

School District  
of  
Reedsburg

# FACILITIES CONDITION ASSESSMENT REPORT

SCHOOL DISTRICT OF REEDSBURG  
Reedsburg, Wisconsin

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# TABLE OF CONTENTS

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Section 1: Assessment Overview	1
Section 2: Executive Summary	5
Section 3: Building Overview	17
Section 4: Observation Highlights	47
Section 5: Appendices	69
Appendix A	70
Appendix B	76

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# 1. ASSESSMENT OVERVIEW

# FACILITIES CONDITION ASSESSMENT OVERVIEW

The School District of Reedsburg has taken a proactive approach to developing a capital plan (Appendix A) and addressing deferred maintenance needs for the building by retaining an independent firm, Aramark Engineering and Asset Solutions, to perform a facilities condition assessment (FCA). The purpose of the assessment is to identify the size and scope of their facilities capital re-investment and deferred maintenance needs, as well as prioritize those needs. This assessment has enabled, and will continue to enable, The School District of Reedsburg to plan for the future by having an appropriate process and tools for addressing their needs, as well as developing an appropriate phase-out strategy (by priority).

This FCA report provides a starting point for making informed, data-driven decisions and the tools to develop a strategy for a comprehensive facilities' re-investment program. Once existing facilities' future capital renewal requirements and deferred maintenance needs have been identified, the School District of Reedsburg can assess its options regarding deferred maintenance and make informed decisions regarding the allocation of capital re-investment in its facilities.

It is crucial that deferred maintenance spending is consistent with both the program direction of The School District of Reedsburg and a clearly defined maintenance strategy. As the School District of Reedsburg and other institutions face increasingly demanding fiscal pressures, it is essential that facility spending decisions be developed within a context that is consistent with both its mission and basic building needs. This FCA report provides the tools to assist The School District of Reedsburg with the allocation of funds to re-invest in its facilities in the most beneficial manner, within each budget year's available capital resources.



# FACILITIES CONDITION ASSESSMENT SCOPE

The FCA was to provide an assessment of approximately 472,176 gross square feet consisting of six buildings built in the 1960's except for the High School, which was built in 1998, that are in good condition. The primary goal of this analysis was to develop a detailed list of maintenance needs and associated costs as well as a prioritization of deferred needs. This detailed survey consisted of two days of inspections in August and two days in September. Inspections were completed by a team of EAS professionals assisted by maintenance staff. Following the completion of the assessment, the EAS assessment team began developing corrections and cost estimates for each deficiency identified. Several follow-up meetings were held, and a team effort contributed to the depth of this document.

Disciplines included electrical engineering, mechanical engineering, plumbing, and architecture. A survey checklist was employed to ensure that the inspection process addressed all existing and potential exposures. Each project identified was assigned a priority ranking based upon the urgency of need as well as an estimate for corrective action or replacement based on RS Means (construction pricing guide) or recent project pricing history, along with categorization and priority. To ensure a systematic and uniform identification of building maintenance requirements, a detailed inspection process has been employed. The identified maintenance projects were codified within a series of maintenance systems and subsystems that are fundamental to the facilities manager and the initiation of a strategic maintenance plan.





# FACILITIES CONDITION ASSESSMENT SCOPE

Name	Service	GSF
Webb Middle School	FCA	100,000
Ironton-LaValle Elementary School	FCA	20,288
Loganville Elementary School	FCA	22,904
Pineview Elementary School	FCA	60,000
Westside Elementary School	FCA	40,000
Reedsburg Area High School	FCA	228,984
	TOTAL	472,176
	BUILDING COUNT	6
	AVG GSF PER BLDG	78,696





## 2. EXECUTIVE SUMMARY

# EXECUTIVE SUMMARY

This comprehensive visual assessment provides a document to help strategically manage needs by estimating costs, and prioritizing and categorizing every opportunity for effective, data-driven decision making. The end goal is to maximize data analytics and to create a prioritized capital replacement strategy that reduces deferred needs and daily maintenance challenges. This report can be referenced and updated on a recurring basis to perpetually maintain a current list of your capital renewal and deferred needs. The following information provides graphical summaries of the identified need.



THE ASSESSMENT  
IDENTIFIED NEEDS  
WITHIN THE  
FOLLOWING  
PRIORITY  
CATEGORIES:

## EXECUTIVE SUMMARY

*Priority One: Life Safety*—Work that needs to be performed immediately to correct cited safety hazards and life safety code violations affecting immediate safety or an immediate threat.

*Priority One A: Currently Critical*—Work that needs to be performed immediately to return a facility to normal operation or will halt accelerated deterioration.

*Priority Two: Potentially Critical in Two Years* —Systems in this category include conditions requiring appropriate attention to preclude predictable deterioration or potential downtime and the associated damage or higher costs if deferred further.

*Priority Three: Necessary in Three Years*—Systems in this category include conditions suggesting that their expected useful life term has passed.

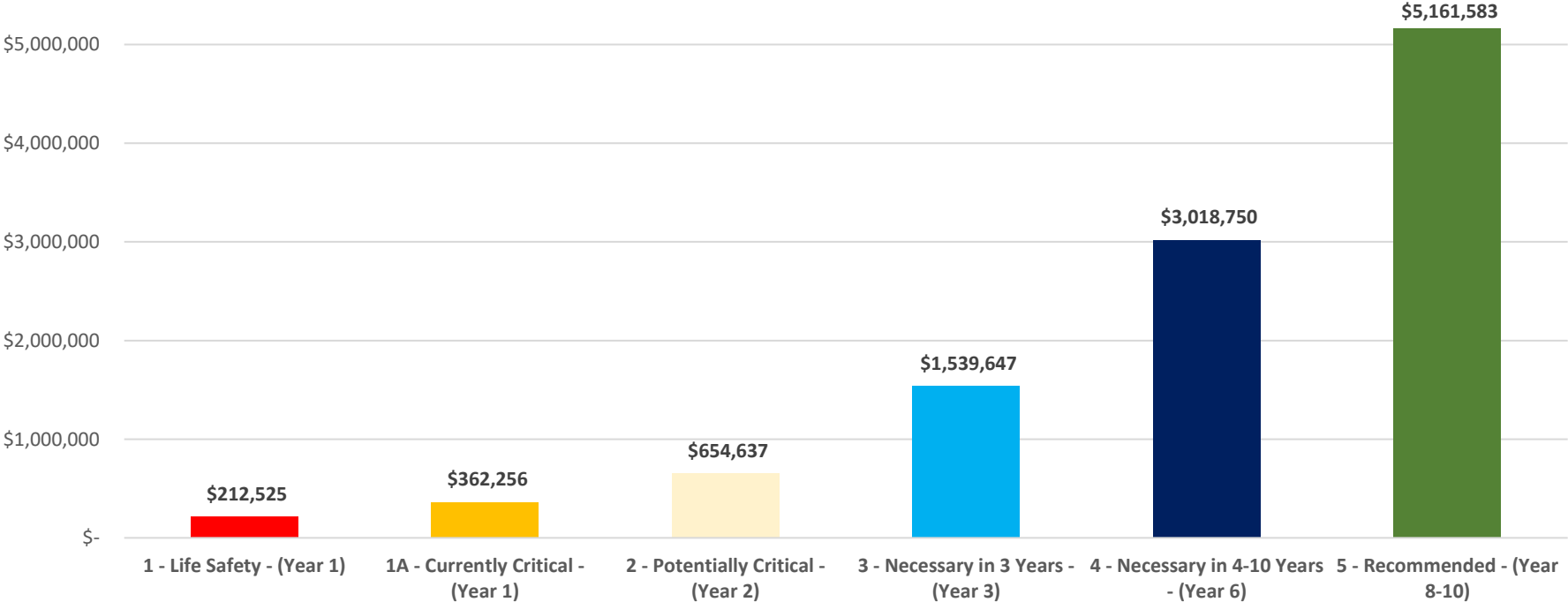
*Priority Four: Necessary in 4 to 10 years*—Systems or items that will come due within the 10-year time frame of this report. These items are not currently a concern but will exceed their useful life term within the next 10 years or are beyond expected life cycles now and exhibit no signs of immediate repair requirements but will need to be addressed within the report timeline.

*Priority Five: Recommended*—Systems that offer operational or cost-saving improvements over existing systems, including modernization or the installation of additional systems that will improve or enhance operations.



# EXECUTIVE SUMMARY

Projects were identified with a total value of \$10,949,397. The following chart summarizes the identified **Project needs by priority category**. This chart shows need by year(s) based on priority.



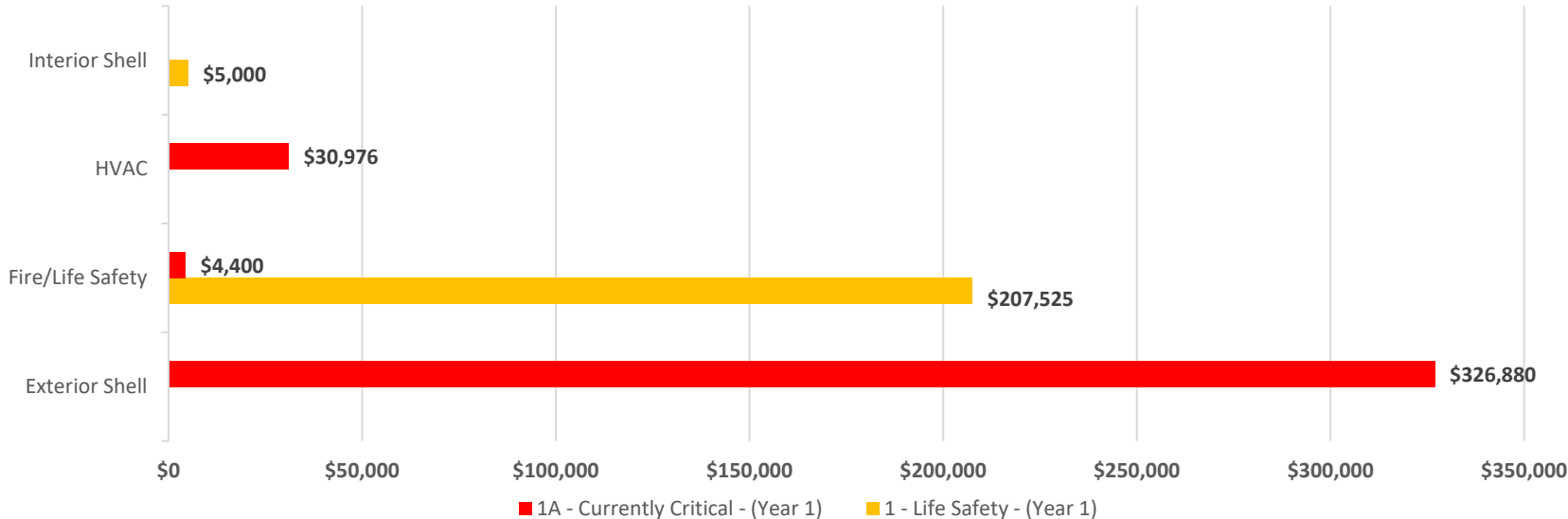
# EXECUTIVE SUMMARY

The following chart breaks out all the **Priority 1 (Life Safety)** or **1A (Currently Critical)** items that have been identified to be addressed within one year.

