



Facilities Assessment Report Corvallis School District

Submitted to Corvallis School District
by DOWA - IBI Group Architects, Inc.
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Part I: Introduction

PARTICIPANTS

Erin Prince, Superintendent

Aaron Hale, Franklin K-8 Principal
Brian Nordyke, District Painter
Bryan Traylor, Hoover Elementary School Principal
Cindy Dagesse, Western View Center
Chad Smithson, Lead Groundskeeper
Cherie Stroud, Crescent Valley High School Principal
Debbie McPheeters, Dixie School Program Administrator
Denise Gorthy, Jefferson and Wilson Elementary Schools Principal
Doug Tiller, District Carpenter
Ed Riley, District Painter
Eric Beasley, Linus Pauling Middle School Principal
Geoff Penrose, Cheldelin Middle School Principal
Jim Bertsch, District Groundskeeper
Julie Wilborn, Harding Administrative Assistant
Kim Patten, Maintenance Supervisor
Leigh Santy, Garfield Elementary School Principal
Lisa Harlan, Lincoln Elementary School Principal
Matt Holliday, District Groundskeeper
Matthew Boring, Corvallis High School Principal
Mike Miller, District Groundskeeper
Patty Pearson, Adams Elementary School Principal
Paul Jennison, District HVAC Technician
Rosemary O'Neil, Mountain View Elementary School Principal
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Steve Nielsen, Business Director
Tim Phillips, District Carpenter
Tim Trivett, District Plumber

Alex Ridley, Glumac
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HISTORY AND PROCESS

Introduction

In 2002, a facility assessment report was conducted at all of the educational facilities in the Corvallis School District. As a result, a bond was successfully passed that allowed work to be done District wide, including the construction of Linus Pauling Middle School and the new Corvallis High School.

A new charge has been set to create a viable, prioritized long-range assessment report for the Corvallis School District and to provide cost estimates for all of work identified. This includes work that was identified in the 2002 assessment, but which could not be addressed in the bond-funded construction during the 2004-2006 timeframe, as well as newly developing issues observed and identified by this report. This report will update the assessment previously completed in 2002.

Facilities Maintenance Staff prepared initial facility assessments which were used as a guideline for individual facility assessments conducted in June 2013.

Dull Olson Weekes – IBI Group Architects Inc., Glumac and KPFF Consulting Engineers conducted reviews of each of the District's facilities, and compiled their findings and recommendations into a Facilities Assessment Report. Pricing for each recommendation documented was provided by an independent cost consultant Architectural Cost Consultants.

Several facilities have been noted as candidates for replacement. Costs for replacement facilities, as well as any associated on and offsite costs and fees have been included in this assessment as a separate section. Detailed reports for these facilities are included in the detailed report section of this report, and reflect the costs associated to make improvements at the facilities should they remain operational.

District wide roofing conditions were reviewed independently by a specialized individual. A separate report will be generated to document the roofing conditions. The findings and recommendations will be in the appendix of the final report.

The School District also conducted facility walkthroughs with local law enforcement and fire authorities to review facility safety and security.

Food Service and Technology components for each facility have been excluded in this 2013 Report. School capacity was also excluded from this report. The conditions of fields, parking areas, sidewalks and playgrounds were conducted by Dull Olson Weekes – IBI Group Architects Inc.

References

A number of documents will also be referenced in regards to the findings in this report. Due to the size of these documents, they will not be included as part of the report but available for reference. These include:

- 2002 Facility Assessment
- 1997 ABKJ Seismic Analysis Report
- 2000 Degenkolb Seismic Building Evaluation
- 2000 CH2MHill Report

The roofing assessment will be located in the appendix of this report.

Facilities

The following facilities are included in this study:

- Adams Elementary School
- Franklin K-8 School
- Garfield Elementary School
- Hoover Elementary School
- Jefferson Elementary School
- Lincoln Elementary School
- Mountain View Elementary School
- Wilson Elementary School
- Cheldelin Middle School
- Linus Pauling Middle School
- Corvallis High School
- Crescent Valley High School
- Harding (College Hill Campus)
- Western View Center
- District Administrative Building, Maintenance and Food Service Warehouse
- Dixie School

Methodology

Dull Olson Weekes – IBI Group Architects, Glumac (electrical, plumbing and mechanical engineers) and KPFF Consulting Engineers (structural) met with District Staff in April 2013 to review the needs, deficiencies and issues at each of the facilities within the Corvallis School District.

The field investigation work for the facilities took place the week of June 3-7, 2013. District facilities personnel as well as campus stewards at each facility were made available to accompany the Architectural/Engineering Project Team and provide additional information about the facilities as they were reviewed. The results from this fieldwork have been compiled into this report.

Overview of Report

The report has been organized to allow the reader to gain an insight at several different levels. The first portion of the report includes an Executive Summary. It is organized into sections that focus on the district as a whole and then each school individually, and gives summary information along with overall estimated costs for each facility. The Executive Summary for each facility does not contain every recommendation that is found in the Detailed Report; rather it provides highlighted observations in addition to the total cost for all levels of work.

Recommendations for each project, as listed in the Executive Summary, as well as individual detailed summaries, are divided into Levels I, II, III and IV. A description of these levels is included in the Executive Summary, as well as on the cost sheets found in the detailed report for each facility.

The second portion of this report also contains facility replacement costs for those facilities identified as candidates for replacement. These facilities include Franklin K-8, Garfield Elementary, Harding, Hoover Elementary School and Lincoln Elementary School. Future long range facilities planning committees can use this information to compare against facility improvements costs and determine if replacement is more cost effective than repairing older facilities.

The last portion of this report contains a detailed report for each facility in the Corvallis School District. This section is where you will find information to support the observations stated in the Executive Summary. It includes full descriptions of site observations, images and breakdown of recommendations with associated costs. These reports include structural, architectural, mechanical, electrical, plumbing and grounds components. Cost sheets are located at the end of each detailed facility report.

Project Budgets

Budget cost amounts have been established for each of the line item deficiencies identified in the facility assessment.

The cost analysis for each item is based on cost information from a professional cost estimator. Each item includes the actual estimated construction cost and the following mark ups:

- 15% General Contractor Overhead and Profit
- 10% Estimating Contingency
- 25% Project Soft Costs, including design fees, permits, special testing requirements, project management, furniture and equipment, and other project related costs. (Please note that soft costs can increase dramatically if high System Development Charges are required and if local

jurisdiction determines needs for wetlands mitigation and offsite improvements such as street and traffic related improvements).

These mark ups result in a cost for each item that represents true project costs, not just actual construction costs. Please note that the mark ups do not include a factor for inflation.

Current school replacement project costs included in this report will include demolition, new construction costs, Owner, Consultant and Construction fees and soft costs. These costs do not include site acquisition or possible offsite improvements. These items would have to be evaluated on a case by case basis.

Building Codes

The latest editions of the following codes were utilized in developing this assessment: International Mechanical Code (IMC), International Plumbing Code (IPC), International Electrical Code (IEC), National Fire Protection Association (NFPA) Codes and Standards, and American Society of Heating, Refrigerating and Air-conditioning Engineers (ASHRAE) Standard 90.1.

All references to “the code” or “code requirements” in the architectural components of this document refer to the 2010 Oregon Structural Specialty Code (OSSC).



Part II: Executive Summary

OVERALL FACILITY ASSESSMENT

The Corvallis School District facilities have been well cared for and exhibit a high level of maintenance. The age of the facilities ranges from over 83 years to less than 8 years and all facilities show a high attention to detail in terms of care and maintenance. However, the majority of the facilities suffer from deferred maintenance issues, accessibility issues, building code and/or fire and life safety deficiencies. Deferred maintenance refers to those maintenance items or building repairs which may not have been performed at the optimum time due to budget or other constraints. These problems tend to exist at the older facilities. Facilities are in need of various upgrades in order to meet current and future needs of the school.

Observations and recommendations are based on the concept of a “useful life” of the building and its elements. In general, all products have a life span in terms of durability and maintenance. It is also based on the current use of each facility.

DISTRICT WIDE EVALUATION OF FACILITIES

The following charts are an overall evaluation of District facility improvements by category, by priority and by school. Individual charts for each facility are addressed in the Executive Summary and the Detailed Reports.

Buildings were reviewed under five categories: Structure/Substructure (structural systems, exterior, wall, roof and window assemblies), Interiors (including toilet facilities), Systems (mechanical, plumbing and fire protection), Electrical and Grounds (included in this category are fields and grounds in addition to site components such as parking and sidewalks).

In the Detailed Summary for each facility, a rating system based on levels was used, ranging from Level I to Level IV. The levels aided in determining the priority or need of each improvement listed. The levels represent the following evaluations:

Level I: Highest Priority - Issues that affect the life safety concerns of the occupant, related to notification of occupants to emergency situations and the ability to safely evacuate the facility; subcomponents of Level I include safety concerns such as electrical loads, hazardous materials that might be affected with remodel or modifications, and lack of fall protection. Level I items may also include structural upgrades to facilities constructed prior to current building codes. Level I items should be addressed within a five year plan.

Level II: Moderate Priority - Issues that are related to the integrity and adequacy of systems within the building to sufficiently withstand a potential significant seismic or wind event and still function; also related are the age of systems or building components that keep day to day operations running without constant repair. Issues may include mechanical, electrical and plumbing systems, fire suppression, lighting and security, as well as flooring, windows doors and other architectural components. Level II Items may be part of a five year plan.

Level III: Low Priority - Issues that may over time affect the day to day maintenance of the building or long-term use of the facility. Issues also include access and clearances at equipment and fixtures, access for individuals with disabilities and both indoor and exterior environment quality. Level III Items could be considered in a five to ten year plan.

Level IV: Issues that are related to the aesthetics of the building's interior and exterior as well as integrity and adequacy of building systems that don't pose any issues or are nearing the end of their remaining lifecycles. These may include items such as cabinetry original to the building that have signs of wear or dated finishes but do not have any damage or deterioration. Level IV items could be considered long-term plans (10 years or more).

District Wide Facilities Assessment Costs

Recommendations by Category	Cost
Structure/Shell	\$40,084,876
Interiors	\$30,063,825
Systems	\$35,164,250
Electrical	\$12,678,000
Grounds	\$15,218,378
Total	\$133,209,329

Recommendations by Priority	Cost
Level I	\$10,688,439
Level II	\$79,017,286
Level III	\$36,553,537
Level IV	\$6,950,067
Total	\$133,209,329

Recommendations by Facility	Cost
Adams	\$ 8,670,402
Franklin	\$ 8,071,571
Garfield	\$ 6,166,378
Hoover	\$ 8,620,237
Jefferson	\$ 7,639,061
Lincoln	\$ 9,138,747
Mountain View	\$ 5,740,499
Wilson	\$ 7,454,088
Cheldelin	\$ 16,230,947
Linus Pauling	\$1,521,788
Corvallis High School	\$ 7,773,076
Crescent Valley High School	\$26,092,091
Harding (College Hill Campus)	\$ 7,965,182
Western View Center	\$ 1,522,805
Administration Building/Maintenance/Food Service Warehouse	\$ 7,093,182
Dixie	\$ 3,509,275
Total	\$133,209,329

District Wide Facilities Assessment Costs

School	Priority I	Priority II	Priority III	Priority IV
Adams	\$499,862	\$3,890,969	\$3,833,888	\$445,683
Franklin	\$780,801	\$3,711,885	\$2,925,598	\$653,287
Garfield	\$219,474	\$4,149,752	\$1,343,645	\$453,507
Hoover	\$1,103,898	\$4,516,803	\$2,358,102	\$641,434
Jefferson	\$385,182	\$3,826,517	\$2,862,247	\$565,115
Lincoln	\$72,500	\$4,756,775	\$3,466,013	\$843,459
Mountain View	\$144,971	\$4,168,117	\$645,311	\$782,100
Wilson	\$355,643	\$4,088,956	\$2,404,374	\$605,115
Cheldelin	\$1,418,728	\$11,663,259	\$2,796,582	\$352,378
Linus Pauling	\$350,902	\$51,303	\$919,583	\$200,000
Corvallis High School	\$703,110	\$3,249,116	\$3,742,737	\$78,113
Crescent Valley High School	\$536,453	\$17,872,918	\$7,277,720	\$405,000
Harding (College Hill Campus)	\$2,586,274	\$4,871,358	\$449,427	\$58,123
Western View Center	\$606,566	\$271,772	\$644,467	-
District Administration Building/Maintenance/Food Service Warehouse	\$776,106	\$5,892,650	\$314,839	\$109,587
Dixie	\$147,969	\$2,035,136	\$569,004	\$757,166
Total	\$10,688,439	\$79,017,286	\$36,553,537	\$6,950,067

Critical Needs by Facility

Adams Elementary School:

- Remodel office for increased visibility
- Replace gymnasium doors and add card readers
- Remove kilns from boiler room
- Upgrade exit signage
- Add fire suppression to kitchen hood

Franklin K-8:

- Roofing repairs and replacement
- Extend/add egress lighting
- Hardwire existing egress lighting
- Relocate kilns
- Add fire suppression to kitchen hood

Garfield Elementary School:

- Replace heating coils in equipment
- Repair mechanical unit for kitchen
- Install egress lighting
- Replace exit signage
- Add fire suppression to kitchen hood

Hoover Elementary School:

- Roofing replacement
- Add card readers to all exterior doors
- Replace exit signage
- Reconfigure entry into site
- Add fire suppression to kitchen hood

Jefferson Elementary School:

- Remodel office for increased visibility
- Replace gymnasium doors and add card readers
- Replace broken circuit breakers
- Replace heating unit in office
- Add fire suppression to kitchen hood

Lincoln Elementary School:

- Install egress lighting
- Replace roofing
- Replace mechanical systems
- Replace all exit signage
- Provide fire suppression to kitchen hood

Mountain View Elementary School:

- Add card readers to gymnasium doors
- Repair sprinkler piping
- Repair natural gas piping
- Provide ventilation to office area
- Remodel/expand existing office
- Add egress lighting
- Replace exit signage
- Provide fire suppression to kitchen hood

Wilson Elementary School:

- Add card readers to gymnasium doors
- Remodel office for increased visibility
- Provide heating and ventilation to office area
- Install egress lighting
- Replace exit signage
- Provide fire suppression to kitchen hood
- Add chain link fencing

Cheldelin Middle School:

- Selected roofing repairs and replacement
- Modify courtyard doors and install panic hardware
- Provide ventilation in Foods Lab
- Relocate hot water heater
- Relocate kilns
- Provide fire suppression to kitchen hood
- Add egress lighting
- Replace exit signage
- Increase security at selected doors
- Install fencing around play fields

Linus Pauling Middle School:

- North Building roofing repairs and replacement
- Move controls serving emergency utilities to emergency power
- Provide condensate corrosion protection
- Modify generator dampers
- Install egress lighting at north building
- Add panic and closer hardware to exterior gates

Corvallis High School:

- Roofing replacement at AT North and South
- Rewire spray booth
- Replace doors and hardware at AT North Building
- Rekey all door hardware
- Replace kiln wiring

Crescent Valley High School:

- Paint gas piping
- Increase exhaust at welding areas
- Provide fire suppression to kitchen
- Install additional generators
- Connect equipment to emergency generator
- Replace exit signage
- Replace broken light fixtures

Harding:

- Roofing replacement
- Complete seismic upgrades
- Reverse select door swings
- Replace all door hardware
- Install switching controls for lighting
- Extend egress lighting
- Replace exit signage

Western View Center:

- Roofing repairs and replacement
- Replace egress lighting battery packs
- Replace exit signage
- Remodel restrooms

District Administrative Offices/Maintenance/Food Service Warehouse:

- Reseal roof
- Replace gas piping and supports
- Replace storm drain grate
- Install egress lighting
- Re-work electrical wiring
- Add exit signage

Dixie:

- Selected roofing replacement
- Provide fire suppression to kitchen hood
- Extend egress lighting
- Replace exit signage
- Complete perimeter fencing

Commentary on Code and Accessibility Issues

Current Code Impact to Existing Facilities

Under the Detailed Summary portion of the report, various types of code issues are identified and discussed; however it is somewhat presumptuous to speculate on the exact course of action for a given school until an action plan based on this facilities assessment can be completed. If the District is determined to undertake a specific addition or renovation project, it would be necessary to review the particular existing conditions within the context of the proposed new project at an early point in the planning process with the local building and fire department officials who have jurisdiction. The requirements of code and fire officials will most likely vary from school to school and with the type of new work that is proposed.

The design basis of the Oregon Structural Specialty Code (OSSC) is to safeguard the public health, safety and general welfare through the building's structural strength, means of egress facilities, stability, adequate lighting and ventilation, energy conservation, and safety to life and property from fire and other hazards attributed to the built environment. Existing structures are covered by Chapter 34 of the OSSC which is invoked when buildings are altered, repaired, added onto or when the occupancy or use of the existing structure is changed. In other words, compliance with the "current" building code is not mandated unless there is a modification made to the building in some way or the owner of the building elects to voluntarily strengthen or otherwise bring their building into compliance.

Seismic and Wind Forces

Inherent in the code design basis are acceptable levels of consistent risk. The level of seismic (earthquake) and wind risk is drawn from consensus. The design basis of seismic loads has changed significantly in the Willamette Valley and Coastal Oregon, more than doubling in load level since the mid-1980's. This increase was brought about by a previously unrecognized risk to the seismic hazards posed by a potentially large earthquake off of the Oregon coast, along with an increased awareness of earthquake faults in the region.

In the late 1970's through mid-1980's seismic events were considered generally on a probabilistic basis. With more awareness and scientific advancements made with geological information, seismic events are more deterministic. The potential sizes of seismic events considered possible are on an order of a moment magnitude scale of 9.0 for coastal earthquakes and 6.0 for a local earthquake. This change in recognized seismicity by such a significant factor makes buildings built prior to this period to the prevailing requirements potentially at higher risk relative to current code requirements. Primarily for this reason, the older buildings evaluated in this study do not meet the requirements of the current code life safety requirements for seismic performance in a strong ground shaking event.

This long-range assessment identifies and prioritizes what rehabilitation should be undertaken to correct those structural deficiencies as funds to do so become available. Some of these recommended structural improvements could be incorporated into other projects which may be planned for the buildings, thus potentially reducing the cost of the upgrades.

In the past, the Corvallis School District has completed partial seismic upgrades in several of its buildings, and based on the availability of suitable funding, the incremental seismic rehabilitation program would continue this work where needs have been identified.

Implications for Additions

It is both expensive and difficult to upgrade an existing building to address these types of basic but significant code issues. Normally, the building code allows non-compliance until a new building project or renovation is proposed. At that time the aspects of the building that are not in conformance with the code are considered, and may be required to be included as a component of the project. For example, if a building addition to a facility results in an excess in basic allowable building area (the area included by surrounding exterior walls, the limits of which are dictated in the code by the type of building construction) the deficiency could be resolved by adding a sprinkler system to the entire facility or by constructing area separation walls to isolate and protect the individual building structures from one another in a wind or seismic event.

Additions proposed at any facility in this report would require that a more thorough building code analysis be conducted to determine the cost (and aesthetic) implications of new construction on the existing facility.

Building Materials

Asbestos

Asbestos is a mineral that was widely used in many building materials, such as ceilings, floor tiles and pipe insulation, mainly for its strength and fire resistance properties. Since the 1980's, building codes no longer allow the use of building materials with asbestos for health and safety reasons. Buildings built before this ban may contain building materials with asbestos; as long as items are undisturbed, there is no threat.

If renovation work were to occur at any school in areas where the building components have been identified as containing asbestos, abatement of these items would occur. Additionally, items containing asbestos have been identified in the report as items to be replaced. Abatement costs of these items are included in the cost of the proposed building component replacement.

The District has an abatement management plan available for review at the District Office.

Wire Glass

Wire glass is constructed by fusing together panes of glass with wire mesh in between them to create a single piece of glazing. The intent of the wire is to hold the glass intact when broken. Wire glass is also rated as a fire retardant material and has been widely used in industrial and commercial applications. Recently, building codes have stipulated that wire glass can no longer be used in certain facilities, such as schools and gymnasiums. When the glass is broken, the exposed edges of the wire inside the glazing can be sharp and cause physical harm to building users.

This glazing does not pose any harm if it is intact, and can be found in many educational facilities constructed prior to the changes in the building codes, including many facilities in the Corvallis School District. Often, remodel or addition work at an existing facility will trigger the replacement of existing wire glass with an alternative safety glass material, such as tempered glazing. An alternative is to replace the glazing over time to eliminate potential safety issues should the glazing be broken or damaged.

Accessibility

Accessibility / ADA

Similarly, accessibility issues have become increasingly complex with respect to the code and to the requirements of the Americans with Disabilities Act (ADA) legislation. Although a detailed accessibility study was not a component of this study, basic issues relating to accessibility are included in the summaries from the field observations. As is the case with fire and life safety issues, new construction work at a school leads to the expenditure of funds for accessibility upgrades, regardless of whether they apply directly to the new work or not.

Toilet Facilities/Fixtures

The fixture count at each facility was not reviewed for actual count versus what is required by code; facilities were reviewed in terms of the state of finishes and fixtures and if toilet facilities are constructed or modified to meet accessibility requirements.

Improvements were made at various facilities to remodel existing facilities to provide accessible toilet facilities, based on current use of the facility or if current conditions of toilet facility size and condition was inadequate.

In addition, all schools may need to add additional facilities depending on the type and size of any proposed additions that result from the information provided by this facility assessment. Any new constructed or remodel work would comply with all code requirements.

Adams Elementary School

1615 SE 35th Street
 Corvallis, Oregon 97333

Built: 1962; 1967 addition;
 2006, 2007 Portables
 Enrollment: 380 students (2013)
 Floor Area: 46,695 SF



Key Recommendations:

- Seismic Upgrades
- Window Replacement
- Flooring Abatement/Replacement
- Office Remodel for increased visibility
- Mechanical System Upgrades/Replacement
- Electrical System Replacement
- Egress Lighting Installation

Facility Assessment Costs

Recommendations by Category	Cost
Structure/Shell	\$2,414,556
Interiors	\$2,961,249
Systems	\$1,904,500
Electrical	\$826,750
Grounds	\$563,347
Total	\$8,670,402

Recommendations by Priority	Cost
Level I	\$499,862
Level II	\$3,890,969
Level III	\$3,833,888
Level IV	\$445,683
Total	\$8,670,402

Franklin K-8 School

750 NW 18th Street
 Corvallis, Oregon 97333

Built: 1947; 1951, 1954 additions
 Enrollment: 354 students (2013)
 Floor Area: 35,944 SF



Key Recommendations:

- Roofing Repairs and Replacement
- Seismic Upgrades
- Window Replacement
- Flooring Abatement/Replacement
- Water Piping Replacement
- Mechanical System Upgrades/Replacement
- Lighting and Electrical Systems Replacement (building and site)
- Egress Lighting Installation

Facility Assessment Costs

Recommendations by Category	Cost
Structure/Shell	\$3,046,623
Interiors	\$2,992,555
Systems	\$740,000
Electrical	\$638,000
Grounds	\$654,393
Total	\$8,071,571

Recommendations by Priority	Cost
Level I	\$780,801
Level II	\$3,711,885
Level III	\$2,925,598
Level IV	\$653,287
Total	\$8,071,571

Garfield Elementary School

1205 NW Garfield Avenue
 Corvallis, Oregon 97330

Built: 1955 (original); 1956, 1957, 1959 additions;
 1987 portable additions
 Enrollment: 394 students (2013)
 Floor Area: 46,822 SF



Key Recommendations:

- Seismic Upgrades
- Window Replacement
- Siding Replacement
- Flooring Abatement/Replacement
- Student Restroom Remodel
- Water Piping Replacement
- Mechanical System Upgrades/Replacement
- Lighting and Electrical Systems Replacement (building and site)
- Egress Lighting Installation
- 2nd Parking Lot Addition

Facility Assessment Costs

Recommendations by Category	Cost
Structure/Shell	\$2,460,656
Interiors	\$921,433
Systems	\$1,840,250
Electrical	\$490,000
Grounds	\$454,039
Total	\$6,166,378

Recommendations by Priority	Cost
Level I	\$219,474
Level II	\$4,149,752
Level III	\$1,343,645
Level IV	\$453,507
Total	\$6,166,378

Hoover Elementary School

3838 NW Walnut Boulevard
 Corvallis, Oregon 97330

Built: 1968; 1978 building addition; 1971,
 1974, 1987 modulares added

Enrollment: 405 students (2013)

Floor Area: 46,282 SF



Key Recommendations:

- Roofing Replacement
- Seismic Upgrades
- Window Replacement
- Siding Replacement
- Card Reader Installation at all exterior doors
- Water Piping Replacement
- Mechanical System Upgrades/Replacement
- Lighting Replacement (building and site)
- Egress Lighting Installation
- Entry driveway reconfiguration

Facility Assessment Costs

Recommendations by Category	Cost
Structure/Shell	\$3,457,493
Interiors	\$2,445,801
Systems	\$1,690,000
Food Service	\$447,750
Grounds	\$579,193
Total	\$8,620,237

Recommendations by Priority	Cost
Level I	\$1,103,898
Level II	\$4,516,803
Level III	\$2,358,102
Level IV	\$641,434
Total	\$8,620,237

Jefferson Elementary School

1825 NW 27th Street
 Corvallis, Oregon 97330

Built: 1960; 1962, 1979 additions;
 1987 Portables
 Enrollment: 327 students (2013)
 Floor Area: 40,155 SF



Key Recommendations:

- Seismic Upgrades
- Flooring Abatement/Replacement
- Office Remodel for increased visibility
- Water Piping Replacement
- Mechanical Systems Replacement
- Electrical Systems Replacement
- Select Lighting Upgrades (building and site)
- Egress Lighting Installation

Facility Assessment Costs

Recommendations by Category	Cost
Structure/Shell	\$1,820,911
Interiors	\$2,958,306
Systems	\$1,652,500
Electrical	\$420,500
Grounds	\$786,844
Total	\$7,639,061

Recommendations by Priority	Cost
Level I	\$385,182
Level II	\$3,826,517
Level III	\$2,862,247
Level IV	\$565,115
Total	\$7,639,061

Lincoln Elementary School

110 SE Alexander Avenue
 Corvallis, Oregon 97333

Built: 1949; additions in 1950, 1953;
 Reconstructed in 1968; additions
 in 1978, 1981; Portables added 1988, 2006
 Enrollment: 366 students (2013)
 Floor Area: 39,601 SF



Key Recommendations:

- Seismic Upgrades
- Door and Window Replacements
- Casework Replacement
- Restroom Remodel/Upgrades
- Mechanical System Replacement
- Select Lighting Replacement
- Egress Lighting Installation
- Parking Lot Addition/Upgrades
- Covered Play Structure Replacement

Facility Assessment Costs

Recommendations by Category	Cost
Structure/Shell	\$1,694,050
Interiors	\$4,671,726
Systems	\$1,828,750
Electrical	\$310,000
Grounds	\$634,221
Total	\$9,138,747

Recommendations by Priority	Cost
Level I	\$ 72,500
Level II	\$4,756,775
Level III	\$3,466,013
Level IV	\$843,459
Total	\$9,138,747

Mountain View Elementary School

340 NE Grainger Avenue
 Corvallis, Oregon 97330

Built: 1954; 1959, 1961, 1966 building additions; 1975, 1988, 2007 portables added
 Enrollment: 290 students (2013)
 Floor Area: 52,170 SF



Key Recommendations:

- Seismic Upgrades
- Select Door Replacement
- Office Remodel/Addition for increased visibility
- Flooring Abatement/Replacement
- Water Piping Replacement
- Mechanical System Replacement
- Lighting and Electrical Systems Replacement
- Egress Lighting Installation
- Parking Lot Upgrades/ Improvement

Facility Assessment Costs

Recommendations by Category	Cost
Structure/Shell	\$2,086,318
Interiors	\$1,583,454
Systems	\$1,353,750
Electrical	\$533,000
Grounds	\$183,977
Total	\$5,740,499

Recommendations by Priority	Cost
Level I	\$ 144,971
Level II	\$4,168,117
Level III	\$645,311
Level IV	\$782,100
Total	\$ 5,740,499

Wilson Elementary School

2701 NW Satinwood Street
Corvallis, Oregon 97330

Built: 1962; 1967 addition
Enrollment: 355 students (2013)
Floor Area: 39,901 SF



Key Recommendations:

- Seismic Upgrades
- Window Replacement
- Floor Abatement/Replacement
- Office Remodel for increased visibility
- Water Piping Replacement
- Mechanical System Replacement
- Electrical System Replacement
- Site Lighting Replacement
- Egress Lighting Installation

Facility Assessment Costs

Recommendations by Category	Cost
Structure/Shell	\$2,094,521
Interiors	\$2,798,971
Systems	\$1,675,000
Electrical	\$405,000
Grounds	\$480,596
Total	\$7,454,088

Recommendations by Priority	Cost
Level I	\$355,643
Level II	\$4,088,956
Level III	\$2,404,374
Level IV	\$605,115
Total	\$7,454,088

Cheldelin Middle School

987 NE Connifer Boulevard
 Corvallis, Oregon 97330

Built: 1976
 Enrollment: 551 students (2013)
 Floor Area: 106,699 SF



Key Recommendations:

- Roofing Repairs and Replacement
- Seismic Upgrades
- Door and Window Replacements
- Flooring Replacement
- Door Hardware Modifications
- Restroom Remodel/Upgrades
- Mechanical System Replacement
- Egress Lighting Installation
- Site Lighting Improvement

Facility Assessment Costs

Recommendations by Category	Cost
Structure/Shell	\$5,606,468
Interiors	\$2,036,823
Systems	\$6,015,500
Electrical	\$1,249,500
Grounds	\$1,322,656
Total	\$16,230,947

Recommendations by Priority	Cost
Level I	\$1,418,728
Level II	\$11,663,259
Level III	\$2,796,582
Level IV	\$352,378
Total	\$16,230,947

Linus Pauling Middle School

1111 NW Cleveland Avenue
 Corvallis, Oregon 97330

Built: 2004
 Enrollment: 679 students (2013)
 Floor Area: 131,327 SF



Key Recommendations:

- Door Hardware Upgrades
- Kiln Enclosure Construction
- Controls Upgrades
- Electrical System Upgrades

Facility Assessment Costs

Recommendations by Category	Cost
Structure/Shell	\$ 314,277
Interiors	\$ 116,363
Systems	\$ 116,250
Electrical	\$ 500,000
Grounds	\$ 474,898
Total	\$ 1,521,788

Recommendations by Priority	Cost
Level I	\$ 350,902
Level II	\$ 51,303
Level III	\$ 919,583
Level IV	\$ 200,000
Total	\$ 1,521,788

Corvallis High School

1400 NE Buchanan Avenue
 Corvallis, Oregon 97330

Built: 2006
 Enrollment: 1,215 students (2013)
 Floor Area: 240,095 SF



Key Recommendations:

- Roofing Repairs and Replacement at AT North and South
- Stair Tread Replacement
- Carpeting Replacement
- Toilet Partition Replacement
- Systems and Finish Upgrades to Tech Buildings
- Landscaping Replacement and Upgrades

Facility Assessment Costs

Recommendations by Category	Cost
Structure/Shell	\$736,045
Interiors	\$811,176
Systems	\$1,997,500
Electrical	\$479,000
Grounds	\$3,749,355
Total	\$7,773,076

Recommendations by Priority	Cost
Level I	\$703,110
Level II	\$3,249,116
Level III	\$3,742,737
Level IV	\$78,113
Total	\$7,773,076

Crescent Valley High School

4444 NW Highland Drive
 Corvallis, Oregon 97330

Built: 1971
 Enrollment: 996 students (2013)
 Floor Area: 247,071 SF



Key Recommendations:

- Seismic Upgrades
- Door and Window Replacement
- Flooring Replacement
- Dust Collection System Replacement
- Auditorium Seating Replacements
- Plumbing and Mechanical Systems Replacement
- Lighting Upgrades/Replacement
- Parking Lot Improvements
- Turf Field Installation

Facility Assessment Costs

Recommendations by Category	Cost
Structure/Shell	\$7,483,785
Interiors	\$3,406,201
Systems	\$8,250,000
Electrical	\$2,822,500
Grounds	\$4,129,605
Total	\$26,092,091

Recommendations by Priority	Cost
Level I	\$536,453
Level II	\$17,872,918
Level III	\$7,277,720
Level IV	\$405,000
Total	\$26,092,091

Harding (College Hill Campus)

510 NE 31st Street
 Corvallis, Oregon 97330

Built: 1923;1935, 1938, 1950;
 1953 additions; 1988 portables
 Enrollment: 94 students (College Hill HS program)
 15 students (WINGS program)
 Floor Area: 37,441 SF



Key Recommendations:

- Roofing Replacement
- Seismic Upgrades
- Window Replacement
- Interior and Exterior Door and Hardware Replacement
- Gutter and Downspout Replacement
- Flooring and Ceiling Replacements
- Restroom Remodel and Upgrades
- Plumbing, Mechanical and Electrical Systems Replacement
- Egress Lighting Installation
- Fire Alarm Replacement
- Access Control Installation

Facility Assessment Costs

Recommendations by Category	Cost
Structure/Shell	\$3,151,470
Interiors	\$1,077,329
Systems	\$1,974,000
Electrical	\$1,555,000
Grounds	\$207,383
Total	\$7,965,182

Recommendations by Priority	Cost
Level I	\$2,586,274
Level II	\$4,871,358
Level III	\$449,427
Level IV	\$58,123
Total	\$7,965,182

Western View Center

1435 SW 35th Street
 Corvallis, Oregon 97330

Built: 1988
 Enrollment: N/A
 Floor Area: 6,400 SF



Key Recommendations:

- Roof Leak Repairs and Roofing Replacement
- Carpet Replacement
- Mechanical Systems Replacement
- Fire Alarm System Replacement

Facility Assessment Costs

Recommendations by Category	Cost
Structure/Shell	\$508,376
Interiors	\$131,040
Systems	\$315,000
Electrical	\$465,000
Grounds	\$103,389
Total	\$1,522,805

Recommendations by Priority	Cost
Level I	\$606,566
Level II	\$271,772
Level III	\$644,467
Level IV	-
Total	\$1,522,805

District Administrative Building/Maintenance/Food Service Warehouse

1555 SW 35th Street
Corvallis, Oregon 97330

Built: Administrative Building – 1963
Physical Plant – 1963; 1979 portables
Food Services Warehouse – 1976

Enrollment: N/A

Floor Area: Administrative Building – 32,750 SF
Physical Plant – 35,700 SF
Food Services Warehouse – 5,000 SF



Key Recommendations:

- Reseal Roof at Administration Building
- Seismic Upgrades
- Overhead Door Replacement
- Carpet Replacement
- Restroom Expansion and Upgrades
- Gas Piping Replacement
- Electrical Systems Replacement
- Parking Lot Upgrades/Improvements
- Site Lighting Replacement

Facility Assessment Costs

Recommendations by Category	Cost
Structure/Shell	\$2,016,552
Interiors	\$310,873
Systems	\$2,891,250
Electrical	\$1,222,500
Grounds	\$652,007
Total	\$7,093,182

Recommendations by Priority	Cost
Level I	\$ 776,106
Level II	\$5,892,650
Level III	\$314,839
Level IV	\$109,587
Total	\$7,093,182

Dixie School

33461 SE Peoria Rd
Corvallis, OR 97333

Built: 1930; additions in 1950 and 1967;
1971 portable added

Enrollment: N/A

Floor Area: 15,155 SF



Key Recommendations:

- Selected Roofing Replacement
- Seismic Upgrades
- Siding Replacement
- Interior and Exterior Door and Hardware Replacement
- Water Piping Replacement
- Mechanical Systems Replacement
- Lighting Replacement (building and site)
- Egress Lighting Installation
- Fencing

Facility Assessment Costs

Recommendations by Category	Cost
Structure/Shell	\$1,192,775
Interiors	\$840,525
Systems	\$920,000
Electrical	\$313,500
Grounds	\$242,475
Total	\$3,509,375

Recommendations by Priority	Cost
Level I	\$147,969
Level II	\$2,035,136
Level III	\$569,004
Level IV	\$757,166
Total	\$3,509,375



Part III: Facility Replacement Costs

Corvallis School District**Garfield Elementary Replacement School | Project Budget Summary**

Cost Item			Budget	Notes
Construction Costs:				
Construction Budget				
Demolition	46,822 SF @	\$5	\$234,110	
Building Construction	70,000 SF @	\$210	\$14,700,000	Based on 550 Students
On-Site Construction			\$1,000,000	Earthwork, Utilities, Playground
Subtotal - (<i>Construction Contract Award</i>)			\$15,934,110	
Construction Change Order Contingency		5%	\$796,706	5% of Construction Cost
Subtotal Construction Budget			\$16,730,816	
Consultant Costs:				
Architect / Engineer / Special Consultants		12.5%	\$2,091,352	Based upon Construction Cost
Subtotal Consultant Budget			\$2,091,352	
Owner Costs:				
Fees / Permits / Furnishings / Equipment		7.5%	\$1,254,811	Assume all new FF&E
Subtotal Owner Budget			\$1,254,811	
Total Project Contingency		5%	\$1,003,848	Based upon Total Project Budget
Index to Construction Start	0 yrs. @	0%		Budget Estimate is in 2013 dollars
TOTAL PROJECT BUDGET			\$21,080,827	

Note: Does not include off-site improvements or site acquisition.

Corvallis School District

Franklin K-8 Replacement School | Project Budget Summary

Cost Item			Budget	Notes
Construction Costs:				
Construction Budget				
Demolition	35,944 SF @	\$5	\$179,720	
Building Construction	90,000 SF @	\$210	\$18,900,000	Based on 550 students
On-Site Construction			\$1,000,000	Earthwork, Utilities, Playground
Subtotal - (<i>Construction Contract Award</i>)			\$20,079,720	
Construction Change Order Contingency		5%	\$1,003,986	5% of Construction Cost
Subtotal Construction Budget			\$21,083,706	
Consultant Costs:				
Architect / Engineer / Special Consultants		12.5%	\$2,635,463	Based upon Construction Cost
Subtotal Consultant Budget			\$2,635,463	
Owner Costs:				
Fees / Permits / Furnishings / Equipment		7.5%	\$1,581,278	Assume all new FF&E
Subtotal Owner Budget			\$1,581,278	
Total Project Contingency			\$1,265,022	Based upon Total Project Budget
Index to Construction Start	0 yrs. @	0%		Budget Estimate is in 2013 dollars
TOTAL PROJECT BUDGET			\$26,565,469	

Note: Does not include off-site improvements or site acquisition.

Corvallis School District

Hoover Elementary Replacement School | Project Budget Summary

Cost Item			Budget	Notes
Construction Costs:				
Construction Budget				
Demolition	46,282 SF @	\$5	\$231,410	
Building Construction	70,000 SF @	\$210	\$14,700,000	Based on 550 Students
On-Site Construction			\$1,000,000	Earthwork, Utilities, Playground
Subtotal - (<i>Construction Contract Award</i>)			\$15,931,410	
Construction Change Order Contingency		5%	\$21,122,526	5% of Construction Cost
Subtotal Construction Budget			\$16,727,980	
Consultant Costs:				
Architect / Engineer / Special Consultants		12.5%	\$2,090,997	Based upon Construction Cost
Subtotal Consultant Budget			\$2,090,997	
Owner Costs:				
Fees / Permits / Furnishings / Equipment		7.5%	\$1,254,599	Assume all new FF&E
Subtotal Owner Budget			\$1,254,599	
Total Project Contingency			\$1,048,950	Based upon Total Project Budget
Index to Construction Start	0 yrs. @	0%		Budget Estimate is in 2013 dollars
TOTAL PROJECT BUDGET			\$21,122,526	

Note: Does not include off-site improvements or site acquisition.

Corvallis School District

Lincoln Elementary Replacement School| Project Budget Summary

Cost Item			Budget	Notes
Construction Costs:				
Construction Budget				
Demolition	39,601 SF @	\$5	\$198,005	
Building Construction	70,000 SF @	\$225	\$15,750,000	Based on 550 students
On-Site Construction			\$1,500,000	Earthwork, Utilities
Subtotal - (<i>Construction Contract Award</i>)			\$17,448,005	
Construction Change Order Contingency		5%	\$872,400	5% of Construction Cost
Subtotal Construction Budget			\$18,320,405	
Consultant Costs:				
Architect / Engineer / Special Consultants		12%	\$2,198,448	Based upon Construction Cost
Subtotal Consultant Budget			\$2,198,448	
Owner Costs:				
Fees / Permits / Furnishings / Equip		10%	\$1,832,041	Assume all new FF&E
Subtotal Owner Budget			\$1,832,041	
Total Project Contingency		5%	\$1,117,544	Based upon Total Project Budget
Index to Construction Start	0 yrs. @	0%		Budget Estimate is in 2013 dollars
TOTAL PROJECT BUDGET			\$23,468,438	

Note: Does not include off-site improvements or site acquisition.

Corvallis School District

New Alternative High School| Project Budget Summary

Cost Item			Budget	Notes
Construction Costs:				
Construction Budget				
Building Demolition	37,441 SF @	\$5	\$187,205	
Building Construction	30,000 SF @	\$225	\$6,750,000	Based on 250 students
On-Site Construction			\$1,500,000	Earthwork, Utilities
Subtotal - (<i>Construction Contract Award</i>)			\$8,437,205	
Construction Change Order Contingency		5%	\$421,860	5% of Construction Cost
Subtotal Construction Budget			\$8,859,065	
Consultant Costs:				
Architect / Engineer / Special Consultants		12%	\$1,063,088	Based upon Construction Cost
Subtotal Consultant Budget			\$1,063,088	
Owner Costs:				
Fees / Permits / Furnishings / Equip		8%	\$708,725	Assume all new FF&E
Subtotal Owner Budget			\$708,725	
Total Project Contingency			\$531,544	Based upon Total Project Budget
Index to Construction Start	0 yrs. @	0%		Budget Estimate is in 2013 dollars
TOTAL PROJECT BUDGET			\$11,162,422	

Note: Does not include off-site improvements or site acquisition.



Part IV: Detailed Summary



Adams Elementary School

1615 SW 35th Street
Corvallis, Oregon 97333

Built: 1962; 1967 addition; 2006, 2007
modulars

Enrollment: 380 students (2013)

Floor Area: 46,695 SF



Field Review Team:

Thea Wayburn	Dull Olson Weekes – IBI Group Architects
Michael Arellano	KPFF Consulting Engineers
Roger Arnold	Glumac
Michael Henning	Glumac
Alex Ridley	Glumac
Dana Troy	Glumac

Report Date: December 2013

Date of Field Visits: June 3-7, 2013

Weather: Sunny, 70's and 80's

Neighborhood: Residential

Site Contacts: John Meyer, CSD 509J
Kim Patten, CSD 509J

General Building Description:

Adams Elementary is one of three prototype facilities in the Corvallis School District (Jefferson and Wilson are the other two). Adams is located adjacent to the School District and Maintenance offices; neighboring land uses include residential, agricultural and civic facilities. The site is a large grass site with large trees and play fields. The building is not sprinklered.

The overall footprint of the building is L-shaped. The school is a single-story structure with wood framed roof and plywood sheathing supported on wood stud bearing walls. The exterior façade has brick veneer with some wood siding at the gymnasium. The gymnasium structure is a 20-foot tall space with glulam columns and bent glulam beams. The school also houses a covered play that is attached to the main building structure. The covered play roof consists of straight wood decking on glulam beams bearing on masonry walls.

One observation made about this facility is the direct access to the gymnasium from the main entry vestibule. The main office is located beyond the vestibule, and currently all doors are kept open from the office through the vestibule to the gym. These gym doors off the vestibule appear to be the main entry point for students and staff. A remodel of the office and adding a window in the vestibule wall from the office could provide better supervision of the entry doors and gymnasium. The cafeteria and gymnasium are one shared space, which can result in challenges or conflicts in scheduling food service with physical education classes.

Overall, this facility is in good to fair condition. A full building review of architectural, structural, mechanical, electrical and plumbing components was conducted. This facility contains several modular buildings which were reviewed as part of the overall facility assessment.

A - STRUCTURE / SHELL			
A10 – STRUCTURE / SUBSTRUCTURE			
Item		Findings	Comments
A10.1	Foundations	<ul style="list-style-type: none"> No issues observed 	
A10.2	Subgrade Enclosures	<ul style="list-style-type: none"> Some cracking in the flooring was observed locally in the hallway, near the fire door of the original construction. A slight ridge in the slab was observed extending from the sidewalk of the building and through classrooms 4 and 6. This ridge reads through the flooring in the classrooms. See Figure A10.2.a. There is a vertical crack in the brick veneer outside the kitchen. There are no signs of foundation settlement. See Figure A10.2.b. 	<p>Settlement in the hallway is likely due to poor subgrade compaction; there are no signs of foundation settlement.</p> <ul style="list-style-type: none"> The ridge in the slab may be caused by a nearby tree root and does not appear to have any adverse effects on the building foundation or structure. The vertical crack in the brick is a cladding issue; it is a natural control joint occurring at keyed joint.
A10.3	Structural Systems	<ul style="list-style-type: none"> There are recommendations available for seismic improvements to the building structure, outlined in the Degenkolb Seismic Evaluation Phase 1 report, dated May 2000. There are recommendations available for seismic improvements to non-structural systems, outlined in the Degenkolb Seismic Evaluation Phase 1 report, dated May 2000. 	<ul style="list-style-type: none"> In 2008 the school received a new roof with “Phase 1” seismic upgrades which included strengthening the connections of the roof diaphragm and adding plywood sheathing to previously deficient areas. “Phase 1” was performed in preparation for the construction of new shear walls in selected areas.
RECOMMENDATIONS			
A10.2	Remove existing flooring locally and grind the existing concrete to provide a smooth transition. Refer to Section B20 for findings and recommendations for flooring. Saw cut along existing crack in the veneer and seal to prevent future water infiltration.		
A10.3	Prioritize and perform the remaining seismic improvements to structural systems as outlined in the Degenkolb report. Perform the remaining seismic improvements to non-structural components as outlined in the Degenkolb report.		
A20 - EXTERIOR COMPONENTS			
Item		Findings	Comments
A20.1	Exterior Walls	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Exterior walls are mainly brick veneer with some wood siding.
A20.2	Doors and Hardware	<ul style="list-style-type: none"> Exterior doors contain wire glass. Several exterior doors are in poor condition (damage, wear) and need to be replaced. Doors at modulars are damaged. Gymnasium doors are in fair condition; hardware needs to be replaced to provide more secure access. 	<ul style="list-style-type: none"> Wire glass is no longer permitted in educational design. Exterior doors are clad in FRP panels. Door hardware has been upgraded.

A20.3	Windows and Skylights	<ul style="list-style-type: none"> Window systems are in poor condition. At several windows, the sealant is showing signs of deterioration. See Figure A20.3. 	<ul style="list-style-type: none"> Window systems are single pane glazing in metal frames.
A20.4	Roof	<ul style="list-style-type: none"> A separate roofing assessment is located in the appendix of this report. 	<ul style="list-style-type: none"> Roofing is single ply, approximately 7 years old.
A20.5	Canopies and Covered Walks	<ul style="list-style-type: none"> No issues observed at building. Bus lane does not have covered area/canopy for students. 	
A20.6	Gutters and Downspouts	<ul style="list-style-type: none"> In general, gutters and downspouts are in good condition with no observed damage. 	<ul style="list-style-type: none"> Several downspouts are in need of re-painting.
A20.7	Trim and Overhangs	<ul style="list-style-type: none"> No issues observed 	
A20.8	Stairs and Ramps	<ul style="list-style-type: none"> No issues observed 	

RECOMMENDATIONS	
A20.2	<p>If remodel work were to occur at this facility, the replacement of wire glass with tempered glazing may be required. Wire glass may also be replaced at the District's discretion to prevent any issues if glazing is damaged or broken.</p> <p>Replace (2) pairs of exterior doors, frames and hardware. Replace (6) single doors, frames and associated hardware at modulars. Replace (2) single exterior doors and frames at gymnasium. Provide new doors, frames, hardware, kick plates and card readers to improve security.</p>
A20.3	Replace all single panel glazing with aluminum storefront window systems, thermal glazing and operable vents.
A20.4	Replace roofing as recommended in the roofing assessment recommendations.
A20.5	Construct covered walk/structure at bus loop.

B - INTERIORS			
B10 – INTERIOR CIRCULATION			
Item		Findings	Comments
B10.1	Construction and Exiting	<ul style="list-style-type: none"> • There are vertical fire doors in the hallway. It is unknown if the fire doors are still operational. • Doors and windows contain wire glass. • The building is not sprinklered. 	<ul style="list-style-type: none"> • Wire glass is no longer permitted in educational facilities. • Classrooms have exterior doors equipped with panic hardware. • A major remodel or addition at this site would require a thorough building code analysis.
B10.2	Stairs and Handrails	<ul style="list-style-type: none"> • Handrails for stage access (both at stairs and ramp) are not code compliant both in construction and material. Stairs to the stage from the cafeteria do not have handrails. 	<ul style="list-style-type: none"> • The stage is now used for storage. • Stage is approximately 3'-0" above gym flooring (5 risers high).
B10.3	Ramps and Elevators	<ul style="list-style-type: none"> • The ramp to the stage is too steep to meet current code. 	<ul style="list-style-type: none"> • The stage is now used for storage. • The ramp lacks at landing at the bottom portion. • With the exception of the stage, this facility is a single story building.
B10.4	Accessibility	<ul style="list-style-type: none"> • The stage is currently not accessible; however, it is now used for storage. • The reception desk in the main office and the library circulation desk do not have an accessible transaction space. 	<ul style="list-style-type: none"> • A remodel or addition executed at this facility might trigger other facility upgrades.
B10.5	Signage	<ul style="list-style-type: none"> • This facility lacks compliant room signage. 	
RECOMMENDATIONS			
B10.1	If remodel work were to occur at this facility, the replacement of wire glass with tempered glazing may be required. Wire glass may also be replaced at the District's discretion to prevent any issues if glazing is damaged or broken. See Sections A20 and B30.		
B10.2	Remove existing handrails and replace with compliant handrail construction. Add a handrail on each side of stairs from gym to stage.		
B10.3	Remove portions of the ramp and install lift for stage access.		
B10.5	Install compliant room signage throughout the facility.		

B20 – INTERIOR FINISHES			
Item		Findings	Comments
B20.1	Flooring	<ul style="list-style-type: none"> The majority of the flooring in this facility is asbestos tile. Egress doors do not have fixed walk-off mats. Carpeting in the main office area is in poor condition. The flooring is cracked at several door thresholds. Flooring in the portables is in poor condition. 	<ul style="list-style-type: none"> Flooring in several classrooms has already been replaced with vinyl composition tile (VCT); this flooring is in good condition. Library carpeting is in good condition.
B20.2	Ceilings	<ul style="list-style-type: none"> In general, the ceilings are in fair condition. A portion of the gymnasium ceiling near the vestibule doors appears to be sagging. See Figure B20.2. The ceiling in the office adjacent to the library has tiles that aren't adhered fully to their ceiling substrate. The ceiling in the kitchen needs to be replaced. 	<ul style="list-style-type: none"> Ceilings are 12X12 wood fiber ceiling tile. This ceiling type is an older ceiling not commonly used. In locations where ceiling tiles is loose or sagging, investigation of damage to framing or substrate should occur.
B20.3	Ceiling Issues	<ul style="list-style-type: none"> There are several areas of water damaged ceiling tiles in classrooms and hallways throughout the facility (unknown if current or old leaks have caused this). 	
B20.4	Fixed Equipment	<ul style="list-style-type: none"> Glazing in display cases is large and glazing material seems thin. 	<ul style="list-style-type: none"> Gymnasium has (6) backstops. Classrooms are equipped with a combination of marker boards, projection screens, televisions and smart boards (in some classrooms). There are (3) display cases located across from the main office.
B20.5	Walls	<ul style="list-style-type: none"> No issues observed 	
B20.6	Wall Finishes	<ul style="list-style-type: none"> One wall of rubber base in the gymnasium is damaged. Refer to Recommendations in B20.1. Lacquer finish on wood paneling is a possible fire hazard. 	<ul style="list-style-type: none"> Classroom walls are painted gypsum wall board. Wall finishes in the hallways and gymnasium are wood paneling. While dated, the wood appears to be in good condition. It is the District's desire to update finishes in hallways. Vestibule walls are brick veneer. Wall base is a combination of wood base and rubber base (5" and 7" high). Wall padding is located behind basketball backstops, and is in good condition. Portions of rubber base are missing in Classroom 18.

B20.7	Furnishings	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> The stage curtain is in fair condition. Window covering consists of horizontal mini blinds. The coverings are in very good condition. Classroom furniture is mainly desks and chairs; the furniture is generally in good condition.
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RECOMMENDATIONS

B20.1	Abate asbestos tile flooring in (13) classrooms, hallways, main office, gymnasium and replace with VCT flooring. Remove all wood and rubber base in this facility and replace with new rubber base. Abate asbestos tile in the kitchen area and replace with slip resistant sheet vinyl flooring and coved base. Replace carpeting in main office. Provide fixed walk off mats at (5) exit door locations. Remove flooring in (2) portables and replace with VCT.		
B20.2	Remove ceiling tiles in gymnasium and office adjacent to library. Once tile is removed, review framing and/or ceiling substrate for evidence of damage and replace as needed. Install new ceiling tile in gymnasium and office. Replace 12x12 ceiling tiles in kitchen and epoxy painted gypsum board ceiling.		
B20.4	Replace glazing in (3) display cases.		
B20.6	Remove all wood paneling from all hallways and replace with full height plastic laminate wainscoting.		

B30 – INTERIOR COMPONENTS

Item		Findings	Comments
B30.1	Interior Windows	<ul style="list-style-type: none"> Interior windows contain wire glass. 	<ul style="list-style-type: none"> Wire glass is no longer permitted in educational facilities.
B30.2	Interior Doors and Hardware	<ul style="list-style-type: none"> Interior doors contain wire glass. Entry door to the kitchen from gym is damaged and in poor condition. Gymnasium door hardware needs to be replaced to provide more secure access. Doors should also be replaced. 	<ul style="list-style-type: none"> Wire glass is no longer permitted in educational facilities. Most interior doors and frames are wood, and while they show signs of wear and age, are generally in good condition. Classroom door hardware has been upgraded.
B30.3	Acoustics	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Gymnasium does not have any acoustic wall panels.
B30.4	Casework	<ul style="list-style-type: none"> Classroom and library casework is aged but the finishes are in good condition. 	<ul style="list-style-type: none"> Casework is inconsistent in its finishes in each classroom.
B30.5	Security	<ul style="list-style-type: none"> Door glazing does not have any covering for security. The gymnasium can be accessed from main entry doors; sight lines are limited from the main office. See Figure B30.5. 	<ul style="list-style-type: none"> Glazing is typically 11"x11". A window from vestibule into office area could improve security from main entry doors into gym as well as monitoring individuals entering the building.
B30.6	Other	<ul style="list-style-type: none"> This facility lacks a separate gymnasium and cafeteria. Both functions share one space, which can cause conflicts between food service and providing adequate physical education classes. A separate gymnasium 	<ul style="list-style-type: none"> This facility is an older school and does not provide adequate building storage.

		would be beneficial to this facility.	
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RECOMMENDATIONS	
B30.1	If remodel work were to occur at this facility, the replacement of wire glass with tempered glazing may be required. Wire glass may also be replaced at the District's discretion to prevent any issues if glazing is damaged or broken.
B30.2	See B30.1. Remove wood door and frame at kitchen and replace with new door, frame, hardware and kick plate. Remove (2) sets of interior wood doors and frames at gymnasium. Replace with new doors, frames, hardware and kickplates.
B30.4	Replace casework (countertops, backsplash and cabinets) in (19) classrooms.
B30.5	Add window coverings or blinds to all glazing in doors. Remodel office area. Relocate main office/reception area and add a window from vestibule into new reception area for added supervision to front door. Reconfigure remaining office area for health room and accessible toilet, staff mailboxes and (2) offices.
B30.6	Construct an addition to house a new gymnasium facility, student restrooms, storage and small group space. Remodel existing locker rooms into building storage.

B40 – TOILET FACILITIES

Item	Findings	Comments
B40.1 Walls and Wall Finishes	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Student restroom walls are a combination of ceramic tile and fiberglass panels. Single stalls restrooms have painted gypsum board walls.
B40.2 Floors and Floor Finishes	<ul style="list-style-type: none"> Flooring in some of the student restrooms is worn and dated. Staff restrooms have asbestos tile flooring. 	<ul style="list-style-type: none"> Student restroom flooring is ceramic tile; classrooms with toilets facilities have sheet vinyl flooring.
B40.3 Ceilings	<ul style="list-style-type: none"> No issues observed 	
B40.4 Partitions	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Colors are dated.
B40.5 Fixtures	<ul style="list-style-type: none"> Refer to Plumbing Section. 	<ul style="list-style-type: none"> Fixtures, particularly wash fountains, are older and shown signs of wear and age.
B40.6 Accessories	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Some paper towel dispensers observed are older models.
B40.7 Accessibility	<ul style="list-style-type: none"> (3) Single stall staff restrooms and classroom restrooms are not accessible. Larger student restrooms have been upgraded for accessibility, but student restrooms located in original locker room area do not provide accessible stalls. 	<ul style="list-style-type: none"> Staff restroom in the main office is 4'-6" x 4'-6".

RECOMMENDATIONS	
B40.2	Replace ceramic tile flooring in student restrooms with new ceramic tile flooring and coved base. Remove asbestos tile flooring from (3) single stall restrooms and replace with sheet vinyl flooring and coved base.
B40.5	See Plumbing Section.
B40.7	See Section B30.6.

C - SYSTEMS			
C10 - PLUMBING			
Item		Findings	Comments
C10.1	Water Service	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Storm sump pump.
C10.2	Piping	<ul style="list-style-type: none"> Domestic hot water (DHW) piping is period to the building. See Figure C10.2. 	<ul style="list-style-type: none"> Exterior hose bibs are present. Storm sump is located outside of the kitchen.
C10.3	Fixtures	<ul style="list-style-type: none"> Lavatories, water closets, urinals, and drinking fountains are all period to the building. See Figure C10.3. There is no grease interceptor in the kitchen. 	<ul style="list-style-type: none"> Each classroom has a sink and toilet. Single level drinking fountains. Single level electric water cooler. Floor mounted manual flush valve water closets. Wall mounted manual flush valve urinals. Manual lavatories in restrooms. Staff lavatory: floor mounted flush valve and manual faucets.
C10.4	Water Pressure and Service	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Located at street with site disconnect.
C10.5	Storm and Overflow Drains	<ul style="list-style-type: none"> Water backs up by the bike rack. See Figure C10.5. The storm drain system has drainage issues. The gutters are clogged at time of field visit. 	<ul style="list-style-type: none"> There are exterior gutters and downspouts present. A further investigation of the storm system is recommended. This is not in the scope of this report.
C10.6	Water Heater	<ul style="list-style-type: none"> Domestic hot water is a separate system. 	<ul style="list-style-type: none"> State SBF 100; 200 MBH (1992) 50 gallon; 4.5 kW; GE; (2010); located in Gym closet.
RECOMMENDATIONS			
C10.2	Repipe domestic hot water piping.		
C10.3	Replace all lavatories, water closets, urinals. Replace all water fountains with bi-level water coolers. Provide grease interceptor for kitchen sinks and dishwasher.		
C10.5	Replace storm drains at bike rack. Flush storm water lines. Remediate storm drain issues (scope of work not part of this report).		

C20 - HVAC			
Item		Findings	Comments
C20.1	Mechanical Equipment	<ul style="list-style-type: none"> • Most forced air equipment is period to the original building or the addition and are functioning, but beyond their useful lives. See Figure C20.1b. • Typhoon cooling unit in library; water cooled condenser used potable water once through, then dumps to sanitary; Model number 55-SC. See Figure C20.1b. • Unit ventilators are operating but past their useful life. 	<ul style="list-style-type: none"> • Kitchen unit: Pace; kitchen make-up unit: Pace • EF-1: Gym exhaust; Aladdin; 9,000 cfm. • HV-1: Gym supply; Pace B19 • EF-4: Old exhaust, no brand; 12,000 cfm. • Unit ventilators with HW fin tube radiators and on/off control. • Addition is fin tube convectors with hot water; central air supply replaced c.2010. • Kitchen exhaust fan on roof, CUE type. • Gym has central air louvers by roof. • Toilet powered exhaust; classrooms have static and powered exhaust. • Locker room exhaust fan has copper ductwork (Aladdin). • 3-ton split system for computer lab.
C20.2	Air Filtration	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • Air filtration capabilities are period to the building.
C20.3	Equipment Accessibility	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • Access to mechanical equipment is either through permanent ladders or A-frame ladders.
C20.4	Air Distribution and Ventilation	<ul style="list-style-type: none"> • The office area lacks ventilation. 	<ul style="list-style-type: none"> • Operable windows are used for natural ventilation. • Typical classroom has three exhaust grilles out of the original coat room.
C20.5	Controls	<ul style="list-style-type: none"> • Spilt systems are not on DDC. • Pneumatic controls have been abandoned in place 	<ul style="list-style-type: none"> • Controls: Delta
C20.6	Chillers	<ul style="list-style-type: none"> • No chillers are installed on site. 	
C20.7	Boiler	<ul style="list-style-type: none"> • Boilers are functioning but past their useful life. See Figure C20.7a. • Electric kilns do not have dedicated exhaust. • Electric kilns also located in the pump room. Two electric kilns located in the boiler room. 	<ul style="list-style-type: none"> • Weil McLain ~1980's • BL1586SW • 3,899 MBH input • Pumps in separate room; B+G 185011. • Constant flow pump, 3-way control. • Pump running on an OA sensor from DDC system. • Broken pump support hangar. • 3-way valves.
RECOMMENDATIONS			
C20.1	Replace all fans and unit ventilators serving the entire building and the kitchen make-up air unit with units of similar capacities. Replace cooling unit in library with a split system AC unit. Replace all unit ventilators.		
C20.4	Provide heat/ventilation unit for office area.		
C20.5	Incorporate existing split systems into the DDC system. Upgrade DDC system to current version of Delta software. Remove abandoned pneumatic DDC system.		

C20.7 Provide new high efficiency boilers and variable speed pumps. Remove kilns from both boiler and pump rooms and provided dedicated exhaust for all kilns.			
C30 – FIRE PROTECTION			
Item		Findings	Comments
C30.1	Fire Suppression System	<ul style="list-style-type: none"> There is not fire suppression in the kitchen hood. 	<ul style="list-style-type: none"> This facility is not sprinklered.
C30.2	Water Service and Backflow Prevention	<ul style="list-style-type: none"> Not Applicable 	
C30.3	System Pressure	<ul style="list-style-type: none"> Not Applicable 	
C30.4	Standpipes	<ul style="list-style-type: none"> Not Applicable 	
C30.5	Fire Pump	<ul style="list-style-type: none"> Not Applicable 	
C30.6	Fire Sprinkler Pipe Condition	<ul style="list-style-type: none"> Not Applicable 	
C30.7	Fire Department Connection	<ul style="list-style-type: none"> Not Applicable 	
C30.8	Fire Sprinkler Zoning	<ul style="list-style-type: none"> Not Applicable 	
C30.9	Flow Monitoring and Alarm	<ul style="list-style-type: none"> Not Applicable 	
C30.10	Hoses and Extinguishers	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Fire extinguishers, no hoses
RECOMMENDATIONS			
C30.1 Provide fire suppression in kitchen hoods.			

D - ELECTRICAL			
D10 - ELECTRICAL EQUIPMENT			
Item	Findings	Comments	
D10.1	Transformers	<ul style="list-style-type: none"> • Unable to access transformer room. • Feeders run beneath building. 	<ul style="list-style-type: none"> • Single utility transformer supplies Adams Elementary School, Food Service and Administration buildings. It is the District's desire to separate the service to each of these facilities.
D10.2	Switchgear and Panelboards	<ul style="list-style-type: none"> • Cloth cable evident in all sampled panelboards. See Figure D10.2a. • No equipment grounding conductors were visible in sampled panelboards. • Sampled panelboards lack sufficient spare capacity. • Panel schedules appear to be outdated or incorrect. • Exposed control transformer terminals in boiler room pose a safety hazard. See Figure D10.2b. 	<ul style="list-style-type: none"> • Cloth cable is no longer acceptable per the current National Electric Code (NEC). Cloth cable is outdated and has the potential to lack grounding capabilities. • 600A, 120Y/208V electrical service supplied from one (1) of three (3) taps on utility transformer in adjacent room. • Single main distribution panel; six (6) disconnects, mix of fusible disconnects and thermal magnetic breakers; no main disconnect accessible. • Two (2) modular classrooms are fed via overhead cabling from main distribution panel. • Electrical Equipment: Federal Pacific Stab-Lok series
D10.3	Lighting	<ul style="list-style-type: none"> • There was a large quantity of apparent ballast failures observed in classrooms during site visit. See Figure D10.3a. • Mechanical and electrical rooms appear underlit and are served by incandescent lighting. See Figure D10.3.b. 	<ul style="list-style-type: none"> • All general lighting replaced or retrofitted with T8 systems; classrooms retrofitted with 2 lamp T8 GE volumetric troffers; hallways utilized original fixtures. • Small quantities of incandescent and self-ballasted CFL lighting in restrooms, closets offices etc.
D10.4	Lighting Controls	<ul style="list-style-type: none"> • Facility lacks automated lighting controls. 	<ul style="list-style-type: none"> • Classroom lighting switched in rows parallel to the windows. • Gym, hallway and circulation lighting unswitched or switched via circuit breaker. • Lighting controls are highly recommended to meet energy code and conserve energy.
D10.5	Back-up and Emergency Power	<ul style="list-style-type: none"> • Not Applicable 	
D10.6	Egress and Emergency Lighting	<ul style="list-style-type: none"> • There is none installed. 	
D10.7	Exit Signage	<ul style="list-style-type: none"> • Exit signs observed do not meet intensity requirements. See figure D10.7a. • Electric door operator is plugged in to adjacent exit sign. See Figure D10.7b. 	<ul style="list-style-type: none"> • Exit signs appear period to building and have been retrofitted with LED. • There is the potential for energy and maintenance savings if

			replaced.
D10.8	Sensors	<ul style="list-style-type: none"> Lighting controls/sensors do not meet current Oregon State Energy Code. 	<ul style="list-style-type: none"> No sensors installed.

RECOMMENDATIONS

- D10.1 Replace single transformer supplying Adams, Food Service Warehouse and Administration offices with individual, pad mount transformers, meters and service entrances to serve each building independently.
- D10.2 Replace building electrical system complete, including panelboards, main distribution panel, and all feeder and branch circuit wiring with an 800A, 120Y/208V system to accommodate owner IT needs and general future growth. Provide a metallic enclosure for control transformer in boiler room.
- D10.3 Replace all mechanical and electrical room lighting with T8 utility fluorescent luminaires. Replace existing, malfunctioning retrofit ballasts NEMA premium ballasts (Lutron EcoSystem series or equivalent). Replace all incandescent and self-ballasted CFL lighting with LED.
- D10.4 Install a building lighting control system; advise standardization around Lutron Quantum system or equivalent
- D10.6 Install battery packs in fixtures along egress paths.
- D10.7 Replace all existing exit signs with LED type with back-up batteries.
- D10.8 Install workstation occupancy sensors to control plug loads at all offices.

D20 – SAFETY / SECURITY

Item		Findings	Comments
D20.1	Fire Alarm	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> System: Siemens
D20.2	Smoke Detection	<ul style="list-style-type: none"> No issues observed 	
D20.3	Pull Stations	<ul style="list-style-type: none"> No issues observed 	
D20.4	Annunciation	<ul style="list-style-type: none"> No issues observed 	
D20.5	Addressable Zones and Systems	<ul style="list-style-type: none"> No issues observed 	
D20.6	Monitoring	<ul style="list-style-type: none"> No issues observed 	
D20.7	Access Control	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Card readers present.
D20.8	Intrusion	<ul style="list-style-type: none"> No issues observed 	
D20.9	Video Surveillance	<ul style="list-style-type: none"> Not Applicable 	

RECOMMENDATIONS

D30 – TECHNOLOGY COMMUNICATIONS

Item		Findings	Comments
D30.1	Paging and Intercom – Head End Condition	<ul style="list-style-type: none"> Intercom system is well past its useful life. Repair parts are unavailable and there is inadequate technical support for this system. 	<ul style="list-style-type: none"> System: Rauland (original to facility)
D30.2	Master Clock	<ul style="list-style-type: none"> Past useful life 	
D30.3	Infrastructure	<ul style="list-style-type: none"> Unused cabling is abandoned in place. Cabling is not labeled. 	
D30.4	Speakers	<ul style="list-style-type: none"> No Issues Observed 	
D30.5	Coverage	<ul style="list-style-type: none"> No Issues Observed 	
D30.6	Clock System	<ul style="list-style-type: none"> Past useful life 	

		<ul style="list-style-type: none"> • Very difficult for users to program 	
D30.7	Clock – Head End	<ul style="list-style-type: none"> • Clock system is well past its useful life. Repair parts are unavailable and there is inadequate technical support for this system. 	<ul style="list-style-type: none"> • System: Latham (original to facility)
RECOMMENDATIONS			
D30.1	Replace intercom system.		
D30.7	Replace clock system.		

E - GROUNDS		
E10 – SITE CIRCULATION AND PARKING		
Item	Findings	Comments
E10.1 Parking Lots	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> There are two separate banks of parking stalls. The first contains (14) standard stalls; the second bank has (20) standard stalls and (2) accessible stalls. The adjacent district office parking lots serve as overflow parking.
E10.2 Site Signage/ Accessories	<ul style="list-style-type: none"> The flagpole is in poor condition. 	<ul style="list-style-type: none"> Site sign is wooden and low to ground.
E10.3 Vehicular Circulation	<ul style="list-style-type: none"> Vehicular circulation shares an entry point with the district office parking lot. Vehicular circulation is one way, parallel with the front entry; all vehicles must loop around the district office to a single point of site exit. Bus loop is separate, located on 35th Street. See Section A20.5. There is no dedicated fire lane. 	<ul style="list-style-type: none"> It has been commented that during drop-off and pick-up times, the shared driving loops can become congested. At this time, there are no recommendations.
E10.4 Curbs and Sidewalks	<ul style="list-style-type: none"> Curb finishes are in fair condition. 	
E10.5 Accessibility	<ul style="list-style-type: none"> Classroom doors have curb access from adjacent play area. There is a raised curb/ramp at an exterior gym door (near the main entrance) that does not appear to meet current code. 	<ul style="list-style-type: none"> Site can be access by sidewalk and/or asphalt paving. Actuators are located at the front door, in the vestibule area and at the exterior doors to the covered play.
E10.6 Bikes and Bike Parking	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> There are two banks of bike racks; 20 ‘U’ shaped racks were observed. All bike parking is covered and located near the school’s front entry.
RECOMMENDATIONS		
E10.2	Replace flagpole.	
E10.5	Remove curb at (21) doors and provide concrete ramp access. Remove ramp/curb at gymnasium door and reconstruct compliant access.	
E20 - SITE COMPONENTS		
Item	Findings	Comments
E20.1 Fields	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Fields are grass.
E20.2 Landscaping	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Site has minimal landscaping (located near entry) and very mature trees on site.
E20.3 Irrigation	<ul style="list-style-type: none"> None observed 	<ul style="list-style-type: none"> It is the District’s desire to add irrigation to field areas.
E20.4 Site Buildings	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Covered play structure is in good condition.
E20.5 Site Security	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> It has been commented that students dropped off at adjacent Western View Center cut across fields, which have sightline issues from the

			school.
E20.6	Fencing	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Site fencing is a combination of wood and chain link fencing.
E20.7	Playground Equipment	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Equipment is in good condition; several items appear to be older.
E20.8	Play Surfaces	<ul style="list-style-type: none"> Play surfaces are in poor condition. Asphalt is worn with severe cracking. See Figure E20.8. 	
E20.9	Site Lighting	<ul style="list-style-type: none"> No lighting exists in parking areas. Site lighting is generally inadequate for the size of site. Luminaires at the covered play area are at risk of falling. See Figure E20.9. 	<ul style="list-style-type: none"> Recessed lighting at soffits; retrofitted with self-ballasted CFL. Small quantity HID building mounted lighting has been added.
E20.10	Grading and Drainage	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Fields were dry at time of field visit.

RECOMMENDATIONS

- E20.3 Add irrigation system to fields.
- E20.8 Resurface paving at both hard play areas. Restripe courts to match existing conditions. Install parking lot and site lighting as recommended by IESNA. Rehang/reinstall luminaire at outdoor covered play area.

IMAGES

Figure A10.2.a - Ridge in slab/sidewalk



Figure A10.2.b – Brick wall



Figure A20.3 - Sealant Issues



Figure B20.2 – Ceiling issues in Gym



Figure B30.5 – Lack of visibility



Figure C10.2 – Piping



Figure C10.3 – Restroom sink



Figure C10.5 – Storm drain blockage



Figure C20.1.a – Forced air equipment



Figure C20.1.b – Library mechanical unit



Figure C20.7 – Existing boiler



Figure D10.2.a – Typical panelboard



Figure D10.2.b – Control transformer



Figure D10.3.a – Classroom Light Retrofit



Figure D10.3.b – Mechanical room lighting



Figure D10.7.a – Exit signage



Figure D10.7.b – Circuit issues



Figure E20.8 – Hard surface conditions



Figure E20.9 – Light is at risk for falling



Adams Elementary	Priority Level				Priority Level I	Priority Level II	Priority Level III	Priority Level IV	
	ITEMS	(Refer to Legend)							
		I	II	III					IV
A - STRUCTURE/SHELL									
A10 - STRUCTURE/SUBSTRUCTURE									
A10.3	1	Complete seismic upgrades per previous reports	X			\$1,212,733			
A20 - EXTERIOR COMPONENTS									
A20.2	1	Replace wire glazing in exterior doors		X			\$ 1,000		
	2	Replace (2) pairs of exterior doors and frames	X			\$ 23,718			
	3	Replace doors at portables	X			\$ 14,373			
	4	Replace exterior gym doors and add card readers	X			\$ 15,859			
A20.3	1	Replace all single glazing window systems		X		\$ 336,806			
A20.4	1	Replace roofing per roofing assessment recommendations			X		\$ 799,000		
A20.5	1	Construct covered walkway adjacent to bus loop		X		\$ 11,067			
TOTAL - STRUCTURE/SHELL					\$ 15,859	\$ 1,598,697	\$ 800,000	\$ -	
B - INTERIORS									
B10 - INTERIOR CIRCULATION									
B10.2	1	Replace handrails at (2) stair locations			X		\$ 1,344		
	2	Add handrails on side of stairs in gymnasium			X		\$ 664		
B10.3	1	Remove portions of existing ramp and install lift		X		\$ 40,413			
B10.5	1	Add compliant room signage throughout facility	X			\$ 40,610			
B20 - INTERIOR FINISHES									
B20.1	1	Abate flooring in classrooms, hallways, main office and gymnasium and replace with VCT; replace base		X		\$ 260,708			
	2	Abate kitchen floor and replace with slip resistant sheet vinyl flooring and covered base	X			\$ 14,402			
	3	Replace carpeting in the main office		X		\$ 1,660			
	4	Provide fixed walk off mats at (5) pairs of exit doors		X		\$ 7,364			
	5	Replace portable flooring with VCT			X	\$ 6,048			
B20.2	1	Replace ceilings in gymnasium and library office	X			\$ 74,990			
	2	Replace kitchen ceiling			X	\$ 41,367			
B20.4	1	Replace glazing in display cases	X			\$ 3,752			
B20.6	1	Remove wood paneling and replace with full height plastic laminate wainscot			X	\$ 126,345			
B30 - INTERIOR COMPONENTS									
B30.1	1	Replace all interior door wire glazing		X		\$ 2,000			
B30.2	1	Remove wood door at kitchen and replace	X			\$ 2,158			
	2	Replace gymnasium doors and hardware	X			\$ 16,761			
B30.4	1	Replace casework in all classrooms			X		\$ 337,122		
B30.5	1	Add blinds or shades to all doorlites	X			\$ 2,295			
	2	Remodel office area/provide visibility into	X			\$ 220,406			
B30.6	1	Construct gymnasium and toilet room addition			X	\$ 1,669,800			
	2	Remodel existing locker rooms into storage			X	\$ 79,053			
B40 - TOILET FACILITIES									
B40.2	1	Replace student restroom flooring		X		\$ 10,558			
	2	Abate flooring in single staff restrooms and replace with sheet vinyl flooring		X		\$ 1,429			
TOTAL - INTERIORS					\$ 237,103	\$ 407,772	\$ 1,898,191	\$ 418,183	
C - SYSTEMS									
C10 - PLUMBING									
C10.2	1	Re-pipe domestic hot water piping		X		\$ 382,500			
C10.3	1	Provide grease interceptor for kitchen sinks and dishwasher		X		\$ 28,750			
C10.4	1	Replace all lavatories, water closets and urinals			X	\$ 165,000			
		Replace all water fountains with bi-level water coolers			X	\$ 28,750			
C10.5	1	Replace storm drains at bike rack		X		\$ 85,000			
	2	Flush storm water lines		X		\$ 5,000			
	3	Remediate storm drain issues (this is not in the scope of this report)							

Adams Elementary	ITEMS	Priority Level				Priority Level I	Priority Level II	Priority Level III	Priority Level IV
		(Refer to Legend)							
		I	II	III	IV				
C20 - HVAC									
C20.1	1	Replace all fans and unit ventilators and kitchen make up air unit serving the entire building with similar capacities and consideration of cooling at owner discretion	X				\$ 393,750		
	2	Replace Typhoon cooling unit with a split system AC unit		X			\$ 51,250		
	3	Replace unit ventilators		X			\$ 22,000		
C20.4	1	Provide heating/ventilating unit for office area	X				\$ 20,000		
C20.5	1	Incorporate split systems onto DDC system			X				\$ 12,500
	2	Upgrade entire DDC system to Delta		X			\$ 117,500		
	3	Remove abandoned pneumatic DDC system			X				\$ 15,000
C20.7	1	Provide new high efficiency boilers and variable speed pumps		X			\$ 482,500		
	2	Remove kilns from boiler and pump room and provide dedicated exhaust	X				\$ 66,250		
	3	Remove DHW heat exchanger from main boilers		X			\$ 16,250		
C30 - FIRE PROTECTION									
C30.1	1	Provide fire suppression in kitchen hood	X				\$ 12,500		
TOTAL - SYSTEMS						\$ 98,750	\$ 1,584,500	\$ 193,750	\$ 27,500
D - ELECTRICAL									
D10 - ELECTRICAL EQUIPMENT									
D10.1	1	Replace utility transformer and service entrances		X			\$ 125,000		
D10.2	1	Replace building electrical system			X			\$ 250,000	
	2	Provide enclosure for control transformer	X				\$ 150		
D10.3	1	Replace mechanical/electrical room lighting			X			\$ 3,600	
	2	Replace malfunctioning ballasts		X			\$ 75,000		
	3	Replace existing incandescent and CFL Lighting			X			\$ 50,000	
D10.4	1	Install retrofit lighting controls			X			\$ 75,000	
D10.6	1	Install egress lighting and retrofit existing luminaires with battery packs	X				\$ 98,000		
D10.7	1	Replace all exit signs with LED meeting intensity criteria	X				\$ 50,000		
D10.8	1	Install workstation occupancy sensors			X			\$ 50,000	
D30 - TECHNOLOGY COMMUNICATIONS									
D30.1	1	Replace intercom system		X			\$ 25,000		
D30.7	1	Replace clock system		X			\$ 25,000		
TOTAL - ELECTRICAL						\$ 148,150	\$ 250,000	\$ 428,600	\$ -
E - GROUNDS									
E10 - SITE CIRCULATION AND PARKING									
E10.2	1	Replace flag pole			X			\$ 6,008	
E10.5	1	Remove curb at exterior classroom doors and construct ramp access			X			\$ 5,396	
	2	Remove curb/ramp at gym and provide compliant access			X			\$ 454	
E20 - SITE COMPONENTS									
E20.3	1	Add irrigation to field areas			X			\$ 442,645	
E20.8	1	Resurface and restripe both hard surface play areas			X			\$ 58,844	
E20.9	1	Extend site lighting		X			\$ 50,000		
TOTAL - GROUNDS						\$ -	\$ 50,000	\$ 513,347	\$ -
TOTALS BY CATEGORY									
								STRUCTURE/SHELL	\$ 2,414,556
								INTERIORS	\$ 2,961,249
								SYSTEMS	\$ 1,904,500
								ELECTRICAL	\$ 826,750
								GROUNDS	\$ 563,347
								FACILITY TOTAL	\$ 8,670,402

Adams Elementary ITEMS	Priority Level (Refer to Legend)				Priority Level I	Priority Level II	Priority Level III	Priority Level IV
	I	II	III	IV				
TOTALS BY PRIORITY								
								LEVEL 1 \$ 499,862
								LEVEL 2 \$ 3,890,969
								LEVEL 3 \$ 3,833,888
								LEVEL 4 \$ 445,683
								PRIORITY TOTAL \$ 8,670,402
LEGEND:								

PRIORITY LEVELS

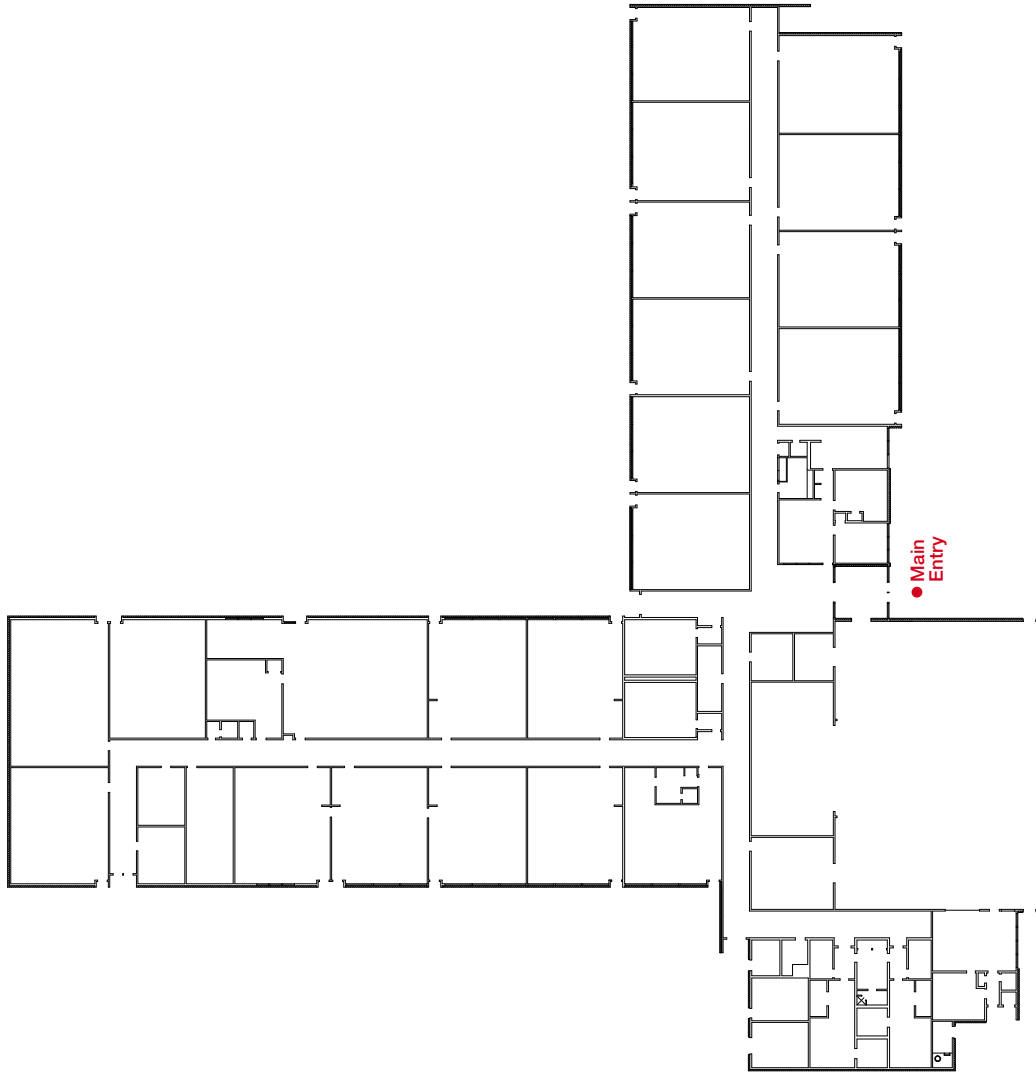
Level I: Highest Priority; Issues that affect the life safety concerns of the occupant, related to notification of occupants to emergency situations and the ability to safely evacuate the facility; subcomponents of Level I include safety concerns such as electrical loads, hazardous materials that might be affected with remodel or modifications, lack of fall protection. Level I items need to be addressed within a 5-year plan.

Level II: Moderate Priority; Issues that are related to the integrity and adequacy of systems within the building to sufficiently withstand a major event and still function; also related are the age of systems or building components that keep day to day operations running without constant repair. Issues may include mechanical, electrical and plumbing systems, fire suppression, lighting and security, as well as flooring, windows doors and other architectural components. Level II Items may be part of a 5-year plan.

Level III: Lower Priority; Issues that may over time affect the day to day maintenance of the building or long term use of the facility. Issues also include access and clearances at equipment and fixtures, access for individuals with disabilities and both indoor and exterior environment quality. Level III Items would be considered in a 5 to 10 year plan.

Level IV: Issues that are related to the aesthetics of both the building's interior and exterior as well as integrity and adequacy of building systems that don't pose any issues or nearing the end of their remaining lifecycles. These may include items such as cabinetry original to the building that have signs of wear or dated finishes but do not have any damage or deterioration. Level IV items would be considered long-term plans (10 years or more).

OVERALL FLOOR PLAN



SCHOOL BUILDING
SCALE: NOT TO SCALE

Adams Elementary School | Corvallis School District



Franklin K-8 School

750 NW 18th Street
Corvallis, Oregon 97330

Built: 1947; 1951, 1954 additions

Enrollment: 354 students (2013)

Floor Area: 35,944 SF



Field Review Team:

Thea Wayburn	Dull Olson Weekes – IBI Group Architects
Jonathan Estabrook	KPFF Consulting Engineers
Roger Arnold	Glumac
Michael Henning	Glumac
Alex Ridley	Glumac
Dana Troy	Glumac

Report Date: December 2013

Date of Field Visits: June 3-7, 2013

Weather: Sunny, 70's and 80's

Neighborhood: Residential/Commercial

Site Contacts: John Meyer, CSD 509J
Kim Patten, CSD 509J

General Building Description:

Franklin is a K-8 campus located adjacent to Corvallis High School. Franklin uses E.D. Hirsch's Core Knowledge Curriculum, a structured curriculum program designed to give all students a solid foundation in cultural facility. This school program is open to all students in the district, and is a highly desired program.

Franklin ES was originally constructed in 1946 with a northern addition in 1951, a locker room addition in 1954 and a kitchen addition in 1970. The building is one story and "C" shaped in plan. The original building and northern addition are wood framed construction. The roof is straight sheathing and 2x roof trusses supported on 2x stud bearing walls forming the interior corridor and exterior walls. The roof of the gymnasium /cafeteria and computer lab consists of heavy timber trusses with 2x purlins and straight sheathing, supported on 8x10 wood columns and spread footings. Lateral loads are taken by wood sheathed shear walls.

This school is on a tight site, nestled between commercial property, residences and the high school field complex, leaving little room for dedicated play fields and little to no room for expansion. This school site houses no modular buildings.

The school is a one story facility with the exception of the library, which is a half level above the main building. The building is wood framed structure with cedar shingles. The facility is not sprinklered. The cafeteria and gymnasium are one shared space, which can result in challenges or conflicts in scheduling food service with physical education classes.

Overall this facility is in fair condition. Due to its age, current use and site restrictions with the current footprint, this facility is a prime candidate for replacement. Refer to the Facility Replacement Costs section of the report for a detailed breakdown of facility replacement costs; recommendations and costs listed in this detailed report will be to replace or improve existing building conditions.

A full building review of architectural, structural, mechanical, electrical and plumbing components was conducted.

A - STRUCTURE / SHELL			
A10 – STRUCTURE / SUBSTRUCTURE			
Item		Findings	Comments
A10.1	Foundations	<ul style="list-style-type: none"> No issues observed 	
A10.2	Subgrade Enclosures	<ul style="list-style-type: none"> No issues observed 	
A10.3	Structural Systems	<ul style="list-style-type: none"> There are recommendations available for seismic improvements to the building structure, outlined in the Degenkolb Seismic Evaluation Phase 2 report, dated July, 2000. There are recommendations available for seismic improvements to non-structural systems, outlined in the Degenkolb Seismic Evaluation Phase 2 report, dated July, 2000. 	<ul style="list-style-type: none"> No seismic improvements have been conducted at this site.
RECOMMENDATIONS			
A10.3	<p>Prioritize and perform the recommended improvements to structural systems as outlined in the Degenkolb Seismic Evaluation Phase 2 report. The report provides specific recommendations. These include but are not limited to a new plywood diaphragms and shear walls, improved connections tying diaphragms to shear walls, and anchoring shear walls adequately to the foundations. Perform recommended seismic improvements to non-structural components as outlined in the Degenkolb Seismic Evaluation Phase 2 report. These include, but are not limited to, anchoring and strapping of mechanical and electrical equipment, replace glazing in exit ways and bracing suspended equipment and ceiling.</p>		
A20 - EXTERIOR COMPONENTS			
Item		Findings	Comments
A20.1	Exterior Walls	<ul style="list-style-type: none"> The exterior walls are in need of repainting. See Figure A20.1. The wood panel infill walls at the gymnasium show signs of damage in various locations. 	<ul style="list-style-type: none"> Walls are mainly cedar shingles and some brick veneer and generally in good condition. Some minimal damage was observed.
A20.2	Doors and Hardware	<ul style="list-style-type: none"> Wire glass is present in exterior doors. Gymnasium doors show signs of wear and should be replaced. Exterior classroom doors and frames show signs of wear. 	<ul style="list-style-type: none"> Wire glass is no longer permitted by code in educational facilities. Classroom door hardware has been upgraded.
A20.3	Windows and Skylights	<ul style="list-style-type: none"> No issues observed, but some window systems are older and inefficient. Wood framed windows are in poor condition. See Figure A20.3. 	<ul style="list-style-type: none"> Windows are a combination of single pane glazing in wood frames or uninsulated glazing in vinyl frames.
A20.4	Roof	<ul style="list-style-type: none"> A separate roofing assessment is located in the appendix of this report. 	<ul style="list-style-type: none"> Roofing is a combination of single ply and shingle roofing and ranges in age from 18-24 years old.

A20.5	Canopies and Covered Walks	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Exterior classroom doors are protected by building overhang, or have a small canopy. Main entry doors are protected by larger canopies.
A20.6	Gutters and Downspouts	<ul style="list-style-type: none"> No issues observed with gutters. 	<ul style="list-style-type: none"> Original copper gutters have been replaced.
A20.7	Trim and Overhangs	<ul style="list-style-type: none"> Several areas have peeling paint. 	<ul style="list-style-type: none"> Overall condition of trim and overhangs is good.
A20.8	Ramps and Stairs	<ul style="list-style-type: none"> No issues observed 	

RECOMMENDATIONS

- A20.1 Repaint all wood siding. Replace (3) infill panels with prefinished metal panels.
- A20.2 If remodel work were to occur at this facility, the replacement of wire glass with tempered glazing may be required. Wire glass may also be replaced at the District's discretion to prevent any issues if glazing is damaged or broken.
- A20.3 Replace one pair of exterior doors and frames. Repaint (17) exterior classroom doors and frames.
- A20.4 Replace all single pane windows with aluminum storefront window systems with thermal glazing and operable vents.
- A20.4 Repair and/or replace roofing systems per roofing assessment recommendations.
- A20.7 Repaint all wood trim.

B - INTERIORS			
B10 – INTERIOR CIRCULATION			
Item		Findings	Comments
B10.1	Construction and Exiting	<ul style="list-style-type: none"> • Doors contain wire glazing. • This building is not sprinklered. 	<ul style="list-style-type: none"> • Wire glass is no longer permitted in educational facilities. • Classrooms have exterior doors equipped with panic hardware. • A major remodel or addition at this site would require a thorough building code analysis.
B10.2	Stairs and Handrails	<ul style="list-style-type: none"> • Handrails for library stairs and at ramp do not meet current code requirements. • Stairs from multi-purpose room to stage do not have any handrails. 	<ul style="list-style-type: none"> • The existing stage has been decrease in size and now is used for storage; the remaining space was absorbed by the current library.
B10.3	Ramps and Elevators	<ul style="list-style-type: none"> • Existing ramp is too steep and does not meet current code requirements. • Existing lift is not functioning properly. 	<ul style="list-style-type: none"> • Lift: Garaventa.
B10.4	Accessibility	<ul style="list-style-type: none"> • There is both stair and ramp access to the library, but neither one meet current code requirements. • Door hardware to locker rooms is not compliant. 	<ul style="list-style-type: none"> • The library is a half story higher than the rest of school. • The ramp is too steep to comply with current code and does not have landing at bottom. • Unless remodel or addition is executed at this facility (which would trigger other upgrades), no recommendations are made at this time. • Locker rooms are now used as storage.
B10.5	Signage	<ul style="list-style-type: none"> • The building lacks compliant room signage. 	
RECOMMENDATIONS			
B10.1	If remodel work were proposed at this facility, the replacement of all wire glass with tempered glazing may be required. Wire glass may also be replaced at the District’s discretion to prevent any issues if glazing is damaged or broken. See Sections A20 and B30.		
B10.2	Remove existing handrails and replace with compliant handrail construction. Add a handrail on each side of stairs from gym to stage.		
B10.3	Replace lift.		
B10.5	Add room signage to entire facility.		

B20 – INTERIOR FINISHES			
Item		Findings	Comments
B20.1	Flooring	<ul style="list-style-type: none"> The majority of the flooring in this facility is asbestos tile. Carpeting in the staff room is in poor condition. Exterior doors do not have fixed walk off mats. There was observed cracking in the hallway flooring. See Figure B20.1. 	<ul style="list-style-type: none"> Carpeting in other locations such as the library is in good condition.
B20.2	Ceilings	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Ceilings are 12x12 wood fiber ceiling.
B20.3	Ceiling Issues	<ul style="list-style-type: none"> Water damaged tiles were observed throughout the school (unknown if current or old leaks have caused this). Several tiles appeared to have their surface worn off and/or broken 	
B20.4	Fixed Equipment	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Lockers are single and double tier and located in the main hallway area. Lockers do not match. Classrooms are equipped with a combination of marker boards, projection screens, televisions and smart boards (in some classrooms). Gymnasium has (4) backstops.
B20.5	Walls	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> There is an existing wall radiator 4'-0" AFF in the cafeteria. This location is a challenge for the types of activities within this space.
B20.6	Wall Finishes	<ul style="list-style-type: none"> Lacquer finish on wood paneling is a possible fire hazard. 	<ul style="list-style-type: none"> Classroom walls are painted gypsum board. Hallway and walls are wood paneling. While dated, the wood paneling is in good condition. It is the district's desire to update finishes in the hallways. Gymnasium wall finishes are in good condition. Wall padding is installed behind basketball backstops and is in good condition. Base is a combination of 3" wood base and rubber base.

B20.7	Furnishings	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Stage curtain is in excellent condition. Library and classroom bookshelves are a combination of fixed and freestanding. Window coverings consist of horizontal blinds, which are in good condition. Classrooms as equipped with desks and chairs and are generally in good condition. Science classrooms have been retrofitted into elementary school classrooms spaces. See Section B30.6.
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RECOMMENDATIONS

- B20.1 Abate flooring in all classrooms, main office, hallways and cafeteria and replace with VCT flooring. Replace carpet in staff room. Remove all wood and rubber base and replace with rubber base. Provide fixed walk off mats at (4) exit door locations. Abate asbestos tile in the kitchen area and replace with slip resistant sheet vinyl flooring and covered base.
- B20.4 Replace single and double tier lockers with new double tier lockers with sloped tops (for 200 students).
- B20.5 Remove wall mounted radiator and replace with alternate system.
- B20.6 Remove all wood paneling from all hallways and replace with full height plastic laminate wainscoting.

B30 – INTERIOR COMPONENTS

Item		Findings	Comments
B30.1	Interior Windows	<ul style="list-style-type: none"> No issues observed 	
B30.2	Interior Doors and Hardware	<ul style="list-style-type: none"> No issues observed with doors and frames except for single door at library. Interior gym doors are damaged and worn. The door to the library does not have compliant hardware. 	<ul style="list-style-type: none"> Door hardware has been upgraded.
B30.3	Acoustics	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> The gymnasium does not have any acoustic wall panels.
B30.4	Casework	<ul style="list-style-type: none"> Classroom casework is aged but the finishes are in good condition. 	<ul style="list-style-type: none"> Casework is inconsistent in its finishes in each classroom.
B30.5	Security	<ul style="list-style-type: none"> Door glazing and interior windows do not have any covering for security. There are (2) entrances to this facility; visibility is limited from the main office to the second entry. 	<ul style="list-style-type: none"> Door glazing varies in size. The secondary (original) building entry has key card access.
B30.6	Other	<ul style="list-style-type: none"> This facility lacks a separate gymnasium and cafeteria. Both functions share one space, which can cause conflicts between food service and providing adequate physical education classes. A separate gymnasium would be beneficial to this facility. Elementary school classrooms have been retrofitted to be middle school level science classrooms. 	<ul style="list-style-type: none"> This facility is an older school and does not provide adequate building storage.

RECOMMENDATIONS	
B30.2	Repaint (1) single door and frame in the library and provide new compliant hardware. Replace (2) pairs of doors and frames in the gymnasium area. Provide compliant hardware and kickplates. Replace door hardware at main library door.
B30.4	Replace casework (countertops, backsplash and cabinets) in all classrooms.
B30.5	Add blinds or shades to all doors with windows, and interior windows.
B30.6	Construct an addition to house a new gymnasium facility, student restrooms, showers, storage and small group space. Remodel existing locker rooms into building storage. Remodel (2) general classrooms into middle school science classrooms. Provide lower cabinets and countertops on (2) walls. Provide (2) accessible sink stations along one of these walls. Install teacher’s demonstration table with sink at front of classroom.

B40 – TOILET FACILITIES

Item	Findings	Comments	
B40.1	Walls and Wall Finishes	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Wall surfaces consist of painted gypsum board and some FRP paneling at the “wet” wall areas.
B40.2	Floors and Floor Finishes	<ul style="list-style-type: none"> Toilet room flooring in all (4) student restrooms is in poor condition. See Figure B40.2. Single stall restrooms are in fair condition. See Section B40.8. 	<ul style="list-style-type: none"> Flooring in student toilet facilities is asbestos tile.
B40.3	Ceilings	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> One set of student restrooms has 2x4 lay-in ceiling tile. This ceiling is not ideal in toilet rooms.
B40.4	Partitions	<ul style="list-style-type: none"> Partitions are in fair condition. 	
B40.5	Fixtures	<ul style="list-style-type: none"> See Plumbing Section 	
B40.6	Accessories	<ul style="list-style-type: none"> No issues observed 	
B40.7	Accessibility	<ul style="list-style-type: none"> Student toilet rooms have been retrofitted to accommodate accessible stall. One accessible stall has a mechanical unit within the stall. Only one single stall restrooms is accessible. 	<ul style="list-style-type: none"> If a remodel or addition at this school were to occur, upgrades to non-accessible toilet rooms may be triggered. At this time, no recommendations are made.
B40.8	Other	<ul style="list-style-type: none"> Single stall restrooms are in need of upgrades. 	<ul style="list-style-type: none"> This facility lacks showers for middle school students. See B30.6 Recommendations.

