.
- Existing doors often have windows in them.
- This site has numerous windows below door height.

Parking lot and Drop-Off / Pick-Up:

Observations:

- Circulation through the parking lot during pick-up and drop-off is inadequate, and creates problems with traffic congestion.
- Pick-up / Drop-off location sees considerable congestion during peak times, and does not allow traffic to flow through.
- Existing accessible parking does not meet current requirements.
- Parents and students using the remote private daycare facilities must walk a considerable distance from parking to classroom.

Landscaping:

Observations:

- The existing landscaping is dated, non-existent in some places, and overgrown in others. The bare areas face erosion issues, and the overgrown areas

trap debris as well as providing a home to nuisance pests.

Play Surface / Fields / Play Structures:

Observations:

- The main asphalt play surface is in moderate condition.
- The existing sports fields have issues with ground squirrels and gophers. Some parts of the grass fields are bare and/or more weeds than grass.
- Existing play structures appear in good condition; however, the existing shredded rubber in the play structure boxes is depleted and in need of replacement.

Outdoor eating area:

Observations:

- Current outdoor eating area is an asphalt area adjacent to the outdoor amphitheater, which provides an inadequate number of seats. No covered seating is available.

Enrollment and Growth:

Observations:

- This site is close to a major new housing development that is currently under construction. While exact impacts are still unknown, this site will likely see an increase in enrollment due to this development activity. Since the site is already operating at close to it's maximum capacity, any significant increase in enrollment would likely require an expansion of the school facilities.

Building:

Entry Visibility:

Observations:

- Building entry visibility is acceptable, but could be improved.

Administration Area:

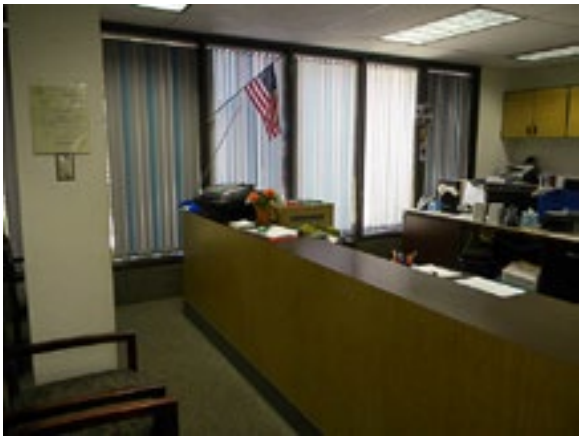
Observations:

- Entry into the office space is difficult, due to a single point of entry users are not able to access the length of the counter.
- Access control to the building core is not currently possible.
- Conference room too small to hold conferences with the door closed for privacy.
- The existing finishes are show signs of wear and tear.
- Existing counters are too high for comfortable use. Counter is not compliant with current accessibility requirements.

Classrooms:

Observations:

- Classrooms are generally in good condition, although some of the finishes are faded and/or dirty.
- Some classrooms have a CRT television mounted in a location that does not comply with current accessibility requirements.



Classroom Pods:

Observations:

- Each pod of nine classrooms surrounds a large central space that appears underutilized.
- If the classroom doors are all locked in an emergency, there is no available exit from the pod space.

Library:

Observations:

- Existing finishes are worn and faded.
- Insufficient curriculum storage available.
- Librarian desk is not accessible.

Multi-Purpose Room:

Observations:

- Most finishes appear in need of replacement.
- Existing Multi-Purpose Room is too small to assemble entire student body.
- Existing sound system is inadequate for current needs.
- Existing folding lunch tables are original, and in poor condition.

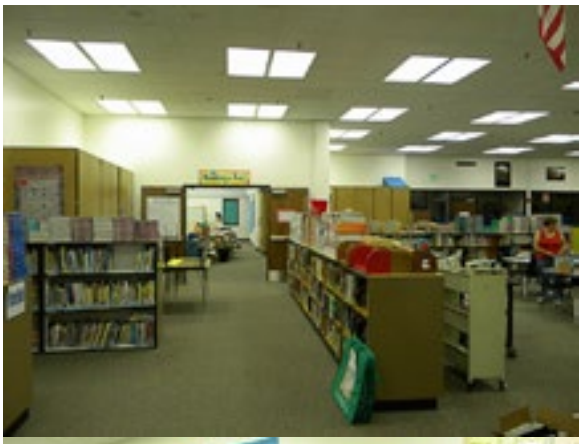
Campus Circulation and Accessibility:

Observations:

- Existing door thresholds are too high for current accessibility standards.
- Some entrances have existing permanent original exterior

walk-off mats that are in poor condition.

- Occasional areas of concrete or asphalt paving that have heaved or cracked cause accessibility issues.



Specialty Classrooms:

Observations:

- No dedicated computer lab space.
- The site is currently utilizing the Multi-Purpose Room for the school Music Program.
- The site currently has no dedicated Science Lab.

Portable Classrooms:

Observations:

- The existing portables are generally in good condition.

Kitchen / Food Service

Observations:

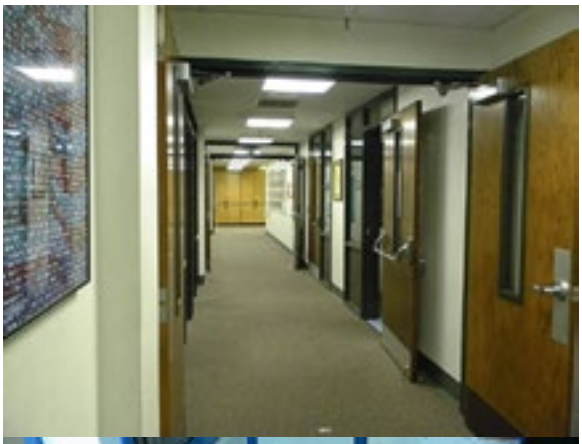
- The existing kitchen layout and equipment do not meet current Department of Health requirements.
- Most existing built-in equipment (refrigerator, freezer, sinks, storage areas, etc.) are beyond their expected lifespan.

Staff Work Areas:

Observations:

- The staff work area appears to be in acceptable condition. The

existing casework appears to be aging, although still serviceable, finishes in general are worn and faded.



Staff Lounge:

Observations:

- The existing staff room finishes are worn and dated.
- The existing casework appears serviceable, although it is beyond it's expected lifespan.

Student Restrooms:

Observations:

- Existing restrooms are not compliant with current accessibility requirements.
- The existing fixture count (Boys – 9 water closets, 11 urinals, and 7 lavatories; Girls – 16 water closets, 7 lavatories) serves the current population of approximately 630 students.

Staff Restrooms:

Observations:

- The existing fixture count of (Men – 2 water closet, 1 urinal, and 2 lavatories; Women – 3 water closets, 3 lavatories) serves the current staff population.

Storage and Custodial Spaces:

Observations:

- Overall general storage capacity is good.
- Custodial spaces in general show signs of wear and tear.
- Custodial spaces are not accessible.

Structural System:

Observations:

- Vinci Park Elementary School is a single story steel framed structure constructed in 1973. The structure is relatively regular and square in plan with the exception of the a few re-entrant corners at one corner of the building. The roof is essentially flat, but does have 4 raised areas to accommodate high architectural ceilings at these locations. The building's roof consists of conventional metal decking welded to the steel structure and is un-topped except for two locations were concrete fill was added for the support of mechanical units. The structure was designed utilizing structural steel moment frames for its primary lateral force resisting system. Buildings of this vintage did not typically incorporate the ductile detailing that is required today for these types of structures. This detailing is required so that these building types will have superior performance when subjected to significant seismic events allowing the steel members and connections to yield gradually rather than abruptly. Our initial review of the drawings indicate that significant effort was utilized in the design of the building, however to fully evaluate the members and connections as to their expected performance level when subjected to a major seismic event is beyond the scope of this report.

Mechanical Systems:

Observations:

- New rooftop multi-zone air handling unit (hot and chilled water), three new gas heat / electric cool packaged rooftop units, and exhaust fans installed in 2006.
- New chiller and boiler added, reusing existing pumps, added in 2006.
- New temperature controls installed in 2006.
- New ductwork on the roof was provided in 2006.

- Existing ductwork and air distribution in building is original.
- Existing hot and chilled water below grade and within building is original.

Electrical Systems:

Observations:

- A 2000A, 277/480V, 3-phase, 4-wire switchboard with a 300KVA utility pad mounted transformer located in the electrical service yard provides power to the campus. The switchboard was of original build and in fair condition. According to PG&E record, the current peak usage on the system is of 355 amps.

Low Voltage Systems:

Observations:

- The existing fire alarm system was of manual/automatic system on a Gamewell 610 panel in the Administration office installed around 2003. The panel is in good and functioning condition. The notification devices were not adequate to meet the current code requirements.
- The existing Bogen Multicom 2000 Public Adress and Master Clock system located in the Administration storage room is in good and functioning condition.

Roofing:

Observations:

- The existing roof is a multi-ply built-up-roofing system. Installed in 2006, it has a 20-year warranty, and an estimated remaining life of 13-15 years.

Exterior Paint:

Observations:

- The existing exterior paint is generally in good condition, although it is aged, and shows many locations where re-painting has occurred over time.

Vinci Park Elementary School

Site Plans

EXISTING BUILDING
NON-SCHOOL BUILDINGS

5' 30' 60'
0 10' 40'

N

VINCI PARK ELEMENTARY SCHOOL

EXISTING CONDITIONS

EXISTING BUILDING
NON-SCHOOL BUILDING

0 10' 40' 5' 30' 60'

VINCI PARK ELEMENTARY SCHOOL

- New security fencing along perimeter of campus
- New student drop off along Vinci Park Way

Vinci Park Elementary School

Paving Assessment Report

VINCI PARK SCHOOL

Summary School Report

Asphalt Surface Evaluation

School Name: Vinci Park School

Area	Type	Use	Area (sq. ft.)	Defect Score	Recommendation	Cost	Year
A	EL	Park	25,252	44	Crack Fill and Seal Coat	$14,752.31	2011
B	EL	Ped	6,604	20	Double application Emulsion Se	$1,981.20	2011
C	EL	Ped	5,112	30	Double application Emulsion Se	$1,533.60	2011
D	EL	Play	4,135	11	Double application Emulsion Se	$1,240.50	2014
E	EL	Ped	3,964	20	Double application Emulsion Se	$1,189.20	2011
F	EL	Play	83,630	42	Dig out/ Crack Fill/ Seal Coat	$32,615.70	2011
G	EL	Ped	632	53	Remove & Replace	$3,160.00	2011
H	EL	Play	2,744	22	Double application Emulsion Se	$823.20	2011
					Total:	**$57,295.71**	

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Specializing in Pavement Rehabilitation
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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Vinci Park School
Area (sf): 25,252
Area Notation: A
Buses: Yes
Surface Type: AC
Garbage Trucks: Yes
Use: Parking Lots or Areas
Defect Score: 44
Recommended Treatment: Crack Fill and Seal Coat
Year: 2011
Visual Description: Pavement exhibits severe raveling and slight shrinkage cracking, previously sealed, in poor condition.
Miscellaneous: Slope = 0.5/ 2.6/ 3.8, Pavement drains to drop inlets in pavement area, ADA - 1) slope exceeds 2%, no crosswalk to southwest 2) trash cans in stalls, cross slope of ramp exceeds 2%.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
1000	0%	1.0%	0.056	V

Crack Width	<1/8"

Cost Breakdown

AC Cost:	$8,838.20
CF Cost:	$1,414.11
DO Cost:	$0.00
Misc. Cost:	$4,500.00
Total Cost:	$14,752.31

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Vinci Park School
Area (sf): 6,604
Area Notation: B
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Pedestrian Areas
Defect Score: 20
Recommended Treatment: Double application Emulsion Seal Coat
Year: 2011
Visual Description: Pavement is in good condition, needs a seal coat.
Miscellaneous: Slope = 1.1/ 6.6/ 3.3/ 15.5, Pavement drains to drop inlets in area, one drop inlet is clogged causing water to pond.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.000	M

Crack Width	0

Cost Breakdown

AC Cost:	$1,981.20
CF Cost:	$0.00
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$1,981.20

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Vinci Park School
Area (sf): 5,112
Area Notation: C
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Pedestrian Areas
Defect Score: 30
Recommended Treatment: Double application Emulsion Seal Coat
Year: 2011
Visual Description: Pavement exhibits severe raveling and needs a seal coat.
Miscellaneous: Slope = 0.7/ 2.6/ 1.4, Pavement drains to adjacent planter areas.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.000	V

Crack Width	0

Cost Breakdown

AC Cost:	$1,533.60
CF Cost:	$0.00
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$1,533.60

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Vinci Park School
Area (sf): 4,135
Area Notation: D
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Playground
Defect Score: 11
Recommended Treatment: Double application Emulsion Seal Coat
Year: 2014
Visual Description: Newer pavement.
Miscellaneous: Slope = 1.3/ 0.5/ 1.9, Pavement drains to planters.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.000	S

Crack Width	0

Cost Breakdown

AC Cost:	$1,240.50
CF Cost:	$0.00
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$1,240.50

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Vinci Park School
Area (sf): 3,964
Area Notation: E
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Pedestrian Areas
Defect Score: 20
Recommended Treatment: Double application Emulsion Seal Coat
Year: 2011
Visual Description: Pavement exhibits moderate raveling.
Miscellaneous: Slope = 0.3/ 1.2/ 7.0, Pavement drains to planter.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.000	M

Crack Width	0

Cost Breakdown

AC Cost:	$1,189.20
CF Cost:	$0.00
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$1,189.20

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Vinci Park School
Area (sf): 83,630
Area Notation: F
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Playground
Defect Score: 42
Recommended Treatment: Dig out/ Crack Fill/ Seal Coat
Year: 2011
Visual Description: Pavement exhibits severe raveling and slight shrinkage cracking.
Miscellaneous: Slope = 0.5/ 1.7/ 2.4/ 5.4/ 10.8, Pavement drains to adjacent field and to drop inlets, the drop inlet is clogged causing a huge area of ponding, numerous areas of ponding water, tree rood damage observed.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.040	V

Crack Width	<1/8"

Cost Breakdown

AC Cost:	$29,270.50
CF Cost:	$3,345.20
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$32,615.70

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Vinci Park School
Area (sf): 632
Area Notation: G
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Pedestrian Areas
Defect Score: 53
Recommended Treatment: Remove & Replace
Year: 2011
Visual Description: Pavement exhibits severe raveling and shrinkage cracking.
Miscellaneous: Slope = 7.9/ 2.1/ 2.9/ 5.2, Tree root damage observed.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.089	V

Crack Width	1/8 - 1/4"

Cost Breakdown

AC Cost:	$3,160.00
CF Cost:	$0.00
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$3,160.00

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Vinci Park School
Area (sf): 2,744
Area Notation: H
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Playground
Defect Score: 22
Recommended Treatment: Double application Emulsion Seal Coat
Year: 2011
Visual Description: Pavemente exhibits moderate raveling.
Miscellaneous: Slope = 0.5/ 2.7/ 1.3/ 4.1, Pavement sheet flows to planter.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.000	M

Crack Width	0

Cost Breakdown

AC Cost:	$823.20
CF Cost:	$0.00
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$823.20

12/10/2010

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VINCI PARK SCHOOL - AREA A

VINCI PARK SCHOOL - AREA A

VINCI PARK SCHOOL - AREA B

VINCI PARK SCHOOL - AREA B

VINCI PARK SCHOOL - AREA C

VINCI PARK SCHOOL - AREA C

VINCI PARK SCHOOL - AREA D

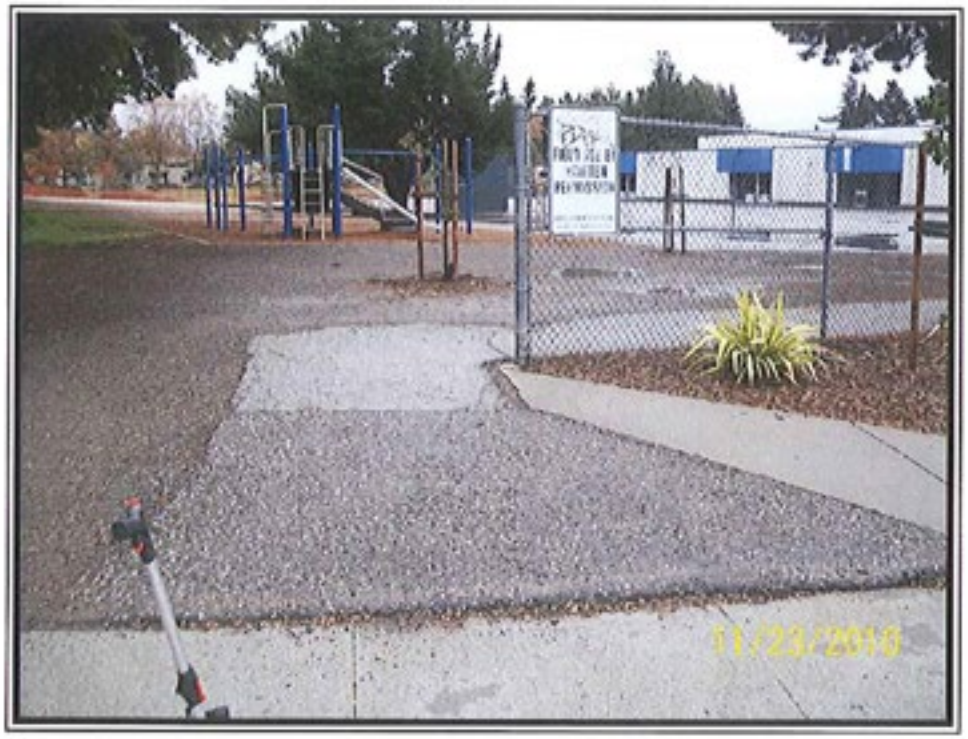
VINCI PARK SCHOOL - AREA D

VINCI PARK SCHOOL - AREA E

VINCI PARK SCHOOL - AREA E

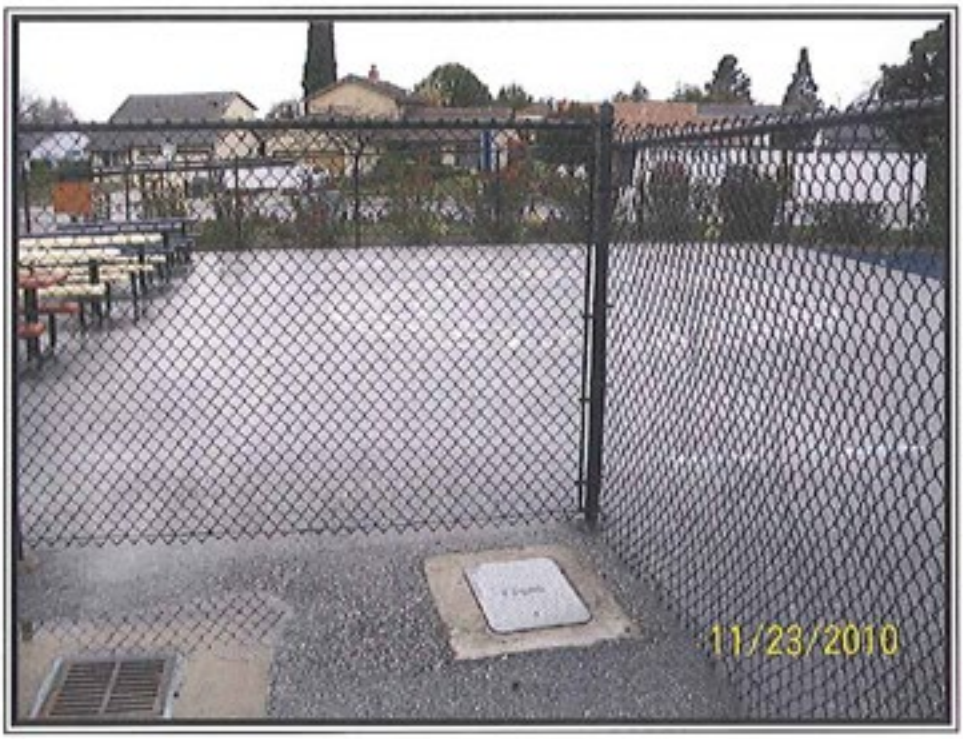
VINCI PARK SCHOOL - AREA F

VINCI PARK SCHOOL - AREA F

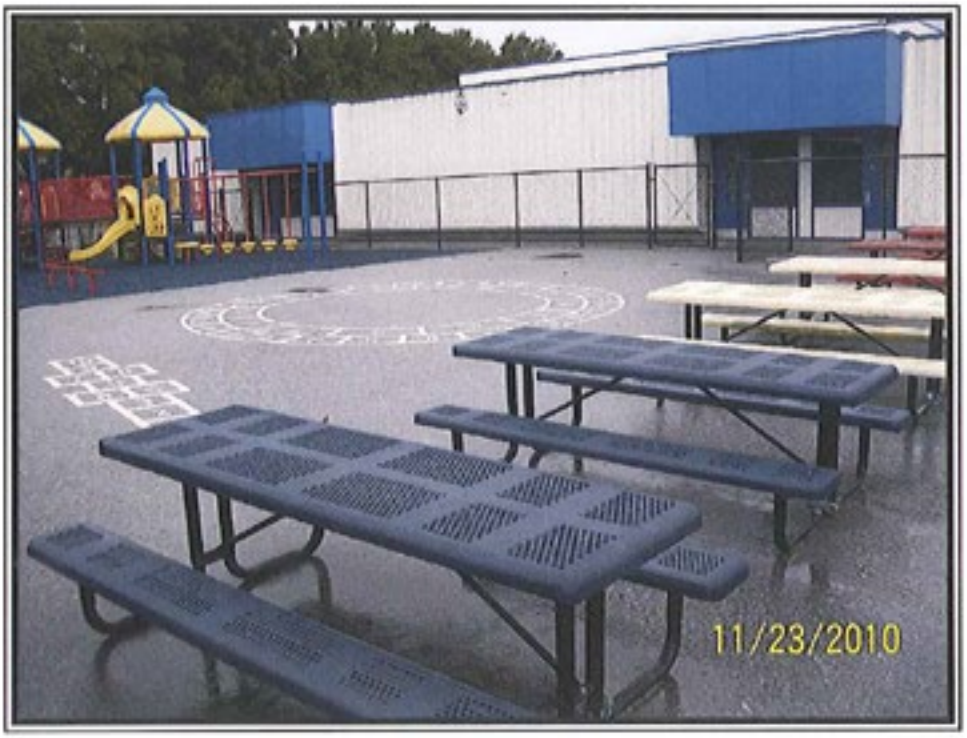


VINCI PARK SCHOOL - AREA G

VINCI PARK SCHOOL - AREA G



VINCI PARK SCHOOL - AREA H



VINCI PARK SCHOOL - AREA H

Vinci Park Elementary School

Seismic Assessment Report

VINCI PARK ELEMENTARY SCHOOL

Key Plan (Photo taken from Google Maps)

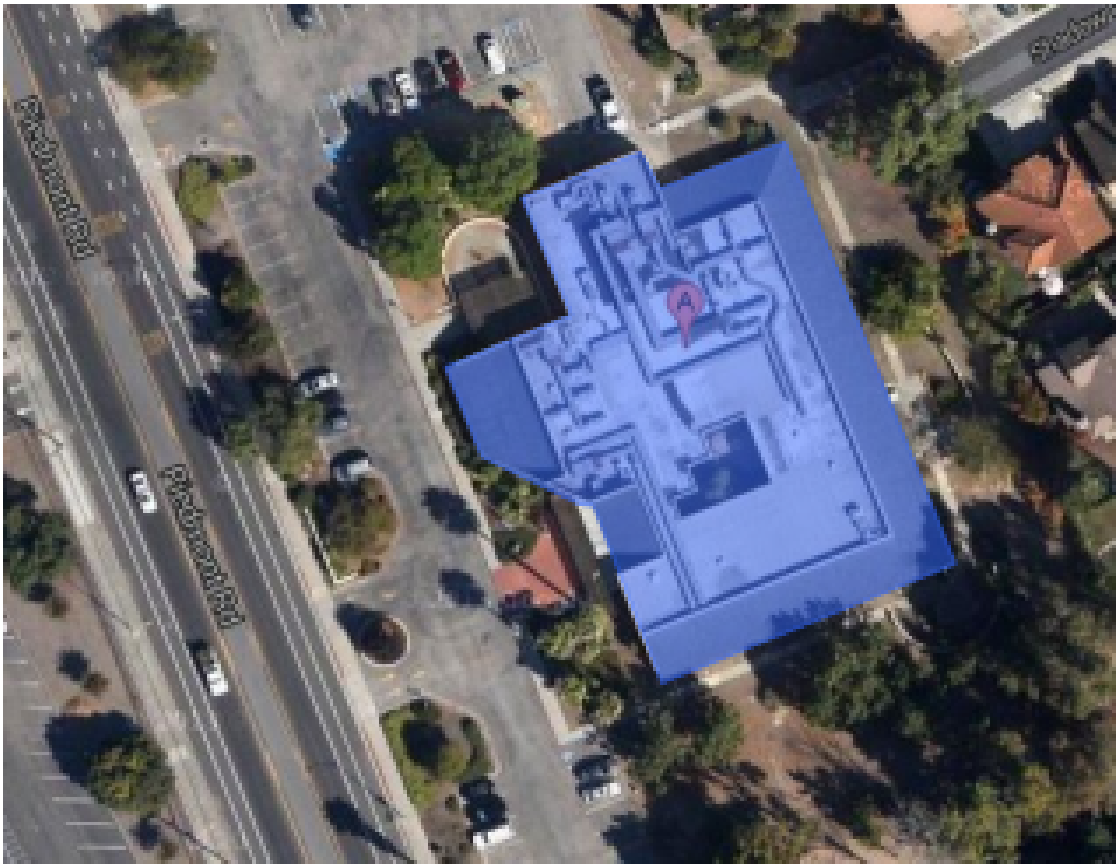
Building Descriptions:

Vinci Park Elementary School is a single story steel framed structure constructed in 1973. The structure is relatively regular and square in plan with the exception of the a few re-entrant corners at one corner of the building. The roof is essentially flat, but does have 4 raised areas to accommodate high architectural ceilings at these locations. The building's roof consists of conventional metal decking welded to the steel structure and is un-topped except for two locations were concrete fill was added for the support of mechanical units. The structure was designed utilizing structural steel moment frames for its primary lateral force resisting system. Buildings of this vintage did not typically incorporate the ductile detailing that is required today for these types of structures. This detailing is required so that these building types will have superior performance when subjected to significant seismic events allowing the steel members and connections to yield gradually rather than abruptly. Our initial review of the drawings

indicate that significant effort was utilized in the design of the building, however to fully evaluate the members and connections as to their expected performance level when subjected to a major seismic event is beyond the scope of this report. We therefore recommend that a more thorough evaluation be completed to fully assess the expected performance level of the structure when subjected to a major seismic event. Upon complete of the more in-depth assessment, retrofit options can be made, as necessary, to obtain a "Life Safety" building performance level.

Vinci Park Elementary School receives a subjective rating of 2.5.

EDUCATIONAL SERVICES CENTER



Key Plan (Photo taken from Google Maps)

Building Description:

The Berryessa Union School District Educational Services Building is a single story wood structure. The building is comprised of a roof joist system supported on interior bearing walls

459

and glulams spanning between bearing walls. The roof consists of sloped areas around the perimeter with a flat interior mechanical well.

The lateral force resisting system consists of a plywood sheathed roof acting as a horizontal wood diaphragm spanning between vertical plywood shear walls. Seismic loads are resisted in both orthogonal directions by way of the wood shear walls located on the interior and exterior of the building structure. A preliminary review of the building is that the building is comprised of shearwalls in each direction that can handle the lateral load of the structure if the shearwalls are in good condition. During the review it was noted that not all shear walls included tie downs at the ends of the walls. We recommend further evaluation of the building be conducted to see if the addition of tie downs would significantly improve the performance of the building.

Educational Services Center Building receives a subjective rating of 2.0.

Vinci Park Elementary School

Mechanical Systems Assessment Report

A. MECHANICAL BUILDING SYSTEMS

1. Existing Conditions:

a. New rooftop multizone air handling unit (hot and chilled water), three new gas heat / electric cool packaged rooftop units, and exhaust fans installed in 2006.

b. New chiller and boiler added, reusing existing pumps, added in 2006.

c. New temperature controls installed in 2006.

d. New ductwork on the roof was provided in 2006.

e. Existing ductwork and air distribution in building is original.

f. Existing hot and chilled water below grade and within building is original.

2. Recommendations:

a. Replace all insulated supply and return ductwork, diffusers and grilles within the building.

b. Replace all exhaust ductwork within the building.

c. Replace all insulated hot and chilled water piping within the building.

d. Replace all insulated underground hot and chilled water piping with pre-insulated piping manufactured to be buried below grade.

3. General:

a. This report and comments to follow are based on observations of the general condition of the mechanical systems and noticeable code issues resulting from a review of the existing drawings and an on-site visit, when required.

b. Refer to Appendix A for Title 24 requirements and general code issues that should be considered.

APPENDIX-A

a. General

1. Comply requirements of California Mechanical Code (CMC) latest edition.

b. Possible Ventilation Code Issues

1. Corridors cannot be used as plenums for the purpose of supplying or exhausting air.
2. Corridors must have minimum two (2) air changes per hour for ventilation.
3. Minimum ventilation for occupied spaces should be 15 cfm/person or 0.15 cfm/sq. ft., whichever is greater.
4. Exhaust airflow from bathrooms should be based on minimum 10 air changes per hour.

c. Possible Fire Smoke Issues

1. Fire/smoke dampers in the system must be interlocked with fire alarm system.
2. Corridors, lobbies, and building entrances to have dedicated supply air.
3. Chemistry classrooms with occupancy separation shall have fire/smoke damper.
4. All air handling equipment supplying air flow in excess of 2,000 cubic feet per minute to have duct smoke detectors in the supply air duct.

d. Possible Title 24 Issues

1. Interior supply and return air ductwork (heating & cooling) shall be insulated with minimum R-value of 4.2.
2. Heating, ventilating, and air conditioning systems to have control capability with night setback.
3. Heating, ventilating, and air conditioning equipment to be certified by the State of California to meet minimum energy requirements.

Vinci Park Elementary School

Electrical and Low Voltage Systems Assessment Report

B. Electrical

1. Power Systems:

A 2000A, 277/480V, 3 phase, 4 wire switchboard with a 300KVA utility pad mounted transformer located in the electrical service yard provides power to the campus. The switchboard was of original built and in fair condition. According to PG&E record, the current peak usage on the system is of 355 amp. There is no spare capacity at the service for future usage. If additional power is needed, the PG&E transformer shall need to be upgraded.

2. Fire Alarm System:

The existing fire alarm system was of manual/automatic system on a Gamewell 610 panel in the administration office installed around 2003. The panel is in good and functioning condition. The notification devices were not adequate to meet the current code requirement.

Recommendations:

a. Provide new horn and strobes in areas required by ADA, NFPA, CEC and CFC.

3. Public Address and Clock Systems:

The existing Bogen Multicom 2000 PA and master clock system located in the administration storage room is in good and functioning condition. Existing speaker and clock units are in good condition for reuse.

Will H. Ector, Jr.
Superintendent

1376 Piedmont Road
San Jose, CA 95132-2427

Phone: (408) 923-1800
Fax: (408) 923-0623

Morrill Middle School

1970 Morrill Avenue
San Jose, CA

Morrill Middle School Assessment

Statistics:

Enrollment (Nov. 2012):	830
Principal:	Anjanette Winckler
Site:	22.5 Acres
Building Area:	Approx. 68,000 SF
Permanent Classrooms:	46
Portable Classrooms:	2 @ 960 SF
Total Size:	69,920 SF

Construction History:

1972	School Constructed
2002	Construction of (2) Portable Classroom buildings
2004	Modernization Projects
2005	Construction of Berryessa Youth Center
2006	Construction of (1) Marquee Signage
2007	Roofing Removal and Replacement
2007	Alteration to Classroom Bldgs. for HVAC Replacement

Morrill Middle School

Site Meeting Minutes

Needs Assessment Scope Categories
Berryessa School District

Morrill Middle School

May 28, 2013

(updated September 18, 2013)

Site

1. Parking lots, traffic control, and drop-off and pick-up areas
    a. Additional parking was requested.
2. PE equipment (Basketball backboards, rims, play structures, matting)
    a. Tennis courts were noted to be non-standard.
    b. Tennis court surface is in poor condition. (9/18/13)
3. Site (ADA) compliance, paved walkways (tripping hazards, level and clear pathways)
    a. No known issues. SFA to evaluate over the summer.
4. Paved Play Area (size, security, location, condition)
    a. Asphalt surface is in reasonably good condition, currently meeting site needs.
5. Turf play area, landscaping and irrigation
    a. Good condition.
6. Fencing and security
    a. Site fencing could be improved, difficult with adjacent facility.
    b. Funneling visitors through the main office entrance prior to entry to the campus core is desired.
    c. Main office visibility could be improved.
7. Trash enclosure
    a. Trash location is acceptable, needs screening from view.
8. Site Utilities (to the street and campus distribution - gas, water, sewer, storm, power)
    a. No known issues.
    b. Water was noted as being discolored after periods of lack of use (weekends, vacations). (9/18/13)
9. Site Lighting (LED)
    a. Significant additional exterior lighting requested.
10. Covered Shade or Eating Structure
    a. An exterior covered eating area is desirable, preferably in the quad area.
11. Roofing
    a. No known issues.
12. Covered walkways
    a. None currently.
13. Exterior Paint
    a. Good condition.
14. Campus Layout and organization
    a. Better defined entry to main office requested.

15. Curb Appeal
    a. General landscaping improvements.
    b. Signage at street.
16. Portable classrooms/restrooms
    a. No issues.
17. Storage
    a. Would prefer permanent storage facility instead of existing containers.
18. Drinking fountains
    a. Existing drinking fountains need to be replaced.
    b. Additional drinking fountain requested at quad area.
19. Signage
    a. District plans to replace all existing wayfinding signage.
    b. District plans to add marquee signage to each campus.

