



## CITY OF LAKE WORTH

1900 2<sup>nd</sup> Ave N · Lake Worth, Florida 33461 · Phone: 561-586-1687

**Agenda**  
**Regular Meeting**  
**City of Lake Worth**  
**Historic Resources Preservation Board**  
**City Hall Commission Room**  
**7 North Dixie Hwy; Lake Worth, FL**

**WEDNESDAY, DECEMBER 14, 2016 6:00 PM**

1. Roll Call and Recording of Absences
- 2. Pledge of Allegiance**
3. Additions/Deletions/Reordering and Approval of the Agenda
4. Approval of Minutes
  - A. November 9, 2016 RM Minutes
5. Cases
  - A. Swearing in of Staff and Applicants
  - B. Proof of Publication
  - C. Withdrawals/Postponements
  - D. Consent
    1. HRPB Project Number 16-00100235: Consideration of a Certificate of Appropriateness (COA) for a rear screen porch addition to the single-family residence located at 406 North L Street; PCN# 38-43-44-21-15-110-0030. The subject property was constructed in 1947 and is a contributing resource within the Northeast Lucerne Local Historic District.
  - E. Public Hearings
    1. Board Disclosure
    2. HRPB Project #16-00100200: Consideration of a Certificate of Appropriateness (COA) for 301 South Federal Highway for new construction of a +/- 6,281 square foot, two-story, three-unit townhome structure on the southwest corner of S. Federal Highway and 3rd Avenue South, 301 South Federal Highway. The 0.15 acre site is currently undeveloped and is located in the Mixed Use-Federal Highway (MU-FH)

zoning district and the Southeast Lucerne Local Historic District. PCN# 38-43-44-21-15-109-0090. The Applicant is requesting a continuance to a date certain of January 11, 2016.

F. Unfinished Business

G. New Business

1. HRPB Project Number 16-00100236: Consideration of a Certificate of Appropriateness (COA) for exterior alterations and two additions to the single-family structure located at 204 North Lakeside Drive; PCN# 38-43-44-21-15-036-0010. The subject structure was constructed c.1978 and is a non-contributing resource within the Old Lucerne Local Historic District.
  2. HRPB Project Number 16-00100241: Consideration of a Certificate of Appropriateness (COA) for roof replacement to the subject property located at 1122 North O St, PCN# 38-43-44-21-15-356-0060. The subject building was constructed in 1947 and the property is a contributing resource within the Northeast Lucerne Local Historic District.
6. Planning Issues
  7. Public Comments (3 minute limit)
  8. Departmental Reports
  9. Board Member Comments
  10. Adjournment
  11. If a person decides to appeal any decision made by the board, agency or commission with respect to any matter considered at such meeting or hearing, he or she will need a record of the proceedings, and that, for such purpose, he or she may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based. (F.S. 286.0105)

NOTE: ALL CITY BOARDS ARE AUTHORIZED TO CONVERT ANY PUBLICLY NOTICED MEETING INTO A WORKSHOP SESSION WHEN A QUORUM IS NOT REACHED. THE DECISION TO CONVERT THE MEETING INTO A WORKSHOP SESSION SHALL BE DETERMINED BY THE CHAIR OR THE CHAIR'S DESIGNEE, WHO IS PRESENT AT THE MEETING. NO OFFICIAL ACTION SHALL BE TAKEN AT THE WORKSHOP SESSION, AND THE MEMBERS PRESENT SHOULD LIMIT THEIR DISCUSSION TO THE ITEMS ON THE AGENDA FOR THE PUBLICLY NOTICED MEETING. (Sec. 2-12 Lake Worth Code of Ordinances)

Note: One or more members of any Board, Authority or Commission may attend and speak at any meeting of another City Board, Authority or Commission.

All project-related back-up materials, including full plan sets, are available for review by the public in the Planning, Zoning and Historic Preservation Division located at 1900 2nd Avenue North.



**CITY OF LAKE WORTH**  
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**Agenda**  
**Regular Meeting**  
**City of Lake Worth**  
**Historic Resources Preservation Board**  
**City Hall Commission Room**  
**7 North Dixie Hwy; Lake Worth, FL**

**WEDNESDAY, NOVEMBER 09, 2016 6:00 PM**

1. Roll Call and Recording of Absences  
Present were: Chairman Herman Robinson; Vice-Chair Darrin Engel; Erin Fitzhugh Sita; Judith Just; Robert D'Arinzo  
Absent: Madeleine Burnside  
Also present: Aimee Sunny, Senior Preservation Coordinator; Jordan Hodges, Preservation Planner; Maxime Ducoste, Assistant Director for Planning & Preservation; Pamala Ryan, Board Attorney; Sherie Coale, Board Secretary.
2. **Pledge of Allegiance**
3. Additions/Deletions/Reordering and Approval of the Agenda  
No additions, changes, or deletions to the agenda.  
**Motion:** J. Just moves to accept the agenda, E. Fitzhugh Sita  
**Vote:** Ayes all, unanimous
4. Approval of Minutes
  - A. October 19, 2016 Meeting Minutes  
**Motion:** E. Fitzhugh Sita moves to approve the October 2016 minutes, J. Just 2<sup>nd</sup>.  
**Vote:** Ayes all, unanimous.
  - B. September 21, 2016 HRPB Workshop Minutes  
**Motion:** E. Fitzhugh Sita moves to approve the September 21, 2016 HRPB workshop minutes, J. Just 2<sup>nd</sup>. Chairman asked for clarification on statement regarding vinyl, will be amended upon confirmation by A/V recording.  
**Vote:** Ayes all, unanimous.
5. Cases
  - A. Swearing in of Staff and Applicants  
Board Secretary administered oath.
  - B. Proof of Publication  
Provided in the meeting packet
    1. Lake Worth Herald Publication

C. Withdrawals/Postponements: None

D. Consent: None

E. Public Hearings

1. Board Disclosure

D. Engel visited 230 N. Palmway in the course of Halloween activities with child. Will not affect his decision making abilities.

2. HRPB Project #16-00100228: Consideration of a Certificate of Appropriateness (COA) for the demolition of a contributing 250 square foot accessory garage structure, installation of a new in-ground pool, and the construction of a new +/- 901 square foot accessory structure including a historic waiver from the accessory structure. Limitations at 230 N. Palmway; PCN# 38-43-44-21-15-038-0080. The subject property is contributing to the Old Lucerne Local Historic District.

**Staff:** A. Sunny presents case including analysis and staff findings. Historic waiver consideration for accessory structure. Allowable square foot limitations for the accessory structure is 697 square feet (based on 40 % of primary structure or 1,000 sq feet whichever is less.) Proposed square footage is 979 square ft. 11.8 % in excess of Code.

**Board:** Demolition of garage requires permit and simultaneous application for new construction. Question regarding setback for second story, it is 17 feet. Measurements are taken from either 12 inches above the crown of road or finished floor height.

**Applicant:** P. Weisman- Provides justification, mentions the improvements are for own personal use, not air B&B as some neighbors do. Mentions square footage of accessory structures of nearby neighbors.

**Board:** Inquiries about landscaping shrubbery around pool and rear of property. Applicant is proposing shrubs rather than fence in the limited area near the alley.

**Public Comment:** Ginnie Powell 224 North Palmway- believes it will create aural and visual invasion of her property despite the attractiveness of the accessory structure. Would be in favor of increasing the footprint but removing the 2<sup>nd</sup> floor even if it created a variance for building lot coverage.

**Board:** Inquires as to how it impedes the use of the property.

**Public:** Ms. Powell believes it does not restrict use of property but she now has privacy. Does not have any trees in that area. The presence of a pool increases the use of the backyard which increases noise to her property, cited a nearby neighbors' pool. Property can be sold or rented at any time. She has lived at property for 27 years and has kept the property nicely. Believes it is reasonable to ask for maintaining her privacy that she has had for years. Has not spoken to the owners.

**Staff:** Noticing requirements were met.

**Board:** The 2<sup>nd</sup> story is allowed by right as is a pool.

**Public:** Brian Gleason 302 N Palmway, property owner to north of proposed project. Would like it approved as designed. 5 nearby properties have been significantly improved increasing value in the neighborhood. Will also overlook his backyard but is ok with it.

**Board:** Board recognizes Ms. Powell's concerns regarding changes to neighboring properties. Explains how a potential homeowner's expectations can be seen through code. We live in an urban area and appreciates the time neighbor took to come to the meeting. Reiteration of the 2-story allowed by right also allows for smaller footprint and

more landscape. Moving away from a larger footprint in a floodplain area is also preferable with regard to health/safety issues.

**Staff:** Historic waiver approved as related to the findings of fact should be part of motion. Historic waiver provisions allows Board to increase the site landscaping or add conditions to mitigate the waiver.

**Motion:** E. Fitzhugh Sita moves to approve HRPB Project #16-00100228: including the waiver with the four findings of fact, subject to staff recommended conditions D. Engel 2<sup>nd</sup>. Motion is amended and seconded to add shade tree on southeast property line, subject to landscape code, to provide additional privacy. Storm-water retention is already a code requirement.

**Vote:** Ayes all, unanimous.

**Board:** Would like to staff to consider increasing accessory structure limitation to 60% or 1,000 square feet through an LDR amendment.

F. Unfinished Business: None

G. New Business

1. HRPB Project #16-00100215: Consideration of a Certificate of Appropriateness (COA) for an addition for the single-family structure located at 1005 North Palmway; PCN# 38-43-44-21-15-298-0150. The subject property was constructed in 1940 and is a non-contributing resource within the Northeast Lucerne Local Historic District.

**Staff:** A. Sunny presents case, analysis and findings.

**Applicant:** Not present.

**Board:** Asks if there is a contractor or if homeowner self-contracting, and whether the word “engineering” be removed from the Conditions of approval as “engineering drawings” are not required for residential permits. Building department will review at time of permit.

**Public Comment:** None

**Motion:** D. Engel moves to approve HRPB Project #16-00100215 with conditions as recommended by staff with word “engineering” removed, E. Fitzhugh Sita 2<sup>nd</sup>.

**Vote:** Ayes all, unanimous.

2. HRPB Project #16-00100234: Consideration of a Certificate of Appropriateness (COA) for window and door replacement for the single-family structure located at 1401 South Lakeside Drive; PCN# 38-43-44-27-01-077-0080. The subject property was constructed in 1953 and is a non-contributing resource within the South Palm Park Local Historic District.

**Staff:** A. Sunny presents case, analysis and findings. Previous administrative approval for installation of windows and doors. A September 9 inspection revealed installation was not in compliance with conditions. Not consistent with goals of Comp plan, review criteria in LDR, or historic guidelines Dept. of the Interior.

**Board:** Inquiry if this is a revised COA, staff states New COA. Windows have been ordered and not yet installed. Why the change?

**Applicant:** Christine Harasz and Rennie Newmark self-contracting and ordered the wrong size, installer told her to order transom. Muntins do not go with mid-century modern. Need for new windows and electric bill is high, will add muntins if required but prefers not to. Contractor verified the sizes to be ordered were correct. Homeowners did not realize until later, sorry that it has happened. Ms. Harasz states it was her mistake. Not high enough, by 12 inches, width is ok.

**Staff:** States the transom style was utilized in mid-century but is more in keeping with Deco style. There was a previous staff level COA approval, which was not followed. The previous approval acknowledged the condition of old windows and the need for replacement.

**Applicant:** Upgrading property, less window area with impact windows. Adding plantation shutters inside will create the look of jalousie windows. Non-contributing property, making house something that it is not. Needs new windows as they are in poor repair.

**Staff: Board:** Staff previously allowed either silver or white frames based upon discussions with applicant.

**Public Comment:** Marion Cone LW Historical Society- Agnes Ballard 1<sup>st</sup> PBC registered architect, and was taught by Frank Lloyd Wright. Only other structure designed by her is in Northwood, West Palm Beach with no drawings. Ask Board to carefully consider the original drawings. Architect designed as far north as Vero Beach.

**Staff:** 2 openings (4 windows) face the street 2 openings (4 windows) do not face the street.

**Applicant:** North elevation changes include door is gone steps exist. East elevation (back door) is where the front door is now located.

**Board:** Unsure of the look of the transom windows, otherwise the windows look good. If the home were of Frank Lloyd Wright design, it would be incredibly well designed. It stands as an example of an Agnes Ballard house.

**Staff:** Compromise suggesting street-facing windows be replaced to meet criteria and proper size windows. Replace non-street facing with 4 windows already ordered be allowed as proposed. Applicant is not in agreement due to having already ordered (10 windows) the product. Not replacing 4 on the west side at this time.

Several Board members like the look of the current front windows. Conditions should include the removal of accordion shutters. Applicant requesting no muntins. Conditions in the staff report match the original Certificate of Appropriateness approval.

**Motion:** E. Fitzhugh Sita moves to approve HRPB Project #16-00100234 with Condition #5, addition of requirement to remove accordion shutters, no reflective glass shall be allowed and no deviations from the plans as submitted by the applicant today. With regard to the historic waiver, a finding of fact that no historic materials were removed. R. D'Arinzo 2<sup>nd</sup>

**Vote:** Ayes all, unanimous.

**Staff:** Disagrees with Board's determination tonight as it is in direct conflict with staff's previous administrative approval and would like it entered into the record.

#### 6. Planning Issues

**Board:** E. Fitzhugh Sita-with regard to the vinyl fence approval last month clarifies/further explains her decision process. Consensus from Board members appears to be allowing in both the front and rear, going against code and does not want to appear arbitrary. Should request a change by the City Commission to revise the code to allow vinyl fencing in the entire City.

Would also like a revision of percentage of accessory structure coverage limitation increased.

Board attorney inquires if Board is considering requesting of the City Commission to revise LDR's. Should be submitted to City Commission by Staff as a discussion item. Assistant Director Planning & Preservation states we must also take the item to P&Z Board and achieve a general consensus for recommendation to the City Commission. The proposed LDR change must be recommended by both Boards. E. Fitzhugh Sita would like it on the agenda with opportunity for public comment.

**Staff:** A. Sunny presents a draft letter to the Mayor and City Commission for design guidelines. Board approves of letter for Chairman signature.

7. **Public Comments:** (3 minute limit) None

8. Departmental Reports:

Casino- LDR presentation and how it has been successful in the City. E. Fitzhugh Sita reminds all of the Planning Congress Board, continuing education and session available next year for professionals. Once the link is received, one can register. PBC Planning.org

9. Board Member Comments:

**Staff:** A. Sunny comments on her concern for Board decisions contrasting with previous staff level decisions (admin approval). Perception seems to be if applicant disagrees with staff, just take the case to Board and applicant can get the approval they desire.

**Board:** asks about big black building- M. Ducoste reminds Board there are no paint color restrictions within the City. 828 N Lakeside is for sale. 801 Lake Ave-pink building is progressing nicely. J. Just asks about Gulfstream status-petition is on appeal, filed and City has responded. Lakeside Castle is for sale. Books ‘Cottages of Lake Worth’ are available for sale. H. Robinson –workshop items to be addressed. Assistant Director for Planning & Preservation provides that it has been difficult to gather any consensus. H. Robinson asks if a new workshop would be helpful. With regard to the trailers at Academy of Positive Learning, it appears a Condition of Approval has been violated. Reference is made to a recently approved Ordinance related to violation of Conditions becoming a City Code violation. Board attorney advises a lawsuit could be filed.

E. Fitzhugh Sita- City Commission approved a PACE provider for financing. Loan is a tax assessment, lien against your home for improvements such as windows, roofs, AC and solar systems.

10. Adjournment: H. Robinson, 2<sup>nd</sup> R. D’Arinzo 8:01 PM

**Attest:**

\_\_\_\_\_  
**Herman Robinson, Chairman**

**Submitted By:**

\_\_\_\_\_  
**Sherie Coale, Board Secretary**

**Minutes Approved:**

\_\_\_\_\_  
**Date**



**MEMORANDUM DATE:** December 7, 2016

**AGENDA DATE:** December 14, 2016

**TO:** Chair and Members of the Historic Resources Preservation Board

**RE:** **406 North L Street**

**FROM:** Aimee N. Sunny, Senior Preservation Coordinator  
Department for Community Sustainability

**TITLE:** **HRPB Project Number 16-00100235:** Consideration of a Certificate of Appropriateness (COA) for a rear screen porch addition to the single-family residence located at **406 North L Street**; PCN# 38-43-44-21-15-110-0030. The subject property was constructed in 1947 and is a contributing resource within the Northeast Lucerne Local Historic District.

**OWNER:** Marie Burkhardt  
406 N L Street  
Lake Worth, FL 33460

**BACKGROUND:**

The property at 406 North L Street has a one-story single-family residence that was constructed in 1952 in the Frame Vernacular Style. The property has public frontage on North L Street to the west. Character defining features of the building include the original wood double hung 6/6 windows, wood window trim, metal window awnings, and asbestos siding. Changes to the building include an addition to the north side of the structure in 1953 and roof replacement with a compatible material. Overall, the building retains a high degree of historic integrity of location, setting, materials, design, and craftsmanship.

**REQUEST:**

The Applicant has submitted plans for a 247 square foot screen porch addition to the one-story house on the subject property. The aluminum framed screen porch addition is proposed to have a solid insulated aluminum roof and will be located on the rear of the existing structure, facing the east. The Applicant has provided proposed architectural plans for the building, including a site plan, floor plans, and elevations.

The screen porch addition will have an aluminum frame, screen walls, and a concrete slab foundation. The screen porch's roof will attach to the rear existing exterior wall under the existing roof system.

The subject property is zoned Single-family and Two-family Residential (SF-TF 14) and is subject to the development standards for this district in the City of Lake Worth Zoning Code and the City's Comprehensive Plan. An addition to a single-family residence is permitted, so long as it conforms to the required development criteria in §23.3-8 of the City of Lake Worth Zoning Code. The following table includes some of the basic specifications for the proposed construction:

<u>Dimension</u>	<u>Required by Code</u>	<u>Existing or Proposed</u>
Lot size	5,000 sq. feet for single family 7,500 sq. feet for two family	8,775 sq. feet
Lot width	50'-0" for one unit 75'-0" for two units	65'-0"
Front (West) setback	20'0"	29.6' existing
Side setback	10% of lot width, Compliance with non-conforming status	North= 9.8' existing, 9.8' proposed South= 8.8' existing, 8.8' proposed
Rear (East) setback	15.0' for primary building	75.0' existing; 62.0' proposed
F.A.R. <sup>1</sup>	0.45	Appx. 0.22 proposed
Max. Building Coverage <sup>2</sup>	30% max.	Appx. 22% proposed
Impervious surface	50% max.	Appx. 30% proposed

**ANALYSIS:**

Zoning and Comprehensive Plan Consistency

Overall, the proposed new construction project is consistent with the development requirements in the City's Zoning Code and Comprehensive Plan.

Historic Preservation

Staff has reviewed the documentation and materials provided in this application and applied the applicable guidelines and standards found in the City's Historic Preservation Ordinance, detailed in Attachment 1 – Decision Criteria.

It is the analysis of Staff that the project as proposed is compatible with the review criteria set forth in the historic preservation regulations. The screen porch enclosure is not visible from North L Street, and is located at the rear of the structure. The proposed design of the screen porch is compatible with the simple Frame Vernacular style of the house. Staff did have concerns as to how the screen porch roof would tie into the existing structure's roof system, given the lack of detail on the drawings. Staff consulted with the contractor, and was advised that the existing gutter system will be removed and the porch roof will be attached to the wall under the existing eave overhang. Staff concurs with the contractor that this will be the best option to minimize any adverse effects on the structure's roofline, and to allow for proper water drainage.

Public Comment

At the time of publication of the agenda, Staff has not received any public comment regarding this project.

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<sup>1</sup> Floor area ratio: A regulatory technique which relates to total developable site area and the size (square feet) of development permitted on a specific site. A numeric rating assigned to each land use category that determines the total gross square feet of all buildings as measured from each building's exterior walls based upon the actual land area of the parcel upon which the buildings are to be located. Total gross square feet calculated using the assigned floor area ratio shall not include such features as parking lots or the first three (3) levels of parking structures, aerial pedestrian crossovers, open or partially enclosed plazas, or exterior pedestrian and vehicular circulation areas.

<sup>2</sup> *Building lot coverage*: The area of a lot covered by the impervious surface associated with the footprint(s) of all buildings on a particular lot. Structured parking garages are exempt from building lot coverage.

**COMPREHENSIVE PLAN CONSISTENCY:**

The project, as proposed, is consistent with the following Comprehensive Plan goals and objectives concerning future land use and housing:

**Goal 1.3** The preserve and enhance the City’s community character as a quality residential and business center within the Palm Beach County urban area. (Objective 1.3.4)

**Goal 1.4** Encourage preservation and rehabilitation of historic and natural resources and where appropriate restrict development that would damage or destroy these resources. (Objective 1.4.2)

**CONSEQUENT ACTION:**

Approve the application; approve the application with conditions; continue the hearing to a date certain to request additional information; or deny the application.

**RECOMMENDATION:**

Staff recommends approval of the requests for a screen porch addition with the following conditions:

- 1) An expansion joint shall be used between the existing structure and the proposed addition as needed in order to avoid damage to the existing building.
- 2) The existing structure shall be properly protected during construction so as not to incur damage from the addition.
- 3) The roofline to the proposed addition shall connect to the exterior wall of the existing structure underneath the eave overhang to minimize any adverse effects to the existing structure’s roofline, subject to staff review during permitting and approval during construction.
- 4) The screen porch shall be designed and constructed so that it shall be considered a permanent structure.
- 5) If possible, the aluminum frame structure shall have a matte finish, rather than glossy.

**POTENTIAL MOTIONS:**

I MOVE TO **APPROVE** HRPB 16-00100100235: Consideration of a Certificate of Appropriateness (COA) a screen porch addition for the subject building located at **406 N L St**, with the conditions as recommended by Staff, based upon the preponderance of competent substantial evidence, and pursuant to the City of Lake Worth Land Development Regulations Section 23.5-4.

I MOVE TO **DENY** HRPB 16-00100235: Consideration of a Certificate of Appropriateness (COA) for a screen porch addition for the subject building located at **406 N L St** because the Applicant has not established by a preponderance of the competent substantial evidence that the application is in compliance with the City of Lake Worth Land Development Regulations Section 23.5-4, the Secretary of the interiors Standards for the Rehabilitation of Historic Properties, and the City’s Comprehensive Plan.

**ATTACHMENTS:**

1. Decision Criteria
2. Photographs
3. Proposed Architectural Drawings

LOCATION MAP



## MEMORANDUM

**DATE:** December 7, 2016

**TO:** Chair and Members of the Historic Resources Preservation Board

**FROM:** Aimee N. Sunny, Senior Preservation Coordinator  
Department of Community Sustainability

**SUBJECT:** **HRPB Project Number 16-00100235:** Consideration of a Certificate of Appropriateness (COA) for a rear screen porch addition to the single-family residence located at **406 North L Street**; PCN# 38-43-44-21-15-110-0030. The subject property was constructed in 1947 and is a contributing resource within the Northeast Lucerne Local Historic District.

**HRPB Meeting Date:** December 14, 2016

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Per Section 23.5-4k(1) of the historic preservation ordinance, the Board shall use the following criteria in making a determination:

A. What is the effect of the proposed work on the landmark or the property upon which such work is to be done?

**Response:** It is the analysis of Staff that the proposed work on the property located at 406 N L Street will have no adverse effect on the historic appearance or significance of the building.

B. What is the relationship between such work and other structures on the landmark site or other property in the historic district?

**Response:** The proposed work will have no direct physical effect on any surrounding properties within the surrounding Northeast Lucerne Local Historic District.

C. To what extent will the historic, architectural, or archaeological significance, architectural style, design, arrangement, texture, materials and color of the landmark or the property be affected?

**Response:** The Applicant is not proposing to replace any original materials on the building. It is the analysis of Staff that the proposed screen porch addition is compatible with the architectural style of the single-family residence and will not adversely affect the historic integrity of the original structure.

D. Would denial of a certificate of appropriateness deprive the property owner of reasonable beneficial use of his property?

**Response:** No, the denial of this COA as submitted does not prevent the Applicant from potentially proposing other alterations to the home, nor would it make the building uninhabitable.

E. Are the applicant's plans technically feasible and capable of being carried out within a reasonable time?

**Response:** Yes.

F. Do the plans satisfy the applicable portions of the general criteria contained in the United States Secretary of the Interior's Standards for Rehabilitation then in effect or as they may be revised from time to time? The current version of the Secretary's Guidelines provides as follows:

(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.

**Response:** No change to the use of the property is proposed.

(2) This historic character of the property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.

**Response:** The Applicant is not removing any historic materials from the property. The proposed changes will not alter the main street-facing elevation, or other features and spaces that characterize this property. The basic shape and form of the structure will not be affected by the addition.

(3) Each property shall be recognized as a physical record of its 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.

**Response:** It is the analysis of Staff that the addition will be compatible with the original Frame Vernacular structure, and given the difference in footprint as well as roof height and slope, the addition will also be easily distinguished from the main structure.

(4) Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved.

**Response:** The historically significant features of the building are being retained.

(5) Distinctive features, finishes and construction techniques or examples of craftsmanship that characterize a historic property shall be preserved.

**Response:** It is the analysis of Staff that no distinctive features, finishes, or examples of craftsmanship that characterize the property are being adversely affected by the scope of work proposed.

(6) Deteriorated architectural features shall be repaired rather than replaced, wherever possible. In the event replacement is necessary, the new material should match the material being replaced in composition, design, color, texture, and other visual qualities.

Repair or replacement of missing architectural features should be based on accurate duplications of features, substantiated by historical, physical, or pictorial evidence rather than on conjectural designs or because the different architectural elements from other buildings or structures happen to be available for relocation.

**Response:** Not applicable to this project.

(7) Chemical or physical treatments, such as sandblasting, that cause damage to historic materials, shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.

**Response:** Not applicable to this project.

(8) Significant archeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken.

**Response:** Not applicable to this project.

(9) New additions, exterior alterations or related new construction shall not destroy historic materials that characterize the property. The new construction 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.

**Response:** The proposed new addition meets this criterion. The addition is compatible in size, massing, and scale. The footprint, roof shape, and location will make the addition easily distinguished from the original structure.

(10) New additions and adjacent or related new construction shall be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic building and its environment would be unimpaired.

**Response:** The proposed addition could be removed at a later date, with some changes to the main structure.

G. What are the effects of the requested change on those elements or features of the structure which served as the basis for its designation and will the requested changes cause the least possible adverse effect on those elements or features?

**Response:** It is the analysis of Staff that the historic character of the property would not be adversely affected by the proposed project as submitted by the Applicant, as outlined above.

Section 23.5-4k(2). *Additional guidelines for alterations.*

In approving or denying applications for certificates of appropriateness for alterations, the HRPB shall also consider the following additional guidelines:

**A.** Is every reasonable effort being made to provide a compatible use for a property that requires minimal alteration of the building, structure or site and its environment, or to use the property for its originally intended purpose?

**Response:** No change to the use of the property is proposed.

**B.** Are the distinguishing original qualities or character of a building, structure or site and its environment being destroyed? The removal or alteration of any historic material or distinctive architectural features shall be avoided whenever possible.

**Response:** No.

**C.** When a certificate of appropriateness is requested to replace windows or doors, the HRPB shall permit the property owner's original design when the HRPB's alternative design would result in an increase in cost of thirty (30) percent above the owner's original cost. The owner shall be required to demonstrate to the HRPB that:

**(1)** The work to be performed will conform to the original door and window openings of the structure; and

**Response:** Not applicable to this project.

**(2)** That the replacement windows or doors with less expensive materials will achieve a savings in excess of thirty (30) percent over historically compatible materials otherwise required by this code.

