



**QUESTIONS?**  
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Town of Chapel Hill  
Office of Planning and Sustainability  
Development Services 919-969-5066  
[planning@townofchapelhill.org](mailto:planning@townofchapelhill.org)

<b>Chapel Hill Historic District</b> <b>Certificate of Appropriateness Application</b>	Project:	<b>19-055</b>
<b>Project Description: "Senlac" was built in 1843 by William Horn Battle, founder of the UNC Law School. Battle's son, Kemp, later lived in the home while serving as president of the University. It remained a single-family residence until 1964, when it was purchased by the Baptist State Convention of NC. The house underwent an addition and renovation, sometime after 1949. It was likely to have been done by the Baptist Convention in the 1960's, and the house was used as the Baptist Campus Ministry facility for many decades. The building was sold in 2015 to the North Carolina Study Center, a non-denominational Christian ministry center and place of worship.</b>	Permit:	
	STAFF REVIEW	
	<input checked="" type="checkbox"/> Application complete and accepted	
	<input type="checkbox"/> Application not complete and returned with a notation of deficiencies	
<b>Instructions:</b> Submit one paper copy and a digital copy of all application materials collated in one file (pdf preferred) <b>Deadlines:</b> Applications are due by the close of business 30 calendar days prior to the scheduled meeting date. <b>Note:</b> Only complete applications may be accepted for Certificate of Appropriateness review. Applications that are not complete will be returned with a notation of deficiencies.	<b>BY:</b>  <b>DATE: Anya Grahn, 8/12/2019</b>  <b>Amendment submitted 9/13/2021</b>	



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#### A: Property Information

Property Address:	203 Battle Lane	Parcel ID Number:	9788672508
Property Owner(s):	Carolina Christian Study Center Inc.	Email:	madison@ncstudycenter.org
	Contact Person: Madison Perry, Executive Director		
Property Owner Address: 203 Battle Lane			
City:	Chapel Hill	State:	NC
Zip:	27705	Phone:	(919) 391-8394
Historic District: <input type="checkbox"/> Cameron-McCauley <input checked="" type="checkbox"/> Franklin-Rosemary <input type="checkbox"/> Gimghoul			Zoning District: R-2, HD-1

#### B: Applicant Information

Applicant: Bret Horton	Role (owner, architect, other):	Architect	
Address (if different from above): 1308 Broad Street			
City:	Durham	State:	NC
Zip:	27705	Phone:	(919) 619-2258
Email: bret@brethorton.com			

#### C. Application Type (check all boxes that apply)

☐ **Minor Work** Exterior works that do not involve any substantial alterations, and do not involve additions or removals that could impair the integrity of the property and/or the district as a whole. See [Design Guidelines](#) (p. 69) for a list of minor works.

☒ **Historic District Commission Review** Includes all exterior changes to structures and features other than minor works

<input checked="" type="checkbox"/> <b>Site-work only (walkways, fencing, walls, etc.)</b>	<input type="checkbox"/> <b>After-the-fact application</b> (for unauthorized work already performed).
<input type="checkbox"/> <b>Restoration or alteration</b>	<input type="checkbox"/> <b>Demolition or moving of a site feature.</b>
<input checked="" type="checkbox"/> <b>New construction or additions</b>	<input type="checkbox"/> <b>Request for review of new application after previous denial</b>
<input type="checkbox"/> <b>Sign</b>	

#### D. Basic information about size, scale, and lot placement.

Provide measurements in feet and square feet where applicable. Where possible, please provide accurate measurements from a licensed surveyor, architect, engineer, etc. If exact measurements are not available, please provide estimated information. Current estimated information about lots and buildings can be found on the [Orange County Real Estate Data](#) website. Information about lot placement can be found on the [Chapel Hill](#) and [Orange County Interactive GIS](#) portals.



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Zoning District:	Minimum setbacks			Maximum heights			Lot size
	Street	Interior	Solar	Primary	Secondary		
Required by zoning	26'	11'	13'	29'	50'		
Proposed	Senlac: 58.2', Battle: 197.0', S. Bound ary: 130.8'	44.4'	64.1'	23'-1"	30'-10"		
	Existing	Change +/-	Total	Total Floor Area Ratio			
Floor Area (main structure)	5,856	+230	6,086	Existing	Proposed	ISA/NLA ratio	
Floor Area (all other)	42	+152	194	0.061	0.065	Existing	Proposed
Impervious Surface Area (ISA)	19,050	+ 2,394	21,444			0.22	0.24
New Land Disturbance			18,762				

#### E: Applicable Design Guidelines

The Town's [Design Guidelines for the Chapel Hill Historic Districts](#) are integral to the application and review process. These guidelines supplement the required review criteria for Certificate of Appropriateness applications (provided in [Section 3.6.2\(e\)\(4\)](#) of the Land Use Management Ordinance) by providing detailed, practical considerations for how to make changes to properties while preserving the special character of their Historic District context. Please review the Design Guidelines and consider their applicability to your proposed project. (Attach additional sheets, as necessary.)

Section/Page	Topic	Brief description of the applicable aspect of your proposal
		Please see attached sheets.