Building

a. Building Insulation, exterior surfaces
    a. No known issues.
b. Windows (Prep rooms/common areas, condition of windows and amount of natural light)
    a. Few windows to discuss infilling.
c. Exterior Doors and Hardware
    a. Door and hardware replacement will likely be district-wide.
    b. Some system for barricading doors was requested.
d. Restrooms (Electric hand dryers, partitions, fixtures, re-seal flooring)
    a. Additional restrooms requested for student use.
    b. Additional restrooms requested for staff use. (9/18/13)
e. Flooring (Carpeting, tiling, resilient, all locations)
    a. No known issues.
f. Tackable Walls surfaces and all other interior finishes
    a. Full-height, wall-to-wall tackable surfaces acceptable.
g. Ceilings
    a. No known issues.
h. Cabinetry (Teaching walls)
    a. Mixed opinion on teaching walls.
i. Classroom size/layout (21st Century Learning environment/classroom)
    a. Meeting to be held on 23JUN2013 with District representatives to discuss this item.
j. Backpack storage or location
    a. Request made specifically for backpack storage at the computer lab.
k. Interior lighting (LED)
    a. No known issues.
l. Blinds
    a. Few windows to address.
m. Markerboards

a. Markerboards in the teaching wall cabinets would be sufficient.

n. Classroom electrical outlets
   a. Insufficient outlets noted in the admin area, as well as D Building.
   b. Girls Locker Room Office also has insufficient outlets. (9/18/13)

o. IT/Data networking (Wi-fi, location, IDF and MDF)
   a. SFA will be meeting with District IT personnel to discuss district-wide implementations.

p. IT/Video network
   a. SFA will be meeting with District IT personnel to discuss district-wide implementations.

q. Communication system (Intercom, Clocks, Speakers)
   a. Built-in sound system for amphitheater area requested.

r. Intrusion Alarm
   a. Intrusion system needs work. Possible new panel?

s. Security cameras
   a. Security cameras are planned to be added to all sites as part of this process.

t. Heating and Ventilating and Air Conditioning (Chiller, mechanical equipment, FCU's)
   a. SFA will evaluate these systems over the summer.
   b. Many spaces were noted as not properly balanced.
   c. Old wood shop room (now music room) has no HVAC system.

u. Energy management system (Controls for HVAC/Lighting)
   a. No known issues.

Miscellaneous:

- Photovoltaic Installation (Solar)
  - Solar installation will occur where economically feasible.
- Multi-purpose/Cafeteria efficiency
  - Evaluate flooring for potential replacement.
  - New finishes for MPR space requested.
  - MPR noted as too small. (9/18/13)
- Administration area functionality
  - Review layout, space utilization.
  - Infill some of the windows for security. (9/18/13)
  - Request for larger conference room. (9/18/13)
- Kitchen
  - SFA to meet with District Food Services personnel to discuss district-wide plan.
- Library/Media Center
  - AV system requested.
  - Storage for laptop/iPad carts requested.
  - Need space for keyboard check-out (bar code reader at kiosk?).
- Specialty Rooms
  - No known issues.
  - Music program requested space for dressing room. (9/18/13)
  - Need to insulate for noise between music room and adjacent spaces. (9/18/13)
  - Instrument storage space requested.

- FFE (Furnishings, Fixtures, Equipment) Lunch tables, classroom furniture, etc.
    - Most furniture is original to the school, and appears in need of replacement.
- Any other creative thoughts/ideas
    - Request to create an overhand around Buildings A, B, and C. (9/18/13)
    - Old woodshop building (now music room) needs acoustic insulation, a dropped ceiling, and an HVAC system. (9/18/13)
    - D Building has several issues with the slab, cracks have caused elevation changes, as well as allowed pest entry points. (9/18/13)
    - D Building also has little to no natural light. (9/18/13)
    - Room D6 has no access to central storage room, and Room D5 is too small to use as a classroom. Potential re-configuration of these spaces. (9/18/13)
    - Science room is oddly-shaped, which is not conducive to conducting classes. (9/18/13)
    - Science program is a priority for the site. (9/18/13)

Grounds:

Security:

Observations:

- While significant portions of this site have a perimeter fence in place, the site is largely open in the front and sides of the campus.
- Building exterior lighting is insufficient.
- Existing doors often have windows in them, and not all doors have modern security hardware.
- This site has several windows below door height.
- The location of the office makes access control difficult. Entrants to the campus must enter to the campus core to access the office space.

Parking lot and Drop-Off / Pick-Up:

Observations:

- Main parking lot adjacent to Berryessa Youth Center is cramped, drive aisles are too narrow. The smaller lot off Morrill Avenue is also cramped and difficult to maneuver through.
- Circulation through the parking lot during pick-up and drop-off is inadequate, and creates problems with traffic congestion.
- Pick-up / Drop-off occurs along the public street, since there is no designated spot off-street.
- Existing accessible parking does not meet current requirements.

Landscaping:

Observations:

- The existing landscaping is dated, non-existent in some places, and overgrown in others. The bare areas face erosion issues, and the overgrown areas trap debris as well as providing a home to nuisance pests.

Play Surface / Fields / Play Structures:

Observations:

- The existing asphaltic concrete play surfaces appear to be in fair condition, although some repair work is needed, particularly on the basketball and tennis play surfaces.

- The existing sports fields have issues with ground squirrels and gophers. Some parts of the grass fields are bare and/or more weeds than grass.

Outdoor eating area:

Observations:

- Current outdoor eating area is the stepped concrete quad area, which has no covered seating area.

Building:

Entry Visibility:

Observations:

- Office entry visibility is poor from campus entry points.

Administration Area:

Observations:

- Conference room too small to for necessary conferences.
- Finishes appear worn.
- Reception desk accessibility is not compliant with current accessibility standards.

Classrooms:

Observations:

- Classrooms are generally in good condition, although many of the finishes are faded and/or dirty.
- Building D classrooms show considerable wear, including cracking in the floor and floor finishes.
- Existing classrooms typically have a CRT television mounted in a location that does not comply with current accessibility requirements.
- Music classroom in old woodshop space does not have adequate heating/cooling, or acoustics.

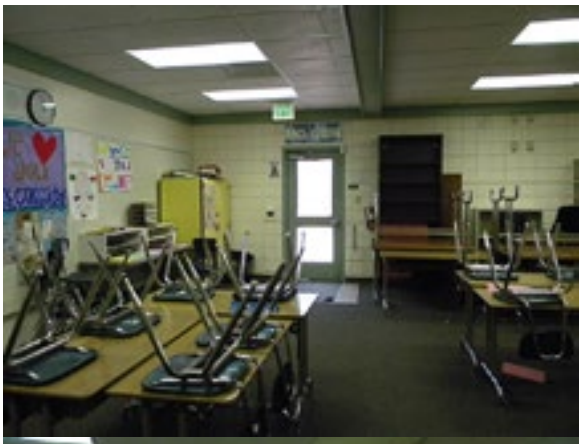
Library:

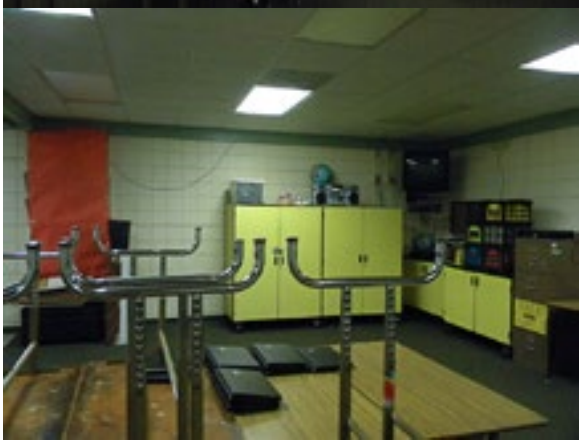
Observations:

- Library finishes are worn and faded.
- Existing integral media center space is insufficient for current needs.

Multi-Purpose Room:

Observations:





- Most finishes appear in need of replacement.
- There is evidence of significant cracks in the slab, causing cracking in the flooring materials.
- Existing sound system is inadequate for current needs.
- Existing original folding cafeteria tables are in need of replacement.

Campus Circulation and Accessibility:

Observations:

- There is currently no covered walkway around the main buildings.
- Existing door thresholds are too high for current accessibility standards.
- Occasional areas of concrete or asphalt paving that have heaved or cracked cause drainage and accessibility issues, particularly around Buildings A, C, and D.

Specialty Classrooms:

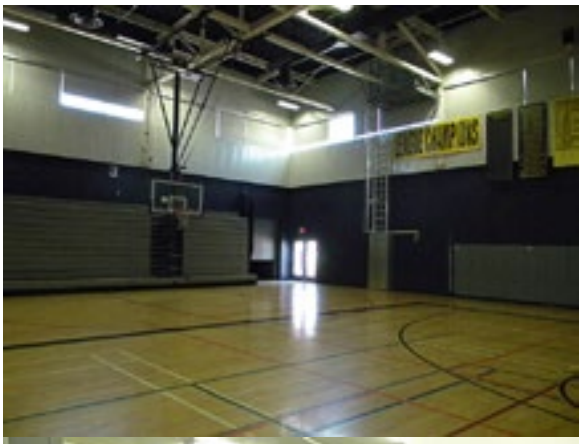
Observations:

- Existing Science Classroom layout (L-shaped room) makes it difficult to seat and teach an entire class, despite the overall size of the space.
- The existing Media Center / Computer Lab space is adjacent to the library in an open and unsecure area without sufficient infrastructure support for the program requirements.

Portable Classrooms:

Observations:

- The existing portable classroom buildings are generally in good condition.



Kitchen / Food Service

Observations:

- The existing kitchen layout and equipment do not meet current Department of Health requirements.
- Most existing built-in equipment (refrigerator, freezer, sinks, storage areas, etc.) are beyond their expected lifespan.

Staff Work Areas:

Observations:

- The staff work area appears to be in good condition. The existing casework appears to be aging, although still servicable.

Staff Lounge:

Observations:

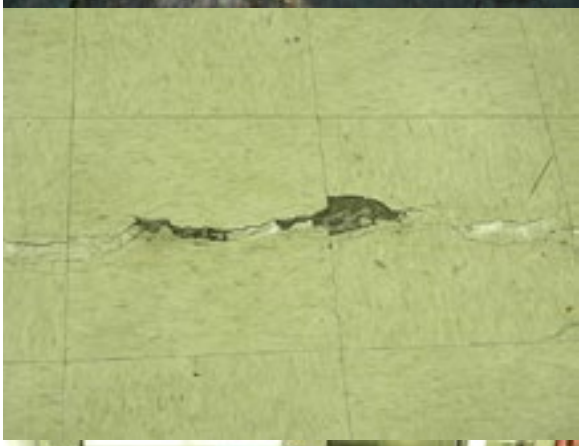
- The existing staff room finishes are worn and dated.
- The existing casework appears serviceable, although it is beyond it's expected lifespan.
- Existing appliances appear serviceable, although beyond their expected lifespan.

Student Restrooms:

Observations:

- While the main student restroom has been upgraded, several other restroom facilities were noted as being either abandoned or requiring upgrades to make fully accessible.

- The existing fixture count (Boys – 6 water closets, 13 urinals, and 8 lavatories; Girls – 14 water closets, 8 lavatories) serves the current population of approximately 830 students.



Staff Restrooms:

Observations:

- The existing fixture count of four (4) (Men – 4 water closets, 3 urinals, and 4 lavatories; Women – 5 water closets, 4 lavatories) serves the current population of staff members, although not all restrooms are accessible.

Storage and Custodial Spaces:

Observations:

- Overall general storage capacity is good.
- Custodial spaces are cluttered and in general show signs of wear and tear.

Structural System:

Observations:

- Morrill Middle School consists of four buildings: the Academic Center, Barn, Union and Youth Center (Gym). The Academic Center, Barn and Union were all constructed at the same time in 1971. The Youth Center (Gym) was a later addition constructed more recently in 2003.
- The Academic Center, Barn and Union were all designed at the same time, by the same engineer and are of similar construction. The three buildings were constructed in 1971. The lateral force resisting system for each building consists of a plywood sheathed roof acting as a horizontal wood diaphragm spanning between CMU shear walls. Shear walls are generally located around the perimeter of each building section or room. The CMU shear walls are anchored to the foundation at 16" O.C. for in-

plane shear transfer and to the roof diaphragm at 4'-0" O.C. for out-of-plane loading. Although wall ties are provide to brace the walls out of plane, these ties as detailed are likely insufficient to resist modern day code level forces.

- Continuous cross-ties do not appear to be present in the roof framing at any of the three buildings. Additionally, discrete chord members were not found in the CMU walls at the roof level. It is recommended that further investigation be performed to determine if the wall reinforcing contains adequate horizontal reinforcing adjacent to the roof to develop chord forces and to determine if diaphragm shear levels are acceptable given the lack of continuous cross-ties.

- It was also noted that there may be several covered walkways connected to adjacent building sections. These covered walkways should be reviewed for susceptibility to damage due to differential movement between adjacent structures in an earthquake.

- The Youth Center Building located at Morrill Middle School is a gymnasium structure with several auxiliary rooms for storage, activities and restrooms. The roof consists of an upper and lower portion that is compromised of steel framing spanning to exterior steel or CMU framing. The lateral system consists of a dual system of steel braces frames and CMU shearwalls. The building was constructed to recent code standards with no noticeable structural deficiencies.

Mechanical Systems:

Observations:

- New packaged rooftop gas heat / electric cool units and exhaust fans installed in 2007.
- New temperature controls were installed in 2007.
- New ductwork on the roof was provided in 2007.
- Existing above ceiling ductwork and air distribution is original.

Electrical Systems:

Observations:

- A 2000A, 277/480V, 3-phase, 4-wire switchboard with a 750KVA utility pad mounted transformer located in the electrical service yard provides power to the campus. The switchboard was installed around 2003, and is in good condition. According to PG&E record, the current peak usage on the system is of 378 amps.

Low Voltage Systems:

Observations:

- The existing fire alarm system is a manual/automatic system on a Gamewell 610 panel in the Administration office installed around 2004. The panel is in good and functioning condition. The notification devices were not adequate to meet the current code requirements.
- The existing Bogen Multicom 2000 Public Adress and Master Clock system located in the Multi-Purpose Room storage room is in good and functioning condition.

Roofing:

Observations:

- The existing roof is a multi-ply built-up-roofing system. Installed in 2006, it has a 20-year warranty, and an estimated remaining life of 12-15 years.

Exterior Paint:

Observations:

- The existing exterior paint is generally in good condition, although it is aged, and shows many locations where re-painting has occurred over time.

Morrill Middle School

Site Plans

MORRILL MIDDLE SCHOOL

EXISTING BUILDINGS

EXISTING CONDITIONS

MORRILL MIDDLE SCHOOL

EXISTING BUILDINGS

- Expand both parking lots to incorporate more student drop offs
- Redesign entrance into school

Morrill Middle School

Paving Assessment Report

MORRILL MIDDLE SCHOOL

Summary School Report

Asphalt Surface Evaluation

School Name: Morrill Middle School

Area	Type	Use	Area (sq. ft.)	Defect Score	Recommendation	Cost	Year
A	MS	Park	14,832	74	Reconstruct	$107,532.00	2011
B	MS	Park	30,172	126	Reconstruct	$218,747.00	2011
C	MS	Park	10,709	9	Double application Emulsion Se	$3,212.70	2011
D	MS	Other	35,636	88	Reconstruct	$258,361.00	2011
E	MS	Play	27,118	217	Reconstruct	$196,605.50	2011
F	MS	Road	12,000	13	Double application Emulsion Se	$3,600.00	2013
G	MS	Play	34,118	11	Double application Emulsion Se	$10,235.40	2013

Total: $798,293.60

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Morrill Middle School
Area (sf): 14,832
Area Notation: A
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Parking Lots or Areas
Defect Score: 74
Recommended Treatment: Reconstruct
Year: 2011
Visual Description: Pavement exhibits severe raveling, previous slurry seal in poor condition.
Miscellaneous: Slope = 1.1/ 0.6/ 2.3, Pavement sheet flows to curb and gutter, then to drain inlet, ADA - new signage required.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	1.0%	0.168	V

Crack Width	1/8 - 1/4"

Cost Breakdown

AC Cost:	$107,532.00
CF Cost:	$0.00
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$107,532.00

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Morrill Middle School
Area (sf): 30,172
Area Notation: B
Buses: Yes
Surface Type: AC
Garbage Trucks: No
Use: Parking Lots or Areas
Defect Score: 126
Recommended Treatment: Reconstruct
Year: 2011
Visual Description: Pavement exhibits severe alligator cracking and numerous areas of previous patching.
Miscellaneous: Slope = 4.9/ 0.7/ 1.8, Pavement sheet flows to drop inlets, bus loading zone is PCC.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	10.0%	0.152	M

Crack Width	1/8 - 1/4"

Cost Breakdown

AC Cost:	$218,747.00
CF Cost:	$0.00
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$218,747.00

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Morrill Middle School
Area (sf): 10,709
Area Notation: C
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Parking Lots or Areas
Defect Score: 9
Recommended Treatment: Double application Emulsion Seal Coat
Year: 2011
Visual Description: Newer pavement area, never been sealed, slight raveling.
Miscellaneous: Slope = 0.9/ 2.2/ 2.9/ 1.7, Pavement flows to curb and gutter, then to drop inlet.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.000	S

Crack Width	0

Cost Breakdown

AC Cost:	$3,212.70
CF Cost:	$0.00
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$3,212.70

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Morrill Middle School
Area (sf): 35,636
Area Notation: D
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Storage, Dumpster, etc.
Defect Score: 88
Recommended Treatment: Reconstruct
Year: 2011
Visual Description: Pavement exhibits severe block cracking, previously sealed, in good condition, just under half of the tennis court area is new pavement with no cracking
Miscellaneous: Slope = 0.2/ 1.5/ 3.1, Pavement flows toward school and into the planter.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	2.0%	0.160	S

Crack Width	1/8 - 1/4"

Cost Breakdown

AC Cost:	$258,361.00
CF Cost:	$0.00
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$258,361.00

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Morrill Middle School
Area (sf): 27,118
Area Notation: E
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Playground
Defect Score: 217
Recommended Treatment: Reconstruct
Year: 2011
Visual Description: Pavement exhibits severe alligator cracking and block cracking, previously sealed, in good condition.
Miscellaneous: Slope = 1.7/ 2.6/ 2.2/ 12.3, Pavement sheet flows toard school, asphalt has been uplifted at adjacent sidewalks causing a trip hazard.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	15.0%	0.260	S

Crack Width	1/8 - 1/4"

Cost Breakdown

AC Cost:	$196,605.50
CF Cost:	$0.00
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$196,605.50

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Morrill Middle School
Area (sf): 12,000
Area Notation: F
Buses: No
Surface Type: AC
Garbage Trucks: Yes
Use: Roadways, Alleyways, Bus Turnouts, etc.
Defect Score: 13
Recommended Treatment: Double application Emulsion Seal Coat
Year: 2013
Visual Description: Newer pavement, never been sealed.
Miscellaneous: Slope = 1.1/ 1.5, Pavement flows to adjacent PCC swale which flows to drop inlets.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.000	S

Crack Width	0

Cost Breakdown

AC Cost:	$3,600.00
CF Cost:	$0.00
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$3,600.00

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Morrill Middle School
Area (sf): 34,118
Area Notation: G
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Playground
Defect Score: 11
Recommended Treatment: Double application Emulsion Seal Coat
Year: 2013
Visual Description: Newer pavement, never been sealed.
Miscellaneous: Slope = 1.3/ 3.3/ 0.5/ 4.9, Pavement sheet flows to drop inlet located within the area and toward the school.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.000	S

Crack Width	0

Cost Breakdown

AC Cost:	$10,235.40
CF Cost:	$0.00
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$10,235.40

12/10/2010

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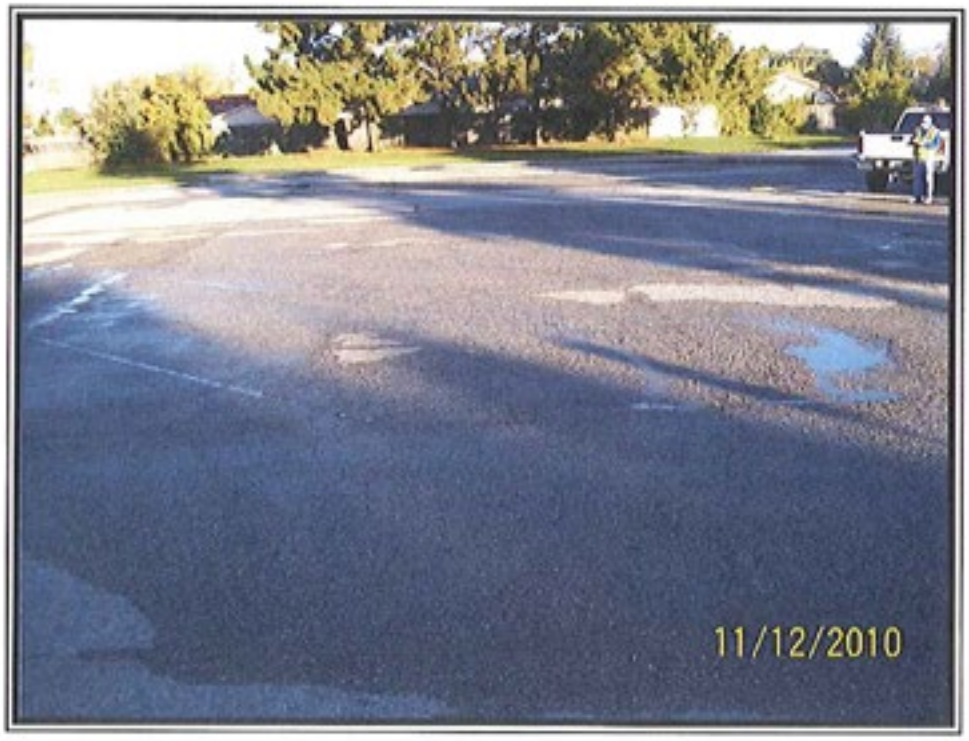
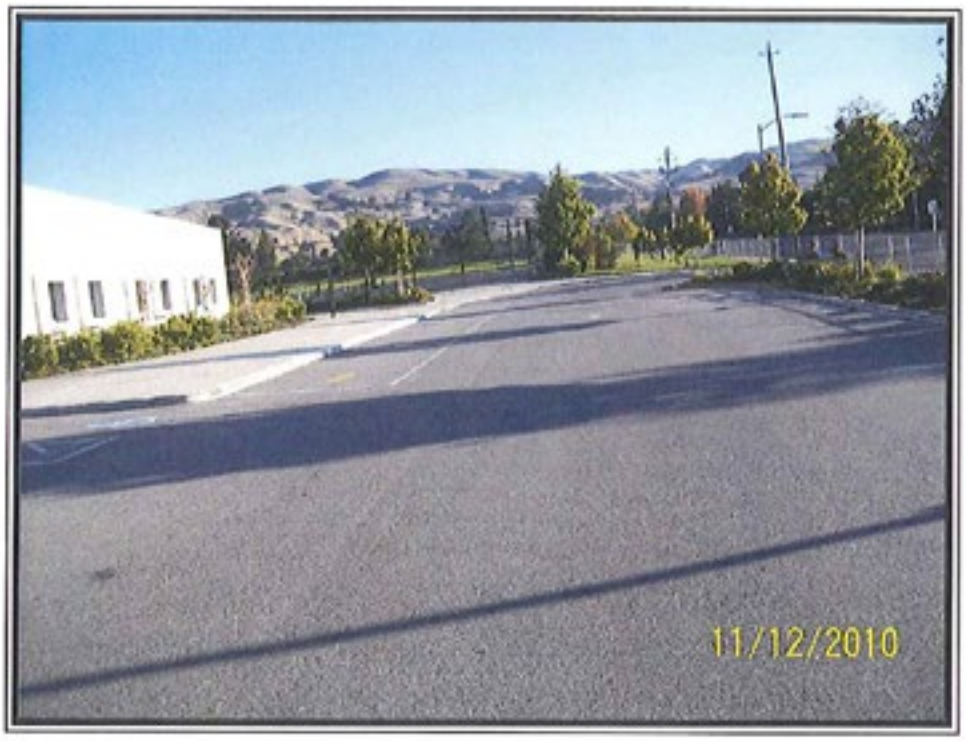
MORRILL MIDDLE SCHOOL - AREA A



MORRILL MIDDLE SCHOOL - AREA A

MORRILL MIDDLE SCHOOL - AREA B

MORRILL MIDDLE SCHOOL - AREA B

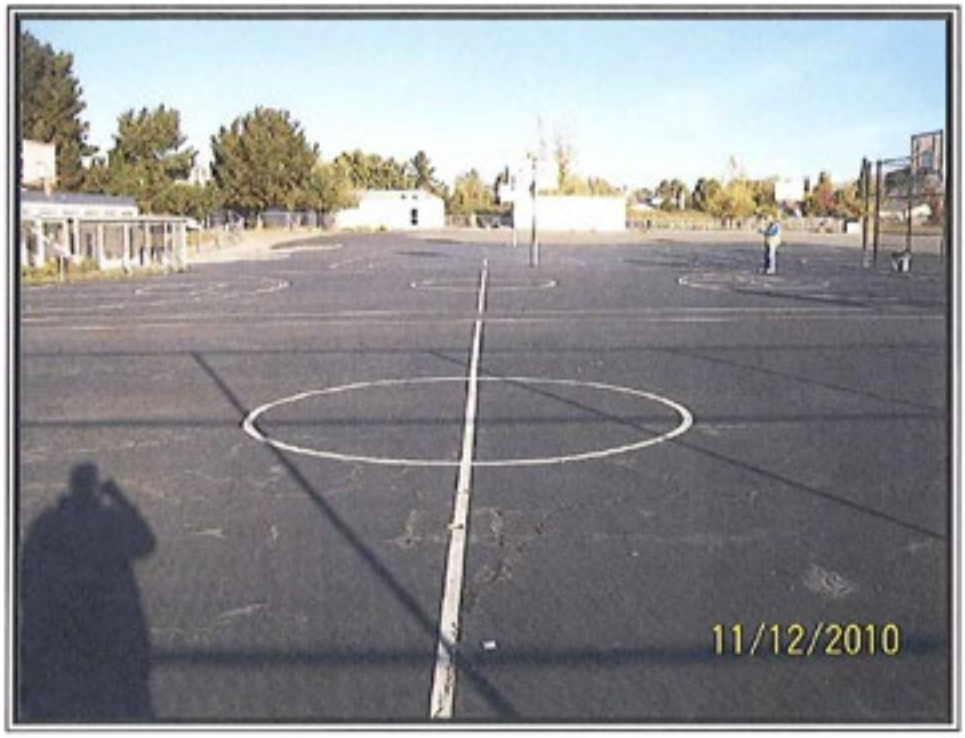


MORRILL MIDDLE SCHOOL - AREA C

MORRILL MIDDLE SCHOOL - AREA C

MORRILL MIDDLE SCHOOL - AREA D

MORRILL MIDDLE SCHOOL - AREA D



MORRILL MIDDLE SCHOOL - AREA E

MORRILL MIDDLE SCHOOL - AREA E

MORRILL MIDDLE SCHOOL - AREA F

MORRILL MIDDLE SCHOOL - AREA F

MORRILL MIDDLE SCHOOL - AREA G

MORRILL MIDDLE SCHOOL - AREA G

Morrill Middle School

Seismic Assessment Report

MORRILL MIDDLE SCHOOL

Key Plan (Photo taken from Google Maps)

Building Descriptions:

Morrill Middle School consists of four buildings: the Academic Center, Barn, Union and Youth Center (Gym). The Academic Center, Barn and Union were all constructed at the same time in 1971. The Youth Center (Gym) was a later addition constructed more recently in 2003.

503

Academic Center, Barn and Union

The Academic Center, Barn and Union were all designed at the same time, by the same engineer and are of similar construction. The three buildings were constructed in 1971. The lateral force resisting system for each building consists of a plywood sheathed roof acting as a horizontal wood diaphragm spanning between CMU shear walls. Shear walls are generally located around the perimeter of each building section or room. The CMU shear walls are anchored to the foundation at 16" O.C. for in-plane shear transfer and to the roof diaphragm at 4'-0" O.C. for out-of-plane loading. Although wall ties are provide to brace the walls out of plane, these ties as detailed are likely insufficient to resist modern day code level forces. Therefore we recommend that further evaluation be conducted to determine if any retrofit measure would be required to upgrade the structure so that its anticipated performance is at a "Life Safety" level.

Continuous cross-ties do not appear to be present in the roof framing at any of the three buildings. Additionally, discrete chord members were not found in the CMU walls at the roof level. It is recommended that further investigation be performed to determine if the wall reinforcing contains adequate horizontal reinforcing adjacent to the roof to develop chord forces and to determine if diaphragm shear levels are acceptable given the lack of continuous cross-ties. It was also noted that there may be several covered walkways connected to adjacent building sections. These covered walkways should be reviewed for susceptibility to damage due to differential movement between adjacent structures in an earthquake.

Morrill Middle School Academic Center, Barn and Union receive a subjective rating of 2.5.

Youth Center (Gym)

The Youth Center Building located at Morrill Middle School is a gymnasium structure with several auxiliary rooms for storage, activities and restrooms. The roof consists of an upper and lower portion that is compromised of steel framing spanning to exterior steel or CMU framing. The lateral system consists of a dual system of steel braces frames and CMU shearwalls. The building was constructed to recent code standards with no noticeable structural deficiencies.

Youth Center (Gym) at Morrill Middle School receives a subjective rating of 1.0.

504

Morrill Middle School

Mechanical Systems Assessment Report

A. MECHANICAL BUILDING SYSTEMS

1. Existing Conditions:

a. New packaged rooftop gas heat / electric cool units and exhaust fans installed in 2006.

b. New temperature controls installed in 2006.

c. New ductwork on the roof was provided in 2006.

d. Existing above ceiling ductwork and air distribution is original.

2. Recommendations:

a. Replace all insulated supply and return ductwork, diffusers and grilles within the building.

b. Replace all exhaust ductwork within the building.

3. General:

a. This report and comments to follow are based on observations of the general condition of the mechanical systems and noticeable code issues resulting from a review of the existing drawings and an on-site visit, when required.

b. Refer to Appendix A for Title 24 requirements and general code issues that should be considered.

APPENDIX-A

a. General

1. Comply requirements of California Mechanical Code (CMC) latest edition.

b. Possible Ventilation Code Issues

1. Corridors cannot be used as plenums for the purpose of supplying or exhausting air.

2. Corridors must have minimum two (2) air changes per hour for ventilation.

3. Minimum ventilation for occupied spaces should be 15 cfm/person or 0.15 cfm/sq. ft., whichever is greater.

4. Exhaust airflow from bathrooms should be based on minimum 10 air changes per hour.

c. Possible Fire Smoke Issues

1. Fire/smoke dampers in the system must be interlocked with fire alarm system.

2. Corridors, lobbies, and building entrances to have dedicated supply air.

3. Chemistry classrooms with occupancy separation shall have fire/smoke damper.

4. All air handling equipment supplying air flow in excess of 2,000 cubic feet per minute to have duct smoke detectors in the supply air duct.

d. Possible Title 24 Issues

1. Interior supply and return air ductwork (heating & cooling) shall be insulated with minimum R-value of 4.2.

2. Heating, ventilating, and air conditioning systems to have control capability with night setback.

3. Heating, ventilating, and air conditioning equipment to be certified by the State of California to meet minimum energy requirements.

Morrill Middle School

Electrical and Low Voltage Systems Assessment Report

B. Electrical

1. Power Systems:

A 2000A, 277/480V, 3 phase, 4 wire switchboard with a 750KVA utility pad mounted transformer located in the electrical service yard provides power to the campus. The switchboard was installed around 2003 and is in good condition. According to PG&E record, the current peak usage on the system is of 378 amp. There is a spare capacity of 431 amp available at the service for future usage. If additional power is needed, the PG&E transformer shall need to be upgraded.

2. Fire Alarm System:

The existing fire alarm system was of manual/automatic system on a Gamewell 610 panel in the administration office installed around 2003. The panel is in good and functioning condition. The notification devices were not adequate to meet the current code requirement.

Recommendations:

a. Provide new horn and strobes in areas required by ADA, NFPA, CEC and CFC.

3. Public Address and Clock Systems:

The existing Bogen Multicom 2000 PA and master clock system located in the administration storage room is in good and functioning condition. Existing speaker and clock units are in good condition for reuse.

Will H. Ector, Jr.
Superintendent

1376 Piedmont Road
San Jose, CA 95132-2427

Phone: (408) 923-1800
Fax: (408) 923-0623

Piedmont Middle School

955 Piedmont Road
San Jose, CA

Piedmont Middle School Assessment

Summary:

Enrollment (Nov. 2012):	813
Principal:	Steve Hamm
Site:	20 Acres
Building Area:	Approx. 70,000 SF
Permanent Classrooms:	47
Portable Classrooms:	5 @ 960 SF
Total Size:	74,800 SF

Construction History:

1959	School Constructed
1973	Construction of Mini-Gym, Additional Classrooms
1992	Construction of (2) Portable Classroom buildings
2002	Modernization Projects
2004	Construction of (2) Portable Classroom buildings
2005	Construction of (1) Portable Classroom building
2013	Alterations to Buildings (HVAC upgrade and Re-roofing)

Piedmont Middle School

Site Meeting Minutes

Needs Assessment Scope Categories
Berryessa School District

Piedmont Middle School

June 07, 2013

(updated September 30, 2013)

Site

1. Parking lots, traffic control, and drop-off and pick-up areas
    a. Significant issues with pick-up and drop-off area size and location, also shape and flow of existing parking lot.
    b. Investigate possibility of expanding adjacent one-lane road.
2. PE equipment (Basketball backboards, rims, play structures, matting)
    a. Replace as needed.
3. Site (ADA) compliance, paved walkways (tripping hazards, level and clear pathways)
    a. Site has access compliance issues at door thresholds, various walkways.
4. Paved Play Area (size, security, location, condition)
    a. Asphalt surface is in poor condition.
    b. Additional paved play surface area requested.
5. Turf play area, landscaping and irrigation
    a. Turf condition is poor.
    b. Request for all-weather track.
6. Fencing and security
    a. Site fencing is inadequate for current security needs.
    b. Funneling visitors through the main office entrance prior to entry to the campus core is desired.
    c. Decorative iron fencing requested along public sides of campus.
7. Trash enclosure
    a. Trash location is acceptable, needs screening from view.
8. Site Utilities (to the street and campus distribution - gas, water, sewer, storm, power)
    a. Investigate storm drainage issues, including drains backing up.
9. Site Lighting (LED)
    a. Lighting requested for building exteriors and at parking lots.
10. Covered Shade or Eating Structure
    a. Shade structures in the quad area requested.
    b. Provide covered outdoor eating area.
11. Roofing
    a. No known issues.
12. Covered walkways
    a. Covered walkways between buildings requested.
13. Exterior Paint

a. No issues noted.

14. Campus Layout and organization
    a. No issues noted.
    b. Infill depressed quad area, turn into campus hub / center. (9/30/13)
15. Curb Appeal
    a. General landscaping improvements, new signage.
16. Portable classrooms/restrooms
    a. Some existing portables need to be replaced.
17. Storage
    a. Access to storage is poor.
    b. No central storage area.
18. Drinking fountains
    a. Need additional drinking fountains spread around campus.
    b. Existing drinking fountains need to be replaced.
19. Signage
    a. District plans to replace all existing wayfinding signage.
    b. District plans to add marquee signage to each campus.