**Response:** Not applicable to this project.





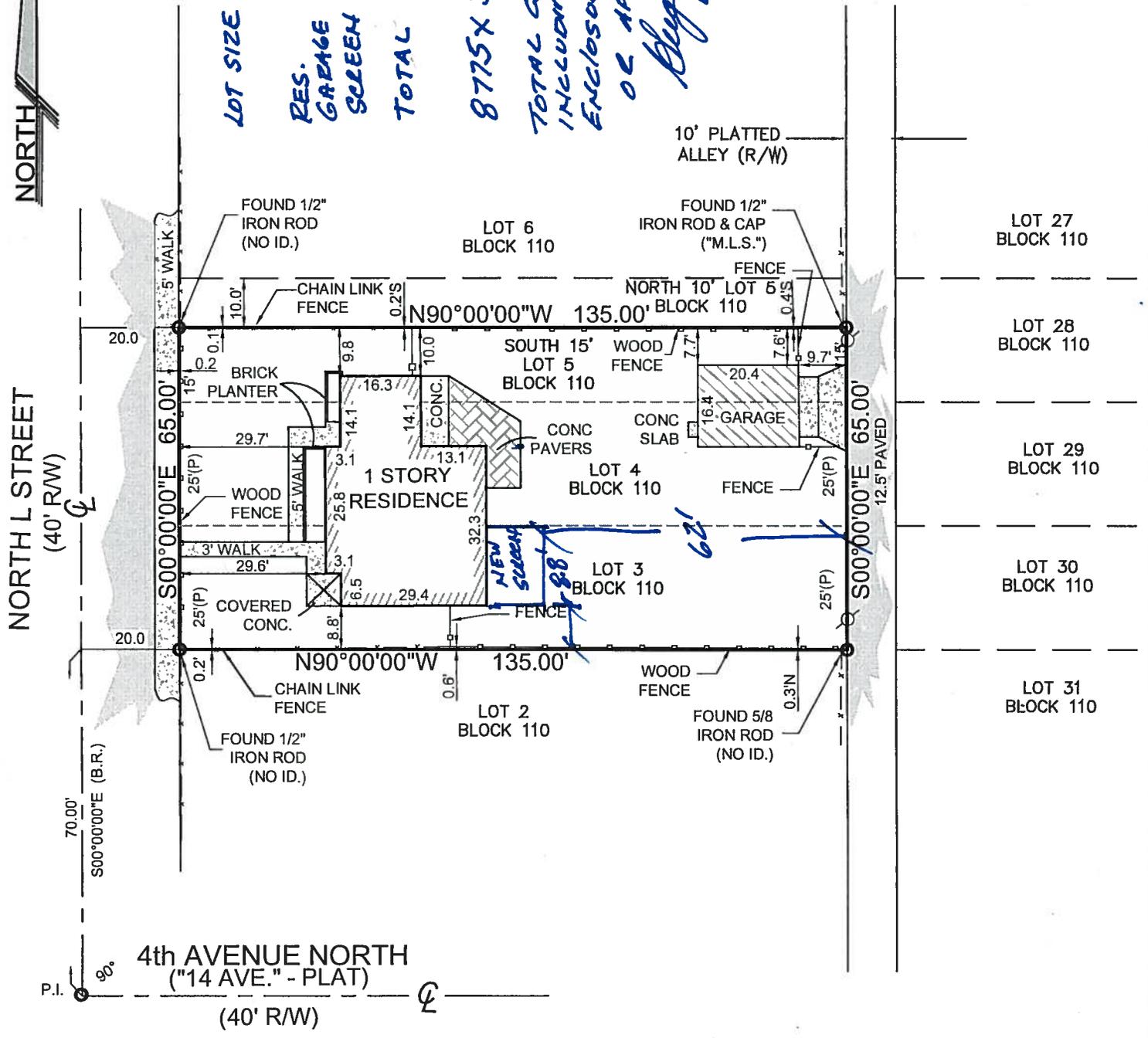






REVISIONS:


LOT SIZE 8775 SQ FT  
 RES. 1345  
 GARAGE 335  
 SCREEN 247  
 TOTAL 1927 SQ FT  
 8775 X 30% = 2632.5  
 TOTAL COVERAGE INCLUDING SCREEN ENCLOSURE IS 1927 SQ FT  
 OR APPROX 22%  
*Big Miller U-16576*



**CERTIFIED TO:** Marie Burkhardt; Ann Marie G. Rezzonico, P.A.; Old Republic National Title Insurance Company  
**PROPERTY ADDRESS:** 406 N "L" St., Lake Worth, FL  
**FLOOD ZONE:** C (FIRM 120213 0001C 09/30/1982)  
**DESCRIPTION:** Lots 3 and 4 and the South 15 feet of Lot 5, Block 110, The Palm Beach Farms Co. Plat No. 2, THE TOWNSITE OF LUCERNE, according to the plat thereof on file in the Office of the Clerk of the Circuit Court in and for Palm Beach County, Florida, recorded in Plat Book 2, Pages 29 to 40 inclusive. (The Townsite of Lucerne is no known as Lake Worth)

- SURVEY NOTES:**
- 1.) Subject Lot Area = 8,775 Sq. Ft. or 0.202 Acres.
  - 2.) Lands shown hereon were not abstracted by this office for easements, right-of-ways, or other instruments of record.
  - 3.) No underground improvements located.
  - 4.) All bearings and distances shown hereon are plat and measured unless otherwise noted.
  - 5.) This firm's "Certificate of Authorization" number is "L.B.#6838".

**BOUNDARY SURVEY**  
 This survey is invalid without embossed surveyor's seal and/or an authenticated electronic signature and authenticated electronic seal.  
  
 Registered Land Surveyor, Florida Certificate No. MICHAEL J. MILLER #4034

**LEGEND:**

<ul style="list-style-type: none"> <li>CALC. = CALCULATED</li> <li>C.B.S. = CONCRETE BLOCK STRUCTURE</li> <li>CONC. MON. = CONCRETE MONUMENT</li> <li>CONC. = CONCRETE</li> <li>D.E. = DRAINAGE EASEMENT</li> <li>U.E. = UTILITY EASEMENT</li> <li>P.E. = POOL EQUIPMENT</li> <li>F.F.E.L. = FINISHED FLOOR ELEVATION</li> <li>EL. = ELEVATION</li> <li>(B.R.) = BEARING REFERENCE</li> <li>(D) = DEED</li> <li>(M) = MEASURED</li> </ul>	<ul style="list-style-type: none"> <li>(P) = PLAT</li> <li>R = RADIUS</li> <li>Δ = CENTRAL "DELTA" ANGLE</li> <li>L = ARC LENGTH</li> <li>CH.B. = CHORD BEARING</li> <li>N.G.V.D. = NATIONAL GEODETIC VERTICAL DATUM</li> <li>O.R.B. = OFFICIAL RECORD BOOK</li> <li>P.B. = PLAT BOOK</li> <li>P.C. = POINT OF CURVATURE</li> <li>P.T. = POINT OF TANGENCY</li> <li>P.R.C. = POINT OF REVERSE CURVATURE</li> <li>P.C.C. = POINT OF COMPOUND CURVATURE</li> </ul>	<ul style="list-style-type: none"> <li>P.I. = POINT OF INTERSECTION</li> <li>P.O.C. = POINT OF COMMENCEMENT</li> <li>P.O.B. = POINT OF BEGINNING</li> <li>R.W. = RIGHT OF WAY</li> <li>—x— = CHAIN LINK FENCE</li> <li>—o—o— = WOOD FENCE</li> <li>—x—x— = METAL FENCE</li> <li>—o—o— = CENTERLINE</li> <li>—- - - - = EASEMENT</li> <li>—- - - - = COVERED</li> <li>—- - - - = OVERHEAD LINES</li> <li>—- - - - = LOT TIE</li> </ul>	<ul style="list-style-type: none"> <li>[Pattern] = ASPHALT PAVEMENT</li> <li>[Pattern] = CONCRETE FLATWORK</li> <li>[Pattern] = PAVER BRICK FLATWORK</li> <li>[Symbol] = WOOD POWER POLE</li> <li>[Symbol] = WATER METER</li> <li>[Symbol] = FIRE HYDRANT</li> <li>[Symbol] = CATCH BASIN</li> <li>[Symbol] = SANITARY MANHOLE</li> </ul>
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SCALE: 1" = 30'	<b>MILLER LAND SURVEYING</b> 1121 LAKE AVENUE LAKE WORTH, FLORIDA 33460 PHONE: (561) 586-2669 - FAX: (561) 582-0151 www.millersurveying.com e-mail: millersurveying@aol.com	REFS: B70/46 U12/12
DRAWN BY: TIRADO		PREV. JOB NO'S. Y120652
FIELD WK: M.M. / B.M.		JOB NO. Y160977
DATE: 11/07/2016		<b>S - 46,195 - A</b>

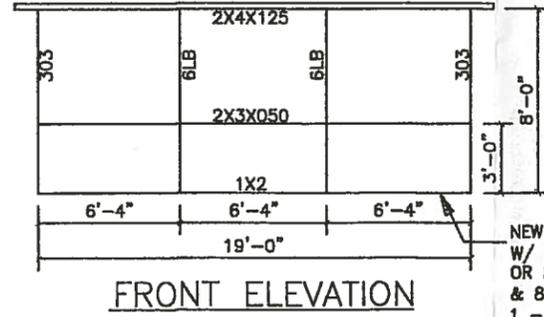
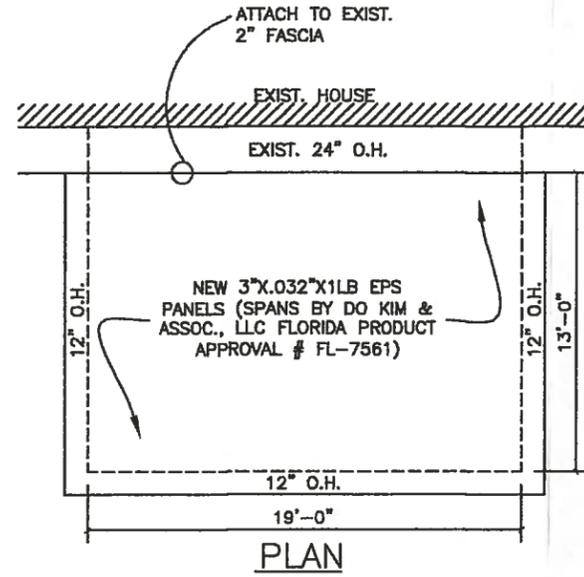
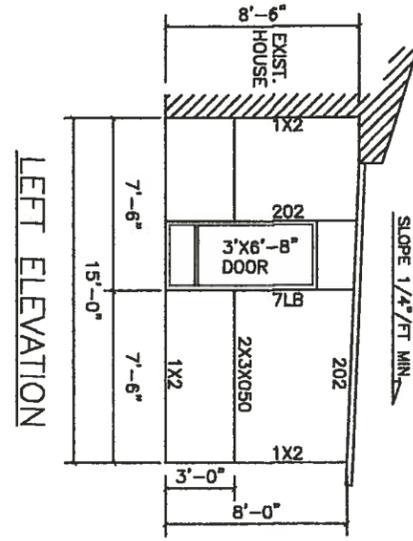
NOTE:  
THIS JOB WAS DESIGNED  
BASED ON 6005-T5  
ALUMINUM ALLOY AND  
18X14 SCREEN MESH.

NOTE:  
DOOR LOCATION IS OPTIONAL  
CONTRACTOR MAY ADJUST IN  
FIELD PER HOMEOWNER REQUEST

**6005-T5**

**PALM BEACH COUNTY DESIGN CERTIFICATION**

CODE EDITION: FBC 2014 EDITION  
 OCCUPANCY: SINGLE FAMILY DWELLING - SCREEN ROOM  
 BUILDING DESIGNED AS: OPEN STRUCTURE  
 BUILDING HEIGHT < 60 FEET  
 MEAN ROOF HEIGHT: 8'-3"  
 RISK CATEGORY: II  
 BASIC WIND VELOCITY PRESSURES:  
 WIND SPEED: 170 MPH (3 SECOND GUST)  
 BASIC WIND VELOCITY PRESSURES: 21.1 PSF WALLS  
 30 PSF ROOF  
 ROOF DEAD LOAD (ACTUAL DEAD LOAD USED TO RESIST UPLIFT REACTIONS): 2 PSF  
 SOIL BEARING CAPACITY: WELL COMPACTED  
 REVIEWED FOR SHEAR WALL REQUIREMENTS: YES  
 IMPACT PROTECTION SPECIFIED: NO



NEW 4" CONC. SLAB  
 W/ 6X6 - 10/10 W.W.M.  
 OR FIBERMESH  
 & 8"X8" FTG. W/  
 1 - #5 REBAR (TYP.)



THESE PLANS CONFORM TO THE FBC 2014 ED.  
 DESIGN BASED ON 170 MPH ULTIMATE WINDS, EXPOSURE "B", CATEGORY II

**TARNOWSKI**  
**ENGINEERING**

CIVIL & STRUCTURAL ENGINEERING  
 7360 N.W. 5th Street Phone (954) 727 - 2027  
 Plantation, FL 33317 Fax (954) 727 - 9644

NEW ALUMINUM ROOFED  
 SCREEN ENCLOSURE FOR:

BURKHARDT RES.  
 406 NORTH L ST.  
 LAKE WORTH, FL  
 CONTRACTOR: EAST COAST WHOLESALE ALUM.

JOB #: 160794  
 DATE: 08/25/16  
 SCALE: 1/8" = 1'-0"  
 DRAWN BY: S.F.  
 CHECKED BY: *UT*  
 SHEET NO. 1 OF 1

Engineering Business CA 00009677

C.T. "Gus" TARNOWSKI  
 P.E. # 50662

*[Signature]*  
 8/29/16



*SCREEN LOCATION*

*REAR*



MILLER  
LAND  
PLANNING, INC.

508 E. Boynton Beach Boulevard  
Boynton Beach, FL 33435

Phone ■ (561)736.8838  
Fax ■ (561)736.8079

## BERMUDA CAY

PCN: 38-43-44-21-15-109-0090

Original: November 30, 2016

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### Request for Continuance - HRPB Project Number 15-00100114

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On behalf of D.F. Ryan Management Services, Inc., please accept this letter as a formal request for a continuance at the December 14, 2016 Historic Resources Preservation Board meeting in order to give city staff time to review the revised architecture plans to be presented at the January 11, 2017 HRPB meeting. In the interim, we will continue to work closely with City staff toward successful completion of this project. If you have any questions or concerns regarding this matter, please feel free to contact our office.

Respectfully,

Curtis Dubberly  
Associate Planner



**City Of Lake Worth**

**Department for Community Sustainability**

**Planning, Zoning and Historic Preservation Division**

1900 Second Avenue North · Lake Worth · Florida 33461 · Phone: 561-586-1687

**MEMORANDUM DATE:** December 7, 2016

**AGENDA DATE:** December 14, 2016

**TO:** Chair and Members of the Historic Resources Preservation Board

**RE:** **204 North Lakeside Drive**

**FROM:** Aimee N. Sunny, Senior Preservation Coordinator  
Department for Community Sustainability

**TITLE: HRPB Project Number 16-00100236:** Consideration of a Certificate of Appropriateness (COA) for exterior alterations and two additions to the single-family structure located at **204 North Lakeside Drive**; PCN# 38-43-44-21-15-036-0010. The subject structure was constructed c.1978 and is a non-contributing resource within the Old Lucerne Local Historic District.

**OWNER/APPLICANT:** Gilbert Rodriguez  
204 North Lakeside Drive  
Lake Worth, FL 33460

**BACKGROUND:**

The property at 204 North Lakeside Drive has a one-story Palm Beach Regency inspired single-family residence constructed c.1978. The property has public frontage on North Lakeside Drive to the west, 2<sup>nd</sup> Avenue North to the south, and the Lake Worth Municipal Golf Course to the east.

The original architectural plans for the building are not available in the City's property files. Based on the information in the City's property file, the property had a previous structure from the 1940's that was demolished in the 1950's, and the current building was constructed c.1978. Although the design style is somewhat unusual for Lake Worth, the architectural design appears to have been inspired by Palm Beach Regency design. Typical characteristics of this style include symmetrical design, classical detailing, simplified decorative elements, and a flat roof. Character defining features of the building include the masonry and stucco with flat roof construction, decorative roof finials, divided light windows, and the decorative stucco banding and trim. Overall, the building retains a moderate degree of historic integrity of location, setting, materials, and design.

**REQUEST:**

The Applicant has submitted plans for a 137 sq. ft. dining room addition on the south, side façade and a 50 sq. ft. open-air covered front porch addition on the west, front façade of the existing house. The Applicant has provided architectural plans for the building, including a site plan, floor plan, details, and elevations. The Applicant is also requesting exterior alterations to replace all of the existing windows, doors, and garage doors,

repair/replace all exterior stucco as needed, repair/replace all decorative stucco banding and window trim as needed, and add decorative, fixed shutters to the windows on all elevations. The Applicant is requesting additional improvements to the property, which can typically be reviewed by Staff, including a new concrete patio on the rear of the property, a new concrete driveway on the south side of the property, and new fencing, including a 6’ tall horizontal wood fence facing South Lakeside Drive and 2<sup>nd</sup> Avenue North, and a 4’ tall black aluminum fence along the east property line facing the Golf Course.

The scope of work for the dining room addition is minimal, adding only 137 sq. ft. to the existing 2,614 sq. ft. house. The overall effect on the front façade will be minimal, with the addition being located mostly behind the existing garage, and in-line with the main structure. The new addition will be concrete masonry construction with a stucco finish and will have a flat roof and aluminum windows and doors to match the existing house. The scope of work for the 50 sq. ft. open-air covered porch addition is also minimal, although it will be visible from the street. The porch addition will utilize concrete masonry construction with a stucco finish, and will have simplified traditional porch columns.

The subject property is zoned Single-family Residential (SFR), and is subject to the development standards for this district in the City of Lake Worth Zoning Code and in the City’s Comprehensive Plan. An addition to a single-family residence is permitted, so long as it conforms to the required development criteria in §23.3-7 of the City of Lake Worth Zoning Code. The following table includes some of the basic specifications for the proposed construction:

<u>Dimension</u>	<u>Required by Code</u>	<u>Existing or Proposed</u>
Lot size	7,500 sq. feet	10,125 sq. feet
Lot width	75’-0”	75’-0”
Front (West) setback	20’0”	21.3’ existing and proposed
Side setback	10% of lot width = 7’-6”	North = 7’-11” existing and proposed; South = 19’-4” existing and proposed
Rear (North) setback	15.0’ for primary building	Appx. 35’ existing and proposed
F.A.R. <sup>1</sup>	0.45	0.26 existing, 0.27 proposed
Max. Building Coverage <sup>2</sup>	30% max.	27.7% proposed
Impervious surface	50% max.	Appx. 45.7% proposed

**ANALYSIS:**

**Zoning and Comprehensive Plan Consistency**

Overall, the proposed addition and exterior alterations are consistent with the development requirements in the City’s Zoning Code and Comprehensive Plan, and would not require any variances from the Code.

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<sup>1</sup> Floor area ratio: A regulatory technique which relates to total developable site area and the size (square feet) of development permitted on a specific site. A numeric rating assigned to each land use category that determines the total gross square feet of all buildings as measured from each building’s exterior walls based upon the actual land area of the parcel upon which the buildings are to be located. Total gross square feet calculated using the assigned floor area ratio shall not include such features as parking lots or the first three (3) levels of parking structures, aerial pedestrian crossovers, open or partially enclosed plazas, or exterior pedestrian and vehicular circulation areas.

<sup>2</sup> *Building lot coverage*: The area of a lot covered by the impervious surface associated with the footprint(s) of all buildings on a particular lot. Structured parking garages are exempt from building lot coverage.

### Historic Preservation

Staff has reviewed the documentation and materials provided in this application and applied the applicable guidelines and standards found in the City's Historic Preservation Ordinance, detailed in Attachment 1 – Decision Criteria.

It is the analysis of Staff that the two additions are fundamentally compatible with the review criteria set forth in the historic preservation regulations. The dining room addition is proposed on a secondary elevation of the building, and will have a minimal visual impact on the building as viewed from North Lakeside Drive. The addition is in scale with the massing and height of the existing structure, and the proposed elevation is compatible with the existing south façade. The front porch addition is also in scale with the massing, height, and detailing of the existing structure, and complements the existing front elevation.

The exterior alterations proposed are compatible with the existing structure, and the historic regulations. The proposed windows replicate the existing 6/6 single-hung windows, and the proposed shutters and revised trim details are compatible with the Regency architectural style. The proposed garage doors utilize a recessed panel design, and simulated divided lights. All stucco and stucco banding is proposed to be repaired or replaced in kind.

Staff has had multiple pre-application meetings with the Applicant, and the Applicant has addressed most of Staff's concerns with these resubmittal drawings. Staff has recommended Conditions of Approval regarding specific detailing of the windows, doors, shutters, and trim.

### Public Comment

At the time of publication of the agenda, Staff has not received any public comment regarding this project.

### **COMPREHENSIVE PLAN CONSISTENCY:**

The project, as proposed, is consistent with the following Comprehensive Plan goals and objectives concerning future land use and housing:

**Goal 1.4** Encourage preservation and rehabilitation of historic and natural resources and where appropriate restrict development that would damage or destroy these resources. (Objective 1.4.2)

**Objective 3.2.5:** To encourage the identification of historically significant housing, and to promote its preservation and rehabilitation as referenced by the Surveys of Historic Properties conducted for the City of Lake Worth.

**Policy 3.2.5.1:** Properties of special value for historic, architectural, cultural or aesthetic reasons will be restored and preserved through the enforcement of the City's Historic Preservation Ordinance to the extent feasible.

### **CONSEQUENT ACTION:**

Approve the application; approve the application with conditions; continue the hearing to a date certain to request additional information; or deny the application.

**RECOMMENDATION:**

Staff recommends approval of the request for two additions and exterior alterations to the existing single-family structure with the following conditions:

- 1) An expansion joint shall be used between the existing structure and the proposed addition as needed in order to avoid damage to the existing building, subject to Staff review at permitting.
- 2) The existing structure shall be properly protected during construction so as not to incur damage from the addition. Drawings may be required to show how the new roof and walls will tie into the existing structure.
- 3) All windows and doors shall be aluminum, and shall not use reflective glass. The windows shall be replaced in the existing openings, and shall not be made smaller by building in the framing.
- 4) All simulated divided lights shall be created by using exterior raised applied triangular muntins. No flat or internal muntins shall be permitted. Insulated glass shall not be permitted, unless the frame is deep enough to accommodate the exterior raised applied muntins.
- 5) The decorative fixed shutters shall be equal to half the width of the window, subject to Staff review at permitting and inspection during construction. Staff recommends using shutter dogs or other decorative hardware with the fixed shutters. The existing stucco window trim may be amended as proposed, in order to allow for the installation of the shutters, subject to staff review at permitting and inspection during construction.
- 6) All existing accordion style shutters shall be removed from the structure.
- 7) The garage doors shall have smaller simulated divided lights, if possible, in order to be compatible with the 6/6 windows. Based on the drawings provided, staff recommends 12-18 lights, rather than 6, as shown.
- 8) The decorative roof finials may be repaired, or replaced with a similar Regency-style appropriate roof finial, subject to Staff review at permitting.
- 9) The stucco finish on the proposed addition shall match the existing smooth stucco finish on the existing structure. If the entire structure needs to have the stucco replaced, the new stucco shall exactly replicate the existing stucco finish on the stucco. The Applicant shall prepare a stucco sample, to be reviewed and approved by Staff, prior to commencing stucco work.
- 10) All decorative stucco banding shall be repaired if possible. If the banding needs to be replaced, it shall be replicated exactly in size, shape, profile, location, and configuration.
- 11) All fencing, hardscape, and mechanical equipment shall comply with the Land Development Regulations.

**POTENTIAL MOTION:**

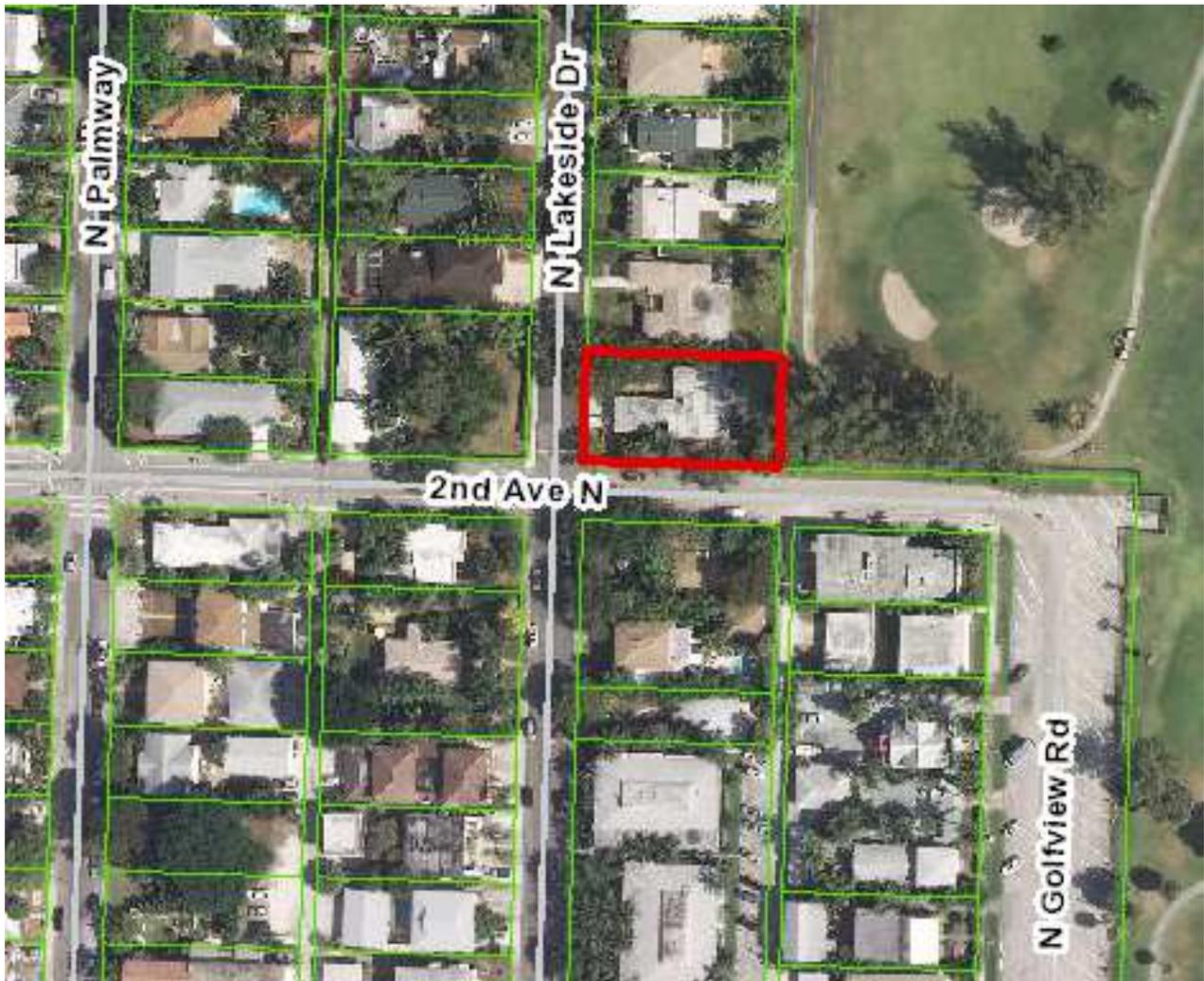
I MOVE TO **APPROVE** HRPB 16-00100236: Consideration of a Certificate of Appropriateness (COA) for exterior alterations and the construction of an addition for the subject building located at **204 North Lakeside Drive**, with conditions as recommended by Staff, based upon the preponderance of competent substantial evidence.

