FACILITY CONDITION ASSESSMENT

prepared for

Richmond Public Schools
301 North Ninth Street
Richmond, VA 23219

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BV PROJECT #:
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May 9, 2024

ON SITE DATE:
February 22, 2024

Richmond Technical Center South
2020 Westwood Avenue
Richmond, VA 23230

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1. Executive Summary

Property Overview and Assessment Details

General Information	
Property Type	Technical Educational Center
Number of Buildings	One
Main Address	2020 Westwood Avenue, Richmond, VA 23230
Site Developed	1966
Outside Occupants / Leased Spaces	None
Date(s) of Visit	February 22, 2024
Management Point of Contact	Daniel Alu Project Engineer 800 Yard Street, Suite 115 Columbus, Ohio 43212 Mobile: 614.949.1355 daniel.alu@gofmx.com
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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 Richmond Technical Center South building was originally constructed in 1966 and has not undergone any significant renovations since. The facility primarily functions as a technical educational center with administrative staff, teachers, and students as occupants.

Architectural

The building consists of a brick and stone façade, aluminum windows, and aluminum and steel exterior doors. The façade and structure have not been altered from the original construction. The roof is original as well and there were leaks observed throughout. The windows are also in poor condition with leaks around the frames as well. The interior finishes have aged and are outdated. Additional studies as well as budgetary costs for repairs have been provided to address these issues.

Mechanical, Electrical, Plumbing and Fire (MEPF)

The HVAC equipment consists of a cooling tower, chiller, boilers, packaged units, and cabinet heaters. The boilers were replaced about 15 years ago and more recently the chiller and cooling tower was replaced in 2019. The HVAC piping was reported to be leaking throughout causing stains on the ceiling tiles. The electrical consists of a main switchboard with distribution panels and transformers. It was reported that the electrical service is undersized. There is a diesel generator present for emergency power that is significantly aged and in very poor condition. There are two hydraulic passenger elevators that serve both floors. The plumbing utilizes two gas boilers for domestic hot water. There is no fire suppression system in place except for the kitchen. The building has a fire alarm system in place along with exit lights, emergency lighting, alarms, and fire extinguishers.

Site

The site consists of an open asphalt parking lot in very poor condition. There are severe cracks and potholes throughout and it was reported to have very poor drainage. The landscaping is well maintained with moderate features and irrigation present. Good lighting is present in the form of pole and building mounted fixtures.

Recommended Additional Studies

It is recommended to investigate the drainage issues with the parking lot and the undersized electrical system.

Facility Condition Index (FCI)

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

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

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

FCI Analysis | Main Building(1966)

Replacement Value	*Total SF*	*Cost/SF*
$ 74,970,000	*187,425*	*$ 400*

	Est Reserve Cost	FCI
Current	$ 1,004,700	**1.3 %**
3-Year	$ 6,691,500	8.9 %
5-Year	$ 8,411,100	11.2 %
10-Year	$ 14,987,000	20.0 %

Immediate Needs

Facility/Building	Total Items	Total Cost
Richmond Technical Center South / Main Building	5	$1,004,600
Richmond Technical Center South	1	$74,000
Richmond Technical Center South / Site	1	$7,000
Total	**7**	**$1,085,600**

Main Building

ID	Location Description	UF Code	Description	Condition	Plan Type	Cost
7467855	Roof	D3030	Cooling Tower, (Typical) Open Circuit, Replace	Poor	Performance/Integrity	$10,000
7467929	Roof	D3030	Cooling Tower, (Typical) Open Circuit, Replace	Poor	Performance/Integrity	$10,000
7467941	Roof	D3050	Packaged Unit, RTU, Pad or Roof-Mounted, Replace	Poor	Performance/Integrity	$7,500
7467863	Throughout building	D3050	HVAC System, Hydronic Piping, 2-Pipe, Replace	Poor	Performance/Integrity	$937,100

7467922	Building exterior	D5010	Generator, Diesel, Replace	Poor	Performance/Integrity	$40,000
Total (5 items)						**$1,004,600**

Richmond Technical Center South

ID	Location Description	UF Code	Description	Condition	Plan Type	Cost
7469324	Throughout building	C2050	Ceiling Finishes, any flat surface, Prep & Paint	Poor	Performance/Integrity	$74,000
Total (1 items)						**$74,000**

Site

ID	Location Description	UF Code	Description	Condition	Plan Type	Cost
7467861	Site	P2030	Engineering Study, Civil, Site Drainage, Evaluate/Report	Poor	Performance/Integrity	$7,000
Total (1 items)						**$7,000**

Key Findings

Generator in Poor condition.

Diesel
Main Building Richmond Technical Center
South Building exterior

Uniformat Code: D5010
Recommendation: **Replace in 2024**

Priority Score: **88.9**

Plan Type:
Performance/Integrity

Cost Estimate: $40,000

$$$$

Unit is aged well past its EUL and severely corroded. - AssetCALC ID: 7467922

Roofing in Poor condition.

Built-Up
Main Building Richmond Technical Center
South Roof

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

Priority Score: **88.8**

Plan Type:
Performance/Integrity

Cost Estimate: $1,344,000

$$$$

Leaks observed throughout - AssetCALC ID: 7467886

Storefront in Poor condition.

Glazing & Framing
Main Building Richmond Technical Center
South Building Exterior

Uniformat Code: B2020
Recommendation: **Replace in 2025**

Priority Score: **87.8**

Plan Type:
Performance/Integrity

Cost Estimate: $110,000

$$$$

Windows reported to be problematic and leaking throughout - AssetCALC ID: 7467947

Window in Poor condition.

Aluminum Double-Glazed, 16-25 SF
Main Building Richmond Technical Center
South Building Exterior

Uniformat Code: B2020
Recommendation: **Replace in 2025**

Priority Score: **87.8**

Plan Type:
Performance/Integrity

Cost Estimate: $532,000

$$$$

Windows reported to be problematic and leaking throughout - AssetCALC ID: 7467960

Cooling Tower in Poor condition.

(Typical) Open Circuit
Main Building Richmond Technical Center South Roof

Uniformat Code: D3030
Recommendation: **Replace in 2024**

Priority Score: **85.9**

Plan Type: Performance/Integrity

Cost Estimate: $10,000

**$$$**$

Severe rust deterioration and likely no longer functioning. - AssetCALC ID: 7467929

Cooling Tower in Poor condition.

(Typical) Open Circuit
Main Building Richmond Technical Center South Roof

Uniformat Code: D3030
Recommendation: **Replace in 2024**

Priority Score: **85.9**

Plan Type: Performance/Integrity

Cost Estimate: $10,000

**$$$**$

Severe rust deterioration and likely no longer functioning. - AssetCALC ID: 7467855

HVAC System in Poor condition.

Hydronic Piping, 2-Pipe
Main Building Richmond Technical Center South Throughout building

Uniformat Code: D3050
Recommendation: **Replace in 2024**

Priority Score: **85.9**

Plan Type: Performance/Integrity

Cost Estimate: $937,100

$$$$

Leaks reported throughout - AssetCALC ID: 7467863

Parking Lots in Poor condition.

Pavement, Asphalt
Site Richmond Technical Center South Site

Uniformat Code: G2020
Recommendation: **Mill & Overlay in 2025**

Priority Score: **84.8**

Plan Type: Performance/Integrity

Cost Estimate: $455,000

$$$$

Major potholes, parking lot holds water, drainage system not efficient - AssetCALC ID: 7467850

Electrical System in Poor condition.

Wiring & Switches, Average or Low Density/Complexity
Main Building Richmond Technical Center South Throughout building

Uniformat Code: D5030
Recommendation: **Replace in 2025**

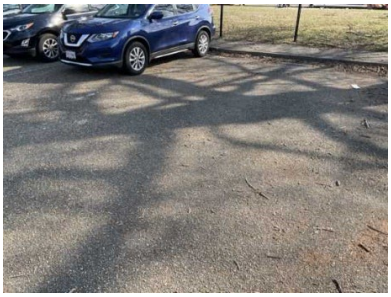
Priority Score: **84.8**

Plan Type: Performance/Integrity

Cost Estimate: $468,600

$$$$

Electrical was reported to be undersized and aged - AssetCALC ID: 7467839



Parking Lots in Poor condition.

Pavement, Asphalt
Site Richmond Technical Center South Site

Uniformat Code: G2020
Recommendation: **Seal & Stripe in 2025**

Priority Score: **84.8**

Plan Type: Performance/Integrity

Cost Estimate: $58,500

$$$$

Paint is completely faded away throughout - AssetCALC ID: 7468001

Packaged Unit in Poor condition.

RTU, Pad or Roof-Mounted
Main Building Richmond Technical Center South Roof

Uniformat Code: D3050
Recommendation: **Replace in 2024**

Priority Score: **81.9**

Plan Type: Performance/Integrity

Cost Estimate: $7,500

$$$$

Unit well exceeds its EUL and is severely rust corroded. - AssetCALC ID: 7467941

Recommended Follow-up Study: Civil, Site Drainage

Civil, Site Drainage
Site Richmond Technical Center South Site

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

Priority Score: **81.9**

Plan Type: Performance/Integrity

Cost Estimate: $7,000

$$$$

It was reported that the parking lot holds water and the drainage system is not efficient. - AssetCALC ID: 7467861

Ceiling Finishes in Poor condition.

any flat surface
Richmond Technical Center South Throughout building

Uniformat Code: C2050
Recommendation: **Prep & Paint in 2024**

Priority Score: **81.8**

Plan Type: Performance/Integrity

Cost Estimate: $74,000

$$$$

Paint is significantly deteriorated and peeling. - AssetCALC ID: 7469324

Suspended Ceilings in Poor condition.

Acoustical Tile (ACT)
Main Building Richmond Technical Center South Throughout building

Uniformat Code: C1070
Recommendation: **Replace in 2025**

Priority Score: **81.8**

Plan Type: Performance/Integrity

Cost Estimate: $525,000

$$$$

Ceiling tiles are stained and missing in areas - AssetCALC ID: 7467857

Overhead/Dock Door in Poor condition.

Aluminum, 12'x12' (144 SF)
Main Building Richmond Technical Center South Building Exterior

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

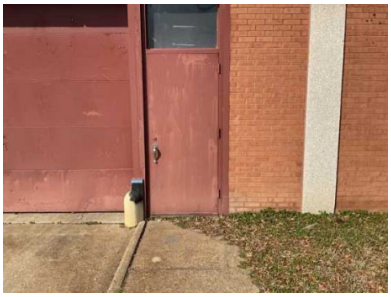
Priority Score: **81.8**

Plan Type: Performance/Integrity

Cost Estimate: $44,000

$$$$

Exterior door hardware and frames are problematic - AssetCALC ID: 7467926



Exterior Door in Poor condition.

