2018 APPENDIX B **BUILDING CODE SUMMARY** FOR ALL COMMERCIAL PROJECTS (EXCEPT 1 AND 2-FAMILY DWELLINGS AND TOWNHOUSES) Name of Project: Sanford Depot Address: 106 Charlotte Ave., Sanford, NC _Zip Code __<u>27330</u> Owner/Authorized Agent: Fedd Walker Phone # (919) 777 - 1200 E-Mail fedd.walker@sanfordnc.net ☐ City/County ☐ Private Owned By: City of Sanford, NC State Code Enforcement Jurisdiction: ☐ County ☐ State **CONTACT:** DESIGNER TELEPHONE # E-MAIL <u>Traub Architecture</u> <u>Gerald Traub</u> <u>3488</u> Architectural (919) 271-6098 jerry@traubarchitecture.com Civil Electrical _Lighthouse Engineering Paul Scott ____26585 (919) 835-9781 pss@lighthouseengineering.cor Fire Alarm <u>Lighthouse Engineering Scott Brown</u> <u>28385</u> (919) 835-9781 sab@lighthouseengineering.coi Plumbing (919) 835-<u>9781 sab@lighthouseengineering.co</u> Mechanical Lighthouse Engineering Scott Brown 28385 Sprinkler-Standpipe Structural <u>Lysaght & Assoc., PA</u> <u>Mark Blankinship</u> <u>PE046123</u> (919) 833-0495 <u>markb@lysaghtassociates.com</u> Retaining Walls >5' High ☐ New Construction ☐ Addition ☒ Renovation 2018 NC CODE FOR: ☐ 1st Time Interior Completion ☐ Shell/Core ☐ Phased Construction – Shell/Core □ Renovation **2018 NC EXISTING BUILDING CODE:** Prescriptive Chapter 14 **Alteration:** Level I Level II 🛛 Level III Historic Property ☐ Change of Use CONSTRUCTED:(date) 1920 ORIGINAL OCCUPANCY(S) (Ch. 3): B **RENOVATED:** (date) CURRENT OCCUPANCY(S) (Ch. 3): B RISK CATEGORY (table 1604.5) Current: I Proposed: I I \prod IV BASIC BUILDING DATA □ III-A ⊠ III-B UV-A ☐ II-B Sprinklers: No Partial Yes NFPA 13 NFPA 13R NFPA 13D Standpipes: No Yes Class I II III Wet Dry Fire District: No Yes (Primary) Flood Hazard Area: No Yes Special Inspections Required: No Yes Gross Building Area: **Gross Building Area:** RENO/ALTER FLOOR EXISTING (SQ NEW (SQ FT) Sub-Total (SQ.FT) 6th Floor 5th Floor 4th Floor 3rd Floor 2nd Floor Mezzanine 1st Floor 2,736 2,736 0 Basement 2,736 TOTAL ALLOWABLE AREA **Primary Occupancy Classification: SELECT ONE** Assembly \square A-1 \square A-2 \square A-3 \square A-4 \square A-5 Business Educational [F-1 Moderate F-2 Low Factory ☐ H-2 Deflagrate ☐ H-3 Combust ☐ H-4 Health ☐ H-5 HPM H-1 Detonate Hazardous Institutional I-1 Condition 1 2 1-2 Condition 1 $\begin{array}{c|cccc} 2 \\ 2 \\ 3 \\ 4 \\ 5 \end{array}$ \Box 1-3 Condition \Box 1 Mercantile Residential \square R-1 \square R-2 \square R-3 \square R-4 ☐ S-2 Low ☐ High-piled S-1 Moderate Parking Garage Open Enclosed Repair Garage Utility and Miscellaneous **Accessory Occupancy Classification(s): Incidental Uses** (Table 509): Special Uses (Chapter 4 – List Code Sections) Special Provisions: (Chapter 5 – List Code Sections): N/A

Mixed Occupancy: \square No \square Yes Separation: $\underline{N/A}$

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,

See below for area calculations for each story, the area of the occupancy shall be such that the sum of the

<u>Actual Area of Occupancy A</u> + <u>Actual Area of Occupancy B</u> < 1

Allowable Area of Occupancy A Allowable Area of Occupancy B

ratios of the actual floor area of each use divided by the allowable floor area for each use shall not exceed 1.

Non-Separated Use (508.3)

Separated Use (508.4) -

shall apply to the entire building.

a. Perimeter which fronts a public way or open space having 20 feet minimum width = (F b. Total Building Perimeter = (P) c. Ratio (F/P) = (F/P) d. W = Minimum width of public way = (W) e. Percent of frontage increase $I_f = 100 [F/P - 0.25] \times W/30 = (\%)$ nlimited area applicable under conditions of Section 507. aximum Building Area = total number of stories in the building x D (maximum 3 stories) (506.2). The maximum area of open parking garages must comply with Table 406.5.4	A
rontage area increases from Section 506.3 are computed thus: a. Perimeter which fronts a public way or open space having 20 feet minimum width =(F) b. Total Building Perimeter =(P) c. Ratio (F/P) =(F/P) d. W = Minimum width of public way =(W) e. Percent of frontage increase I _f = 100 [F/P - 0.25] x W/30 =(%) Inlimited area applicable under conditions of Section 507. Maximum Building Area = total number of stories in the building x D (maximum 3 stories) (506.2). The maximum area of open parking garages must comply with Table 406.5.4	
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b. Total Building Perimeter =(P) c. Ratio (F/P) =(F/P) d. W = Minimum width of public way =(W)	")
ALLOWABLE HEIGHT	
ALLOWABLE SHOWN ON PLANS CODE RE (TABLE 503)	EFERENCE
Building Height in Feet (Table 504.3) 55' 27'	
Building Height in Stories (Table 504.4) 3 1	

FIRE PROTECTION REQUIREMENTS

BUILDING ELEMENT	FIRE		RATING	DETAIL#	DESIGN	DESIGN # FOR	DESIGN#
	SEPARATION DISTANCE (FEET)	REQ'D	PROVIDED (W/* REDUCTION)	AND SHEET #	# FOR RATED ASSEMB LY	RATED PENETRATION	FOR RATED JOINTS
Structural Frame, including columns, girders, trusses		0	0				
Bearing Walls							
Exterior							
North	36'	2	3	12" masonry			
East	36'	2	3	12" masonry			
West	120'	2	3	12" masonry			
South	90'	2	3	12" masonry			
Interior		0	0				
Nonbearing Walls and Partitions Exterior walls							
North							
East							
West							
South							
Interior walls and partitions		0	0				
Floor Construction Including supporting beams and joists		0	0				
Floor Ceiling Assembly		0	0				
Column Supporting Floors		0	0				
Roof Construction, including supporting beams and joists		0	0				
Roof Ceiling Assembly		0	0				
Column Supporting Roof		0	0				
Shaft Enclosures - Exit		0	0				
Shaft Enclosures - Other							
		0	0				
Corridor Separation Occupancy/Fire Barrier Separation		N/A	N/A				
Party/Fire Wall Separation		N/A	N/A				
Smoke Barrier Separation		N/A	N/A				
Smoke Partition		N/A	N/A				
Tenant/Dwelling Unit/ Sleeping Unit Separation		N/A	N/A				
Incidental Use Separation		N/A	N/A				

ENERGY SUMMARY ENERGY REQUIREMENTS:

The following data shall be considered minimum and any special attribute required to meet the energy code shall also be provided. Each Designer shall furnish the required portions of the project information for the plan data sheet. If performance method, state the annual energy cost for the standard reference design vs annual energy cost for the proposed design.

Existing building envelope complies with code: Yes (The remainder of this section is not applicable) EXISTING BUILDING CODE APPLIES

2018 APPENDIX B

BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS **MECHANICAL DESIGN CODE SUMMARY IS ON SHEET M1** **PLUMBING DESIGN CODE SUMMARY IS ON SHEET P1**

ELECTRICAL DESIGN CODE SUMMARY IS ON SHEET E1

STRUCTURAL DESIGN CODE SUMMARY IS ON SHEET S01

LIFE SAFETY SYSTEM REQUIREMENTS

Emergency Lighting:	☐ No ⊠ Yes
Exit Signs:	☐ No ⊠ Yes
Fire Alarm:	⊠ No □ Yes
Smoke Detection Systems:	No □ Yes □ Partial
Carbon Monoxide Detection:	No □ Yes

LIFE SAFETY PLAN REQUIREMENTS

Life Safety Plan Sheet #:	<u>T - 1</u>
·	

- 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 distances (1017) WORST CASE 40' < 200' ALLOWABLE
- ☐ Common path of travel distances (1006.2.1 & 2006.3.2(1)) 58' < 75' ALLOWABLE
- Dead end lengths (1020.4) **NONE.** Multiple exits from all locations in building.
- ☐ Clear exit widths for each exit door
- Maximum calculated occupant load capacity each exit door can accommodate (1005.3) **180 PERSONS**
- 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. N/A
- Location of doors with panic hardware (1010.1.10) N/A
- Location of doors with delayed egress locks and the amount of delay (1010.1.9.7) N/A
- Location of doors with electromagnetic egress locks (1010.1.9.9) N/A
- Location of doors equipped with hold-open devices N/A
- Location of emergency escape windows (1030) N/A
- \boxtimes The square footage of each fire area (202)
- The square footage of each smoke compartment for Occupancy Classification I-2 (407.5) N/A

EGRESS & EXIT ACCESS

Note any code exceptions or table notes that may have been utilized regarding the items above. **NONE**

Section/Table/Note	Title

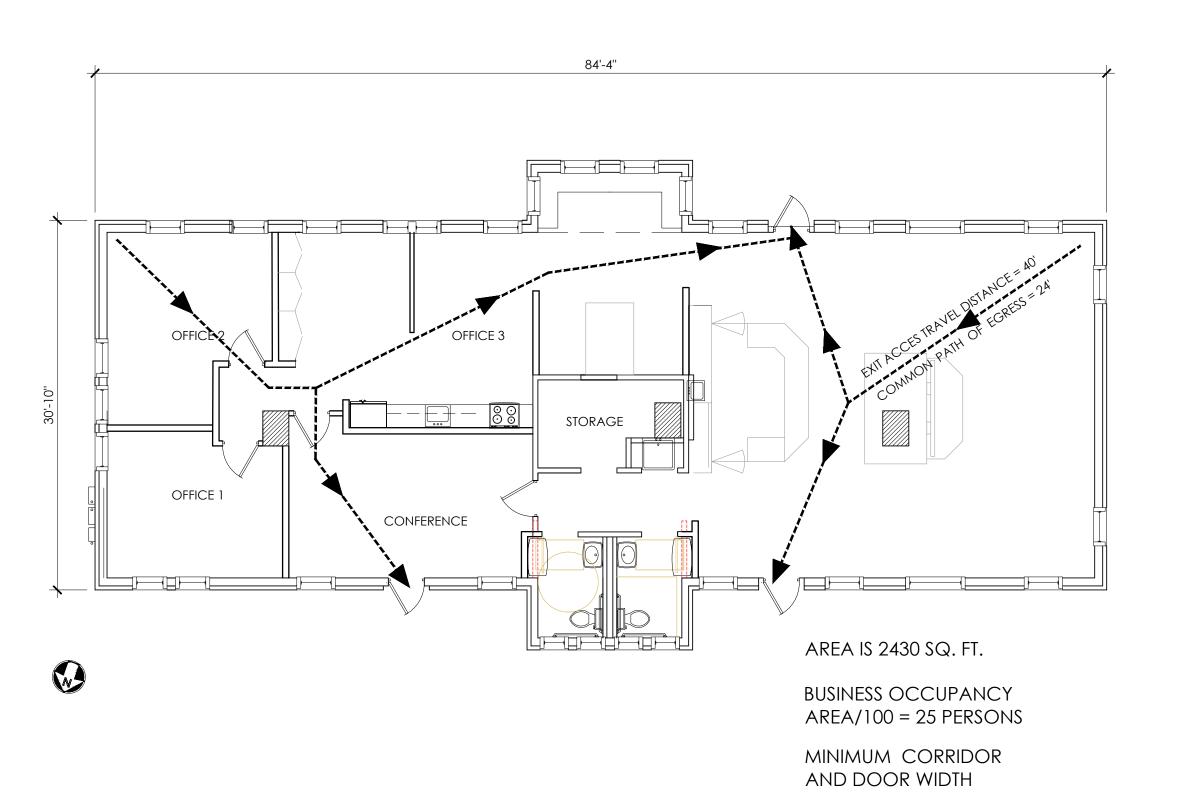
SHEET INDEX

- T.1 APPENDIX "B" & EGRESS
- T.2 GENERAL NOTES, SITE & WALL TAGS
- A.1 EXISTING, DEMOLITION & FLOOR PLAN
- A.2 ELEVATIONS
- A.3 SECTIONS & SCHEDULES
- A.4 REFLECTED CEILING & CASEWORK
- A.5 ROOF PLAN & DETAILS
- E1 ELECTRICAL LEGEND & NOTES
- E2 ELECTRICAL PLANS -- LIGHTING
- E3 ELECTRICAL PLANS -- POWER
- M1 MECHANICAL LEGEND, NOTES, & SCHEDULES
- M2 MECHANICAL PLANS
- P1 PLUMBING LEGEND, NOTES, & SCHEDULES
- P2 PLUMBING PLANS & RISER DIAGRAMS

\$100 GENERAL STRUCTURAL NOTES/DETAILS

- \$101 FOUNDATION & FIRST FLOOR FRAMING PLAN \$102 ATTIC & MECHANICAL PLATFORM FRAMING
- S103 ROOF FRAMING PLAN

25 OCCUPANTS x 0.2"=5"



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REVISIONS $\frac{\mathsf{N}}{\mathsf{N}}$ DESIGN, 06/05/2024 DRAWN BY **GPT** RCHITECTURE PROJECT NO.

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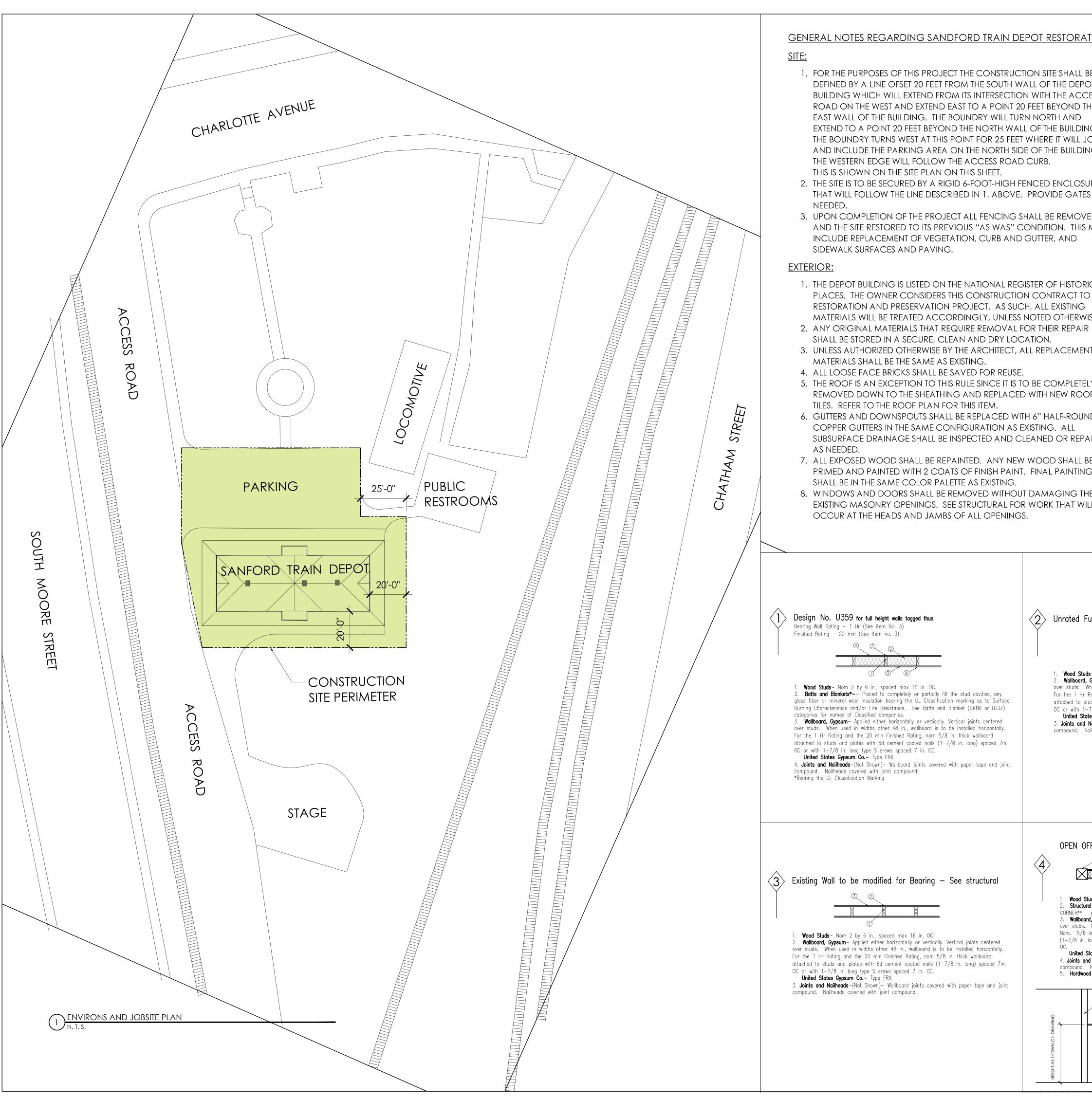
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2023-01

SHEET TITLE

APPENDIX "B"

SHEET INDEX



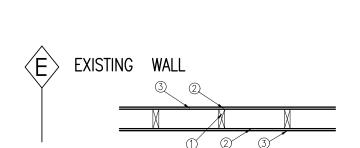
GENERAL NOTES REGARDING SANDFORD TRAIN DEPOT RESTORATION:

- 1. FOR THE PURPOSES OF THIS PROJECT THE CONSTRUCTION SITE SHALL BE DEFINED BY A LINE OFSET 20 FEET FROM THE SOUTH WALL OF THE DEPOT BUILDING WHICH WILL EXTEND FROM ITS INTERSECTION WITH THE ACCESS ROAD ON THE WEST AND EXTEND EAST TO A POINT 20 FEET BEYOND THE EAST WALL OF THE BUILDING. THE BOUNDRY WILL TURN NORTH AND EXTEND TO A POINT 20 FEET BEYOND THE NORTH WALL OF THE BUILDING. THE BOUNDRY TURNS WEST AT THIS POINT FOR 25 FEET WHERE IT WILL JOIN AND INCLUDE THE PARKING AREA ON THE NORTH SIDE OF THE BUILDING. THE WESTERN EDGE WILL FOLLOW THE ACCESS ROAD CURB.
- 2. THE SITE IS TO BE SECURED BY A RIGID 6-FOOT-HIGH FENCED ENCLOSURE THAT WILL FOLLOW THE LINE DESCRIBED IN 1. ABOVE. PROVIDE GATES AS
- 3. UPON COMPLETION OF THE PROJECT ALL FENCING SHALL BE REMOVED AND THE SITE RESTORED TO ITS PREVIOUS "AS WAS" CONDITION. THIS MAY INCLUDE REPLACEMENT OF VEGETATION, CURB AND GUTTER, AND SIDEWALK SURFACES AND PAVING.
- 1. THE DEPOT BUILDING IS LISTED ON THE NATIONAL REGISTER OF HISTORIC PLACES. THE OWNER CONSIDERS THIS CONSTRUCTION CONTRACT TO BE A RESTORATION AND PRESERVATION PROJECT. AS SUCH, ALL EXISTING MATERIALS WILL BE TREATED ACCORDINGLY, UNLESS NOTED OTHERWISE.
- SHALL BE STORED IN A SECURE, CLEAN AND DRY LOCATION.
- 3. UNLESS AUTHORIZED OTHERWISE BY THE ARCHITECT, ALL REPLACEMENT MATERIALS SHALL BE THE SAME AS EXISTING.
- 4. ALL LOOSE FACE BRICKS SHALL BE SAVED FOR REUSE.
- 5. THE ROOF IS AN EXCEPTION TO THIS RULE SINCE IT IS TO BE COMPLETELY REMOVED DOWN TO THE SHEATHING AND REPLACED WITH NEW ROOF TILES. REFER TO THE ROOF PLAN FOR THIS ITEM.
- 6. GUTTERS AND DOWNSPOUTS SHALL BE REPLACED WITH 6" HALF-ROUND COPPER GUTTERS IN THE SAME CONFIGURATION AS EXISTING. ALL SUBSURFACE DRAINAGE SHALL BE INSPECTED AND CLEANED OR REPAIRED
- 7. ALL EXPOSED WOOD SHALL BE REPAINTED. ANY NEW WOOD SHALL BE PRIMED AND PAINTED WITH 2 COATS OF FINISH PAINT. FINAL PAINTING SHALL BE IN THE SAME COLOR PALETTE AS EXISTING.
- 8. WINDOWS AND DOORS SHALL BE REMOVED WITHOUT DAMAGING THE EXISTING MASONRY OPENINGS. SEE STRUCTURAL FOR WORK THAT WILL OCCUR AT THE HEADS AND JAMBS OF ALL OPENINGS.

GENERAL NOTES 2:

INTERIOR:

- 1. THERE ARE MATERIALS ON THE INTERIOR THAT CONTAIN FRIABLE ASBESTOS. (REFER TO THE REPORT FROM JANEZIC BUILDING GROUP, LLC, INCLUDED WITH THE PROJECT DOCUMENTS.) PRIOR TO PERFORMING ANY DEMOLITION OR INTERIOR MODIFICATIONS, THE CONTRACTOR SHALL ABATE AND REMOVE ALL CONTAMINATED MATERIALS. ASBESTOS IS GENERALLY LOCATED IN THE REMAINING CEILING LEVEL PLASTER, THE GWB SKIM COATING, AND THE FLOOR COVERINGS. IT WILL BE THE CONTRACTOR'S OPTION, BUT IT MAY BE MOST EFFICIENT TO ENCAPSULATE THE ENTIRE BUILDING FOR THIS WORK. ANY REMOVAL OF ASBESTOS BEARING MATERIALS SHALL BE PERFORMED BY A LISCENSED ABATEMENT SPECIALIST.
- 2. ALL WINDOWS AND EXTERIOR DOORS ARE TO BE REMOVED AND REPLACED. WHEN REMOVED ALL JAMBS OPENINGS SHALL BE INSPECTED AND REINFORCED AS DESCRIBED ON THE STRUCTURAL DRAWINGS.
- 3. ALL FLOOR JOISTS SHALL BE REPAIRED AT THE PERIMETER OF THE BUILDING. REMOVAL OF FLOORING AROUND THE PERIMETER WILL ALLOW ACCESS TO THE JOIST TAILS TO DO THE WORK SHOWN ON STRUCTURAL DRAWINGS.
- 4. EXISTING MECHANICAL EQUIPMENT AND DUCTWORK SHALL BE REMOVED.
- 5. EXISTING LIGHT FIXTURES SHALL BE REMOVED.



Wood Studs- Nom 2 by 4" or 2 by 6"., spaced max 16 in. OC. **Joints and Nailheads**—(Not Shown)— Damaged wallboard and jo nts covered with paper tape and joint compound. Nailheads covered with joint compound. Surfaces to be spackled and finished as needed for repainting.If condions warrant, GWB may be removed and replaced.

SALVAGE EXISTING WAINSCOT AND CHAIR RAIL

Beaded Board Wainscott Attached to studs Multi-piece Chair Rail Wood Studs— Nom 2 by 6 in., spaced max 16 in. OC. . **Wallboard, Gypsum**— Applied either horizontally or vertically. Vertical joints centered over studs. When used in widths other 48 in., wallboard is to be installed horizontally. For the 1 Hr Rating and the 20 min Finished Rating, nom 5/8 in. thick wallboard attached to study and plates with 6d cement coated nails (1-7/8 in. long) spaced 7in.

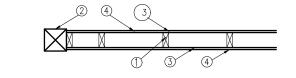
OC or with 1-7/8 in. long type S srews spaced 7 in. OC. United States Gypsum Co.— Type FRX 5. **Joints and Nailheads**—(Not Shown)— Wallboard joints covered with paper tape and joint compound. Nailheads covered with joint compound.

Shoe Molding and cap— Nom 1 by 8"

Remove enough material in good condition to reconstruct at least 6 linear feet of the Historic wainscot system. Pieces shall be removed intact to be reused at a future location. TBD

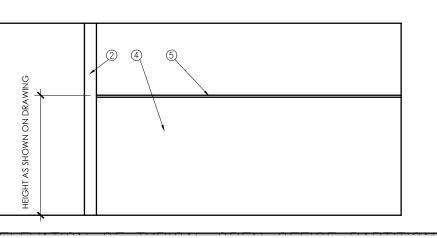
OPEN OFFICE PARTITION

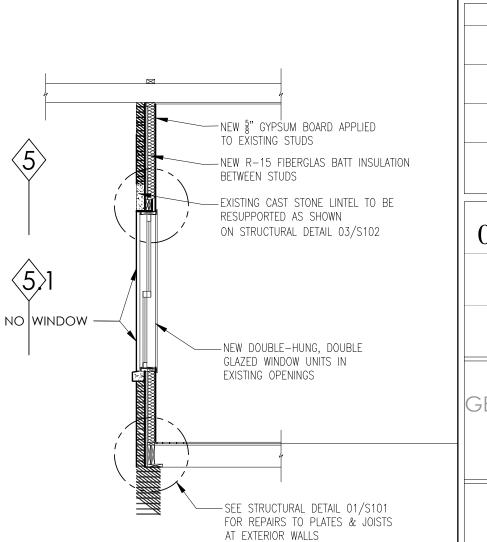
2 Unrated Full Height Wal



Wood Studs- Nom 2 by 4 in., spaced max 16 in. OC. Structural end support- **USE ONLY WHERE THERE IS NO AVAILABLE PERPENDICULAR CORNER** # 1 & Better SYP 6" x 6" from floor plate to structure above 3. **Wallboard, Gypsum**— Applied either horizontally or vertically. Vertical joints centered over studs. When used in widths other 48 in., wallboard is to be installed horizontally. Nom. 5/8 in. thick wallboard attached to studs and plates with 6d cement coated nails (1-7/8 in. long) spaced 7in. OC or with 1-7/8 in. long type S screws spaced 7 in.

United States Gypsum Co.— Type FRX 4. **Joints and Nailheads**—(Not Shown)— Wallboard joints covered with paper tape and joint compound. Nailheads covered with joint compound. 5. **Hardwood cap**. Edges and corners to be Eased by sanding or router.