RECOMMENDATIONS	
B40.2	Remove all asbestos tile flooring from student restrooms and replace with sheet vinyl flooring.
B40.3	Replace 2x4 ceiling tile in one set of student restrooms with painted gypsum board ceiling.
B40.4	Replace all toilet partitions in all student restrooms.
B40.8	Remodel (4) staff restrooms into (3) accessible facilities. Provide new sheet vinyl flooring, FRP wainscot, gypsum board ceiling, new fixtures and lighting. Install new door, frame and hardware.

C - SYSTEMS			
C10 - PLUMBING			
Item		Findings	Comments
C10.1	Water Service	<ul style="list-style-type: none"> No issues observed. 	<ul style="list-style-type: none"> Water service entry in boiler room has four taps. No pressure gauge.
C10.2	Piping	<ul style="list-style-type: none"> Domestic hot water (DHW) piping is period to the building. 	<ul style="list-style-type: none"> Gas service is located on the back side of the building for the kitchen. Gas service is located on the front side of the building for the boiler.
C10.3	Fixtures	<ul style="list-style-type: none"> All restroom fixtures and drinking fountains are period to the building. See Figure C10.3. 	<ul style="list-style-type: none"> Kitchen: three compartment sink, no grease interceptor. New garbage disposal. Water Closets: floor mount manual flush valve Lavatories: manual faucets Urinals: floor mount manual flush valve and wall mount automatic flush valve. Single level drinking fountain. Showers in locker rooms are used as storage and not operable.
C10.4	Storm and Overflow Drains	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> The roof could not be accessed to observe gutters, however based on other buildings, gutters and downspouts likely need cleaning.
C10.5	Water Heater	<ul style="list-style-type: none"> Domestic hot water heaters are functional but past their useful life. See Figure C10.5. 	<ul style="list-style-type: none"> Model; AO Smith 86 gallon; 200 MBH located near the kitchen. Model: State 510E, 82 gallon; 4.5 kW located in the boiler room.
RECOMMENDATIONS			
C10.2	Repipe domestic hot water piping.		
C10.3	Replace all lavatories, water closets and urinals. Replace all water fountains with bi-level water coolers. Add grease interceptor to the kitchen sinks and dishwasher.		
C10.4	Flush storm water lines.		
C10.5	Replace domestic hot water heaters.		

C20 - HVAC			
Item		Findings	Comments
C20.1	Mechanical Equipment	<ul style="list-style-type: none"> Forced air equipment is past its useful life. Some equipment is not functioning and abandoned in place due to access limitations. Unit ventilators are within their useful life and do not need replacement. See Figure 20.1. People have walked on ductwork, creating ductwork to become crushed. Insulation above ceiling has been kicked aside, creating thermal bridges in ceiling. 	<ul style="list-style-type: none"> Exhaust fan access located NE by play shed. Model: Sturdyvent size 6 (serves classroom wing exhaust). Abandoned exhaust fan in place in room with water heater. Kitchen exhaust fan is upblast CUE type. Gym unit in attic is original to building (heating and ventilating only). Library is served by packaged unit and unit ventilator. Model: American Standard cooling only packaged DX unit. Classrooms served by unit ventilators. South building has new unit ventilators (replaced 2011). North building has unit ventilators original to the addition. Model: Trane unit ventilators. Existing unit ventilators do not have new traps. Attic temperature relief fans are installed per requirements fire department; however there is not enough capacity in the building to connect them, so they remain in place unconnected. Window air conditioning units exist in some classrooms. No heating in the locker room. Cabinet heaters are located in hallway. Radiant heating is located in the gym along the wall.
C20.2	Air Filtration	<ul style="list-style-type: none"> Access is restricted making it difficult for filters to be changed. 	<ul style="list-style-type: none"> Air filtration system is period to the building. Refer to C20.1.
C20.3	Equipment Accessibility	<ul style="list-style-type: none"> Access to units is difficult. 	<ul style="list-style-type: none"> Refer to C20.1. Access to fan by play shed is via an extension ladder leaned up against a mezzanine. Access panel opens towards user, creating an awkward entry to attic. Access to gym unit is via a permanent ladder in janitor closet.
C20.4	Air Distribution and Ventilation	<ul style="list-style-type: none"> No issues observed 	
C20.5	Controls	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> System: Andover
C20.6	Chillers	<ul style="list-style-type: none"> Not Applicable 	

C20.7	Boiler	<ul style="list-style-type: none"> • Electric kilns are located in the boiler room. See Figure 20.7. 	<ul style="list-style-type: none"> • (2) new 1,010 MBH input steam boilers replaced in 2011. • Washer and dryer are located in boiler room.
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RECOMMENDATIONS

- C20.1 Replace all heating and ventilating units and exhaust fans.
 C20.7 Relocate electric kilns and provide dedicated exhaust.

C30 – FIRE PROTECTION

Item		Findings	Comments
C30.1	Fire Suppression System	<ul style="list-style-type: none"> • There is no fire suppression in the kitchen hood. 	<ul style="list-style-type: none"> • This building is not sprinklered.
C30.2	Water Service and Backflow Prevention	<ul style="list-style-type: none"> • Not Applicable 	
C30.3	System Pressure	<ul style="list-style-type: none"> • Not Applicable 	
C30.4	Standpipes	<ul style="list-style-type: none"> • Not Applicable 	
C30.5	Fire Pump	<ul style="list-style-type: none"> • Not Applicable 	
C30.6	Fire Sprinkler Pipe Condition	<ul style="list-style-type: none"> • Not Applicable 	
C30.7	Fire Department Connection	<ul style="list-style-type: none"> • Not Applicable 	
C30.8	Fire Sprinkler Zoning	<ul style="list-style-type: none"> • Not Applicable 	
C30.9	Flow Monitoring and Alarm	<ul style="list-style-type: none"> • Not Applicable 	
C30.10	Hoses and Extinguishers	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • Fire extinguishers, no hoses

RECOMMENDATIONS

- C30.1 Provide fire suppression in the kitchen hood.

D - ELECTRICAL			
D10 - ELECTRICAL EQUIPMENT			
Item		Findings	Comments
D10.1	Transformers	<ul style="list-style-type: none"> No issues observed 	
D10.2	Switchgear and Panelboards	<ul style="list-style-type: none"> The main distribution panel is severely overloaded; fuse cartridges hot to touch. There is no remaining spare capacity. Additional spaces were cut out of the panelboard dead front cover. See Figure D10.2.a. Panel schedules are unreadable and missing in most cases. Cloth cable used extensively. No equipment grounding bus bars or conductors were visible in any sampled panelboards. See figure D10.2b. There are numerous instances of equipment stored in front of electrical panels; no OSHA/NEC labeling is visible. Heating and water pipes are installed within the clearance zones of the main distribution panel, see figure D10.2c. Replacement parts for panelboards are unavailable due to age of boards. There are no spare fuses on site; fuse types are unknown. Conductors for the subfed adjacent panel are installed alongside feeder conductors, using same lugs; several strands were cut to fit; 240V power not accessible in these types of panels. Electrical meter for second service is installed in non-UL approved wood enclosure inside the building at the north hallway; there are exposed, energized conductors when cover was opened and no means of locking the cover. See Figure D10.2d. The second service main distribution panel lacks any spare capacity, see figure D10.2e. Computer lab circuits appear to be overloaded. Lighting circuits are supplied via three pole circuit breakers with unknown neutral conductor size and quantity. All branch panels subfed for additional capacity; subfeed panels lack spare capacity as well. Armored Cable is used in outdoor locations to serve light fixtures, see figure D10.2f. 	<ul style="list-style-type: none"> Cloth cable is no longer acceptable per the current National Electric Code (NEC). Cloth cable is outdated and has the potential to lack grounding capabilities. There are (2) separate electric service entrances & systems. Main distribution: 750A, 120/240 volt single phase; pull out fuse cartridges; no main disconnect; >6 disconnects; Coast Electric; adjacent CT cabinet added later, underground fed; meter located adjacent inside boiler room. Second electrical service added 1955 addition, also underground fed: 200A, 120Y/208V; Federal Pacific main distribution and branch panels. Tinned CU conductors Rigid metallic conduit exists throughout facility. Armored cable is not allowed per the code for exterior applications.
D10.2	Switchgear and Panelboards	<ul style="list-style-type: none"> Electrical panel at outdoor covered play area is NEMA 1 rated and shows 	

		<p>evidence of water ingress and damage.</p> <ul style="list-style-type: none"> • Outdoor receptacles missing waterproof covers in several cases. • Inadequate quantity of general receptacles in offices, classrooms and hallways; existing circuits have been dangerously overextended. See Figure D10.2g. 	
D10.3	Lighting	<ul style="list-style-type: none"> • Large quantities of incandescent lighting were observed in electrical, mechanical and back of house spaces, refer to figure D10.3a. • Gym/cafeteria luminaires cord and plug connected, figure D10.3b. • Electrical and mechanical room do not have sufficient lighting • Excessive light levels observed in hallways and offices, see D10.3c • Computer labs overlit, classroom standard fixtures currently installed produce excessive glare • Malfunctioning GE retrofit fixtures installed in classrooms with drop ceilings, refer to figure D10.3d. 	<ul style="list-style-type: none"> • Existing luminaires in classrooms have been retrofitted with T8 lamps and ballasts; light levels appear adequate. • Some classrooms have been retrofitted with standard GE 2 lamp T8 retrofit. • Corridor luminaires were replaced with 4 lamp T8 wraps. • Gym/cafeteria fixtures were replaced with T8 high bay, existing fixtures abandoned in place. • Converted classrooms serve as computer labs.
D10.4	Lighting Controls	<ul style="list-style-type: none"> • Circuit breakers used for lighting control do not appear to be switching duty rated. • Large quantity of light switches abandoned in place or unclear what they operate. 	<ul style="list-style-type: none"> • Majority of gym and hallway lighting is switched via circuit breaker. • Classroom lighting is switched in 2-3 groups. • Lighting controls are highly recommended to meet current energy codes and conserve energy.
D10.5	Back-up and Emergency Power	<ul style="list-style-type: none"> • Not Applicable 	
D10.6	Egress and Emergency Lighting	<ul style="list-style-type: none"> • “Bugeye”/Exit sign combination spacing is insufficient to produce required light levels along egress path. See Figure D10.6. • Cord and plug connected emergency lighting in cafeteria. 	<ul style="list-style-type: none"> • Original exit signs have been replaced with “bugeye” combination devices throughout the facility. • Cord and plug connected emergency lighting does not meet the current code.
D10.7	Exit Signage	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • All exit signs have been replaced with LED and battery backup devices.
D10.8	Sensors	<ul style="list-style-type: none"> • Gym/cafeteria occupancy sensor setting should be reevaluated (timeout should be 15-20 minutes). 	<ul style="list-style-type: none"> • The gym/cafeteria has standalone occupancy sensors in four zones. Time delays are set too long. • Installation of facility-wide sensors could result in potential energy savings.

RECOMMENDATIONS

D10.2 Replace entire electrical system in the building. Install new single service 800A 120Y/208V electrical system, replace all branch panelboards, feeders and branch circuit wiring where accessible. Install equipment grounding conductors in existing branch circuits where possible. Relocate heating and domestic water piping away from electrical equipment clearance zones. Provide additional branch

	circuits to feed computer lab loads. Provide individual single pole breakers and dedicated neutral conductors for all lighting circuits. Replace all armored cable in exterior application and replace with metallic liquidtight conduit. Replace electrical panel at outdoor covered play area with NEMA 3R rated panelboard. Replace all damaged or missing outdoor receptacle covers with weatherproof, vandal resistant, in-use covers. Disconnect and remove existing unit heater above kitchen accessible ceiling. Remove classroom HVAC units from general receptacle circuits; provide dedicated circuits for HVAC equipment. Provide additional general receptacle circuits in hallways, offices and classrooms as needed.
D10.4	Replace all incandescent lighting with linear fluorescent or LED lighting. Hard wire all cord and plug connected general lighting. Replace incandescent lighting in electrical and mechanical rooms with T8 utility fluorescent luminaires. Remove lamps or install 2 lamp T8 fixtures in hallways and offices to reduce light levels. Replace computer lab luminaires with 30% direct, 70% indirect distribution pendant fixtures with dimming capability to reduce eyestrain and conserve energy. Replace malfunctioning GE ballast retrofits with NEMA premium rated ballasts (Lutron EcoSystem ballast family or equivalent).
D10.6	Retrofit existing lighting along egress path with battery packs to supplement egress lighting. Hard wire all egress lighting devices.
D10.8	Reset occupancy sensor time delays in the gym/cafeteria. Install workstation occupancy sensors in offices and classrooms.

D20 – SAFETY / SECURITY

Item	Findings	Comments
D20.1	Fire Alarm <ul style="list-style-type: none"> • Fire alarm system is nearing its useful life. • Cabling is improperly installed in several locations and subject to damage. See Figure D20.1. 	<ul style="list-style-type: none"> • System: Notifier Fire Alarm/Security
D20.2	Smoke Detection <ul style="list-style-type: none"> • No issues observed 	
D20.3	Pull Stations <ul style="list-style-type: none"> • No issues observed 	
D20.4	Annunciation <ul style="list-style-type: none"> • No issues observed 	
D20.5	Addressable Zones and Systems <ul style="list-style-type: none"> • No issues observed 	
D20.6	Monitoring <ul style="list-style-type: none"> • No issues observed 	
D20.7	Access Control <ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • Card readers present
D20.8	Intrusion <ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • System: Sonitrol
D20.9	Video Surveillance <ul style="list-style-type: none"> • Not Applicable 	

RECOMMENDATIONS

D20.1	Upgrade fire alarm system to a District standard system. Review existing fire alarm cabling wiring methods and correct to meet current standards.
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D30 – TECHNOLOGY COMMUNICATIONS

Item	Findings	Comments
D30.1	Paging and Intercom – Head End Condition <ul style="list-style-type: none"> • Paging and intercom system are well past useful life. Repair parts are unavailable and there is inadequate technical support for this system. 	<ul style="list-style-type: none"> • System: Rauland (original to facility).
D30.2	Master Clock <ul style="list-style-type: none"> • The system is past its useful life. 	
D30.3	Infrastructure <ul style="list-style-type: none"> • Unused cabling is abandoned in place. • Cabling is not labeled. 	
D30.4	Speakers <ul style="list-style-type: none"> • The system is past its useful life. 	

D30.5	Coverage	<ul style="list-style-type: none"> No issues observed 	
D30.6	Clock System	<ul style="list-style-type: none"> The system is past its useful life. 	
D30.7	Clock – Head End	<ul style="list-style-type: none"> Clock system is well past its useful life. Repair parts are unavailable and there is inadequate technical support for this system. 	<ul style="list-style-type: none"> System: Latham (original to facility).
RECOMMENDATIONS			
D30.1	Replace intercom and paging system, including all cabling.		
D30.7	Replace clock system, including all cabling.		

E - GROUNDS			
E10 – SITE CIRCULATION AND PARKING			
Item	Findings	Comments	
E10.1	Parking Lots	<ul style="list-style-type: none"> • Parking lot is in good condition with minimal cracking in paved surfaces. 	<ul style="list-style-type: none"> • Parking lots consists of (52) standard stalls and (2) accessible stalls. Off-site street parking along 18th was also observed.
E10.2	Site Signage/Accessories	<ul style="list-style-type: none"> • The flagpole is undersized and in poor condition. See Figure E10.2. 	
E10.3	Vehicular Circulation	<ul style="list-style-type: none"> • Due to the constraints of this site, visitor and staff vehicular circulation are shared. Any available street parking is utilized by surrounding residents. • There is no dedicated fire lane. 	<ul style="list-style-type: none"> • This site does not allow resolution for parking constraints unless school is replaced with a multi-level facility with more compact footprint.
E10.4	Curbs and Sidewalks	<ul style="list-style-type: none"> • Site lacks sidewalks along main entry; parking lots abuts directly to main entrance and adjacent spaces. • Sidewalks near the soft play area need to be replaced. 	
E10.5	Accessibility	<ul style="list-style-type: none"> • No observed issues 	<ul style="list-style-type: none"> • Both main entry doors and office have ADA actuators. • Sidewalks and/or hard surface areas surround entire building.
E10.6	Bikes and Bike Parking	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • There are (3) bike racks near the main entry in addition to (3) racks location on the east side.
RECOMMENDATIONS			
E10.2	Add site sign along NW Taylor. Replace flagpole.		
E10.4	Add 5'-0" wide sidewalk along entire 18 th Street building elevation. Remove and replace sidewalk between building and soft play area.		
E20 - SITE COMPONENTS			
Item	Findings	Comments	
E20.1	Fields	<ul style="list-style-type: none"> • Field space is small compared to other District facilities. 	<ul style="list-style-type: none"> • This school is adjacent to Corvallis High School. There is no room for expansion of fields on this site. • Fields are grass.
E20.2	Landscaping	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • There is a large grass area adjacent to NW Taylor. Landscaping is minimal around the building.
E20.3	Irrigation	<ul style="list-style-type: none"> • None observed 	<ul style="list-style-type: none"> • It is the District's desire to add irrigation to field areas.
E20.4	Site Buildings	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • Covered play structure is in good condition.
E20.5	Site Security	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • There are two entrances to this facility – one on 17th and one on 18th. The one on 17th is an exit only. • Card readers are installed on exterior doors. • Exterior classroom doors do not have hardware from outside.

E20.6	Fencing	<ul style="list-style-type: none"> • Trash receptacles are not fenced in, and visible to visitors and adjacent residences. See Figure E20.6. 	<ul style="list-style-type: none"> • Play areas are fenced in.
E20.7	Playground Equipment	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • Equipment is in excellent condition.
E20.8	Play Surfaces	<ul style="list-style-type: none"> • Striping on the hard surface play areas is worn off. • Backboards are in poor condition. See Figure E20.8. 	
E20.9	Site Lighting	<ul style="list-style-type: none"> • The parking area lighting is insufficient. See Figure E20.9. • Several site luminaires and controls have been vandalized. • Lighting type at the covered play area is costly to maintain. 	<ul style="list-style-type: none"> • Existing site lighting consists of high pressure sodium (HPS), metal halide (MH) and mercury vapor (MV); lighting is building mounted wall packs. • Covered play lighting is served by 500 watt halogen flood lights, some with motion sensors.
E20.10	Grading and Drainage	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • Fields were dry at time of field visit.

RECOMMENDATIONS

- E20.3 Add irrigation system to play fields.
- E20.6 Construct chain link fence enclosure with gate for trash receptacles.
- E20.8 Restripe all hard surface playing areas. Replace (2) basketball backboards.
- E20.9 Install parking lot lighting (per IESNA recommendations). Replace damaged site lighting with vandal resistant equivalent fixtures. Replace covered play lighting with LED, vandal resistant ceiling mounted lighting, and install vandal resistant outdoor rated occupancy sensors.

IMAGES

Figure A20.1 – Siding needs repainting



Figure A20.3 – Original window systems



Figure B20.1 – Cracked flooring



Figure B40.2 – Boys restroom flooring



Figure C10.3 – Typical plumbing fixture



Figure C10.5 – Domestic hot water heater



Figure C20.1 – Mechanical equipment



Figure C20.7 – Mechanical equipment



Figure D10.2.a – Main distribution panel



Figure D10.2.b - Typical original panel



Figure D10.2.c – Piping installed above electrical



Figure D10.2.d – Noncompliant meter installation



Figure D10.2.e – Panel lacks capacity



Figure D10.2.f – Armored cable used outdoors



Figure D10.2.g – Insufficient classroom receptacles



Figure D10.3.a – Mechanical room lighting



Figure D10.3.b – Cafeteria lighting



Figure D10.3.c – Hallways/Offices are overlit



Figure D10.3.d – Retrofit lighting issues



Figure D10.6 – Egress Lighting



Figure D20.1 – Unsecured fire alarm wiring



Figure E10.2 – Flagpole



Figure E10.6 – Trash area



Figure E20.8 – Backboards



Figure E20.9 – Lack of parking lot lighting



ITEMS	Priority Level (Refer to Legend)	Priority Level				Priority Level I	Priority Level II	Priority Level III	Priority Level IV
		I	II	III	IV				
Franklin K-8									
A - STRUCTURE/SHELL									
A10 - STRUCTURE/SUBSTRUCTURE									
A10.3	1	Complete seismic upgrades per previous reports	X				\$ 1,875,602		
A20 - EXTERIOR COMPONENTS									
A20.1	1	Repaint all siding	X				\$ 43,134		
	2	Replace (3) infill panels at gymnasium		X			\$ 6,452		
A20.2	1	Replace wire glazing in exterior doors		X			\$ 1,759		
	2	Replace (1) pair exterior doors and frames	X				\$ 4,743		
	3	Repaint exterior classroom doors and frames		X			\$ 3,360		
A20.3	1	Replace all single glazing window systems	X				\$ 615,558		
A20.4	1	Repair roofing per roofing assessment recommendations	X			\$ 5,000			
	2	Replace roofing per roofing assessment recommendations	X			\$ 486,000			
A20.7	1	Repaint all wood trim		X			\$ 5,015		
TOTAL - STRUCTURE/SHELL						\$ 491,000	\$ 2,539,037	\$ 16,586	\$ -
B - INTERIORS									
B10 - INTERIOR CIRCULATION									
B10.2	1	Replace handrails at (2) stair locations			X		\$ 1,344		
	2	Add handrails on side of stairs in gymnasium			X		\$ 664		
B10.3	1	Replace lift	X				\$ 34,787		
B10.5	1	Add compliant room signage throughout facility	X				\$ 31,260		
B20 - INTERIOR FINISHES									
B20.1	1	Abate flooring in classrooms, hallways, main office and gymnasium and replace with VCT; replace base	X				\$ 264,628		
	2	Replace carpeting in the staff room	X				\$ 3,320		
	3	Provide fixed walk off mats at (4) pairs of exit doors	X				\$ 5,738		
	4	Abate kitchen flooring and replace with slip resistant sheet vinyl flooring and coved base	X			\$ 12,181			
B20.4	1	Replace lockers			X			\$ 115,431	
B20.5	1	Replace wall mounted radiator with alternate system	X				\$ 20,951		
B20.6	1	Remove wood paneling and replace with full height plastic laminate wainscot		X			\$ 183,625		
B30 - INTERIOR COMPONENTS									
B30.2	1	Repaint library door and install new hardware		X			\$ 2,253		
	2	Replace (2) pairs of gymnasium doors		X			\$ 16,761		
	3	Replace hardware at library entry door	X				\$ 2,055		
B30.4	1	Replace casework in all classrooms			X			\$ 256,795	
B30.5	1	Add blinds or shades to all door lites	X			\$ 3,870			
B30.6	1	Construct gymnasium and toilet room addition		X			\$ 1,669,800		
	2	Remodel existing locker rooms into storage			X			\$ 79,053	
	3	Remodel (2) classrooms into science rooms		X			\$ 105,200		
B40 - TOILET FACILITIES									
B40.2	1	Replace student restroom flooring		X			\$ 29,594		
B40.3	1	Remove 2x4 ceiling and replace with gypsum board ceiling		X			\$ 50,913		
B40.4	1	Replace all student toilet partitions		X			\$ 40,827		
B40.8	1	Remodel/enlarge all staff restrooms	X				\$ 61,505		
TOTAL - INTERIORS						\$ 16,051	\$ 424,244	\$ 2,098,973	\$ 453,287
C - SYSTEMS									
C10 - PLUMBING									
C10.2	1	Re-pipe domestic hot water piping	X				\$ 233,750		
C10.3	1	Replace all lavatories, water closets and urinals			X			\$ 131,250	
	2	Replace all water fountains with bi-level water coolers			X			\$ 28,750	
	3	Add grease interceptor to the kitchen sinks and dishwasher	X				\$ 28,750		

ITEMS	Franklin K-8	Priority Level				Priority Level I	Priority Level II	Priority Level III	Priority Level IV
		(Refer to Legend)							
		I	II	III	IV				
C10.4	1	Flush storm water lines	X			\$ 5,000			
C10.5	1	Replace domestic hot water heaters	X			\$ 28,750			
C20 - HVAC									
C20.1	1	Replace all heating and ventilating units and exhaust fans	X			\$ 205,000			
C20.7	1	Relocate electric kilns and provide dedicated exhaust	X			\$ 66,250			
C30 - FIRE PROTECTION									
C30.1	1	Provide fire suppression in kitchen hood	X			\$ 12,500			
TOTAL - SYSTEMS						\$ 78,750	\$ 501,250	\$ -	\$ 160,000

D - ELECTRICAL									
D10 - ELECTRICAL EQUIPMENT									
D10.2	1	Replace electrical system	X			\$ 145,000			
	2	Remove pipes from electrical equipment in clearance zones		X		\$ 35,000			
	3	Install additional general receptacle circuits in computer labs		X		\$ 20,000			
	4	Provide single breakers and dedicated neutrals for lighting circuits			X		\$ 20,000		
	5	Replace armored cable with weatherproof equivalent in exterior areas			X		\$ 20,000		
	6	Replace electrical panel at outdoor covered play area with NEMA 3R equivalent	X			\$ 5,000			
	7	Replace damaged and missing weatherproof receptacle covers	X			\$ 2,500			
	8	Remove HVAC equipment from general classroom receptacle circuits and provide	X			\$ 20,000			
D10.3	1	Replace all incandescent lighting			X		\$ 36,000		
	2	Hard wire all cord and plug connected general lighting					\$ 9,000		
	3	Replace and extend lighting in mechanical and electrical rooms			X		\$ 7,000		
	4	Remove lamps in hallway and office fixtures			X		\$ 20,000		
	5	Replace computer lab lighting			X		\$ 20,000		
	6	Replace malfunctioning ballasts	X			\$ 36,000			
D10.4	1	Install dedicated switching controls for lighting	X			\$ 20,000			
	2	Remove existing unused lighting controls			X		\$ 10,000		
	3	Install retrofit lighting controls			X		\$ 20,000		
D10.6	1	Extend egress lighting, and retrofit existing luminaires with battery packs	X			\$ 40,000			
	2	Hard wire existing egress lighting devices	X			\$ 10,000			
D10.8	1	Install workstation occupancy sensors			X		\$ 40,000		
	2	Adjust/reduce gym occupancy time sensor delay			X		\$ 2,500		
D20 - SAFETY/SECURITY									
D20.1	1	Replace fire alarm system			X			\$ 40,000	
	2	Check fire alarm cabling for damage	X			\$ 20,000			
D30 - TECHNOLOGY COMMUNICATIONS									
D30.1	1	Replace intercom system	X				\$ 20,000		
D30.7	1	Replace time clock system	X				\$ 20,000		
TOTAL - ELECTRICAL						\$ 195,000	\$ 158,500	\$ 244,500	\$ 40,000

E - GROUNDS								
E10 - SITE CIRCULATION AND PARKING								
E10.2	1	Add site sign			X		\$ 3,162	
	2	Replace flag pole		X		\$ 6,008		
E10.4	1	Add sidewalk adjacent to main entry			X		\$ 12,170	
	2	Remove/replace sidewalk near soft play area	X			\$ 2,846		
E20 - SITE COMPONENTS								
E20.3	1	Add irrigation to field areas			X		\$ 465,637	
E20.6	1	Construct chain link trash enclosure with gate			X		\$ 3,874	
E20.8	1	Restripe both hard surface play areas			X		\$ 2,530	
	2	Replace (2) backboards			X		\$ 6,166	
E20.9	1	Install parking lot lighting			X		\$ 72,000	
	2	Install vandal resistant site lighting		X		\$ 40,000		
	3	Replace covered play area lighting and controls	X			\$ 40,000		

Franklin K-8 ITEMS	Priority Level (Refer to Legend)				Priority Level	Priority Level	Priority Level	Priority Level
	I	II	III	IV	I	II	III	IV
TOTAL - GROUNDS					\$ -	\$ 88,854	\$ 565,539	\$ -
TOTALS BY CATEGORY								
					STRUCTURE/SHELL		\$ 3,046,623	
					INTERIORS		\$ 2,992,555	
					SYSTEMS		\$ 740,000	
					ELECTRICAL		\$ 638,000	
					GROUNDS		\$ 654,393	
					FACILITY TOTAL		\$ 8,071,571	
TOTALS BY PRIORITY								
					LEVEL 1		\$ 780,801	
					LEVEL 2		\$ 3,711,885	
					LEVEL 3		\$ 2,925,598	
					LEVEL 4		\$ 653,287	
					PRIORITY TOTAL		\$ 8,071,571	
LEGEND:								

PRIORITY LEVELS

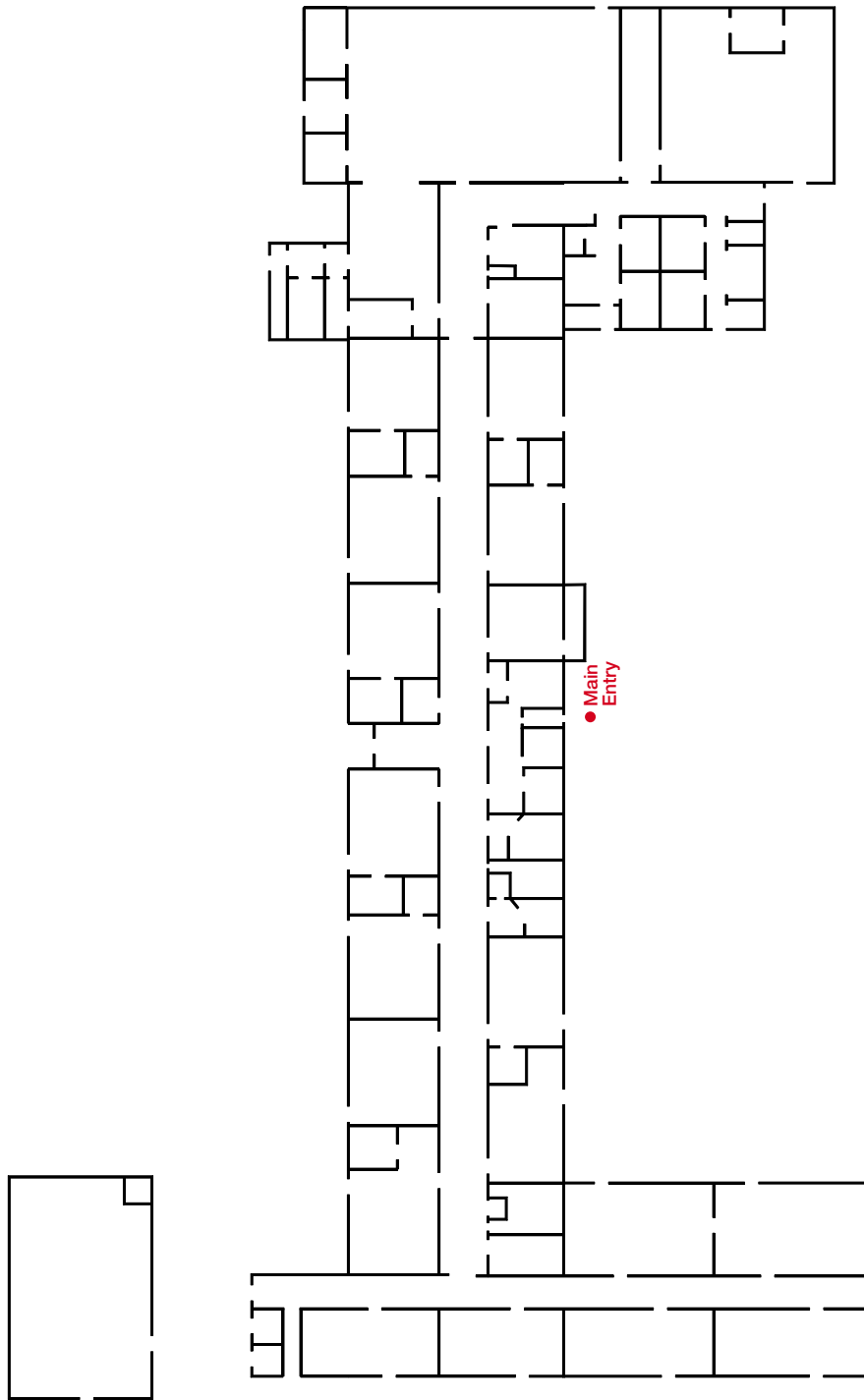
Level I: Highest Priority; Issues that affect the life safety concerns of the occupant, related to notification of occupants to emergency situations and the ability to safely evacuate the facility; subcomponents of Level I include safety concerns such as electrical loads, hazardous materials that might be affected with remodel or modifications, lack of fall protection. Level I items need to be addressed within a 5-year plan.

Level II: Moderate Priority; Issues that are related to the integrity and adequacy of systems within the building to sufficiently withstand a major event and still function; also related are the age of systems or building components that keep day to day operations running without constant repair. Issues may include mechanical, electrical and plumbing systems, fire suppression, lighting and security, as well as flooring, windows doors and other architectural components. Level II Items may be part of a 5-year plan.

Level III: Lower Priority; Issues that may over time affect the day to day maintenance of the building or long term use of the facility. Issues also include access and clearances at equipment and fixtures, access for individuals with disabilities and both indoor and exterior environment quality. Level III Items would be considered in a 5 to 10 year plan.

Level IV: Issues that are related to the aesthetics of both the building's interior and exterior as well as integrity and adequacy of building systems that don't pose any issues or nearing the end of their remaining lifecycles. These may include items such as cabinetry original to the building that have signs of wear or dated finishes but do not have any damage or deterioration. Level IV items would be considered long-term plans (10 years or more).

OVERALL FLOOR PLAN



SCHOOL BUILDING
 SCALE: NOT TO SCALE

Franklin Elementary School | Corvallis School District



Dull Olson Weekes - IBI Group
 Architects, Inc.



Garfield Elementary School

1825 NW 27th Street
 Corvallis, Oregon 97330



Built: 1955 (original); 1956, 1957, 1959 additions; 1987 modular additions

Enrollment: 394 students (2013)

Floor Area: 46,822 SF

Field Review Team:

Thea Wayburn	DOWA – IBI Group Architects Inc.
Jonathan Estabrook	KPFF Consulting Engineers
Roger Arnold	Glumac
Michael Henning	Glumac
Alex Ridley	Glumac
Dana Troy	Glumac

Report Date: December 2013

Date of Field Visits: June 3-7, 2013

Weather: Sunny, 70's and 80's

Neighborhood: Residential

Site Contacts: John Meyer, CSD 509J
 Kim Patten, CSD 509J

General Building Description:

Garfield Elementary School is a one-story wood framed structure with brick veneer as its primary exterior finish. The school site is surrounded by residential and a large park to the north. The site itself has large grass areas and play fields. The building consists of a central corridor down the length of the building with classrooms on both sides. This facility is not sprinklered.

The school is wood framed with brick and cedar siding on the exterior. Classroom story height is 9ft while the gymnasium and multipurpose room story height are 20ft and 13ft respectively. The gymnasium roof is framed from 3x joists which span onto glulam girders. The multipurpose room is framed from 3x joists which span onto 3-point glulam portal frames. Typical exterior classroom walls have large window openings 3ft above the finish

floor elevation which extend to the roof with timber posts at 8ft on center. The lateral force resisting system consists of timber roof diaphragm which spans to timber sheathed wood stud shear walls in each direction.

The building's main entry is centered in the building with two classroom wings. This facility has a separate gymnasium and cafeteria space. The school site houses the school building in addition to (3) modular buildings. The undersized single parking lot and combined vehicular and bus circulation make vehicular traffic on this site congested.

Overall the building is in good to fair condition. Due to the age of the facility and its systems, this facility is a prime candidate for replacement. Refer to the Facility Replacement Costs section of the report for a detailed breakdown of facility replacement costs; recommendations and costs listed in this detailed report will be to replace or improve existing building conditions.

A full building review of architectural, structural, mechanical, electrical and plumbing components was conducted. This facility contains several modular buildings which were reviewed as part of the overall facility assessment.

A - STRUCTURE / SHELL			
A10 – STRUCTURE / SUBSTRUCTURE			
Item		Findings	Comments
A10.1	Foundations	<ul style="list-style-type: none"> No issues observed 	
A10.2	Subgrade Enclosures	<ul style="list-style-type: none"> There is significant settlement of the slab on grade between the corridor and classrooms. See Figure A10.2. 	<ul style="list-style-type: none"> It is thought that settlement is due to poor compaction of soil below slab on grade and insufficient/absence of doweling to adjacent slabs. There does not appear to be signs of settlement of the foundations.
A10.3	Structural Systems	<ul style="list-style-type: none"> There are recommendations available for seismic improvements to the building structure, outlined in the ABKJ Seismic Analysis report, dated May 1997 and in the Degenkolb Seismic Building evaluation Phase 2 report, dated July 2000. There are recommendations available for seismic improvements to non-structural systems, outlined in the Degenkolb Seismic Building evaluation Phase 2 report, dated July 2000. 	<ul style="list-style-type: none"> In 2006 the school received a new roof with seismic upgrades including strengthening the connections of the roof diaphragm to the shear walls and adding plywood sheathing to previously deficient areas. The old brick chimney was also removed and replaced with a code-approved metal flue.
RECOMMENDATIONS			
A10.2	Remove existing flooring and grind the existing concrete to provide a smooth transition. Refer to Section B20 for flooring findings and recommendations.		
A10.3	<p>Prioritize and perform the recommended improvements to structural systems as outlined in the ABKJ and the Degenkolb reports. The report provides specific recommendations. These include but are not limited to the new plywood shear walls, wall out-of-plane bracing at the gym and blocking at vertical diaphragm discontinuities.</p> <p>Perform recommended seismic improvements to non-structural components as outlined in the Degenkolb report. These include, but are not limited to, installing seismic shut off valves and flexible couplings in gas pipes where they enter the building, anchoring and strapping of mechanical and electrical equipment, and bracing suspended equipment and ceiling.</p>		
A20 - EXTERIOR COMPONENTS			
Item		Findings	Comments
A20.1	Exterior Walls	<ul style="list-style-type: none"> The wood siding on (2) sides of the gymnasium are in poor condition. See Figure A20.1. Mechanical grilles are damaged along the north classroom wing. Skirting around the modulars needs to be replaced. 	<ul style="list-style-type: none"> Brick veneer is in good condition.

A20.2	Doors and Hardware	<ul style="list-style-type: none"> • Modular doors need to be replaced. • Exterior classroom doors and frames show signs of wear and need to be repainted. • (7) Classroom doors are in poor condition, and need to be replaced. • Wire glass is present in exterior doors. • Rust at exterior gym doors was observed. • (1) Exterior door still has a door knob; doors knobs are not ADA compliant hardware type. 	<ul style="list-style-type: none"> • Wire glass is no longer permitted by code in educational facilities. • In general, door hardware has been upgraded.
A20.3	Windows and Skylights	<ul style="list-style-type: none"> • Windows systems are showing their age. • Wood trim around windows is in fair condition with areas of peeling paint around the building. 	<ul style="list-style-type: none"> • Windows are single pane glazing in metal frames.
A20.4	Roof	<ul style="list-style-type: none"> • A separate roofing assessment is located in the appendix of this report. 	<ul style="list-style-type: none"> • Internal roof access is desired for this facility. • Roofing is a single ply roofing system, 7 years in age.
A20.5	Canopies and Covered Walks	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • There is a large canopy at the building front; the roof overhang serves as canopy for exterior doors.
A20.6	Gutters and Downspouts	<ul style="list-style-type: none"> • No issues observed on the main building. 	
A20.7	Trim and Overhangs	<ul style="list-style-type: none"> • No issues observed 	
A20.8	Stairs and Ramps	<ul style="list-style-type: none"> • Ramps and stairs to modulares are in fair condition. 	<ul style="list-style-type: none"> • Ramps and stairs are constructed of wood.

RECOMMENDATIONS	
A20.1	Remove damaged siding on two sides of building and replace with prefinished fiber cement siding. Replace (6) mechanical grilles. Replace modular skirting at all modulares.
A20.2	If remodel work were to occur at this facility, the replacement of wire glass with tempered glazing may be required. Wire glass may also be replaced at the District's discretion to prevent any issues if glazing is damaged or broken. Replace (8) doors at modulares. Re-paint (12) exterior doors and frames on main building. Replace (3) pairs of exterior doors at the gymnasium. Replace (7) classroom wood doors with hollow metal doors.
A20.3	Replace all single pane glazing with aluminum storefront, tempered glazing and operable vents. Repaint all wood trim around windows. Replace (1) door knob with lever-type hardware.
A20.4	Provide internal roof access (hatches and ladders). Replace roofing per roofing assessment recommendations.
A20.8	Replace (3) ramps and (3) sets of stairs at the modulares.

B - INTERIORS			
B10 – INTERIOR CIRCULATION			
Item		Findings	Comments
B10.1	Construction and Exiting	<ul style="list-style-type: none"> Interior doors contain wire glazing. This facility is not sprinklered. 	<ul style="list-style-type: none"> Wire glass is no longer permitted in educational facilities. Classrooms have exterior doors equipped with panic hardware. A major remodel or addition would require a thorough building code analysis.
B10.2	Stairs and Handrails	<ul style="list-style-type: none"> Handrails for stage access (both at stairs and ramp) are not code compliant both in construction and material. Stairs to the stage from the cafeteria do not have handrails. 	<ul style="list-style-type: none"> The stage is now used for storage.
B10.3	Ramps and Elevators	<ul style="list-style-type: none"> The ramp to the stage is too steep to meet current code. 	<ul style="list-style-type: none"> The stage is now used for storage. With the exception of the stage and portables, this building is a single story facility. Unless remodel or addition is planned at this facility (which would trigger other upgrades), no recommendations are made at this time.
B10.4	Accessibility	<ul style="list-style-type: none"> The stage is currently not accessible; however, it is now used for storage. The reception desk in the main office does not have an accessible transaction space. The sink cabinet in Room #19 is too tall to meet current accessibility guidelines. Door hardware in locker room areas is not code compliant. 	<ul style="list-style-type: none"> Unless a major remodel and/or addition are proposed for this facility, no recommendations are made for casework modifications or replacement. Locker rooms are used for storage and not occupied space.
B10.5	Signage	<ul style="list-style-type: none"> The building lacks compliant room signage. 	
RECOMMENDATIONS			
B10.1	If remodel work were proposed at this facility, the replacement of all wire glass with tempered glazing may be required. Wire glass may also be replaced at the District's discretion to prevent any issues if glazing is damaged or broken. See Sections A20 and B30.		
B10.2	Remove existing handrails and replace with compliant handrail construction. Add a handrail on each side of stairs from gym to stage.		
B10.3	Remove portions of the ramp and install lift for stage access.		
B10.5	Add compliant room signage throughout the entire facility.		

B20 – INTERIOR FINISHES			
Item		Findings	Comments
B20.1	Flooring	<ul style="list-style-type: none"> • The majority of the flooring in this facility is asbestos tile. • Cracks in flooring were observed in both classroom hallways, and at several classroom door thresholds as well as at the kitchen. • Carpeting in the main office has bubbles and is showing wear. Classroom carpeting (where occurs) is in good condition. • Exterior doors do not have permanent walk-off mats. • Flooring in portables is in fair to poor condition. 	<ul style="list-style-type: none"> • Classrooms have 3” high wood trim/base. Hallways have 6” rubber base. • Gym flooring was recently installed. • (1) Portable is carpeted; the other (2) at vinyl composition tile (VCT).
B20.2	Ceilings	<ul style="list-style-type: none"> • Ceiling tiles in cafeteria are beginning to show their age. 	<ul style="list-style-type: none"> • Ceilings are a 12x12 wood fiber ceiling.
B20.3	Ceiling Issues	<ul style="list-style-type: none"> • Water damaged tiles were observed in hallway near gym (unknown if current or old leaks have caused this). 	
B20.4	Fixed Equipment	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • Classrooms are equipped with a combination of marker boards, projection screens, televisions and smart boards (in some classrooms). • Gymnasium has (6) backstops.
B20.5	Walls	<ul style="list-style-type: none"> • No issues observed 	
B20.6	Wall Finishes	<ul style="list-style-type: none"> • Lacquer finish on wood paneling is a possible fire hazard. 	<ul style="list-style-type: none"> • Classroom walls are gypsum board; hallways are wood paneling. While dated, the wood paneling is in good condition. It is the District’s desire to update finishes in hallways. • Wall padding is located behind all basketball backstops, and is in good condition.
B20.7	Furnishings	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • Most classrooms have wooden freestanding bookshelves. Library book shelving is fixed. • Stage curtain is in excellent condition. • Window coverings are horizontal mini blinds. Coverings are in good condition.

RECOMMENDATIONS	
B20.1	Abate flooring in all classrooms, hallways and cafeteria and replace with VCT. Remove all wood and rubber base in this facility and replace with rubber base. Provide walk off mats at (5) exterior door locations. Replace carpeting in the main office and principal's office. Abate kitchen flooring and replace with slip resistant sheet vinyl flooring and covered base.
B20.6	Remove all wood paneling from all hallways and replace with full height plastic laminate wainscoting.

B30 – INTERIOR COMPONENTS

Item	Findings	Comments
B30.1	Interior Windows	<ul style="list-style-type: none"> No issues observed
B30.2	Interior Doors and Hardware	<ul style="list-style-type: none"> Interior doors contain wire glass. No issues observed with doors and frames.
B30.3	Acoustics	<ul style="list-style-type: none"> Classroom doors and frames are wood. Both show signs of age and wear, but there are no signs of damage. Classroom door hardware has been upgraded.
B30.4	Casework	<ul style="list-style-type: none"> Several classrooms and the library have operable partitions. See Figure B30.3. Partitions are older model, and sound transmission was observed between instructional spaces. Gymnasium does not have any acoustic wall panels.
B30.5	Security	<ul style="list-style-type: none"> Library and classroom casework is aged but the finishes are in good condition. Casework is inconsistent in its finishes in each classroom.
B30.6	Other	<ul style="list-style-type: none"> Door glazing does not have any covering for security. Door glazing is approximately 11"x11".
B30.6	Other	<ul style="list-style-type: none"> This facility is an older school and does not provide adequate building storage.

RECOMMENDATIONS

B30.2	If remodel work were proposed at this facility, the replacement of all wire glass with tempered glazing may be required. Wire glass may also be replaced at the District's discretion to prevent any issues if glazing is damaged or broken.
B30.3	Remove operable partitions in classrooms and replace with infill walls.
B30.4	Replace casework (countertops, backsplash and cabinets) in all classrooms.
B30.5	Add shades or blinds to all doors with glazing.

B40 – TOILET FACILITIES

Item	Findings	Comments
B40.1	Walls and Wall Finishes	<ul style="list-style-type: none"> No issues observed Ceramic tile runs partial height on walls. Finishes are dated but in good condition.
B40.2	Floors and Floor Finishes	<ul style="list-style-type: none"> Flooring in (1) boys restroom is in poor condition. Student restroom floors are ceramic tile. Finishes are dated but in good condition. Flooring in single stall restrooms is asbestos tile.
B40.3	Ceilings	<ul style="list-style-type: none"> No issues observed
B40.4	Partitions	<ul style="list-style-type: none"> Urinal in (1) boys restroom is located adjacent to sink and lacks urinal screen. See Section B40.8.

B40.5	Fixtures	<ul style="list-style-type: none"> Refer to Plumbing Section. 	<ul style="list-style-type: none"> Fixtures appear to be older.
B40.6	Accessories	<ul style="list-style-type: none"> No issues observed 	
B40.7	Accessibility	<ul style="list-style-type: none"> Staff restrooms are not ADA compliant. In general, student restrooms do not meet current accessibility guidelines. 	<ul style="list-style-type: none"> One accessible restroom is provided for the entire facility. The main student restrooms are large enough to be remodeled to accommodate accessible facilities.
B40.8	Other	<ul style="list-style-type: none"> (1) Pair of student restrooms near the main office should be remodeled to make better use of the space. 	

RECOMMENDATIONS

- B40.2 Remove asbestos tile flooring from (3) single stall restrooms and replace with sheet vinyl flooring. Replace flooring in boys' restroom with new ceramic tile flooring.
- B40.8 Remodel (1) set of student restrooms. Provide accessible stall in each, and provide urinal privacy screens in boys' restroom. Provide new sheet vinyl flooring with coved base, full height FRP wainscot, gypsum board ceiling, new fixtures and lighting. Replace wood door with glazing with new wood doors in hollow metal frames and compliant hardware.

C - SYSTEMS			
C10 - PLUMBING			
Item		Findings	Comments
C10.1	Water Service	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Water pressure unknown; connection at the street. Water service entrance is located in the boiler room (three taps; no pressure gauge).
C10.2	Piping	<ul style="list-style-type: none"> Domestic hot water piping is period to the building. 	<ul style="list-style-type: none"> Gas entrance is outside of the cafeteria, psi not marked. Fuel oil piping has been abandoned in place.
C10.3	Fixtures	<ul style="list-style-type: none"> All restroom fixtures and drinking fountains are period to the building. There is no grease interceptor in the kitchen. 	<ul style="list-style-type: none"> Sinks only in the classrooms to the east of the offices. Sinks and toilets present in the classrooms to the west of the offices. Four compartment sink in kitchen, no grease interceptor. Kitchen: gas By-level electric water coolers. Single level electric water coolers. Urinals: floor mounted manual flush valves. Water Closets: wall mounted manual flush valves. Lavatories: foot operated Bradley type.
C10.4	Storm and Overflow Drains	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Exterior gutters and downspouts.
C10.5	Water Heater	<ul style="list-style-type: none"> Shell and tube heat exchange for domestic hot water system are off of main boilers. See Figure C10.5. 	<ul style="list-style-type: none"> Kitchen water heater: State 510E; 52 gallons 4.5 kW.
RECOMMENDATIONS			
C10.2	Repipe domestic hot water piping throughout this facility.		
C10.3	Replace all lavatories, water closets and urinals. Replace all water fountains with b-level water coolers. Add grease interceptor to the kitchen sinks and dishwasher.		
C10.5	Replace shell and tube heat exchanger with stand-alone domestic hot water boilers and pumps.		

C20 - HVAC			
Item		Findings	Comments
C20.1	Mechanical Equipment	<ul style="list-style-type: none"> • Unit serving kitchen (located above hallway by kitchen) was not running at the time of inspection • HV-1 Pace B18 serves gym supply with ¼ hp circulating pump with three way valve has a leaky heating coil. A plastic bucket is catching water. See Figure C20.1. • Most equipment is past its useful life and in need of replacement, but is currently functioning as intended. 	<ul style="list-style-type: none"> • Most of building is served by unit ventilators. There are no fin tube heaters. Spaces relieve air into the attic. All unit ventilators were replaced in the last 14 years. • Exhaust air is located over the closets. • Single unit serving the stage provides heating and ventilation. The stage was walled off to create a room: Rheem RBHC 175145FA. • Two fans in room near stage. Fans serve gym and CR exhaust. One serves gym supply. Access was through permanent ladder. • Office has fin tube radiators and operable windows. • EF-2 Pace U33 serves classroom exhaust. • EF-1 Pace U34 serves gym exhaust. • Locker rooms served by HV-3. • One electric unit heater located in Room 19. • EF-3 Pace U14 • EF-2 (repeat of tags) serves the cafeteria space. • Split system on roof, same and Hoover. Serves the computer lab. Mr. Slim. Fin tube radiators located in offices.
C20.2	Air Filtration	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • Air filtration capabilities are period to the building.
C20.3	Equipment Accessibility	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • Access to mechanical equipment is either through permanent ladders or A-frame ladders.
C20.4	Air Distribution and Ventilation	<ul style="list-style-type: none"> • There are two storage rooms that were converted to occupied spaces that have no air supply or heat. 	<ul style="list-style-type: none"> • Exhaust is located in janitor's closet with server rack. • Exhaust in classrooms is located over coat rack (typical). • Most spaces have operable windows.
C20.5	Controls	<ul style="list-style-type: none"> • Split system is not on the DDC system. 	<ul style="list-style-type: none"> • System: Andover DDC.
C20.6	Chillers	<ul style="list-style-type: none"> • No issues observed 	
C20.7	Boiler	<ul style="list-style-type: none"> • Strong gas smell was observed in the boiler room. • Electric kiln is located within the boiler room. See Figure C20.7.a. • Boilers are aged and beyond useful life. See Figure C20.7.b. • Domestic hot water heat exchanger and storage tank off of main boilers. 	<ul style="list-style-type: none"> • Boilers, National USCA4885; 3,200 MBH input (total of 2). Barometric draft control. • Two inline pumps, ¾ HP. • Domestic hot water: two pumps, one for hot water side (1/8 hp) and one for domestic hot water side (1/12 hp).

RECOMMENDATIONS			
C20.1	Replace exhaust fans and HRV units. Replace heating coil in HV-1. Service unit serving the kitchen to ensure proper operation.		
C20.4	Provide ventilation air and heat to both storage rooms that have been converted to offices.		
C20.5	Incorporate split system on DDC.		
C20.7	Provide adequate venting in boiler room. Relocate electric kiln to a room with dedicated exhaust. Replace both boilers and pumps.		
C30 – FIRE PROTECTION			
Item		Findings	Comments
C30.1	Fire Suppression System	<ul style="list-style-type: none"> The kitchen hood lacks fire suppression. 	<ul style="list-style-type: none"> This facility is not sprinklered.
C30.2	Water Service and Backflow Prevention	<ul style="list-style-type: none"> Not Applicable 	
C30.3	System Pressure	<ul style="list-style-type: none"> Not Applicable 	
C30.4	Standpipes	<ul style="list-style-type: none"> Not Applicable 	
C30.5	Fire Pump	<ul style="list-style-type: none"> Not Applicable 	
C30.6	Fire Sprinkler Pipe Condition	<ul style="list-style-type: none"> Not Applicable 	
C30.7	Fire Department Connection	<ul style="list-style-type: none"> Not Applicable 	
C30.8	Fire Sprinkler Zoning	<ul style="list-style-type: none"> Not Applicable 	
C30.9	Flow Monitoring and Alarm	<ul style="list-style-type: none"> Not Applicable 	
C30.10	Hoses and Extinguishers	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Hoses off of the domestic water systems are located throughout the facility. Extinguishers
RECOMMENDATIONS			
C30.1	Add fire suppression to kitchen hood.		

D - ELECTRICAL			
D10 - ELECTRICAL EQUIPMENT			
Item		Findings	Comments
D10.1	Transformers	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Pole mounted utility transformer ~225kVA.
D10.2	Switchgear and Panelboards	<ul style="list-style-type: none"> Current electrical system does not meet Oregon Electrical Code; no main disconnect provided. See Figure D10.2a. Electrical system is of insufficient size. Missing and ill-fitting panelboard covers were observed. See Figure D10.2b. Outdated, missing and/or difficult to read panel schedules. Some electrical panels blocked by furniture and/or supplies Cloth cable used throughout building. Equipment grounding conductors is not provided in any branch circuits sampled. 	<ul style="list-style-type: none"> Cloth cable is no longer acceptable per the current National Electric Code (NEC). Cloth cable is outdated and has the potential to lack grounding capabilities. 600A 120Y/208V Main Electrical Switchboard; seven (7) disconnects. Square D Equipment typical circa 1955. Two modular classrooms fed from single 200A, 120Y/208V service from main switchboard. Older panels have issues with unavailable replacement parts.
D10.3	Lighting	<ul style="list-style-type: none"> Electrical and mechanical rooms are underlit. The majority of luminaires are aging; cracked, sagging and broken lenses were observed. There are many visible failures evident among retrofitted luminaires; the 4 lamp fixtures show yellowed, cracked and/or broken lenses. There is a significant quantity of incandescent lighting in this facility. 	<ul style="list-style-type: none"> Ineffective incandescent and T12 fluorescent lighting in electrical and mechanical rooms. 2 lamp T8 wrap fixtures in hallways Mixture of 4 lamp T8 2x4 recessed troffers and 2 lamp GE volumetric retrofits in classrooms. T8 high bay fixtures replaced HID in gym and cafeteria. Incandescent lighting in restrooms and closets.
D10.4	Lighting Controls	<ul style="list-style-type: none"> Facility lacks automated lighting controls. 	<ul style="list-style-type: none"> Classroom fixtures switched in rows paralleling the windows. Classroom lighting configuration is very favorable for retrofit lighting controls. Lighting controls are highly recommended to meet current lighting codes and conserve energy.
D10.5	Back-up and Emergency Power	<ul style="list-style-type: none"> Not Applicable 	
D10.6	Egress and Emergency Lighting	<ul style="list-style-type: none"> Egress lighting is not hard wired. 	<ul style="list-style-type: none"> Cord and plug connected "bug eye" fixtures installed in gym and cafeteria.
D10.7	Exit Signage	<ul style="list-style-type: none"> Several exit signs are not functioning. None of the exit signs observed meet intensity criteria. 	<ul style="list-style-type: none"> Incandescent signs have been replaced upon failure; majority of signage remains incandescent.
D10.8	Sensors	<ul style="list-style-type: none"> Lighting controls/sensors do not meet current Oregon State Energy Code. 	<ul style="list-style-type: none"> No sensors installed.

RECOMMENDATIONS

- D10.2 Replace entire electrical system including service entrance, main switchboard, all panelboards and all feeder and branch circuit wiring with a 120Y/208V, 800A system to alleviate safety, capacity and maintenance issues. Use Square D system district standard.
- D10.3 Replace all mechanical and electrical room lighting with T8 utility fluorescent luminaires. Replace existing 4 lamp T8 2x4 recessed troffers with 2 lamp T8 high efficiency volumetric troffer retrofit fixtures. Retrofit hallway fixtures should to single lamp configuration. Replace existing malfunctioning retrofit ballasts with NEMA premium rated ballasts (Lutron EcoSystem ballast). Replace all incandescent fixtures with LED or compact fluorescent (CFL) sources.
- D10.4 Install a building lighting control system (Lutron Quantum system or equivalent).
- D10.6 Hard wire egress "bug eye" fixtures in Gym and cafeteria. Install battery packs in fixtures as required in egress paths.
- D10.7 Replace all incandescent Exit signs with LED equivalent with batteries.
- D10.8 Install a campus wide, wireless lighting control system (Lutron Quantum system or equivalent).

D20 – SAFETY / SECURITY

Item		Findings	Comments
D20.1	Fire Alarm	<ul style="list-style-type: none"> • No Issues observed 	<ul style="list-style-type: none"> • System : Siemens
D20.2	Smoke Detection	<ul style="list-style-type: none"> • No Issues observed 	
D20.3	Pull Stations	<ul style="list-style-type: none"> • No Issues observed 	
D20.4	Annunciation	<ul style="list-style-type: none"> • No Issues observed 	
D20.5	Addressable Zones and Systems	<ul style="list-style-type: none"> • No Issues observed 	
D20.6	Monitoring	<ul style="list-style-type: none"> • No Issues observed 	
D20.7	Access Control	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • Card readers present
D20.8	Intrusion	<ul style="list-style-type: none"> • No Issues observed 	
D20.9	Video Surveillance	<ul style="list-style-type: none"> • Not Applicable 	

RECOMMENDATIONS

D30 – TECHNOLOGY COMMUNICATIONS

Item		Findings	Comments
D30.1	Paging and Intercom – Head End Condition	<ul style="list-style-type: none"> • Intercom system is well past its useful life. Repair parts are unavailable and there is inadequate technical support for this system. 	<ul style="list-style-type: none"> • System: Rauland
D30.2	Master Clock	<ul style="list-style-type: none"> • System is past its useful life. 	
D30.3	Infrastructure	<ul style="list-style-type: none"> • Unused cabling abandoned in place. • Cabling is not labeled. 	
D30.4	Speakers	<ul style="list-style-type: none"> • No issues observed 	
D30.5	Coverage	<ul style="list-style-type: none"> • No issues observed 	
D30.6	Clock System	<ul style="list-style-type: none"> • System is past its useful life; users have difficulties programming. 	
D30.7	Clock – Head End	<ul style="list-style-type: none"> • Clock system is well past its useful life. Repair parts are unavailable and there is inadequate technical support for this system. 	<ul style="list-style-type: none"> • System: Latham

RECOMMENDATIONS

- D30.1 Replace intercom system.
- D30.7 Replace clock system.

E - GROUNDS			
E10 – SITE CIRCULATION AND PARKING			
Item		Findings	Comments
E10.1	Parking Lots	<ul style="list-style-type: none"> • Paving is in fair condition. The paving is worn and has large cracks in many locations. The striping for parking stalls is faded. See Figure E10.1. • There is only one parking lot for staff and visitors, and is undersized. 	<ul style="list-style-type: none"> • Parking lot contains (2) accessible stalls and (28) standard stalls.
E10.2	Site Signage/ Accessories	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • Site sign is wood, and low to the ground. • Flagpole exists at building entry and is in good condition.
E10.3	Vehicular Circulation	<ul style="list-style-type: none"> • One dedicated entry and exit for vehicular circulation. There are two driving aisles, both which run one way and feed into one exit point. • Service vehicles share same circulation route and parking spaces as cars. 	
E10.4	Curbs and Sidewalks	<ul style="list-style-type: none"> • Sidewalks along building’s main entry area and classrooms are in poor condition. 	
E10.5	Accessibility	<ul style="list-style-type: none"> • One classroom exterior door has a ramp that does not meet current code requirements. 	<ul style="list-style-type: none"> • Sidewalks and/or hard surface exist around entire building. Ramps are provided to all portable buildings. • Front door has door actuator.
E10.6	Bikes and Bike Parking	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • (11) ‘U’ shaped bike racks are located in front of the building; (4) older bike racks are located on the west side. None of the bike racks are covered; the ones on the west side are fenced in.
RECOMMENDATIONS			
E10.1	Add second parking lot to east of main entry. Repave and restripe existing parking lot.		
E10.4	Replace sidewalk at building’s main entry and parallel to parking lot.		
E10.5	Remove and replace ramp access to classroom door with a compliant ramp and associated guardrail.		
E20 - SITE COMPONENTS			
Item		Findings	Comments
E20.1	Fields	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • Located adjacent to play structures and hard surface area.
E20.2	Landscaping	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • Majority of the site is lawn. There is minimal planting or landscaped areas at the building’s entry area. • Site contains trees around the site perimeter.
E20.3	Irrigation	<ul style="list-style-type: none"> • None observed 	It is the District’s request to add irrigation to field areas.
E20.4	Site Buildings	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • Covered play structure is in good condition.
E20.5	Site Security	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • Site is fenced. Building accessed by card reader.

			<ul style="list-style-type: none"> • Exterior classroom doors do not have hardware from outside.
E20.6	Fencing	<ul style="list-style-type: none"> • Fencing should be considered at kitchen area for dumpster/trash enclosure. See Figure E20.6. 	<ul style="list-style-type: none"> • Site is fenced (chain link); fencing is either 5'-0" or 6'-0" high. Fencing has gates with locks.
E20.7	Playground Equipment	<ul style="list-style-type: none"> • No issues observed 	
E20.8	Play Surfaces	<ul style="list-style-type: none"> • Hard play surfaces are in good condition. • Backboards and nets are in poor condition. 	<ul style="list-style-type: none"> • No visible damage to hardscape surfaces, just worn from use.
E20.9	Site Lighting	<ul style="list-style-type: none"> • The single mercury vapor luminaires at parking lot are past their useful life. See Figure E20.9. • General site lighting does not meet current lighting codes. 	<ul style="list-style-type: none"> • Building mounted site and soffit lighting is mixed high intensity discharge (HID) and self-ballasted compact fluorescent lighting. • It is the District's desire to add site lighting for the playground.
E20.10	Grading and Drainage	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • There is a ditch/depression in the field area (no grass growing). The field was dry at time of site assessment.
RECOMMENDATIONS			
E20.3	Add irrigation system to fields.		
E20.6	Construct chain link enclosure with gate for trash receptacles.		
E20.8	Replace (4) backboards and (2) basketball nets.		
E20.9	Remove existing parking lot pole fixtures and install new parking lot lighting. Install site lighting at playground.		

IMAGES

Figure A10.2 – Settlement at door threshold



Figure A20.1 – Gymnasium siding



Figure B30.3 – Operable Partitions



Figure C10.5 – Domestic hot water storage tank



Figure C20.1 – Leaking coils



Figure C20.7.a – Kiln in boiler room



Figure C20.7.b – Existing boiler



Figure D10.2.a – Main distribution panel



Figure D10.2.b – Panel missing grounding conductors and cover



Figure E10.1 – Parking lot



Figure E20.6 – Lack of trash enclosure



Figure E20.9 – Existing site lighting



Garfield Elementary	Priority Level				Priority Level I	Priority Level II	Priority Level III	Priority Level IV
	(Refer to Legend)							
	I	II	III	IV				
ITEMS								
A - STRUCTURE/SHELL								
A10 - STRUCTURE/SUBSTRUCTURE								
A10.2	1	Remove existing floor and grind existing concrete	X			\$ 2,371		
A10.3	1	Complete seismic upgrades per previous reports	X			\$1,166,087		
A20 - EXTERIOR COMPONENTS								
A20.1	1	Remove damaged siding and replace with prefinished fiber cement siding	X			\$ 95,197		
	2	Replace (6) mechanical grilles	X			\$ 13,756		
	3	Replace modular skirting material	X			\$ 5,692		
A20.2	1	Replace wire glazing in exterior doors		X			\$ 3,320	
	2	Replace (8) doors at portables	X			\$ 19,164		
	3	Re-paint (12) exterior doors and frames		X			\$ 2,371	
	4	Replace (3) pairs of exterior doors at gymnasium	X			\$ 26,565		
	5	Replace (7) classroom doors	X			\$ 16,769		
A20.3	1	Replace all single glazing window systems	X			\$ 404,901		
	2	Repaint wood trim around all window openings	X			\$ 4,161		
A20.4	1	Add internal roof access (hatches and ladders)	X			\$ 14,231		
	2	Replace roofing per roofing assessment recommendations		X			\$ 655,000	
A20.8	1	Replace (3) ramps and (3) sets of stairs at portables	X			\$ 31,071		
TOTAL - STRUCTURE/SHELL					\$ -	\$ 1,799,965	\$ 660,691	\$ -
B - INTERIORS								
B10 - INTERIOR CIRCULATION								
B10.2	1	Remove existing handrails and construct compliant handrails			X			\$ 3,360
	2	Add handrails on each set of stairs to stage from gym			X			\$ 664
B10.3	1	Remove portions of ramp and install lift		X			\$ 40,413	
B10.5	1	Add compliant room signage throughout facility	X			\$ 40,720		
B20 - INTERIOR FINISHES								
B20.1	1	Abate flooring in classrooms, hallways and cafeteria and replace with VCT; replace base	X			\$ 269,998		
	2	Provide walk off mats at (5) exterior doors locations	X			\$ 6,147		
	3	Replace carpeting in main office and principal's office	X			\$ 3,287		
	4	Abate kitchen flooring and replace with sheet vinyl flooring	X			\$ 12,880		
B20.6	1	Remove wood paneling in all hallways and replace with full height plastic laminate wainscot		X			\$ 126,705	
B30 - INTERIOR COMPONENTS								
B30.2	1	Replace all interior door wire glazing		X			\$ 1,502	
B30.3	1	Remove operable partitions and infill walls		X			\$ 6,538	
B30.4	1	Replace casework in all classrooms			X			\$ 331,983
B30.5	1	Add shades/blinds to all interior door glazing	X			\$ 474		
B40 - TOILET FACILITIES								
B40.2	1	Abate flooring from (3) staff restrooms and replace with sheet vinyl flooring	X			\$ 1,154		
	2	Replace ceramic tile in (1) restroom	X			\$ 4,977		
B40.8	1	Remodel (1) set of student restrooms		X			\$ 70,631	
TOTAL - INTERIORS					\$ 474	\$ 339,163	\$ 245,789	\$ 336,007
C - SYSTEMS								
C10 - PLUMBING								
C10.2	1	Re-pipe domestic hot water piping	X			\$ 382,500		
C10.5	1	Replace shell and tube heat exchanger with stand-alone domestic hot water boilers and pumps	X			\$ 28,750		
C20 - HVAC								
C20.1	1	Replace exhaust fans and HRV units	X			\$ 735,000		
	2	Replace heating coil in HV-1	X			\$ 5,000		
	3	Service unit serving the kitchen to ensure proper operation	X			\$ 2,500		

ITEMS	Priority Level (Refer to Legend)	Priority Level I	Priority Level II	Priority Level III	Priority Level IV	Priority Level I	Priority Level II	Priority Level III	Priority Level IV
C20.4	1 Provide ventilation air and heat to both storage rooms that have been converted to offices	X				\$ 2,500			
C20.5	1 Incorporate system on DDC				X				\$ 117,500
C20.7	1 Provide adequate venting in boiler room	X				\$ 5,000			
	2 Relocate electric kiln to a room with dedicated	X				\$ 66,500			
	3 Replace both boilers and pump		X				\$ 482,500		
C30 - FIRE PROTECTION									
C30.1	1 Provide fire suppression in kitchen hood	X				\$ 12,500			
TOTAL - SYSTEMS						\$ 94,000	\$ 1,628,750	\$ -	\$ 117,500

D - ELECTRICAL									
D10 - ELECTRICAL EQUIPMENT									
D10.2	1 Replace entire electrical system		X				\$ 95,000		
D10.3	1 Replace lighting in mechanical and electrical rooms			X				\$ 25,000	
	2 Replace light fixtures			X				\$ 95,000	
	3 Replace malfunctioning ballasts		X				\$ 50,000		
	4 Replace all incandescent lighting			X				\$ 25,000	
D10.4	1 Retrofit lighting controls			X				\$ 25,000	
D10.6	1 Install egress lighting	X				\$ 50,000			
	2 Retrofit existing lighting with battery packs	X				\$ 50,000			
D10.7	1 Replace all existing exit signs with LED signs	X				\$ 25,000			
D30 - TECHNOLOGY COMMUNICATIONS									
D30.1	1 Replace intercom system		X				\$ 25,000		
D30.7	1 Replace clock system		X				\$ 25,000		
TOTAL - ELECTRICAL						\$ 125,000	\$ 195,000	\$ 170,000	\$ -

E - GROUNDS									
E10 - SITE CIRCULATION AND PARKING									
E10.1	1 Add second parking lot east of entry			X				\$ 138,750	
	2 Repave and restripe parking lot		X				\$ 30,945		
E10.4	1 Replace sidewalks			X				\$ 9,487	
E10.5	1 Remove and replace ramp access to classroom door with complaint ramps and new guardrail		X				\$ 5,929		
E20 - SITE COMPONENTS									
E20.3	1 Add irrigation system to fields			X				\$ 102,626	
E20.6	1 Construct chain link enclosure with gate for trash receptacles			X				\$ 3,874	
E20.8	1 Replace (4) backboards and (2) basketball nets			X				\$ 12,428	
E20.9	1 Install new parking lot lighting		X				\$ 100,000		
	2 Install site lighting at playground		X				\$ 50,000		
TOTAL - GROUNDS						\$ -	\$ 186,874	\$ 267,165	\$ -

TOTALS BY CATEGORY		
	STRUCTURE/SHELL	\$ 2,460,656
	INTERIORS	\$ 921,433
	SYSTEMS	\$ 1,840,250
	ELECTRICAL	\$ 490,000
	GROUNDS	\$ 454,039
	FACILITY TOTAL	\$ 6,166,378

TOTALS BY PRIORITY		
	LEVEL 1	\$ 219,474
	LEVEL 2	\$ 4,149,752
	LEVEL 3	\$ 1,343,645
	LEVEL 4	\$ 453,507
	PRIORITY TOTAL	\$ 6,166,378

LEGEND:

Garfield Elementary	Priority Level				Priority Level	Priority Level	Priority Level	Priority Level
	(Refer to Legend)	Priority Level	Priority Level	Priority Level				
ITEMS	I	II	III	IV	I	II	III	IV

PRIORITY LEVELS

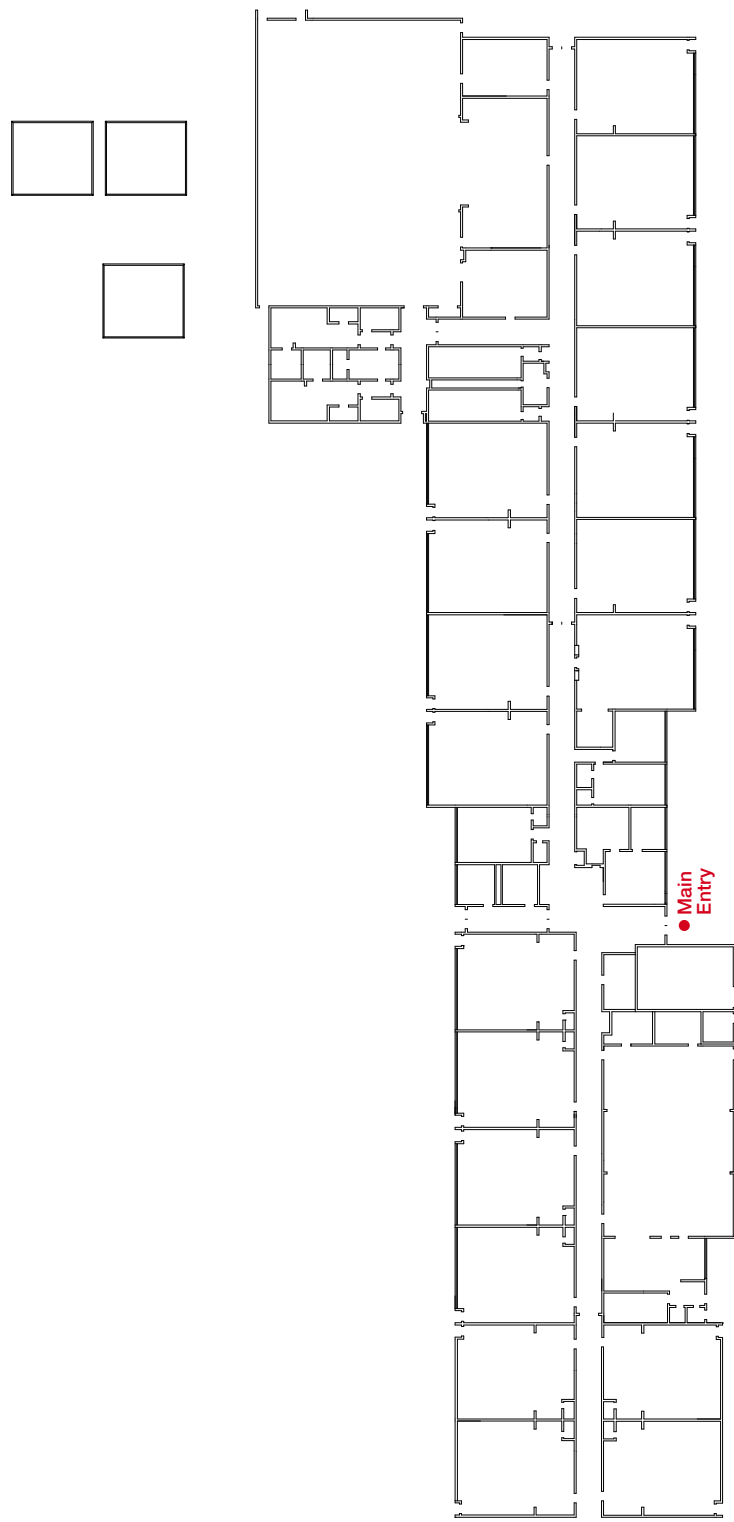
Level I: Highest Priority; Issues that affect the life safety concerns of the occupant, related to notification of occupants to emergency situations and the ability to safely evacuate the facility; subcomponents of Level I include safety concerns such as electrical loads, hazardous materials that might be affected with remodel or modifications, lack of fall protection. Level I items need to be addressed within a 5-year plan.

Level II: Moderate Priority; Issues that are related to the integrity and adequacy of systems within the building to sufficiently withstand a major event and still function; also related are the age of systems or building components that keep day to day operations running without constant repair. Issues may include mechanical, electrical and plumbing systems, fire suppression, lighting and security, as well as flooring, windows doors and other architectural components. Level II Items may be part of a 5-year plan.

Level III: Lower Priority; Issues that may over time affect the day to day maintenance of the building or long term use of the facility. Issues also include access and clearances at equipment and fixtures, access for individuals with disabilities and both indoor and exterior environment quality. Level III Items would be considered in a 5 to 10 year plan.

Level IV: Issues that are related to the aesthetics of both the building's interior and exterior as well as integrity and adequacy of building systems that don't pose any issues or nearing the end of their remaining lifecycles. These may include items such as cabinetry original to the building that have signs of wear or dated finishes but do not have any damage or deterioration. Level IV items would be considered long-term plans (10 years or more).

SCHOOL BUILDING
SCALE: NOT TO SCALE



Garfield Elementary School | Corvallis School District

OVERALL FLOOR PLAN



Dull Olson Weekes - IBI Group
Architects, Inc.



Hoover Elementary School

3838 NW Walnut Boulevard
 Corvallis, Oregon 97330

Built: 1968; 1978 building addition; 1971, 1974, 1987 modulars added

Enrollment: 405 students (2013)

Floor Area: 46,282 SF



Field Review Team:

Thea Wayburn	Dull Olson Weekes – IBI Group Architects Inc.
Jonathan Estabrook	KPFF Consulting Engineers
Roger Arnold	Glumac
Michael Henning	Glumac
Alex Ridley	Glumac
Dana Troy	Glumac

Report Date: December 2013

Date of Field Visits: June 3-7, 2013

Weather: Sunny, 70's and 80's

Neighborhood: Residential

Site Contacts: John Meyer, CSD 509J
 Kim Patten, CSD 509J

General Building Description:

Hoover Elementary School is a single story facility located on former agricultural land. The building is a wood structure with wood and plywood siding. The building is not sprinklered. The site is adjacent to an electrical substation, and parallel to Walnut Boulevard, a major arterial road. The school site houses the original school building as well as (5) portables. Site access is misaligned with the traffic signal on Walnut Boulevard, posing a safety issue for vehicular and pedestrian circulation.

Hoover ES was originally constructed in 1967 with additional classrooms and a covered play area added in 1977. There are also three modular wood classrooms on unbraced concrete masonry unit (CMU) pilasters and two steel modular classrooms with retrofitted pitched wooden roof on CMU crib walls. The roof of the classrooms and office area is plywood sheathing over truss joists at 48" on center and the roof of the multipurpose room is plywood over 2x framing members spanning between joist girders. Corridor roof framing is plywood over 2x joists. Internal and external walls are 2x wood stud. Exterior walls are clad in tongue and groove siding and walls

are braced with 1x4 and 1x6 wood let-in bracing. The covered play area is constructed with 2x decking spanning over 3x10's at 6 foot on center, spanning between glulam beams which span onto HSS3x3 steel posts.

With the exception of the kindergarten classrooms, classrooms are accessed from the building's exterior. There are many points of building entry for students, and no sightlines to many doors from the building's main entry or office. The main office area lacks a staff room; two classrooms within the school are now used for staff and not available as instructional space. The cafeteria and gymnasium are one shared space, which can result in challenges or conflicts in scheduling food service with physical education classes.

Overall, this building is in fair condition. Combined with the traffic and safety issues observed, Hoover Elementary is a prime candidate for replacement. Refer to the Facility Replacement Costs section of the report for a detailed breakdown of facility replacement costs; recommendations and costs listed in this detailed report will be to replace or improve existing building conditions.

A full building review of architectural, structural, mechanical, electrical and plumbing components was conducted. This facility contains several modular buildings which were reviewed as part of the overall facility assessment.

A - STRUCTURE / SHELL			
A10 – STRUCTURE / SUBSTRUCTURE			
Item		Findings	Comments
A10.1	Foundations	<ul style="list-style-type: none"> No issues observed 	
A10.2	Subgrade Enclosures	<ul style="list-style-type: none"> No issues observed 	
A10.3	Structural Systems	<ul style="list-style-type: none"> There are recommendations available for seismic improvements to the building structure, outlined in the ABKJ Seismic Analysis report, dated May 1997. There are recommendations available for seismic improvements to non-structural systems, outlined in the ABKJ Seismic Analysis report, dated May 1997. 	<ul style="list-style-type: none"> It is unclear if any seismic upgrades have been completed since the ABKJ report.
RECOMMENDATIONS			
A10.3	<p>Prioritize and perform the remaining seismic improvements to structural systems as outlined in the ABKJ report. The report provides specific recommendations. These include but are not limited to adding plywood sheathing to existing walls in both directions, brace wooden modular classrooms to foundations and anchor steel modular classrooms to CMU crib walls.</p> <p>Perform the remaining seismic improvements to non-structural components as outlined in the ABKJ report. These include, but are not limited to, anchoring and strapping of mechanical and electrical equipment, and bracing suspended equipment and ceiling.</p>		
A20 - EXTERIOR COMPONENTS			
Item		Findings	Comments
A20.1	Exterior Walls	<ul style="list-style-type: none"> Wood siding is in fair condition; there are several areas of damage to these walls along the entire building. See Figure A20.1. 	<ul style="list-style-type: none"> Exterior walls are wood and/or plywood siding.
A20.2	Doors and Hardware	<ul style="list-style-type: none"> All exterior doors contain wire glass. Doors at all modulars are in poor condition. See Figure A20.2. Gymnasium doors and the exterior library door need to be replaced. Due to the configuration of this facility, classroom and building access is all done by exterior doors. Doors do not have card readers. 	<ul style="list-style-type: none"> Wire glass is no longer permitted in educational facilities. Door hardware has been upgraded. Card readers at all exterior doors have been requested by the School District.
A20.3	Windows and Skylights	<ul style="list-style-type: none"> Classroom and library windows contain wire glass. 	<ul style="list-style-type: none"> Wire glass is no longer permitted in educational facilities. Window systems are single pane glazing in metal frames; replacement with more efficient windows systems is recommended.
A20.4	Roof	<ul style="list-style-type: none"> A separate roofing assessment is located in the appendix of this report. 	<ul style="list-style-type: none"> Roofing is 25 years old.

A20.5	Canopies and Covered Walks	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Exterior doors are covered by covered walk of building overhang.
A20.6	Gutters and Downspouts	<ul style="list-style-type: none"> No issues observed 	
A20.7	Trim and Overhangs	<ul style="list-style-type: none"> Some water damaged wood soffit material was observed outside exit doors on the west side of the building. See Figure A20.7. 	<ul style="list-style-type: none"> Overall, trim and overhangs are in good condition.
A20.8	Ramps and Stairs	<ul style="list-style-type: none"> No issues observed on the main building. (4) modular buildings have wooden stairs and ramps for access. 	

RECOMMENDATIONS

- A20.1 Remove existing siding material from entire building and replace with prefinished fiber cement siding.
- A20.2 If remodel work were to occur at this facility, the replacement of wire glass with tempered glazing may be required. Wire glass may also be replaced at the District’s discretion to prevent any issues if glazing is damaged or broken.
Replace (8) doors at modulars. Replace (2) pairs of exterior doors at gymnasium and (1) single door at library. Add card readers at (22) exterior doors.
- A20.3 Replace all single pane glazing with aluminum storefront system, tempered glazing and operable vents.
- A20.4 Repair and/or replace roofing per roofing assessment recommendations.
- A20.7 Remove damaged soffit material and replace with same material.
- A20.8 Replace wooden stairs and ramps at modulars.

B - INTERIORS

B10 – INTERIOR CIRCULATION

Item		Findings	Comments
B10.1	Construction and Exiting	<ul style="list-style-type: none"> Doors and windows contain wire glazing. This facility is not sprinklered. 	<ul style="list-style-type: none"> Wire glass is no longer permitted in educational facilities. Classrooms all have exterior doors and are equipped with panic hardware. A major remodel or addition at this site would require a thorough building code analysis.
B10.2	Stairs and Handrails	<ul style="list-style-type: none"> Handrails for original stage do not meet current code requirements. There are (4) stair risers to the stage from the gym which have no handrails. 	<ul style="list-style-type: none"> There are no issues with stair access to Rooms 5 and 6. Original stage is no longer used as stage.
B10.3	Ramps and Elevators	<ul style="list-style-type: none"> Existing ramp is too steep and does not meet current code requirements. 	<ul style="list-style-type: none"> The ramp to the original stage does not have a proper landing at the bottom. The stage is no longer used for its original purpose. There are no issues with the ramp access to Rooms 5 and 6.
B10.4	Accessibility	<ul style="list-style-type: none"> The stage is not accessible; the existing ramp is too steep to meet current code requirements. Raised platforms in both kindergarten classrooms are not accessible. The fixed reception desk in the main office does not have an accessible transaction section. Several doors in the gymnasium do not have ADA compliant door hardware. 	<ul style="list-style-type: none"> Ramps to kindergarten platforms would take up a significant amount of square footage within the room. Any significant upgrades or remodel work to this facility might trigger upgrades to items such as raised platforms and complaint access to the stage.
B10.5	Signage	<ul style="list-style-type: none"> This facility lacks compliant room signage. 	

RECOMMENDATIONS

B10.1	If remodel work were to occur at this facility, the replacement of wire glass with tempered glazing may be required. Wire glass may also be replaced at the District’s discretion to prevent any issues if glazing is damaged or broken. See Sections A20 and B30.
B10.2	Remove existing handrail at replace with compliant handrail construction. Add a handrail on each side of stairs from gym to stage.
B10.3	Remove portions of the ramp and install lift for stage access. Construct compliant landings at top and bottom of lift.
B10.4	
B10.5	Replace door knobs on (1) pair of double doors with levers. Provide room compliant signage for the entire facility.

B20 – INTERIOR FINISHES			
Item		Findings	Comments
B20.1	Flooring	<ul style="list-style-type: none"> • There were some observed cracks in the flooring in the hallways, in the gymnasium, in Classroom 15 and 16, and on the ramp flooring that leads to Classroom 6. Several door thresholds have cracks visible in the flooring material. • The carpeting in both kindergarten classrooms (15 and 16) and Room #4 are in poor condition and need to be replaced. See Figure B20.1.a. • Carpeting in Room 17 (portable) needs full replacement. • There is a ridge in the gymnasium floor that spans east to west. See Figure B20.1.b. • Exterior doors do not have fixed walk off mats. • Kitchen flooring is VCT and is in poor condition. 	<ul style="list-style-type: none"> • Flooring is mainly vinyl composition tile (VCT) and carpet. In general, the flooring is in fair condition. • The raised floor material in the gym poses a safety issue. • See Section A for structural comments and recommendations.
B20.2	Ceiling	<ul style="list-style-type: none"> • The kitchen ceiling is in poor condition. 	<ul style="list-style-type: none"> • Most ceilings are 2x4 lay-in acoustical ceiling; the gym has a 12x12 wood fiber ceiling. Classroom and hallway ceilings are generally in good condition.
B20.3	Ceiling Issues	<ul style="list-style-type: none"> • Water stained/damaged ceiling tiles were observed in the hallway outside of the LRC Room and in several classrooms (unknown if current or old leaks have caused this). 	
B20.4	Fixed Equipment	<ul style="list-style-type: none"> • Glazing in display cases is large and glazing material seems thin. 	<ul style="list-style-type: none"> • Classrooms are equipped with a combination of marker boards, projection screens, televisions and smart boards (in some classrooms). • Library casework is aged, but is in good condition. • Gymnasium has (6) backstops. • There are (3) display cases with glass on one side and one 'L' shaped display cases with two sides of glazing.
B20.5	Walls	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • See Section B30.3 regarding the operable walls in the classrooms.

B20.6	Wall Finishes	<ul style="list-style-type: none"> Gymnasium walls have wood paneling, which is in fair condition. Several panels appear loose. Gymnasium wall base is cracked and damaged in many locations on all (4) walls. In some instances, the base is missing altogether. See Figure B20.6. Refer to B20.1 for Recommendations. Lacquer finish on wood paneling is a possible fire hazard. 	<ul style="list-style-type: none"> Gymnasium wall panels are 7'-4" high and constructed of wood or plywood. This paneling is also located in the hallways. It is the District's desire to update finishes in hallways. Other walls have rubber base. Base is 5" high. Wall padding is located behind the basketball backstops and is in good condition.
B20.7	Furnishings	<ul style="list-style-type: none"> The dryer in the kitchen area is not vented to the outside. 	<ul style="list-style-type: none"> Stage curtain is in good condition. Freestanding book shelving and furniture is in good to fair condition. Exterior windows have horizontal mini blinds. The window coverings are in good condition. Classroom furniture is mainly desks and chairs; the furniture is generally in good condition.

RECOMMENDATIONS

- B20.1 Replace carpeting in (2) kindergarten classrooms and adjoining office space. Replace VCT flooring in both kindergarten classrooms. Replace carpeting in (1) classroom and in (1) portable. Provide fixed walk off mats at (5) exterior door locations. Remove flooring in gymnasium and correct flooring/foundation issues; replace flooring and all rubber base. Replace VCT flooring in all hallways with new VCT. Remove VCT flooring from kitchen area and replace with slip resistant sheet vinyl flooring and covered base.
- B20.4 Remove glazing from display cases and replace with tempered glazing.
- B20.6 Remove all wood paneling from all hallways and replace with full height plastic laminate wainscoting.
- B20.7 Provide exterior vent for dryer.

B30 – INTERIOR COMPONENTS

Item		Findings	Comments
B30.1	Interior Windows	<ul style="list-style-type: none"> Glazing contains wire glass. 	<ul style="list-style-type: none"> Wire glass is no longer permitted in educational facilities. Most interior windows have horizontal mini blinds. Window coverings are in good condition.
B30.2	Interior Doors and Hardware	<ul style="list-style-type: none"> Two pairs of doors in the gym are wood bi-fold doors. The hardware does not comply with current code. Doors are in poor condition. 	<ul style="list-style-type: none"> Interior doors and frames are generally wood and appear in fair condition, showing signs of age and wear. Classroom door hardware has been upgraded.
B30.3	Acoustics	<ul style="list-style-type: none"> All classrooms have at least (1) if not (2) operable partition walls. See Figure B30.3. 	<ul style="list-style-type: none"> Partition walls look original to the building. Noise transmission was observed

			<p>at time of building assessment.</p> <ul style="list-style-type: none"> • There are no acoustical wall panels present in the gymnasium.
B30.4	Casework	<ul style="list-style-type: none"> • Casework is worn and dated, but there are no issues with finishes. 	<ul style="list-style-type: none"> • Casework finishes are inconsistent throughout the facility.
B30.5	Security	<ul style="list-style-type: none"> • With the exception of the kindergarten classrooms, general classrooms are accessed from the building’s exterior. Not all exterior doors leading to classroom wings are visible from the main office. 	<ul style="list-style-type: none"> • If this building is not replaced, modifications to hardware are an immediate necessity. Construction of enclosed hallways will not work for many classrooms based on the building’s current layout.
B30.6	Other	<ul style="list-style-type: none"> • This facility lacks a separate gymnasium and cafeteria. Both functions share one space, which can cause conflicts between food service and providing adequate physical education classes. A separate gymnasium would be beneficial to this facility. 	<ul style="list-style-type: none"> • This facility is an older school and does not provide adequate building storage.

RECOMMENDATIONS

B30.1	If remodel work were to occur at this facility, the replacement of wire glass with tempered glazing may be required. Wire glass may also be replaced at the District’s discretion to prevent any issues if glazing is damaged or broken.		
B30.2	Replace bi-fold doors and associated frames. Provide new metal door and frames and compliant hardware.		
B30.3	Remove (6) operable partitions walls and construct new framed walls with painted gypsum board finish.		
B30.4	Replace casework (countertops, backsplash and cabinets) in all classrooms.		
B30.5	See Section A20.3.		
B30.6	Construct an addition to house a new gymnasium facility, student restrooms, storage and small group space. Remodel existing locker rooms into building storage.		

B40 – TOILET FACILITIES

Item		Findings	Comments
B40.1	Walls and Wall Finishes	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • Walls have full height FRP paneling.
B40.2	Floors and Floor Finishes	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • Flooring is tile in student restrooms. • Staff restrooms sheet vinyl flooring
B40.3	Ceilings	<ul style="list-style-type: none"> • Staff room ceilings are in poor condition. See Section B40.8. 	<ul style="list-style-type: none"> • All student restrooms have 2x4 lay-in ceiling tile. This ceiling type is not ideal in restroom facilities.
B40.4	Partitions	<ul style="list-style-type: none"> • Toilet partitions in (2) staff restrooms are in poor condition. 	
B40.5	Fixtures	<ul style="list-style-type: none"> • No issues observed 	
B40.6	Accessories	<ul style="list-style-type: none"> • No issues observed 	
B40.7	Accessibility	<ul style="list-style-type: none"> • Student restrooms have been modified to accommodate accessible stalls. Staff restrooms do not meet accessibility requirements. 	<ul style="list-style-type: none"> • Any significant upgrades or remodel to this building may trigger modifications to other building components, such as restrooms.

B40.8	Other	<ul style="list-style-type: none"> • Staff restroom adjacent to staff lounge are undersized and in poor condition. See Figure B40.8. 	
RECOMMENDATIONS			
B40.3	Remove 2x4 ceiling tile in (4) student restroom areas and replace with painted gypsum board ceilings.		
B40.8	Demolish existing toilet rooms adjacent to staff lounge. Reconfigure so access to toilet rooms is from staff lounge. Provide new sheet vinyl flooring, FRP wainscot, painted gypsum ceilings, new fixtures and lighting. Provide new doors, frames and hardware. Relocate staff kitchen to adjacent wall.		

C - SYSTEMS			
C10 - PLUMBING			
Item		Findings	Comments
C10.1	Water Service	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Water connection is at the street.
C10.2	Piping	<ul style="list-style-type: none"> Domestic hot water (DHW) piping is period to the building. 	<ul style="list-style-type: none"> Gas service is for boiler only. Sprinkler piping is galvanized. Exterior hose bibs are present.
C10.3	Fixtures	<ul style="list-style-type: none"> All restroom fixtures and drinking fountains are period to the building. See Figure C10.3. No grease interceptor in the kitchen. 	<ul style="list-style-type: none"> Kitchen is all electric which means that it has not gas. Drinking fountains in all classrooms. Single level drinking fountains in the corridors. Urinals: floor mounted manual flush valve. Bradley sinks in the restrooms. Water Closets: floor mount manual flush valve. Three compartment sink in the kitchen with no grease interceptor. Washer and dryer located in kitchen. Kitchen restroom: tank water closet and single lavatory.
C10.4	Storm and Overflow Drains	<ul style="list-style-type: none"> Storm drains are in need of cleaning. No sump pump is present. 	
C10.5	Water Heater	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Domestic hot water is produced off of the boiler. Circulation pumps are dated. Model: Vanguard 40 gallon 4.5 kW. See C20.7 for boiler recommendations.
RECOMMENDATIONS			
C10.2	Repipe domestic hot water piping.		
C10.3	Replace all lavatories, water closets and urinals. Replace all water fountains with bi-level water coolers. Add grease interceptor to the kitchen sinks and dishwasher.		
C10.4	Flush storm water lines.		

C20 - HVAC			
C20.1	Mechanical Equipment	<ul style="list-style-type: none"> • All forced air systems are period to the building and functioning, but past their useful lives. See Figure C20.1. • Library has water cooled condenser with potable water. 	<ul style="list-style-type: none"> • General: <ul style="list-style-type: none"> ○ Multizone unit serves west classrooms. ○ Single unit serves gym and kitchen. ○ Single unit serves locker rooms. ○ Single split system serves computer lab. ○ Single unit serves library. Multi-zone unit serves east classrooms. ○ Two zone multi-zone unit serves south west classrooms. • In access above gym, ladder access: <ul style="list-style-type: none"> ○ EF-3 for the kitchen; Pace U12F ○ EF-2 for the toilets; Pace U15F ○ SF-3 for the gym; Trane Torrivent T-12 U87444 ○ EF-1 for the gym; Pace U18F ○ SF-4 for the locker rooms; Trane Torrivent T-3 ○ SF-2 for the classrooms; Trane climate changer 21; SN U87420; 3-way valve; 7 zones. • Library unit is water cooled DX with potable water. Trane AC-1 on the roof. • Pace unit on the roof. AS-5 and RF-3. Serves the two CRs by themselves. No HW coil. Coils in the rooms. Just filters and fans. • SF-1 serves offices and CR's. 3-way valves with asbestos. Heating/ventilation only. Multizone unit with 8 zones. Model 21 SNU87419. • EF-4 serves restrooms. Pace U-12F • HW heaters not on DDC. • Trane unit heater located in storage room. <ul style="list-style-type: none"> ○ Split system for computer lab. PU36EK.

C20.2	Air Filtration	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Air filtration is period to the building.
C20.3	Equipment Accessibility	<ul style="list-style-type: none"> No issues observed. 	<ul style="list-style-type: none"> Equipment is accessed through ladders.
C20.4	Air Distribution and Ventilation	<ul style="list-style-type: none"> No issues observed 	
C20.5	Controls	<ul style="list-style-type: none"> Pneumatic controls have been abandoned in place. 	<ul style="list-style-type: none"> System: Andover DDC Only equipment not on DDC is the hallway radiators.
C20.6	Chillers	<ul style="list-style-type: none"> Not Applicable 	
C20.7	Boiler	<ul style="list-style-type: none"> Boilers are original to the building and functioning but past their useful life. See Figure C20.7.a. Domestic hot water is off of boilers. Piping and pumps are past their useful life. See Figure C20.7.b. Electric kiln is located in the boiler room. Asbestos is present throughout. 	<ul style="list-style-type: none"> Large old boiler 100 HP from 1968. Model: Ray Burner Co. Temp at 180-F. Boiler pumps are primary/stand-by. Model: Hydroflow 220 gpm @ 42 ft. (HWP-1/HWP-2).

RECOMMENDATIONS

- C20.1 Replace all heating and ventilating units and exhaust fans. Replace water cooled unit in library with split system cooling unit.
- C20.7 Replace both boilers and pumps with high efficiency boilers and variable speed pumps. Remove existing domestic hot water heat exchanger and provide new domestic hot water boilers and pumps. Relocate electric kiln and provide dedicated exhaust.

C30 – FIRE PROTECTION

Item		Findings	Comments
C30.1	Fire Suppression System	<ul style="list-style-type: none"> The kitchen hood lacks fire suppression. 	<ul style="list-style-type: none"> Only fire sprinklers are located in the storage room. The riser is located in the boiler room.
C30.2	Water Service and Backflow Prevention	<ul style="list-style-type: none"> Not Applicable 	
C30.3	System Pressure	<ul style="list-style-type: none"> Not Applicable 	
C30.4	Standpipes	<ul style="list-style-type: none"> Not Applicable 	
C30.5	Fire Pump	<ul style="list-style-type: none"> Not Applicable 	
C30.6	Fire Sprinkler Pipe Condition	<ul style="list-style-type: none"> Not Applicable 	
C30.7	Fire Department Connection	<ul style="list-style-type: none"> Not Applicable 	
C30.8	Fire Sprinkler Zoning	<ul style="list-style-type: none"> Not Applicable 	
C30.9	Flow Monitoring and Alarm	<ul style="list-style-type: none"> Not Applicable 	
C30.10	Hoses and Extinguishers	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Fire extinguishers, no hoses

RECOMMENDATIONS

- C30.1 Provide fire suppression at the kitchen hood.