Steel, Standard
Main Building Richmond Technical Center South Building Exterior

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

Priority Score: **81.8**

Plan Type: Performance/Integrity

Cost Estimate: $12,000

$$$$

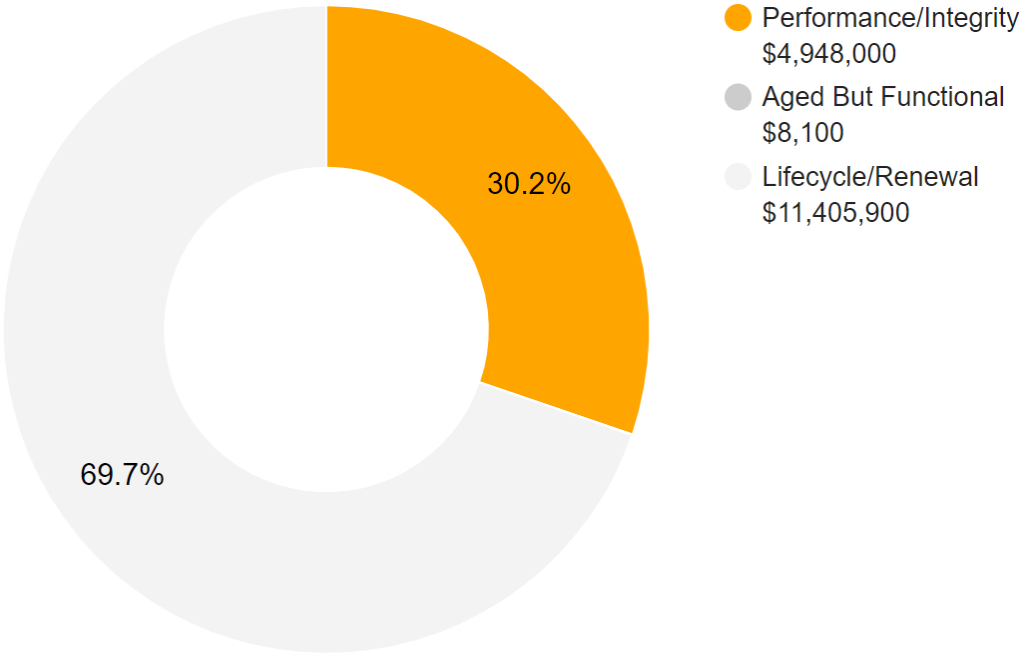
Exterior doors, hardware and frames are problematic and corroded. - AssetCALC ID: 7467918

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.

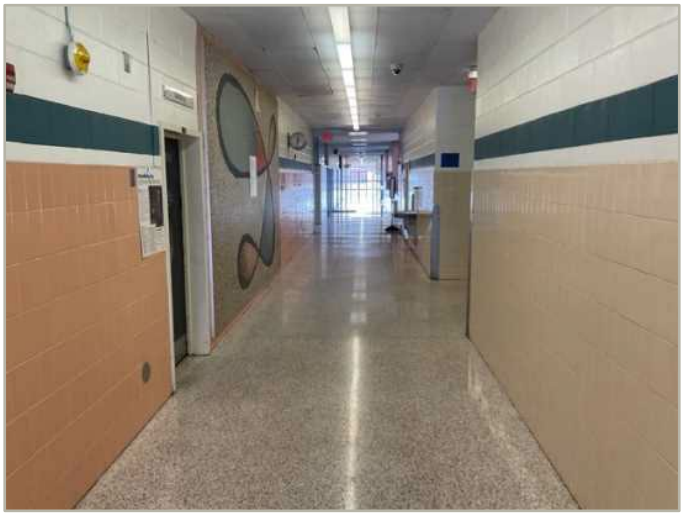
Plan Type Descriptions	
Safety	An observed or reported unsafe condition that if left unaddressed could result in injury; a system or component that presents potential liability risk.
Performance/Integrity	Component or system has failed, is almost failing, performs unreliably, does not perform as intended, 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: $16,362,000

2. Building Information



Building Systems Summary		
Address	2020 Westwood Avenue, Richmond, VA 23230	
Constructed/Renovated	1966	
Building Area	187,425 SF	
Number of Stories	2 stories above grade	
System	*Description*	*Condition*
Structure	Masonry bearing walls with steel frame roof Concrete-topped metal decks and cast-in-place slab over concrete pad column footings	Fair
Façade	Primary Wall Finish: Brick, Secondary Wall Finish: Stone Windows: Aluminum	Fair
Roof	Flat construction with built up finish	Poor
Interiors	Walls: Painted CMU and gypsum board, ceramic tile, brick Floors: Carpet, quarry tile, ceramic tile, terrazzo Ceilings: Painted gypsum board, ACT	Fair
Elevators	Passenger: Two hydraulic cars serving all floors	Fair
Plumbing	Distribution: Copper supply and cast-iron waste & venting Hot Water: Gas domestic boilers Fixtures: Toilets, urinals, and sinks in all restrooms	Fair
HVAC	Central System: Cooling tower, chiller, gas boilers, and air handlers Non-Central System: Packaged units, cabinet heaters	Fair

Building Systems Summary

Fire Suppression	Kitchen suppression system and fire extinguishers	Fair
Electrical	Source & Distribution: Main switchboard with copper wiring. Interior Lighting: LED, linear fluorescent, CFL, halogen Exterior Building-Mounted Lighting: LED, halogen Emergency Power: Diesel generator	Fair
Fire Alarm	Alarm panel with smoke detectors, alarms, strobes, pull stations, back-up emergency lights, and exit signs.	Fair
Equipment/Special	Commercial kitchen equipment	Fair
Accessibility	Presently it does not appear an accessibility study is needed for this building. See the appendix for associated photos and additional information.	
Additional Studies	No additional studies are currently recommended for the building.	
Areas Observed	The interior spaces were observed to gain a clear understanding of the facility's overall condition. Other areas accessed and assessed included the exterior equipment and assets directly serving the 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

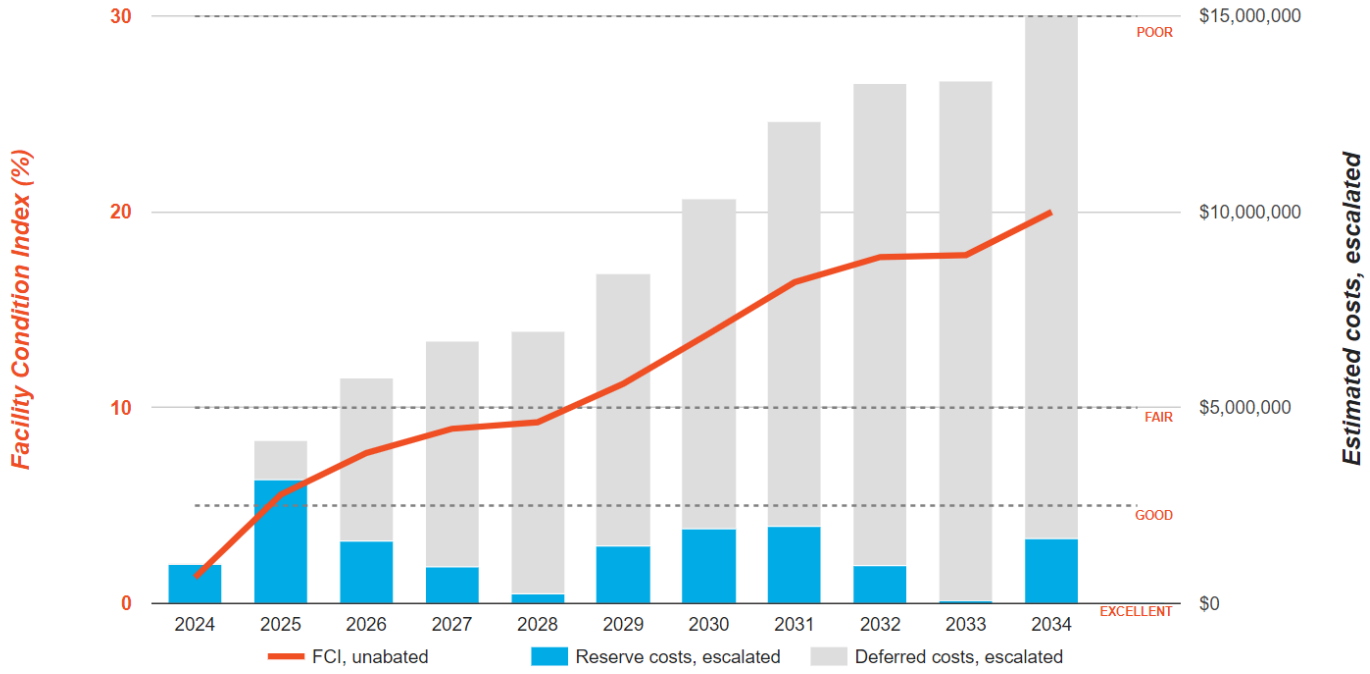
System	Immediate	Short Term (1-2 yr)	Near Term (3-5 yr)	Med Term (6-10 yr)	Long Term (11-20 yr)	TOTAL
Structure	-	-	-	-	$257,800	$257,800
Facade	-	$756,400	-	$1,678,000	-	$2,434,400
Roofing	-	$1,384,300	$2,900	$2,700	-	$1,390,000
Interiors	-	$540,800	$886,700	$1,387,500	$5,121,600	$7,936,700
Conveying	-	-	$6,600	$154,500	$8,800	$169,900
Plumbing	-	$23,900	$12,200	$216,800	$3,131,600	$3,384,400
HVAC	$964,600	$632,800	$236,000	$2,269,600	$823,000	$4,926,100
Fire Protection	-	-	-	$5,100	-	$5,100
Electrical	$40,000	$1,422,600	$139,100	-	-	$1,601,700
Fire Alarm & Electronic Systems	-	-	$1,086,400	$726,100	$677,000	$2,489,500
Equipment & Furnishings	-	-	$275,700	$112,000	$196,400	$584,100
Site Utilities	-	-	-	$23,600	-	$23,600
TOTALS (3% inflation)	**$1,004,600**	**$4,760,800**	**$2,645,700**	**$6,575,900**	**$10,216,300**	**$25,203,300**

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: Richmond Technical Center South Main Building

Replacement Value: $74,970,000 Inflation Rate: 3.0% Average Needs per Year: $1,362,500



Photographic Overview

1 - FRONT ELEVATION

2 - LEFT ELEVATION

3 - REAR ELEVATION

4 - RIGHT ELEVATION

5 - ROOFING

6 - ROOFING

7 - CAFETERIA

8 - LIBRARY

9 - OFFICE

10 - BOILER

11 - COOLING TOWER

12 - SWITCHBOARD

3. Site Summary

Site Information		
Site Area	10.7 acres (estimated)	
Parking Spaces	124 total spaces all in open lots; 2 of which are accessible	
System	*Description*	*Condition*
Pavement/Flatwork	Asphalt lots with limited areas of concrete aprons and pavement and adjacent concrete sidewalks, curbs, ramps, and stairs	Poor
Site Development	Building-mounted signage; chain link and metal tube fencing; dumpster enclosures, and site lights Park benches, picnic tables, trash receptacles	Fair
Landscaping and Topography	Limited landscaping features including lawns, trees, bushes, and planters. Irrigation present Low to moderate site slopes throughout	Fair
Utilities	Municipal water and sewer Local utility-provided electric and natural gas	Fair
Site Lighting	Pole-mounted: HPS, and metal halide	Fair
Ancillary Structures	Storage shed	Fair
Site Accessibility	Presently it does not appear an accessibility study is needed for the exterior site areas. See the appendix for associated photos and additional information.	
Site Additional Studies	The parking lot has cracks throughout and poor drainage.	

