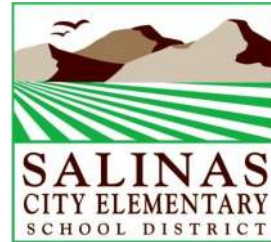


FACILITIES NEEDS ASSESSMENT

LOMA VISTA



PREPARED BY BELLI ARCHITECTURAL GROUP

2022

1. CAMPUS INFORMATION: Loma Vista

Address: 757 Sausal Drive, Salinas, CA 93906
 Year Built: 1966
 Current Principal: Susana Vargas
 Current Enrollment: 556 students

2. ON-SITE OBSERVATIONS

2.1 SITE

Overall, the school site is in good condition. Items noted include:

- No Kindergarten-sized playground present.
- Exterior asphalt needs seal coat.
- Exterior pavement striping needs new paint.
- Exterior lunch tables need painting.
- Non-accessible drinking fountains.



Image 2.1.1 Surfaces in need of seal coating. Taken on 05/03/2022 by Belli Architectural Group.



Image 2.1.2 Site paint striping. Taken on 05/03/2022 by Belli Architectural Group.



Image 2.1.3 Exterior lunch tables. Taken on 05/03/2022 by Belli Architectural Group.



Image 2.1.4 Non-accessible drinking fountain. Taken on 05/03/2022 by Belli Architectural Group.

2.2 EXTERIOR SHELL

The campus contains permanent and relocatable buildings. A few exterior building items noted include:

- Aging roofs in need of replacement at permanent buildings.
- Non-compliant exterior door thresholds.
- Original windows in need of replacement.
- Damaged plywood at fixed breezeway cover between MPR and Admin. Building.
- Damaged gutters.

All portable classroom exteriors are older, but well-maintained and recently painted.



Image 2.2.1 Permanent building gravel roof. Taken on 05/03/2022 by Belli Architectural Group.



Image 2.2.2 Restroom threshold. Taken on 05/03/2022 by Belli Architectural Group.



Image 2.2.4 Damaged plywood at fixed breezeway cover between MPR and Admin. Building. Taken on 05/03/2022 by Belli Architectural Group.



Image 2.2.3 Original windows at admin. office. Taken on 05/03/2022 by Belli Architectural Group.



Image 2.2.5 Damaged gutter. Taken on 05/03/2022 by Belli Architectural Group.

2.3 INTERIORS

Existing interior finishes and casework are in fair condition, but could use upgrades. Items noted include:

- Inefficient and aging light fixtures.
- Aging ceiling panels.
- Uneven and old flooring surfaces.
- Paint in need of refreshment.
- Restroom flooring in need of replacement.
- Non-operational plumbing fixtures.
- Older casework in classrooms with non-accessible sinks.
- Aged, deteriorated equipment in Janitorial spaces. Storage capacity limited.



Image 2.3.1 MPR lighting. Taken on 05/03/2022 by Belli Architectural Group.



Image 2.3.2 Aging ceiling panels. Taken on 05/03/2022 by Belli Architectural Group.

