WALKER UPPER ELEMENTARY SCHOOL
1564 DAIRY ROAD
CHARLOTTESVILLE, VIRGINIA

ECS PROJECT NO. 46:6713

FOR

CITY OF CHARLOTTESVILLE - FACILITIES DEVELOPMENT

NOVEMBER 2, 2021

November 2, 2021

Mr. Josh Bontrager
City of Charlottesville - Facilities Development
305 4th Street NW
Charlottesville, Virginia, 22903

ECS Project No. 46:6713

Reference: Facility Condition Assessment Report for Walker Upper Elementary School, 1564 Dairy Road, Charlottesville, Virginia

Dear Mr. Bontrager:

ECS Mid-Atlantic, LLC is pleased to provide the results of our Facility Condition Assessment (FCA) for the referenced property. The scope of the FCA was performed in general accordance with ASTM and industry guidelines and items contained within the ECS Proposal No. 46:7239-FP, dated June 12, 2020. We understand that our work is being performed under the City of Charlottesville Purchase Order Number 4500313133.

It has been our pleasure to be of service to you on this project. Should you have any questions or comments with regard to the findings and recommendations, please feel free to contact us at your convenience.

Respectfully,

ECS Mid-Atlantic, LLC

Donald M. Goglio
Project Manger
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703-471-8400

Michael G. Doyle, AIA
Principal Architect
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703-471-8400

Project Summary

Construction System	Good	Fair	Poor	Action	Immediate	Over Term Years 1-20
3.2.1 Topography	X			None		
3.2.2 Storm Water Drainage	X			None		
3.2.3 Access and Egress	X			None		
3.2.4 Paving, Curbing, and Parking	X	X		Repair		$30,000
3.2.5 Flatwork	X	X		Repair		$20,932
3.2.6 Landscaping and Appurtenances	X			None		
3.2.7 Recreational Facilities	X			Repair		$10,000
3.2.8 Special Utility Systems		NA		None		
3.3.1 Foundation	X			None		
3.3.2 Building Frame	X			None		
3.3.3 Building Exteriors		X		Repair		$80,000
3.3.4 Exterior Doors	X			None		
3.3.5 Exterior Windows	X	X		Replace		$75,000
3.3.6 Roofing Systems		X		Replace		$1,050,000
3.4.1.1 Supply and Waste Piping	X			None		
3.4.1.2 Domestic Hot Water Production		X		Replace		$4,000
3.4.2.1 Equipment	X	X		Replace		$598,500
3.4.2.2 Distribution System	X			None		
3.4.2.3 Control Systems	X			None		
3.4.3.1 Service and Metering	X			None		
3.4.3.2 Distribution	X	X		Replace		$10,000
3.5 VERTICAL TRANSPORTATION SYSTEMS	X			None		
3.6.1 Sprinklers and Suppression Systems	X			None		
3.6.2 Alarm Systems	X			None		
3.6.3 Security and Other Systems	X			None		
3.7.1 Interior Finishes	X			None		
3.8 Accessibility (ADA) Compliance	X	X		None		
5.1 MOISTURE AND MOLD	X			None		
Totals					$0	$1,878,432

Summary	Today's Dollars	$/Square Feet
Immediate Repairs	$0	$0.00

	Today's Dollars	$/Square Feet	$/Square Feet/Year
Replacement Reserves, today's dollars	$1,878,432.00	$18.42	$0.92
Replacement Reserves, w/20, 2.5% escalation	$1,926,275.69	$18.89	$0.94

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1.0 EXECUTIVE SUMMARY

1.1 BACKGROUND

ECS Mid-Atlantic, LLC (ECS) performed a Facility Condition Assessment (FCA) in general conformance with ASTM guidelines and general scope items contained within the ECS Proposal 46:7239-FP dated June 12, 2020 for the Walker Upper Elementary School property in Charlottesville, Virginia - hereinafter known as the Property.

The FCA was conducted by ECS in response to the authorization of our Proposal by Ms. Susan Dyer on November 23, 2020. The report was completed and reviewed by the following team members:

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Michael G. Doyle, AIA	Principal Architect
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Reliance

This report is provided for the exclusive use of City of Charlottesville - Facilities Development. This report is not intended to be used or relied upon in connection with other projects or by other unidentified third parties. The use of this report by any undesignated third party or parties will be at such party's sole risk and ECS disclaims liability for any such third party use or reliance.

1.2 METHODOLOGY

ECS observations and historical property data provided by the owner were utilized to determine the effective age of the property components. Various factors including exposure to weather elements, system manufacturer quality, level of maintenance, and usage determine the effective age of property components. Depending on the impact of these various factors, the effective age of property components can reduce the Remaining Useful Life (RUL) of a property component. The general requirements of the owner to address facility needs were requested to be prioritized based on the RUL and type of property component. The following Priorities were established by the Owner as follows:

Priority 1: Immediately Critical Items (Year 0)

Items in this Priority category include physical deficiencies that require immediate action as a result of (i) existing or potentially unsafe conditions, (ii) significant negative conditions impacting tenancy, (iii) material building code violations or Title II American with Disabilities Act (ADA) items.

Priority 2: Critical Items (Year 0-1)

Items in this Priority category include physical deficiencies that require immediate action as a result of (i) poor or deteriorated condition of critical element or system, or (ii) a condition that is left "as is," with an extensive delay in addressing same, would result in or contribute to critical element or system failure within one year.

Priority 3: Near Term Items (Years 2-5)

Items in this category include physical deficiencies that require near term action as a result of (i) poor or deteriorated condition of critical element or system, or (ii) a condition that is left "as is," with an extensive delay in addressing same, would result in or contribute to critical element or system failure within two to five years.

Priority 4: Reserve Items (Years 5-20)

Items in this Priority category include Capital Reserves for recurring probable expenditures, which are not classified as operational or maintenance expenses, which should be annually budgeted for in advance. Capital reserves are reasonably predictable both in terms of frequency and cost. However, they may also include components or systems that have an indeterminable life but nonetheless have a potential liability for failure within an estimated time period. A component method has also been included within this report as well.

Reserve items excludes systems or components that are estimated to expire after the reserve term and that are not considered material to the structural and mechanical integrity of the subject property. Furthermore, systems and components that were not deemed to have a material affect on the use were also excluded. Costs that are caused by acts of God, accidents or other occurrences that are typically covered by insurance, rather than reserved funds, are also excluded.

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

ECS's reserve methodology involves identification and quantification of those systems or components requiring capital reserve funds within the evaluation period. Additional information concerning systems or components respective replacement costs (in today's dollars), typical expected useful lives, and remaining useful lives were estimated so that a funding schedule could be prepared. The Capital Reserve Schedule presupposes that all required remedial work has been performed or that monies for remediation have been budgeted for items defined in the Immediate Needs Cost Estimates.

1.3 PROPERTY DESCRIPTION

Walker Upper Elementary School, located at 1564 Dairy Road, in Charlottesville, Virginia, consists of a Two-story building and two one story buildings. The buildings total approximately 102,000 square feet. Parking is provided with Asphalt pavement. The School buildings were reportedly constructed in 1965 with an addition completed in 1988.

SURVEY INFORMATION	
Date of Assessment	July 20, 2021
Assessor	William R. Pratt, P.E.
Weather Conditions	Cloudy | 88F
Property Contact	Josh Bontrager, Project Manager for the City of Charlottesville - Facilities Development

SITE INFORMATION	
Land Area	15.33 acres
Major Cross Streets	Route 250 By-Pass
Pavement - Parking	Asphalt pavement
Number of Parking Spaces	49
Number of Accessible Spaces	Two
Number of Van Accessible Spaces	Two
Pedestrian Sidewalks	Concrete and asphalt sidewalks

BUILDING INFORMATION	
Building Type	School
Number of Buildings	Three
Building Height	Two-story
Square Footage	102,000
Year Constructed	1965
Year Remodeled	1988

BUILDING CONSTRUCTION	
Foundation	Assumed shallow spread footings
Structural System	Structural steel with concrete elevated slabs
Roof	Single-ply sheet membrane
Exterior Finishes	Brick veneer
Windows	Aluminum frame double pane, aluminum frame double pane - operable
Entrance	Storefront entrance

BUILDING SYSTEMS	
HVAC System	Central plant HVAC system with supplemental heating/cooling equipment
Domestic Hot Water	Gas domestic water heater
Water Distribution	Copper
Sanitary Waste Line	PVC and cast iron
Electrical Service	3-phase, 4-wire, 2,500 amps
Branch Wiring	Copper
Elevators	One passenger elevator
Fire Suppression System	Wet sprinkler system and fire extinguishers with automated fire alarm system with alarm bell, strobe, and pull down stations

UTILITY SERVICE PROVIDERS	
Water	Charlottesville Water
Sewer	Charlottesville Public Utilities - Wastewater
Electric	Dominion Virginia Power
Natural Gas	City of Charlottesville

1.4 OPINIONS OF COST

The opinions of cost are provided in the attached reserve replacement table and a summary of immediate repairs included in this report. The reserve replacement table covers capital expenditure items only. Items less than $1,000 in cost have been excluded, except for immediate repairs, ADA or safety issues. Please refer to section 6.0 of this report for a detailed explanation on how these costs are derived.

1.5 COST TABLES

Immediate Repair Cost

Item	Quantity	Unit	Unit Cost	Replacement Percent	Immediate Total
Total Repair Cost					$0.00

Capital Reserve Schedule

Item	EUL	EFF AGE	RUL	Quantity	Unit	Unit Cost	Cycle Replace	Replace Percent	Year 1 2021	Year 2 2022	Year 3 2023	Year 4 2024	Year 5 2025	Year 6 2026	Year 7 2027	Year 8 2028	Year 9 2029	Year 10 2030	Year 11 2031	Year 12 2032	Year 13 2033	Year 14 2034	Year 15 2035	Year 16 2036	Year 17 2037	Year 18 2038	Year 19 2039	Year 20 2040	Total Cost
3.2.4 Paving, Curbing, and Parking																													
MILL, OVERLAY AND RESTRIPE EXISTING ASPHALT	20	19	1	1	LS	$30,000.00	$30,000	100%	$30,000																				$30,000
3.2.5 Flatwork																													
REPLACE CONCRETE SIDEWALK SECTIONS	25	24	1	4	Allow	$2,500.00	$10,000	100%	$2,500						$2,500					$2,500						$2,500			$10,000
REPAIR CONCRETE STEPS	20	19	1	3	EA	$2,000.00	$6,000	100%	$2,000									$2,000										$2,000	$6,000
INSTALL MISSING HANDRAILS	0	0	0	120	LF	$41.10	$4,932	100%	$4,932																				$4,932
3.2.7 Recreational Facilities																													
RESURFACE BASKETBALL COURT	25	20	5	1	LS	$10,000.00	$10,000	100%					$10,000																$10,000
3.3.3 Building Exteriors																													
REPOINT BRICKWORK	20	19	1	1	LS	$40,000.00	$40,000	100%	$20,000																			$20,000	$40,000
CLEAN AND PAINT EXPOSED STEEL AND CONCRETE ELEMENTS	10	9	1	1	Allow	$20,000.00	$20,000	100%	$10,000										$10,000										$20,000
REPLACE SEALANTS	12	11	1	1	LS	$20,000.00	$20,000	100%	$10,000											$10,000									$20,000
3.3.5 Exterior Windows																													
REPLACE WINDOW UNITS	20	19	1	75	EA	$1,000.00	$75,000	100%	$75,000																				$75,000
3.3.6 Roofing Systems																													
REPLACE SINGLE-PLY ROOFING SYSTEM	15	14	1	75,000	SF	$14.00	$1,050,000	100%	$1,050,000																				$1,050,000

Item	EUL	EFF AGE	RUL	Quantity	Unit	Unit Cost	Cycle Replace	Replace Percent	Year 1 2021	Year 2 2022	Year 3 2023	Year 4 2024	Year 5 2025	Year 6 2026	Year 7 2027	Year 8 2028	Year 9 2029	Year 10 2030	Year 11 2031	Year 12 2032	Year 13 2033	Year 14 2034	Year 15 2035	Year 16 2036	Year 17 2037	Year 18 2038	Year 19 2039	Year 20 2040	Total Cost
3.4.1.2 Domestic Hot Water Production																												
REPLACE GAS WATER HEATER	15	4	11	1	EA	$3,000.00	$3,000	100%											$3,000										$3,000
REPLACE ELECTRIC WATER HEATER	15	14	1	1	EA	$1,000.00	$1,000	100%	$1,000																				$1,000
3.4.2.1 Equipment																												
REPLACE BOILERS	15	14	1	2	EA	$25,000.00	$50,000	100%	$25,000							$25,000													$50,000
REPLACE AIR HANDLERS	15	14	1	4	EA	$10,000.00	$40,000	100%	$20,000	$20,000																			$40,000
REPLACE WATER SOURCE HEAT PUMPS	20	19	1	65	EA	$2,500.00	$162,500	100%	$32,500	$32,500	$32,500	$32,500	$32,500																$162,500
REPLACE PACKAGE UNITS	20	19	1	13	EA	$20,000.00	$260,000	100%	$260,000																				$260,000
REPLACE COOLING TOWER	18	10	8	1	EA	$30,000.00	$30,000	100%								$30,000													$30,000
REPLACE SPLIT SYSTEM	15	10	5	1	EA	$2,000.00	$2,000	100%					$2,000																$2,000
REPLACE SPACE HEATERS	15	14	1	2	EA	$2,000.00	$4,000	100%	$4,000																				$4,000
REPLACE CHILLER - HEAT EXCHANGER	25	21	4	1	EA	$40,000.00	$40,000	100%				$40,000																	$40,000
REPLACE WALL MOUNTED AIR CONDITIONER UNITS	15	14	1	2	EA	$5,000.00	$10,000	100%	$5,000										$5,000										$10,000
3.4.3.2 Distribution																												
REPLACE OLDER CIRCUIT BREAKER PANELS	50	49	1	1	LS	$10,000.00	$10,000	100%	$10,000																				$10,000

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Item	EUL	EFF AGE	RUL	Quantity	Unit	Unit Cost	Cycle Replace	Replace Percent	Year 1 2021	Year 2 2022	Year 3 2023	Year 4 2024	Year 5 2025	Year 6 2026	Year 7 2027	Year 8 2028	Year 9 2029	Year 10 2030	Year 11 2031	Year 12 2032	Year 13 2033	Year 14 2034	Year 15 2035	Year 16 2036	Year 17 2037	Year 18 2038	Year 19 2039	Year 20 2040	Total Cost
Total (Uninflated)									$1,561,932.00	$52,500.00	$32,500.00	$72,500.00	$44,500.00	$0.00	$2,500.00	$55,000.00	$0.00	$2,000.00	$18,000.00	$12,500.00	$0.00	$0.00	$0.00	$0.00	$0.00	$2,500.00	$0.00	$22,000.00	$1,878,432.00
Inflation Factor (2.5%)									1.0	1.025	1.051	1.077	1.104	1.131	1.16	1.189	1.218	1.249	1.28	1.312	1.345	1.379	1.413	1.448	1.485	1.522	1.56	1.599	
Total (inflated)									$1,561,932.00	$53,812.50	$34,145.31	$78,074.57	$49,119.67	$0.00	$2,899.23	$65,377.72	$0.00	$2,497.73	$23,041.52	$16,401.08	$0.00	$0.00	$0.00	$0.00	$0.00	$3,804.05	$0.00	$35,170.30	$1,926,275.69

Evaluation Period:	20
# of Square Feet:	102,000
Reserve per Square Feet per year (Uninflated)	$0.92
Reserve per Square Feet per year (Inflated)	$0.94

2.0 PURPOSE AND SCOPE

2.1 SCOPE OF SERVICES

This Facility Condition Assessment (FCA) was conducted in general accordance with items and terminology requested by the Owner herein and ASTM E 2018-15, "Standard Guide for Property Condition Assessments: Baseline Property Condition Assessment Process".

The primary purpose of a FCA is to note construction deficiencies and to identify components which appear to exhibit less than expected service life or which have been poorly maintained. The assessment is not intended to develop detailed remedial plans for identified problems. The services are qualitative in nature and do not include engineering calculations or design. Photographic documentation of our observations is attached.

The following building systems were observed in accordance with ASTM E 2018-15:

- Site Conditions
- Structural Frame and Building Envelope
- Plumbing, Mechanical and Electrical Systems
- Vertical Transportation Systems
- Life Safety and Fire Protection
- Interior Elements
- ADA Considerations
- Building Code Violations

Out of Scope Items

Environmental issues and concerns are considered to be outside of the ASTM scope of services for a Facility Condition Assessment. Although properties may have possible environmental contamination, including, but not limited to radon, mold, lead based paint, asbestos, lead piping, PCB's or volatile chemicals, these issues and concerns should be addressed by an Environmental Assessment, as defined by ASTM Guidelines. ECS recommends that properties be studied by a qualified environmental assessor who can appropriately access, identify, and quantify issues related to environmental safety concerns.

ECS is providing a Facility Condition Assessment consistent with commercial and customary practices and the ASTM E-2018, current at the time the services are provided. The parties expressly acknowledge and agree that ECS is not providing a Reserve Study, which is subject to the National Reserve Study Standards and requires much more detail than a typical Facility Condition Assessment.

2.2 Deviations from Guide (ASTM E2018-15)

ASTM E2018-15 requires that any deviations from the Guide be noted within the report. ECS reduced the cost threshold from $3,000 to $1,000 to allow for smaller items needing repair, replacement or refurbishment. Therefore items with costs less than $1,000 are typically not included in this report unless related to life, safety or accessibility items.

ECS interviewed personnel associated with the Walker Upper Elementary School facility and other government agencies based upon availability. These individuals are identified in Section 4.2. Information obtained from the interviews are included in the applicable sections of this report.

2.3 ASSESSMENT PROCEDURES

The FCA included site reconnaissance, limited interviews with property management, and inquiries or attempted inquiries with the local building and fire departments. Operational testing of building systems or components was not conducted. During the FCA, ECS conducted observations of the following facility features: site development systems; building structure systems; building exterior systems; building interior systems; roof systems; mechanical systems; electrical systems; plumbing systems; and life and fire safety systems.

This report is intended for review as a complete document. Therefore, interpretations and conclusions drawn from the review of any individual section are the sole responsibility of the User.

2.4 DEFINITIONS

Fair, adj - the property or component is functional but will likely require immediate maintenance or repairs during the duration of the term.

Good, adj - the property or component is functional and should continue to provide its intended service with continued routine maintenance through the duration of the term.

Poor, adj - the property or component is not functional. Immediate or near term repairs are required to bring the component back into service or replacement is expected during the duration of the term.

