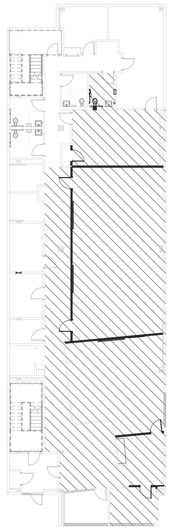
UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL
208 FRANKLIN RENOVATION (SCO ID # 24-28797-01A)
UNIVERSITY OF NORTH CAROLINA DEVELOPMENT OFFICE
100% CONSTRUCTION DOCUMENTS

208 W FRANKLIN ST, CHAPEL HILL, NC 27516



SCOPE OF WORK
1/16" = 1'-0"

DRAWING LIST

GENERAL	
G000	COVER SHEET
G002	NORTH CAROLINA - 2018 APPENDIX B - BUILDING CODE SUMMARY
G101	LEVEL 1 LIFE SAFETY PLAN - OVERALL
STRUCTURAL	
S100	ROOF FRAMING PLAN
S200	SECTIONS AND DETAILS
ARCHITECTURAL	
A101	DEMOLITION PLAN & RCP
A200	NEW FLOOR PLAN, NEW RCP & ADD ALTERNATE ROOF PLAN
A401	DOOR & FRAME TYPES, DETAILS, AND SCHEDULES
A700	UL DETAILS, FIXTURE & ACCESSORIES LEGENDS, ENLARGED PLANS, INTERIOR ELEVATIONS
INTERIORS	
I200	FLOOR FINISH PLAN
HVAC	
H000	HVAC SYMBOLS LEGEND AND CONTRACTOR NOTES
H101	FIRST FLOOR AND ROOF DEMOLITION PLAN
H201	FIRST FLOOR AND ROOF DUCTWORK PLAN
H500	CONTROL DIAGRAMS AND SEQUENCE OF OPERATIONS
H800	DETAILS
H900	MECHANICAL SCHEDULES AND SPECIFICATIONS
PLUMBING	
P000	PLUMBING LEGEND, NOTES, & SYSTEM DIAGRAMS
P101	FIRST FLOOR PLUMBING DEMOLITION PLAN
P201	FIRST FLOOR PLUMBING NEW WORK PLAN
ELECTRICAL	
E000	ELECTRICAL SYMBOLS LEGEND, NOTES & SYSTEM DIAGRAMS
E101	FIRST FLOOR ELECTRICAL DEMOLITION PLAN/RCP
E102	ROOF ELECTRICAL DEMOLITION PLAN
E201	FIRST FLOOR ELECTRICAL NEW WORK PLAN/RCP
E202	ROOF ELECTRICAL NEW WORK PLAN
E401	FIRST FLOOR NEW WORK PLAN - FIRE ALARM DEVICES
E900	ELECTRICAL SCHEDULES AND DETAILS

GENERAL SET NOTES

1. DO NOT SCALE DRAWINGS. CONSULT ARCHITECT FOR ANY MISSING DIMENSIONS.
2. ANY PERSPECTIVE, 3D, OR AXONOMETRIC VIEWS THAT MAY EXIST WITHIN THIS DRAWING SET ARE PURELY SUPPLEMENTAL AND REPRESENTATIVE IN NATURE AND ILLUSTRATE ONLY THE DESIGN INTENT. THESE VIEWS MAY NOT REFLECT PRESICE/COMPLETE DETAILING. REFER TO TWO-DIMENSIONAL DOCUMENTATION FOR CONSTRUCTION DETAILING.
3. GENERAL NOTES AND LEGENDS WITHIN A SERIES (I.E. PLAN NOTES OR PLAN LEGEND) APPLY TO ALL SHEETS WITHIN THAT SERIES, REGARDLESS OF ON WHICH SHEET THE GENERAL NOTES OR LEGEND APPEARS.

COMMON MATERIAL HATCHES

NOTE: THIS LEGEND MAY CONTAIN HATCHES THAT ARE NOT USED IN THIS PROJECT, AND MAY NOT REPRESENT EVERY HATCH USED IN THIS PROJECT. CONSULT ARCHITECT IF UNSURE OF WHAT A HATCH IS INDICATIVE.

- EARTH
- GYPSUM BOARD
- AGGREGATE
- CONCRETE, POURED
- CONCRETE, PRECAST
- CONCRETE MASONRY UNIT (CMU)
- EXISTING BUILDING MATERIALS
- RIGID INSULATION
- BRICK
- STEEL
- ALUMINUM
- WOOD BLOCKING, CONTINUOUS
- WOOD BLOCKING, NON-CONTINUOUS
- WOOD, FINISHED WOODWORK
- PLYWOOD
- BATT OR LOOSE INSULATION

PROJECT ABBREVIATIONS

A	
AFF	ABOVE FINISHED FLOOR
AP	ACCESS PANEL
ACOUS	ACOUSTICAL
ACT	ACOUSTICAL CEILING TILE
AWP	ACOUSTICAL WALL PANEL
ADJ	ADJACENT
A/C	AIR CONDITIONING
ALT	ALTERNATE
ALUM	ALUMINUM
AB	ANCHOR BOLT
ANOD	ANODIZED
APPROX	APPROXIMATE
ARCH	ARCHITECT, ARCHITECTURAL
AD	AREA DRAIN
ACM	ASBESTOS CONTAINING MATERIAL
@	AT
AUTO	AUTOMATIC
B	
BP	BEARING PLATE
BM	BENCH MARK
BITUM	BITUMINOUS
BLK	BLOCK
BLKG	BLOCKING
BD	BOARD
BOT	BOTTOM
BRK	BRICK
BLDG	BUILDING
BN	BULLNOSE
C	
CAB	CABINET
CI	CAST IRON
CB	CATCH BASIN OR CHALK BOARD

CLG	CEILING
CLG HT	CEILING HEIGHT
CL	CENTER LINE
CER	CERAMIC
CIRC	CIRCUMFERENCE
CO	CLEAN OUT
CLR	CLEAR
COL	COLUMN
CONC	CONCRETE
CMU	CONCRETE MASONRY UNIT
CONST	CONSTRUCTION
CJT	CONSTRUCTION JOINT
CONT	CONTINUOUS
CONTR	CONTRACTOR
CJ	CONTROL JOINT
D	
DP	DAMP PROOFING
DEMO	DEMOLISH
DEPT	DEPARTMENT
DET, DTL	DETAIL
DIA	DIAMETER
DIM	DIMENSION
DISP	DISPENSER
DSP	DISPOSAL
DO	DITTO, REPEAT, SAME
DR	DOOR
DBL	DOUBLE
DN	DOWN
DS	DOWNSPOUT
DT	DRAIN TILE
DWR	DRAWER
DWG	DRAWING
DF	DRINKING FOUNTAIN

E	
EA	EACH
EF	EACH FACE
EW	EACH WAY
E	EAST
ELEC	ELECTRICAL
ELEV	ELEVATION
EL	ELEVATOR
EMER	EMERGENCY
ENCL	ENCLOSURE
ENTR	ENTRANCE
EQ	EQUAL
EQUIP	EQUIPMENT
EST	ESTIMATE(D)
EXIST	EXHAUST
EXST	EXISTING
EXP	EXPANSION
EJ	EXPANSION JOINT
F	
FAB	FABRICATE
FT	FEET
FIG	FIGURE
FIN	FINISH
FF	FINISH FLOOR
FEC	FIRE EXTINGUISHER CABINET
FH	FIRE HOSE
FRT	FIRE RETARDANT TREATED
FL.FLR	FLOOR
FD	FLOOR DRAIN
FTG	FOOTING
FND	FOUNDATION
FS	FULL SIZE
FUT	FUTURE

G	
GALV	GALVANIZED
G	GAS
GA	GAUGE
GEN	GENERAL
GC	GENERAL CONTRACTOR
GL	GLASS, GLAZING
GB	GRAB BAR
GR	GRADE, GRADING
GSF	GROSS SQUARE FOOT
GYP	GYPSUM
GYP BD	GYPSUM BD
GWB	GYPSUM WALL BOARD
H	
HDWR	HARDWARE
HDWD	HARDWOOD
HVAC	HEATING, VENTILATING & AIR CONDITIONING
HT, HGT	HEIGHT
HEX	HEXAGONAL
HWY	HIGHWAY
HM	HOLLOW METAL
HORZ	HORIZONTAL
HB	HOSE BIBB
HW	HOT WATER
HR	HOUR
I	
IN	INCH
INCL	INCLUDING
ID	INSIDE DIAMETER
INSUL	INSULATION
INT	INTERIOR
INTERM	INTERMEDIATE

INV	INVERT
J	
JAN	JANITOR
JS	JANITOR SINK
JT	JOINT
K	
KIT	KITCHEN
L	
LBL	LABEL
LAB	LABORATORY
LAM	LAMINATE(D)
LAV	LAVATORY
LYR	LAYER
LDR	LEADER
LH	LEFT HAND
LIB	LIBRARY
LT	LIGHT
LW	LIGHT WEIGHT
M	
MACH	MACHINE
MH	MAN HOLE
MHC	MAN HOLE COVER
MFR	MANUFACTURE
MFRR	MANUFACTURER
MAS	MASONRY
MO	MASONRY OPENING
MAT	MATERIALS
MAX	MAXIMUM
MECH	MECHANICAL
MET	METAL
MTL	METAL
M	METER
MEZZ	MEZZANINE

MIN	MINIMUM
MISC	MISCELLANEOUS
MR	MOISTURE RESISTANT
MTD	MOUNTED
N	
NAT	NATURAL
NRC	NOISE REDUCTION COEFFICIENT
NOM	NOMINAL
N	NORTH
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
NO, #	NUMBER
O	
OC	ON CENTER
OPNG	OPENING
OD	OUTSIDE DIAMETER
OH	OVERHEAD
P	
PT	PAINT(ED)
PR	PAIR
PTR	PAPER TOWEL RECEPTOR
PKG	PARKING
PART BD	PARTICLE BOARD
PART	PARTITION
PVMT	PAVEMENT
PL	PLATE
PLBG	PLUMBING
PLYWD	PLYWOOD
PVC	POLYVINYL CHLORIDE
PC CONC	PRECAST CONCRETE
PRE FAB	PREFABRICATED
PT	PRESSURE TREATED
PL	PROPERTY LINE

Q	
QTY	QUANTITY
R	
RAD	RADIUS
RECP	RECEPTACLE
RE:	REFER TO
REF	REFERENCE
REFR	REFRIGERATOR
REINF	REINFORCED(ING)
REQ'D	REQUIRED
REV	REVISED
RH	RIGHT HAND
R	RISER
RD	ROOF DRAIN
RM	ROOM
RO	ROUGH OPENING
S	
SAN	SANITARY
SCHED	SCHEDULE
SEC	SECOND
SECT	SECTION
SIM	SIMILAR
SSM	SOLID SURFACE MATERIAL
STC	SOUND TRANSMISSION COEFFICIENT
SPEC	SPECIFICATION
SQ	SQUARE
SS	STAINLESS STEEL
STD	STANDARD
STL	STEEL
STOR	STORAGE
SQFT	STRUCTURAL GLAZED FACING TILE
ST STL	STRUCTURAL STEEL

STRUCT	STRUCTURE, STRUCTURAL
SUSP	SUSPENDED
SAT	SUSPENDED ACOUSTICAL TILE
T	
TEL	TELEPHONE
TEMP	TEMPERATURE
THK	THICKNESS
TPD	TOILET PAPER DISPENSER
TOS	TOP OF SLAB/STEEL
TOW	TOP OF WALL
TYP	TYPICAL
U	
UNFIN	UNFINISHED
UNO	UNLESS NOTED OTHERWISE
U	URINAL
V	
VEN	VENEER
VIF	VERIFY IN FIELD
VEST	VESTIBULE
VOL	VOLUME
W	
WC	WATER CLOSET
WT	WEIGHT
WWF	WELDED WIRE FABRIC
WWM	WELDED WIRE MESH
W	WEST
WIND	WINDOW
W/	WITH
W/O	WITHOUT
WD	WOOD
Y	
YD	YARD

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THE UNIVERSITY of NORTH CAROLINA at CHAPEL HILL

PROJECT INFORMATION

Project Number: R24.17133.00
SCO ID#: 24-28797-01A
Client Name: UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL
Project Name: 208 FRANKLIN RENOVATION (SCO ID # 24-28797-01A)
Project Address: 208 W FRANKLIN ST, CHAPEL HILL, NC 27516

PROJECT ISSUE & REVISION SCHEDULE

#	Date	Description

PROFESSIONAL STAMPS

CPL Architects and Engineers, P.C. — Registered Architectural Corporation — 51301 — Charlotte, North Carolina

Eric C. Leibenguth — Registered Seal — 13840 — Architect — North Carolina — 04/17/2025

SHEET INFORMATION

Issued: 04/17/2025
Scale: As indicated
Project Status: 100% CONSTRUCTION DOCUMENTS
Drawn By: MM
Checked By: SC
Drawing Title: COVER SHEET
Drawing Number: G000

4/17/2025 4:41:27 PM PROJECT FILES ON ACC

2018 APPENDIX B
BUILDING CODE SUMMARY
FOR ALL COMMERCIAL PROJECTS
(EXCEPT 1 AND 2 FAMILY DWELLINGS AND TOWNHOUSES)

Name of Project: 208 FRANKLIN RENOVATION (SCO ID # 24-28797-01A)
Address: 208 W FRANKLIN ST, CHAPEL HILL, NC 27516
Proposed Use:
Owner / Authorized Agent: ELENOR METHVEN Phone #: 919.590.0690 Email: EMETHVEN@UNC.EDU
Owned By: ☐ City/County ☐ Private ■ State
Code Enforcement Jurisdiction: ☐ City _____ ☐ County _____ ■ State

CONTACT:

DESIGNER	FIRM	NAME	LICENSE #	PHONE	EMAIL
Architectural	CPL	ERIC LEIBENGUTH	13480	585.329.4972	ELEIBENGUTH@CPLTEAM.COM
Civil	-	-	-	-	-
Electrical	CPL	MICHAEL RANIERI	020216	336.232.5725	MRANIERI@CPLTEAM.COM
Fire Alarm	CPL	MICHAEL RANIERI	020216	336.232.5725	MRANIERI@CPLTEAM.COM
Plumbing	CPL	MICHAEL PENA	052834	336.232.5709	MPENA@CPLTEAM.COM
Mechanical	CPL	MICHAEL PENA	052834	336.232.5709	MPENA@CPLTEAM.COM
Fire Protection	-	-	-	-	-
Structural	BENNETT & PLESS	JEFFREY MOSS	024346	919.740.0188	JMOSS@BENNETT-PLESS.COM
Retaining Walls	-	-	-	-	-
Other	-	-	-	-	-

2018 NC BUILDING CODE:
☐ New Building ☐ Addition ■ Renovation
☐ 1st Time Interior Completion
☐ 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:
☐ Prescriptive ☐ Repair ☐ Chapter 14
☐ Level I ■ Level II ☐ Level III
☐ Historic Property ☐ Change of Use

CONSTRUCTED: 1999 **CURRENT OCCUPANCY: (Ch. 3)** BUSINESS
RENOVATED: 2014 **PROPOSED OCCUPANCY: (Ch. 3)** BUSINESS (NO CHANGE)

RISK CATEGORY: (TABLE 1604.5) Current: ☐ I ☐ II ☐ III ☐ IV
Proposed: ☐ I ■ II ☐ III ☐ IV

BASIC BUILDING DATA:
Construction Type: (check all that apply) ☐ I-A ■ II-A ☐ III-A ☐ IV ☐ V-A ☐ I-B ☐ II-B ☐ III-B ☐ V-B

Sprinklers: ☐ Yes ☐ Partial ■ No ☐ NFPA 13 ☐ NFPA 13R ☐ NFPA 13D
Standpipes: ☐ Yes ■ No **Class:** ☐ I ☐ II ☐ III ☐ Wet ☐ Dry
Fire District: ■ Yes ☐ No **Flood Hazard Area:** ☐ Yes ■ No
Special Inspections Required: ☐ Yes ☐ No
Contact the local inspection jurisdiction for additional procedures and requirements

STORY NO.	DESCRIPTION AND USE	EXISTING TO REMAIN (SQ FT)	NEW (SQ FT)	RENOVATION (SQ FT)	SUB TOTAL
FIRST	BUSINESS	5,368 SF	0 SF	2,350 SF	5,368 SF
SECOND	BUSINESS	5,578 SF	0 SF	0 SF	5,578 SF
THIRD	BUSINESS	5,578 SF	0 SF	0 SF	5,578 SF
FOURTH	BUSINESS	5,368 SF	0 SF	0 SF	5,368 SF
TOTAL					21,892 SF

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 ☐ 1 ☐ 2
☐ I-2 ☐ 1 ☐ 2
☐ I-3 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
☐ I-4
Mercantile ☐
Residential ☐ R-1 ☐ R-2 ☐ R-3 ☐ R-4
Storage ☐ S-1 Moderate ☐ S-2 Low ☐ High-piled
☐ Parking Garage ☐ Open ☐ Enclosed ☐ Repair Garage
Utility & Miscellaneous ☐

Accessory Occupancy Classifications: _____
Incidental Uses (Table 509): _____
Special Uses (Chapter 4 - List Code Sections): _____
Special Provisions: (Chapter 5 - List Code Sections): _____
Mixed Occupancy: ☐ Yes ■ No Separation: _____ Exception: _____
☐ 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.

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

THIRD FLOOR
0 SF / 0 SF + 0 SF / 0 SF + 0 SF / 0 SF + 0 SF / 0 SF ≤ 1
OCCUPANCY D OCCUPANCY C OCCUPANCY B OCCUPANCY A

SECOND FLOOR
0 SF / 0 SF + 0 SF / 0 SF + 0 SF / 0 SF + 0 SF / 0 SF ≤ 1
OCCUPANCY D OCCUPANCY C OCCUPANCY B OCCUPANCY A

FIRST FLOOR
0 SF / 0 SF + 0 SF / 0 SF + 0 SF / 0 SF + 0 SF / 0 SF ≤ 1
OCCUPANCY D OCCUPANCY C OCCUPANCY B OCCUPANCY A

BASEMENT
0 SF / 0 SF + 0 SF / 0 SF + 0 SF / 0 SF + 0 SF / 0 SF ≤ 1
OCCUPANCY D OCCUPANCY C OCCUPANCY B OCCUPANCY A

SEVENTH FLOOR
0 SF / 0 SF ≤ 1
OCCUPANCY A

SIXTH FLOOR
0 SF / 0 SF ≤ 1
OCCUPANCY A

FIFTH FLOOR
0 SF / 0 SF ≤ 1
OCCUPANCY A

FOURTH FLOOR
0 SF / 0 SF ≤ 1
OCCUPANCY A

EXISTING - NO CHANGE

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]
EIGHTH	Description & Use	0 SF	0 SF	0 SF	0 SF
SEVENTH	Description & Use	0 SF	0 SF	0 SF	0 SF
SIXTH	Description & Use	0 SF	0 SF	0 SF	0 SF
FIFTH	Description & Use	0 SF	0 SF	0 SF	0 SF
FOURTH	Description & Use	0 SF	0 SF	0 SF	0 SF
THRID	Description & Use	0 SF	0 SF	0 SF	0 SF
SECOND	Description & Use	0 SF	0 SF	0 SF	0 SF
FIRST	Description & Use	0 SF	0 SF	0 SF	0 SF
BASEMENT	Description & Use	0 SF	0 SF	0 SF	0 SF

[1] Frontage area increases from Section 506.3 computed as follows:
a. Perimeter which fronts a public way or open space having 20 feet minimum width = 100 ft (F)
b. Total Building Perimeter = 200 ft (P)
c. Ratio (F/P) = 0.5 (F/P)
d. W= Minimum width of public way = 20 ft (W)
e. Percent of frontage increase $I_f = 100 [F / P - 0.25] \times W / 30$ = (%)
$I_f = 100 [100\text{ ft} / 200\text{ ft} - 0.25] \times 20\text{ ft} / 30 = 16.7$ (%)
[2] Unlimited area applicable under conditions of Section 507
[3] Maximum Building Area = total number of stories in the building x D (maximum 3 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[1]	EXISTING	CODE REFERENCE
Building Height in Feet (Table 504.3)[2]	-	-	Code Reference
Building Height in Stories (Table 504.4)[2]	-	-	Code Reference

[1] Provide code reference if the "Shown no 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 garage must comply with Table 406.5.4

EXISTING - NO CHANGE

FIRE PROTECTION REQUIREMENTS
Type _____

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (FEET)	RATING REQ'D	RATING PROVIDED (W/ _____ REDUCTION)*	DETAIL # AND SHEET #	DESIGN # FOR RATED ASSEMBLY	DESIGN# FOR RATED PENETRATION	DESIGN # FOR RATED JOINTS
Structural Frame, including columns, girders, trusses	-	-	-	-	-	-	-
Bearing Walls	-	-	-	-	-	-	-
Exterior	-	-	-	-	-	-	-
North	-	-	-	-	-	-	-
East	-	-	-	-	-	-	-
West	-	-	-	-	-	-	-
South	-	-	-	-	-	-	-
Interior	-	-	-	-	-	-	-
Nonbearing Walls and Partitions	-	-	-	-	-	-	-
Exterior	-	-	-	-	-	-	-
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	-	-	-	-	-	-	-
Roof Ceiling Assembly	-	-	-	-	-	-	-
Columns Supporting Roofs	-	-	-	-	-	-	-
Shaft Enclosures - Exit	-	-	-	-	-	-	-
Shaft Enclosures - Other	-	-	-	-	-	-	-
Corridor Separation	-	1HR	-	-	-	-	-
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

EXISTING - NO CHANGE

PERCENTAGE OF WALL OPENING CALCULATIONS

FIRE SEPARATION DISTANCE (FEET) FROM PROPERTY LINES	DEGREE OF OPENING PROTECTION	ALLOWABLE	ACTUAL SHOWN ON PLANS (%)
-	-	-	-
-	-	-	-
-	-	-	-

EXISTING - NO CHANGE

LIFE SAFETY SYSTEM REQUIREMENTS
Emergency Lighting: ■ Yes ☐ No
Exit Signs: ■ Yes ☐ No
Fire Alarm: ■ Yes ☐ No
Smoke Detection Systems: ■ Yes ☐ No ☐ Partial _____
Carbon Monoxide Detection: ■ Yes ☐ No

LIFE SAFETY PLAN REQUIREMENTS
Life Safety Plan Sheet #: G101

■ 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 types for each area as it relates to occupant load calculation (Table 1004.1.2)
■ Occupant loads for each area
■ Exit access travel distance (1017)
■ Common path of travel distance (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 and supporting construction for a fire barrier/fire partition/smoke barrier.
☐ 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

Section/Table/Note	Title
-	-
-	-
-	-
-	-
-	-
-	-

ACCESSIBLE DWELLING UNITS
(SECTION 1107)

TOTAL UNITS	ACCESSIBLE UNITS REQUIRED	ACCESSIBLE UNITS PROVIDED	TYPE A UNITS PROVIDED	TYPE A UNITS REQUIRED	TYPE B UNITS PROVIDED	TYPE B UNITS REQUIRED	TOTAL ACCESSIBLE UNITS PROVIDED
-	-	-	-	-	-	-	-

EXISTING - NO CHANGE

ACCESSIBLE PARKING
(SECTION 1106)

LOT OR PARKING AREA	TOTAL # OF PARKING SPACE REQUIRED	TOTAL # OF PARKING SPACE PROVIDED	# OF ACCESSIBLE SPACES PROVIDED REQUIRED	# OF ACCESSIBLE SPACES WITH 32' ACCESS AISLE	# OF ACCESSIBLE SPACES WITH 8' ACCESS AISLE	TOTAL # ACCESSIBLE PROVIDED
LOT 1	0	0	0	0	0	0
LOT 2	0	0	0	0	0	0
LOT3	0	0	0	0	0	0
LOT 4	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0

EXISTING - NO CHANGE

PLUMBING FIXTURE REQUIREMENTS
(TABLE 2902.1)

USE		WATER CLOSETS MALE	WATER CLOSETS FEMALE	WATER CLOSETS UNISEX	URINALS	LAVATORIES MALE	LAVATORIES FEMALE	LAVATORIES UNISEX	SHOWERS /TUBS	DRINKING FOUNTAINS REGULAR	DRINKING FOUNTAINS ACCESSIBLE
SPACE 1ST FLOOR	EXIST'G	1	1	1	-	1	1	1	1	1	1
	NEW	-	-	1	-	-	-	1	-	-	-
	REQ'D	2	2	-	-	2	2	-	-	1	1

EXISTING - NO CHANGE

SPECIAL APPROVALS
Special approval: (Location Jurisdiction, Department of Insurance, OSC, DPI, etc.)
<text>

EXISTING - NO CHANGE

ENERGY REQUIREMENTS:
The following data shall be considered minimum and any special attribute required to meet the **North Carolina Energy Conservation 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: ☐ No ☐ Yes (Provide code or statutory reference): -
Climate Zone: ☐ 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 total 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: -

EXISTING - NO CHANGE

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

DESIGN LOADS:
Importance Factors: Snow (Is) 1.1
Seismic (Is) 1.25

Live Loads: Roof 20 psf
Mezzanine _____ psf
Floor _____ psf

Ground Snow Load: 15 psf
Wind Load: Ultimate Wind Speed 120 mph (ASCE-7)
Exposure Category C

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 S_S .158 % S_1 .078 %
Site Classification (ASCE 7) ☐ A ☐ B ☐ C ■ 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 ☐

SOIL BEARING CAPACITIES:
Field Test (provide copy of test report) - psf
Presumptive Bearing capacity EXISTING TO REMAIN psf (NOT APPLICABLE FOR NEW SCOPE OF WORK)
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: -
summer dry bulb: -
Interior design conditions
winter dry bulb: -
summer dry bulb: -
relative humidity: -
Building heating load: -
Building cooling load: -
Mechanical Spacing Condition 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 efficiences: -

EXISTING - NO CHANGE

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 ☐ Prescriptive
ASHRAE 90.1 ☐ Performance ■ Prescriptive

Lighting schedule (each fixture type)
Lamp type required in fixture: SEE LIGHTING FIXTURE SCHEDULE ON SHEET E900
Number of lamps in fixture: SEE LIGHTING FIXTURE SCHEDULE ON SHEET E900
Ballast type used in the fixture: ENERGY EFFICIENT LED DRIVERS
Number of ballasts in fixture: SEE LIGHTING FIXTURE SCHEDULE ON SHEET E900
Total wattage per fixture: SEE LIGHTING FIXTURE SCHEDULE ON SHEET E900
Total interior wattage specified vs. allowed (whole building or space by space): 950 vs. 1609
Total exterior wattage specified vs. allowed: N/A

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

EXISTING - NO CHANGE

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THE UNIVERSITY of NORTH CAROLINA at CHAPEL HILL

PROJECT INFORMATION
Project Number: R24.17133.00 SCO ID#: 24-28797-01A
Client Name: UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL
Project Name: 208 FRANKLIN RENOVATION (SCO ID # 24-28797-01A)
Project Address: 208 W FRANKLIN ST, CHAPEL HILL, NC 27516

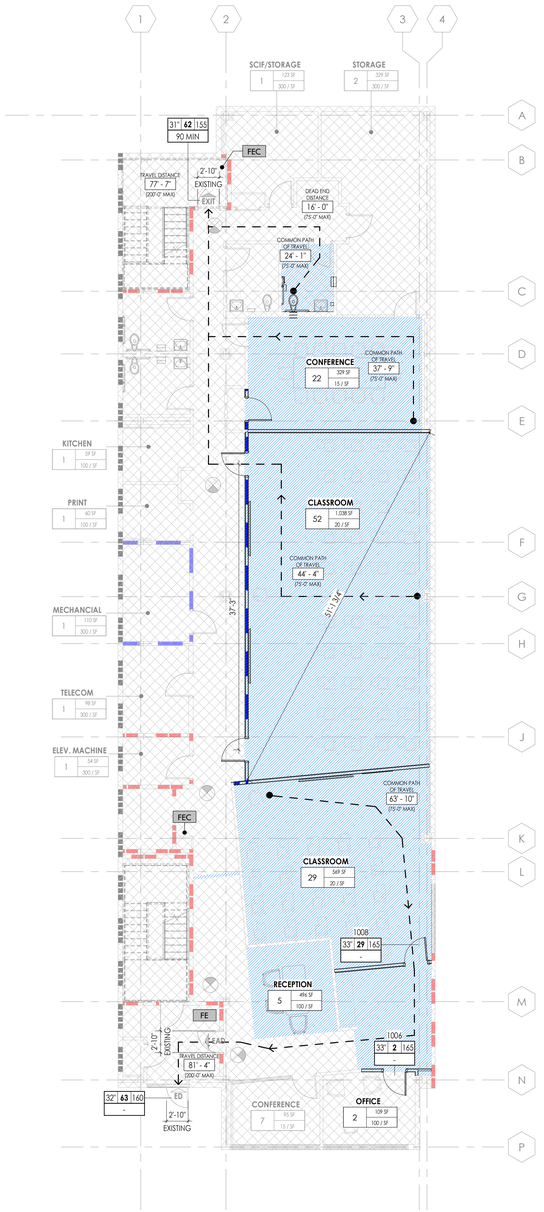
PROJECT ISSUE & REVISION SCHEDULE

#	Date	Description

PROFESSIONAL STAMPS
CPL Architects and Engineers, P.A. — 51301 — Charlotte, North Carolina
Eric C. Leibenguth — Registered Seal 13840 — Architect — North Carolina — 04/17/2025

SHEET INFORMATION
Issued: 04/17/2025 Scale:
Project Status: 100% CONSTRUCTION DOCUMENTS
Drawn By: MM Checked By: SC
Drawing Title: NORTH CAROLINA - 2018 APPENDIX B - BUILDING CODE SUMMARY
Drawing Number: G002

4/17/2025 4:41:31 PM PROJECT FILES ON ACC



01 G101 **LEVEL 1 OVERALL LIFE SAFETY PLAN**

1/8" = 1'-0"

MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURES (TABLE 2902.1)

APPLICABLE BUILDING CODES

BUILDING CODE: 2018 NC BUILDING CODE: BUILDING CODE
EXISTING BUILDING CODE: 2018 NC BUILDING CODE: EXISTING BUILDING CODE

WATER CLOSETS:

B, BUSINESS (TABLE 2902.1): 1 PER 30 FOR THE FIRST 30 AND 1 PER 50 FOR THE REMAINDER EXCEEDING 30
148/2 = 74 OCCUPANTS, 2 LAVATORIES REQUIRED FOR MEN
148/2 = 74 OCCUPANTS, 2 LAVATORIES REQUIRED FOR WOMEN

LAVATORIES:

B, BUSINESS (TABLE 2902.1): 1 PER 40 FOR THE FIRST 80 OCCUPANTS AND 1 PER 80 FOR THE REMAINDER
MEN: 148/2 = 74 OCCUPANTS, 2 LAVATORIES REQIRED FOR MEN
WOMEN: 148/2 = 74 OCCUPANTS, 2 LAVATORIES REQUIRED FOR WOMEN

DRINKING FOUNTAIN:

B-BUSINESS (TABLE 2902.1): 1 PER 100
DF: 126/100 = 1.26 = 2 DRINKING FOUNTAINS REQUIRED

LIFE SAFETY GENERAL NOTES

1. WALL RATINGS INDICATE RATING ASSEMBLY REQUIRED IN HOURS. FOR DESIGNATIONS BETWEEN FIRE BARRIER, FIRE PARTITION, AND FIRE WALL, REFER TO LIFE SAFETY PLANS & CODE STUDY.
2. FOR RENOVATION PROJECTS ONLY: CONTRACTOR TO MAINTAIN ACCESS TO ALL EGRESS PATHS WHENEVER BUILDING IS OCCUPIED DURING CONSTRUCTION. IF AT ANY TIME CONTRACTOR NEEDS TO RESTRICT ACCESS TO ANY EGRESS PATHS OF EXITS, ARCHITECT SHOULD BE CONSULTED TO VERIFY REMAINING EXITS / TRAVEL DISTANCES ARE SUFFICIENT.

LIFE SAFETY SYMBOL LEGEND

EXIT — EXISTING EXIT
ED — EXISTING EXIT DISCHARGE
EAD — EXISTING EXIT ACCESS DOOR
AE — ACCESSIBLE ENTRANCE
HE — HORIZONTAL EXIT
EXISTING EXIT SIGN

ROOM/AREA NAME
##
###'-0"
SF
ROOM AREA
OCCUPANT LOAD FACTOR
CALCULATED OCCUPANT LOAD

ROOM/AREA NAME
##
###'-0"
###
ROOM AREA
INDICATES OCCUPANCY OTHER THAN CODE MIN
STATED OCCUPANT LOAD

STAIR
60" 44"
100
PROVIDED WIDTH
REQUIRED WIDTH
ANTICIPATED LOAD

###-#
##" ### ###
MIN
DOOR NUMBER
ANTICIPATED LOAD
EGRESS CAPACITY
FIRE RATING
CLEAR WIDTH

TRAVEL DISTANCE
0' - 0"
(0'-0" MAX)
TRAVEL DISTANCE

COMMON PATH OF TRAVEL
0' - 0"
(0'-0" MAX)
COMMON PATH TRAVEL

1 HOUR FIRE/SMOKE RATED ASSEMBLY
2 HOUR FIRE/SMOKE RATED ASSEMBLY
4 HOUR FIRE/SMOKE RATED ASSEMBLY

FE	EXISTING FIRE EXTINGUISHER	FE	FIRE EXTINGUISHER
FEB	EXISTING BRACKET MTD FIRE EXTINGUISHER	FEB	BRACKET MTD FIRE EXTINGUISHER
FEC	EXISTING FIRE EXTINGUISHER CABINET	FEC	FIRE EXTINGUISHER CABINET
FHC	EXISTING FIRE HOSE CABINET	FHC	FIRE HOSE CABINET
TES	TACTILE EXIT SIGNAGE	2WC	TWO-WAY COMMUNICATION
TRS	TACTILE RESTROOM SIGNAGE		SYMBOL OF ACCESSIBILITY
OCC	MAXIMUM POSTED OCCUPANCY	AR	AREA OF REFUGE

LIFE SAFETY CODE SUMMARY

CONSTRUCTION TYPE:

II-A, NOT SPRINKLERED

OCCUPANCY TYPE:

CLASSIFICATION: B-BUSINESS

FUNCTIONAL USE GROUP(S):
ASSEMBLY WITHOUT FIXED SEATS
UNCONCENTRATED (TABLES AND CHAIRS)
OCCUPANT LOAD FACTOR: 15 NET
BUSINESS AREAS
OCCUPANT LOAD FACTOR: 100 GROSS
EDUCATIONAL
CLASSROOM AREA
OCCUPANT LOAD FACTOR: 20 NET
ACCESSORY STORAGE AREAS, MECHANICAL EQUIPMENT ROOM
OCCUPANT LOAD FACTOR: 300 GROSS

TOTAL OCCUPANTS: 126

TRAVEL DISTANCES (MAXIMUM):

ALLOWABLE EXIT ACCESS (TABLE 1017.2): 200'-0" (B OCCUPANCY)
PROVIDED EXIT ACCESS: SEE LIFE SAFETY PLAN
ALLOWABLE COMMON PATH OF TRAVEL (TABLE 1006.2.1): 75'-0" (B-OCCUPANCY)
PROVIDED COMMON PATH OF TRAVEL: SEE LIFE SAFETY PLAN
ALLOWABLE DEAD END MAXIMUM (IBC EXISTING BUILDING - SECTION 806.5): 35'-0"
PROVIDE DEAD END LENGTH: 16'-1"

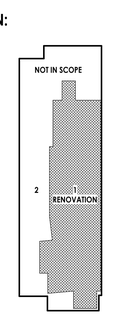
BUILDING SQUARE FOOTAGE:

FIRST FLOOR SCOPE TOTAL AREA (GSF): 2,350 SF
FIRST FLOOR TOTAL AREA (GSF): 5,368 SF
TOTAL BUILDING AREA (GSF): 21,892 SF

CLASSIFICATION OF WORK KEY

(EXISTING AREA NOT IN SCOPE)
ALTERATION LEVEL 2 (NC EXISTING BUILDING CODE)

KEY PLAN:



TRUE NORTH
PROJECT NORTH

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THE UNIVERSITY of NORTH CAROLINA at CHAPEL HILL

PROJECT INFORMATION

Project Number: R24.17133.00
SCO ID#: 24-28797-01A
Client Name: **UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL**
Project Name: **208 FRANKLIN RENOVATION (SCO ID # 24-28797-01A)**
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PROJECT ISSUE & REVISION SCHEDULE

#	Date	Description

PROFESSIONAL STAMPS

CPL Architects and Engineers, P.C. — 51301 — North Carolina — Charlotte, North Carolina

Eric C. Leibenguth — Registered Seal 13840 — Architect — North Carolina — 04/17/2025

SHEET INFORMATION

Issued: 04/17/2025
Scale: As indicated
Project Status: 100% CONSTRUCTION DOCUMENTS
Drawn By: MM
Checked By: SC
Drawing Title: LEVEL 1 LIFE SAFETY PLAN - OVERALL
Drawing Number: G101

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DESIGN CRITERIA

LOCATION: CHAPEL HILL, NORTH CAROLINA
BUILDING CODE: 2018 NORTH CAROLINA STATE BUILDING CODE

RISK CATEGORY II

SUPERIMPOSED LOADS

ROOF DEAD LOAD	20 PSF
ROOF LIVE LOAD	20 PSF

SNOW LOADS Pf = 10.5 psf
Ce=0.9
Ct=1
Pd=43.2 psf
w =10.83 ft

SEE APPENDIX B ON G002 FOR ADDITIONAL INFORMATION

EQUIPMENT WEIGHTS *

DOAS 1 = 4,102 LBS

* CURB WEIGHTS NOT INCLUDED COORDINATE
CURB WEIGHT WITH UNIT MFGR.

GENERAL NOTES

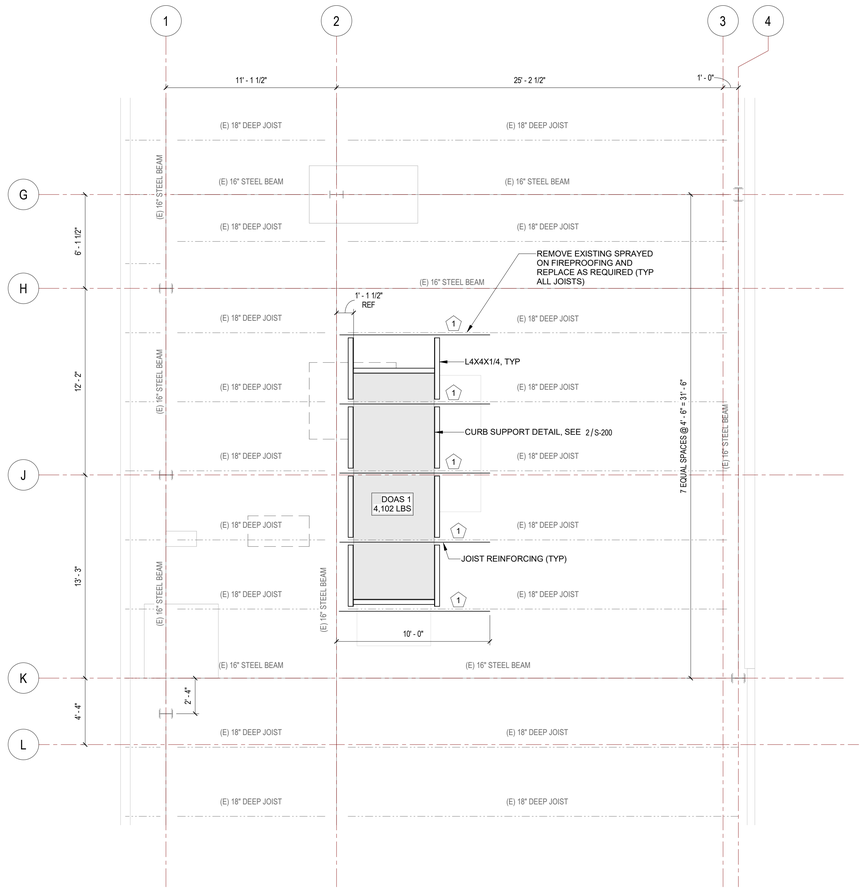
GENERAL

1. DESIGN, FURNISH, AND INSTALL TEMPORARY SHORING, BRACING, AND OTHER TEMPORARY SUPPORTS REQUIRED FOR CONSTRUCTING THE STRUCTURE AND TO MAINTAIN THE STABILITY THROUGHOUT ALL PHASES OF CONSTRUCTION UNTIL THE STRUCTURE IS COMPLETED. ALL TEMPORARY SUPPORTS ARE TO BE REMOVED UNLESS NOTED OTHERWISE.
2. USE STRUCTURAL DRAWINGS IN CONJUNCTION WITH THE DRAWINGS OF OTHER TRADES
3. COORDINATE WITH OTHER TRADES THE ACTUAL LOCATIONS AND SIZES OF OPENINGS AND PENETRATIONS REQUIRED BY THEIR WORK.
4. MODIFICATIONS TO STRUCTURAL COMPONENTS AND INSTALLATION OF PENETRATIONS THROUGH STRUCTURAL MEMBERS ARE NOT PERMITTED WITHOUT PRIOR APPROVAL OF THE ARCHITECT.

