ELEVATION CERTIFICATE

Important: Read the instructions on pages 1–9.

SECTION A – PROPERTY INFORMATION

A1. Building Owner’s Name: Town of Carolina Beach
A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.: 101 Canal Drive
City Carolina Beach State NC ZIP Code 28428

A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.):
Deed Book 1202, Page 334; Tax Parcel ID: R69005-020-009-000; Known as Pump Station 1

A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.): Non-Residential
A5. Latitude/Longitude: Lat. 34°02'01.5" Long. 77°53'35.2" Horizontal Datum: NAD 1983
A6. Attach at least 2 photographs of the building if the Certificate is being used to obtain flood insurance.
A7. Building Diagram Number 18
A8. For a building with a crawlspace or enclosure(s):
   a) Square footage of crawlspace or enclosure(s) NA sq ft
   b) Number of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade NA
   c) Total net area of flood openings in A8b NA sq in
   d) Engineered flood openings? Yes No
   A9. For a building with an attached garage:
      a) Square footage of attached garage NA sq ft
      b) Number of permanent flood openings in the attached garage within 1.0 foot above adjacent grade NA
      c) Total net area of flood openings in A9b NA sq in
      d) Engineered flood openings? Yes No

SECTION B – FLOOD INSURANCE RATE MAP (FIRM) INFORMATION

B1. NFIP Community Name & Community Number: 375347 Town of Carolina Beach
B2. County Name: New Hanover
B3. State: NC
B4. Map/Panel Number: 3720313000
B5. Suffix J
B6. FIRM Index Date 4/3/2005
B7. FIRM Panel Effective/Revised Date 2/1/2007
B8. Flood Zone(s) AE
B9. Base Flood Elevation(s) (Zone AO, use base flood depth) 13’

B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in Item B9.
☐ FIS Profile ☑ FIRM ☐ Community Determined ☐ Other/Source: ____________
B11. Indicate elevation datum used for BFE in Item B9: ☐ NGVD 1929 ☑ NAVD 1988 ☐ Other/Source: ____________
B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)?
☐ CBRS ☑ OPA

SECTION C – BUILDING ELEVATION INFORMATION (SURVEY REQUIRED)

C1. Building elevations are based on: ☑ Construction Drawings* ☐ Building Under Construction* ☑ Finished Construction
*A new Elevation Certificate will be required when construction of the building is complete.
Benchmark Utilized: See Comments
Vertical Datum: NAVD 88
Indicate elevation datum used for the elevations in items a) through h) below. ☐ NGVD 1929 ☑ NAVD 1988 ☐ Other/Source: ____________
Datum used for building elevations must be the same as that used for the BFE.

Check the measurement used.

a) Top of bottom floor (including basement, crawlspace, or enclosure floor) 12.1 feet 10 meters
b) Top of the next higher floor NA ______ feet ______ meters
c) Bottom of the lowest horizontal structural member (V Zones only) NA ______ feet ______ meters
d) Attached garage (top of slab) NA ______ feet ______ meters
e) Lowest elevation of machinery or equipment servicing the building (describe type of equipment and location in comments) 12.2 feet 10 meters
f) Lowest adjacent (finished) grade next to building (LAG) 6.1 feet 2 meters
g) Highest adjacent (finished) grade next to building (HAG) 5.5 feet 2 meters
h) Lowest adjacent grade at lowest elevation of deck or stairs, including structural support 5.1 feet 2 meters

SECTION D – SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION

This certification is to be signed and sealed by a land surveyor, engineer, or architect authorized by law to certify elevation information. I certify that the information on this Certificate represents my best efforts to interpret the data available.
I understand that any false statement may be punishable by fine or imprisonment under 18 U.S. Code, Section 1001.
☐ Check here if comments are provided on back of form. Were latitude and longitude in Section A provided by a licensed land surveyor? ☑ Yes ☐ No
☐ Check here if attachments.

Certifier’s Name: Bob M. Jones, Jr.
License Number: L-2977
Title Prof. Land Surveyor
Company Name: Robert H. Goslee & Associates, PA
Address: 513 Chestnut St.
City: Wilmington
State: NC
ZIP Code: 28401
Signature: ______________________
Date: 9/11/2014
Telephone: (910)763-1941

FEMA Form 086-0-33 (7/12) See reverse side for continuation. Replaces all previous editions.
SECTION D – SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION (CONTINUED)

Copy both sides of this Elevation Certificate for (1) community official, (2) insurance agent/company, and (3) building owner.