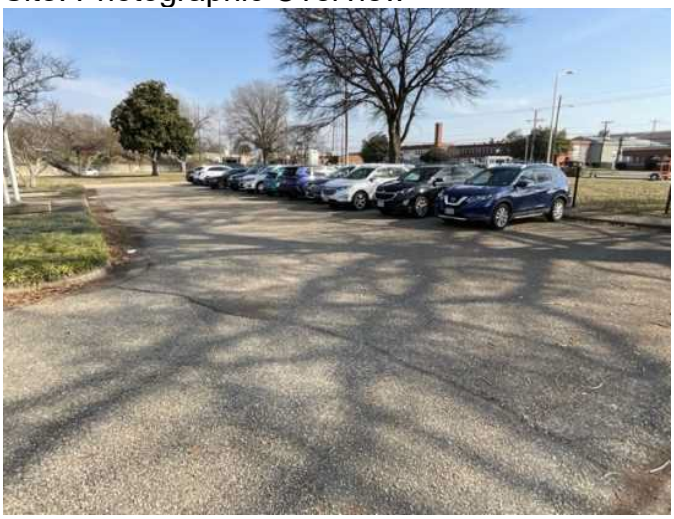
Site Information	
Site Areas Observed	The exterior areas within the property boundaries were observed to gain a clear understanding of the site's overall condition.
Site Key Spaces Not Observed	All key areas of the exterior site were accessible and observed.

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

System Expenditure Forecast

System	Immediate	Short Term (1-2 yr)	Near Term (3-5 yr)	Med Term (6-10 yr)	Long Term (11-20 yr)	TOTAL
Special Construction & Demo	-	-	-	$5,000	-	$5,000
Site Pavement	-	$528,900	-	$69,900	$174,900	$773,600
Site Development	-	-	-	$12,500	$35,900	$48,400
Site Utilities	-	-	-	$108,200	-	$108,200
Follow-up Studies	$7,000	-	-	-	-	$7,000
TOTALS (3% inflation)	**$7,000**	**$528,900**	**-**	**$195,600**	**$210,800**	**$942,300**

Site: Photographic Overview



13 - FRONT PARKING

14 - BACK PARKING

15 - SHED

16 - DUMPSTER AREA

17 - COURTYARD

18 - FENCES

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

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

5. Purpose and Scope

Purpose

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

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

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

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

Scope

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

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

6. Opinions of Probable Costs

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

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

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

Methodology

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

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

Definitions

Immediate Needs

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

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

Replacement Reserves

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

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

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

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

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

Key Findings

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

7. Certification

Richmond Public Schools (the Client) retained Bureau Veritas to perform this Facility Condition Assessment in connection with its continued operation of Richmond Technical Center South, 2020 Westwood Avenue, Richmond, VA 23230, 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.

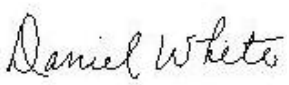
No testing, exploratory probing, dismantling or operating of equipment or in-depth studies were performed unless specifically required under the *Purpose and Scope* section of this report. This assessment did not include engineering calculations to determine the adequacy of the Property's original design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

Prepared by: Bradley Fleming,
Project Manager

Reviewed by:



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Technical Report Reviewer for
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8. Appendices

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

Appendix A:
Site Plan(s)

Site Plan

Project Number	Project Name
166385.24R000-042.468	Richmond Technical Center South
Source	**On-Site Date**
Google Earth	February 22, 2024

BUREAU VERITAS

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Appendix B:
Pre-Survey Questionnaire(s)

Bureau Veritas Facility Condition Assessment: Pre-Survey Questionnaire

Building / Facility Name: Richmond Technical Center South
Name of person completing form: Ronald Hathaway
Title / Association with property: Director of Facilities
Length of time associated w/ property: 30
Date Completed: 2/14/2024
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	1966		
2	Building size in SF	187425		
3	Major Renovation/Rehabilitation		Year	Additional Detail
		Façade		Brick
		Roof		Tar and Gravel
		Interiors		CMU, sheetrock, tile terrazzo floor
		HVAC	2019	Chiller and cooling tower replaced
		Electrical		Original existing service and panels limits expanding the CTE program
		Site Pavement		
		Accessibility	2007	Satisfied the 2007 lawsuit requirement

Question		Response
4	List other significant capital improvements (focus on recent years; provide approximate date).	Chiller and cooling tower replacement. Boilers replaced 15 years ago.
5	List any major capital expenditures planned/requested for the next few years. Have they been budgeted?	Building program scheduled to be relocated to the Altria building after renovations are completed
6	Describe any on-going extremely problematic, historically chronic, or immediate facility needs.	Exterior door hardware and frames problematic, windows leaking

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				Windows leak around the frames
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				Leaking heating and chilled water pipe insulation and ceiling tiles.
10	Are your elevators unreliable, with frequent service calls?		X			
11	Are there any plumbing leaks, water pressure, or clogging/back-up problems?		X			
12	Have there been any leaks or pressure problems with natural gas, HVAC supply/return lines, or steam service?	X				HVAC heating and chilled water piping
13	Are any areas of the facility inadequately heated, cooled or ventilated? Any poorly insulated areas?	X				Building envelope loose due to leaking windows, stains the HVAC system
14	Is the electrical service outdated, undersized, or otherwise problematic?	X				Original, existing service and panels limits expanding the CTE program
15	Are there any problems or inadequacies with exterior lighting?		X			
16	Is site/parking drainage inadequate, with excessive ponding or other problems?	X				Major potholes, parking lot holds water, drainage system not efficient
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: Richmond Technical Center South

BV Project Number: 166385.24R000-042.468

Abbreviated Accessibility Checklist					
Facility History & Interview					
	Question	Yes	No	Unk	Comments
1	Has an accessibility study been previously performed? If so, when?	X			2007
2	Have any ADA improvements been made to the property since original construction? Describe.	X			2007 lawsuit
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 ?	X			
2	Does the required number of van-accessible designated spaces appear to be provided ?	X			
3	Are accessible spaces on the shortest accessible route to an accessible building entrance ?	X			
4	Does parking signage include the International Symbol of Accessibility ?	X			
5	Does each accessible space have an adjacent access aisle ?	X			
6	Do parking spaces and access aisles appear to be relatively level and without obstruction ?	X			

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 ?	X			
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 ?	X			
3	Are curb ramps present at transitions through raised curbs on all accessible routes?	X			
4	Do curb ramps appear to have compliant slopes for all components ?	X			
5	Do ramp runs on an accessible route appear to have compliant slopes ?			X	
6	Do ramp runs on an accessible route appear to have a compliant rise and width ?			X	

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

MAIN ENTRANCE

ADDITIONAL ENTRANCE

	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 ?	✕			
8	Do thresholds at accessible entrances appear to have a compliant height ?	✕			

Abbreviated Accessibility Checklist

Interior Accessible Route

ACCESSIBLE INTERIOR PATH

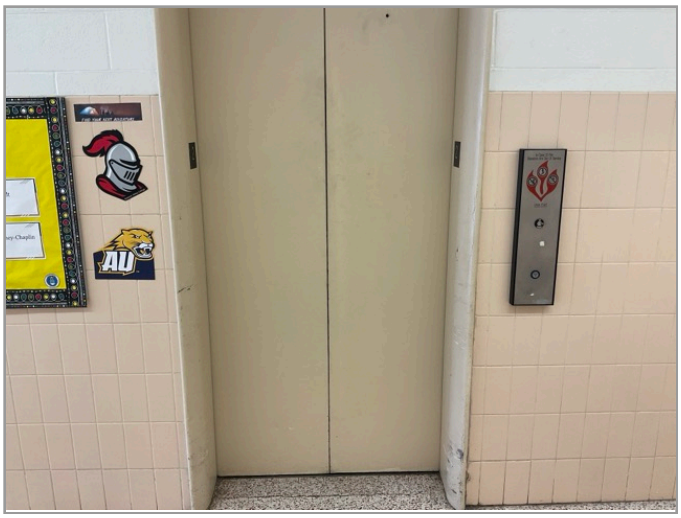
ACCESSIBLE INTERIOR PATH

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

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

Elevators



LOBBY LOOKING AT CAB

IN-CAB CONTROLS

	Question	Yes	No	NA	Comments
1	Are hallway call buttons configured with the “UP” button above the “DOWN” button?	X			
2	Is accessible floor identification signage present on the hoistway sidewalls on each level ?	X			
3	Do the elevators have audible and visual arrival indicators at the lobby and hallway entrances?	X			
4	Do the elevator hoistway and car interior appear to have a minimum compliant clear floor area ?	X			
5	Do the elevator car doors have automatic re-opening devices to prevent closure on obstructions?	X			
6	Do elevator car control buttons appear to be mounted at a compliant height ?	X			

7	Are tactile and Braille characters mounted to the left of each elevator car control button ?	✕			
8	Are audible and visual floor position indicators provided in the elevator car?	✕			
9	Is the emergency call system on or adjacent to the control panel and does it not require voice communication ?	✕			

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 ?	X			
2	Does the lavatory appear to be mounted at a compliant height and with compliant knee area ?	X			
3	Does the lavatory faucet have compliant handles ?	X			
4	Is the plumbing piping under lavatories configured to protect against contact ?	X			
5	Are grab bars provided at compliant locations around the toilet ?	X			
6	Do toilet stall doors appear to provide the minimum compliant clear width ?	X			

