



RIDGE STREET FIRE STATION & HOSE TOWER  
203 RIDGE STREET  
CHARLOTTESVILLE, VIRGINIA

ECS PROJECT NO. 46:6713

FOR

CITY OF CHARLOTTESVILLE - FACILITIES DEVELOPMENT

SEPTEMBER 14, 2021





September 14, 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 Ridge Street Fire Station & Hose Tower, 203 Ridge Street, 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

A handwritten signature in blue ink, appearing to read 'Don Goglio', written in a cursive style.

Donald M. Goglio  
Project Manager  
DGoglio@ecslimited.com  
703-471-8400

A handwritten signature in blue ink, appearing to read 'Michael G. Doyle', written in a cursive style.

Michael G. Doyle, AIA  
Principal Architect  
mdoyle@ecslimited.com  
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		\$81,500
3.2.5 Flatwork		X		Replace		\$5,000
3.2.6 Landscaping and Appurtenances	X			None		
3.2.7 Recreational Facilities		NA		None		
3.2.8 Special Utility Systems		NA		None		
3.3.1 Foundation	X			None		
3.3.2 Building Frame	X	X		Repair		\$50,000
3.3.3 Building Exteriors		X		Repair		\$87,000
3.3.4 Exterior Doors	X			Replace		\$10,200
3.3.5 Exterior Windows		X	X	Replace		\$36,000
3.3.6 Roofing Systems	X	X		Replace		\$130,000
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		\$95,000
3.4.2.2 Distribution System	X	X		Replace		\$55,000
3.4.2.3 Control Systems	X			None		
3.4.3.1 Service and Metering	X	X		Replace		\$57,500
3.4.3.2 Distribution	X	X		Replace		\$20,000
3.5.1 Sprinklers and Suppression Systems	X			None		
3.5.2 Alarm Systems	X			None		
3.5.3 Security and Other Systems	X			None		
3.6.1 Interior Spaces	X	X		Repair		\$7,500
3.7 Accessibility (ADA) Compliance		X		Provide An Additional Accessible Space	\$500	
5.1 MOISTURE AND MOLD		NA		None		
Totals					\$500	\$638,700

Summary	Today's Dollars	\$/Square Feet
Immediate Repairs	\$500	\$0.03

	Today's Dollars	\$/Square Feet	\$/Square Feet/Year
Replacement Reserves, today's dollars	\$638,700.00	\$36.28	\$1.81
Replacement Reserves, w/20, 2.5% escalation	\$741,050.06	\$42.09	\$2.10



## TABLE OF CONTENTS

## PAGE

<b>1.0</b>	<b>EXECUTIVE SUMMARY</b>	<b>1</b>
1.1	BACKGROUND	1
1.2	METHODOLOGY	1
1.3	PROPERTY DESCRIPTION	3
1.4	OPINIONS OF COST	4
1.5	COST TABLES	5
	Immediate Repair Cost	6
	Capital Reserve Schedule	7
<b>2.0</b>	<b>PURPOSE AND SCOPE</b>	<b>10</b>
2.1	SCOPE OF SERVICES	10
2.2	Deviations from Guide (ASTM E2018-15)	10
2.3	ASSESSMENT PROCEDURES	11
2.4	DEFINITIONS	11
	2.4.1 Partial List of ASTM Definitions	11
<b>3.0</b>	<b>SYSTEM DESCRIPTION AND OBSERVATIONS</b>	<b>14</b>
3.1	PROPERTY DESCRIPTION	14
	3.1.1 Property Location	14
	3.1.2 Construction History	14
	3.1.3 Current Property Improvements	14
3.2	SITE CONDITIONS	14
	3.2.1 Topography	14
	3.2.2 Storm Water Drainage	15
	3.2.3 Access and Egress	16
	3.2.4 Paving, Curbing, and Parking	16
	3.2.5 Flatwork	19
	3.2.6 Landscaping and Appurtenances	20
	3.2.7 Recreational Facilities	21
	3.2.8 Special Utility Systems	21
3.3	STRUCTURAL FRAME AND BUILDING EXTERIOR	21
	3.3.1 Foundation	21
	3.3.2 Building Frame	22

3.3.3	Building Exteriors .....	23
3.3.4	Exterior Doors .....	25
3.3.5	Exterior Windows .....	28
3.3.6	Roofing Systems .....	29
3.4	PLUMBING, MECHANICAL, AND ELECTRICAL SYSTEMS .....	32
3.4.1	Plumbing Systems .....	33
3.4.1.1	Supply and Waste Piping .....	33
3.4.1.2	Domestic Hot Water Production .....	33
3.4.2	HVAC Systems .....	34
3.4.2.1	Equipment .....	34
3.4.2.2	Distribution System .....	38
3.4.2.3	Control Systems .....	39
3.4.3	Electrical Systems .....	40
3.4.3.1	Service and Metering .....	40
3.4.3.2	Distribution .....	41
3.5	LIFE SAFETY AND FIRE PROTECTION .....	42
3.5.1	Sprinklers and Suppression Systems .....	42
3.5.2	Alarm Systems .....	44
3.5.3	Security and Other Systems .....	45
3.6	INTERIOR BUILDING COMPONENTS .....	45
3.6.1	Interior Spaces .....	45
3.7	Accessibility (ADA) Compliance .....	51
3.8	Other Structures - Hose Tower .....	57
<b>4.0</b>	<b>DOCUMENT REVIEW .....</b>	<b>58</b>
4.1	DOCUMENTATION REVIEW .....	58
4.2	INTERVIEW SUMMARY .....	58
4.3	BUILDING, LIFE SAFETY, AND ZONING COMPLIANCE .....	58
<b>5.0</b>	<b>ADDITIONAL CONSIDERATIONS .....</b>	<b>59</b>
5.1	MOISTURE AND MOLD .....	59
<b>6.0</b>	<b>RECOMMENDATIONS AND OPINIONS OF COST .....</b>	<b>60</b>
<b>7.0</b>	<b>FACILITY CONDITION INDEX (FCI) .....</b>	<b>62</b>
<b>8.0</b>	<b>LIMITATIONS AND QUALIFICATIONS .....</b>	<b>63</b>

## **TABLE OF APPENDICES**

Appendix I: SITE MAP AND AERIAL PHOTOGRAPH

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

Appendix III: SITE PHOTOGRAPHS

Appendix IV: RESUMES

## 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 Ridge Street Fire Station & Hose Tower 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:

William R. Pratt, P.E.	Principal Engineer
	Phone: 703-471-8400
	E-mail: wpratt@ecslimited.com
Michael G. Doyle, AIA	Principal Architect
	Phone: 703-471-8400
	E-mail: mdoyle@ecslimited.com
Donald M. Goglio	Project Manager
	Phone: 703-471-8400
	E-mail: DGoglio@ecslimited.com

### 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

The Ridge Street Fire Station & Hose Tower property, located at 203 Ridge Street, in Charlottesville, Virginia, consists of a Two-story building. The building totals approximately 17,605 square feet. Parking is provided with Asphalt pavement. The Fire Station building was reportedly constructed in 1959.

SURVEY INFORMATION	
Date of Assessment	May 25, 2021
Assessor	William R. Pratt, P.E.
Weather Conditions	76F   Overcast
Property Contact	Josh Bontrager, Project Manager for City of Charlottesville - Facilities Development

SITE INFORMATION	
Land Area	1.48 acres
Major Cross Streets	Monticello Avenue
Pavement - Parking	Asphalt pavement
Number of Parking Spaces	35
Number of Accessible Spaces	One
Number of Van Accessible Spaces	One
Pedestrian Sidewalks	Concrete sidewalks

BUILDING INFORMATION	
Building Type	Fire Station
Number of Buildings	Two
Building Height	Two-story
Square Footage	17,605
Year Constructed	1959
Year Remodeled	2006

<b>BUILDING CONSTRUCTION</b>	
Foundation	Assumed shallow spread footings
Structural System	Concrete masonry unit bearing walls
Roof	Single-ply sheet membrane, asphalt shingle, and standing seam metal
Exterior Finishes	Brick veneer and wood trim
Windows	Cluminum frame double pane - operable and aluminum frame double pane
Entrance	Storefront entrance

<b>BUILDING SYSTEMS</b>	
HVAC System	Split HVAC system
Domestic Hot Water	Tankless gas water heaters and solar system
Water Distribution	Copper
Sanitary Waste Line	PVC and cast iron
Electrical Service	3-phase, 4-wire, 400 amps
Branch Wiring	Copper
Elevators	N/A
Fire Suppression System	Fire extinguishers with smoke detectors

<b>UTILITY SERVICE PROVIDERS</b>	
Water	Charlotte 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
<b>3.7 Accessibility (ADA) Compliance</b>					
PROVIDE ACCESSIBLE PARKING SPACE AND ACCESS AISLE	1	LS	\$500.00	100%	\$500
Total Repair Cost					\$500.00

### Capital Reserve Schedule

[illegible]

City of Charlottesville - Facilities Development  
ECS Project No. 46:6713  
September 14, 2021

