

FACILITY CONDITION ASSESSMENT



**BUREAU
VERITAS**

prepared for

Shelby County Board of Education
160 South Hollywood Street
Memphis, Tennessee 38112-4892
Michelle Stuart



Jackson Elementary School
3925 Wales Avenue
Memphis, Tennessee 38108

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Bureau Veritas

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1. Executive Summary

Campus Overview and Assessment Details

General Information	
Property Type	Elementary school
Number of Buildings	2
Main Address	3925 Wales Avenue, Memphis, Tennessee 38108
Site Developed	1957, Phase I / 1993 Phase II
Site Area	17.53 acres (estimated)
Parking Spaces	53 total spaces all in open lots; 3 of which are accessible.
Outside Occupants/Leased Spaces	None
Date(s) of Visit	May 20, 2024
Management Point of Contact	Ms. Mary Taylor, Shelby County Board of Education (901) 416-5376 taylorm15@scsk12.org
On-site Point of Contact (POC)	Mrs. Cox
Assessment and Report Prepared By	Dalton W Bryan
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AssetCalc Link	Full dataset for this assessment can be found at: https://www.assetcalc.net/

Campus Findings and Deficiencies

Historical Summary

This Elementary School was originally constructed in 1957 and the Annex building was added in 1993. There were no significant findings to suggest any widespread renovations since 1993.

Architectural

Main Building: The building façade is a brick veneer, which has significant wear and needs repointing. Glazing is typical with aluminum windows and entrance doors are standard steel. The roofs are flat, and no leaks were reported. There are numerous condensation issues within the cafeteria area as evidenced by the hard tiles falling from the ceiling.

Annex: The construction of this building is the same as the main building with no issues found during the assessment.

Mechanical, Electrical, Plumbing and Fire (MEPF)

Main Building: There have been significant upgrades to all the systems since the date of construction. From 1993 to 2018, most of these renovations have been to the HVAC and Electrical systems. No sprinkler systems: however, there are fire extinguishers and a fire panel serving both buildings.

Annex: All systems for this building are approaching five years old and will not require more than maintenance for the next several years. This building does have a sprinkler system.

Site

This site is primarily grass with an upper and lower elevation connected by a central set of concrete stairs. There is a small playground between the two buildings and no significant landscaping. Parking lots are asphalt with typical wear and need usual maintenance and repairs.

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 each building's Facility Condition Index (FCI), which provides a theoretical objective indication of a building's overall condition. By definition, the FCI is defined as the ratio of the cost of current needs divided by current replacement value (CRV) of the 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 deficiencies.
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 relatively compare facilities across a portfolio instead of being over-analyzed and scrutinized as stand-alone values. The table below summarizes the individual findings for this FCA:

Facility (year built)	Cost/SF	Total SF	Replacement Value	Current	3-Year	5-Year	10-Year
Jackson Elementary School / Annex (2019)	\$400	9,704	\$3,881,600	0.0%	0.0%	2.4%	3.9%
Jackson Elementary School / Main Building (1957)	\$400	49,217	\$19,686,800	2.1%	2.6%	16.7%	27.2%

Campus Level FCI:

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

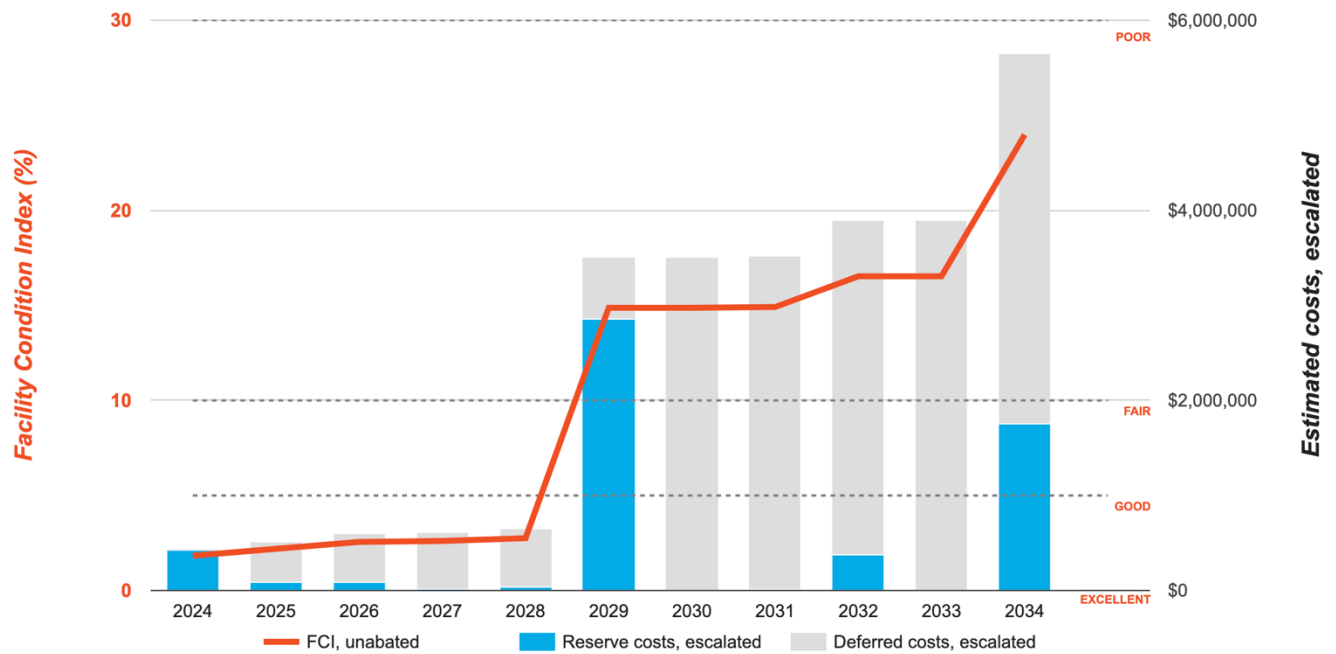
Needs by Year with Unaddressed FCI Over Time

FCI Analysis: Jackson Elementary School

Replacement Value: \$23,568,400

Inflation Rate: 3.0%

Average Needs per Year: \$513,700



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

Systems 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
Facade	\$330,000	-	\$1,400	\$547,000	\$15,800	\$894,100
Roofing	-	-	-	\$576,900	\$269,400	\$846,200
Interiors	\$84,000	\$31,800	\$1,251,600	\$50,400	\$844,600	\$2,262,500
Plumbing	-	\$13,200	\$1,247,500	\$18,500	\$4,400	\$1,283,500
HVAC	-	-	\$2,800	\$591,300	\$416,200	\$1,010,300
Fire Protection	-	-	-	\$400	\$500	\$900
Electrical	-	\$40,300	\$42,500	\$338,600	\$657,400	\$1,078,800
Fire Alarm & Electronic Systems	-	-	\$204,900	-	-	\$204,900
Equipment & Furnishings	-	-	\$133,000	-	\$195,100	\$328,000
Site Pavement	\$11,800	\$86,500	\$12,500	\$14,500	\$36,300	\$161,700
Site Development	\$5,700	-	\$6,300	\$7,300	\$161,800	\$181,000
TOTALS (3% inflation)	\$431,500	\$171,800	\$2,902,400	\$2,144,800	\$2,601,400	\$8,251,900

*Totals have been rounded to the nearest \$100.