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

Appendix D:
Component Condition Report

Component Condition Report | Richmond Technical Center North / Main Building

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
Structure						
A1010	Throughout building	Fair	Foundation System, Concrete or CMU Walls w/ Continuous Footings, 1-2 Story Building, 1-2 Story Building	220 LF	22	7425030
B1010	Building structure	Fair	Structural Framing, Masonry (CMU) Bearing Walls	49,939 SF	22	7513348
Facade						
B2010	Building Exterior	Fair	Exterior Walls, Brick	2,200 SF	8	7425046
B2010	Building Exterior	Fair	Exterior Walls, Stone	2,200 SF	8	7425074
B2010	Exterior walls	Poor	Exterior Walls, any surface, Pressure wash	16,500 SF	0	7517216
B2010	Entrance Soffit	Poor	Exterior Walls, any painted surface, Prep & Paint	720 SF	0	7425005
B2020	Building Exterior	Poor	Window, Aluminum Double-Glazed, 16-25 SF	240	1	7425069
B2050	Building Exterior	Poor	Overhead/Dock Door, Wood, 20'x8' (160 SF)	6	1	7424999
B2050	Building Exterior	Poor	Exterior Door, Aluminum-Framed & Glazed, Standard Swing	20	1	7425064
Roofing						
B3010	Roof	Poor	Roofing, Built-Up	26,100 SF	1	7425073
B3020	Roof	Fair	Roof Appurtenances, Roof Access Ladder, Steel	24 LF	16	7425011
B3060	Roof	Poor	Roof Hatch, Metal	1	1	7425001
Interiors						
C1010	Front Entrance	Fair	Interior Wall, Stone	1,000 SF	18	7424994
C1030	Throughout building	Fair	Interior Door, Wood, Solid-Core	82	14	7424998
C1030	Throughout building	Fair	Door Hardware, School, per Door	82	10	7424983
C1070	Cafeteria	Fair	Suspended Ceilings, Hard Tile, Replacement w/ ACT	2,000 SF	10	7425013
C1070	Throughout building	Poor	Suspended Ceilings, Acoustical Tile (ACT)	48,000 SF	1	7424974
C1090	Restrooms	Fair	Toilet Partitions, Plastic/Laminate	6	6	7424992
C1090	Throughout building	Fair	Lockers, Steel-Baked Enamel, 12" W x 15" D x 72" H	300	6	7425080
C2010	Throughout building	Fair	Wall Finishes, any surface, Prep & Paint	63,000 SF	3	7425070
C2010	Throughout building	Fair	Wall Finishes, Ceramic Tile	30,000 SF	10	7425042
C2010	Classrooms	Poor	Wall Finishes, Vinyl	6,000 SF	1	7425082
C2030	Cafeteria	Good	Flooring, Luxury Vinyl Tile (LVT)	2,000 SF	12	7425061
C2030	Kitchen	Fair	Flooring, Quarry Tile	5,000 SF	15	7425006
C2030	Throughout building	Fair	Flooring, Terrazzo	35,000 SF	15	7424972
C2030	Restrooms	Fair	Flooring, Ceramic Tile	2,000 SF	10	7425068
C2030	Classrooms	Poor	Flooring, Carpet, Commercial Standard	6,000 SF	1	7425019
Conveying						
D1010	Elevator	Fair	Elevator Cab Finishes, Standard	1	6	7425059
D1010	Elevator	Fair	Passenger Elevator, Hydraulic, 2 Floors, Renovate	1	12	7425078
Plumbing						
D2010	Restrooms	Fair	Toilet, Commercial Water Closet	6	10	7424979
D2010	Utility closet	Fair	Sink/Lavatory, Service Sink, Floor	3	10	7425077
D2010	Restrooms	Fair	Sink/Lavatory, Wall-Hung, Vitreous China	4	10	7425014

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
D2010	Throughout building	Fair	Drinking Fountain, Wall-Mounted, Single-Level	4	7	7424978
D2010	Mechanical room	Fair	Water Heater, Electric, Commercial (12 kW)	1	4	7425016
D2010	Mechanical room	Fair	Water Heater, Electric, Commercial (12 kW)	1	4	7425052
D2010	Kitchen	Fair	Sink/Lavatory, Commercial Kitchen, 3-Bowl	1	14	7425060
D2010	Restrooms	Fair	Urinal, Standard	2	10	7425051
D2010	Throughout building	Fair	Plumbing System, Supply & Sanitary, Medium Density (excludes fixtures)	49,939 SF	8	7425062
D2010	Kitchen	Fair	Sink/Lavatory, Commercial Kitchen, 2-Bowl	1	14	7425047
D2010	Restrooms	Fair	Shower, Ceramic Tile	2	10	7425065
D2060	Mechanical room	Fair	Supplemental Components, Compressed Air Dryer, Process Support	1	8	7425029
D2060	Mechanical room	Fair	Air Compressor, Tank-Style	1	6	7425043
D2060	Mechanical room	Fair	Air Compressor, Tank-Style	1	12	7424966
HVAC						
D3020	Throughout building	Fair	Radiator, Hydronic, Column/Cabinet Style (per EA)	20	6	7425033
D3020	Mechanical room	Fair	Boiler, Gas, HVAC [B-2]	1	15	7424997
D3020	Mechanical room	Fair	Boiler, Gas, HVAC [B-1]	1	15	7424985
D3030	Building exterior	Fair	Split System, Condensing Unit/Heat Pump	1	6	7425025
D3030	Building exterior	Good	Split System, Condensing Unit/Heat Pump	1	13	7425076
D3030	Building exterior	Fair	Split System, Condensing Unit/Heat Pump [CU3]	1	2	7425079
D3050	Throughout building	Fair	HVAC System, Ductwork, Medium Density	49,939 SF	8	7424971
D3050	Mechanical room	Fair	Pump, Distribution, HVAC Heating Water	1	3	7425015
D3050	Throughout building	Poor	HVAC System, Hydronic Piping, 2-Pipe	49,939 SF	1	7425002
D3050	Mechanical room	Fair	Pump, Distribution, HVAC Heating Water	1	3	7424984
D3050	Mechanical room	Poor	Air Handler, Interior AHU, Easy/Moderate Access	1	1	7424969
D3050	Mechanical room	Poor	Air Handler, Interior AHU, Easy/Moderate Access	1	1	7424970
D3060	Roof	Fair	Exhaust Fan, Roof or Wall-Mounted, 10" Damper	1	3	7425054
D3060	Roof	Fair	Exhaust Fan, Roof or Wall-Mounted, 12" Damper	1	3	7424982
D3060	Roof	Good	Exhaust Fan, Roof or Wall-Mounted, 12" Damper	1	15	7424977
D3060	Mechanical room	Fair	Exhaust Fan, Centrifugal, 10 to 15 HP Motor	1	3	7424991
D3060	Roof	Fair	Exhaust Fan, Roof or Wall-Mounted, 16" Damper	1	3	7425075
D3060	Roof	Fair	Exhaust Fan, Roof or Wall-Mounted, 24" Damper	1	3	7424995
D3060	Mechanical room	Fair	Exhaust Fan, Centrifugal, 36"Damper	1	3	7425028
D3060	Roof	Fair	Exhaust Fan, Roof or Wall-Mounted, 16" Damper	1	3	7425083
D3060	Mechanical room	Fair	Exhaust Fan, Centrifugal, 42" Damper	1	4	7425012
D3060	Roof	Fair	Exhaust Fan, Roof or Wall-Mounted, 12" Damper	1	3	7425037
D3060	Throughout building	Fair	Supplemental Components, Air Purifier, Electrostatic	12	2	7425036
Fire Protection						
D4010	Kitchen	Fair	Fire Suppression System, Commercial Kitchen, per LF of Hood	10 LF	8	7425057
Electrical						
D5010	Building exterior	Poor	Generator, Diesel	1	1	7425071

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
D5010	Building exterior	Fair	Generator, Diesel	1	16	7425050
D5020	Electrical room	Fair	Distribution Panel, 277/480 V [PANEL HPI]	1	16	7425038
D5020	Electrical room	Fair	Distribution Panel, 120/208 V	1	16	7424990
D5020	Electrical room	Fair	Secondary Transformer, Dry, Stepdown	1	5	7425072
D5020	Electrical room	Fair	Distribution Panel, 120/208 V	1	16	7425024
D5020	Electrical room	Fair	Distribution Panel, 120/208 V	1	16	7425049
D5020	Mechanical room	Good	Secondary Transformer, Dry, Stepdown	1	25	7424962
D5020	Electrical room	Fair	Distribution Panel, 277/480 V	1	16	7425058
D5020	Electrical room	Fair	Distribution Panel, 120/208 V	1	16	7425055
D5020	Electrical room	Fair	Switchboard, 277/480 V [INCOMING & C.T. COMPARTMENT]	1	5	7425026
D5020	Electrical room	Fair	Secondary Transformer, Dry, Stepdown	1	5	7424967
D5030	Throughout building	Fair	Electrical System, Wiring & Switches, Average or Low Density/Complexity	49,939 SF	10	7425034
D5040	Throughout building	Fair	Interior Lighting System, Full Upgrade, Medium Density & Standard Fixtures	49,939 SF	6	7424986
Fire Alarm & Electronic Systems						
D6020	Throughout building	Fair	Low Voltage System, Phone & Data Lines	49,939 SF	6	7425027
D6060	Throughout building	Fair	Intercom/PA System, Public Address Upgrade, Facility-Wide	49,939 SF	6	7425044
D7030	Throughout building	Fair	Security/Surveillance System, Full System Upgrade, Average Density	49,939 SF	8	7425007
D7050	Throughout building	Fair	Fire Alarm System, Full System Upgrade, Standard Addressable, Upgrade/Install	49,939 SF	4	7425008
D7050	Office	Fair	Fire Alarm Panel, Fully Addressable	1	4	7513349
Equipment & Furnishings						
E1010	Classrooms	Fair	Vehicle Lift, 2-Post	1	7	7425032
E1030	Kitchen	Fair	Foodservice Equipment, Walk-In, Combination Freezer/Refigerator	1	10	7424988
E1030	Kitchen	Fair	Foodservice Equipment, Refrigerator, 2-Door Reach-In	1	7	7424975
E1030	Kitchen	Fair	Foodservice Equipment, Steamer, Freestanding	1	5	7424987
E1030	Kitchen	Fair	Foodservice Equipment, Steamer, Freestanding	1	5	7425035
E1030	Kitchen	Fair	Foodservice Equipment, Exhaust Hood, 3 to 6 LF	1	7	7425009
E1030	Kitchen	Fair	Foodservice Equipment, Dishwasher Commercial	1	5	7425022
E1030	Kitchen	Fair	Foodservice Equipment, Food Warmer, Proofing Cabinet on Wheels	1	7	7425020
E1030	Kitchen	Fair	Foodservice Equipment, Griddle	1	7	7424965
E1030	Kitchen	Fair	Foodservice Equipment, Dairy Cooler/Wells	1	7	7424964
E1030	Kitchen	Fair	Foodservice Equipment, Exhaust Hood, 8 to 10 LF	1	7	7424981
E1030	Kitchen	Fair	Foodservice Equipment, Convection Oven, Single	1	5	7424973
E1030	Kitchen	Fair	Foodservice Equipment, Walk-In, Condenser for Refigerator/Freezer	1	3	7425023
E1030	Kitchen	Fair	Foodservice Equipment, Refrigerator, 1-Door Reach-In	1	7	7425010
E1030	Kitchen	Fair	Foodservice Equipment, Range, 2-Burner	1	7	7425000
E1030	Kitchen	Fair	Foodservice Equipment, Convection Oven, Single	1	5	7425041
E1030	Kitchen	Fair	Foodservice Equipment, Food Warmer, Proofing Cabinet on Wheels	1	7	7425031
E1030	Kitchen	Fair	Foodservice Equipment, Walk-In, Condenser for Refigerator/Freezer	1	7	7425081
E1030	Kitchen	Fair	Foodservice Equipment, Refrigerator, Undercounter 2-Door	1	7	7425056

Component Condition Report | Richmond Technical Center North / Main Building

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
E1030	Kitchen	Fair	Foodservice Equipment, Freezer, 2-Door Reach-In	1	7	7425039
E1030	Kitchen	Fair	Foodservice Equipment, Icemaker, Freestanding	1	7	7424968
E1030	Kitchen	Fair	Foodservice Equipment, Range/Oven, 6-Burner	1	7	7425003
E1030	Kitchen	Fair	Foodservice Equipment, Deep Fryer	1	7	7425066
E1040	Throughout building	Good	Healthcare Equipment, Defibrillator (AED), Cabinet-Mounted	1	8	7425048
E2010	Throughout building	Fair	Casework, Countertop, Plastic Laminate	120 LF	4	7424976
E2010	Throughout building	Fair	Casework, Cabinetry Economy	200 LF	5	7425021
E2050	Office	Fair	Office Furniture & Cubicles, Budgetary Upgrade, Mid-Range	2,000 SF	6	7425017
Sitework						
G4050	Building exterior	Fair	Exterior Fixture w/ Lamp, any type, w/ LED Replacement	24	8	7425004
Follow-up Studies						
P2030	Throughout building	Poor	Engineering Study, Structural, Seismic, Evaluate/Report	1	0	7424993

