2018 APPENDIX B
BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS
(EXCEPT 1 AND 2-FAMILY DWELLINGS AND TOWNHOUSES)
(Reproduce the following data on the building plans sheet 1 or 2)

Name of Project: PROGRESS VENTURES
Address: 185 PROGRESS DRIVE, FUQUAY-VARINA, NC 27526 Zip Code 27526
Owner/Authorized Agent: DAN LAGALY Phone # (919 524 4319 E-Mail DDLAGALY@HOTMAIL.COM
Owned By: [X] City/County [ ] Private [ ] State
Code Enforcement Jurisdiction: [ ] City ______ [X] County HARNETT [ ] State

CONTACT:

DESIGNER	FIRM	NAME	LICENSE #	TELEPHONE #	E-MAIL
Architectural				( )	
Civil				( )	
Electrical	AKE ELECTRIC, INC.		U-31732	(919)917-8701	ADAMRKOPPIN@GMAIL.COM
Fire Alarm				( )	
Plumbing	PMC OF NC, INC.		22186-P1	(919)524-2755	ADAMRKOPPIN@GMAIL.COM
Mechanical				( )	
Sprinkler-Standpipe				( )	
Structural	AKE ELECTRIC, INC.		U-31732	(919)917-8701	SEAN@PMCOFNC.COM
Retaining Walls >5' High				( )	
Other				( )	

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

2018 NC BUILDING CODE: [ ] New Building [ ] Addition [ ] Renovation
[ ] 1st Time Interior Completion
[X] Shell/Core - Contact the local inspection jurisdiction for possible additional procedures and requirements
[ ] Phased Construction - Shell/Core- Contact the local inspection jurisdiction for possible additional procedures and requirements

2018 NC EXISTING BUILDING CODE: EXISTING: [ ] Prescriptive [ ] Repair [ ] Chapter 14
Alteration: [ ] Level I [ ] Level II [ ] Level III
[ ] Historic Property [ ] Change of Use

CONSTRUCTED: (date) ______ **CURRENT OCCUPANCY(S)** (Ch. 3): ______
RENOVATED: (date) ______ **PROPOSED OCCUPANCY(S)** (Ch. 3): ______

RISK CATEGORY (Table 1604.5): **Current:** [X] I [ ] II [ ] III [ ] IV
Proposed: [ ] I [X] II [ ] III [ ] IV

BASIC BUILDING DATA
Construction Type: (check all that apply) [ ] I-A [ ] I-B [ ] II-A [X] II-B [ ] III-A [ ] III-B [ ] IV [ ] V-A [ ] V-B
Sprinklers: [X] No [ ] Partial [ ] Yes [ ] NFPA 13 [ ] NFPA 13R [ ] NFPA 13D
Standpipes: [X] No [ ] Yes Class [ ] I [ ] II [ ] III [ ] Wet [ ] Dry
Fire District: [ ] No [X] Yes **Flood Hazard Area:** [X] No [ ] Yes
Special Inspections Required: [X] No [ ] Yes (Contact the local inspection jurisdiction for additional procedures and requirements.)

Gross Building Area Table

FLOOR	EXISTING (SQ FT)	NEW (SQ FT)	SUB-TOTAL
3rd Floor			
2nd Floor			
Mezzanine			
1st Floor		10,080	10,080
Basement			
TOTAL			10,080

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 Deflagrate [ ] H-3 Combust [ ] H-4 Health [ ] H-5 HPM
Institutional [ ] I-1 Condition [ ] 1 [ ] 2
[ ] I-2 Condition [ ] 1 [ ] 2
[ ] I-3 Condition [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5
[ ] I-4
Mercantile [ ]
Residential [ ] R-1 [ ] R-2 [ ] R-3 [ ] R-4
Storage [ ] S-1 Moderate [X] S-2 Low [ ] High-piled
[ ] Parking Garage [ ] Open [ ] Enclosed [ ] Repair Garage
Utility and Miscellaneous [ ]

Accessory Occupancy Classification(s): ______
Incidental Uses (Table 509): ______
Special Uses (Chapter 4 – List Code Sections): ______
Special Provisions: (Chapter 5 – List Code Sections): ______
Mixed Occupancy: [X] No [ ] Yes Separation: ____ Hr. Exception: ______

[X] Non-Separated Use (508.3) - 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 (508.4) - 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.

