



1815 Purdy Avenue, Miami Beach, FL 33139
(305) 250-2936 | www.criterion-cromer.com

February 15, 2024

Garden Point, Inc.
c/o Jarrod Blum, JSB Property Management
700 Pine Drive, Pompano Beach, FL 33060

Reference: Garden Point, Proposal for Reserve Study

Dear Board of Directors,

Thank you for reaching out to us. We are pleased to submit this proposal to complete a Structural Integrity Reserve Study (SIRS) and/or Full Reserve Study for the Garden Point condominium community. This proposal contains two options: the first option is for a Structural Integrity Reserve Study (SIRS) and the second option is for a SIRS plus a Full Reserve Study.

Should you choose to work with us, please sign the included Client Authorization, select which option you are proceeding with, and remit the initial payment. Once the signed authorization and initial payment are received, we will reach out to you with next steps including scheduling the visual inspection and obtaining required documentation.

We appreciate this opportunity to assist in supporting Garden Point's facility and financial planning and look forward to working together. If you have any questions, please feel free to contact our office at 305-250-2936, where we can schedule a Zoom conference to review together, or feel free to contact me directly.

Thank you.

A handwritten signature in black ink that reads "Casey Cromer".

Casey Cromer, P.E.
President
Criterium-Cromer Engineers
Cell: 305-989-8428
casey@criterion-cromer.com

PROPOSAL FOR
STRUCTURAL INTEGRITY RESERVE STUDY AND
FULL RESERVE STUDY

GARDEN POINT

POMPANO BEACH, FL



Prepared for:

Garden Point, Inc.

c/o JSB Property Management

Prepared by:



1815 Purdy Avenue, Miami Beach, FL 33139
(305) 250-2936 | www.criterion-cromer.com

February 15, 2024

1.0 INTRODUCTION

We are pleased to provide this proposal for a Reserve Study for Garden Point, Inc. (the "Association") located in Pompano Beach, Florida. This proposal will provide you with our understanding of your project needs, a clear understanding of how we would complete this evaluation, what you can expect to receive, and why we are most qualified to provide these services.

The purpose of a reserve study is to fulfill the responsibility that the Association has to its residents to maintain an ongoing understanding of the condition and maintenance requirements of the property. This study will serve as a working tool well into the future. This proposal has been prepared based on preliminary information supplied to, or researched by, Criterium-Cromer Engineers.

This proposal includes two options of services:

- Option A: Structural Integrity Reserve Study (SIRS)
- Option B: SIRS and Full Reserve Study

Working with Criterium-Cromer Engineers ensures that a **Professional Engineer (P.E.)** will inspect your property and deliver a signed and sealed report. Additionally, you will receive the expertise of a local engineering firm, with its office in South Florida, backed by a national engineering company with more than 40 years of experience serving Associations.

2.0 PROPERTY DESCRIPTION

Garden Point, Inc. is primarily located at 700 Pine Drive, Pompano Beach, FL 33060. The property contains a three-story residential building, constructed in phases from approximately 1966, which contains a total of 30 residential units.

The Association is responsible for the infrastructure, building exteriors, roofing, exterior waterproofing, balconies, railings, common area stairs, common corridors, elevators, parking areas, 3 pools, 3 pool decks, clubhouse, interior amenities, tennis courts, seawalls, docks, entrance guardhouse, gates, site improvements, and common mechanical, electrical, plumbing, and fire protection systems.

3.0 SCOPE OF SERVICES

The purpose of a reserve study is to determine a reserve needs plan for the Association, to evaluate the current rate of contribution to the reserve fund, and, if required, to suggest alternate funding strategies. Our report will be able to be used as a tool by the Association for considering and managing its future financial obligations, for determining appropriate reserve allocations, and for informing the individual owners of the Association's required reserve expenditures and the resulting financial plan.

The process for conducting a reserve study contains four phases:

1. Inspect: On-site visual inspection performed by a Professional Engineer (P.E.)
2. Review: Document collection and review
3. Analyze: Reserve Fund analysis and report drafted
4. Deliver: Comprehensive report delivered and presented to the Association

3.1 INSPECT

Criterium-Cromer Engineers will inspect and review the condition of the property. This visual inspection will be performed by a **Professional Engineer (P.E.)**. This will give us an opportunity to confirm an inventory of the existing major common and limited common components, evaluate their current condition and estimate the Remaining Useful Life (RUL) of each major component. This step allows us to understand the specific property and your Association thoroughly.

We will require access to all Association common areas within the study area. The visual inspection typically occurs in a single day; however, follow-up visits may be required due to new information, access limitations, scheduling constraints, etc. Depending on the established study area and projected Component List, we may need limited access to a select number of individual units.

3.2 REVIEW

Criterium-Cromer Engineers will evaluate the property specifics which will require the review of various Association documents. We typically request information such as:

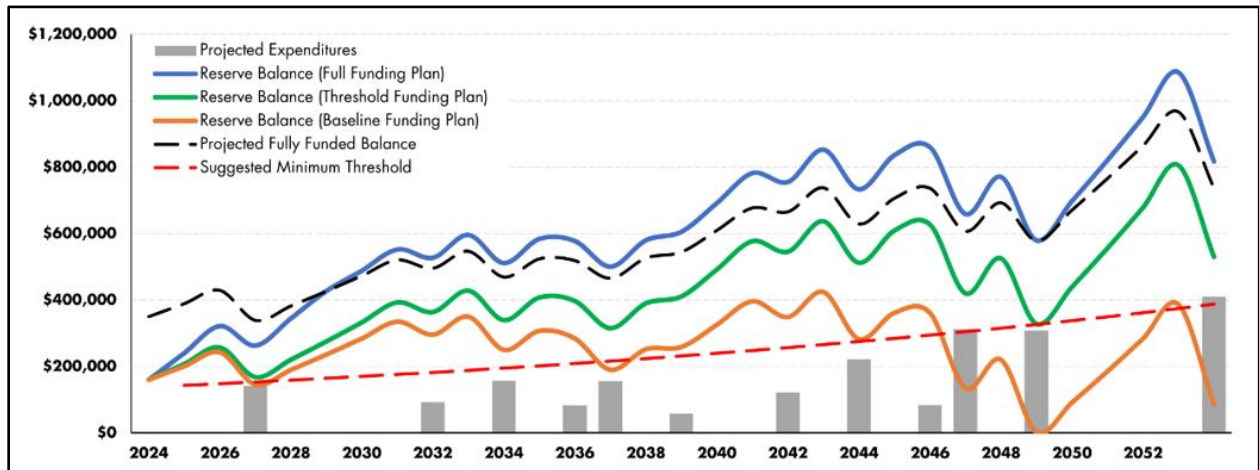
- Current reserve balance and contribution rate
- Association governing documents
- Construction drawings or building floor plans, if available
- Reports and information related to recent and/or major building repairs
- Previous known costs of major building components repair/replacement projects
- A list of active maintenance service contracts for roofs, elevators, fire safety systems, etc.

During the review, we will work with the Association's designated representatives to confirm the specifics of what will be included in the Component Inventory. Consistent with national industry standards, an expense must meet the following criteria in order to qualify as a reserve expense:

- Be the responsibility of the Association
- Contain a limited expected useful life
- Contain a predictable remaining useful life
- Be above a minimum threshold cost

3.3 ANALYZE

Criterium-Cromer Engineers will review the documents received and the inspection findings to finalize the Component List. We will estimate the remaining useful life and the replacement cost or deferred maintenance expense of every item in the Component List, and provide recommended funding plans that account for the projected expenditures of each component over the course of the study period.



Sample Funding Comparison depicting expected expenditures and various funding plans

Non-annual maintenance/repair costs will be developed based on our experience and/or industry guides. Our recommended funding plans will take into consideration a reasonable return on invested accounts and an expected rate of inflation. We will present various alternatives for the reserve fund, typically based on a one-time increase to the annual fund contribution rate or incremental increases to the annual fund contribution rate, and, on occasion, may include periodic special assessments. The final decision for funding the reserves will, of course, be determined by the Association.