Component Condition Report | Richmond Technical Center North / Site

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
Pedestrian Plazas & Walkways						
G2020	Site	Poor	Parking Lots, Pavement, Asphalt, Seal & Stripe	105,000 SF	1	7424996
G2020	Site	Poor	Parking Lots, Pavement, Asphalt, Mill & Overlay	105,000 SF	1	7424980
Sitework						
G2060	Site	Fair	Signage, Property, Building or Pole-Mounted, Replace/Install	1	8	7424963
G2060	Site	Fair	Signage, Property, Building-Mounted Individual Letters, Replace/Install	8	4	7425045
G2060	Site	Fair	Flagpole, Metal	2	12	7425018
G2060	Site	Fair	Fences & Gates, Fence, Chain Link 6'	200 LF	18	7425067
G2060	Site	Fair	Trash Receptacle, Medium-Duty Metal or Precast	4	5	7424989
G2080	Landscape	Fair	Irrigation System, Pop-Up Spray Heads, Commercial	89,000 SF	10	7518770
G4050	Site	Fair	Pole Light Fixture w/ Lamps, any type 20' High, w/ LED Replacement, Replace/Install	14	8	7425053
Follow-up Studies						
P2030		NA	Engineering Study, Civil, Roadway & Driveway, Evaluate/Report	1	0	7517271

Appendix E:
Replacement Reserves

Replacement Reserves Report

5/9/2024

Location	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	Total Escalated Estimate
Richmond Technical Center North	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
Richmond Technical Center North / Main Building	$22,700	$1,346,050	$115,638	$170,903	$232,549	$294,108	$739,397	$220,049	$1,408,728	$0	$1,077,482	$62,291	$316,519	$146,413	$93,781	$1,210,073	$224,916	$180,160	$106,913	$36,824	$4,877	**$8,010,369**
Richmond Technical Center North / Site	$7,000	$427,193	$0	$0	$1,351	$3,246	$56,419	$0	$72,839	$0	$119,609	$65,405	$7,129	$0	$0	$0	$75,822	$0	$7,150	$0	$0	**$843,162**
Grand Total	**$29,700**	**$1,773,243**	**$115,638**	**$170,903**	**$233,900**	**$297,354**	**$795,816**	**$220,049**	**$1,481,567**	**$0**	**$1,197,090**	**$127,696**	**$323,648**	**$146,413**	**$93,781**	**$1,210,073**	**$300,738**	**$180,160**	**$114,063**	**$36,824**	**$4,877**	**$8,853,531**

Richmond Technical Center North

Richmond Technical Center North / Main Building

Uniformat Code	Location Description	ID	Cost Description	Lifespan (EUL)	EAge	RUL	Quantity	Unit	Unit Cost *	Subtotal	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	Deficiency Repair Estimate
B2010	Entrance Soffit	7425005	Exterior Walls, any painted surface, Prep & Paint	10	10	0	720	SF	$3.75	$2,700	$2,700										$2,700										$2,700	**$8,100**
B2010	Exterior walls	7517216	Exterior Walls, any surface, Pressure wash	0	53	* 0	16500	SF	$4.50	$74,250		$74,250																				**$74,250**
B2010	Building Exterior	7425074	Exterior Walls, Stone, Replace	50	42	8	2200	SF	$55.00	$121,000									$121,000													**$121,000**
B2010	Building Exterior	7425046	Exterior Walls, Brick, Replace	50	42	8	2200	SF	$53.00	$116,600									$116,600													**$116,600**
B2020	Building Exterior	7425069	Window, Aluminum Double-Glazed, 16-25 SF, Replace	30	29	1	240	EA	$950.00	$228,000		$228,000																				**$228,000**
B2050	Building Exterior	7425064	Exterior Door, Aluminum-Framed & Glazed, Standard Swing, Replace	30	29	1	20	EA	$1,300.00	$26,000		$26,000																				**$26,000**
B2050	Building Exterior	7424999	Overhead/Dock Door, Wood, 20'x8' (160 SF), Replace	30	29	1	6	EA	$8,700.00	$52,200		$52,200																				**$52,200**
B3010	Roof	7425073	Roofing, Built-Up, Replace	25	24	1	26100	SF	$14.00	$365,400		$365,400																				**$365,400**
B3020	Roof	7425011	Roof Appurtenances, Roof Access Ladder, Steel, Replace	40	24	16	24	LF	$90.00	$2,160																	$2,160					**$2,160**
B3060	Roof	7425001	Roof Hatch, Metal, Replace	30	29	1	1	EA	$1,300.00	$1,300		$1,300																				**$1,300**
C1010	Front Entrance	7424994	Interior Wall, Stone, Replace	50	32	18	1000	SF	$55.00	$55,000																			$55,000			**$55,000**
C1030	Throughout building	7424998	Interior Door, Wood, Solid-Core, Replace	40	26	14	82	EA	$700.00	$57,400															$57,400							**$57,400**
C1030	Throughout building	7424983	Door Hardware, School, per Door, Replace	30	20	10	82	EA	$400.00	$32,800											$32,800											**$32,800**
C1070	Throughout building	7424974	Suspended Ceilings, Acoustical Tile (ACT), Replace	25	24	1	48000	SF	$3.50	$168,000		$168,000																				**$168,000**
C1070	Cafeteria	7425013	Suspended Ceilings, Hard Tile, Replacement w/ ACT, Replace	25	15	10	2000	SF	$3.50	$7,000											$7,000											**$7,000**
C1090	Restrooms	7424992	Toilet Partitions, Plastic/Laminate, Replace	20	14	6	6	EA	$750.00	$4,500							$4,500															**$4,500**
C1090	Throughout building	7425080	Lockers, Steel-Baked Enamel, 12" W x 15" D x 72" H, Replace	20	14	6	300	EA	$500.00	$150,000							$150,000															**$150,000**
C2010	Throughout building	7425042	Wall Finishes, Ceramic Tile, Replace	40	30	10	30000	SF	$18.00	$540,000											$540,000											**$540,000**
C2010	Classrooms	7425082	Wall Finishes, Vinyl, Replace	15	14	1	6000	SF	$2.50	$15,000		$15,000																$15,000				**$30,000**
C2010	Throughout building	7425070	Wall Finishes, any surface, Prep & Paint	10	7	3	63000	SF	$1.50	$94,500				$94,500										$94,500								**$189,000**
C2030	Restrooms	7425068	Flooring, Ceramic Tile, Replace	40	30	10	2000	SF	$18.00	$36,000											$36,000											**$36,000**
C2030	Kitchen	7425006	Flooring, Quarry Tile, Replace	50	35	15	5000	SF	$26.00	$130,000																$130,000						**$130,000**
C2030	Cafeteria	7425061	Flooring, Luxury Vinyl Tile (LVT), Replace	15	3	12	2000	SF	$7.50	$15,000														$15,000								**$15,000**
C2030	Throughout building	7424972	Flooring, Terrazzo, Replace	50	35	15	35000	SF	$14.00	$490,000																$490,000						**$490,000**
C2030	Classrooms	7425019	Flooring, Carpet, Commercial Standard, Replace	10	9	1	6000	SF	$7.50	$45,000		$45,000												$45,000								**$90,000**
D1010	Elevator	7425059	Elevator Cab Finishes, Standard, Replace	15	9	6	1	EA	$9,000.00	$9,000							$9,000															**$9,000**
D1010	Elevator	7425078	Passenger Elevator, Hydraulic, 2 Floors, Renovate	30	18	12	1	EA	$60,000.00	$60,000														$60,000								**$60,000**
D2010	Mechanical room	7425052	Water Heater, Electric, Commercial (12 kW), Replace	20	16	4	1	EA	$12,400.00	$12,400						$12,400																**$12,400**
D2010	Mechanical room	7425016	Water Heater, Electric, Commercial (12 kW), Replace	20	16	4	1	EA	$12,400.00	$12,400						$12,400																**$12,400**
D2010	Throughout building	7425062	Plumbing System, Supply & Sanitary, Medium Density (excludes fixtures), Replace	40	32	8	49939	SF	$11.00	$549,329									$549,329													**$549,329**
D2010	Throughout building	7424978	Drinking Fountain, Wall-Mounted, Single-Level, Replace	15	8	7	4	EA	$1,200.00	$4,800								$4,800														**$4,800**
D2010	Restrooms	7425051	Urinal, Standard, Replace	30	20	10	2	EA	$1,100.00	$2,200											$2,200											**$2,200**
D2010	Restrooms	7425065	Shower, Ceramic Tile, Replace	30	20	10	2	EA	$2,500.00	$5,000											$5,000											**$5,000**
D2010	Restrooms	7424979	Toilet, Commercial Water Closet, Replace	30	20	10	6	EA	$1,300.00	$7,800											$7,800											**$7,800**
D2010	Utility closet	7425077	Sink/Lavatory, Service Sink, Floor, Replace	35	25	10	3	EA	$800.00	$2,400											$2,400											**$2,400**
D2010	Restrooms	7425014	Sink/Lavatory, Wall-Hung, Vitreous China, Replace	30	20	10	4	EA	$1,500.00	$6,000											$6,000											**$6,000**
D2010	Kitchen	7425047	Sink/Lavatory, Commercial Kitchen, 2-Bowl, Replace	30	16	14	1	EA	$2,100.00	$2,100															$2,100							**$2,100**
D2010	Kitchen	7425060	Sink/Lavatory, Commercial Kitchen, 3-Bowl, Replace	30	16	14	1	EA	$2,500.00	$2,500															$2,500							**$2,500**
D2060	Mechanical room	7425043	Air Compressor, Tank-Style, Replace	20	14	6	1	EA	$10,600.00	$10,600							$10,600															**$10,600**
D2060	Mechanical room	7425029	Supplemental Components, Compressed Air Dryer, Process Support, Replace	20	12	8	1	EA	$5,600.00	$5,600									$5,600													**$5,600**
D2060	Mechanical room	7424966	Air Compressor, Tank-Style, Replace	20	8	12	1	EA	$41,400.00	$41,400														$41,400								**$41,400**
D3020	Mechanical room	7424997	Boiler, Gas, HVAC, Replace	30	15	15	1	EA	$50,800.00	$50,800																$50,800						**$50,800**
D3020	Mechanical room	7424985	Boiler, Gas, HVAC, Replace	30	15	15	1	EA	$50,800.00	$50,800																$50,800						**$50,800**
D3020	Throughout building	7425033	Radiator, Hydronic, Column/Cabinet Style (per EA), Replace	30	24	6	20	EA	$800.00	$16,000							$16,000															**$16,000**
D3030	Building exterior	7425079	Split System, Condensing Unit/Heat Pump, Replace	15	13	2	1	EA	$3,400.00	$3,400				$3,400															$3,400			**$6,800**
D3030	Building exterior	7425025	Split System, Condensing Unit/Heat Pump, Replace	15	9	6	1	EA	$7,100.00	$7,100							$7,100															**$7,100**
D3030	Building exterior	7425076	Split System, Condensing Unit/Heat Pump, Replace	15	2	13	1	EA	$5,200.00	$5,200														$5,200								**$5,200**
D3050	Throughout building	7425002	HVAC System, Hydronic Piping, 2-Pipe, Replace	40	39	1	49939	SF	$5.00	$249,695		$249,695																				**$249,695**

