

Discussion Item

Community Water Proofing Strategy

Bld Type	Building Length minus walks x 5' Depth in feet per front	Required Depth to footing	Front Total Sq. Ft.	Building Length in feet per side returns x 2	Required Depth to footing	Side Total Sq. Ft.	Total Sq. Ft. per building	Average cost per square foot	total cost both installed	# of Building type	sq. ft completed FY2017- FY2021 PER BLD TYPE	Minus \$ completed	sub total costs
C-2	108	5	540	30	5	150	690	\$84.00	\$57,960.00	22	834	\$70,056.00	\$1,205,064.00
CCD-4	86	5	430	30	5	150	580	\$84.00	\$48,720.00	9	164	\$13,776.00	\$424,704.00
CCD-6	91	5	455	30	5	150	605	\$84.00	\$50,820.00	3	74	\$6,216.00	\$146,244.00
								\$84.00					
B-7	65	5	325	20	5	100	425	\$84.00	\$35,700.00	24	1942	\$163,128.00	\$693,672.00
B-8	65	5	325	20	5	100	425	\$84.00	\$35,700.00	29	1182	\$99,288.00	\$936,012.00
B-9	65	5	325	20	5	100	425	\$84.00	\$35,700.00	8	348	\$29,232.00	\$256,368.00
B-10	65	5	325	20	5	100	425	\$84.00	\$35,700.00	1	0	\$0.00	\$35,700.00
B-11	65	5	325	20	5	100	425	\$84.00	\$35,700.00	2	0	\$0.00	\$71,400.00
B-12	65	5	325	20	5	100	425	\$84.00	\$35,700.00	2	0	\$0.00	\$71,400.00
B-13	65	5	325	20	5	100	425	\$84.00	\$35,700.00	1	0	\$0.00	\$35,700.00
B-14	65	5	325	20	5	100	425	\$85.00	\$36,125.00	1	50	\$4,250.00	\$31,875.00

Est Full Waterproofing Costs

\$3,876,264.00

Est. "B" TYPES Drains per									\$15,000.00	68	18	\$ 187,941.00	\$832,059.00
Est. "C" TYPES Drains per									\$20,000.00	34	16	\$ 110,085.00	\$569,915.00
Est. Vapor "B" TYPES Barrier									\$15,000.00	68	5	\$75,000.00	\$945,000.00
Est. Vapor "C" TYPES Barrier									\$20,000.00	34			<u>\$680,000.00</u>

Estimated Overall Costs

\$6,903,238.00

5 YEAR	\$1,380,647.60
7 YEAR	\$986,176.86
10 YEAR	\$690,323.80
15 YEAR	\$460,215.87

Landscaping Not Included: TBD costs will vary due to building types



199 E. Montgomery Avenue
Suite 100
Rockville, MD 20850

202.510.9366
walkerconsultants.com

September 10, 2020

Mr. Mark Miller, CMCA, AMS
General Manager
Parkfairfax Condominium
3360 Gunston Road
Alexandria, VA 22302

*Re: Proposal for Professional Engineering and Consulting Services
Parkfairfax Condominium
Foundation Wall Waterproofing and Drainage Repairs
Beverley Drive, Coryell Lane, Fitzgerald Lane, Greenway Place, Gunston Road
Holmes Lane, Lyons Lane, Martha Custis Drive, Mt. Eagle Place, Preston Road,
Ravensthorpe Place, Ripon Place, Valley Drive, and Wellington Road
Alexandria, VA 22302*

Dear Mr. Miller:

As requested, Walker Consultants (Walker) has prepared this proposal to develop the construction documents for the foundation wall waterproofing and drainage repairs and bidding services for Parkfairfax Condominium. This proposal provides our understanding of the project, project objectives, description of our proposed Scope of Services, schedule, fee, and conditions of agreement.

PROJECT UNDERSTANDING

Parkfairfax Condominium was constructed during the 1940s and consists of 285 garden style structures. Each structure varies between two to three stories above grade with multi-wythe brick masonry load bearing walls and wood gable roof framing. It is our understanding that out of the 285 structures, there are 101 structures that have ground level units that are partially located below grade. Table 1.0 below shows the number of building types located throughout Parkfairfax Condominium that we understand have ground level units that are partially located below grade.

Moisture intrusion has been reported by unit owners of the units that are partially located below grade throughout the property.

It is our understanding that Parkfairfax Condominium, through their General Manager, Mark Miller, has requested Walker provide a proposal to develop the construction documents for the foundation wall waterproofing and drainage repairs per our discussion on September 4, 2020 and services for the related bidding phase services.