2.4.1 Partial List of ASTM Definitions

de minimis condition - a physical deficiency that is not material to the conclusions of the report.

deferred maintenance, n - physical deficiencies that could have been remedied with routine maintenance, normal operating maintenance, etc., excluding de minimis conditions that generally do not present a material physical deficiency to the subject property.

easily visible, adj - describes items, components, and systems that are conspicuous, patent, and which may be observed visually during the walk-though survey without: intrusion, relocation or removal of materials, exploratory probing, use of special protective clothing, or use of any equipment (hand tools, meters of any kind, telescope instruments, stools, ladders, lighting devices, etc.).

effective age, n - the estimated age of a building component that considers actual age as affected by maintenance history, location, weather conditions, and other factors. Effective age may be more or less than actual age.

expected useful life (EUL), n - the average amount of time in years that an item, component or system is estimated to function without material repair when installed new and assuming routine maintenance is practiced.

immediate cost, n - opinions of costs that require immediate action as a result of any of the following: (1) material existing or potentially unsafe conditions, (2) material building or fire code violations, (3) physical deficiencies that if left uncorrected would be expected to result in or contribute to critical element or system failure within on year or will result most probably in significant escalation of its remedial cost.

observation, n - the visual survey of items, systems, conditions, or components that are readily accessible and easily visible during a walk-through survey of the subject property.

observe, v - to conduct an observation pursuant to this guide within the context of easily visible and readily accessible.

obvious, adj - plain, evident, and readily accessible; a condition easily visible or fact not likely to be ignored or overlooked by a field observer when conducting a walk-through survey or that which is practically reviewable and would be understood easily by a person conducting the FCA.

opinions of costs, n - opinion of costs that may be encountered in correction of physical deficiencies.

physical deficiency, n - a conspicuous defect or deferred maintenance of a subject property's material systems, components, or equipment as observed during the completion of the FCA. - This definition specifically excludes deficiencies that may be remedied with routine maintenance, miscellaneous minor repairs, normal operating maintenance, etc., and excludes de minimis conditions that generally do not present material physical deficiencies of the subject property.

Point of Contact (POC), n - owner, owner's agent, or user-identified person or persons knowledgeable about the physical characteristics, maintenance, and repair of the subject property.

practically reviewable, adj - describes information that is provided by the source in a manner and form that, upon review, yields information relevant to the subject property without the need for significant analysis, measurements, or calculations. Records or information that feasibly cannot be retrieved by reference to the location of the subject property are not generally considered practically reviewable.

primary commercial real estate improvements, n - the site and building improvements that are of fundamental importance with respect to the commercial real estate. This definition specifically excludes ancillary structures, that may have been constructed to provide support uses such as maintenance sheds, security booths, utility garages, pool filter and equipment buildings, etc.

property, n - the site improvements, which are inclusive of both site work and buildings.

readily accessible, adj - describes areas of the subject property that are promptly made available for observation by the field observer at the time of the walk-through survey and do not require the removal or relocation of materials or personal property, such as furniture, floor, wall, or ceiling coverings; and that are safely accessible in the opinion of the field observer.

readily available, adj - describes information or records that are easily and promptly provided to the consultant upon making a request in compliance with an appropriate inquiry and without the need for the consultant to research archive files.

reasonably ascertainable, adj - describes information that is publicly available, as well as readily available, provided to the consultant's offices from either its source or an information research/ retrieval service within reasonable time, practically reviewable, and available at a nominal cost for either retrieval, reproduction or forwarding.

remaining useful life (RUL), n - a subjective estimate based upon observations, or average estimates of similar items, components, or systems, or a combination thereof, of the number of remaining years that an item, component, or system is estimated to be able to function in accordance with its intended purpose before warranting replacement. Such period of time is affected by the initial quality of an item, component, or system, the quality of the initial installation, the quality and amount of preventive maintenance exercised, climatic conditions, extent of use, etc.

representative observations, n - observations of a reasonable number of samples of repetitive systems, components, areas, etc., which are conducted by the field observer during the walk-through survey. The concept of representative observations extends to all conditions, areas, equipment, components, systems, buildings, etc., to the extent that they are similar and representative of one another.

routine maintenance, n - a repair that does not require specialized equipment, profession services, or contractors, but rather can be corrected within budget and skill set of typical property maintenance staff.

short term cost, n - opinions of costs to remedy physical deficiencies, such as deferred maintenance, that may not warrant immediate attention, but require repairs or replacements that should be undertaken on a priority basis in addition to routine preventive maintenance.

technically exhaustive, adj - describes the use of measurements, instruments, testing, calculations, exploratory probing or discovery, or other means to discover, or a combination thereof, or troubleshoot physical deficiencies or develop architectural or engineering findings, conclusions, and recommendations, or combination thereof.

3.0 SYSTEM DESCRIPTION AND OBSERVATIONS

3.1 PROPERTY DESCRIPTION

The Property contains a Two-story School building and two one-story school buildings.

3.1.1 Property Location

The Property is located at 1564 Dairy Road in Charlottesville, Virginia.

Surrounding Properties	
North	Central Office Schools
East	Route 250 By-Pass
South	Crow Recreation Center
West	Gentry Lane

A Site Location Map and Aerial View are included in Appendix I.

3.1.2 Construction History

We understand that the building was constructed approximately 56 years ago in 1965.

3.1.3 Current Property Improvements

The School buildings, located at 1564 Dairy Road, in Charlottesville, Virginia, consist of a Two-story building and two one-story buildings. The buildings total approximately 102,000 square feet. Parking is provided with Asphalt pavement.

3.2 SITE CONDITIONS

3.2.1 Topography

TOPOGRAPHY		
Item	**Description**	**Condition**
Slope of the property	The property generally slopes to the south	Good
Adjoining Properties	Generally down slope	Good

Comments

The property is generally level and slopes to the south. The adjoining properties are located down gradient from the property.

3.2.2 Storm Water Drainage

STORM WATER DRAINAGE		
Item	**Description**	**Condition**
Storm Water Collection System	Municipal	Good
Storm Water (Retention) Pond		N/A
Storm Water Filtration Structure		N/A
Pavement Drainage	Grated inlet	Good
Landscape Drainage	Yard drains	Good
Sump Pumps		N/A

Comments

The storm water collection system is a municipal system.

Photographs

Typical storm water drainage

Typical storm water drainage

3.2.3 Access and Egress

SITE ACCESS AND EGRESS		
Item	**Description**	**Condition**
Entrance Aprons	Asphalt	Good
Fire Truck Access	North and side of the property	Good
Easements		N/A

Comments

Vehicular access to the site is located on the north and east side of the property. The entrance apron is constructed of asphalt and was observed to be in generally good condition. Fire truck access is available on the north, east, and west sides of the main building.

3.2.4 Paving, Curbing, and Parking

PARKING		
Item	**Description**	**Condition**
Striping	Painted	Fair
Quantity of Parking Spaces	49	Good
Quantity of Loading Spaces		N/A
Arrangement of Spaces	Perpendicular parking	Good
Site Circulation	One way aisles	Good
Lighting		N/A
Accessible Spaces	Two	Good
Accessible Aisles	One	Good

SURFACE PAVEMENT		
Item	**Description**	**Condition**
Pavement Surface	Asphalt pavement	Fair
Drainage	Grated storm inlet	Good
Repair History	Patching noted	Fair

SURFACE PAVEMENT		
Item	**Description**	**Condition**
Concrete Curbs and Gutters	Some chipping and blemishes	Fair
Dumpster Pad	Dumpsters sit on asphalt lot	N/A
Asphalt Curbs		N/A
Fire Lane Painting		Fair

Comments

Asphalt-paved drive lanes and parking areas are located on the north, east, and west side of the site which also provides access to the site. The asphalt pavement was observed to be in generally fair condition with extensive cracks observed on the pavement. Striping was in fair condition. The expected useful life of asphalt pavement is 20 years. Based on the extensive cracking, we recommend milling and overlaying the cracked areas of asphalt pavement.

Photographs

Asphalt parking at west side of the site - note cracking

Asphalt pavement parking - note alligator cracks

Asphalt drive lane east side of the site - note cracking

Asphalt drive lane east side of the site - note cracking

Recommendations

Cost Recommendation	EUL	EFF AGE	RUL	Year	Cost
MILL, OVERLAY AND RESTRIPE EXISTING ASPHALT	20	19	1	1	$30,000
Total					$30,000

3.2.5 Flatwork

SIDEWALKS		
Item	**Description**	**Condition**
Walkways	Concrete and asphalt sidewalks	Fair
Patios	Concrete	Fair
Steps	Concrete with applied aluminum treads	Fair
Landings	Concrete	Good
Handrails	Steel. Painting recommended	Good
Ramps	Concrete	Good
Curb Ramps	Concrete	Good
Truncated Domes	Inset 1-piece	Good

Comments

Along the perimeter of the building, concrete sidewalks sidewalks of undetermined thickness are provided. Regularly spaced control joints were observed. The concrete sidewalks were generally in fair condition, with some cracked sections observed. We recommend the cracked and settled sections be replaced as necessary.

An asphalt sidewalk is located on the south side of the site. The asphalt sidewalk was generally in good condition.

The concrete steps and ramps were observed to be in generally fair condition. The handrails adjacent to the steps and ramps were observed to be in generally good condition. We recommend the deteriorated concrete steps be repaired as needed.

We recommend installing handrails on concrete steps to Crow Rec Center.

Photographs

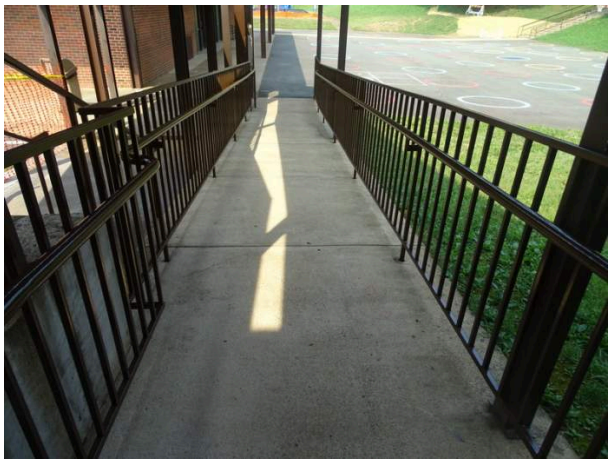
Typical concrete sidewalk

Concrete sidewalk - note deterioration

Concrete sidewalk - note deterioration

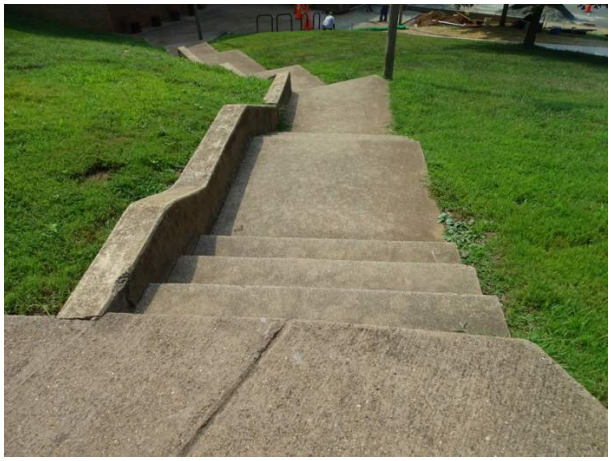
Typical concrete steps - note deterioration

Typical concrete steps - note deterioration



Accessible ramp

Accessible concrete ramp



Typical concrete steps - note missing handrail

Recommendations

Cost Recommendation	EUL	EFF AGE	RUL	Year	Cost
REPLACE CONCRETE SIDEWALK SECTIONS	25	24	1	1 7 12 18	$2,500 $2,500 $2,500 $2,500
REPAIR CONCRETE STEPS	20	19	1	1 10 20	$2,000 $2,000 $2,000
INSTALL MISSING HANDRAILS	0	0	0	1	$4,932
Total					$20,932

3.2.6 Landscaping and Appurtenances

LANDSCAPING		
Item	**Description**	**Condition**
Trees	Located throughout the site	Good
Planting Beds	Located at west side of the site	Good
Lawn Areas	Located throughout the site	Good
Irrigation System		N/A
Monumental Sign	Located at west side of the site	Good

LANDSCAPING		
Item	**Description**	**Condition**
Landscape Lighting		N/A
Retaining Walls	Located between main building and west parking area	Good
Fences and Gates		N/A
Dumpster Area	Located at east end of the site	Good
Fountains		N/A

Comments

The landscaping consists generally of mature trees, small shrubs, and grassed areas around the site. The landscaping was observed to be in generally good condition.

There is a cast in place concrete retaining wall between the main building and the west parking area. The cast in place retaining wall was generally in good condition.

A monument sign is located at the west end of the site. The monument sign was generally in good condition. A dumpster area is located at the east end of the site. The dumpster area was generally in good condition.

Photographs

Typical landscaping

Typical landscaping

3.2.7 Recreational Facilities

BASKETBALL COURT		
Item	**Description**	**Condition**
Playing Surface	Asphalt	Fair
Fencing		N/A
Lighting		N/A

SOCCER FIELD		
Item	**Description**	**Condition**
Playing Surface	Grass	Good
Fencing		N/A
Equipment		N/A
Lighting		N/A

Comments

Basketball Court
There is a basketball court between the main building and the gym. The basketball court was generally in fair condition. We recommend an allowance to resurface the basketball court during the report period.

Soccer Field
The soccer field is located at the south side of the property. The soccer field was in good condition.

Photographs

Basketball court located between main building and gym

Basketball court located between main building and gym - note cracking

Recommendations

Cost Recommendation	EUL	EFF AGE	RUL	Year	Cost
RESURFACE BASKETBALL COURT	25	20	5	5	$10,000
Total					$10,000

3.2.8 Special Utility Systems

Item	Description	Condition
Water Well		N/A
Lift Station		N/A
Septic Field		N/A
Solar Power		N/A
Wind Power		N/A

Comments

The Property does not contain special utility systems.

3.3 STRUCTURAL FRAME AND BUILDING EXTERIOR

3.3.1 Foundation

FOUNDATION		
Item	**Description**	**Condition**
Load Bearing Support	Assumed shallow spread footings	Good
Basement		N/A
Crawl Space		N/A

Comments

The foundation of the building includes Assumed shallow spread footings. Large cracks were not observed in the exterior walls. The foundation system appeared to provide adequate structural support to the building. The foundation was generally in good condition.

3.3.2 Building Frame

BUILDING FRAME		
Item	**Description**	**Condition**
Floor Framing	Concrete	Good
Roof Framing	Steel	Good
Columns	Steel	Good
Load Bearing Walls	CMU	Good
Balconies		N/A
Decks		N/A

Comments

The structure of the building consists of Structural steel with concrete elevated slabs and metal diaphragm roof framing. The structural frame of the building was generally in good condition.

Photographs

Structural framing

3.3.3 Building Exteriors

EXTERIOR FINISHES		
Item	**Description**	**Condition**
Masonry	Brick repointing recommended	Fair
Glass Store Front	Main entrance	Good
Glass Curtain Wall		N/A
Metal		N/A
Concrete	Awning	Fair
Wood Siding		N/A
Accent/Trim	Metal	Good
Covered Soffits		Good
Awnings	Concrete and steel	Good
Paint	Some repainting recommended	Fair
Sealants	Replacement recommended	Fair

Comments

The primary exterior of the building consists of Brick veneer. Painted exposed concrete beams and columns were located on the wast side of building. The building exteriors were generally in good condition with limited deterioration observed. The expected useful life of mortared joints is approximately 20 years before re-pointing is required. Limited deterioration of mortar joints was

observed. We recommend re-pointing of the deteriorated mortar joints. Cracking was observed in the exposed concrete elements. We recommend a concrete repair project to seal cracks and repair delaminated concrete, as required. The paint was in good to fair condition.

Exterior sealants are located around the window and door frames. The expected useful life of exterior sealants is approximately 10 to 12 years before replacement is needed. The exterior sealants were generally in poor condition. The sealants were observed to be hard and separated from the substrate. We recommend that the exterior sealants be replaced.

Various awning structures are located at the over entrance doors throughout the building. The awnings consist of a concrete deck with metal columns. The underside of the concrete and the metal columns were painted. The paint was observed to be peeling at the underside of the awning at various entrances. The awnings should be painted in conjunction with the exposed concrete beams and columns painting project.

Photographs

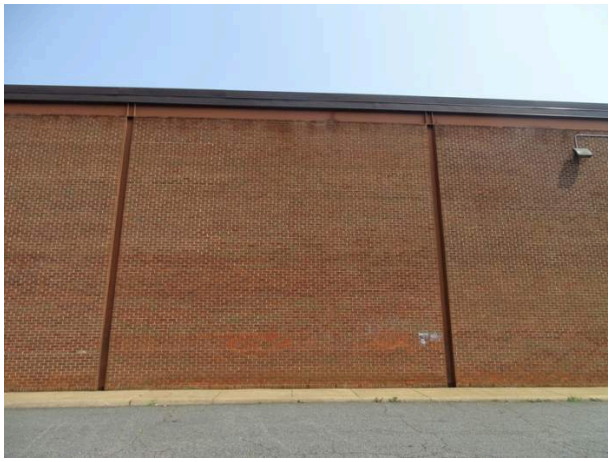
Building exterior west side of main building

Building exterior west side of main building

Building exterior - note sealant deterioration

Main building entrance exterior doors upper level - note peeling paint

Building exterior - note peeling paint



Building exterior of main building efflorescence

Building exterior - note deterioration

Building exterior - note deterioration

Building exterior - note deterioration

Building exterior - note deterioration

Recommendations

Cost Recommendation	EUL	EFF AGE	RUL	Year	Cost
REPOINT BRICKWORK	20	19	1	1 20	$20,000 $20,000
CLEAN AND PAINT EXPOSED STEEL AND CONCRETE ELEMENTS	10	9	1	1 11	$10,000 $10,000
REPLACE SEALANTS	12	11	1	1 12	$10,000 $10,000

Cost Recommendation	EUL	EFF AGE	RUL	Year	Cost
Total					$80,000

3.3.4 Exterior Doors

DOORS		
Item	**Description**	**Condition**
Main Entrance Doors	Storefront entrance	Good
Personnel Doors	Hollow metal and aluminum storefront	Good
Door Hardware	Unmatched sets	Good
Accessibility Controls		N/A
Overhead/Roll-up Doors		N/A

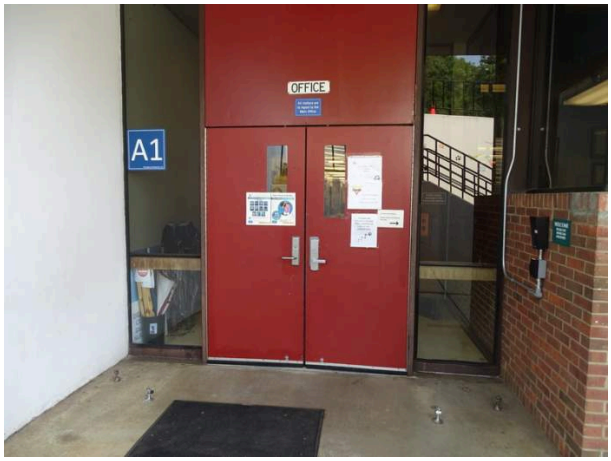
Comments

The main entrance is located at the north portion of the main building and consists of a Storefront entrance. The main entrance doors were generally in good condition.

Personnel doors are located throughout the building. The personnel doors were generally in good condition. It also appeared that many of the doors had been replaced over time. Exterior doors typically have an expected useful life of 20 to 30 years.

