

Owner HOWARD E. LANGE

Mailing Address

Permit No. 25632

Cost \$ 25,000:

Lot 20 Block 10

Subdivision BISCAYNE BEACH Address 7935 Crespi Boulevard

General Contractor LUDWIG BROS. INC.

28303

Bond No. 7935

Architect Donald G. Smith

Engineer

Zoning Regulations: Use RE

Area 17

Lot Size 50 x 115

Building Size: Front 30

Depth 90

Height 15

Stories 1

Certificate of Occupancy No. 824 - 1/30/48

Use APARTMENT-4 Units -

2 two bedroom  
2 one bedroom

Type of Construction #3 CBS

Foundation Spread Footing

Roof flat

Date Oct. 15, 1947

Plumbing Contractor #29787 Phillips

Sewer Connection 1 (4")

Date May 22, 1950

Temporary Closet

Plumbing Contractor # 25831 Reynolds Plumbing Co.

Date Nov. 14, 1947

Water Closets 4

Bath Tubs 4

Floor Drains

Electric Water Heater 1

Lavatories 4

Showers

Grease Traps

Urinals

Sinks 4

Drinking Fountains

#26220 Reynolds-Jan. 30, 1948\*

Gas Stoves 4

Gas Heaters 4 (space) 1 (water) Rough Approved O'Neil

Date Dec. 16, 1948

Gas Radiators

Gas Turn On Approved

Septic Tank Contractor

Tank Size 1 - 800 gals.

Date

Oil Burner Contractor

Tank Size

Date

Sprinkler System

Electrical Contractor # 25532 Doddard

Address

Date Dec. 29, 1947

Switch 26

Range 4 Motors

Fans

Temporary Service #24987 Oct. 18, 1947

Light 24

HEATERS Water

Goddard Elec.

Receptacles 40

Space 4

Centers of Distribution 4

Equipment Service 1

Refrigerators 4

Irons 4

Sign Outlets

No. FIXTURES 24

Electrical Contractor

Date

FINAL APPROVED BY WOODMANSEE

Date of Service January 27, 1948

Alterations or Repairs—Over

METRO ORD. #7534  
RECERTIFICATION DATE 12-29-87

## ALTERATIONS & ADDITIONS

**Building Permits:** #57951 General Window Corp: Remove old windows & replace with awning type - \$250 - Nov. 25, 1958

#75986 National Roofing of Miami, Inc.: Reroofing - \$1,065.00 Work compl., per McLaughlin, 1/25/67

#81714 Ferguson Roofing Co. Re-roof 35 square's \$1,260.00 1/15/69

#09077-Futch Realtor-For Sale Sign-5-12-76

#10,000-Owner-Replace or repair exist. 4" conc. slab patio. extend exist. building to rear line-\$1800-10-14-76

#18152 - John Gonzalez - reroof 3,000. (30 sqs) 5/30/80

18685 8/11/80 John Gonzalez beam restoration double fee 3,500.

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### Plumbing Permits:

#56754-Sooar Service-gas piping 75'-12-18-78

1-2-81/#59117/1 replaced heater/Strunin Plumbing Inc/\$10

#63212 - 1 Water Closet Replace - All City Plumbing Inc. - 4-6-87

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### Electrical Permits:

#50836 Jonsey Elec: 5 Motors (1HP) - September 10, 1957



LEFT: 7935 CRESPI BOULEVARD in 1963 and RIGHT: 7925 CRESPI BOULEVARD in 1963.

# HISTORIC RESOURCES REPORT

FOR

7925-7031 + 7935-7041 CRESPI BOULEVARD

MIAMI BEACH, FLORIDA 33141

BY

ARTHUR J. MARCUS ARCHITECT P.A.

18000 NORTH ANDREWS AVENUE #7F

FORT LAUDERDALE, FLORIDA 33311

FOR

PIERRE ELHADEH

REBOND LLC

407 LINCOLN ROAD #9D

MIAMI BEACH, FLORIDA 33139

FOR THE

CITY OF MIAMI BEACH HISTORIC PRESERVATION BOARD

July 2, 2018





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2018 GOOGLE EARTH  
TATUM WATERWAY SHOWN ABOVE IN CONTEXT OF SURROUNDING NEIGHBORHOODS AND TOWNS



## Section 1

# Neighborhood Context



"Prior to the 1940s the land surrounding the Tatum Waterway was intended to be developed as part of a massive coconut farm on land that extended north up the Florida coast for approximately 100 miles. Henry B. Lum purchased this land from the Federal Government prior to the turn of the 20th century for 35 cents per acre.... The changing economy and demand for housing and tourist lodging following the end of World War II (WWII) made the Tatum Waterway area attractive for development." (3)

"While sparsely populated, by 1945 North Beach already presented a distinct layering of elements; oceanfront hotels, retail corridors, apartment districts and neighborhoods of single family homes." (5)



The buildings in North Beach... "are mainly examples of modest post-World War II tourist hotels, apartment buildings and commercial buildings... The largely multi-family residential development grew up almost entirely after World War II, and its planning was largely designed around garden oriented apartment buildings emphasizing the simple modern architectural motifs of mid-century America." (1)

"As the district urbanized it developed an architectural character calibrated to its resort identity, its modest means and its speculative planning." (2)

"The primary model for postwar housing development in North Beach was that established in South Beach a generation earlier. Courtyard and garden apartment building types, many based on modernist prototypes developed at the Bauhaus in the 1920's, were adapted to the narrow lot structure that typified the resort district's planning." (8)

TOP PHOTO: 1924 AERIAL VIEW OF NORMANDY ISLES  
COURTESY FLORIDA STATE ARCHIVES

LOWER PHOTO: 1941 AERIAL PHOTOGRAPH OF THE TATUM WATERWAY  
COURTESY CITY OF MIAMI BEACH  
PUBLIC WORKS



TOP PHOTO: 1954 AERIAL PHOTOGRAPH COURTESY  
CITY OF MIAMI BEACH PUBLIC WORKS

LOWER PHOTO: BUILDINGS ALONG The TATUM WATERWAY (11)

"The apartment buildings that characterize much of the built environment (in the district) feature....cubic massing and large glass casement windows which cross-ventilated each unit and were sheltered by projecting concrete eyebrows. Exterior catwalks and outdoor stairways predicted the more functional building types of the postwar period." (7)

"Buildings emphasized horizontality, exhibiting flat roofs with broad overhanging eaves echoed by the horizontal projections of the exterior corridors. " (4)

"The scale of architecture along the Tatum Waterway is largely consistent, a product of the fact that a relatively small group of architects constructed much of the area in a short period and literally gave shape to the district." (7)

"The Tatum Waterway neighborhood owes much of its character to the repetition of similar building types and styles within a compact space." (6) Since most of the neighborhood was constructed within a relatively short time frame, most of the neighborhood looks very similar in style and details. This was due as much to the same architects designing a preponderance of the buildings as it was to being built in such a compressed time period. Part of the intent of the development of this area was to provide lower cost 'workers housing' for all those working on the construction of the nearby palatial ocean-front hotels such as the Deauville and Sherry-Frontenac.