**TABLE 1.0 – BREAKDOWN OF STRUCTURE TYPES WITH
PARTIAL BELOW GRADE GROUND LEVEL UNITS**

STRUCTURE TYPE	# OF STRUCTURES
B-7	24
B-8	29
B-9	8
B-10	1
B-11	2
B-12	2
B-13	1
C-2	22
CCD-4	9
CCD-6	3

SCOPE OF SERVICES

To achieve the project objectives, we propose the following scope of services:

PHASE 1 – PRE-DESIGN SURVEY

- Review of available drawings that are provided to us related to the foundations at the subject structure types in Table 1.0 above in an attempt to better understand existing conditions. If available, we may also use copies of the elevation drawings and plans to document our findings.
- Review of available maintenance, past repair contracts, previous repair work scopes, investigative reports, and any other relevant/pertinent information regarding the foundations at the subject structure types in Table 1.0 above that are provided to Walker will be reviewed.
- Interview property manager, and/or unit occupants, if available at the time of our survey work, to obtain information regarding reported water intrusion at the ground level units at the subject structures noted in Table 1.0 above.
- Visit the site to perform a visual spot-check survey of the visually and physically accessible portions of the elevations of the subject structure types as well as the adjacent site to the subject structures to observe general existing conditions related to the foundation walls.

PHASE 2 – FOUNDATION WALL REPAIR CONSTRUCTION DOCUMENTS

- Prepare construction documents that will consist of drawings and a project manual. The drawings will include notes, plans, elevations, sketches, and details required to convey the proposed repair/replacement work and the project manual will include general requirements, contracting requirements, introductory information, procurement requirements, and technical specifications for the following:
 - Exposing the existing foundations (walls and continuous footings) to remove any existing waterproofing membrane currently installed on the existing brick masonry;
 - Repairs to the brick masonry or concrete foundation walls where required and installation of a cementitious parge coat on the existing brick masonry foundation walls;
 - Installation of waterproofing membrane along with drainage board with filter fabric;

- iv. Installation of foundation drains and below grade drain lines for the associated downspouts including potential discharge locations. Where required, storm water tanks and/or sump pumps may be included to allow storm water to reach the proposed discharge locations.
- v. Regrade the site adjacent to where foundation wall waterproofing and drainage repairs are performed to promote positive slope away from the subject structures.
- b. The drawings and project manual will be submitted to Parkfairfax Condominium in draft form for review and comment.
- c. Attend a meeting (virtual) with the Parkfairfax Condominium Board and General Manager on a mutually convenient date to review the draft construction documents submitted by Walker. We have budgeted up to two (2) hours for the meeting.
- d. Once the Condominium has provided their review and comments regarding the drawings and project manual, Walker will finalize to submit to qualified contractors for bidding.

PHASE 3 – BIDDING SERVICES

Task 1: Pre-Bid Conference and Bidding Phase Summaries

- a. Prepare a list of up to five qualified restoration contractors that have experience with similar projects for your consideration as potential bidders.
- b. Issue one electronic copy of the Construction Documents for each selected bidder.
- c. Attend on-site pre-bid conference to be coordinated and directed by Walker.
- d. Prepare a meeting summary and answer questions from the bidders during the meeting.
- e. Answer bidder's post-meeting questions.
- f. Evaluate and provide a tabulated comparison of the bids received including a bid summary letter.

Task 2: Additional Services During Bidding Phase

- a. Prepare and issue any required Addenda.
- b. Attend a meeting (virtual format) with the Condominium to review and discuss the bid submissions for the foundation repairs.
- c. Coordination of and participation of up to two contractor interviews, if requested, for foundation wall waterproofing and drainage repair work.

LIMITATIONS

The preparation of the construction documents will be based on our survey work and review of existing documentation that are provided to Walker and may not discover or disclose latent conditions without performing more invasive testing. More detailed and invasive testing can be provided by Walker as an additional service upon written request from Client.

Excluded from our scope of services and fees is performing intrusive sampling to determine as-built construction, preparation of construction documents drawings, bidding, and any items not specifically included in the scope of services. Should Walker be asked to perform additional services or extend our services beyond the proposed budget, Walker will provide a proposal for our additional services for approval prior to proceeding.

A review of the facility for Building Code compliance and compliance with the Americans with Disabilities Act (ADA) requirements is not part of the scope of work. However, it should be noted that whenever significant repair, rehabilitation, or restoration is undertaken in an existing structure, ADA design requirements may become applicable if there are currently un-met ADA requirements.