Comments  See attached comment page.

Signature  
Date  9/11/2014

SECTION E – BUILDING ELEVATION INFORMATION (SURVEY NOT REQUIRED) FOR ZONE AO AND ZONE A (WITHOUT BFE)

For Zones AO and A (without BFE), complete Items E1–E5. If the Certificate is intended to support a LOMA or LOMR-F request, complete Sections A, B, and C. For Items E1–E4, use natural grade, if available. Check the measurement used. In Puerto Rico only, enter meters.

E1. Provide elevation information for the following and check the appropriate boxes to show whether the elevation is above or below the highest adjacent grade (HAG) and the lowest adjacent grade (LAG).
   a) Top of bottom floor (including basement, crawlspace, or enclosure) is _______ feet _______ meters above or below the HAG.
   b) Top of bottom floor (including basement, crawlspace, or enclosure) is _______ feet _______ meters above or below the LAG.

E2. For Building Diagrams 8–9 with permanent flood openings provided in Section A Items 8 and/or 9 (see pages 8–9 of instructions), the next higher floor (elevation C2 in the diagrams) of the building is _______ feet _______ meters above or below the HAG.

E3. Attached garage (top of slab) is _______ feet _______ meters above or below the HAG.

E4. Top of platform of machinery and/or equipment servicing the building is _______ feet _______ meters above or below the HAG.

E5. Zone AO only. If no flood depth number is available, is the top of the bottom floor elevated in accordance with the community’s floodplain management ordinance? Yes  No  Unknown. The local official must certify this information in Section G.

SECTION F – PROPERTY OWNER (OR OWNER’S REPRESENTATIVE) CERTIFICATION

The property owner or owner’s authorized representative who completes Sections A, B, and E for Zone A (without a FEMA-issued or community-issued BFE) or Zone AO must sign here. The statements in Sections A, B, and E are correct to the best of my knowledge.

Property Owner’s or Owner’s Authorized Representative’s Name

Address  City  State  ZIP Code

Signature  Date  Telephone

Comments

☐ Check here if attachments.

SECTION G – COMMUNITY INFORMATION (OPTIONAL)

The local official who is authorized by law or ordinance to administer the community’s floodplain management ordinance can complete Sections A, B, C (or E), and G of this Elevation Certificate. Complete the applicable item(s) and sign below. Check the measurement used in Items G8–G10. In Puerto Rico only, enter meters.

G1. ☐ The information in Section C was taken from other documentation that has been signed and sealed by a licensed surveyor, engineer, or architect who is authorized by law to certify elevation information. (Indicate the source and date of the elevation data in the Comments area below.)

G2. ☐ A community official completed Section E for a building located in Zone A (without a FEMA-issued or community-issued BFE) or Zone AO.

G3. ☐ The following information (Items G4–G10) is provided for community floodplain management purposes.

G4. Permit Number  G5. Date Permit Issued  G6. Date Certificate Of Compliance/Occupancy Issued

G7. This permit has been issued for: ☐ New Construction  ☐ Substantial Improvement

G8. Elevation of as-built lowest floor (including basement) of the building: _______ feet _______ meters Datum _______

G9. BFE or (in Zone AO) depth of flooding at the building site: _______ feet _______ meters Datum _______

G10. Community's design flood elevation: _______ feet _______ meters Datum _______

Local Official’s Name  Title

Community Name  Telephone

Signature  Date

Comments

☐ Check here if attachments.

FEMA Form 086-0-33 (7/12)  Replaces all previous editions.
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.
101 Canal Dr.

City Carolina Beach  State NC  ZIP Code 28428

If using the Elevation Certificate to obtain NFIP flood insurance, affix at least 2 building photographs below according to the instructions for Item A6. Identify all photographs with date taken; “Front View” and “Rear View”; and, if required, “Right Side View” and “Left Side View.” When applicable, photographs must show the foundation with representative examples of the flood openings or vents, as indicated in Section A8. If submitting more photographs than will fit on this page, use the Continuation Page.