Because of the speculative nature of these properties many buildings were constructed within a relatively short span of years. Building codes have also dramatically transformed since the 1940's.

Efforts to create additional land mass was a prime part of Carl Fisher's developments. Much of Miami Beach is built upon land 'reclaimed' from Biscayne Bay. Fisher also looked to contour the land masses in order to provide a more pleasing environment for the potential buyer.

Recent hurricane seasons have shown the vulnerability of properties along the Tatum Waterway. These properties are an average of 3'-6" above sea level, which is low even for Miami Beach. During Hurricane Irma last year the waters rose as high as 2'-3' during the storm while flooding properties along the Waterway.





TOP PHOTO: VIEW FROM 7925-35 CRESPI BOULEVARD ACROSS THE TATUM WATERWAY. (11)



MIDDLE PHOTO: VIEW LOOKING NORTH UP THE TATUM WATERWAY FROM THE 77TH STREET BRIDGE. (11)



LOWER PHOTO: VIEW LOOKING NORTH ACROSS TATUM WATERWAY TOWARDS CONSTRUCTION OF A NEW BUILDING AT 88TH & COLLINS AVENUE TO REPLACE THE FORMER DEZERLAND HOTEL. ON THE BEACH. (11)



# 7925 + 7935 Crespi Boulevard



ARCHITECT Donald G. Smith

YEAR of CONSTRUCTION: 1947

HISTORIC DISTRICT: Tatum Waterway

ARCHITECTURAL STYLE: MiMo /  
Mid-Century Modern

These simple symmetrical one-story buildings were constructed in 1947 for the owner Howard E. Lange. Completed in the midst of the postwar boom in development which transformed significant parts of North Beach, these structures are loosely designed in the MiMo or Miami Modern style of architecture. Each building contains two (one-bedroom) apartments and two (two-bedroom apartments) for a total of 8 very nicely renovated apartments in the two buildings. Each building sits on a lot measuring 50'-0" x 111'-0"



The buildings contain some typical MiMo details. The clean lines, roof overhangs and courtyard space are all details which are quite typical of this era. Also typical is what shows in the 1960's era photos on this page - to be small panels of decorative brick or stone between the windows facing the street at both buildings. The materials are clearly different in these photos which appear original to the buildings and have since been plastered over with a smooth surface at both buildings.



The ornamental use of stone and brick was a very typical MiMo building detail. However in the 1963 photographs it is apparent that a variegated brick is shown on the 7925 building, while on the 7935 building there is what appears to be a more consistently colored stone such as 'crab orchard stone' cut horizontally.

These buildings have not always had the same ownership which may assist in explaining the different stone used on the fronts of each building.

TOP PHOTO: 7935 Crespi Boulevard 1977 (13)

MIDDLE PHOTO: 7925 Crespi Boulevard 1963 (13)

LOWER PHOTO: 7935 Crespi Boulevard 1963 (13)





These simple one-story buildings are representative of a once novel building type; the one story Mid-Century Modern motel and/or multi-family residential building with clean and simple lines and overhanging roof. This building type has unfortunately become so overly commonplace, that it is now virtually invisible in the built environment.

While these structures are similar in size and scale to other contributing buildings in the neighborhood, these two buildings nonetheless lack any defining architectural characteristics which highlight more notable buildings in Miami Beach by the same Architect Donald Smith, such as the Royal Palm and the Metropole Hotels.

These structures also do not acknowledge their special waterfront site, since there is very minimal shared recreational space located alongside the waterway. Most of this space adjacent to the waterway is privately controlled and fenced-off for the units facing the water.

More concerning is the Engineering Report on the existing floor framing, which was completed after the floor recently collapsed in one apartment. The Report states that, "water intrusion damage, weathering, and aging has caused significant deterioration to most of the precast joists of the sub-floor system" and that "the deterioration becomes significant on numerous joists to the point where their integrity, stability, and load carrying ability are diminishing with time." (12)

"The Tatum Waterway neighborhood is one of the lowest lying in Miami Beach. During king tide, the sea laps onto properties. When storms hit, the streets fill with water. Many of the buildings in the neighborhood are likely below FEMA base flood elevation — the height the agency recommends buildings be at or above to stay dry — because they were built before FEMA started making and distributing flood maps." (9)

For the reasons as stated above it is my opinion that these structures are representative of the lowest level of architectural significance and contribution to the Historic District, if there were such a ranking.

TOP PHOTO: 7925 CRESPI BOULEVARD (11)

MIDDLE PHOTO: STRUCTURAL DAMAGE AT UNDERFLOOR BEAMS (12)

LOWER PHOTO: TATUM WATERWAY (11)



# 2018 Photographs



PHOTOGRAPHS OF 7925 + 7935 CRESPI BOULEVARD (11)







PHOTO ABOVE: 2018 FRONT ELEVATION (11)

RIGHT PHOTO; 1963 FRONT ELEVATION (13)  
(NOTE ORIGINAL BRICK BETWEEN WINDOWS)







LEFT PHOTO ABOVE: 7935 CRESPI BOULEVARD (11) \* RIGHT PHOTO: 7925 CRESPI BOULEVARD (11)

PHOTO BELOW: VIEW FROM CRESPI BOULEVARD AT ENTRANCES TO PROPERTIES (11)