Immediate Needs

Facility/Building	Total Items	Total Cost
Jackson Elementary School / Main Building	2	\$414,000
Jackson Elementary School / Site	4	\$17,500
Total	6	\$431,500

Main Building

ID	Location	Location Description	UF Code	Description	Condition	Plan Type	Cost
7638849	Jackson Elementary School / Main Building	Building Exterior	B2010	Exterior Walls, Brick, Repair/Repoint	Poor	Performance/Integrity	\$330,000
7651493	Jackson Elementary School / Main Building	Cafeteria	C1070	Suspended Ceilings, Hard Tile, ACM Abatement & Replacement w/ ACT, Replace	Poor	Performance/Integrity	\$84,000
Total (2 items)							\$414,000

Site

ID	Location	Location Description	UF Code	Description	Condition	Plan Type	Cost
7641733	Jackson Elementary School / Site	Site	G2020	Parking Lots, Pavement, Asphalt, Seal & Stripe	Poor	Performance/Integrity	\$10,800
7638861	Jackson Elementary School / Site	Site	G2030	Sidewalk, any pavement type, Sectional Repairs (per Man-Day), Repair	Poor	Performance/Integrity	\$1,000
7641728	Jackson Elementary School / Site	Site	G2050	Athletic Surfaces & Courts, Basketball/General, Asphalt Pavement, Seal & Stripe	Poor	Performance/Integrity	\$5,400
7638844	Jackson Elementary School / Site	Site	G2060	Retaining Wall, Brick/Stone, Repair	Failed	Performance/Integrity	\$300
Total (4 items)							\$17,500

Key Findings

**Exterior Walls in Poor condition.**Priority Score: **89.9**

Brick
Main Building Jackson Elementary School
Building Exterior

Plan Type:
Performance/Integrity

Cost Estimate: \$330,000

Uniformat Code: B2010

Recommendation: **Repair/Repoint in 2024****\$\$\$\$**

Majority of exterior walls require repointing. - AssetCALC ID: 7638849

**Sidewalk in Poor condition.**Priority Score: **85.9**

any pavement type, Sectional Repairs (per
Man-Day)
Site Jackson Elementary School Site

Plan Type:
Performance/Integrity

Cost Estimate: \$1,000

Uniformat Code: G2030

Recommendation: **Repair in 2024****\$\$\$\$**

Several crack, repairs towing tread on stairs and small section replacement needed. - AssetCALC ID: 7638861

**Parking Lots in Poor condition.**Priority Score: **84.9**

Pavement, Asphalt
Site Jackson Elementary School Site

Plan Type:
Performance/Integrity

Cost Estimate: \$10,800

Uniformat Code: G2020

Recommendation: **Seal and Stripe in 2024****\$\$\$\$**

Seal is depleted and striping worn up to end of useful life expectancy. - AssetCALC ID: 7641733

**Parking Lots in Poor condition.**Priority Score: **84.8**

Pavement, Asphalt
Site Jackson Elementary School Site

Plan Type:
Performance/Integrity

Cost Estimate: \$84,000

Uniformat Code: G2020

Recommendation: **Mill and Overlay in 2025****\$\$\$\$**

Seal is depleted and striping worn up to end of useful life expectancy. - AssetCALC ID: 7647558



Athletic Surfaces and Courts in Poor condition.

Basketball/General, Asphalt Pavement
Site Jackson Elementary School Site

Uniformat Code: G2050
Recommendation: **Seal and Stripe in 2024**

Priority Score: **82.9**

Plan Type:
Performance/Integrity

Cost Estimate: \$5,400

\$\$\$\$

Severely worn asphalt and striping for play areas are not visible. - AssetCALC ID: 7641728



Retaining Wall in Failed condition.

Brick/Stone
Site Jackson Elementary School Site

Uniformat Code: G2060
Recommendation: **Repair in 2024**

Priority Score: **81.9**

Plan Type:
Performance/Integrity

Cost Estimate: \$300

\$\$\$\$

Planter boxes need brick work repair. - AssetCALC ID: 7638844



Suspended Ceilings in Poor condition.

Hard Tile, ACM Abatement and Replacement with ACT
Main Building Jackson Elementary School Cafeteria

Uniformat Code: C1070
Recommendation: **Replace in 2024**

Priority Score: **81.9**

Plan Type:
Performance/Integrity

Cost Estimate: \$84,000

\$\$\$\$

Water damage - AssetCALC ID: 7651493

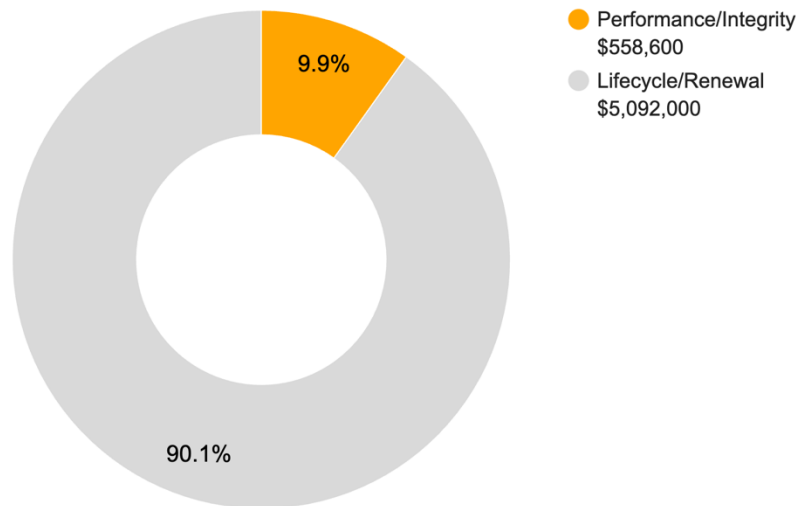
Plan Types

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.

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 handicap 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 not currently deficient or problematic but for which future replacement or repair is anticipated and budgeted.

Plan Type Distribution (by Cost)



10-YEAR TOTAL: \$5,650,600

2. Main Building



Main Building: Systems Summary

Constructed/Renovated	1957/1993	
Building/Group Size	49,217 SF	
Number of Stories	2 above grade	
System	Description	Condition
Structure	Masonry bearing walls with metal roof deck supported by steel joists and concrete strip/wall footing foundation system	Good
Façade	Wall Finish: Brick Windows: Aluminum	Fair
Roof	Primary: Flat construction with single-ply TPO/PVC membrane Secondary: Flat construction with single-ply EPDM membrane	Fair
Interiors	Walls: Painted CMU Floors: VCT Ceilings: ACT	Fair
Elevators	Passenger: One hydraulic car serving all 2 floors	Good
Plumbing	Distribution: Copper and Galvanized iron supply and cast iron and PVC waste and venting Hot Water: Gas domestic boilers and water heaters Fixtures: Toilets, urinals, and sinks in all restrooms	Fair
HVAC	Central System: Boilers, chillers, and air handlers feeding hydronic radiators and cabinet terminal units. Non-Central System: Split-system heat pumps, Ductless split-systems Supplemental components: Make-up air unit	Fair

Main Building: Systems Summary		
Fire Suppression	Fire extinguishers and kitchen hood system	Good
Electrical	Source & Distribution: Main panel with copper wiring. Interior Lighting: LED, linear fluorescent Emergency Power: None	Fair
Fire Alarm	Alarm panel with smoke detectors, heat detectors, alarms, strobes, pull stations, back-up emergency lights, and exit signs	Good
Equipment/Special	Commercial kitchen equipment	Good
Accessibility	Presently it does not appear an accessibility study is needed for this building. See Appendix D.	
Key Issues and Findings	Brick repointing required.	

3. Annex



Annex: Systems Summary

Constructed/Renovated	2019	
Building Size	9,704 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	Good
Façade	Wall Finish: Brick Windows: Aluminum	Good
Roof	Flat construction with single-ply TPO/PVC membrane	Good
Interiors	Walls: Painted CMU Ceilings: ACT	Good
Elevators	None	--
Plumbing	Distribution: Copper supply and PVC waste and venting Hot Water: Electric water heaters with integral tank Fixtures: Toilets, urinals, and sinks in all restrooms	Good
HVAC	Non-Central System: Packaged units	Good

Annex: Systems Summary		
Fire Suppression	Wet-pipe sprinkler system and fire extinguishers	Good
Electrical	Source & Distribution: Main panel with copper wiring. Interior Lighting: LED Emergency Power: None	Good
Fire Alarm	Alarm panel with smoke detectors, heat detectors, alarms, strobes, pull stations, back-up emergency lights, and exit signs	Good
Equipment/Special	None	--
Accessibility	Presently it does not appear an accessibility study is needed for this building. See Appendix D.	
Key Issues and Findings	None observed at the time of assessment.	