These items total \$574,781 are broken out as follows:

- Priority 1 (Life Safety) - \$212,525
- Priority 1A (Currently Critical) - \$362,256

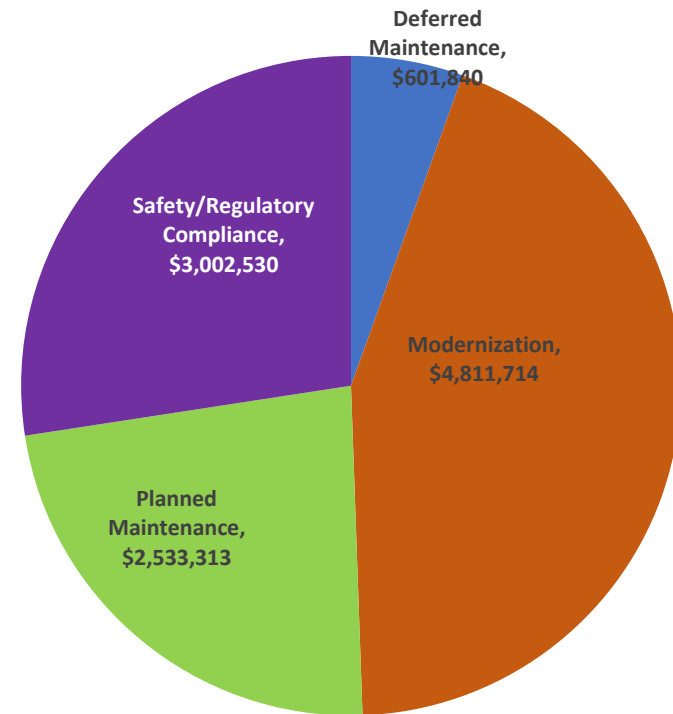
The largest costs in the high priority category are Priority 1 (Life Safety) issues, which include fire alarm systems, along with egress lighting and exit signage. Also, the asphalt playground at the rear of Ironton-LaValle Elementary School is deteriorating and can potentially be a safety hazard and needs to be removed and resurfaced.



# EXECUTIVE SUMMARY

Projects were also classified by budget category. A description of each of the budget categories used in this condition assessment are included in the graph and bullets below:

- **Deferred Maintenance:** Maintenance that has been deferred beyond its normal repair cycle due to inadequate funding or lack of a comprehensive deficiency identification process. Deferred maintenance will result in significant added costs, potential program failure, and/or a liability exposure. Deferred maintenance identified for future years is estimated on visual assessment and equipment life cycle.
- **Planned Maintenance:** Regular maintenance that is essential for the normal protection and preservation of the facilities' structural integrity, functional utility, and/or aesthetic impact.
- **Safety/Regulatory Compliance:** Repairs or changes to a facility to accommodate a modification in code and or safety requirements.
- **Daily Service/Routine Maintenance:** Includes activities such as daily trouble calls, minor repairs when breakdowns occur, and periodic "tune-ups" including the daily operating activities that prevent breakdowns by performing scheduled maintenance.
- **Modernization:** Modifications or improvements to a facility or system that currently does not exist and will improve the function, performance and or the accessibility of a facility.
- Budget categories in this assessment total **\$10,949,397.**



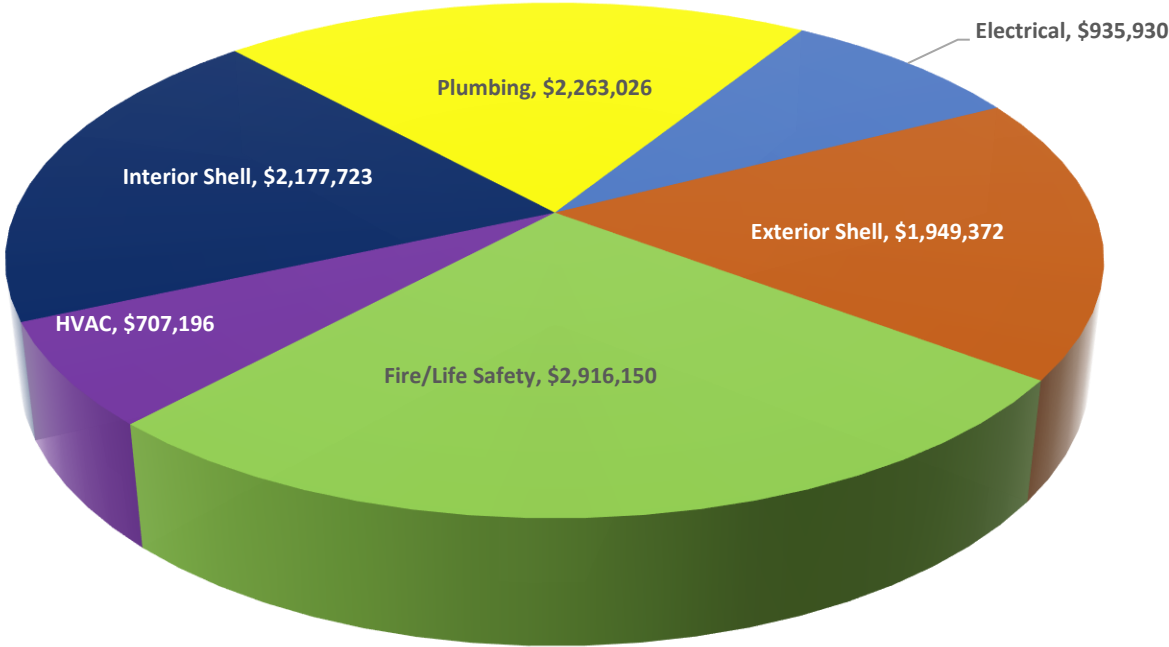
*Note: Deferred Maintenance is based both on visual assessment and standard equipment life cycle. Future identified deferred maintenance may exceed its expected life cycle.*



# EXECUTIVE SUMMARY

The following pie chart summarizes the need broken out by building system. The costs, or systems, were not spread evenly between systems. Most major Exterior Shell and Interior Shell issues were identified, as the buildings are over 40 years old the exterior shell, roofs, windows, and brickwork and interior shell floors and ceilings were found to be in good condition with no exhibit or signs of immediate repair requirements needed within 10 years.

Some of the largest issues identified such as Upgrade Bathrooms (\$1.8M) and Sprinkler System(\$3.0M) are noted as either Priority 4 (4-10 Years) or Priority 5 (Recommended 8-10 Years).



# EXECUTIVE SUMMARY

The following table breaks out all the missions by **Building and Systems**.

BUILDING	ELECTRICAL	EXTERIOR SHELL	FIRE/LIFE SAFETY	HVAC	INTERIOR SHELL	PLUMBING	GRAND TOTAL
Ironton-LaValle Elementary	\$196,908	\$407,580	\$123,420	\$164,948	\$214,173	\$289,534	\$1,396,563
Loganville Elementary	\$224,308	\$130,480	\$130,680	\$231,488	\$125,915	\$518,784	\$1,361,654
Webb Middle	\$295,965	\$514,400	\$800,000	\$309,760	\$1,198,342	\$767,808	\$3,886,275
Westside Elementary	\$218,750	\$425,000	\$240,000		\$160,000	\$400,000	\$1,443,750
Pineview Elementary		\$244,300	\$222,050		\$384,000	\$190,400	\$1,040,750
Reedsburg Area High		\$227,612	\$1,400,000	\$1,000	\$95,294	\$96,500	\$1,820,406
<b>Grand Total</b>	<b>\$935,930</b>	<b>\$1,949,372</b>	<b>\$2,916,150</b>	<b>\$707,196</b>	<b>\$2,177,723</b>	<b>\$2,263,026</b>	<b>\$10,949,397</b>

# EXECUTIVE SUMMARY

The following table breaks out all the missions by **Building and Systems (Priority 1, 1a, and 2 only)**.

BUILDING	ELECTRICAL	EXTERIOR SHELL	FIRE/LIFE SAFETY	HVAC	INTERIOR SHELL	PLUMBING	GRAND TOTAL
Ironton-LaValle Elementary		\$263,880	\$51,425	\$26,708			\$342,013
Loganville Elementary			\$54,450	\$15,488			\$69,938
Webb Middle	\$224,565			\$174,240	\$5,000	\$3,500	\$407,305
Westside Elementary		\$75,000	\$100,000				\$175,000
Pineview Elementary		\$500	\$6,050				\$6,550
Reedsburg Area High		\$227,612		\$1,000			\$228,612
<b>Grand Total</b>	<b>\$224,565</b>	<b>\$566,992</b>	<b>\$211,925</b>	<b>\$217,436</b>	<b>\$5,000</b>	<b>\$3,500</b>	<b>\$1,229,418</b>



# EXECUTIVE SUMMARY

The following table shows the top 10 cost items identified.

BUILDING	SYSTEM	SUBSYSTEM	DESCRIPTION	PRIORITY	TOTAL COST
Reedsburg Area High	Fire/Life Safety	Sprinkler	The building does not have a fire sprinkler system	5 - Recommended - (Year 8-10)	\$1,400,000
Webb Middle	Fire/Life Safety	Sprinkler	The building does not have a fire sprinkler system	5 - Recommended - (Year 8-10)	\$800,000
Webb Middle	Exterior Shell	Windows	Double pane aluminum windows are in good condition	5 - Recommended - (Year 8-10)	\$494,400
Webb Middle	Interior Shell	Flooring/VCT	VCT flooring (12" x 12" tiles) are in good condition	5 - Recommended - (Year 8-10)	\$484,000
Loganville Elementary	Plumbing	Bathrooms	Bathrooms are in poor condition and need to be replaced	4 - Necessary in 4-10 Years - (Year 6)	\$484,000
Webb Middle School	Interior Shell	Ceiling/ACT	12" x 12" Spline ceiling tiles are in good condition	5 - Recommended - (Year 8-10)	\$425,000
Westside Elementary	Plumbing	Restrooms	(8) bathrooms are aged and built on grade.	4 - Necessary in 4-10 Years - (Year 6)	\$400,000
Webb Middle	Plumbing	Bathrooms	Bathrooms are in good condition	5 - Recommended - (Year 8-10)	\$363,000
Westside Elementary	Exterior Shell	Parking lot	Parking lot has spider cracks and holes in pavement.	3 - Necessary in 3 Years - (Year 3)	\$350,000
Webb Middle	Plumbing	Boiler	Patterson Kelly condensing hot water boilers are beyond useful life	3 - Necessary in 3 Years - (Year 3)	\$275,000

As seen above, the majority of the items are not critical, and most can be deferred for more than four years. Also, the top 10 items account for 50% of total need.