		EFF							Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	
Item	EUL	AGE	RUL	Quantity	Unit	Unit Cost	Cycle Replace	Replace Percent	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	Total Cost
3.4.1.2 Domestic Hot Water Production																													
REPLACE WATER HEATER	12	11	1	1	EA	\$2,000.00	\$2,000	200%	\$2,000												\$2,000								\$4,000
3.4.2.1 Equipment																													
REPLACE SPLIT SYSTEMS INCLUDING CONDENSERS AND INTERIOR AIR HANDLERS	20	19	1	3	EA	\$10,000.00	\$30,000	100%	\$20,000															\$10,000					\$30,000
REPLACE PACKAGE UNITS ON ROOF TOP	20	15	5	2	EA	\$15,000.00	\$30,000	100%					\$30,000																\$30,000
REPLACE BOILER	20	15	5	1	EA	\$25,000.00	\$25,000	100%					\$25,000																\$25,000
REPLACE DUCTLESS SPLIT SYSTEM	15	14	1	1	EA	\$10,000.00	\$10,000	100%	\$10,000																				\$10,000
3.4.2.2 Distribution System																													
REPLACE HOT WATER HEATING PIPING	60	59	1	1	EA	\$30,000.00	\$30,000	100%	\$30,000																				\$30,000
REPLACE CEILING MOUNTED AND BASEBOARD HOT WATER HEATERS	60	59	1	1	LS	\$25,000.00	\$25,000	100%	\$25,000																				\$25,000
3.4.3.1 Service and Metering																													
REPLACE MAIN ELECTRICAL SWITCH GEAR	50	49	1	1	EA	\$7,500.00	\$7,500	100%	\$7,500																				\$7,500
REPLACE EMERGENCY GENERATOR AND TRANSFER SWTICH	25	6	19	1	EA	\$50,000.00	\$50,000	100%																		\$50,000		\$50,000	
3.4.3.2 Distribution																													

City of Charlottesville - Facilities Development  
ECS Project No. 46:6713  
September 14, 2021

## 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 Ridge Street Fire Station & Hose Tower 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-through 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 one 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 Fire Station building.

##### 3.1.1 Property Location

The Property is located at 203 Ridge Street in Charlottesville, Virginia.

Surrounding Properties	
North	CSX Railway
East	Ridge Street and commercial properties
South	Commercial properties
West	Commercial properties

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 62 years ago in 1959.

##### 3.1.3 Current Property Improvements

The Fire Station building, located at 203 Ridge Street, in Charlottesville, Virginia, consists of a Two-story building. The building totals approximately 17,605 square feet. Parking is provided with Asphalt pavement.

#### 3.2 SITE CONDITIONS

##### 3.2.1 Topography

TOPOGRAPHY		
Item	Description	Condition
Slope of the property	Generally level sloping to the north	Good
Adjoining Properties	Down gradient	Good

##### Comments

The property is generally level and slopes to the north. 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	Sheet flow to municipal system	Good
Landscape Drainage	Sheet flow to municipal system	Good
Sump Pumps		N/A

#### Comments

The storm water collection system includes a municipal system, trench drains, and yard inlets.

#### Photographs



Typical yard inlet drain

### 3.2.3 Access and Egress

SITE ACCESS AND EGRESS		
Item	Description	Condition
Entrance Aprons	Concrete	Good
Fire Truck Access	East and north sides of the building	Good
Easements		N/A

#### Comments

Vehicular access to the site is located on the east side of the building. The entrance aprons are constructed of concrete and were observed to be in generally good condition. Fire truck access is available on the east and north sides of the building.

### 3.2.4 Paving, Curbing, and Parking

PARKING		
Item	Description	Condition
Striping	Fading observed	Fair
Quantity of Parking Spaces	35	Good
Quantity of Loading Spaces		N/A
Arrangement of Spaces	Perpendicular, diagonal, and parallel parking	Good
Site Circulation	2-way drive aisle	Good
Lighting	Building mounted	Good
Accessible Spaces	One	Fair
Accessible Aisles	One	Fair

SURFACE PAVEMENT		
Item	Description	Condition
Pavement Surface	Asphalt pavement	Poor
Drainage	Sheet flow to municipal system	Fair
Repair History	Alligator cracking and ponding not repaired leading to further deterioration	Poor
Dumpster Area	Located at southwest side of the site	Fair

SURFACE PAVEMENT		
Item	Description	Condition
Concrete Curbs	Deterioration observed	Poor

### Comments

Asphalt-paved drive lanes and parking areas are located on the east, north and northwest, sides of the site. The asphalt pavement was observed to be in generally poor condition. We observed areas of block and alligator cracks in the drive lanes and parking spaces. The expected useful life of asphalt pavement is 20 years. We recommend repairing these areas of asphalt pavement and providing an allowance to overlay the asphalt pavement. Based on the information available, the asphalt pavements were not repaired as previously recommended.

### Photographs



Asphalt paving drive lane and parking northwest side of the building - note alligator cracking



Asphalt paving drive lane and parking northwest side of the building - note alligator cracking





Asphalt paving drive lane and parking northwest side of the building - note alligator cracking



Asphalt paving drive lane and parking northwest side of the building - note alligator cracking



Asphalt paving drive lane and parking northwest side of the building - note alligator cracking



Asphalt paving drive lane and parking northwest side of the building - note alligator cracking



Asphalt paving drive lane and parking northwest side of the building - note alligator cracking



Concrete curb - note deterioration

## Recommendations

Cost Recommendation	EUL	EFF AGE	RUL	Year	Cost
MILL, OVERLAY AND RESTRIPE EXISTING ASPHALT	20	19	1	1	\$74,000
REPLACE CONCRETE CURBS	25	24	1	1	\$2,500
				5	\$2,500
				10	\$2,500
Total					\$81,500

## 3.2.5 Flatwork

SIDEWALKS		
Item	Description	Condition
Walkways	Concrete sidewalks with deterioration observed on the south side of the building	Fair

## Comments

There are Concrete sidewalks of undetermined thickness provided on the east side and south side of the building. Regularly spaced control joints were observed. Several sections of the Concrete sidewalks were observed to be deteriorated. We recommend that the deteriorated sections of Concrete sidewalks be replaced



## Photographs



Concrete sidewalk south side - note deterioration



Concrete sidewalk east side

## Recommendations

Cost Recommendation	EUL	EFF AGE	RUL	Year	Cost
REPLACE DETERIORATED SECTIONS OF SIDEWALK	25	24	1	1	\$1,000
				5	\$1,000
				10	\$1,000
				15	\$1,000
				20	\$1,000
Total					\$5,000

### 3.2.6 Landscaping and Appurtenances

LANDSCAPING		
Item	Description	Condition
Trees	Mature trees, and small shrubs	Good
Lawn Areas	Grassed areas around the site	Good
Retaining Walls	Located at the south side of the site	Good

## 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.

A brick and mortar retaining wall is located on the south side of the site. The retaining wall was generally in good condition and based on the information available was repaired as previously recommended.

### 3.2.7 Recreational Facilities

#### Comments

The property does not contain recreational facilities.

### 3.2.8 Special Utility Systems

Item	Description	Condition
Water Well		N/A
Lift Station		N/A
Septic Field		N/A
Solar Power	Domestic hot water	Good
Wind Power		N/A

#### Comments

The Property contains solar panels on the roof for domestic hot water production.

## 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	Slab on grade (cracking observed at east bay nine area)	Fair
Roof Framing	Metal diaphragm	Good
Columns	Steel interior columns	Good
Load Bearing Walls	Concrete masonry unit (CMU) walls at perimeter	Fair
Balconies		N/A
Decks		N/A

#### Comments

The structure of the building consists of Concrete masonry unit bearing walls with interior steel columns. The structural frame of the building was generally in good to fair condition. Recent renovations indicated repairs to previously noted interior CMU wall cracking that did not pose an imminent danger. The bay number nine concrete slab-on-grade area was cracked. In addition, the area reportedly yields when fire truck engines load the slab area. We recommend removing the cracked concrete area and re-establishing a solid subgrade after removal of soft yielding subgrade material.

#### Photographs



Slab on grade at east bay area - note cracking and settlement

## Recommendations

Cost Recommendation	EUL	EFF AGE	RUL	Year	Cost
REPAIR CRACKED SLAB AT BAY NINE	30	29	1	1	\$50,000
Total					\$50,000

### 3.3.3 Building Exteriors

EXTERIOR FINISHES		
Item	Description	Condition
Masonry	Brick veneer - deterioration of mortar joints observed	Fair
Glass Store Front	Main entrance at east addition	Good
Wood Trim	Peeling paint observed at west addition	Fair
Precast Panels	Located between windows on north wall	Fair
Sealants	Horizontal and vertical joints	Fair

## Comments

The primary exterior of the building consists of Brick veneer and wood trim. The expected useful life of mortared joints is approximately 20 years before re-pointing is required. Deterioration of mortar joints was observed. We recommend re-pointing of the deteriorated mortar joints.

The wood trim and exterior framing are painted. The paint was peeling. Rust was observed on the exterior steel framing. Painting of exterior components is typically recommended every 5 to 7 years. We recommend the wood trim be painted.

Exterior sealants are located around the window and door frames, horizontal joints, and vertical joints in the Brick veneer. The expected useful life of exterior sealants is approximately 10 to 12 years before replacement is needed. The exterior sealants were generally in fair condition. We recommend that the exterior sealants be replaced during the report period.

## Photographs



Building exterior north wall



Building exterior north side of the west bay area



Building exterior -note crack in brick work.