4. Site Summary



Site Information		
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	Building-mounted signage; chain link fencing; wood-board fence dumpster enclosures Playgrounds and sports fields Limited amount of park benches, picnic tables, trash receptacles	Fair
Landscaping and Topography	Limited landscaping features including lawns, trees, bushes, and planters. Irrigation present Severe site slopes throughout along the center of the property running east to west.	Fair
Utilities	Municipal water and sewer Local utility-provided electric and natural gas	Good
Site Lighting	Building-mounted: LED	Fair
Ancillary Structures	None	--
Accessibility	Presently it does not appear an accessibility study is needed for the exterior site areas. See Appendix D.	
Key Issues and Findings	Asphalt pavement needs mill and overlay and striping	

5. Property Space Use and Observed Areas

Areas Observed

The interior spaces were observed to gain a clear understanding of the property's overall condition. Other areas accessed included the site within the property boundaries, the exterior of the property, and the roofs.

Key Spaces Not Observed

All key areas of the property were accessible and observed.

6. 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 Matrix that are 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 particular assessment. A full measured ADA survey would be required to identify any and all 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 not included in the dataset.
- For any “none” boxes checked or reference to “no issues” identified, that alone does not guarantee full compliance.

No information about complaints or pending litigation associated with potential accessibility issues was provided during the interview process.

No detailed follow-up accessibility studies are included as recommendations since no major or moderate issues were identified at any of the campus facilities. Reference the appendix for specific data, photos, and tables or checklists associated with this limited accessibility survey.

7. 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 the 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.

8. 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 systems or component's respective 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.

Exceedingly Aged

A fairly common scenario encountered during the assessment process, and a frequent source of debate, occurs when classifying and describing "very old" systems or components that are still functioning adequately and do not appear nor were reported to be in any way deficient. To help provide some additional intelligence on these items, such components will be tagged in the database as Exceedingly Aged. This designation will be reserved for mechanical or electrical systems or components that have aged well beyond their industry standard lifecycles, typically at least 15 years beyond and/or twice their Estimated Useful Life (EUL). In tandem with this designation, these items will be assigned a Remaining Useful Life (RUL) not less than two years but not greater than 1/3 of their standard EUL. As such the recommended replacement time for these components will reside outside the typical Short-Term window but will not be pushed 'irresponsibly' (too far) into the future.

9. Certification

Shelby County Board of Education (the Client) retained Bureau Veritas to perform this Facility Condition Assessment in connection with its continued operation of Jackson Elementary School, 3925 Wales Avenue, Memphis, Tennessee 38108, 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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10. Appendices

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



Appendix A: Photographic Record



Photographic Overview



1 - FRONT ELEVATION



2 - LEFT ELEVATION



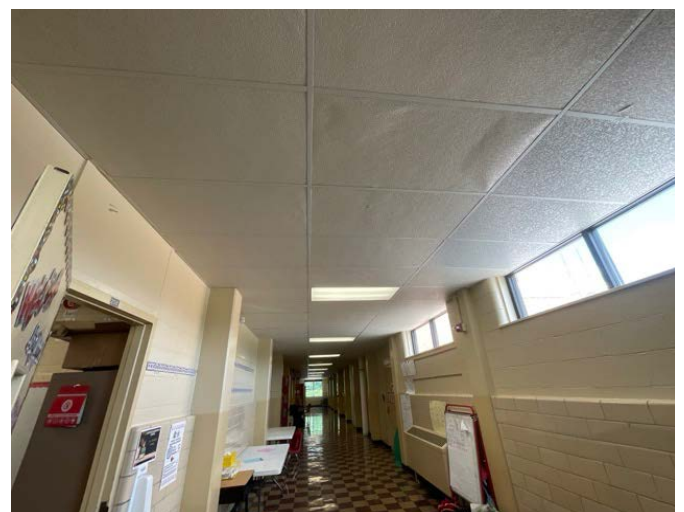
3 - REAR ELEVATION



4 - RIGHT ELEVATION



5 - ROOFING



6 - INTERIOR LIGHTING SYSTEM

Photographic Overview



7 - CHILLER



8 - AIR HANDLER



9 - MAKE-UP AIR UNIT



10 - SPLIT SYSTEM



11 - BOILER



12 - ELECTRICAL SYSTEM

Photographic Overview



13 - ANNEX FRONT ELEVATION



14 - ANNEX RIGHT ELEVATION



15 - ANNEX REAR ELEVATION



16 - ANNEX LEFT ELEVATION



17 - ANNEX ROOFING



18 - ANNEX PACKAGED UNIT

Photographic Overview



19 - ANNEX SPLIT SYSTEM



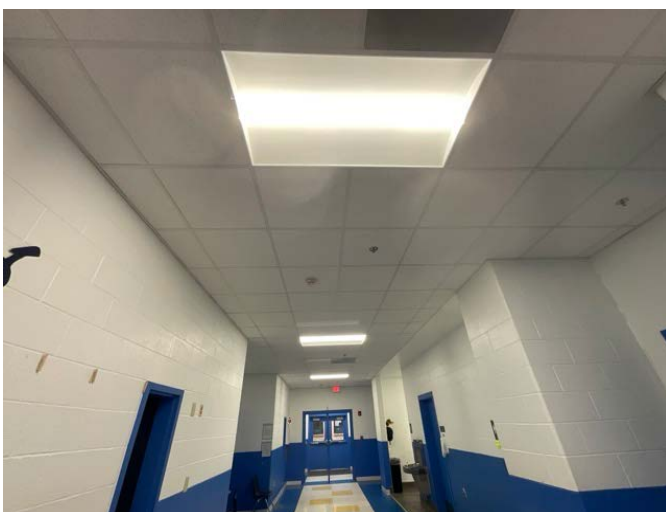
20 - ANNEX PLUMBING SYSTEM



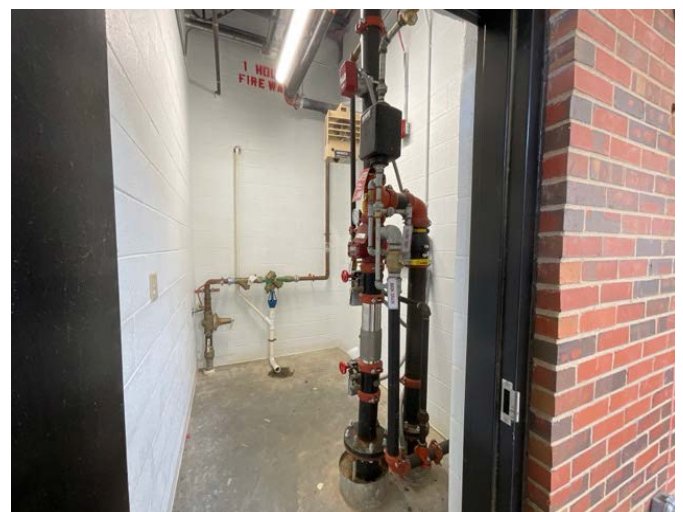
21 - ANNEX WATER HEATER



22 - ANNEX ELECTRICAL SYSTEM



23 - ANNEX INTERIOR LIGHTING SYSTEM



24 - ANNEX FIRE SUPPRESSION SYSTEM

Photographic Overview



25 - FLAGPOLE



26 - PARKING LOTS



27 - FENCES & GATES



28 - DUMPSTER ENCLOSURE



29 - PLAYGROUND



30 - SITE STAIRS/RAMPS/RAILS



Appendix B:

Site Plan



Site Plan



 BUREAU VERITAS	Project Number	Project Name	
	163745.23R000-021.354	Jackson Elementary School	
	Source	On-Site Date	
	Google	May 20, 2024	

Appendix C:

Pre-Survey Questionnaire



BV FACILITY CONDITION ASSESSMENT: PRE-SURVEY QUESTIONNAIRE

Building / Facility Name:	Jackson Elementary School
Name of person completing form:	NA
Title / Association w/ property:	NA
Length of time associated w/ property:	NA
Date Completed:	NA
Phone Number:	NA
Method of Completion:	INCOMPLETE - client/POC unable to complete

The Pre-Survey Questionnaire was not filled out either prior to or during the assessment.

