

**APPENDIX B
2018 BUILDING CODE SUMMARY
FOR ALL COMMERCIAL PROJECTS
(EXCEPT ONE- AND TWO-FAMILY DWELLINGS AND TOWNHOUSES)**

Name of Project: CARTERET COUNTY COURTHOUSE REPAIRS (EXTERIOR)
 Address: BEAUFORT, NORTH CAROLINA Zip Code: 28516
 Owner/Authorized Agent: EUGENE FOXWORTH Phone # (252) 728-8545 E-Mail: eugene.foxworth@carteretcountync.gov
 Owned By: City/County Private State County State

CONTACT:
 DESIGNER: FIRM NAME LICENSE# TELEPHONE# E-MAIL
 Architectural: Coastal Architecture Les Dixon 6419 (252) 241-2121 les@coastalarchitecture.net
 Civil: _____
 Electrical: _____
 Fire Alarm: _____
 Plumbing: _____
 Mechanical: _____
 Sprinkler-Standpipe: _____
 Structural: FDR Engineers Heath Hendrick 256655 (919) 951-5120 hendrick@fdr-eng.com
 Retaining Walls > 5 feet High: _____
 Other: _____

(Other should include firms and individuals such as truss, precast, pre-engineered, interior designers, etc.)

2018 NC BUILDING CODE: New Building Shell/Cor 1st Time Interior Completions
 Addition Phased Construction—Shell Core

2018 NC EXISTING BUILDING CODE: (check all that apply)
 Prescriptive Alteration Level I Historic Property
 Repair Alteration Level II Change of Use
 Chapter 14 Alteration Level III

CONSTRUCTED (date): 1980 CURRENT USE(S) (ch. 3): BUSINESS/EXISTING
 RENOVATED (date): _____ PROPOSED USE(S) (ch. 3): BUSINESS/EXISTING

OCCUPANCY CATEGORY (Table 1604.5): Current: II Proposed: II

BASIC BUILDING DATA EXISTING BUILDING - REPAIRS

Construction Type: (check all that apply)
 I-A I-B II-A II-B III IV V-A V-B
 I-B II-B II-C II-D II-E II-F II-G II-H II-I II-J II-K II-L II-M II-N II-O II-P II-Q II-R II-S II-T II-U II-V II-W II-X II-Y II-Z

Sprinklers: No Partial NFPA 13 NFPA 13R NFPA 130

Standpipes: No Class II III Wet Dry

Primary Fire District: No Yes Flood Hazard Area: No Yes

Special Inspections Required: No Yes

GROSS BUILDING AREA TABLE

Floor	Existing (sq ft)	New (sq ft)	Subtotal
3rd Floor	-	-	-
2nd Floor	-	-	-
Mezzanine	-	-	-
1st Floor	-	-	-
Basement	-	-	-
TOTAL	-	-	-

ENERGY SUMMARY

ENERGY REQUIREMENTS:
 The following data shall be considered minimum and any special attribute required to meet the energy code shall also be provided. Each Designer shall furnish the required portions of the project information for the plan data sheet. If performance method, state the annual energy cost for the standard reference design versus the annual energy cost for the proposed design.

Existing building envelope complies with code: (if checked, the remainder of this section is not applicable.)

Exempt Building: Provide code or statutory reference: _____

Climate Zone: 3A 4A 5A

Method of Compliance:
 Energy Code: Performance Prescriptive
 ASHRAE 90.1: Performance Prescriptive
 Other: Performance (specify source) _____

THERMAL ENVELOPE: (Prescriptive method only)

Roof/Ceiling Assembly (each assembly)
 Description of assembly: _____
 U-Value of total assembly: _____
 R-Value of insulation: _____
 Skylights in each assembly: _____
 U-Value of skylight: _____
 total square footage of skylights in each assembly: _____