7925 CRESPI BOULEVARD (11)



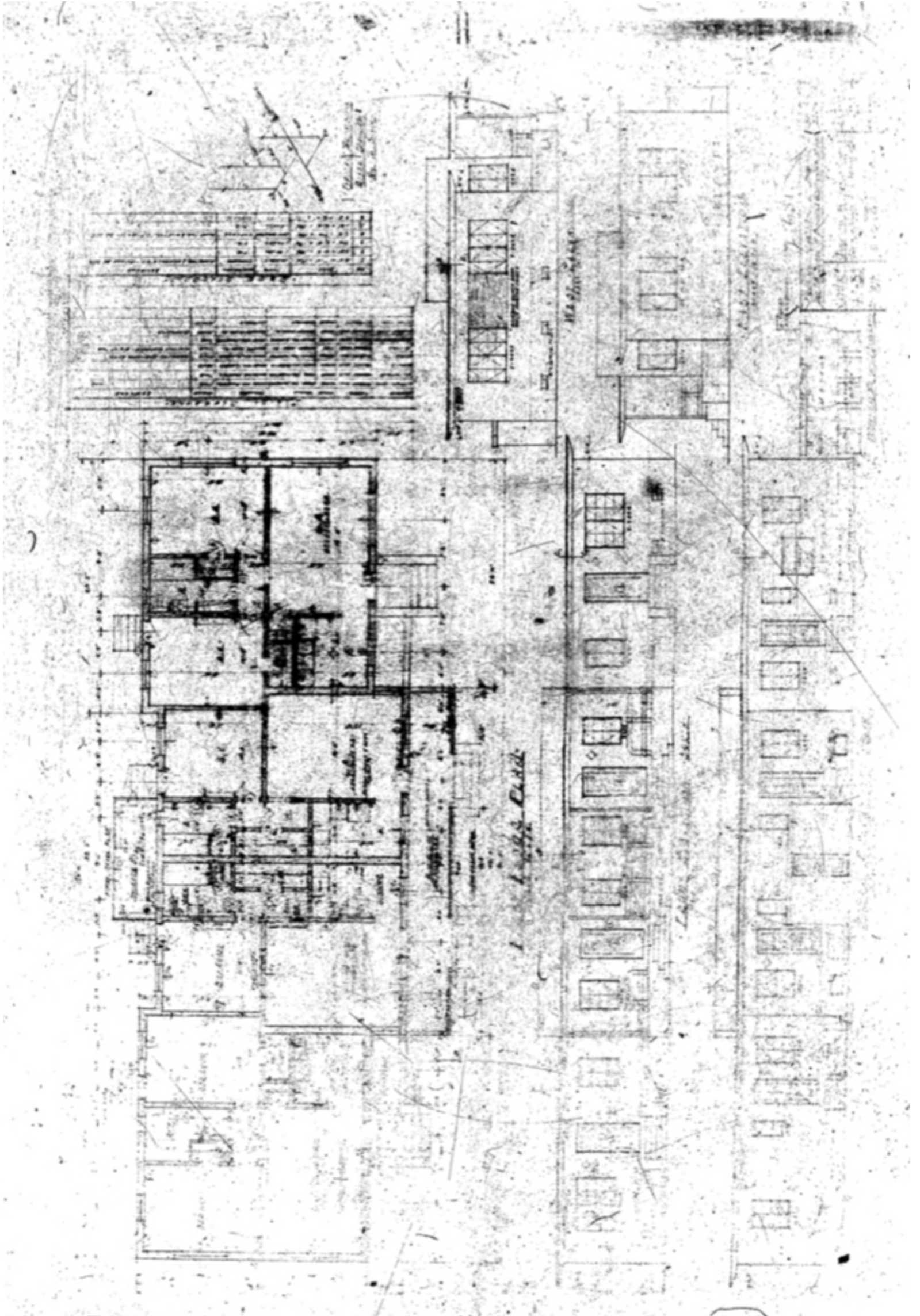


LEFT PHOTO: REAR (NORTH) ELEVATION AT 7935 CRESPI BOULEVARD (11)