Photographs

Main building entrance exterior doors upper level



Typical personnel door

Typical personnel door

3.3.5 Exterior Windows

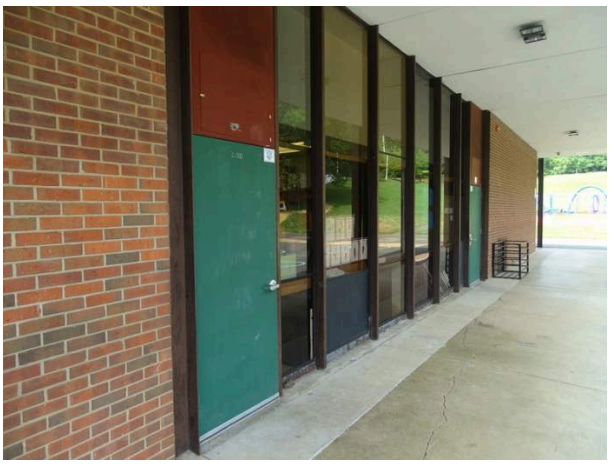
WINDOWS		
Item	**Description**	**Condition**
Window Frame	Metal framed	Good
Glass Pane	Single-pane and double-pane (typically replacement from damage)	Good
Operation		Good

WINDOWS		
Item	**Description**	**Condition**
Screen		N/A
Exterior Header	Varies with condition	Good
Exterior Sill	Varies with condition	Good
Gaskets or Glazing	Neoprene	Fair

Comments

The window system for the building primarily consists of metal frame single pane and/or double pane window units. It was reported that the windows were replaced when damaged as needed. Metal frame single-pane windows have a typical expected useful life of 25 years. There administrative offices on the north side of the main building were reportedly subject to wide temperature fluctuations due to the windows. Replacement of windows has been included in the study period.

Photographs



Typical exterior windows

Typical exterior windows

Typical exterior windows - note deterioration

Typical exterior windows - note deterioration

Typical exterior windows - note deterioration

Typical exterior windows - note deterioration

Recommendations

Cost Recommendation	EUL	EFF AGE	RUL	Year	Cost
REPLACE WINDOW UNITS	20	19	1	1	$75,000
Total					$75,000

3.3.6 Roofing Systems

ROOFING		
Item	**Description**	**Condition**
Single-Ply Sheet Membrane	Patching and ponding observed	Fair
Slate Shingle		N/A
Parapet Walls		Good
Cap Flashing/Coping	Metal coping	Fair
Insulation	Rigid	Good
Substrate/Deck	Metal decking	Good
Slope/Pitch	Some ponding	Good
Drainage	Internal drains, scuppers, gutters, and downspouts	Good
Plumbing Vents	Standard clamped collars	Good
Exhaust Vents	Standard	Good
Equipment Curbs	Counter flashed	Good
Pitch Pockets		N/A
Skylights	Counter flashed curb	Good
Flashing	Metal	Good
Expansion Joints		Good
Roof Age	Reportedly install in 2007 for Building A Reportedly install in 2008 for Building B and Building C	Fair
Warranty		Good

Comments

The main roofing system consists of a single-ply roofing system. The roofing system was reportedly replaced in 2007 for Building A and in 2008 for Building B and Building C. Some patching and ponding were observed and leaks were reported. The expected useful life of a single-ply membrane roofing system is typically 15 years. It is understood the roofing system is currently under warranty.

Observations of blistering were noted on the main building. It is understood that during roofing replacement in 2007 for Building A, inclement weather occurred and moisture was trapped under the single-ply membrane. We recommend a further study of the roofing system in this effected area. If blistering is not repaired soon, the expected useful life will be significantly reduced in this area.

For the overall roofing system, we recommend replacement during the later part of the report period. There are metal components to the roofing system. We recommend the metal components be repaired and painted as needed during roof replacement.

Drainage for the roofing system is provided by internal drains with overflow scuppers. Gutters and downspouts provided drainage from higher roofs to lower roofs at some locations. Roofing penetrations included plumbing vents and exhaust vents throughout the roofing system.

There is a large skylight located on the main building. The skylight was generally in good condition.

Photographs

Single-ply membrane roofing system main building looking north

Single-ply membrane roofing system secondary building looking south

Single-ply membrane roofing system - note patching

Single-ply membrane roofing system - note patching

Typical internal drain

Single-ply membrane roofing system - note ponding

Typical plumbing penetration

Skylight located on main building

Recommendations

Cost Recommendation	EUL	EFF AGE	RUL	Year	Cost
REPLACE SINGLE-PLY ROOFING SYSTEM	15	14	1	1	$1,050,000
Total					$1,050,000

3.4 PLUMBING, MECHANICAL, AND ELECTRICAL SYSTEMS

3.4.1 Plumbing Systems

3.4.1.1 Supply and Waste Piping

PLUMBING - WATER SUPPLY SYSTEM		
Item	**Description**	**Condition**
Piping Material	Copper	Good
Pipe Insulation		Good
Water Shut-offs		Good
Water Flow and Pressure		Good

PLUMBING - WASTE SUPPLY SYSTEM		
Item	**Description**	**Condition**
Piping Material	PVC and cast iron	Good
Vertical Vent Stacks		Good
Clean-outs		Good

Comments

Water Lines
The main water supply lines inside the buildings are Copper. The expected useful life of Copper piping is approximately 40 years. The water supply pipes were generally in good condition.

Waste Lines
The waste lines in the buildings are PVC and cast iron. The expected useful life of PVC and cast iron waste line is approximately 50 years. The waste lines were generally in good condition.

3.4.1.2 Domestic Hot Water Production

HOT WATER PRODUCTION		
Item	**Description**	**Condition**
Heating Equipment	Gas domestic water heater	Good
Water Storage	In water heater	Good
Circulation Pumps		Good

Comments

Domestic hot water to the building is provided by an AO Smith Gas domestic water heater located in the main utility room in the main building and an electric domestic water heater manufactured by RUUD located in a janitor's closet of the secondary building. The water heaters were generally in fair condition.

The expected useful life of water heaters is approximately 15 years with proper maintenance. We recommend the water heaters be replaced during the study period.

Photographs

Gas domestic water heater located in main building

Recommendations

Cost Recommendation	EUL	EFF AGE	RUL	Year	Cost
REPLACE GAS WATER HEATER	15	4	11	11	$3,000
REPLACE ELECTRIC WATER HEATER	15	14	1	1	$1,000
Total					$4,000

3.4.2 HVAC Systems

3.4.2.1 Equipment

EQUIPMENT		
Item	**Description**	**Condition**
Boilers	Located in main utility room	Fair
Chillers	Located in main utility room	Fair
Cooling Towers	Located at east side of the site	Fair
Fan Coil Units		N/A
Heat Exchangers		N/A
Radiators		N/A
Variable Air Volume (VAV) Boxes		N/A
Condensing Units		N/A
Air Handlers		N/A
Package Units	Located on roof tops	Fair
Exhaust Fans		Good
Split System		N/A
Water Source Heat Pumps (WSHP)	Located throughout the buildings	Good
Space Heaters (ceiling mounted)	Located in main utility room	Fair
Air Conditioners (Window)		N/A

Comments

The building is served by a Central plant HVAC system with supplemental heating/cooling equipment and includes a cooling tower, boilers, package units, air handlers, water source heat pumps, and space heaters.

Boilers

The Patterson Kelly boilers have an expected useful life of 20 years with proper maintenance. The two boilers were located in the main utility room at the north side of the secondary building. The boilers were reportedly installed in 2000 and 2014 and were generally in fair condition. We recommend scheduled replacement by age of the boilers during the report period.

Chiller-Heat Exchanger

The chiller-heat exchanger manufactured by BAC is located in the main utility room at the north side of the secondary building. The chiller was installed in 2011 and was in good condition. Chillers have a typical expected useful life of approximately 18 years. The chiller should be replaced during the study period.

Cooling Tower

The cooling tower is located at the east side of the east building at the exterior enclosure . The Evapco cooling tower was installed in 2011 and was in good condition. Cooling towers have a typical expected useful life of approximately 18 years. The cooling tower should be replaced during the study period.

Air Handlers

The air handlers are located throughout the buildings. The units were manufactured by Trane and were in fair condition. The expected useful life of air handlers is 15 years with proper maintenance. We recommend that the air handlers be replaced during the report period.

Rooftop Package Units

Two package units are located on the roof. The Decktron roof top units were installed in approximately 2002. The two AAON roof top units were manufactured in 2014. The expected useful life of package units is 15 years with proper maintenance. We recommend that the units be replaced during the report period.

Water Source Heat Pumps (WSHP)

There are 85 WSHP units located throughout the building. The typical expected useful life of the water source heat pumps is 20 years and they were recently replaced in 2014 and 2015. We recommend a scheduled replacement of the units near the end of the term.

Split System

A Sanyo split system was located on the roof and the IT room. The system installation date was unknown and was in good condition. Split systems have an expected useful life of 15 years and should be replaced during the study period.

Ceiling Mounted Space Heaters

Ceiling mounted space heaters are located in the main utility room. The expected useful life of ceiling mounted space heaters is 15 years with proper maintenance. We recommend that ceiling mounted space heaters be replaced during the report period.

Photographs

Typical boiler located in main utility room

Cooling Tower located on east side of the site

Chiller located in main utility room

Typical Make Up Air Unit located on roof

Typical water source heat pump

Typical Air Handler Unit

Typical space heater

Split system for IT room

Wall mounted air conditioner unit

Recommendations

Cost Recommendation	EUL	EFF AGE	RUL	Year	Cost
REPLACE BOILERS	15	14	1	1 8	$25,000 $25,000
REPLACE AIR HANDLERS	15	14	1	1 2	$20,000 $20,000
REPLACE WATER SOURCE HEAT PUMPS	20	19	1	1 2 3 4 5	$32,500 $32,500 $32,500 $32,500 $32,500
REPLACE PACKAGE UNITS	20	19	1	1	$260,000
REPLACE COOLING TOWER	18	10	8	8	$30,000
REPLACE SPLIT SYSTEM	15	10	5	5	$2,000
REPLACE SPACE HEATERS	15	14	1	1	$4,000
REPLACE CHILLER - HEAT EXCHANGER	25	21	4	4	$40,000
REPLACE WALL MOUNTED AIR CONDITIONER UNITS	15	14	1	1 11	$5,000 $5,000

Cost Recommendation	EUL	EFF AGE	RUL	Year	Cost
Total					$598,500

3.4.2.2 Distribution System

HVAC DISTRIBUTION		
Item	**Description**	**Condition**
Ducts	Insulated sheet metal and ductboard observed	Good
Return Air	Insulated sheet metal and ductboard observed	Good

Comments

The distribution system includes ducted supply and a plenum return. Exposed ductwork was observed in limited locations within the building and was in generally good condition.

3.4.2.3 Control Systems

HVAC CONTROL SYSTEMS		
Item	**Description**	**Condition**
Thermostats		Good
Variable Frequency Drives	Located in main utility room	Good
Energy Management System	BAS in process of replacement	Good

Comments

The thermostats are located throughout the interior spaces. The thermostats were observed to be in generally good condition. It was reported that the existing NOVAR BAS (Building Automation System) is being phased out and an Allerton system that was installed in 2015 is replacing it. The BAS system was in good condition.

3.4.3 Electrical Systems

3.4.3.1 Service and Metering

SERVICE AND METERING		
Item	**Description**	**Condition**
Service Entrance	Located on east side of building	Good

SERVICE AND METERING		
Item	**Description**	**Condition**
Master (House) Meter	Located in the main electrical room	Good
Emergency Power		N/A
Transfer Switch		N/A

Comments

Electricity is provided to the building by Dominion Virginia Power. The main electrical entrance is located on the east side of the site and provides 2,500 amp, 3-phase, 4-wire service.

The main electrical switchgear was manufactured by Square D. The switchgear was in good condition.

Photographs

Electrical meter at exterior wall of main utility room

Main electrical switchgear

3.4.3.2 Distribution

ELECTRICAL DISTRIBUTION SYSTEM		
Item	**Description**	**Condition**
Electrical Sub-panels	Some older circuit breaker panels observed	Good/Fair
Branch Wiring	Copper	Good
GFCI Devices		Good

ELECTRICAL DISTRIBUTION SYSTEM		
Item	**Description**	**Condition**
Building Transformers	Pad mounted	Good
Sub-Meters		N/A

Comments

Power is distributed by copper wire from circuit breaker panels located throughout the building. The expected useful life of sub-panels is 50 years with proper maintenance. Some of the the circuit breaker panels were reportedly recently replaced. Older circuit breaker panels were observed with some rusting. The circuit breaker panels were observed to be in generally good to fair condition. We recommend replacing the remainder of the older circuit breaker panels.

Photographs

Typical older circuit breaker panel

Recommendations

Cost Recommendation	EUL	EFF AGE	RUL	Year	Cost
REPLACE OLDER CIRCUIT BREAKER PANELS	50	49	1	1	$10,000
Total					$10,000

3.5 VERTICAL TRANSPORTATION SYSTEMS

ELEVATORS		
Item	**Description**	**Condition**
Quantity	One passenger elevator	Good
Capacity	2,100 pounds	Good
Manufacturer and Type	Dover - hydraulic	Good
Maintenance Contractor	Southern Elevator	Good
Date of Last Maintenance Inspection	Reportedly within the last year	Good
Cab Finishes		Good
Elevator Certificates	Current	Good
Door Sensors	Operational	Good
Speed	100 feet per minute	Good
Floor Leveling	Operational	Good
Control System	Operational	Good
Fire Recall System	Operational	Good
Lighting	Operational	Good
Equipment Room		Good

Comments

The elevator is located between the main building and the secondary building. The expected useful life of the elevator controls is 30 to 40 years with proper maintenance. Routine maintenance is considered adequate to keep the elevator system in good condition during the projection period of this report. The last annual inspection was performed reportedly within the last year and monthly maintenance is provided by Southern Elevators. The inspection reports are included in an appendix of this report.

Photographs

Elevator cab

Elevator controls

3.6 LIFE SAFETY AND FIRE PROTECTION

3.6.1 Sprinklers and Suppression Systems

SPRINKLER AND SUPPRESSION SYSTEMS		
Item	**Description**	**Condition**
Sprinkler System (wet)	Monitored	Good
Sprinkler Heads	Various	Good
Date of Last Inspection (sprinkler system)	4/5/2021	Good
Sprinkler Pump		N/A
Fire Extinguishers	7/9/2021	Good
Date of Last Inspection (Fire Extinguishers)	Reportedly within the last year	Good
Fire Standpipes	Victalic	Good
Fire Department Connections	Located on north side of main building	Good
Hose Cabinets		N/A
Fire Hydrants		Good

Comments

The fire suppression system is a Wet sprinkler system and fire extinguishers. The fire suppression system was observed but not tested. The sprinklers are connected to the fire alarm. The sprinkler risers are located in the sprinkler room.

Sprinkler heads are located throughout the building. The sprinkler heads were generally in good condition.

Fire extinguishers were observed throughout the building including in mechanical rooms. The fire extinguishers were observed to have recent inspection tags issued July 2021. These devices are required to be inspected annually. Replacement of the fire extinguishers is considered routine maintenance.

Fire hydrants are located at the building exterior. The fire hydrants were observed to be in good condition.

Photographs

Fire sprinkler system

Typical Fire Extinguisher

Fire Department Connections

Typical fire hydrant

3.6.2 Alarm Systems

ALARM SYSTEMS		
Item	**Description**	**Condition**
Public Address System	Observed but not tested	Good
Central Fire Alarm Control Panel	Observed but not tested	Good
Automatic Notification	Observed but not tested	Good
Bells	Observed but not tested	Good
Strobes	Observed but not tested	Good
Exit Signs	Observed but not tested	Good
Exit Lights	Observed but not tested	Good
Pull Stations	Observed but not tested	Good
Smoke Detectors	Observed but not tested	Good
Carbon Monoxide Detectors		N/A

Comments

The fire alarm system was observed but not tested. A fire control panel is located in the Main Office. The fire control panel was observed to be in good condition. Emergency exit signs and lighting, pull stations, fire extinguishers, smoke detectors, and alarm bells and strobes are located throughout the building.

Photographs

Fire alarm annunciator panel

Typical fire alarm bell and strobe

Typical fire alarm pull station

Typical emergency lighting

Fire alarm control panel

3.6.3 Security and Other Systems

SECURITY AND OTHER SYSTEMS		
Item	**Description**	**Condition**
Security Cameras	Throughout buildings	Good
Alarm System	Observed but not tested	Good
Access Control	Observed but not tested	Good
Security Fencing		N/A
Lightning Protection		N/A
Roof Anchors		N/A

Comments

The building is monitored by a motion detector security system with cameras and alarms. The security system was reported to be in good condition.

Photographs

Typical security camera

3.7 INTERIOR BUILDING COMPONENTS

3.7.1 Interior Finishes

MAIN OFFICE		
Item	**Description**	**Condition**
Floor Finishes	Vinyl tile	Good
Wall Finishes	Painted gypsum board	Good
Ceiling Finishes	Suspended acoustical tile, painted gypsum board	Good
Lighting	Fluorescent fixtures	Good
Accessories		N/A

RESTROOMS		
Item	**Description**	**Condition**
Floor Finishes	Ceramic tile	Good
Wall Finishes	Ceramic tile and painted gypsum board	Good
Ceiling Finishes	Suspended acoustical tile	Good
Fixtures	Toilets, urinals, wall hung lavatories	Good
Accessories	Partitions, grab bars, mirrors, soap and paper dispensers	Good
Ventilation	Exhaust fans	Good

RESTROOMS		
Item	**Description**	**Condition**
Lighting	Fluorescent fixtures	Good
Doors	Wood	Good
Door Hardware	Operable	Good

CORRIDORS		
Item	**Description**	**Condition**
Floor Finishes	Vinyl tile	Good
Wall Finishes	Painted gypsum board	Good
Ceiling Finishes	Suspended acoustical tile	Good
Lighting	Fluorescent fixtures	Good
Doors	Wood	Good
Door Hardware	Operable	Good

STAIRS		
Item	**Description**	**Condition**
Location	East and west ends of the main building	Good
Enclosure	Varies	Good
Framing Support	Varies	Good
Treads	Varies	Good
Risers	Varies	Good
Nosing	Varies	Good
Handrails	Steel tube	Good
Lighting	Fluorescent	Good
Pressurized Stairwells		N/A
Doors	Wood	Good
Door Hardware	Operable	Good

KITCHEN		
Item	**Description**	**Condition**
Floor Finishes	Ceramic tile	Good
Wall Finishes	Glazed block	Good
Ceiling Finishes	Painted gypsum board	Good
Counters	Stainless	Good
Sink	Stainless	Good
Cabinets	Stainless	Good
Appliances	Commercial	Good
Stove/Range	Stainless	Good
Exhaust Vent/Hood	Commercial	Good
Refrigerator	Stainless	Good
Dishwasher	Commercial	Good
Microwave Oven	Stainless	Good

UTILITY ROOMS/ MECHANICAL ROOMS		
Item	**Description**	**Condition**
Floor Finishes	Unfinished concrete and/or vinyl tile	Good
Wall Finishes	Painted gypsum board/ CMU	Good
Ceiling Finishes	Unfinished	Good
Janitor Sink Area		Good
Lighting	Fluorescent fixtures	Good

AUDITORIUM		
Item	**Description**	**Condition**
Floor Finishes	Coated concrete, carpet	Good
Wall Finishes	Wood paneling	Good
Ceiling Finishes	Painted gypsum board	Good
Lighting	Incandescent fixtures	Good
Accessories	Stage curtains	Good
Seating	Theater	Good

AUDITORIUM		
Item	**Description**	**Condition**
Stage	Wood	Good

CAFETERIA		
Item	**Description**	**Condition**
Floor Finishes	Vinyl tile	Good
Wall Finishes	Painted gypsum board, CMU	Good
Ceiling Finishes	Suspended acoustical tile	Good
Lighting	Fluorescent fixtures	Good
Accessories	Tables and chairs	Good

LIBRARY		
Item	**Description**	**Condition**
Floor Finishes	Carpet	Good
Wall Finishes	Painted gypsum board	Good
Ceiling Finishes	Suspended acoustical tile/painted gypsum board	Good
Lighting	Fluorescent fixtures	Good
Doors	Wood	Good
Door Hardware	Operable	Good

CLASSROOMS		
Item	**Description**	**Condition**
Floor Finishes	Vinyl tile and/or carpet	Good
Wall Finishes	Painted gypsum board/ painted CMU	Good
Ceiling Finishes	Suspended acoustical tile/painted gypsum board	Good
Lighting	Fluorescent fixtures	Good
Doors	Wood	Good
Door Hardware	Operable	Good

GYM		
Item	**Description**	**Condition**
Floor Finishes	Wood	Good
Wall Finishes	Painted gypsum board/ painted CMU	Good
Ceiling Finishes	Unfinished	Good
Lighting	Fluorescent fixtures	Good
Doors	Wood	Good

Comments

The interior building areas include a main office, restrooms, corridors, classrooms, a kitchen, an auditorium, a cafeteria, a gym, and mechanical/utility spaces.

