



**BUREAU  
VERITAS**

# FACILITY CONDITION ASSESSMENT

*prepared for*

**Richmond Public Schools**  
301 North Ninth Street  
Richmond, VA 23219



Armstrong High School  
2300 Cool Lane  
Richmond, VA 23223

**PREPARED BY:**

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*April 26-29, 2024*

**Bureau Veritas**

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# 1. Executive Summary

## Campus Overview and Assessment Details

General Information	
<b>Property Type</b>	High school campus
<b>Number of Buildings</b>	2
<b>Main Address</b>	2300 Cool Lane, Richmond, VA 23223
<b>Site Developed</b>	1968
<b>Outside Occupants / Leased Spaces</b>	None
<b>Date(s) of Visit</b>	April 26-29, 2024
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<b>AssetCalc Link</b>	Full dataset for this assessment can be found at: <a href="https://www.assetcalc.net/">https://www.assetcalc.net/</a>

## Significant/Systemic Findings and Deficiencies

### Historical Summary

John F. Kennedy High School was originally constructed in 1968. In 2004, Armstrong High School merged with the nearby John F. Kennedy High School, continuing to use the Armstrong name. The school continues to operate as a high school.

### Architectural

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

### Mechanical, Electrical, Plumbing and Fire (MEPF)

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

### Site

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

### Recommended Additional Studies

No additional studies recommended at this time.

## Facility Condition Index (FCI)

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

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

Facility (year built)	Cost/SF	Total SF	Replacement Value	Current	3-Year	5-Year	10-Year
Main Building (1968)	\$400	237,532	\$95,012,800	0.2%	11.7%	20.3%	22.8%
Stadium Concession (1968)	\$400	2,680	\$1,072,000	0.3%	24.2%	36.7%	36.8%

## Immediate Needs

Facility/Building	Total Items	Total Cost
Armstrong High School / Main Building	6	\$168,200
Armstrong High School / Site	1	\$160,000
Armstrong High School / Stadium Concession	1	\$3,100
<b>Total</b>	<b>8</b>	<b>\$331,300</b>

## Main Building

ID	Location Description	UF Code	Description	Condition	Plan Type	Cost
7401466	Main Building	B2010	Exterior Walls, Brick, Repair	Poor	Performance/Integrity	\$74,900
7401289	Roof	B3010	Roofing, Built-Up, Replace	Failed	Performance/Integrity	\$28,000
7401489	Generator room	B3010	Roofing, Asphalt Shingle, 30-Year Premium, Replace	Failed	Performance/Integrity	\$600
7401403	Main Entry	D7010	Entry Security, Metal Detector, Full Body Walkthrough, Replace	Failed	Performance/Integrity	\$4,700
7401422	Kitchen	E1030	Foodservice Equipment, Steam Kettle, Replace	Failed	Performance/Integrity	\$30,000
7401410	Kitchen	E1030	Foodservice Equipment, Steam Kettle, Replace	Failed	Performance/Integrity	\$30,000
<b>Total (6 items)</b>						<b>\$168,200</b>

Site

<u>ID</u>	<u>Location Description</u>	<u>UF Code</u>	<u>Description</u>	<u>Condition</u>	<u>Plan Type</u>	<u>Cost</u>
7401264	Site	G2050	Athletic Surfaces & Courts, Track Surface, Rubber, Replace	Failed	Safety	\$160,000
<b>Total (1 items)</b>						<b>\$160,000</b>

Stadium Concession

<u>ID</u>	<u>Location Description</u>	<u>UF Code</u>	<u>Description</u>	<u>Condition</u>	<u>Plan Type</u>	<u>Cost</u>
7401544	Building exterior	B3080	Soffit, Wood, Replace	Failed	Performance/Integrity	\$3,100
<b>Total (1 items)</b>						<b>\$3,100</b>



### Key Findings



#### Athletic Surfaces & Courts in Failed condition.

Track Surface, Rubber  
Site Armstrong High School Site

Uniformat Code: G2050  
Recommendation: **Replace in 2024**

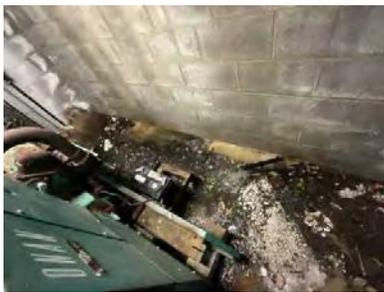
Priority Score: **91.9**

Plan Type: Safety

Cost Estimate: \$160,000

**\$\$\$\$**

Running track is eroded on outside edge and inside edge to the point of becoming a trip hazard - AssetCALC ID: 7401264



#### Roofing in Failed condition.

Asphalt Shingle, 30-Year Premium  
Main Building Armstrong High School  
Generator room

Uniformat Code: B3010  
Recommendation: **Replace in 2024**

Priority Score: **89.9**

Plan Type:  
Performance/Integrity

Cost Estimate: \$600

**\$\$\$\$**

Roofing has failed. Water is leaking directly into generator room. - AssetCALC ID: 7401489



#### Exterior Walls in Poor condition.

Brick  
Main Building Armstrong High School Main  
Building

Uniformat Code: B2010  
Recommendation: **Repair in 2024**

Priority Score: **89.9**

Plan Type:  
Performance/Integrity

Cost Estimate: \$74,900

**\$\$\$\$**

Vertical, horizontal and diagonal cracks in the brick on the western wall 2nd floor. - AssetCALC ID: 7401466



#### Roofing in Poor condition.

Concrete Tile  
Stadium Concession Armstrong High School  
Roof

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

Priority Score: **89.8**

Plan Type:  
Performance/Integrity

Cost Estimate: \$53,300

**\$\$\$\$**

Roofing leaks, broken, missing tiles. - AssetCALC ID: 7401545



**Roofing in Failed condition.**

Priority Score: **88.9**

Built-Up  
Main Building Armstrong High School Roof

Plan Type:  
Performance/Integrity

Uniformat Code: B3010  
Recommendation: **Replace in 2024**

Cost Estimate: \$28,000

**\$\$\$\$**

EDM. Roofing has an applied coding on top of roofing material with patches of hot tar. Roofing has holes and cracks. - AssetCALC ID: 7401289



**Roofing in Poor condition.**

Priority Score: **88.8**

Modified Bitumen  
Main Building Armstrong High School Roof

Plan Type:  
Performance/Integrity

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

Cost Estimate: \$177,400

**\$\$\$\$**

Aged, standing water and reported leaks. - AssetCALC ID: 7401486



**Roofing in Poor condition.**

Priority Score: **88.8**

Built-Up  
Main Building Armstrong High School Roof

Plan Type:  
Performance/Integrity

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

Cost Estimate: \$1,451,600

**\$\$\$\$**

Roofing is very aged with lots of patches, standing water and reported leaks. - AssetCALC ID: 7469321



**Glazing in Poor condition.**

Priority Score: **87.8**

any type by SF  
Main Building Armstrong High School Building  
Exterior

Plan Type:  
Performance/Integrity

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

Cost Estimate: \$344,900

**\$\$\$\$**

Caulking is degraded on exterior single pain windows. - AssetCALC ID: 7401393



**Elevator Controls in Poor condition.**

Automatic, 1 Car  
Main Building Armstrong High School Elevator

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

Priority Score: **85.8**

Plan Type:  
Performance/Integrity

Cost Estimate: \$5,000

\$\$\$\$

Elevator is not currently operational - AssetCALC ID: 7401317



**Passenger Elevator in Poor condition.**

Hydraulic, 2 Floors  
Main Building Armstrong High School Elevator

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

Priority Score: **85.8**

Plan Type:  
Performance/Integrity

Cost Estimate: \$60,000

\$\$\$\$

Estimated, elevator is not currently operational - AssetCALC ID: 7401236



**Sidewalk in Poor condition.**

Concrete, Large Areas  
Site Armstrong High School Site

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

Priority Score: **85.8**

Plan Type:  
Performance/Integrity

Cost Estimate: \$11,300

\$\$\$\$

Sidewalks have heaved and sunk and are cracked or missing concrete - AssetCALC ID: 7401335



**Parking Lots in Poor condition.**

Pavement, Asphalt  
Site Armstrong High School Site

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

Priority Score: **84.8**

Plan Type:  
Performance/Integrity

Cost Estimate: \$241,500

\$\$\$\$

Alligator asphalt, potholes - AssetCALC ID: 7401378



**Interior Door in Poor condition.**

Wood, Solid-Core  
Main Building Armstrong High School  
Throughout building

Uniformat Code: C1030  
Recommendation: **Replace in 2025**

Priority Score: **83.8**

Plan Type:  
Performance/Integrity

Cost Estimate: \$171,500

**\$\$\$\$**

Majority of classroom doors door skin is delaminating - AssetCALC ID: 7401214



**Foodservice Equipment in Failed condition.**

Steam Kettle  
Main Building Armstrong High School Kitchen

Uniformat Code: E1030  
Recommendation: **Replace in 2024**

Priority Score: **81.9**

Plan Type:  
Performance/Integrity

Cost Estimate: \$30,000

**\$\$\$\$**

Very aged and not operational - AssetCALC ID: 7401410



**Foodservice Equipment in Failed condition.**

Steam Kettle  
Main Building Armstrong High School Kitchen

Uniformat Code: E1030  
Recommendation: **Replace in 2024**

Priority Score: **81.9**

Plan Type:  
Performance/Integrity

Cost Estimate: \$30,000

**\$\$\$\$**

Very aged and not operational - AssetCALC ID: 7401422



**Entry Security in Failed condition.**

Metal Detector, Full Body Walkthrough  
Main Building Armstrong High School Main  
Entry

Uniformat Code: D7010  
Recommendation: **Replace in 2024**

Priority Score: **81.9**

Plan Type:  
Performance/Integrity

Cost Estimate: \$4,700

**\$\$\$\$**

Reported by staff that it is no longer functional - AssetCALC ID: 7401403



**Commercial Kitchen in Poor condition.**

Service Line  
Main Building Armstrong High School Kitchen

Uniformat Code: E1030  
Recommendation: **Replace in 2025**

Priority Score: **81.8**

Plan Type:  
Performance/Integrity

Cost Estimate: \$75,000

**\$\$\$\$**

Three service lines, not functional - AssetCALC ID: 7401441



**Foodservice Equipment in Poor condition.**

Freezer, 3-Door Reach-In  
Main Building Armstrong High School Kitchen

Uniformat Code: E1030  
Recommendation: **Replace in 2025**

Priority Score: **81.8**

Plan Type:  
Performance/Integrity

Cost Estimate: \$6,800

**\$\$\$\$**

Not currently operational, awaiting repair - AssetCALC ID: 7401381



**Air Handler in Poor condition.**

Interior AHU, Easy/Moderate Access  
Main Building Armstrong High School Kitchen

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

Priority Score: **81.8**

Plan Type:  
Performance/Integrity

Cost Estimate: \$22,000

**\$\$\$\$**

Staff reports that the air handler is not operational - AssetCALC ID: 7401357



**Foodservice Equipment in Poor condition.**

Steamer, Freestanding  
Main Building Armstrong High School Kitchen

Uniformat Code: E1030  
Recommendation: **Replace in 2025**

Priority Score: **81.8**

Plan Type:  
Performance/Integrity

Cost Estimate: \$10,500

**\$\$\$\$**

Not currently operational - AssetCALC ID: 7401387



**Foodservice Equipment in Poor condition.**

Steamer, Freestanding  
Main Building Armstrong High School Kitchen

Uniformat Code: E1030  
Recommendation: **Replace in 2025**

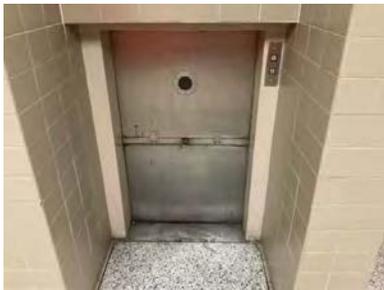
Priority Score: **81.8**

Plan Type:  
Performance/Integrity

Cost Estimate: \$10,500

\$\$\$\$

Not currently operational - AssetCALC ID: 7401453



**Dumbwaiter in Poor condition.**

Electric, up to 5 Stories  
Main Building Armstrong High School Main Building

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

Priority Score: **81.8**

Plan Type:  
Performance/Integrity

Cost Estimate: \$16,700

\$\$\$\$

Not operational - AssetCALC ID: 7401390



**Flooring in Poor condition.**

Vinyl Tile (VCT), w/ Asbestos Abatement  
Main Building Armstrong High School Classrooms

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

Priority Score: **81.8**

Plan Type:  
Performance/Integrity

Cost Estimate: \$19,200

\$\$\$\$

Aged, loose and missing tiles. - AssetCALC ID: 7401273



**Air Handler in Poor condition.**

Interior AHU, Easy/Moderate Access  
Main Building Armstrong High School Gymnasium

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

Priority Score: **81.8**

Plan Type:  
Performance/Integrity

Cost Estimate: \$31,000

\$\$\$\$

Not currently operational, estimated size - AssetCALC ID: 7401374



**Exterior Fixture w/ Lamp in Poor condition.**

any type, w/ LED Replacement  
Main Building Armstrong High School Building exterior

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

Priority Score: **81.8**

Plan Type:  
Performance/Integrity

Cost Estimate: \$13,800

\$\$\$\$

Reported that exterior lighting is insufficient. - AssetCALC ID: 7401313



**BAS/HVAC Controls in Poor condition.**

Extensive/Robust BMS or Smart Building System  
Main Building Armstrong High School  
Throughout building

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

Priority Score: **81.8**

Plan Type:  
Performance/Integrity

Cost Estimate: \$1,425,200

\$\$\$\$

BAS system is a combination of modern and air controls, reported that the BAS system does not maintain temperature properly. - AssetCALC ID: 7401411



**Air Handler in Poor condition.**

Interior AHU, Easy/Moderate Access  
Main Building Armstrong High School  
Gymnasium

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

Priority Score: **81.8**

Plan Type:  
Performance/Integrity

Cost Estimate: \$31,000

\$\$\$\$

Not currently operational, estimated size - AssetCALC ID: 7401359



**Pole Light Fixture w/ Lamps in Poor condition.**

any type 20' High, w/ LED Replacement  
Site Armstrong High School Site

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

Priority Score: **81.8**

Plan Type:  
Performance/Integrity

Cost Estimate: \$32,000

\$\$\$\$

Reported that site lighting is insufficient. - AssetCALC ID: 7401468



### Suspended Ceilings in Poor condition.

Hard Tile, Replacement w/ ACT  
Main Building Armstrong High School  
Throughout building

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

Priority Score: **81.8**

Plan Type:  
Performance/Integrity

Cost Estimate: \$32,200

\$\$\$\$

Lots of stained and missing tiles - AssetCALC ID: 7401339



### Flooring in Poor condition.

any surface, w/ Epoxy Coating  
Stadium Concession Armstrong High School  
Restrooms

Uniformat Code: C2030  
Recommendation: **Prep & Paint in 2025**

Priority Score: **81.7**

Plan Type:  
Performance/Integrity

Cost Estimate: \$23,400

\$\$\$\$

Floors are peeled and chipped - AssetCALC ID: 7401506

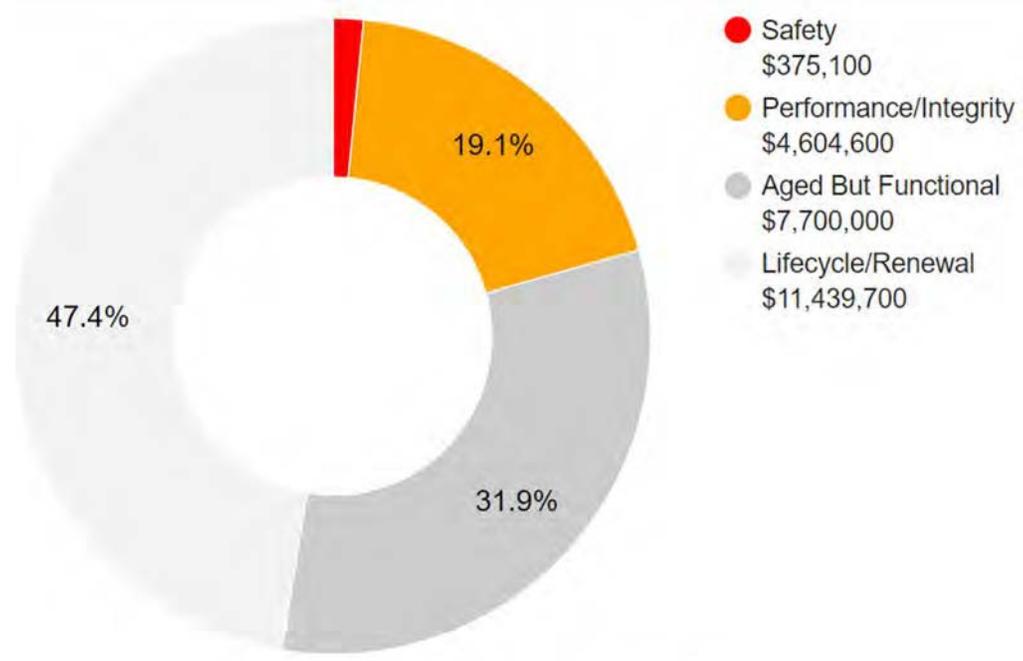
## Plan Types

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

<b>Safety</b>	■	An observed or reported unsafe condition that if left unaddressed could result in injury; a system or component that presents potential liability risk.
<b>Performance/Integrity</b>	■	Component or system has failed, is almost failing, performs unreliably, does not perform as intended, and/or poses risk to overall system stability.
<b>Accessibility</b>	■	Does not meet ADA, UFAS, and/or other accessibility requirements.
<b>Environmental</b>	■	Improvements to air or water quality, including removal of hazardous materials from the building or site.
<b>Retrofit/Adaptation</b>	■	Components, systems, or spaces recommended for upgrades in in order to meet current standards, facility usage, or client/occupant needs.
<b>Lifecycle/Renewal</b>	■	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: \$24,119,400



## 2. Main Building



Main Building: Systems Summary		
<b>Address</b>	2300 Cool Lane, Richmond, VA 23223	
<b>Constructed/Renovated</b>	1968	
<b>Building Area</b>	237,532 SF	
<b>Number of Stories</b>	2 above grade (mechanical mezzanines are present but not included in the count)	
<i>System</i>	<i>Description</i>	<i>Condition</i>
<b>Structure</b>	Masonry bearing walls with concrete roof deck supported by concrete and steel joists with concrete wall footing foundation system.	Fair
<b>Façade</b>	Primary Wall Finish: Brick Secondary Wall Finish: Exposed aggregate concrete finish Windows: Stainless Steel	Fair
<b>Roof</b>	Primary: Flat construction with Built-Up finish. Secondary: Flat construction with modified bituminous finish.	Poor
<b>Interiors</b>	Walls: Painted gypsum board, ceramic tile, wallpaper, wood paneling, and unfinished. Floors: Carpet, VCT, terrazzo, ceramic tile, wood strip, and unfinished concrete. Ceilings: Painted gypsum board, ACT and unfinished/exposed.	Fair
<b>Elevators</b>	Passenger: 1 hydraulic car serving all AA floors Freight: 1 Dumbwaiter serving hallway area.	Poor

<b>Main Building: Systems Summary</b>		
<b>Plumbing</b>	Distribution: Copper supply and cast-iron waste & venting Hot Water: Gas water heater with integral tank and gas tankless water heaters. Fixtures: Toilets, urinals, and sinks in all restrooms	Fair
<b>HVAC</b>	Central System: Boilers, chillers, air handlers, and cooling tower feeding VAVs and cabinet terminal units. Non-Central System: Packaged units, and Split-system heat pumps. Supplemental components: Suspended unit heaters.	Fair
<b>Fire Suppression</b>	Fire extinguishers only.	Fair
<b>Electrical</b>	Source & Distribution: Main switchboard panel with copper wiring. Interior Lighting: LED, linear fluorescent, and incandescent Exterior Building-Mounted Lighting: CFL. Emergency Power: Natural gas generator with automatic transfer switch.	Fair
<b>Fire Alarm</b>	Alarm panel with smoke detectors, heat detectors, alarms, strobes, pull stations, and exit signs.	Fair
<b>Equipment/Special</b>	Commercial kitchen equipment, and commercial laundry equipment.	Fair
<b>Accessibility</b>	Presently it does not appear an accessibility study is needed for this building. See the appendix for associated photos and additional information.	
<b>Additional Studies</b>	Beyond the accessibility study recommended above, no additional studies are currently recommended for the building.	
<b>Areas Observed</b>	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.	
<b>Key Spaces Not Observed</b>	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.