STRUCTURAL STEEL

1. MATERIALS
   - A. STRUCTURAL STEEL ROLLED SHAPES: ASTM A36, U.N.O.
   - B. STRUCTURAL ROD: GRADE 50
   - C. STEEL PLATE: ASTM A572
   - D. WELD ELECTRODE: IN ACCORDANCE WITH AWS D1.1
2. FABRICATE AND ERECT STEEL IN ACCORDANCE WITH THE AISC SPECIFICATION. PERFORM SHOP AND FIELD WELDING IN ACCORDANCE WITH AWS D1.1 WITH CURRENTLY CERTIFIED WELDERS.

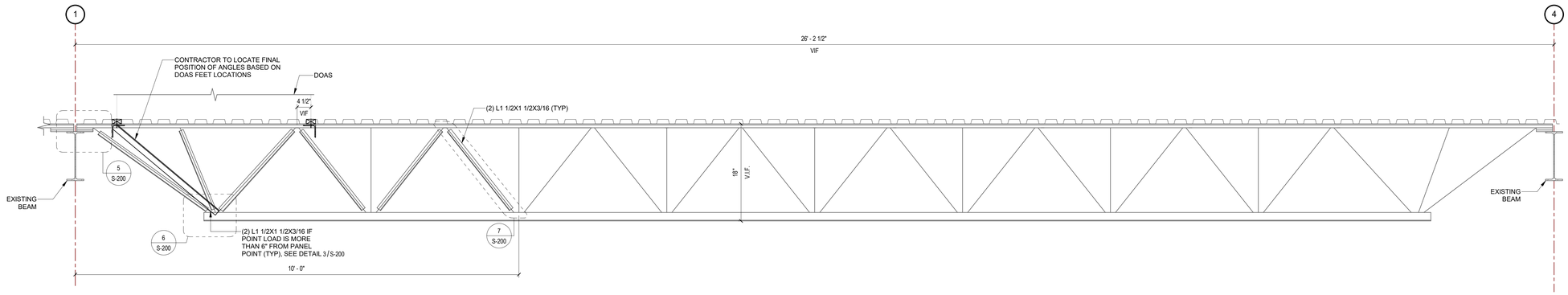
ADD ALTERNATE #001: PROVIDE AND INSTALL ROOF STEEL FRAMING FOR THE SUPPORT OF THE NEW DOAS-1 EQUIPMENT AS SPECIFIED ON SHEETS S-100 & S-200



3 S-100 **ROOF**
SCALE: 1/4" = 1'-0"

ROOF FRAMING PLAN

1. FRAME ROOF OPENINGS W/ L4X4X1/4, COORDINATE LOCATION W/ MECH'L CONTRACTOR, SEE DETAIL 2/S-200. AT CONTRACTOR'S OPTION, ROOF OPENINGS AND EQUIPMENT CURBS CAN BE SUPPORTED ON QUICKFRAMES BY QUICKFRAMES USA. COORDINATE SIZE OF UNITS AND OPENINGS WITH UNIT MFGR. SHOP DRAWINGS SHALL BE SUBMITTED FOR APPROVAL.
2. (#) INDICATES REINFORCEMENT OF EXISTING ROOF JOIST OR GIRDER IS REQUIRED. REFER TO REINFORCEMENT DETAILS.
3. VERIFY LOCATION AND EXTENTS OF ROOF TOP SUPPORTS WITH APPROVED EQUIPMENT SHOP DRAWINGS.



1 S-100 **JOIST TYPE 1 REINFORCEMENT**
SCALE: NTS

4/14/2025 10:49:04 AM

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PROJECT INFORMATION

Project Number: R24.17133.00
SCD ID#: 24-28797-01A
Client Name: UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL
Project Name: 208 FRANKLIN RENOVATION
Project Address: 208 W FRANKLIN ST, CHAPEL HILL, NC 27516

PROJECT ISSUE & REVISION SCHEDULE

#	Date	Description

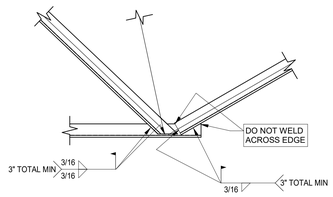
bennett & pless STRUCTURAL ENGINEERS
5430 Wade Park Boulevard, Suite 400
Raleigh, North Carolina 27607
919.832.5587
NC License #F-1105 Project # 25.08.010

NORTH CAROLINA PROFESSIONAL SEAL 024346 ENGINEER JEFFREY J. MOSS
4-17-25

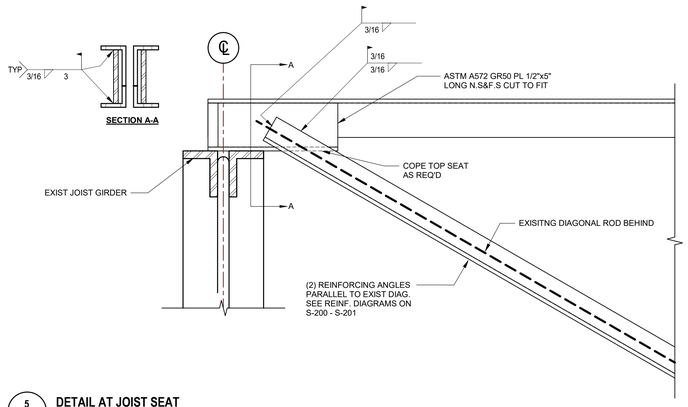
SHEET INFORMATION

Issued: 04/17/2025
Scale: As indicated
Project Status: 100% CONSTRUCTION DOCUMENTS
Drawn By: MGM
Checked By: JJM
Drawing Title: ROOF FRAMING PLAN
Drawing Number: S-100

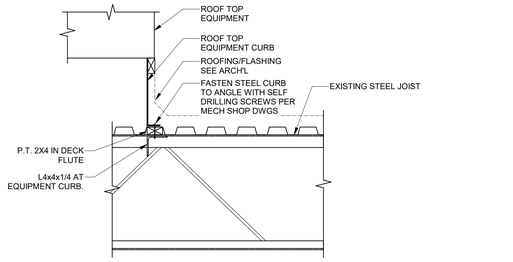
ADD ALTERNATE #001: PROVIDE AND INSTALL ROOF STEEL FRAMING FOR THE SUPPORT OF THE NEW DOAS-1 EQUIPMENT AS SPECIFIED ON SHEETS S-100 & S-200



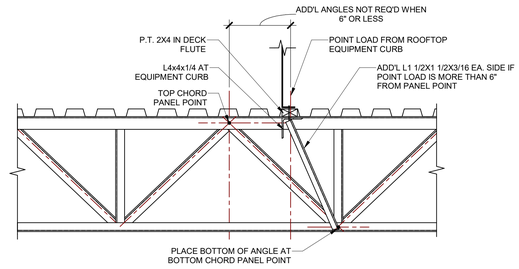
6 S-200 **DETAIL AT PANEL POINT**
SCALE: 1 1/2" = 1'-0"



5 S-200 **DETAIL AT JOIST SEAT**
SCALE: 3" = 1'-0"

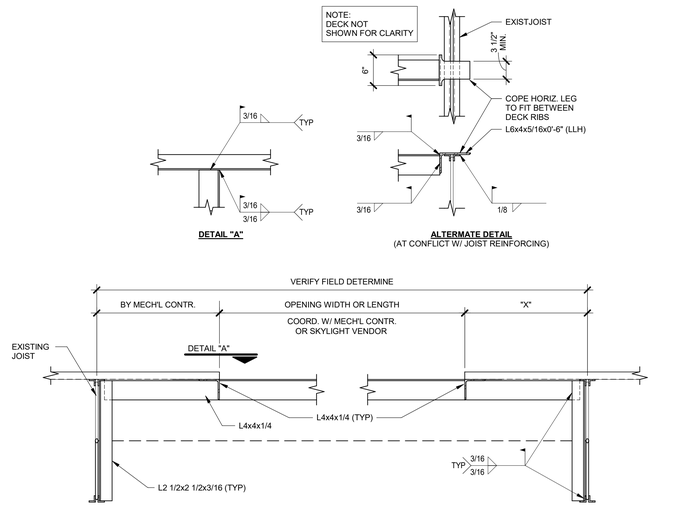


4 S-200 **DETAIL AT ROOF TOP EQUIPMENT SUPPORT**
SCALE: 1" = 1'-0"

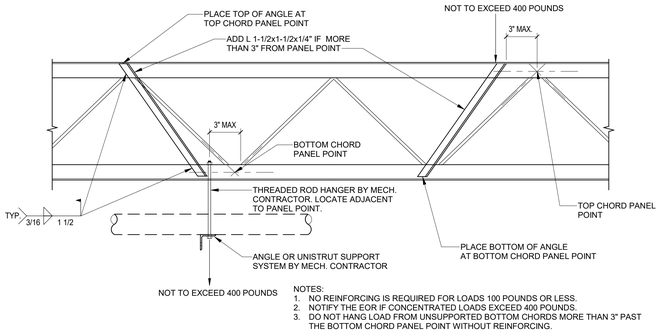


NOTES:
1. PLACEMENT OF ANGLES MAY BE ADJUSTED INTHE FIELD TO AVOID ADD'L ANGLE WITH PRIOR APPROVAL FROM THE ENGINEER.

3 S-200 **JOIST REINFORCEMENT DETAIL**
SCALE: 1" = 1'-0"

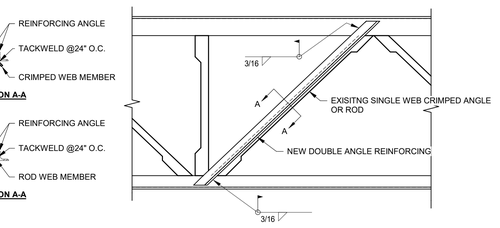


2 S-200 **TYP ROOF OPENING DETAIL**
SCALE: 1" = 1'-0"



NOTES:
1. NO REINFORCING IS REQUIRED FOR LOADS 100 POUNDS OR LESS.
2. NOTIFY THE EOR IF CONCENTRATED LOADS EXCEED 400 POUNDS.
3. DO NOT HANG LOAD FROM UNSUPPORTED BOTTOM CHORDS MORE THAN 3" PAST THE BOTTOM CHORD PANEL POINT WITHOUT REINFORCING.

1 S-200 **TYP. JOIST REINFORCING**
SCALE: 1" = 1'-0"



7 S-200 **WEB MEMBER REINFORCEMENT**
SCALE: 1 1/2" = 1'-0"

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THE UNIVERSITY of NORTH CAROLINA at CHAPEL HILL

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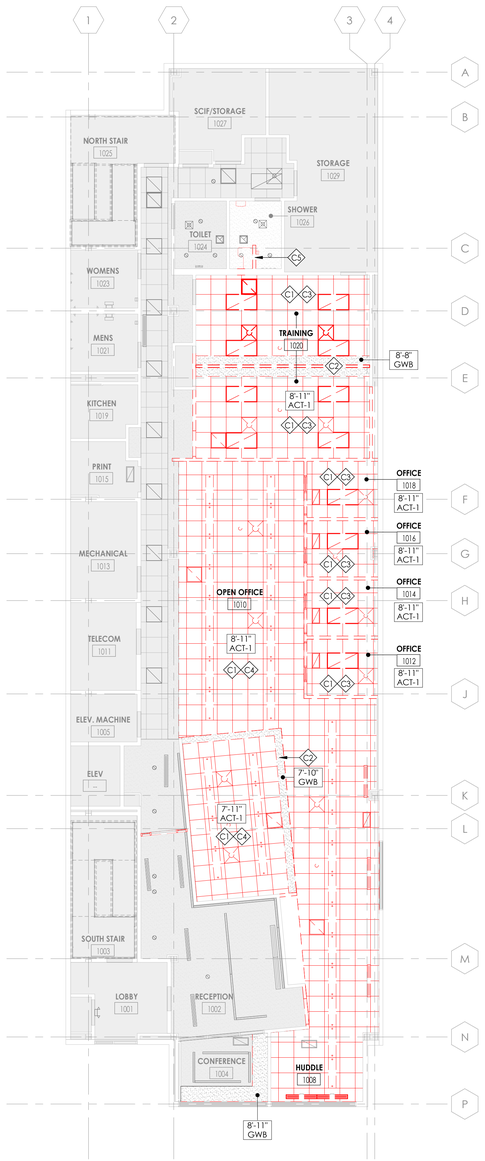
bennett & pless
STRUCTURAL ENGINEERS
5430 Wade Park Boulevard, Suite 400
Raleigh, North Carolina 27607
919.832.5567
NC License #F-1105 Project # 25.08.010

NORTH CAROLINA PROFESSIONAL SEAL 024346 ENGINEER JEFFREY J. MOSS
4-17-25

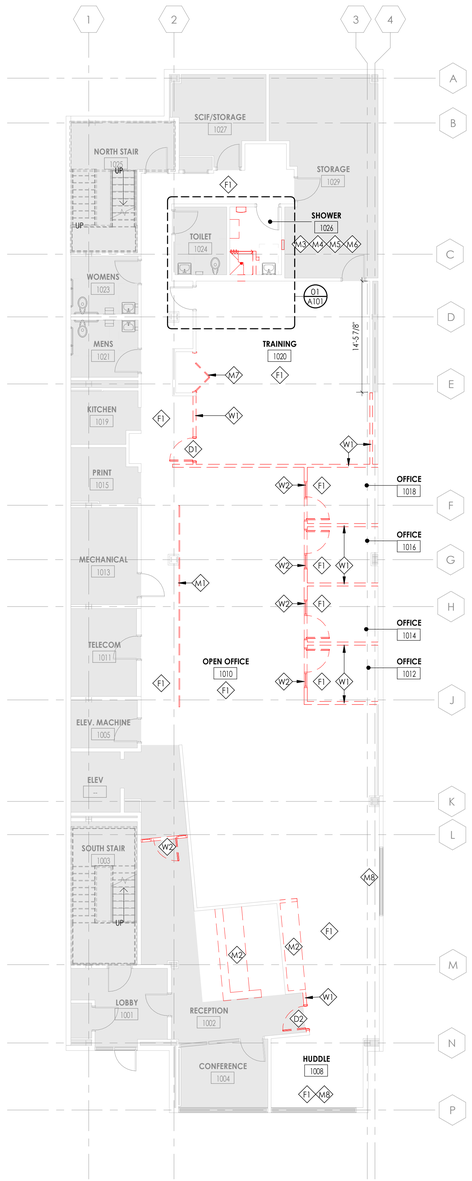
SHEET INFORMATION

Issued: 04/17/2025
Scale: As indicated
Project Status: 100% CONSTRUCTION DOCUMENTS
Drawn By: AS
Checked By: TH
Drawing Title: SECTIONS AND DETAILS
Drawing Number: S-200

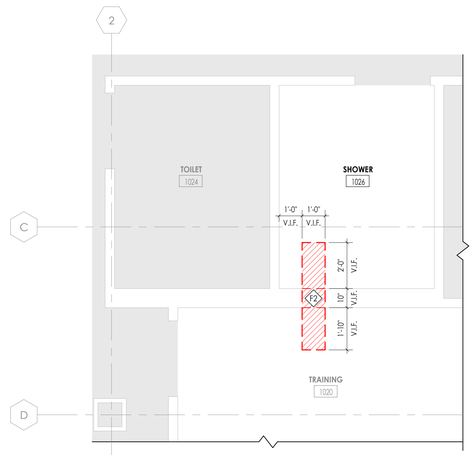
4/16/2025 10:49:55 AM



03 A101 **LEVEL 1 - DEMO RCP PLAN**
1/8" = 1'-0"



02 A101 **LEVEL 1 - DEMO FLOOR PLAN**
1/8" = 1'-0"



01 A101 **SHOWER 1026 - SLAB DEMO ENLARGED PLAN**
3/8" = 1'-0"

DEMOLITION LEGEND

EXISTING TO REMAIN

DEMOLISHED

FLOOR PLAN DEMOLITION KEYED NOTES

D1 DOOR TO BE PROTECTED AND REUSED FOR CLASSROOM 1008.

D2 DOOR TO BE PROTECTED AND REUSED FOR OFFICE 1006.

F1 EXISTING FLOORING, BASE, AND ALL ASSOCIATED ITEMS TO BE REMOVED. PREP SURFACE TO RECEIVE NEW MATERIAL; OWNER TO PROVIDE CARPET AND ALL ASSOCIATED ITEMS FOR GC TO INSTALL.

F2 DEMO PORTION OF EXISTING WALL AND SLAB; PATCH TO MATCH EXISITNG.

M1 REMOVE SUSPENDED PANELS AND ALL ASSOCIATED ITEMS AND SALVAGE TO OWNER. PATCH AND REPAIR SURFACES AS NEEDED.

M2 REMOVE EXISTING MILLWORK AND ALL ASSOCIATED ITEMS. PATCH AND REPAIR SURFACES AS NEEDED.

M3 REMOVE EXISTING SHOWER SURROUND, PLUMBING FIXTURES AND ALL SHOWER ACCESSORIES. PATCH AND REPAIR SURFACES AS NEEDED AND PREPARE TO RECEIVE NEW FINISHES.

M4 REMOVE WALL MOUNTED BENCH AND ALL ASSOCIATED ITEMS. PATCH AND REPAIR WALL AS NEEDED.

M5 REMOVE, STORE, AND REINSTALL SOAP DISPENSER.

M6 PROTECT ACCESSORIES AND SINK NOT BEING DEMOLISHED

M7 DEMOLISH OPERABLE PARTITION AND ALL ASSOCIATED ITEMS.

M8 REMOVE, STORE AND REINSTALL ALL EXISTING WINDOW TREATMENTS.

W1 DEMOLISH WALL AND ALL ASSOCIATED ITEMS TO EXTENTS SHOWN.

W2 DEMOLISH STOREFRONT SYSTEM IN ITS ENTIRETY.

RCP DEMOLITION KEYED NOTES

C1 EXISTING ACT TO BE REMOVED, SALVAGED, AND REINSTALLED; SEE 02/A200.

C2 EXISTING GWB TO BE DEMOLISHED.

C3 REMOVE, SALVAGE, AND REINSTALL EXISTING LIGHT FIXTURES; REFERENCE ELECTRICAL DRAWINGS.

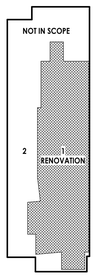
C4 REMOVE EXISTING LIGHT FIXTURES AND DEVICES.

C5 PATCH, REPAIR, AND FILL CEILING AS NEEDED FROM WALL REMOVAL. PAINT TO MATCH ADJACENT.

DEMOLITION GENERAL NOTES

1. REFER TO THE MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS FOR DEMOLITION OF EXISTING UTILITIES AND SERVICES.
2. ALL ITEMS TO BE SALVAGED WITHIN THE DEMOLITION AREA NOT RELATED TO PROJECT SCOPE WILL BE REMOVED BY THE OWNER PRIOR TO ONSET OF DEMOLITION WORK.
3. REMAINING SUBSTRATES SHALL BE LEFT IN A CONDITION ACCEPTABLE TO RECEIVE NEW WORK. WHERE NEW FINISHES ARE SCHEDULED AT EXISTING CONDITIONS, REMOVE EXISTING FINISHES DOWN TO SUBSTRATE AND PREPARE SURFACE FOR NEW FINISH.
4. BUILDINGS THAT ARE OCCUPIED DURING CONSTRUCTION TO FOLLOW ICRA, INCLUDING BUT NOT LIMITED TO: MAINTAIN NEGATIVE AIR PRESSURE THROUGHOUT CONSTRUCTION AREA TO CONTAIN CONSTRUCTION DUST. PROVIDE DUST CONTROL BARRIERS AT ALL AREAS OF DEMOLITION AND CONSTRUCTION. BUILD AND PAINT TEMPORARY PARTITIONS THAT ARE ABLE TO BE WIPED DOWN AND CLEANED. MAINTAIN EMERGENCY EGRESS OF OCCUPIED AREAS AT ALL TIMES. DUST CONTROL AND EGRESS PARTITIONS ARE TO BE CONSTRUCTED AND/ OR RELOCATED PER EACH PHASE OF CONSTRUCTION AS THE PROJECT PROGRESSES AND AS COORDINATED WITH OWNER OCCUPANCY.
5. THE CONTRACTOR IS RESPONSIBLE FOR DAMAGE TO ANY EXISTING FINISHES AND EQUIPMENT NOT REMOVED UNDER THE SCOPE OF WORK. ANY DAMAGE WILL BE REPAIRED TO THE OWNER/ARCHITECT'S SATISFACTION.
6. POWER, COMMUNICATION, FIRE PROTECTION & MEDICAL GAS SHUT DOWNS SHALL NOT EFFECT PORTIONS OF BUILDING(S) THAT NEED TO REMAIN IN USE. CONTRACTOR TO REROUTE OR PROVIDE TEMPORARY POWER, COMMUNICATION, FIRE PROTECTION AND MEDICAL GAS. COORDINATE SHUT DOWNS WITH OWNER AND GENERAL CONTRACTOR.
7. REMOVE AND REPLACE EXISTING CEILINGS, UNLESS NOTED OTHERWISE ON THE DRAWINGS, FOR PERFORMING DEMOLITION OF ALL WORK INDICATED ON THE CONSTRUCTION DRAWINGS. THE EXISTING CEILING SHALL BE REMOVED AND REPLACED IN A MANNER TO AVOID DAMAGE TO THE WALL SYSTEM.
8. NOTIFY ARCHITECT AND OWNER OF EXISTING DUCTWORK, PIPE, AND CONDUIT PENETRATIONS EXPOSED AFTER DEMOLITION THAT ARE NOT FIRESTOPPED THROUGH EXISTING FLOORS AND WALLS IDENTIFIED AS FIRE AND/OR SMOKE RATED ON LIFE SAFETY PLANS. EXISTING NON-COMPLIANT PENETRATIONS ARE TO BE FIRESTOPPED.
9. WORK AREAS SHALL BE MAINTAINED AND ALL WORK AREAS SHALL BE LEFT BROOM CLEANED AT END OF EACH DAY.
10. IN ALL LOCATIONS THAT A DOOR IS ILLUSTRATED TO BE DEMOLISHED, REMOVE AND DISPOSE OF DOOR, FRAME, HARDWARE AND ALL ASSOCIATED ITEMS, UNLESS NOTED OTHERWISE.
11. ALL ITEMS SHOWN WITH A DASHED LINE ARE TO BE REMOVED AND DISPOSED OF UNLESS NOTED OTHERWISE.
12. SINKS INDICATED WITHIN MILLWORK BEING REMOVED SHALL ALSO BE REMOVED AND DISPOSED OF, ALONG WITH ALL ASSOCIATED ITEMS. COORDINATE WITH PLUMBING DRAWINGS.
13. TYPICAL BUILDING COMPONENTS TO BE LEFT IN PLACE WHICH ARE NOT TO BE DEMOLISHED, UNLESS NOTED OTHERWISE:
    A. FIREPROOFING ON COLUMNS AND BEAMS WHICH IS NOT PART OF A WALL OR CEILING SYSTEM. THIS INCLUDES PLASTER, MASONRY, AND CONCRETE COVERS WHICH MAY BE ENCAPSULATED BY THE WALL OR CEILING ASSEMBLIES.
    B. ELECTRIC, PLUMBING AND HVAC LINES FEEDING AREAS TO REMAIN IN OPERATION. COORDINATE WITH MEP DRAWINGS.
    C. ANY STRUCTURES UNCOVERED AS A RESULT OF DEMOLITION WHICH APPEAR TO BE SUPPORTING IN NATURE AND REQUIRING VERIFICATION PRIOR TO DEMOLITION. THIS INCLUDES EQUIPMENT SUPPORTS AND STRUCTURE ADDED AS A RESULT OF PREVIOUS CONSTRUCTION OR ADDITIONS.
14. THE OWNER WILL REMOVE ALL MOVEABLE OR UNATTACHED ITEMS TO BE SAVED OR STORED PRIOR TO CONTRACTORS' SALVAGE OPERATIONS. ITEMS TO BE SALVAGED INCLUDE BUT ARE NOT LIMITED TO, THOSE ITEMS SHOWN ON THE DRAWINGS.
15. OWNER HAS THE RIGHT TO SALVAGE ANY FIXTURES AND/OR MILLWORK WITHIN AN AREA OF DEMOLITION PRIOR TO CONTRACTOR STARTING WORK IN THAT ZONE. COORDINATE TIMING OF SUCH REMOVALS WITH OWNER.
16. RECONSTRUCT EXISTING FIREPROOFING DUE TO WALL, CEILING OR EQUIPMENT DEMOLITION. REFER TO G-SERIES DRAWINGS FOR PROTECTION RATING REQUIREMENTS.
17. THE OWNER WILL PROVIDE THE TESTING RESULTS OF ASBESTOS CONTAINING MATERIALS (ACM) IN THE PROJECT AREA. IN THE CASE THAT ANY SUSPICIOUS MATERIALS ARE UNCOVERED OR QUESTIONED, LEAVE THE PREMISES AND NOTIFY THE OWNER & ABATEMENT CONTRACTOR FOR REQUIRED TESTING AND/OR REMOVALS.
18. IN THE CASE THAT ANY SUSPICIOUS MATERIALS ARE UNCOVERED THAT APPEAR TO CONTAIN HAZARDOUS MATERIALS SUCH AS BUT NOT LIMITED TO MOLD, LEAD PAINT OR ASBESTOS, LEAVE THE PREMISES AND NOTIFY THE OWNER & ABATEMENT CONTRACTOR FOR REQUIRED TESTING AND/OR REMOVALS.

KEY PLAN:



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PROJECT NORTH

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THE UNIVERSITY of NORTH CAROLINA at CHAPEL HILL

PROJECT INFORMATION

Project Number: R24.17133.00
SCO ID#: 24-28797-01A
Client Name: UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL
Project Name: 208 FRANKLIN RENOVATION (SCO ID # 24-28797-01A)
Project Address: 208 W FRANKLIN ST, CHAPEL HILL, NC 27516

PROJECT ISSUE & REVISION SCHEDULE

#	Date	Description

PROFESSIONAL STAMPS

CPL Architects and Engineers, P.A. REGISTERED ARCHITECTURAL CORPORATION 51301 NORTH CAROLINA Charlotte, North Carolina

Eric C. Leibenguth REGISTERED SEAL 13840 ARCHITECT NORTH CAROLINA 04/17/2025

SHEET INFORMATION

Issued: 04/17/2025
Scale: As indicated
Project Status: 100% CONSTRUCTION DOCUMENTS
Drawn By: MM
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Drawing Title: DEMOLITION PLAN & RCP
Drawing Number: A101

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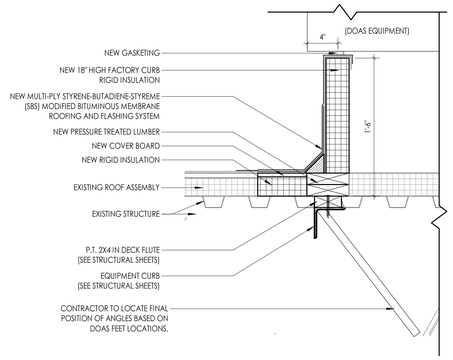
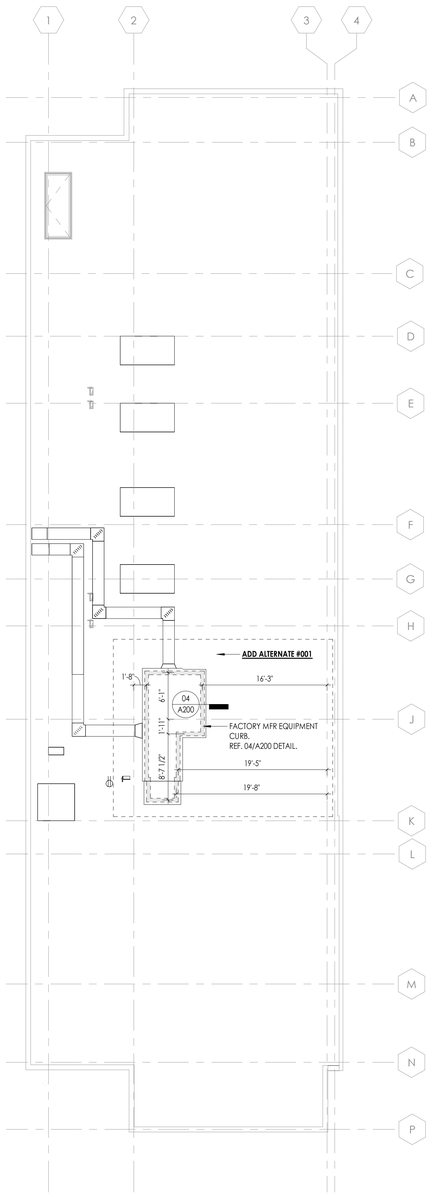


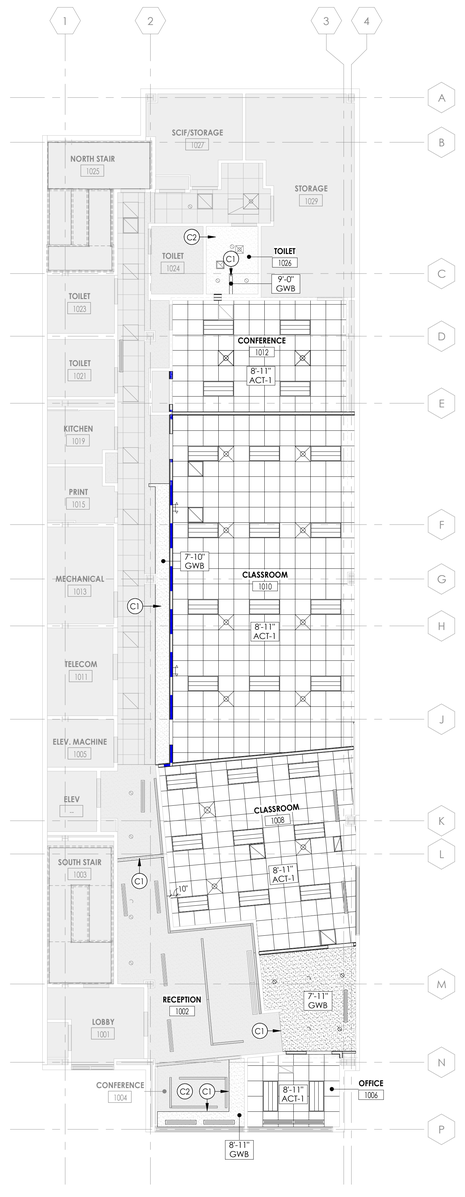
04 / A200 EQUIPMENT CURB DETAIL (ADD ALTERNATE)

1 1/2" = 1'-0"



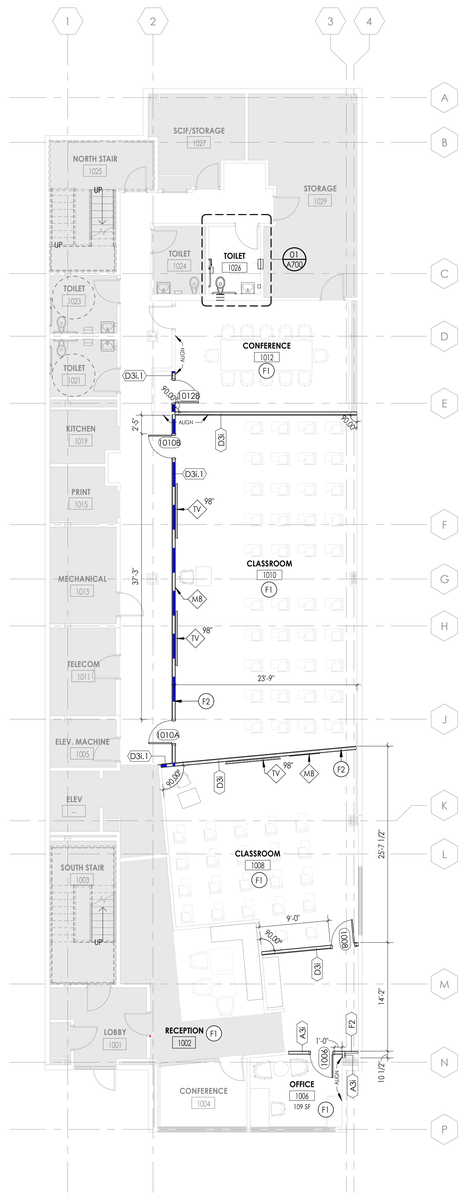
03 / A200 ROOF PLAN - OVERALL (ADD ALTERNATE)

1/8" = 1'-0"



02 / A200 LEVEL 1 - NEW REFLECTED CEILING PLAN

1/8" = 1'-0"



01 / A200 LEVEL 1 - NEW FLOOR PLAN

1/8" = 1'-0"

GENERAL CEILING NOTES

1. ANY DISCREPANCY BETWEEN THE REFLECTED CEILING PLAN AND THE FLOOR PLAN SHALL BE CALLED TO THE ATTENTION OF THE ARCHITECT PRIOR TO COMMENCEMENT OF ANY WORK.
2. FIRESTOP MECHANICAL, ELECTRICAL AND PLUMBING ITEMS, INCLUDING BUT NOT LIMITED TO DUCTWORK AND CONDUIT PENETRATIONS THROUGH FLOORS AND WALLS.
3. ALL ITEMS SHOWN ON ARCHITECTURAL CEILING PLANS ARE FOR REFERENCE ONLY AND ARE SHOWN TO COORDINATE ITEMS WITH CEILINGS. REFER TO MEP DWGS TO COORDINATE ALL CEILING MOUNTED ITEMS. ANY DISCREPANCY SHALL BE CALLED TO THE ATTENTION OF THE ARCHITECT PRIOR TO COMMENCEMENT OF ANY WORK.
4. REFER TO MECHANICAL DRAWINGS FOR DIFFUSERS AND GRILLE LOCATIONS. ELECTRICAL DRAWINGS FOR LIGHTING TYPES AND CONTROLS, AND FIRE PROTECTION DRAWINGS FOR SPRINKLER HEAD LOCATIONS.
5. WHERE APPLICABLE, ALL FIXTURES AND DEVICES SHALL BE CENTERED ON A CEILING TILE.
6. CENTER CEILING GRID (EACH WAY) IN ROOMS SCHEDULED TO RECEIVE ACOUSTICAL CEILING SYSTEMS UNLESS NOTED OTHERWISE.
7. VERIFY WITH ARCHITECT THE INSTALLATION OF ANY CEILING TILES LESS THAN 6" IN WIDTH.
8. PROVIDE MOISTURE RESISTANT GYP. BD. AT ALL TOILET ROOM, JANITOR'S CLOSET AND OTHER WET LOCATION CEILING ASSEMBLIES.
9. ALL GYP. BD. CEILINGS AND SOFFITS SHALL BE PRIMED AND PAINTED SCHEDULED COLOR ON ALL FACES AND UNDERSIDE SURFACE.
10. VERIFY SOFFIT SIZE WITH MILLWORK SHOP DRAWINGS. PROVIDE 2" OVERHANG ON EXPOSED EDGES UNLESS NOTED OTHERWISE.
11. INSTALL CONTROL JOINTS IN GYP. CEILINGS PER ASTM C 840. VERIFY LOCATIONS WITH ARCHITECT.

FLOOR PLAN GENERAL NOTES

1. CONTRACTOR TO PROVIDE ADEQUATE WALL BLOCKING FOR ALL WALL-MOUNTED CABINETS, FIXTURES, ACCESSORIES, AND EQUIPMENT, INCLUDING ITEMS FURNISHED BY OTHERS. REFER TO TYPICAL FIXTURE AND ACCESSORY LEGENDS.
2. PATCH AND FINISH ALL EXISTING CEILINGS AND WALLS TO REMAIN WITHIN THE PROJECT LIMIT AREA TO RECEIVE SPECIFIED FINISHES.
3. PROVIDE CONCRETE FLOOR PATCH AND FLOOR LEVELING AT EXISTING CONCRETE FLOORS FOR NEW FINISHES.
4. ALL EXISTING EXPANSION JOINT COVERS OR ASSEMBLIES ARE TO BE PROTECTED AND MAINTAINED DURING THE COURSE OF CONSTRUCTION UNLESS NOTED OTHERWISE.
5. COORDINATE WITH OTHER TRADES FOR SEQUENCING OF WORK.
6. REFER TO TYPICAL FIXTURE & ACCESSORIES LEGEND FOR FURNISH AND INSTALL SCOPE OF EQUIPMENT AND ACCESSORIES.
7. EQUIPMENT SHOWN ON THESE DOCUMENTS IS FOR REFERENCE ONLY AND IS FOR COORDINATION OF REQUIRED MEP INFRASTRUCTURE. REFER TO OWNER FURNISHED EQUIPMENT DRAWINGS AND SUBMITTALS FOR FINAL COORDINATION AND INSTALLATION REQUIREMENTS INCLUDING BUT NOT LIMITED TO: DIMENSIONS, LOCATIONS & MEP CONNECTION LOCATIONS.
8. ALL FURNITURE IS TO BE PROVIDED BY OWNER AND ARE SHOWN FOR REFERENCE ONLY.
9. CONSULT WITH ARCHITECT TO FINALIZE LOCATIONS OF ANY EXPOSED CONTROL JOINTS PRIOR TO INSTALLATION.
10. ALL QUANTITIES / SQUARE FOOTAGES SHOWN ARE FOR REFERENCE ONLY AND ARE TO BE VERIFIED BY THE CONTRACTOR.

FLOOR PLAN KEYED NOTES

F1 ENSURE THERE ARE NO GAPS OR CRACKS BETWEEN NEW AND EXISTING CONSTRUCTION TO MAINTAIN ACOUSTICAL PRIVACY BETWEEN SPACES.

F2 CONTRACTOR TO PROVIDE TYPICAL BLOCKING IN WALLS.

SYMBOLS LEGEND

NOTE: THIS LEGEND MAY CONTAIN SYMBOLS THAT ARE NOT USED IN THIS PROJECT.

- 300-1 — DOOR TAG
- HMA — GLAZING SYSTEM TAG
- 1 / A — NEW COLUMN GRID LINE
- 1 / A — EXISTING COLUMN GRID LINE
- ROOM NAME / H1234.2 / 150 SF — ROOM TAG
- XXX — PARTITION TYPE TAG
- ### / ## ## — CASEWORK TAG
- 1 — ACCESSORY TAG
- 1 — REVISION NO. 1
- 1 — EQUIPMENT SYMBOL (NUMBER)
- DENOTES FINISH FLOOR GRADE ELEVATION

DIMENSIONING NOTES

1. ALL CONTENT ON DEMOLITION PLANS INDICATE GRAPHIC REPRESENTATION OF APPROXIMATE LOCATIONS OF MATERIALS TO BE REMOVED. IT IS THE CONTRACTORS RESPONSIBILITY TO FIELD VERIFY ALL EXISTING CONDITIONS & DIMENSIONS PRIOR TO COMMENCEMENT OF ALL DEMOLITION WORK. COORDINATE ANY DISCREPANCIES WITH ARCHITECT PRIOR TO COMMENCEMENT OF ALL WORK.
2. ALL EXISTING COMPONENTS DEPICTED IN THIS DRAWING SET ARE GRAPHIC REPRESENTATION OF APPROXIMATE LOCATIONS OF THOSE EXISTING MATERIALS. IT IS THE CONTRACTORS RESPONSIBILITY TO FIELD VERIFY ALL EXISTING CONDITIONS & DIMENSIONS PRIOR TO COMMENCEMENT OF ALL WORK. ALL DIMENSIONS TO EXISTING BUILDING COMPONENTS ARE TO FACE OF EXISTING WALL OR PARTITION.
3. ALL PARTITION & WALL DIMENSIONS INDICATED ON FLOOR PLANS AND REFLECTED CEILING PLANS ARE FROM FACE OF PARTITION TYPE TO FACE OF PARTITION TYPE, UNLESS NOTED OTHERWISE. APPLIED FINISHES WILL BE BUILT OUTSIDE OF THESE DIMENSIONS, UNLESS THE DIMENSION IS INDICATED AS MIN, MAX, CLEAR, OR HOLD.
4. ALL CASEWORK DIMENSIONS INDICATED ARE TO EDGE OF COUNTERTOP OR EDGE OF CABINET.
5. ALL DIMENSIONS TO DOOR OPENINGS ARE TO FINISHED JAMB, UNLESS NOTED OTHERWISE.
6. ALL DIMENSIONS TO GLAZING SYSTEMS ARE TO FINISHED JAMB OR CENTERLINE OF MULLION/GASKET, UNLESS NOTED OTHERWISE. THESE OUTSIDE DIMENSIONS ARE ROUGH OPENING SIZES, AND GLAZING SYSTEMS ARE TO BE ADJUSTED ACCORDINGLY TO ACCOUNT FOR SHIMS, SEALANT, ETC. AS REQUIRED.
7. REFER TO TYPICAL FIXTURE AND ACCESSORY LEGENDS SHEET FOR MORE SPECIFIC DIMENSIONING REQUIREMENTS SURROUNDING FIXTURES AND ACCESSORIES.
8. FIELD VERIFY ALL APPLICABLE DIMENSIONS PRIOR TO SHOP DRAWING SUBMITTAL.

GENERAL DEFINITIONS

LIMIT OF WORK:
THIS TERM SHALL DENOTE THE APPROXIMATE PROJECT BOUNDARY.