The finishes in the main office include vinyl tile floors, painted gypsum board walls, and both painted gypsum board and suspended acoustical tile ceilings. The finishes in the main office were observed to be in generally good condition.

Restrooms are located throughout the building are accessed from corridors. The finishes in the restrooms include ceramic tile floors, ceramic tile and painted gypsum board walls, and suspended acoustical tile ceilings. The restrooms were observed to be in generally good condition.

The finishes in the corridors include vinyl tile floors, painted gypsum board walls, and suspended acoustical tile ceilings. The finishes in the corridors were observed to be in generally good condition.

The finishes in the kitchens include ceramic tile floors, glazed block walls, and painted gypsum board ceilings. The finishes in the kitchens were observed to be in generally good condition.

The utility and mechanical rooms were generally unfinished and/or with vinyl tile floors and CMU walls. Some utility rooms had painted gypsum board walls.

The finishes in the auditorium consist of carpet aisle flooring, with sealed concrete in the seating area, and the stage consist of wood. The walls consist of wood and the ceiling is painted gypsum board. The finishes were generally in good condition.

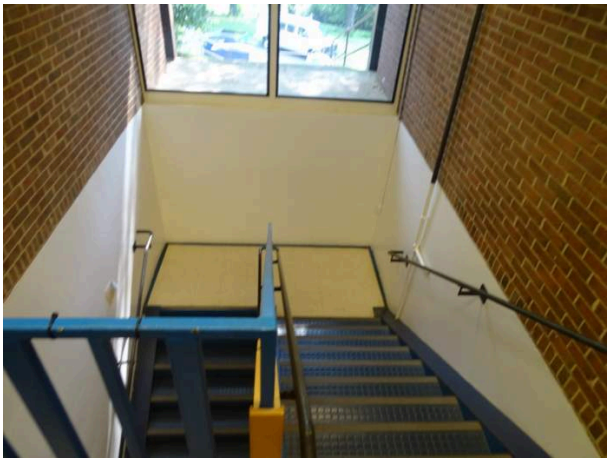
The finishes in the cafeteria area consisted of vinyl tile flooring, painted CMU and gypsum board walls, and suspended acoustical tile ceiling. The finishes were generally in good condition.

The library consisted of carpeted floors, painted gypsum board walls, and suspended acoustical tile ceiling. The library finishes were observed to be in good condition.

The classrooms consist of vinyl tile flooring and/or carpet, painted gypsum board and painted CMU walls, and painted gypsum board and suspended acoustical tile ceilings. The finishes were generally in good condition.

The finishes in the gym consist of wood flooring, painted CMU and painted gypsum board walls, and unfinished ceilings. The finishes in the gym were generally in good condition.

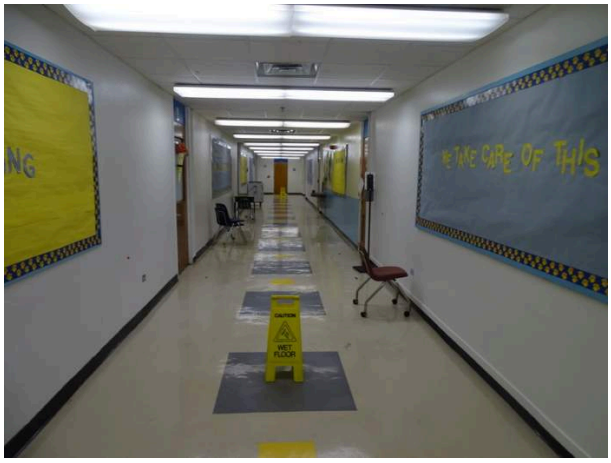
Photographs



Interior finishes of stair area

Interior finishes of cafeteria area

Interior finishes of corridor area



Interior finishes of corridor area

Interior finishes of library area

Interior finishes of gym area

3.8 Accessibility (ADA) Compliance

Comments

Facilities, including site features and buildings, completed and occupied after January 26, 1992 are required to comply fully with the Americans with Disabilities Act (ADA). Facilities constructed after this date must be maintained and operated to comply with the Americans with Disabilities Act Accessibility Guidelines (ADAAG). Existing facilities constructed prior to this date are held to the lesser standard of complying with the extent allowed by structural feasibility and the financial resources available, or a reasonable accommodation must be made. Title III, for the purposes of the ECS scope of work is to address public accommodations. ECS will note work that shall remove architectural barriers in existing facilities, including communication barriers, that are structural in nature, where such removal is readily achievable and able to be carried out without much difficulty or expense.

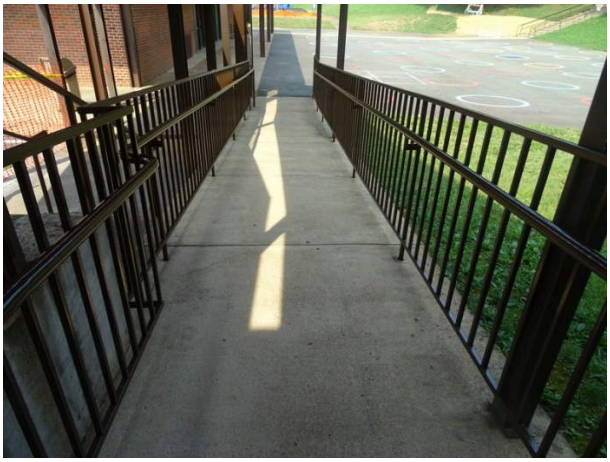
The Walker Upper Elementary School property is considered by the City of Charlottesville - Facilities Development to be within "areas of public accommodations" or a "commercial facility" and is therefore is subject to compliance with Title III of the ADA.

The parking area serving the property has a total of approximately 49 parking spaces. Of the parking spaces, Two are accessible with Two being van accessible. Accessibility requires that two accessible parking spaces be provided in parking areas with a total of 26 to 50 spaces. One in six of the accessible parking spaces are required to be van accessible. A minimum of a 60-inch wide access aisle is required to be provided for every two accessible parking spaces. Accessible aisles were observed to be provided. The number of parking spaces does meet accessibility requirements.

Photographs

Accessible parking spaces

Accessible concrete ramp with truncated domes



Accessible exterior ramp

Accessible interior finishes of restroom area

Uniform Abbreviated Screening Checklist for the 2010 Americans with Disabilities Act			
	Item	**Yes/ No**	**Comments**
A.	**History**		
1.	Has an ADA Survey been completed for this property?	Yes	
2.	Have any ADA improvements been made to the property since original construction?	Yes	installation of chairlift for gym
3.	Has building ownership/management reported any ADA complaints or litigation?	No	not reported

Uniform Abbreviated Screening Checklist for the 2010 Americans with Disabilities Act			
	Item	**Yes/ No**	**Comments**
B.	**Parking**		
1.	Does the required number of standard ADA-designated spaces appear to be provided?	Yes	Two out of the 49 are accessible.
2.	Does the required number of van-accessible designated spaces appear to be provided?	Yes	two out of the Two accessible spaces are van accessible
3.	Are accessible spaces part of the shortest accessible route to an accessible building entrance?	Yes	
4.	Is a sign with the International Symbol of Accessibility at the head of each space?	No	
5.	Does each accessible space have an adjacent access aisle?	Yes	
6.	Do parking spaces and access aisles appear to be relatively level and without obstruction?	Yes	
C.	**Exterior Accessible Route**		
1.	Is an accessible route present from public transportation stops and municipal sidewalks in the property?	Yes	
2.	Are curb cut ramps present at transitions through curbs on an accessible route?	Yes	
3.	Do curb cut ramps appear to have the proper slope for all components?	Yes	
4.	Do ramps on an accessible route appear to have a compliant slope?	Yes	
5.	Do ramps on an accessible route appear to have a compliant length and width?	Yes	
6.	Do ramps on an accessible route appear to have a compliant end and intermediate landings?	Yes	
7.	Do ramps on an accessible route appear to have compliant handrails?	Yes	
D.	**Building Entrances**		

Uniform Abbreviated Screening Checklist for the 2010 Americans with Disabilities Act			
	Item	**Yes/ No**	**Comments**
1.	Do a sufficient number of accessible entrances appear to be provided?	Yes	
2.	If the main entrance is not accessible, is an alternate accessible entrance provided?	N/A	
3.	Is signage provided indicating the location of alternate accessible entrances?	N/A	
4.	Do doors at accessible entrances appear to have compliant clear floor area on each side?	Yes	
5.	Do doors at accessible entrances appear to have compliant hardware?	Yes	
6.	Do doors at accessible entrances appear to have complaint opening width?	Yes	
7.	Do pairs of accessible entrance doors in series appear to have the minimum clear space between them?	N/A	
8.	Do thresholds at accessible entrances appear to have compliant height?	Yes	
E.	**Interior Accessible Routes and Amenities**		
1.	Does an accessible route appear to connect with all public areas inside the building?	Yes	
2.	Do accessible routes appear free of obstructions and/or protruding objects?	No	
3.	Do ramps on accessible routes appear to have compliant slope?	N/A	
4.	Do ramps on accessible routes appear to have compliant length and width?	N/A	
7.	Are adjoining public areas and areas of egress identified with accessible signage?	Yes	
8.	Do public transaction areas have an accessible, lowered counter section?	Yes	
9.	Do public telephones appear mounted with an accessible height and location?	N/A	
10.	Are publicly-accessible swimming pools equipped with an entrance lift?	N/A	

Uniform Abbreviated Screening Checklist for the 2010 Americans with Disabilities Act			
	Item	**Yes/ No**	**Comments**
F.	**Interior Doors**		
1.	Do doors at interior accessible routes appear to have compliant clear floor area on each side?	Yes	
2.	Do doors at interior accessible routes appear to have compliant hardware?	Yes	
3.	Do doors at interior accessible routes appear to have compliant opening force?	Yes	
4.	Do doors at interior accessible routes appear to have a compliant clear opening width?	Yes	
G.	**Elevators**		
1.	Are hallway call buttons configured with the "UP" button above the "DOWN" button?	Yes	
2.	Is accessible floor identification signage present on the hoistway sidewalls?	Yes	
H.	**Toilet Rooms**		
1.	Do publicly-accessible toilet rooms appear to have a minimum compliant floor area?	Yes	
2.	Does the lavatory appear to be mounted at a compliant height and with compliant knee area?	Yes	
3.	Does the lavatory faucet have compliant handles?	Yes	
4.	Is the plumbing piping under lavatories configured to protect against contact?	Yes	
5.	Are grab bars provided at compliant locations around the toilet?	Yes	Toilet paper dispenser appears to be out of accessible reach
6.	Do toilet stall doors appear to provide the minimum compliant clear width?	N/A	
7.	Do toilet stalls appear to provide the minimum compliant clear floor area?	N/A	

Uniform Abbreviated Screening Checklist for the 2010 Americans with Disabilities Act			
	Item	**Yes/ No**	**Comments**
8.	Do urinals appear to be mounted at a compliant height and with compliant approach width?	N/A	
9.	Do accessories and mirrors appear to be mounted at a compliant height?	Yes	

4.0 DOCUMENT REVIEW

4.1 DOCUMENTATION REVIEW

ECS requested relevant documentation from Josh Bontrager, to gain insight into the subject property's physical improvements, extent and type of use, and/or assist in identifying material discrepancies between reported information and observed conditions. ECS' review of documents submitted does not include commenting on the accuracy of such documents or their preparation, methodology, or protocol.

4.2 INTERVIEW SUMMARY

ECS was escorted through the property by Josh Bontrager and Keith Nordstrom who provided information about the property.

5.0 ADDITIONAL CONSIDERATIONS

5.1 MOISTURE AND MOLD

Comments

If present, evidence of mold and moisture issues are noted in the interior section of the report.

6.0 RECOMMENDATIONS AND OPINIONS OF COST

The opinion of cost are based upon approximate quantities, costs, and published information, and they include labor, material, design fees, and appropriate overhead, general conditions, and profit. A detailed analysis of quantities for cost estimating purposes is not included. The opinion of cost to repair, replace, or upgrade the improvements are considered typical for the marketplace. No contractors have provided pricing. The actual cost of repairs may vary from our opinions. ECS has not included contingency funds in our opinions. Amounts indicated represent today's dollars. ECS offers the following comments relative to Immediate and Capital Reserves criteria:

Immediate Issues

Physical deficiencies that require immediate action as a result of (i) existing or potentially unsafe conditions, (ii) significant negative conditions impacting tenancy, (iii) material building code violations, (iv) poor or deteriorated condition of critical element or system, or (v) a condition that is left "as is," with an extensive delay in addressing same, would result in or contribute to critical element or system failure within one year.

ECS has also included physical deficiencies inclusive of deferred maintenance that may not warrant immediate attention, but requiring repairs or replacements that should be undertaken on a priority basis, taking precedence over routine preventative maintenance work within a zero to one year time frame. Included are such physical deficiencies resulting from improper design, faulty installation, and/or substandard quality of original systems or materials. Components or systems that have realized or exceeded their Expected Useful Life (EUL) that may require replacement to be implemented within a zero to one year time frame are also included.

Capital Reserves

Capital Reserves are for recurring probable expenditures, which are not classified as operational or maintenance expenses, which should be annually budgeted for in advance. Capital reserves are reasonably predictable both in terms of frequency and cost. However, they may also include components or systems that have an indeterminable life but nonetheless have a potential liability for failure within an estimated time period. A component method has also been included within this report as well.

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

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

ECS's reserve methodology involves identification and quantification of those systems or components requiring capital reserve funds within the evaluation period. Additional information concerning systems or components respective replacement costs (in today's dollars), typical expected useful lives, and remaining useful lives were estimated so that a funding schedule could be prepared. The Capital Reserve Schedule presupposes that all required remedial work has been performed or that monies for remediation have been budgeted for items defined in the Immediate Needs Cost Estimates.

7.0 FACILITY CONDITION INDEX (FCI)

In accordance with our proposal add alternate, ECS determined the Facility Condition Index (FCI) value for the Walker Upper Elementary School building. ECS determined the FCI value in accordance with industry standards and methodology sponsored by The National Association of College and University Business Officers (NACUBO). The FCI calculation methodology consists of dividing the total cost of Maintenance, Repair, and Replacement Deficiencies of the Facility by the Current Replacement Value of the Facility. FCI values and condition of the buildings based on the industry accepted interpretation of FCI values with ratings: good (under 0.05), fair (0.05 to 0.10), and poor (over 0.10).

Based on our Facility Condition Assessment, the total repair and replacement costs for the Walker Upper Elementary School is $1,878,432.00. The replacement construction cost value obtained from the RS MEANS square foot estimator application is $14,431,826.87. Please see attached documentation from RS MEANS program output as an appendix to the report. The calculated FCI value is determined to be 0.13. In accordance with the industry standards and methodology sponsored by The National Association of College and University Business Officers (NACUBO), the condition of Walker Upper Elementary School is rated as poor.

The letter rating for the school buildings is based on the FCI values with the ratings system provided by you referenced from the City of Alexandria as follows : A (under 0.10), B (0.11 to 0.20), C (0.21 to 0.40), D (0.41 to 0.60), and F (0.61 to 1.00+).

The letter rating for the Walker Upper Elementary School was determined to be B.

8.0 LIMITATIONS AND QUALIFICATIONS

ECS's FCA cannot wholly eliminate the uncertainty regarding the presence of physical deficiencies and the performance of a property's building systems. Preparation of a FCA in accordance with ASTM E 2018-15 “Standard Guide for Property Condition Assessments: Baseline Property Condition Assessment Process” is intended to reduce, but not eliminate, the uncertainty regarding the potential for component or system failure and cannot reduce the potential that such component or system may not be initially observed.

This FCA was prepared recognizing the inherent subjective nature of ECS's opinions as to such issues as workmanship, quality of original installation, and estimating the remaining useful life of any given component or system. It should be understood that ECS's suggested remedy may be determined under time constraints, formed without the aid of engineering calculations, testing, exploratory probing, the removal of materials, or design. Furthermore, there may be other alternate or more appropriate schemes or methods to remedy the physical deficiency. ECS’s opinions are generally formed without detailed knowledge from individuals familiar with the component’s or system’s performance.

The opinions ECS expresses in this report were formed utilizing the degree of skill and care ordinarily exercised by a prudent professional in the same community under similar circumstances. ECS assumes no responsibility or liability for the accuracy of information contained in this report which has been obtained from the Client or the Client's representatives, from other interested parties, or from the public domain. The conclusions presented represent ECS' professional judgment based on information obtained during the course of this assignment. ECS's evaluations, analyses and opinions are not representations regarding the design integrity, structural soundness, or actual value of the property. Factual information regarding operations, conditions and test data provided by the Client or their representative has been assumed to be correct and complete. The conclusions presented are based on the data provided, observations made, and conditions that existed specifically on the date of the assessment.

Appendix I: SITE MAP AND AERIAL PHOTOGRAPH

Site Map

Walker Upper Elementary - FCA 2021

Aerial Photograph

Walker Upper Elementary - FCA 2021

Appendix II: FIRE EXTINGUISHER INSPECTION

Inspection Certificate

For

Charlottesville-Walker Upper
Elementary
1564 Dairy Rd
Charlottesville, VA 22903

This Inspection was performed in accordance with applicable Standards. The subsequent pages of this report provide performance measurements, listed ranges of acceptable results, and complete documentation of the inspection. Whenever discrepancies exist between acceptable performance standards and actual test results, notes and/or recommended solutions have been proposed or provided for immediate review and approval.

Annual Inspection
Inspection Date
Jul 9, 2021

Building: Charlottesville-Walker Upper Elementary
Contact: Jason Davis
Title: Security Maint.