<b>System Expenditure Forecast</b>						
<b>System</b>	<b>Immediate</b>	<b>Short Term (1-2 yr)</b>	<b>Near Term (3-5 yr)</b>	<b>Med Term (6-10 yr)</b>	<b>Long Term (11-20 yr)</b>	<b>TOTAL</b>
<b>Structure</b>	-	-	-	-	-	-
<b>Facade</b>	\$74,900	\$363,100	\$54,600	\$18,400	\$4,331,700	\$4,842,800
<b>Roofing</b>	\$28,600	\$1,677,900	\$34,900	-	-	\$1,741,300
<b>Interiors</b>	-	\$229,600	\$2,606,900	\$1,060,000	\$3,503,200	\$7,399,600
<b>Conveying</b>	-	\$84,200	\$3,500	-	\$4,700	\$92,300
<b>Plumbing</b>	-	\$1,200	\$3,267,000	\$31,900	\$100,400	\$3,400,600
<b>HVAC</b>	-	\$103,600	\$3,087,500	\$1,125,300	\$1,592,700	\$5,909,000
<b>Fire Protection</b>	-	-	\$15,000	-	\$22,500	\$37,500
<b>Electrical</b>	-	-	\$2,298,900	\$49,600	\$71,300	\$2,419,700
<b>Fire Alarm &amp; Electronic Systems</b>	\$4,700	\$1,467,900	\$2,272,300	\$17,800	\$3,195,200	\$6,957,900
<b>Equipment &amp; Furnishings</b>	\$60,000	\$111,700	\$1,339,500	\$13,500	\$720,300	\$2,244,900
<b>Special Construction &amp; Demo</b>	-	-	\$14,800	-	-	\$14,800
<b>Site Development</b>	-	-	\$99,700	\$4,400	-	\$104,100
<b>Site Utilities</b>	-	\$14,200	-	-	-	\$14,200
<b>TOTALS (3% inflation)</b>	<b>\$168,100</b>	<b>\$4,053,400</b>	<b>\$15,094,500</b>	<b>\$2,320,700</b>	<b>\$13,542,000</b>	<b>\$35,178,700</b>

**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.

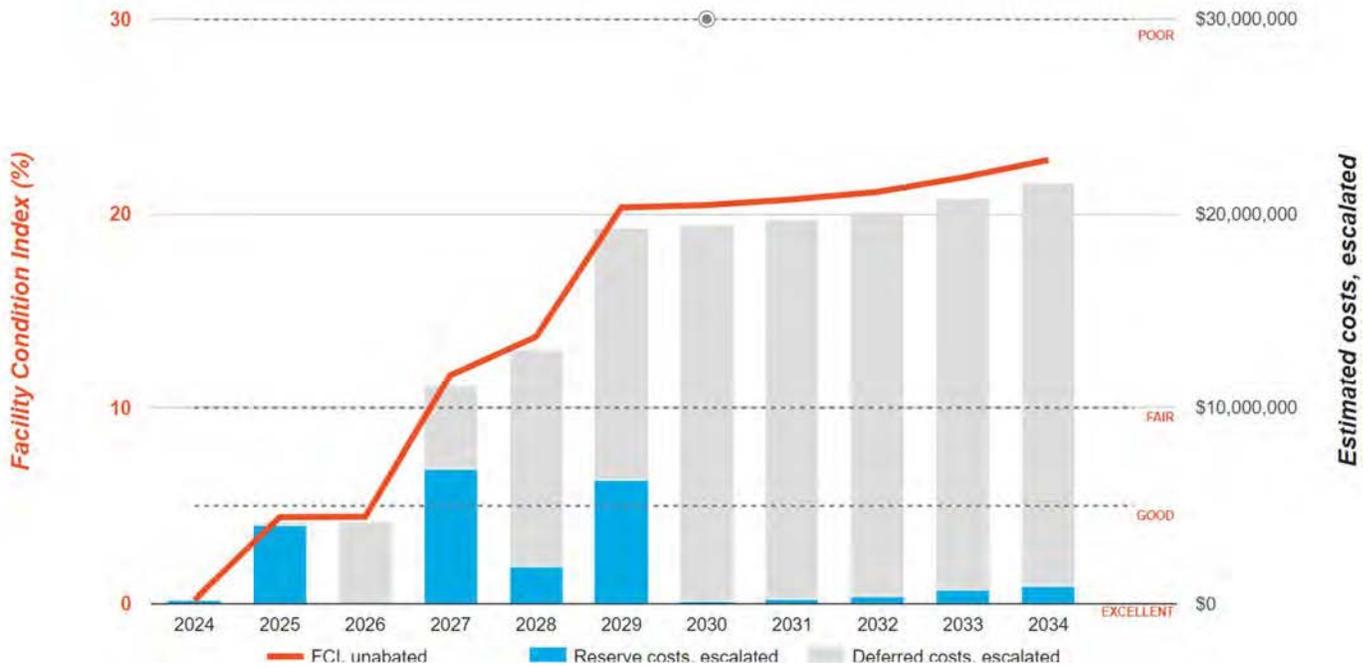
**Needs by Year with Unaddressed FCI Over Time**

**FCI Analysis: Armstrong High School Main Building**

Replacement Value: \$95,012,800

Inflation Rate: 3.0%

Average Needs per Year: \$1,967,000



### Armstrong High School: Photographic Overview



1 - FRONT ELEVATION



2 - LEFT ELEVATION



3 - REAR ELEVATION



4 - EXPOSED SUPERSTRUCTURE



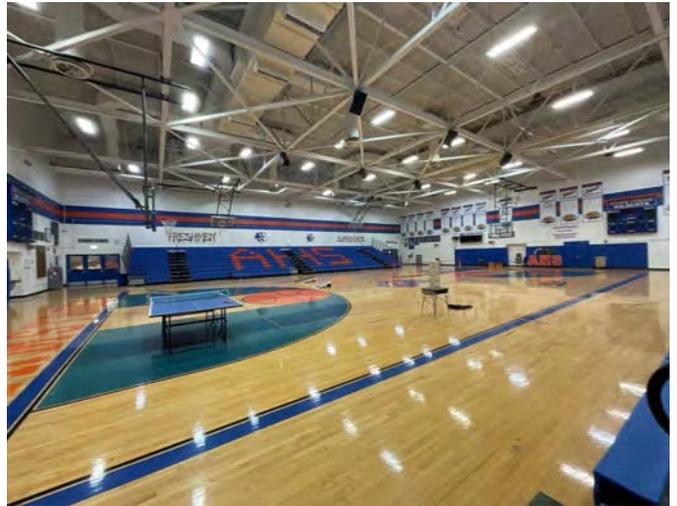
5 - ROOF OVERVIEW



6 - FRONT OFFICE



7 - HALLWAYS



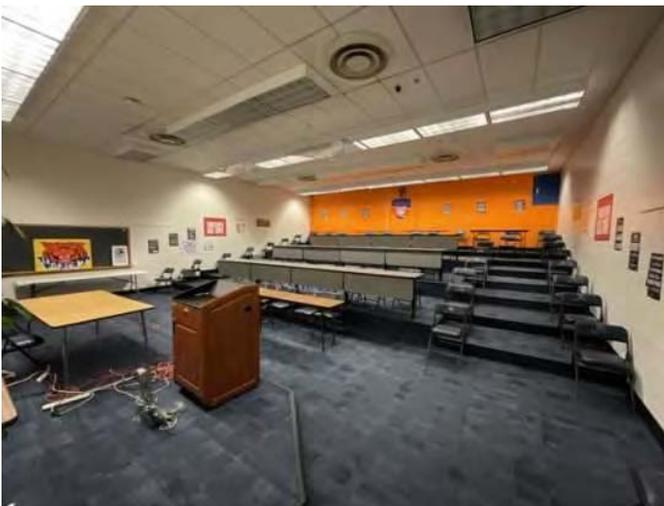
8 - GYMNASIUM



9 - AUDITORIUM



10 - LIBRARY



11 - CLASSROOM



12 - CLASSROOM



13 - CHILDCARE



14 - KITCHEN



15 - WATER HEATER



16 - DOMESTIC BACKFLOW PREVENTER



17 - HVAC BOILERS



18 - AIR HANDLER



19 - CHILLER



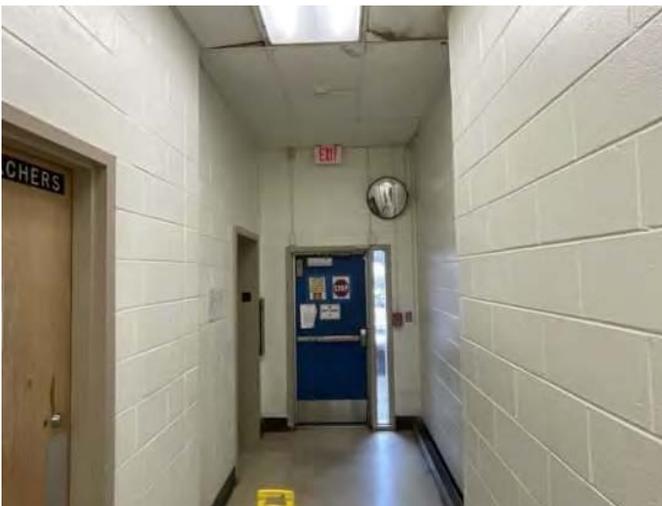
20 - COOLING TOWERS



21 - SWITCHBOARD



22 - FIRE ALARM PANEL



23 - FIRE ALARM SYSTEM COMPONENTS



24 - FIRE EXTINGUISHER

### 3. Stadium Concession Building



#### Stadium Concession Building: Systems Summary

<b>Address</b>	2300 Cool Lane, Richmond, VA 23223	
<b>Constructed/Renovated</b>	1968	
<b>Building Area</b>	2,680 SF	
<b>Number of Stories</b>	1 above grade	
<i>System</i>	<i>Description</i>	<i>Condition</i>
<b>Structure</b>	Masonry bearing walls with wood roof deck supported by wood joists and concrete strip/wall footing foundation	Fair
<b>Façade</b>	Primary Wall Finish: Brick Windows: None	Fair
<b>Roof</b>	Primary: Gable construction with Concrete Tile	Poor
<b>Interiors</b>	Walls: Painted gypsum board, and unfinished. Floors: Coated and unfinished concrete. Ceilings: Painted gypsum board, and unfinished/exposed.	Fair
<b>Elevators</b>	None	--
<b>Plumbing</b>	Distribution: Copper supply and cast-iron waste & venting. Hot Water: Electric water heater with integral tank. Fixtures: Toilets, urinals, and sinks in all restrooms.	Fair

<b>Stadium Concession Building: Systems Summary</b>		
<b>HVAC</b>	Supplemental components: Suspended unit heaters	Fair
<b>Fire Suppression</b>	Fire extinguishers, and kitchen hood system.	Fair
<b>Electrical</b>	Source & Distribution: Main switchboard panel with copper wiring. Interior Lighting: Linear fluorescent, and incandescent. Exterior Building-Mounted Lighting: CFL Emergency Power: None	Fair
<b>Fire Alarm</b>	Smoke detectors with exit signs only.	Fair
<b>Equipment/Special</b>	Commercial kitchen equipment.	Fair
<b>Accessibility</b>	Presently it does not appear an accessibility study is needed for this building. See the appendix for associated photos and additional information.	
<b>Additional Studies</b>	No additional studies are currently recommended for the building.	
<b>Areas Observed</b>	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.	
<b>Key Spaces Not Observed</b>	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.

<b>System Expenditure Forecast</b>						
<b>System</b>	<b>Immediate</b>	<b>Short Term (1-2 yr)</b>	<b>Near Term (3-5 yr)</b>	<b>Med Term (6-10 yr)</b>	<b>Long Term (11-20 yr)</b>	<b>TOTAL</b>
Structure	-	-	-	-	-	-
Facade	-	\$1,500	\$10,500	-	\$95,600	\$107,600
Roofing	\$3,100	\$54,900	-	-	\$5,600	\$63,600
Interiors	-	\$24,100	\$28,900	\$1,600	\$50,200	\$104,700
Plumbing	-	-	\$114,000	-	\$11,200	\$125,100
HVAC	-	-	\$13,800	-	-	\$13,800
Fire Protection	-	-	\$1,700	-	-	\$1,700
Electrical	-	-	\$76,100	-	-	\$76,100
Fire Alarm & Electronic Systems	-	-	\$13,200	-	\$9,100	\$22,300
Equipment & Furnishings	-	-	\$42,300	-	\$65,900	\$108,200
Site Development	-	-	\$5,500	-	\$8,500	\$14,000
Site Utilities	-	-	\$3,900	-	-	\$3,900
<b>TOTALS (3% inflation)</b>	<b>\$3,100</b>	<b>\$80,500</b>	<b>\$309,800</b>	<b>\$1,600</b>	<b>\$246,000</b>	<b>\$641,000</b>

**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.

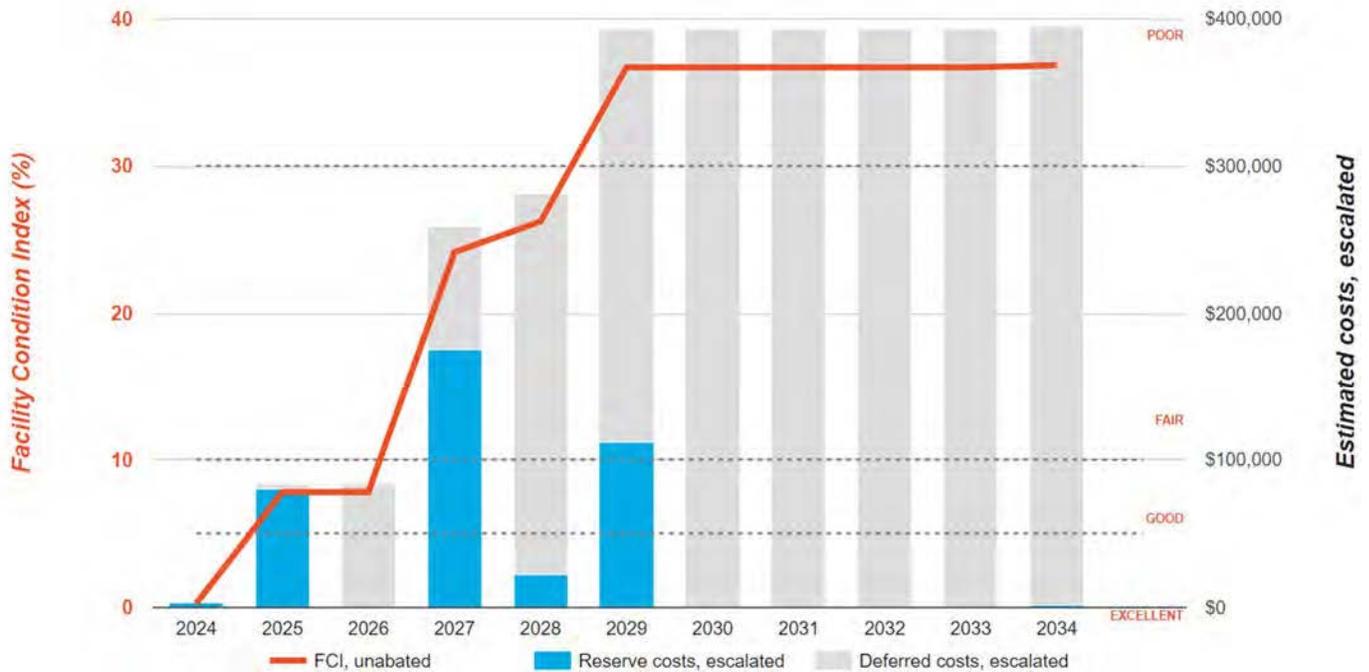
### Needs by Year with Unaddressed FCI Over Time

#### FCI Analysis: Armstrong High School Stadium Concession

Replacement Value: \$1,072,000

Inflation Rate: 3.0%

Average Needs per Year: \$36,000



### Stadium Concession Building: Photographic Overview



1 - FRONT ELEVATION



2 - LEFT ELEVATION



3 - RIGHT ELEVATION



4 - ROOF OVERVIEW



5 - PUBLIC RESTROOM



6 - KITCHEN



7 - WATER HEATER



8 - DOMESTIC BACKFLOW



9 - UNIT HEATER



10 - FIRE EXTINGUISHER



11 - FIRE ALARM SYSTEM COMPONENT



12 - SWITCHBOARD

## 4. Site Summary



Site Information		
<b>Site Area</b>	20.5 acres (estimated)	
<b>Parking Spaces</b>	234 total spaces all in open lots; 7 of which are accessible.	
<i>System</i>	<i>Description</i>	<i>Condition</i>
<b>Pavement/Flatwork</b>	Asphalt lots with limited areas of concrete aprons and pavement and adjacent concrete sidewalks, curbs, ramps, and stairs.	Fair
<b>Site Development</b>	Building-mounted signage; chain link fencing; Sports fields and courts with bleachers, dugouts, press box, fencing, and site lights. Limited Park benches, picnic tables, trash receptacles	Fair
<b>Landscaping and Topography</b>	Significant landscaping features include lawns, trees, bushes, and planters. Irrigation is present for stadium grounds, not present for remainder. Timber retaining walls. Low to moderate site slopes throughout.	Fair
<b>Utilities</b>	Municipal water and sewer Local utility-provided electric and natural gas.	Fair
<b>Site Lighting</b>	Pole-mounted: HPS Pedestrian walkway and landscape accent lighting.	Poor
<b>Ancillary Structures</b>	Storage sheds, Prefabricated modular buildings.	Fair

Site Information	
<b>Site Accessibility</b>	Presently it does not appear an accessibility study is needed for the exterior site areas. See the appendix for associated photos and additional information.
<b>Site Additional Studies</b>	No additional studies are currently recommended for the exterior site areas.
<b>Site Areas Observed</b>	The exterior areas within the property boundaries were observed to gain a clear understanding of the site's overall condition.
<b>Site Key Spaces Not Observed</b>	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
Fire Alarm & Electronic Systems	-	-	\$5,200	-	-	\$5,200
Equipment & Furnishings	-	-	\$222,600	-	-	\$222,600
Special Construction & Demo	-	\$9,300	\$66,200	\$104,300	\$16,400	\$196,200
Site Pavement	-	\$260,300	\$15,000	\$192,400	\$43,500	\$511,200
Site Development	\$160,000	\$7,600	\$329,100	\$623,000	\$560,600	\$1,680,200
Site Utilities	-	\$33,000	\$59,400	-	-	\$92,400
<b>TOTALS (3% inflation)</b>	<b>\$160,000</b>	<b>\$310,200</b>	<b>\$697,500</b>	<b>\$919,700</b>	<b>\$620,400</b>	<b>\$2,707,800</b>

Site: Photographic Overview



1 - PARKING LOTS AND ROADWAYS



2 - STADIUM GROUNDS



3 - SITE LIGHTING AND LANDSCAPING



4 - ANCILLARY BUILDING



5 - ANCILLARY BUILDING



6 - COOLING TOWER STRUCTURE

## 5. ADA Accessibility

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

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

However, this does not:

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

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

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

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

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

<b>Accessibility Summary</b>			
<i>Facility</i>	<i>Year Built/ Renovated</i>	<i>Prior Study Provided?</i>	<i>Major/Moderate Issues Observed?</i>
General Site	1968	No	No
Armstrong High School	1968	No	No
Stadium Concession Building	1968	No	No

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



## 6. 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	
<b>Excellent</b>	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.
<b>Good</b>	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.
<b>Fair</b>	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.
<b>Poor</b>	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.
<b>Failed</b>	Component or system has ceased functioning or performing as intended. Replacement, repair, or other significant corrective action is recommended or required.
<b>Not Applicable</b>	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.

## 7. Opinions of Probable Costs

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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.

## 8. Certification

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Richmond Public Schools (the Client) retained Bureau Veritas to perform this Facility Condition Assessment in connection with its continued operation of Armstrong High School, 2300 Cool Lane, Richmond, VA 23223, 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.

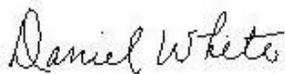
No testing, exploratory probing, dismantling or operating of equipment or in-depth studies were performed unless specifically required under the *Purpose and Scope* section of this report. This assessment did not include engineering calculations to determine the adequacy of the Property's original design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

**Reviewed by:**



---

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Technical Report Reviewer for  
Bill Champion,  
Program Manager  
[bill.champion@bureauveritas.com](mailto:bill.champion@bureauveritas.com)  
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## 9. Appendices

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

# Appendix A:

## Site Plan(s)

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# Site Plan



 <b>BUREAU VERITAS</b>	<b>Project Number</b>	<b>Project Name</b>	
	166385.24R000-033.468	Armstrong High School	
	<b>Source</b>	<b>On-Site Date</b>	
	Google	February 26-29, 2024	

## Appendix B:

### Pre-Survey Questionnaire(s)

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## Bureau Veritas Facility Condition Assessment: Pre-Survey Questionnaire

**Building/Facility Name:** Armstrong High School

**Name of person completing form:** Ronald Hathaway

**Title/Association with property:** Director of Facilities

**Length of time associated w property:** 30

**Date Completed:** February 26, 2024

**Phone Number:** 804-325-0740

**Method of Completion:** Electronic

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

Data Overview		Response		
1	Year/s constructed / renovated	1968		
2	Building size in SF	237532		
3	Major Renovation/Rehabilitation		Year	Additional Detail
		Façade		Brick
		Roof		Tar and Gravel
		Interiors		CMU, sheetrock, VCT, terrazzo, ceramic
		HVAC		Boilers, chiller, VRF, Classroom fan coil and VAV boxes
		Electrical		
		Site Pavement		Asphalt
		Accessibility	2007	Satisfied the 2007 lawsuit requirement
Question		Response		
4	List other significant capital improvements (focus on recent years; provide approximate date).	2017 Chiller and cooling tower replacement, added VRF system to assist the interior space in the building with additional cooling since the original system was not designed to provide cooling in mild temperature to interior classed with computers.		
5	List any major capital expenditures planned/requested for the next few years. Have they been budgeted?	Eliminate pneumatic controls, replace VAV boxes, upgrade BAS system, no budget		
6	Describe any on-going extremely problematic, historically chronic, or immediate facility needs.	Pneumatic controls, no cooling in the kitchen,		

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

## Appendix C:

### Accessibility Review & Photos

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## Visual Checklist - 2010 ADA Standards for Accessible Design

Property Name: Armstrong High School

BV Project Number: 166385.24R000-033.468

### Abbreviated Accessibility Checklist

#### Facility History & Interview

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

## Abbreviated Accessibility Checklist

### Parking



OVERVIEW OF ACCESSIBLE PARKING AREA



CLOSE-UP OF STALL

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

## Abbreviated Accessibility Checklist

### Exterior Accessible Route



ACCESSIBLE RAMP



ACCESSIBLE PATH

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

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

# Abbreviated Accessibility Checklist

## Building Entrances



ACCESSIBLE ENTRANCE



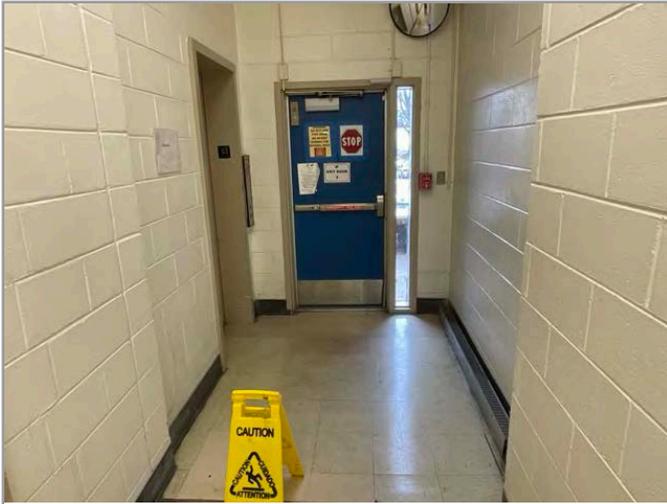
ADDITIONAL ENTRANCE

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

## Abbreviated Accessibility Checklist

### Interior Accessible Route



ACCESSIBLE INTERIOR PATH



SELF-SERVICE AREA

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

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

## Abbreviated Accessibility Checklist

### Elevators



ELEVATOR NOT OPERATIONAL



ELEVATOR NOT OPERATIONAL

Question		Yes	No	NA	Comments
1	Are hallway call buttons configured with the "UP" button above the "DOWN" button?	✘			
2	Is accessible floor identification signage present on the hoistway sidewalls on each level ?		✘		
3	Do the elevators have audible and visual arrival indicators at the lobby and hallway entrances?				Elevator is not currently operational
4	Do the elevator hoistway and car interior appear to have a minimum compliant clear floor area ?				Elevator is not currently operational
5	Do the elevator car doors have automatic re-opening devices to prevent closure on obstructions?				Elevator is not currently operational
6	Do elevator car control buttons appear to be mounted at a compliant height ?				Elevator is not currently operational