Typical sealant condition

## Recommendations

Cost Recommendation	EUL	EFF AGE	RUL	Year	Cost
REPOINT BRICKWORK	20	14	6	6	\$25,000
				12	\$25,000
				18	\$25,000
PAINT WOOD TRIM	7	6	1	1	\$2,000
				8	\$2,000
				15	\$2,000

Cost Recommendation	EUL	EFF AGE	RUL	Year	Cost
REPLACE EXTERIOR SEALANTS	10	9	1	1	\$3,000
				11	\$3,000
Total					\$87,000

### 3.3.4 Exterior Doors

DOORS		
Item	Description	Condition
Main Entrance Doors	Storefront entrance	Good
Personnel Doors	Located at south side of the building	Good
Door Hardware	Varies	Good
Accessibility Controls	Keypad	Good
Overhead/Roll-up Doors	Located at north side of the west bay area and the east and west sides of the east bay area	Fair

### Comments

The main entrances are Storefront entrance for the east addition area. The main entrance doors were generally in good condition. Steel personnel doors are located on the south side of the building. The personnel doors were reportedly recently replaced and generally in good condition. Exterior doors typically have an expected useful life of 20 to 30 years.

Overhead doors are located at north side of the west bay area and the east and west sides of the east bay area. The overhead doors on the north and west sides were generally in good condition. The three overhead doors on the east side of the building were damaged and in need of replacement.



## Photographs



Storefront entrance at west addition



Overhead door damage - east



Overhead door damage east



Overhead door east



Overhead door east



Overhead door damage east



Overhead door damage east

### Recommendations

Cost Recommendation	EUL	EFF AGE	RUL	Year	Cost
REPLACE EAST OVERHEAD DOORS	30	29	1	1	\$10,200
Total					\$10,200

### 3.3.5 Exterior Windows

WINDOWS		
Item	Description	Condition
Window Frame	Aluminium	Fair
Glass Pane	Double pane - some fogging observed	Fair
Operation	Replacement parts reportedly scarcely available	Fair
Screen	Interior	Fair
Exterior Header	Steel lintel and brick or precast	Fair
Exterior Sill	Precast	Fair
Gaskets or Glazing	Neoprene	Fair

#### Comments

The window system for the building primarily consists of Cluminum frame double pane - operable window units with aluminum frame double pane window units located around the building. The gaskets in the windows were generally in fair condition. The expected useful life of gaskets is typically 20 years. Fogged windows were observed at the west exterior walls of the east bay area on the second level. There was also reported leakage for windows on the north wall of the west end of the building on the second level. The window replacement parts for the operable components were reportedly difficult to replenish from the window manufacturer and/or other suppliers. We recommend the windows be replaced during the report period.

#### Photographs



Typical operable exterior window



Typical window - note water staining



## Recommendations

Cost Recommendation	EUL	EFF AGE	RUL	Year	Cost
REPLACE WINDOWS	20	19	1	1	\$36,000
Total					\$36,000

### 3.3.6 Roofing Systems

ROOFING		
Item	Description	Condition
Asphalt Shingle	Roofing system over west addition	Good
Single-Ply Sheet Membrane	Main roofing system over bay areas, offices, kitchen, and dormitory areas - deterioration observed	Fair
Standing Seam Metal	Roofing system over east addition	Good
Parapet Walls	Single-ply membrane	Fair
Cap Flashing/Coping	Pre-cast appeared to be recently replaced	Good
Insulation	Varies with condition	Good
Substrate/Deck	Steel	Good
Slope/Pitch	Ponding observed	Fair
Drainage	Through wall scupper drains, internal drains, and gutters and downspouts	Fair
Plumbing Vents	Clamped boots	Good
Exhaust Vents	Counter flashed	Good
Equipment Curbs	RTUs	Good
Flashing	Metal	Fair
Expansion Joints		N/A
Roof Age	Reportedly replaced in 2006	Fair
Past Repairs	Patching noted	Fair

## Comments

The main roofing system consists of a Single-ply sheet membrane roofing system over the main portion of the building with an asphalt shingle roofing system over the west addition area of the building, and a standing seam metal roofing system over the east addition area of the building.



The main roofing system was reportedly replaced in 2006. Ponding and deterioration of the roofing system was observed at various locations of the single-ply membrane. Based on the information available, the asphalt shingle roofing system was recently replaced as previously recommended. We recommend replacement of the single-ply membrane roofing system and asphalt shingle roofing system during the report period. The standing seam metal roofing system over the east addition was generally in good condition.

The parapet walls consist of single-ply membrane with flashing. Patching of the roofing system along the parapet walls was observed. The parapet walls were capped with pre-cast coping. The parapet walls were observed to be in generally good condition. We recommend the parapet wall flashing be replaced with the above noted roofing replacement.

Drainage for the main roofing system is provided by interior drains and through wall scuppers. The drainage was observed to be in generally good condition. Drainage for the west addition roofing system is provided by gutters and downspouts. The west addition gutters and downspouts were observed to be in good condition.

Roofing penetrations included plumbing vents, equipment curbs, and exhaust vents throughout the roofing system. The roofing system penetrations were generally in good condition.

## Photographs



Single-ply membrane roofing system over main building area



Typical plumbing penetration for main roofing system



Typical internal drain for main roofing system



Single-ply membrane roofing main building area  
- note areas of ponding and deterioration



Single-ply membrane roofing main building area  
- note areas of ponding and deterioration



Typical parapet wall - note area of roofing  
system patching





Typical parapet wall and through wall scupper drain of main roofing system



Asphalt shingle roofing system over west addition - note recent replacement



Asphalt shingle roofing system over west addition - note recent replacement

## Recommendations

Cost Recommendation	EUL	EFF AGE	RUL	Year	Cost
REPLACE ASPHALT SHINGLED ROOFING SYSTEM	15	1	14	14	\$4,000
REPLACE SINGLE-PLY ROOFING SYSTEM	25	15	10	10	\$126,000
Total					\$130,000

## 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	Fiberglass/foam	Good
Water Shut-offs	Typically ball type valves	Good
Water Flow and Pressure		Good

PLUMBING - WASTE SUPPLY SYSTEM		
Item	Description	Condition
Piping Material	PVC and cast iron	Good
Vertical Vent Stacks	PVC	Good
Clean-outs	PVC	Good
Ejector Pumps		N/A

#### Comments

##### Water Lines

The main water supply lines inside the building 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 building 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	Tankless gas water heaters and solar system	Fair
Water Storage	Solar water heating system	Fair
Circulation Pumps	Solar system	Good

## Comments

Domestic hot water to the building is provided by Tankless gas water heaters and solar system located in the main utility room. The were manufactured by Rinnai and Vaughn Manufacturing Corporation. The expected useful life of a Tankless gas water heaters and solar system is approximately 12 to 15 years and with proper maintenance. We recommend the solar water heater be replaced during the report period due to its age. The building contains a solar hot water supply system that is assisted by a Rinnai water heater when the solar can't maintain temperature.

## Photographs



Domestic hot water storage tank

## Recommendations

Cost Recommendation	EUL	EFF AGE	RUL	Year	Cost
REPLACE WATER HEATER	12	11	1	1 13	\$2,000 \$2,000
Total					\$4,000

## 3.4.2 HVAC Systems

### 3.4.2.1 Equipment

EQUIPMENT		
Item	Description	Condition
Boilers	Smith hot water boiler	Fair

EQUIPMENT		
Item	Description	Condition
Central Plant Pumps	Four B&G circulator pumps	Fair
Ceiling Mounted Hot Water Heating Units	Newer and reportedly original units; some were reported as non-operational	Fair
Baseboard Hot Water Heating Units	Located along building perimeter including dorm rooms and corridor areas	Fair
Air Handlers	Located above suspended ceiling tiles	Fair
Condensing Units (split system)	Located at grade and on roof	Fair
Exhaust Fans	Various	Good

### Comments

The building is served by a boiler with 4 pumps, ceiling mounted and baseboard hot water heating units, split systems including 2 at grade and 1 roof top condensers with associated interior air handlers, 1 ductless split system, and 3 roof top package units.

The boiler was reportedly replaced in 2005. Boilers have an expected useful life of 20 years with proper maintenance. We recommend replacing the boiler and pumps during the report period.

The condensers and air handlers vary in age. Condensers and air handlers have an expected useful life of 15 years with proper maintenance. The condensers were located at grade and on roof. The condensers were in good to fair condition. We recommend replacing the condensers and air handlers during the report period.

Ductless split systems have an expected useful life of 15 years with proper maintenance. The system was reportedly installed in 1996 and was in fair condition. We recommend replacing the ductless system during the report period.

Two Carrier package units were reportedly installed in 2006 and the York unit in 2017. Package units have an expected useful life of 20 years with proper maintenance. We recommend replacing the Carrier units during the report period.

The City of Charlottesville self performs the mechanical service for the equipment.



