## Justification-Variance to retain existing 6' NAVD Top of 1st Floor Elevation

We request a Variance to Section R322.2.1 of the *Florida Building Code* and the applicable City of Delray Beach Building Code, both of which require that the top of the 1st floor to be 1' above the FEMA Base Flood Elevation (BFE), on substantial new improvements. Our justification for the Variance request is based on two appropriate and independently supported reasons.

First, raising the existing 6' NAVD top of 1<sup>st</sup> floor to 7' NAVD top of 1<sup>st</sup> floor would compromise the historic character of the building and also make the addition less compatible with the historic house, conflicting with the relevant LDR Development Standards and LDR Visual Compatibility Standards.

Second, the proposed work qualifies for the historic exception to the Florida Building Code R322.2.1 and as a result the proposed work is *not* considered to be 'substantial improvement' and therefore not subject to the FBC R322.2.1 requirement. In addition, if the property qualifies for the FBC historic exception it also qualifies for the Variance to be authorized as per the City of Delray Beach Ordinance XX-16, page 13, Section10.1.7 Variances and Appeals.

Please see discussion below.

**1(a)Variance with respect to the LDR 4.5.1(E)Development Standards and the historic character of the property-** Since the FEMA Base Flood Elevation of 212 Seabreeze is 6' NAVD for Flood Zone AE, see Figure 1, ordinarily the required top of 1st floor would be 7' NAVD for substantial improvements. However, in order to achieve the 7' NAVD top of 1<sup>st</sup> floor, major structural and architectural changes would have to be made to the historic house and site that conflict with the LDR 4.5.1(E)Development Standards and LDR 4.5.1(E)(8) Visual Compatibility Standards. In contrast, retaining the 6' NAVD top of 1<sup>st</sup> floor is consistent and in compliance with the LDR Development Standards and the LDR Visual Compatibility Standards.

**Development Standard 1-**"A property shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site and environment."-The granting of the Variance to retain the existing 6' top of 1<sup>st</sup> floor requires minimal changes as opposed to making major changes to adapt to 7' top of 1<sup>st</sup> floor. Raising the existing steel structure to 7' would require cutting and raising the steel columns which would risk compromising the structural integrity of the steel structure itself. Major site work would also be required to achieve a 7' elevation including adding a massive amount of fill and building a more complex system of retaining walls which would drastically change the nature of the existing site conditions.

**Development Standard 2-** "The historic character of the property shall be retained and preserved. The removal of historic materials or alterations of features and space that characterize a property shall be avoided."-The granting of the Variance preserves and reestablishes the original historic character of the property as opposed to making

fundamental changes to the site and the structure in order to comply with 7' top of 1<sup>st</sup> floor. The elevated historic house has a characteristic relationship involving the height of the structure and the ground floor on grade. Raising the grade and the structure an additional 1' damages this relationship.

**Development Standard 3**-"Each property shall be recognized as a physical record of it's time, place and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings, shall not be undertaken." **Raising the site and the steel structure of the historic house would be in conflict with the physical record of the original historic house and would create a false sense of the historic development by altering the distinctive design and proportions of the elevated historic house. Raising the addition to 7' top of 1st floor would be adding an architectural feature not found in the historic building and would therefore also be in conflict with this Development Standard. By retaining the existing 6' top of 1<sup>st</sup> floor for both the historic building and the addition we would be in full compliance with this Development Standard.** 

**Development Standard 5-** "Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a property shall be preserved."-**The granting of** the Variance would preserve the existing steel structure and the original design of the ground floor on grade and the 2<sup>nd</sup> floor elevation at the proper height. The changes necessary to raise the site and the structure to accommodate a 7' top of 1<sup>st</sup> floor would compromise those same distinctive features and construction techniques.

**Development Standard 9-** "New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment."-The granting of the Variance allows the addition to be more compatible with the historic house. Retaining the 6' top of 1<sup>st</sup> floor in the addition as well allows for a more coherent floor plan between the 6' top of 1<sup>st</sup> floor historic house and a 6' top of 1<sup>st</sup> floor addition. Retaining the 6' top of first floor in the addition and therefore reducing the overall height of the addition is also consistent with keeping the massing, size, scale and architectural features of the addition compatible with the historic house.

