

November 10, 2017

Sergio Velikopoljski. 2655 South Le Jeune Road. Miami, FL 33134

Re: Report of visit to inspect and verify the structural condition of the residence located at 7845 Atlantic Way, Miami Beach, FL 33141.

To Whom It May Concern:

The present report is to notify to the concerned parties and corresponding authorities that on 11/07/2017 NWCS Consulting & Specialty Engineering Services, Inc., represented by its principal officer, Nelson F. Walters, made a visit to the residence located at the address mentioned above and performed a visual inspection to determine its structural condition.

During the inspection we observed cracks at several locations, settlement of ground floor slab, exposed reinforcing bars on 2nd floor slab, step ladder cracks on exterior masonry walls, cracked headers with spalled concrete, concrete patches from previous repair work and rotten wood as well as residues from insect activity, maybe termites or wood worms.

The cracks observed on CMU walls and beams/headers along with the settlement of the ground floor slab are indication of an ongoing process that may be causing differential settlement between the foundations of the load bearing members. The settlement of ground floor slab on compacted fill appears to be due to erosion or to the lost of compaction of the fill, since this residence is located on a flood zone and very close the costal line, what makes that area a very sensitive to the changes on the level of underground water due to either high and low tides or flood.

The lost of cover for reinforcement of the second floor and the headers with spalled and unbound concrete at bottom are a clear signs of an ongoing corrosion process that is affecting the structure and even though we can see the exposed reinforcing bars only at some locations, it is known that when this happens is because the corrosion is already extensive.

The photos attached to this report show the decay of wood structure and wood finish as well as some wood cabinets. It is evident that the wood structure is infected either by termites or by wood worms which compromises the structural integrity of the residence.

In conclusion and to the best of our knowledge it is our professional opinion that the cost of a repair work for the residence would be too high and beyond of the 50% replacement value, which means that

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whole residence will have to be improved to meet the standards of the current Florida Building Code (FBC 2014). Added to the structural repair work would be the repair cost of the finishing as well as the cost of repair and upgrade of Mechanical, Electrical and Plumbing installations. Given these facts we recommend to consider the demolition of this property.

The fallowing photographs document our findings and our opinion.



Photo #1: Step ladder cracks on CMU wall at West side of residence

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Photo #2: Crack at upper left corner of window opening at West side of residence



Photo #3: Header showing big cracks and spalled concrete at upper left corner

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Photo #4: Header showing big cracks and spalled concrete at upper right corner



Photo #5: Cracks at sill and jamb of window opening

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Photo #6: Water blisters at interior side of envelope walls. Evidence of water intrusion.



Photo #7: Interior header showing damaged finishing from possible structural damage.

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Photo #8: Interior header showing damaged finishing from possible structural damage.



Photo #8: Gap between base board and top of finished floor is indicative of ground floor slab settlement.

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Photo #9: Gap between base board and top of finished floor is indicative of ground floor slab settlement.



Photo #10: Concrete spalled and exposed bottom reinforcement of 2nd floor slab due to corrosion.

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Photo #11: Concrete spalled and exposed bottom reinforcement of 2nd floor slab due to corrosion.



Photo #12: Spalled concrete at top of stem wall. Indicative of corrosion process.

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Photo #13: Patching from previous repair work.



Photo #14: Uneven top and jambs of door plus difficulty to operate are signs of differential settlement.

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Photo #15: Roof sheathing with signs of water intrusion.



Photo #16: Roof overhang with signs of water intrusion and deterioration at tip of framing members.

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Photo #17: Wood residues at floor. Sign of insects activity.

Should you have any question or need further information regarding our findings and opinion, please do not hesitate to contact our office.

Respectfully,

NWCS Consulting & Specialty Engineering Services, Inc. FBPE C.A. # 9655

Nelson F. Walters, P.E., Principal.

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