

January 16, 2023

Beach Club of Indian Shores Condominium Association, Inc.
Karl Olander, Treasurer
kolander@tampabay.rr.com

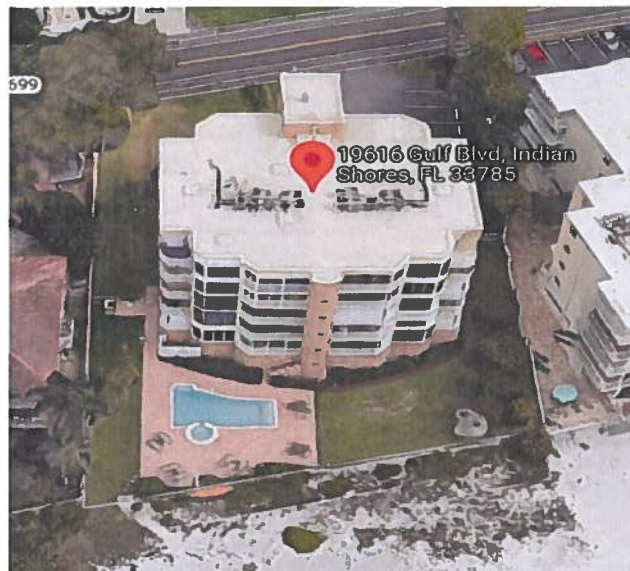
RE: *Beach Club of Indian Shores Condominium Association, Inc.*
19616 Gulf Boulevard
Indian Shores, Florida 33785
KEG File #22RP-0940: Milestone Inspection

Dear Mr. Olander:

As requested, an engineer from Karins Engineering Group, Inc. (KEG) visited the above referenced condominium on December 28th of 2022. The purpose of our visit was to perform a milestone survey on the structure constructed on the property located at 19616 Gulf Boulevard. The milestone survey was completed in accordance with the current Florida Statutes 553.899 for Phase 1 inspection. The inspection was performed by visually inspecting the building structure, including the load-bearing walls, primary structural members, and primary structural systems, and provide a qualitative assessment of the overall structural condition of the building. The milestone survey included habitable and non-habitable for the building envelope, roof and ground floor, as well as the balconies and stairwells. The purpose of the survey was to identify major structural issues and concerns for further testing and repair and to gather information that would enable us to make recommendations for any of the observed deficiencies. Our inspections were limited to visually identifiable concerns within all reasonably accessible areas of common concern and all units and balconies.

Neither our observations nor this report is intended to cover hidden defects, mechanical, electrical, architectural features or other areas of the building not specifically mentioned.

GENERAL INFORMATION



19616 Gulf Boulevard

Firm Registration Number 8371
www.karins.com

KEG was provided with a set of plans for the building. The Association consisted of one structure built circa 1994, per the Pinellas County property appraiser website. The structure is primarily used as a residential condominium (Florida Building Occupancy Class Residential, Risk Category II). The building structure consists of 5 occupied floors over a parking garage on the ground floor. The estimated total actual building area for the building is calculated to be approximately 46,500 square feet with 20,500 square feet of living area per the Pinellas County Property Appraiser.

Per site observations, and original drawings the structure consists of post tension concrete slabs supported by concrete beams and columns with reinforced masonry and light gauge framing infill walls. The original drawings state that the foundation system is a deep pile foundation supporting the columns and shear walls. At the time of our observation the foundations were not dug up or investigated. Access to the units was provided by personnel of the Association's Board. The flat roof systems appeared to be made up of modified bitumen with a maintenance coating. The perimeter of the flat roof appeared to be made up of a masonry parapet wall with a painted stucco finish and parapet coping. Finishes for the building consisted primarily of stucco with a paint coating finish. KEG also noted that the personnel on site was unable to provide access to the elevator pit for the building at the time of the observation.

SUMMARY

KEG performed visual inspections on areas that were accessible at the time of the site visits. Due to the nature of the inspections, no evaluation was performed of the sections of the structure that were behind finishes, obscured by equipment or other items that could not be reasonably moved at the time of the site visits. During the inspections, KEG noted that the structures appeared to be in generally good condition with no signs of significant structural distress. However, KEG observed what appeared to be various drill holes into the masonry walls, located in both stairwells and in the garage. KEG noted them to not have an effect on the structure, however KEG would recommend patching these voids since the stairs are a path of egress and should not have potential openings that would allow smoke to access the stairs. According to the Association, the building was last painted in 2021, and the roof had work performed on it approximately 10-12 years ago.