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F. Checklist of Application Materials					
Attach the required elements in the order indicated.	ATTACHED? TO BE COMPLETED BY APPLICANT		TO BE COMPLETED BY TOWN STAFF		
	YES	N/A	YES	N/A	NO
<b>1. Written description of physical changes proposed.</b> Describe clearly and in detail the physical changes you are proposing to make. Identify the materials to be used (siding, windows, trim, roofing, pavements, decking, fencing, light fixtures, etc.), specify their dimensions, and provide names of manufacturers, model numbers, and specifications where applicable.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>2. History, context, and character information.</b> Please include a summary of what information you have relied on to understand the relevant character and history of the district and subject property—and briefly summarize that information. At a minimum, include: <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Current property information for the lot and all structures, including Building Sketches and Building Details, from <a href="#">Orange County Real Estate Data</a>.</li> <li><input checked="" type="checkbox"/> The entry of your property on the most recent inventory of historic resources in the relevant National Register for Historic Places filing, available via the NC State Historic Preservation Office website: for McCauley-Cameron see <a href="#">West Chapel Hill</a>, for Franklin-Rosemary see <a href="#">Chapel Hill Historic District</a>, for Gimghoul see <a href="#">Gimghoul</a>. (If yours is one of the few properties in McCauley-Cameron or Franklin-Rosemary that has not yet been inventoried, please indicate that.)</li> </ul>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>3. Justification of appropriateness.</b> Attach an annotated statement explaining how the proposed change(s) meets the following standards of appropriateness that the Commission considers in making findings of fact indicating the extent to which the application is or is not congruous with the historic aspects of the historic district. If a standard is not applicable, type “not applicable”. <ul style="list-style-type: none"> <li>A. The height of the building in relation to the average height of the nearest adjacent and opposite buildings.</li> <li>B. The setback and placement on lot of the building in relation to the average setback and placement of the nearest adjacent and opposite buildings.</li> <li>C. Exterior construction materials, including texture and pattern.</li> <li>D. Architectural detailing, such as lintels, cornices, brick bond, and foundation materials.</li> <li>E. Roof shapes, forms, and materials.</li> <li>F. Proportion, shape, positioning and location, pattern, and size of any elements of fenestration.</li> <li>G. General form and proportions of buildings and structures.</li> <li>H. Appurtenant fixtures and other features such as lighting.</li> <li>I. Structural conditions and soundness.</li> </ul>	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



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J. Architectural scale.					
4. <b>Photographs</b> of existing conditions are required. Minimum image size 4" x 6" as printed or the digital equivalent. Maximum 2 images per page.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. <b>Site Plan Set</b> showing existing and proposed conditions. (Min. scale: 1 in. = 20 ft.)  <input checked="" type="checkbox"/> Site plans must show the relationships between, and dimensions of, existing and proposed buildings, additions, sidewalks, walls, fences, driveways, and/or other structures on the property, as well as property lines and applicable zoning setbacks.  <input checked="" type="checkbox"/> Include both written and drawn scales and show accurate measurements. You may also use a copy of a survey with surveyor's seal deleted. Revise the copy as needed to show existing conditions and your proposed work.  <input checked="" type="checkbox"/> Indicate the area of all structural footprints (existing and proposed) in square feet; also, indicate lot size in square feet.	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. <b>Elevation Drawings</b> showing existing structural facades and proposed changes. Drawings should be submitted as 11" x 17" or 8-1/2" x 11" reductions of full-size drawings. All details should be reasonably legible. Photographs are okay for facades with no changes.  <input checked="" type="checkbox"/> Elevation drawings showing all proposed changes above current grade from front, back, and both sides.  <input checked="" type="checkbox"/> Include scale bar, written scale, and label major dimensions (including width of structures and heights from finished grade to fascia/eaves and heights to top of roofs).  <input checked="" type="checkbox"/> Label materials to be used (roofing, siding, windows, trim, light fixtures, etc.)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. <b>Information about context</b> (required for all construction of new structures, proposed impervious surfaces greater than 1500 SF, additions greater than 150 SF, and/or proposed land disturbance greater than 5000 SF.) Detailed information about lots and structures can be found on the <a href="#">Orange County Real Estate Data</a> website; information about lot placement can be found on the <a href="#">Chapel Hill</a> and <a href="#">Orange County</a> GIS portals.  For each of the nearest adjacent and opposite properties, provide:  <input checked="" type="checkbox"/> The height of each building (if an estimate, indicate that).  <input checked="" type="checkbox"/> The setbacks and lots placement of each building (an image from the Town GIS database, including scale, is sufficient).  <input checked="" type="checkbox"/> The size of each lot (net land area in square feet).  <input checked="" type="checkbox"/> The size of all buildings on the nearest adjacent and opposite properties, including building footprint areas, Floor Areas (in square feet), and Floor Area Ratios. Provide current figures from <a href="#">Orange County Real Estate Data</a> ; indicate any corrections for accuracy you believe necessary and your basis for doing so.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. <b>Demolition/Relocation Information</b> (required only if demolition or relocation of a feature is proposed).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



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<input type="checkbox"/> Provide a written description of architectural features, additions, remodeling, and any alterations to the structure(s). Make note of any outbuildings on the site plan of the property.					
<input type="checkbox"/> Provide a history of the structure, giving the construction date and architect or carpenter, briefly noting any significant events, persons and/or families associated with the property. Provide current exterior photographs of the property (4" x 6" as printed or the digital equivalent). If information is unknown, please provide a summary of sources consulted.					
<input type="checkbox"/> If an argument about structural soundness is being made, attach a signed and sealed report from a professional engineer.					
<input type="checkbox"/> As necessary, attach a statement explaining how a delay in demolition would cause the property owner to suffer extreme hardship or be permanently deprived of all beneficial use or return from such property by virtue of the delay.					
<input type="checkbox"/> Provide any records about the structure to be demolished.					
<b>9.</b> Mailing notification fee per <a href="#">Planning &amp; Sustainability Fee Schedule</a> . For a list of addresses, please refer to the Town's <a href="#">Development Notification Tool</a> .	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>10.</b> Certificate of Appropriateness fee per <a href="#">Planning &amp; Sustainability Fee Schedule</a>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>





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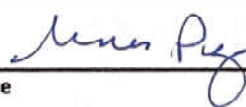
**G: Applicant signature**

I hereby certify that I am authorized to submit this application; that all information is correct to the best of my knowledge, and all work will comply with the State Building Code and all other applicable State and local laws, ordinances, and regulations.