SCHEDULE

Once we have received written authorization to proceed, Walker will be able to perform the pre-design survey field work Phase 1 within two (2) to three (3) weeks, dependent upon weather conditions conducive to our exterior work. We anticipate the field work for Phase 1 will take up to two days to complete; however, based on weather conditions, our field work for Phase 1 could take longer to complete.

We anticipate our draft construction documents (Phase 2) will be submitted to Parkfairfax Condominium for review within six (6) weeks after we complete our field work for Phase 1. Once Walker has received all comments back from Parkfairfax Condominium regarding the draft construction documents, we anticipate it will take one week to incorporate any edits.

In regards to Phase 3, Task 1 bidding services we would anticipate this scope to take approximately four (4) to five (5) weeks to complete.

PROFESSIONAL FEE

Walker proposes to perform the Scope of Services described in Phases 1 through 4 above for the fees presented in Table 2.0 below, plus reimbursable expenses. Our services will be billed in accordance with the attached General Conditions of Agreement.

TABLE 2.0 – SUMMARY OF FEES

PHASE/TASK		PROPOSED FEE
1	Pre-Design Survey	\$17,500 (Lump Sum)
2	Construction Document Preparation	
3/1	Pre-Bid Conference and Bidding Phase Services	\$3,500 (Lump Sum)
3/2	Additional Bidding Phase Services	Hourly



Mr. Mark Miller, CMCA, AMS
Parkfairfax Condominium
Foundation Wall Waterproofing and Drainage Repairs
September 10, 2020
Page 5

Walker is dedicated to providing our clients with engineering services that meet project requirements and deadlines. If you should have any additional questions, please do not hesitate to call or email us.

Sincerely,

WALKER CONSULTANTS

A handwritten signature in blue ink, reading "Joseph W. Wilcher III".

Joseph W. Wilcher III, PE
Restoration Consultant

Enclosures: General Conditions of Agreement for Restoration
Standard Billing Rates for Restoration Consulting Services

AUTHORIZATION

Trusting that this meets with your approval, we ask that you sign in the space below to acknowledge your acceptance of the terms contained herein, and to confirm your authorization for us to proceed. Please return one signed original of this agreement for our records.

PARKFAIRFAX CONDOMINIUM

Authorized Signature _____

Printed Name _____

Title _____

Date _____

SERVICES

Walker Consultants (Walker) will provide the CLIENT professional services that are limited to the work described in the attached letter. Any additional services requested will be provided at our standard hourly rates or for a mutually agreeable lump sum fee. Professional services are provided solely in accordance with written information and documents supplied by the CLIENT, and our services are limited to and furnished solely for the specific use disclosed to us in writing by the CLIENT.

PAYMENT FOR SERVICES

Walker will submit monthly invoices based on work completed plus reimbursable expenses. Reimbursable expenses will be billed at 1.15 times the cost of travel and living expenses, rental of specialized equipment, photographs and renderings, document reproduction, postage and delivery costs, long distance telephone and facsimile charges, additional service consultants, and other project related expenses. Payment is due upon receipt of invoice.

If for any reason the CLIENT does not deliver payment to Walker within thirty (30) days of date of invoice, the CLIENT agrees to pay Walker a monthly late charge of one and one-half percent (1.5%) per month of any unpaid balance of the invoice plus attorney's fees and other costs incurred to collect the unpaid sum.

OWNERSHIP OF DOCUMENTS

All documents prepared or provided by Walker are and remain the property of Walker as instruments of service. Any use for modifications or extensions of this work, for new projects, or for completion of this project by others without Walker's specific written consent will be at CLIENT's sole risk.

STANDARD OF CARE

Walker will perform the Services consistent with the degree of care and skill ordinarily exercised by members of the same profession currently practicing under similar circumstances at the same time and in the same or similar locality. No other warranty, express or implied, is made. Walker's liability to CLIENT and all persons providing work or materials to this project as a result of acts, errors or omissions of Walker shall be limited to the fee or \$10,000, whichever is greater.

Any estimates or projections provided by WALKER will be premised in part upon assumptions provided by the CLIENT. Walker will not independently investigate the accuracy of the assumptions. Because of the inherent uncertainty and probable variation of the assumptions, actual results will vary from estimated or projected results and such variations may be material. As such, Walker makes no warranty or representation, express or implied, as to the accuracy of the estimates or projections.

CONSEQUENTIAL DAMAGES

The Client and Walker waive consequential damages for claims, disputes, or other matters in question, arising out of or relating to this Agreement.