KEG observed the roof of the building to be in generally good condition. Newer aluminum AC stands were installed to meet the current Florida Building Code standard. The roof coating was observed to be worn down and in areas around the post holes of the AC stand, the membrane appeared to be cracking. KEG noted the cracks were not significant, however if the cracks are not repaired properly, they are likely to cause damage to the structure in the future. The hurricane straps observed for the AC units appeared to be in fair to poor condition. Additionally, KEG noted that there is an absence of OSHA tie back anchors at the roof for window washers and swing stages.

KEG noted a few minor spall areas located at the west stairwell. KEG located these spalls to be occurring in the storage area under the stairwell and on the 3rd floor at the concrete exterior of the stairwell. Additionally, KEG noted various minor cracking occurring in the ceiling of the garage, however these minor cracks and spalls do not appear to be affecting the overall structural integrity of the building.

KEG noted the interior units to be generally in good condition, however, water intrusion was evident in the master bedrooms at the base of the floor to ceiling windows. Many of the owners were present during the inspection and stated the water intrusion has occurred during tropical storm or hurricane systems. Additionally, according to the Association, the glass blocks at the south elevation have been resealed. KEG did not observe any areas of water intrusion at the glass block windows.

Based on the scope of the inspection and for the areas that were able to be assessed, within the reasonable degree of engineering certainty, we have not observed any conditions that would compromise the safety of the building for its intended use and occupancy. We reserve the right to amend our opinion should new information be brought to our attention. KEG recommends that the Association has the building structure reviewed every ten years based on the



requirements of the Florida Statutes. Our statements referencing the structural integrity of the building are in reference to the original installation. Our statements are not intended to verify compliance with building codes or accepted construction techniques. This report is prepared for the sole benefit of the client. Any unauthorized use without our permission shall result in no liability or legal exposure to Karins Engineering.

OBSERVATIONS

Building Foundation

As noted above, the building plans that were provided to KEG state that the structure is constructed on a pile cap with piles deep foundation. KEG was not able to visually observe the foundation. Typically, foundations for a 6-story structure on the beach will be constructed of deep piles to provide sufficient support and eliminate the possibility of shallow foundations being eroded away.

KEG reviewed the structure for signs of differential settlement or excessive settlement. Based on our observations, KEG did not observe any signs of conditions that would indicate a failing foundation or settlement in excess of typical anticipated settlement. The slab on grade within the garage also appeared to be in good condition.



Visualization of Piles Foundation Supports in Garage



Overall Structure

KEG's visual inspections included a significant amount of time observing and documenting the structural elements of the building. During this process, KEG observations were focused on identifying signs of significant structural distress within the columns, beams, and walls of the structure.



Rear Elevation of Structure (Facing Gulf of Mexico)

Significant distress in the structure can be identified using visual means by examining the structural elements of the building to see if the elements are in general alignment. This means evidence of settling, bulging, deflections, expansion or contraction of the members. Each of these behaviors would point to stresses in the structural members that may cause a failure in the future.

Settling is the term used to describe the movement of the foundation under loading. Settling foundations means that the structural elements supported by the foundations will move with them. While settling of the building as a whole can cause significant problems with utilities and exterior elements such as slabs, the most concerning item with regards to building stresses is differential settlement, which is when two sections of the building settle at different rates. This type of settlement causes additional stresses to the members which may lead to failures.

Bulging is the term used to describe when a vertical member is loaded in compression and not properly secured to the adjacent joints or flooring systems, which would limit the out of plane movement of the vertical member. This type of behavior leads to reduced load capacities as the load becomes eccentric and causes buckling failure of the element.

Deflections are similar to buckling in behavior but are for horizontal members instead of vertical ones. Excessive deflection is often the result of large loads or wide spans between supporting columns. Both bulging and deflection can



affect the performance of windows and doors, making them difficult to open and close as the member's displacement changes the opening dimensions.