# School District of Reedsburg

$$\begin{array}{rcccl} \text{TOTAL} & \text{Facility} & & & \\ & \text{Condition} & & & \\ & \text{Index} & = & \frac{\text{Cost of Deficiencies}^*}{\text{Current Replacement Value}^\wedge} & = \frac{\$5,787,814}{\$96,796,080} = .06 \end{array}$$

The School District Buildings have a combined FCI of .06; this indicates a Fair to Good condition rating.

For more detailed information regarding the Facilities Condition Index Ratio, please refer to Appendix B on page 69.

*Note that we did not have access to actual current replacement value information and utilized an estimate of \$205 per square foot.*

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### 3. BUILDING OVERVIEW

# BUILDING OVERVIEW

The School District of Reedsburg is a school district based in the city of Reedsburg, Wisconsin. Covering approximately 264 square miles, the district serves the city of Reedsburg and the villages of Ironton, LaValle, Loganville, and Rock Springs. The School District of Reedsburg administers four elementary schools, one intermediate school, one middle school, and one high school. The buildings assessed were built in the 1960's with the exception of the High School which was built in 1998.



# BUILDING OVERVIEW

## WEBB MIDDLE SCHOOL

The Webb Middle School is the second largest school assessed during this trip and contains 575 students. The building is typical of school building construction built in the 1960's with many upgrades made in approximately 1992. The 100,000 GSF one story construction on concrete slab on grade. The building consists of classrooms including a woodworking shop, art, music, and band rooms; gymnasium/auditorium which includes locker rooms with showers and a cafeteria. This building is well maintained.

### HVAC

Five 2,000,000 MMBtu Patterson-Kelly brand gas-fired hot water condensing boilers fueled by natural gas were installed during the 1992 upgrades installed in approximately 1992. These boilers provide the hot water (HHW) required for heating the majority of the building. The building heating is supplied by wall-mounted unit ventilators with hot water heat and a perimeter convection heat. The two 7.5 HP heating hot water recirculating pumps were also installed during the 1992 upgrades and are in good condition. With proper PMs and servicing, these boilers and pumps could last at least another three to five years.

There is one cooling only split system serving the home economics/child development classroom. Three air-cooled condensing units which serve the library. Two 3-ton Trane units utilizes R-22, and one 18,000 Btu single zone Carrier ductless outdoor cooling unit utilizes R410a.

The building has a tank mounted twin air compressor which

operates the older pneumatic controls for the heating system.

Three Blue Ox brand air scrubbers for dust control are hung from the ceiling in the woodworking shop. There is also a make-up air unit with fresh air intake and hot water coil for heating that serves this room and the art classroom.



### ELECTRICAL

The building electrical is a 120/208 volt with 1200-amp incoming service. Supplying a 600 amp service to outdated subpanels. There is no emergency generator in this building.

All the lighting in the building is T12 and T8 lights with MH high bays

# BUILDING OVERVIEW

in the gym area. Additionally, the restrooms utilize space motion occupancy detection sensor lighting to conserve energy.

The building does have a fire alarm system, but no sprinkler system since it was not required per code at time of construction. A Simplex brand model 4010 fire alarm panel is present in the structure and serves as a headend for the fire alarm requirements.

The building has limited egress lighting because there is no emergency generator present, and the exit signs are confusing.

## PLUMBING

The building has a 4-inch incoming utility service for potable domestic water. The incoming utility service utilizes a backflow preventor and water meter located in the mechanical equipment room. There was no booster pump for the domestic water system. Domestic hot water is generated by two gas-fired 120-gallon hot water heaters. These units were installed in February 2021 and are new to the building. Both are located in the mechanical equipment room.

Domestic hot water recirculating pumps are installed for domestic

## FIRE SYSTEMS

This building has a fire alarm system but no sprinkler system since it was not required at the time of construction. Building has limited egress lighting and no generator.

## INTERIOR FINISHES

hot water circulation through the building. These pumps are 7.5 HP and do not have VFDs. These pumps were installed during the 1992 upgrade.

Natural gas piping enters the mechanical equipment room and is utilized for condensing HHW boilers and domestic hot water heaters.

The restrooms in the building are aged and have floor-mounted urinals in restrooms and beyond their useful life. Toilets are older with high flow flush. Some of the restrooms have newer sinks with touch control faucets. The gang showers in the locker rooms are older and are not efficient.

## ARCHITECTURAL

The 100,000 square foot building is a one-story construction on concrete slab on grade, and the exterior is comprised of concrete masonry units and brick. The windows are single pane aluminum frame with storm windows. The roof is an ethylene propylene diene polymer (EDPM) recently replaced in 2014 and is in good condition.



# BUILDING OVERVIEW

Interior finishes include VCT tile on floors in most classrooms and corridors. There are also some areas of carpet in the library and a few classrooms/offices. Woodworking shops and art rooms have concrete floors. Gymnasium floor is hardwood maple. Acoustic ceiling tiles are installed on most ceilings and are in fair condition. Corridor walls have corkboard installed on the upper half of wall which also has lockers and concrete masonry units. The rest of the building walls are standard painted concrete masonry units. The restrooms consist of on-grade 2”x 2” ceramic tile on floors and walls.



# BUILDING OVERVIEW

SYSTEM	SUBSYSTEM	DESCRIPTION	CORRECTIVE ACTION	PRIORITY	TOTAL COST
Electrical	Light Fixtures	Light fixtures are T12 and T8 bulbs	Replace all fixtures with LED	2 - Potentially Critical - (Year 2)	\$208,725
Electrical	Light Fixtures	High bay light in gym are MH fixtures	Replace all fixtures with LED	2 - Potentially Critical - (Year 2)	\$15,840
Electrical	Fire Control Panel	Simplex fire control panel is obsolete	Fire panel made between 1998 and 2014 outdated consider upgrading	3 - Necessary in 3 Years - (Year 3)	\$71,400
Exterior Shell	Windows	Double pane aluminum windows are in good condition	Replace windows with vinyl double pane insulated when necessary	5 - Recommended - (Year 8-10)	\$494,400
Exterior Shell	Roof/EDPM	EDPM Roofing System is new approximately 5 years old	Patch/maintain roofing system as necessary	5 - Recommended - (Year 8-10)	\$20,000
Fire/Life Safety	Sprinkler	The building does not have a fire sprinkler system	Install a fire sprinkler system	5 - Recommended - (Year 8-10)	\$800,000
HVAC	Unit Ventilator	Fan operated unit ventilators with hot water coil which provide minimal fresh air to the building are beyond their useful life	Replace fan operated unit ventilators with a more efficient system and tie to a BMS system.	2 - Potentially Critical - (Year 2)	\$174,240
HVAC	Make-up Air Unit	(8) Make-up air units with hot water heat are beyond their useful life	Replace (8) make-up air units with new units with economizer and tie into a BMS system	4 - Necessary in 4-10 Years - (Year 6)	\$119,680
HVAC	Air Scrubber	(3) Blue Ox air scrubbers are newer	Air scrubbers are in good condition recommend putting an occupancy sensor, so units are not running at all times	4 - Necessary in 4-10 Years - (Year 6)	\$9,900

# BUILDING OVERVIEW

SYSTEM	SUBSYSTEM	DESCRIPTION	CORRECTIVE ACTION	PRIORITY	TOTAL COST
<b>HVAC</b>	Split Systems	3-ton split system cooling only is in excellent condition	No action needed at this time, will require replacement in 6+ years	4 - Necessary in 4-10 Years - (Year 6)	\$5,940
<b>Interior Shell</b>	Conveying	No safety cage apparatus installed on ladder access to mezzanine area behind stage in incoming electrical room	Relocate ladder to new location and install cage or install trolley ladder	1 - Life Safety - (Year 1)	\$5,000
<b>Interior Shell</b>	Flooring/Concrete	Concrete flooring is in good condition	Maintain/paint as necessary	3 - Necessary in 3 Years - (Year 3)	\$100,200
<b>Interior Shell</b>	Flooring/Carpet	Carpet is in fair condition	Replace carpets as needed	3 - Necessary in 3 Years - (Year 3)	\$16,302
<b>Interior Shell</b>	Flooring/Wood	Maple hardwood flooring is in good condition	Maintain as necessary	4 - Necessary in 4-10 Years - (Year 6)	\$65,800
<b>Interior Shell</b>	Flooring/VCT	VCT flooring (12" x 12" tiles) are in good condition	Replace VCT flooring as needed	5 - Recommended - (Year 8-10)	\$484,000
<b>Interior Shell</b>	Ceiling/ACT	12" x 12" Spline ceiling tiles are in good condition	Replace as necessary	5 - Recommended - (Year 8-10)	\$425,000
<b>Interior Shell</b>	CMU	Paint CMU walls as necessary	Paint CMU walls as necessary	5 - Recommended - (Year 8-10)	\$77,440
<b>Interior Shell</b>	Flooring/Ceramic Tiles	2" x 2" Ceramic tiles in bathrooms are in good condition	Replace 2" x 2" ceramic tiles in bathrooms as needed	5 - Recommended - (Year 8-10)	\$24,600
<b>Plumbing</b>	Air Compressor System	60-gallon duplex air compressor is beyond useful life	Replace 60-gallon air compressor with new	2 - Potentially Critical - (Year 2)	\$3,500
<b>Plumbing</b>	Boiler	Patterson Kelly condensing hot water boilers are beyond useful life	Replace hot water condensing boilers with new	3 - Necessary in 3 Years - (Year 3)	\$275,000

# BUILDING OVERVIEW

SYSTEM	SUBSYSTEM	DESCRIPTION	CORRECTIVE ACTION	PRIORITY	TOTAL COST
Plumbing	Toilets	Toilets and fixtures are old	Replace toilets and fixtures	4 - Necessary in 4-10 Years - (Year 6)	\$45,000
Plumbing	Sinks	Sinks and fixtures are aged	Upgrade sinks and fixtures to touchless and more efficient	4 - Necessary in 4-10 Years - (Year 6)	\$26,250
Plumbing	Shower	Showers and fixtures are aged	Replace showers and fixtures with more efficient	4 - Necessary in 4-10 Years - (Year 6)	\$15,000
Plumbing	Domestic Water/Softener	Culligan water softener is new	Water softener installed in 2018 maintain as necessary	4 - Necessary in 4-10 Years - (Year 6)	\$4,000
Plumbing	Bathrooms	Bathrooms are in good condition	Replace when necessary. Bathrooms are built on grade and need complete reworking of all plumbing and sewer system and ceramic tile floors which will include prevailing rate	5 - Recommended - (Year 8-10)	\$363,000
Plumbing	Domestic Hot Water	(2) 120-gallon gas fired hot water tanks	Hot water tanks were installed in 02/2021 maintain as necessary	5 - Recommended - (Year 8-10)	\$20,570
Plumbing	Domestic Hot Water Pumps	(2) 7.5 HP domestic hot water pumps are in good condition	Maintain (2) 7.5 HP domestic hot water pumps as necessary	5 - Recommended - (Year 8-10)	\$8,470
Plumbing	Heating Hot Water Pumps	(2) 7.5 HP heating hot water pumps are in good condition	Maintain (2) 7.5 heating hot water pumps as necessary	5 - Recommended - (Year 8-10)	\$7,018
<b>TOTAL</b>					<b>\$3,886.275</b>



# BUILDING OVERVIEW

## LOGANVILLE ELEMENTARY SCHOOL

Loganville Elementary School is a typical school building construction built in the 1960's with an addition and upgrades to install a handicapped ramp in approximately 1992. The 22,904 GSF one-story construction on concrete slab on grade, and the exterior is made of brickwork with enamel panels under windows and cedar detail on soffit. We were told that approximately 30 students occupy this whole building.