<u>Building</u>

a. Building Insulation, exterior surfaces
    a. No known issues.
b. Windows (Prep rooms/common areas, condition of windows and amount of natural light)
    a. Replace as needed.
    b. Infill lower window areas, preserve upper windows.
c. Exterior Doors and Hardware
    a. Door and hardware replacement will likely be district-wide.
d. Restrooms (Electric hand dryers, partitions, fixtures, re-seal flooring)
    a. Insufficient restrooms for staff and students.
    b. Existing restrooms in need of modernization.
e. Flooring (Carpeting, tiling, resilient, all locations)
    a. Replace as needed.
f. Tackable Walls surfaces and all other interior finishes
    a. Full-height, wall-to-wall tackable surfaces requested.
g. Ceilings
    a. No known issues.
h. Cabinetry (Teaching walls)
    a. Teaching walls requested.
i. Classroom size/layout (21st Century Learning environment/classroom)
    a. Meeting to be held on 23JUN2013 with District representatives to discuss this item.
j. Backpack storage or location
    a. No issues noted.
k. Interior lighting (LED)
    a. Some rooms noted as being insufficiently lit.

   b. Better control options requested.

l. Blinds
   a. Add / replace as necessary.

m. Markerboards
   a. Replace as necessary.

n. Classroom electrical outlets
   a. Additional outlets spread throughout room requested.

o. IT/Data networking (Wi-fi, location, IDF and MDF)
   a. SFA will be meeting with District IT personnel to discuss district-wide implementations.

p. IT/Video network
   a. SFA will be meeting with District IT personnel to discuss district-wide implementations.

q. Communication system (Intercom, Clocks, Speakers)
   a. Clocks noted as not working properly.

r. Intrusion Alarm
   a. No known issues.

s. Security cameras
   a. Security cameras are planned to be added to all sites as part of this process.

t. Heating and Ventilating and Air Conditioning (Chiller, mechanical equipment, FCU's)
   a. SFA will evaluate these systems over the summer. At this time there are no known issues.

u. Energy management system (Controls for HVAC/Lighting)
   a. No issues noted.

Miscellaneous:

- Photovoltaic Installation (Solar)
  - Solar installation will occur where economically feasible.
- Multi-purpose/Cafeteria efficiency
  - MPR noted as too small.
  - Modernize MPR, add wood floor and improve tables and chairs.
- Administration area functionality
  - Space utilization study requested to improve layout and usability.
- Kitchen
  - SFA to meet with District Food Services personnel to discuss district-wide plan.
- Library/Media Center
  - No issues noted.
- Specialty Rooms
  - Need dedicated music space with instrument storage and sound insulation.
  - New mini-gym requested.
- FFE (Furnishings, Fixtures, Equipment) Lunch tables, classroom furniture, etc.
  - Replace as necessary.
- Any other creative thoughts/ideas
  - Problems with drainage at Art Room sink.
  - Demolish school, start over.

- New stage curtains requested.
- Additional outdoor seating requested.
- Add wash fountain in PE area so kids do not need to go to restroom area.
- Add large ball wall in PE area.
- Improve flooring in MPR (noted as too slippery)
- Add/improve air filtration in locker rooms.
- Remove old display cases, replace with new.
- Remove gum stains from concrete.
- Provide a covered bicycle rack and scooter storage area.
- Provide science room lab tables with stools.
- Add closets and cupboards where needed.
- Provide a teaching kitchen space.

Grounds:

Security:

Observations:

- While significant portions of this site have a perimeter fence in place, the site is largely open in the front and also is unsecured around approximately half the back side of the campus.
- Building exterior lighting is insufficient.
- Existing doors often have windows in them, and not all doors have modern security hardware.
- This site has many windows below door height.

Parking lot and Drop-Off / Pick-Up:

Observations:

- Parking lot is too small, with insufficient spaces for staff and visitors.
- Circulation through the parking lot during pick-up and drop-off is inadequate, and creates problems with traffic congestion.
- Pick-up / Drop-off location sees considerable congestion during peak times, and does not allow traffic to flow through.
- Existing accessible parking does not meet current requirements.

Landscaping:

Observations:

- The existing landscaping is dated, non-existent in some places, and overgrown in others. The bare areas face erosion issues, and the overgrown areas

trap debris as well as providing a home to nuisance pests.

Play Surface / Fields / Play Structures:

Observations:

- The existing asphaltic concrete play surfaces appears to be in reasonably good condition, although some repair work is needed.
- The existing sports fields and running track have issues with ground squirrels and gophers. Some parts of the grass fields are bare and/or more weeds than grass.
- Existing basketball standards are in poor condition.

Outdoor quad area:

Observations:

- Current outdoor quad area features a stepped depression below grade that collects debris and fills with water during storms due to poor drainage. Beyond the steps of the depression, there is no seating in this area.
- The existing original flagpole is no longer plumb.

Building:

Entry Visibility:

Observations:

- Main Office entry location is good; however, visibility is poor due to lack of distinguishing features. The office door looks very much like a standard classroom door.

Administration Area:

Observations:

- Conference room too small to hold conferences with the door closed for privacy.
- Finishes appear worn and/or faded.

Classrooms:

Observations:

- Classrooms are generally in good condition, although many of the finishes are faded, worn, and/or dirty.
- Classrooms 26 - 31 are in an older modular building that is in poor condition.
- Many existing classrooms typically have a CRT television mounted in a location that does not comply with current accessibility requirements.

Library:

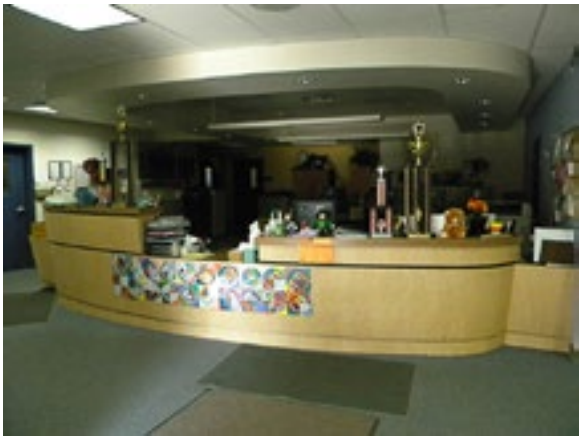
Observations:

- Existing media center space is insufficient for current needs.

Multi-Purpose Room:

Observations:

- Most finishes appear in need of replacement. Existing sports floor is composed of VCT in poor condition.
- Existing sound system is inadequate for current needs.
- Existing original folding cafeteria tables are in need of replacement.
- Room is too small for fans of competing basketball teams to remain inside the building during play.
- Existing high windows cause



significant glare problems for athletic competitions held in this space.

Campus Circulation and Accessibility:

Observations:

- General campus accessibility is good.
- Occasional areas of concrete or asphalt paving that have heaved or cracked cause accessibility issues.

Specialty Classrooms:

Observations:

- Sink drainage in Science Classroom has potential for leaks.

Portable Classrooms:

Observations:

- The existing portables generally appear to be in good condition.

Kitchen / Food Service

Observations:

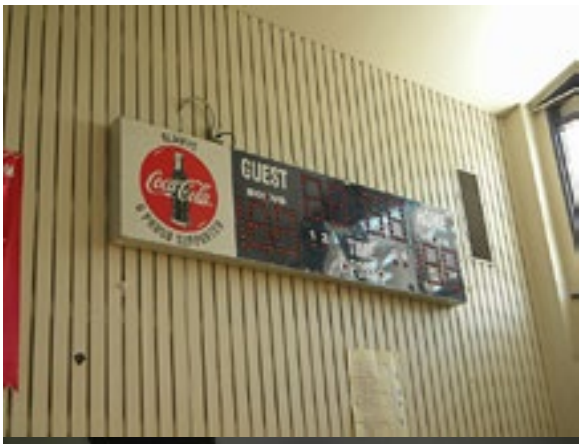
- The existing kitchen layout and equipment do not meet current Department of Health requirements.
- Most existing built-in equipment (refrigerator, freezer, sinks, storage areas, etc.) are beyond their expected lifespan.

Staff Work Areas:

Observations:

- The staff work area appears to be in good condition. The existing casework appears to

be aging, although still serviceable.



Staff Lounge:

Observations:

- The existing staff room finishes are worn and dated.
- The existing casework appears serviceable, although it is beyond it's expected lifespan.
- The existing appliances appear serviceable, although beyond their expected lifespan.

Student Restrooms:

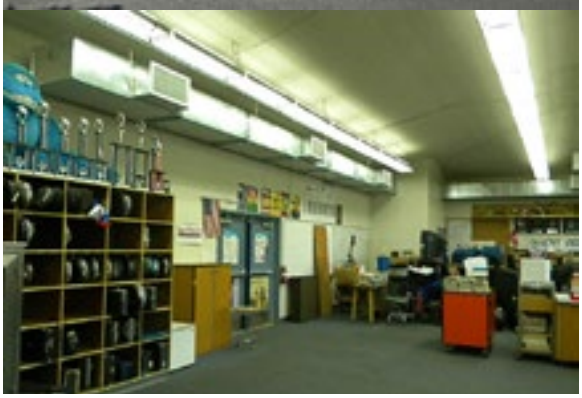
Observations:

- The existing Boys and Girls restrooms adjacent to the Multi-Purpose Room space are not accessible. All other facilities appear to be compliant.
- The existing fixture count (Boys – 6 water closets, 6 urinals, and 7 lavatories; Girls – 9 water closets, 8 lavatories) serves the current population of approximately 813 students.
- Existing drinking fountains are not compliant.

Staff Restrooms:

Observations:

- The existing fixture count (Men – 1 water closet, 2 urinals, and 3 lavatories; Women – 3 water closets, 3 lavatories) serves the current staff population.



Storage and Custodial Spaces:

Observations:

- Overall general storage capacity is acceptable.
- Custodial spaces are cluttered and in general show signs of wear and tear.

Structural System:

Observations:

- Piedmont Middle School consists of multiple buildings for which the original construction dates are unknown. Structural drawings were not available for the original campus construction. Based on the structural drawings that were available, we have the following understanding: 1) several building additions (shaded orange above) were constructed in 1973 to include a new classroom, new shop and expanded shower/locker room, and 2) the campus was "modernized" in 1995. The "modernization" appears to only include infill of several walls and creation of new wall openings and does not appear to include any seismic retrofit/rehabilitation items.

- The classroom, shop and shower/locker room additions were constructed in 1973, presumably designed to the 1973 California Building Code. The additions are generally all of similar design. The lateral force resisting system consists of a plywood sheathed roof acting as horizontal wood diaphragm spanning between vertical plywood shear walls. Seismic loads are resisted in both orthogonal directions by way of wood shear walls located on the exterior and interior of the additions. All of the addition structures were designed to be seismically separated from the existing structures with the exception of the shower room wings. The shower room wings were attached to the existing shower room. building and rely on the existing structure for lateral support on one side each

- During our review it was noticed that the shower room additions have higher diaphragm aspect ratios (i.e. length to width ratio exceeding 2.0). Straight-sheathed diaphragms are flexible and generally have lower capacity than other types of wood diaphragms. As such, the diaphragm aspect ratio is generally limited during design.
- It was also noted that there are several shear walls at the shop addition that appear to have a height to width aspect ratio that is greater than is currently allowed by code. Narrow shear walls are generally subject to much higher stresses and severe deformations that will reduce the capacity of the wall.

Mechanical Systems:

Observations:

- New rooftop gas heat / electric cool air conditioning units, and exhaust fans installed in 2013.
- New electric cool split systems with gas-fired furnaces added in 2013.
- New temperature controls installed in 2013.
- New ductwork on the roof was provided in 2013.
- Existing ductwork and air distribution in the building is original.

Electrical Systems:

Observations:

- A 2000A, 277/480V, 3-phase, 4-wire switchboard with a 500KVA utility pad mounted transformer located next to Building J in the electrical ser-

vice yard provides power to the campus. The switchboard was of original building and in fair and functioning condition. According to PG&E record, the current peak usage on the system is of 286 amps.

- A second service of 600A 120/249V 3-wire switchboard with overhead service provide a 50KVA PG&E pole mounted transformer provides power for the portable building at the north of the campus. The switchboard was of original building in fair and functioning condition. According to PG&E record, the current peak usage on the system is of 171 amp.

Low Voltage Systems:

Observations:

- The existing fire alarm system is a manual/automatic system on a Gamewell 610 panel in the Administration interfaced with an old Federal Signal 8000 panel. The panel had numerous trouble signals due to old device and cabling. The notification devices and initiating devices were not adequate to meet the current code requirement.
- The existing Bogen Multicom 2000 Public Adress and Master Clock system located in the Multi-Purpose Room storage room is in fair to poor condition and does not function well at times.

Roofing:

Observations:

- The existing roof is a multi-ply built-up-roofing system. Installed in 2012, it has a 20-year warranty, and an estimated remaining life of 20 years.

Exterior Paint:

Observations:

- The existing exterior paint is generally in good condition, although it is aged, and shows many locations where re-painting has occurred over time.

Piedmont Middle School

Site Plans

PIEDMONT MIDDLE SCHOOL & MOT

EXISTING CONDITIONS

PIEDMONT MIDDLE SCHOOL & MOT

- Replace 6 existing classrooms. Add 6 new permanent classrooms and a gym.
- Redesign/expand existing parking and playground paving. Redesign inner courtyard and amphitheater.
- Redesign MOT with new offices and county kitchen.

Piedmont Middle School

Paving Assessment Report

PIEDMONT MIDDLE SCHOOL

Summary School Report

Asphalt Surface Evaluation

School Name: Piedmont Middle School

Area	Type	Use	Area (sq. ft.)	Defect Score	Recommendation	Cost	Year
A	MS	Park	29,355	55	Dig out/ Crack Fill/ Seal Coat	$19,804.92	2011
B	MS	Ped	6,690	10	Double application Emulsion Se	$2,007.00	2011
C	MS	Ped	5,334	74	Remove & Replace	$26,670.00	2011
D	MS	Ped	6,432	23	Crack Fill and Seal Coat	$2,328.38	2011
E	MS	Ped	3,583	33	Dig out/ Crack Fill/ Seal Coat	$1,797.05	2011
F	MS	Ped	8,481	39	Dig out/ Crack Fill/ Seal Coat	$3,248.22	2011
G	MS	Play	50,196	37	Dig out/ Crack Fill/ Seal Coat	$22,584.28	2011
H	MS	Other	6,750	221	Remove & Replace	$36,750.00	2011
I	MS	Park	4,900	74	Remove & Replace	$24,500.00	2011
					Total:	**$139,689.86**	

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Piedmont Middle School **Area (sf):** 29,355

Area Notation: A **Buses:** Yes

Surface Type: AC **Garbage Trucks:** No

Use: Parking Lots or Areas

Defect Score: 55

Recommended Treatment: Dig out/ Crack Fill/ Seal Coat

Year: 2011

Visual Description: Pavement appears to have been overlayed, roof drains half blocked. Pavement exhibits moderate raveling, previously slurry almost gone

Miscellaneous: Slope = 4.8/ 1.8/ 0.7, Pavement sheet flows to a low area at the north end and drains to a drop inlet behind a fenced area, ADA - needs AC fill and proper signage, bus unloading and HC stalls make drive path too small, need to adjust planter

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
600	0%	2.0%	0.085	M

Crack Width	1/4 - 1/2"

Cost Breakdown

AC Cost:	$10,274.25
CF Cost:	$2,495.18
DO Cost:	$2,935.50
Misc. Cost:	$4,100.00
Total Cost:	$19,804.92

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Piedmont Middle School
Area (sf): 6,690
Area Notation: B
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Pedestrian Areas
Defect Score: 10
Recommended Treatment: Double application Emulsion Seal Coat
Year: 2011
Visual Description: Pavement exhibits slight raveling and is in good condition with a couple of small areas with tree roots and one bird bath (8x12).
Miscellaneous: Slope = 0.9/ 2.7, AC at southwest is high, causing a trip/ fall hazard.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.000	S

Crack Width	0

Cost Breakdown

AC Cost:	$2,007.00
CF Cost:	$0.00
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$2,007.00

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Piedmont Middle School
Area (sf): 5,334
Area Notation: C
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Pedestrian Areas
Defect Score: 74
Recommended Treatment: Remove & Replace
Year: 2011
Visual Description: Pavement exhibits severe raveling and severe shrinkage cracking.
Miscellaneous: Slope= 1.1/ 3.8, Pavement drains to a 9" drop inlet that does not appear to drain, AC surrounding southwest is lifted, causing trip/ fall hazard, severe treet root damage.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.171	V

Crack Width	1/8 - 1/4"

Cost Breakdown

AC Cost:	$26,670.00
CF Cost:	$0.00
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$26,670.00

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Piedmont Middle School
Area (sf): 6,432
Area Notation: D
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Pedestrian Areas
Defect Score: 23
Recommended Treatment: Crack Fill and Seal Coat
Year: 2011
Visual Description: Pavement exhibits moderate raveling and slight shrinkage cracking.
Miscellaneous: Slope = 1.5/ 5.7, Pavement drains to drop inlet and appears to be functioning properly.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.012	M

Crack Width	1/8 - 1/4"

Cost Breakdown

AC Cost:	$2,251.20
CF Cost:	$77.18
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$2,328.38

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Piedmont Middle School
Area (sf): 3,583
Area Notation: E
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Pedestrian Areas
Defect Score: 33
Recommended Treatment: Dig out/ Crack Fill/ Seal Coat
Year: 2011
Visual Description: Pavement exhibits severe raveling and slight shrinkage cracking.
Miscellaneous: Slope = 1.2/ 2.9, Pavement drains to drop inlet located within the area, severe tree root damage is evident.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.012	V

Crack Width	1/8 - 1/4"

Cost Breakdown

AC Cost:	$1,254.05
CF Cost:	$43.00
DO Cost:	$0.00
Misc. Cost:	$500.00
Total Cost:	$1,797.05

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Piedmont Middle School
Area (sf): 8,481
Area Notation: F
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Pedestrian Areas
Defect Score: 39
Recommended Treatment: Dig out/ Crack Fill/ Seal Coat
Year: 2011
Visual Description: Pavement exhibits moderate to severe raveling, previously sealed.
Miscellaneous: Slope = 1.0/ 6.6 (11.2), Pavement flows to drop inlets located within the area.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.033	V

Crack Width	1/8 - 1/4"

Cost Breakdown

AC Cost:	$2,968.35
CF Cost:	$279.87
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$3,248.22

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Piedmont Middle School
Area (sf): 50,196
Area Notation: G
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Playground
Defect Score: 37
Recommended Treatment: Dig out/ Crack Fill/ Seal Coat
Year: 2011
Visual Description: Pavement exhibits slight raveling, previously sealed (approximately 3 years old), pavement faling adjacent to field (6x40)
Miscellaneous: Slope = 0.5/ 1.4, Pavement sheet flows to lawn and field area.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.080	S

Crack Width	1/4 - 1/2"

Cost Breakdown

AC Cost:	$17,568.60
CF Cost:	$4,015.68
DO Cost:	$0.00
Misc. Cost:	$1,000.00
Total Cost:	$22,584.28

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Piedmont Middle School
Area (sf): 6,750
Area Notation: H
Buses: No
Surface Type: AC
Garbage Trucks: Yes
Use: Storage, Dumpster, etc.
Defect Score: 221
Recommended Treatment: Remove & Replace
Year: 2011
Visual Description: Pavement exhibits severe raveling, alligator cracking, and rutting from garbage trucks.
Miscellaneous: Slope = 1.3/ 4.1. Needs dumpster pad.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	1%	10.0%	0.192	V

Crack Width	1/8 - 1/4"

Cost Breakdown

AC Cost:	$33,750.00
CF Cost:	$0.00
DO Cost:	$0.00
Misc. Cost:	$3,000.00
Total Cost:	$36,750.00

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Piedmont Middle School **Area (sf):** 4,900

Area Notation: I **Buses:** No

Surface Type: AC **Garbage Trucks:** No

Use: Parking Lots or Areas

Defect Score: 74

Recommended Treatment: Remove & Replace

Year: 2011

Visual Description: Pavement exhibits severe raveling and moderate alligator cracking with an area of base failure.

Miscellaneous: Slope = 2.4/ 6.2, Pavement drains to planter.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	1%	4.0%	0.038	V

Crack Width	1/8 - 1/4"

Cost Breakdown

AC Cost:	$24,500.00
CF Cost:	$0.00
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$24,500.00

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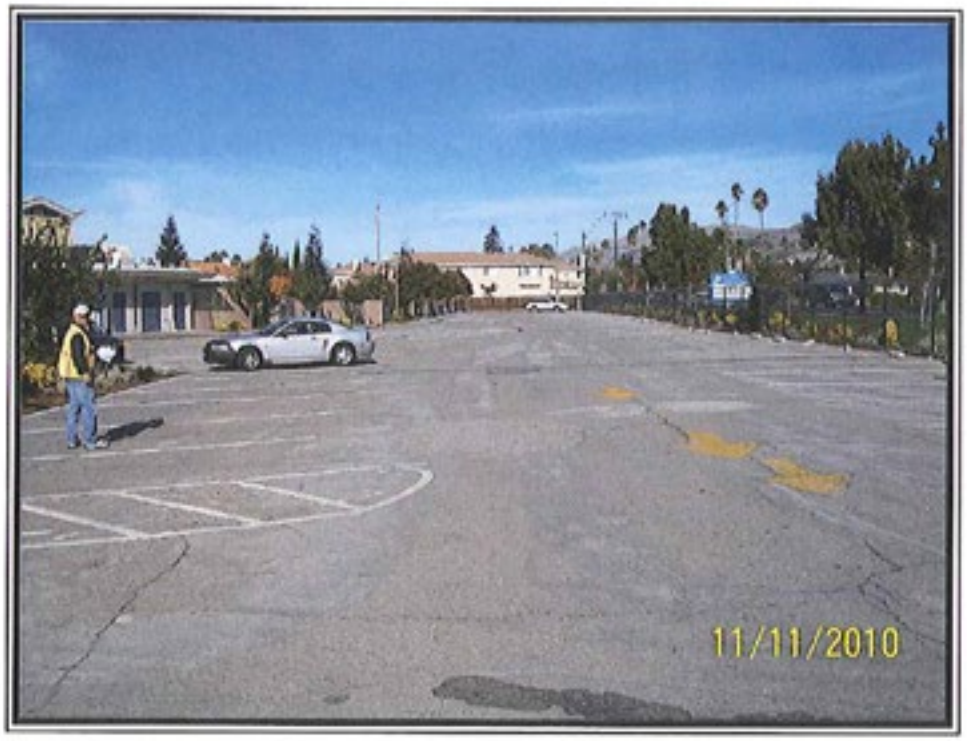
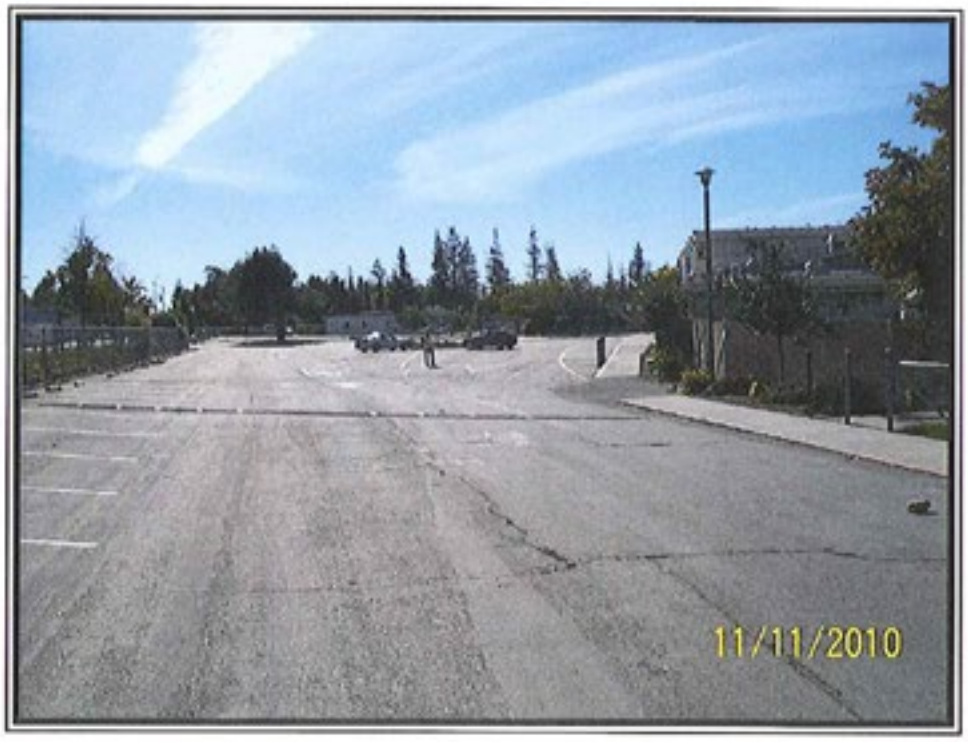


PIEDMONT MIDDLE SCHOOL - AREA A



PIEDMONT MIDDLE SCHOOL - AREA A

PIEDMONT MIDDLE SCHOOL - AREA B

PIEDMONT MIDDLE SCHOOL - AREA B

PIEDMONT MIDDLE SCHOOL - AREA C

PIEDMONT MIDDLE SCHOOL - AREA C

PIEDMONT MIDDLE SCHOOL - AREA D

PIEDMONT MIDDLE SCHOOL - AREA D

PIEDMONT MIDDLE SCHOOL - AREA E

PIEDMONT MIDDLE SCHOOL - AREA E

PIEDMONT MIDDLE SCHOOL - AREA F

PIEDMONT MIDDLE SCHOOL - AREA F

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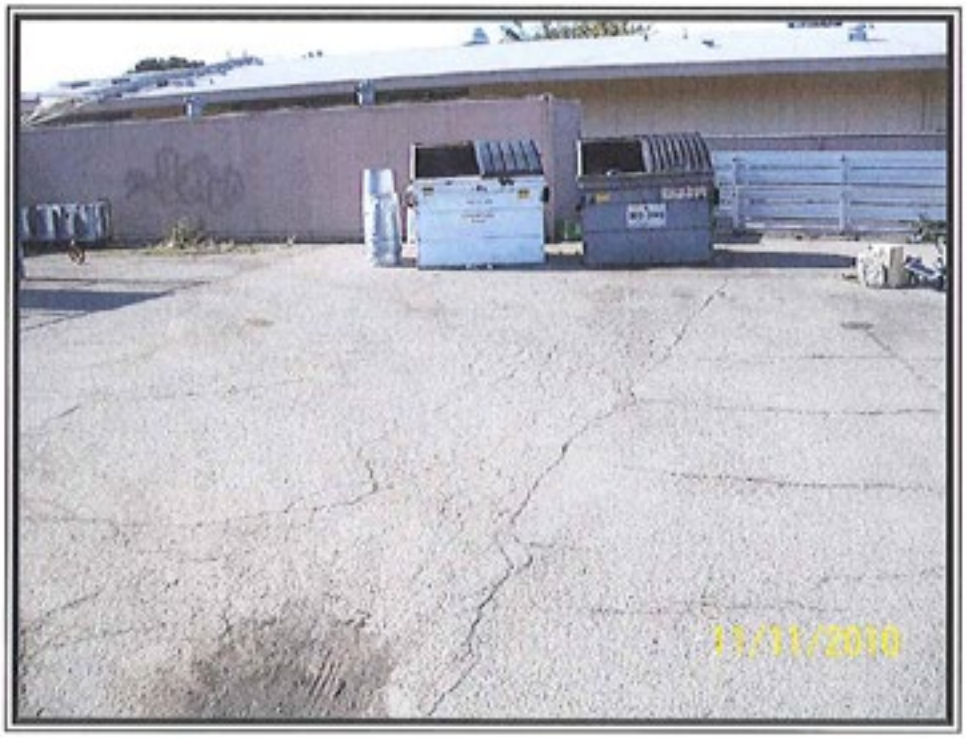
PIEDMONT MIDDLE SCHOOL - AREA G

PIEDMONT MIDDLE SCHOOL - AREA H



PIEDMONT MIDDLE SCHOOL - AREA H

PIEDMONT MIDDLE SCHOOL - AREA I

PIEDMONT MIDDLE SCHOOL - AREA I

Piedmont Middle School

Seismic Assessment Report

PIEDMONT MIDDLE SCHOOL

Key Plan (Photo taken from Google Maps)

Building Descriptions:

Piedmont Middle School consists of multiple buildings for which the original construction dates are unknown. Structural drawings were not available for the original campus construction. Based on the structural drawings that were available, we have the following understanding: 1) several building additions (shaded orange above) were constructed in 1973 to include a new classroom, new shop and expanded shower/locker room, and 2) the campus was "modernized" in 1995. The "modernization" appears to only include infill of several walls and creation of new wall openings and does not appear to include any seismic retrofit/rehabilitation items.

Since structural drawings were not made available for the original campus design it is recommended that these drawings be located and reviewed or the existing buildings be visually observed, documented and reviewed.

Classroom, Shop and Shower/Locker room Additions

The classroom, shop and shower/locker room additions were constructed in 1973, presumably designed to the 1973 California Building Code. The additions are generally all of similar design. The lateral force resisting system consists of a plywood sheathed roof acting as horizontal wood diaphragm spanning between vertical plywood shear walls. Seismic loads are resisted in both orthogonal directions by way of wood shear walls located on the exterior and interior of the additions. All of the addition structures were designed to be seismically separated from the existing structures with the exception of the shower room wings. The shower room wings were attached to the existing shower room building and rely on the existing structure for lateral support on one side each.

During our review it was noticed that the shower room additions have higher diaphragm aspect ratios (i.e. length to width ratio exceeding 2.0). Straight-sheathed diaphragms are flexible and generally have lower capacity than other types of wood diaphragms. As such, the diaphragm aspect ratio is generally limited during design.

It was also noted that there are several shear walls at the shop addition that appear to have a height to width aspect ratio that is greater than is currently allowed by code. Narrow shear walls are generally subject to much higher stresses and severe deformations that will reduce the capacity of the wall.

We recommend that further investigation be performed to verify adequate diaphragm capacity at diaphragms with higher aspect ratios and to determine if the narrow shear walls are adequate to resist the sites lateral forces.

Piedmont Middle School Additions receive a subjective rating of 2.0.

Piedmont Middle School

Mechanical Systems Assessment Report

A. MECHANICAL BUILDING SYSTEMS

1. Existing Conditions:

a. New rooftop gas heat / electric cool air conditioning units, and exhaust fans installed in 2011.

b. New electric cool split systems with gas fired furnaces added in 2011.

c. New temperature controls installed in 2011.

d. New ductwork on the roof was provided in 2011.

e. Existing ductwork and air distribution in building is original.

2. Recommendations:

a. Replace all insulated supply and return ductwork, diffusers and grilles within the building.

b. Replace all exhaust ductwork within the building.

3. General:

a. This report and comments to follow are based on observations of the general condition of the mechanical systems and noticeable code issues resulting from a review of the existing drawings and an on-site visit, when required.

b. Refer to Appendix A for Title 24 requirements and general code issues that should be considered.

APPENDIX-A

a. General

1. Comply requirements of California Mechanical Code (CMC) latest edition.

b. Possible Ventilation Code Issues

1. Corridors cannot be used as plenums for the purpose of supplying or exhausting air.
2. Corridors must have minimum two (2) air changes per hour for ventilation.
3. Minimum ventilation for occupied spaces should be 15 cfm/person or 0.15 cfm/sq. ft., whichever is greater.
4. Exhaust airflow from bathrooms should be based on minimum 10 air changes per hour.

c. Possible Fire Smoke Issues

1. Fire/smoke dampers in the system must be interlocked with fire alarm system.
2. Corridors, lobbies, and building entrances to have dedicated supply air.
3. Chemistry classrooms with occupancy separation shall have fire/smoke damper.
4. All air handling equipment supplying air flow in excess of 2,000 cubic feet per minute to have duct smoke detectors in the supply air duct.

d. Possible Title 24 Issues

1. Interior supply and return air ductwork (heating & cooling) shall be insulated with minimum R-value of 4.2.
2. Heating, ventilating, and air conditioning systems to have control capability with night setback.
3. Heating, ventilating, and air conditioning equipment to be certified by the State of California to meet minimum energy requirements.

Piedmont Middle School

Electrical and Low Voltage Systems Assessment Report

B. Electrical

1. Power Systems:

A 2000A, 277/480V, 3 phase, 4 wire switchboard with a 500KVA utility pad mounted transformer located next to building J in the electrical service yard provides power to the campus. The switchboard was of original building in fair and functioning condition. According to PG&E record, the current peak usage on the system is of 286 amp. There is a spare capacity of 245 amp available at the service for future usage. If additional power is needed, the PG&E transformer shall need to be upgraded.

A second service of 600a, 120/240V, 3 wire switchboard with overhead service provide a 50 KVA PG&E pole mounted transformer provides power for the portable building at the north of the campus. The switchboard was of original building in fair and functioning condition. According to PG&E record, the current peak usage on the system is of 171 amp. There is no spare capacity at the service for future usage. If additional power is needed, the PG&E transformer shall need to be upgraded.

2. Fire Alarm System:

The existing fire alarm system was of a manual/automatic system on a Gamewell 610 panel in the administration office interfaced with an old Federal Signal 8000 panel. The panel had numerous trouble signals due to old device and cabling. The notification devices and initiating devices were not adequate to meet the current code requirement.

Recommendations:

a. Replace existing panel with new Gamewell 602 panel for an addressable supervised automatic system.
b. Provide new horn and strobes in areas required by ADA, NFPA, CEC and CFC.
c. Provide new initiating devices for a complete automatic system per CEC and CFC requirement.

3. Public Address and Clock Systems:

The existing Bogen Multicom 2000 PA and master clock system located in the administration MDF room is in good and functioning condition. Existing speaker and clock units are in good condition for reuse.

Will H. Ector, Jr.
Superintendent

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San Jose, CA 95132-2427

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Sierramont Middle School

3155 Kimlee Drive
San Jose, CA

Sierramont Middle School Assessment

Summary:

Enrollment (Nov. 2012):	1,144
Principal:	Chris Mosley
Site:	21.0 Acres
Building Area:	Approx. 67,000 SF
Permanent Classrooms:	36
Portable Classrooms:	7 @ 960 SF
Total Size:	73,720 SF

Construction History:

1978	School Constructed
1991	Construction of (1) Portable Classroom building
1999	Construction of (2) Portable Classroom buildings
2004	Modernization Projects
2006	HVAC Replacement
2006	Roofing Removal and Replacement
2006	Construction of (1) Marquee Signage
2012	Construction of (4) Portable Classroom buildings
2013	Alterations to Central Plant (Boiler Replacement)

Sierramont Middle School

Site Meeting Minutes

Needs Assessment Scope Categories
Berryessa School District

Sierramont Middle School

May 20, 2013

(updated September 19, 2013)

Site

1. Parking lots, traffic control, and drop-off and pick-up areas
    a. Parents not encouraged to enter parking lot.
    b. A drop-off area was requested.
    c. Current number of parking spaces is adequate.
2. PE equipment (Basketball backboards, rims, play structures, matting)
    a. A track was requested.
    b. Remove sand volleyball court.
    c. Exercise stations need asphalt paving underneath.
    d. Backstops need replacing.
    e. Request made for two additional tennis courts.
    f. Request made for additional ball wall.
    g. Bird nesting issues (at gym, and along building ridges).
    h. Secondary gym requested, separate gym and lunch facilities.
    i. Expand locker rooms, provide new (and additional) lockers.
    j. No showers.
3. Site (ADA) compliance, paved walkways (tripping hazards, level and clear pathways)
    a. Areas with paving issues were noted.
4. Paved Play Area (size, security, location, condition)
    a. Visual control is good, with exception of portable area.
    b. Paving noted to be in decent shape.
5. Turf play area, landscaping and irrigation
    a. Issues noted with squirrels and gophers.
6. Fencing and security
    a. Secure perimeter in place, site deemed security adequate.
7. Trash enclosure
    a. Trash location needs to be moved.
    b. Trash location is actually ok, but the asphalt paving is being damaged by the garbage trucks. (9/19/13)
8. Site Utilities (to the street and campus distribution - gas, water, sewer, storm, power)
    a. Some ponding issues, thought to be maintenance items.
    b. At least one area identified as having drainage issues not associated with maintenance issues. (9/19/13)
9. Site Lighting (LED)
    a. Play area inadequately lit.
    b. Walkway at back of campus needs additional lighting. (9/19/13)

10. Covered Shade or Eating Structure
    a. An exterior covered eating area is desirable.
11. Roofing
    a. No known issues.
12. Covered walkways
    a. None currently.
13. Exterior Paint
    a. Good condition.
14. Campus Layout and organization
    a. Potential new classrooms to replace portables.
    b. Mini gym requested.
    c. Additional restroom facilities needed.
15. Curb Appeal
    a. General landscaping improvements.
16. Portable classrooms/restrooms
    a. Need more restrooms.
    b. Eliminate waterless urinals.
17. Storage
    a. Would prefer interior storage solution.
18. Drinking fountains
    a. Additional drinking fountains requested.
    b. Request made to shade drinking fountains.
19. Signage
    a. District plans to replace all existing wayfinding signage.
    b. District plans to add marquee signage to each campus.

