APPENDIX B

2012 BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS
(EXCEPT ONE- AND TWO-FAMILY DWELLINGS AND TOWNHOUSES)
(Reproduce the following data on the building plans sheet 1 or 2)

Name of Project: ________________________________
Address: ________________________________ Zip Code ________________
Proposed Use: ________________________________

Owner/Authorized Agent: ________________________________ Phone # (___) ___-______ E-Mail ________________________________
Owned By: ☐ City/County ☐ Private ☐ State
Code Enforcement Jurisdiction: ☐ City_________ ☐ County_________ ☐ State

LEAD DESIGN PROFESSIONAL: ________________________________

<table>
<thead>
<tr>
<th>DESIGNER</th>
<th>FIRM</th>
<th>NAME</th>
<th>LICENSE #</th>
<th>TELEPHONE #</th>
<th>E-MAIL</th>
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<tbody>
<tr>
<td>Architectural</td>
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<td>Sprinkler-Standpipe</td>
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<td>Retaining Walls &gt;5' High</td>
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<td>Other</td>
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</table>

2012 EDITION OF NC CODE FOR: ☐ New Construction ☐ Addition ☐ Upfit
EXISTING: ☐ Reconstruction ☐ Alteration ☐ Repair ☐ Renovation
CONSTRUCTED: (date) ________ ORIGINAL USE(S) (Ch. 3): ________________________________
RENOVATED: (date) ________ CURRENT USE(S) (Ch. 3): ________________________________
PROPOSED USE(S) (Ch. 3): ________________________________

BUILDING DATA

Construction Type: ☐ I-A ☐ II-A ☐ III-A ☐ IV ☐ V-A ☐ V-B
(check all that apply) ☐ I-B ☐ II-B ☐ III-B
Sprinklers: ☐ No ☐ Partial ☐ Yes ☐ NFPA 13 ☐ NFPA 13R ☐ NFPA 13D
Standpipes: ☐ No ☐ Yes Class ☐ I ☐ II ☐ III ☐ Wet ☐ Dry
Fire District: ☐ No ☐ Yes (Primary) Flood Hazard Area: ☐ No ☐ Yes
Building Height: (feet) __________
Gross Building Area:

<table>
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<tr>
<th>Floor</th>
<th>Existing (sq ft)</th>
<th>New (sq ft)</th>
<th>Subtotal</th>
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<td>6th Floor</td>
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<td>5th Floor</td>
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<td>4th Floor</td>
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<td>3rd Floor</td>
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<td>Mezzanine</td>
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<td>1st Floor</td>
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<td>Basement</td>
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<tr>
<td>TOTAL</td>
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</tbody>
</table>

2012 NORTH CAROLINA ADMINISTRATIVE CODE AND POLICIES 23
ALLOWABLE AREA

Occupancy:
- Business
- Educational
- Factory: F-1 Moderate, F-2 Low
- Hazardous: H-1 Detonate, H-2 Deflagrate, H-3 Combust, H-4 Health, H-5 HPM
- Institutional: I-1, I-2, I-3, I-4
- I-3 Condition: 1, 2, 3, 4, 5
- Mercantile
- Residential: R-1, R-2, R-3, R-4
- Storage: S-1 Moderate, S-2 Low, High-piled
- Parking Garage, Open, Enclosed, Repair Garage
- Utility and Miscellaneous

Accessory Occupancies:
- Business
- Educational
- Factory: F-1 Moderate, F-2 Low
- Hazardous: H-1 Detonate, H-2 Deflagrate, H-3 Combust, H-4 Health, H-5 HPM
- Institutional: I-1, I-2, I-3, I-4
- I-3 Condition: 1, 2, 3, 4, 5
- Mercantile
- Residential: R-1, R-2, R-3, R-4
- Storage: S-1 Moderate, S-2 Low, High-piled
- Parking Garage, Open, Enclosed, Repair Garage
- Utility and Miscellaneous

Accessory Occupancies:
- Furnace room where any piece of equipment is over 400,000 Btu per hour input
- Rooms with boilers where the largest piece of equipment is over 15 psi and 10 horsepower
- Refrigerant machine room
- Hydrogen cutoff rooms, not classified as Group H
- Incinerator rooms
- Paint shops, not classified as Group H, located in occupancies other than Group F
- Laboratories and vocational shops, not classified as Group H, located in a Group E or I-2 occupancy
- Laundry rooms over 100 square feet
- Group I-3 cells equipped with padded surfaces
- Group I-2 waste and linen collection rooms
- Waste and linen collection rooms over 100 square feet
- Stationary storage battery systems having a liquid electrolyte capacity of more than 50 gallons, or a lithium-ion capacity of 1,000 pounds used for facility standby power, emergency power or uninterrupted power supplies
- Rooms containing fire pumps
- Group I-2 storage rooms over 100 square feet
- Group I-2 commercial kitchens
- Group I-2 laundries equal to or less than 100 square feet
- Group I-2 rooms or spaces that contain fuel-fired heating equipment