### HVAC

Two 1,000,000 MMBtu Aerco brand gas-fired hot water condensing boilers fueled by natural gas are in good condition with an estimated installation in 2002. These boilers provide the hot water (HHW) required for heating the majority of the building. The building heating is supplied by wall-mounted unit ventilators with hot water heat and a perimeter convection heat. These units have reached their useful life. With proper PMs and servicing, these boilers and pumps could last at least another 4-6 years. There was a heating only air handler unit that serves the gymnasium. Heating hot water recirculating pumps were installed during the 1992 upgrades.



The heating system is controlled by Honeywell pneumatic actuators.

There are four split cooling systems in the building. These include three Trane units which serve the library only, one unit was not working at time of visit, and one Carrier unit that serves the principal's office.

# BUILDING OVERVIEW

## ELECTRICAL

The building electrical is a 120/208 volt with 800-amp incoming utility service. Supplying service to outdated subpanels. There is no emergency generator in the building.

The building does have a fire alarm system, but no sprinkler system since it was not required per code at time of construction.

EST brand fire alarm panel is present in the structure and only has three smoke heads serving the new addition of building.

Building has limited egress lighting because there is no emergency generator present, and the exit signs are confusing. Signage and egress lighting should be addressed.

All the lighting in the building is T12 and T8 lights with MH high bays in the gym area. Lighting should be upgraded to LED.

## PLUMBING

The building has a 4-inch incoming utility service for potable domestic water. The incoming utility service utilizes a backflow preventor and water meter located in the boiler room.

## FIRE SYSTEMS

The structure does not have a sprinkler or fire protection system.

Domestic hot water is generated by one gas-fired 80-gallon hot water heaters that were installed approximately in 2018. Both are located in the mechanical equipment room. There is one domestic hot water recirculating pump installed for domestic hot water circulation through the building. This is a small Bell & Gossett approximately 1/3 HP pump.

Natural gas piping enters the boiler room and is utilized for condensing hot water boilers and domestic hot water heaters.

A single water softener unit was installed in 2016 for the boilers and domestic water.

Floor-mounted urinals in restrooms are aged and beyond their useful life. Toilets are older with high flow flush.

## ARCHITECTURAL

The 22,904 square foot building is a one-story construction on concrete slab on grade. The exterior is made of brickwork and CMU with enamel panels under windows and cedar detail on soffit. Exterior windows are single pane aluminum frames with storm windows. EPDM roofing system is in good condition; it was recently replaced in 2016.

# BUILDING OVERVIEW

## INTERIOR FINISHES

Interior finishes include VCT tile on floors in most classrooms and corridors, and there are also some areas of carpet in library and a few classrooms/offices. Corridor and classroom walls have typical concrete masonry units. The gymnasium has 2"x 2" ceramic tiles on upper half of walls. The ceilings are 1 ¼" tongue and groove cedar.



# BUILDING OVERVIEW

SYSTEM	SUBSYSTEM	DESCRIPTION	CORRECTIVE ACTION	PRIORITY	TOTAL COST
Electrical	Light Fixtures	Light fixtures are T12 and T8 bulbs	Replace all fixtures with LED	3 - Necessary in 3 Years - (Year 3)	\$83,188
Electrical	Sub-Panels	Sub panels beyond useful life	Sub panels require upgrades	4 - Necessary in 4-10 Years - (Year 6)	\$129,600
Electrical	Electrical	120-208 800 Amp service will require upgrades	Upgrade electrical service	5 - Recommended - (Year 8-10)	\$11,520
Exterior Shell	Exterior Enamel Panels	Enamel panels under windows are not insulated	Install enamel panels with at least an R19 rated insulation	4 - Necessary in 4-10 Years - (Year 6)	\$9,100
Exterior Shell	Windows	Double pane aluminum windows are in good condition	Replace windows with vinyl double pane insulated	5 - Recommended - (Year 8-10)	\$94,380
Exterior Shell	Roof/EDPM	EDPM Roofing System is new, approx. 5 years old	Patch/maintain roofing system as necessary	5 - Recommended - (Year 8-10)	\$15,000
Exterior Shell	Brickwork	Brickwork on exterior walls is in good condition	Point and maintain exterior brickwork as needed	5 - Recommended - (Year 8-10)	\$12,000
Fire/Life Safety	Sprinkler	Building does not have sprinkler system	Install sprinkler system throughout building	5 - Recommended - (Year 8-10)	\$76,230
Fire/Life Safety	Smoke Head	There are only (3) smoke heads in building	Install additional smoke heads per code	1 - Life Safety - (Year 1)	\$54,450
HVAC	Split Systems	4-ton split system cooling only is beyond useful life	Replace 4-ton split unit with new unit	1A - Currently Critical - (Year 1)	\$10,890
HVAC	Split Systems	3-ton split system cooling only is beyond useful life	Replace 3-ton split unit with new unit	1A - Currently Critical - (Year 1)	\$4,598

# BUILDING OVERVIEW

SYSTEM	SUBSYSTEM	DESCRIPTION	CORRECTIVE ACTION	PRIORITY	TOTAL COST
<b>HVAC</b>	Unit Ventilator	Unit ventilator installed in 1961 is beyond its useful life	Replace fan operated unit ventilators with a more efficient system and tie to a BMS system	4 - Necessary in 4-10 Years - (Year 6)	\$216,000
<b>Interior Shell</b>	Flooring/Carpet	Carpet is in fair condition	Replace carpets as needed	3 - Necessary in 3 Years - (Year 3)	\$6,721
<b>Interior Shell</b>	Flooring/VCT	VCT flooring (12" x 12" tiles) are in good condition	Replace VCT flooring as needed	4 - Necessary in 4-10 Years - (Year 6)	\$114,394
<b>Interior Shell</b>	Flooring/Ceramic Tiles	Ceramic tiles in bathrooms are aged	Replace ceramic tiles in bathrooms	4 - Necessary in 4-10 Years - (Year 6)	\$4,800
<b>Plumbing</b>	Domestic Hot Water	(1) 80-gallon gas fired tank is approaching end of useful life	Replace domestic hot water heater when necessary	3 - Necessary in 3 Years - (Year 3)	\$1,584
<b>Plumbing</b>	Bathrooms	Bathrooms are in poor condition and need to be replaced	Bathrooms are built on grade and need complete reworking of all plumbing and sewer system and ceramic tile floors which will include prevailing rate	4 - Necessary in 4-10 Years - (Year 6)	\$484,000
<b>Plumbing</b>	Boiler	(2) Aerco 1 million btu/hr. hot water boilers are in good condition	Condensing boilers are circa 2002 and in good condition, replace when necessary	4 - Necessary in 4-10 Years - (Year 6)	\$24,200
<b>Plumbing</b>	Toilets	Toilets and fixtures are old	Replace toilets and fixtures	4 - Necessary in 4-10 Years - (Year 6)	\$4,500
<b>Plumbing</b>	Sinks	Sinks and fixtures are aged	Upgrade sinks and fixtures to touchless and more efficient	4 - Necessary in 4-10 Years - (Year 6)	\$4,500
<b>TOTAL</b>					<b>\$1,361,654</b>



# BUILDING OVERVIEW

## IRONTON-LAVALLE ELEMENTARY SCHOOL

Iron-ton-LaValle Elementary School is a typical school building construction built in the 1960's with an addition and upgrades made in approximately 1992. The 20,288 GSF one story construction on concrete slab on grade building is the smallest building assessed during our visit. We were informed that this building also only occupies 25 students. The exterior is made of brickwork with enamel panels under windows and cedar detail on soffit. EPDM roofing system in good condition replaced 2016.



### HVAC

Two 990,000 MMBtu De Dietrich brand gas-fired hot water condensing boilers fueled by natural gas installed in 1998 are in good condition. The building heating is distributed by 16 wall-mounted unit ventilators with hot water heat and fan coil units around the perimeter of the classrooms. These wall-mounted unit ventilators are approaching their useful life, but with proper PMs and servicing, these units could last at least another 3-5 years. Heating hot water recirculating pumps were installed during the 1998 upgrades and are in good condition.

Building circulation air is supplied by one Torrvent brand HVAC unit. This unit is also approaching the end of its useful life and should be considered for replacement within 2-3 years.

The heating system is controlled by aged Honeywell pneumatic actuators.

There are two 2-ton split cooling systems in the building. One serves the front offices, and one serves the library.

### ELECTRICAL

The building electrical is a 120/208 volt with 800-amp incoming utility service. Supplying 600-amp service to outdated subpanels. Subpanels should be upgraded. There is no emergency generator in the building.

The building does have a fire alarm system, but no sprinkler system since it was not required per code at time of construction.

# BUILDING OVERVIEW

EST brand fire alarm panel is present in the structure and only has three smoke heads serving the new addition of building. Additional smoke heads should be installed per code.

Building is missing exit signs and egress lights throughout. Exit signs and egress lighting should be installed per code.

All the lighting in the building is T12 and T8 lights with MH high bays in the gym area. Lighting should be upgraded to LED.

## PLUMBING

The building has a 4-inch incoming utility service for potable domestic water. The incoming utility service utilizes a backflow preventor and water meter located in the boiler room.

Domestic hot water is generated by one gas-fired 80-gallon hot water heater which was installed approximately in 2018 and is located in the mechanical equipment room. There is one domestic hot water recirculating pump installed for domestic hot water circulation through the building.

Natural gas piping enters the boiler room and is utilized for condensing hot water boilers and domestic hot water heaters.

Floor-mounted urinals in restrooms are aged and beyond their useful life. Toilets are older with high flow flush.