## Photographs



Condenser located on grade - manufactured by  
Enviromaster International in 1996



Condenser located on roof - manufactured by  
Carrier in 2006



Condenser located on roof - manufactured by  
Carrier in 2006



Condenser located on roof - manufactured by  
York



Ceiling mounted hot water heating units



Typical hot water baseboard heater unit



Boiler located in main utility room



Typical hot water piping system





Condenser located on grade - manufactured by  
American Standard in 2017

### Recommendations

Cost Recommendation	EUL	EFF AGE	RUL	Year	Cost
REPLACE SPLIT SYSTEMS INCLUDING CONDENSERS AND INTERIOR AIR HANDLERS	20	19	1	1 16	\$20,000 \$10,000
REPLACE PACKAGE UNITS ON ROOF TOP	20	15	5	5	\$30,000
REPLACE BOILER	20	15	5	5	\$25,000
REPLACE DUCTLESS SPLIT SYSTEM	15	14	1	1	\$10,000
Total					\$95,000

### 3.4.2.2 Distribution System

HVAC DISTRIBUTION		
Item	Description	Condition
Plumbing Pipe System	Reportedly original piping system	Fair
Ceiling Mounted and Baseboard Hot Water Heating Units	A combination of new and reportedly original units	Fair

HVAC DISTRIBUTION		
Item	Description	Condition
Ducts	Insulated metal	Good
Return Air	Insulated metal	Good

### Comments

The distribution system includes ducted supply and return for air conditioning. The ductwork was observed to be in generally good condition.

The hot water piping system and the ceiling mounted and baseboard hot water heating units were reportedly original. We recommend replacing these items.

### Recommendations

Cost Recommendation	EUL	EFF AGE	RUL	Year	Cost
REPLACE HOT WATER HEATING PIPING	60	59	1	1	\$30,000
REPLACE CEILING MOUNTED AND BASEBOARD HOT WATER HEATERS	60	59	1	1	\$25,000
Total					\$55,000

### 3.4.2.3 Control Systems

HVAC CONTROL SYSTEMS		
Item	Description	Condition
Thermostats	Digital	Good
Compressor (Pneumatic System)		N/A
Variable Frequency Drives		N/A
Energy Management System		N/A

### Comments

The thermostats are digital. The thermostats were observed to be in generally good condition.

### 3.4.3 Electrical Systems

#### 3.4.3.1 Service and Metering

SERVICE AND METERING		
Item	Description	Condition
Service Entrance	Located south side of the building	Good/Fair
Master (House) Meter	located south side of the building	Good
Emergency Power	Located south side of the building	Good
Transfer Switch	Located in main utility room	Good

#### Comments

Electricity is provided to the building by Dominion Virginia Power through a transformer located on the south side of the building. The main electrical entrance is located on the west side of the building and provides 400 amp, 3-phase, 4-wire service. The switch gear was manufactured by Square D. The expected useful life of switch gear is 50 years with proper maintenance. The electrical service and metering were in good to fair condition, however, the replacement parts are reportedly no longer available. We recommend replacing the main electrical switchgear and older sub panels.

An emergency generator manufactured by Kohler, is located on the south side of the building. The emergency generator services the entire facility. The emergency generator is reportedly tested on a weekly basis. The emergency transfer switch was manufactured by Cutler Hammer. The expected useful life of an emergency transfer switch is 25 years with proper maintenance. The emergency transfer switch was observed to be in good condition.

#### Photographs



Typical electric meter



Main electrical switch gear

## Recommendations

Cost Recommendation	EUL	EFF AGE	RUL	Year	Cost
REPLACE MAIN ELECTRICAL SWITCH GEAR	50	49	1	1	\$7,500
REPLACE EMERGENCY GENERATOR AND TRANSFER SWTICH	25	6	19	19	\$50,000
Total					\$57,500

### 3.4.3.2 Distribution

ELECTRICAL DISTRIBUTION SYSTEM		
Item	Description	Condition
Electrical Sub-panels	Located in various rooms and corridors	Good/Fair
Branch Wiring	Copper	Good
Bus Ducts		N/A
GFCI Devices		N/A
Building Transformers		N/A
Sub-Meters		N/A
COPALUM Connectors		N/A

## Comments

Power is distributed by copper wire from circuit breaker panels located throughout the building. The circuit breaker panels were observed to be in generally good condition, however, the replacement parts are reportedly no longer available. We recommend replacing the panels.

## Photographs



Typical electrical sub panel

## Recommendations

Cost Recommendation	EUL	EFF AGE	RUL	Year	Cost
REPLACE OLDER ELECTRICAL SUB PANELS	50	49	1	1	\$20,000
Total					\$20,000

## 3.5 LIFE SAFETY AND FIRE PROTECTION

### 3.5.1 Sprinklers and Suppression Systems

SPRINKLER AND SUPPRESSION SYSTEMS		
Item	Description	Condition
Sprinkler System (wet)		N/A
Sprinkler System (dry)		N/A
Sprinkler System (chemical)		N/A
Sprinkler Heads		N/A
Date of Last Inspection (sprinkler system)		N/A
Sprinkler Pump		N/A

SPRINKLER AND SUPPRESSION SYSTEMS		
Item	Description	Condition
Sprinkler Pump Controller		N/A
Sprinkler Pipe Material		N/A
Jockey Pump		N/A
Fire Extinguishers		Good
Date of Last Inspection (Fire Extinguishers)	April 2021	Good
Fire Standpipes		N/A
Fire Department Connections		N/A
Hose Cabinets		N/A
Fire Hydrants		N/A

### Comments

The fire suppression system includes fire extinguishers. These devices are required to be inspected annually. Replacement of the fire extinguishers is considered routine maintenance.

### Photographs



Typical fire extinguisher

### 3.5.2 Alarm Systems

ALARM SYSTEMS		
Item	Description	Condition
Annunciator Panel		N/A
Public Address System		N/A
Central Fire Alarm Control Panel		N/A
Automatic Notification		N/A
Bells		N/A
Strobes		N/A
Exit Signs	Throughout building	Good
Exit Lights		N/A
Pull Stations		N/A
Smoke Detectors	Located throughout the building	Good

#### Comments

Smoke detectors are located throughout the building.

#### Photographs



Typical smoke detector

### 3.5.3 Security and Other Systems

SECURITY AND OTHER SYSTEMS		
Item	Description	Condition
Security Cameras	Computerized monitoring stations	Good
Alarm System		N/A
Access Control	Combination code for door at north entrance	Good
Security Fencing		N/A
Lightning Protection		N/A
Roof Anchors		N/A

#### Comments

The building includes a recently installed security combination lock on the north entrance door. There area also security cameras with computerized monitoring stations. The security access and systems were generally in good condition.

### 3.6 INTERIOR BUILDING COMPONENTS

#### 3.6.1 Interior Spaces

BAY AREAS		
Item	Description	Condition
Floor Finishes	Unfinished concrete	Fair
Wall Finishes	Painted CMU	Fair
Ceiling Finishes	Painted plaster	Fair
Lighting	Fluorescent fixtures	Fair

OFFICE AREAS		
Item	Description	Condition
Floor Finishes	Carpet	Fair
Wall Finishes	Wood paneling	Fair
Ceiling Finishes	Suspended acoustical tile	Fair
Lighting	Fluorescent fixtures	Fair
Doors	Wood	Fair
Door Hardware	Varies	Fair



#### RESTROOMS

Item	Description	Condition
Floor Finishes	Ceramic tile	Fair
Wall Finishes	Ceramic tile	Fair
Ceiling Finishes	Suspended acoustical tile	Fair
Fixtures	Toilets, urinals, wall hung lavatories	Fair
Accessories	Partitions, grab bars, mirrors, soap and towel dispensers	Fair
Ventilation	Exhaust fan	Fair
Lighting	Fluorescent fixtures	Fair
Doors	Wood	Fair
Door Hardware	Operable	Fair

#### KITCHEN AREA

Item	Description	Condition
Floor Finishes	Rolled vinyl	Good
Wall Finishes	Painted gypsum board	Good
Ceiling Finishes	Suspended acoustical tile	Good
Counters	Solid surface	Good
Sink	Stainless	Good
Cabinets	Laminate	Good
Appliances	Various	Good
Stove/Range	Gas commercial	Good
Exhaust Vent/Hood	Commercial hood	Good
Refrigerator	Several side by sides	Good
Dish Washer	Built-in	Good
Microwave Oven	Countertop	Good

#### MEETING/TRAINING ROOMS

Item	Description	Condition
Floor Finishes	Wood	Good
Wall Finishes	Painted gypsum board	Good

MEETING/TRAINING ROOMS		
Item	Description	Condition
Ceiling Finishes	Suspended acoustical tile	Good
Lighting	Fluorescent fixtures	Good
Doors	Wood	Good
Door Hardware	Operable	Good

DORM ROOMS		
Item	Description	Condition
Floor Finishes	Carpet and hardwood	Good
Wall Finishes	Painted gypsum board	Good
Ceiling Finishes	Suspended acoustical tile	Good
Lighting	Fluorescent fixtures	Good

UTILITY ROOMS		
Item	Description	Condition
Floor Finishes	Unfinished concrete	Fair
Wall Finishes	Unfinished	Fair
Ceiling Finishes	Unfinished	Fair
Janitor Sink Area	Unfinished	Fair
Lighting	Fluorescent fixtures	Fair

## Comments

The interior common building areas include a reception/entrance area, offices, restrooms, and kitchens. We understand that the common area interiors are partially renovated periodically.

The finishes in the bay area include unfinished concrete floors, and painted concrete masonry unit walls and painted plaster ceilings. The finishes in the bay area were observed to be in generally fair condition.