Replacement Reserves Report

5/9/2024

Uniformat Code	Location Description	ID	Cost Description	Lifespan (EUL)	EAge	RUL	Quantity	Unit	Unit Cost *	Subtotal	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	Deficiency Repair Estimate
D3050	Mechanical room	7424984	Pump, Distribution, HVAC Heating Water, Replace	25	22	3	1	EA	$6,100.00	$6,100				$6,100																		**$6,100**
D3050	Mechanical room	7425015	Pump, Distribution, HVAC Heating Water, Replace	25	22	3	1	EA	$6,100.00	$6,100				$6,100																		**$6,100**
D3050	Mechanical room	7424969	Air Handler, Interior AHU, Easy/Moderate Access, Replace	30	29	1	1	EA	$40,000.00	$40,000		$40,000																				**$40,000**
D3050	Mechanical room	7424970	Air Handler, Interior AHU, Easy/Moderate Access, Replace	25	24	1	1	EA	$22,000.00	$22,000		$22,000																				**$22,000**
D3050	Throughout building	7424971	HVAC System, Ductwork, Medium Density, Replace	30	22	8	49939	SF	$4.00	$199,756								$199,756														**$199,756**
D3060	Roof	7425083	Exhaust Fan, Roof or Wall-Mounted, 16" Damper, Replace	20	17	3	1	EA	$2,400.00	$2,400				$2,400																		**$2,400**
D3060	Mechanical room	7425028	Exhaust Fan, Centrifugal, 36"Damper, Replace	25	22	3	1	EA	$5,600.00	$5,600				$5,600																		**$5,600**
D3060	Roof	7425037	Exhaust Fan, Roof or Wall-Mounted, 12" Damper, Replace	20	17	3	1	EA	$1,400.00	$1,400				$1,400																		**$1,400**
D3060	Roof	7425054	Exhaust Fan, Roof or Wall-Mounted, 10" Damper, Replace	20	17	3	1	EA	$1,200.00	$1,200				$1,200																		**$1,200**
D3060	Roof	7424982	Exhaust Fan, Roof or Wall-Mounted, 12" Damper, Replace	20	17	3	1	EA	$1,400.00	$1,400				$1,400																		**$1,400**
D3060	Roof	7424995	Exhaust Fan, Roof or Wall-Mounted, 24" Damper, Replace	20	17	3	1	EA	$3,000.00	$3,000				$3,000																		**$3,000**
D3060	Mechanical room	7424991	Exhaust Fan, Centrifugal, 10 to 15 HP Motor, Replace	25	22	3	1	EA	$26,000.00	$26,000				$26,000																		**$26,000**
D3060	Roof	7425075	Exhaust Fan, Roof or Wall-Mounted, 16" Damper, Replace	20	17	3	1	EA	$2,400.00	$2,400				$2,400																		**$2,400**
D3060	Mechanical room	7425012	Exhaust Fan, Centrifugal, 42" Damper, Replace	25	21	4	1	EA	$11,000.00	$11,000					$11,000																	**$11,000**
D3060	Roof	7424977	Exhaust Fan, Roof or Wall-Mounted, 12" Damper, Replace	20	5	15	1	EA	$1,400.00	$1,400																$1,400						**$1,400**
D3060	Throughout building	7425036	Supplemental Components, Air Purifier, Electrostatic, Replace	5	3	2	12	EA	$8,800.00	$105,600			$105,600					$105,600					$105,600					$105,600				**$422,400**
D4010	Kitchen	7425057	Fire Suppression System, Commercial Kitchen, per LF of Hood, Replace	20	12	8	10	LF	$400.00	$4,000									$4,000													**$4,000**
D5010	Building exterior	7425071	Generator, Diesel, Replace	25	24	1	1	EA	$20,000.00	$20,000		$20,000																				**$20,000**
D5010	Building exterior	7425050	Generator, Diesel, Replace	25	9	16	1	EA	$40,000.00	$40,000																	$40,000					**$40,000**
D5020	Electrical room	7425026	Switchboard, 277/480 V, Replace	40	35	5	1	EA	$120,000.00	$120,000						$120,000																**$120,000**
D5020	Electrical room	7424967	Secondary Transformer, Dry, Stepdown, Replace	30	25	5	1	EA	$20,000.00	$20,000						$20,000																**$20,000**
D5020	Electrical room	7425072	Secondary Transformer, Dry, Stepdown, Replace	30	25	5	1	EA	$25,000.00	$25,000						$25,000																**$25,000**
D5020	Electrical room	7425058	Distribution Panel, 277/480 V, Replace	30	14	16	1	EA	$7,000.00	$7,000																	$7,000					**$7,000**
D5020	Electrical room	7425055	Distribution Panel, 120/208 V, Replace	30	14	16	1	EA	$6,000.00	$6,000																	$6,000					**$6,000**
D5020	Electrical room	7425024	Distribution Panel, 120/208 V, Replace	30	14	16	1	EA	$7,000.00	$7,000																	$7,000					**$7,000**
D5020	Electrical room	7425049	Distribution Panel, 120/208 V, Replace	30	14	16	1	EA	$7,000.00	$7,000																	$7,000					**$7,000**
D5020	Electrical room	7425038	Distribution Panel, 277/480 V, Replace	30	14	16	1	EA	$10,000.00	$10,000																	$10,000					**$10,000**
D5020	Electrical room	7424990	Distribution Panel, 120/208 V, Replace	30	14	16	1	EA	$6,000.00	$6,000																	$6,000					**$6,000**
D5030	Throughout building	7425034	Electrical System, Wiring & Switches, Average or Low Density/Complexity, Replace	40	30	10	49939	SF	$2.50	$124,848											$124,848											**$124,848**
D5040	Throughout building	7424986	Interior Lighting System, Full Upgrade, Medium Density & Standard Fixtures, Replace	20	14	6	49939	SF	$4.50	$224,726							$224,726															**$224,726**
D6020	Throughout building	7425027	Low Voltage System, Phone & Data Lines, Replace	20	14	6	49939	SF	$1.50	$74,909							$74,909															**$74,909**
D6060	Throughout building	7425044	Intercom/PA System, Public Address Upgrade, Facility-Wide, Replace	20	14	6	49939	SF	$1.65	$82,399							$82,399															**$82,399**
D7030	Throughout building	7425007	Security/Surveillance System, Full System Upgrade, Average Density, Replace	15	7	8	49939	SF	$2.00	$99,878									$99,878													**$99,878**
D7050	Throughout building	7425008	Fire Alarm System, Full System Upgrade, Standard Addressable, Upgrade/Install	20	16	4	49939	SF	$3.00	$149,817					$149,817																	**$149,817**
D7050	Office	7513349	Fire Alarm Panel, Fully Addressable, Replace	15	11	4	1	EA	$15,000.00	$15,000					$15,000														$15,000			**$30,000**
E1010	Classrooms	7425032	Vehicle Lift, 2-Post, Replace	15	8	7	1	EA	$4,920.00	$4,920								$4,920														**$4,920**
E1030	Kitchen	7425023	Foodservice Equipment, Walk-In, Condenser for Refigerator/Freezer, Replace	15	12	3	1	EA	$6,300.00	$6,300			$6,300																$6,300				**$12,600**
E1030	Kitchen	7425041	Foodservice Equipment, Convection Oven, Single, Replace	10	5	5	1	EA	$5,600.00	$5,600						$5,600										$5,600						**$11,200**
E1030	Kitchen	7425035	Foodservice Equipment, Steamer, Freestanding, Replace	10	5	5	1	EA	$10,500.00	$10,500						$10,500										$10,500						**$21,000**
E1030	Kitchen	7424973	Foodservice Equipment, Convection Oven, Single, Replace	10	5	5	1	EA	$5,600.00	$5,600						$5,600										$5,600						**$11,200**
E1030	Kitchen	7424987	Foodservice Equipment, Steamer, Freestanding, Replace	10	5	5	1	EA	$10,500.00	$10,500						$10,500										$10,500						**$21,000**
E1030	Kitchen	7425022	Foodservice Equipment, Dishwasher Commercial, Replace	10	5	5	1	EA	$21,500.00	$21,500						$21,500										$21,500						**$43,000**
E1030	Kitchen	7425056	Foodservice Equipment, Refrigerator, Undercounter 2-Door, Replace	15	8	7	1	EA	$1,700.00	$1,700								$1,700														**$1,700**
E1030	Kitchen	7425039	Foodservice Equipment, Freezer, 2-Door Reach-In, Replace	15	8	7	1	EA	$5,100.00	$5,100								$5,100														**$5,100**
E1030	Kitchen	7425000	Foodservice Equipment, Range, 2-Burner, Replace	15	8	7	1	EA	$1,700.00	$1,700								$1,700														**$1,700**
E1030	Kitchen	7425031	Foodservice Equipment, Food Warmer, Proofing Cabinet on Wheels, Replace	15	8	7	1	EA	$1,700.00	$1,700								$1,700														**$1,700**
E1030	Kitchen	7425081	Foodservice Equipment, Walk-In, Condenser for Refigerator/Freezer, Replace	15	8	7	1	EA	$6,300.00	$6,300								$6,300														**$6,300**
E1030	Kitchen	7424968	Foodservice Equipment, Icemaker, Freestanding, Replace	15	8	7	1	EA	$6,700.00	$6,700								$6,700														**$6,700**
E1030	Kitchen	7425003	Foodservice Equipment, Range/Oven, 6-Burner, Replace	15	8	7	1	EA	$6,000.00	$6,000								$6,000														**$6,000**
E1030	Kitchen	7424981	Foodservice Equipment, Exhaust Hood, 8 to 10 LF, Replace	15	8	7	1	EA	$4,500.00	$4,500								$4,500														**$4,500**
E1030	Kitchen	7425010	Foodservice Equipment, Refrigerator, 1-Door Reach-In, Replace	15	8	7	1	EA	$2,700.00	$2,700								$2,700														**$2,700**
E1030	Kitchen	7425066	Foodservice Equipment, Deep Fryer, Replace	15	8	7	1	EA	$7,000.00	$7,000								$7,000														**$7,000**
E1030	Kitchen	7424975	Foodservice Equipment, Refrigerator, 2-Door Reach-In, Replace	15	8	7	1	EA	$4,600.00	$4,600								$4,600														**$4,600**
E1030	Kitchen	7425009	Foodservice Equipment, Exhaust Hood, 3 to 6 LF, Replace	15	8	7	1	EA	$3,300.00	$3,300								$3,300														**$3,300**
E1030	Kitchen	7425020	Foodservice Equipment, Food Warmer, Proofing Cabinet on Wheels, Replace	15	8	7	1	EA	$1,700.00	$1,700								$1,700														**$1,700**
E1030	Kitchen	7424965	Foodservice Equipment, Griddle, Replace	15	8	7	1	EA	$7,000.00	$7,000								$7,000														**$7,000**
E1030	Kitchen	7424964	Foodservice Equipment, Dairy Cooler/Wells, Replace	15	8	7	1	EA	$3,600.00	$3,600								$3,600														**$3,600**