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

# Abbreviated Accessibility Checklist

## Public Restrooms



TOILET STALL OVERVIEW



SINK, FAUCET HANDLES AND ACCESSORIES

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

7	Do toilet stalls appear to provide the minimum compliant clear floor area ?	X			
8	Where more than one urinal is present in a multi-user restroom, does minimum one urinal appear to be mounted at a compliant height and with compliant approach width ?	X			
9	Do accessories and mirrors appear to be mounted at a compliant height ?	X			

## Appendix D: Component Condition Report

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**Component Condition Report | Armstrong High School / Main Building**

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
<b>Structure</b>						
A1010	Throughout	Fair	Foundation System, Concrete or CMU Walls w/ Continuous Footings	4,800 LF	30	7401262
B1010	Throughout	Fair	Structural Framing, Masonry (CMU) Bearing Walls	237,532 SF	30	7401261
<b>Facade</b>						
B2010	Building Exterior	Fair	Exterior Walls, Brick	39,534 SF	20	7401247
B2010	Main Building	Poor	Exterior Walls, Brick, Repair	2,270 SF	0	7401466
B2010	Building Exterior	Fair	Exterior Walls, Exposed Aggregate Concrete Finish	10,451 SF	20	7401373
B2020	Throughout building	Fair	Screens & Shutters, Rolling Security Shutter, 55 to 100 SF	6	3	7401429
B2020	Hallway	Fair	Screens & Shutters, Rolling Security Shutter, 200 SF	1	3	7401211
B2020	Throughout interior	Fair	Glazing, any type by SF	280 SF	6	7401407
B2020	Building Exterior	Poor	Glazing, any type by SF	6,270 SF	1	7401393
B2050	Building Exterior	Poor	Exterior Door, Wood, Solid-Core	11	1	7401322
B2050	Building Exterior	Fair	Exterior Door, Aluminum-Framed & Glazed, Standard Swing	6	3	7401251
B2050	Building Exterior	Fair	Exterior Door, Steel, Standard	33	3	7401425
B2050	Building Exterior	Fair	Overhead/Dock Door, Steel, 12'x12' (144 SF)	2	3	7401263
<b>Roofing</b>						
B3010	Roof	Failed	Roofing, Built-Up	2,000 SF	0	7401289
B3010	Generator room	Failed	Roofing, Asphalt Shingle, 30-Year Premium	100 SF	0	7401489
B3010	Roof	Poor	Roofing, Built-Up	103,684 SF	1	7469321
B3010	Roof	Poor	Roofing, Modified Bitumen	17,744 SF	1	7401486
B3020	Roof	Fair	Roof Appurtenances, Gutters & Downspouts, Aluminum w/ Fittings	550 LF	3	7401478
B3020	Roof	Fair	Roof Appurtenances, Roof Access Ladder, Steel	40 LF	3	7401350
B3060	Roof	Fair	Roof Hatch, Metal	2	3	7401421
B3060	Roof	Fair	Roof Skylight, per unit, up to 20 SF	16	3	7401255
<b>Interiors</b>						
C1010	Cafeteria	Fair	Interior Wall, Movable Partitions, Fabric 8 to 10' Height	110 LF	3	7401308
C1030	Throughout building	Fair	Door Hardware, School, per Door	295	8	7401281
C1030	Throughout building	Poor	Interior Door, Wood, Solid-Core	245	1	7401214
C1070	Throughout building	Poor	Suspended Ceilings, Hard Tile, Replacement w/ ACT	9,200 SF	1	7401339
C1070	Kitchen	Fair	Suspended Ceilings, Acoustical Tile Fiberglass	3,600 SF	5	7401447
C1070	Throughout building	Fair	Suspended Ceilings, Acoustical Tile (ACT)	203,307 SF	3	7401444
C1090	Throughout building	Fair	Lockers, Steel-Baked Enamel, 12" W x 15" D x 72" H	750	10	7401316
C1090	Restrooms	Fair	Toilet Partitions, Plastic/Laminate	1	10	7401324
C2010	Throughout building	Fair	Wall Finishes, any surface, Prep & Paint	372,874 SF	4	7401456
C2010	Throughout building	Fair	Wall Finishes, Ceramic Tile	13,500 SF	10	7401250
C2010	Throughout building	Fair	Wall Finishes, Wallpaper	4,700 SF	4	7401268
C2010	Office	Fair	Wall Finishes, Wood Paneling	850 SF	3	7401204
C2030	Gymnasium	Fair	Flooring, Rubber Tile	2,000 SF	4	7401246

**Component Condition Report | Armstrong High School / Main Building**

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
C2030	Throughout building	Fair	Flooring, Wood, Strip, Refinish	4,650 SF	6	7401278
C2030	Throughout building	Fair	Flooring, Carpet, Commercial Standard	4,800 SF	4	7401408
C2030	Throughout building	Fair	Flooring, Terrazzo	34,560 SF	15	7401234
C2030	Throughout building	Fair	Flooring, Vinyl Tile (VCT)	180,822 SF	4	7401496
C2030	Classrooms	Poor	Flooring, Vinyl Tile (VCT), w/ Asbestos Abatement	2,400 SF	1	7401273
C2030	Gymnasium	Fair	Flooring, Maple Sports Floor, Refinish	9,500 SF	6	7401493
C2030	Throughout building	Fair	Flooring, any surface, w/ Paint or Sealant, Prep & Paint	1,200 SF	4	7401476
C2050	Throughout building	Fair	Ceiling Finishes, exposed irregular elements, Prep & Paint	12,525 SF	4	7401382
C2050	Throughout building	Fair	Ceiling Finishes, any flat surface, Prep & Paint	8,900 SF	4	7401477
<b>Conveying</b>						
D1010	Elevator	Poor	Passenger Elevator, Hydraulic, 2 Floors, Renovate	1	1	7401236
D1010	Elevator	Poor	Elevator Controls, Automatic, 1 Car	1	1	7401317
D1010	Main Building	Poor	Dumbwaiter, Electric, up to 5 Stories, Renovate	1	1	7401390
D1010	Elevator	Fair	Elevator Cab Finishes, Economy	1	5	7401481
<b>Plumbing</b>						
D2010	Locker room	Fair	Shower, Valve & Showerhead	36	3	7401389
D2010	Locker room	Fair	Backflow Preventer, Domestic Water	1	6	7401259
D2010	Kitchen	Fair	Sink/Lavatory, Commercial Kitchen, 1-Bowl	1	10	7401318
D2010	Restrooms	Fair	Sink/Lavatory, Wall-Hung, Vitreous China	33	5	7401380
D2010	Boiler room	Good	Water Heater, Gas, Tankless	1	11	7401311
D2010	Hallway	Good	Drinking Fountain, Wall-Mounted, Bi-Level	1	13	7401245
D2010	Hallway	Good	Drinking Fountain, Wall-Mounted, Bi-Level	1	13	7401479
D2010	Boiler room	Fair	Water Heater, Gas, Commercial (200 MBH)	1	11	7401443
D2010	Restrooms	Fair	Urinal, Standard	25	5	7401271
D2010	Classrooms	Fair	Sink/Lavatory, Vanity Top, Solid Surface or Vitreous China	5	6	7401394
D2010	Hallway	Good	Drinking Fountain, Wall-Mounted, Bi-Level	1	13	7401323
D2010	Hallway	Good	Drinking Fountain, Wall-Mounted, Bi-Level	1	13	7401386
D2010	Hallway	Good	Drinking Fountain, Wall-Mounted, Bi-Level	1	13	7401315
D2010	Hallway	Good	Drinking Fountain, Wall-Mounted, Bi-Level	1	13	7401284
D2010	Hallway	Good	Drinking Fountain, Wall-Mounted, Bi-Level	1	13	7401342
D2010	Utility closet	Fair	Sink/Lavatory, Service Sink, Wall-Hung	20	3	7401206
D2010	Hallway	Good	Drinking Fountain, Wall-Mounted, Bi-Level	1	13	7401426
D2010	Hallway	Good	Drinking Fountain, Wall-Mounted, Bi-Level	1	13	7401452
D2010	Hallway	Good	Drinking Fountain, Wall-Mounted, Bi-Level	1	13	7401400
D2010	Cafeteria	Good	Drinking Fountain, Wall-Mounted, Bi-Level	1	13	7401483
D2010	Boiler room	Good	Water Heater, Gas, Tankless	1	11	7401224
D2010	Hallway	Fair	Drinking Fountain, Wall-Mounted, Bi-Level	1	9	7401392
D2010	Kitchen	Fair	Sink/Lavatory, Commercial Kitchen, 2-Bowl	1	10	7401270
D2010	Gymnasium	Good	Drinking Fountain, Wall-Mounted, Bi-Level	1	13	7401488

**Component Condition Report | Armstrong High School / Main Building**

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
D2010	Hallway	Good	Drinking Fountain, Wall-Mounted, Bi-Level	1	13	7401430
D2010	Hallway	Good	Drinking Fountain, Wall-Mounted, Bi-Level	1	13	7401420
D2010	Hallway	Good	Drinking Fountain, Wall-Mounted, Bi-Level	1	13	7401269
D2010	Hallway	Good	Drinking Fountain, Wall-Mounted, Bi-Level	1	13	7401492
D2010	Kitchen	Fair	Water Heater, Electric, Instant Hot	1	6	7401238
D2010	Hallway	Fair	Drinking Fountain, Wall-Mounted, Bi-Level	1	9	7401265
D2010	Kitchen	Poor	Drinking Fountain, Wall-Mounted, Single-Level	1	1	7401220
D2010	Cafeteria	Good	Drinking Fountain, Wall-Mounted, Bi-Level	1	13	7401243
D2010	Hallway	Good	Drinking Fountain, Wall-Mounted, Bi-Level	1	13	7401292
D2010	Hallway	Good	Drinking Fountain, Wall-Mounted, Bi-Level	1	13	7401307
D2010	Hallway	Good	Drinking Fountain, Wall-Mounted, Bi-Level	1	13	7401231
D2010	Mechanical room	Good	Backflow Preventer, Domestic Water	1	23	7401343
D2010	Hallway	Good	Drinking Fountain, Wall-Mounted, Bi-Level	1	13	7401260
D2010	Gymnasium	Good	Drinking Fountain, Wall-Mounted, Bi-Level	1	13	7401349
D2010	Cafeteria	Good	Drinking Fountain, Wall-Mounted, Bi-Level	1	13	7401334
D2010	Kitchen	Fair	Sink/Lavatory, Commercial Kitchen, 3-Bowl	1	10	7401314
D2010	Throughout building	Fair	Plumbing System, Supply & Sanitary, Medium Density (excludes fixtures)	237,532 SF	5	7401340
D2010	Cafeteria	Good	Drinking Fountain, Wall-Mounted, Bi-Level	1	13	7401434
D2010	Restrooms	Fair	Toilet, Commercial Water Closet	45	5	7401432
D2010	Hallway	Good	Drinking Fountain, Wall-Mounted, Bi-Level	1	13	7401208
D2010	Hallway	Good	Drinking Fountain, Wall-Mounted, Bi-Level	1	13	7401283
D2010	Boiler room	Fair	Storage Tank, Domestic Water	1	3	7401216
D2010	Hallway	Good	Drinking Fountain, Wall-Mounted, Bi-Level	1	13	7401285
D2010	Hallway	Good	Drinking Fountain, Wall-Mounted, Bi-Level	1	13	7401351
D2060	Boiler room	Fair	Air Compressor, Tank-Style	1	5	7401344
D2060	Boiler room	Fair	Supplemental Components, Air Receiver Tank, Process Support	1	11	7401290
<b>HVAC</b>						
D3020	Boiler room	Fair	Boiler Supplemental Components, Expansion Tank	1	3	7401205
D3020	Boiler room	Fair	Boiler, Gas, HVAC	1	9	7401455
D3020	Boiler room	Good	Boiler Supplemental Components, Chemical Feed System	1	13	7401485
D3020	Mechanical room	Fair	Heat Exchanger, Plate & Frame, HVAC	1	22	7401227
D3020	Mechanical room	Fair	Unit Heater, Hydronic	1	5	7401445
D3020	Boiler room	Fair	Boiler Supplemental Components, Expansion Tank	1	3	7401424
D3020	Boiler room	Fair	Boiler Supplemental Components, Expansion Tank	1	3	7401332
D3020	Boiler room	Fair	Boiler, Gas, HVAC	1	9	7401388
D3020	Boiler room	Good	Boiler Supplemental Components, Expansion Tank	1	32	7401267
D3020	Boiler room	Fair	Unit Heater, Hydronic	1	3	7401467
D3030	Site	Fair	Cooling Tower, (Typical) Open Circuit	1	11	7401240
D3030	Site	Fair	Cooling Tower, (Typical) Open Circuit	1	17	7401442

**Component Condition Report | Armstrong High School / Main Building**

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
D3030	Roof	Fair	Chiller, Air-Cooled	1	13	7401244
D3030	Roof	Fair	Heat Pump, Variable Refrigerant Volume (VRV), 10 TON	1	7	7401418
D3030	Roof	Fair	Heat Pump, Variable Refrigerant Volume (VRV), 10 TON	1	7	7401409
D3030	Boiler room	Fair	Chiller, Water-Cooled	1	17	7401209
D3030	Roof	Fair	Heat Pump, Variable Refrigerant Volume (VRV), 10 TON	1	7	7401406
D3030	Roof	Fair	Heat Pump, Variable Refrigerant Volume (VRV), 10 TON	1	7	7401275
D3050	Building exterior	Fair	Packaged Unit, RTU, Pad or Roof-Mounted	1	3	7401448
D3050	Boiler room	Fair	Pump, Distribution, HVAC Chilled or Condenser Water	1	2	7401221
D3050	Throughout building	Fair	Fan Coil Unit, Hydronic Terminal	9	3	7401446
D3050	Mechanical room	Fair	Air Handler, Interior AHU, Easy/Moderate Access	1	3	7401254
D3050	Mechanical room	Fair	Air Handler, Interior AHU, Easy/Moderate Access	1	3	7401475
D3050	Mechanical room	Fair	Supplemental Components, Surge Tank, HVAC	1	3	7401222
D3050	Boiler room	Fair	Pump, Distribution, HVAC Heating Water	1	4	7401416
D3050	Boiler room	Fair	Pump, Distribution, HVAC Chilled or Condenser Water	1	17	7401304
D3050	Throughout	Fair	Fan Coil Unit, Hydronic Terminal	51	3	7401470
D3050	Mechanical room	Fair	Air Handler, Interior AHU, Easy/Moderate Access	1	3	7401280
D3050	Building exterior	Fair	Packaged Unit, RTU, Pad or Roof-Mounted	1	3	7401363
D3050	Mechanical room	Fair	Air Handler, Interior AHU, Easy/Moderate Access	1	8	7401207
D3050	Boiler room	Fair	Pump, Distribution, HVAC Heating Water	1	4	7401312
D3050	Site	Fair	Pump, Distribution, HVAC Chilled or Condenser Water	1	17	7401372
D3050	Gymnasium	Poor	Air Handler, Interior AHU, Easy/Moderate Access	1	1	7401359
D3050	Gymnasium	Poor	Air Handler, Interior AHU, Easy/Moderate Access	1	1	7401374
D3050	Dance room	Fair	Air Handler, Interior AHU, Easy/Moderate Access	1	3	7401338
D3050	Throughout building	Fair	HVAC System, Hydronic Piping, 4-Pipe	237,532 SF	3	7401326
D3050	Mechanical room	Fair	Air Handler, Interior AHU, Easy/Moderate Access	1	13	7401412
D3050	Roof	Fair	Packaged Unit, RTU, Pad or Roof-Mounted	1	2	7401460
D3050	Kitchen	Poor	Air Handler, Interior AHU, Easy/Moderate Access	1	1	7401357
D3050	Site	Fair	Pump, Distribution, HVAC Chilled or Condenser Water	1	17	7401336
D3050	Boiler room	Fair	Pump, Distribution, HVAC Chilled or Condenser Water	1	17	7401462
D3060	Roof	Fair	Exhaust Fan, Roof or Wall-Mounted, 24" Damper	1	3	7401294
D3060	Roof	Fair	Exhaust Fan, Roof or Wall-Mounted, 36"Damper	1	3	7401235
D3060	Roof	Fair	Exhaust Fan, Roof or Wall-Mounted, 16" Damper	1	3	7401361
D3060	Roof	Fair	Exhaust Fan, Centrifugal, 24" Damper	1	3	7401297
D3060	Mechanical room	Fair	Axial Flow Fan, In-Line, up to 1 HP Motor	1	3	7401282
D3060	Roof	Fair	Exhaust Fan, Centrifugal, 24" Damper	1	15	7401395
D3060	Roof	Fair	Exhaust Fan, Roof or Wall-Mounted, 16" Damper	1	3	7401370
D3060	Mechanical room	Fair	Axial Flow Fan, In-Line, up to 1 HP Motor	1	3	7401347
D3060	Roof	Fair	Exhaust Fan, Centrifugal, 24" Damper	1	3	7401404
D3060	Roof	Fair	Exhaust Fan, Roof or Wall-Mounted, 36"Damper	1	3	7401490

**Component Condition Report | Armstrong High School / Main Building**

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
D3060	Roof	Fair	Exhaust Fan, Centrifugal, 24" Damper	1	3	7401309
D3060	Roof	Fair	Exhaust Fan, Centrifugal, 24" Damper	1	5	7401330
D3060	Mechanical room	Fair	Axial Flow Fan, In-Line, 7.5 HP Motor	1	3	7401303
D3060	Roof	Fair	Exhaust Fan, Roof or Wall-Mounted, 36"Damper	1	3	7401276
D3060	Roof	Fair	Exhaust Fan, Centrifugal, 24" Damper	1	3	7401376
D3060	Roof	Fair	Exhaust Fan, Centrifugal, 12" Damper	1	3	7401341
D3060	Roof	Fair	Exhaust Fan, Centrifugal, 12" Damper	1	3	7401274
D3060	Mechanical room	Fair	Axial Flow Fan, In-Line, 10 HP Motor	1	3	7401384
D3060	Mechanical room	Fair	Axial Flow Fan, In-Line, 2 HP Motor	1	10	7401327
D3060	Roof	Fair	Exhaust Fan, Roof or Wall-Mounted, 36"Damper	1	3	7401306
D3060	Throughout building	Fair	Supplemental Components, Air Purifier, Electrostatic	77	3	7401228
D3060	Roof	Fair	Exhaust Fan, Roof or Wall-Mounted, 42" Damper	1	3	7401300
D3060	Roof	Fair	Exhaust Fan, Roof or Wall-Mounted, 36"Damper	1	3	7401291
D3060	Roof	Fair	Exhaust Fan, Roof or Wall-Mounted, 36"Damper	1	3	7401295
D3060	Roof	Fair	Exhaust Fan, Roof or Wall-Mounted, 36"Damper	1	3	7401433
D3060	Mechanical room	Fair	Axial Flow Fan, In-Line, up to 1 HP Motor	1	3	7401218
D3060	Roof	Fair	Exhaust Fan, Centrifugal, 24" Damper	1	3	7401463
D3060	Roof	Fair	Exhaust Fan, Roof or Wall-Mounted, 16" Damper	1	3	7401367
D3060	Roof	Fair	Exhaust Fan, Roof or Wall-Mounted, 16" Damper	1	3	7401431
D3060	Roof	Fair	Exhaust Fan, Centrifugal, 24" Damper	1	3	7401494
D3060	Roof	Fair	Exhaust Fan, Centrifugal, 24" Damper	1	3	7401256
D3060	Roof	Fair	Exhaust Fan, Roof or Wall-Mounted, 16" Damper	1	3	7401248
D3060	Roof	Fair	Exhaust Fan, Roof or Wall-Mounted, 36"Damper	1	3	7401385
<b>Fire Protection</b>						
D4010	Kitchen	Fair	Fire Suppression System, Commercial Kitchen, per LF of Hood	4 LF	12	7401414
D4030	Throughout building	Fair	Fire Extinguisher, Type ABC, up to 20 LB	89	4	7401362
<b>Electrical</b>						
D5010	Generator room	Fair	Generator, Gas or Gasoline	1	3	7401287
D5010	Electrical room	Fair	Automatic Transfer Switch, ATS	1	3	7401399
D5020	Electrical room	Fair	Secondary Transformer, Dry, Stepdown	1	3	7401320
D5020	Electrical room	Fair	Secondary Transformer, Dry, Stepdown	1	3	7401229
D5020	Electrical room	Fair	Secondary Transformer, Dry, Stepdown	1	8	7401266
D5020	Electrical room	Fair	Distribution Panel, 277/480 V	1	3	7401301
D5020	Electrical room	Fair	Secondary Transformer, Dry, Stepdown	1	3	7401377
D5020	Boiler room	Fair	Motor Control Center, w/ Main Breaker	1	3	7401369
D5020	Electrical room	Fair	Secondary Transformer, Dry, Stepdown	1	3	7401257
D5020	Electrical room	Fair	Distribution Panel, 277/480 V	1	3	7401461
D5020	Electrical room	Fair	Secondary Transformer, Dry, Stepdown	1	3	7401352
D5020	Electrical room	Fair	Distribution Panel, 277/480 V	1	3	7401328