<u>Building</u>

a. Building Insulation, exterior surfaces
    a. Choir room needs soundproofing.
b. Windows (Prep rooms/common areas, condition of windows and amount of natural light)
    a. Replace polycarbonate with glass.
    b. Infill alcove windows.
c. Exterior Doors and Hardware
    a. Door and hardware replacement will likely be district-wide.
    b. Some system for barricading doors was requested.
d. Restrooms (Electric hand dryers, partitions, fixtures, re-seal flooring)
    a. Additional restrooms requested for student use.
    b. Modernization of staff restrooms requested.
e. Flooring (Carpeting, tiling, resilient, all locations)
    a. New carpet requested.
    b. Floor surface needed in locker rooms. Epoxy?
    c. Floor in science room needs to be replaced.
f. Tackable Walls surfaces and all other interior finishes

   a. Full-height, wall-to-wall tackable surfaces acceptable, appear to mostly be in place already.

g. Ceilings
   a. Some ceiling issues / repair needed.
h. Cabinetry (Teaching walls)
   a. Request for teaching walls.
i. Classroom size/layout (21st Century Learning environment/classroom)
   a. Meeting to be held on 23JUN2013 with District representatives to discuss this item.
   b. Issues with inconsistent classroom sizes.
j. Backpack storage or location
   a. No current backpack storage, nor requested.
k. Interior lighting (LED)
   a. No known issues.
   b. Better end-user control requested.
l. Blinds
   a. Acceptable.
m. Markerboards
   a. Markerboards in the teaching wall cabinets would be sufficient.
n. Classroom electrical outlets
   a. More, better distributed.
o. IT/Data networking (Wi-fi, location, IDF and MDF)
   a. SFA will be meeting with District IT personnel to discuss district-wide implementations.
p. IT/Video network
   a. SFA will be meeting with District IT personnel to discuss district-wide implementations.
q. Communication system (Intercom, Clocks, Speakers)
   a. Audio to gym / locker rooms is not loud enough.
   b. Request made for visual alert to gym for lockdown status.
r. Intrusion Alarm
   a. No issues noted.
s. Security cameras
   a. Security cameras are planned to be added to all sites as part of this process.
t. Heating and Ventilating and Air Conditioning (Chiller, mechanical equipment, FCU's)
   a. SFA will evaluate these systems over the summer.
   b. Balancing issues noted.
u. Energy management system (Controls for HVAC/Lighting)
   a. No known issues.

Miscellaneous:

- Photovoltaic Installation (Solar)
  - Solar installation will occur where economically feasible.
- Multi-purpose/Cafeteria efficiency
  - Too small.
  - Needs access upgrade.

- Potentially remove stage to increase size of space. (9/19/13)

- Administration area functionality
  - Review layout, space utilization.
- Kitchen
  - SFA to meet with District Food Services personnel to discuss district-wide plan.
- Library/Media Center
  - No computer lab.
  - Request for upgraded library reception desk/area.
- Specialty Rooms
  - No known issues.
  - Need more storage in general. (9/19/13)
  - Specific storage request for music instrument storage. (9/19/13)
- FFE (Furnishings, Fixtures, Equipment) Lunch tables, classroom furniture, etc.
  - Most furniture is original to the school, and appears in need of replacement.
- Any other creative thoughts/ideas
  - Site needs more classrooms.
  - Odd-shaped classroom layout should be reviewed to see if improvements can be made. (9/19/13)
  - Staff lounge needs modernization work, insufficient electrical power, no stove. (9/19/13)
  - Site requested that an attempt be made to do something with the large open space on campus that is currently undeveloped. (9/19/13)
  - Relocation of portables would be desired. (9/19/13)
  - Soundproofing between classrooms is necessary. (9/19/13)
  - Possible to roof over atrium spaces to create storage spaces, or put to other use. (9/19/13)

Grounds:

Security:

Observations:

- While significant portions of this site have a perimeter fence in place, the site is largely open in the front.
- Building exterior lighting is insufficient.
- Existing doors often have windows in them.
- This site has many windows below door height.

Parking lot and Drop-Off / Pick-Up:

Observations:

- Circulation through the parking lot during pick-up and drop-off in inadequate, and creates problems with traffic congestion.
- Pick-up / Drop-off location sees considerable congestion during peak times, and does not allow traffic to flow through.
- Existing accessible parking does not meet current requirements.

Landscaping:

Observations:

- The existing landscaping is dated, non-existent in some places, and overgrown in others. The bare areas face erosion issues, and the overgrown areas trap debris as well as providing a home to nuisance pests.

Play Surface / Fields / Play Structures:

Observations:

- The existing asphaltic concrete play surfaces appears to be in relatively poor condi-

tion, some areas of reconstruction appear necessary.

- The existing sports fields have issues with ground squirrels and gophers.

Outdoor area:

Observations:

- Current outdoor quad area features a wooden pergola-style cover, with a depressed stage area. The wood has deteriorated over the years.

Building:

Entry Visibility:

Observations:

- Main Office entry location is good; however, visibility is poor due to lack of distinguishing features and due to screening by existing landscaping.

Administration Area:

Observations:

- Administration area appears in good and functional condition.
- Finishes appear worn and/or faded.

Classrooms:

Observations:

- Classrooms are generally in good condition, although many of the finishes are faded, worn, and/or dirty.
- Many existing classrooms typically have a CRT television mounted in a location that does not comply with current accessibility requirements.

Library:

Observations:

- Existing media center space is insufficient for current needs.

Multi-Purpose Room:

Observations:

- Existing sound system is inadequate for current needs.
- Existing original folding cafeteria tables are in need of replacement.

Campus Circulation and Accessibility:

Observations:

- General campus accessibility is good.
- Most door thresholds are too high to meet current accessibility requirements.
- Occasional areas of concrete or asphalt paving that have heaved or cracked cause accessibility issues.

Specialty Classrooms:

Observations:

- Site has no permanent media lab.

Portable Classrooms:

Observations:

- Existing portables appear to be in good condition.

Kitchen / Food Service

Observations:

- The existing kitchen layout and equipment do not meet current Department of Health requirements.
- Most existing built-in equipment (refrigerator, freezer, sinks, storage areas, etc.) are beyond their expected lifespan.

Staff Work Areas:

Observations:

- The staff work area appears to be in good condition. The existing casework appears to be aging, although still servicable.

Staff Lounge:

Observations:

- The existing staff room finishes are worn and dated.
- The existing casework appears serviceable, although it is beyond it's expected lifespan.
- There is no stove available in the staff room.

Student Restrooms:

Observations:

- The existing fixture count (Boys – 6 water closets, 12 urinals, and 12 lavatories; Girls – 12 water closets, 11 lavatories) serves the current population of over 1,100 students.
- Existing drinking fountains are not compliant.
- Restrooms appear compliant, with the exception of the pair of abandoned restrooms

in the Multi-Purpose Room area.

- There is a pair (boys / girls) of restrooms adjacent to the Multi-Purpose Room that have been abandoned.

Staff Restrooms:

Observations:

- The existing fixture count (Men – 2 water closets, 1 urinals, and 3 lavatories; Women – 3 water closets, 3 lavatories) serves the current staff population.

Storage and Custodial Spaces:

Observations:

- Overall general storage capacity is acceptable.
- Custodial spaces are cluttered and in general show signs of wear and tear.

Structural System:

Observations:

- Sierramont Middle School consists of two buildings, both built in 1978. The main building contains the educational portion of the school with classrooms and admin offices, while the second building contains the gymnasium.
- The main building's lateral force resisting system consists of a plywood sheathed roof acting as horizontal wood diaphragm spanning between vertical plywood shear walls. Seismic loads are resisted in both orthogo-

nal directions by way of the wood shear walls located on the exterior and interior of building structure. During our review we noticed that a section of this building has a high roof section, surrounded by plywood shear walls. From our review of the available drawings, it is not evident if sufficient shear transfer is provided for between these two elements. Additionally, we noted that a portion of the shear walls that were considered to be part of the main lateral force resisting system had height to width aspect ratios that were grater that what is allowed today.

- The second building is a single story building and has a high roof section similar to the main building. The entire building consists of a plywood sheathed roof acting as a horizontal wood diaphragm. The lower roof contains vertical plywood shear walls to resist lateral forces while the high roof consists of both plywood shear walls and steel brace frames. Our review of the available structural drawings revealed that the plywood shear walls are discontinuous between the high and low roof similar to the main building. We also noted that the steel brace frames were constructed in a "K" configuration. These types of structures have not performed well in the past, when subject to major seismic events.

Mechanical Systems:

Observations:

- Original chillers, cooling towers, pumps, and associated equipment installed in the Equipment Yard are in poor condition.
- Original fan coil units, exhaust fans, temperature controls, piping, and ductwork.
- New boilers (re-using the existing hot water pumps) added in 2013.
- Existing ductwork and air distribution is original.
- Existing hot and chilled water piping is original.

Electrical Systems:

Observations:

- A 2000A, 277/480V, 3-phase, 4-wire switchboard with a 750KVA utility pad mounted transformer located in the electrical service yard provides power to the campus. The switchboard was was installed around 2003 and is in good condition. According to PG&E record, the current peak usage on the system is of 378 amps.

Low Voltage Systems:

Observations:

- The existing fire alarm system was of manual/automatic system on a Gamewell 610 panel in the Administration Office installed around 2003. The panel is in food and functioning condition. The notification devices were not adequate to meet the current code requirement.
- The existing Bogen Multicom 2000 Public Adress and Master Clock system located in the Multi-Purpose Room storage room is in good and functioning condition.

Roofing:

Observations:

- The existing roof is a multi-ply built-up-roofing system. Installed in 2006, it has a 20-year warranty, and an estimated remaining life of 12-15 years.

Exterior Paint:

Observations:

- The existing exterior paint is generally in good condition, although it is aged, and shows many locations where re-painting has occurred over time.

Sierramont Middle School

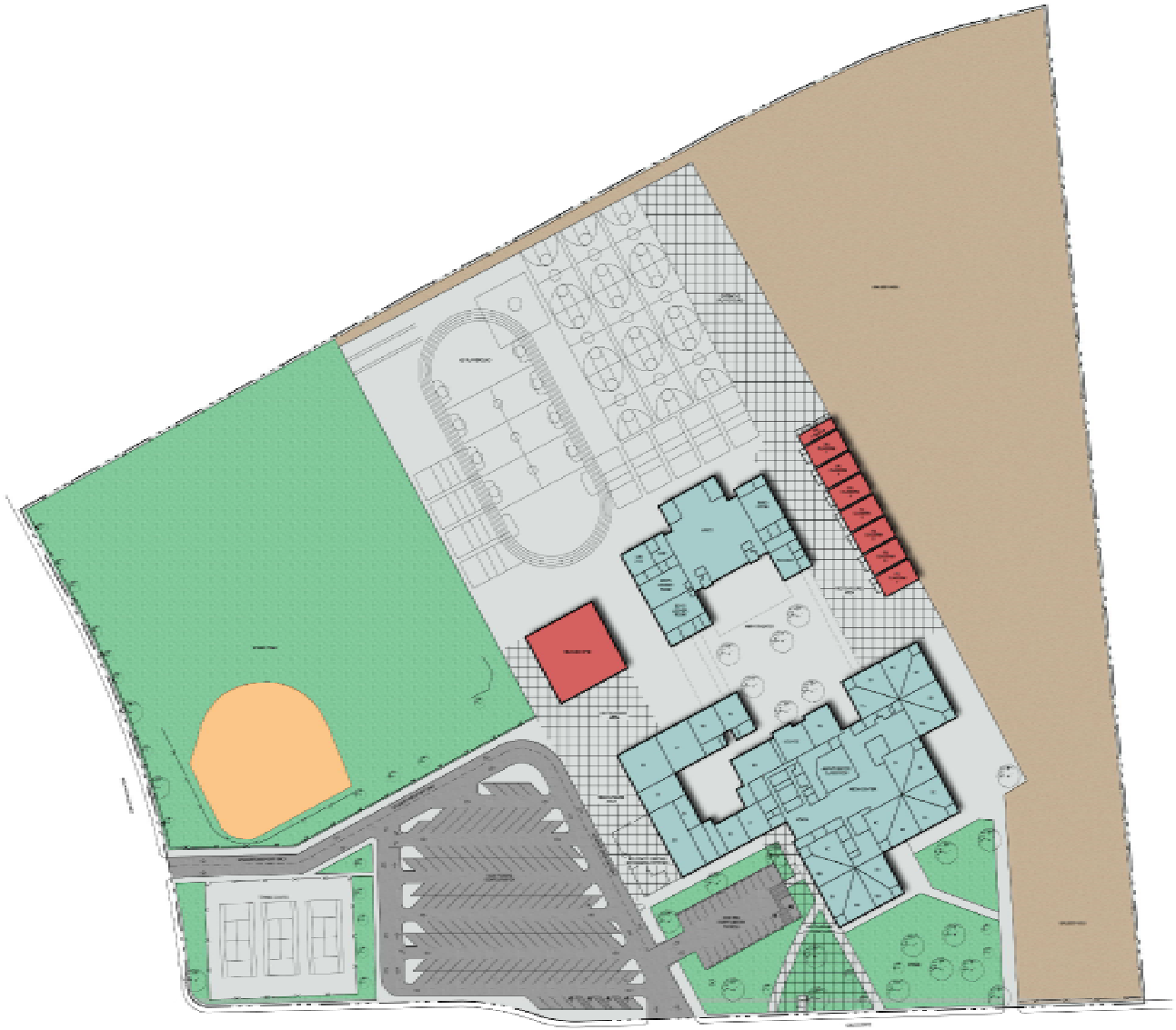
Site Plans

SIERRAMONT MIDDLE SCHOOL

EXISTING BUILDINGS

0 25' 50' 100' 150'

EXISTING CONDITIONS



SIERRAMONT MIDDLE SCHOOL

- 7 new modular classrooms, mini gym, and restrooms
- Expand and reconfigure parking
- Redesign entrance and front facade

Sierramont Middle School

Paving Assessment Report

SIERRAMONT MIDDLE SCHOOL

Summary School Report

Asphalt Surface Evaluation

School Name: Sierramont Middle School

Area	Type	Use	Area (sq. ft.)	Defect Score	Recommendation	Cost	Year
A	MS	Park	13,860	18	Crack Fill and Seal Coat	$6,351.00	2011
B	MS	Park	8,659	81	1/2" level, fabric, & 1.5" overlay	$23,147.50	2011
C	MS	Park	34,712	236	Remove & Replace	$173,560.00	2011
D	MS	Play	18,369	16	Reconstruct	$133,175.25	2015
E	MS	Ped	13,769	65	Reconstruct	$99,825.25	2013
F	MS	Ped	2,394	10	Crack Fill and Seal Coat	$837.90	2011
G	MS	Play	145,564	85	Reconstruct	1,055,339.00	2013
H	MS	Ped	3,333	32	Dig out/ Crack Fill/ Seal Coat	$1,323.20	2013
I	MS	Ped	5,792	66	Reconstruct	$41,992.00	2011
J	MS	Road	9,056	26	Dig out/ Crack Fill/ Seal Coat	$5,169.60	2011
K	MS	Ped	1,648	156	Crack Fill and Seal Coat	$1,376.08	2011

Total: $1,542,096.78

Pavement Engineering Inc
Civil Engineers - Materials Testing
Specializing in Pavement Rehabilitation
San Luis Obispo Office (805) 781-2265

BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Sierramont Middle School **Area (sf):** 13,860

Area Notation: A **Buses:** No

Surface Type: AC **Garbage Trucks:** No

Use: Parking Lots or Areas

Defect Score: 18

Recommended Treatment: Crack Fill and Seal Coat

Year: 2011

Visual Description: Pavement exhibits moderate raveling.

Miscellaneous: Slope = 1.1/ 0.7/ 4.5, Pavement drains to drop inlet and adjscent pavement area, areas of ponding are evident, ADA - 2.5% in stalls, no crosswalk to sidewalk.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
500	0%	0.0%	0.000	M

Crack Width	0

Cost Breakdown

AC Cost:	$4,851.00
CF Cost:	$0.00
DO Cost:	$0.00
Misc. Cost:	$1,500.00
Total Cost:	$6,351.00

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Sierramont Middle School **Area (sf):** 8,659

Area Notation: B **Buses:** No

Surface Type: AC **Garbage Trucks:** No

Use: Parking Lots or Areas

Defect Score: 81

Recommended Treatment: 1/2" level, fabric, & 1.5" overlay

Year: 2011

Visual Description: Pavement exhibits severe raveling and shrinkage cracking.

Miscellaneous: Slope = 4.0/ 2.8/ 3.7/ 5.2, Pavement drains to drop inlets located within the pavement area, ADA - 3.1% in stalls, no crosswalk to sidewalk.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
500	0%	0.0%	0.229	V

Crack Width	1/8 - 1/4"

Cost Breakdown

AC Cost:	$21,647.50
CF Cost:	$0.00
DO Cost:	$0.00
Misc. Cost:	$1,500.00
Total Cost:	$23,147.50

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Sierramont Middle School
Area (sf): 34,712
Area Notation: C
Buses: Yes
Surface Type: AC
Garbage Trucks: Yes
Use: Parking Lots or Areas
Defect Score: 236
Recommended Treatment: Remove & Replace
Year: 2011
Visual Description: Pavement exhibits severe raveling with areas of severe alligator cracking and severe shrinkage cracking.
Miscellaneous: Slope = 3.4/ 4.2/ 0.5, Pavement drains to drop inlets located within the pavement area, ponding observed, need sumpster pad, west driveway previous maintenance includes and overlay, ADA - no crosswalk to building, needs new signage

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	3%	15.0%	0.315	V

Crack Width	1/8 - 1/4"

Cost Breakdown

AC Cost:	$173,560.00
CF Cost:	$0.00
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$173,560.00

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Sierramont Middle School
Area (sf): 18,369
Area Notation: D
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Playground
Defect Score: 16
Recommended Treatment: Reconstruct
Year: 2015
Visual Description: Pavement exhibits expansion cracking at perimeter of tennis court area, acrylic seal is fairly new and in good condition.
Miscellaneous: Slope = 0.7/ 1.4, Pavement sheet flows to planter.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.024	S

Crack Width	<1/8"

Cost Breakdown

AC Cost:	$133,175.25
CF Cost:	$0.00
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$133,175.25

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Sierramont Middle School **Area (sf):** 13,769

Area Notation: E **Buses:** No

Surface Type: AC **Garbage Trucks:** No

Use: Pedestrian Areas

Defect Score: 65

Recommended Treatment: Reconstruct

Year: 2013

Visual Description: Pavement exhibits severe raveling and expansion cracking along lawn edge.

Miscellaneous: Slope = 0.5/ 6.2, Pavement drains to lawn area.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.136	V

Crack Width	1/8 - 1/4"

Cost Breakdown

AC Cost:	$99,825.25
CF Cost:	$0.00
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$99,825.25

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Sierramont Middle School **Area (sf):** 2,394

Area Notation: F **Buses:** No

Surface Type: AC **Garbage Trucks:** No

Use: Pedestrian Areas

Defect Score: 10

Recommended Treatment: Crack Fill and Seal Coat

Year: 2011

Visual Description: Pavement exhibits slight raveling, previously sealed, in good condition.

Miscellaneous: Slope = 0.4/ 4.5, Pavement drains to drop inlet located within the area.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.000	S

Crack Width	0

Cost Breakdown

AC Cost:	$837.90
CF Cost:	$0.00
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$837.90

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Sierramont Middle School **Area (sf):** 145,564

Area Notation: G **Buses:** No

Surface Type: AC **Garbage Trucks:** No

Use: Playground

Defect Score: 85

Recommended Treatment: Reconstruct

Year: 2013

Visual Description: Pavement exhibits moderate raveling, recently sealed, in good condition, severe block shrinkage cracking.

Miscellaneous: Slope = 0.9/ 2.6/ 4.0/ 1.1/ 2.4/ 1.9/ 5.2, Pavement sheet flows to planters.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.221	M

Crack Width	1/8 - 1/4"

Cost Breakdown

AC Cost:	$1,055,339.00
CF Cost:	$0.00
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$1,055,339.00

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Sierramont Middle School
Area (sf): 3,333
Area Notation: H
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Pedestrian Areas
Defect Score: 32
Recommended Treatment: Dig out/ Crack Fill/ Seal Coat
Year: 2013
Visual Description: Pavement exhibits moderate raveling with slight shrinkage cracking and one small area of alligator cracking, pavement around drain is failing
Miscellaneous: Slope = 3.0/ 4.4, Pavement drains to drop inlet in pavement area.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.047	M

Crack Width	1/8 - 1/4"

Cost Breakdown

AC Cost:	$1,166.55
CF Cost:	$156.65
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$1,323.20

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Sierramont Middle School **Area (sf):** 5,792

Area Notation: I **Buses:** No

Surface Type: AC **Garbage Trucks:** No

Use: Pedestrian Areas

Defect Score: 66

Recommended Treatment: Reconstruct

Year: 2011

Visual Description: Pavement exhibits severe raveling and expansion cracking with numerous trenches.

Miscellaneous: Slope = 1.1/ 3.5/ 3.2, Pavement flows to drop inlets, planter, etc.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.138	V

Crack Width	1/8 - 1/4"

Cost Breakdown

AC Cost:	$41,992.00
CF Cost:	$0.00
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$41,992.00

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Sierramont Middle School **Area (sf):** 9,056

Area Notation: J **Buses:** No

Surface Type: AC **Garbage Trucks:** No

Use: Roadways, Alleyways, Bus Turnouts, etc.

Defect Score: 26

Recommended Treatment: Dig out/ Crack Fill/ Seal Coat

Year: 2011

Visual Description: Pavement exhibits moderate raveling with some tree root damage and expansion cracking adjacent to field.

Miscellaneous: Slope = 4.7/ 1.6/ 2.4/ 1.1, Pavement drains to adjacent field and planters, ponding observed.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.000	M

Crack Width	0

Cost Breakdown

AC Cost:	$3,169.60
CF Cost:	$0.00
DO Cost:	$0.00
Misc. Cost:	$2,000.00
Total Cost:	$5,169.60

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Sierramont Middle School
Area (sf): 1,648
Area Notation: K
Buses: No
Surface Type: AC
Garbage Trucks: No
Use: Pedestrian Areas
Defect Score: 156
Recommended Treatment: Crack Fill and Seal Coat
Year: 2011
Visual Description: Pavement exhibits severe raveling and expansion cracking.
Miscellaneous: Slope = 1.7/ 5.1/ 2.1, Pavement drains to adjacent lawn and drop inlets in southwest area.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.485	V

Crack Width	1/8 - 1/4"

Cost Breakdown

AC Cost:	$576.80
CF Cost:	$799.28
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$1,376.08

12/10/2010

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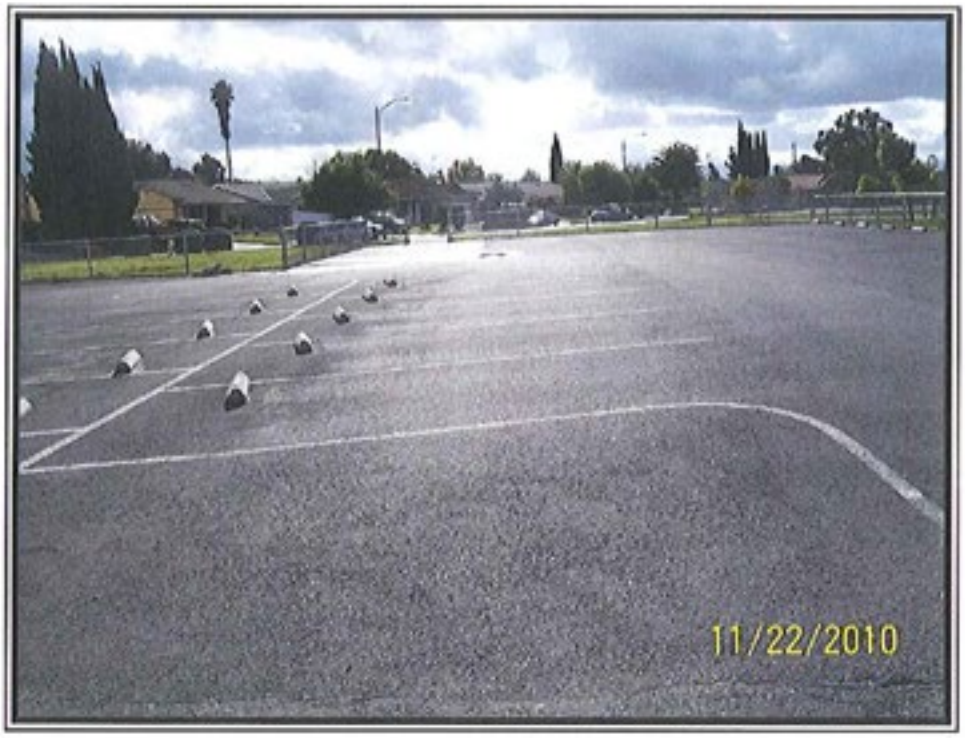
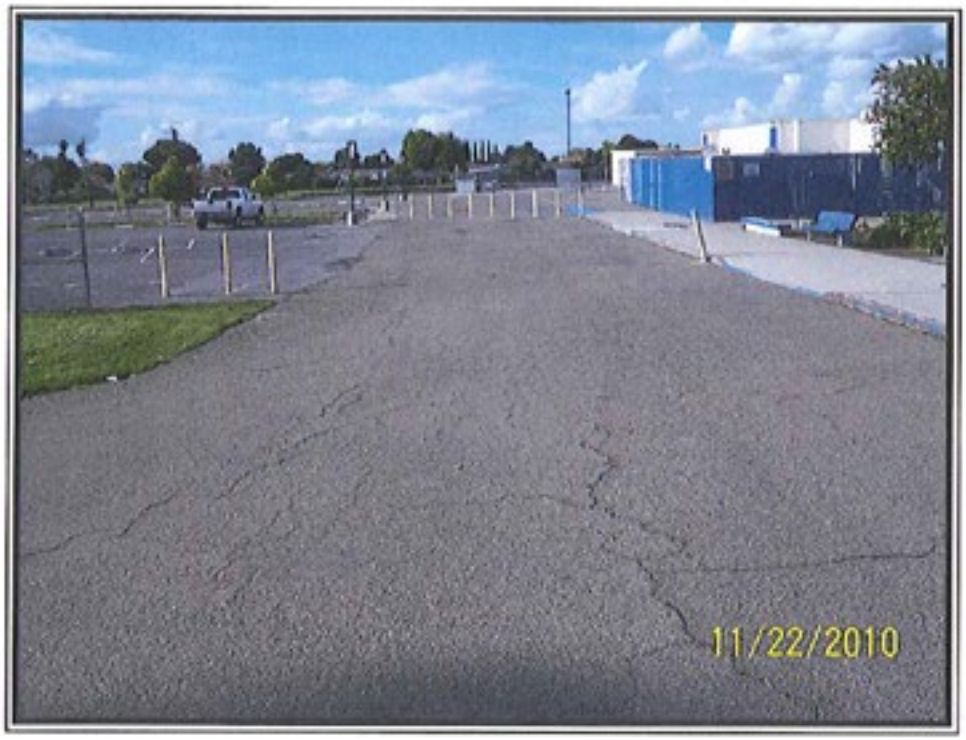


SIERRAMONT MIDDLE SCHOOL - AREA A

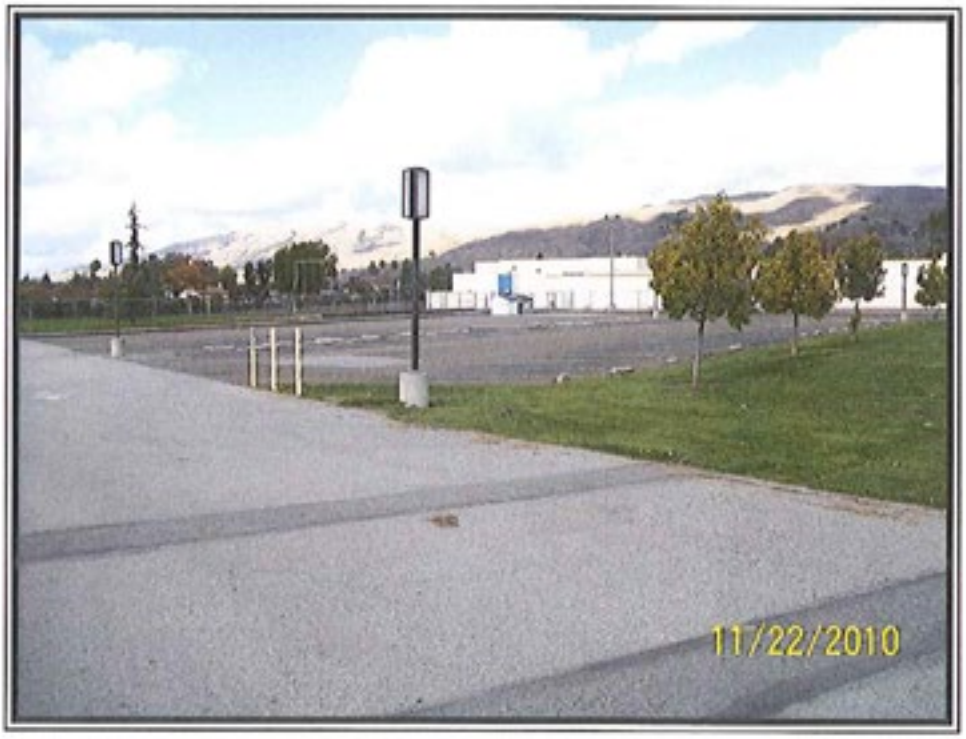
SIERRAMONT MIDDLE SCHOOL - AREA A

SIERRAMONT MIDDLE SCHOOL - AREA B

SIERRAMONT MIDDLE SCHOOL - AREA B



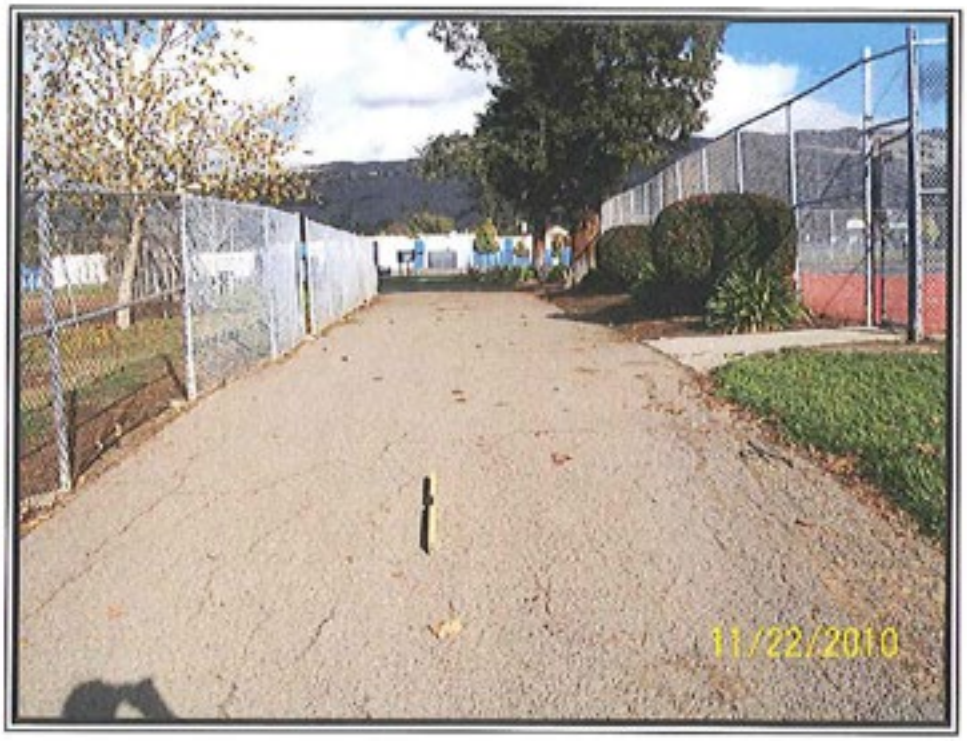
SIERRAMONT MIDDLE SCHOOL - AREA C



SIERRAMONT MIDDLE SCHOOL - AREA C

SIERRAMONT MIDDLE SCHOOL - AREA D

SIERRAMONT MIDDLE SCHOOL - AREA D



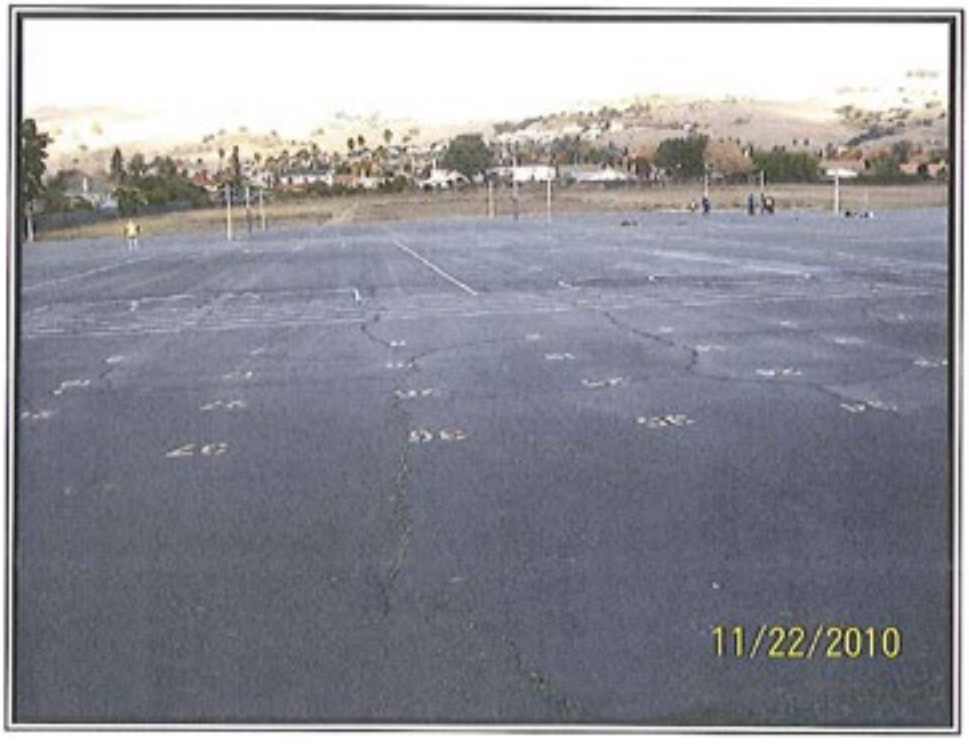
SIERRAMONT MIDDLE SCHOOL - AREA E

SIERRAMONT MIDDLE SCHOOL - AREA E

SIERRAMONT MIDDLE SCHOOL - AREA F

SIERRAMONT MIDDLE SCHOOL - AREA F

SIERRAMONT MIDDLE SCHOOL - AREA G



SIERRAMONT MIDDLE SCHOOL - AREA G

SIERRAMONT MIDDLE SCHOOL - AREA H

SIERRAMONT MIDDLE SCHOOL - AREA H

SIERRAMONT MIDDLE SCHOOL - AREA I

SIERRAMONT MIDDLE SCHOOL - AREA I

SIERRAMONT MIDDLE SCHOOL - AREA J

SIERRAMONT MIDDLE SCHOOL - AREA J

SIERRAMONT MIDDLE SCHOOL - AREA K

SIERRAMONT MIDDLE SCHOOL - AREA K

Sierramont Middle School

Seismic Assessment Report

SIERRAMONT MIDDLE SCHOOL

Key Plan (Photo taken from Google Maps)

Building Descriptions:

Sierramont Middle School consists of two buildings, both built in 1978. The main building contains the educational portion of the school with classrooms and admin offices, while the second building contains the gymnasium.

