



Beaufort County Historic Preservation Review Board Meeting

Chairman

Natalie Harvey

Vice Chairman

Katrina Epps

Board Members

Kathryn Mixon
Sally Murphy
Cheryl Steele
Katherine Pringle
Aileen LeBlanc

County Administrator

JOHN ROBINSON

Staff Support

ROBERT MERCHANT
KRISTEN FORBUS

Administration Building

Beaufort County Government
Robert Smalls Complex
100 Ribaut Road

Contact

Post Office Drawer 1228
Beaufort, South Carolina 29901-1228
(843) 255-2147
www.beaufortcountysc.gov

Historic Preservation Review Board Agenda

Thursday, January 18, 2024 at 1:00 PM

Executive Conference Room, Administration Building
Robert Smalls Complex, 100 Ribaut Road, Beaufort

1. CALL TO ORDER
2. PLEDGE OF ALLEGIANCE
3. FOIA – PUBLIC NOTIFICATION OF THIS MEETING HAS BEEN PUBLISHED, POSTED, AND DISTRIBUTED IN COMPLIANCE WITH THE SOUTH CAROLINA FREEDOM OF INFORMATION ACT
4. APPROVAL OF MINUTES – October 19, 2023
5. CITIZEN COMMENTS (*Comments are limited to 3 minutes.*)

ACTION ITEMS

6. CONSIDERATION OF CASTLE HILL PLANTATION ALTERATIONS
7. ADJOURNMENT

Minutes
Historic Preservation Review Board
October 19, 2023, 1:00 p.m.
Executive Conference Room, Administration Building

CALL TO ORDER:

Ms. Natalie Harvey, Chairman, called the meeting to order at 1:15 p.m.

MEMBERS PRESENT:

Natalie Harvey, Chairman
Katrina Epps, Vice Chairman
Aileen LeBlanc
Sally Murphy
Katherine Pringle
Cheryl Steele

MEMBERS ABSENT:

Kathryn Mixon

STAFF PRESENT:

Kristen Forbus, Beaufort County Planning and Zoning Long Range Planner

PUBLIC COMMENT (non-agenda items):

None.

MINUTES:

Ms. Sally Murphy asked to have the September 18, 2022 meeting minutes approved, Ms. Katherine Pringle seconded. The Board members unanimously approved the minutes as submitted.

Consideration of Haig's Point Oil House Alterations

Mr. Geoff Brunning presented the Haig Point Oil House and stated that he has consulted with the state and will be working with Jeff Fagan. Mr. Jeff Fagan presented the existing conditions which include a settled front corner, a limewash, interior cement mixture, and cedar shakes. He then presented the proposed work of excavating the front corner, a possible concrete footing strip, removal of brick that is to be saved and reinstalled with Daufuskie Island sand and lime wash, and removal and replacement of roof for an aluminum option. The new roof is to have a crimping style with staggered panels to look like the original. It is presumed that the original

probably was made of “turn roof” factory panels with a red lead coating on steal/tin. The door is not original and is to be replaced. The hardware, however, is the original and will be kept. Ms. Murphy asked more questions regarding the proposed limewash. Mr. Fagan explained that there will be limewash in just one area inside of the oil house to display what it would have looked like new and there would be a side without limewash. Mr. Brunning went on to state that there will be signage inside the Oil House to explain this further.

Discussion began regarding Parris Island’s Oil House renovation that occurred in 2005. Differences between the two oil houses and the proposed changes were noted.

Mr. Katrina Epps stated that any excavation findings during the renovation process is to be recorded with the State.

Ms. Murphy motioned to approve. Ms. Aileen LeBlanc commented that the applicant is to reference the study done to the Parris Island Oil House when performing investigative work.

Ms. Murphy suggested that maybe Parris Island’s case is not compatible. Mr. Fagan explained that he will review the research done for the Parris Island Oil House.

Ms. Murphy motioned to approve with the condition that the applicant reviews the Parris Island Oil House 2005 restoration and responds in writing to the HPRB that the proposed alterations are not contrary to the Parris Island Oil House review. Ms. LeBlanc seconded the motion. The motion passed unanimously.

Ms. Epps motioned to adjourn. Ms. LeBlance seconded the motion. The motion passed unanimously. Ms. Natalie Harvey adjourned the meeting at 1:54 PM.



CERTIFICATE OF APPROPRIATENESS APPLICATION

Beaufort County Planning and Zoning Multi Government Center 100 Ribaut Road, Beaufort, South Carolina, 29902 OFFICE (843) 255-2147

Staff Review, Board Review, Outcome:

OFFICE USE ONLY: Date Filed, Application #, Zoning District, BCAGHR Survey, SHC Survey

Schedule: The Historic Preservation Review Board (HPRB) typically meets the 3rd Thursday of each month at 1pm. More information may be found here - https://www.beaufortcountysc.gov/historic-preservation-board/

Submittal Requirements: All forms and information shall be submitted digitally. In addition to a complete application form, applicants shall submit the required items according to the checklists on the subsequent page.

Nature of the Request: Alteration/Addition, New Construction, Demolition/Relocation, Change after Certification

Pursuant to Section 6-29-1145 of the South Carolina Code of Laws, is this tract or parcel restricted by any recorded covenant that is contrary to, conflicts with, or prohibits the activity described in this application? If yes, please attach a copy of the covenants and restrictions to this application.

Applicant, Property, and Project Information

Applicant Name: Michael Frederick, Frederick + Frederick Architects
Applicant Address: 38 Meridian Road, Beaufort, SC 29907
Applicant E-mail: michael@f-farchitects.com Applicant Phone Number: 843-522-8422

Applicant Title: Homeowner, Tenant, Architect, Engineer, Developer

Owner (if other than the Applicant): Livia Basso

Owner Address: 331 Castle Hall Road, Yemassee, SC

Project Name: Castle Hill Plantation

Property Address: 331 Castle Hall Road, Yemassee, SC

Property Identification Number (Tax Map & Parcel Number): R700 006 000 0001 0000

Date Submitted: 1/3/2024

Certification of Correctness: I/we certify that the information in this application is correct.

