Milestone Phase 2 Report
RPO Condominium Association

Report Date:	2/24/2025
Inspection Date:	2/12/2025
Engineering Team Member:	Kaia Iverson
Consultant:	**Dudley McFarquhar, Ph.D., PE** Stone Building Solutions, LLC (SBS) 260 1st Ave S #225 St Petersburg, FL 33701

Per your request, a team from Stone Building Solutions, LLC (SBS) conducted a Phase 2 Milestone Inspection of the referenced property on the following building:

1505 N Hwy A1A, Indialantic, FL, 32903

Project Background

Year Built:	1995
Building Frame:	CMU block, concrete walkways and balconies, concrete staircases
Building Facade:	Stucco cladding, aluminum railings
Roof:	Flat modified bitumen.
Community Description:	This community consists of 1 building, 6 stories, with 20 units, built in 1995.

Executive Summary

This Phase II inspection includes destructive or nondestructive investigation to determine the extent of deficiencies and possible levels of deterioration to the structure(s).

Florida Statute 553.899 indicates that repairs must commence no later than 365 days after receiving the inspection report; however, local officials may reduce this timeline.

If a building owner fails to provide proof to the local enforcement agency that repairs have been scheduled or initiated, the agency is required to assess whether the building is unsafe for human occupancy.

There is conflicting information in Florida Building Commission (Section 1808.3.1 (updated Aug 2024), which states that repairs must be completed within 180 days.

Field Observation Summary

In the Phase I investigation, cracks were identified on the balcony slab edges at multiple areas indicating likely rebar deterioration. Multiple areas on the balcony soffits, and on the soffits below the second-floor balconies, were observed to have de-laminated stucco and possible concrete spalling. Cracks were also identified at the exterior walls on the southeast corner of the building, at the same area where unit owners on the 04 stack have been receiving water infiltration into their units. The purpose of the Phase II investigation was to perform destructive testing at select representative areas on the building. The conditions found within the destructive testing give insight into the conditions of other areas with similar damage and will be used to quantify necessary repairs.

Phase II Areas of Investigation

Location	Unit 504 balcony slab edge
Investigation (destructive)	Destructive testing was performed on the slab edge of the Unit 501 balcony to investigate a crack identified during Phase I. Similar cracking patterns were noted on other balconies throughout the structure. The concrete at the slab edge was carefully chipped away to expose and assess the condition of the rebar. The findings from this investigation are intended to provide a representative assessment of the structural condition of all balconies exhibiting comparable visible distress.
Observation	The concrete in the tested area was easily removed, indicating significant material degradation. The front rebar, oriented parallel to the balcony slab edge, exhibited extensive corrosion. This corrosion resulted in substantial cross-sectional area loss over an estimated length of 5 to 6 feet, with some sections of the reinforcement entirely deteriorated, leading to complete rebar loss in some areas.

Location	Soffit below Unit 204 balcony
Investigation (destructive)	Destructive testing was conducted at areas on the soffit below Unit 204 balcony where delaminated stucco was observed in Phase I. Stucco was removed at three (3) areas displaying this condition. Cracked tiles were observed at the balcony corner near the railing post directly above one area, indicating that there has been water intrusion into the slab.
Observation	Corroded reinforcement was observed at all three tested locations. In the area investigated near the middle of the slab, the rebar was positioned exceptionally low within the concrete, with no protective concrete cover aside from the stucco cladding. The insufficient concrete cover contributed to the de-lamination of the stucco and left the reinforcement highly susceptible to corrosion. At this location, the improperly positioned rebar is not effectively contributing to the intended structural capacity of the slab. At the other areas tested near the slab edge, the rebar placement was not as low as the middle section, however, water intrusion from the railing connections on the balcony above have caused rebar corrosion and concrete spalling. Similar deficiencies are expected at two (2) additional soffit areas below the second-floor balconies and four (4) other locations at elevated balcony soffits.

Location	04 Stack exterior wall corner connecting CMU block exterior wall and metal stud balcony sliding glass door wall
Investigation (visual)	A visual inspection was performed, utilizing a lift, at the exterior wall on the southeast corner where water intrusion into units was identified in Phase I.
Observation	Cracking was observed along the south and east edges of the exterior wall, consistently occurring at the same locations throughout the full height of the 04 stack (from Unit 204 to Unit 604). These cracks create pathways for water intrusion, potentially compromising the integrity of the wall system if not remediated in a timely manner.