602

Main Building

The main building's lateral force resisting system consists of a plywood sheathed roof acting as horizontal wood diaphragm spanning between vertical plywood shear walls. Seismic loads are resisted in both orthogonal directions by way of the wood shear walls located on the exterior and interior of building structure. During our review we noticed that a section of this building has a high roof section, surrounded by plywood shear walls. From our review of the available drawings, it is not evident if sufficient shear transfer is provided for between these two elements. Additionally, we noted that a portion of the shear walls that were considered to be part of the main lateral force resisting system had height to width aspect ratios that were grater that what is allowed today. We recommend that further evaluation be completed to determine the effects of the potential deficiencies noted above.

Sierramont Middle School Main Building receives a subjective rating of 2.5.

Second Building

The second building is a single story building and has a high roof section similar to the main building. The entire building consists of a plywood sheathed roof acting as a horizontal wood diaphragm. The lower roof contains vertical plywood shear walls to resist lateral forces while the high roof consists of both plywood shear walls and steel brace frames. Our review of the available structural drawings revealed that the plywood shear walls are discontinuous between the high and low roof similar to the main building. We also noted that the steel brace frames were constructed in a "K" configuration. These types of structures have not performed well in the past, when subject to major seismic events.

We recommend that further investigation be performed on both buildings to verify the capacity of the slender shear walls as well as if the apparent discontinuous shear walls require retrofit measures to resolve the discontinuity. Additionally we recommend analyzing the brace frames in the second building to determine if the current configurations of the brace frames are adequate to resist the anticipated lateral forces.

Sierramont Middle School Second Building receives a subjective rating of 2.5.

Sierramont Middle School

Mechanical Systems Assessment Report

A. MECHANICAL BUILDING SYSTEMS

1. Existing Conditions:

a. Original chillers, cooling towers and pumps installed in the Equipment Yard.

b. Original fan coil units, exhaust fans, temperature controls, piping and ductwork.

c. New boilers (re-using the existing hot water pumps) added in 2013.

d. Existing ductwork and air distribution is original.

e. Existing hot and chilled water piping is original.

2. Recommendations:

a. Remove existing chillers, cooling towers and pumps. Replace with new air cooled chiller and chilled water pumps.

b. Remove all existing fan coil units and replace with new fan coil units. Modify and reconnect the existing ductwork to the new units. Install the replacement units most matching the removed units to minimize the modifications to the duct connections and the unit supports.

c. Replace all insulated supply and return ductwork, diffusers and grilles within the building. Replace all exhaust ductwork within the building.

d. Replace all insulated hot and chilled water within the building.

3. General:

a. This report and comments to follow are based on observations of the general condition of the mechanical systems and noticeable code issues resulting from a review of the existing drawings and an on-site visit, when required.

b. Refer to Appendix A for Title 24 requirements and general code issues that should be considered.

APPENDIX-A

a. General

1. Comply requirements of California Mechanical Code (CMC) latest edition.

b. Possible Ventilation Code Issues

1. Corridors cannot be used as plenums for the purpose of supplying or exhausting air.

2. Corridors must have minimum two (2) air changes per hour for ventilation.

3. Minimum ventilation for occupied spaces should be 15 cfm/person or 0.15 cfm/sq. ft., whichever is greater.

4. Exhaust airflow from bathrooms should be based on minimum 10 air changes per hour.

c. Possible Fire Smoke Issues

1. Fire/smoke dampers in the system must be interlocked with fire alarm system.

2. Corridors, lobbies, and building entrances to have dedicated supply air.

3. Chemistry classrooms with occupancy separation shall have fire/smoke damper.

6. All air handling equipment supplying air flow in excess of 2,000 cubic feet per minute to have duct smoke detectors in the supply air duct.

d. Possible Title 24 Issues

1. Heating furnaces to have minimum 80% efficiency.

2. Heating & Ventilating and Air Conditioning systems in excess of 2,500 cfm and a total cooling over 75,000 BTU/h (6.25 Tons) must have an economizer. Economizer must be fully integrated into the cooling system so that depending on the weather conditions, economizer can provide partial/full cooling when additional mechanical cooling is required.

3. Interior supply and return air ductwork (heating & cooling) shall be insulated with minimum R-value of 4.2.

4. Hot and chilled water piping less than 50°F and over 110°F shall be insulated with pipe insulation minimum R-value of 4.2.

5. Heating, ventilating, and air conditioning systems to have control capability with night setback.

6. Heating, ventilating, and air conditioning equipment to be certified by the State of California to meet minimum energy requirements.

Sierramont Middle School

Electrical and Low Voltage Systems Assessment Report

B. Electrical

1. Power Systems:

A 2000A, 277/480V, 3 phase, 4 wire switchboard with a 750KVA utility pad mounted transformer located in the electrical service yard provides power to the campus. The switchboard was installed around 2003 and is in good condition. According to PG&E record, the current peak usage on the system is of 378 amp. There is a spare capacity of 431 amp available at the service for future usage. If additional power is needed, the PG&E transformer shall need to be upgraded.

2. Fire Alarm System:

The existing fire alarm system was of manual/automatic system on a Gamewell 610 panel in the administration office installed around 2003. The panel is in good and functioning condition. The notification devices were not adequate to meet the current code requirement.

Recommendations:

a. Provide new horn and strobes in areas required by ADA, NFPA, CEC and CFC.

3. Public Address and Clock Systems:

The existing Bogen Multicom 2000 PA and master clock system located in the administration storage room is in good and functioning condition. Existing speaker and clock units are in good condition for reuse.

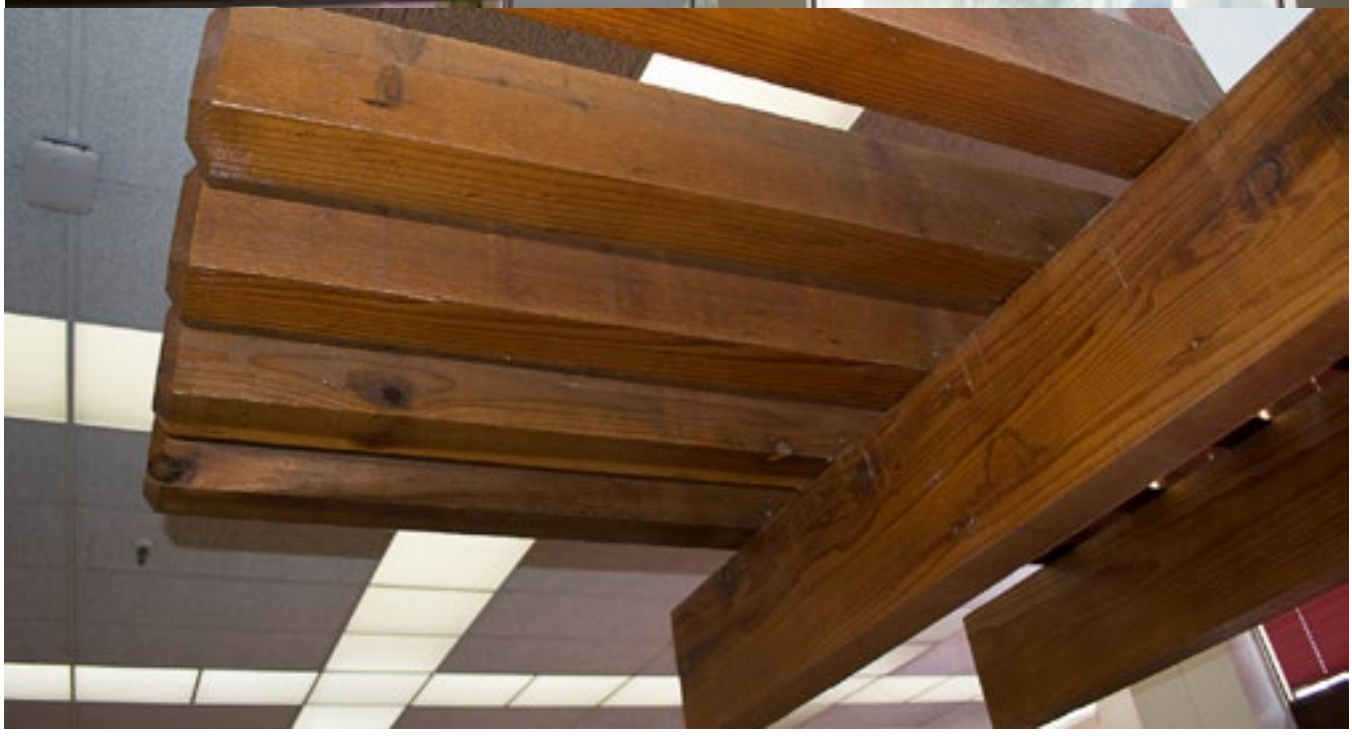
Will H. Ector, Jr.
Superintendent

1376 Piedmont Road
San Jose, CA 95132-2427

Phone: (408) 923-1800
Fax: (408) 923-0623

District Office

1376 Piedmont Road
San Jose, CA



District Office Assessment

Statistics:

Site:	2.5 Acres
Building Area:	Approx. 23,000 SF

Construction History:

1976	Building Constructed

Grounds:

Security:

Observations:

- The sides of the property abutting neighboring properties are fenced. The front and remaining side are not fenced.
- Building exterior lighting is insufficient.
- Existing doors often have windows in them, and not all doors have modern security hardware.
- There is no means of access control between the public spaces and the employee work areas.

Parking Lot:

Observations:

- Main parking lot entry has poor maneuverability due to presence of large circular planter.
- Asphalt paving is in moderate condition.
- Existing accessible parking does not meet current requirements.

Landscaping:

Observations:

- The existing landscaping is dated, non-existent in some places, and overgrown in others. The bare areas face erosion issues, and the overgrown areas trap debris as well as providing a home to nuisance pests.

Building:

Entry Visibility:

Observations:

- Building entry visibility is good.

Work Spaces:

Observations:

- Some work spaces are too small for their functions, or have departments spread out between areas.

- Finishes are worn.

Circulation Spaces:

Observations:

- Circulation area finishes are worn.
- There is a significant amount of underutilized open space in this building.

Meeting Spaces & Board Room:

Observations:

- There are not sufficient numbers of meeting spaces available for use.
- The existing meeting spaces are partitioned off with curtains, which prevents their use for sensitive discussions.
- Finishes are worn and dated.
- The technology available in the board room, while functional, no longer fills the needs of a 21st century learning institution.

Staff Work Areas:

Observations:

- The staff work area appears to be in moderate condition. The existing casework appears to be aging, although still serviceable.

Staff Lounge:

Observations:

- The existing staff room finishes are worn and dated.
- The existing casework appears serviceable, although it is beyond it's expected lifespan.
- Appliances appear original.

Public Restrooms:

Observations:

- The existing public restroom facilities currently provide sufficient numbers of fixtures for anticipated public events.

- The existing public restroom facilities are not compliant with current accessibility standards.

Staff Restrooms:

Observations:

- The existing staff restrooms are not compliant with current accessibility standards.

Storage Spaces:

Observations:

- There is a lack of secure storage for processing high-value shipments.
- There is a lack of secure storage for confidential records.

Structural System:

Observations:

- The Berryessa Union School District Educational Services Building is a single story wood structure. The building is comprised of a roof joist system supported on interior bearing walls and glulams spanning between bearing walls. The roof consists of sloped areas around the perimeter with a flat interior mechanical well.
- The lateral force resisting system consists of a plywood sheathed roof acting as a horizontal wood diaphragm spanning between vertical plywood shear walls. Seismic loads are resisted in both orthogonal directions by way of the wood shear walls located on the interior and exterior of the building structure. A preliminary review of the building is that the building is comprised of shearwalls in each direction that can handle the lateral load of the structure if the shearwalls are in good condition. During the review it was noted that not all shear walls included tie downs at the ends of the walls.

Mechanical Systems:

Observations:

- All existing components (packaged gas heat / electricl cool rooftop air conditioning units (typical of 7), ductwork, exhaust fans, diffusers and grilles, piping, controls, etc.) are original, and have exceeded their serviceable life expectancies.

Electrical Systems:

Observations:

- A 1600A, 120/208V, 3-phase, 4-wire switchboard with a 300KVA utility pad mounted transformer located in the electrical room provides power to the facility. The switchboard was of original build and in fair and functioning condition. According to PG&E record, the current peak usage on the system is of 372 amps.

Low Voltage Systems:

Observations:

- The existing fire alarm system was of a manual system on an original Simplex 4208 panel in the Electrical Room. The panel is in fair and functioning condition. The notification devices were not adequate to meet the current code requirements.
- There is an existing single zone Bogen PA system located in the Board Room. The system is in poor condition.
- There is no master clock system on site.

Roofing:

Observations:

- The existing high roof is a multi-ply built-up-roofing system. It is original to the building, and is beyond it's expected lifespan.
- The existing lower roof is a composition shingle system, which replaced the original Mission-style clay tiles, and was installed in 2012. It has a 20-year warranty, and an anticipated lifespan of 18 years.

Exterior Paint:

Observations:

- The existing exterior paint is generally in good condition, although it is aged, and shows many locations where re-painting has occurred over time.

District Office

Site Plans

BERRYESSA DISTRICT OFFICE

EXISTING BUILDINGS

7.5' 30' 90'
0 15' 60'

EXISTING CONDITIONS

BERRYESSA DISTRICT OFFICE

EXISTING BUILDINGS
REVONATED AREA

- Add fencing around the site and new patio area
- Renovate board room and reconfigure entrance
- Reconfigure ADA parking

District Office

Paving Assessment Report

DISTRICT OFFICE

Summary School Report

Asphalt Surface Evaluation

School Name: District Office

Area	Type	Use	Area (sq. ft.)	Defect Score	Recommendation	Cost	Year
A	DF	Park	46,437	105	Reconstruct	$336,668.25	2011
					Total:	**$336,668.25**	

Pavement Engineering Inc
Civil Engineers - Materials Testing
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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: District Office
Area (sf): 46,437
Area Notation: A
Buses: No
Surface Type: AC
Garbage Trucks: Yes
Use: Parking Lots or Areas
Defect Score: 105
Recommended Treatment: Reconstruct
Year: 2011
Visual Description: Pavement exhibits moderate to severe shrinkage cracking and severe raveling, previously sealed, poor condition.
Miscellaneous: Slope = 1.7/ 3.9/ 3.0/ 3.9/ 4.3, Pavement drains to drop inlets and C&G which drains to drop inlets, ADA - slopes exceed 2% in stalls, no signage.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
600	0%	2.0%	0.273	V

Crack Width	1/8 - 1/4"

Cost Breakdown

AC Cost:	$336,668.25
CF Cost:	$0.00
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$336,668.25

12/10/2010

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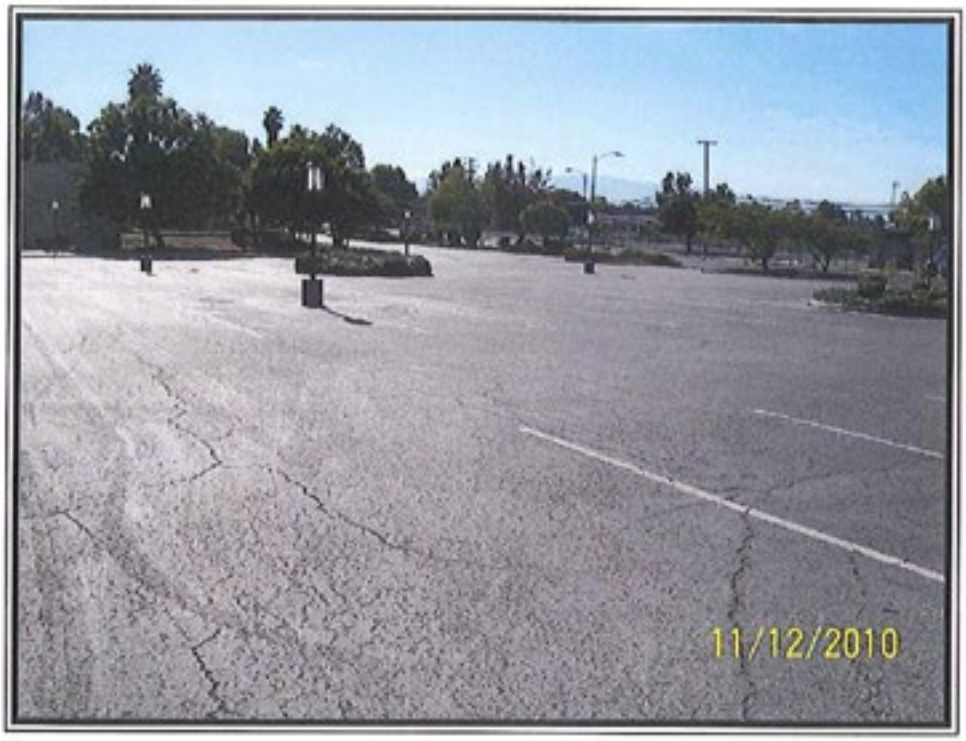
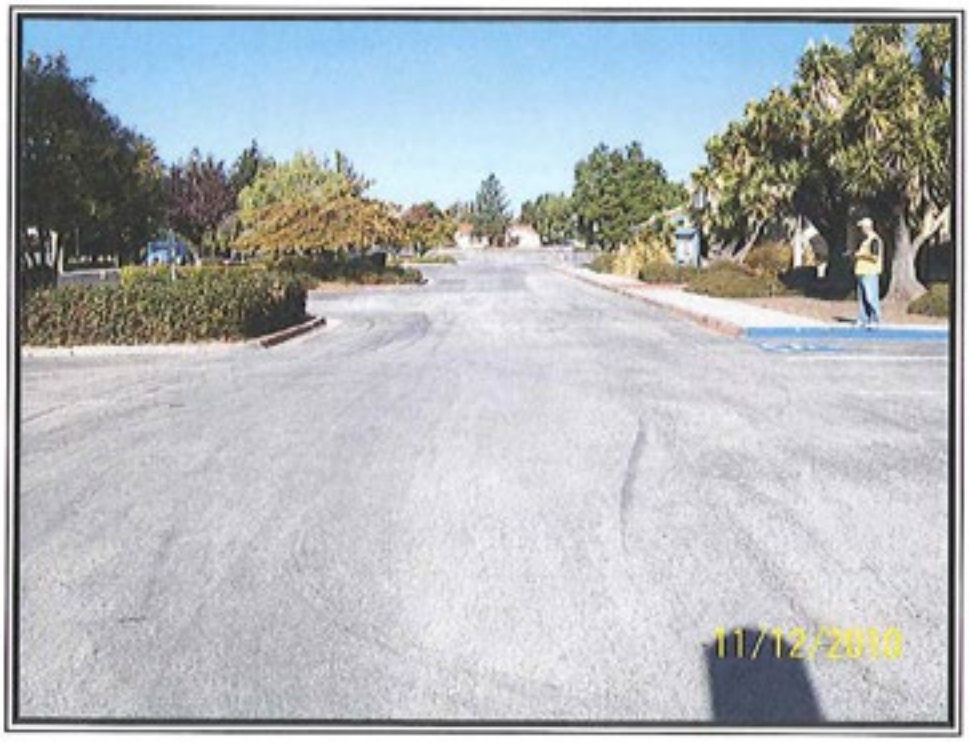


DISTRICT OFFICE - AREA A



DISTRICT OFFICE - AREA A

District Office

Seismic Assessment Report

and glulams spanning between bearing walls. The roof consists of sloped areas around the perimeter with a flat interior mechanical well.

The lateral force resisting system consists of a plywood sheathed roof acting as a horizontal wood diaphragm spanning between vertical plywood shear walls. Seismic loads are resisted in both orthogonal directions by way of the wood shear walls located on the interior and exterior of the building structure. A preliminary review of the building is that the building is comprised of shearwalls in each direction that can handle the lateral load of the structure if the shearwalls are in good condition. During the review it was noted that not all shear walls included tie downs at the ends of the walls. We recommend further evaluation of the building be conducted to see if the addition of tie downs would significantly improve the performance of the building.

Educational Services Center Building receives a subjective rating of 2.0.

Qualitative Seismic Analysis

For

Berryessa Union School District

SANTA CLARA COUNTY, CA

Prepared By

PEOPLES ASSOCIATES
STRUCTURAL ENGINEERS

625

October 31, 2013

District Office

Mechanical Systems Assessment Report

A. MECHANICAL BUILDING SYSTEMS

1. Existing Conditions:

a. All existing components (packaged gas heat/ electric cool rooftop air conditioning units (typical – 7), ductwork, exhaust fans diffusers and grilles, piping, controls, etc.) are all original and have exceeded their serviceable life expectancies.

2. Recommendations:

a. Remove all existing air conditioning units and replace with new air conditioning units.

b. Perform heat load calculations to ensure new equipment is of sufficient capacity and to suit new conditions.

c. Replace all insulated supply and return ductwork, diffusers and grilles within the building. Replace all exhaust ductwork within the building.

3. General:

a. This report and comments to follow are based on observations of the general condition of the mechanical systems and noticeable code issues resulting from a review of the existing drawings and an on-site visit, when required.

b. Refer to Appendix A for Title 24 requirements and general code issues that should be considered.

APPENDIX-A

a. General

1. Comply requirements of California Mechanical Code (CMC) latest edition.

b. Possible Ventilation Code Issues

1. Corridors cannot be used as plenums for the purpose of supplying or exhausting air.

2. Corridors must have minimum two (2) air changes per hour for ventilation.

3. Minimum ventilation for occupied spaces should be 15 cfm/person or 0.15 cfm/sq. ft., whichever is greater.

4. Exhaust airflow from bathrooms should be based on minimum 10 air changes per hour.

c. Possible Fire Smoke Issues

1. Fire/smoke dampers in the system must be interlocked with fire alarm system.

2. Corridors, and building entrances to have dedicated supply air.

3. All air handling equipment supplying air flow in excess of 2,000 cubic feet per minute to have duct smoke detectors in the supply air duct.

d. Possible Title 24 Issues

1. Heating furnaces to have minimum 80% efficiency.

2. Heating & Ventilating and Air Conditioning systems in excess of 2,500 cfm and a total cooling over 75,000 BTU/h (6.25 Tons) must have an economizer. Economizer must be fully integrated into the cooling system so that depending on the weather conditions, economizer can provide partial/full cooling when additional mechanical cooling is required.

3. Exterior supply and return air ductwork (heating & cooling) shall be insulated with minimum R-value of 8.0.

4. Interior supply and return air ductwork (heating & cooling) shall be insulated with minimum R-value of 4.2.

5. Heating, ventilating, and air conditioning systems to have control capability with night setback.

6. Heating, ventilating, and air conditioning equipment to be certified by the State of California to meet minimum energy requirements.

District Office

Electrical and Low Voltage Systems Assessment Report

B. Electrical

1. Power Systems:

A 1600A, 120/208V, 3 phase, 4 wire switchboard with a 300KVA utility pad mounted transformer located in the electrical room provides power to the facility. The switchboard was of original building in fair and functioning condition. According to PG&E record, the current peak usage on the system is of 372 amp. There is a spare capacity of 368 amp available at the service for future usage. If additional power is needed, the PG&E transformer shall need to be upgraded.

2. Fire Alarm System:

The existing fire alarm system was of a manual system on an original Simplex 4208 panel in the electrical room. The panel is in fair and functioning condition. The notification devices were not adequate to meet the current code requirement.

Recommendations:

a. Provide new horn and strobes in areas required by ADA, NFPA, CEC and CFC.

3. Public Address and Clock Systems:

There is an existing single zone Bogen PA system located in the Board room. The system is in good and functioning condition. There is no master clock system on site.

Will H. Ector, Jr.
Superintendent

1376 Piedmont Road
San Jose, CA 95132-2427

Phone: (408) 923-1800
Fax: (408) 923-0623

MOT Office

945 Piedmont Road
San Jose, CA

Maintenance Operations and Transportation Assessment

Statistics:

Site:	2.5 Acres
Building Area:	Approx. 25,000 SF

Construction History:

1968	Building Constructed
2008	Construction of Mobile Phone Antenna Tower

Grounds:

Security:

Observations:

- Existing vehicle gate at main entry is in poor condition.
- Building exterior lighting is insufficient.
- The age and condition of some of the buildings makes them difficult to properly secure.

Parking Lot and Paved areas:

Observations:

- Main parking lot is in good condition, with minor repairs needed.
- Paved work areas are in relatively poor condition, requiring more extensive rehabilitation efforts.

Landscaping:

Observations:

- Site landscaping is in generally good condition.

Building:

Entry Visibility:

Observations:

- Building entry visibility is less than optimal, as the main entry point is obscured from the parking lot, with no signage to direct visitors to the entrance.

Office Areas:

Observations:

- Office space finishes are in poor condition.
- Doors are in poor condition, many need replacement.

Storage and Work Spaces:

Observations:

- Generally in poor, although functional, condition. The buildings are aged and have seen significant wear and tear over the years.

Staff Lounge:

Observations:

- The existing staff room finishes are worn and dated.

Staff Restrooms:

Observations:

- Finishes and fixtures are in poor condition.

Structural System:

Observations:

- Structural drawings were not available for these buildings.

Mechanical Systems:

Observations:

- All existing components (rooftop gas heat / electric cool, furnaces, shop equipment, exhaust fans, ductwork, diffusers and grilles, piping, controls etc.) are all original and have exceeded their serviceable life expectancies.

Electrical Systems:

Observations:

- There are three (3) electrical services on site.
- Service 1 is of a 200A, 120/240V single phase service located behind the front office building with fuse and gutter disconnect for distribution. The panel is powere from a pole mounted 45KVA PG&E transformer via aerial cables. The service is of old construction and has no space or capacity for expansion. According to PG&E record, the current peak usage on the service is of 54 amp.
- Service 2 is of a 400A, 120/240V single phase panel located outside the house unit facing south. The panel is service from the same pole mounted transformer as Service 1. The Switchboard 2 was of original build and in fair and functioning condition. According to PG&E record, the current peak usage on the system is of 54 amp.
- Service 3 is of a 600A, 120/280V, 3 phase, 4 wire switchboard located outside of the maintenance shop building with a pole mounted PG&E transformer of 45 KVA. The

panel was of original build and in fair condition. According to PG&E record, the current peak usage of the service is of 92 amp.

Low Voltage Systems:

Observations:

- The existing fire alarm system was of a manual system on an original Faraday panel for the house unit only. The panel is in fair and functioning condition. The notification devices where not adequate to meet the current code requirement.
- There is no fire alarm system in the office and maintenance shop building.
- There is no paging / clock system at the facility.

Roofing:

Observations:

- The existing roofing is in poor condition, evidence of leaks are apparent, requiring frequent maintenance and repair.

Exterior Paint:

Observations:

- The existing exterior paint is generally in good condition, although it is aged, and shows many locations where re-painting has occurred over time.

MOT

Paving Assessment Report

MAINTENANCE OFFICE

Summary School Report

Asphalt Surface Evaluation

School Name: Maintenance Office

Area	Type	Use	Area (sq. ft.)	Defect Score	Recommendation	Cost	Year
A	DF	Park	28,923	22	Crack Fill and Seal Coat	$12,701.51	2011
B	DF	Park	24,474	69	Reconstruct	$177,436.50	2011
C	DF	Park	8,250	76	Reconstruct	$59,812.50	2011
					Total:	**$249,950.51**	

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Maintenance Office
Area (sf): 28,923
Area Notation: A
Buses: Yes
Surface Type: AC
Garbage Trucks: No
Use: Parking Lots or Areas
Defect Score: 22
Recommended Treatment: Crack Fill and Seal Coat
Year: 2011
Visual Description: Pavement exhibits moderate raveling and has never been sealed, no patching.
Miscellaneous: Slope = 2.0%, Pavement sheet flows across pavement. Section pf PCC sidewalk needs to be replaced (4X38).

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	0%	0.0%	0.020	M

Crack Width	<1/8"

Cost Breakdown

AC Cost:	$10,123.05
CF Cost:	$578.46
DO Cost:	$0.00
Misc. Cost:	$2,000.00
Total Cost:	$12,701.51

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Maintenance Office
Area (sf): 24,474
Area Notation: B
Buses: Yes
Surface Type: AC
Garbage Trucks: Yes
Use: Parking Lots or Areas
Defect Score: 69
Recommended Treatment: Reconstruct
Year: 2011
Visual Description: Pavement exhibits moderate raveling with areas of alligator cracking and a few areas of base failure.
Miscellaneous: Slope = 2.4/ 3.1/ 4.2, Pavement sheet flows to a 9" round drop inlet, severe ponding at drop inlet, new drainage design required.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	1%	3.0%	0.077	M

Crack Width	1/4 - 1/2"

Cost Breakdown

AC Cost:	$177,436.50
CF Cost:	$0.00
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$177,436.50

12/10/2010

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BERRYESSA UNION SCHOOL DISTRICT

Individual Area School Report

Asphalt Surface Evaluation

School Name: Maintenance Office
Area (sf): 8,250
Area Notation: C
Buses: Yes
Surface Type: AC
Garbage Trucks: Yes
Use: Parking Lots or Areas
Defect Score: 76
Recommended Treatment: Reconstruct
Year: 2011
Visual Description: Pavement exhibits moderate raveling with areas of alligator cracking and base failure.
Miscellaneous: Slope = 0.2/ 1.4/, Pavement sheet flows to a drop inlet located at the far end of the site, drop inlet is shallow and doesn't appear to drain, need drainage improvements.

