Structural Integrity Reserve Study
(Fiscal Year: 2025)

Village at Dadeland (Building K)
Miami-Dade County, FL

Prepared for:
Village at Dadeland Condominium Association, Inc.

Prepared by:

CROMER CRITERIUM ENGINEERS
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December 26, 2024

CASEY CROMER LICENSE No. 87329 STATE OF FLORIDA PROFESSIONAL ENGINEER

This item has been digitally signed and sealed by Casey Cromer, P.E. on the date listed above.

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

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INTRODUCTION

Criterium-Cromer Engineers (Criterium) has conducted a Structural Integrity Reserve Study of the Village at Dadeland Condominium Association, Inc. (the "Association") community located at 7440 SW 82nd Street, Miami-Dade County, FL 33143. The services performed are consistent with our proposal dated July 9, 2024.

Criterium-Cromer Engineers presents this confidential report for the Association's review and use. This report and all Appendices must be reviewed in its entirety to understand our findings and their limitations.

We have conducted our study in general accordance with the Florida Statutes, where applicable, as well as following the methodologies included within the National Reserve Study Standards published by the Community Association Institute (CAI). Our analysis has been conducted by licensed Professional Engineers and other qualified staff working with the advisement of a Reserve Specialist. Casey Cromer, P.E. performed a visual site inspection on October 4, 2024. Excerpts of relevant referenced standards are available in Appendix B. Qualifications of the project team leaders can be found in Appendix C.

In reviewing the engineering assumptions, cost estimates, and projected reserve balance values herein, please understand that their accuracy diminishes greatly beyond Year 5. Long-term projections are intended only to indicate the likely pattern of reserve expenditures and to guide financial planning. Criterium agrees with CAI's recommendation that reserve studies should be updated regularly to allow periodic adjustment of funding plans and strategies.

EXECUTIVE SUMMARY

COMMUNITY INFORMATION

Community Name:	Village at Dadeland Condominium Association, Inc.
Building:	Building K
Jurisdiction:	Miami-Dade County, FL
Next Fiscal Year Begins:	January 1, 2025 (Fiscal Year: 2025)
Projected Annual Return on Investment:	N/A
Projected Rate of Annual Inflation:	N/A
Engineer in Responsible Charge:	Casey Cromer, P.E.
Date on Site:	October 4, 2024

FUNDING STATUS AND FUNDING PLAN SCENARIOS

	Fully Funded Balance	Starting Balance	Current Percent Funded	Year 1 (2025) Contribution
Scenario 1	$255,935	$0	0%	$59,908
Scenario 2	$255,935	$127,968	50%	$35,278
Scenario 3	$255,935	$255,935	100%	$25,215

*See Section 3.0 for complete analysis

Component List

#	Component Description	Estimated Quantity	Current Cost		UL	RUL
			Unit	Total		
SIRS Components						
101	Roofing, low-sloped, TPO	1 Lot	$ 175,000	$ 175,000	20	16
102	Roofing, mansard, 3-tab shingles, coated	1 Allow	$ 80,000	$ 80,000	40	16
103	Exterior painting and waterproofing	1 Allow	$ 80,000	$ 80,000	10	6
104	Structural recertification repairs	1 Allow	$ 60,000	$ 60,000	20	15
105	Electrical, unit distribution equipment	1 Lot	$ 85,500	$ 85,500	60	5
106	Electrical, subpanels and disconnects	1 Lot	$ 23,000	$ 23,000	50	5
107	Fire alarm, control panel and components	1 Lot	$ 3,000	$ 3,000	25	8
108	Fire alarm, system devices	1 Lot	$ 36,500	$ 36,500	25	8

1.0 Study Information

1.1 Property Description

The community consists of one four-story building (Building K), 34 two-story buildings, and various amenities. The community was originally constructed starting in 1968 and is located within Miami-Dade County, Florida. We understand that the Association is generally responsible for the infrastructure, building exteriors, roofing, exterior waterproofing, railings, common area stairs, common corridors, elevators, parking areas, interior amenities, and common mechanical, electrical, plumbing, and fire protection systems.

The analysis within this report is limited to the four-story building (Building K) generally located at 7400 and 7410 SW 82nd Street, Miami, FL 33143. This building contains 48 total units. We visited the building on October 4, 2024. During our site visit, we observed the common areas of the property including the rooftop areas, common corridors, electrical equipment, mechanical rooms, and other common components. The common components of the property were found to be in generally good condition and appropriately maintained.

1.2 Sources of Information

The Association and its management representation have provided information which may have been utilized in our study. Additionally, the following documents were provided to us and reviewed:

- 2024 Budget
- Condominium documents, various dates

1.3 Component Notes

General notes, comments, assumptions, and recommendations are listed below. If there are any questions or if any of our assumptions are not accurate, please advise us so we can make appropriate changes.

- Miami-Dade County requires a recertification/milestone inspection to be performed periodically. The first inspection is typically required to be performed prior to the completion of the building's 30th year. This process involves a thorough structural evaluation and often results in some form of required structural repairs. Although future structural repairs are not predictable, we have included a reasonable allowance for structural repairs associated with the future building inspections.

- There are components which are excluded from this analysis as their remaining useful life is estimated to be longer than the study period and/or their useful life cannot be reasonably anticipated. Once the remaining useful life of these components is less than the study period, or their need for repair becomes evident, they should be added to the component list and funding analysis. These components include:
    - The complete replacement of railings
    - The replacement of hidden in-wall plumbing supply/waste piping
    - Work related to underground/site drainage systems

- Our quantity estimations have been performed with the assistance of historical building drawings which may or may not be accurate. While we make every effort to be as accurate as possible, our cost and quantity estimates are to be considered preliminary and by no means a guarantee. We do not recommend using our estimates for future contractor bidding purposes.

- As utilized within this report, the "Year" nomenclature is defined as follows:
    - 2024 | Year 0 = fiscal year from January 1, 2024 through December 31, 2024
    - 2025 | Year 1 = fiscal year from January 1, 2025 through December 31, 2025
    - 2026 | Year 2 = fiscal year from January 1, 2026 through December 31, 2026, etc.

Sample component photos are included in Appendix A – Component Photographs.

1.4 Key Terms

Estimated Quantity: The estimated total quantity for a component, typically designated with one of the following units of measurement:

Allowance = a lump sum cost utilized when future expenditures are difficult to predict
Lot = a lump sum cost utilized for or group of items or related work package
EA = each LF = linear foot SF = square foot SQ = roofing square (100 square feet)

Current Cost: The estimated cost to perform the work, on a unit and/or total basis.

Useful Life (UL): The estimated time, in years, that a newly constructed/installed component can be expected to serve its intended function presuming proper construction, and proactive, planned, preventive maintenance.

Remaining Useful Life (RUL): The estimated time, in years, that an existing component can be expected to service its intended function, presuming timely preventive maintenance. Projects expected to occur in the initial year have a remaining useful life of 0.