Exterior Walls (each assembly) EXISTING
 Description of assembly: _____
 U-Value of total assembly: _____
 R-Value of insulation: _____
 Openings (windows or doors with glazing)
 U-Value of assembly: _____
 Solar heat gain coefficient: _____
 projection factor: _____
 Door R-Values: _____

Walls below grade (each assembly)
 Description of assembly: _____
 U-Value of total assembly: _____
 R-Value of insulation: _____

Floors over unconditioned space (each assembly)
 Description of assembly: _____
 U-Value of total assembly: _____
 R-Value of insulation: _____

Floors slab on grade
 Description of assembly: _____
 U-Value of total assembly: _____
 R-Value of insulation: _____
 Horizontal/vertical requirement: _____
 slab heated: _____

ALLOWABLE AREA

Primary Occupancy Classification(s):
 Assembly A-1 A-2 A-3 A-4 A-5
 Business
 Educational
 Factory F-1 Moderate F-2 Low
 Hazardous H-1 Detonate H-2 Degradate H-3 Combust H-4 Health H-5 HPM
 Institutional I-1 I-2
 I-3 Condition 1 2
 I-2 Condition 1 2
 I-3 Condition 1 2 3
 Mercantile
 Residential R-1 R-2 R-3 R-4
 Storage S-1 Moderate S-2 Low High-piled
 Utility and Miscellaneous Open Enclosed Repair Garage

Accessory Occupancy Classification(s): _____
 Incidental Uses (Table 509): _____
 This separation is not exempt as a Nonseparated Use (see exceptions).

Special Uses (Chapter 4 – List Code Sections): _____
 Special Provisions: (Chapter 5 – List Code Sections): _____
 Mixed Occupancy: No Yes Separation: _____ Hr. Exception: _____
 Non-separated Use (508.3): _____
 Separated Use (508.4)—See below for area calculations for each story, the area of the occupancy shall be such that the sum of the ratios of the actual floor area of each use divided by the allowable floor area for each use shall not exceed 1.

Select one
 Actual Area of Occupancy A + Actual Area of Occupancy B
 Allowable Area of Occupancy A Allowable Area of Occupancy B ≤

_____ + _____ = _____ ≤ 1.00

STORY NO.	DESCRIPTION AND USE	(A) BLDG AREA PER STORY (ACTUAL)	(B) TABLE 506.2 AREA	(C) AREA FOR FRONTAGE INCREASE 4.1	(D) ALLOWABLE AREA PER STORY OR UNLIMITED 3
	EXISTING BUILDING				

1. Frontage area increases from Section 506.2 are computed thus:
 a. Perimeter which fronts a public way or open space having 20 feet minimum width = _____ (F)
 b. Total Building Perimeter = _____ (P)
 c. Ratio (F/P) = _____ (F/P)
 d. W = Minimum width of public way = _____ (W)
2. Unlimited area applicable under conditions of Section 507.
 3. Maximum Building Area = total number of stories in the building x D (maximum 3 stories) (506.2).
 4. The maximum area of open parking garages must comply with Table 406.5.4. The maximum area of air traffic control towers must comply with Table 412.3.1.
 5. Frontage increase is based on the unspinklered area value in Table 506.2.

STRUCTURAL DESIGN

DESIGN LOADS:
 Importance Factors: Wind (IW) _____
 Snow (IS) _____
 Seismic (IE) _____

Live Loads: Roof _____ psf
 Mezzanine _____ psf
 Floor _____ psf

Ground Snow Load: _____ psf

Wind Load: Basic Wind Speed _____ mph (ASCE-7)
 Exposure Category _____

SEISMIC DESIGN CATEGORY: A B C D EXISTING
 Provide the following Seismic Design Parameters:
 Occupancy Category (Table 1604.5) I II III IV
 Spectral Response Acceleration SS _____ %g S1 _____ %g
 Site Classification (ASCE 7) A B C D E F
 Data Source: Field Test Presumptive Historical Data