The office finishes include tile floors, painted gypsum board and wood paneling walls, and acoustical tile ceilings. The finishes in the offices were observed to be in generally good condition.

One restroom is located on each floor. The finishes in the restrooms include ceramic tile floors, painted concrete masonry unit, painted gypsum board and tile walls, and acoustical tile ceilings. The restrooms were observed to be in generally good condition.

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

Based on the fair condition of the interior finishes at various locations, we recommend the interiors be renovated as needed in the bay area.

### Photographs



Typical stair area interior



Typical corridor area interior



Typical dorm room interior



Typical interior of office areas



Typical corridor area interior



Typical kitchen area interiors



Typical kitchen area interiors



Typical kitchen area interiors





Typical meeting room area interior



Typical restroom interiors



Typical Dining room area interior



Typical dorm room interior



Typical interior of bay area - note peeling paint  
on ceiling

### Recommendations

Cost Recommendation	EUL	EFF AGE	RUL	Year	Cost
PAINT BAY AREAS	7	3	4	4	\$2,500
				11	\$2,500
				18	\$2,500
Total					\$7,500

### 3.7 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 Ridge Street Fire Station & Hose Tower property is not considered by the City of Charlottesville - Facilities Development to be within "areas of public accommodations" or a "commercial facility" and is therefore not subject to compliance with Title III of the ADA. The fire station facility does fall under



Title II for employee accommodations. If an employee requires accessibility accommodations, the accommodation can be provided on a case by case basis. It was reported that there were no individual employee based at this facility that required accommodations at this time.

The parking area serving the property has a total of approximately 35 parking spaces. Of the parking spaces, One is accessible with One 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 for one space. The number of parking spaces provided does not meet accessibility requirements. We recommend installing one accessible space with accessible aisle as an immediate item.

### Photographs



Accessible parking space - note one space provided when two are required

### Recommendations

Cost Recommendation	EUL	EFF AGE	RUL	Year	Cost
PROVIDE ACCESSIBLE PARKING SPACE AND ACCESS AISLE	-	-	-	Immediate	\$500
Total					\$500

Uniform Abbreviated Screening Checklist for the 2010 Americans with Disabilities Act			
	Item	Yes/ No	Comments
<b>A.</b>	<b>History</b>		
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	East addition including restrooms and installation of 1 accessible parking space
3.	Has building ownership/management reported any ADA complaints or litigation?	No	
<b>B.</b>	<b>Parking</b>		
1.	Does the required number of standard ADA-designated spaces appear to be provided?	No	One out of the 35 are accessible. provide sign with 1 additional accessible space
2.	Does the required number of van-accessible designated spaces appear to be provided?	Yes	One out of the One 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	Signs shall be 60" high minimum
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	
<b>C.</b>	<b>Exterior Accessible Route</b>		
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?	N/A	
3.	Do curb cut ramps appear to have the proper slope for all components?	N/A	

Uniform Abbreviated Screening Checklist for the 2010 Americans with Disabilities Act			
	Item	Yes/ No	Comments
4.	Do ramps on an accessible route appear to have a compliant slope?	N/A	
5.	Do ramps on an accessible route appear to have a compliant length and width?	N/A	
6.	Do ramps on an accessible route appear to have a compliant end and intermediate landings?	N/A	
7.	Do ramps on an accessible route appear to have compliant handrails?	N/A	
<b>D.</b>	<b>Building Entrances</b>		
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?	Yes	
8.	Do thresholds at accessible entrances appear to have compliant height?	Yes	
<b>E.</b>	<b>Interior Accessible Routes and Amenities</b>		
1.	Does an accessible route appear to connect with all public areas inside the building?	N/A	no public areas within the building
2.	Do accessible routes appear free of obstructions and/or protruding objects?	N/A	
3.	Do ramps on accessible routes appear to have compliant slope?	N/A	

<b>Uniform Abbreviated Screening Checklist for the 2010 Americans with Disabilities Act</b>			
	<b>Item</b>	<b>Yes/ No</b>	<b>Comments</b>
4.	Do ramps on accessible routes appear to have compliant length and width?	N/A	
5.	Do ramps on accessible routes appear to have compliant end and intermediate landings?	N/A	
6.	Do ramps on accessible routes appear to have compliant handrails?	N/A	
7.	Are adjoining public areas and areas of egress identified with accessible signage?	N/A	
8.	Do public transaction areas have an accessible, lowered counter section?	N/A	
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	
<b>F.</b>	<b>Interior Doors</b>		
1.	Do doors at interior accessible routes appear to have compliant clear floor area on each side?	N/A	not typically accessed by the public
2.	Do doors at interior accessible routes appear to have compliant hardware?	N/A	
3.	Do doors at interior accessible routes appear to have compliant opening force?	N/A	
4.	Do doors at interior accessible routes appear to have a compliant clear opening width?	N/A	
<b>G.</b>	<b>Elevators</b>		
1.	Are hallway call buttons configured with the "UP" button above the "DOWN" button?	N/A	
2.	Is accessible floor identification signage present on the hoistway sidewalls?	N/A	
3.	Do the elevators have audible and visual arrival indicators at the entrances?	N/A	

Uniform Abbreviated Screening Checklist for the 2010 Americans with Disabilities Act			
	Item	Yes/ No	Comments
4.	Do the elevator hoistway and car interior appear to have a minimum compliant floor area?	N/A	
5.	Do the elevator car doors have automatic re-opening devices to prevent closure on obstructions?	N/A	
6.	Do elevator car control buttons appear to be mounted at a compliant height?	N/A	
7.	Are tactile and Braille characters mounted to the left of each elevator car control button?	N/A	
8.	Are audible and visual floor position indicators provided in the elevator car?	N/A	
9.	Is the emergency call system at the base of the control panel and not require voice communication?	N/A	
<b>H.</b>	<b>Toilet Rooms</b>		
1.	Do publicly-accessible toilet rooms appear to have a minimum compliant floor area?		
2.	Does the lavatory appear to be mounted at a compliant height and with compliant knee area?		
3.	Does the lavatory faucet have compliant handles?		
4.	Is the plumbing piping under lavatories configured to protect against contact?		
5.	Are grab bars provided at compliant locations around the toilet?		
6.	Do toilet stall doors appear to provide the minimum compliant clear width?		
7.	Do toilet stalls appear to provide the minimum compliant clear floor area?		
8.	Do urinals appear to be mounted at a compliant height and with compliant approach width?		

Uniform Abbreviated Screening Checklist for the 2010 Americans with Disabilities Act			
	Item	Yes/ No	Comments
9.	Do accessories and mirrors appear to be mounted at a compliant height?		
<b>I.</b>	<b>Hospitality Guestrooms</b>		
1.	Does property management report the minimum required accessible guestrooms?	N/A	
2.	Does property management report the minimum required accessible guestrooms with roll-in showers?	N/A	

### 3.8 Other Structures - Hose Tower

A hose tower is located at the northwest side of the property. The hose tower is constructed of CMU with brick veneer. It was reported the hose tower was not utilized for training purposes, however, hose storage was noted.

A shed that houses HVAC equipment was also located on the property.



## **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.

ECS was provided access to documents provided on the City of Charlottesville ftp site.

### **4.2 INTERVIEW SUMMARY**

ECS was escorted through the property by Josh Bontrager and Shawn Davis who provided information about the property.

### **4.3 BUILDING, LIFE SAFETY, AND ZONING COMPLIANCE**

ECS researched FOIA data using online property data and/or contacted the local building code compliance offices for the local jurisdiction. Initial research did not indicate outstanding building, life safety, or zoning violations. Upon receiving information regarding the status of the inquiries submitted, this report can be updated if necessary.

## **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 Ridge Street Fire Station 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 Ridge Street Fire Station is \$638,700.00. The replacement construction cost value obtained from the RS MEANS square foot estimator application is \$2,756,355.48. Please see attached documentation from RS MEANS program output as an appendix to the report. The calculated FCI value is determined to be 0.23. In accordance with the industry standards and methodology sponsored by The National Association of College and University Business Officers (NACUBO), the condition of Ridge Street Fire Station is rated as poor.