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

______ + ______ + ... = ______ ≤ 1.00

STORY NO.	DESCRIPTION AND USE	(A) BLDG AREA PER STORY (ACTUAL)	(B) TABLE 506.2[4] AREA	(C) AREA FOR FRONTAGE INCREASE[1,5]	(D) ALLOWABLE AREA PER STORY OR UNLIMITED[2,3]

[1] Frontage area increases from Section 506.3 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 $I_f = 100[F/P - 0.25] \times W/30$ = ______ (%)
[2] Unlimited area applicable under conditions of Section 507.
[3] Maximum Building Area = total number of stories in the building x D (maximum3 stories) (506.2).
[4] The maximum area of open parking garages must comply with Table 406.5.4.
[5] Frontage increase is based on the unsprinklered area value in Table 506.2.

ALLOWABLE HEIGHT

	ALLOWABLE	SHOWN ON PLANS	CODE REFERENCE [1]
Building Height in Feet (Table 504.3) [2]	40	21.5	
Building Height in Stories (Table 504.4) [3]	1	1	

[1] **Provide code reference if the "Shown on Plans" quantity is not based on Table 504.3 or 504.4.**
[2] The maximum height of air traffic control towers must comply with Table 412.3.1.
[3] The maximum height of open parking garages must comply with Table 406.5.4.

FIRE PROTECTION REQUIREMENTS

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (FEET)	RATING REQ'D	RATING PROVIDED (W/ * REDUCTION)	DETAIL # AND SHEET #	DESIGN # FOR RATED ASSEMBLY	SHEET # FOR RATED PENETRATION	SHEET # FOR RATED JOINTS
Structural Frame, including columns, girders, trusses							
Bearing Walls	>20'	0					
Exterior							
North							
East							
West							
South							
Interior							
Nonbearing Walls and Partitions							
Exterior walls	>20'	0					
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		0					
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

PERCENTAGE OF WALL OPENING CALCULATIONS

FIRE SEPARATION DISTANCE (FEET) FROM PROPERTY LINES	DEGREE OF OPENINGS PROTECTION (TABLE 705.8)	ALLOWABLE AREA (%)	ACTUAL SHOWN ON PLANS (%)

LIFE SAFETY SYSTEM REQUIREMENTS

Emergency Lighting: [ ] No [X] Yes
Exit Signs: [ ] No [X] Yes
Fire Alarm: [X] No [ ] Yes
Smoke Detection Systems: [X] No [ ] Yes [ ] Partial ______
Carbon Monoxide Detection: [X] 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 (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 sign locations (1013)
- [ ] 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

ACCESSIBLE DWELLING UNITS
(SECTION 1107)

UNIT CLASSIFICATION	TOTAL UNITS	ACCESSIBLE UNITS REQUIRED	ACCESSIBLE UNITS PROVIDED	TYPE A UNITS REQUIRED	TYPE A UNITS PROVIDED	TYPE B UNITS REQUIRED	TYPE B UNITS PROVIDED	TOTAL ACCESSIBLE UNITS PROVIDED

ACCESSIBLE PARKING
(SECTION 1106)

LOT OR PARKING AREA	TOTAL # OF PARKING SPACES		# OF ACCESSIBLE SPACES PROVIDED		TOTAL # ACCESSIBLE PROVIDED
	REQUIRED	PROVIDED	96" SPACES	132" SPACES	
	19	19	2		2
TOTAL	19	19	2		2

PLUMBING FIXTURE REQUIREMENTS
(TABLE 2902.1)

USE		WATER CLOSETS			URINALS	LAVATORIES			SHOWERS /TUBS	DRINKING FOUNTAINS	
		MALE	FEMALE	UNISEX		MALE	FEMALE	UNISEX		REGULAR	ACCESSIBLE
SPACE	EXIST'G										
	NEW			6				6			
	REQ'D			6				6			

SPECIAL APPROVALS

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

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 vs annual energy cost for the proposed design.