## ARCHITECTURAL

The 20,288 square foot building is a one-story construction on concrete slab on grade, and the exterior is made of brickwork with

enamel panels under windows and cedar detail on soffit. Exterior windows are single pane aluminum frames with storm windows. EPDM roofing system in good condition recently replaced in 2016.

## FIRE SYSTEMS

The structure does not have a sprinkler or fire protection system.

# BUILDING OVERVIEW

## INTERIOR FINISHES

Interior finishes include VCT tile on floors in most classrooms and corridors, and there are also some areas of carpet in library and a few classrooms/offices. Corridor and classroom walls have typical concrete masonry units, the gymnasium has 2" x 2" ceramic tiles on upper half of walls. The ceilings are 12" x 12" acoustic ceiling tiles which are in poor condition.

## EXTERIOR FINISHES

The concrete canopy in front of the building has deteriorated and should be removed. Paving has deteriorated on playground/basketball court in rear of building. Concrete pavers on walkways are need of repair/replacement and are trip hazards. There are two main entrance doors, one in front of the building and one in the rear. Both have broken bucks and should be repaired.



# BUILDING OVERVIEW

SYSTEM	SUBSYSTEM	DESCRIPTION	CORRECTIVE ACTION	PRIORITY	TOTAL COST
Electrical	Light Fixtures	Light fixtures are T12 and T8 bulbs	Replace all fixtures with LED	3 - Necessary in 3 Years - (Year 3)	\$136,428
Electrical	Sub-Panels	Sub panels beyond useful life	Sub panels require upgrades	4 - Necessary in 4-10 Years - (Year 6)	\$51,840
Electrical	Electrical	120-208 600-amp service will require upgrades	Upgrade electrical service	5 - Recommended - (Year 8-10)	\$8,640
Exterior Shell	Asphalt Playground	Asphalt playground at rear of building is deteriorated	Resurface asphalt playground at rear of building	1A - Currently Critical - (Year 1)	\$232,200
Exterior Shell	Front Walkway	Concrete walkway into and around building has failed	Replace concrete block walkway and curbing	1A - Currently Critical - (Year 1)	\$17,280
Exterior Shell	Doors/Exterior	Bucks are rotted on both egress doors	Replace rotted bucks on both egress doors	1A - Currently Critical - (Year 1)	\$2,400
Exterior Shell	Canopy	Concrete canopy in front of building has deteriorated and needs to be removed	Remove concrete canopy in front of building	2 - Potentially Critical - (Year 2)	\$12,000
Exterior Shell	Windows	Double pane aluminum window units are in good condition	Replace windows with vinyl double pane insulated	5 - Recommended - (Year 8-10)	\$128,700
Exterior Shell	Roof/EDPM	EDPM Roofing System is new, approx. 5 years old	Patch/maintain roofing system as necessary	5 - Recommended - (Year 8-10)	\$15,000
Fire/Life Safety	Sprinkler	Building does not have sprinkler system	Install sprinkler system throughout building	5 - Recommended - (Year 8-10)	\$71,995
Fire/Life Safety	Smoke Head	There are not enough smoke heads installed per code	Install additional smoke heads per code	1 - Life Safety - (Year 1)	\$51,425

# BUILDING OVERVIEW

SYSTEM	SUBSYSTEM	DESCRIPTION	CORRECTIVE ACTION	PRIORITY	TOTAL COST
<b>HVAC</b>	Split Systems	2-ton split system cooling only unit is beyond useful life.	Replace 2-ton split unit with new unit	1A - Currently Critical - (Year 1)	\$10,890
<b>HVAC</b>	Split Systems	2-ton split system cooling only unit is beyond useful life.	Replace 2-ton split unit with new unit	1A - Currently Critical - (Year 1)	\$4,598
<b>HVAC</b>	Circulation Air	(1) Torrvent HVAC unit	Replace unit with efficient new unit	2 - Potentially Critical - (Year 2)	\$11,220
<b>HVAC</b>	Unit Ventilator	Unit ventilator installed in the 1960s are beyond their useful life	Replace fan operated unit ventilators with a more efficient system and tie into a BMS system	4 - Necessary in 4-10 Years - (Year 6)	\$138,240
<b>Interior Shell</b>	Flooring/Carpet	Carpet is in fair condition	Replace carpets as necessary	3 - Necessary in 3 Years - (Year 3)	\$2,453
<b>Interior Shell</b>	Flooring/VCT	VCT flooring (12" x 12" tiles) is in good condition	Replace VCT flooring as needed	5 - Recommended - (Year 8-10)	\$126,720
<b>Interior Shell</b>	Ceiling/ACT	12" x 12" Spline ceiling tiles are in good condition	Replace spline ceiling tiles as necessary	5 - Recommended - (Year 8-10)	\$85,000
<b>Plumbing</b>	Domestic Hot Water	(1) 80-gallon gas fired domestic water tank is beyond useful life	Replace 80-gallon gas fired domestic water tank with new	3 - Necessary in 3 Years - (Year 3)	\$1,584
<b>Plumbing</b>	Bathrooms	Bathrooms are in poor condition and need to be replaced	Bathrooms are built on grade and need complete reworking of all plumbing and sewer system and ceramic tile floors which will include prevailing rate	4 - Necessary in 4-10 Years - (Year 6)	\$242,000



# BUILDING OVERVIEW

SYSTEM	SUBSYSTEM	DESCRIPTION	CORRECTIVE ACTION	PRIORITY	TOTAL COST
Plumbing	Boiler	(2) Dietrick 990,000 btu/hr. gas fired condensing hot water boilers are circa 1998 and in good condition	Maintain boilers as needed, replace when necessary	4 - Necessary in 4-10 Years - (Year 6)	\$24,200
Plumbing	Toilets	Toilets and fixtures are old	Replace toilets and fixtures with new efficient	4 - Necessary in 4-10 Years - (Year 6)	\$15,000
Plumbing	Sinks	Sinks and fixtures are aged	Upgrade sinks and fixtures to more efficient	4 - Necessary in 4-10 Years - (Year 6)	\$6,750
<b>TOTAL</b>					<b>\$1,396,563</b>



# BUILDING OVERVIEW

## WESTSIDE ELEMENTARY SCHOOL

Westside Elementary School is a typical school building construction built in 1961 with an addition and upgrades in 1981. The 40,000 GSF one-story construction on concrete slab on grade, exterior is made of brickwork. Westside enrolls approximately 200 students in grades Pre-K through grade 2.

### HVAC

Two 2,000 MMBtu/hr. Fulton brand gas-fired hot water condensing boilers fueled by natural gas are in excellent condition and were installed in 2017. These boilers provide the hot water (HHW) required for heating the majority of the building. The building heating is supplied by wall-mounted unit ventilators with hot water heat and a perimeter convection heat. These boilers and pumps, with proper preventative maintenance and servicing, will last at least 30 years.

There was a cooling only air handler unit that serves the main offices. Heating hot water recirculating pumps were original to building but are still in good condition. There is also one air handling unit for makeup air into the building. The heating system is controlled by a mix of Honeywell and Johnson Controls pneumatic actuators.

### ELECTRICAL

The building electrical is a 120/208 volt with 600-amp incoming utility service supplying several distribution panels throughout the building. There is no emergency generator in building.

The building does have a fire alarm system, but no sprinkler system since it was not required per code at time of construction. EST brand fire alarm panel is present in the structure and only has



# BUILDING OVERVIEW

smoke heads throughout but are not in compliance with NFPA 72 of required 20 to 30 feet distance, and they are not in all areas.

Building has adequate egress lighting, however, exit signage should be addressed.

All the lighting in the building is T12 and T8 lights. Lighting should be upgraded to LED.

## PLUMBING

The building has a 2" incoming utility service for potable domestic water. The incoming utility service utilizes backflow preventor and water meter located in the boiler room. Domestic hot water is generated by one electric operated 80-gallon hot water heater. They were installed approximately in March of 2021 and are located in the mechanical equipment room. There is one domestic hot water recirculating pump installed for domestic hot water circulation through the building. This is a small Bell & Gossett approximately 1/3 HP pump.

The natural gas piping enters into the boiler room and is utilized for the condensing hot water boilers. A new gas-train was installed in 2017 along with the boilers.

Floor-mounted urinals in restrooms are aged and beyond their useful life. Toilets are older with high flow flush.

## ARCHITECTURAL

The 40,000 square foot building is a two-story construction on concrete slab on grade, and the exterior is made of brickwork and CMU units. Exterior windows are single pane aluminum frame with storm windows. Standing metal seam roofing system is in fair condition and needs maintenance to repair flashing.

## FIRE SYSTEMS

The structure has fire protection and no sprinkler system or fire protection system.

## INTERIOR FINISHES

Interior finishes include VCT tile on floors in most classrooms and corridors, and there are also some areas of carpet in library and a few classrooms/offices. Corridor and classroom walls have typical concrete masonry units. Acoustic ceiling tiles are present through most of the building.

# BUILDING OVERVIEW

SYSTEM	SUBSYSTEM	DESCRIPTION	CORRECTIVE ACTION	PRIORITY	TOTAL COST
Electrical	Panels	The older 600-amp electrical panel require upgrades	Upgrade all electrical panels with new panels	3 - Necessary in 3 Years - (Year 3)	\$150,000
Electrical	Lighting	Lighting is T-12 and T-8 fluorescent lights	Replace with LED fixtures	3 - Necessary in 3 Years - (Year 3)	\$68,750
Exterior Shell	Roof/Metal	Standing seam metal roofing has leaks at valleys and flashing.	Assess and repair flashing and valleys on roof.	1A - Currently Critical - (Year 1)	\$75,000
Exterior Shell	Parking lot	Parking lot has spider cracks and holes in pavement	Repave parking lot	3 - Necessary in 3 Years - (Year 3)	\$350,000
Fire/Life Safety	Sprinkler	Building does not have sprinkler system.	Install sprinkler system throughout building	5 - Recommended - (Year 8-10)	\$140,000
Fire/Life Safety	Fire Alarm	(2) EST Fire Alarm panel have reached their useful life cycle.	Replace with upgraded panel to meet code	1 - Life Safety - (Year 1)	\$100,000
Interior Shell	Ceiling/ACT	Acoustic tile damage throughout building	Replace with new tile	3 - Necessary in 3 Years - (Year 3)	\$160,000
Plumbing	Restrooms	(8) bathrooms are aged and built on grade	Complete reworking of all plumbing and sewer system and ceramic tile floors which will include prevailing rate	4 - Necessary in 4-10 Years - (Year 6)	\$400,000
<b>TOTAL</b>					<b>\$1,443,750</b>



# BUILDING OVERVIEW

## PINEVIEW ELEMENTARY SCHOOL

Pineview Elementary School is a typical school building construction building in 1961 with an addition and upgrades in 1981. The 60,000 GSF one-story construction is on concrete slab on grade; exterior is made of brickwork. Pineview enrolls approximately 340 students in grades Pre-K through grade 2.