CLEAR:
THE PRESENCE OF "CLEAR" IN A DIMENSION STRING INDICATES THAT THE HEIGHT/LENGTH MUST BE AT LEAST THE DIMENSION SPECIFIED. THESE DIMENSIONS ARE FROM FACE OF FARTHEST FINISH TO FACE OF FARTHEST FINISH, INCLUDING APPLIED FINISHES. ANY DISCREPANCY MUST BE REVIEWED BY THE ARCHITECT. WHERE USED IN CONJUNCTION WITH ANOTHER TERM (I.E. "MIN CLEAR"), SLIGHT VARIATIONS IN THIS DIMENSION ARE ACCEPTABLE SO LONG AS THE MINIMUM SIZE IS MAINTAINED. A VARIANCE OVER 1" MUST BE REVIEWED BY THE ARCHITECT PRIOR TO COMMENCEMENT OF ALL WORK.

MINIMUM OR MIN:
THE PRESENCE OF "MIN" OR "MINIMUM" IN A DIMENSION STRING INDICATES A MINIMUM CLEAR HEIGHT/LENGTH OF THE AMOUNT INDICATED. THESE DIMENSIONS ARE FROM FACE OF FARTHEST FINISH TO FACE OF FARTHEST FINISH, INCLUDING APPLIED FINISHES. SLIGHT VARIATIONS IN THIS DIMENSION ARE ACCEPTABLE SO LONG AS THE MINIMUM SIZE IS MAINTAINED.

MAXIMUM OR MAX:
THE PRESENCE OF "MAX" OR "MAXIMUM" IN A DIMENSION STRING INDICATES A MAXIMUM CLEAR HEIGHT/LENGTH OF THE AMOUNT INDICATED. THESE DIMENSIONS ARE FROM FACE OF FARTHEST FINISH TO FACE OF FARTHEST FINISH, INCLUDING APPLIED FINISHES. SLIGHT VARIATIONS IN THIS DIMENSION ARE ACCEPTABLE SO LONG AS THE MAXIMUM SIZE IS NOT REACHED.

RCP KEYED NOTES

C1 ALIGN WITH EXISTING CEILING, PATCH, AND PAINT TO MATCH.

C2 EXISTING ACT CEILING TO REMAIN.

CEILING TYPE LEGEND

NOTE: THIS LEGEND MAY CONTAIN SYMBOLS THAT ARE NOT USED IN THIS PROJECT.

- ACT-1 / 9'-0" — CEILING TYPE / CEILING HEIGHT ABOVE FINISHED FLOOR
- GWB — GYPSUM CEILING ON FRAMING OR SUSPENSION SYSTEM
- ACT — ACOUSTICAL TILE CEILING TO MATCH EXISTING

CEILING SYMBOL LEGEND

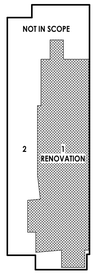
NOTE: THIS LEGEND MAY CONTAIN SYMBOLS THAT ARE NOT USED IN THIS PROJECT.

- RECESSED CAN LIGHT
- SPECIALITY LIGHT PENDANT, WALL SCONCE (GRAPHICS VARY)
- SUPPLY AIR DIFFUSER
- EXHAUST DIFFUSER
- CEILING ACCESS PANEL
- 2'x4' LIGHT
- STRIP LIGHT
- 1'X'4 LINEAR LIGHT
- RETURN AIR DIFFUSER
- LINEAR SLOT DIFFUSER

ADD ALTERNATE - ROOF PLAN

1. **ADD ALTERNATE #001:**
   SEE MECHANICAL AND STRUCTURAL DRAWINGS FOR MECHANICAL UNIT CURB DETAILS.

KEY PLAN:



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THE UNIVERSITY of NORTH CAROLINA at CHAPEL HILL

PROJECT INFORMATION

Project Number: R24.17133.00
SCO ID#: 24-28797-01A
Client Name: **UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL**
Project Name: **208 FRANKLIN RENOVATION (SCO ID # 24-28797-01A)**
Project Address: 208 W FRANKLIN ST, CHAPEL HILL, NC 27516

PROJECT ISSUE & REVISION SCHEDULE

#	Date	Description

PROFESSIONAL STAMPS

CPL Architects and Engineers, P.C. — Certificate of Authorization — 51301 — North Carolina — Charlotte, North Carolina

Eric C. Leibenguth — Registered Seal — 13340 — Architect — North Carolina — 04/17/2025

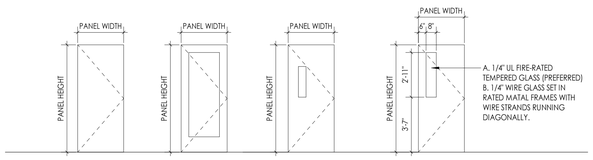
SHEET INFORMATION

Issued: 04/17/2025
Scale: As indicated
Project Status: 100% CONSTRUCTION DOCUMENTS
Drawn By: MM
Checked By: SC
Drawing Title: NEW FLOOR PLAN, NEW RCP & ADD ALTERNATE ROOF PLAN
Drawing Number: A200

4/17/2025 4:41:37 PM PROJECT FILES ON ACC

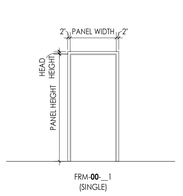
DOOR SCHEDULE- NEW

DOOR NUMBER	FIRE RATING (MIN)	DOOR PANEL: PANEL TYPE	DOOR PANEL: SINGLE PANEL DIMENSIONS: PANEL 1 WIDTH	DOOR PANEL: SINGLE PANEL DIMENSIONS: PANEL 1 HEIGHT	DOOR PANEL: TOTAL PANEL DIMENSIONS: PANELS 1 & 2 WIDTH	DOOR PANEL: TOTAL PANEL DIMENSIONS: HEIGHT	DOOR PANEL: TOTAL PANEL DIMENSIONS: THICKNESS	DOOR PANEL FINISH: SIDE 1 / SIDE 2	DOOR FRAME: FRAME TYPE	DOOR FRAME: FRAME DIMENSIONS: JAMB WIDTH	DOOR FRAME: FRAME DIMENSIONS: HEAD HEIGHT	DOOR FRAME: FRAME DIMENSIONS: FRAME DEPTH	DOOR FRAME: FRAME FINISH	DETAILS: HEAD DTL	DETAILS: JAMB DTL	HW SET	GLAZING TYPE	COMMENTS
FIRST FLOOR																		
1006	-	PNL-FG-AL	3'-0"	7'-0"	3'-0"	7'-0"	0'-1 3/4"	PAINT TO MATCH EXISTING	FRM-00HM1	0'-2"	0'-2"	0'-5 3/4"	PAINT TO MATCH EXISTING	7/A401	3/A401	1	EXISTING	OFCI, RELOCATED DOOR. REFERENCE DEMOLITION PLAN.
1008	-	PNL-N-WD	3'-0"	7'-0"	3'-0"	7'-0"	0'-1 3/4"	PAINT TO MATCH EXISTING	FRM-00HM1	0'-2"	0'-2"	0'-6 3/8"	PAINT TO MATCH EXISTING	7/A401	3/A401	1	EXISTING	OFCI, RELOCATED DOOR. REFERENCE DEMOLITION PLAN.
1010A	1HR	PNL-N1-HM	3'-0"	7'-0"	3'-0"	7'-0"	0'-1 3/4"	PAINT TO MATCH EXISTING	FRM-00HM1	0'-2"	0'-2"	0'-6 3/8"	PAINT TO MATCH EXISTING	7/A401	3/A401	1	SEE DOOR PANEL TYPES	OFCI, NEW DOOR.
1010B	1HR	PNL-N1-HM	3'-0"	7'-0"	3'-0"	7'-0"	0'-1 3/4"	PAINT TO MATCH EXISTING	FRM-00HM1	0'-2"	0'-2"	0'-6 3/8"	PAINT TO MATCH EXISTING	7/A401	3/A401	1	SEE DOOR PANEL TYPES	OFCI, NEW DOOR.
1012B	1HR	PNL-F-HM	3'-0"	7'-0"	3'-0"	7'-0"	0'-1 3/4"	PAINT TO MATCH EXISTING	FRM-00HM1	0'-2"	0'-2"	0'-6 3/8"	PAINT TO MATCH EXISTING	7/A401	3/A401	1	N/A	OFCI, NEW DOOR.



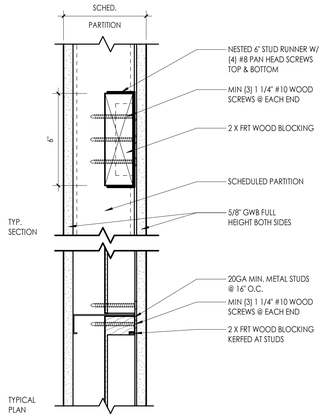
DOOR PANEL TYPES

1/4" = 1'-0"



DOOR FRAME TYPES

1/4" = 1'-0"



METAL STUD BLOCKING, TYPICAL

3" = 1'-0"

NOTE: REFER TO A700 SERIES FOR ACCESSORY LOCATIONS AND TYPICAL MOUNTING HEIGHTS.

LIGHT GAUGE DESIGN CRITERIA

TYPICAL PARTITIONS:
L/240 AT 5 LB/SQ FT (239 PA) LATERAL LOAD.
PARTITIONS WITH TILE FACING:
L/360 AT 7.5 LB/SQ FT (359 PA) LATERAL LOAD.

LIGHT GAUGE GENERAL NOTES

1. CONDITIONS INDICATED SHOW DESIGN INTENT, ESPECIALLY IN REGARD TO ACCOMMODATION OF STRUCTURAL DEFLECTION AND CONTINUITY OF INTEGRITY OF SOUND, SMOKE AND FIRE WALLS.
2. DESIGN INTENT DETAILS ARE NOT INTENDED TO BE PROPRIETARY. CONTRACTOR MAY EMPLOY SIMILAR HEAD-OF-WALL DESIGNS AND COMPONENTS AS APPROPRIATE FOR CONDITIONS.
3. DESIGN INTENT DETAILS MAY NOT SHOW ALL CONDITIONS TO BE ENCOUNTERED ON A PROJECT. COMPLY WITH MANUFACTURER AND UL APPROVED METHODS FOR ATYPICAL CONDITIONS.
4. SECURE TOP OF INTERIOR PARTITIONS TO SUPERSTRUCTURE IN A WAY THAT PROVIDES LATERAL STABILITY (PERPENDICULAR-TO AND IN-PLANE WITH WALL) WHILE ALLOWING FOR STATED MINIMUM VERTICAL DEFLECTION OF THE SUPERSTRUCTURE.
5. RIGIDLY SECURE SLOTTED TOP TRACK TO BUILDING SUPERSTRUCTURE IN AN APPROVED MANNER, EMPLOY Z-BARS, COLD-ROLLED CHANNELS OR SIMILAR SPACER TO ACCOMMODATE THICKNESS OF FIREPROOFING, WHERE INDICATED.
6. SLOTTED TOP TRACK, INDICATED ON THESE DETAILS, IS THE BASIS FOR DESIGN AND REFERS TO DEEP-LEG TRACKS WITH VERTICALLY SLOTTED HOLES. OPTIONAL MANUFACTURERS MAY PROVIDE SIMILAR, PROPRIETARY METHODS IN ACCORDANCE WITH THE PROVISIONS OF THE SPECIFICATION.
7. SECURE VERTICAL STUDS TO SLOTTED TOP TRACK AT MID-HEIGHT OF VERTICAL SLOTS IN TRACK. COMPONENTS INTENDED TO SLIDE VERTICALLY AS SUPERSTRUCTURE DEFLECTS.
8. DO NOT SCREW GWB TO TOP TRACK OR SUPERSTRUCTURE. GWB SCREWS INTO THE STUDS MUST BE AT LEAST 1" BELOW THE BOTTOM OF THE TOP TRACK.
9. FIRESTOPPING AND ACOUSTICAL SEALANTS SHALL AUTOBOND.
10. WHERE A PARTITION IS STC DESIGNATED, FILL ALL VOIDS WITH SOUND ATTENTUATION BATTS.

PARTITION GENERAL NOTES

NOTE: ALL WALL TYPES MAY NOT BE USED ON THIS PROJECT.

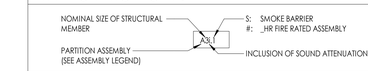
PARTITION FRAMING NOTES:
1. ANY PARTITION NOT DESIGNATED WITH A PARTITION TAG SHALL BE TYPE "A3L"
2. ALL PARTITIONS SHALL EXTEND TO STRUCTURE ABOVE, UNO. PROVIDE DIAGONAL BRACING AS REQUIRED.
3. REFER TO STRUCTURAL DRAWINGS FOR MASONRY WALL REINFORCEMENT, GROUTING, AND STRUCTURAL ATTACHMENT.
4. WHERE 24" O.C. SPACING IS UTILIZED FOR ANY REASON, INCREASE STEEL GAUGE AS APPROPRIATE TO MAINTAIN INTEGRITY.
5. REFER TO SPECIFICATIONS FOR METAL STUD GAUGE REQUIREMENTS. ASSUME A MIN STUD GAUGE OF 18 GA. INCREASE WHERE REQUIRED.
6. REFER TO TYPICAL FIXTURE AND ACCESSORIES SHEET FOR BLOCKING REQUIREMENTS.
7. "LINE OF STRUCTURE" INDICATED IN TYPICAL DETAILS IS DIAGRAMMATIC ONLY.
8. REFER TO HEAD OF WALL DETAILS FOR CONNECTION TO STRUCTURE AND FIRE-RATED REQUIREMENTS OF ALL PARTITIONS.

PARTITION INSULATION & GWB NOTES:
1. FOR RATED & SOUND ATTENUATED PARTITIONS:
   A. SCRIBE GWB AROUND UNDERSIDE OF DECKING AND AROUND OF STRUCTURE.
   B. FRICTION FIT SOUND ATTENUATING INSULATION BETWEEN STUDS TO FILL FULL DEPTH OF CAVITY.
      NON-RATED PARTITIONS, USE: BATT INSULATION (FIBERGLASS)
      RATED PARTITIONS, USE: ROCK WOOL
1. GWB MAY TERMINATE AT 6" MIN ABOVE CEILING FOR ALL PARTITIONS THAT ARE *NEITHER* RATED *NOR* SOUND ATTENUATED.
2. PARTITIONS ARE ASSUMED TO HAVE A BASELINE OF 5/8" TYPE 'X' GWB. PROVIDE ALTERNATIVE TYPES OF WALL BOARD BASED ON THE SPECIFIC LOCATION AND/OR FINISHES TO BE APPLIED:
   A. PROVIDE 5/8" BACKER BOARD IN LIEU OF ONE LAYER GWB AT ALL WALL FACES RECEIVING TILE.
   B. PROVIDE MOISTURE RESISTANT GWB AT ALL TOILET ROOMS, JANITOR'S CLOSETS AND OTHER WET LOCATIONS WHERE TILE AND TILE BACKER BOARD ARE NOT INSTALLED, INCLUDING BEHIND AND 2'-0" IN EACH DIRECTION FROM THE CENTERLINES OF ALL PLUMBING FIXTURES, UNO.
3. PARTITION TYPES WITH ONE SIDE OF DOUBLE DRYWALL TO BE PLACED SO THAT THE DOUBLE SIDE IS ON CORRIDOR AND/OR HIGH TRAFFIC SIDE OF WALL.
4. PROVIDE CONTROL JOINT WHERE NEW PARTITIONS ABUT EXISTING CONSTRUCTION.
5. PROVIDE CONTROL JOINTS A MAXIMUM OF 30'-0" APART, UNLESS NOTED OTHERWISE, PER ASTM C 840-17A. LOCATE ABOVE DOOR FRAMES WHERE POSSIBLE.
6. REFER TO SPECIFICATIONS FOR FINISH LEVEL INFORMATION.

PARTITION LIFE SAFETY NOTES:
1. REFER TO CODE/LIFE SAFETY DRAWINGS FOR RATED PARTITIONS AND UL ASSEMBLIES. ALL RATED PARTITIONS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH UL DESIGN LISTINGS.
2. REFER TO UL HEAD-OF-WALL AND WALL-TO-WALL CONNECTIONS AND UL APPROVED PENETRATIONS FOR RATED WALLS. FOR ALL PARTITIONS INDICATED AS PART OF A SMOKE COMPARTMENT, SEAL TIGHT ALL GAPS, PENETRATIONS, AND OPENINGS WITHIN PARTITION TO PREVENT PASSAGE OF SMOKE.
3. FIRESTOP/ SMOKE STOP ALL REQUIRED WALL PARTITIONS, SLABS, AND PENETRATIONS THROUGH NEW AND EXISTING WALLS WITHIN THE PROJECT LIMITS IN COORDINATION WITH CODE PLAN, OR WHERE COORDINATED SYSTEMS CONNECTION POINTS ARE LOCATED OUTSIDE THE PROJECT LIMIT AREA. SEE ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING DRAWINGS AND **SPECIFICATIONS**.
4. WHERE RATED PARTITIONS ARE PERPENDICULAR TO METAL DECK RIBS, PACK ALL VOIDS WITH FIRESAFING MATERIAL.
5. NOTIFY OWNER AND ARCHITECT OF ANY EXISTING NON-COMPLIANT PENETRATIONS THROUGH RATED PARTITIONS AS SHOWN ON THE LIFE SAFETY PLANS.
6. CONSTRUCT ALL WALLS AND PARTITIONS IN ORDER OF RATING PRIORITY, BEGINNING WITH THE HIGHEST RATED WALLS FIRST. REFER TO FRAMING DETAILS.
7. EACH FIRE AND SMOKE RESISTANCE RATED PARTITION SHOWN ON THE PLANS SHALL BE IDENTIFIED AS SUCH WITH A LABEL AS REQUIRED BY THE ADOPTED STATE CODE.
8. AT TEMPORARY PARTITIONS, TAPE JOINTS BETWEEN WALL AND FLOOR, AND WALL AND CEILING. PROVIDE FIRE RETARDANT POLYETHYLENE FROM TOP OF CEILING PANELS TO UNDERSIDE OF DECK. TAPE JOINT BETWEEN POLYETHYLENE AND GWB. SEAL PENETRATIONS IN POLYETHYLENE AT DUCTS, PIPES, CONDUITS, AND CABLING. IF CEILING DOES NOT EXIST, EXTEND GWB TO DECK.

PARTITION FINISH NOTES:
1. REFER TO INTERIOR DRAWINGS FOR LOCATIONS OF WALL TILE AND OTHER SPECIALTY/APPLIED WALL FINISHES.
2. WHERE LARGE FORMAT WALL TILE IS INDICATED ON FINISH DRAWINGS (15" OR LONGER IN ANY DIRECTION), PROVIDE ENHANCED WALL FINISH TOLERANCE. REFER TO SPECIFICATIONS.

PARTITION TAG LEGEND



PARTITION ASSEMBLY LEGEND

A	STEEL STUDS 1 LAYER GWB, EACH SIDE	D	STEEL STUDS 2 LAYER GWB, ONE SIDE 1 LAYER GWB, ONE SIDE
B	STEEL STUDS 2 LAYER GWB, EACH SIDE	F	STEEL STUDS 1 LAYER GWB, ONE SIDE

DOOR AND FRAME NOTES

1. ALL FRAMES ARE TO RECEIVE FULL PERIMETER SEALANT, INTERIOR AND EXTERIOR
2. ALL DOOR AND WINDOW OPENING DIMENSIONS ARE TO BE VERIFIED IN FIELD AND COORDINATED WITH APPROVED SHOP DRAWINGS PRIOR TO FABRICATION.
3. SEE SCHEDULE FOR DOOR & FRAME MATERIAL

DOOR AND FRAME SCHEDULE LEGEND

NOTE: THIS LEGEND MAY CONTAIN SYMBOLS THAT ARE NOT USED IN THIS PROJECT.

DOOR OR FRAME MATERIAL		DOOR OR FRAME FINISH	
ACR	ACROVYN DOOR	PTD	PAINT
ACR-L	ACROVYN LEAD LINED DOOR	ST	WOOD STAIN
ALUM	ALUMINUM	AN	CLEAR ANODIZED
FRP	FIBERGLASS REINFORCED POLYMER	DB	DARK BRONZE (ANODIZED)
HM	HOLLOW METAL	SS	STAINLESS STEEL
HM-L	HOLLOW METAL LEAD LINED	BE	BAKED ENAMEL
IHM	INSULATED HOLLOW METAL		
WD	WOOD		
WD-L	WOOD LEAD LINED		

DOOR HARDWARE SPECIFICATIONS

COMPLY WITH AMERICANS WITH DISABILITY ACT (ADA), "2010 ADA STANDARDS FOR ACCESSIBLE DESIGN":
- HANDLES, PULLS, LATCHES, LOCKS, AND OTHER OPERABLE PARTS ON DOORS SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING, OR TWISTING OF THE WRIST.
- THE FORCE FOR PUSHING OR PULLING OPEN A DOOR OR GATE OTHER THAN FIRE DOORS SHALL BE 5 POUNDS MAXIMUM FOR INTERIOR HINGED DOORS.

MATCH EXISTING FINISHES. CONTRACTOR TO CONSULT AND REVIEW WITH UNIVERSITY PRIOR TO INSTALLATION.

1. HINGES:
4 1/2" x 4 1/2" AND NO LESS THAN (3) PER DOOR LEAF.
   A. MCKINNEY (PREFERRED)
   B. STANLEY
   C. IVES

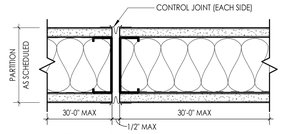
2. DOOR CLOSERS:
TO BE EQUAL TO LCN 4000 AND 4100 SERIES.
   A. LCN (PREFERRED)
   B. NORTON
   C. DORMA

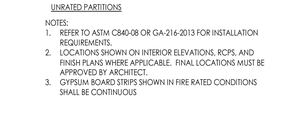
3. MORTISE LOCKS:
   A. CORBIN RUSSWIN ML2054 FULL ESCUTCHEON (PREFERRED)
   B. CORBIN-RUSSWIN ML 2000 SERIES
   C. SCHLAGE

5. SILENCERS, STOPS, AND FLUSH BOLTS:
   A. ROCKWOOD
   B. GLYNN-JOHNSON
   C. IVES

HARDWARE SETS
HARDWARE SET #1:
3 HINGES
1 LEVER/LOCKSET
1 FLOOR STOP
1 WALL STOP
3 SILENCERS
1 CLOSER

*ALL LEVERS TO HAVE AN END RETURN.

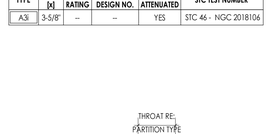




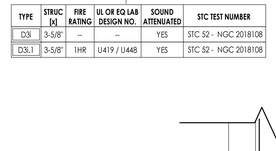
NOTES:
1. REFER TO ASTM C840-08 OR GA-216-2013 FOR INSTALLATION REQUIREMENTS.
2. LOCATIONS SHOWN ON INTERIOR ELEVATIONS, RCPS, AND FINISH PLANS WHERE APPLICABLE. FINAL LOCATIONS MUST BE APPROVED BY ARCHITECT.
3. GYPSUM BOARD STRIPS SHOWN IN FIRE RATED CONDITIONS SHALL BE CONTINUOUS

CONTROL JOINT DETAILS

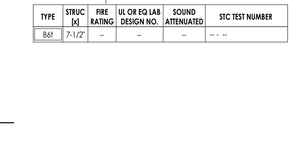
3" = 1'-0"



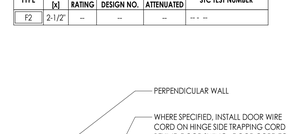
TYPE	STRUC [x]	FIRE RATING	UL OR EQ LAB DESIGN NO.	SOUND ATTENUATED	STC TEST NUMBER
A3i	3-5/8"	--	--	YES	STC 46 - NGC 2018106



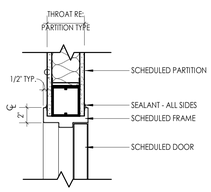
TYPE	STRUC [x]	FIRE RATING	UL OR EQ LAB DESIGN NO.	SOUND ATTENUATED	STC TEST NUMBER
D3i	3-5/8"	--	--	YES	STC 52 - NGC 2018108
D3i.1	3-5/8"	1HR	U419 / U448	YES	STC 52 - NGC 2018108



TYPE	STRUC [x]	FIRE RATING	UL OR EQ LAB DESIGN NO.	SOUND ATTENUATED	STC TEST NUMBER
B6i	7-1/2"	--	--	--	-- - --

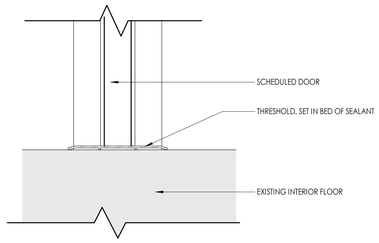


TYPE	STRUC [x]	FIRE RATING	UL OR EQ LAB DESIGN NO.	SOUND ATTENUATED	STC TEST NUMBER
F2	2-1/2"	--	--	--	-- - --



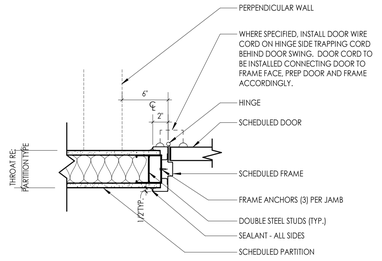
06 / A401 HM FRAME DOOR - HEAD DETAIL

1 1/2" = 1'-0"



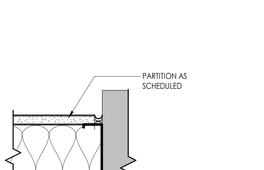
04 / A401 HM FRAME DOOR - SILL DETAIL

3" = 1'-0"



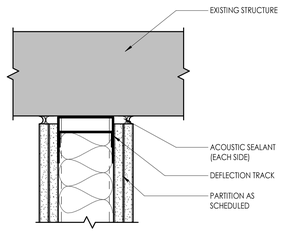
02 / A401 HM DOOR JAMB DETAIL

1 1/2" = 1'-0"



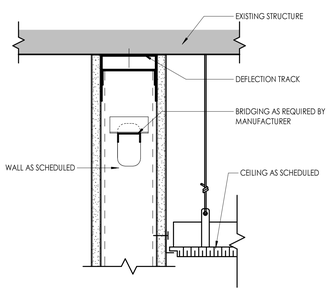
07 / A401 TYP. PLAN DETAIL - PARTITION AT DISSIMILAR MATERIALS

3" = 1'-0"



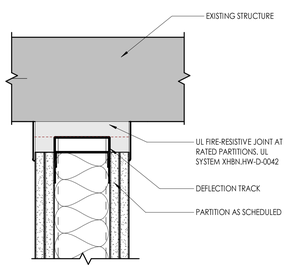
05 / A401 TYP. SECTION DETAIL @ STC PARTITION TO EXISTING STRUCTURE

3" = 1'-0"



03 / A401 TYP. SECTION DETAIL - INTERIOR PARTITION AT ACT

3" = 1'-0"



01 / A401 TYP. SECTION DETAIL @ RATED PARTITION TO EXISTING STRUCTURE

3" = 1'-0"

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1111 Haynes Street Suite 100,
Raleigh, NC 27604
CPLteam.com

THE UNIVERSITY of NORTH CAROLINA at CHAPEL HILL

PROJECT INFORMATION

Project Number: R24.17133.00
SCO ID#: 24-28797-01A
Client Name: **UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL**
Project Name: **208 FRANKLIN RENOVATION (SCO ID # 24-28797-01A)**
Project Address: 208 W FRANKLIN ST, CHAPEL HILL, NC 27516

PROJECT ISSUE & REVISION SCHEDULE

#	Date	Description

PROFESSIONAL STAMPS

CPL Architects and Engineers P.A. — REGISTERED ARCHITECTURAL CORPORATION — 51301 — NORTH CAROLINA — Charlotte, North Carolina

Eric C. Leibenguth — REGISTERED SEAL — 13840 — Architect — NORTH CAROLINA — 04/17/2025

SHEET INFORMATION

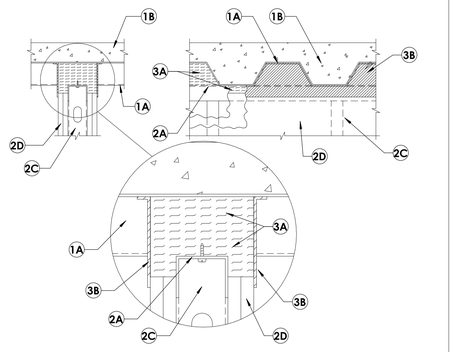
Issued: 04/17/2025
Scale: As indicated
Project Status: 100% CONSTRUCTION DOCUMENTS
Drawn By: MM
Checked By: SC
Drawing Title: DOOR & FRAME TYPES, DETAILS, AND SCHEDULES
Drawing Number: A401

4/17/2025 4:41:38 PM PROJECT FILES ON ACC

HWD0042

System No. HW-D-0042

ANSI/UL 2079	CAN/ULC-S115
Assembly Ratings — 1 and 2 Hr (See Items 2 and 3A)	F Ratings — 1 and 2 Hr (See Items 2 and 3A)
Nominal Joint Width – 1 In.	FT Ratings — 1 and 2 Hr (See Items 2 and 3A)
Class II Movement Capabilities —	
50% Compression or Extension	FH Ratings — 1 and 2 Hr (See Items 2 and 3A)
L Rating At Ambient — Less Than 1 CFM/Ln Ft	FTH Ratings — 1 and 2 Hr (See Items 2 and 3A)
L Rating At 400°F — Less Than 1 CFM/Ln Ft	Nominal Joint Width – 1 In.
	Movement Capabilities — 50% Compression or Extension
	L Rating At Ambient — Less Than 1 CFM/Ln Ft
	L Rating At 400°F — Less Than 1 CFM/Ln Ft



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Hilti Firestop Systems

HWD0042

1. **Floor Assembly** — The fire-rated fluted steel deck/concrete floor assembly shall be constructed of the materials and in the manner described in the individual D700 or D900 Floor Ceiling Design in the UL Fire Resistance Directory and shall include the following construction features:

A. Steel Floor And Form (UHF™ – Max 3 In. [76 mm]) deep galv steel fluted units.

B. Concrete — Min 2-1/2 In. [64 mm] thick reinforced concrete, as measured from the top plane of the floor units.

C. Spray-Applied Fire Resistive Materials* — (Optional, Not Shown)—Prior to or after the installation of the steel ceiling runners, Forming Material and Fill, Void or Cavity Material (Items 2A, 3A, 3B, respectively) the steel floor units may be sprayed with a min 5/16 in. (8 mm) to max 1-3/4 in. [45 mm] thickness of fire resistive material.

ISOLATEK INTERNATIONAL — Type 300

W R GRACE & CO - CONN — Types MK-6 HY or MK-10HB

14. **Roof Assembly** — (Not Shown) — As an alternate to the floor assembly, a fire rated fluted steel deck roof assembly may be used. The roof assembly shall be constructed of the materials and in the manner described in the individual P900 Series Roof-Ceiling Design in the UL Fire Resistance Directory. The hourly rating of the roof assembly shall be equal to or greater than the hourly rating of the wall assembly. The roof assembly shall include the following construction features:

A. Steel Roof Deck — Max 3 In. [76 mm] deep galv steel fluted roof deck.

B. Roof Insulation — Min 2-1/4 In. [57 mm] thick poured insulating concrete, as measured from the top plane of the floor units.

15. **Roof Assembly** — As an alternate to Items 1 and 1A, a fire rated protected fluted steel deck roof assembly may be used. The roof assembly shall be constructed of the materials and in the manner described in the individual P700 Series Roof-Ceiling Design in the UL Fire Resistance Directory. The hourly rating of the roof assembly shall be equal to or greater than the hourly rating of the wall assembly. The roof assembly shall include the following construction features:

A. Steel Roof Deck — Max 3 In. [76 mm] deep galv steel fluted roof deck.

B. Spray—Applied Fire Resistive Materials* — (Not Shown)—Prior to or after the installation of the steel ceiling runners, Forming Material and Fill, Void or Cavity Material (Items 2A, 2A, 3B), the roof assembly shall be sprayed with the type and thickness of fire resistive material indicated in the individual P700 Series design.

ISOLATEK INTERNATIONAL — Type 300

W R GRACE & CO - CONN — Types MK-6 HY or MK-10HB

2. **Wall Assembly** — The 1 or 2 hr fire rated gypsum board/steel stud wall assembly shall be constructed of the materials and in the manner described in the individual U400 or V400 Series Wall and Partition Design in the UL Fire Resistance Directory and shall include the following construction features:

A. Steel Floor And Ceiling Runners — Floor and ceiling runners of wall assembly shall consist of galv steel channels sized to accommodate steel studs (Item 2C). Flange height of ceiling runner shall be min 1/4 in. (6 mm) greater than max extended joint width. Ceiling runner installed perpendicular to direction of fluted steel deck and secured to valleys with steel masonry anchors, steel fasteners or welds spaced max 24 in. (610 mm) OC, before or after optional spray-applied fire resistive material is used. The use of welds to secure the ceiling runner may only be used prior to the installation of the optional spray-applied material.

A1. Light Gauge Framing* Slotted Ceiling Runner — As an alternate to the ceiling runner in Item 2A, slotted ceiling runner to consist of galv steel channel with slotted flanges sized to accommodate steel studs (Item 2C). Slotted ceiling runner installed perpendicular to direction of fluted steel deck and secured to valleys with steel fasteners or welds spaced max 24 in. (610 mm) OC before optional spray-applied fire resistive material is used. Ceiling runner installed perpendicular to direction of fluted steel deck and secured to valleys with steel masonry anchors, steel fasteners or welds spaced max 24 in. (610 mm) OC, before or after optional spray-applied fire resistive material is used. The use of welds to secure the ceiling runner may only be used prior to the installation of the optional spray-applied material.

BEACH CONSTRUCTION INNOVATIONS INC, DBA SUPERJACK SYSTEMS — SJF-TRK CALIFORNIA EXPANDED METAL PRODUCTS CO — CST

CLARKDIETRICH BUILDING SYSTEMS — Type S/T, S/T-H

CONSOLIDATED FABRICATORS CORP, BUILDING PRODUCTS DIV — SCT250, SCT300 MARKING/WARE, DIV OF WARE INDUSTRIES INC — Type SLT

CSR GYPSUM — Type S/T

CLARK SUPPLY INC — ST250, ST300 F & P SUPPLY — SCT250, SCT300

SCAFCO STEEL STUD MANUFACTURING CO

TELLING INDUSTRIES LLC — True-Action Deflection Track

A2. Light Gauge Framing* Vertical Deflection Ceiling Runner — When the non joint width is less than or equal to 3/4 in. (19 mm), vertical deflection ceiling runner may be used as an alternate to the ceiling runners in Items 2A and 2A1. Vertical deflection ceiling runner to consist of galv steel channel with slotted vertical deflection clips mechanically fastened within runner. Slotted clips provided with step bushings for permanent fastening of steel studs. Flanges sized to accommodate steel studs (Item 2C). Vertical deflection ceiling runner installed perpendicular to direction of fluted steel deck and secured to valleys with steel masonry anchors, steel fasteners or welds spaced max 24 in. (610 mm) OC, before or after optional spray-applied fire resistive material is used. The use of welds to secure the ceiling runner may only be used prior to the installation of the optional spray-applied material.

THE STEEL NETWORK INC — VertiTrack VTD250, VTD362, VTD400, VTD450 and VTD600

HWD0042

A3. Light Gauge Framing* - Notched Ceiling Runner — As an alternate to the ceiling runners in Items 2A through 2A3, notched ceiling runners to consist of C-shaped galv steel channel with notched return flanges sized to accommodate steel studs (Item 2C). Notched ceiling runner installed perpendicular to direction of fluted steel deck and secured to valleys with steel masonry anchors, steel fasteners or welds spaced max 24 in. (610 mm) OC, before or after optional spray-applied fire resistive material is used. The use of welds to secure the ceiling runner may only be used prior to the installation of the optional spray-applied material.

CLARK SUPPLY INC — Type SCR

B. Steel Attachment Clips — (Optional - Not Shown) - When spray applied fireproofing is used ceiling runner may be secured to deck with Z-shaped clips formed from min 1 in. (25 mm) long strips of min 20 ga galv steel. Length of clips should not exceed the width (thickness) of the wall. Clips to be used to extend through the thickness of the spray-applied fire resistive material on the bottom of the steel deck with 1-1/2 or 2 in. (38 or 51 mm) long upper and lower legs. Legs of clips fastened to valleys of steel deck prior to application of spray-applied fire-resistive material and top of ceiling runner with steel masonry anchors, steel fasteners or welds. Clips spaced max 24 in. (610 mm) OC.

C. Studs — Steel studs to be min 2-1/2 in. (64 mm) wide. Studs cut 1/2 to 3/4 in. (13 to 19 mm) less in length than assembly height with bottom resting in and resting on floor runner and with top resting in ceiling runner without attachment. When slotted ceiling runner (Item 2A1) is used, steel studs secured to slotted ceiling runner with No. 8 by 1/2 in. (13 mm) long wafer head steel screws at midheight of slot on each side of wall. When vertical deflection ceiling runner (Item 2A2) is used, steel studs secured to slotted vertical deflection clips, through the bushings, with steel screws at midheight of each slot. Stud spacing not to exceed 24 in. (610 mm) OC.

D. Gypsum Board* — Gypsum board panels to be installed in one ply min total thickness of 5/8 in. and 1-1/4 in. (16 and 32 mm) on each side of wall for 1 and 2 hr rated assemblies, respectively. Gypsum board panels to be installed as specified in the individual Wall and Partition Design in the UL Fire Resistance Directory, except that a max 1 in. (25 mm) gap shall be maintained between the top of the gypsum board and the bottom of the steel deck units and the top row of screws shall be installed into the studs 1-1/2 to 2 in. (38 to 51 mm) below the bottom of the ceiling runner. The hourly rating of the joint system is dependent on the hourly rating of the wall.

3. **Joint System** — Max separation between bottom of floor or roof and top of wall at time of installation of joint system is 1 in. (13 mm). The joint system is designed to accommodate a max 50 percent compression or extension from its installed width. The joint system consists of forming material and a fill material, as follows:

A. Forming Material* — Nom 4 pcf (64 kg/m3) density mineral wool batt insulation cut with a length approx equal to the overall thickness of the wall. Multiple pieces stacked on top of each other, as needed, and then compressed 25 percent in thickness and inserted into the flutes of the steel deck above the top of the ceiling runner. The mineral wool batt insulation is to project beyond each side of the ceiling runner, flush with wall surfaces. Alternately, nom 4 pcf (64 kg/m3) forming material cut to shape of flute and nom 1 in. (25 mm) longer than thickness of wall; mineral wool compressed from ends and firmly packed into each flute to attain a min compression rate of 14 percent in the length (wall thickness) direction to be flush with both wall surfaces. Additional 5/8 in. and 1-1/4 in. (16 and 32 mm) wide strips for 1 and 2 hr rated assemblies, respectively, of nom 4 pcf (64 kg/m3) mineral wool batt insulation are to be cut to fill the gap between the top of the gypsum board and bottom of the steel deck. The strips of mineral wool are compressed 50 percent and tightly packed, cut edge first, into the gap between the top of the gypsum board and bottom of the steel deck on both sides of the wall.

RC MINWOOL 5 | C — MinWool-1200 Siding

ROCK WOOL MANUFACTURING CO — Delta-Board ROXUL INC — SAFE

THERMAFIBER INC — Type SAF

A1. Forming Material* —Plugs — (Optional, Not Shown) Preformed mineral wool plugs, formed to the shape of the fluted floor units, friction fit to completely fill the flutes above the ceiling channel. The plugs shall project beyond each side of the ceiling runner, flush with wall surfaces. Additional forming material, described in Item 3A, to be used in conjunction with the plugs to fill the gap between the top of gypsum board and bottom of the steel deck.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP777 Speed Plugs

A2. Forming Material* - Strips — (Optional) - Nom 5/8 in. and/or 1-1/4 in. (16 and 32 mm) wide by 2 in. (51 mm) high pre-cut mineral wool strips for 1 and 2 hr rated assemblies respectively. The strips are compressed 50 percent and firmly packed, cut edge first, into the gap between the top of the gypsum board and bottom of the steel floor units on both sides of the wall.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP 767 Speed Strips

B. Fill, Void or Cavity Material* — Min 1/4 in. (6.4 mm) dry thickness (1.8 in. or 3.2 mm wet thickness) of fill material sprayed or troweled on each side of the wall to completely cover mineral wool forming material and to overlap a min of 1/2 in. (13 mm) onto gypsum board and steel deck on both sides of wall. When Spray-Applied Fire Resistive Material* is applied to the Steel Floor and Form Units*, the fill material is to overlap the gypsum board a min of 1/2 in. (13 mm) and the Spray-Applied Fire Resistive Material a min of 2 in. (51 mm) on both sides of wall. When spray-applied fire resistive materials are used, the firestop joint spray shall overlap the wall a min 1/2 in. (13 mm) and overlap the spray-applied fire resistive material a min of 2 in. (51 mm) on both sides of the wall.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — CP-SP WB Firestop Joint Spray

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

UL DETAIL

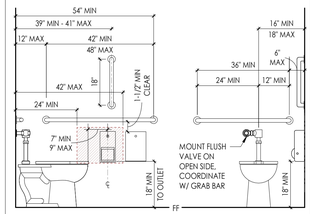
1" = 1'-0"

TOILET ACCESSORIES GENERAL NOTES

1. THE CONTRACTOR SHALL INSTALL ALL FIXTURES AND ACCESSORIES IN ACCORDANCE WITH APPLICABLE BUILDING CODES FOR THIS PROJECT. REFER TO LIFE SAFETY SHEET.
2. DIMENSIONS REFLECT MOUNTING HEIGHT ABOVE FINISH FLOOR.
3. DIMENSIONS REFLECT CLEAR DIMENSIONS FROM FINAL INSTALLED WALL FINISH.
4. REFER TO FLOOR PLANS AND INTERIOR ELEVATIONS FOR APPROPRIATE LOCATIONS FOR ALL FIXTURES AND ACCESSORIES.
5. PROVIDE KNEE PROTECTION AT ALL ACCESSIBLE SINKS.
6. DIMENSIONS GIVEN ARE TO OPERABLE PARTS, WHERE APPLICABLE.
7. CONTRACTOR TO PROVIDE ADEQUATE WALL BLOCKING FOR ALL WALL-MOUNTED CABINETS, FIXTURES, ACCESSORIES, AND EQUIPMENT, INCLUDING ITEMS FURNISHED BY OTHERS. ANYTHING REQUIRED TO SUPPORT THE WEIGHT OF A PERSON SHALL USE FIRE-RETARDANT TREATED WOOD. LIGHTER WEIGHT ITEMS MAY USE STRAPPING.
8. REFER TO SPECIFICATIONS FOR ALL BASIS OF DESIGN INFORMATION.
9. REFER TO SCHEDULE FOR ALL PROCUREMENT (OFCI VS CFCI) DESIGNATIONS.

