2006 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: Fellowship and Education Center First Baptist Richlands
Address: 100 Rand Street Zip Code 28574
Proposed Use: Family Life Center
Owner/Authorized Agent: B.Garrett Phone # (910)575-9005 E-Mail garrettb@atmc.net
Owned By: ☐ City/County ■ Private ☐ State
Code Enforcement Jurisdiction: ☐ City ■ County ☐ State

LEAD DESIGN PROFESSIONAL: Brian Garrett, AIA

DESIGNER	FIRM	NAME	LICENSE #	TELEPHONE #	E-MAIL
Architectural	Brian D. Garrett Arch.	Brian Garrett	5120	(910)575-9005	garrettb@atmc.net
Civil	Gairy Canady	Gairy Canady		(910)324-4616	
Electrical	McDowell Engineers	Greg McDowell	18518	(910)270-3747	mcdowelleng@bellsouth.net
Fire Alarm	McDowell Engineers	Greg McDowell	18518	(910)270-3747	mcdowelleng@bellsouth.net
Plumbing	McDowell Engineers	Steve Everhart	23933	(910)270-3747	mcdowelleng@bellsouth.net
Mechanical	McDowell Engineers	Steve Everhart	23933	(910)270-3747	mcdowelleng@bellsouth.net
Sprinkler-Standpipe	NA			( )	
Structural	Woods Engineering	Don Woods	19475	(910)343-8007	woodsengineering@bellsouth.net
Retaining Walls >5' High				( )	
Other				( )	

2006 EDITION OF NC CODE FOR: ■ New Construction ☐ Addition ☐ Upfit
EXISTING: ☐ Reconstruction ☐ Alteration ☐ Repair
CONSTRUCTED _____ ORIGINAL USE _____ RENOVATED _____ CURRENT USE _____

BUILDING DATA
Construction Type: ☐ I-A ☐ I-B ☐ II-A ☐ II-B ☐ III-A ☐ III-B ☐ IV ☐ V-A ■ V-B
Mixed construction: ■ No ☐ Yes Types _____
Sprinklers: ☐ No ☐ Partial ■ Yes ■ NFPA13 ☐ NFPA13R ☐ NFPA 13D
Standpipes: ■ No ☐ Yes Class ☐ I ☐ II ☐ III ☐ Wet ☐ Dry
Fire District: ☐ No ■ Yes Flood Hazard Area: ■ No ☐ Yes
Building Height: Feet 35'-10" Number of Stories 2
Mezzanine: ■ No ☐ Yes
Gross Building Area:

FLOOR	EXISTING (SQ FT)	NEW (SQ FT)	SUB-TOTAL
6th Floor			
5th Floor			
4th Floor			
3rd Floor			
2nd Floor		4200 SF	
Mezzanine			
1st Floor		14,993 SF	
Basement			
TOTAL		18,993 SF	

ALLOWABLE AREA

Primary Occupancy: Assembly ☐ A-1 ☐ A-2 ■ A-3 ☐ A-4 ☐ A-5
☐ Business ☐ Educational Factory ☐ F-1 Moderate ☐ F-1 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
☐ Utility and Miscellaneous ☐ Parking Garage ☐ Open ☐ Enclosed ☐ Repair Garage
Secondary Occupancy: _____
Special Uses: ☐ 402 ☐ 403 ☐ 403 ☐ 405 ☐ 406 ☐ 407 ☐ 408 ☐ 409 ☐ 410 ☐ 411 ☐ 412 ☐ 413 ☐ 414 ☐ 415 ☐ 415 ☐ 417 ☐ 418 ☐ 419 ☐ 420 ☐ 421
Special Provisions: ☐ 508.2 ☐ 508.3 ☐ 508.4 ☐ 508.5 ☐ 508.6 ☐ 508.7 ☐ 508.8
Mixed Occupancy: ■ No ☐
☐ Incidental Use Separation (302.1.1)
This separation is not exempt as a Non-Separated Use (see exceptions).
☐ Non-Separated Use (302.3.1)
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 (302.3.2) - 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 503[3] AREA	(C) AREA FOR FRONTAGE INCREASE[1]	(D) AREA FOR SPRINKLER INCREASE[2]	(E) ALLOWABLE AREA OR UNLIMITED[3]	(F) MAXIMUM BUILDING AREA[4]
1	Multi-use	14,993 SF	6000 SF	2700 SF	12,000 SF	20,700 SF	41,400 SF