Expansion and contraction of the members are essentially terms that describe the same behavior but in different directions. These terms refer to the loss or gain of dimensional size in the members. This behavior can be the result of moisture absorption or evaporation and thermal heating and cooling. Depending on construction and environmental factors, the members may expand or contract in such a way as to stress the surrounding members and cause failures.



Beach Club Condominium Observed from Adjacent Grade

The overall structure appeared to be in good condition with no visual signs that would be considered significant to the structural integrity of the structure.

The exposed plumbing in the garage consisted of PVC and metal piping held up by metal fasteners and hangars. KEG noted that the hangars are in fair to poor conditions, appeared to be oxidizing and rusting. Typically, this is due to the Gulf salt air it is exposed to. Additionally, KEG noted the metal pipes to be experiencing the same oxidizing and rusting as the metal hangars. The Association may wish to investigate replacing the hangars with a stainless-steel product and coating the metal pipes with a marine grade epoxy paint.





Metal Pipes Showing Signs of Oxidizing and Rusting

While KEG was visually inspecting the pipes and sprinkler lines, there appeared to be an absence of fire caulking at the penetrations leaving a void. Potentially the fire caulking was on the other end of the penetration, but KEG could not verify. Typically, these are in fire rated walls and slabs to help prevent fire or smoke from entering an emergency exit egress or between two types of occupancy, such as the garage and interior units.