## 1(b)Variance with respect to LDR 4.5.1E(8) Visual Compatibility Standards and the historic character of the property:

(a) Height: The height of proposed buildings or modifications shall be visually compatible in comparison or relation to the height of existing structures and buildings in a historic district for all major and minor development. For major development, visual compatibility with respect to the height of residential structures, as defined by 4.5.1(E)2)(a)shall also be determined through application of the Building Height Plane.-The granting of a Variance to preserve the 6' NAVD for top of 1st floor for both the original house and the addition, mitigates the height issue by minimizing the height of the addition and helps keep it largely out of the public view. A Waiver to allow the height of the addition to be higher than the historic house is being submitted.

(b)Front Facade Proportion: The front facade of each building or structure shall be visually compatible with and be in direct relationship to the width of the building and to the height of the front elevation of other existing structures and buildings within the subject historic district-**The** granting of the Variance retains the height and spatial relationships of the front façade.

(c) Proportion of Openings (Windows and Doors): The openings of any building within a historic district shall be visually compatible with the openings exemplified by prevailing historic architectural styles of similar buildings within the district. The relationship of the width of windows and doors to the height of windows and doors among buildings shall be visually compatible within the subject historic district-**The granting of the Variance retains the historic proportions of the openings**.

(d) Rhythm of Solids to Voids: The relationship of solids to voids of a building or structure shall be visually compatible with existing historic buildings or structures within the subject historic district for all development, with particular attention paid to the front facades.-The granting of a Variance retains the historic Rhythm of Solids and Voids.

(e) Rhythm of buildings on streets. The relationship of buildings to open space between them and adjoining buildings shall be visually compatible with the relationship between existing historic buildings or structures within the subject historic district. The property is an individually designated historic house and is not in an historic district. However, the proposed Variance to retain the 6' top of 1<sup>st</sup> floor for both the restored historic house and addition does not change or affect the relationship of the open spaces between the historic building and the adjacent structures.

(f) Rhythm of entrance and/or porch projections. The relationship of entrances and porch projections to the sidewalks of a building shall be visually compatible with existing architectural styles of entrances and porch projections on existing historic buildings and structures within the subject historic district for all development.-The property is an individually designated historic house and is not in an historic district. In addition there are no sidewalks on S Vista del Mar. The proposed Variance has no affect on the relationship of entrances, porches and sidewalks.

(g)Relationship of Materials, Texture, and Color: The relationship of materials, texture, and color of the facade of a building and/or hardscaping shall be visually compatible with the predominant materials used in the historic buildings and structures within the subject historic district-The granting of a Variance retains the historic relationships of materials, texture and color.

(h) Roof shapes. The roof shape, including type and slope, of a building or structure shall be visually compatible with the roof shape of existing historic buildings or structures within the subject historic district. The roof shape shall be consistent with the architectural style of the building.- The granting of the Variance would have no affect on the roof shape.

(i) Walls of continuity.Walls, fences, evergreen landscape masses, or building facades, shall form cohesive walls of enclosure along a street to ensure visual compatibility with historic buildings or structures within the subject historic district and the structure to which it is visually related.-The granting of the variance would have no affect on the walls, fences, landscaping or building facades. In contrast, without a Variance a more extensive system of retaining walls would be required to raise the site and house to 7' elevation thereby damaging the visual compatibility with the historic structure.

(j) Scale of a Building: The size of a building and the building mass in relation to open spaces, windows, door openings, balconies, porches, and lot size shall be visually compatible with the building size and mass of historic buildings and structures within a historic district for all development. To determine whether the scale of a building is appropriate, the following shall apply for major development only-The granting of the Variance retains the size, mass, height, location and setback of the original historic building. The granting of the Variance is consistent with making the addition's size and mass more compatible with the original house.

(k) Directional expression of front elevation. A building shall be visually compatible with the buildings, structures, and sites within a historic district for all development with regard to its directional character, whether vertical or horizontal.-**The property is individually designated and is not in a historic district. However, the granting of the Variance retains the original historic directional expression.** 

(I)Architectural Style: All major and minor development shall consist of only one (1) architectural style per structure or property and not introduce elements definitive of another **The granting of the Variance does not introduce any design elements characteristic of a different style.** 

(m) Additions to individually designated properties and contributing structures in all historic districts. Visual compatibility shall be accomplished as follows:

1. Additions shall be located to the rear or least public side of a building and be as inconspicuous as possible.

The granting of the Variance does not affect the location of the addition.

