

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 & 2)

Name of Project: MARSHBANKS CLASSROOMS
Address: 234 DAY DORM ROAD, LILLINGTON, NC
Zip Code: 27546
Owner/Authorized Agent: BRETT STRICKLAND
Phone: 919-805-0664
E-Mail: BRETT@SJ-NC.COM

CONTACT:

Table with 6 columns: DESIGNER, FIRM, NAME, LICENSE#, TELEPHONE#, EMAIL. Contains design information for Tony Johnson Architect.

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

2018 NC BUILDING CODE EDITION:

New Building:
[] New building
[] First time interior completion (upfit)
[] Addition
[] Renovation
[] Shell/Core
[] Phased Construction

2018 EXISTING BUILDING CODE:

Check all that apply:

[X] Prescriptive Compliance
[] Work Area Compliance
[] Performance Compliance
[X] Change of Use
[] Historic Property
[] Addition
[] Repair
[] Relocated

Alteration:
[] Level I (Renovation)
[X] Level II (Alteration)
[] Level III (Reconstruction)

Constructed: (date) Current Occupancy (S) (Ch. 3):
Renovated: (date) Proposed Occupancy (S) (Ch. 3):

Risk Category (Table 1604.5):
Current: [] I [X] II [] III [] IV
Proposed: [] I [X] II [] III [] IV

BASIC BUILDING DATA:

Construction Type:
[] I-A [] II-A [] III-A [] IV [] V-A
[] I-B [] II-B [X] III-B [] V-B

Mixed construction: [X] No [] Yes
Types: [X] NFPA 13-07 [] NFPA 13R-07 [] NFPA 13D-07
Standpipes: [X] No [] Yes
Primary Fire District: [X] No [] Yes
Special Inspections Required: [X] No [] Yes

GROUND BUILDING AREA TABLE:

Table with 5 columns: Floor, Existing (sq.ft.), New (sq.ft.), Renovated (sq.ft.), Sub-Total. Shows 16,908 sq.ft for 1st floor.

ALLOWABLE AREA: CHAPTER 5

OCCUPANCY

Primary Occupancy:
Assembly 303 [] A-1 [] A-2 [] A-3 [] A-4 [] A-5
Business 304 [X] B
Educational 305 [] E
Factory 306 [] F-1 Moderate [] F-2 Low
Hazardous 307 [] H-1 Detonate [] H-2 Deflagrate [] H-3 Combust [] H-4 Health [] H-5 HPM
Institutional 308 [] I-1 [] I-2 [] I-3 [] I-4 Day Care
I-3 Use Condition [] 1 [] 2 [] 3 [] 4 [] 5
Mercantile 309 [] M
Residential 310 [] R-1 [] R-2 [] R-3 [] R-4
Storage 311 [] S-1 Moderate [] S-2 Low [] High-piled
[] Parking Garage [] Open [] Enclosed [] Repair Garage
Utility and Miscellaneous 312 [] U

Accessory Occupancies (<= 10%):

Assembly 303 [] A-1 [] A-2 [] A-3 [] A-4 [] A-5
Business 304 [] B
Educational 305 [] E
Factory 306 [] F-1 Moderate [] F-2 Low
Hazardous 307 [] H-1 Detonate [] H-2 Deflagrate [] H-3 Combust [] H-4 Health [] H-5 HPM
Institutional 308 [] I-1 [] I-2 [] I-3 [] I-4 Day Care
I-3 Use Condition [] 1 [] 2 [] 3 [] 4 [] 5
Mercantile 309 [] M
Residential 310 [] R-1 [] R-2 [] R-3 [] R-4
Storage 311 [] S-1 Moderate [] S-2 Low [] High-piled
[] Parking Garage [] Open [] Enclosed [] Repair Garage
Utility and Miscellaneous 312 [] U

Reviewed For Code Compliance By:
D. Banks Wallace
Chief Deputy Fire Marshal
07/27/2020 9:27:53 AM

INCIDENTAL USES:

[] Furnace room where any piece of equipment is over 400,000 Btu per hour input
[] Room 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 room 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
[] Room containing Life-Safety generator
[] Room containing primary transformers
[] 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 room or spaces that contain fuel-fired heating equipment

Special Uses:
[] 402 [] 403 [] 404 [] 405 [] 406 [] 407 [] 408 [] 409 [] 410 [] 411 [] 412
[] 413 [] 414 [] 415 [] 416 [] 417 [] 418 [] 419 [] 420 [] 421 [] 422 [] 423 [] 424 [] 425
Special Provisions:
[] 510.2 [] 510.3 [] 510.4 [] 510.5 [] 510.6 [] 510.7 [] 510.8 [] 510.9

Mixed Occupancy: [] No [] Yes Separation: ___ Hr. Exception: ___
Select one
Actual Area of Occupancy A + Actual Area of Occupancy B <= 1
Allowable Area of Occupancy A + Allowable Area of Occupancy B + = <= 1.00

ALLOWABLE AREA

Table with 7 columns: Story Number, Description and Use, A, B, C, D, E, F. Shows 16,908 sq.ft for classrooms/offices.