Special Uses:
- q 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417
- q 418 419 420 421 422 423 424 425 426 427

Special Provisions:
- q 509.2 509.3 509.4 509.5 509.6 509.7 509.8 509.9

continued
ALLOWABLE AREA—cont'd

Mixed Occupancy:

- No
- Yes

Separation: _____ Hr.

Exception: ______________________

- Incidental Use Separation (508.2.5)
  - This separation is not exempt as a Nonseparated Use (see exceptions).
- Nonseparated Use (508.3.2)
  - The required type of construction for the building shall be determined by applying the height and area limitations for each of the applicable occupancies to the entire building. The most restrictive type of construction, so determined, shall apply to the entire building.
- Separated Use (508.3.3) - 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.

\[
\frac{\text{Actual Area of Occupancy A}}{\text{Allowable Area of Occupancy A}} + \frac{\text{Actual Area of Occupancy B}}{\text{Allowable Area of Occupancy B}} \leq 1
\]

\[
\frac{\text{Actual Area of Occupancy A}}{\text{Allowable Area of Occupancy A}} + \frac{\text{Actual Area of Occupancy B}}{\text{Allowable Area of Occupancy B}} + \ldots = \frac{\text{Actual Area}}{\text{Allowable Area}} \leq 1.00
\]

<table>
<thead>
<tr>
<th>STORY NO.</th>
<th>DESCRIPTION AND USE</th>
<th>(A) BLDG AREA PER STORY (ACTUAL)</th>
<th>(B) TABLE 5033 AREA</th>
<th>(C) AREA FOR FRONTAGE INCREASE¹</th>
<th>(D) AREA FOR SPRINKLER INCREASE²</th>
<th>(E) ALLOWABLE AREA OR UNLIMITED³</th>
<th>(F) MAXIMUM BUILDING AREA⁵</th>
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</thead>
<tbody>
<tr>
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</tbody>
</table>

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)
   e. Percent of frontage increase \(I_f = 100 \times \frac{F/P - 0.25}{W/30} \times \%\)

2. The sprinkler increase per Section 506.3 is as follows:
   a. Multi-story building \(I_s = 200\) percent
   b. Single-story building \(I_s = 300\) percent

3. Unlimited area applicable under conditions of Section 507.

4. Maximum Building Area = total number of stories in the building \(\times E\) (506.4).

5. The maximum area of open parking garages must comply with Table 406.3.5. The maximum area of air traffic control towers must comply with Table 412.1.2.
### ALLOWABLE HEIGHT

<table>
<thead>
<tr>
<th>Type of Construction</th>
<th>ALLOCABLE (TABLE 503)</th>
<th>INCREASE FOR SPRINKLERS</th>
<th>SHOWN ON PLANS</th>
<th>CODE REFERENCE</th>
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<tbody>
<tr>
<td>Type</td>
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</tbody>
</table>

Building Height in Feet

Feet = \( H + 20' = \)_____

Building Height in Stories

Stories + 1 = _____

### FIRE PROTECTION REQUIREMENTS

<table>
<thead>
<tr>
<th>BUILDING ELEMENT</th>
<th>FIRE SEPARATION DISTANCE (FEET)</th>
<th>RATING</th>
<th>PROVIDED (W/ REDUCTION)</th>
<th>DETAIL # AND SHEET #</th>
<th>DESIGN # FOR RATED ASSEMBLY</th>
<th>DESIGN # FOR RATED PENETRATION</th>
<th>DESIGN # FOR RATED JOINTS</th>
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<td>Nonbearing walls and partitions</td>
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<td>Floor Construction</td>
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* Indicate section number permitting reduction
LIFE SAFETY SYSTEM REQUIREMENTS

- Emergency Lighting: ❑ No ❑ Yes
- Exit Signs: ❑ No ❑ Yes
- Fire Alarm: ❑ No ❑ Yes
- Smoke Detection Systems: ❑ No ❑ Yes ❑ Partial _______
- Panic Hardware: ❑ No ❑ Yes