Replacement Reserves Report

5/9/2024

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
E1030	Kitchen	7424988	Foodservice Equipment, Walk-In, Combination Freezer/Refigerator, Replace	20	10	10	1	EA	$35,000.00	$35,000											$35,000											**$35,000**
E1040	Throughout building	7425048	Healthcare Equipment, Defibrillator (AED), Cabinet-Mounted, Replace	10	2	8	1	EA	$1,500.00	$1,500									$1,500										$1,500			**$3,000**
E2010	Throughout building	7424976	Casework, Countertop, Plastic Laminate, Replace	15	11	4	120	LF	$50.00	$6,000					$6,000															$6,000		**$12,000**
E2010	Throughout building	7425021	Casework, Cabinetry Economy, Replace	20	15	5	200	LF	$175.00	$35,000						$35,000																**$35,000**
E2050	Office	7425017	Office Furniture & Cubicles, Budgetary Upgrade, Mid-Range, Replace	10	4	6	2000	SF	$20.00	$40,000							$40,000										$40,000					**$80,000**
G4050	Building exterior	7425004	Exterior Fixture w/ Lamp, any type, w/ LED Replacement, Replace	20	12	8	24	EA	$600.00	$14,400									$14,400													**$14,400**
P2030	Throughout building	7424993	Engineering Study, Structural, Seismic, Evaluate/Report	0	0	0	1	EA	$20,000.00	$20,000	$20,000																					**$20,000**
Totals, Unescalated											**$22,700**	**$1,306,845**	**$109,000**	**$156,400**	**$206,617**	**$253,700**	**$619,233**	**$178,920**	**$1,112,063**	**$0**	**$801,748**	**$45,000**	**$222,000**	**$99,700**	**$62,000**	**$776,700**	**$140,160**	**$109,000**	**$62,800**	**$21,000**	**$2,700**	**$6,308,286**
Totals, Escalated (3.0% inflation, compounded annually)											**$22,700**	**$1,346,050**	**$115,638**	**$170,903**	**$232,549**	**$294,108**	**$739,397**	**$220,049**	**$1,408,728**	**$0**	**$1,077,482**	**$62,291**	**$316,519**	**$146,413**	**$93,781**	**$1,210,073**	**$224,916**	**$180,160**	**$106,913**	**$36,824**	**$4,877**	**$8,010,369**

Richmond Technical Center North / 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	7424996	Parking Lots, Pavement, Asphalt, Seal & Stripe	5	4	1	105000	SF	$0.45	$47,250		$47,250					$47,250					$47,250					$47,250					**$189,000**
G2020	Site	7424980	Parking Lots, Pavement, Asphalt, Mill & Overlay	25	24	1	105000	SF	$3.50	$367,500		$367,500																				**$367,500**
G2060	Site	7424989	Trash Receptacle, Medium-Duty Metal or Precast, Replace	20	15	5	4	EA	$700.00	$2,800					$2,800																	**$2,800**
G2060	Site	7425067	Fences & Gates, Fence, Chain Link 6', Replace	40	22	18	200	LF	$21.00	$4,200																	$4,200					**$4,200**
G2060	Site	7425045	Signage, Property, Building-Mounted Individual Letters, Replace/Install	20	16	4	8	EA	$150.00	$1,200				$1,200																		**$1,200**
G2060	Site	7424963	Signage, Property, Building or Pole-Mounted, Replace/Install	20	12	8	1	EA	$1,500.00	$1,500								$1,500														**$1,500**
G2060	Site	7425018	Flagpole, Metal, Replace	30	18	12	2	EA	$2,500.00	$5,000												$5,000										**$5,000**
G2080	Landscape	7518770	Irrigation System, Pop-Up Spray Heads, Commercial, Replace	20	10	10	89000	SF	$1.00	$89,000										$89,000												**$89,000**
G4050	Site	7425053	Pole Light Fixture w/ Lamps, any type 20' High, w/ LED Replacement, Replace/Install	20	12	8	14	EA	$4,000.00	$56,000								$56,000														**$56,000**
P2030	Site	7517271	Engineering Study, Civil, Roadway & Driveway, Evaluate/Report	0	53	0	1	EA	$7,000.00	$7,000	$7,000																					**$7,000**
Totals, Unescalated											**$7,000**	**$414,750**	**$0**	**$0**	**$1,200**	**$2,800**	**$47,250**	**$0**	**$57,500**	**$0**	**$89,000**	**$47,250**	**$5,000**	**$0**	**$0**	**$0**	**$47,250**	**$0**	**$4,200**	**$0**	**$0**	**$723,200**
Totals, Escalated (3.0% inflation, compounded annually)											**$7,000**	**$427,193**	**$0**	**$0**	**$1,351**	**$3,246**	**$56,419**	**$0**	**$72,839**	**$0**	**$119,609**	**$65,405**	**$7,129**	**$0**	**$0**	**$0**	**$75,822**	**$0**	**$7,150**	**$0**	**$0**	**$843,162**

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	7425078	D1010	**Passenger Elevator**	Hydraulic, 2 Floors	3000 - 4000 LB	Richmond Technical Center North / Main Building	Elevator	No dataplate	No dataplate	No dataplate		https://rvaschools.gofmx.com/equipment/1555042	

D20 Plumbing

Index	ID	UFCode	Component Description	Attributes	Capacity	Building	Location Detail	Manufacturer	Model	Serial	Dataplate Yr	Barcode	Qty
1	7425016	D2010	**Water Heater**	Electric, Commercial (12 kW)	80 GAL	Richmond Technical Center North / Main Building	Mechanical room	Bradford White	MII80363SF70	ED10438055	2008	https://rvaschools.gofmx.com/equipment/1555001	
2	7425052	D2010	**Water Heater**	Electric, Commercial (12 kW)	80 GAL	Richmond Technical Center North / Main Building	Mechanical room	Bradford White	MII80363SF70	EK11187778	2008	https://rvaschools.gofmx.com/equipment/1555022	
3	7425043	D2060	**Air Compressor**	Tank-Style	3 HP	Richmond Technical Center North / Main Building	Mechanical room	A. O. Smith	E217V1	153126M		https://rvaschools.gofmx.com/equipment/1555000	
4	7424966	D2060	**Air Compressor**	Tank-Style	30 HP	Richmond Technical Center North / Main Building	Mechanical room	Ingersoll Rand	UP6S-30-125	CBV474741		https://rvaschools.gofmx.com/equipment/1554992	
5	7425029	D2060	**Supplemental Components**	Compressed Air Dryer, Process Support	20 CFM	Richmond Technical Center North / Main Building	Mechanical room	Ingersoll Rand	D127ECA100	541666		https://rvaschools.gofmx.com/equipment/1554991	

D30 HVAC

Index	ID	UFCode	Component Description	Attributes	Capacity	Building	Location Detail	Manufacturer	Model	Serial	Dataplate Yr	Barcode	Qty
1	7424985	D3020	**Boiler** [B-1]	Gas, HVAC	2000 MBH	Richmond Technical Center North / Main Building	Mechanical room	Patterson-Kelley	N-2000-2	No dataplate	2009	https://rvaschools.gofmx.com/equipment/1554997	
2	7424997	D3020	**Boiler** [B-2]	Gas, HVAC	2000 MBH	Richmond Technical Center North / Main Building	Mechanical room	Patterson-Kelley	N-2000-2	No dataplate	2009	https://rvaschools.gofmx.com/equipment/1554998	
3	7425033	D3020	**Radiator**	Hydronic, Column/Cabinet Style (per EA)		Richmond Technical Center North / Main Building	Throughout building						20
4	7425025	D3030	**Split System**	Condensing Unit/Heat Pump	5 TON	Richmond Technical Center North / Main Building	Building exterior	Carrier	HCA760GKA200	E152116116	2015	https://rvaschools.gofmx.com/equipment/1555032	
5	7425076	D3030	**Split System**	Condensing Unit/Heat Pump	4 TON	Richmond Technical Center North / Main Building	Building exterior	Carrier	N4A5548AKAHAABAB	E223706355	2022	https://rvaschools.gofmx.com/equipment/1555033	
6	7425079	D3030	**Split System** [CU3]	Condensing Unit/Heat Pump	2 TON	Richmond Technical Center North / Main Building	Building exterior	Carrier	25HNA624A300	0207E24210		https://rvaschools.gofmx.com/equipment/1555031	
7	7425015	D3050	**Pump**	Distribution, HVAC Heating Water	5 HP	Richmond Technical Center North / Main Building	Mechanical room	Baldor	EJMM3218T	166687T139		https://rvaschools.gofmx.com/equipment/1554995	
8	7424984	D3050	**Pump**	Distribution, HVAC Heating Water	5 HP	Richmond Technical Center North / Main Building	Mechanical room	Baldor	EJMM3218T	166687T139		https://rvaschools.gofmx.com/equipment/1554996	
9	7424969	D3050	**Air Handler**	Interior AHU, Easy/Moderate Access	8000 CFM	Richmond Technical Center North / Main Building	Mechanical room	No dataplate	No dataplate	No dataplate		https://rvaschools.gofmx.com/equipment/1555030	
10	7424970	D3050	**Air Handler**	Interior AHU, Easy/Moderate Access	4000 CFM	Richmond Technical Center North / Main Building	Mechanical room	Carrier	39CD1052UR10	724425946		https://rvaschools.gofmx.com/equipment/1555029	
11	7425028	D3060	**Exhaust Fan**	Centrifugal, 36"Damper	12750 CFM	Richmond Technical Center North / Main Building	Mechanical room	Carrier	27GA33CAA	BF0770-04-082		https://rvaschools.gofmx.com/equipment/1555028	
12	7425012	D3060	**Exhaust Fan**	Centrifugal, 42" Damper	20000 CFM	Richmond Technical Center North / Main Building	Mechanical room	No dataplate	No dataplate	No dataplate		https://rvaschools.gofmx.com/equipment/1555007	
13	7424991	D3060	**Exhaust Fan**	Centrifugal, 10 to 15 HP Motor	40000 CFM	Richmond Technical Center North / Main Building	Mechanical room	Carrier	2734542AH	BF0770-01-072-		https://rvaschools.gofmx.com/equipment/1555027	
14	7425054	D3060	**Exhaust Fan**	Roof or Wall-Mounted, 10" Damper	500 CFM	Richmond Technical Center North / Main Building	Roof	Illegible	Illegible	Illegible		https://rvaschools.gofmx.com/equipment/1555039	

