



September 9, 2025

CALAIS AT PELICAN BAY CONDOMINIUM ASSOCIATION, INC.

Attn: Mr. Rich Meyer
7064 Pelican Bay Boulevard
Naples, FL 34108
Office: 239.566.3320
Phone: 239.784.9680
Email: rmeyer@swpropmgt.com

Subject: Report of Engineering Consulting Services
STRUCTURAL EVALUATION AND REMEDIATION WORK SUMMARY
Calais at Pelican Bay
Naples, Collier County, Florida 34108
SOCOTEC Project Number VS232306

SOCOTEC Consulting, Inc. (SOCOTEC) has been pleased to assist the Association in evaluating the existing conditions of the building structures at the subject property and outlining a series of considerations for the long-term maintenance of the structures. Since 2022, the Board of Directors has taken steps to execute the building repairs necessary during the current restoration project based on our earlier assessments. These repairs have included extensive ongoing structural restoration work consisting of concrete restoration, post-tension cable repairs, painting, stucco repairs, and waterproofing work. Given the age of the structures and the findings from the early remedial work, the Association should recognize that similar conditions are likely to be present in a similar fashion on other structures as this work proceeds. This report serves to update you on the ongoing building restoration work, explain our findings, evaluate several critical factors that are directly contributing to the structural deterioration, and provide recommendations moving forward.

Field Observations

Based on our observations during our visual inspections and investigations of the buildings, it has been shown that water intrusion into the concrete elements over decades has been the leading cause of the corrosion of the reinforcing steel and post-tension cables, distressed/spalled concrete, and delaminated stucco of multiple structural elements including columns, balcony decks, and deck edges across buildings D, E, F, and H. It is our professional engineering opinion that the water intrusion is most likely caused by the following factors and/or the combination of them.

- Lack of or failure of the waterproofing membrane along the concrete structural deck,
- Unsealed penetrations of the fasteners attaching the screen enclosure and shutter system to the concrete deck creating water entry points,
- Cracks/distress observed along the balcony deck edge allowing water penetration.

In general, the observations made during our investigations include the following:

- Concrete distress (spalling, cracking, etc.) and corroded reinforcing steel at multiple structural elements including columns, beams, balcony decks/deck edges of several balconies,
- Several balcony decks with delaminated floor tiles and in some instances with multiple layers of flooring,
- Severe deterioration of multiple post-tension cables throughout several balcony decks,
- Advanced corrosion of the screen enclosure and shutter system fasteners,
- Deteriorated sealant/unsealed gaps at the bottom sliding glass door track to deck joints,
- Stucco cracks along several of the balcony headers and majority showing significant corrosion and deterioration of the framing elements.

The following photographs were taken at the time of our site visits and are representative of the typical conditions observed across Buildings D, E, F and H.



View of initial signs of distress on headers - stucco cracks along the fastener points.



View of deterioration of header observed after further investigation.



View of deterioration of header observed after further investigation.



View of condition of header metal framing observed.



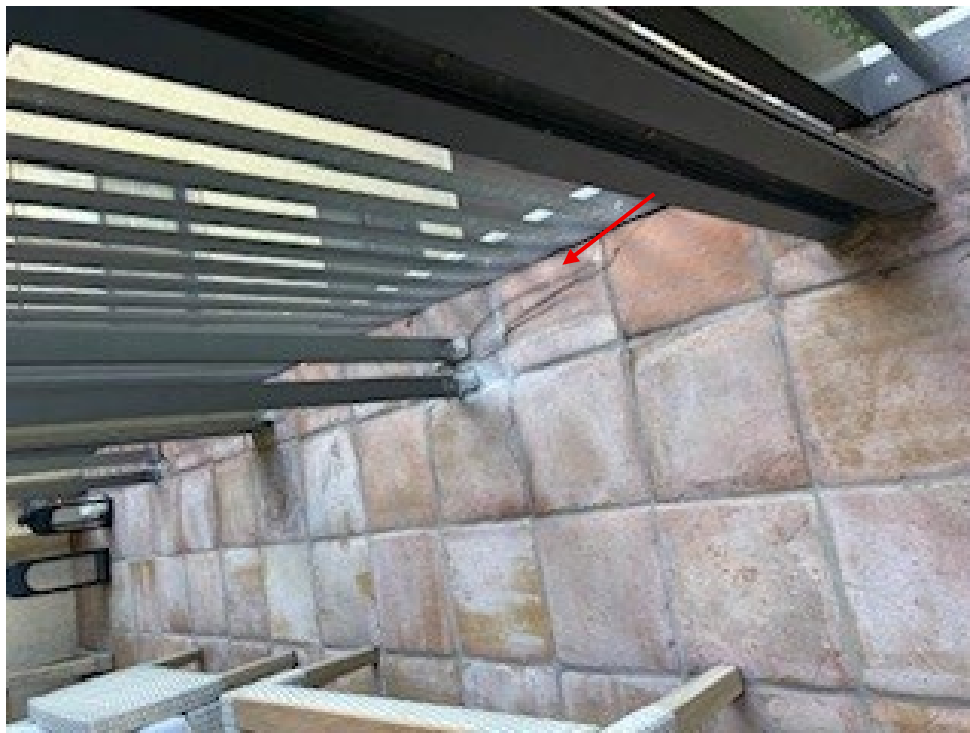
View of structural distress observed at balcony deck edge along fastener points.