### HVAC

Three 2,000 MMBtu/hr. Fulton brand gas-fired hot water condensing boilers fueled by natural gas are in excellent condition installed in 2017. These boilers provide the hot water (HHW) required for heating the majority of the building. The building heating is supplied by wall-mounted unit ventilators with hot water heat and a perimeter convection heat. These boilers and pumps, with proper preventative maintenance and servicing will last at least 30 years. There was a cooling only air handler unit that serves the main office. Heating hot water recirculating pumps were original to building but are still in good condition. There is also one air handling unit for makeup air into the building. The heating system is controlled by a mix of Honeywell and Johnson Controls pneumatic actuators.

### ELECTRICAL

The building electrical is a 120/208 volt with 600-amp incoming utility service, supplying several distribution panels throughout the building. There is no emergency generator in building.

The building does have a fire alarm system, but no sprinkler system since it was not required per code at time of construction.

EST brand fire alarm panel is present in the structure and only has smoke heads throughout but are not in compliance with NFPA 72 of required 20 to 30 feet distance and they are not in all areas.

Building has adequate egress lighting, however, exit signage should be addressed.

All the lighting in the building is T12 and T8 lights. Lighting should be upgraded to LED.





# BUILDING OVERVIEW

## PLUMBING

The building has a 2" incoming utility service for potable domestic water. The incoming utility service utilizes backflow preventor and water meter located in the boiler room. Domestic hot water is generated by one electric operated 80-gallon hot water heater. They were installed approximately in March of 2021. Both are located in the mechanical equipment room. There is one domestic hot water recirculating pump installed for domestic hot water circulation through the building. This is a small Bell & Gossett approximately 1/3 HP pump. The natural gas piping enters into the boiler room and is utilized for the condensing hot water boilers. A new gas-train was installed in 2017 with the boilers.

Floor-mounted urinals in restrooms are aged and beyond their useful life. Toilets are older with high flow flush.

## ARCHITECTURAL

The 60,000 square foot building is a two-story construction on concrete slab on grade; exterior is made of brickwork and CMU units. Exterior windows are single pane aluminum frame with storm windows; however, the interior rooms have double pane aluminum replaces in 1998. EDPM roof is in good condition and will only require maintenance at this time.

## FIRE SYSTEMS

The structure has no sprinkler system

## INTERIOR FINISHES

Interior finishes include terrazzo flooring in most classrooms and corridors, there are also some areas of carpet in library and a few classrooms/ offices and some VCT flooring. Corridor and classroom walls have typical concrete masonry units.

# BUILDING OVERVIEW

SYSTEM	SUBSYSTEM	DESCRIPTION	CORRECTIVE ACTION	PRIORITY	TOTAL COST
Exterior Shell	Walkways	Walkways and handicapped ramp are in fair condition some cracking visible	Grind and fill cracks with crack sealer as necessary	2 - Potentially Critical - (Year 2)	\$500
Exterior Shell	Windows	(65) Single pane windows are inefficient	Replace windows with vinyl double pane insulated	4 - Necessary in 4-10 Years - (Year 6)	\$185,900
Exterior Shell	Doors/Exterior	(6) Door systems are single pane and inefficient	Replace door systems with double pane systems	4 - Necessary in 4-10 Years - (Year 6)	\$42,900
Exterior Shell	Roof/EDPM	EDPM Roofing System is newer	Patch/maintain roofing system as necessary	5 - Recommended - (Year 8-10)	\$15,000
Fire/Life Safety	Sprinkler	Building has no sprinklers	Install sprinkler system throughout building	5 - Recommended - (Year 8-10)	\$216,000
Fire/Life Safety	Egress Lighting	No egress lighting in boiler room	Install egress lighting in boiler room	1 - Life Safety - (Year 1)	\$1,650
Fire/Life Safety	Exit Signs	Building is missing (8) exit signs	Survey building with local AHJ for proper placement of exit signs and install	1A - Currently Critical - (Year 1)	\$4,400
Interior Shell	Flooring/Carpet	Carpet is in fair condition	Replace carpets as needed	3 - Necessary in 3 Years - (Year 3)	\$71,500
Interior Shell	Walls/Paint	Block, drywall, and plaster walls are in good condition	Paint and maintain walls as needed	3 - Necessary in 3 Years - (Year 3)	\$10,000
Interior Shell	Ceiling/ACT	Ceiling tile damaged in some areas	Replace with new tile	4 - Necessary in 4-10 Years - (Year 6)	\$240,000
Interior Shell	Floor/Terrazzo	Terrazzo flooring cafeteria/kitchen area in fair condition	Maintain terrazzo flooring as necessary	4 - Necessary in 4-10 Years - (Year 6)	\$40,000

# BUILDING OVERVIEW

SYSTEM	SUBSYSTEM	DESCRIPTION	CORRECTIVE ACTION	PRIORITY	TOTAL COST
<b>Interior Shell</b>	Ceiling/Paint	Paint on ceilings is in fair condition	Paint and maintain cafeteria/kitchen ceilings	4 - Necessary in 4-10 Years - (Year 6)	\$20,000
<b>Interior Shell</b>	Walls/Ceramic Tiles	Ceramic tiles in cafeteria/ kitchen area are in fair condition	Reseal and clean ceramic tile	4 - Necessary in 4-10 Years - (Year 6)	\$2,500
<b>Plumbing</b>	Restrooms	(3) boy's restrooms have floor-mounted urinals	Replace floor-mounted urinals wall mounted urinals (Require complete demolition of wall and concrete floor due to plumbing configuration)	4 - Necessary in 4-10 Years - (Year 6)	\$150,000
<b>Plumbing</b>	Sinks	(39) faucets are older and inefficient	Upgrade to touchless and efficient faucets	4 - Necessary in 4-10 Years - (Year 6)	\$19,500
<b>Plumbing</b>	Toilets	(38) toilets are older and inefficient	Upgrade to low flow toilets	5 - Recommended - (Year 8-10)	\$20,900
<b>TOTAL</b>					<b>\$1,040,750</b>

# BUILDING OVERVIEW

## REEDSBURG AREA HIGH SCHOOL

Reedsburg Area High School is a typical school building construction built in 1998 with the addition of the CAL (Communication and Arts Learning Center) a 598 seat auditorium in 2001 and the 5,000 GSF Fitness Center addition in 2021. The 228,984 GSF two-story construction on concrete slab on grade, and the exterior is made of brickwork. Reedsburg Area High School enrolls approximately 900 students in grades 9 through 12.

### HVAC

Four 2,000 MMBtu/hr. Lochinvar brand gas-fired hot water condensing boilers fueled by natural gas are in excellent condition installed in 1998. These boilers provide the hot water (HHW) required for heating in majority of the building. With proper preventative maintenance and servicing, these boilers and pumps will last at least 30 years. There are several HVAC units that serve the entire building. Heating hot water recirculating pumps were original to the building but are still in good condition.



# BUILDING OVERVIEW

There is also one air handling unit for makeup air into the boiler that is not in service. The heating system is controlled BMS system.

The building has two 125-ton York air cooled chillers that were installed in 2019 and are in excellent condition. With proper maintenance and servicing these units should last approximately 20 years.

## ELECTRICAL

The building electrical is a 3000-amp incoming utility service with transformers supplying 480/277-120/208 to the building. There is a 60-kW emergency generator in building.

The building does have an upgraded Simplex 4010 fire alarm system, but no sprinkler system since it was not required per code at time of construction.

Building has adequate egress lighting and exit signs in good condition.

98% of the lighting in the building was changed to LED in 2018.

## PLUMBING

The building has a 2" incoming utility service for potable domestic water. The incoming utility service utilizes backflow preventor and water meter located in the boiler room. Domestic hot water is generated by three gas-fired 100-gallon hot water heater. These were installed approximately in March of 2020. They are in the mechanical equipment room. There is two domestic Bell & Gossett approximately 1/3 HP each hot

water recirculating pumps installed for domestic hot water circulation through the building.

The natural gas piping enters the boiler room and is utilized for the condensing hot water boilers. The gas train was installed in 1998 with the boilers.

## ARCHITECTURAL

The 228,984 square foot building is a two-story construction on a concrete slab on grade. The exterior is made of brickwork and CMU units. Exterior windows are double pane insulated aluminum frame.

The roof is made of EDPM and a bituminous built-up roof system. The upper roof has several areas which need repair.



# BUILDING OVERVIEW

## FIRE SYSTEMS

The structure does not a sprinkler system.

## INTERIOR FINISHES

Interior finishes include VCT tile on floors in most classrooms and corridors, there are also some areas of carpet in library, offices, and auditorium as well as some traditional terrazzo flooring. Corridor and classroom walls have typical concrete masonry unit and drywall.



# BUILDING OVERVIEW

SYSTEM	SUBSYSTEM	DESCRIPTION	CORRECTIVE ACTION	PRIORITY	TOTAL COST
Exterior Shell	Roof/EDPM	Reported leaks in bituminous built-up EDPM roofing system	Repair/patch roofing system	2 - Potentially Critical - (Year 2)	\$227,612
Fire/Life Safety	Sprinkler	The building does not have a fire sprinkler system	Install a fire sprinkler system	5 - Recommended - (Year 8-10)	\$1,400,000
HVAC	AHU	AHU in boiler room is not in service motor is disconnected	Replace motor and inspect for proper functionality on AHU	2 - Potentially Critical - (Year 2)	\$1,000
Interior Shell	Flooring/Carpet	Carpet is in fair condition	Replace carpet as needed	3 - Necessary in 3 Years - (Year 3)	\$11,097
Interior Shell	Seating	Bolted down theater seats need to be removed in order to replace carpet	Labor for removable of theater seating and replacement after carpet is installed	3 - Necessary in 3 Years - (Year 3)	\$11,000
Interior Shell	Flooring/Carpet	Carpet is in fair condition	Replace carpet as needed	3 - Necessary in 3 Years - (Year 3)	\$10,153
Interior Shell	Flooring/Carpet	Carpet is in fair condition	Replace carpet as needed	3 - Necessary in 3 Years - (Year 3)	\$2,288
Interior Shell	Floor/Hardwood	Hardwood floor in large gym is in good condition	Sand and resurface hardwood floor	4 - Necessary in 4-10 Years - (Year 6)	\$36,600
Interior Shell	Floor/Hardwood	Hardwood floor in small gym is in good condition	Sand and resurface hardwood floor	4 - Necessary in 4-10 Years - (Year 6)	\$24,156
Plumbing	Toilets	Toilets are inefficient	Upgrade to touchless and efficient toilets	4 - Necessary in 4-10 Years - (Year 6)	\$71,500
Plumbing	Sinks	Sink fixtures are inefficient	Upgrade to touchless and efficient faucets	4 - Necessary in 4-10 Years - (Year 6)	\$25,000
<b>TOTAL</b>					<b>\$1,820,406</b>

## 4. OBSERVATION HIGHLIGHTS



# OBSERVATION HIGHLIGHTS

## EQUIPMENT & SYSTEM STRENGTHS WEBB MIDDLE SCHOOL



Duplex water softener installed in 2018 for boiler and domestic water



Wood Shop has 3 air scrubbers for dust control



Three of the five Patterson-Kelly gas-fired 2,000,000 MMbtu hot water boilers circa 1998 are in good condition



Brand new two 120-gallon gas-fired domestic hot water heaters installed February 2021



Newer sinks and fixtures with touch control in restrooms



Corridors with CMU, corkboard, VCT and ACT are in good condition and well maintained



# OBSERVATION HIGHLIGHTS

## LOGANVILLE ELEMENTARY SCHOOL



(1 of 2) Aerco hot water boilers are in good condition and well maintained. This one was in the process of being rebuilt



(2 of 2) Aerco hot water boilers are in good condition and well maintained.



