FACILITY CONDITION ASSESSMENT

prepared for

Richmond Public Schools
301 North Ninth Street
Richmond, VA 23219

J. L. Francis Elementary School
5146 Snead Road
Richmond, VA 23224

PREPARED BY:
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BV PROJECT #:
166385.24R000-010.468

DATE OF REPORT:
July 1, 2024

ON SITE DATE:
March 14, 2024

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1. Executive Summary

Campus Overview and Assessment Details

General Information	
Property Type	Elementary school campus
Number of Buildings	1
Main Address	5146 Snead Road, Richmond, VA 23224
Site Developed	1968
Outside Occupants / Leased Spaces	None
Date(s) of Visit	March 14, 2024
Management Point of Contact	Daniel Alu Project Engineer 800 Yard Street, Suite 115 Columbus, Ohio 43212 C: 614.949.1355 daniel.alu@gofmx.com
On-site Point of Contact (POC)	Ronald (Bobby) Hathaway Jr., Director of Facilities Department of Facility Services 1461 A Commerce Road Richmond, VA 23224 Office: (804) 780-6251 Mobil: (804) 325-0740 Email: Rhathawa@rvaschools.net
Assessment & Report Prepared By	Jake Stauffer
Reviewed By	Daniel White Technical Report Reviewer for Bill Champion Program Manager 800.733.0660 x7296234 Bill.Champion@bureauveritas.com
AssetCalc Link	Full dataset for this assessment can be found at: https://www.assetcalc.net/

Significant/Systemic Findings and Deficiencies

Historical Summary

J.L. Francis Elementary School was originally constructed in 1968. The school has undergone several partial renovations throughout the years.

Architectural

The building is constructed with load bearing masonry walls supporting steel framed roof structure. The building has a low sloped roof with a built-up system and gravel finish. The roofing system was observed to show signs of deterioration. Windows are aluminum framed with steel entrance doors. Exterior windows show signs of deterioration and damage. Interior finishes consist of your commercial carpet, terrazzo, and ceramic tile, with painted and ceramic tile walls and suspended Acoustic Ceiling Tile (ACT). The interior finishes have been periodically replaced as needed over the years.

Mechanical, Electrical, Plumbing and Fire (MEPF)

Heating and cooling are provided by boilers and a chiller which supply hydronic fan coil units. Supplemental heating and cooling are provided by rooftop package units and split system heat pumps. Systems are controlled by building automation system (BAS). Hot water is provided by a gas-fired water heater located in the boiler room. The main electrical distribution is from a dedicated electrical switchboard. Fire protection is provided via a fire alarm system with a central panel, and fire extinguishers spread throughout the school. The kitchen within the cafeteria contains commercial food preparation equipment that are all in usable condition.

Site

Site systems consist of an asphalt paved parking lot and concrete sidewalks adjacent to the building. Landscaping is provided with the site including a grass field and some garden areas. Asphalt surfaces are generally free of cracks and heaving; however, seal and stripe are recommended in the short term. Concrete walkways are free of any heavy damage. The playground is equipped with small and large playground structures that were observed to be free of any heavy damage.

Recommended Additional Studies

No additional studies recommended at this time.

Facility Condition Index (FCI)

One of the major goals of the FCA is to calculate the Facility Condition Index (FCI), which provides a theoretical objective indication of a facility's overall condition. The FCI is defined as the ratio of the cost of current needs divided by the current replacement value (CRV) of the facility. In this report, each building is considered as a separate facility. The chart below presents the industry standard ranges and cut-off points.

FCI Ranges and Description	
0 – 5%	In new or well-maintained condition, with little or no visual evidence of wear or
5 – 10%	Subjected to wear but is still in a serviceable and functioning condition.
10 – 30%	Subjected to hard or long-term wear. Nearing the end of its useful or serviceable life.
30% and above	Has reached the end of its useful or serviceable life. Renewal is now necessary.

The deficiencies and lifecycle needs identified in this assessment provide the basis for a portfolio-wide capital improvement funding strategy. In addition to the current FCI, extended FCI's have been developed to provide owners the intelligence needed to plan and budget for the "keep-up costs" for their facilities. As such the 3-year, 5-year, and 10-year FCI's are calculated by dividing the anticipated needs of those respective time periods by current replacement value. As a final point, the FCI's ultimately provide more value when used to compare facilities across a portfolio instead of being over-analyzed and scrutinized as stand-alone mathematical values. The table below presents the current, 3-year, 5-year, and 10-year FCI's for each facility:

FCI Analysis | J.L. Francis Elementary School / Main Building(1968)

Replacement Value	*Total SF*	*Cost/SF*
$ 22,781,600	*56,954*	*$ 400*

	Est Reserve Cost	FCI
Current	$ 0	**0.0 %**
3-Year	$ 1,907,200	8.4 %
5-Year	$ 2,832,700	12.4 %
10-Year	$ 4,906,700	21.5 %

Immediate Needs

There are no immediate needs to report.

Key Findings

Parking Lots in Poor condition.

Pavement, Asphalt
J.L. Francis Elementary School

Uniformat Code: G2020
Recommendation: **Seal & Stripe in 2026**

Priority Score: **84.7**

Plan Type:
Performance/Integrity

Cost Estimate: $18,500

$$$$

Surface cracks and faded striping. - AssetCALC ID: 7666978

Parking Lots in Poor condition.

Pavement, Asphalt
Site J.L. Francis Elementary School Site

Uniformat Code: G2020
Recommendation: **Mill & Overlay in 2026**

Priority Score: **84.7**

Plan Type:
Performance/Integrity

Cost Estimate: $179,400

$$$$

Asphalt pavement is deteriorated and inadequate for all parking. Many cars are parked in grassy areas. - AssetCALC ID: 7516133

Piping & Valves in Poor condition.

Fiberglass Insulation, Domestic Water
Main Building J.L. Francis Elementary School
Above ceilings

Uniformat Code: D2010
Recommendation: **Replace in 2025**

Priority Score: **82.8**

Plan Type:
Performance/Integrity

Cost Estimate: $3,600

$$$$

Water piping insulation above ceilings was reported to be deteriorated and causing condensation stains on ceilings. - AssetCALC ID: 7648801

Athletic Surfaces & Courts in Poor condition.

Basketball/General, Asphalt Pavement
J.L. Francis Elementary School Play courts

Uniformat Code: G2050
Recommendation: **Seal & Stripe in 2026**

Priority Score: **82.7**

Plan Type:
Performance/Integrity

Cost Estimate: $9,000

$$$$

Seal and repair play courts due to general deterioration. - AssetCALC ID: 7668073

BAS/HVAC Controls in Poor condition.

Basic System or Legacy Upgrades
Main Building J.L. Francis Elementary School
Mechanical room

Uniformat Code: D8010
Recommendation: **Upgrade/Install in 2026**

Priority Score: **81.7**

Plan Type: Performance/Integrity

Cost Estimate: $142,400

$$$$

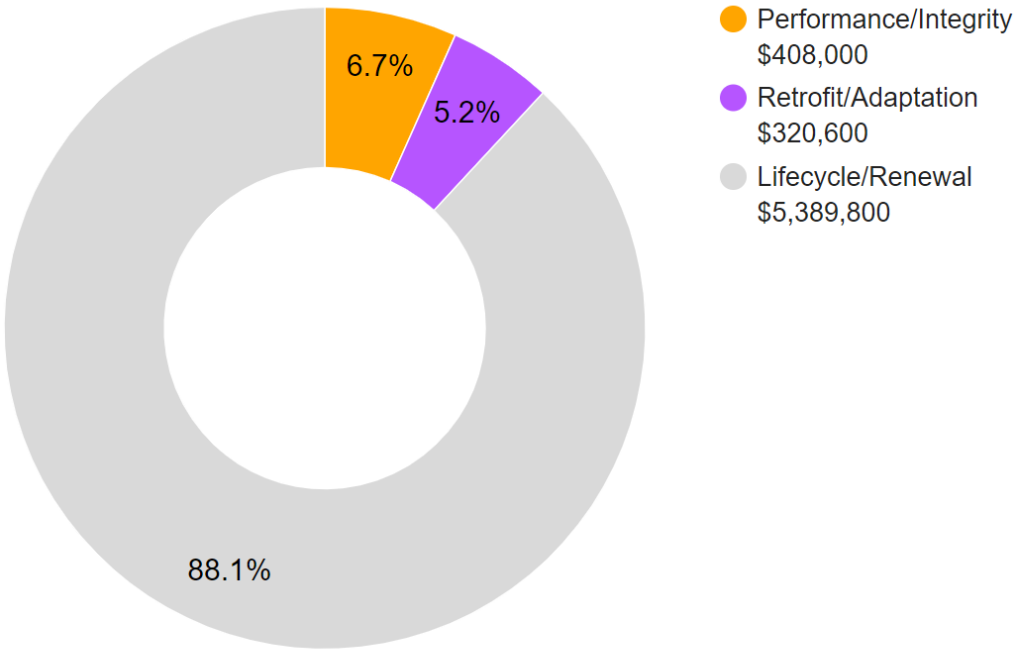
Pneumatic system is old and struggles to maintain balanced temperatures. - AssetCALC ID: 7443734

Plan Types

Each line item in the cost database is assigned a Plan Type, which is the primary reason or rationale for the recommended replacement, repair, or other corrective action. This is the "why" part of the equation. A cost or line item may commonly have more than one applicable Plan Type; however, only one Plan Type will be assigned based on the "best" fit, typically the one with the greatest significance and highest on the list below.