Front and left side view (Photo taken Sept. 9, 2014)

Rear & left side view (Photo taken Sept. 9, 2014)
Comments Section
101 Canal Drive, Carolina Beach, NC 28428

The benchmark was established using the N. C. Geodetic Survey RTK VRS system. The lowest equipment servicing the building is an electrical panel located on the outside of the building attached to the north wall. The elevation in C2.e is to the bottom of the panel box. The structure has a flood proofing device which when added to the floor elevation would equal a barrier of 14.1'. A copy of the Floodproofing Certificate is attached to the Elevation Certificate. There is a wall air conditioner which would allow flood waters into structure. The bottom elevation of this air conditioner is 13.1'. The building is built on a raised concrete slab.

Bob M. Jones, Jr.
Professional Land Surveyor
N. C. License No.: L-2977
FLOODPROOFING CERTIFICATE
FOR NON-RESIDENTIAL STRUCTURES

The floodproofing of non-residential buildings may be permitted as an alternative to elevating to or above the Base Flood Elevation; however, a floodproofing design certification is required. This form is to be used for that certification. Floodproofing of a residential building does not alter a community's floodplain management elevation requirements or affect the insurance rating unless the community has been issued an exception by FEMA to allow floodproofed residential basements. The permitting of a floodproofed residential basement requires a separate certification specifying that the design complies with the local floodplain management ordinance.

BUILDING OWNER'S NAME
Town of Carolina Beach:

STREET ADDRESS (including Apt., Unit, Suite, and/or Bldg. Number) OR RD. ROUTE AND BOX NUMBER
101 Canal Drive

OTHER DESCRIPTION (Lot and Block Numbers, etc.)

CITY
Carolina Beach
STATE
NC
ZIP CODE
28428

SECTION I FLOOD INSURANCE RATE MAP (FIRM) INFORMATION

Provide the following from the proper FIRM:

<table>
<thead>
<tr>
<th>COMMUNITY NUMBER</th>
<th>PANEL NUMBER</th>
<th>SUFREF</th>
<th>DATE OF FIRM INDEX</th>
<th>FIRM ZONE</th>
<th>BASE FLOOD ELEVATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>375347</td>
<td>3720313000</td>
<td>J</td>
<td>April 3, 2006</td>
<td>AE</td>
<td>13</td>
</tr>
</tbody>
</table>

SECTION II FLOODPROOFING INFORMATION (By a Registered Professional Engineer or Architect)

Floodproofing Design Elevation Information:

Building is floodproofed to an elevation of ________________ feet NGVD. (Elevation datum used must be the same as that on the FIRM.)

Height of floodproofing on the building above the lowest adjacent grade is ________________ feet.

(NOTE: For insurance rating purposes, the building's floodproofed design elevation must be at least one foot above the Base Flood Elevation to receive rating credit. If the building is floodproofed only to the Base Flood Elevation, then the building's insurance rating will result in a higher premium.)

SECTION III CERTIFICATION (By Registered Professional Engineer or Architect)

Non-Residential Floodproofed Construction Certification:

I certify that, based upon development and/or review of structural design, specifications, and plans for construction, the design and methods of construction are in accordance with accepted standards of practice for meeting the following:

The structure, together with attendant utilities and sanitary facilities, is constructed to the floodproofed design elevation indicated above, with walls that are substantially impermeable to the passage of water.

All structural components are capable of resisting hydrostatic and hydrodynamic loads imposed by the effects of buoyancy and anticipated debris impact forces.

I certify that the information on this certificate represents my best efforts to inform and aptly evaluate. I understand that any false statement may be punishable by fine or imprisonment under 18 U.S. Code, Section 1001.

CERTIFIER'S NAME: Xue C. Hsu
LICENSE NUMBER (or Affix Seal): NC 11712

TITLE: Owner
COMPANY NAME: HMC Consultants, Inc.

ADDRESS: 2408 Winthrop Dr.
CITY: Raleigh
STATE: NC
ZIP CODE: 27612

SIGNATURE: Xue C. Hsu
DATE: 6/12/12
PHONE: (919) 783-7-80

Copies should be made of this Certificate for: 1) community official, 2) insurance agent/company, and 3) building owner.

FEMA Form 81-65, Mar 09
Replaces all previous editions
F056 (3/09)
Flood Barrier Shield

Flood Barrier Shield is custom fabricated. Specify exact width needed, and installation option required.

\[ H = 24'' \text{ Height} \]

* Gate mounted on interior side of door