I acknowledge and agree that the Historic District Commission members, Town employees, and Town agents may enter, solely in performance of their official duties and only at reasonable times, upon the applicant's property for examination or survey thereof pursuant to North Carolina General Statute 160A-400.8. However, no member, employee, or agent of the Historic District Commission may enter any private building or structure without the express consent of the owner or occupant thereof.

I understand and agree that an approved Certificate of Appropriateness is valid only for the particular application, plans, specifications and related project details presented to, and approved by, the Historic District Commission. If any of the data contained in this application, any plans or any specifications presented to the Commission are changed or altered for any reason, including, but not limited to, changes or alternations deemed practically necessary during construction, required due to subsequent Town reviews, or otherwise, a new hearing before the Historic District may be required. By signing below, the applicant agrees to notify the Development Services Center of any changes or alternations in the data contained in this application, the approved plans or the approved specifications related to the project that is the subject of this application.

Hearings on Certificate of Appropriateness applications before the Commission are quasi-judicial proceedings. Therefore, Historic District Commission members are not permitted to discuss a pending application with the applicant or other party. By signing below, the applicant agrees to refrain from speaking with or contacting any member of the Historic District Commission about an application outside of the formal evidentiary hearing on the application.

Bret Horton		2/6/20
Applicant (printed name)	Signature	Date
Madison Perry, North Carolina Study Center		2/6/20
Property Owner	Signature	Date
(if different from above)		



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## Certificate of Appropriateness Supplemental Requirements

**\*In addition to [Residential](#) Zoning OR [Administrative](#) Zoning Compliance Permit Requirements**

Certificate of Appropriateness applications are subject to review and approval by the Historic District Commission as well as by Town staff. For assistance with this application, please contact the Chapel Hill Planning Department.

**Please submit *all* materials listed on this sheet.** The Historic District Commission meets on the second Tuesday of each month at 6:30 pm. For confirmation of a meeting date and the placement of your request on the agenda, please call the Planning Department. **Applications are due one month in advance of meeting.**

### Application Process:

1. Historic District Commission Review of Certificate of Appropriateness (COA) Supplemental materials
2. Staff review of Residential / Administrative Zoning Compliance Permit (ZCP) materials

**\*\*COA (step 1) and ZCP (step 2) materials may be submitted simultaneously or separately.**

### Required Application Materials

(In addition to [Residential](#) Zoning Compliance Permit or [Administrative](#) Zoning Compliance Permit Requirements)

**An Electronic copy of each document is required in addition to paper copies.**

**Provide a single set of the following materials:**

- |  |  |
|--|--|
|  | 1. Application Form. Either <a href="#">Residential</a> Zoning Compliance or <a href="#">Administrative</a> Zoning Compliance.   |
|  | 2. Recorded plat or deed verifying property's current ownership  |
|  | 3. Recorded plat of easements, right-of-way, and dedications, if applicable  |
|  | 4. <a href="#">Mailing List of Property Owners</a> , applicable within 100 feet of property boundaries<br>The Town will prepare a formal notice to be mailed to surrounding property owners about the application. You may find it helpful to discuss the proposed changes with your neighbors in person so you can address their concerns both in your planning and presentation. |
|  | 5. Mailing notification fee. The fee per address can be found on the <a href="#">Planning Department's Fee Schedule</a> .  |
|  | 6. Certificate of Appropriateness fee per <a href="#">Planning Department's Fee Schedule</a>   |
|  | 7. Reduced Site Plan Set (reduced to 8.5" x 11")   |
|  | 8. Building Elevations (label building height from top of roof to finished grade line)   |
|  | 9. Floor Plan, only if accessory apartment, duplex, or commercial application.   |

(Continued)





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**10. Written Description**

Describe all proposed changes to the property, list all materials to be used, and address the criteria (listed below) that the Commission uses to determine appropriateness. Presenting your proposal with these criteria in mind will provide a clear basis for the Commission's deliberations.

- a) The height of the building in relation to the average height of the nearest adjacent and opposite buildings;
- b) The setback and placement of the building on the lot in relation to the average setback and placement of the nearest adjacent and opposite buildings;
- c) The exterior construction materials, including textures and patterns;
- d) The architectural detailing such as lintels, cornices, brick bond, and foundation materials;
- e) The roof shape, form, and materials;
- f) The proportion, shape, location, pattern, and size of any elements of fenestration (windows, doors);
- g) The general form and proportion of the buildings;
- h) The accessory fixture and other features (including lighting fixtures, hardware, awnings, etc.);
- i) The architectural scale in relation to existing structures and surrounding buildings; and
- j) Structural conditions and soundness.

Provide photographs of existing property and elevation drawings of the proposed changes. Depict changes in as much detail as possible, paying special attention to those features which the Commission uses to determine appropriateness. This section of the application allows the Commission to see the current state of the property, to visualize the proposed changes, and to assess the impact. The visual description must include dimensions. For new buildings and major additions, the visual description must include the interior floor plan.