2.0 Funding Methodologies

Component Method (Straight Line Funding)

The Component Method is a reserve funding method which is based on the sum of funding for each individual component. This method utilized the fully funded balance as well as the annual contribution rate required to maintain the fully funded balance. The fully funded balance for each component is the direct proportion of the fraction of life "used up". This value is calculated for each component, and then totaled to determine the fully funded balance for the reserve account. The Component Method is based on the current cost and condition of each component and therefore does not consider inflation, returns on investments, or the available excess cash flow that the reserve account may have at any given point.

Cash Flow Method (Pooled Funding)

The Cash Flow Method is a reserve funding method which is based on the expected balance of the reserve account over time. This method considers the projected inflation rate as well as future returns on investments. The Cash Flow Method can consider various funding goals including baseline funding, threshold funding, and full funding. Cash Flow Method funding plans are typically created based on the following funding goals, as defined by the National Reserve Study Standards (listed by most aggressive to most conservative):

Baseline Funding

Establishing a reserve funding goal of allowing the reserve cash balance to approach but never fall below zero during the cash flow projection. This is the funding goal with the greatest risk of being prepared to fund future repair and replacement of major components, and it is not recommended as a long-term solution/plan. Baseline funding may lead to project delays, the need for a special assessment, and/or a line of credit for the community to fund needed repairs and replacement of major components.

Threshold Funding

Establishing a reserve funding goal of keeping the reserve balance above a specified dollar or percent funded amount. Depending on the threshold selected, this funding goal may be weaker or stronger than "fully funded" with respective higher risk or less risk of cash problems. In determining the threshold, many variables should be considered, including things such as investment risk tolerance, community age, building type, components that are not readily inspected, and components with a remaining useful life of more than 30 years.

Full Funding

Setting a reserve funding goal to attain and maintain reserves at or near 100 percent funded. Fully funded is when the actual or projected reserve balance is equal to the fully funded balance.

3.0 Structural Integrity Reserve Study – Funding Plans

A Structural Integrity Reserve Study only covers a portion of the Association components. Therefore, if one of Structural Integrity Reserve Study funding plans is followed, it will only be predictive if the future expenditures are limited to those presented in the component list for the Structural Integrity Reserve Study. See Section 0 for additional commentary and see Section 5.0 for the scope of a Structural Integrity Reserve Study. For this Association the following funding methods/plans have been calculated, as summarized below:

Component Method (Straight Line Funding)

Scenario 1: Starting Balance = 0% Funded

- The SIRS starting balance is $0, equal to 0% of the Fully Funded Balance.
- The Year 1 contribution requirement is $59,908.
- The complete funding plan details can be found on Page 10.

Scenario 2: Starting Balance = 50% Funded

- The SIRS starting balance is $127,968, equal to 50% of the Fully Funded Balance.
- The Year 1 contribution requirement is $35,278.
- The complete funding plan details can be found on Page 11.

Scenario 3: Starting Balance = 100% Funded

- The SIRS starting balance is $255,935, equal to 100% of the Fully Funded Balance.
- The Year 1 contribution requirement is $25,215.
- The complete funding plan details can be found on Page 12.

Cash Flow Method (Pooled Funding)

Based on our discussions with the Association, it is our understanding that the Association is required to utilize the component method (straight line funding). Therefore, funding plans utilizing the cash flow method (pooled funding) have not been included within this analysis.

COMPONENT METHOD – SCENARIO 1

Scenario 1: Starting Balance = 0% Funded

- The SIRS starting balance is $0, equal to 0% of the Fully Funded Balance.
- The Year 1 contribution requirement is $59,908.

#	Component Description	Current Cost	UL	RUL	Fully Funded Balance	Starting Balance	Remaining Balance	Year 1 Contribution
SIRS Components								
101	Roofing, low-sloped, TPO	$ 175,000	20	16	$ 35,000	$ -	$ 175,000	$ 10,938
102	Roofing, mansard, 3-tab shingles, coated	$ 80,000	40	16	$ 48,000	$ -	$ 80,000	$ 5,000
103	Exterior painting and waterproofing	$ 80,000	10	6	$ 32,000	$ -	$ 80,000	$ 13,333
104	Structural recertification repairs	$ 60,000	20	15	$ 15,000	$ -	$ 60,000	$ 4,000
105	Electrical, unit distribution equipment	$ 85,500	60	5	$ 78,375	$ -	$ 85,500	$ 17,100
106	Electrical, subpanels and disconnects	$ 23,000	50	5	$ 20,700	$ -	$ 23,000	$ 4,600
107	Fire alarm, control panel and components	$ 3,000	25	8	$ 2,040	$ -	$ 3,000	$ 375
108	Fire alarm, system devices	$ 36,500	25	8	$ 24,820	$ -	$ 36,500	$ 4,563
Total					**$ 255,935**	**$ -**	**$ 543,000**	**$ 59,908**

COMPONENT METHOD – SCENARIO 2

Scenario 2: Starting Balance = 50% Funded

- The SIRS starting balance is $127,968, equal to 50% of the Fully Funded Balance.
- The Year 1 contribution requirement is $35,278.

#	Component Description	Current Cost	UL	RUL	Fully Funded Balance	Starting Balance	Remaining Balance	Year 1 Contribution
SIRS Components								
101	Roofing, low-sloped, TPO	$ 175,000	20	16	$ 35,000	$ -	$ 175,000	$ 10,938
102	Roofing, mansard, 3-tab shingles, coated	$ 80,000	40	16	$ 48,000	$ -	$ 80,000	$ 5,000
103	Exterior painting and waterproofing	$ 80,000	10	6	$ 32,000	$ 28,893	$ 51,108	$ 8,518
104	Structural recertification repairs	$ 60,000	20	15	$ 15,000	$ -	$ 60,000	$ 4,000
105	Electrical, unit distribution equipment	$ 85,500	60	5	$ 78,375	$ 78,375	$ 7,125	$ 1,425
106	Electrical, subpanels and disconnects	$ 23,000	50	5	$ 20,700	$ 20,700	$ 2,300	$ 460
107	Fire alarm, control panel and components	$ 3,000	25	8	$ 2,040	$ -	$ 3,000	$ 375
108	Fire alarm, system devices	$ 36,500	25	8	$ 24,820	$ -	$ 36,500	$ 4,563
Total					**$ 255,935**	**$ 127,968**	**$ 415,033**	**$ 35,278**

COMPONENT METHOD – SCENARIO 3

Scenario 3: Starting Balance = 100% Funded

- The SIRS starting balance is $255,935, equal to 100% of the Fully Funded Balance.
- The Year 1 contribution requirement is $25,215.