S REVISIONS 06/05/2024 DRAWN BY **GPT** PROJECT NO. 2023-01 SHEET TITLE GENERAL NOTE SITE & WALL TAGS \triangleleft

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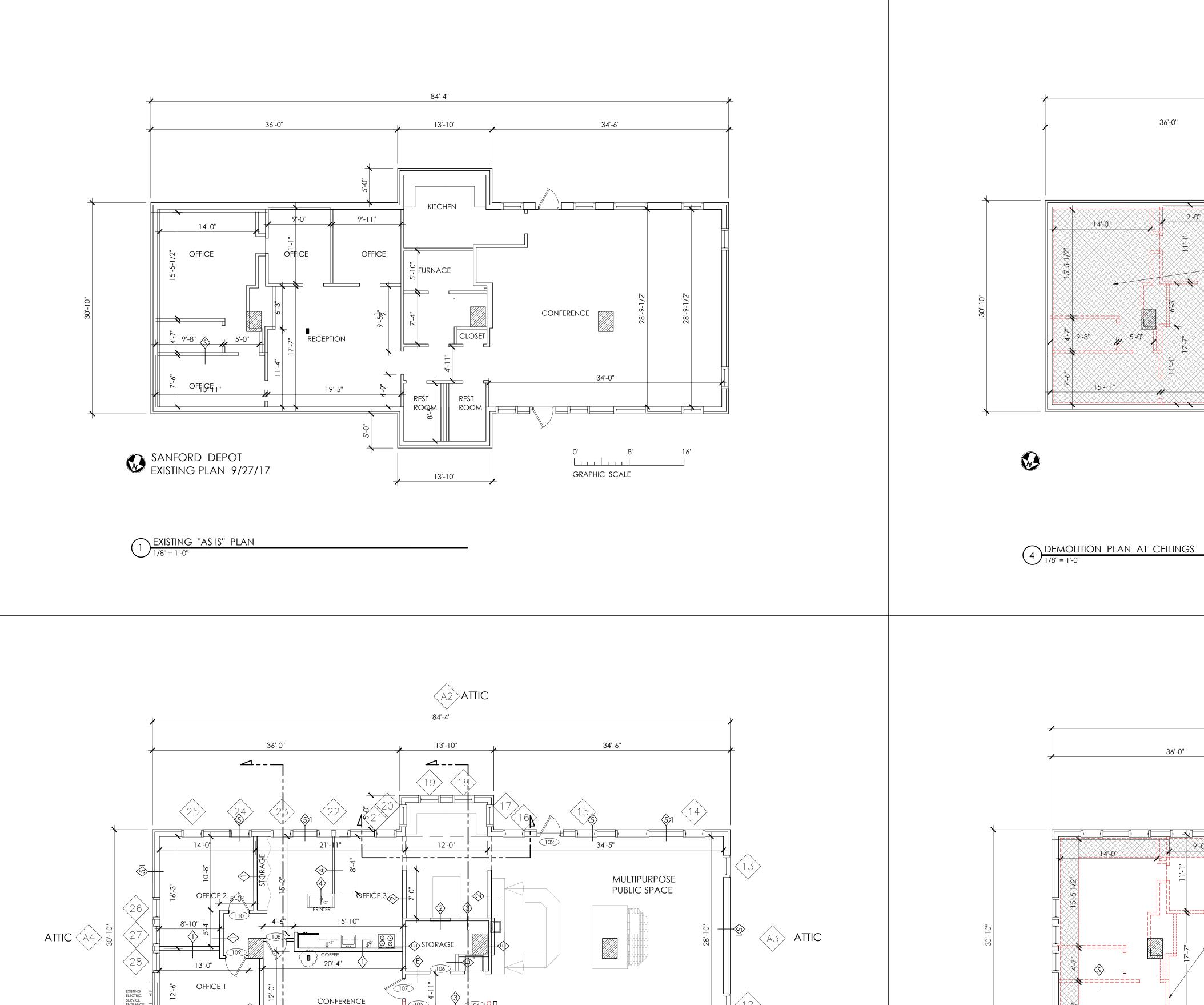
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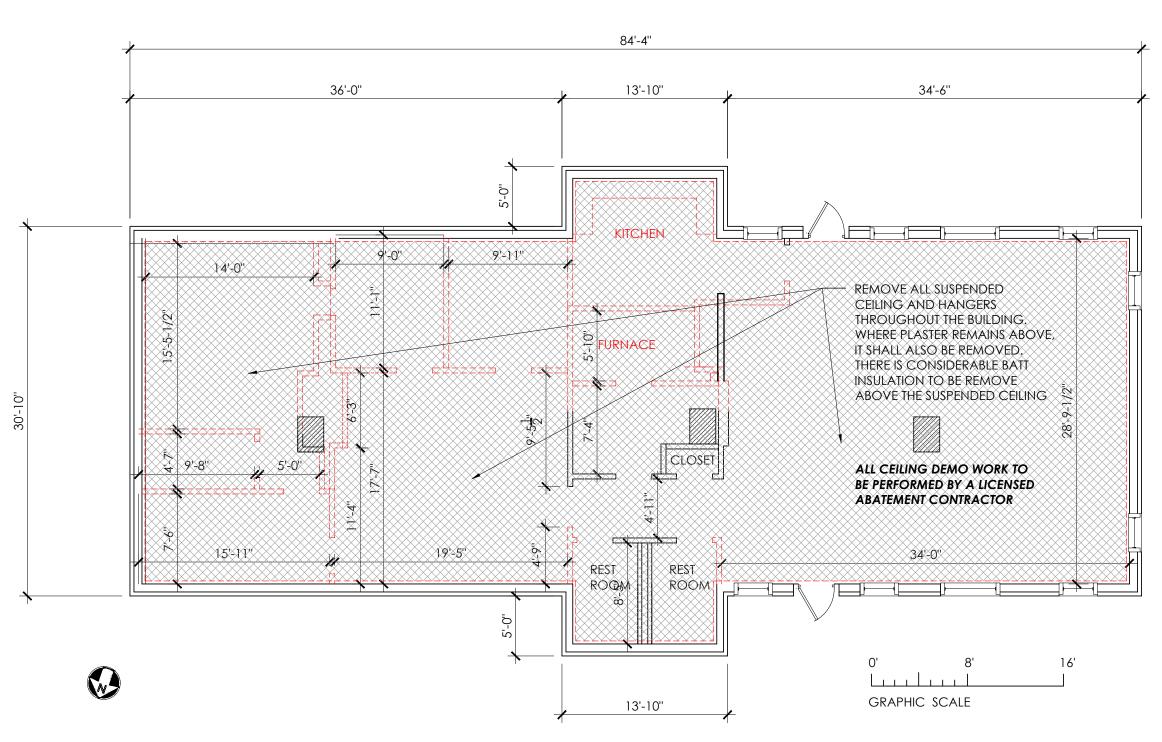
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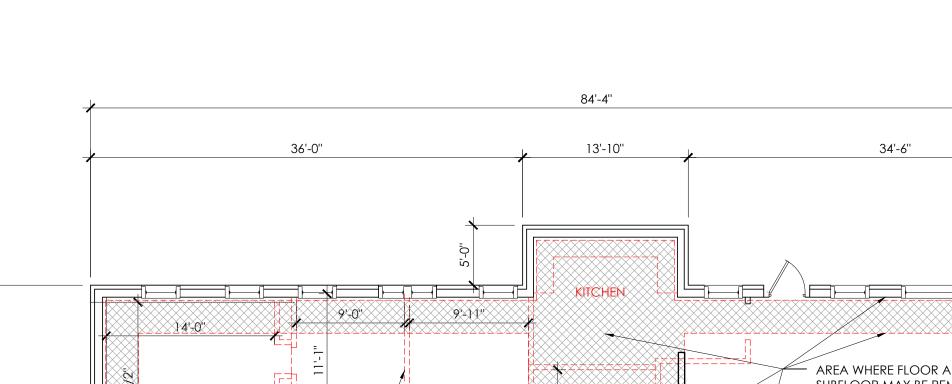


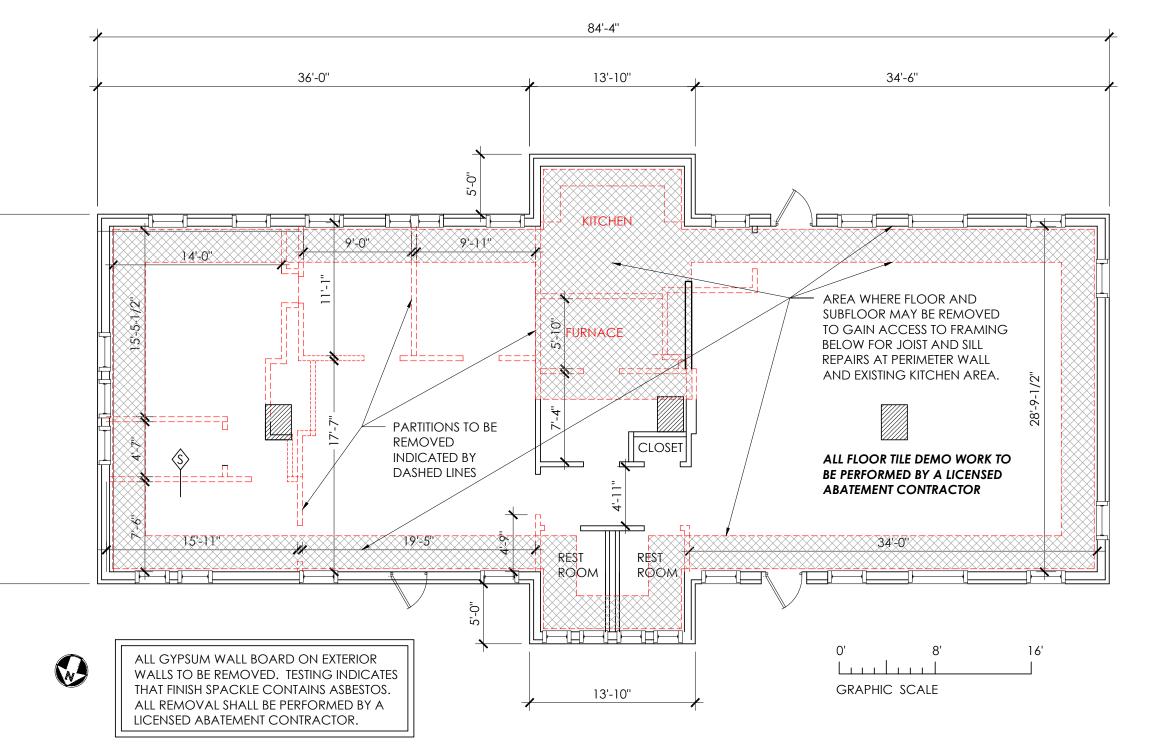
14'-10-1/2"

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2 FLOOR PLAN 1/8" = 1'-0"







3 FIRST FLOOR DEMOLITION PLAN
1/8" = 1'-0"

DEPOT harlotte SANFORD REVISIONS <u>N</u> DESIGN, 06/05/2024

> DRAWN BY GPT

PROJECT NO. 2023-01

SHEET TITLE

EXISTING PLAN

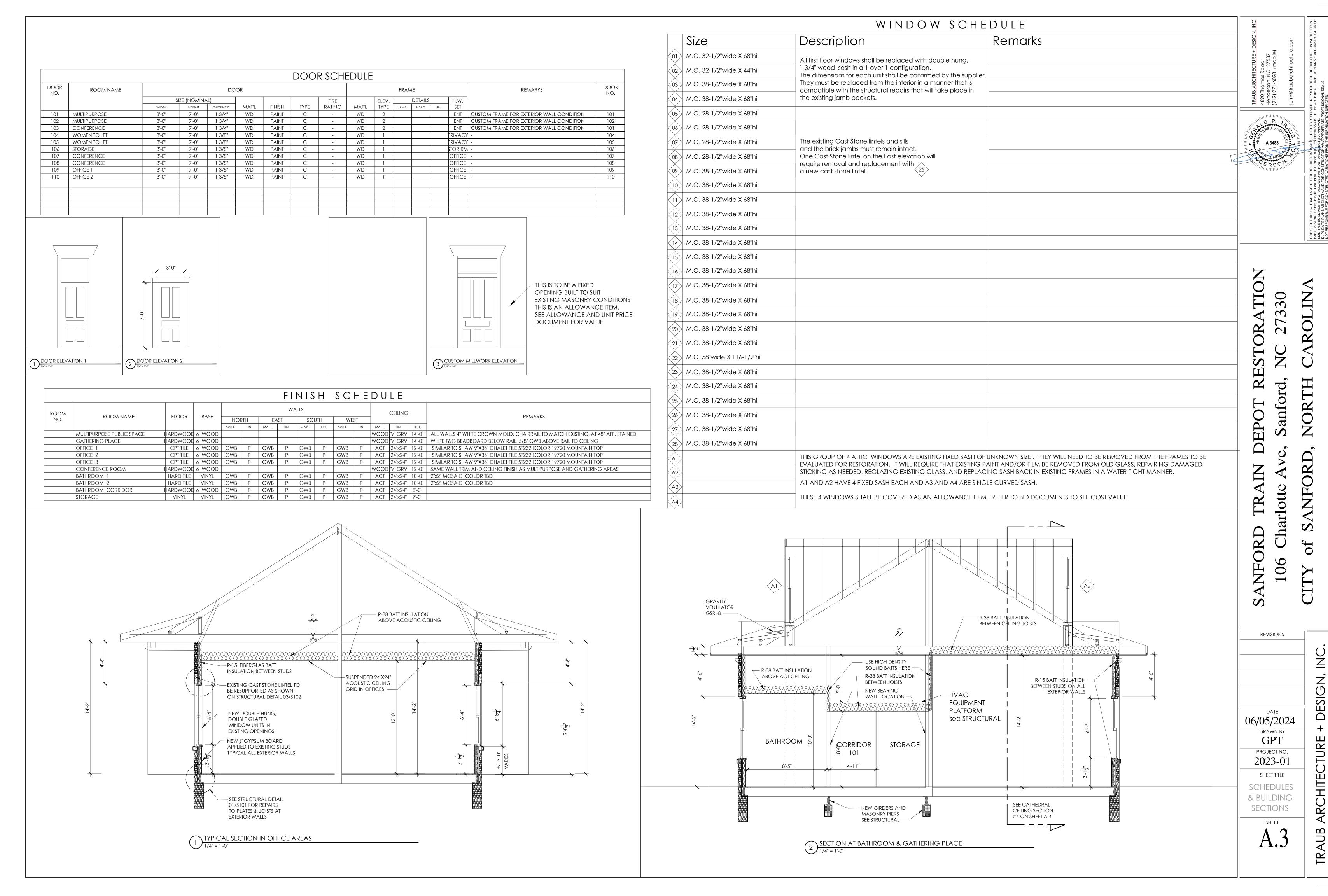
PROPOSED PLAI DEMOLITION

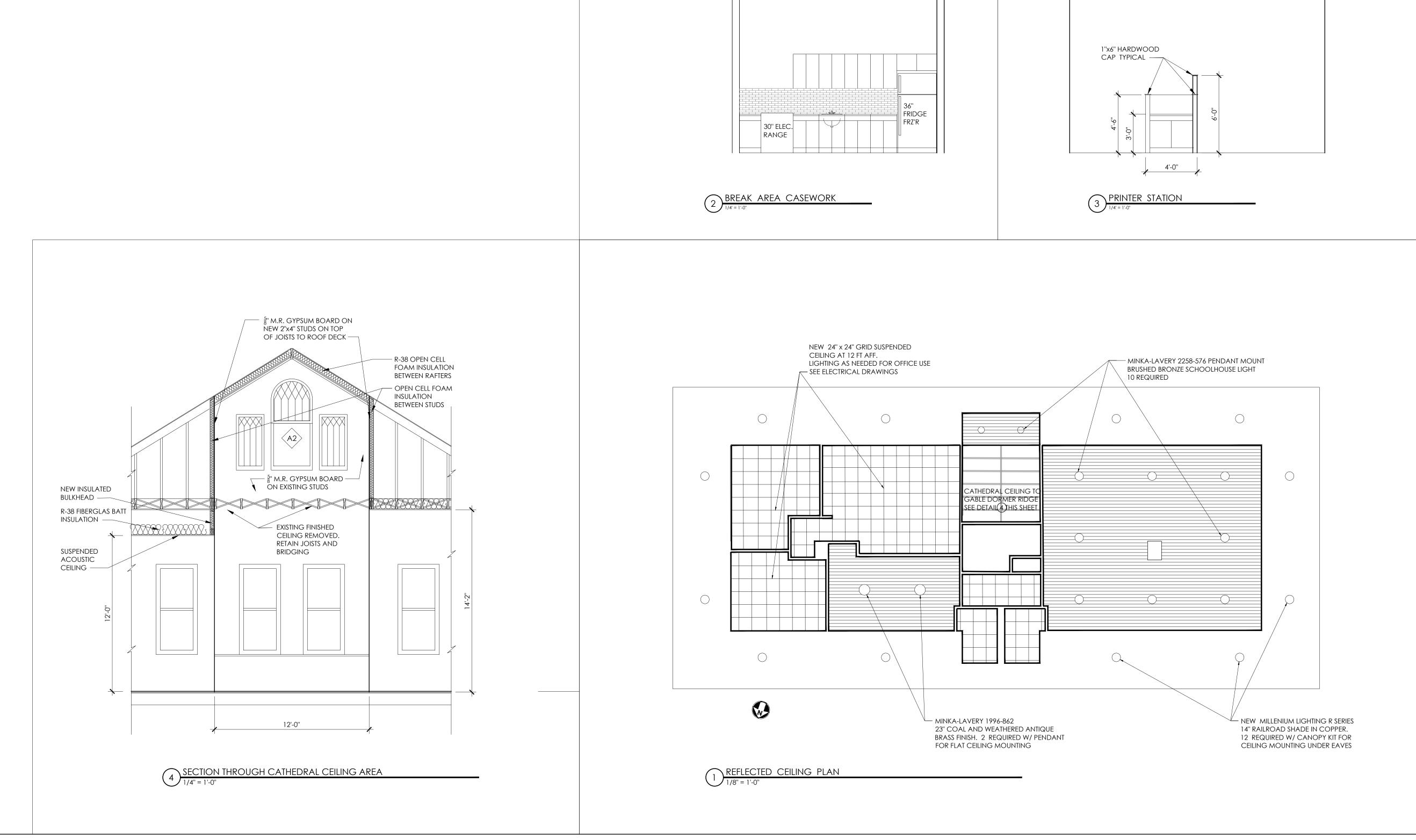
RCHITECTURE

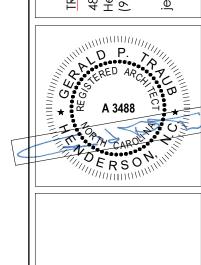
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RESTORATION NORTH





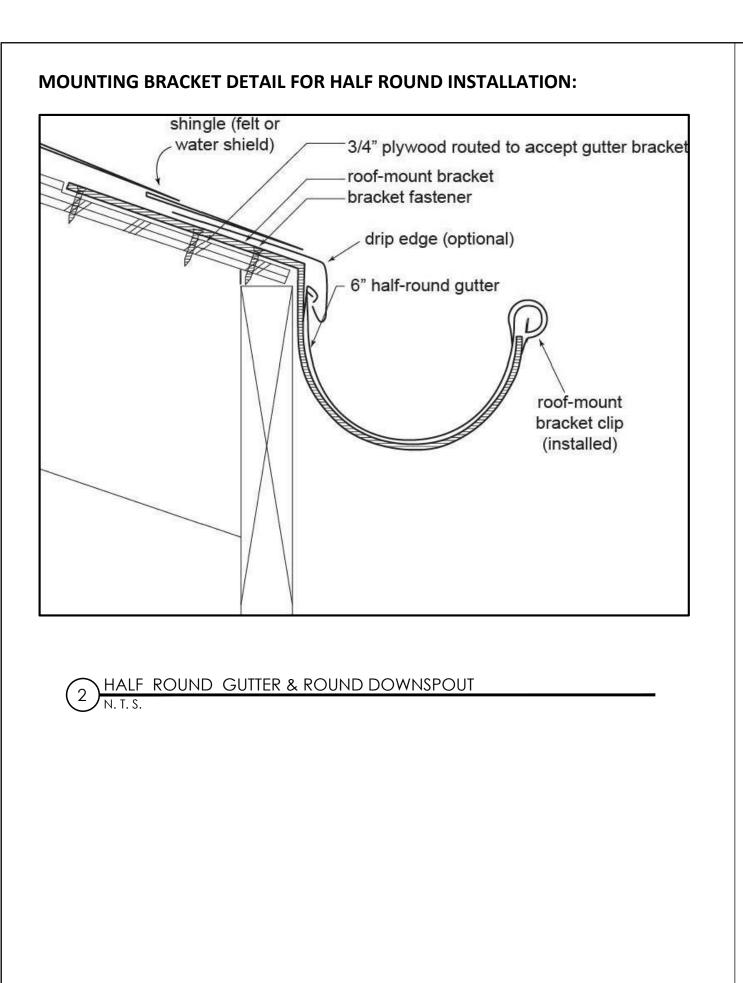


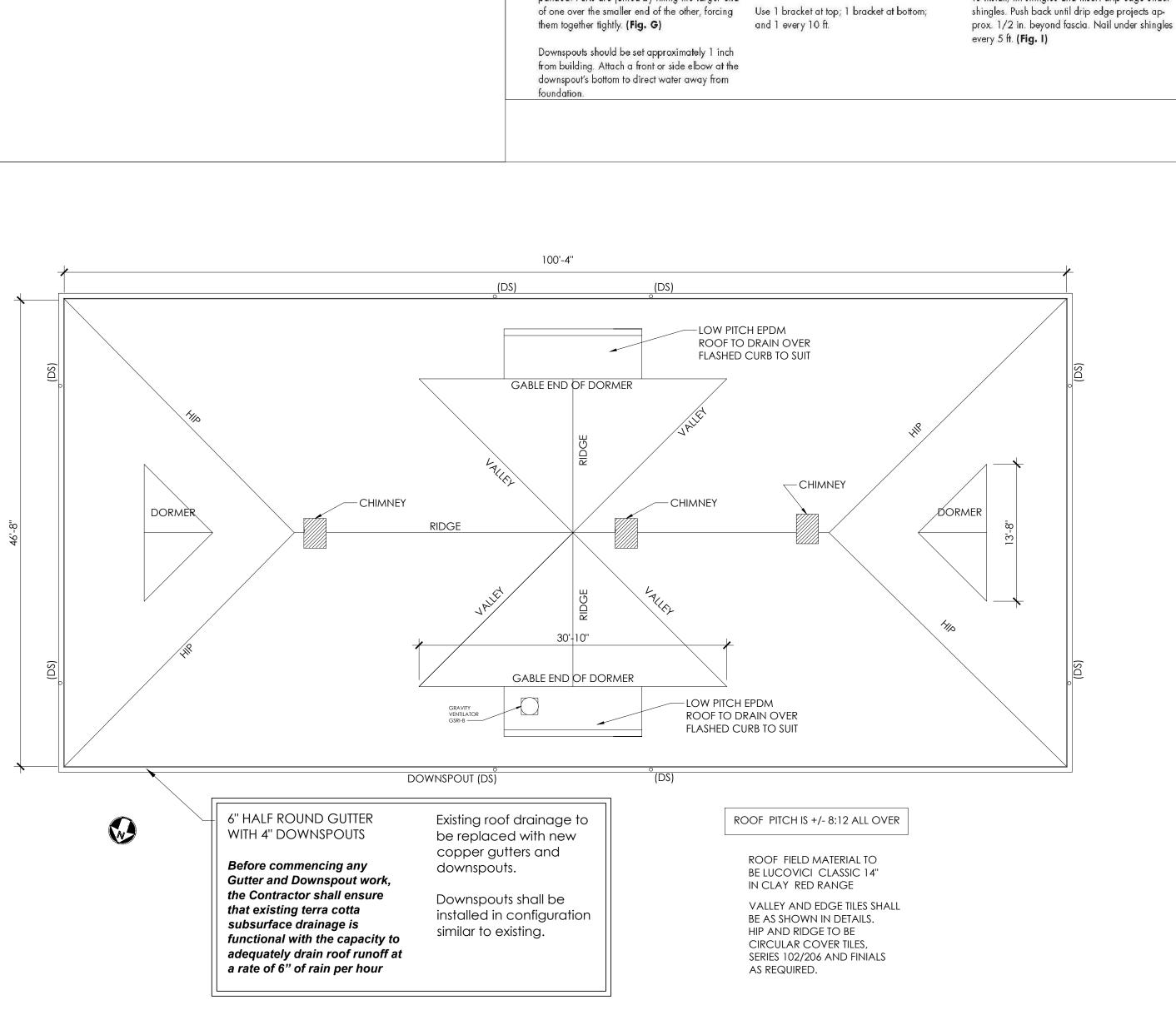


RESTORATION Sanford, NORTH DEPOT ANFOR S

REVISIONS <u>Z</u> DESIGN, 06/05/2024 DRAWN BY GPT ARCHITECTURE PROJECT NO. 2023-01 SHEET TITLE REFLECTED CEILING CASEWORK

TRAUB





INSTALLATION INSTRUCTIONS

Step 4: Decide which hanger you will use.

Roof Mount Hange

(1 every 2 ft of gutter) Installed on roof (not fascia) under

shingles. Used for

new construction or when fascia board not

available. Use Hanger

Bending Tool to install.

Step 2: Assemble gutter. Begin at opposite downspout side of gutter run.

Fascia Mount Hanger

every 2 ft of gutter) Installed on

(Fig. I)

TOWARDS THE EAVE.

Snap end cap to gutter and solder. (Fig. B)

(Fig. H)

Installing Drip Edge

Help direct roof run-off into gutters (optional).

To install, lift shingles and insert drip edge under

Step 1: REMOVE old gutters and

inspect fascia board. REPLACE IF

NEEDED. Tack a string to fascia

board and level. Drop string about

1/4 in. per 20 ft. and retack string.

This is sloped toward downspout.

Step 3: Join two gutter sections.

Rivet and solder (recommended) or

use gutter connectors. (Fig. C)

Attaching Corners/Miters

(Fig. F)

solder only.)

If turning a corner with a gutter, use an inside or outside corner/miter.