## 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.



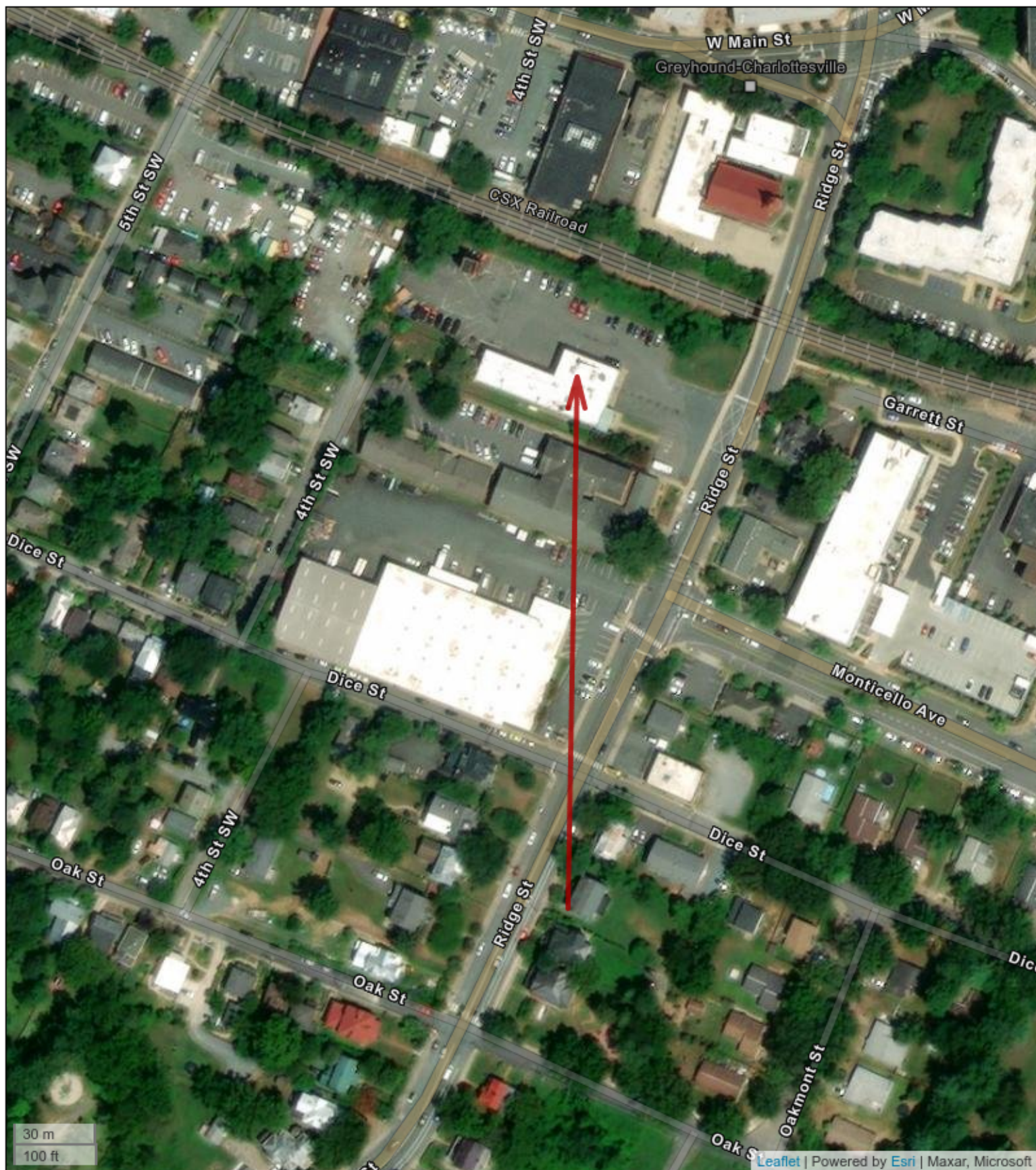
# **Appendix I: SITE MAP AND AERIAL PHOTOGRAPH**



**Site Map**  
Ridge Street Fire Station - FCA 2021







**Aerial Photograph**  
Ridge Street Fire Station - FCA 2021



## **Appendix II: RS MEANS ESTIMATE FOR FACILITY CONDITION INDEX (FCI)**

# Square Foot Cost Estimate Report

Date: 1/20/2022

<b>Estimate Name</b>	<b>Ridge Street Fire Station</b>
	<b>City of Charlottesville</b> 203 Ridge Street Charlottesville Virginia 22902
Building Type	Fire Station, 2 Story with Face Brick & Concrete Block / Steel Joists
Location	CHARLOTTESVILLE, VA
	2.00
Stories Height	14.00
Floor Area (S.F.)	17,605.00
LaborType	OPN
Basement Included	No
Data Release	Year 2021
Cost Per Square Foot	\$156.57
<b>Total Building Cost</b>	<b>\$2,756,355.43</b>



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

**\*\* Area entered is outside the range recommended by RSMeans.**

## Assembly Customization Type :

- ⊕ Added
- ◐ Partially Swapped
- Fully Swapped

		Quantity	% of Total	Cost Per SF	Cost
<b>A Substructure</b>			<b>5.9%</b>	<b>\$6.81</b>	<b>\$119,910.03</b>
<b>A1010</b>	<b>Standard Foundations</b>			<b>\$3.28</b>	<b>\$57,669.49</b>
	Foundation wall, CIP, 4' wall height, direct chute, .197 CY/LF, 9.44 PLF, 16" thick	500.00		\$2.20	<b>\$38,730.50</b>
	Strip footing, concrete, reinforced, load 5.1 KLF, soil bearing capacity 3 KSF, 12" deep x 24" wide	500.00		\$1.03	<b>\$18,101.50</b>
	Spread footings, 3000 PSI concrete, load 50K, soil bearing capacity 6 KSF, 3' - 0" square x 12" deep	5.28		\$0.05	<b>\$837.49</b>
<b>A1030</b>	<b>Slab on Grade</b>			<b>\$3.34</b>	<b>\$58,827.64</b>
	Slab on grade, 5" thick, light industrial, reinforced	8,802.50		\$3.34	<b>\$58,827.64</b>



		Quantity	% of Total	Cost Per SF	Cost
<b>A2010</b>	<b>Basement Excavation</b>			<b>\$0.19</b>	<b>\$3,412.91</b>
	Excavate and fill, 4000 SF, 4' deep, sand, gravel, or common earth, on site storage	8,802.50		\$0.19	<b>\$3,412.91</b>
<b>B Shell</b>			<b>32.8%</b>	<b>\$37.98</b>	<b>\$668,622.17</b>
<b>B1010</b>	<b>Floor Construction</b>			<b>\$8.33</b>	<b>\$146,657.17</b>
	Steel column, W14, 300 KIPS, 10' unsupported height, 61 PLF	73.94		\$0.49	<b>\$8,674.81</b>
	Floor, concrete, slab form, open web bar joist @ 2' OC, on bearing wall, 35' span, 23" deep, 75 PSF superimposed load, 121 PSF total load	8,802.50		\$7.84	<b>\$137,982.36</b>
<b>B1020</b>	<b>Roof Construction</b>			<b>\$4.65</b>	<b>\$81,883.58</b>
	Roof, steel joists, beams, 1.5" 22 ga metal deck, on columns and bearing wall, 35'x35' bay, 28" deep, 40 PSF superimposed load, 62 PSF total load	8,802.50		\$4.41	<b>\$77,593.95</b>
	Roof, steel joists, beams, 1.5" 22 ga metal deck, on columns and bearing wall, 35'x35' bay, 28" deep, 40 PSF superimposed load, 62 PSF total load, add for column	8,802.50		\$0.24	<b>\$4,289.63</b>
<b>B2010</b>	<b>Exterior Walls</b>			<b>\$15.14</b>	<b>\$266,478.45</b>
	Brick wall, composite double wythe, standard face/CMU back-up, 8" thick, perlite core fill	10,500.00		\$15.14	<b>\$266,478.45</b>
<b>B2020</b>	<b>Exterior Windows</b>			<b>\$2.42</b>	<b>\$42,591.53</b>
	Windows, aluminum, awning, insulated glass, 4'-5" x 5'-3"	60.87		\$2.42	<b>\$42,591.53</b>
<b>B2030</b>	<b>Exterior Doors</b>			<b>\$4.12</b>	<b>\$72,606.25</b>
	Door, steel 18 gauge, hollow metal, 1 door with frame, no label, 3'-0" x 7'-0" opening	7.04		\$1.12	<b>\$19,681.37</b>
	Door, steel 24 gauge, overhead, sectional, electric operator, 12'-0" x 12'-0" opening	14.58		\$3.01	<b>\$52,924.89</b>
<b>B3010</b>	<b>Roof Coverings</b>			<b>\$3.32</b>	<b>\$58,405.18</b>
	Roofing, asphalt flood coat, gravel, base sheet, 3 plies 15# asphalt felt, mopped	8,802.50		\$1.32	<b>\$23,266.06</b>
	Insulation, rigid, roof deck, composite with 2" EPS, 1" perlite	8,802.50		\$0.86	<b>\$15,178.24</b>
	Roof edges, aluminum, duranodic, .050" thick, 6" face	500.00		\$0.71	<b>\$12,579.90</b>
	Flashing, aluminum, no backing sides, .019"	500.00		\$0.12	<b>\$2,066.71</b>
	Gravel stop, aluminum, extruded, 4", mill finish, .050" thick	500.00		\$0.30	<b>\$5,314.28</b>
<b>C Interiors</b>			<b>15.0%</b>	<b>\$17.40</b>	<b>\$306,278.38</b>
<b>C1010</b>	<b>Partitions</b>			<b>\$4.06</b>	<b>\$71,482.00</b>
	Concrete block (CMU) partition, light weight, hollow, 6" thick, no finish	10,355.88		\$4.06	<b>\$71,482.00</b>
<b>C1020</b>	<b>Interior Doors</b>			<b>\$2.69</b>	<b>\$47,428.96</b>