Applicant's Signature, Date: 01/03/2024
Owner's Signature, Date: 01/03/2024

(The owner's signature is required if the applicant is not the owner.)



CERTIFICATE OF APPROPRIATENESS APPLICATION

Beaufort County Planning and Zoning
Multi Government Center
100 Ribaut Road, Beaufort, South Carolina, 29902
OFFICE (843) 255-2147

- Staff Review
- Board Review
- Outcome:

Project Name: **Castle Hill Plantation**

Property Size in Acres: **1784.00** Proposed Building Use: **Single family home**

Nature of Work (check all that apply):

- | | | |
|---|--|---|
| <input type="checkbox"/> New Construction | <input checked="" type="checkbox"/> Repair / Restoration | <input checked="" type="checkbox"/> Alterations / Additions |
| <input type="checkbox"/> Demolition | <input type="checkbox"/> Relocation | <input type="checkbox"/> Site Work |

Building Square Footage (if multiple buildings, please list each one and their square footage by floor):
6,825

Is this project an adaptive reuse project: Y N (See Section 5.10.80 for more information)

Are there existing buildings on the site? Y N if yes, will they remain?

Provide a complete description of proposed work, including the reason for the proposed work, site work, landscaping, and work on outbuildings:

Please see attached sheets for project description.

CONTACT INFORMATION

Attention: Rob Merchant, Planning & Zoning Director
Beaufort County Planning & Zoning Department
100 Ribaut Road, Beaufort, South Carolina 29902
E-Mail: robm@bcgov.net | Phone: (843) 255-2148 | Fax: (843) 255-9432

See Division 5.10 and Section 7.2.120 of the Beaufort County Community Development Code for complete information about Certificates of Appropriateness and Section 7.5.40 for complete information about the Historic Preservation Review Board | This form is also available online at www.beaufortcountysc.gov | updated September 2, 2022

REVISED SEPTEMBER 2, 2022

**HISTORIC PRESERVATION REVIEW
BOARD CERTIFICATE OF
APPROPRIATENESS**

Application Requirements

The Beaufort County Community Development Code applies to all projects. Division 5.10 details information about historic preservation standards in Beaufort County. Section 7.2.120 outlines the process for applying for a Certificate of Appropriateness.

Please use the checklist below to submit a complete application packet. Application packets are due by noon 20 business days prior to the scheduled meeting date. The Beaufort County Historic Preservation Review Board meets every third Thursday of the month.

NOTE 1: Applications will not be considered complete until all the required items have been submitted. Incomplete applications will not be placed on the agenda. Applications must be submitted by noon 20 business days prior to the scheduled meeting date.

NOTE 2: If a New Construction project also requires major demolition a separate application is required. (Refer to the Checklist for Demolition on last page).

NOTE 3: Applications are to be compiled in the order in which the applicant plans to present the application to the Board during the meeting.

Submission Requirements for New Construction and Alterations or Additions

Please submit DIGITAL FILES ONLY via email to: robm@bcgov.net

*Submittals should show existing and proposed conditions. Architectural drawings should show and clearly label existing conditions and the current proposed plans.

***This Application Requirements Checklist MUST be included in applications, with submitted items checked.**

- Existing Context:** Color photographs of the existing structure and the adjacent structures.
- Plat:** A plat indicating the tax map and parcel number, existing structure(s), setbacks, existing trees, and proposed construction footprint.
- Site Plan:** A site plan, to scale, indicating the location of the existing structure on the lot, proposed new structure, any site modifications (parking, paths, landscaping, tree removal, etc...), any new or existing mechanical equipment and screening area, and percentage of the total impervious paving. The plan should also include any connections to the public right of way (street and/or sidewalk), and grade elevations of the street and/or sidewalk and the proposed construction at the first floor.
- Design:** One or more drawings that convey the intent of the proposal. This may include floor plans, elevations, and building sections. They should display massing and scale of new construction and how it relates to the existing structure or surrounding context. For new construction and additions, this drawing should include a street elevation and/or a street section showing height and width relationships to existing adjacent buildings.
- 3-D Rendering:** A 3-D rendering, or physical scale model, showing the height, mass and scale of the proposed building in its context is required for all structures except single-family and 2-3 unit residential buildings.
- Pre-application Conference:** A Pre-application conference is required for all commercial new construction and substantial commercial renovation projects. The requirement for an Archeological Impact Assessment will be determined at this meeting
- Elevations:** Elevation drawings of all sides of the building, including heights – height above grade, floor-to-floor heights, eave height and ridge height (if applicable). For Alterations or Additions, existing conditions drawings of all four elevations are also required.
- Color Rendering:** A colored version of at least one elevation, noting proposed materials and colors.
- Additional on-site representation, such as a height story pole, and corner staking of the foundation, may be required.
- A Certified Arborist report may be required if specimen or grand trees are affected by the project.
- Details:** A typical wall section(s), window details, door details, eave details, porch details, and any other details characteristic to the building are required.
- Material Samples and Cut Sheets:** Applicant to submit cut sheets for all exterior building materials, to include roof and typical roof details, doors, windows, dryer vents, exterior lighting, etc. Samples of windows, lighting and building materials may be required at Staff's discretion.
- Final Materials List:** A final list, including colors, is required.

Submission Requirements for Change After Certification

Please submit DIGITAL FILES ONLY via email to: robm@bcgov.net

Change After Certification

- Copy of Certificate of Appropriateness** received with previous approval.
- Previously Approved Drawings:** Applicant to submit **complete** set of previously approved documents. Current proposed documents to be interlaced between previously approved documents and must be formatted to match previously approved. For example, previously approved elevations should be followed by current proposed. Drawings to be clearly noted as “Previously Approved” or “Current Proposed”, and all proposed revisions in the current proposed drawings must be clouded and noted.