2. Additions or accessory structures shall not be located in front of the established front wall plane of a historic building.

The granting of the Variance does not affect the established front wall plane of the house.

**3**. Characteristic features of the original building shall not be destroyed or obscured-**The** granting of the Variance restores the characteristic features of the original historic house. The characteristic elevation of the steel structure original house and the ground floor living space on grade are retained.

4.Additions shall be designed and constructed so that the basic form and character of the historic building will remain intact if the addition is ever removed.-**The granting of the Variance does not affect the basic form and character of the historic building if the addition is removed** 

5. Additions shall not introduce a new architectural style, mimic too closely the style of the existing building nor replicate the original design, but shall be coherent in design with the existing building.

The granting of the Variance does not introduce a new architectural style or mimic the style of the existing building. By retaining the 6' top of 1st floor for the historic house and the addition, the addition becomes more compatible with the historic house and has a more coherent floor plan since both structures will be on the same level.

6. Additions shall be secondary and subordinate to the main mass of the historic building and shall not overwhelm the original building.-The granting of the variance is consistent with keeping the addition secondary and subordinate to the historic building by retaining the same 6' top of 1<sup>st</sup> floor elevation of the historic house as opposed to raising the addition to 7' thereby making the addition grade, floor plan and height inconsistent with the historic house .

**Background Detail-**The architecture of the original Paul Rudolph house is characterized by the 2nd floor structure elevated at a certain height above grade. In order to minimize the changes to the defining characteristics of the historic house, the site and the environment, we propose to retain the existing 6' top of 1<sup>st</sup> floor elevation and thereby restore the original dimensions, proportions and spatial relationship of the original historic building with respect to the elevation above the ground floor on grade. The preservation of the 6' top of 1<sup>st</sup> floor with the ground floor on grade is a critical step in restoring the distinctive features of the historic house and in making the addition compatible with the historic building.

The original 1<sup>st</sup> floor, the covered open air ground floor living room and the front door and entry rested on grade as designed by Paul Rudolph and as built in 1956. **The height from** ground level grade to top of 1<sup>st</sup> floor steel beam and the open air vertical space on the ground floor was 8'4". See Figure 2 for photo of original Paul Rudolph designed house elevated above ground floor on grade.

The 1981 addition raised the 1st floor approximately 3' above the existing 3' grade, which resulted in the elevated 2<sup>nd</sup> floor structure being raised to a height of 11'4" above grade or a total height of 14'4". This was done to place the 1981 addition first floor at the required base flood elevation in effect at that time. However, by doing so the original design of the ground floor on grade with the open air space 8'4" above grade was compromised. The top of the 2nd floor original Paul Rudolph house now sits approximately 12'4" above the existing 3' site grade so not only is it substantially higher than the elevation of the original

historic house but the vertical height of the ground floor space under the house is out of proportion to the elevated 2<sup>nd</sup> floor structure above. See Figures 2 and 3 showing existing 2<sup>nd</sup> floor structure 12'4"above grade and the top of first floor entry vestibule at 6' NAVD elevation (3' above existing 3' grade)

The proposed design re positions the 1<sup>st</sup> floor on grade, as Paul Rudolph originally designed. Since the existing top of 1<sup>st</sup> floor is currently at an elevation of 6' NAVD, we propose to gradually fill and re grade a portion of the site under and around the house in order to retain the same 6' top of first floor elevation and re establish the ground floor at 6' elevation, rather than raise the top of 1<sup>st</sup> floor to 7' NAVD. To comply with current Florida Building Code and achieve the current required City of Delray Beach top of 1<sup>st</sup> floor elevation of 7' would require raising the entire steel structure and also undertake a major amount of site work, both of which would significantly conflict with LDR Development Standards and the LDR Visibility Standards.

By reestablishing the top of ground floor on grade at 6' NAVD for both the original Paul Rudolph house and for the addition, we are not only preserving the character and integrity of the historic house but are also making the addition more compatible with the historic house. Retaining the same 6' top of 1st floor throughout the historic house and the addition allows the design of a more coherent floor plan in both structures. Retaining the 6' top of 1st floor in the addition also helps keep the overall height of the addition to a minimum.