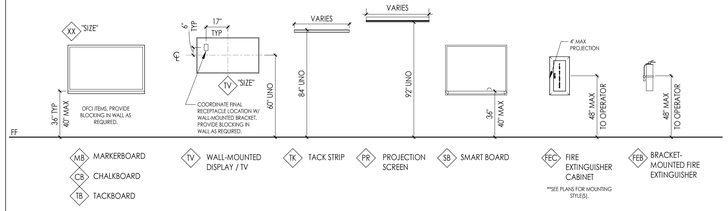
TYPICAL TOILET MOUNTING HEIGHTS

SCALE 1/2"=1'-0"



TYPICAL ACCESSORIES MOUNTING HEIGHTS

NOTE: THIS LEGEND MAY CONTAIN SYMBOLS THAT ARE NOT USED IN THIS PROJECT.

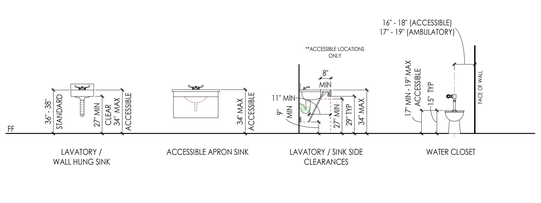


- MB MARKERBOARD
- CB CHALKBOARD
- TB TACKBOARD
- TV WALL-MOUNTED DISPLAY / TV
- TK TACK STRIP
- PR PROJECTION SCREEN
- SB SMART BOARD
- FEC FIRE EXTINGUISHER CABINET — **SEE PLANS FOR MOUNTING STYLES.
- FEB BRACKET-MOUNTED FIRE EXTINGUISHER

PLUMBING FIXTURE LEGEND WITH MOUNTING HEIGHTS

NOTE: THIS LEGEND MAY CONTAIN SYMBOLS THAT ARE NOT USED IN THIS PROJECT.

SCALE 1/4"=1'-0"

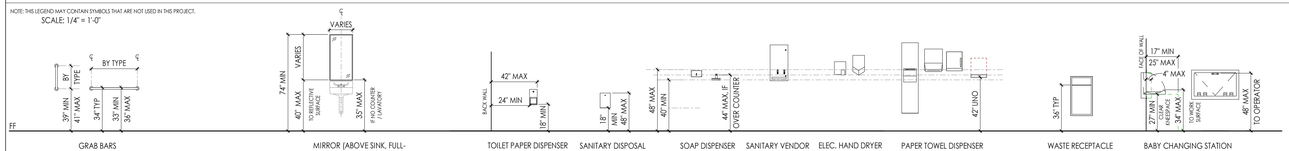


LAVATORY / WALL HUNG SINK | ACCESSIBLE APRON SINK | LAVATORY / SINK SIDE CLEARANCES | WATER CLOSET

TOILET ROOM ACCESSORIES LEGEND

NOTE: THIS LEGEND MAY CONTAIN SYMBOLS THAT ARE NOT USED IN THIS PROJECT.

SCALE: 1/4" = 1'-0"

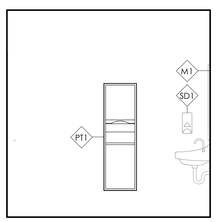


GRAB BARS | MIRROR (ABOVE SINK, FULL-LENGTH, FREESTANDING) | TOILET PAPER DISPENSER | SANITARY DISPOSAL | SOAP DISPENSER | SANITARY VENDOR | ELEC. HAND DRYER | PAPER TOWEL DISPENSER | WASTE RECEPTACLE | BABY CHANGING STATION

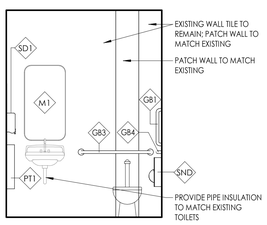
- GB 18" GRAB BAR (HORIZONTAL OR VERTICAL, PER PLAN)
- GB3 36" GRAB BAR
- GB4 42" GRAB BAR
- M1 MIRROR
- TP1 SURFACE MOUNTED, SINGLE ROLL
- SND
- SD1 HORIZONTAL
- SD2 VERTICAL
- SD2 DECK-MOUNTED
- SNV
- D1
- PT1 SEMI-RECESSED COMBINED
- PT2 RECESSED COMBINED
- PT3 SURFACE PAPER TOWEL
- PT4 SEMI-RECESSED PAPER TOWEL
- PT5 RECESSED PAPER TOWEL
- W1
- CS1 SURFACE MOUNTED
- CS2 RECESSED

SPECIALTY ACCESSORY / EQUIPMENT SCHEDULE

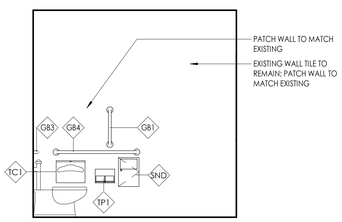
TYPE MARK	DESCRIPTION	FURN / INSTALLED	BASIS OF DESIGN / MODEL	EQUAL 1	EQUAL 2
GB1	GRAB BAR	CFCI	BOBRICK B-6806	AMERICAN SPECIALTIES INC.	BRADLEY CORPORATION
GB3	GRAB BAR	CFCI	BOBRICK B-6806	AMERICAN SPECIALTIES INC.	BRADLEY CORPORATION
GB4	GRAB BAR	CFCI	BOBRICK B-6806	AMERICAN SPECIALTIES INC.	BRADLEY CORPORATION
M1	MIRROR	OFCI			
PT1	PAPER TOWEL WASTE DISPENSER	OFCI			
SD1	SOAP DISPENSER	OFCI			
SND	SANITARY NAPKIN DISPOSAL	OFCI			
TC1	TOILET COVER DISPENSER	OFCI			
TP1	DISPENSER, TOILET PAPER, SURFACE MOUNT	OFCI			



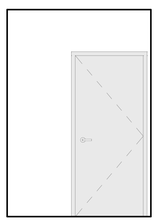
05 / A700 — **EAST WALL ELEVATION** — 3/8" = 1'-0"



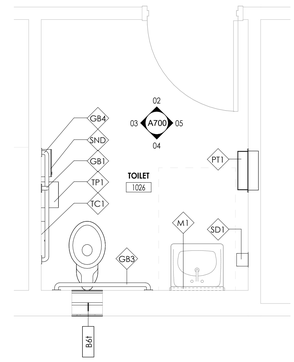
04 / A700 — **SOUTH WALL ELEVATION** — 3/8" = 1'-0"



03 / A700 — **WEST WALL ELEVATION** — 3/8" = 1'-0"



02 / A700 — **NORTH WALL ELEVATION** — 3/8" = 1'-0"



01 / A700 — **ENLARGED RESTROOM PLAN** — 1/2" = 1'-0"

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1111 Haynes Street Suite 100,
Raleigh, NC 27604
CPLteam.com

THE UNIVERSITY of NORTH CAROLINA at CHAPEL HILL

PROJECT INFORMATION

Project Number: R24.17133.00 | SCO ID#: 24-28797-01A

Client Name: **UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL**

Project Name: **208 FRANKLIN RENOVATION (SCO ID # 24-28797-01A)**

Project Address: 208 W FRANKLIN ST, CHAPEL HILL, NC 27516

PROJECT ISSUE & REVISION SCHEDULE

#	Date	Description

PROFESSIONAL STAMPS

CPL Architects and Engineers, P.A. — 51301 — Charlotte, North Carolina

Eric C. Leibenguth — REGISTERED SEAL 13840 — ARCHITECT — NORTH CAROLINA — 04/17/2025

SHEET INFORMATION

Issued: 04/17/2025 | Scale: As indicated

Project Status: 100% CONSTRUCTION DOCUMENTS

Drawn By: MM | Checked By: SC

Drawing Title: UL DETAILS, FIXTURE & ACCESSORIES LEGENDS, ENLARGED PLANS, INTERIOR ELEVATIONS

Drawing Number: A700

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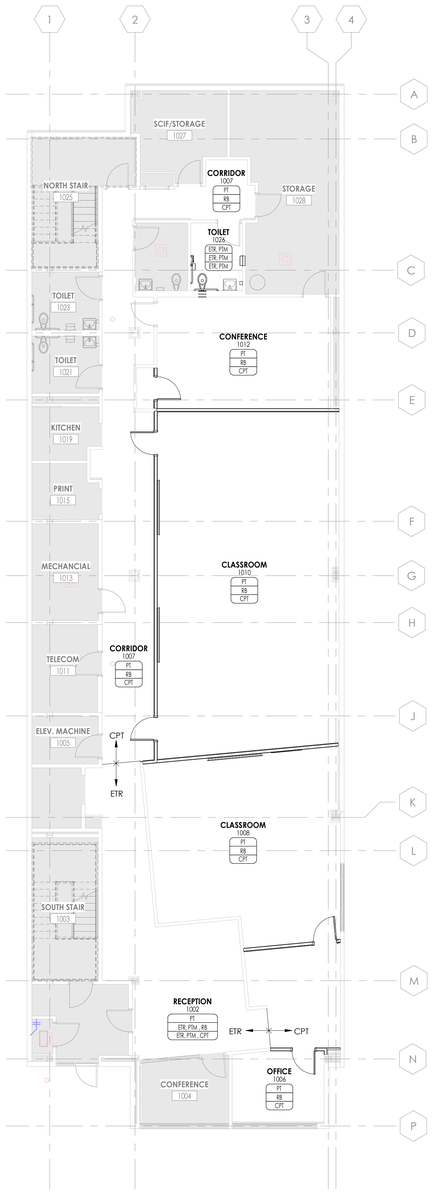


01 / I200 **LEVEL 1 INTERIOR FINISH PLAN**

1/8" = 1'-0"

FINISH PLAN GENERAL NOTES

1. ALL WALLS WITHIN SCOPE TO BE PAINTED PER UNC STANDARDS. OWNER TO PROVIDE REQUIRED PAINT COLOR AND PAINT SYSTEM TO BE USED.
2. OWNER TO PROVIDE NEW CARPET AND BASE FOR DESINGATED AREAS. GC TO INSTALL.
3. EXISTING TILE TO REMAIN IN RECEPTION AND TOILET. PATCH AND REPAIR FLOOR, BASE, AND WALL AS NEEDED. OWNER TO PROVIDE MATERIAL SPECIFICATIONS.
4. ALL NEW AND EXISTING HOLLOW METAL DOORS, DOOR FRAMES AND WINDOW FRAMES IN PROJECT SCOPE SHALL BE PAINTED. OWNER TO PROVIDE REQUIRED PAINT COLOR AND PAINT SYSTEM.
5. ALL NEW WOOD DOORS SHALL BE STAINED TO MATCH EXISTING DOORS UNLESS NOTED OTHERWISE.
6. PAINT GWB CEILINGS TO MATCH EXISTING, UNLESS NOTED OTHERWISE.
7. ALL LOUVERS, VENTS, GRILLES AND OTHER MISCELLANEOUS MECHANICAL AND ELECTRICAL DEVICES ARE TO BE FACTORY FINISHED TO MATCH THE SURFACE ON WHICH THEY APPEAR, UNLESS NOTED OTHERWISE.
8. ALL FLOOR FINISHES SHALL TRANSITION AT THE CENTERLINE OF THE DOOR, UNLESS NOTED OTHERWISE.
9. ALL NON-EPOXY GROUT TO BE SEALED A MINIMUM OF TWO TIMES PRIOR TO COMPLETION.
10. PROVIDE ADA / ANSI COMPLIANT ACCESSIBLE TRANSITION AT ALL TOILET ROOM DOORS AND MATERIAL TRANSITIONS WHERE REQUIRED.
11. REFER TO REFLECTED CEILING PLANS FOR CEILING TYPES AND SOFFIT FINISHES.
12. REFER TO FLOOR PATTERN PLAN & DETAILS FOR ADDITIONAL INFORMATION ON FLOORING INSTALLATION.
13. PROVIDE CONCRETE FLOOR PREPARATION IN ACCORDANCE WITH FLOORING MANUFACTURER SPECIFICATION.

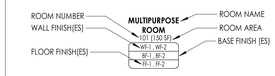
FINISH ABBREVIATIONS

NOTE: THIS LEGEND MAY CONTAIN ABBREVIATIONS THAT ARE NOT IN THIS PROJECT

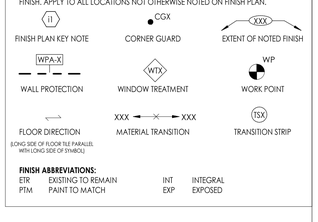
ACT	ACOUSTICAL CEILING TILE	RB	RESILIENT BASE
AGL	ART GLASS	RF	RESILIENT FLOOR
AWP	ACOUSTICAL WALL PANEL	RP	RESIN PANEL
CC	CUBICLE CURTAIN	RS	RESILIENT SHEET
CG	CORNER GUARD	RST	RESILIENT STAIR TREAD
CHR	CHAIR RAIL	RT	RESILIENT TILE
CPT	CARPET	SC	SPECIALTY CEILING
CR	CRASH RAIL	SCON	SEALED CONCRETE
DG	DIGITAL GRAPHIC	SN	STAIR NOSING & RISER
DS	DIVIDER STRIP	SSM	SOLID SURFACE MATERIAL
DWC	DIGITAL WALL COVERING	ST	STONE VENEER
DWP	DIGITAL WALL PANEL	SV	SHEET VINYL
EPT	EPOXY PAINT	SWP	SHEET WALL PROTECTION
ERF	EPOXY RESIN FLOOR	T	TILE
ETR	EXISTING TO REMAIN	TER	TERRAZZO
EXP	EXPOSED	TR	TRIM
FILM	FILM	TS	TRANSITION STRIP
FRP	FIBER REINFORCED PANEL	UPH	UPHOLSTERY
GRT	GROUT	VCT	VINYL COMPOSITION TILE
HR	HAND RAIL	VET	VINYL ENHANCED TILE
INT	INTEGRAL	VQT	VINYL QUARTZ TILE
LAM	LAMINATE	WC	WALL COVERING
LVT	LUXURY VINYL TILE	WD	WOOD
PT	PAINT	WG	WALL GUARD
PTM	PATCH TO MATCH	WOC	WALK OFF CARPET
QB	QUARRY TILE BASE	WS	WRITEABLE SURFACE
QT	QUARRY TILE	WT	WINDOW TREATMENT
QTZ	QUARTZ		

FINISH PLAN SYMBOLS LEGEND

NOTE: THIS LEGEND MAY CONTAIN SYMBOLS THAT ARE NOT IN THIS PROJECT



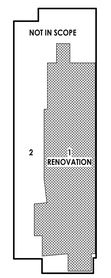
NOTE: FOR EACH CATEGORY, THE FIRST FINISH LISTED IS ASSUMED TO BE THE FIELD FINISH, APPLY TO ALL LOCATIONS NOT OTHERWISE NOTED ON FINISH PLAN.



FINISH ABBREVIATIONS:

ETR	EXISTING TO REMAIN	INT	INTEGRAL
PTM	PAINT TO MATCH	EXP	EXPOSED

KEY PLAN:



TRUE NORTH

PROJECT NORTH

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CPLteam.com

THE UNIVERSITY of NORTH CAROLINA at CHAPEL HILL

PROJECT INFORMATION

Project Number: R24.17133.00
SCO ID#: 24-28797-01A

Client Name
UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL

Project Name
208 FRANKLIN RENOVATION (SCO ID # 24-28797-01A)

Project Address
208 W FRANKLIN ST, CHAPEL HILL, NC 27516

PROJECT ISSUE & REVISION SCHEDULE

#	Date	Description

PROFESSIONAL STAMPS

CPL Architects and Engineers, PC — Certified Architecture Corporation — 51301 — North Carolina — Charlotte, North Carolina

Eric C. Leibenguth — Registered Seal 13840 — Architect — North Carolina — 04/17/2025

SHEET INFORMATION

Issued: 04/17/2025
Scale: As indicated
Project Status: 100% CONSTRUCTION DOCUMENTS
Drawn By: CPL
Checked By: CPL
Drawing Title: FLOOR FINISH PLAN

Drawing Number
-
I200

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MECHANICAL SYMBOLS LIST

SYMBOL	DESCRIPTION
	CONNECTION - TOP
	CONNECTION - BOTTOM
	DIRECTION OF FLOW
	REDUCER
	CAP OR PLUG
	ELBOW DOWN
	ELBOW UP
	TEE OUTLET - UP
	TEE OUTLET - DOWN
	UNION
	GATE VALVE
	BALL VALVE
	BALANCING VALVE
	STRAINER
	STRAINER WITH BLOW-DOWN
	BUTTERFLY VALVE
	GLOBE VALVE
	CHECK VALVE
	TRIPLE DUTY VALVE
	GAS COCK, PLUG VALVE
U/C	UNDERCUT DOOR 1"
M	AIR VENT - MANUAL
A	AIR VENT - AUTOMATIC
	FLANGE
	CONTROL/SOLENOIND VALVE, ELECTRIC 2-WAY
	CONTROL VALVE, ELECTRIC 3-WAY
	CONTROL VALVE, PNEUMATIC 2-WAY
	CONTROL VALVE, PNEUMATIC 3-WAY
	RELIEF / SAFETY VALVE
	PRESSURE REDUCING VALVE
V	VACUUM BREAKER
	FLEXIBLE PIPE CONNECTOR
	EXPANSION COMPENSATOR W/ GUIDES
	EXPANSION JOINT
	PIPE ANCHOR
	PIPE GUIDE
TT	THERMOSTATIC TRAP
FT	FLOAT & THERMOSTATIC TRAP
BT	BUCKET TRAP
TD	THERMODYNAMIC TRAP
	THERMOMETER
	WELL
	PRESSURE GAUGE
	STEAM PRESSURE GAUGE WITH 1/4" NEEDLE VALVE
	PRESSURE GAUGE WITH 1/4" NEEDLE VALVE
XX	PIPING
	PUMP

SYMBOL	DESCRIPTION
20X10	DUCT SECTION - SUPPLY
20X10	DUCT SECTION - RETURN
20X10	DUCT SECTION - EXHAUST
A" Ø	DUCT SECTION - ROUND DUCT IN INCHES
20/10	DUCT SECTION - FLAT OVAL DUCT IN INCHES
	ACOUSTIC THERMAL LINING
	FLEXIBLE DUCTWORK
	FLEXIBLE CONNECTION
	FIRE DAMPER
	SMOKE DAMPER
	COMBINATION FIRE AND SMOKE DAMPER
VD	VOLUME DAMPER
	DAMPER CONTROL, PARALLEL BLADE
	DAMPER CONTROL, OPPOSED BLADE
AAD	AUTOMATIC AIR DAMPER
BDD	BACK DRAFT DAMPER
BG	BLAST GATE
12X10 / 12X10 / 10X20	AIR DUCT (FIRST FIGURE IS DUCT WIDTH/TOP, SECOND FIGURE IS DUCT DEPTH) / FLAT OVAL
	TURNING VANES
	EXISTING WORK TO BE REMOVED (HATCHED)
	POINT OF CONNECTION
	POINT OF DISCONNECTION
	AIR FLOW SENSOR
	FILTER
	TRANSITION SQUARE TO ROUND
	HUMIDIFIER DISPERSION TUBE
RISE / R	RISE IN DUCT
DROP / D	DROP IN DUCT
	SQUARE OR RECTANGULAR CEILING DIFFUSER (4 WAY)
	CEILING DIFFUSER WITH SECTORIZING BAFFLE(S) (1 WAY, 2 WAY,3 WAY)
	ROUND CEILING DIFFUSER
	SQUARE OR RECTANGULAR CEILING RETURN GRILLE
	EXHAUST GRILLE
	SUPPLY REGISTER, RETURN OR EXHAUST GRILLE
	AIR FLOW
X / XX	X = DIFFUSER OR GRILL TYPE XX = AIR FLOW VALUE (CFM)
X | XXX / XX / XXXX	X = DIFFUSER OR GRILL TYPE XX = CONNECTION SIZE XXX = AIR FLOW VALUE (CFM) XXXX = NOMINAL SIZE

SYMBOL	DESCRIPTION
E/S	ELECTRIC/PNEUMATIC SWITCH OR RELAY
P/E	PNEUMATIC/ELECTRIC SWITCH OR RELAY
CT	CURRENT TRANSDUCER
O/C	OPEN/CLOSED
S/S	START/STOP
E/S	ENABLE/DISABLE
V	TEMPERATURE SENSOR (DUCT OR PIPE MOUNTED)
H	HUMIDITY SENSOR (DUCT MOUNTED)
F	FLOW TRANSMITTER
P	PRESSURE TRANSMITTER
ΔP	DIFFERENTIAL PRESSURE TRANSMITTER
E/P	ELECTRIC/PNEUMATIC TRANSDUCER
E/E	ELECTRIC/ELECTRONIC TRANSDUCER
	DUCT SMOKE DETECTOR
T	SPACE THERMOSTAT
T	SPACE TEMPERATURE SENSOR
CO2	SPACE CARBON DIOXIDE SENSOR
CH4	SPACE NATURAL GAS SENSOR
NOx	NITROGEN OXIDES SENSOR
CO	SPACE CARBON MONOXIDE SENSOR
G	SPACE SENSOR WITH GUARD
H	SPACE HUMIDISTAT
FS	WATER FLOW SENSOR
P/A	PNEUMATIC ACTUATOR
E/A	ELECTRIC ACTUATOR
VSD / VFD	VARIABLE SPEED / FREQUENCY DRIVE
C/C	COOLING COIL
H/C	HEATING COIL
G/F	GAS FURNACE
H	HUMIDIFIER
A	ALARM
S	STATUS
FS	FLOW SWITCH
ΔP	DIFFERENTIAL STATIC PRESSURE SWITCH
R	RELAY
	PRESSURE GAUGE
FZ	FREEZE-STAT
DI	DIGITAL INPUT (TO BUILDING MANAGEMENT SYSTEM)
DO	DIGITAL OUTPUT (FROM BUILDING MANAGEMENT SYSTEM)
AO	ANALOG OUTPUT (FROM BUILDING MANAGEMENT SYSTEM)
AI	ANALOG INPUT (TO BUILDING MANAGEMENT SYSTEM)
	ELECTRICAL INTERFACE
SF	SPEED FEED BACK
	TRAVERSE AVERAGING SENSOR
	PROBE SENSOR
	FREEZE STAT SENSOR

SYMBOL	DESCRIPTION
24X12 / 12X10 / VD	SUPPLY / RETURN / EXHAUST AIR TAKEOFFS
24X12 / 8"Ø / VD	SUPPLY / RETURN / EXHAUST AIR TAKEOFFS
14"Ø / 10"Ø / VD	SUPPLY AIR TAKEOFFS
14"Ø / 10"Ø / VD	SUPPLY AIR TAKEOFFS
24X12 / 6X12 / 12X10 / 18X12 / 20X12	SUPPLY AIR TAKEOFFS
24X12 / 12X10 / VD	SUPPLY/RETURN EXHAUST AIR TAKEOFFS W/ REGISTER/GRILLE/ DIFFUSER
VD / VD	SUPPLY/RETURN EXHAUST AIR END OF MAIN BRANCH TAKEOFFS
VD / VD	SUPPLY/RETURN EXHAUST AIR END OF MAIN BRANCH TAKEOFFS
	LONG RADIUS 90° ELBOW R/W=1.5
	LONG RADIUS 45° ELBOW R/W=1.5
	90° ELBOW WITH TURNING VANES
18X16 / 18X8 / 18X8	90 VERTICAL SPLIT OFF (PLAN VIEW)
20X10 / 20X10 / 20X10	DUCT TURNING UP OR DOWN

SYMBOL	DESCRIPTION
24X12 / 12X10 / 24X12	1-1/2 TIMES BRANCH SIZE
24X12 / 8"Ø / 8"Ø	1-1/2 TIMES BRANCH SIZE
14"Ø / 10"Ø / 10"Ø	CONICAL TEE
14"Ø / 10"Ø / 10"Ø	LATERAL
18X12 / 24X12 / 12X10 / 6X12 / 20X12	
24X12 / 12X10 / 24X12	
VD / VD	
VD / VD	
18X8 / 18X16 / 18X8	
20X10	

SYMBOL	DESCRIPTION
AAD	AUTOMATIC AIR DAMPER
ACC	AIR-COOLED CONDENSING UNIT
AFF	ABOVE FINISHED FLOOR
AHU	AIR HANDLING UNIT
BD	BACKDRAFT DAMPER
CA	COMPRESSED AIR
CD	COOLING COIL CONDENSATE DRAIN
CFM	CUBIC FEET PER MINUTE
CHWR	CHILLED WATER RETURN
CHWS	CHILLED WATER SUPPLY
CR	CONDENSER WATER RETURN
CS	CONDENSER WATER SUPPLY
(E)	EXISTING
EA	EXHAUST AIR
EC	ELECTRICAL CONTRACTOR
EF	EXHAUST FAN
ERHC	ELECTRIC REHEAT COIL
ETR	EXISTING TO REMAIN
EUH	ELECTRIC UNIT HEATER
F&T	FLOAT AND THERMOSTATIC TRAP
FCU	FAN-COIL UNIT
FPM	FEET PER MINUTE
GC	GENERAL CONTRACTOR
HHWR	HEATING HOT WATER RETURN
HHWS	HEATING HOT WATER SUPPLY
HP	HEAT PUMP
HPS	HIGH PRESSURE STEAM
LPC	LOW PRESSURE CONDENSATE
LPS	LOW PRESSURE STEAM
MC	MECHANICAL CONTRACTOR
MPC	MEDIUM PRESSURE CONDENSATE
MPS	MEDIUM PRESSURE STEAM
NC	NORMALLY CLOSED
NO	NORMALLY OPEN
NTS	NOT TO SCALE
OA	OUTSIDE AIR
PC	PLUMBING CONTRACTOR
RA	RETURN AIR
RHC	HOT WATER REHEAT COIL
RLL	REFRIGERANT LIQUID PIPE
RSL	REFRIGERANT SUCTION PIPE
RTU	ROOFTOP UNIT
RV	ROOF VENT
SA	SUPPLY AIR
SHWR	SECONDARY HEATING HOT WATER RETURN
SHWS	SECONDARY HEATING HOT WATER SUPPLY
SSI	SPLIT SYSTEM INDOOR SECTION (EVAPORATOR SECTION)
SSO	SPLIT SYSTEM OUTDOOR SECTION (CONDENSING UNIT)
TC	TEMPERATURE CONTROLS CONTRACTOR
UH	UNIT HEATER
UV	UNIT VENTILATOR
V	VENT
WWHP	WATER-TO-WATER HEAT PUMP

MECHANICAL GENERAL NOTES

1. ALL NEW WORK IS TO BE PERFORMED IN COMPLIANCE WITH THE 2018 NORTH CAROLINA MECHANICAL CODE.
2. MAINTAIN CLEARANCE OF A MINIMUM OF 6" BETWEEN DUCTWORK, PIPING, EQUIPMENT, ETC., AND ALL RATED WALL ASSEMBLIES TO ALLOW FOR INSPECTIONS OF RATED WALLS.
3. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS WITHIN THE BUILDING PRIOR TO COMMENCEMENT OF ALL DEMOLITION AND NEW WORK.
4. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REMOVE AND REPLACE EXISTING CEILINGS, UNLESS OTHERWISE NOTED ON THE ARCHITECTURAL DRAWINGS, FOR PERFORMING DEMOLITION OR NEW WORK WITHIN THE BUILDING. THE EXISTING CEILINGS SHALL BE REMOVED IN A MANNER TO AVOID DAMAGE TO THE CEILING SYSTEMS. STORAGE OF CEILING SYSTEM COMPONENTS FOR REINSTALLATION IS THE RESPONSIBILITY OF THE CONTRACTOR. THE STORAGE OF ALL MATERIAL SHALL BE IN AREAS OR LOCATIONS APPROVED BY THE OWNER. THE OWNER WILL NOT COMPENSATE FOR ANY DAMAGED OR LOST MATERIAL WHILE IN STORAGE. AFTER COMPLETION OF ALL DEMOLITION OR NEW WORK, THE CONTRACTOR SHALL REINSTALL THE CEILING SYSTEMS TO MATCH THE ORIGINAL INSTALLATION.
5. DEMOLITION DRAWINGS SHOW MAJOR EQUIPMENT, PIPING, AND DUCTWORK REMOVALS. THE INTENT IS NOT TO IDENTIFY ALL MISCELLANEOUS PIPING, PIPING ACCESSORIES, DUCTWORK, DUCTWORK ACCESSORIES, SUPPORTS, CONTROLS, CONTROL ACCESSORIES, CONTROL WIRING, CONDUIT, AND PNEUMATIC CONTROL TUBING TO BE DISCONNECTED AND REMOVED, BUT IS THE REQUIREMENT UNDER THIS CONTRACT. NO EQUIPMENT, PIPING, OR DUCTWORK SHALL BE ABANDONED IN PLACE, UNLESS OTHERWISE NOTED ON THE DRAWINGS.
6. ALL EQUIPMENT INDICATED TO BE TURNED OVER TO THE OWNER SHALL BE DISCONNECTED AND REMOVED FROM THE EXISTING SYSTEMS AND DELIVERED (INCLUDING LOADING AND UNLOADING) TO A STORAGE AREA WITHIN THE BUILDING AS SELECTED BY THE OWNER. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR ANY EQUIPMENT DAMAGED DURING REMOVAL AND DELIVERY. ANY DAMAGE TO EQUIPMENT PRIOR TO DISCONNECTING SHOULD BE REPORTED TO THE OWNER'S REPRESENTATIVE, IF NOT REPORTED, THE CONTRACTOR TAKES FULL RESPONSIBILITY FOR REPAIRS TO THE EQUIPMENT.
7. BEFORE DISCONNECTING, REMOVING, OR SERVICING ANY AIR CONDITIONING EQUIPMENT OR SYSTEMS CONTAINING REFRIGERANTS, THE EQUIPMENT OR SYSTEMS SHALL BE EVACUATED OF ALL REFRIGERANT PER THE LATEST ADOPTED RULES AND REGULATIONS BY THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY (EPA). THE CONTRACTOR OR TECHNICIAN PERFORMING THE WORK SHALL BE CERTIFIED BY AN EPA APPROVED CERTIFYING AGENCY OR ORGANIZATION.
8. ALL DUCTWORK, PIPING, AND CONDUIT PENETRATIONS THROUGH RATED VERTICAL AND HORIZONTAL ASSEMBLIES SHALL BE PROVIDED WITH FIRE/SMOKE STOPPINGS PER SPECIFICATION. REFER TO CODE ANALYSIS DRAWING FOR ALL RATED LOCATIONS.
9. UNLESS SHOWN ON THE ARCHITECTURAL DRAWINGS, IT IS THE RESPONSIBILITY OF THIS CONTRACT TO PATCH AND FINISH ALL EXISTING DUCTWORK OR PIPE PENETRATIONS THROUGH FLOORS, ROOFS, INTERIOR WALLS, AND EXTERIOR WALLS AFTER DEMOLITION WORK. IN ADDITION, ALL NEW PENETRATIONS SHALL BE PROVIDED FOR INSTALLATION OF MECHANICAL SYSTEMS INCLUDING, BUT NOT LIMITED TO, EQUIPMENT, CURBING, DUCTWORK, PIPING, CONTROLS, ETC. PATCHING AND FINISHING SHALL MATCH EXISTING CONSTRUCTION INCLUDING FIRE RATINGS. PROVIDE LINTELS PER LINTEL TAKEOFF.
10. IT IS NOT THE INTENT OF THE DRAWINGS TO SHOW ALL AIR VENTS AND DRAINS IN THE PIPING SYSTEMS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE AIR VENTS AT ALL SYSTEM HIGH POINTS AND AT AREAS WITHIN THE PIPING SYSTEMS THAT COULD ACCUMULATE OR TRAP AIR WHICH WOULD PREVENT PROPER VENTING OR OPERATION OF THE SYSTEMS. DRAINS SHALL BE PROVIDED AT ALL LOW POINTS WITHIN THE PIPING SYSTEM TO FACILITATE COMPLETE DRAINING OF THE SYSTEM .
11. UNLESS NOTED OTHERWISE IT IS THE RESPONSIBILITY OF THIS CONTRACTOR TO MODIFY AND PATCH ROOFING AND ROOF DECKS AS NECESSARY TO INSTALL NEW EQUIPMENT SUPPORTS, PIPING PORTALS, CURBS AND RAILS. IT IS THE RESPONSIBILITY OF THIS CONTRACTOR TO PATCH ROOFING AND DECKS WHEN DEMOLISHING ROOF MOUNTED EQUIPMENT. COORDINATE WITH THE OWNER AND EXISTING ROOFING MANUFACTURERS TO MAINTAIN THE WARRANTIES ON ALL ROOFS. ALL ROOFING WORK TO BE PERFORMED BY CERTIFIED ROOFING CONTRACTOR. IT IS ALSO THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE STRUCTURAL FRAMING ASSOCIATED WITH THE WORK IN THIS CONTRACT. REFER TO ARCHITECTURAL DRAWINGS FOR ROOF AND DECK TYPES AND FRAMING DETAILS. PROVIDE STRUCTURAL FRAMING FOR EQUIPMENT AND ROOF OPENINGS. REFER TO STRUCTURAL DRAWINGS FOR DETAILS.
12. INSTALLATION OF ALL MECHANICAL EQUIPMENT RAILS AND CURBS SHALL CONFORM TO THE WIND RESTRAINT REQUIREMENTS APPLICABLE BUILDING CODE AND THIS PROJECT.

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THE UNIVERSITY of NORTH CAROLINA at CHAPEL HILL

PROJECT INFORMATION

Project Number: R24.17133.00
SCO ID#: 24-28797-01A
Client Name: **UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL**
Project Name: **208 FRANKLIN RENOVATION**
Project Address: 208 W FRANKLIN ST, CHAPELL HILL, NC 27516

PROJECT ISSUE & REVISION SCHEDULE

#	Date	Description

PROFESSIONAL STAMPS

NORTH CAROLINA REGISTERED PROFESSIONAL ENGINEER — 25078 — 04/17/25 — RELEASED TO BIDDING

SHEET INFORMATION

Issued: 04/17/2025
Scale:
Project Status: 100% CONSTRUCTION DOCUMENTS
Drawn By: JWB
Checked By: RR
Drawing Title: HVAC SYMBOLS LEGEND AND CONTRACTOR NOTES
Drawing Number: H000

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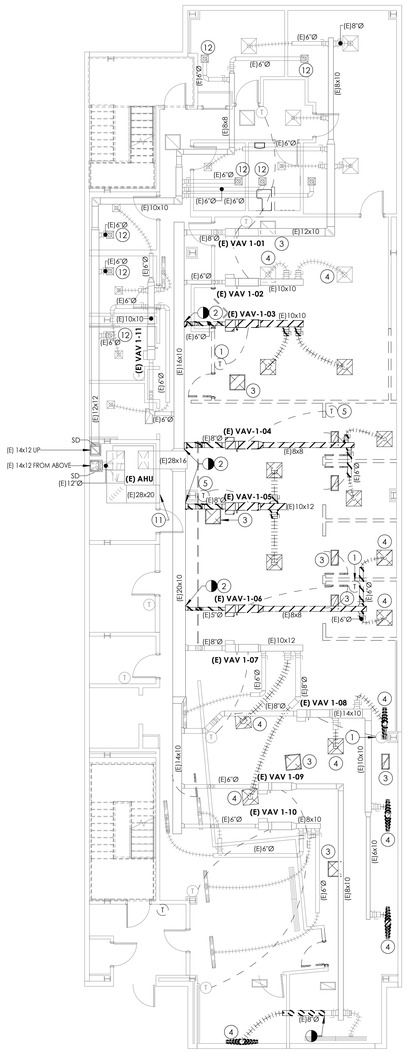
GENERAL NOTES

1. COORDINATE REMOVAL OF EXISTING HVAC EQUIPMENT CONTROLLERS WITH SCHNEIDER ELECTRIC. EXISTING CONTROLLER TO BE REINSTALLED ON NEW EQUIPMENT.

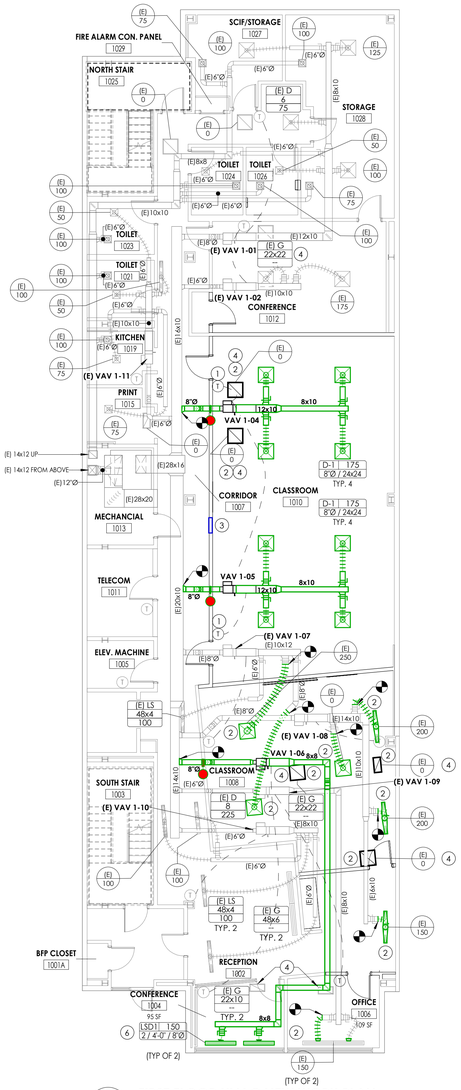
KEY NOTES

1. REMOVE THERMOSTAT TO BE RELOCATED.
2. REMOVE SUPPLY DUCT DOWNSTREAM OF DISCONNECTION POINT.
3. REMOVE RETURN GRILLE TO BE RELOCATED.
4. REMOVE SUPPLY DIFFUSER TO BE RELOCATED.
5. RETURN THERMOSTAT TO OWNER.
6. REMOVE ERV.
7. REMOVE ERV CU-1 AND ASSOCIATED REFRIGERANT LINES AND CONTROLS.
8. REMOVE COOLING COIL.
9. REMOVE EF AND ASSOCIATED CONTROLS.
10. VRF SYSTEM CONDENSING UNIT TO REMAIN.
11. RETURN AIR DUCT OPENING. PROVIDE FILTER MEDIA DURING CONSTRUCTION. REPLACE FILTER MEDIA AS NECESSARY FOR PROPER OPERATION OF THE AHU.
12. EXHAUST GRILLES ARE DUCTED TO AN ENERGY RECOVERY UNIT ON THE ROOF. PROVIDE FILTER MEDIA AND REPLACE AS NECESSARY FOR PROPER OPERATION OF THE ERV EXHAUST FAN.

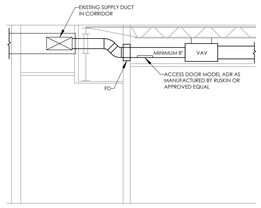

(E) VAV 1-01
(E) VAV 1-02
(E) VAV-1-03
(E) VAV 1-11
(E) VAV-1-04
(E) AHU
(E) VAV-1-05
(E) VAV-1-06
(E) VAV 1-07
(E) VAV 1-08
(E) VAV 1-09
(E) VAV 1-10
SD
(E) 14x12 UP
(E) 14x12 FROM ABOVE
SD
(E) 12"Ø
(E) 10x10
(E) 12x10
(E) 10x10
(E) 10x10
(E) 16x10
(E) 12x12
(E) 28x16
(E) 28x20
(E) 10x12
(E) 20x10
(E) 10x10
(E) 10x12
(E) 14x10
(E) 14x10
(E) 10x10
(E) 8x10
(E) 10x10
(E) 6x10
(E) 8x10
(E) 8x8
(E) 8x8
(E) 8x8

KEY NOTES

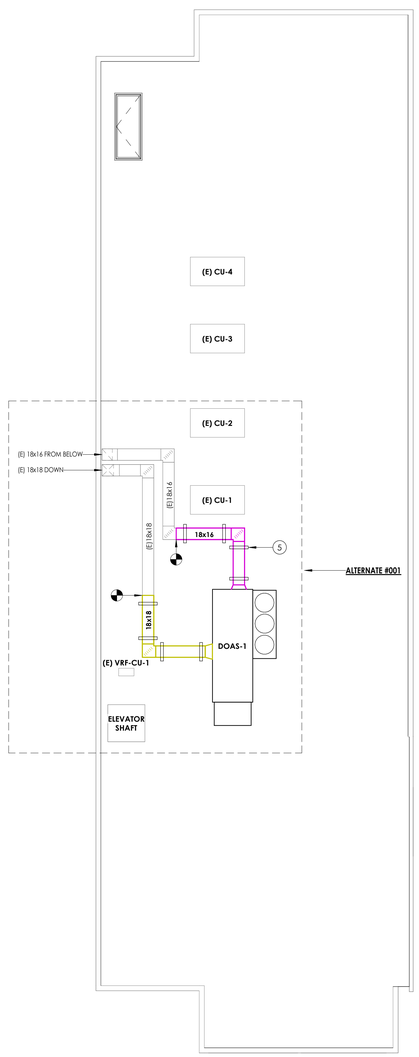
1. REINSTALL EXISTING THERMOSTAT IN NEW LOCATION.
2. CLEAN EXISTING AIR DISTRIBUTION DEVICE AND INSTALL IN NEW LOCATION AS INDICATED. PROVIDE NEW FLEX CONNECTOR AS NECESSARY TO ACCOMMODATE NEW DEVICE LOCATION. MAINTAIN EXISTING AIRFLOW.
3. 24X18 RETURN AIR OPENING ABOVE CEILING. PROVIDE FIRE DAMPER.
4. PROVIDE RETURN AIR CANOPY MODEL RAC AS MANUFACTURED BY PRICE OR APPROVE EQUAL.
5. DUCT SUPPORT (TYPICAL)
6. PROVIDE REMOTE OPERATED BALANCING DAMPER MODEL RT-150 AS MANUFACTURED BY METROPOLITAN AIR TECHNOLOGY OR APPROVED EQUAL BY POTTORFF OR RUSKIN.