D - ELECTRICAL			
D10 - ELECTRICAL EQUIPMENT			
Item		Findings	Comments
D10.1	Transformers	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> 150 kVA Utility transformer located at rear of the site serves the main building. (4) Modular classrooms are supplied from 50kVA single phase pole mounted transformer.
D10.2	Switchgear and Panelboards	<ul style="list-style-type: none"> Cold water pipes are installed within clearance zone of main distribution panel. See Figure D10.2a. No equipment grounding conductors were visible in sampled panelboards. See Figure D10.2b. The majority of panelboards have insufficient spare capacity. See Figure D10.2b. Panel schedules are missing or incorrect. Numerous panels are blocked by furniture and supplies. There are several cases of poorly supported wiring observed. See Figures D10.2c and D10.2d. 	<ul style="list-style-type: none"> Main distribution panel divided into two (2) 120Y/208V, 400A sections, each with a 400A fusible disconnect; output disconnects also fusible type. Equipment: GE (typical) Newer Square D panelboard installed in mechanical room.
D10.3	Lighting	<ul style="list-style-type: none"> Offices and corridors appear to be overlit; Incandescent lighting in mechanical and electrical rooms is insufficient. See Figures D10.3a and D10.3b. Recessed incandescent lighting in kitchen areas is insufficient. See Figure D10.3c. 	<ul style="list-style-type: none"> IESNA recommends 30FC for offices and 15-20FC for hallways. All fluorescent fixtures have been retrofitted with T8 lighting and drop ceilings throughout facility. HID gym and cafeteria lighting has been replaced with T8 fluorescent lighting.
D10.4	Lighting Controls	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Classroom lighting is switched in banks; hallway, gym, cafeteria lighting is switched via circuit breaker.
D10.5	Back-up and Emergency Power	<ul style="list-style-type: none"> Not Applicable 	
D10.6	Egress and Emergency Lighting	<ul style="list-style-type: none"> Egress lighting is inadequate. 	<ul style="list-style-type: none"> Some "bugeye" fixtures in gym, restrooms, etc.
D10.7	Exit Signage	<ul style="list-style-type: none"> All exit signs do not meet 100 foot visibility requirement. 	<ul style="list-style-type: none"> Original exit signs have been retrofitted with LED lighting.
D10.8	Sensors	<ul style="list-style-type: none"> Lighting controls/sensors do not meet current Oregon State Energy Code. No automated lighting controls observed. 	
RECOMMENDATIONS			
D10.2	<p>Remove cold water pipes from space above main distribution panel. Install equipment grounding bus bars and conductors in branch circuits where possible and install GFCI circuit breakers where required for personnel protection. Install new panelboards fed from main distribution panels in spaces where additional capacity is needed. Trace out facility electrical system to generate a new, complete panel schedules. Label all device, receptacle and switch faceplates with source panel and circuit number. Complete arc flash hazard analysis be for entire facility. Verify existing equipment fault current ratings meet or exceed available fault current level. Take corrective action where required. Install a full size,</p>		

D10.3	up to date, laminated copy of the building single line diagram in the main electrical room, adjacent to the main switchboard. Improve enforcement of OSHA/NEC clearance requirements in front of panelboards and electrical equipment. Provide proper support for wiring in boiler room.
D10.4	Convert 4 lamp fixtures to 2 lamp in offices and remove fixtures from hallways to generate more reasonable light levels. Replace all incandescent lighting in the kitchen, mechanical and electrical rooms with linear fluorescent or LED sources or new luminaires.
D10.6	Install a campus wide, wireless lighting control system (Lutron Quantum system or equivalent).
D10.7	Retrofit existing luminaires along egress paths with battery packs.
D10.8	Replace all remaining retrofitted exist signage with LED exit signs with batteries.
D10.8	Install occupancy sensors plug strips to switch off workstations and equipment in offices, classrooms and other occupied spaces.

D20 – SAFETY / SECURITY

Item	Findings	Comments	
D20.1	Fire Alarm and Panels	• No issues observed	• System: Notifier (less than 10 years old).
D20.2	Smoke Detection	• No issues observed	
D20.3	Pull Stations	• No issues observed	
D20.4	Annunciation	• No issues observed	
D20.5	Addressable Systems and Zones	• No issues observed	
D20.6	Monitoring	• No issues observed	
D20.7	Access Control	• No issues observed	• Card readers present
D20.8	Intrusion	• No issues observed	
D20.9	Video Surveillance	• Not Applicable	

RECOMMENDATIONS

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D30 – TECHNOLOGY COMMUNICATIONS

Item	Findings	Comments	
D30.1	Paging and Intercom – Head End Condition	• There are numerous problems and complaints made on the current aging system. Replacement parts are rare and costly, and there is inadequate technical support on the system.	• System: Rauland Telecenter intercom and paging system (original to the building with later improvements).
D30.2	Master Clock	• Past useful life – numerous issues.	
D30.3	Infrastructure	• Large quantities of cabling have been abandoned in ceilings and walls. • Cabling is not labeled.	
D30.4	Speakers	• No issues observed	
D30.5	Coverage	• No issues observed	
D30.6	Clock System	• There are numerous complaints on this aging system. Replacement parts are rare and costly, and there is inadequate	• System: Latham

		technical support on the system.	
D30.7	Clock – Head End	<ul style="list-style-type: none"> • The clock system is past its useful life. • There are many issues with the system. 	
RECOMMENDATIONS			
D30.1	Replace the intercom and paging systems.		
D30.7	Replace the clock system.		

E - GROUNDS			
E10 – SITE CIRCULATION AND PARKING			
Item		Findings	Comments
E10.1	Parking Lots	<ul style="list-style-type: none"> The entry access point to the parking lot does not align with the traffic signal on Walnut Boulevard. Parking areas are not striped for accessible crosswalk. 	<ul style="list-style-type: none"> There is one main parking lot containing (35) standard stalls and (2) accessible stalls. There are (5) stalls near the portables and an additional (10) stalls near the site entry point. Asphalt paving is in good condition with No issues observed.
E10.2	Site Signage/ Accessories	<ul style="list-style-type: none"> Site lacks site signage. 	<ul style="list-style-type: none"> Flagpole is in good condition.
E10.3	Vehicular Circulation	<ul style="list-style-type: none"> The entry drive to the site does not align with the traffic signal on Walnut Boulevard, creating a traffic hazard. The parking lot and parent pick-up/drop off share the same area. Buses use fire lane to line up parallel to portables. All circulation utilizes one site exit. This site has a dedicated fire lane around the school. 	
E10.4	Curbs and Sidewalks	<ul style="list-style-type: none"> The community access path behind the school is in need of replacement. 	<ul style="list-style-type: none"> Sidewalks are in good condition. There are little to no curbs on site.
E10.5	Accessibility	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Site is access by sidewalks and or hard play surfaces. A fire lane is also present. A door actuator is located at the school's main entrance, and in lobby area.
E10.6	Bikes and Bike Parking	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> There were (2) bike racks onsite; racks are not covered.
RECOMMENDATIONS			
E10.1	The parking lot entrance should be reconfigured to reduce or eliminate vehicular issues with the adjacent arterial road and traffic signals. Accessible stalls should be located as close to building entry as possible.		
E10.2	Install site sign.		
E10.3	See Section E10.1.		
E10.4	Replace access path with new asphalt paving.		
E20 - SITE COMPONENTS			
Item		Findings	Comments
E20.1	Fields	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Fields are grass. Field location is far from building entry.
E20.2	Landscaping	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Site has minimal landscaping, mainly located near soft play areas.
E20.3	Irrigation	<ul style="list-style-type: none"> None observed 	<ul style="list-style-type: none"> It is the District's desire to add irrigation to field areas.
E20.4	Site Buildings	<ul style="list-style-type: none"> See Section A20 for comments on portable buildings. 	<ul style="list-style-type: none"> There are (5) portables on site. There are no site storage buildings

			<p>present.</p> <ul style="list-style-type: none"> Covered play structure is in good condition.
E20.5	Site Security	<ul style="list-style-type: none"> With the exception of kindergarten classrooms, all classrooms are accessed from the outside of this building. Several exterior doors provide connection in and through the building, but they are not secured visibly from the main office. 	<ul style="list-style-type: none"> If this building is not replaced, modifications to hardware are an immediate necessity. Construction of enclosed hallways will not work for many classrooms based on the building's current layout.
E20.6	Fencing	<ul style="list-style-type: none"> No issues observed with site fencing. Trash cans for kitchen are currently located in covered play area and not fenced. Another dumpster is located in the parking lot and accessed through the building. 	<ul style="list-style-type: none"> Site is fenced.
E20.7	Playground Equipment	<ul style="list-style-type: none"> Backboards and nets are in fair to poor condition. 	<ul style="list-style-type: none"> Play equipment at both playgrounds is in very good condition.
E20.8	Play Surfaces	<ul style="list-style-type: none"> Asphalt play surfaces are in fair condition, mainly the area near the covered play and classrooms 8-12. See Figure E20.8. 	<ul style="list-style-type: none"> Both hard surface areas have visible patching.
E20.9	Site Lighting	<ul style="list-style-type: none"> No parking lot lighting is installed. Site lighting is insufficient, particularly near dumpsters. 	<ul style="list-style-type: none"> There is incandescent soffit and entry lighting. Mercury vapor (MV) lighting is used at the rear of the site; high intensity discharge (HID) wall packs were added to the eastern portion of the site. Compact fluorescent and HID wall packs are installed on the modular classrooms.
E20.10	Grading and Drainage	<ul style="list-style-type: none"> No issues observed at time of visit. There are some noted issues with creek stabilization and erosion issues. 	<ul style="list-style-type: none"> A further investigation of storm water issues is recommended. This is not in the scope of this report.

RECOMMENDATIONS

- E20.3 Add irrigation to fields.
- E20.5 See Section B30.
- E20.6 Construct chain link fence trash enclosure with gate.
- E20.7 Replace (4) basketball backboards and hoops.
- E20.8 Resurface and re-stripe both hard surface play areas. Replace asphalt area adjacent to covered play.
- E20.9 Replace and extend site and parking lot lighting (per IESNA recommendations).
- E20.10 Remediate erosion issues (scope of work not part of this report).

IMAGES

Figure A20.1 – Exterior wall damage



Figure A20.2 – Portable door



Figure A20.7- Soffit



Figure B20.1.a – Carpeting in classroom



Figure B20.1.b – Gymnasium flooring



Figure B20.6 – Damaged base



Figure B30.3 – Typical classroom partition



Figure D40.8 – Staff restroom



Figure C10.3 – Typical restroom fixture



Figure C20.1 – Mechanical unit



Figure C20.7.a – Boiler



Figure C20.7.b – Hot water piping/pumps



Figure D10.2.a - Pipes installed above panels



Figure D10.2.b – Grounding bus bar missing



Figure D10.2.c – Incorrect conduit type



Figure D10.2.d – Damaged armored cable



Figure D10.3.a – Mechanical room lighting



Figure D10.3.b - Failing lighting



Figure D10.3.c – Kitchen lighting



Figure E20.8 – Hard surface play area



Hoover Elementary	Priority Level				Priority Level I	Priority Level II	Priority Level III	Priority Level IV
	(Refer to Legend)							
	I	II	III	IV				
ITEMS								
A - STRUCTURE/SHELL								
A10 - STRUCTURE/SUBSTRUCTURE								
A10.3	1	Complete seismic upgrades per previous reports	X			\$ 2,049,135		
A20 - EXTERIOR COMPONENTS								
A20.1	1	Remove existing wood siding and replace with prefinished fiber cement siding	X			\$ 397,711		
A20.2	1	Replace (8) doors at portables	X			\$ 19,164		
	2	Replace (2) pairs of exterior doors and frames	X			\$ 18,184		
	3	Replace exterior library door	X			\$ 4,688		
	4	Add card readers to exterior doors	X		\$ 110,687			
	5	Replace all exterior wire glazing		X			\$ 11,622	
A20.3	1	Replace all single glazing window systems	X			\$ 92,977		
A20.4	1	Repair roofing per roofing assessment recommendations	X		\$ 5,000			
	2	Replace roofing per roofing assessment recommendations	X		\$ 705,000			
A20.7	1	Remove and replace damaged wood soffit		X			\$ 1,897	
A20.8	1	Replace wood stairs and ramps at (4) portables	X			\$ 41,428		
TOTAL - STRUCTURE/SHELL					\$ 820,687	\$ 2,623,287	\$ 13,519	\$ -
B - INTERIORS								
B10 - INTERIOR CIRCULATION								
B10.2	1	Replace handrails at (2) stair locations			X		\$ 1,344	
	2	Add handrails on side of stairs in gymnasium			X		\$ 664	
B10.3	1	Remove portions of existing ramp and install lift		X			\$ 40,413	
B10.4	1	Replace door knobs on (1) set of exterior doors		X			\$ 2,008	
B10.5	1	Add compliant room signage throughout facility	X			\$ 40,250		
B20 - INTERIOR FINISHES								
B20.1	1	Replace carpeting in (2) kindergarten classrooms and adjoining office space	X			\$ 18,263		
	2	Replace VCT flooring in (2) kindergarten classrooms	X			\$ 4,704		
	3	Replace carpeting in (1) classroom and (1) portable	X			\$ 19,126		
	4	Provide fixed walk off mats at (5) pairs of exit doors	X			\$ 11,168		
	5	Remove gymnasium flooring and replace with VCT	X		\$ 42,082			
	6	Replace VCT flooring in hallways with new VCT		X			\$ 15,483	
	7	Remove VCT flooring from kitchen area and replace with slip resistant sheet vinyl flooring and covered base	X		\$ 8,317			
B20.4	1	Replace glazing in display cases with tempered glazing	X			\$ 4,648		
B20.6	1	Remove wood paneling and replace with full height plastic laminate wainscot		X			\$ 98,288	
B20.7	1	Add exterior vent for dryer	X			\$ 474		
B30 - INTERIOR COMPONENTS								
B30.1	1	Replace all interior door wire glazing		X			\$ 2,403	
B30.2	1	Replace bi-fold doors with new doors, frames and hardware		X			\$ 12,491	
B30.3	1	Remove (6) operable partition walls and construct new framed walls with gypsum finish	X			\$ 13,589		
B30.4	1	Replace casework in all classrooms		X			\$ 228,585	
B30.6	1	Construct gymnasium and toilet room addition		X			\$ 1,669,800	
	2	Remodel existing locker rooms		X			\$ 79,053	
B40 - TOILET FACILITIES								
B40.3	1	Remove 2x4 ceiling tile in student restrooms		X			\$ 36,240	
B40.8	1	Reconfigure/remodel staff restrooms	X			\$ 96,408		
TOTAL - INTERIORS					\$ 50,399	\$ 208,630	\$ 1,778,838	\$ 407,934
C - SYSTEMS								
C10 - PLUMBING								
C10.2	1	Re-pipe domestic hot water piping	X			\$ 372,500		

Hoover Elementary		Priority Level				Priority Level I	Priority Level II	Priority Level III	Priority Level IV
		(Refer to Legend)	I	II	III				
ITEMS									
C10.3	1	Replace all lavatories, water closets and urinals			X			\$ 153,750	
	2	Replace all water fountains with bi-level water coolers			X			\$ 28,750	
	3	Add grease interceptor to the kitchen sinks and dishwasher		X			\$ 28,750		
C10.5	1	Flush storm water lines	X				\$ 5,000		
C20 - HVAC									
C20.1	1	Replace all heating and ventilating units and exhaust fans	X				\$ 460,000		
	2	Replace water cooled unit in library with split system cooling unit	X				\$ 51,250		
C20.7	1	Replace both boilers and pumps with high efficiency boilers and variable speed pumps	X				\$ 482,500		
	2	Remove existing DHW heat exchanger and provide new DHW boilers and pumps	X				\$ 28,750		
	3	Relocate electric kilns and provide dedicated exhaust	X			\$ 66,250			
C30 - FIRE PROTECTION									
C30.1	1	Provide fire suppression in kitchen hood	X			\$ 12,500			
TOTAL - SYSTEMS						\$ 78,750	\$ 1,400,000	\$ 28,750	\$ 182,500
D - ELECTRICAL									
D10 - ELECTRICAL EQUIPMENT									
D10.2	1	Remove cold water pipes from electrical room	X				\$ 3,750		
	2	Install equipment grounding bus bars and conductors	X				\$ 50,000		
	3	Install new panelboards to alleviate spare capacity problems		X			\$ 25,000		
	4	Trace electrical system and label panels		X			\$ 25,000		
	5	Complete arc flash analysis	X				\$ 15,000		
	6	Install single line diagram in electrical room			X			\$ 1,000	
	7	enforce panelboard clearances		X			\$ 1,500		
	8	Properly support wiring in boiler room	X				\$ 1,500		
D10.3	1	Remove lamps/fixtures from overlit areas		X			\$ 25,000		
	2	Replace incandescent lighting in mechanical/electrical rooms and kitchen	X				\$ 25,000		
D10.4	1	Install retrofit lighting controls		X			\$ 50,000		
D10.6	1	Install egress lighting and retrofit existing luminaires with battery packs	X			\$ 50,000			
D10.7	1	Replace all exit signs with LED meeting intensity criteria	X			\$ 25,000			
D10.8	1	Install workstation occupancy sensors		X			\$ 50,000		
D20 - SAFETY/SECURITY									
D20.1	1	Replace fire alarm system			X			\$ 50,000	
D30 - TECHNOLOGY COMMUNICATIONS									
D30.1	1	Replace intercom system	X			\$ 25,000			
D30.7	1	Replace time clock system	X			\$ 25,000			
TOTAL - ELECTRICAL						\$ 75,000	\$ 145,250	\$ 176,500	\$ 51,000
E - GROUNDS									
E10 - SITE CIRCULATION AND PARKING									
E10.1	1	Reconfigure entry into site	X			\$79,062			
E10.2	1	Install site sign		X			\$ 3,162		
E10.4	1	Replace community access path with new asphalt path		X			\$ 1,215		
E20 - SITE COMPONENTS									
E20.3	1	Add irrigation to field areas		X			\$ 339,372		
E20.6	1	Construct chain link fence trash enclosure with gate		X			\$ 3,874		
E20.7	1	Replace (4) basketball backboards and nets		X			\$ 12,333		
E20.8	1	Resurface and restripe both hard surface play areas	X			\$ 86,474			
	2	Replace asphalt area adjacent to the covered play		X			\$ 3,701		

Hoover Elementary		Priority Level				Priority Level I	Priority Level II	Priority Level III	Priority Level IV
		(Refer to Legend)							
		I	II	III	IV				
ITEMS									
E20.9	1	Extend and replace site lighting and add parking lot lighting		X			\$ 50,000		
E20.10	1	Remediate erosion issues (this scope of work requires further investigation and is not included in this report)							
TOTAL - GROUNDS						\$ 79,062	\$ 139,636	\$ 360,495	\$ -
TOTALS BY CATEGORY									
						STRUCTURE/SHELL	\$ 3,457,493		
						INTERIORS	\$ 2,445,801		
						SYSTEMS	\$ 1,690,000		
						ELECTRICAL	\$ 447,750		
						GROUNDS	\$ 579,193		
						FACILITY TOTAL	\$ 8,620,237		
TOTALS BY PRIORITY									
						LEVEL 1	\$ 1,103,898		
						LEVEL 2	\$ 4,516,803		
						LEVEL 3	\$ 2,358,102		
						LEVEL 4	\$ 641,434		
						PRIORITY TOTAL	\$ 8,620,237		
LEGEND:									

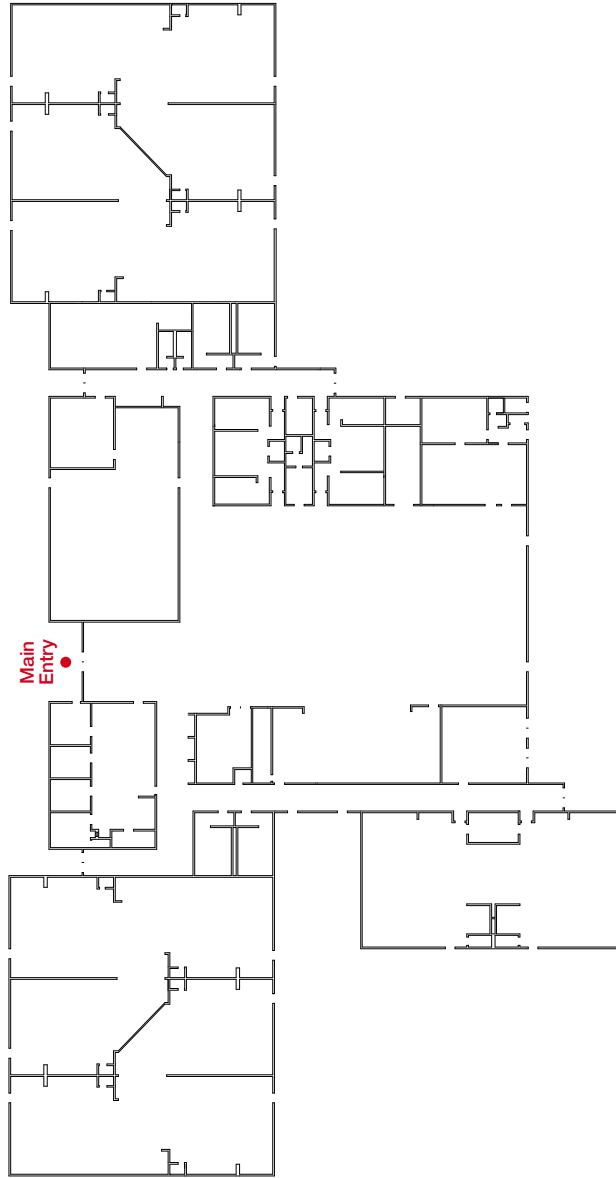
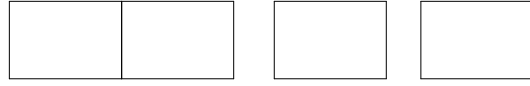
PRIORITY LEVELS

Level I: Highest Priority; Issues that affect the life safety concerns of the occupant, related to notification of occupants to emergency situations and the ability to safely evacuate the facility; subcomponents of Level I include safety concerns such as electrical loads, hazardous materials that might be affected with remodel or modifications, lack of fall protection. Level I items need to be addressed within a 5-year plan.

Level II: Moderate Priority; Issues that are related to the integrity and adequacy of systems within the building to sufficiently withstand a major event and still function; also related are the age of systems or building components that keep day to day operations running without constant repair. Issues may include mechanical, electrical and plumbing systems, fire suppression, lighting and security, as well as flooring, windows doors and other architectural components. Level II Items may be part of a 5-year plan.

Level III: Lower Priority; Issues that may over time affect the day to day maintenance of the building or long term use of the facility. Issues also include access and clearances at equipment and fixtures, access for individuals with disabilities and both indoor and exterior environment quality. Level III Items would be considered in a 5 to 10 year plan.

Level IV: Issues that are related to the aesthetics of both the building's interior and exterior as well as integrity and adequacy of building systems that don't pose any issues or nearing the end of their remaining lifecycles. These may include items such as cabinetry original to the building that have signs of wear or dated finishes but do not have any damage or deterioration. Level IV items would be considered long-term plans (10 years or more).



SCHOOL BUILDING
SCALE: NOT TO SCALE

Hoover Elementary School | Corvallis School District

OVERALL FLOOR PLAN



Dull Olson Weekes - IBI Group
Architects, Inc.



Jefferson Elementary School

1825 NW 27th Street
 Corvallis, Oregon 97330

Built: 1960; 1962, 1979 additions; 1987
 modulars

Enrollment: 327 students (2013)

Floor Area: 40,155 SF



Field Review Team:

Thea Wayburn	Dull Olson Weekes – IBI Group Architects
Jonathan Estabrook	KPFF Consulting Engineers
Roger Arnold	Glumac
Alex Ridley	Glumac
Dana Troy	Glumac

Report Date: December 2013

Date of Field Visits: June 3-7, 2013
Neighborhood: Residential

Weather: Sunny, 70's and 80's

Site Contacts: John Meyer, CSD 509J
 Kim Patten, CSD 509J

General Building Description:

Jefferson Elementary is one of three prototype facilities in the Corvallis School District (Adams and Wilson are the other two). Jefferson is surrounded by residential property on three sides and a church on the fourth side. This school site is long and narrow and its parking lot is undersized in relation to other elementary schools in the District. This facility is not sprinklered.

Jefferson ES was originally constructed in 1960 with an additional east-west classroom wing added in 1961 and a covered play area added in 1979. The overall footprint of the building is L-shaped. The school is a single-story structure with wood framed roof and plywood sheathing supported on wood stud bearing walls. The exterior façade has brick veneer. There are several interior masonry walls in the transverse direction of the building. The gymnasium structure is a 20-foot tall space with glulam columns and bent glulam beams. The covered play that is attached to the main building structure consists of straight wood decking on glulam beams bearing on masonry walls. Longitudinal shear walls are plywood sheathed and transverse shear walls are a combination of masonry and wood framed. There are two modular classroom structures on site as well.

One observation made about this facility is the direct access to the gymnasium from the main entry vestibule. The main office is located beyond the vestibule, and currently all doors are kept open from the office through the vestibule to the gym. These gym doors off the vestibule appear to be the main entry point for students and staff. A remodel of the office and adding a window in the vestibule wall from the office could provide better supervision of the entry doors and gymnasium. The cafeteria and gymnasium are one shared space, which can result in challenges or conflicts in scheduling food service with physical education classes.

Overall this facility is in good condition. A full building review of architectural, structural, mechanical, electrical and plumbing components was conducted. This facility contains several modular buildings which were reviewed as part of the overall facility assessment.

A - STRUCTURE / SHELL			
A10 – STRUCTURE / SUBSTRUCTURE			
Item		Findings	Comments
A10.1	Foundations	<ul style="list-style-type: none"> Diagonal cracks in the bed joints of the masonry veneer are present at some locations. See Figure A10.2. 	<ul style="list-style-type: none"> Cracks like this indicate settlement in the center of the foundation spanning between transverse walls.
A10.2	Subgrade Enclosures	<ul style="list-style-type: none"> A slight crack in floor finishes was observed in Room 14. See Figure A10.3. 	<ul style="list-style-type: none"> The crack is likely due to shrinkage of the concrete slab and possesses no immediate structural threat.
A10.3	Structural Systems	<ul style="list-style-type: none"> There are recommendations available for seismic improvements to the building structure, outlined in the Degenkolb Seismic Evaluation Phase 2 report, dated July 2000. There are recommendations available for seismic improvements to non-structural systems, outlined in the Degenkolb Seismic Evaluation Phase 2 report, dated July 2000. 	<ul style="list-style-type: none"> In 2003 the school received a new roof with “Phase 1” seismic upgrades which included strengthening the connections of the roof diaphragm and adding plywood sheathing to previously deficient areas. “Phase 1” was performed in preparation for the construction of new shear walls in selected areas.
RECOMMENDATIONS			
A10.1	Conduct an investigation as to the cause of settlement and if necessary underpin effected foundations.		
A10.3	<p>Prioritize and perform the remaining seismic improvements to structural systems as outlined in the Degenkolb report. The report provides specific recommendations. These include but are not limited to bracing masonry walls for out of plane forces, adding blocking and positive attachment from roof joists to shear walls, wall out-of-plane bracing at the gym and anchoring shear walls adequately to the foundations.</p> <p>Perform the remaining seismic improvements to non-structural components as outlined in the Degenkolb report. These include, but are not limited to, anchoring and strapping of mechanical and electrical equipment, and bracing suspended equipment and ceiling.</p>		
A20 - EXTERIOR COMPONENTS			
Item		Findings	Comments
A20.1	Exterior Walls	<ul style="list-style-type: none"> No issues observed with main building. The modular buildings lack skirting around them. 	<ul style="list-style-type: none"> Exterior walls are mostly brick veneer with some wood siding.
A20.2	Doors and Hardware	<ul style="list-style-type: none"> Exterior doors contain wire glass. Painted finish on exterior classroom doors is in fair condition. Doors at modulars are in poor condition; doors are rusted in various locations and flooring is rotted. See Figure A20.2. Gymnasium doors are in fair condition; hardware needs to be replaced to provide more secure access. 	<ul style="list-style-type: none"> Wire glass is no longer permitted in educational facilities. Hardware has been upgraded.
A20.3	Windows and Skylights	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Windows are single pane glass in aluminum frames.

A20.4	Roof	<ul style="list-style-type: none"> • A separate roofing assessment is located in the appendix of this report. 	<ul style="list-style-type: none"> • The roofing is a modified built up roofing system, 10 years in age.
A20.5	Canopies and Covered Walks	<ul style="list-style-type: none"> • No issues observed 	
A20.6	Gutters and Downspouts	<ul style="list-style-type: none"> • No issues observed 	
A20.7	Trim and Overhangs	<ul style="list-style-type: none"> • No issues observed 	
A20.8	Ramps and Stairs	<ul style="list-style-type: none"> • Ramps and stairs to (2) modular classrooms are in fair condition. See Figure A20.8. 	<ul style="list-style-type: none"> • Ramps and stairs are wood construction.

RECOMMENDATIONS

- A20.1 Install skirting/panels at all modulares.
- A20.2 If remodel work were to occur at this facility, the replacement of wire glass with tempered glazing may be required. Wire glass may also be replaced at the District's discretion to prevent any issues if glazing is damaged or broken.
Repaint (18) single doors and frames. Replace (2) single exterior doors and frames at gymnasium.
Provide new doors, frames, hardware, kick plates and card readers to improve security. Replace doors, frames and associated hardware at modulares.
- A20.4 Replace roofing per roofing assessment recommendations.
- A20.8 Replace (2) ramps and (2) sets of stairs at modulares.

B - INTERIORS			
B10 – INTERIOR CIRCULATION			
Item		Findings	Comments
B10.1	Construction and Exiting	<ul style="list-style-type: none"> • There are vertical fire doors in the hallway. It is unknown if the fire doors are still operational. • Doors and windows contain wire glass. • This facility is not sprinklered. 	<ul style="list-style-type: none"> • Wire glass is no longer permitted in educational facilities. • Classrooms have exterior doors equipped with panic hardware. • A major remodel or upgrade would require a more thorough building code analysis.
B10.2	Stairs and Handrails	<ul style="list-style-type: none"> • Handrails for stage access (both at stairs and ramp) are not code compliant both in construction and material. Stairs to the stage from the cafeteria do not have handrails. 	<ul style="list-style-type: none"> • The stage is now used for storage.
B10.3	Ramps and Elevators	<ul style="list-style-type: none"> • The ramp to the stage is too steep to meet current code. 	<ul style="list-style-type: none"> • The stage is now used for storage. • The ramp lacks at landing at the bottom portion. • With the exception of the stage, this facility is a single story building. • Unless a remodel or addition is executed at this facility (which would trigger other upgrades), no recommendations are made at this time.
B10.4	Accessibility	<ul style="list-style-type: none"> • The stage is currently not accessible; however, it is now used for storage. • The reception desk in the main office and the library circulation desk do not have an accessible transaction space. 	<ul style="list-style-type: none"> • Unless a remodel or addition is executed at this facility (which would trigger other upgrades), no recommendations are made at this time.
B10.5	Signage	<ul style="list-style-type: none"> • This facility lacks compliant room signage. 	
RECOMMENDATIONS			
B10.1	If remodel work were to occur at this facility, the replacement of wire glass with tempered glazing may be required. Wire glass may also be replaced at the District’s discretion to prevent any issues if glazing is damaged or broken. See Sections A20 and B30.		
B10.2	Remove existing handrails and replace with compliant handrail construction. Add a handrail on each side of stairs from gym to stage.		
B10.3	Remove portions of the ramp and install lift for stage access. Provide compliant landings at top and bottom of ramp.		
B10.5	Install compliant room signage throughout the facility.		

B20 – INTERIOR FINISHES			
Item		Findings	Comments
B20.1	Flooring	<ul style="list-style-type: none"> The majority of the flooring in this facility is asbestos tile. Carpeting in one classroom hallway is in poor condition; carpet has visible bubbles in various locations. See Figure B20.1. Carpeting in the music classroom and computer classroom are in fair condition. Other classroom carpet is in fair condition. Flooring (carpet) in one of the portables needs to be replaced. Egress doors do not have fixed walk-off mats. Kitchen flooring is in poor condition. 	<ul style="list-style-type: none"> Several classrooms have vinyl composition tile (VCT); there are no issues with this flooring. Carpeting in the library is in good condition. Stage has wood flooring.
B20.2	Ceilings	<ul style="list-style-type: none"> Ceiling tiles in the gymnasium are worn and damaged. See Figure B20.2. The kitchen ceiling is in poor condition. 	<ul style="list-style-type: none"> The majority of the ceilings are 12x12 wood fiber tiles. This ceiling type is an older ceiling not commonly used.
B20.3	Ceiling Issues	<ul style="list-style-type: none"> There are several areas of water damaged ceiling tiles in classrooms and hallways throughout the facility (unknown if current or old leaks have caused this). 	
B20.4	Fixed Equipment	<ul style="list-style-type: none"> Glazing in display cases is large and glazing material seems thin. 	<ul style="list-style-type: none"> Gymnasium has (6) backstops. Classrooms are equipped with a combination of marker boards, projection screens, televisions and smart boards (in some classrooms). There are (3) display cases located across from the main office.
B20.5	Walls	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> The majority of interior walls are gypsum board; the vestibule walls are brick.

B20.6	Wall Finishes	<ul style="list-style-type: none"> Lacquer finish on wood paneling is a possible fire hazard. 	<ul style="list-style-type: none"> Classroom walls are painted gypsum board; hallway and gymnasium walls are wood paneling (full height in hallways, 7'-0" high in gymnasium). While dated, the wood is in very good condition. It is the District's desire to update finishes in the hallway. Some classrooms have 3" wood base. Other classrooms and hallways have rubber base (5" and 7" high). Wall padding is located behind the basketball backstops, and is in good condition.
B20.7	Furnishings	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Stage curtain is in good condition. Most classrooms have freestanding bookshelves. Library book shelving is fixed. Window coverings are horizontal mini blinds; coverings are in good condition. Classroom furniture is desk and chairs; these are in good condition.

RECOMMENDATIONS

- B20.1 Remove all asbestos floor tile in hallways, gymnasium, main office, and in (11) classrooms. Abate flooring in kitchen area and replace with slip resistant sheet vinyl flooring and coved base. Remove carpeting in hallway and replace with VCT. Remove all wood and rubber base in this facility and replace with new rubber base. Remove carpeting in music classroom, computer classroom, main office and (2) general classrooms and replace with new carpeting. Provide fixed walk off mats at (5) exterior door locations.
- B20.2 Replace ceiling in gymnasium. Replace kitchen ceiling with epoxy painted gypsum ceiling.
- B20.4 Replace glazing in (3) display cases with tempered glazing.
- B20.6 Remove all wood paneling from all hallways and replace with full height plastic laminate wainscoting.

B30 – INTERIOR COMPONENTS

Item		Findings	Comments
B30.1	Interior Windows	<ul style="list-style-type: none"> Interior windows in the main office contain wire glass. 	<ul style="list-style-type: none"> Wire glass is no longer permitted in educational facilities.
B30.2	Interior Doors and Hardware	<ul style="list-style-type: none"> Interior doors contain wire glass. Gymnasium door hardware needs to be replaced to provide more secure access. Doors should also be replaced. Interior screen door to kitchen hallway swings the wrong way. 	<ul style="list-style-type: none"> Wire glass is no longer permitted in educational facilities. Doors and frames are constructed of wood, and although showing signs of age and wear are in good

			condition. Classroom door hardware has been upgraded.
B30.3	Acoustics	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Gymnasium does not have acoustical wall panels.
B30.4	Casework	<ul style="list-style-type: none"> Classroom and library casework is aged and in good to fair condition. 	<ul style="list-style-type: none"> Casework is inconsistent in its finishes in each classroom.
B30.5	Security	<ul style="list-style-type: none"> Door glazing does not have any covering for security. Gymnasium can be accessed from main entry doors; sight lines are limited from the main office. See Figure B30.5. 	<ul style="list-style-type: none"> Glazing is 11"x11". A window from vestibule into office area could improve security from main entry doors into gym as well as monitoring individuals entering the building.
B30.6	Other	<ul style="list-style-type: none"> This facility lacks a separate gymnasium and cafeteria. Both functions share one space, which can cause conflicts between food service and providing adequate physical education classes. A separate gymnasium would be beneficial to this facility. 	<ul style="list-style-type: none"> This facility is an older school and does not provide adequate building storage.

RECOMMENDATIONS

- B30.1 If remodel work were to occur at this facility, the replacement of wire glass with tempered glazing may be required. Wire glass may also be replaced at the District's discretion to prevent any issues if glazing is damaged or broken.
- B30.2 See B30.1. Remove (2) sets of interior wood doors and frames at gymnasium. Replace with new doors, frames, hardware and kickplates. Remove screen door and replace with new wood door with kick plates. Install so door swings toward path of egress.
- B30.4 Replace casework (countertops, backsplash and cabinets) in (16) classrooms.
- B30.5 Add window coverings or blinds to all glazing in doors.
Remodel office area. Relocate main office/reception area and add a window from vestibule into new reception area for added supervision to front door. Reconfigure remaining office area for health room and accessible toilet, staff mailboxes and (2) offices.
- B30.6 Construct an addition to house a new gymnasium facility, student restrooms, storage and small group space. Remodel existing locker rooms into building storage.

B40 – TOILET FACILITIES

Item		Findings	Comments
B40.1	Walls and Wall Finishes	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Student restroom walls are a combination of ceramic tile and fiberglass panels. Single stalls restrooms have painted gypsum board walls. A life skills toilet room has FRP paneling behind the sink.
B40.2	Floors and Floor Finishes	<ul style="list-style-type: none"> Staff restrooms have asbestos flooring. 	<ul style="list-style-type: none"> Student restroom flooring is ceramic tile; classrooms with toilet facilities have sheet vinyl flooring. The life skills toilet room has VCT flooring.
B40.3	Ceilings	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Ceilings are painted gypsum board or fiberglass panels.

B40.4	Partitions	<ul style="list-style-type: none"> No issues observed 	
B40.5	Fixtures	<ul style="list-style-type: none"> Refer to Plumbing Section 	<ul style="list-style-type: none"> Fixtures appear to be worn, possibly original fixtures to the facility.
B40.6	Accessories	<ul style="list-style-type: none"> No issues observed 	
B40.7	Accessibility	<ul style="list-style-type: none"> Single stall restrooms are not accessible. A life skills toilet room has been added at one classroom, but it does not meet current code requirements for accessibility. The designated accessible restroom does not have grab bars at the toilet. 	<ul style="list-style-type: none"> The staff restroom in the main office is undersized (4'-6"X4'-6"). Unless remodel or addition is planned at this facility (which would trigger other upgrades), no recommendations are made at this time.
B40.8	Other	<ul style="list-style-type: none"> Life skills Classrooms do not have accessible restroom facilities with space for changing. 	

RECOMMENDATIONS

- B40.2 Remove asbestos tile flooring from (2) single stall restrooms and replace with sheet vinyl flooring and coved base.
- B40.5 See Plumbing Section.
- B40.7 Add grab bars to accessible toilet room toilet.
- B40.8 Construct (2) accessible restroom facilities for the Life Skills classrooms.

C - SYSTEMS			
C10 - PLUMBING			
Item		Findings	Comments
C10.1	Water Service	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Water enters building via boiler room; meter at the street.
C10.2	Piping	<ul style="list-style-type: none"> Domestic hot water (DHW) piping is period to the building. See Figure C10.2. 	<ul style="list-style-type: none"> 2 PSI gas. Gas in kitchen.
C10.3	Fixtures	<ul style="list-style-type: none"> All restroom fixtures and drinking fountains are period to the building. See Figure C10.3. There is no grease interceptor in the kitchen. 	<ul style="list-style-type: none"> Four compartment sink, no grease interceptor. Single level drinking fountains. Urinals: floor mounted manual flush valves. Water Closets: wall mount manual flush valve.
C10.4	Storm and Overflow Drains	<ul style="list-style-type: none"> Gutters are in need of cleaning. 	<ul style="list-style-type: none"> Exterior gutters and downspouts.
C10.5	Water Heater	<ul style="list-style-type: none"> Domestic hot water is generated by a hot water heater. 	<ul style="list-style-type: none"> Separate domestic hot water heater (100 gallons 300 MBH Reco USA. 1/12 hp circ pump B+G.).
RECOMMENDATIONS			
C10.2	Repipe domestic hot water piping.		
C10.3	Replace all lavatories, water closets and urinals. Replace all water fountains with bi-level water coolers. Add a grease interceptor to the kitchen sinks and dishwasher.		
C10.4	Flush storm water lines.		
C20 - HVAC			
Item		Findings	Comments
C20.1	Mechanical Equipment	<ul style="list-style-type: none"> All forced air systems are period to the building and functioning, but past their useful lives. See Figure C20.1. Asbestos is present in mechanical equipment. Janitor's closet needs additional exhaust. 	<ul style="list-style-type: none"> Kitchen has its own unit for makeup air. Classrooms are primarily unit ventilators. Teachers' lounge has its own unit, original to the addition. Return is outside the room. Copper ductwork for the locker room exhaust. Model: American standard fan and units. EF-1 American Std. 33GR; serves gym. EF-4 American Std. 360-JO serves classroom exhaust south wing. HV-1 (Gym supply) heating only, American Standard size 2-V-15. Exhaust in classrooms out of coat closet. Ductless split system in the computer room. Fin tube heaters in the offices. Room 5A has electric strip heat, no ventilation.
C20.2	Air Filtration	<ul style="list-style-type: none"> Air filtration is period to the building; however, there were no issues observed. 	

C20.3	Equipment Accessibility	<ul style="list-style-type: none"> Roof access is limited and or difficult. 	
C20.4	Air Distribution and Ventilation	<ul style="list-style-type: none"> Office area lacks ventilation. Equipment has been located in front of thermostat. See Figure C20.4. 	
C20.5	Controls	<ul style="list-style-type: none"> Split systems and hallway heaters are not on the DDC system. 	<ul style="list-style-type: none"> System: Andover DDC Boiler rooms are start/stop.
C20.6	Chillers	<ul style="list-style-type: none"> Not Applicable 	
C20.7	Boiler	<ul style="list-style-type: none"> Boilers are functional, but past their useful life. Asbestos is present. 	<ul style="list-style-type: none"> Boilers: Kewanee type C with fire box return (original to building, 1960). System converted from oil to gas in the 1980's.

RECOMMENDATIONS

- C20.1 Replace all heating and ventilating units and exhaust fans.
- C20.3 Provide permanent ladder access to roof.
- C20.4 Provide heat/ventilation unit for office area. Relocate appliances blocking thermostat.
- C20.5 Connect split systems and hallway heaters to the DDC system.
- C20.7 Provide new high efficiency boilers and variable speed pumps. Replace all necessary piping in the mechanical room.

C30 – FIRE PROTECTION

Item		Findings	Comments
C30.1	Fire Suppression System	<ul style="list-style-type: none"> The kitchen hood lacks fire suppression. 	<ul style="list-style-type: none"> This facility is not sprinklered.
C30.2	Water Service and Backflow Prevention	<ul style="list-style-type: none"> Not Applicable 	
C30.3	System Pressure	<ul style="list-style-type: none"> Not Applicable 	
C30.4	Standpipes	<ul style="list-style-type: none"> Not Applicable 	
C30.5	Fire Pump	<ul style="list-style-type: none"> Not Applicable 	
C30.6	Fire Sprinkler Pipe Condition	<ul style="list-style-type: none"> Not Applicable 	
C30.7	Fire Department Connection	<ul style="list-style-type: none"> Not Applicable 	
C30.8	Fire Sprinkler Zoning	<ul style="list-style-type: none"> Not Applicable 	
C30.9	Flow Monitoring and Alarm	<ul style="list-style-type: none"> Not Applicable 	
C30.10	Hoses and Extinguishers	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Fire extinguishers, but no hoses present.

RECOMMENDATIONS

- C30.1 Provide fire suppression at the kitchen hood.

D - ELECTRICAL			
D10 - ELECTRICAL EQUIPMENT			
Item		Findings	Comments
D10.1	Transformers	<ul style="list-style-type: none"> No issues observed 	
D10.2	Switchgear and Panelboards	<ul style="list-style-type: none"> The majority of breakers in all branch panels have been replaced with tandem breakers. See Figure D10.2.a. The main distribution panel grounding conductor is missing bushing at panel entrance. See Figure D10.2.b. The main distribution panel is missing its panel schedule. Two breakers in Panel A have broken handle ties. Branch circuit wiring at panel A is missing bushing. See Figure D10.2.c. The pre-drilled holes in the electrical panels have been left open; it is a code violation to leave open/removed. Panel schedules appear outdated. Door operator is connected to adjacent emergency lighting circuit. See Figure D10.2d. The neutral bus bar in panel A is overcrowded; multiple large gage conductors installed using multiple terminals. There is no spare capacity remaining in the electrical system. See Figure D10.2e. Cloth cable insulation was observed. Panels observed do not have equipment grounding conductors installed. See Figure D10.2e. Branch circuits observed lack grounding conductors. Conduit runs to boilers are not supported adequately. See Figure D10.2f. 	<ul style="list-style-type: none"> Cloth cable is no longer acceptable per the current National Electric Code (NEC). Cloth cable is outdated and has the potential to lack grounding capabilities. 600A, 120Y/208V electrical service 600A main distribution panel, no main disconnect; 5 feeder disconnects, 1 spare; disconnects are thermal magnetic circuit breakers 200A 3 pole branch panels throughout; located in hallways Two (2) modular classrooms fed via separate arial service, 120/240V, 200A Coast Electric/ITE equipment typical Copper wire used throughout. New service installed with equipment grounding conductors; bonded to panelboard enclosures.
D10.3	Lighting	<ul style="list-style-type: none"> Hallways appear overlit (2 lamp T8 wraps on 12' centers). See Figure D10.3a. Classroom lighting is at end of its useful life. There are numerous cases of broken, cracked, yellowed and sagging lenses. See Figure D10.3b. Incandescent lighting in mechanical and electrical rooms is insufficient. See Figure D10.3c. Computer labs are overlit. See Figure D10.3d. 	<ul style="list-style-type: none"> All classrooms, offices, hallways were retrofitted to T8 lamps. T8 highbay luminaires were replaced with high intensity discharge (HID) lighting in gym/cafeteria. There is evidence of excessive glare on screens in computer labs.
D10.4	Lighting Controls	<ul style="list-style-type: none"> No automated controls are installed. 	<ul style="list-style-type: none"> Classroom lighting is switched in rows. Lighting in gym, hallways and cafeteria is switched via circuit breaker. Lighting controls are highly recommended to meet energy

			codes and conserve energy.
D10.5	Back-up and Emergency Power	<ul style="list-style-type: none"> • Not Applicable 	
D10.6	Egress and Emergency Lighting	<ul style="list-style-type: none"> • None present 	
D10.7	Exit Signage	<ul style="list-style-type: none"> • Existing exit signs do not meet current intensity requirements • Existing exit signs do not have emergency backup batteries 	<ul style="list-style-type: none"> • The exit signage is original to the facility, and has been retrofitted with LED light sources.
D10.8	Sensors	<ul style="list-style-type: none"> • None installed 	<ul style="list-style-type: none"> • This does not meet Oregon State Energy code.

RECOMMENDATIONS

- D10.2 Replace and upsize the building’s electrical system, including all panelboards, main distribution panel and all feeder and branch circuit wiring with an 800A 120Y/208V system to accommodate future growth. Install grounding conductors in all branch circuits. Install bushings or cable clamps where missing to protect conductor insulation. Replace circuit breakers with broken handle ties to prevent equipment damage. Install knockout plugs where needed. Provide dedicated circuit for door operators. Install strut supports for conduit runs serving boilers.
- D10.3 Remove lamps from hallway fixtures to produce more appropriate lighting levels. Replace recessed 2x4 classroom, office and lobby luminaires with 2 lamp, T8 high efficiency volumetric luminaire retrofits or new fixtures. Replace incandescent lighting in mechanical and electrical rooms with T8 utility fluorescent luminaires. Replace computer lab lighting with 70% uplight, 30% downlight, linear fluorescent pendants with dimming capabilities to reduce glare and enhance visual comfort.
- D10.4 Provide switches for gym, cafeteria and hallway lighting circuits; ensure electrical panels remain locked at all times. Install a building lighting control system (Lutron Quantum system or equivalent).
- D10.6 Install retrofit battery packs in existing luminaires as needed along egress paths
- D10.7 Replace all retrofitted and incandescent exit signs with LED fixtures supplied with emergency batteries
- D10.8 Install workstation occupancy sensors in offices and classrooms to reduce plugload energy consumption.

D20 – SAFETY / SECURITY

Item	Findings	Comments	
D20.1	Fire Alarm	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • System: Notifier; replaced in 2007
D20.2	Smoke Detection	<ul style="list-style-type: none"> • No issues observed 	
D20.3	Pull Stations	<ul style="list-style-type: none"> • No issues observed 	
D20.4	Annunciation	<ul style="list-style-type: none"> • No issues observed 	
D20.5	Addressable Zones and Systems	<ul style="list-style-type: none"> • No issues observed 	
D20.6	Monitoring	<ul style="list-style-type: none"> • No issues observed 	
D20.7	Access Control	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • Card readers present.
D20.8	Intrusion	<ul style="list-style-type: none"> • No issues observed 	
D20.9	Video Surveillance	<ul style="list-style-type: none"> • None installed 	

RECOMMENDATIONS

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D30 – TECHNOLOGY COMMUNICATIONS			
Item		Findings	Comments
D30.1	Paging and Intercom – Head End Condition	<ul style="list-style-type: none"> Existing system is well past useful life. Repair parts are unavailable and there is inadequate technical support for this system. 	<ul style="list-style-type: none"> System: Rauland (period to building; upgraded in the 1980s).
D30.2	Master Clock	<ul style="list-style-type: none"> Clock system is past its useful life. 	
D30.3	Infrastructure	<ul style="list-style-type: none"> Unused cable has been abandoned in place, Cables lack labeling. 	
D30.4	Speakers	<ul style="list-style-type: none"> No issues observed 	
D30.5	Coverage	<ul style="list-style-type: none"> No issues observed 	
D30.6	Clock System	<ul style="list-style-type: none"> The system is past its useful life; users have difficulties programming the clock system. 	
D30.7	Clock – Head End	<ul style="list-style-type: none"> The clock system well past useful life. Repair parts are unavailable and there is inadequate technical support for this system. 	<ul style="list-style-type: none"> System: Latham
RECOMMENDATIONS			
D30.1	Replace the intercom and paging system.		
D30.7	Replace the clock system.		

E - GROUNDS			
E10 – SITE CIRCULATION AND PARKING			
Item		Findings	Comments
E10.1	Parking Lots	<ul style="list-style-type: none"> • Parking lot is undersized. Staff and visitor parking are shared. See Figure E10.1. • The paving in parking areas is in fair condition; striping is faded. 	<ul style="list-style-type: none"> • The parking lot consists of (17) parking stalls and (2) accessible stalls. There are an additional (6) stalls near the kitchen as well as (6) parallel parking stalls in the parking lot
E10.2	Site Signage/ Accessories	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • Site sign is wood and dated. • Flag pole exists at building entry.
E10.3	Vehicular Circulation	<ul style="list-style-type: none"> • Site has one point of entry and exit. Vehicular drop-off lane is shared with the parking lot. • Bus loop is separate from staff and visitor parking areas. • There is no dedicated fire lane. 	
E10.4	Curbs and Sidewalks	<ul style="list-style-type: none"> • The sidewalk along building front has cracks, and is in fair condition. 	
E10.5	Accessibility	<ul style="list-style-type: none"> • Classroom doors on east side have curb access. 	<ul style="list-style-type: none"> • Actuators located at front door, adjacent to main office in addition to other egress doors throughout the facility.
E10.6	Bikes and Bike Parking	<ul style="list-style-type: none"> • Location of bike racks appears far from school's main entry. 	<ul style="list-style-type: none"> • There are (25) individual bike racks onsite; none are covered or fenced in.
RECOMMENDATIONS			
E10.1	Construct separate visitor parking lot south of existing lot. Repave and re-stripe existing lot.		
E10.4	Replace sidewalk in front of building entry all the way to the street.		
E10.5	Remove curb/step and construct concrete ramps to exterior doors at classrooms.		
E10.6	Relocate bike parking closer to main entry.		
E20 - SITE COMPONENTS			
Item		Findings	Comments
E20.1	Fields	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • Fields are grass.
E20.2	Landscaping	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • There is minimal landscaping (at building entry). Mature trees line the site.
E20.3	Irrigation	<ul style="list-style-type: none"> • None observed 	<ul style="list-style-type: none"> • It is the District's desire to add irrigation to the fields.
E20.4	Site Buildings	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • Covered play is in good condition.
E20.5	Site Security	<ul style="list-style-type: none"> • No issues observed 	
E20.6	Fencing	<ul style="list-style-type: none"> • Trash receptacles adjacent to kitchen are not fenced in. Receptacles are visible to visitors. 	<ul style="list-style-type: none"> • Combination of chain link and wood site fencing.
E20.7	Playground Equipment	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • Playground equipment is in excellent condition.
E20.8	Play Surfaces	<ul style="list-style-type: none"> • Court striping is faded. 	<ul style="list-style-type: none"> • Surfaces are in good condition.
E20.9	Site Lighting	<ul style="list-style-type: none"> • Site and parking lot lighting is inadequate. 	<ul style="list-style-type: none"> • Incandescent and compact fluorescent recessed soffit lighting was observed.

			<ul style="list-style-type: none"> • Site lighting: high intensity discharge (HID) building mounted lighting.
E20.10	Grading and Drainage	<ul style="list-style-type: none"> • It has been noted that there are drainage issues near portables. 	<ul style="list-style-type: none"> • Fields were dry at the time of the site visit.
RECOMMENDATIONS			
E20.3	Add irrigation system to fields		
E20.6	Construct chain link trash enclosure with gate adjacent to kitchen.		
E20.8	Repaint all court striping on hard surface play areas.		
E20.9	Replace and extend site and parking lot lighting (per IESNA recommendations). Replace existing compact fluorescent and incandescent site lighting with LED luminaires.		
E20.10	Regrade fields adjacent to portables to prevent water issues underneath portables and ponding in fields.		

IMAGES

Figure A10.2 - Crack in masonry veneer



Figure A10.3 – Crack in Room 14 floor finish



Figure A20.2 – Typical portable door



Figure A20.8 – Ramps at portable



Figure B20.1 – Hallway carpeting



Figure B20.2 – Gymnasium ceiling



Figure B30.5 – Gymnasium security



Figure C10.2 – Hot water piping



Figure C10.3 – Outdated plumbing fixture



Figure C20.1 – Mechanical equipment



Figure C20.4 – Thermostat access blocked



Figure C20.7 – Boilers



Figure D10.2.a – Lack of spare capacity



Figure D10.2.b – Conductor subject to damage



Figure D10.2.c – Wiring missing cable clamp



Figure D10.2.d – Door connected to lighting circuit



Figure D10.2.e – Overcrowded busbar



Figure D10.2.f – Conduits need additional support



Figure D10.3.a – Hallway lighting



Figure D10.3.b – Typical classroom lighting

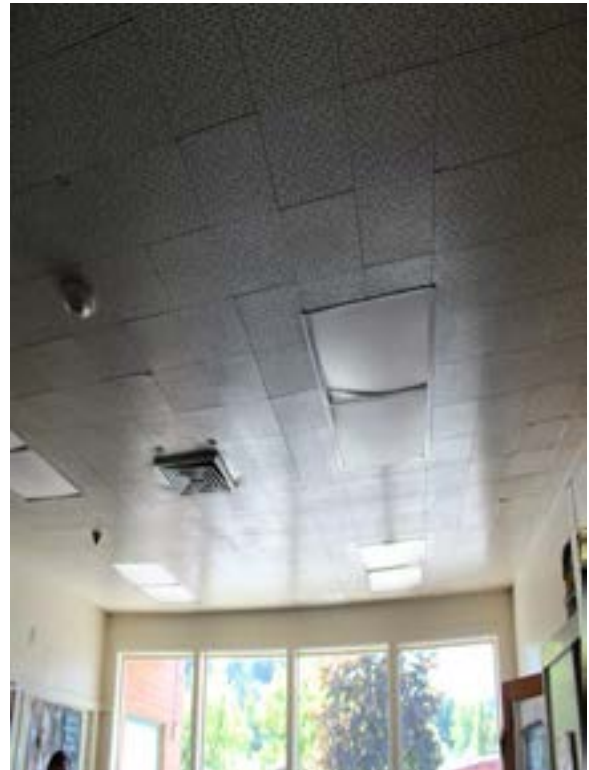


Figure D10.3.c – Mechanical room lighting



Figure D10.3.d – Computer lab lighting



Figure E10.1 – Parking lot



Jefferson Elementary	Priority Level				Priority Level I	Priority Level II	Priority Level III	Priority Level IV
	(Refer to Legend)							
	I	II	III	IV				
ITEMS								
A - STRUCTURE/SHELL								
A10 - STRUCTURE/SUBSTRUCTURE								
A10.2	1	Conduct investigation for settlement and underpin effected foundations	X			\$ 55,343		
A10.3	1	Complete seismic upgrades per previous reports	X			\$ 1,000,047		
A20 - EXTERIOR COMPONENTS								
A20.1	1	Add skirting to all modulares	X			\$ 3,795		
A20.2	1	Replace wire glazing in exterior doors		X			\$ 1,095	
	2	Repaint single doors and frames		X			\$ 3,557	
	3	Replace exterior gym doors and add card readers	X			\$ 28,778		
	4	Replace doors, frames and hardware at modulares	X			\$ 9,582		
A20.4	1	Replace roofing per roofing assessment	X			\$ 698,000		
A20.8	1	Replace (2) sets of stairs and ramps at portables	X			\$ 20,714		
TOTAL - STRUCTURE/SHELL					\$ 28,778	\$ 1,787,481	\$ 4,652	\$ -
B - INTERIORS								
B10 - INTERIOR CIRCULATION								
B10.2	1	Replace handrails at (2) stair locations			X			\$ 1,344
	2	Add handrails on side of stairs in gymnasium			X			\$ 664
B10.3	1	Remove portions of existing ramp and install lift		X			\$ 40,413	
B10.5	1	Add compliant room signage throughout facility	X			\$ 34,922		
B20 - INTERIOR FINISHES								
B20.1	1	Abate flooring in classrooms, hallways, main office and gymnasium and replace with VCT; replace base	X			\$ 241,069		
	2	Abate kitchen floor and replace with slip resistant sheet vinyl flooring and covered base	X			\$ 14,650		
	3	Replace carpeting in the main office and (4) classrooms		X			\$ 28,225	
	4	Provide fixed walk off mats at (5) pairs of exit doors	X			\$ 7,364		
B20.2	1	Replace ceiling in gymnasium	X			\$ 72,699		
	2	Replace kitchen ceiling		X			\$ 42,118	
B20.4	1	Replace glazing in display cases with tempered glazing	X			\$ 3,752		
B20.6	1	Remove wood paneling and replace with full height plastic laminate wainscot		X			\$ 132,291	
B30 - INTERIOR COMPONENTS								
B30.1	1	Replace all interior door wire glazing		X			\$ 1,502	
B30.2	1	Replace gymnasium doors and hardware	X			\$ 17,710		
	2	Replace screen door at kitchen and reverse door swing	X			\$ 1,976		
B30.4	1	Replace casework in all classrooms			X			\$ 286,554
B30.5	1	Add blinds or shades to all door lites	X			\$ 1,622		
	2	Remodel office area/provide visibility into	X			\$ 220,406		
B30.6	1	Construct gymnasium and toilet room addition		X			\$ 1,669,800	
	2	Remodel existing locker rooms into storage		X				\$ 79,053
B40 - TOILET FACILITIES								
B40.2	1	Abate flooring in single staff restrooms and replace with sheet vinyl flooring		X			\$ 1,429	
B40.7	1	Add grab bars to accessible toilet rooms		X			\$ 237	
B40.8	1	Construct (2) accessible toilet rooms for Life Skills	X			\$ 58,506		
TOTAL - INTERIORS					\$ 238,654	\$ 436,022	\$ 1,916,015	\$ 367,615
C - SYSTEMS								
C10 - PLUMBING								
C10.2	1	Repipe domestic hot water piping	X			\$ 368,750		
C10.3	1	Replace all lavatories, water closets and urinals			X			\$ 156,250
	2	Replace all water fountains with bi-level water coolers			X			\$ 28,750
	3	Add grease interceptor to the kitchen sinks and dishwasher	X			\$ 28,750		

Jefferson Elementary			Priority Level				Priority Level I	Priority Level II	Priority Level III	Priority Level IV
			(Refer to Legend)	I	II	III				
ITEMS										
C10.4	1	Flush storm water lines	X				\$ 5,000			
C20 - HVAC										
C20.1	1	Replace all heating and ventilating units and exhaust fans	X				\$ 528,750			
C20.3	1	Provide permanent ladder access to the roof	X				\$ 6,250			
C20.4	1	Provide heating/ventilating unit for office area spaces	X				\$ 20,000			
	2	Remove appliance blocking access to thermostat	X				\$ 2,500			
C20.5		Connect split systems and hallway heaters to the DDC system				X			\$ 12,500	
C20.7	1	Provide new high efficiency boilers and variable speed pumps. Replace all necessary piping in the mechanical room	X				\$ 482,500			
C30 - FIRE PROTECTION										
C30.1	1	Provide fire suppression in kitchen hood	X				\$ 12,500			
TOTAL - SYSTEMS							\$ 38,750	\$ 1,416,250	\$ -	\$ 197,500
D - ELECTRICAL										
D10 - ELECTRICAL EQUIPMENT										
D10.2	1	Replace electrical system	X				\$ 80,000			
	2	Install bushings or cable clamps where missing	X				\$ 1,500			
	3	Replace circuit breakers with broken handle ties	X				\$ 2,500			
	4	Install knockout plugs where missing	X				\$ 750			
	5	Provide dedicated circuit fro door operators	X				\$ 5,000			
	6	Install strut support for boiler conduit	X				\$ 750			
D10.3	1	Remove excess lamps from hallway fixtures			X			\$ 15,000		
	2	Replace existing, aging classroom, office and lobby luminaires			X			\$ 50,000		
	3	Replace insufficient electrical and mechanical room lighting	X				\$ 25,000			
	4	Replace computer lab lighting			X			\$ 25,000		
D10.4	1	Install retrofit lighting controls			X			\$ 50,000		
	2	Provide switched for gym, cafeteria and hallway lighting where not provided	X				\$ 15,000			
D10.6	1	Install egress lighting and retrofit existing luminaires with battery packs	X				\$ 50,000			
D10.7	1	Replace all exit signs with LED meeting intensity criteria	X				\$ 25,000			
D10.8	1	Install workstation occupancy sensors			X			\$ 50,000		
D30 - TECHNOLOGY COMMUNICATIONS										
D30.7	1	Replace clock system	X				\$ 25,000			
TOTAL - ELECTRICAL							\$ 79,000	\$ 151,500	\$ 190,000	\$ -
E - GROUNDS										
E10 - SITE CIRCULATION AND PARKING										
E10.1	1	Construct visitor's parking lot			X			\$ 56,335		
	2	Repave and restripe existing parking lot	X				\$ 29,572			
E10.4	1	Replace sidewalk			X			\$ 8,538		
E10.5	1	Remove curb at exterior classroom doors and construct ramp access			X			\$ 1,027		
					X			\$ 1,581		
E10.6	1	Relocate bike parking			X					
E20 - SITE COMPONENTS										
E20.3	1	Add irrigation to field areas			X			\$ 364,756		
E20.6	1	Construct chain link trash enclosure			X			\$ 3,874		
E20.8	1	Resurface and restripe both hard surface play areas			X			\$ 105,469		
E20.9	1	Replace and extend site and parking area lighting			X			\$ 85,000		
	2	Replace existing site lighting with LED fixtures			X			\$ 125,000		
E20.10	1	Regrade fields adjacent to portables	X				\$ 5,692			
TOTAL - GROUNDS							\$ -	\$ 35,264	\$ 751,580	\$ -

Jefferson Elementary	Priority Level				Priority Level I	Priority Level II	Priority Level III	Priority Level IV
	(Refer to Legend)							
ITEMS	I	II	III	IV				
TOTALS BY CATEGORY								
						STRUCTURE/SHELL	\$ 1,820,911	
						INTERIORS	\$ 2,958,306	
						SYSTEMS	\$ 1,652,500	
						ELECTRICAL	\$ 420,500	
						GROUNDNS	\$ 786,844	
						FACILITY TOTAL	\$ 7,639,061	
TOTALS BY PRIORITY								
						LEVEL 1	\$ 385,182	
						LEVEL 2	\$ 3,826,517	
						LEVEL 3	\$ 2,862,247	
						LEVEL 4	\$ 565,115	
						PRIORITY TOTAL	\$ 7,639,061	
LEGEND:								

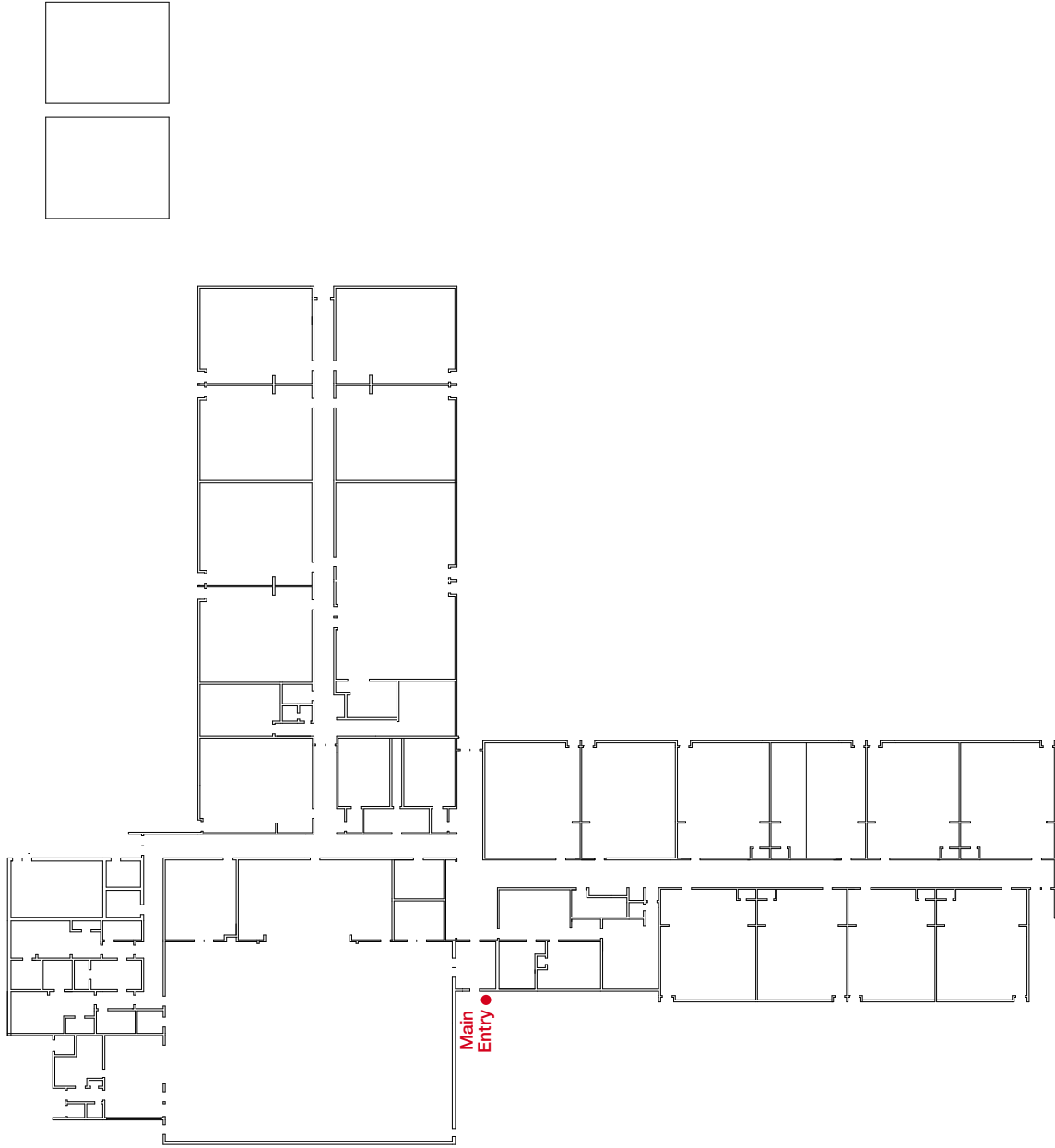
PRIORITY LEVELS

Level I: Highest Priority; Issues that affect the life safety concerns of the occupant, related to notification of occupants to emergency situations and the ability to safely evacuate the facility; subcomponents of Level I include safety concerns such as electrical loads, hazardous materials that might be affected with remodel or modifications, lack of fall protection. Level I items need to be addressed within a 5-year plan.

Level II: Moderate Priority; Issues that are related to the integrity and adequacy of systems within the building to sufficiently withstand a major event and still function; also related are the age of systems or building components that keep day to day operations running without constant repair. Issues may include mechanical, electrical and plumbing systems, fire suppression, lighting and security, as well as flooring, windows doors and other architectural components. Level II Items may be part of a 5-year plan.

Level III: Lower Priority; Issues that may over time affect the day to day maintenance of the building or long term use of the facility. Issues also include access and clearances at equipment and fixtures, access for individuals with disabilities and both indoor and exterior environment quality. Level III Items would be considered in a 5 to 10 year plan.

Level IV: Issues that are related to the aesthetics of both the building's interior and exterior as well as integrity and adequacy of building systems that don't pose any issues or nearing the end of their remaining lifecycles. These may include items such as cabinetry original to the building that have signs of wear or dated finishes but do not have any damage or deterioration. Level IV items would be considered long-term plans (10 years or more).



SCHOOL BUILDING
SCALE: NOT TO SCALE

Jefferson Elementary School | Corvallis School District

OVERALL FLOOR PLAN



Lincoln Elementary School

110 SE Alexander Avenue
Corvallis, Oregon 97333



Built: 1949; additions in 1950, 1953;
reconstructed in 1968; additions
in 1978, 1981; modulars added 1988,
2006

Enrollment: 366 students (2013)

Floor Area: 39,601 SF

Field Review Team:

Earl Carson	Dull Olson Weekes – IBI Group Architects
Michael Arellano	KPFF Consulting Engineers
Roger Arnold	Glumac
Michael Henning	Glumac
Alex Ridley	Glumac
Dana Troy	Glumac

Report Date: December 2013

Date of Field Visits: June 3-7, 2012
Neighborhood: Residential/Commercial

Weather: Sunny, 70's-80's

Site Contacts: Lisa Harlan
Kim Patten, CSD 509J

General Building Description:

Lincoln Elementary School is a single story structure located at the corner of a busy intersection, creating congestion for bus loading/unloading at the front of the building and poor access to the parking lot for parent drop-off. The parking lot is too small for its heavy use from this facility and the adjacent Benton County Health Clinic and is in an undesirable location at the back of the building, creating a security problem and poor access from the ADA parking stalls.

Lincoln was constructed in 1948 and was added on in 1949 and 1953. The additions were a gymnasium and classroom wing respectively. The school is a single-story structure with wood framed roofs and masonry bearing walls. There appears to be some concrete work which is listed in previous reports to be part of the construction

of the additions. Covered walkways wrap around the perimeter of the C-shaped foot print and are wood framed with steel posts. At the gymnasium sloped glulam bent frames span the space and masonry walls provide the exterior enclosure. Wood trusses support the roof over the stage area. In 1978 a stand-alone covered play area was built with wood trusses and L-shaped corner walls sheathed with plywood.

The main building consists of an L-shaped classroom wing, main office, kitchen and a shared use gymnasium/cafeteria with a stage. This building portion consists of concrete masonry and brick walls with low-sloped wood roof framing that is prone to roof leaks and dry rot. In addition, many of the spaces have not been upgraded to the latest egress, accessibility or fire-life-safety code requirements.

The 1978 addition was originally designed as an open plan, but has subsequently been sub-divided and remodeled several times. This has resulted circuitous series of hallways that lack flow and limits site lines for monitoring students and security. In addition, the south wing of the school has no internal hallway, which inhibits movements for students on days of inclement weather and results in far more exterior doors that need to be locked and monitored than what is typical in elementary schools. The cafeteria and gymnasium are one shared space, which can result in challenges or conflicts in scheduling food service with physical education classes.

Overall this facility is in poor condition. This facility is a prime candidate for replacement. Refer to the Facility Replacement Costs section of the report for a detailed breakdown of facility replacement costs; recommendations and costs listed in this detailed report will be to replace or improve existing building conditions.

A full building review of architectural, structural, mechanical, electrical and plumbing components was conducted.

A - STRUCTURE / SHELL			
A10 – STRUCTURE / SUBSTRUCTURE			
Item		Findings	Comments
A10.1	Foundations	<ul style="list-style-type: none"> No issues observed 	
A10.2	Subgrade Enclosures	<ul style="list-style-type: none"> Some cracking in the flooring was observed locally in the hallway, mainly at the transition between the original construction and the classroom addition. 	<ul style="list-style-type: none"> It is thought that settlement is due to poor compaction of soil below slab on grade and insufficient/absence of doweling to adjacent slabs. There does not appear to be signs of settlement of the foundations.
A10.3	Structural Systems	<ul style="list-style-type: none"> A dry-rotted beam and split roof joist was observed in the covered walkway at the south end of the classroom wing. See Figures A10.3 a and b. In the boiler room, a large crack in the curved masonry wall was found, along with an infill masonry wall area that appeared to be un-grouted. See Figures A10.3.c and d. There are recommendations available for seismic improvements to the building structure, outlined in the Degenkolb Seismic Evaluation Phase 1 report, dated May 2000. There are recommendations available for seismic improvements to non-structural systems, outlined in the Degenkolb Seismic Evaluation Phase 1 report, dated May 2000. 	<ul style="list-style-type: none"> In 2005 the school received a new roof with seismic upgrades including strengthening the connections of the roof diaphragm to new shear walls and adding plywood sheathing to previously deficient areas. New shear walls were performed in the way of shotcrete walls at specific locations.
RECOMMENDATIONS			
A10.2	Remove the existing flooring locally and grind the existing concrete to provide a smooth transition. Refer to Section B20 for findings and recommendations for flooring.		
A10.3	Replace the dry-rotted beam and joist at the south end of the classroom wing. Seal or epoxy inject crack in curved masonry wall in the boiler room. Investigate the extent, or lack of, grouting and dowels in the infill masonry wall in the boiler room and replace infill wall with a reinforced and grouted wall. Prioritize and perform the remaining seismic improvements to structural systems as outlined in the Degenkolb report. Perform the remaining seismic improvements to non-structural components as outlined in the Degenkolb report.		
A20 - EXTERIOR COMPONENTS			
Item		Findings	Comments
A20.1	Exterior Walls	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> The main building is painted CMU over a brick base; building additions are masonry with a painted stucco finish.

A20.2	Doors and Hardware	<ul style="list-style-type: none"> • In general, doors throughout this facility are in poor condition. • Many egress doors contain wire glazing. • Hardware needs to be upgraded on all doors, including modular buildings. 	<ul style="list-style-type: none"> • Many of the doors in the main portion of the building are original painted wood doors and frames with transoms; however many of the doors have been changed out to HM doors with newer hardware. • Doors in subsequent additions are hollow metal doors and frames, which are generally in good condition. • Wire glass is no longer permitted in educational facilities.
A20.3	Windows and Skylights	<ul style="list-style-type: none"> • Window systems are showing their age. See Figure A20.3. 	<ul style="list-style-type: none"> • Windows on the main building consist of steel framed single-glazed windows with glass block in some locations. • Windows in the addition are painted frames with single glazed windows and asbestos panels above and below windows.
A20.4	Roof	<ul style="list-style-type: none"> • A separate roofing assessment is located in the appendix of this report. 	<ul style="list-style-type: none"> • Roofing is a single ply system, 7 years in age.
A20.5	Canopies and Covered Walks	<ul style="list-style-type: none"> • Exposed wood framed canopies and covered walks are in poor condition, with paint peeling and visible dry rotting in many locations. See Figure A20.5. 	
A20.6	Gutters and Downspouts	<ul style="list-style-type: none"> • Gutters need to be cleaned. See Section C10.4. 	<ul style="list-style-type: none"> • Gutters and downspouts are in good condition.
A20.7	Trim and Overhangs	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • The main building has a metal panel mansard with painted wood soffit at front of building. • The addition has a metal panel mansard with painted stucco soffit.

RECOMMENDATIONS

- A20.2 If remodel work were proposed at this facility, the replacement of all wire glass with tempered glazing may be required. Wire glass may also be replaced at the district's discretion to prevent any issues if glazing is damaged or broken.
 Replace (4) existing wood and hollow metal entrance doors, frames and hardware (including entrance with wire glazing) with new storefront entrance systems. Replace (6) existing doors in wood frames at main building with new HM doors and frames. Replace (8) hollow metal doors and hardware in existing frames at the modular classrooms.
- A20.3 Replace all existing windows with new aluminum storefront system and thermal glazing.
- A20.4 Replace roofing per roofing assessment recommendations.
- A20.5 Replace any dry rotting wood and cover with prefinished metal fascia and soffits.

B - INTERIORS			
B10 – INTERIOR CIRCULATION			
Item		Findings	Comments
B10.1	Construction and Exiting	<ul style="list-style-type: none"> This facility is not sprinklered. Facility contains wire glass. 	<ul style="list-style-type: none"> A major remodel or addition would require a more thorough building code analysis. Wire glass is no longer permitted in educational facilities.
B10.2	Stairs and Handrails	<ul style="list-style-type: none"> Stairs and handrails to stage do not meet current codes. 	
B10.3	Ramps and Elevators	<ul style="list-style-type: none"> There is no ADA access to the stage. 	
B10.4	Accessibility	<ul style="list-style-type: none"> No handicap door actuators at any of the doors along paths of egress. There is a raised floor between two classrooms in 1978 addition that is not ADA accessible. 	<ul style="list-style-type: none"> Actuators need to be located at front entrance doors, at play area and egress doors that lead to portables.
B10.5	Signage	<ul style="list-style-type: none"> Facility lacks compliant room signage. 	
RECOMMENDATIONS			
B10.1	If remodel work were proposed at this facility, the replacement of all wire glass with tempered glazing may be required. Wire glass may also be replaced at the district’s discretion to prevent any issues if glazing is damaged or broken. See Sections A20 and B30.		
B10.2	Provide a lift and a new compliant stair on the west side of the stage.		
B10.3	See Section B10.2.		
B10.4	Provide ADA door openers at (3) doors; doors at front entrance, play area and out to portable classroom buildings.		
B10.5	Provide compliant signage throughout this facility.		
B20 – INTERIOR FINISHES			
Item		Findings	Comments
B20.1	Flooring	<ul style="list-style-type: none"> VCT flooring is in poor condition in building addition, with large cracks in one of the hallways. See Figure B20.1.a. Carpet showing some wear and tear in media center, and some bubbling in the classrooms of the 1978 addition. See Figures B20.1.b and c. Loose walk-off mats at hallway exit doors are a tripping hazard. 	
B20.2	Ceilings	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> The main building ceilings are 12x12 wood fiber ceiling tile (painted). The ceiling in the subsequent additions is 2/x4 lay-in ceiling tile. The 12x12 ceiling tile is an older type not commonly used in current buildings.

B20.3	Ceiling Issues	<ul style="list-style-type: none"> No issues observed 	
B20.4	Fixed Equipment	<ul style="list-style-type: none"> No issues observed 	
B20.5	Walls	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Walls are painted gypsum board.
B20.6	Wall Finishes	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> The wainscot is dated, but generally in good condition.
B20.7	Furnishings	<ul style="list-style-type: none"> No issues observed 	

RECOMMENDATIONS

B20.1 Patch and repair cracks in existing concrete slab in hallway between 1949 and 1978 additions. Provide new VCT flooring in halls and classrooms in 1978 addition. Provide fixed walk off mats at all egress doors. Provide new carpet in media center and 1978 addition classrooms.

B30 – INTERIOR COMPONENTS

Item		Findings	Comments
B30.1	Interior Windows	<ul style="list-style-type: none"> Some windows contain wire glass. 	<ul style="list-style-type: none"> Windows are wood framed. Wire glass is no longer permitted in educational facilities.
B30.2	Interior Doors and Hardware	<ul style="list-style-type: none"> Some doors contain wire glass. Classroom doors and cross-corridor doors showing age and hardware in poor shape. 	<ul style="list-style-type: none"> Wire glass is no longer permitted in educational facilities.
B30.3	Acoustics	<ul style="list-style-type: none"> No issues observed 	
B30.4	Casework	<ul style="list-style-type: none"> The sinks and casework is in poor condition in most classrooms. Classrooms lack teacher cabinets and tall storage cabinets. 	
B30.5	Security	<ul style="list-style-type: none"> The hall to the east classroom wing is circuitous and difficult to monitor. The lack of an interior hallway in the south classroom wing means rooms must be accessed from exterior through a number of doors. 	
B30.6	Other	<ul style="list-style-type: none"> Office is broken into two separate areas, requiring one to walk out in the hall and enter again. This facility lacks a separate gymnasium and cafeteria. Both functions share one space, which can cause conflicts between food service and providing adequate physical education classes. A separate gymnasium would be beneficial to this facility. 	<ul style="list-style-type: none"> This facility is an older school and does not provide adequate building storage.

RECOMMENDATIONS

B30.1 If remodel work were proposed at this facility, the replacement of all wire glass with tempered glazing may be required. Wire glass may also be replaced at the district's discretion to prevent any issues if glazing is damaged or broken.

B30.2 Replace (7) classroom and hall doors with new wood doors and hardware

B30.4	Replace cabinets, countertops and backsplash in all classrooms; provide ADA compliant sinks and drinking fountains. Add (1) tall cabinet and (1) teacher cabinet to each classroom.
B30.5	A remodel and addition to the south classroom wing would allow for an interior hallway in the south wing and for better circulation and security.
B30.6	Remodel the main office to consolidate the office and have a better connection to the front to the building. This would provide an interior hall to the south wing and improve the line of site for monitoring students and better building security. Construct an addition to house a new gymnasium facility, student restrooms, storage and small group space.

B40 – TOILET FACILITIES

Item		Findings	Comments
B40.1	Walls and Wall Finishes	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Walls are FRP or painted gypsum board wall.
B40.2	Floors and Floor Finishes	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Flooring is a miss-match of ceramic tile, sheet vinyl and VCT flooring.
B40.3	Ceilings	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Ceilings are painted gypsum board.
B40.4	Partitions	<ul style="list-style-type: none"> Many of the older toilet rooms do not have an ADA stall. 	<ul style="list-style-type: none"> Partitions are a combination of metal and FRP-faced partitions.
B40.5	Fixtures	<ul style="list-style-type: none"> Refer to Plumbing Section. 	<ul style="list-style-type: none"> Many of the toilet fixtures and drinking fountains are older, non-code compliant fixtures.
B40.6	Accessories	<ul style="list-style-type: none"> No issues observed 	
B40.7	Accessibility	<ul style="list-style-type: none"> Half of the toilet rooms are not ADA compliant and would require expansions to provide the space to bring them into code compliance. 	

RECOMMENDATIONS

B40.7	Remodel/enlarge (4) student toilet rooms. New toilet rooms would include new ceramic tile floors, ceramic tile wainscot, three new sinks and toilet fixtures with metal partitions with an ADA toilet stall in each.
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C - SYSTEMS			
C10 - PLUMBING			
Item		Findings	Comments
C10.1	Water Service	<ul style="list-style-type: none"> No issues observed. 	<ul style="list-style-type: none"> Domestic water in is in the boiler room; only one is used.
C10.2	Piping	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> A plumbing vent was modified because it was drawing in fumes to the MZ unit ASU-2. After modification, there have been no more complaints. Natural gas (at 2 PSI) Separate gas entrance for the kitchen; 275 CFH @ 3 PSI.
C10.3	Fixtures	<ul style="list-style-type: none"> All restroom fixtures and drinking fountains are period to the building. There is no grease interceptor in the kitchen. 	<ul style="list-style-type: none"> Single level drinking fountains. Floor mounted urinals and water closets present with manual flush valves. Kitchen hood has no fire suppression; gas range and oven. Kitchen: 3-compartment sink.
C10.4	Storm and Overflow Drains	<ul style="list-style-type: none"> Several roof overflow drains are clogged. 	<ul style="list-style-type: none"> Sump pump for the storm drains is in the boiler room.
C10.5	Water Heater	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Model: Bradford white: 125 MBH; 60 gallons; EF60T125E3N2; condensing. Model: Bradford White: 4.5 kW; 50 gallons; circulating pump. There is a 3rd hot water heater in the E-Wing.
RECOMMENDATIONS			
C10.3	Replace all lavatories, water closets and urinals. Replace all water fountains with bi-level water coolers.		
C10.4	Flush storm water lines.		

C20 - HVAC			
Item		Findings	Comments
C20.1	Mechanical Equipment	<ul style="list-style-type: none"> • Overall, most equipment is period to the building and functioning, but is past its useful life. • All remodels have been done in piecemeal fashion and are either not adequate or functioning properly. • There is not enough heating for the gymnasium space. 	<ul style="list-style-type: none"> • First two classrooms have their own packaged units on the roof because of road noise. Replaced by the department of transportation (1989); ductwork is all exterior and internally lined; 654ANX036; 3 tons; R22. • MAU-1 in boiler room serves gym and a few classrooms; heating/ventilation only; airflow is unknown; no relief; dampers to mix air. • HW Unit ventilator in custodian storage. • Trane Climate Changer multizone, size 21; SN U91379, cooling was never connected; supply fan and return fan; HW coils; 7 zones. • (3) Heating and ventilation units are located above the ceiling in corridor; 3-way valves, 2 fans, one on each end. • Exhaust fans in kitchen and storage. • RTU servers two classrooms; booster coils in CR's Pace A-15F; ASU-2; Constant volume • Some classrooms do not have ventilation at all. • EF-16; GB121 • EF for the restrooms. • Indoor clinic unit located above by the gym. • HW unit heater in the janitor's room. • Split system serves old clinic. • Mr. Slim CUs 2 tons. RU24's serves computer lab.
C20.2	Air Filtration	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • Air filtration is period to the equipment.
C20.3	Equipment Accessibility	<ul style="list-style-type: none"> • No issues observed. 	<ul style="list-style-type: none"> • Access is through a roof hatch.
C20.4	Air Distribution and Ventilation	<ul style="list-style-type: none"> • No issues observed 	
C20.5	Controls	<ul style="list-style-type: none"> • No issues observed. 	<ul style="list-style-type: none"> • System: Andover DDC
C20.6	Chillers	<ul style="list-style-type: none"> • Not Applicable 	
C20.7	Boiler	<ul style="list-style-type: none"> • No issues observed. 	<ul style="list-style-type: none"> • Boiler room has access off of the street. Model: Lochinvar (total of 2); 2005, 2000 MBH input, 1700 output, PBN 2000. • Electric kiln in located in the boiler room, but it is not used. • MAU-1 is in the boiler room.

RECOMMENDATIONS			
C20.1 Replace all HVAC equipment with the exception of the boilers. Provide full design of system with district direction.			
C30 – FIRE PROTECTION			
Item		Findings	Comments
C30.1	Fire Suppression System	<ul style="list-style-type: none"> There is no fire suppression in the kitchen hood. 	<ul style="list-style-type: none"> This facility is not sprinklered.
C30.2	Water Service and Backflow Prevention	<ul style="list-style-type: none"> Not Applicable 	
C30.3	System Pressure	<ul style="list-style-type: none"> Not Applicable 	
C30.4	Standpipes	<ul style="list-style-type: none"> Not Applicable 	
C30.5	Fire Pump	<ul style="list-style-type: none"> Not Applicable 	
C30.6	Fire Sprinkler Pipe Condition	<ul style="list-style-type: none"> Not Applicable 	
C30.7	Fire Department Connection	<ul style="list-style-type: none"> Not Applicable 	
C30.8	Fire Sprinkler Zoning	<ul style="list-style-type: none"> Not Applicable 	
C30.9	Flow Monitoring and Alarm	<ul style="list-style-type: none"> Not Applicable 	
C30.10	Hoses and Extinguishers	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Fire extinguishers
RECOMMENDATIONS			
C30.1 Provide fire suppression in the kitchen hood.			

D - ELECTRICAL			
D10 - ELECTRICAL EQUIPMENT			
Item		Findings	Comments
D10.1	Transformers	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> All are energy efficient dry type distribution. 120Y/208V – 120/240V single phase transformer feeding mechanical loads.
D10.2	Switchgear and Panelboards	<ul style="list-style-type: none"> Bolted pressure switches require annual maintenance to function reliably. Switchboard disconnect and bus ratings are much too large for building load; utility transformer only capable of supplying 400A. Branch panels in south wing appear to be period of building; installed without equipment grounding conductors and bus bars. Electrical panel labels appear out of date. Abandoned and broken feeder was observed behind the modular classrooms; exposed conductors visible. See Figure D10.2. 	<ul style="list-style-type: none"> Main Distribution panel, service entrance and branch panels replaced 2005; 150 kVA utility pad mount transformer on north grounds. Square D 1200A, 120Y208V switchboard; bolted pressure main disconnect with ground fault sensors installed; 25kAIC rating. Mix of square D and Cutler Hammer electrical equipment. Plenty of spare capacity in panels. Three (3) modular classrooms supplied via separate service entrance on east side of site; each supplied via 200A independent 120/240V feeder. Tennis court receptacles and lights supplied via separate service entrance on east site.
D10.3	Lighting	<ul style="list-style-type: none"> GE retrofit kits seen to be failing in may locations; there are registered complaints of flickering, dim operation, slow or delayed start etc. See Figure D10.3a. T12 under- cabinet lighting is typical throughout facility. See Figure D10.3.b. Mechanical and electrical rooms are served by incandescent utility luminaires; light levels are below safe levels. See Figure D10.3c. Computer labs are illuminated by T8 wrap pendant fixtures; light and glare levels appear high. See Figure D10.3d. 	<ul style="list-style-type: none"> T12 lamps are dated. Majority of luminaires have been retrofitted with T8 lamps; mix of original and new luminaires. Classrooms lighting has been retrofitted with district standard GE volumetric T8 kit.
D10.4	Lighting Controls	<ul style="list-style-type: none"> No automated controls are installed. 	<ul style="list-style-type: none"> Classroom lighting is switched in groups. Hallway, gym, cafeteria and lobby lighting are controlled via circuit breaker. T8 strips replaced high intensity discharge (HID) lighting in the gym/cafeteria. Lighting controls are highly recommended to meet current energy code and conserve energy.
D10.5	Back-up and Emergency	<ul style="list-style-type: none"> Not Applicable 	

	Power		
D10.6	Egress and Emergency Lighting	<ul style="list-style-type: none"> No egress lighting installed. 	
D10.7	Exit Signage	<ul style="list-style-type: none"> Exit signs do not meet intensity requirements. See Figure D10.7. 	<ul style="list-style-type: none"> There is a mix of retrofitted incandescent and compact fluorescent (CFL) exit signs, luminaires period to facility.
D10.8	Sensors	<ul style="list-style-type: none"> There are no sensors installed. 	<ul style="list-style-type: none"> Currently does not meet Oregon State Energy Codes.

RECOMMENDATIONS

- D10.2 Replace bolted pressure main disconnect with 800A molded case circuit breaker. Replace branch panels in south wing if not already updated. Trace electrical system; produce and install new up to date panel schedules. Verify abandoned and broken feeder conductors are not energized; remove unused conduit and conductors.
- D10.3 Replace all malfunctioning GE retrofit ballasts; replace with NEMA premium ballasts: Lutron EcoSystem or equivalent. Replace all remaining T12 undercabinet lighting with LED or T8 luminaires. Replace existing incandescent mechanical and electrical room lighting with T8 utility fluorescent luminaires. Replace computer lab lighting with 70% uplight, 30% downlight direct/indirect pendant fixtures with dimming capability.
- D01.4 Provide light switches for gym, cafeteria, hallway and lobby lighting if not already provided. Install a building lighting control system (Lutron Quantum system or equivalent).
- D10.6 Install retrofit battery packs in existing luminaires along egress paths.
- D10.7 Replace all CFL and retrofitted LED exit signs with LED luminaires supplied with emergency batteries.
- D10.8 Install workstation occupancy sensors in offices and classrooms to reduce plugload energy consumption.

D20 – SAFETY / SECURITY

Item	Findings	Comments
D20.1 Fire Alarm	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> System: Siemens
D20.2 Smoke Detection	<ul style="list-style-type: none"> No issues observed 	
D20.3 Pull Stations	<ul style="list-style-type: none"> No issues observed 	
D20.4 Annunciation	<ul style="list-style-type: none"> No issues observed 	
D20.5 Addressable Zones and Systems	<ul style="list-style-type: none"> No issues observed 	
D20.6 Monitoring	<ul style="list-style-type: none"> No issues observed 	
D20.7 Access Control	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Card readers present.
D20.8 Intrusion	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> System: Sonitrol
D20.9 Video Surveillance	<ul style="list-style-type: none"> Not Applicable 	

RECOMMENDATIONS

D30 – TECHNOLOGY COMMUNICATIONS

Item	Findings	Comments
D30.1 Paging and Intercom – Head End	<ul style="list-style-type: none"> The existing system is past its useful life. Repair parts are unavailable and there is inadequate technical support for 	<ul style="list-style-type: none"> System: Rauland

	Condition	this system.	
D30.2	Master Clock	<ul style="list-style-type: none"> • System is past its useful life. 	
D30.3	Infrastructure	<ul style="list-style-type: none"> • Unused cable has been abandoned in place. • Cabling is not labeled. 	
D30.4	Speakers	<ul style="list-style-type: none"> • No issues observed 	
D30.5	Coverage	<ul style="list-style-type: none"> • No issues observed 	
D30.6	Clock System	<ul style="list-style-type: none"> • The system is past its useful life; users have difficulties programming existing system. 	
D30.7	Clock – Head End	<ul style="list-style-type: none"> • The system is past its useful life. Repair parts are unavailable and there is inadequate technical support for this system. 	<ul style="list-style-type: none"> • System: Latham
RECOMMENDATIONS			
D30.1	Replace intercom and paging system.		
D30.7	Replace clock system.		

E - GROUNDS			
E10 – SITE CIRCULATION AND PARKING			
Item		Findings	Comments
E10.1	Parking Lots	<ul style="list-style-type: none"> • Parking lot and parent drop-off at the rear of the building has no visibility from the main office. • Parking area is undersized. • There are cracks and spalling in the A/C paving. See Figures E10.1.a and b. • Parking stripes are faded. 	<ul style="list-style-type: none"> • The parking lots contains (25) stalls that are shared with the adjacent Benton County Health Clinic. • (2) Accessible stalls are located in the rear parking lot.
E10.2	Site Signage/ Accessories	<ul style="list-style-type: none"> • There is currently no site signage directing visitors from the parking area to the main office. 	
E10.3	Vehicular Circulation	<ul style="list-style-type: none"> • Access to rear parking area is poor, just off of a state highway that is difficult to access when arriving from the north. • There is no parent drop-off curb and sidewalk separating foot traffic from vehicular traffic, creating a potentially unsafe condition. • Service deliveries and garbage collection access is through this parking lot and parent drop-off area. 	
E10.4	Curbs and Sidewalks	<ul style="list-style-type: none"> • A/C paving between the portables and the building is in poor condition. 	<ul style="list-style-type: none"> • Sidewalk elevations create potential trip hazards. • The covered walkway adjacent to the hard play surface has an issue with the height of the curb in relation to the walkways, creating the potential for tripping.
E10.5	Accessibility	<ul style="list-style-type: none"> • Accessible parking stalls are located at the rear parking lot, but there is no accessible pathway to the front of the building. 	
E10.6	Bikes and Bike Parking	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • There are (2) bike racks adjacent to the hard surface play area.
RECOMMENDATIONS			
E10.1	Resurface and restripe the parking area and giving it over for use solely for service area serving the Benton County Health Center parking. Demolish the underutilized tennis courts to the east of site and providing a new parking area with ADA parking stalls and a dedicated parent drop-off area that has direct visual and ADA pathway connection to the main office.		
E10.2	Add signage from the parking area to the main entrance to orient visitors to the site.		
E10.3	See E10.1.		
E10.4	Extend concrete sidewalk from play area to the front of the site on the east side of the building to improve site circulation and to better connect the portable buildings with the main building.		
E20 - SITE COMPONENTS			
Item		Findings	Comments
E20.1	Fields	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • Fields are grass.
E20.2	Landscaping	<ul style="list-style-type: none"> • Landscaping is in poor condition. 	
E20.3	Irrigation	<ul style="list-style-type: none"> • None observed 	<ul style="list-style-type: none"> • It is the District's desire to add irrigation to fields.

E20.4	Site Buildings	<ul style="list-style-type: none"> The covered play structure is an old wood-framed building whose wood siding and framing is dry-rotting due to weather exposure. 	<ul style="list-style-type: none"> Covered play is undersized compared to other elementary schools.
E20.5	Site Security	<ul style="list-style-type: none"> Visibility from the main office is poor, specifically for parent drop-off. There is no internal hallway in the south wing. Entrance to many and numerous exterior doors at that are difficult to monitor. See Section B30.5. 	
E20.6	Fencing	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> There is a fence around the entire play area.
E20.7	Playground Equipment	<ul style="list-style-type: none"> No issues observed 	
E20.8	Play Surfaces	<ul style="list-style-type: none"> A/C paving in hard surface play area cracking and spalling in many locations. See Figure E20.8. Tennis courts surface is in poor condition, with cracks and moss growth. 	
E20.9	Site Lighting	<ul style="list-style-type: none"> There is insufficient parking area lighting. Site lighting is generally insufficient. See Figure E20.9. Incandescent lighting is in service at site. 	<ul style="list-style-type: none"> Site lighting is a mix of high intensity discharge (HID), compact fluorescent (CFL) and incandescent site lighting at modular classrooms, building and soffit mounted fixtures.
E20.10	Grading and Drainage	<ul style="list-style-type: none"> Area drain at play area does not work well. 	<ul style="list-style-type: none"> Fields were dry at the time of the field visit.

RECOMMENDATIONS

- E20.3 Add irrigation system to fields.
- E20.4 Replace covered play structure in its entirety with a larger steel-framed pre-manufactured covered play at this site.
- E20.8 Resurface and restripe the hard surface play area. Any improvements to the hard surface play area should include improving drainage and below-grade pipes for better drainage in this area.
- E20.9 Install parking lot lighting per IESNA recommendations. Extend site lighting as indicated by IESNA. Remove and replace all remaining incandescent lighting with LED or linear fluorescent lighting.
- E20.10 See E20.8.