Misc. AC Fill	Base Failure (%)	Alligator Cracking (%)	Crack Factor	Ravel
0	1%	3.0%	0.101	M

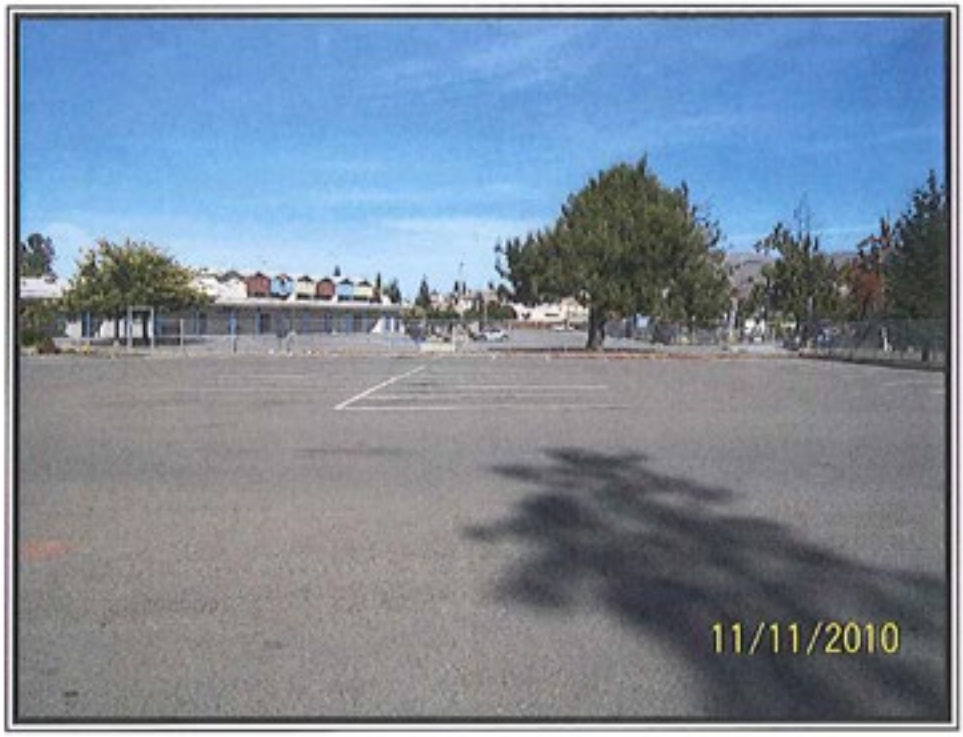
Crack Width	1/4 - 1/2"

Cost Breakdown

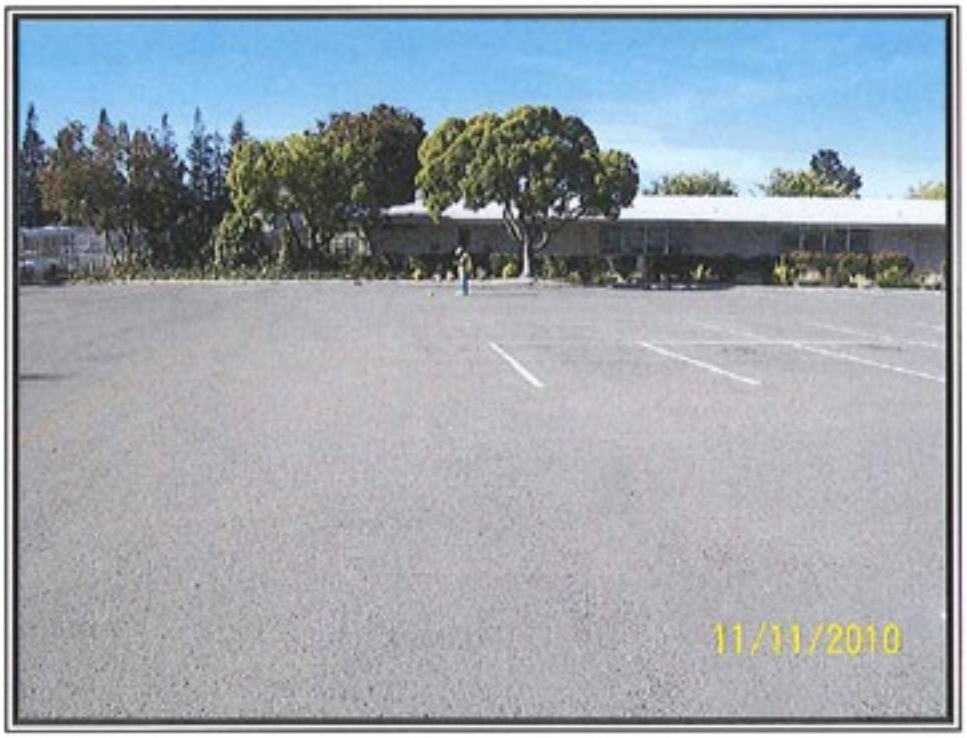
AC Cost:	$59,812.50
CF Cost:	$0.00
DO Cost:	$0.00
Misc. Cost:	$0.00
Total Cost:	$59,812.50

12/10/2010

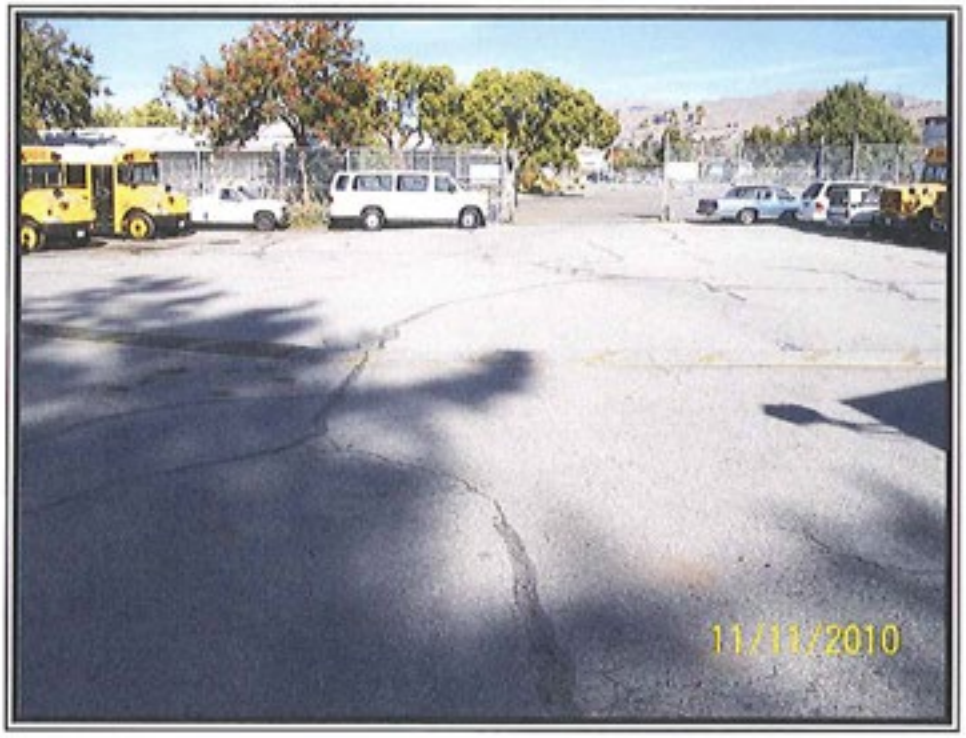
Pavement Engineering Inc
Civil Engineers - Materials Testing
Specializing in Pavement Rehabilitation
San Luis Obispo Office (805) 781-2265



M.O.T. - AREA A

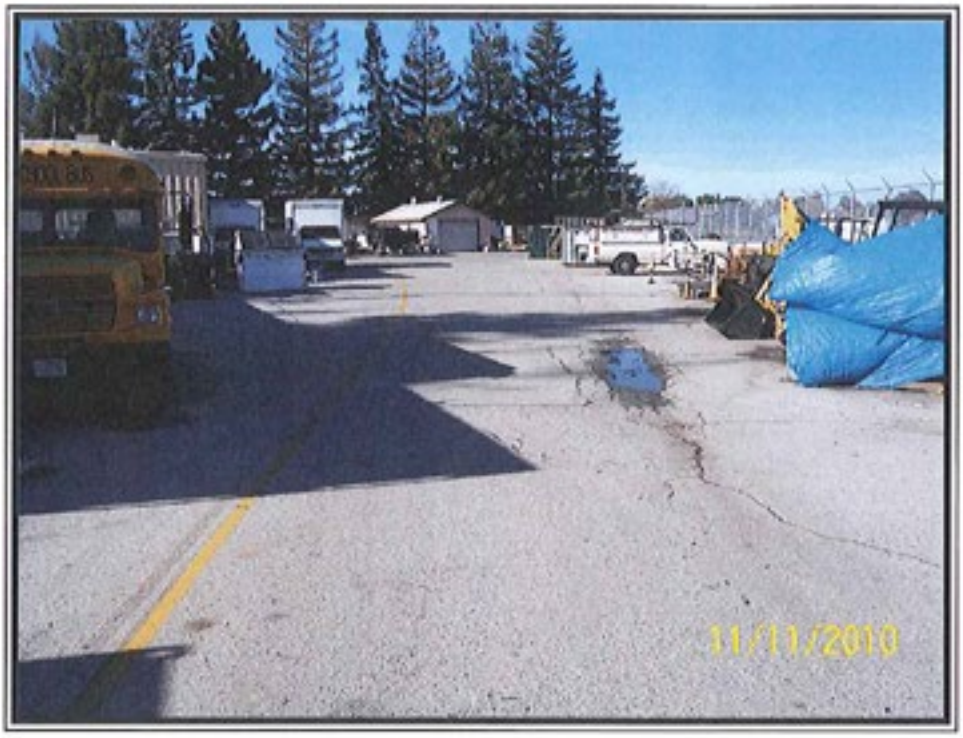


M.O.T. AREA A



M.O.T. - AREA B

M.O.T. - AREA B



M.O.T. - AREA C

M.O.T. - AREA C

MOT

Mechanical Systems Assessment Report

A. MECHANICAL BUILDING SYSTEMS

1. Existing Conditions:

a. All existing components (rooftop gas heat / electric cool, furnaces, shop equipment, exhaust fans, ductwork, diffusers and grilles, piping, controls, etc.) are all original and have exceeded their serviceable life expectancies.

2. Recommendations:

a. Remove all existing air conditioning units, furnaces, shop equipment and exhaust fans and replace with new comparable units to minimize the impact to existing supports and connections.

b. Perform heat load calculations to ensure new equipment is of sufficient capacity and to suit new conditions.

c. Replace all insulated supply and return ductwork, diffusers and grilles within the building. Replace all exhaust ductwork within the building.

3. General:

a. This report and comments to follow are based on observations of the general condition of the mechanical systems and noticeable code issues resulting from a review of the existing drawings and an on-site visit, when required.

b. Refer to Appendix A for Title 24 requirements and general code issues that should be considered.

APPENDIX-A

a. General

1. Comply requirements of California Mechanical Code (CMC) latest edition.

b. Possible Ventilation Code Issues

1. Corridors cannot be used as plenums for the purpose of supplying or exhausting air.

2. Corridors must have minimum two (2) air changes per hour for ventilation.

3. Minimum ventilation for occupied spaces should be 15 cfm/person or 0.15 cfm/sq. ft., whichever is greater.

4. Exhaust airflow from bathrooms should be based on minimum 10 air changes per hour.

c. Possible Fire Smoke Issues

1. Fire/smoke dampers in the system must be interlocked with fire alarm system.

2. Corridors, and building entrances to have dedicated supply air.

3. All air handling equipment supplying air flow in excess of 2,000 cubic feet per minute to have duct smoke detectors in the supply air duct.

d. Possible Title 24 Issues

1. Heating furnaces to have minimum 80% efficiency.

2. Heating & Ventilating and Air Conditioning systems in excess of 2,500 cfm and a total cooling over 75,000 BTU/h (6.25 Tons) must have an economizer. Economizer must be fully integrated into the cooling system so that depending on the weather conditions, economizer can provide partial/full cooling when additional mechanical cooling is required.

3. Exterior supply and return air ductwork (heating & cooling) shall be insulated with minimum R-value of 8.0.

4. Interior supply and return air ductwork (heating & cooling) shall be insulated with minimum R-value of 4.2.

5. Heating, ventilating, and air conditioning systems to have control capability with night setback.

6. Heating, ventilating, and air conditioning equipment to be certified by the State of California to meet minimum energy requirements.

MOT

Electrical and Low Voltage Systems Assessment Report

B. Electrical

1. Power Systems:

There are three (3) electrical services on site. Service 1 is of a 200A, 120/240V single phase service located behind the front office building with fuse and gutter disconnect for distribution. The panel is powered from a pole mounted 45KVA PG&E transformer via aerial cables. The service is of old construction and has no space or capacity for expansion. According to PG&E record, the current peak usage on the service is of 54 amp. There is a spare capacity of 89 amp available at the service transformer for future usage. If additional power is needed, the switchboard and PG&E transformer shall need to be upgraded

Service 2 is of a 400A, 120/240V single phase panel located outside of the house unit facing south. The panel is service from the same pole mounted PG&E transformer as Service 1. The switchboard 2 was of original building in fair and functioning condition. According to PG&E record, the current peak usage on the system is of 54 amp. There is a spare capacity of 89 amp available at the service transformer for future usage. If additional power is needed, the PG&E transformer shall need to be upgraded.

Service 3 is of a 600A, 120/208V, 3 phase, 4 wire switchboard located outside of the maintenance shop building with a pole mounted PG&E transformer of 45 KVA. The panel was of original building and in fair condition. According to PG&E record, the current peak usage on the service is of 92 amp. There is a spare capacity of 10 amp available at the service. If additional power is needed, the PG&E transformer shall need to be upgraded

2. Fire Alarm System:

The existing fire alarm system was of a manual system on an original Faraday panel for the house unit only. The panel is in fair and functioning condition. The notification devices were not adequate to meet the current code requirement. There is no fire alarm system in the office and maintenance shop building.

Recommendations:

a. Provide new horn and strobes in areas required by ADA, NFPA, CEC and CFC.
b. Provide new fire alarm system at office and maintenance buildings.

3. Public Address and Clock Systems:

There is no paging/clock system at the facility.

Will H. Ector, Jr.
Superintendent

1376 Piedmont Road
San Jose, CA 95132-2427

Phone: (408) 923-1800
Fax: (408) 923-0623

Central Kitchen

995 Bard Street
San Jose, CA

Central Kitchen Assessment

Grounds:

Parking Lot and Paved areas:

Observations:

- See Toyon Assessment for condition of asphalt paving.
- The existing parking lot, which is shared with the school, is too small for the delivery trucks that must frequently arrive and depart.
- Because the parking lot is shared, the kitchen delivery activity creates a safety risk.

Building:

General:

Observations:

- Existing finishes are in poor condition.
- Kitchen layout and equipment no longer meet current accessibility requirements.
- Kitchen does not comply with current Health Department requirements.

Office Areas:

Observations:

- Office space has been carved out of existing corners of the kitchen space.
- The current space allotted for office space is insufficient.
- Due to the lack of walls around the office spaces, it is impossible to secure any items.

Storage Spaces:

Observations:

- Storage capacity is insufficient. Staff sometimes must divert deliveries to the MOT storage spaces to accept large deliveries that reduce costs.
- Current storage layout and organization is poor, often requiring double- or triple-handling of shipments before they can be used.

Refrigerator / Freezer:

Observations:

- The existing walk-in refrigerator and freezer are both original, and well beyond their expected lifespan. Both require continual maintenance to keep operational.
- Access to the freezer is difficult, as there is a significant incline to the short ramp leading to the door.

Work Area:

Observations:

- The existing work area is too small for the volume of meal production that occurs at this site. Additional production line space is needed, along with ancillary equipment.

Staff Restrooms:

Observations:

- Finishes and fixtures are in poor condition, and do not comply with current accessibility requirements.

Structural System:

Observations:

- See Toyon Elementary School Assessment for information.

Mechanical Systems:

Observations:

- See Toyon Elementary School Assessment for information.

Electrical Systems:

Observations:

- See Toyon Elementary School Assessment for information.

Low Voltage Systems:

Observations:

- See Toyon Elementary School Assessment for information.

Roofing:

Observations:

- The existing roofing is in poor condition, evidence of leaks are apparent, requiring frequent maintenance and repair.

Exterior Paint:

Observations:

- The existing exterior paint is generally in good condition, although it is aged, and shows many locations where re-painting has occurred over time.

Will H. Ector, Jr.
Superintendent

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Appendix

Structural Assessment Report

Qualitative Seismic Analysis

For

Berryessa Union School District

SANTA CLARA COUNTY, CA

Prepared By

PEOPLES ASSOCIATES
STRUCTURAL ENGINEERS

October 31, 2013

Project No.: 13-154

TABLE OF CONTENTS

PROJECT SUMMARY

Peoples Associates has performed a qualitative seismic assessment for the buildings within the Berryessa Elementary School District as presented in this report. Re-locatable buildings were excluded from this evaluation as they are predominantly Field Act certified and generally accepted to present a low risk to the building and its occupants, when subjected to a significant seismic event. The subject buildings were evaluated using the "Life Safety" performance level as defined by the ASCE 31-03 as "Building performance that includes damage to both structural and nonstructural components during a design earthquake, such that: (a) partial or total structural collapse does not occur, and (b) damage to nonstructural components is non—life-threating". A modified Tier 1 screening, utilizing our structural experience with these types of buildings was used for this evaluation as not all elements of the task list were suited for the level of evaluation reported. Deficiencies identified in this report are based upon a combination of the ASCE 31-03 Tier 1 evaluation and our experience with designing, retrofitting and analyzing these types of buildings.

An evaluation of each buildings lateral force resisting system was conducted based upon the available plans, relevant geotechnical data and specified material strength. In cases were some of these items were not available, conservative assumptions were made, when appropriate, that were consistent with standard construction methods of the buildings era. Additionally, lateral forces consistent with AISC 31-03 Tier 1 methodology, were calculated to aid in the evaluation of the buildings lateral force resisting systems.

To finalize our evaluation of the subject buildings, we have assigned a subject rating from 1 to 4 to help quantify the quality of each buildings later force resisting system as it relates to the "Life Safety" level of performance, as shown below:

1.0 **Good** – Buildings receiving this value appear to have a complete global lateral force resisting systems that when subject to a significant nearby seismic event are expected to perform at a level consistent with buildings which were constructed to modern day building codes. No significant lateral deficiencies were identified in these buildings and

no further action is recommended at this time with respect to the seismic evaluation and or retrofit measures.

2.0 **Acceptable** – Buildings receiving this value appear to have a global lateral force resisting system that when subjected to a significant nearby seismic event are expected to perform at a level consistent with buildings that were constructed to the building codes at the time of construction of the subject building. Potential deficiencies in the lateral force resisting system have been identified and it is recommend that further study, beyond the scope of this report, be conducted to determine if these potential deficiencies should be retrofitted as part of anticipated overall modernization efforts.

3.0 **Not Acceptable** – Buildings receiving this value appear to have a global lateral force resisting system that when subjected to a significant nearby seismic event are expected to perform at a levels that would put the building and its occupants at a significant risk. Substantial deficiencies in the lateral force resisting system have been identified and it is recommend that further study, beyond the scope of this report, be conducted as soon as practical to determine magnitude of these deficiencies and what, if any immediate actions would be recommend to improve the as-built condition.

4.0 **Dangerous** – Buildings receiving this value appear to have little or no functional global lateral force resisting system that when subjected to even relatively small, nearby seismic events, are expected to perform poorly and put the building and its occupants at significant risk. The probability of occurrence of this magnitude of seismic event is high and therefore it is recommended that immediate measures be taken to take these buildings out of service as soon as practical so that retrofit measures can be implemented.

No buildings evaluated in this report received a value of 4.0. The majority of the structures evaluated received a value of 2.0 or better. The table on the next page summarizes each buildings subjective score:

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BERRYESSA UNION SCHOOL DISTRICT SANTA CLARA COUNTY, CALIFORNIA			
#	**SCHOOL**	**BLDG ID (IF APPLICABLE)**	**SUBJECTIVE RATING[1]**
1	BROOKTREE ELEMENTARY SCHOOL	-	2.5
2	CHERRYWOOD ELEMENTARY SCHOOL	-	NR
3	LANEVIEW ELEMENTARY SCHOOL	A & C	2.0
		B	2.0
		D	2.0
4	MAJESTIC ELEMENTARY SCHOOL	-	2.5
5	MILPITAS CHRISTIAN SCHOOL (FORMERLY BIRCHWOOD SCHOOL)	-	2.5
6	MORRILL MIDDLE SCHOOL	ACADEMIC CENTER	2.5
		BARN	2.5
		UNION	2.5
		YOUTH CENTER (GYM)	1.0
7	NOBLE ELEMENTARY	-	NR
		D & E	2.5
		STAGE 3	2.0
		ADMIN BLDG	1.5
8	NORTHWOOD ELEMENTARY	100	3.0
	(FORMERLY LAKEWOOD SCHOOL)	200	2.0
		300-500	2.5
		600	2.0
9	PIEDMONT MIDDLE SCHOOL	-	NR
		ADDITIONS	2.0
10	RUSKIN ELEMENTARY SCHOOL	-	2.5
11	SIERRAMONT MIDDLE SCHOOL	MAIN	2.5
		SECOND	2.5
12	SUMMERDALE ELEMENTARY SCHOOL	-	2.5
13	TOYON ELEMENTARY SCHOOL	A,B,C,D,E,J,H & G	NR
		F	2.5
		H	NR
14	VINCI PARK ELEMENTARY SCHOOL	-	2.5
15	EDUCATIONAL SERVICES CENTER	-	2.0

Note: 1) NR - Not subjectively rated due to incomplete as-builts at the time of review. See the report for addition clarification.

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BROOKTREE ELEMENTARY SCHOOL

Key Plan (Photo taken from Google Maps)

Building Descriptions:

The building at Brooktree Elementary is one of three identical single story buildings with a wood framed and concrete shear walls built in 1974. The other two schools are Majestic Elementary School and Summerdale Elementary School, evaluated in separate sections of this report. The building consists of multiple attached classrooms with centralized multipurpose rooms. The building shape is fairly irregular with the roof containing several discontinuities due to differing plate heights and openings in the roof diaphragm.

The lateral force resisting system consists of a plywood sheathed roof acting as horizontal wood diaphragm spanning between vertical concrete shear walls. Seismic loads are resisted in both directions by way of the concrete shear walls located on the interior and exterior of the structure. Our evaluation of the lateral force resisting system revealed that the concrete shear walls appear to be adequately designed, however it is not clear if the as-built condition of the out of plane wall ties are adequate to resist modern day code level forces. We recommend that further evaluation

and investigation be conducted to determine the as-built condition as well as the capacity of the ties supporting the concrete walls out of plane.

Brooktree Elementary School receives a subjective rating of 2.5.

CHERRYWOOD ELEMENTARY SCHOOL

Key Plan (Photo taken from Google Maps)

Building Description:

The Cherrywood Elementary School Building is a tall single story structure with a mezzanine level. The drawings provided at the time of this review were incomplete. Only a partial set of Architectural plans were available. Very little information could be concluded from the plans. The building roof appears to be comprised of an open web truss system spanning between steel beams and concrete columns. A lateral system for the structure could not be determined. Since structural drawings were not made available for the building design, we recommend that these drawings be located and reviewed or the existing buildings be visually observed, documented and reviewed.

Cherrywood Elementary School does not receive a subjective rating at this time.

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LANEVIEW ELEMENTARY SCHOOL

Key Plan (Photo taken from Google Maps)

Building Descriptions:

Laneview Elementary School is comprised of four buildings. The main building containing the multipurpose room and offices is designated as Building B. The other three buildings are classrooms with Buildings A and C essentially being mirrors of each other. The roofs for Buildings A, B and C are tied together by covered walkways. Architectural and structural plans were available at the time of this review. From those plans the buildings, all built together at the same time, were built around 1967. Each building is referred to in this report as they are referenced on the Architectural plans. See the key plan for building labels.

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Buildings A & C

These buildings are single story wood structures with a roof joist system supported on interior bearing walls and glulams spanning between exterior walls. The roof consists of an upper and lower portion. The two buildings are mirrored each side of the main building.

This building's lateral force resisting system consists of a plywood sheathed roof acting as a horizontal wood diaphragm spanning between vertical plywood shear walls. Seismic loads are resisted in both orthogonal directions by way of the wood shear walls located on the exterior of the building structure. A preliminary review of the building is that the building is comprised of numerous non-orthogonal shearwalls that can handle the lateral load if the walls are in good condition. During the review it was noted that not all shearwalls included tiedowns which although the loads at the time of design may not have required the tiedowns, the code mandated loads have increased significantly since then. Therefore we would recommend a further analysis be completed to determine if tiedowns need to be added. In general, the installation of tiedowns at the ends of shearwalls is recommended to ensure the desired performance of the lateral system during a significant seismic event. Additionally, we recommend further review of the connections between the low and high roofs to ensure adequate load transfer.

Laneview Elementary School Buildings A & C receive a subjective rating of 2.0.

Bldg. B

This building is a single story wood structure with a roof joist system supported on interior bearing walls and glulams spanning between bearing walls. The roof consists of an upper and lower portion. The upper roof also cantilevers out to cover a portion of walkway adjacent to the building on each side.

This building's lateral force resisting system consists of a plywood sheathed roof acting as a horizontal wood diaphragm spanning between vertical plywood shear walls. Seismic loads are resisted in both orthogonal directions by way of the wood shear walls located on the exterior of the building structure. A preliminary review of the building is that the building is comprised of numerous non-orthogonal shearwalls that can handle the lateral load if the walls are in good

condition. During the review it was noted that not all shear walls included tie downs at each end of the wall. In general, the installation of tie downs at the ends of shear walls improves the overall performance of the building during a major seismic event. We recommend further evaluation of the building be conducted to see if the addition of tie downs would significantly improve the performance of the building. Additionally, we recommend further review of the connections between the low and high roofs to ensure adequate load transfer.

Laneview Elementary School Building B receives a subjective rating of 2.0.

Bldg. D

This building is a single story wood structure with a single level roof joist system supported on bearing walls. This building's lateral force resisting system consists of a plywood sheathed roof acting as a horizontal wood diaphragm spanning between vertical plywood shear walls. Seismic loads are resisted in both orthogonal directions by way of the wood shear walls located on the exterior of the building structure. Our review of the building is that the building is comprised of shearwalls in each direction that can handle the lateral load of the structure if the shearwalls are in good condition. During the review it was noted that not all walls included tie downs at each end. We recommend further evaluation of the building be conducted to see if the addition of tie downs would significantly improve the performance of the building.

Laneview Elementary School Building D receives a subjective rating of 2.0.

MAJESTIC WAY ELEMENTARY SCHOOL

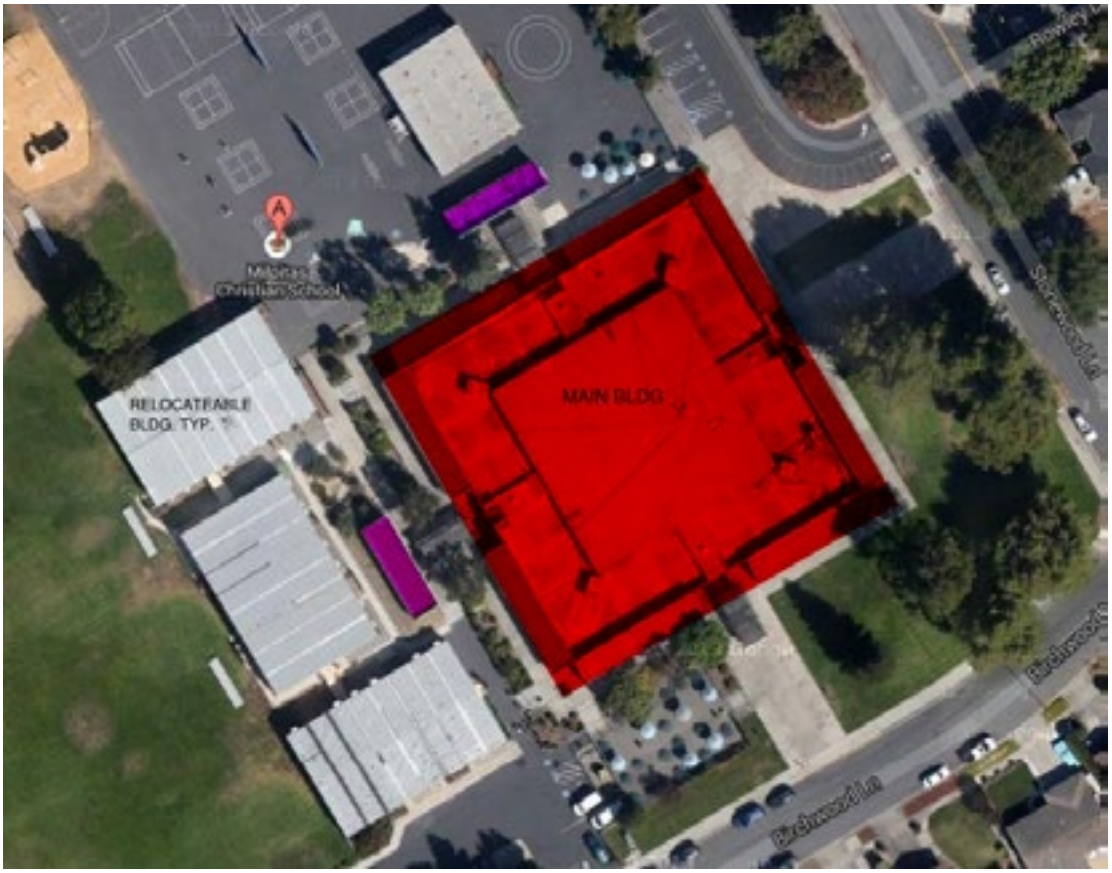
Key Plan (Photo taken from Google Maps)

Building Description:

The building is one of three identical single story building with a wood framed roof with concrete walls built in 1974. Please refer to the evaluation written for Brooktree Elementary for specific recommendations for this building type.

Majestic Elementary School receives a subjective rating of 2.5.

MILPITAS CHRISTIAN SCHOOL
(FORMERLY BIRCHWOOD ELEMENTARY SCHOOL)



Key Plan (Photo taken from Google Maps)

Building Description:

Main Building

The main building consists of a single story structure with an interior mezzanine level as is perceived to have been built around 1970. The available drawings for this building were incomplete and were not the approved set and therefore a complete evaluation of the building was not possible at this time. However from the available drawings we were able to determine that the roof and mezzanine are wood framed with the exterior walls constructed of CMU. The overall building shape is regular with the exception of the roof plate heights that differ in a few locations.

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The lateral force resisting system appears to consist of a plywood sheathed roof acting as horizontal wood diaphragm spanning between exterior CMU shear walls resisting seismic loads in both directions. Although, a complete set of design documents was not available at the time of our review, we were able to determine the most probable later force resisting system for this structure. From our experience, buildings of this type of construction built during this era lacked the necessary construction detailing required for the building to perform at a level consistent with the "Life Safety" level of performance.

We recommend that an effort be put forth to locate the original approved set of construction documents so that a full seismic evaluation can be completed for this structure. In the absence of reviewing the original drawings, we would recommend that a site observation be conducted to verify as-built conditions with the expectations that some destructive demolition be required to expose key elements of the lateral force resisting system. Upon the evaluation of either of the above methods, retrofit measures can be made, as necessary, to up-grade the existing structure to an acceptable level of performance.

Bathroom Buildings

Adjacent to the main building are two one story bathroom structures. The roof of the structures consists of a sloped wood roof diaphragm with CMU perimeter walls. As is the case with the main building, adequate structural drawings were not available for review, to determine the expected performance level of these buildings. However, as in the case of the main building, we were able to determine the general construction type of the building to be similar to the main building. Therefore we would similarly recommend that either the original construction documents be made available for review or a site observation be conducted to verify the as-built conditions.

The proposed retrofit for the bathroom buildings would most likely involve updating the out-of-plane wall ties to meet the most current code requirements.

Milpitas Christian School (Formerly Birchwood School) receives a subjective rating of 2.5

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MORRILL MIDDLE SCHOOL

Key Plan (Photo taken from Google Maps)

Building Descriptions:

Morrill Middle School consists of four buildings: the Academic Center, Barn, Union and Youth Center (Gym). The Academic Center, Barn and Union were all constructed at the same time in 1971. The Youth Center (Gym) was a later addition constructed more recently in 2003.

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Academic Center, Barn and Union

The Academic Center, Barn and Union were all designed at the same time, by the same engineer and are of similar construction. The three buildings were constructed in 1971. The lateral force resisting system for each building consists of a plywood sheathed roof acting as a horizontal wood diaphragm spanning between CMU shear walls. Shear walls are generally located around the perimeter of each building section or room. The CMU shear walls are anchored to the foundation at 16" O.C. for in-plane shear transfer and to the roof diaphragm at 4'-0" O.C. for out-of-plane loading. Although wall ties are provide to brace the walls out of plane, these ties as detailed are likely insufficient to resist modern day code level forces. Therefore we recommend that further evaluation be conducted to determine if any retrofit measure would be required to upgrade the structure so that its anticipated performance is at a "Life Safety" level.

Continuous cross-ties do not appear to be present in the roof framing at any of the three buildings. Additionally, discrete chord members were not found in the CMU walls at the roof level. It is recommended that further investigation be performed to determine if the wall reinforcing contains adequate horizontal reinforcing adjacent to the roof to develop chord forces and to determine if diaphragm shear levels are acceptable given the lack of continuous cross-ties. It was also noted that there may be several covered walkways connected to adjacent building sections. These covered walkways should be reviewed for susceptibility to damage due to differential movement between adjacent structures in an earthquake.

Morrill Middle School Academic Center, Barn and Union receive a subjective rating of 2.5.

Youth Center (Gym)

The Youth Center Building located at Morrill Middle School is a gymnasium structure with several auxiliary rooms for storage, activities and restrooms. The roof consists of an upper and lower portion that is compromised of steel framing spanning to exterior steel or CMU framing. The lateral system consists of a dual system of steel braces frames and CMU shearwalls. The building was constructed to recent code standards with no noticeable structural deficiencies.

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Youth Center (Gym) at Morrill Middle School receives a subjective rating of 1.0.

NOBLE ELEMENTARY SCHOOL

Key Plan (Photo taken from Google Maps)

Building Descriptions:

Noble Elementary School consists of multiple buildings oriented in a "hub" configuration. Structural drawings were not made available for the original construction; however, it is assumed to be early 1960s. Structural drawings were available for the design of Unit D, Unit E, Stage 3 and the Administration Building.

Since structural drawings were not made available for the original campus design it is recommended that these drawings be located and reviewed or the existing buildings be visually observed, documented and reviewed.

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It was also noted that there are several covered walkways connected to adjacent buildings. These covered walkways should be reviewed for susceptibility to damage due to differential movement between adjacent structures in an earthquake.

Units D and E

Units D and E were of nearly identical design, each consisting of two separate buildings, and were built in 1963. The lateral force resisting system for each building consists of a plywood sheathed roof acting as a horizontal wood diaphragm spanning between vertical plywood shear walls. Seismic loads are resisted in both orthogonal directions by way of wood shear walls located on the exterior and interior of the buildings.

All four building structures were designed with long windows just below the roof line. These windows create a discontinuity between the roof diaphragms and shear walls in many locations. 3x6 mullions were provided as a transfer mechanism but should be reviewed in greater detail. One of the buildings in Unit D includes a low roof surrounded by wood shear walls. According to the details there may not be adequate strapping between the upper and lower shear walls. Additionally, there does not appear to be a direct transfer mechanism between the upper and lower roof for diaphragm shear loads.

The majority of the roof diaphragms have diaphragm aspect ratios (i.e. length to width ratio) very near 2.0. Straight-sheathed diaphragms are flexible and generally have lower capacity than other types of wood diaphragms. As such, the diaphragm aspect ratio is generally limited during design. Additionally, these diaphragms appear to be unblocked.

We recommend that further investigation be performed to verify adequate diaphragm capacity at diaphragms with higher aspect ratios, verify if adequate load transfer can be obtained between the diaphragm and shear walls and to determine if adequate load transfer can be obtained between the high and low roofs.

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Noble Elementary School Units D and E receive a subjective rating of 2.5.

Stage 3

The Stage 3 building was built in 1968 and is of similar construction to Units D and E, however this building did not have the full length clerestory window condition. The lateral force resisting system for each building consists of a plywood sheathed roof acting as a horizontal wood diaphragm spanning between vertical plywood shear walls. Seismic loads are resisted in both orthogonal directions by way of wood shear walls located on the exterior and interior of the buildings.

The roof diaphragm aspect ratio (i.e. length to width ratio) is very near 2.0. Straight-sheathed diaphragms are flexible and generally have lower capacity than other types of wood diaphragms. As such, the diaphragm aspect ratio is generally limited during design. Additionally, these diaphragms appear to be unblocked.

We recommend that further investigation be performed to verify adequate diaphragm capacity at diaphragms with higher aspect ratios, verify if adequate load transfer can be obtained between the diaphragm and shear walls and to determine if adequate load transfer can be obtained between the high and low roofs.

Noble Elementary School Stage 3 receives a subjective rating of 2.0.

Administration Building

The Administration Building was built in 1992 and consists of a wood panelized roof diaphragm with plywood sheathed shear walls. The building was constructed to relatively recent code standards with no notable, structural deficiencies.

Noble Elementary School Administration Building receives a subjective rating of 1.5.

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NORTHWOOD ELEMENTARY SCHOOL
(FORMERLY LAKEWOOD ELEMENTARY)

Key Plan (Photo taken from Google Maps)

Building Descriptions:

Northwood Elementary School is comprised of six buildings. Architectural drawings were not available at the time of review for this campus. Based on the structural drawings that were available, all the buildings are estimated to be constructed at the same time roughly around the mid-1960s. The breakdown of each building corresponds to the structural plan designations and will be referenced in that way. See the key plan for building labels.

Unit 100

This unit is a single story wood framed building with a plywood roof supported on steel and glue lam beams spanning between concrete columns and exterior walls. The building footprint is regular in shape, but the roof diaphragm is discontinuous due to differing plate heights.

This building's lateral force resisting system consists of a plywood sheathed roof acting as a horizontal wood diaphragm spanning between cantilevered concrete columns. Seismic loads are resisted in both orthogonal directions by way of the concrete columns located on the interior of the building structure. This lateral system is not a type that is typically used for this type of structure. We recommend a more thorough investigation of this system to determine the adequacy of the design. Additionally, the structure appears to have a discontinuity at the high roof diaphragm that does not appear to be tied back into the lower roof in a manner consistent with current code standards.