[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 = 367 ft (F)
b. Total Building Perimeter = 526 ft(P)
c. Ratio (F/P) = 69% (F/P)
d. W = Minimum width of public way = 30' (W)
e. Percent of frontage increase If = 100 [F/P - 0.25] x W/30 = 45 (%)
[2] The sprinkler increase per Section 506.3 is as follows:
a. Multi-story building Is = 200 percent
b. Single story building Is = 300 percent
[3] Unlimited area applicable under conditions of Sections Group B, F, M, S, A-4 (507);
Group A motion picture (507.9); Malls (402.6); and H-2 aircraft paint hangers (507.7).
[4] Maximum Building Area = total number of stories in the building x E (506.4).
[5] The maximum area of parking garages must comply with 406.3.5. The maximum area of air traffic control towers must comply with 412.1.2.

ALLOWABLE HEIGHT

	ALLOWABLE (TABLE 503)	INCREASE FOR SPRINKLERS	SHOWN ON PLANS	CODE REFERENCE
Type of Construction	Type V-B		Type V-B	
Building Height in Feet	Feet 40	Feet = H+20' = 60	35'-10"	
Building Height in Stories	Stories 1	Stories = 1 = _____	Stories 1	

FIRE PROTECTION REQUIREMENTS

Life Safety Plan Sheet #, if Provided _____

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (FEET)	RATING REQD	RATING PROVIDED (w/ _____)	DETAIL # AND SHEET #	DETAIL # FOR RATED ASSEMBLY	DETAIL # FOR RATED PENETRATION	DETAIL # FOR RATED JOINTS
Structural Frame, including columns, girders, trusses	N/A						
Bearing Walls							
Exterior	N/A	0	0				
North							
East							
West							
South							
Interior							
Nonbearing Walls and Partitions Exterior walls	N/A						
North							
East							
West							
South							
Interior walls and partitions							
Floor Construction Including supporting beams and joists	N/A						
Roof Construction Including supporting beams and joists	N/A						
Shaft Enclosures - Exit	1						
Shaft Enclosures - Other	1						
Corridor Separation		0	0				
Occupancy Separation	N/A						
Party/Fire Wall Separation	N/A						
Smoke Barrier Separation	N/A						
Tenant Separation	N/A						
Incidental Use Separation	N/A						

* 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
Panic Hardware: ☐ No ■ Yes

EXIT REQUIREMENTS

NUMBER AND ARRANGEMENT OF EXITS

FLOOR, ROOM OR SPACE DESIGNATION	MINIMUM[2] NUMBER OF EXITS		TRAVEL DISTANCE		ARRANGEMENT MEANS OF EGRESS[3,4] (SECTION 1014.2)	
	REQUIRED	SHOWN ON PLANS	ALLOWABLE TRAVEL DISTANCE (TABLE 1015.1)	ACTUAL TRAVEL DISTANCE SHOWN ON PLANS	REQUIRED DISTANCE BETWEEN EXIT DOORS	ACTUAL DISTANCE SHOWN ON PLANS
multi-use	2	4	250 FT	76 FT	72	72

[1] Corridor dead ends (Section 1016.3)
[2] Single exits (Table 1018.2)
[3] Common Path of Travel (Section 1013.3)

EXIT WIDTH

USE GROUP OR SPACE DESCRIPTION	(a) AREA[1] sq. ft.	(b) AREA[1] PER OCCUPANT (TABLE 1003.2.2.2)	CALCULATED OCCUPANT LOAD	(c) EGRESS WIDTH PER OCCUPANT (TABLE 1005.1)		EXIT WIDTH (in)[3,4,5,6] REQUIRED WIDTH (SECTION 1005.1) (a ÷ b) x c		ACTUAL WIDTH SHOWN ON PLANS	
				STAIR	LEVEL	STAIR	LEVEL	STAIR	LEVEL
multi-use	6,800	15 net	454		.15	68			72
Second Flr	1,500	15 net	100	.2		20		36	