3.4 DELIVER

Criterium-Cromer Engineers will deliver a final, comprehensive report in electronic format. This report will be signed and sealed by a **Professional Engineer (P.E.)** and will include a narrative describing our activities and summary of our findings. We will also include a variety of tables and figures identifying common components with details, estimated replacement costs, estimated useful life, remaining useful life, projected annual expenditures, current funding plan, and alternative funding plans.

This report is intended to be easy to understand in order for the Association to make a well-informed decision on its future funding strategy. Additional sample report excerpts are included in the attachments. After finalizing our report, we will be available to meet (virtual) with the Association Board and/or property management representatives to review our findings and recommendations.

Option A: Structural Integrity Reserve Study (SIRS)

As defined in Florida Statutes section 718.112(2)(g)1, related to a Structural Integrity Reserve Study, we will provide a reserve study encompassing “each building on the condominium property that is three stories or higher in height”, which will include the components within the SIRS Study Area and SIRS Item List “as related to the structural integrity and safety of the building”.

SIRS Study Area

The SIRS Study Area is limited to buildings three stories or higher and will therefore exclude Association items not directly within (or affecting) the building such as site improvements, pavement, roadways, sidewalks, detached pool decks, landscaping, detached structures, etc.

SIRS Item List

The SIRS Item List is consistent with the Florida Statutes section 718.112(2)(g)1 (a. through h.) which includes: the roof, structure, fireproofing and fire protection systems, plumbing, electrical systems, waterproofing and exterior painting, windows and exterior doors, and any other item that has a deferred maintenance expense or replacement cost that exceeds \$10,000 and the failure to replace or maintain such item negatively affects the items listed above. Please note that The SIRS Item List is not inclusive of all Association items within the building and will exclude Association items such as interior amenities, mechanical systems, elevators, and other similar items not related to the structural integrity and safety of the building.

It is important to note that a Structural Integrity Reserve Study is not the equivalent of a building recertification or other Milestone Inspection and will not meet the need of a building recertification and/or Milestone Inspection that may be required in the future.

Option B: SIRS and Full Reserve Study

In addition to the Structural Integrity Reserve Study (SIRS) described in Option A, Option B will also include a more comprehensive study that is consistent with the CAI-defined Full Reserve Study. This Full Reserve Study will review all Association components and site assets including site improvements, pavement, roadways, sidewalks, detached pool decks, landscaping, detached structures,, interior amenities, mechanical systems, elevators, and other similar items not related to the structural integrity and safety of the building.

In an effort to give the Association ample flexibility, The SIRS analysis and Full Reserve Study analysis will be presented separately, giving the Association the sufficient information to proceed with their financial planning in a manner of their choosing.



Overview of the Association depicting the study areas of the SIRS (outlined in red) and Full Reserve Study (outlined in yellow)

4.0 ABOUT CRITERIUM ENGINEERS

Criterion-Cromer Engineers is a local engineering firm, with its office in South Florida, backed by a national engineering company with more than 40 years of experience serving Associations. We are committed to helping building owners, real estate investors, contractors, condominiums, and homeowner associations understand the buildings they own, build, manage, or purchase. We know buildings of all types: high-rise condominiums, townhomes, single-family homes, commercial facilities, etc.

This office is affiliated with Criterion Engineers: a network of approximately 35 offices throughout North America. With over 75 licensed Professional Engineers in the organization, we have extensive resources to draw upon when specialized input is required.

Criterion Engineers specializes in working with existing buildings and building owners, from problem solving to maintenance planning. We have been evaluating buildings since 1957. Projects range in scope from pre-purchase single-family home inspections to forensic and building performance analysis for hotels, apartments, and office buildings. We provide Capital Needs Assessments, Property Condition Assessments, Reserve and Transition Studies, Cost Segregation Studies, Structural Evaluations, and other engineering consulting services for clients throughout the country. We have examined more than 850,000 buildings throughout North America in the last sixty years.

To summarize, Criterium Engineers offers:

- Experience with thousands of communities in the United States and Canada.
- Senior staff member involvement throughout the project.
- A commitment to collaboration with you, as our client.
- An analysis and report you can understand.
- An unequaled body of knowledge from examining more than 850,000 buildings.

5.0 PROJECT TEAM

This project team will be led by:

Senior Engineer – Casey Cromer, P.E. is a Professional Engineer and a native of South Florida. Throughout Florida, he has vast forensic engineering and construction experience and has consulted on projects varying from single-family residences, high-rise condominiums, and construction collapses. His primary focus has been the building envelope including stucco, fenestrations, roofing, waterproofing, concrete protection, and more. His practice areas include forensic investigations, expert witness services, litigation support, fenestrations, waterproofing, claddings, roofing, property condition assessments, post-tension cable inspections, aerial drone surveys, and more.

Project Advisor – H. Alan Mooney, P.E., RS, is the Founding President of Criterium Engineers. Alan will serve as an engineering advisor with genuine interest and experience relating to condominium associations. Alan has extensive experience with CAI and is both a certified Reserve Specialist (RS) and a licensed Professional Engineer (P.E.) in Florida, North Carolina, New York and several other states. He has been a keynote presenter at CAI Leadership Forums, many industry conferences and client seminars.

Qualifications for the project team are included in the attachments. As needed, other members of the Criterium team will be assigned to this project.

6.0 FEES

The lump sum fee for a **Reserve Study** for this project is:

Option A: Structural Integrity Reserve Study (SIRS): **\$3,950**

Option B: SIRS and Full Reserve Study: **\$5,350**

An initial payment of **50%** is due at the time of authorization to proceed. The balance will be billed with delivery of our initial report. Our Standard Terms and Conditions, which are the basis for this agreement, are attached. At the request and with the approval of the Client, additional tasks and/or services can be performed, and will be billed at our current hourly rates.

Please sign the attached Client Authorization form. When we receive your authorization, along with the initial payment, we will begin work. This proposal is valid for 90 days after submission.

7.0 SCHEDULE

Criterium-Cromer Engineers will begin scheduling site inspection activities after receiving the signed Client Authorization, initial payment, and other required necessary documentation. Once we inspect the property and receive all pertinent information, we expect to deliver the initial report within approximately 6 weeks.

8.0 CONCLUSION

Criterium-Cromer Engineers looks forward to working with you on this and future assignments. Please feel free to contact us if you have any questions. If this proposal is acceptable as is, simply execute the attached authorization and return it along with your initial payment. Thank you for the opportunity to be of service.

Respectfully submitted,



Casey Cromer, P.E.

President

Criterium-Cromer Engineers

Cell: 305-989-8428

casey@criterium-cromer.com

Attachments:

- Client Authorization
- Standard Terms and Conditions
- Project Team Qualifications
- Sample Report Excerpts

CLIENT AUTHORIZATION

Date: **February 15, 2024**

Client: **Garden Point, Inc.**

Project Title: **Reserve Study**

Total Fees: **(✓ one to authorize)**

☐ Option A: Structural Integrity Reserve Study (SIRS): **\$3,950**

☐ Option B: SIRS and Full Reserve Study: **\$5,350**

An initial payment of **50%** is due along with this signed Client Authorization to proceed with the scope of services.

I hereby authorize Cromer Group, P.A., d/b/a Criterium-Cromer Engineers to undertake the engineering services as described in the accompanying proposal letter dated **February 15, 2024** and guarantee payment of all fees and expenses when invoiced, less any credits due by prepayments or retainers. I further agree to make payment(s) for the services rendered in accordance with the enclosed Standard Terms and Conditions of Criterium-Cromer Engineers dated June 15, 2023. I have read and understand the description of services to be provided, any noted limits on those services and the Standard Terms and Conditions.

Date

Authorized Signature (one signature binds all parties)

Printed Name

For (Company / Association)

Please return a copy of this Client Authorization to:
Criterium-Cromer Engineers, **1815 Purdy Avenue, Miami Beach, FL 33139**
or scan and send to **admin@criterium-cromer.com**

Please make checks payable to **Criterium-Cromer Engineers**.