Visualization of Sprinkler Line Missing Fire Caulking

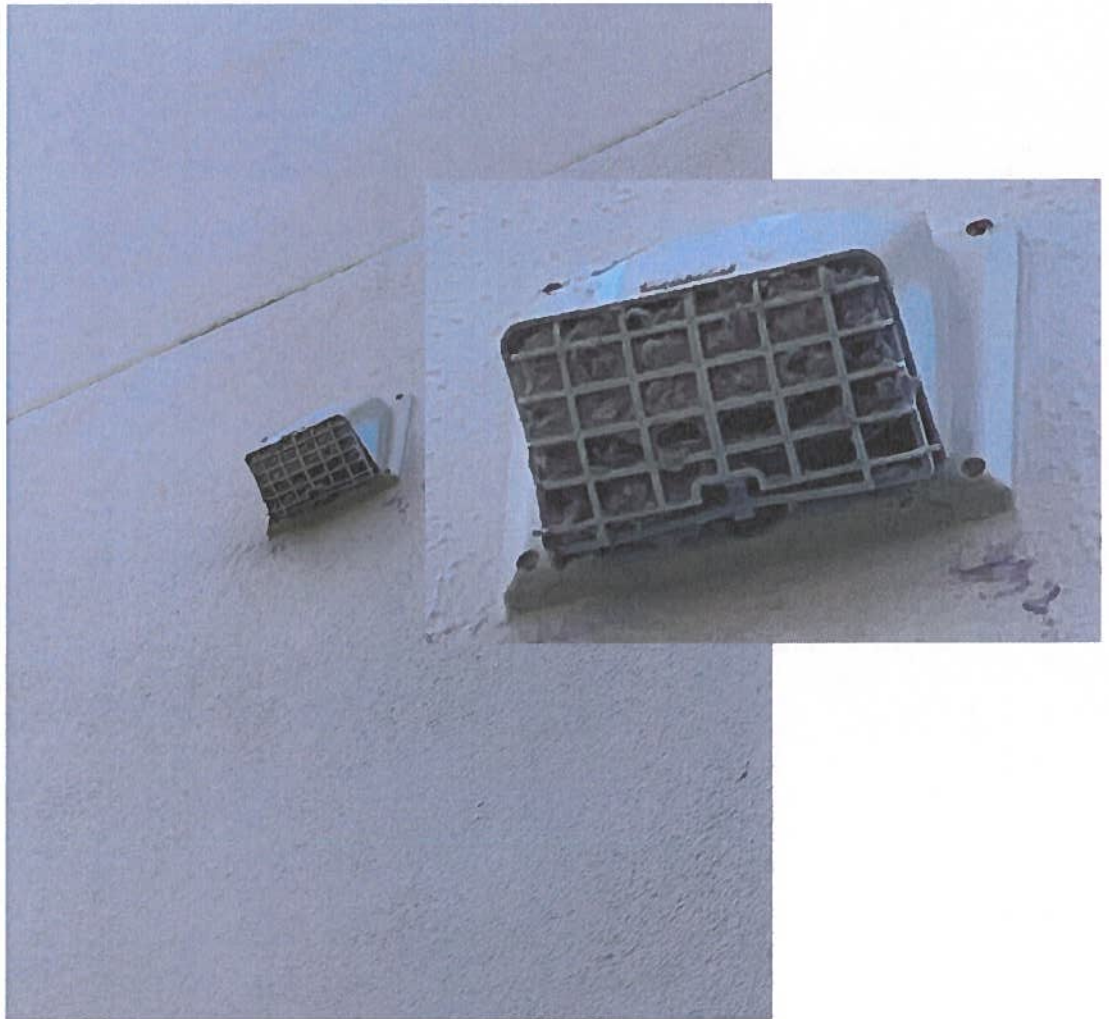


KEG noted the overall structure to be in generally good condition, however, a few minor spalls were located and observed at the west stairwell. The minor spalls were located in the storage area under the stairwell and on the 3rd floor at the exterior of stairwell. These spalls are minor and are not affecting the overall integrity of the structure, however, KEG would recommend the Association repair the spalls during the next restoration or paint project.



Spall Occurring Under West Stairwell

During the inspection of the overall structure, KEG noted that the north and south faces of the structure appeared to have dryer vents. On the north side of the structure, the lowest dryer vent screen appeared to be clogged with lint. KEG recommends the removal of the screens at the dryer vents to prevent screens clogging with lint and becoming a fire hazard or proper routine cleaning.



Observation of Dryer Vents on North Face of Structure with Trapped Lint

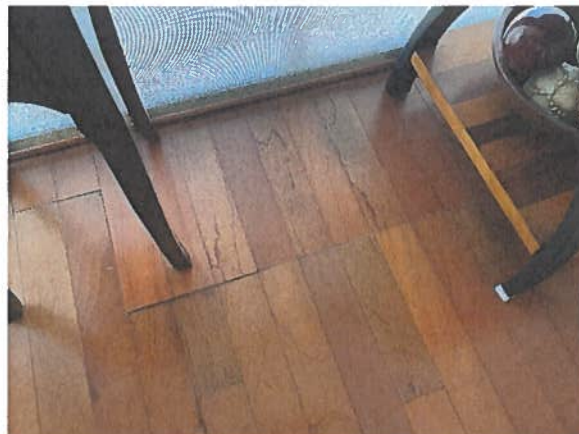
Bearing Walls and Structural Systems

KEG noted the structural systems, including the masonry unit walls, concrete columns and beams appeared to be in generally good condition. KEG did not observe any significant cracking or spalling in any of the observed structural systems. The exterior walls and structural systems are finished with stucco and paint coating that form the primary moisture barrier. According to the Association, a new paint coating was applied to the building approximately a year ago. These systems appeared to be in generally good condition with minor cracks and bubbling occurring at the cementitious painted finish on the balcony ceilings. KEG noted that one of the unit balcony ceilings at Unit 302 was observed to not have the cementitious painted finish, however the balcony ceiling painted finish was bubbling.



Bubbling Painted Finish Observed at Balcony Ceiling

The interior finishes consisted of painted drywall within the condo units. As KEG inspected the interior of the units, KEG did not note any areas of significant water intrusion on the walls or ceilings. KEG noted water intrusion at the master bedroom floor to ceiling window systems. Water intrusion staining and water damage at the floor finishes adjacent to the window system. Unit owners stated that the windows primarily only are an issue during major wind events such as hurricanes and tropical storms.



Moisture Damage and Replacement of Wood next to Window System



Roof System

KEG noted the building consisted of one main flat roof with a parapet wall perimeter. The top of the stairwells and elevator tower also had a flat roof, however KEG was unable to observe. The main roof had a modified bitumen system with a maintenance covering installed as the primary roofing system. This system, according to the drawings provided by the Association, appeared to have been installed over the post tension concrete slab. However, KEG did not conduct any roof cores.