Basic structural system (check one)
 Bearing Wall Dual w/Special Moment Frame
 Building Frame Dual w/intermediate R/C or Special Steel
 Moment Frame Inverted Pendulum
 Analysis Procedure: Simplified Equivalent Lateral Force Dynamic
 Architectural, Mechanical, Components anchored? Yes No

LATERAL DESIGN CONTROL: Earthquake Wind

SOIL BEARING CAPACITIES:
 Field Test (provide copy of test report) _____ psf
 Presumptive Bearing capacity _____ psf
 Pile size, type, and capacity _____

ALLOWABLE HEIGHT	ALLOWABLE HEIGHT		CODE REFERENCE
	ALLOWABLE	SHOWN ON PLANS	
Building Height in Feet (Table 504.3)	EXISTING		
Building Height in Stories (Table 504.4)	EXISTING		

1. Provide code reference if the "Shown on Plans" quantity is not based on Table 504.3 or 504.4.

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (feet)	RATING		DETAIL # AND SHEET #	DESIGN # FOR RATED ASSEMBLY	SHEET # FOR RATED PENETRATION	SHEET # FOR RATED JOINTS
		REQ'D	PROVIDED (w/ REDUCTION)				
Structural Frame including columns, girders, trusses							
Bearing Walls							
Exterior							
North							
East							
West							
South							
Nonbearing walls and partitions							
Exterior walls							
North							
East							
West							
South							
Interior walls and partitions							
Floor Construction including supporting beams and joists							
Floor Ceiling Assembly							
Columns Supporting Floors							
Roof Construction, including supporting beams and joists							
Roof Ceiling Assembly							
Columns Supporting Roof							
Shaft Enclosures—Exit							
Shaft Enclosures—Other							
Corridor Separation							
Occupancy/Fire Barrier Separation							
Party/Fire Wall Separation							
Smoke Barrier Separation							
Smoke Partition							
Tenant/Dwelling Unit/ Sleeping Unit Separation							
Incidental Use Separation							

* Indicate section number permitting reduction

MECHANICAL DESIGN

MECHANICAL SUMMARY

MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT

Thermal Zone
 winter dry bulb: _____
 summer dry bulb: _____

Interior design conditions
 winter dry bulb: _____
 summer dry bulb: _____
 relative humidity: _____

Building heating load: _____

Building cooling load: _____

Mechanical Spacing Conditioning System
 Unitary
 description of unit: _____
 heating efficiency: _____
 cooling efficiency: _____
 size category of unit: _____
 Boiler
 Size category, if oversized, state reason: _____
 Chiller
 Size category, if oversized, state reason: _____

List equipment efficiencies: _____

ELECTRICAL DESIGN

ELECTRICAL SUMMARY

ELECTRICAL SYSTEM AND EQUIPMENT

Method of Compliance:
 Energy Code: Prescriptive Performance
 ASHRAE 90.1: Prescriptive Performance

Lighting schedule (each fixture type)
 lamp type required in fixture
 number of lamps in fixture
 ballast type used in the fixture
 number of fixtures
 total wattage per fixture
 total interior wattage specified versus allowed (whole building or space by space)
 total exterior wattage specified versus allowed

Additional Prescriptive Compliance
 506.2.1 More Efficient Mechanical Equipment
 506.2.2 Reduced Lighting Power Density
 506.2.3 Energy Recovery Ventilation Systems
 506.2.4 Higher Efficiency Service Water Heating
 506.2.5 On-Site Supply of Renewable Energy
 506.2.6 Automatic Daylighting Control Systems

FIRE SEPARATION DISTANCE (feet) FROM PROPERTY LINES	PERCENTAGE OF WALL OPENING CALCULATIONS		
	DEGREE OF OPENINGS PROTECTION (TABLE 705.8)	ALLOWABLE AREA (%)	ACTUAL SHOWN ON PLANS (%)
	EXISTING		

LIFE SAFETY SYSTEM REQUIREMENTS

Emergency Lighting: Yes No
 Exit Signs: Yes No
 Fire Alarm: Yes No
 Smoke Detector: Yes No
 Carbon Monoxide: Yes No