Items Requiring Further Investigation

No areas require further investigation by SBS. However, the extent of rebar deterioration at each area of required remediation will not be known until remediation has begun and the concrete can be chipped away.

Repairs

Deficiencies (required remediation):

1. Concrete restoration is required for all balcony areas exhibiting face-of-slab cracks and soffit stucco delamination, due to the significant rebar deterioration identified at representative locations, including the Unit 504 balcony slab edge and the soffit below the Unit 204 balcony. Figure 1 below illustrates all identified areas with similar damage.

   During the remediation process, deteriorated concrete should be removed until sound material is reached and the exposed reinforcement is free of corrosion. Concrete should be chipped away around the full circumference of the rebar, providing sufficient clearance for thorough cleaning and treatment. The rebar should then be coated with a rust inhibitor before concrete patching. If more than 20% of the rebar's cross-sectional area has been lost—such as the severely corroded rebar observed at the Unit 504 balcony—it must be replaced. Additionally, all areas with excessively low reinforcement placement, such as below the Unit 204 balcony, should have the affected rebar replaced to ensure the slab maintains its intended strength.

2. Repairs are also necessary along the southeast corner of the entire height of the 04 stack, where exterior wall cracking has been observed. In these areas, the stucco should be fully removed and replaced. Any underlying damage to the CMU block or metal studs discovered during the restoration process must be properly repaired to ensure the long-term durability of the structure.

Figure 1. Areas of required remediation based on findings at representative areas during Phase II investigation. Areas in red signify slab edge cracks, areas in blue signify soffit damage, and areas in purple signify column damage.

Maintenance Items:

1. Seal all bolted connections at railing posts to mitigate water intrusion into the balcony slabs.
2. Apply a high-performance topical sealant to all cracked areas in the balcony tile to mitigate moisture penetration.
3. Seal all exposed interfaces between the balcony tile face and slab edge to reduce the risk of water infiltration, subsequent concrete degradation, and possible tile damage.
4. Seal all hairline cracks on balconies to mitigate water intrusion and potential expansion of existing cracks.
5. Apply sealant around all hurricane shutter connections to mitigate water intrusion into the balcony slabs, especially at the base with segmented sections with attaching anchor bolt.
6. Perform concrete restoration at one window sill exhibiting spalling on the left elevation (far-right, second-floor window) to restore structural integrity and prevent further deterioration.
7. It is recommended that the association paint and waterproof all balconies on the rear (East) elevation, as well as soffit areas below second-floor balconies during the required balcony remediation. Multiple hairline cracks have been identified, and proper routing, sealing, and waterproofing will mitigate further water intrusion. Failure to properly seal and protect these areas will likely result in more extensive structural repairs over time.
8. Investigate water intrusion issues at Units 204 and 404. While Phase II investigations did not reveal obvious sealant failures from a ground-level assessment, further evaluation is recommended to determine the source of leakage and appropriate remediation measures.
9. Repair area of failed remediation above the generator room door on the right elevation. Continued deterioration may affect door operation, potentially creating a life safety concern if left unaddressed.

This concludes the Phase II summary that must be distributed to your membership. If you have any questions, please advise us at your earliest convenience.

The opinions and findings expressed in this report are based upon the information available to Stone Inspections Group LLC (SIG) as of the date of this report and are the result of limited testing of the property and exposed building components. As such, SIG assumes no liability for the misuse of this information by others and reserves the right to modify the conclusions contained herein upon receipt or discovery of additional Information. Due to the limited access and the non-destructive nature of the investigation, SIG cannot be held responsible for any hidden defects that may negatively impact the performance of the structure. This report is intended to provide an overview of the existing conditions observed, and should not be used as an indicator of future performance; no expressed or implied warranty implied.

Respectfully Submitted,

Dudley McFarquhar, Ph.D., PE
FL PE # 48598
(800) 892-1116 www.stonebldg.com

Dudley McFarquhar
Digitally signed by Dudley McFarquhar
Date: 2025.02.27 06:37:53 -05'00'