EPIC
FORENSICS & ENGINEERING

January 31, 2023

Board of Directors
The Marina at the Bluffs Condominium Association, Inc.
1550 Marina Isle Way
Jupiter, FL 33477

1806 Old Okeechobee Road
Suite A
West Palm Beach, FL 33409
Ph: 561-581-8800
www.epicforensics.com

Re: Milestone Inspection Report – Phase One.
Building 15.
1501 Marina Isle Way, Jupiter, FL 33477

Dear Board of Directors,

At the request of **The Marina at the Bluffs Condominium Association, Inc.** ("Client"), **Epic Forensics & Engineering, Inc.** ("Epic") performed a "Milestone Inspection" of the property located at **1501 Marina Isle Way, Jupiter, FL 33477** per the new 2022 Legislature Subsection 4-D. The areas observed by Epic included, the exterior elevations of the building, the roof, the common corridor areas, two stairs, all available and readily accessible private balcony units (27 out of 30), the exterior surroundings of the building (landscape areas) and front Porte Cochere and trash room. This on-site assessment was performed by Epic on May 4, 2022. The purpose of this milestone inspection was to perform a non-destructive, visual review of the current condition of the property. It is Epic's opinion that a significant number of structural elements were observed sufficient to afford reasonable assurance that, in Epic's professional opinion, such elements are representative of a significative portion of the exterior facades and available, readily accessible, and visible elements of the building framing system. Based on the 2022 legislature SB-4D, the milestone inspection is required for *"the purpose of attesting to the life safety and adequacy of the structural components of the building and, to the extent reasonably possible, determining the general structural condition of the building as it affects the safety of such building, including a determination of any necessary maintenance, repair, or replacement of any structural component of the building. The purpose of such inspection is not to determine if the condition of an existing building is in compliance with the Florida Building Code or the fire safety code"*.

Deficiencies noted within this report are limited to items that, if not properly addressed, could potentially pose a **future** risk to the life or safety of the occupants of the Buildings (including residents, guests, staff and pets), as well as conditions that could potentially contribute to and/or cause significant structural damage to the Buildings during **future** severe storm or wind events. Deficiencies described within this report are based on the limited scope of work described above and are not intended to represent an all-inclusive or exhaustive review of the Buildings in their totality. The specific deficiencies described herein, as well as any other like-kind

conditions encountered throughout the Buildings, should be addressed in a timely manner (as described in further detail below) in order to protect the occupants and maintain the intended structural integrity of the Building. To facilitate the Client's planning, repairs should be started within 90-days of the date of this report.

Under section 553.899, ***"Mandatory structural inspections for condominium and cooperative buildings"***. Subsection 4, The milestone inspection is required, and the building's initial milestone inspection must be performed before December 31, 2024.

As indicated in Section 553.899, Subsection 8(c), based on the Milestone Inspection Phase One, during the visual examination of habitable and non-habitable areas of a building, including the major structural components of the building, Epic did not observe any "Substantial Structural Deterioration".

As defined in Section 553.899, subsection 2(b), "*Substantial structural deterioration" means substantial structural distress that negatively affects a building's general structural condition and integrity. The term does not include surface imperfections such as cracks, distortion, sagging, deflections, misalignment, signs of leakage, or peeling of finishes unless the licensed engineer or architect performing the phase one or phase two inspection determines that such surface imperfections are a sign of substantial structural deterioration*".

It is Epic's opinion that based on the current condition of the observed building components at the time of the assessment, the Property is deemed to be Structurally safe for continued use under the present occupancy with qualifications listed below. The deficiencies observed in the property shall be promptly addressed to prevent continuing deterioration. Currently, the observed deficiencies do not represent a significant or "substantial structural deterioration", but if not properly addressed and corrected within the timeframe noted above, they may negatively affect the general structural condition and integrity of the building. See ***"Substantial Structural Deterioration"*** items below.

As indicated above, the deficiencies observed at the property are not an immediate structural concern for the integrity of the building, however they may represent an unsafe condition to the building occupants. Deficiencies listed below are life-safety related and have been deemed "High Priority" repairs (i.e., potential threat to life-safety) and must be repaired/restored promptly. See ***"Life-safety related"*** items below.

Per Section 553.899, Subsection 8(e), items that are currently damaged but are not considered substantial structural deterioration shall be listed and recommended remedial or preventive repairs are proposed for the Association to address. See ***"Non-Substantial Structural Deterioration"*** items below.

BACKGROUND INFORMATION

The current subject property consists of twenty-two (22) 5-story buildings, containing a total of 660 residential units, and is located at Marina Isle Way, Jupiter, FL 33477. The buildings are numbered from 5 thru 26 and are located around the marina where repairs and renovations are currently being performed by a General Contractor hired by the Marina Association (see **Exhibit #1**, showing building numbers and associated street address numbers; management and dockmaster offices are also shown for reference). Shown below in red lettering is Building 15 (1501) associated with the deficiencies listed in this milestone inspection report.

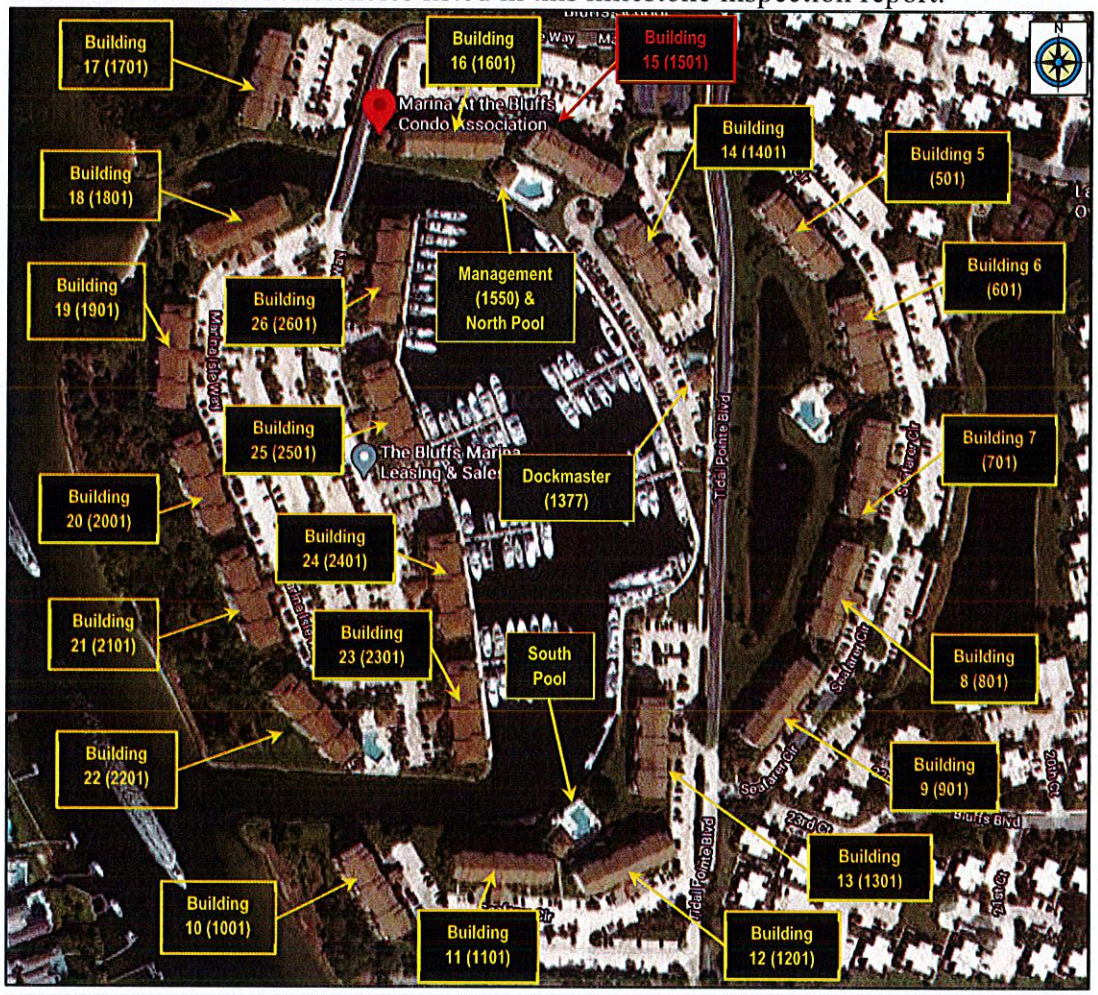

Exhibit 1: Aerial photograph of the property with building numbers and address numbers. (*Source: Google Maps 2020*)

SUBSTANTIAL STRUCTURAL DETERIORATION

None observed for this building.

LIFE-SAFETY RELATED

- Balcony guardrail vertical posts with visible separation and/or gaps between the concrete wall of the concrete pocket and the post (see **Photos #1 and #2**). Also, moisture was observed ponding in low spots around the post base. This condition indicates moisture has penetrated the base of the post and could cause damage to the concrete and corrosion of the reinforcement in the slab. Further evidence of moisture within the railing post base can be observed at locations with vegetation and/or organic growth. Also, at several locations, the degree of deterioration of the post base grout allows unwanted lateral movement of the guardrail system top member or top rail.

Photo #1. View of post base deteriorated grout with large gaps and metal post with signs of corrosion damage (unit 201 corridor).

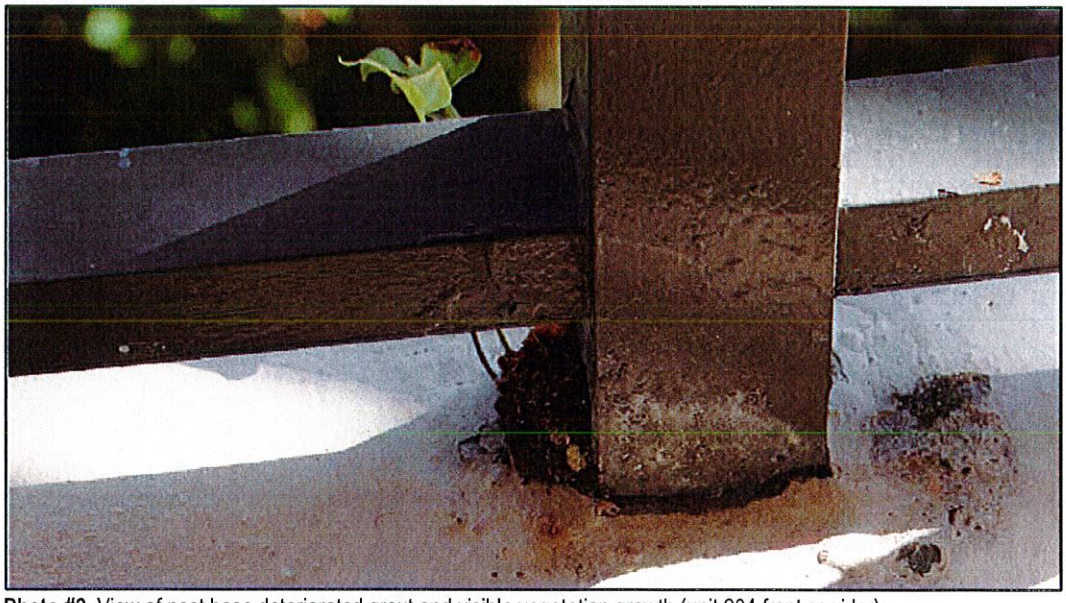

Photo #2. View of post base deteriorated grout and visible vegetation growth (unit 204 front corridor).

Proposed remedial repairs:

Since the existing guardrail system in not "current" code complaint, the guardrail system cannot be removed or un-installed from the current location. If the guardrail is removed, a new current code compliant system shall be installed in its place. For that reason, we recommend the following remedial actions:

- At locations where concrete/grout cracks, delamination, and/or spalling is identified, remove all grout to expose the embedded portion of railing post and remove adjoining cracked, delaminated and/or spalled concrete.
- Remove all grout, corrosion, scale, slurry, and other bond-inhibiting material from exposed railing post by thorough wire-brushing or high-pressure water blasting.
- Install weep hole at post base above finishes.
- Replace removed concrete non-shrink non-metallic grout around the post.
- Prime railing posts to a minimum of 1-inch above the finish concrete surface to provide adequate grout-to-aluminum isolation.
- Seal around post base with sealant.
- Plaster finish and paint the repair area to match the surroundings.

NOTE: this is not a repair protocol to correct the observed deficiency. Detailed procedures and material specifications shall be prepared prior to correcting the issue(s) listed above. Repair protocols shall be properly submitted to the applicable building departments and building permits shall be obtained prior to commencement of work.

- Balcony floors and exterior edges with imminent concrete spalls. This condition can also be caused by insufficient rebar concrete coverage and by superficial cracks that allow moisture intrusion. Corrosion present at reinforcing steel produces expansion of the diameter of the bar which leads to displacement of surface materials, in this case, concrete (See **Photos #3 & #4).** Due to the uncertainty of this condition, it is not possible to predict if or when the finishes will fall. We recommend removing the deficient portions of the finishes or concrete elements from the slab edges or ceilings to prevent pieces of debris from falling down and hurting residents.

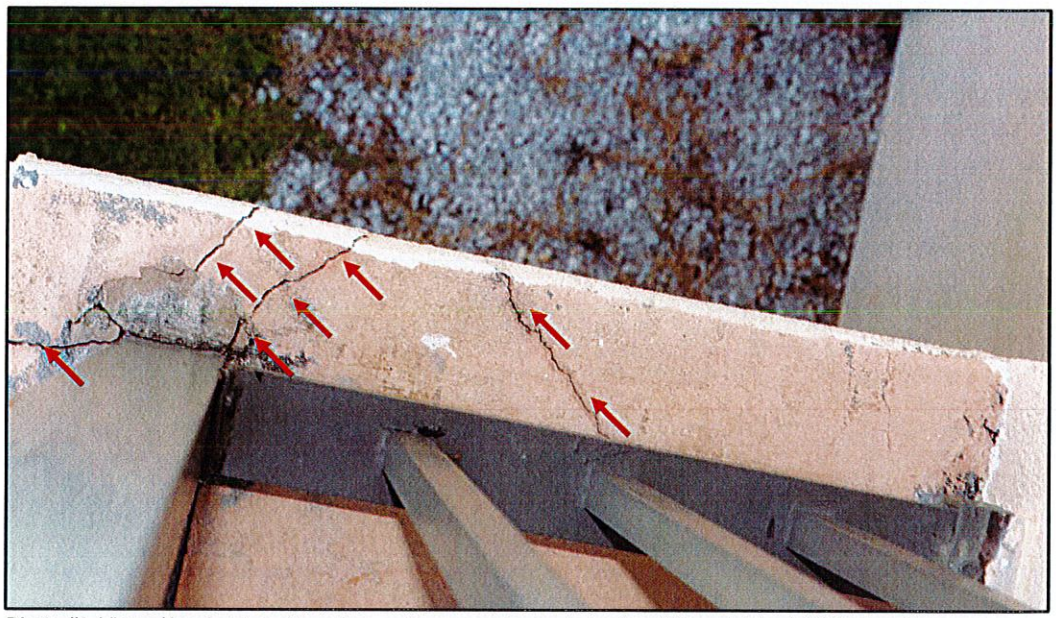

Photo #3. View of imminent spalling of concrete corner observed at edge of floor slab (unit 305 balcony).

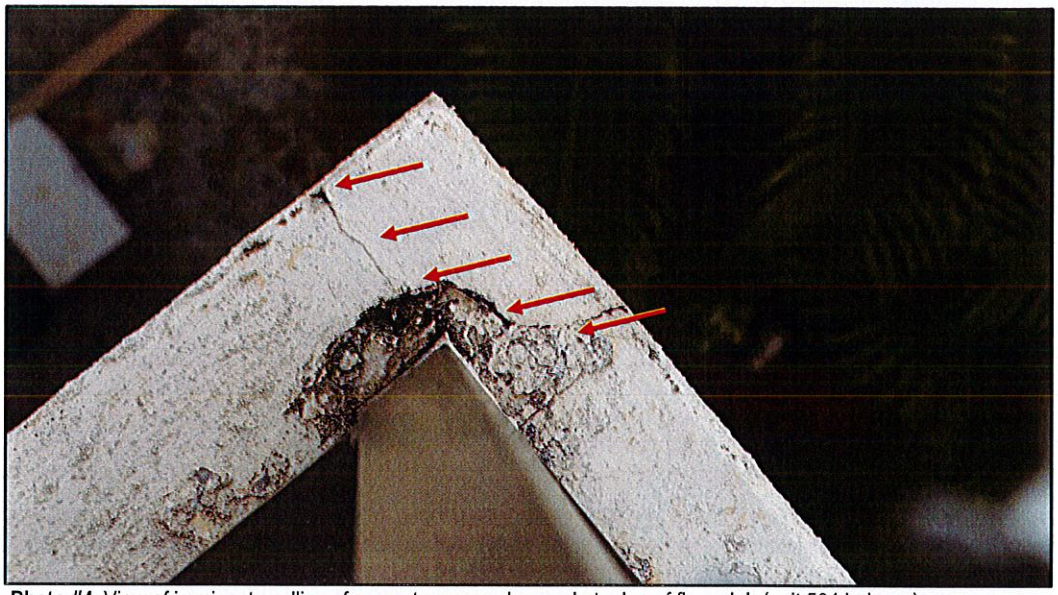

Photo #4. View of imminent spalling of concrete corner observed at edge of floor slab (unit 504 balcony).

NON-SUBSTANTIAL STRUCTURAL DETERIORATION ITEMS

- Balcony ceiling and exterior edges with exposed and corroded reinforcement bars. This condition can be caused by insufficient rebar concrete coverage and by superficial cracks that allow moisture intrusion. Corrosion present at reinforcing steel produces expansion of the diameter of the bar (exfoliation) which leads to displacement (jacking) of surface finishes, such as stucco. This condition can be observed prior to stucco/concrete finishes failure, in the form of bulging of the exterior finishes (see **Photo #5 & #6).**

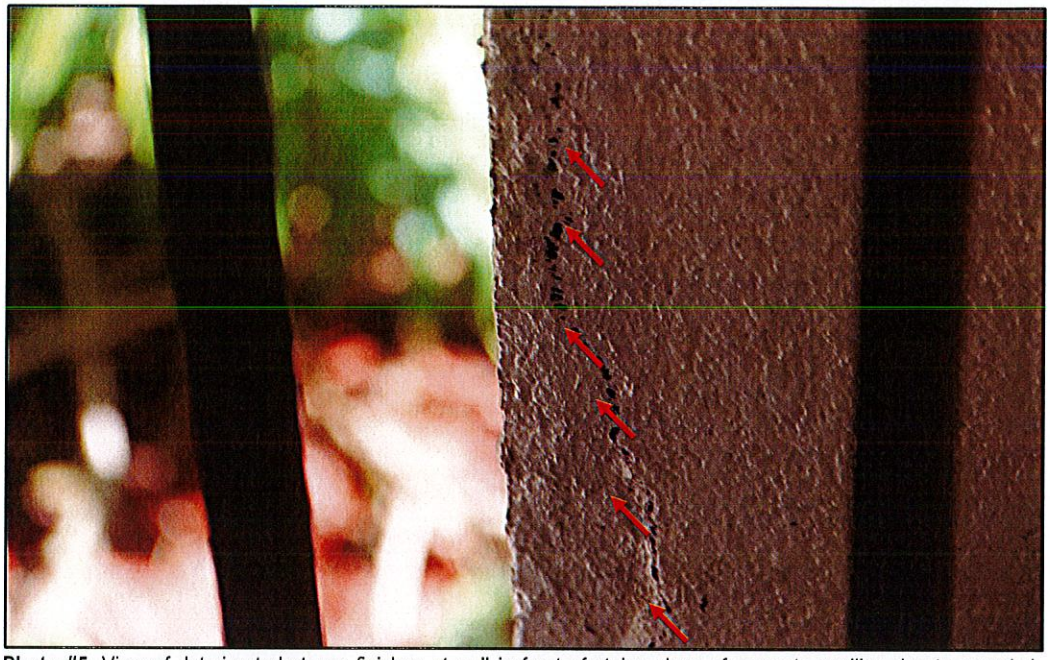

Photo #5. View of deteriorated stucco finishes at wall in front of stairs, signs of concrete spalling due to corroded reinforcing, condition observed at wall in front of stairs next to unit 202 front corridor.

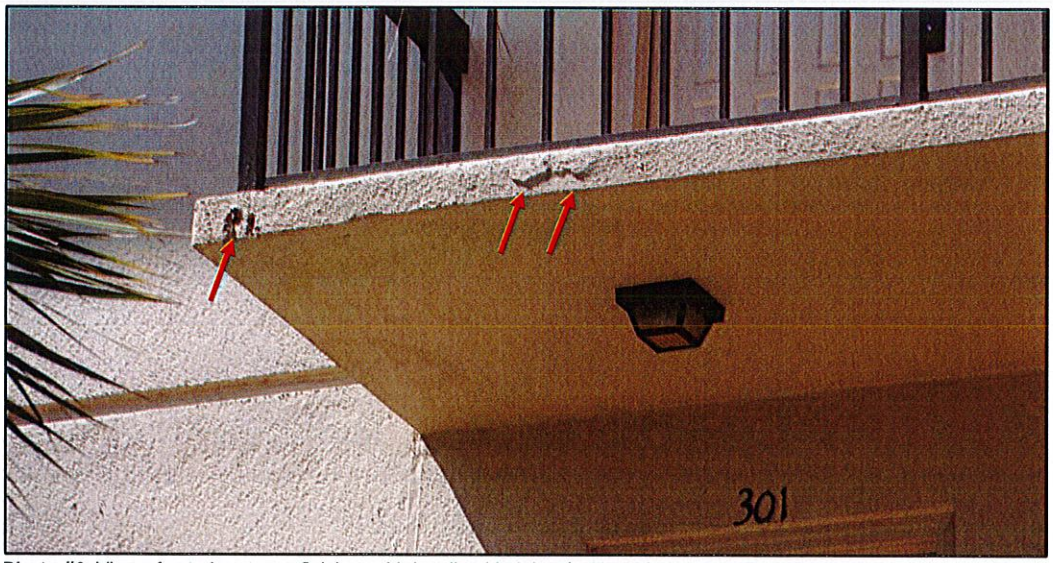

Photo #6. View of exterior stucco finishes with localized bulging (ceiling of unit 301 front corridor).

- In certain instances, this condition can be concealed by finishes that have not yet failed or have been covered by previous repairs. This condition requires additional invasive evaluations to clearly define the limits of the deficiency (see **Photo** #7).

Photo #7. View of cracks and deteriorated floor finishes, signs of concrete slab spalling due to corroded reinforcing, condition observed at floor (top of slab) of unit 505 front corridor.

- Exterior sealants around door and window observed with signs of deterioration (cohesion failure). This condition can allow wind driven rain to enter the building envelope and cause damage to the concrete elements as well as damage to interior finishes, personal property and create environmental contamination such as mold and mildew. Sealant shall be removed and replaced preferably with a paintable and UV resistant silicone or hybrid sealant material (See **Photo #8**).

Photo #8. View of deteriorated sealant around the front door of unit 404.

- Anchors for hurricane shutters observed with severe deterioration in the form of corrosion. This condition will compromise the structural integrity of the shutters under severe wind events. Expansion of the anchor due to severe corrosion will damage the concrete and can allow moisture to enter and damage reinforcing bars within the slab. Corroded anchors shall be replaced with corrosion resistant anchors.

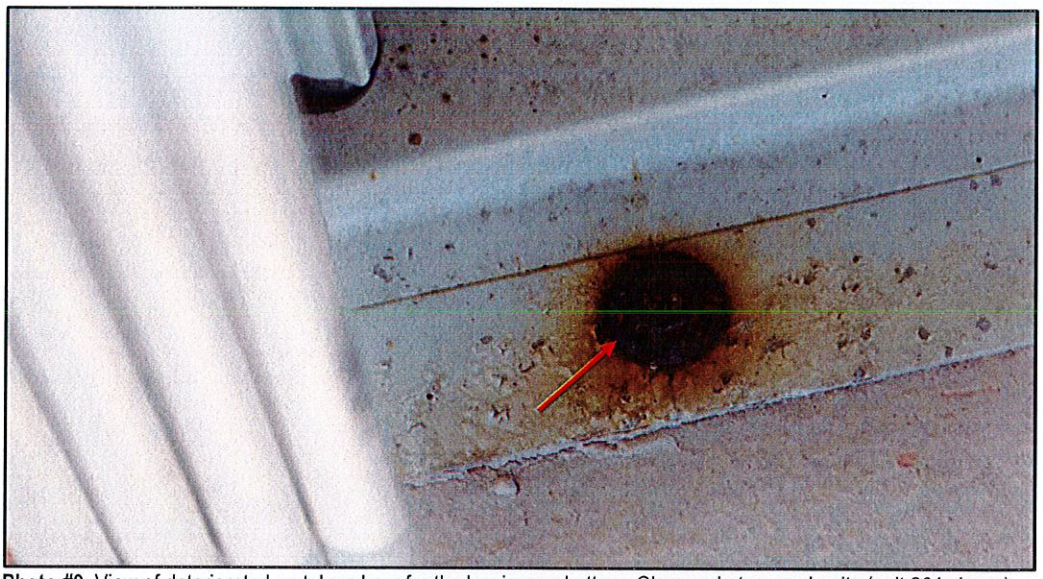

Photo #9. View of deteriorated metal anchors for the hurricane shutters. Observed at several units (unit 201 shown).

- Balcony ceiling and exterior edges with exposed and corroded metals and corroded steel elements observed at numerous units. This condition refers to metals used in the slab during construction, and also metals installed after construction (see **Photo #10**. Exposed corroded metals shall be removed by grinding metals to a depth of at least 1 inch, coating remains of metal elements in cavity, patching hole and finish or paint to match existing adjacent areas.

Photo #10. Close up view of embedded metals within concrete slabs with visible corrosion stains (unit 302 front corridor).

- Floor slabs with unsealed penetrations and cracks. Unsealed penetrations allow rainwater to penetrate and usually leads to corrosion of member reinforcement and spalling of concrete (Long term). The majority of the cracks observed are hairline cracks and do not represent a structural concern, however if not repaired

they can cause future damage to the structure. Cracks shall be routed, sealed and surfaces finished with waterproofing membrane. (See **Photo #11**).

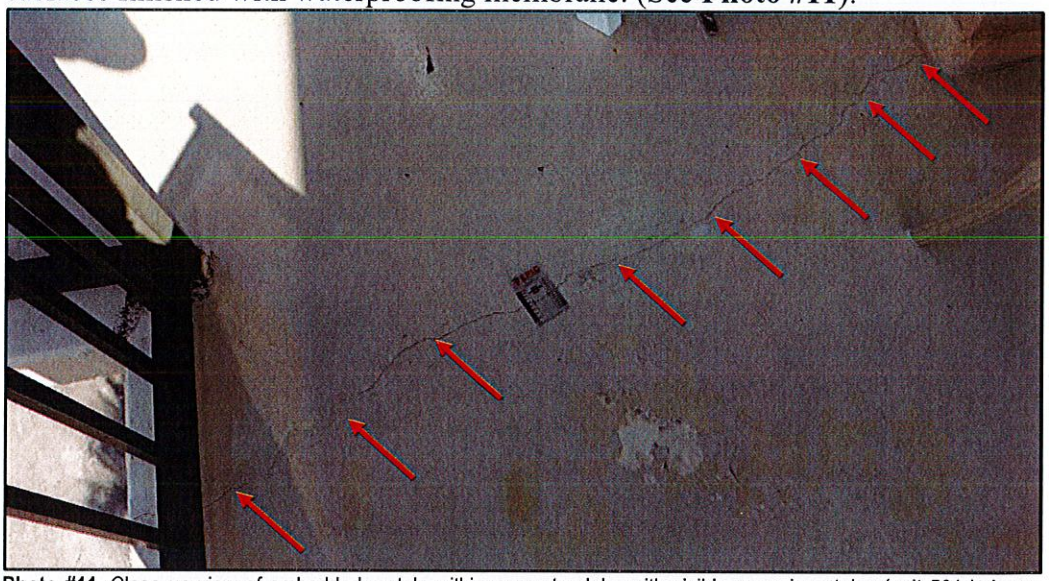

Photo #11. Close up view of embedded metals within concrete slabs with visible corrosion stains (unit 501 balcony shown).

- Balcony units with floor finishes (i.e. tile), it was observed, at private balcony units with floor finishes (i.e. tile) installed up to the edge of the slab and the edge of the tile perimeter completely sealed preventing water that enters through grout lines or cracks to escape. In many cases water accumulates with no way to drain out damaging the finishes and potentially the concrete and reinforcement within the slabs (See **Photo #12**).

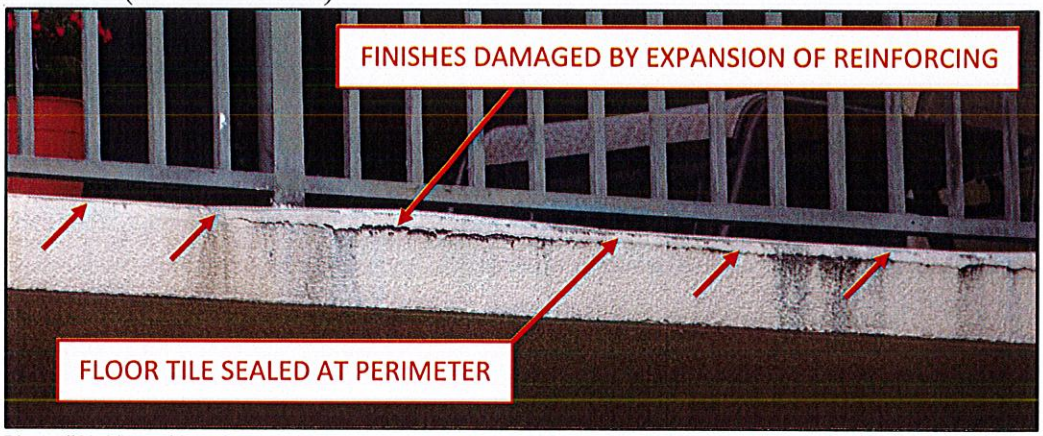

Photo #12. View of floor finishes (tile) with edges sealed (Unit 204 balcony shown).

- The above discussed deficiencies are considered "***Non-substantial structural deterioration***", deficiencies observed do not constitute a structural-related or life-safety related issue, however if they are not addressed in a timely manner (i.e. during the next 90 or the next scheduled building painting, (whichever timeline is less). With long-term exposure to the aggressive environmental conditions that

exist at this property, these deficiencies can worsen and lead to damages to the structure. Epic recommends that "***Non-substantial structural deterioration***" items be monitored by the Association's Staff minimum on a monthly basis and to alert Epic if any of those conditions worsens. Epic's report can be used as the baseline for comparison and record keeping by the Association's Staff.

Below at the end of the report is attached (***Appendix #1***) a list in table form (***Table #1***) of all the unit balconies accessed and balcony areas observed from adjacent locations. The table below shows the observed deficiencies noted during Epic's inspections. Notes and photos shown above are representative examples of each deficiency observed in the building. Cells in the table below highlighted with red indicate that a photo of this deficiency is shown above. Conditions identified in the table below will look similar to the example photo shown above.

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CLOSURE

The opinions and recommendations expressed in this document are based on a review of the noted material, as well as my education, training, and experience as a licensed, professional engineer, and have been reached within a reasonable degree of engineering probability. These opinions and recommendations are based on the information currently available to me and may be amended or supplemented should new information become available.

As a routine matter, in order to avoid possible misunderstanding, nothing in this document should be construed directly or indirectly as a guarantee for any portion of the building/structure. To the best of my knowledge and ability, this document represents an accurate appraisal of the present condition of the building/structure based upon careful evaluation of observed conditions, to the extent reasonably possible.

This document has been prepared in accordance with the applicable professional standard of care. No other warranties or guarantees, expressed or implied, are made or intended. This document has been prepared solely for the Client or its authorized representatives for the purpose stated herein and should not be relied upon by any other party or for any other purpose. The conclusions in this letter are based on the limited investigation described above. Should additional information become available, Epic reserves the right to re-evaluate and/or supplement the opinions, comments, and/or recommendations provided herein, and to issue a revised version of, or supplement to, this letter, if deemed necessary.

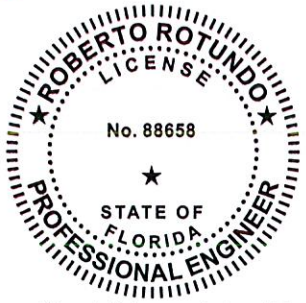
Any reliance on this document by any party other than the Client shall be without liability to Epic or its employees.

Please contact Epic at 561-581-8800 if you have any questions.

Respectfully submitted,
EPIC FORENSICS & ENGINEERING, INC.
Registry 30519

This item has been digitally signed and sealed by the engineer named below on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed, and the signature must be verified on any

By: _____
Roberto Rotundo, P.E.
Florida License No. 88658



Roberto Rotundo,
P.E. 88658
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"As a routine matter, in order to avoid possible misunderstanding, nothing in this report should be construed directly or indirectly as a guarantee for any portion of the structure. To the best of our knowledge and ability, this report represents and accurate appraisal of the present condition of the building based upon careful evaluation of observed conditions, conditions, to the extent reasonably possible."

Appendix #1

Table #1 – Accessed Residential Balcony Unit List - Observed deficiencies.

Building		Deficiencies																											
		Railings						Stucco Deficiencies					Concrete								Others									
1501		Loose	Failing Paint	Gap Observed	Fails 42"+ Height Requirement	Moisture evident	Bad Post Pockets	Cracks (LF)	Overhead (SF)	Walls (SF)	Slab (SF)	Edge (SF)	Cracked Slab (LF)	Exposed Rebar	Edge crack	Overhead Spall (SF)	Spalled Edge (SF)	Delaminated Edge (SF)	Delaminated Slab (SF)	Spalling Slab (SF)	Cracked Tile	Door sealant	Unsealed Electrical Box	Vegetation	Unsealed Penetrations	Waterproofing deficient (SF)	Corroded anchors (Shutters)	Sealed Balcony Edge	Rust Spots
Balconies (rear of building)	Units																												
	506						9					5									1			1					
	505						3			2																			
	504						7			2			30		3				1										
	503	NO ACCESS TO BALCONY																											
	502						7																						
	501						4						5		6				2				1			2			1
	406	NO ACCESS TO BALCONY																											
	405						3				5		5		2						1								
	404								5.5														1						1
	403						7						6		1								1						
	402														1									1					1
	401							6		1			10										1						
	306						4		1				10										2						
	305						5			2	5		5		1														
	304						3				6												1						
	303						6				4													1					1
	302						4		1		1		12																
	301						3		1			0.5	50																
	206						3		1	1			5		3														1
	205						5		2	5			12										1		2				
	204						4		1	8		7															1		
	203																							1					
	202						5			2			12		3														
	201						2		4						5														
	106	NO ACCESS TO BALCONY																											
	105						2						12																
	104					1	1		2																				
	103																												
	102																				1								
	101								0.5															1					
Corridors (front of building)	Units																												
	506																												
	505												12							1									
	504												16																
	503												8																
	502												12																
	501																												
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	405												12									1				2			
	404				1								12									1							
	403												20												0.25				
	402												4																
	401	1		1		1	3																		1				
	306						4																						
	305	1		1			6						4																
	304						5						4							1		1							
	303	1		1		1	6						12																
	302						5						10																1
	301						5					0.3													0.75				
	206	1				2	2																	1					
	205			1		2	2						8											1					
	204			2		2	2			0.3		0.5												1					
	203												12																
	202			1		1	2			0.5			8									1		1					
	201			1			1			0.3			4													1			
	106																									2			
	105																												
	104																												
	103																									2			
	102																									2			
	101																												
Exterior	Location																												
	Front											6.5																	
	Left																												
	Right																												
	Rear											15																	

Table #1 – Accessed Residential Balcony Unit List - Observed deficiencies.