Plan Type Descriptions	
Safety	An observed or reported unsafe condition that if left unaddressed could result in injury; a system or component that presents potential liability risk.
Performance/Integrity	Component or system has failed, is almost failing, performs unreliably, does not perform as intended, and/or poses risk to overall system stability.
Accessibility	Does not meet ADA, UFAS, and/or other accessibility requirements.
Environmental	Improvements to air or water quality, including removal of hazardous materials from the building or site.
Retrofit/Adaptation	Components, systems, or spaces recommended for upgrades in in order to meet current standards, facility usage, or client/occupant needs.
Lifecycle/Renewal	Any component or system that is neither deficient nor aged past EUL but for which future replacement or repair is anticipated and budgeted.

Plan Type Distribution (by Cost)



10-YEAR TOTAL: $6,118,400

2. Building Information

Building Systems Summary

Address	5146 Snead Road, Richmond, VA 23224
Constructed/Renovated	1968
Building Area	56,954 SF
Number of Stories	1 above grade

System	*Description*	*Condition*
Structure	Masonry bearing walls with metal roof deck supported by open-web steel joists and concrete strip/wall footing foundation system	Fair
Façade	Primary Wall Finish: Brick Windows: Aluminum	Fair
Roof	Primary: Flat construction with single-ply membrane with stone ballast Secondary: Mansard construction with metal finish	Fair
Interiors	Walls: Painted gypsum board and ceramic tile Floors: Carpet, VCT, ceramic tile, terrazzo Ceilings: Painted gypsum board and ACT	Fair
Elevators	None	Fair
Plumbing	Distribution: Copper supply and cast-iron waste & venting Hot Water: Gas water heater with integral tank Fixtures: Toilets, urinals, and sinks in all restrooms	Fair

Building Systems Summary		
HVAC	Central System: Boilers, feeding fan coil terminal units Non-Central System: Packaged units, Split-system heat pumps Building Automation System (BAS)	Fair
Fire Suppression	Fire extinguishers only	Fair
Electrical	Source & Distribution: Main switchboard panel with copper wiring. Interior Lighting: Linear fluorescent, CFL. Exterior Building-Mounted Lighting: Metal Hallide	Fair
Fire Alarm	Alarm panel with smoke detectors, heat detectors, alarms, strobes, pull stations, back-up emergency lights, and exit signs	Fair
Equipment/Special	Commercial kitchen equipment	Fair
Accessibility	Presently it does not appear an accessibility study is needed for this building. See the appendix for associated photos and additional information.	
Additional Studies	No additional studies are currently recommended for the building.	
Areas Observed	The interior spaces were observed to gain a clear understanding of the facility's overall condition. Other areas accessed and assessed included the exterior equipment and assets directly serving the building, the exterior walls of the facility, and the roof.	
Key Spaces Not Observed	All key areas of the facility were accessible and observed.	

The table below shows the anticipated costs by trade or building system over the next 20 years.

System Expenditure Forecast

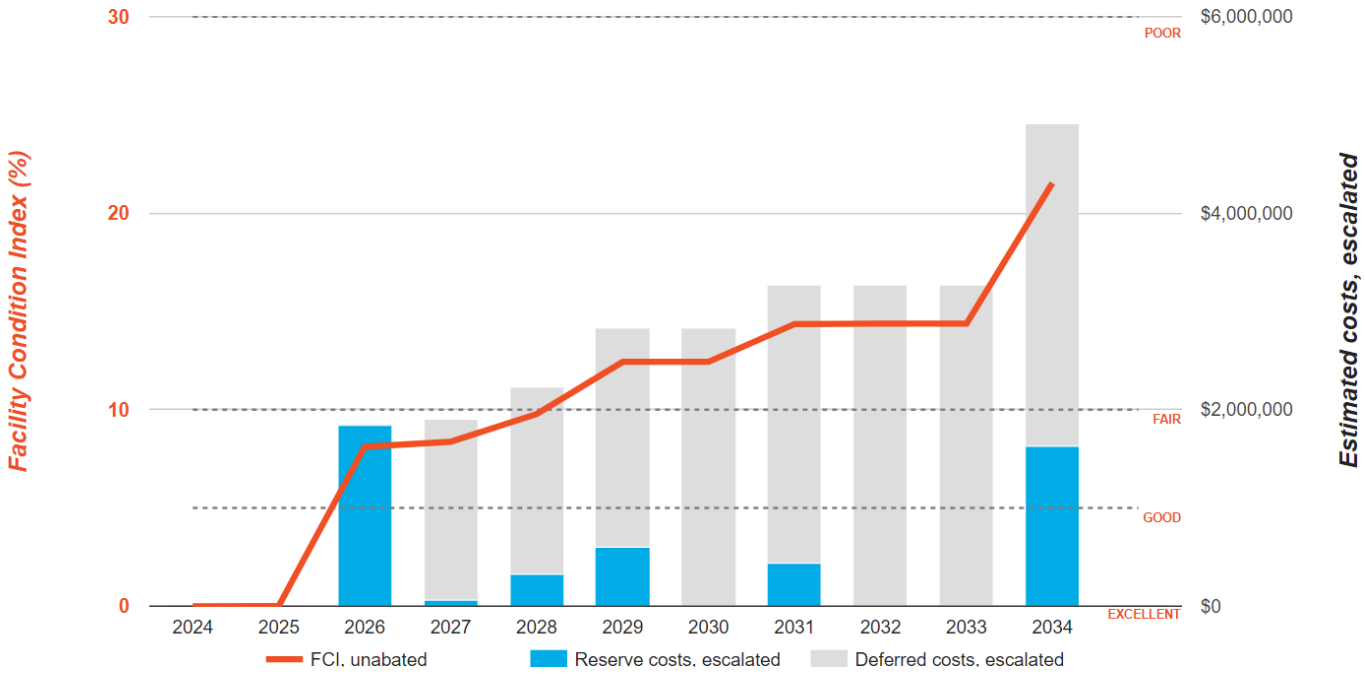
System	Immediate	Short Term (1-2 yr)	Near Term (3-5 yr)	Med Term (6-10 yr)	Long Term (11-20 yr)	TOTAL
Structure	-	-	-	-	$3,090,900	$3,090,900
Facade	-	-	$52,000	-	$850,900	$902,900
Roofing	-	$1,691,800	-	-	$335,800	$2,027,600
Interiors	-	-	$130,800	$491,900	$764,900	$1,387,700
Plumbing	-	$3,700	$16,200	$962,200	$9,000	$991,200
HVAC	-	$3,600	$87,300	$237,500	$227,300	$555,700
Fire Protection	-	-	$320,500	-	-	$320,500
Electrical	-	-	$360,900	$306,200	-	$667,000
Fire Alarm & Electronic Systems	-	$151,100	-	-	$522,900	$674,000
Equipment & Furnishings	-	-	$14,800	$76,200	$106,000	$197,000
TOTALS (3% inflation)	**-**	**$1,850,200**	**$982,500**	**$2,073,900**	**$5,907,800**	**$10,814,400**

NEEDS OVER TIME: The vertical blue bars in the graphic below represent the year-by-year needs identified for the facility. The orange line forecasts what would happen to the FCI (left Y axis) over time, assuming zero capital expenditures over the next ten years. The dollar amounts allocated for each year are associated with the values along the right Y axis.

Needs by Year with Unaddressed FCI Over Time

FCI Analysis: J.L. Francis Elementary School Main Building

Replacement Value: $22,781,600 Inflation Rate: 3.0% Average Needs per Year: $446,100



Building: Photographic Overview

1 - FRONT ELEVATION

2 - LEFT ELEVATION

3 - REAR ELEVATION

4 - RIGHT ELEVATION

5 - ROOF FRAMING

6 - ROOF OVERVIEW

7 - INTERIOR CORRIDOR

8 - LIBRARY

9 - DOMESTIC HOT WATER

10 - ROOF MOUNTED PACKAGE UNIT

11 - MAIN ELECTRICAL ROOM

12 - FIRE ALARM CONTROL PANEL

3. Site Summary

Site Information		
Site Area	6.7 acres (estimated)	
Parking Spaces	52 total spaces all in open lots; 2 of which are accessible.	
System	*Description*	*Condition*
Pavement/Flatwork	Asphalt lots with limited areas of concrete aprons and pavement and adjacent concrete sidewalks, curbs, ramps, and stairs.	Fair
Site Development	Property entrance signage; chain link fencing; Playgrounds and sports fields and courts with fencing and site lights	Fair
Landscaping and Topography	Limited landscaping features including lawns, trees, bushes. Irrigation not present	Fair
Utilities	Municipal water and sewer Local utility-provided electric and natural gas.	Fair
Site Lighting	Pole-mounted: Metal halide	Fair
Ancillary Structures	Prefabricated modular buildings	Fair
Site Accessibility	Presently it does not appear an accessibility study is needed for the exterior site areas. See the appendix for associated photos and additional information.	

Site Information	
Site Additional Studies	No additional studies are currently recommended for the exterior site areas
Site Areas Observed	The exterior areas within the property boundaries were observed to gain a clear understanding of the site's overall condition.
Site Key Spaces Not Observed	All key areas of the exterior site were accessible and observed.

The table below shows the anticipated costs by trade or site system over the next 20 years.

System Expenditure Forecast

System	Immediate	Short Term (1-2 yr)	Near Term (3-5 yr)	Med Term (6-10 yr)	Long Term (11-20 yr)	TOTAL
Special Construction & Demo	-	-	-	$678,700	-	$678,700
Site Pavement	-	$209,900	-	$22,700	$56,800	$289,400
Site Development	-	$9,500	$47,100	$211,800	$48,900	$317,400
Site Utilities	-	-	$9,200	$22,600	-	$31,800
TOTALS (3% inflation)	**-**	**$219,400**	**$56,300**	**$935,800**	**$105,700**	**$1,317,200**

Site: Photographic Overview

1 - SIGNAGE

2 - PLAY STRUCTURE

3 - SITE DEVELOPMENT

4 - SECONDARY PARKING

5 - ASPHALT DRIVEWAY

6 - PEDESTRIAN WALKWAY

4. ADA Accessibility

Generally, Title II of the Americans with Disabilities Act (ADA) prohibits discrimination by entities to access and use of “areas of public accommodations” and “public facilities” on the basis of disability. Regardless of their age, these areas and facilities must be maintained and operated to comply with the Americans with Disabilities Act Accessibility Guidelines (ADAAG).