**11. Information Regarding Surrounding Properties**

For new construction or large projects, the applicant is required to provide information on:

- The height of the nearest adjacent and opposite buildings;
- The setback and placement of the nearest adjacent and opposite buildings;
- The scale of the nearest adjacent and opposite buildings, including percentage of lot coverage.

**12. Demolition Information (if applicable)**

Provide a description of architectural features, additions, remodeling, and any alterations to the structure(s). Make note of any outbuildings on the site plan of the property. Provide a history of the structure, giving the construction date and architect or carpenter, briefly noting any significant events, persons, and/or families associate with the property.



1308 Broad Street Durham, NC 27705 919.619.2258 www.brethorton.com

### **Written Description of Physical Changes Proposed**

We propose to install cedar shingles on the locations of the house where new asphalt architectural shingles were previously approved and where they currently exist on the house. These locations include all the roof over the two-story portion of the house and the roof over the one-story, hipped-roof wings. Please see drawings for further information about location of proposed cedar shingles. The shingles are to be western red, pressure-treated cedar and are to have random widths but a consistent 5 ½" exposure. The ridges are to be cedar and the valleys (only two and, because of the pitch and height of the roof, difficult to see from the street) are to be a "classic bronze" finished metal to give the appearance of patinated copper.

We propose to replace six existing columns on the front of the house with fiberglass/concrete composite columns made by HB&G. The columns we propose to replace include: (3) all-wood columns, likely original to a 1920's renovation; (2) replacement fiberglass/concrete composite columns; and (1) column with a wood shaft and wood capital, both of which may or may not be original to the 1920's renovation, and a furniture-grade structural foam base. The six new columns we propose are HB&G's round tapered "PermaCast" columns, made of fiberglass-reinforced concrete shafts and furniture-grade structural foam bases and capitals. Their details, dimensions, and profiles are of the simplified doric order (referred to as "Tuscan" by the product literature), and the profiles and dimensions of their base and cap are very similar to those of the existing wood columns. The product cut sheets, provided as part of this application, demonstrate their similarity to the details of the existing all-wood columns. The proposed columns' base diameter (11.6") is less than an inch less than the average of the three existing all-wood columns (12.5"), and their upper diameter (9.4") is only slightly more than an inch less than the upper diameter of the existing all-wood columns (10.6").

### Applicable Design Guidelines

<i>Page / Standard #</i>	<i>Topic</i>	<i>Brief description of the applicable aspect of your proposal</i>
Page #79-82 / Standard #3.1	Roofs, Gutters, & Chimneys	This will be one of probably a number of roofing replacements over the history of the 180-year-old house. Old photographs show evidence of a wood roof over the two-story portion of the house. We believe the western-red cedar roof we propose will be similar to that roof.
Page # 64-66 Standard #2.1	Wood	<p>The applicant believes there is an ongoing risk of water damage to the six columns which support the front porch. The replacement, which happened at an unknown date in the past, of two of the six columns with fiberglass/concrete replacement columns points to a history of damage. The water damage evident on the three existing all-wood (shaft, base, and capital) columns also points to a history of damage. A past replacement of the base of the sixth column also points to a history of damage. The shaft of this sixth column is wood, but it is 1" smaller in diameter than the three all-wood columns, which could be evidence of it also being a replacement column.</p> <p>The height of the porch, the relatively shallow eave, the details of the columns, which include horizontal surfaces on which water can sit, and the lack of significant pitch of the front porch floor have all likely led to water damage. Some form of replacement will have to happen, as all of the existing all-wood columns show damage, either in their shafts, bases, or capitals, and much of the damage is beyond the scope of repair.</p> <p>The owner of the house would like easier to maintain and more durable columns, which are historically accurate except for their material. The proposed columns would be painted to match the finish of the existing wood columns. The applicant hopes Standard 2.1.6 could allow for such a substitution.</p>
Page # 96-99 Standard #3.6	Porches, Entrances, & Balconies	Please see description for "wood", above.

## Photographs



Photo, date unknown, showing circa 1876 Italianate-style renovation. Upper roof appears to be wood shingle while the roof the over one-story wings appears to be metal. Italianate, double columns can be seen on the porch.



West elevation today, during renovation. The house was renovated in the 1920's in the colonial revival style, and the Italianate double columns were replaced at that time with classical-order single columns. Columns, for the purpose of this application, are numbered from left (north) to right (south): N3, N2, N1, S1, S2, and S3.





Column N3. Non-original replacement column. Shaft is fiberglass/concrete composite and base and capital are furniture-grade structural foam.





Column N3 base. Furniture-grade structural foam base, lifted up to show how it slides onto shaft.



Column N2. Non-original replacement column. Shaft is fiberglass/concrete composite and base and capital are furniture-grade structural foam.



Column N2 capital. Furniture-grade structural foam capital and base do not show any indication of needing repair.





Column N1. Likely an original column from the 1920's renovation. All wood.



Column N1 capital. Holes in capital indicate where screw-driver probe test was performed and where significant rot was discovered.



Column N1 base. A screwdriver was able to be pushed well into the wood at the bottom left corner of the base.





Column S1. Likely an original column from the 1920's renovation. All wood.



Column S1 base. Shows significant water damage. Metal standoffs, at the four corners of the base, were employed at some point in the past in an attempt to allow air and water circulation under the base.





