HISTORICAL PRESERVATION BOARD STRUCTURAL REPORT
947 Lincoln Road
Miami Beach, Florida, 33139

Prepared for

Beilinson Gomez Architects

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PREPARED BY

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EXHIBIT B

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STRUCTURAL CONDITION ASSESSMENT for
947 Lincoln Road
Miami Beach, Florida, 33139

I. INTRODUCTION

General

Per the request of Beilinson Gomez Architects, we have conducted a visual structural condition assessment on the existing structure located at 947 Lincoln Road, Miami Beach, Florida, 33139.

The purpose of the inspection is to assess the structural condition of the building to determine the feasibility of the development of the structure.

Structural System

The Structure is currently a two-story building. The 2nd-floor is small and is located at the corner of Michigan Avenue and Lincoln Lane North.

The Building Structural System is as follows:

- The exterior walls are concrete masonry unit (CMU) block bearing walls.
- The 1st and 2nd floors and roofs are framed with wood members, wood beams, and joists.
- The ground floor is a slab-on-grade.
- Parapets are framed with wood studs.

II. METHODOLOGY

This inspection was visual in nature from the exterior and interior of the building. Our office did not perform any destructive or non-destructive testing.

Every attempt was made to access all portions of the building to observe any signs of distress in the structural members, including masonry, wood, and concrete. Distress signs are cracking, spalling, water damage, and termite damage.

No structural analysis was performed on the building to determine the capacity of the structural systems.

III. STRUCTURAL SYSTEMS

The structure was built in 1924 with an area of 7,500 square feet. The building is approximately 150 feet long (North-South direction) by 50 feet wide (East-West direction).

The Structure is currently a one-story building with a small 2nd floor at a corner.

The building's structural members are as follows:

Foundations: The building foundation cannot be seen from a visual inspection, but it should be a continuous wide footing supporting the exterior walls.

The ground floor is a slab-on-grade.

Exterior Walls: The exterior walls of the building are concrete masonry unit (CMU) block bearing walls; in some places, they have been infilled with wood.

Interior Walls: Interior walls are load-bearing and non-load-bearing. The load-bearing walls support the floor joists system extending from the exterior walls and some of them support the 2nd floor walls. These load-bearing walls should be supported on continuous wide footings.

Roof: The roof deck is wood boards resting on 2"x4" wood joists supported by 2"x5" sister girders.

In some areas, the roof deck is sloped for stormwater drainage.

IV. SITE OBSERVATIONS

We have inspected the structure and our summary of the evaluation of the existing conditions of the structural components is as follows:

The concrete cantilever slab at the exterior walls exhibits concrete spalling, cracking, and deterioration.

Wood members; The roof is in fair condition, only the members that are rooted, have some damage, or have the connection failed must be repaired or replaced. The exterior wood infill frames have the same condition.

Masonry members; which comprise the exterior walls of the building, are for the most part in fair condition. Several hairline cracks in the masonry are attributed to the age and settlement of the shallow foundations.

The parapet walls should also be repaired, they have signs of deterioration, the wood has rotted and the exterior finishes damaged.

The components and cladding elements of the building and accessories such as doors and windows are in bad condition.

V. STRUCTURAL EVALUATION

There are several factors to be considered in the structural evaluation of this building;

Initial Construction:

Building construction and standards of the 1920's are considered deficient in today's standards. This applies to this structure and other structures built in the 1920's. This building under the current building code is deemed deficient.

The structure's roof connections for wind uplift forces, and wind lateral resistance are non-existent. Moreover, opening protection and CMU reinforcing are also non-existent. The building has to be strengthened to comply with the current Florida Building Code. This means that the roof connection tie-downs have to be implemented to strengthen the roof, and lateral load structural systems have to be installed. Wall openings such as doors and windows and the exterior CMU walls have to be reinforced.

Materials Status:

Site Conditions

Based on the visual observation in the field, there are wood members of the building such as the roof and floor joists, and interior stud walls that are in poor and failing condition.

The windows, doors, and ceiling of the building are in poor condition.

The concrete cantilever slab at the exterior walls exhibits concrete spalling, cracking, and deterioration.

The interior partitions and ceiling are in bad condition with the presence of humidity, rotting, and damage.

VI. RECOMMENDATIONS

Based on the site observations of the conditions of structural members of the building the structural members of this building need to be replaced or repaired.

VII. NEW STRUCTURES

Within the building, on the 1st floor, an interior load-bearing wall must be removed to accommodate the new interior floor distribution for the restaurant.

This load-bearing wall supports a 2nd-floor wall and the load from the 2nd-floor roof.

The new structure to replace the 1st-floor load-bearing wall is proposed to be with a frame of steel W or HSS columns and a W steel beam. The foundation for the columns will be isolated footings.

APPENDIX A

PHOTOS

	
Photo 1- North Elevation	Photo 2- South Elevation
	
Photo 3 - West Elevation	Photo 4 – Cracks on the parapet wall
	
Photo 5- Cantilever slab with concrete spalling and cracks.	Photo 6 – Windows, door, and ceiling in bad condition.

	
Photo 7 – Exterior stucco with cracks	Photo 8 – Interior partitions in poor conditions, presence of humidity due to lack of waterproofing in the roof.