An electronic payment link is available at the top of our website, www.criterium-cromer.com

STANDARD TERMS AND CONDITIONS
CRITERIUM-CROMER ENGINEERS
EFFECTIVE JUNE 15, 2023

Section 1: Standard of Service

Criterion-Cromer Engineers (Criterion) is dedicated to providing its clients with quality service. Services performed by Criterion under this agreement will be conducted in a manner consistent with that level of care and skill that is ordinarily exercised by members of the profession currently practicing under similar conditions at the time the services are performed. No other warranty, express or implied, is made. Client recognizes that interpretations and recommendations of Criterion are based solely on the information available to the company. Criterion will be responsible for those data, interpretations and recommendations, but shall not be responsible for the interpretation by others of the information developed.

PURSUANT TO SECTION 558.0035, F.S., AN INDIVIDUAL EMPLOYEE OR AGENT OF CRITERIUM MAY NOT BE HELD INDIVIDUALLY LIABLE FOR NEGLIGENCE ARISING OUT OR RELATED TO THIS AGREEMENT AND THE SERVICES PROVIDED.

Section 2: Charges

Services are generally provided on a lump sum or an hourly basis plus necessary out-of-pocket costs. Current hourly rates are as follows:

Senior Engineer.....	\$210.00/hr.
Project Engineer / Field Technician	\$185.00/hr.
Project Administrator.....	\$100.00/hr.
Legal Services (Deposition, Testimony, Etc.)	Hourly Rate x2.

Where appropriate, company and personal vehicles used in conjunction with project work will be charged at the current IRS rate or other stated rate per mile. Vehicle rental or special vehicle requirements will be charged directly to the client. Out-of-pocket costs such as printing, word processing, reproduction, special consultant fees, permits, special equipment, extraordinary insurance, fares, telephone, overnight lodging or meals expense, and other similar project-related costs are billed at cost plus 15 percent. In the event that Criterion shall be charged more than a nominal fee to obtain public information or documents of record from government offices and public agencies Criterion may pass those costs along to you, our client, at cost plus 15 percent in addition to all other fees in our proposal.

Section 3: Terms of Payment, Invoice Submittals

Criterion requires an initial payment or retainer fee to be paid before commencing any project. Extended engagements may require interim invoicing on a weekly, monthly, or other basis. At the completion of the project, we will issue a final invoice.

Payment of each invoice is due upon presentation of our report unless credit terms have been established and are included in our project agreement. Unless otherwise agreed to in writing, invoices issued to clients with established credit will be due within 30 days from date of invoice. Failure to pay invoices within the allotted time period will constitute a breach of contract and may result in suspension of work until such time as all overdue payments are made in full. Should any suspension occur because of overdue payments, the time for contract completion, if any is stated, shall be extended by the period of the suspension.

STANDARD TERMS AND CONDITIONS
CRITERIUM-CROMER ENGINEERS
EFFECTIVE JUNE 15, 2023

All outstanding invoiced balances remaining unpaid for thirty (30) days after date of invoice will be charged a finance charge in the amount of 1 ½ percent per month from the date of invoice, with the annual percentage rate being 18 percent, computed on a monthly basis. In the event that any invoice remains unpaid and it becomes necessary, in the opinion of Criterium, to initiate collection procedures, the client hereby agrees to pay all collection costs including, but not limited to, reasonable fees for attorneys retained by Criterium and court costs at our standard billing rate for time necessitated in court appearances or presentation of claim to the appropriate court jurisdiction. Exceptions to the foregoing "Terms of Payment, Invoice Submittal" must be specified in writing as part of our confirmation letter or project agreement.

Section 4: Insurance

Criterium represents and warrants that it is protected by Workers Compensation insurance and has such coverage under Public Liability and Property Damage insurance policies which Criterium deems adequate. Certificates for all such policies of insurance shall be provided to the Client upon request in writing. Criterium shall not be responsible for any loss, damage or liability arising from any acts by Client, its agents, staff and other consultants.

Section 5: Limitation of Liability

5.a. To the fullest extent permitted by law, neither Criterium, its consultants, nor their agents or employees shall be jointly, severally, or individually liable to client in excess of the compensation to be paid pursuant to this agreement or of Twenty-Five Thousand Dollars (\$25,000.00), whichever is greater, by reason of any claim, loss, costs, or damages whatsoever arising out of, resulting from or in any way related to this Project or Contract, including but not limited to breach of contract or negligence.

5.b. Criterium is not responsible for site conditions or the contractor's performance of the work, including supervision and safety measures.

5.c. Mutual Waiver of Consequential Damages: In no event shall Criterium or client be liable to each other for any indirect or consequential damages arising out of or relating to this Contract.

Section 6: Indemnification

Criterium agrees to defend (subject to the provisions herein), indemnify, and hold harmless Client from and against any claims, liabilities, actions, demands, losses, damages, costs and expenses sustained by any person or entity to the extent caused by Criterium's negligent acts, errors or omissions in connection with the services performed hereunder. Except however, and notwithstanding any other terms in or applicable to this agreement, in regards to claims, liabilities, actions, demands, losses, damages, costs and expenses caused by the negligent acts, errors or omissions of Criterium during the performance of professional services, it is expressly agreed that Criterium's duty to defend Client shall be limited to reimbursing Client's reasonable costs, attorney fees and expenses incurred in its own defense to the extent of the claim caused by Criterium.

Client agrees to defend, indemnify, and hold harmless Criterium from and against any claims, liabilities, actions, demands, losses, damages, costs and expenses arising out of or resulting from the use, reuse or modification of the information for any project other than the named project or any third-party not granted reliance on Criteriums' reports and services.

Section 7: Ownership of Documents

All reports, field data, field notes, calculations, estimates and other documents prepared by Criterium, as instruments of service, shall remain the property of Criterium. Our ownership includes all associated copyrights and the right of reuse, regardless of whether or not the Project is completed. Criterium shall, upon receipt of full payment for services

STANDARD TERMS AND CONDITIONS
CRITERIUM-CROMER ENGINEERS
EFFECTIVE JUNE 15, 2023

rendered, grant Client a limited, exclusive, revocable license to use the reports and other deliverables for the project specified (only). Any use other than on the named project is strictly prohibited. Any reuse or modification of the documents, without written verification, completion, or adaptation by Criterium, as appropriate for the specific purpose, will be at Client's sole risk and without liability or legal exposure to Criterium. Client agrees that all reports furnished to Client or his agents, which are not paid for, will be returned upon demand and will not thereafter be used by Client for any purpose whatever. Client shall defend, indemnify, and hold harmless Criterium from any and all claims arising from Client's reuse, modification, or disclosure of the instruments of service or other work product produced hereunder to any third parties.

Criterium will retain all pertinent records relating to the services performed for a period of five years following submission of the report, during which period the records will be made available to Client at all reasonable times.

Section 8: Copies of Document

Subject to the terms in the preceding section, Criterium agrees to furnish client with an electronic copy of our report, drawings, or documents relating to the services performed. Hard copies, bound or unbound, may be provided upon request at a charge of cost plus 15 percent. Criterium shall retain an electronic copy of the final report in its files for a period of five years.

Section 9: Client Responsibilities

Client agrees to provide all requested and relevant information in a timely manner. Failure to provide information within the agreed upon timeframe may delay the completion of the services within the agreed upon timeframe. It is not the responsibility of Criterium to verify the accuracy or relevance of the information supplied. Criterium is relying on the accuracy, completeness and appropriateness of client-provided information.

Criterium is performing the Services so that Client may utilize the information and recommendations contained in the reports, produced as instruments of service, which are not intended to be comprehensive, to effect prudent and timely decisions necessary for, among other things, the purchase, refinance, budgeting, planning, care, operation and maintenance of the property, as well as the safety of the occupants and other users.