I MOVE TO **DENY** HRPB 16-00100236: Consideration of a Certificate of Appropriateness (COA) for exterior alterations and the construction of an addition for the subject building located at **204 North Lakeside Drive** because the Applicant has not established by a preponderance of the evidence that the application is in compliance with the City of Lake Worth Land Development Regulations Section 23.5-4, the Secretary of the Interiors Standards for the Rehabilitation of Historic Properties, and the City's Comprehensive Plan.

**ATTACHMENTS:**

1. Decision Criteria
2. Application Photographs and Product Information
3. Proposed Architectural Drawings
4. Proposed Window Information

LOCATION MAP



## MEMORANDUM

**DATE:** December 7, 2016

**TO:** Chair and Members of the Historic Resources Preservation Board

**FROM:** Aimee N. Sunny, Senior Preservation Coordinator  
Department of Community Sustainability

**SUBJECT:** **HRPB Project Number 16-00100236:** Consideration of a Certificate of Appropriateness (COA) for exterior alterations and an addition to the single-family structure located at **204 North Lakeside Drive**; PCN# 38-43-44-21-15-036-0010. The subject structure was constructed c.1978 and is a non-contributing resource within the Old Lucerne Local Historic District.

**HRPB Meeting Date:** December 14, 2016

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Per Section 23.5-4k(1) of the historic preservation ordinance, the Board shall use the following criteria in making a determination:

A. What is the effect of the proposed work on the landmark or the property upon which such work is to be done?

**Response:** It is the analysis of Staff that the proposed work on the property located at 204 N Lakeside Drive will have no adverse effect on the historic appearance or significance of the building.

B. What is the relationship between such work and other structures on the landmark site or other property in the historic district?

**Response:** The proposed work will have no direct physical effect on any surrounding properties within the Old Lucerne Local Historic District.

C. To what extent will the historic, architectural, or archaeological significance, architectural style, design, arrangement, texture, materials and color of the landmark or the property be affected?

**Response:** The Applicant is not proposing to replace any historically significant materials on the building. It is the analysis of Staff that the proposed addition and exterior alterations are compatible with the architectural style of the single-family residence and will not adversely affect the historic integrity of the original structure.

D. Would denial of a certificate of appropriateness deprive the property owner of reasonable beneficial use of his property?

**Response:** No, the denial of this COA as submitted does not prevent the Applicant from potentially proposing other alterations to the home, nor would it make the building uninhabitable.

E. Are the applicant's plans technically feasible and capable of being carried out within a reasonable time?

**Response:** Yes.

F. Do the plans satisfy the applicable portions of the general criteria contained in the United States Secretary of the Interior's Standards for Rehabilitation then in effect or as they may be revised from time to time? The current version of the Secretary's Guidelines provides as follows:

(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.

**Response:** No change to the use of the property is proposed.

(2) This historic character of the property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.

**Response:** The Applicant is not removing any historic materials from the property. The proposed changes will only slightly alter the main street-facing elevation, and are compatible with the Regency inspired architectural style. The basic shape and form of the structure will not be affected by the addition.

(3) Each property shall be recognized as a physical record of its 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.

**Response:** It is the analysis of Staff that the addition will be compatible with the original structure, but will not add a false sense of historic development.

(4) Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved.

**Response:** The historically significant features of the building are being retained.

(5) Distinctive features, finishes and construction techniques or examples of craftsmanship that characterize a historic property shall be preserved.

**Response:** It is the opinion of Staff that no distinctive features, finishes, or examples of craftsmanship that characterize the property are being adversely affected by the scope of work proposed.

(6) Deteriorated architectural features shall be repaired rather than replaced, wherever possible. In the event replacement is necessary, the new material should match the material being replaced in composition, design, color, texture, and other visual qualities.

Repair or replacement of missing architectural features should be based on accurate duplications of features, substantiated by historical, physical, or pictorial evidence rather than on conjectural designs or because the different architectural elements from other buildings or structures happen to be available for relocation.

**Response:** Not applicable to this project.

(7) Chemical or physical treatments, such as sandblasting, that cause damage to historic materials, shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.

**Response:** Not applicable to this project.

(8) Significant archeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken.

**Response:** Not applicable to this project.

(9) New additions, exterior alterations or related new construction shall not destroy historic materials that characterize the property. The new construction 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.

**Response:** The proposed new addition meet this criterion. The addition is compatible in size, massing, and scale.

(10) New additions and adjacent or related new construction shall be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic building and its environment would be unimpaired.

**Response:** The proposed addition could be removed at a later date, with some changes to the main structure.

G. What are the effects of the requested change on those elements or features of the structure which served as the basis for its designation and will the requested changes cause the least possible adverse effect on those elements or features?

**Response:** It is the opinion of Staff that the character of the property would not be adversely affected by the proposed project as submitted by the Applicant, as outlined above. Staff has recommended Conditions of Approval to further increase the compatibility of the requested addition and exterior alterations.

Section 23.5-4k(2). *Additional guidelines for alterations.*

In approving or denying applications for certificates of appropriateness for alterations, the HRPB shall also consider the following additional guidelines:

**A.** Is every reasonable effort being made to provide a compatible use for a property that requires minimal alteration of the building, structure or site and its environment, or to use the property for its originally intended purpose?

**Response:** No change to the use of the property is proposed.

**B.** Are the distinguishing original qualities or character of a building, structure or site and its environment being destroyed? The removal or alteration of any historic material or distinctive architectural features shall be avoided whenever possible.

**Response:** No.

**C.** When a certificate of appropriateness is requested to replace windows or doors, the HRPB shall permit the property owner's original design when the HRPB's alternative design would result in an increase in cost of thirty (30) percent above the owner's original cost. The owner shall be required to demonstrate to the HRPB that:

**(1)** The work to be performed will conform to the original door and window openings of the structure; and

**Response:** Not applicable to this project.

**(2)** That the replacement windows or doors with less expensive materials will achieve a savings in excess of thirty (30) percent over historically compatible materials otherwise required by this code.

**Response:** Not applicable to this project.

**DOC-BOX**  
204 N. Lakeside DR.

LOT	JOB
PERMIT	BUILDING

**WARNING**  
DEDICATED  
CONSTRUCTION SITE.  
VIOLATIONS  
WILL BE PROSECUTED  
TO THE FULL  
EXTENT OF THE LAW.

204

 **NOTICE**  
This property is being considered for a

HRPB Projects 16-00100236  
COA - ADDITION AND ALTERATIONS

For information regarding this case call:

**City of Lake Worth  
Planning, Zoning & Historic  
Preservation Division  
561-586-1687**



**Existing front door west side**



**Proposed front door**



**New proposed front covered entry**



**New proposed front covered entry**



**New proposed front covered entry**

204

**Existing garage doors west side**



**Proposed new garage doors**

Model CGU/CG/CD11 with SQ24 Windows.  
Shown with Standard White Steel Base and  
Standard White Composite Overlays;  
Standard Spade Handles and Step Plates.

the look of WOOD  
the ease of STEEL®

## Colors

### STEEL BASE DOOR COLORS



Standard White    Almond    Desert Tan    Sandtone

### COMPOSITE OVERLAY COLORS



Standard White    Almond    Desert Tan    Sandtone

*Due to the printing process, colors may vary.*

- Composite overlays and steel base are available in Standard White, Almond, Desert Tan and Sandtone. Overlay and steel base colors can be mixed to achieve desired look.
- Coachman® Collection doors can be painted using a high-quality exterior latex paint.

**IMPORTANT:** When painting your door, we require use of either a pre-approved paint or paints having a Light Reflective Value (LRV) of 38 or higher. Use of other paints will void the door's warranty.

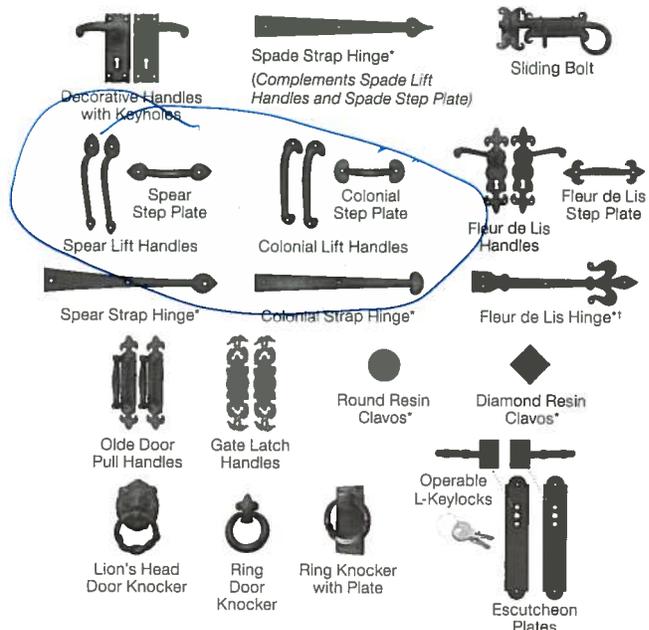
A list of pre-approved paints can be found at <http://info.garagedoors.com/lrv>

## Decorative Hardware

### STANDARD



### OPTIONAL



\*Door may not open properly if installed near the top depending on opening dimensions and lift type. See your Clopay Dealer for more details.  
\*\*Hardware may not fit on all door designs. See your Clopay Dealer for more details.



**Existing rear facing east**



**Proposed sliding glass door family room**



## Sliding Glass Door - EcoGuard 700 Series

### PRODUCT FEATURES

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Maximum panel size 4 x 9

---

Available in standard and custom sizes

---

Designed for installation in masonry and wood-frame openings

---

Tandem rollers with stainless steel high precision roller bearings with composite wheels for whisper quiet operation

---

Screens are Available

---

Intuition sliding door system: Dual point mortise locking mechanism for One-motion

---

Optional laminated insulating glass available

---

Standard and custom muntin available

---

Miami-Dade County NOA

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**Side north view**



**Kitchen window north side**



**Side north view**



**South side**



**Panoramic south side**



**Typical window**



## Single Hung - EcoGuard 100 Series

### PRODUCT FEATURES

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A classic style window that features a vertically sliding bottom sash

---

2 ¾" frame depth

---

Available in a wide range of styles and sizes

---

Bottom sash locks available for egress and/or handicap requirements

---

Superboost Class 5 hybrid balance for smooth and easy lifting

---

Optional laminated insulating glass available

---

Standard and custom muntin patterns available

---

Glass orientations: equal, pro-view

---

Miami-Dade County NOA

---



**Proposed 6 ft wood fence  
south side**



**Proposed 4 ft black aluminum fence rear east side**

# A New Residential Addition and Remodel For:

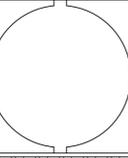
# 204 N LAKESIDE DR

## LAKE WORTH, FL



SANDRA PUERTA  
AR 95385

THE CONSTRUCTION AND  
ARCHITECTURE GROUP, INC.  
6476 Kirsten Way, Lake Worth, FL 33467  
Phone | 561.248.5498  
Facsimile | 561.712.8895  
FL LIC. #: AA2600780 • AR 95385



BLDG. DEPT.  
PLAN REVISIONS:



A New Residential Addition and Remodel For:  
**204 N LAKESIDE DR**  
LAKE WORTH, FL  
PNC: 38 - 43 - 44 - 21 - 15-036 - 0010

MANAGED BY: **SP**  
DRAWN BY: **FZ**  
REVIEWED BY:

Cover and  
Project  
Information

DATE:  
Nov. 2, 16

SHEET:  
**CVR**

OF

### TERMS OF USE & LICENSE AGREEMENT

**Building Codes And Zoning Requirements**  
At the time of creation, these plans were designed to meet the requirements of a nationally recognized model building code in effect where these plans were produced. Because of the great differences in geography and climate throughout the United States each state, county and municipality has its own building codes, zoning requirements, ordinances and building regulations. These plans may need to be modified and additional drawings and details may need to be added to comply with your local conditions, requirements, and a wide range of other matters. All of our plans can be adapted to the local building codes and requirements. It is the responsibility of the purchaser and/or builder of each plan to see that the structure is built in strict compliance with the governing municipal codes (city, county, state and federal). In addition to the building plans that you order, you will also need a site plan that shows where the house is going to be located on the lot. There are some areas of the country that have very strict engineering codes. If you are building in this type of area, it is possible that you will need to hire a local engineer to analyze the house and provide additional drawings and calculations that may be required by your building department.

**Notice Duty Of Cooperation**  
Our firm assumes no liability for any home constructed from these plans. Only qualified Designers, Architects, Contractors or Structural Engineers should attempt to modify any portion of these plans. It is the sole responsibility of the purchaser to obtain any and all structural analysis, engineering and specifications that are required where the structure is to be built. Written dimensions on these drawings should have precedence over scaled dimensions; the contractor shall verify and be responsible for all dimensions and conditions on the job.

**Architectural And Engineering Seals**  
Some cities and states are now requiring that a licensed architect or engineer review and "seal" these plans, or officially approve them prior to construction. In addition, you may need to obtain permits or inspections from your local governments before and in the course of construction. Prior to using these plans, we strongly advise that you consult a licensed architect or engineer, as well as consult with your local building official before applying for any permit or before starting any construction related to these plans. We authorize the use of these plans on the express condition that you strictly comply with all local building codes, zoning requirements and other applicable laws, regulations, ordinances and requirements.

**License Agreement**  
By the purchase of our plans, customers are granted a limited license to use the plans for the construction of only one home. It is strictly prohibited to reproduce, sell, modify, trace, redraw or reuse the plans or designs without the written permission from the copyright owner. This limited license also applies to all other reproducible media. All orders, once placed, are final. No refunds or exchanges will be granted.

**Terms And Conditions**  
It is not permitted to copy any part of our original designs or reproduce them in any way by any means, unless you have purchased reproducible plans, which clearly indicate your right to copy or duplicate these plans. We do not authorize them to be sold to another person or third party. We only authorize the use of your chosen design as an aid in the construction of one single-family home. You may not use this design or these plans to build a second or multiple dwellings without purchasing another set of plans or paying additional design fees.

**Terms And Conditions - Ownership and Use of Documents**  
The Architect shall have the right to include representations of the Design of Project, including, but not limited to, photographs, plans, drawings, artistic renderings, digital images, and/or video, and/or for such other similar demonstrative images of the exterior and interior of the subject project, among the Architect's promotional, marketing, advertising, and/or professional materials (collectively, "marketing materials"). The Architect's marketing materials shall not include any image and/or description of the Client's confidential or proprietary information and/or property. The Architect shall be permitted to post an appropriate job site sign, which sign may include the Architect's name, business address, business telephone number, and/or such other similar business related information, within the boundary of the subject property, beginning with the issuance of the permit through the commencement date of issuance of a certificate of occupancy.

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Our architects have taken substantial care and effort to create these plans. However, because the architects cannot provide on-site consultation, supervision and control over actual construction, and because of the great variances in local building requirements, building practices and soil, seismic, weather and other conditions, we cannot assume any responsibility or liability or make any warranty, express or implied, with respect to the content or use of these plans.

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**Applicable Law**  
This site is created and controlled by Sandra Puerta Architecture, P.A., in the State of Florida. As such, the laws of the State of Florida will govern these disclaimers, terms and conditions, without giving effect to any principles of conflicts of laws. Sandra Puerta Architecture, P.A., reserves the right to make changes to its site and these disclaimers, terms and conditions at any time. You hereby irrevocably and unconditionally consent to submit to the exclusive jurisdiction of the courts of the State of Florida, and of the United States of America located in Broward County, Florida for any disputes arising out of or relating to use of or purchase made through Sandra Puerta Architecture, P.A., and agree not to commence any litigation relating thereto except in such courts, waive any objection to the laying of venue of any such litigation in the in Broward County, Florida courts and agree not to plead or claim in any court that such litigation brought therein has been brought in an inconvenient forum.

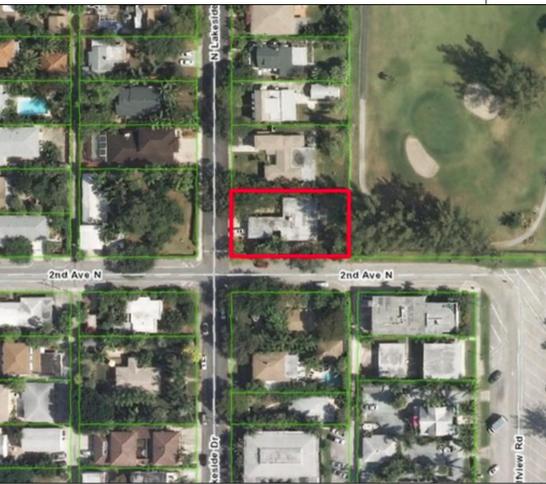
**Dispute Resolution**  
In the unlikely event that any controversy or claim arising out of or relating to this User Agreement or our services shall be settled by binding arbitration in accordance with the commercial arbitration rules of the American Arbitration Association. Any such controversy or claim shall be arbitrated on an individual basis and shall not be consolidated in any arbitration with any claim or controversy of any other party. The arbitration shall be conducted in Broward County, Florida, and judgment on the arbitration award may be entered into any court having jurisdiction thereof. Either you or we may seek any interim or preliminary relief from a court of competent jurisdiction in Broward County, Florida, necessary to protect the rights or property of you or us pending the completion of arbitration.

**Miscellaneous**  
In the event that any provision of the User Agreement conflicts with the law under which the User Agreement is to be construed or if any provision is held invalid by a court with jurisdiction over the parties to the User Agreement, such provision will be restated to reflect as nearly as possible the original intentions of the parties in accordance with applicable law, and the remainder of this User Agreement will remain in full force and effect. If either party fails to insist upon or enforce strict performance by the other party of any provision of the User Agreement, or to exercise any right under the User Agreement, such a failure will not be construed as a waiver or relinquishment to any extent of such party's right to assert or rely upon any such provision or right in that or any other instance. That is, all provisions and rights will remain in full force and effect.

### VICINITY MAP



### SATELLITE AERIAL



### EXISTING FRONTAGE



### SCOPE OF WORK

1. NEW INTERIOR RENOVATION AND ADDITIONAS PER PLANS.
2. ALL M.E.P. WORK AS PER PLANS.
3. SEE PLANS FOR MORE INFORMATION.

### (F.B.C. 2014 ASCE-7-10 EXP. 'C')

ENCLOSED	170 MPH (3 SEC. GUST)
HEIGHT	15 FEET
IMPORTANCE FACTOR	1.0
q = 36.3 PSF VELOCITY PRESSURE	
BUILDING CLASSIFICATION	IIIB
OCCUPANCY CLASSIFICATION	R-3   RESIDENTIAL
BUILDING CODES	2014 F.B.C.

### DESIGN WIND PRESSURES

WINDOWS & DOORS	POS +42.9 P.S.F. NEG -57.3 P.S.F. WORST CASE ALL OPENINGS
ROOF	FIELD ZONE ① -42.8 PSF 3' EDGE ZONE ② -71.9 PSF 3' x 3' CORNERS ③ -108.2 PSF

### AREA CALCULATIONS

EXISTING SQUARE FOOTAGE	2,614 S.F.
EXISTING UNDER AIR	1,787 S.F.
EXISTING NOT UNDER AIR	827 S.F.
<i>(TO BE TRANSFORMED INTO UNDER AIR)</i>	
PROPOSED SQUARE FOOTAGE HOME ADDITION (under air)	137 S.F.
TOTAL ADDITION UNDER AIR	137 S.F.
TOTAL ADDITION NOT UNDER AIR	0 S.F.
NEW TOTAL UNDER AIR	1,924 S.F.
NEW TOTAL NOT UNDER AIR	827S.F.
<b>TOTAL SQUARE FOOTAGE</b>	<b>2,751 S.F.</b>

### PROPERTY INFORMATION

ALL WORK TO BE PERFORMED IN ACCORDANCE WITH THE F.B.C. 2014 EDITION WITH ALL AMENDMENTS, THE N.E.C., THE ZONING ORDINANCES IN THE CITY OF JURISDICTION AND ALL APPLICABLE CODES AND STANDARDS.

**LEGAL DESCRIPTION**  
TOWN OF LAKE WORTH LT 1 & S 1/2 OF LT 2 BLK 36

**MUNICIPALITY**  
LAKE WORTH

**PARCEL CONTROL NUMBER**  
38 - 43 - 44 - 21-15 - 036 - 0010

**SUBDIVISION**  
-----

**LAND USE CODE**  
0100 - SINGLE FAMILY

**ZONING CODE**  
SFR - Single Family Residential ( 38-LAKE WORTH )

**LOCATION ADDRESS**  
204 N LAKESIDE DR

**CLASSIFICATION OF WORK**  
REMODELING

### PROJECT TEAM

#### OWNER

**GILBERT A RODRIGUEZ**  
204 NORTH LAKESIDE DR.  
LAKE WORTH FL 33460

#### ARCHITECT

**SANDRA PUERTA, AR 95385**  
6476 Kirsten Way  
Lake Worth, FL 33467  
Voice | 561.712.8898  
Fax | 561.828.2645  
Email | sandra@thearchitectgroup.com

#### BUILDING DEPARTMENT

**CITY OF LAKE WORTH**  
1900 2ND AVE N  
Lake Worth, FL 33461  
Voice | 561.586.1652

#### ZONING DEPARTMENT

**CITY OF LAKE WORTH**  
1900 2ND AVE N  
Lake Worth, FL 33461  
Voice | 561.586.1652

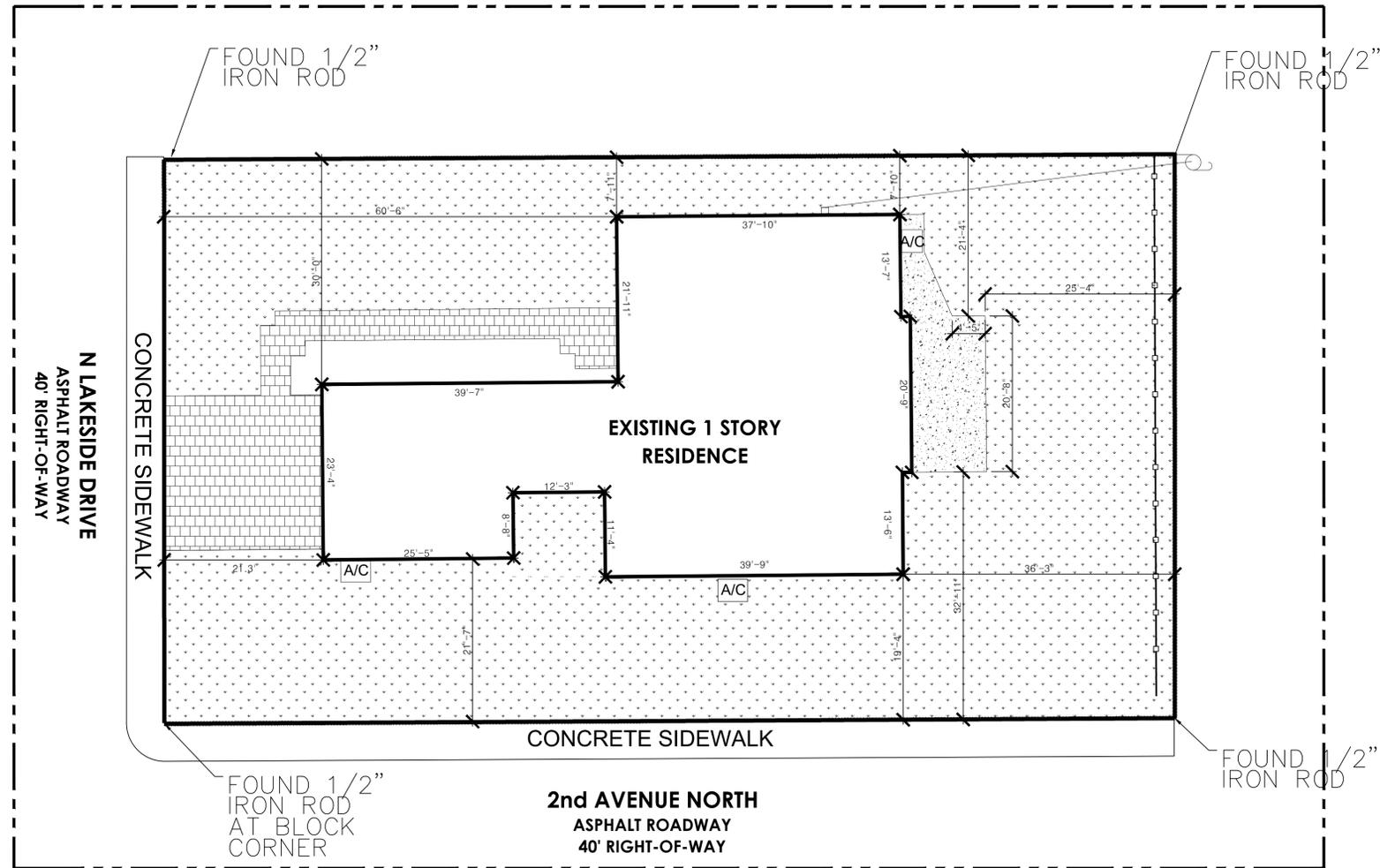
### SHEET INDEX

CVR	COVER SHEET
A-0	GENERAL NOTES + SPECIFICATIONS
SP-1	SITE PLAN
SP-2	PROPOSED SITE PLAN
A-1	PROPOSED FLOOR PLAN
A-2.1	EXISTING ELEVATIONS
A-2.2	PROPOSED ELEVATIONS

CONTRACTOR TO VERIFY ANY CONDITION AND NOTIFY ALL RESPONSIBLE PARTIES IF THERE ARE ANY DISCREPANCIES. THE ARCHITECT ASSUMES NO RESPONSIBILITY.

ALL WORK TO BE PERFORMED IN ACCORDANCE WITH THE F.B.C. 2014 EDITION WITH ALL AMENDMENTS, THE N.E.C., THE ZONING ORDINANCES IN THE CITY OF JURISDICTION AND ALL APPLICABLE CODES AND STANDARDS.