View of structural distress parallel to corroded steel reinforcement bar.



View of cracked/delaminated tiles stemming from shutter system fastener points.



View of cracked/delaminated tiles stemming from shutter system fastener points.



View of exposed balcony deck edge steel reinforcement bar and concrete spall.



View of corroded steel reinforcement bar and distressed concrete at balcony column.



View of corroded steel reinforcement bar and distressed concrete at balcony column.



View of corroded steel reinforcement bar and distressed concrete at balcony column.



View of initial signs of distress at balcony deck edge – minor cracks.



View of corroded steel reinforcement bar, deteriorated concrete, and header framing.



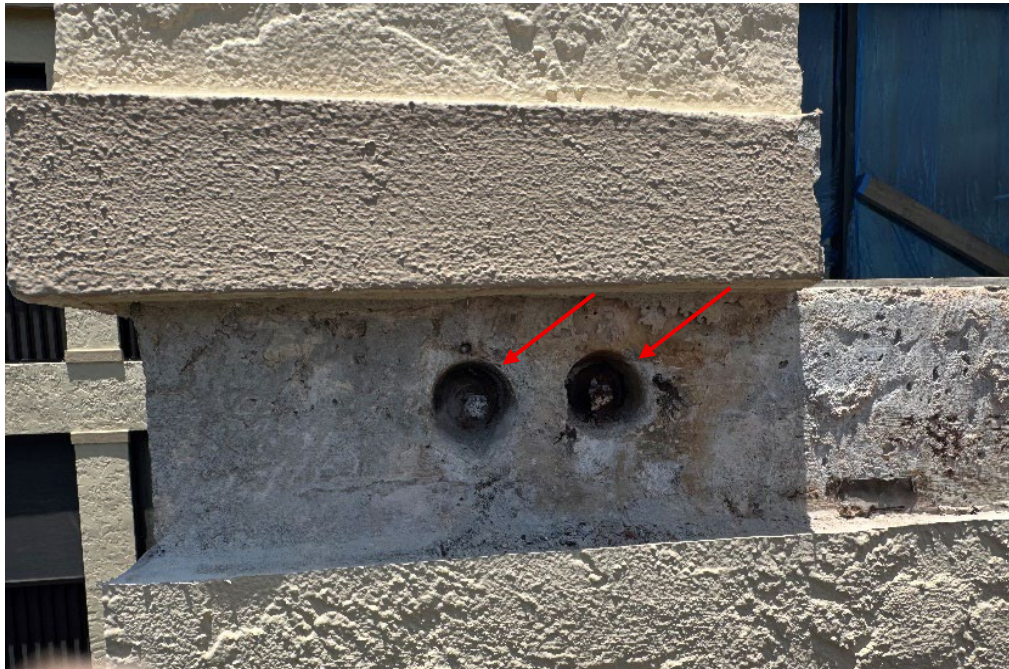
View of corroded steel reinforcement bar along balcony deck edge.



Typical view of compromised post-tension cables along balcony deck edge.



View of post-tension cable pockets with deteriorated cement and signs of corrosion.



View of post-tension cable pockets with deteriorated cement with signs of corrosion.

Evaluation and Recommendations

Based on our observations, the extensive restoration needs are due to systemic waterproofing failures and inadequate maintenance of critical building systems. Our inspections revealed significant deterioration, and, in some units, complete absence of a waterproofing system installed over the balcony concrete decks or along the balcony deck edge for modified balconies converted into living space following original development. Waterproofing systems installed in Southwest Florida typically have a useful life of 5 to 20 years depending on the specific system utilized. The waterproofing system is an essential barrier to prevent water from penetrating into the deck and causing premature deterioration of the concrete, reinforcing steel, and post-tension cables. This was consistent with our findings including the corrosion of multiple post-tension cables and reinforcement throughout the buildings, and spalling/deterioration of the concrete.

Once water begins to penetrate the concrete elements and reaches the reinforcing steel, it initiates the corrosion process, and the iron in the steel begins to oxidize and expand. This expansion creates internal pressure within the concrete and causes the concrete to crack initially as hairline fractures and worsens over time as the corrosion continues creating wider cracks and leading to concrete spalling: the breaking away of concrete pieces from the surface. These cracks typically run parallel to the reinforcing bars and reach the concrete surface. This exposes more reinforcement to the environment, accelerating the deterioration cycle and allowing more water infiltration. These issues present major structural concerns as these findings indicate advanced deterioration and progressive structural weakening. You should anticipate that similar repairs to the decks and deck edges will trigger similar work related to post-tension cables and reinforcing steel if damage to the structural elements is revealed as work proceeds. Addressing only the visible concrete damage without resolving the root causes will result in continued deterioration, more extensive post-tension failures, and escalating repair costs.