Appendix D:

Accessibility Review and Photos



Visual Checklist - 2010 ADA Standards for Accessible Design

Property Name: Jackson Elementary School

BV Project Number: 163745.23R000-021.354

Abbreviated Accessibility Checklist

Facility History & Interview

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

Abbreviated Accessibility Checklist

Parking



OVERVIEW OF ACCESSIBLE PARKING AREA



CLOSE-UP OF STALL

Question		Yes	No	NA	Comments
1	Does the required number of standard ADA designated spaces appear to be provided ?	✗			
2	Does the required number of van-accessible designated spaces appear to be provided ?	✗			
3	Are accessible spaces on the shortest accessible route to an accessible building entrance ?	✗			
4	Does parking signage include the International Symbol of Accessibility ?	✗			
5	Does each accessible space have an adjacent access aisle ?	✗			
6	Do parking spaces and access aisles appear to be relatively level and without obstruction ?	✗			

Abbreviated Accessibility Checklist

Exterior Accessible Route



ACCESSIBLE PATH



ACCESSIBLE PATH

Question		Yes	No	NA	Comments
1	Is an accessible route present from public transportation stops and municipal sidewalks on or immediately adjacent to the property ?	✗			
2	Does a minimum of one accessible route appear to connect all public areas on the exterior, such as parking and other outdoor amenities, to accessible building entrances ?	✗			
3	Are curb ramps present at transitions through raised curbs on all accessible routes?	✗			
4	Do curb ramps appear to have compliant slopes for all components ?	✗			
5	Do ramp runs on an accessible route appear to have compliant slopes ?	✗			
6	Do ramp runs on an accessible route appear to have a compliant rise and width ?	✗			

7	Do ramps on an accessible route appear to have compliant end and intermediate landings ?	✕			
8	Do ramps and stairs on an accessible route appear to have compliant handrails?	✕			
9	For stairways that are open underneath, are permanent barriers present that prevent or discourage access?			✕	

Abbreviated Accessibility Checklist

Building Entrances



ACCESSIBLE ENTRANCE



DOOR HARDWARE

Question		Yes	No	NA	Comments
1	Do a sufficient number of accessible entrances appear to be provided ?	✗			
2	If the main entrance is not accessible, is an alternate accessible entrance provided?	✗			
3	Is signage provided indicating the location of alternate accessible entrances ?	✗			
4	Do doors at accessible entrances appear to have compliant maneuvering clearance area on each side ?	✗			
5	Do doors at accessible entrances appear to have compliant hardware ?	✗			
6	Do doors at accessible entrances appear to have a compliant clear opening width ?	✗			

7	Do pairs of accessible entrance doors in series appear to have the minimum clear space between them ?	×			
8	Do thresholds at accessible entrances appear to have a compliant height ?	×			

Abbreviated Accessibility Checklist

Interior Accessible Route



ACCESSIBLE INTERIOR PATH



DOOR HARDWARE

Question		Yes	No	NA	Comments
1	Does an accessible route appear to connect all public areas inside the building ?	✗			
2	Do accessible routes appear free of obstructions and/or protruding objects ?	✗			
3	Do ramps on accessible routes appear to have compliant slopes ?	✗			
4	Do ramp runs on an accessible route appear to have a compliant rise and width ?	✗			
5	Do ramps on accessible routes appear to have compliant end and intermediate landings ?	✗			
6	Do ramps on accessible routes appear to have compliant handrails ?	✗			

7	Are accessible areas of refuge and the accessible means of egress to those areas identified with accessible signage ?	×			
8	Do public transaction areas have an accessible, lowered service counter section ?	×			
9	Do public telephones appear mounted with an accessible height and location ?			×	
10	Do doors at interior accessible routes appear to have compliant maneuvering clearance area on each side ?	×			
11	Do doors at interior accessible routes appear to have compliant hardware ?	×			
12	Do non-fire hinged, sliding, or folding doors on interior accessible routes appear to have compliant opening force ?	×			
13	Do doors on interior accessible routes appear to have a compliant clear opening width ?	×			

Abbreviated Accessibility Checklist

Public Restrooms



TOILET STALL OVERVIEW



SINK, FAUCET HANDLES AND ACCESSORIES

Question		Yes	No	NA	Comments
1	Do publicly accessible toilet rooms appear to have a minimum compliant floor area ?		✗		There are no assessable toilet stalls
2	Does the lavatory appear to be mounted at a compliant height and with compliant knee area ?	✗			
3	Does the lavatory faucet have compliant handles ?	✗			
4	Is the plumbing piping under lavatories configured to protect against contact ?		✗		No need protection for plumbing under sinks
5	Are grab bars provided at compliant locations around the toilet ?			✗	
6	Do toilet stall doors appear to provide the minimum compliant clear width ?			✗	

7	Do toilet stalls appear to provide the minimum compliant clear floor area ?			×	
8	Where more than one urinal is present in a multi-user restroom, does minimum one urinal appear to be mounted at a compliant height and with compliant approach width ?		×		No assessable alterations have been made
9	Do accessories and mirrors appear to be mounted at a compliant height ?		×		No assessable alterations have been made

Abbreviated Accessibility Checklist

Playgrounds & Swimming Pools



ACCESSIBLE ROUTE TO PLAYGROUND



OVERVIEW OF PLAYGROUND

Question		Yes	No	NA	Comments
1	Is there an accessible route to the play area / s?	✗			
2	Has the play area been reviewed for accessibility ?			✗	
3	Are publicly accessible swimming pools equipped with an entrance lift ?			✗	

Appendix E:

Component Condition Report



Component Condition Report | Jackson Elementary School / Annex

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
Facade						
B2010	Building Exterior	Good	Exterior Walls, Brick Veneer	6,068 SF	45	7641718
B2020	Building Exterior	Good	Glazing, any type, by SF	1,600 SF	25	7641727
B2050	Building Exterior	Good	Exterior Door, Steel, Standard	4	35	7651559
B2050	Building Exterior	Good	Exterior Door, Steel, Standard	4	35	7641734
Roofing						
B3010	Roof	Good	Roofing, Single-Ply Membrane, TPO/PVC	10,170 SF	15	7641725
Interiors						
C1030	Throughout building	Good	Interior Door, Steel, Standard	8	35	7651561
C1030	Throughout building	Good	Interior Door, Steel, w/ Extensive Glazing	4	35	7651562
C1070	Throughout building	Good	Suspended Ceilings, Acoustical Tile (ACT)	8,000 SF	20	7651569
C2010	Throughout building	Fair	Wall Finishes, any surface, Prep & Paint	24,260 SF	5	7651563
C2030	Throughout building	Good	Flooring, Vinyl Tile (VCT)	7,504 SF	10	7651566
C2030	Restrooms	Good	Flooring, Ceramic Tile	1,200 SF	35	7651574
C2030	Mechanical room	Fair	Flooring, any surface, w/ Epoxy Coating, Prep & Paint	1,000 SF	5	7651560
C2050	Throughout building	Fair	Ceiling Finishes, any flat surface, Prep & Paint	1,200 SF	5	7651567
Plumbing						
D2010	Restrooms	Good	Toilet, Commercial Water Closet	8	25	7651573
D2010	Hallway	Good	Drinking Fountain, Wall-Mounted, Single-Level	1	10	7641714
D2010	Throughout building	Good	Sink/Lavatory, Vanity Top, Solid Surface or Vitreous China	8	25	7651564
D2010	Utility closet	Good	Backflow Preventer, Domestic Water	1	25	7641719
D2010	Utility closet	Good	Water Heater, Electric, Residential	1	10	7641739
D2010	Restrooms	Good	Urinal, Standard	2	25	7651571
D2010	Utility closet	Good	Sink/Lavatory, Service Sink, Floor	1	30	7641735