Unless clearly defined in the project's scope, it is understood and agreed that Criterium shall not be responsible for implementing the recommendations as part of its Services. Criterium shall not be responsible or liable for Client's determination to implement or not implement Criterium's recommendations, or for the services performed by any consultant(s) and/or contractor(s) whom Client may select to implement such recommendations. Further, it is understood that Criterium is not responsible or liable, and Client shall hold Criterium harmless, for any effects or hazardous conditions on the property, including the services or work performed by the consultant(s) and/or contractor(s) in the design and construction of the property.

Section 10: Images

Client hereby acknowledges and agrees that Criterium and/or its agents may create or obtain images, photographs, and/or video and/or audio recordings of the Property during the Project, including inspection of the Property (collectively, "Images"). Client agrees that Criterium may use such Images for Criterium purposes, including but not limited to education, internal training, scholarship, research, marketing, advertisement, and promoting Criterium's website, products, services, or ideas.

STANDARD TERMS AND CONDITIONS
CRITERIUM-CROMER ENGINEERS
EFFECTIVE JUNE 15, 2023

Section 11: Force Majeure

The engineer shall not be responsible or liable for any failure or delay in the performance of its obligations under this contract arising out of or resulting from any cause or event beyond our control, such as war, strike, crime, epidemic/pandemic, regulations and/or restriction imposed by any government agency, or other event.

Section 12: Termination and Assigns

This agreement to perform engineering services may be terminated by either party by written notice. In the event of termination, Criterium shall be paid for services performed and expenses incurred up to the termination notice date, plus any expenses or penalties resulting from the termination. Neither the Client nor Criterium may delegate, assign, sublet or transfer his duties or interest in this agreement without the written consent of the other party.

Section 13: Disputes

If, in your opinion as our client, or that of any third party granted reliance on Criteriums' reports or services, Criterium was negligent or in breach of contract, to the fullest extent permitted by law, any action arising out of or related to the services provided must be brought to our attention no later than one (1) year after our field visit. In the event this limiting period is not enforceable under the applicable jurisdiction, then the period shall be revised to reflect the shortest duration legally enforceable or, if no limiting period is enforceable, then this provision shall be stricken without voiding the remaining provisions of the Agreement.

Any controversy or claim arising out of or relating to this agreement, or the breach thereof, shall be settled by arbitration in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association, and judgment upon the award rendered by the arbitrator(s) may be entered in any court having jurisdiction thereof.

In addition to and prior to arbitration, the parties agree to negotiate all disputes in good faith for a period of thirty (30) days from the date of bringing the concerns to our attention. If such negotiations do not resolve the concerns, the parties shall further endeavor to settle disputes by mediation in accordance with the Construction Industry Mediation Rules of the American Arbitration Association currently in effect unless the parties mutually agree otherwise. Demand for mediation shall be filed in writing with the other party to this Agreement and with the American Arbitration Association.

In no event shall the demand for mediation be made after the date when institution or legal or equitable proceedings based on such claim, dispute or other matter in question would be barred by the applicable statute of limitations.

If the Client brings an action against Criterium and Criterium prevails, Criterium shall be entitled to recover costs and expenses, including reasonable attorneys' fees and costs.



BUILDING INSPECTION ENGINEERS
PROUDLY SERVING NORTH AMERICA SINCE 1957

Casey Cromer, P.E.
President / Senior Engineer



Casey Cromer is a Professional Engineer and a native of Miami, Florida. Within the Greater Miami area, he has 10 years of forensic engineering and construction experience and has consulted on projects varying from single-family residences, to high-rise condominiums, to construction collapses. His primary focus has been the building envelope including stucco, fenestrations, roofing, waterproofing, concrete protection, and more.

His practice areas include forensic investigations, expert witness services, litigation support, fenestrations, waterproofing, claddings, roofing, property condition assessments, post-tension cable inspections, aerial drone surveys, and more.

EDUCATION, PROFESSIONAL LICENSES, AND AFFILIATIONS

The University of Central Florida (UCF) – Orlando, Florida

Bachelor of Science, Civil Engineering

Licensed Professional Engineer

State of Florida, No. 87329

ASTM Committee C11 (Gypsum and Related Building Materials and Systems), Voting Member

Stucco Institute – Sealed Stucco System Technician

FAA Certified Remote Pilot (Drone)

WHY I DO WHAT I DO

"I have always been fascinated by buildings and have a knack for problem solving – so what better way to put those two together than engineering! Being able to consult and work on buildings of all sizes has kept my days interesting and the knowledge gained throughout each project has been invaluable."

PROJECT HIGHLIGHTS

Building Envelope Investigations

- Acqualina Resort & Residences (52-story, five-star hotel and residence) – Entire façade (stucco and EIFS) via swing stage and drone for structural integrity of wall claddings, including recommendations and repairs.
- Akoya Condominium (47-story luxury condo) – Entire façade (stucco) via swing stage for structural wall repairs during stucco remediation. Daily inspections to sign off on structural repairs.
- 800 Waterford (250,000 sq. ft. Class-A office) – Entire façade (precast panels and curtainwalls) via swing stage for water tightness including water testing of repaired areas.

Construction Defect Projects

- Represented developers, general contractors, subcontractors, associations, and/or owners.
- Acqualina Mansions, Aria (Longboat Key, FL), Aria on the Bay, Asia Brickell Key, Axis Brickell, Chateau Beach, CitySide (Sarasota, FL), Continuum South Beach, Crimson Condo, Eloquence on the Bay, Fendi Chateau, Jade Ocean, Grove at Grand Bay, Iconbay Condo, Mint Condo, Nine at Mary Brickell, Nordica Condo, Ocean 7, Peninsula Aventura, Toscano at Dadeland, Vista Del Mar (Myrtle Beach, SC), Vizcayne, W South Beach, 1100 Millecento, 321 Ocean, 900 Biscayne...

Structural Collapse Investigations

- Champlain Towers (Surfside, FL) – Investigated and lead team of subject experts for in-service condominium collapse.
- Miami-Dade College Parking Garage – construction collapse investigation to determine collapse origin, original design requirements, and repair feasibility.
- Key West International Airport – Litigation support for a construction collapse.

Property Loss Investigations

- Cause and origin investigations on hundreds of residential and commercial buildings.
- Determine structural and material failures as related to construction defects, storm damage, water intrusion, normal wear and tear, etc.



BUILDING INSPECTION ENGINEERS
PROUDLY SERVING NORTH AMERICA SINCE 1957

H. Alan Mooney, P.E. *Founding President*



Alan Mooney is a civil and structural engineer with over 40 years of experience as a consulting engineer. From 1988 until 2018 he was President and principal owner of Criterium Engineers, a national consulting engineering firm with affiliate offices throughout North America.

His experience includes:

- complex multi-million-dollar engineering and construction projects
- forensic engineering
- construction quality assurance services
- numerous building envelope quality assurance and commissioning projects
- thousands of residential and commercial building inspections

In addition to his own projects, he continues to serve as an advisor/consultant for inspections, structural evaluations, investigative engineering, structural design and trainer for the Criterium Engineers staff.

As a structural engineer, he has designed a variety of structures in wood, concrete and steel. These structures include bridges, multi-story buildings, parking garages and marine facilities.

Mr. Mooney has also established an impressive track record as a noted seminar leader and author, both locally and nationally, on construction-related issues, construction quality, and building inspection procedures and standards.

EDUCATION AND PROFESSIONAL AFFILIATION

Rutgers University, New Brunswick, NJ – 1969
Bachelors of Science, Civil Engineering

Licensed Professional Engineer in ME, NH, VT, MA, CT, NY, NC, NJ, AZ, NV, FL, KS, WA
CAI Reserve Specialist (RS)
Licensed Reserve Study Specialist in NV

CAI (Community Associations Institute)
ASCE (American Society of Civil Engineers)
The Order of the Engineer

WHY I DO WHAT I DO

"Building technology is always changing; keeping up is an exciting challenge. Diagnosing problems means using good judgment and capitalizing on years of experience. It's even more challenging and exciting because every client's needs are different. What we do represents the essence of being a professional engineer."

WHY CRITERIUM ENGINEERS

"I founded Criterium Engineers to allow other engineers to discover their full potential as professionals."