IMAGES

Figure A10.3.a – Covered walkway



Figure A10.3.b – Covered walkway



Figure A10.3.c – Boiler room wall



Figure A10.3.d – Boiler room wall



Figure A20.3 - Windows



Figure A20.5 – Canopies



Figure B20.1.a – Flooring issues



Figure B20.1.b – Flooring issues



Figure B20.1.c – Flooring issues



Figure D10.2 – Abandoned electrical feeder



Figure D10.3.a – Typical ballast failure



Figure D10.3.b – T12 lighting



Figure D10.3.c – Mechanical room lighting



Figure D10.3.d – Typical computer lab lighting



Figure D10.7 – Typical exit sign



Figure E10.1.a – Parking lot



Figure E10.1.b – Parking lot



Figure E20.8 – Hard surface play area



Figure E20.9 – Typical site lighting



Lincoln Elementary		Priority Level				Priority Level I	Priority Level II	Priority Level III	Priority Level IV
		(Refer to Legend)							
ITEMS		I	II	III	IV				
A - STRUCTURE/SHELL									
A10 - STRUCTURE/SUBSTRUCTURE									
A10.2	1	Grind existing concrete down to provide smooth transitions					\$ 1,581		
A10.3	1	Replace dry rotted beam at south end of classroom wing					\$ 3,953		
	2	Seal/epoxy inject crack in masonry wall					\$ 4,743		
	3	Replace infill wall in boiler room					\$ 1,581		
	4	Complete seismic upgrades per previous reports					\$ 407,024		
A20 - EXTERIOR COMPONENTS									
A20.2	1	Replace existing wood and hollow metal doors, frames and hardware (including entrance with wire glazing) at (4) locations with new storefront entrance systems					\$ 70,934		
	2	Replace (6) existing doors in wood frames with new HM doors and frames at main building					\$ 14,373		
	3	Replace (8) hollow metal doors and hardware in existing frames at the portable classrooms					\$ 19,164		
A20.3	1	Replace all existing windows with new aluminum storefront system and thermal glazing					\$ 215,050		
A20.4	1	Replace roofing per roofing assessment recommendations						\$ 764,000	
A20.5	1	Replace any dry rotting wood and cover with prefinished metal fascia and soffits					\$ 191,647		
TOTAL - STRUCTURE/SHELL						\$ -	\$ 930,050	\$ 764,000	\$ -
B - INTERIORS									
B10 - INTERIOR CIRCULATION									
B10.2	1	Provide a lift and a new compliant stair on the west side of the stage							\$ 44,366
B10.4	1	Provide ADA door openers at (3) doors					\$ 26,090		
B10.5	1	Provide compliant signage throughout this facility						\$ 34,440	
B20 - INTERIOR FINISHES									
B20.1	1	Patch and repair cracks in existing concrete slab in hallway between 1949 and 1978 additions					\$ 1,350		
	2	Provide new VCT flooring in halls and classrooms in 1978 addition					\$ 13,440		
	3	Provide fixed walk off mats at all egress doors					\$ 6,404		
	4	Provide new carpet in media center and 1978 addition classrooms					\$ 66,412		
B30 - INTERIOR COMPONENTS									
B30.1	1	Replace wood frames relites containing wire glass with new hollow metal frames and tempered glazing						\$ 5,218	
B30.2	1	Replace (7) classroom and hall doors with new wood doors and hardware						\$ 15,108	
B30.4	1	Replace cabinets, countertops and backsplash in all classrooms; provide compliant sinks and bubblers						\$ 152,559	
	2	Add (1) tall cabinet and (1) teacher cabinet to each classroom							\$ 55,501
B30.5	1	Construct addition adjacent to the south classroom wing							\$ 695,750
B30.6	1	Remodel/consolidate the main office						\$1,720,400	
	2	Construct gymnasium and toilet room addition					\$ 1,669,800		
B40 - TOILET FACILITIES									
B40.7	1	Remodel/enlarge (4) student toilet rooms						\$ 164,888	
TOTAL - INTERIORS						\$ -	\$ 1,783,496	\$ 2,092,613	\$ 795,617
C - SYSTEMS									
C10 - PLUMBING									
C10.2	1	Replace all lavatories, water closets and urinals						\$ 153,750	
	2	Replace all water fountains with bi-level water coolers						\$ 28,750	
	3	Add grease interceptor to the kitchen sinks and dishwasher					\$ 28,750		
C10.4	1	Flush storm water lines					\$ 5,000		

Lincoln Elementary	ITEMS	Priority Level (Refer to Legend)				Priority Level I	Priority Level II	Priority Level III	Priority Level IV
		I	II	III	IV				
C20 - HVAC									
C20.1	1	Replace all HVAC equipment except for the boilers; provide full design with input from school district on whether to include cooling.	X				\$ 1,600,000		
C30 - FIRE PROTECTION									
C30.1	1	Provide fire suppression in kitchen hood	X			\$ 12,500			
TOTAL - SYSTEMS						\$ 12,500	\$ 1,633,750	\$ 182,500	\$ -
D - ELECTRICAL									
D10 - ELECTRICAL EQUIPMENT									
D10.2	1	Replace main disconnect with smaller circuit breaker		X			\$ 5,000		
	2	Replace branch panels in south wing	X			\$ 40,000			
	3	Trace electrical system; provide new panel schedules		X		\$ 20,000			
	4	Remove abandoned feeder near modular classrooms		X		\$ 5,000			
D10.3	1	Replace malfunctioning GE ballasts in retrofit fixtures	X			\$ 20,000			
	2	Replace T12 undercabinet lighting		X		\$ 15,000			
	3	Replace incandescent lighting in electrical and mechanical rooms		X		\$ 10,000			
	4	Replace computer lab lighting		X		\$ 10,000			
D10.4	1	Install retrofit lighting controls				\$ 40,000			
	2	Provide additional light switches for gym lighting where not already provided	X			\$ 5,000			
D10.6	1	Install egress lighting and retrofit existing luminaires with battery packs	X		\$ 40,000				
D10.7	1	Replace all exit signs with LED meeting intensity criteria	X		\$ 20,000				
D10.8	1	Install workstation occupancy sensors		X		\$ 40,000			
D30 - TECHNOLOGY COMMUNICATIONS									
D30.1	1	Replace intercom and paging system	X		\$ 20,000				
D30.7	1	Replace time clock system	X		\$ 20,000				
TOTAL - ELECTRICAL						\$ 60,000	\$ 105,000	\$ 145,000	\$ -
E - GROUNDS									
E10 - SITE CIRCULATION AND PARKING									
E10.1	1	Resurface and restripe the parking area; make usage only for school	X			\$ 67,413			
	2	Demolish the underutilized tennis courts to the east of site and providing a new parking area with ADA parking stalls and a dedicated parent drop-off area			X			\$ 47,842	
E10.2	1	Add signage from the parking area to the main entrance to orient visitors to the site	X			\$ 3,162			
E10.4	1	Extend concrete sidewalk from play area to the front of the site on the east side of the building to improve site circulation		X		\$ 12,170			
E20 - SITE COMPONENTS									
E20.3	1	Add irrigation system to fields		X		\$ 249,730			
E20.4	1	Replace covered play structure	X			\$ 66,412			
E20.8	1	Resurface and restripe hard surface play area; improve drainage	X			\$ 127,492			
E20.9	1	Replace and extend parking and site lighting per IESNA recommendations	X			\$ 40,000			
	2	Replace remaining incandescent and compact fluorescent site lighting with LED		X		\$ 20,000			
TOTAL - GROUNDS						\$ -	\$ 304,479	\$ 281,900	\$ 47,842

Lincoln Elementary ITEMS	Priority Level (Refer to Legend)				Priority Level I	Priority Level II	Priority Level III	Priority Level IV
	I	II	III	IV				
TOTALS BY CATEGORY								
								STRUCTURE/SHELL \$ 1,694,050
								INTERIORS \$ 4,671,726
								SYSTEMS \$ 1,828,750
								ELECTRICAL \$ 310,000
								GROUNDS \$ 634,221
								FACILITY TOTAL \$ 9,138,747
TOTALS BY PRIORITY								
								LEVEL 1 \$ 72,500
								LEVEL 2 \$ 4,756,775
								LEVEL 3 \$ 3,466,013
								LEVEL 4 \$ 843,459
								PRIORITY TOTAL \$ 9,138,747

LEGEND:

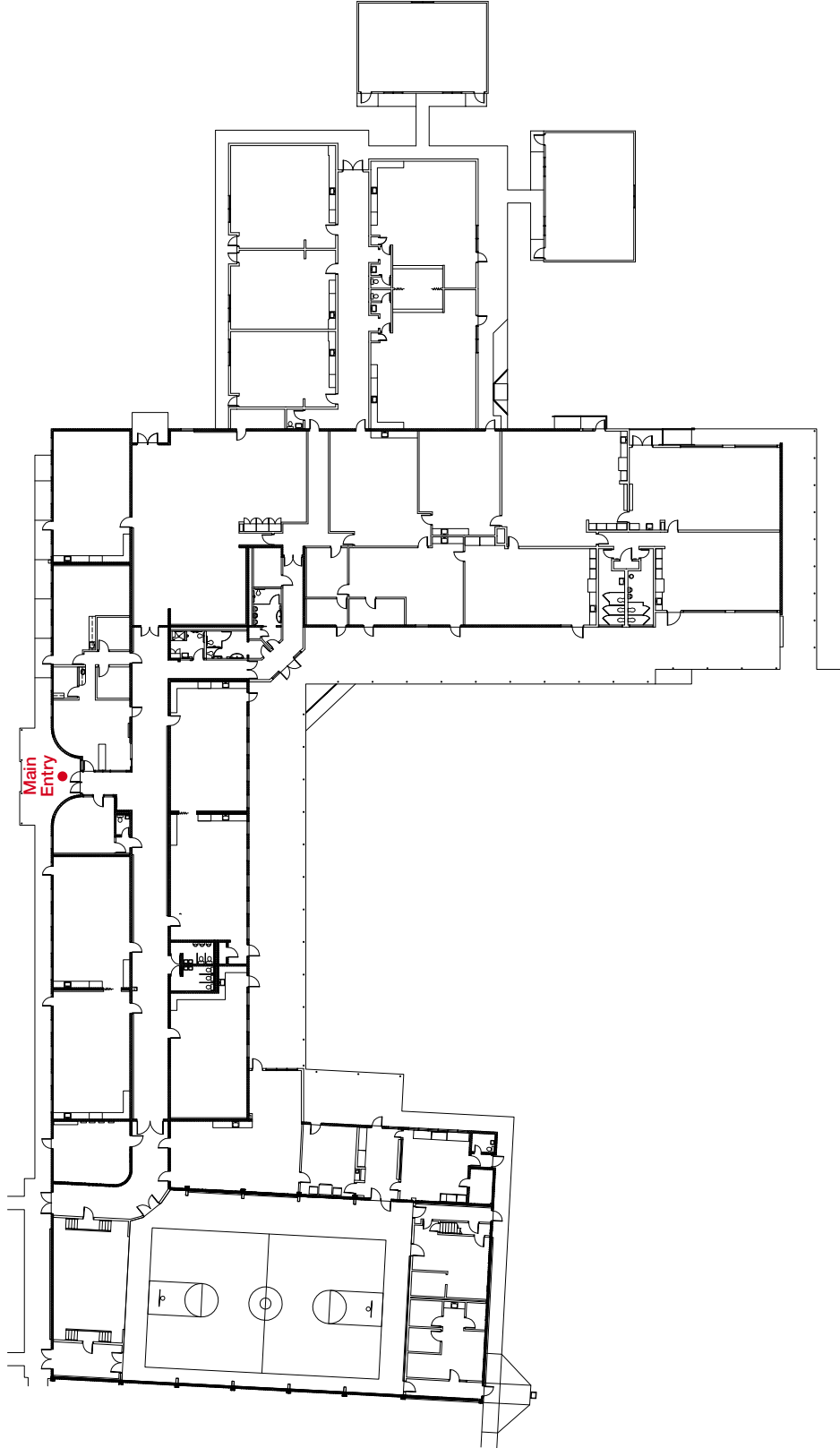
PRIORITY LEVELS

Level I: Highest Priority; Issues that affect the life safety concerns of the occupant, related to notification of occupants to emergency situations and the ability to safely evacuate the facility; subcomponents of Level I include safety concerns such as electrical loads, hazardous materials that might be affected with remodel or modifications, lack of fall protection. Level I items need to be addressed within a 5-year plan.

Level II: Moderate Priority; Issues that are related to the integrity and adequacy of systems within the building to sufficiently withstand a major event and still function; also related are the age of systems or building components that keep day to day operations running without constant repair. Issues may include mechanical, electrical and plumbing systems, fire suppression, lighting and security, as well as flooring, windows doors and other architectural components. Level II Items may be part of a 5-year plan.

Level III: Lower Priority; Issues that may over time affect the day to day maintenance of the building or long term use of the facility. Issues also include access and clearances at equipment and fixtures, access for individuals with disabilities and both indoor and exterior environment quality. Level III Items would be considered in a 5 to 10 year plan.

Level IV: Issues that are related to the aesthetics of both the building's interior and exterior as well as integrity and adequacy of building systems that don't pose any issues or nearing the end of their remaining lifecycles. These may include items such as cabinetry original to the building that have signs of wear or dated finishes but do not have any damage or deterioration. Level IV items would be considered long-term plans (10 years or more).



SCHOOL BUILDING
SCALE: NOT TO SCALE

Lincoln Elementary School | Corvallis School District

OVERALL FLOOR PLAN



Dull Olson Weekes - IBI Group
Architects, Inc.



Mountain View Elementary School

340 NE Grainger Avenue
Corvallis, Oregon 97330

Built: 1954; 1959, 1961, 1966 building additions; 1975, 1988, 2007 modulars added

Enrollment: 290 students (2013)

Floor Area: 52,170 SF



Field Review Team:

Thea Wayburn	Dull Olson Weekes – IBI Group Architects
Michael Arellano	KPFF Consulting Engineers
Roger Arnold	Glumac
Michael Henning	Glumac
Alex Ridley	Glumac
Dana Troy	Glumac

Report Date: December 2013

Date of Site Visits: June 3-7, 2103
Neighborhood: Agricultural/Residential

Weather: Sunny, 70's and 80's

Site Contacts: Rosemary O'Neil
Kim Patten, CSD, 509J

General Building Description:

Mountain View Elementary School is located in an agricultural setting. The large open site has ample room for facility and field spaces for both school and community use. The school has its offices and library in the central portion with classroom wings on either side. This facility is not sprinklered.

The school is a single-story structure with wood framed roofs bearing on a combination of wood stud and concrete masonry bearing walls. The exterior is clad with wood siding, and some metal panel at the gymnasium. Glulam beams span the high-ceiling spaces of the cafeteria and gymnasium. In addition to the main building the school has a stand-alone wood-framed covered play structure.

The key observation at this facility is that the main office is undersized at this facility, and the principal's office is located across the hall from the administrative area.

Overall this facility is in good condition. A full building review of architectural, structural, mechanical, electrical and plumbing components was conducted. This facility contains several modular buildings which were reviewed as part of the overall facility assessment.

A - STRUCTURE / SHELL			
A10 – STRUCTURE / SUBSTRUCTURE			
Item		Findings	Comments
A10.1	Foundations	<ul style="list-style-type: none"> No issues observed 	
A10.2	Subgrade Enclosures	<ul style="list-style-type: none"> A large vertical crack was found in the wing walls flanking a stair on grade just north of the multi-purpose room. See Figure A10.2. 	
A10.3	Structural Systems	<ul style="list-style-type: none"> There are recommendations available for seismic improvements to the building structure, outlined in the Degenkolb Seismic Evaluation Phase 2 report, dated July 2000. There are recommendations available for seismic improvements to non-structural systems, outlined in the Degenkolb Seismic Evaluation Phase 2 report, dated July 2000. 	<ul style="list-style-type: none"> In 2003 the school received a new roof with “Phase 1” seismic upgrades which included strengthening the connections of the roof diaphragm and adding plywood sheathing to previously deficient areas. “Phase 1” was performed in preparation for the construction of new shear walls in selected areas.
RECOMMENDATIONS			
A10.2	Seal crack in exterior walls supporting stair access to multi-purpose room to prevent further deterioration.		
A10.3	Prioritize and perform the remaining seismic improvements to structural systems as outlined in the Degenkolb report. Perform the remaining seismic improvements to non-structural components as outlined in the Degenkolb report.		
A20 - EXTERIOR COMPONENTS			
Item		Findings	Comments
A20.1	Exterior Walls	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Exterior walls are comprised of wood and metal siding.
A20.2	Doors and Hardware	<ul style="list-style-type: none"> Exterior doors contain wire glass. (1) Pair of exterior doors is in fair condition. Doors at all modulars are in fair to poor condition. See Figure A20.2. 	<ul style="list-style-type: none"> Wire glass is no longer permitted in educational facilities.
A20.3	Windows and Skylights	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Window systems are in good condition.
A20.4	Roof	<ul style="list-style-type: none"> A separate roofing assessment is located in the appendix of this report. 	<ul style="list-style-type: none"> Roofing is a built up roofing system, 7 years in age.
A20.5	Canopies and Covered Walks	<ul style="list-style-type: none"> No issues observed 	
A20.6	Gutters and Downspouts	<ul style="list-style-type: none"> No issues observed 	
A20.7	Trim and Overhangs	<ul style="list-style-type: none"> No issues observed 	
A20.8	Ramps and Stairs	<ul style="list-style-type: none"> Ramps at modulars are in fair condition. 	<ul style="list-style-type: none"> (2) of the ramps are metal; the other ramp is concrete.

RECOMMENDATIONS

- A20.2 If remodel work were to occur at this facility, the replacement of wire glass with tempered glazing may be required. Wire glass may also be replaced at the District's discretion to prevent any issues if glazing is damaged or broken.
Replace (1) pair exterior doors and frames. Replace (6) single metal doors and frames at modulars and provide weather-stripping above doors for protection. Replace (1) single door and frame at gymnasium; provide new door, frame, hardware and kickplate.
- A20.4 Replace roofing per roofing assessment recommendations.
- A20.8 Replace (3) ramps and handrails at modular buildings.

B - INTERIORS			
B10 – INTERIOR CIRCULATION			
Item		Findings	Comments
B10.1	Construction and Exiting	<ul style="list-style-type: none"> • Doors and windows contain wire glass. • This facility is not sprinklered. 	<ul style="list-style-type: none"> • Wire glass is no longer permitted in educational facilities. • Classrooms have exterior doors equipped with panic hardware. • A major remodel or addition at this site would require a thorough building code analysis.
B10.2	Stairs and Handrails	<ul style="list-style-type: none"> • Handrails for stage access (both at stairs and ramp) are not code compliant both in construction and material. Stairs to the stage from the gymnasium do not have handrails. 	<ul style="list-style-type: none"> • The stage is now used for storage. Stage is (5) risers above the gym finished floor.
B10.3	Ramps and Elevators	<ul style="list-style-type: none"> • The ramp to the stage is too steep to meet current code. 	<ul style="list-style-type: none"> • The stage is now used for storage. • With the exception of the stage and portables, this building is a single story facility. • Unless remodel or addition is executed at this facility (which would trigger other upgrades), no recommendations are made at this time.
B10.4	Accessibility	<ul style="list-style-type: none"> • The stage is currently not accessible; however, it is now used for storage. • The reception desk in the main office does not have an accessible transaction space. 	<ul style="list-style-type: none"> • The accessibility issues in the main office would be addressed with a remodel/expansion of this area. • If there are no major remodels or changes implemented at this facility, accessibility modifications would not be triggered.
B10.5	Signage	<ul style="list-style-type: none"> • The facility lacks compliant room signage. 	
RECOMMENDATIONS			
B10.1	If remodel work were to occur at this facility, the replacement of wire glass with tempered glazing may be required. Wire glass may also be replaced at the District’s discretion to prevent any issues if glazing is damaged or broken. See Sections A20 and B30.		
B10.2	Remove existing handrails and replace with compliant handrail construction. Add a handrail on each side of stairs from gym to stage.		
B10.3	Remove portions of the ramp and install lift for stage access. Provide compliant landing at top and bottom of lift.		
B10.5	Add compliant room signage to the entire building.		

B20 – INTERIOR FINISHES			
Item		Findings	Comments
B20.1	Flooring	<ul style="list-style-type: none"> The majority of the flooring is asbestos tile. Exterior doors do not have fixed walk off mats. Carpeting in the main office, principal's office, one classroom and the library are in fair condition. See Figure B20.1. Carpeting in one of the portables is in poor condition. 	<ul style="list-style-type: none"> Flooring throughout the facility is a combination of asbestos tile and vinyl composition tile (VCT) flooring replacement. See Section B30.6 for recommendations to office area. If office expansion is not pursued, carpeting needs to be replaced.
B20.2	Ceilings	<ul style="list-style-type: none"> Ceiling tiles in cafeteria and gymnasium are beginning to show their age. Ceilings in general are in fair condition. The 2x4 ceiling tile in one of the portables is in poor condition. The kitchen ceiling tile is in fair to poor condition. 	<ul style="list-style-type: none"> Ceilings are a 12x12 wood fiber ceiling.
B20.3	Ceiling Issues	<ul style="list-style-type: none"> Water damaged tiles observed in hallway near gym, on the stage and in Classroom 4 (unknown if current or old leaks have caused this). 	<ul style="list-style-type: none"> Since existing ceiling material is an older type no often used, it is recommended to replace ceilings in their entirety at these locations.
B20.4	Fixed Equipment	<ul style="list-style-type: none"> Gymnasium backstops are in fair condition. 	<ul style="list-style-type: none"> There are a total of (6) backstops.
B20.5	Walls	<ul style="list-style-type: none"> No issues observed 	
B20.6	Wall Finishes	<ul style="list-style-type: none"> The FRP panels in the cafeteria are in poor condition. Several panels have "bubbles" in the panels. See Figure B20.6. Rubber base in the hallway near the gymnasium is chipped in several locations. Lacquer finish on wood paneling is a possible fire hazard. 	<ul style="list-style-type: none"> FRP panels are 7'-0" tall. The wood paneling in the gymnasium (7'-0" high) and in the hallways is in good condition. Hallways are full height wood panels. While dated, they are in good condition. However, it is the District's desire to update finishes in the hallways. Rubber wall base is both 5" high and 7" high. Wall padding is located behind the basketball backstops, and is in good condition.
B20.7	Furnishings	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Stage curtain is in excellent condition. Windows have horizontal mini blinds. Window coverings are in good condition. Classroom furniture consists of tables and chairs, and is generally in good condition.

RECOMMENDATIONS	
B20.1	Remove all asbestos flooring tile in hallways, main office, gymnasium and (7) classrooms and replace with VCT. Remove all wood and rubber base in this facility and replace with new rubber base. Replace carpeting in office area and principal's office, and in Classroom 8. Abate kitchen flooring and replace with slip resistant sheet vinyl flooring and coved base. Replace carpeting in the library and adjacent work room. Provide fixed walk off mats at (6) exterior door locations. Replace flooring in (1) portable with VCT.
B20.2	Replace 12x12 ceiling tile in kitchen and replace with epoxy painted gypsum board ceiling.
B20.3	Replace ceilings in all hallways, at stage and (1) classroom with 2x4 lay-in acoustical ceiling system.
B20.4	Replace (6) backstops.
B20.6	Remove FRP panels in cafeteria and replace with new FRP panels. Remove all wood paneling from hallways and replace with full height plastic laminate wainscoting.

B30 – INTERIOR COMPONENTS

Item	Findings	Comments	
B30.1	Interior Windows	<ul style="list-style-type: none"> Interior windows contain wire glass. 	<ul style="list-style-type: none"> Wire glass is no longer permitted in educational facilities.
B30.2	Interior Doors and Hardware	<ul style="list-style-type: none"> Doors in gymnasium are in fair condition; door hardware needs to be upgraded. One wooden door leading to the kitchen from the cafeteria is in poor condition, and does not have ADA compliant hardware. 	<ul style="list-style-type: none"> Doors and frames are constructed of wood, and while many show signs of age and/or wear, are in good to fair condition. Classroom door hardware has been upgraded.
B30.3	Acoustics	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> There are no acoustic wall panels in the gymnasium. One operable partition wall was observed, but appears to have been partially infilled.
B30.4	Casework	<ul style="list-style-type: none"> Classroom casework is aged but the finishes are in good condition. 	<ul style="list-style-type: none"> Casework is inconsistent in its finishes in each classroom. Library casework is aged but in good condition.
B30.5	Security	<ul style="list-style-type: none"> No issues observed 	
B30.6	Other	<ul style="list-style-type: none"> The main office area is undersized. There is not adequate space in the main office reception area. See Figure B30.6. The principal's office is located across the hall from other administrative spaces. 	<ul style="list-style-type: none"> This facility is an older school and does not provide adequate building storage.

RECOMMENDATIONS	
B30.1	If remodel work were to occur at this facility, the replacement of wire glass with tempered glazing may be required. Wire glass may also be replaced at the District's discretion to prevent any issues if glazing is damaged or broken.
B30.2	Replace (1) pair of doors and (1) single door at the gymnasium. Install new doors, frames, hardware and kickplates. Replace (1) door and frame in kitchen. Install new wood door, metal frame, hardware and kickplate.
B30.4	Replace casework (countertops, backsplash and cabinets) in all classrooms.
B30.6	Expand the main office. This would include remodel of the existing space as well as a building addition to the east. Provide all new carpeting, painted gypsum board walls, ceilings and new reception desk area. Add an accessible staff restroom facility. Construct new entry vestibule to increase security for this facility. Covert current Principal's office into conference room. Remodel existing locker room area into storage room and accessible restroom facilities for students.

B40 – TOILET FACILITIES			
Item		Findings	Comments
B40.1	Walls and Wall Finishes	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Wall finishes in the student restrooms are a combination of ceramic tile and a fiberglass wall panel; staff walls are painted gypsum board.
B40.2	Floors and Floor Finishes	<ul style="list-style-type: none"> Ceramic tile floor in the student restrooms is in good to fair condition. Flooring in the staff restrooms is asbestos tile. 	
B40.3	Ceilings	<ul style="list-style-type: none"> There are several water damaged tiles in two of the staff restrooms. 	<ul style="list-style-type: none"> Gypsum board ceilings in staff restrooms; 2x4 acoustical ceiling tiles in staff restrooms. 2x4 ceiling systems are not ideal for restroom facilities. A complete remodel of the staff restrooms is recommended – see B40.8.
B40.4	Partitions	<ul style="list-style-type: none"> Partitions are in fair condition. The partition in the staff restroom (observed) is in poor condition. 	
B40.5	Fixtures	<ul style="list-style-type: none"> See Plumbing Section 	<ul style="list-style-type: none"> Fixtures appear dated.
B40.6	Accessories	<ul style="list-style-type: none"> No issues observed 	
B40.7	Accessibility	<ul style="list-style-type: none"> Staff restrooms are not accessible. 	<ul style="list-style-type: none"> Modifications were made to student restrooms to provide accessible stalls, but general layout of these restrooms is inefficient. Any significant remodel of this facility could trigger additional upgrades in the student toilet rooms. An additional accessible staff restroom should be provided if office remodel/expansion is implemented – see section B30.6.
B40.8	Other	<ul style="list-style-type: none"> Staff restrooms are in poor condition and should be upgraded. 	
RECOMMENDATIONS			
B40.2	Replace ceramic tile flooring in (4) student toilet rooms. Abate flooring in (1) single stall restroom and replace with sheet vinyl flooring.		
B40.3	Replace ceilings in student restrooms with painted gypsum board ceilings.		
B40.4	Remove and replace partitions in (4) student toilet rooms.		
B40.5	See Plumbing Section.		
B40.8	Remodel (2) staff restrooms in their entirety. Provide new sheet vinyl flooring, FRP wainscot, gypsum board ceiling, new fixtures and lighting. Provide new door, frame and hardware. Reconfigure toilet rooms to make accessible restroom facilities.		

C - SYSTEMS			
C10 - PLUMBING			
Item		Findings	Comments
C10.1	Water Service	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Entrance is at the boiler room from a ground well. 5000 gallon storage tank with RO (reverse osmosis) system. Seven taps are available. There is an abandoned in place underground storage tank.
C10.2	Piping	<ul style="list-style-type: none"> Domestic hot water piping is period to the building and in need of replacement per request of the District. The sprinkler riser on the stage is corroded. See Figure C10.2a. The natural gas piping on the roof is not weather protected and is corroding. See Figure C10.2b. 	
C10.3	Fixtures	<ul style="list-style-type: none"> All restroom fixtures and drinking fountains are period to the building. There is no grease interceptor in the kitchen. 	<ul style="list-style-type: none"> Four compartment sink with no grease interceptor. Lavatories are stainless steel wall mount with manual faucet. Urinals are wall hung manual flush / auto flush mix. Combination of single level drinking fountain and single bi-level water coolers. Water closets are floor mount manual flush valve.
C10.4	Storm and Overflow Drains	<ul style="list-style-type: none"> Gutters need cleaning and maintenance. 	<ul style="list-style-type: none"> Exterior gutters and storm drains throughout.
C10.5	Water Heater	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Model: Bradford White 1990 50 gallon 4.5 kW. Water heater is in good shape and not in need of replacement. Tank in Janitor closet (by gym): 50 gallon GE tank (unknown capacity) with a circulation pump. Boiler Room: Lochinvar hot water heater.

RECOMMENDATIONS

- C10.2 Repipe domestic hot water piping. Repair sprinkler riser piping on stage. Repair natural gas piping on roof that is not weather proofed.
- C10.3 Replace all lavatories, water closets and urinals. Replace all water fountains with bi-level water coolers. Add grease interceptor to the kitchen sinks and dishwasher.
- C10.4 Flush storm water lines.

C20 - HVAC			
Item		Findings	Comments
C20.1	Mechanical Equipment	<ul style="list-style-type: none"> All HVAC equipment is functioning, but with the exception of (4) gas packs is beyond its useful life. See Figure C20.1. 	<ul style="list-style-type: none"> North classrooms have operable windows, unit ventilators, exhaust under coat rack, and fin tube heaters. Office has fin tube heaters with no air. Electric heat located in the room by cafeteria. Access to cafeteria unit is in a storage room off of the cafeteria. Trane Torrivent 212-I with a circulation pump. Well water has RO filter. Replaced all drinking water piping with pex. South classrooms served by fin tube convectors. Exhaust fan is original to the building. HV-1 provides heating and ventilation, Pace A22. Gym served by HV-2 Pace unit. HV-3 serves teacher room. Locker rooms served by HV-3 Pace A9V. Four central classrooms each have their own gaspak unit. All Bryants: <ul style="list-style-type: none"> Computer: 581BJV036072AJ Boys/Girls: 574ANW024060A4 CRC: 581BJV036072AJ Music: Same as CRC Roof: <ul style="list-style-type: none"> Exhausts fans that used to serve gaspak rooms are abandoned in place. Boiler flues Kitchen exhaust fan Locker room exhaust fan Static hood Powered exhaust fans for classrooms. Baseboard Radiators in restrooms. Unit heater by entryways.
C20.2	Air Filtration	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Air filtration is period to the equipment.
C20.3	Equipment Accessibility	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Access is via permanent ladders.
C20.4	Air Distribution and Ventilation	<ul style="list-style-type: none"> Office space has no ventilation. 	
C20.5	Controls	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> System: Andover DDC

C20.6	Chillers	<ul style="list-style-type: none"> • Not Applicable 	
C20.7	Boiler	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • The boilers were replaced in 2005. • Model: Lochinvar Powerfin; • 2000 input 1720 output (total of 3). • Pump: Model PBN2000 (1 pump each, 1 hp).

RECOMMENDATIONS

- C20.1 Replace all HVAC equipment (with the exception of (4) gas pack units).
 C20.4 Provide ventilation to all offices.

C30 – FIRE PROTECTION

Item		Findings	Comments
C30.1	Fire Suppression System	<ul style="list-style-type: none"> • There is no fire suppression in the kitchen. 	<ul style="list-style-type: none"> • The stage area is the only part of the building with sprinklers. The riser is located on the stage.
C30.2	Water Service and Backflow Prevention	<ul style="list-style-type: none"> • No issues observed 	
C30.3	System Pressure	<ul style="list-style-type: none"> • No issues observed 	
C30.4	Standpipes	<ul style="list-style-type: none"> • No issues observed 	
C30.5	Fire Pump	<ul style="list-style-type: none"> • No issues observed 	
C30.6	Fire Sprinkler Pipe Condition	<ul style="list-style-type: none"> • No issues observed 	
C30.7	Fire Department Connection	<ul style="list-style-type: none"> • No issues observed 	
C30.8	Fire Sprinkler Zoning	<ul style="list-style-type: none"> • No issues observed 	
C30.9	Flow Monitoring and Alarm	<ul style="list-style-type: none"> • No issues observed 	
C30.10	Hoses and Extinguishers	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • Fire extinguishers

RECOMMENDATIONS

- C30.1 Provide fire suppression in the kitchen.

D - ELECTRICAL			
D10 - ELECTRICAL EQUIPMENT			
Item		Findings	Comments
D10.1	Transformers	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Pole mounted utility transformer.
D10.2	Switchgear and Panelboards	<ul style="list-style-type: none"> No equipment grounding conductors or bus bars were visible in sampled panelboards. See figure D10.2a. Cloth cable in use throughout facility. Replacement panels for older panelboards are unavailable; other replacement parts are rare and costly. There is very little remaining spare capacity observed in sampled panelboards and distribution infrastructure. Electrical rooms appear very crowded and there is little space to accommodate new equipment. Panel schedules appear inaccurate and out of date. Receptacle circuits have been severely overextended in offices and classrooms. There is insufficient power and receptacles installed in computer labs. The junction box at SW corner of building and in the computer lab are missing covers; energized conductors are exposed. See Figures D10.2b and D10.2c. Computer lab receptacle circuits are controlled by switches at the door. See Figure D10.2d. 	<ul style="list-style-type: none"> Cloth cable is no longer acceptable per the current National Electric Code (NEC). Cloth cable is outdated and has the potential to lack grounding capabilities. 800A 120/240V single phase Ariel Service; replaced in 2011; square D equipment, main circuit breaker service disconnect in weatherproof enclosure; size appears adequate. Main distribution panel: 1000A square D with 1000A fusible main, 5 fusible feeder disconnects, 1 spare; seven (7) additional safety switches (fusible), tapped off of the main distribution panel bus. A mix of Square D and Cutler Hammer branch panelboards are installed in hallways.
D10.3	Lighting	<ul style="list-style-type: none"> Original fixtures in hallways, classrooms and offices are well past their useful life. There are numerous cases of cracked, broken and yellowing lenses. See Figure D10.3a. Computer labs are lit with newer direct acrylic pendant fixtures; light levels appear excessive and glare is a problem, See Figure D10.3c. Some restroom fixtures are missing lenses. See Figure D10.3b. Office and lobby lighting levels appear excessive. Mechanical and electrical rooms are underlit. 	<ul style="list-style-type: none"> Most lighting was upgraded to T8 fluorescent (utilizing original fixtures). T8 high bay luminaires were replaced with high intensity discharge (HID) in the gym and cafeteria. Restroom fixtures appear to have been replaced with T8 wrap luminaires. Light levels of 20 – 30FC recommended for office and lobby areas.
D10.4	Lighting Controls	<ul style="list-style-type: none"> No automated controls are installed. 	<ul style="list-style-type: none"> Classroom lighting is switched in rows parallel to the windows Hallway, gym and cafeteria lighting controlled via circuit breaker and keyed switches (in a few cases). Lighting controls are highly recommended to meet current energy codes and to conserve

			energy.
D10.5	Back-up and Emergency Power	<ul style="list-style-type: none"> • Not Applicable 	
D10.6	Egress and Emergency Lighting	<ul style="list-style-type: none"> • Gym and cafeteria egress lighting are connected via cord and plug. • There is insufficient egress lighting throughout this facility. 	<ul style="list-style-type: none"> • Egress lighting must be hard wired. • Some egress lighting devices installed in restrooms, gym and cafeteria.
D10.7	Exit Signage	<ul style="list-style-type: none"> • Exit signs do not meet intensity requirements. See Figure D10.7. 	<ul style="list-style-type: none"> • Exit signs are period to facility, primarily incandescent with LED retrofits.
D10.8	Sensors	<ul style="list-style-type: none"> • None installed 	<ul style="list-style-type: none"> • Currently does not meet Oregon State Energy Code.

RECOMMENDATIONS

- D10.2 Replace building distribution infrastructure complete size to match new service entrance, including main distribution panel, branch panelboards and all feeder and branch circuit wiring. Install additional capacity where needed. Install additional receptacles and circuits in classrooms and computer labs. Replace switches controlling computer lab receptacles with occupancy sensors to reduce energy consumption.
- D10.3 Replace aging light fixtures in classrooms, offices, lobbies and hallways with high efficiency linear fluorescent replacements. Replace computer lab lighting with 70% uplight 30% downlight direct/indirect pendant fixtures with dimming capability. Remove lamps or install 2 lamp luminaires in office and lobbies to produce more appropriate light levels.
- D10.4 Provide light switches for gym, hallway and cafeteria lighting (if not already provided). Install a building lighting control system (Lutron Quantum system or equivalent).
- D10.6 Install retrofit battery packs in existing luminaires along egress paths. Eliminate cord and plug connections for egress lighting and provide hard wired devices/connections.
- D10.7 Replace all retrofitted and incandescent exit signs with LED equivalents supplied with emergency batteries.
- D10.8 Install workstation occupancy sensors in offices and classrooms to reduce plugload energy consumption.

D20 – SAFETY / SECURITY

Item		Findings	Comments
D20.1	Fire Alarm	<ul style="list-style-type: none"> • No issues observed 	System: Siemens
D20.2	Smoke Detection	<ul style="list-style-type: none"> • No issues observed 	
D20.3	Pull Stations	<ul style="list-style-type: none"> • No issues observed 	
D20.4	Annunciation	<ul style="list-style-type: none"> • No issues observed 	
D20.5	Addressable Zones and Systems	<ul style="list-style-type: none"> • No issues observed 	
D20.6	Monitoring	<ul style="list-style-type: none"> • No issues observed 	
D20.7	Access Control	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • Card readers present.
D20.8	Intrusion	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • System: Sonitrol
D20.9	Video Surveillance	<ul style="list-style-type: none"> • Not Applicable 	

RECOMMENDATIONS

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D30 – TECHNOLOGY COMMUNICATIONS			
Item		Findings	Comments
D30.1	Paging and Intercom – Head End Condition	<ul style="list-style-type: none"> The existing system is past its useful life. Repair parts are unavailable and there is inadequate technical support for this system. There are coverage issues with the existing system. 	<ul style="list-style-type: none"> System: Rauland
D30.2	Master Clock	<ul style="list-style-type: none"> The clock system is past its useful life. 	
D30.3	Infrastructure	<ul style="list-style-type: none"> Unused cable has been abandoned in place. Cabling lacks labels. 	
D30.4	Speakers	<ul style="list-style-type: none"> There are coverage issues with the current intercom system. 	
D30.5	Coverage	<ul style="list-style-type: none"> No issues observed 	
D30.6	Clock System	<ul style="list-style-type: none"> The clock system is past its useful life; users have difficulty programing current system. 	
D30.7	Clock – Head End	<ul style="list-style-type: none"> The clock system is well past its useful life. Repair parts are unavailable and there is inadequate technical support for this system. 	<ul style="list-style-type: none"> System: Latham
RECOMMENDATIONS			
D30.1	Replace the intercom and paging system.		
D30.4	See D30.1.		
D30.7	Replace the clock system.		

E - GROUNDS			
E10 – SITE CIRCULATION AND PARKING			
Item		Findings	Comments
E10.1	Parking Lots	<ul style="list-style-type: none"> • Parking lot surfaces are in fair condition. See Figure E10.1. • Accessible stalls are located far from building and there is not striping in the parking lot for pedestrian circulation. 	<ul style="list-style-type: none"> • There are two parking area: the lot in front of the building contains (11) parking stalls and (3) accessible stalls. The second lots contains (42) parking stalls. • Accessible parking signs are also located in front of the main entry.
E10.2	Site Signage/ Accessories	<ul style="list-style-type: none"> • Site sign is in fair condition. • Flagpole is rusted. 	
E10.3	Vehicular Circulation	<ul style="list-style-type: none"> • Bus parking occurs adjacent to building. • Drop off and pick up areas are shared by buses and vehicular circulation. • There is no dedicated fire lane. 	
E10.4	Curbs and Sidewalks	<ul style="list-style-type: none"> • The curb at the student drop-off needs replacement. • Portions of the sidewalk adjacent to the building entry are in fair condition. 	
E10.5	Accessibility	<ul style="list-style-type: none"> • The kitchen is not accessible from the outside (step/curb). • Several classrooms' exterior doors have curb/step. 	<ul style="list-style-type: none"> • Sidewalks and/or asphalt surface surround the facility. In general, ramps allow access where grading changes occur. • The school's main doors and those near the main office have actuators.
E10.6	Bikes and Bike Parking	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • (3) Bike racks are located in the building's rear; racks are not covered.
RECOMMENDATIONS			
E10.1	Replace asphalt paving in parking lot on the east side of the site. Restripe all parking stalls. Restripe parking lot in front of building's entry; relocate accessible stalls as close to building as possible and provide striping crosswalk to building sidewalk from parking lot area.		
E10.2	Replace site sign. Replace flagpole (locate in same area).		
E10.4	Replace curb along entire north elevation. Replace sidewalk from NE corner of building to main entry area.		
E10.5	Remove concrete step and handrails and construct ramp access (with guardrail) to kitchen. Remove curb at (4) classroom doors and provide ramp access.		
F20 - SITE COMPONENTS			
Item		Findings	Comments
E20.1	Fields	<ul style="list-style-type: none"> • There are several holes in the field/grass adjacent to one of the portables. Due to the agricultural setting of this school, it is most likely caused by animals. See Figure E20.1. 	<ul style="list-style-type: none"> • Fields are grass.
E20.2	Landscaping	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • There are some mature trees and well maintained landscaping near building's entry; the remainder of the site has minimal to little landscaping, mainly lawn.
E20.3	Irrigation	<ul style="list-style-type: none"> • None observed 	
E20.4	Site Buildings	<ul style="list-style-type: none"> • There is some torn material in the covered play structure. 	<ul style="list-style-type: none"> • No site storage buildings were observed.

E20.5	Site Security	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Main entry door has actuator and ramp access.
E20.6	Fencing	<ul style="list-style-type: none"> The trash area is not fenced/enclosed. Receptacles are visible. 	<ul style="list-style-type: none"> 6'-0" chain link fence encloses site.
E20.7	Playground Equipment	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Equipment is in excellent condition.
E20.8	Play Surfaces	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Hardscape areas are in good condition.
E20.9	Site Lighting	<ul style="list-style-type: none"> There is insufficient parking lot lighting. See Figure E20.9.a. Incandescent lighting remains in operation. See Figure E20.9.b. 	<ul style="list-style-type: none"> Site lighting is a mixture of high intensity discharge (HID) and incandescent lighting.
E20.10	Grading and Drainage	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Fields were dry at the time of the site visit.
RECOMMENDATIONS			
E20.1	Re-grade field area adjacent to (2) portables and re-seed for lawn area.		
E20.4	Remove damage material at covered play structure and replace.		
E20.6	Construct chain link trash enclosure with gate located adjacent to the kitchen.		
E20.9	Extend parking lot lighting per IESNA recommendations. Replace all incandescent lighting with LED lighting.		

IMAGES

Figure A10.2 – Cracks in concrete wall



Figure A20.2 – Exterior doors



Figure B20.1 – Carpeting in office



Figure B20.6 – FRP panels in cafeteria



Figure B30.6 – Undersized main office



Figure C10.2.a – Sprinkler piping corrosion



Figure C10.2.b – Gas piping corrosion



Figure C20.1 – Mechanical equipment



Figure D10.2.a - Typical panelboard



Figure D10.2.b – Junction box lacks cover



Figure D10.2.c – Junction box lacks cover



Figure D10.2.d - Computer lab switches



Figure D10.3.a – Light is missing lens



Figure D10.3.b – Dated hallway lighting



Figure D10.3.c – Computer lab lighting

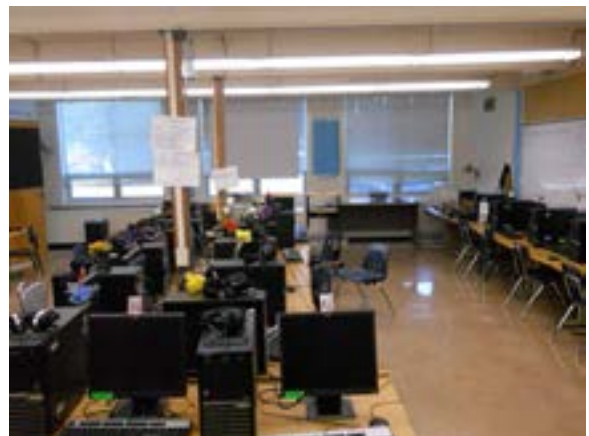


Figure D10.7 – Retrofitted exit sign



Figure E10.1 – Parking lot



Figure E20.1 – Field issues



Figure E20.9.a – Insufficient parking area lighting



Figure E20.9.b – Incandescent site lighting



Mountain View Elementary	Priority Level				Priority Level I	Priority Level II	Priority Level III	Priority Level IV	
	(Refer to Legend)								
		I	II	III					IV
ITEMS									
A - STRUCTURE/SHELL									
A10 - STRUCTURE/SUBSTRUCTURE									
A10.2	1	Seal crack in exterior walls to prevent further deterioration	X			\$ 1,581			
A10.3	1	Complete seismic upgrades per previous reports	X			\$ 1,273,127			
A20 - EXTERIOR COMPONENTS									
A20.2	1	Replace wire glazing in exterior doors		X			\$ 9,563		
	2	Replace (1) pair of exterior doors and frames	X			\$ 2,632			
	3	Replace doors at portables and add weather stripping	X			\$ 14,373			
	4	Replace exterior gym door and add card readers	X			\$ 19,971			
A20.4	1	Replace roofing per roofing assessment recommendations		X		\$ 734,000			
						\$ 31,071			
A20.8	1	Replace (3) sets of ramps and handrails at portables		X					
TOTAL - STRUCTURE/SHELL					\$ 19,971	\$ 2,056,784	\$ 9,563	\$ -	
B - INTERIORS									
B10 - INTERIOR CIRCULATION									
B10.2	1	Replace handrails at (2) stair locations			X			\$ 1,344	
	2	Add handrails on side of stairs in gymnasium			X			\$ 664	
B10.3	1	Remove portions of existing ramp and install lift		X			\$ 40,413		
B10.5	1	Add compliant room signage throughout facility	X			\$ 45,371			
B20 - INTERIOR FINISHES									
B20.1	1	Abate flooring in classrooms, hallways, main office and gymnasium and replace with VCT; replace base	X			\$ 183,774			
	2	Abate kitchen floor and replace with slip resistant sheet vinyl flooring and coved base	X			\$ 18,975			
	3	Replace carpeting in the main office, principal's office and (1) classroom	X			\$ 12,850			
	4	Replace carpeting in the library and adjacent work room		X			\$ 15,939		
	5	Provide fixed walk off mats at (6) pairs of exit doors	X			\$ 11,527			
	6	Replace flooring in (1) portable with VCT		X			\$ 6,048		
B20.2	1	Replace kitchen ceiling		X			\$ 53,035		
B20.3	1	Replace ceiling in hallways, classroom and stage			X			\$ 82,220	
B20.4	1	Replace (6) backstops		X			\$ 18,026		
B20.6	1	Remove FRP paneling in cafeteria and replace with FRP panels	X			\$ 15,939			
	2	Remove wood paneling and replace with full height plastic laminate wainscot		X			\$ 144,931		
							\$ 3,214		
B30 - INTERIOR COMPONENTS									
B30.1	1	Replace all interior door wire glazing		X					
B30.2	1	Replace gymnasium doors and hardware		X			\$ 17,710		
	2	Replace single kitchen door and frame	X			\$ 2,395			
B30.4	1	Replace casework in all classrooms			X			\$ 254,581	
B30.6	1	Remodel/expand main office suite; convert Principal's office into a conference room	X			\$ 296,769			
	2	Remodel existing locker rooms into storage and student restroom facilities			X			\$ 225,291	
B40 - TOILET FACILITIES									
B40.2	1	Replace student restroom flooring		X			\$ 19,005		
	2	Abate flooring in single staff restrooms and replace with sheet vinyl flooring	X			\$ 1,142			
B40.3	1	Replace 2x4 ceilings in student restrooms with gypsum board ceilings		X			\$ 59,399		
B40.4	1	Replace all student toilet partitions	X			\$ 21,267			
B40.8	1	Remodel staff toilet rooms	X			\$ 31,625			
TOTAL - INTERIORS					\$ -	\$ 641,634	\$ 377,720	\$ 564,100	
C - SYSTEMS									
C10 - PLUMBING									
C10.2	1	Re-pipe domestic hot water piping	X			\$ 423,750			

ITEMS	Priority Level				Priority Level I	Priority Level II	Priority Level III	Priority Level IV	
	(Refer to Legend)								
	I	II	III	IV					
Mountain View Elementary									
2	Repair sprinkler riser piping in stage room	X				\$ 10,000			
3	Repair natural gas piping on roof that is not weather proofed	X				\$ 6,250			
C10.3	1 Replace all lavatories, water closets and urinals				X			\$ 181,250	
	2 Replace all water fountains with bi-level water coolers.				X			\$ 28,750	
	3 Add grease interceptor to the kitchen sinks and dishwasher		X			\$ 28,750			
C10.4	1 Flush storm water lines		X			\$ 5,000			
C20 - HVAC									
C20.1	1 Replace HVAC equipment		X			\$ 641,250			
C20.4	1 Provide ventilating unit in the offices		X			\$ 16,250			
C30 - FIRE PROTECTION									
C30.1	1 Provide fire suppression in the kitchen		X			\$ 12,500			
TOTAL - SYSTEMS						\$ 45,000	\$ 1,098,750	\$ -	\$ 210,000
D - ELECTRICAL									
D10 - ELECTRICAL EQUIPMENT									
D10.2	1 Replace electrical system		X			\$ 155,000			
	2 Install additional receptacles and circuits in classrooms and computer labs		X			\$ 15,000			
	3 Replace switches controlling computer lab receptacles with occupancy sensors				X			\$ 8,000	
D10.3	1 Replace existing luminaires in hallways, classrooms, lobbies and offices			X				\$ 55,000	
	2 Replace computer lab lighting			X				\$ 15,000	
	3 Remove lamps in hallways and offices			X				\$ 15,000	
D10.4	1 Install retrofit lighting controls			X				\$ 55,000	
	2 Provide light switches for gym, cafeteria and hallway lighting where not provided		X			\$ 30,000			
D10.6	1 Install egress lighting and retrofit existing luminaires with battery packs		X			\$ 55,000			
D10.7	1 Replace all exit signs with LED meeting intensity criteria		X			\$ 25,000			
D10.8	1 Install workstation occupancy sensors			X				\$ 55,000	
D30 - TECHNOLOGY COMMUNICATIONS									
D30.1	1 Replace intercom system		X			\$ 25,000			
D30.7	1 Replace clock system		X			\$ 25,000			
TOTAL - ELECTRICAL						\$ 80,000	\$ 250,000	\$ 195,000	\$ 8,000
E - GROUNDS									
E10 - SITE CIRCULATION AND PARKING									
E10.1	1 Replace asphalt paving in parking lot and restripe		X			\$ 57,411			
	2 Restripe parking stall at main entry; Relocate accessible stalls closer to main entrance and provide accessible crosswalk striping			X				\$ 1,881	
E10.2	1 Replace site sign			X				\$ 3,162	
	2 Replace flag pole			X				\$ 6,008	
E10.4	1 Replace curb along north elevation			X				\$ 1,106	
	2 Replace sidewalk			X				\$ 8,064	
E10.5	1 Remove concrete step and handrails at exterior kitchen door and provide ramp access			X				\$ 6,325	
	2 Remove curb at exterior classroom doors and construct ramp access			X				\$ 1,027	
E20 - SITE COMPONENTS									
E20.1	1 Regrade fields adjacent to portables and re-seed		X			\$8,538			
E20.4	1 Remove damaged material and covered play and replace			X				\$ 1,581	
E20.6	1 Construct chain link trash enclosure with gate			X				\$ 3,874	
E20.9	1 Replace and extend parking lot lighting		X			\$ 55,000			
	2 Replace remaining incandescent site lighting with LED			X				\$ 30,000	
TOTAL - GROUNDS						\$ -	\$ 120,949	\$ 63,028	\$ -

Mountain View Elementary	Priority Level				Priority Level	Priority Level	Priority Level	Priority Level
	(Refer to Legend)	Priority Level	Priority Level	Priority Level				
ITEMS	I	II	III	IV	I	II	III	IV
TOTALS BY CATEGORY								
						STRUCTURE/SHELL	\$ 2,086,318	
						INTERIORS	\$ 1,583,454	
						SYSTEMS	\$ 1,353,750	
						ELECTRICAL	\$ 533,000	
						GROUNDNS	\$ 183,977	
						FACILITY TOTAL	\$ 5,740,499	
TOTALS BY PRIORITY								
						LEVEL 1	\$ 144,971	
						LEVEL 2	\$ 4,168,117	
						LEVEL 3	\$ 645,311	
						LEVEL 4	\$ 782,100	
						PRIORITY TOTAL	\$ 5,740,499	
LEGEND:								

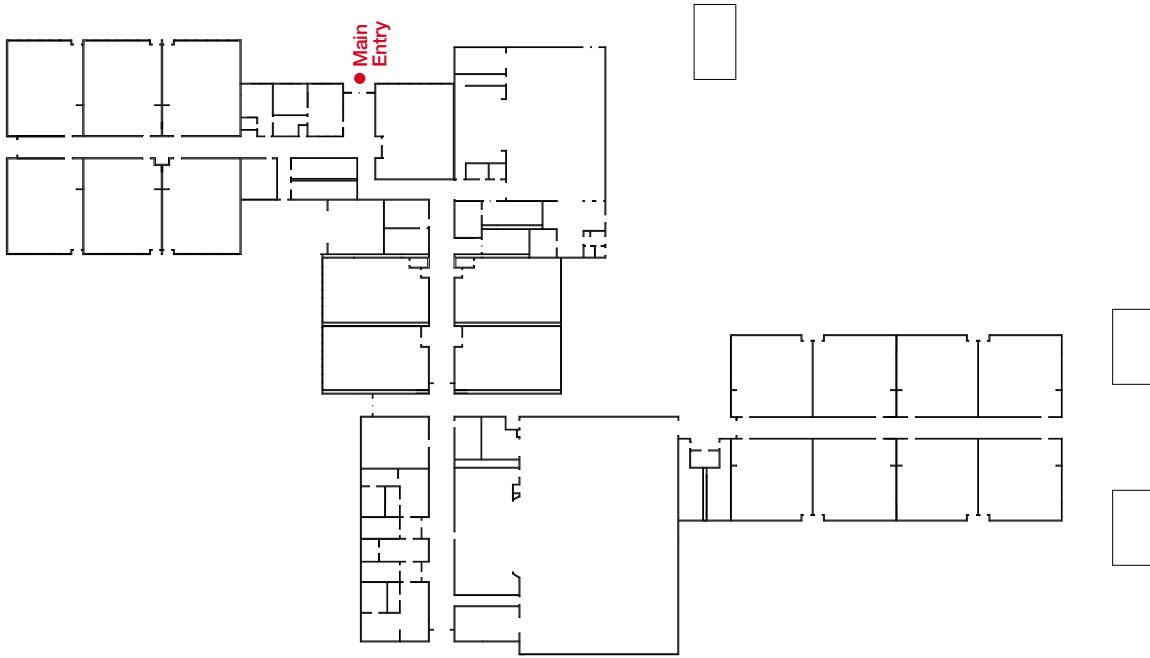
PRIORITY LEVELS

Level I: Highest Priority; Issues that affect the life safety concerns of the occupant, related to notification of occupants to emergency situations and the ability to safely evacuate the facility; subcomponents of Level I include safety concerns such as electrical loads, hazardous materials that might be affected with remodel or modifications, lack of fall protection. Level I items need to be addressed within a 5-year plan.

Level II: Moderate Priority; Issues that are related to the integrity and adequacy of systems within the building to sufficiently withstand a major event and still function; also related are the age of systems or building components that keep day to day operations running without constant repair. Issues may include mechanical, electrical and plumbing systems, fire suppression, lighting and security, as well as flooring, windows doors and other architectural components. Level II Items may be part of a 5-year plan.

Level III: Lower Priority; Issues that may over time affect the day to day maintenance of the building or long term use of the facility. Issues also include access and clearances at equipment and fixtures, access for individuals with disabilities and both indoor and exterior environment quality. Level III Items would be considered in a 5 to 10 year plan.

Level IV: Issues that are related to the aesthetics of both the building's interior and exterior as well as integrity and adequacy of building systems that don't pose any issues or nearing the end of their remaining lifecycles. These may include items such as cabinetry original to the building that have signs of wear or dated finishes but do not have any damage or deterioration. Level IV items would be considered long-term plans (10 years or more).



SCHOOL BUILDING
SCALE: NOT TO SCALE

Mountain View Elementary School | Corvallis School District

OVERALL FLOOR PLAN



Wilson Elementary School

2701 NW Satinwood Street
Corvallis, Oregon 97330

Built: 1962; 1967 addition
Enrollment: 355 students (2013)
Floor Area: 39,901 SF



Field Review Team:

Thea Wayburn	DOWA-IBI Group Architects
Michael Arellano	KPFF Consulting Engineers
Roger Arnold	Glumac
Michael Henning	Glumac
Alex Ridley	Glumac
Dana Troy	Glumac

Report Date: December 2013

Date of Field Visits: June 3-7, 2013

Weather: Sunny, 70's and 80's

Neighborhood: Residential

Site Contacts: John Meyer, CSD 509J
Kim Patten, CSD 509J

General Building Description:

Wilson Elementary is one of three prototype facilities in the Corvallis School District (Adams and Jefferson are the other two). The site is a relatively flat open field; a large open field slopes gently to the north. There is adequate space for play fields and hard surface play areas. Residential property surrounds this school site on three sides. This facility is not sprinklered.

The overall footprint of the building is L-shaped. The school is a single-story structure with wood framed roof and plywood sheathing supported on wood stud bearing walls. The cladding consists of brick veneer. The gymnasium structure is a 20-foot tall space with glulam columns and bent glulam beams. The school also houses a covered play that is attached to the main building structure. The covered play roof consists of straight wood decking on glulam beams bearing on masonry walls.

One observation made about this facility is the direct access to the gymnasium from the main entry vestibule. The main office is located beyond the vestibule, and currently all doors are kept open from the office through the vestibule to the gym. These gym doors off the vestibule appear to be the main entry point for students and staff. A remodel of the office and adding a window in the vestibule wall from the office could provide better supervision of the entry doors and gymnasium. The cafeteria and gymnasium are one shared space, which can result in challenges or conflicts in scheduling food service with physical education classes.

Overall this facility is in good condition. A full building review of architectural, structural, mechanical, electrical and plumbing components was conducted.

A - STRUCTURE / SHELL			
A10 – STRUCTURE / SUBSTRUCTURE			
Item		Findings	Comments
A10.1	Foundations	<ul style="list-style-type: none"> No issues observed 	
A10.2	Subgrade Enclosures	<ul style="list-style-type: none"> Some cracking in the flooring was observed locally in the hallway, mainly at the transition between the original construction and the classroom addition. 	<ul style="list-style-type: none"> It is thought that settlement is due to poor compaction of soil below slab on grade and insufficient/absence of doweling to adjacent slabs. There does not appear to be signs of settlement of the foundations.
A10.3	Structural Systems	<ul style="list-style-type: none"> Access to the ceiling space revealed that HVAC units hung from the roof structure lack cross-bracing. See Figure A10.3. There are recommendations available for seismic improvements to the building structure, outlined in the Degenkolb Seismic Evaluation Phase 2 report, dated July 2000. There are recommendations available for seismic improvements to non-structural systems, outlined in the Degenkolb Seismic Evaluation Phase 2 report, dated July 2000. 	<ul style="list-style-type: none"> In 2003 the school received a new roof with “Phase 1” seismic upgrades which included strengthening the connections of the roof diaphragm and adding plywood sheathing to previously deficient areas. “Phase 1” was performed in preparation for the construction of new shear walls in selected areas.
RECOMMENDATIONS			
A10.2	Remove the existing flooring locally and grind the existing concrete to provide a smooth transition. Refer to Section B20 for findings and recommendations for flooring.		
A10.3	Prioritize and perform the remaining seismic improvements to structural systems as outlined in the Degenkolb report. Perform the remaining seismic improvements to non-structural components as outlined in the Degenkolb report.		
A20 - EXTERIOR COMPONENTS			
Item		Findings	Comments
A20.1	Exterior Walls	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Exterior walls are mainly brick veneer; there is minimal wood panels/siding below windows and at gymnasium.
A20.2	Doors and Hardware	<ul style="list-style-type: none"> Exterior egress doors and frames are in poor condition. Exterior doors contain wire glass. The exterior door and sidelite at the library is in fair condition. The exterior gymnasium doors are in need of replacement; hardware needs to be replaced to provide more secure access. See Figure A20.2. 	<ul style="list-style-type: none"> Wire glass is no longer permitted in educational facilities. Egress doors and frames are wood. Door hardware has been upgraded.

A20.3	Windows and Skylights	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Windows are single pane glazing in aluminum frames. This window system is not an efficient system.
A20.4	Roof	<ul style="list-style-type: none"> A separate roofing assessment is located in the appendix of this report. 	<ul style="list-style-type: none"> Roofing is a modified built up system, 10 years in age.
A20.5	Canopies and Covered Walks	<ul style="list-style-type: none"> No issues observed 	
A20.6	Gutters and Downspouts	<ul style="list-style-type: none"> No issues observed 	
A20.7	Trim and Overhangs	<ul style="list-style-type: none"> No issues observed 	
A20.8	Ramps and Stairs	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> With the exception of the stage, this school is a single level facility.

RECOMMENDATIONS

- A20.2 If remodel work were to occur at this facility, the replacement of wire glass with tempered glazing may be required. Wire glass may also be replaced at the District’s discretion to prevent any issues if glazing is damaged or broken.
 Replace door and sidelite (and frame) at library. Replace (2) pairs of exterior doors and frames at gymnasium. Provide new doors, frames, hardware and kickplates and card readers to improve security/access. Replace (21) single exterior doors with new doors, frames and associated hardware.
- A20.3 Replace all single pane glazing with aluminum storefront system, tempered glazing and operable vents.
- A20.4 Replace roofing per roofing assessment recommendations.

B - INTERIORS			
B10 – INTERIOR CIRCULATION			
Item		Findings	Comments
B10.1	Construction and Exiting	<ul style="list-style-type: none"> • There are vertical fire doors in the hallway. It is unknown if the fire doors are still operational. • Doors and windows contain wire glass. • This facility is not sprinklered. 	<ul style="list-style-type: none"> • Wire glass is no longer permitted in educational facilities. • Classrooms have exterior doors equipped with panic hardware. • A major remodel or addition at this site would require a thorough building code analysis.
B10.2	Stairs and Handrails	<ul style="list-style-type: none"> • Handrails for stage access (both at stairs and ramp) are not code compliant both in construction and material. Stairs to the stage from the cafeteria do not have handrails. 	<ul style="list-style-type: none"> • The stage is now used for storage.
B10.3	Ramps and Elevators	<ul style="list-style-type: none"> • The ramp to the stage is too steep to meet current code. 	<ul style="list-style-type: none"> • The stage is now used for storage. • The ramp lacks at landing at the bottom portion. • With the exception of the stage, this facility is a single story building. • Unless remodel or addition is planned at this facility (which would trigger other upgrades), no recommendations are made at this time.
B10.4	Accessibility	<ul style="list-style-type: none"> • The stage is currently not accessible; however, it is now used for storage. • The reception desk in the main office and the library circulation desk do not have an accessible transaction space. 	<ul style="list-style-type: none"> • Unless remodel or addition is planned at this facility (which would trigger other upgrades), no recommendations are made at this time.
B10.5	Signage	<ul style="list-style-type: none"> • This facility lacks compliant room signage. 	
RECOMMENDATIONS			
B10.1	If remodel work were to occur at this facility, the replacement of wire glass with tempered glazing may be required. Wire glass may also be replaced at the District’s discretion to prevent any issues if glazing is damaged or broken. See Sections A20 and B30.		
B10.2	Remove existing handrails and replace with compliant handrail construction. Add a handrail on each side of stairs from gym to stage.		
B10.3	Remove portions of the ramp and install lift for stage access. Construct compliant landings at top and bottom of lift.		
B10.5	Install compliant room signage throughout the facility.		

B20 – INTERIOR FINISHES			
Item		Findings	Comments
B20.1	Flooring	<ul style="list-style-type: none"> The majority of the flooring is asbestos tile. Several classrooms are fully carpeted; the carpeting is in fair condition. The carpet in Classroom 12 is in poor condition. The carpet in Classroom 2 has bubbles. See Figure B20.1.a. Carpeting in the main office is in fair condition. Egress doors do not have fixed walk off mats. There is significant cracking/settling in one classroom hallway. See Figure B20.1.b. 	<ul style="list-style-type: none"> The carpeting in the library is in good condition. The flooring in the classrooms east of the gymnasium has been replaced by VCT. This flooring is in good condition. See Section A10 for additional structural information.
B20.2	Ceilings	<ul style="list-style-type: none"> Ceilings in the gymnasium are showing signs of wear. The ceiling in the kitchen is in fair condition. 	<ul style="list-style-type: none"> Ceilings are 12X12 wood fiber ceiling tile. This ceiling type is an older ceiling not commonly used.
B20.3	Ceiling Issues	<ul style="list-style-type: none"> No issues observed 	
B20.4	Fixed Equipment	<ul style="list-style-type: none"> Glazing in display cases is large and glazing material seems thin. 	<ul style="list-style-type: none"> Gymnasium has (6) backstops. Classrooms are equipped with a combination of marker boards, projection screens, televisions and smart boards (in some classrooms). There are (3) display cases located across from the main office.
B20.5	Walls	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> The majority of interior walls are gypsum board; the vestibule walls are brick.
B20.6	Wall Finishes	<ul style="list-style-type: none"> Lacquer finish on wood paneling is a possible fire hazard. 	<ul style="list-style-type: none"> Classroom walls are painted gypsum board. Hallway and gymnasium walls are wood paneling (full height in hallways, 7'-0" high in gymnasium). While dated, the wood is in very good condition. It is the District's desire to update finishes in hallways. Most walls have 5" high rubber base; base is 7" high rubber base in hallways. Wall padding is located behind basketball backstops, and is in good condition.

B20.7	Furnishings	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Stage curtain is in very good condition. Most classrooms have wooden freestanding bookshelves. Library book shelving is fixed. Window coverings are horizontal mini blinds. Window coverings are in good condition. Classroom furniture is mainly desks and chairs; the furniture is generally in good condition.
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RECOMMENDATIONS

B20.1	Remove all asbestos floor tile in hallways, gymnasium, main office and in (9) classrooms with VCT. Remove all wood and rubber base in this facility and replace with new rubber base. Abate asbestos tile in the kitchen area and replace with slip resistant sheet vinyl and coved base. Replace carpeting in (3) classrooms and in the main office area. Provide fixed walk off mats at (5) exterior door locations. Replace VCT in hallway with new VCT.
B20.3	Replace ceiling in kitchen area with epoxy painted gypsum board ceiling.
B20.4	Replace glazing in (3) display cases with tempered glazing.
B20.6	Remove all wood paneling from all hallways and replace with full height plastic laminate wainscoting.

B30 – INTERIOR COMPONENTS

Item	Findings	Comments	
B30.1	Interior Windows	<ul style="list-style-type: none"> Interior windows contain wire glass. 	<ul style="list-style-type: none"> Wire glass is no longer permitted in educational facilities.
B30.2	Interior Doors and Hardware	<ul style="list-style-type: none"> Interior doors contain wire glass. Interior gym doors and hardware need replacement. 	<ul style="list-style-type: none"> Wire glass is no longer permitted in educational facilities. Interior doors and frames are wood, and while they show signs of wear and age, are generally in good condition. Classroom door hardware has been upgraded.
B30.3	Acoustics	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Gymnasium does not have any acoustic wall panels.
B30.4	Casework	<ul style="list-style-type: none"> Classroom and library casework is aged but the finishes are in good condition. 	<ul style="list-style-type: none"> Casework is inconsistent in its finishes in each classroom.
B30.5	Security	<ul style="list-style-type: none"> Door glazing does not have any covering for security. Gymnasium can be accessed from main entry doors; sight lines are limited from the main office. See Figure B30.5. 	<ul style="list-style-type: none"> Glazing is typically 11"x11". A window from vestibule into office area could improve security from main entry doors into gym as well as monitoring individuals entering the building.
B30.6	Other	<ul style="list-style-type: none"> This facility lacks a separate gymnasium and cafeteria. Both functions share one space, which can cause conflicts between food service and providing adequate physical education classes. A separate gymnasium 	<ul style="list-style-type: none"> This facility is an older school and does not provide adequate building storage.

		would be beneficial to this facility.	
RECOMMENDATIONS			
B30.1	If remodel work were to occur at this facility, the replacement of wire glass with tempered glazing may be required. Wire glass may also be replaced at the District's discretion to prevent any issues if glazing is damaged or broken.		
B30.2	See Section B30.1. Replace (2) sets of interior doors and frames at the gymnasium. Provide new hardware and kickplates.		
B30.4	Replace casework (countertops, backsplash and cabinets) in all classrooms.		
B30.5	Add window coverings or blinds to all glazing in doors. Remodel office area. Relocate main office/reception area and add a window from vestibule into new reception area for added supervision to front door. Reconfigure remaining office area for health room and accessible toilet, staff mailboxes and (2) offices.		
B30.6	Construct an addition to house a new gymnasium facility, student restrooms, storage and small group space. Remodel existing locker rooms into building storage.		
B40 – TOILET FACILITIES			
Item	Findings	Comments	
B40.1	Walls and Wall Finishes	• No issues observed	• Student restroom flooring is ceramic tile.
B40.2	Floors and Floor Finishes	• No issues observed	• Student restroom walls are a combination of fiberglass and ceramic tile.
B40.3	Ceilings	• No issues observed	
B40.4	Partitions	• Partitions are in good to fair condition.	
B40.5	Fixtures	• Refer to Plumbing Section	• Fixtures appear worn.
B40.6	Accessories	• No issues observed	
B40.7	Accessibility	• Student restrooms have been made accessible. The smaller student restrooms adjacent to the original locker rooms and single staff restrooms are not accessible.	• The staff restroom in the main office is undersized (4'-6"X4'-6").
RECOMMENDATIONS			

C - SYSTEMS			
C10 - PLUMBING			
Item		Findings	Comments
C10.1	Water Service	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Water service entry located in the boiler room.
C10.2	Piping	<ul style="list-style-type: none"> Domestic hot water (DHW) piping is period to the building. See Figure C10.2. 	<ul style="list-style-type: none"> Gas entry for boiler (2 PSI) Gas entry for kitchen.
C10.3	Fixtures	<ul style="list-style-type: none"> All restroom fixtures and drinking fountains are period to the building. See Figure C10.3. There is no grease interceptor in the kitchen. 	<ul style="list-style-type: none"> Four compartment sink, no grease interceptor Gas oven in kitchen Exterior hose bibs WC: Floor mount flush valve Lavatories: manual valve Urinals: floor mounted manual flush Foot pedal operated Bradley sink Single level drinking fountains Staff water closet: Floor mounted flush tank
C10.4	Storm and Overflow Drains	<ul style="list-style-type: none"> Gutter cleaning/maintenance are needed. 	<ul style="list-style-type: none"> Exterior gutters and downspouts.
C10.5	Water Heater	<ul style="list-style-type: none"> Domestic hot water is off of the boiler. 	<ul style="list-style-type: none"> Model: Bradford White 50 gallons, 4.5 kW. Mixing valve in lieu of circulating pump. Located off of the gym.
RECOMMENDATIONS			
C10.2	Repipe domestic hot water piping.		
C10.3	Replace all lavatories, water closets and urinals. Replace all water fountains with bi-level water coolers. Add grease interceptor to the kitchen sinks and dishwasher.		
C10.4	Flush storm water lines.		
C10.5	Provide dedicated hot water boilers and recirculation pumps.		

C20 - HVAC			
Item		Findings	Comments
C20.1	Mechanical Equipment	<ul style="list-style-type: none"> • Forced air systems are functional but beyond their useful life. See Figure C20.1a. • No airflow or ventilation in office. • Condensing unit on roof has a wedged shaped 2x4 acting as the curb (not sufficient as a curb during a seismic event). See Figure 20.1b. 	<ul style="list-style-type: none"> • Fin tube convectors provide heat. No unit ventilators. • Heating and ventilating equipment provide 65 degree air or higher. • Exhaust fans serve two classrooms a piece. • Packaged rooftop unit serves library. Typhoon unit was replaced. • Split system serves the computer room. • Gym has its own unit • Locker room have their own units plus fin tubes. • Kitchen has its own unit. • Fin tube heaters in offices and baseboard heaters. • Each classroom has fin tubes of wall, exhaust under coat area; supply in soffit. • In area above stage: • HV-4 serves south (old) wing. Rheem, new bearing and motor shaft of 2010. • HV-1 serves the gym Pace B19 • EF-1 exhaust fan for gym, not running (it was not hot enough). Recold Blower Corp size 34SISWF1. • Above men's RR: • Unit serves down to firewall. HV-5. Could not get a reading off of it. • There is a unit with access by Room 14. Exhaust fan. • Unit is in room 18 serves rest of the building. 100% OA. No return fan. Access through the A-frame unit. HV-1 Pace unit. • Locker room exhaust fan has copper ductwork similar to others. • HV-2 serves the locker room. • Kitchen unit HV-3 in same space as HV-2. Pace • Packaged AC unit serving the library: RHEEM RJNL-A060CK R410a. Installed 2008 • Unit heater located in bathroom. • Old kitchen exhaust fan on the roof. Other classroom exhaust fans also old.
C20.2	Air Filtration	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • Air filtration is period to the building.

C20.3	Equipment Accessibility	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Access is by A-frame ladders and permanent stairs.
C20.4	Air Distribution and Ventilation	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Operable windows are present throughout the building.
C20.5	Controls	<ul style="list-style-type: none"> Split system and unit heaters near the entrance not on the DDC. 	<ul style="list-style-type: none"> System: Andover DDC.
C20.6	Chillers	<ul style="list-style-type: none"> Not Applicable 	<ul style="list-style-type: none">
C20.7	Boiler	<ul style="list-style-type: none"> Boilers are functional but past their useful life. See Figure 20.7. Domestic hot water is off of the boiler. Asbestos is present in mechanical equipment. Boiler flues are not insulated. 	<ul style="list-style-type: none"> Boilers: Birchfield 1800 MBH (original to the building, total of (2)). Hot water pumps: Taco DHW pump :1/6 hp

RECOMMENDATIONS

- C20.1 Replace all heating and ventilating units and exhaust fans. Provide ventilation and heating to office area. Replace curb at rooftop condensing unit.
- C20.5 Connect split system to the DDC system.
- C20.7 Provide new high efficiency boilers, variable speed piping and associated piping in the mechanical room.

C30 – FIRE PROTECTION

Item		Findings	Comments
C30.1	Fire Suppression System	<ul style="list-style-type: none"> The kitchen hood lacks fire suppression. 	<ul style="list-style-type: none"> This facility is not sprinklered.
C30.2	Water Service and Backflow Prevention	<ul style="list-style-type: none"> Not Applicable 	
C30.3	System Pressure	<ul style="list-style-type: none"> Not Applicable 	
C30.4	Standpipes	<ul style="list-style-type: none"> Not Applicable 	
C30.5	Fire Pump	<ul style="list-style-type: none"> Not Applicable 	
C30.6	Fire Sprinkler Pipe Condition	<ul style="list-style-type: none"> Not Applicable 	
C30.7	Fire Department Connection	<ul style="list-style-type: none"> Not Applicable 	
C30.8	Fire Sprinkler Zoning	<ul style="list-style-type: none"> Not Applicable 	
C30.9	Flow Monitoring and Alarm	<ul style="list-style-type: none"> Not Applicable 	
C30.10	Hoses and Extinguishers	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Fire extinguishers

RECOMMENDATIONS

- C30.1 Provide fire suppression in the kitchen hood.

D - ELECTRICAL			
D10 - ELECTRICAL EQUIPMENT			
Item		Findings	Comments
D10.1	Transformers	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Utility transformer of unknown size in a PPL Vault.
D10.2	Switchgear and Panelboards	<ul style="list-style-type: none"> Main electrical service appears undersized. Branch panels lack sufficient spare capacity. See Figure D10.2.a. Branch circuits sampled are missing equipment grounding conductors; panels do not have grounding bus bars. Supplies are stored in front of distribution panel. Subfed panel neutral conductor shares lug with feeder neutral conductor; conductor strands appear to have been cut to accommodate wire. See Figure D10.2b. Cloth cable in evidence throughout facility. Cover is missing from the intercom system control cabinet; energized components exposed. See Figure D10.2c. Panel A appears to have water damage and corrosion. Some circuit breakers and contactors appear to be nearing end of useful life; heard buzzing very loudly. 	<ul style="list-style-type: none"> Cloth cable is no longer acceptable per the current National Electric Code (NEC). Cloth cable is outdated and has the potential to lack grounding capabilities. 600A, 120Y/208V electrical service Cutler Hammer distribution panel with 5 fusible disconnects. Cutler Hammer branch panels 200A 30-42 space. Maintenance personnel unable to lock the majority of electrical panels.
D10.3	Lighting	<ul style="list-style-type: none"> There is evidence of ballast failure in volumetric retrofit luminaires. Incandescent lighting remains in service at stage, mechanical and electrical rooms and various closets and restrooms. Offices appear overlit. 	<ul style="list-style-type: none"> Retrofitted to T8 linear fluorescent; hallways utilized original luminaires. Some classrooms are outfitted with standard GE volumetric retrofit; remaining classrooms are served by 2 lamp T8 surface mounted wrap fixtures. T8 highbay lighting replaced high intensity discharge lighting in gym. Offices are lit by 4 lamp T8 recessed 2x4 troffers.
D10.4	Lighting Controls	<ul style="list-style-type: none"> No automated controls are installed. 	<ul style="list-style-type: none"> Classroom lighting switched in rows parallel to the windows; Classroom lighting configuration very favorable for retrofit lighting controls. Hallway, gym and cafeteria lighting are switched via circuit breaker. Lighting controls are highly recommended to meet current energy efficiency codes and conserve energy.

D10.5	Back-up and Emergency Power	<ul style="list-style-type: none"> • Not Applicable 	
D10.6	Egress and Emergency Lighting	<ul style="list-style-type: none"> • Lighting is insufficient egress path. 	<ul style="list-style-type: none"> • Small quantity of “bugeye” egress luminaires installed in hallways and restrooms.
D10.7	Exit Signage	<ul style="list-style-type: none"> • Existing exit signs observed do not meet intensity requirements. 	<ul style="list-style-type: none"> • Exit signs appear period to building (retrofitted with LED). • Replacement of existing signage could result in energy and maintenance savings potential.
D10.8	Sensors	<ul style="list-style-type: none"> • No sensors observed; currently does not meet Oregon State Energy Code 	

RECOMMENDATIONS

- D10.2 Replace and upsize building electrical system complete, including all panelboards, main distribution panel and all feeder and branch circuit wiring with an 800A, 120Y/208V system to accommodate for future growth. Improve enforcement of 3 foot clearance requirements for electrical equipment. Secure panels to prohibit access.
- D10.3 Replace remaining GE retrofitted ballasts (Lutron EcoSystem series ballasts or equivalent). Replace existing incandescent lighting in mechanical, electrical rooms and other areas with LED or linear fluorescent luminaires.
- D10.4 Install a building lighting control system (Lutron Quantum system).
- D10.6 Install retrofit battery packs in existing fixtures along egress paths.
- D10.7 Replace all retrofitted and incandescent exit signs with LED fixtures with emergency batteries.
- D10.8 Install workstation occupancy sensors in offices and classrooms to reduce plugload energy consumption.

D20 – SAFETY / SECURITY

Item	Findings	Comments	
D20.1	Fire Alarm	<ul style="list-style-type: none"> • Existing fire alarm system is not a district standard. 	<ul style="list-style-type: none"> • System: Silent Knight
D20.2	Smoke Detection	<ul style="list-style-type: none"> • No issues observed 	
D20.3	Pull Stations	<ul style="list-style-type: none"> • No issues observed 	
D20.4	Annunciation	<ul style="list-style-type: none"> • No issues observed 	
D20.5	Addressable Zones and Systems	<ul style="list-style-type: none"> • No issues observed 	
D20.6	Monitoring	<ul style="list-style-type: none"> • No issues observed 	
D20.7	Access Control	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • Card readers present
D20.8	Intrusion	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • System: Sonitrol
D20.9	Video Surveillance	<ul style="list-style-type: none"> • Not Applicable 	

RECOMMENDATIONS

- D20.1 Replace existing fire alarm system with District standard system.

D30 – TECHNOLOGY COMMUNICATIONS

Item	Findings	Comments	
D30.1	Paging and Intercom –	<ul style="list-style-type: none"> • Existing system is well past its useful life. Repair parts are unavailable and 	<ul style="list-style-type: none"> • System: Rauland

	Head End Condition	there is inadequate technical support for this system.	
D30.2	Master Clock	<ul style="list-style-type: none"> • Clock is past its useful life. 	
D30.3	Infrastructure	<ul style="list-style-type: none"> • Unused cable has been abandoned in place. • Cabling is not labeled. 	
D30.4	Speakers	<ul style="list-style-type: none"> • No issues observed 	
D30.5	Coverage	<ul style="list-style-type: none"> • No issues observed 	
D30.6	Clock System	<ul style="list-style-type: none"> • The clock system is past its useful life; system is very difficult for users to program. 	
D30.7	Clock – Head End	<ul style="list-style-type: none"> • Clock system is well past its useful life. Repair parts are unavailable and there is inadequate technical support for this system. 	<ul style="list-style-type: none"> • System: Latham
RECOMMENDATIONS			
D40.1	Replace intercom and paging system.		
D40.7	Replace clock system.		

E - GROUNDS			
E10 – SITE CIRCULATION AND PARKING			
Item		Findings	Comments
E10.1	Parking Lots	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> The parking lot contains (86) standard stalls and (4) accessible stalls. There are also parking stalls located parallel to entry.
E10.2	Site Signage/ Accessories	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> No issues with flagpole. Site sign is wooden construction and low to the ground.
E10.3	Vehicular Circulation	<ul style="list-style-type: none"> There is no dedicated fire lane. 	<ul style="list-style-type: none"> Parking lot's aisles are wide to accommodate vehicular circulation.
E10.4	Curbs and Sidewalks	<ul style="list-style-type: none"> Curbs finishes along parking lot are in fair condition. The sidewalk along the north side of the building is in fair condition. 	
E10.5	Accessibility	<ul style="list-style-type: none"> The main entry door lacks an actuator. Several exterior classroom doors are not accessible. 	<ul style="list-style-type: none"> Building is surrounded by sidewalks.
E10.6	Bikes and Bike Parking	<ul style="list-style-type: none"> Bike racks are located quite a distance from the front doors for supervision. 	<ul style="list-style-type: none"> There are (4) uncovered bike racks located in the law area adjacent to the entry drive.
RECOMMENDATIONS			
E10.4	Repaint curbs in parking lot. Replace sidewalk along north elevation.		
E10.5	Remove curbs at (11) exterior classroom doors and provide ramp access. See Section A20.2 for hardware recommendations.		
E10.6	Install bike racks adjacent to building entry.		
E20 - SITE COMPONENTS			
Item		Findings	Comments
E20.1	Fields	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Fields are grass.
E20.2	Landscaping	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> The site is mainly lawn; there are some mature trees and landscaping at the school's entry.
E20.3	Irrigation	<ul style="list-style-type: none"> None observed 	<ul style="list-style-type: none"> It is the District's desire to add irrigation to field areas.
E20.4	Site Buildings	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Covered play is in good condition.
E20.5	Site Security	<ul style="list-style-type: none"> Gymnasium can be directly accessed from main entry doors (and with poor sight lines from main office). There is no gate/fence between building and adjacent park/play structure. 	
E20.6	Fencing	<ul style="list-style-type: none"> See Section E20.5. Trash receptacles are not enclosed, and are visible to visitors and neighbors. See Figure E20.6. 	<ul style="list-style-type: none"> Playground areas are fenced.
E20.7	Playground Equipment	<ul style="list-style-type: none"> The playground and play structure at the adjacent Wildcat Park is available for school use. 	
E20.8	Play Surfaces	<ul style="list-style-type: none"> Play surfaces are in fair condition. Paving is cracked and finish is quite worn. See Figure E20.8. Striping is in fair condition. 	<ul style="list-style-type: none"> There are (2) hardscape areas. There are no issues observed with the backboards.

E20.9	Site Lighting	<ul style="list-style-type: none"> • Parking fixtures are damaged (most likely vehicular collision). • Lighting bases appear too small/shallow. See Figure E20.9. 	<ul style="list-style-type: none"> • 175W mercury halide parking lot pole lighting. • High intensity discharge (HID) and incandescent lighting is present in building mounted and soffit lighting.
E20.10	Grading and Drainage	<ul style="list-style-type: none"> • Several storm drains are overgrown with grass and or other materials. See Figure E20.10. 	<ul style="list-style-type: none"> • Fields were dry at the time of field visit.

RECOMMENDATIONS

E20.3	Add irrigation system to fields.
E20.6	Add chain link fence with gate between SW corner of building and adjacent playground/park. See section B30.5 for building security recommendations. Construct chain link fence trash enclosure with gate (located near kitchen).
E20.8	Resurface all hard surface asphalt paving (both locations). Restripe to match existing conditions.
E20.9	Install concrete bollards around parking area pole bases to prevent further damage. Replace any remaining incandescent site lighting with LED luminaires.
E20.10	Repair/replace storm line and clean out overgrown drains in (3) locations.

IMAGES

Figure A10.3 – Mechanical units



Figure A20.2 – Gymnasium door



Figure B20.1.a – Classroom carpeting



Figure B20.1.b – Cracks in hallway flooring



Figure B30.5 – Gymnasium security



Figure C10.2 – Domestic hot water piping



Figure C10.3 – Plumbing fixtures



Figure C20.1.a – Forced air system



Figure C20.1.b – Roof curb



Figure C20.7 – Boilers



Figure D10.2.a – Lack of spare capacity



Figure D10.2.b – Neutral conductors share lug



Figure D10.2.c - Cabinet is missing cover

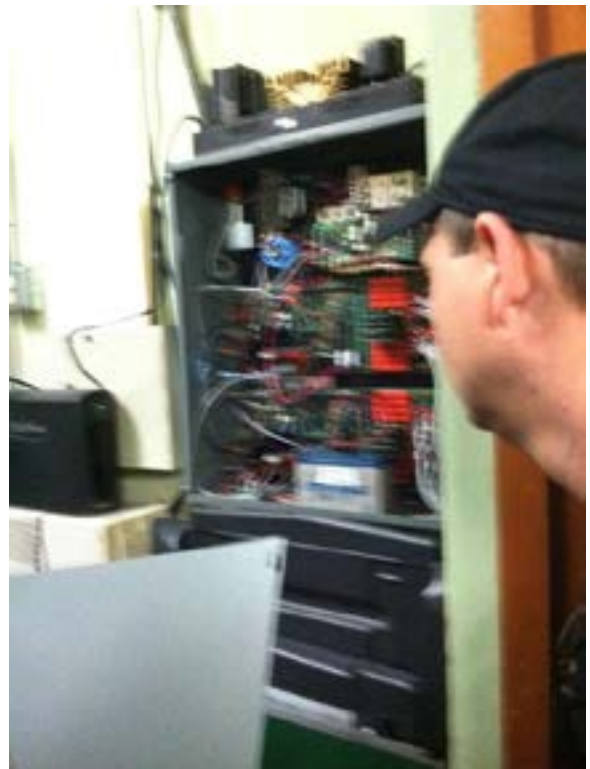


Figure E20.6 – Trash receptacle area



Figure E20.8 – Paving



Figure E20.9 – Parking light poles



Figure E20.10 – Overgrown storm drains



Wilson Elementary		Priority Level				Priority Level I	Priority Level II	Priority Level III	Priority Level IV
		(Refer to Legend)	I	II	III				
ITEMS									
A - STRUCTURE/SHELL									
A10 - STRUCTURE/SUBSTRUCTURE									
A10.2	1	Grind existing concrete to provide smooth transition	X				\$ 1,581		
							\$ 993,721		
A10.3	1	Complete seismic upgrades per previous reports	X						
A20 - EXTERIOR COMPONENTS									
A20.2	1	Replace wire glazing in exterior doors		X			\$ 1,095		
	2	Replace door and sidelite at library		X			\$ 6,371		
	3	Replace exterior gym doors and add card readers	X			\$ 19,971			
	4	Replace (21) exterior doors	X				\$ 50,307		
A20.3	1	Replace all single glazing window systems	X				\$ 287,475		
A20.4	1	Replace roofing per roofing assessment recommendations	X				\$ 734,000		
TOTAL - STRUCTURE/SHELL						\$ 19,971	\$ 2,067,084	\$ 7,466	\$ -
B - INTERIORS									
B10 - INTERIOR CIRCULATION									
B10.2	1	Replace handrails at (2) stair locations			X			\$ 1,344	
	2	Add handrails on side of stairs in gymnasium			X			\$ 664	
B10.3	1	Remove portions of existing ramp and install lift		X			\$ 40,413		
B10.5	1	Add compliant room signage throughout facility	X				\$ 34,701		
B20 - INTERIOR FINISHES									
B20.1	1	Abate flooring in classrooms, hallways, main office and gymnasium and replace with VCT	X			\$ 207,273			
	2	Abate kitchen floor and replace with slip resistant sheet vinyl flooring and covered base	X			\$ 14,036			
	3	Replace carpeting in the main office and (3) classrooms		X			\$ 28,225		
	4	Provide fixed walk off mats at (5) pairs of exit doors	X			\$ 7,364			
	5	Replace VCT in hallways with new VCT flooring	X			\$ 11,424			
B20.2	1	Replace kitchen ceiling		X			\$ 40,262		
B20.4	1	Replace glazing in display cases	X				\$ 3,752		
B20.6	1	Remove wood paneling and replace with full height plastic laminate wainscot		X			\$ 132,291		
B30 - INTERIOR COMPONENTS									
B30.1	1	Replace all interior door wire glazing		X			\$ 1,802		
B30.2	1	Replace gymnasium doors and hardware	X			\$ 17,710			
B30.4	1	Replace casework in all classrooms			X			\$ 286,554	
B30.5	1	Add blinds or shades to all door lites	X			\$ 1,897			
	2	Remodel office area/provide visibility into	X			\$ 220,406			
B30.6	1	Construct gymnasium and toilet room addition		X			\$ 1,669,800		
	2	Remodel existing locker rooms into storage		X				\$ 79,053	
TOTAL - INTERIORS						\$ 236,339	\$ 282,224	\$ 1,912,793	\$ 367,615
C - SYSTEMS									
C10 - PLUMBING									
C10.2	1	Re-pipe domestic hot water piping	X				\$ 370,000		
C10.3	1	Replace all lavatories, water closets and urinals			X			\$ 156,250	
	2	Replace all water fountains with bi-level water coolers			X			\$ 28,750	
	3	Add grease interceptor to the kitchen sinks and dishwasher	X			\$ 28,750			
C10.4	1	Flush storm water lines	X				\$ 5,000		
C10.5	1	Provide dedicated DHW boilers and recirculation pumps	X				\$ 28,750		
C20 - HVAC									
C20.1	1	Replace all heating and ventilating units and exhaust fans	X			\$ 528,750			
	2	Provide ventilation and heating to the office	X			\$ 20,000			
	3	Provide adequate curb for condensing unit on the roof	X			\$ 1,250			

Wilson Elementary		Priority Level				Priority Level I	Priority Level II	Priority Level III	Priority Level IV
		(Refer to Legend)							
ITEMS		I	II	III	IV				
C20.5	1 Connect split system to the DDC system				X				\$ 12,500
C20.7	1 Provide new high efficiency boilers, variable speed piping, and associated piping in the mechanical room		X				\$ 482,500		
C30 - FIRE PROTECTION									
C30.1	1 Provide fire suppression in kitchen hood	X					\$ 12,500		
TOTAL - SYSTEMS						\$ 33,750	\$ 1,443,750	\$ -	\$ 197,500

D - ELECTRICAL									
D10 - ELECTRICAL EQUIPMENT									
D10.2	1 Replace electrical system		X				\$ 120,000		
	2 Improve enforcement and labeling of required panel clearances		X				\$ 2,500		
	3 Provide secure access of electrical and control panels	X					\$ 2,500		
D10.3	1 Replace malfunctioning GE ballasts in retrofit fixtures		X				\$ 40,000		
	2 Replace incandescent lighting in mechanical and electrical rooms			X			\$ 20,000		
D10.4	1 Install retrofit lighting controls			X			\$ 40,000		
D10.6	1 Install egress lighting and retrofit existing luminaires with battery packs	X					\$ 40,000		
D10.7	1 Replace all exit signs with LED signs meeting intensity criteria	X					\$ 20,000		
D10.8	1 Install workstation occupancy sensors			X			\$ 40,000		
D20 - SAFETY/SECURITY									
D20.1	1 Replace existing fire alarm system				X			\$ 40,000	
D30 - TECHNOLOGY COMMUNICATIONS									
D30.1	1 Replace intercom system		X				\$ 20,000		
D30.7	1 Replace time clock system		X				\$ 20,000		
TOTAL - ELECTRICAL						\$ 62,500	\$ 202,500	\$ 100,000	\$ 40,000

E - GROUNDS									
E10 - SITE CIRCULATION AND PARKING									
E10.4	1 Repaint curbs in parking lot			X			\$ 2,988		
	2 Replace the sidewalk at the north elevation			X			\$ 6,641		
E10.5	1 Remove curb at exterior classroom doors and construct ramp access			X			\$ 1,027		
E10.6	1 Install bike racks adjacent to main entrance		X				\$ 2,846		
E20 - SITE COMPONENTS									
E20.3	1 Add irrigation to field areas			X			\$ 320,098		
E20.6	1 Add chain link fencing	X					\$ 3,083		
	2 Construct chain link trash enclosure			X			\$ 3,874		
E20.8	1 Resurface and restripe both hard surface play areas		X				\$ 74,424		
E20.9	1 Install bollards around parking area lighting poles			X			\$ 9,487		
	2 Replace remaining incandescent and compact fluorescent site lighting with LED			X			\$ 40,000		
E20.10	1 Repair/replace storm drain line and clean out (3) overgrown drains		X				\$ 16,128		
TOTAL - GROUNDS						\$ 3,083	\$ 93,398	\$ 384,115	\$ -

Wilson Elementary ITEMS	Priority Level (Refer to Legend)				Priority Level	Priority Level	Priority Level	Priority Level
	I	II	III	IV	I	II	III	IV
TOTALS BY CATEGORY								
						STRUCTURE/SHELL		\$ 2,094,521
						INTERIORS		\$ 2,798,971
						SYSTEMS		\$ 1,675,000
						ELECTRICAL		\$ 405,000
						GROUNDS		\$ 480,596
						FACILITY TOTAL		\$ 7,454,088
TOTALS BY PRIORITY								
						LEVEL 1		\$ 355,643
						LEVEL 2		\$ 4,088,956
						LEVEL 3		\$ 2,404,374
						LEVEL 4		\$ 605,115
						PRIORITY TOTAL		\$ 7,454,088
LEGEND:								

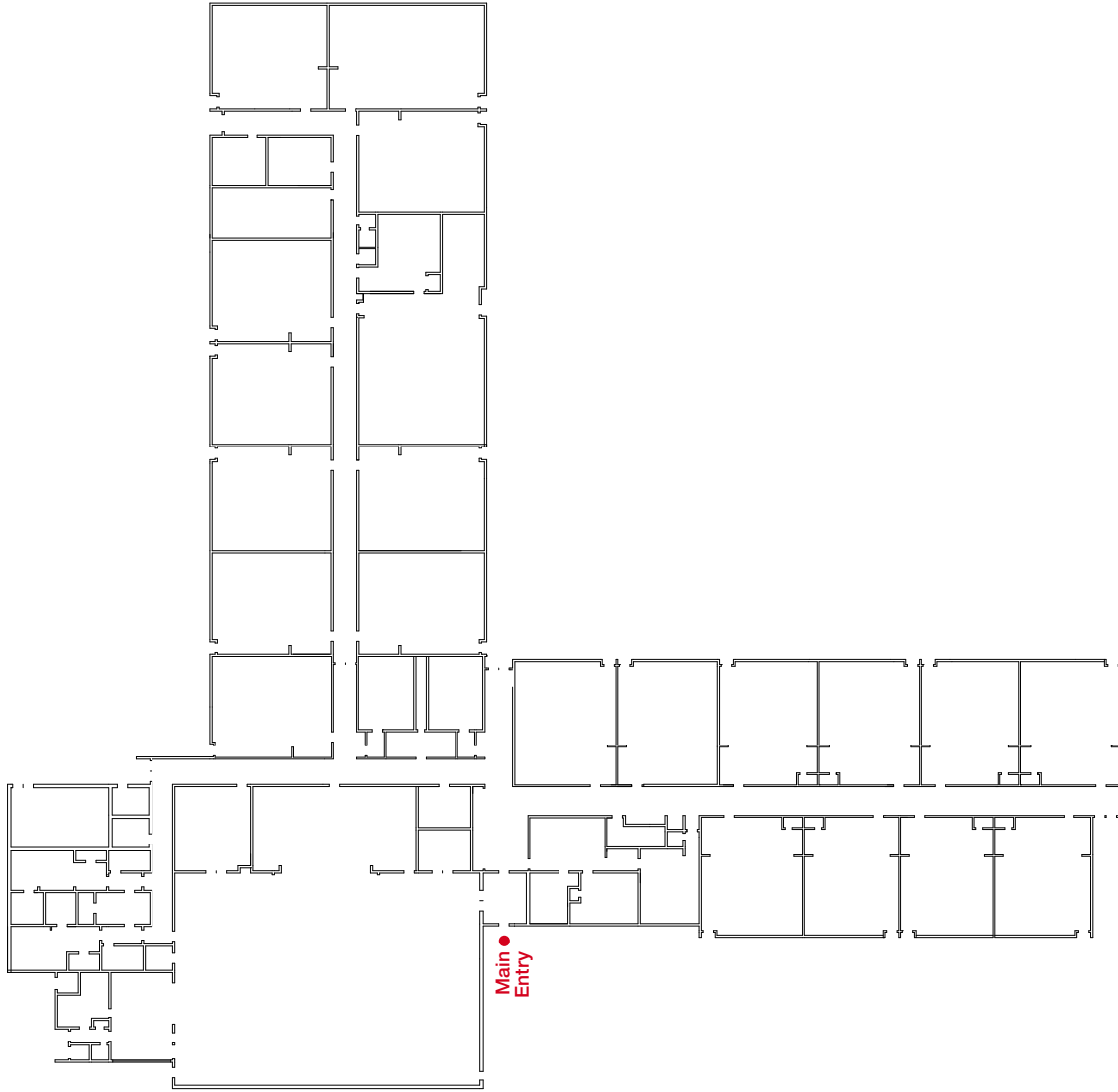
PRIORITY LEVELS

Level I: Highest Priority; Issues that affect the life safety concerns of the occupant, related to notification of occupants to emergency situations and the ability to safely evacuate the facility; subcomponents of Level I include safety concerns such as electrical loads, hazardous materials that might be affected with remodel or modifications, lack of fall protection. Level I items need to be addressed within a 5-year plan.

