

Name of Project: UNC-Wilmington, Dobo Hall Computer Lab, Renovation

Address: 602 College Road, Wilmington, NC, 28402

Proposed Use: Computer Lab & Offices

Owner or Authorized Agent: Jerry L. Walker, AIA Phone #: 252-436-8778

Owned By: ☐ City/County ☐ Private ☒ State

Code Enforcement Jurisdiction: ☐ City ☐ County

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

507. The area, Group B, is unfilled when equipped with an automatic sprinkler system.

Primary Occupancy:

<input type="checkbox"/> Business	<input type="checkbox"/> Assembly	<input type="checkbox"/> A-1	<input type="checkbox"/> A-2	<input type="checkbox"/> A-3	<input type="checkbox"/> A-4	<input type="checkbox"/> A-5
<input type="checkbox"/> High-Hazard	<input type="checkbox"/> Educational	<input type="checkbox"/> H-1	<input type="checkbox"/> H-2	<input type="checkbox"/> H-3	<input type="checkbox"/> H-4	<input type="checkbox"/> H-5
<input type="checkbox"/> Institutional	<input type="checkbox"/> I-1	<input type="checkbox"/> I-2	<input type="checkbox"/> I-3	<input type="checkbox"/> I-4	<input type="checkbox"/> I-5	
<input type="checkbox"/> Mercantile	<input type="checkbox"/> Use With Condition 1	<input type="checkbox"/> U-1	<input type="checkbox"/> U-2	<input type="checkbox"/> U-3	<input type="checkbox"/> U-4	<input type="checkbox"/> U-5
<input type="checkbox"/> Storage	<input type="checkbox"/> Residential	<input type="checkbox"/> R-1	<input type="checkbox"/> R-2	<input type="checkbox"/> R-3	<input type="checkbox"/> R-4	<input type="checkbox"/> R-5
<input type="checkbox"/> Utility and Miscellaneous	<input type="checkbox"/> S-1	<input type="checkbox"/> S-2	<input type="checkbox"/> S-3	<input type="checkbox"/> S-4	<input type="checkbox"/> S-5	
	<input type="checkbox"/> Parking Garage	<input type="checkbox"/> P-1	<input type="checkbox"/> P-2	<input type="checkbox"/> P-3	<input type="checkbox"/> P-4	<input type="checkbox"/> P-5
	<input type="checkbox"/> Unoccupied	<input type="checkbox"/> U-1	<input type="checkbox"/> U-2	<input type="checkbox"/> U-3	<input type="checkbox"/> U-4	<input type="checkbox"/> U-5
	<input type="checkbox"/> Enclosed	<input type="checkbox"/> E-1	<input type="checkbox"/> E-2	<input type="checkbox"/> E-3	<input type="checkbox"/> E-4	<input type="checkbox"/> E-5
	<input type="checkbox"/> Repair	<input type="checkbox"/> R-1	<input type="checkbox"/> R-2	<input type="checkbox"/> R-3	<input type="checkbox"/> R-4	<input type="checkbox"/> R-5

Secondary Occupancy:

<input type="checkbox"/> 402	<input type="checkbox"/> 403	<input type="checkbox"/> 404	<input type="checkbox"/> 405	<input type="checkbox"/> 406	<input type="checkbox"/> 407	<input type="checkbox"/> 408	<input type="checkbox"/> 409	<input type="checkbox"/> 410	<input type="checkbox"/> 411	<input type="checkbox"/> 412
<input type="checkbox"/> 413	<input type="checkbox"/> 414	<input type="checkbox"/> 415	<input type="checkbox"/> 416	<input type="checkbox"/> 417	<input type="checkbox"/> 418	<input type="checkbox"/> 419	<input type="checkbox"/> 420	<input type="checkbox"/> 421	<input type="checkbox"/> 422	<input type="checkbox"/> 423

Special Provisions:

<input type="checkbox"/> 508.2	<input type="checkbox"/> 508.3	<input type="checkbox"/> 508.4	<input type="checkbox"/> 508.5	<input type="checkbox"/> 508.6	<input type="checkbox"/> 508.7	<input type="checkbox"/> 508.8
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Mixed Occupancy:

<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> Separation	<input type="checkbox"/> Hr.	<input type="checkbox"/> Exception:
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1. Frontage area increases from Section 506.2 are computed as:
 a. Perimeter which from a public way or from a street having 30 feet minimum width = _____ (F)
 b. Total Building Perimeter = _____
 c. Ratio (F/P) = _____
 d. W = Maximum width of public way = _____
 e. Percent of frontage increase = $100 [(F/P-0.25) \times (W/30)]$ _____ (%)

2. The sprinkler increase in Section 506.3 is as follows:
 a. Multi-story building 1 = 200 percent
 b. Single-story building 1 = 300 percent
 c. Unlimited area of increase of sections of Section Group B, J, M, S, A-4 (507);
 Group A (multiple use) (507.3); Mall (402.8); and H-2 aircraft part hangars (507.7).
 d. Maximum Building Area = total number of stories in the building x 1,596,400
 e. 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.