SELECT PROJECT HIGHLIGHTS

- **Silo Point, Baltimore, Maryland** – provided transition study and follow-up consulting for a unique, high-end condominium complex involving the conversion of an abandoned grain handling complex.
- **Sun City Anthem, Las Vegas, Nevada** – provided comprehensive reserve fund study for a large (10,000 residents), high end home owner association in Las Vegas.
- **San Diego Airport Expansion** – envelope commissioning
- **Phoenix Sky Harbor Airport** – envelope quality assurance
- **IKEA** – facilities review of all locations in the U.S.
- **Wimar-Tahoe** – provided expert testimony for building performance in a \$100 million dispute involving a Lake Tahoe casino complex.
- **American Residential Properties** – provided property evaluation reports for a national client purchasing thousands of homes as rental properties across the country

EXPERIENCE HIGHLIGHTS

- 30 years' experience as a construction quality consultant including collaboration with several major builders to develop effective quality assurance programs.
- 30 years' experience as a construction expert in construction disputes, including serving as an expert witness on numerous occasions.
- Has performed more than 15,000 building inspections personally
- Criterium Engineers now performs over 20,000 building inspections annually to standards Mr. Mooney developed and refines on an ongoing basis
- Founding president of the National Academy of Building Inspection Engineers (NABIE), 1989-1993.
- Co-author of the NABIE Standards of Practice for Home Inspections
- Author of the National Association of Home Builders (NAHB) Quality Construction for the Master Builder
- 30 years experience as a seminar leader; presented seminars to builders, appraisers, real estate agents in more than 30 states
- National and regional speaker for CAI conferences
- Chosen Speaker of the Year by the Dallas, TX chapter of the Community Associations Institute (CAI), 2001

STRUCTURAL INTEGRITY RESERVE STUDY

SAMPLE REPORT EXCERPTS

COMPONENT METHOD

STRUCTURAL INTEGRITY RESERVE STUDY

#	Component Description	Estimated Quantity	Current Cost		UL	RUL	Annual Deterioration	Fully Funded Balance
			Unit	Total				
Building Structure and Envelope								
101	Roofing and appurtenances	Sample Report (no data)	\$	62,000	20	2	\$ 3,100	\$ 55,800
102	Exterior painting, waterproofing, and minor repairs		\$	115,000	10	9	\$ 11,500	\$ 11,500
103	Planter waterproofing, roof level		\$	22,400	25	24	\$ 896	\$ 896
104	Planter waterproofing, corridors, north		\$	12,600	30	12	\$ 420	\$ 7,560
105	Planter waterproofing, ground level		\$	44,500	30	12	\$ 1,483	\$ 26,700
106	Exterior metal doors, stairs/mechanical rooms		\$	26,400	40	22	\$ 660	\$ 11,880
107	Parking garage, waterproofing exposed level		\$	47,250	20	2	\$ 2,363	\$ 42,525
108	Pool deck, waterproofing and tile		\$	112,500	25	24	\$ 4,500	\$ 4,500
109	Exterior windows and doors, lobby		\$	13,500	35	17	\$ 386	\$ 6,943
110	Exterior windows and doors, corridors		\$	39,500	35	17	\$ 1,129	\$ 20,314
111	Structural repairs, recertification		\$	46,500	20	11	\$ 2,325	\$ 20,925
Building Structure and Envelope Subtotal (11 Line Items)							\$ 28,761	\$ 209,543
Electrical Systems								
201	Unit distribution/meter panel, 800 amps, 10-20 meters		\$	28,500	40	21	\$ 713	\$ 13,538
202	Electrical subpanel, 250-400 amps		\$	12,000	40	21	\$ 300	\$ 5,700
203	Electrical subpanel, 250-400 amps		\$	3,000	40	36	\$ 75	\$ 300
204	Electrical disconnects, 125-400 amps		\$	10,000	30	11	\$ 333	\$ 6,333
Electrical Systems Subtotal (4 Line Items)							\$ 1,421	\$ 25,871
Plumbing								
301	Domestic water, duplex booster pump system		\$	36,000	15	14	\$ 2,400	\$ 2,400
302	Pump/lift station		\$	20,000	50	32	\$ 400	\$ 7,200
303	Domestic water backflow preventer		\$	3,500	40	22	\$ 88	\$ 1,575
Plumbing Subtotal (3 Line Items)							\$ 2,888	\$ 11,175
Fire Protection Systems								
401	Fire pump and controller, 750 GPM		\$	46,000	30	12	\$ 1,533	\$ 27,600
402	Jockey pump and controller		\$	8,200	30	2	\$ 273	\$ 7,653
403	Fire main backflow preventer		\$	7,500	40	22	\$ 188	\$ 3,375
404	Fire alarm panel and components		\$	14,500	15	2	\$ 967	\$ 12,567
405	Fire alarm system components		\$	72,500	25	7	\$ 2,900	\$ 52,200
Fire Protection Systems Subtotal (5 Line Items)							\$ 5,861	\$ 103,395
Total							\$ 38,930	\$ 349,984

