

2021.11.01 Owner Information on the Spalling and Railing Project

The major common area railing replacement and concrete spalling repair project has begun.

HISTORY: The Keauhou Punahale complex was built in the late 1970s and the Board had identified major projects to replace the roofs and the irrigation system. Then in 2017, complex-wide spalling damage of the suspended walkways and stairs, along with deterioration of the common area railings was identified, that affect safety and building integrity.

Spalling is a condition that causes the concrete to crack and break apart by corrosion of steel rebar in the concrete structures. It is mostly caused by water filtering through worn top coatings, but also occurred at the steel railing connection points. Also over the years portions of the steel hand railings had rusted and the wood top-pieces had rotted underneath. This damage left the railings unstable and unable to guarantee the safety of people in the complex.

Though the AOA Reserve Fund was adequate for the planned replacement for the roofs and irrigation, the Board recognized it would not be adequate to also fund this new, priority project. After reviewing the options of a one-time assessment to owners or using a loan to fund the spalling and railing repairs, the Board decided to seek owner approval for a loan. If not approved the Board would have to collect a large special assessment from each owner. The owners overwhelmingly approved a loan up to \$1.5 million. The loan payment has been included in the monthly HOA fee.

The spalling repair and railing replacement is a large, complex project and the Board contracted with the Bergeman Group, a major construction management company, to design and manage the full project. Though initially promising, the contract was terminated in mid-2019 for non-performance. The Board began the process again with a local architect, experienced in the management of major condominium repair and well-respected by the County planning department. John Hetherington has proved to be an outstanding partner in the design and bidding process. He will also serve as the project coordinator and inspector.

The original "As-Built" blueprints for the complex were lost in a flood in Hilo. John worked with a building engineer to recreate the portions needed for the project at a reasonable cost. These new plans were the foundation of the project bid package and the County building permit applications.

The project design went through various alternatives. Some major rebuild options, including demolition and rebuild of all suspended walkways and stairways was considered, estimated and reluctantly eliminated as it would exceed the loan approval and excessively extend the completion of the safety repairs. The final design will provide long-lasting concrete repairs, but in our tropical environment spalling is an unending problem that will need to be continuously monitored. The new railings will be powder-coated aluminum that can be expected to provide decades of service as they are highly resistant to corrosion.

CURRENT: Early in 2021, Blake Kolona Painting and General Construction, LLC (Kolona) was selected as the project contractor, with Railing Systems Hawaii (RSH) the subcontractor for the hand railings. Both are local businesses with extensive experience in similar projects. Hawaii County building permits and the project insurance bond have been issued. The project loan, with American Savings Bank, was approved and signed in May.

Over the summer the raw materials arrived in Seattle and the major railing components were cast. All the pieces are moving to the powder-coating company in California. Once the powder-coating is finished everything will be shipped to our island for RSH to custom –manufacture our project.

Kolona has begun the spalling repair under the stairs and walkways. This will be on-going through the end of the year, and though noisy and dusty, it should not restrict access to your apartment.

For the foreseeable future, the circle drive in front of B Building will be closed to serve as the staging area. An equipment storage container, a large **construction ONLY** debris dumpster, construction materials, work vehicles and other facilities needed for the project will be located in the staging.

FUTURE: Every building in the complex will be involved in the project. The plan is to begin with A Building, then C, B, D and E. The work will overlap between buildings and the full project is expected to continue for 7-8 months.

In 2022 the old railings will be removed then any damage to connection points restored and the walkways and stairs prepared for the new coating by grinding or stripping the surface, repairing surface cracks, as well as new stair-nosings installed. Next the new railings will be installed and finally the new polymer coating will be applied. The coating may require multiple layers and will take a minimum of 48 hours to cure. ***During curing the surface will be closed to all traffic.***

- The work will be noisy, dusty and have some fumes. It will involve the area right up to your front door.
- There will be times when access to your apartment will be restricted during the work day or for multiple days.
- Your vehicle parking may be relocated for adequate work access and to assure there is no damage to your vehicle.

Schedule, work and closure updates will be posted on the KeauhouPunahale.org website.

Some of the Existing Spalling Damage:

