

BUILDING CODE SUMMARY- BUILDING 1

Name of Project: **DIXON HIGH SCHOOL ADDITION**
 Address: **180 DIXON SCHOOL ROAD HOLLY RIDGE, NC** Zip Code: **28445**
 Proposed Use: **EDUCATIONAL**
 Owner or Authorized Agent: **ONSLOW COUNTY SCHOOLS, JEFFREY L HUDSON** Phone #: **(910) 455-2211** E-Mail: **jeff.hudson@onslow.k12.nc.us**
 Owned By: City/County Private State
 Code Enforcement Jurisdiction: City County

LEAD DESIGN PROFESSIONAL: **SFL Architects, PA**
 DESIGNER: **SFL Architects, PA** NAME: **KENNETH C. UNDERWOOD** LICENSE# **NC 7368** TELEPHONE# **(910) 494-4999** E-MAIL **kunderwood@sfla.biz**
 Architectural: **PARKER & ASSOCIATES** NAME: **TIMOTHY M. STEWART** LICENSE# **NC 14575** TELEPHONE# **(910) 455-2414** E-MAIL **tpstewart@parker.com**
 Civil: **PROGRESSIVE DESIGN COLLABORATIVE LTD** NAME: **HANK G. HOOMANN** LICENSE# **NC 5040** TELEPHONE# **(919) 790-9999** E-MAIL **hoomann@pdconline.com**
 Electrical: **PROGRESSIVE DESIGN COLLABORATIVE LTD** NAME: **HANK G. HOOMANN** LICENSE# **NC 5040** TELEPHONE# **(919) 790-9999** E-MAIL **hoomann@pdconline.com**
 Fire Alarm: **PROGRESSIVE DESIGN COLLABORATIVE LTD** NAME: **HANK G. HOOMANN** LICENSE# **NC 5040** TELEPHONE# **(919) 790-9999** E-MAIL **hoomann@pdconline.com**
 Plumbing: **PROGRESSIVE DESIGN COLLABORATIVE LTD** NAME: **HANK G. HOOMANN** LICENSE# **NC 5040** TELEPHONE# **(919) 790-9999** E-MAIL **hoomann@pdconline.com**
 Mechanical: **PROGRESSIVE DESIGN COLLABORATIVE LTD** NAME: **HANK G. HOOMANN** LICENSE# **NC 5040** TELEPHONE# **(919) 790-9999** E-MAIL **hoomann@pdconline.com**
 Structural: **LASATER-HOPKINS-CHANG, PC** NAME: **STEPHEN K. FERGUSON** LICENSE# **NC 18675** TELEPHONE# **(919) 632-6687** E-MAIL **stferguson@theengineers.com**
 Retaining Walls > 5' High: Other

2009 EDITION OF NC CODE FOR: New Construction Addition Upfit
 EXISTING: Reconstruction Alteration Repair
 CONTRACTED: ORIGINAL USE **EDUCATIONAL** RENOVATED CURRENT USE **EDUCATIONAL**

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 NFA 13 NFA 13R NFA 13D
 Sprinklers: No Partial Yes NFPA 13 NFPA 13R NFPA 13D
 Standpipes: No Yes Class: I II III Wet Dry Other
 Fire District: No Yes Hazard Area: No Yes
 Building Height: **18'-0"** Feet Number of Stories: **2**
 Mezzanine: No Yes

FLOOR	EXISTING (SQFT)	NEW(SQFT)	SUBTOTAL
4th Floor			
3rd Floor			
2nd Floor			
Mezzanine			
1st Floor	13,130	633	13,663
Basement	13,130	633	13,663
TOTAL			

ALLOWABLE AREA
 Primary Occupancy: Assembly Educational Factory F-1 Moderate F-2 Low F-3 High H-5 HPM
 Hazardous: H-1 Detonate H-2 Detonate H-3 Combust H-4 Health H-5 HPM
 Institutions: I-1 I-2 I-3 I-4 I-5
 Residential: R-1 R-2 R-3 R-4
 Mercantile: S-1 Moderate S-2 Low High-Piled Enclosed Repair
 Storage: Utility and Miscellaneous Parking Garage Open

Secondary Occupancy: A-1 A-2 A-3 A-4 A-5 A-6
 Special Uses: 402 403 404 405 406 407 408 409 410 411
 Special Provisions: 508.2 508.3 508.4 508.5 508.6 508.7 508.8
 Mixed Occupancy: No Yes Separation: Hr. Exception:

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.

$$\frac{\text{Actual Area of Occupancy A}}{\text{Allowable Area of Occupancy A}} + \frac{\text{Actual Area of Occupancy B}}{\text{Allowable Area of Occupancy B}} \leq 1.00$$

STORY NO.	DESCRIPTION AND USE	(A) BLDG AREA PER STORY (ACTUAL)	(B) TABLF 503 ⁴ AREA	(C) AREA OF FRONTAGE INCREASE ⁵	(D) AREA FOR SPRINKLER INCREASE ⁶	(E) ALLOWABLE AREA OR UNLIMITED	(F) MAXIMUM BUILDING AREA ⁷
BUILDING 1	ASSEMBLY	13,663	9,600	4,883	N/A	N/A	14,383

BUILDING 1 (existing)
¹Frontage area increase from Section 506.2 are computed thus:
 a. Perimeter which forms a public way or open space having 20 feet minimum width = 534 (F)
 b. Total Building Perimeter = 682 (F)
 c. Ratio (F/F) = 78 (F)
 d. W = Minimum width of public way = 29.14 (W)
 e. Percent of frontage increase $I_f = 100 [(F/F) - 0.25] \times W/30 = 51.41$ (%)
²The sprinkler increase per Section 506.3 is as follows:
 a. Multi-story building $I_s = 200\%$
 b. Single-story building $I_s = 300\%$
³Unlimited area applicable under conditions of Sections Group B, F, M, S, A-4 (507), Group A (507.9), Malls (402.6), and H-2 aircraft paint hangars (507.7).
⁴Maximum Building Area = total number of stories in the building x E (506.4).
⁵The 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.