Structural Integrity Reserve Study
Sample Project
Page 8



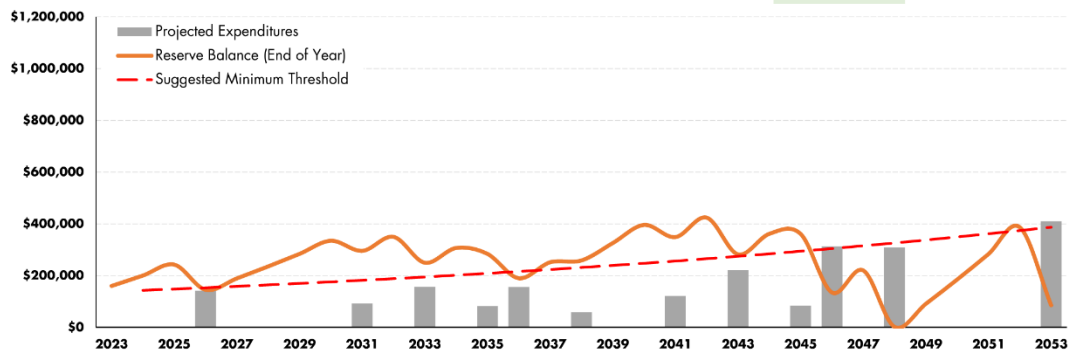
BASELINE FUNDING PLAN

STRUCTURAL INTEGRITY RESERVE STUDY

Year	Reserve Balance (Start of Year)	Investment Returns	Projected Expenditures	Reserve Contributions			Reserve Balance (End of Year)	Suggested Minimum Threshold	Projected Percent Funded
				Association Annual Total	Average Unit Monthly Total	Change from Prior Year			
2023	Year 0			\$ 35,000	\$ 50		\$ 160,000		46%
2024	Year 1	\$ 160,000	\$ 2,400	\$ 37,800	\$ 54	8.0%	\$ 200,200	\$ 142,841	51%
2025	Year 2	\$ 200,200	\$ 3,003	\$ 39,123	\$ 56	3.5%	\$ 242,326	\$ 147,840	56%
2026	Year 3	\$ 242,326	\$ 3,635	\$ 40,492	\$ 58	3.5%	\$ 145,105	\$ 153,014	43%
2027	Year 4	\$ 145,105	\$ 2,177	\$ 41,910	\$ 60	3.5%	\$ 189,191	\$ 158,370	50%
2028	Year 5	\$ 189,191	\$ 2,838	\$ 43,376	\$ 62	3.5%	\$ 235,405	\$ 163,913	55%
2029	Year 6	\$ 235,405	\$ 3,531	\$ 44,895	\$ 65	3.5%	\$ 283,831	\$ 169,650	60%
2030	Year 7	\$ 283,831	\$ 4,257	\$ 46,466	\$ 67	3.5%	\$ 334,554	\$ 175,588	64%
2031	Year 8	\$ 334,554	\$ 5,018	\$ 92,240	\$ 69	3.5%	\$ 295,425	\$ 181,733	60%
2032	Year 9	\$ 295,425	\$ 4,431	\$ 49,775	\$ 72	3.5%	\$ 349,631	\$ 188,094	64%
2033	Year 10	\$ 349,631	\$ 5,244	\$ 156,733	\$ 74	3.5%	\$ 249,660	\$ 194,677	53%
2034	Year 11	\$ 249,660	\$ 3,745	\$ 53,321	\$ 77	3.5%	\$ 306,726	\$ 201,491	59%
2035	Year 12	\$ 306,726	\$ 4,601	\$ 82,488	\$ 79	3.5%	\$ 284,025	\$ 208,543	55%
2036	Year 13	\$ 284,025	\$ 4,260	\$ 155,791	\$ 82	3.5%	\$ 189,613	\$ 215,842	41%
2037	Year 14	\$ 189,613	\$ 2,844	\$ 59,118	\$ 85	3.5%	\$ 251,574	\$ 223,397	48%
2038	Year 15	\$ 251,574	\$ 3,774	\$ 58,273	\$ 88	3.5%	\$ 258,262	\$ 231,215	47%
2039	Year 16	\$ 258,262	\$ 3,874	\$ 63,328	\$ 91	3.5%	\$ 325,464	\$ 239,308	53%
2040	Year 17	\$ 325,464	\$ 4,882	\$ 65,545	\$ 94	3.5%	\$ 395,890	\$ 247,684	58%
2041	Year 18	\$ 395,890	\$ 5,938	\$ 121,141	\$ 97	3.5%	\$ 348,527	\$ 256,353	52%
2042	Year 19	\$ 348,527	\$ 5,228	\$ 70,213	\$ 101	3.5%	\$ 423,968	\$ 265,325	57%
2043	Year 20	\$ 423,968	\$ 6,360	\$ 221,088	\$ 104	3.5%	\$ 281,910	\$ 274,611	45%
2044	Year 21	\$ 281,910	\$ 4,229	\$ 75,214	\$ 108	3.5%	\$ 361,353	\$ 284,223	51%
2045	Year 22	\$ 361,353	\$ 5,420	\$ 83,407	\$ 112	3.5%	\$ 361,213	\$ 294,171	49%
2046	Year 23	\$ 361,213	\$ 5,418	\$ 312,586	\$ 116	3.5%	\$ 134,616	\$ 304,467	22%
2047	Year 24	\$ 134,616	\$ 2,019	\$ 83,391	\$ 120	3.5%	\$ 220,026	\$ 315,123	32%
2048	Year 25	\$ 220,026	\$ 3,300	\$ 308,021	\$ 124	3.5%	\$ 1,616	\$ 326,152	0%
2049	Year 26	\$ 1,616	\$ 24	\$ 89,331	\$ 128	3.5%	\$ 90,970	\$ 337,567	14%
2050	Year 27	\$ 90,970	\$ 1,365	\$ 92,457	\$ 133	3.5%	\$ 184,792	\$ 349,382	24%
2051	Year 28	\$ 184,792	\$ 2,772	\$ 95,693	\$ 137	3.5%	\$ 283,257	\$ 361,611	33%
2052	Year 29	\$ 283,257	\$ 4,249	\$ 99,042	\$ 142	3.5%	\$ 386,549	\$ 374,267	40%
2053	Year 30	\$ 386,549	\$ 5,798	\$ 409,494	\$ 102,509	\$ 147	\$ 85,362	\$ 387,366	12%

*Suggested Minimum Threshold = 2 * Average Annual Expenditure (Future Costs)

Below 10% Funded
Below Threshold
Above Threshold



Structural Integrity Reserve Study
Sample Project
Page 9

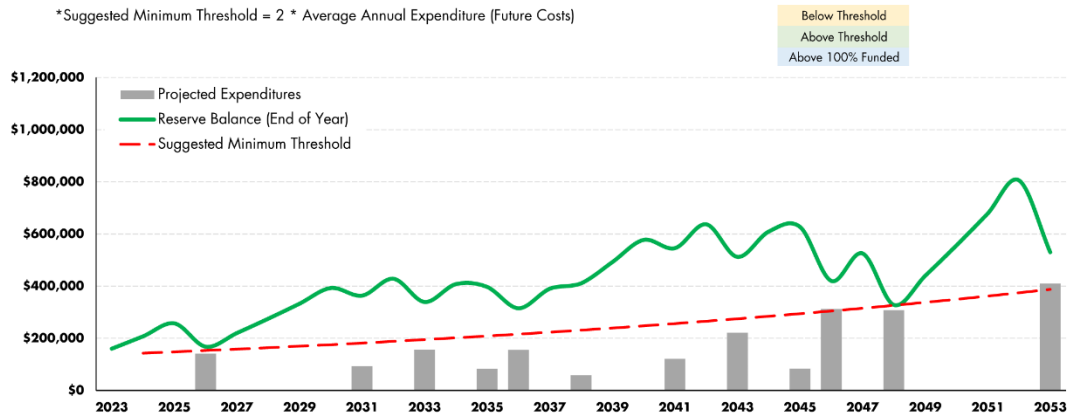


THRESHOLD FUNDING PLAN

STRUCTURAL INTEGRITY RESERVE STUDY

Year		Reserve Balance (Start of Year)	Investment Returns	Projected Expenditures	Reserve Contributions			Reserve Balance (End of Year)	Suggested Minimum Threshold	Projected Percent Funded
					Association Annual Total	Average Unit Monthly Total	Change from Prior Year			
2023	Year 0				\$ 35,000	\$ 50		\$ 160,000		46%
2024	Year 1	\$ 160,000	\$ 2,400	\$ -	\$ 44,950	\$ 65	28.4%	\$ 207,350	\$ 142,841	53%
2025	Year 2	\$ 207,350	\$ 3,110	\$ -	\$ 46,523	\$ 67	3.5%	\$ 256,984	\$ 147,840	60%
2026	Year 3	\$ 256,984	\$ 3,855	\$ 141,348	\$ 48,152	\$ 69	3.5%	\$ 167,642	\$ 153,014	49%
2027	Year 4	\$ 167,642	\$ 2,515	\$ -	\$ 49,837	\$ 72	3.5%	\$ 219,993	\$ 158,370	58%
2028	Year 5	\$ 219,993	\$ 3,300	\$ -	\$ 51,581	\$ 74	3.5%	\$ 274,874	\$ 163,913	64%
2029	Year 6	\$ 274,874	\$ 4,123	\$ -	\$ 53,386	\$ 77	3.5%	\$ 332,384	\$ 169,650	70%
2030	Year 7	\$ 332,384	\$ 4,986	\$ -	\$ 55,255	\$ 79	3.5%	\$ 392,625	\$ 175,588	75%
2031	Year 8	\$ 392,625	\$ 5,889	\$ 92,240	\$ 57,189	\$ 82	3.5%	\$ 363,463	\$ 181,733	73%
2032	Year 9	\$ 363,463	\$ 5,452	\$ -	\$ 59,191	\$ 85	3.5%	\$ 428,105	\$ 188,094	78%
2033	Year 10	\$ 428,105	\$ 6,422	\$ 156,733	\$ 61,262	\$ 88	3.5%	\$ 339,056	\$ 194,677	72%
2034	Year 11	\$ 339,056	\$ 5,086	\$ -	\$ 63,406	\$ 91	3.5%	\$ 407,548	\$ 201,491	78%
2035	Year 12	\$ 407,548	\$ 6,113	\$ 82,488	\$ 65,626	\$ 94	3.5%	\$ 396,799	\$ 208,543	77%
2036	Year 13	\$ 396,799	\$ 5,952	\$ 155,791	\$ 67,923	\$ 98	3.5%	\$ 314,882	\$ 215,842	68%
2037	Year 14	\$ 314,882	\$ 4,723	\$ -	\$ 70,300	\$ 101	3.5%	\$ 389,905	\$ 223,397	74%
2038	Year 15	\$ 389,905	\$ 5,849	\$ 58,273	\$ 72,760	\$ 105	3.5%	\$ 410,241	\$ 231,215	75%
2039	Year 16	\$ 410,241	\$ 6,154	\$ -	\$ 75,307	\$ 108	3.5%	\$ 491,701	\$ 239,308	81%
2040	Year 17	\$ 491,701	\$ 7,376	\$ -	\$ 77,943	\$ 112	3.5%	\$ 577,020	\$ 247,684	85%
2041	Year 18	\$ 577,020	\$ 8,655	\$ 121,141	\$ 80,671	\$ 116	3.5%	\$ 545,205	\$ 256,353	82%
2042	Year 19	\$ 545,205	\$ 8,178	\$ -	\$ 83,494	\$ 120	3.5%	\$ 636,877	\$ 265,325	86%
2043	Year 20	\$ 636,877	\$ 9,553	\$ 221,088	\$ 86,416	\$ 124	3.5%	\$ 511,759	\$ 274,611	81%
2044	Year 21	\$ 511,759	\$ 7,676	\$ -	\$ 89,441	\$ 129	3.5%	\$ 608,877	\$ 284,223	86%
2045	Year 22	\$ 608,877	\$ 9,133	\$ 83,407	\$ 92,571	\$ 133	3.5%	\$ 627,174	\$ 294,171	85%
2046	Year 23	\$ 627,174	\$ 9,408	\$ 312,586	\$ 95,811	\$ 138	3.5%	\$ 419,807	\$ 304,467	69%
2047	Year 24	\$ 419,807	\$ 6,297	\$ -	\$ 99,165	\$ 142	3.5%	\$ 525,269	\$ 315,123	76%
2048	Year 25	\$ 525,269	\$ 7,879	\$ 308,021	\$ 102,636	\$ 147	3.5%	\$ 327,763	\$ 326,152	57%
2049	Year 26	\$ 327,763	\$ 4,916	\$ -	\$ 106,228	\$ 153	3.5%	\$ 438,907	\$ 337,567	65%
2050	Year 27	\$ 438,907	\$ 6,584	\$ -	\$ 109,946	\$ 158	3.5%	\$ 555,436	\$ 349,382	73%
2051	Year 28	\$ 555,436	\$ 8,332	\$ -	\$ 113,794	\$ 163	3.5%	\$ 677,562	\$ 361,611	78%
2052	Year 29	\$ 677,562	\$ 10,163	\$ -	\$ 117,777	\$ 169	3.5%	\$ 805,502	\$ 374,267	83%
2053	Year 30	\$ 805,502	\$ 12,083	\$ 409,494	\$ 121,899	\$ 175	3.5%	\$ 529,990	\$ 387,366	72%