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)= (F/P-0.25)x W/30= ___(%)
2. The sprinkler increase per Section 506.3 is as follows:
a. Multi-story building (S)=200 percent
b. Single story building (S)=300 percent
3. Unlimited area applicable under conditions of Sections Group B, F, M, S, A-4 (507.3), A-3 (507.6); Group A motion picture (507.11); Covered Mall Buildings (507.12); and H-2 aircraft paint hangers (507.9).
4. Maximum Building Area=total number of stories in the building x E, But not greater than 3xE (506.4.1).
5. The maximum area of a single-use parking garage shall be permitted to comply with Table 406.3.5. The maximum area of air traffic control towers must comply with table 412.3.2.

ALLOWABLE HEIGHT: CHAPTER 5

Table with 4 columns: Type of Construction, Feet=, Type=, Code Reference. Shows 75 feet for 3 stories.

Provide code reference if the "Shown on Plans" quantity is not based on Table 504.3 or 504.4

FIRE PROTECTION REQUIREMENTS: CHAPTER 6 (TABLE 601)

Table with 8 columns: Building Element, Fire Separation Distance (Feet), Rating* (Required/Provided), Detail # and Sheet #, Design # for Rated Assembly, Design # for Rated Penetration, Design # for Rated Joints. Shows >30 for structural frame.

PERCENTAGE OF WALL OPENING CALCULATIONS: NA

Table with 4 columns: Fire Separation Distance (feet) From Property Lines, Degree of Openings Protection (Table 705.8), Allowable Area (%), Actual Shown on Plans (%).

LIFE SAFETY SYSTEM REQUIREMENTS: Chapters 9 and 10

Emergency Lighting: S1006 [] No [X] Yes
Exit Signs: S1011 [] No [X] Yes
Fire Alarm: S907, NFPA 72-07 [] No [X] Yes
Smoke Detection Systems: S907 [] No [X] Yes
Carbon Monoxide Detection: [] No [X] Yes

LIFE SAFETY PLAN REQUIREMENTS:

Life Safety Plan Sheet #, if Provided: _____

[] Fire and/or smoke rated wall locations (Chapter 7)
[] Assumed and real property line locations (if not on site plan)
[] Exterior wall opening area with respect to distance to assumed property lines (705.8)
[] Existing structures within 30' of the proposed building
[X] Occupancy types for each area as it relates to occupant load calculation (Table 1004.1.2)
[X] Occupant loads for each area
[X] Exit access travel distances (1017)
[X] Common path of travel distances (1006.2.1 & 1006.3.2(1))
[] Dead end lengths (1020.4)
[X] Clear exit widths for each exit door
[X] Maximum calculated occupant load capacity each exit door can accommodate based on egress width (1005.3)

ACCESSIBLE DWELLING UNITS: (Section 1107)

Table with 7 columns: Total Units, Accessible Units Req'd, Type A Units Req'd, Type A Units Provided, Type B Units Req'd, Type B Units Provided, Total Accessible Units Provided.

ACCESSIBLE PARKING REQUIREMENTS: (Section 1106)

Table with 6 columns: Lot or Parking Area, Total Number of Parking Spaces (Required/Provided), # of Accessible Spaces Provided (Regular with 5' Access Aisle, Van Space Access Aisle, 8' Access), Total # Accessible Provided. Shows 1 van space provided.

Note: one out of every six accessible parking spaces shall be for van accessible parking.

PLUMBING FIXTURE REQUIREMENTS: Chapter 29 (Table 2902.1)

Table with 10 columns: Occupancy Use Group and/or Space Designation, Waterclosets (Male, Female, Unisex), Urinals Plum-Sec. (419.2), Lavatories (Male, Female, Unisex), Showers/Tubs, Drinking Fountains Plum-Sec. (410). Shows 3 urinals and 1 drinking fountain.

SPECIAL APPROVAL: Special approval: (Local Jurisdiction, Department of Insurance, OSC, DPH, DHHS, ICC, 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 design vs annual energy cost for the proposed design.

