

FACILITY CONDITION ASSESSMENT



**BUREAU
VERITAS**

prepared for

Richmond Public Schools
301 North Ninth Street
Richmond, VA 23219



Norrell Elementary School (Closed)
2120 Fendall Avenue
Richmond, VA 23230

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BV PROJECT #:

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ON SITE DATE:

February 21-22, 2024

Bureau Veritas

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1. Executive Summary

Campus Overview and Assessment Details

General Information	
Property Type	Elementary School
Number of Buildings	1
Main Address	2120 Fendall Avenue, Richmond, VA 23230
Site Developed	1964
Outside Occupants / Leased Spaces	None
Date(s) of Visit	February 21-22, 2024
Management Point of Contact	Lloyd Schieldge, Facilities Planner RPS Facility Services 1461-A Commerce Road Richmond, VA 23224 804.510.4758 (mobile) lschild@vaschools.net
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@vaschools.net
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AssetCalc Link	Full dataset for this assessment can be found at: https://www.assetcalc.net/



Significant/Systemic Findings and Deficiencies

Historical Summary

The Alber V. Norrell Elementary School was originally constructed in 1964 and operated as a middle school until it was shut down in 2017. Richmond school district then started utilizing the building for district administrative purposes and continues to operate as such today.

Architectural

The building consists of brick, CMU, and steel construction with metal roof decking. In general, the structure appears to be sound, with no significant areas of settlement deficiencies observed. The roof membrane shows signs of significant wear, with some evidence of leakage throughout and requires replacement. The interior finishes have been repaired or replaced as needed and are anticipated for lifecycle replacement based on useful life and normal wear.

Mechanical, Electrical, Plumbing and Fire (MEPF)

The MEPF systems and infrastructure vary significantly in age; while some components were replaced, many remain older and past their useful life. The building heating is served by two boilers, cooling is provided by a chiller, and these units feed air handlers, unit heaters and unit ventilators throughout the building. The BAS system is a combination of air controls and more modern electronic controls. The facility electrical distribution is supplied by switchboards. The building has a fire alarm system in place along with exit lights, emergency lighting, alarms, and fire extinguishers. The MEPF infrastructure itself is generally in fair working condition with major expenditures anticipated in the short term.

Site

In general, the site has been well maintained. Most of the site contains moderate landscaping, and irrigation is not present. The asphalt paved parking areas and drive aisles are well maintained but due for striping in the near future.

Recommended Additional Studies

See the *Systems Summary* tables in the latter sections of this report for recommended additional studies associated with accessibility, structural, and moisture intrusion.

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 relatively 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 Norrell ES (Closed) / Main Building(1964)			
Replacement Value	Total SF	Cost/SF	
\$ 12,911,100	43,037	\$ 300	
	Est Reserve Cost		FCI
Current	\$ 301,100		2.3 %
3-Year	\$ 2,472,400		19.1 %
5-Year	\$ 3,775,300		29.2 %
10-Year	\$ 4,186,400		32.4 %



Immediate Needs

Facility/Building	Total Items	Total Cost
Norrell ES (Closed) / Main Building	2	\$301,000
Norrell ES (Closed) / Site	1	\$1,300
Total	3	\$302,300

Main Building

ID	Location Description	UF Code	Description	Condition	Plan Type	Cost
7386928	Building Exterior	B2020	Glazing, any type by SF, Replace	Poor	Performance/Integrity	\$296,000
7421908	Throughout	P2030	Engineering Study, Environmental, Mold, Evaluate/Report	NA	Environmental	\$5,000
Total (2 items)						\$301,000



Key Findings



Roof Appurtenances in Poor condition.

Roof Access Ladder, Steel
Main Building Norrell Elementary School
(Closed) Roof

Uniformat Code: B3020
Recommendation: **Replace in 2025**

Priority Score: **96.8**

Plan Type: Safety

Cost Estimate: \$3,200

\$\$\$\$

Ladders are poorly attached to exterior brick wall and are loose. - AssetCALC ID: 7386925



Site Stairs & Ramps in Poor condition.

Handrails, Metal
Site Norrell Elementary School (Closed) Site

Uniformat Code: G2030
Recommendation: **Install in 2024**

Priority Score: **94.9**

Plan Type: Safety

Cost Estimate: \$1,300

\$\$\$\$

Handrails are rusted and detached at base - AssetCALC ID: 7386958



Sidewalk in Poor condition.

Concrete, Large Areas
Site Norrell Elementary School (Closed) Site

Uniformat Code: G2030
Recommendation: **Replace in 2025**

Priority Score: **94.8**

Plan Type: Safety

Cost Estimate: \$12,200

\$\$\$\$

Concrete sidewalks are cracked, heaved and sunken, some areas have been patched with asphalt. Others are gravel. - AssetCALC ID: 7387015



Roofing in Poor condition.

Built-Up
Main Building Norrell Elementary School
(Closed) Roof

Uniformat Code: B3010
Recommendation: **Replace in 2025**

Priority Score: **88.8**

Plan Type:
Performance/Integrity

Cost Estimate: \$602,500

\$\$\$\$

Reported in PSQ that the roof leaks, evidence of roof leakage throughout building. - AssetCALC ID: 7387024



Glazing in Poor condition.

any type by SF
Main Building Norrell Elementary School
(Closed) Building Exterior

Uniformat Code: B2020
Recommendation: **Replace in 2024**

Priority Score: **87.9**

Plan Type:
Performance/Integrity

Cost Estimate: \$296,000

\$\$\$\$

Original single pane, aluminum windows, have lots of built-up corrosion and loose leaking panes. -
AssetCALC ID: 7386928



Exhaust Fan in Poor condition.

Roof or Wall-Mounted, 36"Damper
Main Building Norrell Elementary School
(Closed) Roof

Uniformat Code: D3060
Recommendation: **Replace in 2025**

Priority Score: **85.8**

Plan Type:
Performance/Integrity

Cost Estimate: \$5,600

\$\$\$\$

Exhaust fan is very dated and does not appear to be operational - AssetCALC ID: 7386970



Vertical Lift in Poor condition.

Wheelchair, 5' Rise
Main Building Norrell Elementary School
(Closed) Hallway

Uniformat Code: D1010
Recommendation: **Renovate in 2025**

Priority Score: **85.8**

Plan Type:
Performance/Integrity

Cost Estimate: \$17,000

\$\$\$\$

Unreliable, with frequent service calls. - AssetCALC ID: 7386967



Vertical Lift in Poor condition.

Wheelchair, 5' Rise
Main Building Norrell Elementary School
(Closed) Hallway

Uniformat Code: D1010
Recommendation: **Renovate in 2025**

Priority Score: **85.8**

Plan Type:
Performance/Integrity

Cost Estimate: \$17,000

\$\$\$\$

Unreliable, with frequent service calls. - AssetCALC ID: 7386961



Air Handler in Poor condition.

Exterior AHU, 1201 to 2400 CFM
Main Building Norrell Elementary School
(Closed) Roof

Uniformat Code: D3050
Recommendation: **Replace in 2025**

Priority Score: **81.8**

Plan Type:
Performance/Integrity

Cost Estimate: \$17,300

\$\$\$\$

Estimated size unit does not appear to have operated in quite a long time - AssetCALC ID: 7387017



Air Compressor in Poor condition.

Tank-Style
Main Building Norrell Elementary School
(Closed) Boiler room

Uniformat Code: D2060
Recommendation: **Replace in 2025**

Priority Score: **81.8**

Plan Type:
Performance/Integrity

Cost Estimate: \$10,600

\$\$\$\$

compressor is missing, unit is very dated - AssetCALC ID: 7386962



Flooring in Poor condition.

Carpet, Commercial Standard
Main Building Norrell Elementary School
(Closed) Main roof

Uniformat Code: C2030
Recommendation: **Replace in 2025**

Priority Score: **81.8**

Plan Type:
Performance/Integrity

Cost Estimate: \$9,400

\$\$\$\$

Stained and worn - AssetCALC ID: 7386989



Air Handler in Poor condition.