1 H201 **FIRST FLOOR HVAC NEW WORK PLAN**
1/8" = 1'-0"



3 H201 **VAV INSTALLATION DETAIL**
NOT TO SCALE



2 H201 **ROOF HVAC PLAN - ALTERNATE #001**
1/8" = 1'-0"

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THE UNIVERSITY of NORTH CAROLINA at CHAPEL HILL

PROJECT INFORMATION

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SCO ID#: 24-28797-01A
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Project Name: 208 FRANKLIN RENOVATION
Project Address: 208 W FRANKLIN ST, CHAPELL HILL, NC 27516

PROJECT ISSUE & REVISION SCHEDULE

#	Date	Description

PROFESSIONAL STAMPS

SHEET INFORMATION

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Project Status: CONSTRUCTION SET
Drawn By: JWB
Checked By: RR
Drawing Title: FIRST FLOOR AND ROOF DUCTWORK PLAN
Drawing Number: - H201

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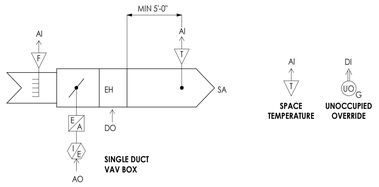


SINGLE DUCT VAV BOX

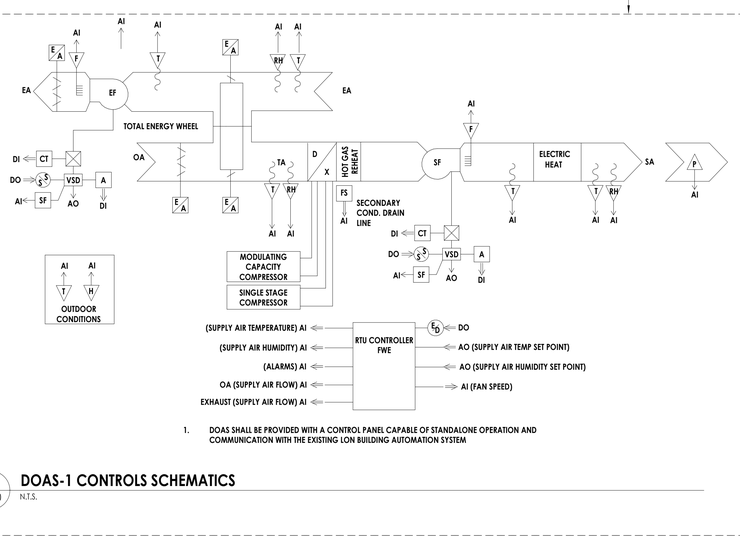
NOTES:

1. CONTROLS CONTRACTOR TO PROVIDE LON COMPATIBLE DDC CONTROLLER.
2. WHEN MULTIPLE VAV BOXES SERVES ONE ROOM, CONTROL ALL VAV BOXES WITH ONE THERMOSTAT.

1 H500 VAV BOX WITH ELECTRIC HEAT CONTROL SCHEMATIC

NOT TO SCALE

ALTERNATE #001



1. DOAS SHALL BE PROVIDED WITH A CONTROL PANEL CAPABLE OF STANDALONE OPERATION AND COMMUNICATION WITH THE EXISTING LON BUILDING AUTOMATION SYSTEM

2 H500 DOAS-1 CONTROLS SCHEMATICS

N.T.S.

SINGLE DUCT VAV BOX SEQUENCE OF OPERATION.

- UNIT REQUEST - VAV BOXES SHALL OPERATE ON A USER DEFINED 365-DAY OCCUPANCY SCHEDULE. OCCUPIED AND UNOCCUPIED SPACE TEMPERATURE SETPOINTS SHALL BE SET UP AS A GLOBAL VALUE. TERMINAL UNITS WILL HAVE THREE MODES OF OPERATION: OCCUPIED, SETBACK HEATING/COOLING, AND UNOCCUPIED (OFF).

- THE VAV BOX SHALL RUN UNDER THE FOLLOWING CONDITIONS:
  a. OCCUPANCY – THE VAV BOX SHALL REQUEST THE AHU TO RUN AT ALL OCCUPIED TIMES.
  b. SETUP-UP & SET-BACK – THE VAV BOX SHALL REQUEST THE AHU TO RUN DURING UNOCCUPIED TIMES IF ITS SPACE TEMPERATURE SENSOR REPORTS A TEMPERATURE BELOW 64° F (ADJUSTABLE) OR ABOVE 83° F (ADJUSTABLE) UNIT SHALL REMAIN REQUESTED UNTIL SPACE IS BROUGHT TO SET BACK TEMPERATURE PLUS A DEADBAND.
  c. OVERRIDE REQUEST - UPON A REQUEST FROM THE ZONE THERMOSTAT OVERRIDE REQUEST VAV SHALL ENTER "OCCUPIED MODE" FOR A PERIOD OF 2 HOURS.

- DAMPER CONTROL - SUPPLY AIR DAMPER SHALL MODULATE BETWEEN MAXIMUM AND MINIMUM FLOW TO MAINTAIN SPACE TEMPERATURE COOLING SET POINT OF 75° F (ADJUSTABLE). IN HEATING MODE THE DAMPER SHALL MODULATE TO MAINTAIN HEATING AIR FLOW. DAMPER POSITION SHALL BE REPORTED TO THE BAS.

- HEATING COIL CONTROL - BAS SHALL MODULATE SCR CONTROLLER TO MAINTAIN SPACE TEMPERATURE AT SPACE TEMPERATURE HEATING SETPOINT OF 70° F (ADJUSTABLE).

- TEMPERATURE SENSORS - LOCAL TEMPERATURE SETPOINTS SHALL INITIALLY BE SET UP FOR +/- 1 ° F FROM GLOBAL SETPOINT.

- TRENDING
  BAS SHALL MONITOR AND TREND THE FOLLOWING POINTS AT 10 MIN INTERVALS AND SHALL STORE THE DATA FOR A MINIMUM OF 30 DAYS.
  a. SPACE TEMPERATURE
  b. SPACE TEMPERATURE SETPOINT
  c. DISCHARGE AIR TEMPERATURE
  d. ELECTRIC HEAT SIGNAL
  e. DAMPER POSITION
  f. OVERRIDE REQUESTED

- ALARMS
  a. VAV BOX CONTROLLER SHALL GENERATE ALARMS IN THE BAS UPON THE FOLLOWING CONDITIONS:
  b. SPACE TEMPERATURE MORE THAN 4° F ABOVE OR BELOW SETPOINT
  c. DISCHARGE AIR ABOVE 100° F.
  d. OVERRIDE REQUESTED MORE THAN 4 TIMES IN 24 HOURS

DOAS-1 SEQUENCE OF OPERATION.

- THE BAS SHALL COMMAND THE DOAS UNIT START/STOP BASED ON BUILDING OCCUPANCY SCHEDULE. ONCE ENABLE THE DOAS UNIT SHALL BE CONTROLLED BUY ITS OWN BUILT-IN CONTROL SEQUENCE TO PROVIDE PRECONDITIONED OUTSIDE AIR TO EACH AHU IN THE BUILDING.

OCCUPIED MODE:

- OUTSIDE AIR AND EXHAUST AIR DAMPERS SHALL OPEN.

- ONCE DAMPERS ARE CONFIRMED OPEN BY THE UNIT DAMPER POSITION SWITCHES THE SUPPLY AND EXHAUST AIR FANS SHALL MODULATE SPEED TO PROVIDE AIR FLOW INDICATED IN THE UNIT SCHEDULE.

- VENTILATION MODE (ECONOMIZER)
  a. VENTILATION MODE IS USED DURING NEUTRAL OUTDOOR AIR CONDITIONS WHEN THERE IS NOT A NEED FOR HEATING, COOLING, OR DEHUMIDIFICATION. THE OUTSIDE AIR AND EXHAUST DAMPERS OPEN, THE SUPPLY AND EXHAUST FANS RUN CONTINUOUSLY AND THE ENERGY WHEEL BYPASS DAMPER OPEN. A DEMAND FOR DEHUMIDIFICATION LOCKS OUT VENTILATION MODE.

- TEMPERATURE AND HUMIDITY CONTROL. (DISCHARGE CONTROL)
  a. THE COOLING SYSTEM AND THE ELECTRIC HEATER SHALL MODULATE CAPACITY TO MAINTAIN SUPPLY AIR TEMPERATURE BETWEEN 68°F (ADJ.) AND 76°F (ADJ.)
  b. IF SUPPLY AIR TEMPERATURE DROPS BELOW 68°F (ADJ.) THE ELECTRIC HEATER SHALL BE ENERGIZED AND CAPACITY MODULATED TO INCREASE SUPPLY AIR TEMPERATURE.
  c. IF THE SUPPLY AIR TEMPERATURE INCREASES ABOVE 76°F (ADJ.) THE COMPRESSOR WILL BE ENERGIZED AND CAPACITY MODULATED TO REDUCE THE SUPPLY AIR TEMPERATURE.
  d. DEHUMIDIFICATION MODE IS ENABLED WHEN THE SUPPLY AIR DEWPOINT RISES ABOVE THE SUPPLY AIR DEWPOINT SETPOINT 55°F (ADJ.) AND IS TERMINATED WHEN THE SUPPLY AIR DEWPOINT FALLS 3° BELOW SETPOINT. DURING DEHUMIDIFICATION MODE, COOLING IS CONTROLLED TO THE DEHUMIDIFICATION TEMPERATURE SETPOINT ACTIVE, AND HOT GAS REHEAT CONTROLS THE DISCHARGE AIR TEMPERATURE SETPOINT ACTIVE.

- ENERGY RECOVERY WHEEL
  a. DURING OCCUPIED OPERATION, THE ERV IS TYPICALLY ON/OFF. THE ERV OPERATES DURING OCCUPIED OPERATION EXCEPT DURING VENTILATION OR ECONOMIZER MODE.
  b. DURING HEATING MODE, THE EXHAUST BYPASS DAMPER IS MODULATED TO MAINTAIN THE DISCHARGE AIR TEMPERATURE SETPOINT. THE BYPASS DAMPER IS SET TO FULLY OPEN WHENEVER THE ERV IS DISABLED.
  c. THE OUTDOOR AIR BYPASS ON THE ENERGY RECOVERY WHEEL IS USED AS FROST CONTROL FOR THE ERV DURING LOW AMBIENT CONDITIONS. THE DAMPER IS MODULATED OPEN WHENEVER THE EXHAUST LEAVING TEMPERATURE (LOCATED DOWNSTREAM OF THE ERV) FALLS BELOW 15°. THE BYPASS DAMPER IS SET TO FULLY OPEN WHENEVER THE ERV IS DISABLED.

SAFETIES

- A HIGH STATIC PRESSURE SWITCH SHALL BE LOCATED IN THE SUPPLY DUCT AND SHALL DISABLE UNIT SUPPLY FAN UPON SENSING A DISCHARGE AIR STATIC PRESSURE ABOVE 3"W.C. THIS HI-STATIC CONDITION SHALL GENERATE AN ALARM IN THE BAS, UNIT SHALL NOT BE COMMANDED TO RUN UNTIL ALARM HAS BEEN MANUALLY RESET IN THE BAS.

- UNIT CONTROLLER SHALL MONITOR THE FIRE ALARM SYSTEM AND SUPPLY FAN AND EXHAUST FANS SHALL BE SHUT OFF ON ANY BUILDING SMOKE ALARM.

- A FLOAT SWITCH IN THE DRAIN PAN SHALL GENERATE AN ALARM IN THE BAS AND SHUT DOWN THE UNIT IF CONDENSATE WATER LEVEL INCREASES IN THE DRAIN PAN.

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PROJECT ISSUE & REVISION SCHEDULE

#	Date	Description

PROFESSIONAL STAMPS

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 35072 04/17/25 ENGINEERING

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Project Status: 100% CONSTRUCTION DOCUMENTS
Drawn By: JWB
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Drawing Title: CONTROL DIAGRAMS AND SEQUENCE OF OPERATIONS
Drawing Number: H500

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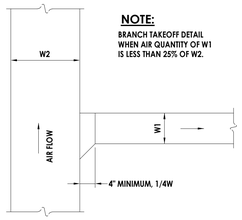
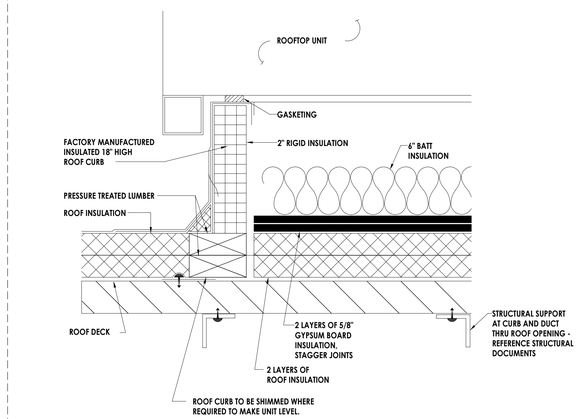


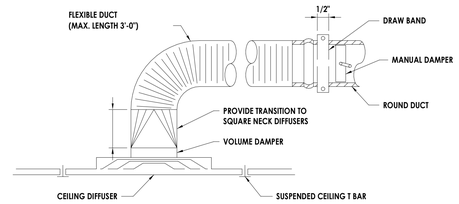
NOTE:
BRANCH TAKEOFF DETAIL WHEN AIR QUANTITY OF W1 IS LESS THAN 25% OF W2.

1 H800 **BRANCH DUCT TAKEOFF**
NOT TO SCALE

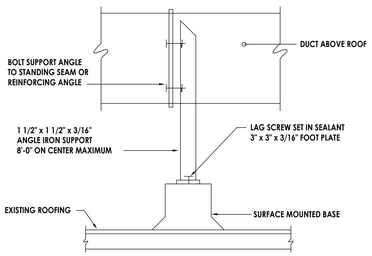


EXISTING ROOF NOTES:
1. ALL ROOFTOP HVAC UNITS TO HAVE CURB AND CURB INTERIOR AS SHOWN.
2. REFER TO ARCHITECTURAL DRAWINGS FOR ROOF AND STEEL SUPPORTS INFORMATION.
3. REMOVE EXISTING ROOFING AND ROOF INSULATION DOWN TO EXISTING ROOF DECK AS NECESSARY FOR INSTALLATION OF HVAC EQUIPMENT CURB. CUT OPENING IN EXISTING ROOF DECK AS NECEASSARY FOR INSTALLATION OF HVAC EQUIPMENT CURB.
4. SECURE EQUIPMENT TO CURB WITH CADMIUM PLATED HARDWARE.
5. INSTALLATION OF ALL ROOF MOUNTED MECHANICAL COMPONENTS SHALL CONFORM TO THE STATE BUILDING CODE AND WIND RESTRAINT REQUIREMENTS OF THIS PROJECT.

2 H800 **HVAC EQUIPMENT CURB ROOFING - ALTERNATE BID #001**
NOT TO SCALE

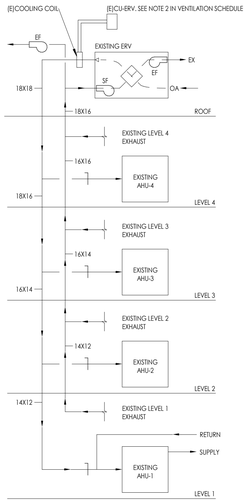


3 H800 **DIFFUSER**
NOT TO SCALE



EXISTING ROOF NOTES:
1. PROVIDE ROOF MEMBRANE REINRORCING PAD .

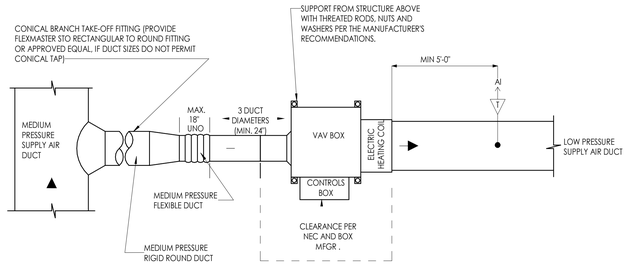
4 H800 **DUCT SUPPORT CURB - ALTERNATE BID #001**
NOT TO SCALE



5 H800 **EXISTING VENTILATION SYSTEM FLOW DIAGRAM**
NOT TO SCALE

VENTILATION SCHEDULE		
AHU	OUTSIDE AIR CFM	
	EXISTING	NEW
AHU-1	425	1000
AHU-2	500	500
AHU-3	575	575
AHU-4	525	525

1. REBALANCE OUTSIDE AIR TO INDICATE NEW AIR FLOW.
2. RENALANCE EXISTING ERV TO 2100 CFM SUPPLY. EXHAUST AIR FLOW TO REMAIN AS IS.



NOTES:
1. PROVIDE CLEARANCE PER NEC FOR ELECTRICAL/CONTROL BOX.
2. FIELD INSULATE THE EXTERIOR OF THE VAV BOX BACK PANEL WITH 1/2" THICK CLOSED CELL INSULATION. TIGHTLY BUTT INSULATION AGAINST DUCT INLET COLLAR AND SEAL MEDIUM PRESSURE FLEXIBLE SUPPLY DUCT AGAINST PANEL INSULATION.

6 H800 **VARIABLE AIR VOLUME TERMINAL UNIT DETAIL**
NOT TO SCALE

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CPLteam.com
NC ENGINEERING FIRM LICENSE NO. C-2194

THE UNIVERSITY of NORTH CAROLINA at CHAPEL HILL

PROJECT INFORMATION

Project Number	SCO ID#
R24.17133.00	24-28797-01A

Client Name
UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL

Project Name
208 FRANKLIN RENOVATION

Project Address
208 W FRANKLIN ST, CHAPELL HILL, NC 27516

PROJECT ISSUE & REVISION SCHEDULE

#	Date	Description

PROFESSIONAL STAMPS

SHEET INFORMATION

Issued	Scale
04/17/2025	

Project Status
100% CONSTRUCTION DOCUMENTS

Drawn By	Checked By
JWB	RR

Drawing Title
DETAILS

Drawing Number
H800

4/15/2025 5:36:34 PM PROJECT FILES ON ACC

SINGLE DUCT VARIABLE AIR VOLUME TERMINAL UNIT (ELECTRIC HEAT)

TAG	LOCATION	SERVICE	MANUFACTURER	MODEL	INLET SIZE (IN.)	OUTLET SIZE (IN.)	MAX. (CFM)	MIN. (CFM)	STATIC PRESSURE		NOISE		ELECTRIC HEAT						ELECTRICAL						NOTES
									INLET	DOWN	NC RAD	NC DISC.	CFM	EAT (°F)	LAT (°F)	KW	MBTUH	STAGES	V	PH	HZ	MCA	FLA	MOCP	
(E) VAV 1-01	**CONFERENCE 1012**	**CORRIDOR 1007,TOILET 1024, TOILET 1026, SCIF/STORAGE 1027, STORAGE 1028**	-	-	8	12x10	500	150	-	-	30	-	300	55	95	3.5	13.08	3	208	3	60	-	-	-	1
(E) VAV 1-02	**CONFERENCE 1012**	**CONFERENCE 1012**	-	-	6	10X10	350	120	-	-	30	-	210	55	95	2.5	9.16	2	208	3	60	-	-	-	1
(E) VAV 1-07	**CLASSROOM 1010**	**CORRIDOR 1007, CLASSROOM 1008**	-	-	8	12x10	575	345	-	-	30	-	345	55	95	4.0	15.04	3	208	3	60	-	-	-	1
(E) VAV 1-08	**CLASSROOM 1008**	**RECEPTION 1002, CLASSROOM 1008**	-	-	8	14X10	550	195	-	-	30	-	330	55	95	4.0	14.39	3	208	3	60	-	-	-	1
(E) VAV 1-09	**CLASSROOM 1008**	**OFFICE 1006**	-	-	6	10X8	300	105	-	-	30	-	180	55	95	2.0	7.85	2	208	3	60	-	-	-	1
(E) VAV 1-10	**CLASSROOM 1008**	**RECEPTION 1002**	-	-	6	10X8	300	100	-	-	30	-	180	55	95	2.0	7.85	2	208	3	60	-	-	-	1
(E) VAV 1-11	**KITCHEN 1019**	**PRINT 1015, KITCHEN 1019, TOILET 1021, TOILET 1023**	-	-	6	10X10	350	105	-	-	30	-	210	55	95	2.5	9.16	2	208	3	60	-	-	-	1
VAV 1-04	**CLASSROOM 1010**	**CLASSROOM 1010**	**TRANE**	**VCEF**	8	12x10	700	300	1	.25	20	25	300	55	92.6	3.5	11.95	MODULATING	208	3	60	12.14	9.72	15	2,3,4
VAV 1-05	**CLASSROOM 1010**	**CLASSROOM 1010**	**TRANE**	**VCEF**	8	12x10	700	300	1	.25	20	25	300	55	92.6	3.5	11.95	MODULATING	208	3	60	12.14	9.72	15	2,3,4
VAV 1-06	**CLASSROOM 1008**	**CONFERENCE 1004**	**TRANE**	**VCEF**	5	8x8	300	100	1	.25	15	22	180	55	90.48	2.0	6.83	MODULATING	208	3	60	6.94	5.55	15	2,3,4

NOTES:

1. EXISTING VAV BOX.
2. NEW VAV BOX CONTROLS PROVIDE BY EXISTING BUILDING AUTOMATION SYSTEMS CONTRACTOR (SCHNEIDER ELECTRIC).
3. PROVIDE ELECTRIC HEATER WITH SCR CONTROL.
4. PROVIDE WITH 1" FOIL FACED INSULATION

OA CALCULATIONS SUMARY

ROOM	AREA SQ.FT	OCCUPANCY	CFM/PERSON	CFM/FT²	MIN OA FLOW (CFM)	MIN SUPPLY AIR FLOW (CFM)
CLASSROOM 1010	1038	40	7.5	0	300	600
CLASSROOM 1008	569	25	7.5	0	188	290
CONFERENCE 1012	329	12	5	0.06	80	210
CONFERENCE 1004	95	5	5	0.06	31	100

ALTERNATE #001

DEDICATED OUTSIDE AIR SYSTEM (DOAS) PART 1 - ALTERNATE BID #001

TAG	MANUFACTURER	MODEL	SUPPLY FAN									EXHAUST FAN							ENERGY RECOVERY													
																			WINTER								SUMMER						
			AIR FLOW (CFM)	ESP (IN H20)	TOTAL S.P. (IN H20)	NUMBER OF MOTORS	BHP	MOTOR HP	TYPE	DRIVE	STANDARD MIN. OA (CFM)	AIRFLOW (CFM)	ESP (IN.WG.)	NUMBER OF MOTORS	BHP	MOTOR HP	TYPE	DRIVE	OA (CFM)	OAT (DB/WB)	EA (CFM)	EAT		LAT		RECOVERED CAPACITY (MBH)	EFFECTIVENESS		OA (CFM)	OAT (DB/WB)	EA (CFM)	EAT		LAT		RECOVERED CAPACITY (BTUH)	EFFECTIVENESS	
																						DB	WB	DB	WB	TOTAL	SENSIBLE				DB	WB	DB	WB	TOTAL	SENSIBLE
DOAS-1	**TRANE**	**OADG012**	**2600**	**1**	**2.37**	**1**	**1.37**	**2**	**CENT**	**DIRECT**	**2600**	**1875**	**1**	**1**	**1.5**	**1**	**CENT**	**DIRECT**	**2600**	**18.5/15.3**	**1875**	**70**	**58**	**49.3**	**43.3**	**134.37**	**82%**	**84%**	**2600**	**95/78**	**1875**	**75**	**63**	**82.5**	**69.6**	**85.56**	**79%**	**83%**

DEDICATED OUTSIDE AIR SYSTEM (DOAS) CONTINUATION - ALTERNATE BID #001

TAG	DX COOLING										HOT GAS REHEAT		ELECTRIC HEAT		ELECTRICAL							WEIGHT (LBS)
	EDB (°F)	EWB (°F)	LDB (°F)	LWB (°F)	TOTAL CAPACITY (MBH)	SENSIBLE CAPACITY (MBH)	AMBIENT (°F)	STAGES	FACE VELOCITY (FPM)	CIRCUITS	REFRIGERANT	LADB (°F)	CAPACITY (MBH)	CAPACITY	CONTROL	V	PH	HZ	MCA	FLA	MOCP	
DOAS-1	**82.5**	**69.6**	**51.8**	**51.8**	**139.8**	**85.4**	**95**	**MODULATING**	**213**	**1**	**454B**	**75**	**86.7**	**20.0 kW**	**MODULATIG**	**208**	**3**	**60**	**87.2**	**69.8**	**90**	**4605**

NOTES:

1. PROVIDE ALL NECESSARY CONTROLS FOR STANDALONE OPERATION. PROVIDE LON COMMUNICATION CARD COMPATIBLE WITH EXISTING BUILDING AUTOMATION SYSTEM. THE DOAS UNIT SHALL BE ENABLE/DISABLE AND MONITORED BY THE BAS. COORDINATE WITH CONTROLS CONTRACTOR.
2. PROVIDE 14" ROOF CURB AND CURB EXTENSION FOR SIDE SUPPLY AND RETURN.
3. MODULATING CAPACITY HOT GAS REHEAT COIL.
4. MERV 13 FILTER
5. DIGITAL SCROLL COMPRESSOR. 5 YEAR WARRANTY.
6. SINGLE POINT ELECTRICAL CONNECTION.
7. PROVIDE HAIL GUARDS.

DIFFUSER/GRILLE SCHEDULE

MARK	APPLICATION	MATERIAL	FINISH	DESIGN EQUIPMENT	REMARK
LSD1	**LINEAR SLOT DIFFUSER**	**ALUMINUM**	**WHITE ENAMEL**	**SDS**	**1,3,4**
D-1	**SUPPLY DIFFUSER**	**STEEL**	**WHITE ENAMEL**	**SPD**	**2**

NOTES:

1. PROVIDE WITH INTERNALLY INSULATED SUPPLY AIR PLENUM.
2. 24x24 MODULE
3. PROVIDE MOUTING FRAME FOR GYPSUM BOARD CEILING.
4. 1" SLOT, 2-SLOT, 48" LONG

MECHANICAL SPECIFICATIONS

1. GENERAL

1.1 FURNISH ALL MATERIALS AND LABOR NECESSARY TO PROVIDE COMPLETE AND OPERATING SYSTEMS AND TO DEMONSTRATE TO THE OWNER AND ENGINEER THAT ALL SYSTEMS ARE OPERATING PROPERLY AND AS SPECIFIED. PROVIDE ALL REQUIRED EXCAVATION AND BACK FILLING.

1.2 WARRANTY ALL WORK AND ALL MATERIALS, EQUIPMENT AND DEVICES FOR A PERIOD OF ONE YEAR AFTER OWNER'S ACCEPTANCE.

1.3 CODE REQUIREMENTS: ALL WORK SHALL CONFORM TO THE LATEST EDITION, OR EDITION AS NOTED, OF:
- INTERNATIONAL BUILDING CODES, ALL VOLUMES
- NORTH CAROLINA STATE BUILDING CODES, ALL VOLUMES
- NFPA 90A AND 90B
- NFPA 101
- NFPA 91
- NFPA 70 (NATIONAL ELECTRIC CODE)
- ASHRAE STANDARD 15
- ASHRAE STANDARD 55
- ASHRAE STANDARD 62
- ASHRAE STANDARD 90.1
- SMACNA: HVAC AIRDUCT LEAKAGE TEST MANUAL
- SMACNA: HVAC DUCT CONSTRUCTION STANDARDS METAL & FLEXIBLE
- NFPA 96
- SMACNA: FIRE, SMOKE & RADIATION DAMPER INSTALLATION GUIDE FOR HVAC SYSTEMS
- APPLICABLE FEDERAL, STATE AND LOCAL CODES AND ORDINANCES
- UNDERWRITERS LABORATORIES, INCLUSIVE OF UL 555, CURRENT EDITIONS

1.4 CONTRACT DRAWINGS: DRAWINGS ARE DIAGRAMMATIC AND NOT INTENDED TO BE SCALED FOR DIMENSIONS. ALL EQUIPMENT AND DEVICES ARE SHOWN IN APPROXIMATE LOCATIONS.

1.5 SUBMITTALS: SUBMIT COMPLETE CATALOG DATA AND DESCRIPTIVE LITERATURE IN ELECTRONIC PDF FORM FOR APPROVAL ON ALL MAJOR PIECES OF EQUIPMENT INCLUDING VIBRATION ISOLATORS, INSULATION, AIR DISTRIBUTION AND AIR MOVING EQUIPMENT AND TEMPERATURE CONTROL DEVICES. TAG SUBMITTALS TO THE CORRESPONDING PIECE OF EQUIPMENT SCHEDULED THAT ITEM IS BEING SUBMITTED FOR.

1.6 CORRESPONDENCE: DIRECT ALL CORRESPONDENCE INCLUDING SUBMITTALS TO THE ARCHITECT FOR DISTRIBUTION TO PROPER PARTIES.

1.7 RECORD DRAWINGS: PROVIDE RECORD AS-BUILT DRAWINGS OF ALL CHANGES MADE TO THE CONTRACT DRAWINGS DURING CONSTRUCTION

1.8 MATERIALS AND EQUIPMENT: ALL MATERIALS, EQUIPMENT AND DEVICES SHALL, AS A MINIMUM MEET THE REQUIREMENTS OF UL WHERE UL STANDARDS ARE ESTABLISHED AND SHALL BE CLASSIFIED FOR THE PURPOSE USED.

1.9 ALL ITEMS SHALL BE NEW UNLESS INDICATED OTHERWISE. ALL MATERIALS, EQUIPMENT AND DEVICES SHALL BE CURRENT PRODUCTS BY MANUFACTURERS REGULARLY ENGAGED IN THE PRODUCTION OF SUCH PRODUCTS.

1.10 ALL EQUIPMENT SHALL HAVE A FACTORY APPLIED PAINTING OR GALVANIZING FINISH UNLESS EQUIPMENT IS INHERENTLY CORROSION RESISTANT (E.G. STAINLESS STEEL, PLASTIC, ETC.)

1.11 COORDINATE THE LOCATION OF MECHANICAL EQUIPMENT AND DEVICES WITH OTHER TRADES TO AVOID CONFLICTS AND INTERFERENCE. COORDINATE THE EXACT LOCATION OF ALL CEILING MOUNTED AIR DEVICES WITH THE ARCHITECTURAL REFLECTED CEILING PLAN.

1.12 INSTALL ALL EQUIPMENT AND DEVICES IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS.

1.13 CAREFULLY COORDINATE PHASING AND SCHEDULING OF ALL DEMOLITION AND RENOVATION WORK WITH OWNER.

2. DUCTWORK: SUPPLY, RETURN AND EXHAUST:

2.1. DUCTWORK SHALL BE GALVANIZED STEEL, FABRICATED AND INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF THE SMACNA HVAC DUCT CONSTRUCTION STANDARDS METAL AND FLEXIBLE AND NFPA 90A.

2.2. RECTANGULAR DUCTWORK SHALL HAVE THEIR LONGITUDINAL SEAMS AND TRANSVERSE JOINTS SEALED WITH A WATER BASED SEALANT.

2.3. RECTANGULAR ELBOWS SHALL BE PROVIDED WITH SINGLE THICKNESS TURNING VANES.

2.4. ROUND SHEETMETAL DUCTWORK SHALL BE LONGITUDINAL SEAM-IN TYPE WITH SEGMENTED STANDING SEAM FITTINGS. ROUND DUCTWORK SHALL HAVE THEIR TRANSVERSE JOINTS AND LONGITUDINAL LOCK SEAMS SEALED WITH WATER BASED SEALANT.

2.5. ROUND BRANCH TAKE-OFF SHALL BE FLEXMASTER STOD-BO-3, 45 DEGREE SIDE TAKEOFF FITTING.

2.6. RECTANGULAR BRANCH TAKE-OFF SHALL BE TAPPED INTO MAIN RECTANGULAR DUCTS WITH A 45-DEGREE ENTRY FITTING.

2.7. SUPPLY DUCTWORK FROM THE OUTLET OF AHU TO THE INLET OF VAV BOXES SHALL BE PRESSURE CLASS 3" POSITIVE AND SMACNA SEAL CLASS "A".

2.8. SUPPLY, RETURN AND EXHAUST DUCTWORK OTHER THAN ABOVE SHALL BE PRESSURE CLASS 2" POSITIVE OR NEGATIVE AND SMACNA SEAL CLASS "A".

3. INSULATION

3.1. ALL MATERIALS SHALL HAVE A FLAME SPREAD/FUEL CONTRIBUTION/SMOKE DEVELOPED RATING OF 25/50/50.

3.2. AS A MINIMUM, ALL INSULATION THICKNESS AND THERMAL CONDUCTIVITY SHALL BE IN ACCORDANCE WITH ASHRAE 90.1 OR THE NORTH CAROLINA STATE BUILDING ENERGY CONSERVATION CODE, AS APPLICABLE.

4. INDOOR DUCT INSULATION

4.1. WRAP ALL SUPPLY, RETURN, AND OUTSIDE AIR SHEET METAL DUCTS WITH FLEXIBLE FIBER GLASS INSULATION WITH A FOIL SCRIM VAPOR BARRIER JACKET.

5. OUTDOOR DUCT INSULATION

5.1. PROVIDE 2" EXPANDED POLYSTYRENE INSULATION WITH TWO COATS OF WEATHER BARRIER MASTIC AND .032 INCH THICK CORRUGATED ALUMINUM JACKED.

6. DAMPERS

6.1. FIRE DAMPERS SHALL BE CURTAIN TYPE WITH THE DAMPER BLADES MOUNTED OUTSIDE THE AIR STREAM. DAMPERS SHALL BE UL 555 CLASSIFIED. DAMPERS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

6.2. VOLUME CONTROL DAMPERS SHALL BE SINGLE BLADE TYPE FOR DUCTWORK 10 INCHES AND LESS IN DEPTH AND OPPOSED BLADE TYPE FOR DUCTWORK OVER 10 INCHES. DAMPERS SHALL BE RUSKIN MD-35 OR APPROVED EQUAL. DAMPERS SHALL BE PROVIDED WITH LOCKING QUADRANT OPERATOR.

6.3. ROUND BALANCING DAMPERS SHALL BE FLEXMASTER SLBO.

6.4. ALL DAMPER HANDLES SHALL BE PROVIDED WITH AN INSULATION BUILD/OUT EXTENSION WHERE USED IN DUCTWORK THAT IS INSULATED.

7. TERMINAL VAV BOXES

7.1. TERMINAL VAV BOXES AND ACCESSORIES SHALL BE AS SCHEDULED WITH EQUALS BY TRANE, PRICE, TITUS, OR NAILOR.

7.2. VAV BOXES CONFIGURATION: VOLUME-DAMPER ASSEMBLY INSIDE UNIT CASING WITH CONTROL COMPONENTS INSIDE A PROTECTIVE METAL SHROUD.

7.3. AIRSTREAM SURFACES: SURFACES IN CONTACT WITH THE AIRSTREAM SHALL COMPLY WITH REQUIREMENTS IN ASHRAE 62.1.

7.4. ACCESS: REMOVABLE PANELS FOR ACCESS TO PARTS REQUIRING SERVICE, ADJUSTMENT, OR MAINTENANCE: WITH AIRTIGHT GASKET AND QUARTER-TURN LATCHES.

7.5. VOLUME DAMPER: GALVANIZED STEEL WITH PERIPHERAL GASKET AND SELF-LUBRICATING BEARINGS WITH A MAXIMUM LEAKAGE RATE OF 2% AT 3" STATIC PRESSURE.

7.6. VELOCITY SENSORS SHALL BE MULTIPOINT ARRAY LOCATED IN THE AIR INLET.

7.7. FACTORY MOUNTED AND WIRED ELECTRICAL COMPONENTS MOUNTED IN A NEMA, TYPE 1 ENCLOSURE. WITH REMOVABLE COVER. PROVIDE A SINGLE POINT CONNECTION.

7.8. ELECTRICAL CONNECTION WITH DISCONNECT SWITCH, CONTROL VOLTAGE TRANSFORMER AND WIRING TERMINATIONS.

7.9. ELECTRONIC CONTROLS: PROVIDED BY EXISTING BUILDING AUTOMATION SYSTEM CONTRACTOR.

8. AIR DISTRIBUTION DEVICES

8.1. AIR DISTRIBUTION DEVICES SHALL BE AS SCHEDULED WITH APPROVED EQUALS BY PRICE, CARNES, METALAIRE, NAILOR OR TITUS. AIR DISTRIBUTION DEVICE SOUND POWER LEVELS SHALL NOT EXCEED THE NC OCCUPANCY LEVEL RECOMMENDATIONS IN THE ASHRAE GUIDE.

9. DEDICATED OUTSIDE AIR UNIT (DOAS)

9.1. PACKAGED AIR CONDITIONING EQUIPMENT SHALL BE AS SCHEDULED WITH EQUALS BY TRANE, DAIKIN, OR AAON.

9.2. PROVIDE ALL SYSTEMS COMPLETE INCLUDING FILTER DRIER, EXPANSION VALVES, CHECK VALVES AND LIQUID LINE/SUCTION GAS LINE SERVICE VALVES WITH GAUGE PORTS, FAN BLOWER, COOLING COIL SECTION, HOT GAS REHEAT COIL, ELECTRIC HEAT, FILTER SECTION, ENERGY RECOVERY VENTILAITOR AND ALL ACCESSORIES AND CONTROLS NECESSARY FOR A COMPLETE OPERATIONAL SYSTEM. UNITS SHALL BE PROVIDED WITH ANTI-SHORT CYCLE TIMERS AND FACTORY WIRED LOW VOLTAGE CONTROLS AND LON COMMUNICATION CARD COMPATIBLE WITH EXISTING BUILDING AUTOMATION SYSTEM.

9.3. PROVIDE A FIVE-YEAR WARRANTY ON ALL COMPRESSOR, PARTS AND LABOR.

9.4. CONDENSER COILS SHALL BE COPPER TUBES WITH MECHANICALLY BONDED ALUMINUM FINS.

9.5. COOLING COIL SHALL BE 6-ROW, COPPER TUBES WITH MECHANICALLY BONDED ALUMINUM FINS, 10 FINS PER INCH MAXIMUM.

9.6. CONDENSER COIL SHALL BE COPPER TUBES WITH MECHANICALLY BONDED ALUMINUM FINS.

9.7. ELECTRIC HEAT WITH SCR CONTROL UL LISTED FOR ZERO CLEARANCE TO COMBUSTIBLE MATERIAL.

9.8. AIR FLOW MEASUREMENT IN SUPPLY AND EXHAUST FAN AREAS.

9.9. UNITS SHALL BE SUITABLE FOR HORIZONTAL SUPPLY AND RETURN INSTALLATION. MANUFACTURER PROVIDED ROOF CURB WITH HORIZONTAL SUPPLY AND RETURN CONNECTIONS ARE ACCEPTABLE.

9.10. UNITS SHALL BE PROVIDED WITH STAINLESS STEEL DOUBLE-SLOPED CONDENSATE PAN, PRIMARY AND AUXILIARY DRAIN CONNECTIONS.

9.11. SUPPLY AND EXHAUST SHALL BE DIRECT DRIVE FAN MOTORS WITH VFD.

9.12. CONDENSER FAN SHALL BE DIRECT DRIVE WITH VFD FOR LOW AMBIENT CONTROL.

9.13. DIGITAL SCROLL COMPRESSOR.

9.14. MERV 13 FILTER.

9.15. MODULATING WHELL BY-PASS DAMPERS.

9.16. PROVIDE HAIL GUARD TO PROTECT CONDENSER COIL AND WEATHER HOOD ON OUTSIDE AIR INTAKE EXHAUST OPENING.

9.17. UNITS SHALL BE PROVIDED WITH A SINGLE POINT ELECTRICAL CONNECTION AND A FACTORY FURNISHED, UNIT-MOUNTED DISCONNECT SWITCH.