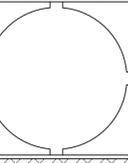


AREA CALCULATIONS	
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AR 95385

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FL Lic. #: AA20002780 - AR 95385



BLDG. DEPT.  
PLAN REVISIONS:



A New Residential Addition and Remodel For:  
**204 N LAKESIDE DR**

LAKE WORTH, FL  
PNC: 38 - 43 - 44 - 21 - 15-036 - 0010

MANAGED BY: **SP**  
DRAWN BY: **FZ**  
REVIEWED BY: **SP**

Site Plans and Notes

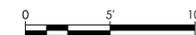
DATE:  
Nov. 2, 16

SHEET:  
**SP-1**

OF

**EXISTING SITE PLAN**

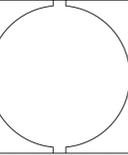
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MANAGED BY: SP  
DRAWN BY: FZ  
REVIEWED BY: SP

Site Plans  
and Notes

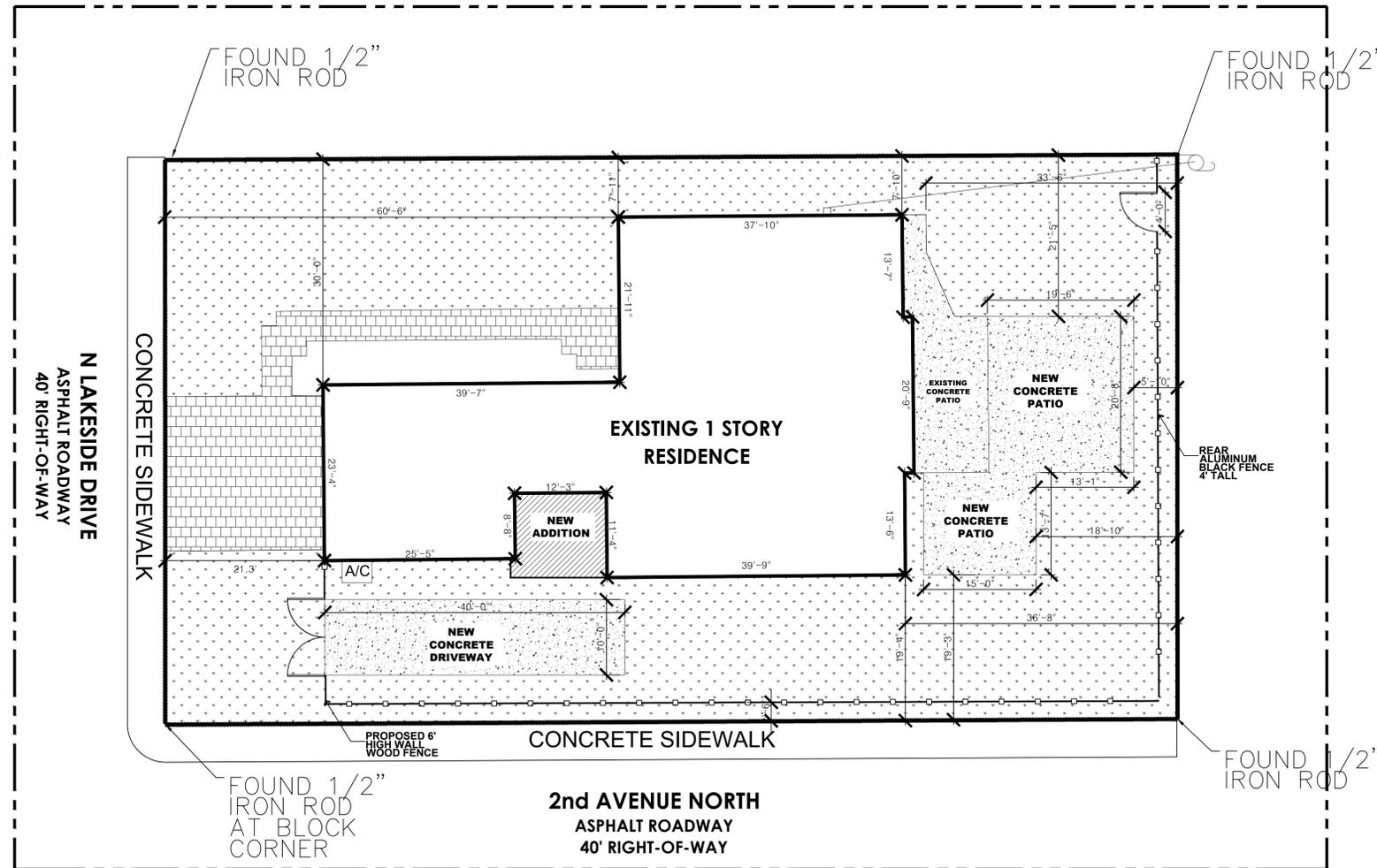
DATE:  
Nov. 2, 16

SHEET:  
SP-2

OF

LOT COVERAGE INFORMATION	
LOT SQUARE FOOTAGE	10,125
EXISTING IMPERVIOUS (Structure, Asphalt/Concrete Surface)	
HOUSE SQFT :	2,614 SF.
DRIVEWAY SQFT:	483 SF.
PATIOS SQFT:	225 SF.
A/C PADS:	16 SF.
WALKWAYS:	120 SF.
PROPOSED IMPERVIOUS (Structure, Asphalt/Concrete Surface)	
POOL & DECK SQFT :	582 SF.
EQUIPMENT PAD/S:	400 SF.
OTHER:	137 SF.
TOTAL IMPERVIOUS:	4,577 SF.
<b>PERCENT OF IMPERVIOUS:</b>	<b>45%</b>

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**PROPOSED SITE PLAN**

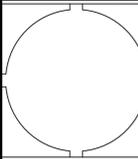
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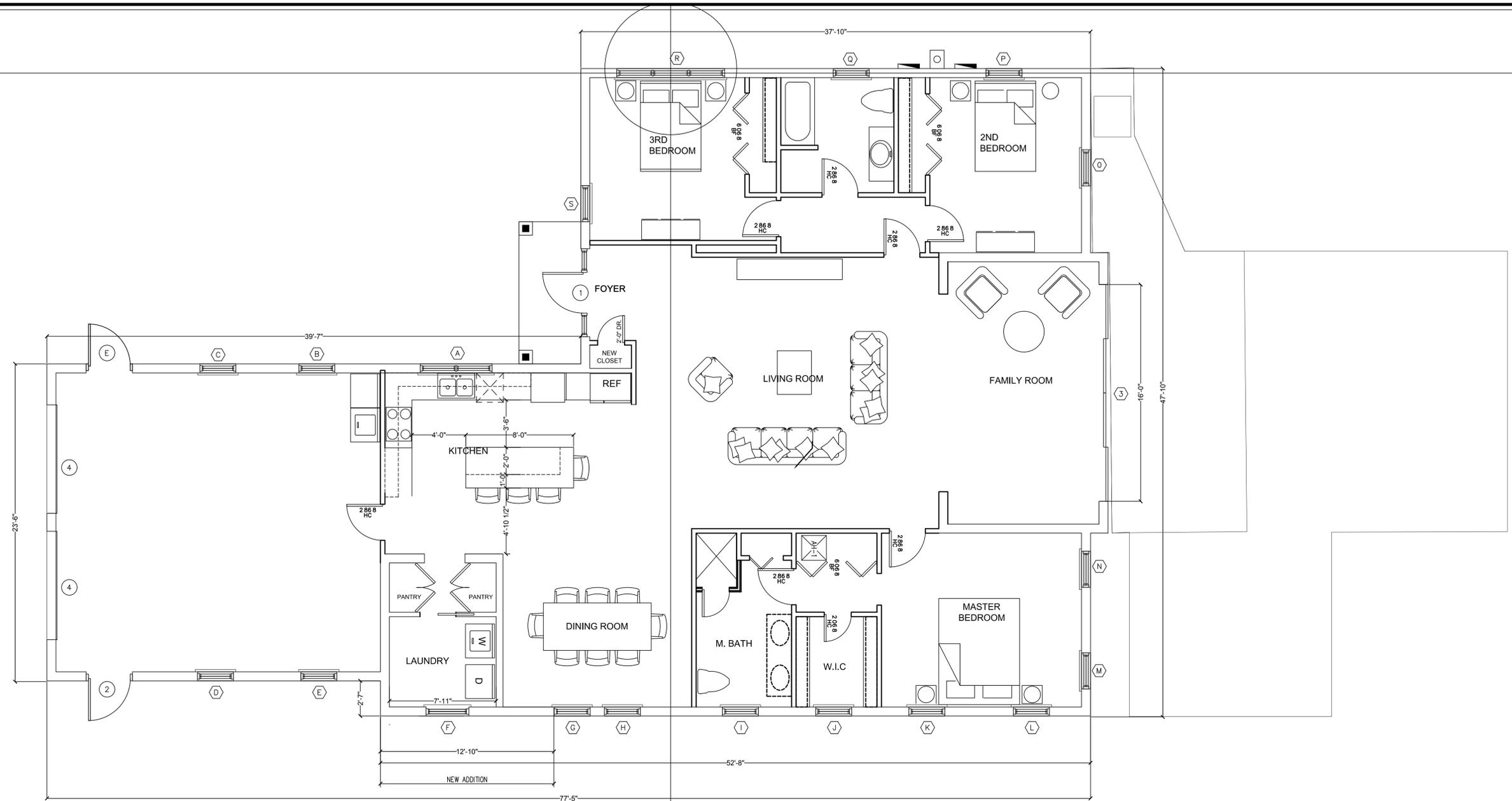
MANAGED BY: SP  
DRAWN BY: FZ  
REVIEWED BY: SP

Proposed Floor  
Plan and Unit  
Areas

DATE:  
Nov. 2, 16

SHEET:  
**A-1**

OF



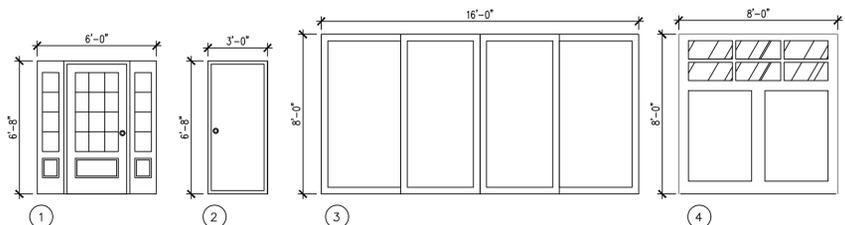
**GENERAL CONSTRUCTION NOTES**

1. ALL WORK BY ALL TRADES TO BE COMPLETED IN ACCORDANCE WITH ALL APPLICABLE, LOCAL, & GOVERNMENTAL CODES, ORDINANCES, STANDARDS AND RESTRICTIONS.
2. ALL TRADES TO COORDINATE THEIR WORK WITH ALL OTHER TRADES TO AVOID INTERFERENCE WITH THE PROGRESS OF CONSTRUCTION.
3. CONTRACTOR TO VERIFY ALL DIMENSIONS ON THE JOB PRIOR TO COMMENCING CONSTRUCTION AND NOTIFY ARCHITECT OF ALL DISCREPANCIES. DIMENSIONS ALWAYS TAKE PRECEDENCE OVER SCALED DRAWINGS.
4. ALL DIMENSIONS ARE NOMINAL TO THE FACE OF STUDS, CONC. BLK. OR EDGE OF MONOLITHIC SLAB FOOTING UNLESS NOTED OTHERWISE. DOOR AND WINDOW SIZE OPENINGS TO BE VERIFIED WITH THE MANUFACTURER.
5. IT IS NOT THE INTENT OF THESE PLANS TO SHOW EVERY MINOR DETAIL OF CONSTRUCTION. THE CONTRACTOR IS EXPECTED TO FURNISH & INSTALL ALL ITEMS FOR COMPLETE FULLY OPERATIVE SYSTEMS IN FIRST CLASS WORKMANLIKE MANNER.
6. INSULATE EXTERIOR MASONRY WALL WITH MIN. R-4.1 INSUL., EXTERIOR WD. FRAMED WALLS WITH R-19 INSUL. AND ATTIC SPACES WITH MIN. R-30 INSUL.
7. COMPACT ALL FILL TO A MIN. OF 95% DENSITY AND POISON SOIL FOR TERMITES; MIN. SOIL BRG.: 2500 P.S.F.
8. MIN. CONC. STRENGTH: 3000 P.S.I. @ 28 DAYS. MIN. CONCRETE COVERAGE FOR REINF. BARS, SLAB: 3/4"; BEAMS & COLS: 1 1/2"; TIE COLS: 3/4"; FORMED CONC. BELOW GRADE: 2" & UNFORMED CONC.: 3".
9. REINFORCING STEEL TO BE GRADE 60.
10. DETAILS OF CONCRETE REINF. SHALL BE IN ACCORDANCE WITH "THE MANUAL OF STD. PRACTICE FOR REINFORCED CONCRETE CONSTRUCTION", TRAP.
11. TIE COLUMNS TO HAVE DOWELS INTO CONCRETE FIG. WITH THE SAME SIZE AND NUMBER OF DOWELS AS VERTICAL REINF. BARS.; REINF. STL. TO BE LAPPED 30 BAR DIAM. MIN. @ SPLICES.
12. PROVIDE CLEANOUT OPENINGS AT THE BOTTOM OF GROUTED CELLS OF CONCRETE BLK. TIE COLUMNS.
13. ALL WOOD IN CONTACT WITH CONC., MASONRY OR STL. SHALL BE PRESS. TRID. WD. STRUCTURAL LUMBER TO BE A STRESS GRADE OF MIN. F = 1200 PSI (BENDING).
14. MIN. ELECTRICAL WIRE SIZE SHALL BE #14 A.W.G. (EXCLUDING THE CONTROL WIRING). ALL CONDUCTORS SHALL BE "COPPER" WITH "THIN" INSULATION.
15. ALL RACEWAYS UNDERGROUND OR LARGER THAN 2" IN DIAM. SHALL BE GALVANIZED RIGID STL. CONDUIT OR SCHED. 40 PVC.; OTHER RACEWAYS AS PER CODE REQRMS.
16. PROVIDE "GFI" RECEPTACLES IN BATHROOMS, AT KITCHEN COUNTERS, IN GARAGE AND OUTSIDE LOCATIONS.
17. SANITARY PLBG. PIPING TO HAVE MIN. 1/8" PER FT. PITCH AT ALL HORIZ. RUNS. PROVIDE CLEANOUTS AT THE BASE OF WASTE STACKS.
18. ALL UNDERGRD. WATER PIPING SHALL BE COPPER TYPE "K" ALL OTHER WATER PIPING SHALL BE COPPER TYPE "L".
19. PROVIDE AIR CHAMBERS AND SHUT OFF VALVES FOR ALL WATER SUPPLY PIPING AT FIXTURES; PROVIDE VACUUM BREAKER AND SHUTOFF VALVE ON ALL HOSE BIBBS.
20. A/C AIR HANDLING UNITS TO HAVE CONDENSATE SAFE WASTE WITH TRAP.

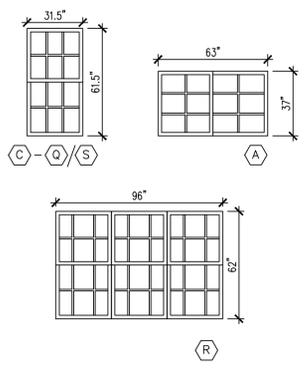
**PROPOSED FLOOR PLAN**

SCALE: 1/4" = 1'-0"

MARK	SIZE			MATERIAL			QTY	OPERATION	FRAME			THRESHOLD	HW SET	NOTES			
	(R.O.)			WOOD	WD/GLASS	METAL			FER/GLASS	WOOD	METAL				ALUMINUM	EXTG	IRON
	W	H	TH														
1	72"	80"	1 3/4"											IMPACT GLASS DOOR- W/ SIDELITES			
2	36"	80"	1 3/8"											IMPACT			
3	192"	80"	1 3/8"											IMPACT			
4	96"	96"	1 3/8"											IMPACT GARAGE DOOR			



MARK	SIZE (R.O.)		TYPE	MATERIAL			OPERATION			NOTES	REMARKS
	W	H		WOOD	ALUM.	WD/CLAD	VENTED				
							CUSTOM	H. ROLL	S. HUNG		
A	63"	37"									IMPACT
B	31.5"	61.5"									IMPACT
C	31.5"	61.5"									IMPACT
D	31.5"	61.5"									IMPACT
F	31.5"	61.5"									IMPACT
G	31.5"	61.5"									IMPACT
H	31.5"	61.5"									IMPACT
I	31.5"	61.5"									IMPACT
J	31.5"	61.5"									IMPACT
K	31.5"	61.5"									IMPACT
L	31.5"	61.5"									IMPACT
M	31.5"	61.5"									IMPACT
N	31.5"	61.5"									IMPACT
O	31.5"	61.5"									IMPACT
P	31.5"	61.5"									IMPACT
Q	31.5"	61.5"									IMPACT
R	96"	62"									IMPACT
S	31.5"	61.5"									IMPACT



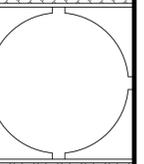
**WALL PLAN LEGEND**

WALL TYPE	WALL DESCRIPTION
(Symbol)	EXISTING EXTERIOR WALL
(Symbol)	EXISTING - NO CHANGE
(Symbol)	EXISTING INTERIOR WALL
(Symbol)	EXISTING - NO CHANGE
(Symbol)	IN FILL EXTERIOR WALL
(Symbol)	IN FILL OPENING
(Symbol)	NEW INTERIOR WALL
(Symbol)	NEW WALLS AS PER DETAIL
(Symbol)	NEW EXTERIOR CBS WALLS
(Symbol)	NEW WALLS AS PER DETAIL
(Symbol)	NEW EXTERIOR FRAME WALLS
(Symbol)	NEW WOOD FRAMED WALLS AS PER DETAIL



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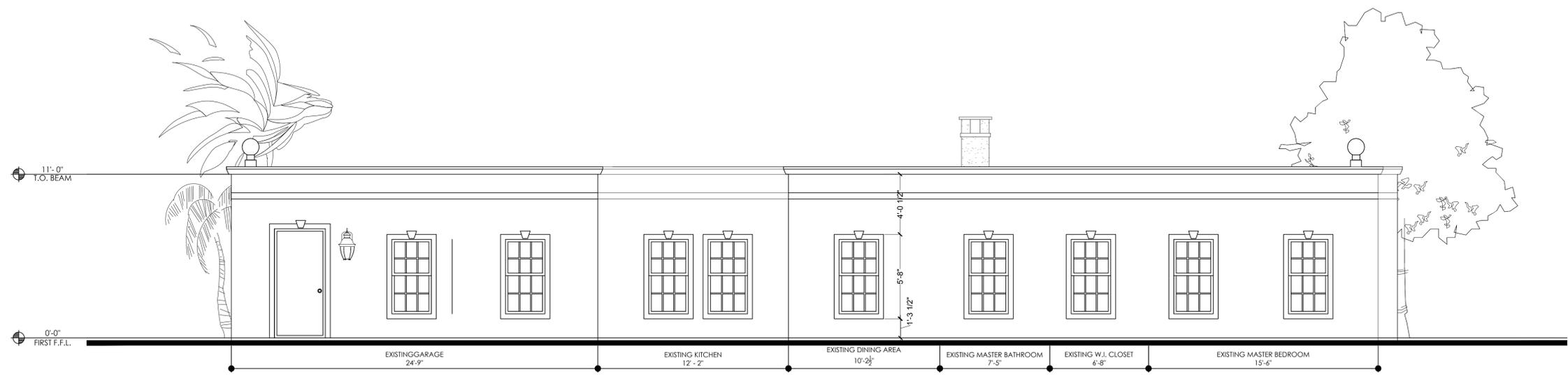
MANAGED BY: SP  
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REVIEWED BY: SP

Proposed  
Elevations

DATE:  
Nov. 2, 16

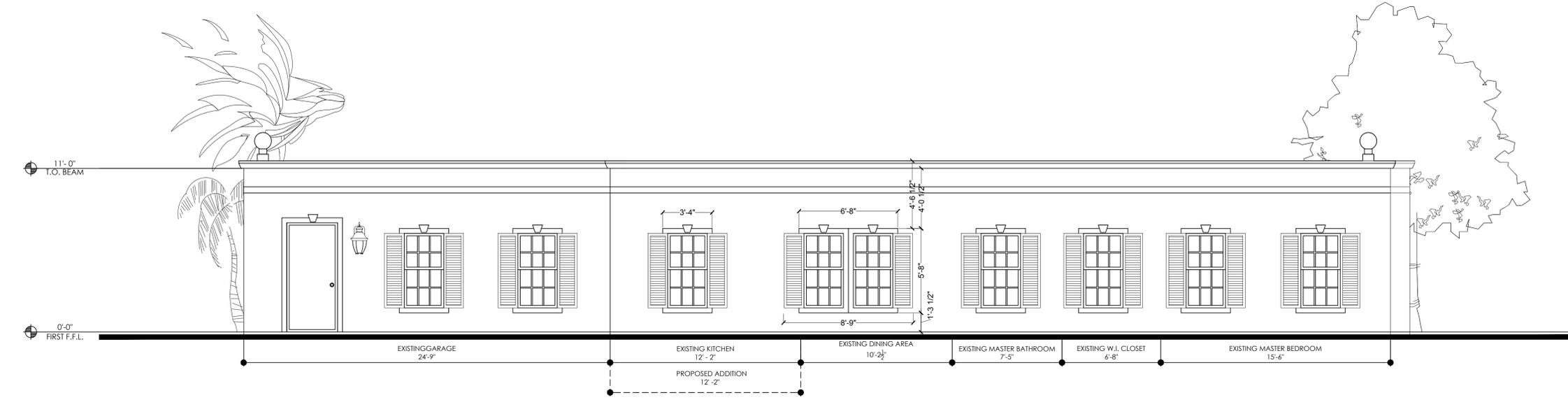
SHEET:  
**A-2**

OF



**EXISTING ELEVATION (SOUTH)**

SCALE: 1/4" = 1'-0"



**PROPOSED ELEVATION (SOUTH)**

SCALE: 1/4" = 1'-0"

DESIGN WIND PRESSURES	
WINDOWS & DOORS	POS +42.9 P.S.F. NEG -57.3 P.S.F. WORST CASE ALL OPENINGS



SANDRA PUERTA  
AR 95385

THE CONSTRUCTION AND  
ARCHITECTURE GROUP, INC.  
6476 Kirsten Way, Lake Worth, FL 33467  
Phone | 561.248.5488  
Facsimile | 561.712.8895  
FL Lic. #: AA26002780 - AR 95385

BLDG. DEPT.  
PLAN REVISIONS:



A New Residential Addition and Remodel For:  
**204 N LAKESIDE DR**  
LAKE WORTH, FL  
PNC: 38 - 43 - 44 - 21 - 15-036 - 0010

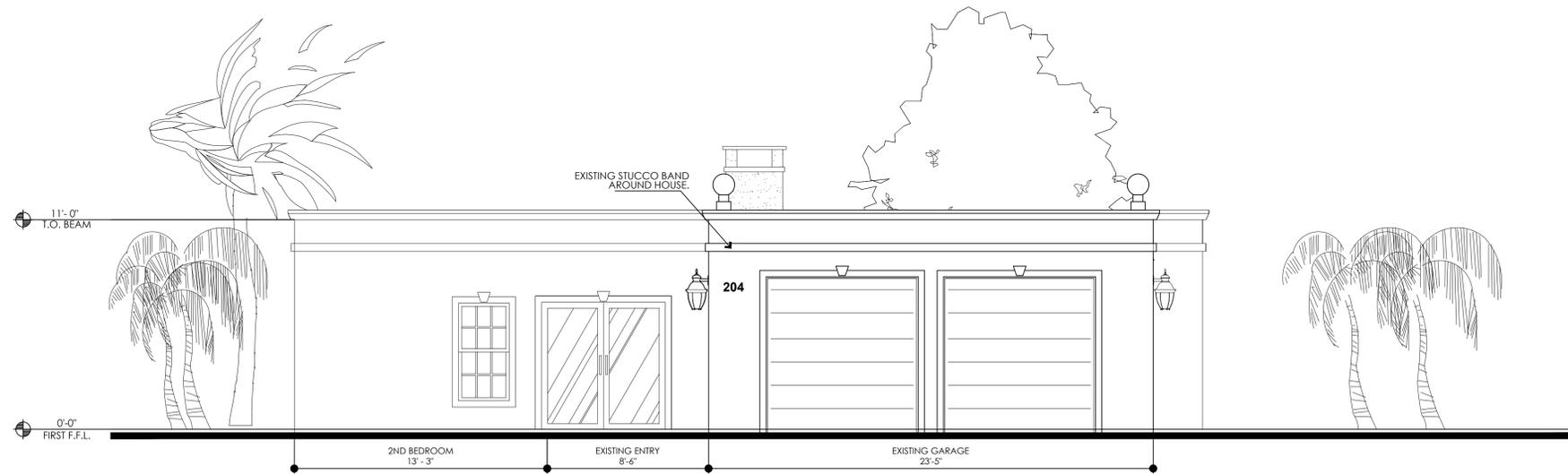
MANAGED BY: SP  
DRAWN BY: FZ  
REVIEWED BY: SP

Existing  
Elevations

DATE:  
Nov. 2, 16

SHEET:  
**A-2.2**

OF



### EXISTING FRONT ELEVATION (WEST)

SCALE: 1/4" = 1'-0"



### PROPOSED FRONT ELEVATION (WEST)

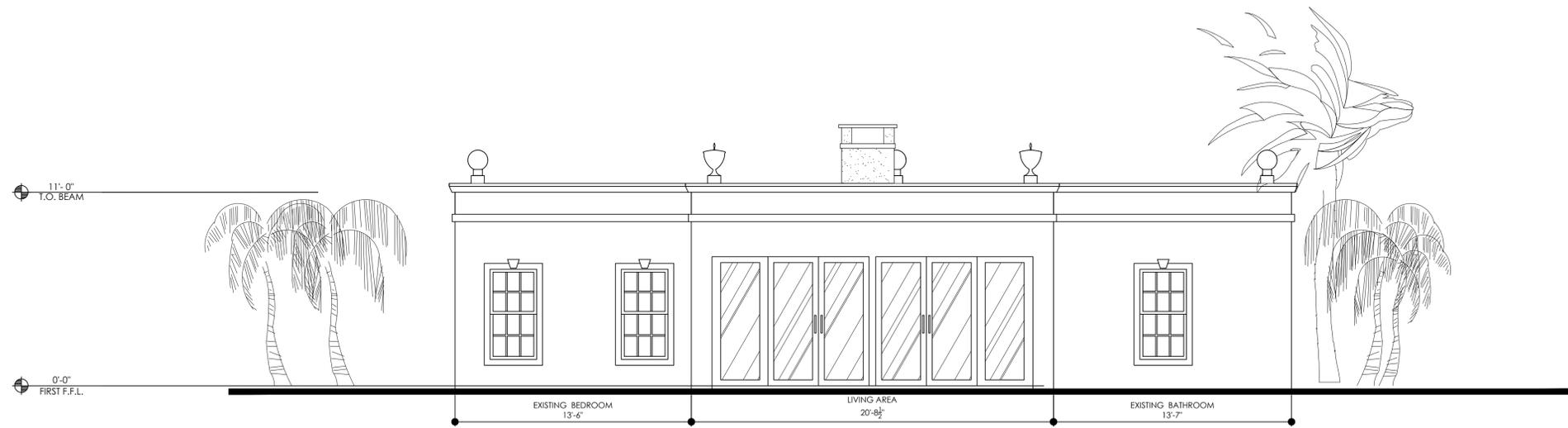
SCALE: 1/4" = 1'-0"

#### DESIGN WIND PRESSURES

WINDOWS &  
DOORS

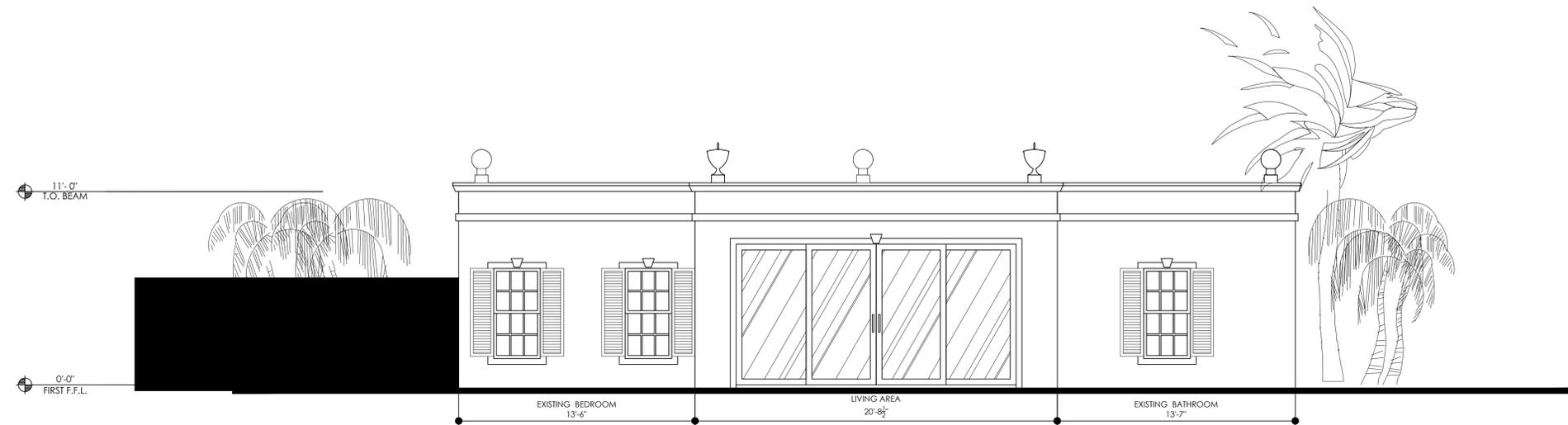
POS +42.9 P.S.F.  
NEG -57.3 P.S.F.  
WORST CASE ALL OPENINGS