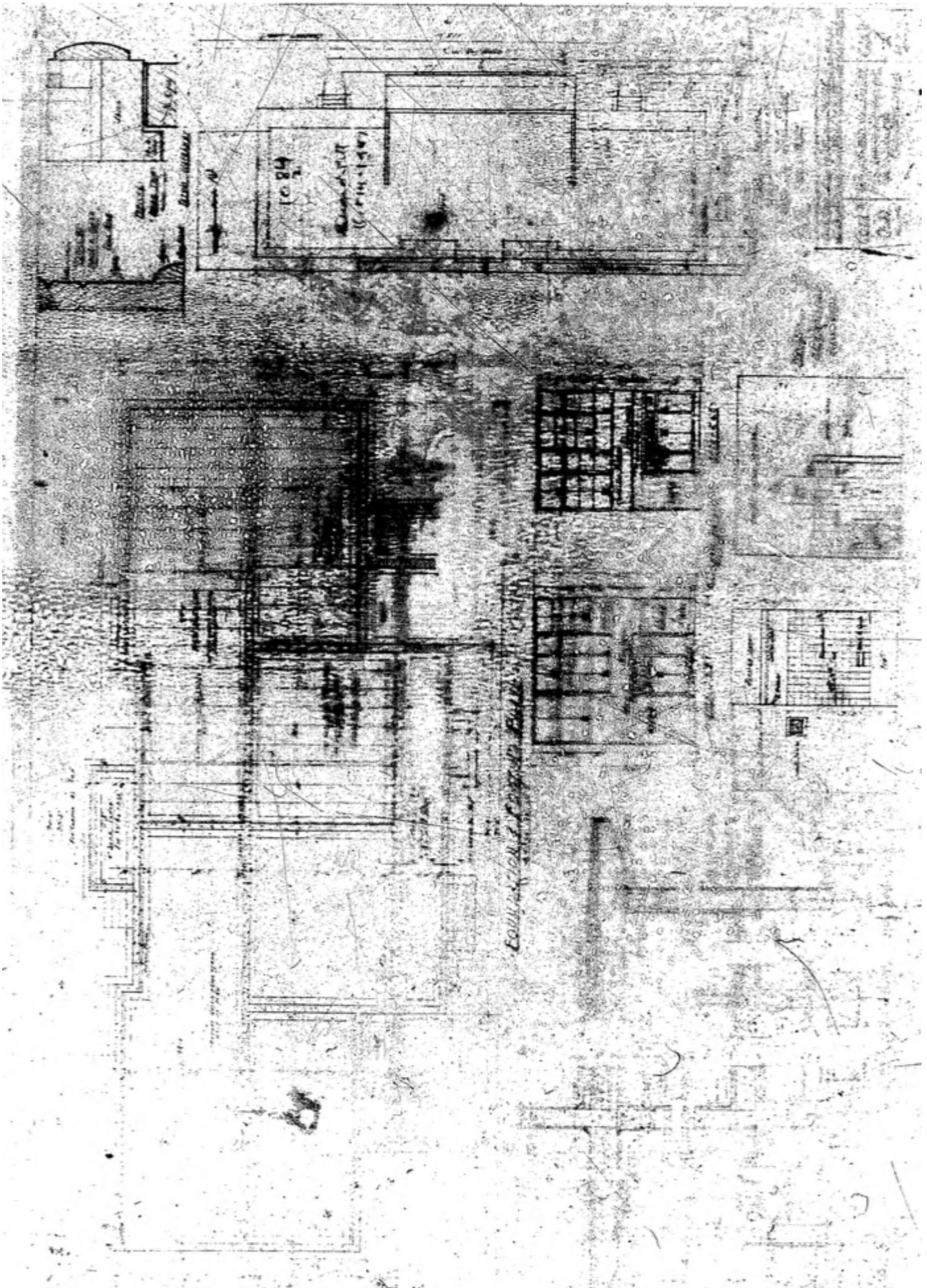


RIGHT PHOTO: REAR (SOUTH) ELEVATION AT 7925 CRESPI BOULEVARD (11)

# Historic Drawings







Owner	HOWARD E. LANGE	Mailing Address	Permit No. 25631	Cost \$ 25,000:
Lot 21	Block 10	Subdivision BISCAYNE BEACH	Address 7925 Crespí Boulevard	
General Contractor	LUDWIG BROTHERS		Bond No. 3675	
Architect	Donald G. Smith		Engineer	
Zoning Regulations:	Use RE	Area 17	Lot Size 50 x 115	Stories 1
Building Size:	Front 30	Depth 90	Height 15	
Certificate of Occupancy No.	825	1/30/48	Use APARTMENT HOUSE - 4 Units - 2 two bedrooms one bedrooms	
Type of Construction	# 3 CBS	Foundation Spread Footing	Roof Flat	Date Oct. 15, 1947
Plumbing Contractor		Sewer Connection		Date
		Temporary Closet		
Plumbing Contractor # 25984	Reynolds Brothers			Date Dec. 9, 1947
Water Closets 4	Bath Tubs 4	Floor Drains	Electric Water Heater 1	
Lavatories 4	Showers	Grease Traps		
Urinals	Sinks 4	Drinking Fountains		
#26219 Reynolds: Jan. 30, 1948*	Gas Heaters 4 (space) 1 (water) Rough Approved O'Neill			Date Dec. 16, 1947
Gas Stoves 4	Gas Turn On Approved J.J. FARREY Jan. 19, 1948			
Gas Radiators	1 - Tank Size 800 gals.			
Septic Tank Contractor 1	Tank Size			
Oil Burner Contractor				
Sprinkler System				
Electrical Contractor # 25530	Goddard	Address		Date Dec. 29, 1947
Switch 26	Range 4 Motors	Fans	Temporary Service #25881 Feb. 20, 1948	
OUTLETS Light 24	HEATERS Water	Centers of Distribution 4	Goddard Electric	
Receptacles 40	Space 4	Equipment Service 1		
	Refrigerators 4	Sign Outlets		
	Irons 4			
	Electrical Contractor			
No. FIXTURES 24				
FINAL APPROVED BY	Date of Service			
Alterations or Repairs—Over				



# ALTERATIONS & ADDITIONS

Building Permits: # 30492 Four ft. Block Wall - 12x20 Spread Footings - with three 5/8 rods on North Side of house- Owner \$ 100....August 9, 1949

# 31819 115 Yn. ft. of block wall(un'er 5' in height)-R.D. Stephens, contractor- \$ 600.... Jan. 9, 1950

#62541 Snyder, Realtor: For Sale Sign - \$5.00 - July 26, 1960

#64215 The Keyes Co: For Sale Sign - \$5.00 - Feb. 10, 1961

#68184 Marion Butler, Realtor For Sale Sign 5.00 10/8/62

#81431 Nyststrand-Lloyd Corp. Re-roof 34 squares \$875.00 11/22/68

#85236 - Casino Fence - Install 85' of Chain Link Fence 5' high \$247.00 10/8/70  
~~#88424 Joe Anon-XXXXX Addition-\$4200-11-12-73~~ ~~10/8/74~~

#04710-Acosta Roofing-Re-roof 5 sqs-\$180-12-6-73

Plumbing Permits: # 30010 Phillips Plumbing: 1 sewer - 4" - June 23, 1950

1-14-81/#59139/repairs to water piping under building/Strunin Plumbing Inc/\$10

2-13-81/#59139/reinspection/Strunin Plumbing/\$25

## BUILDING PERMITS:

FILE NO: 883 (Mendel Eisen, owner) Applicant requests permission to waive 7 in. of the required 7 1/2 ft. side yard setback. Permission to waive 10 ft. of the required 20 ft. for pedestal elevation in the rear setback area, in order to extend the existing living room and bedroom. BOARD OF ADJUSTMENT GRANTED - NOV. 2, 1973

Electrical Permits: # 30610 Astor Electric: 1 switch outlet, 5 receptacles, 10 fixtures- Jan. 13, 1950

#71012-Iro Electric- 8 light outlets; 2 fixtures-12-4-73



28304  
LOT 21 BLOCK 10 SUBDIVISION \_\_\_\_\_ ADDRESS 7925 Creeper Blvd

ALTERATIONS & ADDITIONS

#21574 1/28/82 owner exterior paint \$500.