Component Condition Report | Jackson Elementary School / Annex

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
D2010	Throughout building	Good	Plumbing System, Supply & Sanitary, High Density (excludes fixtures)	9,704 SF	35	7641721
D2010	Throughout building	Good	Drinking Fountain, Wall-Mounted, Single-Level	1	10	7651570
HVAC						
D3030	Main roof	Good	Split System, Condensing Unit/Heat Pump	1	10	7641738
D3050	Roof	Good	Packaged Unit, RTU, Pad or Roof-Mounted	1	15	7641715
D3050	Roof	Good	Packaged Unit, RTU, Pad or Roof-Mounted	1	15	7641724
D3050	Roof	Good	Packaged Unit, RTU, Pad or Roof-Mounted	1	15	7641716
D3050	Roof	Good	Packaged Unit, RTU, Pad or Roof-Mounted	1	15	7641729
D3050	Roof	Good	Packaged Unit, RTU, Pad or Roof-Mounted	1	15	7641736
D3050	Roof	Good	Packaged Unit, RTU, Pad or Roof-Mounted	1	15	7641730
D3050	Roof	Good	Packaged Unit, RTU, Pad or Roof-Mounted	1	15	7641732
Fire Protection						
D4010	Throughout building	Good	Fire Suppression System, Full System Install/Retrofit, High Density/Complexity, Renovate	9,704 SF	35	7641713
D4030	Throughout building	Good	Fire Extinguisher, Type ABC, up to 20 LB	2	8	7651572
Electrical						
D5020	Utility closet	Good	Distribution Panel, 120/208 V	1	25	7641717
D5040	Building exterior	Good	Exterior Fixture w/ Lamp, any type, w/ LED Replacement	4	15	7641723
D5040	Throughout building	Good	Interior Lighting System, Full Upgrade, High Density & Standard Fixtures	9,704 SF	15	7641726
Fire Alarm & Electronic Systems						
D7050	Throughout, fed frpm main building	Fair	Fire Alarm System, Full System Upgrade, Standard Addressable, Maintain	9,704 SF	5	7658838

Component Condition Report | Jackson Elementary School / Main Building

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
Facade						
B2010	Building Exterior	Poor	Exterior Walls, Brick, Repair/Repoint	10,000 SF	0	7638849

Component Condition Report | Jackson Elementary School / Main Building

Draft - For Discussion Purposes Only

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
B2020	Building Exterior	Fair	Glazing, any type, by SF	7,400 SF	10	7638837
B2020	Cafeteria	Fair	Screens & Shutters, Rolling Security Shutter, 10 to 50 SF	1	5	7651532
B2050	Building Exterior	Fair	Exterior Door, Steel, Standard	19	11	7638839
Roofing						
B3010	Roof	Fair	Roofing, Single-Ply Membrane, EPDM	8,400 SF	10	7638864
B3010	Roof	Fair	Roofing, Single-Ply Membrane, TPO/PVC	19,814 SF	10	7638854
Interiors						
C1030	Throughout building	Fair	Door Hardware, School, per Door	75	2	7651494
C1030	Throughout building	Fair	Interior Door, Wood, Solid-Core	85	5	7651490
C1070	Throughout building	Fair	Suspended Ceilings, Acoustical Tile Fiberglass	38,217 SF	5	7651527
C1070	Cafeteria	Poor	Suspended Ceilings, Hard Tile, ACM Abatement & Replacement w/ ACT	6,000 SF	0	7651493
C2010	Throughout building	Fair	Wall Finishes, Ceramic Tile	15,000 SF	5	7651504
C2010	Throughout building	Fair	Wall Finishes, any surface, Prep & Paint	108,042 SF	5	7651529
C2030	Boiler room	Fair	Flooring, any surface, w/ Epoxy Coating, Prep & Paint	2,500 SF	5	7651541
C2030	Stage Platform	Fair	Flooring, Wood, Strip, Refinish	200 SF	5	7651497
C2030	Throughout building	Fair	Flooring, Vinyl Tile (VCT)	43,517 SF	5	7651503
C2030	Restrooms	Fair	Flooring, Quarry Tile	2,500 SF	5	7651499
C2030	Library	Fair	Flooring, Carpet, Commercial Standard	500 SF	5	7651506
C2050	Throughout building	Fair	Ceiling Finishes, any flat surface, Prep & Paint	5,000 SF	5	7651525
Plumbing						
D2010	Boiler room	Fair	Pump, Circulation, Domestic Water	1	3	7638832
D2010	Kitchen	Fair	Water Heater, Gas, Commercial (125 MBH)	1	2	7651492
D2010	Throughout building	Fair	Drinking Fountain, Wall-Mounted, Single-Level	5	8	7638859
D2010	Throughout building	Fair	Sink/Lavatory, Trough Style, Solid Surface	1	5	7651489
D2010	Restrooms	Fair	Toilet, Commercial Water Closet	40	5	7651524

Component Condition Report | Jackson Elementary School / Main Building

Draft - For Discussion Purposes Only

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
D2010	Throughout	Fair	Plumbing System, Supply & Sanitary, High Density (includes fixtures)	49,216 SF	5	7658830
D2010	Restrooms	Fair	Sink/Lavatory, Vanity Top, Solid Surface or Vitreous China	24	5	7651500
D2010	Boiler room	Fair	Sink/Lavatory, Service Sink, Wall-Hung	6	5	7651502
D2010	Throughout building	Good	Drinking Fountain, Wall-Mounted, Single-Level	4	10	7651522
HVAC						
D3020	Boiler room	Good	Boiler, Gas, HVAC	1	20	7638860
D3020	Throughout building	Fair	Radiator, Hydronic, Column/Cabinet Style (per EA)	22	8	7638847
D3020	Boiler room	Good	Boiler, Gas, HVAC, 1001 to 2000 MBH	1	20	7651517
D3030	Roof	Fair	Split System, Condensing Unit/Heat Pump	1	7	7638856
D3030	Throughout building	Fair	Unit Ventilator, 500 CFM	21	10	7638835
D3030	West elevation	Fair	Chiller, Air-Cooled	1	8	7638865
D3050	Cafeteria	Good	Air Handler, Interior AHU, Easy/Moderate Access	1	19	7638862
D3050	Cafeteria	Good	Air Handler, Interior AHU, Easy/Moderate Access	1	19	7638855
D3050	Boiler room	Fair	Pump, Distribution, HVAC Heating Water	1	12	7638834
D3050	Cafeteria	Good	Air Handler, Interior AHU, Easy/Moderate Access	1	19	7638845
D3050	Cafeteria	Good	Air Handler, Interior AHU, Easy/Moderate Access	1	19	7638840
D3050	Boiler room	Fair	Pump, Distribution, HVAC Heating Water	1	12	7638833
D3050	Roof	Fair	Make-Up Air Unit, MUA or MAU	1	8	7638866
D3050	Cafeteria	Good	Air Handler, Interior AHU, Easy/Moderate Access	1	19	7638850
D3060	Roof	Fair	Exhaust Fan, Centrifugal, 16" Damper	1	5	7638858
Electrical						
D5020	Boiler room	Fair	Distribution Panel, 120/208 V	1	2	7651540
D5020	Electrical room	Fair	Switchboard, 120/208 V, 1000 AMP	1	15	7638857
D5020	Electrical room	Fair	Switchboard, 277/480 V, 1000 AMP	1	15	7638836
D5020	Electrical room	Fair	Secondary Transformer, Dry, Stepdown	1	4	7638852