**EXISTING ELEVATION (EAST)**

SCALE: 1/4" = 1'-0"



**PROPOSED ELEVATION (EAST)**

SCALE: 1/4" = 1'-0"

**DESIGN WIND PRESSURES**

WINDOWS &  
DOORS

POS +42.9 P.S.F.  
NEG -57.3 P.S.F.  
WORST CASE ALL OPENINGS



**SANDRA PUERTA**  
AR 95385

**THE CONSTRUCTION AND  
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Phone | 561.248.5498  
Focimille | 561.712.8895  
FL Lic. # AA26002780 - AR 95385

**BLDG. DEPT.  
PLAN REVISIONS:**



A New Residential Addition and Remodel For:

**204 N LAKESIDE DR**

LAKE WORTH, FL  
PNC: 38 - 43 - 44 - 21 - 15-036 - 0010

MANAGED BY:	SP
DRAWN BY:	FZ
REVIEWED BY:	SP

Proposed  
Elevations

DATE:  
Nov. 2, 16

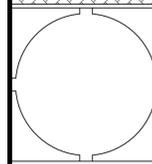
SHEET:  
**A-2.3**

OF



SANDRA PUERTA  
AR 95385

THE CONSTRUCTION AND  
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BLDG. DEPT.  
PLAN REVISIONS:



A New Residential Addition and Remodel For:  
**204 N LAKESIDE DR**  
LAKE WORTH, FL  
PNC: 38 - 43 - 44 - 21 - 15-036 - 0010

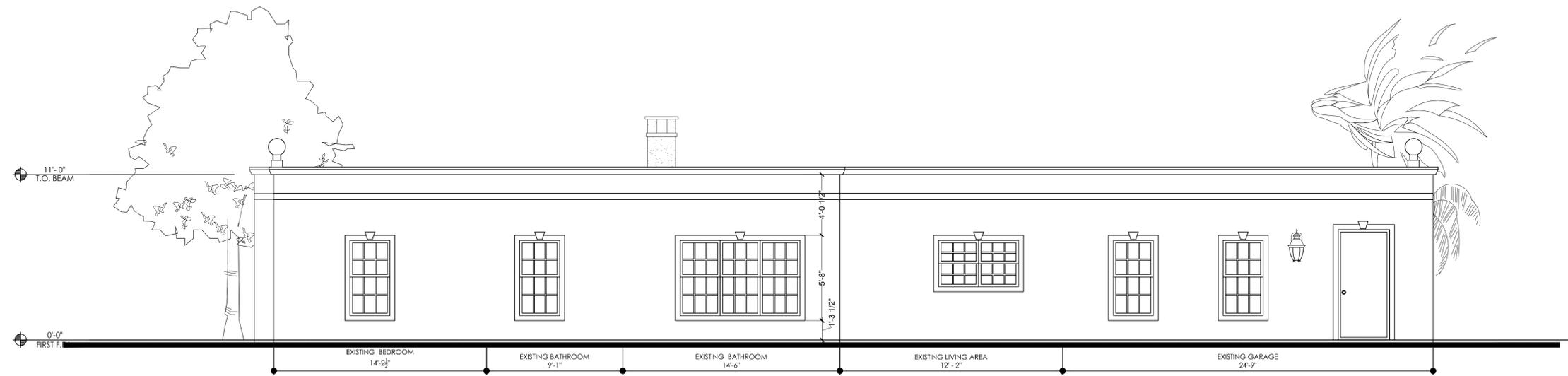
MANAGED BY: SP  
DRAWN BY: FZ  
REVIEWED BY: SP

Existing  
Elevations

DATE:  
Nov. 2, 16

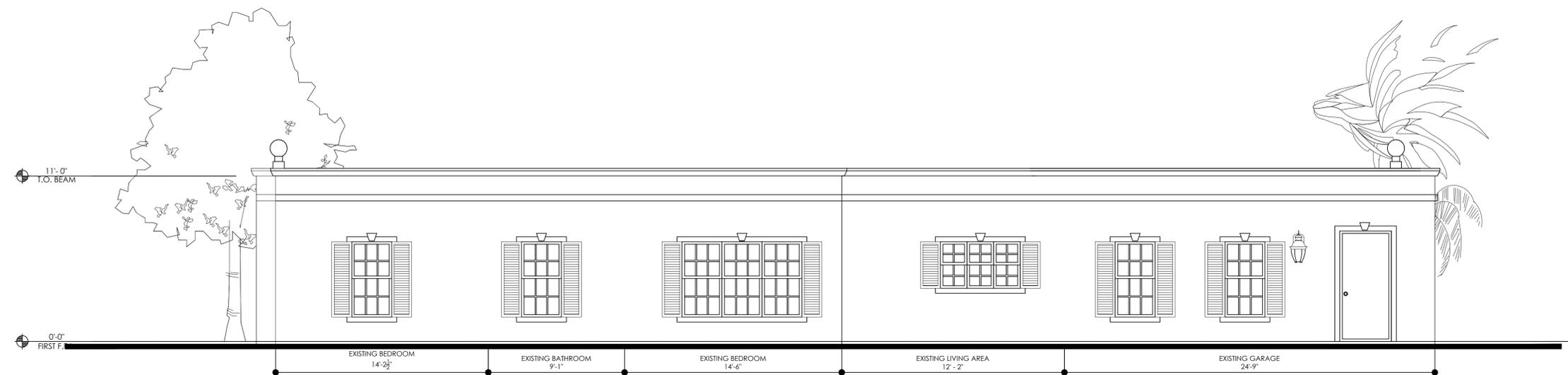
SHEET:  
**A-2.4**

OF



**EXISTING ELEVATION (NORTH)**

SCALE: 1/4" = 1'-0"



**PROPOSED ELEVATION (NORTH)**

SCALE: 1/4" = 1'-0"

DESIGN WIND PRESSURES	
WINDOWS & DOORS	POS +42.9 P.S.F. NEG -57.3 P.S.F. WORST CASE ALL OPENINGS



**MEMORANDUM DATE:** December 7, 2016

**AGENDA DATE:** December 14, 2016

**TO:** Chair and Members of the Historic Resources Preservation Board

**RE:** **1122 North O Street**

**FROM:** Aimee N. Sunny, Senior Preservation Coordinator  
Department for Community Sustainability

**TITLE:** **HRPB Project Number 16-00100241:** Consideration of a Certificate of Appropriateness (COA) for roof replacement to the subject property located at **1122 North O St**, PCN# 38-43-44-21-15-356-0060. The subject building was constructed in 1947 and the property is a contributing resource within the Northeast Lucerne Local Historic District.

**OWNER:** Kevin Brennan  
1122 North O Street  
Lake Worth, FL 33460

**BACKGROUND:**

The property at 1122 North O Street has a one-story single-family structure built in 1947 in a Mid-Century Masonry Vernacular style. The property has public frontage on North O Street to the west. The original architectural plans for the main house are available in the City's property files. Based on the title block on the drawings, this house appears to have been part of the G.I. Home Planning Service, and is listed as "B 107 Sarasota." Based on the original plans, the building has undergone several changes over time, including roof replacement from asbestos shingle to asphalt shingle, window replacement, and shutter installation. Overall, the building retains a moderate degree of historic integrity of location, setting, materials, and design.

**REQUEST:**

The Applicant is proposing to replace the existing dimensional asphalt shingle roof with a new 26 gauge steel 5v-crimp roof in White.

**COMPREHENSIVE PLAN CONSISTENCY:**

It is the analysis of Staff that the project, as proposed, is not consistent with the Comprehensive Plan goals and objectives concerning historic preservation and housing due to the fact that the Applicant is proposing a change that will have an adverse effect on the historic integrity of the property.

**Goal 1.4** Encourage preservation and rehabilitation of historic and natural resources and where appropriate restrict development that would damage or destroy these resources. (Objective 1.4.2)

**Objective 3.2.5:** To encourage the identification of historically significant housing, and to promote its preservation and rehabilitation as referenced by the Surveys of Historic Properties conducted for the City of Lake Worth.

**Policy 3.2.5.1:** Properties of special value for historic, architectural, cultural or aesthetic reasons will be restored and preserved through the enforcement of the City’s Historic Preservation Ordinance to the extent feasible.

**CONSEQUENT ACTION:**

Approve the application; approve the application with conditions; continue the hearing to a date certain to request additional information; or deny the application.

**ANALYSIS:**

Staff has reviewed the documentation and materials provided in this application and outlined the applicable guidelines and standards found in the City’s Historic Preservation Ordinance, detailed in Attachment 1 – Decision Criteria.

The National Park Service and Secretary of the Interior’s Standards have very specific criteria regarding replacement of historic materials. Specifically Standards 2, 3, 5 and 6 apply in this situation:

**Standard 2** - The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.

**Standard 3** - Each property shall be recognized as a physical record of its 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.

**Standard 5** - Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.

**Standard 6** - Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture, and, where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.

According to the Secretary of the Interior’s Standards, distinctive materials that characterize a property shall be preserved. If a distinctive feature must be replaced, the new feature should match the old in design, color, texture, and where possible materials. The roof material is an important character defining feature of a historic property. According to the City’s property file, the original roof in 1947 was asbestos shingle. In 2005, this material was removed, and the current dimensional asphalt shingle roof was installed. Asbestos shingle is no longer manufactured, however asphalt shingle is similar in composition, material, and design, and is therefore the appropriate replacement material.

It is the analysis of Staff that the proposed change to an aluminum 5v-crimp roof is not appropriate for the structure, and negatively effects a character defining feature of the property. The Mid-Century Masonry Vernacular style of architecture primarily used flat white concrete tile as a roofing material, and occasionally used an asbestos shingle or rolled roofing. In this case, there is substantial documentation that asbestos shingles were the original roofing material. Additionally, the Mid-Century Masonry Vernacular architectural style did not use

metal roofing, and adding a 5-v crimp roof will create a false sense of historical development by adding an architectural feature that was not used in this type of residential design in Lake Worth. Therefore, the proposed metal roof installation does not comply with the Secretary of the Interior's Standards for Rehabilitation or the City's Land Development Regulations, Historic Preservation Ordinance, §23.5-4(k).

The National Park Service Preservation Brief #4 "Roofing for Historic Buildings" has been included as Attachment #5. This Brief discusses the issues and options for the repair and replacement of historic roofs. Under the "Alternative Materials" section of the Brief, Staff would like to draw special attention to this paragraph:

"In a rehabilitation project, there may be valid reasons for replacing the roof with a material other than the original. The historic roofing may no longer be available, or the cost of obtaining specially fabricated materials may be prohibitive. But the decision to use an alternative material should be weighed carefully against the primary concern to keep the historic character of the building. If the roof is flat and is not visible from any elevation of the building, and if there are advantages to substituting a modern built-up composition roof for what might have been a flat metal roof, then it may make better economic and construction sense to use a modern roofing method. But if the roof is readily visible, the alternative material should match as closely as possible the scale, texture, and coloration of the historic roofing material."

Staff recommended that the Applicant utilize an asphalt shingle roof, as this roof type most closely replicates the original asbestos shingle. If the Board wishes to consider an alternate material, flat white concrete tile is compatible with the architectural style of the structure, however the Applicant would need to verify if the roof structure is capable of supporting the additional weight of the tile.

**RECOMMENDATION:**

Staff recommends that the Board deny the application as submitted, given that the metal roof installation as proposed by the Applicant does not meet the Secretary of the Interior's Standards for Rehabilitation, does not meet the criteria set forth in the City of Lake Worth Land Development Regulations §23.5-4(k), and will have an adverse effect on the integrity and character of the property.

**POTENTIAL MOTION:**

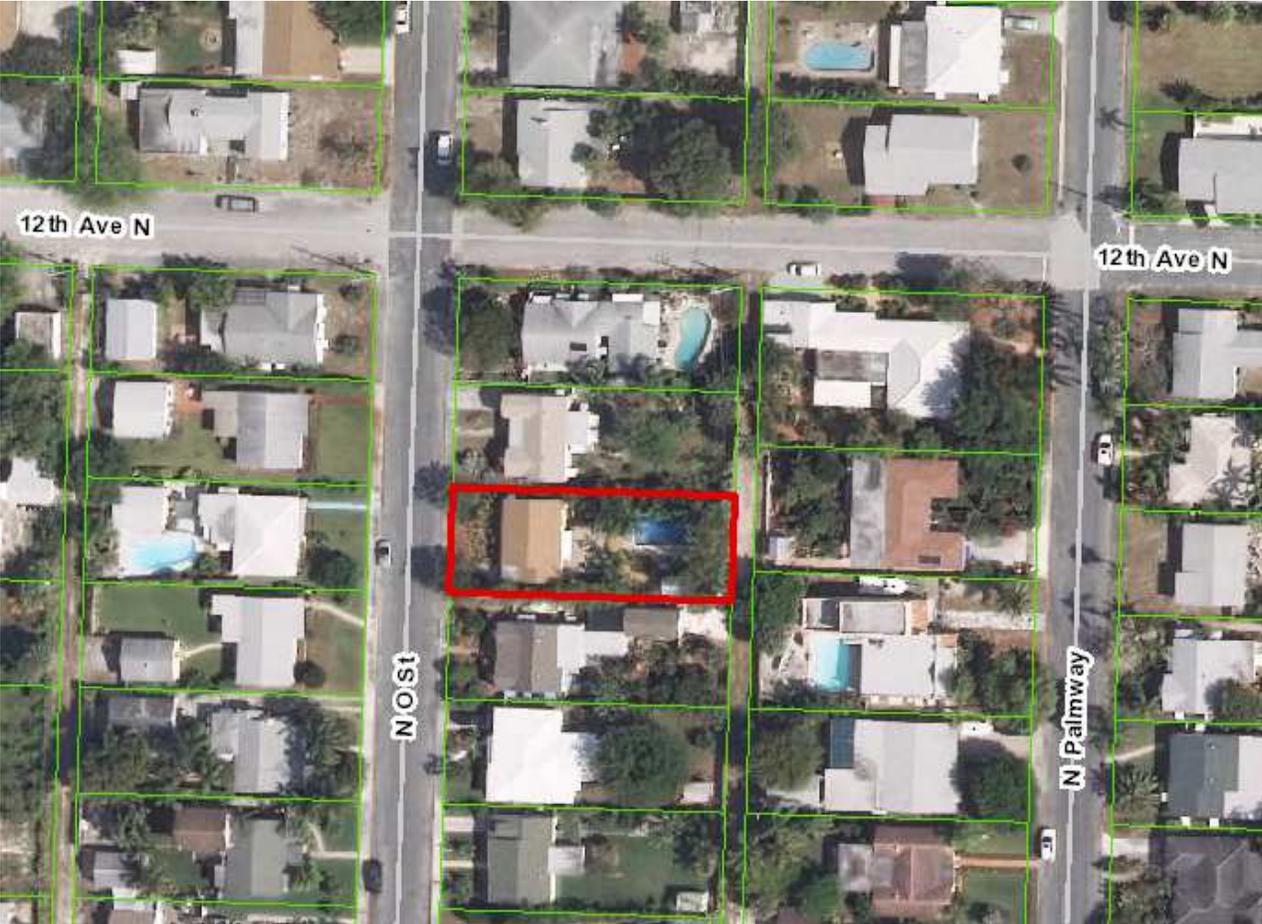
I MOVE TO **DENY** HRPB 16-00100241: Consideration of a Certificate of Appropriateness (COA) for roof replacement with an alternate material for the subject building located at **1122 North O Street** because the Applicant has not established by a preponderance of the competent substantial evidence that the application is in compliance with the City of Lake Worth Land Development Regulations Section 23.5-4, the Secretary of the interiors Standards for the Rehabilitation of Historic Properties, and the City's Comprehensive Plan.

I MOVE TO **APPROVE** HRPB 16-00100241: Consideration of a Certificate of Appropriateness (COA) for roof replacement with an alternate material for the subject building located at **1122 North O Street**, based upon the preponderance of competent substantial evidence, and pursuant to the City of Lake Worth Land Development Regulations Section 23.5-4.

**ATTACHMENTS:**

1. Administrative Decision Criteria
2. Application Photographs
3. Roof Brochure
4. Original Architectural Drawings
5. NPS Preservation Brief #4 "Roofing for Historic Buildings"

LOCATION MAP



## MEMORANDUM

**DATE:** December 7, 2016

**TO:** Chair and Members of the Historic Resources Preservation Board

**FROM:** Aimee N. Sunny, Senior Preservation Coordinator  
Department of Community Sustainability

**SUBJECT:** **HRPB Project Number 16-00100241:** Consideration of a Certificate of Appropriateness (COA) for roof replacement to the subject property located at **1122 North O St**, PCN# 38-43-44-21-15-356-0060. The subject building was constructed in 1947 and the property is a contributing resource within the Northeast Lucerne Local Historic District.

**HRPB Meeting Date:** December 14, 2016

---

Per Section 23.5-4k(1) of the historic preservation ordinance, the Board shall use the following criteria in making a determination:

A. What is the effect of the proposed work on the landmark or the property upon which such work is to be done?

**Response:** It is the analysis of Staff that the proposed work on the property located at 1122 North O Street will have an adverse visual effect on the building.

B. What is the relationship between such work and other structures on the landmark site or other property in the historic district?

**Response:** The proposed work will have no direct physical effect on any surrounding properties within the surrounding Northeast Lucerne Local Historic District. However, the project would have an adverse visual effect on the building itself and an indirect adverse effect on the district.

C. To what extent will the historic, architectural, or archaeological significance, architectural style, design, arrangement, texture, materials and color of the landmark or the property be affected?

**Response:** The project as proposed would have an adverse effect on the integrity of material and design of the building. The proposed roof replacement is not compatible with the architectural style and design of the structure.

D. Would denial of a certificate of appropriateness deprive the property owner of reasonable beneficial use of his property?

**Response:** The denial of this COA as submitted does not prevent the Applicant from proposing other alterations to the home, or re-roofing with an alternate recommended material.

E. Are the applicant's plans technically feasible and capable of being carried out within a reasonable time?

**Response:** Yes.

F. Do the plans satisfy the applicable portions of the general criteria contained in the United States Secretary of the Interior's Standards for Rehabilitation then in effect or as they may be revised from time to time? The current version of the Secretary's Guidelines provides as follows:

(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.

**Response:** No change to the use of the property is proposed.

(2) This historic character of the property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.

**Response:** It is the analysis of Staff that the proposed metal roof material would alter the Masonry Vernacular character of the structure.

(3) Each property shall be recognized as a physical record of its 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.

**Response:** The installation of a 5v-crimp metal roof on this Mid-Century Masonry Vernacular structure will create a false sense of historical development. Metal roofing was not used in this architectural style in Lake Worth, and is not compatible or appropriate.

(4) Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved.

**Response:** Not applicable to this project.

(5) Distinctive features, finishes and construction techniques or examples of craftsmanship that characterize a historic property shall be preserved.

**Response:** The roof is a distinctive feature of the structure, and the type of roof material used on the structure should be retained. Although the original materials have been removed, the proposed metal roof represents a further departure from the original roof material and the Masonry Vernacular style.

(6) Deteriorated architectural features shall be repaired rather than replaced, wherever possible. In the event replacement is necessary, the new material should match the material being replaced in composition, design, color, texture, and other visual qualities.

Repair or replacement of missing architectural features should be based on accurate duplications of features, substantiated by historical, physical, or pictorial evidence rather than on conjectural designs or because the different architectural elements from other buildings or structures happen to be available for relocation.

**Response:** Not applicable to this project.

(7) Chemical or physical treatments, such as sandblasting, that cause damage to historic materials, shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.

**Response:** Not applicable to this project.

(8) Significant archeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken.

**Response:** Not applicable to this project.

(9) New additions, exterior alterations or related new construction shall not destroy historic materials that characterize the property. The new construction 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.

**Response:** The application is not proposing a new addition or new construction.

(10) New additions and adjacent or related new construction shall be undertaken in such manner that, if removed in the future, the essential form and integrity of the historic building and its environment would be unimpaired.

**Response:** Not applicable to this project.

G. What are the effects of the requested change on those elements or features of the structure which served as the basis for its designation and will the requested changes cause the least possible adverse effect on those elements or features?

**Response:** It is the analysis of Staff that the historic character of the property would be adversely affected by the proposed project as submitted by the Applicant, as outlined above. The proposal does not represent the least possible adverse effect.

Section 23.5-4k(2). *Additional guidelines for alterations.*

In approving or denying applications for certificates of appropriateness for alterations, the HRPB shall also consider the following additional guidelines:

**A.** Is every reasonable effort being made to provide a compatible use for a property that requires minimal alteration of the building, structure or site and its environment, or to use the property for its originally intended purpose?

**Response:** No change to the use of the property is proposed.

**B.** Are the distinguishing original qualities or character of a building, structure or site and its environment being destroyed? The removal or alteration of any historic material or distinctive architectural features shall be avoided whenever possible.

**Response:** It is the analysis of Staff that the historic character of the property would be adversely affected by the proposed project as submitted by the Applicant, as the original architectural style of the building would be negatively affected by the alterations proposed.

**C.** When a certificate of appropriateness is requested to replace windows or doors, the HRPB shall permit the property owner's original design when the HRPB's alternative design would result in an increase in cost of thirty (30) percent above the owner's original cost. The owner shall be required to demonstrate to the HRPB that:

**(1)** The work to be performed will conform to the original door and window openings of the structure; and

**Response:** Not applicable to this project.

**(2)** That the replacement windows or doors with less expensive materials will achieve a savings in excess of thirty (30) percent over historically compatible materials otherwise required by this code.

**Response:** Not applicable to this project.

1122



## NOTICE

This property is being considered for a

HRPB Project 16-0000241  
COA - REBUIL. of META. by COME

For information regarding this case call

City of Lake Worth  
Planning, Zoning & Historic  
Preservation Division  
561-586-1687



**WEST**

[https://photos.google.com/photo/AF1QipNf9tpo2\\_XA49YwIw68A3FmEd\\_bCuyJ\\_5yhCE0c](https://photos.google.com/photo/AF1QipNf9tpo2_XA49YwIw68A3FmEd_bCuyJ_5yhCE0c)



**EAST**

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**EAST**

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# NORTH

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# SOUTH

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# EXISTING SHINGLES

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**CAP SHEET OVER  
ENTRANCE  
WEST**



**EXISTING CAP SHEET  
MATERIAL**



# Metal Roofing

Trusted Quality  
Tested Strength



A GIBRALTAR INDUSTRIES COMPANY



# Trusted Quality. Tested Strength.

## Agricultural • Industrial



SEM-LOK

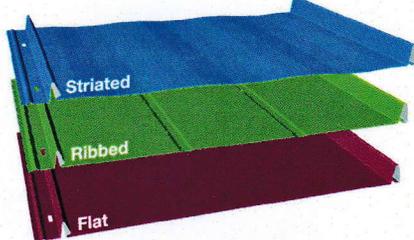
### Design Features

- Architectural concealed fastener standing seam panel
- 16" width coverage
- 1" seam height
- Minimum roof slope 2/12 pitch
- Hemmed snap lock design
- Low gloss paint finish
- 26 and 24 gauge
- Anti-siphon channel side lap design
- Available in Ribbed, Flat or Striated
- Nail fin design with slotted holes for attachment
- Architectural Applications  
Applied over decking

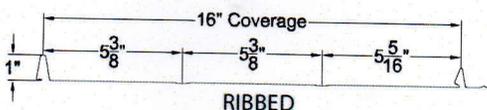
### Material

- Galvalume
- SemCoat Plus

Approvals: MIAMI-DADE • UL • FL CODE



SEM-LOK



2-1/2" & 1-1/4"  
CORRUGATED

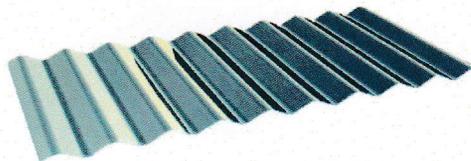
### Design Features

- Architectural exposed fastener panel
- 24" width coverage (siding) and 21-1/2" width coverage (roof)
- 1-1/4" and 2-1/2" corrugations on center spacing availability
- 1/4" or 1/2" corrugation height
- Minimum roof slope 3/12 pitch
- Utility, 29, 26 and 24 gauge
- Architectural Applications  
Applied over decking

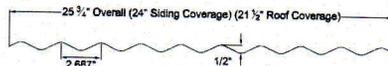
### Material

- Galvanized Steel or Galvalume
- SemCoat SP or SemCoat Plus

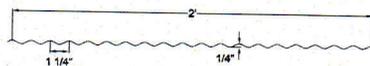
Approvals: UL • FL CODE



2-1/2" CORRUGATED



1-1/4" CORRUGATED



5-V CRIMP



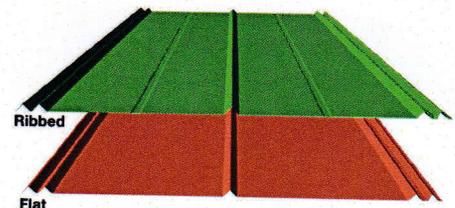
### Design Features

- Architectural exposed fastener panel
- 24" width coverage
- 7/16" height inverted V(s)
- Minimum roof slope 3/12 pitch
- Utility, 29, 26 and 24 gauge
- Anti-siphon channel side lap design
- Architectural Applications  
Applied over decking

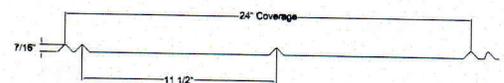
### Material

- Galvanized Steel or Galvalume
- SemCoat SP or SemCoat Plus

Approvals: TDI • MIAMI-DADE • UL • FL CODE



5-V CRIMP



[www.semetals.com](http://www.semetals.com)

Technical Support 800.SE Specs 800.737.7327



DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)  
BOARD AND CODE ADMINISTRATION DIVISION

MIAMI-DADE COUNTY  
PRODUCT CONTROL SECTION  
11805 SW 26 Street, Room 208  
Miami, Florida 33175-2474  
T (786) 315-2590 F (786) 315-2599  
[www.miamidade.gov/economy](http://www.miamidade.gov/economy)

## NOTICE OF ACCEPTANCE (NOA)

Southeastern Metals Manufacturing Co., Inc.  
11801 Industry Drive  
Jacksonville, FL 32218

### SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER - Product Control Section to be used in Miami-Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (in Miami-Dade County) and/or the AHJ (in areas other than Miami-Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code including the High Velocity Hurricane Zone of the Florida Building Code.

### DESCRIPTION: 5-V Crimp Metal Roofing Panel System

**LABELING:** Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

**RENEWAL** of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

**TERMINATION** of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

**ADVERTISEMENT:** The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

**INSPECTION:** A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA renews NOA No.11-0714.08 and consists of pages 1 through 5.  
The submitted documentation was reviewed by Gaspar J Rodriguez.



NOA No.: 16-0510.23  
Expiration Date: 11/08/21  
Approval Date: 06/30/16  
Page 1 of 5

## ROOFING SYSTEM APPROVAL

**Category:** Roofing  
**Sub-Category:** Non-Structural Metal Roofing  
**Material:** Steel  
**Maximum Design Pressure:** -180 PSF

### TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

<u>Product</u>	<u>Dimensions</u>	<u>Test Specifications</u>	<u>Product Description</u>
5V Crimp Metal Roof Panels	Length : various Height : 7/16" Width: 25 1/2" (Coverage width: 24") Thickness : 0.0217 Yield Strength: Min.53ksi	TAS 125	Corrosion resistant, galvalume or galvanized performed, Kynar or SuperL II coated, pre-finished, metal panels.