*Suggested Minimum Threshold = 2 * Average Annual Expenditure (Future Costs)



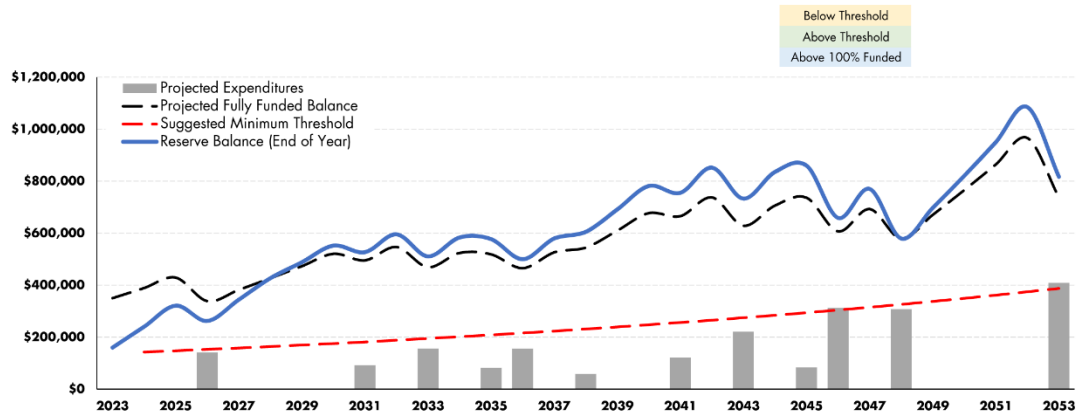
Structural Integrity Reserve Study
Sample Project
Page 10



FULL FUNDING PLAN

STRUCTURAL INTEGRITY RESERVE STUDY

Year	Reserve Balance (Start of Year)	Investment Returns	Projected Expenditures	Reserve Contributions			Reserve Balance (End of Year)	Suggested Minimum Threshold	Projected Percent Funded
				Association Annual Total	Average Unit Monthly Total	Change from Prior Year			
2023	Year 0			\$ 35,000	\$ 50		\$ 160,000		46%
2024	Year 1	\$ 160,000	\$ 2,400	\$ 77,650	\$ 112	121.9%	\$ 240,050	\$ 142,841	62%
2025	Year 2	\$ 240,050	\$ 3,601	\$ 77,650	\$ 112	0.0%	\$ 321,301	\$ 147,840	75%
2026	Year 3	\$ 321,301	\$ 4,820	\$ 77,650	\$ 112	0.0%	\$ 262,422	\$ 153,014	77%
2027	Year 4	\$ 262,422	\$ 3,936	\$ 77,650	\$ 112	0.0%	\$ 344,008	\$ 158,370	90%
2028	Year 5	\$ 344,008	\$ 5,160	\$ 77,650	\$ 112	0.0%	\$ 426,819	\$ 163,913	100%
2029	Year 6	\$ 426,819	\$ 6,402	\$ 54,850	\$ 79	-29.4%	\$ 488,071	\$ 169,650	103%
2030	Year 7	\$ 488,071	\$ 7,321	\$ 56,770	\$ 82	3.5%	\$ 552,162	\$ 175,588	106%
2031	Year 8	\$ 552,162	\$ 8,282	\$ 58,757	\$ 84	3.5%	\$ 526,961	\$ 181,733	106%
2032	Year 9	\$ 526,961	\$ 7,904	\$ 60,813	\$ 87	3.5%	\$ 595,678	\$ 188,094	109%
2033	Year 10	\$ 595,678	\$ 8,935	\$ 62,942	\$ 90	3.5%	\$ 510,822	\$ 194,677	109%
2034	Year 11	\$ 510,822	\$ 7,662	\$ 65,145	\$ 94	3.5%	\$ 583,629	\$ 201,491	111%
2035	Year 12	\$ 583,629	\$ 8,754	\$ 67,425	\$ 97	3.5%	\$ 577,319	\$ 208,543	111%
2036	Year 13	\$ 577,319	\$ 8,660	\$ 69,785	\$ 100	3.5%	\$ 499,973	\$ 215,842	107%
2037	Year 14	\$ 499,973	\$ 7,500	\$ 72,227	\$ 104	3.5%	\$ 579,699	\$ 223,397	110%
2038	Year 15	\$ 579,699	\$ 8,695	\$ 74,755	\$ 107	3.5%	\$ 604,877	\$ 231,215	111%
2039	Year 16	\$ 604,877	\$ 9,073	\$ 77,371	\$ 111	3.5%	\$ 691,321	\$ 239,308	113%
2040	Year 17	\$ 691,321	\$ 10,370	\$ 80,079	\$ 115	3.5%	\$ 781,770	\$ 247,684	115%
2041	Year 18	\$ 781,770	\$ 11,727	\$ 82,882	\$ 119	3.5%	\$ 755,238	\$ 256,353	114%
2042	Year 19	\$ 755,238	\$ 11,329	\$ 85,783	\$ 123	3.5%	\$ 852,350	\$ 265,325	116%
2043	Year 20	\$ 852,350	\$ 12,785	\$ 88,785	\$ 128	3.5%	\$ 732,833	\$ 274,611	117%
2044	Year 21	\$ 732,833	\$ 10,992	\$ 91,893	\$ 132	3.5%	\$ 835,718	\$ 284,223	118%
2045	Year 22	\$ 835,718	\$ 12,536	\$ 95,109	\$ 137	3.5%	\$ 859,956	\$ 294,171	117%
2046	Year 23	\$ 859,956	\$ 12,899	\$ 98,438	\$ 141	3.5%	\$ 658,707	\$ 304,467	109%
2047	Year 24	\$ 658,707	\$ 9,881	\$ 101,883	\$ 146	3.5%	\$ 770,471	\$ 315,123	111%
2048	Year 25	\$ 770,471	\$ 11,557	\$ 105,449	\$ 152	3.5%	\$ 579,456	\$ 326,152	100%
2049	Year 26	\$ 579,456	\$ 8,692	\$ 109,140	\$ 157	3.5%	\$ 697,288	\$ 337,567	104%
2050	Year 27	\$ 697,288	\$ 10,459	\$ 112,960	\$ 162	3.5%	\$ 820,707	\$ 349,382	107%
2051	Year 28	\$ 820,707	\$ 12,311	\$ 116,913	\$ 168	3.5%	\$ 949,931	\$ 361,611	110%
2052	Year 29	\$ 949,931	\$ 14,249	\$ 121,005	\$ 174	3.5%	\$ 1,085,186	\$ 374,267	112%
2053	Year 30	\$ 1,085,186	\$ 16,278	\$ 125,241	\$ 180	3.5%	\$ 817,210	\$ 387,366	111%