Component Condition Report | Jackson Elementary School / Main Building

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
D5020	Boiler room	Fair	Secondary Transformer, Dry, Stepdown	1	2	7651523
D5020	Boiler room	Fair	Switchboard, 120/208 V	1	11	7651535
D5020	Boiler room	Fair	Switchboard, 277/480 V, 1000 AMP	1	12	7651495
D5020	Electrical room	Fair	Distribution Panel, 120/208 V	1	3	7638838
D5030	Throughout building	Fair	Electrical System, Wiring & Switches, High Density/Complexity	49,217 SF	11	7638846
D5040	Throughout building	Fair	Interior Lighting System, Full Upgrade, High Density & Standard Fixtures	49,217 SF	10	7638853
D5040	Building exterior	Fair	Exterior Fixture w/ Lamp, any type, w/ LED Replacement	6	10	7638851
D5040	Building exterior	Fair	Exterior Fixture w/ Lamp, any type, w/ LED Replacement	4	8	7638843
Fire Alarm & Electronic Systems						
D7050	Throughout	Fair	Fire Alarm System, Full System Upgrade, Standard Addressable, Maintain	49,217 SF	5	7658831
Equipment & Furnishings						
E1030	Kitchen	Fair	Commercial Kitchen, Refrigeration Line	1 LS	5	7651542
E1030	Kitchen	Fair	Sink/Lavatory, Commercial Kitchen, 3-Bowl	1	5	7651491
E1030	Kitchen	Fair	Commercial Kitchen, Cooking Line Primary	1 LS	5	7651498
E1030	Kitchen	Fair	Foodservice Equipment, Exhaust Hood, 8 to 10 LF	2	5	7651488
E1030	Kitchen	Fair	Sink/Lavatory, Commercial Kitchen, 2-Bowl	2	5	7651507
E1030	Kitchen	Fair	Commercial Kitchen, Service Line	1 LS	5	7651508
E1070	Cafeteria	Fair	Theater & Stage Equipment, Flameproof Curtain, Medium Weight Velour	600 SF	5	7651521

Component Condition Report | Jackson Elementary School / Site

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
Pedestrian Plazas & Walkways						
G2020	Site	Poor	Parking Lots, Pavement, Asphalt, Mill & Overlay	24,000 SF	1	7647558
G2020	Site	Poor	Parking Lots, Pavement, Asphalt, Seal & Stripe	24,000 SF	0	7641733
G2030	Site	Poor	Sidewalk, any pavement type, Sectional Repairs (per Man-Day), Repair	1	0	7638861

Component Condition Report | Jackson Elementary School / Site

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UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
Athletic, Recreational & Playfield Areas						
G2050	Site	Fair	Play Structure, Multipurpose, Small	1	12	7638863
G2050	Site	Poor	Athletic Surfaces & Courts, Basketball/General, Asphalt Pavement, Seal & Stripe	12,000 SF	0	7641728
Sitework						
G2060	Site	Fair	Fences & Gates, Fence, Chain Link 10'	50 LF	11	7638867
G2060	Site	Fair	Flagpole, Metal	1	15	7638842
G2060	Site	Good	Dumpster Enclosure, Gates, Wood/Metal, Replace/Install	1	15	7641737
G2060	Site	Fair	Fences & Gates, Fence, Chain Link 8'	3,500 LF	11	7638848
G2060	Site	Failed	Retaining Wall, Brick/Stone, Repair	20 SF	0	7638844