Moving forward, according to the recently passed State Legislature and amended laws, to ensure the safety of condominium and cooperative association buildings, they must prescribe to the specific requirements outlined by the Milestone Inspection (MI) and Structural Integrity Reserve Study (SIRS) statutes. The main purpose of these statutes is to require older buildings to be inspected (MI) and ensure that associations and

cooperatives are reserving sufficient funds (SIRS) to maintain the properties. Based on these statutes, we recommend that associations implement a comprehensive maintenance program that includes regular repainting of building exteriors every 7 years based on the typical useful life of exterior coating systems in this environment. Usually, any restoration work and waterproofing necessary is performed concurrently with the repainting of the buildings to maximize cost efficiency and minimizing disruption to residents while ensuring comprehensive building envelope maintenance. We strongly recommend that periodic structural restoration work be budgeted and incorporated into your association's ongoing maintenance schedule for the property. This proactive approach aligns with Florida's statutory requirements for reserve studies and helps ensure adequate funding is available when maintenance needs arise. Proper budget planning and regular implementation of this maintenance schedule will support the long-term structural integrity of the property and prevent more costly emergency repairs and potential safety concerns.

To address these issues comprehensively and reduce future restoration needs, we recommend:

- Completing all necessary structural repairs following proper concrete restoration procedure to the compromised structural elements.
- Replacement of all compromised waterproofing systems and future replacement of the waterproofing systems across the structural elements (exterior decks, walkways, staircases, etc.) nearing their maximum useful life.
- Replacement of all screen enclosure and shutter system corroded fasteners with appropriate stainless-steel fasteners.
- Replacement of all deteriorated sealants and sealing of all exterior wall/deck junctions, sliding glass door/deck junctions, and fastener penetrations with a polyurethane sealant.
- Comprehensive post-tension system evaluation and repair program.
- Implementation of a preventive maintenance program to monitor and maintain the structural elements of the buildings.

As an option, we are presenting below four (4) waterproofing systems and associated typical warranties for your consideration. Typically, the cost of the waterproofing system increases as the expected useful life and warranty periods increase.

- Tremco Vulkem 350 / 351: 5-year manufacturer's material warranty.
- Sikalastic Pedestrian Traffic 1500: 5–10-year manufacturer's material warranty.
- Tremco Vulkem MSUP / 350NF / Epoxy Primer: 10-year manufacturer's material warranty.
- Tremco Vulkem EWS: 20-year manufacturer's labor and material warranty.

We also understand that the Association would like our professional opinion regarding the option to install floor tile on the balcony decks. While the installation of floor tile over the waterproofing system is acceptable, the waterproofing system underneath must be replaced periodically according to the useful life determined by the manufacturer to maintain its full integrity. If waterproofing failures occur beneath tile installations, replacement will require removal of the tile, resulting in more costly replacement work. We also want to emphasize that having tile over the balcony's deck may conceal any structural issues with the concrete deck and/or failure of the waterproofing since the deck surface is not visible. Further, the balcony decks should be sloped to drain outward from the building towards the deck edges. During the installation of the waterproofing and tile, the positive slope shall be maintained for proper drainage.

Additionally, we have previously identified several units with cracked stucco along the headers on the screened balconies. After further investigation, we found that this header is not a structural beam but rather a light gauge metal framing with stucco covering. Most of the headers observed contain severely corroded and deteriorated light gauge metal framing. Repairs to these headers have been made at multiple units in accordance with our previously provided repair details. The Association should anticipate that these findings are unlikely to be limited to a single unit, rather may be present throughout the property.

We bring this matter to your attention with a sense of urgency while understanding the intricacies of Association document requirements. We are working directly with your

contractor to address each of the elements identified as well as any new findings they identify during the course of their work. We will endeavor to keep the Association fully informed as the work proceeds. We recommend that the specific items outlined above be completed in conjunction with the paint and restoration project currently underway to allow for the most cost-effective way to address these repairs. We also recommend the Association consider the timeline for other work identified in our previous reports and include it in your ongoing maintenance effort for the property.

Closing

We trust the information contained herein is suitable for your needs and appreciate working with you as your engineering consultant. We recommend that you read this report thoroughly and should you have any questions or if we can be of further assistance, please contact us.

Sincerely,
SOCOTEC CONSULTING, INC.

Dyani Colon

Dyani Colon
Staff Engineer

Casey M. Ward

Casey M. Ward, P.E.
Principal Engineer
Florida Registration No. 69788

Distribution: 1 – Addressee (via email), 1 – File