Company: Fire Solutions
Contact: Christopher Bowmaster
Title: Technician

Executive Summary

Generated by: BuildingReports.com

Building Information

Building: Charlottesville-Walker Upper Elementary
Address: 1564 Dairy Rd
Address:
City/State/Zip: Charlottesville, VA 22903
Country: United States of America

Contact: Jason Davis
Phone: 434-964-6771
Fax:
Mobile:
Email: davisja@charlottesville.org

Inspection Performed By

Company: Fire Solutions
Address: 205 Haley Road
Address:
City/State/Zip: Ashland, Virginia 23005
Country: United States

Inspector: Christopher Bowmaster
Phone: 804-994-1711
Fax:
Mobile: 804-994-1711
Email: cbowmaster@firesolutionsinc.com

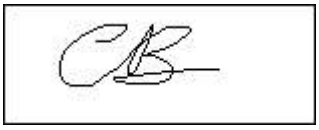
Inspection Summary

Category:	Total Items		Serviced		Passed		Failed/Other	
	Qty	%	Qty	%	Qty	%	Qty	%
Fire	33	100.00%	33	100.00%	33	100.00%	0	0%
Totals	**33**	**100%**	**33**	**100.00%**	**33**	**100.00%**	**0**	**0%**

Verification

Company: Fire Solutions

Inspector: Christopher Bowmaster



Signed: Jul 9, 2021

Building: Charlottesville-Walker Upper Elementary

Contact: Jason Davis

Fire Solutions Certifications

Certification Type	Number
WBENC Certified	2005121836

Notes & Recommendations

Generated by: BuildingReports.com

Building: Charlottesville-Walker Upper Elementary

The Notes & Recommendations Report details additional inspection notes made by the Inspectors during the course of the building inspection. Notes are grouped by Category.

Note	Device Type	Location	Comment	ScanID
Fire				
1	Fire Extinguisher Block with a book case	2nd in room 208 412.09 a bldg	Passed	39853415

Inspection & Testing

Generated by: BuildingReports.com

Building: Charlottesville-Walker Upper Elementary

The Inspection & Testing section lists all of the items inspected in your building. Items are grouped by Passed or Failed /Other. Items are listed by Category. Each item includes the services performed, and the time & date at which testing occurred.

Device Type	Location	ScanID : S/N	Service	Date Time
Passed				
Fire				
Fire Extinguisher, 10 Lbs, A.B.C.	1st boiler room 412.25 b bldg	39853421 BS915931	Inspected	06/14/21 11:19:00 AM
Fire Extinguisher, 5 Lbs, A.B.C.	1st boiler room office 412.26 b bldg	39853420 AW770963	Inspected	06/14/21 11:19:36 AM
Fire Extinguisher, 2.5 Lbs, Halotron	1st computer lab 412.34 a bldg	49753251 Y-434148	Inspected	06/14/21 10:56:43 AM
Fire Extinguisher, 5 Lbs, A.B.C.	1st elevator room 412.31 a bldg	39853399 A-40185411	Inspected	06/14/21 11:03:04 AM
Fire Extinguisher, 5 Lbs, A.B.C.	1st guidance office A109 412.16 a bldg	39853405 F75958868	Inspected	06/14/21 10:54:18 AM
Fire Extinguisher, 5 Lbs, A.B.C.	1st gym storage area bldg C 412.33	39853430 F75958895	Inspected	06/14/21 11:16:09 AM
Fire Extinguisher, 5 Lbs, A.B.C.	1st hallway B bldg 412.20	39853423 F75958878	Inspected	06/14/21 11:05:46 AM
Fire Extinguisher, 5 Lbs, A.B.C.	1st hallway by B104 412.18 b bldg	39853429 F75958904	Inspected	06/14/21 11:10:48 AM
Fire Extinguisher, 5 Lbs, A.B.C.	1st in room B100 412.19 b bldg	39853422 RM-668582	Inspected	06/14/21 11:06:37 AM
Fire Extinguisher, 5 Lbs, A.B.C.	1st in room B102 412.21 b bldg	39853424 D00692063	Inspected	06/14/21 11:08:12 AM
Fire Extinguisher, 5 Lbs, A.B.C.	1st in room B102 412.22 b bldg	39853425 BU082826	Inspected	06/14/21 11:07:52 AM
Fire Extinguisher, 5 Lbs, A.B.C.	1st in room B109 412.23 b bldg	39853398 E-95765960	Inspected	06/14/21 11:11:48 AM
Fire Extinguisher, 5 Lbs, A.B.C.	1st in room B110 412.24 b bldg	39853419 CC-937333	Inspected	06/14/21 11:12:28 AM
Fire Extinguisher, 6 Ltr, A. B.C.	1st kitchen. 412.11 a bldg	39853402 AB627050	Inspected	06/14/21 11:00:33 AM
Fire Extinguisher, 5 Lbs, A.B.C.	1st lunchroom 412.17 a bldg	39853403 XS066543	Inspected	06/14/21 10:58:03 AM
Fire Extinguisher, 5 Lbs, A.B.C.	1st main office 109 412.15 a bldg	39853406 D-06914535	Inspected	06/14/21 10:53:22 AM
Fire Extinguisher, 5 Lbs, A.B.C.	1st mechanical room custodial 412.14 a bldg	39853401 YU-404883	Inspected	06/14/21 10:58:53 AM

Device Type	Location	ScanID : S/N	Service	Date Time
Passed				
Fire				
Fire Extinguisher, 5 Lbs, A.B.C.	1st stage left B120 412.27 b bldg	39853428 B-14706175	Inspected	06/14/21 11:09:54 AM
Fire Extinguisher, 5 Lbs, A.B.C.	1st stage right B120 412.29 b bldg	39853426 SU969763	Inspected	06/14/21 11:09:08 AM
Fire Extinguisher, 5 Lbs, A.B.C.	1st stairwell 1 412.13 a bldg	39853400 F75958876	Inspected	06/14/21 10:59:26 AM
Fire Extinguisher, 5 Lbs, A.B.C.	2nd hallway across from room 230 412.01 a bldg	39853407 F75958893	Inspected	06/14/21 10:51:27 AM
Fire Extinguisher, 5 Lbs, A.B.C.	2nd hallway across from room. 214 412.05 a bldg	39853414 YW224333	Inspected	07/09/21 9:37:50 AM
Fire Extinguisher, 5 Lbs, A.B.C.	2nd hallway by room 240 412.04 a bldg	39853411 B-04196253	Inspected	06/14/21 10:44:57 AM
Fire Extinguisher, 5 Lbs, A.B.C.	2nd hallway by room 224 412.02 a bldg	39853408 YA677523	Inspected	06/14/21 10:47:01 AM
Fire Extinguisher, 5 Lbs, A.B.C.	2nd in room 201 412.07 a bldg	39853418 F75958913	Inspected	06/14/21 10:36:07 AM
Fire Extinguisher, 5 Lbs, A.B.C.	2nd in room 202 412.08 a bldg	39853417 XF-108390	Inspected	06/14/21 10:37:00 AM
Fire Extinguisher, 5 Lbs, A.B.C.	2nd in room 208 412.09 a bldg	39853415 F75958899	Inspected	06/14/21 10:39:14 AM
Fire Extinguisher, 5 Lbs, A.B.C.	2nd in room 211 412.10 a bldg	49753250 F75958879	Inspected	06/14/21 10:40:29 AM
Fire Extinguisher, 5 Lbs, A.B.C.	2nd in room L1 412.06 a bldg	39853412 WU350448	Inspected	06/14/21 10:44:05 AM
Fire Extinguisher, 5 Lbs, A.B.C.	2nd in stem lab 412.30 a bldg	39853413 A31416311	Inspected	06/14/21 10:42:14 AM
Fire Extinguisher, 5 Lbs, A.B.C.	2nd library on column 412.28 a bldg	39853416 F75958885	Inspected	06/14/21 10:43:06 AM
Fire Extinguisher, 5 Lbs, A.B.C.	2nd mechanical room 412.03	39853409 F75958846	Inspected	06/14/21 10:46:33 AM
Fire Extinguisher, 5 Lbs, A.B.C.	2nd mechanical room 412.32 a bldg	39853410 F75958856	Inspected	06/14/21 10:45:53 AM

Service Summary

Generated by: BuildingReports.com

Building: Charlottesville-Walker Upper Elementary

The Service Summary section provides an overview of the services performed in this report.

Device Type	Service	Quantity
	Passed	
Fire Extinguisher, 10 Lbs, A.B.C.	Inspected	1
Fire Extinguisher, 2.5 Lbs, Halotron	Inspected	1
Fire Extinguisher, 5 Lbs, A.B.C.	Inspected	30
Fire Extinguisher, 6 Ltr, A.B.C.	Inspected	1
Total		**33**
Grand Total		**33**

Fire Extinguisher Maintenance Report

Generated by: BuildingReports.com

Building: Charlottesville-Walker Upper Elementary

This report provides details on the Hydrostatic Test and Maintenance/Breakdown dates for fire extinguishers. Items that will need either of these services at any time in the next two years are displayed. Items are grouped together by year for budgeting purposes.

ScanID	Location	Serial #	Hydro	Breakdown	Mfr Date
Due in 2022					
Breakdown/Maintenance					
Fire Extinguisher, A.B.C., 5 Lbs					
39853412	2nd in room L1 412.06 a bldg	WU350448	04/07/16	04/07/16	04/07/04
				Total Fire Extinguisher, A.B.C., 5 Lbs:	**1**
Fire Extinguisher, A.B.C., 6 Ltr					
39853402	1st kitchen. 412.11 a bldg	AB627050	04/07/16	04/07/16	04/07/08
				Total Fire Extinguisher, A.B.C., 6 Ltr:	**1**
Due in 2023					
Breakdown/Maintenance					
Fire Extinguisher, A.B.C., 5 Lbs					
39853417	2nd in room 202 412.08 a bldg	XF-108390	04/07/17	04/07/17	04/07/05
39853424	1st in room B102 412.21 b bldg	D00692063	04/07/17	04/07/17	04/07/17
				Total Fire Extinguisher, A.B.C., 5 Lbs:	**2**
Fire Extinguisher, Halotron, 2.5 Lbs					
49753251	1st computer lab 412.34 a bldg	Y-434148	04/07/17	04/07/17	04/07/17
				Total Fire Extinguisher, Halotron, 2.5 Lbs:	**1**

Inventory & Warranty Report

Generated by: BuildingReports.com

Building: Charlottesville-Walker Upper Elementary

The Inventory & Warranty Report lists each of the devices and items that are included in your Inspection Report. A complete inventory count by device type and category is provided. Items installed within the last 90 days, within the last year, and devices installed for two years or more are grouped together for easy reference.

Device or Type	Category	% of Inventory	Quantity
Fire Extinguisher	Fire	100.00%	33

Type	Qty	Model #	Description	Manufacture Date
In Service - 1 Year to 2 Years				
Badger				
Fire Extinguisher	1	5 HI SA40 ABC	A.B.C.	08/06/2019
Buckeye				
Fire Extinguisher	11	5 HI SA40 ABC	A.B.C.	08/06/2019
In Service - 2 Years to 3 Years				
Ansul				
Fire Extinguisher	1	X-AA05S-1	A.B.C.	04/07/2019
In Service - 3 Years to 5 Years				
Buckeye				
Fire Extinguisher	1	2.5FHALOTRON	Halotron	04/07/2017
Amerex				
Fire Extinguisher	1	AB402-17	A.B.C.	04/07/2017
Ansul				
Fire Extinguisher	1	X-AA05S-1	A.B.C.	04/07/2017
In Service - 5 Years to 10 Years				
Ansul				
Fire Extinguisher	1	X-A05S	A.B.C.	04/07/2016
Fire Extinguisher	1	X-A05	A.B.C.	10/05/2015
Fire Extinguisher	1	X-AA05-1	A.B.C.	04/07/2015
Amerex				
Fire Extinguisher	1	AB402-14	A.B.C.	10/05/2014
PyroChem				
Fire Extinguisher	1	PPC5ABC 2	A.B.C.	04/07/2014
Amerex				
Fire Extinguisher	1	AB402-13	A.B.C.	04/07/2013
PyroChem				
Fire Extinguisher	1	PPC 10T ABC-1	A.B.C.	04/07/2013
Ansul				
Fire Extinguisher	1	XAA05-1	A.B.C.	04/07/2012

In Service - 10 Years to 15 Years				
PyroChem				
Fire Extinguisher	1	FF-KS6000	A.B.C.	04/07/2008
Amerex				
Fire Extinguisher	1	AB402-07	A.B.C.	04/07/2007
Badger				
Fire Extinguisher	1	B5M-07	A.B.C.	04/07/2007
In Service - 15 Years to 25 Years				
Amerex				
Fire Extinguisher	1	AB500-06	A.B.C.	04/07/2006
Ansul				
Fire Extinguisher	1	X-AA05-1	A.B.C.	04/07/2006
Badger				
Fire Extinguisher	1	B5M-07	A.B.C.	04/07/2005
Amerex				
Fire Extinguisher	1	AB402-04	A.B.C.	04/07/2004
Fire Extinguisher	1	AB402-02	A.B.C.	04/07/2002
Fire Extinguisher	1	A500-00	A.B.C.	08/06/2000

Appendix III: FIRE SPRINKLER INSPECTION

INSPECTION AND TESTING FORM OF WATER BASED FIRE PROTECTION SYSTEMS

1. PROPERTY INFORMATION

Name of property: Walker Upper Elementary (4433-22903-00022)
Address:
Description of property:
Name of property representative: City of Charlottesville (30548899), Jason Davis (434-964-6771) davisja@charlottesville.org
Address: 315 4th St NW, Charlottesville, VA 22903
Phone: 434-962-3643 Fax: 434-970-3026 E-mail: staplesk@charlottesville.org

2. TESTING INFORMATION

Testing Organization: SIEMENS Organization License No.:
Address: 5106 Glen Alden Drive, Richmond, VA 23231
Phone: 804-222-6680 Fax: None E-mail: None
Start Date/Time: Completion Date/Time:
Contract Info: City of CVille Sprinkler (2600105673) Notification Number: 5102050595
Inspection Type:

NOTES: 1) All questions are to be answered Yes, No, or Not Applicable (NA). Explain all No answers in Parts 6, 7, or 8 of this form.
2) Inspection, Testing, and Maintenance are to be performed with water supplies (including fire pumps) in service, unless the impairment procedures of NFPA 25 are followed.

3. GENERAL INFORMATION (TO BE COMPLETED BY OWNER)

Is the building fully sprinklered?	
Has the occupancy classification and hazard of contents remained the same since last inspection?	
Are all fire protection systems in service?	
Has the system remained in service without modification since last inspection?	
Have any fire systems, devices or alarms activated since the last inspection?	
If a fire has occurred since the last inspection, have all damaged sprinkler system components been replaced?	

4. INSPECTOR'S SECTION

4.1 Inspections

Control valves in the correct (open or closed) position and free from external leaks?	Yes
Control valves locked, sealed or supervised?	Yes
Hydraulic nameplate (calculated systems) securely attached and legible?	No
Alarm and/or dry pipe valves free from physical damage, trim valves in appropriate position and no leakage?	Yes
Water flow alarm devices free from physical damage?	Yes
Fire department connections visible, signage, accessible, free from damage, couplings free, and caps in place?	Yes
Gauges in good condition showing normal pressure?	Yes
Adequate heat in areas with wet piping?	Yes
Post indicator valves are provided with a correct wrench and in the normal position?	(NA)
Backflow preventers relief port on RPZ device not discharging?	(NA)
For freezer systems, is the gauge near the compressor reading the same as the gauge near the dry-valve?	(NA)
Pressure Reducing valves are in the open position, not leaking, maintain downstream pressure accordance with the design criteria, good condition, and handwheels not broken?	(NA)
Valve encloser for pre-action, deluge and dry systems are above 40f?	(NA)

4.2 Testing

Post indicating valves opened until spring or torsion is felt in the rod, then backed off one-quarter turn?	(NA)
Valve supervisory switches indicate movement?	(NA)
Mechanical water flow alarm device passed tests by opening the inspector's test or bypass connection with alarms actuating and flow observed?	(NA)

Electrical Waterflow (Vane type, Paddle-type, and Pressure Switch-type) alarm devices passed tests by opening the inspector's test connection or bypass connection with alarm actuating, and flow is observed?	(NA)
Priming level of dry pipe valves correct?	(NA)
Quick opening devices of dry pipe systems passed?	(NA)
Air compressor or nitrogen system in good condition per manufacture maintenance procedure?	(NA)
Low air pressure signal of dry pipe system passed?	(NA)
Main Drain Test water pressure is within 10% reduction in full flow pressure compared to previous test?	(NA)

5. MAIN DRAIN / TRIP TESTS RESULTS

5.1 Report Totals

Total Qty	Functionally Tested Qty	Functionally Tested %	Visually Tested Qty	Visually Tested %	Failed Qty	Failed %
1	0	0%	1	100%	0	0%

5.2 Report Totals by Type

Total Qty	Functionally Tested Qty	Functionally Tested %	Visually Tested Qty	Visually Tested %	Failed Qty	Failed %	Device or System Type
1	0	0%	1	100%	0	0%	Wet Sprinkler Systems

5.3 Report Details by Type

Wet Sprinkler Systems

Row	Date	Address	Location	Model	Water Source	Source PSI	Test Pipe Size	Static PSI	Restore Time (sec)	5 Year Performed	Visual/ Functional	Pass/ Fail
1	04/05/21	1:1	"B" Mech. Room	4 inch CSC Check	City	110	2	120	NA	Yes	Visual	Pass

6. COMMENTS

Address	Location	NFPA Classification	Comment:
1:1	"B" Mech. Room	Wet Sprinkler	None to report.

7. DEFICIENCIES (ONLY RELATED TO NFPA 25)

A condition that will or has the potential to adversely impact the performance of a system or portion thereof but does not rise to the level of an impairment.

Address	Location	NFPA Classification	Deficiencies:
1:1	"B" Mech. Room	Wet Sprinkler	None to report.

8. IMPAIRMENTS

A condition where a fire protection system or unit or portion thereof is out of order, and the condition can result in the fire protection system or unit not functioning in a fire event.

Address	Location	NFPA Classification	Impairments:
1:1	"B" Mech. Room	Wet Sprinkler	None to report.

9. CERTIFICATION

This Testing Was Performed in Accordance with Applicable NFPA Standards.

I state that the information on this form is correct at the time and place of my inspection and that all equipment tested at this time was left in operational condition upon completion of this inspection except as noted in Parts 6, 7, and 8 above.

Name of Inspector:_ Inspector License #:

Signature: CRAIG BROWN Date: 4.5.21

10. ACCEPTANCE BY OWNER OR OWNER'S REPRESENTATIVE

Name of Owner or Representative:

Signature: _____ Date: _____

The owner and/or designated representative acknowledges the responsibility of the operating condition of the component parts at the time of this inspection. Pursuant to the National Fire Protection Association Form 25, Chapter 4, the owner is responsible for proper maintenance and care of the sprinkler system. It is agreed that the inspection service provided by the contractor as prescribed herein is limited to performing a visual inspection and/or routine testing, and any investigation or unscheduled testing, modification, maintenance, repair, etc., of the component parts is not included as part of the inspection work performed. It is understood that this inspection pertains to the condition of the sprinkler system on the day of inspection only. This inspection meets or exceeds NFPA 25 requirements and or local AHJ requirements. AHJ requirements supersede all other code requirements. The inspector shall not be liable for future defaults or defects in the sprinkler system which are beyond the inspector's control, including, but not limited to, failure from malicious tampering, accidents, lack of proper inspection, material failure or inadequate heating. The inspector can give no assurance, nor will be held liable, with regard to work that may have been previously performed or work performed at a future date by other companies. It is further understood that all information contained herein is provided to the best of the knowledge of the party providing such information.

Appendix IV: ELEVATOR CERTIFICATES

E & F ELEVATOR INSPECTIONS AND CONSULTING, INC.
PO BOX 176
CROZIER, VIRGINIA 23039
(804) 784-1945

CHECKLIST FOR INSPECTION OF HYDRAULIC ELEVATORS

GENERAL NOTES:
(a) See ASME A17.2.1 for detailed code requirements.
(b) OK - meets requirements, NG - insert number to identify comment of back of the Checklist, NA - not applicable.