$\Sigma F = 534$
 $F @ 30' = 483$
 $F @ 21' = 51$
 $W = (21) \times (51/534) + (30) \times (483/534)$
 $W = (21) \times (0.10) + (30) \times (0.90)$
 $W = 2.01 + 27.3$
 $W = 29.14$
 $I_f = 100 [(F/F) - 0.25] W/30$
 $I_f = 100 (534/682 - 0.25) 29.14/30$
 $I_f = 100 (0.78 - 0.25) 0.97$
 $I_f = 100 (0.53) 0.97$
 $I_f = 51.41$
 $I_f = 51.41\%$

ALLOWABLE HEIGHTS	ALLOWABLE (TABLE 503)	INCREASE FOR SPRINKLERS	SHOWN ON PLANS	CODE REFERENCE
Type of Construction	Type III		Type III	
Building Height in Feet	Feet 55'-0"	Feet +H+20" = N/A	Feet 18'-0"	
Building Height in Stories	Stories 2	Stories +1 = N/A	Stories 1	

LIFE SAFETY SYSTEM REQUIREMENTS
 Emergency Lighting No Yes Smoke Detection Systems No Yes
 Exit Signs No Yes Panic Hardware No Yes
 Fire Alarms No Yes

FLOOR, ROOM OR SPACE DESIGNATION	MINIMUM NUMBER OF EXITS		TRAVEL DISTANCE		ARRANGEMENT MEANS OF EGRESS ² (SECTION 1014.2)	
	REQ	SHOWN ON PLAN	ALLOWABLE TRAVEL DISTANCE TABLE (1015.1)	ACTUAL TRAVEL DISTANCE SHOWN ON PLANS	REQUIRED DISTANCE BETWEEN EXIT DOORS	ACTUAL DISTANCE SHOWN ON PLANS
CAFETERIA	2	3	207'	66'	44'	58'
OFFICE	1	2	207'	141'	84'	140'

¹Corridor dead ends (Section 1016.3)
²Single exits (Table 1016.2)
³Common Path of Travel (Section 1013.3)

USE GROUP OR SPACE DESCRIPTION	EXIT WIDTH (IN)					
	(a)		(b)		(c)	
	AREA (SQFT)	AREA PER OCCUPANT (TABLE 1004.1.2)	EGRESS WIDTH PER OCCUPANT (TABLE 1006.1)	REQUIRED WIDTH (SECTION 1005.1) (ab) x c	ACTUAL WIDTH SHOWN ON PLANS	
CAFETERIA	3,351	15	0.2	44.7"	67.2"	
OFFICE	3,902	100	0.2	7.2"	67.2"	

¹See Table 1004.1.2 to determine whether net or gross area is applicable.
²See definition "Area, Gross" and "Area, Net" (Section 1002).
³Minimum stairway width (Section 1009.1); min. corridor width (Section 1016.2); min. door width (Section 1009.1.1)
⁴Minimum width of exit passageway (Section 1020.2)
⁵See Section 1004.5 for converging exits.
⁶The loss of one means of egress shall not reduce the available capacity to less than 50 percent of the total required (Section 1005.1)
⁷Assembly occupancies (Section 1024)

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (FEET)	RATING		DETAIL # AND SHEET #	DETAIL # FOR RATED ASSEMBLY	DESIGN # FOR RATED PENETRATION	DESIGN # FOR RATED JOINTS
		REQD	PROVIDED (W/ X REDUCTION)				
Structural Frame, including columns, girders, trusses	0						
Bearing walls	0						
Exterior	0						
North	0						
East	0						
West	0						
South	0						
Interior	0						
Nonbearing walls and partitions	0						
Exterior	0						
North	0						
East	0						
West	0						
South	0						
Interior	0						
Floor construction including supporting beams and joists	0						
Roof construction including supporting beams and joists	0						
Shaft Enclosures - Exit	0						
Shaft Enclosures - Other	0						
Corridor Separation	0						
Occupancy Separation	0						
Party/Fire Wall Separation	3 HR			3/LS-3	3/LS-3	C-AJ-1044	C-AJ-1044
Smoke Barrier Separation	0						
Tenant Separation	0						
Incidental Use Separation	0						

* Indicate section number permitting reduction

USE	WATER CLOSETS			LAVATORIES		SHOWERS/TUBS	DRINKING FOUNTAINS	
	MALE	FEMALE	URINALS	MALE	FEMALE		REGULAR	ACCESS.
EXISTING	3	5	2	4	4	N/A	0	0
NEW	0	0	0	0	0	N/A	0	0
REQUIRED	0	0	0	0	0	N/A	0	0