Interior AHU, Easy/Moderate Access
Main Building Norrell Elementary School
(Closed) Gymnasium

Uniformat Code: D3050
Recommendation: **Replace in 2025**

Priority Score: **81.8**

Plan Type:
Performance/Integrity

Cost Estimate: \$22,000

\$\$\$\$

Not currently operational, estimated size - AssetCALC ID: 7386952



Pole Light Fixture w/ Lamps in Poor condition.

any type 30' High, w/ LED Replacement
Site Norrell Elementary School (Closed) Site

Uniformat Code: G4050
Recommendation: **Replace/Install in 2025**

Priority Score: **81.8**

Plan Type:
Performance/Integrity

Cost Estimate: \$13,600

\$\$\$\$

Both poles lean severely - AssetCALC ID: 7386941



Exterior Fixture w/ Lamp in Poor condition.

any type, w/ LED Replacement
Main Building Norrell Elementary School
(Closed) Building Exterior

Uniformat Code: G4050
Recommendation: **Replace in 2025**

Priority Score: **81.8**

Plan Type:
Performance/Integrity

Cost Estimate: \$3,600

\$\$\$\$

Lots of broken exterior fixtures, and reported on PSQ that exterior lighting was insufficient. - AssetCALC ID: 7386988



Air Handler in Poor condition.

Exterior AHU, 1201 to 2400 CFM
Main Building Norrell Elementary School
(Closed) Roof

Uniformat Code: D3050
Recommendation: **Replace in 2025**

Priority Score: **81.8**

Plan Type:
Performance/Integrity

Cost Estimate: \$17,300

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Estimated size unit does not appear to have operated in quite a long time - AssetCALC ID: 7386948



Air Handler in Poor condition.

Interior AHU, Easy/Moderate Access
Main Building Norrell Elementary School
(Closed) Gymnasium

Uniformat Code: D3050
Recommendation: **Replace in 2025**

Priority Score: **81.8**

Plan Type:
Performance/Integrity

Cost Estimate: \$40,000

\$\$\$\$

Not currently operational, estimated size - AssetCALC ID: 7386931



Flooring in Poor condition.

Wood, Strip
Main Building Norrell Elementary School
(Closed) Gymnasium

Uniformat Code: C2030
Recommendation: **Refinish in 2025**

Priority Score: **81.8**

Plan Type:
Performance/Integrity

Cost Estimate: \$4,000

\$\$\$\$

Finishes worn - AssetCALC ID: 7386985



BAS/HVAC Controls in Poor condition.

Basic System or Legacy Upgrades
Main Building Norrell Elementary School
(Closed) Throughout building

Uniformat Code: D8010
Recommendation: **Upgrade/Install in 2025**

Priority Score: **81.8**

Plan Type:
Performance/Integrity

Cost Estimate: \$107,600

\$\$\$\$

Building is very hot on north end and cold on south end. Occupants complained about both summer and winter HVAC controls. Reported in PSQ that the BAS system does not maintain heating or cooling very well, system is a combination of air controls and more modern electronic controls. - AssetCALC ID: 7386966



Exterior Door in Poor condition.

Wood, Solid-Core
Main Building Norrell Elementary School
(Closed) Building Exterior

Uniformat Code: B2050
Recommendation: **Replace in 2025**

Priority Score: **81.8**

Plan Type:
Performance/Integrity

Cost Estimate: \$17,500

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Exterior door wood is checked and cracked - AssetCALC ID: 7386965



Toilet Partitions in Poor condition.

Marble
Main Building Norrell Elementary School
(Closed) Restrooms

Uniformat Code: C1090
Recommendation: **Replace in 2025**

Priority Score: **81.8**

Plan Type:
Performance/Integrity

Cost Estimate: \$18,700

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Doors have been broken off many times - AssetCALC ID: 7387018



Fences & Gates in Poor condition.

Fence, Chain Link 6'
Site Norrell Elementary School (Closed) Site

Uniformat Code: G2060
Recommendation: **Replace in 2025**

Priority Score: **81.8**

Plan Type:
Performance/Integrity

Cost Estimate: \$10,800

\$\$\$\$

Site fencing has lots of holes and down fencing - AssetCALC ID: 7386976



Wall Finishes in Poor condition.

any surface
Main Building Norrell Elementary School
(Closed) Throughout building

Uniformat Code: C2010
Recommendation: **Prep & Paint in 2025**

Priority Score: **81.7**

Plan Type:
Performance/Integrity

Cost Estimate: \$24,200

\$\$\$\$

Peeling paint - AssetCALC ID: 7386971



**Recommended Follow-up Study:
Environmental, Mold**

Environmental, Mold
Main Building Norrell Elementary School
(Closed) Throughout

Uniformat Code: P2030
Recommendation: **Evaluate/Report in 2024**

Priority Score: **72.9**

Plan Type: Environmental

Cost Estimate: \$5,000

\$\$\$\$

Suspected mold reported on PSQ. - AssetCALC ID: 7421908

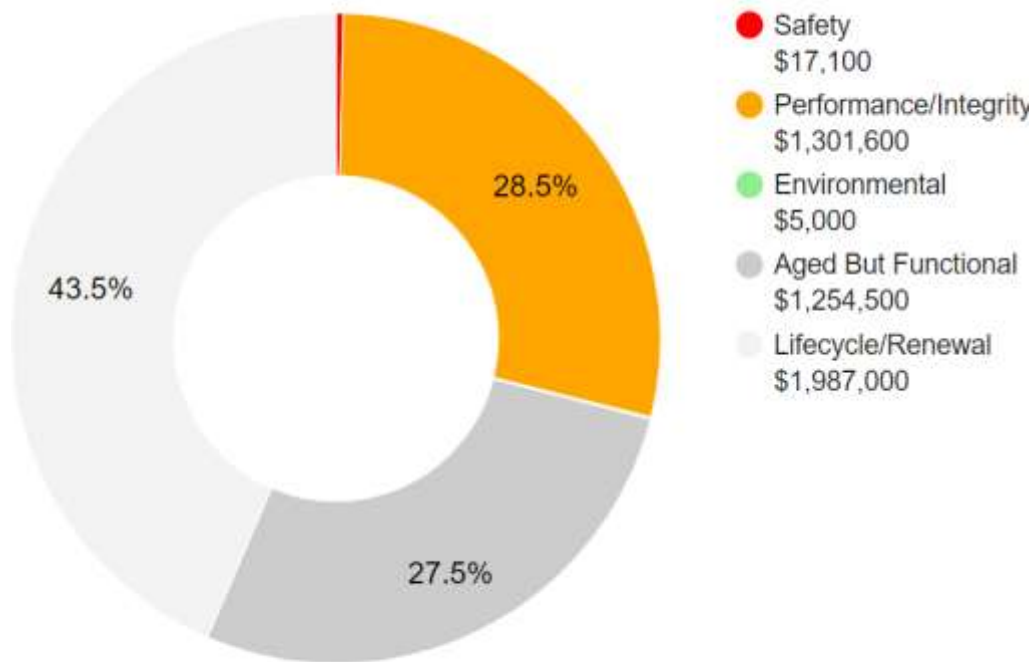
Plan Types

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: \$4,565,200



2. Norrell Elementary School (Closed)



Norrell Elementary School (Closed): Systems Summary		
Address	2120 Fendall Avenue, Richmond, VA 23222	
Constructed/Renovated	1965	
Building Area	43,037 SF	
Number of Stories	1 above grade	
<i>System</i>	<i>Description</i>	<i>Condition</i>
Structure	Masonry bearing walls with metal roof deck supported by open-web steel joists with concrete wall footing foundation system	Fair
Façade	Primary Wall Finish: Brick Windows: Aluminum	Fair
Roof	Primary: Flat construction with built up finish	Poor
Interiors	Walls: Painted gypsum board, ceramic tile and unfinished Floors: Carpet, VCT, vinyl sheeting, terrazzo, ceramic tile, wood strip, coated and unfinished concrete Ceilings: Painted gypsum board, ACT and unfinished/exposed	Fair
Elevators	None	--