10. DDC CONTROLS

10.1. NEW EQUIPMENT SHALL BE INTEGRATED IN THE EXISTING SCHNEIDER ELECTRIC CONTROLS SYSTEMS.

10.2. PROVIDE ALL SENSORS, INDICATORS, ACTUATORS, FINAL CONTROL ELEMENTS, USER INTERFACE UPGRADE, OTHER APPARATUS, ACCESSORIES AND SOFTWARE COMPATIBLE WITH EXISTING BAS.

10.3. CONTROL ENCLOSURES: NEMA 250, TYPE 1 FOR DRY AND CLEAN INDOOR LOCATIONS AND TYPE 3R FOR OUTDOOR LOCATIONS.

10.4. ELECTRIC ACTUATORS: DIRECT-COUPLED TYPE WITH ELECTRONIC OVERLOAD PROTECTION OR DIGITAL ROTATION-SENSING CIRCUITRY. MECHANICAL SPRING-RETURN MECHANISM. PROVIDE EXTERNAL MANUAL GEAR RELEASE ON NONSPRING-RETURN ACTUATORS.

10.5. CONTROL CABLE: AS RECOMMENDED BY CONTROLS MANUFACTURER.

10.6. ENGAGE A FACTORY-AUTHORIZED SERVICE REPRESENTATIVE TO TRAIN OWNER'S MAINTENANCE PERSONNEL TO ADJUST, OPERATE, AND MAINTAIN HVAC INSTRUMENTATION AND CONTROLS.

10.7. PROVIDE LAMINATED 11 X 17 CONTROL DRAWINGS INCLUDING SYSTEM CONTROL SCHEMATICS, SEQUENCES OF OPERATION AND PANEL TERMINATION DRAWINGS. SHALL BE PROVIDED IN PANELS FOR MAJOR PIECES OF EQUIPMENT. DRAWINGS SHOULD BE OF SUFFICIENT SIZE TO BE EASILY READ. TERMINAL UNIT DRAWINGS SHALL BE LOCATED IN THE CENTRAL PLANT EQUIPMENT PANEL OR MECHANICAL ROOM PANEL.

10.8 PRODUCT WARRANTY CERTIFICATES: SUBMIT MANUFACTURERS PRODUCT WARRANTY CERTIFICATES COVERING THE HARDWARE PROVIDED.

10.9 UPGRADE USER INTERFACE TO SHOW NEW EQUIPMENT AND FLOOR PLAN. MAINTAIN CONNECTIVITY WITH CAMPUS NETWORK. COORDINATE WITH THE OWNER.

11. TESTING, ADJUSTING AND BALANCING OF HVAC SYSTEMS

11.1. ALL HVAC SYSTEMS, EQUIPMENT AND DEVICES SHALL BE ADJUSTED AND BALANCED TO WITHIN +10%/-5% OF THE INDICATED VALUES AND THE RESULTS RECORDED AND SUBMITTED FOR APPROVAL.

11.2. REPORTS SHALL BE ON AABC OR NEBB PREPRINTED OR COMPUTERIZED FORMS.

11.3. TAB FIRM SHALL BE NEBB OR AABC CERTIFIED.

11.4. PROVIDE ALL MATERIALS AND LABOR NECESSARY.

11.5. WORK TO BE PERFORMED IN ACCORDANCE WITH AGENCY STANDARDS.

11.6. SUBMIT SIX COPIES OF CERTIFIED REPORT INCLUSIVE OF SYSTEM DIAGRAMS FOR REVIEW AND APPROVAL.

12. BAS SYSTEM COMMISSIONING

12.1. CONTRACTOR RESPONSIBILITIES
- COMPLETELY INSTALL AND THOROUGHLY INSPECT, STARTUP, TEST, ADJUST, BALANCE, AND DOCUMENT ALL SYSTEMS AND EQUIPMENT.
- ASSIST COMMISSIONING AUTHORITY IN VERIFICATION AND PERFORMANCE TESTING. THIS WILL GENERALLY INCLUDE THE FOLLOWING:
  - ATTEND COMMISSIONING (CX) PROGRESS AND COORDINATION MEETINGS, DURING FUNCTIONAL TESTING, ACCEPTANCE AND PUNCHLIST CLOSE OUT. THE NUMBER OF MEETINGS WILL VARY DEPENDING ON THE COMPLEXITY OF THE PROJECT.
  - PREPARE AND SUBMIT REQUIRED DRAFT FORMS AND SYSTEMS INFORMATION.
  - HELP ESTABLISH TREND LOGS OF SYSTEM OPERATION AS SPECIFIED HEREIN.
  - DEMONSTRATE SYSTEM OPERATION.
  - MANIPULATE SYSTEMS AND EQUIPMENT TO FACILITATE TESTING.
  - PROVIDE INSTRUMENTATION NECESSARY FOR VERIFICATION AND PERFORMANCE TESTING.
  - MANIPULATE CONTROL SYSTEMS TO FACILITATE VERIFICATION AND PERFORMANCE TESTING.
  - TRAIN OWNER'S REPRESENTATIVES AS SPECIFIED IN PART III OF THIS SECTION.
- COMPENSATION FOR RETESTING: CONTRACTOR SHALL COMPENSATE OWNER FOR SITE TIME NECESSITATED BY INCOMPLETENESS OF SYSTEMS OR EQUIPMENT AT TIME OF FUNCTIONAL PERFORMANCE TESTING. ALL TESTING FAILURES, WHICH REQUIRE ON-SITE TIME FOR RETESTING, WILL BE CONSIDERED ACTUAL DAMAGES TO THE OWNER. ALL PARTIES UNDER CONTRACT WITH THE OWNER WHO ARE AFFECTED BY THE RETESTING SHALL BE INCLUDED IN THE CONTRACT MODIFICATION.
-

12.2. BAS START-UP TESTING, ADJUSTING, CALIBRATION
- TUNE ALL CONTROL LOOPS TO OBTAIN THE FASTEST STABLE RESPONSE WITHOUT HUNTING, OFFSET OR OVERSHOOT. RECORD TUNING PARAMETERS AND RESPONSE TEST RESULTS FOR EACH CONTROL LOOP IN THE BAS STARTUP REPORT. EXCEPT FROM A STARTUP, MAXIMUM ALLOWABLE VARIANCE FROM SET POINT FOR CONTROLLED VARIABLES UNDER NORMAL LOAD FLUCTUATIONS SHALL BE AS FOLLOWS. WITHIN 3 MINUTES OF ANY UPSET (FOR WHICH THE SYSTEM HAS THE CAPABILITY TO RESPOND) IN THE CONTROL LOOP, TOLERANCES SHALL BE MAINTAINED (EXCEPTIONS NOTED):
  - DUCT AIR TEMPERATURE: ±1°F.
  - SPACE TEMPERATURE: ±2°F
  - DUCT PRESSURE: ± 0.25" W.G.
  - DUCT OR SPACE HUMIDITY: ±5%
  - AIR FLOW CONTROL: ±5% OF SETPOINT VELOCITY.
  -
- SUBMIT START-UP TEST REPORT: REPORT SHALL BE COMPLETED, SUBMITTED, AND APPROVED PRIOR TO SUBSTANTIAL COMPLETION AND THE START OF ANY COMMISSIONING TESTING.

12.3. BAS DEMONSTRATION
- ALL BAS DEMONSTRATION FOR THE OWNER SHALL TAKE PLACE FROM THE BAS GRAPHICS PRIOR TO THE START OF COMMISSIONING & FUNCTIONAL TESTING.
- DEMONSTRATE THE OPERATION OF THE BAS HARDWARE, SOFTWARE, AND ALL RELATED COMPONENTS AND SYSTEMS TO THE SATISFACTION OF THE COMMISSIONING AUTHORITY AND OWNER. IF THE WORK FAILS TO BE DEMONSTRATED TO CONFORM TO THE CONTRACT SPECIFICATIONS, SO AS TO REQUIRE SCHEDULING OF ADDITIONAL SITE VISITS BY THE COMMISSIONING AUTHORITY & OWNER FOR RE-DEMONSTRATION, CONTRACTOR SHALL REIMBURSE OWNER FOR COSTS OF SUBSEQUENT COMMISSIONING AUTHORITY SITE VISITS.

12.4. BAS WARRANTY PHASE & OPPOSITE SEASON TRENDING AND TESTING:
- OPPOSITE SEASON TESTING: WITHIN 12 MONTHS OF COMPLETION OF THE ACCEPTANCE PHASE, COMMISSIONING PROVIDER/OWNER SHALL SCHEDULE AND CONDUCT OPPOSITE SEASON FUNCTIONAL PERFORMANCE TESTING. CONTRACTOR SHALL REMEDY ANY CONTRACTUAL DEFICIENCIES IDENTIFIED IN THE OPPOSITE SEASON OR WARRANTY TESTING.

12.5. SOFTWARE OPTIMIZATION ASSISTANCE
- PROVIDE A BAS TECHNICIAN TO WORK AT THE DIRECTION OF COMMISSIONING AUTHORITY FOR SOFTWARE OPTIMIZATION ASSISTANCE FOR A MINIMUM OF 16 HOURS.
- THE CONTRACTOR SHALL PROVIDE THE SERVICES OF A BAS TECHNICIAN AS SPECIFIED TO BE AT THE DISPOSAL OF THE COMMISSIONING AUTHORITY/OWNER. THE PURPOSE OF THIS REQUIREMENT IS TO MAKE CHANGES, ENHANCEMENTS AND ADDITIONS TO CONTROL UNIT AND/OR WORKSTATION SOFTWARE THAT HAVE BEEN IDENTIFIED BY THE COMMISSIONING AUTHORITY/OWNER DURING THE CONSTRUCTION AND COMMISSIONING OF THE PROJECT AND THAT ARE BEYOND THE SPECIFIED CONTRACT REQUIREMENTS. THE COST FOR THIS SERVICE SHALL BE INCLUDED WITH THE BID. REQUESTS FOR ASSISTANCE SHALL BE FOR CONTIGUOUS OR NON-CONTIGUOUS 8-HOUR DAYS.
- THE BAS TECHNICIAN PROVIDED SHALL BE THOROUGHLY TRAINED IN THE PROGRAMMING AND OPERATION OF THE CONTROLLER. IF THE BAS TECHNICIAN PROVIDED CANNOT PERFORM EVERY SOFTWARE TASK REQUESTED BY THE COMMISSIONING AUTHORITY/OWNER IN A TIMELY FASHION, CONTRACTOR SHALL PROVIDE ADDITIONAL QUALIFIED PERSONNEL AT THE PROJECT SITE AS REQUESTED BY THE COMMISSIONING AUTHORITY/OWNER, TO MEET THE TOTAL SPECIFIED REQUIREMENT (PER BUILDING) ON-SITE.

12.6. BAS OPERATOR TRAINING AND O&M MANUALS
- PROVIDE UP TO 4 COMPLETE SETS OF THE APPROVED OPERATIONS AND MAINTENANCE (O&M) MANUALS (HARD COPY AND ONE ELECTRONIC COPY) TO BE USED FOR TRAINING.
- CONTRACTOR SHALL SUBMIT A TRAINING PLAN, ON-SITE TRAINING; PROVIDE SERVICES OF CONTROLS CONTRACTOR'S QUALIFIED TECHNICAL PERSONNEL FOR ONE 8-HOUR DAY (AE TO ADJUST DAYS OF TRAINING PER THE PROJECT NEEDS UP TO 4 DAYS ON NEW CAPITAL PROJECTS) TO INSTRUCT OWNER'S PERSONNEL IN OPERATION AND MAINTENANCE OF BAS. INSTRUCTION SHALL BE IN CLASSROOM SETTING AT THE PROJECT SITE FOR APPROPRIATE PORTIONS OF THE TRAINING.

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THE UNIVERSITY of NORTH CAROLINA at CHAPEL HILL

PROJECT INFORMATION

Project Number: R24.17133.00
SCO ID#: 24-28797-01A
Client Name: **UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL**
Project Name: **208 FRANKLIN RENOVATION**

Project Address: 208 W FRANKLIN ST, CHAPELL HILL, NC 27516

PROJECT ISSUE & REVISION SCHEDULE

#	Date	Description

PROFESSIONAL STAMPS

REGISTERED PROFESSIONAL ENGINEER — SEAL 35878 — 04/17/25 — ENGINEERING CERTIFICATION — NOT TO BE USED FOR CONSTRUCTION UNLESS SIGNED AND SEALED

SHEET INFORMATION

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Drawing Number: H900

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PLUMBING EQUIPMENT & FIXTURE SCHEDULE

MARK	FIXTURE	CW	HW	SAN	V	DESCRIPTION	MODEL NUMBER	REMARKS
WC-1	WATER CLOSET, ACCESSIBLE	1"	-	3"	2"	FLOOR MOUNTED, ELONGATED, VITREOUS CHINA, MADERA FLOWISE, 1.25GPF, ADA HEIGHT, TOP SPUD, MANUAL FLUSH VALVE.	AMERICAN STANDARD # 3461.001 FV: SLOAN # ROYAL 111	-

REMARKS:

1. ALL ACCESSIBLE EQUIPMENT/FIXTURES TO BE INSTALLED PER ADA REQUIREMENTS.
2. PIPING SIZED PRE PLAN.

GENERAL PLUMBING EQUIPMENT & FIXTURE COMMENTS:

A. PLUMBING CONTRACTOR SHALL PROVIDE ALL RISERS, CARRIERS, P-TRAPS, STRAINERS, TAIL PIECES, DRAINS, ETC. REQUIRED TO FACILITATE COMPLETE INSTALLATION OF ALL SCHEDULED EQUIPMENT.
B. CATALOGUE NUMBERS ARE SHOWN TO SUPPLEMENT FIXTURE DESCRIPTION. IF MODEL NUMBER IS DISCONTINUED OR DOES NOT MEET SET FORTH BY FIXTURE DESCRIPTION, THE ARCHITECT/ENGINEER SHOULD BE NOTIFIED. IF NOTIFICATION IS RECEIVED PRIOR TO BIDDING, THE ARCHITECT/ENGINEER RESERVES THE RIGHT TO CHOOSE BETWEEN FIXTURES REGARDLESS OF PRICE.

GENERAL NOTES

A. ALL WORK SHALL COMPLY WITH STATE AND LOCAL CODES AND SPECIAL OCCUPANCY STANDARDS IN ACCORDANCE WITH 2018 NC PLUMBING CODE.

B. DOMESTIC WATER LINES SHALL BE TYPE L COPPER, LEAD FREE JOINTS. INSULATE ALL PIPING WITH PREFORMED FIBERGLASS PIPE INSULATION WITH ASJ COVER SIZED PER STATE ENERGY CODE. ALL FITTINGS AND VALVES TO BE COVERED WITH PREFORMED PVC FITTING COVERS. ALL EXPOSED VERTICAL FIXTURE SUPPLY LINES TO BE COVERED WITH PVC JACKET TO 7' ABOVE FINISHED FLOOR, UNLESS OTHERWISE NOTED ON PLANS OR SPECS.

C. PROVIDE WATER HAMMER ARRESTORS AS REQUIRED BY STATE PLUMBING CODE ON BRANCH PIPING TO EACH TOILET ROOM, LAUNDRY ROOM, SOLENOID VALVE, FAST CLOSING VALVE OR AS OTHERWISE REQUIRED BY CODE.

D. UNDERGROUND SANITARY AND VENT PIPING SHALL BE SERVICE WEIGHT CAST IRON, HUB AND SPIGOT WITH RUBBER GASKET PUSH JOINTS. ABOVE GROUND SANITARY AND VENT PIPING SHALL BE NO-HUB CAST IRON OR DWV COPPER WITH DWV COPPER FITTINGS.

E. IT IS THE RESPONSIBILITY OF THE PLUMBING CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS WITHIN THE BUILDING PRIOR TO COMMENCEMENT OF ALL DEMOLITION AND NEW WORK.

F. IT IS THE RESPONSIBILITY OF THE PLUMBING CONTRACTOR TO REMOVE AND REPLACE EXISTING CEILINGS UNLESS OTHERWISE NOTED ON THE ARCHITECTURAL DRAWINGS, FOR PERFORMING DEMOLITION OR NEW WORK WITHIN THE BUILDING. THE CONTRACTOR SHALL REINSTALL THE CEILING SYSTEMS TO MATCH THE ORIGINAL INSTALLATION. ANY CEILING SYSTEM COMPONENT DAMAGED DURING DEMOLITION, STORAGE, OR RE-INSTALLATION SHALL BE REPLACED WITH A NEW AT NO EXPENSE TO THE OWNER.

G. UNLESS SHOWN ON THE ARCHITECTURAL DRAWINGS, IT IS THE RESPONSIBILITY OF THE PLUMBING CONTRACTOR TO PATCH AND FINISH ALL EXISTING PIPE PENETRATIONS AND TRENCHING THRU FLOOR AND WALLS AFTER DEMOLITION. IN ADDITION, ALL NEW PENETRATIONS AND TRENCHING SHALL BE PROVIDED FOR INSTALLATION OF PLUMBING SYSTEM INCLUDING, BUT NOT LIMITED TO, EQUIPMENT, PIPING, ETC.

H. ALL PIPING AND CONDUIT PENETRATIONS THRU RATED WALLS OR FLOORS SHALL BE PROVIDED WITH FIRE/SMOKE STOPPING.

I. ALL PIPING SYSTEMS SHALL BE PRESSURE TESTED, PURGED, DISINFECTED AND/OR AIR REMOVED AS DICTATED BY CODE, MANUFACTURER SPECIFICATION, HEALTH DEPARTMENT AND/OR OTHER RELATED INDUSTRY STANDARDS. TEST REPORTS SHALL BE SUBMITTED FOR DOCUMENTATION.

J. COORDINATE MOUNTING OF FIXTURES AND TRIM WITH ARCHITECTURAL ELEVATIONS, MILLWORK, SPECIALTY EQUIPMENT AND ADA GRAB BARS.

K. FLOOR DRAINS AND FLOOR SINKS SHALL BE FLUSH TO FLOOR AND LOCATED AT A LOW POINT IN FLOOR UNLESS OTHERWISE NOTED ON THE PLANS. FLOOR DRAINS SHALL HAVE EITHER A TRAP PRIMER OR TRAP GUARD INSTALLED.

L. SLOPE SANITARY DRAINAGE PIPING 2 1/2" AND LESS MINIMUM OF 1/4" PER FOOT. SLOPE SANITARY DRAINAGE PIPING 3" AND LESS MINIMUM OF 1/8" PER FOOT.

M. PROVIDE SHUTOFF VALVES IN ALL DOMESTIC WATER PIPING SYSTEM BRANCHES SERVING TWO OR MORE FIXTURES.

N. INSTALL PIPING SO ALL VALVES, STRAINERS, TRAPS, ETC. ARE ACCESSIBLE.

FIXTURES & FITTINGS LEGEND

	TEE OUTLET - UP
	TEE OUTLET - DOWN
	CONNECTION - BOTTOM
	CONNECTION TOP
	ELBOW - TURNED UP
	ELBOW - TURNED DOWN
	PIPE CAP
	UNION
	BALL VALVE
	BALANCING VALVE
	CHECK VALVE
	BUTTERFLY VALVE
CO	CLEAN OUT
FCO	FLOOR CLEAN OUT
WCO	WALL CLEAN OUT
HB	HOSE BIBB
NFHB	NON FREEZE HOSE BIBB
YH	YARD HYDRANT
FD	FLOOR DRAIN
	POINT OF CONNECTION
	POINT OF REMOVAL

PIPING LEGEND

XX	PIPING
XX	PIPING BELOW GRADE
X	EXISTING PIPING
CW	COLD WATER
HW	HOT WATER
HWR	HOT WATER RECIRCULATING
SAN	SANITARY SEWER
V	VENT
	PLUMBING TO BE REMOVED

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PROJECT INFORMATION

Project Number: R24.17133.00
SCO ID#: 24-28797-01A
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Project Address: 208 W FRANKLIN ST, CHAPELL HILL, NC 27516

PROJECT ISSUE & REVISION SCHEDULE

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PROFESSIONAL STAMPS

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 53478 04/17/25 ENGINEER ROBERTO REYNOSO

SHEET INFORMATION

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Drawing Title: PLUMBING LEGEND, NOTES, & SYSTEM DIAGRAMS
Drawing Number: P000

4/15/2025 5:43:47 PM PROJECT FILES ON ACC

KEY NOTES

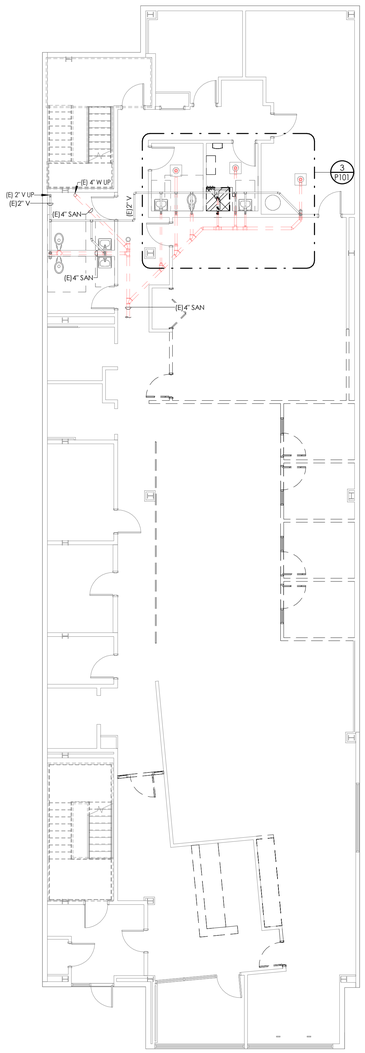
A. REMOVE EXISTING SHOWER STALL.

B. COORDINATE WITH GC TO DEMO EXISTING FLOOR AROUND SHOWER DRAIN TO EXPOSE DRAIN LINE TO SANITARY MAIN.

C. REMOVE SHOWER DRAIN LINE BACK TO MAIN SANITARY LINE.

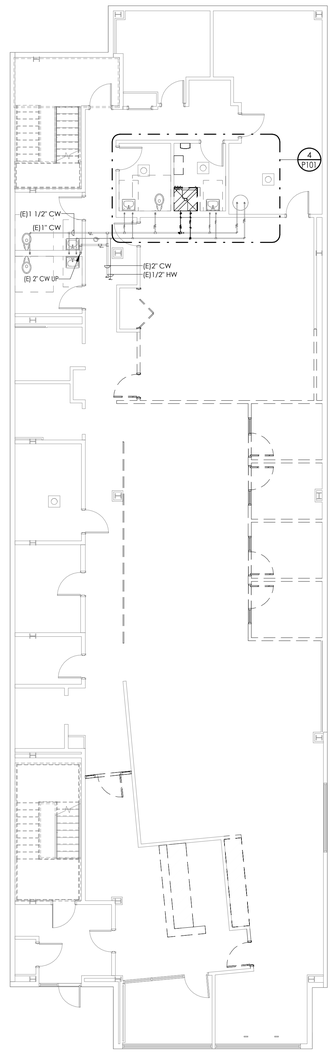
D. COORDINATE WITH GC THE EXTENT OF WALL AND CEILING DEMOLITION TO EXPOSE WATER, WASTE AND VENT LINE DEMOLITION WORK.

E. REMOVE EXISTING SHOWER WATER LINES BACK TO THE WATER LINES ABOVE THE CEILING AND CAP.



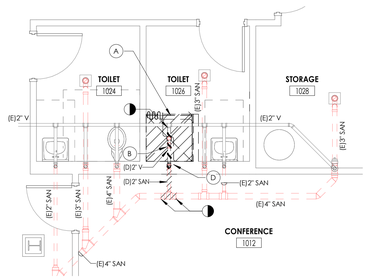
1 P101 FIRST FLOOR SANITARY DEMOLITION PLAN

1/8" = 1'-0"



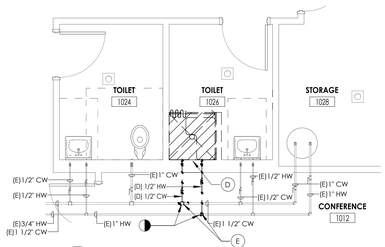
2 P101 FIRST FLOOR WATER DEMOLITION PLAN

1/8" = 1'-0"



3 P101 RESTROOM SANITARY DEMOLITION PLAN

1/4" = 1'-0"



4 P101 RESTROOM WATER DEMOLITION PLAN

1/4" = 1'-0"

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NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT
JOSEPH R. T. O. KEY
04/17/25
ENGINEERING

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-
P101

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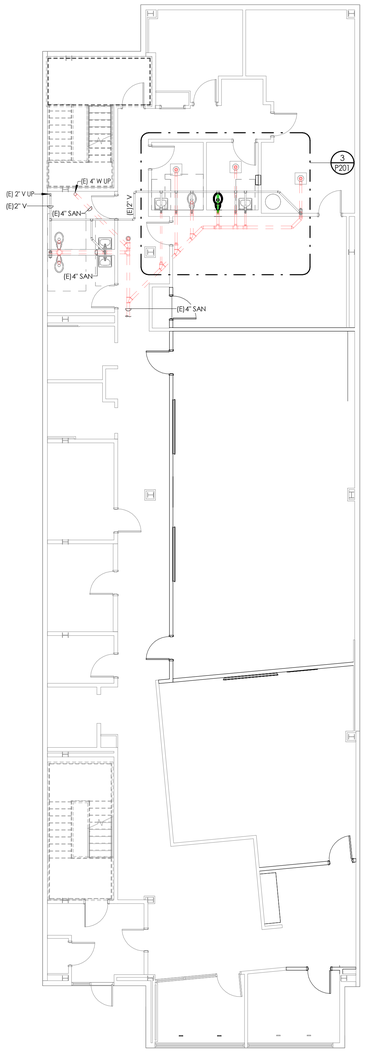
KEY NOTES

A. INSTALL NEW WASTE LINE FOR NEW WATER CLOSET. INSTALL STUB UP 12" FROM FACE OF WALL.

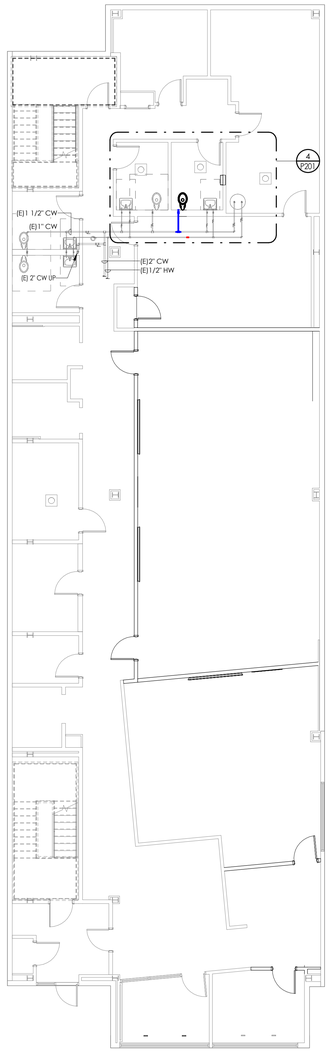
B. INSTALL NEW NEW VENT LINE AND CONNECT TO EXISTING VENT LINE ABOVE CEILING..

C. INSTALL NEW WATER CLOSET.

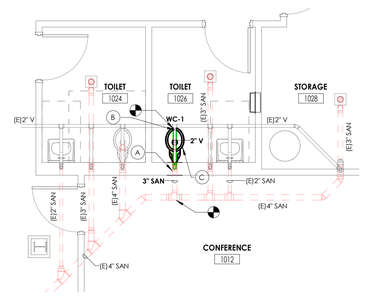
D. INSTALL NEW WATER LINES.



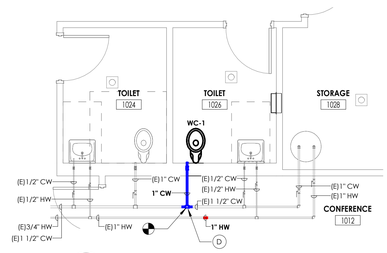
1 P201 **FIRST FLOOR SANITARY NEW WORK PLAN**
1/8" = 1'-0"



2 P201 **FIRST FLOOR WATER NEW WORK PLAN**
1/8" = 1'-0"



3 P201 **RESTROOM SANITARY NEW WORK PLAN**
1/4" = 1'-0"



4 P201 **RESTROOM WATER NEW WORK PLAN**
1/4" = 1'-0"

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THE UNIVERSITY of NORTH CAROLINA at CHAPEL HILL

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PROJECT ISSUE & REVISION SCHEDULE

#	Date	Description

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WIRING LEGEND:

NOTE: ALL RECEPTACLES TO BE TAMPER-RESISTANT

- SIMPLEX RECEPTACLE
- DUPLEX/QUADRUPLEX RECEPTACLE
- RECESSED FLOOR MOUNTED DUPLEX/QUADRUPLEX RECEPTACLE
- CEILING MOUNTED DUPLEX/QUADRUPLEX RECEPTACLE
- SPECIAL RECEPTACLE - NEMA IDENTIFICATION LISTED ON PLANS
  - C COUNTER HEIGHT OR 48" AFF
  - GFI GROUND FAULT CIRCUIT INTERRUPTER
  - TR TAMPER RESISTANT
  - USB (TYPE A/TYPE C) UNIVERSAL SERIAL BUS OUTLETS WITH DUPLEX RECEPTACLE
  - WP WEATHER PROOF "WHILE IN USE"
  - WR WEATHER RESISTANT
- CB CEILING BOX
- FB FLOOR BOX
- WB WALL BOX
- GFI PROVIDE BLANK-FACE GFI DEVICE ABOVE COUNTER TO FEED-THROUGH AND PROTECT UNDERCOUNTER OR OBSTRUCTED RECEPTACLE. LABEL GFI DEVICE WITH EQUIPMENT NAME (E.G., "I/C REFRIG"). LABEL RECEPTACLE AS GFI PROTECTED BY REMOTE DEVICE ABOVE COUNTER. GFI IS REQUIRED TO BE READILY ACCESSIBLE PER NEC.
- HD HAND DRYER POWER CONNECTION
- HARDWIRE CONNECTION
- JUNCTION BOX
- J DISCONNECT SWITCH
- DISCONNECT SWITCH, FUSED
  - * 60A AMP RATING
  - 3P POLES
  - 40AF FUSE SIZE
  - SN SOLID NEUTRAL
  - 0 NEMA STARTER SIZE
  - EXAMPLE: 60A/3P/45AF
- COMBINATION VARIABLE FREQUENCY DRIVE AND DISCONNECT
- VFD VARIABLE FREQUENCY DRIVE
- M MOTOR WITH DESIGNATOR
- EF-1 BRANCH CIRCUIT HOME RUN WITH PANEL NAME AND CIRCUIT NUMBER
- LPA-6 BRANCH CIRCUIT WIRING, PROVIDE QUANTITIES OF CONDUCTORS REQUIRED FOR CIRCUITING AND SWITCHING AS REQUIRED
- LIGHTING PLANS: POWER LEG ONLY (NO SWITCH LEG BETWEEN ROOMS)
  RISER DIAGRAMS: EXISTING CIRCUIT/RACEWAY TO REMAIN
  OTHER PLANS: CONDUIT BELOW SLAB OR GRADE

COMMUNICATIONS LEGEND:

UNLESS NOTED OTHERWISE ON DRAWINGS, FOR EACH COMMUNICATIONS OUTLET BELOW, PROVIDE TWO-GANG BOX WITH SINGLE-GANG MUDRING, WITH 1" CONDUIT WITH PULL CORD STUBBED 90° TO NEAREST CABLE TRAY ABOVE ACCESSIBLE DROP CEILING IN CORRIDOR. PROVIDE NYLON BUSHING ON CONDUIT END.

- TELEPHONE OUTLET
- DATA OUTLET
- COMBINATION TELEPHONE/DATA OUTLET
  - * W WALL MOUNTED
  - C COUNTER
- CEILING MOUNTED TELEPHONE/DATA DEVICE
- HDMI HDMI OUTLET
- TV CATV OUTLET - PROVIDE TYPE F CONNECTOR WITH RG6/4 CABLING TO CATV PANEL/RACK
- WAP WIRELESS ACCESS POINT
- S CEILING/WALL MOUNTED SPEAKER

SECURITY LEGEND:

UNLESS NOTED OTHERWISE ON DRAWINGS, FOR EACH SECURITY DEVICE BELOW, PROVIDE TWO-GANG BOX WITH SINGLE-GANG MUDRING, WITH 1" CONDUIT WITH PULL CORD STUBBED 90° TO NEAREST CABLE TRAY ABOVE ACCESSIBLE DROP CEILING IN CORRIDOR. PROVIDE NYLON BUSHING ON CONDUIT END.

- CR CARD READER
- KP KEYPAD
- EB ELECTRIC STRIKE OR HINGE - COORDINATE WITH DOOR HARDWARE
- LR LATCH RETRACTION
- DC DOOR CONTACT SWITCH
- ML MAGNETIC LOCK
- REX REQUEST TO EXIT
- AUTOMATIC DOOR PUSH PLATE, HANDICAP ACCESSIBLE
- WALL-MOUNTED CAMERA

PANEL LEGEND:

- EEEE ELECTRICAL PANEL, TYPE AS SCHEDULED
- ESCS XXX ELECTRICAL SYSTEMS CONTROL PANEL
  - FACP FIRE ALARM CONTROL PANEL
  - FAAP FIRE ALARM ANNUNCIATOR PANEL
  - NAC NOTIFICATION APPLIANCE CIRCUIT PANEL
  - ACP ACCESS CONTROL PANEL
  - SCP SECURITY CONTROL PANEL
  - BMS BUILDING MANAGEMENT SYSTEM
  - CBU CENTRAL BATTERY UNIT
- SPD SURGE PROTECTION DEVICE
- TS TIME SWITCH, 7-DAY, SPST

ABBREVIATIONS:

AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GROUND
BFG	BELOW FINISHED GROUND
BOD	BASIS OF DESIGN
CKT	CIRCUIT
EBJ	EQUIPMENT BONDING JUMPER
ETR	EXISTING TO REMAIN
FWE	FURNISHED WITH EQUIPMENT
GEC	GROUNDING ELECTRODE CONDUCTOR
MBJ	MAIN BONDING JUMPER
TYP	TYPICAL
UGE	UNDERGROUND SECONDARY SERVICE
UGG	UNDERGROUND GENERATOR CONDUITS
UGGC	UNDERGROUND GENERATOR CONTROL CONDUITS
UGP	UNDERGROUND PRIMARY SERVICE
WG	PROVIDE WIRE GUARD

NOTE:
SYMBOLS SHOWN ON THIS ELECTRICAL SYMBOLS LIST ARE FOR REFERENCE PURPOSES ONLY. ALL OF THESE SYMBOLS MAY NOT BE USED FOR THIS PROJECT.

LIGHT FIXTURE LEGEND:

NOTE: SEE LIGHTING FIXTURE SCHEDULE FOR LETTER DESIGNATION AND DESCRIPTION OF TYPES

- XX LIGHTING FIXTURE AS SCHEDULED
- XX EMERGENCY LIGHTING FIXTURE AS SCHEDULED
- EXIT SIGN (WHERE USED, ARROW INDICATES CHEVRON DIRECTION)
- EMERGENCY BATTERY PACK
- OS OCCUPANCY SENSOR, CEILING MTD - WATTSTOPPER DT-300 OR EQUAL WITH ALL POWER PACKS, ACCESSORIES, AND WIRING TO CONTROL ALL LIGHTS IN THE SPACE
- PC PHOTOCELL
- S SWITCH
- WALL DIMMER SWITCH
  - (NONE) SINGLE POLE TOGGLE SWITCH
  - 2 TWO-POLE TOGGLE SWITCH
  - 3 THREE-WAY TOGGLE SWITCH
  - 4 FOUR-WAY TOGGLE SWITCH
  - K KEYED SWITCH
  - O OCCUPANCY SENSOR WALL SWITCH
  - O3 OCCUPANCY SENSOR, THREE-WAY WALL SWITCH
  - T TIME SWITCH
  - V VACANCY SENSOR SWALL SWITCH
  - V3 VACANCY SENSOR, THREE-WAY WALL SWITCH
- ^{S} LOWER CASE LETTER INDICATES SWITCH LEG

FIRE/LIFE SAFETY LEGEND:

- F FIRE ALARM MANUAL PULL STATION, ADDRESSABLE
- FIRE ALARM SPEAKER AND STROBE COMBINATION - ADJACENT NUMBER DENOTES CANDELA RATING
- CLG FIRE ALARM SPEAKER AND STROBE COMBINATION CEILING MOUNTED - ADJACENT NUMBER DENOTES CANDELA RATING
- FIRE ALARM STROBE - ADJACENT NUMBER DENOTES CANDELA RATING
- FIRE ALARM STROBE CEILING MOUNTED - ADJACENT NUMBER DENOTES CANDELA RATING
- FIRE ALARM SPRINKLER BELL
- SMOKE DETECTOR, ADDRESSABLE
- HEAT DETECTOR, ADDRESSABLE
- DUCT DETECTOR, ADDRESSABLE
- DUCT DETECTOR FOR SMOKE DAMPER, ADDRESSABLE
  [AHU-19] HVAC EQUIPMENT NAME TAG ADJACENT TO DUCT DETECTOR INDICATES EQUIPMENT ASSOCIATED WITH THIS DETECTOR. REFER TO MECHANICAL FOR ASSOCIATED SMOKE CONTROL SEQUENCES OF OPERATION.
- SD SMOKE DAMPER
- RTS REMOTE TEST STATION FOR DUCT DETECTOR
- R FIRE ALARM SHUT DOWN RELAY
- AIM ADDRESSABLE INPUT MONITOR MODULE
- AOM ADDRESSABLE OUTPUT CONTROL MODULE
- CM ADDRESSABLE CARBON MONOXIDE DETECTOR
- VS TAMPER SWITCH
- WF FLOW SWITCH

GENERAL ELECTRICAL NOTES:

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE (NFPA 70), WITH THE NORTH CAROLINA STATE BUILDING CODE, AND WITH LOCAL CODES AND ORDINANCES.
2. ALL CONDUIT AND WIRING SHALL BE CONCEALED IN WALLS OR ABOVE CEILINGS UNLESS OTHERWISE NOTED OR APPROVED BY THE ARCHITECT/ENGINEER. ALL DEVICE OUTLET BOXES SHALL BE RECESSED UNLESS NOTED OR APPROVED BY THE ARCHITECT/ENGINEER. WHERE APPROVED OR NOTED, SURFACE METAL RACEWAY AND DEVICE SHALL BE USED IN-LIEU OF CONDUIT AND CONCEALED BOXES AT NO EXTRA COST TO THE OWNER.
3. ALL CONDUIT ROUTES SHOWN ARE APPROXIMATE ONLY. CONTRACTOR SHALL FIELD VERIFY FINAL ROUTE.
4. CONDUIT RUNS SHOWN ARE SCHEMATIC AND DO NOT INDICATE THE NECESSARY FITTINGS AND JUNCTION BOXES THAT ARE INCLUDED IN THE SCOPE OF THE WORK.
5. ALL METAL RACEWAYS, INCLUDING CONDUIT, WIRE TROUGHS, WIREMOLD, ETC., SHALL BE GROUNDED. ALL CONNECTIONS IN METAL RACEWAYS SHALL BE COMPLETED IN SUCH A MANNER AS TO MAINTAIN A CONTINUOUS PATH TO GROUND THROUGHOUT THE ENTIRE LENGTH OF THE RACEWAY.
6. UNLESS NOTED OTHERWISE ON THE DRAWINGS, EACH BRANCH CIRCUIT SHALL BE 2#12, 1#12G; 3/4"CONDUIT. COMBINED NEUTRALS ARE NOT PERMITTED. PROVIDE #10 AWG FOR 120V BRANCH CIRCUITS LONGER THAN 100 FEET; PROVIDE #8 AWG FOR 120V BRANCH CIRCUITS LONGER THAN 150 FEET; INCREASE CONDUIT SIZE AS REQUIRED.

SPECIFICATIONS

DIV. 26 - ELECTRICAL

1. THE STATE CONSTRUCTION OFFICE (SCO) IS THE AUTHORITY HAVING JURISDICTION (AHJ) FOR THE ELECTRICAL INSPECTIONS ON THIS PROJECT. IT IS THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO NOTIFY THE ELECTRICAL INSPECTORS AT SCO TO SCHEDULE THE REQUIRED ROUGH-IN, ABOVE CEILING, AND FINAL INSPECTIONS, AS APPLICABLE. NO WORK SHALL BE COVERED UP UNTIL AFTER THE INSPECTIONS HAVE BEEN COMPLETED AND APPROVED BY AN AUTHORIZED SCO INSPECTOR. SCHEDULE ELECTRICAL INSPECTIONS WITH THE SCO ELECTRICAL INSPECTOR FOR MONDAY THROUGH FRIDAY.

2. WORK UNDER DIVISIONS 26, 27, AND 28 SHALL INCLUDE PROVIDING ALL MATERIALS, LABOR EQUIPMENT, AND SERVICES NECESSARY FOR THE PROPER COMPLETION OF ALL ELECTRICAL WORK AS SHOWN ON THE ENTIRE SET OF DRAWINGS AND SPECIFICATIONS. THIS SHALL ALSO INCLUDE, BUT NOT BE LIMITED TO, THE FURNISHING, HANDLING, INSTALLATION, AND FINAL CONNECTION OF ALL REQUIRED COMPONENTS.