Column S2. Likely an original from the 1920's renovation. All wood. A large split in the finger-jointed wood of the shaft can be seen on the right edge of the column.



Column S2 capital showing water damage.





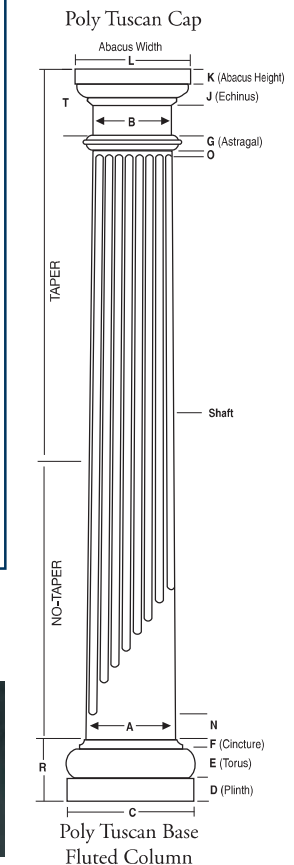
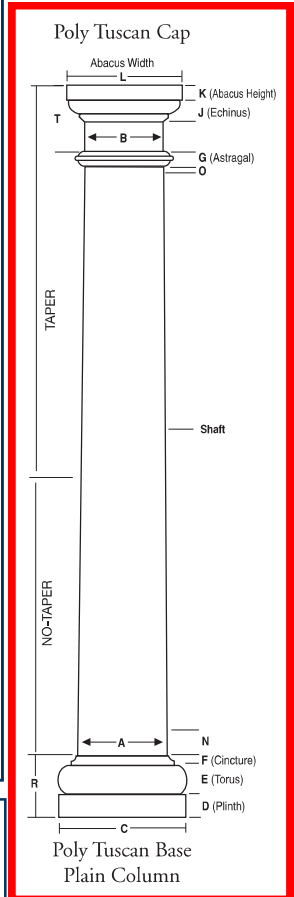
Column S3. Perhaps an original from the 1920's renovation, however wood shaft is narrower than other wood shafts, capital is wood; the base is a replacement furniture-grade structural foam base.

# Round Tapered **PERMA**Cast® Columns

COL. SIZE	A	B	C	D	E	F	G	J	K	L	O	N	R	T	LENGTHS AVAIL. (ft.)
6"	5 $\frac{5}{8}$ "	4 $\frac{1}{2}$ "	9"	1 $\frac{1}{8}$ "	1 $\frac{1}{4}$ "	$\frac{3}{8}$ "	$\frac{3}{4}$ "	1 $\frac{1}{2}$ "	1 $\frac{1}{2}$ "	8"	1"	6 $\frac{1}{4}$ "	3 $\frac{3}{8}$ "	4 $\frac{1}{8}$ "	4.6, 8
8"	7 $\frac{7}{8}$ "	6 $\frac{1}{4}$ "	10 $\frac{1}{2}$ "	1 $\frac{3}{8}$ "	1 $\frac{3}{4}$ "	$\frac{1}{2}$ "	1 $\frac{1}{2}$ "	1 $\frac{1}{2}$ "	1 $\frac{1}{2}$ "	9 $\frac{1}{4}$ "	$\frac{1}{2}$ "	2 $\frac{1}{4}$ "	4 $\frac{1}{2}$ "	4 $\frac{1}{2}$ "	5.6, 8, 10, 12
10"	9 $\frac{1}{8}$ "	8 $\frac{1}{2}$ "	13 $\frac{1}{8}$ "	2 $\frac{1}{8}$ "	2 $\frac{3}{8}$ "	$\frac{3}{4}$ "	1 $\frac{1}{2}$ "	1 $\frac{1}{2}$ "	1 $\frac{1}{2}$ "	11 $\frac{1}{4}$ "	$\frac{3}{8}$ "	2 $\frac{1}{4}$ "	5 $\frac{1}{2}$ "	5"	6.8, 9, 10, 12
12"	11 $\frac{1}{8}$ "	9 $\frac{3}{4}$ "	16 $\frac{1}{2}$ "	2 $\frac{3}{8}$ "	2 $\frac{3}{4}$ "	$\frac{7}{8}$ "	1 $\frac{1}{2}$ "	1 $\frac{1}{2}$ "	2 $\frac{1}{4}$ "	13 $\frac{3}{4}$ "	$\frac{3}{4}$ "	2 $\frac{3}{8}$ "	6 $\frac{1}{2}$ "	5 $\frac{3}{4}$ "	6.8, 9, 10, 12, 14, 16, 18
14"	13 $\frac{1}{8}$ "	11 $\frac{1}{2}$ "	19 $\frac{1}{2}$ "	3 $\frac{1}{8}$ "	3 $\frac{3}{8}$ "	1 $\frac{1}{2}$ "	1"	2"	2 $\frac{1}{2}$ "	17"	$\frac{7}{8}$ "	2 $\frac{1}{2}$ "	7 $\frac{1}{2}$ "	7"	8, 9, 10, 12, 14, 16, 18
16"	15 $\frac{1}{4}$ "	13 $\frac{3}{8}$ "	22"	3 $\frac{3}{8}$ "	3 $\frac{3}{8}$ "	1 $\frac{1}{2}$ "	1 $\frac{1}{8}$ "	2 $\frac{1}{2}$ "	2 $\frac{1}{2}$ "	19 $\frac{3}{8}$ "	1"	3"	8 $\frac{3}{8}$ "	8"	8, 10, 12, 14, 16, 18, 20
18"	17 $\frac{1}{2}$ "	15 $\frac{3}{8}$ "	24 $\frac{3}{8}$ "	4"	4"	1 $\frac{1}{2}$ "	1 $\frac{1}{8}$ "	2 $\frac{3}{4}$ "	3 $\frac{1}{8}$ "	22 $\frac{3}{8}$ "	1 $\frac{1}{2}$ "	10 $\frac{1}{4}$ "	9 $\frac{3}{8}$ "	8 $\frac{3}{8}$ "	8, 10, 12, 14, 16, 18, 20, 22, 24, 26
20"	19 $\frac{1}{2}$ "	17 $\frac{3}{8}$ "	27"	4 $\frac{1}{4}$ "	4 $\frac{1}{2}$ "	2"	1 $\frac{1}{8}$ "	2 $\frac{3}{4}$ "	3 $\frac{1}{8}$ "	24 $\frac{1}{2}$ "	1 $\frac{1}{2}$ "	10 $\frac{3}{4}$ "	11 $\frac{1}{4}$ "	9"	10, 12, 14, 16, 18, 20, 22, 24
22"	21 $\frac{1}{8}$ "	19 $\frac{1}{4}$ "	30 $\frac{1}{4}$ "	5"	5"	2"	1 $\frac{1}{8}$ "	3"	3 $\frac{1}{8}$ "	27 $\frac{1}{2}$ "	1 $\frac{1}{2}$ "	10 $\frac{3}{4}$ "	12"	10 $\frac{1}{4}$ "	16, 18, 20, 22, 24, 26
24"	23 $\frac{1}{8}$ "	21 $\frac{1}{4}$ "	33 $\frac{1}{2}$ "	6"	5 $\frac{1}{4}$ "	2 $\frac{1}{4}$ "	2"	3 $\frac{1}{2}$ "	4"	30 $\frac{3}{8}$ "	1 $\frac{1}{2}$ "	10 $\frac{3}{4}$ "	13 $\frac{1}{2}$ "	11 $\frac{1}{8}$ "	12, 14, 16, 18, 20, 22, 24, 26, 28, 30
28"	28"	24 $\frac{1}{4}$ "	38"	6 $\frac{1}{4}$ "	6 $\frac{1}{4}$ "	2 $\frac{3}{4}$ "	2 $\frac{1}{4}$ "	3 $\frac{3}{4}$ "	4 $\frac{1}{8}$ "	33 $\frac{3}{8}$ "	1 $\frac{1}{2}$ "	10 $\frac{3}{4}$ "	15 $\frac{1}{2}$ "	11 $\frac{1}{4}$ "	20, 22, 24, 26, 28
30"	29 $\frac{3}{8}$ "	26 $\frac{1}{2}$ "	41 $\frac{1}{8}$ "	6 $\frac{1}{2}$ "	5 $\frac{7}{8}$ "	2 $\frac{1}{2}$ "	3"	4"	4 $\frac{1}{8}$ "	38 $\frac{1}{4}$ "	1 $\frac{1}{2}$ "	10 $\frac{3}{4}$ "	14 $\frac{7}{8}$ "	14 $\frac{7}{8}$ "	20, 22, 24, 26, 28, 30