Norrell Elementary School (Closed): Systems Summary		
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
HVAC	Central System: Boilers, chiller, air handlers feeding fan coils, hydronic baseboard radiators and cabinet terminal units. Non-Central System: Window AC Units	Fair
Fire Suppression	Fire extinguishers only	Fair
Electrical	Source & Distribution: Main switchboard panel with copper wiring. Interior Lighting: LED, linear fluorescent, and incandescent Exterior Building-Mounted Lighting: HPS Emergency Power: none	Fair
Fire Alarm	Alarm panel with smoke detectors, heat detectors, alarms, strobes, pull stations, and exit signs	Fair
Equipment/Special	None	--
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	The interior ceiling and walls are in poor condition. Suspected mold on the interior walls and ceiling. A professional engineer, architect, or consultant must be retained to analyze the existing condition, provide recommendations and, if necessary, estimate the scope and cost of any required repairs. Due to the ambiguity of the required repair scope at the time of this assessment, the cost for any possible subsequent repairs is not included.	
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 buildings, the exterior walls of the facility, and the roofs.	
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	-	-	-	-	\$2,714,800	\$2,714,800
Facade	\$296,000	\$18,000	\$2,800	\$3,700	\$1,981,500	\$2,302,100
Roofing	-	\$626,500	-	-	-	\$626,500
Interiors	-	\$58,000	\$475,400	\$294,300	\$607,400	\$1,435,000
Conveying	-	\$35,000	-	-	-	\$35,000
Plumbing	-	\$10,900	\$660,700	\$35,800	-	\$707,500
HVAC	-	\$120,100	\$666,100	\$73,900	\$181,400	\$1,041,500
Fire Protection	-	-	-	\$3,400	\$4,600	\$8,000
Electrical	-	-	\$405,300	-	\$78,800	\$484,100
Fire Alarm & Electronic Systems	-	\$110,800	\$245,200	-	\$334,900	\$691,000
Equipment & Furnishings	-	-	\$14,900	-	\$22,800	\$37,600
Site Utilities	-	\$3,700	-	-	-	\$3,700
Site Development	-	-	\$20,800	-	-	\$20,800
Follow-up Studies	\$5,000	-	-	-	-	\$5,000
TOTALS (3% inflation)	\$301,000	\$983,100	\$2,491,200	\$411,100	\$5,926,100	\$10,112,500



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.

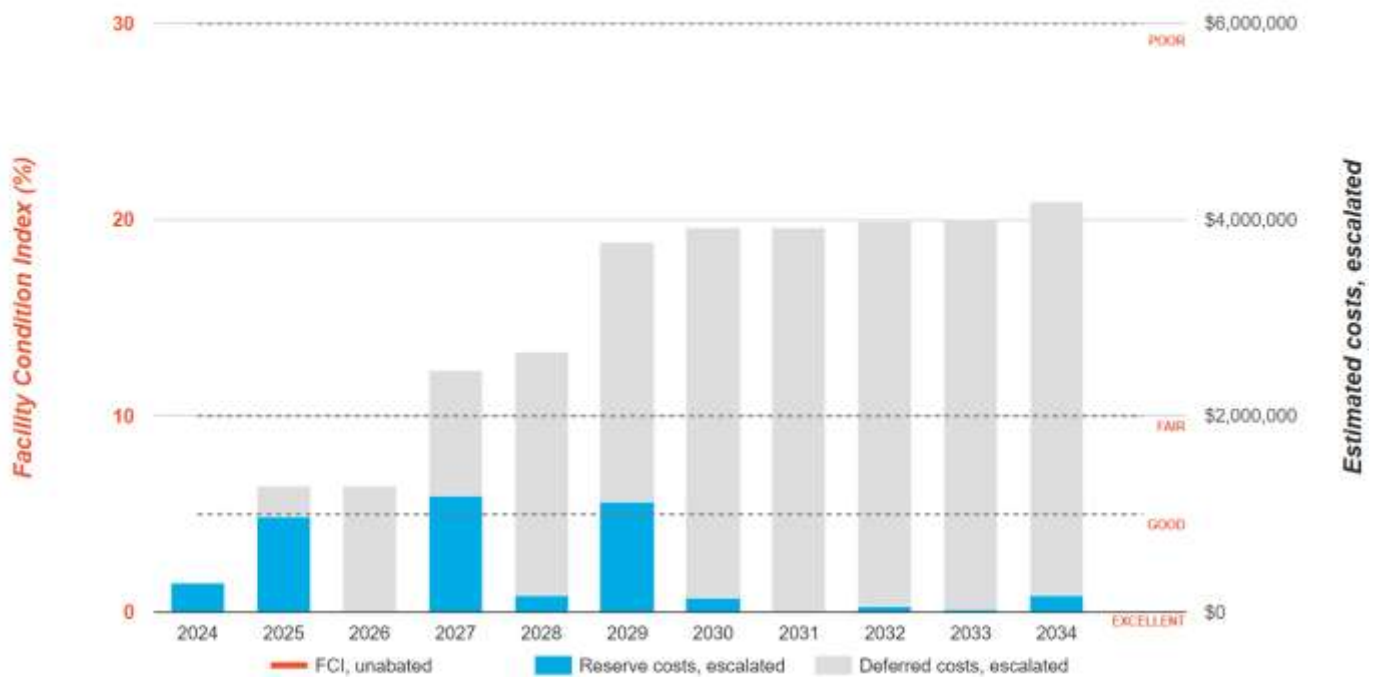
Needs by Year with Unaddressed FCI Over Time