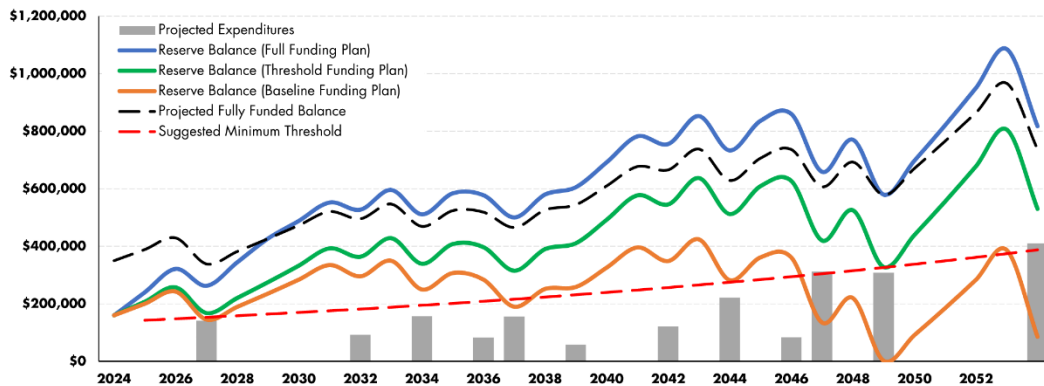
Structural Integrity Reserve Study
Sample Project
Page 11



COMPARISON OF CASH FLOW METHOD PLANS

STRUCTURAL INTEGRITY RESERVE STUDY

Year		Baseline Funding			Threshold Funding			Full Funding		
		Annual Contribution	Reserve Balance (End of Year)	Percent Funded	Annual Contribution	Reserve Balance (End of Year)	Percent Funded	Annual Contribution	Reserve Balance (End of Year)	Percent Funded
2023	Year 0	\$ 35,000	\$ 160,000	46%	\$ 35,000	\$ 160,000	46%	\$ 35,000	\$ 160,000	46%
2024	Year 1	\$ 37,800	\$ 200,200	51%	\$ 44,950	\$ 207,350	53%	\$ 77,650	\$ 240,050	62%
2025	Year 2	\$ 39,123	\$ 242,326	56%	\$ 46,523	\$ 256,984	60%	\$ 77,650	\$ 321,301	75%
2026	Year 3	\$ 40,492	\$ 145,105	43%	\$ 48,152	\$ 167,642	49%	\$ 77,650	\$ 262,422	77%
2027	Year 4	\$ 41,910	\$ 189,191	50%	\$ 49,837	\$ 219,993	58%	\$ 77,650	\$ 344,008	90%
2028	Year 5	\$ 43,376	\$ 235,405	55%	\$ 51,581	\$ 274,874	64%	\$ 77,650	\$ 426,819	100%
2029	Year 6	\$ 44,895	\$ 283,831	60%	\$ 53,386	\$ 332,384	70%	\$ 54,850	\$ 488,071	103%
2030	Year 7	\$ 46,466	\$ 334,554	64%	\$ 55,255	\$ 392,625	75%	\$ 56,770	\$ 552,162	106%
2031	Year 8	\$ 48,092	\$ 295,425	60%	\$ 57,189	\$ 363,463	73%	\$ 58,757	\$ 526,961	106%
2032	Year 9	\$ 49,775	\$ 349,631	64%	\$ 59,191	\$ 428,105	78%	\$ 60,813	\$ 595,678	109%
2033	Year 10	\$ 51,518	\$ 249,660	53%	\$ 61,262	\$ 339,056	72%	\$ 62,942	\$ 510,822	109%
2034	Year 11	\$ 53,321	\$ 306,726	59%	\$ 63,406	\$ 407,548	78%	\$ 65,145	\$ 583,629	111%
2035	Year 12	\$ 55,187	\$ 284,025	55%	\$ 65,626	\$ 396,799	77%	\$ 67,425	\$ 577,319	111%
2036	Year 13	\$ 57,118	\$ 189,613	41%	\$ 67,923	\$ 314,882	68%	\$ 69,785	\$ 499,973	107%
2037	Year 14	\$ 59,118	\$ 251,574	48%	\$ 70,300	\$ 389,905	74%	\$ 72,227	\$ 579,699	110%
2038	Year 15	\$ 61,187	\$ 258,262	47%	\$ 72,760	\$ 410,241	75%	\$ 74,755	\$ 604,877	111%
2039	Year 16	\$ 63,328	\$ 325,464	53%	\$ 75,307	\$ 491,701	81%	\$ 77,371	\$ 691,321	113%
2040	Year 17	\$ 65,545	\$ 395,890	58%	\$ 77,943	\$ 577,020	85%	\$ 80,079	\$ 781,770	115%
2041	Year 18	\$ 67,839	\$ 348,527	52%	\$ 80,671	\$ 545,205	82%	\$ 82,882	\$ 755,238	114%
2042	Year 19	\$ 70,213	\$ 423,968	57%	\$ 83,494	\$ 636,877	86%	\$ 85,783	\$ 852,350	116%
2043	Year 20	\$ 72,671	\$ 281,910	45%	\$ 86,416	\$ 511,759	81%	\$ 88,785	\$ 732,833	117%
2044	Year 21	\$ 75,214	\$ 361,353	51%	\$ 89,441	\$ 608,877	86%	\$ 91,893	\$ 835,718	118%
2045	Year 22	\$ 77,847	\$ 361,213	49%	\$ 92,571	\$ 627,174	85%	\$ 95,109	\$ 859,956	117%
2046	Year 23	\$ 80,571	\$ 134,616	22%	\$ 95,811	\$ 419,807	69%	\$ 98,438	\$ 658,707	109%
2047	Year 24	\$ 83,391	\$ 220,026	32%	\$ 99,165	\$ 525,269	76%	\$ 101,883	\$ 770,471	111%
2048	Year 25	\$ 86,310	\$ 1,616	0%	\$ 102,636	\$ 327,763	57%	\$ 105,449	\$ 579,456	100%
2049	Year 26	\$ 89,331	\$ 90,970	14%	\$ 106,228	\$ 438,907	65%	\$ 109,140	\$ 697,288	104%
2050	Year 27	\$ 92,457	\$ 184,792	24%	\$ 109,946	\$ 555,436	73%	\$ 112,960	\$ 820,707	107%
2051	Year 28	\$ 95,693	\$ 283,257	33%	\$ 113,794	\$ 677,562	78%	\$ 116,913	\$ 949,931	110%
2052	Year 29	\$ 99,042	\$ 386,549	40%	\$ 117,777	\$ 805,502	83%	\$ 121,005	\$ 1,085,186	112%
2053	Year 30	\$ 102,509	\$ 85,362	12%	\$ 121,899	\$ 529,990	72%	\$ 125,241	\$ 817,210	111%



Structural Integrity Reserve Study
Sample Project
Page 12