		Quantity	% of Total	Cost Per SF	Cost
	Door, single leaf, kd steel frame, metal fire, commercial quality, 3'-0" x 7'-0" x 1-3/8"	35.21		\$2.69	<b>\$47,428.96</b>
<b>C1030</b>	<b>Fittings</b>			<b>\$0.32</b>	<b>\$5,674.48</b>
	Toilet partitions, cubicles, ceiling hung, stainless steel	5.28		\$0.32	<b>\$5,674.48</b>
<b>C2010</b>	<b>Stair Construction</b>			<b>\$2.13</b>	<b>\$37,527.00</b>
	Stairs, steel, pan tread for conc in-fill, picket rail, 24 risers w/ landing	2.00		\$2.13	<b>\$37,527.00</b>
<b>C3010</b>	<b>Wall Finishes</b>			<b>\$2.61</b>	<b>\$46,007.85</b>
	Glazed coating	10,500.00		\$0.26	<b>\$4,661.37</b>
	Painting, masonry or concrete, latex, brushwork, primer & 2 coats	20,711.76		\$1.35	<b>\$23,714.35</b>
	Painting, masonry or concrete, latex, brushwork, addition for block filler	20,711.76		\$1.00	<b>\$17,632.13</b>
<b>C3020</b>	<b>Floor Finishes</b>			<b>\$1.79</b>	<b>\$31,556.61</b>
	Concrete topping, paint	8,802.50		\$0.57	<b>\$10,078.60</b>
	Vinyl, composition tile, maximum	8,802.50		\$1.22	<b>\$21,478.01</b>
<b>C3030</b>	<b>Ceiling Finishes</b>			<b>\$3.78</b>	<b>\$66,601.48</b>
	Acoustic ceilings, 3/4" fiberglass board, 24" x 48" tile, tee grid, suspended support	8,802.50		\$3.78	<b>\$66,601.48</b>
<b>D Services</b>			<b>46.4%</b>	<b>\$53.79</b>	<b>\$946,934.19</b>
<b>D1010</b>	<b>Elevators and Lifts</b>			<b>\$8.24</b>	<b>\$145,026.65</b>
	Hydraulic passenger elevator, 2500 lb., 2 floor, 125 FPM	1.76		\$8.24	<b>\$145,026.65</b>
<b>D2010</b>	<b>Plumbing Fixtures</b>			<b>\$10.70</b>	<b>\$188,456.22</b>
	Water closet, vitreous china, bowl only with flush valve, wall hung	17.43		\$3.28	<b>\$57,694.18</b>
	Urinal, vitreous china, wall hung	5.81		\$0.39	<b>\$6,949.59</b>
	Lavatory w/trim, vanity top, PE on CI, 20" x 18"	11.62		\$0.93	<b>\$16,441.83</b>
	Kitchen sink w/trim, countertop, stainless steel, 33" x 22" double bowl	2.99		\$0.36	<b>\$6,329.28</b>
	Laundry sink w/trim, molded stone, on wall, 45"x 21" double compartment	2.99		\$0.24	<b>\$4,285.97</b>
	Service sink w/trim, PE on CI, wall hung w/rim guard, 24" x 20"	5.81		\$1.43	<b>\$25,254.11</b>
	Shower, stall, baked enamel, terrazzo receptor, 36" square	20.42		\$3.42	<b>\$60,147.31</b>
	Water cooler, electric, wall hung, semi recessed, 8.1 GPH	5.81		\$0.64	<b>\$11,353.94</b>
<b>D2020</b>	<b>Domestic Water Distribution</b>			<b>\$1.59</b>	<b>\$28,017.02</b>
	Gas fired water heater, commercial, 100< F rise, 200 MBH input, 192 GPH	1.70		\$1.59	<b>\$28,017.02</b>
<b>D2040</b>	<b>Rain Water Drainage</b>			<b>\$0.52</b>	<b>\$9,146.74</b>

		Quantity	% of Total	Cost Per SF	Cost
	Roof drain, CI, soil,single hub, 4" diam, 10' high	3.40		\$0.38	<b>\$6,750.53</b>
	Roof drain, CI, soil,single hub, 4" diam, for each additional foot add	56.00		\$0.14	<b>\$2,396.21</b>
<b>D3050</b>	<b>Terminal &amp; Package Units</b>			<b>\$20.39</b>	<b>\$358,910.49</b>
	Rooftop, multizone, air conditioner, offices, 10,000 SF, 31.66 ton	19,365.50		\$20.39	<b>\$358,910.49</b>
<b>D4010</b>	<b>Sprinklers</b>			<b>\$3.29</b>	<b>\$57,989.20</b>
	Wet pipe sprinkler systems, steel, light hazard, 1 floor, 5000 SF	8,802.50		\$2.07	<b>\$36,499.30</b>
	Wet pipe sprinkler systems, steel, light hazard, each additional floor, 5000 SF	8,802.50		\$1.22	<b>\$21,489.90</b>
<b>D4020</b>	<b>Standpipes</b>			<b>\$1.65</b>	<b>\$29,004.34</b>
	Wet standpipe risers, class III, steel, black, sch 40, 4" diam pipe, 1 floor	2.46		\$1.35	<b>\$23,749.60</b>
	Wet standpipe risers, class III, steel, black, sch 40, 4" diam pipe, additional floors	2.46		\$0.30	<b>\$5,254.74</b>
<b>D5010</b>	<b>Electrical Service/Distribution</b>			<b>\$0.78</b>	<b>\$13,711.88</b>
	Overhead service installation, includes breakers, metering, 20' conduit & wire, 3 phase, 4 wire, 120/208 V, 400 A	1.00		\$0.27	<b>\$4,702.00</b>
	Feeder installation 600 V, including RGS conduit and XHHW wire, 400 A	50.00		\$0.19	<b>\$3,407.00</b>
	Switchgear installation, incl switchboard, panels & circuit breaker, 120/208 V, 3 phase, 400 A	0.50		\$0.32	<b>\$5,602.88</b>
<b>D5020</b>	<b>Lighting and Branch Wiring</b>			<b>\$5.42</b>	<b>\$95,344.28</b>
	Receptacles incl plate, box, conduit, wire, 2.5 per 1000 SF, .3 watts per SF	17,605.00		\$1.38	<b>\$24,222.72</b>
	Wall switches, 1.0 per 1000 SF	17,605.00		\$0.22	<b>\$3,792.12</b>
	Miscellaneous power, .8 watts	17,605.00		\$0.16	<b>\$2,737.58</b>
	Central air conditioning power, 4 watts	17,605.00		\$0.51	<b>\$9,043.69</b>
	Fluorescent fixtures recess mounted in ceiling, 0.8 watt per SF, 20 FC, 5 fixtures @32 watt per 1000 SF	26,407.50		\$3.16	<b>\$55,548.18</b>
<b>D5030</b>	<b>Communications and Security</b>			<b>\$1.02</b>	<b>\$18,044.02</b>
	Communication and alarm systems, fire detection, addressable, 25 detectors, includes outlets, boxes, conduit and wire	0.79		\$0.74	<b>\$13,085.58</b>
	Fire alarm command center, addressable without voice, excl. wire & conduit	1.76		\$0.28	<b>\$4,958.45</b>
<b>D5090</b>	<b>Other Electrical Systems</b>			<b>\$0.19</b>	<b>\$3,283.35</b>
	Generator sets, w/battery, charger, muffler and transfer switch, gas/gasoline operated, 3 phase, 4 wire, 277/480 V, 15 kW	5.02		\$0.19	<b>\$3,283.35</b>
<b>E Equipment &amp; Furnishin</b>			<b>0.0%</b>	<b>\$0.00</b>	<b>\$0.00</b>

		Quantity	% of Total	Cost Per SF	Cost
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%	\$115.98	\$2,041,744.76
Contractor's Overhead & Profit			25.0 %	\$28.99	\$510,436.19
Architectural Fees			8.0 %	\$11.60	<del>\$204,174.48</del>
User Fees			0.0 %	\$0.00	\$0.00
Total Building Cost				\$156.57	\$2,756,355.43

## **Appendix III: SITE PHOTOGRAPHS**



1 - Ridge Street Fire Station & Hose Station



2 - Asphalt paving drive lane and parking northwest side of the building - note alligator cracking





3 - Asphalt paving drive lane and parking northwest side of the building - note alligator cracking



4 - Asphalt paving drive lane and parking northwest area of the site - note alligator cracking





5 - Asphalt paving drive lane and parking northwest side of the building - note alligator cracking



6 - Asphalt paving drive lane and parking northwest side of the building - note alligator cracking





7 - Asphalt paving drive lane and parking northwest side of the building - note alligator cracking



8 - Asphalt paving drive lane at east entrance





9 - Asphalt paving drive lane and parking northwest area of the site - note alligator cracking



10 - Asphalt paving drive lane and parking northwest side of the building - note alligator cracking



11 - Asphalt paving drive lane and parking northwest side of the building - note alligator cracking



12 - Asphalt paving drive lane and parking northwest side of the building - note alligator cracking





13 - Concrete curb - note deterioration



14 - Concrete sidewalk south side - note deterioration





15 - Lawn area



16 - Typical drain





17 - Typical drain



18 - Typical yard inlet drain



19 - Concrete crack along the drain



20 - Typical flag pole





21 - Slab on grade at east bay area - note cracking and settlement



22 - Slab on grade at east bay area - note cracking and settlement



23 - Slab on grade at east bay area - note cracking and settlement



24 - Typical ceiling





25 - Building exterior north wall



26 - Building exteriors - note deterioration



27 - Building exterior north side of the west bay area



28 - Typical exterior of bay area





29 - Training tower structure



30 - Building exterior -note crack in brick work.