FCI Analysis: Norrell ES (Closed) Main Building

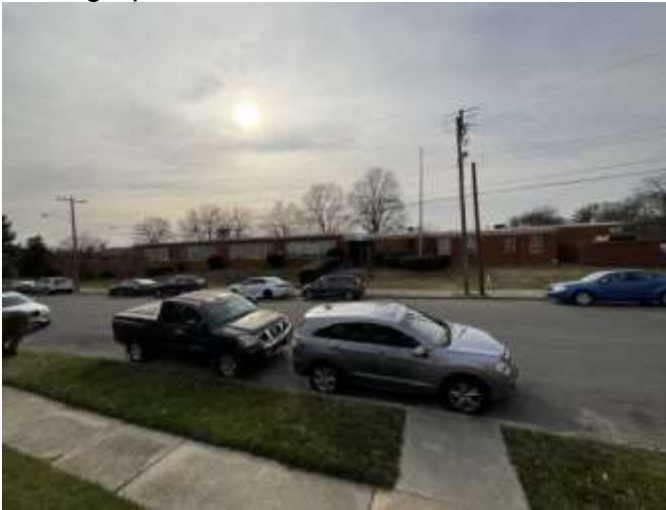
Replacement Value: \$12,911,100

Inflation Rate: 3.0%

Average Needs per Year: \$380,600



Photographic Overview



1 - FRONT ELEVATION



2 - LEFT ELEVATION



3 - RIGHT ELEVATION



4 - EXPOSED SUPERSTRUCTURE



5 - ROOFING



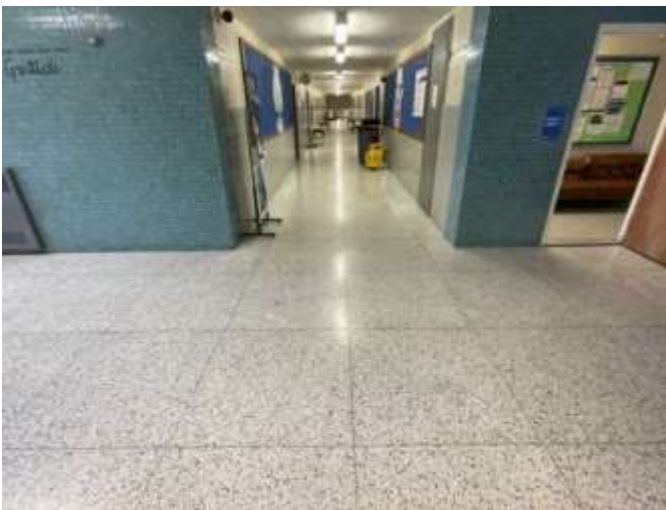
6 - CONFERENCE ROOM



7 - OFFICE



8 - GYMNASIUM



9 - HALLWAYS



10 - RESTROOM



11 - WHEELCHAIR LIFT



12 - WATER HEATER



13 - BOILERS



14 - CHILLER



15 - AIR HANDLER



16 - SWITCHBOARD



17 - FIRE ALARM PANEL



18 - FIRE ALARM SYSTEM COMPONENTS

3. Site Summary



Site Information		
Site Area	3.93 acres (estimated)	
Parking Spaces	53 total spaces all in open lots; 3 of which are accessible	
<i>System</i>	<i>Description</i>	<i>Condition</i>
Pavement/Flatwork	Asphalt lots with limited areas of concrete aprons and pavement and adjacent concrete sidewalks, curbs, ramps, and stairs	Fair
Site Development	Building entrance signage; chain link fencing Limited park benches, picnic tables, and trash receptacles	Fair
Landscaping and Topography	Significant landscaping features including lawns, trees, and bushes Irrigation not present Low to moderate site slopes throughout	Fair
Utilities	Municipal water and sewer	Fair
Site Lighting	Pole-mounted: HPS	Fair
Ancillary Structures	None	--

Site Information	
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 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
Structure	-	-	-	-	\$5,600	\$5,600
Special Construction & Demo	-	-	-	-	\$18,400	\$18,400
Site Development	-	\$11,700	\$6,000	\$10,200	-	\$27,900
Site Pavement	\$1,300	\$35,400	-	\$300,000	\$66,500	\$403,300
Site Utilities	-	\$14,000	-	-	-	\$14,000
TOTALS (3% inflation)	\$1,300	\$61,100	\$6,000	\$310,300	\$90,500	\$469,200

Site: Photographic Overview



1 - PARKING LOT



2 - SITE STAIRS



3 - ANCILLARY BUILDINGS



4 - SITE FENCING



5 - LANDSCAPING



6 - LANDSCAPING

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			
<i>Facility</i>	<i>Year Built/ Renovated</i>	<i>Prior Study Provided?</i>	<i>Major/Moderate Issues Observed?</i>
General Site	1964	No	No
Norrell Elementary School (Closed)	1964	No	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 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.

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 Norrell Elementary School (closed), 2120 Fendall Avenue, Richmond, VA 23222, 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.

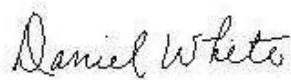
No testing, exploratory probing, dismantling or operating of equipment or in-depth studies were performed unless specifically required under the *Purpose and Scope* section of this report. This assessment did not include engineering calculations to determine the adequacy of the Property's original design 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



 BUREAU VERITAS	Project Number	Project Name	
	166385.24R000-049.468	Norrell Elementary School (Closed)	
	Source	On-Site Date	
	Google	February 21, 2024	

Appendix B:

Pre-Survey Questionnaires(s)



Bureau Veritas Facility Condition Assessment: Pre-Survey Questionnaire

Building / Facility Name: Norrell Elementary School (Closed)
Name of person completing form: Ronald Hathaway
Title / Association with property: Director of Facilities
Length of time associated w/ property: 30
Date Completed: 2/20/2024
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	1964		
2	Building size in SF	43037		
3	Major Renovation/Rehabilitation		Year	Additional Detail
		Façade	1964	Brick
		Roof		Tar and Gravel
		Interiors		CMU, VCT, Terrazzo, Ceramic, wood flooring
		HVAC	2020	Air cooled chiller, Boiler 2019
		Electrical	1964	
		Site Pavement		Asphalt
		Accessibility		Satisfied the 2007 lawsuit requirement
Question		Response		
4	List other significant capital improvements (focus on recent years; provide approximate date).	Boilers replaced in 2019 Chiller replaced in 2020		
5	List any major capital expenditures planned/requested for the next few years. Have they been budgeted?	None		
6	Describe any on-going extremely problematic, historically chronic, or immediate facility needs.	Dual temperature HVAC challenging in mild season.		

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				HVAC and roof leaks
10	Are your elevators unreliable, with frequent service calls?		X			Chair lifts
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				Hallways
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 Checklist - 2010 ADA Standards for Accessible Design

Property Name: Norrell Elementary School (Closed)

BV Project Number: 166385.24R000-049.468

Abbreviated Accessibility Checklist

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		

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 RAMP



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

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 ?	X			
2	If the main entrance is not accessible, is an alternate accessible entrance provided?	X			
3	Is signage provided indicating the location of alternate accessible entrances ?		X		
4	Do doors at accessible entrances appear to have compliant maneuvering clearance area on each side ?	X			
5	Do doors at accessible entrances appear to have compliant hardware ?	X			
6	Do doors at accessible entrances appear to have a compliant clear opening width ?	X			

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

Abbreviated Accessibility Checklist

Interior Accessible Route



ACCESSIBLE INTERIOR LIFT



SELF-SERVICE AREA

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

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 ?	✗			
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 ?	✗			
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 ?	X			
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 ?		X		
9	Do accessories and mirrors appear to be mounted at a compliant height ?	X			

Appendix D:

Component Condition Report

Component Condition Report | Norrell ES (Closed) / Main Building

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
Structure						
A1010	Throughout	Fair	Foundation System, Concrete or CMU Walls w/ Continuous Footings	2,484 LF	20	7421078
B1010	Throughout	Fair	Structural Framing, Masonry (CMU) Bearing Walls	43,037 SF	20	7421079
Facade						
B2010	Building Exterior	Fair	Exterior Walls, Brick	20,700 SF	20	7386944
B2020	Building Exterior	Poor	Glazing, any type by SF	5,382 SF	0	7386928
B2020	Throughout interior	Fair	Glazing, any type by SF	50 SF	10	7386932
B2050	Building Exterior	Poor	Exterior Door, Wood, Solid-Core	25	1	7386965
B2050	Building Exterior	Fair	Exterior Door, Aluminum-Framed & Glazed, Standard Swing	2	3	7387002
Roofing						
B3010	Roof	Poor	Roofing, Built-Up	43,037 SF	1	7387024
B3020	Roof	Poor	Roof Appurtenances, Roof Access Ladder, Steel	35 LF	1	7386925
B3060	Roof	Poor	Roof Hatch, Metal	2	1	7386973
Interiors						
C1030	Throughout building	Fair	Interior Door, Steel, Fire-Rated at 90 Minutes or Over	3	5	7387021
C1030	Throughout building	Fair	Interior Door, Wood, Solid-Core	84	3	7387005
C1030	Throughout building	Fair	Door Hardware, Office, per Door	114	5	7387007
C1070	Throughout building	Fair	Suspended Ceilings, Hard Tile, Replacement w/ ACT	1,750 SF	3	7386981
C1070	Throughout building	Fair	Suspended Ceilings, Acoustical Tile (ACT)	5,206 SF	3	7386984
C1070	Throughout building	Fair	Suspended Ceilings, Acoustical Tile (ACT)	29,506 SF	5	7386927
C1090	Restrooms	Poor	Toilet Partitions, Marble	22	1	7387018
C2010	Throughout building	Fair	Wall Finishes, Ceramic Tile	6,075 SF	10	7386943
C2010	Throughout building	Fair	Wall Finishes, any surface, Prep & Paint	42,400 SF	6	7386936
C2010	Throughout building	Poor	Wall Finishes, any surface, Prep & Paint	16,140 SF	1	7386971