**Component Condition Report | Armstrong High School / Main Building**

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
D5020	Electrical room	Fair	Secondary Transformer, Dry, Stepdown	1	3	7401293
D5020	Electrical room	Fair	Distribution Panel, 277/480 V	1	3	7401484
D5020	Mechanical room	Fair	Secondary Transformer, Dry, Stepdown	1	3	7401379
D5020	Mechanical room	Fair	Secondary Transformer, Dry, Stepdown	1	3	7401272
D5020	Mechanical room	Fair	Secondary Transformer, Dry, Stepdown	1	3	7401415
D5020	Boiler room	Fair	Motor Control Center, w/ Main Breaker	1	3	7401439
D5020	Electrical room	Fair	Secondary Transformer, Dry, Stepdown	1	3	7401405
D5020	Electrical room	Fair	Switchboard, 277/480 V	1	3	7401356
D5020	Electrical room	Fair	Secondary Transformer, Dry, Stepdown	1	3	7401473
D5020	Electrical room	Fair	Distribution Panel, 277/480 V	1	3	7401299
D5020	Electrical room	Good	Switchboard, 277/480 V	1	30	7401298
D5020	Electrical room	Fair	Distribution Panel, 277/480 V	1	3	7401436
D5020	Mechanical room	Fair	Motor Control Center, w/ Main Breaker	1	3	7401215
D5020	Electrical room	Fair	Secondary Transformer, Dry, Stepdown	1	3	7401337
D5020	Electrical room	Fair	Secondary Transformer, Dry, Stepdown	1	3	7401286
D5020	Electrical room	Fair	Secondary Transformer, Dry, Stepdown	1	3	7401458
D5020	Mechanical room	Fair	Secondary Transformer, Dry, Stepdown	1	3	7401226
D5020	Electrical room	Fair	Secondary Transformer, Dry, Stepdown	1	3	7401213
D5030	Boiler room	Fair	Variable Frequency Drive, VFD, by HP of Motor, Replace/Install	1	12	7401354
D5030	Boiler room	Fair	Variable Frequency Drive, VFD, by HP of Motor, Replace/Install	1	12	7401239
D5030	Throughout building	Fair	Electrical System, Wiring & Switches, Average or Low Density/Complexity	237,532 SF	3	7401302
D5030	Mechanical room	Fair	Variable Frequency Drive, VFD, by HP of Motor, Replace/Install	1	7	7401232
D5040	Throughout building	Fair	Interior Lighting System, Full Upgrade, Medium Density & Standard Fixtures	237,532 SF	3	7401427
<b>Fire Alarm &amp; Electronic Systems</b>						
D6020	Main Building	Fair	Low Voltage System, Phone & Data Lines	237,562 SF	5	7401365
D6030	Auditorium	Fair	Sound System, Theater/Auditorium/Church	6,400 SF	5	7401366
D6060	Throughout building	Fair	Intercom/PA System, Public Address Upgrade, Facility-Wide	237,532 SF	5	7401413
D7010	Main Entry	Good	Entry Security, Metal Detector, Full Body Walkthrough	1	7	7401319
D7010	Main Entry	Failed	Entry Security, Metal Detector, Full Body Walkthrough	1	0	7401403
D7010	Main Entry	Good	Entry Security, Metal Detector, Full Body Walkthrough	1	7	7401375
D7030	Throughout building	Fair	Security/Surveillance System, Full System Upgrade, Average Density	237,532 SF	5	7401368
D7050	Office	Fair	Fire Alarm Panel, Fully Addressable	1	4	7401437
D7050	Throughout building	Fair	Fire Alarm System, Full System Upgrade, Standard Addressable, Install	237,532 SF	5	7401487
D8010	Throughout building	Poor	BAS/HVAC Controls, Extensive/Robust BMS or Smart Building System, Upgrade/Install	237,532 SF	1	7401411
<b>Equipment &amp; Furnishings</b>						
E1030	Cafeteria	Fair	Cafeteria Equipment, Folding Table, Cafeteria	40	5	7401360
E1030	Kitchen	Fair	Foodservice Equipment, Tilting Skillet	1	3	7401451
E1030	Kitchen	Fair	Foodservice Equipment, Refrigerator, 2-Door Reach-In	1	8	7401321
E1030	Kitchen	Fair	Foodservice Equipment, Icemaker, Freestanding	1	3	7401331

**Component Condition Report | Armstrong High School / Main Building**

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
E1030	Kitchen	Fair	Foodservice Equipment, Convection Oven, Single	1	3	7401353
E1030	Kitchen	Fair	Foodservice Equipment, Refrigerator, 3-Door Reach-In	1	6	7401398
E1030	Classrooms	Good	Foodservice Equipment, Ice maker, Freestanding	1	12	7401397
E1030	Classrooms	Fair	Foodservice Equipment, Refrigerator, 2-Door Reach-In	1	3	7401457
E1030	Building exterior	Fair	Foodservice Equipment, Walk-In, Condenser for Refrigerator/Freezer	1	3	7401253
E1030	Kitchen	Fair	Foodservice Equipment, Walk-In, Freezer	1	3	7401279
E1030	Building exterior	Fair	Foodservice Equipment, Walk-In, Condenser for Refrigerator/Freezer	1	3	7401391
E1030	Kitchen	Poor	Foodservice Equipment, Convection Oven, Single	1	1	7401364
E1030	Kitchen	Fair	Foodservice Equipment, Walk-In, Refrigerator	1	3	7401401
E1030	Kitchen	Fair	Foodservice Equipment, Convection Oven, Single	1	3	7401355
E1030	Kitchen	Fair	Foodservice Equipment, Walk-In, Evaporator for Refrigerator/Freezer	1	3	7401230
E1030	Kitchen	Fair	Commercial Kitchen, Food Preparation Line	2 LS	3	7401212
E1030	Kitchen	Fair	Foodservice Equipment, Exhaust Hood, 8 to 10 LF	1	3	7401258
E1030	Kitchen	Fair	Laundry Equipment, Dryer, Commercial	1	3	7401474
E1030	Kitchen	Fair	Laundry Equipment, Washer, Commercial	1	3	7401346
E1030	Kitchen	Fair	Commercial Kitchen, Service Line	1 LS	3	7401428
E1030	Kitchen	Poor	Foodservice Equipment, Steamer, Freestanding	1	1	7401453
E1030	Kitchen	Poor	Foodservice Equipment, Steamer, Freestanding	1	1	7401387
E1030	Kitchen	Fair	Foodservice Equipment, Walk-In, Evaporator for Refrigerator/Freezer	1	3	7401296
E1030	Kitchen	Poor	Foodservice Equipment, Freezer, 3-Door Reach-In	1	1	7401381
E1030	Kitchen	Poor	Commercial Kitchen, Service Line	3 LS	1	7401441
E1030	Kitchen	Failed	Foodservice Equipment, Steam Kettle	1	0	7401422
E1030	Kitchen	Failed	Foodservice Equipment, Steam Kettle	1	0	7401410
E1070	Auditorium	Fair	Theater & Stage Equipment, Flameproof Curtain, Medium Weight Velour	2,600 SF	3	7401480
E2010	Classroom	Fair	Fixed Seating, Auditorium/Theater, Metal Standard	84	4	7469277
E2010	Throughout building	Fair	Casework, Countertop, Plastic Laminate	250 LF	3	7401219
E2010	Gymnasium	Fair	Bleachers, Telescoping Power-Operated, up to 15 Tier (per Seat)	920	5	7401465
E2010	Throughout building	Fair	Casework, Cabinetry Economy	725 LF	5	7401333
E2010	Auditorium	Fair	Fixed Seating, Auditorium/Theater, Metal and Wood Standard	820	3	7401396
<b>Special Construction &amp; Demo</b>						
F1020	Roof	Fair	Ancillary Building, Greenhouse, Glazing & Accessories	170 SF	5	7401435
<b>Athletic, Recreational &amp; Playfield Areas</b>						
G2050	Gymnasium	Fair	Sports Apparatus, Basketball, Backboard/Rim/Pole	6	5	7401233
G2050	Gymnasium	Fair	Sports Apparatus, Scoreboard, Electronic Standard	2	5	7401310
<b>Sitework</b>						
G2060	Locker room	Fair	Bench, Wood/Composite/Fiberglass	10	3	7401225
G2060	Building exterior	Fair	Signage, Property, Building-Mounted Individual Letters, Replace/Install	23	8	7401464
G2060	Locker room	Fair	Bench, Wood/Composite/Fiberglass	10	3	7401371
G2060	Roof	Fair	Picnic Table, Wood/Composite/Fiberglass	3	3	7401325

**Component Condition Report | Armstrong High School / Main Building**

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
G4050	Building exterior	Poor	Exterior Fixture w/ Lamp, any type, w/ LED Replacement	23	1	7401313

**Component Condition Report | Armstrong High School / Stadium Concession**

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
<b>Structure</b>						
A1010	Throughout	Fair	Foundation System, Concrete or CMU Walls w/ Continuous Footings	273 LF	25	7467570
B1010	Throughout	Fair	Structural Framing, Masonry (CMU) Bearing Walls	2,680 SF	25	7467568
<b>Facade</b>						
B2010	Building Exterior	Poor	Exterior Walls, any painted surface, Prep & Paint	500 SF	1	7401512
B2010	Throughout	Fair	Exterior Walls, Brick Veneer	1,917 SF	20	7467569
B2020	Building exterior	Fair	Screens & Shutters, Rolling Security Shutter, 10 to 50 SF	5	3	7401510
B2050	Building Exterior	Fair	Exterior Door, Steel, Standard	6	3	7401530
<b>Roofing</b>						
B3010	Roof	Poor	Roofing, Concrete Tile	2,850 SF	1	7401545
B3080	Building exterior	Failed	Soffit, Wood	213 SF	0	7401544
<b>Interiors</b>						
C1030		Fair	Interior Door, Steel, Standard	2	10	7401514
C1090	Restrooms	Fair	Toilet Partitions, Plastic/Laminate	18	5	7401505
C2010	Throughout building	Fair	Wall Finishes, any surface, Prep & Paint	5,154 SF	4	7401503
C2030	Restrooms	Poor	Flooring, any surface, w/ Epoxy Coating, Prep & Paint	1,950 SF	1	7401506
C2050	Throughout building	Fair	Ceiling Finishes, any flat surface, Prep & Paint	1,950 SF	5	7401528
<b>Plumbing</b>						
D2010	Restrooms	Fair	Urinal, Standard	6	5	7401548
D2010	Throughout	Fair	Plumbing System, Supply & Sanitary, Low Density (excludes fixtures)	2,680 SF	5	7401513
D2010	Mechanical room	Fair	Backflow Preventer, Irrigation Water	1	3	7401540
D2010	Interior	Fair	Backflow Preventer, Domestic Water	1	3	7401518
D2010	Utility closet	Fair	Water Heater, Electric, Commercial ( 12 kW), 30 to 80 GAL	1	3	7401521
D2010	Utility closet	Fair	Sink/Lavatory, Service Sink, Wall-Hung	2	5	7401529
D2010	Kitchen	Fair	Sink/Lavatory, Commercial Kitchen, 3-Bowl	1	5	7401524
D2010	Restrooms	Fair	Sink/Lavatory, Wall-Hung, Vitreous China	16	5	7401546
D2010	Restrooms	Fair	Toilet, Commercial Water Closet	18	5	7401531
D2020	Kitchen	Fair	Supplemental Components, Grease Trap/Interceptor, Undercounter	1	3	7401538
D2020	Mechanical room	Fair	Pump, Sewage Ejector	1	3	7401504
D2020	Mechanical room	Fair	Pump, Sewage Ejector	1	3	7401515
<b>HVAC</b>						
D3020	Interior	Fair	Unit Heater, Electric	1	3	7401511
D3020	Kitchen	Fair	Unit Heater, Electric	1	3	7401508
D3020	Kitchen	Fair	Unit Heater, Electric	1	3	7401526
D3020	Interior	Fair	Unit Heater, Electric	1	3	7401517

**Component Condition Report | Armstrong High School / Stadium Concession**

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
D3020	Interior	Fair	Unit Heater, Electric	1	3	7401542
D3060	Roof	Fair	Exhaust Fan, Roof or Wall-Mounted, 16" Damper	1	3	7401535
<b>Fire Protection</b>						
D4010	Kitchen	Fair	Fire Suppression System, Commercial Kitchen, per LF of Hood	4 LF	3	7401541
<b>Electrical</b>						
D5020	Electrical room	Fair	Secondary Transformer, Dry, Stepdown	1	3	7401519
D5020	Electrical room	Fair	Switchboard, 277/480 V	1	3	7401520
D5020	Electrical room	Fair	Distribution Panel, 120/240 V	1	3	7401549
D5030	Electrical room	Fair	Electrical System, Wiring & Switches, Average or Low Density/Complexity	2,680 SF	5	7401516
D5040	Throughout building	Fair	Interior Lighting System, Full Upgrade, Medium Density & Standard Fixtures	2,680 SF	4	7401522
<b>Fire Alarm &amp; Electronic Systems</b>						
D6020	Throughout building	Fair	Low Voltage System, Phone or Data Lines	2,680 SF	3	7401532
D7030	Throughout building	Fair	Security/Surveillance System, Full System Upgrade, Average Density	2,680 SF	3	7401507
D7050	Throughout	Fair	Fire Alarm System, Full System Upgrade, Basic/Zoned, Upgrade/Install	2,680 SF	3	7401523
<b>Equipment &amp; Furnishings</b>						
E1030	Kitchen	Fair	Foodservice Equipment, Exhaust Hood, 3 to 6 LF	1	3	7401547
E1030	Kitchen	Fair	Foodservice Equipment, Icemaker, Freestanding	1	3	7401543
E1030	Kitchen	Fair	Foodservice Equipment, Deep Fryer	1	3	7401536
E1030	Kitchen	Fair	Foodservice Equipment, Range, 2-Burner	1	3	7401537
E1030	Kitchen	Fair	Commercial Kitchen, Food Preparation Line	1 LS	3	7401525
<b>Sitework</b>						
G2080	Mechanical room	Fair	Irrigation System, Control Panel	1	3	7401533
G4050	Building exterior	Fair	Exterior Fixture w/ Lamp, any type, w/ LED Replacement	6	3	7401534

**Component Condition Report | Armstrong High School / Site**

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
<b>Fire Alarm &amp; Electronic Systems</b>						
D6060	Stadium	Fair	Intercom/PA System, Public Address Upgrade, School Stadium	1	5	7401217
<b>Equipment &amp; Furnishings</b>						
E2010	Site	Fair	Bleachers, Fixed Steel Frame, Aluminum Benches (per Seat)	1,600	5	7401450
<b>Special Construction &amp; Demo</b>						
F1020	Site	Poor	Ancillary Building, Brick, Standard	45 SF	1	7401449
F1020	Site	Fair	Ancillary Building, Brick	1,294 SF	10	7472257
F1020	Site	Fair	Ancillary Building, Wood-Framed, Standard	550 SF	3	7401305
F1020	Site	Fair	Ancillary Building, Steel, Pre-Engineered	150 SF	15	7401277
F1020	Site	Fair	Ancillary Building, Wood-Framed, Basic/Minimal	100 SF	15	7401223
F1020	Site	Fair	Ancillary Building, Steel, Pre-Engineered	175 SF	5	7401329
F1020	Site	Poor	Ancillary Building, Brick, Standard	45 SF	1	7401358
<b>Pedestrian Plazas &amp; Walkways</b>						

**Component Condition Report | Armstrong High School / Site**

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
G2020	Site	Fair	Parking Lots, Pavement, Asphalt, Seal & Stripe	30,500 SF	3	7401241
G2020	Site	Poor	Parking Lots, Pavement, Asphalt, Mill & Overlay	69,000 SF	1	7401378
G2030	Site	Poor	Sidewalk, Concrete, Large Areas	1,250 SF	1	7401335
G2030	Site	Fair	Sidewalk, Concrete, Large Areas	15,350 SF	8	7401345
<b>Athletic, Recreational &amp; Playfield Areas</b>						
G2050	Site	Fair	Sports Apparatus, Scoreboard, Electronic Standard	1	3	7401491
G2050	Site	Fair	Sports Site Lighting, Stadium, Clustered	4	8	7401419
G2050	Site	Failed	Athletic Surfaces & Courts, Track Surface, Rubber	32,000 SF	0	7401264
G2050	Site	Fair	Sports Apparatus, Tennis/Volleyball, Net w/ Posts & Anchors	5	5	7401402
G2050	Site	Fair	Athletic Surfaces & Courts, Tennis/Volleyball, 2-Color Surface, Seal & Stripe	28,500 SF	3	7401495
G2050	Site	Fair	Sports Apparatus, Player/Dugout Benches, 12' Length	8	5	7401469
G2050	Site	Fair	Sports Apparatus, Football, Goal Post	2	6	7401383
G2050	Site	Fair	Sports Apparatus, Soccer, Movable Practice Goal	4	3	7401417
<b>Sitework</b>						
G2060	Site	Fair	Picnic Table, Metal Powder-Coated	8	8	7401288
G2060	Site	Poor	Retaining Wall, Treated Timber	220 SF	1	7401482
G2060	Site	Fair	Picnic Table, Metal Powder-Coated	10	8	7401472
G2060	Site	Fair	Park Bench, Metal Powder-Coated	2	5	7401438
G2060	Site	Fair	Fences & Gates, Fence, Chain Link 4'	1,650 LF	5	7401210
G2060	Site	Poor	Park Bench, Wood/Composite/Fiberglass	5	1	7401242
G2060	Site	Fair	Fences & Gates, Fence, Chain Link 8'	3,500 LF	20	7401459
G2060	Site	Fair	Flagpole, Metal	2	3	7401249
G2060	Site	Fair	Signage, Exterior/Site, Guide & Directional Pole-Mounted, Replace/Install	22	5	7401237
G2080	Stadium	Fair	Irrigation System, Pop-Up Spray Heads, Commercial	176,000 SF	5	7472510
G4050	Site	Fair	Pole Light Fixture w/ Lamps, any type 30' High, w/ LED Replacement, Replace/Install	8	3	7401423
G4050	Site	Poor	Pole Light Fixture w/ Lamps, any type 20' High, w/ LED Replacement, Replace/Install	8	1	7401468

## Appendix E: Replacement Reserves

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Replacement Reserves Report



5/8/2024

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	
Armstrong High School	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Armstrong High School / Main Building	\$168,129	\$4,036,321	\$17,080	\$6,913,365	\$1,872,423	\$6,308,779	\$124,659	\$264,839	\$371,886	\$708,492	\$850,859	\$138,285	\$83,122	\$408,869	\$997,664	\$894,024	\$2,557,087	\$991,606	\$503,444	\$1,661,359	\$5,306,561		\$35,178,852
Armstrong High School / Site	\$160,000	\$310,185	\$0	\$198,521	\$0	\$499,010	\$11,941	\$0	\$588,383	\$0	\$319,368	\$0	\$0	\$82,935	\$0	\$16,359	\$0	\$0	\$28,133	\$0	\$493,023		\$2,707,857
Armstrong High School / Stadium Concession	\$3,089	\$80,541	\$0	\$175,295	\$22,275	\$112,218	\$0	\$0	\$0	\$0	\$1,613	\$34,467	\$0	\$0	\$11,694	\$6,076	\$0	\$0	\$94,689	\$0	\$99,061		\$641,017
<b>Grand Total</b>	<b>\$331,218</b>	<b>\$4,427,046</b>	<b>\$17,080</b>	<b>\$7,287,182</b>	<b>\$1,894,698</b>	<b>\$6,920,006</b>	<b>\$136,600</b>	<b>\$264,839</b>	<b>\$960,269</b>	<b>\$708,492</b>	<b>\$1,171,840</b>	<b>\$172,752</b>	<b>\$83,122</b>	<b>\$491,805</b>	<b>\$1,009,358</b>	<b>\$916,459</b>	<b>\$2,557,087</b>	<b>\$991,606</b>	<b>\$626,266</b>	<b>\$1,661,359</b>	<b>\$5,898,645</b>		<b>\$38,527,726</b>