Building Permits:

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Plumbing Permits:

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Electrical Permits:

# Building Card for 7935 Crespi Boulevard

Owner	HOWARD E. LANGE	Mailing Address	Permit No. 25632	Cost	\$ 25,000:
Lot	20 Block 10	Subdivision	BISCAYNE BEACH Address 7935 Crespi Boulevard		
General Contractor	LUDWIG BROS. INC.		Bond No. 7935		
Architect	Donald G. Smith		Engineer		
Zoning Regulations:	Use RE	Area 17	Lot Size 50 x 115	Stories 1	
Building Size:	Front 30	Depth 90	Height 15	Use APARTMENT-4 Units - 2 two bedroom 2 one bedroom	
Certificate of Occupancy	No. 824 - 1/30/48		Foundation Spread Footing	Roof flat	Date Oct. 15, 1947
Type of Construction	#3 CBS				
Plumbing Contractor	#29787 Phillips		Sewer Connection 1 (4")		Date May 22, 1950
			Temporary Closet		
Plumbing Contractor	# 25831 Reynolds Plumbing Co.				Date Nov. 14, 1947
Water Closets 4	Bath Tubs 4		Floor Drains		
Lavatories 4	Showers		Grease Traps		Electric Water Heater 1
Urinals	Sinks 4		Drinking Fountains		
Gas Stoves 4	Gas Heaters 4 (space) 1 (water) Rough Approved O'Neill				Date Dec. 16, 1948
Gas Radiators	Gas Turn On Approved				
Septic Tank Contractor			Tank Size 1 - 300 gals.		Date
Oil Burner Contractor			Tank Size		Date
Sprinkler Contractor					
Electrical Contractor	# 25532 Doddard		Address		Date Dec. 29, 1947
Range 4	Motors		Fans	Temporary Service #24987 Oct. 18, 1947	Goddard Elec.
HEATERS Water	Space 4		Centers of Distribution 4		
Refrigerators 4	Receptacles 40		Equipment Service 1		
Irons 4			Sign Outlets		
No. FIXTURES 24	Electrical Contractor				Date
FINAL APPROVED BY	WOODMANSEE		Date of Service	January 27, 1948	
Alterations or Repairs--Over					

126220 Reynolds-Jan. 30, 1948  
Gas Stoves 4

METRO ORD # 7934  
RECEIVED  
DATE: 12-29-47



## ALTERATIONS & ADDITIONS

**Building Permits:** #57951 General Window Corp: Remove old windows & replace with awning type - \$250 - Nov. 25, 1958

#75986 National Roofing of Miami, Inc.: Reroofing - \$1,065.00 Work compl., per McLaughlin, 1/25/67

#81714 Ferguson Roofing Co. Re-roof 35 square's \$1,260.00 1/15/69

#09077-Futch Realtor-For Sale Sign-5-12-76

#10,000-Owner-Replace or repair exist. 4" conc. slab patio. extend exist. building to rear line-\$1800-10-14-76

#18152 - John Gonzalez - reroof 3,000. (30 sqs) 5/30/80

18685 8/11/80 John Gonzalez beam restoration double fee 3,500.

---

### Plumbing Permits:

#56754-Sooar Service-gas piping 75'-12-18-78

1-2-81/#59117/1 replaced heater/Strunin Plumbing Inc/\$10

#63212 - 1 Water Closet Replace - All City Plumbing Inc. - 4-6-87

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### Electrical Permits:

#50836 Jonsey Elec: 5 Motors (1HP) - September 10, 1957

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# Donald G. Smith Architect



Donald G. Smith Architect (1906-1967) was born in Indiana and educated at Case Western Reserve University in Cleveland, Ohio. In 1938 he established a private practice based in Miami Beach. In the post-war years he formed a partnership with Irvin Korach.

It is interesting to note that there is a recurrent architectural theme in Smith's work. In every project there are some type of panels inserted either vertically or horizontally between adjacent windows. This is also true at 7925 + 7935 Crespi Boulevard.

## REPRESENTATIVE PROJECTS in MIAMI BEACH:

Royal Palm Hotel, 1545 Collins Avenue,  
Metropole Hotel, 625 Collins Avenue

- 820 Michigan Avenue 1938
- 918 Jefferson Avenue 1940
- 355 Meridian Avenue 1940
- 150 Washington Avenue 1939
- 328 Euclid Avenue 1939
- 305 Jefferson Avenue 1939
- 1350 Lenox Avenue 1937
- 310 Meridian Avenue 1940
- 554 Meridian Avenue 1949
- 635 Collins Avenue 1940
- 7710 Tatum Waterway Drive 1948
- 7720 Tatum Waterway Drive 1947
- 7740 Tatum Waterway Drive 1947
- 7780 Tatum Waterway Drive 1948
- 7790 Tatum Waterway Drive 1948
- 7800 Tatum Waterway Drive 1948
- 7810 Tatum Waterway Drive 1948
- 7820 Tatum Waterway Drive 1948
- 7879 Crespi Boulevard 1948



TOP PHOTO:  
METROPOLE HOTEL

MIDDLE PHOTO:  
7790 + 7800 + 7810 TATUM WATERWAY DRIVE

LOWER PHOTO:  
ROYAL PALM HOTEL POSTCARD, 1948



# MiMo

MiMo is the local name for the Miami Modern (MiMo) style of architecture, popular in South Florida from the mid 1940's through the mid 1960's. It is pronounced as "MyMo" which is the shortened version of Miami Modern, or as it is also known as Mid-Century Modern.

In the years following the end of World War II in 1945, land development and construction boomed in south Florida. The advent of air conditioning coincided with the popularity of the mid-century style and helped to fuel the post-war boom.

In some of the best examples of this style as shown on this page, concrete was sculpted into forms that expressed the optimism of the times. Whimsical and sculptural forms along with a simplicity of geometric form gives MiMo architecture its rhythm.. And all of these photos are excellent examples of the MiMo style of architecture from the northern parts of Miami Beach.

This whimsical quality is so appropriate to capture the element of fun present at an oceanside resort. Hotels were designed to provide a stress-free time for visitors throughout the year, and these mid-century resort designs expressed this joy as integral to the architecture.

South Florida Mid-Century style was shaped by the interaction of the International Style with the Tropics, including a bit of Resort MiMo thrown in as well and with a dash of whimsy!

With sculptural allusions to speed and machinery and optimism in the future, this 'whimsical' architecture often differs from much of what is often commonly recognized as the mid-century style. As with any style, it was the superb Architects & Engineers of that generation who interpreted their visions of the future into exciting building designs, some of which are pictured on this page.

TOP PHOTO: TEMPLE MENORAH 75th & DICKENS AVENUE, MIAMI BEACH.