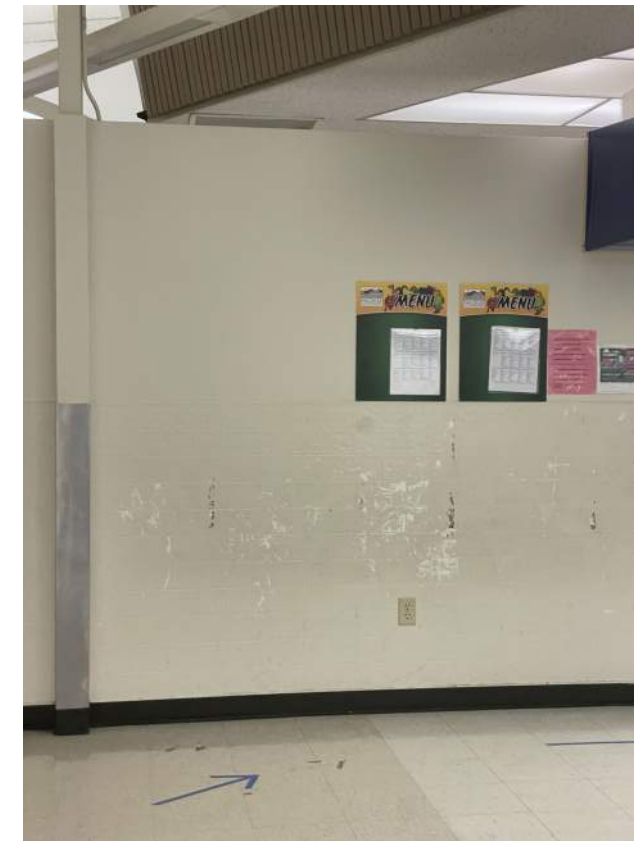


Image 2.3.4 Worn wall surfaces. Taken on 05/03/2022 by Belli Architectural Group.



Image 2.3.3 Aging flooring. Taken on 05/03/2022 by Belli Architectural Group.



Image 2.3.5 Restroom flooring. Taken on 05/03/2022 by Belli Architectural Group.



Image 2.3.6 Single occupancy non-accessible restroom. Taken on 05/03/2022 by Belli Architectural Group.

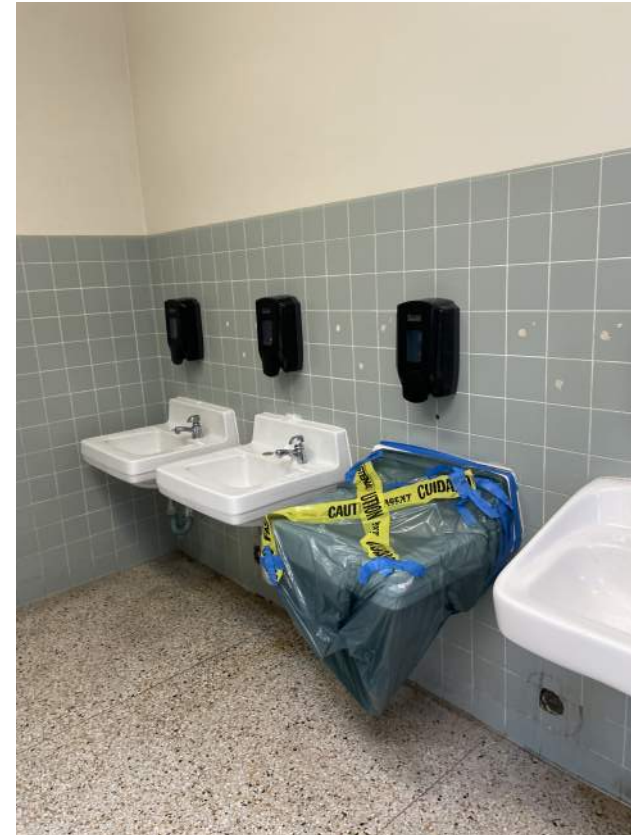


Image 2.3.8 Non-operational plumbing fixtures. Taken on 05/03/2022 by Belli Architectural Group.



Image 2.3.10 Janitorial Room. Taken on 05/03/2022 by Belli Architectural Group.



Image 2.3.7 Old classroom casework. Taken on 05/03/2022 by Belli Architectural Group.



Image 2.3.9 Preschool. Small deteriorated spaces Taken on 05/03/2022 by Belli Architectural Group.

2.4 ACCESSIBILITY

The campus presents significant accessibility issues, such as:

- Non-accessible drinking fountains.
- Non-accessible restrooms.
- Non-accessible accessories at restrooms.
- Non-accessible thresholds.



Image 2.4.1 Non-ADA compliant drinking fountain. Taken on 05/03/2022 by Belli Architectural Group.



Image 2.4.2 Non-ADA compliant restroom and accessories. Taken on 05/03/2022 by Belli Architectural Group.



Image 2.4.3 Non-ADA compliant restroom. Taken on 05/03/2022 by Belli Architectural Group.



Image 2.4.4 Non-accessible sink. Taken on 05/03/2022 by Belli Architectural Group.

2.5 SERVICES

For MEP findings, please refer to subsequent reports provided by Aurum Consulting and Axiom Engineers.

2.6 STAKEHOLDER REMARKS

- ADA upgrades needed throughout the campus.
- Kindergarten playground needed.