Armstrong High School

Armstrong High School / Main Building

Uniformat Code	Location	Description	ID	Cost Description	Lifespan (EUL)	EAge	RUL	Quantity	Unit	Unit Cost *	Subtotal	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	Deficiency Repair Estimate
B2010	Main Building	Exterior Walls, Brick, Repair	7401466		0	1	0	2270	SF	\$33.00	\$74,910	\$74,910																					\$74,910
B2010	Building Exterior	Exterior Walls, Brick, Replace	7401247		50	30	20	39534	SF	\$53.00	\$2,095,302																					\$2,095,302	\$2,095,302
B2010	Building Exterior	Exterior Walls, Exposed Aggregate Concrete Finish, Replace	7401373		50	30	20	10451	SF	\$29.00	\$303,079																					\$303,079	\$303,079
B2020	Building Exterior	Glazing, any type by SF, Replace	7401393		30	29	1	6270	SF	\$55.00	\$344,850		\$344,850																				\$344,850
B2020	Throughout interior	Glazing, any type by SF, Replace	7401407		30	24	6	280	SF	\$55.00	\$15,400							\$15,400															\$15,400
B2020	Hallway	Screens & Shutters, Rolling Security Shutter, 200 SF, Replace	7401211		20	17	3	1	EA	\$4,000.00	\$4,000				\$4,000																		\$4,000
B2020	Throughout building	Screens & Shutters, Rolling Security Shutter, 55 to 100 SF, Replace	7401429		20	17	3	6	EA	\$2,000.00	\$12,000				\$12,000																		\$12,000
B2050	Building Exterior	Exterior Door, Wood, Solid-Core, Replace	7401322		25	24	1	11	EA	\$700.00	\$7,700		\$7,700																				\$7,700
B2050	Building Exterior	Exterior Door, Steel, Standard, Replace	7401425		40	37	3	33	EA	\$600.00	\$19,800				\$19,800																		\$19,800
B2050	Building Exterior	Exterior Door, Aluminum-Framed & Glazed, Standard Swing, Replace	7401251		30	27	3	6	EA	\$1,300.00	\$7,800				\$7,800																		\$7,800
B2050	Building Exterior	Overhead/Dock Door, Steel, 12'x12' (144 SF), Replace	7401263		30	27	3	2	EA	\$3,200.00	\$6,400				\$6,400																		\$6,400
B3010	Generator room	Roofing, Asphalt Shingle, 30-Year Premium, Replace	7401489		30	30	0	100	SF	\$5.50	\$550	\$550																					\$550
B3010	Roof	Roofing, Built-Up, Replace	7401289		25	25	0	2000	SF	\$14.00	\$28,000	\$28,000																					\$28,000
B3010	Roof	Roofing, Built-Up, Replace	7469321		25	24	1	103684	SF	\$14.00	\$1,451,576		\$1,451,576																				\$1,451,576
B3010	Roof	Roofing, Modified Bitumen, Replace	7401486		20	19	1	17744	SF	\$10.00	\$177,440		\$177,440																				\$177,440
B3020	Roof	Roof Appurtenances, Roof Access Ladder, Steel, Replace	7401350		40	37	3	40	LF	\$90.00	\$3,600				\$3,600																		\$3,600
B3020	Roof	Roof Appurtenances, Gutters & Downspouts, Aluminum w/ Fittings, Replace	7401478		20	17	3	550	LF	\$9.00	\$4,950				\$4,950																		\$4,950
B3060	Roof	Roof Skylight, per unit, up to 20 SF, Replace	7401255		30	27	3	16	EA	\$1,300.00	\$20,800				\$20,800																		\$20,800
B3060	Roof	Roof Hatch, Metal, Replace	7401421		30	27	3	2	EA	\$1,300.00	\$2,600				\$2,600																		\$2,600
C1010	Cafeteria	Interior Wall, Movable Partitions, Fabric 8 to 10' Height, Replace	7401308		25	22	3	110	LF	\$29.40	\$3,234				\$3,234																		\$3,234
C1030	Throughout building	Interior Door, Wood, Solid-Core, Replace	7401214		40	39	1	245	EA	\$700.00	\$171,500		\$171,500																				\$171,500
C1030	Throughout building	Door Hardware, School, per Door, Replace	7401281		30	22	8	295	EA	\$400.00	\$118,000								\$118,000														\$118,000
C1070	Throughout building	Suspended Ceilings, Hard Tile, Replacement w/ ACT, Replace	7401339		25	24	1	9200	SF	\$3.50	\$32,200		\$32,200																				\$32,200
C1070	Throughout building	Suspended Ceilings, Acoustical Tile (ACT), Replace	7401444		25	22	3	203307	SF	\$3.50	\$711,575				\$711,575																		\$711,575
C1070	Kitchen	Suspended Ceilings, Acoustical Tile Fiberglass, Replace	7401447		25	20	5	3600	SF	\$5.50	\$19,800				\$19,800																		\$19,800
C1090	Restrooms	Toilet Partitions, Plastic/Laminate, Replace	7401324		20	10	10	1	EA	\$750.00	\$750									\$750													\$750
C1090	Throughout building	Lockers, Steel-Baked Enamel, 12" W x 15" D x 72" H, Replace	7401316		20	10	10	750	EA	\$500.00	\$375,000									\$375,000													\$375,000
C2010	Throughout building	Wall Finishes, Ceramic Tile, Replace	7401250		40	30	10	13500	SF	\$18.00	\$243,000									\$243,000													\$243,000
C2010	Office	Wall Finishes, Wood Paneling, Replace	7401204		30	27	3	850	SF	\$28.00	\$23,800				\$23,800																		\$23,800
C2010	Throughout building	Wall Finishes, Wallpaper, Replace	7401268		15	11	4	4700	SF	\$2.20	\$10,340				\$10,340															\$10,340		\$10,340	\$20,680
C2010	Throughout building	Wall Finishes, any surface, Prep & Paint	7401456		10	6	4	372874	SF	\$1.50	\$559,311				\$559,311											\$559,311							\$559,311
C2030	Throughout building	Flooring, any surface, w/ Paint or Sealant, Prep & Paint	7401476		10	6	4	1200	SF	\$1.50	\$1,800				\$1,800												\$1,800						\$1,800
C2030	Throughout building	Flooring, Wood, Strip, Refinish	7401278		10	4	6	4650	SF	\$4.00	\$18,600				\$18,600													\$18,600					\$18,600
C2030	Classrooms	Flooring, Vinyl Tile (VCT), w/ Asbestos Abatement, Replace	7401273		15	14	1	2400	SF	\$8.00	\$19,200		\$19,200															\$19,200					\$19,200
C2030	Throughout building	Flooring, Vinyl Tile (VCT), Replace	7401496		15	11	4	180822	SF	\$5.00	\$904,110				\$904,110														\$904,110				\$904,110
C2030	Gymnasium	Flooring, Rubber Tile, Replace	7401246		15	11	4	2000	SF	\$9.00	\$18,000				\$18,000														\$18,000				\$18,000
C2030	Throughout building	Flooring, Terrazzo, Replace	7401234		50	35	15	34560	SF	\$14.00	\$483,840																	\$483,840					\$483,840
C2030	Throughout building	Flooring, Carpet, Commercial Standard, Replace	7401408		10	6	4	4800	SF	\$7.50	\$36,000				\$36,000											\$36,000							\$36,000
C2030	Gymnasium	Flooring, Maple Sports Floor, Refinish	7401493		10	4	6	9500	SF	\$5.00	\$47,500				\$47,500														\$47,500				\$47,500
C2050	Throughout building	Ceiling Finishes, any flat surface, Prep & Paint	7401477		10	6	4	8900	SF	\$2.00	\$17,800				\$17,800												\$17,800						\$17,800
C2050	Throughout building	Ceiling Finishes, exposed irregular elements, Prep & Paint	7401382		10	6	4	12525	SF	\$2.50	\$31,31																						

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Uniformat Code	Location Description	ID	Cost Description	Lifespan (EUL)	EA	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
D2010	Kitchen	7401238	Water Heater, Electric, Instant Hot, Replace	15	9	6	1	EA	\$500.00	\$500							\$500														\$500	
D2010	Boiler room	7401311	Water Heater, Gas, Tankless, Replace	15	4	11	1	EA	\$2,000.00	\$2,000												\$2,000									\$2,000	
D2010	Boiler room	7401224	Water Heater, Gas, Tankless, Replace	15	4	11	1	EA	\$2,000.00	\$2,000												\$2,000									\$2,000	
D2010	Boiler room	7401443	Water Heater, Gas, Commercial (200 MBH), Replace	20	9	11	1	EA	\$16,600.00	\$16,600												\$16,600									\$16,600	
D2010	Throughout building	7401340	Plumbing System, Supply & Sanitary, Medium Density (excludes fixtures), Replace	40	35	5	237532	SF	\$11.00	\$2,612,852					\$2,612,852																\$2,612,852	
D2010	Locker room	7401259	Backflow Preventer, Domestic Water, Replace	30	24	6	1	EA	\$10,500.00	\$10,500							\$10,500														\$10,500	
D2010	Kitchen	7401220	Drinking Fountain, Wall-Mounted, Single-Level, Replace	15	14	1	1	EA	\$1,200.00	\$1,200		\$1,200														\$1,200					\$1,200	
D2010	Utility closet	7401206	Sink/Lavatory, Service Sink, Wall-Hung, Replace	35	32	3	20	EA	\$1,400.00	\$28,000				\$28,000																	\$28,000	
D2010	Locker room	7401389	Shower, Valve & Showerhead, Replace	30	27	3	36	EA	\$800.00	\$28,800				\$28,800																	\$28,800	
D2010	Restrooms	7401432	Toilet, Commercial Water Closet, Replace	30	25	5	45	EA	\$1,300.00	\$58,500						\$58,500															\$58,500	
D2010	Restrooms	7401271	Urinal, Standard, Replace	30	25	5	25	EA	\$1,100.00	\$27,500						\$27,500															\$27,500	
D2010	Restrooms	7401380	Sink/Lavatory, Wall-Hung, Vitreous China, Replace	30	25	5	33	EA	\$1,500.00	\$49,500						\$49,500															\$49,500	
D2010	Classrooms	7401394	Sink/Lavatory, Vanity Top, Solid Surface or Vitreous China, Replace	30	24	6	5	EA	\$1,100.00	\$5,500							\$5,500														\$5,500	
D2010	Hallway	7401265	Drinking Fountain, Wall-Mounted, Bi-Level, Replace	15	6	9	1	EA	\$1,500.00	\$1,500										\$1,500											\$1,500	
D2010	Hallway	7401392	Drinking Fountain, Wall-Mounted, Bi-Level, Replace	15	6	9	1	EA	\$1,500.00	\$1,500										\$1,500											\$1,500	
D2010	Kitchen	7401314	Sink/Lavatory, Commercial Kitchen, 3-Bowl, Replace	30	20	10	1	EA	\$2,500.00	\$2,500											\$2,500										\$2,500	
D2010	Kitchen	7401270	Sink/Lavatory, Commercial Kitchen, 2-Bowl, Replace	30	20	10	1	EA	\$2,100.00	\$2,100											\$2,100										\$2,100	
D2010	Kitchen	7401318	Sink/Lavatory, Commercial Kitchen, 1-Bowl, Replace	30	20	10	1	EA	\$1,600.00	\$1,600											\$1,600										\$1,600	
D2010	Hallway	7401245	Drinking Fountain, Wall-Mounted, Bi-Level, Replace	15	2	13	1	EA	\$1,500.00	\$1,500														\$1,500							\$1,500	
D2010	Hallway	7401479	Drinking Fountain, Wall-Mounted, Bi-Level, Replace	15	2	13	1	EA	\$1,500.00	\$1,500														\$1,500							\$1,500	
D2010	Hallway	7401323	Drinking Fountain, Wall-Mounted, Bi-Level, Replace	15	2	13	1	EA	\$1,500.00	\$1,500														\$1,500							\$1,500	
D2010	Hallway	7401386	Drinking Fountain, Wall-Mounted, Bi-Level, Replace	15	2	13	1	EA	\$1,500.00	\$1,500														\$1,500							\$1,500	
D2010	Hallway	7401315	Drinking Fountain, Wall-Mounted, Bi-Level, Replace	15	2	13	1	EA	\$1,500.00	\$1,500														\$1,500							\$1,500	
D2010	Hallway	7401284	Drinking Fountain, Wall-Mounted, Bi-Level, Replace	15	2	13	1	EA	\$1,500.00	\$1,500														\$1,500							\$1,500	
D2010	Hallway	7401342	Drinking Fountain, Wall-Mounted, Bi-Level, Replace	15	2	13	1	EA	\$1,500.00	\$1,500														\$1,500							\$1,500	
D2010	Hallway	7401426	Drinking Fountain, Wall-Mounted, Bi-Level, Replace	15	2	13	1	EA	\$1,500.00	\$1,500														\$1,500							\$1,500	
D2010	Hallway	7401452	Drinking Fountain, Wall-Mounted, Bi-Level, Replace	15	2	13	1	EA	\$1,500.00	\$1,500														\$1,500							\$1,500	
D2010	Cafeteria	7401483	Drinking Fountain, Wall-Mounted, Bi-Level, Replace	15	2	13	1	EA	\$1,500.00	\$1,500														\$1,500							\$1,500	
D2010	Hallway	7401400	Drinking Fountain, Wall-Mounted, Bi-Level, Replace	15	2	13	1	EA	\$1,500.00	\$1,500														\$1,500							\$1,500	
D2010	Gymnasium	7401488	Drinking Fountain, Wall-Mounted, Bi-Level, Replace	15	2	13	1	EA	\$1,500.00	\$1,500														\$1,500							\$1,500	
D2010	Hallway	7401420	Drinking Fountain, Wall-Mounted, Bi-Level, Replace	15	2	13	1	EA	\$1,500.00	\$1,500														\$1,500							\$1,500	
D2010	Hallway	7401430	Drinking Fountain, Wall-Mounted, Bi-Level, Replace	15	2	13	1	EA	\$1,500.00	\$1,500														\$1,500							\$1,500	
D2010	Hallway	7401269	Drinking Fountain, Wall-Mounted, Bi-Level, Replace	15	2	13	1	EA	\$1,500.00	\$1,500														\$1,500							\$1,500	
D2010	Hallway	7401492	Drinking Fountain, Wall-Mounted, Bi-Level, Replace	15	2	13	1	EA	\$1,500.00	\$1,500														\$1,500							\$1,500	
D2010	Cafeteria	7401243	Drinking Fountain, Wall-Mounted, Bi-Level, Replace	15	2	13	1	EA	\$1,500.00	\$1,500														\$1,500							\$1,500	
D2010	Hallway	7401292	Drinking Fountain, Wall-Mounted, Bi-Level, Replace	15	2	13	1	EA	\$1,500.00	\$1,500														\$1,500							\$1,500	
D2010	Hallway	7401307	Drinking Fountain, Wall-Mounted, Bi-Level, Replace	15	2	13	1	EA	\$1,500.00	\$1,500														\$1,500							\$1,500	
D2010	Hallway	7401231	Drinking Fountain, Wall-Mounted, Bi-Level, Replace	15	2	13	1	EA	\$1,500.00	\$1,500														\$1,500							\$1,500	
D2010	Cafeteria	7401334	Drinking Fountain, Wall-Mounted, Bi-Level, Replace	15	2	13	1	EA	\$1,500.00	\$1,500														\$1,500							\$1,500	
D2010	Hallway	7401260	Drinking Fountain, Wall-Mounted, Bi-Level, Replace	15	2	13	1	EA	\$1,500.00	\$1,500														\$1,500							\$1,500	
D2010	Gymnasium	7401349	Drinking Fountain, Wall-Mounted, Bi-Level, Replace	15	2	13	1	EA	\$1,500.00	\$1,500														\$1,500							\$1,500	
D2010	Cafeteria	7401434	Drinking Fountain, Wall-Mounted, Bi-Level, Replace	15	2	13	1	EA	\$1,500.00	\$1,500														\$1,500							\$1,500	
D2010	Hallway	7401283	Drinking Fountain, Wall-Mounted, Bi-Level, Replace	15	2	13	1	EA	\$1,500.00	\$1,500														\$1,500							\$1,500	
D2010	Hallway	7401208	Drinking Fountain, Wall-Mounted, Bi-Level, Replace	15	2	13	1	EA	\$1,500.00	\$1,500														\$1,500							\$1,500	
D2010	Hallway	7401285	Drinking Fountain, Wall-Mounted, Bi-Level, Replace	15	2	13	1	EA	\$1,500.00	\$1,500														\$1,500							\$1,500	
D2010	Hallway	7401351	Drinking Fountain, Wall-Mounted, Bi-Level, Replace	15	2	13	1	EA	\$1,500.00	\$1,500														\$1,500							\$1,500	
D2060	Boiler room	7401344	Air Compressor, Tank-Style, Replace	20	15	5	1	EA	\$10,600.00	\$10,600						\$10,600															\$10,600	
D2060	Boiler room	7401290	Supplemental Components, Air Receiver Tank, Process Support, Replace	30	19	11	1	EA	\$6,000.00	\$6,000												\$6,000									\$6,000	
D3020	Boiler room	7401455	Boiler, Gas, HVAC, Replace	30	21	9	1	EA	\$270,000.00	\$270,000										\$270,000											\$270,000	
D3020	Boiler room	7401388	Boiler, Gas, HVAC, Replace	30	21	9	1	EA	\$270,000.00	\$270,000										\$270,000											\$270,000	
D3020	Boiler room	7401467	Unit Heater, Hydronic, Replace	20	17	3	1																									

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Uniformat Code	Location Description	ID	Cost Description	Lifespan (EUL)	EA	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	
D3030	Site	7401240	Cooling Tower, (Typical) Open Circuit, Replace	25	14	11	1	EA	\$46,700.00	\$46,700												\$46,700									\$46,700		
D3030	Roof	7401244	Chiller, Air-Cooled, Replace	25	12	13	1	EA	\$28,300.00	\$28,300													\$28,300									\$28,300	
D3030	Boiler room	7401209	Chiller, Water-Cooled, Replace	25	8	17	1	EA	\$400,000.00	\$400,000																	\$400,000					\$400,000	
D3030	Site	7401442	Cooling Tower, (Typical) Open Circuit, Replace	25	8	17	1	EA	\$46,700.00	\$46,700																	\$46,700					\$46,700	
D3030	Roof	7401275	Heat Pump, Variable Refrigerant Volume (VRV), 10 TON, Replace	15	8	7	1	EA	\$44,000.00	\$44,000								\$44,000														\$44,000	
D3030	Roof	7401406	Heat Pump, Variable Refrigerant Volume (VRV), 10 TON, Replace	15	8	7	1	EA	\$44,000.00	\$44,000								\$44,000														\$44,000	
D3030	Roof	7401409	Heat Pump, Variable Refrigerant Volume (VRV), 10 TON, Replace	15	8	7	1	EA	\$44,000.00	\$44,000								\$44,000														\$44,000	
D3030	Roof	7401418	Heat Pump, Variable Refrigerant Volume (VRV), 10 TON, Replace	15	8	7	1	EA	\$44,000.00	\$44,000								\$44,000														\$44,000	
D3050	Boiler room	7401221	Pump, Distribution, HVAC Chilled or Condenser Water, Replace	15	13	2	1	EA	\$5,100.00	\$5,100			\$5,100														\$5,100					\$5,100	
D3050	Throughout building	7401326	HVAC System, Hydronic Piping, 4-Pipe, Replace	40	37	3	237532	SF	\$8.00	\$1,900,256				\$1,900,256																		\$1,900,256	
D3050	Mechanical room	7401222	Supplemental Components, Surge Tank, HVAC, Replace	30	27	3	1	EA	\$8,840.00	\$8,840				\$8,840																		\$8,840	
D3050	Boiler room	7401312	Pump, Distribution, HVAC Heating Water, Replace	25	21	4	1	EA	\$13,600.00	\$13,600					\$13,600																	\$13,600	
D3050	Boiler room	7401416	Pump, Distribution, HVAC Heating Water, Replace	25	21	4	1	EA	\$13,600.00	\$13,600					\$13,600																	\$13,600	
D3050	Boiler room	7401462	Pump, Distribution, HVAC Chilled or Condenser Water, Replace	25	8	17	1	EA	\$34,700.00	\$34,700																	\$34,700					\$34,700	
D3050	Boiler room	7401304	Pump, Distribution, HVAC Chilled or Condenser Water, Replace	25	8	17	1	EA	\$34,700.00	\$34,700																	\$34,700					\$34,700	
D3050	Site	7401372	Pump, Distribution, HVAC Chilled or Condenser Water, Replace	25	8	17	1	EA	\$34,700.00	\$34,700																	\$34,700					\$34,700	
D3050	Site	7401336	Pump, Distribution, HVAC Chilled or Condenser Water, Replace	25	8	17	1	EA	\$34,700.00	\$34,700																	\$34,700					\$34,700	
D3050	Gymnasium	7401359	Air Handler, Interior AHU, Easy/Moderate Access, Replace	30	29	1	1	EA	\$31,000.00	\$31,000		\$31,000																				\$31,000	
D3050	Gymnasium	7401374	Air Handler, Interior AHU, Easy/Moderate Access, Replace	30	29	1	1	EA	\$31,000.00	\$31,000		\$31,000																				\$31,000	
D3050	Kitchen	7401357	Air Handler, Interior AHU, Easy/Moderate Access, Replace	25	24	1	1	EA	\$22,000.00	\$22,000		\$22,000																				\$22,000	
D3050	Roof	7401460	Packaged Unit, RTU, Pad or Roof-Mounted, Replace	20	18	2	1	EA	\$11,000.00	\$11,000			\$11,000																			\$11,000	
D3050	Dance room	7401338	Air Handler, Interior AHU, Easy/Moderate Access, Replace	25	22	3	1	EA	\$22,000.00	\$22,000				\$22,000																		\$22,000	
D3050	Building exterior	7401363	Packaged Unit, RTU, Pad or Roof-Mounted, Replace	20	17	3	1	EA	\$75,000.00	\$75,000					\$75,000																	\$75,000	
D3050	Throughout	7401470	Fan Coil Unit, Hydronic Terminal, Replace	20	17	3	51	EA	\$3,840.00	\$195,840				\$195,840																		\$195,840	
D3050	Mechanical room	7401280	Air Handler, Interior AHU, Easy/Moderate Access, Replace	25	22	3	1	EA	\$22,000.00	\$22,000					\$22,000																	\$22,000	
D3050	Throughout building	7401446	Fan Coil Unit, Hydronic Terminal, Replace	20	17	3	9	EA	\$2,530.00	\$22,770					\$22,770																	\$22,770	
D3050	Mechanical room	7401254	Air Handler, Interior AHU, Easy/Moderate Access, Replace	25	22	3	1	EA	\$22,000.00	\$22,000					\$22,000																	\$22,000	
D3050	Mechanical room	7401475	Air Handler, Interior AHU, Easy/Moderate Access, Replace	30	27	3	1	EA	\$165,000.00	\$165,000					\$165,000																	\$165,000	
D3050	Building exterior	7401448	Packaged Unit, RTU, Pad or Roof-Mounted, Replace	20	17	3	1	EA	\$75,000.00	\$75,000					\$75,000																		\$75,000
D3050	Mechanical room	7401207	Air Handler, Interior AHU, Easy/Moderate Access, Replace	25	17	8	1	EA	\$22,000.00	\$22,000								\$22,000														\$22,000	
D3050	Mechanical room	7401412	Air Handler, Interior AHU, Easy/Moderate Access, Replace	30	17	13	1	EA	\$40,000.00	\$40,000													\$40,000									\$40,000	
D3060	Mechanical room	7401218	Axial Flow Fan, In-Line, up to 1 HP Motor, Replace	20	17	3	1	EA	\$2,100.00	\$2,100				\$2,100																		\$2,100	
D3060	Mechanical room	7401384	Axial Flow Fan, In-Line, 10 HP Motor, Replace	20	17	3	1	EA	\$7,000.00	\$7,000				\$7,000																		\$7,000	
D3060	Mechanical room	7401303	Axial Flow Fan, In-Line, 7.5 HP Motor, Replace	20	17	3	1	EA	\$5,600.00	\$5,600				\$5,600																		\$5,600	
D3060	Mechanical room	7401347	Axial Flow Fan, In-Line, up to 1 HP Motor, Replace	20	17	3	1	EA	\$2,100.00	\$2,100				\$2,100																		\$2,100	
D3060	Mechanical room	7401282	Axial Flow Fan, In-Line, up to 1 HP Motor, Replace	20	17	3	1	EA	\$2,100.00	\$2,100				\$2,100																		\$2,100	
D3060	Mechanical room	7401327	Axial Flow Fan, In-Line, 2 HP Motor, Replace	20	10	10	1	EA	\$3,500.00	\$3,500											\$3,500											\$3,500	
D3060	Roof	7401385	Exhaust Fan, Roof or Wall-Mounted, 36" Damper, Replace	20	17	3	1	EA	\$5,600.00	\$5,600				\$5,600																		\$5,600	
D3060	Roof	7401248	Exhaust Fan, Roof or Wall-Mounted, 16" Damper, Replace	20	17	3	1	EA	\$2,400.00	\$2,400				\$2,400																		\$2,400	
D3060	Roof	7401256	Exhaust Fan, Centrifugal, 24" Damper, Replace	25	22	3	1	EA	\$3,000.00	\$3,000				\$3,000																		\$3,000	
D3060	Roof	7401494	Exhaust Fan, Centrifugal, 24" Damper, Replace	25	22	3	1	EA	\$3,000.00	\$3,000				\$3,000																		\$3,000	
D3060	Roof	7401431	Exhaust Fan, Roof or Wall-Mounted, 16" Damper, Replace	20	17	3	1	EA	\$2,400.00	\$2,400				\$2,400																		\$2,400	
D3060	Roof	7401463	Exhaust Fan, Centrifugal, 24" Damper, Replace	25	22	3	1	EA	\$3,000.00	\$3,000				\$3,000																		\$3,000	
D3060	Roof	7401367	Exhaust Fan, Roof or Wall-Mounted, 16" Damper, Replace	20	17	3	1	EA	\$2,400.00	\$2,400				\$2,400																		\$2,400	
D3060	Roof	7401300	Exhaust Fan, Roof or Wall-Mounted, 42" Damper, Replace	20	17	3	1	EA	\$11,000.00	\$11,000				\$11,000																		\$11,000	
D3060	Roof	7401291	Exhaust Fan, Roof or Wall-Mounted, 36" Damper, Replace	20	17	3	1	EA	\$5,600.00	\$5,600				\$5,600																		\$5,600	
D3060	Roof	7401295	Exhaust Fan, Roof or Wall-Mounted, 36" Damper, Replace	20	17	3	1	EA	\$5,600.00	\$5,600				\$5,600																		\$5,600	
D3060	Roof	7401433	Exhaust Fan, Roof or Wall-Mounted, 36" Damper, Replace	20	17	3	1	EA	\$5,600.00	\$5,600				\$5,600																		\$5,600	
D3060	Roof	7401306	Exhaust Fan, Roof or Wall-Mounted, 36" Damper, Replace	20	17	3	1	EA	\$5,																								





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Uniformat Code	Location	Description	ID	Cost Description	Lifespan (EUL)	Age	RUL	Quantity	Unit	Unit Cost *	Subtotal	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	Deficiency Repair Estimate	
G2050	Site	Athletic Surfaces & Courts, Track Surface, Rubber, Replace	7401264		10	10	0	32000	SF	\$5.00	\$160,000	\$160,000										\$160,000										\$160,000	\$480,000	
G2050	Site	Sports Apparatus, Soccer, Movable Practice Goal, Replace	7401417		15	12	3	4	EA	\$700.00	\$2,800				\$2,800																	\$2,800		\$5,600
G2050	Site	Athletic Surfaces & Courts, Tennis/Volleyball, 2-Color Surface, Seal & Stripe	7401495		10	7	3	28500	SF	\$1.50	\$42,750				\$42,750									\$42,750										\$85,500
G2050	Site	Sports Apparatus, Scoreboard, Electronic Standard, Replace	7401491		25	22	3	1	EA	\$8,000.00	\$8,000				\$8,000																			\$8,000
G2050	Site	Sports Apparatus, Player/Dugout Benches, 12' Length, Replace	7401469		15	10	5	8	EA	\$450.00	\$3,600					\$3,600																\$3,600		\$7,200
G2050	Site	Sports Apparatus, Tennis/Volleyball, Net w/ Posts & Anchors, Replace	7401402		20	15	5	5	EA	\$1,400.00	\$7,000					\$7,000																		\$7,000
G2050	Site	Sports Apparatus, Football, Goal Post, Replace	7401383		25	19	6	2	EA	\$5,000.00	\$10,000						\$10,000																	\$10,000
G2050	Site	Sports Site Lighting, Stadium, Clustered, Replace	7401419		50	42	8	4	EA	\$75,000.00	\$300,000									\$300,000														\$300,000
G2060	Site	Park Bench, Wood/Composite/Fiberglass, Replace	7401242		20	19	1	5	EA	\$600.00	\$3,000		\$3,000																					\$3,000
G2060	Site	Fences & Gates, Fence, Chain Link 4', Replace	7401210		40	35	5	1650	LF	\$18.00	\$29,700					\$29,700																		\$29,700
G2060	Site	Park Bench, Metal Powder-Coated, Replace	7401438		20	15	5	2	EA	\$700.00	\$1,400					\$1,400																		\$1,400
G2060	Site	Picnic Table, Metal Powder-Coated, Replace	7401288		20	12	8	8	EA	\$700.00	\$5,600										\$5,600													\$5,600
G2060	Site	Picnic Table, Metal Powder-Coated, Replace	7401472		20	12	8	10	EA	\$700.00	\$7,000										\$7,000													\$7,000
G2060	Site	Fences & Gates, Fence, Chain Link 8', Replace	7401459		40	20	20	3500	LF	\$31.25	\$109,375																				\$109,375			\$109,375
G2060	Site	Flagpole, Metal, Replace	7401249		30	27	3	2	EA	\$2,500.00	\$5,000				\$5,000																			\$5,000
G2060	Site	Signage, Exterior/Site, Guide & Directional Pole-Mounted, Replace/Install	7401237		20	15	5	22	EA	\$500.00	\$11,000					\$11,000																		\$11,000
G2060	Site	Retaining Wall, Treated Timber, Replace	7401482		25	24	1	220	SF	\$20.00	\$4,400		\$4,400																					\$4,400
G2080	Stadium	Irrigation System, Pop-Up Spray Heads, Commercial, Replace	7472510		20	15	5	176000	SF	\$1.00	\$176,000					\$176,000																		\$176,000
G4050	Site	Pole Light Fixture w/ Lamps, any type 20' High, w/ LED Replacement, Replace/Install	7401468		20	19	1	8	EA	\$4,000.00	\$32,000		\$32,000																					\$32,000
G4050	Site	Pole Light Fixture w/ Lamps, any type 30' High, w/ LED Replacement, Replace/Install	7401423		20	17	3	8	EA	\$6,800.00	\$54,400				\$54,400																			\$54,400
<b>Totals, Unescalated</b>												\$160,000	\$301,150	\$0	\$181,675	\$0	\$430,450	\$10,000	\$0	\$464,475	\$0	\$237,640	\$0	\$0	\$56,475	\$0	\$10,500	\$0	\$0	\$16,525	\$0	\$272,975	\$2,141,865	
<b>Totals, Escalated (3.0% inflation, compounded annually)</b>												\$160,000	\$310,185	\$0	\$198,521	\$0	\$499,010	\$11,941	\$0	\$588,383	\$0	\$319,368	\$0	\$0	\$82,935	\$0	\$16,359	\$0	\$0	\$28,133	\$0	\$493,023	\$2,707,857	

Armstrong High School / Stadium Concession

Uniformat Code	Location	Description	ID	Cost Description	Lifespan (EUL)	Age	RUL	Quantity	Unit	Unit Cost *	Subtotal	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	Deficiency Repair Estimate	
B2010	Building Exterior	Exterior Walls, any painted surface, Prep & Paint	7401512		10	9	1	500	SF	\$3.00	\$1,500		\$1,500										\$1,500											\$3,000
B2010	Throughout	Exterior Walls, Brick Veneer, Replace	7467569		50	30	20	1917	SF	\$27.00	\$51,759																					\$51,759		\$51,759
B2020	Building exterior	Screens & Shutters, Rolling Security Shutter, 10 to 50 SF, Replace	7401510		20	17	3	5	EA	\$1,200.00	\$6,000				\$6,000																			\$6,000
B2050	Building Exterior	Exterior Door, Steel, Standard, Replace	7401530		40	37	3	6	EA	\$600.00	\$3,600				\$3,600																			\$3,600
B3010	Roof	Roofing, Concrete Tile, Replace	7401545		50	49	1	2850	SF	\$18.70	\$53,295		\$53,295																					\$53,295
B3080	Building exterior	Soffit, Wood, Replace	7401544		20	20	0	213	SF	\$14.50	\$3,089	\$3,089																				\$3,089		\$6,177
C1030	Stadium Concession	Interior Door, Steel, Standard, Replace	7401514		40	30	10	2	EA	\$600.00	\$1,200											\$1,200												\$1,200
C1090	Restrooms	Toilet Partitions, Plastic/Laminate, Replace	7401505		20	15	5	18	EA	\$750.00	\$13,500					\$13,500																		\$13,500
C2010	Throughout building	Wall Finishes, any surface, Prep & Paint	7401503		10	6	4	5154	SF	\$1.50	\$7,731				\$7,731										\$7,731									\$15,462
C2030	Restrooms	Flooring, any surface, w/ Epoxy Coating, Prep & Paint	7401506		10	9	1	1950	SF	\$12.00	\$23,400		\$23,400									\$23,400												\$46,800
C2050	Throughout building	Ceiling Finishes, any flat surface, Prep & Paint	7401528		10	5	5	1950	SF	\$2.00	\$3,900					\$3,900										\$3,900								\$7,800
D2010	Utility closet	Water Heater, Electric, Commercial ( 12 kW), 30 to 80 GAL., Replace	7401521		20	17	3	1	EA	\$12,400.00	\$12,400				\$12,400																			\$12,400
D2010	Interior	Backflow Preventer, Domestic Water, Replace	7401518		30	27	3	1	EA	\$3,200.00	\$3,200				\$3,200																			\$3,200
D2010	Mechanical room	Backflow Preventer, Irrigation Water, Replace	7401540		30	27	3	1	EA	\$3,200.00	\$3,200				\$3,200																			\$3,200
D2010	Throughout	Plumbing System, Supply & Sanitary, Low Density (excludes fixtures), Replace	7401513		40	35	5	2680	SF	\$5.00	\$13,400					\$13,400																		\$13,400
D2010	Restrooms	Urinal, Standard, Replace	7401548		30	25	5	6	EA	\$1,100.00	\$6,600					\$6,600																		\$6,600
D2010	Utility closet	Sink/Lavatory, Service Sink, Wall-Hung, Replace	7401529		35	30	5	2	EA	\$1,400.00	\$2,800					\$2,800																		\$2,800
D2010	Kitchen	Sink/Lavatory, Commercial Kitchen, 3-Bowl, Replace	7401524		30	25	5	1	EA	\$2,500.00	\$2,500					\$2,500																		\$2,500
D2010	Restrooms	Sink/Lavatory, Wall-Hung, Vitreous China, Replace	7401546		30	25	5	16	EA	\$1,500.00	\$24,000					\$24,000																		\$24,000
D2010	Restrooms	Toilet, Commercial Water Closet, Replace	7401531		30	25	5	18	EA	\$1,300.00	\$23,400					\$23,400																		\$23,400
D2020	Kitchen	Supplemental Components, Grease Trap/Interceptor, Undercounter, Replace	7401538		20	17	3	1	EA	\$1,800.00	\$1,800				\$1,800																			\$1,800
D2020	Mechanical room	Pump, Sewage Ejector, Replace	7401504		15	12	3	1	EA	\$3,280.00	\$3,280				\$3,280															\$3,280				\$6,560
D2020	Mechanical room	Pump, Sewage Ejector, Replace	7401515		15	12	3	1	EA	\$3,280.00	\$3,280				\$3,280															\$3,280				\$6,560
D3020	Kitchen	Unit Heater, Electric, Replace	7401508		20	17	3																											

Replacement Reserves Report



5/8/2024

Uniformat Code	Location Description	ID	Cost Description	Lifespan (EUL)	Age	RUL	Quantity	Unit	Unit Cost *	Subtotal	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	Deficiency Repair Estimate		
D5020	Electrical room	7401549	Distribution Panel, 120/240 V, Replace	30	27	3	1	EA	\$2,500.00	\$2,500				\$2,500																		\$2,500		
D5030	Electrical room	7401516	Electrical System, Wiring & Switches, Average or Low Density/Complexity, Replace	40	35	5	2680	SF	\$2.50	\$6,700						\$6,700																\$6,700		
D5040	Throughout building	7401522	Interior Lighting System, Full Upgrade, Medium Density & Standard Fixtures, Replace	20	16	4	2680	SF	\$4.50	\$12,060				\$12,060																		\$12,060		
D6020	Throughout building	7401532	Low Voltage System, Phone or Data Lines, Replace	20	17	3	2680	SF	\$1.00	\$2,680				\$2,680																		\$2,680		
D7030	Throughout building	7401507	Security/Surveillance System, Full System Upgrade, Average Density, Replace	15	12	3	2680	SF	\$2.00	\$5,360				\$5,360														\$5,360				\$10,720		
D7050	Throughout	7401523	Fire Alarm System, Full System Upgrade, Basic/Zoned, Upgrade/Install	20	17	3	2680	SF	\$1.50	\$4,020				\$4,020																		\$4,020		
E1030	Kitchen	7401547	Foodservice Equipment, Exhaust Hood, 3 to 6 LF, Replace	15	12	3	1	EA	\$3,300.00	\$3,300				\$3,300																		\$3,300	\$6,600	
E1030	Kitchen	7401543	Foodservice Equipment, Icemaker, Freestanding, Replace	15	12	3	1	EA	\$6,700.00	\$6,700				\$6,700																			\$6,700	\$13,400
E1030	Kitchen	7401536	Foodservice Equipment, Deep Fryer, Replace	15	12	3	1	EA	\$7,000.00	\$7,000				\$7,000																			\$7,000	\$14,000
E1030	Kitchen	7401537	Foodservice Equipment, Range, 2-Burner, Replace	15	12	3	1	EA	\$1,700.00	\$1,700				\$1,700																			\$1,700	\$3,400
E1030	Kitchen	7401525	Commercial Kitchen, Food Preparation Line, Replace	15	12	3	1	LS	\$20,000.00	\$20,000				\$20,000																			\$20,000	\$40,000
G2080	Mechanical room	7401533	Irrigation System, Control Panel, Replace	15	12	3	1	EA	\$5,000.00	\$5,000				\$5,000																			\$5,000	\$10,000
G4050	Building exterior	7401534	Exterior Fixture w/ Lamp, any type, w/ LED Replacement, Replace	20	17	3	6	EA	\$600.00	\$3,600				\$3,600																				\$3,600
<b>Totals, Unescalated</b>											\$3,089	\$78,195	\$0	\$160,420	\$19,791	\$96,800	\$0	\$0	\$0	\$0	\$1,200	\$24,900	\$0	\$0	\$7,731	\$3,900	\$0	\$0	\$55,620	\$0	\$54,848	\$506,493		
<b>Totals, Escalated (3.0% inflation, compounded annually)</b>											\$3,089	\$80,541	\$0	\$175,295	\$22,275	\$112,218	\$0	\$0	\$0	\$0	\$1,613	\$34,467	\$0	\$0	\$11,694	\$6,076	\$0	\$0	\$94,689	\$0	\$99,061	\$641,017		

## Appendix F: Equipment Inventory List

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D10 Conveying													
Index	ID	UFCode	Component Description	Attributes	Capacity	Building	Location Detail	Manufacturer	Model	Serial	Dataplate Yr	Barcode	Qty
1	7401317	D1010	<b>Elevator Controls</b>	Automatic, 1 Car		Armstrong High School / Main Building	Elevator	Dover	CP-60-15	1-69133	1982	<a href="https://rvaschools.gofmx.com/equipment/1556533">https://rvaschools.gofmx.com/equipment/1556533</a>	
2	7401236	D1010	<b>Passenger Elevator</b>	Hydraulic, 2 Floors	3000 LB	Armstrong High School / Main Building	Elevator						
3	7401390	D1010	<b>Dumbwaiter</b>	Electric, up to 5 Stories		Armstrong High School / Main Building	Main Building	Sedgwick	No dataplate	No dataplate		<a href="https://rvaschools.gofmx.com/equipment/1556581">https://rvaschools.gofmx.com/equipment/1556581</a>	
D20 Plumbing													
Index	ID	UFCode	Component Description	Attributes	Capacity	Building	Location Detail	Manufacturer	Model	Serial	Dataplate Yr	Barcode	Qty
1	7401216	D2010	<b>Storage Tank</b>	Domestic Water	600 GAL	Armstrong High School / Main Building	Boiler room	No dataplate	No dataplate	No dataplate	1968	<a href="https://rvaschools.gofmx.com/equipment/1556446">https://rvaschools.gofmx.com/equipment/1556446</a>	
2	7401521	D2010	<b>Water Heater</b>	Electric, Commercial ( 12 kW), 30 to 80 GAL	120 Gal	Armstrong High School / Stadium Concession	Utility closet	State Industries, Inc.	SB3 120-18-SFE	2788 1882		<a href="https://rvaschools.gofmx.com/equipment/1556613">https://rvaschools.gofmx.com/equipment/1556613</a>	
3	7401238	D2010	<b>Water Heater</b>	Electric, Instant Hot		Armstrong High School / Main Building	Kitchen	A. O. Smith	EJC 2 200	1527N000134	2015	<a href="https://rvaschools.gofmx.com/equipment/1556534">https://rvaschools.gofmx.com/equipment/1556534</a>	
4	7401443	D2010	<b>Water Heater</b>	Gas, Commercial (200 MBH)	81 GAL	Armstrong High School / Main Building	Boiler room	State Industries, Inc.	SBD81199NE 118	1549M000830	2015	<a href="https://rvaschools.gofmx.com/equipment/1556450">https://rvaschools.gofmx.com/equipment/1556450</a>	
5	7401311	D2010	<b>Water Heater</b>	Gas, Tankless	7 GPM	Armstrong High School / Main Building	Boiler room	Navien	2087B2122256052	884954920853	2020	<a href="https://rvaschools.gofmx.com/equipment/1556448">https://rvaschools.gofmx.com/equipment/1556448</a>	
6	7401224	D2010	<b>Water Heater</b>	Gas, Tankless	7 GPM	Armstrong High School / Main Building	Boiler room	Navien	2087B2122256052	884954920870	2020	<a href="https://rvaschools.gofmx.com/equipment/1556447">https://rvaschools.gofmx.com/equipment/1556447</a>	
7	7401259	D2010	<b>Backflow Preventer</b>	Domestic Water	6 IN	Armstrong High School / Main Building	Locker room	Watts Regulator	909	241700	2000	<a href="https://rvaschools.gofmx.com/equipment/1556588">https://rvaschools.gofmx.com/equipment/1556588</a>	
8	7401518	D2010	<b>Backflow Preventer</b>	Domestic Water	2 IN	Armstrong High School / Stadium Concession	Interior	Watts Regulator	909	169524		<a href="https://rvaschools.gofmx.com/equipment/1556610">https://rvaschools.gofmx.com/equipment/1556610</a>	
9	7401343	D2010	<b>Backflow Preventer</b>	Domestic Water	.75 IN	Armstrong High School / Main Building	Mechanical room	Watts Regulator	LF909	069117	2017	<a href="https://rvaschools.gofmx.com/equipment/1556472">https://rvaschools.gofmx.com/equipment/1556472</a>	
10	7401540	D2010	<b>Backflow Preventer</b>	Irrigation Water	2 IN	Armstrong High School / Stadium Concession	Mechanical room	Febco	825Y RP	R2057		<a href="https://rvaschools.gofmx.com/equipment/1556612">https://rvaschools.gofmx.com/equipment/1556612</a>	
11	7401504	D2020	<b>Pump</b>	Sewage Ejector	1 HP	Armstrong High School / Stadium Concession	Mechanical room	Weil Pump	250216-1	307-356		<a href="https://rvaschools.gofmx.com/equipment/1556606">https://rvaschools.gofmx.com/equipment/1556606</a>	
12	7401515	D2020	<b>Pump</b>	Sewage Ejector	1 HP	Armstrong High School / Stadium Concession	Mechanical room	Weil Pump	250216-1	No dataplate		<a href="https://rvaschools.gofmx.com/equipment/1556607">https://rvaschools.gofmx.com/equipment/1556607</a>	
13	7401538	D2020	<b>Supplemental Components</b>	Grease Trap/Interceptor, Undercounter		Armstrong High School / Stadium Concession	Kitchen	Illegible	Illegible	Illegible		<a href="https://rvaschools.gofmx.com/equipment/1556623">https://rvaschools.gofmx.com/equipment/1556623</a>	
14	7401344	D2060	<b>Air Compressor</b>	Tank-Style	5 HP	Armstrong High School / Main Building	Boiler room	Ingersoll Rand	2475N7.5	0905140021	2009	<a href="https://rvaschools.gofmx.com/equipment/1556433">https://rvaschools.gofmx.com/equipment/1556433</a>	
15	7401290	D2060	<b>Supplemental Components</b>	Air Receiver Tank, Process Support	120 GAL	Armstrong High School / Main Building	Boiler room	Dayton Electric	4KP88	L 12/28/2004-00009	2005	<a href="https://rvaschools.gofmx.com/equipment/1556434">https://rvaschools.gofmx.com/equipment/1556434</a>	
D30 HVAC													
Index	ID	UFCode	Component Description	Attributes	Capacity	Building	Location Detail	Manufacturer	Model	Serial	Dataplate Yr	Barcode	Qty
1	7401455	D3020	<b>Boiler</b>	Gas, HVAC	5021 MBH	Armstrong High School / Main Building	Boiler room	Burnham	5W.150.50. G. GP	28255	2003	<a href="https://rvaschools.gofmx.com/equipment/1556438">https://rvaschools.gofmx.com/equipment/1556438</a>	
2	7401388	D3020	<b>Boiler</b>	Gas, HVAC	5021 MBH	Armstrong High School / Main Building	Boiler room	Burnham	5W.150.50. G. GP	28254	2003	<a href="https://rvaschools.gofmx.com/equipment/1556437">https://rvaschools.gofmx.com/equipment/1556437</a>	
3	7401227	D3020	<b>Heat Exchanger</b>	Plate & Frame, HVAC	13 GPM	Armstrong High School / Main Building	Mechanical room	No dataplate	No dataplate	No dataplate	2011	<a href="https://rvaschools.gofmx.com/equipment/1556473">https://rvaschools.gofmx.com/equipment/1556473</a>	
4	7401511	D3020	<b>Unit Heater</b>	Electric	10 KW	Armstrong High School / Stadium Concession	Interior	Markel	No dataplate	No dataplate		<a href="https://rvaschools.gofmx.com/equipment/1556614">https://rvaschools.gofmx.com/equipment/1556614</a>	
5	7401508	D3020	<b>Unit Heater</b>	Electric	10 KW	Armstrong High School / Stadium Concession	Kitchen	Markel	No dataplate	No dataplate		<a href="https://rvaschools.gofmx.com/equipment/1556622">https://rvaschools.gofmx.com/equipment/1556622</a>	
6	7401526	D3020	<b>Unit Heater</b>	Electric	10 KW	Armstrong High School / Stadium Concession	Kitchen	Markel	No dataplate	No dataplate		<a href="https://rvaschools.gofmx.com/equipment/1556621">https://rvaschools.gofmx.com/equipment/1556621</a>	