#	Component Description	Current Cost	UL	RUL	Fully Funded Balance	Starting Balance	Remaining Balance	Year 1 Contribution
SIRS Components								
101	Roofing, low-sloped, TPO	$ 175,000	20	16	$ 35,000	$ 35,000	$ 140,000	$ 8,750
102	Roofing, mansard, 3-tab shingles, coated	$ 80,000	40	16	$ 48,000	$ 48,000	$ 32,000	$ 2,000
103	Exterior painting and waterproofing	$ 80,000	10	6	$ 32,000	$ 32,000	$ 48,000	$ 8,000
104	Structural recertification repairs	$ 60,000	20	15	$ 15,000	$ 15,000	$ 45,000	$ 3,000
105	Electrical, unit distribution equipment	$ 85,500	60	5	$ 78,375	$ 78,375	$ 7,125	$ 1,425
106	Electrical, subpanels and disconnects	$ 23,000	50	5	$ 20,700	$ 20,700	$ 2,300	$ 460
107	Fire alarm, control panel and components	$ 3,000	25	8	$ 2,040	$ 2,040	$ 960	$ 120
108	Fire alarm, system devices	$ 36,500	25	8	$ 24,820	$ 24,820	$ 11,680	$ 1,460
Total					**$ 255,935**	**$ 255,935**	**$ 287,065**	**$ 25,215**

4.0 Discussion of Funding Plans

4.1 Funding Recommendations

The decision on how an association chooses to fund its reserves is entirely up to the association and typically determined by an elected Board of Directors. In determining how to proceed, an association should consider many factors.

One important factor is the association's willingness to accept future special assessments. If an association's top priority is to avoid special assessments, then they should consider a conservative plan that is regularly updated, such as a Full Funding Plan with annual updates. In this scenario, it is nearly a guarantee that no special assessments will be required. Alternatively, if an association is agreeable to special assessments, they could consider a Baseline Funding Plan with updates only every ten years. We do not recommend this approach.

Another important element of reserve funding is maintaining an up-to-date reserve study. A detailed reserve study can often be updated for multiple years. A reserve study update is a simpler process than starting a full reserve study from scratch and can often be performed without the need for site visits and at a significantly lower cost.

We typically recommend that a moderate approach be considered for an association's reserve funding. A Threshold Funding Plan maintains an acceptable reserve balance throughout the study period without unnecessarily high reserve contribution rates. If updated at least every three years, a Threshold Funding Plan should be adequate to avoid special assessments in the future.

4.2 Limitations of a Structural Integrity Reserve Study

As described in the Florida Statutes, a Structural Integrity Reserve Study (SIRS) is intended to provide an analysis of reserve funding for components related to the structural integrity and safety of buildings three stories and higher. Fundamentally, a SIRS only covers a portion of total association components. However, association components which are not related to the structural integrity and safety of the building can be numerous and costly to maintain, repair, and replace.

Association components outside of the scope of a SIRS can include:

- Site improvements such as roadways, sidewalks, asphalt, fencing, irrigation systems, etc.
- Components not part of a building, such as pools, amenity decks, etc.
- Structures less than three stories in height
- Elevator machinery and cabs
- Interiors amenities such as gyms, lobby finishes, corridor finishes, etc.
- Electronic amenities such as security systems, access control systems, etc.
- Mechanical systems such as HVAC components, cooling towers, vehicle gates, etc.

Therefore, if the Association chooses to follow one of the SIRS funding plans for its reserve contributions, we recommend that expenditures from that reserve account be limited to those included in the SIRS component list and for other components which are directly related to the structural integrity and safety of the building. In this scenario, a separate reserve account could be maintained and utilized for other association expenditures not related to the structural integrity and safety of the building.

It is also important to note that a SIRS is not intended to be a thorough structural evaluation or assessment but rather a useful tool to assist an association in its financial planning. The need for future structural repairs is not typically predictable and therefore such repairs may not meet the requirements to be considered reserve components. The need for structural repairs should be evaluated, at a minimum, during county-required building recertification process (if applicable) or state-required Milestone Inspection process. A SIRS 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.

5.0 Scope And Basis

5.1 Objectives

The purpose of a reserve study is to conduct a reserve analysis for the Association which includes an evaluation of the current rate of contribution to the reserves, and, if necessary, suggestions to alternative funding strategies. This report is intended to be used as a tool by the Association for considering and managing its future financial obligations, determining appropriate reserve fund allocations, and informing the individual owners of the Association's required reserve expenditures and the resulting financial plan.

For purposes of financial planning, Association expenses are typically divided into two categories:

- Annual Operations: Related to commonly held elements of real property and other assets. These expenses typically include annual operating expenditures, taxes, insurance, property management costs, and other service fees.
- Reserve Expenditures: Related to major periodic repairs and/or replacement of commonly held elements which meet the following criteria:
    - The Association has the obligation to maintain or replace the existing element.
    - The need and schedule for this project can be reasonably anticipated.
    - The total cost for the project is material to the Association, can be reasonably estimated, and includes all direct and related costs.

The focuses of our reserve analysis are long-term reserve expenditures, the funding plan, and ensuring adequate reserve balances. History demonstrates that, as time progresses, property conditions and management strategies will change. As a result, planned scopes of work may be altered or deferred, actual cost in the marketplace will vary from estimates, and actual rates of inflation and returns on investment will vary from projections. For these reasons, we concur with the CAI's guidelines and recommend that this reserve study be updated at least every three years.

The reserve expenditures included within the Structural Integrity Reserve Study differ from traditional reserve expenses and are described in the Florida Statutes.

5.2 Level of Service

Structural Integrity Reserve Study

This analysis is consistent with the Florida Statutes section 718.112(2)(g)1, related to a Structural Integrity Reserve Study, which describes 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". Excerpts from the Florida Statutes are provided in Appendix B.

SIRS Study Area

The SIRS Study Area is limited to buildings three stories or higher and therefore excludes many common components which are not directly within (or affecting) buildings.

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. The SIRS Item List is not inclusive of all Association items within the building and excludes Association items such as interior finishes, interior amenities, HVAC 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.

5.3 Opinions of Useful Life

For components which require periodic reserve expenditures for their repairs or replacement, the frequency of work equals the typical, industry accepted expected useful life (UL) for the type of feature. Theoretically, the remaining useful life (RUL) of a component, prior to the next reserve expenditure for its repair or replacement, is equal to the difference between its UL and its age: RUL = UL – Age.

In our experience, the effective age and actual RUL of an installed item can vary greatly from its actual age and calculated RUL. These variances depend on the quality of its original materials and workmanship, level of service, climatic exposure, and ongoing maintenance. As part of our analysis, we have determined our opinion of the UL and RUL of each common component based on our evaluation of its history and its existing condition.

In summary, we have based our opinion of the useful life, remaining useful life, and expected frequency and schedule of repair for each common component on some or all of the following:

- Actual or assumed age.
- Observed existing condition.
- Association's maintenance history and plan.
- Fannie Mae – Estimated Useful Life Tables
- Marshall & Swift Valuation Service Expected Life Expectancies
- Our experience with actual performance of such components under similar service and exposure.

5.4 Estimating

In developing our estimate of reserve expenditures for most common components, we have estimated quantities of each item as well as unit costs for its repair or replacement. In some cases, it is more appropriate to estimate a lump sum cost for a required work package or 'lot'. In other cases, particularly when future expenditures are difficult to predict, it is more appropriate to allocate an allowance.

Unless directed to take a different approach, we assume that contract labor will perform the work and apply appropriate installer's mark-ups on supplied material and equipment. When required, our estimated costs consider demolition and disposal of existing materials as well as protection of other portions of the property. When appropriate for large reserve projects, we will also consider soft costs for design and project management, as well as typical general contractor's cost for general conditions, supervision, overhead and profit.