Level II: Moderate Priority; Issues that are related to the integrity and adequacy of systems within the building to sufficiently withstand a major event and still function; also related are the age of systems or building components that keep day to day operations running without constant repair. Issues may include mechanical, electrical and plumbing systems, fire suppression, lighting and security, as well as flooring, windows doors and other architectural components. Level II Items may be part of a 5-year plan.

Level III: Lower Priority; Issues that may over time affect the day to day maintenance of the building or long term use of the facility. Issues also include access and clearances at equipment and fixtures, access for individuals with disabilities and both indoor and exterior environment quality. Level III Items would be considered in a 5 to 10 year plan.

Level IV: Issues that are related to the aesthetics of both the building's interior and exterior as well as integrity and adequacy of building systems that don't pose any issues or nearing the end of their remaining lifecycles. These may include items such as cabinetry original to the building that have signs of wear or dated finishes but do not have any damage or deterioration. Level IV items would be considered long-term plans (10 years or more).



SCHOOL BUILDING
SCALE: NOT TO SCALE

Wilson Elementary School | Corvallis School District

OVERALL FLOOR PLAN



Cheldelin Middle School

987 NE Conifer Road
Corvallis, OR 97330

Built: 1976
Enrollment: 551 students (2013)
Floor Area: 106,699 SF



Field Review Team:

Earl Carson	Dull Olson Weekes – IBI Group Architects Inc.
Michael Arellano	KPFF Consulting Engineers
Roger Arnold	Glumac
Michael Henning	Glumac
Alex Ridley	Glumac
Dana Troy	Glumac

Report Date: December 2013

Date of Field Visits: June 3-7, 2013
Neighborhood: Residential

Weather: Sunny, 70's and 80's

Site Contacts: Geoff Penrose
Kim Patten, CSD 509J

General Building Description:

Cheldelin Middle School is a one-story building located in a quiet residential neighborhood adjoining by residential houses and a large city park with a railroad track on one side. The site is a flat grassy site with large trees and play fields. The vehicular entrance to the site consists of a bus drop-off at the front of the building and a separate parking lot at the corner of the site whose surface is in poor condition with many large cracks and damage from tree roots. The drive and parking lot is connected to the building by a number of sidewalks that are showing some cracks and tree root damage in many locations. There is a fire lane around the back of the building that connects to the hard-surface play area outside the gymnasium.

Cheldelin Middle School is comprised of three building areas inter-connected by interior and exterior corridors, and a stand-alone building that houses administrative offices. Two of the building areas are single-story buildings and house classrooms, library, cafeteria/multi-purpose room, music room and former shop classrooms. Typical construction is reinforced masonry walls with a wood-framed roof and plywood sheathing. The former shop classroom is framed with wood which are exposed to view. The third building area includes a gymnasium

building that has a tall ceiling and a partial upper gym. The gymnasium building is a concrete framed structure with masonry infill walls. Concrete wall panels rest atop the concrete frame. The roof is spanned by steel trusses supported off concrete encased full-height steel columns. Wood beams and sheathing span between the steel trusses. There are some level changes at the cafeteria stage and gymnasium that are not currently ADA accessible. The construction of the building consists of brick and precast walls with low-sloped wood-framed roofs that are prone to occasional roof leaks.

The building as a whole is in good condition but is showing its age, specifically at exterior openings, interior floor finishes and casework. The exterior openings are wood framed with single-glazed windows and doors with hardware that are not compliant to the latest ADA and egress code requirements. A full building review of architectural, structural, mechanical, electrical and plumbing components was conducted.

A - STRUCTURE / SHELL			
A10 – STRUCTURE / SUBSTRUCTURE			
Item		Findings	Comments
A10.1	Foundations	<ul style="list-style-type: none"> No issues observed 	
A10.2	Subgrade Enclosures	<ul style="list-style-type: none"> No issues observed 	
A10.3	Structural Systems	<ul style="list-style-type: none"> A roof leak was observed in the corridor north of the gymnasium; in the attic space. It appears that a portion of the attic sheathing was cut to expose the leak. See Figures A10.3.a and b. There are recommendations available for seismic improvements to the building structure, outlined in the CH2MHILL Seismic Analysis and Evaluation report, dated March 2000. There are recommendations available for seismic improvements to non-structural systems, outlined in the ABKJ Inc. School Facility Structural Seismic Analysis report, dated May 1997. 	<ul style="list-style-type: none"> In 2007 the existing suspended ceiling in the halls was replaced with a new T-bar grid system.
RECOMMENDATIONS			
A10.3	<p>Investigate the extent of the roof leak at the corridor north of the gym and assess the damage to the roof and attic structure. If any rot is encountered, portions of the sheathing and/or joists may need to be replaced. Prioritize and perform the recommended improvements to structural systems as outlined in the CH2MHILL report. The report provides specific recommendations for each of the building areas. These include but are not limited to the construction of new wood shear walls, wall out-of-plane bracing, strengthening of the roof diaphragms, and strengthening the concrete panel connections at the gym. Perform recommended seismic improvements to non-structural components as outlined in the ABKJ Inc. report. These include, but are not limited to, anchoring and strapping of mechanical and electrical equipment, and bracing suspended equipment and ceiling.</p>		
A20 - EXTERIOR COMPONENTS			
Item		Findings	Comments
A20.1	Exterior Walls	<ul style="list-style-type: none"> Mansard panels above soffits contain asbestos. 	<ul style="list-style-type: none"> Exterior walls consist of brick and precast concrete walls that are not insulated.
A20.2	Doors and Hardware	<ul style="list-style-type: none"> Exterior door hardware does not meet current code requirements. See Figure A20.2. Exterior hollow metal doors and relites at the gymnasium hallway have wire glass. 	<ul style="list-style-type: none"> Majority of the doors are hollow metal doors and frames with single-glazed windows. Some exterior doors are painted wood doors and frames. Wire glass is no longer permitted in educational facilities.
A20.3	Windows and Skylights	<ul style="list-style-type: none"> Window systems are starting to be affected by the weather, specifically at the band room where the window system is failing. See Figure A20.3. 	<ul style="list-style-type: none"> Window systems are single-glazed windows with painted wood frames and spandrel panels.

A20.4	Roof	<ul style="list-style-type: none"> • A separate roofing assessment is located in the appendix of this report. 	<ul style="list-style-type: none"> • Roofing is a combination of built up roofing systems, ranging in age from 10 to 27 years old.
A20.5	Canopies and Covered Walks	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • The covered walk is constructed of steel posts and wood deck and beams.
A20.6	Gutters and Downspouts	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • Gutters and downspouts are prefinished sheet metal.
A20.7	Trim and Overhangs	<ul style="list-style-type: none"> • No issues observed 	
A20.8	Ramps and Stairs	<ul style="list-style-type: none"> • Not Applicable 	

RECOMMENDATIONS

- A20.1 Remove mansard panels and replace with metal panels.
- A20.2 If remodel work were to occur at this facility, the replacement of wire glass with tempered glazing may be required. Wire glass may also be replaced at the District’s discretion to prevent any issues if glazing is damaged or broken.
 Replace exterior doors and relites with new hollow metal or storefront doors and frames with thermal glazing and code compliant hardware. Provide ADA and key card openers at main paths of egress where they don’t currently exist. Replace the exterior door and window at the band room.
- A20.3 Replace exterior window openings with new full-height hollow metal or storefront frames with thermal glazing, operable vents and spandrel panels.
- A20.4 Repair and/or replace roofing systems per the roofing assessment recommendations.

B - INTERIORS			
B10 – INTERIOR CIRCULATION			
Item		Findings	Comments
B10.1	Construction and Exiting	<ul style="list-style-type: none"> This facility is not sprinklered. Doors currently in the building swing in the wrong direction, and in some cases create a dead-end corridor condition. Egress from courtyards does not currently meet egress code requirements. This facility contains wire glass. 	<ul style="list-style-type: none"> Wire glass is no longer permitted in educational facilities. A major remodel or addition at this site would require a thorough building code analysis.
B10.2	Stairs and Handrails	<ul style="list-style-type: none"> Stairs at the cafeteria stage are in poor condition and do not meet current code requirements. 	<ul style="list-style-type: none"> Stairs to the upper gymnasium meet current egress code requirements.
B10.3	Ramps and Elevators	<ul style="list-style-type: none"> N/A 	
B10.4	Accessibility	<ul style="list-style-type: none"> There is no ADA access to the stage in the cafeteria and the upper gymnasium. Exterior doors at the front of the building and between buildings do not have ADA door openers. Sinks in the Foods Lab (Home EC) are not ADA compliant. 	
B10.5	Signage	<ul style="list-style-type: none"> This facility lacks compliant room signage. 	
RECOMMENDATIONS			
B10.1	<p>If remodel work were to occur at this facility, the replacement of wire glass with tempered glazing may be required. Wire glass may also be replaced at the District's discretion to prevent any issues if glazing is damaged or broken. See Sections A20 and B30.</p> <p>Correct door swing on doors that create dead-end corridors. Reverse door swing on doors from classroom courtyard and add panic hardware. Gates from central courtyard should be furnished with panic hardware for emergency egress.</p>		
B10.2	<p>Rebuild the front of the stage with side stairs that meet stair egress requirements.</p>		
B10.4	<p>Install an ADA lift should be provided to both the upper gymnasium and to the stage in the cafeteria stage. If the gymnasium floor to floor height is more than 12'-0", the School District may want to consider an elevator in this location. Provide (1) accessible sink location in Foods Lab.</p>		
B10.5	<p>Provide new compliant signage throughout the facility.</p>		

B20 – INTERIOR FINISHES			
Item		Findings	Comments
B20.1	Flooring	<ul style="list-style-type: none"> • VCT flooring in halls and classrooms in poor condition. • Cracks are showing in the VCT flooring of the cafeteria. • Carpet in media center in poor condition. • Wood flooring finish is peeling away in many locations at both the upper and lower gymnasium. • Sealed concrete floor finish in kitchen and food rooms is not slip resistant, which could create a potentially dangerous condition. • Walk-off mats at hallway exit doors a tripping hazard. 	
B20.2	Ceilings	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • In general, 2x4 acoustic ceiling tiles appear to be in good condition.
B20.3	Ceiling Issues	<ul style="list-style-type: none"> • 2x4 acoustic ceiling tiles have been removed in places due to leaks in roof (unknown if these leaks are current or old). 	
B20.4	Fixed Equipment	<ul style="list-style-type: none"> • Equipment in wood shop is dated and not to code. • Dust collection system does not work properly. • Plastic laminate service counter in the kitchen is in poor condition. See Figure B20.4. • Projection screens in most classrooms appear to be in bad shape. There are some rooms that still have chalk boards. 	<ul style="list-style-type: none"> • Wood shop is currently not being used. No recommendations are made at this time.
B20.5	Walls	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • Brick exterior walls and interior gypsum plaster walls appear in good condition.
B20.6	Wall Finishes	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • There does not seem to be a lot of pin-up space in halls.
B20.7	Furnishings	<ul style="list-style-type: none"> • Wood bleachers in gymnasium are in poor condition and difficult to operate. See Figure B20.7. • Curtains in most classrooms look dated and do not always operate properly. • Stoves in the Foods Lab do not have hoods. See Section C20.1. 	<ul style="list-style-type: none"> • Chairs and tables throughout the facility look dated and mis-matched.
RECOMMENDATIONS			
B20.1	Patch and repair cracks in existing concrete slab and abandon floor electrical outlets in the cafeteria. Provide new VCT flooring in all classrooms, halls and the cafeteria. Provide walk off mats at all egress doors. Provide new carpet in the main office and media center. Provide new hardwood flooring in both upper and lower gymnasiums. Provide slip-resistant flooring in the kitchen and food rooms.		
B20.4	Replace all plastic laminate countertops and service line with new stainless steel counters and equipment in the kitchen. Replace projection screens in all classrooms and change out the balance of chalkboards in teaching spaces with marker boards.		
B20.6	Provide tackable surfaces in the classroom hallways.		
B20.7	Replace wood bleachers in gymnasium with new motorized bleachers. Replace all curtains at exterior windows with new manual roller shades.		

B30 – INTERIOR COMPONENTS			
Item		Findings	Comments
B30.1	Interior Windows	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Relites are wood framed.
B30.2	Interior Doors and Hardware	<ul style="list-style-type: none"> Wood doors and frames, with a majority of doors having relites with wire glass. 	<ul style="list-style-type: none"> Wire glass is no longer permitted in education facilities. Door hardware in good condition.
B30.3	Acoustics	<ul style="list-style-type: none"> No issues observed 	
B30.4	Casework	<ul style="list-style-type: none"> The casework is in poor condition in most spaces, specifically in the food room and classrooms. See Figure B30.4. 	<ul style="list-style-type: none"> Teacher cabinets and additional storage are needed in all classrooms.
B30.5	Security	<ul style="list-style-type: none"> Doors do not have shades or blinds for security. 	<ul style="list-style-type: none"> Classroom doors have glazing.
RECOMMENDATIONS			
B30.2	If remodel work were to occur at this facility, the replacement of wire glass with tempered glazing may be required. Wire glass may also be replaced at the District's discretion to prevent any issues if glazing is damaged or broken.		
B30.4	Replace casework and countertop in food room and classrooms with new plastic laminate casework. Add (1) tall storage cabinet and (1) teacher cabinet to every classroom.		
B30.5	Add shades or blinds to all classroom doors.		
B40 – TOILET FACILITIES			
Item		Findings	Comments
B40.1	Walls and Wall Finishes	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Brick with FRP in some locations.
B40.2	Floors and Floor Finishes	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Ceramic tile floor in good condition.
B40.3	Ceilings	<ul style="list-style-type: none"> Restrooms have 2'x4' acoustical ceiling tiles are in poor condition. T-bar grids are rusting. 	<ul style="list-style-type: none"> Acoustic ceilings with T-bar grids are not an appropriate ceiling type in toilet rooms.
B40.4	Partitions	<ul style="list-style-type: none"> Partitions are in fair condition. 	<ul style="list-style-type: none"> Partitions are a combination of FRP and metal.
B40.5	Fixtures	<ul style="list-style-type: none"> Refer to Plumbing Section. 	<ul style="list-style-type: none"> Fixtures are in poor condition.
B40.6	Accessories	<ul style="list-style-type: none"> No issues observed 	
B40.7	Accessibility	<ul style="list-style-type: none"> Toilet rooms are not ADA code compliant. 	
B40.8	Other	<ul style="list-style-type: none"> Student toilet rooms should be remodeled for better sightlines and to provide accessible student restroom facilities. 	
RECOMMENDATIONS			
B40.3	Replace all 2x4 lay-in ceilings in restrooms with a gypsum ceiling.		
B40.8	Replace/relocate toilet fixtures and partitions in all (8) student toilet rooms to improve site lines and upgrade to latest code requirements. Provide new ceramic tile floors and walls, gypsum board ceiling, new stainless steel partitions, fixtures and lighting.		

C - SYSTEMS			
C10 - PLUMBING			
Item		Findings	Comments
C10.1	Water Service	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Water service main off of stage. Pressure unknown.
C10.2	Piping	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Gas with unknown PSI located outside boiler room in chain link enclosure.
C10.3	Fixtures	<ul style="list-style-type: none"> All restroom fixtures and drinking fountains are period to the building. 	<ul style="list-style-type: none"> All electric kitchen. Commercial dishwasher located in the kitchen Three compartment sink, no grease interceptor. Bi-level water fountains and single level water coolers observed as well as single level, two faucet water fountains. Urinals: floor mounted manual flush valve. Water closets: floor mounted manual flush valve. Lavatories: manual Bradley type with handicapped stainless steel side lav. Washers/dryers were present; located in janitor's closet.
C10.4	Storm and Overflow Drains	<ul style="list-style-type: none"> Gutters and roof drains are in need of cleaning. 	<ul style="list-style-type: none"> Exterior gutters and downspouts Exterior hose bibs
C10.5	Water Heater	<ul style="list-style-type: none"> Domestic hot water heater in office needs to be relocated to the floor level. 	<ul style="list-style-type: none"> Water heater: Rheem 80 gallon 4.5 kW booster for kitchen with small fractional recirculating pump. Office water heater: National, 5 kW, 30 gallons, and a small fractional recirculation pump (located above ceiling). (2) AO Smith cyclone Xi with small fractional circulating pump located in main boiler room.
RECOMMENDATIONS			
C10.4	Flush storm water lines.		
C10.5	Relocate domestic hot water heater located in the office ceiling to the floor level.		

C20 - HVAC		
Item	Findings	Comments
C20.1	Mechanical Equipment	<ul style="list-style-type: none"> • All equipment is original to the building and beyond its useful life, however is still functioning. See Figures C20.1a-c. • The unit serving the office is very noisy. • Venting is needed above the stoves in food room.

C20.1	Mechanical Equipment		<ul style="list-style-type: none"> ○ Library is also served by two through-the-wall AC units. ○ ASU B-3 access by Room 28 ○ ASU B-7 serves the offices. Access by A-frame ladder. Cooling coil not connected. Unit is very loud, office occupants notice the noise. ○ ASU C-1 access by ladder. Constant volume without heat. Coils located downstream. Model #: Pace A22. ● Inset C: <ul style="list-style-type: none"> ○ ASU C-4 and C-5 are located in Room 34 and 35, respectively, serving its associated room. ○ Additional units located in hallway outside of Room 34 could not be fully access because of surrounding brick and concrete walls. ○ ASU D-1: Big gym unit, Pace B18V, no access to name plate. ○ (3) Exhaust fans on the gym room. No tie-offs provided for access. ○ ASU D-3 serves the north upper gym ○ ASU D-5 serves men's locker room. ○ ASU D-2 serves the south upper gym. ○ ASU D-4 serves the women's locker room. ● Unit heaters located in hallways near exterior doors. ● Abandoned in place dust collection.
C20.2	Air Filtration	<ul style="list-style-type: none"> ● No issues observed 	<ul style="list-style-type: none"> ● Air filtration is period to the equipment.

C20.3	Equipment Accessibility	<ul style="list-style-type: none"> • Access to most equipment is unsafe and may cause serious harm in the future. • Access to most equipment is through tight spaces and prevents proper maintenance. See Figures C20.3.a-c. 	<ul style="list-style-type: none"> • Equipment access is through permanent or portable ladders. • Main roof access is by exterior extension ladder. • Access to mechanical equipment in classroom wing is by permanent ladder, but one must crawl over and under ductwork to access all units. Screws had been put in from ceiling below, creating hazards for people crawling under ductwork. Wood framing was installed over ductwork to avoid damaging it. • Gym roof access is inside from upper gym. Need to use an extension ladder on the slippery gym floor surface. Ladder can easily slide if there is not someone to hold it. The access door is 15' above the ground. Access to the roof is through the mechanical room, but tie offs are needed. Difficulty of access prevents regular maintenance. No access to name plate. • ASU-C3 is located above the corridor. Brick on one side and concrete on the other. No access to change the unit out. • Many units are located above the ceiling in the corridors with poor access via A-frame ladders.
C20.4	Air Distribution and Ventilation	<ul style="list-style-type: none"> • Replace duct board ductwork with sheet metal ductwork. 	<ul style="list-style-type: none"> • Ductwork is a combination of sheet metal and duct board ductwork. • Visual inspection of ductwork appeared to be in good order. Air leakage could not be determined from the visit.
C20.5	Controls	<ul style="list-style-type: none"> • Cooling units are tied to the DDC with on/off control only. 	<ul style="list-style-type: none"> • Controls: Andover DDC.
C20.6	Chiller	<ul style="list-style-type: none"> • No issues observed 	
C20.7	Boiler	<ul style="list-style-type: none"> • (2) Electric kilns are located in the boiler room. See Figure C20.7. 	<ul style="list-style-type: none"> • Boilers: Hydrotherm KN-20 boilers (total of 4); installed 2012. • (2) Hot water pumps, 7.5 kW.

RECOMMENDATIONS

- C20.1 Provide 2-3 ton split system cooling unit in server room. Replace all heating and ventilating units and fans in the building. Provide permanent access with adequate clearances for maintenance. Provide venting above stoves in food room.
- C20.3 Refer to Section C20.1.
- C20.4 Replace all duct board ductwork with sheet metal ductwork.
- C20.5 Incorporate cooling units on DDC system.
- C20.7 Relocate electric kilns to a room with dedicated exhaust.

C30 – FIRE PROTECTION			
Item		Findings	Comments
C30.1	Fire Suppression System	<ul style="list-style-type: none"> • Kitchen hoods lack fire suppression. 	<ul style="list-style-type: none"> • The stage is the only location with fire suppression.
C30.2	Water Service and Backflow Prevention	<ul style="list-style-type: none"> • No issues observed 	
C30.3	System Pressure	<ul style="list-style-type: none"> • No issues observed 	
C30.4	Standpipes	<ul style="list-style-type: none"> • No issues observed 	
C30.5	Fire Pump	<ul style="list-style-type: none"> • No issues observed 	
C30.6	Fire Sprinkler Pipe Condition	<ul style="list-style-type: none"> • No issues observed 	
C30.7	Fire Department Connection	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • The fire sprinkler riser is located at the stage.
C30.8	Fire Sprinkler Zoning	<ul style="list-style-type: none"> • No issues observed 	
C30.9	Flow Monitoring and Alarm	<ul style="list-style-type: none"> • No issues observed 	
C30.10	Hoses and Extinguishers	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • Fire extinguishers only
RECOMMENDATIONS			
C30.1	Add fire suppression to kitchen area.		

D - ELECTRICAL			
D10 - ELECTRICAL EQUIPMENT			
Item		Findings	Comments
D10.1	Transformers	<ul style="list-style-type: none"> Isolated ground system conductors connected to normal building ground at source electrical panels. 	<ul style="list-style-type: none"> Isolated ground system (transformers & panelboards) 1 per wing. Majority of transformers original to building: standard efficiency dry type distribution.
D10.2	Switchgear and Panelboards	<ul style="list-style-type: none"> Bolted pressure switches require annual maintenance to ensure reliable operation. See Figure D10.2.a. Majority of panelboards and switchboards approaching rated life; replacement parts rare and costly. Nearly all panel boards lack spare capacity. See Figure D10.2.b. Equipment grounding conductors were not installed in all older sampled panelboards. See Figure D10.2.c. Numerous panelboards missing locking devices or were locked by building occupants such that maintenance personnel were unable to access. See Figure D10.2d. Several instances of furniture and/or supplies blocking access to electrical equipment. Possibly severe arc flash hazard; equipment labels missing. Many panel schedules appear to be outdated or missing entirely. Adhesive tape is used extensively as the means of fastening wiremold (seen failing in numerous locations). See Figure D10.2e. 	<ul style="list-style-type: none"> 1600A, 277Y/480V building service from 750kVA pad mounted transformer on north grounds; appears adequate. Main switchboard General Electric, with 1600A bolted pressure switch main disconnects and fusible disconnects. Most panelboards are original to building; General Electric typical; new panelboards are Square D. Nonmetallic wiremold used extensively for power and telecom services. Panels must be locked at all times per Occupational Safety and Health Administration (OSHA) standards.
D10.3	Lighting	<ul style="list-style-type: none"> Retrofit fixtures delamped in all classrooms. Rooms are likely overlit. See figure D10.3. There have been numerous complaints regarding lighting performance, i.e. flickering fixtures in gyms, etc. 	<ul style="list-style-type: none"> Lighting retrofitted with 2 lamp T8 volumetric GE retrofit fixture in classrooms; lamps and ballasts replaced in hallways: 2x4 lensed troffers; HID gym fixtures replaced with T8 high bays. All lighting is 277V. Luminaires in classrooms are switched in groups; gym lighting is switched via circuit breakers. Some areas lit by incandescent and self-ballasted fluorescent lamps, specifically breezeways, corridors and offices.
D10.4	Lighting Controls	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Classroom lighting is switched in banks of 2 or 3, depending on size of room.
D10.5	Back-up and Emergency	<ul style="list-style-type: none"> Not Applicable 	

	Power		
D10.6	Egress and Emergency Lighting	<ul style="list-style-type: none"> Egress lighting is inadequate. Few fixtures have been retrofitted with battery packs. There was no annual testing and maintenance schedule. No means of testing was observed. 	<ul style="list-style-type: none"> Small quantity of emergency luminaires and fixture integrated battery packs.
D10.7	Exit Signage	<ul style="list-style-type: none"> Majority of retrofitted exit signs do not appear to meet 100 foot visibility requirement. 	<ul style="list-style-type: none"> Mix of incandescent and compact fluorescent (CFL) exit signs, most appear to have been retrofitted with LED. Some exit sign/egress lighting combinations installed.
D10.8	Sensors	<ul style="list-style-type: none"> Lighting controls/sensors do not meet current Oregon State Energy Code. 	<ul style="list-style-type: none"> No automated lighting controls observed.

RECOMMENDATIONS

D10.2	<p>Install additional 277Y/480V and 120Y/208V panelboards in each wing to alleviate spare capacity problems; there appears to be available capacity to directly feed these from the main switchboard. Equipment grounding conductors should also be provided in branch circuits wherever possible. Install GFCI circuit breakers where required for personnel protection. Create and implement an annual maintenance program for the bolted pressure switch main disconnect per manufacturer's instructions. Check all switchboard, transformer and panelboard lugs with AL conductors for missing antioxidant compound and any signs of oxidation. Provide antioxidant compound where missing. Install or replace panel locks where missing or defeated. Provide OSHA/NEC approved panelboard labels requiring 3 feet of clearance in front of all panelboards along with floor labeling and improved enforcement. Complete arc flash hazard analysis be for entire facility; verify existing equipment fault current ratings meet or exceed available fault current level, and take corrective action where required. In spaces where wiremold is used on masonry walls, install straps where the adhesive tape has failed. Trace out facility electrical system to generate new, complete panel schedules. Label all device, receptacle and switch faceplates with source panel and circuit number. Install a full size, up to date, laminated copy of the building single line diagram in the main electrical room, adjacent to the main switchboard.</p>		
D10.3	<p>Replace malfunctioning GE ballasts with NEMA premium ballasts. Adopt Lutron EcoSystem series ballasts as district-wide standard. Remove every other fixture in all classrooms and replace any removed lamps. Replace existing self-ballasted CFL and incandescent lighting with LED or CFL where possible. Install standalone/wall mounted occupancy sensors.</p>		
D10.4	<p>Install a campus wide, wireless lighting control system; advise standardization around Lutron Quantum system or equivalent.</p>		
D10.6	<p>Retrofit existing luminaires in egress paths with battery packs.</p>		
D10.7	<p>Replace all remaining retrofitted exit signs with LED exit signs with batteries.</p>		
D10.8	<p>Install occupancy sensor plug strips to switch off workstations and equipment on offices, classrooms and other areas.</p>		

D20 – SAFETY / SECURITY

Item	Findings	Comments	
D20.1	Fire Alarm and Panels	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> System: Siemens
D20.2	Smoke Detection	<ul style="list-style-type: none"> No issues observed 	
D20.3	Pull Stations	<ul style="list-style-type: none"> There is evidence of vandalism damage. See Figure D20.3. 	

		<ul style="list-style-type: none"> • Pull stations are installed with nonmetallic wiremold; numerous fasteners missing and tape attachment is failing. • Several pull stations are installed in student accessible areas. 	
D20.4	Annunciation	<ul style="list-style-type: none"> • No issues observed 	
D20.5	Addressable Systems and Zones	<ul style="list-style-type: none"> • No issues observed 	
D20.6	Monitoring	<ul style="list-style-type: none"> • No issues observed 	
D20.7	Access Control	<ul style="list-style-type: none"> • There is evidence of building occupants bypassing system; paper stuck in door strikes at several exterior doors. See Figure D20.7. 	<ul style="list-style-type: none"> • Campus wide card access system; door strikes and card readers are installed at building entrances. • Unsecure doors pose a security risk.
D20.8	Intrusion	<ul style="list-style-type: none"> • No issues observed 	
D20.9	Video Surveillance	<ul style="list-style-type: none"> • Not Applicable 	

RECOMMENDATIONS

D20.3 Remove all pull stations from student accessible areas to eliminate false fire alarms.
 D20.7 Upgrade security to monitor these doors more closely.

D30 – TECHNOLOGY COMMUNICATIONS

Item		Findings	Comments
D30.1	Paging and Intercom – Head End Condition	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • System: AIPHONE (installed 2013)
D30.2	Master Clock	<ul style="list-style-type: none"> • The system is past useful life. 	
D30.3	Infrastructure	<ul style="list-style-type: none"> • There is no cable labeling. • Large quantities of cabling are abandoned in ceilings and walls. 	
D30.4	Speakers	<ul style="list-style-type: none"> • No issues observed 	
D30.5	Coverage	<ul style="list-style-type: none"> • No issues observed 	
D30.6	Clock System	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • System replaced Summer 2013
D30.7	Clock – Head End	<ul style="list-style-type: none"> • See Sections D30.1 and D30.6. 	
D30.8	Other	<ul style="list-style-type: none"> • Wireless access points were added at every classroom (Summer 2013). 	

RECOMMENDATIONS

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E - GROUNDS			
E10 – SITE CIRCULATION AND PARKING			
Item		Findings	Comments
E10.1	Parking Lots	<ul style="list-style-type: none"> • A/C paving surface is in poor condition and stripes barely visible. See Figure E10.1. • Tree roots causing cracks and uplift in A/C paving. • Parking area located at the corner of the site with poor visibility between visitor parking and the front office. 	<ul style="list-style-type: none"> • There are approximately 80 parking spaces, with 4 ADA accessible parking stalls.
E10.2	Site Signage/ Accessories	<ul style="list-style-type: none"> • Signage is needed. 	<ul style="list-style-type: none"> • The front entrance is not apparent when arriving at the facility.
E10.3	Vehicular Circulation	<ul style="list-style-type: none"> • There is good separation between bus drop-off and parent drop-off areas; however there is poor visibility between parent drop-off and the front office. • The bus drop-off does not meet current ADA code requirements. 	<ul style="list-style-type: none"> • An additional visitor parking lot would allow for better security for those visiting the site, provide a better ADA pathway and reinforce the main entrance by ‘dressing up’ the front of the building with new site signage, landscaping and pedestrian pathways.
E10.4	Curbs and Sidewalks	<ul style="list-style-type: none"> • Curbs and sidewalks at this facility are in poor condition, with cracks and weed growth. See Figure E10.4. • Concrete walk is uplifting in some locations from tree roots, creating a potentially dangerous condition. 	
E10.5	Accessibility	<ul style="list-style-type: none"> • ADA pathway from the parking lot to the front entrance a long way from the front entrance and is not readily apparent. 	
E10.6	Bikes and Bike Parking	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • Bicycle parking is in a good location that can be monitored from the front office; however there is no covered bicycle parking at this facility.
RECOMMENDATIONS			
E10.1	Restripe and resurface parking lot.		
E10.2	Add building signage over the front entrance would be helpful directing first time visitors to the main office.		
E10.3	Provide/construct a smaller visitor parking area and ADA parking spaces within the existing bus loop at the front of the building. Improve the current bus drop-off to make ADA compliant.		
E10.4	Weeds should be removed from sidewalk and curb joints and cracks and sealed with a concrete joint sealant. Concrete sidewalks with major cracks and uplift from tree root damage should be demolished and repoured.		
E20 - SITE COMPONENTS			
Item		Findings	Comments
E20.1	Fields	<ul style="list-style-type: none"> • Play fields are generally in good condition; however the running track is incorrectly striped for competition events. 	
E20.2	Landscaping	<ul style="list-style-type: none"> • Landscaping at the front of building is overgrown. 	
E20.3	Irrigation	<ul style="list-style-type: none"> • None observed 	<ul style="list-style-type: none"> • It is the District’s desire to add irrigation to the fields.

E20.4	Site Buildings	<ul style="list-style-type: none"> • None observed 	
E20.5	Site Security	<ul style="list-style-type: none"> • Site can be accessed from any side with limited visibility from the building at the back of the site. 	
E20.6	Fencing	<ul style="list-style-type: none"> • There is no fencing around the site. 	
E20.7	Playground Equipment	<ul style="list-style-type: none"> • Not Applicable 	
E20.8	Play Surfaces	<ul style="list-style-type: none"> • Hard play surface in good condition; however there is no covered play area. 	
E20.9	Site Lighting	<ul style="list-style-type: none"> • Poles and foundations are past their rated life. • Missing manhole covers and exposed wiring was observed at several locations. See figure F20.9. 	<ul style="list-style-type: none"> • High intensity discharge (HID) site lighting exists in parking lot and at front entry.
E20.10	Grading and Drainage	<ul style="list-style-type: none"> • Storm drain at the east of the building is clogged by tree roots and backs up when it rains. • Drains are needed in the covered walk area. 	<ul style="list-style-type: none"> • A further investigation of storm water issues is recommended. This is not in the scope of this report.

RECOMMENDATIONS

- E20.1 Restripe track for track competition standards.
- E20.3 Add irrigation system to fields.
- E20.5 Install a new fence around the play fields and hard play area to improve security of the site.
- E20.6 See E20.5.
- E20.8 Construct a covered play structure at the hard play area for outdoor play during inclement weather.
- E20.9 Replace existing site luminaires and poles. Provide additional site fixtures as needed near front entrances and driveway.
- E20.10 Add drains in covered walk area. Remediate storm drain issues (scope of work not part of this report).

IMAGES

Figure A10.3.a – Roof leak



Figure A10.3.b – Roof joists



Figure A20.2 – Exterior door



Figure A20.3 – Window systems



Figure B20.4 – Kitchen countertop



Figure B20.7 – Gymnasium bleachers



Figure B30.4 – Foods lab casework



Figure C20.1.a – Equipment access



Figure C20.1.b – Equipment access



Figure C20.1.c – Equipment access



Figure C20.7 – Kilns in boiler room



Figure D10.2.a – Pressure switch not maintained



Figure D10.2.b – Lack of panel capacity



Figure D10.2.c – Grounding conductors missing



Figure D10.2.d – Inaccessible electrical panels



Figure D10.2.e – Wiremold missing fasteners



Figure D10.3 – Delamped classroom lighting



Figure D20.3 – Vandalized pull station



Figure D20.7 – Bypassed card access point



Figure E10.1 – Parking lot



Figure E10.4 – Sidewalks



Figure E20.9 – Site lighting missing manhole cover



ITEMS	Cheldelin Middle School	Priority Level				Priority Level I	Priority Level II	Priority Level III	Priority Level IV
		(Refer to Legend)							
		I	II	III	IV				
A - STRUCTURE/SHELL									
A10 - STRUCTURE/SUBSTRUCTURE									
A10.3	1 Investigate extent of roof leak and assess damage	X				\$ 3,953			
	2 Complete seismic upgrades per previous reports		X				\$ 3,036,920		
A20 - EXTERIOR COMPONENTS									
A20.1	1 Remove mansard panels and replace with metal panel system		X				\$ 115,842		
A20.2	1 Replace wire glazing in exterior door relites			X			\$ 1,660		
	2 Replace all exterior doors with new compliant hardware and new hinges		X			\$ 102,465			
	3 Replace all exterior doors and frames with hollow metal or storefront doors with thermal glazing				X			\$ 131,243	
	4 Add actuators at main egress doors		X			\$ 52,181			
	5 Add key card openers at main egress doors		X			\$ 22,137			
	6 Replace exterior HM door/frame and wood-framed window/panels with curtain wall at band room		X			\$ 14,539			
A20.3	1 Replace all wood-framed single glazing windows		X				\$ 297,528		
A20.4	1 Repair and replace selected roofing systems per roofing assessment recommendations	X				\$ 773,000			
	2 Replace selected roofing systems per roofing assessment recommendations		X				\$ 1,055,000		
TOTAL - STRUCTURE/SHELL						\$ 776,953	\$ 4,696,612	\$ 1,660	\$ 131,243
B - INTERIORS									
B10 - INTERIOR CIRCULATION									
B10.1	1 Correct door swings on corridor doors	X				\$ 8,855			
	2 Reverse door swing on door from courtyard and add panic hardware	X				\$ 12,650			
	3 Add panic hardware to gates from central courtyard	X				\$ 4,111			
B10.2	1 Rebuild the front of existing stage and add side stairs and handrails			X			\$ 12,650		
	2 Add handrails on each set of stairs to stage from gym			X			\$ 1,106		
B10.4	1 Install lift to upper gymnasium		X			\$ 31,625			
	2 Provide (1) accessible sink location in Foods lab		X			\$ 2,055			
B10.5	1 Add compliant room signage throughout facility		X			\$ 214,874			
B20 - INTERIOR FINISHES									
B20.1	1 Patch and repair cracks in cafeteria flooring and abandon electric outlets		X			\$ 3,162			
	2 Provide new VCT flooring in all classrooms, hallways and cafeteria		X			\$ 362,896			
	3 Provide walk off mat at all egress doors		X			\$ 7,684			
	4 Provide new carpeting in the main office and media center		X			\$ 56,450			
	5 Provide new hardwood flooring and vented base in both gymnasiums		X			\$ 262,092			
	6 Add slip resistant sheet vinyl flooring in kitchen suite	X				\$ 17,670			
B20.4	1 Replace serving line with new stainless steel countertop			X			\$ 19,508		
	2 Replace projection screens in classrooms		X			\$ 46,567			
	3 Replace chalkboards with marker boards			X			\$ 11,701		
B20.6	1 Provide tackable surfaces in classroom hallways				X			\$ 11,385	
B20.7	1 Replace wood bleachers in gymnasium with new motorized bleachers	X				\$ 227,700			
	2 Replace all curtains at exterior windows with new manual roller shades			X			\$ 26,090		
B30 - INTERIOR COMPONENTS									
B30.2	1 Replace all interior door wire glazing			X			\$ 2,253		
B30.4	1 Replace casework and countertops in foods room and all classrooms		X			\$ 249,647			
	2 Add tall storage cabinet and teacher's cabinet to all classrooms			X			\$ 77,085		
B30.5	1 Add shades/blinds to all interior door glazing	X				\$ 711			
B40 - TOILET FACILITIES									
B40.3	1 Replace 2x4 lay-in ceilings with gypsum board ceilings		X			\$ 40,872			

Cheldelin Middle School		Priority Level				Priority Level	Priority Level	Priority Level	Priority Level
		(Refer to Legend)							
ITEMS		I	II	III	IV	I	II	III	IV
B40.8	1 Remodel (10) student toilet rooms and (2) staff toilet rooms for ADA code compliance and new finishes			X				\$ 325,424	
TOTAL - INTERIORS						\$ 271,697	\$ 1,277,924	\$ 475,817	\$ 11,385

C - SYSTEMS									
C10 - PLUMBING									
C10.3	1 Replace all lavatories, water closets and urinals			X				\$ 695,000	
	2 Replace all water fountains with bi-level water coolers			X				\$ 118,000	
C10.4	1 Flush storm water lines		X				\$ 16,250		
C10.5	1 Relocate domestic hot water heater in ceiling above office to floor level	X				\$ 5,000			
C20 - HVAC									
C20.1	1 Provide 2-3 ton split system cooling unit in server room		X				\$ 26,250		
	2 Replace all heating and ventilating units and fans in the facility. Provide permanent access and adequate clearance		X				\$ 3,100,000		
	3 Provide venting above stove in foods room	X				\$ 11,250			
C20.4	1 Replace all duct board ductwork with sheet metal ductwork		X				\$ 1,860,000		
C20.5	1 Incorporate cooling units on DDC system				X			\$ 98,750	
C20.7	1 Relocate electric kilns to a room with dedicated exhaust	X				\$ 66,250			
C30 - FIRE PROTECTION									
C30.1	1 Provide fire suppression in kitchen	X				\$ 18,750			
TOTAL - SYSTEMS						\$ 101,250	\$ 5,002,500	\$ 813,000	\$ 98,750

D - ELECTRICAL									
D10 - ELECTRICAL EQUIPMENT									
D10.2	1 Install additional panelboards			X				\$ 80,000	
	2 Provide equipment grounding conductors			X				\$ 150,000	
	3 Provide bolted pressure switch maintenance		X			\$ 25,000			
	4 Check aluminum conductors for oxidation and repair if needed		X			\$ 1,000			
	5 Install and replace panel locks			X			\$ 5,000		
	6 Install and update panel labels			X			\$ 2,500		
	7 Complete arc flash study		X			\$ 5,000			
	8 Trace electrical system and update panel schedules			X			\$ 10,000		
	9 Install mechanical fasteners on loose wiremold			X			\$ 5,000		
	10 Install single line diagram in electrical room				X			\$ 1,000	
D10.3	1 Replace/retrofit malfunctioning ballasts		X			\$ 160,000			
	2 Remove every other fixture in all classrooms				X			\$ 110,000	
	3 Replace incandescent lighting; install stand-alone occupancy sensors			X				\$ 215,000	
D10.4	1 Install campus wide lighting controls			X				\$ 100,000	
D10.6	1 Provide egress lighting by retrofitting existing luminaires with battery packs	X				\$ 110,000			
D10.7	1 Replace exit signs with LED and battery fixtures	X				\$ 60,000			
D10.8	1 Install workstation occupancy sensors				X			\$ 110,000	
D20 - SAFETY/SECURITY									
D20.3	1 Remove pull stations in student accessible areas			X				\$ 50,000	
D20.7	1 Provide additional security to compromised doors	X						\$ 50,000	
TOTAL - ELECTRICAL						\$ 170,000	\$ 191,000	\$ 777,500	\$ 111,000

E - GROUNDS									
E10 - SITE CIRCULATION AND PARKING									
E10.1	1 Restripe and resurface parking lot		X				\$ 196,953		
E10.2	1 Add building signage over front entrance		X				\$ 4,743		
E10.3	1 Construct visitor parking lot with accessible stalls and parent drop-off			X			\$ 111,655		
	2 Improve bus drop off to make compliant		X				\$ 7,906		

Cheldelin Middle School		Priority Level				Priority Level I	Priority Level II	Priority Level III	Priority Level IV
		(Refer to Legend)							
ITEMS		I	II	III	IV				
E10.4	1 Clean up overgrowth in sidewalks and seal			X			\$ 5,929		
	2 Remove tree damaged sidewalks and replace with new concrete sidewalks		X			\$ 16,128			
E20 - SITE COMPONENTS									
E20.1	1 Restripe track		X			\$ 189,750			
E20.3	1 Add irrigation system to fields			X			\$ 171,850		
E20.5	1 Install a new fence around play fields and hard surface areas	X				\$ 98,828			
E20.8	1 Construct new covered play structure			X			\$ 339,171		
E20.9	1 Replace existing site lighting and poles			X			\$100,000		
	2 Provide additional lighting near front entrances		X			\$75,000			
E20.10	1 Repair/replace portion of storm sewer drain and clean out (this scope of work requires further investigation and is not included in this report)		X						
	2 Add drains in covered walk area		X			\$ 4,743			
TOTAL - GROUNDS						\$ 98,828	\$ 495,223	\$ 728,605	\$ -

TOTALS BY CATEGORY			
	STRUCTURE/SHELL	\$	5,606,468
	INTERIORS	\$	2,036,823
	SYSTEMS	\$	6,015,500
	ELECTRICAL	\$	1,249,500
	GROUNDS	\$	1,322,656
	FACILITY TOTAL	\$	16,230,947

TOTALS BY PRIORITY			
	LEVEL 1	\$	1,418,728
	LEVEL 2	\$	11,663,259
	LEVEL 3	\$	2,796,582
	LEVEL 4	\$	352,378
	PRIORITY TOTAL	\$	16,230,947

LEGEND:

PRIORITY LEVELS

Level I: Highest Priority; Issues that affect the life safety concerns of the occupant, related to notification of occupants to emergency situations and the ability to safely evacuate the facility; subcomponents of Level I include safety concerns such as electrical loads, hazardous materials that might be affected with remodel or modifications, lack of fall protection. Level I items need to be addressed within a 5-year plan.

Level II: Moderate Priority; Issues that are related to the integrity and adequacy of systems within the building to sufficiently withstand a major event and still function; also related are the age of systems or building components that keep day to day operations running without constant repair. Issues may include mechanical, electrical and plumbing systems, fire suppression, lighting and security, as well as flooring, windows doors and other architectural components. Level II Items may be part of a 5-year plan.

Level III: Lower Priority; Issues that may over time affect the day to day maintenance of the building or long term use of the facility. Issues also include access and clearances at equipment and fixtures, access for individuals with disabilities and both indoor and exterior environment quality. Level III Items would be considered in a 5 to 10 year plan.

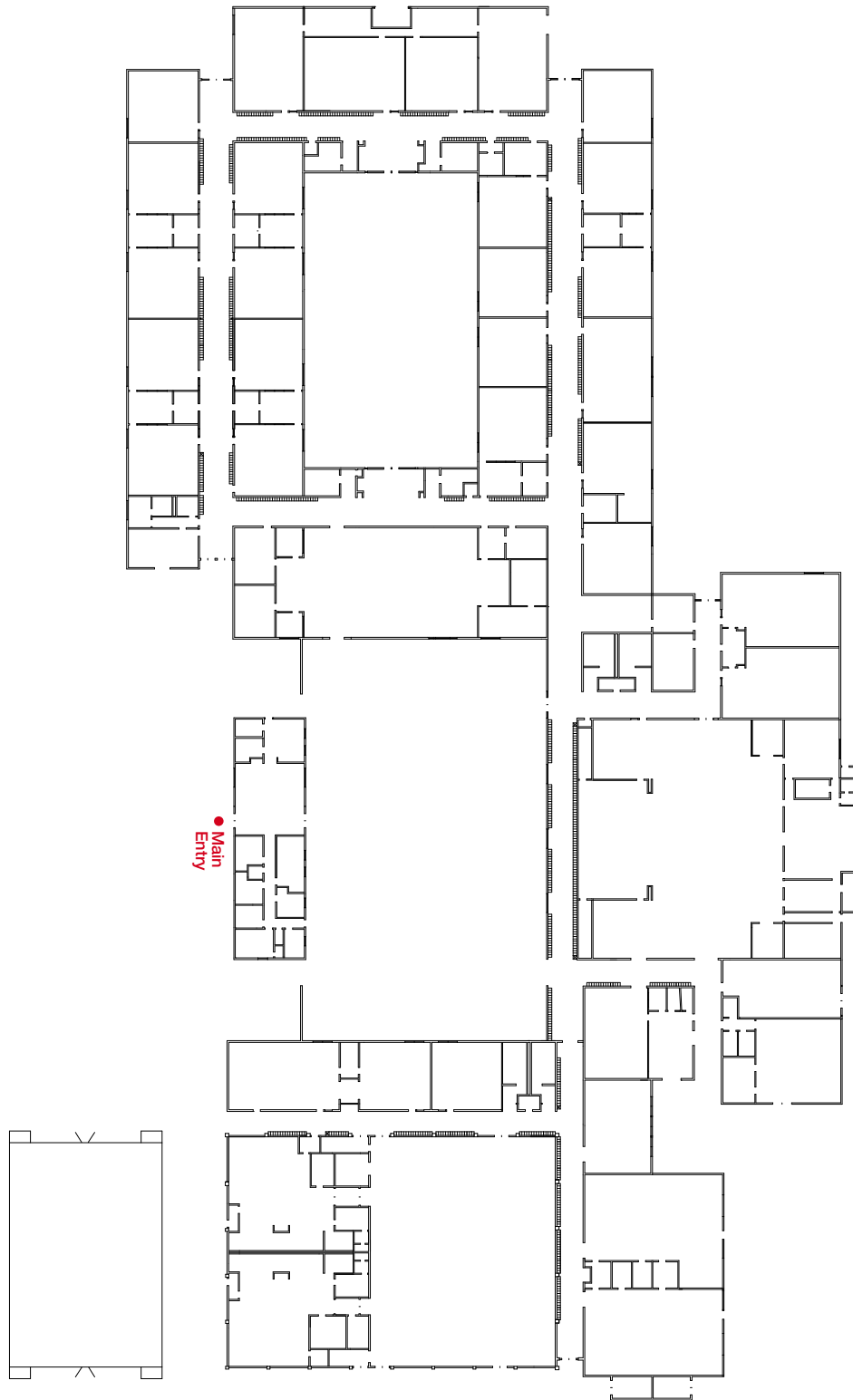
Level IV: Issues that are related to the aesthetics of both the building's interior and exterior as well as integrity and adequacy of building systems that don't pose any issues or nearing the end of their remaining lifecycles. These may include items such as cabinetry original to the building that have signs of wear or dated finishes but do not have any damage or deterioration. Level IV items would be considered long-term plans (10 years or more).

Dull Olson Weekes - IBI Group
Architects, Inc.



OVERALL FLOOR PLAN

Cheladain Middle School | Corvallis School District



SCHOOL BUILDING ○
SCALE: NOT TO SCALE



Linus Pauling Middle School

1111 NW Cleveland Avenue
Corvallis, Oregon 97330

Built: 2004
Enrollment: 679 students (2013)
Floor Area: 131,327 SF



Field Review Team:

Earl Carson	Dull Olson Weekes – IBI Group Architects
Jonathan Estabrook	KPFF Consulting Engineers
Roger Arnold	Glumac
Michael Henning	Glumac
Alex Ridley	Glumac
Dana Troy	Glumac

Report Date: December 2013

Date of Field Visits: June 3-7, 2013
Neighborhood: Commercial/Residential

Weather: Sunny, 70's and 80's

Site Contacts: Nancy Hausen
Kim Patten, CSD 509J

General Building Description:

Linus Pauling Middle School was constructed in 2004 and is one of the newer schools in the School District. The building's main entrance is set back from a busy commercial road by a small visitor's parking lot and parent drop-off area. The Osborn Aquatic Center and the Boys and Girls Club of Corvallis are located on the adjoining site to the north and share a parking lot between three agencies. To the west of the site are large playfields that are surrounded by a quiet residential neighborhood. The bus loading and unloading occurs along the sidewalk to the south of the site. Another district school, Garfield Elementary School, occupies the site adjoining the school to the south.

The new building is reinforced CMU with composite metal floor slabs and metal roof diaphragms. The gymnasium is constructed from concrete tilt walls with open web joists and metal deck framing the roof. The 1988 building is a one-story structure, square in plan, with wood framed roof and walls, and interior steel columns. The exterior is clad with partial height brick veneer and the remainder with metal panel.

Overall this facility is in excellent condition. A full building review of architectural, structural, mechanical, electrical and plumbing was conducted.

A - STRUCTURE / SHELL			
A10 – STRUCTURE / SUBSTRUCTURE			
Item		Findings	Comments
A10.1	Foundations	<ul style="list-style-type: none"> No issues observed. 	
A10.2	Subgrade Enclosures	<ul style="list-style-type: none"> There were a number ground floor slabs with cracks in finishes. See Figures A10.2 a and b. 	<ul style="list-style-type: none"> Cracks of this nature are likely due to thermal shrinkage of the slab on grade as it has cured. Cracks should be monitored to ensure they do not get larger over time.
A10.3	Structural Systems	<ul style="list-style-type: none"> At the south entrance to the corridor next to the gymnasium there are some minor cracks in the plaster finish. See Figure A10.3.a. A leak in the ceiling of room 205 was noted. See Figure A10.3.b. There are a couple of minor cracks in the bottom of the concrete tilt walls on the outside face of the West walls. There are all minor in nature. See Figure A10.3.c. The roof and skylight of the 1988 building are showing signs of deterioration. 	<ul style="list-style-type: none"> Cracks are minor in nature and likely due to thermal shrinkage or minor building settlement post construction. This leak has been a problem ever since the building was handed over. It is likely due to condensation from mechanical equipment. It is unclear if any seismic upgrades have been carried out on the 1988 North Building.
RECOMMENDATIONS			
A10.3 Investigate and repair the cause of the leak in the ceiling of room 205.			
A20 - EXTERIOR COMPONENTS			
Item		Findings	Comments
A20.1	Exterior Walls	<ul style="list-style-type: none"> Upper portions of exterior cladding need to be repainted. 	
A20.2	Doors and Hardware	<ul style="list-style-type: none"> No issues observed 	
A20.3	Windows and Skylights	<ul style="list-style-type: none"> The pyramidal translucent skylight in the 1988 North Building is discolored and showing its age. 	
A20.4	Roof	<ul style="list-style-type: none"> A separate roofing assessment is located in the appendix of this report. 	<ul style="list-style-type: none"> The north building roof is a built up system, 25 years in age.
A20.5	Canopies and Covered Walks	<ul style="list-style-type: none"> The covered walk between the 1988 North Building and Main Building has a metal panel system that allows wasps to nest behind it. 	
A20.6	Gutters and Downspouts	<ul style="list-style-type: none"> No issues observed 	
A20.7	Trim and Overhangs	<ul style="list-style-type: none"> No issues observed 	

A20.8	Ramps and Stairs	<ul style="list-style-type: none"> • No issues observed 	
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RECOMMENDATIONS

- A20.1 Repaint upper portions of exterior cladding around entire building.
- A20.3 Refurbish translucent panels of the pyramidal skylight at the 1988 North Building.
- A20.4 Repair/replace roofing per roofing assessment recommendations.
- A20.5 Replace the metal panel system from the 1988 addition with a system to match the metal panel system on the 2004 Main Building at the canopy, including insect screens at points of infiltration.

B - INTERIORS			
B10 – INTERIOR CIRCULATION			
Item		Findings	Comments
B10.1	Construction and Exiting	<ul style="list-style-type: none"> • ADA actuators are provided at the majority of egress doors in the building, however there are (2) doors in the facility that require wheelchair access that do not currently have ADA actuators. 	<ul style="list-style-type: none"> • The doors that lack actuators are the door into the office reception area, the door from the office to the Commons and the doors to the North Building.
B10.2	Stairs and Handrails	<ul style="list-style-type: none"> • No issues observed 	
B10.3	Ramps and Elevators	<ul style="list-style-type: none"> • No issues observed 	
B10.4	Accessibility	<ul style="list-style-type: none"> • No issues observed 	
B10.5	Signage	<ul style="list-style-type: none"> • No issues observed 	
RECOMMENDATIONS			
B10.1 Provide ADA actuators in (2) locations, the door into office reception and the doors to North Building.			
B20 – INTERIOR FINISHES			
Item		Findings	Comments
B20.1	Flooring	<ul style="list-style-type: none"> • The concrete slab flooring on the first level is cracking and allowing for moisture infiltration at numerous locations. This is causing damage to the marmoleum flooring system. See Figures B20.1.a and B20.1.b. 	<ul style="list-style-type: none"> • Slab issues do not seem to be impacting wood flooring, carpet or ceramic tile flooring systems.
B20.2	Ceilings	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • The majority of ceilings are 2x2 or 2x4 lay-in acoustical ceiling tile.
B20.3	Ceiling Issues	<ul style="list-style-type: none"> • The 2x4 acoustic ceiling tiles have been removed in (1) classroom due to leaks from the roof (unknown if leaks are new or older). See Figure B20.3. 	
B20.4	Fixed Equipment	<ul style="list-style-type: none"> • The art room does not have a kiln. 	<ul style="list-style-type: none"> • Classrooms are equipped with televisions, projectors and smart boards as well as marker boards.
B20.5	Walls	<ul style="list-style-type: none"> • There are cracks occurring in wall at the building storage due to slab settlement. See Section A10 for structural findings. 	<ul style="list-style-type: none"> • Walls are mostly painted gypsum board; there are several walls with brick veneer and marble/stone.
B20.6	Wall Finishes	<ul style="list-style-type: none"> • No issues observed 	
B20.7	Furnishings	<ul style="list-style-type: none"> • No issues observed 	
RECOMMENDATIONS			
B20.1 Remove portions of marmoleum flooring as required to patch, repair and seal concrete slab. Replace marmoleum flooring as required to match existing.			

B20.4 Provide a separate covered steel structure with metal roofing surrounded by chain link fence outside the art room for an exterior kiln.

B30 – INTERIOR COMPONENTS

Item		Findings	Comments
B30.1	Interior Windows	• No issues observed	
B30.2	Interior Doors and Hardware	• Cross corridor doors (won-doors) close due to failure of electrically operated magnetic hold-opens.	• Doors need to be propped open at these locations.
B30.3	Acoustics	• No issues observed	
B30.4	Casework	• No issues observed	
B30.5	Security	• No issues observed	
B30.6	Other		

RECOMMENDATIONS

B30.2 Replace hardware and rewire electrically operated magnetic hold-opens at all cross corridor doors.

B40 – TOILET FACILITIES

Item		Findings	Comments
B40.1	Walls and Wall Finishes	• No issues observed	
B40.2	Floors and Floor Finishes	• No issues observed	
B40.3	Ceilings	• No issues observed	
B40.4	Partitions	• No issues observed	
B40.5	Fixtures	• No issues observed	
B40.6	Accessories	• No issues observed	
B40.7	Accessibility	• ADA restrooms are needed to support the general classroom population.	

RECOMMENDATIONS

B40.7 Remodel (1) toilet room off the hall from a (4) stall toilet room to a single stall accessible toilet room consisting of a plastic laminate changing station, plastic laminate cabinetry, (1) ADA toilet stall, (1) ADA sink, an electrical outlet for a motorized changing station and hose bib.

C - SYSTEMS			
C10 - PLUMBING			
Item		Findings	Comments
C10.1	Water Service	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Water main entry is located in the boiler room (Main Building).
C10.2	Piping	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Gas service for boiler located next to gym outside of boiler room (Main Building).
C10.4	Fixtures	<ul style="list-style-type: none"> All restroom fixtures and drinking fountains in the North Building are period to the building. 	<p>Main Building:</p> <ul style="list-style-type: none"> Commercial washer and clothes dryer located in kitchen. Ice maker located in the kitchen. Grease interceptor is located inside the kitchen. Water coolers. Urinals are floor mounted, automatic flush valve. Water closets are floor mounted, automatic flush valve. Lavatories are floor mounted, Bradley type automatic sink. Single compartment sink in science classrooms. One, two, and three compartment sinks in kitchen. Wall mounted manual hand sink in kitchen. <p>North Building:</p> <ul style="list-style-type: none"> Two toilets; water closets are wall mount manual flush valve. Lavatories are manual wall mount. Single water fountain.
C10.6	Storm and Overflow Drains	<ul style="list-style-type: none"> Gutters and storm drains are in need in cleaning. Grass is growing in the dirt clogging drains on the Main Building. 	<p>Main Building</p> <ul style="list-style-type: none"> Building has exterior gutters, downspouts and roof drains. Many drains were clogged. <p>North Building:</p> <ul style="list-style-type: none"> Exterior gutters and downspouts and roof drains are present.
C10.7	Water Heater	<ul style="list-style-type: none"> There is a heat exchanger to make hot water off of the emergency fuel oil boiler, but the controls are not on emergency power. Therefore the boiler will not work in an emergency. 	<ul style="list-style-type: none"> Model: PVi 1400N250A-PVL, 250 gallons, 1,000 MBH each (total of 2).
RECOMMENDATIONS			
C10.3	Replace all lavatories and water closets in the North Building. Replace all water fountains with bi-level water coolers in the North Building.		
C10.4	Flush storm water lines.		
C10.7	Relocate controls serving the emergency fuel oil boiler to emergency power.		

C20 - HVAC		
Item	Findings	Comments
C20.1 Mechanical Equipment	<p>Main Building:</p> <ul style="list-style-type: none"> • Rooftop equipment paint is starting to fail before the end of its useful life. See Figure C20.1. <p>North Building:</p> <ul style="list-style-type: none"> • The forced air system is period to the building and functioning, but past its useful life. 	<p>Main Building:</p> <ul style="list-style-type: none"> • Most of the building is served by multi-zone units. Cooling used to be only for the offices; however there were complaints in the second story of the school. Two additional chillers and cooling coils were added to provide cooling to the remainder of the building. • Life Skills area has washer/dryer, electric range/oven, dishwasher, refrigerator, microwave, restroom, and a shower. • Rooftop equipment on east roof. <ul style="list-style-type: none"> ○ CH-3 Chiller, McQuay AGZ070BS27-ER11, R-22 ○ (2) Relief/intake hoods for AHU-8. ○ ASU-7: Logic Air CSU-12K-H-15, 8950 cfm, 5 hp. ○ AHU-17: Logic Air CSU-12K-H-15, 7550 cfm, 3 hp. ○ AHU-12: Logic Air, no model number, 7800 cfm, 3 hp. ○ CAC-2: Mr. Slip PU2KEK, MDF room, not on DDC. ○ EF-16: DX11B ○ Boiler flues. ○ (3) exhaust fans, EF-22 DX085; EF-5 DX11B; EF-6 DX08B. ○ (2) gravity relief hoods. • Rooftop equipment on library roof. <ul style="list-style-type: none"> ○ ASU-15: Single-zone, serves the library as a single zone. ○ Split system serving computer lab, PU36, not on DDC. • Rooftop equipment on central roof. <ul style="list-style-type: none"> ○ CH-2 Chiller, McQuay AGZ090BS27-ER11, R-22 ○ Unknown exhaust fan not running. ○ EF-21: Lab exhaust fan, REX12B. ○ EF-6: General exhaust fan, EX11B. ○ EF-23: General exhaust fan, DX11B. ○ EF-17: General exhaust fan, DX11B.

<p>C20.1</p>	<p>Mechanical Equipment</p>	<ul style="list-style-type: none"> • Rooftop equipment on south roof. <ul style="list-style-type: none"> ○ ASU-13: Logic Air, 4200 cfm, 2hp, no model number. ○ EF-3: DX06B. ○ CAC-3: MDF room, PU24K2. ○ CH-1: Chiller, McQuay, STNU031200133, R-22, swamp cooler has been disabled. ○ AHU-9: Commons, Logic Air, no model number, 15850 cfm, 7.5 hp. ○ AHU-10: Kitchen, McQuay OAH004FHAC. ○ EF-11: Kitchen exhaust, FX16BFT. ○ EF-12: Same as EF-11. ○ Make up air for kitchen, Captive Air, NSAU2-G12. ○ Walk in freezer/cooler condensers. ○ Boiler flues. • Rooftop equipment on west roof. <ul style="list-style-type: none"> ○ AHU-3: Locker rooms CSU-10K, 8425 cfm, 15 hp. ○ AHU-4: Health room and condensing unit. ○ Split system PU24EK2. ○ EF-13: Exhaust fan DX085. ○ Louvers for generators. • Rooftop equipment on gym roof. <ul style="list-style-type: none"> ○ Two large exhaust fans. ○ Relieve intake hoods. • 2nd floor east mechanical room. <ul style="list-style-type: none"> ○ AHU-8: Offices, VAV, relieves air into the space. Fed from CH-1, operating at near 100% flow (57 Hz). ○ (2) CHWP serving chiller 3. ○ Access to roof. • 2nd floor west mechanical room. <ul style="list-style-type: none"> ○ AHU-11: McQuay, custom unit, no CFM listing. ○ AHU-14: Main computer lab ○ (2) pumps for CH-2, B+G models. ○ AHU-6: Auditorium/lobby. ○ AHU-5: Upstairs classrooms. ○ AHU-16: Upstairs classrooms. ○ Roof access. • PE Mezzanine. <ul style="list-style-type: none"> ○ ERU: McQuay ○ AHU-1: McQuay, large gym, constant volume. ○ AHU-2: Small gym, constant volume.
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C20.1	Mechanical Equipment		<p>North Building</p> <ul style="list-style-type: none"> • The North Building is similar to the Western View Conference Center. The unit is original to building. • The strip heat in the unit was replaced with duct coils at the terminal units.
C20.2	Air Filtration	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • Air filtration is period to the building.
C20.3	Equipment Accessibility	<ul style="list-style-type: none"> • A cabinet is located directly under the access panel so the damper cannot be accessed. See Figure C20.3. 	<p>Main Building:</p> <ul style="list-style-type: none"> • Access to most equipment on roof is through doors on the 2nd floor with permanent ladders to the roof.
C20.4	Air Distribution and Ventilation	<ul style="list-style-type: none"> • There is no exhaust in the 2nd floor custodian room. • The system serving the computer lab prohibits ventilation to the space when the unit is operational. 	<p>Main Building:</p> <ul style="list-style-type: none"> • The computer lab is served by a split system. When the unit is on, the fire dampers to the multi-zone close to isolate the room, at which point there is no ventilation being delivered to the space.
C20.5	Controls	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • Controls: Andover DDC.
C20.6	Chillers	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • CH-1: Chiller, McQuay, STNU031200133, R-22, swamp cooler has been disabled. • CH-2 Chiller, McQuay AGZ090BS27-ER11, R-22. • CH-3 Chiller, McQuay AGZ070BS27-ER11, R-22.
C20.7	Boiler	<ul style="list-style-type: none"> • There is no limestone condensate protection on the boilers. 	<ul style="list-style-type: none"> • Boiler: Weil-McLain backup boiler, burns diesel and gas, 3,753 MBH input, tag B-3. • B-1 and B-2: Lochinvar Intelifin IBN2000, 2000 MBH with no limestone protection. • Limestone is used to balance the acidity of the condensate produced by boilers. If omitted, corrosion and/or failure of the system can occur.

RECOMMENDATIONS

- C20.1 Paint all rooftop chillers and air handing units.
- C20.3 Provide permanent access to the fire damper on the 2nd floor outside Room 213.
- C20.4 Provide exhaust in the 2nd floor custodian room by tying into another exhaust fan.
- C20.7 Provide condensate corrosion protection.

C30 – FIRE PROTECTION

Item		Findings	Comments
C30.1	Fire Suppression System	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • The kitchen hood has fire suppression. • The entire building is sprinkled.
C30.2	Water Service and Backflow Prevention	<ul style="list-style-type: none"> • No issues observed 	
C30.3	System Pressure	<ul style="list-style-type: none"> • No issues observed 	

C30.4	Standpipes	<ul style="list-style-type: none"> • No issues observed 	
C30.5	Fire Pump	<ul style="list-style-type: none"> • No issues observed 	
C30.6	Fire Sprinkler Pipe Condition	<ul style="list-style-type: none"> • No issues observed 	
C30.7	Fire Department Connection	<ul style="list-style-type: none"> • No issues observed 	<p>Main Building:</p> <ul style="list-style-type: none"> • The fire department connection is located south of building at bus loading area. • Water into building is located in the boiler room.
C30.8	Fire Sprinkler Zoning	<ul style="list-style-type: none"> • No issues observed 	
C30.9	Flow Monitoring and Alarm	<ul style="list-style-type: none"> • No issues observed 	
C30.10	Hoses and Extinguishers	<ul style="list-style-type: none"> • No issues observed 	
RECOMMENDATIONS			

D - ELECTRICAL			
D10 - ELECTRICAL EQUIPMENT			
Item		Findings	Comments
D10.1	Transformers	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Model: General Electric, high efficiency dry type. 1 MVA utility transformer, pad-mounted near the loading dock.
D10.2	Switchgear and Panelboards	<ul style="list-style-type: none"> A service entrance Transient Voltage Surge Suppression (TVSS) device was not provided. Numerous panels and switchboards have been blocked by furniture and supplies. See figure D10.2. 	<ul style="list-style-type: none"> The TVSS device would protect the HVAC control boards from burning out frequently. 2000A, 277Y/480V building service. Single main distribution panel, 2000A main circuit breaker. 300A, 280Y/120V service provided for North Building. Equipment: General Electric Spectra series typical.
D10.3	Lighting	<ul style="list-style-type: none"> Volumetric recessed luminaires in hallways and circulation areas seem to be collecting debris in the lamp shields. Uplight wall sconces in cafeteria offer inadequate illumination and insufficient hot – restrike times for interior lighting; significant chromaticity variations also in evidence. See Figure D10.3. Halogen accent lighting installed in several locations. T12 and HID lighting remains in service in North Building. 	<ul style="list-style-type: none"> T8, Compact fluorescent (CFL) and Metal Halide Interior Lighting is typical in this facility. Classrooms and hallways are served by 2x2 and 2x4 lensed troffers. Cafeteria and lobby lighting is a decorative pendant type with wall mounted uplight luminaires in the cafeteria. T8 linear fluorescent luminaires are installed in mechanical and electrical spaces. Overall, light levels appear to exceed IESNA/ASHRAE 90.1 (2010) recommendations. Halogen lighting is an older, inefficient lighting technology with a shorter lamp life.
D10.4	Lighting Controls	<ul style="list-style-type: none"> There is a large amount of failures in evidence in both in the remote operated circuit breakers and also the low voltage relay connections and control logic. Lighting control interface difficult to operate, program and troubleshoot. See Figure D10.4. Lighting zone sweep and override controls are not provided. 	<ul style="list-style-type: none"> Controls: Lithonia Synergy system controls lighting in exterior spaces, as well as in circulation and public spaces. Standalone lighting controls are installed in offices and classrooms.
D10.5	Back-up and Emergency Power	<ul style="list-style-type: none"> The generator combustion air louvers do not appear to have spring returns to fail open in the event of a power failure. See Figure D10.5a. There is insufficient space to open the generator enclosure rear doors and perform maintenance in the space provided. See figure D10.5b. 	<ul style="list-style-type: none"> 250kVA, 277Y/480V diesel generator installed in mechanical room on second floor; installed with weatherproof enclosure. 300A and 225A Automatic Transfer Switches (ATS) provided for emergency and standby loads.

D10.6	Egress and Emergency Lighting	<ul style="list-style-type: none"> No issues observed in the Main Building. There is no egress lighting installed in North Building. 	<ul style="list-style-type: none"> Egress lighting spacing and placement appears adequate in the new building.
D10.7	Exit Signage	<ul style="list-style-type: none"> No issues observed 	
D10.8	Sensors	<ul style="list-style-type: none"> Daylight sensors in south hallway and entry vestibule appear to have failed; all lighting was operating at full power under maximum daylight conditions. 	<ul style="list-style-type: none"> Occupancy and vacancy sensors are provided in offices, classrooms and circulation areas. Daylight sensors are provided utilizing switching technology.

RECOMMENDATIONS

D10.2	Provide and install a surge suppression device (TVSS) as close as possible to the service entrance to mitigate power quality issues. Remove items stored in front of electrical panels and switchboards; improve enforcement of OSHA/NEC electrical equipment clearance requirements.
D10.3	Replace volumetric troffer fixtures with lensed equivalents to prevent unsightly collection of debris. Replace existing metal halide uplight luminaires in cafeteria with ceramic metal halide lamps and electronic ballasts to minimize restrike time, chromaticity variations and improve light output; provide higher (>80%) reflectance ceiling finish at soffits above fixtures to improve luminance and efficiency in cafeteria. Replace halogen accent lighting with LED or fluorescent equivalents to save energy and reduce maintenance requirements. Replace T12 and high intensity discharge lamps and ballasts in north building with high performance T8 and compact fluorescent lamps and ballasts.
D10.4	Replace existing lighting control system complete (Square D powerlink system or equivalent). Provide override and sweep off controls for all building lighting.
D10.5	Ensure generator combustion air louver actuators are outfitted with spring loaded dampers that are guaranteed to fail open in the event of a power failure, to ensure the generator is able to start. Remove generator weatherproof enclosure to permit easy access by maintenance personnel.
D10.6	Provide retrofit battery packs as required in existing luminaires in North Building.
D10.8	Investigate reason(s) for south wing daylight sensor failures; repair and replace as necessary.

D20 – SAFETY / SECURITY

Item	Findings	Comments	
D20.1	Fire Alarm	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> System: Silent Knight
D20.2	Smoke Detection	<ul style="list-style-type: none"> No issues observed 	
D20.3	Pull Stations	<ul style="list-style-type: none"> No issues observed 	
D20.4	Annunciation	<ul style="list-style-type: none"> No issues observed 	
D20.5	Addressable Zones and Systems	<ul style="list-style-type: none"> No issues observed 	
D20.6	Monitoring	<ul style="list-style-type: none"> No issues observed 	
D20.7	Access Control	<ul style="list-style-type: none"> No issues observed 	
D20.8	Intrusion	<ul style="list-style-type: none"> No issues observed 	
D20.9	Video Surveillance	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> PTZ dome style cameras are installed throughout the facility.

RECOMMENDATIONS

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D30 – TECHNOLOGY COMMUNICATIONS			
Item		Findings	Comments
D30.1	Paging and Intercom – Head End Condition	• No issues observed	
D30.2	Master Clock	• No issues observed	
D30.3	Infrastructure	• No issues observed	
D30.4	Speakers	• No issues observed	
D30.5	Coverage	• No issues observed	
D30.6	Clock System	• No issues observed	
D30.7	Clock – Head End	• No issues observed	
RECOMMENDATIONS			

E - GROUNDS			
E10 – SITE CIRCULATION AND PARKING			
Item		Findings	Comments
E10.1	Parking Lots	<ul style="list-style-type: none"> No issues observed 	
E10.2	Site Signage/ Accessories	<ul style="list-style-type: none"> No issues observed 	
E10.3	Vehicular Circulation	<ul style="list-style-type: none"> No issues observed 	
E10.4	Curbs and Sidewalks	<ul style="list-style-type: none"> No issues observed 	
E10.5	Accessibility	<ul style="list-style-type: none"> No issues observed 	
E10.6	Bikes and Bike Parking	<ul style="list-style-type: none"> No issues observed 	
RECOMMENDATIONS			
E20 - SITE COMPONENTS			
Item		Findings	Comments
E20.1	Fields	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Corvallis HS has proposed construction a JV baseball field at this site due to site restrictions at the nearby high school site.
E20.2	Landscaping	<ul style="list-style-type: none"> No issues observed 	
E20.3	Irrigation	<ul style="list-style-type: none"> Irrigation for entire site is fed by a well, including irrigation to the greenhouse. This is overtaxing the well pump and tank system. The irrigation system feeding the gardens cannot be separately controlled. 	
E20.4	Site Buildings	<ul style="list-style-type: none"> There appears to be a need for a field house for field equipment. See Figure E20.4. 	<ul style="list-style-type: none"> Field equipment is currently being stored in the bicycle shelter.
E20.5	Site Security	<ul style="list-style-type: none"> Steel gate at courtyard does not latch properly, creating a security issue. Gate doors are rusting. See Figure E20.5. 	<ul style="list-style-type: none"> Site is fenced.
E20.6	Fencing	<ul style="list-style-type: none"> No issues observed 	
E20.7	Playground Equipment	<ul style="list-style-type: none"> No issues observed 	
E20.8	Play Surfaces	<ul style="list-style-type: none"> No issues observed 	
E20.9	Site Lighting	<ul style="list-style-type: none"> Spare and replacement parts for the building entry light fixtures are no longer available. 	<ul style="list-style-type: none"> Site lighting consists of high intensity discharge (HID) and compact fluorescent (CFL) lighting. Spacing and placement of fixtures appears adequate.
E20.10	Grading and Drainage	<ul style="list-style-type: none"> There is a grading issue at the south field that affects water drainage. 	
RECOMMENDATIONS			
E20.1	Provide a JV baseball field for Corvallis High School at the south playfield. Field construction will include regrading the site, seeding, irrigation, fencing and bleachers.		

- E20.3 Connect greenhouse irrigation system to the domestic water system from the 1988 North Building. Add a zone of existing irrigation system to provide better control to irrigation of gardens.
- E20.4 Construct a field house to store field equipment for both Linus Pauling Middle School and Corvallis High School.
- E20.5 Provide panic and closer hardware for the steel gates out from courtyard that is more appropriate for exterior conditions.
Replace building entry fixtures (upon failure) with Luminaire LED fixtures or equivalent with extended (greater than 5 year) warranty.
- E20.10 See E20.1.

IMAGES

Figure A10.2a – Slab on grade cracking



Figure A10.2.b – Slab on grade cracking



Figure A10.3.a – Crack in wall finishes



Figure A10.3.b – Ceiling leak



Figure A10.3.c – Cracks in concrete wall



Figure B20.1.a – Flooring issues



Figure B20.1.b – Flooring Issues



Figure B20.3 – Classroom ceiling



Figure C20.1 – Failing paint on unit



Figure C20.3 – Blocked fire/smoke damper



Figure D10.2 – Inaccessible switchboard



Figure D10.3 – Inadequate cafeteria lighting



Figure D10.4 – Lighting control issues



Figure D10.5.a – Generator combustion air louvers

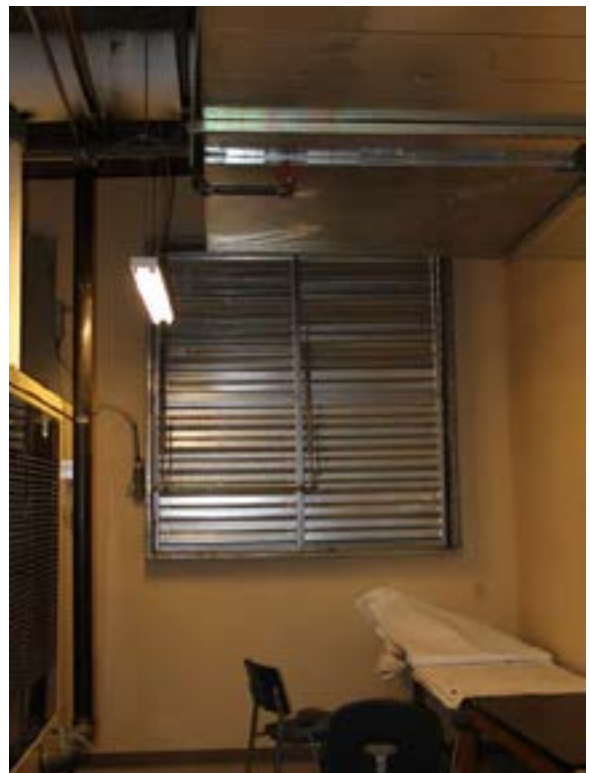


Figure D10.5.b – Insufficient space/access



Figure E20.4 – Lack of site storage



Figure E20.5 – Courtyard gate



Linus Pauling Middle School		Priority Level				Priority Level I	Priority Level II	Priority Level III	Priority Level IV
		(Refer to Legend)	I	II	III				
ITEMS									
A - STRUCTURE/SHELL									
A10 - STRUCTURE/SUBSTRUCTURE									
A10.3	1	Investigate and repair the cause of the leak in the ceiling of room 205	X				\$ 1,581		
A20 - EXTERIOR COMPONENTS									
A20.1	1	Repaint upper portions of exterior cladding around entire building		X			\$ 2,767		
A20.3	1	Refurbish translucent panels of the pyramidal skylight at the 1988 north building		X			\$ 44,275		
A20.4	1	Repair roofing per roofing assessment recommendations	X			\$ 5,000			
	2	Replace roofing per roofing assessment recommendations	X			\$ 245,000			
A20.5	1	Replace the metal panel system from the 1988 addition with a system to match the metal panel system on the 2006 main building at the canopy		X			\$ 15,654		
TOTAL - STRUCTURE/SHELL						\$ 250,000	\$ 1,581	\$ 62,696	\$ -
B - INTERIORS									
B10 - INTERIOR CIRCULATION									
B10.1	1	Provide ADA actuators in (2) locations, the door into office reception and the doors to north building		X			\$ 26,090		
B20 - INTERIOR FINISHES									
B20.1	1	Remove portions of marmoleum flooring as required to patch, repair and seal concrete slab; replace flooring	X			\$ 20,160			
B20.4	1	Provide a separate covered steel structure with metal roofing surrounded by chain link fence outside the art room for an exterior kiln	X			\$ 16,144			
B30 - INTERIOR COMPONENTS									
B30.2	1	Replace hardware and rewire electrically operated magnetic hold-opens at all cross corridor doors	X			\$ 15,812			
B40 - TOILET FACILITIES									
B40.7	1	Remodel (1) toilet room off the hall from a (4) stall toilet room to a single stall accessible toilet room		X			\$ 38,157		
TOTAL - INTERIORS						\$ 16,144	\$ 35,972	\$ 64,247	\$ -
C - SYSTEMS									
C10 - PLUMBING									
C10.3	1	North Building: replace all lavatories and water closet		X			\$ 61,250		
	2	North Building: replace all water fountains with bi-level water coolers		X			\$ 15,000		
C10.4	1	Flush storm water lines	X			\$ 11,250			
C10.7	1	Move controls serving the emergency fuel oil boiler to emergency power	X			\$ 10,000			
C20 - HVAC									
C20.1	1	North Building: replace all HVAC equipment	X						
	2	Paint all rooftop chillers and air handling units.	X			\$ 12,500			
C20.3	1	Provide permanent access to the fire damper on the 2nd floor outside Room 213		X			\$ 1,250		
C20.4		Provide exhaust in the 2nd floor custodian room by tying into another exhaust fan		X			\$ 1,250		
C20.7		Provide condensate corrosion protection	X			\$ 3,750			
TOTAL - SYSTEMS						\$ 26,250	\$ 13,750	\$ 76,250	\$ -
D - ELECTRICAL									
D10 - ELECTRICAL EQUIPMENT									
D10.2	1	Install surge protection device at building service entrance		X			\$ 100,000		
	2	Remove items from electrical rooms		X			\$ 2,500		
D10.3	1	Replace volumetric recessed luminaires			X			\$ 35,000	
	2	Replace upright luminaires in cafeteria			X		\$ 35,000		
	3	Replace halogen lighting			X			\$ 35,000	

Linus Pauling Middle School		Priority Level				Priority Level I	Priority Level II	Priority Level III	Priority Level IV
		(Refer to Legend)							
ITEMS		I	II	III	IV				
4	North Building: replace existing T12 fluorescent and high intensity discharge type lighting				X				\$ 65,000
D10.4	1 Replace malfunctioning lighting control system			X				\$ 100,000	
	2 Install sweep and override lighting controls				X				\$ 35,000
D10.5	1 Ensure generator dampers are fail-open type	X				\$ 2,500			
	2 Remove generator weatherproof enclosure			X			\$ 5,000		
D10.6	1 Install egress lighting in north building	X				\$ 50,000			
D10.8	1 Investigate and correct reasons for daylight sensor failures			X			\$ 35,000		
TOTAL - ELECTRICAL						\$ 52,500	\$ -	\$ 277,500	\$ 170,000

E - GROUNDS									
E20 - SITE COMPONENTS									
E20.1	1 Provide a JV baseball field for Corvallis High School at the south playfield			X				\$381,808	
E20.3	1 Connect greenhouse irrigation system to the domestic water system from the 1988 north building			X				\$11,859	
	2 Add a zone of existing irrigation system to provide better control to irrigation of gardens			X				\$7,906	
E20.4	1 Construct a field house to store field equipment for both Linus Pauling Middle School and Corvallis High School			X				\$37,317	
E20.5	1 Provide panic and closer hardware for the steel gates out from courtyard that is more appropriate for exterior conditions	X				\$ 6,008			
E20.9	1 Replace entry lighting upon failure				X				\$30,000
TOTAL - GROUNDS						\$ 6,008	\$ -	\$ 438,890	\$ 30,000

TOTALS BY CATEGORY	
STRUCTURE/SHELL	\$ 314,277
INTERIORS	\$ 116,363
SYSTEMS	\$ 116,250
ELECTRICAL	\$ 500,000
GROUNDS	\$ 474,898
FACILITY TOTAL	\$ 1,521,788

TOTALS BY PRIORITY	
LEVEL 1	\$ 350,902
LEVEL 2	\$ 51,303
LEVEL 3	\$ 919,583
LEVEL 4	\$ 200,000
PRIORITY TOTAL	\$ 1,521,788

LEGEND:

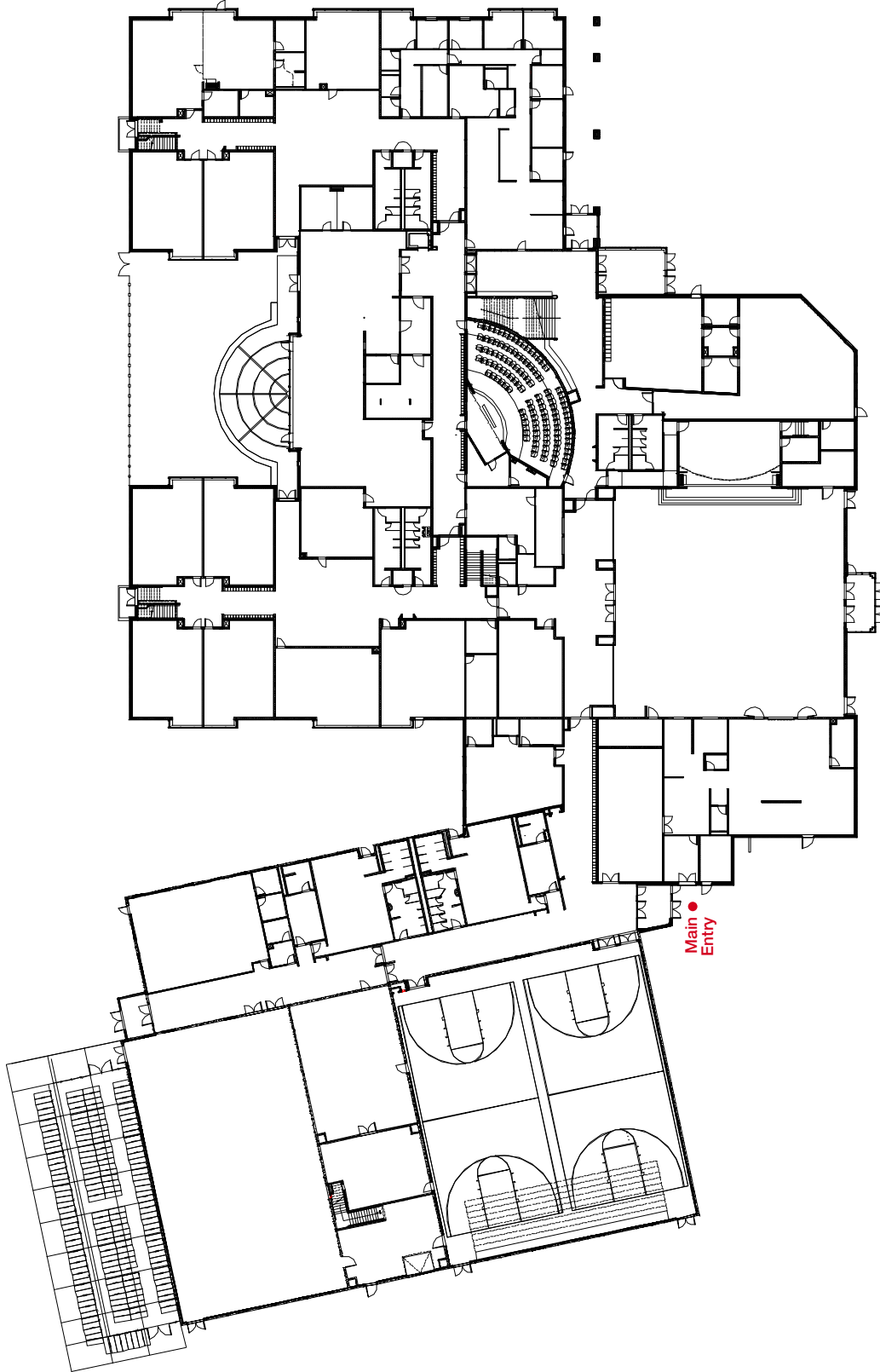
PRIORITY LEVELS

Level I: Highest Priority; Issues that affect the life safety concerns of the occupant, related to notification of occupants to emergency situations and the ability to safely evacuate the facility; subcomponents of Level I include safety concerns such as electrical loads, hazardous materials that might be affected with remodel or modifications, lack of fall protection. Level I items need to be addressed within a 5-year plan.

Level II: Moderate Priority; Issues that are related to the integrity and adequacy of systems within the building to sufficiently withstand a major event and still function; also related are the age of systems or building components that keep day to day operations running without constant repair. Issues may include mechanical, electrical and plumbing systems, fire suppression, lighting and security, as well as flooring, windows doors and other architectural components. Level II Items may be part of a 5-year plan.

Level III: Lower Priority; Issues that may over time affect the day to day maintenance of the building or long term use of the facility. Issues also include access and clearances at equipment and fixtures, access for individuals with disabilities and both indoor and exterior environment quality. Level III Items would be considered in a 5 to 10 year plan.

Level IV: Issues that are related to the aesthetics of both the building's interior and exterior as well as integrity and adequacy of building systems that don't pose any issues or nearing the end of their remaining lifecycles. These may include items such as cabinetry original to the building that have signs of wear or dated finishes but do not have any damage or deterioration. Level IV items would be considered long-term plans (10 years or more).



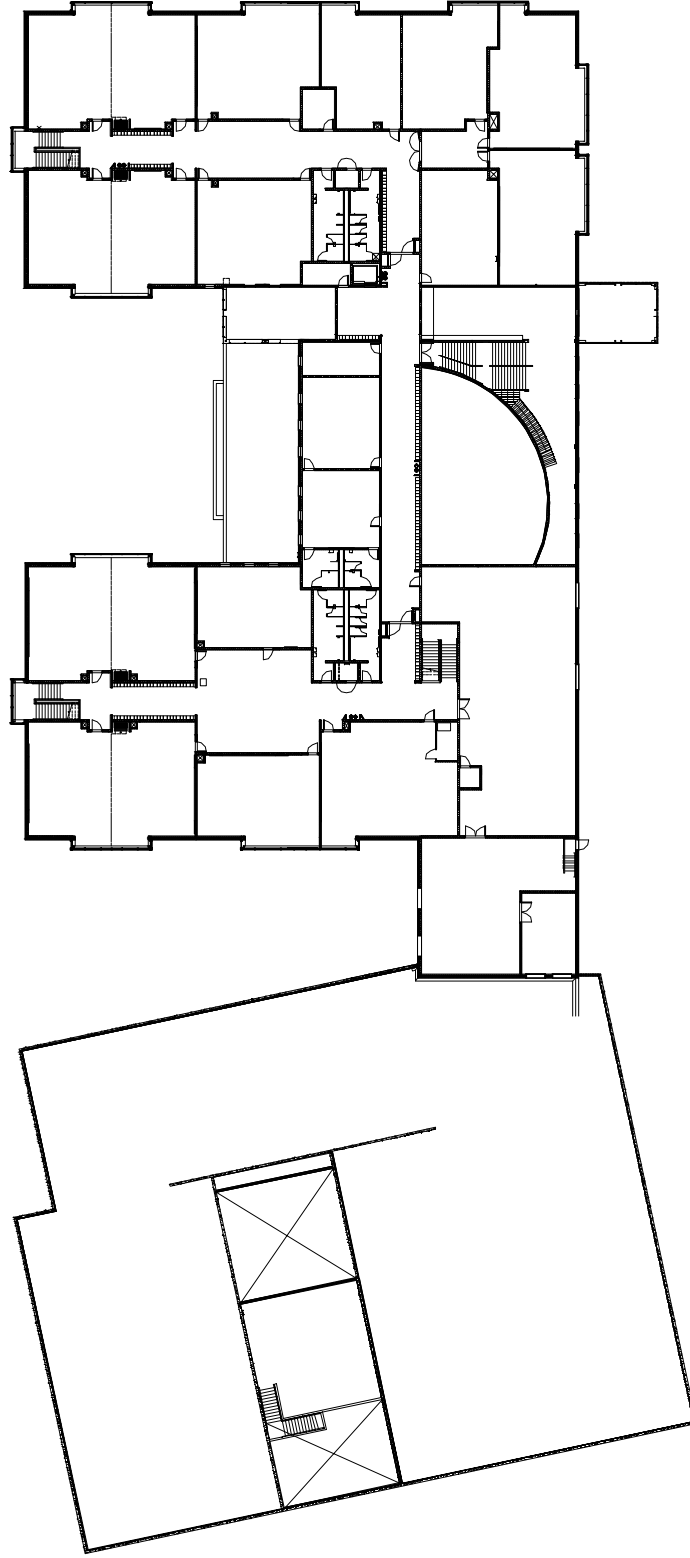
SCHOOL BUILDING MAIN FLOOR
SCALE: NOT TO SCALE

Linus Pauling Middle School | Corvallis School District

OVERALL FLOOR PLAN



Dull Olson Weekes - IBI Group
Architects, Inc.



SCHOOL BUILDING SECOND FLOOR
SCALE: NOT TO SCALE

Linus Pauling Middle School | Corvallis School District

OVERALL FLOOR PLAN



Dull Olson Weekes - IBI Group
Architects, Inc.



Corvallis High School

1400 NW Buchanan Avenue
Corvallis, OR 97330

Built: 2005
Enrollment: 1,215 students (2013)
Floor Area: 240,095 SF



Field Review Team:

Earl Carson	Dull Olson Weekes – IBI Group Architects
Jonathan Estabrook	KPFF Consulting Engineers
Roger Arnold	Glumac
Michael Henning	Glumac
Alex Ridley	Glumac
Dana Troy	Glumac

Report Date: December 2013

Date of Field Visits: June 3-7, 2013

Weather: Sunny, 70's and 80's

Neighborhood: Residential

Site Contacts: Axel Anders
Kim Patten, CSD 509J

General Building Description:

Corvallis HS is one of the newer schools in the School District. The main building and the adjoining football field were built in 2005. The building is on the same site as the former high school; the site still has some buildings from the original high school – FACS Building containing the foods labs and teen parent facilities, Building AT South containing the mechanical shops and art classrooms, and Building AT North containing the wood shop and ceramics. There is a creek that runs through the northeast of the site, Dixon Creek, which separates the vocational shop buildings and bus drop off from the rest of the site that are connected by two pedestrian bridges. To the east of the site on a separate city block are the JV softball field and baseball field from the original high school as well as a new batting cage building and tennis courts.

The main building is a two story steel-framed building with veneer brick exterior walls interspersed with metal and precast panel system and tilt-up concrete walls at the gymnasium. The buildings remaining from the original high school are one- and two-story buildings with painted framed with masonry infill panels and wood framed roofs that were partially remodeled in 2005. The batting cage building is a wood-framed building with veneer

CMU and fiber cement siding. The new high school building is reinforced concrete masonry units (CMU) with composite metal floor slabs and metal roof diaphragms.

Overall this facility is in excellent condition. A full building review of architectural, structural, mechanical, electrical and plumbing components was conducted.

A - STRUCTURE / SHELL			
A10 – STRUCTURE / SUBSTRUCTURE			
Item		Findings	Comments
A10.1	Foundations	<ul style="list-style-type: none"> No issues observed 	
A10.2	Subgrade Enclosures	<ul style="list-style-type: none"> No issues observed 	
A10.3	Structural Systems	<ul style="list-style-type: none"> The greenhouse roof at the end of AT South building has loose panels which are held in place by loose boards. See Figure A10.3.a. 	<ul style="list-style-type: none"> In 2005 the AT North and South buildings were upgraded by tying the roof diaphragm to the concrete frame.
RECOMMENDATIONS			
A10.3 Replace the roof at the greenhouse.			
A20 - EXTERIOR COMPONENTS			
Item		Findings	Comments
A20.1	Exterior Walls	<ul style="list-style-type: none"> The paint at tilt-up concrete walls are fading and discoloring on the main building. 	
A20.2	Doors and Hardware	<ul style="list-style-type: none"> Doors and hardware at Building AT North are in poor condition; doors have hardware that is not ADA compliant. Some door relites have wire glazing. 	<ul style="list-style-type: none"> Wire glass is no longer permitted in educational facilities.
A20.3	Windows and Skylights	<ul style="list-style-type: none"> No issues observed 	
A20.4	Roof	<ul style="list-style-type: none"> The mansard roof on Building H contains asbestos panels. A separate roofing assessment is located in the appendix of this report. 	<ul style="list-style-type: none"> Roofing on the older buildings is a combination of roofing systems, approximately 24-25 years old.
A20.5	Canopies and Covered Walks	<ul style="list-style-type: none"> There are complaints that students have been able to climb on top of canopies and have access to roof area, specifically at canopies at service court and at courtyard of cafeteria. 	
A20.6	Gutters and Downspouts	<ul style="list-style-type: none"> No issues observed 	
A20.7	Trim and Overhangs	<ul style="list-style-type: none"> No issues observed 	
A20.8	Ramps and Stairs	<ul style="list-style-type: none"> No issues observed 	
RECOMMENDATIONS			
A20.1 Paint tilt-up concrete walls at gymnasium.			
A20.2 If remodel work were to occur at this facility, the replacement of wire glass with tempered glazing may be required. Wire glass may also be replaced at the District's discretion to prevent any issues if glazing is damaged or broken.			
A20.4 Abate asbestos mansard panels as part of roofing replacement with a metal panel system. Repair and/or replace roofing per roofing assessment recommendations.			
A20.5 Add a wall mounted ornamental fence at parapet roof at specific points of access to deter climbing onto roof from adjacent low canopies.			

B - INTERIORS			
B10 – INTERIOR CIRCULATION			
Item		Findings	Comments
B10.1	Construction and Exiting	<ul style="list-style-type: none"> • Cross-corridor doors shut every day at 4:00pm and have no vision panels, creating a safety issue when the doors are reopened. • Older buildings contain wire glass. 	<ul style="list-style-type: none"> • Doors: Won-door. New vision panels can only be 100 square inches per code and must have labeled rating. • Wire glass is no longer permitted in educational facilities.
B10.2	Stairs and Handrails	<ul style="list-style-type: none"> • Rubberized stair treads are not installed firmly to stairs and often split, break and fall off. 	
B10.3	Ramps and Elevators	<ul style="list-style-type: none"> • No issues observed 	
B10.4	Accessibility	<ul style="list-style-type: none"> • There are several doors along major routes public access that do not have ADA actuators, specifically at the science wing, south gymnasium doors and Buildings H, AT North and AT South. 	<ul style="list-style-type: none"> • Request has been made to provide ADA door openers at toilet rooms at the gymnasium as well for games.
B10.5	Signage	<ul style="list-style-type: none"> • Building lacks directional signage, specifically at the main entry. 	<ul style="list-style-type: none"> • Room signage is compliant.
RECOMMENDATIONS			
B10.1	If remodel work were to occur at this facility, the replacement of wire glass with tempered glazing may be required. Wire glass may also be replaced at the District’s discretion to prevent any issues if glazing is damaged or broken. See Sections A20 and B30. Install glass relites in (8) cross-corridor doors.		
B10.2	Replace all rubberized stair treads throughout the school with a new rubber tread system with radiused nosings that better fits the contours of the stairs.		
B10.4	Provide ADA actuators at two exterior doors and two interior toilet rooms of the main building and one at an exterior door of Buildings H, AT North and AT South for a total of (7) doors.		
B10.5	Install directional signage at main entry, entrance to auditorium and on both levels of classrooms wing.		
B20 – INTERIOR FINISHES			
Item		Findings	Comments
B20.1	Flooring	<ul style="list-style-type: none"> • Carpet seams are delaminating in many locations. Steel reducer strips at carpet edges come up easily and become tripping hazards. See Figure B20.1. 	