Appendix F: Replacement Reserves



Replacement Reserves Report

7/24/2024

Unifor mat 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
C2030	Restrooms	7651499	Flooring, Quarry Tile, Replace	50	45	5	2500	SF	\$26.00	\$65,000						\$65,000																\$65,000
C2030	Stage Platform	7651497	Flooring, Wood, Strip, Refinish	10	5	5	200	SF	\$4.00	\$800						\$800										\$800						\$1,600
C2030	Throughout building	7651503	Flooring, Vinyl Tile (VCT), Replace	15	10	5	43517	SF	\$5.00	\$217,585						\$217,585														\$217,585		\$435,170
C2030	Library	7651506	Flooring, Carpet, Commercial Standard, Replace	10	5	5	500	SF	\$7.50	\$3,750						\$3,750																\$7,500
C2050	Throughout building	7651525	Ceiling Finishes, any flat surface, Prep & Paint	10	5	5	5000	SF	\$2.00	\$10,000						\$10,000																\$20,000
D2010	Kitchen	7651492	Water Heater, Gas, Commercial (125 MBH), Replace	20	18	2	1	EA	\$12,400.00	\$12,400			\$12,400																			\$12,400
D2010	Boiler room	7638832	Pump, Circulation, Domestic Water, Replace	15	12	3	1	EA	\$2,600.00	\$2,600				\$2,600															\$2,600			\$5,200
D2010	Throughout	7658830	Plumbing System, Supply & Sanitary, High Density (includes fixtures), Replace	40	35	5	49216	SF	\$20.00	\$984,320						\$984,320																\$984,320
D2010	Throughout building	7651489	Sink/Lavatory, Trough Style, Solid Surface, Replace	30	25	5	1	EA	\$2,500.00	\$2,500						\$2,500																\$2,500
D2010	Boiler room	7651502	Sink/Lavatory, Service Sink, Wall-Hung, Replace	35	30	5	6	EA	\$1,400.00	\$8,400						\$8,400																\$8,400
D2010	Restrooms	7651524	Toilet, Commercial Water Closet, Replace	30	25	5	40	EA	\$1,300.00	\$52,000						\$52,000																\$52,000
D2010	Restrooms	7651500	Sink/Lavatory, Vanity Top, Solid Surface or Vitreous China, Replace	30	25	5	24	EA	\$1,100.00	\$26,400						\$26,400																\$26,400
D2010	Throughout building	7638859	Drinking Fountain, Wall-Mounted, Single-Level, Replace	15	7	8	5	EA	\$1,200.00	\$6,000									\$6,000													\$6,000
D2010	Throughout building	7651522	Drinking Fountain, Wall-Mounted, Single-Level, Replace	15	5	10	4	EA	\$1,200.00	\$4,800											\$4,800											\$4,800
D3020	Boiler room	7651517	Boiler, Gas, HVAC, 1001 to 2000 MBH, Replace	30	10	20	1	EA	\$50,800.00	\$50,800																				\$50,800		\$50,800
D3020	Boiler room	7638860	Boiler, Gas, HVAC, Replace	30	10	20	1	EA	\$50,800.00	\$50,800																				\$50,800		\$50,800
D3020	Throughout building	7638847	Radiator, Hydronic, Column/Cabinet Style (per EA), Replace	30	22	8	22	EA	\$800.00	\$17,600									\$17,600													\$17,600
D3030	West elevation	7638865	Chiller, Air-Cooled, Replace	25	17	8	1	EA	\$240,000.00	\$240,000									\$240,000													\$240,000
D3030	Roof	7638856	Split System, Condensing Unit/Heat Pump, Replace	15	8	7	1	EA	\$7,100.00	\$7,100								\$7,100														\$7,100
D3030	Throughout building	7638835	Unit Ventilator, 500 CFM, Replace	20	10	10	21	EA	\$7,400.00	\$155,400											\$155,400											\$155,400
D3050	Boiler room	7638833	Pump, Distribution, HVAC Heating Water, Replace	25	13	12	1	EA	\$6,800.00	\$6,800													\$6,800									\$6,800
D3050	Boiler room	7638834	Pump, Distribution, HVAC Heating Water, Replace	25	13	12	1	EA	\$6,800.00	\$6,800													\$6,800									\$6,800
D3050	Roof	7638866	Make-Up Air Unit, MUA or MAU, Replace	20	12	8	1	EA	\$35,000.00	\$35,000									\$35,000													\$35,000
D3050	Cafeteria	7638862	Air Handler, Interior AHU, Easy/Moderate Access, Replace	25	6	19	1	EA	\$15,000.00	\$15,000																			\$15,000			\$15,000
D3050	Cafeteria	7638855	Air Handler, Interior AHU, Easy/Moderate Access, Replace	25	6	19	1	EA	\$15,000.00	\$15,000																			\$15,000			\$15,000
D3050	Cafeteria	7638845	Air Handler, Interior AHU, Easy/Moderate Access, Replace	25	6	19	1	EA	\$15,000.00	\$15,000																			\$15,000			\$15,000
D3050	Cafeteria	7638840	Air Handler, Interior AHU, Easy/Moderate Access, Replace	25	6	19	1	EA	\$15,000.00	\$15,000																			\$15,000			\$15,000
D3050	Cafeteria	7638850	Air Handler, Interior AHU, Easy/Moderate Access, Replace	25	6	19	1	EA	\$15,000.00	\$15,000																		\$15,000				\$15,000
D3060	Roof	7638858	Exhaust Fan, Centrifugal, 16" Damper, Replace	25	20	5	1	EA	\$2,400.00	\$2,400						\$2,400																\$2,400
D5020	Boiler room	7651523	Secondary Transformer, Dry, Stepdown, Replace	30	28	2	1	EA	\$30,000.00	\$30,000			\$30,000																			\$30,000
D5020	Electrical room	7638852	Secondary Transformer, Dry, Stepdown, Replace	30	26	4	1	EA	\$30,000.00	\$30,000					\$30,000																	\$30,000
D5020	Boiler room	7651535	Switchboard, 120/208 V, Replace	40	29	11	1	EA	\$50,000.00	\$50,000												\$50,000										\$50,000
D5020	Boiler room	7651495	Switchboard, 277/480 V, 1000 AMP, Replace	40	28	12	1	EA	\$52,000.00	\$52,000													\$52,000									\$52,000
D5020	Electrical room	7638836	Switchboard, 277/480 V, 1000 AMP, Replace	40	25	15	1	EA	\$52,000.00	\$52,000																\$52,000						\$52,000
D5020	Electrical room	7638857	Switchboard, 120/208 V, 1000 AMP, Replace	40	25	15	1	EA	\$52,100.00	\$52,100																\$52,100						\$52,100
D5020	Boiler room	7651540	Distribution Panel, 120/208 V, Replace	30	28	2	1	EA	\$8,000.00	\$8,000			\$8,000																			\$8,000
D5020	Electrical room	7638838	Distribution Panel, 120/208 V, Replace	30	27	3	1	EA	\$8,000.00	\$8,000				\$8,000																		\$8,000
D5030	Throughout building	7638846	Electrical System, Wiring & Switches, High Density/Complexity, Replace	40	29	11	49217	SF	\$4.00	\$196,868												\$196,868										\$196,868
D5040	Building exterior	7638843	Exterior Fixture w/ Lamp, any type, w/ LED Replacement, Replace	20	12	8	4	EA	\$600.00	\$2,400									\$2,400													\$2,400
D5040	Building exterior	7638851	Exterior Fixture w/ Lamp, any type, w/ LED Replacement, Replace	20	10	10	6	EA	\$600.00	\$3,600											\$3,600											\$3,600
D5040	Throughout building	7638853	Interior Lighting System, Full Upgrade, High Density & Standard Fixtures, Replace	20	10	10	49217	SF	\$5.00	\$246,085											\$246,085											\$246,085
D7050	Throughout	7658831	Fire Alarm System, Full System Upgrade, Standard Addressable, Maintain	20	15	5	49217	SF	\$3.00	\$147,651						\$147,651																\$147,651
E1030	Kitchen	7651542	Commercial Kitchen, Refrigeration Line, Replace	15	10	5	1	LS	\$15,000.00	\$15,000						\$15,000													\$15,000			\$30,000
E1030	Kitchen	7651508	Commercial Kitchen, Service Line, Replace	15	10	5	1	LS	\$25,000.00	\$25,000						\$25,000														\$25,000		\$50,000
E1030	Kitchen	7651498	Commercial Kitchen, Cooking Line Primary, Replace	15	10	5	1	LS	\$50,000.00	\$50,000						\$50,000														\$50,000		\$100,000
E1030	Kitchen	7651491	Sink/Lavatory, Commercial Kitchen, 3-Bowl, Replace	30	25	5	1	EA	\$2,500.00	\$2,500						\$2,500																\$2,500
E1030	Kitchen	7651488	Foodservice Equipment, Exhaust Hood, 8 to 10 LF, Replace	15	10	5	2	EA	\$4,500.00	\$9,000						\$9,000														\$9,000		\$18,000
E1030	Kitchen	7651507	Sink/Lavatory, Commercial Kitchen, 2-Bowl, Replace	30	25	5	2	EA	\$2,100.00	\$4,200						\$4,200																\$4,200
E1070	Cafeteria	7651521	Theater & Stage Equipment, Flameproof Curtain, Medium Weight Velour, Replace	15	10	5	600	SF	\$15.00	\$9,000						\$9,000														\$9,000		\$18,000
Totals, Unescalated											\$414,000	\$0	\$80,400	\$10,600	\$30,000	\$2,368,463	\$0	\$7,100	\$301,000	\$0	\$1,246,123	\$258,268	\$65,600	\$0	\$0	\$310,713	\$0	\$0	\$2,600	\$75,000	\$427,185	\$5,597,052



Replacement Reserves Report

7/24/2024

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
Totals, Escalated (3.0% inflation, compounded annually)											\$414,000	\$0	\$85,296	\$11,583	\$33,765	\$2,745,697	\$0	\$8,732	\$381,298	\$0	\$1,674,685	\$357,503	\$93,530	\$0	\$0	\$484,081	\$0	\$0	\$4,426	\$131,513	\$771,544	\$7,197,654

Jackson 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
G2020	Site	7641733	Parking Lots, Pavement, Asphalt, Seal & Stripe	5	5	0	24000	SF	\$0.45	\$10,800	\$10,800					\$10,800					\$10,800					\$10,800					\$10,800	\$54,000
G2020	Site	7647558	Parking Lots, Pavement, Asphalt, Mill & Overlay	25	24	1	24000	SF	\$3.50	\$84,000		\$84,000																				\$84,000
G2030	Site	7638861	Sidewalk, any pavement type, Sectional Repairs (per Man-Day), Repair	0	0	0	1	EA	\$1,000.00	\$1,000	\$1,000																					\$1,000
G2050	Site	7641728	Athletic Surfaces & Courts, Basketball/General, Asphalt Pavement, Seal & Stripe	5	5	0	12000	SF	\$0.45	\$5,400	\$5,400					\$5,400					\$5,400					\$5,400					\$5,400	\$27,000
G2050	Site	7638863	Play Structure, Multipurpose, Small, Replace	20	8	12	1	EA	\$10,000.00	\$10,000												\$10,000										\$10,000
G2060	Site	7638848	Fences & Gates, Fence, Chain Link 8', Replace	40	29	11	3500	LF	\$25.00	\$87,500											\$87,500											\$87,500
G2060	Site	7638867	Fences & Gates, Fence, Chain Link 10', Replace	40	29	11	50	LF	\$25.00	\$1,250											\$1,250											\$1,250
G2060	Site	7638842	Flagpole, Metal, Replace	30	15	15	1	EA	\$2,500.00	\$2,500															\$2,500							\$2,500
G2060	Site	7638844	Retaining Wall, Brick/Stone, Repair	0	0	0	20	SF	\$12.50	\$250	\$250																					\$250
G2060	Site	7641737	Dumpster Enclosure, Gates, Wood/Metal, Replace/Install	20	5	15	1	EA	\$1,700.00	\$1,700															\$1,700							\$1,700
Totals, Unescalated											\$17,450	\$84,000	\$0	\$0	\$0	\$16,200	\$0	\$0	\$0	\$0	\$16,200	\$88,750	\$10,000	\$0	\$0	\$20,400	\$0	\$0	\$0	\$0	\$16,200	\$269,200
Totals, Escalated (3.0% inflation, compounded annually)											\$17,450	\$86,520	\$0	\$0	\$0	\$18,780	\$0	\$0	\$0	\$0	\$21,771	\$122,851	\$14,258	\$0	\$0	\$31,783	\$0	\$0	\$0	\$0	\$29,259	\$342,672