TOP MIDDLE PHOTO: ALEXANDER HOTEL, 5777 COLLINS AVENUE, MIAMI BEACH

LOWER MIDDLE PHOTO: EDEN ROC HOTEL LOBBY. 4999 COLLINS AVENUE, MIAMI BEACH

LOWER PHOTO LEFT: NORTH SHORE BAND SHELL, MIAMI BEACH

LOWER PHOTO RIGHT: 7222-7223 DICKENS AVENUE, MIAMI BEACH





## Bibliography

- (1) Proposed North Shore Historic District Tatum Waterway Expansion Designation Report, CMB 2017 p.5
- (2) Ibid., p.6.
- (3) Ibid.,p.13.
- (4) Ibid., p.15.
- (5) Miami Modern Metropolis: Garden Apartments: Community, Tranquility and Amenity by Karen Scheinberg & Allan T. Shulman, in 2009, p.278
- (6) Proposed North Shore Historic District Tatum Waterway Expansion Designation Report, CMB 2017 p.13
- (7) Ibid., p.6.
- (8) Miami Modern Metropolis: Garden Apartments: Community, Tranquility and Amenity by Karen Scheinberg & Allan T. Shulman, in 2009, p.278
- (9) Miami Herald May 1, 2018 Can a Miami Beach Neighborhood Preserve its History and Protect Itself from Sea Rise? By Kyra Gurney and Alex Harris
- (10) Ibid.
- (11) Photograph by Arthur Marcus
- (12) Floor Framing - Evaluation for 7925-7935 Crespi Boulevard by Forge Engineering Inc., 2.08.2017.
- (13) Courtesy City of Miami Beach Public Works





February 8, 2017

Mr. David Grosso, Property Manager

**MORRISON REALTY LLC.**

c/o Urban Resource Real Estate & Property Management

1193 71<sup>st</sup> Street

Miami Beach, FL 33141

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Cell: 786.426.1197

Fax: 305.403.2425

Email: david@urbanresource.com

**Subject:** Report of Forensic Engineering Consulting Services  
**FLOOR FRAMING - EVALUATION**  
7925 Crespi Boulevard  
Miami Beach, FL 33141  
Forge Engineering Project Number 3595-001.01

Forge Engineering Inc. (FORGE) is pleased to present this report of forensic engineering consulting services for the subject building. These services were completed in general accordance with our proposal No. 3595-001.01P dated December 2, 2016, and authorized by you on January 18, 2017. This report has been generated as requested by you and presents our opinion of the conditions of the floor framing at the subject building.

FORGE has endeavored to conduct the services identified herein in a manner consistent with that level of care and skill ordinarily exercised by members of the same profession currently practicing in the same locality and under similar conditions as this project. No other representation, express or implied, is included or intended in this document.

### **Project Information**

Our understanding of your needs for our services is based on a discussion between you and Felix M. Anton, P.E. of our firm, and our experience with similar projects. According to Miami Dade County Property Appraiser, the subject building was constructed circa 1947. We understand that during a crawl space inspection, an NSquare, Inc. representative observed deterioration in numerous concrete precast joists and precast

slabs. Therefore, you engaged FORGE to perform a structural evaluation of the subject floor framing and provide recommendations for its repair.

### **Site Observation**

As part of the scope of work outlined in our proposal, a FORGE representative visited the subject site on January 24, 2017 to observe and document the current condition of the floor framing, and gather site-specific information. We have listed below information provided by you and observations obtained during our visual inspection inside the crawl space.

- We reviewed a set of construction plans for the structure provided by you. The plans appear to be a partial set of construction plans for an addition, dated September 1973.
- The floor loads of the structure are transferred to a shallow foundation system via a system of concrete precast joists.
- The subfloor structure consists of typical 3-inch x 8-inch precast I- joists at 24-inch spacing. 24-inches wide precast planks form the original subfloor decking of the structure.
- The floor tiling system consists of typical ceramic tile installed over a wood framing attached to the precast planks mentioned above.
- We observed evidence of distress on the majority of the precast joists.
- We noted exposed and corroded steel reinforcement at various locations along the majority of the precast joists.
- The greatest deterioration is present at the joist's supports and at the center of joist's span.
- The damage becomes significant on numerous precast joists to the point where their individual integrity, stability, and load carrying ability have been compromised.
- We observed that minor repair work has been performed to the subfloor system.

The following photographs were taken at the time of our site visit and are representative of the conditions observed.







Street view of 7925 Crespi Blvd. building



View of floor framing inside the crawlspace.





View of typical profile of floor framing.



View of significant deterioration of floor joist at support section.







View of significant deterioration of floor joist at mid span section.



View of significant deterioration of floor joist at support section.



## Evaluations and Recommendations

Our evaluations and recommendations are based on the project information provided to us, our field observations, and our experience with similar conditions. Should new information become available or the conditions encountered during remediation be substantially different from the information presented in this report, please contact us so we may evaluate the new information.

It is our opinion, that water intrusion damage, weathering, and aging has caused significant deterioration to most of the precast joists of the subfloor system. The deterioration is revealed through the cracking, deflection, and loss of structural section that are visible on the affected precast members. The deterioration was also revealed through spalling, delamination, and surface corrosion of the steel reinforcement of the concrete precast joists. The deterioration was more prevalent on the precast joists.

Based on our observations, the damage in most of the precast joists appears to be greater than 10% of their section, with numerous joists where the damage was greater than 20% of their section. The deterioration becomes significant on numerous joists to the point where their integrity, stability, and load carrying ability are diminishing with time. Evidence of local failure was revealed through excessive deflection observed on numerous precast joists and on the tiling system.

Fortunately, the concrete foundation system was found to be in general good condition for its age, with just minor issues.

Based on our evaluation, it is our professional engineering opinion that the existing floor framing is nearing the end of its useful life. However, although there is significant deterioration of numerous floor joists, the floor framing is still capable of supporting its intended load capacity. An appropriate remediation program must be completed within a year to return the individual structural integrity to the significantly deteriorated floor-framing members.

The subject remediation program would include a significant volume of concrete restoration, as well as the strengthening of the existing precast joists by installing an additional support system. A secondary beam system reinforcing the existing precast





joists at their mid span and a smart jack system would form the additional support system. The remediation program would renew the structural integrity, stability, and load carrying capability of the floor structure along with extending its remaining useful life.

Alternatively, you could design and install a new wood floor frame. The new wood floor frame should be designed to support 100% of the floor load system in order to replace the structural function of the existing precast joist system. This option would allow leaving the precast joists on their existing conditions. In addition, we recommend that the existing precast joists remain in place.