LOT OR PARKING AREA	TOTAL # OF PARKING SPACES		# OF ACCESSIBLE SPACES PROVIDED		TOTAL # ACCESSIBLE PROVIDED
	REQUIRED	PROVIDED	REGULAR WITH 8' ACCESS AISLE	VAN SPACE WITH 8' ACCESS AISLE	
	162	240	6	2	8
TOTAL	162	240	6	2	8

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

STRUCTURAL DESIGN
 DESIGN LOADS
 Impulse Factors: Wind (I) 1.15 Snow (I) 1.0 Seismic (I) 1.25
 Live Loads: Roof 20 psf Mezzanine N/A Floor 100 psf
 Snow Load: 10 psf
 Wind Load: Basic Wind Speed 130 mph (ASCE-7-98) Exposure Category C Wind Base Shears (for MWFRS) V_e = 34 kips V_l = 23 kips

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 S₁ 0.20 S_s 0.113 S_{0.2} 0
 Spectral Response Acceleration S_s 0.428 S_{0.1} 0.264 S_{0.05} 0
 Site Classification E
 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_e = 34 kips V_l = 23 kips
 Simplified Equivalent Lateral Force Modal
 Architectural, Mechanical, Components Anchored? YES (Per NCSBC Section 1621)

LATERAL DESIGN LOAD Earthquake X Wind X
 SOIL BEARING CAPACITIES
 Field Test (provide copy of test report) 2000 psf
 Presumptive bearing capacity File size, type, and capacity

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 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

ROOFCEILING ASSEMBLY: (first assembly) (second assembly, if applicable)
 Description of assembly SINGLE-PLY MEMBRANE
 TAPERED INSULATION OVER 1 LAYER 2" RIGID INSULATION
 U-Value of total assembly 0.45 AVERAGE
 R-Value of insulation N/A
 Skylights in each assembly N/A
 U-Value of skylight N/A
 total square footage of skylights in each assembly N/A

EXTERIOR WALLS: (first assembly) (second assembly, if applicable)
 Description of assembly BRICK VENEER, 2" CAVITY, 2" RIGID INSULATION, BITUMINOUS DAMP PROOFING, 8" CMU (12" CMU WHERE NOTED)
 U-Value of total assembly R-5.7 REQUIRED; R-10 PROVIDED
 R-Value of insulation
 Openings (window or doors with glazing)
 U-Value of assembly MAX 0.67 FIXED; 0.67 OPERABLE
 shading coefficient
 protection factor
 low e required, if applicable
 Door R-Values MIN 1.6

WALLS ADJACENT TO UNCONDITIONED SPACE: (first assembly) (second assembly, if applicable)
 Description of assembly N/A
 U-Value of total assembly
 R-Value of insulation
 Openings (window or doors with glazing)
 U-Value of assembly
 low e required, if applicable
 Door R-Values

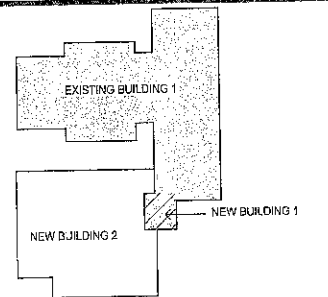
WALLS BELOW GRADE: (first assembly) (second assembly, if applicable)
 Description of assembly N/A
 U-Value of total assembly
 R-Value of insulation

FLOORS OVER UNCONDITIONED SPACE: (first assembly) (second assembly, if applicable)
 Description of assembly N/A
 U-Value of total assembly
 R-Value of insulation

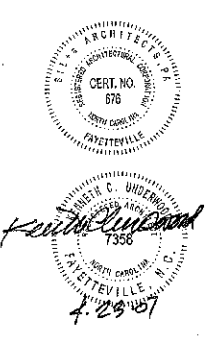
FLOOR SLAB ON GRADE: (first assembly) (second assembly, if applicable)
 Description of assembly 4" REINFORCED CONCRETE SLAB OVER 10" L/VACUOR BARRIER OVER 4" STONE OVER COMPACTED EARTH
 U-Value of total assembly
 R-Value of insulator
 Horizontal/vertical requirements
 Slab heated

ELECTRICAL SUMMARY
 REFERENCE ELECTRICAL DRAWING SHEET E-1 FOR ELECTRICAL SYSTEMS AND EQUIPMENT.

MECHANICAL SUMMARY
 REFERENCE MECHANICAL DRAWING SHEET M-1 FOR MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT.



sfl+a
 ARCHITECTS
 214 Burgess St.
 Fayetteville, NC 28301
 Phone: 910.484.4989
 Fax: 910.484.1466
 www.sfla.biz



THIS DRAWING IS NOT TO BE SCALED FOR CONSTRUCTION PURPOSES, THE SCALE WHEN INDICATED IS FOR GENERAL REFERENCE ONLY

ONSLOW COUNTY SCHOOLS
DIXON HIGH SCHOOL ADDITION
 BUILDING CODE SUMMARY

Project #: 00548000
 Drawn By: G.V. EAP
 Checked By: J.V.
 Issue Date: 02/28/2007
 Revisions:

BUILDING CODE SUMMARY - BUILDING 2

Name of Project: DIXON HIGH SCHOOL ADDITION
 Address: 160 DIXON SCHOOL ROAD HOLLY RIDGE, NC Zip Code: 28145
 Proposed Use: EDUCATIONAL
 Owner or Authorized Agent: ONSLOW CO. SCHOOLS, JEFFREY L. HUDSON Phone #: (910) 456-2211 E-Mail: Jeff.Hudson@onslow.k12.nc.us
 Owned By: City/County Private County: _____ State: _____
 Code Enforcement Jurisdiction: City: _____ County: _____ State: _____