### MANUFACTURING LOCATION:

1. Jacksonville, FL

### EVIDENCE SUBMITTED:

<u>Test Agency</u>	<u>Test Identifier</u>	<u>Test Name/Report</u>	<u>Date</u>
PRI Construction Materials Technologies	SEM-011-02-05	TAS-125	11/23/10
PRI Construction Materials Technologies	SEM-011-02-07	ASTM E 8	05/07/12
Farabaugh Engineering and Testing, Inc.	T270-07	TAS-100	08/24/07
Farabaugh Engineering and Testing, Inc.	T166-07	TAS-100	04/15/07
Force Engineering & Testing, Inc.	188-0331T-06A-C	TAS-125	02/26/07
Hurricane Test Laboratory, LLC.	0041-0906-07	TAS-125	09/12/07
BASF	Accelerated Weathering	ASTM G 154	07/12/07
BASF	Salt Spray	ASTM B 117	07/12/07



NOA No.: 16-0510.23  
Expiration Date: 11/08/21  
Approval Date: 06/30/16  
Page 2 of 5

**APPROVED ASSEMBLIES:**

**System:** "5V-Crimp" Metal Panels  
**Deck Type:** Wood, Non-insulated  
**Deck Description:** 19/32" or greater plywood or wood plank.  
**Slope Range:** 2":12" or greater  
**Maximum Uplift Pressure:** See Table A Below

**Deck Attachment:** In accordance with applicable building code, but in no case it shall be less than 8d annular ring shank nails spaced at 6" o.c. In re-roofing, where deck is less than 19/32" thick (minimum 15/32") the above attachment method must be in addition to existing attachment.

**Underlayment:** Minimum underlayment shall be an ASTM D 226 Type II installed with a minimum 4" side-lap and 6" end-laps. Underlayment shall be fastened with corrosion resistant tin-caps and 12 gauge 1-1/4" annular ring-shank nails, spaced 6" o.c. at all laps and two staggered rows 12" o.c. in the field of the roll. Or, any approved underlayment having a current NOA.

**Valleys:** Valley construction shall be in compliance with Roofing Application Standard RAS 133 and with current published installation instructions and details in Southeastern Metal Manufacturing Metal Roofing Installation Manual.

**Fire Barrier Board:** Any approved fire barrier having a current NOA. Refer to a current fire directory listing for fire ratings of this roofing system assembly as well as the location of the fire barrier within the assembly. See Limitation # 1.

**Metal Panels and Accessories:** Install the "5V-Crimp Panels" and accessories in compliance with the current published installation instructions and details in Southeastern Metals Manufacturing Company's Installation Manual. Flashings, penetrations, valley construction and other details shall be constructed in compliance with Roofing Application Standard RAS133.

1. At the eave, rake, and ridge, fasteners shall be located not more than 3" away from the panel end.
2. The leading side edge of the panel should be the side with the anti-siphon groove; each panel side will overlap this channel to provide a capillary brake.
3. The panels shall be fastened with metal roofing sealing washer screws with dimensions as listed below in **Table A**, in the crown of the inverted V ribs as shown in the details herein.
4. The panel's width fasteners shall be spaced at 11 1/2" to the center rib, Then 12 1/2" to the next, perpendicular to the slope, through the overlapping panel. The flat area of the panel as shown in the details herein.
5. The panels fastening pattern at the interior of the panel, shall be in rows spaced as listed in **Table A** below, running parallel to the slope of the roof.

<b>Table A</b>			
<b>Maximum Design Pressure</b>			
	<b>Field</b>	<b>Perimeter and Corner<sup>1</sup></b>	<b>Perimeter and Corner<sup>1</sup></b>
<b>Maximum Design Pressure</b>	-67.25 PSF	-154.75 PSF	-180 PSF
<b>Fastener Type</b>	#9 x 2"	#9 x 2"	#10-14 x 2-1/2"
<b>Maximum Fastener Spacing</b>	16" OC	8" OC	8" OC
1. Extrapolation shall not be allowed			



## LIMITATIONS

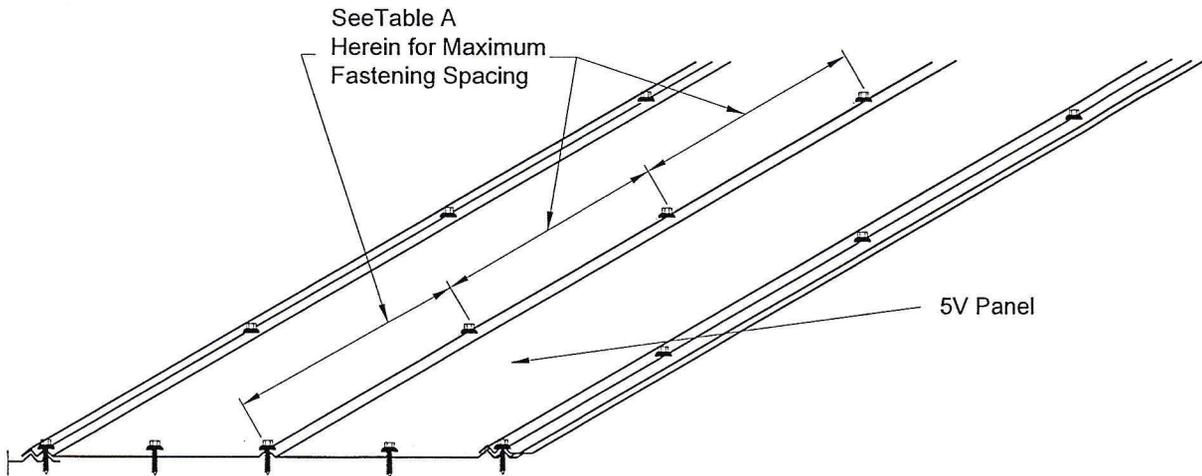
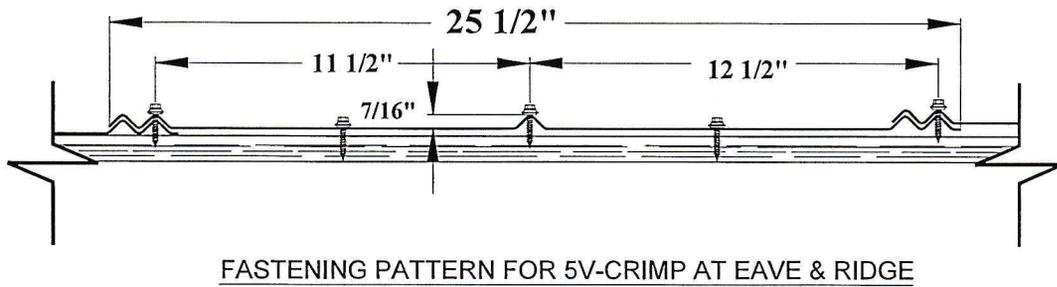
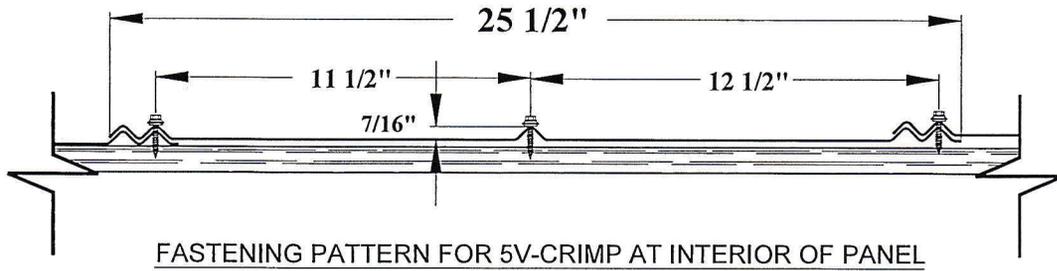
1. Fire classification is not part of this acceptance; refer to a current Approved Roofing Materials Directory for fire ratings of this product.
2. The maximum designed pressure listed herein shall be applicable to all roof pressure zones (i.e. field, perimeters, and corners). Neither rational analysis, nor extrapolation shall be permitted for enhanced fastening at enhanced pressure zones (i.e. perimeters, extended corners and corners).
3. Panels may be rolls formed in continuous lengths from eave to ridge. Maximum lengths shall be as described in Roofing Application Standard RAS 133
4. All panels shall be permanently labeled with the manufacturer's name and/or logo, and the following statement: "Miami-Dade County Product Control Approved" or with the Miami-Dade County Product Control Seal as seen below. All clips shall be permanently labeled with the manufacturer's name and/or logo, and/or model.



5. All products listed herein shall have a quality assurance audit in accordance with the Florida Building Code and Rule 61G20-3 of the Florida Administrative Code.



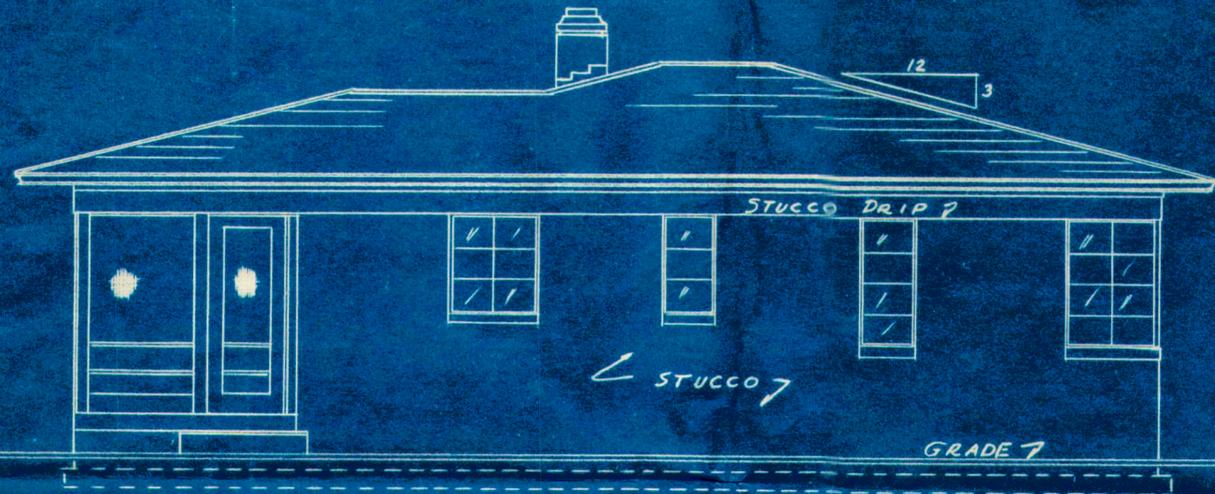
# "5-V CRIMP" METAL ROOF PANELS



END OF THIS ACCEPTANCE

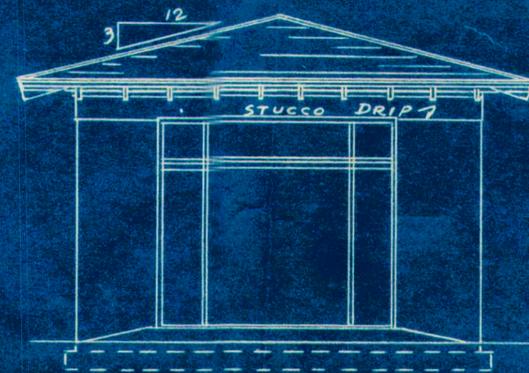


NOA No.: 16-0510.23  
Expiration Date: 11/08/21  
Approval Date: 06/30/16  
Page 5 of 5



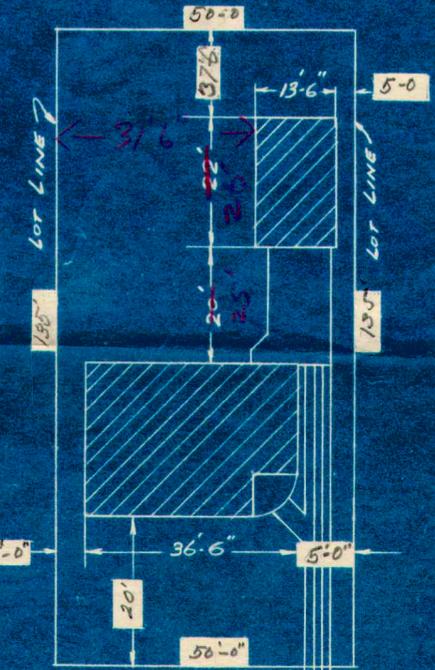
REAR ELEVATION

SCALE:  $\frac{3}{4}$ " = 1 FT.

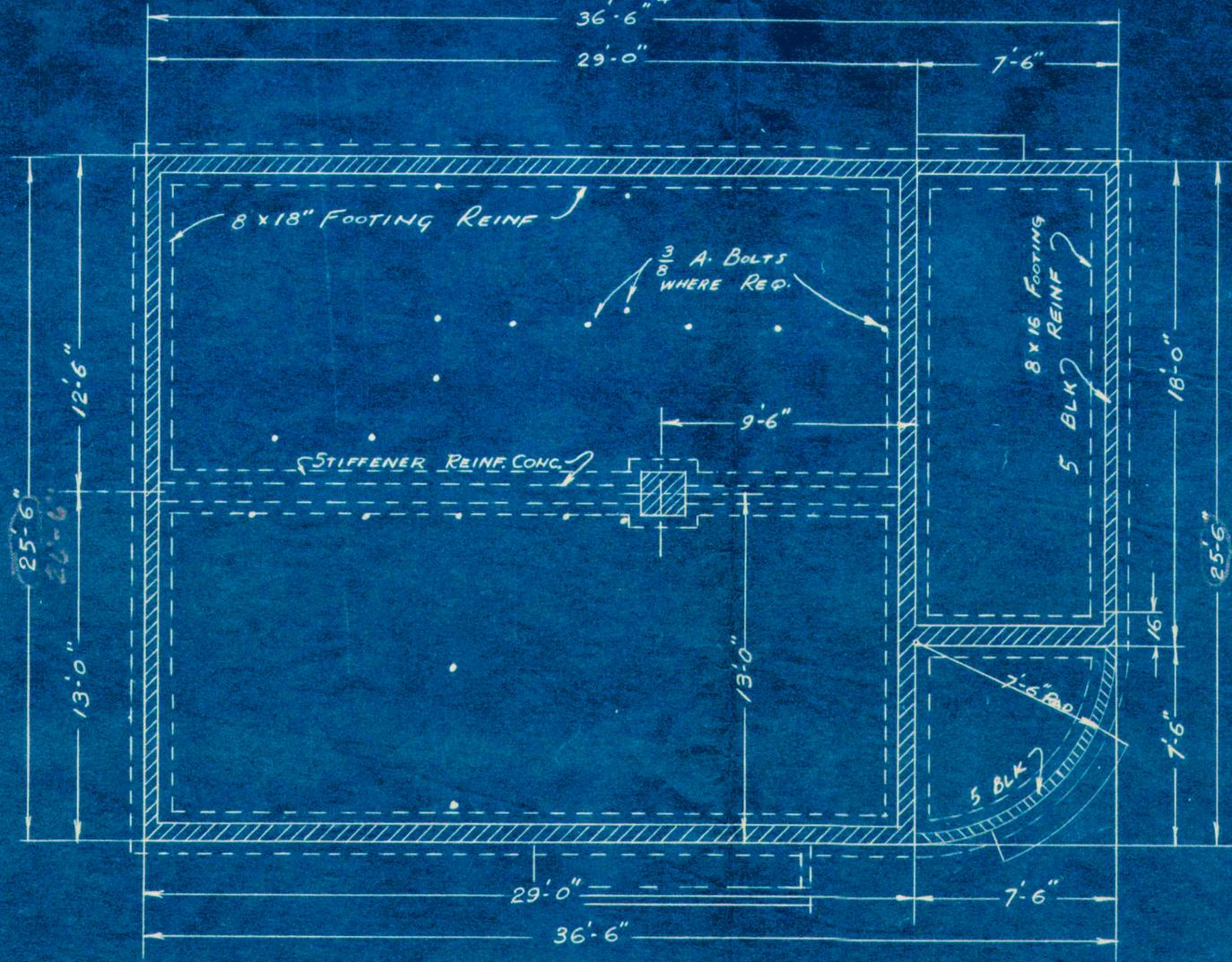


FRONT ELEVATION

SCALE:  $\frac{1}{4}$ " = 1 FT.

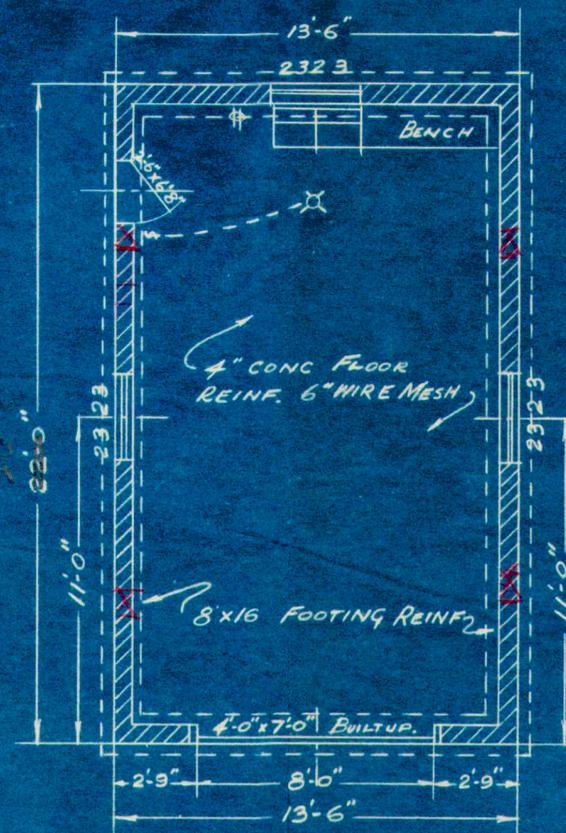


PLOT PLAN  
SCALE: 1" = 20'

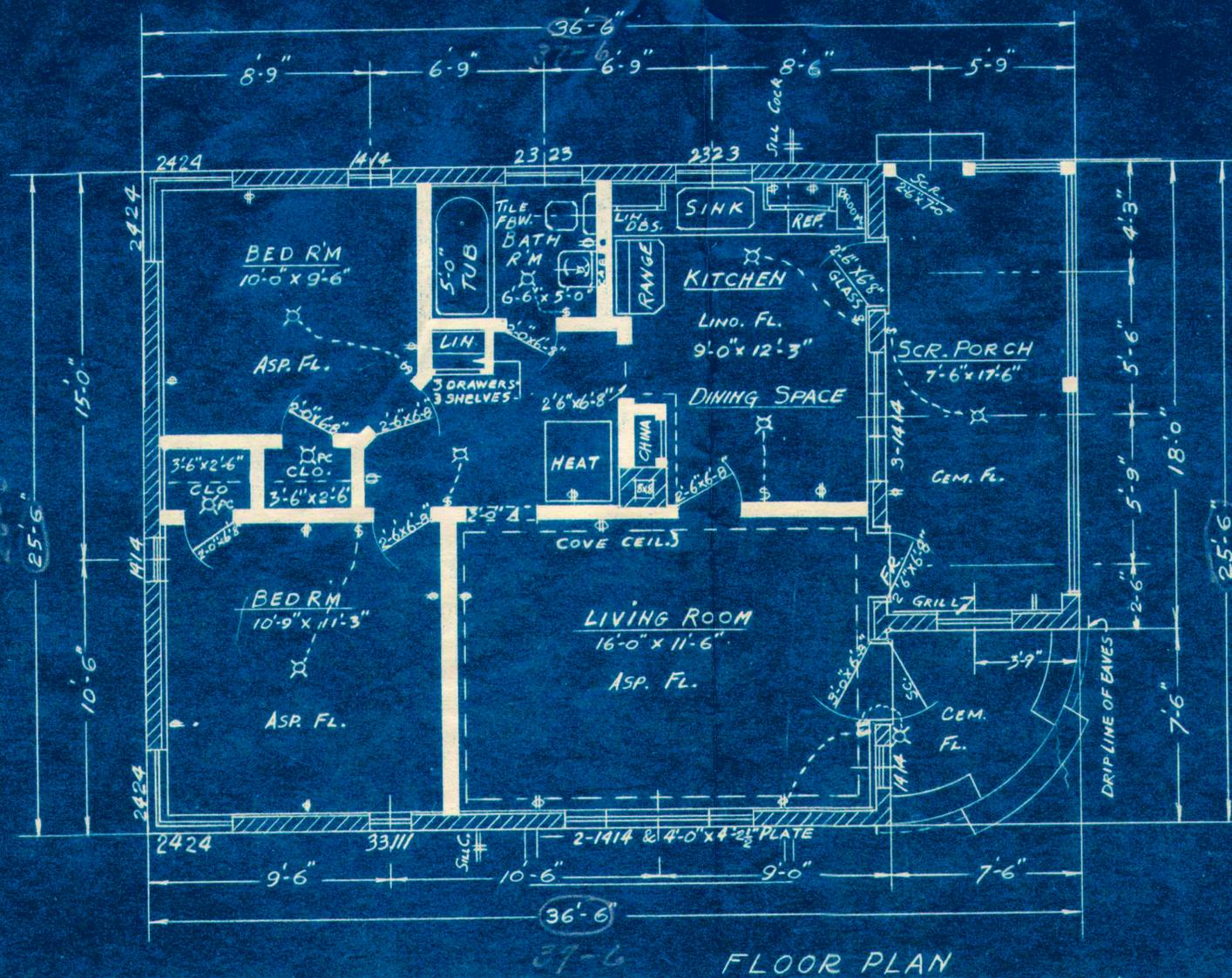
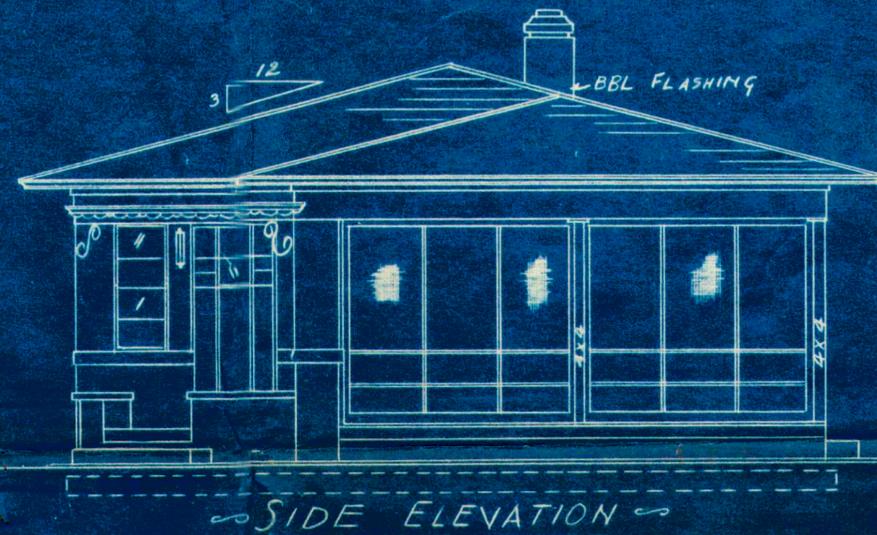
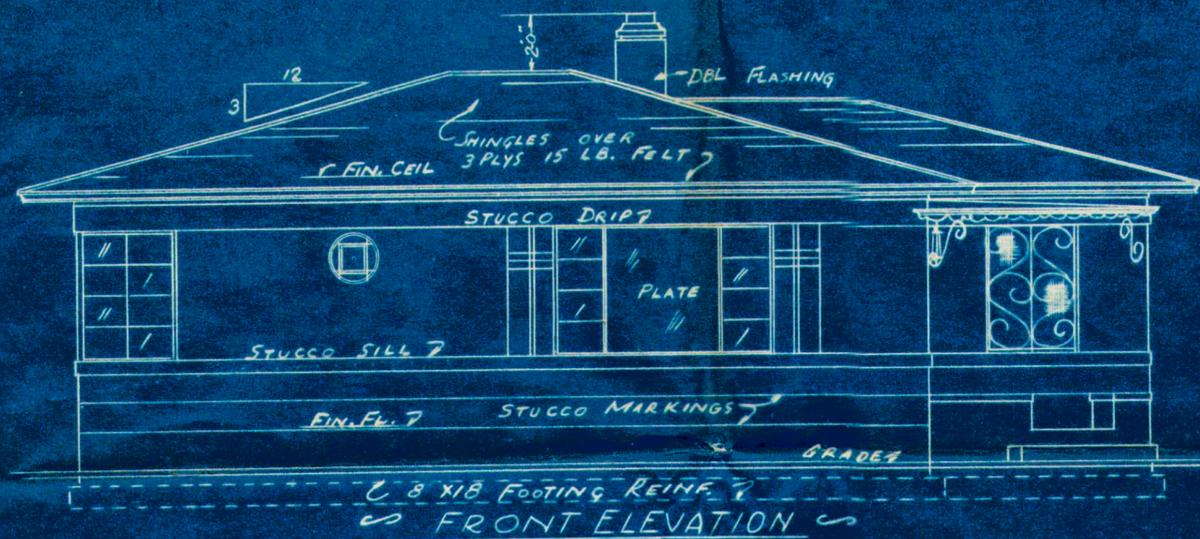


FOUNDATION PLAN

SCALE  $\frac{1}{4}$ " = 1'-0"