3. MECHANICAL REPORT

AXIOM ENGINEERSSM
CONSULTING MECHANICAL ENGINEERS
 22 Lower Ragsdale Dr., Suite A Monterey, CA 93940
 Phone 831.649.8000 Fax 831.649.8038



School Name: **Loma Vista ES**

Address 757 Sausal Drive

Findings from a site visit conducted on May 3, 2022. It appears the last significant HVAC/Plumbing modernization to the school was in 2002. This site is in desperate need of a new modernization. It is desired to install a Pelican Wireless Control System to allow the district maintenance staff to control all HVAC equipment

3.1 HVAC

Administration Building:

The heating system consist of a one (1) Armstrong up-flow gas-fired furnace utilizing an overhead supply air duct system with ceiling diffusers. The furnace was installed during the 2002 modernization. The heating system appeared to be in fair condition and operating. This furnace is 20 years old and should be replaced. Thermostats are programmable. Ceiling mounted exhaust fans throughout require replacing.

Multi-Purpose/Library Building:

The heating system consist of a five (5) Armstrong horizontal gas-fired furnaces located in an attic mezzanine. These furnaces were installed during the 2002 modernization. The heating system appeared to be in fair condition and operating. These furnaces are now 20 years old and need replacing. Thermostats are programmable. Ceiling mounted exhaust fans throughout require replacing.



It appears as if the original rooftop HV unit has been abandoned on the roof. This should be removed.



Classrooms 1 thru 9:

The heating system for these classrooms consist of Armstrong up-flow furnaces located inside a TEAM Mfg. metal enclosure. These were installed during the 2003 modernization. The heating system appeared to be in fair condition and operating. These furnaces inside the enclosures are 20 years old and should be replaced. Thermostats are non-programmable and operate from a 0 to 6 hour no-hold timer.



Classrooms 10, 11, 20 thru 32 and 35:

These are portable classroom consisting of the exterior wall mounted “Bard” type heat pump units. All portables utilize this type of equipment. These units throughout the campus appear to be original and are operating satisfactory. Older (20 years) units become a continual maintenance problem and should be replaced with new units. The photo below is of a unit that has been vandalized.



Classroom 16 thru 18:

This heating system consist of four (4) Lennox, rooftop mounted, packaged, gas heat/electric cooling units. These units appear to be from the 2002 modernization and due to salt air exposure, need replacing. Supply and return ductwork serving these classrooms is overhead. This building recently had a new roof installed. The metal enclosure shown around the HVAC unit in the picture below has been removed.



3.2 PLUMBING

Administration Building:

A gas-fired tank type water heater located here does not have DSA approved seismic bracing.

Multi-Purpose/Library Building:

A minor modernization to the kitchen was performed in 2013. A new gas-fired tank-less water heater was installed, along with new kitchen sinks and a grease interceptor.



Classrooms:

All of the classroom sinks throughout the campus do not meet ADA. All of the outside old-style Haws “white vinyl” drinking fountains also do not meet ADA and should be replaced.

4.3 FIRE SPRINKLERS

Fire Sprinklers are not present on the site. A few small storage rooms have fire sprinklers connected to the domestic water system. These fire sprinklers are connected to the domestic water system, which was an accepted practice at the time.

Note that there is a fire hydrant on site to provide fire protection for the portables.



This concludes the assessment.

AXIOM ENGINEERSSM CONSULTING MECHANICAL ENGINEERS
 22 Lower Ragsdale Dr., Suite A • Monterey, CA 93940 • Phone 831.649.8000 • Fax 831.649.8038

4. ELECTRICAL REPORT



ELECTRICAL ENGINEERING · LIGHTING DESIGN · SYSTEMS DESIGN

ELECTRICAL DUE DILIGENCE REPORT

For
Loma Vista Elementary School
Salinas, CA

For
Belli Architectural Group
235 Monterey Street, Suite B
Salinas, California 93901

May 6, 2022

Prepared by: Najib Anwary, P.E.

Aurum Consulting Engineers Monterey Bay
404 W. Franklin Street, Suite 100
Monterey, California 93940
Telephone : (831) 646-3330
Fax: (831) 646-3336
ACEMB Project #: 21-393.00

4.1 INTRODUCTION

The following is based on a walk-through visual inspection of the school. No electrical equipment was opened for inspection, no load studies done, no testing was performed. The intent was to evaluate the electrical systems and identify any obvious problems that may be present.