Solder (recommended) to connect

Front elbow

Attaching Spout and/or Elbows

Each downspout and elbow has one end ex-

panded. Parts are joined by fitting the larger end

of one over the smaller end of the other, forcing

(Fig. G

Attaching Downspout

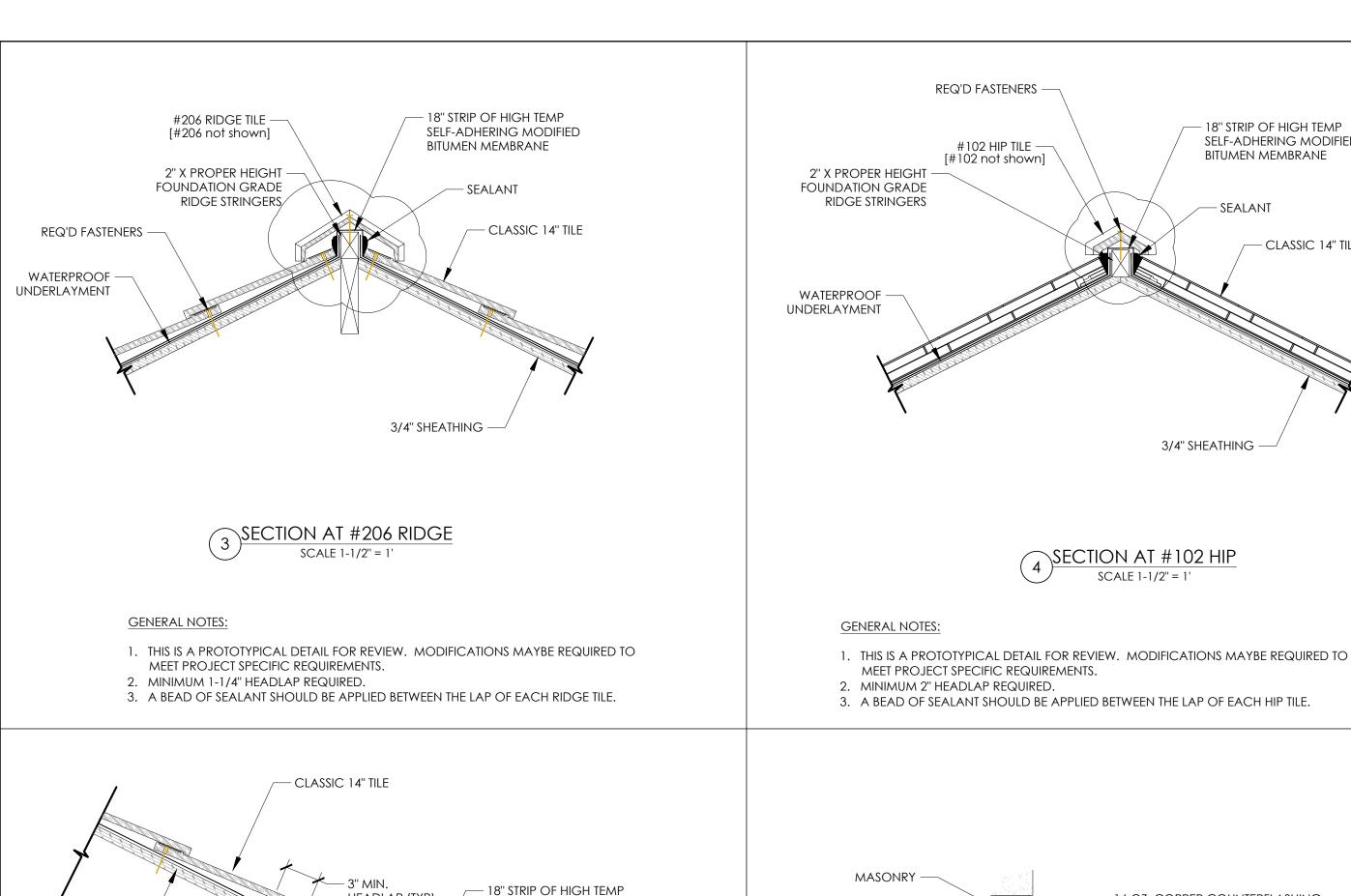
Fasten downspouts against wall. (Fig. H)

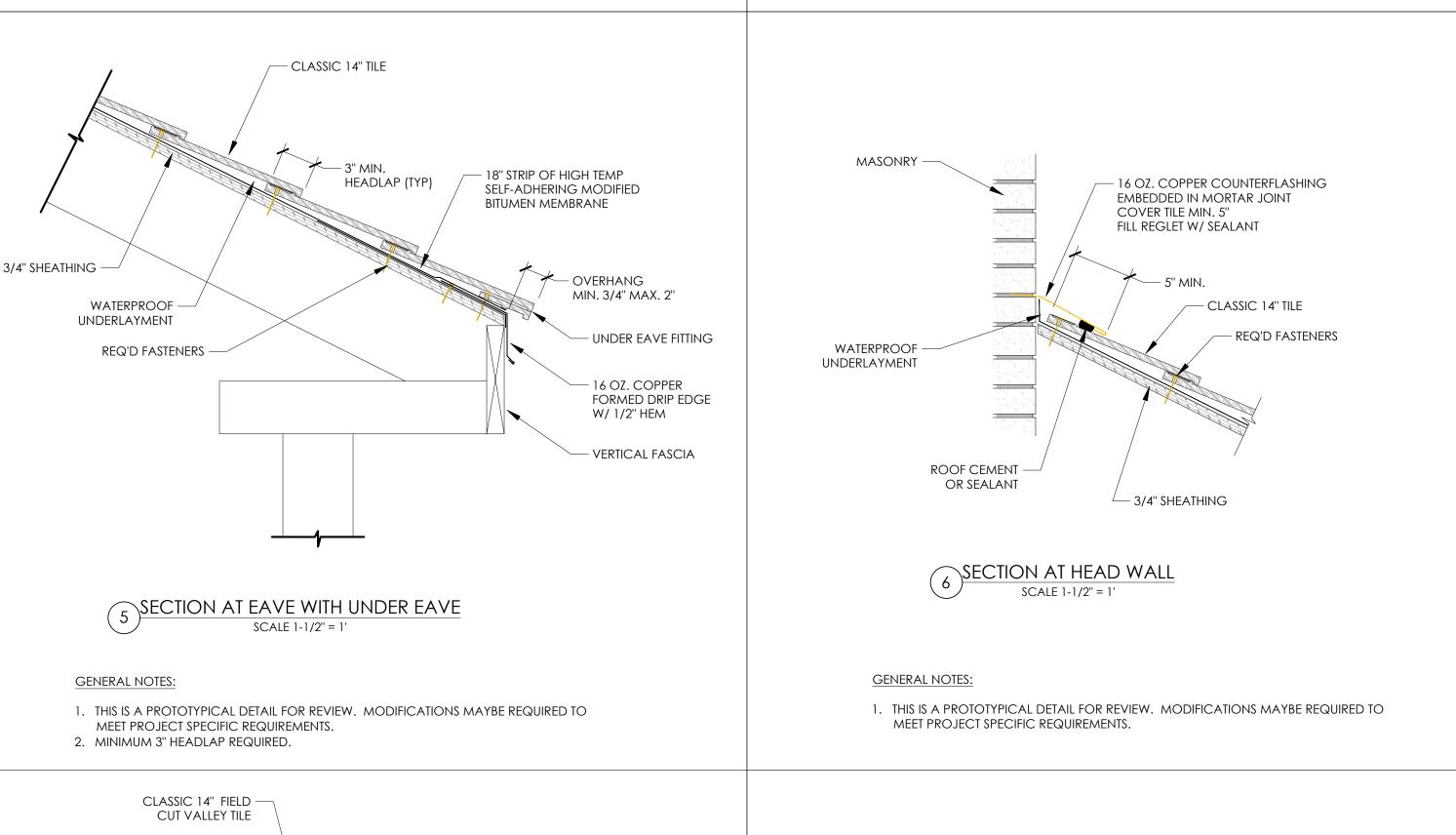
Use 1 bracket at top; 1 bracket at bottom;

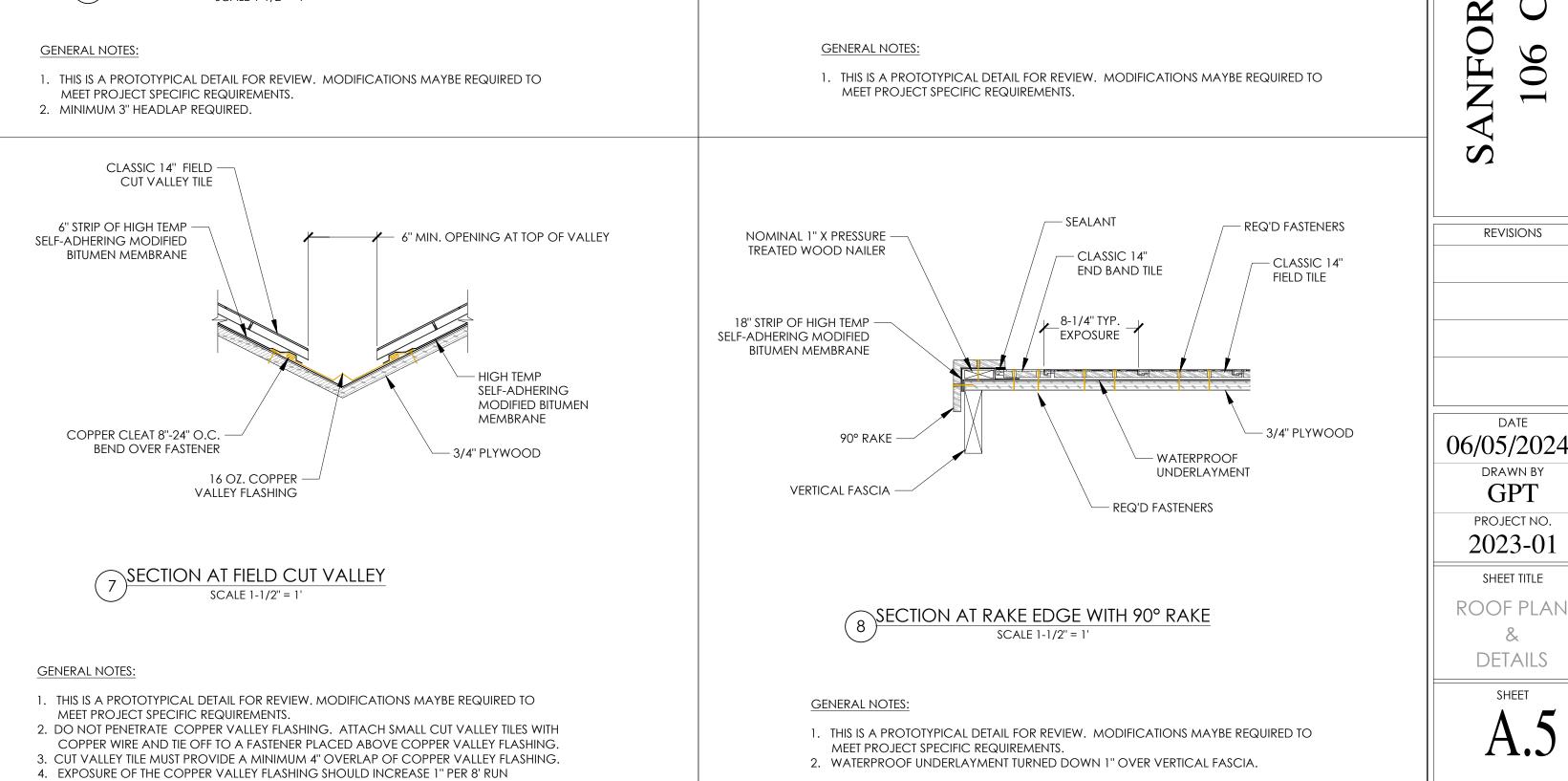
corners/miters to gutter OR use

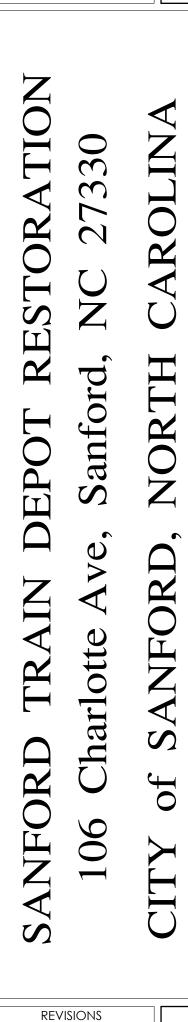
gutter connector. (For VMZinc®,

(Fig. A)









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PROJECT NO.

2023-01

SHEET TITLE

ROOF PLAN

DETAILS

SHEET

- 18" STRIP OF HIGH TEMP

BITUMEN MEMBRANE

- SEALANT

3/4" SHEATHING -

SECTION AT #102 HIP

SELF-ADHERING MODIFIED

— CLASSIC 14" TILE

	ELECTRICAL SYMBOL LEGEND
	CIRCUIT CONDUCTORS CONCEALED IN FLOOR, WALL OR CEILING.
	ARROWHEAD INDICATES HOMERUN TO PANEL NOTED.
//	INDICATES HOT LEG OF CIRCUIT TO BE CARRIED OVER TO NEXT DEVICE. SEE PLANS FOR CONTROL SCHEME.
0	JUNCTION BOX CEILING MOUNTED.
0	JUNCTION BOX FLOOR MOUNTED.
Ю \$	JUNCTION BOX WALL MOUNTED AT HEIGHT INDICATED ON DRAWINGS. SINGLE POLE SWITCH, 20A, 120/277 VOLT, 46" A.F.F. TO CENTER.
·	"3" INDICATES 3-WAY SWITCH. "4" INDICATES 4-WAY SWITCH. "D" INDICATES DIMMER SWITCH OF TYPE TO SUIT LOAD; FINAL SELECTION BY OWNER. "H" INDICATES HINGE MOUNTED PUSH OFF SWITCH.
SS	"M" INDICATES 120V, 20A MOTOR RATED TOGGLE SWITCH. INDICATES FLUORESCENT FIXTURES DUAL SWITCHED, INBOARD/OUTBOARD
-0	SWITCHED SEPARATELY. SINGLE RECEPTACLE, 20 AMP, 120 VOLT, 18" A.F.F. TO CENTER.
⊕	DUPLEX RECEPTACLE, 15 AMP, 120 VOLT, 18" A.F.F. TO CENTER. "GFI" INDICATES GROUND FAULT CIRCUIT INTERRUPTER TYPE. "WP" INDICATES WEATHERPROOF. "EWC" INDICATES MOUNT GFI RECEPTACLE BESIDE ENCLOSURE OF ELECTRIC WATER COOLER.
#	QUADRUPLEX RECEPTACLE, AS ABOVE, 18" A.F.F.
⇒	DUPLEX RECEPTACLE, AS ABOVE, SPLIT WIRED, TOP HALF SWITCHED, 18" A.F.F.
=	DUPLEX RECEPTACLE, AS ABOVE, MOUNTED 6" ABOVE COUNTER TOP OR 4" ABOVE BACKSPLASH, AS APPROPRIATE, OR AT HEIGHT INDICATED.
=	DUPLEX RECEPTACLE, AS ABOVE, MOUNTED 6" ABOVE COUNTER TOP OR 4" ABOVE BACKSPLASH, AS APPROPRIATE, OR AT HEIGHT INDICATED, WITH GFI PROTECTION.
	RECESSED FLUSH FLOOR DUPLEX RECEPTACLE WITH COVERPLATE. COORDINATE EXACT FINISH WITH ARCHITECT AND OWNER; FINAL LOCATION BY OWNER.
\$	240V RECEPTACLE, SEE PLANS FOR NEMA CONFIGURATION.
•	TELEPHONE OUTLET, 18" A.F.F. TO CENTER OR ALIGN MOUNTING HEIGHT WITH ADJACENT DEVICE, UNLESS OTHERWISE NOTED. PROVIDE ¾" CONDUIT TO ACCESSIBLE CEILING. ALIGN MOUNTING HEIGHT WITH ADJACENT DEVICE.
◁	DATA OUTLET, 18" A.F.F. TO CENTER OR ALIGN MOUNTING HEIGHT WITH ADJACENT DEVICE, UNLESS OTHERWISE NOTED. PROVIDE 1" CONDUIT TO ACCESSIBLE CEILING.
4	TELEPHONE/DATA OUTLET, 18" A.F.F. TO CENTER OR ALIGN MOUNTING HEIGHT WITH ADJACENT DEVICE, UNLESS OTHERWISE NOTED. PROVIDE I" CONDUIT TO ACCESSIBLE CEILING.
□ ₁ 30/?/FPN	HEAVY DUTY FUSIBLE/NON-FUSIBLE DISCONNECT SWITCH, NUMBERS INDICATE FRAME SIZE, NUMBER OF POLES AND FUSING. PROVIDE NEMA I ENCLOSURE INSIDE. PROVIDE NEMA 3 ENCLOSURE FOR ALL SWITCHES LOCATED OUTSIDE. "FPN" INDICATES FUSE PER EQUIPMENT NAMEPLATE "NF" INDICATES NON-FUSED. "MS" INDICATES MOTOR STARTER OF TYPE TO SUIT LOAD.
	240/120V PANEL, SURFACE OR RECESS MOUNTED, SEE SCHEDULE FOR DETAILS.
9	FAN, PROVIDED AND INSTALLED BY MECHANICAL CONTRACTOR, WIRED BY ELECTRICAL CONTRACTOR. PROVIDE DISCONNECTING MEANS AS REQUIRED.
MH	WATER HEATER, PROVIDED AND INSTALLED BY PLUMBING CONTRACTOR, WIRED BY ELECTRICAL CONTRACTOR. PROVIDE DISCONNECTING MEANS AS REQUIRED.
M	ELECTRIC UTILITY METER LOCATION.
®	CONNECTION FOR RANGE HOOD/FAN.
МО	WALL SWITCH PASSIVE INFRARED AND MICROPHONIC OCCUPANCY SENSOR EQUAL TO SENSOR SWITCH MODEL WSD PDT. TIME DELAYS 10 MINUTES FOR ON/OFF.
M	WALL OR CEILING MOUNTED PASSIVE INFRARED OCCUPANCY SENSOR EQUAL TO SENSOR SWITCH MODEL HW 13. TIME DELAYS 10 MINUTES FOR ON/OFF.
M2	CEILING MOUNTED PASSIVE INFRARED AND MICROPHONIC OCCUPANCY SENSOR EQUAL TO SENSOR SWITCH MODEL CM PDT 9. TIME DELAYS 10 MINUTES FOR ON/OFF.
MΞ	CEILING MOUNTED PASSIVE INFRARED AND MICROPHONIC OCCUPANCY SENSOR EQUAL TO SENSOR SWITCH MODEL CM PDT 10. TIME DELAYS 30 MINUTES FOR ON/OFF.
м4	CORNER MOUNTED PASSIVE INFRARED OCCUPANCY SENSOR EQUAL TO SENSOR SWITCH MODEL WV 16. TIME DELAYS 10 MINUTES FOR ON/OFF.
м5	CORNER MOUNTED PASSIVE INFRARED OCCUPANCY SENSOR EQUAL TO SENSOR SWITCH MODEL WV 16 R P. TIME DELAYS 10 MINUTES FOR ON/OFF.
Мб	CORNER MOUNTED PASSIVE INFRARED AND MICROPHONIC OCCUPANCY SENSOR EQUAL TO SENSOR SWITCH MODEL WV PDT 16 R P. TIME DELAYS 10 MINUTES FOR ON/OFF.
M7	WALL SWITCH PASSIVE INFRARED OCCUPANCY SENSOR EQUAL TO SENSOR SWITCH MODEL WSD. TIME DELAYS 10 MINUTES FOR ON/OFF.
МВ	CEILING MOUNTED PASSIVE INFRARED AND MICROPHONIC OCCUPANCY SENSOR EQUAL TO SENSOR SWITCH MODEL CM PDT 10. TIME DELAYS 10 MINUTES FOR ON/OFF.
мэ	WALL SWITCH PASSIVE INFRARED OCCUPANCY SENSOR WITH DUAL RELAYS FOR INBOARD/OUTBOARD SWITCHING EQUAL TO SENSOR SWITCH MODEL WSD 2P. TIME DELAYS 10 MINUTES FOR ON/OFF.
	THE MOTION SENSOR LAYOUT SHALL BE REVIEWED AND ADJUSTED BY THE ACTUAL DEVICE MANUFACTURER WHICH THE CONTRACTOR SELECTS. THE CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR THE SYSTEM TO THE ENGINEER FOR REVIEW, PRIOR TO PURCHASE AND INSTALLATION.

Drawing Sheet List										
#	Title									
E1	ELECTRICAL LEGEND AND NOTES									
E2	ELECTRICAL PLANS - LIGHTING									
E3	ELECTRICAL PLANS - POWER									

GENERAL ELECTRICAL NOTES

- ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH THE 2020 EDITION OF THE NATIONAL ELECTRICAL CODE AND ALL LOCAL AND STATE CODES.
- 2. ALL MATERIAL, DEVICES, APPLIANCES, AND EQUIPMENT SHALL BE NEW AND SHALL CONFORM TO THE STANDARDS OF THE UNDERWRITER'S LABORATORIES, INC., AND THE NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION.
- 3. ALL ELECTRICAL PERMITS AND INSPECTION FEES SHALL BE OBTAINED AND PAID FOR BY THE ELECTRICAL CONTRACTOR. DRAWINGS ARE DIAGRAMMATIC ONLY AND INDICATE ONLY THE GENERAL ARRANGEMENT. SEE ARCHITECTURAL
- DRAWINGS FOR EXACT DIMENSIONS. 4. ELECTRICAL CONTRACTOR SHALL GUARANTEE ALL WORK AND MATERIALS FOR

ONE YEAR EFFECTIVE THE DAY THE PROJECT IS ACCEPTED BY THE OWNER.

- 5. ELECTRICAL CONTRACTOR SHALL MAKE ALL ELECTRICAL POWER CONNECTIONS TO HVAC, PLUMBING AND OTHER EQUIPMENT AS REQUIRED.
- 6. A COMPLETE GROUNDING SYSTEM SHALL BE PROVIDED AND INSTALLED IN ACCORDANCE WITH ARTICLE 250 OF THE NEC, AND AS SHOWN ON THE DRAWINGS.
- 7. ALL CUTTING AND PATCHING OF WALLS AND FLOORS FOR ELECTRICAL EQUIPMENT SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.
- 8. CONDUCTORS #8 AND SMALLER SHALL BE COPPER RATED AT NOT LESS THAN 600 VOLTS. CONDUCTORS #6 AND LARGER MAY BE ALUMINUM RATED AT NOT LESS THAN 600 VOLTS. MINIMUM SIZE SHALL BE #12. ALL WIRE #8 AWG AND LARGER SHALL BE STRANDED. ALL CONDUCTORS #10 AND SMALLER SHALL BE SOLID, UNLESS OTHERWISE NOTED. BRANCH CIRCUIT CONDUCTORS SHALL BE TYPE THAN OR THWN AS REQUIRED.
- 9. ALL WIRING SHALL BE INSTALLED IN GALVANIZED RIGID CONDUIT, INTERMEDIATE METAL CONDUIT, OR EMT, EXCEPT AS ALLOWED BELOW. EMT SHALL NOT BE USED IN OR UNDER CONCRETE SLABS, OR IN MASONRY WALLS. USE SCHEDULE 40 PVC OUTDOORS WHERE NOT SUBJECT TO PHYSICAL DAMAGE OR BELOW FLOOR SLAB. MINIMUM CONDUIT SIZE TO BE 1/2". TYPE MC AND AC CABLE MAY BE USED WHERE PERMISSIBLE BY NEC. FLEXIBLE CONDUIT SHALL BE USED FOR CONNECTIONS TO VIBRATING EQUIPMENT AND LUMINAIRES, BUT SHALL NOT EXCEED 6' IN LENGTH.
- 10. PROVIDE A PULLWIRE IN ALL EMPTY CONDUITS.
- II. PROVIDE A TYPED DIRECTORY IN ALL PANELBOARDS CLEARLY DESCRIBING THE LOCATION OF AND TYPE OF LOAD BEING SERVED FOR ALL CIRCUITS. PROVIDE ENGRAVED PHENOLIC NAMEPLATES FOR ALL PANELBOARDS AND DISCONNECT SWITCHES, WHITE LETTERS ON BLACK BACKGROUND.
- 12. FUSES 0 600 AMPS SHALL BE UL CLASS "RK-1" LOW PEAK DUAL ELEMENT TIME DELAY WITH 200,000 AMPERE INTERRUPTING RATING AS MANUFACTURED BY BUSSMANN, UNLESS NOTED OTHERWISE.
- 13. ALL TERMINALS/LUGS SHALL BE 60/75° RATED. ALL TERMINALS, SPLICING CONNECTORS, LUGS, ETC SHALL BE IDENTIFIED FOR USE WITH THE MATERIAL (CU/AL) OF THE CONDUCTOR AND SHALL BE PROPERLY INSTALLED.
- 14. VERIFY ALL REQUIREMENTS AND COORDINATE EXACT LOCATION OF INCOMING ELECTRICAL SERVICE WITH LOCAL POWER COMPANY PRIOR TO PROJECT START-UP. NOTIFY ENGINEER OF ANY CHANGES AS MAY BE REQUIRED.
- 15. E.C. TO VERIFY DEVICE PLATE COLOR AND MATERIAL WITH ARCHITECT PRIOR TO PURCHASE.
- 16. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL ELECTRICAL EQUIPMENT FROM FOREIGN MATERIAL DURING CONSTRUCTION (PAINT, SPACKLE, ETC.).
- 17. PENETRATIONS OF REQUIRED SMOKE PARTITIONS SHALL BE SEALED USING METHODS APPROVED UNDER THE STATE BUILDING CODE. COORDINATION WITH THE GENERAL CONTRACTOR SHALL BE MAINTAINED TO INSURE THAT THIS SMOKE STOPPING IS ACCOMPLISHED.
- 18. WHERE A HOME RUN IS SHOWN THE CIRCUIT SHALL BE INSTALLED IN A DEDICATED CONDUIT, DO NOT COMBINE WITH OTHER CIRCUITS. WHERE A CIRCUIT HOMERUN IS NOT SHOWN, THE CONTRACTOR SHALL COMBINE CIRCUITS AS FOLLOWS: A MAXIMUM OF THREE 20A BRANCH CIRCUITS MAY BE COMBINED IN A COMMON HOMERUN WITH SEPARATE NEUTRALS FOR A MAXIMUM TOTAL OF SIX CURRENT CARRYING CONDUCTORS. ALL BRANCH CIRCUITS LARGER THAN 20A SHALL BE SEPARATELY HOMERUN TO THE PANEL.
- 19. COORDINATE WITH THE CABLE TY AND TELEPHONE UTILITIES FOR SERVICE ENTRANCE AND CABLING REQUIREMENTS PRIOR TO ANY PURCHASING. INSTALLATION MUST COMPLY WITH THEIR RESPECTIVE REGULATIONS AND REQUIREMENTS.
- 20. RECEPTACLES IN COMMERCIAL AREAS SHALL BE SPECIFICATION GRADE EQUAL TO HUBBELL 5200/5300 SERIES; GROUND FAULT RECEPTACLES SHALL BE EQUAL TO HUBBELL GF-5362. LIGHTING SWITCHES SHALL BE SPECIFICATION GRADE EQUAL TO HUBBELL 1200 SERIES.
- 21. ALL EXTERIOR FIXTURES AND DEVICES SHALL BE RATED FOR OPERATION AT 0° F AND SHALL BE DAMP OR WET LABELED AS REQUIRED.
- 22. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ALL ELECTRICAL EQUIPMENT, DEVICES, ETC. IN ACCORDANCE WITH LOCAL SEISMIC CODE REQUIREMENTS. PROVIDE SEISMIC RESTRAINTS, ACCESSORIES AND INSTALLATION DETAIL AS REQUIRED.
- 23. ALL QUESTIONS MUST BE SUBMITTED IN RFI FORMAT TO THE ARCHITECT AND MUST BE ADDRESSED BY THE APPROPRIATE DESIGNER OF RECORD PRIOR TO BECOMING A PROPOSED CHANGE ORDER.

SYSTEM COMMISSIONING NOTES (NCECC C408)

COMMISSIONING REQUIREMENTS ARE NOT REQUIRED FOR THIS BUILDING, PER EXEMPTION UNDER NCECC C408.1, WHICH ALLOWS COMMISSIONING EXEMPTIONS FOR BUILDINGS LESS THAN OR EQUAL TO 10,000 SQUARE FEET OF CONDITIONED SPACE. THIS UPFIT CONTAINS ~2,400 SQUARE FEET OF CONDITIONED SPACE.