PERIOD OF SERVICE

Services shall be complete the earlier of (1) the date when final documents are accepted by the CLIENT or (2) thirty (30) days after final documents are delivered to the CLIENT.

PRINCIPALS

Senior Principal	\$310.00
Principal	\$285.00

PROJECT MANAGEMENT

Senior Project Manager	\$250.00
Project Manager	\$215.00
Assistant Project Manager	\$175.00

CONSULTANTS

Senior Consultant	\$250.00
Consultant	\$215.00
Analyst / Planner	\$175.00

RESTORATION CONSULTANTS

Director of Restoration	\$285.00
Senior Restoration Consultant	\$250.00
Restoration Consultant	\$215.00
Restoration Engineer	\$180.00
Assistant Restoration Consultant / Restoration Specialist	\$175.00

DESIGN

Senior Engineer / Senior Architect	\$210.00
Engineer / Architect	\$185.00
Designer	\$175.00

TECHNICAL

Senior Technician	\$160.00
Technician	\$145.00

SUPPORT

Senior Administrative Assistant / Business Manager	\$120.00
Administrative Assistant	\$100.00



Prepared for Parkfairfax Condominium

Proposal for Professional Engineering and Consulting Services

September 10, 2020

Prepared by

Walker Consultants
199 E. Montgomery Ave, Suite 100
Rockville, MD 20850
202.510.9366
walkerconsultants.com



WALKER
CONSULTANTS

Contents

Cover Letter	
01 Firm Profile and Experience	6
02 Resumes	10
03 Project Approach	15
04 References	21





199 E. Montgomery Ave, Suite 100
Rockville, MD 20850
202.510.9366
walkerconsultants.com

September 10, 2020

Mr. Mark Miller, CMCA, AMS
General Manager
Parkfairfax Condominium
3360 Gunston Road
Alexandria, VA 22302

Re: Parkfairfax Condominium
Beverly Drive, Coryell Lane, Fitzgerald Lane, Greenway Place, Gunston Road
Holmes Lane, Lyons Lane, Martha Custis Drive, Mt. Eagle Place, Preston Road,
Ravenworth Place, Ripon Place, Valley Drive, and Wellington Road
Alexandria, VA 22302

Dear Mr. Mr. Miller:

Walker Consultants (Walker) is pleased to submit the attached proposal to Parkfairfax Condominium regarding the proposed foundation wall waterproofing and drainage repairs at 101 of the garden style structures located throughout the community.

For over 55-years, through 23 offices, and with more than 300 staff members nation-wide, Walker Consultants is the industry leader focusing on the built environment, having started with parking design and restoration consulting services and expanding into building restoration and building envelope consulting services many years ago. Our Washington D.C. office services the Maryland, Virginia, and Washington DC region with a staff specializing in the assessment and restoration of the built environment including various types of structures such as buildings of varying construction, parking structures, plazas, stadiums, specialty concrete and masonry structures, wood-framed construction, and historic structures among other types. Walker brings unparalleled experience performing repair/replacement/restoration engineering services to existing structures and we are able to pull from specialized experience that Walker has from across the nation for highly specialized conditions.

The success of the proposed foundation wall waterproofing and drainage repairs and other potential future projects at Parkfairfax Condominium will depend upon a wide variety of factors. No factor is more important than the people that will work on the project. We have assembled a team of highly qualified individuals for this project, including our proposed Project Manager, Joseph W. Wilcher, III, PE. Mr. Wilcher is a Professional Engineer, licensed in the States of Delaware and Maryland, the Commonwealth of Virginia, and the District of Columbia with over 11 years of experience in the evaluation and forensic restoration of defects, deficiencies, and failures of buildings' and parking structures' envelope and structural systems. Mr. Wilcher has worked on the property of Parkfairfax Condominium from 2009 to 2018 on a variety of projects, including foundation repair/stabilization at several of the structures, while employed with another engineering firm.

Our goal is to provide a quality service that will ensure our clients' goodwill and respect while delivering our services in a manner whereby our clients recognize that we are one of the best firms with which they have worked. We have provided cost-effective restoration services for communities across the United States. Our proven commitment to meeting our client's needs has resulted in an over 85% client return rate. Our depth of talent and multi-disciplined team of professionals is ready to serve Parkfairfax Condominium.

The entire Walker team is committed and available to provide the required services for this project. We understand the needs of Parkfairfax Condominium, and we look forward to this opportunity. Thank you for considering Walker.

Sincerely,
WALKER CONSULTANTS

A handwritten signature in blue ink, appearing to read 'K. McCleary', is positioned above the printed name.