We have based our opinion of unit, lump sum, and allowance costs on some or all of the following:

- Records of previous expenses.
- Previously solicited Vendor quotations or Contractor proposals.
- Provided reserve budgets developed by others.
- Our project files on repairs and replacements at other properties.
- RSMeans Construction Cost Data.
- Marshall & Swift Valuation Service – Facility Cost Index.

The primary purpose of this reserve study is to aid in overall budget planning. While we make every effort to be accurate, our cost and quantity estimates are to be considered preliminary and by no means a guarantee. Annual reserve expenditure budgets have been calculated for all years during the study period by inflating the annual tallies of current dollar cost at a rate of inflation selected by the Association.

5.5 Information Provided

Our initial financial analysis was based on the current funding rate and future plans of the Association. We were provided with initial information on the reserves and its funding plan.

- Reserve Balance Provided: $428,188
- As of: December 31, 2023
- Current Monthly Reserve Contribution: $3,187.50
- Fiscal Year Starting Date: January 1, 2025
- For Designated Year: 2025
- Total Projected Balance on Starting Date: $466,438
- Planned Increases: N/A
- Planned Special Assessments: N/A
- Projected Annual Return on Investment: N/A
- Projected Rate of Annual Inflation: 3.0%

Financial data, records of past expenses, and cost estimates provided by others have been taken in good faith and at face value. No audit or other verification has been performed.

6.0 Projected Expenditures Schedule

See the following pages.

PROJECTED EXPENDITURE SCHEDULE

Projected Expenditures in 2030 (Year 6)			
#	Component Category	Component Description	Estimated Cost
105	SIRS Components	Electrical, unit distribution equipment	$ 99,118
106	SIRS Components	Electrical, subpanels and disconnects	$ 26,663
			$ 125,781

Projected Expenditures in 2031 (Year 7)			
#	Component Category	Component Description	Estimated Cost
103	SIRS Components	Exterior painting and waterproofing	$ 95,524
			$ 95,524

Projected Expenditures in 2033 (Year 9)			
#	Component Category	Component Description	Estimated Cost
107	SIRS Components	Fire alarm, control panel and components	$ 3,800
108	SIRS Components	Fire alarm, system devices	$ 46,237
			$ 50,037

Projected Expenditures in 2040 (Year 16)			
#	Component Category	Component Description	Estimated Cost
104	SIRS Components	Structural recertification repairs	$ 93,478
			$ 93,478

Projected Expenditures in 2041 (Year 17)			
#	Component Category	Component Description	Estimated Cost
101	SIRS Components	Roofing, low-sloped, TPO	$ 280,824
102	SIRS Components	Roofing, mansard, 3-tab shingles, coated	$ 128,377
103	SIRS Components	Exterior painting and waterproofing	$ 128,377
			$ 537,577

Projected Expenditures in 2051 (Year 27)			
#	Component Category	Component Description	Estimated Cost
103	SIRS Components	Exterior painting and waterproofing	$ 172,527
			$ 172,527

7.0 Standards and Limitations

Criterium-Cromer Engineers shall perform duties to at least the professional standards consistent with a licensed, Professional Engineer, but does not guarantee or warrant that all adverse conditions concerning the property can be or will be discovered and included in the report. The photographs are an integral part of this report and must be included in any review.

This study is limited to the visual observations made during our inspection. We did not undertake any excavation, conduct any destructive or invasive testing, remove surface materials or finishes, or displace furnishings or equipment. The observations described in this study are valid on the dates of the investigation. Accordingly, we cannot comment on the condition of systems that we could not see, such as buried structures and utilities, nor are we responsible for conditions that could not be seen or were not within the scope of our services at the time of inspection. We did not perform any computations or other engineering analysis as part of this study, nor did we conduct a comprehensive code compliance investigation.

This information in this study is not to be considered a warranty of condition, quality, compliance or cost. No warranty is implied. Financial data, records of past expenses, and cost estimates provided by others have been taken in good faith and at face value. No audit or other verification has been performed.

Reserve budgets are opinions of likely expense based on reasonable cost estimates. We have not obtained competitive quotations or estimates from contractors. Actual costs can vary significantly, based on the specific scope of work developed, availability of materials and qualified contractors, and many other variables. We cannot be responsible for variances.

Criterium-Cromer Engineers does not offer financial counseling services. Although reasonable rates of inflation and return on investment must be assumed to calculate projected balances, no one can accurately predict actual economic performance. Although reserve fund management and investment may be discussed during the course of the study, we do not purport to hold any special qualifications in this area. We recommend that the Association also seek other professional guidance before finalizing their current reserve fund planning activity. Depending on issues which may arise, an appropriate team of consultants to aid decision-making might include their property manager, accountant, financial counselor, and attorney.

Criterium-Cromer Engineers prepared this confidential report for the review and use of the Association. We do not intend any other individual or party to rely upon this study without our express written consent. If another individual or party relies on this study, they shall indemnify, defend and hold Criterium-Cromer Engineers, its subsidiaries, affiliates, officers, directors, members, shareholders, partners, agents, employees and such other parties in interest specified by Criterium-Cromer Engineers harmless for any damages, losses, or expenses they may incur as a result of its use. Any use or reliance of the report by an individual or party other than shall constitute acceptance of these terms and conditions.

8.0 Conclusion

To the best of our ability, we have attempted to work in the best interest of the Association and to aid the Board toward fulfillment of their fiduciary responsibilities and obligations to the individual Unit Owners who comprise the association's membership. In our professional opinion, and within the limitations disclosed elsewhere herein, all information contained herein is reliable and appropriate to guide the Board's deliberations and decision-making. We consider our report confidential and will not share its content with anyone but the Board without its knowledge and release.

We are unaware of any other involvement or business relationship between Criterium-Cromer Engineers and the Developer, individual Unit Owners, members of the Board, or any other entities which constitutes any conflict of interest.

Criterium Engineers appreciates this opportunity to assist you in support of the financial planning for your community. We are pleased to present this report for the Board's consideration and use. Thank you.