			L	LIGHTING	3 FIX	TUR	E SCHE	EDUL	.E	
MARK	MANUF.	CATALOG NUMBER	NO.	MP DATA TYPE	VOLTS	BAL NO.	LAST DATA TYPE	INPUT WATTS	MOUNTING	DESCRIPTION
А	DAYBRITE	25BP3040L8C5- 2-UNV-DIM	-	LED 3500K	120/277	1	-	33	GRID	REST ROOMS - 2X2 LED FLAT PAVEL FIXTURE.
В	DAYBRITE	2FGXG38B835- 2-R5-UNV-DIM	-	LED 3500K	UNV	-	-	32	GRID	OFFICE - 2X2 ARCHITECTURAL LED FIXTURE.
С	SIGNIFY	FSS-4-40L-835-UNV-DIM	-	LED 3500K	UNV	1	-	31	SURFACE	STORAGE, PLATFORM - LED STRIP LIGHT WITH LENS; PROVIDE WIRE GUARD AT MECHANICAL PLATFORM.
D	LIGHTOLIER	S5R-835K-7-Z10U	1	LED 3500K	UNV	1	-	10	SURFACE	CONFERENCE - 5" SLIMSURFACE LED PUCK LIGHT WITH WHITE FINISH.
F	BOCK LIGHTING	WOZZLEI4	-	LED E26 MED BASE	120	1	-	27	PENDANT (HEIGHT BY ARCH)	CONFERENCE - 14" PENDANT LIGHT.
Н	BOCK LIGHTING	A30619135131	-	LED E26 MED BASE	120	1	-	36	PENDANT (HEIGHT BY ARCH)	SERVICE COUNTER AREA - PENDANT LIGHT.
Р	BOCK LIGHTING	A1061915130	-	LED E26 MED BASE	120	-	-	36	PENDANT (HEIGHT BY ARCH)	SALES, RECEPTION - PENDANT SCHOOLHOUSE LIGHTS SURFACE MOUNTED TO WOOD CEILING.
Х	MILLENNIUM LIGHTING	RRRSI8 CP	-	LED 25W MED A2I	120	1	-	25	SURFACE	EXTERIOR - 'R SERIES' 18" RAILROAD SHADE WITH COPPER FINISH RATED FOR EXTERIOR USE.
Z	LEDALUX	WPC36QCIX23U3KCZBU	-	LED 3000K	120/277	1	-	23	WALL	WALL PACK WITH DIE-CAST HOUSING AND 90 MIN BATTERY BACKUP; MOUNTING HEIGHTS PER ARCHITECT.
⊗ EX	BEGHELLI	PX-G-HT	1	LED	UNV	1	-	4	UNIVERSAL	THERMOPLASTIC LED EXIT SIGN WITH GREEN LETTERS AND WHITE HOUSING. CONNECT TO UNSWITCHED LEG ON NEAREST EMERGENCY CIRCUIT.
□	BEGHELLI	BBX	2	LED	UNV	1	-	5	UNIVERSAL	SURFACE LED EMERGENCY LIGHT. MOUNT AT 80" AFF TO BOTTOM. MAX 63' SPACING. PROVIDE WITH 90 MINUTE BATTERY BACKUP.

CATALOG NUMBERS AND MANUFACTURERS ARE TO INDICATE TYPE AND QUALITY OF FIXTURE DESIRED. SUBMIT CUTSHEETS OF THESE AND ALTERNATE MANUFACTURERS FOR ARCHITECT AND OWNER APPROVAL PRIOR TO PURCHASE OF ANY FIXTURES. INFORMATION ON ALTERNATE FIXTURES PROPOSED BY THE CONTRACTOR SHALL INCLUDE THE ADD/DEDUCT ASSOCIATED WITH ACCEPTANCE OF THAT FIXTURE (OR THE ALTERNATE PACKAGE AS A WHOLE).

EXIT AND EMERGENCY LIGHTING FIXTURES SHALL BE CIRCUITED TO AN UNSWITCHED LEG OF THE LOCAL LIGHTING CIRCUIT, UNLESS NOTED OTHERWISE.

LIGHTING SYSTEMS **ENERGY CONSERVATION CODE SECTION 405**

LIGHTING POWER DENSITY CALCULATION COMPLIANCE

INTERIOR LIGHTING POWER DENSITY CALCULATION PER TABLE 405.4.2. SEE LIGHTING FIXTURE SCHEDULE FOR FIXTURE INFORMATION. INTERIOR WATTAGE SPECIFIED VS. ALLOWED <u>1,098</u> VS. <u>1,920</u> EXTERIOR LIGHTING POWER DENSITY CALCULATION PER TABLE 405.6.2. SEE

LIGHTING FIXTURE SCHEDULE FOR FIXTURE INFORMATION.

TRADABLE EXTERIOR WATTAGE SPECIFIED VS. ALLOWED 369 VS. 600 NONTRADABLE EXTERIOR WATTAGE SPECIFIED VS. ALLOWED _____NA_ VS. NA____

THEREOF. SIGNED: NAME: PAUL SCOTT

DESIGNER STATEMENT:

ELECTRICAL ENGINEER

SECTION 406 COMPLIANCE - \square N/A □ 406.1.1 ■ 406.1.2 □ 406.1.3

EXIS'	TING	
	•	

VOLTAGE: 240/120V AMPS: 200 - MLO				P	<u>ANE</u>	TING EL:	A				I PHASE 3 WIR SURFACE MOUNTE NEMA
- DESCRIPTION -	POLE	WIRE SIZE	BRK SIZE	CCT #		В	CCT #	BRK SIZE	WIRE SIZE	POLE	- DESCRIPTION -
REC: EXTERIOR	1	-	20	1	-/-		2	30	-	2	EQ: DISHWASHER
USED	1	-	20	3		-/-	4				
REC: BACK ROOM	1	-	20	5	-/-		6	20	-	1	LTS: UTILITY ROOM
REC: MULTIPURPOSE ROOM	1	-	20	7		-/-	8	20	-	1	UTILITY ROOM
USED	1	-	20	9	-/-		10	20	-	1	USED
USED	1	-	20	11		-/-	12	20	-	1	USED
EQ: TIMECLOCK	1	-	20	13	-/-		14	20	-	1	LTS: MULTIPURPOSE RO
LTS: EXTERIOR	1	-	20	15		-/-	16	20	-	1	EQ: COPIER
USED	1	-	20	17	-/-		18	20	-	1	SPARE
FRONT OFFICE	1	-	20	19		-/-	20	20	-	1	EQ: REFRIGERATOR
REC: KITCHEN	1	-	20	21	-/-		22	20	-	1	EQ: SUMP PUMP
REC: OFFICE 2	1	-	20	23		-/-	24	20	-	1	LTS: KITCHEN
HVAC: A/C	2	-	50	25	-/-		26	60	-	2	HVAC: A/C
				27		-/-	28				
REC: RSVP	1	-	20	29	-/-		30	30	-	-	FURNACE
LTS: RSVP	1	-	20	31		-/-	32	60	-	2	HVAC: A/C
EQ: SUMP PUMP	1	-	20	33	-/-		34				
USED	1	-	20	35		-/-	36	20	-	1	HVAC: BATH HEATER
SPACE	1	-	-	37	-/-		38	20	-	1	HVAC: BATH HEATER
SPACE	1	-	-	39		-/-	40	20	-	1	EQ: NEW SUMP PUMP
TOTAL		IEC+1	-n I	/ A		- -			חרי	441	D 1374
TOTAL C	UNN	NEC 1	:U K\	/A			J		DEL	IAN	D kVA: -

EXISTING LOADS ARE SHOWN FAINT. PANEL IS EQUAL TO ITE EQ LOAD CENTER.

E.C. TO FIELD VERIFY ALL EXISTING CONDITIONS AND LOCATIONS OF EQUIPMENT PRIOR TO BIDDING WORK.

REVISED PANEL "A" LOAD SUMMARY

CIRCUIT DIRECTORY TO BE UPDATED PER NEC 408.4

X COMMERCIAL (SEE BELOW)

TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE DESIGN OF THIS BUILDING

ENERGY CONSERVATION CODE, SECTION C405 AND ANY LOCAL AMENDMENTS

□ 406.1.4 □ 406.1.5 □ 406.1.6

COMPLIES WITH THE LIGHTING SYSTEMS REQUIREMENTS OF THE INTERNATIONAL

VOLTAGE: 240/120V AMPS: 200 - MLO				Р	ANE	TING EL:	Α				I PHASE 3 WIRE FLUSH MOUNTED
	201 5	WIRE	BRK		LOAD PE	r phase B]	BRK	WIRE	ho. 1	NEMA 1
· · · · · · · · · · · · · · · · · · ·	ULE	WIRE SIZE				Б	CCT #	BRK SIZE	WIRE SIZE		- DESCRIPTION -
REC: OFFICES, EXTERIOR REC: OFFICES	1	12	20	3	1.1/3.0	1.1 /3.0		40	0	2	EUS RANGE
REC: CONFERENCE	1	12	20	5	1.1/_	_	6	20	_	1	 SPARE
REC: CONFERENCE, STORAGE	1	12	20	7	""/ -	0.9/0.3	Ľ	20	12		LTS/REC: ATTIC
REC: REST ROOMS, MARKET	1	12	20	9	1.1/_	0.3	10	20	-	_	SPARE
REC: KIOSK, MARKET, TVS	1	12	20	<u> </u>	/-	1.2 / 0.2		20	12	_	LTS: RESTROOMS, STORAG
EQ: TIMECLOCK	1	12	20	13	0.1 /0.5	_	14	20	12	_	LTS: SALES, SERVICE
LTS: EXTERIOR	<u> </u>	12	20	15	7 0.5	0.4/0.4		20	12	1	EQ: PRINTER
REC: RECEPTION	1	12	20	17	0.7/1.1	7 0.4	18	20	12	1	REC: DESK AREA
REC: RECEPTION	1	12	20	19	7 1.1	0.7/0.6	20	20	12	1	EQ: REFRIGERATOR
REC: BAR AREA	1	12	20	21	0.4/0.3		22	20	12	-	EQ: SUMP PUMP
REC: SERVICE COUNTER	1	12	20	23		0.7/0.6	24	20	12	1	LTS: OFFICE, BREAK
HVAC: AH-1	2	6	50	25	4.0/5.2		26	60	6	_	HVAC: AH-2
				27		4.0/5.2	28				
FI REC: EXTERIOR	1	12	20	29	0.4/_		30	30	1	1	SPARE
SPARE	1	1	20	31		⁻ /1.6	32	30	10	2	HVAC: HP-I
EQ: SUMP PUMP	1	12	20	33	0.3/1.6		34				
SPARE	1	1	20	35		- / _{2.1}	36	40	8	2	HVAC: HP-2
SPACE	1	1	-	37	- / _{2.l}		38				
SPACE	1	1	1	39		⁻ /0.3	40	20	12	1	EQ: SUMP PUMP
					22.6	23.I 5.7					

EXISTING LOADS ARE SHOWN FAINT; NEW AND/OR REVISED LOADS ARE SHOWN BOLD.

- PANEL IS EQUAL TO ITE EQ LOAD CENTER. PROVIDE AN UPDATED TYPED DIRECTORY IN ALL PANELBOARDS CLEARLY DESCRIBING THE
- LOCATION OF AND TYPE OF LOAD BEING SERVED FOR ALL CIRCUITS. 3. E.C. SHALL COORDINATE EXISTING BREAKER DESIGNATIONS SHOWN ON PANEL SCHEDULE AND AT EQUIPMENT WITH ACTUAL PANEL LAYOUT AND EXISTING CIRCUITING IN FIELD. CIRCUIT ASSIGNMENTS AND LABELING MAY BE ADJUSTED AS REQUIRED.
- 4. ATC CIRCUIT VIA 120V ASTRONOMIC TIMECLOCK WITH LOCKABLE COVER AND BATTERY BACKUP; LOCATE TIMECLOCK ADJACENT TO PANEL. NOTE: EXISTING DEVICES MAY BE REUSED
- IF ADEQUATE. TC - CIRCUIT VIA MULTI-POLE 24-HR, 7-DAY TIMECLOCK WITH LOCKABLE COVER; LOCATE
- TIMECLOCK ADJACENT TO PANEL. NOTE: EXISTING DEVICES MAY BE REUSED IF ADEQUATE.
- 6. MS FIXTURES SHALL BE CONTROLLED VIA LOCAL MOTION SENSORS BY WATTSTOPPER OR
- 7. GFI PROVIDE GFCI BREAKER FOR CIRCUIT. GFCI RECEPTACLES MAY BE USED IN LIEU OF GFCI BREAKERS SO LONG AS THE DEVICE(S) CONFORM TO NEC CODE REQUIREMENTS FOR GFCI PROTECTION AND CAN BE MOUNTED IN A READILY ACCESSIBLE LOCATION.

HEVIOLD I AND	L A LOAL		IVIIVI	VI I I
LOAD TYPE		kVA CONN	DEM FACT	kVA DEM
LOADS ON 200AMP FUSED DIS	SCONNECT			
LIGHTS + EFS		1.6	1.25	2.0
RECEPTACLES	IST IOKVA	10.0	1.0	10.0
	REMAINDER	0.3	0.5	0.2
HVAC	LARGEST MOTOR	6.0	1.25	7.5
	REMAINDER	19.8	1.0	19.8
EQUIPMENT		8.0	1.0	8.0
TOTALS		45.7		47.5
TOTAL AMPS @ 240V IØ	197.9			









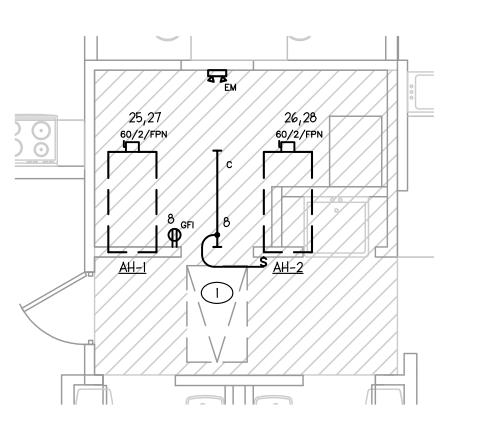
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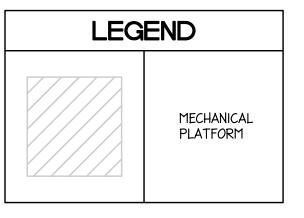
REVISIONS	
DATE	╽ ╴
08-04-2023	∥
DRAWN BY JRS	
PROJECT NO.	[
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ELECTRICAL LEGEND AND NOTES

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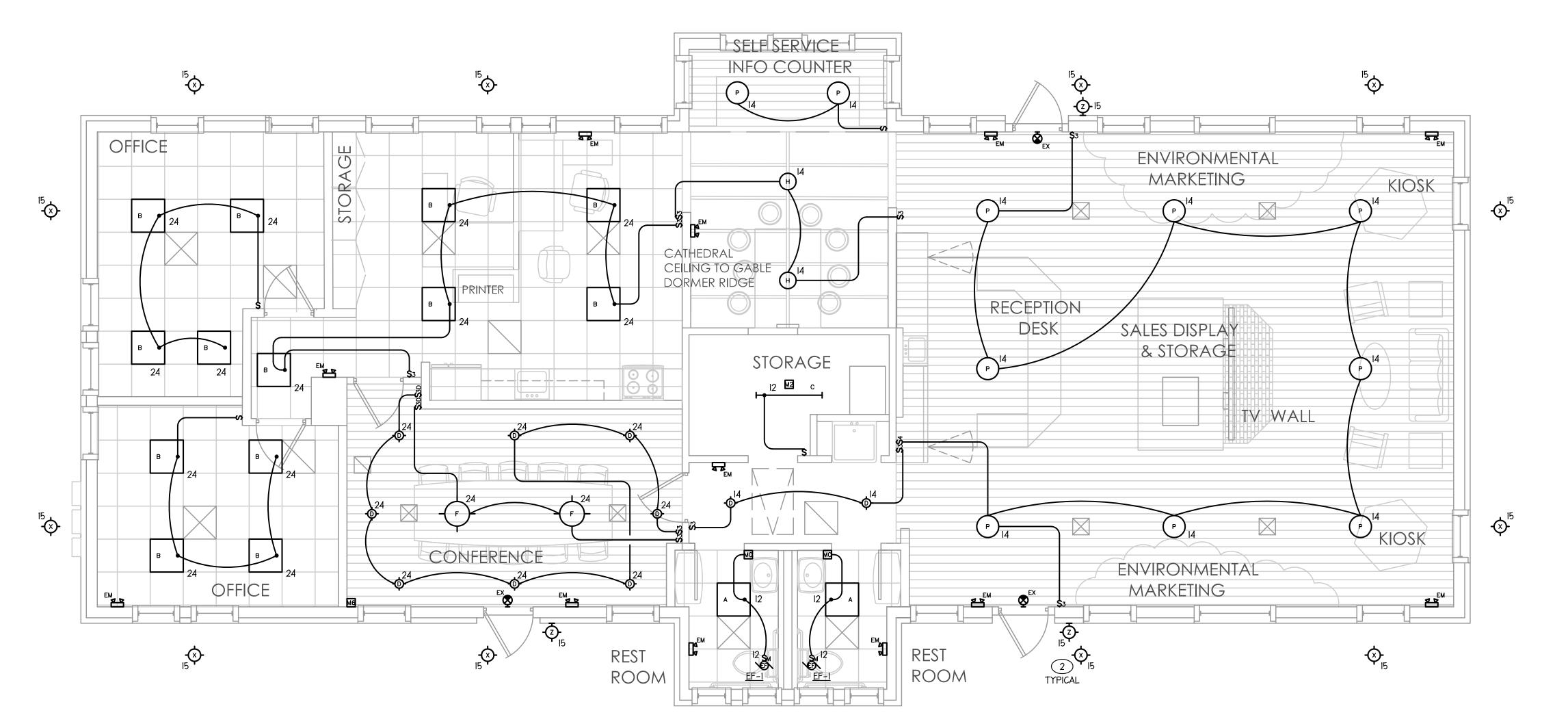




NOTE: ANY CIRCUIT NUMBERS PROVIDED FOR EXISTING DEVICES ARE FOR GUIDANCE ONLY AND SHALL NOT BE RELIED UPON FOR SAFETY PURPOSES. THE INTENT IS FOR EXISTING DEVICES ON THIS PLAN TO REMAIN CIRCUITED AS IS, AND THE CONTRACTOR SHALL ADJUST CIRCUIT ASSIGNMENTS WITHIN A PANEL TO SUIT

EXISTING CONDITIONS.







GENERAL NOTES: (ELECTRICAL LIGHTING PLANS)

- I. EXISTING DEVICES ARE SHOWN FAINT. NEW AND/OR RELOCATED DEVICES ARE SHOWN BOLD. FIELD VERIFY EXACT LOCATION OF ALL DEVICES PRIOR TO STARTING WORK. EXISTING DEVICES SHALL REMAIN, UNLESS OTHERWISE NOTED.
 - E EXISTING DEVICE TO REMAIN. R - RELOCATE EXISTING FIXTURE OR DEVICE AND ALL ASSOCIATED CIRCUIT WIRING, SWITCHES, ETC. TO NEW LOCATION AS SHOWN. REM - REMOVE EXISTING DEVICE AND ALL ASSOCIATED
- 2. EXISTING INFORMATION WAS OBTAINED FROM SITE VISIT DATED II-16-17 AND 03-10-23. E.C. SHALL VERIFY ALL FIELD CONDITIONS PRIOR TO BEGINNING WORK.

WIRING, SWITCHES, ETC.

- 3. LIGHTING FIXTURE AND SWITCH LOCATIONS SHALL BE COORDINATED WITH ARCHITECT AND OWNER PRIOR TO INSTALLATION.
- 4. ALL CIRCUITS TO PANEL "A".

TAGGED NOTES: (ELECTRICAL LIGHTING PLANS)

- (I) E.C. SHALL PROVIDE A GFI RECEPTACLE, SWITCH AND LIGHT FIXTURE "C" IN THE ATTIC. CONFIRM LOCATIONS WITH ARCHITECT AND OWNER PRIOR TO ROUGH-IN; COORDINATE WITH M.C. TO PROVIDE BEST ILLUMINATION AND ACCESS.
- 2 E.C. SHALL REMOVE EXISTING EXTERIOR LIGHT FIXTURES AND REPLACE WITH NEW LIGHT FIXTURES AS INDICATED; COORDINATE WITH ARCHITECT AND OWNER PRIOR TO BEGINNING WORK.









ROLIN **DEPO** NFORD

REVISIONS

 $\frac{\mathsf{N}}{\mathsf{N}}$

DESIGN,

ARCHITECTURE

TRAUB

08-04-2023

DRAWN BY JRS

PROJECT NO. GTA-1701

ELECTRICAL PLANS -LIGHTING

ELECTRICAL CONTRACTOR. FPN FUSE PER EQUIPMENT NAMEPLATE REQUIREMENTS.

G.C. GENERAL CONTRACTOR. M.C. MECHANICAL CONTRACTOR.

AFG

P.C. PLUMBING CONTRACTOR. INDICATES DEVICE TO HAVE WEATHERPROOF COVER.

UON UNLESS OTHERWISE NOTED.

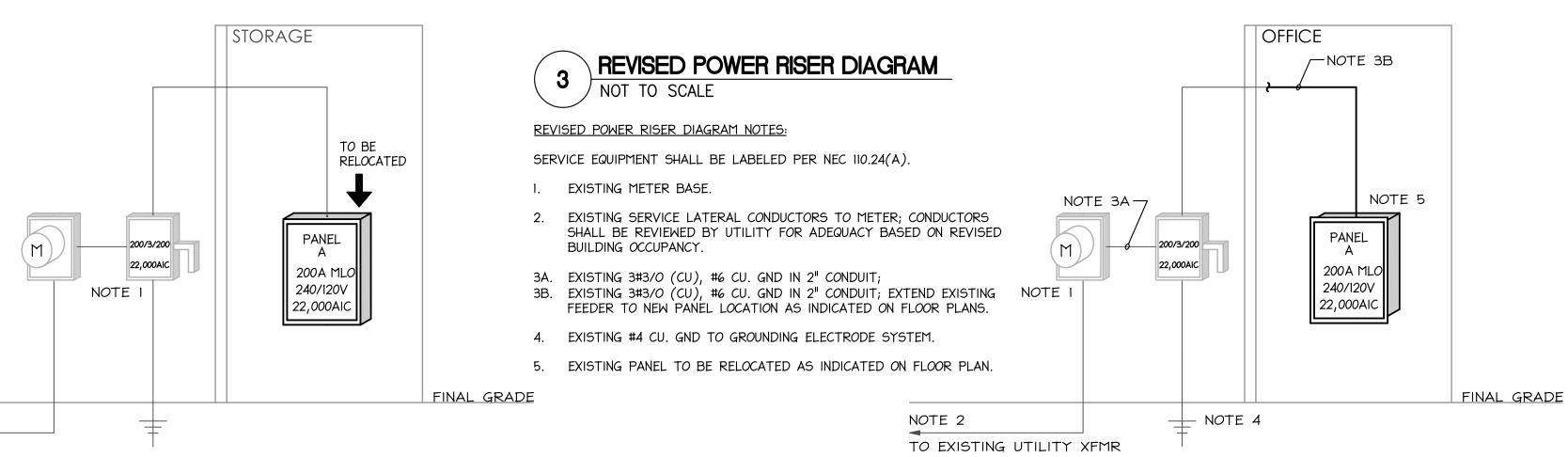
NIGHT LIGHT, LIGHT NOT SWITCHED.

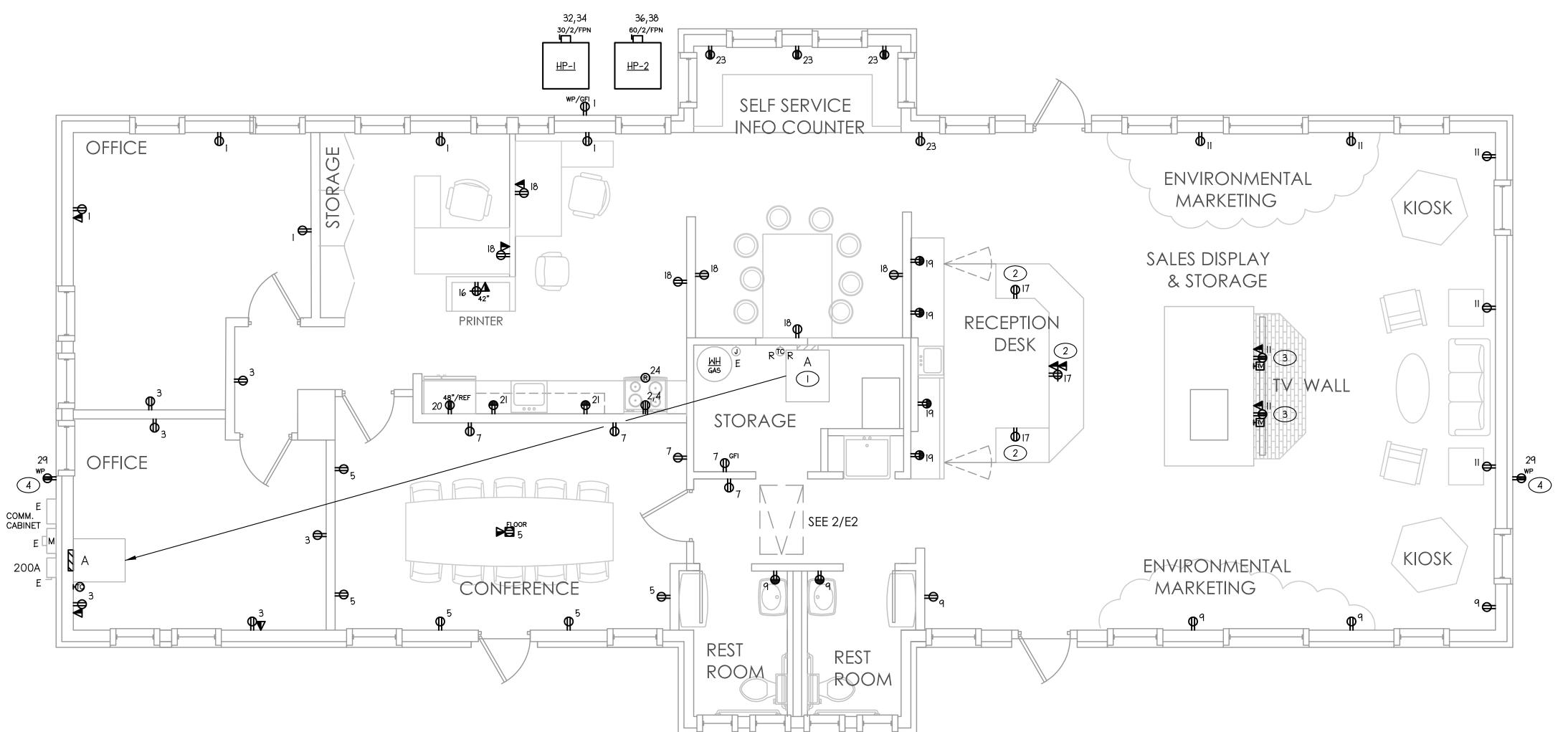
EXISTING POWER RISER DIAGRAM NOT TO SCALE EXISTING ELECTRICAL RISER DIAGRAM NOTES: ITEMS SHOWN FAINT ARE EXISTING, ITEMS SHOWN BOLD ARE REMOVED AND/OR RELOCATED.