Kirby L. McCleary, PE
Principal / Director of Building Envelope,
Forensics & Restoration



01 Firm Profile and Experience



Company Profile

Walker Consultants provides planning, design, engineering, forensics, restoration and consulting for the built environment.

Our experts have been advancing industry standards since we began in 1965. We are a 100% employee-owned company that takes pride in the value we provide our clients through integrity, honesty, and excellence.

Walker possesses a strong foundation as an industry leader in all aspects of the built environment that encompasses building envelope and structural systems. We offer our clients a wide spectrum of specialists and renowned experts who can bring effective and practical solutions to complex challenges.

Our staff includes highly experienced forensic engineers who provide investigative assessments, creative repair solutions, and litigation support on all types of facilities around the world impacted by natural events as well as design or construction defects.

Additionally, we are among the largest providers of restoration and building envelope services in the industry. The combination of our structural engineering and architectural design excellence, building science experts, and vast geographic presence make Walker the first choice for these specialized services throughout the country.

Offices 

Staff 

States 

Countries 

Repeat Customers (%) 



Building Envelope



Established in 1965 as a structural engineering firm, Walker has the experience and knowledge to make the many systems of your structure work together to prolong its life.

Specialized Staff	10
New Design	+50
Restoration	1K

Walker's ability to provide problem-solving and building science services for structures makes us qualified for new construction. Through our restoration experience, we have encountered and mitigated almost every possible design error or construction mistake. We understand how the different systems of a structure, including roofing, façade, below-grade waterproofing, and structural systems interact with one another. We know the errors to avoid and how to provide a long-lasting design.

- Building Envelope Testing
- Façade Access Davit & Anchor Testing
- Design Peer Review
- Fenestration Consulting
- Construction Monitoring and Third-Party Review
- Waterproofing Design
- Building Science
- Façade Design and Restoration
- Roofing Design and Repairs
- Plaza Design and Remediation
- Commissioning

Walker knows the
errors to avoid and
how to provide a
long-lasting design
for your structure.

Forensics & Restoration



Walker has pioneered new methods and set industry standards for testing, restoration and preservation.

Specialized Staff **20**

Parking Projects **4K+**

Other Projects **350**

Published Articles **20**

Helping owners extend the life of their facilities, Walker utilizes state-of-the-art testing, restoration and preservation strategies to offer prescriptive recommendations that enable clients to improve the long-term health and increase the value of their assets. Our experience includes a wide array of projects for parking facilities; office, residential, medical and institutional buildings, bridges, tunnels, water-treatment facilities, airports, sports/entertainment facilities, and plazas. Compared to overhauls, renovations, or wholesale dismantling and reconstruction, Walker's approaches are practical and a substantially smaller investment in time and money; and are less disruptive.

Walker's approaches
to preservation are
practical and less
disruptive.

- Investigations and Assessments
- Collapse/Failure Investigation
- Damage Investigation
 - Earthquake
 - Extreme Wind
 - Flood and Storm Surge
 - Fire/Lightning
 - Impact
 - Explosion
- Due Diligence Surveys
- Diagnostic & Non-Destructive Testing/Destructive Testing Consulting
- Vibration Monitoring and Mitigation
- Structural Strengthening
- Seismic Upgrades
- Seismic and Wind Hazard and Risk Assessment
- Asset Management Plan and Maintenance Programs
- Repair Design and Construction Documents
- Litigation/Claim Support and Expert Testimony
- Emergency Response Consulting and Safety Assessment
- Structural Stabilization
- Deconstruction Consulting/ Demolition and Implosion Monitoring
- Code Compliance and Peer Review



02 Resumes

Kirby L. McCleary, PE

Principal, Director of Building Envelope, Forensics & Restoration



Key Experience

Forensic Investigation, Evaluation,
and Remediation
Building Envelope Consultation
Expert Witness Services

Education

Bachelor of Science, Civil Engineering
(with a Structural Engineering
emphasis), The Pennsylvania State
University

Registrations

Registered Professional Engineer in
the Commonwealth of Virginia, the
State of Maryland, and the District of
Columbia

Affiliations

Association for Preservation Technology
– Washington DC Chapter
Community Associations Institute (CAI)
Washington, DC Metropolitan and
Chesapeake Region (Baltimore,
Maryland) Chapters, member
International Facility Management
Association (IFMA), Capital Chapter,
and Chesapeake Chapter, member
American Institute of Steel Construction
(AISC), member
International Concrete Repair Institute
(ICRI), member
International Institute of Building
Enclosure Consultants (formerly RCI,
Inc.), member

