To: Bay View Villas
From: Leo Cannyn, PMP, P.E., Principal Project Manager
Subject: 19807 Gulf Blvd, Indian Shores, FL 33785 Engineering Affidavit for Milestone Inspection Phase 1
Date: 1/17/2024

To Whom This May Concern:

Beryl Engineering & Inspection, LLC ("Beryl") was retained by Bay View Villas with regards to inspection located at 19807 Gulf Blvd, Indian Shores, FL 33785. According to the Pinellas County Property Appraiser Website, the building was built in 1980. The structural systems are consistent with a Slab-on-Grade foundation with Wood Frame walls clad in Siding veneer. The roof structure is consistent with Trusses with a predominantly Gable roof design covered with Dimensional Shingle.

Beryl performed a review of the property file as found on the Pinellas County website and visited the property on 7/12/2023. This review and inspection was a visual and non-invasive review of the accessible areas of the exterior for the purposes of a Senate Bill 2022 4-D / 2023 154 Milestone Inspection as part of a Structural Integrity Reserve Study process. Photographs were retained by Beryl for future reference and some relevant photographs are attached.

The primary purpose of this letter is for Beryl as Engineer to certify that at the time of their review on 1/17/2024 we found that the building appeared to be structurally deficient during our inspection for the areas inspected.

At the time of inspection, Beryl observed extensive damage to the sea wall adjacent to the community pool. The damage may cause potential structural failure to the existing wall. While we don't recommend a Phase 2 at this time, we still recommend a design consultation to have permit plans developed for the seawall repairs. We recommend that within the next 1 to 3 years that the owner consider replacing the seawall by installing a vinyl sheet-pile wall in front of the seawall and forming a new capstone to join the existing wall and vinyl sheet-pile wall to create a new wall. Vinyl sheet piles are installed in front of the existing wall to provide additional support to the existing wall and form a new seawall barrier to prevent soil erosion and collapse. These vinyl sheet piles are driven into the ground using heavy equipment and then tied back into the existing grounds. This description is a simplified performance specification as a proper design should be

drafted using the latest Florida Building Codes by a design company with a specialty in seawall design to apply for a permit for installation by a Licensed General Contractor.

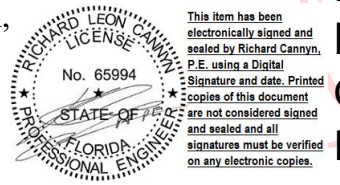
The capstone of the seawall was examined for signs of spalling and cracking. Spalling is when the seawall rebar in the capstone starts to show and the capstone itself starts to crumble. Cracks develop, and the sea air penetrates the cracks rusting the rebar. This spalling should be accompanied by rusting of the rebar that is visible. Once a capstone crumbles, the wall sections separate from each other. We did find evidence of spalling at the capstone along with rusting at least three locations. The cracking at the capstone allowed rusting of the interior rebar. Repairs after the inspection could entail the following for the existing sea wall:

- Foundation preparation: Assess the soil conditions and prepare the foundation for the new sea wall, which may involve excavating, compacting, or installing appropriate reinforcement.
- Erosion control and drainage: Implement measures to manage erosion and ensure proper drainage behind the sea wall to prevent water accumulation.

Beryl also observed vinyl soffit installed under the upper balcony decking at all units. The installed vinyl soffit was warping at multiple units causing water to not properly drain and potentially encasing the moisture at the decks wood framing.

- We recommend removal of the vinyl soffit to inspect the wood framing to determine if moisture damage is evident.
- Thoroughly examine (if any exists) affected areas of the balcony wood deck to determine the extent of the rot. Look for signs of decay, such as soft or spongy wood, discoloration, or fungal growth.
- Replace any damaged wood: Use pressure-treated or rot-resistant lumber for added durability. Install the new wood securely, ensuring proper alignment and fastening.
- Treat the remaining wood: After removing the damaged wood, inspect the remaining wood for any signs of decay or vulnerability. Treat the unaffected wood with a wood preservative or sealer to protect it from future rot and moisture damage.

- Improve drainage and ventilation by removing the existing vinyl soffit. One of the primary causes of wood rot is excessive moisture.

From, 

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Richard Leon Cannyn
Florida PE # 65994
1/17/2024

CC: Beryl Project Files

This document has been electronically sealed in accordance with Florida Statute 471.025 and Florida Statute 668.001 - 668.006.