Submission Requirements for Demolition or Relocation

Please submit DIGITAL FILES ONLY via email to: robm@bcgov.net

- A written statement describing the history of the architectural significance of the structure to be demolished, the structural or physical condition of the structure, and the proposed use of the site after demolition or relocation. The statement should also include any recent attempt(s) to sell the property or move the structure. A recent appraisal with comparisons is strongly encouraged. You may refer to *The Beaufort County Above Ground Resources Survey of 1997* or consult county staff or historic foundations for verification of the date of construction and historic information.
- Tax map or plat showing the location of the property
- Color photographs of all sides of the structure.
- Color photographs of adjoining properties.
- A written report by an engineer, regarding the structural condition of the building, is required if the reason for demolition is related to the structural integrity of the building.

Castle Hill Plantation



Presentation to

The Historic Preservation Review Board

Beaufort County Planning and Zoning Commission

January 3, 2024

Historical Context and Architectural History

Castle Hill Plantation was established by Dr. James Cuthbert sometime after his immigration to the Carolinas in 1737. The Cuthbert family retained ownership of the property until around 1838, when it was sold to Nathaniel Heyward. The plantation was sold again in 1849 to Colonel John Screven, who died in 1903. The house of these 19th Century inhabitants was lost to fire in the early 1900's and the design of that original building is unknown. (Cuthbert & Hoffius, 2009)

The property consists of 1,784 acres and is located in Yemassee, SC. There is a large pond, wetlands and old rice fields, and many native plants and animals.

The property was purchased in 1929 by Blair S. Williams, a New York stock broker. Mr. Williams hired architect, Willis Irvin, and the house was built in 1935. (Cuthbert & Hoffius, 2009)

Willis Irvin, of Augusta, Georgia designed upscale residences throughout the lowcountry from the late 1910's through 1940's. A promotional catalog for his work espoused his goal of creating "residential work in that style characteristic of the Old South." His colonial revival style included "monumental porticos, an extensive vocabulary of classical ornamentation, and sumptuous interiors...a mythical conception of the southern plantation that was grander and more lavish than anything in the 'Old South.'" (SCIWAY, 2019) The Williams, as wealthy northerners building the house at Castle Hill as a winter residence, were typical of Irvin's clientele. (SCIWAY, 2019). The house, however, was less typical of Irvin, as it lacks the traditional columned, double porch at the entryway and the classical ornamentation is more minimal.



Castle Hill Plantation house and owner Joseph T. Wearn, with superintendent Dave Gamble. Wearn bought the property in the 1950's or 60's and owned it until his death in 1984.

Most of Irvin's colonial revivalist residences featured large porticos and ornate details such as featured in these examples of his work.



C.K. Dunlap House, Hartsville, Darlington County SC, 1934.



Evans- Russell House, Spartanburg, SC, ca. 1901

Sources:

Cuthbert, Robert B. & Hoffius, Stephen G. (Eds.). (2009). *Northern Money, Southern Land: The Lowcountry Plantation Sketches of Chlotilde R. Martin*. The University of South Carolina Press.

SCIWAY. (2019). *Castle Hill Plantation – Beaufort County*. South Carolina Plantations. <https://south-carolina-plantations.com/beaufort/castle-hill.html>

Vivian, Daniel J. (2016). *Irvin, Willis*. South Carolina Encyclopedia. The University of South Carolina Press.

Raymond and Livia Basso acquired Castle Hill Plantation in 1985. They constructed a kitchen addition in 1996. In 2019, a fire started by a power washing equipment engulfed the house and required more than 2 dozen firefighter to extinguish. The damage to the house, from the fire, smoke, water damage, mold & mildew, was extensive. The roof was covered by tarps to patch the network of holes, the framing was charred and destroyed in many places, the HVAC, plumbing & electrical systems were destroyed, the plaster was waterlogged and full of mold. Appraiser Ann Valverde inspected the furnishings and interiors, calling the contents of the home a total loss.



Existing Context Photographs:





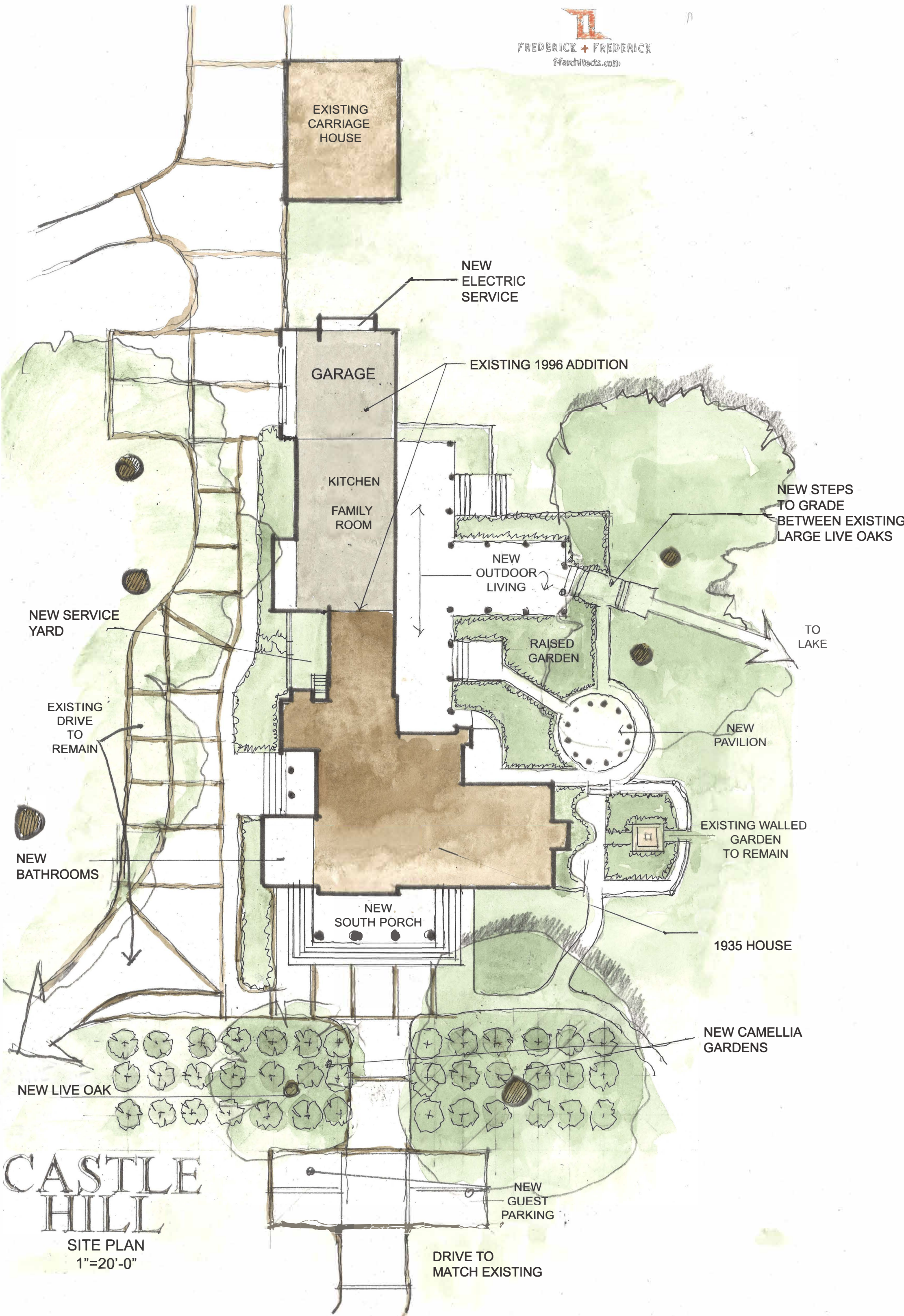
21st Century Renovations

Frederick and Frederick Architects drew plans for the initial phase of Ms. Basso's project, which was a full rehabilitation of the house to its pre-fire condition. To date, the damaged materials have been removed from the house, and the structural framing and roof have been replaced. The house, in its stripped-down state, sits ready for Ms. Basso's thoughtful renovation plans.

The renovation seeks to honor the long history of the house and its architectural integrity. The proposed porches are reminiscent of the grand porticos typical of Willis Irvin's style. The exterior changes to the 1996 kitchen addition will contextualize this portion of the house in a way that ties it to the original structure. The covered outdoor living room will enhance Ms. Basso's enjoyment of the pond view and the great natural beauty of the place. The pond and surrounding wetlands are overgrown and choking with invasive plants, Ms. Basso plans to clean it all up and restore the pond environment. A new brick, wrought iron, and wood gate will provide a marked entrance to the property, the design is shown in the attached set of drawings.

New bathrooms and the new kitchen will be updated to the 21st century standards. The HVAC system will be energy efficient. All new windows (Andersen A-series traditional double-hung) will also be energy efficient and visually appropriate. These upgrades will contribute to Ms. Basso's comfort and safety as a full time resident of the house.

The following watercolor drawings are provided to convey the design intent, and more detailed hardline drawings are attached with this submittal, as well. The improvements to the amenities and aesthetics will enable the house at Castle Hill to be preserved for generations to come.



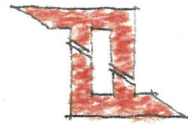
CASTLE HILL
SITE PLAN
1"=20'-0"

DRIVE TO MATCH EXISTING



SOUTH ELEVATION
1/8"=1'-0"