LOCATIONS OF ALL ELECTRICAL PANELS AND EQUIPMENT.

EXISTING INFORMATION WAS OBTAINED FROM SITE VISIT DATED 05-20-20. E.C. SHALL VERIFY ALL FIELD CONDITIONS INCLUDING

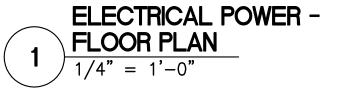
I. AMPERAGE OF EXISTING DISCONNECT (200A, TO REMAIN) WAS BASED ON SITE VISIT INVESTIGATION (EQUIPMENT WAS LOCKED); E.C. SHALL CONFIRM SIZE PRIOR TO BEGINNING WORK AND NOTIFY ENGINEER IF SPECIFICATIONS ARE DIFFERENT THAN THAT LISTED ON THE DRAWINGS.





ELECTRICAL DEMOLITION NOTES

- DRAWINGS ARE BASED ON EXISTING PLANS AND NON-DESTRUCTIVE FIELD INVESTIGATIONS. THE CONTRACTOR SHALL VISIT THE EXISTING BUILDING AND FAMILIARIZE HIMSELF WITH THE EXISTING CONDITIONS. THE CONTRACTOR SHALL EXAMINE RELATED DRAWINGS TO AVOID CONFLICTS.
- 2. PROVIDE ELECTRICAL DEMOLITION WORK AS NECESSARY TO INSTALL NEW WORK. ELECTRICAL CONTRACTOR SHALL REROUTE AND RECONNECT ANY CIRCUITS THAT WILL REMAIN IN USE BUT INTERFERES WITH NEW CONSTRUCTION.
- 3. MATERIAL BEING REMOVED UNDER DEMOLITION (AND NOT TO BEING RELOCATED) SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED COMPLETELY FROM THE SITE, UNLESS OTHERWISE NOTED.
- 4. EXISTING CONDUITS THAT WILL NOT BE REUSED SHALL BE REMOVED IN CEILING PLENUMS AND WALLS. OTHERS MAY BE ABANDONED BELOW FLOOR SLABS. CONTRACTOR SHALL REMOVE ALL WIRING FROM ABANDONED CONDUITS. CUT-OFF ABANDONED CONDUITS BELOW FLOOR AND GROUT FLUSH WITH NON-CONTRACTING GROUT.
- 5. ABANDONED DEVICES SHALL BE REMOVED WITH THE JUNCTION BOX. WALLS SHALL BE PATCHED TO MATCH ADJACENT SURFACES.
- 6. CONTRACTOR SHALL EXERCISE CARE IN REMOVING DEMOLITION ITEMS AND SHALL REPAIR OR REPLACE AT HIS COST ANY DAMAGE CAUSED TO EXISTING CONSTRUCTION AND EQUIPMENT TO REMAIN.
- 7. SCHEDULE WORK IN EXISTING BUILDING AT TIME CONVENIENT TO OWNER.
- 8. DEVICES TO BE REMOVED AND NOT REINSTALLED SHALL HAVE JUNCTION BOXES, CONDUCTORS, CONDUIT AND ALL ASSOCIATED APPURTENANCES REMOVED BACK TO LAST ACTIVE DEVICE OR PANELBOARD.

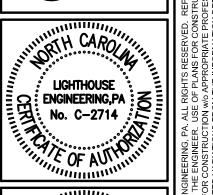


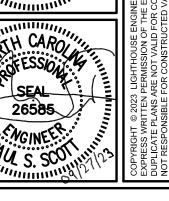
TAGGED NOTES: (ELECTRICAL POWER PLANS)

- () EXISTING ELECTRICAL PANEL AND TIMECLOCK TO BE RELOCATED; EXTEND EXISTING WIRING AS REQUIRED. FURR-OUT AROUND ELECTRICAL PANEL SO THAT PANEL IS RECESSED MOUNTED; COORDINATE WITH ARCHITECT. PROVIDE LOCKABLE COVER FOR ELECTRICAL PANEL AND TIMECLOCK.
- 2) COORDINATE EXACT LOCATION AND MOUNTING HEIGHT WITH OWNER AND MILLWORK PROVIDED.
- (3) COORDINATE EXACT LOCATION, REQUIREMENTS AND MOUNTING HEIGHT WITH MANUFACTURER AND MILLWORK PROVIDED.
- 4) PROVIDE RECEPTACLE AT EAVES FOR EXTERIOR PLUG-IN LIGHTING; COORDINATE FINAL LOCATION WITH OWNER PRIOR TO ROUGH-IN.









ROL

REVISIONS $\frac{S}{N}$ ESIGN, 08-04-2023 ARCHITECTURE DRAWN BY JRS

PROJECT NO. 6TA-1701 ELECTRICAL

POWER

PLANS -

TRAUB

HVAC GENERAL NOTES

- 1. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL MATERIAL AND EQUIPMENT IN STRICT ACCORDANCE WITH THE 2018 NORTH CAROLINA MECHANICAL CODE, ALL STATE AND LOCAL CODES AND STANDARDS, AND PER MANUFACTURER'S DIRECTIONS.
- 2. THE CONTRACTOR SHALL SECURE AND PAY FOR ALL NECESSARY PERMITS, LICENSE, INSPECTIONS, APPROVALS, AND FEES.
- 3. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH ALL OTHER TRADES BEFORE INSTALLATION OF ANY MATERIALS OR EQUIPMENT.
- 4. THESE DRAWINGS ARE DIAGRAMMATIC AND SHOW GENERAL LOCATION AND ARRANGEMENT OF ALL MATERIALS AND EQUIPMENT. THE DRAWINGS SHALL BE FOLLOWED AS CLOSELY AS BUILDING CONSTRUCTION AND ALL OTHER WORK WILL PERMIT.
- 5. DO NOT SCALE DRAWINGS FOR MEASUREMENTS.
- 6. ALL DUCT DIMENSIONS SHOWN ARE INTERIOR DUCT DIMENSIONS.
- 7. ALL PENETRATIONS THROUGH EXTERIOR WALLS & ROOF SHALL BE FLASHED & COUNTERFLASHED IN A WATERPROOF MANNER (COLOR TO MATCH EXTERIOR).
- 8. SEAL ALL PENETRATIONS OF RATED WALLS WITH FIRE DAMPER OR SEALANT MATERIAL APPROVED BY LOCAL CODE. TO BE INSTALLED PER MFG. INSTRUCTIONS.
- 9. ALL SUSPENDED MATERIALS AND EQUIPMENT SHALL BE INDIVIDUALLY SUPPORTED FROM THE BUILDING STRUCTURE. DO NOT SUSPEND ITEMS FROM THE CEILING OR ITS SUPPORT SYSTEM.
- 10. INSTALL ALL CONTROL DEVICES, INCLUDING THERMOSTATS AND SWITCHES, 4'-0" ABOVE FINISHED FLOOR FROM TOP OF DEVICE. PROVIDE THE REQUIRED DEVICE(S) FOR ALL SYSTEMS WHETHER LOCATED ON THE PLANS OR NOT.
- II. LOCATE CEILING DIFFUSERS IN ACCORDANCE WITH ARCHITECTURAL REFLECTED CEILING PLANS (IF PROVIDED).
- 12. PROVIDE MANUFACTURER'S RECOMMENDED CLEARANCES AROUND MECHANICAL UNITS FOR MAINTENANCE AND FILTER REMOVAL.
- 13. ALL PIPING AND DUCTWORK LOCATIONS SHALL BE COORDINATED W/ WORK UNDER OTHER DIVISIONS OF THE SPECIFICATIONS, TO AVOID INTERFERENCE.
- 14. ALL SUPPLY, RETURN AND OUTSIDE AIR DUCTS SHALL BE INSULATED AS FOLLOWS:

CONDITIONED SPACES R-6 MINIMUM NON-CONDITIONED SPACES R-8 MINIMUM

CONCEALED SHEET METAL DUCT MAY BE EXTERNALLY INSULATED WITH MINERAL FIBER BOARD OR BLANKET OR MAY BE INTERNALLY INSULATED WITH DUCT LINER. THE FIRST 15' FROM THE AIR HANDLER SHALL BE INTERNALLY LINED.

15. CERTIFIED TEST AND BALANCE CONTRACTOR SHALL BALANCE SYSTEM TO AIR QUANTITIES INDICATED ON PLANS AND PROVIDE OWNER'S REPRESENTATIVE WITH COMPLETE BALANCE REPORT. IF BALANCING DAMPERS ARE NOT PROVIDED IN RETURN DUCTWORK, CONTRACTOR SHALL BALANCE SUPPLY SIDE TO AIR QUANTITIES INDICATED ON PLANS AND SHALL BALANCE OUTSIDE AIR AND RETURN AIR FLOWS AT THE AIR HANDLER TO AIR QUANTITIES INDICATED IN THE SCHEDULE. PROVIDE NEW AIR FILTERS FOR EACH UNIT.

- 16. AS REQUIRED BY LOCAL CODES, MECHANICAL CONTRACTOR SHALL PROVIDE U.L. LISTED FIRE DAMPERS WHERE REQUIRED FOR FIRE PROTECTION REQUIREMENTS OF THE HVAC SYSTEM & THE UL ASSEMBLY.
- 17. PROVIDE I YEAR WARRANTY ON ALL EQUIPMENT AND 5 YEAR WARRANTY ON ALL COMPRESSORS.
- 18. ALL INTAKE OPENINGS SHALL BE LOCATED A MINIMUM OF 10'-0" FROM ALL
- 19. CONDENSATE DRAIN PIPING AND FITTINGS SHALL BE SCHEDULE 40 PVC WHEN LOCATED IN NON-PLENUM LOCATIONS. PIPING TO BE SCHEDULE 40 CPVC RATED FOR PLENUM INSTALLATION OR PVC WRAPPED WITH PLENUM RATED INSULATION WHEN LOCATED IN PLENUM LOCATIONS. DRAINS FROM AIR HANDLING UNITS SHALL BE TRAPPED.

EXHAUST LOCATIONS.

- 20. A COMPLETE SYSTEM OF SEISMIC RESTRAINTS SHALL BE DESIGNED BY MASON INDUSTRIES & SEALED BY THEIR REGISTERED ENGINEER & INSTALLED BY THIS CONTRACTOR, AS REQ'D BY APPLICABLE CODES FOR THE LOCALE OF THIS PROJECT.
- 21. ALL MAIN DUCTWORK SHALL BE GALVANIZED SHEET METAL CONSTRUCTED IN ACCORDANCE WITH SMACNA STANDARDS. RUNOUTS FROM MAIN/BRANCH DUCTS MAY BE FLEXIBLE DUCT CONFORMING TO THE REQUIREMENTS OF UL 181 FOR CLASS I FLEXIBLE AIR DUCTS.
- 22. THE MECHANICAL CONTRACTOR SHALL PROVIDE REFRIGERANT AND LOW VOLTAGE CONTROL LINES FROM THE CONDENSER(S) TO THE AIR HANDLING UNIT(S). COORDINATE ROUTING AND INSTALLATION WITH THE GENERAL CONTRACTOR. SIZE REFRIGERANT LINES PER MANUFACTURER'S REQUIREMENTS.
- 23. ELECTRICAL CONTRACTOR TO PROVIDE ALL HIGH VOLTAGE ELECTRICAL WIRING, CONDUIT, DISCONNECT SWITCHES, FUSES, ETC. TO SPLIT SYSTEM UNIT(S). ALL FINAL ELECTRICAL CONNECTIONS ARE BY ELECTRICAL CONTRACTOR.
- 24. OUTSIDE AIR DUCTWORK SHALL BE WRAPPED WITH 1/2" FIBERGLASS DUCT WRAP WITH VAPOR BARRIER.
- 25. REFRIGERANT PIPING, NOT SHOWN ON PLANS, SHALL BE SIZED \$ INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS, INSTALLATION INSTRUCTIONS AND LOCAL CODES.
- 26. MECHANICAL CONTRACTOR SHALL VERIFY LOCATION OF ALL PENETRATIONS FOR RELIEF HOODS, OUTSIDE AIR HOODS, LOUVERS, AND WALL CAPS WITH ARCHITECT & OWNER PRIOR TO INSTALLATION.
- 27. MECHANICAL CONTRACTOR SHALL PAINT ALL RELIEF HOODS, INTAKE HOODS, LOUVERS, AND VENT CAPS. CONFIRM COLOR WITH ARCHITECT & OWNER PRIOR TO INSTALLATION.
- 28. ALL CUTTING AND PATCHING OF WALLS AND FLOORS FOR MECHANICAL EQUIPMENT SHALL BE THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR.
- 29. MC SHALL CONSULT OWNER OR OWNER'S REPRESENTATIVE WITH REGARD TO ALL DEMO/REMOVED EQUIPMENT FOR DISPOSAL OR RESALE.

SPLIT SYSTEM HEAT PUMP UNIT SCHEDULE

	AIR HANDLING UNIT DATA									HEAT PUMP												
FAN DATA				COO	OLING HEAT AUX.			ELECTRICAL DATA		GENERAL DATA				ELE	CTRICAL DA							
UNIT TAG	AREA SERVED	MANUF. MODEL	FAN CFM	ESP (" OF WG)	MOTOR (HP)	OA (CFM)	TOTAL (MBH)	SENS. (MBH)	TOTAL (MBH)	HEAT (KW@240)	VOLTAGE (V/PH)	MCA (A)	MOCP (A)	UNIT TAG	MANUF. MODEL	TONNAGE	SEER 2	HSPF 2	VOLTAGE (V/PH)	MCA (A)	MOCP (A)	NOTES
AH-I	OFFICES	CARRIER FV4CNF002	950	0.50"	1/2	200	28.8	21.6	17.2	8	240/1¢	48.5	50	HP-I	CARRIER 25SCA530	2.5	14.3	7.8	240/1¢	18.2	30	1-13
AH-2	MAIN LOB.	CARRIER FV4CNF005	1300	0.50"	1/2	200	40.0	30.0	25.2	10	240/10	58.5	60	HP-2	CARRIER 25SCA542	3.5	15.2	7.8	240/1¢	24.7	40	I-13

- 1. COOLING CAPACITIES ARE RATED IN ACCORDANCE WITH ARI STANDARD 210/240 AT 95°F AMBIENT OUTDOOR AIR TEMP. 80°F DRY BULB, 67°F WET BULB ENTERING AIR TEMP., AND AIR QUANTITY LISTED BY MFG. UNITS ABOVE 5 TONS ARE RATED IN ACCORDANCE WITH ARI STANDARD 340.
- 2. REFRIG. PIPING TO BE SIZED PER TOTAL INSTALL. EQUIV. LENGTH. LONG-LINE APP.TO BE PROVIDED WHENEVER MFG. RECOMM. LENGTHS ARE EXCEEDED, INCL. LIQ. LINE SOLENOID VALVES, ACCUMULATOR, ETC. MAX T.E.L. IS PER MFG.
- 3. PROVIDE SINGLE POINT ELECTRICAL CONNECTION FOR AIR HANDLING UNIT.
- 4. PROVIDE 3 SETS OF NEW FILTERS FOR EACH UNIT. PROVIDE ONE AT INSTALLATION, ONE PRIOR TO AIR BALANCE AND ONE AT TURNOVER TO OWNER.
- 5. SYSTEMS SHALL HAVE A MINIMUM 14.3 SEER2 AND 7.5 HSPF2 RATING.
- 6. PROVIDE MANUFACTURER'S 7-DAY PROGRAMMABLE THERMOSTAT W/ HUMIDITY CONTROLS AND MANUAL OVERRIDE.
- 7. PROVIDE BI-FLOW TXV FOR HEAT PUMP OPERATION.

- 8. AHU TO USE HORIZONTAL APPLICATION.
- 9. RETURN AIR THROUGH DUCTED GRILLE(S).
- 10. RUN CONDENSATE TO EXTERIOR DOWN TO GRADE, AWAY FROM FOOT TRAFFIC, TOWARDS STORM RUN-OFF. IF NOT POSSIBLE FOR A GRAVITY RUN, PROVIDE CONDENSATE PUMP.
- II. OUTDOOR THERMOSTAT TO LOCK-OUT ELECTRIC HEAT WHEN TEMPERATURE IS 40°F OR HIGHER. PROVIDE UNIT WITH EMERGENCY HEAT OVERRIDE OPTION.
- 12. LOW AMBIENT KIT DOWN TO 0°F.
- 13. CATALOG NUMBERS AND MANUFACTURERS ARE TO INDICATE TYPE AND QUALITY OF UNIT DESIRED. SUBMIT CUTSHEETS OF THESE AND ALTERNATE MANUFACTURERS FOR ARCHITECT AND OWNER APPROVAL PRIOR TO PURCHASE OF ANY UNITS. INFORMATION ON ALTERNATE UNITS PROPOSED BY THE CONTRACTOR SHALL INCLUDE THE ADD/DEDUCT ASSOCIATED WITH ACCEPTANCE OF THAT UNIT (OR THE ALTERNATE PACKAGE AS A WHOLE).

	FAN SCHEDULE												
UNIT NO.	UNIT NO. SERVICE AREA SERVED CFM S.P. RPM TYPE \$ MIN. MOTOR HP \$ MANUFACTURER \$ MODEL NO. DRIVE CONTROL SCHEME REMARKS												
EF-I	EXHAUST	UNITS	80	0.10"	MFG	CEILING	43 WATTS/0.4 A 120/1¢	BROAN MODEL A80	DIRECT	LIGHTS	1-4		

NOTES:

SCREEN

- 3. COLOR BY ARCHITECT
- 2. BACKDRAFT DAMPER 4. INTEGRAL DISCONNECT SWITCH

	DIFFUSER SCHEDULE													
SYMBOL	CFM	NECK SIZE	MODULE SIZE	FRAME TYPE	PATTERN	DAMPER	MATERIAL	SERVICE	FINISH	MANUFACTURER \$ MODEL NO.	NOTES			
A	AS NOTED	AS NOTED	12x12	SURFACE	4-WAY	YES	STEEL	SUPPLY	NOTE 2	TITUS TDC	1-3			
B	AS NOTED	AS NOTED	12x12	SURFACE	FIXED	NO	STEEL	RETURN	NOTE 2	TITUS PAR	1-3			
©	AS NOTED	AS NOTED	24x24	SURFACE	FIXED	NO	STEEL	RETURN	NOTE 2	TITUS PAR	1-3			
(D)	AS NOTED	AS NOTED	24x24	LAY-IN	FIXED	NO	STEEL	RETURN	NOTE 2	TITUS PAR	1-3			
E	AS NOTED	AS NOTED	24x24	LAY-IN	4-WAY	YES	STEEL	SUPPLY	NOTE 2	TITUS TDC	1-3			
F	AS NOTED	AS NOTED	AS NOTED	SURFACE	ADJ.	YES	STEEL	SUPPLY	NOTE 2	TITUS 300RS	1-3			

- I. DIFFUSER DESIGNATIONS ON PLANS AS FOLLOWS:
 - DIFFUSER OR
 - NECK SIZE.

 8x4

 AS NOTED ABOVE

 AIR QUANTITY
- 2. FINISH TO MATCH / BE ABLE MATCH CEILING OR WALL OR DOOR.
- 3. FACTORY INSULATION BACKING ON GRILLES EXPOSED TO NON-CONDITIONED AREAS. ALTERNATELY, FIELD SUPPLY AND INSTALL.

	Drawing Sheet List
#	Title
M1	MECHANICAL LEGEND, NOTES, & SCHEDULES
M2	MECHANICAL PLANS

MECHANICAL LEGEND

RECTANGULAR DUCT

ROUND METAL DUCT

FLEXIBLE ROUND DUCT

VOLUME DAMPER

SUPPLY TAP

ELBOW WITH TURNING VANES

SUPPLY TAP WITH VOLUME DAMPER

SUPPLY DIFFUSER/GRILLE OR RISER

RETURN REGISTER/GRILLE OR RISER

EXHAUST REGISTER/GRILLE OR RISER

SIDEWALL DIFFUSER/GRILLE

CEILING EXHAUST FAN

I" DOOR UNDER CUT

T-STAT

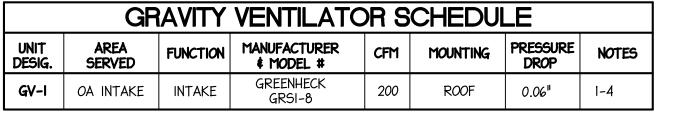
- 18x14 +

<u> 60</u> +

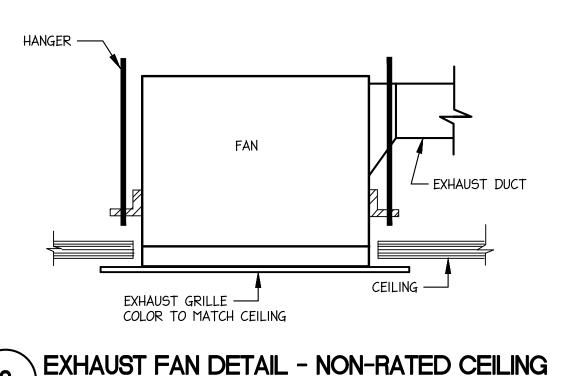
SYSTEM COMMISSIONING NOTES (NCECC C408) COMMISSIONING REQUIREMENTS ARE NOT REQUIRED FOR THIS BUILDING, PER EXEMPTION UNDER NCECC C408.1, WHICH ALLOWS COMMISSIONING EXEMPTIONS FOR

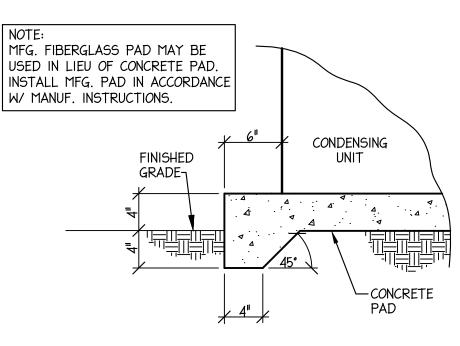
BUILDINGS LESS THAN OR EQUAL TO 10,000 SQUARE FEET OF CONDITIONED SPACE.

THIS BUILDING CONTAINS 2,400 SQUARE FEET OF CONDITIONED SPACE.

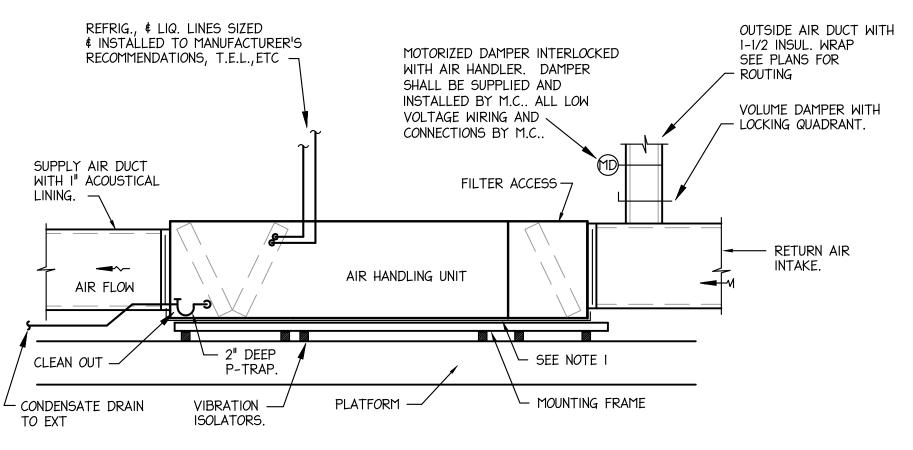


- I. PROVIDE FACTORY MANUFACTURED ROOF CURB. 4. INSTALL W/ INSECT SCREEN.
- 2. COLOR TO MATCH ROOF
- 3. INSTALL W/ BACKDRAFT DAMPER.





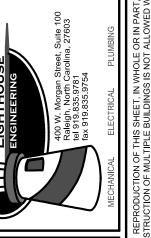


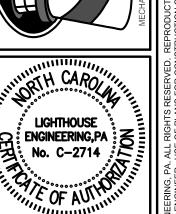


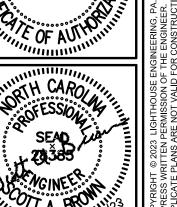
1. 1岁 DEEP AUXILIARY DRAIN PAN WITH MICROFLOAT SWITCH. INTERLOCK FLOAT SWITCH WITH AIR HANDLER. INSTALL FLOAT SWITCH IN ONE CORNER OF PAN AND TILT PAN TO THAT CORNER.