\*There may be a variance of up to 1/4" in all dimensions. Fluted columns available in all diameters. See page 16 for Parallel dimensions. See page 18 for Decorative Capital dimensions.      Standard Fluted Column (Fluted in mold)

• Split columns are not load bearing.



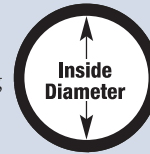
## COLUMN-LOC®

Column-Loc® creates a continuous connection from floor to beam/header without the expense of splitting and reattaching the column. This labor saving product is easy to install and delivers wind uplift resistance especially important in coastal and high wind areas. Currently available for 8" and 10" round (tapered and no-taper) and square PermaCast® columns. Kits are available with and without threaded rod in lengths up to 12'.



## ROUND PERMACAST® INSIDE DIMENSIONS

Inside dimension may vary up to 1/8". Splitting a column will decrease inside dimension 1/8".



COLUMN SIZE	TOP I.D.	BOT I.D.
6"	3 $\frac{7}{8}$ "	4 $\frac{1}{8}$ "
8"	5 $\frac{1}{2}$ "	6 $\frac{1}{8}$ "
10"	7 $\frac{1}{8}$ "	8 $\frac{1}{8}$ "
12"	8 $\frac{3}{8}$ "	10 $\frac{1}{8}$ "
14"	10 $\frac{7}{8}$ "	12 $\frac{1}{8}$ "
16"	12 $\frac{7}{8}$ "	15"
18"	14 $\frac{1}{2}$ "	16 $\frac{3}{8}$ "
20"	16 $\frac{1}{16}$ "	18 $\frac{3}{8}$ "
22"	18 $\frac{3}{8}$ "	20 $\frac{3}{16}$ "
24"	20"	22 $\frac{3}{8}$ "
28"	22 $\frac{1}{8}$ "	26 $\frac{1}{4}$ "
30"	25 $\frac{1}{4}$ "	28 $\frac{3}{8}$ "

\*Plain columns only

## PLUMB-FIT®

To make installation even easier our 6"-12" round and square poly Tuscan Cap and Base Sets with flashing cap come with the Plumb-Fit® patented (Patent 9689674) installation system included.