Presentations

“Repair/Replacement Projects- A Guide
to Avoiding Pitfalls,” *Chesapeake
Region Chapter Community
Associations Institute*

Kirby is the Director of Building Envelope, Forensics and Restoration in the Washington, DC office. Mr. McCleary has over twenty years of experience in the evaluation, design, and associated consultation of new and existing building structures of all types, uses, and construction materials. Kirby’s responsibilities include forensic investigation, evaluation, and remediation of existing building defects and deficiencies related to a variety of building envelope and structural systems, building envelope consultation for new construction, as well as expert witness and litigation support services.

Before joining Walker Consultants, Mr. McCleary held the position of Associate with a local Washington DC Metropolitan Area structural engineering firm specializing in building envelope and structural systems.

Project Highlights

Building Envelope and Restoration

Wilton House Condominium

Merrifield, Virginia (2018)

Evaluation and consultation including testing related to building envelope moisture infiltration conditions (EIFS, masonry, and fenestrations) at 15-story concrete framed residential building

Fort Ellsworth Condominium

Alexandria, Virginia (2018)

Evaluation of structural distress at three buildings with history of settlement conditions for 19 building community with 169 residential units.

Lincoln Park Condominium

Reston, Virginia (2018-2019)

Building envelope evaluation related to sprinkler pipe freeze-up conditions at 108 units within eight 4-story buildings, preparation of construction documents including design coordination with Fire Protection Engineer, bidding, contract assembly and construction phase services.

Forensics / Expert Witness

Herauf v. Elmont Condominium

Baltimore, Maryland (2019)

Qualified expert witness testimony provided based on forensic evaluation of structural wall connection failures performed while at prior firm.



Kirby L. McCleary, PE

Project Highlights (Continued)

Forensics / Expert Witness

Silverbrook Farm Condominium

Owings Mills, Maryland (2015-2019)

Mediation/litigation support services related to building envelope repair construction defects at 11-building community that contributed to extensive sprinkler pipe freeze-up conditions. Services also included preparation of construction documents, and construction phase services. Forensic evaluation and construction documents performed while at prior firm.

One Loudoun Condominium

Ashburn, Virginia (2019-2020)

Services included forensic evaluations and mediation/litigation support services related to 11-building 160-unit condominium in developer transition relative to various building envelope defects including façade and roof systems

Joseph W. Wilcher, III, PE

Consultant – Building Envelope, Forensics & Restoration



Key Experience

Building Envelope

Due Diligence

Forensics

Restoration

Education

Bachelor and Master of Architectural Engineering with structural emphasis, The Pennsylvania State University, 2009

Minor, Engineering Mechanics, The Pennsylvania State University, 2009

Registrations

Registered Professional Engineer in the States of Delaware, and Maryland, The District of Columbia, and the Commonwealth of Virginia

Affiliations

Member of Community Associations Institute (CAI) Washington, DC and Chesapeake Region (Baltimore, MD) Chapters; American Institute of Steel Construction (AISC); American Society of Civil Engineers (ASCE); American Wood Council (AWC); American Concrete Institute (ACI); and International Concrete Repair Institute (ICRI)

Committee Member of ACI 562-A

Joe is a Restoration Consultant in the Washington, DC office and has over 11 years of experience in the evaluation and forensic restoration of defects, deficiencies and failures of buildings' and parking structures' envelope and structural systems. Joe is responsible for managing and coordinating building and parking structure as well as façade restoration projects.

Joe's experience includes condition appraisal reports; the assessment, investigation, and repair / rehabilitation of building structures and site features; strengthening, modifications, and design of existing and new structures; preparation of shoring designs for emergency structural issues and repair and replacement projects; evaluation and design for remediation of building moisture infiltration conditions; construction observation as well as contract administration services for projects. Joe has also performed structural design and prepared technical documents for renovations and additions to existing structures.

His experience includes structural systems (gravity and lateral framing elements, walls, foundations, and connections) such as conventional, prestressed, and post-tensioned reinforced concrete; structural steel; masonry; and wood.

Before joining Walker in 2018, Joe worked with a consulting engineering firm that specialized in building envelope and structural systems in the Washington DC/Baltimore region.