Sanf 90

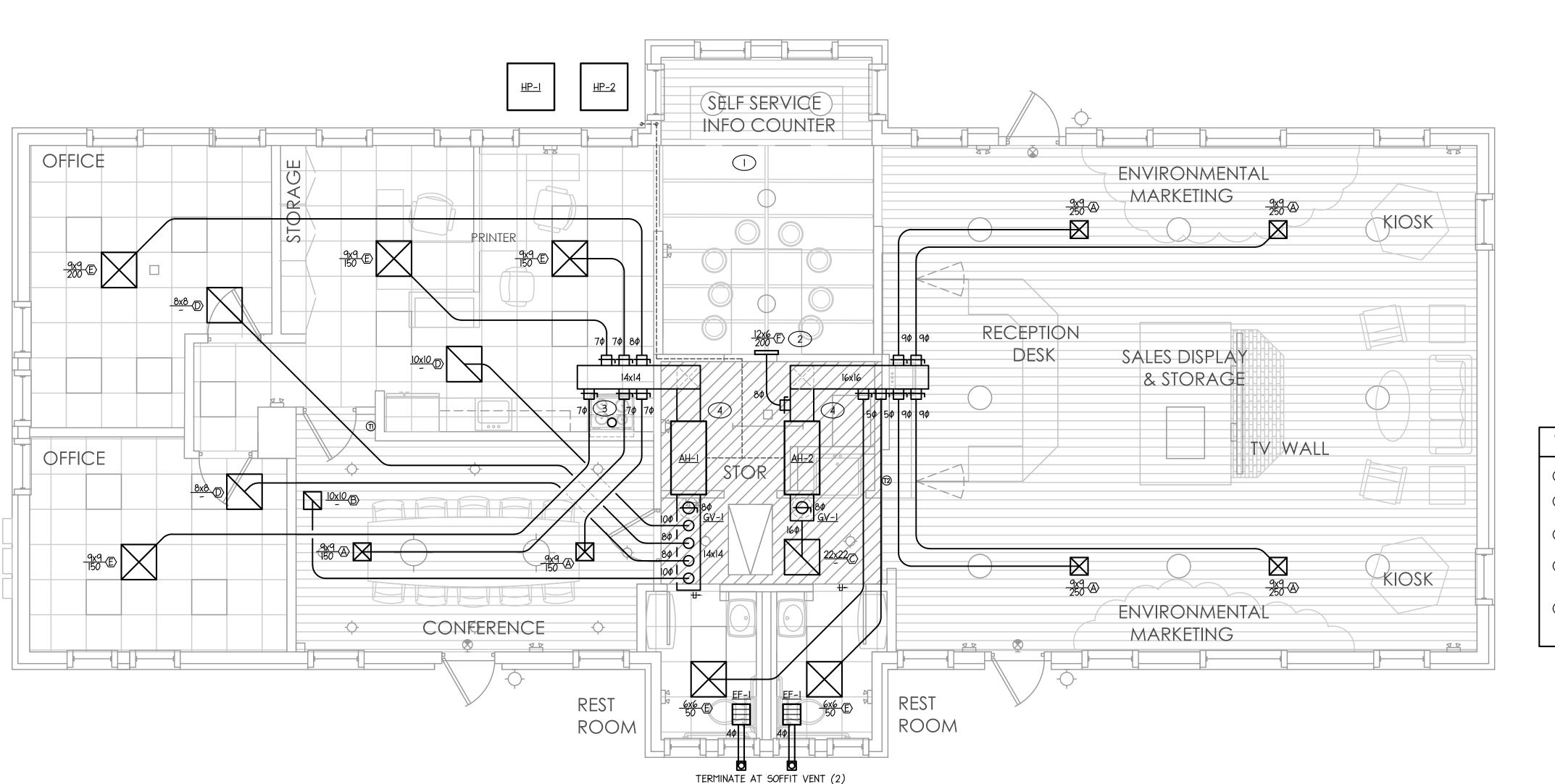
REVISIONS DESIGN, DATE 08-04-2023 **ECTURE**

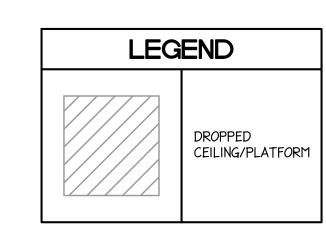
DRAWN BY PROJECT NO. GTA-1701

MECHANICAL LEGEND, NOTES **& SCHEDULES**

RC

TRAUI



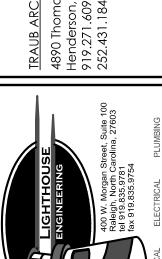


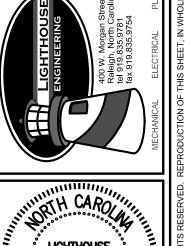
TAGGED NOTES - THIS SHEET

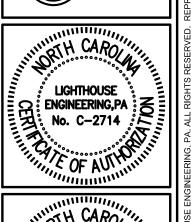
- 1) DOUBLE HEIGHT SPACE.
- 2 ADJUST DIFFUSER FINS TOWARDS WALLS, WINDOWS, AND OCCUPANTS.
- 3 RANGE HOOD EXHAUST TO ROOF CAP. CONFIRM DUCT SIZE AND GAUGE WITH MFG. REQS.
- 4 AIR HANDLERS ARE LOCATED IN A DROPPED CEILING CAVITY WITH MECHANICAL PLATFORM.
- DUCTWORK TO ROUTE UP INTO ATTIC SPACE. 5 OA DUCT TO TERMINATE AT GV-1 ON ROOF. PLACE MIN. 101 AWAY FROM EXHAUST TERMINATIONS.

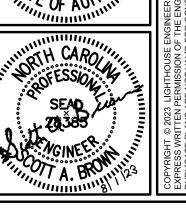


	MECHANICAL VENTILATION CALCULATIONS														
VAC Unit	C Unit Location Zone Occupant Density Outoor Air Zone Outdoor Air Floor Area Initial Zone Zone Area Distribution Required Zone Design Zone														
		Occupancy	(People/1000 sf)	CFM/Person	Population	CFM/SQFT		Outdoor Airflow	Effectivness	Outdoor Airflow	Outdoor Airflow				
				(Rp)	(Pz)	(Ra)	(Az)	(Vbz)	(Ez)	(Voz)	(CFM)				
H-1	Offices	Office	5	5	3.65	0.06	730	62.1	0.8	77.6					
		Conference	50	5	13	0.06	260	80.6	0.8	100.8					
										178.3	200				
H-2	Lobby	Entry/Lobby	10	5	11.7	0.06	1170	128.7	0.8	160.9	200				
	Calculations are base on the 2018 NCMC Table 403.3, Vbz = RpPz + RaAz, Voz = Vbz/Ez														









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Charlotte

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REVISIONS

DESIGN, INC

DATE 08-04-2023

DRAWN BY PROJECT NO.

GTA-1701 MECHANICAL ARCHITECTURE

TRAUB

PLANS

PLUMBING GENERAL NOTES

- THE CONTRACTOR SHALL FURNISH AND INSTALL ALL MATERIAL AND EQUIPMENT IN STRICT ACCORDANCE WITH THE 2018 NORTH CAROLINA PLUMBING CODE AND ALL STATE AND LOCAL CODES, STANDARDS, AND PER MANUFACTURER'S DIRECTIONS.
- 2. ALL PLUMBING FIXTURES AND PLUMBING SYSTEM EQUIPMENT SHALL BE PROVIDED COMPLETE WITH ALL ACCESSORIES, HANGERS, VALVES, STOPS, TAILPIECES, TRAPS, FAUCETS, STRAINERS, ETC. SEE FIXTURE SCHEDULE.
- 3. FURNISH AND INSTALL COMPLETE SYSTEMS OF SOIL, WASTE, VENT, HOT AND COLD WATER PIPING FROM ALL PLUMBING FIXTURES, AND/OR OTHER
- 4. CLEANOUT PLUGS SHALL BE INSTALLED IN ACCORDANCE WITH PLUMBING CODE REQUIREMENTS. PROVIDE CLEANOUTS AT THE BASE OF ALL WASTE STACKS, AT EVERY FOUR 45 DEGREE TURNS, AND AT EVERY 100 FEET. CLEANOUTS SHALL BE PLACED IN READILY ACCESSIBLE LOCATIONS.
- 5. ALL SOIL, WASTE, AND VENT LINES SHALL BE CONCEALED IN THE BUILDING CONSTRUCTION.
- 6. COPPER PIPING SHALL BE PROTECTED AGAINST CONTACT WITH MASONRY OR DISSIMILAR METALS. ALL HANGERS, SUPPORTS, ANCHORS, AND CLIPS SHALL BE COPPER OR COPPER PLATED. WHERE COPPER PIPING IS CARRIED ON IRON TRAPEZE HANGERS WITH OTHER PIPING, SATISFACTORY AND PERMANENT ELECTROLYTIC ISOLATION MATERIAL SHALL PROTECT THE COPPER AGAINST CONTACT WITH OTHER METALS.
- WHERE COPPER PIPING IS SLEEVED THROUGH MASONRY, SLEEVES SHALL BE COPPER OR RED BRASS. WHERE COPPER MUST BE CONCEALED IN A MASONRY PARTITION OR AGAINST MASONRY, CONTACT SHALL BE PREVENTED BY COATING THE COPPER HEAVILY WITH ASPHALTIC ENAMEL AND PROVIDING 15# ASPHALT SATURATED FELT BETWEEN THE PIPE AND MASONRY.
- THE PLUMBING CONTRACTOR SHALL COORDINATE CLOSELY WITH THE MECHANICAL AND THE ELECTRICAL CONTRACTORS TO AVOID CONFLICT WITH OTHER TRADES.
- 9. CEILING AREA HAS LIMITED SPACE. CONTRACTOR MUST COORDINATE WITH OTHER TRADES FOR ALL STRUCTURES, PIPING, CONDUIT, DUCTWORK, LIGHTING, ETC. TO PROPERLY BE INSTALLED.
- 10. ALL PIPE INSULATION SHALL RUN CONTINUOUSLY THROUGH FLOORS, WALLS, AND PARTITIONS.
- II. PROVIDE DRAIN VALVES IN THE HOT AND COLD WATER SYSTEM AT ALL LOW POINTS TO ALLOW FOR COMPLETE DRAINAGE. PROVIDE SHUT-OFF VALVES AT THE BASE OF ALL STACKS.
- 12. PROVIDE BALL VALVES IN ALL BRANCH LINES OF THE HOT AND COLD WATER DISTRIBUTION SYSTEM ON 3/4" AND LARGER CW & HW AND AS SHOWN ON PLANS, RISERS, AND SCHEMATIC DETAILS. PROVIDE SHUT OFF VALVES ON THE FIXTURE SUPPLY TO EACH PLUMBING FIXTURE, APPLIANCE, OR MECHANICAL EQUIPMENT.
- 13. VACUUM BREAKERS SHALL BE PROVIDED FOR ALL FIXTURES TO WHICH HOSES MAY BE ATTACHED. VACUUM BREAKERS SHALL BE PERMANENTLY ATTACHED.
- 14. WASTE AND VENT PIPING SHALL BE AS FOLLOWS: BELOW SLAB: PVC PIPE, PVC SOCKET FITTINGS, AND SOLVENT-CEMENTED ABOVE SLAB: PVC PIPE, PVC SOCKET FITTINGS, AND SOLVENT-CEMENTED
- 15. DOMESTIC WATER PIPING ABOVE SLAB SHALL BE TYPE 'L' COPPER. DOMESTIC WATER PIPING BELOW SLAB SHALL BE TYPE 'K' COPPER. INSULATION IS REQUIRED ON ALL WATER SUPPLY PIPING ABOVE FINISHED FLOOR. INSULATION TO HAVE A MINIMUM R FACTOR OF 6.5 OR PER LOCAL JURISDICTION.

FITTINGS.

- 16. EXPOSED LAVATORY DRAINS AND HOT WATER LINES MUST BE INSULATED AND COVERED PER ADA REQUIREMENTS.
- 17. ALL PLUMBING VENT LOCATIONS TO BE VERIFIED WITH ARCHITECT BEFORE INSTALLATION.
- 18. ALL PLUMBING LINES REQUIRED TO BE JETTED PRIOR TO TURNOVER.
- 19. PIPING SHOULD BE COORDINATED WITH ALL STRUCTURAL FOOTINGS AND FOUNDATIONS. PIPE SHOULD BE OFFSET TO AVOID CONTACT WITH FOOTINGS AND FOUNDATION WALLS. IF PIPING MUST RUN UNDERNEATH A FOOTING OR THROUGH A FOUNDATION WALL, THE PIPE MUST BE INSTALLED WITH A RELIEVING ARCH OR IN A PIPE SLEEVE.
- 20. INVERT ELEVATIONS SHALL BE ESTABLISHED AND VERIFIED BEFORE WASTE PIPING IS INSTALLED SO THAT PROPER SLOPES WILL BE MAINTAINED.
- 21. THE PLUMBING CONTRACTOR SHALL PROVIDE WATER HAMMER PROTECTION ON ALL WATER DISTRIBUTION PIPING. INSTALLATION OF AIR CHAMBERS OR SHOCK ARRESTORS SHALL BE IN ACCORDANCE WITH PDI-WH201. SEE SHOCK ARRESTOR SCHEDULE (IF PROVIDED).
- 22. REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHTS OF PLUMBING FIXTURES.
- 23. PROVIDE ACCESS DOORS FOR ALL VALVES AND DEVICES REQUIRING ACCESS WHEN LOCATED IN WALLS OR ABOVE INACCESSIBLE CEILING CONSTRUCTION. ACCESS DOORS TO BE RATED WHERE INSTALLED IN RATED ASSEMBLIES.

PLUMBING LEGEND										
	DOMESTIC COLD WATER RIDING									
	DOMESTIC COLD WATER PIPING									
	DOMESTIC COLD WATER PIPING (UNDRSLAB)									
	DOMESTIC HOT WATER PIPING									
	VENT PIPING									
	WASTE (SANITARY SEWER)									
——————————————————————————————————————	BALL VALVE									
	CHECK VALVE									
<u> </u>	PIPE UP									
 ə	PIPE DOWN									
	5, 605, 55, 101									

FLOOR DRAIN CONNECT TO EXISTING AAV AIR ADMITTANCE VALVE ABV ABOVE AFF ABOVE FINISHED FLOOR

BV BALANCING VALVE CW COLD WATER DN DOWN

E.C. ELECTRICAL SUB-CONTRACTOR FCO FLOOR CLEAN OUT

FD FLOOR DRAIN FR FROM

FS FLOOR SINK G.C. GENERAL CONTRACTOR

HB HOSE BIBB HD HUB DRAIN

HW HOT WATER M.C. MECHANICAL SUB-CONTRACTOR

P.C. PLUMBING SUB-CONTRACTOR

SD STORM DRAINAGE

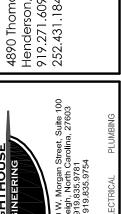
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W WASTE

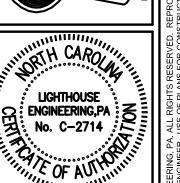
	PLUMBING FIXTURE SPECIFICATIONS AND CONNECTION SCHEDULE																		
								FAUCET/VALV	E		DRA	NN .	SUPPLIES		PIPE	SIZES			
MARK	FIXTURE	TYPE	MANUFACTURER	MODEL NO.	MATERIAL	STYLE	MANUFACT. MODEL NO.	SPOUT	HANDLES	CENTERS	TYPE	SIZE	l	WASTE	VENT	CM	HM	MOUNTING	REMARKS
P-I	KITCHEN SINK	SINGLE COMP ^I T	DAYTON	D125214	STAINLESS STEEL	6½" DEEP 4-HOLE	CFG 47513B	8" SWING	SINGLE LEVER	8"	CRUMB CUP	1½"	McGUIRE 165	1½"	1½"	<i>l</i> ⁄2"	½"	COUNTER TOP	PROVIDE WITH ELKAY LK-35
P-2	REFRIGERATOR BOX	BOTTOM SUPPLY	SPECIALTY PRODUCTS	<i>0</i> B-807	PVC	RECESSED BOX	-	-	-	-	-	-	-	-	-	1/2"	-	WALL	SHUT-OFF VALVE & THREADED CW CONNECTION.
P-3	UTILITY SINK	FLOOR MOUNTED	FIAT	FL-I	MOLDED STRUCTURAL PLASTIC	ONE COMP'T 23" X 22"	FIAT AI DECK TYPE 4" CENTERS	THREADED	TWO HANDLES	63/4"	-	-	-	1½"	1½"	<u>у</u> п	<i>\bar{y}</i> ₂ "	FLOOR	WHITE BAKED ENAMEL LEGS AND 4" BACK LEDGE.
P-4	KITCHEN SINK	SINGLE COMP ^I T	DAYTON	DI252I4	STAINLESS STEEL	6½" DEEP 4-HOLE	CFG 47513B	8" SWING	SINGLE LEVER	8"	CRUMB CUP	11/2"	McGUIRE 165	1½"	1½"	у п 2	<i>l</i> ⁄₂"	COUNTER TOP	PROVIDE WITH ELKAY LK-35

1. CATALOG NUMBERS AND MANUFACTURERS ARE TO INDICATE TYPE AND QUALITY OF FIXTURE DESIRED. SUBMIT CUTSHEETS OF THESE AND ALTERNATE MANUFACTURERS FOR ARCHITECT AND OWNER APPROVAL PRIOR TO PURCHASE OF ANY FIXTURES. INFORMATION ON ALTERNATE FIXTURES PROPOSED BY THE CONTRACTOR SHALL INCLUDE THE ADD/DEDUCT ASSOCIATED WITH ACCEPTANCE OF THAT FIXTURE (OR THE ALTERNATE PACKAGE AS A WHOLE).

Drawing Sheet List								
#	Title							
P1	PLUMBING LEGEND, NOTES, & SCHEDULES							
P2	PLUMBING PLANS							









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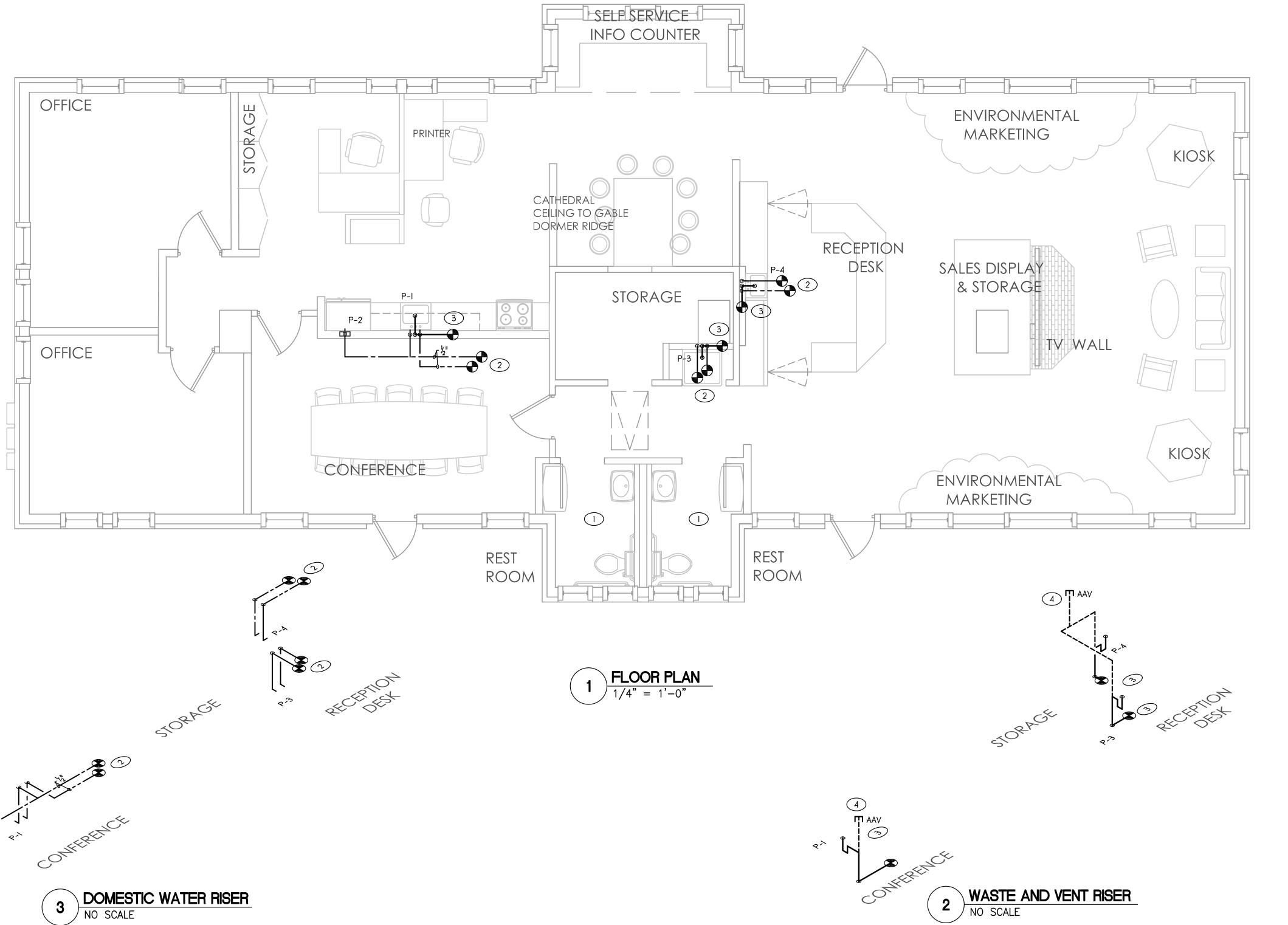
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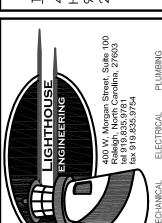
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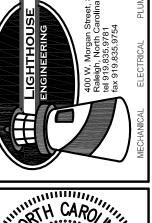
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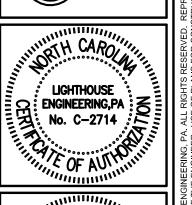
PROJECT NO. GTA-1701 PLUMBING

LEGEND, NOTES, **& SCHEDULES**











NOI **DEPO** SANFORD

REVISIONS DESIGN, INC

08-04-2023

DRAWN BY PROJECT NO. 6TA-1701

PLUMBING PLANS

ARCHITECTURE

TRAUB

GENERAL STRUCTURAL NOTES

THESE DRAWINGS, AS INSTRUMENTS OF PROFESSIONAL SERVICE, ARE THE PROPERTY OF LYSAGHT & ASSOCIATES, P.A., FOR USE SOLELY WITH THIS PROJECT AND SHALL NOT BE REPRODUCED FOR OTHER PURPOSES.

THE PROFESSIONAL ENGINEER WHOSE SEAL APPEARS ON THESE DRAWINGS IS THE PROJECT STRUCTURAL ENGINEER-OF-RECORD (SER) WHO BEARS LEGAL RESPONSIBILITY FOR THE PERFORMANCE OF THE STRUCTURAL FRAMING RELATING TO PUBLIC HEALTH, SAFETY, AND WELFARE. NO OTHER PARTY, WHETHER OR NOT A PROFESSIONAL ENGINEER, MAY COMPLETE, CORRECT, REVISE, DELETE, OR ADD TO THESE CONSTRUCTION DOCUMENTS OR PERFORM INSPECTIONS OF THE WORK WITHOUT THE WRITTEN PERMISSION OF THE SER. THE STRUCTURAL FRAMING IS DESCRIBED AS NEW AND/OR REINFORCEMENTS OF THE EXISTING STRUCTURE. LYSAGHT ASSOCIATES IS NOT RESPONSIBLE FOR THE DESIGN OF THE ORIGINAL

USE STRUCTURAL DRAWINGS IN CONJUNCTION WITH JOB SPECIFICATIONS, AND OTHER DRAWINGS.

SECTIONS AND DETAILS SHOWN SHALL BE CONSIDERED TYPICAL FOR ALL SIMILAR

ALL NON-STRUCTURAL ELEMENTS INDICATED ON THE STRUCTURAL DRAWINGS HAVE BEEN SHOWN IN GENERAL RELATIONSHIP TO THE STRUCTURAL ELEMENTS. THEY SHALL NOT BE ASSUMED TO BE ACCURATE AND REFERENCE MUST BE MADE TO THE APPROPRIATE CONSULTANT(S) PLANS AND SPECIFICATIONS.

CONTRACTOR SHALL VERIFY ALL CONDITIONS IN THE FIELD AND TAKE ALL NECESSARY FIELD MEASUREMENTS.

CONTRACTOR SHALL TAKE SUCH ACTION AS NECESSARY TO PREVENT MOVEMENT OF OR DAMAGE TO THE ADJACENT STRUCTURE DURING CONSTRUCTION.

THE STRUCTURE SHOWN ON THESE DRAWINGS IS STRUCTURALLY SOUND ONLY IN ITS COMPLETED FORM. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY BRACING TO STABILIZE THE BUILDING DURING CONSTRUCTION.

WHENEVER EXISTING CONSTRUCTION IS RENOVATED, THERE IS LIKELY SOME COSMETIC DEFECTS DUE TO THE AGE OF THE BUILDING THAT WILL NOT BE CORRECTED DURING THE RENOVATION. THESE DEFECTS INCLUDE SAGGING FLOORS, MINOR CRACKS IN MASONRY WALLS, CRACKS IN SHEETROCK OR PLASTER THAT IS LEFT IN PLACE, ETC. THIS IS TO BE EXPECTED BY THE OWNER, UNLESS NOTED OTHERWISE ON THE DRAWINGS.

ABBREVIATIONS

AB	ANCHOR BOLT	NTS	NOT TO SCALE
AFF	ABOVE FINISH FLOOR	O.C.	ON CENTER
B/B	BACK TO BACK	P.A.F.	POWDER-ACTUATED FASTENER
BCX	BOTTOM CHORD EXTENSION	P.T.	PRESSURE-TREATED
CIC	CENTER TO CENTER	SER	STRUCT. ENGINEER OF RECORD
CJ	CONTROL / CONSTR. JOINT IN SLAB	S.P.F.	SPRUCE-PINE-FIR
DJ	DOUBLE JOIST	S.Y.P.	SOUTHERN YELLOW PINE
EJ	EXPANSION JOINT	T.O.F.	TOP OF FOOTING
EOS	EDGE OF SLAB	T.O.S.	TOP OF STEEL
E.M.	EACH WAY	T.O.J.	TOP OF JOIST
JBE	JOIST BEARING ELEVATION	U.N.O.	UNLESS NOTED OTHERWISE
MCJ	MASONRY CONTROL JOINT	W.W.F.	WELDED WIRE FABRIC
LBW	LOAD BEARING WALL		

SCOPE OF STRUCTURAL ENGINEERING SERVICES

LYSAGHT & ASSOCIATES, P.A. HAS PERFORMED THE STRUCTURAL DESIGN AND PREPARED THE STRUCTURAL WORKING DRAWINGS FOR THIS PROJECT AS RELATED TO THE RESTORATION OF THE ORIGINAL STRUCTURE AS SHOWN ON THE PLANS. "CONSTRUCTION REVIEW" SERVICES ARE ALSO A PART OF OUR CONTRACT IN THE FORM OF A MAXIMUM OF (3) SITE VISITS TO THE PROJECT.

A "CONSTRUCTION REVIEW REPORT" CAN BE SENT TO THE CONTRACTOR AND/OR ARCHITECT FOLLOWING EACH FIELD TRIP IF REQUESTED.

PORTIONS OF THE STRUCTURAL DESIGN (AS NOTED ON THE DRAWINGS AND IN THESE NOTES) ARE THE RESPONSIBILITY OF THE MATERIAL SUPPLIERS. SHOP DRAWINGS FOR EACH OF THE STRUCTURAL COMPONENTS MUST BE SUBMITTED TO THE STRUCTURAL ENGINEER FOR REVIEW PRIOR TO FABRICATION AND ERECTION.

THE STRUCTURAL ENGINEER IS RESPONSIBLE FOR THE DESIGN OF THE PRIMARY STRUCTURAL SYSTEM AS RELATED TO THE RESTORATION ONLY. EXCEPT FOR THE COMPONENTS NOTED ABOVE. RESPONSIBILITY FOR ANY SECONDARY STRUCTURAL AND NON-STRUCTURAL SYSTEMS NOT SHOWN ON THE STRUCTURAL PLANS RESTS WITH SOMEONE OTHER THAN THE STRUCTURAL ENGINEER.

THE STRUCTURAL ENGINEER HAS NOT DONE A SUBSURFACE INVESTIGATION (HE IS NOT A SOILS SPECIALIST). ANY FOUNDATION DESIGN IS BASED UPON AN ASSUMED ALLOWABLE BEARING PRESSURE AS SHOWN IN THE "FOUNDATION" STRUCTURAL NOTES. THIS ALLOWABLE BEARING PRESSURE MUST BE VERIFIED BY THE CONTRACTOR OR OWNER. IF PROBLEMS ARE ENCOUNTERED, A SOILS ENGINEER SHOULD BE RETAINED TO EVALUATE THE CONDITIONS AND RECOMMEND THE APPROPRIATE FOUNDATION SYSTEM.