80-gallon gas-fired domestic hot water heater and water softener installed in 2018 in good condition

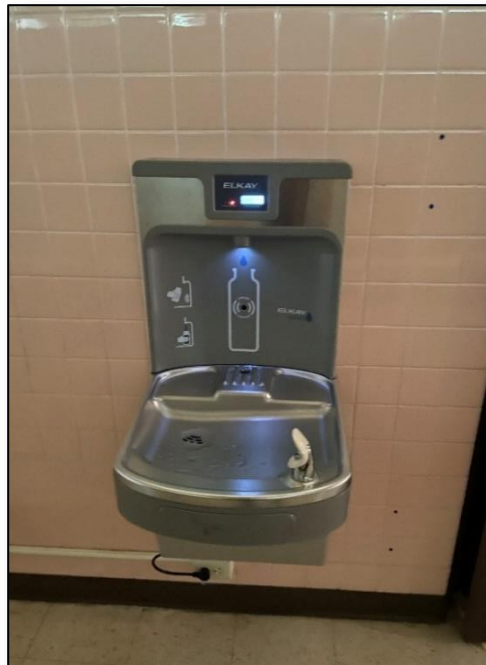


# OBSERVATION HIGHLIGHTS

## LOGANVILLE ELEMENTARY SCHOOL – CONTINUED



12" x 12" VCT on floors in corridors and classroom. 1 ¼" tongue and groove wood ceiling are in good condition



New energy saving water fountains installed in building



Roof is approximately 5 years old and in good condition

# OBSERVATION HIGHLIGHTS

## IRONTON-LAVALLE ELEMENTARY SCHOOL



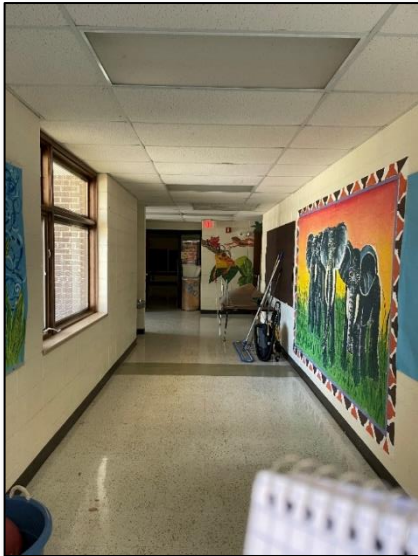
New energy saving water domestic hot water heater installed



Boilers are in good condition and well maintained



Newer carpet tiles at entrances in good condition



VCT and ACT in building are in good condition and well maintained

# OBSERVATION HIGHLIGHTS

## REEDSBURG AREA HIGH SCHOOL



Building has an 80 kW generator in excellent condition



Three domestic HW Heaters in good condition



Building has a 3000 amp Main Distribution Panel, providing 480/277V to building



Building has 2 chillers installed in 2019 providing 250 tons of cooling throughout building



# OBSERVATION HIGHLIGHTS

## WESTSIDE ELEMENTARY SCHOOL



Newer Lochnivar boilers installed in 2018 are in good condition



New energy efficient water fountains installed

# OBSERVATION HIGHLIGHTS

PINEVIEW ELEMENTARY SCHOOL



Three Fulton Boilers installed in 2004 are in good condition



Terrazzo concrete floors are durable and in good condition



# OBSERVATION HIGHLIGHTS

## IMPROVEMENT OPPORTUNITIES

### WEBB MIDDLE SCHOOL

**Building could use some energy saving initiatives implemented such as automatic control system, VFDs installed on pumps, and outdoor reset on boilers. Mechanical rooms can use some housekeeping.**

Implementation of outdoor reset would heat water based on outdoor temperature and heat according, thus saving energy. Once building temperature is satisfied, the pumps would run at a lower percentage. Installation of automatic controls would provide the opportunity to control energy consumption and monitor equipment operation in real time.



# OBSERVATION HIGHLIGHTS

## WEBB MIDDLE SCHOOL – CONTINUED

The 1200-amp incoming electrical utility supplying 800 amp subpanels should be upgraded to new panelboards.

**Impact:** The existing electrical utility can fail and cause a system wide outage. No emergency generator and limited egress and exit signage throughout the building.



The existing aged incoming electrical main incoming switch and distribution panels behind gymnasium.



Library and other rooms limited egress and exit signage which would cause confusing during an emergency evacuation.

# OBSERVATION HIGHLIGHTS

## LOGANVILLE ELEMENTARY SCHOOL

**Upgrade lighting to new LED for energy efficiency throughout building. Install additional egress lighting and exit signs; the egress lighting does not meet code compliance of one foot candle per square foot.**

Save money and energy. Bulbs on LED lighting life expectancy is 10 years or possibly more in a school building. No loss of life in an event of an emergency.





# OBSERVATION HIGHLIGHTS

LOGANVILLE ELEMENTARY SCHOOL

**Curtain walls could use low E-glass windows with R value of 19 for the exterior walls.**

This will provide energy saving and occupant comfort level.

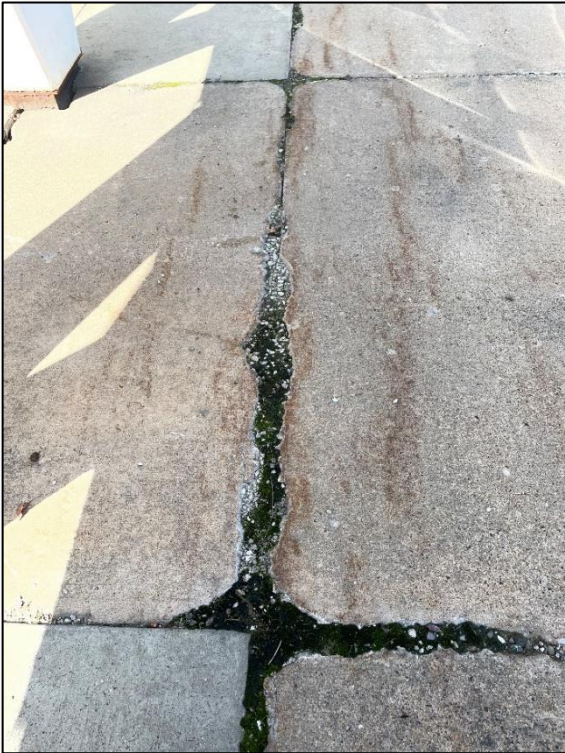


# OBSERVATION HIGHLIGHTS

## IRONTON-LAVALLE ELEMENTARY SCHOOL

Asphalt on playground at the rear of building needs to be resurfaced, concrete pavers in front of building are deteriorated, and exterior canopy is structurally failing at front of building.

These items need to be addressed for the safety of the students and staff.





# OBSERVATION HIGHLIGHTS

## IRONTON-LAVALLE ELEMENTARY SCHOOL CONTINUED

**Bathrooms should be updated. Floor-mounted urinals with grout lines are hard to clean and cause an unsanitary condition. Sinks and toilets are outdated and should be replaced with touch-free controls.**

Upgrading the bathrooms will eliminate the excessive amount of water usage. Also, it will provide a more sanitary environment for students and staff with touch-free controls.



# OBSERVATION HIGHLIGHTS

## REEDSBURG AREA HIGH SCHOOL

**Water fountains should be replaced with an energy efficient type as seen in elementary schools.**

This will provide energy saving and occupant comfort level.



# OBSERVATION HIGHLIGHTS

REEDSBURG ELEMENTARY SCHOOL – CONTNUED

**Bituminous built-up roof with gravel has leaks and should be repaired. Walkways on roof have deteriorated and may cause trip hazards.**

Repair roof to prevent widespread damage to building. Repair deteriorated walkways to prevent trip hazard.



# OBSERVATION HIGHLIGHTS

WESTSIDE ELEMENTARY SCHOOL

Rolling doors to cafeteria should be attached to a fire link in the event of a fire.





# OBSERVATION HIGHLIGHTS

## WESTSIDE ELEMENTARY SCHOOL – CONTINUED

**Bathrooms should be updated. Floor-mounted urinals with grout lines are hard to clean and cause an unsanitary condition. Sinks and toilets are outdated and should be replaced with touch-free controls.**

Upgrading the bathrooms will eliminate the excessive amount of water usage and provide a more sanitary environment for students and staff with touch-free controls.





# OBSERVATION HIGHLIGHTS

## WESTSIDE ELEMENTARY SCHOOL – CONTINUED

**Upgrade lighting to new LED for energy efficiency throughout building. Install additional egress lighting and exit signs; the egress lighting does not meet code compliance of one foot candle per square foot.**

Save money and energy. Bulbs on LED lighting life expectancy is 10 years or possibly more in a school building. No loss of life in an event of an emergency.



# OBSERVATION HIGHLIGHTS

## PINEVIEW ELEMENTARY SCHOOL

**Bathrooms should be updated. Floor-mounted urinals with grout lines are hard to clean and cause an unsanitary condition. Sinks and toilets are outdated and should be replaced with touch-free controls.**

Upgrading the bathrooms will eliminate the excessive amount of water usage and provide a more sanitary environment for students and staff with touch-free controls.



# OBSERVATION HIGHLIGHTS

## PINEVIEW ELEMENTARY SCHOOL – CONTINUED

**Concrete pavers on walkway and handicapped ramp in front of building are deteriorated and may cause a trip hazard.**

These items need to be addressed for the safety of the students and staff.



Please print responsibly



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## **5. APPENDICES**



# APPENDICES – APPENDIX A

## APPENDIX A – CAPITAL PLANNING APPROACH

The maintenance needs and deferrals identified within this analysis are not unique to The School District of Reedsburg but are characteristic of all institutions where educational programs, not facility maintenance, is the overriding priority. Given the reality of limited financial resources and competing needs the organization and its facilities, the development of a strategic phase-out plan is essential to avoid future deferrals of critical maintenance needs that could potentially disrupt the institution's mission.