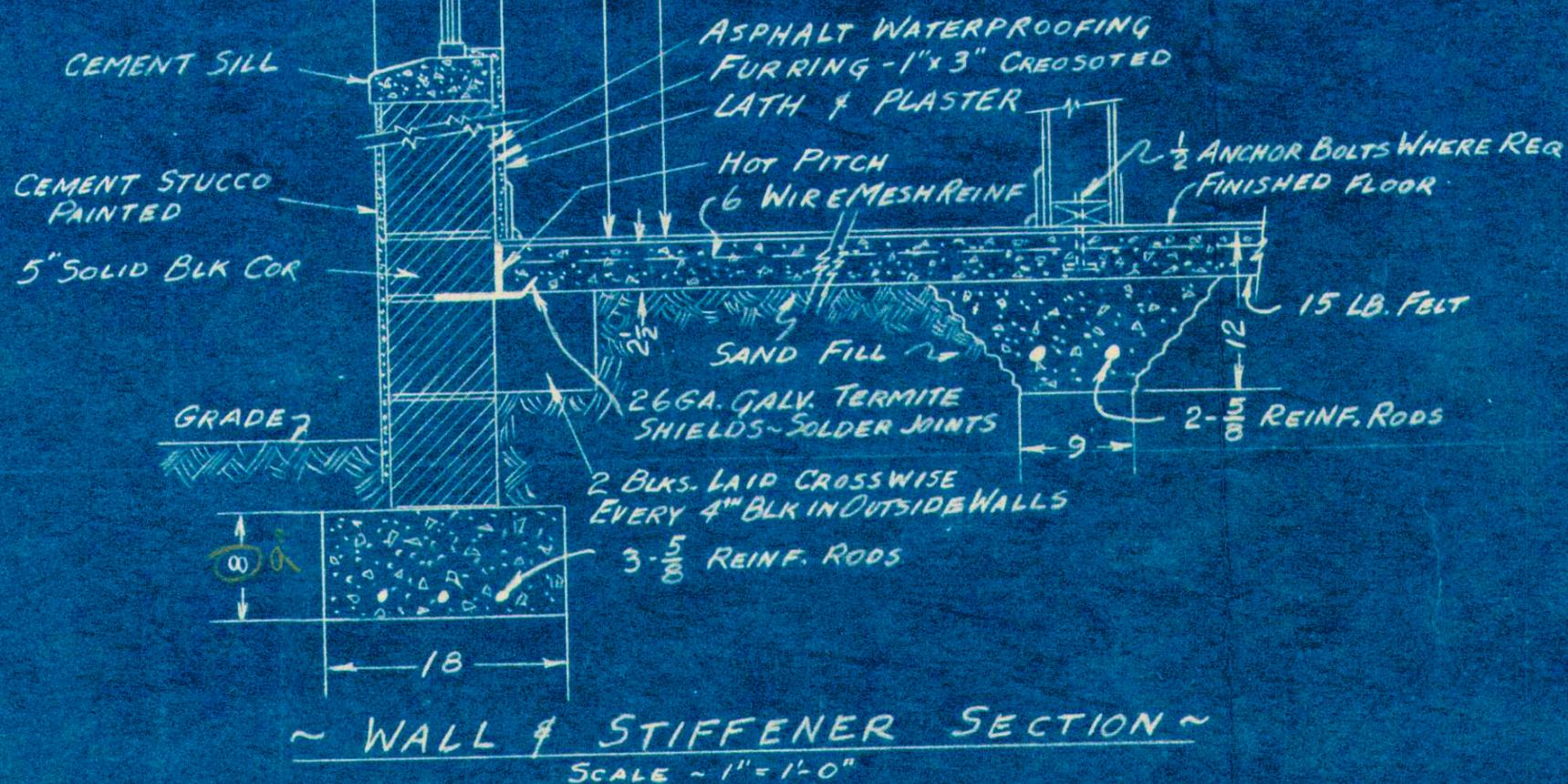
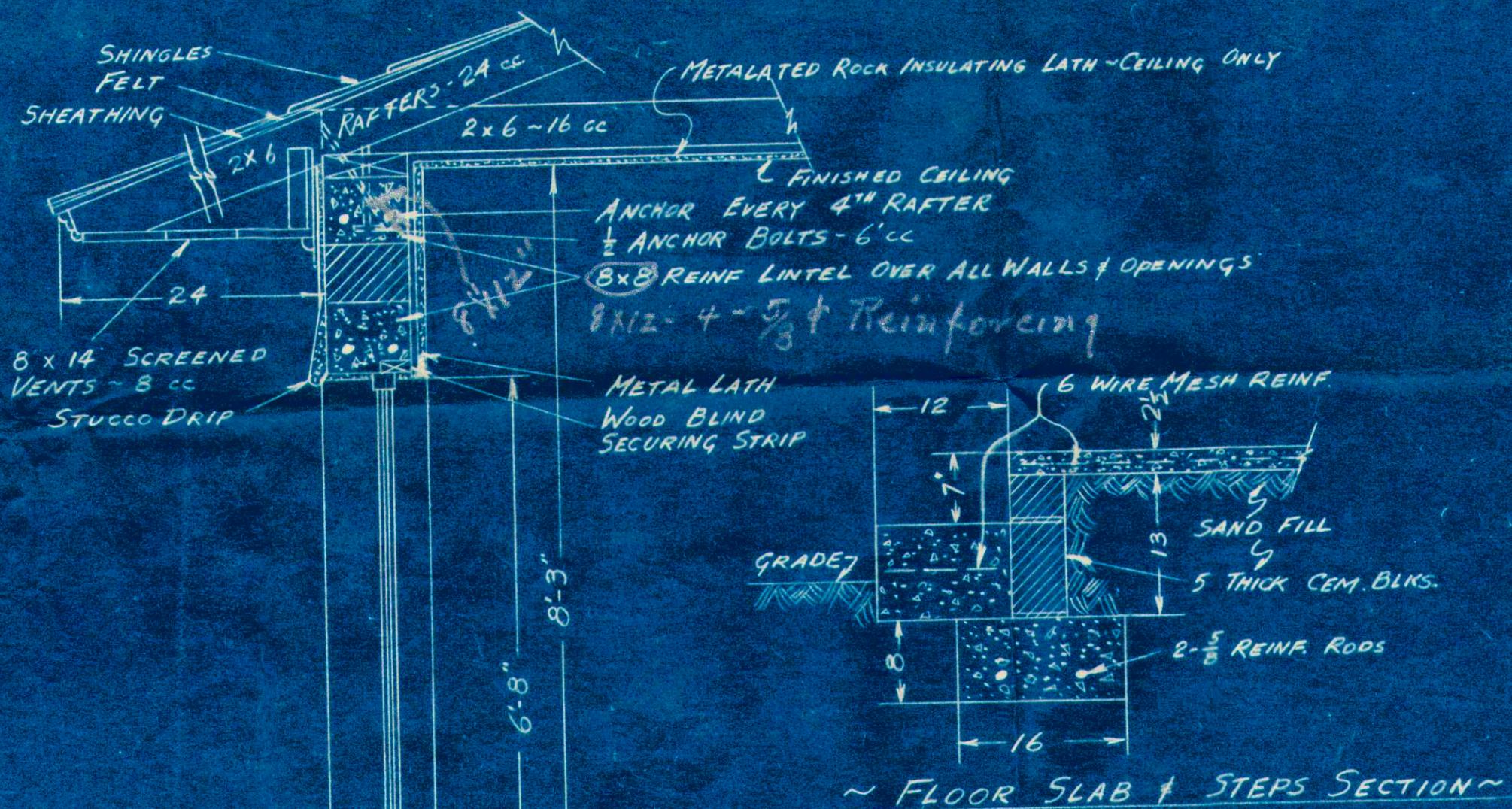


GARAGE



FOUR ROOM RESIDENCE AND GARAGE

20610229  
5/12/47  
20711



# Building Inspection Report

CITY OF LAKE WORTH, FLORIDA

ADDRESS 1122-24 - No 0 PERMIT NO. (If Any) 8511  
DATE OF INSP. 11-7-47 TYPE OF INSP. Routine ( ) Foundation ( )  
COPY OF REPORT RENDERED TO: George Brown Special  Framing ( )  
Condemnation ( ) Stucco & Plaster ( )  
Occupancy ( ) Final ( )

REMARKS: C.B.S. Res. Beam - 8" x 12" & contains four (4) continuous 5/8" & columns contain four (4) 5/8" &

© Kisto Pool

NOTICE TO BUILDER—Immediate action should be taken to correct any faults or non-compliances noted above, before proceeding to further stages of construction.

Inspector's Signature: E. Blitzer

## CITY OF LAKE WORTH BUILDING PERMIT

No 8511

Void if not used within 60 days.

Permission is hereby granted for the construction of a building as per plans and specifications filed with the Building Inspector.

Owner GEO. B. BROWN  
Builder SELF  
Location of building 1122-24 No 0 Street, between \_\_\_\_\_  
Lot 6 Block 356 Addition TOWNSHIP Fire Limit OUTER Zone A  
New Construction 1 C.B.S. RES. Repairs \_\_\_\_\_ Remodeling \_\_\_\_\_

FEE FOR PERMIT—\$1.00 plus ten cents per each additional \$100.00.

REMARKS:

C.B.S. 1 FAMILY RES.  
4 ROOMS + BATH.

STATIC PLAN AS FOR PERMIT # 8223

Date Sept. 25/47

Paid \$ 5.00  
Comp - Dec 30 - 47  
City Treasurer.

Edmund Gregory  
Building Inspector

Permit No. 8511  
Zone A  
Fire Limit OUTER

## APPLICATION FOR BUILDING PERMIT

### City of Lake Worth

Application is hereby made to the Building Inspector of the City of Lake Worth, for the approval of plans, in duplicate, herewith submitted including plot plan, for the erection of the building or buildings herein described. All provisions of the Building and Zoning Laws and Ordinances shall be complied with in the erection of said building or buildings, whether specified herein or not.

(Sign Here)

George B Brown

Lake Worth, Florida Sept. 25/17

#### DETAILED STATEMENTS OF SPECIFICATIONS FOR THE ERECTION OF NEW BUILDINGS

State buildings to be erected C.B.S. Res. No. of stories 1  
Location of Bldg. 1122-24 No. Ost Lot 6 Block 356 Addn. TOWNSHIP  
Occupancy 1 FAMILY C.B.S. RES. No. of rooms 4 + BATH  
Size of lot: No. of feet frontage 50' Feet rear 50' Depth 135'  
Size of Bldg.: 26' x 37' Feet frontage 37' Feet rear 37' Depth 26'  
Build. set back: Front 20'-0" Sides N.-5' S.-7' Rear 77'  
No. of feet in height from surface of ground to highest point of roof 13'  
Height of 1st story 8' 2nd ✓ 3rd ✓ 4th ✓  
Size of foundation: Footing 9x16 4-1/2" or 2x8" C.B.S.  
Material for foundation POURED RAINE CONC FOOTING.  
Thickness of external walls: 1st story 8" 2nd ✓ 3rd ✓ 4th ✓  
Size of girder or beam 8x12 set on CONC. BLOCK WALL  
Construction of chimneys ✓  
With what materials walls to be coped ✓  
Will roof be flat, pitched, or mansard? PITCHED 5x12 Material of roofing ASBESTOS.  
Size of joist or beams: 1st floor CONC. 4" 2nd ✓ 3rd ✓ 4th ✓  
Centers \_\_\_\_\_  
Ceiling joist 2x6 Rafters 2x6 Centers 16"  
Size of studding 2x4 Centers 16"  
Will there be any projection beyond building line? \_\_\_\_\_  
Have you complied with State Workmen's Compensation Requirements? NO.  
Cost of building \$5000.00  
Remarks \_\_\_\_\_  
C.B.S. 1 FAMILY RES. 4 ROOM + BATH  
FLOOR AREA 994 SQ. FT.  
Owner Geo. B. Brown Address 327 No E St  
Contractor SELF Address \_\_\_\_\_  
Work was commenced on the within building on the 25th day of SEPT.  
\_\_\_\_\_, 1917, and completed on the \_\_\_\_\_ day of \_\_\_\_\_  
\_\_\_\_\_, 19\_\_\_\_.

Respectfully,

Edgar W. Gump  
Inspector.

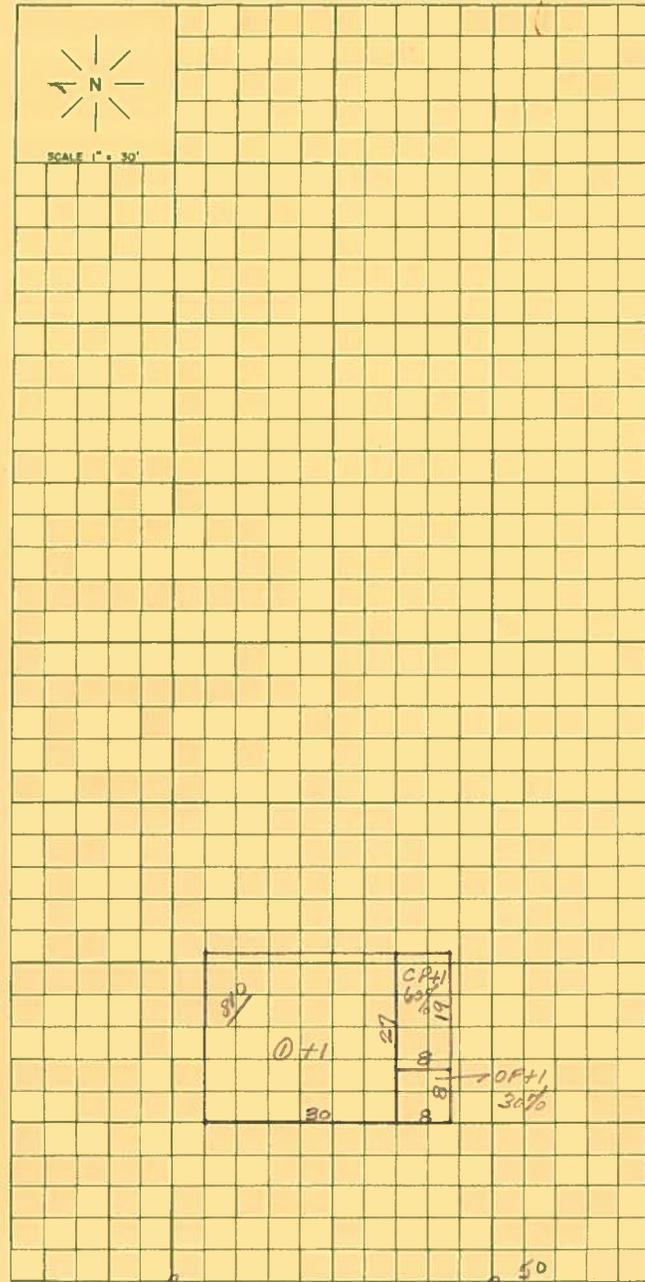
SAME PLAN USED AS IN PERMIT # 9223



RESIDENTIAL  
PROPERTY RECORD CARD  
LAKE WORTH, FLORIDA



SCALE 1" = 30'



1122 No 0 St  
PROPERTY ADDRESS

PLOTTED  DRAWN BY W. M. DATE 12-29-55  
RANDOM  CLASSIFIED BY DATE

HUNNICUTT AND ASSOCIATES, VALUATION ENGINEERS AND CONSULTANTS. STANDARD RPRC-1

CONSTRUCTION DATA												CARDS	MAP NO.	SEC.	TWP.	RNG.	PARCEL NO.				
BUILDING	1	2	3	4	BUILDING	1	2	3	4	BUILDING	1	2	3	4	1	4/4	22	44	43	5	
1. RES.					Flat					Res. Rooms											
					Shed					Rental Units											
2.					Gable	0				Efficiency Apts.											
					Hip					___ Rm. Apts.											
3.					Gambrel					___ Rm. Apts.											
					Roll																
4.					Sheet					Notes											
					SUB-STRUCTURE				PLUMBING												
					Slab					Composition											
					Piers					Metal											
					Continuous Wall	0				Wood											
					Conc. Bsmt. Floor					Asbestos	0										
					Semifinished Bsmt					Tile											
					Bsmt. Living Qts.					Slate											
					WALL FRAME				FLOORS												
					Wood					Notes											
					Conc. Block	0				Dirt											
					Tile					Single											
					Brick					Double											
					Stone					Pine											
					Rf. Concrete					Hardwood											
										Concrete	0										
					SHEATHING				HEATING												
					Yes					Tile											
					None	0				Terrazzo											
					EXTERIOR WALLS				ELECTRICITY												
					Unfinished					Notes											
					Wood					Unfinished											
					Roll					Wall Board											
					Sheet					Ceiling											
					Shingles					Plaster	0										
					Composition					Panel Board											
					Metal					Plywood											
					Asbestos					Pine Panel											
					Stucco	0				Hardwood Pan.											
					Com. Brick					Notes											
					Face Brick					EQUIPMENT											
					Stone					Vent. Fan											
										Air Condition											
										Insulation											
					FURRING				Notes												
					Yes					Yes	0										
					None					None											

SUBDIVISION TOWNSITE BLOCK 356  
LOTS OR DESCRIPTION: 6

NOTES  
N.O.H. - INT. EST.

NO.	STYS.	SH.	CLASS	AREA	RATE	FLATS	REPL. COST	DATE BUILT	COND.	ADJ.	VALUE
1	1	S	R-5	920	4.07		3744	1945	85%		3180
			SHUFFLE BOARD	6x52=312	25		78		80%		60
ACRES	QUANTITY - TYPE DESCRIPTION			DIMENSIONS SQUARE FEET	UNIT PRICE	D.F.	C.F.	PRICE PER FRONT FOOT		VALUE	
				50x135	50 - 1			50 -		2500	

YEAR	VALUE 1956	VALUE 1966	VALUE 19	VALUE 19	VALUE 19	VALUE 19
LAND	2000	2500				
IMPRS.	6480	8100				
TOTAL	8480	10600				

10600

PROPERTY ADDRESS  
 HSE. - BOX NO. STREET NAME - RURAL ROUTE NO.  
 1122 NO 0 ST  
 OWN OF LAKE WORTH  
 T 6 BLK 356

BATCH NO. 9999

**PALM  
 BEACH  
 COUNTY  
 FLORIDA**

38	43	44	21	15	356	006	00
CITY	RG.	TWP.	SEC.	SUBD.	BLOCK	LOT	

PARCEL IDENTIFICATION NUMBER  
 12/10/79 1 OF 1

APPRAISED VALUE RECAP

	THIS CARD	THIS PARCEL
IMPR.	8749	8749
LAND	5500	5500
TOTAL	14249	14249

BUILDING DIMENSIONS

BASE-130\*226\*230\*226  
 A-OPF-18\*28  
 B-EPF-118\*28

FOUNDATION CONTINUOUS FOOTING  
 FLOOR SYSTEM SLAB ON GRADE HF1.00  
 EXTERIOR WALL CONCRETE BLK/STU PWF1.00  
 STRUCTURE FRAME NONE  
 ROOF FRAMING GABLE / HIP  
 ROOF COVERING ASBESTOS/WOOD SHINGLE  
 FLOOR FINISH AVERAGE  
 INTERIOR FINISH ASPHALT TILE  
 PAINT-DECOR PLASTERED FURRED  
 INSULATION AVERAGE  
 LIGHTING NONE  
 BATH TILE NO. OF FIXTURES 3  
 ELECTRICAL 1/2 WALL  
 QUALITY FACTOR AVERAGE

TOTAL UNITS	91	100	103	94	14.35	13.49	01	50	50
SHAPE FACTORS				ADJ'D. UNITS	BASE RATE	ADJ'D. BASE RATE	IMPR. TYPE	ACTUAL YEAR BUILT	EFF.

AREA DESC.	% OF RATE	ADJ'D. SQ. FOOT RATE	AREA RATE	NO. OF SQ. FEET	REPL. COST NEW
BASE	100	13.49	13.49	780	10522
EPF	80	13.49	10.79	144	1554
OPF	30	13.49	4.05	64	259



BLDG. CALCULATIONS

TOTAL AREAS -> AUX. - 208 BASE - 780

AGE	DEPRECIATION				% COND.	REPL. COST NEW	DEPR. REPL. COST
	NOR. PHYS.	OTHER PHYS.	FUNC.	ECON.			
8	34	0	0	0	66	12335	8141

DESCRIPTION OF EX. FEAT./SPEC. BLDG.	COND.	SIZE - DIM. - RATING	UNIT PRICE	UNITS	VALUE
OUTLY BLDG	A	4X20	4.40	80	352
SHUFFLE CT	G	5X40	1.28	200	256
TOTAL CALCULATED EX. FEAT./SPEC. BLDG. VALUE ->					608

MO. YR.	PRICE	BOOK	PAGE	V/I	INST.	Q	NO. OF STORIES
76	100	2522	0156	1	OC	D	1
M		A		N			

GENERAL PARCEL DATA									
LAND APPRAISAL DATE	BY	PARC. STATUS	DIST. TREND	TOPO.	TYPE OWNER	ROAD NUMBER	TYPE		
04 11 78	472	0	0	0			7		
LOCATION CODE		SUB'D/TRACT NUMBER		N-S COORD.		E-W COORD.			
CENSUS IDENTIFICATION									
TRACT	BLOCK	BLK. FACE	AREA	CONG. DIST.	OPTIONAL				

LAND DESCRIPTION		SOIL/USE CODES				FACTORS		UNIT LAND PRICE	ADJ'D. UNIT LAND PRICE	LAND UNITS	LAND VALUE
TYPE	SIZE - DIMENSION AREA	SOIL CLASS	OTHER	CLEAR	UN-CLEARED	SWAMP WASTE	DEPTH	COND.			
RESIDENT.							100	100	110.00	110.00	50.00
TOTAL CALCULATED LAND VALUE ->											5500

GENERAL CARD DATA									
LAND USE	BUILDING APPRAISAL DATE			BY	SOURCE	NO. DWEL UNITS			
11	07	26	76	28	IN	1			
UTILITIES		ZONING		BUILDING OCC. CONT.					
11124		RIC		00					
PERMIT NO.				F.H.A. NUMBER					
INCOME DATA									
SOURCE		RENTAL		SCHEDULE					

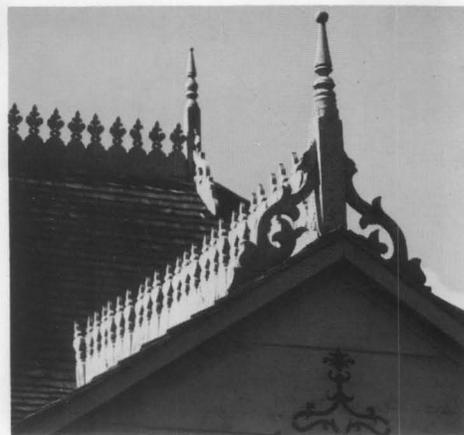
# 4 PRESERVATION BRIEFS

## Roofing for Historic Buildings

Sarah M. Sweetser



U.S. Department of the Interior  
National Park Service  
Cultural Resources  
Heritage Preservation Services



HABS

### Significance of the Roof

A weather-tight roof is basic in the preservation of a structure, regardless of its age, size, or design. In the system that allows a building to work as a shelter, the roof sheds the rain, shades from the sun, and buffers the weather.

During some periods in the history of architecture, the roof imparts much of the architectural character. It defines the style and contributes to the building's aesthetics. The hipped roofs of Georgian architecture, the turrets of Queen Anne, the Mansard roofs, and the graceful slopes of the Shingle Style and Bungalow designs are examples of the use of roofing as a major design feature.

But no matter how decorative the patterning or how compelling the form, the roof is a highly vulnerable element of a shelter that will inevitably fail. A poor roof will permit the accelerated deterioration of historic building materials—masonry, wood, plaster, paint—and will cause general disintegration of the basic structure. Furthermore, there is an urgency involved in repairing a leaky roof since such repair costs will quickly become prohibitive. Although such action is desirable as soon as a failure is discovered, temporary patching methods should be carefully chosen to prevent inadvertent damage to sound or historic roofing materials and related features. Before any repair work is performed, the historic value of the materials used on the roof should be understood. Then a complete internal and external inspection of the roof should be planned to determine all the causes of failure and to identify the alternatives for repair or replacement of the roofing.

### Historic Roofing Materials in America

**Clay Tile:** European settlers used clay tile for roofing as early as the mid-17th century; many pantiles (S-curved tiles), as well as flat roofing tiles, were used in Jamestown, Virginia. In some cities such as New York and Boston, clay was popularly used as a precaution against such fire as those that engulfed London in 1666 and scorched Boston in 1679.

Tiles roofs found in the mid-18th century Moravian settlements in Pennsylvania closely resembled those found in Germany. Typically, the tiles were 14–15" long, 6–7" wide with a curved butt. A lug on the back allowed the tiles to hang on the lathing without nails or pegs. The tile surface was usually scored with finger marks to promote drainage. In the Southwest, the tile roofs of the Spanish missionaries (mission tiles) were first manufactured (ca. 1780) at the Mission San Antonio de Padua in California. These semicircular tiles were



*Repairs on this pantile roof were made with new tiles held in place with metal hangers. (Main Building, Ellis Island, New York)*

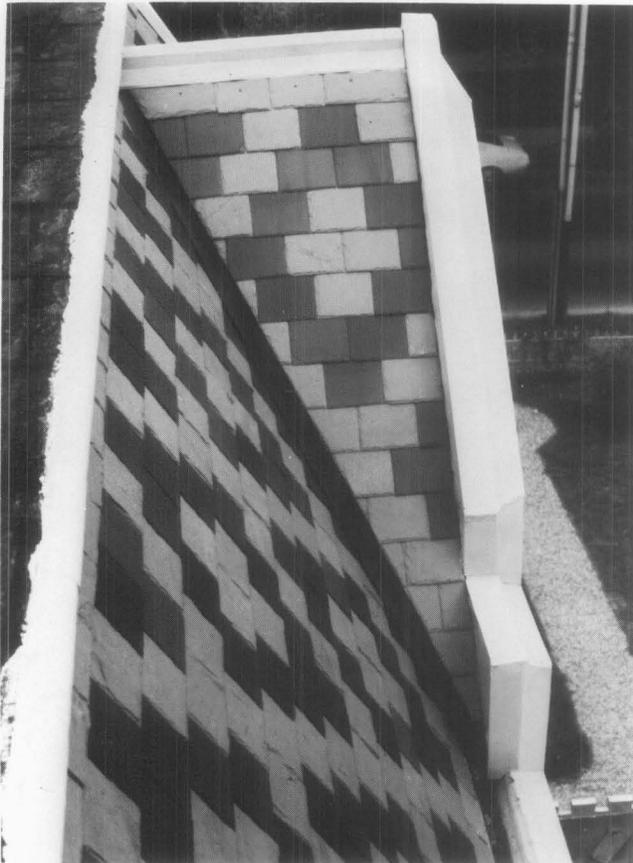
made by molding clay over sections of logs, and they were generally 22" long and tapered in width.

The plain or flat rectangular tiles most commonly used from the 17th through the beginning of the 19th century measured about 10" by 6" by 1/2", and had two holes at one end for a nail or peg fastener. Sometimes mortar was applied between the courses to secure the tiles in a heavy wind.

In the mid-19th century, tile roofs were often replaced by sheet-metal roofs, which were lighter and easier to install and maintain. However, by the turn of the century, the Romanesque Revival and Mission style buildings created a new demand and popularity for this picturesque roofing material.

**Slate:** Another practice settlers brought to the New World was slate roofing. Evidence of roofing slates have been found also among the ruins of mid-17th-century Jamestown. But because of the cost and the time required to obtain the material, which was mostly imported from Wales, the use of slate was initially limited. Even in Philadelphia (the second largest city in the English-speaking world at the time of the Revolution) slates were so rare that "The Slate Roof House" distinctly referred to William Penn's home built late in the 1600s. Sources of native slate were known to exist along the eastern seaboard from Maine to Virginia, but difficulties in inland transportation limited its availability to the cities, and contributed to its expense. Welsh slate continued to be imported until the development of canals and railroads in the mid-19th century made American slate more accessible and economical.

Slate was popular for its durability, fireproof qualities, and



*The Victorians loved to use different colored slates to create decorative patterns on their roofs, an effect which cannot be easily duplicated by substitute materials. Before any repair work on a roof such as this, the slate sizes, colors, and position of the patterning should be carefully recorded to assure proper replacement. (Ebenezer Maxwell Mansion, Philadelphia, Pennsylvania, photo courtesy of William D. Hershey)*

aesthetic potential. Because slate was available in different colors (red, green, purple, and blue-gray), it was an effective material for decorative patterns on many 19th-century roofs (Gothic and Mansard styles). Slate continued to be used well into the 20th century, notably on many Tudor revival style buildings of the 1920s.

**Shingles:** Wood shingles were popular throughout the country in all periods of building history. The size and shape of the shingles as well as the detailing of the shingle roof differed according to regional craft practices. People within particular regions developed preferences for the local species of wood that most suited their purposes. In New England and the Delaware Valley, white pine was frequently used: in the South, cypress and oak; in the far west, red cedar or redwood. Sometimes a protective coating was applied to increase the durability of the shingle such as a mixture of brick dust and fish oil, or a paint made of red iron oxide and linseed oil.

Commonly in urban areas, wooden roofs were replaced with more fire resistant materials, but in rural areas this was not a major concern. On many Victorian country houses, the practice of wood shingling survived the technological advances of metal roofing in the 19th century, and near the turn of the century enjoyed a full revival in its namesake, the Shingle Style. Colonial revival and the Bungalow styles in the 20th century assured wood shingles a place as one of the most fashionable, domestic roofing materials.

**Metal:** Metal roofing in America is principally a 19th-century phenomenon. Before then the only metals commonly



*Replacement of particular historic details is important to the individual historic character of a roof, such as the treatment at the eaves of this rounded butt wood shingle roof. Also note that the surface of the roof was carefully sloped to drain water away from the side of the dormer. In the restoration, this function was augmented with the addition of carefully concealed modern metal flashing. (Mount Vernon, Virginia)*



*Galvanized sheet-metal shingles imitating the appearance of pantiles remained popular from the second half of the 19th century into the 20th century. (Episcopal Church, now the Jerome Historical Society Building, Jerome, Arizona, 1927)*

used were lead and copper. For example, a lead roof covered "Rosewell," one of the grandest mansions in 18th-century Virginia. But more often, lead was used for protective flashing. Lead, as well as copper, covered roof surfaces where wood, tile, or slate shingles were inappropriate because of the roof's pitch or shape.

Copper with standing seams covered some of the more notable early American roofs including that of Christ Church (1727-1744) in Philadelphia. Flat-seamed copper was used on many domes and cupolas. The copper sheets were imported from England until the end of the 18th century when facilities for rolling sheet metal were developed in America.