7	7401517	D3020	Unit Heater	Electric	3 KW	Armstrong High School / Stadium Concession	Interior	Dayton Electric	No dataplate	No dataplate		<a href="https://rvaschools.gofmx.com/equipment/1556611">https://rvaschools.gofmx.com/equipment/1556611</a>
8	7401542	D3020	Unit Heater	Electric	3 KW	Armstrong High School / Stadium Concession	Interior	Dayton Electric	No dataplate	No dataplate		<a href="https://rvaschools.gofmx.com/equipment/1556609">https://rvaschools.gofmx.com/equipment/1556609</a>
9	7401445	D3020	Unit Heater	Hydronic	12 MBH	Armstrong High School / Main Building	Mechanical room	Inaccessible	Inaccessible	Inaccessible		
10	7401467	D3020	Unit Heater	Hydronic	400 MBH	Armstrong High School / Main Building	Boiler room	Inaccessible	Inaccessible	Inaccessible	1968	<a href="https://rvaschools.gofmx.com/equipment/1556451">https://rvaschools.gofmx.com/equipment/1556451</a>
11	7401485	D3020	Boiler Supplemental Components	Chemical Feed System		Armstrong High School / Main Building	Boiler room	Advantage Controls	XSCF3E6	0385882L22-002	2022	<a href="https://rvaschools.gofmx.com/equipment/1556435">https://rvaschools.gofmx.com/equipment/1556435</a>
12	7401205	D3020	Boiler Supplemental Components	Expansion Tank	35 GAL	Armstrong High School / Main Building	Boiler room	Stover	Illegible	Illegible	1968	<a href="https://rvaschools.gofmx.com/equipment/1556455">https://rvaschools.gofmx.com/equipment/1556455</a>
13	7401424	D3020	Boiler Supplemental Components	Expansion Tank	300 GAL	Armstrong High School / Main Building	Boiler room	Inaccessible	Inaccessible	Inaccessible	1968	<a href="https://rvaschools.gofmx.com/equipment/1556454">https://rvaschools.gofmx.com/equipment/1556454</a>
14	7401332	D3020	Boiler Supplemental Components	Expansion Tank	300 GAL	Armstrong High School / Main Building	Boiler room	Inaccessible	Inaccessible	Inaccessible	1968	<a href="https://rvaschools.gofmx.com/equipment/1556453">https://rvaschools.gofmx.com/equipment/1556453</a>
15	7401267	D3020	Boiler Supplemental Components	Expansion Tank	70 GAL	Armstrong High School / Main Building	Boiler room	No dataplate	No dataplate	No dataplate	2016	<a href="https://rvaschools.gofmx.com/equipment/1556452">https://rvaschools.gofmx.com/equipment/1556452</a>
16	7401244	D3030	Chiller	Air-Cooled	20 TON	Armstrong High School / Main Building	Roof	Trane	RAUJC204PC13ABDF00C20	C12H05218	2012	<a href="https://rvaschools.gofmx.com/equipment/1556485">https://rvaschools.gofmx.com/equipment/1556485</a>
17	7401209	D3030	Chiller	Water-Cooled	301 TON	Armstrong High School / Main Building	Boiler room	Daikin Industries	C3012BLYY2-A	5163002400	2016	<a href="https://rvaschools.gofmx.com/equipment/1556439">https://rvaschools.gofmx.com/equipment/1556439</a>
18	7401240	D3030	Cooling Tower	(Typical) Open Circuit	180 TON	Armstrong High School / Main Building	Site	Evapco	AT 19-114	10-377649	2010	<a href="https://rvaschools.gofmx.com/equipment/1556596">https://rvaschools.gofmx.com/equipment/1556596</a>
19	7401442	D3030	Cooling Tower	(Typical) Open Circuit	180 TON	Armstrong High School / Main Building	Site	Evapco	AT 19-2K14	16-795166	2016	<a href="https://rvaschools.gofmx.com/equipment/1556595">https://rvaschools.gofmx.com/equipment/1556595</a>
20	7401418	D3030	Heat Pump	Variable Refrigerant Volume (VRV), 10 TON	10 TON	Armstrong High School / Main Building	Roof	Daikin Industries	RXYQ120TYDN	1607326579	2016	<a href="https://rvaschools.gofmx.com/equipment/1556505">https://rvaschools.gofmx.com/equipment/1556505</a>
21	7401409	D3030	Heat Pump	Variable Refrigerant Volume (VRV), 10 TON	10 TON	Armstrong High School / Main Building	Roof	Daikin Industries	RXYQ120TYDN	1607326581	2016	<a href="https://rvaschools.gofmx.com/equipment/1556506">https://rvaschools.gofmx.com/equipment/1556506</a>
22	7401406	D3030	Heat Pump	Variable Refrigerant Volume (VRV), 10 TON	10 TON	Armstrong High School / Main Building	Roof	Daikin Industries	RXYQ120TYDN	1607326580	2016	<a href="https://rvaschools.gofmx.com/equipment/1556504">https://rvaschools.gofmx.com/equipment/1556504</a>
23	7401275	D3030	Heat Pump	Variable Refrigerant Volume (VRV), 10 TON	10 TON	Armstrong High School / Main Building	Roof	Daikin Industries	RXYQ120TYDN	1607326585	2016	<a href="https://rvaschools.gofmx.com/equipment/1556503">https://rvaschools.gofmx.com/equipment/1556503</a>
24	7401221	D3050	Pump	Distribution, HVAC Chilled or Condenser Water	1 HP	Armstrong High School / Main Building	Boiler room	Armstrong	No dataplate	No dataplate	2011	<a href="https://rvaschools.gofmx.com/equipment/1556470">https://rvaschools.gofmx.com/equipment/1556470</a>
25	7401304	D3050	Pump	Distribution, HVAC Chilled or Condenser Water	60 HP	Armstrong High School / Main Building	Boiler room	Armstrong	No dataplate	No dataplate	2016	<a href="https://rvaschools.gofmx.com/equipment/1556445">https://rvaschools.gofmx.com/equipment/1556445</a>
26	7401372	D3050	Pump	Distribution, HVAC Chilled or Condenser Water	60 HP	Armstrong High School / Main Building	Site	Bell & Gossett	e-SOSCSSF	C231417-01 K61	2016	<a href="https://rvaschools.gofmx.com/equipment/1556598">https://rvaschools.gofmx.com/equipment/1556598</a>
27	7401336	D3050	Pump	Distribution, HVAC Chilled or Condenser Water	60 HP	Armstrong High School / Main Building	Site	Bell & Gossett	e-80SC SSF	C231417-02 K61	2016	<a href="https://rvaschools.gofmx.com/equipment/1556597">https://rvaschools.gofmx.com/equipment/1556597</a>
28	7401462	D3050	Pump	Distribution, HVAC Chilled or Condenser Water	60 HP	Armstrong High School / Main Building	Boiler room	Armstrong	No dataplate	No dataplate	2016	<a href="https://rvaschools.gofmx.com/equipment/1556442">https://rvaschools.gofmx.com/equipment/1556442</a>
29	7401416	D3050	Pump	Distribution, HVAC Heating Water	20 HP	Armstrong High School / Main Building	Boiler room	Taco	TA1024B3JIB2L0	No dataplate	2003	<a href="https://rvaschools.gofmx.com/equipment/1556440">https://rvaschools.gofmx.com/equipment/1556440</a>
30	7401312	D3050	Pump	Distribution, HVAC Heating Water	20 HP	Armstrong High School / Main Building	Boiler room	Taco	TA1024B3JIB2L0	No dataplate	2003	<a href="https://rvaschools.gofmx.com/equipment/1556441">https://rvaschools.gofmx.com/equipment/1556441</a>
31	7401222	D3050	Supplemental Components	Surge Tank, HVAC	400 GAL	Armstrong High School / Main Building	Mechanical room	No dataplate	No dataplate	No dataplate		<a href="https://rvaschools.gofmx.com/equipment/1556471">https://rvaschools.gofmx.com/equipment/1556471</a>
32	7401254	D3050	Air Handler	Interior AHU, Easy/Moderate Access	4000 CFM	Armstrong High School / Main Building	Mechanical room	No dataplate	No dataplate	No dataplate		<a href="https://rvaschools.gofmx.com/equipment/1556467">https://rvaschools.gofmx.com/equipment/1556467</a>
33	7401475	D3050	Air Handler	Interior AHU, Easy/Moderate Access	45000 CFM	Armstrong High School / Main Building	Mechanical room	No dataplate	No dataplate	No dataplate		<a href="https://rvaschools.gofmx.com/equipment/1556466">https://rvaschools.gofmx.com/equipment/1556466</a>
34	7401280	D3050	Air Handler	Interior AHU, Easy/Moderate Access	4000 CFM	Armstrong High School / Main Building	Mechanical room	No dataplate	No dataplate	No dataplate		<a href="https://rvaschools.gofmx.com/equipment/1556475">https://rvaschools.gofmx.com/equipment/1556475</a>
35	7401207	D3050	Air Handler	Interior AHU, Easy/Moderate Access	4000 CFM	Armstrong High School / Main Building	Mechanical room	McQuay	No dataplate	No dataplate	2007	<a href="https://rvaschools.gofmx.com/equipment/1556516">https://rvaschools.gofmx.com/equipment/1556516</a>
36	7401359	D3050	Air Handler	Interior AHU, Easy/Moderate Access	6000 CFM	Armstrong High School / Main Building	Gymnasium	No dataplate	No dataplate	No dataplate	1968	<a href="https://rvaschools.gofmx.com/equipment/1556605">https://rvaschools.gofmx.com/equipment/1556605</a>
37	7401374	D3050	Air Handler	Interior AHU, Easy/Moderate Access	6000 CFM	Armstrong High School / Main Building	Gymnasium	No dataplate	No dataplate	No dataplate	1968	<a href="https://rvaschools.gofmx.com/equipment/1556604">https://rvaschools.gofmx.com/equipment/1556604</a>
38	7401338	D3050	Air Handler	Interior AHU, Easy/Moderate Access	4000 CFM	Armstrong High School / Main Building	Dance room	No dataplate	No dataplate	No dataplate		<a href="https://rvaschools.gofmx.com/equipment/1556580">https://rvaschools.gofmx.com/equipment/1556580</a>

39	7401412	D3050	<b>Air Handler</b>	Interior AHU, Easy/Moderate Access	7000 CFM	Armstrong High School / Main Building	Mechanical room	McQuay	CAH040GMDC	FB0U070600588	2007	<a href="https://rvaschools.gofmx.com/equipment/1556478">https://rvaschools.gofmx.com/equipment/1556478</a>
40	7401357	D3050	<b>Air Handler</b>	Interior AHU, Easy/Moderate Access	4000 CFM	Armstrong High School / Main Building	Kitchen	Trane	UCCAA10C0A0RCJ12	K16L82869	2016	<a href="https://rvaschools.gofmx.com/equipment/1556603">https://rvaschools.gofmx.com/equipment/1556603</a>
41	7401446	D3050	<b>Fan Coil Unit</b>	Hydronic Terminal	850 CFM	Armstrong High School / Main Building	Throughout building	McQuay	F.TSC.2.S04.A.A.7	Various	2005	9
42	7401470	D3050	<b>Fan Coil Unit</b>	Hydronic Terminal	1600 CFM	Armstrong High School / Main Building	Throughout	No dataplate	No dataplate	Various	2005	51
43	7401448	D3050	<b>Packaged Unit</b>	RTU, Pad or Roof-Mounted	40 TON	Armstrong High School / Main Building	Building exterior	Trane	TCH480A40N2A3MC1A00	C04606225	2004	<a href="https://rvaschools.gofmx.com/equipment/1556602">https://rvaschools.gofmx.com/equipment/1556602</a>
44	7401363	D3050	<b>Packaged Unit</b>	RTU, Pad or Roof-Mounted	48 TON	Armstrong High School / Main Building	Building exterior	Trane	TCH480A40N2A3MC1A00	C04606226	2004	<a href="https://rvaschools.gofmx.com/equipment/1556601">https://rvaschools.gofmx.com/equipment/1556601</a>
45	7401460	D3050	<b>Packaged Unit</b>	RTU, Pad or Roof-Mounted	5 TON	Armstrong High School / Main Building	Roof	Illegible	Illegible	Illegible		<a href="https://rvaschools.gofmx.com/equipment/1556489">https://rvaschools.gofmx.com/equipment/1556489</a>
46	7401282	D3060	<b>Axial Flow Fan</b>	In-Line, up to 1 HP Motor	1000 CFM	Armstrong High School / Main Building	Mechanical room	New York Blower Company	Inaccessible	Inaccessible		<a href="https://rvaschools.gofmx.com/equipment/1556468">https://rvaschools.gofmx.com/equipment/1556468</a>
47	7401347	D3060	<b>Axial Flow Fan</b>	In-Line, up to 1 HP Motor	1000 CFM	Armstrong High School / Main Building	Mechanical room	New York Blower Company	T-227	No dataplate		<a href="https://rvaschools.gofmx.com/equipment/1556474">https://rvaschools.gofmx.com/equipment/1556474</a>
48	7401218	D3060	<b>Axial Flow Fan</b>	In-Line, up to 1 HP Motor	1000 CFM	Armstrong High School / Main Building	Mechanical room	New York Blower Company	Inaccessible	Inaccessible		<a href="https://rvaschools.gofmx.com/equipment/1556517">https://rvaschools.gofmx.com/equipment/1556517</a>
49	7401327	D3060	<b>Axial Flow Fan</b>	In-Line, 2 HP Motor	8970 CFM	Armstrong High School / Main Building	Mechanical room	New York Blower Company	2014-04204-01	No dataplate	2014	<a href="https://rvaschools.gofmx.com/equipment/1556518">https://rvaschools.gofmx.com/equipment/1556518</a>
50	7401303	D3060	<b>Axial Flow Fan</b>	In-Line, 7.5 HP Motor	21000 CFM	Armstrong High School / Main Building	Mechanical room	Loren Cook Company	300 QMX	065S941189	2007	<a href="https://rvaschools.gofmx.com/equipment/1556479">https://rvaschools.gofmx.com/equipment/1556479</a>
51	7401384	D3060	<b>Axial Flow Fan</b>	In-Line, 10 HP Motor	40000 CFM	Armstrong High School / Main Building	Mechanical room	New York Blower Company	T-547	No dataplate		<a href="https://rvaschools.gofmx.com/equipment/1556469">https://rvaschools.gofmx.com/equipment/1556469</a>
52	7401341	D3060	<b>Exhaust Fan</b>	Centrifugal, 12" Damper	1000 CFM	Armstrong High School / Main Building	Roof	JennAir	89CT A KD	Illegible		<a href="https://rvaschools.gofmx.com/equipment/1556488">https://rvaschools.gofmx.com/equipment/1556488</a>
53	7401274	D3060	<b>Exhaust Fan</b>	Centrifugal, 12" Damper	1000 CFM	Armstrong High School / Main Building	Roof	JennAir	89CT A KD	Illegible		<a href="https://rvaschools.gofmx.com/equipment/1556514">https://rvaschools.gofmx.com/equipment/1556514</a>
54	7401297	D3060	<b>Exhaust Fan</b>	Centrifugal, 24" Damper	3000 CFM	Armstrong High School / Main Building	Roof	Illegible	Illegible	Illegible	2014	<a href="https://rvaschools.gofmx.com/equipment/1556499">https://rvaschools.gofmx.com/equipment/1556499</a>
55	7401395	D3060	<b>Exhaust Fan</b>	Centrifugal, 24" Damper	3000 CFM	Armstrong High School / Main Building	Roof	Greenheck	6-143-V6-4-X	14542314	2014	<a href="https://rvaschools.gofmx.com/equipment/1556490">https://rvaschools.gofmx.com/equipment/1556490</a>
56	7401404	D3060	<b>Exhaust Fan</b>	Centrifugal, 24" Damper	3000 CFM	Armstrong High School / Main Building	Roof	Illegible	Illegible	Illegible	2014	<a href="https://rvaschools.gofmx.com/equipment/1556498">https://rvaschools.gofmx.com/equipment/1556498</a>
57	7401309	D3060	<b>Exhaust Fan</b>	Centrifugal, 24" Damper	3000 CFM	Armstrong High School / Main Building	Roof	Illegible	Illegible	Illegible	2014	<a href="https://rvaschools.gofmx.com/equipment/1556508">https://rvaschools.gofmx.com/equipment/1556508</a>
58	7401330	D3060	<b>Exhaust Fan</b>	Centrifugal, 24" Damper	3000 CFM	Armstrong High School / Main Building	Roof	Illegible	Illegible	Illegible	2014	<a href="https://rvaschools.gofmx.com/equipment/1556502">https://rvaschools.gofmx.com/equipment/1556502</a>
59	7401376	D3060	<b>Exhaust Fan</b>	Centrifugal, 24" Damper	3000 CFM	Armstrong High School / Main Building	Roof	Illegible	Illegible	Illegible	2014	<a href="https://rvaschools.gofmx.com/equipment/1556500">https://rvaschools.gofmx.com/equipment/1556500</a>
60	7401463	D3060	<b>Exhaust Fan</b>	Centrifugal, 24" Damper	3000 CFM	Armstrong High School / Main Building	Roof	Illegible	Illegible	Illegible	2014	<a href="https://rvaschools.gofmx.com/equipment/1556510">https://rvaschools.gofmx.com/equipment/1556510</a>
61	7401494	D3060	<b>Exhaust Fan</b>	Centrifugal, 24" Damper	3000 CFM	Armstrong High School / Main Building	Roof	Illegible	Illegible	Illegible	2014	<a href="https://rvaschools.gofmx.com/equipment/1556501">https://rvaschools.gofmx.com/equipment/1556501</a>
62	7401256	D3060	<b>Exhaust Fan</b>	Centrifugal, 24" Damper	3000 CFM	Armstrong High School / Main Building	Roof	Illegible	Illegible	Illegible	2014	<a href="https://rvaschools.gofmx.com/equipment/1556513">https://rvaschools.gofmx.com/equipment/1556513</a>
63	7401361	D3060	<b>Exhaust Fan</b>	Roof or Wall-Mounted, 16" Damper	2000 CFM	Armstrong High School / Main Building	Roof	Illegible	Illegible	Illegible		<a href="https://rvaschools.gofmx.com/equipment/1556492">https://rvaschools.gofmx.com/equipment/1556492</a>
64	7401370	D3060	<b>Exhaust Fan</b>	Roof or Wall-Mounted, 16" Damper	2000 CFM	Armstrong High School / Main Building	Roof	Illegible	142 BCR A	Illegible		<a href="https://rvaschools.gofmx.com/equipment/1556487">https://rvaschools.gofmx.com/equipment/1556487</a>
65	7401535	D3060	<b>Exhaust Fan</b>	Roof or Wall-Mounted, 16" Damper	1500 CFM	Armstrong High School / Stadium Concession	Roof	Inaccessible	Inaccessible	Inaccessible		
66	7401367	D3060	<b>Exhaust Fan</b>	Roof or Wall-Mounted, 16" Damper	2000 CFM	Armstrong High School / Main Building	Roof	Illegible	Illegible	Illegible		<a href="https://rvaschools.gofmx.com/equipment/1556493">https://rvaschools.gofmx.com/equipment/1556493</a>
67	7401431	D3060	<b>Exhaust Fan</b>	Roof or Wall-Mounted, 16" Damper	2000 CFM	Armstrong High School / Main Building	Roof	Illegible	Illegible	Illegible		<a href="https://rvaschools.gofmx.com/equipment/1556494">https://rvaschools.gofmx.com/equipment/1556494</a>
68	7401248	D3060	<b>Exhaust Fan</b>	Roof or Wall-Mounted, 16" Damper	2000 CFM	Armstrong High School / Main Building	Roof	Illegible	Illegible	Illegible		<a href="https://rvaschools.gofmx.com/equipment/1556496">https://rvaschools.gofmx.com/equipment/1556496</a>
69	7401294	D3060	<b>Exhaust Fan</b>	Roof or Wall-Mounted, 24" Damper	2000 CFM	Armstrong High School / Main Building	Roof	Illegible	Illegible	Illegible		<a href="https://rvaschools.gofmx.com/equipment/1556497">https://rvaschools.gofmx.com/equipment/1556497</a>
70	7401235	D3060	<b>Exhaust Fan</b>	Roof or Wall-Mounted, 36" Damper	9000 CFM	Armstrong High School / Main Building	Roof	Illegible	Illegible	Illegible		<a href="https://rvaschools.gofmx.com/equipment/1556482">https://rvaschools.gofmx.com/equipment/1556482</a>
71	7401490	D3060	<b>Exhaust Fan</b>	Roof or Wall-Mounted, 36" Damper	9000 CFM	Armstrong High School / Main Building	Roof	Illegible	Illegible	Illegible		<a href="https://rvaschools.gofmx.com/equipment/1556483">https://rvaschools.gofmx.com/equipment/1556483</a>

72	7401276	D3060	<b>Exhaust Fan</b>	Roof or Wall-Mounted, 36"Damper	9000 CFM	Armstrong High School / Main Building	Roof	Illegible	Illegible	Illegible		<a href="https://rvaschools.gofmx.com/equipment/1556511">https://rvaschools.gofmx.com/equipment/1556511</a>
73	7401306	D3060	<b>Exhaust Fan</b>	Roof or Wall-Mounted, 36"Damper	9000 CFM	Armstrong High School / Main Building	Roof	Illegible	Illegible	Illegible		<a href="https://rvaschools.gofmx.com/equipment/1556491">https://rvaschools.gofmx.com/equipment/1556491</a>
74	7401291	D3060	<b>Exhaust Fan</b>	Roof or Wall-Mounted, 36"Damper	9000 CFM	Armstrong High School / Main Building	Roof	Illegible	Illegible	Illegible		<a href="https://rvaschools.gofmx.com/equipment/1556512">https://rvaschools.gofmx.com/equipment/1556512</a>
75	7401295	D3060	<b>Exhaust Fan</b>	Roof or Wall-Mounted, 36"Damper	9000 CFM	Armstrong High School / Main Building	Roof	Illegible	Illegible	Illegible		<a href="https://rvaschools.gofmx.com/equipment/1556486">https://rvaschools.gofmx.com/equipment/1556486</a>
76	7401433	D3060	<b>Exhaust Fan</b>	Roof or Wall-Mounted, 36"Damper	9000 CFM	Armstrong High School / Main Building	Roof	Illegible	Illegible	Illegible		<a href="https://rvaschools.gofmx.com/equipment/1556509">https://rvaschools.gofmx.com/equipment/1556509</a>
77	7401385	D3060	<b>Exhaust Fan</b>	Roof or Wall-Mounted, 36"Damper	9000 CFM	Armstrong High School / Main Building	Roof	Illegible	Illegible	Illegible		<a href="https://rvaschools.gofmx.com/equipment/1556507">https://rvaschools.gofmx.com/equipment/1556507</a>
78	7401300	D3060	<b>Exhaust Fan</b>	Roof or Wall-Mounted, 42" Damper	16000 CFM	Armstrong High School / Main Building	Roof	Illegible	Illegible	Illegible		<a href="https://rvaschools.gofmx.com/equipment/1556495">https://rvaschools.gofmx.com/equipment/1556495</a>
79	7401228	D3060	<b>Supplemental Components</b>	Air Purifier, Electrostatic	2000 CFM	Armstrong High School / Main Building	Throughout building	Carrier	FN1AAF006000	Various	2021	77