Project Highlights

Restoration

Parkfairfax Condominium

Fairfax, Virginia (2009 – 2018 at previous firm)

Joe performed differential settlement investigations (visual and intrusive) and building movement monitoring services (visual and crack gage) for multiple structures and/or individual units located throughout the property. He has also managed, developed, and provided foundation stabilization and structural repair/replacement designs, bidding, and construction observation services. Joe worked on the global façade survey back in 2016/2017 to determine which category each of the structures should be considered based on the survey findings and review of historical documentation of the previous global surveys performed. Joe also developed roof framing repairs to address fire and tree damage.

Farrington Place Condominium

Farrington, Virginia (Ongoing)

Joe performed a condition assessment for the six buildings that make up the subject property regarding reported differential movement at the exterior brick façade and interior finishes. Joe is currently developing the recommended repairs for the foundations at one of the buildings at the property based on the findings from the condition assessment.



Joseph W. Wilcher, III, PE

Project Highlights (Continued)

Fairwinds of Annapolis

Annapolis, MD (Ongoing)

Joe is working with the Condominium and their property management company to perform repairs to foundations at one of the buildings that has experienced differential settlement.

Acadia at the Metro Assessment

Vienna, VA (Ongoing)

Performed condition assessment of exterior façade (brick and siding), courtyard and foundation wall waterproofing, and exhaust shaft; developed repair construction documents regarding above listed components. Building Envelope Restoration

Arlington Court Condominium

Arlington, VA (Ongoing)

Prepared construction documents for repairs to first floor wood framing and foundation drainage/waterproofing.

Leisure World of Maryland

Silver Spring, MD (2019- 2020)

Assessment regarding reported differential movement in various building components throughout property.



03 Project Approach

Approach



Walker has developed a project approach that has resulted in thousands of successful consultation and restoration projects. Walker begins every project with a walk-through of each structure and a discussion with the Owner to define the concerns, future repair and maintenance goals, and obligations for the project. This type of information can make significant differences in repair versus replacement recommendations and associated costs as well as feasibility of proposed additions/alterations. Gathering this information is essential to providing critical information for a client to make an informed decision about the approach that best meets their goals. This information will guide the development of the next phase of the project including to what extent testing and intrusive sampling may be needed for the condition assessment.

Following the project kick-off, Walker's team of professionals will develop a plan to perform a visual review of the facility to document existing deterioration and conditions that may require repair, including potential testing and intrusive sampling.

We focus on gathering information during the visual condition assessment, including the deterioration type(s), likely cause(s), repair approach options, and projected repair quantities. From this information Walker can perform needed structural analyses and combined with opinions of rough probable cost projections, when needed, we can prepare a report with our opinions and recommendations regarding the cause of deterioration/damage observed and various repair/replacement options, or the feasibility of proposed additions/alterations to the structure. With the completed assessment report, we can meet with you at your request to review and answer any questions.

Methodology



Walker's experience with evaluation and analysis of new and existing structures; our assessment of existing structural and building envelope defects and remediation of those conditions; as well as expert witness experience related to repair work implemented improperly or inadequately, provide us with a unique ability to understand and evaluate the benefits and challenges of various repair and replacement approaches for the built environment. This allows us to assist our clients in making the best decision to address their given building envelope and structural conditions.

We approach restoration needs as a consultant, encompassing both your engineering and business requirements. For each phase of the project, we will provide information and recommendations that form the basis for a powerful and useful tool to manage and protect your assets. We do this by preparing condition assessment reports and asset management plans.

Condition assessments provide a general professional opinion of the condition of the structure. It is based upon a visual examination, and invasive testing could be prescribed, if needed. For the most comprehensive, in-depth analysis of a structure's condition, extensive testing, combined with a visual examination, provides a summary of the problems, their nature, their effect on the structure, and accurate repair quantity projections for rough budgeting purposes and comparison to replacement options depending upon analysis results both financial and structural. Asset Management Plans may also be prepared to provide maintenance planning and priorities over the short and longer term (five to ten years).

Repair program alternatives are evaluated and prioritized within the condition assessment reports and a restoration program or replacement plan is recommended to meet available funds and operational constraints. The information gathered and evaluated as part of the condition assessment provides you with the necessary budget data and justification to begin immediate repair planning and budgeting or to facilitate a decision to replace the various systems.

Emergency Response



When unexpected disasters occur, you can also count on Walker's rapid Emergency Response to expedite your facility's return to service. Emergency response services require the quick and appropriate application of technical expertise, knowledge, and resources to mitigate additional damage. We customize plans to meet the occurrence's specific requirements to get our clients up and running quickly, cost-effectively, and safely. This strategy strengthens any litigation, insurance, forensic engineering, and restoration support that Walker may provide throughout your project's duration.