Existing building envelope complies with code: [ ] No [ ] Yes (The remainder of this section is not applicable)

Exempt Building: [X] No [ ] Yes (Provide code or statutory reference): ______

Climate Zone: [X] 3A [ ] 4A [ ] 5A

Method of Compliance: Energy Code [ ] Performance [ ] Prescriptive
ASHRAE 90.1 [ ] Performance [ ] Prescriptive
(If "Other" specify source here) ______

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)
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: ______

2018 APPENDIX B
BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS
STRUCTURAL DESIGN
(PROVIDE ON THE STRUCTURAL SHEETS IF APPLICABLE)

DESIGN LOADS:

Importance Factors: Snow (I_S) 15
Seismic (I_E) ______

Live Loads: Roof 20 psf
Mezzanine ______ psf
Floor 100 psf

Ground Snow Load: 20 psf

Wind Load: Ultimate Wind Speed 120 mph (ASCE-7)
Exposure Category B

SEISMIC DESIGN CATEGORY: [ ] A [ ] B [X] C [ ] D
Provide the following Seismic Design Parameters:
Risk Category (Table 1604.5) [ ] I [X] II [ ] III [ ] IV
Spectral Response Acceleration S_S 0.1750 %g S_1 0.0840 %g
Site Classification (ASCE 7) [ ] A [ ] B [ ] C [X] D [ ] E [ ] F
Data Source: [ ] Field Test [ ] Presumptive [ ] Historical Data
Basic structural system [ ] 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 [X]

SOIL BEARING CAPACITIES:
Field Test (provide copy of test report) ______ psf
Presumptive Bearing capacity 2000 psf
Pile size, type, and capacity ______

2018 APPENDIX B
BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS
MECHANICAL DESIGN
(PROVIDE ON THE MECHANICAL SHEETS IF APPLICABLE)

MECHANICAL SUMMARY

MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT

Thermal Zone
winter dry bulb: 17
summer dry bulb: 90

Interior design conditions
winter dry bulb: 73
summer dry bulb: 70
relative humidity: 50

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: ______

2018 APPENDIX B
BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS
ELECTRICAL DESIGN
(PROVIDE ON THE ELECTRICAL SHEETS IF APPLICABLE)

ELECTRICAL SUMMARY

ELECTRICAL SYSTEM AND EQUIPMENT

Method of Compliance: Energy Code [ ] Performance [X] Prescriptive
ASHRAE 90.1 [ ] Performance [ ] Prescriptive

Lighting schedule (each fixture type)
lamp type required in fixture LED LIGHTS
number of lamps in fixture
ballast type used in the fixture
number of ballasts in fixture
total wattage per fixture SEE ELECTRICAL PLAN
total interior wattage specified vs. allowed (whole building or space by space)
total exterior wattage specified vs. allowed

Additional Efficiency Package Options
(When using the 2018 NCECC; not required for ASHRAE 90.1)
- [ ] C406.2 More Efficient HVAC Equipment Performance
- [ ] C406.3 Reduced Lighting Power Density
- [ ] C406.4 Enhanced Digital Lighting Controls
- [ ] C406.5 On-Site Renewable Energy
- [ ] C406.6 Dedicated Outdoor Air System
- [ ] C406.7 Reduced Energy Use in Service Water Heating

NORTH CAROLINA PROFESSIONAL SEAL 043832 9-14-2026 ENGINEER MICHAEL A. LAGALY

THESE PLANS, NOTES AND DETAILS ARE DESIGNED TO MEET THE 2018 NORTH CAROLINA EXISTING BUILDING CODE.

MDL
ENGINEERING SERVICES
213 Linton Banks Pl.
Cary, NC 27513
(919) 999-8153

STEEL FRAME BUILDING
185 Progress Road
Fuqua Varina, NC 27526

DRAWN BY: ML
DATE: SEPT 14, 2026
FILE: SD11576
REV: A

SCALE: 3/16 INCH = 1 FOOT

SHEET
S0