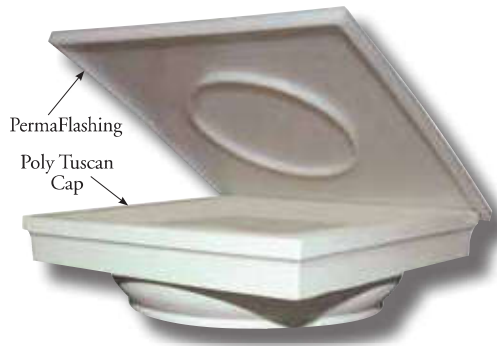
## ROUND PERMACAST® PORCH INSTALLATION BRACKET

The HB&G Porch Installation Bracket includes the bracket and all required hardware. The bracket fits 20" - 30" Plain Round PermaCast® Columns and will secure a 2nd story porch to our PermaCast® Columns. Three brackets are required for each column.





HB&G's number one goal is finding ways that we can save you time and make your life easier.



### PermaCast® PermaFlashing and Installation Kit

The PermaCast® flashing with Plumb-Fit® and installation kit is available in selected Tuscan cap and base sets.\*

This innovation will not only save time but will keep the elements out of the column and secure the top and bottom of the column.

\*Not available in Tuscan cap and base sets for Craftsman, No-taper, PermaLite®, and Wood columns.

### Split Column Assembly and Flange Kits

HB&G offers a split kit and a split kit with flange option with an improved MMA adhesive.

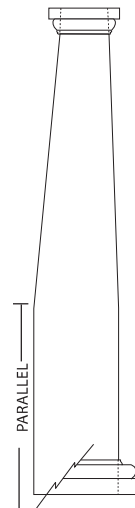
These kits can be purchased separately. **MMA adhesive must be stored in a climate-controlled environment.**



Installation Kit for Beveled Cap and Base



Installation Kit



**Entasis** - Parallel Dimensions are used to specify where the column begins to taper. These dimensions use length from the bottom of the column shaft to the point where the taper begins. This is necessary to determine how much a column can be shortened before the base begins to fit loosely. Filler and caulking may be used to fill the gap between the base and shaft if it is necessary to shorten the column beyond the parallel dimension.

### PARALLEL DIMENSIONS\*

Column Size	Parallel Dim.	Column Size	Parallel Dim.
6x4	0"	18x18	60"
6x6	8"	18x20	84"
6x8	32"	18x22	49"
8x5	12"	18x24	73"
8x6	24"	18x26	97"
8x8	32"	20x10	0"
8x9	28"	20x12	0"
8x10	40"	20x14	0"
10x6	8"	20x16	4"
10x8	32"	20x18	28"
10x9	28"	20x20	52"
10x10	40"	20x22	76"
10x12	48"	20x24	100"
12x6	8"	22x16	45"
12x8	32"	22x18	69"
12x9	20"	22x20	93"
12x10	32"	22x22	53"
12x12	48"	22x24	77"
12x14	59"	22x26	101"
12x16	40"	24x12	21"
12x18	73"	24x14	45"
14x8	32"	24x16	69"
14x9	12"	24x18	93"
14x10	24"	24x20	75"
14x12	48"	24x22	99"
14x14	27"	24x24	123"
14x16	51"	24x26	77"
14x18	75"	24x28	101"
16x8	16"	24x30	125"
16x10	40"	28x20	20"
16x12	29"	28x22	44"
16x14	53"	28x24	68"
16x16	36"	28x26	92"
16x18	60"	28x28	116"
16x20	84"	30x20	92"
18x8	0"	30x22	116"
18x10	16"	30x24	140"
18x12	40"	30x26	75"
18x14	48"	30x28	99"
18x16	36"	30x30	123"

Column Size	Bottom Diameter
6x4	5 <sup>3</sup> / <sub>8</sub> "
18x8	17 <sup>1</sup> / <sub>4</sub> "
20x10	18 <sup>11</sup> / <sub>16</sub> "
20x12	18 <sup>5</sup> / <sub>16</sub> "
20x14	19 <sup>1</sup> / <sub>4</sub> "

\*For Tapered Round Columns

Bret Horton Architect

1308 Broad Street  
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919.619.2258

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Addition &  
Renovations to  
The Battle House

NC STUDY CENTER

203 Battle Lane  
Chapel Hill, NC 27514

HISTORIC DISTRICT  
COMMISSION REVIEW

Not For Construction

ISSUED

REVISIONS

NO.	DATE
NO.	DATE
NO.	DATE
NO.	DATE
NO.	DATE

EXISTING  
WEST  
ELEVATION

DATE 9.10.21 SHEET  
SCALE AS NOTED A2.0  
DRAWN BH  
PROJECT NUMBER



COLUMN "N3". NON-ORIGINAL  
REPLACEMENT COLUMN.  
FIBERGLASS/CONCRETE  
COMPOSITE SHAFT WITH  
STRUCTURAL FOAM BASE &  
CAPITAL.

COLUMN "N2". NON-ORIGINAL  
REPLACEMENT COLUMN.  
FIBERGLASS/CONCRETE  
COMPOSITE SHAFT WITH  
STRUCTURAL FOAM BASE &  
CAPITAL.

COLUMN "N1". LIKELY AN  
ORIGINAL COLUMN FROM THE  
1920'S RENOVATION. ALL WOOD.

COLUMN "S1". LIKELY AN  
ORIGINAL COLUMN FROM THE  
1920'S RENOVATION. ALL  
WOOD.