Component Condition Report | Norrell ES (Closed) / Main Building

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
C2030	Throughout building	Fair	Flooring, Terrazzo	5,600 SF	15	7387006
C2030	Gymnasium	Fair	Athletic Flooring, Indoor Gymnasium Resilient Flooring, 3/8" Thickness	4,000 SF	3	7386995
C2030	Gymnasium	Poor	Flooring, Wood, Strip, Refinish	1,000 SF	1	7386985
C2030	Gymnasium	Fair	Flooring, Vinyl Tile (VCT), w/ Asbestos Abatement	120 SF	3	7386940
C2030	Throughout building	Fair	Flooring, Vinyl Tile (VCT)	26,900 SF	4	7386926
C2030	Throughout building	Fair	Flooring, Ceramic Tile	3,320 SF	6	7386957
C2030	Main roof	Poor	Flooring, Carpet, Commercial Standard	1,250 SF	1	7386989
C2050	Gymnasium	Fair	Ceiling Finishes, exposed irregular elements, Prep & Paint	6,975 SF	4	7386949
Conveying						
D1010	Hallway	Poor	Vertical Lift, Wheelchair, 5' Rise, Renovate	1	1	7386961
D1010	Hallway	Poor	Vertical Lift, Wheelchair, 5' Rise, Renovate	1	1	7386967
Plumbing						
D2010	Restrooms	Fair	Toilet, Commercial Water Closet	28	3	7387010
D2010	Hallway	Fair	Drinking Fountain, Wall-Mounted, Single-Level	1	9	7386997
D2010	Hallway	Fair	Drinking Fountain, Wall-Mounted, Bi-Level	1	9	7386954
D2010	Hallway	Fair	Drinking Fountain, Wall-Mounted, Single-Level	1	9	7386946
D2010	Utility closet	Fair	Sink/Lavatory, Service Sink, Wall-Hung	3	3	7386969
D2010	Locker room	Fair	Shower, Ceramic Tile	8	3	7387004
D2010	Throughout building	Fair	Plumbing System, Supply & Sanitary, Medium Density (excludes fixtures)	43,037 SF	5	7387008
D2010	Restrooms	Fair	Urinal, Standard	8	3	7386968
D2010	Boiler room	Fair	Water Heater, Gas, Commercial (200 MBH)	1	9	7387019
D2010	Hallway	Fair	Drinking Fountain, Wall-Mounted, Single-Level	1	9	7387022
D2010	Throughout building	Fair	Sink/Lavatory, Wall-Hung, Vitreous China	22	3	7386951
D2060	Boiler room	Fair	Supplemental Components, Compressed Air Dryer, Process Support	1	10	7386979
D2060	Boiler room	Poor	Air Compressor, Tank-Style	1	1	7386962

Component Condition Report | Norrell ES (Closed) / Main Building

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
HVAC						
D3020	Boiler room	Fair	Boiler Supplemental Components, Expansion Tank	1	3	7386960
D3020	Boiler room	Fair	Boiler Supplemental Components, Expansion Tank	1	3	7387012
D3020	Boiler room	Fair	Boiler Supplemental Components, Expansion Tank	1	3	7387020
D3020	Throughout	Fair	Radiator, Hydronic, Baseboard (per LF)	750 LF	3	7421227
D3020	Boiler room	Fair	Boiler Supplemental Components, Expansion Tank	1	3	7387014
D3020	Boiler room	Good	Boiler, Gas, HVAC [Boiler #1]	1	21	7386996
D3020	Boiler room	Fair	Boiler Supplemental Components, Expansion Tank	1	3	7386930
D3020	Boiler room	Fair	Boiler Supplemental Components, Expansion Tank	1	3	7387023
D3020	Boiler room	Good	Boiler, Gas, HVAC [Boiler #2]	1	21	7386993
D3020	Boiler room	Fair	Boiler Supplemental Components, Expansion Tank	1	3	7386950
D3030	Building exterior	Good	Chiller, Air-Cooled	1	22	7386983
D3050	Throughout building	Fair	HVAC System, Hydronic Piping, 4-Pipe	43,037 SF	3	7386999
D3050	Boiler room	Fair	Pump, Distribution, HVAC Chilled or Condenser Water	1	3	7386977
D3050	Gymnasium	Poor	Air Handler, Interior AHU, Easy/Moderate Access	1	1	7386931
D3050	Throughout building	Fair	Fan Coil Unit, Hydronic Terminal	27	5	7387000
D3050	Boiler room	Fair	Pump, Distribution, HVAC Heating Water	1	10	7386963
D3050	Roof	Poor	Air Handler, Exterior AHU, 1201 to 2400 CFM	1	1	7386948
D3050	Boiler room	Good	Pump, Distribution, HVAC Heating Water	1	20	7386980
D3050	Boiler room	Fair	Pump, Distribution, HVAC Heating Water	1	3	7386987
D3050	Gymnasium	Poor	Air Handler, Interior AHU, Easy/Moderate Access	1	1	7386952
D3050	Boiler room	Fair	Pump, Distribution, HVAC Heating Water	1	10	7386998
D3050	Roof	Poor	Air Handler, Exterior AHU, 1201 to 2400 CFM	1	1	7387017
D3050	Boiler room	Good	Pump, Distribution, HVAC Heating Water	1	20	7386972
D3060	Roof	Poor	Exhaust Fan, Centrifugal, 16" Damper	1	1	7386945

Component Condition Report | Norrell ES (Closed) / Main Building

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
D3060	Roof	Poor	Exhaust Fan, Centrifugal, 16" Damper	1	1	7387013
D3060	Roof	Poor	Exhaust Fan, Centrifugal, 16" Damper	1	1	7386975
D3060	Roof	Poor	Exhaust Fan, Centrifugal, 16" Damper	1	1	7386978
D3060	Roof	Poor	Exhaust Fan, Centrifugal, 16" Damper	1	1	7386982
D3060	Roof	Poor	Exhaust Fan, Centrifugal, 16" Damper	1	1	7387011
D3060	Throughout building	Fair	Supplemental Components, Air Purifier, Electrostatic	27	3	7386933
D3060	Roof	Poor	Exhaust Fan, Roof or Wall-Mounted, 36"Damper	1	1	7386970
Fire Protection						
D4030	Throughout building	Fair	Fire Extinguisher, Type ABC, up to 20 LB	19	6	7386964
Electrical						
D5020	Electrical room	Fair	Switchboard, 120/208 V	1	3	7386953
D5020	Electrical room	Fair	Secondary Transformer, Dry, Stepdown	1	4	7386938
D5020	Electrical room	Fair	Switchboard, 120/208 V	1	14	7387016
D5030	Throughout building	Fair	Electrical System, Wiring & Switches, Average or Low Density/Complexity	43,037 SF	3	7387009
D5040	Throughout building	Fair	Interior Lighting System, Full Upgrade, Medium Density & Standard Fixtures	43,037 SF	5	7386956
Fire Alarm & Electronic Systems						
D6020	Throughout building	Fair	Low Voltage System, Phone & Data Lines	43,037 SF	3	7386942
D7030	Throughout building	Fair	Security/Surveillance System, Full System Upgrade, Average Density	43,037 SF	5	7386939
D7050	Office	Fair	Fire Alarm Panel, Multiplex	1	3	7386935
D7050	Throughout building	Fair	Fire Alarm System, Full System Upgrade, Basic/Zoned, Upgrade/Install	43,037 SF	3	7386990
D8010	Throughout building	Poor	BAS/HVAC Controls, Basic System or Legacy Upgrades, Upgrade/Install	43,037 SF	1	7386966
Equipment & Furnishings						
E1040	Hallway	Fair	Healthcare Equipment, Defibrillator (AED), Cabinet-Mounted	1	5	7386994
E1070	Gymnasium	Fair	Theater & Stage Equipment, Flameproof Curtain, Medium Weight Velour	800 SF	3	7386955
Athletic, Recreational & Playfield Areas						