Respectfully submitted,

Casey Cromer, P.E.
President
Criterium-Cromer Engineers

APPENDIX A

COMPONENT PHOTOGRAPHS

Component Photographs

Photo 1
SIRS Components

Photo 2
SIRS Components

Photo 3
SIRS Components

Photo 4
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Photo 5
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Photo 19
SIRS Components

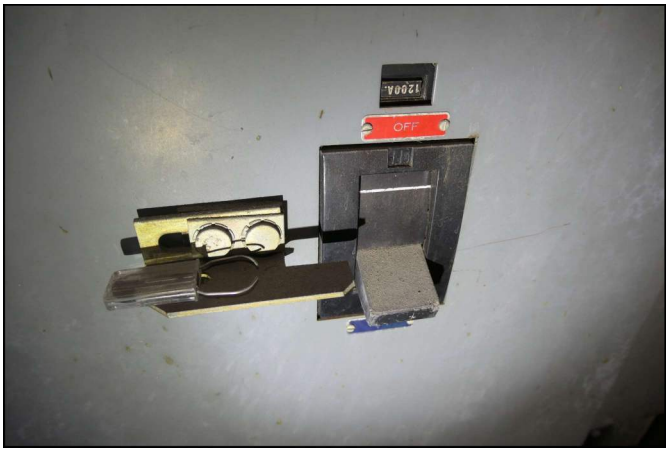

Photo 20
SIRS Components

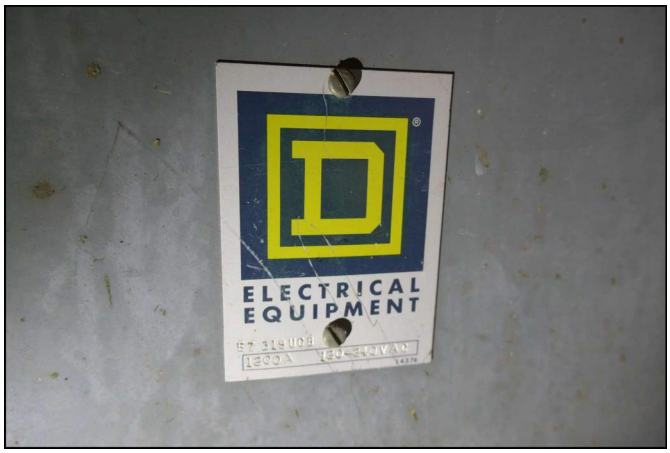

Photo 21
SIRS Components

Photo 22
SIRS Components

Photo 23
SIRS Components

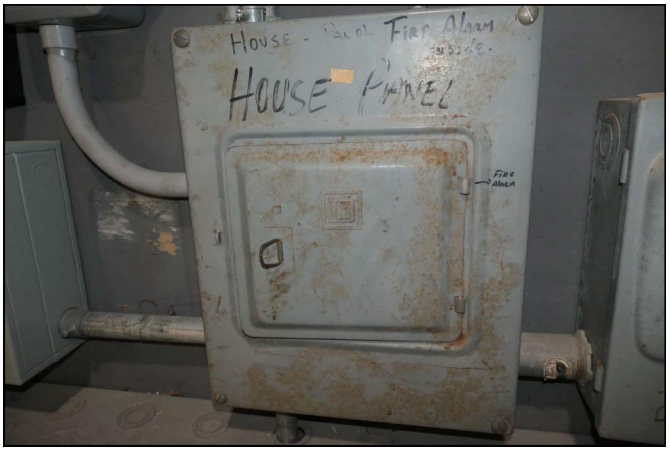

Photo 24
SIRS Components

Component Photographs

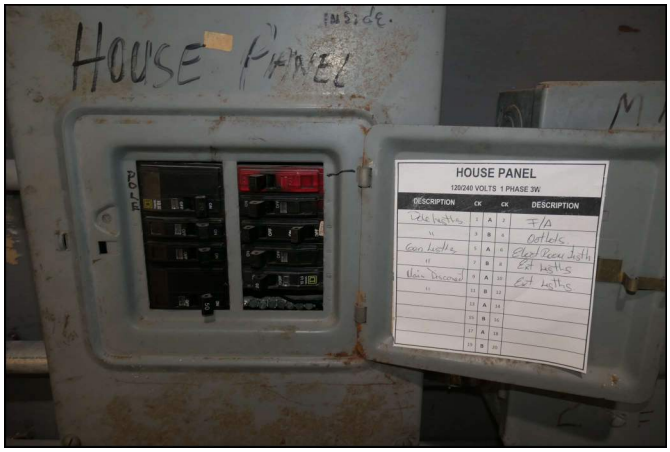

Photo 25
SIRS Components

Photo 26
SIRS Components

Photo 27
SIRS Components

Photo 28
SIRS Components

Photo 29
SIRS Components

Photo 30
SIRS Components

Component Photographs

Photo 31
SIRS Components

Photo 32
SIRS Components

Photo 33
SIRS Components

Photo 34
SIRS Components

Photo 35
SIRS Components

Photo 36
SIRS Components

Component Photographs

Photo 37
SIRS Components

Photo 38
SIRS Components

Photo 39
SIRS Components

Photo 40
SIRS Components

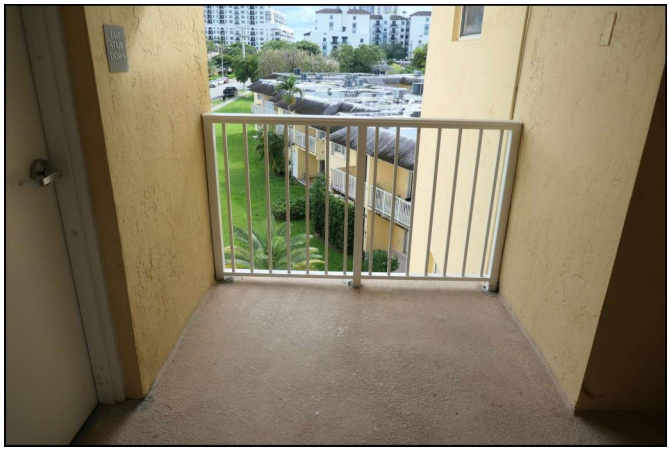

Photo 41
SIRS Components

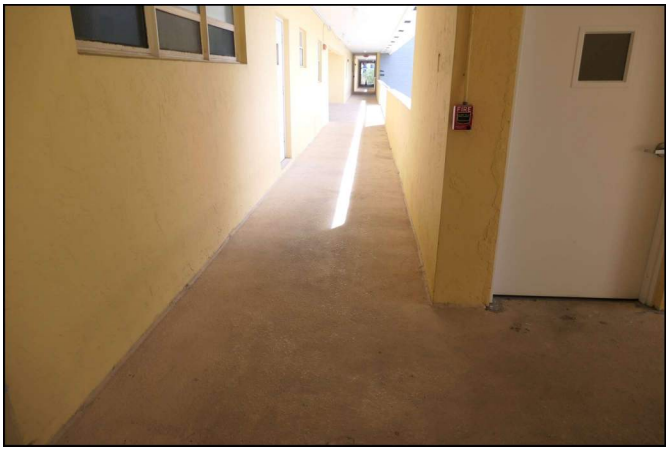

Photo 42
SIRS Components

Component Photographs

Photo 43
SIRS Components

Photo 44
SIRS Components

Photo 45
SIRS Components

Photo 46
SIRS Components

Photo 47
SIRS Components

Photo 48
SIRS Components

Component Photographs

Photo 49
SIRS Components

Photo 50
SIRS Components

Photo 51
SIRS Components

Photo 52
SIRS Components

Photo 53
SIRS Components

Photo 54
SIRS Components

Component Photographs

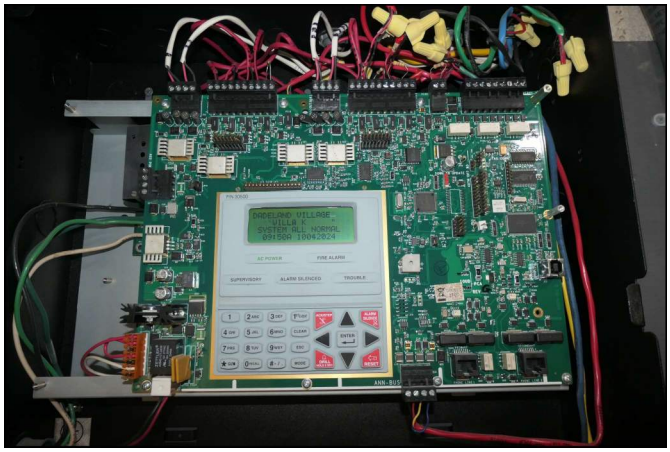

Photo 55
SIRS Components

Photo 56
SIRS Components

Photo 57
SIRS Components

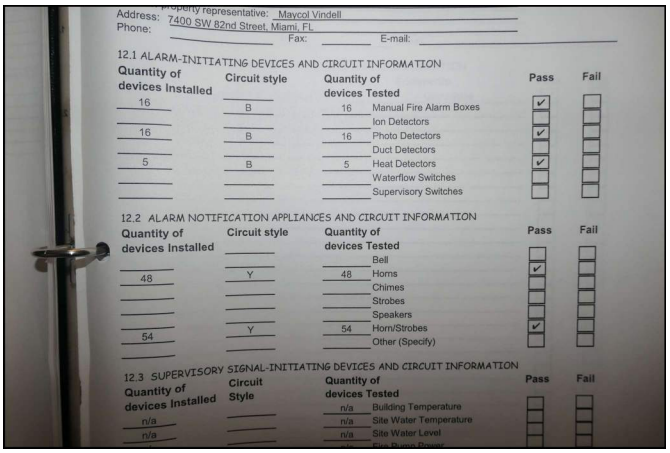

Photo 58
SIRS Components

Photo 59
SIRS Components

Photo 60
SIRS Components

Component Photographs

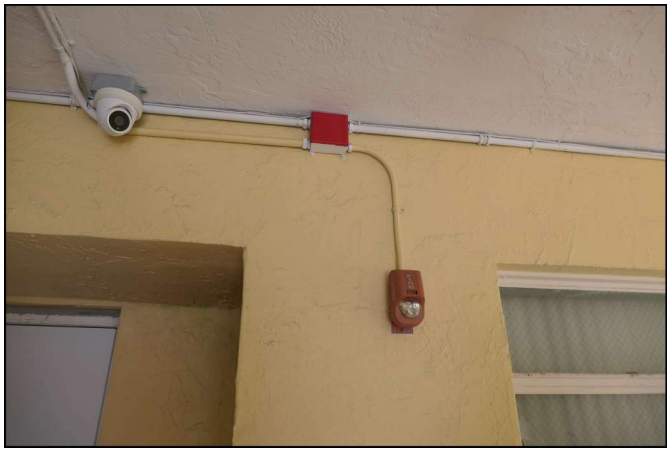

Photo 61
SIRS Components

Photo 62
SIRS Components

Photo 63
SIRS Components

Photo 64
SIRS Components

Photo 65
SIRS Components

Photo 66
SIRS Components

APPENDIX B

REFERENCE DOCUMENTS

EXCERPTS FROM THE FLORIDA STATUTES

Section 718.112(2)(f): Annual Budget.–

1. The proposed annual budget of estimated revenues and expenses must be detailed and must show the amounts budgeted by accounts and expense classifications, including, at a minimum, any applicable expenses listed in s. 718.504(21). The board shall adopt the annual budget at least 14 days before the start of the association's fiscal year. In the event that the board fails to timely adopt the annual budget a second time, it is deemed a minor violation and the prior year's budget shall continue in effect until a new budget is adopted. A multicondominium association must adopt a separate budget of common expenses for each condominium the association operates and must adopt a separate budget of common expenses for the association. In addition, if the association maintains limited common elements with the cost to be shared only by those entitled to use the limited common elements as provided for in s. 718.113(1), the budget or a schedule attached to it must show the amount budgeted for this maintenance. If, after turnover of control of the association to the unit owners, any of the expenses listed in s. 718.504(21) are not applicable, they do not need to be listed.