31 - Typical sealant condition



32 - Building exterior north wall





33 - Storefront entrance at west addition



34 - Typical steel personnel door



35 - Typical over head door



36 - Typical operable exterior window





37 - Typical window - note water staining



38 - Typical window - note water staining



39 - Exterior windows



40 - Single-ply membrane roofing system over main building area





41 - Typical plumbing penetration for main roofing system



42 - Typical internal drain for main roofing system



43 - Single-ply membrane roofing main building area - note areas of ponding and deterioration



44 - Single-ply membrane roofing main building area - note areas of ponding and deterioration





45 - Typical parapet wall - note area of roofing system patching



46 - Standing seam metal roofing system over east addition



47 - Roofing system



48 - Typical parapet wall and through wall scupper drain of main roofing system





49 - Typical chimneys



50 - Asphalt shingle roofing system over west addition - note recent replacement



51 - Asphalt shingle roofing system over west addition - note recent replacement



52 - Typical solar panel





53 - Domestic hot water storage tank



54 - Boiler located in main utility room



55 - Typical hot water piping system



56 - Condenser located on roof - manufactured by Carrier in 2006





57 - Condenser located on roof - manufactured by Carrier in 2006



58 - Condenser located on roof - manufactured by York



59 - Condenser located on grade - manufactured by Enviromaster International in 1996

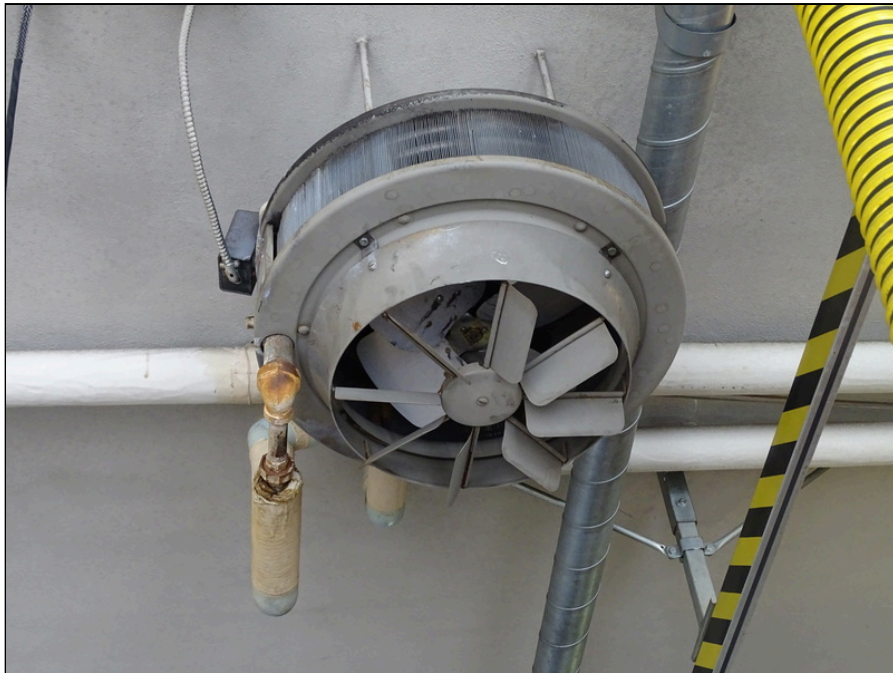


60 - Condenser located on grade - manufactured by American Standard





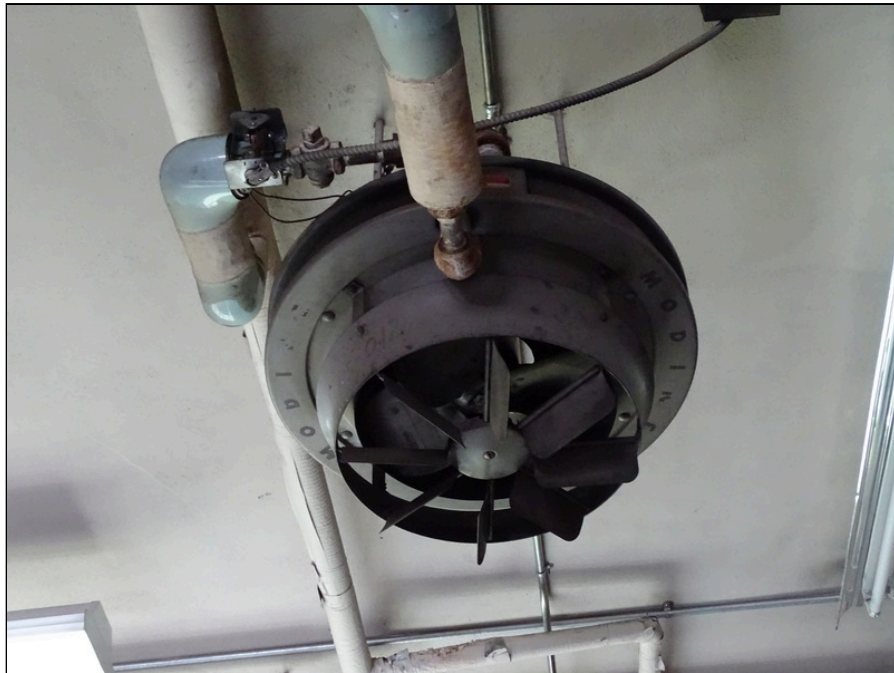
61 - Condenser located on grade - manufactured by American Standard



62 - Typical space heater

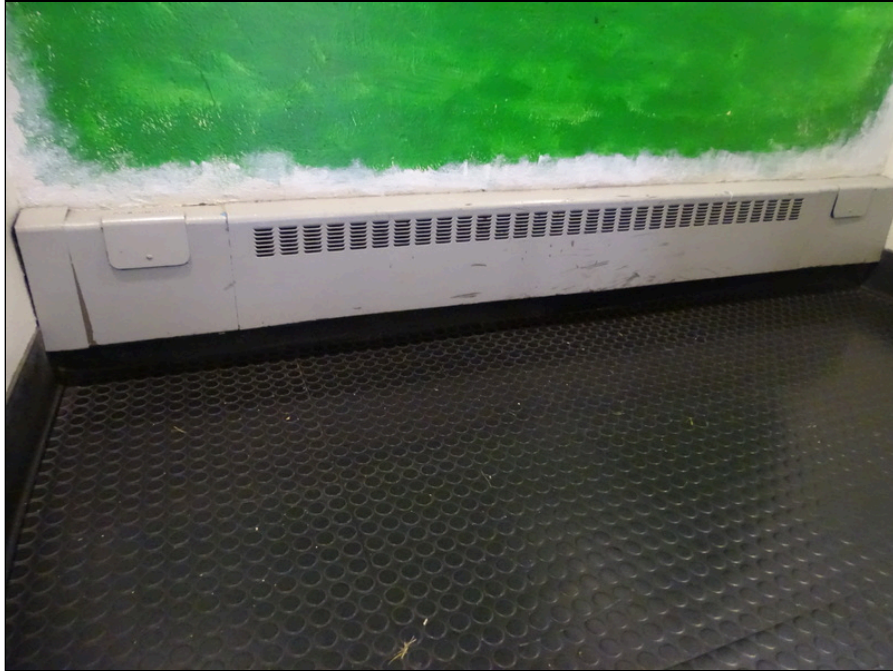


63 - Ceiling mounted hot water heating units



64 - Typical space heater





65 - Typical hot water baseboard heater unit



66 - Typical hot water baseboard heater unit



67 - Typical digital thermostat



68 - Emergency power supply on south side of the building





69 - Utility transformers on south side of the building



70 - Typical electric meter



71 - Typical electric meter



72 - Emergency transfer switch





73 - Main electrical switch gear



74 - Typical older circuit breaker panel



75 - Typical electrical sub panel



76 - Typical fire extinguisher





77 - Typical smoke detector



78 - Typical Exit sign



79 - Typical gas meter



80 - Typical interior of bay area - note peeling paint on ceiling



81 - Typical stair area interior



82 - Typical corridor area interior





83 - Typical dorm room area interior



84 - Typical interior of office areas





85 - Typical corridor area interior



86 - Typical kitchen area interiors



87 - Typical kitchen area interiors



88 - Typical kitchen area interiors



89 - Typical living area interior



90 - Laundry appliances





91 - Typical restroom interiors



92 - Typical corridor area interiors





93 - Typical dining area interior



94 - Typical dorm room area interior



95 - Typical interior of bay area



96 - Accessible parking space - note one space provided when two are required





97 - Overhead door damage - east



98 - Overhead door damage east



99 - Overhead door east



100 - Overhead door east





101 - Overhead door damage east



102 - Overhead door damage east

## **Appendix IV: 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, Suffolk, 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 MEMBERSHIPS

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 MEMBERSHIPS

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
- 4<sup>th</sup> Street Reconstruction, Washington, DC
- Sibley Memorial Hospital Addition, Cancer Center, Washington, DC
- Washington Headquarters Services, Arlington, VA
- Walmart #5968-00, Washington, DC
- Progression Place, 7<sup>th</sup> Street, NW, Washington, DC
- National Gallery of Art, Washington, DC
- City Market @ O, Washington, DC