3. DRAWINGS SHALL NOT BE SCALED. REFER TO ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR BUILDING CONSTRUCTION AND DIMENSIONS AND TO FINISH SCHEDULES ON ARCHITECTURAL DRAWINGS FOR MATERIAL, FINISH, AND CONSTRUCTION METHODS OF WALLS, FLOOR, AND CEILING TO ENSURE PROPER ROUGH-IN AND INSTALLATION OF WORK. VERIFY DIMENSIONS IN FIELD.

4. THE ENTIRE SET (ARCHITECTURAL, CIVIL, MECHANICAL, ETC.) OF SPECIFICATIONS AND DRAWINGS ARE COMPLIMENTARY AND ARE TO BE TAKEN TOGETHER FOR A COMPLETE INTERPRETATION OF THE WORK. UNLESS OTHERWISE MODIFIED BY SPECIFIC NOTATION, IT SHALL BE UNDERSTOOD THAT THE INDICATION AND/OR DESCRIPTION OF ANY ITEM, IN THE DRAWINGS AND/OR SPECIFICATIONS, CARRIES WITH IT THE INSTRUCTION TO FURNISH AND INSTALL THE ITEM AND RELATED ACCESSORIES, WHETHER OR NOT THIS INSTRUCTION IS EXPLICITLY STATED AS PART OF THE INDICATION OR DESCRIPTION. NO EXCLUSIONS FROM OR LIMITATIONS IN THE SYMBOLS, DIAGRAMS, AND LANGUAGE USED IN THE DRAWINGS OR SPECIFICATIONS SHALL BE INTERPRETED AS MEANING THAT THE APPURTENANCES OR ACCESSORIES NECESSARY TO COMPLETE ANY REQUIRED SYSTEM, ITEM, OR WORK ARE EXCLUDED OR OMITTED.

5. THE WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE DIAGRAMMATIC INTENT EXPRESSED ON THE DRAWINGS. DETAILS ARE INTENDED FOR THE PURPOSE OF ESTABLISHING GENERAL FEASIBILITY. THEY DO NOT SUPERSEDE FIELD COORDINATION FOR THE INTENDED WORK. THE USE OF WORDS IN THE SINGULAR SHALL NOT BE CONSIDERED AS LIMITED WHERE OTHER INDICATIONS DENOTE THAT MORE THAN ONE ITEM IS REFERRED TO. THE USE OF DESCRIPTIONS OF ONE AREA SHALL NOT BE CONSIDERED AS LIMITING THE DESCRIPTION TO THAT AREA. WHERE DRAWINGS, CODES, AND/OR SPECIFICATIONS CONFLICT, THE MORE STRINGENT SHALL GOVERN. DISCREPANCIES OR OMISSIONS SHALL BE REPORTED TO THE ENGINEER FOR CLARIFICATION PRIOR TO BID. UNLESS SPECIFICALLY CLARIFIED BY ADDENDUM, THE MORE STRINGENT ITEM AND/OR GREATER NUMBER SHALL BE INCLUDED IN THE BID.

6. A LICENSED CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS, INSPECTIONS. THE OWNER SHALL PAY ALL FEES. DELIVER ALL CERTIFICATES OF INSPECTION TO THE OWNER.

7. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO BID AND SHALL VERIFY EVERY ASPECT OF THE PROPOSED WORK AND EXISTING FIELD CONDITIONS WHICH MIGHT AFFECT THE COMPLETION OF THE ELECTRICAL WORK. FAILURE OR NEGLECT TO THOROUGHLY INVESTIGATE THE CONTRACT DOCUMENTS AND/OR THE SITE SHALL NOT BE SUFFICIENT CAUSE FOR ADDITIONAL COMPENSATION TO THE CONTRACTOR.

8. THE DRAWINGS ARE DIAGRAMMATIC IN NATURE AND ARE NOT INTENDED TO INCLUDE EVERY DETAIL OF CONSTRUCTION. THE CONTRACTOR SHALL COORDINATE ACTUAL INSTALLATION WITH THE WORK OF OTHER TRADES AND EXISTING SITE CONDITIONS. FINISH DIMENSIONS SHALL BE TAKEN IN THE FIELD IN LIEU OF SCALING FROM THE PLANS.

9. ALL WORK SHALL MEET OR EXCEED LOCAL CODES, AND LATEST EDITION OF THE NATIONAL ELECTRICAL CODE (NEC, NFPA 70). WHERE PROVISIONS HEREIN EXCEED CODE REQUIREMENTS, THE CONTRACTOR SHALL PROVIDE THE WORK AS SPECIFIED. ALL MATERIALS USED IN THIS PROJECT SHALL BE NEW AND UL LISTED.

10. ALL BRANCH CIRCUIT AND FEEDER CONDUIT SHALL BE GRC WITH INSULATING BUSHINGS AND LOCKNUTS. BELOW SLAB/GRADE MAY BE SCHEDULE 40 PVC, WHERE RUN AT LEAST 24" BELOW GRADE AND USING GRC ELBOWS AND GRC STUB-UPS. CONDUIT SHALL NOT BE RUN IN BUILDING SLAB UNLESS OTHERWISE NOTED. BRANCH CIRCUIT AND FEEDER CONDUIT INDOORS, ABOVE THE SLAB, MAY BE ELECTRICAL METALLIC TUBING (EMT), WHERE NOT SUBJECT TO PHYSICAL DAMAGE. EMT SHALL RUN CONCEALED IN FINISHED SPACES. MINIMUM CONDUIT SIZE 1/2". USE GRC CONDUIT AND SEAL-OFFS IN CLASSIFIED AREAS. SEAL CONDUITS CROSSING THERMAL BARRIERS TO PREVENT MOISTURE MIGRATION. ALL STEEL CONDUITS EXITING EARTH OR CONCRETE SHALL BE TAPED OR PAINTED WITH BITUMASTIC MATERIALS WITHIN 2' OF EXITANCE TO PREVENT CORROSION. USE EXPANSION FITTINGS WHEN CROSSING EXPANSION JOINTS. ALL CONDUITS SHALL BE LABELED WITHIN 12' OF BOXES OR PANEL TO IDENTIFY THE CIRCUITS WITHIN. USE STAMPED-STEEL COMPRESSION FITTINGS WITH EMT. ALL TOOLS AND CONNECTORS SHALL BE LISTED FOR USE WITH THE TYPE OF CONDUCTOR AND TERMINATION INSTALLED.

11. ALL CONDUIT AND BOXES SHALL BE SECURED TO, AND SUPPORTED FROM, THE BUILDING STRUCTURE. ALL EQUIPMENT MOUNTED TO MASONRY WALLS SHALL BE SUPPORTED BY CHANNEL TO PREVENT CORROSION. RUN CONDUITS PARALLEL AND/OR PERPENDICULAR TO BUILDING LINES. CONDUIT PENETRATIONS SHALL BE PERPENDICULAR TO THE SURFACE.

12. ALL FINAL CONNECTIONS BETWEEN MECHANICAL AND ELECTRICAL EQUIPMENT SHALL BE MADE USING AN 18" TO 36" SECTION OF FLEXIBLE CONDUIT, LOCATED FOR INDOORS, LIQUID-TIGHT FOR OUTDOORS. THE PURPOSE IS FOR VIBRATION AND NOISE ISOLATION, AND TO HELP FACILITATE EQUIPMENT REPAIRS WHEN NECESSARY. USE INSULATED THROAT, MACHINED STEEL TO 1" SIZE AND MALLEABLE IRON ON LARGER SIZES.

13. EVERY CONDUIT/CABLE ON THIS PROJECT SHALL CONTAIN A GREEN INSULATED COPPER GROUND WIRE SIZED PER THE NEC, UNLESS SHOWN OTHERWISE. MINIMUM SIZE GROUND #12. THIS INCLUDES LIGHTING FIXTURE WHIPS.

14. ALL WIRE SHALL BE COPPER, TYPE THHN/THWN, RATED 600 VOLTS, SIZE #12 UNLESS SHOWN OTHERWISE. ALL WIRE #8 AND LARGER SHALL BE STRANDED. WIRE SHALL BE RUN IN CONDUIT. ALL FIRE ALARM WIRE SHALL BE IN CONDUIT. UNLESS DERATING FACTORS ARE APPLIED AND WIRING IS SIZED ACCORDINGLY, MAX (4) CONDUCTORS PLUS GROUND IN ANY ONE CONDUIT. THE THREE PHASE CONDUCTORS SHALL BE CONNECTED TO CONSECUTIVE ODD OR CONSECUTIVE EVEN-NUMBERED CIRCUIT BREAKERS. THE NEUTRAL SHALL BE SIZED ONE SIZE LARGER IN MULTIWIRE BRANCH CIRCUITING. CONTRACTOR SHALL OBSERVE BEND RADIUS AND SUPPORT REQUIREMENTS.

15. WIRING DEVICES SHALL BE OF TYPE COMMERCIAL SPEC GRADE, UNLESS OTHERWISE NOTED ON DRAWINGS, AND MATCH IN COLOR AND MANUFACTURER. GROUND POLE SHALL BE UP WHEN USING STEEL PLATES. BRASS MOUNTING STRAPS. SEPARATE ELECTRICAL OUTLETS ON OPPOSITE SIDES OF 1- OR 2-HOUR RATED WALLS A MINIMUM OF 6" HORIZONTALLY. PROVIDE GFCI RECEPTACLES IN UNIT BATHROOMS AND WITHIN 6' OF SINKS.

16. ALL PANELS, DISCONNECT SWITCHES, CONTACTORS, STARTERS, TIMERS, SHALL BE IDENTIFIED WITH ENGRAVED, LAMINATED PLASTIC LABELS. EMBOSSED TAPE LABELS ARE NOT ACCEPTABLE. ALL LABELS SHALL HAVE FOUR (4) LINES OF 3/32" HIGH WHITE LETTERS ON COLORED FIELD AND SHALL INDICATE THE DEVICE NAME OR FUNCTION ON THE FIRST LINE, VOLTAGE AND PHASING ON THE SECOND LINE, SOURCE ON THE THIRD LINE, AND DATE-INSTALLED ON THE FOURTH LINE. EXAMPLES:

PANEL H4 DISC ACR #1
277/480V,3Ø,4W/480V,3Ø,3W
FED FROM MSB2-3 FED FROM L3-32,34,36
INSTALLED 3/7/95 INSTALLED 10/30/88

THE LABELS SHALL BE SIZED APPROPRIATELY FOR THE REQUIRED LETTERING. SECURE LABELS TO FRONT COVER USING SCREWS OR RTV. JUNCTION BOX COVERS SHALL BE LABELED WITH PERMANENT MARKER. PROVIDE ACCESS DOORS WHERE REQUIRED TO ALLOW ACCESS TO NON-ACCESSIBLE LOCATIONS.

18. PROVIDE FIREPROOFING SEALS FOR ALL PENETRATIONS IN RATED PARTITIONS. SEAL SHALL BE AS DESCRIBED IN THE UL DIRECTORY FOR TYPE OF PENETRATION AND MATERIALS USED.

19. CLEAN ELECTRICAL DEBRIS AND LITTER, GENERATED BY THE EC AND ASSOCIATED SUB-CONTRACTORS, FROM THE JOB DAILY. TURN OFF AND LOCK THE TEMPORARY SERVICE AT THE END OF THE DAY. IF OTHERS WILL BE WORKING AFTER THE ELECTRICIAN LEAVES THE JOB, BE RESPONSIBLE FOR SEEING THAT THE TEMPORARY POWER IS "MADE SAFE" WHEN THE ELECTRICIAN IS NOT ON THE JOBSITE. ALL 120 VOLT, 20 AMP CIRCUITS SHALL BE GFI PROTECTED. DO NOT LEAVE ENERGIZED PANELS OPEN WHEN UNATTENDED. TURN POWER OFF TO SUCH PANELS WHEN NOT NEEDED. COVER PANELS WITH CARDBOARD OR PLYWOOD BARRIERS BRIGHTLY MARKED: "DANGER! HIGH VOLTAGE - HOT PANEL - KEEP OUT", OR SIMILAR WORDING OF THE DANGER, TO KEEP UNAUTHORIZED PERSONNEL SAFELY AWAY FROM THE HAZARD. DISCARD ALL EXTENSION CORDS THAT SHOW VISIBLE SIGNS OF WEAR. REPLACE WORN CORDS WITH NEW CORDS.

20. UNLESS OTHERWISE SPECIFIED, ALL MECHANICAL, ELECTRICAL AND PLUMBING EQUIPMENT, PIPE, AND DUCT SHALL BE RESTRAINED TO RESIST SEISMIC FORCES EXCEPT THOSE ITEMS SPECIFICALLY EXEMPTED BY CODE. RESTRAINT DEVICES SHALL BE DESIGNED AND SELECTED TO MEET THE SEISMIC REQUIREMENTS AS DEFINED IN THE LATEST ISSUE OF THE IBC OR LOCAL JURISDICTION BUILDING CODE.

21. SUBMIT SHOP DRAWINGS AND PRODUCT DATA FOR EQUIPMENT AND/OR SYSTEMS AS INDICATED UNDER EACH SECTION OF DIVISIONS 26, 27, AND 28. SHOP DRAWINGS SHALL INCLUDE SUFFICIENT INFORMATION TO INDICATE COMPLETE COMPLIANCE WITH SPECIFICATIONS. PROVIDE SHOP DRAWINGS TO THE ARCHITECT/ENGINEER FOR REVIEW, AMENDING, AND APPROVAL ON THE FOLLOWING ITEMS, WHENEVER THESE ITEMS ARE IN THE PROJECT:

1. PANELS AND CIRCUIT BREAKERS
2. CONTACTORS AND STARTERS
3. DISCONNECT SWITCHES
4. FUSES
5. LIGHTING FIXTURES, LAMPS, AND BALLASTS,
6. LIQUIDTIGHT CONDUIT FITTINGS.
7. EMT CONDUIT FITTINGS.
8. BONDING BUSHINGS.
9. CONNECTORS AND LUGS.
10. LIGHT SWITCHES, RECEPTACLES, AND PLATES.
11. FIRE ALARM SYSTEM DEVICES, CABLING, CACULATIONS, AND TEST REPORTS.
12. SCHEDULE OF ENGRAVED LABELS FOR EQUIPMENT.

AT THE TIME OF EACH SUBMISSION, ANY DEVIATIONS FROM THE CONTRACT DOCUMENTS SHALL BE CALLED TO THE ATTENTION OF THE ARCHITECT-ENGINEER IN WRITING, AND SHALL BE PLAINLY MARKED ON THE SHOP DRAWINGS AND PRODUCT DATA.

DIV. 27 - COMMUNICATIONS

1. EMT CONDUIT SHALL BE USED AS SLEEVES IN THE FOLLOWING AREAS: INTERIOR PARTITIONS, ABOVE SUSPENDED CEILINGS, ABOVE SOLID CEILINGS WITH LIMITED ACCESS, AND FLOOR PENETRATIONS. ALL CONDUIT SLEEVES LARGER THAN 2" SHALL BE FITTED WITH "SCREW-ON" TYPE PLASTIC BUSHINGS (INSTALLED ON AN EMT CONNECTOR WHEN EMT IS USED). PUSH-ON TYPE BUSHINGS SHALL BE PERMITTED ON CONDUITS 2" OR SMALLER. SLEEVES THAT PENETRATE CEILINGS SHALL EXTEND TO 10' AFF SO THEY CAN BE EASILY ACCESSED VIA LADDER. SLEEVES THAT REACH INTO TELECOMMUNICATIONS ROOMS SHALL EXTEND 2" INTO THE ROOM. ON THE OUTSIDE OF THE TELECOMMUNICATIONS ROOM, THE SLEEVE SHALL EXTEND TO 4" FROM THE EDGE OF THE CABLE TRAY.

2. ALL SEALS SHALL UTILIZE UL APPROVED FIRESTOPPING ASSEMBLIES THAT ARE APPROVED FOR THAT PENETRATION TYPE. COMMUNICATIONS PATHWAYS SHALL BE FIRESTOPPED ACCORDING TO ALL STATE AND LOCAL CODE REQUIREMENTS AND PER THE NEC. NON-CEMENTITIOUS FIRESTOPPING SHALL BE USED TO SEAL THE INTERIOR OF SLEEVES AND SHALL BE OF A TYPE THAT WILL REMAIN PLIABLE FOR EASE OF REMOVAL IN FUTURE CABLE INSTALLATIONS.

3. COMMUNICATIONS CABLING HANGERS AND SUPPORTS ARE ONLY TO BE USED IN ISOLATED INSTANCES SUCH AS MINOR RENOVATIONS OR MOVES, ADDS, AND CHANGES WHERE THERE ARE NO CABLE TRAYS AND CONDUIT RACEWAYS AVAILABLE TO SUPPORT CABLE INSTALLATIONS. USE OF CABLE HANGERS AND J-HOOKS IS ONLY PERMITTED WITH APPROVAL BY COMMTECH ENGINEERING ON A CASE-BY-CASE BASIS. WHEN PERMITTED, CABLING SHALL BE SUPPORTED WITH HANGERS AND SUPPORTS SUCH AS OPEN-TOP J-HOOKS, SECURELY FASTENED TO BUILDING STRUCTURE. TO ELIMINATE HARMONICS AND CROSSTALK, J-HOOK SPACING SHOULD BE VARIED AND RANDOM BETWEEN 4'-5' CENTERS, SPACING BETWEEN J-HOOKS SHALL NOT EXCEED 5 FEET.

4. UNLESS OTHERWISE NOTED, ALL CABLING SHALL BE HOUSED IN CONDUIT/BACKBOX SYSTEMS, AS OPPOSED TO SURFACE MOUNTED OR HUNG CABLING. BENDS BETWEEN PULL POINTS SHALL BE A MAXIMUM OF 180 DEGREES. PULL BOXES SHALL BE UTILIZED BETWEEN BENDS EXCEEDING 180 DEGREES. THE USE OF LB-TYPE OR SIMILAR CONDUITS IS NOT PERMISSIBLE. EACH TELECOMMUNICATIONS OUTLET SHALL HAVE A 1" MINIMUM EMT CONDUIT ROUTED FROM THE RECESSED OUTLET BOX THAT EXTENDS TO WITHIN 4" OF A CABLE TRAY OR HOME RUN BACK TO THE NEAREST TELECOMMUNICATIONS ROOM.

5. UNLESS OTHERWISE SPECIFIED, PROFESSIONAL, NON-ERASABLE, ADHESIVE, MACHINE-PRINTED LABELS SHALL BE USED AND BEAR THE APPROVED CABLE IDENTIFICATION METHOD. LABELS FOR STAINLESS STEEL FACEPLATES SHALL BE CLEAR ADHESIVE TYPE WITH BLACK LETTERING. BUILDING IDs AND ROOM NUMBERS ARE ASSIGNED BY UNC FACILITIES. CONTRACTOR SHALL VERIFY WITH THE UNC PROJECT MANAGER TO ENSURE THE PROPER BUILDING ID AND ROOM NUMBERS ARE USED WHEN LABELING COMMUNICATIONS SYSTEMS COMPONENTS.

6. ALL CABLE SHALL BE LABELED BOTH AT THE OUTLET AND THE PATCH PANEL WITH AN ALPHA/NUMERIC IDENTIFICATION CODE USING THE FOLLOWING FORMAT: (T-1) INDICATES TELEPHONE ONE. (T-2) INDICATES TELEPHONE TWO. (D-1) INDICATES DATA ONE. (D-2) INDICATES DATA TWO. (R-1) INDICATES RISER ONE. (R-2) INDICATES RISER TWO, ETC. IN THE EVENT A FLOOR IS SERVED BY MORE THAN ONE TELECOM ROOM DUE TO CABLE DISTANCES EXCEEDING 90 METERS OR OTHER PHYSICAL RESTRAINTS, EACH COMMUNICATIONS OUTLET SHALL BE LABELED WITH SERVING TELECOM ROOM NUMBER. EACH HORIZONTAL CABLE SHALL BE LABELED WITHIN 6" OF CABLE TERMINATION.

7. FOR EACH PATCH PANEL AFFECTED IN THIS RENOVATION, PROVIDE AN UPDATED CABLE DESTINATION CHART THAT SHOWS THE ROOM NUMBER DESTINATION OF EACH CABLE LEAVING THE TELECOM ROOM. THE CABLE DESTINATION CHART SHALL BE PRINTED ON 8.5" x 11" PAPER, PLACED IN A CLEAR, PLASTIC SLEEVE, AND HUNG FROM THE PRIMARY RACK HOUSING PATCH PANELS. 48-PORT CATEGORY 6A DATA PATCH PANELS SHALL BE LABELED CONSECUTIVELY BEGINNING WITH PORT 1 THROUGH 48. SUBSEQUENT PATCH PANEL PORTS SHALL BE LABELED 49-96, 97-144, ETC.

8. ALL COPPER DATA CABLING SHALL BE PLENUM RATED, CATEGORY 6A UNSHIELDED TWISTED PAIR (UTP), WHITE IN COLOR. SPLICING OF COPPER UTP CABLES IS NOT PERMITTED. FOR EACH DATA FACEPLATE, CATEGORY 6A DATA CABLE SHALL BE TERMINATED IN A CATEGORY 6A JACK. JACKS SHALL BE WIRED AS PER TIA-568-C.0 USING T-568B PINOUT. DATA JACKS SHALL BE SECURED IN FACEPLATE IN TOP AND MIDDLE POSITION ON RIGHT SIDE OF SIX-POSITION FACEPLATE. ALL FACEPLATES AND ASSOCIATED TERMINATION HARDWARE SHALL BE INSTALLED IN COMPLIANCE WITH TIA-568-C SERIES STANDARDS.

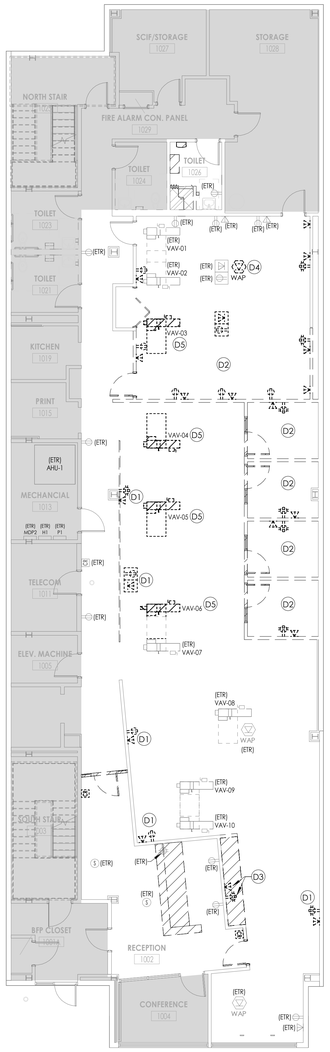
9. PULL CABLES IN ACCORDANCE WITH CABLE MANUFACTURER'S RECOMMENDATIONS AND NFPA-70. ALL CABLING SHALL BE INSTALLED IN COMPLIANCE WITH THE LATEST EDITION OF TIA-568 AND RELATED STANDARDS. PULLING LUBRICANT IS PERMITTED TO EASE PULLING TENSION. LUBRICANT SHALL BE OF TYPE THAT IS NON-INJURIOUS TO CABLE JACKET AND OTHER MATERIALS USED. LUBRICANT SHALL NOT HARDEN OR BECOME ADHESIVE WITH AGE. PULL STRING (NYLON: 1/8" MINIMUM) SHALL BE INSTALLED WITH CABLE INSTALLED IN ALL CONDUITS AND INNERDUCTS. PULL STRINGS SHALL BE TAGGED IN TELECOM ROOM AND AT EACH CORRESPONDING OUTLET TO IDENTIFY WHERE THE STRING TERMINATES. REPAIR DAMAGE CAUSED BY INSTALLATION OF CABLE, RACEWAY, OR OTHER HARDWARE. REPAIRS SHALL MATCH PREEXISTING COLOR AND FINISH OF WALLS, FLOORS, AND CEILINGS. REPLACE ANY CONTRACTOR-DAMAGED CEILING TILES TO MATCH COLOR, SIZE, STYLE, AND TEXTURE.

10. DEMOLITION OF ANY NETWORK CABLING OR OTHER NETWORK COMPONENTS MAY BE PERFORMED AS GENERAL LABOR ACTIVITY ONLY IF FIRST CAREFULLY COORDINATED WITH ITS COMMTECH ENGINEERING AND ONLY AFTER NOTIFICATION FROM ITS COMMTECH ENGINEERING THAT ELEMENTS TO BE REMOVED HAVE BEEN DECOMMISSIONED AND INSTRUCTIONS FOR SALVING/PRESERVATION HAVE BEEN COMMUNICATED. DEMOLITION OF NETWORK CABLING AND COMPONENTS THAT ARE OPERATIONAL MAY NOT BE PERFORMED AS GENERAL LABOR ACTIVITY, AND WORKERS SHALL NOT BE PERMITTED TO ACCESS OPERATIONAL TELECOMMUNICATIONS ROOMS. WHERE DEMOLITION IS TO OCCUR IN AN ACTIVE NETWORKING ENVIRONMENT, IT MAY BE PERFORMED BY QUALIFIED DATA COMMUNICATIONS TECHNICANS IF FIRST CAREFULLY COORDINATED WITH ITS COMMTECH ENGINEERING.

DIV. 28 - FIRE DETECTION AND ALARM

1. THE EXISTING FIRE ALARM IS SIMPLEX 4100ES. FIRE ALARM IS ADDRESSABLE TYPE WITH 24vdc OPERATING VOLTAGE. EVACUATION SIGNAL SHALL BE THE ANSI S3.41 THREE-PULSE, TEMPORAL PATTERN. PROVIDE TRANSIENT PROTECTION ON AC INPUTS WITH "FEED-THROUGH" TYPE SPD. INCLUDE A 5-10 TURN COIL IN THE BRANCH CIRCUIT CONDUCTOR JUST DOWNSTREAM OF THE SUPPRESSOR CONNECTION. PROVIDE "P" TYPE FILTER ON ALL DC CIRCUITS EXTENDING OUTSIDE OF THE BUILDING, AT THE PANEL AND AT THE POINT OF EXITANCE FROM THE BUILDING.

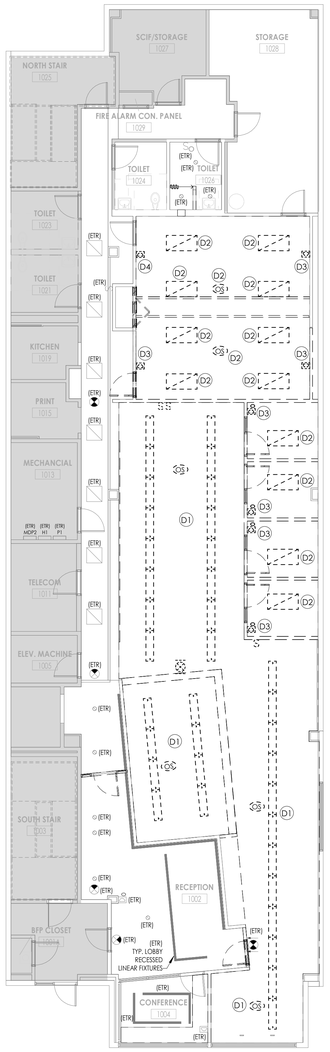
2. NAC CIRCUIT SHALL BE CLASS B. VOLTAGE DROP SHALL NOT EXCEED 14%. NAC MODULE



1 E101 **FIRST FLOOR ELECTRICAL DEMOLITION PLAN - POWER/SYSTEMS**
1/8" = 1'-0"

DX **DEMOLITION PLAN NOTES (POWER/SYSTEMS):**

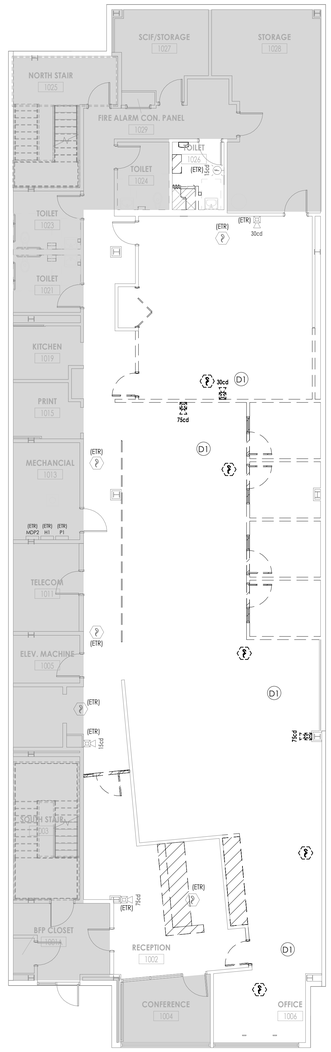
1. DEMOLISH EXISTING POWER/DATA FEED FOR EXISTING FURNITURE SYSTEMS. MAINTAIN CONTINUITY FOR DEVICES REMAINING ON THE CIRCUIT.
2. DEMOLISH EXISTING RECEPTACLES AND DATA/TEL JACKS IN THIS AREA, UNLESS NOTED AS "ETR". MAINTAIN CONTINUITY FOR DEVICES REMAINING ON THE CIRCUIT.
3. DEMOLISH EXISTING RECEPTACLE AND DATA/TEL JACK. MAINTAIN CONTINUITY FOR DEVICES REMAINING ON THE CIRCUIT.
4. DISCONNECT EXISTING WIRELESS ACCESS POINT (WAP). PROTECT AND STORE DEVICE FOR REUSE IN NEW CEILING.
5. DEMOLISH EXISTING VAV UNIT AND ASSOCIATED DISCONNECT SWITCH. REMOVE CIRCUIT AND PATHWAYS BACK TO SOURCE, MAINTAINING OTHER UNITS ON THE CIRCUIT, IF APPLICABLE.



2 E101 **FIRST FLOOR ELECTRICAL DEMOLITION RCP - LIGHTING**
1/8" = 1'-0"

DX **DEMOLITION PLAN NOTES (LIGHTING):**

1. DEMOLISH EXISTING LIGHT FIXTURES AND ANY ASSOCIATED LIGHT SWITCHES IN THIS AREA. RE-USE EXISTING CIRCUITS/PATHWAYS FOR NEW FIXTURES/DEVICES, IF POSSIBLE.
2. DISCONNECT AND REMOVE EXISTING LIGHT FIXTURES AND ASSOCIATED OCCUPANCY SENSORS. PROTECT AND STORE DEVICES FOR REUSE.
3. DEMOLISH EXISTING LIGHT SWITCH. REMOVE WIRING BACK TO SOURCE.
4. DEMOLISH EXISTING LIGHT SWITCH. MAINTAIN CIRCUITRY FOR CONNECTION TO REPLACEMENT SWITCH.



3 E101 **FIRST FLOOR ELECTRICAL DEMOLITION PLAN - FIRE ALARM DEVICES**
1/8" = 1'-0"

DX **DEMOLITION PLAN NOTES (FIRE ALARM DEVICES):**

1. UNLESS LABELED AS (ETR), DEMOLISH ALL FIRE ALARM NOTIFICATION AND INITIATION DEVICES IN THIS AREA. MAINTAIN CIRCUIT AND OUTLETS FOR REPLACEMENT DEVICES. REPROGRAM EXISTING FIRE ALARM CONTROL PANEL AS REQUIRED TO ACCOUNT FOR ANY DEMOLISHED/NEW DEVICES.

GENERAL NOTES - DEMOLITION:

A. ITEMS TO BE REMOVED ARE INDICATED BY DASHED LINETYPE.

B. "ETR" DENOTES EXISTING TO REMAIN.

C. FOR ALL EXISTING FIXTURES, DEVICES, ETC. INDICATED TO REMAIN, FIELD VERIFY THE EXISTING CIRCUIT, AND PROVIDE NEW LABEL ON DEVICE PLATE WITH CORRECT PANEL/CIRCUIT PER SPECIFICATIONS.

D. DRAWINGS INDICATE SPECIFIC ITEMS TO BE REMOVED AND/OR RELOCATED IN ORDER TO INDICATE GENERAL SCOPE. ADDITIONAL ITEMS NOT INDICATED, BUT NECESSARY FOR PROJECT RENOVATIONS, SHALL BE REMOVED, RELOCATED AND/OR REROUTED. THE CONTRACTOR SHALL ASSUME WITHIN THE BASE BID A NOMINAL AMOUNT OF BRANCH CIRCUITS, FIXTURES, DEVICES, AND SYSTEMS WIRING WITHIN WALLS OR OPENINGS BEING REMOVED OR RELOCATED AS REQUIRED TO ACCOMMODATE THE NEW CONSTRUCTION.

E. WHERE DEVICES, FIXTURES, ETC. ARE INDICATED TO BE REMOVED, THEY AND THEIR RELATED WIRING/CONDUIT SHALL BE REMOVED BACK TO THE SOURCE PANELBOARD UNLESS OTHERWISE NOTED. ON CIRCUITS WHERE OTHER DEVICES, FIXTURES, ETC. ARE FOUND THAT MUST REMAIN, MAINTAIN CIRCUIT CONTINUITY BY PROVIDING ADDITIONAL WIRING, TO FEED THROUGH TO THESE REMAINING ITEMS. RELOCATE ANY CIRCUITS THAT REMAIN, TO AVOID CONFLICT WITH NEW CONSTRUCTION AS REQUIRED. PROPERLY TERMINATE ALL WIRING.

F. THE CONTRACTOR SHALL REMOVE THE EXISTING ELECTRIC IN AREAS OF NEW RENOVATIONS TO ACCOMMODATE NEW CONSTRUCTION. REROUTING OF EXISTING MAY BE REQUIRED AT NEW OPENINGS IN EXISTING CONSTRUCTION OR INTERFERENCE WITH OTHER NEW WORK AS NOTED IN THE FOLLOWING NOTES.

G. COORDINATE DEMOLITION OF EQUIPMENT, DEVICES, ETC., WITH OTHER DISCIPLINES AS APPLICABLE. REFER TO ARCHITECTURAL DEMOLITION DRAWINGS AND NOTES FOR COORDINATION.

H. DRAWINGS ARE GRAPHICAL REPRESENTATIONS OF APPROXIMATE EQUIPMENT AND DEVICE LOCATIONS. CONTRACTOR SHALL VISIT THE SITE TO DETERMINE THE EXACT EXTENT OF ELECTRICAL WORK REQUIRED TO COMPLETE THE PROJECT. EXISTING CONDITIONS ARE TAKEN FROM FIELD OBSERVATION AND EXISTING BUILDING DOCUMENTS. OTHER ELECTRICAL ITEMS MAY EXIST FOR WHICH THE CONTRACTOR IS RESPONSIBLE.

I. CONTRACTOR SHALL PROPERLY DISPOSE OF ALL ITEMS, EQUIPMENT, PANELS, LIGHT FIXTURES, ETC. BEING REMOVED AS PART OF THIS PROJECT. THE OWNER SHALL HAVE THE RIGHT OF RETAINING ANY ITEMS BEING REMOVED.

J. CONTRACTOR SHALL PROVIDE NEW COVERPLATES ON ALL BOXES OF UNUSED AND/OR REMOVED FLUSH MOUNT DEVICES UPON COMPLETION OF PROJECT.

K. FIREPROOFING AND/OR FIRE STOP MATERIALS REMOVED FROM FIRE RATED WALLS AND CEILINGS AS A RESULT OF DEMOLITION SHALL BE RE-INSTALLED USING AN APPROVED METHOD AS DESCRIBED IN ASSOCIATED PROJECT SPECIFICATIONS.

L. THE DISPOSAL OF SPENT FLUORESCENT LIGHTS AND THERMOSTATS THAT CONTAIN MERCURY GENERATED IN PUBLIC BUILDINGS MUST FOLLOW AN APPROVED RECYCLING PROGRAM REQUIRED BY NC GENERAL STATUTES G.S. § 130A-310.60.€ CONSULT WITH THE BUILDING OWNER FOR RECYCLING PROGRAM DETAILS.

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THE UNIVERSITY of NORTH CAROLINA at CHAPEL HILL

PROJECT INFORMATION

Project Number
R24.17133.00

Client Name
UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL

Project Name
208 FRANKLIN RENOVATION

Project Address
208 W FRANKLIN ST, CHAPELL HILL, NC 27516

PROJECT ISSUE & REVISION SCHEDULE

#	Date	Description

PROFESSIONAL STAMPS

NORTH CAROLINA PROFESSIONAL SEAL 020216 ENGINEER MICHAEL S. RAYNOR
04/17/2025

SHEET INFORMATION

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Drawn By: -
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Drawing Title: FIRST FLOOR ELECTRICAL DEMOLITION PLAN/RCP
Drawing Number: -
E101

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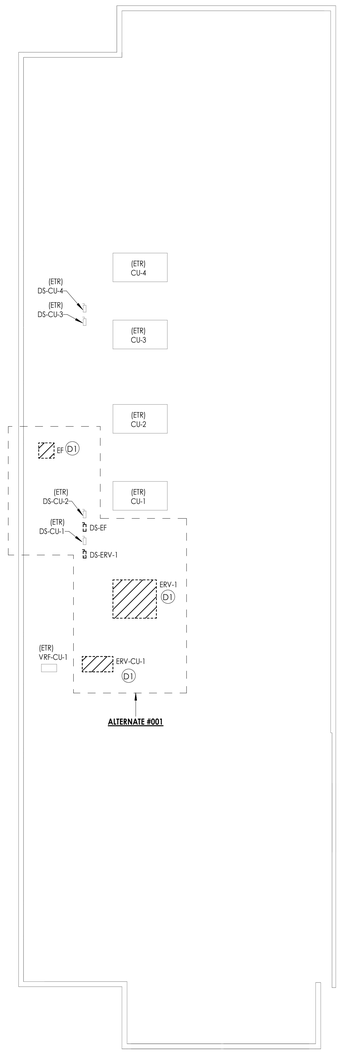

1 E102 ROOF ELECTRICAL DEMOLITION PLAN

1/8" = 1'-0"

(DX) DEMOLITION PLAN NOTES:

1. **ADD ALTERNATE #001:**
   DISCONNECT AND REMOVE EXISTING MECHANICAL UNIT AND ASSOCIATED DISCONNECT SWITCH/STARTER. REMOVE CIRCUIT AND PATHWAYS BACK TO SOURCE, MAINTAINING OTHER UNITS ON THE CIRCUIT, IF APPLICABLE.

GENERAL NOTES - DEMOLITION:

A. ITEMS TO BE REMOVED ARE INDICATED BY DASHED LINETYPE.

B. 'ETR' DENOTES EXISTING TO REMAIN.

C. FOR ALL EXISTING FIXTURES, DEVICES, ETC. INDICATED TO REMAIN, FIELD VERIFY THE EXISTING CIRCUIT, AND PROVIDE NEW LABEL ON DEVICE PLATE WITH CORRECT PANEL/CIRCUIT PER SPECIFICATIONS.

D. DRAWINGS INDICATE SPECIFIC ITEMS TO BE REMOVED AND/OR RELOCATED IN ORDER TO INDICATE GENERAL SCOPE. ADDITIONAL ITEMS NOT INDICATED, BUT NECESSARY FOR PROJECT RENOVATIONS, SHALL BE REMOVED, RELOCATED AND/OR REROUTED. THE CONTRACTOR SHALL ASSUME WITHIN THE BASE BID A NOMINAL AMOUNT OF BRANCH CIRCUITS, FIXTURES, DEVICES, AND SYSTEMS WIRING WITHIN WALLS OR OPENINGS BEING REMOVED OR RELOCATED AS REQUIRED TO ACCOMMODATE THE NEW CONSTRUCTION.

E. WHERE DEVICES, FIXTURES, ETC. ARE INDICATED TO BE REMOVED, THEY AND THEIR RELATED WIRING/CONDUIT SHALL BE REMOVED BACK TO THE SOURCE PANELBOARD UNLESS OTHERWISE NOTED. ON CIRCUITS WHERE OTHER DEVICES, FIXTURES, ETC., ARE FOUND THAT MUST REMAIN, MAINTAIN CIRCUIT CONTINUITY BY PROVIDING ADDITIONAL WIRING, TO FEED THROUGH TO THESE REMAINING ITEMS. RELOCATE ANY CIRCUITS THAT REMAIN, TO AVOID CONFLICT WITH NEW CONSTRUCTION AS REQUIRED. PROPERLY TERMINATE ALL WIRING.

F. THE CONTRACTOR SHALL REMOVE THE EXISTING ELECTRIC IN AREAS OF NEW RENOVATIONS TO ACCOMMODATE NEW CONSTRUCTION. REROUTING OF EXISTING MAY BE REQUIRED AT NEW OPENINGS IN EXISTING CONSTRUCTION OR INTERFERENCE WITH OTHER NEW WORK AS NOTED IN THE FOLLOWING NOTES.

G. COORDINATE DEMOLITION OF EQUIPMENT, DEVICES, ETC., WITH OTHER DISCIPLINES AS APPLICABLE. REFER TO ARCHITECTURAL DEMOLITION DRAWINGS AND NOTES FOR COORDINATION.

H. DRAWINGS ARE GRAPHICAL REPRESENTATIONS OF APPROXIMATE EQUIPMENT AND DEVICE LOCATIONS. CONTRACTOR SHALL VISIT THE SITE TO DETERMINE THE EXACT EXTENT OF ELECTRICAL WORK REQUIRED TO COMPLETE THE PROJECT. EXISTING CONDITIONS ARE TAKEN FROM FIELD OBSERVATION AND EXISTING BUILDING DOCUMENTS. OTHER ELECTRICAL ITEMS MAY EXIST FOR WHICH THE CONTRACTOR IS RESPONSIBLE.