Address: Walker Upper Elementary School
1564 Dairy Rd.
Charlottesville, VA

[ ] Routine inspection and test
[X] Periodic inspection and test
[ ] Acceptance inspection and test

Id No: 1

Our Number: CS104

[X] Passenger **Rated Load: 2100**
[ ] Freight Class **Speed: 100**

Inspected by: Steve Bowers
Signature: _____ Date: 2/25/21
QEI NO: E000983 **Certifying organization: QEITF**

	OK	NG	NA		OK	NG	NA
1. INSIDE OF CAR				2.16 Tanks	X		
1.1 Door reopening device	X			2.17 Flexible hydraulic hose asemblies			X
1.2 Stop switch	X			2.18 Supply line and shut-off valve	X		
1.3 Operating control device	X			2.19 Hydraulic cylinder			X
1.4 Car floor and landing sill.	X			2.20 Pressure switch			X
1.5 Car lighting	X			2.21 Governor, overspeed switch & seal			X
1.6 Car emergency signal		X		2.22 Code data plate			X
1.7 Car door or gate	X						
1.8 Door closing force	X			**3. TOP OF CAR**			
1.9 Power closing of doors and gates	X			3.1 Stop switch	X		
1.10 Power opening of doors or gates	X			3.2 Car top light and outlet	X		
1.11 Car vision panels and glass car doors			X	3.3 Top of car operating device	X		
1.12 Car enclosure	X			3.4 Top of car clearance, refuge space	X		
1.13 Emergency exit			X	3.5 Normal terminal stopping device	X		
1.14 Ventilation	X			3.6 Emergency terminal speed limiting	X		
1.15 Operating device symbols	X			3.7 Anti-creep leveling device	X		
1.16 Rated load, platform area, data plate	X			3.8 Crosshead data plate	X		
1.17 Standby power operation			X	3.9 Top emergency exit	X		
1.18 Restricted opening of doors	X			3.10 Floor number identification	X		
1.19 Car ride	X			3.11 Hoistway construction	X		
				3.12 Hoistway smoke control			X
2. MACHINE ROOM				3.13 Pipes, wiring, & ducts	X		
2.1 Access to machine	X			3.14 Windows, projections, recesses, setbacks	X		
2.2 Headroom	X			3.15 Hoistway clearances	X		
2.3 Lighting and receptacles	X			3.16 Multiple hoistway			X
2.4 Enclosure of machinery space	X			3.17 Traveling cables, junction boxes	X		
2.5 Housekeeping	X			3.18 Door and gate equipment	X		
2.6 Ventilation	X			3.19 Car frame and stiles	X		
2.7 Fire extinguisher	X			3.20 Guide rails fastening & equipment	X		
2.8 Pipes, wiring, and ducts	X			3.21 Governors releasing carrier			X
2.9 Guarding of exposed equipment	X			3.22 Governor rope			X
2.10 Numbering of elevator equipment			X	3.23 Wire rope fastening and hitch plate			X
2.11 Disconnecting means and control	X			3.24 Suspension rope			X
2.12 Controller wiring, fuses, grounding	X			3.25 Slack rope device			X
2.13 Hydraulic power unit	X			3.26 Traveling sheave			X
2.14 Relief valves	X			3.27 Counterweight			X
2.15 Control valve	X						

CHECKLIST FOR INSPECTION OF HYDRAULIC ELEVATORS

	OK	NG	NA		OK	NG	NA
4. OUTSIDE HOISTWAY				**5. PIT**			
4.1 Car platform guard	X			5.1 Pit access, lighting & stop switch	X		
4.2 Hoistway doors	X			5.2 Bottom clearance and runby	X		
4.3 Vision panels			X	5.3 Plunger and cylinder	X		
4.4 Hoistway door locking device	X			5.4 Car buffer	X		
4.5 Access to hoistway	X			5.5 Normal terminal stopping devices	X		
4.6 Power closing of hoistway doors			X	5.6 Traveling cables	X		
4.7 Sequence operation			X	5.7 Car frame & platform	X		
4.8 Hoistway enclosure	X			5.8 Guiding members	X		
4.9 Elevator parking device			X	5.9 Supply piping	X		
4.10 Emergency doors in blind hoistways			X	5.10 Car safety - including roped-hydraulic			X
4.11 Standby power selection switch			X	5.11 Governor rope tension device			X
				6. FIREFIGHTERS SERVICE	X		

MAINTENANCE

1.6 Teleph0ne is inoperative. – Dials to an out of service number.

OWNER

Appendix V: RS MEANS ESTIMATE FOR FACILITY CONDITION INDEX (FCI)

Square Foot Cost Estimate Report

Date: **2/18/2022**

Estimate Name	**Walker Upper Elementary**
	City of Charlottesville 1564 Dairy Road Charlottesville Virginia 22902
Building Type	School, Elementary with Brick Veneer / Reinforced Concrete
Location	CHARLOTTESVILLE, VA
	2.00
Stories Height	15.00
Floor Area (S.F.)	102,000.00
LaborType	OPN
Basement Included	No
Data Release	Year 2021
Cost Per Square Foot	$141.49
Total Building Cost	**$14,431,826.87**

Costs are derived from a building model with basic components. Scope differences and market conditions can cause costs to vary significantly.

** **Area, Stories entered is outside the range recommended by RSMeans.**

Assembly Customization Type :

⊕ Added

◐ Partially Swapped

● Fully Swapped

		Quantity	% of Total	Cost Per SF	Cost
A Substructure			**5.5%**	**$5.77**	**$588,047.60**
A1010	**Standard Foundations**			**$3.19**	**$325,810.45**
	Foundation wall, CIP, 4' wall height, direct chute, .148 CY/LF, 7.2 PLF, 12" thick	2,500.00		$1.66	**$169,102.50**
	Strip footing, concrete, reinforced, load 11.1 KLF, soil bearing capacity 6 KSF, 12" deep x 24" wide	2,500.00		$0.89	**$90,507.50**
	Spread footings, 3000 PSI concrete, load 100K, soil bearing capacity 6 KSF, 4' - 6" square x 15" deep	181.33		$0.65	**$66,200.45**
A1030	**Slab on Grade**			**$2.46**	**$251,343.30**
	Slab on grade, 4" thick, non industrial, reinforced	51,000.00		$2.46	**$251,343.30**

		Quantity	% of Total	Cost Per SF	Cost
A2010	**Basement Excavation**			**$0.11**	**$10,893.86**
	Excavate and fill, 30,000 SF, 4' deep, sand, gravel, or common earth, on site storage	89,250.00		$0.11	**$10,893.86**
B Shell			**34.9%**	**$36.92**	**$3,766,203.31**
B1010	**Floor Construction**			**$0.79**	**$80,918.40**
	Cast-in-place concrete column, 12", square, tied, minimum reinforcing, 150K load, 10'-14' story height, 135 lbs/LF, 4000PSI	1,500.00		$0.79	**$80,918.40**
B1020	**Roof Construction**			**$7.33**	**$747,866.55**
	Roof, concrete, beam and slab, 25'x25' bay, 40 PSF superimposed load, 20" deep beam, 9" slab, 152 PSF total load	51,000.00		$7.33	**$747,866.55**
B2010	**Exterior Walls**			**$15.34**	**$1,564,363.50**
	Brick wall, composite double wythe, standard face/CMU back-up, 8" thick, perlite core fill, 3" XPS	52,500.00		$15.34	**$1,564,363.50**
B2020	**Exterior Windows**			**$8.21**	**$836,975.58**
	Windows, aluminum, awning, insulated glass, 4'-5" x 5'-3"	652.17		$4.47	**$456,337.83**
	Aluminum flush tube frame, for 1/4"glass, 1-3/4"x4", 5'x20' opening, three intermediate horizontals	7,500.00		$1.63	**$166,654.13**
	Glazing panel, insulating, 1" thick units, 2 lites, 1/4" float glass, clear	7,500.00		$2.10	**$213,983.63**
B2030	**Exterior Doors**			**$0.84**	**$85,729.46**
	Door, aluminum & glass, with transom, narrow stile, double door, hardware, 6'-0" x 10'-0" opening	9.07		$0.59	**$60,389.44**
	Door, steel 18 gauge, hollow metal, 1 door with frame, no label, 3'-0" x 7'-0" opening	9.07		$0.25	**$25,340.02**
B3010	**Roof Coverings**			**$4.17**	**$425,214.06**
	Roofing, single ply membrane, EPDM, 60 mils, loosely laid, stone ballast	51,000.00		$0.86	**$88,204.50**
	Insulation, rigid, roof deck, extruded polystyrene, 40 PSI compressive strength, 4" thick, R20	51,000.00		$1.98	**$202,076.28**
	Base flashing, rubber, neoprene, 1/16" thick, 24 ga galv reglet, 24 ga galv counter flashing	2,500.00		$0.59	**$59,774.25**
	Roof edges, aluminum, duranodic, .050" thick, 8" face	2,500.00		$0.64	**$64,825.50**
	Flashing, aluminum, no backing sides, .019"	2,500.00		$0.10	**$10,333.53**
B3020	**Roof Openings**			**$0.25**	**$25,135.77**
	Roof hatch, with curb, 1" fiberglass insulation, 2'-6" x 3'-0", galvanized steel, 165 lbs	9.07		$0.11	**$11,398.61**
	Smoke hatch, unlabeled, galvanized, 2'-6" x 3', not incl hand winch operator	9.07		$0.13	**$13,737.16**
C Interiors			**19.5%**	**$20.64**	**$2,105,016.96**

		Quantity	% of Total	Cost Per SF	Cost
C1010	**Partitions**			**$3.45**	**$352,030.05**
	Concrete block (CMU) partition, light weight, hollow, 6" thick, no finish	51,000.00		$3.45	**$352,030.05**
C1020	**Interior Doors**			**$1.55**	**$157,930.24**
	Door, single leaf, kd steel frame, hollow metal, commercial quality, flush, 3'-0" x 7'-0" x 1-3/8"	145.71		$1.55	**$157,930.24**
C1030	**Fittings**			**$1.05**	**$107,274.05**
	Toilet partitions, cubicles, ceiling hung, painted metal	102.00		$0.71	**$72,675.71**
	Chalkboards, liquid chalk type, aluminum frame & chalktrough	2,040.00		$0.34	**$34,598.34**
C3010	**Wall Finishes**			**$3.60**	**$367,260.59**
	2 coats paint on masonry with block filler	102,000.00		$2.00	**$203,620.56**
	2 coats paint on masonry with block filler	52,500.00		$1.03	**$104,804.70**
	Ceramic tile, thin set, 4-1/4" x 4-1/4"	10,200.00		$0.58	**$58,835.33**
C3020	**Floor Finishes**			**$5.76**	**$587,030.40**
	Carpet, tufted, nylon, roll goods, 12' wide, 36 oz	10,200.00		$0.49	**$49,758.05**
	Carpet, padding, add to above, 2.7 density	10,200.00		$0.09	**$9,154.70**
	Terrazzo, maximum	10,200.00		$1.88	**$191,900.76**
	Vinyl, composition tile, maximum	61,200.00		$1.46	**$149,327.39**
	Oak strip, sanded and finished, minimum	20,400.00		$1.44	**$147,370.01**
	Underlayment, plywood, 3/8" thick	20,400.00		$0.39	**$39,519.49**
C3030	**Ceiling Finishes**			**$5.23**	**$533,491.62**
	Acoustic ceilings, 3/4"mineral fiber, 12" x 12" tile, concealed 2" bar & channel grid, suspended support	102,000.00		$5.23	**$533,491.62**
D Services			**39.9%**	**$42.17**	**$4,301,829.68**
D2010	**Plumbing Fixtures**			**$6.93**	**$706,781.46**
	Water closet, vitreous china, bowl only with flush valve, wall hung	102.00		$3.31	**$337,645.50**
	Urinal, vitreous china, wall hung	34.00		$0.40	**$40,671.31**
	Lavatory w/trim, wall hung, PE on CI, 20" x 18"	102.00		$1.66	**$168,970.65**
	Kitchen sink w/trim, countertop, stainless steel, 43" x 22" double bowl	13.60		$0.31	**$31,535.68**
	Service sink w/trim, PE on CI,wall hung w/rim guard, 24" x 20"	4.53		$0.19	**$19,706.06**
	Water cooler, electric, wall hung, wheelchair type, 7.5 GPH	52.13		$1.06	**$108,252.26**
D2020	**Domestic Water Distribution**			**$0.73**	**$74,069.54**
	Gas fired water heater, commercial, 100< F rise, 300 MBH input, 278 GPH	3.85		$0.73	**$74,069.54**
D2040	**Rain Water Drainage**			**$0.89**	**$90,812.13**

		Quantity	% of Total	Cost Per SF	Cost
	Roof drain, CI, soil,single hub, 5" diam, 10' high	34.00		$0.81	**$82,500.15**
	Roof drain, CI, soil,single hub, 5" diam, for each additional foot add	170.00		$0.08	**$8,311.98**
D3010	**Energy Supply**			**$9.19**	**$937,269.84**
	Commercial building heating system, fin tube radiation, forced hot water, 10,000 SF, 100,000 CF, total 2 floors	102,000.00		$9.19	**$937,269.84**
D3050	**Terminal & Package Units**			**$9.72**	**$991,919.40**
	Splt sys, air cooled condensing unit, schools and colleges, 20,000 SF, 76.66 ton	102,000.00		$9.72	**$991,919.40**
D4010	**Sprinklers**			**$2.47**	**$251,683.98**
	Wet pipe sprinkler systems, steel, light hazard, 1 floor, 50,000 SF	102,000.00		$2.47	**$251,683.98**
D4020	**Standpipes**			**$0.45**	**$46,004.04**
	Wet standpipe risers, class III, steel, black, sch 40, 4" diam pipe, 1 floor	2.27		$0.21	**$21,841.37**
	Wet standpipe risers, class III, steel, black, sch 40, 4" diam pipe, additional floors	11.33		$0.24	**$24,162.67**
D5010	**Electrical Service/Distribution**			**$0.42**	**$42,899.14**
	Overhead service installation, includes breakers, metering, 20' conduit & wire, 3 phase, 4 wire, 120/208 V, 800 A	1.25		$0.12	**$12,698.44**
	Feeder installation 600 V, including RGS conduit and XHHW wire, 800 A	60.00		$0.09	**$9,386.70**
	Switchgear installation, incl switchboard, panels & circuit breaker, 120/208 V, 3 phase, 800 A	1.20		$0.20	**$20,814.00**
D5020	**Lighting and Branch Wiring**			**$8.30**	**$846,665.79**
	Receptacles incl plate, box, conduit, wire, 8 per 1000 SF, .9 W per SF, with transformer	102,000.00		$2.43	**$248,135.40**
	Wall switches, 2.0 per 1000 SF	102,000.00		$0.33	**$33,456.00**
	Miscellaneous power, 1.2 watts	102,000.00		$0.25	**$25,377.60**
	Central air conditioning power, 4 watts	102,000.00		$0.51	**$52,397.40**
	Fluorescent fixtures recess mounted in ceiling, 1.6 watt per SF, 40 FC, 10 fixtures @32watt per 1000 SF	117,300.00		$4.78	**$487,299.39**
D5030	**Communications and Security**			**$3.01**	**$306,678.76**
	Communication and alarm systems, includes outlets, boxes, conduit and wire, sound systems, 12 outlets	1.41		$0.24	**$24,529.04**
	Communication and alarm systems, fire detection, addressable, 100 detectors, includes outlets, boxes, conduit and wire	2.83		$1.68	**$171,493.17**
	Fire alarm command center, addressable with voice, excl. wire & conduit	2.27		$0.26	**$26,635.60**

		Quantity	% of Total	Cost Per SF	Cost
	Communication and alarm systems, includes outlets, boxes, conduit and wire, master clock systems, 10 rooms	1.52		$0.28	**$28,121.53**
	Communication and alarm systems, includes outlets, boxes, conduit and wire, master TV antenna systems, 12 outlets	2.36		$0.28	**$28,117.68**
	Internet wiring, 2 data/voice outlets per 1000 S.F.	61.20		$0.27	**$27,781.74**
D5090	**Other Electrical Systems**			**$0.07**	**$7,045.60**
	Generator sets, w/battery, charger, muffler and transfer switch, gas/gasoline operated, 3 phase, 4 wire, 277/480 V, 15 kW	10.77		$0.07	**$7,045.60**
E Equipment & Furnishin			**0.3%**	**$0.28**	**$29,053.37**
E1020	**Institutional Equipment**			**$0.28**	**$29,053.37**
	Architectural equipment, laboratory equipment, counter tops, stainless steel	113.33		$0.28	**$29,053.37**
E1090	**Other Equipment**			**$0.00**	**$0.00**
F Special Construction			**0.0%**	**$0.00**	**$0.00**
G Building Sitework			**0.0%**	**$0.00**	**$0.00**
Sub Total			**100%**	**$105.79**	**$10,790,150.93**
Contractor's Overhead & Profit			**25.0 %**	**$26.45**	**$2,697,537.73**
Architectural Fees			**7.0 %**	**$9.26**	**$944,138.21**
User Fees			**0.0 %**	**$0.00**	**$0.00**
Total Building Cost				**$141.49**	**$14,431,826.87**

Appendix VI: SITE PHOTOGRAPHS

1 - Walker Upper Elementary School

2 - Asphalt parking at west side of the site - note cracking

3 - Asphalt pavement parking - note alligator cracks

4 - Asphalt drive lane east side of the site - note cracking

5 - Asphalt pavement parking

6 - Asphalt drive lane east side of the site - note cracking

7 - Asphalt sidewalk at south end of the site

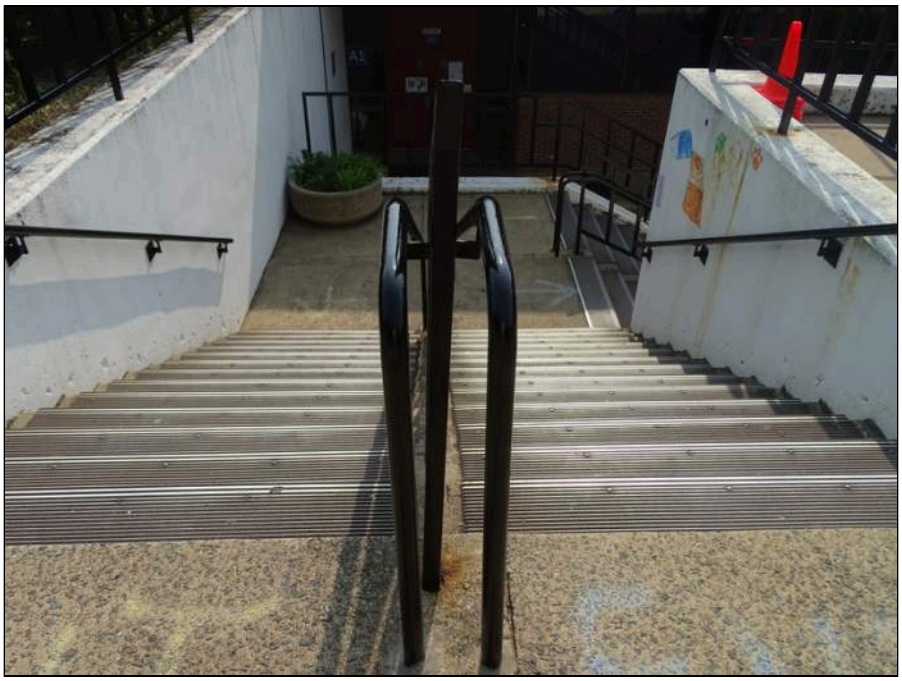
8 - Typical concrete sidewalk

9 - Concrete sidewalk - note deterioration

10 - Concrete sidewalk - note deterioration

11 - Concrete sidewalk - note deterioration

12 - Typical concrete steps - note deterioration



13 - Typical concrete steps

14 - Typical concrete steps handrail - note handrail deterioration

15 - Typical concrete steps - note deterioration

16 - Typical concrete steps - note missing handrail

17 - Typical landscaping

18 - Typical landscaping

19 - Typical landscaping

20 - Monument sign at west end of the site

21 - Cast in place concrete retaining wall between main building and west parking area