LEAD DESIGN PROFESSIONAL: SFL Architects, PA.
 DESIGNER: SFL Architects, PA. NAME: KENNETH C. UNDERWOOD LICENSE# NC 7358 TELEPHONE# (910) 464-4989 E-MAIL: k.underwood@sfla.biz
 Architectural: PARKER & ASSOCIATES, PA. NAME: TIMOTHY M. STEWART LICENSE# NC 14576 TELEPHONE# (910) 456-2414 E-MAIL: tparker@biztec.com
 Electrical: PROGRESSIVE DESIGN COLLABORATIVE LTD. NAME: HANK G. HOOMANI LICENSE# NC 5040 TELEPHONE# (919) 790-8989 E-MAIL: hoomani@pdcelectrical.com
 Fire Alarm: PROGRESSIVE DESIGN COLLABORATIVE LTD. NAME: HANK G. HOOMANI LICENSE# NC 5040 TELEPHONE# (919) 790-8989 E-MAIL: hoomani@pdcelectrical.com
 Plumbing: PROGRESSIVE DESIGN COLLABORATIVE LTD. NAME: HANK G. HOOMANI LICENSE# NC 5040 TELEPHONE# (919) 790-8989 E-MAIL: hoomani@pdcelectrical.com
 Mechanical: PROGRESSIVE DESIGN COLLABORATIVE LTD. NAME: HANK G. HOOMANI LICENSE# NC 5040 TELEPHONE# (919) 790-8989 E-MAIL: hoomani@pdcelectrical.com
 Sprinkler-Standpipe: LASATER-HOPKINS-CHANG, PC NAME: STEPHEN K. FERGUSON LICENSE# NC 10675 TELEPHONE# (919) 852-5587 E-MAIL: sferguson@lhconcorp.com
 Structural: LASATER-HOPKINS-CHANG, PC NAME: STEPHEN K. FERGUSON LICENSE# NC 10675 TELEPHONE# (919) 852-5587 E-MAIL: sferguson@lhconcorp.com
 Retaining Walls > 5' High: _____
 Other: _____

2008 - EDITION OF NC CODE FOR: New Construction Addition Alter Repair
 EXISTING: Reconstruction Alteration Repair
 CONTRACTED: ORIGINAL USE RENOVATED CURRENT USE EDUCATIONAL

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
 Sprinklers: No Partial Yes
 Standpipes: No Yes
 Fire District: No Yes
 Building Height: 18'-0" Feet
 Mezzanine: No Yes

Gross Building Area:
 FLOOR EXISTING (SQFT) NEW (SQFT) SUBTOTAL
 4th Floor _____
 3rd Floor _____
 2nd Floor _____
 Mezzanine _____
 1st Floor 9,223 9,223
 Basement _____
 TOTAL 0,223 9,223

ALLOWABLE AREA

Primary Occupancy: Assembly Business Hazardous Institutional Mercantile Storage Utility and Miscellaneous
 A-1 Educational A-2 Moderate A-3 F-1 Moderate A-4 F-2 Low A-5 H-5 HPM
 H-1 Detonate H-2 Deflagrate H-3 Combust H-4 Health H-5 HPM
 I-1 I-2 I-3 I-4 I-5
 R-1 Residential R-2 R-3 R-4
 S-1 Moderate S-2 Low High-Piled Open Enclosed Repair

Special Use: 402 403 404 405 406 407 408 409 410 411
 412 413 414 415 416 417 418 419 420 421
 Special Provisions: 508.2 508.3 508.4 508.5 508.6 508.7 508.8
 Mixed Occupancy: No Yes
 Incident Use Separation (302.1.1)
 Non-Separated Use (302.3.1)
 Separated Use (302.3.2)

STORY NO.	DESCRIPTION AND USE	(A) BLDG AREA PER STORY (ACTUAL)	(B) TABLE 506.2 AREA	(C) AREA OF FRONTAGE INCREASE*	(D) AREA FOR SPRINKLER INCREASE*	(E) ALLOWABLE AREA OR UNLIMITED	(F) MAXIMUM BUILDING AREA*
BUILDING 2	EDUCATIONAL	9,223	14,500	N/A	N/A	N/A	14,500

*Frontage area increases from Section 506.2 are computed as:
 a. Perimeter which forms a public way or open space having 20 feet minimum width = (F)
 b. Total Building Perimeter = (P)
 c. Ratio (F/P) = _____
 d. W = Minimum width of public way = _____ (W)
 e. Percent of frontage increase = 100 [(F/P) - 0.25] x W/30 = _____ (%)
 f. The sprinkler increase per Section 506.3 is as follows:
 a. Multi-story building = 200%
 b. Single-story building = 300%
 *Unlimited area applicable under conditions of Sections Group B, F, M, S, A-4 (507);
 Group A motion picture (507.9); Matte (402.6); and H-2 aircraft paint hangars (507.7).
 *Maximum Building Area = total number of stories in the building x E (506.4).
 *The maximum area of parking garages must comply with 408.3.5. The maximum area of air traffic control towers must comply with 412.1.2.