LIFE SAFETY PLAN REQUIREMENTS

- Life Safety Plan Sheet #: ______________________
  - ❑ Fire and/or smoke rated wall locations (Chapter 7)
  - ❑ Assumed and real property line locations
  - ❑ Exterior wall opening area with respect to distance to assumed property lines (705.8)
  - ❑ Existing structures within 30 feet of the proposed building
  - ❑ Occupancy types for each area as it relates to occupant load calculation (Table 1004.1.1)
  - ❑ Occupant loads for each area
  - ❑ Exit access travel distances (1016)
  - ❑ Common path of travel distances (1014.3 & 1028.8)
  - ❑ Dead end lengths (1018.4)
  - ❑ Clear exit widths for each exit door
  - ❑ Maximum calculated occupant load capacity each exit door can accommodate based on egress width (1005.1)
  - ❑ 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 (1008.1.10)
  - ❑ Location of doors with delayed egress locks and the amount of delay (1008.1.9.7)
  - ❑ Location of doors with electromagnetic egress locks (1008.1.9.8)
  - ❑ Location of doors equipped with hold-open devices
  - ❑ Location of emergency escape windows (1029)
  - ❑ The square footage of each fire area (902)
  - ❑ The square footage of each smoke compartment (407.4)
  - ❑ Note any code exceptions or table notes that may have been utilized regarding the items above

ACCESSIBLE DWELLING UNITS
(SECTION 1107)

<table>
<thead>
<tr>
<th>TOTAL UNITS</th>
<th>ACCESSIBLE UNITS REQUIRED</th>
<th>ACCESSIBLE UNITS PROVIDED</th>
<th>TYPE A UNITS REQUIRED</th>
<th>TYPE A UNITS PROVIDED</th>
<th>TYPE B UNITS REQUIRED</th>
<th>TYPE B UNITS PROVIDED</th>
<th>TOTAL ACCESSIBLE UNITS PROVIDED</th>
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</thead>
</table>

ACCESSIBILITY PARKING
(SECTION 1106)

<table>
<thead>
<tr>
<th>LOT OR PARKING AREA</th>
<th>TOTAL # OF PARKING SPACES REQUIRED</th>
<th># OF ACCESSIBLE SPACES PROVIDED</th>
<th>REGULAR WITH 5' ACCESS Aisle</th>
<th>VAN SPACES WITH 132&quot; ACCESS Aisle</th>
<th>8' ACCESS Aisle</th>
<th>TOTAL # ACCESSIBLE PROVIDED</th>
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<tr>
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2012 NORTH CAROLINA ADMINISTRATIVE CODE AND POLICIES 27
STRUCTURAL DESIGN

DESIGN LOADS:

Importance Factors:
- Wind ($F_w$)
- Snow ($F_s$)
- Seismic ($F_L$)

Live Loads:
- Roof _______ psf
- Mezzanine _______ psf
- Floor _______ psf

Ground Snow Load: _______ psf

Wind Load:
- Basic Wind Speed _______ mph (ASCE-7)
- Exposure Category _______
- Wind Base Shears (for MWFRS) $V_x = _______ \quad V_y = _______

SEISMIC DESIGN CATEGORY:

Provide the following Seismic Design Parameters:

- Occupancy Category (Table 1604.5): □ I  □ II  □ III  □ IV
- Spectral Response Acceleration: $S_x \quad \%g \quad S_y \quad \%g$
- Site Classification (Table 1613.5.2): □ 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

Seismic base shear: $V_x = _______ \quad V_y = _______

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

SPECIAL INSPECTIONS REQUIRED: □ Yes □ No

PLUMBING FIXTURE REQUIREMENTS

(TABLE 2902.1)

| USE | WATERCLOSETS | URINALS | LAVATORIES | SHOWERS/ | DRINKING FOUNTAINS |
|-----|--------------|---------|------------| TUBBS/   | REGULAR | ACCESSIBLE |
|     | MALE | FEMALE | MALE | FEMALE |           |          |
| SPACE | EXISTING |         |        |        |           |          |
|       | NEW   |         |        |        |           |          |
| REQUIRED |     |         |        |        |           |          |

SPECIAL APPROVALS

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

Climate Zone: 3 4 5

Method of Compliance:
- Prescriptive (Energy Code)
- Performance (Energy Code)
- Prescriptive (ASHRAE 90.1)
- Performance (ASHRAE 90.1)

THERMAL ENVELOPE

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)
- 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:
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: 

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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 ballasts in fixture
total wattage per fixture
total interior wattage specified vs. allowed (whole building or space by space)
total exterior wattage specified vs. 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