22 - Dumpster area at east end of the site

23 - Basketball court located between main building and gym

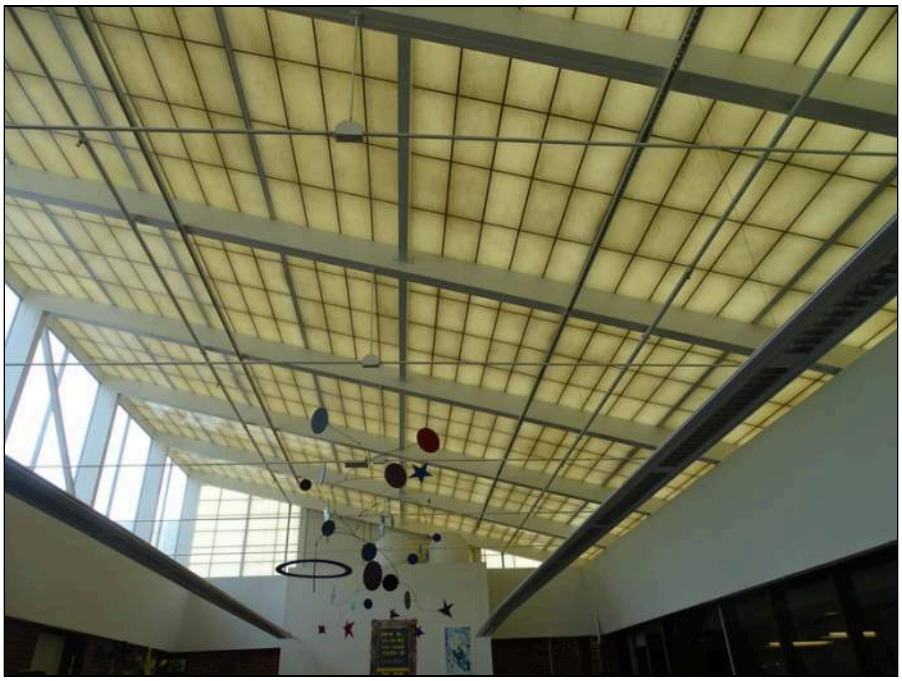
24 - Basketball court located between main building and gym - note cracking

25 - Typical play ground

26 - Typical storm water drainage

27 - Typical storm water drainage

28 - Structural framing



29 - Structural framing

30 - Building exterior west side of main building

31 - Building exterior west side of main building

32 - Building exterior - note sealant deterioration

33 - Main building entrance exterior doors upper level - note peeling paint

34 - Building exteriors - note deterioration

35 - Building exterior - note peeling paint

36 - Building exterior of main building efflorescence

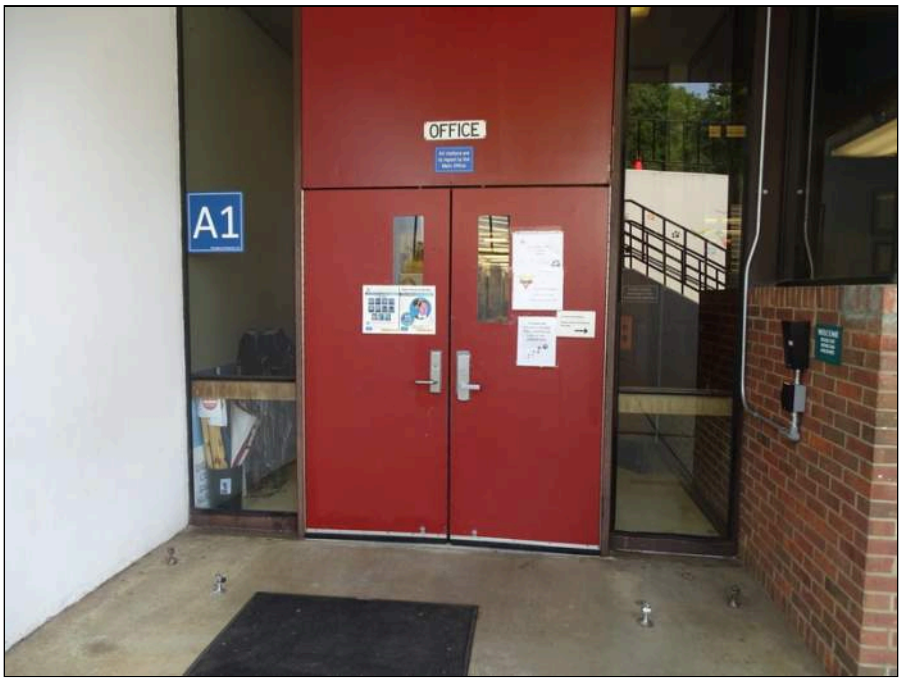
37 - Building exterior - note deterioration

38 - Building exterior - note deterioration

39 - Building exterior - note deterioration

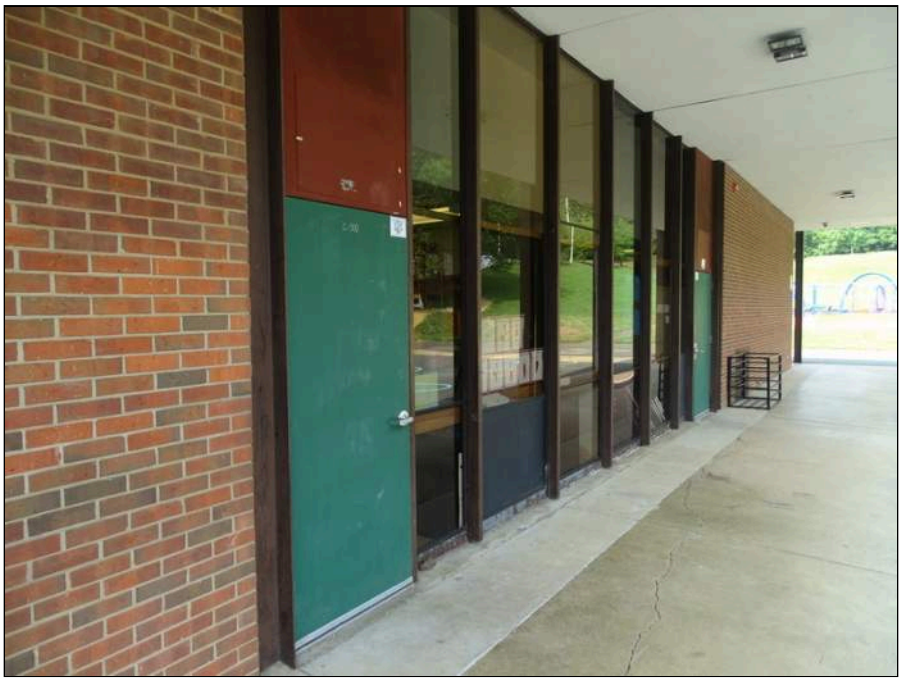
40 - Building exterior - note deterioration