THE STRUCTURAL ENGINEER HAS NOT DESIGNED THE STRUCTURE FOR SPECIFIC VIBRATION LIMITS. VIBRATION LIMITATIONS ARE BASED ON STANDARD ENGINEERING PRACTICES AND PAST EXPERIENCE WITH SIMILAR

THE STRUCTURAL ENGINEER HAS NOT DESIGNED THE STRUCTURE TO SUPPORT DYNAMIC LOADS FROM VIBRATING MACHINERY OR EQUIPMENT. ALL VIBRATING EQUIPMENT AND MACHINERY MUST BE ISOLATED FROM THE

THE STRUCTURAL ENGINEER IS NOT RESPONSIBLE FOR, AND WILL NOT HAVE CONTROL OF, CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES, OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE CONSTRUCTION WORK; NOR WILL HE BE RESPONSIBLE FOR THE CONTRACTOR'S FAILURE TO CARRY OUT THE CONSTRUCTION WORK IN ACCORDANCE WITH THE

FIELD MEASUREMENTS AND THE VERIFICATION OF FIELD DIMENSIONS ARE NOT PART OF THE STRUCTURAL ENGINEER'S RESPONSIBILITY. THE CONTRACTOR MUST CHECK ALL (ASSUMED) EXISTING CONDITIONS SHOWN ON THESE DRAWINGS FOR ACCURACY AND NOTIFY THE STRUCTURAL ENGINEER OF ANY DISCREPANCIES.

CODE

NORTH CAROLINA STATE BUILDING CODE - 2018 EDITION (IBC 2015) FOR NEW WORK NORTH CAROLINA STATE EXISTING BUILDING CODE - 2018 EDITION STRUCTURAL LOADING PER ASCE 7-2010

BLDG RISK CATEGORY (NCSBC TABLE 1604.5) II

DESIGN LOADS

ROOF DEAD LOAD ROOF LIVE LOAD FLOOR DEAD LOAD FLOOR LIVE LOAD (Uniform)	12.5 20 10 50	PSF PSF PSF PSF
SNOW LOAD DATA : GROUND SNOW LOAD SNOW EXPOSURE FACTOR SNOW LOAD IMPORTANCE FACTOR THERMAL FACTOR	15 1.0 1.0 1.1	PSF
FLAT ROOF SNOW LOAD ROOF SLOPE FACTOR	15 1.0	PSF
PITCHED ROOF SNOW LOAD	15	PSF
WIND LOAD DATA : ULTIMATE DESIGN WIND SPEED, Vult WIND EXPOSURE	115 B	MPH
INTERNAL PRESSURE COEFFICIENTS	+0.18,	-0.18
WIND BASE SHEAR (x-x DIRECTION)	-	KIPS
WIND BASE SHEAR (y-y DIRECTION)	-	KIPS

WIND PRESSURE FOR COMPONENTS / CLADDING PER ASCE 7-10

BUILDING CODE REQUIREMENTS FOR EXISTING BUILDINGS

THE 2018 NORTH CAROLINA EXISTING BUILDING CODE CLARIFIES ALL REQUIREMENTS FOR "EXISTING BUILDINGS AND STRUCTURES." THESE REQUIREMENTS INCLUDE, BUT ARE NOT LIMITED TO, ADDITIONS, ALTERATIONS, AND REPAIRS OF EXISTING STRUCTURES.

THESE CODE PROVISIONS HAVE BEEN INTERPRETED AS FOLLOWS:

I. THE EXISTING BUILDING IS EXEMPT FROM A WIND OR SEISMIC ANALYSIS BECAUSE THE MAIN WIND (AND SEISMIC) FORCE RESISTING SYSTEM WILL NOT BE ALTERED DURING

2. ALL EXISTING GRAVITY ELEMENTS THAT ARE AFFECTED BY THE RENOVATION MUST BE CHECKED FOR DESIGN LOADS SHOWN ABOVE, AND REINFORCED AS NECESSARY.

3. ALL DEFECTIVE STRUCTURAL ELEMENTS MUST BE REPAIRED OR REPLACED.

THE SCOPE OF STRUCTURAL DESIGN IS ONLY AS NOTED IN THE DRAWINGS. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO NOTIFY THE S.E.R. IF ANY DEFECTIVE, DETERIORATED, OR DAMAGED MEMBERS ARE FOUND, THAT ARE NOT SPECIFICALLY NOTED

FOR PURPOSES OF THESE NOTES, ASSUMPTION SHALL BE DEFINED AS "TO BELIEVE, THINK, OR SUPPOSE A CONDITION TO BE TRUE." AN ASSUMPTION CAN NOT BE CONFIRMED BY THE STRUCTURAL ENGINEER BECAUSE IT IS BEYOND HIS SCOPE OF SERVICES AND/OR EXPERTISE. IF THE CLIENT REQUIRES CONFIRMATION OF AN ASSUMPTION, THEN ANOTHER EXPERT SHALL DO THE NECESSARY CALCULATIONS

THE FOLLOWING ASSUMPTIONS HAVE BEEN MADE REGARDING THE STRENGTHS OF THE VARIOUS EXISTING STRUCTURAL COMPONENTS:

A. ALLOWABLE SOIL BEARING PRESSURE	2,000 PS
B. EXISTING CONCRETE, F'c	3,000 PS
C. EXISTING MASONRY, f'm (old buildings)	1,000 PS

FOUNDATIONS

ALL FOOTINGS SHALL REST ON SOIL CAPABLE OF SAFELY SUPPORTING 2,000 PSF. CONTACT STRUCTURAL ENGINEER IF UNSATISFACTORY SUBSURFACE CONDITIONS ARE

FOOTINGS SHALL BE CARRIED TO A LOWER ELEVATION THAN THOSE INDICATED ON THESE DRAWINGS IF NECESSARY TO REACH FIRM UNDISTURBED SOIL, AND SHALL BE COORDINATED WITH GEOTECHNICAL REPORT, IF REPORT IS PROVIDED FOR PROJECT. ANY INFORMATION IN THE GEOTECHNICAL REPORT SHALL CONTROL.

REINFORCING STEEL

ALL DETAILING, FABRICATION AND PLACING OF REINFORCING STEEL SHALL BE IN ACCORDANCE WITH THE LATEST "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES", ACI 315.

REINFORCING BARS SHALL BE NEW BILLET STEEL CONFORMING TO ASTM A615, GRADE 60. CLEAR CONCRETE COVER OVER BARS SHALL BE 3" FOR FOOTINGS.

PROVIDE CORNER BARS AT ALL FOOTING STEPS AND CORNERS. BARS SHALL BE A MINIMUM OF 2'-6" LONG AND SHALL HAVE THE SAME SIZE AND SPACING AS HORIZONTAL REINFORCING.

LAP ALL SPLICES IN CAST-IN-PLACE CONCRETE AS SPECIFICALLY CALLED FOR, BUT AT LEAST 50 BAR DIAMETERS.

CONCRETE MASONRY UNITS SHALL BE ERECTED AS LOAD BEARING CONCRETE MASONRY. COMPLY WITH THE REQUIREMENTS OF ACI 530.1 / ASCE 6 / TMS 602 "SPECIFICATION FOR MASONRY STRUCTURES."

CONCRETE MASONRY UNITS SHALL CONFORM TO ASTM SPECIFICATIONS FOR HOLLOW LOAD-BEARING CONCRETE MASONRY UNITS (ASTM C901). MORTAR SHALL CONFORM TO THE REQUIREMENTS OF ASTM STANDARD SPECIFICATIONS FOR MORTAR FOR UNIT MASONRY (ASTM C270), TYPE "M" OR "S". THE MINIMUM NET COMPRESSIVE STRENGTH OF MASONRY UNITS SHALL BE 2000 PSI (Fm = 2000 PSI FOR MASONRY SYSTEM).

ALL GROUT USED TO FILL REINFORCED MASONRY CAVITIES AND SHOWN AT OTHER LOCATIONS ON THE PLANS SHALL CONFORM TO ASTM C476 AND SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI.

ALL STEEL BEARING SHALL BE ON A BOND BEAM, SOLID BLOCK OR 8" OF BRICK.

STRUCTURAL STEEL

FABRICATE AND ERECT ALL STRUCTURAL STEEL IN ACCORDANCE WITH THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS" (ANSI/AISC 360-10)".

GENERAL CONTRACTOR TO COORDINATE SHOP COATS OF RUST-INHIBITIVE PAINT. STEEL COLUMNS BELOW GRADE THAT ARE NOT ENCASED IN CONCRETE SHALL BE FIELD PAINTED WITH A WATERPROOF MASTIC COMPOUND TO PREVENT CORROSION.

THE STEEL USED SHALL HAVE THE FOLLOWING MINIMUM YIELD STRESS:

CHANNELS, ANGLES, PLATES, MISC. SHAPES	36 KSI (A36)
STRUCTURAL PIPE SHAPES	35 KSI (A53, B)
HSS TUBE SHAPES	46 KSI (A500, B or 0

FOR MISCELLANEOUS STEEL NOT SHOWN ON THESE DRAWINGS, SEE ARCHITECTURAL AND OTHER ENGINEERING DRAWINGS

SUBMIT ERECTION AND SHOP DRAWINGS TO THE STRUCTURAL ENGINEER FOR REVIEW PRIOR TO FABRICATION.

SOLID WOOD FRAMING, HEADERS AND PLYWOOD

ALL SOLID WOOD FRAMING SHALL COMPLY WITH THE NATIONAL FOREST PRODUCTS ASSOCIATION "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION."

ALL SOLID FRAMING SHALL BE SPRUCE-PINE-FIR #1 (NLGA grading rules) UNLESS NOTED OTHERWISE ON THE PLANS.

PLYWOOD SHALL CONFORM TO THE AMERICAN PLYWOOD ASSOCIATION "PLYWOOD DESIGN SPECIFICATION." PLYWOOD SHALL BE CDX (UNO). PLYWOOD CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE APA "DESIGN/CONSTRUCTION GUIDE - RESIDENTIAL AND COMMERCIAL".

ALL MEMBERS SHALL BE FRAMED, ANCHORED, TIED AND BRACED IN ACCORDANCE WITH GOOD CONSTRUCTION PRACTICE AND THE NORTH CAROLINA STATE BUILDING

WHEN WOOD JOISTS ARE CLOSER THAN 18", OR WOOD GIRDERS ARE CLOSER THAN 12", TO EXPOSED GROUND IN THE CRAWLSPACE, THEY SHALL BE PRESERVATIVE

ALL JOINTS OF SOLID WOOD GIRDERS AND THE OUTSIDE MEMBERS OF BUILT-UP GIRDERS SHALL BE MADE OVER PIER OR COLUMN SUPPORTS.

MICROLLAM HEADERS (LVL'S) ARE MANUFACTURED BY Weyerhauser iLevel Trus Joist. (THE CONTRACTOR MAY SUBSTITUTE EQUIVALENT HEADERS IF PROPERLY DESIGNED BY THE MANUFACTURER.) MICRO-LAM HEADERS ARE ALWAYS DOUBLED AND MUST BE NAILED TOGETHER WITH 2 ROWS OF IOD NAILS @ 12" O.C. STAGGERED. PROVIDE CONTINUOUS LATERAL SUPPORT FOR TOP OF HEADER.

AN EXTRA FLOOR JOIST SHALL BE PLACED UNDER NON-LOAD BEARING PARTITIONS

BUILT-UP STUD COLUMNS MUST BE SECURELY BOLTED AND NAILED TOGETHER TO ACT AS A COMPOSITE MEMBER. MAXIMUM BOLT SPACING IS 3'-O" WITH BOLTS AT

WHICH RUN PARALLEL TO THE FLOOR JOISTS. (THIS NOTE GOVERNS OVER INFORMATION SHOWN ON THE FRAMING PLANS.) ALL WOOD IN CONTACT WITH MASONRY OR EXPOSED TO THE WEATHER SHALL BE

PRESSURE PRESERVATIVE TREATED TO THE RETENTIONS REQUIRED BY SECTION 2303 OF THE BUILDING CODE.

NAIL SIZES SPECIFIED ON PLANS AND DETAILS ARE "STANDARD COMMON NAILS". ALL WOOD FRAMING SHALL BE FASTENED IN ACCORDANCE WITH TABLE 2304.IO.I OF THE BUILDING CODE.

USE 2X6 WALL STUDS FOR NEW WALLS OVER 10'-O" IN HEIGHT.

TUCK-POINTING EXISTING MASONRY BUILDINGS

TUCK-POINTING: THE FILLING IN WITH FRESH MORTAR OF CUT-OUT OR DEFECTIVE MORTAR JOINTS IN BRICK MASONRY

RE-POINTING: THE PROCESS OF REMOVING DETERIORATED MORTAR FROM THE JOINTS OF A BRICK MASONRY WALL AND REPLACING IT WITH NEW MORTAR.

REFER TO ARCHITECTURAL SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS FOR MASONRY RESTORATION. CONTACT ARCHITECT OR STRUCTURAL ENGINEER IF THERE ARE ANY DISCREPANCIES BETWEEN THESE NOTES AND THE ARCHITECTURAL SPECIFICATIONS.

INTRODUCTION

THE TWO TERMS, TUCK-POINTING, AND RE-POINTING, ARE OFTEN USED INTERCHANGEABLY. THE PROCESS OF TUCK-POINTING OR RE-POINTING BRICK MASONRY WALLS IS A LABOR-INTENSIVE AND A SPECIALIZED CRAFT. WHEN TUCK-POINTING IS PROPERLY DONE WITH SKILL, SUITABLE MATERIALS AND GOOD TECHNIQUES, THE OPERATION CAN MATERIALLY IMPROVE THE WATER-TIGHTNESS, APPEARANCE AND EXTEND THE LIFE OF BRICK MASONRY WALLS.

TUCK-POINTING IS USUALLY UNDERTAKEN FOR ONE OF TWO REASONS: FIRST, TO STOF OR PREVENT WATER PENETRATION INTO OR THROUGH BRICK MASONRY. IN THIS CASE, TUCK-POINTING MUST ALSO BE COMBINED WITH CAREFUL CHECKING OF OTHER ARCHITECTURAL DETAILS, SUCH AS CAPS, COPINGS, CAULKING JOINTS, SEALANT, WEEP-HOLES, ETC. IN GENERAL, THE REASON FOR THIS TYPE OF TUCK-POINTING IS TO CORRECT POOR WORKMANSHIP OR INAPPROPRIATE DETAILING.

THE SECOND REASON IS TO PRESERVE AN OLDER OR HISTORIC BUILDING BY REPLACING WEATHERED MORTAR JOINTS, THEREBY EXTENDING THE LIFE AND USEFULNESS OF THE

REGARDLESS OF THE INITIAL PURPOSE OR REASON FOR TUCK-POINTING BRICK MASONRY, THE GENERAL PROCEDURE AND CARE REQUIRED REMAIN ESSENTIALLY THE

THE FIRST STEP IS TO IDENTIFY THE AREAS OF THE WALL OR WALLS AND LOCATIONS WHICH WILL REQUIRE RE-POINTING. ON OLDER BUILDINGS, ONE WAY THAT THIS CAN BE DONE IS BY "CLEANING" THE SURFACES WITH LOW OR MODERATE-PRESSURE WATER (WITHOUT GRIT OR CHEMICALS). THE PURPOSE OF THIS OPERATION IS NOT TO "CLEAN" THE BUILDING, BUT TO IDENTIFY THE AREAS WHERE MORTAR JOINTS ARE WEAK, DECAYED, OR IN NEED OF REPLACEMENT.

THE SECOND STEP IS TO SECURE QUALIFIED AND EXPERIENCED TUCK-POINTING CRAFTSMEN. AN INDIVIDUAL WHO IS AN EXCELLENT MASON/BRICKLAYER MAY NOT BE A GOOD TUCK-POINTING CRAFTSMAN. IT IS SUGGESTED THAT SKILLS BE TESTED AND EVALUATED PRIOR TO THE SELECTION OF CRAFTSMEN TO ACCOMPLISH A TUCK-POINTING PROJECT. ONE METHOD OF TESTING CRAFTSMANSHIP IS TO DESIGNATE AN INCONSPICUOUS SECTION OF WALL AND PERMIT THE CANDIDATES TO PLACE A SAMPLE OF THEIR WORK ON THAT SECTION OF THE WALL. THE SKILLS IN QUESTION ARE:

A) CUTTING OUT OF THE JOINTS TO THE PROPER DEPTH AND PROPER PROFILE; B) PROPERLY PREPARING THE WALL FOR TUCK-POINTING; AND C) THE TUCK-POINTING OF THE NEW MORTAR INTO THE CUT-OUT SPACES BY PROPER LAYERING, PRESSURING, TOOLING AND NEATNESS. IT IS IMPORTANT THAT THE POINTING OPERATION BE KEPT EXTREMELY NEAT AND CLEAN SO THAT ADDITIONAL CLEAN-DOWN OPERATIONS OF THE FINISHED WALL ARE NOT NECESSARY.

THE FOLLOWING IS THE PROCEDURE SUGGESTED FOR RESTORATION OF BRICK MASONRY IN-SITU, I.E., RE-POINTING OR TUCK-POINTING.

I.O CLEAN WALLS, USING MODERATE PRESSURE HOT WATER AND/OR STEAM, WITHOUT CLEANING SOLUTIONS OR GRIT. PRESSURE SHOULD BE ABOUT 200-275 PSI, AND DIRECTED AT THE MASONRY AT AN ANGLE OF NOT MORE THAN 30 DEGREES FROM THE WALL SURFACE.

SPOT-CLEAN TAR, CAULKING, ETC., USING PREVIOUSLY TESTED PROCEDURES (SEE BIA TECHNICAL NOTES 20). THIS CLEANING WILL REMOVE SOME OF THE DIRT FROM THE WALL AND MAKE INFIRM OR DETERIORATED MORTAR JOINTS EASILY IDENTIFIABLE. THE PURPOSE OF THE CLEANING IS NOT, REPEAT NOT, TO GET A "NEW-LOOKING" BUILDING.

2.0 IDENTIFY AREAS OF WALLS TO BE TUCK-POINTED.

NOTE: CAREFULLY EXAMINE AND PROBE ALL PORTIONS OF THE WALL TO IDENTIFY JOINTS WHICH REQUIRE POINTING.

3.0 IDENTIFY A PORTION OF THE WALL TO BE USED AS A "PANEL TO

NOTE: THE PANEL TO MATCH SHOULD BE CLEARLY IDENTIFIED AND USED AS THE STANDARD OF COMPARISON FOR COLOR, SIZE OF JOINT, AND QUALITY OF WORKMANSHIP FOR THOSE PORTIONS THAT WILL BE TUCK-POINTED.

NOTE FOR HISTORIC PRESERVATION: REMOVE A REASONABLE SAMPLE OF MORTAR FROM THE WALL AND PULVERIZE IT WITH A WOODEN MALLET. EXAMINE THE POWDERED MORTAR FOR COLOR, AGGREGATE SIZE, INCLUDING SIZE AND DISTRIBUTION OF ANY OYSTER SHELLS, HORSEHAIR, OR OTHER INGREDIENTS. THIS INFORMATION CAN BE USED TO HELP DUPLICATE THE MORTAR MIX TO BE USED FOR

4.0 JOINTS TO BE TUCK-POINTED SHOULD BE CUT OUT TO A DEPTH APPROXIMATELY TWO AND ONE-HALF TIMES THE JOINT THICKNESS. ALL CUTTING SHALL BE DONE BY HAND. NO POWER TOOLS OF ANY TYPE SHOULD BE USED IN THE CUTTING OPERATION. JOINTS ARE TO BE CUT OUT TO A SQUARE PROFILE, AND CLEANED OF DUST AND DEBRIS WITH AIR OR CLEAN WATER.

5.0 PROCEDURE FOR MIXING

- 5.1 A SAMPLE OR SAMPLES OF MORTAR SHALL BE MIXED DRY BY HAND MIXING AND COMPARED WITH THE EXISTING MORTAR SAMPLE FOR COLOR, TEXTURE AND AMOUNT AND SIZE OF OYSTER SHELLS, HORSEHAIR, ETC.
- 5.2 MORTAR SHALL BE MIXED IN A PADDLE BATCH MIXER FOR AT LEAST THREE AND NOT OVER SEVEN MINUTES, USING LESS WATER THAN NEEDED FOR NORMAL, WORKABLE MORTAR.
 - NOTE: THE MIXED MORTAR SHALL BE OF A CONSISTENCY TO BE MOLDED INTO A BALL BY HAND.
- 5.3 MIXED MORTAR SHALL BE PERMITTED TO STAND FOR NOT LESS THAN ONE HOUR, NOR MORE THAN ONE AND ONE-HALF HOURS FOR PRE- HYDRATION. THE WATER SHALL BE ADDED TO SMALL BATCHES, CAREFULLY MIXED BY HAND TO BRING THE MORTAR TO A WORKABLE CONSISTENCY.
- NOTE: THE AMOUNT OF WATER ADDED WILL VARY DAY TO DAY AND SECTION TO SECTION, OF THE WALL, DEPENDING UPON THE TEMPERATURE, HUMIDITY, WIND, AND THE ABSORPTION OF THE BRICK.

INITIAL MIXING SHALL BE DISCARDED.

- 5.4 ALL MORTAR SHALL BE USED WITHIN TWO AND ONE-HALF HOURS OF ITS INITIAL MIXING, AND WITHIN ONE HOUR OF ADDING WATER TO BRING IT TO A WORKING CONSISTENCY. RE-TEMPERING OF THE MORTAR (ADDING OF ADDITIONAL WATER TO THE MIX) TO REPLACE EVAPORATED WATER SHALL
- BE PERMITTED WITHIN THESE TIME FRAMES. 5.5 ANY MORTAR NOT USED WITHIN TWO AND ONE-HALF HOURS OF

TUCK-POINTING EXISTING MASONRY BUILDINGS (CONTINUED)

- 6.0 PREPARE THE JOINTS FOR TUCK-POINTING. ALL JOINTS SHALL BE CLEANED OF DUST AND DEBRIS WITH AIR OR WATER.
- 7.0 THE MORTAR FOR RE-POINTING, HAVING BEEN PREHYDRATED (SEE MORTAR SPECIFICATION) AND BROUGHT TO WORKING CONSISTENCY, SHALL BE TUCKED INTO THE JOINTS IN APPROXIMATELY ONE-QUARTER INCH LAYERS AND TIGHTLY COMPRESSED. WHEN EACH LAYER IS "THUMBPRINT" HARD, ANOTHER ONE-QUARTER INCH LAYER SHALL BE TUCKED INTO THE JOINT.
- CARE MUST BE EXERCISED TO FULLY FILL THE JOINTS TO THE PROPER DEPTH, AND FINALLY TO TOOL THEM AT THE APPROPRIATE TIME TO AVOID TOOL BURN AND/OR SLICKING.
- 7.1 ON HOT, DRY DAYS, TUCK-POINTING OPERATIONS SHALL BE DONE ON THE SHADY SIDE OF THE BUILDING, OR SUITABLE SHADING DEVICES SHALL BE ERECTED TO KEEP THE FRESH WORK IN THE SHADE.
- NOTE: TUCK-POINTING MUST BE ACCOMPLISHED CAREFULLY BY EXPERIENCED CRAFTSMEN. THE WORK AREA (SURFACE OF THE WALLS) SHALL BE KEPT CLEAN DURING THE TUCK-POINTING OPERATION IN ORDER TO AVOID NECESSITATING ADDITIONAL CLEAN-DOWN.

8.1 MORTAR MATERIALS

- 8.1 HYDRATED LIME SHALL BE TYPE S, NON-AIR-ENTRAINED, IN ACCORDANCE WITH ASTM C 207.
- 8.2 PORTLAND CEMENT SHALL BE TYPE I, IN ACCORDANCE WITH ASTM C 150.
- 8.3 SAND SHALL BE SIMILAR IN SIZE AND GRADATION TO EXISTING MORTAR SAND, AND SHALL OTHERWISE BE IN ACCORDANCE WITH ASTM C 144.
- SAND SHALL ALSO BE SELECTED FOR COLOR TO CLOSELY MATCH EXISTING MORTAR.
- 8.4 ADDITIVES TO MORTAR: NO CHEMICAL ADDITIVES SHALL BE USED IN THE MORTAR MIX FOR TUCK-POINTING. HOWEVER, IN MANY HISTORIC PROJECTS, THE ORIGINAL MORTARS CONTAINED SUCH THINGS AS OYSTER SHELLS, HORSEHAIR, OR OTHER MATERIALS.
- NOTE: FOR TRUE DUPLICATION OF THE MORTAR FOR HISTORIC BUILDINGS, THESE ITEMS SHOULD BE ADDED TO THE TUCK-POINTING MORTAR.
- 8.4.1 OYSTER SHELLS, IF REQUIRED, SHALL BE THOROUGHLY WASHED AND RINSED WITH CLEAR WATER TO REMOVE ALL TRACES OF SALT AND/OR ALGAE. THEY SHALL BE CRUSHED TO A SIZE MATCHING THAT OF THE ORIGINAL MORTAR.
- 8.4.2 COLORING, IF NEEDED, TO MATCH EXISTING MORTAR SHALL BE OF METALLIC OXIDES, NOT ORGANIC. COLOR MAY BE ADDED TO THE MIX IN QUANTITIES NOT TO EXCEED 6% BY WEIGHT OF THE CEMENT IN THE MIX.
- 8.5 WATER FOR MORTAR SHALL BE CLEAN, CLEAR, AND SUITABLE FOR DRINKING, AND SHALL BE FREE OF CHEMICALS THAT MAY BE DELETERIOUS TO THE MASONRY AND TO THE MORTAR.

MORTAR MIX

GENERAL

IT IS IMPERATIVE THAT TUCK-POINTING MORTAR BE OF THE SAME STRENGTH OR WEAKER IN COMPRESSIVE STRENGTH THAN THE ORIGINAL MORTAR. THIS IS PARTICULARLY TRUE FOR HISTORIC PROJECTS AND PRESERVATION WORK. IN GENERAL, MORTAR SHALL CONSIST OF TYPE N, O, OR K MORTARS, IN ACCORDANCE WITH THE PROPORTION SPECIFICATION OF ASTM C 270-82, OR BIA MI-72 (TECHNICAL NOTES

TYPE N MORTAR SHALL CONSIST OF ONE (I) PART, BY VOLUME, PORTLAND CEMENT, TYPE I; ONE (I) PART, BY VOLUME, HYDRATED LIME, TYPE S; AND SIX (6) PARTS. BY VOLUME, SAND.

TYPE O MORTAR SHALL CONSIST OF ONE (I) PART, BY VOLUME, PORTLAND CEMENT, TYPE I; TWO (2) PARTS, BY VOLUME, HYDRATED LIME, TYPE S; AND NINE (9) PARTS, BY VOLUME, SAND.

TYPE K MORTAR (NO LONGER INCLUDED IN ASTM C 270) SHALL CONSIST OF ONE (I)

PART, BY VOLUME, HYDRATED LIME, TYPE S; AND THREE (3) PARTS, BY VOLUME,

BUT NOT TO EXCEED TWO (2) PARTS, BY VOLUME.

OYSTER SHELLS MAY BE ADDED TO MATCH EXISTING MORTAR,

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REVISIONS 06/05/24 DRAWN BY PROJECT NO. LA-13997 SHEET TITLE

GENERAL STRUCTURAL **NOTES/DETAILS**

EXISTING PLAN NOTES:

12" O.C. (TYP.)