2a. In addition to annual operating expenses, the budget must include reserve accounts for capital expenditures and deferred maintenance. These accounts must include, but are not limited to, roof replacement, building painting, and pavement resurfacing, regardless of the amount of deferred maintenance expense or replacement cost, and any other item that has a deferred maintenance expense or replacement cost that exceeds $10,000. The amount to be reserved must be computed using a formula based upon estimated remaining useful life and estimated replacement cost or deferred maintenance expense of the reserve item. In a budget adopted by an association that is required to obtain a structural integrity reserve study, reserves must be maintained for the items identified in paragraph (g) for which the association is responsible pursuant to the declaration of condominium, and the reserve amount for such items must be based on the findings and recommendations of the association's most recent structural integrity reserve study. With respect to items for which an estimate of useful life is not readily ascertainable or with an estimated remaining useful life of greater than 25 years, an association is not required to reserve replacement costs for such items, but an association must reserve the amount of deferred maintenance expense, if any, which is recommended by the structural integrity reserve study for such items. The association may adjust replacement reserve assessments annually to take into account an inflation adjustment and any changes in estimates or extension of the useful life of a reserve item caused by deferred maintenance. The members of a unit-owner-controlled association may determine, by a majority vote of the total voting interests of the association, to provide no reserves or less reserves than required by this subsection. For a budget adopted on or after December 31, 2024, the members of a unit-owner-controlled association that must obtain a structural integrity reserve study may not determine to provide no reserves or less reserves than required by this subsection for items listed in paragraph (g), except that members of an association operating a multicondominium may determine to provide no reserves or less reserves than required by this subsection if an alternative funding method has been approved by the division.

2b. Before turnover of control of an association by a developer to unit owners other than a developer under s. 718.301, the developer-controlled association may not vote to waive the reserves or reduce funding of the reserves. If a meeting of the unit owners has been called to determine whether to waive or reduce the funding of reserves and no such result is achieved or a quorum is not attained, the reserves included in the budget shall go into effect. After the turnover, the developer may vote its voting interest to waive or reduce the funding of reserves.

3. Reserve funds and any interest accruing thereon shall remain in the reserve account or accounts, and may be used only for authorized reserve expenditures unless their use for other purposes is approved in advance by a majority vote of all the total voting interests of the association. Before turnover of control of an association by a developer to unit owners other than the developer pursuant to s. 718.301, the developer-controlled association may not vote to use reserves for purposes other than those for which they were intended. For a budget adopted on or after December 31, 2024, members of a unit-owner-controlled association that must obtain a structural integrity reserve study may not vote to use reserve funds, or any interest accruing thereon, for any other purpose other than the replacement or deferred maintenance costs of the components listed in paragraph (g).