Sheet iron was first known to have been manufactured here by the Revolutionary War financier, Robert Morris, who had a rolling mill near Trenton, New Jersey. At his mill Morris produced the roof of his own Philadelphia mansion, which he started in 1794. The architect Benjamin H. Latrobe used sheet iron to replace the roof on Princeton's "Nassau Hall," which had been gutted by fire in 1802.

The method for corrugating iron was originally patented in England in 1829. Corrugating stiffened the sheets, and allowed greater span over a lighter framework, as well as reduced installation time and labor. In 1834 the American architect William Strickland proposed corrugated iron to cover his design for the market place in Philadelphia.

Galvanizing with zinc to protect the base metal from rust was developed in France in 1837. By the 1850s the material was used on post offices and customhouses, as well as on train sheds and factories. In 1857 one of the first metal roofs in the



Repeated repair with asphalt, which cracks as it hardens, has created a blistered surface on this sheet-metal roof and built-in gutter, which will retain water. Repairs could be made by carefully heating and scraping the surface clean, repairing the holes in the metal with a flexible mastic compound or a metal patch, and coating the surface with a fibre paint. (Roane County Courthouse, Kingston, Tennessee, photo courtesy of Building Conservation Technology, Inc.)

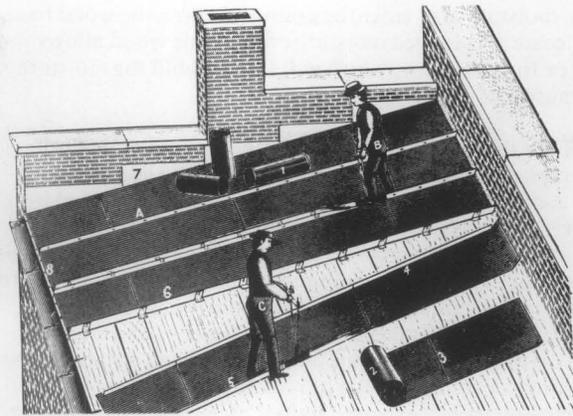
South was installed on the U.S. Mint in New Orleans. The Mint was thereby “fireproofed” with a 20-gauge galvanized, corrugated iron roof on iron trusses.

Tin-plate iron, commonly called “tin roofing,” was used extensively in Canada in the 18th century, but it was not as common in the United States until later. Thomas Jefferson was an early advocate of tin roofing, and he installed a standing-seam tin roof on “Monticello” (ca. 1770–1802). The Arch Street Meetinghouse (1804) in Philadelphia had tin shingles laid in a herringbone pattern on a “piazza” roof.

However, once rolling mills were established in this country, the low cost, light weight, and low maintenance of tin plate made it the most common roofing material. Embossed tin shingles, whose surfaces created interesting patterns, were popular throughout the country in the late 19th century. Tin roofs were kept well-painted, usually red; or, as the architect A. J. Davis suggested, in a color to imitate the green patina of copper.

Terne plate differed from tin plate in that the iron was dipped in an alloy of lead and tin, giving it a duller finish. Historic, as well as modern, documentation often confuses the two, so much that it is difficult to determine how often actual “terne” was used.

Zinc came into use in the 1820s, at the same time tin plate was becoming popular. Although a less expensive substitute for lead, its advantages were controversial, and it was never widely used in this country.



A Chicago firm’s catalog dated 1896 illustrates a method of unrolling, turning the edges, and finishing the standing seam on a metal roof.



Tin shingles, commonly embossed to imitate wood or tile, or with a decorative design, were popular as an inexpensive, textured roofing material. These shingles  $8\frac{3}{8}$  inch by  $12\frac{1}{2}$  inch on the exposed surface) were designed with interlocking edges, but they have been repaired by surface nailing, which may cause future leakage. (Ballard House, Yorktown, Virginia, photo by Gordie Whittington, National Park Service)

**Other Materials:** Asphalt shingles and roll roofing were used in the 1890s. Many roofs of asbestos, aluminum, stainless steel, galvanized steel, and lead-coated copper may soon have historic values as well. Awareness of these and other traditions of roofing materials and their detailing will contribute to more sensitive preservation treatments.

### Locating the Problem

#### Failures of Surface Materials

When trouble occurs, it is important to contact a professional, either an architect, a reputable roofing contractor, or a craftsman familiar with the inherent characteristics of the particular historic roofing system involved. These professionals may be able to advise on immediate patching procedures and help plan more permanent repairs. A thorough examination of the roof should start with an appraisal of the existing condition and quality of the roofing material itself. Particular attention should be given to any southern slope because year-round exposure to direct sun may cause it to break down first.

**Wood:** Some historic roofing materials have limited life expectancies because of normal organic decay and “wear.” For example, the flat surfaces of wood shingles erode from exposure to rain and ultraviolet rays. Some species are more hardy than others, and heartwood, for example, is stronger and more durable than sapwood.

Ideally, shingles are split with the grain perpendicular to

the surface. This is because if shingles are sawn across the grain, moisture may enter the grain and cause the wood to deteriorate. Prolonged moisture on or in the wood allows moss or fungi to grow, which will further hold the moisture and cause rot.

**Metal:** Of the inorganic roofing materials used on historic buildings, the most common are perhaps the sheet metals: lead, copper, zinc, tin plate, terne plate, and galvanized iron. In varying degrees each of these sheet metals are likely to deteriorate from chemical action by pitting or streaking. This can be caused by airborne pollutants; acid rainwater; acids from lichen or moss; alkalis found in lime mortars or portland cement, which might be on adjoining features and washes down on the roof surface; or tannic acids from adjacent wood sheathings or shingles made of red cedar or oak.

Corrosion from "galvanic action" occurs when dissimilar metals, such as copper and iron, are used in direct contact. Corrosion may also occur even though the metals are physically separated; one of the metals will react chemically against the other in the presence of an electrolyte such as rainwater. In roofing, this situation might occur when either a copper roof is decorated with iron cresting, or when steel nails are used in copper sheets. In some instances the corrosion can be prevented by inserting a plastic insulator between the dissimilar materials. Ideally, the fasteners should be a metal sympathetic to those involved.

Iron rusts unless it is well-painted or plated. Historically this problem was avoided by use of tin plating or galvanizing. But this method is durable only as long as the coating remains intact. Once the plating is worn or damaged, the exposed iron will rust. Therefore, any iron-based roofing material needs to be undercoated, and its surface needs to be kept well-painted to prevent corrosion.

One cause of sheet metal deterioration is fatigue. Depending upon the size and the gauge of the metal sheets, wear and metal failure can occur at the joints or at any protrusions in the sheathing as a result from the metal's alternating movement to thermal changes. Lead will tear because of "creep," or the gravitational stress that causes the material to move down the roof slope.

**Slate:** Perhaps the most durable roofing materials are slate and tile. Seemingly indestructible, both vary in quality. Some slates are hard and tough without being brittle. Soft slates are more subject to erosion and to attack by airborne and rain-

water chemicals, which cause the slates to wear at nail holes, to delaminate, or to break. In winter, slate is very susceptible to breakage by ice, or ice dams.

**Tile:** Tiles will weather well, but tend to crack or break if hit, as by tree branches, or if they are walked on improperly. Like slates, tiles cannot support much weight. Low quality tiles that have been insufficiently fired during manufacture, will craze and spall under the effects of freeze and thaw cycles on their porous surfaces.

#### Failures of Support Systems

Once the condition of the roofing material has been determined, the related features and support systems should be examined on the exterior and on the interior of the roof. The gutters and downspouts need periodic cleaning and maintenance since a variety of debris fill them, causing water to back up and seep under roofing units. Water will eventually cause fasteners, sheathing, and roofing structure to deteriorate. During winter, the daily freeze-thaw cycles can cause ice floes to develop under the roof surface. The pressure from these ice floes will dislodge the roofing material, especially slates, shingles, or tiles. Moreover, the buildup of ice dams above the gutters can trap enough moisture to rot the sheathing or the structural members.

Many large public buildings have built-in gutters set within the perimeter of the roof. The downspouts for these gutters may run within the walls of the building, or drainage may be through the roof surface or through a parapet to exterior downspouts. These systems can be effective if properly maintained; however, if the roof slope is inadequate for good runoff, or if the traps are allowed to clog, rainwater will form pools on the roof surface. Interior downspouts can collect debris and thus back up, perhaps leaking water into the surrounding walls. Exterior downspouts may fill with water, which in cold weather may freeze and crack the pipes. Conduits from the built-in gutter to the exterior downspout may also leak water into the surrounding roof structure or walls.

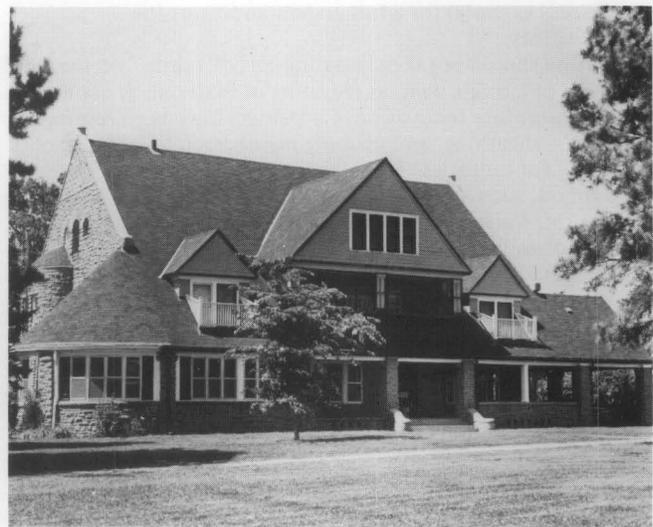
Failure of the flashing system is usually a major cause of roof deterioration. Flashing should be carefully inspected for failure caused by either poor workmanship, thermal stress, or metal deterioration (both of flashing material itself and of the fasteners). With many roofing materials, the replacement of flashing on an existing roof is a major operation, which may require taking up large sections of the roof surface. Therefore, the installation of top quality flashing material on



*This detail shows slate delamination caused by a combination of weathering and pollution. In addition, the slates have eroded around the repair nails, incorrectly placed in the exposed surface of the slates. (Lower Pontalba Building, New Orleans, photo courtesy of Building Conservation Technology, Inc.)*



*Temporary stabilization or "mothballing" with materials such as plywood and building paper can protect the roof of a project until it can be properly repaired or replaced. (Narbonne House, Salem, Massachusetts)*



*These two views of the same house demonstrate how the use of a substitute material can drastically affect the overall character of a structure. The textural interest of the original tile roof was lost with the use of asphalt shingles. Recent preservation efforts are replacing the tile roof. (Frank House, Kearney, Nebraska, photo courtesy of the Nebraska State Historical Society, Lincoln, Nebraska)*

a new or replaced roof should be a primary consideration. Remember, some roofing and flashing materials are not compatible.

Roof fasteners and clips should also be made of a material compatible with all other materials used, or coated to prevent rust. For example, the tannic acid in oak will corrode iron nails. Some roofs such as slate and sheet metals may fail if nailed too rigidly.

If the roof structure appears sound and nothing indicates recent movement, the area to be examined most closely is the roof substrate—the sheathing or the battens. The danger spots would be near the roof plates, under any exterior patches, at the intersections of the roof planes, or at vertical surfaces such as dormers. Water penetration, indicating a breach in the roofing surface or flashing, should be readily apparent, usually as a damp spot or stain. Probing with a small pen knife may reveal any rot which may indicate previously undetected damage to the roofing membrane. Insect infestation evident by small exit holes and frass (a sawdust-like debris) should also be noted. Condensation on the underside of the roofing is undesirable and indicates improper ventilation. Moisture will have an adverse effect on any roofing material; a good roof stays dry inside and out.

### Repair or Replace

Understanding potential weaknesses of roofing material also requires knowledge of repair difficulties. Individual slates can be replaced normally without major disruption to the rest of the roof, but replacing flashing on a slate roof can require substantial removal of surrounding slates. If it is the substrate or a support material that has deteriorated, many surface materials such as slate or tile can be reused if handled carefully during the repair. Such problems should be evaluated at the outset of any project to determine if the roof can be effectively patched, or if it should be completely replaced.

Will the repairs be effective? Maintenance costs tend to multiply once trouble starts. As the cost of labor escalates, repeated repairs could soon equal the cost of a new roof.

The more durable the surface is initially, the easier it will be to maintain. Some roofing materials such as slate are expensive to install, but if top quality slate and flashing are used, it will last 40–60 years with minimal maintenance. Although the installation cost of the roof will be high, low maintenance needs will make the lifetime cost of the roof less expensive.

### Historical Research

In a restoration project, research of documents and physical investigation of the building usually will establish the roof's history. Documentary research should include any original plans or building specifications, early insurance surveys, newspaper descriptions, or the personal papers and files of people who owned or were involved in the history of the building. Old photographs of the building might provide evidence of missing details.

Along with a thorough understanding of any written history of the building, a physical investigation of the roofing and its structure may reveal information about the roof's construction history. Starting with an overall impression of the structure, are there any changes in the roof slope, its configuration, or roofing materials? Perhaps there are obvious patches or changes in patterning of exterior brickwork where a gable roof was changed to a gambrel, or where a whole upper story was added. Perhaps there are obvious stylistic changes in the roof line, dormers, or ornamentation. These observations could help one understand any important alteration, and could help establish the direction of further investigation.

Because most roofs are physically out of the range of careful scrutiny, the "principle of least effort" has probably limited the extent and quality of previous patching or replacing, and usually considerable evidence of an earlier roof surface remains. Sometimes the older roof will be found as an underlayment of the current exposed roof. Original roofing may still be intact in awkward places under later features on a roof. Often if there is any unfinished attic space, remnants of roofing may have been dropped and left when the roof was being built or repaired. If the configuration of the roof has been changed, some of the original material might still be in place under the existing roof. Sometimes whole sections of the roof and roof framing will have been left intact under the higher roof. The profile and/or flashing of the earlier roof may be apparent on the interior of the walls at the level of the alteration. If the sheathing or lathing appears to have survived changes in the roofing surface, they may contain evidence of the roofing systems. These may appear either as dirt marks, which provide "shadows" of a roofing material, or as nails broken or driven down into the wood, rather than pulled out during previous alterations or repairs. Wooden headers in the roof framing may indicate that earlier chimneys or skylights have been removed. Any metal ornamentation that might have existed may be indicated by anchors or unusual markings along the ridge or at other edges of the roof. This primary

evidence is essential for a full understanding of the roof's history.

Caution should be taken in dating early "fabric" on the evidence of a single item, as recycling of materials is not a mid-20th-century innovation. Carpenters have been reusing materials, sheathing, and framing members in the interest of economy for centuries. Therefore, any analysis of the materials found, such as nails or sawmarks on the wood, requires an accurate knowledge of the history of local building practices before any final conclusion can be accurately reached. It is helpful to establish a sequence of construction history for the roof and roofing materials; any historic fabric or pertinent evidence in the roof should be photographed, measured, and recorded for future reference.

During the repair work, useful evidence might unexpectedly appear. It is essential that records be kept of any type of work on a historic building, before, during, and after the project. Photographs are generally the easiest and fastest method, and should include overall views and details at the gutters, flashing, dormers, chimneys, valleys, ridges, and eaves. All photographs should be immediately labeled to insure accurate identification at a later date. Any patterning or design on the roofing deserves particular attention. For example, slate roofs are often decorative and have subtle changes in size, color, and texture, such as a gradually decreasing coursing length from the eave to the peak. If not carefully noted before a project begins, there may be problems in replacing the surface. The standard reference for this phase of the work is *Recording Historic Buildings*, compiled by Harley J. McKee for the Historic American Buildings Survey, National Park Service, Washington, D.C., 1970.

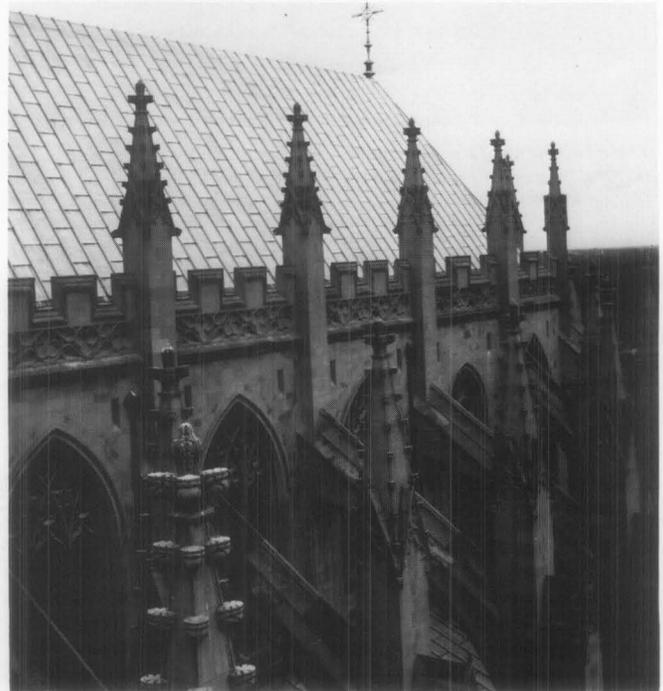
#### Replacing the Historic Roofing Material

Professional advice will be needed to assess the various aspects of replacing a historic roof. With some exceptions, most historic roofing materials are available today. If not, an architect or preservation group who has previously worked with the same type material may be able to recommend suppliers. Special roofing materials, such as tile or embossed metal shingles, can be produced by manufacturers of related products that are commonly used elsewhere, either on the exterior or interior of a structure. With some creative thinking and research, the historic materials usually can be found.



*Because of the roof's visibility, the slate detailing around the dormers is important to the character of this structure. Note how the slates swirl from a horizontal pattern on the main roof to a diamond pattern on the dormer roofs and side walls. (18th and Que Streets, NW, Washington, D.C.)*

**Craft Practices:** Determining the craft practices used in the installation of a historic roof is another major concern in roof restoration. Early builders took great pride in their work, and experience has shown that the "rustic" or irregular designs commercially labeled "Early American" are a 20th-century invention. For example, historically, wood shingles underwent several distinct operations in their manufacture including splitting by hand, and smoothing the surface with a draw knife. In modern nomenclature, the same item would be a "tapersplit" shingle which has been dressed. Unfortunately, the rustic appearance of today's commercially available "handsplit" and re-sawn shingle bears no resemblance to the hand-made roofing materials used on early American buildings.



*Good design and quality materials for the roof surface, fastenings, and flashing minimize roofing failures. This is essential on roofs such as on the National Cathedral where a thorough maintenance inspection and minor repairs cannot be done easily without special scaffolding. However, the success of the roof on any structure depends on frequent cleaning and repair of the gutter system. (Washington, D.C., photo courtesy of John Burns, A.I.A.)*

Early craftsmen worked with a great deal of common sense; they understood their materials. For example they knew that wood shingles should be relatively narrow; shingles much wider than about 6" would split when walked on, or they may curl or crack from varying temperature and moisture. It is important to understand these aspects of craftsmanship, remembering that people wanted their roofs to be weather-tight and to last a long time. The recent use of "mother-goose" shingles on historic structures is a gross underestimation of the early craftsman's skills.

**Supervision:** Finding a modern craftsman to reproduce historic details may take some effort. It may even involve some special instruction to raise his understanding of certain historic craft practices. At the same time, it may be pointless (and expensive) to follow historic craft practices in any construction that will not be visible on the finished product. But if the roofing details are readily visible, their appearance should be based on architectural evidence or on historic prototypes. For instance, the spacing of the seams on a standing-seam metal roof will affect the building's overall scale and should therefore match the original dimensions of the seams.

Many older roofing practices are no longer performed because of modern improvements. Research and review of specific detailing in the roof with the contractor before beginning the project is highly recommended. For example, one early craft practice was to finish the ridge of a wood shingle roof with a roof "comb"—that is, the top course of one slope of the roof was extended uniformly beyond the peak to shield the ridge, and to provide some weather protection for the raw horizontal edges of the shingles on the other slope. If the "comb" is known to have been the correct detail, it should be used. Though this method leaves the top course vulnerable to the weather, a disguised strip of flashing will strengthen this weak point.

Detail drawings or a sample mock-up will help ensure that the contractor or craftsman understands the scope and special requirements of the project. It should never be assumed that the modern carpenter, slater, sheet metal worker, or roofer will know all the historic details. Supervision is as important as any other stage of the process.



*Special problems inherent in the design of an elaborate historic roof can be controlled through the use of good materials and regular maintenance. The shape and detailing are essential elements of the building's historic character, and should not be modified, despite the use of alternative surface materials. (Gamwell House, Bellingham, Washington)*

#### **Alternative Materials**

The use of the historic roofing material on a structure may be restricted by building codes or by the availability of the materials, in which case an appropriate alternative will have to be found.

Some municipal building codes allow variances for roofing materials in historic districts. In other instances, individual variances may be obtained. Most modern heating and cooking is fueled by gas, electricity, or oil—none of which emit the hot embers that historically have been the cause of roof fires. Where wood burning fireplaces or stoves are used, spark arrestor screens at the top of the chimneys help to prevent flaming material from escaping, thus reducing the number of fires that start at the roof. In most states, insurance rates have been equalized to reflect revised considerations for the risks involved with various roofing materials.

In a rehabilitation project, there may be valid reasons for replacing the roof with a material other than the original. The historic roofing may no longer be available, or the cost of obtaining specially fabricated materials may be prohibitive. But

the decision to use an alternative material should be weighed carefully against the primary concern to keep the historic character of the building. If the roof is flat and is not visible from any elevation of the building, and if there are advantages to substituting a modern built-up composition roof for what might have been a flat metal roof, then it may make better economic and construction sense to use a modern roofing method. But if the roof is readily visible, the alternative material should match as closely as possible the scale, texture, and coloration of the historic roofing material.

Asphalt shingles or ceramic tiles are common substitute materials intended to duplicate the appearance of wood shingles, slates, or tiles. Fire-retardant, treated wood shingles are currently available. The treated wood tends, however, to be brittle, and may require extra care (and expense) to install. In some instances, shingles laid with an interlay of fire-retardant building paper may be an acceptable alternative.

Lead-coated copper, terne-coated steel, and aluminum/zinc-coated steel can successfully replace tin, terne plate, zinc, or lead. Copper-coated steel is a less expensive (and less durable) substitute for sheet copper.

The search for alternative roofing materials is not new. As early as the 18th century, fear of fire cause many wood shingle or board roofs to be replaced by sheet metal or clay tile. Some historic roofs were failures from the start, based on over-ambitious and naive use of materials as they were first developed. Research on a structure may reveal that an inadequately designed or a highly combustible roof was replaced early in its history, and therefore restoration of a later roof material would have a valid precedent. In some cities, the substitution of sheet metal on early row houses occurred as soon as the rolled material became available.

Cost and ease of maintenance may dictate the substitution of a material wholly different in appearance from the original. The practical problems (wind, weather, and roof pitch) should be weighed against the historical consideration of scale, texture, and color. Sometimes the effect of the alternative material will be minimal. But on roofs with a high degree of visibility and patterning or texture, the substitution may seriously alter the architectural character of the building.

#### **Temporary Stabilization**

It may be necessary to carry out an immediate and temporary stabilization to prevent further deterioration until research can determine how the roof should be restored or rehabilitated, or until funding can be provided to do a proper job. A simple covering of exterior plywood or roll roofing might provide adequate protection, but any temporary covering should be applied with caution. One should be careful not to overload the roof structure, or to damage or destroy historic evidence or fabric that might be incorporated into a new roof at a later date. In this sense, repairs with caulking or bituminous patching compounds should be recognized as potentially harmful, since they are difficult to remove, and at their best, are very temporary.

#### **Precautions**

The architect or contractor should warn the owner of any precautions to be taken against the specific hazards in installing the roofing material. Soldering of sheet metals, for instance, can be a fire hazard, either from the open flame or from overheating and undected smoldering of the wooden substrate materials.

Thought should be given to the design and placement of any modern roof appurtenances such as plumbing stacks, air vents, or TV antennas. Consideration should begin with the placement of modern plumbing on the interior of the building, otherwise a series of vent stacks may pierce the roof membrane at various spots creating maintenance problems as well as aesthetic ones. Air handling units placed in the attic space will require vents which, in turn, require sensitive design. Incorporating these in unused chimneys has been very successful

in the past.

Whenever gutters and downspouts are needed that were not on the building historically, the additions should be made as unobtrusively as possible, perhaps by painting them out with a color compatible with the nearby wall or trim.

### Maintenance

Although a new roof can be an object of beauty, it will not be protective for long without proper maintenance. At least twice a year, the roof should be inspected against a checklist. All changes should be recorded and reported. Guidelines should be established for any foot traffic that may be required for the maintenance of the roof. Many roofing materials should not be walked on at all. For some—slate, asbestos, and clay tile—a self-supporting ladder might be hung over the ridge of the roof, or planks might be spanned across the roof surface. Such items should be specifically designed and kept in a storage space accessible to the roof. If exterior work ever requires hanging scaffolding, use caution to insure that the anchors do not penetrate, break, or wear the roofing surface, gutters, or flashing.

Any roofing system should be recognized as a membrane that is designed to be self-sustaining, but that can be easily damaged by intrusions such as pedestrian traffic or fallen tree branches. Certain items should be checked at specific times. For example, gutters tend to accumulate leaves and debris during the spring and fall and after heavy rain. Hidden gutter screening both at downspouts and over the full length of the gutter could help keep them clean. The surface material would require checking after a storm as well. Periodic checking of the underside of the roof from the attic after a storm or winter freezing may give early warning of any leaks. Generally, damage from water or ice is less likely on a roof that has good flashing on the outside and is well ventilated and insulated on the inside. Specific instructions for the maintenance of the different roof materials should be available from the architect or contractor.

### Summary

The essential ingredients for replacing and maintaining a historic roof are:

- Understanding the historic character of the building and being sympathetic to it.
- Careful examination and recording of the existing roof and any evidence of earlier roofs.
- Consideration of the historic craftsmanship and detailing and implementing them in the renewal wherever visible.
- Supervision of the roofers or maintenance personnel to assure preservation of historic fabric and proper understanding of the scope and detailing of the project.
- Consideration of alternative materials where the original cannot be used.
- Cyclical maintenance program to assure that the staff understands how to take care of the roof and of the particular trouble spots to safeguard.

With these points in mind, it will be possible to preserve the architectural character and maintain the physical integrity of the roofing on a historic building.

This Preservation Brief was written by Sarah M. Sweetser, Architectural Historian, Technical Preservation Services Division. Much of the technical information was based upon an unpublished report prepared under contract for this office by John G. and Diana S. Waite. Some of the historical information was from Charles E. Peterson, FAIA, "American Notes," *Journal of the Society of Architectural Historians*.

The illustrations for this brief not specifically credited are from the files of the Technical Preservation Services Division.

This publication was prepared pursuant to Executive Order 11593, "Protection and Enhancement of the Cultural Environment," which directs the Secretary of the Interior to "develop and make available to Federal agencies and State and local governments information concerning professional methods and tech-



Decorative features such as cupolas require extra maintenance. The flashing is carefully detailed to promote run-off, and the wooden ribbing must be kept well-painted. This roof surface, which was originally tin plate, has been replaced with lead-coated copper for maintenance purposes. (Lyndhurst, Tarrytown, New York, photo courtesy of the National Trust for Historic Preservation)

niques for preserving, improving, restoring and maintaining historic properties." The Brief has been developed under the technical editorship of Lee H. Nelson, AIA, Chief, Preservation Assistance Division, National Park Service, U.S. Department of the Interior, Washington, D.C. 20240. Comments on the usefulness of this information are welcome and can be sent to Mr. Nelson at the above address. This publication is not copyrighted and can be reproduced without penalty. Normal procedures for credit to the author and the National Park Service are appreciated. February 1978.

Additional readings on the subject of roofing are listed below.

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