Northwood Elementary School Unit 100 receives a subjective rating of 3.0.

Unit 200

This unit is a single story wood framed building with a plywood roof supported on glue lam beams spanning between exterior walls.

This building's lateral force resisting system consists of a plywood sheathed roof acting as a horizontal wood diaphragm spanning between vertical plywood shear walls. Seismic loads are resisted in both orthogonal directions by way of the wood shear walls located on the exterior of the building structure. A preliminary review of the building is that the building is comprised of numerous shearwalls that can adequately handle the lateral load if the walls are in good condition. During the review it was noted that not all shear walls included tie downs at each end of the wall. We recommend further evaluation of the building be conducted to see if the addition of tie downs would significantly improve the performance of the building.

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Northwood Elementary School Unit 200 receives a subjective rating of 2.0.

Units 300, 400 & 500

These units are single story wood building with a panelized roof system supported on steel beams and glulams spanning between exterior walls.

This building's lateral force resisting system consists of a plywood sheathed roof acting as a horizontal wood diaphragm spanning between vertical plywood shear walls. Seismic loads are resisted in both orthogonal directions by way of the wood shear walls located on the exterior of the building structure. A preliminary review of the building is that the building is comprised of numerous shearwalls that can adequately handle the lateral load if the walls are in good condition. During the review it was noted that not all shear walls included tie downs at each end of the wall. We recommend further evaluation of the building be conducted to see if the addition of tie downs would significantly improve the performance of the building.

Northwood Elementary School Units 300-500 receive a subjective rating of 2.0.

Unit 600

This unit is a small single story wood building with a wood joist roof system supported on a sawn lumber beam spanning between exterior walls.

This building's lateral force resisting system consists of a plywood sheathed roof acting as a horizontal wood diaphragm spanning between vertical plywood shear walls. Seismic loads are resisted on three sides by way of the wood shear walls located on the exterior of the building structure. A preliminary review of the building is that the building is comprised of numerous shearwalls that can adequately handle the lateral load if the walls are in good condition. During the review it was noted that not all shear walls included tie downs at each end of the wall. We recommend further evaluation of the building be conducted to see if the addition of tie downs would significantly improve the performance of the building.

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Northwood Elementary School Unit 600 receives a subjective rating of 2.0.

PIEDMONT MIDDLE SCHOOL

Key Plan (Photo taken from Google Maps)

Building Descriptions:

Piedmont Middle School consists of multiple buildings for which the original construction dates are unknown. Structural drawings were not available for the original campus construction. Based on the structural drawings that were available, we have the following understanding: 1) several building additions (shaded orange above) were constructed in 1973 to include a new classroom, new shop and expanded shower/locker room, and 2) the campus was "modernized" in 1995. The "modernization" appears to only include infill of several walls and creation of new wall openings and does not appear to include any seismic retrofit/rehabilitation items.

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Since structural drawings were not made available for the original campus design it is recommended that these drawings be located and reviewed or the existing buildings be visually observed, documented and reviewed.

Classroom, Shop and Shower/Locker room Additions

The classroom, shop and shower/locker room additions were constructed in 1973, presumably designed to the 1973 California Building Code. The additions are generally all of similar design. The lateral force resisting system consists of a plywood sheathed roof acting as horizontal wood diaphragm spanning between vertical plywood shear walls. Seismic loads are resisted in both orthogonal directions by way of wood shear walls located on the exterior and interior of the additions. All of the addition structures were designed to be seismically separated from the existing structures with the exception of the shower room wings. The shower room wings were attached to the existing shower room building and rely on the existing structure for lateral support on one side each.

During our review it was noticed that the shower room additions have higher diaphragm aspect ratios (i.e. length to width ratio exceeding 2.0). Straight-sheathed diaphragms are flexible and generally have lower capacity than other types of wood diaphragms. As such, the diaphragm aspect ratio is generally limited during design.

It was also noted that there are several shear walls at the shop addition that appear to have a height to width aspect ratio that is greater than is currently allowed by code. Narrow shear walls are generally subject to much higher stresses and severe deformations that will reduce the capacity of the wall.

We recommend that further investigation be performed to verify adequate diaphragm capacity at diaphragms with higher aspect ratios and to determine if the narrow shear walls are adequate to resist the sites lateral forces.

Piedmont Middle School Additions receive a subjective rating of 2.0.

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RUSKIN ELEMENTARY SCHOOL

Key Plan (Photo taken from Google Maps)

Building Descriptions:

This building was constructed in 1968 and consists of multiple hexagonal shaped elements connected together via covered, exterior corridors. The main building's layout has multiple classrooms that surround an auditorium and lunchroom. Additionally, the auditorium has a mezzanine level that serves as a teachers lounge.

The lateral force resisting system consists of a plywood sheathed roof acting as horizontal wood diaphragm spanning between vertical plywood shear walls. Seismic loads are resisted in multiple

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directions by way of the wood shear walls located at the exterior and interior of each hexagonal building. In our evaluation of the buildings overall lateral system we noted a potential deficiency in the lateral force resisting system of the mezzanine structure, in that one side of the mezzanine did not appear to have adequate length of shear wall to resist the anticipated seismic forces. Additionally, we noted that the perimeter shear walls at the auditorium lacked the vertical continuity at the low roof level.

We recommend that further investigation be performed to confirm that the as-built mezzanine has a viable lateral force resisting system. Additionally, we recommend reviewing the as-built condition of the apparent vertical discontinuity at perimeter walls of the auditorium and adding vertical straps as necessary to resolve any discontinuity that may exist.

NOTE: The two auxiliary buildings on the north end of campus were not reviewed, as structural drawings were not available at the time of our review.

Ruskin Elementary School receives a subjective rating of 2.5.

SIERRAMONT MIDDLE SCHOOL

Key Plan (Photo taken from Google Maps)

Building Descriptions:

Sierramont Middle School consists of two buildings, both built in 1978. The main building contains the educational portion of the school with classrooms and admin offices, while the second building contains the gymnasium.

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Main Building

The main building's lateral force resisting system consists of a plywood sheathed roof acting as horizontal wood diaphragm spanning between vertical plywood shear walls. Seismic loads are resisted in both orthogonal directions by way of the wood shear walls located on the exterior and interior of building structure. During our review we noticed that a section of this building has a high roof section, surrounded by plywood shear walls. From our review of the available drawings, it is not evident if sufficient shear transfer is provided for between these two elements. Additionally, we noted that a portion of the shear walls that were considered to be part of the main lateral force resisting system had height to width aspect ratios that were grater that what is allowed today. We recommend that further evaluation be completed to determine the effects of the potential deficiencies noted above.

Sierramont Middle School Main Building receives a subjective rating of 2.5.

Second Building

The second building is a single story building and has a high roof section similar to the main building. The entire building consists of a plywood sheathed roof acting as a horizontal wood diaphragm. The lower roof contains vertical plywood shear walls to resist lateral forces while the high roof consists of both plywood shear walls and steel brace frames. Our review of the available structural drawings revealed that the plywood shear walls are discontinuous between the high and low roof similar to the main building. We also noted that the steel brace frames were constructed in a "K" configuration. These types of structures have not performed well in the past, when subject to major seismic events.

We recommend that further investigation be performed on both buildings to verify the capacity of the slender shear walls as well as if the apparent discontinuous shear walls require retrofit measures to resolve the discontinuity. Additionally we recommend analyzing the brace frames in the second building to determine if the current configurations of the brace frames are adequate to resist the anticipated lateral forces.

Sierramont Middle School Second Building receives a subjective rating of 2.5.

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SUMMERDALE ELEMENTARY SCHOOL

Key Plan (Photo taken from Google Maps)

Building Description:
The building is one of three identical single story building with a wood framed roof with concrete walls built in 1974. Please refer to the evaluation written for Brooktree Elementary for specific recommendations for this building type.

Summerdale Elementary School receives a subjective rating of 2.5.

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TOYON ELEMENTARY SCHOOL

Key Plan (Photo taken from Google Maps)

Building Descriptions:

Toyon Elementary School is comprised of nine buildings. The buildings were originally constructed and renovated in several different phases over the years. The buildings are labeled according to the Architectural plans that were the basis of this review. Not all buildings had Architectural and/or Structural plans to serve as the basis of this review as noted in the sections below.

Buildings A, B, C, D, E, J, H, G

The drawings that were available for these buildings for our review, was limited to a select few Architectural plan sheets. No structural plans were available for any of the buildings listed above. Therefore, we recommend that construction drawings be located and/or a site observation be conducted so that a seismic evaluation can be performed on the subject buildings.

These buildings do not receive a subjective rating at this time.

Bldg. F

The plans for this building indicate that this building was built around 1956. The building is a single story structure containing several classrooms. The framing consists of wood roof joists spanning between bearing walls. The building also features a clerestory window which runs nearly the entire length of the structure.

The lateral force resisting system for the building consists of a sloped roof with diagonal sheathing acting as a horizontal wood diaphragm spanning between vertical plywood shear walls. It appears that the vertical load path to the shear walls below is insufficient due to the large clerestory window that spans nearly the entire length of the structure. Additionally, it appears that the transvers shear walls do not have tie-downs restraining them from uplift. We recommend a more in depth review of the buildings lateral force resisting system be conducted to determine what, if any retrofit measure would be necessary to increase the buildings anticipated performance to a "Life Safety" level.

The structural plans also indicated covered walkways at the corridors of buildings C, D and E. The gravity as well as lateral support for the walkways are standard 3" diameter steel pipe columns. Our preliminary evaluation of these columns is that they would not perform at a level consistent with "Life Safety" when subjected a major seismic event.

Buildings C, D and E appear to be similar construction and therefore the recommendations would most likely be consist with those made for Building F.

Toyon Elementary School Building F receives a subjective rating of 2.5.

Bldg. H

The original plans for the design of Bldg H were not available at the time of this review. Architectural and Structural plans for the 1979 library addition were available but did not provide adequate information to review the building as a whole. We recommend that an effort

be put forth to locate the original approved set of construction documents so that a full seismic evaluation can be completed for this structure. In the absence of reviewing the original drawings, we would recommend that a site observation be conducted to verify as-built conditions with the expectations that some destructive demolition be required to expose key elements of the lateral force resisting system. Upon the evaluation of either of the above methods, retrofit measures can be made, as necessary, to up-grade the existing structure to an acceptable level of performance.

Toyon Elementary School Building H does not receive a subjective rating at this time.

VINCI PARK ELEMENTARY SCHOOL

Key Plan (Photo taken from Google Maps)

Building Descriptions:

Vinci Park Elementary School is a single story steel framed structure constructed in 1973. The structure is relatively regular and square in plan with the exception of the a few re-entrant corners at one corner of the building. The roof is essentially flat, but does have 4 raised areas to accommodate high architectural ceilings at these locations. The building's roof consists of conventional metal decking welded to the steel structure and is un-topped except for two locations were concrete fill was added for the support of mechanical units. The structure was designed utilizing structural steel moment frames for its primary lateral force resisting system. Buildings of this vintage did not typically incorporate the ductile detailing that is required today for these types of structures. This detailing is required so that these building types will have superior performance when subjected to significant seismic events allowing the steel members and connections to yield gradually rather than abruptly. Our initial review of the drawings

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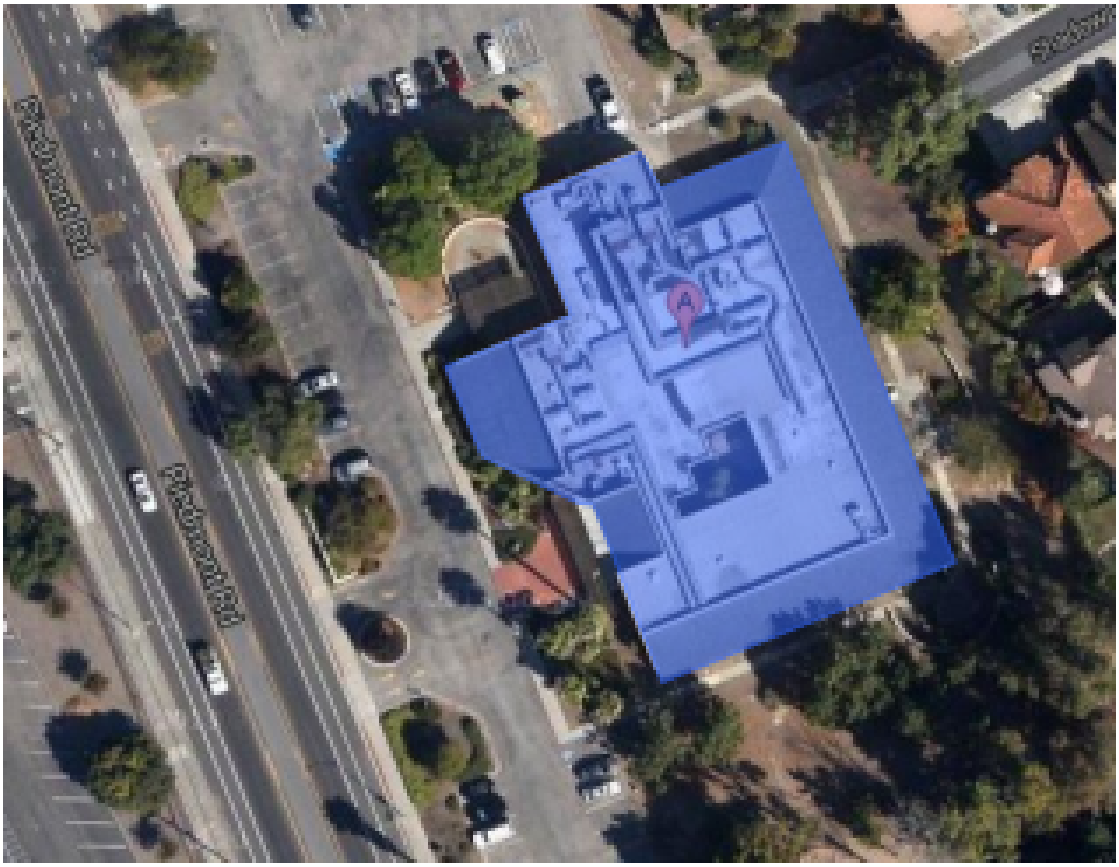
indicate that significant effort was utilized in the design of the building, however to fully evaluate the members and connections as to their expected performance level when subjected to a major seismic event is beyond the scope of this report. We therefore recommend that a more thorough evaluation be completed to fully assess the expected performance level of the structure when subjected to a major seismic event. Upon complete of the more in-depth assessment, retrofit options can be made, as necessary, to obtain a "Life Safety" building performance level.

Vinci Park Elementary School receives a subjective rating of 2.5.

EDUCATIONAL SERVICES CENTER



Key Plan (Photo taken from Google Maps)

Building Description:

The Berryessa Union School District Educational Services Building is a single story wood structure. The building is comprised of a roof joist system supported on interior bearing walls[690]

and glulams spanning between bearing walls. The roof consists of sloped areas around the perimeter with a flat interior mechanical well.

The lateral force resisting system consists of a plywood sheathed roof acting as a horizontal wood diaphragm spanning between vertical plywood shear walls. Seismic loads are resisted in both orthogonal directions by way of the wood shear walls located on the interior and exterior of the building structure. A preliminary review of the building is that the building is comprised of shearwalls in each direction that can handle the lateral load of the structure if the shearwalls are in good condition. During the review it was noted that not all shear walls included tie downs at the ends of the walls. We recommend further evaluation of the building be conducted to see if the addition of tie downs would significantly improve the performance of the building.

Educational Services Center Building receives a subjective rating of 2.0.

Mechanical & Electrical Assessment Report

Berryessa Union School District
1376 Piedmont Road
San Jose, CA

Mechanical and Electrical Assessment

Prepared By:

August 29, 2013

ALFA TECH Inc.
97 East Brokaw Road, Suite 300, San Jose CA, 95112

Table of Contents

BROOKTREE ELEMENTARY SCHOOL
BERRYESSA UNIFIED SCHOOL DISTRICT

A. MECHANICAL BUILDING SYSTEMS

1. Existing Conditions:

a. New chiller, boiler, chemical treatment and pumps installed in the Equipment Yard in 2008.

b. New temperature controls installed in 2008.

c. Existing air handling units, ductwork and hot and chilled water piping are from original project.

2. Recommendations:

a. Remove all existing air handling units and replace with new air handling units.

b. Replace all existing exhaust fans.

c. Replace all insulated supply and return ductwork, diffusers and grilles within the building. Replace all exhaust ductwork within the building.

d. Replace all insulated underground hot and chilled water piping with pre-insulated piping manufactured to be buried below grade.

e. Replace all insulated hot and chilled water piping within the building.

3. General:

a. This report and comments to follow are based on observations of the general condition of the mechanical systems and noticeable code issues resulting from a review of the existing drawings and an on-site visit, when required.

b. Refer to Appendix A for Title 24 requirements and general code issues that should be considered.

BROOKTREE ELEMENTARY SCHOOL
BERRYESSA UNIFIED SCHOOL DISTRICT

APPENDIX-A

a. General

1. Comply requirements of California Mechanical Code (CMC) latest edition.

b. Possible Ventilation Code Issues

1. Corridors cannot be used as plenums for the purpose of supplying or exhausting air.

2. Corridors must have minimum two (2) air changes per hour for ventilation.

3. Minimum ventilation for occupied spaces should be 15 cfm/person or 0.15 cfm/sq. ft., whichever is greater.

4. Exhaust airflow from bathrooms should be based on minimum 10 air changes per hour.

c. Possible Fire Smoke Issues

1. Fire/smoke dampers in the system must be interlocked with fire alarm system.

2. Corridors, lobbies, and building entrances to have dedicated supply air.

3. Chemistry classrooms with occupancy separation shall have fire/smoke damper.

4. All air handling equipment supplying air flow in excess of 2,000 cubic feet per minute to have duct smoke detectors in the supply air duct.

d. Possible Title 24 Issues

1. Heating furnaces to have minimum 80% efficiency.

2. Heating & Ventilating and Air Conditioning systems in excess of 2,500 cfm and a total cooling over 75,000 BTU/h (6.25 Tons) must have an economizer. Economizer must be fully integrated into the cooling system so that depending on the weather conditions, economizer can provide partial/full cooling when additional mechanical cooling is required.

3. Interior supply and return air ductwork (heating & cooling) shall be insulated with minimum R-value of 4.2.

5. Hot and chilled water piping less than 50°F and over 110°F shall be insulated with pipe insulation minimum R-value of 4.2.

6. Heating, ventilating, and air conditioning systems to have control capability with night setback.

8. Heating, ventilating, and air conditioning equipment to be certified by the State of California to meet minimum energy requirements.

BROOKTREE ELEMENTARY SCHOOL
BERRYESSA UNION SCHOOL DISTRICT

B. Electrical

1. Power Systems:

A 1000A, 277/480V, 3 phase, 4 wire switchboard with a 300KVA utility pad mounted transformer located in the electrical service yard provides power to the campus. The switchboard was of original built and in fair condition. According to PG&E record, the current peak usage on the system is of 228 amp. There is a spare capacity of 77 amp approximately at the service for future usage. If additional power is needed, the PG&E transformer shall need to be upgraded.

2. Fire Alarm System:

The existing fire alarm system was of manual/automatic system on a Gamewell 610 panel in the administration office installed around 2003. The panel is in good and functioning condition. The notification devices were not adequate to meet the current code requirement.

Recommendations:

a. Provide new horn and strobes in areas required by ADA, NFPA, CEC and CFC.

3. Public Address and Clock Systems:

The existing Bogen Multicom 2000 PA and master clock system located in the multi-purpose building storage room is in good and functioning condition. Existing speaker and clock units are in good condition for reuse.

DISTRICT - OFFICES
BERRYESSA UNIFIED SCHOOL DISTRICT

A. MECHANICAL BUILDING SYSTEMS

1. Existing Conditions:

a. All existing components (packaged gas heat/ electric cool rooftop air conditioning units (typical – 7), ductwork, exhaust fans diffusers and grilles, piping, controls, etc.) are all original and have exceeded their serviceable life expectancies.

2. Recommendations:

a. Remove all existing air conditioning units and replace with new air conditioning units.

b. Perform heat load calculations to ensure new equipment is of sufficient capacity and to suit new conditions.

c. Replace all insulated supply and return ductwork, diffusers and grilles within the building. Replace all exhaust ductwork within the building.

3. General:

a. This report and comments to follow are based on observations of the general condition of the mechanical systems and noticeable code issues resulting from a review of the existing drawings and an on-site visit, when required.

b. Refer to Appendix A for Title 24 requirements and general code issues that should be considered.

DISTRICT - OFFICES
BERRYESSA UNIFIED SCHOOL DISTRICT

APPENDIX-A

a. General

1. Comply requirements of California Mechanical Code (CMC) latest edition.

b. Possible Ventilation Code Issues

1. Corridors cannot be used as plenums for the purpose of supplying or exhausting air.

2. Corridors must have minimum two (2) air changes per hour for ventilation.

3. Minimum ventilation for occupied spaces should be 15 cfm/person or 0.15 cfm/sq. ft., whichever is greater.

4. Exhaust airflow from bathrooms should be based on minimum 10 air changes per hour.

c. Possible Fire Smoke Issues

1. Fire/smoke dampers in the system must be interlocked with fire alarm system.

2. Corridors, and building entrances to have dedicated supply air.

3. All air handling equipment supplying air flow in excess of 2,000 cubic feet per minute to have duct smoke detectors in the supply air duct.

d. Possible Title 24 Issues

1. Heating furnaces to have minimum 80% efficiency.

2. Heating & Ventilating and Air Conditioning systems in excess of 2,500 cfm and a total cooling over 75,000 BTU/h (6.25 Tons) must have an economizer. Economizer must be fully integrated into the cooling system so that depending on the weather conditions, economizer can provide partial/full cooling when additional mechanical cooling is required.

3. Exterior supply and return air ductwork (heating & cooling) shall be insulated with minimum R-value of 8.0.

4. Interior supply and return air ductwork (heating & cooling) shall be insulated with minimum R-value of 4.2.

5. Heating, ventilating, and air conditioning systems to have control capability with night setback.

6. Heating, ventilating, and air conditioning equipment to be certified by the State of California to meet minimum energy requirements.

DISTRICT OFFICE
BERRYESSA UNION SCHOOL DISTRICT

B. Electrical

1. Power Systems:

A 1600A, 120/208V, 3 phase, 4 wire switchboard with a 300KVA utility pad mounted transformer located in the electrical room provides power to the facility. The switchboard was of original building in fair and functioning condition. According to PG&E record, the current peak usage on the system is of 372 amp. There is a spare capacity of 368 amp available at the service for future usage. If additional power is needed, the PG&E transformer shall need to be upgraded.

2. Fire Alarm System:

The existing fire alarm system was of a manual system on an original Simplex 4208 panel in the electrical room. The panel is in fair and functioning condition. The notification devices were not adequate to meet the current code requirement.

Recommendations:

a. Provide new horn and strobes in areas required by ADA, NFPA, CEC and CFC.

3. Public Address and Clock Systems:

There is an existing single zone Bogen PA system located in the Board room. The system is in good and functioning condition. There is no master clock system on site.

CHERRYWOOD ELEMENTARY SCHOOL
BERRYESSA UNIFIED SCHOOL DISTRICT

A. MECHANICAL BUILDING SYSTEMS

1. Existing Conditions:

a. New chillers, boilers and pumps (with VFD's) installed in the Equipment Yard in 2010.

b. New exhaust fans installed in 2010.

c. New temperature controls installed in 2010.

d. Existing indoor air handling units in main building and Administration building are original.

e. Existing ductwork and air distribution in building is original.

2. Recommendations:

a. Remove all existing air handling units and replace with new air handling units. Install the replacement units most matching the removed units to minimize the modifications to the duct connections and the unit supports.

b. Replace all insulated supply and return ductwork, diffusers and grilles within the building. Replace all exhaust ductwork within the building.

c. Replace all insulated underground hot and chilled water piping with pre-insulated piping manufactured to be buried below grade.

d. Replace all insulated hot and chilled water within the building.

3. General:

a. This report and comments to follow are based on observations of the general condition of the mechanical systems and noticeable code issues resulting from a review of the existing drawings and an on-site visit, when required.

b. Refer to Appendix A for Title 24 requirements and general code issues that should be considered.

CHERRYWOOD ELEMENTARY SCHOOL
BERRYESSA UNIFIED SCHOOL DISTRICT

APPENDIX-A

a. General

1. Comply requirements of California Mechanical Code (CMC) latest edition.

b. Possible Ventilation Code Issues

1. Corridors cannot be used as plenums for the purpose of supplying or exhausting air.

2. Corridors must have minimum two (2) air changes per hour for ventilation.

3. Minimum ventilation for occupied spaces should be 15 cfm/person or 0.15 cfm/sq. ft., whichever is greater.

4. Exhaust airflow from bathrooms should be based on minimum 10 air changes per hour.

c. Possible Fire Smoke Issues

1. Fire/smoke dampers in the system must be interlocked with fire alarm system.

2. Corridors, lobbies, and building entrances to have dedicated supply air.

3. Chemistry classrooms with occupancy separation shall have fire/smoke damper.

6. All air handling equipment supplying air flow in excess of 2,000 cubic feet per minute to have duct smoke detectors in the supply air duct.

d. Possible Title 24 Issues

1. Heating & Ventilating and Air Conditioning systems in excess of 2,500 cfm and a total cooling over 75,000 BTU/h (6.25 Tons) must have an economizer. Economizer must be fully integrated into the cooling system so that depending on the weather conditions, economizer can provide partial/full cooling when additional mechanical cooling is required.

2. Exterior supply and return air ductwork (heating & cooling) shall be insulated with minimum R-value of 8.0.

3. Interior supply and return air ductwork (heating & cooling) shall be insulated with minimum R-value of 4.2.

4. Hot and chilled water piping less than 50°F and over 110°F shall be insulated with pipe insulation minimum R-value of 4.2.

5. Heating, ventilating, and air conditioning systems to have control capability with night setback.

6. Heating, ventilating, and air conditioning equipment to be certified by the State of California to meet minimum energy requirements.

CHERRYWOOD ELEMENTARY SCHOOL
BERRYESSA UNION SCHOOL DISTRICT

B. Electrical

1. Power Systems:

A 1600A, 277/480V, 3 phase, 4 wire switchboard with a 300KVA utility pad mounted transformer located at the mechanical chiller yard provides power to the campus. The switchboard was installed around 2005 and is in good and functioning condition. According to PG&E record, the current peak usage on the system is of 228 amp. There is a spare capacity of 84 amp approximately at the service for future usage. If additional power is needed, the PG&E transformer shall need to be upgraded.

2. Fire Alarm System:

The existing fire alarm system was of manual system on a Gamewell 610 panel in the administration office storage room installed around 2003. The panel is in good and functioning condition. The initiation and notification devices were not adequate to meet the current code requirement.

Recommendations:

a. Provide new horn and strobes in areas required by ADA, NFPA, CEC and CFC.
b. Provide smoke detectors below ceiling and heat detector above accessible ceiling for a complete coverage automatic system with supervision and monitoring capability.

3. Public Address and Clock Systems:

The existing Bogen Multicom 2000 PA and master clock system located in the main office storage room is in good and functioning condition. Existing speaker and clock units are in good condition for reuse.

LANEVIEW ELEMENTARY SCHOOL
BERRYESSA UNIFIED SCHOOL DISTRICT

A. MECHANICAL BUILDING SYSTEMS

1. Existing Conditions:

a. New rooftop condensing units & indoor furnaces with D/X coils installed in 2009.

b. New exhaust fans installed in 2009.

c. New temperature controls installed in 2009.

d. Existing ductwork in ceiling space is original.

2. Recommendations:

a. Replace all insulated supply and return ductwork, diffusers and grilles within the building. Replace all exhaust ductwork within the building.

3. General:

a. This report and comments to follow are based on observations of the general condition of the mechanical systems and noticeable code issues resulting from a review of the existing drawings and an on-site visit, when required.

b. Refer to Appendix A for Title 24 requirements and general code issues that should be considered.

LANEVIEW ELEMENTARY SCHOOL
BERRYESSA UNIFIED SCHOOL DISTRICT

APPENDIX-A

a. General

1. Comply requirements of California Mechanical Code (CMC) latest edition.

b. Possible Ventilation Code Issues

1. Corridors cannot be used as plenums for the purpose of supplying or exhausting air.

2. Corridors must have minimum two (2) air changes per hour for ventilation.

3. Minimum ventilation for occupied spaces should be 15 cfm/person or 0.15 cfm/sq. ft., whichever is greater.

4. Exhaust airflow from bathrooms should be based on minimum 10 air changes per hour.

c. Possible Fire Smoke Issues

1. Fire/smoke dampers in the system must be interlocked with fire alarm system.

2. Corridors, lobbies, and building entrances to have dedicated supply air.

3. Chemistry classrooms with occupancy separation shall have fire/smoke damper.

6. All furnaces supplying air flow in excess of 2,000 cubic feet per minute to have duct smoke detectors in the supply air duct.

d. Possible Title 24 Issues

1. Heating furnaces to have minimum 80% efficiency.

2. Heating & Ventilating and Air Conditioning systems in excess of 2,500 cfm and a total cooling over 75,000 BTU/h (6.25 Tons) must have an economizer. Economizer must be fully integrated into the cooling system so that depending on the weather conditions, economizer can provide partial/full cooling when additional mechanical cooling is required.

3. Exterior supply and return air ductwork (heating & cooling) shall be insulated with minimum R-value of 8.0.

4. Interior supply and return air ductwork (heating & cooling) shall be insulated with minimum R-value of 4.2.

5. Heating, ventilating, and air conditioning systems to have control capability with night setback.

LAINVIEW ELEMENTARY SCHOOL
BERRYESSA UNION SCHOOL DISTRICT

B. Electrical

1. Power Systems:

A 2000A, 120/208V, 3 phase, 4 wire switchboard with a 300KVA utility pad mounted transformer located next to the kindergarten classroom building provides power to the campus. The switchboard was installed around 2002 and is in good and functioning condition. According to PG&E record, the current peak usage on the system is of 431 amp. There is a spare capacity of 295 amp approximately at the service for future usage. If additional power is needed, the PG&E transformer shall need to be upgraded.

2. Fire Alarm System:

The existing fire alarm system was of automatic system on a Gamewell 602 panel in the administration office installed in 2008. The panel is in good and functioning condition. The initiation and notification devices meet the current code requirement.

3. Public Address and Clock Systems:

The existing Bogen Multicom 2000 PA and master clock system located in the main office storage room is in good and functioning condition. Existing speaker and clock units are in good condition for reuse.

MAJESTIC WAY ELEMENTARY SCHOOL
BERRYESSA UNIFIED SCHOOL DISTRICT

A. MECHANICAL BUILDING SYSTEMS

1. Existing Conditions:

a. New chillers, boilers and pumps installed in 2008.

b. New exhaust fans installed in 2010.

c. New temperature controls installed in 2008.

d. Existing above ceiling ductwork and air distribution is original.

e. Existing indoor air handling units are original.

2. Recommendations:

a. Remove all existing indoor air handling units and replace with new air handling units. Install the replacement units most matching the removed units to minimize the modifications to the duct connections and the unit supports.

b. Remove all existing exhaust fans and replace with new exhaust fans to match the performance of the existing fans.

c. Replace all insulated supply and return ductwork, diffusers and grilles within the building. Replace all exhaust ductwork within the building.

d. Replace all insulated hot and chilled water within the building.

3. General:

a. This report and comments to follow are based on observations of the general condition of the mechanical systems and noticeable code issues resulting from a review of the existing drawings and an on-site visit, when required.

b. Refer to Appendix A for Title 24 requirements and general code issues that should be considered.

MAJESTIC WAY ELEMENTARY SCHOOL
BERRYESSA UNIFIED SCHOOL DISTRICT

APPENDIX-A

a. General

1. Comply requirements of California Mechanical Code (CMC) latest edition.

b. Possible Ventilation Code Issues

1. Corridors cannot be used as plenums for the purpose of supplying or exhausting air.

2. Corridors must have minimum two (2) air changes per hour for ventilation.

3. Minimum ventilation for occupied spaces should be 15 cfm/person or 0.15 cfm/sq. ft., whichever is greater.

4. Exhaust airflow from bathrooms should be based on minimum 10 air changes per hour.

c. Possible Fire Smoke Issues

1. Fire/smoke dampers in the system must be interlocked with fire alarm system.

2. Corridors, lobbies, and building entrances to have dedicated supply air.

3. Chemistry classrooms with occupancy separation shall have fire/smoke damper.

6. All air handling equipment supplying air flow in excess of 2,000 cubic feet per minute to have duct smoke detectors in the supply air duct.

d. Possible Title 24 Issues

1. Heating furnaces to have minimum 80% efficiency.

2. Heating & Ventilating and Air Conditioning systems in excess of 2,500 cfm and a total cooling over 75,000 BTU/h (6.25 Tons) must have an economizer. Economizer must be fully integrated into the cooling system so that depending on the weather conditions, economizer can provide partial/full cooling when additional mechanical cooling is required.

3. Interior supply and return air ductwork (heating & cooling) shall be insulated with minimum R-value of 4.2.

5. Hot and chilled water piping less than 50°F and over 110°F shall be insulated with pipe insulation minimum R-value of 4.2.

6. Boiler controls to have hot water reset based on outdoor air temperature.

7. Heating, ventilating, and air conditioning systems to have control capability with night setback.

MAJESTIC WAY ELEMENTARY SCHOOL
BERRYESSA UNION SCHOOL DISTRICT

B. Electrical

1. Power Systems:

A 1000A, 277/480V, 3 phase, 4 wire switchboard with a 300KVA utility pad mounted transformer located in the electrical service yard provides power to the campus. The switchboard was of original built and in fair condition. According to PG&E record, the current peak usage on the system is of 261 amp. There is a spare capacity of 35 amp approximately at the service for future usage. If additional power is needed, the PG&E transformer shall need to be upgraded.

2. Fire Alarm System:

The existing fire alarm system was of manual/automatic system on a Gamewell 610 panel in the administration office installed around 2003. The panel is in good and functioning condition. The notification devices were not adequate to meet the current code requirement.

Recommendations:

a. Provide new horn and strobes in areas required by ADA, NFPA, CEC and CFC.

3. Public Address and Clock Systems:

The existing Bogen Multicom 2000 PA and master clock system located in the multi-purpose building storage room is in good and functioning condition. Existing speaker and clock units are in good condition for reuse.

MORRILL MIDDLE SCHOOL
BERRYESSA UNIFIED SCHOOL DISTRICT

A. MECHANICAL BUILDING SYSTEMS

1. Existing Conditions:

a. New packaged rooftop gas heat / electric cool units and exhaust fans installed in 2006.

b. New temperature controls installed in 2006.

c. New ductwork on the roof was provided in 2006.

d. Existing above ceiling ductwork and air distribution is original.

2. Recommendations:

a. Replace all insulated supply and return ductwork, diffusers and grilles within the building.

b. Replace all exhaust ductwork within the building.