Existing building envelope complies with code: [] No [X] Yes

Exempt Building: [] No [X] Yes

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

Method of Compliance:
[] Prescriptive (Energy Code) [] Prescriptive (ASHRAE 90.1)
[] Performance (Energy Code) [] 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 skylight 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-Value: _____

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)

DESIGNS LOADS:

Importance Factors:
Snow (s): [] .80 [] 1.0 [] 1.1 [] 1.2
Seismic (s): [] 1.0 [] 1.25 [] 1.5
Live Loads:
Roof (live & snow): (psf)
Mezzanine: (psf)
Floor: (psf)
Ground Snow Load: (psf)
Wind Load:
Basic Wind Speed: (mph ASCE 7)
Exposure Category: [] B [] C [] D

SEISMIC DESIGN CATEGORY:

[] A [] B [] C [] D

Provide the following Seismic Design Parameters:

Risk Category (Table 1604.5) [] I [] II [] III [] IV
Spectral Response Acceleration Ss ___ %g S1 ___ %g
Site Classification (ASCE 7) [] 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
Analysis Procedure: [] Simplified [] Modal [] Equivalent Lateral Force
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 (psf)

SOIL BEARING CAPACITIES: [] Yes [] No

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:
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: _____

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

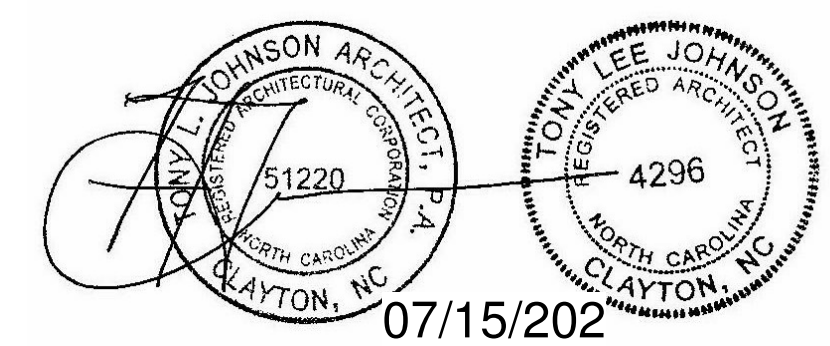
ELECTRICAL SUMMARY

ELECTRICAL SYSTEM AND EQUIPMENT

Method of Compliance:
Lighting schedule (each fixture type)
lamp type required in fixture: number of lamps in fixture: ballast type used in the fixture: number of ballast 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 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

Remainder of building to remain vacant/unused.

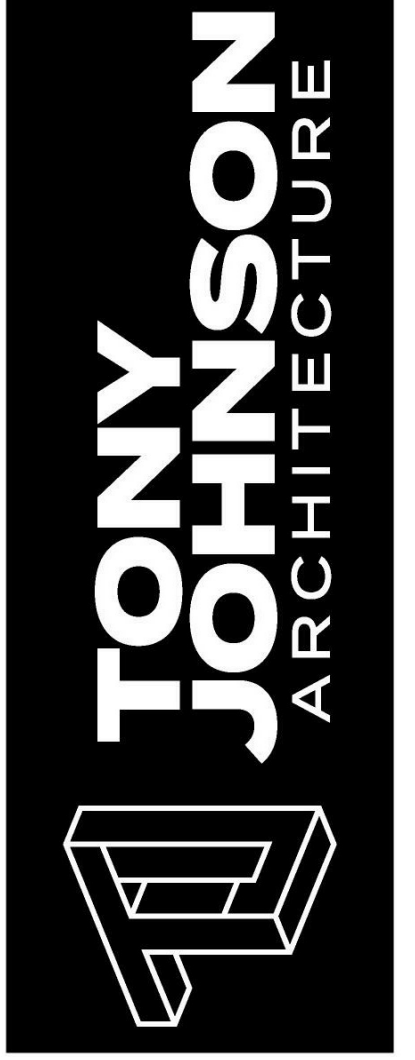
NOTICE TO CONTRACTOR:
All construction must comply with current NC Building Codes and is subject to field inspection and verification.
APPROVED
Limited building only review.
Permit holder responsible for full compliance with the code.
07/22/2020



REVISIONS table with columns: NUMBER, DATE.

MARSHBANKS CLASSROOMS
CAMPBELL UNIVERSITY

919-550-7717
Tony@tonyjohnsonarchitect.com
104 North Lumbard St
Clayton, NC 27520
TonyJohnsonArchitect.com