4. The only voting interests that are eligible to vote on questions that involve waiving or reducing the funding of reserves, or using existing reserve funds for purposes other than purposes for which the reserves were intended, are the voting interests of the units subject to assessment to fund the reserves in question. Proxy questions relating to waiving or reducing the funding of reserves or using existing reserve funds for purposes other than purposes for which the reserves were intended must contain the following statement in capitalized, bold letters in a font size larger than any other used on the face of the proxy ballot: WAIVING OF RESERVES, IN WHOLE OR IN PART, OR ALLOWING ALTERNATIVE USES OF EXISTING RESERVES MAY RESULT IN UNIT OWNER LIABILITY FOR PAYMENT OF UNANTICIPATED SPECIAL ASSESSMENTS REGARDING THOSE ITEMS.

Section 718.112(2)(g): Structural Integrity Reserve Study–

1. A residential condominium association must have a structural integrity reserve study completed at least every 10 years after the condominium's creation for each building on the condominium property that is three stories or higher in height, as determined by the Florida Building Code, which includes, at a minimum, a study of the following items as related to the structural integrity and safety of the building:
    a. Roof.
    b. Structure, including load-bearing walls and other primary structural members and primary structural systems as those terms are defined in s. 627.706.
    c. Fireproofing and fire protection systems.
    d. Plumbing.
    e. Electrical systems.
    f. Waterproofing and exterior painting.
    g. Windows and exterior doors.
    h. 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 in sub-subparagraphs a.-g., as determined by the visual inspection portion of the structural integrity reserve study.

2. A structural integrity reserve study is based on a visual inspection of the condominium property. A structural integrity reserve study may be performed by any person qualified to perform such study. However, the visual inspection portion of the structural integrity reserve study must be performed or verified by an engineer licensed under chapter 471, an architect licensed under chapter 481, or a person certified as a reserve specialist or professional reserve analyst by the Community Associations Institute or the Association of Professional Reserve Analysts.

3. At a minimum, a structural integrity reserve study must identify each item of the condominium property being visually inspected, state the estimated remaining useful life and the estimated replacement cost or deferred maintenance expense of each item of the condominium property being visually inspected, and provide a reserve funding schedule with a recommended annual reserve amount that achieves the estimated replacement cost or deferred maintenance expense of each item of condominium property being visually inspected by the end of the estimated remaining useful life of the item. The structural integrity reserve study may recommend that reserves do not need to be maintained for any item for which an estimate of useful life and an estimate of replacement cost cannot be determined, or the study may recommend a deferred maintenance expense amount for such item. The structural integrity reserve study may recommend that reserves for replacement costs do not need to be maintained for any item with an estimated remaining useful life of greater than 25 years, but the study may recommend a deferred maintenance expense amount for such item.

4. This paragraph does not apply to buildings less than three stories in height; single-family, two-family, or three-family dwellings with three or fewer habitable stories above ground; any portion or component of a building that has not been submitted to the condominium form of ownership; or any portion or component of a building that is maintained by a party other than the association.

community
ASSOCIATIONS INSTITUTE

Reserve Study Standards®™

RSS - RS052023

Terms and Definitions

Adequate Reserves: A replacement reserve fund and stable and equitable multiyear funding plan that together provide for the reliable and timely execution of the association's major repair and replacement projects as defined herein without reliance on additional supplemental funding.

Capital Improvements: Additions to the association's common area that previously did not exist. While these components should be added to the reserve study for future replacement, the cost of construction or installation cannot be taken from the reserve fund.

Cash Flow Method (also known as pooling): A method of developing a reserve funding plan where funding of reserves is designed to offset the annual expenditures from the reserve fund.

To determine the selected funding plan, different reserve funding plans are tested against the anticipated schedule of reserve expenses until the desired funding goal is achieved.

Common Area: The areas identified in the community association's master deed or declarations of covenant easements and restrictions that the association is obligated to maintain and replace or based on a well-established association precedent.

Community Association: A nonprofit entity that exists to preserve the nature of the community and protect the value of the property owned by members. Membership in the community association is mandatory and automatic for all owners. All owners pay mandatory lien-based assessments that fund the operation of the association and maintain the common area or elements, as defined in the governing documents. The community association is served and lead by an elected board of trustees or directors.

Components: The individually listed projects within the physical analysis which are determined for inclusion using the process described within the component inventory. These components form the building blocks for the reserve study. **Components are selected to be included in the reserve study based on the following three-part test:**

1. The association has the obligation to maintain or replace the existing element.
2. The need and schedule for this project can be reasonably anticipated.
3. The total cost for the project is material to the association, can be reasonably estimated, and includes all direct and related costs.

Component Inventory: The task of selecting and quantifying reserve components. This task can be accomplished through on-site visual observations, review of association design and organizational documents, review of association precedents, and discussion with appropriate representative(s) of the association.

The Reserve Specialist, in coordination with the client, will determine the methodology for including these components in the study. Typical evaluation techniques for consideration include:

- Inclusion of long-life components with funding in the study.
- Addition of long-life components with funding at the time when they fall within the 30-year period from the date of study preparation.

- Identification of long-life components in the component inventory even when they are not yet being funded in the 30-year funding plan.

Component Method (also known as Straight Line): A method of developing a reserve funding plan where the total funding is based on the sum of funding for the individual components.

Condition Assessment: The task of evaluating the current condition of the component based on observed or reported characteristics. The assessment is limited to a visual, non-invasive evaluation.

Effective Age: The difference between useful life and estimated remaining useful life. Not always equivalent to chronological age since some components age irregularly. Used primarily in computations.

Financial Analysis: The portion of a reserve study in which the current status of the reserves (measured as cash or percent funded) and a recommended reserve funding plan are derived, and the projected reserve income and expense over a period of time are presented. The financial analysis is one of the two parts of a reserve study. A minimum of 30 years of income and expense are to be considered.

Fully Funded: 100 percent funded. When the actual (or projected) reserve balance is equal to the fully funded balance.

Fully Funded Balance (FFB): An indicator against which the actual (or projected) reserve balance can be compared. The reserve balance that is in direct proportion to the fraction of life "used up" of the current repair or replacement cost. This number is calculated for each component, and then summed for an association total.

FFB = Current Cost X Effective Age/Useful Life

Example: For a component with a $10,000 current replacement cost, a 10-year useful life, and effective age of 4 years, the fully funded balance would be $4,000.

Fund Status: The status of the reserve fund reported in terms of cash or percent funded.

Funding Goals:

The three funding goals listed below range from the most aggressive to most conservative:

Baseline Funding

Establishing a reserve funding goal of allowing the reserve cash balance to approach but never fall below zero during the cash flow projection. This is the funding goal with the greatest risk of being prepared to fund future repair and replacement of major components, **and it is not recommended** as a long-term solution/plan. Baseline funding may lead to project delays, the need for a special assessment, and/or a line of credit for the community to fund needed repairs and replacement of major components.

Threshold Funding

Establishing a reserve funding goal of keeping the reserve balance above a specified dollar or percent funded amount. Depending on the threshold selected, this funding goal may be weaker or stronger than "fully funded" with respective higher risk or less risk of cash problems. In determining the threshold, many variables should be considered, including things such as

investment risk tolerance, community age, building type, components that are not readily inspected, and components with a remaining useful life of more than 30 years.

Full Funding
Setting a reserve funding goal to attain and maintain reserves at or near 100 percent funded. Fully funded is when the actual or projected reserve balance is equal to the fully funded balance.