B20.2	Ceilings	<ul style="list-style-type: none"> No issues observed 	
B20.3	Ceiling Issues	<ul style="list-style-type: none"> No issues observed 	
B20.4	Fixed Equipment	<ul style="list-style-type: none"> Dust collection system at wood shop is in poor shape. See Figure B20.4. The spray booth in the wood shop's exhaust fan is broken and unable to be used. 	
B20.5	Walls	<ul style="list-style-type: none"> No issues observed 	
B20.6	Wall Finishes	<ul style="list-style-type: none"> Wainscot is coming off the walls in some locations. 	<ul style="list-style-type: none"> All walls are finished with a level-3 rough texture finish, including the gymnasium.
B20.7	Furnishings	<ul style="list-style-type: none"> There is currently no storage for wrestling mats in the main gymnasium. They are currently stored behind the bleachers. The school auditorium doubles as a community theater, and its high usage adds wear and tear to auditorium infrastructure. 	<ul style="list-style-type: none"> Two-tier academic lockers are located in hallways, and are in very good condition. Allowance should be made for lighting, rigging and curtain replacement.

RECOMMENDATIONS			
B20.1	Replace carpet in classroom wing on upper and lower floors with new vinyl reducer strips.		
B20.4	Replace dust collection system and spray booth in wood shop. Rewire exposed wiring in spray booth room with fire-rated wiring.		
B20.6	Remove wainscot in science wing halls and replace with new wainscot with a furring system. Match adjacent wainscoting.		
B20.7	Construct an addition at back of the fitness room with a door into the gymnasium for mat storage. Provide maintenance allowance for rigging and curtain replacement.		

B30 – INTERIOR COMPONENTS

Item	Findings	Comments	
B30.1	Interior Windows	<ul style="list-style-type: none"> There are relites in wood shop and ceramics that are wood framed with wire glazing. 	<ul style="list-style-type: none"> Wire glass is no longer permitted in educational facilities.
B30.2	Interior Doors and Hardware	<ul style="list-style-type: none"> There are doors in the wood shop and ceramics with relites that contain wire glass. Toilet room doors at AT North are not ADA code compliant. 	<ul style="list-style-type: none"> Wire glass is no longer permitted in educational facilities. It is the District's request to re-key all interior doors.
B30.3	Acoustics	<ul style="list-style-type: none"> No issues observed 	
B30.4	Casework	<ul style="list-style-type: none"> No issues observed 	
B30.5	Security	<ul style="list-style-type: none"> No issues observed 	
B30.6	Other		

RECOMMENDATIONS	
B30.1	If remodel work were to occur at this facility, the replacement of wire glass with tempered glazing may be required. Wire glass may also be replaced at the District's discretion to prevent any issues if glazing is damaged or broken.
B30.2	See B30.1. Replace doors and hardware to toilet room in Building AT North. Rekey all interior doors in the main building, FACS Building, AT North and AT South.

B40 – TOILET FACILITIES			
Item		Findings	Comments
B40.1	Walls and Wall Finishes	<ul style="list-style-type: none"> Wall finishes in toilet room of Building AT North is in poor condition. 	<ul style="list-style-type: none"> There are no issues with the finishes in the main building.
B40.2	Floors and Floor Finishes	<ul style="list-style-type: none"> Ceramic tile flooring in toilet room of Building AT North is in poor condition. 	<ul style="list-style-type: none"> There are no issues with the finishes in the main building.
B40.3	Ceilings	<ul style="list-style-type: none"> No issues observed 	
B40.4	Partitions	<ul style="list-style-type: none"> Resin panel toilet partitions in many locations have been vandalized and are covered with stainless steel covers. See Figure B40.4. Toilet partitions in Building AT North in poor condition. 	
B40.5	Fixtures	<ul style="list-style-type: none"> Refer to Plumbing Section. 	<ul style="list-style-type: none"> Toilet fixtures and drinking fountain in toilet rooms of AT North Building are in poor condition.
B40.6	Accessories	<ul style="list-style-type: none"> No issues observed 	
B40.7	Accessibility	<ul style="list-style-type: none"> Toilet rooms in Building AT North are not ADA accessible. See Figure B40.7. 	
B40.8	Other	<ul style="list-style-type: none"> Toilet rooms in AT North Building should be remodeled. 	
RECOMMENDATIONS			
B40.4	Replace all toilet partitions in the main building with stainless steel toilet partitions.		
B40.8	Remodel toilet rooms in Building AT North with new finishes, plumbing fixtures and partitions that are ADA accessible.		

C - SYSTEMS			
C10 - PLUMBING			
Item		Findings	Comments
C10.1	Water Service	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Water entry is located by the auditorium.
C10.2	Piping	<ul style="list-style-type: none"> No issues observed 	<p>Main Building:</p> <ul style="list-style-type: none"> Gas service for boiler is located by main mechanical room. <p>AT North Building:</p> <ul style="list-style-type: none"> Gas service is located on the east side of the building. Gas service for gas fired kilns is located behind kilns.
C10.3	Fixtures	<ul style="list-style-type: none"> All restroom fixtures and drinking fountains not in the main building are period to their construction, and while functional are past their useful life. There are also no restrooms located in the batting cages. 	<p>Main Building:</p> <ul style="list-style-type: none"> Urinals are wall mounted automatic flush valve. Water closets are wall mounted automatic flush valve. Lavatories are wall mount auto sensor. Gas kitchen with hoods and full fire suppression. Two and three compartment sinks; grease interceptor. Wall mounted manual hand sinks Commercial dishwasher. Dishwasher in lab storage Water coolers The laundry room has (2) washers and (1) dryer; the kitchen has (1) washer and (1) dryer. <p>FACS Building:</p> <ul style="list-style-type: none"> Water coolers. Classrooms contain two compartment sinks, electric ranges/ovens, and portable residential dishwashers. Water closets are floor mount manual flush valve. Lavatories are wall mount manual. <p>AT South Building:</p> <ul style="list-style-type: none"> Foot pedal sink in shop. Water closets are floor mount manual flush valve. Lavatories are manual wall mount. Lavatories with water fountain are located in lab (with fish tanks). <p>AT North Building:</p> <ul style="list-style-type: none"> Water cooler Urinals are wall mount manual flush valve. Water closets are floor mount manual flush valve. Lavatories are manual wall mount. Four compartment sink in ceramics

			<p>lab.</p> <ul style="list-style-type: none"> • Large single compartment sinks on work bench.
C10.4	Storm and Overflow Drains	<ul style="list-style-type: none"> • Gutters and downspouts are in need of cleaning. 	<p>Main Building :</p> <ul style="list-style-type: none"> • It is a combination of exterior gutters and downspouts and roof drains. <p>FACS:</p> <ul style="list-style-type: none"> • Exterior Gutters and downspouts that go underground. • Some storm/overflow drains have debris preventing water flow.
C10.5	Water Heater	<ul style="list-style-type: none"> • No issues observed 	<p>Main Building:</p> <ul style="list-style-type: none"> • Model: AO Smith Legent 2000 (x2). 1 hp recirculation pumps (located in main mechanical room) • Model: Cyclone, 100 gallon, 1,000 MBH, w/fractional recirculation pump (for kitchen). • (1) WH-6 in lab storage, 10 gallon 2.5 kW. <p>FACS Building:</p> <ul style="list-style-type: none"> • WH-10, 80 gallons 18 kW
RECOMMENDATIONS			
C10.3	Replace all restroom fixtures and water fountains in building except for the Main Building. Provide restrooms in the batting cages.		
C10.4	Flush storm water lines.		

C20 - HVAC			
Item		Findings	Comments
C20.1	Mechanical Equipment	<p>Main Building:</p> <ul style="list-style-type: none"> • The HVAC for the theater cannot be run during a performance because of the noise and moving of curtains. • There is no air conditioning in the gym and it becomes too hot to use. • The heater in the custodial room is ineffective. • The paint on the rooftop units is already failing. See Figure 20.1.a. <p>Ancillary Buildings:</p> <ul style="list-style-type: none"> • All equipment is period to the buildings and functioning, but beyond its useful life. See Figure C20.1b. 	<p>Main Building:</p> <ul style="list-style-type: none"> • Many of the rooftop units had outside air dampers that were 100% closed. CO2 sensors may have been satisfied. • Wall mounted unit heater at the theater entrance. • Main mechanical room: <ul style="list-style-type: none"> ○ (1) Chilled water storage tank. ○ (2) Domestic hot water boilers. ○ (4) boilers. ○ (1) Water heater for kitchen. ○ Hot water pumps. ○ Chilled water pumps. ○ DX indoor unit for MDF room. • On the roof with access by the elevator: <ul style="list-style-type: none"> ○ AHU-4 ○ AHU-15 ○ AHU-6 ○ AHU-5 ○ General exhaust fans ○ AHU-14 ○ AHU-3 ○ CU-7 - Carrier, no name plate, for MDF/elec rooms. ○ CU-9 - Carrier, no name plate, for MDF/elec rooms. ○ Exhaust fan for life skills ○ Boiler and DHW flues. ○ AHU-1 ○ (9) utility vent sets with stacks. No tags. Model SFB-9-4-CW-UB-x. Serves science buildings. Operate based on switch in classrooms. • On the roof with access by the auditorium: <ul style="list-style-type: none"> ○ York XP090C00P2AAA4A added for blackbox theater. ○ AHU-8 ○ AHU-9 ○ (2) condensing units for elec/MDF. ○ (2) toilet exhaust fans

<p>C20.1</p>	<p>Mechanical Equipment</p>	<ul style="list-style-type: none"> • On the roof with access by the gym: <ul style="list-style-type: none"> ○ AHU-10 - Big gym ○ AHU-11 - Mat room. ○ AHU-12 - Weight room. ○ AHU-13 - Small gym. ○ Split system serving unknown. • On the roof with access by the kitchen: <ul style="list-style-type: none"> ○ AHU-7 - AAON, DX, kitchen. ○ Make up air unit for the kitchen ○ Walk-in freezer/cooler condensing units. Refrigerant piping insulation is deteriorating. ○ (4) Carrier CU's serving unknown. ○ (4) Kitchen exhaust fans. • Damaged laundry exhaust on south side of building, but does not appear to affect performance. <p>FACS:</p> <ul style="list-style-type: none"> • Multi-zone unit, used to be steam, connected from the HS. Located in the attic. Original to the building. • EF for freeze protection. • HV-9, Thermal HTM142-5. • Ductwork insulation in the attic is all exposed fiberglass. <p>AT South Building:</p> <ul style="list-style-type: none"> ○ Mechanical shops and labs. ○ HV-8 serves the two eastern labs. There is no relief in the spaces. ○ Two exhaust fans serve the storage rooms and were not running. ○ Leaking compressor air connection at west side of T12. ○ AC units serve the computer classroom, journalism, and computer room. ○ Fujitsu CU located in chain link enclosure outside. ○ HV-7 is a multi-zone unit that serves the journalizing paces. ○ HV-6 is a multi-zone unit that server the west shops. ○ FC-1 serves the TV room. ○ 13 year old heater in the green house. ○ Hood exhaust is running in the jewelry lab.
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C20.1	Mechanical Equipment		<ul style="list-style-type: none"> ○ Single Multi-zone unit original to the building serves these spaces. ○ Outdoor gas kilns located east of the building. ○ Air compressor to the shop equipment. Ingersoll-Rand Type 30 5 & 3x3-1/2; 253D5 ○ Compressed gas tanks secured to wall. ○ Exhaust hood over welding stations. ○ Residential box fans suspended from ceiling in green house to move air. ○ Hazardous chemicals stored in building. <p>AT North Building:</p> <ul style="list-style-type: none"> ● Woodshop and ceramic spaces. ● Five heating/ventilating units. ● Duct collection system ● HV-5 runs for one hour in the morning for warm up. ● (5) Electric kilns located in the ceramics area. ● Exhaust fan by the light switch operates the exhaust fan in the ceramics room. ● Boiler room with two boilers. ● Unit heaters located in hallways.
C20.2	Air Filtration	<ul style="list-style-type: none"> ● No issues observed 	<ul style="list-style-type: none"> ● Air filtration is period to the building.
C20.3	Equipment Accessibility	<ul style="list-style-type: none"> ● The terminal units serving the choir room are very difficult to get to. The access door is 15 feet off the ground with work tables and ductwork below. See Figure C20.3. 	<p>Main Building:</p> <ul style="list-style-type: none"> ● Roof equipment is all accessible by elevator to ships ladder.
C20.4	Air Distribution and Ventilation	<ul style="list-style-type: none"> ● No issues observed 	<p>Main Building:</p> <ul style="list-style-type: none"> ● Operable windows exist in various rooms.
C20.5	Controls	<ul style="list-style-type: none"> ● No issues observed 	
C20.8	Chillers	<ul style="list-style-type: none"> ● The chillers in the main building are loud. 	<p>Main Building:</p> <ul style="list-style-type: none"> ● CH-1: McQuay AGS370B27-ER10. ● CH-2: McQuay AGS230B27-ER10. ● Pumps located in main mechanical room: Paco, 40 HP. ● Both chillers located outside on grade in walled/fenced enclosure.

C20.10	Boiler	<ul style="list-style-type: none"> No issues observed 	<p>Main Building:</p> <ul style="list-style-type: none"> Model: Benchmark 4.0 (total of 4); located in main mechanical room. Pumps: Paco, 15 hp (total of 2). <p>AT North Building:</p> <ul style="list-style-type: none"> Mode: Weil McLain 2887 input MBH each. Installed in 2005; serves both AT North and South. 3 pumps, one stand-by, 3 hp each.
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RECOMMENDATIONS

C20.1	Revise diffusers serving the stage to provide low velocity airflow during performances. Provide air conditioning to the gym off of one of the chillers. Replace all HVAC and shop equipment in the ancillary buildings. Paint all rooftop units.
C20.3	Provide permanent ladder access in the Choir Room.

C30 – FIRE PROTECTION

Item	Findings	Comments
C30.1	Fire Suppression System	<ul style="list-style-type: none"> No issues observed <p>Main Building:</p> <ul style="list-style-type: none"> The kitchen has full fire suppression. <p>FACS:</p> <ul style="list-style-type: none"> Sprinkled on the eve outside and in attic. <p>AT North and South Buildings:</p> <ul style="list-style-type: none"> The buildings are not sprinkled.
C30.2	Water Service and Backflow Prevention	<ul style="list-style-type: none"> No issues observed <ul style="list-style-type: none"> Water service is located in exterior accessed storage room at the NE Corner of building.
C30.3	System Pressure	<ul style="list-style-type: none"> No issues observed
C30.4	Standpipes	<ul style="list-style-type: none"> No issues observed
C30.5	Fire Pump	<ul style="list-style-type: none"> No issues observed
C30.6	Fire Sprinkler Pipe Condition	<ul style="list-style-type: none"> No issues observed
C30.7	Fire Department Connection	<ul style="list-style-type: none"> No issues observed <p>Main Building and FACS:</p> <ul style="list-style-type: none"> The fire department connection (FDC) is located at the NE Corner of building. Three taps. Pressure at 73 psi. <p>AT North and South Buildings:</p> <ul style="list-style-type: none"> The FDC is located outside by the two buildings.
C30.8	Fire Sprinkler Zoning	<ul style="list-style-type: none"> No issues observed
C30.9	Flow Monitoring and Alarm	<ul style="list-style-type: none"> No issues observed
C30.10	Hoses and Extinguishers	<ul style="list-style-type: none"> No issues observed <ul style="list-style-type: none"> Fire extinguishers (no hoses) are present in all buildings.

RECOMMENDATIONS

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D- ELECTRICAL		
D10 - ELECTRICAL EQUIPMENT		
Item	Findings	Comments
D10.1	Transformers	<ul style="list-style-type: none"> No issues observed
D10.2	Switchgear and Panelboards	<p>AT North and South Buildings:</p> <ul style="list-style-type: none"> The outdoor covered kiln area’s electrical equipment is not NEMA 3R rated for outdoor use. See Figure D10.2a. The Woodshop busway system lacks capacity and available spare parts. See Figure D10.2b. The tool power relays at the wood, metal and ceramic shops are very noisy and need replacing. The switchboard at AT North is inaccessible due to storage. See Figure D10.2c. The main circuit breaker’s electronic trip units in AT North and South Building switchboards appear not to have been programmed. The ceramics lab electrical equipment clearance is violated by large storage shelving. See Figure D10.2d. <p>Main Building:</p> <ul style="list-style-type: none"> Low voltage distribution is located in the north electrical room: 2000A, 120Y/208V, Square D QED series switchboard; 2000A main circuit breaker with Micrologic trip unit; service entrance surge suppression device. High voltage distribution is located in the south electrical room: 2 sections 4000A and 3000A, 277Y/480V, Square D QED series switchboard; with downstream 3000A main circuit breaker with Micrologic trip unit; service entrance surge protection device. All panelboards are Square D NQ or NF series. Classroom, AV and lab panels are installed with panel integrated surge suppression devices. <p>FACS Building:</p> <ul style="list-style-type: none"> 400A, 120Y/208V electrical service is supplied via 400A, 3R weatherproof Square D I line panelboard on west exterior. Supplied from main building low voltage distribution in north electrical room (installed in 2005). The existing panelboards were replaced in 2005 with Square D NQ series. <p>AT North and South Buildings:</p> <ul style="list-style-type: none"> AT North and South buildings are

			<p>supplied from independent taps off of utility transformer.</p> <ul style="list-style-type: none"> • AT North building is served via 600A, 120Y/208V Square D I line weatherproof 3R switchboard, with main circuit breaker installed on west exterior wall. • AT South building is supplied via 1200A, 120Y/208V Square D I line weatherproof switchboard with main circuit breaker installed in north exterior wall. <p>All existing panelboards were replaced in 2005 with Square D NQ series.</p>
D10.3	Lighting	<ul style="list-style-type: none"> • No issues observed 	<p>Main Building:</p> <ul style="list-style-type: none"> • Hallways are served by lensed, recessed 2 x 4 and 6" round fluorescent luminaires. • Classrooms and offices are served by T8 fluorescent pendant fixtures installed in continuous rows. • Back of house areas are lit by industrial fluorescent strip luminaires with 2, 3 or 4 lamps. <p>FACS Building:</p> <ul style="list-style-type: none"> • Classrooms and offices are served by 2' x 4' lensed, recessed troffers with 2 and 3 T8 lamps. • Lab are served by 4 lamp T8 surface mount wraps, row mounted. • Mechanical areas are lit by 2 lamp surface mounted T8 utility luminaires and screw base compact fluorescent lamps. • All lighting was replaced in 2005. <p>AT North and South Buildings:</p> <ul style="list-style-type: none"> • Shop areas are served by 8', 4 lamp T8 pendants with wire guards • Offices and classrooms are served by 2'x4' recessed troffers with 2 and 3 lamps each. • 2 lamp T8 wall mount luminaires are installed in restrooms. • Hallways are served by 6", lensed recessed luminaires with 26W and 32W compact fluorescent lamps. • Mechanical and electrical spaces are served by 2 lamp T8 utility fluorescent luminaires. • All lighting was replaced in 2005.
D10.4	Lighting Controls	<ul style="list-style-type: none"> • No issues observed 	<p>Main Building:</p> <ul style="list-style-type: none"> • Site, circulation area, hallway and lobby lighting controlled via Square D Powerlink System; astronomic time clock controls site lighting.

			<ul style="list-style-type: none"> Classrooms and offices are controlled via standalone systems; west and south classrooms are installed with daylight harvesting capability and dimming ballasts. ETC system is installed for theater lighting control. <p>FACS Building:</p> <ul style="list-style-type: none"> Lab lighting is switched in groups; no automated controls. Classroom lighting is controlled via standalone systems with occupancy detection only. <p>AT North and South Buildings:</p> <ul style="list-style-type: none"> Shop lighting is switched in groups; no automated controls. Classroom lighting is controlled via standalone systems with occupancy detection only.
D10.5	Back-up and Emergency Power	<ul style="list-style-type: none"> No issues observed at Main Building and FACS Building. There is no back-up power installed in the AT North and South Buildings. 	<p>Main Building:</p> <ul style="list-style-type: none"> 300kVA, 277Y/480V Caterpillar diesel generator installed at loading dock. 125A, 277Y/480V Caterpillar life safety transfer switch. 400A, 277Y/480V Caterpillar essential services transfer switch. <p>FACS Building:</p> <ul style="list-style-type: none"> Emergency power is supplied from main building generator.
D10.6	Egress and Emergency Lighting	<p>Main Building:</p> <ul style="list-style-type: none"> Automatic flush valves and sink faucets are not connected to generator power. <p>AT North, South and FACS Buildings:</p> <ul style="list-style-type: none"> No issues observed 	<p>Main Building:</p> <ul style="list-style-type: none"> Egress lighting power is supplied via building generator/emergency lighting system. Stadium egress lighting is supplied via 3kW central battery inverter system. <p>FACS Building:</p> <ul style="list-style-type: none"> Egress lighting power is supplied from the main building generator/emergency lighting system. <p>AT North and South Buildings:</p> <ul style="list-style-type: none"> Egress lighting is supplied via fixture integrated battery packs.
D10.7	Exit Signage	<ul style="list-style-type: none"> No issues observed 	<p>Main Building:</p> <ul style="list-style-type: none"> LED exist signs, supplied from main building emergency lighting system. <p>FACS Building:</p> <ul style="list-style-type: none"> LED exit signs, supplied from the main building emergency lighting system. <p>AT North and South Buildings:</p> <ul style="list-style-type: none"> LED exit signs, supplied with integral battery packs.

D10.8	Sensors	<ul style="list-style-type: none"> • There are no workstation sensors installed in any building. 	<p>Main Building:</p> <ul style="list-style-type: none"> • Vacancy sensors and override switches are installed in classrooms and offices. • Classrooms on west and south walls are supplied with daylight sensors as well. <p>FACS Building:</p> <ul style="list-style-type: none"> • Occupancy sensors and override switches are installed in classrooms. • Exterior lighting is controlled via photocell. <p>AT North and South Buildings:</p> <ul style="list-style-type: none"> • Occupancy sensors and override switches are installed in classrooms. • Exterior lighting is controlled via photocell.
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RECOMMENDATIONS

D10.2	Replace all electrical wiring and equipment at outdoor kiln area with NEMA 3R rated raceway, boxes and fittings. Replace wood shop busway system with increased capacity system (Starline track busway system or equivalent). Replace tool power contactors in ceramics, metals and wood shops. Remove obstructions in front of north T building switchboard to comply with code clearance requirements. Use original, or generate new, electrical system fault current and coordination study results to properly program all facility circuit breaker electronic trip units. Relocate large storage shelf away from front of ceramics lab electrical equipment to comply with code clearance requirements. Replace any missing or illegible panel schedules and labels.		
D10.4	Install local lighting controls for rear theater hallway lighting with override capability by the theatrical lighting control system and provide footlights similar to those installed at the stage throughout areas subject to override control signals from the theatrical lighting control system.		
D10.5	Connect all automated flush valve and faucet power supplies to essential services power system.		
D10.8	Install workstation occupancy sensors in offices and classrooms to reduce plug-load energy consumption.		

D20 – SAFETY / SECURITY

Item	Findings	Comments
D20.1	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • Main Building: Siemens • FACS Building: retrofitted with Siemens; expander panel reports to central panel in main building. • AT North and South Buildings: retrofitted with Siemens; expander panels report to central panel in main building.
D20.2	<ul style="list-style-type: none"> • No issues observed 	
D20.3	<ul style="list-style-type: none"> • No issues observed 	
D20.4	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • Annunciators installed at main entry of each building.
D20.5	<ul style="list-style-type: none"> • No issues observed 	

D20.6	Monitoring	• No issues observed	
D20.7	Access Control	• No issues observed	
D20.8	Intrusion	• No issues observed	
D20.9	Video Surveillance	• The current system is nearing the end of its useful life.	
RECOMMENDATIONS			
D20.9	Replace the video surveillance system.		
D30 – TECHNOLOGY COMMUNICATIONS			
Item		Findings	Comments
D30.1	Paging and Intercom – Head End Condition	• No issues observed	
D30.2	Master Clock	• No issues observed	
D30.3	Infrastructure	• No issues observed	
D30.4	Speakers	• No issues observed	
D30.5	Coverage	• No issues observed	
D30.6	Clock System	• No issues observed	
D30.7	Clock – Head End	• No issues observed	
RECOMMENDATIONS			

E - GROUNDS			
E10 – SITE CIRCULATION AND PARKING			
Item		Findings	Comments
E10.1	Parking Lots	<ul style="list-style-type: none"> No issues observed at time of visit. 	<ul style="list-style-type: none"> There are (89) compact stalls, (8) accessible stalls and (135) standard parking stalls at this facility. Parking occurs off-site (on adjacent streets) due to the amount of drivers and a lack of available spaces.
E10.2	Site Signage/ Accessories	<ul style="list-style-type: none"> No issues observed 	
E10.3	Vehicular Circulation	<ul style="list-style-type: none"> No issues observed 	
E10.4	Curbs and Sidewalks	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> There is only a gravel pad at bleachers around the baseball field.
E10.5	Accessibility	<ul style="list-style-type: none"> There does not appear to be an accessible route to the bleachers at the baseball or softball fields or ADA access to the press box. 	
E10.6	Bikes and Bike Parking	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Bike parking is located in various locations on this site, including a large covered bike parking area on Buchanan Avenue.
RECOMMENDATIONS			
E10.5	Provide new bleacher systems with handicap seating and toilet rooms and a press box that is ADA accessible for the baseball and softball. A concrete walk with an ADA accessible route should connect this new bleacher system to the sidewalk at the street.		
E20 - SITE COMPONENTS			
Item		Findings	Comments
E20.1	Fields	<ul style="list-style-type: none"> There are large coniferous trees to the south of the football field that drop needles onto the track. Football field turf stripes are fading. 	<ul style="list-style-type: none"> The turf field is approximately 9 years old. Turf field replacement should be considered. Due to site limitations, there is no JV baseball field. Refer to Recommendations in Linus Pauling report. See Section E10.5.
E20.2	Landscaping	<ul style="list-style-type: none"> Many of the planter areas are not well maintained. 	
E20.3	Irrigation	<ul style="list-style-type: none"> Irrigation system is failing in many locations. 	
E20.4	Site Buildings	<ul style="list-style-type: none"> It is desired to add restrooms to the batting cages. See Section C10.3. 	
E20.5	Site Security	<ul style="list-style-type: none"> No issues observed 	
E20.6	Fencing	<ul style="list-style-type: none"> No issues observed 	
E20.7	Playground Equipment	<ul style="list-style-type: none"> N/A 	
E20.8	Play Surfaces	<ul style="list-style-type: none"> See Section E20.1. 	
E20.9	Site Lighting	<p>Main Building:</p> <ul style="list-style-type: none"> Parking area pole luminaire was observed to be leaning. See Figure 	<p>Main Building:</p> <ul style="list-style-type: none"> Ceramic metal halide (CMH), quartz metal halide (MH) and compact

		<p>E20.9a.</p> <ul style="list-style-type: none"> Baseball field lighting is well beyond its useful life. <p>FACS Building:</p> <ul style="list-style-type: none"> Incandescent recessed soffit lighting is present. West wall lighting observed to be operating during daylight hours. <p>AT North and South Buildings:</p> <ul style="list-style-type: none"> Incandescent and high intensity discharge (HID) lighting used. See Figure E20.9b. 	<p>fluorescent lighting (CFL) used throughout site;</p> <ul style="list-style-type: none"> MH pole mount luminaires serve parking areas and walkways; building entrances and bike/bus shelters are served by CFL and CMH canopy lighting. Stadium lighting is 1500W metal halide with Musco remote ballasts. Baseball field lighting is desired by district. <p>FACS Building:</p> <ul style="list-style-type: none"> Recessed soffit lighting. <p>AT North and South Buildings:</p> <ul style="list-style-type: none"> Recessed soffit lighting around perimeter. Metal Halide (MH) area lighting between buildings and at entrances.
E20.10	Grading and Drainage	<ul style="list-style-type: none"> Bio-swale and area along the banks of the river are overgrowing and has been known to house the homeless. 	<ul style="list-style-type: none"> Drainage was added to the softball field in 2012.

RECOMMENDATIONS

E20.1	Remove large coniferous trees at south the football field and replace with smaller deciduous trees. Re-paint striping on turf field. Replace turf field in its entirety (long term recommendation).
E20.2	Provide plants in existing planters that are drought-resistant and require less maintenance.
E20.3	See Section E20.2.
E20.9	Replace all incandescent lighting in FACS and AT North and South Buildings with LED or CFL retrofit systems. Replace malfunctioning photocell controlling FACS west exterior lighting. Replace AT North and South Buildings' HID site area luminaires with high efficiency, full cutoff LED or CMH wallpack luminaires. Replace leaning pole luminaire foundation; provide pole foundations designed by registered structural engineer. Replace baseball field lighting system, poles, foundations and wiring complete (Musco Light-Structure Green System or equivalent).
E20.10	Provide a chain link fence around the bio-swale and along the river to deter access of these areas.

IMAGES

Figure A10.3 – Greenhouse roof at AT South

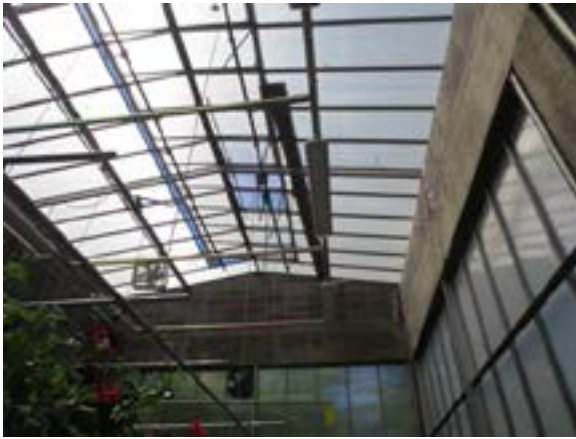


Figure B20.1 - Carpeting



Figure B20.4 – Dust collector



Figure B40.4 – Toilet partitions



Figure B40.7 – AT North restrooms



Figure C20.1.a – Paint failing on roof units



Figure C20.1.b – Mechanical equipment



Figure C20.3 – Choir room ductwork access



Figure D10.2.a - Incorrect wiring at kilns

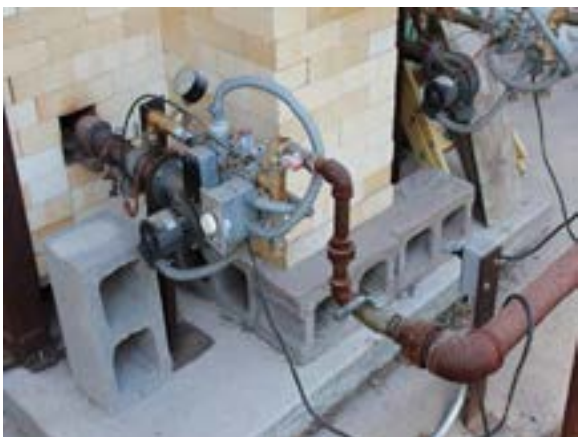


Figure D10.2.b – Aging busway system



Figure D10.2.c – Inaccessible switchboard



Figure D10.2.d – Electrical clearance



Figure E20.9.a – Incandescent lighting Figure



E20.9.b - Light pole foundation



Corvallis High School	Priority Level				Priority Level I	Priority Level II	Priority Level III	Priority Level IV	
	ITEMS	(Refer to Legend)							
		I	II	III					IV
A - STRUCTURE/SHELL									
A10 - STRUCTURE/SUBSTRUCTURE									
A10.3	1	Replace greenhouse roof		X			\$ 177,890		
A20 - EXTERIOR COMPONENTS									
A20.1	1	Paint tilt-up concrete walls	X				\$ 19,370		
A20.2	1	Provide new doors, frames and glazing at AT North building	X				\$ 27,798		
A20.4	1	Abate mansard panels and replace with metal panel system		X			\$ 20,872		
	2	Repair roofing at AT North and South per roofing assessment recommendations	X				\$ 20,000		
	3	Replace roofing at AT North and South per roofing assessment recommendations	X				\$ 463,000		
A20.5	1	Add ornamental fence at parapet roof to deter access	X				\$ 7,115		
TOTAL - STRUCTURE/SHELL					\$ 483,000	\$ 54,283	\$ 198,762	\$ -	
B - INTERIORS									
B10 - INTERIOR CIRCULATION									
B10.1	1	Add glazing to cross corridor doors	X				\$ 56,925		
B10.2	1	Replace all rubberized stair treads	X				\$ 37,001		
B10.4	1	Provide ADA actuators at (2) exterior doors and (2) interior toilet rooms at main building		X			\$ 34,787		
	2	Provide ADA actuators at select exterior doors at AT North, AT South and FACS Buildings		X			\$ 26,090		
B10.5	1	Install directional signage at main entry, auditorium and both levels of classroom wing		X			\$ 2,371		
B20 - INTERIOR FINISHES									
B20.1	1	Replace carpet in classroom wing on upper and lower floors with new vinyl reducer strips	X				\$ 240,745		
							\$ 34,787		
B20.4	1	Replace dust collection system and spray booth in wood shop	X						
	2	Rewire exposed wiring in spray booth room with fire-rated wiring	X				\$ 3,162		
B20.6	1	Remove wainscot in science wing halls and replace with new wainscot		X			\$ 42,551		
B20.7	1	Construct an addition at back of the fitness room with a door into the gymnasium for mat storage			X			\$ 78,113	
	2	Provide maintenance allowance for rigging and curtain replacement		X			\$ 71,156		
B30 - INTERIOR COMPONENTS									
B30.1	1	Replace all interior door wire glazing in wood shop and ceramics	X				\$ 3,004		
B30.2	1	Replace all openings from east interior wall of the wood shop with new hollow metal-framed relites and doors		X			\$ 12,196		
	2	Replace doors and hardware to toilet room in Building AT North	X				\$ 2,395		
	3	Rekey all interior doors in the main building, H Building, AT North and AT South	X				\$ 1,897		
B40 - TOILET FACILITIES									
B40.4	1	Replace all toilet partitions in the main building with stainless steel toilet partitions	X				\$ 101,200		
	2	Remodel toilet rooms in Building AT North with new finishes, plumbing fixtures and partitions that are ADA accessible		X			\$ 62,796		
TOTAL - INTERIORS					\$ 7,454	\$ 473,662	\$ 251,947	\$ 78,113	
C - SYSTEMS									
C10 - PLUMBING									
C10.3	1	Replace all restroom fixtures and water fountains in FACS and AT North and South Buildings		X			\$ 108,750		
	2	Provide restrooms in the batting cages	X				\$ 65,000		
C10.4	1	Flush storm water lines	X				\$ 7,500		
C20 - HVAC									
C20.1	1	Revise diffusers serving the stage to provide low velocity airflow during performances		X			\$ 16,250		
	2	Provide air conditioning to the gym off of one of the chillers		X			\$ 550,000		

Corvallis High School	ITEMS	Priority Level (Refer to Legend)				Priority Level I	Priority Level II	Priority Level III	Priority Level IV
		I	II	III	IV				
	3	Replace all HVAC and shop equipment in the ancillary buildings	X				\$ 1,243,750		
C20.4	1	Provide permanent ladder access in the Choir Room of the main building	X				\$ 6,250		
TOTAL - SYSTEMS						\$ -	\$ 1,322,500	\$ 675,000	\$ -

D - ELECTRICAL									
D10 - ELECTRICAL EQUIPMENT									
D10.2	1	Replace kiln area wiring with weatherproof wiring	X			\$ 10,000			
	2	Replace inadequate wood shop busway system			X		\$ 25,000		
	3	Replace tool power contactors in all shops			X		\$ 25,000		
	4	Remove scrap metal from area in front of all switchboards and panelboards		X		\$ 5,000			
	5	Program all facility breaker trip units		X		\$ 5,000			
	6	Replace missing electrical panel schedules		X		\$ 2,500			
D10.4	1	Install local lighting controls in theater rear hallway	X			\$ 5,000			
D10.5	1	Connect flush valve and faucets to generator		X		\$ 1,750			
D10.8	1	Install workstation occupancy sensors			X		\$ 210,000		
D20 - SAFETY/SECURITY									
D20.9	1	Replace video surveillance system	X			\$ 189,750			
TOTAL - ELECTRICAL						\$ 204,750	\$ 14,250	\$ 260,000	\$ -

E - GROUNDS									
E10 - SITE CIRCULATION AND PARKING									
E10.5	1	Provide new bleacher systems at baseball and softball fields with handicap seating and toilet rooms and a press box that is ADA accessible; provide concrete walk with accessible route			X		\$ 2,251,255		
E20 - SITE COMPONENTS									
E20.1	1	Remove large coniferous trees at south the football field and replace with smaller deciduous trees			X		\$ 9,961		
	2	Re-paint striping on turf field	X			\$ 7,906			
	3	Replace turf field		X			\$ 1,185,937		
E20.2	1	Provide plants in existing planters that are drought resistant and require less maintenance			X		\$ 15,812		
E20.9	1	Replace FACS and AT North and South incandescent lighting			X		\$ 25,000		
	2	Replace malfunctioning photocell controlling FACS building west lighting			X		\$ 5,000		
	3	Replace AT North and South building area lighting with full cutoff LED or ceramic metal halide luminaires			X		\$ 50,000		
	4	Replace leaning pole luminaire at parking lot		X		\$ 5,000			
	5	Replace baseball field lighting		X		\$ 150,000			
E20.10	1	Provide a chain link fence around the bio-swale and along the river to deter access of these areas		X		\$ 43,484			
TOTAL - GROUNDS						\$ 7,906	\$ 1,384,421	\$ 2,357,028	\$ -

TOTALS BY CATEGORY	
	STRUCTURE/SHELL \$ 736,045
	INTERIORS \$ 811,176
	SYSTEMS \$ 1,997,500
	ELECTRICAL \$ 479,000
	GROUNDS \$ 3,749,355
	FACILITY TOTAL \$ 7,773,076

TOTALS BY PRIORITY	
	LEVEL 1 \$ 703,110
	LEVEL 2 \$ 3,249,116
	LEVEL 3 \$ 3,742,737
	LEVEL 4 \$ 78,113
	PRIORITY TOTAL \$ 7,773,076

LEGEND:

Corvallis High School	Priority Level				Priority Level	Priority Level	Priority Level	Priority Level
	(Refer to Legend)	I	II	III				
ITEMS					I	II	III	IV

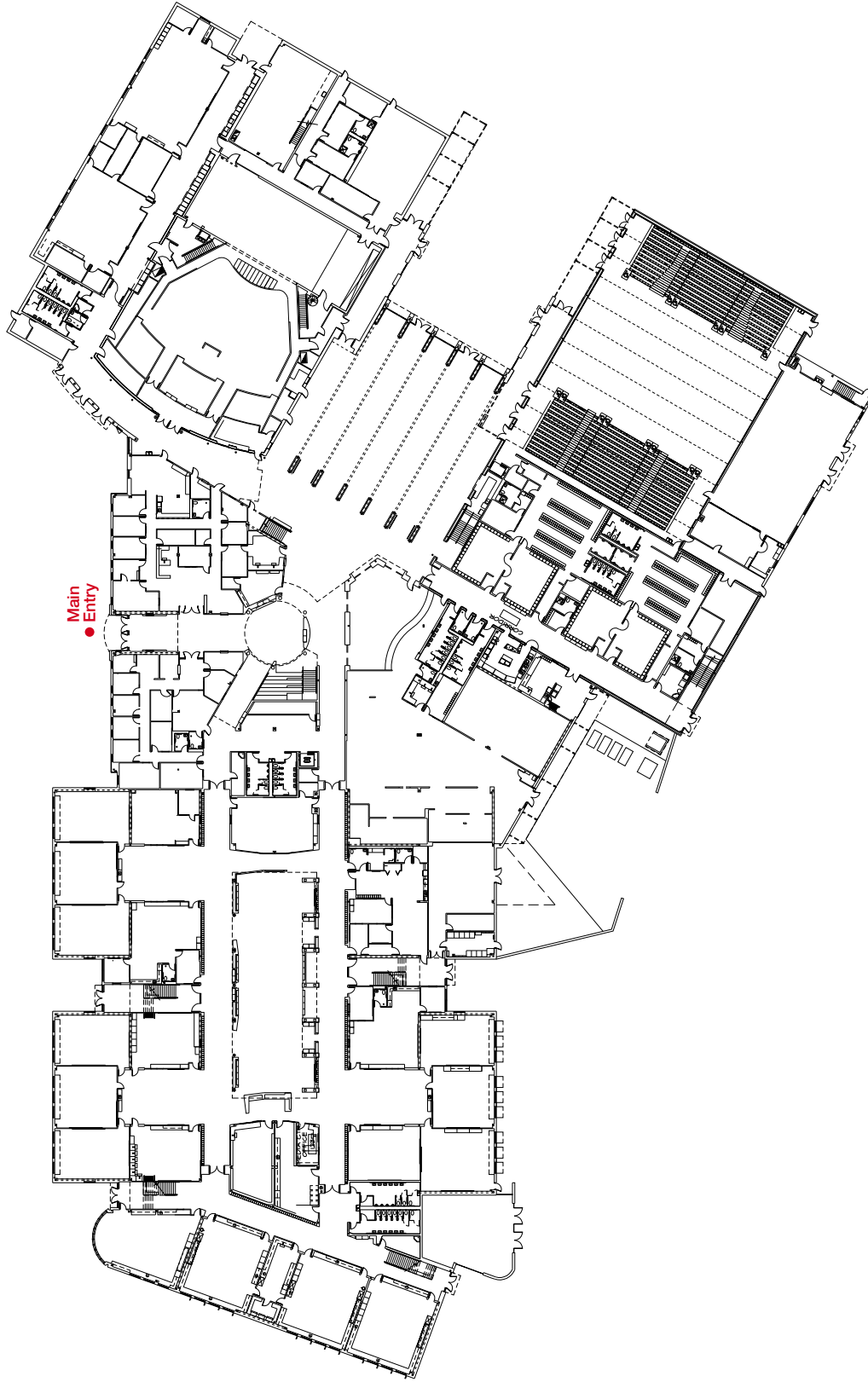
PRIORITY LEVELS

Level I: Highest Priority; Issues that affect the life safety concerns of the occupant, related to notification of occupants to emergency situations and the ability to safely evacuate the facility; subcomponents of Level I include safety concerns such as electrical loads, hazardous materials that might be affected with remodel or modifications, lack of fall protection. Level I items need to be addressed within a 5-year plan.

Level II: Moderate Priority; Issues that are related to the integrity and adequacy of systems within the building to sufficiently withstand a major event and still function; also related are the age of systems or building components that keep day to day operations running without constant repair. Issues may include mechanical, electrical and plumbing systems, fire suppression, lighting and security, as well as flooring, windows doors and other architectural components. Level II Items may be part of a 5-year plan.

Level III: Lower Priority; Issues that may over time affect the day to day maintenance of the building or long term use of the facility. Issues also include access and clearances at equipment and fixtures, access for individuals with disabilities and both indoor and exterior environment quality. Level III Items would be considered in a 5 to 10 year plan.

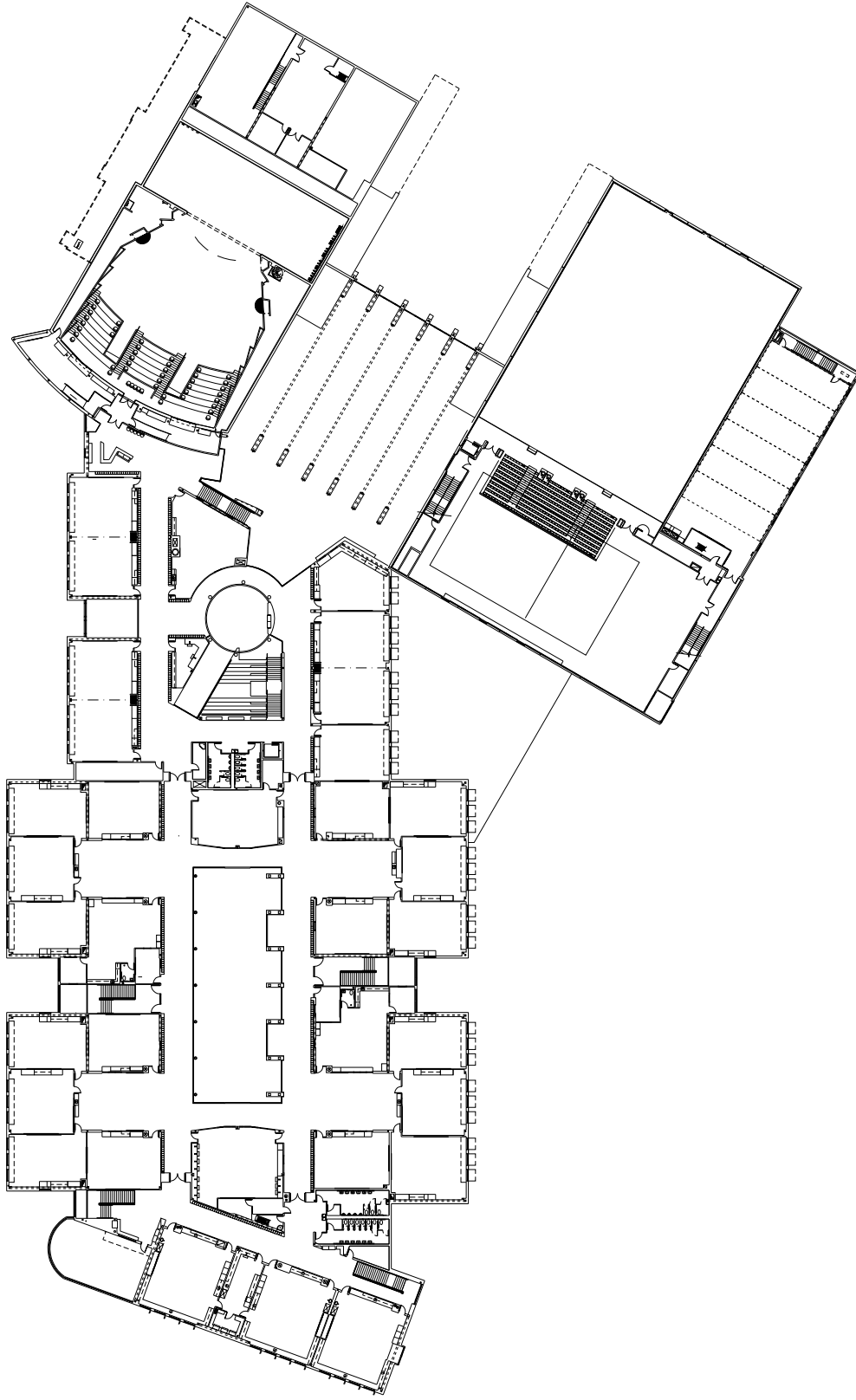
Level IV: Issues that are related to the aesthetics of both the building's interior and exterior as well as integrity and adequacy of building systems that don't pose any issues or nearing the end of their remaining lifecycles. These may include items such as cabinetry original to the building that have signs of wear or dated finishes but do not have any damage or deterioration. Level IV items would be considered long-term plans (10 years or more).



SCHOOL BUILDING MAIN FLOOR
SCALE: NOT TO SCALE

Corvallis High School | Corvallis School District

OVERALL FLOOR PLAN



SCHOOL BUILDING SECOND FLOOR
SCALE: NOT TO SCALE

Corvallis High School | Corvallis School District

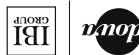
OVERALL FLOOR PLAN



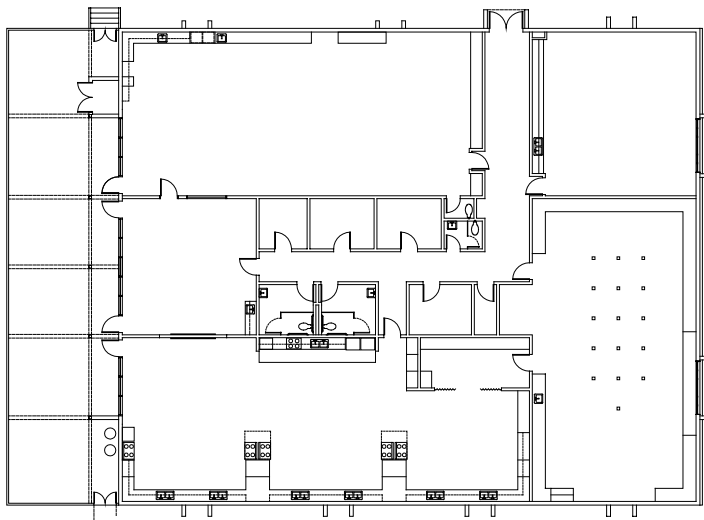
Dull Olson Weekes - IBI Group
Architects, Inc.

OVERALL FLOOR PLAN

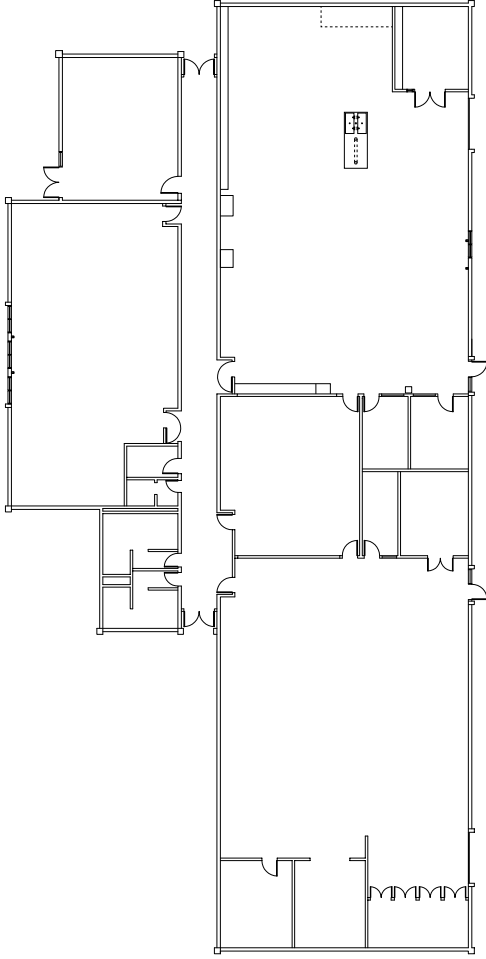
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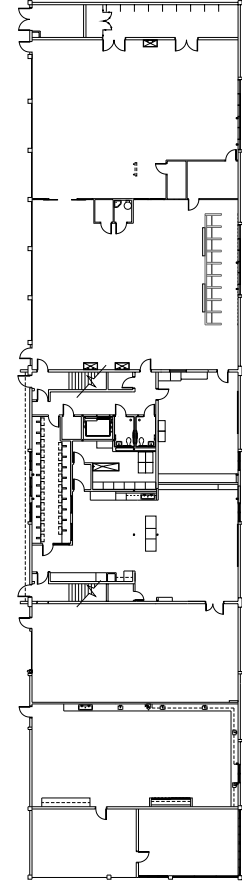
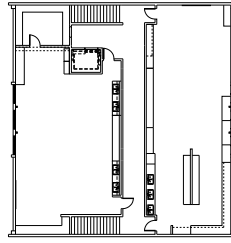
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FACS BUILDING
SCALE: NOT TO SCALE



TECH BUILDING NORTH
SCALE: NOT TO SCALE



TECH BUILDING SOUTH
SCALE: NOT TO SCALE



Crescent Valley High School

4444 NW Highland Drive
Corvallis, Oregon 97330

Built: 1971
Enrollment: 996 students (2013)
Floor Area: 247,071 SF



Field Review Team:

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Report Date: December 2013

Dates of Field Visits: June 3 -7, 2013

Weather: Sunny, 70's and 80's

Neighborhood: Agricultural

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General Building Description:

Crescent Valley High School is a campus of buildings, all constructed in 1971, arrayed around a central paved quad area. The site is a large grassy site with large trees that slopes gradually down to a creek that bisects the entire site. The creek is flanked on each side by large trees and plants and snakes between the campus of buildings and through the central quad. The river occasionally floods, filling the central quad area and sometimes flooding the lower level of the gymnasium building.

The campus is organized into buildings labeled A, B, C/D/E, and F. Building A makes up the first building structure and houses the gymnasium and multi-purpose rooms. It is a two-story structure with concrete columns and both precast and cast-in place walls. Concrete encased columns above the first floor support long-span steel trusses with steel purlins and metal decking.

The second building, Building B, houses the cafeteria, auditorium and classrooms. This unit has a wood-framed roof with wood decking and glulam beams. It is a single-story structure with varying roof heights. The roof for the

auditorium is higher and steps up higher to create a stage loft. Roofs are supported on precast and cast-in place concrete beams and columns.

Building C/D/E makes up the third building and has classroom spaces flanking a library and administrative offices. This building has three mechanical mezzanines with concrete slab floors. Otherwise the building is a single-story structure with a wood-framed roof that consists of wood decking on glulam beams and girders supported on concrete columns and walls.

The last building, Building F, houses art and science as well as shop classrooms and is a single-story building with wood-framed roof construction on concrete columns, similar to the other units.

The south side of the site is the formal entrance to the school, with parent drop-off and visitor parking at the front of the southern-most building on the campus, the one-story main building (Building C/D/E) containing the media center, classrooms and the main office. To the north of the creek are three separate buildings; the two-story gymnasium building (Building A), the one story cafeteria/theater building (Building B) and a one-story classroom building (Building F). Directly to the east of this building is the bus drop-off area and student parking, whose surface is cracking and spalling in a number of locations. The north and east of the site is taken up by the playfields, with a small parking area next to the football field that serves double duty as the service entrance. The parking areas and play fields connect to the campus building by a series of sidewalks bridges that are in poor condition in many places, and in some cases are incomplete.

This facility is in good to fair condition. A remodel of the main entrance was done in 2004, which updated the front entrance and many of the interior spaces in Buildings B and C/D/E. However the majority of the buildings' exterior and interior systems and finishes are original to the building and are nearing the end of their life cycle.

A full building review of architectural, structural, mechanical, electrical and plumbing components was conducted.

A - STRUCTURE / SHELL		
A10 – STRUCTURE / SUBSTRUCTURE		
Item	Findings	Comments
A10.1	Foundations	<ul style="list-style-type: none"> No issues observed
A10.2	Subgrade Enclosures	<ul style="list-style-type: none"> Unit B, covered walkway outside Auditorium, floor slab has settled a couple of inches and is a potential trip hazard. Covered walkway between Units A and C, floor slab has significant cracking and spalling. See Figure 10.2.
A10.3	Structural Systems	<ul style="list-style-type: none"> In Unit A, diagonal cracks were found in the cast-in-place concrete shear walls that separate the gym space from the multi-purpose rooms at the north side of the gym. See Figures A10.3.a and b. In Unit B, found a crack and crack monitor on a masonry wall at south side of Auditorium, near the entry. The wall may be a bearing wall. See Figure A10.3.c. In Units B, C/D/E, and F, at the covered walkways, minor to moderate cracking and spalling was observed at the top of the exterior concrete columns. See Figures A10.3.d and e. In all units, at the covered walkways, it was found that precast concrete fascia panels have occasional cracks and spalling ranging from minor to moderate, typically at or near panel joints. See Figures A10.3.f and g. The sealant between panels and concrete structure is deteriorated or not existing. In Units C/D/E, at mechanical mezzanines, it was found that the mechanical equipment is not anchored to the concrete slab. See Figure A10.3.h. There are recommendations available for seismic improvements to the building structure for Units B through F, outlined in the CH2MHILL Seismic Analysis and Evaluation report, dated November 1999. There are recommendations available for seismic improvements to the building structure for Unit A, outlined in the CH2MHILL Seismic Analysis and Evaluation report, dated July 2000. There are recommendations available for seismic improvements to non-structural systems, outlined in the CH2MHILL Seismic Analysis and Evaluation reports, dated November 1999 and July 2000.

RECOMMENDATIONS	
A10.2	Fill and patch cracked concrete in covered walkway floor slabs to avoid trip hazards. In areas where a slab panel has settled relative to adjacent panel, grind the edge of the adjacent panel flush with lower slab.
A10.3	<p>Investigate the extent of the cracks and assess the probable cause at Building A. Install a crack monitor to help determine if cracks are due to original shrinkage or if there is ongoing movement. Epoxy inject or seal cracks if cracks are deemed to be original shrinkage cracks and no further study is necessary.</p> <p>At the crack in the masonry wall at Building B continue to check existing crack monitor. If movement persists, it may be necessary to remove carpeting in hallway and determine if the floor slab or foundation is experiencing some settlement or is significantly cracked, which may require further study and possible strengthening.</p> <p>At Buildings B, C/D/E and F, patch and fill cracking and spalling at top of exterior columns supporting covered walkways to prevent further wear and possible reinforcement corrosion or exposure.</p> <p>Patch and fill cracking and spalling of precast concrete fascia panels to prevent further wear and possible reinforcement corrosion or exposure at all buildings. Replace existing sealant between joints and between panels and concrete structure to prevent further wear and possible water infiltration.</p> <p>At Building C/D/E, anchor mechanical units in mechanical mezzanines. Refer to CH2MHILL report for a complete list of seismic improvements to non-structural components.</p> <p>Prioritize and perform the remaining recommended improvements to structural systems as outlined in the CH2MHILL report. The report provides specific recommendations for each of the building areas. These include but are not limited to the construction of new wood shear walls, wall out-of-plane bracing, strengthening of the roof diaphragms, and strengthening the concrete panel connections at the gym.</p> <p>Perform recommended seismic improvements to non-structural components as outlined in the CH2MHILL report. These include, but are not limited to, anchoring and strapping of mechanical and electrical equipment, and bracing suspended equipment.</p>

A20 - EXTERIOR COMPONENTS

Item	Findings	Comments	
A20.1	Exterior Walls	<ul style="list-style-type: none"> There are some precast concrete panels that are cracking, spalling and have joints failing that leave large gaps. See Figures A20.1. 	<ul style="list-style-type: none"> Exterior walls consist of brick and precast concrete walls that are not insulated.
A20.2	Doors and Hardware	<ul style="list-style-type: none"> The majority of the doors are hollow metal doors and frames with single-glazed windows and hardware that do not meet current code requirements. Many of the doors are rusting out and failing. See Figure A20.2.a and b. Some exterior doors contain wire glass. 	<ul style="list-style-type: none"> Wire glass is no longer permitted in educational facilities.
A20.3	Windows and Skylights	<ul style="list-style-type: none"> Gaps appear to be forming below the large hollow metal windows in the cafeteria. See Figure A20.3.a. Window systems are original to the building, and showing their age. See Figure A20.3.b. 	<ul style="list-style-type: none"> Window systems are hollow metal frames with single-glazed windows.
A20.4	Roof	<ul style="list-style-type: none"> Roof access to Building C/D/E is via disappearing stairs through teaching spaces. There is currently no roof access to Buildings B and F. A separate roofing assessment is located in the appendix of this report. 	
A20.5	Canopies and Covered Walks	<ul style="list-style-type: none"> No issues observed 	
A20.6	Gutters and Downspouts	<ul style="list-style-type: none"> No issues observed 	

A20.7	Trim and Overhangs	<ul style="list-style-type: none"> • Stucco soffits at covered walk at perimeter of buildings are discoloring with sealant between precast panels. • Sealant at precast panels is falling off in many locations. 	
A20.8	Ramps and Stairs	<ul style="list-style-type: none"> • No issues observed 	

RECOMMENDATIONS

- A20.1 Patch and repair cracked precast concrete panels. Clean gaps where panel joints have failed and reseal with backer rod and sealant.
- A20.2 If remodel work were to occur at this facility, the replacement of wire glass with tempered glazing may be required. Wire glass may also be replaced at the District's discretion to prevent any issues if glazing is damaged or broken.
 Replace all existing hollow metal door and frames with new storefront system at main paths of egress and hollow metal doors and code complaint hardware at all main path of egress to match new main office upgrades and new hollow metal doors and frames at service doors.
- A20.3 Replace all windows with aluminum storefront systems and insulated glazing.
- A20.4 Replace (2) disappearing stairs in Building C/D/E with fixed ships ladders. Relocate mechanical room access from classroom to a storage room. Provide ships ladders and roof hatches at Buildings B and F.
- A20.7 Clean soffits at covered walkway. Clean joints between the stucco soffits and precast panels and reseal with backer rod and sealant.

B - INTERIORS			
B10 – INTERIOR CIRCULATION			
Item		Findings	Comments
B10.1	Construction and Exiting	<ul style="list-style-type: none"> • ADA door openers are failing in many locations. • Doors contain wire glass. 	<ul style="list-style-type: none"> • Wire glass is no longer permitted in educational facilities.
B10.2	Stairs and Handrails	<ul style="list-style-type: none"> • No issues observed 	
B10.3	Ramps and Elevators	<ul style="list-style-type: none"> • The exterior ramp to upper gymnasium does not meet current ADA code requirements. See Figure B10.3. • There is no elevator in the two-story Building A. 	
B10.4	Accessibility	<ul style="list-style-type: none"> • See Section B10.3. 	
B10.5	Signage	<ul style="list-style-type: none"> • The majority of the facility has signage that is not compliant. • Directional signage would improve way finding on this large school campus. 	<ul style="list-style-type: none"> • Remodeled areas have compliant signage.
RECOMMENDATIONS			
B10.1	<p>If remodel work were to occur at this facility, the replacement of wire glass with tempered glazing may be required. Wire glass may also be replaced at the District’s discretion to prevent any issues if glazing is damaged or broken. See Sections A20 and B30.</p> <p>Repair ADA door openers in (3) locations and provide door openers for any doors along main paths of egress between buildings. Replace door opener at auditorium entrance.</p>		
B10.3	<p>Construct a building addition to the front of the gymnasium that would incorporate a new ADA compliant entrance ramp, a new elevator, expand the weight room below and provide an entrance lobby for events.</p>		
B10.5	<p>Provide compliant signage in Buildings A & B. Add directional signage at all main entry doors of all (5) buildings.</p>		
B20 – INTERIOR FINISHES			
Item		Findings	Comments
B20.1	Flooring	<ul style="list-style-type: none"> • VCT flooring in Buildings A and B are in poor condition. See Figure B20.1.a. • Carpet in Building B, auditorium and media center in Building C/D/E is in poor condition. See Figures B20.1.b, c and d. • The sealed concrete floor finish in the kitchen is not slip resistant. • Loose walk-off mats at hallway exit doors are tripping hazard. 	<ul style="list-style-type: none"> • Floor finishes that were updated in the 2004 remodel are in good condition. • The gymnasium hardwood flooring is already scheduled to be sanded and refinished summer 2013.
B20.2	Ceilings	<ul style="list-style-type: none"> • Most spaces in this facility have a modular ceiling system that are in poor condition and do not conform to standard light fixture sizes. 	<ul style="list-style-type: none"> • Ceilings replaced in the 2004 remodel with 2x4 acoustic ceiling tiles are in good condition.
B20.3	Ceiling Issues	<ul style="list-style-type: none"> • No issues observed 	
B20.4	Fixed Equipment	<ul style="list-style-type: none"> • The dust collection system in wood shop is in poor condition. • There is no fume extraction system in metal shop. 	

B20.5	Walls	<ul style="list-style-type: none"> Modular wall systems in Building B and around the media center in Building C/D/E have poor acoustics and contribute to long-term maintenance issues. 	
B20.6	Wall Finishes	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Full-height wood paneling in auditorium looks dated.
B20.7	Furnishings	<ul style="list-style-type: none"> Seating in auditorium in poor shape and should be replaced. See Figure B20.7. Furniture in the media center is in poor condition. 	<ul style="list-style-type: none"> Bleachers in gymnasium are in poor condition; however, they are in the process of being replaced. Full height student lockers are located in hallways and are generally in good condition. Display cases are located throughout the campus and are in good condition.

RECOMMENDATIONS

B20.1 Replace VCT flooring in all classrooms, halls and the cafeteria of Buildings A & B. Replace all carpet flooring in Building B and the media center of Building C/D/E. Provide slip-resistant sheet vinyl flooring with covered base in the kitchen in Building B. Provide fixed walk off mats at all egress doors. Replace carpeting in auditorium.

B20.2 Replace ceilings in cafeteria and media center spaces with ceiling systems that would accentuate the space and provide acoustic attenuation.

B20.4 Provide a new dust collection system for the wood shop that meets current code requirements. Provide a fume extraction system for welding booths in shop.

B20.5 Remove modular wall system from cafeteria. Replace modular wall systems at classrooms for better acoustics in Building B. Replace modular wall system around media center.

B20.6 Replace wood paneling in the auditorium with new wood panel system.

B20.7 Replace all auditorium seating. Provide allowance for future lighting replacements.

B30 – INTERIOR COMPONENTS

Item	Findings	Comments	
B30.1	Interior Windows	<ul style="list-style-type: none"> No issues observed 	
B30.2	Interior Doors and Hardware	<ul style="list-style-type: none"> The plastic laminate faced wood doors in areas not yet remodeled are failing and have door hardware that does not meet ADA or egress code requirements. Many of the doors with relites have wire glazing. 	<ul style="list-style-type: none"> Doors that were installed in the 2004 remodel are in good condition. Wire glass is no longer permitted in educational facilities.
B30.3	Acoustics	<ul style="list-style-type: none"> The cafeteria has many hard surfaces that can be noisy during times of heavy use. Acoustic panels in gymnasium seem to get a lot of abuse by basketballs and volleyballs. Cheer room has no acoustic attenuation. See Figure B30.3. The auditorium lacks acoustical attenuation. 	
B30.4	Casework	<ul style="list-style-type: none"> Casework in Buildings A & B are in poor condition. See Figure B30.4.a. Foods room cooking stations lack hoods. See Figure B30.4.b. 	<ul style="list-style-type: none"> No issues observed with casework installed in the 2004 remodel. Science classroom casework is in very good condition.

B30.5	Security	• No issues observed	
B30.6	Other		

RECOMMENDATIONS

B30.2	If remodel work were to occur at this facility, the replacement of wire glass with tempered glazing may be required. Wire glass may also be replaced at the District’s discretion to prevent any issues if glazing is damaged or broken. Replace all plastic laminate faced wood interior doors with new hollow metal doors at main paths of egress and new wood doors at all other locations with new code compliant hardware.		
B30.3	Replace existing wall panels at gymnasium with 1,500 SF abuse-resistant acoustical panels. Add 500 SF of perforated wood panels with acoustical absorptive paneling to back of auditorium. Provide acoustical 1000 SF of acoustic wall panels to (3) walls of the cheer room and 500 SF of acoustical ceiling clouds. Add 1000 SF of acoustic wall panels to the cafeteria.		
B30.4	Replace casework, backsplash and countertops in all classrooms in Buildings ‘A’ and ‘B’. Replace all casework in foods lab with new countertops, cabinets and backsplash to foods room and add (1) Type ‘A’ hoods to each of the cooking stations. Provide ADA access to all sink locations.		

B40 – TOILET FACILITIES

Item		Findings	Comments
B40.1	Walls and Wall Finishes	• No issues observed	• Finishes are a combination of painted concrete masonry (CMU), exposed brick or FRP panels.
B40.2	Floors and Floor Finishes	• No issues observed	• Ceramic tile floor in moderate condition.
B40.3	Ceilings	• Toilet room ceilings consist of 2x4 acoustical ceiling tiles that are in poor condition.	• 2x4 ceiling tiles are not ideal in toilet room facilities.
B40.4	Partitions	• No issues observed	• Partitions are a combination of metal and resin panel.
B40.5	Fixtures	• No issues observed	
B40.6	Accessories	• No issues observed	
B40.7	Accessibility	• No issues observed	

RECOMMENDATIONS

B40.3	Replace 2x4 acoustical ceiling tiles with painted gypsum board ceilings in (14) toilet rooms.		
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C - SYSTEMS			
C10 - PLUMBING			
Item		Findings	Comments
C10.1	Water Service	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Entry in Boiler Room (Building B).
C10.2	Piping	<ul style="list-style-type: none"> Gas piping does not have weather proof paint and is corroding at Building F. See Figure C10.2. Domestic hot water piping needs to be re-piped per request of the district. 	<p>Building A:</p> <ul style="list-style-type: none"> Entry by boiler room (5psi); abandoned in place hot water piping. <p>Building B:</p> <ul style="list-style-type: none"> Entry by boiler room <p>Building C/D/E:</p> <ul style="list-style-type: none"> Small gas entry by greenhouse
C10.3	Drain and Vent Systems	<ul style="list-style-type: none"> There is no grease interceptor in the kitchen. 	<p>Building A:</p> <ul style="list-style-type: none"> Urinals are wall mounted manual flush valve. Lavatories are manual wall mount. Water closets are wall mounted manual flush valve. Gang showers: manual valve. <p>Building B:</p> <ul style="list-style-type: none"> All electric kitchen with no gas; manual fire suppression on one hood with deep fryer, but the deep fryer is not used anymore. Three total hoods. Commercial dishwasher. Single level manual hand sink in kitchen. Walk-in cooler/freezer Two compartment sink <p>Building C/D/E:</p> <ul style="list-style-type: none"> Exterior hose bibs. Single level water fountain. Urinals are wall mounted manual flush valves. Lavatories are automatic Bradley type. Water closets are floor mounted manual flush valve. <p>F Building:</p> <ul style="list-style-type: none"> Large manual single compartment sink in the dark room. Single level water fountains. Large manual single compartment sink in the crafts/shop. Eye wash stations. Gas service in the labs at the work benches.
C10.4	Storm and Overflow Drains	<ul style="list-style-type: none"> All roof drains are in need of cleaning. See Figure C10.4. Saw dust accumulations were observed in Building F drains. 	<p>Building A:</p> <ul style="list-style-type: none"> Water has ponded on the roof; still standing water after multiple days of sunshine.
C10.5	Water Heater	<ul style="list-style-type: none"> Domestic hot water is off of the main 	<p>Building A:</p>

		boiler in the A Building.	<ul style="list-style-type: none"> • Domestic hot water off of main boilers, 2 recirculation pumps. Building B: • Model: AO Smith, in boiler room, 300 MBH, 130 gallons Building C/D/E: • Bradford White, Room D72, 80 gallons, 4.5 kW, small fractional hp circulation pump. • Bradford White, Room D77, 80 gallons, 4.5 kW, small fractional hp circulation pump. • State 52 gallon, 18 kW, located in E mechanical room. • Single compartment manual sink in teacher area. C wing. Building F: • Model: AO Smith, in mechanical room, Cyclone 200 MBH, 100 gallons
RECOMMENDATIONS			
C10.2	Paint gas piping on the roof of Building F. Re-pipe domestic hot water piping.		
C10.3	Provide a grease interceptor for the kitchen.		
C10.4	Flush storm water lines.		
C10.5	Provide a separate domestic hot water heater in the Building A with all associated piping and pumps.		

C20 - HVAC		
Item	Findings	Comments
C20.1 Mechanical Equipment	<ul style="list-style-type: none"> • There have been no substantial upgrades to the air distribution system since it was constructed. All forced air equipment is functioning, but beyond its useful life. See Figure C20.1. • Valves are leaking in the upper level of Building A. • Exhaust fans in the locker rooms are in poor condition. • Welding exhaust is insufficient in F65. 	<p>Building A (lower level):</p> <ul style="list-style-type: none"> • Building is primarily heating and ventilating units. • Wrestling (now the weight room) has unit ventilators. • ASU-6 Serves the locker rooms. A separate unit serves the girls locker rooms; could not access at the time of the site visit • ASU-4 serves the teams room. • Baseboard heaters in the coach's offices. • Unit heaters in corridors near doors. <p>Building A (upper level):</p> <ul style="list-style-type: none"> • ASU A-2 serves the west gym. • ASU A-4 serves the girls locker room. Model: Torrivent T-10. • ASU A-5 serves the wrestling room. Model: Trane Torrivent, no tag. • ASU A-3 serves the team lockers, Model: Trane Torrivent T-12. • ASU A-1 serves the east and central gym. Model: Trane Torrivent. <p>Building B (main building):</p> <ul style="list-style-type: none"> • Access to mechanical room from exterior, north side of building (down stairs to the basement). • Home Ec Room has electric ranges, dishwashers and dryers. • Smoke exhaust observed in Stage B28. • Remodel in 2005 replaced the gaskets in all Victaulic fittings. <p>Building B (mechanical rooms):</p> <ul style="list-style-type: none"> • ASU B-5, Trane Climate Changer Type 24, serves kitchen, single zone. • ASU B-4, Trane Climate Changer Type 35, serves cafeteria, single zone. • ASU B-3, Trane Climate Changer Type 21, 6 zones. • EF B-6, serves general exhaust. • ASU B-2, Trane Climate Changer Type 21, serves auditorium, single zone. • ASU B-1, Trane Climate Changer, Type 35, 7 zones.

<p>C20.1</p>	<p>Mechanical Equipment</p>		<p>Building B (roof):</p> <ul style="list-style-type: none"> • Access through C/D/E Building, across canopy and portable ladder. Other access by extension ladder. • General exhaust fans serve dressing rooms and kitchen areas. • 6 boiler flues <p>Building C/D/E (main building):</p> <ul style="list-style-type: none"> • Room C08 has a cassette AC unit that was required to be installed, but was never hooked up. • Rooms D63/D62 used to be a single room, but was divided up into two rooms, one a computer lab and the other a work space. The thermostat is in the computer lab, so the work space is over cooled. To compensate, a unit heater was installed; simultaneous heating and cooling occurs. • E65 has a split system not on the DDC system. • Unit heaters in green house. Green house is mostly used as chair storage now. <p>Building C/D/E (C wing mechanical room):</p> <ul style="list-style-type: none"> • Access off of Room C08; pull down stair access. • ASU C-1, Trane Climate Changer Size 41, serves classrooms N & W. 13 zones. • ASU C-2, Trane Climate Changer Size 21, serves classrooms S & E. • EF C-1, general exhaust, Pace U15F. • Single unit heater for freeze protection. <p>Building C/D/E (E wing mechanical room):</p> <ul style="list-style-type: none"> • Access in Room E09; pull down stairs access. • ASU E-1, Trane Climate Changer Size 35, 10 zones, serves all of E. • EF E-1, tags not correct. • EF E-2, general exhaust. <p>Access to CDE roof is via small door. Connects to B and F roofs via portable ladders and canopy.</p>
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C20.1	Mechanical Equipment		<p>Building F (main building):</p> <ul style="list-style-type: none"> • Exhaust fans over sinks in F06. • Exhaust rooms over work benches. • Gas tanks secured to wall. • Kiln room off of Room F02 has (3) large and (1) small electric kilns. There is exhaust for kilns (manual switch). • Outside: (1) functional gas kiln and (1) in progress. • Shop F04 has a very strong lacquer smell. • ASU F-4, Trane Torrivent Size 21 serves the shop F04. • North labs have general exhaust and hood exhaust. The smoke damper closes when the exhaust fans are turned on. The teacher/students have their own fan and the hood is on its own fan. System is VAV instead of multi-zone. <p>Building F (mechanical rooms):</p> <ul style="list-style-type: none"> • One accessed by room F19; the other room is centrally located. • VAV system, McQuay CAH025FDAC. Serves the north lab spaces. • ASU F-1, Trane Climate Changer Size 31 5 zones. • ASU F-2, Trane Climate Changer Size 31 5 zones • EF F-3 serves labs, Page U22AF • Water heater <p>Building F (roof):</p> <ul style="list-style-type: none"> • Access is through CDE Building. • Teacher/student exhaust fans serving north labs are GB type (~8 fans) • Hood exhaust fans serving north labs are CUE type 121BX (~8 fans) • Kiln exhaust on east side. • CU for computer lab. Model: Mr. Slim PU18EK. • (4) CUE type fans for art exhaust. • Dark room exhaust is original to the building. • MAU for the art room. Model: Modine WeatherHawk. • Shop saw dust removal system.
C20.2	Air Filtration	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • Air filtration is period to the building.

C20.3	Equipment Accessibility	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Access to mechanical rooms is either through fixed ladders, pull down stairs, or portable ladders. Roof access to B-F buildings is through mechanical room in E wing then by portable ladders.
C20.4	Air Distribution and Ventilation	<ul style="list-style-type: none"> Welding areas lack sufficient ventilation. 	
C20.5	Controls	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> System: Andover DDC
C20.6	Chillers	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Chillers are located outside of Building B and provide all chilled water for the campus. Carrier: (2005) no model number, SN: 37404F58149. CHWP (1) 20 hp.
C20.7	Boiler	<ul style="list-style-type: none"> Boilers in Building A are in need of replacement. 	<p>Building A:</p> <ul style="list-style-type: none"> (1) Weil McLain 3073 MBH boiler with unknown size pump. (1) Weil McLain 5124 MBH boiler with 5 hp size pump. <p>Building B:</p> <ul style="list-style-type: none"> (6) Modcon 850 HL, 1 pump each, 2 hp. 4 building pumps, 2 hp each. The boilers will not talk to the DDC system and cannot be corrected.

RECOMMENDATIONS

- C20.1 Replace all forced air equipment in the building, including ductwork, exhaust fans, and duct collection systems.
 C20.4 Provided increased dedicated exhaust for the welding areas.
 C20.7 Replace all of the boilers and associated piping and pumps in the Building A.

C30 – FIRE PROTECTION

Item		Findings	Comments
C30.1	Fire Suppression System	<ul style="list-style-type: none"> There is an incomplete suppression system for the kitchen hoods. 	<ul style="list-style-type: none"> This facility is sprinklered.
C30.2	Water Service and Backflow Prevention	<ul style="list-style-type: none"> No issues observed 	
C30.3	System Pressure	<ul style="list-style-type: none"> No issues observed 	
C30.4	Standpipes	<ul style="list-style-type: none"> No issues observed 	
C30.5	Fire Pump	<ul style="list-style-type: none"> No issues observed 	
C30.6	Fire Sprinkler Pipe Condition	<ul style="list-style-type: none"> No issues observed 	

C30.7	Fire Department Connection	<ul style="list-style-type: none"> • No issues observed 	<p>Building A:</p> <ul style="list-style-type: none"> • Sprinkler and water <p>Building B:</p> <ul style="list-style-type: none"> • Located at back of building; riser in boiler room. <p>Building C/D/E:</p> <ul style="list-style-type: none"> • C wing FDC located by C wing entrance; C wing fire riser in Room C05. • D wing FDC located by D wing entrance; D wing fire riser in corridor by Room D01. • E wing FDC located by main campus entry; E wing fire riser in Room E08. <p>Building F:</p> <ul style="list-style-type: none"> • Located by back of building.
C30.8	Fire Sprinkler Zoning	<ul style="list-style-type: none"> • No issues observed 	
C30.9	Flow Monitoring and Alarm	<ul style="list-style-type: none"> • No issues observed 	
C30.10	Hoses and Extinguishers	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • Fire extinguishers, no hoses.
RECOMMENDATIONS			
C30.1	Provide fire suppression in the kitchen.		

D - ELECTRICAL			
D10 - ELECTRICAL EQUIPMENT			
Item		Findings	Comments
D10.1	Transformers	<ul style="list-style-type: none"> No issues observed 	<p>Building A:</p> <ul style="list-style-type: none"> Supplied via 500kVA pad-mounted utility transformer. <p>Building B:</p> <ul style="list-style-type: none"> Supplied via two 750 kVA pad-mounted utility transformers. <p>Building C/D/E:</p> <ul style="list-style-type: none"> Supplied via two 300kVA pad-mounted utility transformers. <p>Building F:</p> <ul style="list-style-type: none"> Supplied via 500kVA pad-mounted utility transformer. Campus supplied via underground utility owned medium voltage (MV) loop; metering accomplished at MV interconnect at pole. Distribution transformers original to buildings; standard efficiency dry type.

D10.2	Switchgear and Panelboards	<ul style="list-style-type: none"> • All switchboards and panelboards observed lack any spare capacity for future growth – the problem is especially severe in the case of 120V circuits. • All panelboards and switchboards are approaching their rated life. • Most panelboards observed were not locked, or had no visible means of locking • Each panelboard sampled lacks equipment grounding busses and conductors in branch circuits. • Most electrical rooms observed had equipment stored within panel and switchboard clearance zones. See Figure D10.2a. • A possibly significant arc flash hazard exists throughout the facility; equipment rating labels are missing or illegible in most cases. • Panel schedules appear to be missing, incorrect, conflicting or illegible in the majority of panels. See Figure D10.2b. • Unit C and E mechanical/electrical penthouse rooms are very difficult and dangerous to access. • The cover for the RF-E1 starter is missing; live 480V conductors are exposed. See Figure D10.2c. 	<p>Building A:</p> <ul style="list-style-type: none"> • 600A, 277Y/480V electrical service; Square D switchboard with 600A main circuit breaker (MCB) and 10 fusible disconnect switch outputs. The equipment is period to the building. <p>Building B:</p> <ul style="list-style-type: none"> • 1000A, 277Y/480V electrical service for main building; Square D switchboard with 1000A MCB and 10 fusible disconnect switches. The equipment is period to the building. • 1200A, 277Y/480V electrical service for support building (chiller and HVAC equipment), main lug only. The equipment is period to the building. <p>Building C/D/E:</p> <ul style="list-style-type: none"> • 1600A, 277Y/480V electrical service supplied to unit D and subfed from there; Square D switchboard with 1600A MCB and 8 fusible disconnect switches. The equipment is period to the building. • Units C and E are subfed from Unit D service, each with a 400A, 277Y/480V service and 6 fusible disconnect switches each. The equipment is period to the building. <p>Building F:</p> <ul style="list-style-type: none"> • 1200A, 277Y/480V electrical service; Square D switchboard with 1200A MCB and 12 fusible disconnect switches. The equipment is period to the building.
D10.3	Lighting	<ul style="list-style-type: none"> • Classrooms, hallways, offices and restrooms appear overlit. • Mechanical and electrical rooms are not provided with enough light for maintenance purposes; in some rooms all of the lamps in the space had failed. See figure D10.3a. • There were numerous failures evident in the cafeteria lighting; several lenses have fallen on building occupants; relamping is difficult without breaking lenses and ceiling tiles. See Figure D10.3b. 	<ul style="list-style-type: none"> • Classrooms, hallways, offices: served by 2' x 4', 3 lamp lensed T8 recessed troffers. Few classrooms lit by 2' x 4', 3 lamp T8 parabolic recessed troffers. (primarily in Unit F). Almost all lighting operates at 277V. • Mechanical and electrical rooms are served by a combination of T12 and T8 fluorescent and incandescent luminaires. Luminaires operates at 120 and 277V. • T8 high-bay luminaires replaced High Intensity Discharge (HID) lighting in the gym. • T8 strip fixtures are installed in existing coffered ceiling in cafeteria.
D10.4	Lighting Controls	<ul style="list-style-type: none"> • No automated lighting controls are installed. 	<ul style="list-style-type: none"> • Classroom & office lighting is switched in groups.

			<ul style="list-style-type: none"> • Hallway, circulation, gym and cafeteria lighting is controlled via circuit breaker. • Exterior lighting is controlled via time clock. • Strand lighting system with ETC control interface is installed for stage lighting.
D10.5	Back-up and Emergency Power	<ul style="list-style-type: none"> • Generator supplies life safety loads only • Generator combustion air dampers are blocked by stored landscape supplies. See Figure D10.5. 	<ul style="list-style-type: none"> • 60kW, 277Y/480V Kohler diesel generator with day tank and automatic transfer switch located in Building B support building mechanical room.
D10.6	Egress and Emergency Lighting	<ul style="list-style-type: none"> • Building A egress lighting is provided via remote mounted battery packs which appear well past their useful life; there is no emergency power supplied to the building. See Figure D10.6. 	<ul style="list-style-type: none"> • Egress lighting powered by emergency generator in Buildings B, C/D/E and F.
D10.7	Exit Signage	<ul style="list-style-type: none"> • Building A exit signs powered by integral battery packs; majority period to building and do not meet intensity requirements. • Several failures observed in the remaining facility exit signs. 	<ul style="list-style-type: none"> • Exit signs powered by emergency generator in Buildings B, C/D/E and F.
D10.8	Sensors	<ul style="list-style-type: none"> • Lighting controls/sensors do not meet current Oregon State Energy Code. 	

RECOMMENDATIONS

D10.2	<p>Install additional 120Y/208V panelboards in each unit to provide more spare capacity. Provide additional distribution infrastructure (i.e. transformers and switchboards) as required to accomplish this. Replace panelboards and switchboards as repair and replacement parts become unavailable. Take steps to ensure panelboards remain locked to all building occupants except building maintenance personnel. Provide equipment grounding conductors in branch circuits where possible and install equipment grounding busses in existing panelboards. Remove stored equipment and items from electrical equipment clearance zones and improve enforcement of OSHA/NEC clearance requirements. Complete an arc flash hazard analysis and protection device coordination study of the entire system. Verify existing equipment ratings and configuration settings meet or exceed the study results. Take corrective actions where required. Trace out facility electrical system to generate new, complete panel schedules. Label all device, receptacle and switch faceplates with source panel and circuit number. Install full size, up to date, laminated copies of the building single line diagrams in all main electrical rooms, adjacent to main switchboards. Replace missing motor starter cover.</p>
D10.3	<p>Remove lamps, relocate or install new luminaires in hallways, classrooms, offices and restrooms as needed to produce IESNA recommended light levels in those spaces and conserve energy. Replace all incandescent and T12 fluorescent lighting in mechanical and electrical spaces with T8 utility fluorescent luminaires. Extend lighting where required to produce IESNA recommended light levels throughout each space. Rework the cafeteria accessible ceiling grid to accept new high efficiency (T5HO, lensed, recessed or indirect pendant luminaires).</p>
D10.5	<p>Install additional generator capacity to power standby loads such as IT equipment and critical mechanical systems. Remove items from area surrounding generator combustion air intake to ensure availability of power during a power failure.</p>
D10.7	<p>Install additional generator capacity to supply Building A exit sign needs. Replace all existing incandescent, CFL or retrofitted exit signs with LED type signs.</p>
D10.8	<p>Install occupancy sensor plug strips to switch off workstations and other equipment in offices, classrooms and other areas. Install a campus wide, wireless, addressable lighting control system (Lutron Quantum system or equivalent).</p>

D20 – SAFETY / SECURITY			
Item		Findings	Comments
D20.1	Fire Alarm and Panels	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> System is approximately 10-15 years in age (Firelight).
D20.2	Smoke Detection	<ul style="list-style-type: none"> No issues observed 	
D20.3	Pull Stations	<ul style="list-style-type: none"> No issues observed 	
D20.4	Annunciation	<ul style="list-style-type: none"> The system is at the end of its useful life. 	
D20.5	Addressable Systems and Zones	<ul style="list-style-type: none"> None installed 	
D20.6	Monitoring	<ul style="list-style-type: none"> No issues observed 	
D20.7	Access Control	<ul style="list-style-type: none"> There is an unusually large quantity of failures in the access control system component power supplies. Door operators and strikes are not on emergency power. 	
D20.8	Intrusion	<ul style="list-style-type: none"> No issues observed 	
D20.9	Video Surveillance	<ul style="list-style-type: none"> There is inadequate coverage. 	<ul style="list-style-type: none"> The district expressed concerns about lack of coverage.
RECOMMENDATIONS			
D20.7	Replace malfunctioning access control components with equivalents with improved capacity. Connect access control system to emergency power source and investigate whether other vital systems are connected to the emergency generator; correct as required.		
D20.9	Extend security camera system as required and install additional support infrastructure as needed.		
D30 – TECHNOLOGY COMMUNICATIONS			
Item		Findings	Comments
D30.1	Paging and Intercom – Head End Condition	<ul style="list-style-type: none"> There are numerous problems and complaints with the existing system. Replacement parts are hard to find and costly, and there is inadequate technical support for this system. 	<ul style="list-style-type: none"> System: Rauland
D30.2	Master Clock	<ul style="list-style-type: none"> The master clock system is past its useful life. 	
D30.3	Infrastructure	<ul style="list-style-type: none"> Cable labeling is poor. There is a large quantity of cabling abandoned in ceilings and walls. 	
D30.4	Speakers	<ul style="list-style-type: none"> No issues observed 	
D30.5	Coverage	<ul style="list-style-type: none"> No issues observed 	
D30.6	Clock System	<ul style="list-style-type: none"> There are numerous problems and complaints with the existing system. Replacement parts are hard to find and costly, and there is inadequate technical support for this system. 	
D30.7	Clock – Head End	<ul style="list-style-type: none"> The head end is past its useful life. 	<ul style="list-style-type: none"> System: Latham
RECOMMENDATIONS			
D30.1	Replace intercom and paging system.		
D30.7	Replace clock system.		

E- GROUNDS			
E10 – SITE CIRCULATION AND PARKING			
Item		Findings	Comments
E10.1	Parking Lots	<ul style="list-style-type: none"> The A/C paving surface is in poor condition. There are cracks, spalling and pot holes appearing at numerous locations. Striping is barely visible. See Figures E10.1.a and b. 	
E10.2	Site Signage/ Accessories	<ul style="list-style-type: none"> The main entrance to the site is not apparent when arriving to the site by car. 	
E10.3	Vehicular Circulation	<ul style="list-style-type: none"> The current number of parking spaces meets the needs of the students and staff during normal school use. However, during football games parking area at rear of campus is too small, resulting in visitors having to park across campus and walk through the campus. 	
E10.4	Curbs and Sidewalks	<ul style="list-style-type: none"> Sidewalks throughout the site are in very poor condition or incomplete. Many of the sidewalks are cracking and uplifting due to tree root damage. See Figure E10.4.a. There are no sidewalk connections to the greenhouse, varsity baseball fields and JV baseball field. One of the pedestrian bridges over the river connecting the playfield is in poor condition and has been condemned. See Figure E10.4.b. Sidewalks are uplifting or sinking in some locations under the covered walk and along the main paths of egress that may impact ADA accessibility and egress into the buildings on campus. 	<ul style="list-style-type: none"> Refer to Section E20.10.
E10.5	Accessibility	<ul style="list-style-type: none"> The ramp of main entrance to gymnasium does not meet latest accessibility code. See Section B10.3. There is no ADA access to baseball fields due to incomplete sidewalks. Accessible parking at front of the building appears to meet accessibility code, but striping is faded. See Section E10.1. 	
E10.6	Bikes and Bike Parking	<ul style="list-style-type: none"> This facility lacks adequate bicycle parking. 	<ul style="list-style-type: none"> One bicycle rack was located under a covered walkway.
RECOMMENDATIONS			
E10.1	Resurface and restripe parking lot, including ADA parking stalls, aisles and crosswalks. Demolish and replace bus drive with a deeper profile asphalt paving that is more appropriate for bus use.		
E10.2	Install a new monument sign at the north and south of the campus on Highland Drive. This would be effective in directing visitors to the main entrance to the site.		
E10.4	Demolish and repour sidewalks in front of the gymnasium. Extended sidewalks from the gymnasium and parking area to the varsity baseball field, JV baseball field and greenhouse.		
E10.5	See Section B10.3. Provide an ADA pathway to the varsity baseball field.		
E10.6	Add covered bicycle parking structure near the front entry of the school.		

E20 - SITE COMPONENTS			
Item		Findings	Comments
E20.1	Fields	<ul style="list-style-type: none"> The running track has many cracks forming in the surface. See Figure E20.1. The football field is poorly graded and has low points in the center of the field due to the irrigation system. The visitor stands at football field are undersized. 	
E20.2	Landscaping	<ul style="list-style-type: none"> The planter in parking area islands gets high use foot traffic and is difficult to maintain. 	
E20.3	Irrigation	<ul style="list-style-type: none"> Irrigation valves for the football field are located in the center of the field. 	<ul style="list-style-type: none"> The location of these valves makes it difficult to maintain and causes a potential dangerous condition. Irrigation system for this school is connected to city water, which can be costly.
E20.4	Site Buildings	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Site buildings are generally in good condition.
E20.5	Site Security	<ul style="list-style-type: none"> No issues observed 	
E20.6	Fencing	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Site is fenced.
E20.7	Playground Equipment	<ul style="list-style-type: none"> N/A 	
E20.8	Play Surfaces	<ul style="list-style-type: none"> Cracks are forming in the tennis courts surfacing; nets and posts in poor condition. See Figure E20.8. 	
E20.9	Site Lighting	<ul style="list-style-type: none"> The parking lot fixtures, poles and foundations are past their useful/rated life. See Figures E20.9a-c. Existing HID lamps are unshielded. Luminaires at entry driveway no longer function, underground wiring has been cut. A large quantity of building mounted and soffit/recessed are dated, inefficient lighting systems. See Figure E20.9.d. There is a broken wall fixture behind Building B (near chiller). See Figure E20.9e. 	<ul style="list-style-type: none"> Parking lot and walkway luminaires are 1 or 2 lamp 150W High pressure sodium (HPS). Soffit lighting is 50W and 70W HPS. Wallpacks are metal halide (MH), mercury vapor (MV) and HPS types and range between 70W and 400W. Football field is served by Musco 1500W MH flood systems (circa 2005). Softball and baseball field lighting is desired by owner at this facility.

E20.10	Grading and Drainage	<ul style="list-style-type: none"> • There is a low point in grading behind the football field bleacher 'berm' that causes ponding during heavy rains that affect maintenance in this area. • The creek running through the center of the site occasionally overflows, causing the quad to fill with water and sometimes flooding into Building 'A'. • During heavy rains, sanitary system for toilet rooms at football field house occasionally causes back-ups in Building 'F'. • Below-grade storm drains throughout the site are clogged by tree root damage. 	<ul style="list-style-type: none"> • Further investigation of grading and drainage issues is recommended (not in the scope of work for this report).
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RECOMMENDATIONS

- E20.1 Resurface and restripe running track. Replace grass football field with turf field. Replace visitor bleachers with a larger bleacher system that accommodates accessible seating.
- E20.2 Re-landscape parking area islands with hardier drought-resistant plants around existing trees and a semi-permeable hard surface between planting areas for pedestrian foot traffic.
- E20.3 Replace irrigation system at football field with a new system that has manifolds boxes out of the playing area. Provide a well on the site dedicated to the irrigation system or going to a turf field to save on water costs.
- E20.8 Replace tennis court surfacing and provide new posts and nets.
- E20.9 Replace and extend parking and site lighting as recommended by IESNA. High efficiency LED or ceramic metal halide (CMH) luminaires with full cutoff optics are strongly recommended. Replace existing HID soffit and wall lighting with LED or CFL luminaires with full cutoff optics where possible. Replace broken luminaire behind Building B.
- E20.10 Provide an area drain and storm drain connection to drainage swale at north of the site. Improve grading and drainage for this site (this scope of work is not included in this report).