ALLOWABLE HEIGHTS

Type of Construction	ALLOWABLE (TABLE 503)	INCREASE FOR SPRINKLERS	SHOWN ON PLANS	CODE REFERENCE
Building Height in Feet	Feet 55'-0"	Feet H+20" N/A	Feet 38'-0"	
Building Height in Stories	Stories 2	Stories+1= N/A	Stories 1	

LIFE SAFETY SYSTEM REQUIREMENTS

Emergency Lighting No Yes
 Exit Signs No Yes
 Fire Alarms No Yes
 Smoke Detection Systems No Yes
 Panic Hardware No Yes

EXIT REQUIREMENTS
 NUMBER AND ARRANGEMENTS OF EXITS

FLOOR, ROOM OR SPACE DESIGNATION	MINIMUM NUMBER OF EXITS		TRAVEL DISTANCE		ARRANGEMENT MEANS OF EGRESS (SECTION 1014.2)	
	REQ	SHOWN ON PLAN	ALLOWABLE TRAVEL DISTANCE (TABLE 1015.1)	ACTUAL TRAVEL DISTANCE SHOWN ON PLANS	REQUIRED DISTANCE BETWEEN EXIT DOORS	ACTUAL DISTANCE SHOWN ON PLANS
CLASSROOM	2	2	200'	75'	70'	94'

*Corridor dead ends (Section 1016.3)
 *Single exits (Table 1018.2)
 *Common Path of Travel (Section 1013.3)

EXIT WIDTH

USE GROUP OR SPACE DESCRIPTION	AREA (SQFT)	AREA PER OCCUPANT (TABLE 1004.1.2)	EGRESS WIDTH PER OCCUPANT (TABLE 1005.1)	REQUIRED WIDTH (SECTION 1005.1) (a/b) x c				ACTUAL WIDTH SHOWN ON PLANS			
				STAIR		LEVEL		STAIR		LEVEL	
				STAIR	LEVEL	STAIR	LEVEL				
CLASSROOM	5,000	20	0.2			50"				1176"	

*See Table 1004.1.2 to determine whether net or gross area is applicable.
 *See definition "Area, Gross" and "Area, Net" (Section 1002)
 *Minimum stairway width (Section 1009.1); min. corridor width (Section 1016.2); min. floor width (Section 1008.1.1)
 *Minimum width of exit passageway (Section 1020.2)
 *See Section 1004.5 for converging exits.
 *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)
 *Assembly occupancies (Section 1024)

FIRE PROTECTION REQUIREMENTS
 Life Safety Plan Sheet #, if Provided: LS-3

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (FEET)	RATING REQD	PROVIDED (W/ X * REDUCTION)	DETAIL # AND SHEET #	DETAIL # FOR RATED ASSEMBLY	DESIGN # FOR RATED PENETRATION	DESIGN # FOR RATED JOINTS
Structural Frame, including columns, girders, trusses	0	0					
Bearing walls	0	0					
Exterior	0	0					
North	0	0					
East	0	0					
West	0	0					
South	0	0					
Interior	0	0					
Nonbearing walls and partitions	0	0					
Exterior	0	0					
North	0	0					
East	0	0					
West	0	0					
South	0	0					
Interior	0	0					
Floor construction including supporting beams and joists	0	0					
Roof construction including supporting beams and joists	0	0					
Shaft Enclosures - Exit	0	0					
Shaft Enclosures - Other	0	0					
Corridor Separation	1 HR			3/LS-3	3/LS-5	C-AJ-1013 C-AJ-5001	
Occupancy Separation	0						
Party/Fire Wall Separation	3 HR			3/LS-3	3/LS-5	C-AJ-1044	
Smoke Barrier Separation	0						
Tenant Separation	0						
Incidental Use Separation	1 HR			3/LS-3	3/LS-3	C-AJ-1013 C-AJ-5001	

* Indicate section number permitting reduction

PLUMBING FIXTURE REQUIREMENTS

USE	WATER CLOSETS		URINALS	LAVATORIES		SHOWERS/TUBS	DRINKING FOUNTAINS	
	MALE	FEMALE		MALE	FEMALE		REGULAR	ACCESS.
EXISTING								
NEW	2	4	2	2	2	N/A	1	1
REQUIRED	4	4		1	1	N/A	1	1

ACCESSIBLE PARKING

LOT OR PARKING AREA	TOTAL # OF PARKING SPACES		# OF ACCESSIBLE SPACES PROVIDED		TOTAL # ACCESSIBLE PROVIDED
	REQUIRED	PROVIDED	REGULAR WITH 5' ACCESS AISLE	VAN SPACE WITH 8' ACCESS AISLE	
	162	240	6	2	8
TOTAL	162	240	6	2	8

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

STRUCTURAL DESIGN

DESIGN LOADS
 Importance Factors: Wind (I) 1.15 Snow (I) 1.0 Seismic (I) 1.25
 Live Loads: Roof 20 psf Mozzarine N/A Floor 100 psf
 Snow Load: 10 psf
 Wind Load: Basic Wind Speed 130 mph (ASCE-7-99)
 Exposure Category C
 Wind Base Shear (for MWFRS) V_x = 34 kips V_y = 23 kips

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

SEISMIC DESIGN CATEGORY B B C D

Provide the following Seismic Design Parameters:
 Seismic Use Group II
 Spectral Response Acceleration S_s 0.26 g S₁ 0.113 g
 S_s 0.428 g S_w 0.284 g
 Site Classification 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 Pentadrum
 Seismic base shear V_s = 83 kips
 Analysis Procedure Simplified Equivalent Lateral Force Model
 Architectural, Mechanical, Components Anchored? YES (Per NCSBC Section 1621)