CASTLE HILL



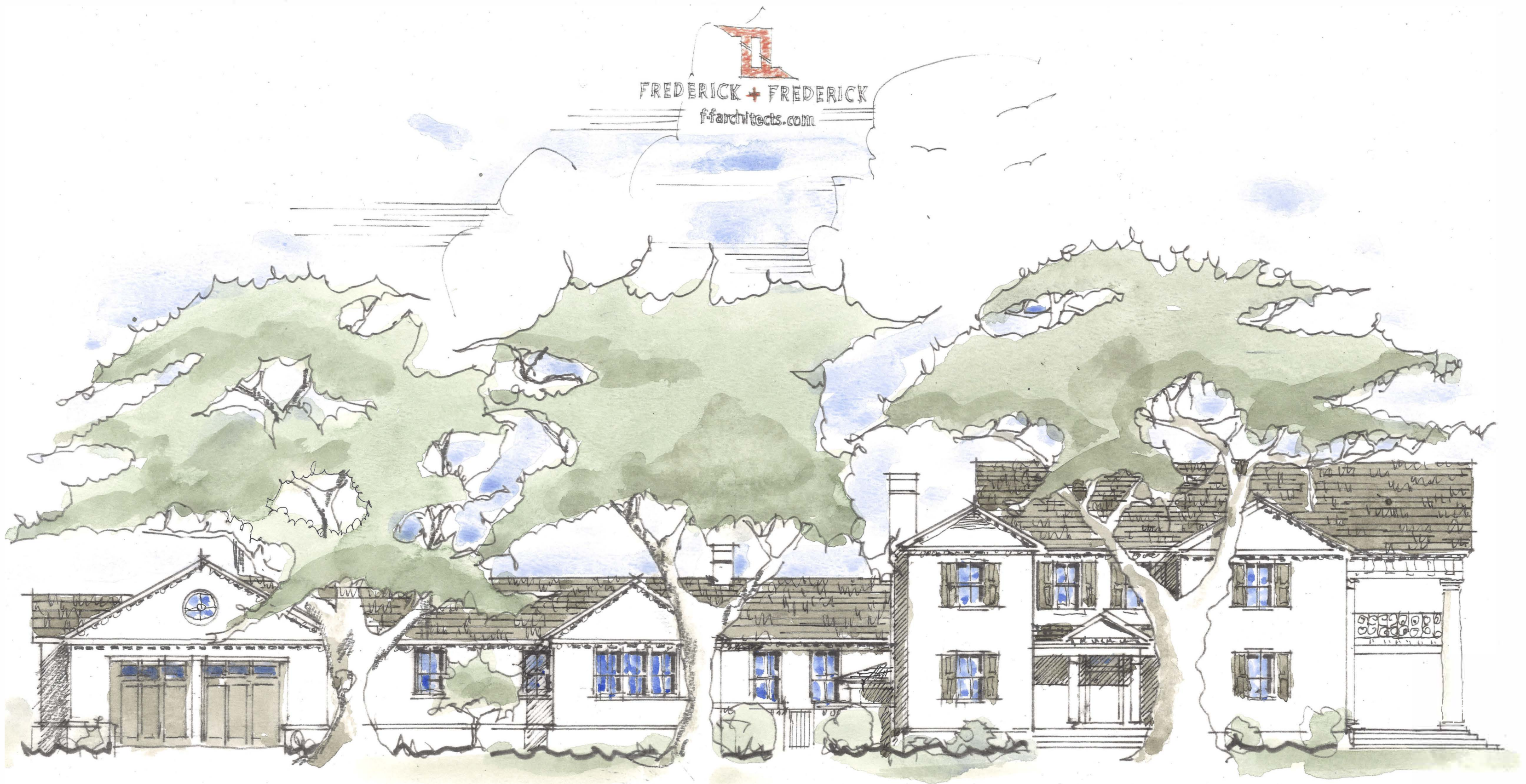
FREDERICK + FREDERICK
ffarchitects.com



NORTHEAST VIEW

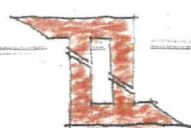
CASTLE
HILL

FREDERICK + FREDERICK
ffarchitects.com



WEST ELEVATION
1"=10'-0"

CASTLE
HILL



FREDERICK + FREDERICK
f-farchitects.com



EAST ELEVATION
1"=10'-0"

CASTLE HILL

New Materials List:

Roof:

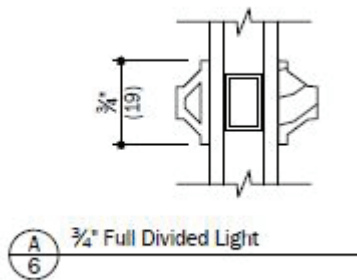
The roof has been re-built using salvaged and new color matched slate shingles over a new wood I framed roof structure, 1X6 sheathing, 30# roofing felt, and copper flashings

Doors:

Andersen A Series
Weiland Lift & Slide doors
Finish color: White

Windows:

Andersen A Series, double hung, traditional, with 3/4" full divided light
Finish color: white



Paving:

Carmel Travertine, Ashlar pattern, 12x12, 16x16, 12x24



New Exterior Light Fixures:



Bevolo Williamsburg Original Bracket
Lantern
22" x 10.3" x 9"



B-K Lighting Mini Drivestar Flush recessed
in-grade LED, Old Copper finish



Nora Lighting, 4" Recessed LED,
Bronze finish



WILLIAMSBURG

ORIGINAL BRACKET

The Williamsburg fixture was originally produced from a colonial design. We often use this fixture in both primary and secondary areas. The Williamsburg naturally complements the French Quarter lantern and is often paired with this fixture. The Williamsburg can be purchased with or without the stack (pictured without stack). The bracket mount Williamsburg is available in natural gas, liquid propane, and electric. *10" & 12" are not available in gas.

Standard Lantern Sizes

Height	Width	Depth
10.0"	7.3"	6.0"
12.0"	8.8"	7.5"
14.0"	10.3"	9.0"
15.0"	7.3"	6.0"
16.0"	10.3"	9.0"
18.0"	8.8"	7.5"
22.0"	10.3"	9.0"

NLCBC-469

4" Cobalt LED Adjustable Retrofit

Source: 12W LED

Up to 1000lm

PRODUCT DESCRIPTION

Cobalt retrofit series is cULus classified for use in existing IC or Non-IC housings manufactured by Nora and others. Patented adjustable mechanism rotates and adjusts while never exposing an opening or breaking the ceiling plane. Retrofit luminaires deliver up to 1000 lumens in various color temperature options. Cobalt series integrates the latest COB LED technology, giving bright spectacular light output and low power consumption.

FEATURES

- Retrofit existing 4" recessed housings
- Field adjustable beam spreads (flood installed, spot and narrow flood included)
- Up to 1000 lumen output
- 2700K, 3000K, 3500K or 4000K @ 90+ CRI
- COB LED Technology
- Integral dimmable driver
- Includes medium base socket adapter
- ENERGY STAR certified

SPECIFICATION

Trim: Aluminum spun reflector with deep set diffused lens for excellent visual comfort while providing high lumen output. Adjustable design rotates and adjusts while never exposing an opening or breaking the ceiling plane. Reflector places the LED optics deeper than the standard increasing the visual comfort. Additionally the deep cones reduces board images when off.

Adjustability: 358° rotate and 30° tilt

Optics: Spot (included), Medium (included) and Flood optic (installed)

Lens: Frosted Lens (installed) and Semi-Frosted Lens (included)

ELECTRICAL

Input Voltage: 120V

Lumens / Wattage: Up to 1000lm / 12W

(Delivered lumens will vary depending on CCT, optic & finish)

Color Temperature: 2700K, 3000K, 3500K or 4000K

Color Rendering Index: 90+ CRI

Beam Spread: 48° Spot, 69° Narrow Flood, 99° Flood

Operating Temperature: 0°C to 25°C

Life Expectancy: 54,000 Hours @ L70

Dimming: Triac, ELV or 0-10V (must specify)

Click Here or check complete dimmer list at

www.NoraLighting.com in the "Compatibility" page under "Resources" tab

COMPATIBLE HOUSINGS

Cobalt retrofit reflectors are compatible with most 4" IC and Non-IC housings by Nora and others.

