

Youssef Hachem Consulting Engineering

July 11, 2022

Building Official City of Miami Beach 1700 Convention Center Dr. Miami Beach, Florida 33139

RE: Commodore Hotel 1360 Collins Ave Miami Beach, Florida 33139 Renovation and addition of pool deck at roof level.

Dear Official:

We have inspected the building at the above-mentioned address, the purpose of the inspection is to assess the structural condition of the building, the inspection was visual in nature. The building was built in 1939 and consists of three floors of hotel rooms. The Ground floor is wood framing, the second, and roof are wood joist construction. The exterior walls are masonry walls with tie beams and columns. The stairs are wood framed construction.

The development plans call for the addition of pool deck and extension of existing stairs and elevator from the third floor to the roof level. The building CMU walls and wood framing are in good condition. Moreover, new structural roof framing and structural strengthening will be required during construction for the new pool deck.

The following is the bracing procedure to support the building:

- 1. Strip and remove all existing non-structural wall and ceiling finishes (stucco, plaster, drywall, etc.) to expose all masonry walls, concrete tie beams and tie column and Ground, second, third and roof wood rafters/joists.
- 2. Inspect all existing exposed concrete tie beams and columns. Any damaged concrete (cracking, spalling, etc.) and rusted reinforcing bars will be repaired or replaced, so as to restore the elements to their original design strength and capacity.
- 3. Existing exterior masonry walls will be reinforced using vertical #5 rebars (continuous from the footing to the roof beams) spaced at 24" o.c., placed in grout/concrete filled block cells. This reinforcement will significantly add to the load capacity of the existing old masonry walls (to resist downward loads and lateral wind). Rooms partition walls will be designed as shear walls if necessary so the existing building and the new roof structural members will work as a combined structural system so the whole structure will comply with the current requirements of the Florida Building Code, High velocity Hurricane Zone (HVHZ).
- 4. All wood elements in the building being floor joists or interior stud walls will be repaired based on the extent of damage of those elements.



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- 5. Foundations will be reinforced using helical piles. New foundations, if needed, will be installed for the new columns or walls in the building to support the roof loads and the modified load path of the existing floors.
- 6. The construction of the new roof will be constructed out of steel beams from north to south.
- 7. The exterior walls, interior stud walls, and foundations will be strengthened to carry the additional load from the new roof load.
- 8. Wood floor joists will be tension strapped to the walls to create the floor diaphragms needed to resist the windloads.

If you have any questions, please do not hesitate to contact us at 305-969-9423 Sincerely,

Youssef Hachem, PhD, P.E. FL. P.E. 43302