A preliminary study of construction costs of both options shows that the remediation program including the concrete restoration and strengthening of the existing precast joists would be about 80% more expensive than installing a new wood joist system to substitute the existing precast joist system.

FORGE will be able to prepare construction plans, specifications, and contract documents adequate for transmittal to contractors for bidding and performing the remediation option selected by you.

## Closing

We trust the information contained herein is suitable for your needs and appreciate the opportunity to have been of service to you. Should you have any questions or if we can be of further assistance, please call us.

Sincerely,  
Forge Engineering, Inc.  
Florida Certificate of Authorization No. 7544

*Felix M. Anton*  
Felix M. Anton, P.E., S.I.  
Senior Engineer  
Florida Registration No 77755

Distribution: 1 – Addressee (via email),  
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Page 1 of 1



STRUCTURAL CONDITION ASSESSMENT  
7925-7935 Crespi Blvd  
Miami Beach, Florida 33141

Prepared for  
Sunstone, Inc.

August 2, 2018

PREPARED BY





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STRUCTURAL CONDITION ASSESSMENT for  
7925-7935 Crespi Blvd  
Miami Beach, Florida

## I. INTRODUCTION

### **General**

Per the request of Sunstone, we have conducted a visual structural condition assessment on the existing structures located at 7925-7935 Crespi Blvd in Miami Beach, Florida. The Buildings are located in the Miami Beach Tatum Waterway Historic District.

The 7925 lot and 7935 lot, each has one story building approximately 2,500 SF built in 1974, per the Miami Dade County property tax assessor office.

The purpose of the inspection is to assess the structural condition of the structures.

### **Structural System**

The properties are two individual buildings, single story masonry buildings, with a crawl space under the buildings. The two buildings are identical in the structural system, and is as follows:

- First Floor:
  - Elevated precast concrete floor panels supported by precast concrete joists system.
  - Exterior masonry bearing walls, with concrete tie columns and tie beams
  - Interior wood load bearing stud walls
- Roof :
  - Wood joists framing, with wood planking

The components and cladding of the building, such as doors, windows and roof waterproofing are not addressed in this report. Moreover, Sunstone should perform termite and asbestos testing on the building. The electrical and electrical systems are not part of this report.



## II. METHODOLOGY

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

No structural analysis was performed on the buildings to determine the capacity of the structural systems. It's our opinion that the current structural system of the building does not comply Florida Building Code 2017, HVHZ (High Velocity Hurricane Zone) edition.

Moreover, ownership furnished our office with a report by Forge Engineering, Inc. dated February 8, 2017, assessing the structural integrity of the building.

## III. STRUCTURAL SYSTEMS

Based on Miami Dade County tax records, the structures were built in 1947 with and has an area of 2,500 square feet each. The buildings are approximately 95 feet long (East-West direction) by 35 feet wide (North-South direction). The buildings have a crawl space. The buildings are one story each. The building's structural members are as follows:

**Foundations:** The building is built on shallow foundations about 24" wide x 12" thick. The foundations support a concrete stem walls (interior and exterior). The interior stem walls support the interior wood stud walls and the exterior stem walls support the exterior masonry walls.

**Exterior Walls:** The exterior walls of the buildings are concrete masonry unit (CMU) block bearing walls. The CMU block is the three cell block, which was typical at the time of construction of the building. The exterior walls do have concrete tie columns and beams.

**Interior Walls:** There are two types of interior walls, load bearing and non-load bearing. Both types are wood 2"x4" stud walls. The load bearing walls support the roof joists system extending from the exterior walls. These stud walls are in turn supported by the concrete stem walls and foundations.

**Floors:** The flooring system is elevated precast concrete floor panels about 2 ½" thick supported by precast concrete joists system. The concrete joists are about 2' apart. The concrete joists run in the North-South direction, and are supported by the stem wall.

**Roof:** The roof deck is 2"x8" wood joists supporting 1"x6" wood planks.

#### IV. SITE OBSERVATIONS

We have inspected the structures on multiple occasions, and our summary of the evaluation of the existing conditions of the structural components are as follows:

**Concrete members;** which are the tie columns, tie beams, floor deck, and precast subfloor joists, and foundations have variable levels of deterioration. Tie columns and beams exhibit concrete spalling, cracking, and deterioration (please see photos).

The foundations exhibit substantial settlement that is exhibited by typical cracking of the exterior walls, please see photos.

There are several concrete precast joists in the subfloor system that has exposed reinforcing rebars where the concrete has completely spalled off the members. Reinforcing rebars are corroded in multiple locations. Several of the joists has severe cracking. Concrete deterioration is evident in the concrete joists and have occurred at full width of the joists. There are previous attempts to restore the concrete members, and those attempts themselves have failed. Previous attempts were to replace the concrete joists with wood joists in the 7925 building.

Currently, there is one location in building 7935 that has total collapse of the concrete subfloor joists (please see photos). The joists have collapsed and fallen to grade into the crawl space, these joists are beyond repair.

The Whole site is depressed and slanted towards the north east including the settlement of the structures, the settlement of the property walls and the site concrete slabs. The most probable culprit is the deficient seawall on the Tatum canal. The seawall is damaged and undermined. Loss of subsoil coupled with shallow foundations will lead to the exhibited deficiencies in the structures and property walls. Moreover, we observed fish in the canal swimming into and under the wall, leading to the presumption of voids under it.



**Wood members;** The roof of the structure has different levels of deterioration based on previous roof leaks. The moisture intrusion had caused damage to wood members of the buildings.

**Masonry members;** which comprise the exterior walls of the building, is mostly in fair condition, but do exhibit cracking to settlement of the foundations. There are several hairline cracks in the masonry that are attributed to age, and exposure to the elements.

## V. RECOMMENDATIONS

The site is about 3.58 NGVD (verified by elevation certificate by Adis Nunez, registered surveyor dated 2/6/18). The FEMA NFIP classification for the site is AE 8.0, and the structures finished floor elevations are 4.5' for 7925 Crespi and 4.99' for 7935 Crespi. The site is known to flood on regular basis, the damaged seawall had led to the loss of soil and settlement of foundations, property walls, and terrace slabs.

We investigated the possibility of raising the structure, but due to the structural condition of the first floor and the evident local bearing failures, we feel that the whole first floor will collapse and the structure will not be elevated without replacing the first floor.