IMAGES

Figure A10.2 – Covered walkway



Figure A10.3.a – Cracks in panels



Figure A10.3.b – Cracks in panels



Figure A10.3.c – Cracks at Auditorium wall



Figure A10.3.d – Cracks at exterior columns



Figure A10.3.e – Cracks at exterior columns



Figure A10.3.f – Fascia panel joint cracks



Figure A10.3.g – Fascia panel joint cracks



Figure A10.3.h – Equipment not anchored



Figure A20.1 – Exterior Walls



Figure A20.2.a – Exterior doors



Figure A20.2.b – Exterior doors



Figure A20.3.a – Windows in cafeteria



Figure A20.3.b – Exterior windows



Figure B10.3 – Exterior ramp



Figure B20.1.a – Flooring issues



Figure B20.1.b – Flooring issues



Figure B20.1.c – Flooring issues



Figure B20.1.d – Flooring issues



Figure B20.7 – Auditorium seating

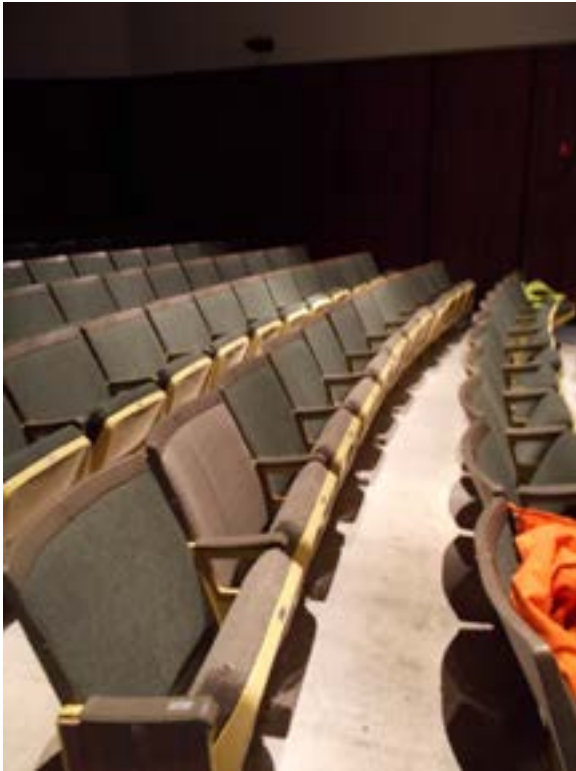


Figure B30.3 – Lack of acoustic treatment



Figure B30.4.a – Classroom casework



Figure B30.4.b – Foods lab



Figure C10.3 – Rusted gas piping



Figure C10.4 – Storm drains with sawdust



Figure C20.1 – Dated equipment



Figure D10.2.a – Blocked panel



Figure D10.2.b – Typical panelboard



Figure D10.2.c - Starter is missing cover



Figure D10.3.a – Typical mechanical room lighting



Figure D10.3.b – Cafeteria lighting



Figure D10.5 – Air louver blocked



Figure D10.6 – Failed lighting inverter



Figure E10.1.a – Parking lot



Figure E10.1.b- Parking lot



Figure E10.4.a – Sidewalks



Figure E10.4.b – Condemned bridge



Figure E20.1 – Running track



Figure E20.8 – Tennis courts



Figure E20.9.a – Parking area lighting



Figure E20.9.b - Unshielded lamps



Figure E20.9.c – Walkway lighting



Figure E20.9.d – Site lighting



Crescent Valley High School		Priority Level				Priority Level I	Priority Level II	Priority Level III	Priority Level IV
		(Refer to Legend)	I	II	III				
ITEMS									
A - STRUCTURE/SHELL									
A10 - STRUCTURE/SUBSTRUCTURE									
A10.2	1	Fill and patch cracked concrete in covered walkway floor slabs to avoid trip hazards	X				\$ 3,162		
	2	In areas where a slab panel has settled relative to adjacent panel, grind the edge of the adjacent panel flush with lower slab	X				\$ 2,371		
							\$ 1,581		
A10.3	1	Investigate the extent of the cracks and assess the probable cause at Building A; mitigate issues	X				\$ 1,581		
	2	Monitor cracks in masonry wall at Building B; mitigate issues	X				\$ 11,859		
	3	At Buildings B, CDE and F, patch and fill cracking and spalling at top of exterior columns supporting covered walkways to prevent further wear and possible reinforcement corrosion or exposure	X				\$ 19,765		
	4	Patch and fill cracking and spalling of precast concrete fascia panels to prevent further wear and possible reinforcement corrosion or exposure at all buildings	X				\$ 11,859		
	5	Replace existing sealant between joints and between panels and concrete structure to prevent further wear and possible water infiltration	X				\$ 2,371		
	6	At Building CDE, anchor mechanical units in mechanical mezzanines	X						
	7	Complete upgrades per previous structural reports	X				\$ 5,567,204		
A20 - EXTERIOR COMPONENTS									
A20.1	1	Patch and repair cracked precast concrete panels; clean gaps where joints have failed and reseal with backer rod and sealant	X				\$ 2,292		
A20.2	1	Replace all existing hollow metal door and frames with new storefront system at main paths of egress and classrooms, and hollow metal doors and code complaint hardware at all main path of egress to match new main office upgrades and new hollow metal doors and frames at service doors			X			\$ 1,356,815	
A20.3	1	Replace all windows with aluminum storefront systems and insulated glazing	X				\$ 376,902		
A20.4	1	Replace (2) disappearing stairs in Building CDE with fixed ships ladders		X			\$ 48,386		
	2	Relocate mechanical room access from classroom to a storage room		X			\$ 27,039		
	3	Provide ships ladders and roof hatches at Buildings B and F		X			\$ 28,462		
A20.7	1	Clean, patch and repair stucco soffits at covered walkway where required	X				\$ 2,371		
	2	Clean joints between the stucco soffits and precast panels and reseal with backer rod and sealant	X				\$ 19,765		
TOTAL - STRUCTURE/SHELL						\$ -	\$ 6,023,083	\$ 1,460,702	\$ -
B - INTERIORS									
B10 - INTERIOR CIRCULATION									
B10.1	1	Repair ADA door openers in (3) locations and provide door openers for any doors along main paths of egress between buildings		X			\$ 45,065		
	2	Replace door opener at auditorium entrance	X				\$ 6,325		
B10.3	1	Construct a building addition to the front of the gymnasium that would incorporate a new ADA compliant entrance ramp, a new elevator, expand the weight room below and provide an entrance lobby for events			X			\$ 1,136,676	
B10.5	1	Provide compliant signage in Buildings A and B		X			\$ 104,362		
	2	Add directional signage at all main entry doors of all (5) buildings		X			\$ 19,534		
B20 - INTERIOR FINISHES									
B20.1	1	Replace VCT flooring in all classrooms, halls and the cafeteria of Buildings A & B	X				\$ 174,728		
	2	Replace all carpet flooring in Building B and the media center of Building CDE	X				\$ 182,634		
	3	Provide slip-resistant sheet vinyl flooring with coved base in the kitchen and serving area in Building B	X			\$ 40,203			
	4	Provide fixed walk off mats at all egress doors	X				\$ 25,616		
	5	Replace carpeting in auditorium	X				\$ 18,184		
B20.2	1	Replace ceilings in cafeteria and media center spaces with acoustical ceiling systems		X				\$ 328,860	

Crescent Valley High School		Priority Level				Priority Level I	Priority Level II	Priority Level III	Priority Level IV
		(Refer to Legend)	I	II	III				
ITEMS									
B20.4	1 Provide a new dust collection system for the wood shop that meets current code requirements	X				\$ 18,975			
	2 Provide a fume extraction system for welding booths in shop	X				\$ 11,859			
B20.5	1 Remove modular wall system from cafeteria			X		\$ 3,953			
	2 Replace modular wall systems at classrooms for better acoustics in Building B			X		\$ 34,882			
	3 Replace modular wall system around media center			X		\$ 90,985			
B20.6	1 Replace wood paneling in the auditorium with new wood panel system	X				\$ 120,570			
B20.7	1 Replace all auditorium seating	X				\$ 253,000			
	2 Provide allowance for future lighting replacements			X			\$79,062		
B30 - INTERIOR COMPONENTS									
B30.2	1 Replace all plastic laminate faced wood interior doors with new hollow metal doors at main paths of egress and new wood doors at all other locations with new code compliant hardware			X		\$ 298,223			
B30.3	1 Replace existing wall panels at gymnasium with 1,500 SF abuse-resistant acoustical panels			X		\$ 37,950			
	2 Provide acoustical 1000 SF of acoustic wall panels to (3) walls of the cheer room and 500 SF of acoustical ceiling clouds			X		\$ 90,921			
	3 Add 1000 SF of acoustic wall panels to the cafeteria	X				\$ 23,718			
B30.4	1 Replace casework, backsplash and countertops in all classrooms in Buildings 'A' and 'B'	X				\$ 101,832			
	2 Replace all casework in foods lab with new countertops, cabinets and backsplash to foods room and add (1) Type 'A' hoods to each of the cooking stations; provide ADA access at new sinks.	X				\$ 118,751			
B40 - TOILET FACILITIES									
B40.3	1 Replace 2x4 acoustical ceiling tiles with painted gypsum board ceilings in 14 toilet rooms			X		\$ 39,333			
TOTAL - INTERIORS						\$ 40,203	\$ 1,056,192	\$ 2,309,806	\$ -
C - SYSTEMS									
C10 - PLUMBING									
C10.2	1 Paint gas piping on the roof of Building F	X				\$ 6,250			
	2 Re-pipe domestic hot water piping		X			\$ 1,513,750			
C10.3	1 Provide a grease interceptor for the kitchen			X		\$ 56,250			
C10.4	1 Flush storm water lines		X			\$ 20,000			
C10.5	1 Provide a separate domestic hot water heater in the Building A with all associated piping and pumps		X			\$ 110,000			
C20 - HVAC									
C20.1	1 Replace all forced air equipment in the building, including ductwork, exhaust fans, and duct collection systems		X			\$ 5,577,500			
C20.4	1 Provided increased dedicated exhaust for the welding areas	X				\$ 38,750			
C20.7	1 Replace all of the boilers and associated piping and pumps in the Building A		X			\$ 908,750			
C30 - FIRE PROTECTION									
C30.1	1 Provide fire suppression in the kitchen	X				\$ 18,750			
TOTAL - SYSTEMS						\$ 63,750	\$ 8,130,000	\$ 56,250	\$ -
D - ELECTRICAL									
D10 - ELECTRICAL EQUIPMENT									
D10.2	1 Install additional 120Y/208V capacity	X				\$ 125,000			
	2 Replace panelboards and switchboards as spare parts become unavailable			X		\$ 500,000			
	3 Keep panels locked; repair/replace lock as required	X				\$ 80,000			
	4 Provide equipment grounding means			X		\$ 250,000			
	5 Maintain clearances around electrical equipment	X				\$ 60,000			
	6 Complete arc flash analysis	X				\$ 25,000			
	7 Trace electrical system, install labels			X		\$ 125,000			
	8 Install single line diagrams				X			\$ 5,000	
	9 Provide permanent/ reliable access means to penthouses	X				\$ 80,000			

Crescent Valley High School		Priority Level				Priority Level I	Priority Level II	Priority Level III	Priority Level IV
		(Refer to Legend)	I	II	III				
ITEMS									
10	Replace missing starter cover	X				\$ 2,500			
D10.3	1 Reduce lighting levels in classrooms, offices and hallways			X			\$ 125,000		
	2 Install additional lighting in mechanical and electrical rooms		X			\$ 90,000			
	3 Replace cafeteria lighting		X			\$ 150,000			
D10.5	1 Install additional generator capacity for standby loads		X			\$ 250,000			
	2 Remove items from area around generator combustion air louvers	X				\$ 20,000			
D10.6	1 Install additional generator capacity for Building A egress lighting loads	X				\$ 100,000			
D10.7	1 Install additional generator capacity for Building A exit signs	X				\$ 45,000			
	2 Replace aging and/or dim exit signs	X				\$ 150,000			
D10.8	1 Install workstation occupancy sensors				X			\$ 200,000	
	2 Install campus wide automated lighting controls			X			\$ 100,000		
D20 - SAFETY/SECURITY									
D20.7	1 Replace and upsize malfunctioning access control system components	X				\$ 50,000			
	2 Connect access control system and other critical systems to emergency generator	X				\$ 65,000			
D20.9	1 Extend security camera system where required		X				\$ 75,000		
D40 - TECHNOLOGY COMMUNICATIONS									
D40.1	1 Replace intercom and paging system		X				\$ 75,000		
D40.6	1 Replace clock system		X				\$ 75,000		
TOTAL - ELECTRICAL						\$ 432,500	\$ 1,085,000	\$ 1,100,000	\$ 205,000
E - GROUNDS									
E10 - SITE CIRCULATION AND PARKING									
E10.1	1 Resurface and restripe parking lot, including ADA parking stalls, aisles and crosswalks		X			\$ 486,996			
	2 Demolish and replace bus drive with a deeper profile asphalt paving that is more appropriate for bus use			X			\$ 148,933		
E10.2	1 Install a new monument sign at the north and south of the campus on Highland Drive			X			\$ 7,906		
E10.4	1 Demolish and repour sidewalks in front of the gymnasium			X			\$ 20,872		
	2 Extended sidewalks from the gymnasium and parking area to the varsity baseball field, JV baseball field and greenhouse, improve existing pedestrian bridge			X			\$ 63,381		
E10.5	1 Provide an ADA pathway to the varsity baseball field			X			\$ 7,906		
E10.6	1 Add covered bicycle parking structure near front entry of school			X			\$ 26,090		
E20 - SITE COMPONENTS									
E20.1	1 Resurface and restripe running track		X			\$ 351,828			
	2 Replace grass football field with turf field			X			\$ 1,581,250		
	3 Replace visitor bleachers with a larger bleacher system that accommodates accessible seating			X			\$ 158,125		
E20.2	1 Re-landscape parking area islands with hardier drought-resistant plants around existing trees and a semi-permeable hard surface between planting areas for pedestrian foot traffic			X			\$ 7,906		
E20.3	1 Replace irrigation system at football field with a new system that has manifolds boxes out of the playing area			X			\$ 118,593		
	2 Provide a well on the site dedicated to the irrigation system		X			\$ 79,062			
E20.8	1 Replace tennis court surfacing and provide new nets and posts		X			\$ 592,968			
E20.9	1 Replace and extend parking and walkway lighting		X				\$ 210,000		
	2 Replace building luminaires			X				\$ 200,000	
	3 Replace broken light fixture behind Building B	X				\$ 50,000			

Crescent Valley High School		Priority Level				Priority Level I	Priority Level II	Priority Level III	Priority Level IV
		(Refer to Legend)							
ITEMS		I	II	III	IV				
E20.10	1 Provide area drain and below grade connection to drainage swale		X				\$ 17,789		
	2 Improve grading and drainage (this scope of work requires further investigation and is not included in this report)		X						
TOTAL - GROUNDS						\$ -	\$ 1,578,643	\$ 2,350,962	\$ 200,000

TOTALS BY CATEGORY			
	STRUCTURE/SHELL	\$	7,483,785
	INTERIORS	\$	3,406,201
	SYSTEMS	\$	8,250,000
	ELECTRICAL	\$	2,822,500
	GROUNDS	\$	4,129,605
	FACILITY TOTAL	\$	26,092,091

TOTALS BY PRIORITY			
	LEVEL 1	\$	536,453
	LEVEL 2	\$	17,872,918
	LEVEL 3	\$	7,277,720
	LEVEL 4	\$	405,000
	PRIORITY TOTAL	\$	26,092,091

LEGEND:

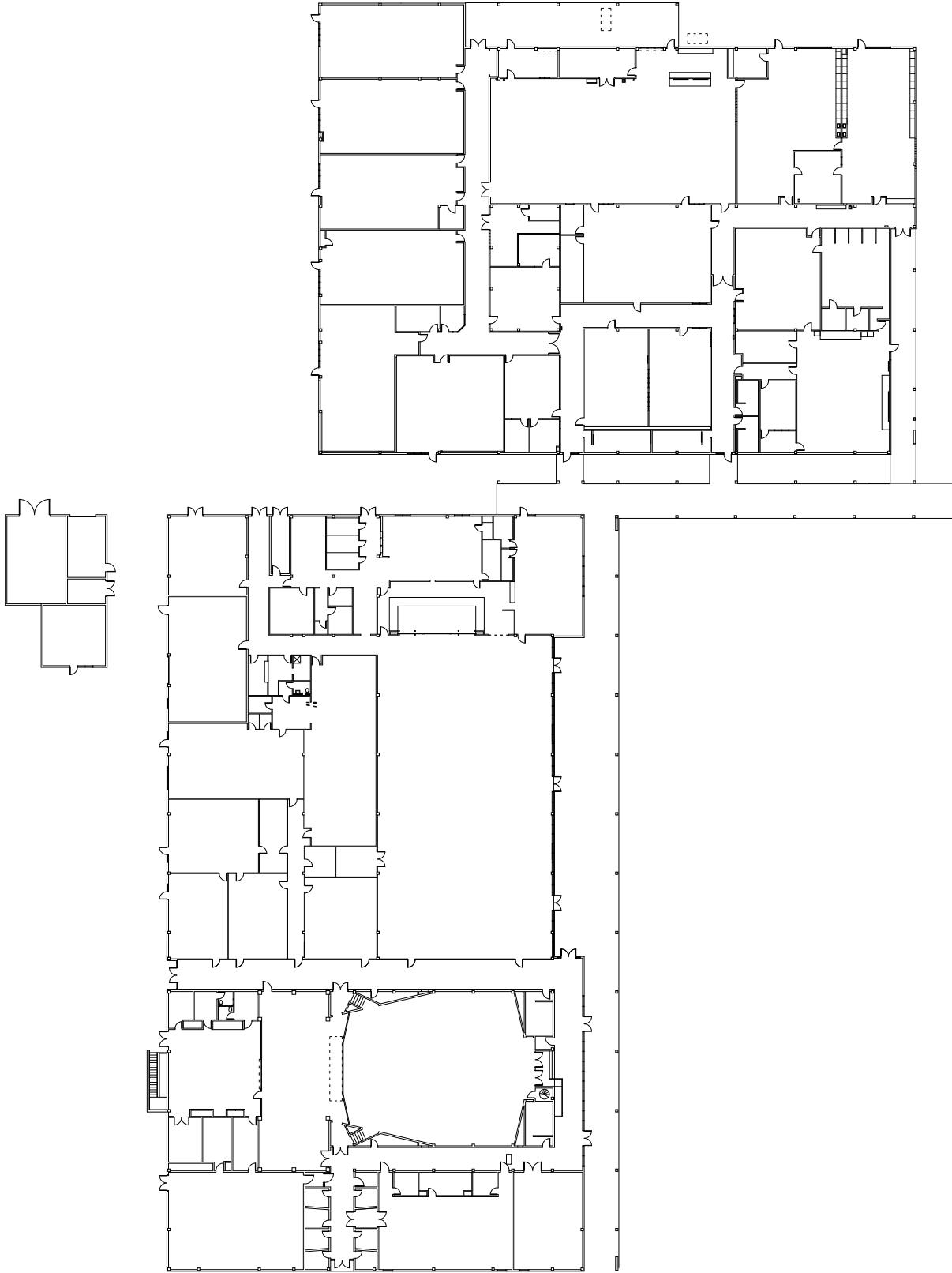
PRIORITY LEVELS

Level I: Highest Priority; Issues that affect the life safety concerns of the occupant, related to notification of occupants to emergency situations and the ability to safely evacuate the facility; subcomponents of Level I include safety concerns such as electrical loads, hazardous materials that might be affected with remodel or modifications, lack of fall protection. Level I items need to be addressed within a 5-year plan.

Level II: Moderate Priority; Issues that are related to the integrity and adequacy of systems within the building to sufficiently withstand a major event and still function; also related are the age of systems or building components that keep day to day operations running without constant repair. Issues may include mechanical, electrical and plumbing systems, fire suppression, lighting and security, as well as flooring, windows doors and other architectural components. Level II Items may be part of a 5-year plan.

Level III: Lower Priority; Issues that may over time affect the day to day maintenance of the building or long term use of the facility. Issues also include access and clearances at equipment and fixtures, access for individuals with disabilities and both indoor and exterior environment quality. Level III Items would be considered in a 5 to 10 year plan.

Level IV: Issues that are related to the aesthetics of both the building's interior and exterior as well as integrity and adequacy of building systems that don't pose any issues or nearing the end of their remaining lifecycles. These may include items such as cabinetry original to the building that have signs of wear or dated finishes but do not have any damage or deterioration. Level IV items would be considered long-term plans (10 years or more).



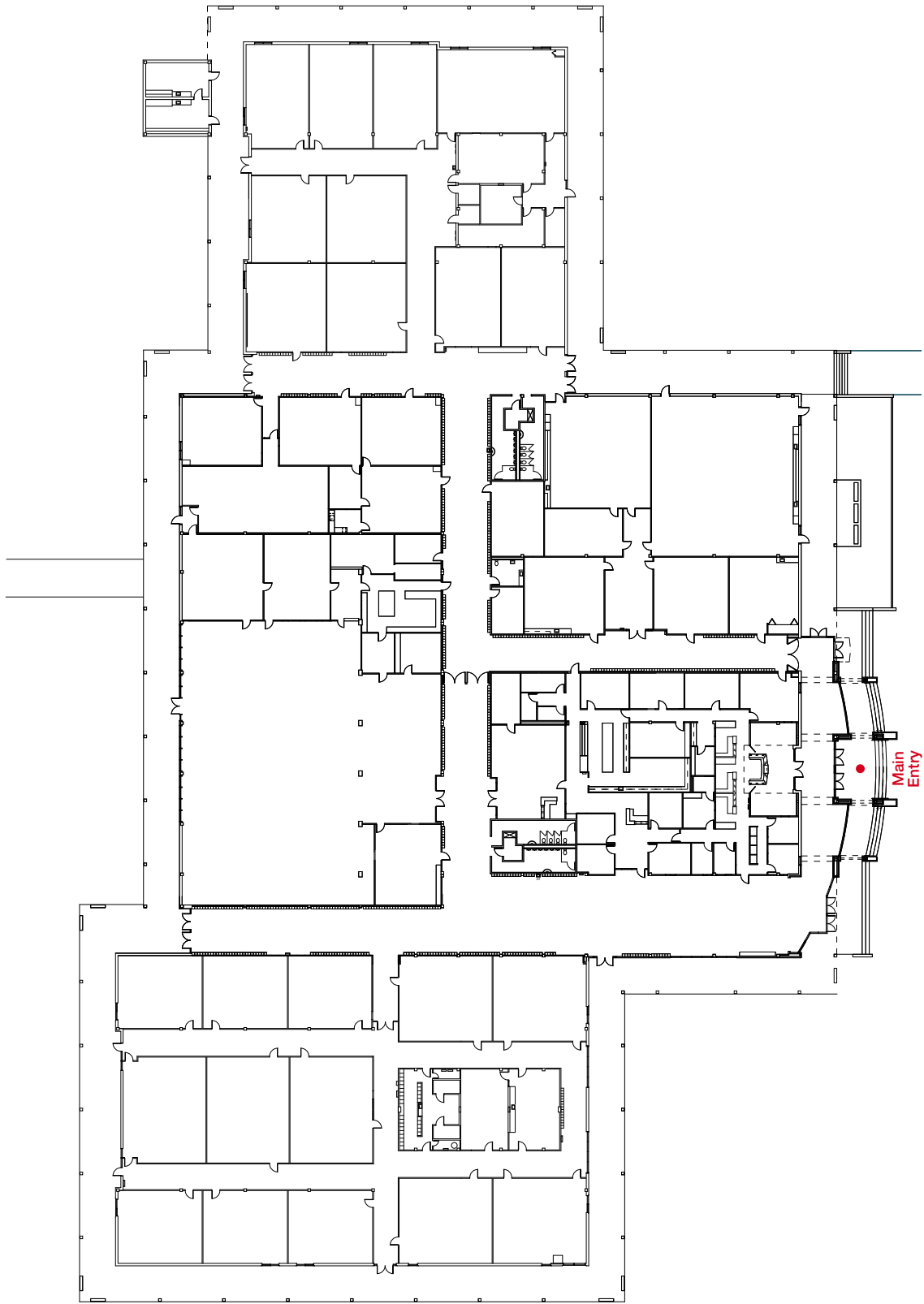
SCHOOL BUILDING - CAFE/ARTS/TECHNOLOGY
 SCALE: NOT TO SCALE

Crescent Valley High School | Corvallis School District

OVERALL FLOOR PLAN



Dull Olson Weekes - IBI Group
 Architects, Inc.



SCHOOL BUILDING - OFFICE/LIBRARY
 SCALE: NOT TO SCALE

OVERALL FLOOR PLAN



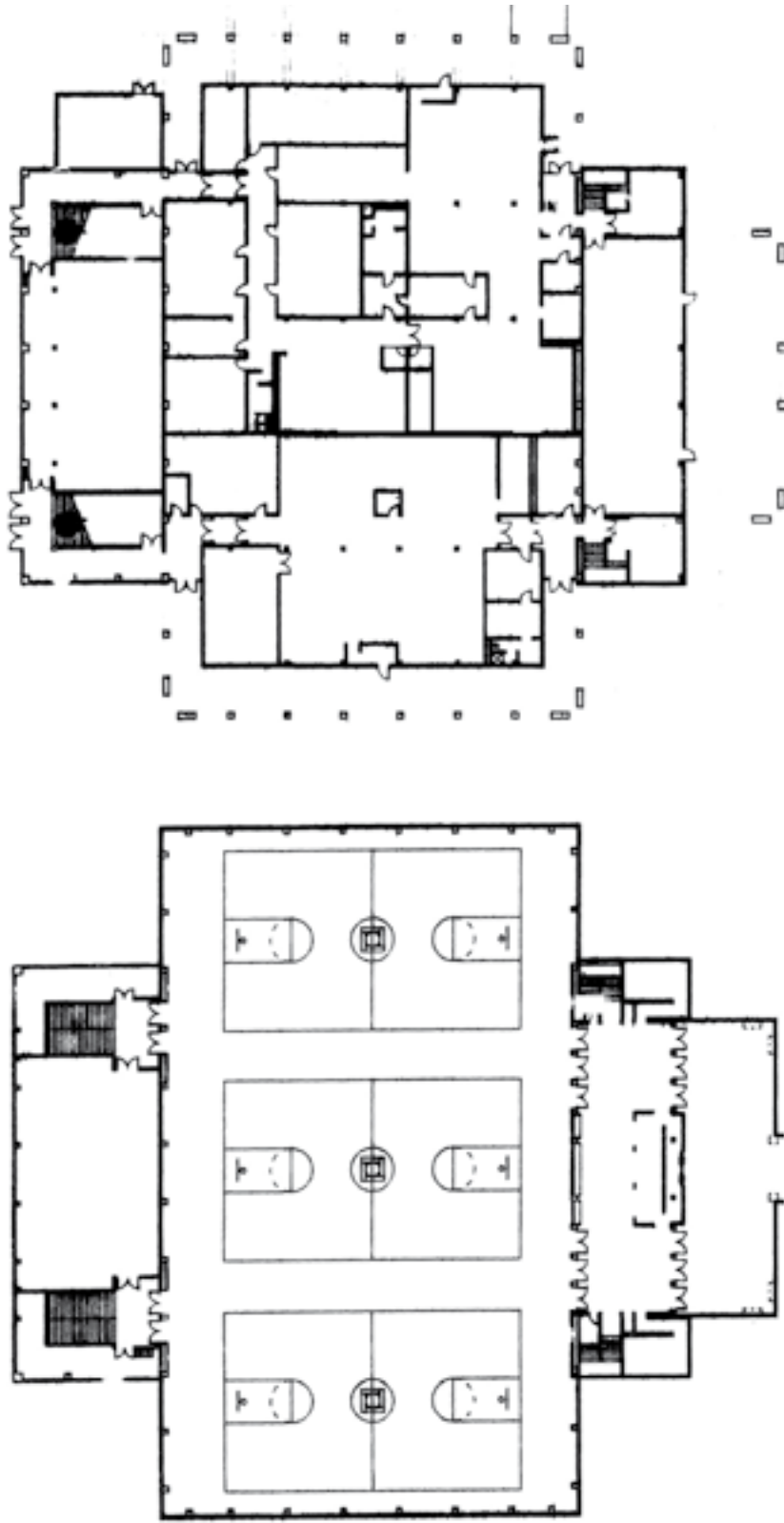
Dull Olson Weekes - IBI Group
 Architects, Inc.

Crescent Valley High School | Corvallis School District

OVERALL FLOOR PLAN



Dull Olson Weekes - IBI Group
Architects, Inc.



SCHOOL BUILDING - GYM/LOCKER ROOM UPPER
SCALE: NOT TO SCALE

SCHOOL BUILDING - GYM/LOCKER ROOM LOWER
SCALE: NOT TO SCALE



Harding (College Hill Campus)

510 NW 31st Street
Corvallis, Oregon 97330

Built: 1923;1935,1938,1950,1953 additions;
1988 modulars

Enrollment: 94 students (College Hill HS program)
15 students (WINGS program)

Floor Area: 37,441 SF



Field Review Team:

Thea Wayburn	DOWA –IBI Group Architects Inc.
Jonathan Estabrook	KPFF Consulting Engineers
Roger Arnold	Glumac
Alex Ridley	Glumac
Dana Troy	Glumac

Report Date: December 2013

Date of Site Visits: June 3-7, 2013

Weather: Sunny, 70's and 80's

Neighborhood: Residential

Site Contacts: Julie Wilborn
Kim Patten, CSD 509J

General Building Description:

Harding is a two-story wood framed structure with brick veneer walls. The first floor is located one-half level above grade and one-half below. Building additions are wood framed structure with wood siding. The building is not sprinklered.

Harding was originally constructed in 1923 as an elementary school with additions in 1935, 1938, 1950 and 1953. The original building and 1938 addition are the two story, unreinforced 12" thick brick bearing wall building at the South end of the site. The first floor and roof are timber framed. The 1950 addition can be split into the West wing and East wing and was originally separated from the 1938 addition. The West wing is constructed with glulam beams at 8ft on center forming a low pitch roof on wood stud walls on spread footings. The East wing is constructed with wood roof trusses, similar to the 1938 addition, on wood stud walls on spread footings. The 1953 addition consists of the North classroom wing, gymnasium and covered play area. The North classroom wing is constructed with wood roof trusses on wood stud walls on spread footings. The gymnasium is

constructed from two glulam arches in the interior with 2x6 wood stud end walls. 3x16 purlins at 2ft on center spanning between the arches and the end walls with 1-inch diagonal sheathing. Other walls are wood framed. The covered play area consists of 8x8 wood columns supporting wood trusses at 11.5ft on center spanning 54ft with wood rafters between them and a standing seam metal roof. The West wall is plywood sheathed from 2ft above grade to the roof and the South wall is an 8-inch masonry block wall. It is unclear if this wall is reinforced.

The original Harding Elementary School now houses the school district's alternative education program, known as College Hill High School. This serves students from both Crescent Valley and Corvallis High Schools. An independent study environment is provided where student earn credits toward a high school diploma. This building also houses the district's WINGS program, a post school transition program for students ages 18-21 with developmental disabilities. The program provides first hand independent living and work experiences within the community. The south side of the original building contains all of the District's central instructional media center storage.

These high school programs are now housed in this former elementary school; one of the biggest challenges observed in this facility were elementary school size amenities now being used by adults. In addition, Harding is the oldest building in the district's inventory and very few upgrades have been made to the facility.

This facility is in fair to poor condition. Based on the age of this facility, its current usage and the lack of upgrades, this facility is a prime candidate for replacement. Refer to the Facility Replacement Costs section of the report for a detailed breakdown of facility replacement costs; recommendations and costs listed in this detailed report will be to replace or improve existing building conditions.

A full building review of architectural, structural, mechanical, electrical and plumbing components was conducted.

A - STRUCTURE / SHELL			
A10 – STRUCTURE / SUBSTRUCTURE			
Item		Findings	Comments
A10.1	Foundations	<ul style="list-style-type: none"> No issues observed 	
A10.2	Subgrade Enclosures	<ul style="list-style-type: none"> Flooding is an issue at times of heavy rain in the basement particularly along the East wall of the 1938 addition. Bulging plaster was observed at the top of the boiler room wall. See Figure A10.2. 	<ul style="list-style-type: none"> Flooding is thought to be due to poor roof drainage and the slope of the ground/stairs along the South and East elevations of the 1938 addition. Bulging finishes could be due to a leak that occurred previously.
A10.3	Structural Systems	<ul style="list-style-type: none"> Minor cracking was observed in the exterior masonry bearing walls. Poor compaction was noted at the top of a concrete wall near the existing lift, leaving a large rock pocket. See Figure A10.3. There are recommendations available for seismic improvements to the building structure, outlined in the CH2MHILL Seismic Analysis and Evaluation report, dated February, 2000. There are recommendations available for seismic improvements to non-structural systems, outlined in the CH2MHILL Seismic Analysis and Evaluation report, dated February, 2000. 	<ul style="list-style-type: none"> No seismic improvements have been completed to date.
RECOMMENDATIONS			
A10.2	Install improved drainage to prevent future flooding. Investigate the cause of bulging finishes and remediate issues.		
A10.3	Seal cracks in exterior walls to prevent water filtration and further deterioration. Roughen, apply bonding agent and fill in rock pocket at top of wall near the existing lift with non-shrink grout and trowel finish. Prioritize and perform the recommended improvements to structural systems as outlined in the CH2MHILL report. The report provides specific recommendations. These include but are not limited to the new plywood diaphragms and shear walls, improved connections tying diaphragms to shear walls, wall out-of-plane bracing at the gym and anchoring shear walls adequately to the foundations. Perform recommended seismic improvements to non-structural components as outlined in the CH2MHILL report. These include, but are not limited to, anchoring and strapping of mechanical and electrical equipment, and bracing suspended equipment and ceiling.		
A20 - EXTERIOR COMPONENTS			
Item		Findings	Comments
A20.1	Exterior Walls	<ul style="list-style-type: none"> Concrete walls around the building have damaged and or visible cracking. See Figure A20.1. 	<ul style="list-style-type: none"> Exterior materials are a combination of exposed concrete, brick and wood siding.

A20.2	Doors and Hardware	<ul style="list-style-type: none"> • Exterior doors contain wire glass. • Door hardware has not been upgraded; doors were observed to have a door knob (no longer allowed as accessible hardware). See Figure A20.2.a. • Exterior doors near the gymnasium are in poor condition. See Figure A20.2.b. • Doors at (6) classrooms and (3) egress doors need actuators for accessibility. 	<ul style="list-style-type: none"> • Wire glass is no longer permitted in educational facilities. • Several classroom spaces are used for instruction of individuals with disabilities.
A20.3	Windows and Skylights	<ul style="list-style-type: none"> • Windows are in fair to poor condition. 	<ul style="list-style-type: none"> • Window systems are single pane glass in wood or metal frames.
A20.4	Roof	<ul style="list-style-type: none"> • A separate roofing assessment is located in the appendix of this report. 	<ul style="list-style-type: none"> • Roofing is a combination of single ply and shingle roofing and ranges in age from 18-25 years old.
A20.5	Canopies and Covered Walks	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • Most exterior doors are covered by building overhang or by small canopy.
A20.6	Gutters and Downspouts	<ul style="list-style-type: none"> • Gutters and downspouts are in poor condition. Gutters were damaged in several locations around the building. See Figure A20.6. 	<ul style="list-style-type: none"> • Gutters and downspouts are 3" shallow copper gutters.
A20.7	Trim and Overhangs	<ul style="list-style-type: none"> • No issues observed 	
A20.8	Ramps and Stairs	<ul style="list-style-type: none"> • No issues observed 	

RECOMMENDATIONS

- A20.1 Repair damaged concrete wall along 31st Street.
- A20.2 If remodel work were to occur at this facility, the replacement of wire glass with tempered glazing may be required. Wire glass may also be replaced at the District's discretion to prevent any issues if glazing is damaged or broken.
Replace hardware for (12) single exterior doors and (7) pairs of exterior doors. Replace (2) pairs of exterior doors and frames near gymnasium. Add actuators to (6) classroom doors and (3) pairs of egress doors.
- A20.3 Replace all windows at this facility with aluminum storefront system, tempered glazing and operable vents.
- A20.4 Repair and/or replace roofing systems per roofing assessment recommendations.
- A20.6 Replace all gutters and downspouts.

B - INTERIORS			
B10 – INTERIOR CIRCULATION			
Item		Findings	Comments
B10.1	Construction and Exiting	<ul style="list-style-type: none"> Classrooms in the original part of the school must exit through the corridor to egress doors. Doors and windows contain wire glass. There is one exit door that does not swing the right direction for egress. This facility is not sprinklered. 	<ul style="list-style-type: none"> There appear to be adequate exits for classrooms; however, currently many spaces are used for storage and not instruction. Classrooms in the addition have exterior doors. Wire glass is no longer permitted in educational design.
B10.2	Stairs and Handrails	<ul style="list-style-type: none"> Handrails to the kitchen area do not meet current code requirements. Handrails for stage access do not meet current code requirements. 	<ul style="list-style-type: none"> The lower portion of the building is used as storage. A significant remodel to this facility or re-use of kitchen and adjacent spaces may trigger upgrades to stairs. The stage is no longer in use.
B10.3	Ramps and Elevators	<ul style="list-style-type: none"> There is a lift to access the kitchen area, but it does not appear to be functioning. There is no interior accessible path to original library and classrooms. The ramp access to the stage is not compliant. 	<ul style="list-style-type: none"> A significant remodel to this facility or re-use of kitchen and adjacent spaces may trigger upgrade or full replacement of lift. The stage is no longer in use.
B10.4	Accessibility	<ul style="list-style-type: none"> There is no access to the original kitchen and cafeteria spaces. The lift/elevator does not appear to be functioning or code compliant. This facility lacks ADA actuators. Stage access from the gym is by portable stair. 	<ul style="list-style-type: none"> The lower portion of this facility is used as storage. The stage is no longer used.
B10.5	Signage	<ul style="list-style-type: none"> This facility lacks compliant room signage. 	
RECOMMENDATIONS			
B10.1	If remodel work were to occur at this facility, the replacement of wire glass with tempered glazing may be required. Wire glass may also be replaced at the District’s discretion to prevent any issues if glazing is damaged or broken. See Sections A20 and B30. Reverse door swing in one pair of exit doors.		
B10.2	Replace handrails at (2) stair locations.		
B10.3	Replace lift at kitchen. Install lift at stage.		
B10.5	Install compliant room signage throughout this facility.		

B20 – INTERIOR FINISHES			
Item		Findings	Comments
B20.1	Flooring	<ul style="list-style-type: none"> The majority of the flooring in this facility is asbestos tile. The VCT flooring in the main office is bubbling up in several locations. See Figure B20.1. There is minimal carpeting in this facility; the carpet in one upper classroom and the original library is in fair condition. Carpeting in several classrooms is in poor condition. Flooring at door thresholds is cracked. Exterior egress doors do not have fixed walk-off mats. 	<ul style="list-style-type: none"> Wood floors in the gymnasium are in excellent condition. Several classrooms have vinyl composition (VCT) tile flooring; these are in good condition. No replacement is recommended for carpet in classrooms in the upper level (currently storage space).
B20.2	Ceilings	<ul style="list-style-type: none"> Ceilings in the gymnasium and many classrooms are in fair to poor condition. 	<ul style="list-style-type: none"> This facility has a combination of 2x4 acoustical ceiling tile and 12x12 wood fiber ceiling tiles. The 2x4 ceilings are in good condition.
B20.3	Ceiling Issues	<ul style="list-style-type: none"> Water stained/damaged ceiling tiles were observed in the gymnasium and many other locations throughout this facility (unknown if current or old leaks have caused this). Ceiling tiles in several classrooms were bowing. Damaged ceiling tiles in the gymnasium have been removed and replaced with plywood. See Figure B20.3. 	<ul style="list-style-type: none"> The damaged tiles are wood fiber ceiling tiles. This tile is an older ceiling type not commonly used in ceilings today. Full replacement is recommended.
B20.4	Fixed Equipment	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> The gymnasium has (6) backstops. Wooden bleachers (Universal Bleacher) run the length of one wall in the gymnasium. There were no issues observed. It is not known if they are still used. There is a scoreboard in the gymnasium; it was not in use at the time of the field visit. Marker boards were observed in several instructional spaces. One hallway contains half height lockers, which appear in fair condition.
B20.5	Walls	<ul style="list-style-type: none"> No issues observed 	

B20.6	Wall Finishes	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Walls are wood paneling in hallways (full height), and painted gypsum board in most instructional spaces. Wall padding is located behind the basketball backstops, and is in good condition.
B20.7	Furnishings	<ul style="list-style-type: none"> Freestanding bookshelves in the library are in fair condition. (8) Sets of horizontal mini blinds need to be replaced. 	<ul style="list-style-type: none"> A washer and dryer are located in the original locker rooms. The dryer is vented to the exterior. Stage curtain is in good condition. Window coverings are a combination of roller shades and horizontal mini blinds. The roller shades are in good condition.

RECOMMENDATIONS

- B20.1 Remove all asbestos flooring in hallways and classrooms and replace with VCT flooring. Remove and replace VCT flooring in the main office area. Replace carpeting in original library and in (2) classrooms. Provide fixed walk off mats at (5) pairs of exit doors. Remove rubber base in hallways and classrooms with asbestos flooring and replace with new rubber base
- B20.2 Replace ceilings in (12) classrooms and classroom hallways. Replace ceiling in the gymnasium.
- B20.3 Refer to B20.2.
- B20.7 Replace (8) sets of horizontal mini blinds.

B30 – INTERIOR COMPONENTS

Item	Findings	Comments
B30.1 Interior Windows	<ul style="list-style-type: none"> No issues observed 	
B30.2 Interior Doors and Hardware	<ul style="list-style-type: none"> Interior doors contain wire glass. 	<ul style="list-style-type: none"> Wire glass is no longer permitted in educational facilities.
B30.3 Acoustics	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> There are no acoustical wall panels in the gymnasium.
B30.4 Casework	<ul style="list-style-type: none"> Casework in occupied classrooms is in fair to poor condition. See Figure B30.4. 	<ul style="list-style-type: none"> Casework is sized for elementary school children, and is too small/short for current building's needs.
B30.5 Security		
B30.6 Other	<ul style="list-style-type: none"> Several classrooms on the upper level are used for storage, not occupied space. The main office should be remodeled/expanded. The waiting area is undersized. 	

RECOMMENDATIONS

- B30.2 If remodel work were to occur at this facility, the replacement of wire glass with tempered glazing may be required. Wire glass may also be replaced at the District's discretion to prevent any issues if glazing is damaged or broken.
Replace hardware at (50) doors. Replace (12) classroom doors and frames.
- B30.4 Replace casework in all classrooms.
- B30.6 Remodel/expand main office area to include (1) private office, waiting area, main desk, storage room and accessible restroom.

B40 – TOILET FACILITIES			
Item		Findings	Comments
B40.1	Walls and Wall Finishes	<ul style="list-style-type: none"> Restroom walls are in fair condition. 	<ul style="list-style-type: none"> Walls are ceramic tile or fiberglass panels.
B40.2	Floors and Floor Finishes	<ul style="list-style-type: none"> Floors are in fair condition. 	<ul style="list-style-type: none"> Student restrooms have ceramic tile floors; staff restroom has VCT flooring.
B40.3	Ceilings	<ul style="list-style-type: none"> Ceilings are in fair condition 	<ul style="list-style-type: none"> Staff restroom has 2x4 lay-in ceiling. This is not ideal for a restroom.
B40.4	Partitions	<ul style="list-style-type: none"> Partitions are in fair condition. 	
B40.5	Fixtures	<ul style="list-style-type: none"> Refer to Plumbing Section. In one boys' restroom, urinals are located adjacent to the sink and do not have urinal screens. 	<ul style="list-style-type: none"> Fixtures appear to be in fair condition.
B40.6	Accessories	<ul style="list-style-type: none"> No issues observed 	
B40.7	Accessibility	<ul style="list-style-type: none"> None of the toilet facilities are accessible. 	<ul style="list-style-type: none"> Restrooms in the upper level appear to be used for storage as well as restroom facilities. Restrooms were originally designed for elementary school children. This facility is now used by adults.
B40.8	Other	<ul style="list-style-type: none"> All restrooms in this facility are inadequate for the current use of this facility and their finishes are in poor condition. 	<ul style="list-style-type: none"> Restrooms on upper level are being used as both restroom facilities and storage.
RECOMMENDATIONS			
B40.3	<p>Remodel one restroom in upper level of existing building into an accessible staff restroom. Provide new ceramic tile floors and walls, painted gypsum board ceilings, new stainless steel partitions, fixtures and lighting. Relocate partition wall near door to provide wide access. Convert second restroom into storage by removing all abandoned fixtures and accessories.</p> <p>Enlarge student restrooms and provide multiple stall, accessible facilities. Relocate one restroom to Room 35; expand the other student restroom into Room 6. Remodel remaining existing student restroom space into staff restroom facilities. Provide sheet vinyl flooring with coved base, full height FRP wainscot, stainless steel partitions, new fixtures and lighting, as well as new hollow metal doors, frames and compliant hardware.</p>		

C - SYSTEMS		
C10 - PLUMBING		
Item	Findings	Comments
C10.1	Water Service	<ul style="list-style-type: none"> No issues observed
C10.2	Piping	<ul style="list-style-type: none"> No issues observed
C10.3	Fixtures	<ul style="list-style-type: none"> All plumbing fixtures are period to the building and are functional, but beyond their useful life.
C10.4	Storm and Overflow Drains	<ul style="list-style-type: none"> Drain outside boiler room door was backing up in the past so a sump pump was installed to remove water.
C10.5	Water Heater	<ul style="list-style-type: none"> No issues observed
RECOMMENDATIONS		
C10.3	Install grease interceptor for the kitchen. Replace all plumbing fixtures with new water efficient fixtures.	

C20 - HVAC			
Item		Findings	Comments
C20.1	Mechanical Equipment	<ul style="list-style-type: none"> The building systems are well beyond their useful life and many of the units are not functioning. There is poor access to the units for maintenance. See Figures C20.1a and C20.1b. The existing kitchen exhaust fan is too close to adjacent operable windows (not compliant with code). 	<ul style="list-style-type: none"> One multi-zone unit serves the oldest portion of the building. It is a newer unit, and could not be accessed at the time of the site visit. Make up air fans and fin tube convectors serve the classrooms. AHU-3 serves two classrooms on the NW side of the building. ASU-2 is the make-up unit for the gym, which was de-commissioned in the 1980's. EF-1 Aladdin forward curve 22. Belts last serviced July of 2011. ASU-1 – unit for gym and locker rooms (non-working). There is a broken damper on the roof. EF-1 Aladdin FC270 EF-3 Aladdin FC300 EF-2 Aladdin F22FS EF-4 Aladdin 1/12 HP motor ASU-4 Old fuel pump abandoned in place. New air compressor. Hot water fan coil unit in basement room.
C20.2	Air Filtration	<ul style="list-style-type: none"> See Section C20.1. 	
C20.3	Equipment Accessibility	<ul style="list-style-type: none"> There is poor access to mechanical equipment. 	<ul style="list-style-type: none"> In gym, you have to climb over other units and ductwork to access other units. To access units in the attic you must travel across piping and through many doors without working lights to get to all equipment.
C20.4	Air Distribution and Ventilation	<ul style="list-style-type: none"> No issues observed 	
C20.5	Controls	<ul style="list-style-type: none"> The building is served by pneumatic controls. 	<ul style="list-style-type: none"> District preference is Andover DDC controls.
C20.6	Chillers	<ul style="list-style-type: none"> Not Applicable 	
C20.7	Boiler	<ul style="list-style-type: none"> It is the District's desire to replace the existing boilers. 	<ul style="list-style-type: none"> Boilers: Weil McLain, output of 1084 MBH (total of 2). The existing fuel tank is abandoned underground.
RECOMMENDATIONS			
C20.1	Replace all equipment, ductwork, and associated materials. Redesign the mechanical system for the entire building.		
C20.5	Replace pneumatic controls with Andover DDC controls.		
C20.7	Replace boilers.		

C30 – FIRE PROTECTION			
Item		Findings	Comments
C30.1	Fire Suppression System	<ul style="list-style-type: none"> The kitchen has no fire suppression. 	<ul style="list-style-type: none"> This facility is not sprinklered. The kitchen is no longer in use.
C30.2	Water Service and Backflow Prevention	<ul style="list-style-type: none"> No issues observed 	
C30.3	System Pressure	<ul style="list-style-type: none"> No issues observed 	
C30.4	Standpipes	<ul style="list-style-type: none"> No issues observed 	
C30.5	Fire Pump	<ul style="list-style-type: none"> No issues observed 	
C30.6	Fire Sprinkler Pipe Condition	<ul style="list-style-type: none"> No issues observed 	
C30.7	Fire Department Connection	<ul style="list-style-type: none"> No issues observed 	
C30.8	Fire Sprinkler Zoning	<ul style="list-style-type: none"> No issues observed 	
C30.9	Flow Monitoring and Alarm	<ul style="list-style-type: none"> No issues observed 	
C30.10	Hoses and Extinguishers	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Fire extinguishers present.
RECOMMENDATIONS			
C30.1	Install fire suppression in the kitchen.		

D - ELECTRICAL			
D10 - ELECTRICAL EQUIPMENT			
Item		Findings	Comments
D10.1	Transformers	<ul style="list-style-type: none"> No issues observed 	
D10.2	Switchgear and Panelboards	<ul style="list-style-type: none"> All panels observed offer no space for further expansion; some panels exceed NEC allowable quantity of tandem breakers. See Figure D10.2a. Schedules in all panels are missing, incorrect, conflicting or illegible. Cloth cable used extensively throughout facility. No equipment grounding means in evidence at any panel observed. Repair parts for each type of panel in the building are no longer available. Electrical service size appears inadequate. The main electrical service equipment is inaccessible due to storage of school items. See Figure D10.2b. The south electrical room does not meet NEC size, access and combustibility requirements. See Figure D10.2c. 	<ul style="list-style-type: none"> Cloth cable is no longer acceptable per the current National Electric Code (NEC). Cloth cable is outdated and has the potential to lack grounding capabilities. 400A, 120Y/208V electric service; mix of ITE, Westinghouse and Square D equipment. Ages range from 40 to 60 years. 400A CT cabinet and switchboard mounted above with 4 circuit breaker disconnects; meter installed in electric room adjacent to the current transformer enclosure.
D10.3	Lighting	<ul style="list-style-type: none"> Electrical and mechanical rooms are served by incandescent lighting; light levels are too low. 	<ul style="list-style-type: none"> The majority of lighting is T8 fluorescent; 2 lamp surface mount warp luminaires in hallways and 3 lamp 2 x 4 troffers or 2 lamp pendants in classrooms. Gym & cafeteria lighting replaced high intensity discharge (HID) lighting with T8 Highbay luminaires. Incandescent lighting remains in several areas throughout the facility.
D10.4	Lighting Controls	<ul style="list-style-type: none"> No automated lighting controls are installed. Existing breakers are not switching duty rated. 	<ul style="list-style-type: none"> Classroom lighting switched in three groups; classroom lighting configuration is very favorable for retrofit lighting controls. Hallway and gym lighting is controlled via circuit breaker Site lighting is controlled via mechanical time clock. Circuit breakers are used to control gym and hallway lighting.
D10.5	Back-up and Emergency Power	<ul style="list-style-type: none"> None installed 	
D10.6	Egress and Emergency Lighting	<ul style="list-style-type: none"> There is an insufficient quantity of "bugeye" style egress luminaires. 	<ul style="list-style-type: none"> Bugeye style luminaires are installed at select locations throughout facility.
D10.7	Exit Signage	<ul style="list-style-type: none"> All observed exit signs are incandescent type with no backup power source. See 	

		Figure D10.7. <ul style="list-style-type: none"> Several failures were observed. 	
D10.8	Sensors	<ul style="list-style-type: none"> None installed 	<ul style="list-style-type: none"> Lighting controls/sensors do not meet current Oregon State Energy Code.

RECOMMENDATIONS

- D10.2 Replace entire electrical system including service entrance, main switchboard, all panelboards and all feeder and branch circuit wiring with a 120Y/208V, 800A system to alleviate safety, capacity and maintenance issues. Use Square D system (district standard).
- D10.3 Replace all mechanical and electrical room lighting with T8 utility fluorescent luminaires.
- D10.4 Install a building lighting control system; advise standardization around Lutron Quantum system or equivalent. Provide dedicated switching means for lighting currently controlled by circuit breaker. Provide astronomic time clock(s) to control site lighting.
- D10.6 Install retrofit battery packs in existing luminaires along building egress path as needed.
- D10.7 Replace all incandescent Exit signs with LED equivalent with batteries.
- D10.8 Install workstation occupancy sensors in offices and classrooms to reduce plugload energy consumption.

D20 – SAFETY / SECURITY

Item		Findings	Comments
D20.1	Fire Alarm	<ul style="list-style-type: none"> The fire alarm system is past its useful life. 	<ul style="list-style-type: none"> System: Zans; installed in the 1970's.
D20.2	Smoke Detection	<ul style="list-style-type: none"> The system is past its useful life. 	
D20.3	Pull Stations	<ul style="list-style-type: none"> No issues observed 	
D20.4	Annunciation	<ul style="list-style-type: none"> The system is past its useful life. 	
D20.5	Addressable Zones and Systems	<ul style="list-style-type: none"> None installed 	
D20.6	Monitoring	<ul style="list-style-type: none"> No issues observed 	
D20.7	Access Control	<ul style="list-style-type: none"> None installed 	
D20.8	Intrusion	<ul style="list-style-type: none"> No issues observed 	
D20.9	Video Surveillance	<ul style="list-style-type: none"> None installed 	

RECOMMENDATIONS

- D20.1 Replace fire alarm system with District standard system.
- D20.7 Install access control system.

D30 – TECHNOLOGY COMMUNICATIONS

Item		Findings	Comments
D30.1	Paging and Intercom – Head End Condition	<ul style="list-style-type: none"> The existing system is well past its useful life. Repair parts are unavailable and there is inadequate technical support for this system. 	<ul style="list-style-type: none"> System: Rauland (installed in the 1950's).
D30.2	Master Clock	<ul style="list-style-type: none"> The master clock is past its useful life. 	
D30.3	Infrastructure	<ul style="list-style-type: none"> Unused cabling has been abandoned in place. Cabling is not labeled. 	
D30.4	Speakers	<ul style="list-style-type: none"> No issues observed 	

D30.5	Coverage	<ul style="list-style-type: none"> No issues observed 	
D30.6	Clock System	<ul style="list-style-type: none"> The clock system is past its useful life and users have difficulty programming the system. 	
D30.7	Clock – Head End	<ul style="list-style-type: none"> The clock system is past its useful life. Repair parts are unavailable and there is inadequate technical support for this system. 	<ul style="list-style-type: none"> System: Latham (original to building)

RECOMMENDATIONS

- D30.1 Replace the intercom and paging system.
- D30.7 Replace the clock system.

E - GROUNDS			
E10 – SITE CIRCULATION AND PARKING			
Item	Findings	Comments	
E10.1	Parking Lots	<ul style="list-style-type: none"> This site lacks a main parking lot. Parking lot in rear of facility is in fair condition. Accessible stalls do not have striping for pedestrian access. 	<ul style="list-style-type: none"> There is a drop off loop in front of the school; parking for the main entrance is street parking. The rear parking lot contains 23 standard stalls and (2) accessible stalls. Parking near the main entry consists of (5) standard stalls and (1) accessible stall striped in drop-off loop.
E10.2	Site Signage/ Accessories	<ul style="list-style-type: none"> Site lacks signage. 	<ul style="list-style-type: none"> Flagpole is present at front of building.
E10.3	Vehicular Circulation	<ul style="list-style-type: none"> Vehicular circulation is restrictive on this site. At the front of the building is a small drop off/pick-loop; parking is done on the street. See Figure E10.3. Buses for the WINGS program access the site through the rear parking area. There is no dedicated fire lane. 	
E10.4	Curbs and Sidewalks	<ul style="list-style-type: none"> Sidewalks are in good to fair condition. 	
E10.5	Accessibility	<ul style="list-style-type: none"> This facility lacks ADA actuators. 	<ul style="list-style-type: none"> Sidewalks and/or hard surface areas are located around the facility.
E10.6	Bikes and Bike Parking	<ul style="list-style-type: none"> No bike racks observed onsite. 	<ul style="list-style-type: none"> It is unknown if bikes are used as transportation to the site, given the unique nature of the facility's programs.
RECOMMENDATIONS			
E10.1	Construct new parking lot adjacent to building (access on 31 st). Expand rear parking lot by removing covered play area to create staff/overflow parking.		
E10.2	Add site sign.		
E10.3	Refer to Section E10.1.		
E20 - SITE COMPONENTS			
Item	Findings	Comments	
E20.1	Fields	<ul style="list-style-type: none"> Not Applicable 	
E20.2	Landscaping	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> This site is comprised of many mature trees along site's perimeter and minimal landscaping.
E20.3	Irrigation	<ul style="list-style-type: none"> None observed 	
E20.4	Site Buildings	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Site houses a small greenhouse and adjacent garden. There are no issues with the covered play structure.
E20.5	Site Security	<ul style="list-style-type: none"> Lack of parking near main entry forces visitors to parking on street or the rear of building and enter building from one of its rear entry points. 	
E20.6	Fencing	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> 6'-0" high chain link fencing

E20.7	Playground Equipment	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> This facility is not currently used as an elementary school. Current equipment is not conducive for adult and/or disabled students.
E20.8	Play Surfaces	<ul style="list-style-type: none"> Paving is worn; there are large cracks in many locations. 	<ul style="list-style-type: none"> This facility is not currently used as an elementary school. At this time, no upgrades or recommendations are suggested.
E20.9	Site Lighting	<ul style="list-style-type: none"> Existing lighting is not energy efficient. Area luminaires are inappropriate for building's setting. There is inefficient lighting capacity at parking areas. 	<ul style="list-style-type: none"> Site lighting is primarily halogen floods and mercury vapor area luminaires. Halogen and mercury vapor lighting has been phased out by energy legislation. Complaints of glare from facility's lighting have been made by adjacent neighbors.
E20.10	Grading and Drainage	<ul style="list-style-type: none"> No issues observed 	
RECOMMENDATIONS			
E20.5	Refer to Section E10.1.		
E20.9	Replace all site lighting with high efficiency, full cut-off LED or ceramic metal halide luminaires. Replace and extend parking area lighting per IESNA recommendations.		

IMAGES

Figure A10.2 – Bulging plaster in boiler room



Figure A10.3 – Top of wall at lift



Figure A20.1 – Damaged concrete



Figure A20.2.a – Outdated hardware



Figure A20.2.b – Gymnasium Doors



Figure A20.6 – Gutters



Figure B20.1 – Main office flooring



Figure B20.3 – Ceiling in gymnasium



Figure B30.4 – Casework



Figure C20.1.a – Poor equipment access



Figure C20.1.b – Dirty units from lack of accessibility



Figure D10.2.a – Panelboard with too many tandem breakers



Figure D10.2.b – Electrical clearance issues



Figure D10.2.c – South electrical room



Figure D10.7 – Incandescent exit signs



Figure E10.3 – Lack of parking



ITEMS	Harding (College Hill Campus)	Priority Level (Refer to Legend)				Priority Level I	Priority Level II	Priority Level III	Priority Level IV
		I	II	III	IV				
A - STRUCTURE/SHELL									
A10 - STRUCTURE/SUBSTRUCTURE									
A10.2	1	Install improved drainage to prevent future	X			\$ 7,906			
	2	Investigate the cause of bulging finishes and remediate issues	X			\$ 2,371			
A10.3	1	Seal cracks in exterior walls to prevent water filtration and further deterioration	X			\$ 1,581			
	2	Roughen, apply bonding agent and fill in rock pocket at top of wall near the existing lift with non-shrink grout and trowel finish	X			\$ 2,371			
	3	Complete seismic upgrades per previous reports	X			\$ 1,953,718			
A20 - EXTERIOR COMPONENTS									
A20.1	1	Repair damaged concrete wall		X			\$ 2,371		
A20.2	1	Replace wire glazing in exterior doors		X			\$ 6,109		
	2	Replace hardware at exterior doors	X			\$ 82,225			
	3	Replace exterior gym doors			X			\$ 17,710	
	4	Add actuators to select exterior doors	X			\$ 78,271			
A20.3	1	Replace all single glazing window systems		X		\$ 461,710			
A20.4	1	Repair roofing per roofing assessment recommendations	X			\$ 5,000			
	2	Replace roofing per roofing assessment recommendations	X			\$ 490,000			
A20.6	1	Replace all gutters and downspouts		X		\$ 40,127			
TOTAL - STRUCTURE/SHELL						\$ 2,448,718	\$ 676,562	\$ 8,480	\$ 17,710
B - INTERIORS									
B10 - INTERIOR CIRCULATION									
B10.1	1	Reverse door swing to follow egress path of travel	X			\$ 2,213			
B10.2	1	Replace handrails at (2) stair locations		X			\$ 1,344		
B10.3	1	Replace lift adjacent to kitchen	X			\$ 34,787			
	2	Add lift at stage			X			\$ 40,413	
B10.5	1	Add compliant room signage throughout facility	X			\$ 30,239			
B20 - INTERIOR FINISHES									
B20.1	1	Abate flooring in classrooms and hallways and replace with VCT; replace base	X			\$ 136,423			
	2	Remove and replace VCT flooring in main office	X			\$ 2,795			
	3	Replace carpeting in original library and (2) classrooms	X			\$ 13,638			
	4	Provide fixed walk off mats at (5) pairs of exit doors	X			\$ 5,955			
B20.2	1	Replace ceilings in classrooms and hallways	X			\$ 160,496			
	2	Replace ceiling in gymnasium		X			\$ 109,041		
B20.7	1	Replace (8) sets of horizontal mini blinds		X			\$ 2,656		
B30 - INTERIOR COMPONENTS									
B30.2	1	Replace all interior door wire glazing		X			\$ 1,328		
	2	Replace hardware at interior doors	X			\$ 55,343			
	3	Replace select classroom doors and frames	X			\$ 28,747			
B30.4	1	Replace casework in all classrooms	X			\$ 108,726			
B30.6	1	Remodel/expand main office		X			\$ 68,401		
B40 - TOILET FACILITIES									
B40.8	1	Remodel upper restroom into staff restroom	X			\$ 55,967			
	2	Convert restroom into storage; remove abandoned fixtures		X			\$ 34,544		
	3	Enlarge/upgrade student restroom facilities	X			\$ 144,201			
	4	Remodel existing student toilet room into staff restroom	X			\$ 40,072			
TOTAL - INTERIORS						\$ 57,556	\$ 762,046	\$ 217,314	\$ 40,413
C - SYSTEMS									
C10 - PLUMBING									
C10.3	1	Install grease interceptor for the kitchen	X			\$ 28,750			
	2	Replace all plumbing fixtures with new water efficient fixtures		X			\$ 118,750		
C20 - HVAC									
C20.1	1	Replace all equipment, ductwork, and associated materials	X			\$ 1,487,500			

ITEMS	Priority Level (Refer to Legend)				Priority Level I	Priority Level II	Priority Level III	Priority Level IV
	I	II	III	IV				
C20.5 1 Replace pneumatic controls		X			\$ 200,000			
C20.7 1 Replace boilers		X			\$ 126,500			
C30 - FIRE PROTECTION								
C30.1 1 Install fire suppression in the kitchen			X				\$ 12,500	
TOTAL - SYSTEMS					\$ -	\$ 1,842,750	\$ 131,250	\$ -

D - ELECTRICAL								
D10 - ELECTRICAL EQUIPMENT								
D10.2 1 Replace existing electrical system		X			\$ 1,250,000			
D10.3 1 Replace and extend lighting in electrical and mechanical rooms		X			\$ 40,000			
D10.4 1 Install dedicated switching controls for lighting	X				\$ 20,000			
2 Install astronomic time clock for site lighting		X			\$ 5,000			
3 Install retrofit lighting controls		X			\$ 40,000			
D10.6 1 Extend egress lighting and retrofit existing luminaires with battery packs	X				\$ 40,000			
D10.7 1 Replace all incandescent exit signs with LED	X				\$ 20,000			
D10.8 1 Install workstation occupancy sensors		X			\$ 40,000			
D20 - SAFETY/SECURITY								
D20.1 1 Replace fire alarm system		X			\$ 40,000			
D20.7 1 Install access control system		X			\$ 20,000			
D30 - TECHNOLOGY COMMUNICATIONS								
D30.1 1 Replace intercom and paging system		X			\$ 20,000			
D30.7 1 Replace clock system		X			\$ 20,000			
TOTAL - ELECTRICAL					\$ 80,000	\$ 1,475,000	\$ -	\$ -

E - GROUNDS								
E10 - SITE CIRCULATION AND PARKING								
E10.1 1 Construct new parking lot			X			\$ 40,875		
2 Expand rear parking lot/remove covered play			X			\$ 48,346		
E10.2 1 Add site sign			X			\$ 3,162		
E20 - SITE COMPONENTS								
E20.9 1 Replace site lighting		X			\$ 40,000			
2 Install parking lot lighting		X			\$ 75,000			
TOTAL - GROUNDS					\$ -	\$ 115,000	\$ 92,383	\$ -

TOTALS BY CATEGORY	
STRUCTURE/SHELL	\$ 3,151,470
INTERIORS	\$ 1,077,329
SYSTEMS	\$ 1,974,000
ELECTRICAL	\$ 1,555,000
GROUNDS	\$ 207,383
FACILITY TOTAL	\$ 7,965,182

TOTALS BY PRIORITY	
LEVEL 1	\$ 2,586,274
LEVEL 2	\$ 4,871,358
LEVEL 3	\$ 449,427
LEVEL 4	\$ 58,123
PRIORITY TOTAL	\$ 7,965,182

LEGEND:

PRIORITY LEVELS

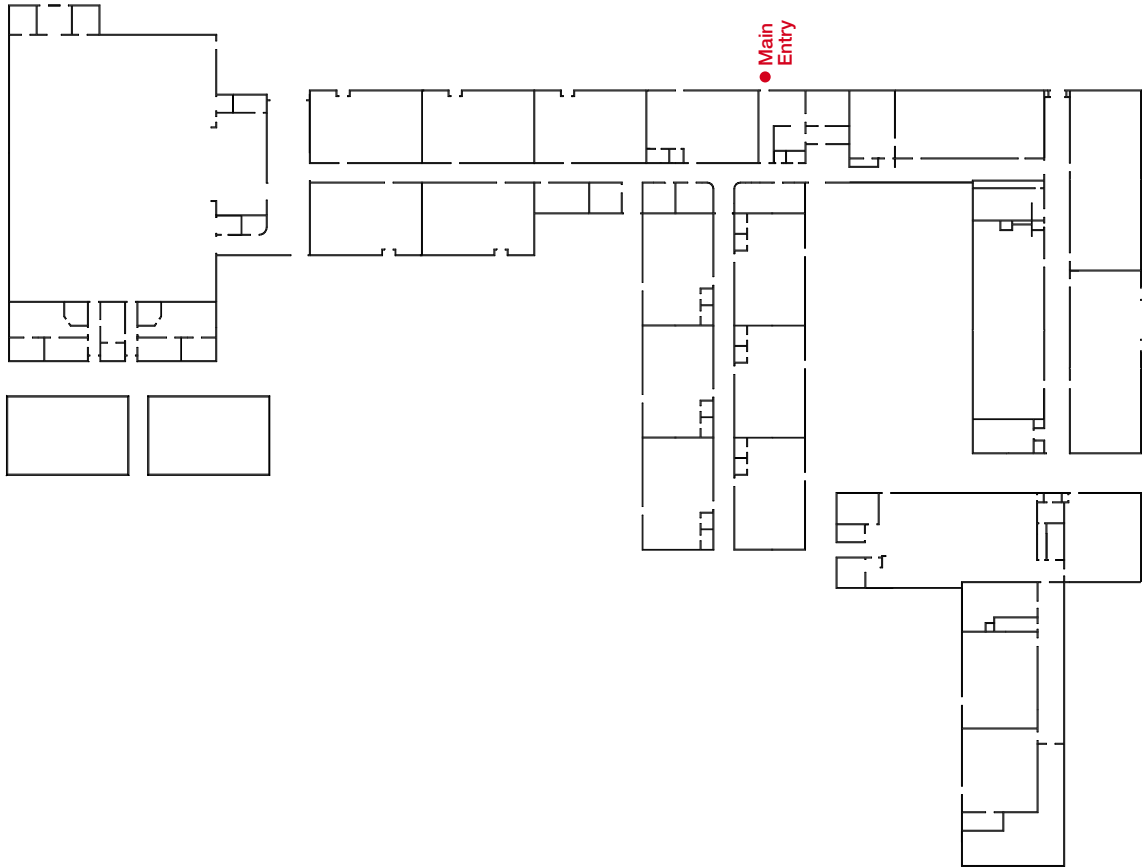
Level I: Highest Priority; Issues that affect the life safety concerns of the occupant, related to notification of occupants to emergency situations and the ability to safely evacuate the facility; subcomponents of Level I include safety concerns such as electrical loads, hazardous materials that might be affected with remodel or modifications, lack of fall protection. Level I items need to be addressed within a 5-year plan.

Harding (College Hill Campus)	Priority Level				Priority Level	Priority Level	Priority Level	Priority Level
	(Refer to Legend)	I	II	III				
ITEMS					I	II	III	IV

Level II: Moderate Priority; Issues that are related to the integrity and adequacy of systems within the building to sufficiently withstand a major event and still function; also related are the age of systems or building components that keep day to day operations running without constant repair. Issues may include mechanical, electrical and plumbing systems, fire suppression, lighting and security, as well as flooring, windows doors and other architectural components. Level II Items may be part of a 5-year plan.

Level III: Lower Priority; Issues that may over time affect the day to day maintenance of the building or long term use of the facility. Issues also include access and clearances at equipment and fixtures, access for individuals with disabilities and both indoor and exterior environment quality. Level III Items would be considered in a 5 to 10 year plan.

Level IV: Issues that are related to the aesthetics of both the building's interior and exterior as well as integrity and adequacy of building systems that don't pose any issues or nearing the end of their remaining lifecycles. These may include items such as cabinetry original to the building that have signs of wear or dated finishes but do not have any damage or deterioration. Level IV items would be considered long-term plans (10 years or more).



SCHOOL BUILDING
SCALE: NOT TO SCALE

Harding | Corvallis School District

OVERALL FLOOR PLAN



Dull Olson Weekes - IBI Group
Architects, Inc.



Western View Center

1435 SW 35th Street
Corvallis, OR 97333

Built: 1988

Enrollment: N/A

Floor Area: 6,400 SF



Field Review Team:

Earl Carson	Dull Olson Weekes – IBI Group Architects
Michael Arellano	KPFF Consulting Engineers
Roger Arnold	Glumac
Alex Ridley	Glumac
Dana Troy	Glumac

Report Date: December 2013

Date of Field Visits: June 3-7, 2013

Weather: Sunny, 70's and 80's

Neighborhood: Residential

Site Contacts: John Meyer, CSD 509J
Kim Patten, CSD 509J

General Building Description:

The Western View Center is a building that previously functioned as the media center for a school that has since been demolished. It now serves as the district's conference and training center. The building is on the edge of a large grassy site and near a busy highway. The facility is accessed by a concrete fire lane that connects to a shared driveway with the adjacent School District offices. Next to the building and at the end of the concrete drive is an A/C paved parking lot with approximately nine parking spaces, none of which are code compliant ADA parking stalls. Across from the concrete drive is a portable building that is not currently being used and a gravel parking lot for overflow parking.

Western View Center was constructed in 1988 and served as the Library of the former Western View Middle School. The original Western View Middle School was built in 1959 and was demolished, except for the library building, in 2006. The surviving building is a one-story structure, square in plan, with wood framed roof and walls, and interior steel columns. The exterior is clad with partial height veneer and the remainder with metal panel. A covered walkway wraps around the west and south sides of the building and appears to be steel framed.

The current layout of the building consists of a large room flanked on two sides by office space. These rooms are not currently being used; however a few of the spaces have been reconfigured to create a computer training room. There is one unisex toilet room in the building that is ADA accessible, but is undersized based on the number of people who use the facility.

Overall, this facility is in good condition. A full building review of architectural, structural, mechanical, electrical and plumbing components was conducted.

A - STRUCTURE / SHELL			
A10 – STRUCTURE / SUBSTRUCTURE			
Item		Findings	Comments
A10.1	Foundations	<ul style="list-style-type: none"> No issues observed 	
A10.2	Subgrade Enclosures	<ul style="list-style-type: none"> No issues observed 	
A10.3	Structural Systems	<ul style="list-style-type: none"> A roof leak was observed in the west end of the building and a catch bucket was in place. See Figure A10.3. 	
RECOMMENDATIONS			
A10.3	Investigate the extent of the roof leak at the at the west end of the building assess the damage to the roof structure. If any rot is encountered, portions of the sheathing and/or joists may need to be replaced.		
A20 - EXTERIOR COMPONENTS			
Item		Findings	Comments
A20.1	Exterior Walls	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> The exterior materials are brick with metal wall panel above that are in good condition.
A20.2	Doors and Hardware	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Hollow metal door and frame with ADA compliant hardware.
A20.3	Windows and Skylights	<ul style="list-style-type: none"> The pyramidal translucent skylight is discolored and showing its age. See Figure A20.3. 	<ul style="list-style-type: none"> Aluminum storefront system is in good condition.
A20.4	Roof	<ul style="list-style-type: none"> A separate roofing assessment is located in the appendix of this report. 	<ul style="list-style-type: none"> Roofing is a 25 year old built up roofing system.
A20.5	Canopies and Covered Walks	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Metal panel canopy and soffit with steel posts are in good condition.
A20.6	Gutters and Downspouts	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Prefinished sheet metal downspouts at canopy appear to be in good condition.
A20.7	Trim and Overhangs	<ul style="list-style-type: none"> No issues observed 	
A20.8	Ramps and Stairs	<ul style="list-style-type: none"> N/A 	
RECOMMENDATIONS			
A20.3	Refurbish translucent panels of pyramidal skylight.		
A20.4	Repair and/or replace roofing per roofing assessment recommendations.		

B - INTERIORS			
B10 – INTERIOR CIRCULATION			
Item		Findings	Comments
B10.1	Construction and Exiting	<ul style="list-style-type: none"> No issues observed 	
B10.2	Stairs and Handrails	<ul style="list-style-type: none"> N/A 	
B10.3	Ramps and Elevators	<ul style="list-style-type: none"> N/A 	
B10.4	Accessibility	<ul style="list-style-type: none"> No issues observed 	
B10.5	Signage	<ul style="list-style-type: none"> This facility lacks compliant signage. 	
RECOMMENDATIONS			
B10.5 Install compliant room signage throughout this facility.			
B20 – INTERIOR FINISHES			
Item		Findings	Comments
B20.1	Flooring	<ul style="list-style-type: none"> Carpet in training spaces is showing its age. See Figure B20.1. 	<ul style="list-style-type: none"> VCT in vestibules is in good condition.
B20.2	Ceilings	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> 2'x2' acoustical ceiling tiles in good condition.
B20.3	Ceiling Issues	<ul style="list-style-type: none"> Ceiling tiles removed for roof leak in large room (unknown if this leak is old or recent). 	
B20.4	Fixed Equipment	<ul style="list-style-type: none"> Facility lacks pin up space for schedule and announcements. 	
B20.5	Walls	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Painted gypsum board walls are in good condition.
B20.6	Wall Finishes	<ul style="list-style-type: none"> No issues observed 	
B20.7	Furnishings	<ul style="list-style-type: none"> Roller shades are in poor condition; many are missing. 	
RECOMMENDATIONS			
B20.1 Replace carpet in training area and computer lab.			
B20.4 Install 200 SF of tackable wall panels near main entry.			
B20.7 Replace roller shades at all exterior windows.			
B30 – INTERIOR COMPONENTS			
Item		Findings	Comments
B30.1	Interior Windows	<ul style="list-style-type: none"> Wire glass is observed in hollow metal frames. 	<ul style="list-style-type: none"> Wire glass is no longer permitted in educational facilities.
B30.2	Interior Doors and Hardware	<ul style="list-style-type: none"> Hollow metal doors with wire glass are observed in several locations. 	<ul style="list-style-type: none"> Wire glass is no longer permitted in educational facilities.
B30.3	Acoustics	<ul style="list-style-type: none"> Large training area space requires speaker to project voice. 	
B30.4	Casework	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Shelving and circulation desk still left from old media

			center does not match to new use of the space.
B30.5	Security	<ul style="list-style-type: none"> There are some doors that do not latch properly that sometimes sets off the alarm system. 	
B30.6	Other	<ul style="list-style-type: none"> Building consists of a large open space flanked on two sides by offices. The use of the space has changed from a media center to a training classroom space. Teaching wall location in undesirable location due to glare from windows that flank each side. Also, space can only be used for one class at a time (aside from dedicated computer training room reconfigured out of a few of the offices), resulting in scheduling conflicts. Existing staff room is underutilized. See Section B40.8. 	

RECOMMENDATIONS

- B30.1 If remodel work were to occur at this facility, the replacement of wire glass with tempered glazing may be required. Wire glass may also be replaced at the District’s discretion to prevent any issues if glazing is damaged or broken.
- B30.2 See B30.1.
- B30.5 Remodel the large room with partition walls the large room into two or three separate classrooms with the area under the pyramidal skylight acting as a lobby.
- B30.6 See Section 40.8. Install countertop, sink and lower cabinets as well as adequate power for a coffee station adjacent to the training area.

B40 – TOILET FACILITIES

Item		Findings	Comments
B40.1	Walls and Wall Finishes	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Walls are finished with plastic laminate wainscot.
B40.2	Floors and Floor Finishes	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Flooring is sheet vinyl.
B40.3	Ceilings	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Ceiling is 2’x4’ acoustical ceiling tile. This ceiling type is not ideal for toilet facilities.
B40.4	Partitions	<ul style="list-style-type: none"> None 	
B40.5	Fixtures	<ul style="list-style-type: none"> No issues observed 	
B40.6	Accessories	<ul style="list-style-type: none"> No issues observed 	
B40.7	Accessibility	<ul style="list-style-type: none"> No issues observed 	
B40.8	Other	<ul style="list-style-type: none"> The toilet room is undersized for the current use of this space. See Figure B40.8. 	

RECOMMENDATIONS

- B40.8 Reconfigure existing staff room and existing toilet room to allow for separate toilet facilities for men and women with multiple stalls, sheet vinyl floor, plastic laminate wainscot and gypsum board ceilings.

C - SYSTEMS		
C10 - PLUMBING		
Item	Findings	Comments
C10.1	Water Service	<ul style="list-style-type: none"> No issues observed
C10.2	Piping	<ul style="list-style-type: none"> No issues observed
C10.4	Fixtures	<ul style="list-style-type: none"> All fixtures are period to the building and functioning, but beyond their useful life.
C10.6	Storm and Overflow Drains	<ul style="list-style-type: none"> Some blockage was observed.
C10.7	Water Heater	<ul style="list-style-type: none"> No issues observed
		<ul style="list-style-type: none"> Exterior hose bibs are located around the building.
		<ul style="list-style-type: none"> Single water closets with wall hung flush valves. Lavatory is a manual faucet. One sink in the kitchen has a manual faucet. Single drinking fountain
		<ul style="list-style-type: none"> Roof drains present. Exterior gutters and downspouts on the overhang.
		<ul style="list-style-type: none"> 30 gallon; 4.5 kW
RECOMMENDATIONS		
C10.4	Replace all plumbing fixtures.	
C20 - HVAC		
Item	Findings	Comments
C20.1	Mechanical Equipment	<ul style="list-style-type: none"> The entire system is period to the building and not functioning as it should be. Replacement parts for the heat pump are not available due to the age of the system. There is no reheat in the terminal units. All heating is provided through electric strip heat in the unit. Transformer is located in the electrical room. The room is hot because it is on the PVVT system. Ductwork is fiberboard; when a bypass damper fails, the board blows apart.
C20.2	Air Filtration	<ul style="list-style-type: none"> No issues observed
C20.3	Equipment Accessibility	<ul style="list-style-type: none"> No issues observed
C20.4	Air Distribution and Ventilation	<ul style="list-style-type: none"> No issues observed
C20.5	Controls	<ul style="list-style-type: none"> There is no control over the mechanical system.
C20.6	Chillers	<ul style="list-style-type: none"> Not Applicable
C20.7	Boiler	<ul style="list-style-type: none"> Not Applicable
		<ul style="list-style-type: none"> Single packaged variable volume, variable temperature packaged heat pump system. Constant volume Pressure dependent terminal units. Standalone, no DDC. Operates on a timeclock. Single Carrier Variable air volume (VAV) on roof from 1989.
		<ul style="list-style-type: none"> Air filtration is period to the building.
		<ul style="list-style-type: none"> Access to the roof is via fixed ladder.
		<ul style="list-style-type: none"> A DOS system is needed to fix the HVAC controls; the computer used for this is no longer operational. Andover is district preference for controls.
RECOMMENDATIONS		
C20.1	Replace all HVAC equipment and ductwork with new system (redesign of entire system is recommended).	
C20.5	Install new controls.	

C30 – FIRE PROTECTION			
Item		Findings	Comments
C30.1	Fire Suppression System	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> This facility is not sprinklered.
C30.2	Water Service and Backflow Prevention	<ul style="list-style-type: none"> No issues observed 	
C30.3	System Pressure	<ul style="list-style-type: none"> No issues observed 	
C30.4	Standpipes	<ul style="list-style-type: none"> No issues observed 	
C30.5	Fire Pump	<ul style="list-style-type: none"> No issues observed 	
C30.6	Fire Sprinkler Pipe Condition	<ul style="list-style-type: none"> No issues observed 	
C30.7	Fire Department Connection	<ul style="list-style-type: none"> No issues observed 	
C30.8	Fire Sprinkler Zoning	<ul style="list-style-type: none"> No issues observed 	
C30.9	Flow Monitoring and Alarm	<ul style="list-style-type: none"> No issues observed 	
C30.10	Hoses and Extinguishers	<ul style="list-style-type: none"> No issues observed 	
RECOMMENDATIONS			

D - ELECTRICAL			
D10 - ELECTRICAL EQUIPMENT			
Item		Findings	Comments
D10.1	Transformers	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Building is supplied by a 75kVA pad mounted utility transformer to the east of the building. 2 modular classrooms are supplied via utility transformer taps; separately metered.
D10.2	Switchgear and Panelboards	<ul style="list-style-type: none"> 120Y/208V electrical panel lacks spare capacity. See Figure D10.2. 	<ul style="list-style-type: none"> 225A, 277Y/480V electrical service to conference center; 3R panel at building exterior near transformer, 225A breaker; second panel in electrical room 225A bus, 175A main circuit breaker, large quantity of free spaces; 30kVA transformer and 100A 120Y/208V, 30 space panel; challenger/cutler hammer electrical equipment. 200A, 120Y/208V electrical service to each modular classroom.
D10.3	Lighting	<ul style="list-style-type: none"> T12 lighting systems still exist in this facility. Metal halide luminaires are no longer acceptable for interior illumination. See Figure D10.3. 	<ul style="list-style-type: none"> Lighting is a mix of metal halide and T12 and T8 fluorescent lighting. Recessed 2x4 troffers were retrofitted with T8 as existing T12 systems fail. Metal halide up lighting located at the central open area, 175 watt.
D10.4	Lighting Controls	<ul style="list-style-type: none"> No automated controls installed 	<ul style="list-style-type: none"> Lighting controls are highly recommended to meet current energy codes and to conserve energy.
D10.5	Back-up and Emergency Power	<ul style="list-style-type: none"> Not Applicable 	
D10.6	Egress and Emergency Lighting	<ul style="list-style-type: none"> Emergency battery packs are well past useful life and no longer function reliably. 	<ul style="list-style-type: none"> Egress lighting is supplied by fixture integrated battery packs period to facility.
D10.7	Exit Signage	<ul style="list-style-type: none"> Emergency batteries provided with exit signs are well past useful life, warranty period and no longer functioning reliably. 	<ul style="list-style-type: none"> LED exit signs are installed throughout the building; signs are period to the building and include emergency batteries.
D10.8	Sensors	<ul style="list-style-type: none"> None installed 	<ul style="list-style-type: none"> Currently does not meet Oregon State Energy Code.
RECOMMENDATIONS			
D10.2	Upsize building 120Y/208V electrical panel from 100A to 225A with at least 42 spaces.		
D10.3	Replace all remaining T12 lamps and ballasts with T8 systems. Replace existing metal halide upright luminaire with a compact fluorescent or LED equivalent.		
D10.4	Install a building lighting control system; use Lutron Quantum system or equivalent.		
D10.6	Replace all emergency lighting battery packs to ensure reliable operation.		
D10.7	Replace all exit signs, replace with exit signs offering maintenance free batteries.		
D10.8	Install workstation occupancy sensors in offices and classrooms to reduce plugload energy consumption.		

D20 – SAFETY / SECURITY			
Item		Findings	Comments
D20.1	Fire Alarm	<ul style="list-style-type: none"> • Fire alarm system is approaching the end of useful life. 	<ul style="list-style-type: none"> • System: Firelight
D20.2	Smoke Detection	<ul style="list-style-type: none"> • No issues observed 	
D20.3	Pull Stations	<ul style="list-style-type: none"> • No issues observed 	
D20.4	Annunciation	<ul style="list-style-type: none"> • No issues observed 	
D20.5	Addressable Zones and Systems	<ul style="list-style-type: none"> • No issues observed 	
D20.6	Monitoring	<ul style="list-style-type: none"> • No issues observed 	
D20.7	Access Control	<ul style="list-style-type: none"> • None installed 	
D20.8	Intrusion	<ul style="list-style-type: none"> • No issues observed 	
D20.9	Video Surveillance	<ul style="list-style-type: none"> • None installed 	
RECOMMENDATIONS			
D20.1 Replace existing fire alarm system with District standard system.			
D30 – TECHNOLOGY COMMUNICATIONS			
Item		Findings	Comments
D30.1	Paging and Intercom – Head End Condition	<ul style="list-style-type: none"> • None installed 	
D30.2	Master Clock	<ul style="list-style-type: none"> • None installed 	
D30.3	Infrastructure	<ul style="list-style-type: none"> • None installed 	
D30.4	Speakers	<ul style="list-style-type: none"> • None installed 	
D30.5	Coverage	<ul style="list-style-type: none"> • None installed 	
D30.6	Clock System	<ul style="list-style-type: none"> • None installed 	
D30.7	Clock – Head End	<ul style="list-style-type: none"> • None installed 	
RECOMMENDATIONS			

E - GROUNDS			
E10 – SITE CIRCULATION AND PARKING			
Item		Findings	Comments
E10.1	Parking Lots	<ul style="list-style-type: none"> A/C paved parking is in poor condition and striping is faded. See Figure E10.1. 	<ul style="list-style-type: none"> Parking lots contains (9) standard stalls. There is an overflow gravel lot along the concrete drive.
E10.2	Site Signage	<ul style="list-style-type: none"> Facility lacks effective building signage. 	<ul style="list-style-type: none"> Front entrance not apparent when arriving at the facility.
E10.3	Vehicular Circulation	<ul style="list-style-type: none"> Concrete drive to the front of the building. 	
E10.4	Curbs and Sidewalks	<ul style="list-style-type: none"> Curbs and sidewalks occur only at the front entrance. 	
E10.5	Accessibility	<ul style="list-style-type: none"> There is no ADA parking stalls serving the facility. 	
E10.6	Bikes and Bike Parking	<ul style="list-style-type: none"> There is no bicycle parking; however this may not be a high priority for a training facility. 	
RECOMMENDATIONS			
E10.1	Construct a new parking lot at the front of the facility to accommodate more visitors. Provide ADA parking stalls with an accessible pathway to the front entrance. Provide concrete curb ramp at the existing sidewalk.		
E10.2	Add site signage over building entrance.		
E10.5	See Section E10.1.		
E20 - SITE COMPONENTS			
Item		Findings	Comments
E20.1	Fields	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Grass fields around the site are in good condition (maintained by District).
E20.2	Landscaping	<ul style="list-style-type: none"> No landscaping present. 	
E20.3	Irrigation	<ul style="list-style-type: none"> None observed 	
E20.4	Site Buildings	<ul style="list-style-type: none"> Older modular building across drive appears in fair condition. 	<ul style="list-style-type: none"> Modular building is no longer used.
E20.5	Site Security	<ul style="list-style-type: none"> No issues observed 	
E20.6	Fencing	<ul style="list-style-type: none"> No issues observed 	
E20.7	Playground Equipment	<ul style="list-style-type: none"> Not Applicable 	
E20.8	Play Surfaces	<ul style="list-style-type: none"> Not Applicable 	
E20.9	Site Lighting	<ul style="list-style-type: none"> Inefficient lighting technologies are in use throughout site. 	<ul style="list-style-type: none"> Site lighting consists of high pressure sodium wallpack lighting at entrances and 70W metal halide recessed luminaires installed in soffits.
E20.10	Grading and Drainage	<ul style="list-style-type: none"> No issues observed 	
RECOMMENDATIONS			
E20.9	Replace wallpack luminaires with LED or fluorescent equivalents. Replace soffit luminaire lamps and ballasts with compact fluorescent or LED retrofit systems.		

IMAGES

Figure A10.3 – Roof leak



Figure A20.3 - Skylight



Figure B20.1 – Carpeting



Figure B40.8 – Undersized toilet



Figure C20.1 – Outdated mechanical equipment



Figure D10.2 – Panelboard lacks capacity



Figure D10.3 – Inefficient fixture



Figure E10.1 – Parking



Western View Center	Priority Level				Priority Level I	Priority Level II	Priority Level III	Priority Level IV	
	(Refer to Legend)								
	I	II	III	IV					
ITEMS									
A - STRUCTURE/SHELL									
A10 - STRUCTURE/SUBSTRUCTURE									
A10.3	1	Investigate the roof leak and remediate any	X			\$ 1,581			
	2	Seismic upgrades		X			\$ 212,520		
A20 - EXTERIOR COMPONENTS									
A20.3	1	Refurbish translucent skylight panels		X			\$ 44,275		
A20.4	1	Repair roofing per roofing assessment recommendations	X			\$ 5,000			
	2	Replace roofing per roofing assessment recommendations	X			\$ 245,000			
TOTAL - STRUCTURE/SHELL						\$ 250,000	\$ 1,581	\$ 256,795	\$ -
B - INTERIORS									
B10 - INTERIOR CIRCULATION									
B10.5	1	Add compliant room signage throughout facility	X			\$ 5,566			
B20 - INTERIOR FINISHES									
B20.1	1	Replace carpet in the training area and computer lab	X			\$ 41,507			
B20.4	1	Install 200 SF of tackable wall panels		X			\$ 4,743		
B20.7	1	Replace roller shades at all exterior windows		X			\$ 6,522		
B30 - INTERIOR COMPONENTS									
B30.1	1	Replace all interior door wire glazing		X			\$ 1,328		
B30.5	1	Remodel large room into 2-3 classrooms		X			\$ 39,417		
B30.6	1	Install new plastic laminate countertop, sink and cabinets for coffee station adjacent to training area	X			\$ 6,641			
B40 - TOILET FACILITIES									
B40.8	1	Remodel existing staff room and restroom into separate accessible toilet facilities for men and women	X			\$ 25,316			
TOTAL - INTERIORS						\$ 25,316	\$ 53,714	\$ 52,010	\$ -
C - SYSTEMS									
C10 - PLUMBING									
C10.4	1	Replace all plumbing fixtures		X			\$ 72,500		
C20 - HVAC									
C20.1	1	Replace all HVAC equipment and ductwork with new equipment and design	X			\$ 206,250			
C20.5	1	Provide Andover controls		X			\$ 36,250		
TOTAL - SYSTEMS						\$ 206,250	\$ 36,250	\$ 72,500	\$ -
D - ELECTRICAL									
D10 - ELECTRICAL EQUIPMENT									
D10.2	1	Install larger 120V panelboard		X			\$ 15,000		
D10.3	1	Replace all remaining T12 lamps and ballasts		X			\$ 45,000		
	2	Replace metal halide uplight luminaire	X			\$ 25,000			
D10.4	1	Install automated lighting controls		X			\$ 85,000		
D10.6	1	Replace egress lighting battery packs	X			\$ 85,000			
D10.7	1	Replace exit signs	X			\$ 40,000			
D10.8	1	Install workstation occupancy sensors		X			\$ 85,000		
D20 - SAFETY/SECURITY									
D20.1	1	Replace fire alarm system		X			\$ 85,000		
TOTAL - ELECTRICAL						\$ 125,000	\$ 110,000	\$ 230,000	\$ -
E - GROUNDS									
E10 - SITE CIRCULATION AND PARKING									
E10.1	1	Construct new parking lot at front of facility with accessible stalls and concrete curb ramp	X			\$ 40,227			
E10.2	1	Add site signage over building entrance		X			\$ 3,162		
E20 - SITE COMPONENTS									
E20.9	1	Replace wallpack fixtures		X			\$ 30,000		
	2	Retrofit soffit luminaires	X			\$ 30,000			

Western View Center ITEMS	Priority Level (Refer to Legend)				Priority Level	Priority Level	Priority Level	Priority Level
	I	II	III	IV	I	II	III	IV
TOTAL - GROUNDS					\$ -	\$ 70,227	\$ 33,162	\$ -
TOTALS BY CATEGORY								
					STRUCTURE/SHELL	\$ 508,376		
					INTERIORS	\$ 131,040		
					SYSTEMS	\$ 315,000		
					ELECTRICAL	\$ 465,000		
					GROUNDS	\$ 103,389		
					FACILITY TOTAL	\$ 1,522,805		
TOTALS BY PRIORITY								
					LEVEL 1	\$ 606,566		
					LEVEL 2	\$ 271,772		
					LEVEL 3	\$ 644,467		
					LEVEL 4	\$ -		
					PRIORITY TOTAL	\$ 1,522,805		

LEGEND:

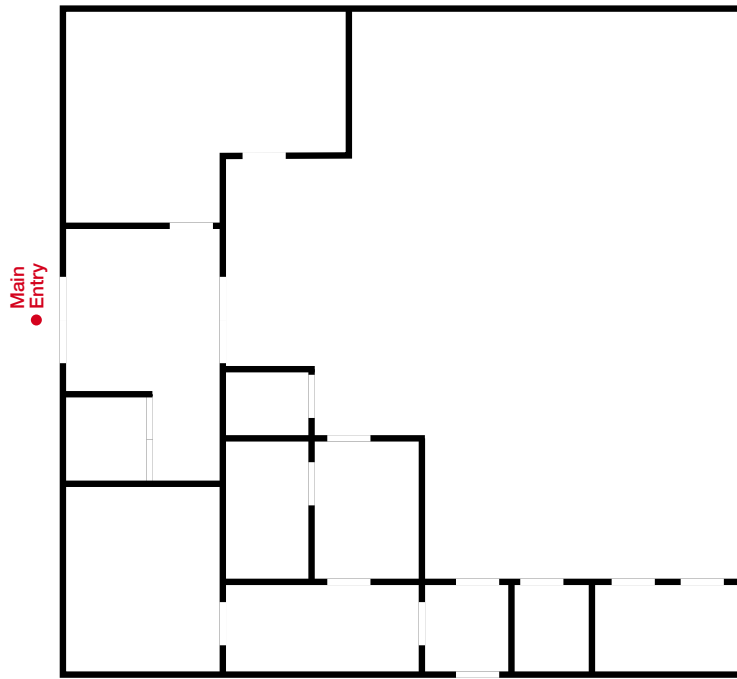
PRIORITY LEVELS

Level I: Highest Priority; Issues that affect the life safety concerns of the occupant, related to notification of occupants to emergency situations and the ability to safely evacuate the facility; subcomponents of Level I include safety concerns such as electrical loads, hazardous materials that might be affected with remodel or modifications, lack of fall protection. Level I items need to be addressed within a 5-year plan.

Level II: Moderate Priority; Issues that are related to the integrity and adequacy of systems within the building to sufficiently withstand a major event and still function; also related are the age of systems or building components that keep day to day operations running without constant repair. Issues may include mechanical, electrical and plumbing systems, fire suppression, lighting and security, as well as flooring, windows doors and other architectural components. Level II Items may be part of a 5-year plan.

Level III: Lower Priority; Issues that may over time affect the day to day maintenance of the building or long term use of the facility. Issues also include access and clearances at equipment and fixtures, access for individuals with disabilities and both indoor and exterior environment quality. Level III Items would be considered in a 5 to 10 year plan.

Level IV: Issues that are related to the aesthetics of both the building's interior and exterior as well as integrity and adequacy of building systems that don't pose any issues or nearing the end of their remaining lifecycles. These may include items such as cabinetry original to the building that have signs of wear or dated finishes but do not have any damage or deterioration. Level IV items would be considered long-term plans (10 years or more).



REFERENCE PLAN
SCALE: NOT TO SCALE

Western View Center | Corvallis School District

OVERALL FLOOR PLAN



Dull Olson Weekes - IBI Group
Architects, Inc.



**District Administrative
Building/Maintenance/Food Service
Warehouse**

1555 SW 35th Street
Corvallis, Oregon 97333



Built: Administrative Building – 1963
Physical Plant – 1963; 1979 modulars
Food Services Warehouse – 1976

Enrollment: N/A

Floor Area: Administrative Building – 32,750 SF
Physical Plant – 35,700 SF
Food Services Warehouse – 5,000 SF

Field Review Team:

Thea Wayburn	Dull Olson Weekes – IBI Group Architects Inc.
Michael Arellano	KPFF Consulting Engineers
Roger Arnold	Glumac
Michael Henning	Glumac
Alex Ridley	Glumac
Dana Troy	Glumac

Report Date: December 2013

Date of Field Visits: June 3-7, 2013

Weather: Sunny, 70's and 80's

Neighborhood: Residential

Site Contacts: Kim Patten, CSD 509J

General Building Description:

The Corvallis School District's administrative offices, maintenance facilities and food service warehouse are all located on a single campus, adjacent to Adams Elementary School and in close proximity to the Oregon State University campus. The administrative offices are home to the school superintendent, business services, facilities and maintenance, technology, food and nutrition services and human resources. All buildings on this single campus are single story facilities with the exception of the administrative offices, which contain some second floor office and storage space and mezzanine storage. Sprinklers were observed in the administrative

The district offices and maintenance facilities are housed in two attached buildings of different construction types. The administration building is a wood-framed single-story structure. Immediately to the east of the administration building are the maintenance offices and warehouse inside a single story concrete tilt-up building. The roof of the maintenance building is wood framed with straight decking and glulam beams supported on the exterior concrete walls and interior steel columns. Various areas within the warehouse contain storage mezzanines which appear to be wood framed, but some steel framing was also utilized. A garage addition to the warehouse occurred at a later date and is located to the southeast of the warehouse. The addition is a single story wood framed structure.

An independent metal building is serves as the food services warehouse and is located south east of the district offices. The metal building has steel bent frames roughly 20 feet on center with Z purlins and metal decking making up the roof structure. End walls are framed with light gage metal studs and partial-height plywood sheathing. The exterior of the building is clad with metal panel.

The main observation was the condition of the site's parking areas. Paving is in poor condition, and tree roots are causing damage to parking lanes. The parking lots share its ingress and egress points with the adjacent Adams Elementary School. Vehicular circulation for the school occurs in the rear of the district's campus, which feeds into the single exit point for the site.

Generally all of these buildings on this campus are in good condition. A full building review of architectural, structural, mechanical, electrical and plumbing components was conducted.

A - STRUCTURE / SHELL			
A10 – STRUCTURE / SUBSTRUCTURE			
Item		Findings	Comments
A10.1	Foundations	<ul style="list-style-type: none"> No issues observed 	
A10.2	Subgrade Enclosures	<ul style="list-style-type: none"> No issues observed 	
A10.3	Structural Systems	<ul style="list-style-type: none"> There are recommendations available for seismic improvements to the District Offices and Maintenance building structure, outlined in the Degenkolb Seismic Evaluation Phase 2 report, dated July 2000. There are recommendations available for seismic improvements to non-structural systems in the District Offices and Maintenance building, outlined in the Degenkolb Seismic Evaluation Phase 2 report, dated July 2000. There are recommendations available for seismic improvements to the Food Services Warehouse, outlined in the ABKJ Inc. School Facility Structural Seismic Analysis report, dated May 1997. 	
RECOMMENDATIONS			
A10.3	Prioritize and perform the recommended improvements to structural systems for the District Offices and Maintenance Building as outlined in the Degenkolb report. The report provides specific recommendations for each of the building areas. Perform recommended seismic improvements to non-structural components in the District Offices and Maintenance Building as outlined in the Degenkolb report. Prioritize and perform the recommended improvements to structural systems for the Food Services Warehouse as outlined in the ABKJ, Inc. report.		
A20 - EXTERIOR COMPONENTS			
Item		Findings	Comments
A20.1	Exterior Walls	<ul style="list-style-type: none"> The paint is peeling on two sides of the maintenance freestanding building. See Figure A20.1. Metal siding on the maintenance storage building is damaged in several areas on two sides. The metal siding at the food services warehouse is in poor condition. 	<ul style="list-style-type: none"> The administration building exterior walls are in very good condition; materials consist of concrete base, wood siding and brick veneer.

A20.2	Doors and Hardware	<ul style="list-style-type: none"> • The exterior doors at the food services warehouse are in poor condition with evidence of rust on the doors and frames. See Figure A20.2.a. • Overhead doors at the shops are in fair to poor condition and need to be replaced. See Figure A20.2.b. • (2) Single man door in shop areas are in fair condition. • The detached maintenance storage building has (1) door in fair condition. • Exterior doors contain wire glass. 	<ul style="list-style-type: none"> • Doors on the administration building have no issues observed. • Several overhead doors are missing weather-stripping, and there are large gaps between slab and door bottom. • Wire glass is no longer permitted in certain building types, such as educational facilities.
A20.3	Windows and Skylights	<ul style="list-style-type: none"> • There are broken windows at the food services warehouse and the detached maintenance buildings. 	<ul style="list-style-type: none"> • The administration building windows appear to be in good condition.
A20.4	Roof	<ul style="list-style-type: none"> • A separate roofing assessment is located in the appendix of this report. 	<ul style="list-style-type: none"> • Roofing is a variety of systems, and range in age from 7 to 27 years.
A20.5	Canopies and Covered Walks	<ul style="list-style-type: none"> • There are several doors lacking weather protection. 	
A20.6	Gutters and Downspouts	<ul style="list-style-type: none"> • The gutters and downspouts are in good condition. 	
A20.7	Trim and Overhangs	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • Painting of the administration building's fascia should be considered a long term recommendation.
A20.8	Ramps and Stairs	<ul style="list-style-type: none"> • Ramp access on the north side does not meet current code. • The detached maintenance offices and storage building are not accessible (accessed by stair). • Several doors on the south side of the building are accessible only by stairs. 	<ul style="list-style-type: none"> • A partial handrail is installed; current code requires continuous handrails on both sides of ramps. • Remodel of this building may trigger other upgrades, such as modifications to exterior door access and ramp compliance.

RECOMMENDATIONS

- A20.1 Remove peeling paint from walls and repaint all (4) walls of the detached maintenance offices. Remove and replace metal siding at the food services warehouse building with new metal siding. Remove damaged siding and replace with similar siding at the maintenance storage building.
- A20.2 If remodel work were to occur at this facility, the replacement of wire glass with tempered glazing may be required. Wire glass may also be replaced at the District's discretion to prevent any issues if glazing is damaged or broken.
Replace (3) single doors and frames at the food services warehouse. Replace (6) overhead doors at the shop area. Replace (2) single door and frame at shop building and (1) single door and frame at detached maintenance storage building.
- A20.3 Replace (2) windows with vinyl faced window systems and tempered glazing at the food service warehouse.
- A20.4 Repair and/or replace roofing systems per roofing assessment recommendations.
- A20.5 Construct canopies at (4) doors located on the administration building.
- A20.7 Repaint all fascia on administration building.