Figure 1 Original House as designed by Paul Rudolph, elevated 8'4" above grade

## 2) Justification for the Variance with respect to the historic exception in the Florida Building Code and the City of Delray Beach Ordinance.

In order to allow the City of Delray Beach Building Department to grant a building permit for our improvements using the 6' NAVD top of 1<sup>st</sup> floor elevation we are seeking a Variance based on the fact that our project is eligible for the historic exception cited in the Florida Building Code and the relevant City of Delray Beach Ordinance. The FBC requires all new construction defined as '**substantial improvements**' to be 1' above Base Flood Elevation. Since the property is located in Flood Zone AE with a BFE of 6' NAVD, the required top of first floor would be 7'. However, according to the Florida Building Code 1201.3, see below, *our proposed work is not considered to be substantial improvement and the building qualifies for the Variance to remain at 6' NAVD top of* 1<sup>st</sup> floor elevation.

We propose to apply the 'historic exception' detailed in the 6th Edition (2017) Florida Building Code, Existing Building:

**1201.3 Flood hazard areas.** In flood hazard areas, if all proposed work, including repairs, work required because of a change of occupancy, and alterations, constitutes substantial improvement, then the building shall comply with Section 1612 of the *Florida Building Code, Building*, or Section R322 of the *Florida Building Code, Residential*, as applicable.

Exception: If the program that designated the building as historic determines that it will continue to be an historic building after the proposed work is completed, then the proposed work is not considered to be substantial improvement. For the purposes of this exception, an historic building is:

1. Individually listed in the National Register of Historic Places; or

2. A contributing resource within a National Register of Historic Places listed district; or

3. Designated as historic property under an official municipal, county, special district or state designation, law, ordinance or resolution either individually

or as a contributing property in a district, provided the local program making the designation is approved by the Department of the Interior (the Florida state historic preservation officer maintains a list of approved local programs); or 4. Determined eligible by the Florida State Historic
Preservation Officer for listing in the National Register
of Historic Places, either individually or as a
contributing property in a district.
The historic exception variance is also referenced in the City of Delay Beach

Ordinance XX-16, page 13, Section 10.1.7 Variances and Appeals-

(E) Historic Buildings: A variance is authorized to be issued for the repair, improvement, or rehabilitation of a historic building that is determined eligible for the exception to the flood resistant construction requirements of the Florida Building Code, Existing Building, Chapter 11 Historic Buildings, upon a determination that the proposed repair, improvement, or rehabilitation will not preclude the building's continued designation as a historic building and the variance is the minimum necessary to preserve the historic character and design of the building.

If the proposed work precludes the building's continued designation as a historic building, the variance shall not be granted and the building and any repair, improvement, and rehabilitation shall be subject to the requirements of the Florida Building Code."

Based on the City of Delray Beach Ordinance, a Variance is authorized to be issued to retain the existing 6' top of 1st floor elevation as long as "*the proposed repair, improvement or rehabilitation will not preclude the buildings designation as a historic building and the variance is the minimum necessary to preserve the historic character and design of the building*". The reason cited in the Ordinance *not* to grant the Variance would be if the proposed work precludes the building's continued designation as a historic building. Our proposed work, if approved by the HPB, would not preclude the building's continued historic designation.



Figure 2. Post demo North view -existing 6' NAVD top of 1<sup>st</sup> floor elevation, Ground floor elevated 3' above grade, 2<sup>nd</sup> floor elevated 12'4" above grade



Figure 3. Post demo South view -existing 6' NAVD top of 1st floor elevation, ground floor elevated 3' above grade, 2<sup>nd</sup> floor elevated 12'4"above grade

The proposed Variance is consistent with the following findings for the reasons stated:

(5) Findings: The following findings must be made prior to approval of a variance:

(a) That special conditions and circumstances exist which are peculiar to the land, structure, or building involved and which are not generally applicable to other lands, structures, or buildings subject to the same zoning (The matter of economic hardship shall not constitute a basis for the granting of a variance) The Variance is for a historic house with an existing 6' top of 1<sup>st</sup> floor and a distinctive elevated height and proportions, whose historic character would be damaged by raising the property to 7'.

(b) That literal interpretation of the regulations would deprive the applicant of rights commonly enjoyed by other properties subject to the same zoning; Most of the other houses in the area built before the new flood elevation regulations came into effect in October 2017 are at 6' NAVD top of 1<sup>st</sup> floor elevation or less. The historic exemption is available to all qualified historic home applicants.