4.2 FIELD FINDINGS

Electrical System:

There are (2) Main “metered” electrical service switchboards (MSB1 and MSB2) at the site. MSB1 is a 1200 amp, 120/208 volt, 3 phase, NEMA 3R service located on the north side of the campus behind portable building #28. The MSB has a connection for an existing Solar PV system on site and this Solar PV System is connected to the MSB through a step-down voltage transformer (steps down 480V Solar PV system to 208V electrical distribution system) located adjacent to the MSB. The Solar PV is then connected ahead of the main breaker and the solar data collector panel is located on the back of portable building #28 which may require relocation should portable building #28 be removed from site. The MSB serves in large part, the main campus except for the western most string of portables consisting of Portables #20 through #27. MSB2 is a 600 amp, 120/240V, 1-phase, NEMA 3R service located behind portable #21 on the west side of campus. MSB3 serves the string of (8) portables and a restroom portable. The electrical service switchboard MSB1 seems to be relatively new and the additional electrical service MSB2 seems to have been added as buildings/modulars were added to the site. MSB1 expected life; approximately 15-20 yrs. MSB2 expected life; 10-15 yrs. The electrical services are used primarily for lighting and heating equipment, with minimal plug loads. Some of the electrical distribution system panels that are located around the site and are original to the buildings when the school was built, are old and manufactured by a company that no longer exists. The reliability of the older electrical panel system’s breakers to function correctly when necessary cannot be relied upon. It is recommended to replace the oldest panels within the central campus buildings that have panels “original” to the school construction “ZINSCO” (manufacturer) panels as soon as possible. Where the District plans to add HVAC to the site, the MSB2 may not be adequate and MSB1 will need further evaluation to confirm capacity for proposed new HVAC system. See attached photos MSB1 & MSB.

Interior Lighting is primarily fluorescent with T8 or T12 lamps at interior spaces. Most if not all the lighting throughout the school campus is old and although there was no mention of complete failure, some light fixtures seemed original to the spaces, so they are likely near their “end of life”, especially with regards to efficiency. Emergency lighting was not apparent at any classrooms, restrooms, exterior landings. However, in multi-use spaces, bug-eye type stand-alone emergency light fixtures were installed. Occupant sensors and multilevel switching necessary for energy conservation is almost non-existent. Expected life; Unknown. It is recommended to retrofit campus wide lighting system in the near future. This would be a good opportunity for reduction in energy use from more efficient lighting fixtures, improved classroom lighting, smart lighting controls and reduced maintenance. See attached LTG1 photo.

Exterior Lighting at parking lots is LED with pole and wall mounted fixtures leading to the back parking lot from the front lot. The pole lights seem to be relatively new compared to most building mounted exterior light fixtures. Exterior building wall packs around the

campus are older and appear to be fluorescent lamp fixtures that are deteriorating with oxidation of the lens prohibiting light spread from source. The exterior canopy light fixtures for most of the campus seems to have been updated to LED technology. Exterior lighting is controlled by both time clock and photocell for auto shut-off. The campus does not seem to have obvious issues with lack of coverage for exterior pathways, however, it is best to get District staff input for any night time observation of the site. Illumination of any dark/under lit locations that require new light fixtures will require that new lighting be controlled via an astronomic time clock or photocell as well as dark sky compliant/full cut-off light fixtures. Expected life of existing exterior lighting; 5-10 yrs. minimum for newer LED fixtures and unknown for older fluorescent/HID fixtures.

Classrooms have typically one outlet per wall with modifications in some areas to accommodate current computer loads (where surface raceways were added). Expected life; Unknown. It is recommended to retrofit classrooms, in the near future, with additional circuits and outlets to accommodate a minimum district standard quantity of devices in general classroom/space for equipment connections including multi-media equipment. This will in turn require an upgrade to existing electrical panel boards which will need to be connected to the existing main electrical switchboard or nearby distribution panels. There are some classrooms where either the sink was added or the receptacle installation was original to the site and thus the receptacle(s) are not GFCI (Ground-Fault Circuit Interrupt) type. These should be replaced.

Telephone System:

The existing telephone system appears to be an analog only system for entire campus, it is in fair condition, but will likely need to be upgraded to new district standard of Voice Over IP (VoIP) system. There was no input provided for major problems except that the desire is to bring the entire site to standard VoIP system. Expected life; unknown, District IT input is required.