B - INTERIORS			
B10 – INTERIOR CIRCULATION			
Item		Findings	Comments
B10.1	Construction and Exiting	<ul style="list-style-type: none"> • Doors and windows contain wire glass. • All buildings have multiple exits. • (1) exterior door adjacent to the facilities offices does not swing the correct way for exiting. • One of the exterior doors at storage C-001 has a significant drop to the asphalt outside; door has been marked as a “Non-Exit”. 	<ul style="list-style-type: none"> • Wire glass is no longer permitted in certain building types, such as educational facilities.
B10.2	Stairs and Handrails	<ul style="list-style-type: none"> • One stair handrail (near facilities department) does not meet current code requirements. • One stair handrail is constructed from 2x4 wood framing on one side. 	<ul style="list-style-type: none"> • The handrail is shorter than the stair run in both instances. The stairs are for access to upper level/mezzanine storage spaces.
B10.3	Ramps and Elevators	<ul style="list-style-type: none"> • Not Applicable 	
B10.4	Accessibility	<ul style="list-style-type: none"> • The second floor spaces in the administration building are only accessed by stairs. • The main reception desk does not have accessible transaction space. 	<ul style="list-style-type: none"> • The majority of the upper level mezzanine is used for storage. • A significant remodel of this building may trigger other upgrades to this building.
B10.5	Signage	<ul style="list-style-type: none"> • This building lacks compliant room signage as well as directory signage for all the departments housed in this facility. See Figure B10.5. 	
RECOMMENDATIONS			
B10.1	<p>If remodel work were to occur at this facility, the replacement of wire glass with tempered glazing may be required. Wire glass may also be replaced at the District’s discretion to prevent any issues if glazing is damaged or broken. See Sections A20 and B30. Re-install (1) exterior door to swing per path of egress. The door at C-001 should be removed and infilled to avoid potential exiting issues.</p>		
B10.5	<p>Install compliant room signage at all buildings. Install directory signage at main entry to improve way finding. Replace ceiling hung department signage with directional signage.</p>		
B20 – INTERIOR FINISHES			
Item		Findings	Comments
B20.1	Flooring	<ul style="list-style-type: none"> • Carpeting in this facility is mismatched, and generally in fair condition. Carpeting in the maintenance office area and in room #41 is in poor condition. • The flooring in the staff room is asbestos tile flooring. • Carpeting located adjacent to the restrooms is in poor condition. See Figure B20.1.a. • Carpeting and/or entry mat in entry vestibules is in poor condition. • The board room carpeting is stained and in poor condition. See Figure B20.1.b. 	<ul style="list-style-type: none"> • Shop and maintenance floor finishes are in good condition, considering their use and wear. • Hard surface flooring in this facility is vinyl composition tile (VCT), which is in good condition.

B20.2	Ceilings	<ul style="list-style-type: none"> • Rooms #8, #32, #41 and #42 have ceilings in fair condition. • The main entry and open office area ceilings are showing signs of age. 	<ul style="list-style-type: none"> • Ceilings are a combination of 12x12 wood fiber ceiling tiles and 2x4 lay-in acoustical ceiling tiles. • The wood fiber tiles are an older ceiling type not commonly used. • Shop areas do not have ceilings.
B20.3	Ceiling Issues	<ul style="list-style-type: none"> • Water damaged ceiling tile was observed in the detached maintenance building (C-001). It is not known if these are caused by current or earlier water issues. 	
B20.4	Fixed Equipment	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • Board room contains smart board, document camera and projection screen.
B20.5	Walls	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • There were several unfinished walls in the maintenance storage building.
B20.6	Wall Finishes	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • Wall finishes are mainly painted gypsum board. There is some wood paneling in the main open office area. While dated, it is in good condition. • Wall base is 4" high rubber base.
B20.7	Furnishings		<ul style="list-style-type: none"> • The board room furniture was upgraded in 2010. • Most windows have horizontal mini blinds. Window covering is in good condition.

RECOMMENDATIONS

- B20.1 Replace all carpeting in the administration building. Abate asbestos tile flooring in the staff room and replace with VCT flooring and rubber base. Remove carpeting in hallway adjacent to restrooms and install VCT flooring. Remove carpeting and/or entry mat flooring at (2) entry vestibules and replace with walk off mats.
- B20.2 Replace ceilings in (4) offices with 2x4 lay-in acoustical ceiling tile. Replace ceiling in main entry and in main office area.

B30 – INTERIOR COMPONENTS

Item		Findings	Comments
B30.1	Interior Windows	<ul style="list-style-type: none"> • Some interior windows contain wire glass. 	<ul style="list-style-type: none"> • Wire glass is no longer permitted in certain building types, such as educational facilities.
B30.2	Interior Doors and Hardware	<ul style="list-style-type: none"> • Interior doors contain wire glass. • Several doors are in fair condition. • Several interior doors in the food services warehouse have door knobs. 	<ul style="list-style-type: none"> • Wire glass is no longer permitted in certain building types, such as educational facilities. • Interior doors and frames are wood, and while they show varying levels of wear, are

			generally in good condition.
B30.3	Acoustics	<ul style="list-style-type: none"> No issues observed 	
B30.4	Casework	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> There are minimal amounts of fixed casework (mainly in staff room and mail room). While dated, there were no issues observed or significant damage.
B30.5	Security	<ul style="list-style-type: none"> No issues observed 	
B30.6	Other		

RECOMMENDATIONS

- B30.1 If remodel work were to occur at this facility, the replacement of wire glass with tempered glazing may be required. Wire glass may also be replaced at the District's discretion to prevent any issues if glazing is damaged or broken.
- B30.2 See Section B30.1. Replace (4) interior doors in the administration building. Remove (2) door knobs and replace with lever hardware at the food services warehouse.

B40 – TOILET FACILITIES

Item		Findings	Comments
B40.1	Walls and Wall Finishes	<ul style="list-style-type: none"> Finishes are in fair condition. 	<ul style="list-style-type: none"> Walls are painted gypsum board.
B40.2	Floors and Floor Finishes	<ul style="list-style-type: none"> Finishes are in fair condition. 	<ul style="list-style-type: none"> Floors are ceramic tile.
B40.3	Ceilings	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Ceilings are painted gypsum board.
B40.4	Partitions	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Partitions are FRP.
B40.5	Fixtures	<ul style="list-style-type: none"> Refer to Plumbing Section 	<ul style="list-style-type: none"> Sinks and countertops are in fair condition.
B40.6	Accessories	<ul style="list-style-type: none"> No issues observed 	
B40.7	Accessibility	<ul style="list-style-type: none"> Men's and Women's restroom facilities are not accessible. 	<ul style="list-style-type: none"> A separate accessible single stall restroom is located near maintenance department.
B40.8	Other	<ul style="list-style-type: none"> Restroom facilities are undersized. 	

RECOMMENDATIONS

- B40.1 See Section B40.8.
- B40.2 See Section B40.8.
- B40.5 See Plumbing Section.
- B40.8 Remodel and expand Women's and Men's restroom facilities to increase fixture counts and provide accessible stall. Combine existing men's and women's restrooms to create new women's restroom facility. Relocate men's restroom across the hallway in existing office space.

C - SYSTEMS			
C10 - PLUMBING			
Item		Findings	Comments
C10.1	Water Service	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Water pressure unknown. Seven taps, only two are used.
C10.2	Piping	<ul style="list-style-type: none"> Natural gas piping on roof is corroding; it is not painted with weatherproof paint. See Figure C10.2.a. Natural gas piping is supported with rotted wood blocks. See Figure C10.2.b. The gas pipe for the Trane unit on the roof is on wooden sleepers. 	<ul style="list-style-type: none"> One hose bib around the building. Natural gas service at 2 PSI. Single exterior wall hydrant. It is the district's request to replace all domestic hot water and cold water piping.
C10.3	Fixtures	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Water closets are manual flush tanks. Urinals are manual flush valve. Lavatories are manual faucets. Bi-level water coolers.
C10.4	Storm and Overflow Drains	<ul style="list-style-type: none"> There are problems on the grounds with existing tree roots. See Section E10.1. The storm drain on roof does not have grate. 	
C10.5	Water Heater	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Bradford White; 40 gallons; 40 MBH; located in the shop space. Bradford White; 50 gallons; 40 MBH; located in an emergency pan, but the pans are not drained.
RECOMMENDATIONS			
C10.2	Replace all gas piping and supports on the roof. Replace all domestic hot water and cold water piping.		
C10.4	See Section E10.1 for recommendations. Replace storm drain grate.		

C20 - HVAC		
Item	Findings	Comments
C20.1 Mechanical Equipment	<ul style="list-style-type: none"> • A trash can is being used as a weather-proof enclosure for the piping and electrical connections of the Lennox split system condensing unit. See Figure C20.1a. • Mechanical equipment for these buildings is a hodge-podge of equipment and is beyond its useful life, incorrectly installed and not maintained. See Figure C20.1b. • There is insufficient heating in the Food Service Warehouse. 	<ul style="list-style-type: none"> • Seven rooftop units are located on the roof. • 2001 Bryant; serves superintendent suite offices. • 2012 Carrier; serves conference room. • 2001 Bryant; 3 tons; serves north half of administration office. • 2001 Bryant; serves south half of administration office. • 1990's Lennox; serves tech offices. • 1990's Lennox; serves server room. • 1990's Trane; 4 tons; serves facilities/maintenance offices; condensate drips right to the roof; there is a mix of three different types of curbs supporting it. • Three splits next to one another, one serves the MDF room, and the other two serve the server room. 3 ton carrier serves MDF room, 3 ton Fujitsu serves sever room, 2 ton Lennox also serves server room. • Dust collector, in good working order; manual operation. • Paint room exhaust stack. • Various exhaust fans. • Window AC unit in SW office. • Heating and ventilating unit located next to the saw dust bag house. Ductwork is >20 feet of flexible duct. • Centrifugal blower for the duct extraction system located at ceiling of woodshop. • Paint booth is very limited usage. • Gas fired unit heater in the paint shop on DDC controls. • Exhaust hood adjacent to the paint spray booth. Should be analyzed for hazardous storage and whether sanitary is being correctly treated before being released to the sanitary sewer. • Server room has a temperature controlled emergency exhaust fan.

C20.1	Mechanical Equipment		<ul style="list-style-type: none"> Gas fired unit heater in automotive mechanical shop. Motor oil in auto shop has a strong odor. Electric shop: LG through the wall cooling; electric unit heater; water heater 1-2 months old, 20 gallon electric; not sprinkled. Grounds shop: Cold spot through the wall; electric heaters Conference ductwork is above the roof, internally lined. There is not enough room above the ceiling to place the ductwork. Warehouse is naturally ventilated. Ductwork in second floor of shop creates an unusable space with the installation heights. All rooftop units are gas paks. Fin tube (radiator) heaters in the shop; some do not function. Food warehouse fin tube heaters do not work. Electric/Grounds rooms have unit heaters.
C20.2	Air Filtration	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Air filtration is period to the building.
C20.3	Equipment Accessibility	<ul style="list-style-type: none"> There is no permanent/fixed access to the roof. 	<ul style="list-style-type: none"> Roof access is via an A-frame wooden ladder.
C20.4	Air Distribution and Ventilation	<ul style="list-style-type: none"> No issues observed 	
C20.5	Controls	<ul style="list-style-type: none"> Exhaust fans are not on the DDC system. 	<ul style="list-style-type: none"> Rooftop units, fans, unit heaters, and some split systems are on the DDC system. Controls: Delta , 2001 (not up to date)
C20.6	Chillers	<ul style="list-style-type: none"> Not Applicable 	
C20.7	Boiler	<ul style="list-style-type: none"> Not Applicable 	

RECOMMENDATIONS

C20.1	Replace current (trash can) electrical enclosure with NEMA 3R rated electrical assembly and weather-proof roof penetration for refrigerant lines and conduit. Replace all mechanical equipment, ductwork, and associated materials. Provide heating in the Food Service Warehouse.
C20.3	Provide permanent access to roof.
C20.5	Upgrade controls to current version of Delta controls.

C30 – FIRE PROTECTION

Item	Findings	Comments
C30.1	<ul style="list-style-type: none"> Upper portion of wood shop: low hanging pipes, exposed pipes should be up-turned heads. The plumbing area is not sprinkled. 	<ul style="list-style-type: none"> Water connection located at the curb then to a riser. The majority of the building is sprinklered.

C30.2	Water Service and Backflow Prevention	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> It is not clear where the water comes into the building. Backflow preventer replaced 6-7 years ago; located in the building (in room known as "Bowling Alley").
C30.3	System Pressure	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Pressure: 70 PSI.
C30.4	Standpipes	<ul style="list-style-type: none"> No issues observed 	
C30.5	Fire Pump	<ul style="list-style-type: none"> No issues observed 	
C30.6	Fire Sprinkler Pipe Condition	<ul style="list-style-type: none"> No issues observed 	
C30.7	Fire Department Connection	<ul style="list-style-type: none"> No issues observed 	
C30.8	Fire Sprinkler Zoning	<ul style="list-style-type: none"> No issues observed 	
C30.9	Flow Monitoring and Alarm	<ul style="list-style-type: none"> No issues observed 	
C30.10	Hoses and Extinguishers	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Extinguishers are present.
RECOMMENDATIONS			

D - ELECTRICAL		
D10 - ELECTRICAL EQUIPMENT		
Item	Findings	Comments
D10.1 Transformers	<p>Administration Building:</p> <ul style="list-style-type: none"> Electrical service runs beneath Adams Elementary, making it difficult to access. <p>Food Service Warehouse:</p> <ul style="list-style-type: none"> Electrical service runs beneath Adams Elementary, making it difficult to access. 	<ul style="list-style-type: none"> Adams Elementary, Administration Building and Food Service Warehouse are supplied from one transformer in vault at Adams Elementary.
D10.2 Switchgear and Panelboards	<p>Administration Building:</p> <ul style="list-style-type: none"> The majority of panelboards and switchboards are well past their useful lives. The main switchboard is configured with 6 fusible switch disconnects and no main disconnect (the maximum allowable by NEC). There is no room for expansion. See Figure D10.2a. All panelboards and switchboards observed are completely out of spare capacity. See Figure D10.2.b. Electrical rooms do not meet NEC clearance and combustibility requirements. All panels observed were missing up-to-date panel schedules; existing labeling was illegible and conflicting. Most branch panels observed had multiple additional sections installed; these panels were not meant for this and lack input and output lugs. Additional conductors were “sistered” alongside the existing conductors and were cut in numerous situations to fit. See Figure D10.2c. Cloth cable was observed in all sampled panelboards. No equipment grounding conductors or busses were visible in sampled panelboards, see figure D10.2c. <p>Food Service Warehouse:</p> <ul style="list-style-type: none"> All panelboards and switchboards observed are completely out of spare capacity. See Figure D10.2d. Branch circuits are installed using non-metallic cable. See Figure D10.2e. 	<p>Administration Building:</p> <ul style="list-style-type: none"> 1200A, 120Y/208V electrical service fed underground from utility transformer located in Adams Elementary. Equipment is a mix of Square D, Federal Pacific and Cutler Hammer ranging from 30 – 50 years of age. <p>Food Service Warehouse:</p> <ul style="list-style-type: none"> 200A, 120Y/208V electrical service fed underground from utility transformer located in Adams Elementary. Equipment is Square D (circa 1970’s). Cloth cable is no longer acceptable per the current National Electric Code (NEC). Cloth cable is outdated and has the potential to lack grounding capabilities.
D10.3 Lighting	<p>Administration Building:</p> <ul style="list-style-type: none"> Mechanical and electrical rooms appear underlit and are served by incandescent lighting. Existing lighting is at the end of its useful life; large quantities of T12 and incandescent lighting are in use in shop areas. See Figure D10.3a. <p>Food Service Warehouse:</p>	<p>Administration Building:</p> <ul style="list-style-type: none"> Offices, hallways and meeting rooms are lit by 1’ x 4’ surface mount wrap luminaires retrofitted to use T8 lamps, mounted in continuous rows; every other luminaire is disconnected. Compact fluorescent down-lighting installed in lobby.

		<ul style="list-style-type: none"> • Almost exclusively served by T12 fluorescent strip fixtures; fixtures likely installed with ballasts containing PCB. See Figure D10.3b. • Incandescent lighting is installed in restroom. 	<ul style="list-style-type: none"> • Shop lighting is a mix of T12 and T8 fluorescent lighting. <p>Food Service Warehouse:</p> <ul style="list-style-type: none"> • T8 and T12 fluorescent lighting; chain hung strip fixtures throughout; incandescent lighting in restroom.
D10.4	Lighting Controls	<p>Administration Building:</p> <ul style="list-style-type: none"> • There is a small quantity of standalone automated controls. <p>Food Service Warehouse:</p> <ul style="list-style-type: none"> • No automated controls are installed. 	<p>Administration Building:</p> <ul style="list-style-type: none"> • Open area and hallway lighting is switched via circuit breaker. • Office, shop and conference room lighting are switched in groups. <p>Food Service Warehouse:</p> <ul style="list-style-type: none"> • Lighting is switched in groups.
D10.5	Back-up and Emergency Power	<ul style="list-style-type: none"> • Not Applicable 	
D10.6	Egress and Emergency Lighting	<ul style="list-style-type: none"> • None installed 	
D10.7	Exit Signage	<p>Administration Building:</p> <ul style="list-style-type: none"> • Only photo luminescent type is provided; adhesive is failing and spacing and placement is inadequate. See Figure D10.7. <p>Food Service Warehouse:</p> <ul style="list-style-type: none"> • Only photo luminescent type provided; adhesive is failing and spacing and placement is inadequate. 	<p>Administration Building:</p> <ul style="list-style-type: none"> • Photo luminescent installed at entrances. <p>Food Service Warehouse:</p> <ul style="list-style-type: none"> • Photo luminescent installed at entrances.
D10.8	Sensors	<ul style="list-style-type: none"> • No sensors observed; does not meet current Oregon State Energy Code. 	

RECOMMENDATIONS

- D10.1 Provide new, independent electrical services to Administration Building and Food Service Warehouse.
- D10.2 Replace Administration Building main switchboard with new switchboard provided with at least 12 circuit breaker branch disconnects and a 1200A main circuit breaker. Replace all multi-section branch panels in Administration Building with new panels; provide two or three 42 pole sections as required to accommodate existing circuits with 25% spare capacity. Provide panels with feed through style lugs. Ensure at least 36" clear in front of all electrical equipment at all times; rework Administration Building main electrical room such that door swings outward from room. Replace cloth cable where possible.
- D10.3 Install equipment grounding conductors and busses in all panelboards and branch circuits where possible. Replace all existing non-metallic cable wiring with EMT conduit and armored cable as appropriate. Install new 2 section (84 circuit), 200A electrical panel at food service warehouse. Replace all mechanical and electrical room lighting with T8 utility strip luminaires; extend as needed to meet IESNA recommendations. Replace or retrofit remaining T12 and incandescent lighting in Administration Building with high performance T8 lamps and ballasts. Replace T12 strip luminaires in food service warehouse with high performance T8 equivalents. Replace or retrofit incandescent lighting with compact fluorescent (CFL).
- D10.4 Install a building lighting control system for the Administration Building (Lutron Quantum system or equivalent). Install standalone vacancy lighting controls in Food Service Warehouse.
- D10.6 Install battery packs in existing fixtures as required along egress paths in Administration Building.
- D10.7 Replace all existing photo luminescent exit signs with LED type with back-up batteries.
- D10.8 Install workstation occupancy sensors to control plug loads at workstations and offices.

D20 – SAFETY / SECURITY			
Item		Findings	Comments
D20.1	Fire Alarm	Administration Building: <ul style="list-style-type: none"> No issues observed Food Service Warehouse: <ul style="list-style-type: none"> Existing Gamewell system expander panel reports to fire alarm system at Adams Elementary. 	<ul style="list-style-type: none"> Administration Building System: Siemens Food Service Building System: Gamewell/Zans system (period to facility)
D20.2	Smoke Detection	<ul style="list-style-type: none"> No issues observed 	
D20.3	Pull Stations	<ul style="list-style-type: none"> No issues observed 	
D20.4	Annunciation	Administration Building: <ul style="list-style-type: none"> No issues observed Food Service Warehouse: <ul style="list-style-type: none"> None installed 	
D20.5	Addressable Zones and System	Administration Building: <ul style="list-style-type: none"> No issues observed Food Service Warehouse: <ul style="list-style-type: none"> None installed 	
D20.6	Monitoring	<ul style="list-style-type: none"> No issues observed 	
D20.7	Access Control	Administration Building: <ul style="list-style-type: none"> No issues observed Food Service Warehouse: <ul style="list-style-type: none"> None installed 	
D20.8	Intrusion	<ul style="list-style-type: none"> No issues observed 	
D20.9	Video Surveillance	<ul style="list-style-type: none"> None installed 	
RECOMMENDATIONS			
D30 – TECHNOLOGY COMMUNICATIONS			
Item		Findings	Comments
D30.1	Paging and Intercom – Head End Condition	<ul style="list-style-type: none"> None installed 	
D30.2	Master Clock	<ul style="list-style-type: none"> None installed 	
D30.3	Infrastructure	<ul style="list-style-type: none"> None installed 	
D30.4	Speakers	<ul style="list-style-type: none"> None installed 	
D30.5	Coverage	<ul style="list-style-type: none"> None installed 	
D30.6	Clock System	<ul style="list-style-type: none"> None installed 	
D30.7	Clock – Head End	<ul style="list-style-type: none"> None installed 	
RECOMMENDATIONS			

E- GROUNDS			
E10 – SITE CIRCULATION AND PARKING			
Item		Findings	Comments
E10.1	Parking Lots	<ul style="list-style-type: none"> The parking lot is in poor condition. See Figures E10.1.a and b. Mature trees in landscaped islands have caused damage in the parking lot. See Figure E10.1.c. Asphalt is badly cracked in the parking lot in front of the main entrance. Parking stall striping is faded. 	<ul style="list-style-type: none"> This site has adequate parking lots (and parking stalls) in various locations, including the parking area adjacent to the site (former Western View MS). This parking lot area is in good to fair condition. Parking near maintenance is in good to fair condition. A further investigation of storm water issues is recommended. This is not in the scope of this report.
E10.2	Site Signage/ Accessories	<ul style="list-style-type: none"> This site does not have a site sign. The flagpole is rusted and needs replacement. 	
E10.3	Vehicular Circulation	<ul style="list-style-type: none"> There are shared ingress and egress points with the adjacent Adams Elementary school. School traffic must loop behind the administration building to exit the site. There is an asphalt drive around the entire site. 	
E10.4	Curbs and Sidewalks	<ul style="list-style-type: none"> Curbs are in fair to poor condition; curbs are missing in several areas. See Figure E10.4. Sidewalks are in good condition. 	
E10.5	Accessibility	<ul style="list-style-type: none"> There is hard surface material around the building's perimeter. Several exterior doors are not accessible. Accessible parking stalls are located at building's entry but there are not designated cross walk or sidewalk. 	
E10.6	Bikes and Bike Parking	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> There is (1) multi-bike bike rack located in a parking stall adjacent to the main entrance. The bike rack is neither covered nor fenced in.
RECOMMENDATIONS			
E10.1	Remove asphalt paving in main parking lot. Remove trees in center island in parking lot. Repave and restripe parking lot to match existing quantities of stalls. Restripe parking and lanes in all parking areas. Remediate storm drain issues (scope of work not part of this report).		
E10.2	Install site sign. Replace flagpole.		
E10.4	Remove and replace all curbs in parking lot located at front of administration building.		
E10.5	Add ramps to (2) exterior door locations.		
E20 - SITE COMPONENTS			
Item		Findings	Comments
E20.1	Fields	<ul style="list-style-type: none"> Not Applicable 	
E20.2	Landscaping	<ul style="list-style-type: none"> Tree roots have caused damaged to 	<ul style="list-style-type: none"> There is some landscaping near the

		adjacent parking lot areas, see E10.1.	main entry area, and at the street. These appear in good condition.
E20.3	Irrigation	<ul style="list-style-type: none"> • None observed 	
E20.4	Site Buildings	<ul style="list-style-type: none"> • This complex houses several site storage buildings, which are in good condition. 	
E20.5	Site Security	<ul style="list-style-type: none"> • No issues observed 	
E20.6	Fencing	<ul style="list-style-type: none"> • Not Applicable 	<ul style="list-style-type: none"> • Tennis courts are fenced.
E20.7	Playground Equipment	<ul style="list-style-type: none"> • Not Applicable 	
E20.8	Play Surfaces	<ul style="list-style-type: none"> • Not Applicable 	<ul style="list-style-type: none"> • Although this is not an educational facility, it was observed to have large fields behind the maintenance buildings as well as tennis courts. If usage of adjacent building changed resurfacing the tennis courts is recommended.
E20.9	Site Lighting	<p>Administration Building:</p> <ul style="list-style-type: none"> • All site lighting is high intensity discharge type. • There is insufficient lighting at the parking lots. See Figure E20.9a. <p>Food Service Warehouse:</p> <ul style="list-style-type: none"> • There is insufficient perimeter lighting. See Figure E20.9b. • Existing lighting is all incandescent. 	<p>Administration Building:</p> <ul style="list-style-type: none"> • Mercury vapor and high pressure sodium site lighting using wall packs and area luminaires are installed at fleet and visitor parking areas as well as around entrances. <p>Food Service Warehouse:</p> <ul style="list-style-type: none"> • Incandescent wall lighting is located near the entrances.
E20.10	Grading and Drainage	<ul style="list-style-type: none"> • See Section E10.1. 	

RECOMMENDATIONS

- E20.2 See section E10.1.
- E20.8 Resurface (4) tennis courts.
- E20.9 Replace HID site lighting with LED equivalent luminaires. Replace and extend parking lot lighting as required to meet IESNA recommendations; use high efficiency ceramic metal halide or LED full cutoff luminaires. Replace and extend perimeter lighting at the Food Service Warehouse as required to meet IESNA requirements. Replace all remaining incandescent lighting with LED retrofit devices or install new fixtures.

IMAGES

Figure A20.1 – Peeling siding



Figure A20.2.a – Rusted door



Figure A20.2.b – Overhead Doors



Figure B10.5 - Signage



Figure B20.1.a – Hallway carpeting



Figure B20.1.b – Board room carpet



Figure C10.2 – Rusting pipes/rotted supports



Figure C20.1.a - Current electrical protection



Figure C20.1.b – Current mechanical system



Figure D10.2.a – Electrical Room



Figure D10.2.b - Multi-section branch panel



Figure D10.2.c – Existing branch panel conditions



Figure D10.2.d – Existing electrical panel



Figure D10.3.a – Administration building lighting



Figure D10.3.b – Food service warehouse light



Figure D10.7 – Photoluminescent exit sign



Figure E10.1.a – Parking Lots



Figure E10.1.b – Parking Lots



Figure E10.1.c – Tree root damage



Figure E10.4 – Missing curb



Figure E20.9.a – Administration building parking lot lighting



Figure E20.9.b – Perimeter lighting



District Administrative Offices/Maintenance/Food Service Warehouse ITEMS	Priority Level (Refer to Legend)				Priority Level I	Priority Level II	Priority Level III	Priority Level IV
	I	II	III	IV				
A - STRUCTURE/SHELL								
A10 - STRUCTURE/SUBSTRUCTURE								
A10.3	1	Complete seismic upgrades per previous reports for all buildings	X			\$ 1,383,396		
A20 - EXTERIOR COMPONENTS								
A20.1	1	Maintenance Building: remove peeling paint and re-paint (4) walls		X		\$ 6,862		
	2	Food Service Warehouse: remove and replace metal siding with new metal siding		X		\$ 4,269		
	3	Maintenance Storage: remove damaged siding and replace with new siding			X		\$ 5,929	
A20.2	1	Food Service Warehouse: replace (2) exterior doors and (1) overhead door	X			\$ 16,966		
	2	Administration Building: replace (6) overhead doors at maintenance area	X			\$ 98,480		
	3	Administration Building: replace (2) man doors at maintenance		X		\$ 4,791		
	4	Administration Building: replace man door and frame at maintenance storage building		X		\$ 2,395		
	5	Administration Building: replace wire glazing in exterior doors		X		\$ 1,062		
A20.3	1	Food Service Warehouse: replace (2) windows		X		\$ 2,473		
A20.4	1	Administration Building: reseal roof	X			\$ 415,000		
	2	Food Service Warehouse: replace roof			X		\$ 56,000	
	3	Grounds Building: Replace roof		X		\$ 10,200		
A20.6	1	Administration Building: construct canopies at (4) exterior doors		X		\$ 6,325		
A20.7	1	Administration Building: repaint all fascia		X		\$ 2,404		
TOTAL - STRUCTURE/SHELL					\$ 415,000	\$ 1,498,842	\$ 40,781	\$ 61,929
B - INTERIORS								
B10 - INTERIOR CIRCULATION								
B10.1	1	Administration Building: re-install one exterior door to correct exiting	X			\$ 1,106		
	2	Electrical Shop: Infill door at C-001			X		\$ 1,012	
B10.5	1	Administration Building: add compliant room signage throughout facility	X			\$ 28,482		
	2	Administration Building: install directional signage	X			\$ 11,543		
B20 - INTERIOR FINISHES								
B20.1	1	Administration Building: replace carpeting	X			\$ 88,395		
	2	Abate staff room flooring and replace with VCT and new rubber base	X			\$ 4,712		
	3	Remove carpeting adjacent to existing restrooms and replace with VCT flooring	X			\$ 1,185		
	4	Remove existing flooring at both entry doors and install permanent walk off mats in both vestibules	X			\$ 3,278		
B20.2	1	Administration Building: replace ceiling in (4) offices		X		\$ 4,585		
	2	Administration Building: replace ceiling in main entry and office areas		X		\$ 45,856		
B30 - INTERIOR COMPONENTS								
B30.1	1	Administration Building: replace all interior wire glazing		X		\$ 1,062		
B30.2	1	Administration Building: replace (4) interior		X		\$ 9,582		
	2	Food Service Warehouse: remove (2) door knobs and replace with compliant hardware	X			\$ 2,008		
B40 - TOILET FACILITIES								
B40.8	1	Expand women's restroom and relocate/expand men's restroom facilities	X			\$ 108,067		
TOTAL - INTERIORS					\$ 1,106	\$ 247,670	\$ 61,085	\$ 1,012
C - SYSTEMS								
C10 - PLUMBING								
C10.2	1	Replace all gas piping and supports on the roof	X			\$ 33,750		
	2	Replace all domestic hot water and cold water piping		X		\$ 528,750		
C10.4	1	Replace storm drain grate	X			\$ 1,250		
C20 - HVAC								

ITEMS	District Administrative Offices/Maintenance/Food Service Warehouse	Priority Level (Refer to Legend)				Priority Level I	Priority Level II	Priority Level III	Priority Level IV
		I	II	III	IV				
		C20.1	1 Provide rated electrical enclosure/assembly and weatherproof penetration for refrigerant lines and conduit	X					
	2 Replace all mechanical equipment, ductwork, and associated materials		X				\$ 2,160,000		
C20.3	1 Provide permanent access to the roof		X			\$ 6,250			
C20.5	1 Upgrade controls		X			\$ 156,250			
TOTAL - SYSTEMS						\$ 40,000	\$ 2,851,250	\$ -	\$ -

D - ELECTRICAL

D10 - ELECTRICAL EQUIPMENT									
D10.1	1 Provide new, independent electric services for all buildings		X				\$ 300,000		
D10.2	1 Replace main switchboard		X				\$ 75,000		
	2 Administration Building Replace multi-section branch panels		X				\$ 120,000		
	3 Administration Building: Rework main electrical room to meet national electrical code	X				\$ 150,000			
	4 Replace cloth cable where accessible		X				\$ 100,000		
	5 Install equipment grounding means		X				\$ 75,000		
	5 Food Service Warehouse: remove non-metallic cable	X				\$ 50,000			
	6 Food Service Warehouse: replace main electrical panel		X				\$ 45,000		
D10.3	1 Replace mechanical and electrical room lighting		X				\$ 20,000		
	2 Replace and retrofit T12 lighting in both buildings		X				\$ 2,500		
D10.4	1 Install retrofit lighting controls		X				\$ 50,000		
D10.6	1 Install egress lighting and retrofit existing luminaires with battery packs	X				\$ 90,000			
D10.7	1 Replace all exit signs with LED meeting intensity criteria	X				\$ 30,000			
D10.8	1 Administration Building install workstation occupancy sensors			X				\$ 40,000	
D20 - SAFETY/SECURITY									
D20.1	1 Food Service Warehouse: install standalone fire alarm system		X				\$ 75,000		
TOTAL - ELECTRICAL						\$ 320,000	\$ 862,500	\$ 40,000	\$ -

E - GROUNDS

E10 - SITE CIRCULATION AND PARKING									
E10.1	1 Remove asphalt paving in main parking lot, repair tree issues and construct new asphalt paving parking lot; provide accessible stalls and crosswalk		X				\$ 170,814		
	2 Restripe all parking stalls on campus			X				\$ 1,565	
	3 Remediate storm drain issues (this scope of work requires further investigation and is not included in this report)								
E10.2	1 Install site sign			X				\$ 3,162	
	2 Replace flag pole			X				\$ 6,008	
E10.4	1 Remove and replace all curbs in main parking lot		X				\$ 11,574		
E10.5	1 Add ramps and guardrails at (2) exterior door locations			X				\$ 12,238	
E20 - SITE COMPONENTS									
E20.8	1 Re-surface (4) tennis courts				X				\$ 46,646
E20.9	1 Administration Building: replace high intensity discharge site lighting			X				\$ 150,000	
	2 Administration Building replace and extend parking lighting		X				\$ 150,000		
	3 Food Service Warehouse: replace food service building perimeter lighting		X				\$ 100,000		
TOTAL - GROUNDS						\$ -	\$ 432,388	\$ 172,973	\$ 46,646

TOTALS BY CATEGORY		
	STRUCTURE/SHELL	\$ 2,016,552
	INTERIORS	\$ 310,873

District Administrative Offices/Maintenance/Food Service Warehouse ITEMS	Priority Level (Refer to Legend)				Priority Level	Priority Level	Priority Level	Priority Level
	I	II	III	IV	I	II	III	IV
	SYSTEMS							\$ 2,891,250
	ELECTRICAL							\$ 1,222,500
	GROUND							\$ 652,007
	FACILITY TOTAL							\$ 7,093,182
TOTALS BY PRIORITY								
	LEVEL 1							\$ 776,106
	LEVEL 2							\$ 5,892,650
	LEVEL 3							\$ 314,839
	LEVEL 4							\$ 109,587
	PRIORITY TOTAL							\$ 7,093,182

LEGEND:

PRIORITY LEVELS

Level I: Highest Priority; Issues that affect the life safety concerns of the occupant, related to notification of occupants to emergency situations and the ability to safely evacuate the facility; subcomponents of Level I include safety concerns such as electrical loads, hazardous materials that might be affected with remodel or modifications, lack of fall protection. Level I items need to be addressed within a 5-year plan.

Level II: Moderate Priority; Issues that are related to the integrity and adequacy of systems within the building to sufficiently withstand a major event and still function; also related are the age of systems or building components that keep day to day operations running without constant repair. Issues may include mechanical, electrical and plumbing systems, fire suppression, lighting and security, as well as flooring, windows doors and other architectural components. Level II Items may be part of a 5-year plan.

Level III: Lower Priority; Issues that may over time affect the day to day maintenance of the building or long term use of the facility. Issues also include access and clearances at equipment and fixtures, access for individuals with disabilities and both indoor and exterior environment quality. Level III Items would be considered in a 5 to 10 year plan.

Level IV: Issues that are related to the aesthetics of both the building's interior and exterior as well as integrity and adequacy of building systems that don't pose any issues or nearing the end of their remaining lifecycles. These may include items such as cabinetry original to the building that have signs of wear or dated finishes but do not have any damage or deterioration. Level IV items would be considered long-term plans (10 years or more).

OVERALL FLOOR PLAN



OFFICE MAIN FLOOR
SCALE: NOT TO SCALE

OFFICE SECOND FLOOR
SCALE: NOT TO SCALE

CSD Offices | Corvallis School District



Dull Olson Weekes - IBI Group
Architects, Inc.



Dixie School

33461 SE Peoria Rd
Corvallis, OR 97333

Built: 1930; additions in 1950 and 1967;
1971 modular added

Enrollment: N/A

Floor Area: 15,155 SF



Field Review Team:

Earl Carson	Dull Olson Weekes – IBI Group Architects
Jonathan Estabrook	KPFF Consulting Engineers
Roger Arnold	Glumac
Michael Henning	Glumac
Alex Ridley	Glumac
Dana Troy	Glumac

Report Date: December 2013

Date of Field Visits: June 3-7, 2013

Weather: Sunny, 70's and 80's

Neighborhood: Agricultural

Site Contacts: Angie Buzo
Kim Patten, CSD 509J

General Building Description:

Dixie Elementary School is a small rural school that is currently being used by the School District for Early Intervention Programs that serves special needs students throughout entire School District. The school is surrounded by farm land, but is located on a major road with easy access just outside of the City of Corvallis. The site has two large playfields and play areas that are in good condition; however the parking area at the front of the building is in poor condition with many large cracks and damage by tree roots. The bus drop off is a gravel turnaround to the north of the main building with no ADA compliance.

The original building is single story timber framed on unreinforced concrete stem walls and strip footings (similar to housing construction at that time). The 1967 building is rectangular in shape with a 26 foot high multipurpose room in the western corner and 14 foot high everywhere else. There is also a covered play area off the north eastern end. The roof is a combination of truss joists and 2x joists with plywood sheathing. The walls are timber framed stud walls with plywood sheathing clad in brick on concrete strip footings. The covered play area is framed with 2x joists on timber beams spanning from the classroom wall to steel columns and reinforced

masonry walls. It is plywood sheathed in the same plane as the classrooms. Lateral loads are taken from the roof diaphragm into wood sheathed shear walls. A freestanding covered walkway is located between the two buildings and is constructed of 2x sheathing over 4x wood beams supported on embedded steel columns.

The original buildings and additions are connected by a covered walk that is in poor condition and not ADA compliant. The 1930 building is currently used as a student evaluation center and has no access or toilet facilities for students in wheelchairs. The 1950's addition to this building is currently being used as staff offices.

The 1967 building contains the main office, gymnasium, kitchen and classroom building and is in good condition for of building this age. The kitchen is an older facility that is currently not being used. The School District does not feed students from this facility, but does share the space with the Head Start program which makes use of the kitchen.

A full building review of architectural, structural, mechanical, electrical and plumbing components was conducted.

A - STRUCTURE / SHELL			
A10 – STRUCTURE / SUBSTRUCTURE			
Item		Findings	Comments
A10.1	Foundations	<ul style="list-style-type: none"> No issues observed 	
A10.2	Subgrade Enclosures	<ul style="list-style-type: none"> Holes in crawl space of 1930's building enable rodents to live under building. See Figure A10.2. 	<ul style="list-style-type: none"> Rodents pose a health hazard.
A10.3	Structural Systems	<ul style="list-style-type: none"> Roof vents in 1930's building have been covered up. See Figure A10.3. There are recommendations available for seismic improvements to the building structure, outlined in the Degenkolb Seismic Evaluation Phase 2 report, dated July, 2000. There are recommendations available for seismic improvements to non-structural systems, outlined in the Degenkolb Seismic Evaluation Phase 2 report, dated July, 2000. 	<ul style="list-style-type: none"> No seismic improvements have been completed to date. Framing should be monitored by the District to make sure it is not compromised structurally.
RECOMMENDATIONS			
A10.2	Properly secure the crawl space of the 1930 portion of this facility to prevent rodent infiltration.		
A10.3	<p>Uncover roof vents and install netting to prevent insects and birds from nesting in the roof and allow the roof space to breath.</p> <p>Prioritize and perform the recommended improvements to structural systems as outlined in the Degenkolb Seismic Evaluation Phase 2 report. The report provides specific recommendations. These include but are not limited to, improved connections tying diaphragms to shear walls, and anchoring shear walls adequately to the foundations.</p> <p>Perform recommended seismic improvements to non-structural components as outlined in the Degenkolb Seismic Evaluation Phase 2 report. These include, but are not limited to, anchoring and strapping of mechanical and electrical equipment, and bracing suspended equipment and ceiling.</p>		
A20 - EXTERIOR COMPONENTS			
Item		Findings	Comments
A20.1	Exterior Walls	<ul style="list-style-type: none"> The brick at the classroom wing in good condition, but wood siding at the multi-purpose room is in poor condition from weather exposure. 	<ul style="list-style-type: none"> The building was recently painted (Summer 2013).
A20.2	Doors and Hardware	<ul style="list-style-type: none"> Wood doors on the main building have plastic laminate finishes that swell from weather exposure; door hardware is not ADA compliant. 	<ul style="list-style-type: none"> Some original exterior doors and hardware have been replaced.
A20.3	Windows and Skylights	<ul style="list-style-type: none"> Windows are older, inefficient window systems. 	<ul style="list-style-type: none"> Windows are a combination of wood frame or steel frame single pane window systems. Some of the wood frame windows are painted shut.
A20.4	Roof	<ul style="list-style-type: none"> A separate roofing assessment is located in the appendix of this report. 	<ul style="list-style-type: none"> Roofing is a combination of types/systems, and ranges in age from 16-20 years old.

A20.5	Canopies and Covered Walks	<ul style="list-style-type: none"> Covered walk with steel posts and wood deck and beams are in poor condition. See Section B30.6. 	
A20.6	Gutters and Downspouts	<ul style="list-style-type: none"> Some sheet metal gutters on the main building are in poor condition and patched with PVC downspouts. Other downspouts are PVC downspouts that are not adequately attached to building, in some cases rerouted to covered play. See Figure A20.6. 	
A20.7	Trim and Overhangs	<ul style="list-style-type: none"> Wood fascia exposed to the weather is peeling and in poor condition. The coping (cap) at the multi-purpose room is showing extreme weather exposure. 	<ul style="list-style-type: none"> The trim and overhangs were recently painted (Summer 2013).

RECOMMENDATIONS

- A20.2 Replace (9) exterior wood doors with new hollow metal or storefront doors and code compliant hardware.
- A20.3 Replace wood framed windows in 1930's evaluation building with new aluminum storefront system with thermal glazing. Replace the steel framed single-glazed in the 1950's office and 1967 main building with aluminum storefront system with thermal glazing.
- A20.4 Repair and/or replace roofing systems per roofing assessment recommendations.
- A20.5 Replace the covered walk connecting two buildings with a new steel framed cover integrated with at ADA ramp for better access for students in wheelchairs.
- A20.6 Remove existing downspouts and replace with prefinished sheet metal downspouts.
- A20.7 Replace all exposed fascia wood boards prefinished sheet metal fascia.

B - INTERIORS			
B10 – INTERIOR CIRCULATION			
Item		Findings	Comments
B10.1	Construction and Exiting	<ul style="list-style-type: none"> The multi-purpose room is partitioned off to create additional storage that blocks full egress from the space and is not code compliant. Doors and windows contain wire glass. 	<ul style="list-style-type: none"> Wire glass is no longer permitted in educational facilities.
B10.2	Stairs and Handrails	<ul style="list-style-type: none"> Not Applicable 	
B10.3	Ramps and Elevators	<ul style="list-style-type: none"> Not Applicable 	
B10.4	Accessibility	<ul style="list-style-type: none"> There are no ADA door actuators in the entire facility. 	
B10.5	Signage	<ul style="list-style-type: none"> This facility lacks compliant signage. 	
RECOMMENDATIONS			
B10.1	<p>If remodel work were to occur at this facility, the replacement of wire glass with tempered glazing may be required. Wire glass may also be replaced at the District's discretion to prevent any issues if glazing is damaged or broken. See Sections A20 and B30.</p> <p>Construct a storage room that should be provided elsewhere in the building so that full use of the multi-purpose room can be restored to code compliance.</p>		
B10.4	<p>Provide ADA door actuators where students come into the facilities and at main paths of egress.</p>		
B10.5	<p>Provide compliant signage throughout the facility.</p>		
B20 – INTERIOR FINISHES			
Item		Findings	Comments
B20.1	Flooring	<ul style="list-style-type: none"> Vinyl Composition Tile (VCT) in halls, classrooms and multi-purpose room are in poor condition, showing cracks and water damage in many locations. See Figure B20.1. Walk-off mats at hallway exit doors a tripping hazard. 	
B20.2	Ceilings	<ul style="list-style-type: none"> The multi-purpose room ceiling has been patched and repaired many times. See Figure B20.2. A new lay-in acoustical ceiling would make access to building systems more convenient. 	<ul style="list-style-type: none"> Entire facility consists of 12x12 painted wood fiber ceiling tiles that have been painted and appear to be in good condition.
B20.3	Ceiling Issues	<ul style="list-style-type: none"> No issues observed 	
B20.4	Fixed Equipment	<ul style="list-style-type: none"> Classroom marker boards are old. There are no smart board projectors in the facility. 	<ul style="list-style-type: none"> This facility is not currently used by the school district as an instructional facility.
B20.5	Walls	<ul style="list-style-type: none"> No issues observed 	

B20.5	Walls	<ul style="list-style-type: none"> No issues observed 	
B20.6	Wall Finishes	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> 1930/1950 evaluation building: painted gypsum plaster in good condition 1967 main building: vertical wood siding in the halls that are scratched in some locations, but in good condition. Classrooms are painted gypsum plaster in good condition.
B20.7	Furnishings	<ul style="list-style-type: none"> All window coverings are in poor condition. See Figure B20.7. 	<ul style="list-style-type: none"> The windows coverings are a mix of roller shades and horizontal blinds.

RECOMMENDATIONS	
B20.1	Patch and repair existing concrete slab and provide new VCT flooring in the 1976 building in the halls, classrooms and multi-purpose room. Install fixed walk off mats at (3) egress door locations. Install fixed walk off mats at (3) egress doors.
B20.2	Install a new suspended ceiling system in the entire facility to make it easier to service new building systems in the future.
B20.4	Provide new marker boards and smart board projectors in classrooms and meeting room.

B30 – INTERIOR COMPONENTS

Item	Findings	Comments	
B30.1	Interior Windows	<ul style="list-style-type: none"> Windows contain wire glass. 	<ul style="list-style-type: none"> Interior windows have wood frames. Wire glass is no longer permitted in educational facilities.
B30.2	Interior Doors and Hardware	<ul style="list-style-type: none"> Most door hardware consists of old door knobs in poor condition and not ADA compliant. Doors contain wire glass. 	<ul style="list-style-type: none"> Door and frames are constructed of wood. Wire glass is no longer permitted in educational facilities.
B30.3	Acoustics	<ul style="list-style-type: none"> Multi-purpose room could use some acoustic attenuation. 	
B30.4	Casework	<ul style="list-style-type: none"> Casework in the offices is in poor condition. See Figure B30.4. 	<ul style="list-style-type: none"> Painted wood cabinets with plastic laminate countertops in classrooms are old, but in good condition.
B30.5	Security	<ul style="list-style-type: none"> The main office is in the middle of the facility with no visibility to the parking lot and no clear entry to the facility. Glazing in doors does not have shades or blinds. 	
B30.6	Other		

RECOMMENDATIONS	
B30.1	If remodel work were to occur at this facility, the replacement of wire glass with tempered glazing may be required. Wire glass may also be replaced at the District’s discretion to prevent any issues if glazing is damaged or broken.
B30.2	See Section B30.1.
B30.3	Add 500 SF of acoustic wall panels to multi-purpose room.

B30.4	Replace casework in offices and meeting rooms with new plastic laminate casework. Replace casework, countertops and backsplashes in classrooms with new plastic laminate casework; provide ADA compliant sinks.
B30.5	Remodel the main office to provide a reception where the current staff room is and windows to the outside, in conjunction with a new main entry canopy. Add shades or blinds to doors with glazing.

B40 – TOILET FACILITIES

Item		Findings	Comments
B40.1	Walls and Wall Finishes	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> 1967 main building: full-height moisture-resistant paneling.
B40.2	Floors and Floor Finishes	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> 1930/1950 evaluation building: Sheet vinyl in good condition. 1967 main building: ceramic tile floor that has been patched and repaired.
B40.3	Ceilings	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> All toilet rooms consist of 1x1 painted acoustic tile that have been painted and appear to be in good condition, but are not well suited for this space.
B40.4	Partitions	<ul style="list-style-type: none"> Facilities lack ADA stalls. 	<ul style="list-style-type: none"> Partitions are metal.
B40.5	Fixtures	<ul style="list-style-type: none"> See Plumbing Section 	<ul style="list-style-type: none"> Fixtures look dated and not ADA compliant.
B40.6	Accessories	<ul style="list-style-type: none"> No issues observed 	
B40.7	Accessibility	<ul style="list-style-type: none"> 1930/1950 evaluation building: not ADA accessible. 1967 main building: changing table is in poor condition and there is no power for the hoist. There are no separate staff toilets. 	

RECOMMENDATIONS

B40.7	Convert two toilet rooms in the main building into two ADA compliant staff toilets that do not currently exist at this facility. Remodel main building toilet rooms with new finishes, gypsum board ceilings, new fixtures, partitions and power for a motorized changing table.
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C - SYSTEMS			
C10 - PLUMBING			
Item		Findings	Comments
C10.1	Water Service	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> The building is on a well system. There is an underground storage tank for both buildings plus an above ground storage tank for both buildings. The building is on a septic system.
C10.2	Piping	<ul style="list-style-type: none"> Domestic hot water piping is period to the building. 	<ul style="list-style-type: none"> Natural gas service for the main building is at the northeast side. A sump pump is located in boiler room for sanitary.
C10.3	Fixtures	<ul style="list-style-type: none"> All restroom fixtures and drinking fountains are period to the building. There is no grease interceptor in the kitchen. 	<ul style="list-style-type: none"> Adult water closets: wall hung manual flush valve Children water closets: floor mount manual flush tank. Lavatories are all manual. No urinals present in the building. Four compartment sink in kitchen with no grease interceptor.
C10.4	Storm and Overflow Drains	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Exterior gutters and downspouts are present which connect to an underground storm system.
C10.5	Water Heater	<ul style="list-style-type: none"> Domestic hot water is provided off of main boiler. 	<ul style="list-style-type: none"> Single domestic hot water heater in kitchen: National; 600 Watts; ~20 gallons (capacity could not be read).
RECOMMENDATIONS			
C10.2	Repipe domestic hot water system.		
C10.3	Replace all lavatories, water closets and urinals. Replace all water fountains with bi-level water coolers. Add grease interceptor to the kitchen sinks and dishwasher.		
C10.5	Provide a separate domestic hot water boiler, pumps and necessary piping.		

C20 - HVAC			
Item		Findings	Comments
C20.1	Mechanical Equipment	<ul style="list-style-type: none"> All forced air systems are period to the building and near failure, well past their useful lives. See Figure C20.1. 	<ul style="list-style-type: none"> The exhaust fans serve the classrooms and restroom exhaust. HV-1: Thermal; HT-81-VS HV-2: Thermal; HT-121-11 A single AC unit serves the small building. Purchased by the occupants at no cost to the school because the occupants were uncomfortable and could not get funding. The split system provides cooling through ductwork to all spaces. Thermostat is located in main office reception. The main building is not cooled. The main building classrooms are heated with fin tube heaters and heating ventilation units. Multipurpose room heated by HV-1. Heating only, supplies 65-degrees or greater depending on OA temp. Office and classrooms served by HV-2. Heating only, and supplies 65-degrees or greater depending on OA temp. The offices have booster coils for additional heating. HV-1/2 are located in a mechanical room accessible by ladder in the office/conference room. Hot water unit heater at entry from kitchen.
C20.2	Air Filtration	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Air filtration is period to the building
C20.3	Equipment Accessibility	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> Equipment is accessed via permanent ladders or direct access in a closet.
C20.4	Air Distribution and Ventilation	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> All ventilation is either by unit ventilators or heating and ventilating units. Ductwork is galvanized steel. Exhaust in classrooms was located above the coat closet.
C20.5	Controls	<ul style="list-style-type: none"> Building is on pneumatic controls. 	<ul style="list-style-type: none"> District preference is Andover.
C20.6	Chillers	<ul style="list-style-type: none"> No issues observed 	
C20.7	Boiler	<ul style="list-style-type: none"> The boiler is original to the building and beyond its useful life. See Figure C20.7. 	<ul style="list-style-type: none"> Model: Birchfield, 1500 MBH. Original to building, retrofitted to run gas. 2 HP pump (approx. 7 years old).
RECOMMENDATIONS			
C20.1	Replace all HVAC components with new equipment. Coordinate with district on system type, layout and components.		
C20.5	Replace pneumatic controls with Andover DDC controls.		
C20.7	Provide new high efficiency boilers and variable speed pumps. Replace all necessary piping in the mechanical room.		

C30 – FIRE PROTECTION			
Item		Findings	Comments
C30.1	Fire Suppression System	<ul style="list-style-type: none"> There is no fire suppression in the kitchen. 	<ul style="list-style-type: none"> The facility is not sprinkled.
C30.2	Water Service and Backflow Prevention	<ul style="list-style-type: none"> Not Applicable 	
C30.3	System Pressure	<ul style="list-style-type: none"> Not Applicable 	
C30.4	Standpipes	<ul style="list-style-type: none"> Not Applicable 	
C30.5	Fire Pump	<ul style="list-style-type: none"> Not Applicable 	
C30.6	Fire Sprinkler Pipe Condition	<ul style="list-style-type: none"> Not Applicable 	
C30.7	Fire Department Connection	<ul style="list-style-type: none"> Not Applicable 	
C30.8	Fire Sprinkler Zoning	<ul style="list-style-type: none"> Not Applicable 	
C30.9	Flow Monitoring and Alarm	<ul style="list-style-type: none"> Not Applicable 	
C30.10	Hoses and Extinguishers	<ul style="list-style-type: none"> None observed 	
RECOMMENDATIONS			
C30.1 Provide fire suppression in the kitchen hood.			

D - ELECTRICAL			
D10 - ELECTRICAL EQUIPMENT			
Item		Findings	Comments
D10.1	Transformers	<ul style="list-style-type: none"> No issues observed 	<ul style="list-style-type: none"> A single phase, 75kVA pole mounted transformer serves each building.
D10.2	Switchgear and Panelboards	<ul style="list-style-type: none"> It is unclear whether the panelboards serving the secondary building and pump house are service entrance rated. 	<ul style="list-style-type: none"> 400A CT enclosure, with 4 fusible disconnects. 120/240V, 400A service to main building, underground fed. 200A residential style exterior meter/main and interior panelboard. 120/240, 200A service to secondary building, fed via aerial drop from pole. 60A residential style exterior panelboard serves pump house, 60A, 120/240 service fed from secondary building. Square D and Cutler Hammer equipment typical – period to facility.
D10.3	Lighting	<ul style="list-style-type: none"> Hallway luminaires are well past their useful life. There are numerous broken lenses and fixture bodies. See Figure D10.3. Classroom luminaires well past their useful life. Mechanical and electrical rooms appear underlit. 	<ul style="list-style-type: none"> Lighting is a mix of T8 and T12 linear fluorescent lights. T8 high-bay luminaires replaced high bay lighting in cafeteria/gym. Hallway lighting period to facility (T12 lamps). Classrooms, offices and the kitchen are served by 2 lamp T12 surface wrap luminaires (also period to facility). Secondary building served by T12 surface wraps and pendants. Mechanical and electrical rooms served by incandescent luminaires period to building.
D10.4	Lighting Controls	<ul style="list-style-type: none"> Facility lacks automated lighting controls. 	<ul style="list-style-type: none"> Classroom lighting switched in rows parallel to the windows. Lighting controls are highly recommended to meet current energy codes and conserve energy.
D10.5	Back-up and Emergency Power	<ul style="list-style-type: none"> Not Applicable 	
D10.6	Egress and Emergency Lighting	<ul style="list-style-type: none"> Existing egress luminaires are installed with insufficient spacing. See figure D10.5. 	<ul style="list-style-type: none"> Small quantity of exit sign and egress luminaire combinations are installed.
D10.7	Exit Signage	<ul style="list-style-type: none"> Several failures observed with existing exit signs. Period exit signs do not meet intensity requirements. 	<ul style="list-style-type: none"> The majority of exit signage is incandescent retrofitted with LED. Few have been replaced with LED luminaires.

D10.8	Sensors	<ul style="list-style-type: none"> No sensors installed. 	<ul style="list-style-type: none"> Lighting controls and sensors do not meet current Oregon State Energy Code.
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RECOMMENDATIONS

D10.2	Verify panelboard serving secondary building is service entrance rated; if not, replace with service entrance rated equipment.
D10.3	Replace hallway luminaires with new, high efficiency single lamp T8 fixtures. Replace classroom, office and kitchen lighting with 2 lamp, high efficiency T8, lensed fixtures. Replace incandescent mechanical and electrical lighting with T8 utility fluorescent luminaires.
D10.4	Install a building lighting control system; use Lutron Quantum system or equivalent.
D10.6	Install battery packs in fixtures as required along egress paths.
D10.7	Replace all remaining incandescent and retrofitted exit signs with light emitting diode (LED) equivalent with battery backup.
D10.8	Install workstation occupancy sensors to workstation and appliance plug-loads.

D20 – SAFETY / SECURITY

Item	Findings	Comments
D20.1	Fire Alarm	<ul style="list-style-type: none"> Existing fire alarm system is past its useful life.
D20.2	Smoke Detection	<ul style="list-style-type: none"> Detectors are past their useful life.
D20.3	Pull Stations	<ul style="list-style-type: none"> Installed in student accessible areas.
D20.4	Annunciation	<ul style="list-style-type: none"> System is past its useful life.
D20.5	Addressable zones and systems	<ul style="list-style-type: none"> None installed
D20.6	Monitoring	<ul style="list-style-type: none"> No issues observed
D20.7	Access Control	<ul style="list-style-type: none"> This facility lacks security access control system.
D20.8	Intrusion	<ul style="list-style-type: none"> No issues observed
D20.9	Video Surveillance	<ul style="list-style-type: none"> Not Applicable

RECOMMENDATIONS

D20.1	Replace fire alarm system with District standard system.
D20.7	Install access control system.

D30 – TECHNOLOGY COMMUNICATIONS

Item	Findings	Comments
D30.1	Paging and Intercom – Head End Condition	<ul style="list-style-type: none"> Intercom system is well past its useful life. Repair parts are unavailable and there is inadequate technical support for this system.
D30.2	Master Clock	<ul style="list-style-type: none"> Master clock is past its useful life.
D30.3	Infrastructure	<ul style="list-style-type: none"> Large quantities of unused cable have been abandoned in place. In-use cabling is not labeled.
D30.4	Speakers	<ul style="list-style-type: none"> No issues observed
D30.5	Coverage	<ul style="list-style-type: none"> No issues observed
D30.6	Clock System	<ul style="list-style-type: none"> The system is past its useful life.
D30.7	Clock – Head End	<ul style="list-style-type: none"> Clock system is well past its useful life. Repair parts are unavailable and there

		is inadequate technical support for this system.	
RECOMMENDATIONS			
D30.1	Replace intercom system.		
D30.7	Replace clock system.		

E- GROUNDS			
E10 – SITE CIRCULATION AND PARKING			
Item	Findings	Comments	
E10.1	Parking Lots	<ul style="list-style-type: none"> • Front parking lot in A/C paving surface is in poor condition and striping hardly visible. See Figure E10.1. • Tree roots are causing cracks and uplift in concrete curb and A/C paving. 	<ul style="list-style-type: none"> • There are (10) stalls; no accessible stalls are provided.
E10.2	Site Signage/ Accessories	<ul style="list-style-type: none"> • Building signage not prominent and the main office location is not apparent. 	
E10.3	Vehicular Circulation	<ul style="list-style-type: none"> • Bus drop-off and parking areas with gravel drive are not ADA compliant. See Figure E10.3. 	
E10.4	Curbs and Sidewalks	<ul style="list-style-type: none"> • Concrete walk connecting parking and circulation around the site is minimal and for the most part not ADA compliant. 	
E10.5	Accessibility	<ul style="list-style-type: none"> • There is no ADA parking or accessible bus drop off. 	
E10.6	Bikes and Bike Parking	<ul style="list-style-type: none"> • There is no bicycle parking. 	<ul style="list-style-type: none"> • It is not known if bike parking is needed at this facility. •
RECOMMENDATIONS			
E10.1	Resurface front parking area and demolish and re-pour parking surface at area of tree root damage. Restripe stalls to provide (2) accessible stalls. Provide a new A/C parking area to the west of the building with (10) parking stalls and (2) ADA parking stalls with a dedicated drop-off at main entry and converting the existing parking area into a dedicated bus drop-off area.		
E10.2	Install building signage in a more prominent location on the building. Install site signage clearly directing visitors to the main office.		
E10.3	See E10.1.		
E10.4	See E10.1 and A20.4 for Recommendations.		
E10.5	See E10.1.		
E20 - SITE COMPONENTS			
Item	Findings	Comments	
E20.1	Fields	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • Play fields are generally in good shape; however playground grass area gets heavier use and could be reseeded in some areas.
E20.2	Landscaping	<ul style="list-style-type: none"> • Landscaping is in poor condition. 	
E20.3	Irrigation	<ul style="list-style-type: none"> • None observed 	
E20.4	Site Buildings	<ul style="list-style-type: none"> • None observed 	
E20.5	Site Security	<ul style="list-style-type: none"> • No issues observed 	
E20.6	Fencing	<ul style="list-style-type: none"> • There is fencing around the entire site, however there is a fence segment missing at one side of covered play adjoining the bus turnaround that creates a dangerous condition. 	
E20.7	Playground Equipment	<ul style="list-style-type: none"> • No issues observed 	<ul style="list-style-type: none"> • Equipment is accessible and in good condition.
E20.8	Play Surfaces	<ul style="list-style-type: none"> • Covered play areas are showing cracks 	

		and rough surfaces.	
E20.9	Site Lighting	<ul style="list-style-type: none"> • The front portion of the site appears overlit. See Figure E20.9. • Overall site lighting does not meet current energy code. 	<ul style="list-style-type: none"> • Site lighting is a mix of high intensity discharge (HID), linear fluorescent and incandescent lighting. • Recessed incandescent luminaires are installed at entrances, retrofitted with self-ballasted compact fluorescent lamps (CFL). • High pressure sodium (HPS) lighting is installed along the front drive beneath eaves. • Quartz metal halide (MH) flood lights serve north parking area. • Halogen flood lights with motion sensors are installed around the rear of the facility.
E20.10	Grading and Drainage	<ul style="list-style-type: none"> • No issues observed 	
RECOMMENDATIONS			
E20.2	Provide new planting to enhance front entry.		
E20.6	Complete fencing around covered play area.		
E20.8	Resurface A/C paving at covered play area.		
E20.9	Replace HID lighting with LED equivalent luminaires. Reduce site lighting to produce more acceptable lighting levels.		

IMAGES

Figure A10.2 – Holes in crawl space



Figure A10.3 – Covered up roof vents



Figure A20.1 – Exterior walls



Figure A20.6 – Gutters



Figure B20.1 – Flooring issues



Figure B20.2 – Ceiling in multi-purpose room



Figure B20.7 – Window coverings



Figure B30.4 – Casework in office



Figure C20.1 – Aging mechanical equipment



Figure C20.7 – Hot water boiler



Figure D10.3 – Aging hallway lighting



Figure D10.5 – Insufficient egress lighting



Figure E10.1 - Parking



Figure E10.3 – Gravel parking lot



Figure E20.9 – Excessive site lighting



Dixie School		Priority Level				Priority Level I	Priority Level II	Priority Level III	Priority Level IV
		(Refer to Legend)	I	II	III				
ITEMS									
A - STRUCTURE/SHELL									
A10 - STRUCTURE/SUBSTRUCTURE									
A10.2	1	Properly secure the crawl space of the 1930 portion of this facility to prevent rodent infiltration	X				\$ 2,371		
A10.3	1	Uncover roof vents and install netting to prevent insects and birds from nesting in the roof and allow the roof space to breath	X				\$ 2,371		
	2	Complete seismic upgrades per previous reports	X				\$ 670,987		
A20 - EXTERIOR COMPONENTS									
A20.2	1	Replace exterior wood doors with new hollow metal or storefront doors and code compliant hardware		X			\$ 75,480		
A20.3	1	Replace wood framed windows in 1930's evaluation building with new aluminum storefront system with thermal glazing	X				\$ 64,040		
	2	Replace the steel framed single-glazed in the 1950's office and 1967 main building with aluminum storefront system with thermal glazing	X				\$ 42,630		
A20.4	1	Replace the covered walk connecting the two buildings		X			\$ 55,976		
	2	Repair and replace selected roofing per roofing assessment recommendations	X				\$ 200,000		
	3	Replace selected roofing systems per roofing assessment recommendations	X			\$ 64,000			
	4	Replace selected roofing systems per roofing assessment recommendations	X				\$ 7,900		
A20.5	1	Remove existing downspouts and replace with prefinished sheet metal downspouts	X				\$ 2,277		
	2	Replace all exposed fascia wood boards prefinished sheet metal fascia		X			\$ 4,743		
TOTAL - STRUCTURE/SHELL						\$ 64,000	\$ 992,576	\$ 136,199	\$ -
B - INTERIORS									
B10 - INTERIOR CIRCULATION									
B10.1	1	Construct a separate building storage room so that full use of the multi-purpose room fully utilized			X			\$ 284,625	
B10.4	1	Provide ADA door actuators where students come into the facilities and at main paths of egress	X				\$17,393		
B10.5	1	Provide compliant room signage throughout the facility		X			\$ 13,180		
B20 - INTERIOR FINISHES									
B20.1	1	Patch and repair existing concrete slab and provide new VCT flooring in the 1976 building in the halls, classrooms and multi-purpose room	X				\$ 55,027		
	2	Install fixed walk off mats at (3) egress door locations	X				\$ 1,921		
B20.2	1	Install a new suspended ceiling system in the entire facility to make it easier to service new building systems in the future			X			\$ 159,152	
B20.4	1	Provide new marker boards and smart board projectors in classrooms and meeting room			X			\$ 18,975	
B20.7	1	Provide new window shades throughout the facility		X			\$ 11,218		
B30 - INTERIOR COMPONENTS									
B30.1	1	Replace windows with wire glazing to new glazing with hollow metal frames		X			\$ 996		
B30.2	1	Replace existing wood doors and frames with new wood doors with ADA compliant hardware and glazed relites		X			\$ 15,180		
B30.3	1	Add 500 SF of acoustic wall panels to multi-purpose room			X			\$ 11,859	
B30.4	1	Replace casework in offices and meeting rooms with new plastic laminate casework			X			\$ 6,957	
	2	Replace casework, countertops and backsplashes in classrooms with new plastic laminate casework; provide ADA compliant sinks			X			\$ 69,575	
B30.5	1	Remodel the main office			X			\$ 120,385	
	2	Add shades or blinds to doors with glazing	X			\$ 284			
B40 - TOILET FACILITIES									
B40.7	1	Convert two toilet rooms in the 1930's building into two ADA compliant staff toilet rooms		X			\$ 53,798		

Dixie School ITEMS	Priority Level (Refer to Legend)				Priority Level I	Priority Level II	Priority Level III	Priority Level IV	
	I	II	III	IV					
	TOTAL - INTERIORS								\$ 284
C - SYSTEMS									
C10 - PLUMBING									
C10.2	1	Re-pipe domestic hot water piping	X			\$ 75,000			
C10.3	1	Replace all lavatories, water closets and urinals		X			\$ 111,250		
	2	Replace all water fountains with bi-level water coolers		X			\$ 28,750		
	3	Add grease interceptor to the kitchen sinks and dishwasher	X			\$ 28,750			
C10.5	1	Replace domestic hot water heaters and associated piping and pumps	X			\$ 28,750			
C20 - HVAC									
C20.1	1	Replace all HVAC components with new equipment	X			\$ 165,000			
C20.5	1	Replace pneumatic controls	X			\$ 107,500			
C20.7	1	Provide new high efficiency boilers and variable speed pumps and replace all necessary piping in the mechanical room	X			\$ 362,500			
C30 - FIRE PROTECTION									
C30.1	1	Provide fire suppression in kitchen hood	X			\$ 12,500			
TOTAL - SYSTEMS						\$ 12,500	\$ 767,500	\$ 140,000	\$ -
D - ELECTRICAL									
D10 - ELECTRICAL EQUIPMENT									
D10.2	1	Verify that equipment serving secondary building is service rated		X			\$ 1,000		
D10.3	1	Replace all incandescent and T12 fluorescent lighting		X			\$ 20,000		
	2	Replace hallway, kitchen, classroom and office			X			\$ 20,000	
	3	Replace and extend lighting in electrical and mechanical rooms		X			\$ 7,500		
D10.4	1	Install retrofit lighting controls		X			\$ 40,000		
D10.6	1	Extend egress lighting, retrofit existing luminaires with battery packs	X			\$ 40,000			
D10.7	1	Replace existing retrofitted and incandescent exit signs	X			\$ 30,000			
D10.8	1	Install workstation occupancy sensors		X			\$ 40,000		
D20 - SAFETY/SECURITY									
D20.1	1	Replace fire alarm system	X			\$ 40,000			
D20.7	1	Install access control system	X			\$ 25,000			
D30 - TECHNOLOGY COMMUNICATIONS									
D30.1	1	Replace paging and intercom system		X		\$ 25,000			
D30.7	1	Replace clock system		X		\$ 25,000			
TOTAL - ELECTRICAL						\$ 70,000	\$ 115,000	\$ 108,500	\$ 20,000
E - GROUNDS									
E10 - SITE CIRCULATION AND PARKING									
E10.1	1	Resurface front parking area and narrow to clear tree root infringement; restripe to provide accessible stalls	X			\$ 82,557			
	2	Provide a new A/C parking area to the west of the building with a new concrete sidewalk for parent drop-off at main entry			X			\$ 65,638	
E10.2	1	Install building signage in a more prominent location on the building	X			\$ 3,162			
	2	Install site signage clearly directing visitors to the main office		X			\$ 1,581		
E20 - SITE COMPONENTS									
E20.2	1	Provide new planting to enhance front entry		X			\$ 7,906		
E20.6	1	Complete fencing around covered play area	X			\$ 1,185			
E20.8	1	Resurface A/C paving at covered play area		X			\$ 5,446		

ITEMS	Dixie School	Priority Level				Priority Level I	Priority Level II	Priority Level III	Priority Level IV
		(Refer to Legend)							
		I	II	III	IV				
E20.9	1	Replace site lighting with LED; remove luminaires where possible to provide recommended light levels			X			\$ 75,000	
TOTAL - GROUNDS						\$ 1,185	\$ 85,719	\$ 89,933	\$ 65,638
TOTALS BY CATEGORY									
						STRUCTURE/SHELL	\$ 1,192,775		
						INTERIORS	\$ 840,525		
						SYSTEMS	\$ 920,000		
						ELECTRICAL	\$ 313,500		
						GROUNDS	\$ 242,475		
						FACILITY TOTAL	\$ 3,509,275		
TOTALS BY PRIORITY									
						LEVEL 1	\$ 147,969		
						LEVEL 2	\$ 2,035,136		
						LEVEL 3	\$ 569,004		
						LEVEL 4	\$ 757,166		
						PRIORITY TOTAL	\$ 3,509,275		

LEGEND:

PRIORITY LEVELS

Level I: Highest Priority; Issues that affect the life safety concerns of the occupant, related to notification of occupants to emergency situations and the ability to safely evacuate the facility; subcomponents of Level I include safety concerns such as electrical loads, hazardous materials that might be affected with remodel or modifications, lack of fall protection. Level I items need to be addressed within a 5-year plan.

Level II: Moderate Priority; Issues that are related to the integrity and adequacy of systems within the building to sufficiently withstand a major event and still function; also related are the age of systems or building components that keep day to day operations running without constant repair. Issues may include mechanical, electrical and plumbing systems, fire suppression, lighting and security, as well as flooring, windows doors and other architectural components. Level II Items may be part of a 5-year plan.

Level III: Lower Priority; Issues that may over time affect the day to day maintenance of the building or long term use of the facility. Issues also include access and clearances at equipment and fixtures, access for individuals with disabilities and both indoor and exterior environment quality. Level III Items would be considered in a 5 to 10 year plan.

Level IV: Issues that are related to the aesthetics of both the building's interior and exterior as well as integrity and adequacy of building systems that don't pose any issues or nearing the end of their remaining lifecycles. These may include items such as cabinetry original to the building that have signs of wear or dated finishes but do not have any damage or deterioration. Level IV items would be considered long-term plans (10 years or more).



SCHOOL BUILDING
SCALE: NOT TO SCALE

Dixie Elementary School | Corvallis School District

OVERALL FLOOR PLAN



Dull Olson Weekes - IBI Group
Architects, Inc.



Appendix

A ROOFING STUDY FOR THE

CORVALLIS SCHOOL DISTRICT

1555 SW 35TH STREET

CORVALLIS, OREGON 97339



PREPARED BY

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November 20, 2013

FEBRUARY 2014



Definitions

BUR	Built Up Roofing (Standard Hot Mop)
Modified BUR	Built up Roofing (Hot Mop with modified asphalt)
Single Ply	Roofing consisting of one ply (TPO, EPDM, etc)
TPO	Thermoplastic Polyolefin (single ply roofing)
EPDM	Ethylene propylene diene terpolymer (single ply roofing)
Aluminum Emulsion	Aluminum Reflective Coating
Shingles	Asphalt Shingles
Gravel Ballast	Rocks used to weigh down and protect single ply roofs
Siplast	Roofing Manufacturer
Tremco	Roofing Manufacturer

Adams Elementary School

TPO Area: 569 Squares

The entire school was re-roofed in 2006 with a 45 ml. TPO roof. The TPO appears to be holding up well with gutters and downspouts and sloping roof. Maintenance has reported no leaks. Given the fact this roof was installed approximately seven years ago and is performing well, it may not experience some of the recent material failures of TPO roof membranes. I would project this roof to maintain is 20-year life cycle which would suggest replacement approximately 13-years from now.

Budget for Replacement in 13 years: \$ 799,000.00



ADAMS ELEMENTARY SCHOOL ROOF DIAGRAM

Franklin K-8 School

TPO Area: 55 Squares Shingles: 464 Squares

This older facility has a combination of steep shingled roof areas over a non-vented attic space and flat roof areas with TPO roofing. The TPO roofs were installed in 1989 and the shingles were installed in 1995-1997. Maintenance reports numerous leaks with this facility and our visual inspection shows the shingles are very brittle and breaking apart. Furthermore, according to maintenance the shingles were installed over skip sheathing so plywood and seismic upgrades should be completed during the next re-roof which I am recommending occurs this next summer. The TPO membrane is near the end of its life cycle and should be replaced at the same time. All gutters, downspouts and flashings will also need to be replaced. Although patching took place this summer, more maintenance will be required to get through this winter.

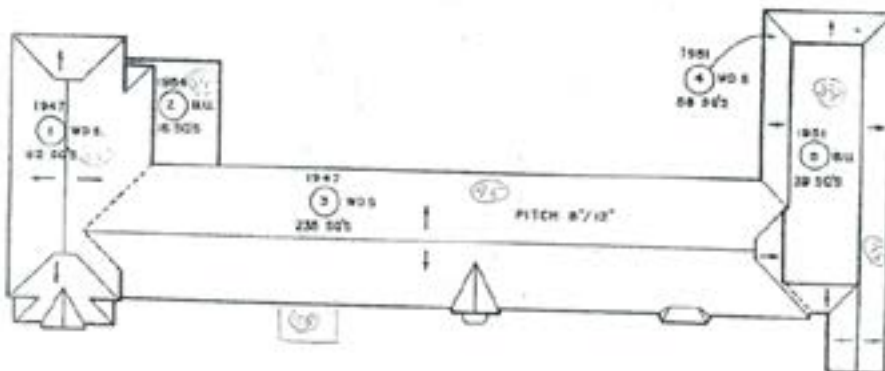
Recommended Repairs Estimate: \$ 5,000.00
 Budget for Replacement in 2014: \$ 486,000.00



TPO Membrane is wearing out



Shingles are brittle and breaking apart



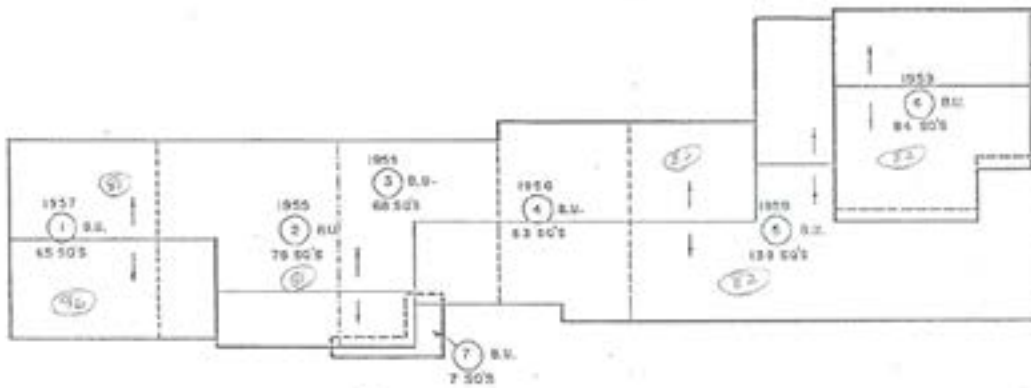
FRANKLIN ROOF DIAGRAM

Garfield Elementary School

TPO Area: 493 Squares

The entire school was re-roofed in 2006 with a 60 ml. TPO roof. The TPO appears to be holding up well with gutters, downspouts and a sloping roof. Maintenance has reported no leaks. Given the fact this roof was installed approximately seven years ago and is performing well, it may not experience some of the recent material failures of TPO roof membranes. I would project this roof to maintain its 20-year life cycle which would suggest replacement in approximately 13-years from now.

Budget for Replacement in 13 years: \$655,000.00



GARFIELD ROOF DIAGRAM

Hoover Elementary

BUR or EPDM with Gravel 428 Squares

The entire school was roofed in 1988 in what appears to be a BUR or EPDM with Gravel Ballast. Maintenance reports numerous leaks and failures every year. There are screens on two roof decks which create a trap for water and should be removed during the next roofing cycle. The roof is clearly at the end of its life cycle and should be replaced this coming year. Given the history there will probably be some maintenance required this winter.

Recommended Repairs Estimate: \$ 5,000.00

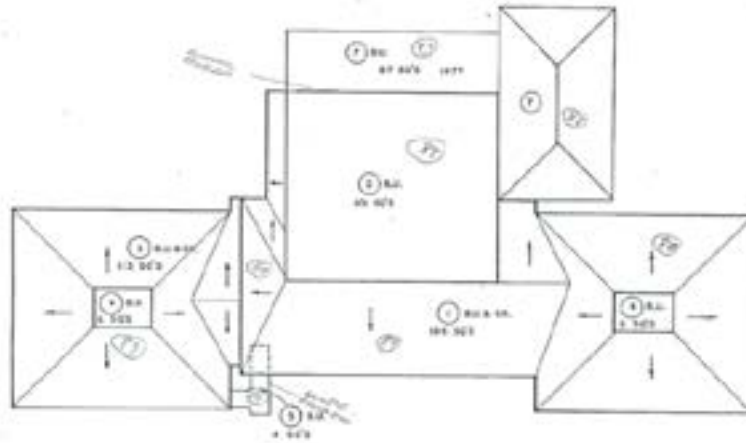
Budget for Replacement in 2014: \$ 705,000.00



ROOF DRAINS HAVE BEEN PATCHED



MOSS BUILDUP AT DRAINS AND MUST BE REMOVED



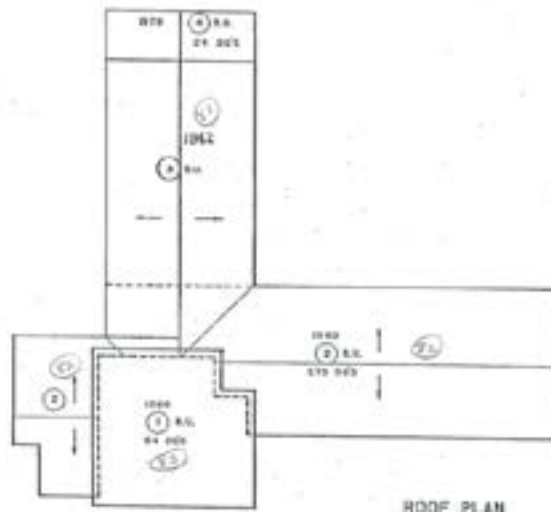
HOOVER ROOF DIAGRAM

Jefferson

Siplast BUR 497 Squares

The entire school was re-roofed in 2003 with Siplast BUR and appears to be holding up well. Maintenance reports a few minor leaks and no issues. Therefore, it appears this roof should hold its projected life cycle and be replaced in 2023.

Budget for Replacement in 2023: \$698,000.00



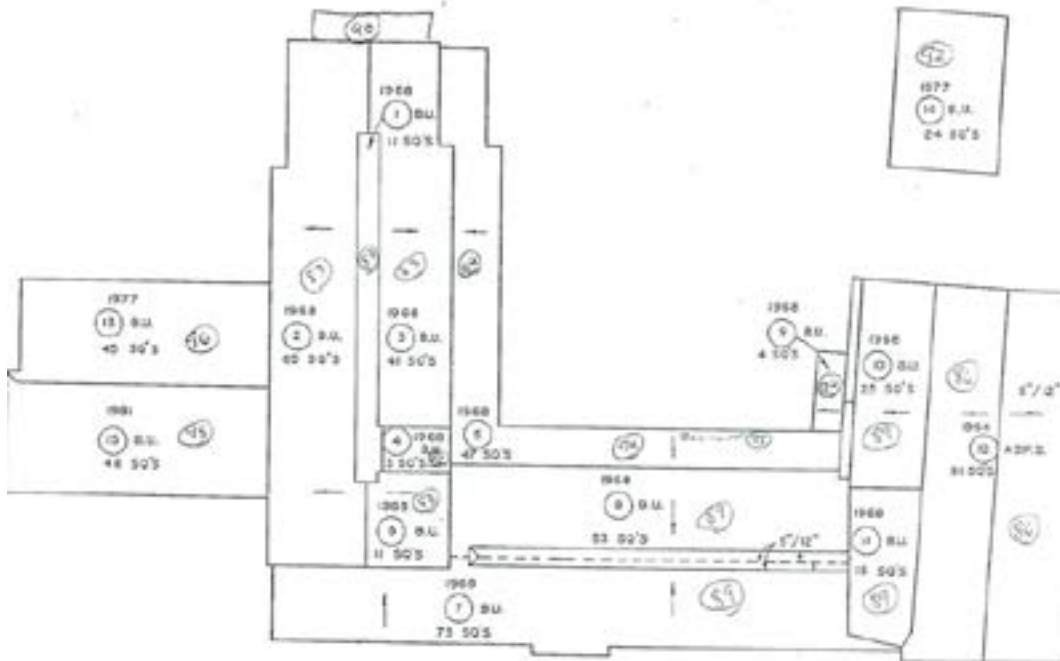
JEFFERSON ROOF DIAGRAM

Lincoln Elementary School

TPO Roof Area: 493 Squares

The entire school was re-roofed in 2006 with a 60 ml TPO roof. The TPO appears to be holding up well with gutters, downspouts and a sloping roof. Maintenance has reported no leaks. Given the fact this roof was installed approximately seven years ago and is performing well, it may not experience some of the recent material failures typical of TPO roof membranes. I would project this roof to maintain its 20-year life cycle which would suggest replacement in approximately 13-years from now.

Budget for Replacement in 13 years: \$764,000.00



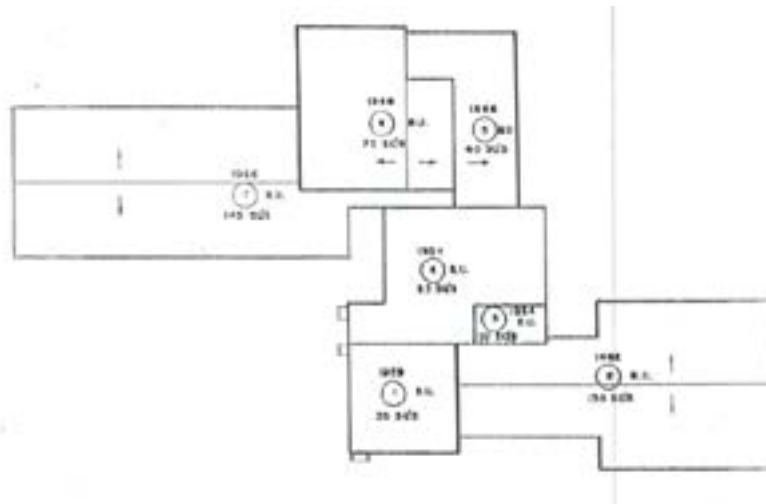
LINCOLN ROOF DIAGRAM

Mt. View Elementary

Siplast BUR 497 Squares

The entire school was re-roofed in 2003 with Siplast BUR and appears to be holding up well. Maintenance reports a few minor leaks and no issues. Therefore, it appears this roof should hold its projected life cycle and be replaced in 2023.

Budget for Replacement in 2023: \$734,000.00



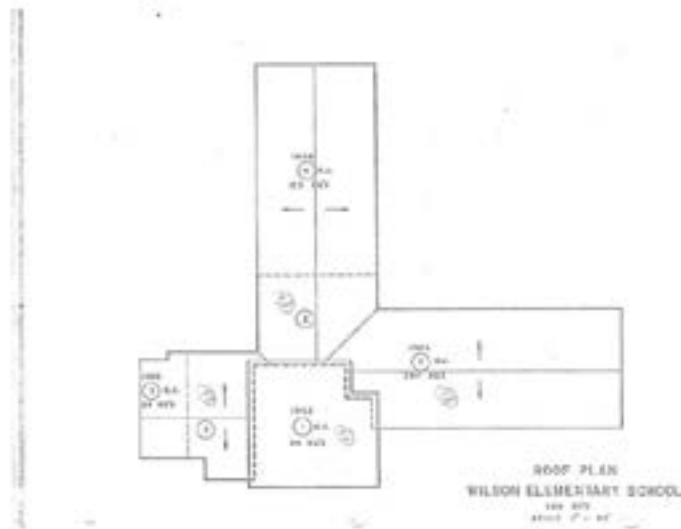
MOUNTAIN VIEW ROOF DIAGRAM

Wilson

Siplast BUR 497 Squares

The entire school was re-roofed in 2003 with Siplast BUR and appears to be holding up well. Maintenance reports a few minor leaks and no issues. Therefore, it appears this roof should hold its projected life cycle and be replaced in 2023.

Budget for Replacement in 2023: \$ 734,000.00



WILSON ROOF DIAGRAM

Cheldelin Middle School

BUR 500 Squares Siplast BUR 660 Squares

Cheldelin Middle School has had approximately 50% of the roof replaced in 2003 with a Siplast Paradiene 30 modified BUR which appears to be performing as expected. Therefore, this portion of the school should last the expected life cycle of 20-years and be replaced around 2023.

The remaining portion of the school has a BUR with Gravel which was installed in 1986-88 and has reached the end of its life cycle and experiencing leaks every year. The walkway covers are all BUR with aluminum emulsion coating which was reapplied this past summer but is losing its ability to serve as a patch. I would recommend minimal repairs this winter to get by and replace in 1-2 years maximum.

Recommended Repairs Estimate: \$ 5,000.00

Budget for Replacement of older areas in 2014: \$ 768,000.00

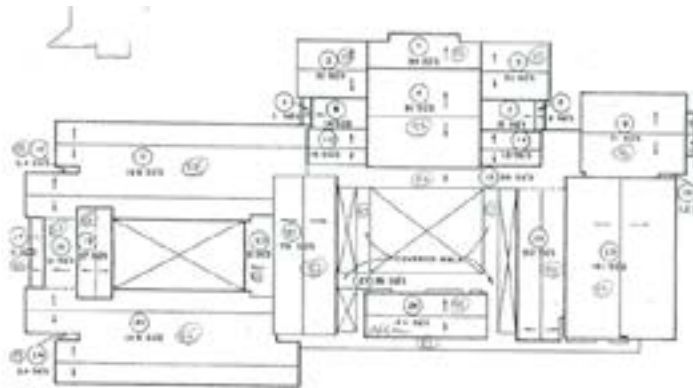
Budget for Replacement of 2003 Roof in 2023: \$ 1,055,000.00



POOR DETAILING SHOULD BE REPLACED



WALK COVERS ARE AT END OF USEFUL LIFE



CHELDELIN ROOF DIAGRAM

Linus Pauling – Northing Building

BUR Area: 43 Squares

This was one building left from the original campus which was retained during the 2006 construction / replacement. The BUR was installed in 1988 and is in poor shape with numerous repairs. The BUR has reached the end of its life cycle and has many leaks. The large fiberglass skylight structure appears to have worn down to the fiber, has at least one hole and needs to be replaced. With some repairs this roof may last another year or two at the very best.

Recommended Repairs Estimate: \$ 5,000.00

Budget for Replacement in 2014-2015: \$245,000.00



Fiberglass Skylight weathering through



BUR wearing out

Corvallis High School

T-North

EPDM Area: 103 Squares

BUR Area: 43 Squares

The majority of Corvallis High School received a TPO roof in 2006 which is already experiencing failures common to TPO roofs and is being dealt with under warranty. Therefore, the main portion of Corvallis High School is not part of this study. The industrial arts buildings, T-South and T-North are two buildings reviewed in this study. T-North has two decks one with a Tremco EPDM single ply roof installed in 1988 and one deck with a BUR installed the same year. Both roofs are 25-years old and nearly the end of their projected life cycles. Both are experiencing leaks, especially at roof drains.

Recommended Repairs Estimate: \$ 10,000.00

Budget for Replacement in 2-3 years: \$214,000.00

T-South

EPDM Area: 168 Squares

The T-South building has a Tremco EPDM roof installed in 1989 which is also at the end of its projected life cycle and is experience numerous failures. Maintenance indicates a current contract for repairs is out for bidding. If adequate repairs are accomplished, I would recommend replacing within a 2-3 year window.

Recommended Repairs Estimate: \$ 10,000.00

Budget for Replacement in 2-3 years: \$249,000.00



T-North Drain and TPO wearing out



T-South Drain and EPDM wearing out

Harding Elementary School

TPO Roofing: 119 Squares 3 Tab Shingles: 344 Squares

This older facility has a combination of steep shingled roof areas over a non-vented attic space and flat roof areas with TPO roofing. The TPO roofs were installed in 1988 and the shingles were installed in 1995-1997. Maintenance reports numerous leaks with this facility and our visual inspection shows the shingles are very brittle and breaking apart. Furthermore, according to maintenance the shingles were installed over shiplap sheathing so plywood and seismic upgrades should be completed during the next re-roof which I am recommending occurs this next summer. The TPO membrane is near the end of its life cycle and should be replaced at the same time. All gutters, downspouts and flashings will also need to be replaced. Some maintenance will be required to get through this winter.

Recommended Repairs Estimate: \$ 5,000.00

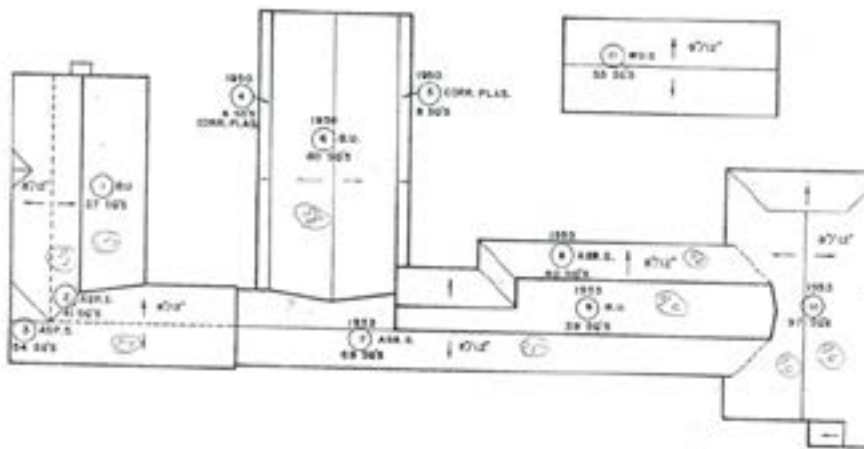
Budget for Replacement in 2014: \$490,000.00



TPO is reaching end of life expectancy



Shingles are brittle and falling apart



HARDING ROOF DIAGRAM

Western View Center

BUR Area: 43 Squares

The BUR was installed in 1988 and is in poor shape with numerous repairs. The BUR has reached the end of its life cycle and has many leaks. The large fiberglass skylight structure appears to have worn down to the fiber, and needs to be replaced. With some repairs this roof may last another year or two at best.

Recommended Repairs Estimate: \$ 5,000.00

Budget for Replacement in 2014-2015: \$245,000.00



SKYLIGHT WEARING THROUGH



BUR WORN DOWN TO ASPHALT

Administration Building/Administration Offices

BUR Roof with Aluminum Emulsion: 296 Squares

The district offices/administration building is a BUR installed in 1986 and then a Tremco Ply felt flood coat aluminum emulsion coating which was reapplied in 2006. New HVAC equipment was installed above the board room recently and was installed with too many penetrations without counter flashings. A few leaks have been reported in this area. In general, this roof has expended its useful life cycle but has been nursed along with the aluminum emulsion coatings. Given the fact that there are no apparent blisters, I would recommend touching up the aluminum emulsion coating and sealing penetrations while budgeting for replacement within the next three years.

Budget for Replacement in 5 years: \$415,000.00



Cracking and Failing along edges of Roof



Emulsion wearing off, edges failing



AMINISTRATION ROOF DIAGRAM

Food Service Warehouse

Metal Roofing: 70 Squares

This metal building had new metal roof panels installed in 2006 and has good slope with gutters. Therefore based on metal roof panels performance this roof should be in good shape for the next 20-24 years.

Budget for Replacement in 2033: \$56,000.00



Grounds Shop Building

3 Tab Shingles: 23 Squares

This 3-tab shingle roof was re-roofed in 2002 and has had no leaks; therefore I would recommend replacement in 14 years at the end of the shingles life cycle.

Budget for Replacement in 14 years: \$10,200.00



Dixie

Shingle Area: 15 Squares BUR Area: 125 Squares Tremco Hypolan Area: 40 Squares

This school has three distinct roof areas. The shingle portion was re-roofed in 1993 and is approximately 20 years old. The main building is a Tremco Bur with Gravel and was roofed in 1997 and has a few leaks. The gym has a Tremco Hypolan Single Ply roof installed in 1993. I would budget to replace the shingle roof in 5-10 years, the BUR with a few repairs could be extended out 5 years and the Single ply is reaching the end of its life cycle and should be replaced in the next 2-3 years.

Recommended Repairs Estimate: \$ 5,000.00

Budget for Shingle Replacement in 2020: \$ 7,900.00

Budget for BUR Replacement in 2018: \$195,000.00

Budget for SP Replacement in 2015: \$ 64,000.00



SHINGLES SHOULD HAVE MOSS REMOVED



BUR NEARING END OF ITS USEFUL LIFE



ROOF PLAN
DIXIE ELEMENTARY SCHOOL
1997

DIXIE ROOF DIAGRAM

Corvallis Roofing Cost Estimate
November 20, 2013

SCHOOL/FACILITY	MOD. BUR SF AGE	BUR SF AGE	BALLASTED SP SF	METAL ROOFING	TPO SINGLE PLY	3-TAB SHINGLES	IMMEDIATE REPAIR	IMMEDIATE REPAIR COST	BUDGET REPLACEMENT COST	REPLACEMENT TIMELINE												
Adams Elementary					56,900 7 YEARS				\$ 799,000	13 YEARS												
Franklin K-8					5,500 24 YEARS	46,400 18 YEARS	REPAIR LEAKS	\$ 5,000	\$ 486,000	1 YEAR												
Garfield Elementary					49,300 7 YEARS				\$ 655,000	13 YEARS												
Hoover Elementary			42,800 25 YEARS				REPAIR LEAKS	\$ 5,000	\$ 705,000	1 YEAR												
Jefferson	49,700 10 YEARS								\$ 698,000	10 YEARS												
Lincoln Elementary					49,300 7 YEARS				\$ 764,000	13 YEARS												
Mt. View Elementary		49,700 7 YEARS							\$ 734,000	10 YEARS												
Wilson	49,700 10 YEARS								\$ 734,000	10 YEARS												
Chedelin Middle School		50,000 27 YEARS					REPAIR LEAKS	\$ 5,000	\$ 768,000	1 YEAR												
Chedelin Middle School	66,000 10 YEARS								\$ 1,055,000	10 YEARS												
Linus Pauling - North Bldg		4,300 25 YEARS					REPAIR LEAKS	\$ 5,000	\$ 245,000	1 YEAR												
Corvallis High School T-North		4,300 25 YEARS	10,300 25 YEARS				REPAIR LEAKS	\$ 10,000	\$ 214,000	2-3 YEARS												
Corvallis High School T-South			16,800 24 YEARS				REPAIR LEAKS	\$ 10,000	\$ 249,000	2-3 YEARS												
Harding Elementary					11,900 25 YEARS	34,400 18 YEARS	REPAIR LEAKS	\$ 5,000	\$ 490,000	1 YEAR												
Western View Center		4,300 25 YEARS					REPAIR LEAKS	\$ 5,000	\$ 245,000	1 YEAR												
Administration Bldg Admin Offices		29,600 27 YEARS					RE-SEAL		\$ 415,000	1-5 YEARS												
Administration Bldg Food Svc Warehouse				7,000 7 YEARS					\$ 56,000	20 YEARS												
Administration Bldg Grounds Shop						2,300 11 YEARS			\$ 10,200	14 YEARS												
Dixie BUR		12,500 16 YEARS					REPAIR LEAKS	\$ 5,000	\$ 195,000	5 YEARS												
Dixie SP					4,000 20 YEARS				\$ 64,000	2 YEARS												
Dixie Shingles						1,500 20 YEARS			\$ 7,900	7 YEARS												
GRAND TOTALS								\$ 55,000	\$ 9,589,100													
<table border="1"> <thead> <tr> <th colspan="2">Legend</th> </tr> <tr> <th>Color</th> <th>Status of Roof</th> </tr> </thead> <tbody> <tr> <td style="background-color: red;"></td> <td>Repair 0-3 years</td> </tr> <tr> <td style="background-color: yellow;"></td> <td>Repair 4-10 years</td> </tr> <tr> <td style="background-color: orange;"></td> <td>Repair 11-19 years</td> </tr> <tr> <td style="background-color: green;"></td> <td>Repair 20+ years</td> </tr> </tbody> </table>											Legend		Color	Status of Roof		Repair 0-3 years		Repair 4-10 years		Repair 11-19 years		Repair 20+ years
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<p>Notes:</p> <p>4-ply modified BUR system by Johns Manville or Malarkey. Cost \$8-\$15/sf depending on number of penetrations, size of roofs, access and amount of sheet metal work required.</p> <p>Inflation will track with the price of oil so it is volatile currently. I would estimate average annual inflation at 3-4% for each year beyond 2013.</p> <p>Budgets include a 10% contingency and 12% fees.</p> <p>All budgets include tear off and represent 2013 costs.</p> <p>This matrix does not include any modular buildings.</p>																						