3. General:

a. This report and comments to follow are based on observations of the general condition of the mechanical systems and noticeable code issues resulting from a review of the existing drawings and an on-site visit, when required.

b. Refer to Appendix A for Title 24 requirements and general code issues that should be considered.

MORRILL MIDDLE SCHOOL
BERRYESSA UNIFIED SCHOOL DISTRICT

APPENDIX-A

a. General

1. Comply requirements of California Mechanical Code (CMC) latest edition.

b. Possible Ventilation Code Issues

1. Corridors cannot be used as plenums for the purpose of supplying or exhausting air.

2. Corridors must have minimum two (2) air changes per hour for ventilation.

3. Minimum ventilation for occupied spaces should be 15 cfm/person or 0.15 cfm/sq. ft., whichever is greater.

4. Exhaust airflow from bathrooms should be based on minimum 10 air changes per hour.

c. Possible Fire Smoke Issues

1. Fire/smoke dampers in the system must be interlocked with fire alarm system.

2. Corridors, lobbies, and building entrances to have dedicated supply air.

3. Chemistry classrooms with occupancy separation shall have fire/smoke damper.

4. All air handling equipment supplying air flow in excess of 2,000 cubic feet per minute to have duct smoke detectors in the supply air duct.

d. Possible Title 24 Issues

1. Interior supply and return air ductwork (heating & cooling) shall be insulated with minimum R-value of 4.2.

2. Heating, ventilating, and air conditioning systems to have control capability with night setback.

3. Heating, ventilating, and air conditioning equipment to be certified by the State of California to meet minimum energy requirements.

MORRILL MIDDLE SCHOOL
BERRYESSA UNION SCHOOL DISTRICT

B. Electrical

1. Power Systems:

A 2000A, 277/480V, 3 phase, 4 wire switchboard with a 750KVA utility pad mounted transformer located in the electrical service yard provides power to the campus. The switchboard was installed around 2003 and is in good condition. According to PG&E record, the current peak usage on the system is of 378 amp. There is a spare capacity of 431 amp available at the service for future usage. If additional power is needed, the PG&E transformer shall need to be upgraded.

2. Fire Alarm System:

The existing fire alarm system was of manual/automatic system on a Gamewell 610 panel in the administration office installed around 2003. The panel is in good and functioning condition. The notification devices were not adequate to meet the current code requirement.

Recommendations:

a. Provide new horn and strobes in areas required by ADA, NFPA, CEC and CFC.

3. Public Address and Clock Systems:

The existing Bogen Multicom 2000 PA and master clock system located in the administration storage room is in good and functioning condition. Existing speaker and clock units are in good condition for reuse.

MAINTENANCE FACILITY BUILDING & MOT
BERRYESSA UNIFIED SCHOOL DISTRICT

A. MECHANICAL BUILDING SYSTEMS

1. Existing Conditions:

a. All existing components (rooftop gas heat / electric cool, furnaces, shop equipment, exhaust fans, ductwork, diffusers and grilles, piping, controls, etc.) are all original and have exceeded their serviceable life expectancies.

2. Recommendations:

a. Remove all existing air conditioning units, furnaces, shop equipment and exhaust fans and replace with new comparable units to minimize the impact to existing supports and connections.

b. Perform heat load calculations to ensure new equipment is of sufficient capacity and to suit new conditions.

c. Replace all insulated supply and return ductwork, diffusers and grilles within the building. Replace all exhaust ductwork within the building.

3. General:

a. This report and comments to follow are based on observations of the general condition of the mechanical systems and noticeable code issues resulting from a review of the existing drawings and an on-site visit, when required.

b. Refer to Appendix A for Title 24 requirements and general code issues that should be considered.

MAINTENANCE FACILITY BUILDING & MOT
BERRYESSA UNIFIED SCHOOL DISTRICT

APPENDIX-A

a. General

1. Comply requirements of California Mechanical Code (CMC) latest edition.

b. Possible Ventilation Code Issues

1. Corridors cannot be used as plenums for the purpose of supplying or exhausting air.

2. Corridors must have minimum two (2) air changes per hour for ventilation.

3. Minimum ventilation for occupied spaces should be 15 cfm/person or 0.15 cfm/sq. ft., whichever is greater.

4. Exhaust airflow from bathrooms should be based on minimum 10 air changes per hour.

c. Possible Fire Smoke Issues

1. Fire/smoke dampers in the system must be interlocked with fire alarm system.

2. Corridors, and building entrances to have dedicated supply air.

3. All air handling equipment supplying air flow in excess of 2,000 cubic feet per minute to have duct smoke detectors in the supply air duct.

d. Possible Title 24 Issues

1. Heating furnaces to have minimum 80% efficiency.

2. Heating & Ventilating and Air Conditioning systems in excess of 2,500 cfm and a total cooling over 75,000 BTU/h (6.25 Tons) must have an economizer. Economizer must be fully integrated into the cooling system so that depending on the weather conditions, economizer can provide partial/full cooling when additional mechanical cooling is required.

3. Exterior supply and return air ductwork (heating & cooling) shall be insulated with minimum R-value of 8.0.

4. Interior supply and return air ductwork (heating & cooling) shall be insulated with minimum R-value of 4.2.

5. Heating, ventilating, and air conditioning systems to have control capability with night setback.

6. Heating, ventilating, and air conditioning equipment to be certified by the State of California to meet minimum energy requirements.

MAINTENANCE FACILITY BUILDING & MOT
BERRYESSA UNION SCHOOL DISTRICT

B. Electrical

1. Power Systems:

There are three (3) electrical services on site. Service 1 is of a 200A, 120/240V single phase service located behind the front office building with fuse and gutter disconnect for distribution. The panel is powered from a pole mounted 45KVA PG&E transformer via aerial cables. The service is of old construction and has no space or capacity for expansion. According to PG&E record, the current peak usage on the service is of 54 amp. There is a spare capacity of 89 amp available at the service transformer for future usage. If additional power is needed, the switchboard and PG&E transformer shall need to be upgraded

Service 2 is of a 400A, 120/240V single phase panel located outside of the house unit facing south. The panel is service from the same pole mounted PG&E transformer as Service 1. The switchboard 2 was of original building in fair and functioning condition. According to PG&E record, the current peak usage on the system is of 54 amp. There is a spare capacity of 89 amp available at the service transformer for future usage. If additional power is needed, the PG&E transformer shall need to be upgraded.

Service 3 is of a 600A, 120/208V, 3 phase, 4 wire switchboard located outside of the maintenance shop building with a pole mounted PG&E transformer of 45 KVA. The panel was of original building and in fair condition. According to PG&E record, the current peak usage on the service is of 92 amp. There is a spare capacity of 10 amp available at the service. If additional power is needed, the PG&E transformer shall need to be upgraded

2. Fire Alarm System:

The existing fire alarm system was of a manual system on an original Faraday panel for the house unit only. The panel is in fair and functioning condition. The notification devices were not adequate to meet the current code requirement. There is no fire alarm system in the office and maintenance shop building.

Recommendations:

a. Provide new horn and strobes in areas required by ADA, NFPA, CEC and CFC.
b. Provide new fire alarm system at office and maintenance buildings.

3. Public Address and Clock Systems:

There is no paging/clock system at the facility.

NOBLE ELEMENTARY SCHOOL
BERRYESSA UNIFIED SCHOOL DISTRICT

A. MECHANICAL BUILDING SYSTEMS

1. Existing Conditions:

a. New packaged gas heat / electric cool rooftop units and exhaust fans installed in 2008.

b. New temperature controls installed in 2008.

c. New ductwork on the roof was provided in 2008.

d. Existing above ceiling ductwork and air distribution is original.

2. Recommendations:

a. Replace all insulated supply and return ductwork, diffusers and grilles within the building.

b. Replace all exhaust ductwork within the building.

3. General:

a. This report and comments to follow are based on observations of the general condition of the mechanical systems and noticeable code issues resulting from a review of the existing drawings and an on-site visit, when required.

b. Refer to Appendix A for Title 24 requirements and general code issues that should be considered.

NOBLE ELEMENTARY SCHOOL
BERRYESSA UNIFIED SCHOOL DISTRICT

APPENDIX-A

a. General

1. Comply requirements of California Mechanical Code (CMC) latest edition.

b. Possible Ventilation Code Issues

1. Corridors cannot be used as plenums for the purpose of supplying or exhausting air.

2. Corridors must have minimum two (2) air changes per hour for ventilation.

3. Minimum ventilation for occupied spaces should be 15 cfm/person or 0.15 cfm/sq. ft., whichever is greater.

4. Exhaust airflow from bathrooms should be based on minimum 10 air changes per hour.

c. Possible Fire Smoke Issues

1. Fire/smoke dampers in the system must be interlocked with fire alarm system.

2. Corridors, lobbies, and building entrances to have dedicated supply air.

3. Chemistry classrooms with occupancy separation shall have fire/smoke damper.

4. All air handling equipment supplying air flow in excess of 2,000 cubic feet per minute to have duct smoke detectors in the supply air duct.

d. Possible Title 24 Issues

1. Interior supply and return air ductwork (heating & cooling) shall be insulated with minimum R-value of 4.2.

2. Heating, ventilating, and air conditioning systems to have control capability with night setback.

3. Heating, ventilating, and air conditioning equipment to be certified by the State of California to meet minimum energy requirements.

NOBLE ELEMENTARY SCHOOL
BERRYESSA UNION SCHOOL DISTRICT

B. Electrical

1. Power Systems:

A 2000A, 120/208V, 3 phase, 4 wire switchboard with a 150KVA utility pad mounted transformer located next to the kindergarten classroom building provides power to the campus. The switchboard was installed around 2002 and is in good and functioning condition. According to PG&E record, the current peak usage on the system is of 461 amp which exceeds the PG&E transformer capacity. If additional power is needed, the PG&E transformer shall need to be upgraded.

2. Fire Alarm System:

The existing fire alarm system was of automatic system on a Gamewell 602 panel in building A installed in 2011. The panel is in good and functioning condition. The initiation and notification devices meet the current code requirement.

3. Public Address and Clock Systems:

The existing Bogen Multicom 2000 PA and master clock system located in the main office is in good and functioning condition. Existing speaker and clock units are in good condition for reuse.

NORTHWOOD ELEMENTARY SCHOOL
BERRYESSA UNIFIED SCHOOL DISTRICT

A. MECHANICAL BUILDING SYSTEMS

1. Existing Conditions:

a. New rooftop air conditioning units (gas heat / electric cool).

b. New ductwork on roof.

c. New exhaust fans.

d. New temperature controls.

e. Existing above ceiling ductwork and air distribution is original.

2. Recommendations:

a. Replace all insulated supply and return ductwork, diffusers and grilles within the building. Replace all exhaust ductwork within the building.

3. General:

a. This report and comments to follow are based on observations of the general condition of the mechanical systems and noticeable code issues resulting from a review of the existing drawings and an on-site visit, when required.

b. Refer to Appendix A for Title 24 requirements and general code issues that should be considered.

NORTHWOOD ELEMENTARY SCHOOL
BERRYESSA UNIFIED SCHOOL DISTRICT

APPENDIX-A

a. General

1. Comply requirements of California Mechanical Code (CMC) latest edition.

b. Possible Ventilation Code Issues

1. Corridors cannot be used as plenums for the purpose of supplying or exhausting air.
2. Corridors must have minimum two (2) air changes per hour for ventilation.
3. Minimum ventilation for occupied spaces should be 15 cfm/person or 0.15 cfm/sq. ft., whichever is greater.
4. Exhaust airflow from bathrooms should be based on minimum 10 air changes per hour.

c. Possible Fire Smoke Issues

1. Fire/smoke dampers in the system must be interlocked with fire alarm system.
2. Corridors, lobbies, and building entrances to have dedicated supply air.
3. Chemistry classrooms with occupancy separation shall have fire/smoke damper.
4. All air handling equipment supplying air flow in excess of 2,000 cubic feet per minute to have duct smoke detectors in the supply air duct.

d. Possible Title 24 Issues

1. Interior supply and return air ductwork (heating & cooling) shall be insulated with minimum R-value of 4.2.

NORTHWOOD ELEMENTARY SCHOOL
BERRYESSA UNION SCHOOL DISTRICT

B. Electrical

1. Power Systems:

A 2000A, 120/208V, 3 phase, 4 wire switchboard with a 300KVA utility pad mounted transformer located next to the kindergarten classroom building provides power to the campus. The switchboard was installed around 2002 and is in good and functioning condition. According to PG&E record, the current peak usage on the system is of 461 amp. There is a spare capacity of 257 amp available at the service for future need. If additional power is needed, the PG&E transformer shall need to be upgraded.

2. Fire Alarm System:

The existing fire alarm system was of automatic system on a Gamewell 602 panel in main office MDF room installed in 2009. The panel is in good and functioning condition. The initiation and notification devices meet the current code requirement.

3. Public Address and Clock Systems:

The existing Bogen Multicom 2000 PA and master clock system located in the main office conference room is in good and functioning condition. Existing speaker and clock units are in good condition for reuse. The main unit is suggested to be relocated to the MDF room to clear usage in the conference room.

PIEDMONT MIDDLE SCHOOL
BERRYESSA UNIFIED SCHOOL DISTRICT

A. MECHANICAL BUILDING SYSTEMS

1. Existing Conditions:

a. New rooftop gas heat / electric cool air conditioning units, and exhaust fans installed in 2011.

b. New electric cool split systems with gas fired furnaces added in 2011.

c. New temperature controls installed in 2011.

d. New ductwork on the roof was provided in 2011.

e. Existing ductwork and air distribution in building is original.

2. Recommendations:

a. Replace all insulated supply and return ductwork, diffusers and grilles within the building.

b. Replace all exhaust ductwork within the building.

3. General:

a. This report and comments to follow are based on observations of the general condition of the mechanical systems and noticeable code issues resulting from a review of the existing drawings and an on-site visit, when required.

b. Refer to Appendix A for Title 24 requirements and general code issues that should be considered.

PIEDMONT MIDDLE SCHOOL
BERRYESSA UNIFIED SCHOOL DISTRICT

APPENDIX-A

a. General

1. Comply requirements of California Mechanical Code (CMC) latest edition.

b. Possible Ventilation Code Issues

1. Corridors cannot be used as plenums for the purpose of supplying or exhausting air.

2. Corridors must have minimum two (2) air changes per hour for ventilation.

3. Minimum ventilation for occupied spaces should be 15 cfm/person or 0.15 cfm/sq. ft., whichever is greater.

4. Exhaust airflow from bathrooms should be based on minimum 10 air changes per hour.

c. Possible Fire Smoke Issues

1. Fire/smoke dampers in the system must be interlocked with fire alarm system.

2. Corridors, lobbies, and building entrances to have dedicated supply air.

3. Chemistry classrooms with occupancy separation shall have fire/smoke damper.

4. All air handling equipment supplying air flow in excess of 2,000 cubic feet per minute to have duct smoke detectors in the supply air duct.

d. Possible Title 24 Issues

1. Interior supply and return air ductwork (heating & cooling) shall be insulated with minimum R-value of 4.2.

2. Heating, ventilating, and air conditioning systems to have control capability with night setback.

3. Heating, ventilating, and air conditioning equipment to be certified by the State of California to meet minimum energy requirements.

PIEDMONT MIDDLE SCHOOL
BERRYESSA UNION SCHOOL DISTRICT

B. Electrical

1. Power Systems:

A 2000A, 277/480V, 3 phase, 4 wire switchboard with a 500KVA utility pad mounted transformer located next to building J in the electrical service yard provides power to the campus. The switchboard was of original building in fair and functioning condition. According to PG&E record, the current peak usage on the system is of 286 amp. There is a spare capacity of 245 amp available at the service for future usage. If additional power is needed, the PG&E transformer shall need to be upgraded.

A second service of 600a, 120/240V, 3 wire switchboard with overhead service provide a 50 KVA PG&E pole mounted transformer provides power for the portable building at the north of the campus. The switchboard was of original building in fair and functioning condition. According to PG&E record, the current peak usage on the system is of 171 amp. There is no spare capacity at the service for future usage. If additional power is needed, the PG&E transformer shall need to be upgraded.

2. Fire Alarm System:

The existing fire alarm system was of a manual/automatic system on a Gamewell 610 panel in the administration office interfaced with an old Federal Signal 8000 panel. The panel had numerous trouble signals due to old device and cabling. The notification devices and initiating devices were not adequate to meet the current code requirement.

Recommendations:

a. Replace existing panel with new Gamewell 602 panel for an addressable supervised automatic system.
b. Provide new horn and strobes in areas required by ADA, NFPA, CEC and CFC.
c. Provide new initiating devices for a complete automatic system per CEC and CFC requirement.

3. Public Address and Clock Systems:

The existing Bogen Multicom 2000 PA and master clock system located in the administration MDF room is in good and functioning condition. Existing speaker and clock units are in good condition for reuse.

RUSKIN ELEMENTARY SCHOOL
BERRYESSA UNIFIED SCHOOL DISTRICT

A. MECHANICAL BUILDING SYSTEMS

1. Existing Conditions:

a. New packaged gas heat / electric cool rooftop units, and exhaust fans installed in 2006.

b. New temperature controls installed in 2006.

c. New ductwork on the roof was provided in 2006.

d. Existing ductwork and air distribution in building is original.

2. Recommendations:

a. Replace all insulated supply and return ductwork, diffusers and grilles within the building.

b. Replace all exhaust ductwork within the building.

3. General:

a. This report and comments to follow are based on observations of the general condition of the mechanical systems and noticeable code issues resulting from a review of the existing drawings and an on-site visit, when required.

b. Refer to Appendix A for Title 24 requirements and general code issues that should be considered.

RUSKIN ELEMENTARY SCHOOL
BERRYESSA UNIFIED SCHOOL DISTRICT

APPENDIX-A

a. General

1. Comply requirements of California Mechanical Code (CMC) latest edition.

b. Possible Ventilation Code Issues

1. Corridors cannot be used as plenums for the purpose of supplying or exhausting air.

2. Corridors must have minimum two (2) air changes per hour for ventilation.

3. Minimum ventilation for occupied spaces should be 15 cfm/person or 0.15 cfm/sq. ft., whichever is greater.

4. Exhaust airflow from bathrooms should be based on minimum 10 air changes per hour.

c. Possible Fire Smoke Issues

1. Fire/smoke dampers in the system must be interlocked with fire alarm system.

2. Corridors, lobbies, and building entrances to have dedicated supply air.

3. Chemistry classrooms with occupancy separation shall have fire/smoke damper.

4. All air handling equipment supplying air flow in excess of 2,000 cubic feet per minute to have duct smoke detectors in the supply air duct.

d. Possible Title 24 Issues

1. Interior supply and return air ductwork (heating & cooling) shall be insulated with minimum R-value of 4.2.

2. Heating, ventilating, and air conditioning systems to have control capability with night setback.

3. Heating, ventilating, and air conditioning equipment to be certified by the State of California to meet minimum energy requirements.

RUSKIN ELEMENTARY SCHOOL
BERRYESSA UNION SCHOOL DISTRICT

B. Electrical

1. Power Systems:

A 1000A, 277/480V, 3 phase, 4 wire switchboard with a 300KVA utility pad mounted transformer located next to the portable classroom buildings provides power to the campus. The switchboard was installed around 2002 and is in good and functioning condition. According to PG&E record, the current peak usage on the system is of 219 amp. There is a spare capacity of 87 amp available at the service for future need. If additional power is needed, the PG&E transformer shall need to be upgraded.

2. Fire Alarm System:

The existing fire alarm system was of automatic system on a Gamewell 602 panel in main office hall way installed in 2009. The panel is in good and functioning condition. The initiation and notification devices meet the current code requirement.

3. Public Address and Clock Systems:

The existing Bogen Multicom 2000 PA and master clock system located in the building D mezzanine is in good and functioning condition. Existing speaker and clock units are in good condition for reuse.

SIERRAMONT MIDDLE SCHOOL
BERRYESSA UNIFIED SCHOOL DISTRICT

A. MECHANICAL BUILDING SYSTEMS

1. Existing Conditions:

a. Original chillers, cooling towers and pumps installed in the Equipment Yard.

b. Original fan coil units, exhaust fans, temperature controls, piping and ductwork.

c. New boilers (re-using the existing hot water pumps) added in 2013.

d. Existing ductwork and air distribution is original.

e. Existing hot and chilled water piping is original.

2. Recommendations:

a. Remove existing chillers, cooling towers and pumps. Replace with new air cooled chiller and chilled water pumps.

b. Remove all existing fan coil units and replace with new fan coil units. Modify and reconnect the existing ductwork to the new units. Install the replacement units most matching the removed units to minimize the modifications to the duct connections and the unit supports.

c. Replace all insulated supply and return ductwork, diffusers and grilles within the building. Replace all exhaust ductwork within the building.

d. Replace all insulated hot and chilled water within the building.

3. General:

a. This report and comments to follow are based on observations of the general condition of the mechanical systems and noticeable code issues resulting from a review of the existing drawings and an on-site visit, when required.

b. Refer to Appendix A for Title 24 requirements and general code issues that should be considered.

SIERRAMONT ELEMENTARY SCHOOL
BERRYESSA UNIFIED SCHOOL DISTRICT

APPENDIX-A

a. General

1. Comply requirements of California Mechanical Code (CMC) latest edition.

b. Possible Ventilation Code Issues

1. Corridors cannot be used as plenums for the purpose of supplying or exhausting air.

2. Corridors must have minimum two (2) air changes per hour for ventilation.

3. Minimum ventilation for occupied spaces should be 15 cfm/person or 0.15 cfm/sq. ft., whichever is greater.

4. Exhaust airflow from bathrooms should be based on minimum 10 air changes per hour.

c. Possible Fire Smoke Issues

1. Fire/smoke dampers in the system must be interlocked with fire alarm system.

2. Corridors, lobbies, and building entrances to have dedicated supply air.

3. Chemistry classrooms with occupancy separation shall have fire/smoke damper.

6. All air handling equipment supplying air flow in excess of 2,000 cubic feet per minute to have duct smoke detectors in the supply air duct.

d. Possible Title 24 Issues

1. Heating furnaces to have minimum 80% efficiency.

2. Heating & Ventilating and Air Conditioning systems in excess of 2,500 cfm and a total cooling over 75,000 BTU/h (6.25 Tons) must have an economizer. Economizer must be fully integrated into the cooling system so that depending on the weather conditions, economizer can provide partial/full cooling when additional mechanical cooling is required.

3. Interior supply and return air ductwork (heating & cooling) shall be insulated with minimum R-value of 4.2.

4. Hot and chilled water piping less than 50°F and over 110°F shall be insulated with pipe insulation minimum R-value of 4.2.

5. Heating, ventilating, and air conditioning systems to have control capability with night setback.

6. Heating, ventilating, and air conditioning equipment to be certified by the State of California to meet minimum energy requirements.

MORRILL MIDDLE SCHOOL
BERRYESSA UNION SCHOOL DISTRICT

B. Electrical

1. Power Systems:

A 2000A, 277/480V, 3 phase, 4 wire switchboard with a 750KVA utility pad mounted transformer located in the electrical service yard provides power to the campus. The switchboard was installed around 2003 and is in good condition. According to PG&E record, the current peak usage on the system is of 378 amp. There is a spare capacity of 431 amp available at the service for future usage. If additional power is needed, the PG&E transformer shall need to be upgraded.

2. Fire Alarm System:

The existing fire alarm system was of manual/automatic system on a Gamewell 610 panel in the administration office installed around 2003. The panel is in good and functioning condition. The notification devices were not adequate to meet the current code requirement.

Recommendations:

a. Provide new horn and strobes in areas required by ADA, NFPA, CEC and CFC.

3. Public Address and Clock Systems:

The existing Bogen Multicom 2000 PA and master clock system located in the administration storage room is in good and functioning condition. Existing speaker and clock units are in good condition for reuse.

SUMMERDALE ELEMENTARY SCHOOL
BERRYESSA UNIFIED SCHOOL DISTRICT

A. MECHANICAL BUILDING SYSTEMS

1. Existing Conditions:

a. New chiller, cooling tower (with new water treatment system), boiler and pumps provided in 2009.

b. New temperature controls installed in 2009.

c. Existing fan coil units are original.

d. Existing ductwork and air distribution in building is original.

e. Existing hot and chilled water are original.

2. Recommendations:

a. Demolish all existing air fan coil units (above ceiling) and replace with new fan coil units. Install the replacement units most matching the removed units to minimize the modifications to the existing above ceiling installation and the unit supports.

b. Replace all insulated supply and return ductwork, diffusers and grilles within the building. Replace all exhaust ductwork within the building.

c. Replace all insulated hot and chilled water within the building.

d. Replace all exhaust fans.

3. General:

a. This report and comments to follow are based on observations of the general condition of the mechanical systems and noticeable code issues resulting from a review of the existing drawings and an on-site visit, when required.

b. Refer to Appendix A for Title 24 requirements and general code issues that should be considered.

SUMMERDALE ELEMENTARY SCHOOL
BERRYESSA UNIFIED SCHOOL DISTRICT

APPENDIX-A

a. General

1. Comply requirements of California Mechanical Code (CMC) latest edition.

b. Possible Ventilation Code Issues

1. Corridors cannot be used as plenums for the purpose of supplying or exhausting air.

2. Corridors must have minimum two (2) air changes per hour for ventilation.

3. Minimum ventilation for occupied spaces should be 15 cfm/person or 0.15 cfm/sq. ft., whichever is greater.

4. Exhaust airflow from bathrooms should be based on minimum 10 air changes per hour.

c. Possible Fire Smoke Issues

1. Fire/smoke dampers in the system must be interlocked with fire alarm system.

2. Corridors, lobbies, and building entrances to have dedicated supply air.

3. Chemistry classrooms with occupancy separation shall have fire/smoke damper.

6. All air handling equipment supplying air flow in excess of 2,000 cubic feet per minute to have duct smoke detectors in the supply air duct.

d. Possible Title 24 Issues

1. Heating & Ventilating and Air Conditioning systems in excess of 2,500 cfm and a total cooling over 75,000 BTU/h (6.25 Tons) must have an economizer. Economizer must be fully integrated into the cooling system so that depending on the weather conditions, economizer can provide partial/full cooling when additional mechanical cooling is required.

2. Interior supply and return air ductwork (heating & cooling) shall be insulated with minimum R-value of 4.2.

3. Hot and chilled water piping less than 50°F and over 110°F shall be insulated with pipe insulation minimum R-value of 4.2.

4. Heating, ventilating, and air conditioning systems to have control capability with night setback.

5. Heating, ventilating, and air conditioning equipment to be certified by the State of California to meet minimum energy requirements.

SUMMERDALE ELEMENTARY SCHOOL
BERRYESSA UNION SCHOOL DISTRICT

B. Electrical

1. Power Systems:

A 1000A, 277/480V, 3 phase, 4 wire switchboard with a 300KVA utility pad mounted transformer located in the electrical service yard provides power to the campus. The switchboard was of original built and in fair condition. According to PG&E record, the current peak usage on the system is of 227 amp. There is a spare capacity of 78 amp approximately at the service for future usage. If additional power is needed, the PG&E transformer shall need to be upgraded.

2. Fire Alarm System:

The existing fire alarm system was of manual/automatic system on a Gamewell 610 panel in the administration office installed around 2003. The panel is in good and functioning condition. The notification devices were not adequate to meet the current code requirement.

Recommendations:

a. Provide new horn and strobes in areas required by ADA, NFPA, CEC and CFC.

3. Public Address and Clock Systems:

The existing Bogen Multicom 2000 PA and master clock system located in the multi-purpose building storage room is in good and functioning condition. Existing speaker and clock units are in good condition for reuse.

TOYON ELEMENTARY SCHOOL
BERRYESSA UNIFIED SCHOOL DISTRICT

A. MECHANICAL BUILDING SYSTEMS

1. Existing Conditions:

a. New chiller, pumps (w/ VFD's), boiler and exterior piping installed in 2008 for Buildings G & H.

b. New exhaust fans installed in 2008 for Buildings G & H. All other buildings have original exhaust fans.

c. New temperature controls installed in 2008.

d. New air handling units and ductwork on the roof was provided for Buildings G & H in 2008. All other buildings have original vertical baseboard fan coil units.

e. All hot and chilled water is original.

2. Recommendations:

a. Remove all existing exposed, vertical baseboard fan coil units and replace with new vertical gas fired furnaces with split DX cooling with controlled outside air intake, EC motors and new ductwork with diffusers and grilles.

b. Replace all insulated supply and return ductwork, diffusers and grilles within the building. Replace all exhaust ductwork within the building.

c. Replace all insulated underground hot and chilled water piping with pre-insulated piping manufactured to be buried below grade.

d. Replace all insulated hot and chilled water pipe installed within the building.

e. Replace all insulated hot and chilled water pipes installed on the covered walkway canopy.

3. General:

This report and comments to follow are based on observations of the general condition of the mechanical systems and noticeable code issues resulting from a review of the existing drawings and an on-site visit, when required.

Refer to Appendix A for Title 24 requirements and general code issues that should be considered.

TOYON ELEMENTARY SCHOOL
BERRYESSA UNIFIED SCHOOL DISTRICT

APPENDIX-A

a. General

1. Comply requirements of California Mechanical Code (CMC) latest edition.

b. Possible Ventilation Code Issues

1. Corridors cannot be used as plenums for the purpose of supplying or exhausting air.

2. Corridors must have minimum two (2) air changes per hour for ventilation.

3. Minimum ventilation for occupied spaces should be 15 cfm/person or 0.15 cfm/sq. ft., whichever is greater.

4. Exhaust airflow from bathrooms should be based on minimum 10 air changes per hour.

c. Possible Fire Smoke Issues

1. Fire/smoke dampers in the system must be interlocked with fire alarm system.

2. Corridors, lobbies, and building entrances to have dedicated supply air.

3. Chemistry classrooms with occupancy separation shall have fire/smoke damper.

6. All air handling equipment supplying air flow in excess of 2,000 cubic feet per minute to have duct smoke detectors in the supply air duct.

d. Possible Title 24 Issues

1. Heating furnaces to have minimum 80% efficiency.

2. Heating & Ventilating and Air Conditioning systems in excess of 2,500 cfm and a total cooling over 75,000 BTU/h (6.25 Tons) must have an economizer. Economizer must be fully integrated into the cooling system so that depending on the weather conditions, economizer can provide partial/full cooling when additional mechanical cooling is required.

3. Interior supply and return air ductwork (heating & cooling) shall be insulated with minimum R-value of 4.2.

4. Hot and chilled water piping less than 50°F and over 110°F shall be insulated with pipe insulation minimum R-value of 4.2.

5. Heating, ventilating, and air conditioning systems to have control capability with night setback.

6. Heating, ventilating, and air conditioning equipment to be certified by the State of California to meet minimum energy requirements.

TOYON ELEMENTARY SCHOOL
BERRYESSA UNION SCHOOL DISTRICT

B. Electrical

1. Power Systems:

A 1200A, 120/208V, 3 phase, 4 wire switchboard with a 300KVA utility pad mounted transformer located next building C electrical room provides power to the campus. The switchboard was installed around 1996 and is in good and functioning condition. According to PG&E record, the current peak usage on the system is of 256 amp. There is a spare capacity of 514 amp approximately at the service for future usage. If additional power is needed, the PG&E transformer shall need to be upgraded.

2. Fire Alarm System:

The existing fire alarm system was of automatic system on a Gamewell 602 panel in the administration office installed in 2008. The panel is in good and functioning condition. The initiation and notification devices meet the current code requirement.

3. Public Address and Clock Systems:

The existing Bogen Multicom 2000 PA and master clock system located in the building E storage room is in good and functioning condition. Existing speaker and clock units are in good condition for reuse.

VINCI PARK ELEMENTARY SCHOOL
BERRYESSA UNIFIED SCHOOL DISTRICT

A. MECHANICAL BUILDING SYSTEMS

1. Existing Conditions:

a. New rooftop multizone air handling unit (hot and chilled water), three new gas heat / electric cool packaged rooftop units, and exhaust fans installed in 2006.

b. New chiller and boiler added, reusing existing pumps, added in 2006.

c. New temperature controls installed in 2006.

d. New ductwork on the roof was provided in 2006.

e. Existing ductwork and air distribution in building is original.

f. Existing hot and chilled water below grade and within building is original.

2. Recommendations:

a. Replace all insulated supply and return ductwork, diffusers and grilles within the building.

b. Replace all exhaust ductwork within the building.

c. Replace all insulated hot and chilled water piping within the building.

d. Replace all insulated underground hot and chilled water piping with pre-insulated piping manufactured to be buried below grade.

3. General:

a. This report and comments to follow are based on observations of the general condition of the mechanical systems and noticeable code issues resulting from a review of the existing drawings and an on-site visit, when required.

b. Refer to Appendix A for Title 24 requirements and general code issues that should be considered.

VINCI PARK ELEMENTARY SCHOOL
BERRYESSA UNIFIED SCHOOL DISTRICT

APPENDIX-A

a. General

1. Comply requirements of California Mechanical Code (CMC) latest edition.

b. Possible Ventilation Code Issues

1. Corridors cannot be used as plenums for the purpose of supplying or exhausting air.

2. Corridors must have minimum two (2) air changes per hour for ventilation.

3. Minimum ventilation for occupied spaces should be 15 cfm/person or 0.15 cfm/sq. ft., whichever is greater.

4. Exhaust airflow from bathrooms should be based on minimum 10 air changes per hour.

c. Possible Fire Smoke Issues

1. Fire/smoke dampers in the system must be interlocked with fire alarm system.

2. Corridors, lobbies, and building entrances to have dedicated supply air.

3. Chemistry classrooms with occupancy separation shall have fire/smoke damper.

4. All air handling equipment supplying air flow in excess of 2,000 cubic feet per minute to have duct smoke detectors in the supply air duct.

d. Possible Title 24 Issues

1. Interior supply and return air ductwork (heating & cooling) shall be insulated with minimum R-value of 4.2.

2. Heating, ventilating, and air conditioning systems to have control capability with night setback.

3. Heating, ventilating, and air conditioning equipment to be certified by the State of California to meet minimum energy requirements.

VINCI PARK ELEMENTARY SCHOOL
BERRYESSA UNION SCHOOL DISTRICT

B. Electrical

1. Power Systems:

A 2000A, 277/480V, 3 phase, 4 wire switchboard with a 300KVA utility pad mounted transformer located in the electrical service yard provides power to the campus. The switchboard was of original built and in fair condition. According to PG&E record, the current peak usage on the system is of 355 amp. There is no spare capacity at the service for future usage. If additional power is needed, the PG&E transformer shall need to be upgraded.

2. Fire Alarm System:

The existing fire alarm system was of manual/automatic system on a Gamewell 610 panel in the administration office installed around 2003. The panel is in good and functioning condition. The notification devices were not adequate to meet the current code requirement.

Recommendations:

a. Provide new horn and strobes in areas required by ADA, NFPA, CEC and CFC.

3. Public Address and Clock Systems:

The existing Bogen Multicom 2000 PA and master clock system located in the administration storage room is in good and functioning condition. Existing speaker and clock units are in good condition for reuse.