LATERAL DESIGN LOAD Earthquake X Wind X

SOIL BEARING CAPACITIES
 Field Test (Provide copy of test report) 2000 psf
 Presumptive bearing capacity _____ psf
 Pile size, type, and capacity _____

ENERGY SUMMARY
 ENERGY REQUIREMENTS:
 The following data shall be considered minimum and any special attributes 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: (first assembly) (second assembly, if applicable)
 Description of assembly: SINGLE-PLY MEMBRANE TAPERED INSULATION OVER 1 LAYER 2" RIGID INSULATION
 U-Value of total assembly _____
 R-Value of insulation _____
 U-Value of skylight _____
 total square footage of skylights in each assembly: N/A

EXTERIOR WALLS: (first assembly) (second assembly, if applicable)
 Description of assembly: BRICK VENEER 2" CAVITY 2" RIGID INSULATION BITUMINOUS DAMP PROOFING 3 CMU (12 CMU WHERE NOTED)
 U-Value of total assembly _____
 R-Value of insulation _____
 U-Value of assembly _____
 U-Value of window or door with glazing _____
 U-Value of assembly _____
 shading coefficient _____
 protection factor _____
 low e required, if applicable _____
 Door R-Values: MIN 1.5

WALLS ADJACENT TO UNCONDITIONED SPACE: (first assembly) (second assembly, if applicable)
 Description of assembly: N/A
 U-Value of total assembly _____
 R-Value of insulation _____
 U-Value of assembly _____
 U-Value of window or door with glazing _____
 U-Value of assembly _____
 low e required, if applicable _____
 Door R-Values _____

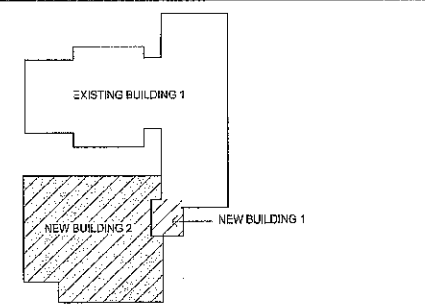
WALLS BELOW GRADE: (first assembly) (second assembly, if applicable)
 Description of assembly: N/A
 U-Value of total assembly _____
 R-Value of insulation _____

FLOORS OVER UNCONDITIONED SPACE: (first assembly) (second assembly, if applicable)
 Description of assembly: N/A
 U-Value of total assembly _____
 R-Value of insulation _____

FLOOR SLAB ON GRADE: (first assembly) (second assembly, if applicable)
 Description of assembly: 4" REINFORCED CONCRETE SLAB OVER 10MIL VAPOR BARRIER OVER 4" STONE OVER COMPACTED EARTH
 U-Value of total assembly _____
 R-Value of insulation _____
 Horizontal/vertical requirements _____
 Slab heated _____

ELECTRICAL SUMMARY
 REFERENCE ELECTRICAL DRAWING SHEET E-1 FOR ELECTRICAL SYSTEMS AND EQUIPMENT.

MECHANICAL SUMMARY
 REFERENCE MECHANICAL DRAWING SHEET M-1 FOR MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT.



214 Burgess St.
 Fayetteville, NC 28301
 Phone: 910.484.4989
 Fax: 910.484.1466
 www.sfla.biz

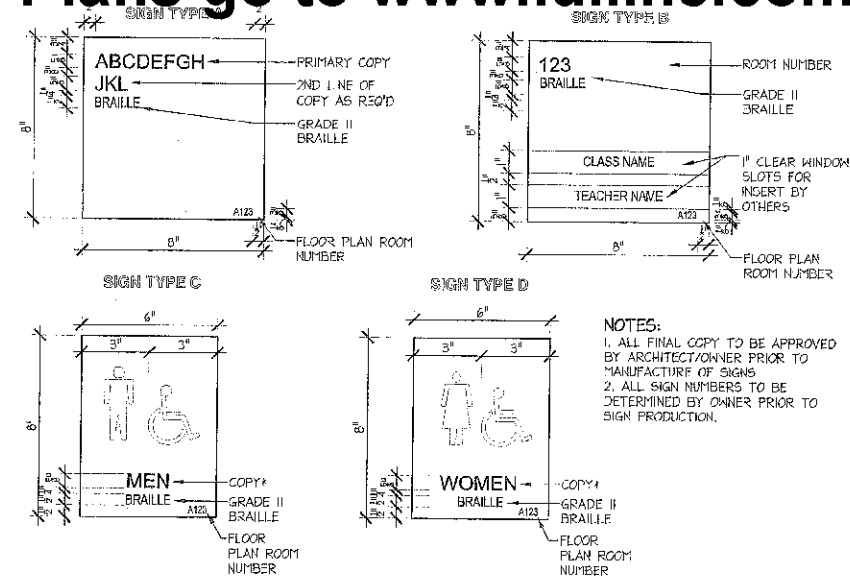


THIS DRAWING IS NOT TO BE SCALED FOR CONSTRUCTION PURPOSES. THE SCALE WHEN INDICATED IS FOR GENERAL REFERENCE ONLY.