FIRE PROTECTION REQUIREMENTS							
BUILDING ELEMENT	FIRE SEPARATION DISTANCE (FEET)	RATING REQUIRED	PROVIDED (W/ REDUCTION)	DETAIL # FOR SHEET #	DESIGN # FOR RATED ASSEMBLY	DESIGN # FOR RATED PENETRATION	DESIGN # FOR RATED JOINTS
Structural Frame, including columns, girders, trusses	>0/PI	0	0	N/A	N/A	N/A	N/A
Bearing walls	>0/PI	0	0	N/A	N/A	N/A	N/A
Exterior	>0/PI	0	0	N/A	N/A	N/A	N/A
North	>0/PI	0	0	N/A	N/A	N/A	N/A
East	>0/PI	0	0	N/A	N/A	N/A	N/A
West	>0/PI	0	0	N/A	N/A	N/A	N/A
South	>0/PI	0	0	N/A	N/A	N/A	N/A
Interior	N/A	0	0	N/A	N/A	N/A	N/A
Nonbearing walls and partitions	>0/PI	0	0	N/A	N/A	N/A	N/A
Exterior	>0/PI	0	0	N/A	N/A	N/A	N/A
North	>0/PI	0	0	N/A	N/A	N/A	N/A
East	>0/PI	0	0	N/A	N/A	N/A	N/A
West	>0/PI	0	0	N/A	N/A	N/A	N/A
South	>0/PI	0	0	N/A	N/A	N/A	N/A
Interior	N/A	0	0	N/A	N/A	N/A	N/A
Floor construction including supporting beams and joists	N/A	0	0	N/A	N/A	N/A	N/A
Roof construction including supporting beams and joists	N/A	0	0	N/A	N/A	N/A	N/A
Shafts - Exit	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Shafts - Other	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Courtyard Separation	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Occupancy Separation	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Park/Fire Wall Separation	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Smoke Barrier Separation	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tenant Separation	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Incidental Use Separation	N/A	N/A	N/A	N/A	N/A	N/A	N/A

* Indicate column number over which dimension.

- ¹ See Table 1004.1.2 to determine whether net or gross area is applicable.
- ² See definition "Area, Gross" and "Area, Net" (Section 1002)
- ³ Minimum stairway width (Section 1005.1), min. door width (Section 1016.2); min. door width (Section 1018.1)
- ⁴ Minimum width of exit passageway (Section 1020.2)
- ⁵ See Section 1004.5 for covering exits.
- ⁶ 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)
- ⁷ Assembly occupancies (Section 1024)

Compliance with section 1616.4 only? ☐ Yes ☐ No

SEISMIC DESIGN CATEGORY

Provide the following Seismic Design Parameters:

Seismic Use Group _____

Spectral Response Acceleration S_s _____ %g S_1 _____ %g

Site Classification ☐ F ☐ M ☐ P ☐ Presumptive ☐ Historical Data

Basic structural system (check one)

☐ Barrier Wall ☐ Dual w/ Intermediate Moment Frame

☐ Building Frame ☐ Dual w/ Specialized R/C or Special Steel

☐ Moment Frame ☐ Inverted Pendulum

Seismic base shear $V_u =$ _____ $V_s =$ _____

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) _____ p/ft

Presumptive Bearing capacity _____ p/ft

Pile size, type and capacity _____

effectively change the occupancy or the occupancy count of this building.

SPECIAL APPROVALS

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

N/A

ENERGY REQUIREMENTS:

The following data shall be considered minimum and any special attribute required to meet the energy code shall be provided. Each Designer shall furnish the required portions of the project information over 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

Sightlights 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

The scope of this project will not change the envelope or heat load of this building.

Floors slab on grade (each assembly)
Description of assembly
U-Value of total assembly
R-Value of insulation
Horizontal/vertical requirement
slab heated

MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT

Method of Compliance:

☐ Prescriptive ☐ Performance ☐ Energy Cost Budget

See Mechanical Drawings

Thermal Zone
winter dry bulb
summer dry bulb
summer dry bulb
summer dry bulb

Interior design conditions
winter dry bulb
summer dry bulb
relative humidity

Building heating load

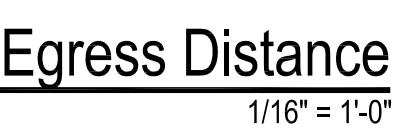
Building cooling load

Mechanical Spacing Conditioning system
Unitary
description of unit
heating efficiency
cooling efficiency
heat output of unit
cooling output of unit
Boiler
unit boiler output. If oversized, state reason.
Chiller
unit 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 coils

(B)



A

Second Floor Plan

$$1/16^m = 1'-0^m$$
$$1/16^m = 1'-0^m$$

Record Drawings

02 College Road
Wilmington, NC 28403



UNCW
THE UNIVERSITY OF
NORTH CAROLINA
AT WILMINGTON

[illegible]

Project Number 732.DOBO Date Feb 08
 Drawn by JC Checked by JLW

As Noted

Code Summary

Life Safety Plan

et Number
Of 10

wing Number

G-102