Component Condition Report | Norrell ES (Closed) / Main Building

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
G2050	Gymnasium	Fair	Sports Apparatus, Basketball, Backboard/Rim/Pole	2	3	7386974
Sitework						
G4050	Building Exterior	Poor	Exterior Fixture w/ Lamp, any type, w/ LED Replacement	6	1	7386988
Follow-up Studies						
P2030	Throughout	NA	Engineering Study, Environmental, Mold, Evaluate/Report	1	0	7421908

Component Condition Report | Norrell ES (Closed) / Site

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
Structure						
B1080	Site	Fair	Stairs, Concrete, Exterior	65 SF	15	7387003
Special Construction & Demo						
F1020	Site	Fair	Ancillary Building, Wood-Framed or CMU, Basic/Minimal	85 SF	20	7386959
F1020	Site	Fair	Ancillary Building, Wood-Framed or CMU, Basic/Minimal	85 SF	20	7386986
Pedestrian Plazas & Walkways						
G2020	Site	Fair	Parking Lots, Pavement, Asphalt, Mill & Overlay	48,000 SF	7	7386991
G2020	Site	Fair	Parking Lots, Pavement, Asphalt, Seal & Stripe	48,000 SF	2	7386947
G2030	Site	Poor	Sidewalk, Concrete, Large Areas	1,350 SF	1	7387015
G2030	site	Fair	Sidewalk, Concrete, Large Areas	4,050 SF	8	7421219
G2030	Site	Poor	Site Stairs & Ramps, Handrails, Metal, Install	8 LF	0	7386958
Sitework						
G2060	Site	Poor	Fences & Gates, Fence, Chain Link 6'	512 LF	1	7386976
G2060	Site	Fair	Signage, Property, Building-Mounted Individual Letters, Replace/Install	20	3	7387001
G2060	Site	Fair	Flagpole, Metal	1	3	7386934
G2060	Site	Poor	Bike Rack, Fixed 1-5 Bikes	1	1	7386992
G2060	Site	Fair	Fences & Gates, Fence, Chain Link 8'	305 LF	10	7386929

Component Condition Report | Norrell ES (Closed) / Site

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
G4050	Site	Poor	Pole Light Fixture w/ Lamps, any type 30' High, w/ LED Replacement, Replace/Install	2	1	7386941

Appendix E: Replacement Reserves

Replacement Reserves Report



4/11/2024

Uniformat Code	Location Description	ID	Cost Description	Lifespan (EUL)	Age	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
D3020	Boiler room	7386950	Boiler Supplemental Components, Expansion Tank, Replace	40	37	3	1	EA	\$3,540.00	\$3,540				\$3,540																		\$3,540
D3020	Boiler room	7387012	Boiler Supplemental Components, Expansion Tank, Replace	40	37	3	1	EA	\$3,540.00	\$3,540				\$3,540																		\$3,540
D3050	Throughout building	7386999	HVAC System, Hydronic Piping, 4-Pipe, Replace	40	37	3	43037	SF	\$8.00	\$344,296				\$344,296																		\$344,296
D3050	Boiler room	7386977	Pump, Distribution, HVAC Chilled or Condenser Water, Replace	25	22	3	1	EA	\$6,500.00	\$6,500				\$6,500																		\$6,500
D3050	Boiler room	7386987	Pump, Distribution, HVAC Heating Water, Replace	15	12	3	1	EA	\$5,100.00	\$5,100				\$5,100															\$5,100			\$10,200
D3050	Boiler room	7386963	Pump, Distribution, HVAC Heating Water, Replace	15	5	10	1	EA	\$5,100.00	\$5,100											\$5,100											\$5,100
D3050	Boiler room	7386998	Pump, Distribution, HVAC Heating Water, Replace	15	5	10	1	EA	\$5,100.00	\$5,100											\$5,100											\$5,100
D3050	Boiler room	7386980	Pump, Distribution, HVAC Heating Water, Replace	25	5	20	1	EA	\$6,100.00	\$6,100																				\$6,100		\$6,100
D3050	Boiler room	7386972	Pump, Distribution, HVAC Heating Water, Replace	25	5	20	1	EA	\$6,100.00	\$6,100																				\$6,100		\$6,100
D3050	Gymnasium	7386931	Air Handler, Interior AHU, Easy/Moderate Access, Replace	30	29	1	1	EA	\$40,000.00	\$40,000		\$40,000																				\$40,000
D3050	Gymnasium	7386952	Air Handler, Interior AHU, Easy/Moderate Access, Replace	25	24	1	1	EA	\$22,000.00	\$22,000		\$22,000																				\$22,000
D3050	Roof	7386948	Air Handler, Exterior AHU, 1201 to 2400 CFM, Replace	20	19	1	1	EA	\$17,300.00	\$17,300		\$17,300																				\$17,300
D3050	Roof	7387017	Air Handler, Exterior AHU, 1201 to 2400 CFM, Replace	20	19	1	1	EA	\$17,300.00	\$17,300		\$17,300																				\$17,300
D3050	Throughout building	7387000	Fan Coil Unit, Hydronic Terminal, Replace	20	15	5	27	EA	\$2,530.00	\$68,310						\$68,310																\$68,310
D3060	Roof	7386945	Exhaust Fan, Centrifugal, 16" Damper, Replace	25	24	1	1	EA	\$2,400.00	\$2,400		\$2,400																				\$2,400
D3060	Roof	7387013	Exhaust Fan, Centrifugal, 16" Damper, Replace	25	24	1	1	EA	\$2,400.00	\$2,400		\$2,400																				\$2,400
D3060	Roof	7386975	Exhaust Fan, Centrifugal, 16" Damper, Replace	25	24	1	1	EA	\$2,400.00	\$2,400		\$2,400																				\$2,400
D3060	Roof	7386982	Exhaust Fan, Centrifugal, 16" Damper, Replace	25	24	1	1	EA	\$2,400.00	\$2,400		\$2,400																				\$2,400
D3060	Roof	7387011	Exhaust Fan, Centrifugal, 16" Damper, Replace	25	24	1	1	EA	\$2,400.00	\$2,400		\$2,400																				\$2,400
D3060	Roof	7386970	Exhaust Fan, Roof or Wall-Mounted, 36" Damper, Replace	20	19	1	1	EA	\$5,600.00	\$5,600		\$5,600																				\$5,600
D3060	Roof	7386978	Exhaust Fan, Centrifugal, 16" Damper, Replace	25	24	1	1	EA	\$2,400.00	\$2,400		\$2,400																				\$2,400
D3060	Throughout building	7386933	Supplemental Components, Air Purifier, Electrostatic, Replace	5	2	3	27	EA	\$1,760.00	\$47,520				\$47,520					\$47,520			\$47,520						\$47,520				\$190,080
D4030	Throughout building	7386964	Fire Extinguisher, Type ABC, up to 20 LB, Replace	10	4	6	19	EA	\$150.00	\$2,850						\$2,850																\$5,700
D5020	Electrical room	7386953	Switchboard, 120/208 V, Replace	40	37	3	1	EA	\$50,000.00	\$50,000				\$50,000																		\$50,000
D5020	Electrical room	7386938	Secondary Transformer, Dry, Stepdown, Replace	30	26	4	1	EA	\$7,600.00	\$7,600				\$7,600																		\$7,600
D5020	Electrical room	7387016	Switchboard, 120/208 V, Replace	40	26	14	1	EA	\$52,100.00	\$52,100												\$52,100										\$52,100
D5030	Throughout building	7387009	Electrical System, Wiring & Switches, Average or Low Density/Complexity, Replace	40	37	3	43037	SF	\$2.50	\$107,593				\$107,593																		\$107,593
D5040	Throughout building	7386956	Interior Lighting System, Full Upgrade, Medium Density & Standard Fixtures, Replace	20	15	5	43037	SF	\$4.50	\$193,667						\$193,667																\$193,667
D6020	Throughout building	7386942	Low Voltage System, Phone & Data Lines, Replace	20	17	3	43037	SF	\$1.50	\$64,556				\$64,556																		\$64,556
D7030	Throughout building	7386939	Security/Surveillance System, Full System Upgrade, Average Density, Replace	15	10	5	43037	SF	\$2.00	\$86,074						\$86,074														\$86,074		\$172,148
D7050	Office	7386935	Fire Alarm Panel, Multiplex, Replace	15	12	3	1	EA	\$4,000.00	\$4,000				\$4,000																		\$4,000
D7050	Throughout building	7386990	Fire Alarm System, Full System Upgrade, Basic/Zoned, Upgrade/Install	20	17	3	43037	SF	\$1.50	\$64,556				\$64,556																		\$64,556
D8010	Throughout building	7386966	BAS/HVAC Controls, Basic System or Legacy Upgrades, Upgrade/Install	15	14	1	43037	SF	\$2.50	\$107,593		\$107,593																			\$107,593	\$215,185
E1040	Hallway	7386994	Healthcare Equipment, Defibrillator (AED), Cabinet-Mounted, Replace	10	5	5	1	EA	\$1,500.00	\$1,500						\$1,500																\$1,500
E1070	Gymnasium	7386955	Theater & Stage Equipment, Flameproof Curtain, Medium Weight Velour, Replace	15	12	3	800	SF	\$15.00	\$12,000				\$12,000																	\$12,000	\$24,000
G2050	Gymnasium	7386974	Sports Apparatus, Basketball, Backboard/Rim/Pole, Replace	25	22	3	2	EA	\$9,500.00	\$19,000				\$19,000																		\$19,000
G4050	Building Exterior	7386988	Exterior Fixture w/ Lamp, any type, w/ LED Replacement, Replace	20	19	1	6	EA	\$600.00	\$3,600		\$3,600																				\$3,600
P2030	Throughout	7421908	Engineering Study, Environmental, Mold, Evaluate/Report	0	1	0	1	EA	\$5,000.00	\$5,000	\$5,000																					\$5,000
Totals, Unescalated											\$301,010	\$954,446	\$0	\$1,087,466	\$159,538	\$968,979	\$126,210	\$0	\$47,520	\$21,700	\$127,900	\$37,585	\$0	\$47,520	\$69,538	\$79,900	\$174,043	\$0	\$109,100	\$134,500	\$2,698,490	\$7,145,442
Totals, Escalated (3.0% inflation, compounded annually)											\$301,010	\$983,079	\$0	\$1,188,303	\$179,561	\$1,123,312	\$150,701	\$0	\$60,197	\$28,314	\$171,887	\$52,026	\$0	\$69,785	\$105,182	\$124,482	\$279,287	\$0	\$185,735	\$235,847	\$4,873,773	\$10,112,480