NEW FJI/FGI/F2/MPI PIER

NEW DROPPED-

FGI GIRDER

-PT WOOD

SCHEDULE

BLOCKING

– NEW MPI PIER. FILL SOLID WITH GROUT

OR CONCRETE - SEE

F2.4 FOOTING - SEE

SCHEDULE FOR SIZE

REINFORCEMENT

REQUIREMENTS

I" SCALE

NEW DROPPED —

FG2 GIRDER

- THIS EXISTING FOUNDATION AND FIRST FLOOR FRAMING PLAN IS INTENDED TO DOCUMENT EXISTING CONDITIONS. IT IS NOT DEEMED
- TO BE ACCURATE OR COMPLETE. DUE TO LIMITED ACCESS INCLUDING A VERY LOW CRAWL SPACE, ALL DIMENSIONS AND EXISTING CONDITIONS SHALL BE FIELD
- ALL DIMENSIONS ARE APPROXIMATE AND SHALL BE VERIFIED.
- MEMBER DIMENSIONS ARE ACTUAL, NOT NOMINAL. A PLASTIC VAPOR BARRIER AND (2) SUMP PUMPS WERE OBSERVED. THERE WAS MINIMAL STANDING WATER, BUT IT WAS LOWER THAN THE SUMP PUMP ENTRY POINT. THE PUMPS APPEARED

ASSUMED THAT A SEALED CRAWL SPACE OR SIMILAR ACTION WILL

TO BE OPERATIONAL, BUT THIS COULD NOT BE VERIFIED. IT IS

BE TAKEN TO ADDRESS THE WATER INFILTRATION ISSUES. THIS PLAN DOES NOT IMPLY ANY STRUCTURAL VERIFICATION OF THE LOAD CAPACITY OF EXISTING MEMBERS. THE INTENT OF THE PLAN IS TO IDENTIFY REPAIR AREAS AND PROVIDE THE REPAIR RECOMMENDATIONS INCLUDED ON THIS PLAN.

REPAIR AND RESTORATION NOTES:

THE BELOW ITEMS CORRESPOND TO THE NUMBERED AND CLOUDED ITEMS SHOWN ON THE PLAN.

I. THE FLOOR JOISTS UNDER THE KITCHEN HAVE DETERIORATED AND NEED TO BE REPLACED. REMOVE THE EXISTING FLOOR AND SUBFLOOR IN THE AREA SHOWN AND INSTALL THE NEW FJI FLOOR JOISTS AS SHOWN. THE INSTALLATION OF THE NEW FJI FLOOR JOISTS SHALL BE COORDINATED WITH THE REPAIR TO THE BOTTOM OF THE WALLS THAT IS DETAILED IN REPAIR ITEM 2 BELOW.

2. THE BOTTOM OF THE BALLOON FRAMED STUDS IN THE EXTERIOR WALL AND THE ENDS OF THE EXISTING FLOOR JOISTS ARE DETERIORATED DUE TO WATER INFILTRATION. THE DETERIORATED AREAS SHALL BE REPAIRED ACCORDING TO DETAIL OI/SIOI. THE GENERAL REPAIR DESCRIPTION IS DESCRIBED AS FOLLOWS: SHORE THE EXISTING EXTERIOR WALLS AND CUT OFF THE DETERIORATED BOTTOM OF THE STUDS; INSTALL A NEW PT DOUBLE BAND AS SHOWN ON THE DETAIL. INSTALL A NEW PT PLATE UNDER THE CUT STUDS; SHORE THE EXISTING FLOOR JOISTS AND CUT THE DETERIORATED ENDS OF THE FLOOR JOISTS SO THAT THEY CAN BE ATTACHED TO THE NEW BAND WITH JOIST HANGERS. SHORING IS THE RESPONSIBILITY OF THE CONTRACTOR; AFTER ALL REPAIRS HAVE BEEN COMPLETED, INSTALL NEW PLYWOOD SUBFLOOR.

-PT WOOD

SCHEDULE

NEW FG2/F2.4/MPI PIER @ EXISTING JOISTS

BLOCKING

- NEW MPI PIER. FILL

SOLID WITH GROUT OR CONCRETE - SEE

F2.4 FOOTING - SEE

SCHEDULE FOR SIZE

REINFORCEMENT

REQUIREMENTS

I" SCALE

REPAIR AND RESTORATION NOTES (CONTINUED):

3. DROPPED GIRDERS (FG2) BEARING ON MASONRY PIERS (MPI) ON CONCRETE FOOTINGS (F2.4) ARE ADDED TO SUPPORT EXISTING IST FLOOR WALLS THAT WILL BECOME LOAD BEARING WALLS THAT SUPPORT A NEW MECHANICAL PLATFORM ABOVE THE IST FLOOR AND BELOW THE EXISTING ATTIC JOISTS. SEE SIO2 FOR THE LOCATION AND STRUCTURAL FRAMING FOR THE NEW MECHANICAL PLATFORM. COORDINATE WITH THE ARCHITECTURAL AND MECHANICAL DRAWINGS.

FOOTING SCHEDULE					
MK#	SIZE	REINFORCING	NOTES		
F2.4	2'-4" X 2'-4" X I2" THICK	(3) #4'S EACH WAY	MPI PIER FOOTING		
NOTES	5 INFORCING TO BE LOCATED	3" CLEAR FROM BOT	TOM OF FOOTING.		

MK#	SIZE	REINFORCING	NOTES
MPI	16" X 16" CMU	NONE	1

MK#	SIZE	MATERIAL	GRADE	NOTE	RyL	RyS
FJI	2 X I2	PT SYP	#/	1, 2	0.8	0.8
FGI	(3) 2 × 10	PT SYP	#/	1, 3	3.3	3.3
FG2	(3) 2 X I2	PT SYP	#	1, 3	2.9	2.9

I. SIZE SHOWN IS NOMINAL. 2. FJI JOISTS ARE SPACED AT 12" O.C. 3. FGI AND FG2 GIRDERS ARE DROPPED

_EXISTING BRICK VENEER

-NEW 2X4 PLATE

EXISTING 2X4 EXTERIOR STUD WALL TRIMMED AT BOTTOM & ATTACHED TO NEW PLATE

-NEW 3/4" T&G STURDIFLOOR

-NOTCH END OF NEW SISTERED 2XI2 - MUST HAVE 2"

BOLT TO BRICK W $\frac{1}{2}$ " BOLTS @ 6'-0" O.C. (MIN.)

CONTRACTOR IS RESPONSIBLE FOR TEMPORARY

SHORING OF WALLS AND FLOOR FRAMING WHILE

REPAIRS ARE MADE. RECOMMEND REPAIRING THE WALL IN LIMITED SECTIONS BEFORE MOVING TO THE NEXT.

MIN. BEARING. USE HANGER IF LESS THAN 2".

- REMOVE DETERIORATED 2X4 WALL PLATE AND INSTALL NEW PT 2X8 PLATE - EPOXY

—12" (+-) BRICK FOUNDATION WALL

—EXISTING 2 I/2" X II" FLOOR JOIST TRIMMED AT END WHERE DETERIORATION EXISTS

 \bullet ROWS OF (4) \longrightarrow

I6D NAILS

(TYP.)



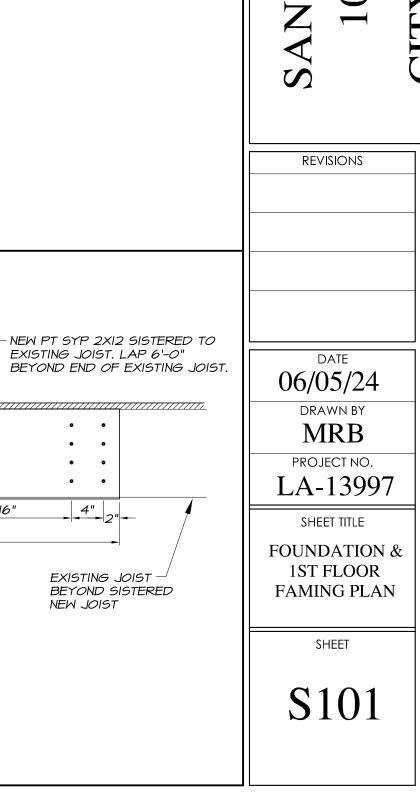
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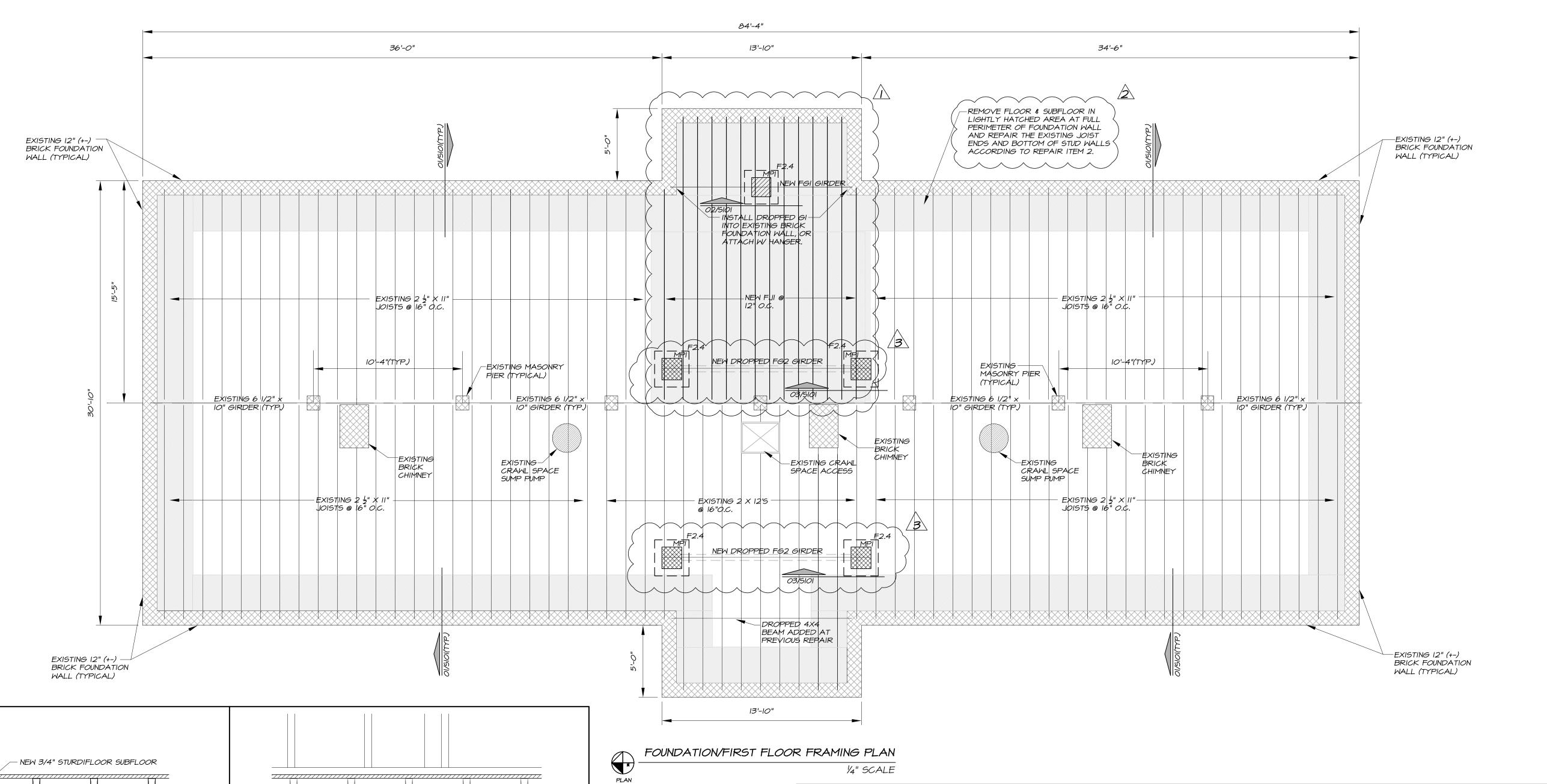


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revisions 06/05/24 DRAWN BY PROJECT NO. LA-13997 SHEET TITLE 1ST FLOOR





-EXISTING BRICK VENEER

STUD WALL -

-EXISTING 2X4 EXTERIOR

FLOOR JOIST

-2X4 WALL PLATE

(DETERIORATED)

EXISTING CONDITION

-12" (+-) BRICK

FOUNDATION WALL

DETERIORATED AT BOTTOM

−EXISTING 2 I/2" X II"

PICTURE SHOWING DETERIORATION OF

EXTERIOR STUD PLATE/BOTTOM OF WALL

EXTERIOR WALL AT FOUNDATION

NO SCALE

EXISTING PLAN NOTES:

- THIS EXISTING FRAMING PLAN IS INTENDED TO DOCUMENT EXISTING CONDITIONS. IT IS NOT DEEMED TO BE ACCURATE OR COMPLETE.
- DUE TO LIMITED ACCESS INCLUDING THROUGH THE DROPPED CEILING AND NO WALKBOARDS IN THE ATTIC, ALL DIMENSIONS AND EXISTING CONDITIONS SHALL BE
- FIELD VERIFIED. ALL DIMENSIONS ARE APPROXIMATE AND SHALL BE FIELD VERIFIED.
- MEMBER DIMENSIONS ARE ACTUAL, NOT NOMINAL.
- LBW = EXISTING 2X4 LOAD-BEARING WALL WITH 4" BRICK VENEER.
- SEE SIOI FOR FOUNDATION PLAN WITH REPAIRS. THIS PLAN DOES NOT IMPLY ANY STRUCTURAL VERIFICATION OF THE LOAD CAPACITY OF EXISTING MEMBERS. THE INTENT OF THE PLAN IS TO IDENTIFY REPAIR AREAS AND PROVIDE THE REPAIR RECOMMENDATIONS INCLUDED ON THIS PLAN.

REPAIR AND RESTORATION NOTES:

- THE BELOW ITEMS CORRESPOND TO THE NUMBERED AND CLOUDED ITEMS SHOWN ON THE PLAN.
- I. INSTALL A NEW MECHANICAL PLATFORM THAT IS LOCATED BELOW THE EXISTING ATTIC. THE DISTANCE FROM THE MECHANICAL PLATFORM TO THE BOTTOM OF THE ATTIC JOISTS IS APPROXIMATELY 5'-O". BOTTOM OF THE ATTIC JOISTS. THE NEW MECHANICAL PLATFORM JOISTS (MPJI'S) ARE SYP 2XIO'S AS SHOWN ON THE PLANS AND IN THE FRAMING SCHEDULE. THE MPJI JOISTS ARE SUPPORTED BY LOAD BEARING WALLS WHICH ARE SUPPORTED BY NEW GIRDERS AND PIERS. SEE SHEET SIOI FOR THE NEW GIRDER, PIER, AND FOOTINGS. COORDINATE THE DIMENSIONS AND LOCATION OF THE MECHANICAL ROOM WITH THE ARCHITECTURAL AND MECHANICAL PLANS.
- 2. THE EXISTING CEILING FINISHES SHALL BE REMOVED IN THE SHADED AREA AS SHOWN. THE EXISTING ATTIC JOISTS AND ROOF STRUCTURE IN THE AREA SHALL REMAIN UNDISTURBED. SEE ARCHITECTURAL PLANS FOR NON-STRUCTURAL FRAMING AND NEW FINISHES IN THE OPEN

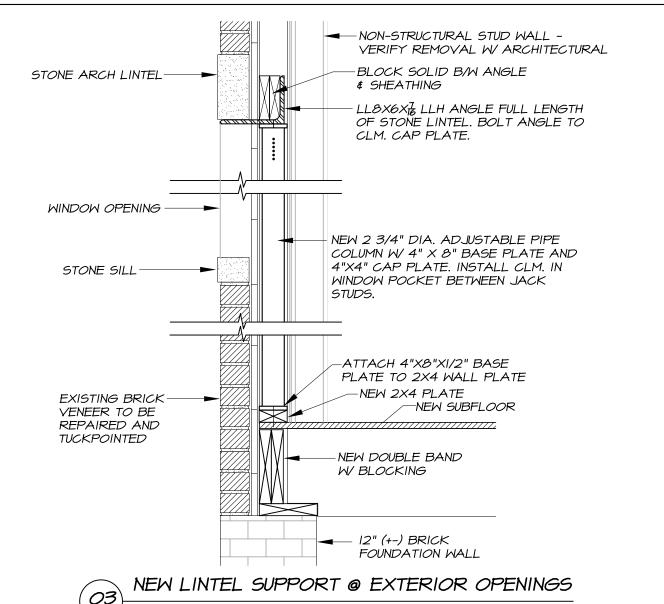
REPAIR AND RESTORATION NOTES (CONTINUED):

- THE BELOW ITEMS CORRESPOND TO THE NUMBERED AND CLOUDED ITEMS SHOWN ON THE PLAN.
- 3. NEW LINTELS WITH SUPPORTING POSTS SHALL BE ADDED TO EVERY WINDOW/DOOR OPENING FROM THE INTERIOR OF THE BUILDING AS SHOWN ON DETAIL 03/SI02. THE PURPOSE OF THE NEW LINTELS IS TO SUPPORT THE EXISTING STONE LINTELS IN THE BRICK VENEER. THE CONTRACTOR SHALL INSTALL A SAMPLE LINTEL SUPPORT AT A WINDOW FOR REVIEW BY THE ARCHITECT & ENGINEER.
- 4. AFTER INSTALLATION OF THE LINTELS ON THE INTERIOR AND AFTER ALL INTERIOR STRUCTURAL WORK AND WATERPROOFING AND CRAWL SPACE IMPROVEMENTS HAVE BEEN COMPLETED, THE EXTERIOR BRICK VENEER SHALL BE REPAIRED BY REPLACING MISSING AND BROKEN BRICKS AND BY REPAIRING THE MORTAR BY TUCKPOINTING AS SPECIFIED ON SHEET SIOO. A SAMPLE BRICK BRICK VENEER REPAIR AREA SHALL BE INSTALLED FOR APPROVAL BY THE ARCHITECT PRIOR TO CONTINUING WITH REPAIRS.

MK#	SIZE	MATERIAL	GRADE	NOTE	RyL	RyS
ILAW	2×10	SYP	No.I	1, 2	0.4	0.4

2. THE MECHANICAL PLATFORM IS LOCATED APPROXIMATELY 5'-O" BELOW THE BOTTOM OF THE ATTIC JOISTS. SEE ARCHITECTURAL PLANS FOR ELEVATIONS.

	8'-0"		84'-4"		
		<i>36'-0"</i>	I3'-IO" ►	34'-6"	 ►
"O-'8		LBW LBW	REMOVE CEILING FINISHES IN SHADED AREA. STRUCTURE REMAINS. EXISTING 2" X IO" ATTIC JOISTS @ 24" O.C.	A TYP) LBM	
"OI-'0E	EXISTING 2" X IO" JOISTS @ 24"O.C.	EXISTING BRICK CHIMNEY EXISTING 4X8 CLM. EXISTING 5"x12" GIRDER EXISTING 5"x12" GIRD	LBW LBW (2)MPJI R ATTIC (HATCHED) BELOW ATTIC LEVEL MPJI'S BELOW ATTIC @ 16" D.C.	EXISTING EXISTING	EXISTING 2" X IO" JOISTS @ 24"O.C.
8'-0"		EXISTING 2" X IO" ATTIC JOISTS @ 24" O.C.	LBW LBW 13'-10"	LBW ATTP)	



NOTE: USE 2X6 STUDS FOR NEW WALLS OVER 10'-0" IN HEIGHT.

1/4" SCALE



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EXISTING PLAN NOTES:

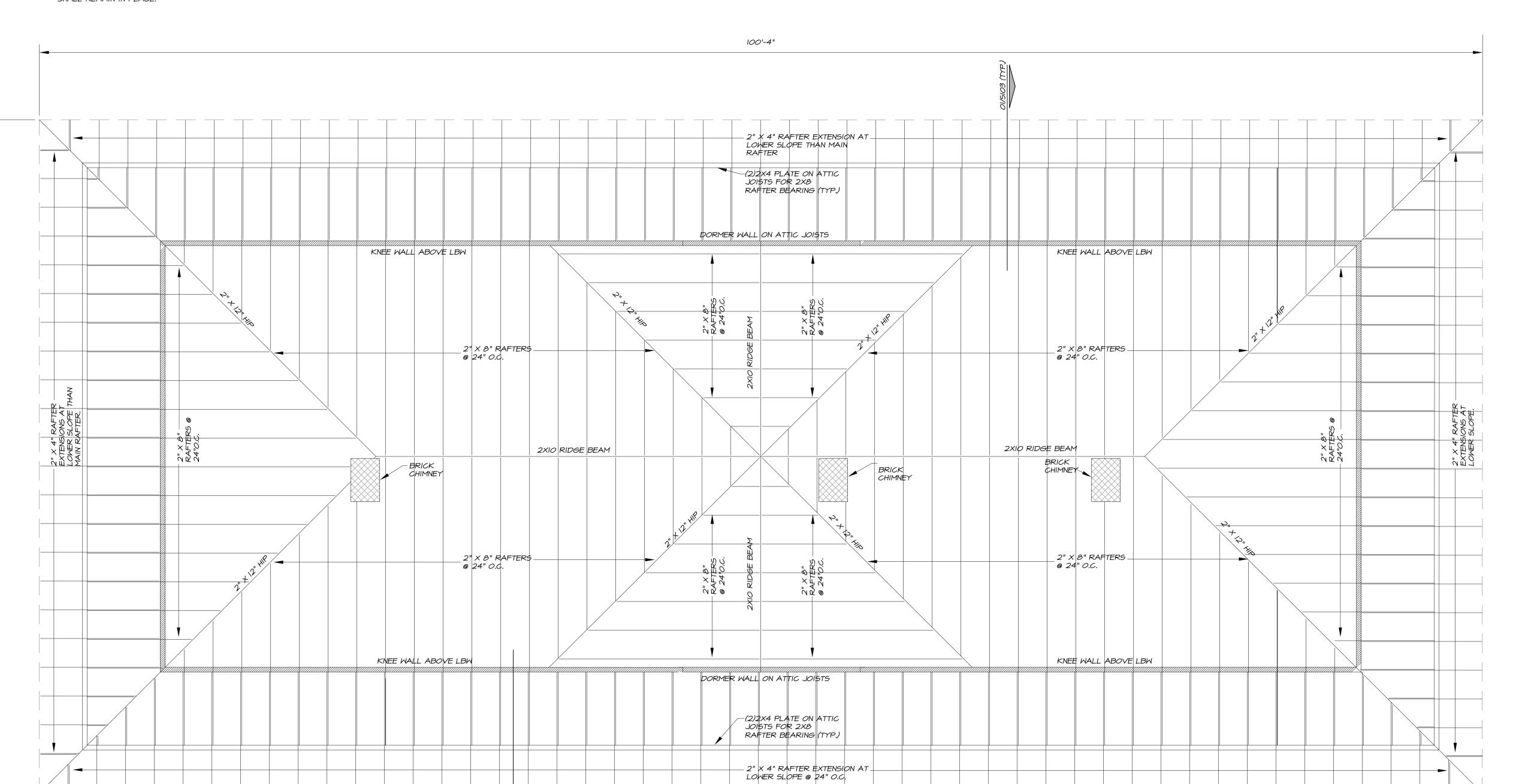
- THIS EXISTING FRAMING PLAN IS INTENDED TO DOCUMENT EXISTING CONDITIONS. IT IS NOT DEEMED TO BE ACCURATE OR COMPLETE.
- DUE TO LIMITED ACCESS INCLUDING THROUGH THE DROPPED CEILING AND NO WALKBOARDS IN THE ATTIC, ALL DIMENSIONS AND EXISTING CONDITIONS SHALL BE FIELD VERIFIED.
- MEMBER DIMENSIONS ARE ACTUAL, NOT NOMINAL.
- SEE SIOI FOR FOUNDATION PLAN WITH REPAIRS AND SIO2 FOR THE ATTIC FRAMING PLAN.
 SHEET SIO2 SHOWS THE LOAD BEARING WALLS BELOW AND THE WINDOW AND DOOR
 OPENINGS. THIS ROOF FRAMING PLAN DOES NOT SHOW THE LOAD BEARING WALLS BELOW
 FOR CLARITY.
- THIS PLAN DOES NOT IMPLY ANY STRUCTURAL VERIFICATION OF THE LOAD CAPACITY OF EXISTING MEMBERS. THE INTENT OF THE PLAN IS TO IDENTIFY REPAIR AREAS AND PROVIDE THE REPAIR RECOMMENDATIONS INCLUDED ON THIS PLAN.
- THERE IS SOME INTERMITTENT RAFTER BRACING THAT IS NOT SHOWN. THE RAFTER BRACING SHALL REMAIN IN PLACE.

REPAIR AND RESTORATION NOTES:

I. THE EXISTING ROOF STRUCTURE SHALL REMAIN IN PLACE

2. THE EXISTING ROOF MATERIAL SHALL BE REMOVED AND REPLACED. ALL OF THE EXISTING ROOF MATERIAL SHALL BE REMOVED AND ANY DAMAGED ROOF SHEATHING SHALL BE REPLACED AS NEEDED. REPLACE ANY DAMAGED EXISTING ROOF SHEATHING WITH IN-KIND MATERIAL AS REQUIRED. PROVIDE A UNIT PRICE PER LINEAR FOOT FOR REPLACEMENT OF SHEATHING. SEE ARCHITECTURAL PLANS FOR THE SPECIFICATION OF THE NEW ROOFING MATERIAL WHICH WILL BE EQUAL OR SIMILAR TO "CLASSIC 14" INTERLOCKING TILE" MANUFACTURED BY LUDOWICKI. THE WEIGHT OF THE NEW ROOFING MATERIAL SHALL BE & PSF (+-). THE CONTRACTOR SHALL SUBMIT MATERIAL DATA AND SHOP DRAWINGS TO THE ARCHITECT FOR APPROVAL.

3. SEE ARCHITECTURAL PLANS FOR ALL NON-STRUCTURAL INFORMATION AND DETAILS.

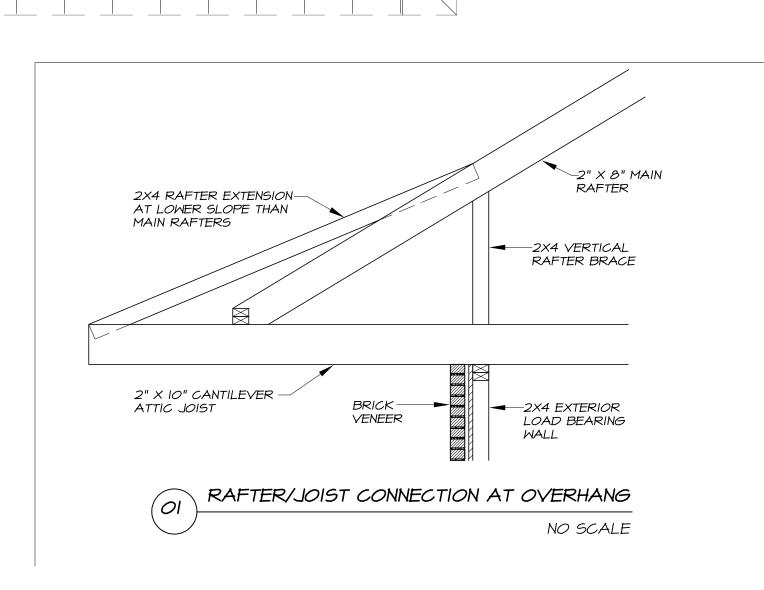


NOTE: USE 2X6 STUDS FOR NEW WALLS OVER 10'-0" IN HEIGHT.



EXISTING ROOF FRAMING PLAN

1/4" SCALE



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CITY of SANFORD, NORTH CAROLINA

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PLAN

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