Fire Box

[NFBIC-4LMRATA*](#)

ICAT Dedicated LED

[NFBIC-4LMRATA/4W](#)

ICAT Dedicated LED for LE4

[NFBIC-4INCATA](#)

ICAT Line Voltage

New Construction

[NHIC-4LMRAT*](#)

ICAT Dedicated LED

[NHIC-4LMRAT/4W*](#)

ICAT Dedicated LED for LE4

[NHIC-4LMRAT/EM*](#)

ICAT Dedicated LED for EM

[NHIC-4LMRAT/6WEM*](#)

ICAT Dedicated LED for EM+LE4

[NHIC-4LMRAT/277*](#)

ICAT Dedicated LED, 277V

(includes step-down transformer)

[NHICCP-4LMRAT*](#)

Chicago Plenum Dedicated LED

[NSIC-4010AT](#)

ICAT Line Voltage

[NS-4010AT](#)

AT Line Voltage

[NHIC-4G24AT](#)

ICAT GU24

Remodel

[NHRIC-4LMRAT*](#)

ICAT Dedicated LED

[NSRIC-4040AT](#)

ICAT Line Voltage

[NSR-4040AT](#)

AT Line Voltage

[NHRIC-4G24AT](#)

ICAT GU24

* Nora Dedicated LED housings are cULus listed for use only with Nora LED Retrofits.

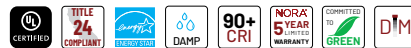
Retrofit: Cobalt retrofit series includes medium base screw-socket adapter ([NRA-21ISM](#)) for retrofitting into existing medium base downlight housings. GU24 socket adapter is available for use with GU24 housings, must specify [NRA-212SM](#).

ACCESSORIES

NLCBC-469TIR: Premium TIR optics are available in 25° or 45°, must specify ring finish.

LABELS AND LISTINGS

- cULus classified for Damp Location when used with compatible housing
- Suitable for Type IC and Non-IC
- Certified to the high efficacy requirements of California Title 24 JA8-2022
- ENERGY STAR certified (not BB or BZBZ finish)
- RoHs Compliant
- 5-Year Limited Warranty



Type

Project

Catalog No.

Notes

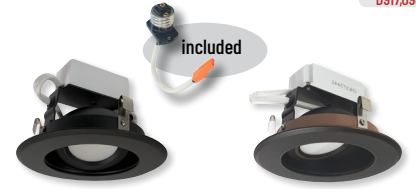
Performance Data

Part Number	Lumens	CCT
NLCBC-46927XWW	881lm	2700K
NLCBC-46930XWW	970lm	3000K
NLCBC-46935XWW	972lm	3500K
NLCBC-46940XWW	1011lm	4000K

Delivered lumens will vary depending on CCT, optic and finish

PRODUCT IMAGES & DIMENSIONS

PATENT No.: D917,090S



BB
Black Reflector
Black Flange

BZBZ
Bronze Reflector
Bronze Flange



HZN
Haze Reflector
Natural Metal Flange



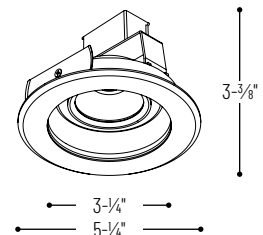
HZW
Haze Reflector
White Flange



MPW
Matte Powder White Reflector
Matte Powder White Flange



WW
White Reflector
White Flange



4" Cobalt LED Adjustable Retrofit

Color Temperature	Reflector Finish / Flange Finish	Dimming & Emergency
NLCBC-46927X = 2700K	BB = Black Reflector / Black Flange	(blank) = 120V Triac/ELV
NLCBC-46930X = 3000K	BZBZ = Bronze Reflector/ Bronze Flange	EM = Remote Emergency (requires Nora EM housing)
NLCBC-46935X = 3500K	HZN = Haze Reflector/ Natural Metal Flange	
NLCBC-46940X = 4000K	HZW = Haze Reflector / White Flange	
	MPW = Matte Powder White Reflector / Matte Powder White Flange	
	WW = White Reflector / White Flange	
NLCBC-46930X = 3000K	HZW = Haze Reflector / White	LE4 = 120V 0-10V/Triac/ELV
NLCBC-46935X = 3500K	WW = White Reflector / White	277V 0-10V (requires Nora 4W housing)
		LE4EM = LE4 w/ Remote Emergency (requires Nora 6WEM housing)

Optional Accessories

Description	Optic	Ring Finish
NLCBC-469TIR = TIR optic	25 = 25° 45 = 45°	B = Black BZ = Bronze HZ = Haze MPW = Matte Powder White WW = White / White

NRA-21ISM = Medium base screw-in socket (included)
NRA-212SM = Socket adapter for use with GU24 housings

Example: **NLCBC-46935XWW** = 4" Cobalt LED Adjustable Retrofit, 3500K, White Reflector / White Flange, 120V input; Triac / ELV dimming

PHOTOMETRICS

4" Cobalt LED Adjustable Retrofit

Type

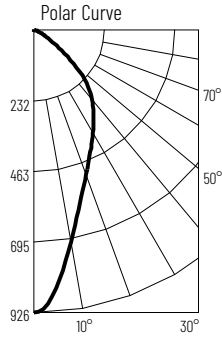
Project

Catalog No.