Norrell ES (Closed) / Site

Uniformat Code	Location Description	ID	Cost Description	Lifespan (EUL)	Age	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
B1080	Site	7387003	Stairs, Concrete, Exterior, Replace	50	35	15	65	SF	\$55.00	\$3,575																\$3,575					\$3,575	
F1020	Site	7386959	Ancillary Building, Wood-Framed or CMU, Basic/Minimal, Replace	35	15	20	85	SF	\$60.00	\$5,100																					\$5,100	\$5,100
F1020	Site	7386986	Ancillary Building, Wood-Framed or CMU, Basic/Minimal, Replace	35	15	20	85	SF	\$60.00	\$5,100																					\$5,100	\$5,100
G2020	Site	7386947	Parking Lots, Pavement, Asphalt, Seal & Stripe	5	3	2	48000	SF	\$0.45	\$21,600			\$21,600									\$21,600									\$21,600	\$86,400
G2020	Site	7386991	Parking Lots, Pavement, Asphalt, Mill & Overlay	25	18	7	48000	SF	\$3.85	\$184,800						\$184,800																\$184,800
G2030	Site	7387015	Sidewalk, Concrete, Large Areas, Replace	50	49	1	1350	SF	\$9.00	\$12,150		\$12,150																				\$12,150
G2030	site	7421219	Sidewalk, Concrete, Large Areas, Replace	50	42	8	4050	SF	\$9.00	\$36,450																						

Replacement Reserves Report



4/11/2024

Uniformat Code	Location DescriptionID	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)									\$1,320	\$38,215	\$22,915	\$6,010	\$0	\$0	\$0	\$253,846	\$46,174	\$0	\$10,247	\$0	\$30,796	\$0	\$0	\$5,570	\$0	\$35,702	\$0	\$0	\$18,422		\$469,218

Appendix F:

Equipment Inventory List

D10 Conveying													
Index	ID	UFCode	Component Description	Attributes	Capacity	Building	Location Detail	Manufacturer	Model	Serial	Dataplate Yr	Barcode	Qty
1	7386961	D1010	Vertical Lift	Wheelchair, 5' Rise	495 LBS	Norrell ES (Closed) / Main Building	Hallway	Garaventa	XPRESSII	No dataplate	2010	https://rvaschools.gofmx.com/equipment/1556341	
2	7386967	D1010	Vertical Lift	Wheelchair, 5' Rise	495 LBS	Norrell ES (Closed) / Main Building	Hallway	Garaventa	XPRESSII	No dataplate	2010	https://rvaschools.gofmx.com/equipment/1556340	
D20 Plumbing													
Index	ID	UFCode	Component Description	Attributes	Capacity	Building	Location Detail	Manufacturer	Model	Serial	Dataplate Yr	Barcode	Qty
1	7387019	D2010	Water Heater	Gas, Commercial (200 MBH)	81 GAL	Norrell ES (Closed) / Main Building	Boiler room	A. O. Smith	BTR 199 118	1343M002692	2013	https://rvaschools.gofmx.com/equipment/1556326	
2	7386962	D2060	Air Compressor	Tank-Style	5 HP	Norrell ES (Closed) / Main Building	Boiler room	Curtis	6D65CD	No dataplate		https://rvaschools.gofmx.com/equipment/1556320	
3	7386979	D2060	Supplemental Components	Compressed Air Dryer, Process Support	5 CFM	Norrell ES (Closed) / Main Building	Boiler room	Hankison	HPR5-10	H510A1151504040		https://rvaschools.gofmx.com/equipment/1556317	
D30 HVAC													
Index	ID	UFCode	Component Description	Attributes	Capacity	Building	Location Detail	Manufacturer	Model	Serial	Dataplate Yr	Barcode	Qty
1	7386996	D3020	Boiler [Boiler #1]	Gas, HVAC	2000 MBH	Norrell ES (Closed) / Main Building	Boiler room	P-K Thermific	N-2000-2	CY-50-15-38938	2015	https://rvaschools.gofmx.com/equipment/1556325	
2	7386993	D3020	Boiler [Boiler #2]	Gas, HVAC	2000 MBH	Norrell ES (Closed) / Main Building	Boiler room	P-K Thermific	N-2000-2	CY-50-15-38896	2015	https://rvaschools.gofmx.com/equipment/1556324	
3	7421227	D3020	Radiator	Hydronic, Baseboard (per LF)		Norrell ES (Closed) / Main Building	Throughout						750
4	7386960	D3020	Boiler Supplemental Components	Expansion Tank	80 GAL	Norrell ES (Closed) / Main Building	Boiler room	Inaccessible	Inaccessible	Inaccessible		https://rvaschools.gofmx.com/equipment/1556334	
5	7387012	D3020	Boiler Supplemental Components	Expansion Tank	80 GAL	Norrell ES (Closed) / Main Building	Boiler room	Inaccessible	Inaccessible	Inaccessible		https://rvaschools.gofmx.com/equipment/1556333	
6	7387020	D3020	Boiler Supplemental Components	Expansion Tank	80 GAL	Norrell ES (Closed) / Main Building	Boiler room	Inaccessible	Inaccessible	Inaccessible		https://rvaschools.gofmx.com/equipment/1556335	
7	7387014	D3020	Boiler Supplemental Components	Expansion Tank	15 GAL	Norrell ES (Closed) / Main Building	Boiler room	Armstrong Air	Illegible	Illegible		https://rvaschools.gofmx.com/equipment/1556332	
8	7386930	D3020	Boiler Supplemental Components	Expansion Tank	40 GAL	Norrell ES (Closed) / Main Building	Boiler room	Inaccessible	Inaccessible	Inaccessible		https://rvaschools.gofmx.com/equipment/1556331	
9	7387023	D3020	Boiler Supplemental Components	Expansion Tank	15 GAL	Norrell ES (Closed) / Main Building	Boiler room	Bell & Gossett	Inaccessible	Inaccessible		https://rvaschools.gofmx.com/equipment/1556337	
10	7386950	D3020	Boiler Supplemental Components	Expansion Tank	80 GAL	Norrell ES (Closed) / Main Building	Boiler room	Inaccessible	Inaccessible	Inaccessible		https://rvaschools.gofmx.com/equipment/1556336	
11	7386983	D3030	Chiller	Air-Cooled	60 TON	Norrell ES (Closed) / Main Building	Building exterior	Daikin Industries	AGZ060EDSEMNN0A	STNU210100195	2021	https://rvaschools.gofmx.com/equipment/1556347	
12	7386977	D3050	Pump	Distribution, HVAC Chilled or Condenser Water	7.5 HP	Norrell ES (Closed) / Main Building	Boiler room	Armstong	Illegible	Illegible		https://rvaschools.gofmx.com/equipment/1556319	
13	7386963	D3050	Pump	Distribution, HVAC Heating Water	1 HP	Norrell ES (Closed) / Main Building	Boiler room	Bell & Gossett	E90	C21791-D2 M51	2019	https://rvaschools.gofmx.com/equipment/1556330	
14	7386980	D3050	Pump	Distribution, HVAC Heating Water	5 HP	Norrell ES (Closed) / Main Building	Boiler room	Bell & Gossett	e-1510 SSF 7	C217910-02M51	2019	https://rvaschools.gofmx.com/equipment/1556322	
15	7386987	D3050	Pump	Distribution, HVAC Heating Water	1 HP	Norrell ES (Closed) / Main Building	Boiler room	Weinman	1-1/2G1-4	145369		https://rvaschools.gofmx.com/equipment/1556318	
16	7386998	D3050	Pump	Distribution, HVAC Heating Water	1 HP	Norrell ES (Closed) / Main Building	Boiler room	Bell & Gossett	E90	C217911-01 M51	2019	https://rvaschools.gofmx.com/equipment/1556329	
17	7386972	D3050	Pump	Distribution, HVAC Heating Water	5 HP	Norrell ES (Closed) / Main Building	Boiler room	Bell & Gossett	e-1510 SSF 7	C217910-01M512	2019	https://rvaschools.gofmx.com/equipment/1556323	
18	7386948	D3050	Air Handler	Exterior AHU, 1201 to 2400 CFM	2000 CFM	Norrell ES (Closed) / Main Building	Roof	Illegible	Illegible	Illegible		https://rvaschools.gofmx.com/equipment/1556353	
19	7387017	D3050	Air Handler	Exterior AHU, 1201 to 2400 CFM	2000 CFM	Norrell ES (Closed) / Main Building	Roof	Illegible	Illegible	Illegible		https://rvaschools.gofmx.com/equipment/1556356	
20	7386931	D3050	Air Handler	Interior AHU, Easy/Moderate Access	8000 CFM	Norrell ES (Closed) / Main Building	Gymnasium	No dataplate	No dataplate	No dataplate		https://rvaschools.gofmx.com/equipment/1556342	
21	7386952	D3050	Air Handler	Interior AHU, Easy/Moderate Access	4000 CFM	Norrell ES (Closed) / Main Building	Gymnasium	No dataplate	No dataplate	No dataplate	1964	https://rvaschools.gofmx.com/equipment/1556348	
22	7387000	D3050	Fan Coil Unit	Hydronic Terminal	850 CFM	Norrell ES (Closed) / Main Building	Throughout building	A AAFB	Inaccessible	Inaccessible			27
23	7386945	D3060	Exhaust Fan	Centrifugal, 16" Damper	1500 CFM	Norrell ES (Closed) / Main Building	Roof	DVD	Illegible	Illegible		https://rvaschools.gofmx.com/equipment/1556350	
24	7387013	D3060	Exhaust Fan	Centrifugal, 16" Damper	1500 CFM	Norrell ES (Closed) / Main Building	Roof	DVD	6	Illegible		https://rvaschools.gofmx.com/equipment/1556354	
25	7386975	D3060	Exhaust Fan	Centrifugal, 16" Damper	1500 CFM	Norrell ES (Closed) / Main Building	Roof	DVD	16	Illegible		https://rvaschools.gofmx.com/equipment/1556355	

26	7386978	D3060	Exhaust Fan	Centrifugal, 16" Damper	1500 CFM	Norrell ES (Closed) / Main Building	Roof	DVD	6	Illegible		https://rvaschools.gofmx.com/equipment/1556352
27	7386982	D3060	Exhaust Fan	Centrifugal, 16" Damper	1500 CFM	Norrell ES (Closed) / Main Building	Roof	DVD	6	Illegible		https://rvaschools.gofmx.com/equipment/1556351
28	7387011	D3060	Exhaust Fan	Centrifugal, 16" Damper	1500 CFM	Norrell ES (Closed) / Main Building	Roof	DVD	16	Illegible		https://rvaschools.gofmx.com/equipment/1556357
29	7386970	D3060	Exhaust Fan	Roof or Wall-Mounted, 36" Damper	10000 CFM	Norrell ES (Closed) / Main Building	Roof	DVD	Illegible	Illegible		https://rvaschools.gofmx.com/equipment/1556349
30	7386933	D3060	Supplemental Components	Air Purifier, Electrostatic	2000 CFM	Norrell ES (Closed) / Main Building	Throughout building	Carrier	FN1AAF006000	Various	2021	27

D40 Fire Protection

Index	ID	UFCode	Component Description	Attributes	Capacity	Building	Location Detail	Manufacturer	Model	Serial	Dataplate Yr	Barcode	Qty
1	7386964	D4030	Fire Extinguisher	Type ABC, up to 20 LB		Norrell ES (Closed) / Main Building	Throughout building						19

D50 Electrical

Index	ID	UFCode	Component Description	Attributes	Capacity	Building	Location Detail	Manufacturer	Model	Serial	Dataplate Yr	Barcode	Qty
1	7386938	D5020	Secondary Transformer	Dry, Stepdown	45 KVA	Norrell ES (Closed) / Main Building	Electrical room	Square D	33716-17422-009	11578089-008- 1	1998	https://rvaschools.gofmx.com/equipment/1556339	
2	7386953	D5020	Switchboard	120/208 V	800 AMP	Norrell ES (Closed) / Main Building	Electrical room	FPE	CDPR	AG-667708	1964	https://rvaschools.gofmx.com/equipment/1556327	
3	7387016	D5020	Switchboard	120/208 V	1000 AMP	Norrell ES (Closed) / Main Building	Electrical room	General Electric	SCP	84821	1998	https://rvaschools.gofmx.com/equipment/1556338	

D70 Electronic Safety & Security

Index	ID	UFCode	Component Description	Attributes	Capacity	Building	Location Detail	Manufacturer	Model	Serial	Dataplate Yr	Barcode	Qty
1	7386935	D7050	Fire Alarm Panel	Multiplex		Norrell ES (Closed) / Main Building	Office	EST	LSS1	No dataplate		https://rvaschools.gofmx.com/equipment/1556328	

E10 Equipment

Index	ID	UFCode	Component Description	Attributes	Capacity	Building	Location Detail	Manufacturer	Model	Serial	Dataplate Yr	Barcode	Qty
1	7386994	E1040	Healthcare Equipment	Defibrillator (AED), Cabinet-Mounted		Norrell ES (Closed) / Main Building	Hallway						