The School District of Reedsburg now has the opportunity to develop a phase-out approach that strategically addresses key deferred maintenance identified in this report. The prioritization of all deficiencies provides an initial strategic approach for developing a budget to address deferred need. Depending upon financial constraints and programmatic requirements, additional iterations of prioritization may need to occur. This process can easily be modified using the list of observations found in Excel, provided as part of this assessment. In addition, the Excel can be updated by adding, editing, and closing out deficiencies so that deferred need is readily quantifiable on an ongoing basis.

The deferred maintenance needs at The School District of Reedsburg can grow unless operating and capital budgets are reconciled with facilities' needs. The deferred maintenance can only be addressed with the complementary solutions of "Catch Up" capital allocations and "Keep Up" budget increases. This balanced approach to deferred maintenance funding is the only long-term answer for effective phase-out spending. This strategically balanced approach to spending will protect future investments in Reedsburg facilities from erosion due to underfunded operating and maintenance budgets and prevent the renewed accumulation of maintenance deferrals.

## FACILITIES RE-INVESTMENT PROCESS OVERVIEW

Re-investing in facilities represents a significant investment for most organizations. A process is needed that enhances the understanding of the deferred maintenance exposure and emphasizes a phase-out strategy that supports current short-term plans and longer-term goals. We look to three key goals to support the successful outcomes of the process.

1. **Asset Preservation:** Protect the longevity of physical assets and unique values that form the core of your institution.
2. **Strategic Transformation:** Facilitate change with strategic and technical resources to allow realization of aspirations.

# APPENDICES – APPENDIX A

- 3. **Resource Optimization:** Manage resources effectively to yield savings and operational improvements.

Based on a comprehensive inspection process that includes the detailed identification of facilities related needs in existing facilities and grounds associated with deferred maintenance, cyclical maintenance, regulatory modernization, and opportunities for operating cost savings, the total exposure can be identified. Once the total exposure has been identified, a Phase-out Strategy is required to effectively address the scope, breadth, and depth of the exposure identified.

A successful Phase-Out Strategy should be:

**Balanced** - to address highest priority needs across all campus buildings, programs, and constituents.

**Aligned** – with the institution’s missions and goals as they pertain to the facilities.

**Strategic** – taking advantage of system reconfiguration opportunities for operational savings.



# APPENDICES – APPENDIX A

How effectively the capital budgets are re-invested back into the facilities can dramatically influence the Facilities Department’s success. A structured and consistent approach to prioritizing capital needs, using consensus-based criteria that support defined strategic objectives, organizations can maximize facilities re-investment budgets to support their mission in the long-term.

Additional benefits of employing such a process include:

- Greater buy-in, understanding, and support among the various constituents in the capital budgeting process from administration to faculty to athletics to facility managers.
- Reduced time and effort in generating facility re-investment budgets and in making budget adjustments when inevitable changes in allocations occur.
- More defined budget requests that tell a story with quantifiable metrics.

Seven key phases, from establishing the steering committee to reporting on the program successes is outlined in this process. The key to a successful facilities’ re-investment process lies in engaging all appropriate campus constituents to articulate strategic objectives, mutually determine target percentages of the available funds for data driven decision-making, and to actively participate in an objective and well-defined prioritization process.

## 1. Creating a Steering Committee

Facility re-investment decisions impact all functional areas of

facilities. Therefore, it is important to bring together representatives from a variety of an organization’s functions to be part of the facilities’ re-investment steering committee. These representatives could include administration, finance, faculty, operations, facilities, sustainability, and/or Energy Management group. It is also critical to have solid and stable leadership responsible for guiding and overseeing the budgeting process.

For example, the Facilities Re-Investment Steering Committee may be led by the Director of Facilities and include the Director of Planning and Construction, representatives from Administration, Finance, as well as select specialists, as needed.

## 2. Set Phase-Out Goals in Alignment with Institution’s Missions/Goals

Building consensus among these facilities constituents about priorities is frequently challenging. An important foundation for enabling effective decision-making is fostering a common understanding among this cross-functional group by involving the organization’s leadership in the first meeting to explain his/her thoughts on the mission and goals of the company. The committee should then discuss their understanding of the company’s mission and goals as seen from their perspective, so each committee member understands the impact of these guiding principles on their fellow committee members.

Further conversation should be engendered to ensure the understanding of the necessary terminology, including the language of observation categories, facilities re-investment budgeting, and facilities maintenance. There should also be a

# APPENDICES – APPENDIX A

process for soliciting feedback from the committee members to ensure the process is on track and meeting its defined objectives. Additionally, the group should understand specific funding sources for capital needs, and the constraints of each funding stream.

### 3. Review Overall Themes of Collected Data

The Facilities Re-Investment Steering Committee should fully understand the major themes of the collected data. As with any educational institution, the volume of data collected can be voluminous. The Committee members neither have the time or inclination to read all of the outstanding exposures. A short, succinct approach to understanding the big picture is needed. A report out of the major themes identified during the data collecting process would be the level of detail the committee members would need at this point in the process. The committee members should also have an understanding of the overall data available describing the exposures as well as any gaps or inconsistencies in this information, if known.

### 4. Develop Apportionment Strategy / Targets

At this point, the Committee members should discuss the apportionment of the facilities' re-investment funds available but in general, percentage terms. The amount of funds available may not be known at the time of the discussion or the amount could change many times before finalized. The apportionment of the funds, on percentage basis, should then be discussed:

- By Constituency

- By Institutional Stewardship
- By Priority
- By Type (safety, code, energy savings, comfort, sustainability, etc.)
- By Impact on FCI (ratio of the cost of deferred maintenance relative to current replacement value)

Once all these factors have been fully discussed, there should be an attempt to form agreement on the percentage for each constituent and Institutional Stewardship category. Once finalized, these targets become the basis for the facilities' re-investment funds allocation.

### 5. Develop Annual Phase-Out Plan Based on Available Funds

Based on the funds available and the target percentages agreed to by the committee members, a select sub-committee organizes the observations in priority fashion for each Institutional Stewardship category and each constituency with an eye on the available funds for each. Discussion related to each set of criteria should be entertained before agreement of the selected observations for phase-out is finalized.

### 6. Communicate Approach and Focus

Upon finalization of the deferred maintenance observations to be phased-out in the coming budget year, a report to the community is prepared for distribution. By keeping the community involved in the process, the entire community will see an open and transparent process that has deliberately addressed exposures in a

# APPENDICES – APPENDIX A

thoughtful and fiscally prudent manner. Periodic updates throughout the year as construction and remediations are completed should occur.

## 7. Report on Spending vs. Strategy / Targets

At the completion of the deferred maintenance phase-out projects for the year, a complete report on the outcomes vs the planned goals should be developed. This report should address the successes, benefits, and even the limitations of the work completed.

### Manage the Data and Repeat

Any deferred maintenance observations that have been addressed should be noted as such in the database of observations. Any additional deferred maintenance observations made throughout the year should be added to the database of observations.





# APPENDICES – APPENDIX A

## Alignment with the Mission

By ensuring that budgeting efforts are aligned with the School District’s mission and objectives, facilities re-investment efforts can be optimized to deliver long-term value. This process will help organizations avoid time-wasting political battles, inefficiencies in the budgeting process and helps to eliminate much of the uncertainty that can derail effective capital budgeting. Most importantly it aligns everyone involved with the school’s mission.

This mission-driven facilities’ re-investment process leads companies to far more strategic and more defensible results. It turns episodic, uncertain budgeting processes into processes that drive facilities re-investment budgets to support of the company’s mission in the long term.



# APPENDICES – APPENDIX B

## APPENDIX B – FACILITY CONDITION INDEX (FCI)

Facility Condition Index (FCI) is a ratio used to measure the relative condition of a single building or portfolio of buildings. It is calculated by dividing the Current Replacement Value (CRV) by the existing Cost of Deferred Maintenance. (Priority 1,2,3,4)

Suggested Condition Ratios ranges based on NACUBO are as follows:

*The generally accepted range of FCI's for establishing a buildings condition is shown. This standard was developed by the National Association of College and University Business Officers (NACUBO) and has been adopted by the Building Owners and Managers Association, the Council on Education Facilities, and a number of other national facilities groups. Our experience shows a wider variety of possible FCIs and have ranked them according to our internal scale.*

FCI Range	NACUBO Industry Condition Rating	Aramark Rating Based on 30+ Years' Experience
Under .05	Good	Excellent
.05 to .10	Fair	Good
.10 to .15	Poor	Fair
.15 to .30		Poor
Over .30		Critical

The details below identify the FCI for the School District of Reedsburg:

$$\text{TOTAL Facility Condition Index} = \frac{\text{Cost of Deficiencies}^*}{\text{Current Replacement Value}^\wedge} = \frac{\$5,787,814}{\$96,796,080} = .06$$

The school district buildings have an FCI of .06; this indicates a Fair to Good condition rating. Note that we did not have access to actual current replacement value information and utilized an estimate of \$205 per square foot.

\* Includes projects identified to be addressed within the next 10 years.

^ Estimated at \$205 per square foot.

# APPENDICES – APPENDIX B

## FACILITY CONDITION INDEX (FCI) BY BUILDING (Priorities 1-4)

BUILDING	COST OF DEFICIENCIES	GSF	CRV	FCI
Webb Middle School	\$1,161,777	100,000	\$20,500,000	0.07
Loganville Elementary	\$1,152,524	22,904	\$4,695,320	0.26
Westside Elementary	\$1,303,750	40,000	\$8,200,000	0.18
Ironton-LaValle Elementary	\$960,508	20,288	\$4,159,040	0.25
Pineview Elementary	\$788,850	60,000	\$12,300,000	0.08
Reedsburg Area High School	\$420,406	228,984	\$46,971,720	0.01
<b>Cost of Deficiencies</b>	<b>\$5,787,814</b>	<b>472,176</b>	<b>\$96,796,080</b>	<b>0.06</b>

# APPENDICES – APPENDIX B

## FACILITY CONDITION INDEX (FCI) BY BUILDING (All Identified Projects)

BUILDING	COST OF DEFICIENCIES	GSF	CRV	FCI
Webb Middle School	\$3,886,275	100,000	\$20,500,000	0.19
Loganville Elementary	\$1,361,654	22,904	\$4,695,320	0.29
Westside Elementary	\$1,443,750	40,000	\$8,200,000	0.18
Ironton-LaValle Elementary	\$1,396,563	20,288	\$4,159,040	0.34
Pineview Elementary	\$1,040,750	60,000	\$12,300,000	0.08
Reedsburg Area High School	\$1,820,406	228,984	\$46,971,720	0.04
<b>Cost of Deficiencies</b>	<b>\$10,949,397</b>	<b>472,176</b>	<b>\$96,796,080</b>	<b>0.11</b>