#### D40 Fire Protection

Index	ID	UFCode	Component Description	Attributes	Capacity	Building	Location Detail	Manufacturer	Model	Serial	Dataplate Yr	Barcode	Qty
1	7401414	D4010	<b>Fire Suppression System</b>	Commercial Kitchen, per LF of Hood		Armstrong High School / Main Building	Kitchen	Ansul	R-102	No dataplate		<a href="https://rvaschools.gofmx.com/equipment/1556577">https://rvaschools.gofmx.com/equipment/1556577</a>	4
2	7401541	D4010	<b>Fire Suppression System</b>	Commercial Kitchen, per LF of Hood		Armstrong High School / Stadium Concession	Kitchen	Kitchen Knight	PCL-300	No dataplate		<a href="https://rvaschools.gofmx.com/equipment/1556625">https://rvaschools.gofmx.com/equipment/1556625</a>	4
3	7401362	D4030	<b>Fire Extinguisher</b>	Type ABC, up to 20 LB		Armstrong High School / Main Building	Throughout building						89

#### D50 Electrical

Index	ID	UFCode	Component Description	Attributes	Capacity	Building	Location Detail	Manufacturer	Model	Serial	Dataplate Yr	Barcode	Qty
1	7401287	D5010	<b>Generator</b>	Gas or Gasoline	55 KW	Armstrong High School / Main Building	Generator room	Onan	55.0 KB-15R 1486 P	0774838990	1978	<a href="https://rvaschools.gofmx.com/equipment/1556563">https://rvaschools.gofmx.com/equipment/1556563</a>	
2	7401399	D5010	<b>Automatic Transfer Switch</b>	ATS	100 AMP	Armstrong High School / Main Building	Electrical room	Onan	LTDU100-4X/103895	0774838678	1978	<a href="https://rvaschools.gofmx.com/equipment/1556560">https://rvaschools.gofmx.com/equipment/1556560</a>	
3	7401320	D5020	<b>Secondary Transformer</b>	Dry, Stepdown	45 KVA	Armstrong High School / Main Building	Electrical room	Cutler-Hammer	V48M28T45K	J02A00719	1997	<a href="https://rvaschools.gofmx.com/equipment/1556476">https://rvaschools.gofmx.com/equipment/1556476</a>	
4	7401229	D5020	<b>Secondary Transformer</b>	Dry, Stepdown	75 KVA	Armstrong High School / Main Building	Electrical room	Siemens	3F3Y075K13	No dataplate	1997	<a href="https://rvaschools.gofmx.com/equipment/1556530">https://rvaschools.gofmx.com/equipment/1556530</a>	
5	7401266	D5020	<b>Secondary Transformer</b>	Dry, Stepdown	75 KVA	Armstrong High School / Main Building	Electrical room	Cutler-Hammer	V48M28T75J	J02A00599	2002	<a href="https://rvaschools.gofmx.com/equipment/1556515">https://rvaschools.gofmx.com/equipment/1556515</a>	
6	7401377	D5020	<b>Secondary Transformer</b>	Dry, Stepdown	112.5 KVA	Armstrong High School / Main Building	Electrical room	General Electric	9T23A3875	No dataplate	1968	<a href="https://rvaschools.gofmx.com/equipment/1556575">https://rvaschools.gofmx.com/equipment/1556575</a>	
7	7401257	D5020	<b>Secondary Transformer</b>	Dry, Stepdown	30 KVA	Armstrong High School / Main Building	Electrical room	General Electric	9T23A3872	No dataplate		<a href="https://rvaschools.gofmx.com/equipment/1556477">https://rvaschools.gofmx.com/equipment/1556477</a>	
8	7401352	D5020	<b>Secondary Transformer</b>	Dry, Stepdown	45 KVA	Armstrong High School / Main Building	Electrical room	General Electric	9T23A3873	No dataplate		<a href="https://rvaschools.gofmx.com/equipment/1556458">https://rvaschools.gofmx.com/equipment/1556458</a>	
9	7401293	D5020	<b>Secondary Transformer</b>	Dry, Stepdown	225 KVA	Armstrong High School / Main Building	Electrical room	General Electric	9T23A3877	No dataplate	1968	<a href="https://rvaschools.gofmx.com/equipment/1556578">https://rvaschools.gofmx.com/equipment/1556578</a>	
10	7401379	D5020	<b>Secondary Transformer</b>	Dry, Stepdown	112.5 KVA	Armstrong High School / Main Building	Mechanical room	General Electric	9T23A3875	No dataplate	1968	<a href="https://rvaschools.gofmx.com/equipment/1556529">https://rvaschools.gofmx.com/equipment/1556529</a>	
11	7401272	D5020	<b>Secondary Transformer</b>	Dry, Stepdown	112.5 KVA	Armstrong High School / Main Building	Mechanical room	General Electric	9T23A3875	No dataplate	1968	<a href="https://rvaschools.gofmx.com/equipment/1556520">https://rvaschools.gofmx.com/equipment/1556520</a>	
12	7401415	D5020	<b>Secondary Transformer</b>	Dry, Stepdown	15 KVA	Armstrong High School / Main Building	Mechanical room	General Electric	912149303	No dataplate	1968	<a href="https://rvaschools.gofmx.com/equipment/1556531">https://rvaschools.gofmx.com/equipment/1556531</a>	
13	7401519	D5020	<b>Secondary Transformer</b>	Dry, Stepdown	50 KVA	Armstrong High School / Stadium Concession	Electrical room	General Electric	9T23B2673	No dataplate		<a href="https://rvaschools.gofmx.com/equipment/1556616">https://rvaschools.gofmx.com/equipment/1556616</a>	
14	7401405	D5020	<b>Secondary Transformer</b>	Dry, Stepdown	75 KVA	Armstrong High School / Main Building	Electrical room	Siemens	3F3Y075K13	No dataplate	1997	<a href="https://rvaschools.gofmx.com/equipment/1556573">https://rvaschools.gofmx.com/equipment/1556573</a>	
15	7401473	D5020	<b>Secondary Transformer</b>	Dry, Stepdown	75 KVA	Armstrong High School / Main Building	Electrical room	Siemens	3F3Y075K13	No dataplate	1997	<a href="https://rvaschools.gofmx.com/equipment/1556459">https://rvaschools.gofmx.com/equipment/1556459</a>	
16	7401337	D5020	<b>Secondary Transformer</b>	Dry, Stepdown	45 KVA	Armstrong High School / Main Building	Electrical room	Cutler-Hammer	V48M28T45K	J02A00609	1997	<a href="https://rvaschools.gofmx.com/equipment/1556457">https://rvaschools.gofmx.com/equipment/1556457</a>	
17	7401286	D5020	<b>Secondary Transformer</b>	Dry, Stepdown	112.5 KVA	Armstrong High School / Main Building	Electrical room	General Electric	9T23A3875	No dataplate	1968	<a href="https://rvaschools.gofmx.com/equipment/1556582">https://rvaschools.gofmx.com/equipment/1556582</a>	
18	7401458	D5020	<b>Secondary Transformer</b>	Dry, Stepdown	75 KVA	Armstrong High School / Main Building	Electrical room	Siemens	3F3Y075K13	No dataplate	1997	<a href="https://rvaschools.gofmx.com/equipment/1556583">https://rvaschools.gofmx.com/equipment/1556583</a>	
19	7401226	D5020	<b>Secondary Transformer</b>	Dry, Stepdown	75 KVA	Armstrong High School / Main Building	Mechanical room	General Electric	9T23A3875	No dataplate	1968	<a href="https://rvaschools.gofmx.com/equipment/1556526">https://rvaschools.gofmx.com/equipment/1556526</a>	

20	7401213	D5020	<b>Secondary Transformer</b>	Dry, Stepdown	45 KVA	Armstrong High School / Main Building	Electrical room	General Electric	9T23A3873	No dataplate		<a href="https://rvaschools.gofmx.com/equipment/1556589">https://rvaschools.gofmx.com/equipment/1556589</a>
21	7401356	D5020	<b>Switchboard</b>	277/480 V	3000 AMP	Armstrong High School / Main Building	Electrical room	General Electric	A/V LINE	132-79439 P41		<a href="https://rvaschools.gofmx.com/equipment/1556558">https://rvaschools.gofmx.com/equipment/1556558</a>
22	7401520	D5020	<b>Switchboard</b>	277/480 V	400 AMP	Armstrong High School / Stadium Concession	Electrical room	General Electric		6166300		<a href="https://rvaschools.gofmx.com/equipment/1556617">https://rvaschools.gofmx.com/equipment/1556617</a>
23	7401298	D5020	<b>Switchboard</b>	277/480 V	1200 AMP	Armstrong High School / Main Building	Electrical room	General Electric	U7415513	150788004	2014	<a href="https://rvaschools.gofmx.com/equipment/1556559">https://rvaschools.gofmx.com/equipment/1556559</a>
24	7401549	D5020	<b>Distribution Panel</b>	120/240 V	200 AMP	Armstrong High School / Stadium Concession	Electrical room	General Electric	NA	NA		<a href="https://rvaschools.gofmx.com/equipment/1556615">https://rvaschools.gofmx.com/equipment/1556615</a>
25	7401301	D5020	<b>Distribution Panel</b>	277/480 V	600 AMP	Armstrong High School / Main Building	Electrical room	General Electric	AJ-397567	No dataplate	1968	<a href="https://rvaschools.gofmx.com/equipment/1556594">https://rvaschools.gofmx.com/equipment/1556594</a>
26	7401461	D5020	<b>Distribution Panel</b>	277/480 V	400 AMP	Armstrong High School / Main Building	Electrical room	General Electric	AJ-397569	No dataplate	1968	<a href="https://rvaschools.gofmx.com/equipment/1556593">https://rvaschools.gofmx.com/equipment/1556593</a>
27	7401328	D5020	<b>Distribution Panel</b>	277/480 V	400 AMP	Armstrong High School / Main Building	Electrical room	General Electric	AJ-671827	No dataplate	1968	<a href="https://rvaschools.gofmx.com/equipment/1556579">https://rvaschools.gofmx.com/equipment/1556579</a>
28	7401484	D5020	<b>Distribution Panel</b>	277/480 V	400 AMP	Armstrong High School / Main Building	Electrical room	General Electric	AJ-397569	No dataplate	1968	<a href="https://rvaschools.gofmx.com/equipment/1556585">https://rvaschools.gofmx.com/equipment/1556585</a>
29	7401299	D5020	<b>Distribution Panel</b>	277/480 V	400 AMP	Armstrong High School / Main Building	Electrical room	General Electric	AJ-673961	No dataplate	1968	<a href="https://rvaschools.gofmx.com/equipment/1556584">https://rvaschools.gofmx.com/equipment/1556584</a>
30	7401436	D5020	<b>Distribution Panel</b>	277/480 V	400 AMP	Armstrong High School / Main Building	Electrical room	General Electric	AJ-673961	No dataplate	1968	<a href="https://rvaschools.gofmx.com/equipment/1556592">https://rvaschools.gofmx.com/equipment/1556592</a>
31	7401369	D5020	<b>Motor Control Center</b>	w/ Main Breaker	600 AMP	Armstrong High School / Main Building	Boiler room	General Electric	DJ A1 A2 T	75C 243 0 35 - 1	1968	<a href="https://rvaschools.gofmx.com/equipment/1556436">https://rvaschools.gofmx.com/equipment/1556436</a>
32	7401439	D5020	<b>Motor Control Center</b>	w/ Main Breaker	600 AMP	Armstrong High School / Main Building	Boiler room	General Electric	DJ A1 A2 T	75C 243 0 35 - 4	1968	<a href="https://rvaschools.gofmx.com/equipment/1556519">https://rvaschools.gofmx.com/equipment/1556519</a>
33	7401215	D5020	<b>Motor Control Center</b>	w/ Main Breaker	600 AMP	Armstrong High School / Main Building	Mechanical room	General Electric	DJ A1 A2 T	750 2430 35 - 3	1968	<a href="https://rvaschools.gofmx.com/equipment/1556465">https://rvaschools.gofmx.com/equipment/1556465</a>
34	7401354	D5030	<b>Variable Frequency Drive</b>	VFD, by HP of Motor	60 HP	Armstrong High School / Main Building	Boiler room	Eaton	H-Max	No dataplate	2016	<a href="https://rvaschools.gofmx.com/equipment/1556444">https://rvaschools.gofmx.com/equipment/1556444</a>
35	7401239	D5030	<b>Variable Frequency Drive</b>	VFD, by HP of Motor	60 HP	Armstrong High School / Main Building	Boiler room	Eaton	H-Max	No dataplate	2016	<a href="https://rvaschools.gofmx.com/equipment/1556443">https://rvaschools.gofmx.com/equipment/1556443</a>
36	7401232	D5030	<b>Variable Frequency Drive</b>	VFD, by HP of Motor	75 HP	Armstrong High School / Main Building	Mechanical room	Honeywell	11606736	11606730	2011	<a href="https://rvaschools.gofmx.com/equipment/1556464">https://rvaschools.gofmx.com/equipment/1556464</a>

#### D70 Electronic Safety & Security

Index	ID	UFCode	Component Description	Attributes	Capacity	Building	Location Detail	Manufacturer	Model	Serial	Dataplate Yr	Barcode	Qty
1	7401437	D7050	<b>Fire Alarm Panel</b>	Fully Addressable		Armstrong High School / Main Building	Office	Siemens	FS-250	575-249351 Rev 0		<a href="https://rvaschools.gofmx.com/equipment/1556431">https://rvaschools.gofmx.com/equipment/1556431</a>	

#### E10 Equipment

Index	ID	UFCode	Component Description	Attributes	Capacity	Building	Location Detail	Manufacturer	Model	Serial	Dataplate Yr	Barcode	Qty
1	7401474	E1030	<b>Laundry Equipment</b>	Dryer, Commercial	80 LB	Armstrong High School / Main Building	Kitchen	Speed Queen	ST050NQT81G1W01	0708006714	2007	<a href="https://rvaschools.gofmx.com/equipment/1556587">https://rvaschools.gofmx.com/equipment/1556587</a>	
2	7401346	E1030	<b>Laundry Equipment</b>	Washer, Commercial	55 LB	Armstrong High School / Main Building	Kitchen	Continental	RMG055P1102111001	2380989J16	2016	<a href="https://rvaschools.gofmx.com/equipment/1556586">https://rvaschools.gofmx.com/equipment/1556586</a>	
3	7401360	E1030	<b>Cafeteria Equipment</b>	Folding Table, Cafeteria		Armstrong High School / Main Building	Cafeteria						40
4	7401353	E1030	<b>Foodservice Equipment</b>	Convection Oven, Single		Armstrong High School / Main Building	Kitchen	Garland	No dataplate	No dataplate		<a href="https://rvaschools.gofmx.com/equipment/1556543">https://rvaschools.gofmx.com/equipment/1556543</a>	
5	7401364	E1030	<b>Foodservice Equipment</b>	Convection Oven, Single		Armstrong High School / Main Building	Kitchen	Blodgett	No dataplate	No dataplate		<a href="https://rvaschools.gofmx.com/equipment/1556552">https://rvaschools.gofmx.com/equipment/1556552</a>	
6	7401355	E1030	<b>Foodservice Equipment</b>	Convection Oven, Single		Armstrong High School / Main Building	Kitchen	Garland	No dataplate	No dataplate		<a href="https://rvaschools.gofmx.com/equipment/1556542">https://rvaschools.gofmx.com/equipment/1556542</a>	
7	7401536	E1030	<b>Foodservice Equipment</b>	Deep Fryer		Armstrong High School / Stadium Concession	Kitchen	Frymaster	HI4SD	8100716068		<a href="https://rvaschools.gofmx.com/equipment/1556620">https://rvaschools.gofmx.com/equipment/1556620</a>	
8	7401547	E1030	<b>Foodservice Equipment</b>	Exhaust Hood, 3 to 6 LF		Armstrong High School / Stadium Concession	Kitchen	Grease Master	GSW1	No dataplate		<a href="https://rvaschools.gofmx.com/equipment/1556624">https://rvaschools.gofmx.com/equipment/1556624</a>	
9	7401258	E1030	<b>Foodservice Equipment</b>	Exhaust Hood, 8 to 10 LF	10	Armstrong High School / Main Building	Kitchen	No dataplate	No dataplate	No dataplate		<a href="https://rvaschools.gofmx.com/equipment/1556541">https://rvaschools.gofmx.com/equipment/1556541</a>	
10	7401381	E1030	<b>Foodservice Equipment</b>	Freezer, 3-Door Reach-In		Armstrong High School / Main Building	Kitchen	Hobart	QF3	32564502		<a href="https://rvaschools.gofmx.com/equipment/1556538">https://rvaschools.gofmx.com/equipment/1556538</a>	
11	7401543	E1030	<b>Foodservice Equipment</b>	Icemaker, Freestanding		Armstrong High School / Stadium Concession	Kitchen	Vevor	ZBJLB-400T-JT0001V1	TFK06100300		<a href="https://rvaschools.gofmx.com/equipment/1556618">https://rvaschools.gofmx.com/equipment/1556618</a>	

12	7401331	E1030	<b>Foodservice Equipment</b> Icemaker, Freestanding	Armstrong High School / Main Building	Kitchen	Manitowoc	QD0283W	010462999	2001	<a href="https://rvaschools.gofmx.com/equipment/1556536">https://rvaschools.gofmx.com/equipment/1556536</a>
13	7401397	E1030	<b>Foodservice Equipment</b> Icemaker, Freestanding	Armstrong High School / Main Building	Classrooms	Ice-O-Matic	GEM0650A6	21071280011700	2021	<a href="https://rvaschools.gofmx.com/equipment/1556591">https://rvaschools.gofmx.com/equipment/1556591</a>
14	7401537	E1030	<b>Foodservice Equipment</b> Range, 2-Burner	Armstrong High School / Stadium Concession	Kitchen	Garland	Illegible	Illegible		<a href="https://rvaschools.gofmx.com/equipment/1556619">https://rvaschools.gofmx.com/equipment/1556619</a>
15	7401321	E1030	<b>Foodservice Equipment</b> Refrigerator, 2-Door Reach-In	Armstrong High School / Main Building	Kitchen	Delfield	CSRR12P-S	1707152002765	2017	<a href="https://rvaschools.gofmx.com/equipment/1556547">https://rvaschools.gofmx.com/equipment/1556547</a>
16	7401457	E1030	<b>Foodservice Equipment</b> Refrigerator, 2-Door Reach-In	Armstrong High School / Main Building	Classrooms	TURBO-AIR	M3R47-2-N	H2M3R4LE7200		<a href="https://rvaschools.gofmx.com/equipment/1556590">https://rvaschools.gofmx.com/equipment/1556590</a>
17	7401398	E1030	<b>Foodservice Equipment</b> Refrigerator, 3-Door Reach-In	Armstrong High School / Main Building	Kitchen	Hobart	Q3	321007315	2015	<a href="https://rvaschools.gofmx.com/equipment/1556537">https://rvaschools.gofmx.com/equipment/1556537</a>
18	7401422	E1030	<b>Foodservice Equipment</b> Steam Kettle	Armstrong High School / Main Building	Kitchen	Groen	AH-20	40069	1968	<a href="https://rvaschools.gofmx.com/equipment/1556546">https://rvaschools.gofmx.com/equipment/1556546</a>
19	7401410	E1030	<b>Foodservice Equipment</b> Steam Kettle	Armstrong High School / Main Building	Kitchen	Groen	AH-40	43639	1968	<a href="https://rvaschools.gofmx.com/equipment/1556545">https://rvaschools.gofmx.com/equipment/1556545</a>
20	7401453	E1030	<b>Foodservice Equipment</b> Steamer, Freestanding	Armstrong High School / Main Building	Kitchen	Convotherm	WS20002AB2AAUL	WS215050551	2021	<a href="https://rvaschools.gofmx.com/equipment/1556539">https://rvaschools.gofmx.com/equipment/1556539</a>
21	7401387	E1030	<b>Foodservice Equipment</b> Steamer, Freestanding	Armstrong High School / Main Building	Kitchen	Cleveland	Illegible	Illegible		<a href="https://rvaschools.gofmx.com/equipment/1556540">https://rvaschools.gofmx.com/equipment/1556540</a>
22	7401451	E1030	<b>Foodservice Equipment</b> Tilting Skillet	Armstrong High School / Main Building	Kitchen	Cleveland	SGM-30	5125-6E-06	2006	<a href="https://rvaschools.gofmx.com/equipment/1556544">https://rvaschools.gofmx.com/equipment/1556544</a>
23	7401253	E1030	<b>Foodservice Equipment</b> Walk-In, Condenser for Refrigerator/Freezer	Armstrong High School / Main Building	Building exterior	Russell	RLD300L44-E	H04259724-0101	2001	<a href="https://rvaschools.gofmx.com/equipment/1556561">https://rvaschools.gofmx.com/equipment/1556561</a>
24	7401391	E1030	<b>Foodservice Equipment</b> Walk-In, Condenser for Refrigerator/Freezer	Armstrong High School / Main Building	Building exterior	Russell	RLS200H22-E	H04259724-0401	2001	<a href="https://rvaschools.gofmx.com/equipment/1556562">https://rvaschools.gofmx.com/equipment/1556562</a>
25	7401230	E1030	<b>Foodservice Equipment</b> Walk-In, Evaporator for Refrigerator/Freezer	Armstrong High School / Main Building	Kitchen	Russell	AE46-164B	W04H25972403001	2001	<a href="https://rvaschools.gofmx.com/equipment/1556551">https://rvaschools.gofmx.com/equipment/1556551</a>
26	7401296	E1030	<b>Foodservice Equipment</b> Walk-In, Evaporator for Refrigerator/Freezer	Armstrong High School / Main Building	Kitchen	Russell	AA38-160	W04H25972406001	2001	<a href="https://rvaschools.gofmx.com/equipment/1556549">https://rvaschools.gofmx.com/equipment/1556549</a>
27	7401279	E1030	<b>Foodservice Equipment</b> Walk-In, Freezer	Armstrong High School / Main Building	Kitchen	Harford	No dataplate	No dataplate	2001	<a href="https://rvaschools.gofmx.com/equipment/1556550">https://rvaschools.gofmx.com/equipment/1556550</a>
28	7401401	E1030	<b>Foodservice Equipment</b> Walk-In, Refrigerator	Armstrong High School / Main Building	Kitchen	Harford	No dataplate	No dataplate	2001	<a href="https://rvaschools.gofmx.com/equipment/1556548">https://rvaschools.gofmx.com/equipment/1556548</a>