Observation of Main Roof

The main flat roof was observed to have HVAC systems installed on aluminum AC stands to meet the current standards of the Florida Building Code to maintain the roof under the HVAC equipment. KEG observed the AC unit hurricane straps and other metal type products appeared to be in fair to poor conditions, likely due to the constant exposure to the harsh Florida environment. Due to being exposed to the harsh Florida environment, this is typical for the metals to be oxidizing and rusting. KEG would recommend replacing all rusting and corroding metals on the roof with stainless steel products. Drainage for the roofs consisted of overflow scuppers and roof drains. KEG did not note any major signs of ponding water on the main roof.

Additionally, KEG noted the absence of OHSA tie back anchors, which are part of the OHSA requirements for workers to be able to hook up to and perform their work on the exterior faces of the building safely. Typically, the anchors must be capable of supporting at least 5000 pounds per line as part of a complete personal fall protection system that maintains a safety factor of at least two. KEG recommends the Association review the current condition with any contractor that works on the building.





Hurricane AC Strap Observed to be in Poor Condition



Old Metal Flashing at Existing Curb Corroding



Roof Drain Cover with Significant Corrosion

Floor System

The floor systems for the building appeared to consist of post tension concrete slabs supported with concrete beams and columns. The slabs appeared to span between the width of each unit.

The railings located along the edge of the floor systems were observed to consist of an aluminum style guard rail. The aluminum railings appeared to be in generally good condition. The sealants at transition points of wall to railing were observed to show no signs of cracking or failing. However, a few post pockets at the railings were observed to be experiencing minor cracking. Although the cracking is minor, it can be the cause of future issues if not maintained properly or in a timely manner. Additionally, KEG noted several guardrails on the balconies to be flaking off its current coating. Typically for aesthetic purposes, the paint coatings on the guardrails help preserve the makeup of the rails. This is likely due to the excess use by the tenants on the balconies or due to the constant harsh Florida environment.

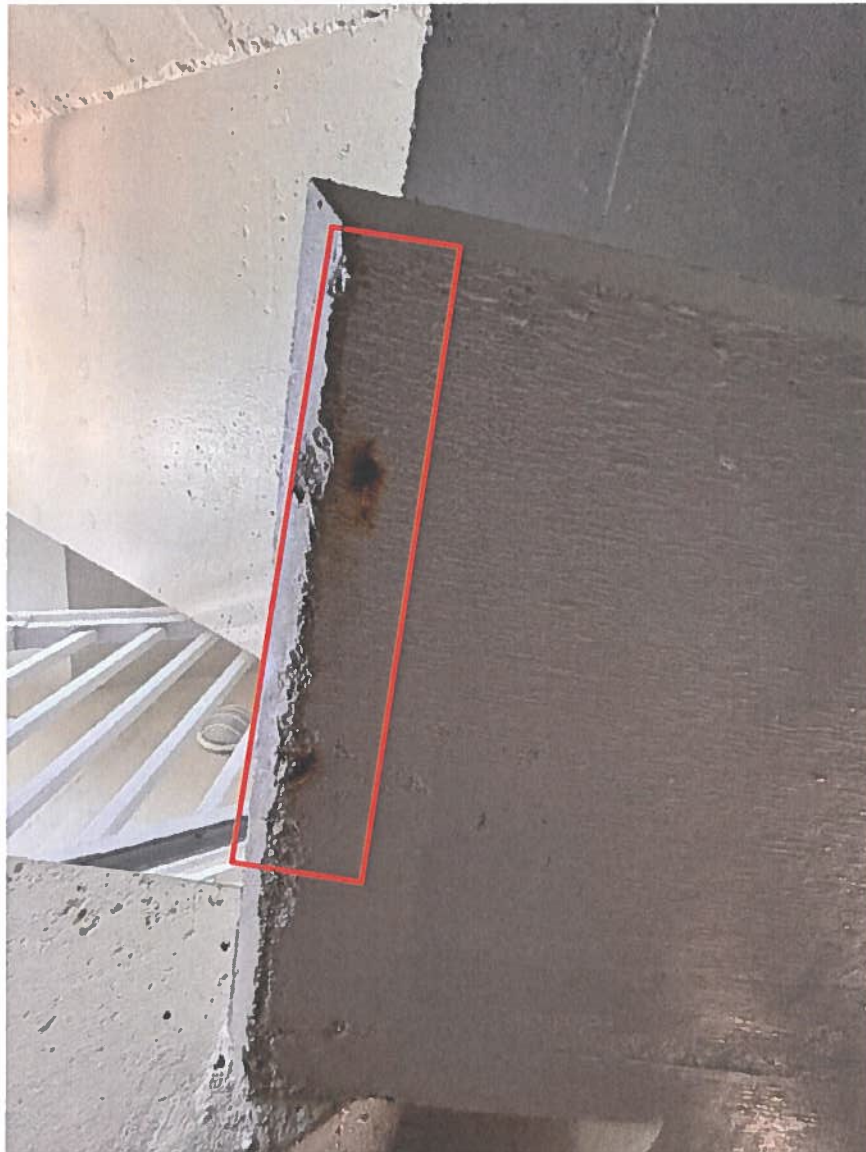
The stairs, balconies, and walkway guardrails serve as fall protection for the residents. The railings were spot measured to meet the requirements of the current Florida Building Code for both height (42 inch minimum) and spacing for vertical members (4 inch maximum).