LIFE SAFETY PLAN REQUIREMENTS

Life Safety Plan Sheet #: _____

Fire and/or smoke rated wall locations (Chapter 7)
 Assumed and real property line locations (if not on the site plan)
 Exterior wall opening area with respect to distance to assumed property lines (705.8)
 Occupancy Use for each area as it relates to occupant load calculation (Table 1004.1.2)
 Occupant loads for each area
 Exit access travel distances (1017)
 Common path of travel distances [Tables 1006.2.1 & 1006.3.2(1)]
 Dead end lengths (1020.4)
 Clear exit widths for each exit door
 Maximum calculated occupant load capacity each exit door can accommodate based on egress width (1005.3)
 Actual occupant load for each exit door
 A separate schematic plan indicating where fire rated floor/ceiling and/or roof structure is provided for purposes of occupancy separation
 Location of doors with panic hardware (1010.1.10)
 Location of doors with delayed egress locks and the amount of delay (1010.1.9.7)
 Location of doors with electromagnetic egress locks (1010.1.9.9)
 Location of doors equipped with hold-open devices
 Location of emergency escape windows (1030)
 The square footage of each fire area (202)
 The square footage of each smoke compartment for Occupancy Classification I-2 (407.5)
 Note any code exceptions or table notes that may have been utilized regarding the items above

TOTAL UNITS	ACCESSIBLE DWELLING UNITS (SECTION 1107)						TOTAL ACCESSIBLE UNITS PROVIDED
	ACCESSIBLE UNITS REQUIRED	ACCESSIBLE UNITS PROVIDED	TYPE A UNITS REQUIRED	TYPE A UNITS PROVIDED	TYPE B UNITS REQUIRED	TYPE B UNITS PROVIDED	
							N/A

LOT OR PARKING AREA	TOTAL # OF PARKING SPACES		# OF ACCESSIBLE SPACES PROVIDED			TOTAL # ACCESSIBLE UNITS PROVIDED
	REQUIRED	PROVIDED	VAN SPACES WITH			
			REGULAR WITH 5' ACCESS AISLE	132" ACCESS AISLE	8' ACCESS AISLE	
						EXISTING
TOTAL						

USE	WATERCLOSETS		LAVATORIES			SHOWERS/TUBS	DRINKING FOUNTAINS	
	Male	Female	Male	Female	Unisex		Regular	Accessible
	REQ'D							
PROVIDED								EXISTING

SPECIAL APPROVALS

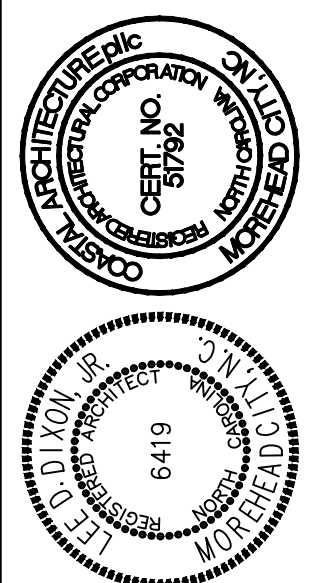
Special approval: (Local Jurisdiction, Department of Insurance, OSC, DPI, DHHS, ICC, etc., describe below)

Coastal Architecture
 • Architectural Design
 • Planning
 • Interiors



Lee D. Dixon, Jr., AIA
 252-247-2127
 lee@coastalarchitecture.net
 4206 Bridges St. Ext., Suite C
 Morehead City, NC 28557
 www.CoastalArchitecture.net

CARTERET COUNTY
 COURTHOUSE REPAIRS
 BEAUFORT, NORTH CAROLINA



GENERAL DATA

23025

ISSUED: 02/16/24
 DWG BY: MSG
 CKD BY: LDD

REVISIONS

SHEET NO.
G-1
 OF