Notes

Test Information

Test Number: NTR11157
 Part Number: NLCBC-4694OSWW
 Beam Spread: Spot
 Lumens: 1011lm
 Wattage: 11.4W
 Efficacy: 89lpw
 CCT / CRI: 4000K / 90 CRI
 Spacing Criteria (0°-180): 0.66
 Spacing Criteria (90°-270): 0.66



Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	57.9fc	3'-5"
6'	25.7fc	5'-1"
8'	14.5fc	6'-10"
10'	9.3fc	8'-6"
12'	6.4fc	10'-4"

Zonal Lumen Summary

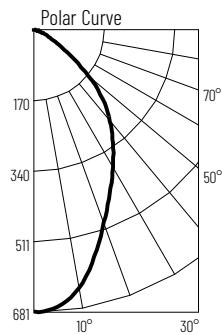
Zone	Lumens	% Luminaire
0-30	446	44.1
0-40	661	65.4
0-60	842	93.2
0-90	1004	99.4
90-180	6	0.6
0-180	1011	100

Candela Table

Vertical Angles	Candela
0	926
5	850
15	588
25	441
35	343
45	246

Test Information

Test Number: NTR11156
 Part Number: NLCBC-4694OMWW
 Beam Spread: Narrow Flood
 Lumens: 988lm
 Wattage: 11.5W
 Efficacy: 86lpw
 CCT / CRI: 4000K / 90 CRI
 Spacing Criteria (0°-180): 0.9
 Spacing Criteria (90°-270): 0.92



Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	42.4fc	5'-6"
6'	18.9fc	8'-4"
8'	10.6fc	11'
10'	6.8fc	13'-10"
12'	4.7fc	16'-6"

Zonal Lumen Summary

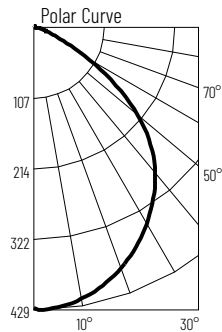
Zone	Lumens	% Luminaire
0-30	424	42.9
0-40	634	64.2
0-60	916	92.7
0-90	981	99.2
90-180	7	0.8
0-180	988	100

Candela Table

Vertical Angles	Candela
0	679
5	670
15	566
25	437
35	335
45	239

Test Information

Test Number: NTR11155
 Part Number: NLCBC-4694OFWW
 Beam Spread: Flood
 Lumens: 943lm
 Wattage: 11.5W
 Efficacy: 82lpw
 CCT / CRI: 4000K / 90 CRI
 Spacing Criteria (0°-180): 1.2
 Spacing Criteria (90°-270): 1.22



Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	26.6fc	9'-2"
6'	11.8fc	13'-10"
8'	6.7fc	18'-5"
10'	4.3fc	23'-1"
12'	3fc	27'-8"

Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	323	34.3
0-40	520	55.2
0-60	848	89.9
0-90	935	99.2
90-180	8	0.8
0-180	943	100

Candela Table

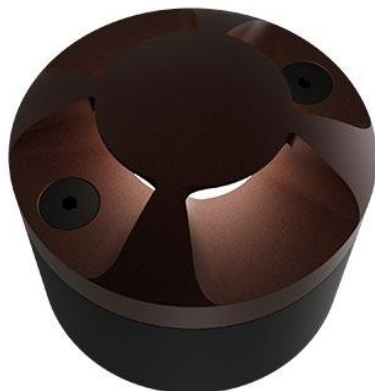
Vertical Angles	Candela
0	426
5	425
15	404
25	366
35	315
45	251

Lumen Output Multipliers

Color Temperature: 2700K (0.87), 3000K (0.96), 3500K (0.96), 4000K (1.00)

DATE: _____ PROJECT: _____ TYPE: _____

CATALOG NUMBER LOGIC:



**Use with remote 12VAC Magnetic Transformer.*

CATALOG NUMBER LOGIC

Example: MD - LED - e71 - F - SAP - 1 - A

MATERIAL

(Blank) - Aluminum B - Brass S - Stainless Steel

SERIES

MD - Mini-Micro DriveStar

SOURCE

LED - Solid State System with Integral Non-Dimming Driver*

LED TYPE

e70 - 3W LED/2700K e85 - 3W LED/2700K 90 CRI

e71 - 3W LED/3000K e86 - 3W LED/3000K 90 CRI

e72 - 3W LED/4000K e87 - 3W LED/3500K 80 CRI

e73 - 3W LED/Amber

INSTALLATION

F - Flush

FINISH (See page 2 for full-color swatches)

Standard Finishes (BZP, BZW, BLP, BLW, WHP, WHW, SAP, VER)

Premium Finish (ABP, AMG, AQW, BCM, BGE, BPP, CAP, CMG, CRM, HUG, NBP, OCP, RMG, SDS, SMG, TXF, WCP, WIR)

Also available in RAL Finishes

Brass Finishes (MAC, POL, MIT)

Stainless Steel Finishes (MAC, POL)