ONSLOW COUNTY SCHOOLS
 DIXON HIGH SCHOOL ADDITION
 BUILDING CODE SUMMARY

Project #: 005-45000
 Drawn By: GV, EAP
 Checked By: _____
 Issue Date: 02/26/2007
 Revisions: _____

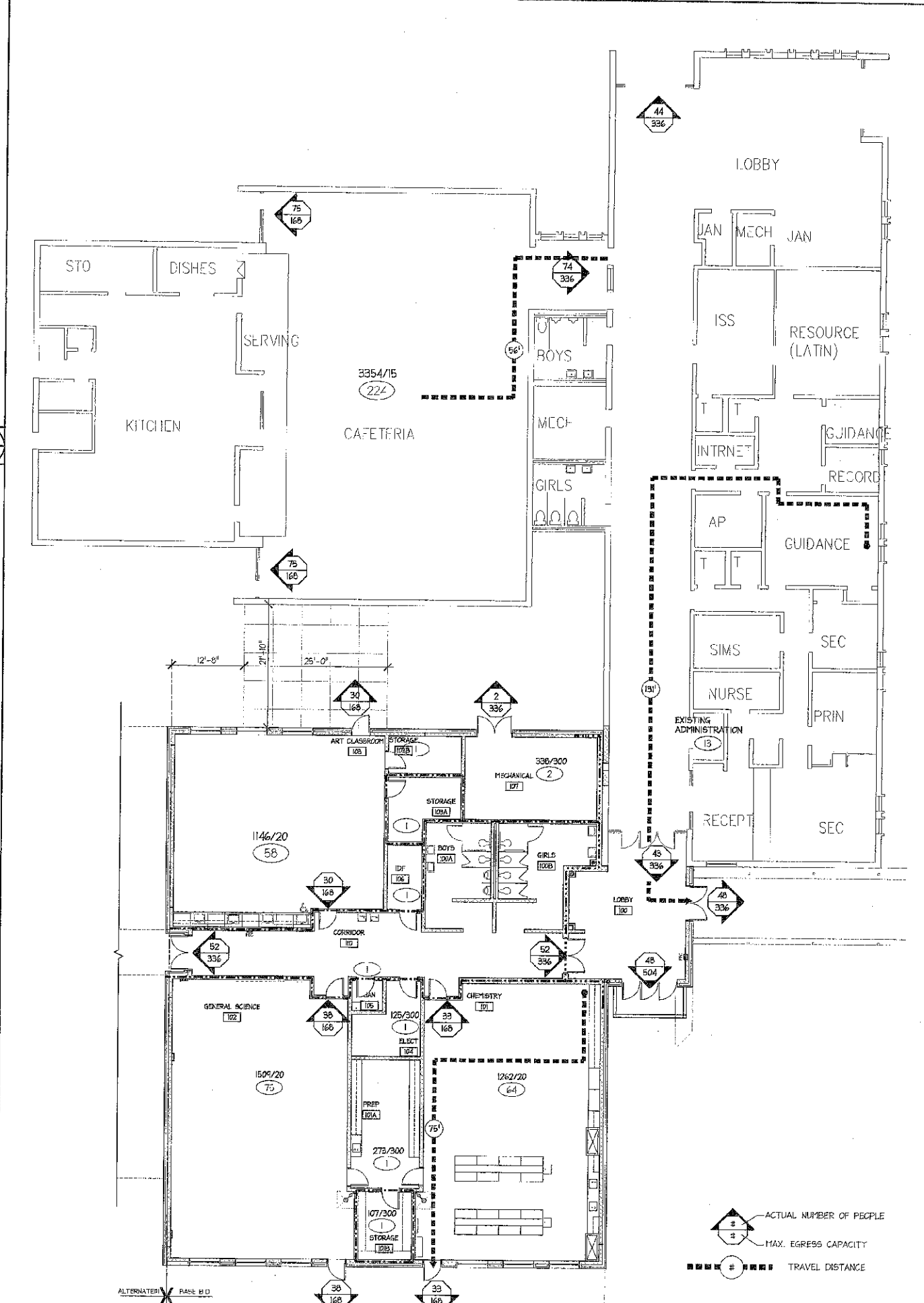
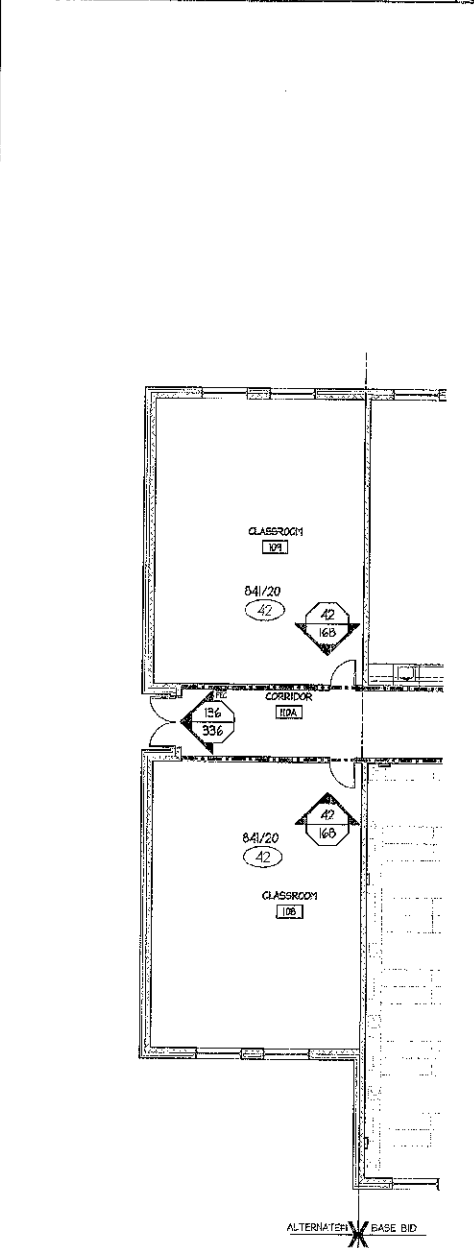
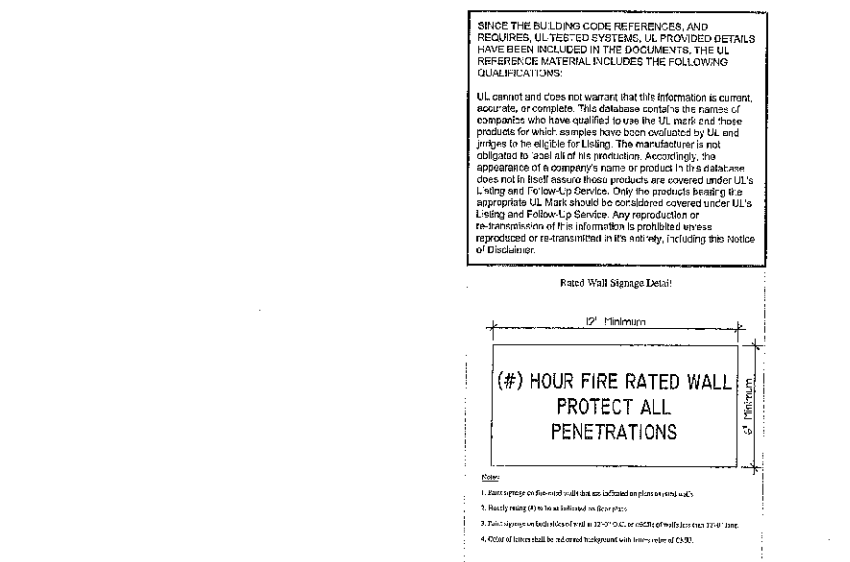
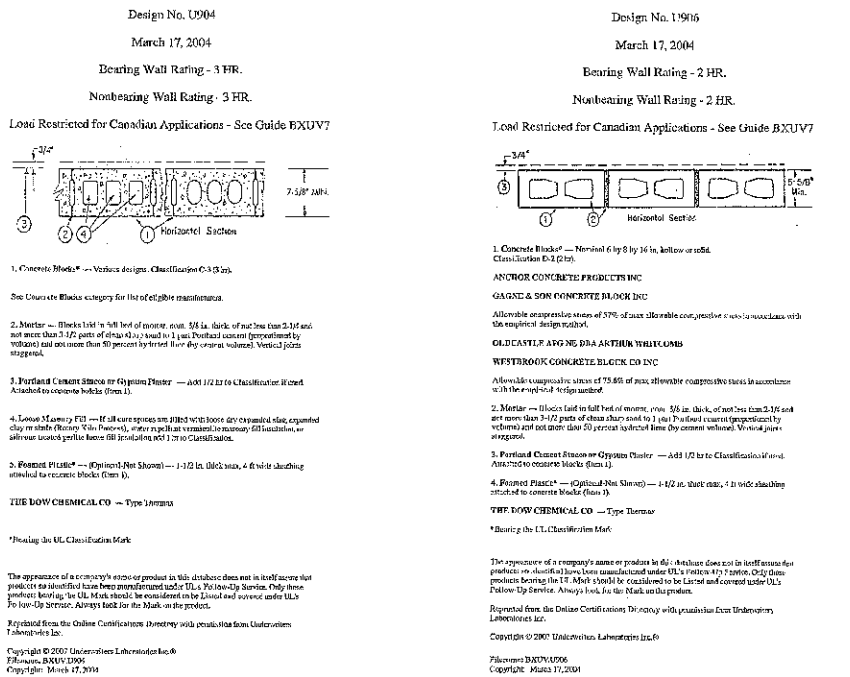
LS-2