PA Speaker System:

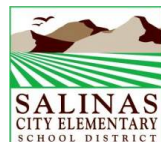
The existing PA System is a Dukane model and is connected to speakers around the campus, some exterior speakers with separate amplifiers are located strategically to cover large open field areas. Expected life; 1-2 yrs., the system is old and requires regular maintenance, per district staff.

Clock System:

The existing Program Clock system is a wireless battery operated system, PRIMEX is manufacturer. It seems to be in good condition and functional. The school staff reported no ongoing problems with the existing system. Expected life; approximately 5 yrs. Where PA Speaker system is upgraded, it is recommended to upgrade the clock system if desired to have both under one “umbrella”/manufacturer.

Data System:

There are IDF’s (Intermediate Distribution Frame) throughout the school campus with wireless routers in most of the buildings/classroom spaces. Since most classrooms have only a couple computers at most (except for computer labs), the existing campus wide data system seems to be working fine. Expected life; unknown. It is recommended to retrofit classrooms, in the near future, with additional outlets to accommodate a district standard



quantity of devices in general classroom/space for computers, printers and multi-media equipment. This will require District IT input on available bandwidth and patch panels at existing distribution frames to accommodate an increase in connections.

Fire Alarm System:

1.The existing Fire Alarm System (Notifier) is an AFP-200 model that is discontinued. The site does not have current code compliant coverage as required by California Fire Code. The school site has pull stations and horns/horn-strobes for majority of the spaces which met code standards at the time of install, however, where spaces are remodeled and required to conform to current code requirements, the existing Notifier AFP-200 panel will not accommodate such upgrades and increase in quantity of devices (smoke detectors and heat detectors). The existing system is old and will need to be replaced and or modified to accommodate any future remodel work or the required Emergency Voice Evacuation System addition. The raceways associated with low voltage systems around the center of campus are surface metal raceways (Panduit, see attached photo “EXTERIOR CONDUIT”) mounted just below the eave of the buildings and are used to route fire alarm cables as well as other low voltage systems from one section of the building to the next. Expected life of existing system; 1-3 years if no new major building renovations occur.

Security:

1.The existing campus security system is comprised of a stand-alone security panel in Administration building. The system seems to be in good condition and the school staff reported no ongoing problems. The system is interconnected to remote building booster panels and the campus has motion detectors throughout the site connected to the security panel. Expected life; 4 to 5 more years. There is also a CCTV Security Camera system which Power over Ethernet (POE) cameras located strategically by the district throughout the site. Each camera is connected to a local IDF/MDF via data cable. Expected life; unknown, seems to be in working condition with no reported problems.

4.3 SUMMARY

The school electrical infrastructure is in fair condition, however, the older “ZINSCO” manufacturer panelboards (see attached photo “ZINSCO PANEL”) need to be replaced with new branch circuit panels to alleviate failing breakers and any possible overload conditions that may be present due to over extending existing circuits. The school interior lighting system and controls need to be upgraded in the near future where energy may be conserved with lower maintenance cost and higher lamp life LED technology. An increase in the classroom receptacle quantity and associated electrical loads will require electrical distribution upgrades to support future additional computer/technology loads as well as possible mechanical HVAC connections. The raceways associated with low voltage systems around the campus may need to be verified/inspected for re-use where additional fiber optic cables/network cabling for any low voltage system upgrades is deemed necessary in order to verify cost impact of new trench vs. existing underground conduit re-use. Where a new building may be proposed at this site, an electrical survey will need to be completed and it is likely that the new building will require an Electrical (PG&E) service upgrade to accommodate any new proposed building (should an equivalent number of buildings/rooms not be slated to be removed due to new building added). In addition, Site Telecom, Fire Alarm, and Low Voltage Systems will need upgrades to accommodate new connections with newer technology and EM Voice Evacuation Fire Alarm System.



MSB1.



MSB1.



MSB1.



MSB1.



MSB2.



ZINCO PANEL.



LTG1.



MSB2.



EXTERIOR CONDUIT.

404 W. Franklin Street, Suite 100 - Monterey, CA 93940
1798 Technology Drive, Suite 242 - San Jose, CA 95110
T 831 646 3330 (Monterey) T 408 564 7925 (San Jose) F 831 646 3356

www.acemb.com