The concrete joists deterioration is substantial on most of the joists where stability and load carrying capacity are greatly reduced. Local bearing failure is evident though out the buildings with coupled with observed cracking.

The existing walls of the structures are non-reinforced masonry, and will not nbe able to resist any hydrostatic lateral loads from flooding.

Based on the site observations of the conditions of structural members of the buildings, the structural members of this building need to be replaced rather than repaired, that is evident by the collapse of the joist system and missed alignment of the stem walls due to settlement. Hence, in order to do so, these structural members need to be demolished.

## APPENDIX A

### PHOTOS





Photo 1- looking west between both buildings

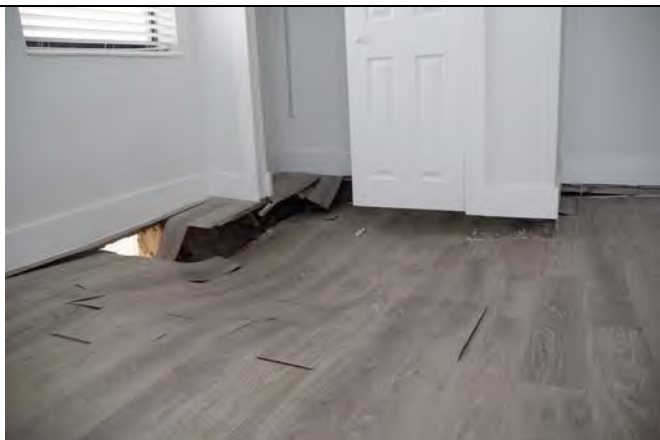


Photo 2- failed joist system in 7935



Photo 3 - failed joist system in 7935



Photo 4 - failed joist system in 7935

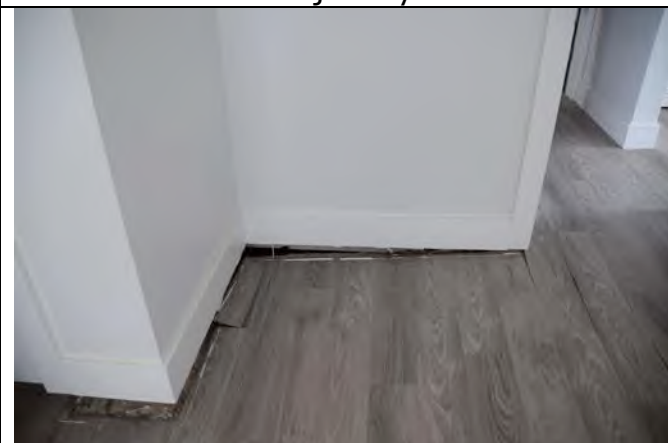


Photo 5- separation between joists and walls

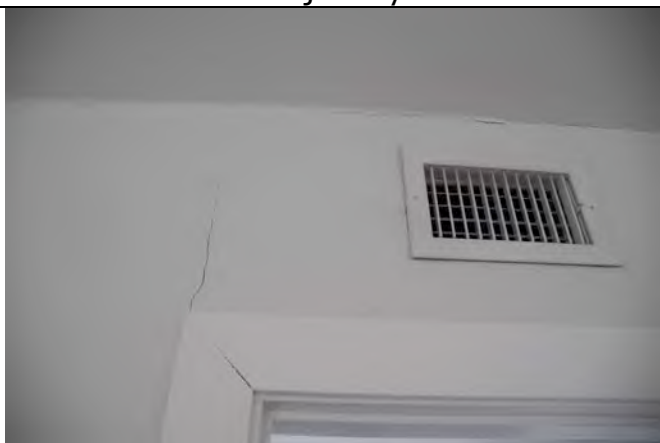


Photo 6 - Cracking due to settlement



Photo 7 - Cracking of property wall due to settlement



Photo 8 - Cracking of property wall due to settlement



Photo 9 - Cracking in exterior walls



Photo 10 - Cracking in exterior walls



Photo 11 - Failed seawall



Photo 12 - settlement in wall, notice gate lock



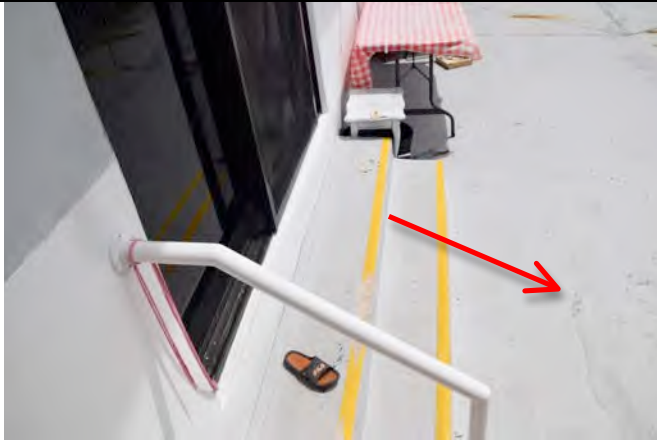


Photo 13 - Cracking in concrete patio



Photo 14 - Seawall deteriorated condition



Photo 15 - Structure eave cracking



Photo 16 - Seawall deteriorated condition



Photo 17 - Rebar corrosion and Concrete spalling of concrete joist system



Photo 18 - Rebar corrosion and Concrete spalling of concrete joist system, and loss of bearing



Photo 19 - Rebar corrosion and Concrete spalling of concrete joist system, and loss of bearing



Photo 20 - concrete floor failure



Photo 21 - Rebar corrosion and Concrete spalling of concrete joist system, and loss of bearing



Photo 22 Rebar corrosion and Concrete spalling of concrete joist system, and loss of bearing





Photo 23 - Rebar corrosion and Concrete spalling of joist system, and loss of bearing



Photo 24 - Rebar corrosion and Concrete spalling of joist system, and loss of bearing



Photo 25 - previous repairs



Photo 26 - cracking in exterior walls



Photo 27 - cracking in soffits



Photo 28 - Rebar corrosion and Concrete spalling of concrete joist system, and loss of bearing



Photo 29 - Rebar corrosion and Concrete spalling of concrete joist system



Photo 30 - Wood joist replacing concrete



Photo 31 - Rebar corrosion and Concrete spalling of concrete joist system



Photo 32 - Wood joist replacing concrete



Photo 33 - Inadequate Previous repairs