Cracking Sealant at Handrail in West Stairwell

Framing

The beams and columns supporting the floor and roof slab systems were composed of reinforced concrete. Visual inspection of these elements was completed with no major signs of stress. However, KEG noted rusting stains appearing in one of the undersides of the concrete beams. This is likely to be where a chair or tie wire was used to tie together the steel reinforcement and does not pose any significant threat to the overall condition of the building structure or the building component.



Rust Stains at Concrete Beam

Windows, Storefronts and Exterior Doors

KEG's visual inspection included documentation of all windows and sliding glass doors of the structure. The sliding glass doors are protected by the overhang of the balcony above and storm shutter/ screens were also observed to help protect the sliding glass doors. The windows and sliding glass doors were generally in good condition. However, KEG noted moisture intrusion at the west elevation master bedroom windows to be typical during the inspection. This could likely be an installation issue of these floor to ceiling windows or a breakdown of interior components and sealants. Additionally, KEG noted the fasteners inside numerous sliding glass doors appeared to be rusting. This is common when using non stainless steel fasteners and can become an avenue for water intrusion.



Observed Fasteners Rusting at Sliding Glass Doors



Water Stains Typical in Carpet at Master Bedroom Window

The north and south elevations of the building contained glass block windows. Typically, these were found in the master bathrooms and walk in closet areas of the interior units. KEG noted the glass blocks to be in generally good condition. According to the Association, all glass block windows were resealed before the recent storms of Hurricane Ian and Tropical Storm Nicole.



Glass Blocks Typical in Master Bathroom

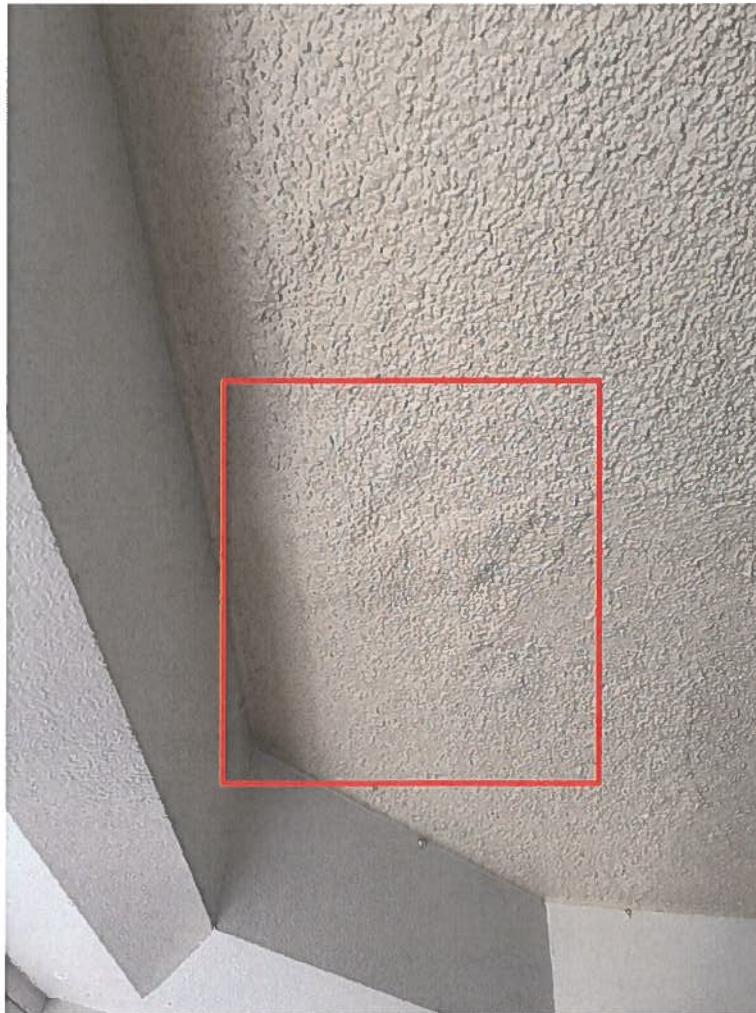
The exterior doors were also observed during the inspection, KEG noted the doors to be in fair condition. Several of the doors leading to the balconies were observed to be rusting, along with components of the doors.