OPTICAL OPENINGS

1 - Single

2 - 2 @ 180°

4 - 4 @ 90°

FACEPLATE STYLE

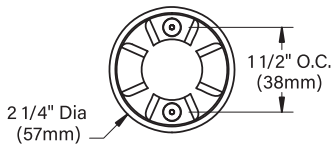
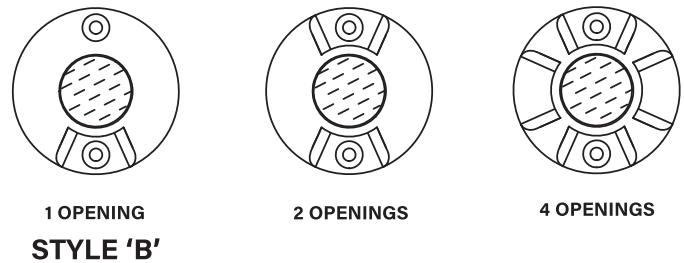
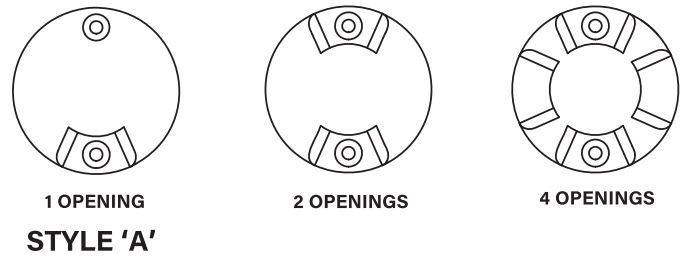
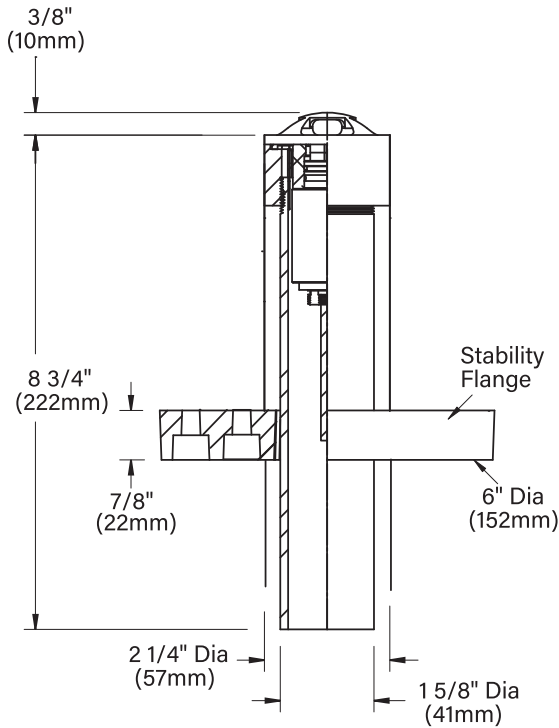
A - Solid

B - Round Accent

MOD OPTION

25 - 25 Ft Leads

DATE: _____ PROJECT: _____ TYPE: _____



SURFACE MOUNT

STANDARD FINISHES



PREMIUM FINISHES






[Click Here](#) to view larger, full-color swatches of all available finishes on our website.

DATE:	PROJECT:	TYPE:
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ACCESSORIES (Configure separately)

SPECIFICATIONS

ELECTRICAL	WATTAGE	3W LED
	WIRING	Teflon® coated, 18AWG, 600V, 250° C rated and certified to UL 1659 standard. Anti-Siphon Valve (ASV™) prevents "wicking" through conductor insulation. Provided with 5' fixture leads.
	TRANSFORMER	For use with 12VAC remote magnetic transformers only. B-K Lighting cannot guarantee performance with third party manufacturers' transformers.
PHYSICAL	MATERIALS	Furnished in copper-free aluminum (6061-T6), brass (360) or stainless steel (304).
	BODY	Unibody design with enclosed, water-proof wireway and integral heat sink is fully machined from solid billet.
	HOUSING	Fixture provided with 1-5/8" dia., 80 PVC housing for direct burial into soil or concrete. 6" dia., molded stability flange projects into substrate to simplify installation and reinforce housing stability.
	FACEPLATE	Machined from solid, copper-free aluminum, brass or stainless steel. Available with one, two, or four optical openings. Countersunk holes provide for flush hardware mounting.
	LENS	Shock-resistant, tempered, frosted acrylic lens is factory adhered to faceplate and provides hermetically sealed optical compartment.
	LED	Integrated solid state system and modular design with electrical quick disconnects permit field upgrade and maintenance. High power, forward throw source complies with ANSI C78.377 binning requirements and exceeds ENERGY STAR® lumen maintenance requirements. LM-80 certified components. Integral, non-dim. constant current driver. 12VAC/VDC input. 50/60Hz. Proprietary input control scheme achieves power factor correction and eliminates inrush current. Output, over-voltage, open-circuit, and short circuit protected. Inrush current limited to 250mA.
	INSTALLATION	Features integral concrete pour collar (CPC). Top edge of collar to be installed flush with finished grade. Collar material and finish to match faceplate. Two (2) threaded holes for faceplate installation. Faceplate style A is suitable for walk-over and drive-over applications up to 35,000 lbs. GVW. Fully machined copper-free aluminum installation collar. Provided with hard-coat (Type III) black anodize finish for maximum corrosion resistance.
	HARDWARE	Tamper-resistant, stainless steel hardware. Faceplate screws are black oxide treated for additional corrosion resistance.
	FINISH	StarGuard, our 15-stage chromate-free process cleans and conversion coats aluminum components prior to application of Class 'A' TGIC polyester powder coating and is RoHS compliant.
	WARRANTY	5-year limited warranty.
CERTIFICATION & LISTING	UL Listed. Certified to CAN/CSA/ANSI Standards. ADA compliant. IP68 Rated. Made in the USA with sustainable processes.	
  		

B-K LIGHTING
MADE IN THE USA

 559.438.5800 | INFO@BKLIGHTING.COM | BKLIGHTING.COM

LAMP & DRIVER DATA (e70, e71, e72, e73)

DATE: _____ PROJECT: _____ TYPE: _____

DRIVER DATA	Input Volts	InRush Current	Operating Current	Operation Ambient Temperature
		12VAC/DC 50/60Hz	<250mA (non-dimmed)	500mA

LM79 DATA				L70 DATA	OPTICAL DATA			
BK No.	CCT (Typ.)	CRI (Typ.)	Input Watts (Typ.)	Minimum Rated Life (hrs.) 70% of initial lumens (L ₇₀)	No. of Windows	Beam Type	Angle	Delivered Lumens
e70	2700K	80	3	50,000	1	Radial	360°h x 270°v	14
					2	Radial	360°h x 270°v	23
					4	Radial	360°h x 270°v	40
e71	3000K	80	3	50,000	1	Radial	360°h x 270°v	15
					2	Radial	360°h x 270°v	24
					4	Radial	360°h x 270°v	42
e72	4000K	80	3	50,000	1	Radial	360°h x 270°v	17
					2	Radial	360°h x 270°v	27
					4	Radial	360°h x 270°v	48
e73	Amber (590nm)	~	3	50,000	~	Radial	360°h x 270°v	~

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