15	7424982	D3060	**Exhaust Fan**	Roof or Wall-Mounted, 12" Damper	1000 CFM	Richmond Technical Center North / Main Building	Roof	Illegible	Illegible	Illegible		https://rvaschools.gofmx.com/equipment/1555037	
16	7424977	D3060	**Exhaust Fan**	Roof or Wall-Mounted, 12" Damper	1000 CFM	Richmond Technical Center North / Main Building	Roof	Greenheck	CUBE-098-4-X	12005724 1002		https://rvaschools.gofmx.com/equipment/1555041	
17	7425037	D3060	**Exhaust Fan**	Roof or Wall-Mounted, 12" Damper	1000 CFM	Richmond Technical Center North / Main Building	Roof	Illegible	Illegible	Illegible		https://rvaschools.gofmx.com/equipment/1555040	
18	7425075	D3060	**Exhaust Fan**	Roof or Wall-Mounted, 16" Damper	2000 CFM	Richmond Technical Center North / Main Building	Roof	Illegible	Illegible	Illegible		https://rvaschools.gofmx.com/equipment/1555036	
19	7425083	D3060	**Exhaust Fan**	Roof or Wall-Mounted, 16" Damper	2000 CFM	Richmond Technical Center North / Main Building	Roof	Illegible	Illegible	Illegible		https://rvaschools.gofmx.com/equipment/1555038	
20	7424995	D3060	**Exhaust Fan**	Roof or Wall-Mounted, 24" Damper	5000 CFM	Richmond Technical Center North / Main Building	Roof	Illegible	Illegible	Illegible		https://rvaschools.gofmx.com/equipment/1555035	
21	7425036	D3060	**Supplemental Components**	Air Purifier, Electrostatic	2000 CFM	Richmond Technical Center North / Main Building	Throughout building	Carrier	FN1AAFC06000	1521F24772	2021		12

D40 Fire Protection

Index	ID	UFCode	Component Description	Attributes	Capacity	Building	Location Detail	Manufacturer	Model	Serial	Dataplate Yr	Barcode	Qty
1	7425057	D4010	**Fire Suppression System**	Commercial Kitchen, per LF of Hood		Richmond Technical Center North / Main Building	Kitchen						10

D50 Electrical

Index	ID	UFCode	Component Description	Attributes	Capacity	Building	Location Detail	Manufacturer	Model	Serial	Dataplate Yr	Barcode	Qty
1	7425071	D5010	**Generator**	Diesel	30 KW	Richmond Technical Center North / Main Building	Building exterior	Kohler	30RH0771	591043A54		https://rvaschools.gofmx.com/equipment/1554989	
2	7425050	D5010	**Generator**	Diesel	60 KW	Richmond Technical Center North / Main Building	Building exterior	Generac	No dataplate	No dataplate		https://rvaschools.gofmx.com/equipment/1555034	
3	7425072	D5020	**Secondary Transformer**	Dry, Stepdown	225 KVA	Richmond Technical Center North / Main Building	Electrical room	Sorgel Electric Corp	TD3225H4-216	S-05308-6		https://rvaschools.gofmx.com/equipment/1555024	
4	7424962	D5020	**Secondary Transformer**	Dry, Stepdown	30 KVA	Richmond Technical Center North / Main Building	Mechanical room	Hammond Power Solutions	SG3A0030KB	CB01245804		https://rvaschools.gofmx.com/equipment/1554999	
5	7424967	D5020	**Secondary Transformer**	Dry, Stepdown	150 KVA	Richmond Technical Center North / Main Building	Electrical room	Sorgel Electric Corp	TD3150H4-216	S-05395-14		https://rvaschools.gofmx.com/equipment/1555003	
6	7425026	D5020	**Switchboard** [INCOMING & C.T. COMPARTMENT]	277/480 V	2500 AMP	Richmond Technical Center North / Main Building	Electrical room	Square D	I-LINE	42-13492 1A		https://rvaschools.gofmx.com/equipment/1554990	
7	7424990	D5020	**Distribution Panel**	120/208 V	400 AMP	Richmond Technical Center North / Main Building	Electrical room	Square D	NQ0B	N00B-13492-284		https://rvaschools.gofmx.com/equipment/1555005	
8	7425024	D5020	**Distribution Panel**	120/208 V	600 AMP	Richmond Technical Center North / Main Building	Electrical room	Square D	I-LINE	-13492-502		https://rvaschools.gofmx.com/equipment/1555023	
9	7425049	D5020	**Distribution Panel**	120/208 V	600 AMP	Richmond Technical Center North / Main Building	Electrical room	Square D	No dataplate	-13492-5E4		https://rvaschools.gofmx.com/equipment/1555004	
10	7425055	D5020	**Distribution Panel**	120/208 V	400 AMP	Richmond Technical Center North / Main Building	Electrical room	Square D	NQ0B	N00B-13492-285		https://rvaschools.gofmx.com/equipment/1555006	
11	7425058	D5020	**Distribution Panel**	277/480 V	600 AMP	Richmond Technical Center North / Main Building	Electrical room	Square D	No dataplate	13492-5E3		https://rvaschools.gofmx.com/equipment/1555002	
12	7425038	D5020	**Distribution Panel** [PANEL HPI]	277/480 V	800 AMP	Richmond Technical Center North / Main Building	Electrical room	Square D	I-LINE	-13492-5E1		https://rvaschools.gofmx.com/equipment/1555025	

D70 Electronic Safety & Security

Index	ID	UFCode	Component Description	Attributes	Capacity	Building	Location Detail	Manufacturer	Model	Serial	Dataplate Yr	Barcode	Qty
1	7513349	D7050	**Fire Alarm Panel**	Fully Addressable		Richmond Technical Center North / Main Building	Office	NA	NA	NA			

E10 Equipment

Index	ID	UFCode	Component Description	Attributes	Capacity	Building	Location Detail	Manufacturer	Model	Serial	Dataplate Yr	Barcode	Qty
1	7425032	E1010	**Vehicle Lift**	2-Post	15000 LB	Richmond Technical Center North / Main Building	Classrooms						
2	7424973	E1030	**Foodservice Equipment**	Convection Oven, Single		Richmond Technical Center North / Main Building	Kitchen	Vulcan	No dataplate	No dataplate		https://rvaschools.gofmx.com/equipment/1554985	
3	7425041	E1030	**Foodservice Equipment**	Convection Oven, Single		Richmond Technical Center North / Main Building	Kitchen	Vulcan	No dataplate	No dataplate		https://rvaschools.gofmx.com/equipment/1554983	
4	7424964	E1030	**Foodservice Equipment**	Dairy Cooler/Wells		Richmond Technical Center North / Main Building	Kitchen	Traulsen	UPT4812-LR	T46725B07		https://rvaschools.gofmx.com/equipment/1555010	
5	7425066	E1030	**Foodservice Equipment**	Deep Fryer		Richmond Technical Center North / Main Building	Kitchen	Vulcan	No dataplate	No dataplate		https://rvaschools.gofmx.com/equipment/1555020	
6	7425022	E1030	**Foodservice Equipment**	Dishwasher Commercial		Richmond Technical Center North / Main Building	Kitchen	Jackson	ConserverXL	No dataplate		https://rvaschools.gofmx.com/equipment/1555013	
7	7425009	E1030	**Foodservice Equipment**	Exhaust Hood, 3 to 6 LF		Richmond Technical Center North / Main Building	Kitchen	Greenheck	GD1-3.75-S	12006109		https://rvaschools.gofmx.com/equipment/1555014	
8	7424981	E1030	**Foodservice Equipment**	Exhaust Hood, 8 to 10 LF		Richmond Technical Center North / Main Building	Kitchen	No dataplate	No dataplate	No dataplate		https://rvaschools.gofmx.com/equipment/1554987	
9	7425020	E1030	**Foodservice Equipment**	Food Warmer, Proofing Cabinet on Wheels		Richmond Technical Center North / Main Building	Kitchen	Lockwood	H-HEAT UNIT-	110713024		https://rvaschools.gofmx.com/equipment/1555016	
10	7425031	E1030	**Foodservice Equipment**	Food Warmer, Proofing Cabinet on Wheels		Richmond Technical Center North / Main Building	Kitchen	Epco	No dataplate	No dataplate		https://rvaschools.gofmx.com/equipment/1555008	
11	7425039	E1030	**Foodservice Equipment**	Freezer, 2-Door Reach-In		Richmond Technical Center North / Main Building	Kitchen	True Manufacturing Co	T-23F-2	5193313		https://rvaschools.gofmx.com/equipment/1555009	
12	7424965	E1030	**Foodservice Equipment**	Griddle		Richmond Technical Center North / Main Building	Kitchen	StarMax	No dataplate	No dataplate		https://rvaschools.gofmx.com/equipment/1555021	
13	7424968	E1030	**Foodservice Equipment**	Icemaker, Freestanding		Richmond Technical Center North / Main Building	Kitchen	Ice-O-Matic	No dataplate	No dataplate		https://rvaschools.gofmx.com/equipment/1555015	
14	7425000	E1030	**Foodservice Equipment**	Range, 2-Burner		Richmond Technical Center North / Main Building	Kitchen	StarMax	No dataplate	No dataplate		https://rvaschools.gofmx.com/equipment/1555018	
15	7425003	E1030	**Foodservice Equipment**	Range/Oven, 6-Burner		Richmond Technical Center North / Main Building	Kitchen	Vulcan	No dataplate	No dataplate		https://rvaschools.gofmx.com/equipment/1555019	
16	7425010	E1030	**Foodservice Equipment**	Refrigerator, 1-Door Reach-In		Richmond Technical Center North / Main Building	Kitchen	Turbo Air	M3F24-1-N	No dataplate		https://rvaschools.gofmx.com/equipment/1555012	
17	7424975	E1030	**Foodservice Equipment**	Refrigerator, 2-Door Reach-In		Richmond Technical Center North / Main Building	Kitchen	True Manufacturing Co	T-35-HC	10517523		https://rvaschools.gofmx.com/equipment/1555011	
18	7425056	E1030	**Foodservice Equipment**	Refrigerator, Undercounter 2-Door		Richmond Technical Center North / Main Building	Kitchen	True Manufacturing Co	TSID-48-2L	5128684		https://rvaschools.gofmx.com/equipment/1554988	
19	7424987	E1030	**Foodservice Equipment**	Steamer, Freestanding		Richmond Technical Center North / Main Building	Kitchen	Alto-Shaam	No dataplate	No dataplate		https://rvaschools.gofmx.com/equipment/1555017	
20	7425035	E1030	**Foodservice Equipment**	Steamer, Freestanding		Richmond Technical Center North / Main Building	Kitchen	Cleveland	No dataplate	No dataplate		https://rvaschools.gofmx.com/equipment/1554984	
21	7425023	E1030	**Foodservice Equipment**	Walk-In, Condenser for Refigerator/Freezer		Richmond Technical Center North / Main Building	Kitchen	No dataplate	No dataplate	No dataplate		https://rvaschools.gofmx.com/equipment/1554994	
22	7425081	E1030	**Foodservice Equipment**	Walk-In, Condenser for Refigerator/Freezer		Richmond Technical Center North / Main Building	Kitchen	Copeland	KATB-015E-CAV-800	12H61862R		https://rvaschools.gofmx.com/equipment/1554993	

23	7424988	E1030	**Foodservice Equipment**	Walk-In, Combination Freezer/Refigerator	Richmond Technical Center North / Main Building	Kitchen	Tafco	No dataplate	No dataplate	https://rvaschools.gofmx.com/equipment/1554982
24	7425048	E1040	**Healthcare Equipment**	Defibrillator (AED), Cabinet-Mounted	Richmond Technical Center North / Main Building	Throughout building				