DATE 07-15-2020
PROJECT # 2020-078
APPENDIX B
SHEET A-01

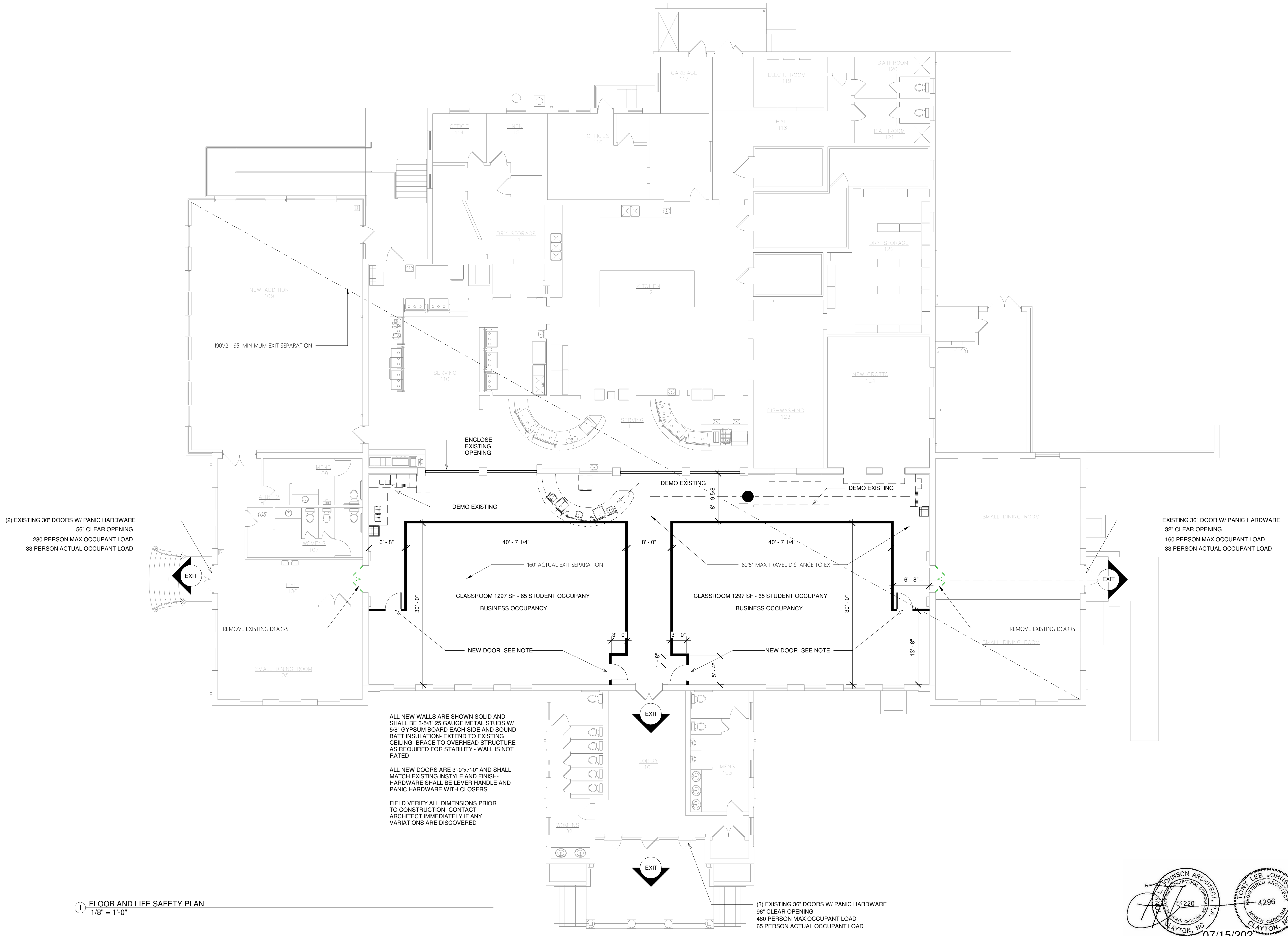
REVISIONS	
NUMBER	DATE

MARSHBANKS CLASSROOMS
 CAMPBELL UNIVERSITY
 234 DAY DORM ROAD, LILLINGTON, NC

919-550-7717
 Tony@TonyJohnsonArchitecture.com
 104 North Lombard St
 Clayton, NC 27520
 TonyJohnsonArchitecture.com



DATE	07-15-2020
PROJECT #	2020-078
FLOOR/LIFE SAFETY PLAN	
SHEET	A-1



ALL NEW WALLS ARE SHOWN SOLID AND SHALL BE 3-5/8" 25 GAUGE METAL STUDS W/ 5/8" GYPSUM BOARD EACH SIDE AND SOUND BATT INSULATION- EXTEND TO EXISTING CEILING- BRACE TO OVERHEAD STRUCTURE AS REQUIRED FOR STABILITY- WALL IS NOT RATED

ALL NEW DOORS ARE 3'-0"x7'-0" AND SHALL MATCH EXISTING INSTYLE AND FINISH- HARDWARE SHALL BE LEVER HANDLE AND PANIC HARDWARE WITH CLOSERS

FIELD VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION- CONTACT ARCHITECT IMMEDIATELY IF ANY VARIATIONS ARE DISCOVERED

1 FLOOR AND LIFE SAFETY PLAN
 1/8" = 1'-0"

(3) EXISTING 36" DOORS W/ PANIC HARDWARE
 96" CLEAR OPENING
 480 PERSON MAX OCCUPANT LOAD
 65 PERSON ACTUAL OCCUPANT LOAD