Balcony and Balcony Coatings

Access to the balconies was thru the interior of units. KEG noted majority of the balconies were tiled over, restricting the observation of the balconies. However, upon visual inspections of the tile, it appeared to show no signs of spalling or cracking occurring at the slab or slab edge.

The ceilings of the balconies for a majority were a cementitious painted finished, however a few of the balcony ceilings were observed to be a painted finish directly to the concrete substrate. Upon the visual inspection, it appeared a few areas of the balcony ceilings were bubbling and sagging. KEG noted this to likely be water intrusion occurring at the balconies above and running down into the balcony ceilings.



Bubbling of Cementitious Painted Finish at Balcony Ceiling

Unit Interiors

KEG performed inspections of the unit interiors with the specific intent of documenting the finishes for evidence of moisture intrusion, water damage, or major cracks within the interior finishes. These types of damages can indicate a failure of the weatherproofing installed on the exterior of the building, such as roof systems, sealants and paint. However, depending on the location of the damage, it may be the result of leaking pipes, flooding or HVAC systems.

During these visual inspections, KEG noted majority of units to not have signs of moisture intrusion, water damage or major cracking of interior finishes. However, it was documented that in Unit 502, the tenant reported water damage to the ceiling where the skylight was located. This was likely due to the skylight having cracked sealants, KEG recommended resealing or replacement of the skylight to prevent further damage to the ceiling and water intrusion from occurring.



Drywall Damage at Ceiling Skylight, Unit 502



Elevator Pits and Shafts

During the inspection, the Association did not provide access to the elevator pit, therefore KEG was unable to visually observe if any deficiencies were occurring in this location of the building.

SUMMARY

In our professional opinion, Beach Club of Indian Shores is in generally good condition for the age of the structure. The structure does not appear to have any substantial structural deterioration but will require remedial and preventative repair to maintain the condition of the building. KEG observed several areas where repairs should be performed as part of the scope of work for the next maintenance project. This would include the repairing of any minor concrete spalls, and delaminating or cracking stucco. Additionally, patching the various voids that are drilled into the masonry walls.


The roof appears to be generally in good condition, with a few areas that should be addressed to maintain the current condition of the roof and prevent leaks from developing into the interior of the structure. KEG would recommend routine maintenance of the roof covering and repair of cracks in the membrane to maintain the structures watertight seal. Any corroded components on the roof and anywhere else on the building should be replaced with stainless steel metals.

Based on the scope of the inspection and for the areas that were able to be assessed, within the reasonable degree of engineering certainty, we have not observed any conditions that would compromise the safety of the building for its intended use and occupancy. We reserve the right to amend our opinion should new information be brought to our attention. KEG recommends that the Association has the building structure reviewed every ten years based on the requirements of the Florida Statues. Our statements referencing the structural integrity of the building are in reference to the original installation. Our statements are not intended to verify compliance with building codes or accepted construction techniques. This report is prepared for the sole benefit of the client. Any unauthorized use without our permission shall result in no liability or legal exposure to Karins Engineering.

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We trust this information is helpful. Should questions arise, please do not hesitate to call.

Sincerely,


Thomas Buffington, PE.
Florida Registration #87546
St. Petersburg Area Manager
Karins Engineering Group, Inc.