[1] See Table 1004.1.2 to determine whether net or gross area is applicable.
See definition "Area, Gross" and "Area, Net" (Section 1002)
[2] Minimum stairway width (Section 1005.1); min. corridor width (Section 1016.2); min. door width (Section 1018.1)
[3] Minimum width of exit passageway (Section 1020.2)
[4] See Section 1004.5 for converging exits.
[5] The loss of one means of egress shall not reduce the available capacity to less than 50 percent of the total required (Section 1005.1)
[6] Assembly occupancies (Section 1024)

STRUCTURAL DESIGN On Plans

DESIGN LOADS:

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

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

Snow Load: _____ psf

Wind Load: Basic Wind Speed _____ mph (ASCE-7-02)
Exposure Category _____
Wind Base Shears (for MWFRS) Vx = _____ Vy = _____

SEISMIC DESIGN CATEGORY A
Compliance with Section 1616.4 only? ☐ Yes ☐ No

SEISMIC DESIGN CATEGORY ☐ B ☐ C ☐ D
Provide the following Seismic Design Parameters:
Seismic Use Group _____
Spectral Response Acceleration S_S _____ %g S_1 _____ %g
Site Classification _____ ☐ 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 = _____ V_y = _____
Analysis Procedure _____ Simplified _____ Equivalent Lateral Force _____ Modal
Architectural, Mechanical, Components anchored? _____

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 _____

PLUMBING FIXTURE REQUIREMENTS

USE	WATERCLOSETS MALE	WATERCLOSETS FEMALE	URINALS	LAVATORIES MALE	LAVATORIES FEMALE	SHOWERS/ TUBS	DRINKING FOUNTAINS REGULAR	DRINKING FOUNTAINS ACCESSIBLE
EXISTING								
NEW	3	4	2	2	2		1	1
REQUIRED	3	3	1	2	2		1	1

ACCESSIBLE PARKING existing

LOT OR PARKING AREA	TOTAL # OF PARKING SPACES REQUIRED	TOTAL # OF PARKING SPACES PROVIDED	# OF ACCESSIBLE SPACES PROVIDED REGULAR WIDE 8'	VAN SPACES WIDE 8' ACCESS AISLE	TOTAL # ACCESSIBLE PROVIDED
TOTAL					

SPECIAL APPROVALS

Special approval: (Local Jurisdiction, Department of Insurance, OSC, DPI, DFS, ICC, etc., describe below)
On Structural Plans

ENERGY SUMMARY On Plans

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 energy cost budget method, state the annual energy cost budget vs allowable annual energy cost budget.

THERMAL ENVELOPE

Method of Compliance:
☐ Prescriptive ☐ Performance ☐ Energy Cost Budget

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
shading coefficient
projection factor
low e required, if applicable
Door R-Values

Walls adjacent to unconditioned space (each assembly)
Description of assembly
U-Value of total assembly
R-Value of insulation
Openings (windows or doors with glazing)
U-Value of assembly
Low e required, if applicable
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

On Plans ELECTRICAL SUMMARY

ELECTRICAL SYSTEM AND EQUIPMENT

Method of Compliance:
☐ Prescriptive ☐ Performance ☐ Energy Cost Budget

Lighting schedule
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
total exterior wattage specified vs allowed

Equipment schedules with motors (not used for mechanical systems)
motor horsepower
number of phases
minimum efficiency
motor type
# of poles

On Plans MECHANICAL SUMMARY

MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT

Method of Compliance
☐ Prescriptive ☐ Energy Cost Budget

Climate Zone _____

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
heat output of unit
cooling output of unit
Boiler
total boiler output. If oversized, state reason.
Chiller
total chiller capacity. If oversized, state reason.

List equipment efficiencies

Equipment schedules with motors (mechanical systems)
motor horsepower
number of phases
minimum efficiency
motor type
# of poles

BRIAN D. GARRETT ARCHITECT, P.A. 790-5 SUNSET BLVD. SUNSET BEACH, N.C. 28468 REGISTRATION NO. 52546 910-575-9005
SEAL
BRIAN D. GARRETT REGISTERED ARCHITECT 5120 NORTH CAROLINA SUNSET BEACH, N.C.
BID SET

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PROJECT NO.: 1106

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APPENDIX B

SHEET NUMBER:
B1 OF 1