Walker's Washington DC office is located in Maryland less than one hour from Parkfairfax Condominium with professional engineers licensed in the Commonwealth of Virginia. Our engineers have firsthand experience responding to local and regional structural emergencies. The DC office most recently responded to a stair collapse at a large-scale residential community in Maryland. Representatives of Walker were on-site within a short time after being notified by our client and we were able to perform emergency evaluation of the collapsed stair structure as well as emergency evaluation of 24 additional similar stair structures throughout the site, within the same day. The evaluation work was complex as it required demolition to access crawl spaces below the stair landings in order to observe the base of the structural stair framing.

In that case the majority of the stair structures required closure, which were the only access/egress to most units. A shoring plan was devised and within 48 hours temporary shoring was installed restoring access to all units until permanent repairs could be implemented. Walker's rapid response and commitment to restoring access quickly during a weekend saved building occupants additional costs for temporary relocation and averted potential additional structural failures at other stairs.

Special Considerations

There may be situations where certain structural repairs may affect HVAC and other mechanical equipment or fire protection systems that may affect outcome of the repair versus replacement cost analysis of a structure. Structural repairs may precipitate code required upgrades of these systems as just one example. Walker Consultants has long-term relationships with MEP Engineers and Fire Protection Engineers that we can rely on to provide us needed consultation, input, investigation and analysis to provide Parkfairfax Condominium with a more detailed and complete picture of the implications of a building repair approach versus replacement, that other firms may not be able to provide.

Walker is also experienced and available to provide additional services as requested such as:

Preparing construction documents and selecting a contractor.

After assessing the structure, we can prepare the construction documents necessary to implement repairs. In addition to the repair program, the documents can include any operational and aesthetic upgrades identified during the condition review. After the preparation of construction documents, we can assist during the bidding process by:

- Providing a list of prequalified bidders and screening other potential bidders
- Attending a pre-bid conference
- Assisting in the review of bids received
- Attending pre-contract award conferences or additional interviews with prospective contractors

Construction Phase Services.

We can provide the following services related to project administration and construction observation for compliance with the construction documents during the construction phase.

Attend pre-construction meeting

- Review shop drawings and material sample submittals
- Evaluate materials test results submitted by Testing Agency
- Review contractor's payment requests and verify completed quantities
- Make periodic site visits to observe work progress. When required, we can provide full-time resident services
- Prepare and issue change orders

- Review or prepare “as-built” drawings
- Make final punch list visits towards project completion
- Resolution of problems or conflicts due to latent conditions or failure of a contractor to perform under contract documents
- Provide overall administration of the contract as your representative to maintain the operation of the facility, required occupancy, pedestrian and vehicular traffic control, and noise/dust control during the restoration of the facility



04 References

References

Walker has been serving the Mid-Atlantic Region since 1982, having extensive experience in consulting, design, and restoration services for local municipalities.

Walker provided restoration and consulting services for the following clients:



Photo credit: coldwellbankerhomes.com

Farrington Place Condominium Farrington, Virginia (Ongoing)

Performed a condition assessment for the six buildings that make up the subject property regarding reported differential movement at the exterior brick façade and interior finishes. Joe is currently developing the recommended repairs for the foundations at one of the buildings at the property based on the findings from the condition assessment.

National Reality Partners, LLC
Dalia Martinez, CMCA, AMS
Portfolio Manager
365 Herndon Parkway, Suite 106
Herndon, VA 20170
703.435.3800 | DMartinez@NRPartnersLLC.com



Photo credit: lcchoa.com/longmeadcrossing

Longmead Crossing Condominium Silver Spring, MD (2019)

Performed emergency services to investigate the condition of the ground level steel framing staircases at 25 buildings due to a partial collapse at one of the staircases. As part of the emergency services, developed the design of the temporary shoring for the staircases and repair/replacement construction documents. Construction phase services were also provided.

Summit Management Services, AAMC
Rosa Gonzales, Community Association Manager
3833 Farragut Avenue, Kensington, MD 20895
301.576.8372 | rosa.gonzales@summitmanage.com



Photo credit: thegablesontuckerman.eunify.net

Gables on Tuckerman North Bethesda, MD (Ongoing)

Evaluation of steel and wood framed staircases, metal plate wood trusses for floor framing, and wood framed balconies and decks. Preparation of repair/replacement construction documents for components listed and provided construction phase services.

The Gables on Tuckerman
Michael Steward, CMCA, AMS, General Manager
10801 Hampton Mill Terrace, North Bethesda, MD 20852
301.770.1357



WALKER
CONSULTANTS