I. CONTRACTOR SHALL PROPERLY DISPOSE OF ALL ITEMS, EQUIPMENT, PANELS, LIGHT FIXTURES, ETC. BEING REMOVED AS PART OF THIS PROJECT. THE OWNER SHALL HAVE THE RIGHT OF RETAINING ANY ITEMS BEING REMOVED.

J. CONTRACTOR SHALL PROVIDE NEW COVERPLATES ON ALL BOXES OF UNUSED AND/OR REMOVED FLUSH MOUNT DEVICES UPON COMPLETION OF PROJECT.

K. FIREPROOFING AND/OR FIRE STOP MATERIALS REMOVED FROM FIRE RATED WALLS AND CEILINGS AS A RESULT OF DEMOLITION SHALL BE RE-INSTALLED USING AN APPROVED METHOD AS DESCRIBED IN ASSOCIATED PROJECT SPECIFICATIONS.

L. THE DISPOSAL OF SPENT FLUORESCENT LIGHTS AND THERMOSTATS THAT CONTAIN MERCURY GENERATED IN PUBLIC BUILDINGS MUST FOLLOW AN APPROVED RECYCLING PROGRAM REQUIRED BY NC GENERAL STATUTES G.S. § 130A-310.60.€ CONSULT WITH THE BUILDING OWNER FOR RECYCLING PROGRAM DETAILS.

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PROJECT ISSUE & REVISION SCHEDULE

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PROFESSIONAL STAMPS

NORTH CAROLINA REGISTERED SEAL 020216 04/17/2025 ENGINEER MICHAEL S. RAINES

SHEET INFORMATION

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Drawing Title: ROOF ELECTRICAL DEMOLITION PLAN
Drawing Number: - E102

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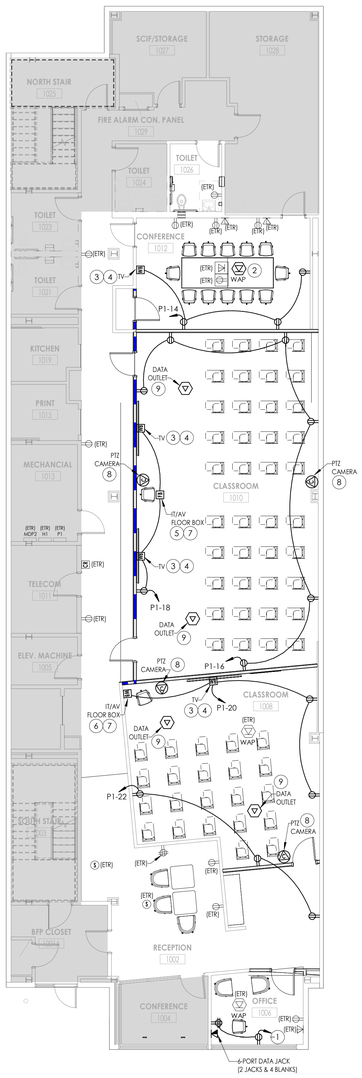

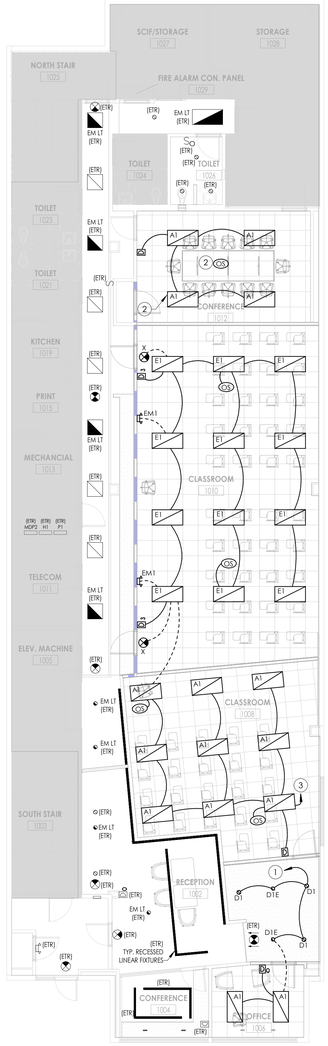

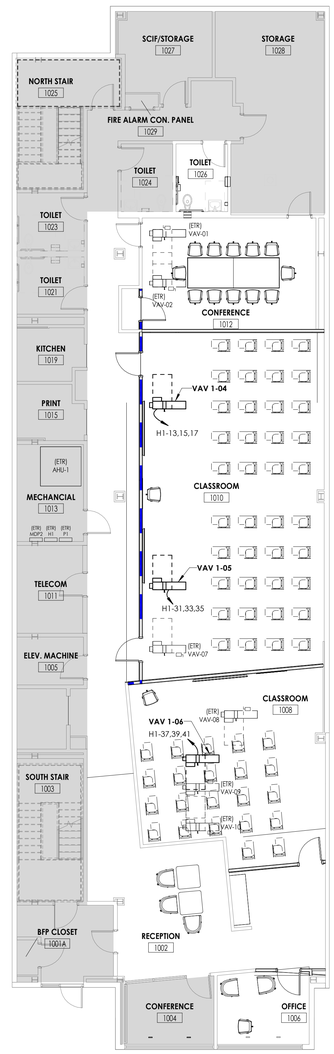

1 FIRST FLOOR POWER & SYSTEMS PLAN
E201 — 1/8" = 1'-0"

(X) PLAN NOTES - POWER/SYSTEMS:

1. CONNECT RECEPTACLE CIRCUIT TO EXISTING LOCAL CIRCUIT IN PANEL "P1".
2. REINSTALL WIRELESS ACCESS POINT IN NEW CEILING. RECONNECT TO EXISTING POWER/DATA CIRCUIT, EXTENDING CONDUCTORS AS REQUIRED.
3. PROVIDE CHIEF TEMPO IN-WALL DISPLAY MOUNT (MODEL FPIWMS) FOR TV. COORDINATE EXACT LOCATION OF DISPLAY MOUNT SYSTEM WITH TV LOCATION PRIOR TO ROUGH-IN. G.C. TO PROVIDE BLOCKING AS REQUIRED AT ALL LOCATIONS TO ACCOMMODATE TV MOUNTS.
4. PROVIDE ONE (1) DUPLEX RECEPTACLE AND ONE 4-PORT DATA JACK OUTLET. INSTALL DEVICES USING SINGLE-GANG KNOCKOUTS PROVIDED BY TV MOUNT SYSTEM. PROVIDE 1-1/2" CONDUIT FOR DATA OUTLET, EXTENDED TO WITHIN 4' OF A CABLE TRAY OR RUN TO THE NEAREST TELECOMMUNICATIONS ROOM. PROVIDE TWO (2) ADDITIONAL 1-1/2" SPARE CONDUITS WITH PULL STRINGS FROM TV MOUNT, EXTENDED TO WITHIN 4' OF A CABLE TRAY OR RUN TO THE NEAREST TELECOMMUNICATIONS ROOM.
5. PROVIDE RECTANGULAR FLOOR BOX WITH MINIMUM 4-GANG CAPACITY AND WHILE-IN-USE COVER. COORDINATE WITH ARCHITECTURAL DRAWINGS TO VERIFY BOX IS COMPATIBLE WITH INSTALLED FLOOR TYPE. VERIFY FINAL LOCATION OF BOX WITH OWNER PRIOR TO ROUGH-IN. VERIFY COVER STYLE AND FINISH WITH ARCHITECT.
6. PROVIDE RECTANGULAR WALL BOX WITH MINIMUM 4-GANG CAPACITY AND WHILE-IN-USE COVER. VERIFY FINAL LOCATION AND HEIGHT OF BOX WITH OWNER PRIOR TO ROUGH-IN. VERIFY COVER STYLE AND FINISH WITH ARCHITECT.
7. PROVIDE TWO (2) DUPLEX RECEPTACLES AND TWO (2) 6-PORT DATA JACK OUTLETS INSIDE BOX. PROVIDE BLANK COVER PLATES FOR ANY UNUSED OUTLET OPENINGS. PROVIDE 1-1/2" CONDUIT FOR EACH DATA OUTLET, EXTENDED TO WITHIN 4' OF A CABLE TRAY OR RUN TO THE NEAREST TELECOMMUNICATIONS ROOM. PROVIDE ONE (1) SPARE 2" CONDUIT WITH PULL STRING TO THE BOX, EXTENDED TO WITHIN 4' OF A CABLE TRAY OR RUN TO THE NEAREST TELECOMMUNICATIONS ROOM.
8. PROVIDE 1-1/2" CONDUIT TO CAMERA LOCATION, EXTENDED TO WITHIN 4' OF A CABLE TRAY OR RUN TO THE NEAREST TELECOMMUNICATIONS ROOM.
9. PROVIDE 6-PORT DATA JACK OUTLET (2 JACKS, 4 BLANKS) ABOVE ACCESSIBLE CEILING. PROVIDE 1" CONDUIT FOR EACH DATA OUTLET, EXTENDED TO WITHIN 4' OF A CABLE TRAY OR RUN TO THE NEAREST TELECOMMUNICATIONS ROOM. VERIFY LOCATION WITH OWNER PRIOR TO ROUGH-IN.

2 FIRST FLOOR RCP - LIGHTING
E201 — 1/8" = 1'-0"

(X) PLAN NOTES - LIGHTING:

1. CONNECT NEW LIGHTING FIXTURE CIRCUIT TO EXISTING LOBBY CIRCUIT (PANEL P1 CKT 35), EXTENDING CONDUCTORS AS REQUIRED USING #12AWG CU.
2. CONNECT NEW LIGHT FIXTURES TO EXISTING LIGHTING CIRCUIT IN THIS AREA (PANEL P1 CKT 39). EXTEND CONDUCTORS AS REQUIRED USING #12AWG CU.
3. CONNECT NEW LIGHT FIXTURES TO EXISTING LIGHTING CIRCUIT IN THIS AREA (PANEL P1 CKT 41). EXTEND CONDUCTORS AS REQUIRED USING #12AWG CU.

5 FIRST FLOOR POWER PLAN - HVAC
E201 — 1/8" = 1'-0"

GENERAL NOTES - POWER & SYSTEMS:

A. AT EACH (X) SYMBOL INDICATED, REFER TO ELECTRICAL EQUIPMENT WIRING SCHEDULE ON SHEET E200A.

B. NO MORE THAN THE EQUIVALENT OF THE FOLLOWING ARE ALLOWED IN A CONDUIT RUN BETWEEN JUNCTION OR PULL BOXES:
   a. THREE (3) 90-DEGREE BENDS FOR POWER WIRING
   b. TWO (2) 90-DEGREE BENDS FOR DATA/TEL WIRING

C. ALL SLEEVES SHALL PROTRUDE 4" EACH SIDE OF FLOOR/WALL AND SHALL BE CAPPED AT BOTH ENDS.

D. NO HORIZONTAL RUN OF DATA CONDUIT SHALL BE MORE THAN 80 FEET BETWEEN PULLBOXES.

E. DATA/TEL OUTLETS SHALL BE 4" SQUARE BOXES WITH SINGLE GANG PLASTER RING AND MINIMUM 1" CONDUIT EXTENDED TO WITHIN 4" OF A CABLE TRAY OR RUN TO THE NEAREST TELECOMMUNICATIONS ROOM.

F. STAGGER OUTLETS ON OPPOSITE SIDES OF COMMON WALLS A MINIMUM OF 6" HORIZONTALLY.

GENERAL NOTES - LIGHTING:

A. ALL WALL MOUNTED OCCUPANCY DIMMER SWITCH SENSORS TO BE DUAL-TECHNOLOGY WITH ON/OFF BUTTONS.

B. CONNECT ALL EXIT SIGNS, EMERGENCY LIGHTS (EM), AND NIGHT LIGHTS (FIXTURES MARKED "NL") UNSWITCHED TO LOCAL LIGHTING CIRCUIT. AIM EM LIGHTS TO ILLUMINATE THE PATH OF EGRESS.

C. PROVIDE UNSWITCHED HOT LEG, OF SAME CIRCUIT, TO FIXTURES PROVIDED WITH AN INTEGRAL BATTERY FOR EMERGENCY ILLUMINATION.

D. PROVIDE SMALL MOTION, DUAL TECHNOLOGY OCCUPANCY SENSORS TO OPERATE WITH CEILING HEIGHTS FROM 8' TO 15'. VERIFY MAXIMUM SPACING OF OCCUPANCY SENSORS WITH MANUFACTURER'S RECOMMENDATIONS, ADJUST SPACING AS NEEDED. DO NOT EXCEED MAXIMUM SPACING. PROVIDE POWER PACKS AS REQUIRED TO ACCOMMODATE LOAD.

E. SET ALL OCCUPANCY SENSORS IN RESTROOMS AND LOCKER ROOMS TO 15 MINUTES. WHERE MULTIPLE OCCUPANCY SENSORS ARE IN SAME ROOM, WIRE IN PARALLEL SO THAT ANY SENSOR WILL ACTIVATE THE LIGHTS.

F. REFER TO MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR FINAL DIRECTION OF INSTALLATION OF ROOM CONTROLLERS AND COMPONENTS. PROVIDE ALL NECESSARY EQUIPMENT, DEVICES, AND CABLING FOR FULLY OPERABLE INSTALLATION OF ROOM CONTROLLER SYSTEMS. WHERE A 3-WAY SWITCH AND 3-WAY DIMMER ACTIVATE ROOM LIGHTS THE DIMMING FUNCTION IS ONLY AT THE MAIN ENTRANCE TO THE ROOM.

G. RECESSED FIXTURES (INCLUDING DRIVERS) INSTALLED IN PERMANENT CEILING FINISHES SHALL BE ACCESSIBLE/REMOVABLE WITHOUT REQUIRING REMOVAL OF ANY PORTION OF THE CEILING.

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Client Name
UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL

Project Name
208 FRANKLIN RENOVATION

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208 W FRANKLIN ST, CHAPELL HILL, NC 27516

PROJECT ISSUE & REVISION SCHEDULE

#	Date	Description

PROFESSIONAL STAMPS

NORTH CAROLINA REGISTERED PROFESSIONAL ENGINEER 030216 04/17/2025 ENGINEER MICHAEL S. RAINEY

SHEET INFORMATION

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Drawing Title: FIRST FLOOR ELECTRICAL NEW WORK PLAN/RCP
Drawing Number: E201

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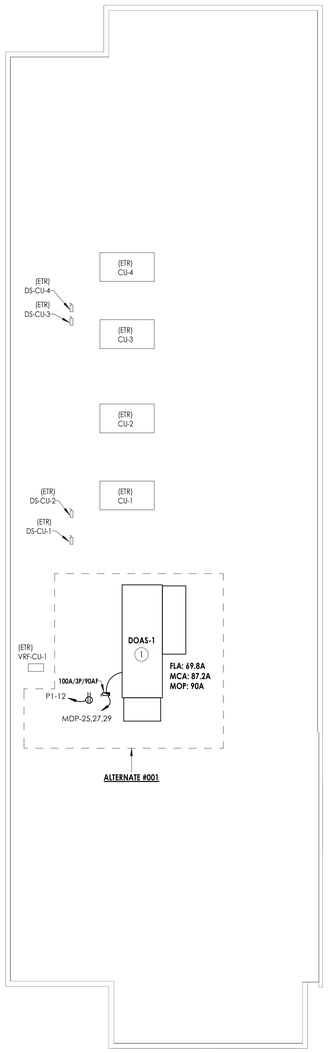

1 E202 ROOF ELECTRICAL NEW WORK PLAN

1/8" = 1'-0"

(X) PLAN NOTES - POWER:

1. **ADD ALTERNATE #001:**
   PROVIDE NEW CIRCUIT FOR DOAS-1. PROVIDE FUSED DISCONNECT SWITCH AND FUSES AS INDICATED. COORDINATE DISCONNECT SWITCH LOCATION WITH MECHANICAL EQUIPMENT CLEARANCES.

GENERAL NOTES - POWER & SYSTEMS:

A. AT EACH (X) SYMBOL INDICATED, REFER TO ELECTRICAL EQUIPMENT WIRING SCHEDULE ON SHEET E200A.

B. NO MORE THAN THE EQUIVALENT OF THE FOLLOWING ARE ALLOWED IN A CONDUIT RUN BETWEEN JUNCTION OR PULL BOXES:
   a. THREE (3) 90-DEGREE BENDS FOR POWER WIRING
   b. TWO (2) 90-DEGREE BENDS FOR DATA/TEL WIRING

C. ALL SLEEVES SHALL PROTRUDE 4" EACH SIDE OF FLOOR/WALL AND SHALL BE CAPPED AT BOTH ENDS.

D. NO HORIZONTAL RUN OF DATA CONDUIT SHALL BE MORE THAN 80 FEET BETWEEN PULLBOXES.

E. DATA/TEL OUTLETS SHALL BE 4" SQUARE BOXES WITH SINGLE GANG PLASTER RING AND MINIMUM 1" CONDUIT EXTENDED TO WITHIN 4" OF A CABLE TRAY OR RUN TO THE NEAREST TELECOMMUNICATIONS ROOM.

F. STAGGER OUTLETS ON OPPOSITE SIDES OF COMMON WALLS A MINIMUM OF 6" HORIZONTALLY.

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PROFESSIONAL STAMPS

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 020216 04/17/2025 MICHAEL S. RAINEY

SHEET INFORMATION

Issued	Scale
04/17/2025	As indicated

Project Status
100% CONSTRUCTION DOCUMENTS

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-	-

Drawing Title
ROOF ELECTRICAL NEW WORK PLAN

Drawing Number
-
E202

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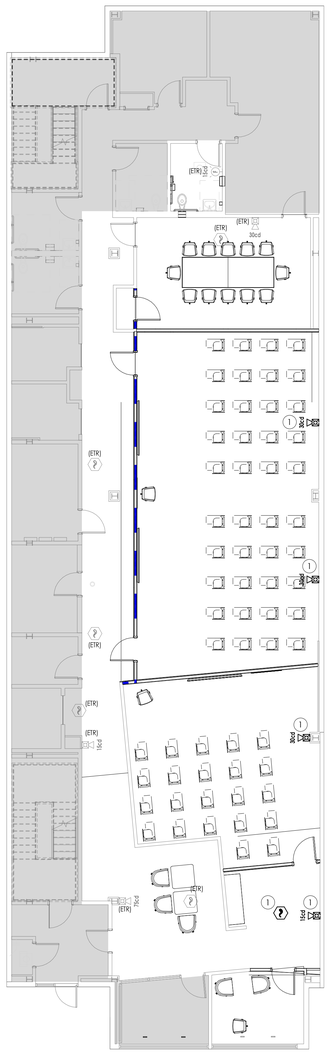
(ETR)
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(ETR)
(ETR)
(ETR)

PANEL MDP (Existing)			VOLTAGE: 208/120 3 PH 4W					AIC RATING:		REMARKS:
			FEEDER AMP: 800	MAINS: 800 MLO				MOUNTING: SURFACE		Eaton PRL4B
			LUGS: -	FEED:				ENCLOSURE: NEMA 1		Mech Room 2nd Floor
BKR	NOTE	LOAD DESCRIPTION	VA	CKT	PHASE	CKT	VA	LOAD DESCRIPTION	NOTE	BKR
40/3	E	MCU-1	2520	1	A	2	9374	CU-1, CU-2	E	100/3
↓	↓	↓	2520	3	B	4	9374	↓	↓	↓
↓	↓	↓	2520	5	C	6	9374	↓	↓	↓
150/3	E	CU-3, CU-4	10924	7	A	8	10000	ELEVATOR	E	200/3
↓	↓	↓	10924	9	B	10	10000	↓	↓	↓
↓	↓	↓	10924	11	C	12	10000	↓	↓	↓
150/3	E	PANEL 'H1'	15345	13	A	14	15010	PANEL 'H4'	E	150/3
↓	↓	↓	16915	15	B	16	15010	↓	↓	↓
↓	↓	↓	16915	17	C	18	15010	↓	↓	↓
150/3	E	PANEL 'H2'	15500	19	A	20	14660	PANEL 'H3'	E	150/3
↓	↓	↓	14500	21	B	22	15910	↓	↓	↓
↓	↓	↓	14500	23	C	24	15910	↓	↓	↓
90/3	**N**	**NEW DOAS-1 (ALTERNATE #001)**	8376	25	A	26	4142	CU-5	E	50/3
↓	↓	↓	8376	27	B	28	4142	↓	↓	↓
		Connected Load Per Phase	8376	29	C	30	4142	↓		
			PH A: 105851		**PH B: 107671**		**PH C: 107671**			

	Lighting	HVAC	Motors	Recept.	Ref.	Kitchen	Misc	Total VA	Amps
Connected VA	500	251013	66000	1180	0	0	2500	321193	**891.6**
Demand Factor	1.25	1.00	1.00	NEC	1.00	1.00	1.00		
Demand VA	625	251013	66000	1180	0	0	2500	321318	**891.9**

PANEL H1 (Existing)			VOLTAGE: 208/120 3 PH 4W					AIC RATING:		REMARKS:
			FEEDER AMP: 150	MAINS: 225 MLO				MOUNTING: SURFACE		Square D NQ
			LUGS:	FEED:				ENCLOSURE: NEMA 1		Mech Room 1st Floor
BKR	NOTE	LOAD DESCRIPTION	VA	CKT	PHASE	CKT	VA	LOAD DESCRIPTION	NOTE	BKR
15/3	E	VAV BOX 1-01	1167	1	A	2	2667	VAV BOXES 1-08, 1-09, 1-10	E	15/3
↓	↓	↓	1167	3	B	4	2667	↓	↓	↓
↓	↓	↓	1167	5	C	6	2667	↓	↓	↓
20/3	E	VAV BOX 1-02	833	7	A	8	833	VAV BOX 1-11	E	20/3
↓	↓	↓	833	9	B	10	833	↓	↓	↓
↓	↓	↓	833	11	C	12	833	↓	↓	↓
15/3	**N**	**NEW VAV BOX 1-04**	1166	13	A	14	833	VAV BOX 1-12	E	20/3
↓	↓	↓	1166	15	B	16	833	↓	↓	↓
↓	↓	↓	1166	17	C	18	833	↓	↓	↓
20/3	E	VAV BOX 1-07	1333	19	A	20	500	EXISTING LOAD	E	20/1
↓	↓	↓	1333	21	B	22	0	SPACE	E	-
↓	↓	↓	1333	23	C	24	0	SPACE	E	-
20/1	E	EXISTING LOAD	500	25	A	26	180	RECEPTACLE - RECEPTION TV	E	15/1
20/1	E	EXISTING LOAD	500	27	B	28	500	AHU-1 PANEL	E	20/1
20/1	E	EXISTING LOAD	500	29	C	30	500	SMOKE DAMPERS	E	20/1
15/3	**N**	**NEW VAV BOX 1-05**	1166	31	A	32	3000	AHU-1	E	60/3
↓	↓	↓	1166	33	B	34	3000	↓	↓	↓
↓	↓	↓	1166	35	C	36	3000	↓	↓	↓
15/3	**N**	**NEW VAV BOX 1-06**	666	37	A	38	500	UV LIGHT	E	20/1
↓	↓	↓	666	39	B	40	2250	WATER HEATER	E	30/2
		Connected Load Per Phase	666	41	C	42	2250	↓	↓	↓
			PH A: 15345		**PH B: 16915**		**PH C: 16915**			

	Lighting	HVAC	Motors	Recept.	Ref.	Kitchen	Misc	Total VA	Amps
Connected VA	500	36996	9000	180	0	0	2500	49176	**136.5**
Demand Factor	1.25	1.00	1.00	NEC	1.00	1.00	1.00		
Demand VA	625	36996	9000	180	0	0	2500	49301	**136.9**

PANEL P1 (Existing)			VOLTAGE: 208/120 3 PH 4W					AIC RATING:		REMARKS:
			FEEDER AMP: 100	MAINS: 100 MLO				MOUNTING: SURFACE		Square D NQ
			LUGS:	FEED:				ENCLOSURE: NEMA 1		Mech Room 1st Floor
BKR	NOTE	LOAD DESCRIPTION	VA	CKT	PHASE	CKT	VA	LOAD DESCRIPTION	NOTE	BKR
20/1	E	RECEPTACLE	540	1	A	2	720	RECEPTACLE	E	20/1
20/1	E	KITCHEN RECEPTACLE	1000	3	B	4	720	RECEPTACLE	E	20/1
20/1	E	KITCHEN RECEPTACLE	1000	5	C	6	720	RECEPTACLE	E	20/1
20/1	E	KITCHEN RECEPTACLE	1000	7	A	8	0	**SPARE**	**R**	**20/1**
20/1	E	PRINT ROOM	1000	9	B	10	0	**SPARE**	**R**	**20/1**
20/1	E	PRINT ROOM	1000	11	C	12	180	**DOAS-1 SERVICE RECEPTACLE**	**R**	**20/1**
20/3	**R**	**SPARE**	0	13	A	14	900	**REC - CONF. 1012**	**R**	**20/1**
↓	↓	↓	0	15	B	16	1080	**REC - CLASSRM 1010**	**R**	**20/1**
↓	↓	↓	0	17	C	18	1260	**REC - CLASSRM 1010**	**R**	**20/1**
20/3	**R**	**SPARE**	0	19	A	20	1080	**REC - CLASSRM 1008**	**R**	**20/1**
↓	↓	↓	0	21	B	22	540	**REC - CLASSRM 1008, RECEPTION 1002**	**R**	**20/1**
↓	↓	↓	0	23	C	24	720	**REC - CONF. 1004, OFFICE 1006**	**R**	**20/1**
20/1	**R**	**SPARE**	0	25	A	26	0	SPACE	E	20/1
20/1	E	LOBBY RECEPTACLE	1080	27	B	28	500	AUTO DOOR-TIME CLOCK	E	20/1
20/1	E	HALL RECEPTACLE	720	29	C	30	500	STAIRWELL LIGHTS	E	20/1
20/1	E	RECEPTACLE - MECH ROOM	600	31	A	32	720	RECEPTACLE	E	20/1
20/1	E	WHITE NOISE SPEAKERS	500	33	B	34	500	FACP	E	20/1
20/1	**R**	**LTS - RECEPTION 1002, OFFICE 1006**	1000	35	C	36	500	OUTSIDE ENTRANCE LIGHTS	E	20/1
20/1	E	ELEVATOR LIGHTING	100	37	A	38	500	OUTSIDE EXTERIOR WALL LIGHTS	E	20/1
20/1	**R**	**LTS - CONF 1012, BATH 1024, 1026, STOR.**	1000	39	B	40	720	TELECOM RECEPTACLE	E	20/1
20/1	**R**	**LTS - CLASSRMS 1008 & 1010**	1500	41	C	42	720	TELECOM RECEPTACLE	E	20/1
		Connected Load Per Phase	**PH A:** 6160		**PH B:** 8640		**PH C: 9820**			

	Lighting	HVAC	Motors	Recept.	Ref.	Kitchen	Misc	Total VA	Amps
Connected VA	5100	0	0	18020	0	0	1500	24620	**68.3**
Demand Factor	1.25	1.00	1.00	NEC	1.00	1.00	1.00		
Demand VA	6375	0	0	14010	0	0	1500	21885	**60.7**

← **ALTERNATE #001**

EXISTING PANEL GENERAL NOTES:

A. EXISTING CIRCUIT DATA SHOWN IS TAKEN FROM EXISTING FACILITY DOCUMENTATION AND/OR FIELD OBSERVATION. FIELD VERIFY ALL CIRCUITS.

B. VERIFY CIRCUITS ON EXISTING PANELS. ADJUST CIRCUITING AS REQUIRED TO MEET DESIGN INTENT OF DRAWINGS. TURN SPARE BREAKERS OFF.

C. PROVIDE NEW TYPEWRITTEN PANEL DIRECTORY TO REFLECT NEW CONDITIONS UPON COMPLETION OF WORK DESCRIBED IN THESE DRAWINGS.

D. REUSE EXISTING CIRCUIT BREAKERS WHERE POSSIBLE. PROVIDE NEW BREAKERS AS REQUIRED-TYPE, VOLTAGE RATING, AND AIC RATING TO MATCH EXISTING. CIRCUIT BREAKERS SHALL BE UL LISTED FOR INSTALLATION WITHIN THE EXISTING PANELBOARD.

E. PANEL SCHEDULES REFLECT STATUS AFTER PROPOSED WORK IS COMPLETE.

HANDLE-TIE NOTES:

1. WHERE MULTI-WIRE BRANCH CIRCUITS (SINGLE PHASE HOMERUNS WITH A COMMON NEUTRAL) ARE INSTALLED, THESE CIRCUITS SHALL BE SERVED BY ADJACENT BREAKERS VIA HANDLE TIE. REFER TO NEC 210.4.

2. EXISTING MULTI-WIRE HOMERUNS THAT ARE RE-FED, RELOCATED, RE-USED OR PARTIALLY RE-USED SHALL BE MODIFIED AS REQUIRED TO MEET THIS CODE REQUIREMENT. RE-LABEL ANY EXISTING DEVICES, CONDUIT, JUNCTION BOXES, ETC. AS REQUIRED TO REFLECT CIRCUIT NUMBER CHANGES.

3. FOR NEW CIRCUITS, MULTI-WIRE BRANCH CIRCUITS ARE NOT PERMITTED.

4. CONTRACTOR SHALL FIELD VERIFY ALL ACTUAL CIRCUIT CONDITIONS PRIOR TO ORDERING HANDLE-TIES, AND PROVIDE HANDLE-TIES REQUIRED TO COMPLY WITH THE NEC.

PANEL SCHEDULE NOTES:

E EXISTING CIRCUIT TO REMAIN

N PROVIDE NEW CIRCUIT BREAKER, TYPE, VOLTAGE RATING, AND AIC RATING TO MATCH EXISTING

R REVISED LOAD/DESCRIPTION FOR EXISTING CIRCUIT BREAKER

LUMINAIRE SCHEDULE

MARK	DESCRIPTION	MANUFACTURER	MODEL	VOLTAGE	LUMENS	LOAD	TYPE/CCT	MOUNTING	COMMENTS
A1	2'x4' EDGE-LIT FLAT PANEL, 0-10V DIMMING TO 10%	METALUX OR APPROVED EQUAL BY LITHONIA OR SYLVANIA	24FP3835HE	120-277	3849	29 VA	3500K LED	RECESSED	
D1	6" LED OPEN DOWNLIGHT, 0-10V 10% MIMIMUM DIMMING	LITHONIA OR APPROVED EQUAL BY PORTFOLIO OR HALO (COOPER)	LDN6-35-20-L06-xx-LSS-xx-MVOLT-GZ10	120-277	2000	23 VA	3500K LED	RECESSED	1
D1E	SAME AS D1 WITH OPTIONAL EMERGENCY BATTERY PACK BACKUP	LITHONIA OR APPROVED EQUAL BY PORTFOLIO OR HALO (COOPER)	LDN6-35-20-L06-xx-LSS-xx-MVOLT-GZ10-EL	120-277	2000	23 VA	3500K LED	RECESSED	1
E1	EXISTING 2'x4' LED FLAT PANEL							RECESSED	2
EM1	EMERGENCY LIGHT WITH DUAL HEADS, POLYCARBONATE HOUSING WITH THERMOPLASTIC HEADS, SEALED MAINTENANCE FREE NI-CAD BATTERY, INTEGRAL TEST SWITCH, UL 924 LISTED	SURE-LITE OR APPROVED EQUAL BY LITHONIA OR SUNCO	AP25QLED30	120-277	-	1 VA	LED	SURFACE	
X	SINGLE-FACE LED EXIT SIGN, SLIM ALUMINUM HOUSING, BRUSHED ALUMINUM FACE AND TRIM, INTEGRAL BATTERY BACKUP	SURE-LITE OR APPROVED EQUAL BY LITHONIA OR E-CONOLIGHT	ARCEL-7-1-R-C-WH	120-277		2 VA	RED LETTER LED	UNIVERSAL	

LUMINAIRE SCHEDULE GENERAL NOTES:

A. PROVIDE COMPATIBLE DIMMER FOR FIXTURE WHERE INDICATED ON LIGHTING FIXTURE PLANS.

B. PROVIDE DRIVERS AS REQUIRED FOR FIXTURES IN AREAS WHERE DIMMING IS INDICATED.

C. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS AND ELEVATIONS FOR EXACT LOCATIONS OF ALL LIGHTING FIXTURES.

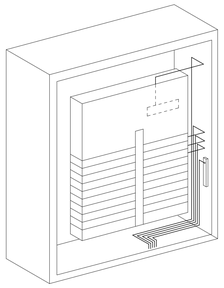
D. PROVIDE WITH PROPER MOUNTING HARDWARE FOR CEILING TYPE INDICATED ON PLANS.

E. VERIFY LUMINAIRE FINISH COLOR WITH ARCHITECT AND OWNER.

LUMINAIRE SCHEDULE REMARKS:

1. COORDINATE EXACT COLOR/FINISH WITH ARCHITECT/OWNER PRIOR TO ORDERING FIXTURE(S). PROVIDE PHYSICAL COLOR CHART AS REQUIRED BY ARCHITECT.

2. EXISTING 2x4 LED TO BE REUSED IN CLASSROOM 1010. CLEAN FIXTURE BEFORE INSTALLING.



NOTES:

1. ALL BENDS IN CONDUCTORS #10 AND SMALLER SHALL BE 90-DEGREES STRAIGHT AND TRUE. BENDS IN LARGER SIZE CONDUCTORS SHALL HAVE A UNIFORM RADIUS.
2. BEND CONDUCTORS TOWARD THE BACK CORNERS OF THE PANEL CAN. BEND CONDUCTORS FORWARD TO CONNECT TO CIRCUIT BREAKERS.
3. TIE WRAP CONDUCTORS TO FORM NEAT AND ORDERLY BUNDLES. AVOID EXCESSIVE USE OF TIE WRAPS.
4. NO CONDUCTORS SHALL TOUCH PANEL CAN.
5. FINISHED PANEL SHALL PRESENT A CLEAN, SHARP, AND ORDERLY APPEARANCE.
6. EACH ELECTRICAL PANEL SHALL HAVE: (a)-AN ENGRAVED NAMEPLATE PERMANENTLY ATTACHED TO THE EXTERIOR COVER; (b)-A TYPEWRITTEN CIRCUIT DIRECTORY INSIDE EACH DOOR; AND (c)-A TYPEWRITTEN WIRING COLOR CODE INSIDE EACH DOOR.

4 E900 **TYPICAL PANELBOARD WORKMANSHIP DETAIL**
NO SCALE

TYPICAL NAMEPLATE EXAMPLES FOR EACH EQUIPMENT TYPE

Panelboard

M
208Y/120V 3Ø 4W
Fed From MDP

Typical Fan Disconnect / Starter / VFD

FCU-1
120V 1Ø
AP06-32

Equipment Disconnect

ERV-1
208V 3Ø 4W
Fed From M-1/3/5

Typical Fan Disconnect / Starter / VFD

P-1
208V 3Ø
Fed From M-2/4/6

EQUIPMENT LABELING NOTES

A. PROVIDE ENGRAVED LAMINATED NAMEPLATE FOR EACH PIECE OF ELECTRICAL EQUIPMENT. LABEL TAPE IS NOT ACCEPTABLE.

B. COORDINATE SUPPLY SOURCE (PANEL/CIRCUIT WHERE FED FROM) WITH ACTUAL CIRCUITS USED.

C. ON EACH UNIT OF EQUIPMENT, INSTALL UNIQUE DESIGNATION LABEL THAT IS CONSISTENT WITH WIRING DIAGRAMS AND SCHEDULES.

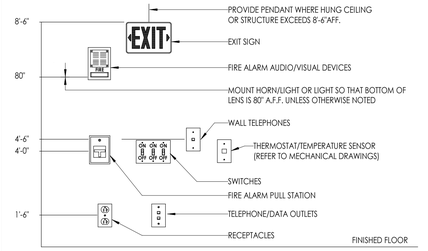
D. PROVIDE LABEL AS SHOWN FOR EACH EQUIPMENT TYPE. INFORMATION SHALL INCLUDE NAME OF EQUIPMENT, VOLTAGE/PHASE, SUPPLY SOURCE, AND SYSTEM BRANCH.

E. LABEL EQUIPMENT WITH SELF-ADHESIVE, ENGRAVED, LAMINATED ACRYLIC OR MELAMINE LABEL. UNLESS OTHERWISE INDICATED, EQUIPMENT NAME SHALL BE 1-INCH-HIGH LETTERS, AND ADDITIONAL TEXT SHALL BE 1/2-INCH-HIGH LETTERS. LABEL SIZE SHALL ACCOMMODATE TEXT REQUIRED FOR EACH PARTICULAR PIECE OF EQUIPMENT.

F. LABEL THE FOLLOWING ITEMS:
- PANELBOARDS
- DISCONNECT SWITCHES
- ENCLOSURES & ELECTRICAL CABINETS
- WIRING DEVICES
- VARIABLE SPEED CONTROLLERS
- ACCESS DOORS AND PANELS FOR CONCEALED ELECTRICAL ITEMS. LABEL WITH ITEMS CONCEALED

G. NAMEPLATE COLOR CODE SHALL BE PER OWNER'S STANDARDS.

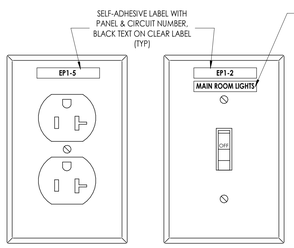
TYPICAL DEVICE MOUNTING HEIGHTS DETAIL



NOTES:
1. ALL MOUNTING HEIGHTS SHALL BE MEASURED FROM FINISHED FLOOR TO CENTERLINE OF DEVICE EXCEPT EXIT SIGNS.
2. DEVICES SHALL BE INSTALLED ON A COMMON VERTICAL CENTERLINE WHEREVER POSSIBLE.
3. ALL DEVICES SHALL BE INSTALLED AT MOUNTING HEIGHTS AS INDICATED ON THIS DETAIL UNLESS OTHERWISE NOTED.

7 E900 **TYPICAL DEVICE MOUNTING HEIGHTS**
NO SCALE

3 E900 **EQUIPMENT IDENTIFICATION NAMEPLATE DETAIL**
NOT TO SCALE



TYPICAL RECEPTACLE FACEPLATE

TYPICAL LIGHTING CONTROL (SWITCH, DIMMER, OCCUPANCY SENSOR) FACEPLATE

NOTES:

A. PROVIDE LABEL FOR ALL WIRING DEVICES, INCLUDING BUT NOT LIMITED TO:
- RECEPTACLES
- LIGHT SWITCHES
- WALL DIMMERS
- WALL OCCUPANCY SENSORS
- FAN SPEED CONTROLS
- EMERGENCY STOP BUTTONS (SHUNT-TRIP CIRCUIT)
- MANUAL MOTOR STARTERS
- REMOTE CONTROL SWITCHES
- CONTROL DEVICES
- VARIABLE FREQUENCY DRIVES
- DISCONNECT SWITCHES

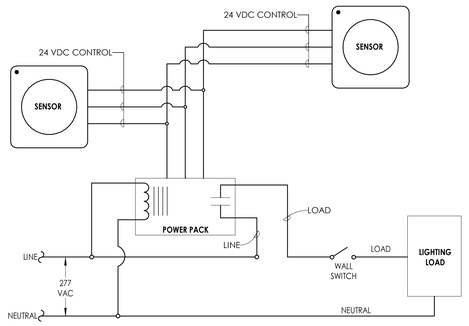
B. LABEL SHALL BE EMBOSSED ADHESIVE TAPE, WITH ½-INCH BLACK-FILLED LETTERS ON CLEAR BACKGROUND.

C. FOR MULTIPLE LIGHTING CONTROLS IN SAME ROOM, ALSO PROVIDE LABEL INDICATING LIGHTS SERVED BY EACH CONTROL.

D. FOR MANUAL MOTOR STARTERS AND SWITCHES USED TO CONTROL MOTORS OR EQUIPMENT OTHER THAN LIGHTS, ALSO PROVIDE LABEL INDICATING EQUIPMENT SERVED BY THE CONTROL.

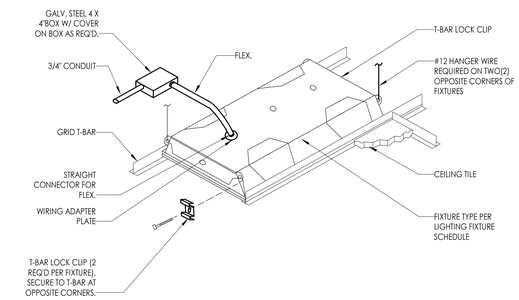
E. WHEN LABELING OUTDOOR DEVICES, LABEL SHALL BE INSTALLED ON THE FACEPLATE INSIDE THE WEATHERPROOF DEVICE COVER, NOT ON THE OUTSIDE OF THE COVER.

8 E900 **TYPICAL WIRING DEVICE LABELING DETAIL**
NOT TO SCALE



NOTE: COORDINATE EXACT REQUIREMENTS WITH OCCUPANCY SENSOR MANUFACTURER'S WIRING DIAGRAMS.

5 E900 **OCCUPANCY SENSOR WIRING DIAGRAM1**
NOT TO SCALE



6 E900 **TYPICAL RECESSED FIXTURE MOUNTING**
NOT TO SCALE

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THE UNIVERSITY of NORTH CAROLINA at CHAPEL HILL

PROJECT INFORMATION

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UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL

Project Name
208 FRANKLIN RENOVATION

Project Address
208 W FRANKLIN ST, CHAPEL HILL, NC 27516

PROJECT ISSUE & REVISION SCHEDULE

#	Date	Description

PROFESSIONAL STAMPS

NORTH CAROLINA REGISTERED LICENSE SEAL 020216 04/17/2025 Registered Professional MICHAEL S. RAITER

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