A public entity (i.e. city governments) shall operate each service, program, or activity so that the service, program, or activity, when viewed in its entirety, is readily accessible to and usable by individuals with disabilities.

However, this does not:

1. Necessarily require a public entity to make each of its existing facilities accessible to and usable by individuals with disabilities;
2. Require a public entity to take any action that would threaten or destroy the historic significance of an historic property; or
3. Require a public entity to take any action that it can demonstrate would result in a fundamental alteration in the nature of a service, program, or activity or in undue financial and administrative burdens. In those circumstances where personnel of the public entity believe that the proposed action would fundamentally alter the service, program, or activity or would result in undue financial and administrative burdens, a public entity has the burden of proving that compliance with 35.150(a) of this part would result in such alteration or burdens. The decision that compliance would result in such alteration or burdens must be made by the head of a public entity or his or her designee after considering all resources available for use in the funding and operation of the service, program, or activity, and must be accompanied by a written statement of the reasons for reaching that conclusion. If an action would result in such an alteration or such burdens, a public entity shall take any other action that would not result in such an alteration or such burdens but would nevertheless ensure that individuals with disabilities receive the benefits or services provided by the public entity.

Removal of barriers to accessibility should be addressed from a liability standpoint in order to comply with federal law, but the barriers may or may not be building code violations. The Americans with Disabilities Act Accessibility Guidelines are part of the ADA federal civil rights law pertaining to the disabled and are not a construction code. State and local jurisdictions have adopted the ADA Guidelines or have adopted other standards for accessibility as part of their construction codes.

During the FCA, Bureau Veritas performed a limited high-level accessibility review of the facility non-specific to any local regulations or codes. The scope of the visual observation was limited to the same areas observed while performing the FCA and the categories set forth in the material included in the appendix. It is understood by the Client that the limited observations described herein do not comprise a full ADA Compliance Survey, and that such a survey is beyond the scope of this assessment. A full measured ADA survey would be required to identify more specific potential accessibility issues. Additional clarifications of this limited survey:

- This survey was visual in nature and actual measurements were not taken to verify compliance
- Only a representative sample of areas was observed
- Two overview photos were taken for each subsection regardless of perceived compliance or non-compliance
- Itemized costs for individual non-compliant items are included in the dataset
- For any “none” boxes checked or reference to “no issues” identified, that alone does not guarantee full compliance

The following table summarizes the accessibility conditions of the general site and each significant building included in this report:

Accessibility Summary

Facility	*Year Built/ Renovated*	*Prior Study Provided?*	*Major/Moderate Issues Observed?*
General Site	1968 / 2007	Yes	No
Main Building	1968/ 2007	Yes	No

No detailed follow-up accessibility study is currently recommended since no major or moderate issues were identified at the subject site. Reference the appendix for specific data, photos, and tables or checklists associated with this limited accessibility survey.

5. Purpose and Scope

Purpose

Bureau Veritas was retained by the client to render an opinion as to the Property's current general physical condition on the day of the site visit.

Based on the observations, interviews and document review outlined below, this report identifies significant deferred maintenance issues, existing deficiencies, and material code violations of record, which affect the Property's use. Opinions are rendered as to its structural integrity, building system condition and the Property's overall condition. The report also notes building systems or components that have realized or exceeded their typical expected useful lives.

The physical condition of building systems and related components are typically defined as being in one of five condition ratings. For the purposes of this report, the following definitions are used:

Condition Ratings	
Excellent	New or very close to new; component or system typically has been installed within the past year, sound and performing its function. Eventual repair or replacement will be required when the component or system either reaches the end of its useful life or fails in service.
Good	Satisfactory as-is. Component or system is sound and performing its function, typically within the first third of its lifecycle. However, it may show minor signs of normal wear and tear. Repair or replacement will be required when the component or system either reaches the end of its useful life or fails in service.
Fair	Showing signs of wear and use but still satisfactory as-is, typically near the median of its estimated useful life. Component or system is performing adequately at this time but may exhibit some signs of wear, deferred maintenance, or evidence of previous repairs. Repair or replacement will be required due to the component or system's condition and/or its estimated remaining useful life.
Poor	Component or system is significantly aged, flawed, functioning intermittently or unreliably; displays obvious signs of deferred maintenance; shows evidence of previous repair or workmanship not in compliance with commonly accepted standards; has become obsolete; or exhibits an inherent deficiency. The present condition could contribute to or cause the deterioration of contiguous elements or systems. Either full component replacement is needed or repairs are required to restore to good condition, prevent premature failure, and/or prolong useful life.
Failed	Component or system has ceased functioning or performing as intended. Replacement, repair, or other significant corrective action is recommended or required.
Not Applicable	Assigning a condition does not apply or make logical sense, most commonly due to the item in question not being present.

Scope

The standard scope of the Facility Condition Assessment includes the following:

- Visit the Property to evaluate the general condition of the building and site improvements, review available construction documents in order to familiarize ourselves with, and be able to comment on, the in-place construction systems, life safety, mechanical, electrical, and plumbing systems, and the general built environment.
- Identify those components that are exhibiting deferred maintenance issues and provide cost estimates for Immediate Costs and Replacement Reserves based on observed conditions, maintenance history and industry standard useful life estimates. This will include a review of documented capital improvements completed within the last five-year period and work currently contracted for, if applicable.
- Provide a full description of the Property with descriptions of in-place systems and commentary on observed conditions.
- Provide a high-level categorical general statement regarding the subject Property's compliance to Title III of the Americans with Disabilities Act. This will not constitute a full ADA survey, but will help identify exposure to issues and the need for further review.
- Obtain background and historical information about the facility from a building engineer, property manager, maintenance staff, or other knowledgeable source. The preferred methodology is to have the client representative or building occupant complete a Pre-Survey Questionnaire (PSQ) in advance of the site visit. Common alternatives include a verbal interview just prior to or during the walk-through portion of the assessment.
- Review maintenance records and procedures with the in-place maintenance personnel.
- Observe a representative sample of the interior spaces/units, including vacant spaces/units, to gain a clear understanding of the property's overall condition. Other areas to be observed include the exterior of the property, the roofs, interior common areas, and the significant mechanical, electrical and elevator equipment rooms.
- Provide recommendations for additional studies, if required, with related budgetary information.
- Provide an Executive Summary at the beginning of this report, which highlights key findings and includes a Facility Condition Index as a basis for comparing the relative conditions of the buildings within the portfolio.

6. Opinions of Probable Costs

Cost estimates are attached throughout this report, with the Replacement Reserves in the appendix.

These estimates are based on Invoice or Bid Document/s provided either by the Owner/facility and construction costs developed by construction resources such as *R.S. Means, CBRE Whitestone,* and *Marshall & Swift,* Bureau Veritas's experience with past costs for similar properties, city cost indexes, and assumptions regarding future economic conditions.

Opinions of probable costs should only be construed as preliminary, order of magnitude budgets. Actual costs most probably will vary from the consultant's opinions of probable costs depending on such matters as type and design of suggested remedy, quality of materials and installation, manufacturer and type of equipment or system selected, field conditions, whether a physical deficiency is repaired or replaced in whole, phasing or bundling of the work (if applicable), quality of contractor, quality of project management exercised, market conditions, use of subcontractors, and whether competitive pricing is solicited, etc. Certain opinions of probable costs cannot be developed within the scope of this guide without further study. Opinions of probable cost for further study should be included in the FCA.

Methodology

Based upon site observations, research, and judgment, along with referencing Expected Useful Life (EUL) tables from various industry sources, Bureau Veritas opines as to when a system or component will most probably necessitate replacement. Accurate historical replacement records, if provided, are typically the best source of information. Exposure to the elements, initial quality and installation, extent of use, the quality and amount of preventive maintenance exercised, etc., are all factors that impact the effective age of a system or component. As a result, a system or component may have an effective age that is greater or less than its actual chronological age. The Remaining Useful Life (RUL) of a component or system equals the EUL less its *effective age*, whether explicitly or implicitly stated. Projections of Remaining Useful Life (RUL) are based primarily on age and condition with the presumption of continued use and maintenance of the Property similar to the observed and reported past use and maintenance practices, in conjunction with the professional judgment of Bureau Veritas's assessors. Significant changes in occupants and/or usage may affect the service life of some systems or components.

Where quantities could not be or were not derived from an actual construction document take-off or facility walk-through, and/or where systemic costs are more applicable or provide more intrinsic value, budgetary square foot and gross square foot costs are used. Estimated costs are based on professional judgment and the probable or actual extent of the observed defect, inclusive of the cost to design, procure, construct and manage the corrections.

Definitions

Immediate Needs

Immediate Needs are line items that require immediate action as a result of: (1) material existing or potential unsafe conditions, (2) failed or imminent failure of mission critical building systems or components, or (3) conditions that, if not addressed, have the potential to result in, or contribute to, critical element or system failure within one year or will most probably result in a significant escalation of its remedial cost.

For database and reporting purposes the line items with RUL=0, and commonly associated with *Safety* or *Performance/Integrity* Plan Types, are considered Immediate Needs.

Replacement Reserves

Cost line items traditionally called Replacement Reserves (equivalently referred to as Lifecycle/Renewals) are for recurring probable renewals or expenditures, which are not classified as operation or maintenance expenses. The replacement reserves should be budgeted for in advance on an annual basis. Replacement Reserves are reasonably predictable both in terms of frequency and cost. However, Replacement Reserves may also include components or systems that have an indeterminable life but, nonetheless, have a potential for failure within an estimated time period.

Replacement Reserves generally exclude systems or components that are estimated to expire after the reserve term and are not considered material to the structural and mechanical integrity of the subject property. Furthermore, systems and components that are not deemed to have a material effect on the use of the Property are also excluded. Costs that are caused by acts of God, accidents, or other occurrences that are typically covered by insurance, rather than reserved for, are also excluded.

Replacement costs are solicited from ownership/property management, Bureau Veritas's discussions with service companies, manufacturers' representatives, and previous experience in preparing such schedules for other similar facilities. Costs for work performed by the ownership's or property management's maintenance staff are also considered.

Bureau Veritas's reserve methodology involves identification and quantification of those systems or components requiring capital reserve funds within the assessment period. The assessment period is defined as the effective age plus the reserve term. Additional information concerning system or component replacement costs (in today's dollars), typical expected useful lives, and remaining useful lives were estimated so that a funding schedule could be prepared. The Replacement Reserves Schedule presupposes that all required remedial work has been performed or that monies for remediation have been budgeted for items defined as Immediate Needs.

For the purposes of 'bucketizing' the System Expenditure Forecasts in this report, the Replacement Reserves have been subdivided and grouped as follows: Short Term (years 1-3), Near Term (years 4-5), Medium Term (years 6-10), and Long Term (years 11-20).

Key Findings

In an effort to highlight the most significant cost items and not be overwhelmed by the Replacement Reserves report in its totality, a subsection of Key Findings is included within the Executive Summary section of this report. Key Findings typically include repairs or replacements of deficient items within the first five-year window, as well as the most significant high-dollar line items that fall anywhere within the ten-year term. Note that while there is some subjectivity associated with identifying the Key Findings, the Immediate Needs are always included as a subset.

7. Certification

Richmond Public Schools (the Client) retained Bureau Veritas to perform this Facility Condition Assessment in connection with its continued operation of J. L. Francis Elementary School, 5146 Snead Road, Richmond, VA 23224, the "Property". It is our understanding that the primary interest of the Client is to locate and evaluate materials and building system defects that might significantly affect the value of the property and to determine if the present Property has conditions that will have a significant impact on its continued operations.

The conclusions and recommendations presented in this report are based on the brief review of the plans and records made available to our Project Manager during the site visit, interviews of available property management personnel and maintenance contractors familiar with the Property, appropriate inquiry of municipal authorities, our Project Manager's walk-through observations during the site visit, and our experience with similar properties.

No testing, exploratory probing, dismantling or operating of equipment or in-depth studies were performed unless specifically required under the *Purpose and Scope* section of this report. This assessment did not include engineering calculations to determine the adequacy of the Property's original design or existing systems. Although walk-through observations were performed, not all areas may have been observed (see Section 1 for specific details). There may be defects in the Property, which were in areas not observed or readily accessible, may not have been visible, or were not disclosed by management personnel when questioned. The report describes property conditions at the time that the observations and research were conducted.

This report has been prepared for and is exclusively for the use and benefit of the Client identified on the cover page of this report. The purpose for which this report shall be used shall be limited to the use as stated in the contract between the client and Bureau Veritas.

This report, or any of the information contained therein, is not for the use or benefit of, nor may it be relied upon by any other person or entity, for any purpose without the advance written consent of Bureau Veritas. Any reuse or distribution without such consent shall be at the client's or recipient's sole risk, without liability to Bureau Veritas.

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8. Appendices

Appendix A: Site Plan(s)
Appendix B: Pre-Survey Questionnaire(s)
Appendix C: Accessibility Review and Photos
Appendix D: Component Condition Report
Appendix E: Replacement Reserves
Appendix F: Equipment Inventory List

Appendix A:
Site Plan(s)

Site Plan

Project Number	Project Name
166385.24R000-010.468	J.L. Francis Elementary School
Source	**On-Site Date**
Google	March 14, 2024

N

Appendix B:
Pre-Survey Questionnaire(s)

Bureau Veritas Facility Condition Assessment: Pre-Survey Questionnaire

Building / Facility Name: J.L. Francis Elementary School

Name of person completing form: Ronald Hathaway

Title / Association with property: Director of Facilities

Length of time associated w/ property: 30

Date Completed: March 4, 2024

Phone Number: 804-325-0740

Method of Completion: Electronic

Directions: Please answer all questions to the best of your knowledge and in good faith. Please provide additional details in the Comments column, or backup documentation for any ***Yes*** responses.

Data Overview		Response		
1	Year/s constructed / renovated	1968		
2	Building size in SF	56954		
3	Major Renovation/Rehabilitation		Year	Additional Detail
		Façade		T-111 siding
		Roof		Metal, tar and gravel
		Interiors		Carpet, CMU, partition walls, drop ceiling
		HVAC		Hot water boiler and chiller
		Electrical		Original
		Site Pavement		Asphalt
		Accessibility	2007	Satisfied the 2007 lawsuit requirement
Question		**Response**		
4	List other significant capital improvements (focus on recent years; provide approximate date).	Replaced boiler in 2020, replaced carpet in 2022		
5	List any major capital expenditures planned/requested for the next few years. Have they been budgeted?	Eliminate pneumatic controls, upgrade BAS		
6	Describe any on-going extremely problematic, historically chronic, or immediate facility needs.	Climate control		

Mark the column corresponding to the appropriate response. Please provide additional details in the Comments column, or backup documentation for any **Yes** responses. (**NA** indicates "*Not Applicable*", **Unk** indicates *"Unknown"*)						
Question		Response				Comments
		Yes	No	Unk	NA	
7	Are there any problems with foundations or structures, like excessive settlement?		X			
8	Are there any wall, window, basement or roof leaks?		X			
9	Has any part of the facility ever contained visible suspect mold growth, or have there been any indoor air quality or mold related complaints from occupants?	X				Roof leak and air conditioning leaks
10	Are your elevators unreliable, with frequent service calls?				X	
11	Are there any plumbing leaks, water pressure, or clogging/back-up problems?		X			
12	Have there been any leaks or pressure problems with natural gas, HVAC supply/return lines, or steam service?		X			
13	Are any areas of the facility inadequately heated, cooled or ventilated? Any poorly insulated areas?	X				Yes, dual temperature HVAC system struggles in the spring and fall
14	Is the electrical service outdated, undersized, or otherwise problematic?			X		
15	Are there any problems or inadequacies with exterior lighting?	X				
16	Is site/parking drainage inadequate, with excessive ponding or other problems?		X			
17	Are there any other unresolved construction defects or significant issues/hazards at the property that have not yet been identified above?	X				
18	ADA: Has an accessibility study been performed at the site? If so, indicate when.	X				
19	ADA: If a study has occurred, have the associated recommendations been addressed? In full or in part?	X				Satisfied the 2007 lawsuit requirement
20	ADA: Have there been regular complaints about accessibility issues, or associated previous or pending litigation?		X			

Appendix C:
Accessibility Review and Photos

Visual Survey - 2010 ADA Standards for Accessible Design

Property Name: J.L. Francis Elementary School

BV Project Number: 166385.24R000-010.468

Facility History & Interview

	Question	Yes	No	Unk	Comments
1	Has an accessibility study been previously performed? If so, when?			X	
2	Have any ADA improvements been made to the property since original construction? Describe.			X	
3	Has building management reported any accessibility-based complaints or litigation?			X	

J.L. Francis Elementary School: Accessibility Issues

Category	Major Issues (ADA study recommended)	Moderate Issues (ADA study recommended)	Minor Issues	None*
Parking				X
Exterior Accessible Route				X
Building Entrances				X
Interior Accessible Route				X
Elevators				X
Public Restrooms				X
Kitchens/Kitchenettes				X
Playgrounds & Swimming Pools				X
Other				X

**be cognizant that if the "None" box is checked that does not guarantee full compliance; this study is limited in nature*

J.L. Francis Elementary School: Photographic Overview

OVERVIEW OF ACCESSIBLE PARKING AREA

CLOSE-UP OF STALL

ACCESSIBLE RAMP

ACCESSIBLE PATH

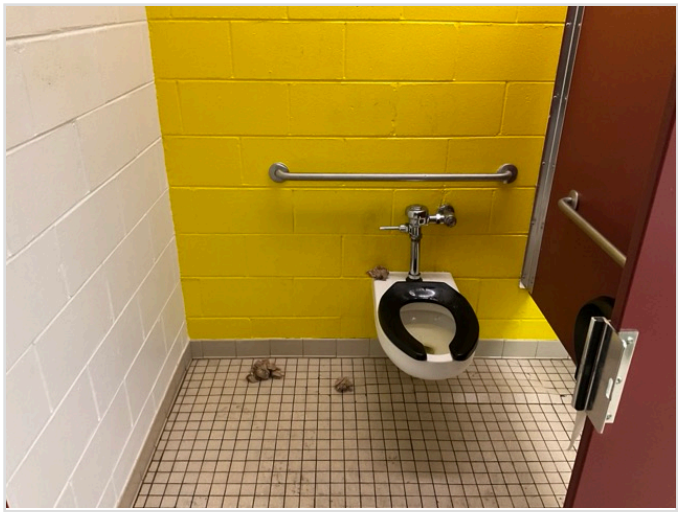
ACCESSIBLE ENTRANCE

MAIN ENTRANCE

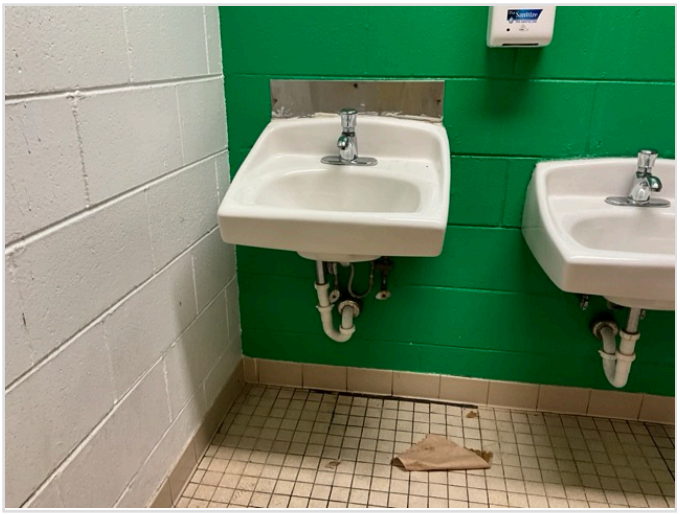
J.L. Francis Elementary School: Photographic Overview

ACCESSIBLE INTERIOR PATH

DOOR HARDWARE



TOILET STALL OVERVIEW



SINK, FAUCET HANDLES AND ACCESSORIES

ACCESSIBLE ROUTE TO PLAYGROUND

OVERVIEW OF PLAYGROUND

Appendix D:
Component Condition Report

Component Condition Report | J.L. Francis Elementary School / Main Building

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity		RUL	ID
Structure							
A1010	Building exterior	Fair	Foundation System, Concrete or CMU Walls w/ Continuous Footings	1,400	LF	19	7648805
B1010	Building exterior	Fair	Structural Framing, Masonry (CMU) Bearing Walls	56,954	SF	19	7648870
Facade							
B2010	Building Exterior	Fair	Exterior Walls, Brick Veneer	17,450	SF	20	7443715
B2020	Building Exterior	Fair	Glazing, any type, by SF	865	SF	3	7443756
B2050	Building Exterior	Fair	Exterior Door, Steel, Standard	16		30	7443732
Roofing							
B3010	Roof	Fair	Roofing, Built-Up	56,954	SF	2	7516154
B3010	Roof	Fair	Roofing, Metal	7,150	SF	20	7443707
Interiors							
C1030	Throughout building	Fair	Interior Door, Wood, Solid-Core	68		15	7516148
C1070	Throughout building	Fair	Suspended Ceilings, Acoustical Tile (ACT)	28,475	SF	10	7516169
C2010	Throughout building	Fair	Wall Finishes, any surface, Prep & Paint	37,250	SF	5	7516168
C2030		Fair	Flooring, Ceramic Tile	8,545	SF	15	7516142
C2030	Throughout building	Fair	Flooring, Carpet, Commercial Tile	25,630	SF	7	7516146
C2030	Building interior	Fair	Flooring, Vinyl Tile (VCT)	22,785	SF	10	7516184
C2050	Throughout building	Fair	Ceiling Finishes, any flat surface, Prep & Paint	28,480	SF	5	7516178
Plumbing							
D2010	Restroom	Fair	Toilet, Child-Sized	12		5	7516183
D2010	Kitchen	Fair	Sink/Lavatory, Commercial Kitchen, 3-Bowl	2		20	7516161
D2010	Restroom	Fair	Sink/Lavatory, Wall-Hung, Vitreous China	24		10	7516151
D2010	Above ceilings	Poor	Piping & Valves, Fiberglass Insulation, Domestic Water	600	LF	1	7648801
D2010	Building interior	Fair	Sink/Lavatory, Service Sink, Floor	4		5	7516174

Component Condition Report | J.L. Francis Elementary School / Main Building

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
D2010	Restroom	Fair	Toilet, Commercial Water Closet	8	10	7516145
D2010		Fair	Plumbing System, Supply & Sanitary, Medium Density (excludes fixtures)	56,954 SF	10	7662072
D2010	Mechanical room	Fair	Water Heater, Gas, Commercial (600 MBH)	1	7	7443741
D2010	Corridors	Fair	Drinking Fountain, Wall-Mounted, Single-Level	6	10	7516156
D2010	Restroom	Fair	Urinal, Standard	6	10	7516162
HVAC						
D3020	Mechanical room	Fair	Boiler, Gas, HVAC	1	25	7443735
D3030	Kitchen	Fair	Split System, Fan Coil Unit, DX	1	8	7443754
D3030	Building exterior	Fair	Heat Pump, Packaged & Wall-Mounted, 2.5 to 3 TON	1	5	7443706
D3030	Kitchen	Fair	Split System, Fan Coil Unit, DX	1	3	7443745
D3030	Roof	Fair	Split System, Condensing Unit/Heat Pump	1	2	7443742
D3030	Building exterior	Fair	Heat Pump, Packaged & Wall-Mounted, 2.5 to 3 TON	1	5	7443709
D3030	Roof	Fair	Computer Room AC Unit, Air-Cooled Condenser, 51 to 60 TON [ACU1]	1	7	7443750
D3030	Roof	Fair	Computer Room AC Unit, Air-Cooled Condenser, 51 to 60 TON [ACU2]	1	7	7443743
D3030	Roof	Fair	Split System, Condensing Unit, 4 TON	1	7	7443737
D3030	Building exterior	Fair	Heat Pump, Packaged & Wall-Mounted, 2.5 to 3 TON	1	5	7443749
D3030	Mechanical room	Fair	Chiller, Water-Cooled, 101 to 150 TON	1	12	7443724
D3030	Modular exterior	Fair	Heat Pump, Packaged & Wall-Mounted, 2.5 to 3 TON	1	5	7443714
D3030	Modular exterior	Fair	Heat Pump, Packaged & Wall-Mounted, 2.5 to 3 TON	1	5	7443703
D3050	Roof	Fair	Packaged Unit, RTU, Pad or Roof-Mounted [RTU1]	1	7	7443746
D3050	Mechanical room	Fair	Pump, Distribution, HVAC Heating Water	1	5	7443722
D3050	Building interior	Fair	Fan Coil Unit, Hydronic Terminal, 401 to 800 CFM	22	10	7718805
D3050	Roof	Fair	Packaged Unit, RTU, Pad or Roof-Mounted	1	7	7443752
D3050	Mechanical room	Fair	Pump, Distribution, HVAC Heating Water	1	5	7443712
D3050	Roof	Fair	Packaged Unit, RTU, Pad or Roof-Mounted [RTU3]	1	7	7443728

Component Condition Report | J.L. Francis Elementary School / Main Building

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
D3060	Roof	Fair	Exhaust Fan, Roof or Wall-Mounted, 24" Damper	12	5	7443747
Fire Protection						
D4010	Throughout Building	NA	Fire Suppression System, Full System Install/Retrofit, Medium Density/Complexity, Install	56,954 SF	4	7648804
Electrical						
D5020	Mechanical room	Fair	Motor Control Center, w/ Main Breaker [MCC]	1	5	7443755
D5020	Mechanical room	Fair	Distribution Panel, 277/480 V [PNL.SWBD]	1	5	7443708
D5030	Throughout building	Fair	Electrical System, Wiring & Switches, High Density/Complexity	56,954 SF	10	7662073
D5040	Throughout building	Fair	Interior Lighting System, Full Upgrade, Medium Density & Standard Fixtures	56,954 SF	5	7516172
Fire Alarm & Electronic Systems						
D7030	Throughout Building	Excellent	Security/Surveillance System, Full System Installation, Average Density	56,954 SF	15	7648803
D7050	Office	Fair	Fire Alarm Panel, Fully Addressable	1	12	7443733
D8010	Mechanical room	Poor	BAS/HVAC Controls, Basic System or Legacy Upgrades, Upgrade/Install	56,954 SF	2	7443734
Equipment & Furnishings						
E1030	Kitchen	Fair	Foodservice Equipment, Food Warmer, Proofing Cabinet on Wheels	1	10	7443740
E1030	Kitchen	Fair	Foodservice Equipment, Refrigerator, 3-Door Reach-In	1	11	7443720
E1030	Kitchen	Fair	Foodservice Equipment, Refrigerator, 2-Door Reach-In	1	11	7443716
E1030	Kitchen	Fair	Foodservice Equipment, Steam Kettle	1	10	7443748
E1030	Kitchen	Fair	Foodservice Equipment, Food Warmer, Proofing Cabinet on Wheels	1	10	7443705
E1030	Kitchen	Fair	Foodservice Equipment, Exhaust Hood, 8 to 10 LF	1	5	7443719
E1030	Kitchen	Fair	Foodservice Equipment, Refrigerator, 3-Door Reach-In	1	11	7443726
E1030	Kitchen	Fair	Foodservice Equipment, Food Warmer, Proofing Cabinet on Wheels	1	10	7443718
E1030	Kitchen	Fair	Foodservice Equipment, Walk-In, Freezer	1	16	7443723
E1030	Kitchen	Fair	Foodservice Equipment, Convection Oven, Double	1	7	7443713
E1030	Kitchen	Fair	Foodservice Equipment, Freezer, 2-Door Reach-In	1	11	7443729
E1030	Kitchen	Fair	Foodservice Equipment, Dairy Cooler/Wells	1	10	7443738

Component Condition Report | J.L. Francis Elementary School / Main Building

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
E1030	Kitchen	Fair	Foodservice Equipment, Convection Oven, Double	1	5	7443727
E1030	Kitchen	Fair	Foodservice Equipment, Dairy Cooler/Wells	1	10	7443711
E1030	Kitchen	Fair	Foodservice Equipment, Freezer, 3-Door Reach-In	1	10	7443704

Component Condition Report | J.L. Francis Elementary School / Site

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
Special Construction & Demo						
F1020	Site	Fair	Ancillary Building, Classroom/Office Module, Basic/Portable	2,525 SF	10	7443730
F1020	Site	Fair	Ancillary Building, Classroom/Office Module, Basic/Portable	2,525 SF	10	7443731
Pedestrian Plazas & Walkways						
G2020	Site	Poor	Parking Lots, Pavement, Asphalt, Mill & Overlay	41,000 SF	2	7516133
G2020		Poor	Parking Lots, Pavement, Asphalt, Seal & Stripe	41,000 SF	2	7666978
Athletic, Recreational & Playfield Areas						
G2050	Site	Fair	Playfield Surfaces, Chips Rubber, 6" Depth	10,675 SF	10	7443721
G2050	Site	Fair	Sports Apparatus, Basketball, Backboard/Rim/Pole	3	5	7443725
G2050	Site	Fair	Athletic Surfaces & Courts, Basketball/General, Asphalt Pavement, Seal & Stripe	11,000 SF	3	7443717
G2050	Site	Fair	Play Structure, Swing Set, 4 Seats	3	5	7443710
G2050	Site	Fair	Play Structure, Multipurpose, Large	2	10	7443736
G2050	Play courts	Poor	Athletic Surfaces & Courts, Basketball/General, Asphalt Pavement, Seal & Stripe	16,000 SF	2	7668073
Sitework						
G2060	Site	Fair	Park Bench, Metal Powder-Coated	5	15	7443753
G2060	Site	Fair	Fences & Gates, Fence, Chain Link 4'	1,225 LF	25	7443751
G4050	Site	Fair	Pole Light Fixture w/ Lamps, any type 20' High, w/ LED Replacement, Replace/Install	4	10	7443744
G4050	Building exterior	Fair	Exterior Fixture w/ Lamp, any type, w/ LED Replacement	14	3	7443739

Appendix E:
Replacement Reserves

Replacement Reserves Report

6/21/2024

Location	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	Total Escalated Estimate
J.L. Francis Elementary School	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
J.L. Francis Elementary School / Main Building	$0	$3,708	$1,846,493	$57,013	$320,511	$605,034	$0	$436,697	$5,827	$0	$1,631,430	$31,145	$235,251	$0	$0	$768,681	$40,118	$530,002	$7,831	$3,090,926	$1,203,863	**$10,814,532**
J.L. Francis Elementary School / Site	$0	$0	$219,421	$14,588	$0	$41,734	$0	$33,760	$6,271	$0	$895,754	$0	$39,137	$7,269	$0	$5,453	$0	$45,371	$8,427	$0	$0	**$1,317,184**
Grand Total	**$0**	**$3,708**	**$2,065,914**	**$71,601**	**$320,511**	**$646,768**	**$0**	**$470,458**	**$12,098**	**$0**	**$2,527,184**	**$31,145**	**$274,388**	**$7,269**	**$0**	**$774,134**	**$40,118**	**$575,373**	**$16,258**	**$3,090,926**	**$1,203,863**	**$12,131,716**

J.L. Francis Elementary School

J.L. Francis Elementary School / Main Building

Uniformat Code	Location Description	ID	Cost Description	Lifespan (EUL)	EAge	RUL	Quantity	Unit	Unit Cost *	Subtotal	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	Deficiency Repair Estimate
A1010	Building exterior	7648805	Foundation System, Concrete or CMU Walls w/ Continuous Footings,	75	56	19	1400	LF	$120.00	$168,000																				$168,000		**$168,000**
B1010	Building exterior	7648870	Structural Framing, Masonry (CMU) Bearing Walls	75	56	19	56954	SF	$28.00	$1,594,712																				$1,594,712		**$1,594,712**
B2010	Building Exterior	7443715	Exterior Walls, Brick Veneer, Replace	50	30	20	17450	SF	$27.00	$471,150																					$471,150	**$471,150**
B2020	Building Exterior	7443756	Glazing, any type, by SF, Replace	30	27	3	865	SF	$55.00	$47,575				$47,575																		**$47,575**
B3010	Roof	7443707	Roofing, Metal, Replace	40	20	20	7150	SF	$26.00	$185,900																					$185,900	**$185,900**
B3010	Roof	7516154	Roofing, Built-Up, Replace	25	23	2	56954	SF	$28.00	$1,594,712			$1,594,712																			**$1,594,712**
C1030	Throughout building	7516148	Interior Door, Wood, Solid-Core, Replace	40	25	15	68	EA	$700.00	$47,600																$47,600						**$47,600**
C1070	Throughout building	7516169	Suspended Ceilings, Acoustical Tile (ACT), Replace	25	15	10	28475	SF	$3.50	$99,663											$99,663											**$99,663**
C2010	Throughout building	7516168	Wall Finishes, any surface, Prep & Paint	10	5	5	37250	SF	$1.50	$55,875						$55,875										$55,875						**$111,750**
C2030	Main Building	7516142	Flooring, Ceramic Tile, Replace	40	25	15	8545	SF	$18.00	$153,810																$153,810						**$153,810**
C2030	Building interior	7516184	Flooring, Vinyl Tile (VCT), Replace	15	5	10	22785	SF	$5.00	$113,925											$113,925											**$113,925**
C2030	Throughout building	7516146	Flooring, Carpet, Commercial Tile, Replace	10	3	7	25630	SF	$6.50	$166,595								$166,595										$166,595				**$333,190**
C2050	Throughout building	7516178	Ceiling Finishes, any flat surface, Prep & Paint	10	5	5	28480	SF	$2.00	$56,960						$56,960										$56,960						**$113,920**
D2010	Mechanical room	7443741	Water Heater, Gas, Commercial (600 MBH), Replace	20	13	7	1	EA	$32,000.00	$32,000								$32,000														**$32,000**
D2010	Main Building	7662072	Plumbing System, Supply & Sanitary, Medium Density (excludes fixtures), Replace	40	30	10	56954	SF	$11.00	$626,494											$626,494											**$626,494**
D2010	Restroom	7516183	Toilet, Child-Sized, Replace	30	25	5	12	EA	$900.00	$10,800						$10,800																**$10,800**
D2010	Building interior	7516174	Sink/Lavatory, Service Sink, Floor, Replace	35	30	5	4	EA	$800.00	$3,200						$3,200																**$3,200**
D2010	Restroom	7516151	Sink/Lavatory, Wall-Hung, Vitreous China, Replace	30	20	10	24	EA	$1,500.00	$36,000											$36,000											**$36,000**
D2010	Restroom	7516145	Toilet, Commercial Water Closet, Replace	30	20	10	8	EA	$1,300.00	$10,400											$10,400											**$10,400**
D2010	Corridors	7516156	Drinking Fountain, Wall-Mounted, Single-Level, Replace	15	5	10	6	EA	$1,200.00	$7,200											$7,200											**$7,200**
D2010	Restroom	7516162	Urinal, Standard, Replace	30	20	10	6	EA	$1,100.00	$6,600											$6,600											**$6,600**
D2010	Kitchen	7516161	Sink/Lavatory, Commercial Kitchen, 3-Bowl, Replace	30	10	20	2	EA	$2,500.00	$5,000																					$5,000	**$5,000**
D2010	Above ceilings	7648801	Piping & Valves, Fiberglass Insulation, Domestic Water, Replace	40	39	1	600	LF	$6.00	$3,600		$3,600																				**$3,600**
D3030	Mechanical room	7443724	Chiller, Water-Cooled, 101 to 150 TON, Replace	25	13	12	1	EA	$150,000.00	$150,000													$150,000									**$150,000**
D3030	Roof	7443742	Split System, Condensing Unit/Heat Pump, Replace	15	13	2	1	EA	$3,400.00	$3,400			$3,400																	$3,400			**$6,800**
D3030	Kitchen	7443745	Split System, Fan Coil Unit, DX, Replace	15	12	3	1	EA	$4,600.00	$4,600				$4,600																	$4,600		**$9,200**
D3030	Building exterior	7443709	Heat Pump, Packaged & Wall-Mounted, 2.5 to 3 TON, Replace	20	15	5	1	EA	$4,400.00	$4,400						$4,400																**$4,400**
D3030	Modular exterior	7443714	Heat Pump, Packaged & Wall-Mounted, 2.5 to 3 TON, Replace	20	15	5	1	EA	$4,400.00	$4,400						$4,400																**$4,400**
D3030	Building exterior	7443749	Heat Pump, Packaged & Wall-Mounted, 2.5 to 3 TON, Replace	20	15	5	1	EA	$4,400.00	$4,400						$4,400																**$4,400**
D3030	Building exterior	7443706	Heat Pump, Packaged & Wall-Mounted, 2.5 to 3 TON, Replace	20	15	5	1	EA	$4,400.00	$4,400						$4,400																**$4,400**
D3030	Modular exterior	7443703	Heat Pump, Packaged & Wall-Mounted, 2.5 to 3 TON, Replace	20	15	5	1	EA	$4,400.00	$4,400						$4,400																**$4,400**
D3030	Roof	7443737	Split System, Condensing Unit, 4 TON, Replace	15	8	7	1	EA	$5,200.00	$5,200								$5,200														**$5,200**
D3030	Roof	7443743	Computer Room AC Unit, Air-Cooled Condenser, 51 to 60 TON, Replace	20	13	7	1	EA	$34,000.00	$34,000								$34,000														**$34,000**
D3030	Roof	7443750	Computer Room AC Unit, Air-Cooled Condenser, 51 to 60 TON, Replace	20	13	7	1	EA	$34,000.00	$34,000								$34,000														**$34,000**
D3030	Kitchen	7443754	Split System, Fan Coil Unit, DX, Replace	15	7	8	1	EA	$4,600.00	$4,600									$4,600													**$4,600**
D3050	Mechanical room	7443722	Pump, Distribution, HVAC Heating Water, Replace	25	20	5	1	EA	$6,500.00	$6,500						$6,500																**$6,500**
D3050	Mechanical room	7443712	Pump, Distribution, HVAC Heating Water, Replace	25	20	5	1	EA	$6,500.00	$6,500						$6,500																**$6,500**
D3050	Roof	7443752	Packaged Unit, RTU, Pad or Roof-Mounted, Replace	20	13	7	1	EA	$30,000.00	$30,000								$30,000														**$30,000**
D3050	Roof	7443728	Packaged Unit, RTU, Pad or Roof-Mounted, Replace	20	13	7	1	EA	$15,000.00	$15,000								$15,000														**$15,000**
D3050	Roof	7443746	Packaged Unit, RTU, Pad or Roof-Mounted, Replace	20	13	7	1	EA	$30,000.00	$30,000								$30,000														**$30,000**

Replacement Reserves Report

6/21/2024

Uniformat Code	Location Description	ID	Cost Description	Lifespan (EUL)	EAge	RUL	Quantity	Unit	Unit Cost *	Subtotal	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	Deficiency Repair Estimate
D3050	Building interior	7718805	Fan Coil Unit, Hydronic Terminal, 401 to 800 CFM, Replace	20	10	10	22	EA	$1,670.00	$36,740											$36,740												**$36,740**
D3060	Roof	7443747	Exhaust Fan, Roof or Wall-Mounted, 24" Damper, Replace	20	15	5	12	EA	$3,000.00	$36,000						$36,000																	**$36,000**
D4010	Throughout Building	7648804	Fire Suppression System, Full System Install/Retrofit, Medium Density/Complexity, Install	40	36	4	56954	SF	$5.00	$284,770					$284,770																		**$284,770**
D5020	Mechanical room	7443755	Motor Control Center, w/ Main Breaker, Replace	30	25	5	1	EA	$15,000.00	$15,000						$15,000																	**$15,000**
D5020	Mechanical room	7443708	Distribution Panel, 277/480 V, Replace	30	25	5	1	EA	$40,000.00	$40,000						$40,000																	**$40,000**
D5030	Throughout building	7662073	Electrical System, Wiring & Switches, High Density/Complexity, Replace	40	30	10	56954	SF	$4.00	$227,816											$227,816												**$227,816**
D5040	Throughout building	7516172	Interior Lighting System, Full Upgrade, Medium Density & Standard Fixtures, Replace	20	15	5	56954	SF	$4.50	$256,293						$256,293																	**$256,293**
D7030	Throughout Building	7648803	Security/Surveillance System, Full System Installation, Average Density, Replace	15	0	15	56954	SF	$3.00	$170,862																$170,862							**$170,862**
D7050	Office	7443733	Fire Alarm Panel, Fully Addressable, Replace	15	3	12	1	EA	$15,000.00	$15,000													$15,000										**$15,000**
D8010	Mechanical room	7443734	BAS/HVAC Controls, Basic System or Legacy Upgrades, Upgrade/Install	15	13	2	56954	SF	$2.50	$142,385			$142,385																$142,385				**$284,770**
E1030	Kitchen	7443719	Foodservice Equipment, Exhaust Hood, 8 to 10 LF, Replace	15	10	5	1	EA	$4,500.00	$4,500						$4,500																$4,500	**$9,000**
E1030	Kitchen	7443727	Foodservice Equipment, Convection Oven, Double, Replace	10	5	5	1	EA	$8,280.00	$8,280						$8,280										$8,280							**$16,560**
E1030	Kitchen	7443713	Foodservice Equipment, Convection Oven, Double, Replace	10	3	7	1	EA	$8,280.00	$8,280								$8,280											$8,280				**$16,560**
E1030	Kitchen	7443704	Foodservice Equipment, Freezer, 3-Door Reach-In, Replace	15	5	10	1	EA	$6,800.00	$6,800											$6,800												**$6,800**
E1030	Kitchen	7443738	Foodservice Equipment, Dairy Cooler/Wells, Replace	15	5	10	1	EA	$3,600.00	$3,600											$3,600												**$3,600**
E1030	Kitchen	7443718	Foodservice Equipment, Food Warmer, Proofing Cabinet on Wheels, Replace	15	5	10	1	EA	$1,700.00	$1,700											$1,700												**$1,700**
E1030	Kitchen	7443740	Foodservice Equipment, Food Warmer, Proofing Cabinet on Wheels, Replace	15	5	10	1	EA	$1,700.00	$1,700											$1,700												**$1,700**
E1030	Kitchen	7443705	Foodservice Equipment, Food Warmer, Proofing Cabinet on Wheels, Replace	15	5	10	1	EA	$1,700.00	$1,700											$1,700												**$1,700**
E1030	Kitchen	7443748	Foodservice Equipment, Steam Kettle, Replace	20	10	10	1	EA	$30,000.00	$30,000											$30,000												**$30,000**
E1030	Kitchen	7443711	Foodservice Equipment, Dairy Cooler/Wells, Replace	15	5	10	1	EA	$3,600.00	$3,600											$3,600												**$3,600**
E1030	Kitchen	7443729	Foodservice Equipment, Freezer, 2-Door Reach-In, Replace	15	4	11	1	EA	$5,100.00	$5,100												$5,100												**$5,100**
E1030	Kitchen	7443726	Foodservice Equipment, Refrigerator, 3-Door Reach-In, Replace	15	4	11	1	EA	$6,400.00	$6,400												$6,400												**$6,400**
E1030	Kitchen	7443720	Foodservice Equipment, Refrigerator, 3-Door Reach-In, Replace	15	4	11	1	EA	$6,400.00	$6,400												$6,400												**$6,400**
E1030	Kitchen	7443716	Foodservice Equipment, Refrigerator, 2-Door Reach-In, Replace	15	4	11	1	EA	$4,600.00	$4,600												$4,600												**$4,600**
E1030	Kitchen	7443723	Foodservice Equipment, Walk-In, Freezer, Replace	20	4	16	1	EA	$25,000.00	$25,000																	$25,000						**$25,000**
Totals, Unescalated											**$0**	**$3,600**	**$1,740,497**	**$52,175**	**$284,770**	**$521,908**	**$0**	**$355,075**	**$4,600**	**$0**	**$1,213,938**	**$22,500**	**$165,000**	**$0**	**$0**	**$493,387**	**$25,000**	**$320,660**	**$4,600**	**$1,762,712**	**$666,550**	**$7,636,972**
Totals, Escalated (3.0% inflation, compounded annually)											**$0**	**$3,708**	**$1,846,493**	**$57,013**	**$320,511**	**$605,034**	**$0**	**$436,697**	**$5,827**	**$0**	**$1,631,430**	**$31,145**	**$235,251**	**$0**	**$0**	**$768,681**	**$40,118**	**$530,002**	**$7,831**	**$3,090,926**	**$1,203,863**	**$10,814,532**

J.L. Francis Elementary School / Site

Uniformat Code	Location Description	ID	Cost Description	Lifespan (EUL)	EAge	RUL	Quantity	Unit	Unit Cost *	Subtotal	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	Deficiency Repair Estimate
F1020	Site	7443731	Ancillary Building, Classroom/Office Module, Basic/Portable, Replace	25	15	10	2525	SF	$100.00	$252,500											$252,500												**$252,500**
F1020	Site	7443730	Ancillary Building, Classroom/Office Module, Basic/Portable, Replace	25	15	10	2525	SF	$100.00	$252,500											$252,500												**$252,500**
G2020	Site	7516133	Parking Lots, Pavement, Asphalt, Mill & Overlay	25	23	2	41000	SF	$4.38	$179,375			$179,375																				**$179,375**
G2020	Site	7666978	Parking Lots, Pavement, Asphalt, Seal & Stripe	5	3	2	41000	SF	$0.45	$18,450			$18,450					$18,450					$18,450						$18,450				**$73,800**
G2050	Play courts	7668073	Athletic Surfaces & Courts, Basketball/General, Asphalt Pavement, Seal & Stripe	5	3	2	16000	SF	$0.56	$9,000			$9,000					$9,000					$9,000						$9,000				**$36,000**
G2050	Site	7443717	Athletic Surfaces & Courts, Basketball/General, Asphalt Pavement, Seal & Stripe	5	2	3	11000	SF	$0.45	$4,950				$4,950					$4,950					$4,950					$4,950				**$19,800**
G2050	Site	7443725	Sports Apparatus, Basketball, Backboard/Rim/Pole, Replace	25	20	5	3	EA	$9,500.00	$28,500						$28,500																	**$28,500**
G2050	Site	7443710	Play Structure, Swing Set, 4 Seats, Replace	20	15	5	3	EA	$2,500.00	$7,500						$7,500																	**$7,500**
G2050	Site	7443736	Play Structure, Multipurpose, Large, Replace	20	10	10	2	EA	$35,000.00	$70,000											$70,000												**$70,000**
G2050	Site	7443721	Playfield Surfaces, Chips Rubber, 6" Depth, Replace	15	5	10	10675	SF	$7.00	$74,725											$74,725												**$74,725**
G2060	Site	7443753	Park Bench, Metal Powder-Coated, Replace	20	5	15	5	EA	$700.00	$3,500																$3,500							**$3,500**
G4050	Site	7443744	Pole Light Fixture w/ Lamps, any type 20' High, w/ LED Replacement, Replace/Install	20	10	10	4	EA	$4,200.00	$16,800											$16,800												**$16,800**
G4050	Building exterior	7443739	Exterior Fixture w/ Lamp, any type, w/ LED Replacement, Replace	20	17	3	14	EA	$600.00	$8,400				$8,400																			**$8,400**
Totals, Unescalated											**$0**	**$0**	**$206,825**	**$13,350**	**$0**	**$36,000**	**$0**	**$27,450**	**$4,950**	**$0**	**$666,525**	**$0**	**$27,450**	**$4,950**	**$0**	**$3,500**	**$0**	**$27,450**	**$4,950**	**$0**	**$0**	**$1,023,400**
Totals, Escalated (3.0% inflation, compounded annually)											**$0**	**$0**	**$219,421**	**$14,588**	**$0**	**$41,734**	**$0**	**$33,760**	**$6,271**	**$0**	**$895,754**	**$0**	**$39,137**	**$7,269**	**$0**	**$5,453**	**$0**	**$45,371**	**$8,427**	**$0**	**$0**	**$1,317,184**

Appendix F:
Equipment Inventory List

D20 Plumbing

Index	ID	UFCode	Component Description	Attributes	Capacity	Building	Location Detail	Manufacturer	Model	Serial	Dataplate Yr	Barcode	Qty
1	7443741	D2010	**Water Heater**	Gas, Commercial (600 MBH)	230 GAL	J.L. Francis Elementary School / Main Building	Mechanical room	A. O. Smith	BTH 199 100	1115M001881	2011		

D30 HVAC

Index	ID	UFCode	Component Description	Attributes	Capacity	Building	Location Detail	Manufacturer	Model	Serial	Dataplate Yr	Barcode	Qty
1	7443735	D3020	**Boiler**	Gas, HVAC		J.L. Francis Elementary School / Main Building	Mechanical room	Camus	DFNH-1500-MGI	071928453	2019	1576762	
2	7443724	D3030	**Chiller**	Water-Cooled, 101 to 150 TON	130 TON	J.L. Francis Elementary School / Main Building	Mechanical room	McQuay	WGZ130CA27-ER10	STNU110700030	2011		
3	7443750	D3030	**Computer Room AC Unit** [ACU1]	Air-Cooled Condenser, 51 to 60 TON		J.L. Francis Elementary School / Main Building	Roof	Daikin	ACH.060A	T11602948	2011	1576804	
4	7443743	D3030	**Computer Room AC Unit** [ACU2]	Air-Cooled Condenser, 51 to 60 TON		J.L. Francis Elementary School / Main Building	Roof	McQuay	ACH.060A	T11G02947	2011	1576801	
5	7443706	D3030	**Heat Pump**	Packaged & Wall-Mounted, 2.5 to 3 TON		J.L. Francis Elementary School / Main Building	Building exterior	Inaccessible	Inaccessible	Inaccessible		1576736	
6	7443749	D3030	**Heat Pump**	Packaged & Wall-Mounted, 2.5 to 3 TON		J.L. Francis Elementary School / Main Building	Building exterior	Inaccessible	Inaccessible	Inaccessible		1576735	
7	7443714	D3030	**Heat Pump**	Packaged & Wall-Mounted, 2.5 to 3 TON		J.L. Francis Elementary School / Main Building	Modular exterior	Inaccessible	Inaccessible	Inaccessible		1576732	
8	7443703	D3030	**Heat Pump**	Packaged & Wall-Mounted, 2.5 to 3 TON		J.L. Francis Elementary School / Main Building	Modular exterior	Inaccessible	Inaccessible	Inaccessible		1576740	

9	7443709	D3030	**Heat Pump**	Packaged & Wall-Mounted, 2.5 to 3 TON	Inaccessible	J.L. Francis Elementary School / Main Building	Building exterior	Inaccessible	Inaccessible	Inaccessible		
10	7443737	D3030	**Split System**	Condensing Unit, 4 TON		J.L. Francis Elementary School / Main Building	Roof	No dataplate	24ABB348A610	L5016E16433	2016	1576799
11	7443742	D3030	**Split System**	Condensing Unit/Heat Pump		J.L. Francis Elementary School / Main Building	Roof	No dataplate	No dataplate	No dataplate		1576798
12	7443754	D3030	**Split System**	Fan Coil Unit, DX		J.L. Francis Elementary School / Main Building	Kitchen	Carrier	FB4CNP048	1717A82784	2017	1576743
13	7443745	D3030	**Split System**	Fan Coil Unit, DX		J.L. Francis Elementary School / Main Building	Kitchen	Carrier	FA48NF048	3405A89066	2005	1576738
14	7443722	D3050	**Pump**	Distribution, HVAC Heating Water		J.L. Francis Elementary School / Main Building	Mechanical room	WEG	EL 0071B0T3E213TC	Illegible		1576802
15	7443712	D3050	**Pump**	Distribution, HVAC Heating Water		J.L. Francis Elementary School / Main Building	Mechanical room	WEG	EL 0071B0T3E213TC	Illegible		1576803
16	7718805	D3050	**Fan Coil Unit**	Hydronic Terminal, 401 to 800 CFM	Inaccessible	J.L. Francis Elementary School / Main Building	Building interior					22
17	7443752	D3050	**Packaged Unit**	RTU, Pad or Roof-Mounted	15 TON	J.L. Francis Elementary School / Main Building	Roof	Trane	WCD180E40CAC 1"	112710287D	2011	1576796
18	7443746	D3050	**Packaged Unit** [RTU1]	RTU, Pad or Roof-Mounted	15 TON	J.L. Francis Elementary School / Main Building	Roof	Trane	YCD180F4HAAA	112710324D	2011	1576734
19	7443728	D3050	**Packaged Unit** [RTU3]	RTU, Pad or Roof-Mounted	7.5 TON	J.L. Francis Elementary School / Main Building	Roof	Trane	Illegible	Illegible	2011	1576800

20	7443747	D3060	**Exhaust Fan**	Roof or Wall-Mounted, 24" Damper	2500 Estimated CFM	J.L. Francis Elementary School / Main Building	Roof	Illegible	Illegible	Illegible			12

D50 Electrical

Index	ID	UFCode	Component Description	Attributes	Capacity	Building	Location Detail	Manufacturer	Model	Serial	Dataplate Yr	Barcode	Qty
1	7443708	D5020	**Distribution Panel** [PNL.SWBD]	277/480 V		J.L. Francis Elementary School / Main Building	Mechanical room	Federal Pacific	NA	NA		1576758	
2	7443755	D5020	**Motor Control Center** [MCC]	w/ Main Breaker		J.L. Francis Elementary School / Main Building	Mechanical room	Federal Pacific	No dataplate	No dataplate		1576755	

D70 Electronic Safety & Security

Index	ID	UFCode	Component Description	Attributes	Capacity	Building	Location Detail	Manufacturer	Model	Serial	Dataplate Yr	Barcode	Qty
1	7443733	D7050	**Fire Alarm Panel**	Fully Addressable		J.L. Francis Elementary School / Main Building	Office	Edwards	io Series	No dataplate		1576739	

E10 Equipment

Index	ID	UFCode	Component Description	Attributes	Capacity	Building	Location Detail	Manufacturer	Model	Serial	Dataplate Yr	Barcode	Qty
1	7443713	E1030	**Foodservice Equipment**	Convection Oven, Double		J.L. Francis Elementary School / Main Building	Kitchen	Master	200	No dataplate		1577876	
2	7443727	E1030	**Foodservice Equipment**	Convection Oven, Double		J.L. Francis Elementary School / Main Building	Kitchen	Convotherm	C4ET620ESN	VS219114841		1577874	
3	7443738	E1030	**Foodservice Equipment**	Dairy Cooler/Wells		J.L. Francis Elementary School / Main Building	Kitchen	Beverage-Air	SMF49Y1S	12408237		1577867	
4	7443711	E1030	**Foodservice Equipment**	Dairy Cooler/Wells		J.L. Francis Elementary School / Main Building	Kitchen	Beverage-Air	SMF34Y1S	12404371		1577877	
5	7443719	E1030	**Foodservice Equipment**	Exhaust Hood, 8 to 10 LF		J.L. Francis Elementary School / Main Building	Kitchen	Illegible	Illegible	Illegible		1577873	

6	7443740	E1030	**Foodservice Equipment**	Food Warmer, Proofing Cabinet on Wheels	J.L. Francis Elementary School / Main Building	Kitchen	Metro	NA	C5HME034049	2019	1577869
7	7443705	E1030	**Foodservice Equipment**	Food Warmer, Proofing Cabinet on Wheels	J.L. Francis Elementary School / Main Building	Kitchen	Metro	NA	C5HME034036	2019	1577870
8	7443718	E1030	**Foodservice Equipment**	Food Warmer, Proofing Cabinet on Wheels	J.L. Francis Elementary School / Main Building	Kitchen	No dataplate	No dataplate	No dataplate		1577868
9	7443729	E1030	**Foodservice Equipment**	Freezer, 2-Door Reach-In	J.L. Francis Elementary School / Main Building	Kitchen	Delfield	GBF2P-S	1120528567		1576741
10	7443704	E1030	**Foodservice Equipment**	Freezer, 3-Door Reach-In	J.L. Francis Elementary School / Main Building	Kitchen	Traulsen	G31310	T99120G05		1577865
11	7443716	E1030	**Foodservice Equipment**	Refrigerator, 2-Door Reach-In	J.L. Francis Elementary School / Main Building	Kitchen	Manitowoc	GBR2S	1120097909		1577872
12	7443720	E1030	**Foodservice Equipment**	Refrigerator, 3-Door Reach-In	J.L. Francis Elementary School / Main Building	Kitchen	Manitowoc	BBR3S	1120066294		1577871
13	7443726	E1030	**Foodservice Equipment**	Refrigerator, 3-Door Reach-In	J.L. Francis Elementary School / Main Building	Kitchen	Traulsen	T45375H10	G30010		1576742
14	7443748	E1030	**Foodservice Equipment**	Steam Kettle	J.L. Francis Elementary School / Main Building	Kitchen	Cleveland	Illegible	Illegible		1577875
15	7443723	E1030	**Foodservice Equipment**	Walk-In, Freezer	J.L. Francis Elementary School / Main Building	Kitchen	Kolpak	HARC2N1A	410218382	2020	1577866