Appendix G:

Equipment Inventory List

D20 Plumbing													
Index	ID	UFCode	Component Description	Attributes	Capacity	Building	Location Detail	Manufacturer	Model	Serial	Dataplate Yr	Barcode	Qty
1	7638832	D2010	Pump	Circulation, Domestic Water	.5 HP	Jackson Elementary School / Main Building	Boiler room	Balbor	33117	37B01X54	2001		
2	7641739	D2010	Water Heater	Electric, Residential	50 GAL	Jackson Elementary School / Annex	Utility closet	Bradford White	LE250S3-3NLWW	WC44843063	2019		
3	7651492	D2010	Water Heater	Gas, Commercial (125 MBH)	82 GAL	Jackson Elementary School / Main Building	Kitchen	Rheem / Ruud	G82-156	RNG 1000G05153	1998		
4	7641719	D2010	Backflow Preventer	Domestic Water	2 IN	Jackson Elementary School / Annex	Utility closet	Wilkins	975xl	ACA5218	2019		
D30 HVAC													
Index	ID	UFCode	Component Description	Attributes	Capacity	Building	Location Detail	Manufacturer	Model	Serial	Dataplate Yr	Barcode	Qty
1	7638860	D3020	Boiler	Gas, HVAC	1500 MBH	Jackson Elementary School / Main Building	Boiler room	Lochinvar	PBN1501	C14H00261207	2014		
2	7651517	D3020	Boiler	Gas, HVAC, 1001 to 2000 MBH	1501 MBH	Jackson Elementary School / Main Building	Boiler room	Lochinvar	PBNI501	C14H00261206	2014		
3	7638847	D3020	Radiator	Hydronic, Column/Cabinet Style (per EA)		Jackson Elementary School / Main Building	Throughout building						22
4	7638865	D3030	Chiller	Air-Cooled	160 TON	Jackson Elementary School / Main Building	West elevation	Carrier	30R A1596-03-73	5107085200	2007		
5	7638856	D3030	Split System	Condensing Unit/Heat Pump	5 TON	Jackson Elementary School / Main Building	Roof	Lennox	SSB060H4S45G	5816H05494	2016		
6	7641738	D3030	Split System	Condensing Unit/Heat Pump	1 TON	Jackson Elementary School / Annex	Main roof	Daikin Industries	RX12NMVJU	Illegible	2019		

7	7638835	D3030	Unit Ventilator	500 CFM	500 CFM	Jackson Elementary School / Main Building	Throughout building	Daikin Industries	Inaccessible	Inaccessible	21
8	7638834	D3050	Pump	Distribution, HVAC Heating Water	10 HP	Jackson Elementary School / Main Building	Boiler room	U.S. Electrical Motors	E659A	X11X251R134M	2011
9	7638833	D3050	Pump	Distribution, HVAC Heating Water	10 HP	Jackson Elementary School / Main Building	Boiler room	U.S. Electrical Motors	E659A	X1X251R134M	2011
10	7638862	D3050	Air Handler	Interior AHU, Easy/Moderate Access	1600 CFM	Jackson Elementary School / Main Building	Cafeteria	Daikin Industries	Inaccessible	Inaccessible	2018
11	7638855	D3050	Air Handler	Interior AHU, Easy/Moderate Access	1600 CFM	Jackson Elementary School / Main Building	Cafeteria	Inaccessible	Inaccessible	Inaccessible	2018
12	7638845	D3050	Air Handler	Interior AHU, Easy/Moderate Access	1600 CFM	Jackson Elementary School / Main Building	Cafeteria	Daikin Industries	Inaccessible	Inaccessible	2018
13	7638840	D3050	Air Handler	Interior AHU, Easy/Moderate Access	1600 CFM	Jackson Elementary School / Main Building	Cafeteria	Daikin Industries	Inaccessible	Inaccessible	2018
14	7638850	D3050	Air Handler	Interior AHU, Easy/Moderate Access	1600 CFM	Jackson Elementary School / Main Building	Cafeteria	Daikin Industries	Inaccessible	Inaccessible	2018
15	7638866	D3050	Make-Up Air Unit	MUA or MAU	6000 CFM	Jackson Elementary School / Main Building	Roof	Illegible	Illegible	Illegible	
16	7641715	D3050	Packaged Unit	RTU, Pad or Roof-Mounted	3 TON	Jackson Elementary School / Annex	Roof	Lennox	LGH036H4EB5Y	5619M05647	2019
17	7641724	D3050	Packaged Unit	RTU, Pad or Roof-Mounted	3 TON	Jackson Elementary School / Annex	Roof	Lennox	LGH036H4EB5Y	5619M05649	2019
18	7641716	D3050	Packaged Unit	RTU, Pad or Roof-Mounted	3 TON	Jackson Elementary School / Annex	Roof	Lennox	LGH036H4EB5Y	5619M05643	2019

19	7641729	D3050	Packaged Unit	RTU, Pad or Roof-Mounted	3 TON	Jackson Elementary School / Annex	Roof	Lennox	LGH036H4EB5Y	5619M05641	2019		
20	7641736	D3050	Packaged Unit	RTU, Pad or Roof-Mounted	3 TON	Jackson Elementary School / Annex	Roof	Lennox	LGH036H4EB5Y	5619M05637	2019		
21	7641730	D3050	Packaged Unit	RTU, Pad or Roof-Mounted	3 TON	Jackson Elementary School / Annex	Roof	Lennox	LGH036H4EB5Y	5619M05634	2019		
22	7641732	D3050	Packaged Unit	RTU, Pad or Roof-Mounted	3 TON	Jackson Elementary School / Annex	Roof	Lennox	LGH036H4EB5Y	5619M05631	2019		
23	7638858	D3060	Exhaust Fan	Centrifugal, 16" Damper	2000 CFM	Jackson Elementary School / Main Building	Roof	ECON-AIR	Illegible	Illegible			
D40 Fire Protection													
Index	ID	UFCode	Component Description	Attributes	Capacity	Building	Location Detail	Manufacturer	Model	Serial	Dataplate Yr	Barcode	Qty
1	7651572	D4030	Fire Extinguisher	Type ABC, up to 20 LB		Jackson Elementary School / Annex	Throughout building				2019		2
D50 Electrical													
Index	ID	UFCode	Component Description	Attributes	Capacity	Building	Location Detail	Manufacturer	Model	Serial	Dataplate Yr	Barcode	Qty
1	7638852	D5020	Secondary Transformer	Dry, Stepdown	300 KVA	Jackson Elementary School / Main Building	Electrical room	Siemens	3F3Y300	No dataplate	1993		
2	7651523	D5020	Secondary Transformer	Dry, Stepdown	300 KVA	Jackson Elementary School / Main Building	Boiler room	Siemens	3F3Y300	No dataplate	1995		
3	7651535	D5020	Switchboard	120/208 V	800 AMP	Jackson Elementary School / Main Building	Boiler room	Siemens	Illegible	No dataplate	1995		
4	7638857	D5020	Switchboard	120/208 V, 1000 AMP	800 AMP	Jackson Elementary School / Main Building	Electrical room	Siemens	S4	No dataplate	1993		
5	7638836	D5020	Switchboard	277/480 V, 1000 AMP	1200 AMP	Jackson Elementary School / Main Building	Electrical room	Siemens	S4E60ML120EBS	18-86432-A00	1993		