(c) That the special conditions and circumstances have not resulted from actions of the applicant; **The existing historic house has a 6' NAVD top of 1**<sup>st</sup> **floor dating back to 1981.** 

(d) That granting the variance will not confer onto the applicant any special privilege that is denied to other lands, structures, and buildings under the same zoning. Neither the permitted, nor nonconforming use, of neighborhood lands, structures, or buildings under the same zoning shall be considered grounds for the issuance of a variance; The granting of the Variance will not confer any special privilege as other pre October 2017 houses in the neighborhood are already at 6' NAVD or less and other designated historic houses qualify for the same historic exception.

(e) That the reasons set forth in the variance petition justify the granting of the variance, and that the variance is the minimum variance that will make possible the reasonable use of the land, building, or structure; **The Variance is the minimum Variance necessary as it does not involve any changes to the existing historic house elevation.** 

(f) That the granting of the variance will be in harmony with the general purpose and intent of existing regulations, will not be injurious to the neighborhood, or otherwise detrimental to the public welfare. The granting of the Variance will preserve the historic house and the status quo of the neighborhood whereas the raising of the house will damage both the historic character of the house and create a structure that could be seen as objectionable.

(6) **Alternative Findings of the Historic Preservation Board:** The Board may be guided by the following to make findings as an alternative to the criteria above:

(a) That a variance is necessary to maintain the historic character of property and demonstrating that the granting of the variance would not be contrary to the public interest, safety, or

welfare. The Variance is necessary to retain the existing 6' top of 1<sup>st</sup> floor and the characteristic elevation of the 2nd floor as well as preserve the historic character of the property by allowing the addition to be in harmony with and compatible to the historic house. The public interest, safety and welfare would not be affected by the granting of the Variance.

(b) That special conditions and circumstances exist, because of the historic setting, location, nature, or character of the land, structure, appurtenance, sign, or building involved, which are not applicable to other lands, structures, appurtenances, signs, or buildings in the same zoning district, which have not been designated as historic sites or a historic district nor listed on the Local Register of Historic Places. Both the site and the existing historic house have special conditions justifying the Variance. The low elevation of the existing site would require major changes to the site and to the existing structure to achieve 7' top of 1<sup>st</sup> floor.

(c) That literal interpretation of the provisions of existing ordinances would alter the historic character of the historic district, or historic site to such an extent that it would not be feasible to preserve the historic character of the historic district or historic site. The historic house was designed to be on grade and to have the 2<sup>nd</sup> floor elevated 8'4" above grade resulting in certain visual proportions with respect to the ground floor space and the elevated 2<sup>nd</sup> floor structure. Raising the grade to 7' top of first floor would also require the entire steel structure to be cut and raised in order to achieve 7', compromising the proportions of the original design.

(d) That the variance requested will not significantly diminish the historic character of a historic site or of a historic district. The Variance will retain the existing historic character of the house, not diminish it.

(e) That the requested variance is necessary to accommodate an appropriate adaptive reuse of a historic building, structure, or site: The Variance for the historic house and addition will accommodate the improvements to the historic house with a minimum of changes and allow the addition to be more compatible with the historic house by keeping it at the same top of 1<sup>st</sup> floor.

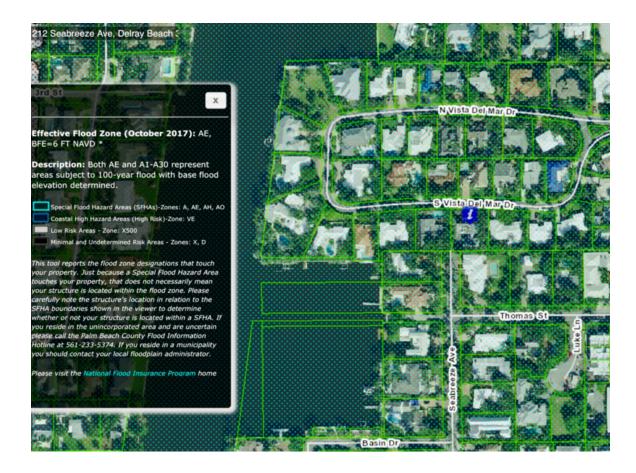


Figure 4. 212 Seabreeze Base Flood Elevation Map