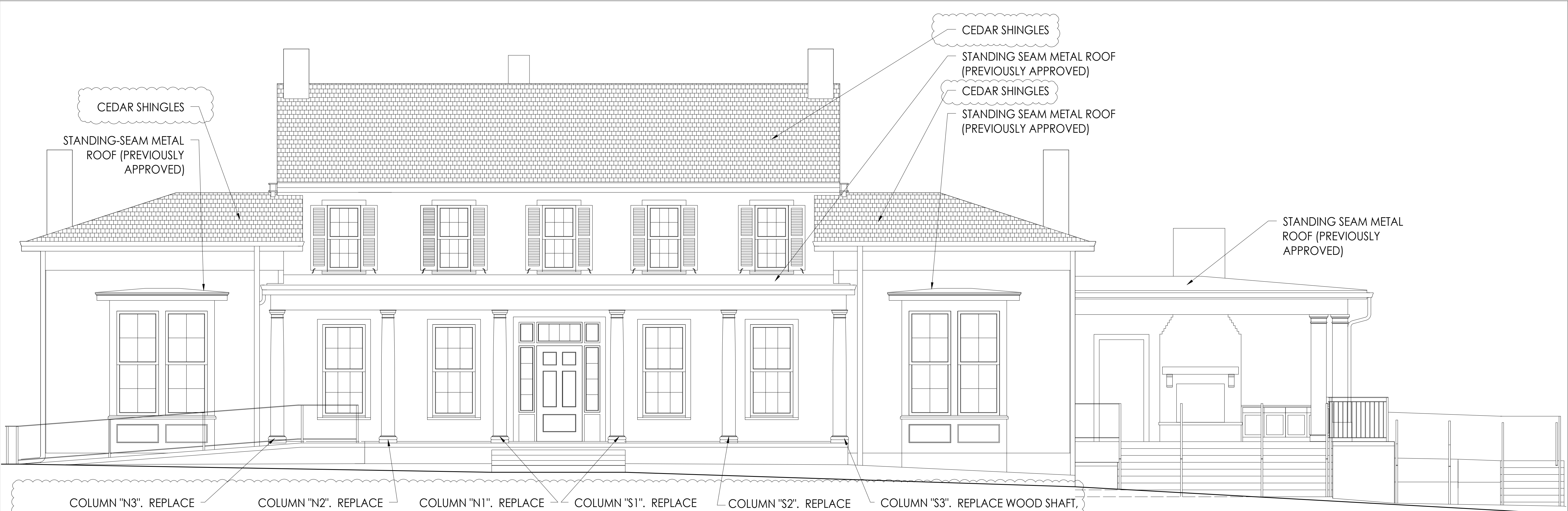
COLUMN "S2". LIKELY AN  
ORIGINAL COLUMN FROM THE  
1920'S RENOVATION. ALL  
WOOD.

COLUMN "S3". PERHAPS AN  
ORIGINAL FROM THE 1920'S  
RENOVATION, HOWEVER WOOD  
SHAFT IS NARROWER THAN OTHER  
WOOD SHAFTS. CAPITAL IS  
WOOD, AND THE BASE IS A  
REPLACEMENT STRUCTURAL FOAM  
BASE.

1  
A2.0

EXISTING WEST ELEVATION

1/4"=1'-0"



- COLUMN "N3". REPLACE NON-ORIGINAL, FIBERGLASS/CONCRETE COMPOSITE REPLACEMENT COLUMN WITH NEW COMPOSITE COLUMN TO VERY CLOSELY MATCH DIMENSIONS & DETAILS OF EXISTING WOOD COLUMNS.
- COLUMN "N2". REPLACE NON-ORIGINAL, FIBERGLASS/CONCRETE COMPOSITE REPLACEMENT COLUMN WITH NEW COMPOSITE COLUMN TO VERY CLOSELY MATCH DIMENSIONS & DETAILS OF EXISTING WOOD COLUMNS.
- COLUMN "N1". REPLACE ALL-WOOD COLUMN WITH NEW COMPOSITE COLUMN TO VERY CLOSELY MATCH DIMENSIONS & DETAILS OF EXISTING WOOD COLUMNS.
- COLUMN "S1". REPLACE ALL-WOOD COLUMN WITH NEW COMPOSITE COLUMN TO VERY CLOSELY MATCH DIMENSIONS & DETAILS OF EXISTING WOOD COLUMNS.
- COLUMN "S2". REPLACE ALL-WOOD COLUMN WITH NEW COMPOSITE COLUMN TO VERY CLOSELY MATCH DIMENSIONS & DETAILS OF EXISTING WOOD COLUMNS.
- COLUMN "S3". REPLACE WOOD SHAFT, WOOD CAPITAL, AND STRUCTURAL FOAM BASE WITH NEW COMPOSITE COLUMN TO VERY CLOSELY MATCH DIMENSIONS & DETAILS OF EXISTING WOOD COLUMNS.

1  
A2.1  
**WEST ELEVATION**  
1/4"=1'-0"



2  
A2.1  
**SOUTH ELEVATION**  
1/4"=1'-0"

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NO.	DATE
NO.	DATE

**EXTERIOR  
ELEVATIONS**  
DATE 9.10.21 SHEET  
SCALE AS NOTED  
DRAWN BH  
PROJECT NUMBER  
**A2.1**



1  
A2.2  
EAST ELEVATION  
1/4"=1'-0"



2  
A2.2  
NORTH ELEVATION  
1/4"=1'-0"

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NO.	DATE
NO.	DATE

EXTERIOR  
ELEVATIONS

DATE 9.10.21 SHEET  
SCALE AS NOTED  
DRAWN BH  
PROJECT NUMBER

A2.2