41 - Main building entrance exterior doors upper level



42 - Typical personnel door

43 - Typical personnel door



44 - Typical exterior windows

45 - Typical exterior windows

46 - Typical exterior windows - note deterioration

47 - Typical exterior windows - note deterioration

48 - Typical exterior windows - note deterioration

49 - Typical exterior windows - note deterioration

50 - Single-ply membrane roofing system main building looking north

51 - Single-ply membrane roofing system secondary building looking south

52 - Single-ply membrane roofing system - note patching

53 - Single-ply membrane roofing system - note patching

54 - Typical internal drain

55 - Single-ply membrane roofing system - note ponding

56 - Typical plumbing penetration

57 - Skylight located on main building

58 - Gas domestic water heater located in main building

59 - Typical boiler located in main utility room

60 - Cooling Tower located on east side of the site

61 - Chiller located in main utility room

62 - Typical Make Up Air Unit located on roof

63 - Typical water source heat pump

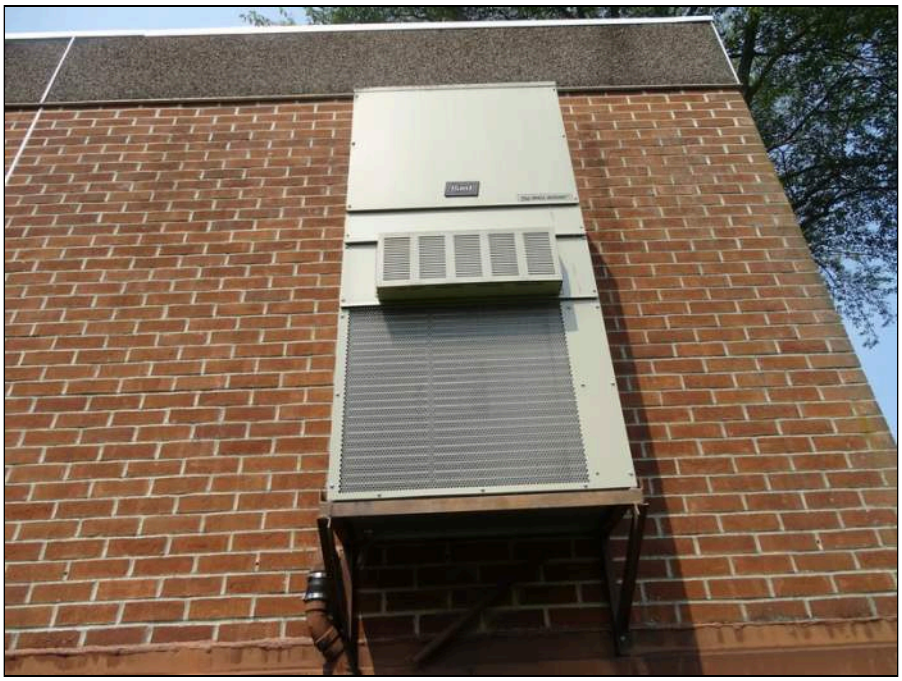
64 - Typical water source heat pump

65 - Typical Air Handler Unit

66 - Typical space heater

67 - Split system for IT room

68 - Wall mounted air conditioner unit



69 - Wall mounted air conditioner unit

70 - Typical mechanical duct

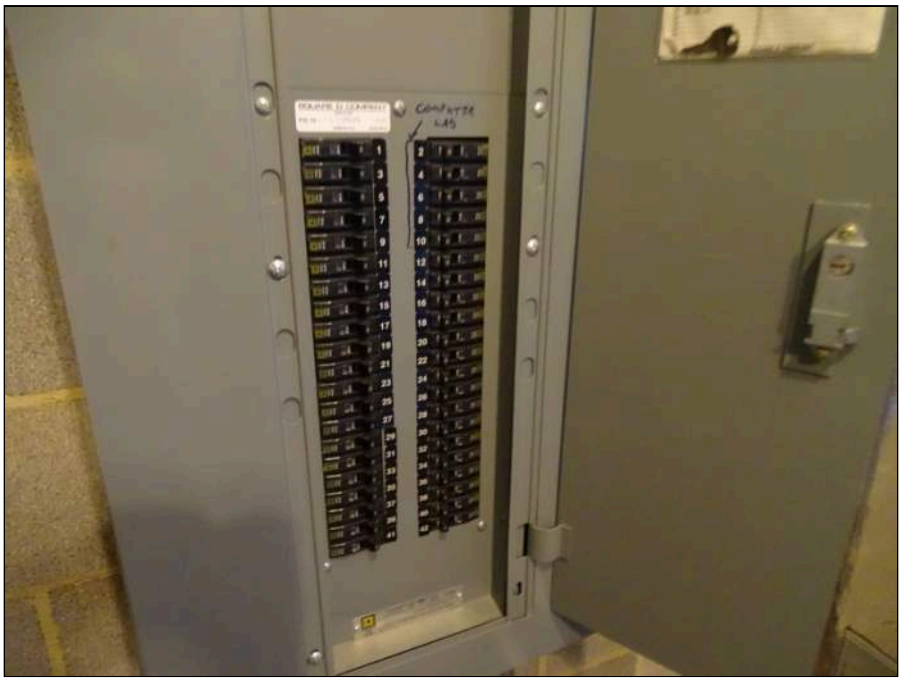
71 - Typical thermostat control

72 - Typical gas meter

73 - Utility transformer at east side of the site

74 - Electrical meter at exterior wall of main utility room

75 - Main electrical switchgear



76 - Typical newer electrical circuit breaker panel

77 - Typical older circuit breaker panel

78 - Elevator cab

79 - Elevator controls

80 - Fire sprinkler system

81 - Typical fire sprinkler head

82 - Typical Fire Extinguisher

83 - Fire Department Connections

84 - Typical fire hydrant

85 - Fire alarm annunciator panel

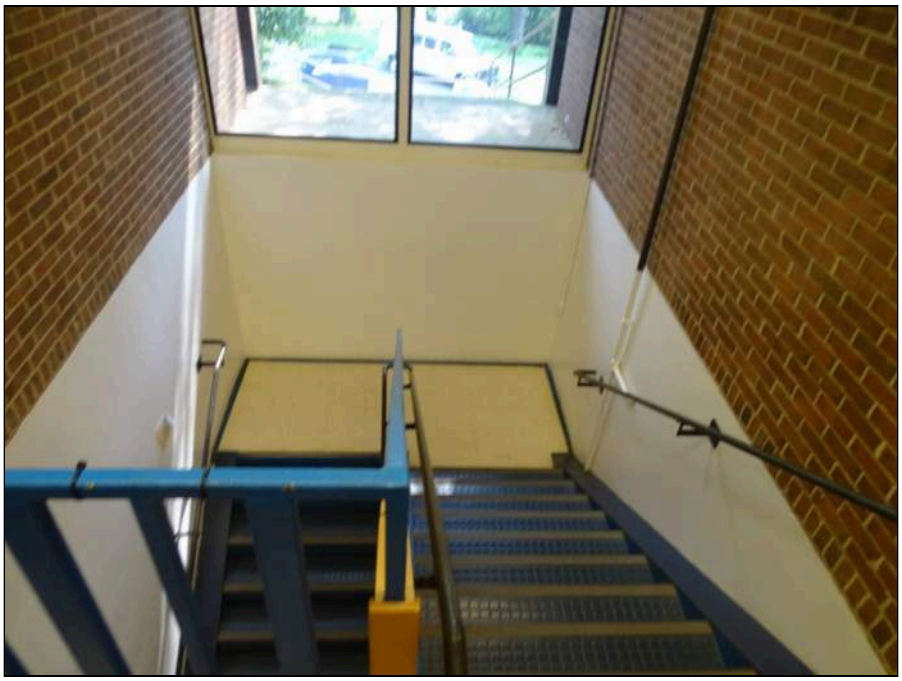
86 - Typical fire alarm bell and strobe

87 - Typical fire alarm pull station

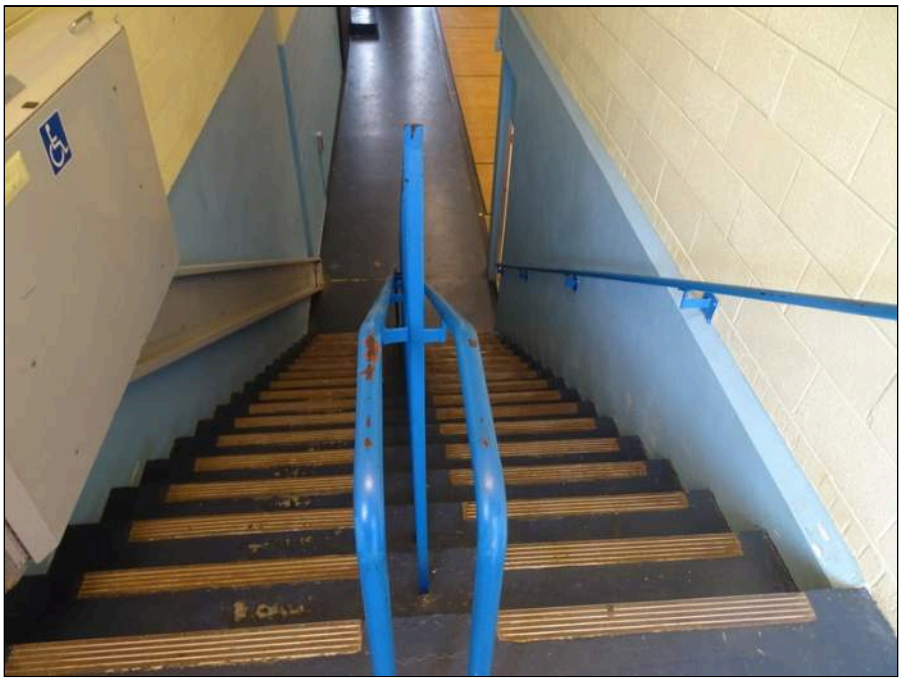
88 - Typical emergency lighting

89 - Fire alarm control panel

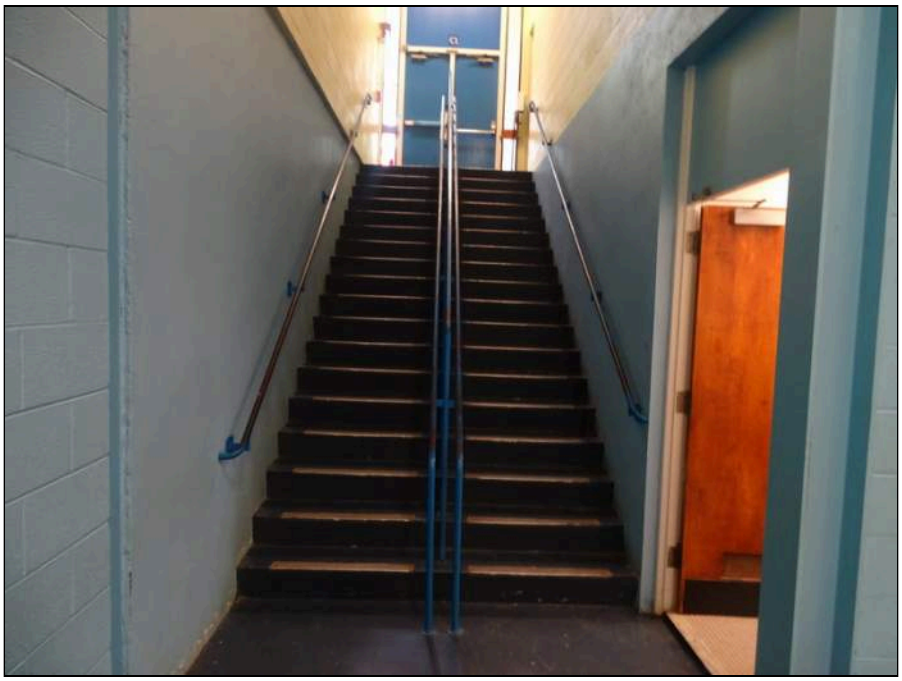
90 - Typical security camera



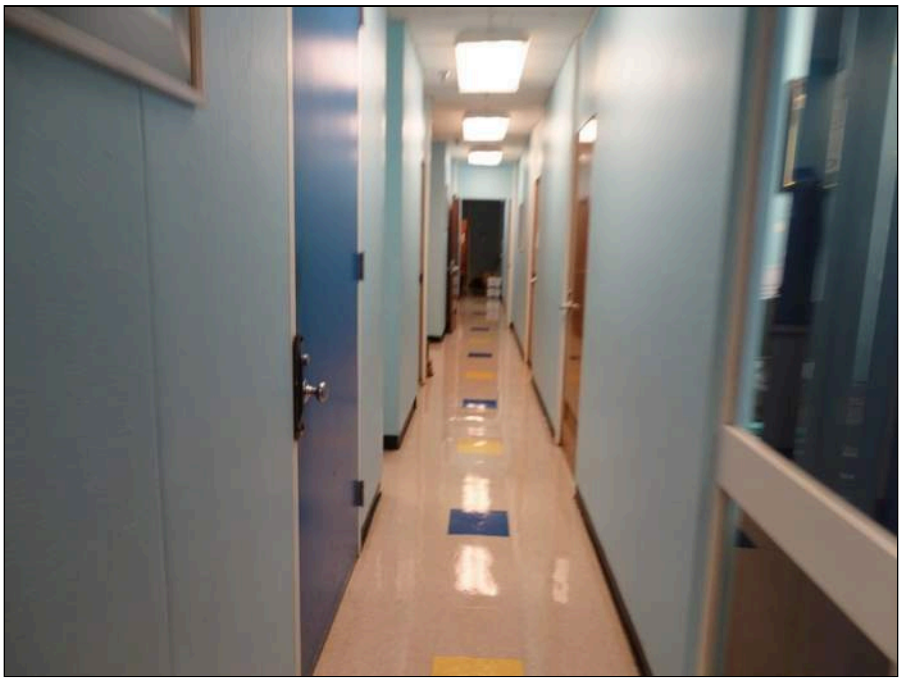
91 - Interior finishes of stair area



92 - Interior finishes of stair area



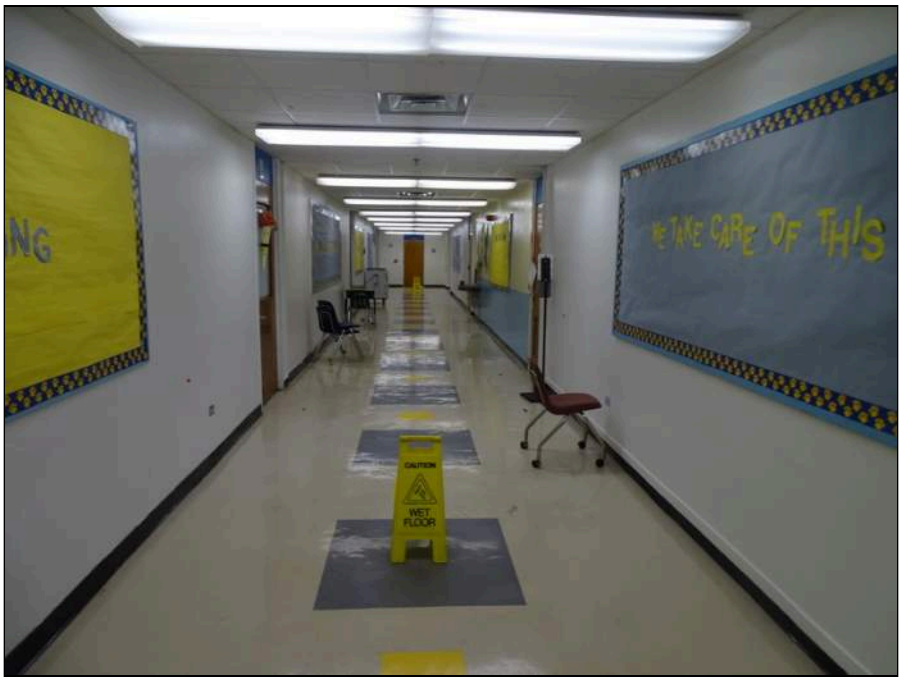
93 - Interior finishes of stair area



94 - Interior finishes of corridor area

95 - Interior finishes of cafeteria area

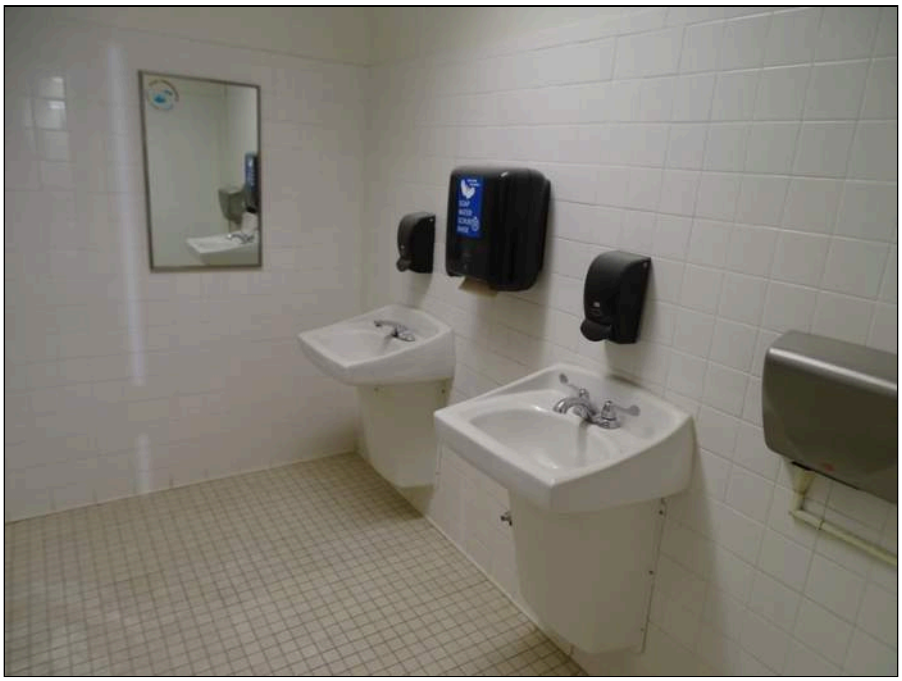
96 - Interior finishes of corridor area



97 - Interior finishes of corridor area

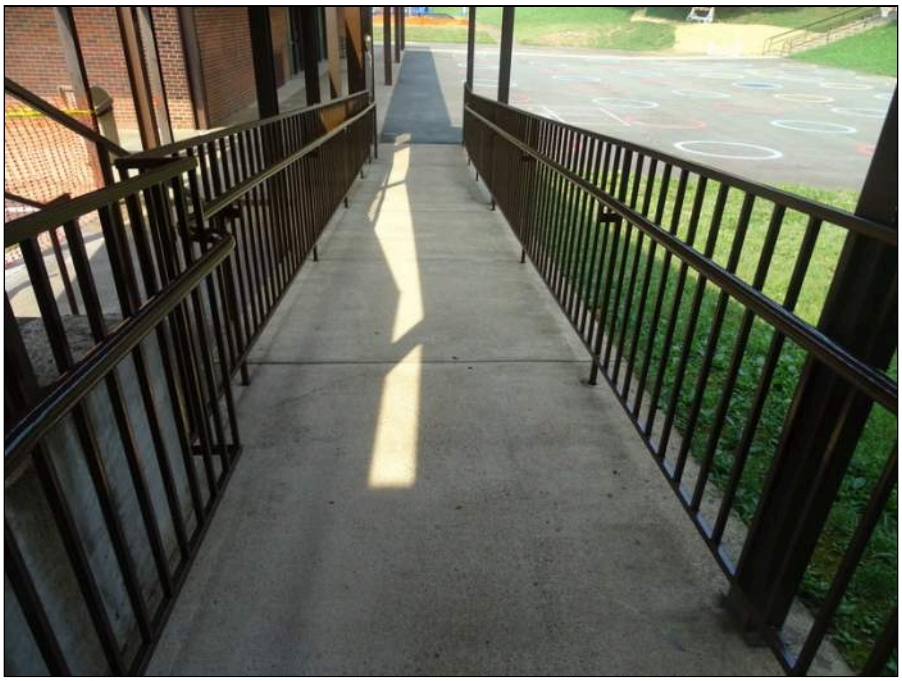
98 - Interior finishes of library area

99 - Interior finishes of gym area



100 - Interior finishes of restroom area

101 - Interior finishes of classroom area



102 - Accessible ramp

103 - Accessible interior finishes of restroom area

104 - Accessible chair lift

105 - Accessible concrete ramp

106 - Accessible parking spaces

Appendix VII: RESUMES

Michael G. Doyle, AIA

Principal Architect – Facilities Department

Education

Bachelor of Architecture, 1987, Architecture, Virginia Polytechnic Institute and State University, Blacksburg, VA

Registrations

Registered Architect: AZ, DC, MD, VA, NC, IL
The Leadership in Energy and Environmental Design (LEED) Accredited Professional: 2009

Mr. Doyle serves as a Principal Architect for the Facilities Engineering Group in ECS Chantilly. He has over 25 years of experience in the construction industry, and his expertise includes the Americans with Disabilities Act, Property Condition Surveys, Pre and Post Construction Survey Services, Pavement Assessments, and Third-Party Plan Review. He has worked with numerous government agencies and has significant experience with local government and educational facilities; commercial high-rise buildings; multi-unit, residential, and correctional facilities. Mr. Doyle also has had experience on several high-profile historic projects, including the Jefferson Memorial, the Tivoli Theater, the Tariff Building, The White House, the Court of Appeals in Washington, DC; the Valley Bank Building in Leesburg, Virginia; and the Shenandoah Courthouse at Woodstock, Virginia.

Property Condition Assessments - Mr. Doyle has extensive experience performing property condition assessments from small commercial properties, large high rise buildings, to government-owned properties. Mr. Doyle has performed assessment in general accordance with ASTM E 2018, Standard Guide for Property Condition Assessments: Baseline Property Condition Assessment Process. Mr. Doyle also has experience in performing property condition assessments in accordance with lender and specific client requirements. Mr. Doyle has worked with teams of experts in providing detailed reports and simple reserve analysis for properties.

Relevant Project Experience

Darien Lake, Darien Center, NY – Mr. Doyle was the Principal Architect for the property assessment of the Darien Lake amusement park. The property included over 200 buildings including buildings within the park, maintenance and administration buildings, hotel, campground buildings, and sewer treatment center.

Ballston Park Apartments, Arlington, VA (2014) - originally developed in 1938, this complex includes 50 two-story apartment buildings, one three-story apartment building, one single-family residence, and a single-story office/clubhouse. A PCA and a Phase I Environmental Site Assessment was conducted and documented.

Hyatt House Lodging, Sterling, VA (2014) - This six-story, 162-room, 98,793-square-foot hotel with surface parking was constructed in 2007 as a Sierra Suites and subsequently converted to a Hyatt House. Recreational facilities include a swimming pool, fitness center, a grill area, and a fire pit. Building systems observed per ASTM E 2018 included site conditions, the structural frame and building envelope; plumbing, mechanical and electrical systems, vertical transportation Systems, life safety and fire protection, and ADA Considerations. A Phase I Environmental Site Assessment was also conducted.

WHMO Facilities Assessment, Washington, DC (2015) - This is a privately owned, government-leased facility with a sensitive mission. The structure is believed to be a 1920s vintage building designed as a multi-story car dealership. The government has occupied this space continuously since 1963. Mr. Doyle conducted a survey of the complete facility, identified and documented areas of concerns. He also provide a recommendation for remediation for each area of concern, a Rough Order Magnitude (ROM) cost for remediation, and categorized each area of concern as critical, non-critical or aesthetic.

Additional Project Experience

- City of Charlottesville Portfolio, Charlottesville, VA
- Liberty Park, Herndon, VA
- Oakcrest School, McLean, VA
- Signature Flight Support, Arlington, VA
- The Gap, Washington, DC
- Lanham Crossing, Lanham, MD
- ZIM American Headquarters Building, Sulfolk, VA
- The Portrait Building, Washington, DC
- The Aventine of Alexandria, Alexandria, VA

DONALD GOGLIO

CODE COMPLIANCE PROJECT MANAGER

CERTIFICATIONS

Master Plumber
Master Gasfitter
Cross Connection Technician
Commercial Building Inspector
Commercial Plumbing Inspector
Commercial Mechanical Inspector
Accessibility Inspector/Plan Reviewer
Fire Inspector I and II
LEED Green Associate
CPR/First Aid Training
OSHA 30 hr Training

SKILLS

Code Compliance
Construction Administration
Special Inspection Services
Condition Assessments
Forensic Consultation

PROFESSIONAL MEMBERHSHIPS

American Wood Council
USGBC

EDUCATION

Montgomery College, 1991
Silver Spring, MD

YEARS OF EXPERIENCE

ECS: <1 Other: 38

PROFESSIONAL PROFILE

Mr. Goglio has 38 years of construction, mechanical trade, and management experience. He manages code compliance projects, including reviewing plans, providing technical support, and conducting inspections.

PROJECT EXPERIENCE

Fort Lee AIT Barracks, Ft. Lee, VA – Quality Control Manager – The Fort Lee AIT Barracks project is a soldiers' basic combat training facility for over 1,200 Army personnel. The complex is a cohesive development, providing both housing and affiliated functions for soldiers in the AIT program. In addition to housing, the facility includes an outdoor jogging track, physical training pits, and access drivers and parking areas that meet USACE requirements. The project's five-story brick buildings meet DoD Minimum Antiterrorism Standards for Buildings and obtained LEED® Gold certification from the US Green Building Council. The Fort Lee project is part of the Northeast Region Multiple Award Task Order Contract (MATOC).

Terrapin Row, College Park, MD – Assistant Superintendent – Terrapin Row is a transformative student housing complex located on the University of Maryland's historic South Campus. The mixed-use community features 1,493 beds across 418 apartments as well as a 489-space parking garage. Terrapin Row boasts ample amenities centered around a college lifestyle, including a swimming pool, volleyball court, outdoor kitchens and fire pits, exterior TVs, a fitness center, bike storage, a cyber cafe and game room, and numerous live-learn spaces. The multi-phase project consists of seven buildings and encompasses a pedestrian and bike-friendly Village Green surrounded by over 11,856 square feet of retail space. The Village Green flows into a grand stairway and amphitheater that opens to a pedestrian plaza to welcome pedestrians towards the main academic centers of campus.

The Hartley at the Parks, Washington, DC – Assistant Superintendent – The Hartley is a 323-unit mixed-use apartment community with a Whole Foods Market as its retail anchor in Northwest DC. This six-story community consists of five stories of wood framing over a one-story concrete podium with 317 apartments and six townhomes. It is a part of The Parks at Walter Reed, a mixed-use master-planned redevelopment of the 66-acre historic Walter Reed Army Medical Center with 2,200 residential units plus office and retail. The Hartley features two interior courtyards: the north courtyard includes pool and amenity space, and the south courtyard includes a Zen Garden. The second-floor amenity space includes a lounge, multi-purpose room, fitness center, and pet spa. The studio, one-, two-, and three-bedroom units feature high-end finishes, including quartz countertops and EnergyStar® appliances.

DONALD GOGLIO

CODE COMPLIANCE PROJECT MANAGER

CERTIFICATIONS

Master Plumber
Master Gasfitter
Cross Connection Technician
Commercial Building Inspector
Commercial Plumbing Inspector
Commercial Mechanical Inspector
Accessibility Inspector/Plan Reviewer
Fire Inspector I and II
LEED Green Associate
CPR/First Aid Training
OSHA 30 hr Training

SKILLS

Code Compliance
Construction Administration
Special Inspection Services
Condition Assessments
Forensic Consultation

PROFESSIONAL MEMBERHSHIPS

American Wood Council
USGBC

EDUCATION

Montgomery College, 1991
Silver Spring, MD

YEARS OF EXPERIENCE

ECS: <1 Other: 38

PROFESSIONAL PROFILE

Mr. Goglio has 38 years of construction, mechanical trade, and management experience. He manages code compliance projects, including reviewing plans, providing technical support, and conducting inspections.

PROJECT EXPERIENCE

- Fort Lee AIT Barracks, Ft. Lee, VA
- Terrapin Row, College Park, MD
- The Hartley at the Parks, Washington, DC
- River Point, Washington, DC
- Juniper, Columbia, MD
- The Smith, King of Prussia, PA
- Banner Hill, Baltimore, MD
- Jefferson Square, Baltimore, MD
- Metropolitan at Largo Station, Largo, MD
- The Village at Leesburg, Leesburg, VA
- The Elms at Clarksburg Village, Clarksburg, MD
- Hidden Creek, Gaithersburg, MD
- Paramount, Gaithersburg, MD
- Thayer & Spring, Silver Spring, MD

William R. Pratt, PE

Principal Engineer, ECS Mid-Atlantic, LLC
Professional-In-Charge

Education

Bachelor of Science, 1989, Mechanical Engineering, University of Massachusetts

Registrations

Professional Engineer: DC, VA, MD

ICC Commercial Building, Plumbing, and Mechanical Inspector

Mr. Pratt serves as Senior Project Engineer for ECS Mid-Atlantic, LLC. Mr. Pratt is responsible as the Professional-In-Charge of the code compliance group and provides supervision of code compliance inspection programs for the local jurisdictions. Additionally, he oversees execution of project management for construction materials testing, property condition assessments.

Property Condition Assessments - Bill has extensive experience in performing property condition assessments for a variety of properties and structures. These assessments include evaluation of site improvements, building components, roofing, pavements, electrical systems, mechanical systems, and HVAC systems. He performs assessment in general accordance with ASTM E 2018 – 08, Standard Guide for Property Condition Assessments: Baseline Property Condition Assessment Process. Bill also has experience in performing property condition assessments that meet with lender and specific client requirements. He works with teams of experts in providing detailed reports and simple reserve analysis for properties.

Select Project Experience – PCA

- City of Charlottesville, VA - 51 Property Portfolio including schools, libraries, museums, fire and police stations, and court buildings
- Home Properties 800+ Apartment Units, 4-Property Portfolio to Freddie Mac Standard, Hampton and Virginia Beach, VA
- Boulders Office Park 300,000+ SF, 3-Property Portfolio , Richmond, VA
- Darien Lake Theme Park, Darien Center, NY
- Madison Place Office Building, Alexandria, VA
- King of Glory Lutheran Church, Williamsburg, VA
- Comfort Inn, Charlottesville, VA
- The Wisconsin Building, Washington, DC

Select Project Experience – Code Compliance and Special Inspections

- City Center DC, Washington, DC
- DC Courts Judiciary Square, IDIQ Contract, Washington, DC
- Hilton Garden Inn, Washington, DC
- Waterfront Mall, Washington, DC
- 4th Street Reconstruction, Washington, DC
- Sibley Memorial Hospital Addition, Cancer Center, Washington, DC
- Washington Headquarters Services, Arlington, VA
- Walmart #5968-00, Washington, DC
- Progression Place, 7th Street, NW, Washington, DC
- National Gallery of Art, Washington, DC
- City Market @ O, Washington, DC