It should be noted that, in certain jurisdictions, there may be statutory funding requirements that would dictate the funding requirements. In all cases, these standards are considered the minimum to be referenced.

Funding Plan: An association's plan to provide income to a reserve fund to offset anticipated expenditures from that fund. The plan must be a minimum of 30 years of projected income and expenses.

Funding Principles: A funding plan addressing these principles. These funding principles are the basis for the recommendations included within the reserve study:

- Sufficient funds when required.
- Stable funding rate over the years.
- Equitable funding rate over the years.
- Fiscally responsible.

Initial Year: The first fiscal year in the financial analysis or funding plan.

Life Estimates: The task of estimating useful life and remaining useful life of the reserve components.

Life Cycle Cost: The ongoing cost of deterioration which must be offset in order to maintain and replace common area components at the end of their useful life. Note that the cost of preventive maintenance and corrective maintenance determined through periodic structural inspections (if required) are included in the calculation of life cycle costs and often result in overall net lower life cycle costs.

Maintenance: Maintenance is the process of maintaining or preserving something, or the state of being maintained. Maintenance is often defined in three ways: preventive maintenance, corrective maintenance, and deferred maintenance. Maintenance projects commonly fall short of "replacement" but may pass the defining test of a reserve component and be appropriate for reserve funding. Maintenance types are categorized below:

Preventive Maintenance: Planned maintenance carried out proactively at predetermined intervals, aimed at reducing the performance degradation of the component such that it can attain, at minimum, its estimated useful life.

Deferred Maintenance: Maintenance which is not performed and leads to premature deterioration to the common areas due to lack of preventive maintenance.

This results in a reduction in the remaining useful life of the reserve components and the potential of inadequate funding. Typically, deferred maintenance creates a need for corrective maintenance.

Corrective Maintenance: Maintenance performed following the detection of a problem, with the goal of remediating the condition such that the intended function and life of the component or system is restored, preserved, or enhanced.

Many corrective maintenance projects could be prevented with a proactive, preventive maintenance program. Note that when the scope is minor, these projects may fall below the threshold of cost significance and thus are handled through the operational budget. In other cases, the cost and timing should be included within the reserve study.

Percent Funded: The ratio, at a particular point in time clearly identified as either the beginning or end of the association's fiscal year, of the actual (or projected) reserve balance to the fully funded balance, expressed as a percentage.

While percent funded is an indicator of an association's reserve fund size, it should be viewed in the context of how it is changing due to the association's reserve funding plan, in light of the association's risk tolerance and is not by itself a measure of "adequacy."

Periodic Structural Inspection: Structural system inspections aimed at identifying issues when they become evident.

Additional information and recommendations are included within the Condominium Safety Public Policy Report. www.condosafety.com

Physical Evaluation: The portion of the reserve study where the component inventory, condition assessment, and life and valuation estimate tasks are performed. This represents one of the two parts of the reserve study.

Preventive Maintenance Schedule: A summary of the preventive maintenance tasks included within a maintenance manual which should be performed such that the useful lives of the components are attained or exceeded. This schedule should include both the timing and the estimated cost of the task(s).

Remaining Useful Life (RUL): Also referred to as "remaining life" (RL). The estimated time, in years, that a component can be expected to serve its intended function, presuming timely preventive maintenance. Projects expected to occur in the initial year have zero remaining useful life.

Replacement Cost: The cost to replace, repair, or restore the component to its original functional condition during that particular year, including all related expenses (including but not limited to shipping, engineering, design, permits, installation, disposal, etc.).

Reserve Balance: Actual or projected funds, clearly identified as existing either at the beginning or end of the association's fiscal year, which will be used to fund reserve component expenditures. The source of this information should be disclosed within the reserve study.

Also known as beginning balance, reserves, reserve accounts, or cash reserves. This balance is based on information provided and not audited.

Reserve Study: A reserve study is a budget planning tool which identifies the components that a community association is responsible to maintain or replace, the current status of the reserve fund, and a stable and equitable funding plan to offset the anticipated future major common area expenditures.

This limited evaluation is conducted for budget and cash flow purposes. Tasks outside the scope of a reserve study include, but are not limited to, design review, construction evaluation, intrusive or destructive testing, preventive maintenance plans, and structural or safety evaluations.

Reserve Study Provider: An individual who prepares reserve studies. In many instances, the reserve study provider will possess a specialized designation such as the Reserve Specialist® (RS) designation administered by Community Associations Institute (CAI). This designation indicates that the provider has shown the necessary skills to perform a reserve study that conforms to these standards. In some instances, qualifications in excess of the RS designation will be required if supplemental subject matter expertise is required.

Reserve Study Provider Firm: A company that prepares reserve studies as one of its primary business activities.

Responsible Charge: A Reserve Specialist (RS) in responsible charge of a reserve study shall render regular and effective supervision to those individuals' performing services that directly and materially affect the quality and competence of services rendered by the Reserve Specialist. A Reserve Specialist shall maintain such records as are reasonably necessary to establish that the Reserve Specialist exercised regular and effective supervision of a reserve study of which he or she was in responsible charge. A Reserve Specialist engaged in any of the following acts or practices shall be deemed not to have rendered the regular and effective supervision required herein:

1. The regular and continuous absence from principal office premises from which professional services are rendered; except for performance of field work or presence in a field office maintained exclusively for a specific project;

2. The failure to personally inspect or review the work of subordinates where necessary and appropriate;

3. The rendering of a limited, cursory or perfunctory review of plans or projects in lieu of an appropriate detailed review; and

4. The failure to personally be available on a reasonable basis or with adequate advance notice for consultation and inspection where circumstances require personal availability.

Site Visit: A visual assessment of the accessible areas of the components included within the reserve study.

The site visit includes tasks such as, but not limited to, on-site visual observations, a review of the association's design and governing documents, review of association precedents, and discussion with appropriate representative(s) of the association.

Special Assessment: A temporary assessment levied on the members of an association in addition to regular assessments. Note that special assessments are often regulated by governing documents or local statutes.

Special assessments, when used to make up for unplanned reserve fund shortfalls, may be an indicator of deferred maintenance, improper reserve project planning, and unforeseen catastrophes and accidents, as well as other surprises.

Structural System: The structural components within a building that, by contiguous interconnection, form a path by which external and internal forces, applied to the building, are delivered to the ground. This is generally a combination of structural beams, columns, and bracing and is not included within the reserve study, although it is reviewed as part of the recommended periodic structural inspections.

It is important to recognize that individual structural components which are not a part of the structural system, such as decks, balconies, and podium deck components may be included for reserve funding if they otherwise satisfy the three-part test.

Useful Life (UL): The estimated time, in years, that a reserve component can be expected to serve its intended function if properly constructed presuming proactive, planned, preventive maintenance.

Best practice is that a component's Useful Life should reflect the actual preventive maintenance being performed (or not performed).

Valuation Estimates: The task of estimating the current repair or replacement costs for the reserve components.

APPENDIX C

QUALIFICATIONS

CROMER CRITERIUM ENGINEERS

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 over 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