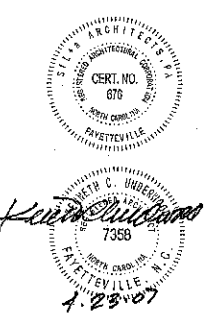
SIGNAGE SCHEDULE			
ROOM	TYPE	NOTES	
100	LOBBY	A	
100A	BOYS	C	
100B	GIRLS	D	
101	CHEMISTRY	B	
101A	PREP	A	(2) 1 EA DOOR
101B	STORAGE	A	
102	GENERAL SCIENCE	B	
103	ART CLASSROOM	B	
103A	STORAGE	A	
103B	STORAGE	A	
104	ELECT	A	
105	JAN	A	
106	IDF	A	
107	MECHANICAL		
110	CORRIDOR		

SIGNAGE SCHEDULE			
ROOM	TYPE	NOTES	
108	CLASSROOM	D	ALTERNATE
109	CLASSROOM	B	ALTERNATE

SIGNAGE SCHEDULE AND DETAILS 3" = 1'-0" 4 LS-3



sfl+a
ARCHITECTS
214 Burgess St.
Fayetteville, NC 28301
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ON SLOW COUNTY SCHOOLS
DIXON HIGH SCHOOL ADDITION
UL DETAILS AND LIFE SAFETY PLAN

Project #: 00549000
Drawn By: GP, EAP
Checked By: GV
Issue Date: 02/28/2007
Revisions: