			2018 APF	PEN	$\square$ IX $E$	3 BI			S C	CODE	E SU	MMARY
Name of Project: Antioch	Church						<u> </u>	(D)	(0)	(2)		ACCESSIBLE PARKING (SECTION 1106)
Address: 494 Antioch C			Zip Code: 28334	STOR' NO.	DESCRIPTION AND USE		ÁREA TABI	LE 506.2 <sup>4</sup> AR	(C) LEA FOR ONTAGE _ A	(D) ALLOWABL REA PER STOR	E EV OR	TOTAL # PARKING SPACES # ACCESSIBLE SPACES PROVIDED
Proposed Use: Church ad	dition			1		(ACTU	UAL)	IN	CREASE <sup>1,5</sup>	REA PER STOR UNLIMITEI <b>24,000</b>	2,3	LOT OR PARKING AREA  REQUIRED  PROVIDED  REGULAR WITH 5' ACCESS AISLE  132" ACCESS 8' ACCESS SPACES PROVIDE
Owner or Authorized Agent :	Clay Hamilton Phone	e #(910)890-4774	E-Mail:		7, 6 7,656111	22,0	21	1,000	ot osed	21,000		See Site Plan
Owned By:	City / County	□ Private	State									
Code Enforcement Jurisdiction	CityDunn	County Harnett	State									TOTAL
LEAD DESIGN PROFI	SSIONAL: Joe T. Smith, Jr.											PLUMBING FIXTURE REQUIREMENTS
DESIGNER FIRM	NAME	LICENSE # TELEPHONI	E# E-MAIL	1 Fron	tage area increases from So	ection 506.2 are com	nnuted thus:					(TABLE 2902.1)
	eering & Design Joe T. Smith,			a. 1	Perimeter which fronts a p Total Building Perimeter	public way or open s	pace having 20	) feet minimum wi	dth =	_ (F)		USE WATER CLOSETS URINALS LAVATORIES SHOWERS DRINKING FOUNTAIN MALE FEMALE UNISEX WALE FEMALE UNISEX & TUBS REGULAR ACCESSIB
Civil				c. 1	Ratio (F/P) = W = Minimum width of p	_ (F/P)	(W)					Tenant   EXISTING   2   4   0   1   2   2   0   0   1   0
	eering & Design  Joe T. Smith,  eering & Design  Joe T. Smith,			e. ]	Percent of frontage increas	ise $I_f = 100 [F/P - 0]$	$0.25] \times W/30 =$	=(%)				0cc. Load         NEW         0         0         1         2         0         0         1         0         1         1         1         634 people         REQUIRED         0         0         1         0<
	eering & Design  Joe T. Smith,	<del>``</del>			mited area applicable unde imum Building Area = tota			x D (maximum 3	stories) (506.2).			
	eering & Design Joe T. Smith,			4 The n 412.3	maximum area of parking §	garages must comply	y with 406.5.4.	The maximum as	rea of air traffic c	control towers mu	st comply with Table	SPECIAL APPROVALS
	B.D. T.B.D. eering & Design Joe T. Smith,	T.B.D. T.B.D. (919)-736-	T.B.D		tage increase is based on the	he unsprinklered area	a value in Table	e 506.2.				Special approval: (Local Jurisdiction, Department of Insurance, OSC, DPI, DHHS, ICC, etc., describe below)
Retaining Walls >5' High				<b></b>								
Other				<b> </b>			ALLOWA	ABLE HEIG	<u>HT</u>			
2018 NC BUILDING CODE:		ell/Core	Completion	11		A	ALLOWABLE	5	SHOWN ON PLANS		CODE REFERENCE	
2018 NC EXISTING CODE:	<del>-</del>	ased Construction-Shell Core eration Level I Historic Property		Building F	Height in Feet (Table 504.3	3)	60		25'-0"		TEL EXELVEE	STRUCTURAL DESIGN
(check all that apply)		eration Level II		I —	Height in Stories (Table 504	<i>′</i>	2		1			DESIGN LOADS: Importance Snow (I <sub>s</sub> ) 1.10
		eration Level III		1. Provide	code reference if the "Sho	own on Plans" quant	ity is not based	on Table 504.3 o	r 504.4.			Factors: Seismic $(I_{\mathbf{E}})$ 1.10
CONSTRUCTED: (date) RENOVATED: (date)		(Ch. 3) A-3 Church (Ch. 3) A-3 Church										Live Loads: Roof 20 PSF
	3322 032(3)	· · · · · · · · · · · · · · · · · · ·		<b> </b>			1	ION REQUI			DESIG	Mezzanine 40 PSF
BUILDING DATA Construction Type:	☐ I-A ☐ II-A	☐ III-A ☐ IV	☐ V-A	F	BUILDING ELEMENT	FIRE SEPARATION DISTANCE		PROVIDED (W/_N/A_*	AND F	OR RATED   F	DESIGN # FOR FOR RATED	Ground Snow Load: 10 PSF
	☐ I-A ☐ II-A ☐ II-B	☐ III-B	□ V-A □ V-B			(FEET)		REDUCTION)	SHEET# A	ASSEMBLY PE	ENETRATION RATE JOIN	
•	NO Partial	NFPA 13  □ NFPA 13R	☐ NFPA 13D	Structural f	frame, including columns, asses			0 HOUR				
	NO         Class:         □         I           NO         □         YES (Primary)	☐ II ☐ III  Flood Hazard Area: ☒ No	<ul><li>☐ Wet</li><li>☐ Dry</li><li>☐ YES</li></ul>	Bearing wa Exterior								SEISMIC CATEGORY
Special Inpections Required:		_		North East		>30' >30'	0 HOUR 0 HOUR	N/A N/A		X		Provide the following Seismic Design Parameters:
	GROSS I	BUILDING AREA TABLE		West South	t	>30' >30'	0 HOUR 0 HOUR					Occupancy Category (Table 1604.5)
FLOOR	EXISTING (SQ. FT.)	NEW (SQ. FT.)	SUB-TOTAL	Interior	,		0 HOUR		*****	*****	****	Site Classification (ASCE-7) A B C X D E F
3th Floor				Exterior								Basic Structural System: (check one)
2nd Floor Mezzanine	1,714	1,130	2,844	North East		>30' >30'	0 HOUR 0 HOUR					□ Bearing Wall □ Dual W/ Special Moment Frame □ Building Frame □ Dual W/ Intermediate R/C or Special Steel
1stFloor (Upper Level)	9,078	10,625	19,703	West South		>30' >30'	0 HOUR	0 HOUR 0 HOUR				Moment Frame Inverted Pendulum
Basement (Lower Level) TOTAL:	10,792	11,755	22,547	Interior Floor Cons	walls and partitions		0 HOUR	0 HOUR				Analysis Procedure: Simplified Equivalent Lateral Force Dynamic
	<u> </u>		1 '		supporting beams and joist	ts	0 HOUR	0 HOUR				Architectural, Mechanical, Components Anchored?  \( \sum \) Yes \( \sum \) No
Primary Occupancy :	AI	LLOWABLE AREA		including s	supporting beams and joist	ts	0 HOUR	0 HOUR				LATERAL DESIGN CONTROL:   Earthquake   Wind
Assembly	☐ A-1 ☐ A-2 ☒ A-3 ☐ A-4	4			ng Assembly		0 HOUR					SOIL BEARING CAPACITIES: Field Test (provide copy of test report)  N/A  psf
Business				Shafts Encl	Supporting Roof closures - Exit		N/A N/A	N/A N/A				Presumptive Bearing Capacity 2000 psf
Educational Factory	F-1 Moderate F-2 Low			Shafts Encl Corridor Se	closures - Other		N/A 0 HOUR	N/A 0 HOUR				Pile Size, Type, and Capacity  N/A
Hazardous		e H-3 Combust H-4 Health	☐ H-5 HMP	Occupancy	y/Fire Barrier Separation Wall Separation		N/A N/A	N/A N/A				SPECIAL INSPECTIONS REQUIRED: No
Institutional I-3 Con	☐ I-1 ☐ I-2 ☐ I-3 ☐ I-4 lition ☐ 1 ☐ 2			Smoke Bar	rrier Separation		N/A N/A	N/A N/A				ENEDOV SUMMADV
I-2 Con	dition 1 2				velling Unit/ Sleeping Unit	t	N/A	N/A				ENERGY SUMMARY ENERGY REQUIREMENTS:
I-1 Con Mercantile	dition	□ 4  □ 5		Separation Incidental U	Use Separation		N/A	N/A				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
Residential	☐ R-1 ☐ R-2 ☐ R-3 ☐ R-4	1		*Indicates se	ection number permitting r	reduction.  ERCENTAGE	OF WALL	L OPENING	CALCULA	ATIONS		reference design vs annual energy cost for the proposed design.
Storage	S-1 Moderate S-2	<del></del>		FIRE SEP	ARATION DISTANCE	DEGREE OF O	OPENINGS		ABLE AREA	<del></del>	AL SHOWN ON PLAN	Existing building envelope complies with code: [ (If checked, the remainder of this section is not applicable.)
Utility and Misc.	Parking Garage Open End	closed Repair Garage		(feet) FRO	OM PROPERTY LINES	PROTEC (TABLE '		ALLOW	(%)	ACTO	(%)	Exempt Building: Provide code or statutory reference:  Climate Zone: 3 × 4 5
Accessory Occupancy Classif	cation(s):				>30'	Unprotected,	Sprinklered	No	Limit		N/A	Method of Compliance :
Incidental Uses: (Table 509)  This separation is not experience.	tempt as a Nonseparated Use (see exceptions											Energy Code: Performance Prescriptive Trade-Off
Special Uses: (Chapter 4 - List	Code Sections):			—		TIPE CO		(/ <b>///////////////////////////////////</b>	IIDES SEX	70		ASHRAE 90.1: Performance Prescriptive Trade-Off  Other: Performance (specify source)
<b>Special Provisions:</b> (Chapter 5	- List Code Sections):			Emergency l	Lighting:	•	FETY SYS ⊠ Yes	STEM REQU	<u>JIKEMENT</u>	15		THERMAL ENVELOPE:
Mixed Occupancy: ⊠ NO	YES Secondary occupancy type(s):_	Separ	ation:Hour Exception:	Emergency I Exit Signs:	agnung.	☐ No	X Yes					Roof/Ceiling Assembly (each assembly)  Description of Assembly Metal Building W/ "Simple—Saver" liner system
Non-Separated Use The required type o	f construction for the building shall be determ	nined by applying the height and area limit	ations for each of the applicable occupancies to the entire	Fire Alarm:	ection Systems:			☐ Partial ☑ Partial				U-value of Total Assembly
building. The most  Separated Use (508)	restrictive type of construction, so determine 4) See below for area calculations for each s	ed, shall apply to the entire building. story, the area of the occupancy shall be suc	th that the sum of the ratios of the actual floor area of		noxide Detection:		Yes 2	ry raiuai				R-value of Insulation 30  Skylights in each assembly N/A
each use divided by	the allowable floor area for each use shall no	ot exceed 1.		===			AFFTV DI	LAN REQUI	REMENTS	<u> </u>		U-Value of skylightN/A
	Actual Area of Occupancy A	+ Actual Area of Occupancy B	— = < 1.0	Life Safety	Plan Sheet #:LF-	-	XIEII IL	ZAIV KEQUI	KEMENTS	<u>-</u>		Total square footage of skylights in each assembly N/A  Fytorior Wells (each assembly)
	Allowable Area of Occupancy A  N/A  N/A	Allowable Area of Occupancy B	_		Fire and/or smoke rated wa	all locations (Chapte	er 7)					Exterior Walls (each assembly)  Description of Assembly Metal Building W/ "Simple—Saver" liner system
		+ N/A	$= N/A \le 1.0$		Assumed and real property Exterior wall opening area	•	ance to assume	d property lines (	705.8)			U-value of Total Assembly
					Occupancy Use for each a	rea as it relates to oc						R-value of Insulation 25 Openings (windows or doors with glazing) Alum. Storefront
				_	Occupant loads for each ar Exit access travel distances							U-Value of assembly
					Common path of travel dis		5.2.1 & 1006.3.2	2(1)]				Solar heat gain coefficient: <0.40 Projection factor: 0.91
				_	Dead end lengths (1020.4) Clear exit widths for each							Door R-Values: N/A
					Maximum calculated occu		ach exit door ca	an accommodate l	pased on egress w	vidth (1005.3)		Walls below grade (each assembly)
				_	Actual occupant load for e		no moto 1.0	siling and	tmotor .	dod for "	of occur-	Description of Assembly U-value of Total Assembly
					A separate schematic plan Location of doors with par	_		and/or roof s	structure is provid	ueu 10r purposes	or occupancy separation	R-value of Insulation
					Location of doors with del	-			.7)			Floors over unconditioned space (each assembly)  Description of Assembly
					Location of doors with ele- Location of doors equipped			9.9)				U-value of Total Assembly
					Location of emergency esc	cape windows (1030						R-value of Insulation
					The square footage of each The square footage of each		nt for Occupanc	cy Classification I	-2 (407.5)			Floors slab on grade  Description of Assembly Slab on Grade
					Note any code exceptions	_	_					U-value of Total Assembly N/A  R-value of Insulation R-15 24" Long
				===		ACC	ESSIBLE	DWELLING	G UNITS			R-value of Insulation R-15 24 Long  Horizontal/vertical requirement N/A
					<del></del>		(SECT	TION 1107)				Slab heatedN/A
				TOTAL UNITS	UNITS	UNITS U	JNITS	UNITS	UNITS	TYPE B UNITS	TOTAL ACCESSIBLE UNITS	
					REQUIRED P	PROVIDED REC	QUIRED PI	PROVIDED R	EQUIRED P	PROVIDED	PROVIDED	<del>- </del>
							ļ			1		<del>'</del>

# **INDEX TO DRAWINGS**

# **COVER / CODE SUMMARY**

T-1 COVER SHEET

## LIFE SAFETY

LF-1 LIFE SAFETY PLAN 1ST FLOOR PLAN / OCC. KEY LF-2 LIFE SAFETY PLAN 2ND FLOOR PLAN / OCC. KEY

## STRUCTURAL

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- S-1 FOUNDATION PLAN S-2 FOUNDATION DETAILS
- S-3 SECOND FLOOR FRAMING PLAN

- G-1 FIRST FLOOR PLAN
- G-2 SECOND FLOOR PLAN
- G-3 DOOR & WINDOW SCHEDULES
- G-4 SCHEDULES / DETAILS G-5 EXTERIOR ELEVATIONS

# SECTIONS / DETAILS

- D-1 WALL SECTION
- D-2 WALL SECTION

# **PLUMBING** P-1 FIRST FLOOR WASTE PIPING PLAN

- P-2 FIRST FLOOR SUPPLY PIPING PLAN
- P-3 PLUMBING NOTES AND SCHEDULES

## **MECHANICAL**

- M-1 FIRST FLOOR MECHANICAL PLAN
- M-2 SECOND FLOOR MECHANICAL PLAN M-3 MECHANICAL NOTES AND SCHEDULES
- M-4 MECHANICAL DETAILS

## **ELECTRICAL**

- E-1 FIRST FLOOR ELECTRICAL LIGHTING PLAN
- E-2 SECOND FLOOR ELECTRICAL LIGHTING PLAN
- E-3 FIRST FLOOR ELECTRICAL POWER PLAN
- E-4 SECOND FLOOR ELECTRICAL POWER PLAN
- E-5 ELECTRICAL NOTES AND SCHEDULES
- E-6 ELECTRICAL NOTES AND SCHEDULES
- E-7 ELECTRICAL DETAILS

# **FIRE ALARM**

FA-1 FIRE ALARM PLAN

FA-2 FIRE ALARM DETAILS

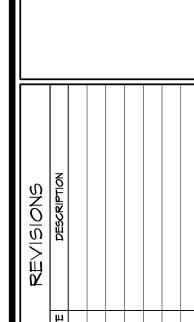
NOTICE TO CONTRACTOR

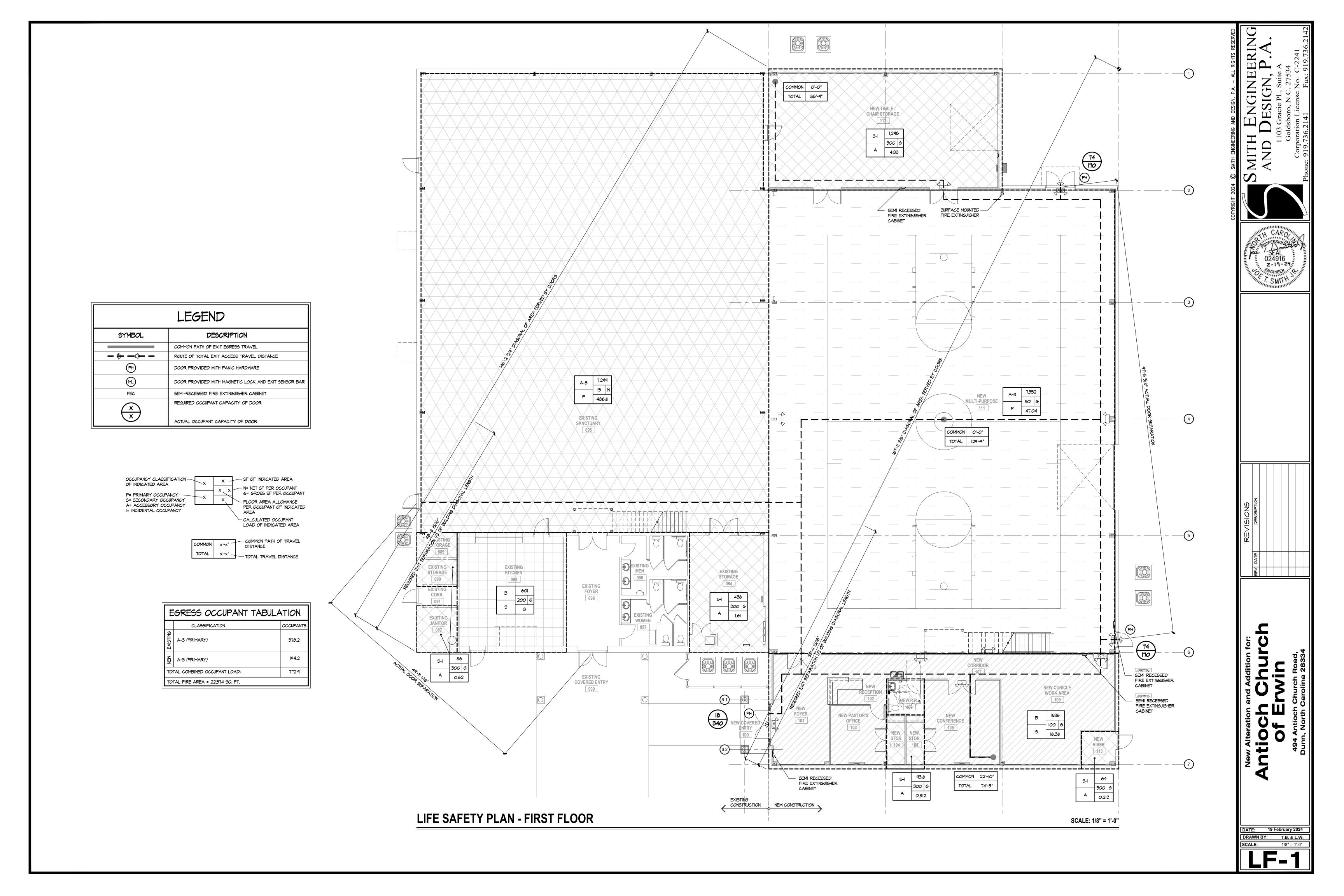
All construction must comply with current NC Building Codes and is subject to field inspection and verification. Reviewed for Code Compliance

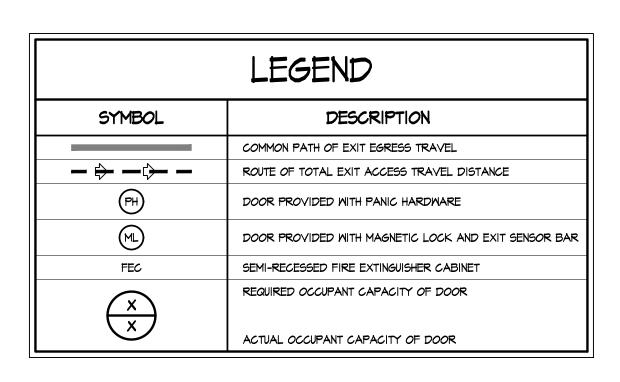


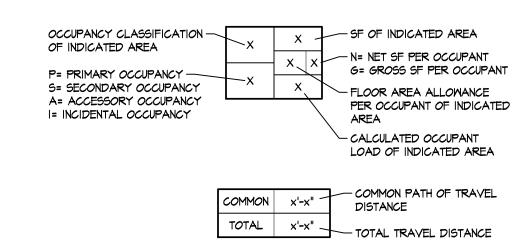


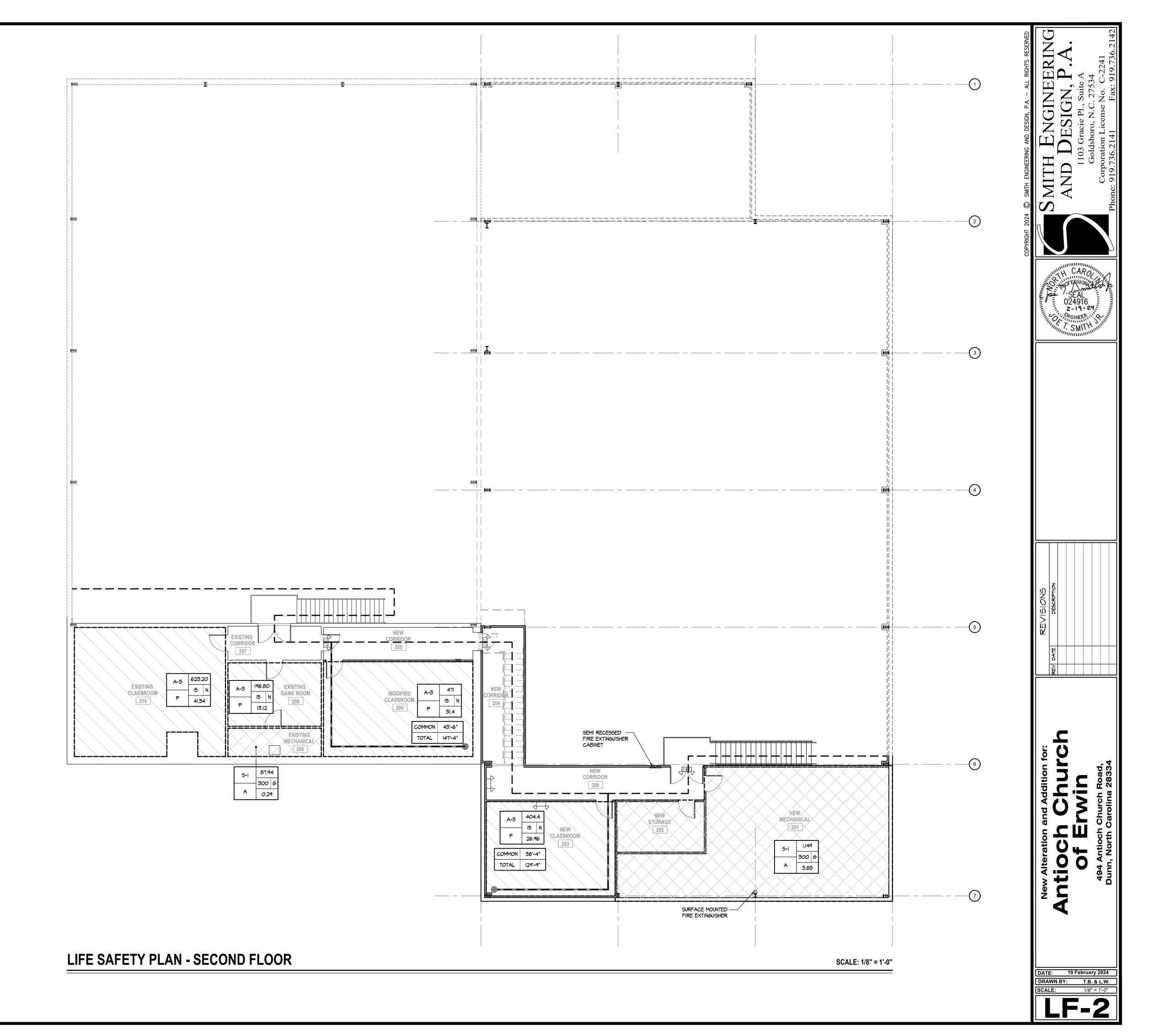
SEE NOTES ON SECOND FLOOR REDUCTION











# STRUCTURAL NOTES

## **FOUNDATIONS**

- SOIL DESIGN BEARING VALUE 2000 PSF TO BE FIELD VERIFIED BY INDEPENDENT GEOTECHNICAL TESTING LABORATORY.
- SITE PREPARATION AND PLACEMENT OF ENGINEERED COMPACTED FILL SHALL BE MONITORED BY THE GEOTECHNICAL LABORATORY. ALL NECESSARY STRIPPING, CUTTING, PROOF, ROLLING, AND FILLING OPERATIONS SHALL BE SO MONITORED.
- ALL FILL INSIDE THE BUILDING AND TO 10' OUTSIDE THE BUILDING INCLUDING RAMPS, STOOPS, AND STEPS SHALL BE CLEAN SELECT MATERIAL FREE OF DELETERIOUS MATERIALS SUCH AS WOOD, ROOTS, TRASH, OR OTHER EXTRANEOUS MATERIALS. PLACE FILL IN 8" LIFTS, MEASURED LOOSE, AND COMPACT EACH LIFT TO 95% MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT AS MEASURED BY ASTM D698. THE UPPERMOST 16" SHALL BE COMPACTED TOO 100% MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT AS MEASURED BY ASTM D698.
- ALL FOOTING EXCAVATIONS SHALL BE APPROVED BY THE GEOTECHNICAL LABORATORY PRIOR TO PLACING FOOTING CONCRETE.
- FOOTING ELEVATIONS SHALL NOT BE RAISED OR LOWERED UNLESS SPECIFICALLY APPROVED BY THE ENGINEER.
- FOOTINGS MAY CARRIED TO LOWER ELEVATION WHERE DIRECTED BY THE ENGINEER.
- CONSTRUCTION JOINTS IN CONTINUOUS WALL FOOTING SHALL BE MADE MIDWAY BETWEEN COLUMNS AND AT LEAST 4' FROM THE
- INTERSECTION OF ANOTHER WALL FOOTING. COLUMN FOOTING IN LINE WITH WALL FOOTINGS SHALL BE PLACED
- CONTINUOUSLY AND FLUSH TOP WITH CONTIGUOUS WALL FOOTINGS. FOUNDATIONS SHALL BE PLACED ONLY ON APPROVED NATURAL UNDISTURBED SOIL STRATA OR ON PROPERLY PLACED ENGINEERED CONTROLLED COMPACTED FILL UNDER THE SUPERVISION OF
- PROVIDE ADEQUATE TEMPORARY BRACING FOR THE FOUNDATION WALLS DURING BACKFILLING AND COMPACTION OPERATIONS.

- CONCRETE SHALL DEVELOP THE FOLLOWING MINIMUM COMPRESSIVE STRENGTHS AT 28 DAY:
- A. FOOTINGS AND FOUNDATIONS 3000 PSI
- B. INTERIOR SLABS ON GRADE 3000 PSI

GEOTECHNICAL LABORATORY.

- C. EXTERIOR SLABS ON GRADE 3000 PSI
- CONCRETE SHALL BE REGULAR STONE CONCRETE.
- CONCRETE TO BE PERMANENTLY EXPOSED TO WEATHER SHALL HAVE
- 5% AIR ENTRAINMENT. CONCRETE FOR NOT PERMANENTLY EXPOSED TO THE WEATHER SUCH AS FOUNDATIONS AND INTERIOR FLOOR SLABS SHALL NOT HAVE AIR ADDED BY ENTRAINMENT.
- ALL CONCRETE WORK SHALL CONFORM TO "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" ACI 318.
- OBSERVE ALL AND STRICTLY FOLLOW ALL ACI 305 AND 306 REQUIREMENTS RESPECTIVELY FOR PROTECTION OF CONCRETE IN HOT AND COLD WEATHER.
- ALL CONCRETE WORK SHALL BE PROPERLY CURED IN CONFORMANCE WITH ACI 308. EITHER WATER CURING METHOD OR SEALING MATERIALS METHOD MAY BE USED TO PROVIDE THAT THE METHOD CHOSEN HAS NO DETRIMENTAL EFFECT ON THE FINAL FINISH SPECIFIED FOR THE RESPECTIVE AREAS.
- PLACE 1/2" PRE-FORMED, IMPREGNATED EXPANSION JOINT FILLER SURFACES UNLESS OTHERWISE NOTED.
- PROVIDE CONSTRUCTION OR CONTROL JOINTS IN SLABS ON GRADE IN LOCATIONS AS SHOWN ON FOUNDATION PLAN OR AT OTHER LOCATIONS APPROVED BY THE ENGINEER. BUT SPACING OF JOINTS SHALL NOT EXCEED 20' IN ANY DIRECTION.
- THE TYPE OF JOINT USED WEATHER CONTROL JOINT OR CONSTRUCTION JOINT IS THE OPTION OF THE CONTRACTOR UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- SAW JOINTS FOR CONTROL JOINTS IN THE CONCRETE SLABS SHALL BE MADE AS SOON AS THE CONCRETE HAS SUFFICIENT STRENGTH TO PREVENT SPALLING OF THE JOINT DUE TO THE ACTION OF THE SAW. BUT IN NO CASE GREATER THAN 4 HOURS AFTER INITIAL PLACEMENT OF THE CONCRETE. UTILIZE SOFT CUT TECHNOLOGY IF NECESSARY TO EXPEDITE SAWING OF SLAB CONTROL JOINTS. INSTALL THE SEMI-RIGID JOINT FILLER ONLY AFTER THE SLABS HAVE FULLY

- - UNLESS OTHERWISE NOTED. 14. SEE GENERAL DRAWINGS FOR REQUIRED FLOOR FINISHES AND PROVIDE NECESSARY RECESSIONS, DEPRESSIONS, AND SLAB FINISH

13. CHAMFER EXPOSED EDGES AND CORNERS OF CONCRETE 3/4"

- AS REQUIRED TO ACCEPT FINISHES. 15. ALL CONCRETE FIELD TESTING SHALL BE ACCORDANCE WITH ACI AND
- ASTM STANDARDS. 16. ALL CONCRETE SAMPLES FOR FIELD TESTS SHALL BE TAKEN AT
- FINAL POINT OF DISCHARGE WHETHER IT BE THE TRUCK CHUTE OR THE END OF THE HOSE FOR PUMPER TRUCK.

## REINFORCING STEEL

- 1. BARS SHALL BE ROLLED FROM NEW BILLET-STEEL CONFORMING TO "SPECIFICATION FOR DEFORMED BILLET-STEEL BARS FOR CONCRETE REINFORCEMENT". ASTM A615, GRADE 60.
- . WELDED WIRE FABRIC SHALL CONFORM TO ASTM A 185 AND SHALL BE FURNISHED IN FLAT SHEETS.
- 3. DETAIL AND FABRICATE REINFORCING STEEL IN ACCORDANCE WITH "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES," ACI 315.
- 4. REINFORCING STEEL SHALL BE IN PLACE AND REVIEWED BY THE LOCAL BUILDING INSPECTOR PRIOR TO PLACING CONCRETE.
- 5. PLACE ONE LAYER OF 6 X 6 X W1.4 X W1.4 OC EACH WAY AT MIDDEPTH OF 4" SLABS ON GRADE AND ONE LAYER OF 6 X 6 X W2.9 X W2.9 OC EACH WAY AT MIDDEPTH OF 8" SLABS ON GRADE.
- 6. PROVIDE ADEQUATE SUPPORTS TO HOLD REBARS IN PLACE WHILE PLACING THE CONCRETE. TIE REBARS TO SUPPORTS TO PREVENT MOVEMENT WHILE PLACING THE FRESH CONCRETE.
- 7. FABRICATE BARS IN CONTINUOUS FOOTINGS, WALLS, BOND BEAMS AND TURNED DOWN SLABS TO LONGEST PRACTICAL LENGTHS.
- 8. LAP REBAR SPLICES A MINIMUM OF 48 BAR DIAMETERS BUT A MINIMUM OF 24" UNLESS OTHERWISE NOTED. PLAN REBAR SPLICES TO OCCUR AT POINTS OF MINIMUM STRESS UNLESS OTHERWISE
- 9. TERMINATE CONTINUOUS BARS IN TURNED DOWN SLABS, WITH A STANDARD 90 DEGREE HOOK AT DISCONTINUOUS ENDS, CORNERS,
- 10. AT LOCATIONS REQUIRING VERTICAL DOWELS INTO FOOTINGS, THE PLACEMENT OF THE DOWELS SHALL MATCH THE SIZE AND THE
- LOCATION OF THE VERTICAL WALL REBARS REQUIRING THE DOWELS. 11. ALL DOWELS SHALL TERMINATE IN THE FOOTING WITH A STANDARD ACI 90 DEGREE HOOK UNLESS SPECIFICALLY SHOWN OTHERWISE. DOWELS SHALL LAP THEIR MATCHING VERTICAL REBAR 48 BAR
- 12. PROVIDE THE FOLLOWING CLEARANCES FROM REBARS TO CONCRETE FACE UNLESS OTHERWISE NOTED ON DRAWINGS:
- A. EARTH FORMS 3"

DIAMETERS OR A MINIMUM OF 24".

- B. WALL FORMS 2" C. TOP OF SLAB - 1"

# EXTERIOR WOOD WALL FRAMING

- 1. ALL EXTERIOR WALL STUDS SHALL BE STUD GRADE OR BETTER 2x6 SPF LUMBER SPACED AT 16" O.C.
- 2. GRADED STRESS RATED FINGER JOINTED LUMBER OF EQUAL STRENGTH MAY BE UTILIZED FOR WALL FRAMING AT THE OPTION OF THE
- 3. ALL WALL BOTTOM PLATES IN CONTACT WITH CONCRETE SHALL BE PRESSURE TREATED NO. 2 OR BETTER SYP.
- 4. ALL WALL TOP PLATES AND OTHER BOTTOM PLATES SHALL BE NO. 2 OR BETTER SYP.
- 5. ALL EXTERIOR WALL SURFACES SHALL BE SHEATHED WITH 1/2" CDX SHEATHING GRADE PLYWOOD OR 1/2" OSB SHEATHING. ALL PANEL SEAMS SHALL BE BLOCKED AS NOTED ON THE DRAWINGS. LEAVE A 1/8" SEAM GAP ALL AROUND WALL SHEATHING PANELS FOR PANEL SWELL DUE TO AMBIENT MOISTURE.

- 12. SAW JOINTS IN CONSTRUCTION JOINTS SHALL BE SAWED ONLY AFTER 6. NAIL WALL SHEATHING TO STUD WORK WITH 8D NAILS SPACED AT 4" SLABS HAVE FULLY CURED AND JUST PRIOR TO INSTALLING THE AT PANEL EDGES AND 8" O.C. IN PANEL FIELD.
  - 7. NAIL WALL SHEATHING TO ALL BOTTOM AND TOP PLATES WITH 8D SPACED AT 4". AT DOUBLE PLATES STAGGER NAILING WITH 8" SPACING ON EACH PLATE MEMBER.
  - ANCHOR EXTERIOR BUILDING WALLS TO FOUNDATION WITH ANCHOR BOLTS AS SPECIFIED ON FOUNDATION PLAN.

# INTERIOR LOAD BEARING WOOD WALL FRAMING

- 1. ALL INTERIOR WALL STUDS SHALL BE STUD GRADE OR BETTER SPF LUMBER SPACED AT 16" O.C. SIZE OF STUDS TO BE AS INDICATED ON FLOOR PLAN.
- ALL INTERIOR LOAD BEARING WALL GYPSUM BOARD SHALL BE 1/2"
- SCREW PATTERN FOR GYPSUM WALL BOARD PANELS AT INTERIOR LOAD BEARING WALLS SHALL BE #10 DRY WALL SCREWS SPACED AT 6" AT PANEL EDGES AND 12" IN PANEL FIELD.

## INTERIOR PARTITION WOOD WALL FRAMING

- 1. ALL INTERIOR WALL STUDS SHALL BE STUD GRADE OR BETTER SPF LUMBER SPACED AT 16" O.C. SIZE STUDS TO BE AS INDICATED ON FLOOR PLAN.
- 2. ALL INTERIOR LOAD BEARING WALL GYPSUM BOARD SHALL BE 1/2" OR 5/8" AS SPECIFIED.
- 3. SCREW PATTERN FOR GYPSUM WALL BOARD PANELS AT INTERIOR LOAD BEARING WALLS SHALL BE #10 DRY WALL SCREWS SPACED AT 6" AT PANEL EDGES AND 12" IN PANEL FIELD.

# INTERIOR PARTITION WALL FRAMING

- INTERIOR LOAD NON-LOAD BEARING PARTITION WALL STUDS SHALL BE 600S137-33 LIGHT GAGE METAL STUDS. REFER TO GENERAL DRAWINGS FOR STUD SIZE AND WALL FRAMING DIMENSIONS.
- 2. SPACING OF INTERIOR LOAD BEARING WALL STUDS SHALL BE 16".
- 3. SCREW PATTERN FOR GYPSUM WALL BOARD PANELS AT INTERIOR PARTITION WALLS SHALL BE #10 DRY WALL SCREW SPACED AT 6"

AT PANEL EDGES AND 12" IN PANEL FIELD.

- 4. PROVIDE ONE ROW OF METAL STUD WALL BRIDGING PLACED AT 1/2 POINT OF STUD HEIGHT.
- 5. INSTALLATION OF LIGHT GAUGE STEEL FRAMING SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

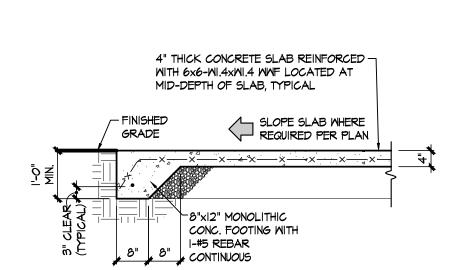
THE CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING ALL DIMENSIONS IN THE DRAWINGS AND ADVISING THE ENGINEER OF ANY DIFFERENCES IN THE DIMENSIONS ON THE DRAWINGS PRIOR TO COMMENCING CONSTRUCTION.

# **EXISTING CONDITIONS**

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING ALL EXISTING JOB CONDITIONS, ANY ADVERSE EXISTING CONDITIONS AFFECTING WORK SHOWN ON THESE DRAWINGS SHALL BE BROUGHT TO ATTENTION OF THE ENGINEER FOR POSSIBLE CLARIFICATION OF RECONCILIATION.

# CONSTRUCTION SAFETY

1. THESE DRAWINGS DO NOT CONTAIN THE REQUIREMENTS FOR JOB SAFETY. ALL PROVISIONS FOR SAFETY SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

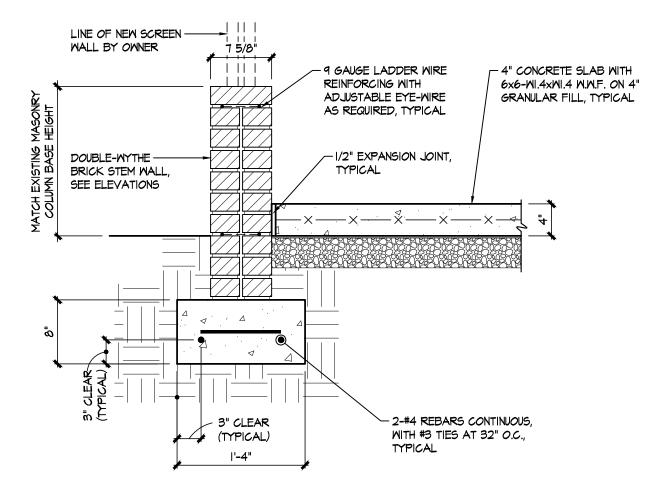


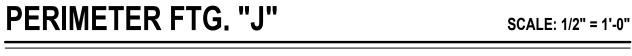


TYP. SLAB EDGE FOOTING AT CONCRETE APRON

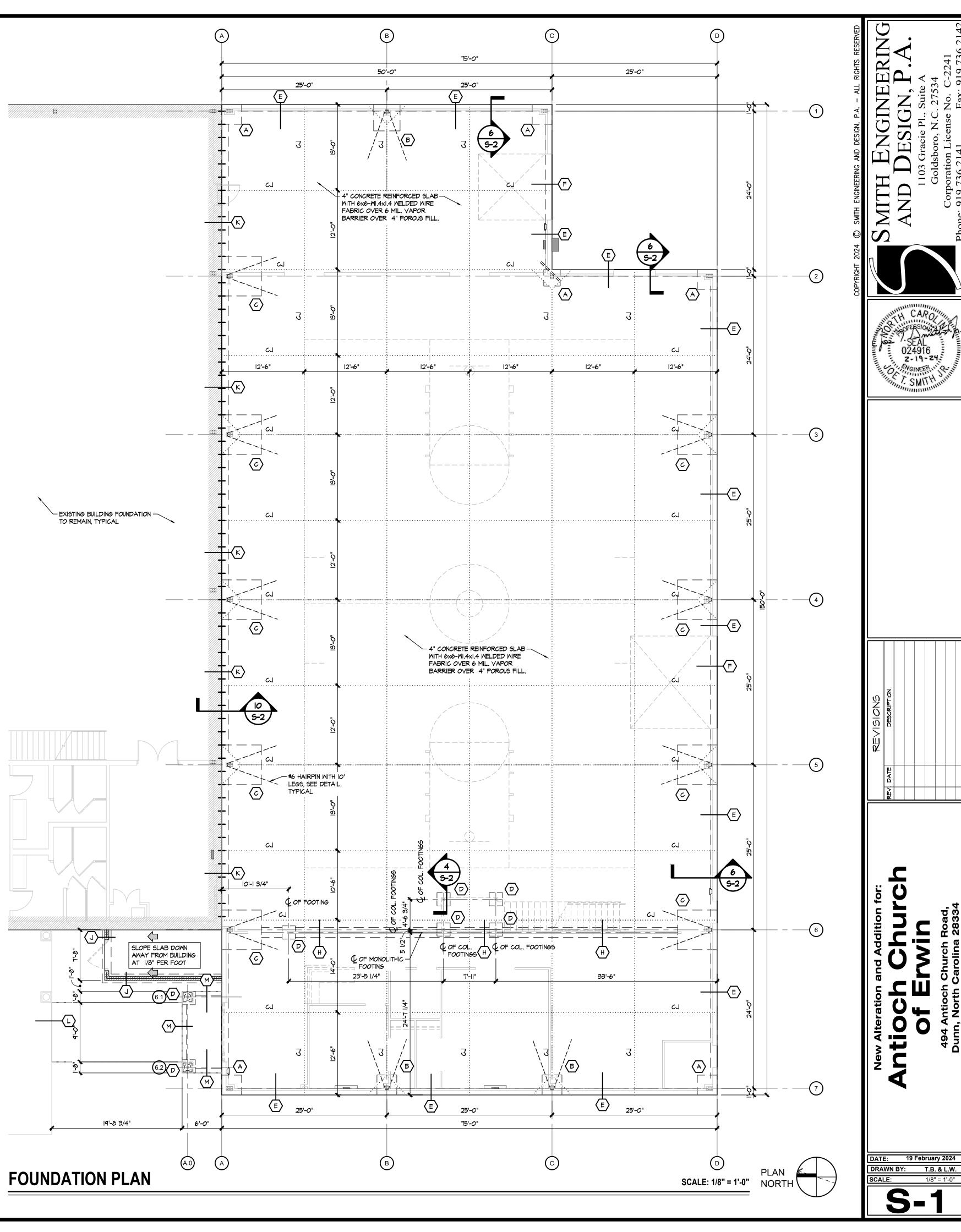
SCALE: 1/2" = 1'-0"

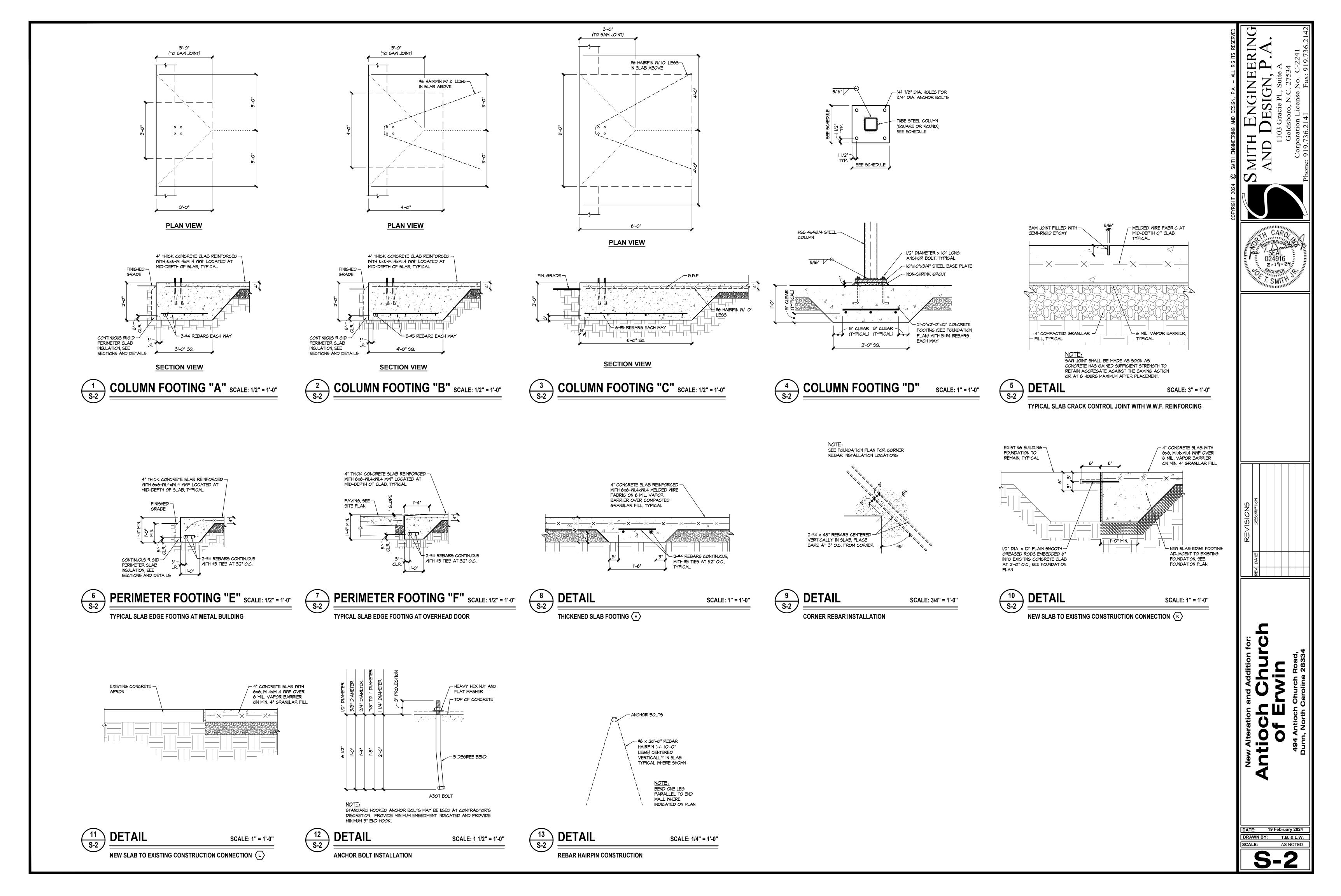
S-1

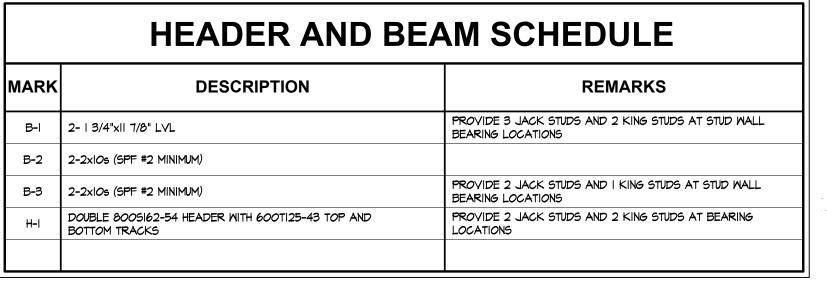


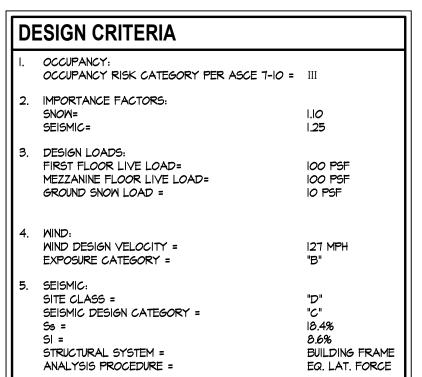


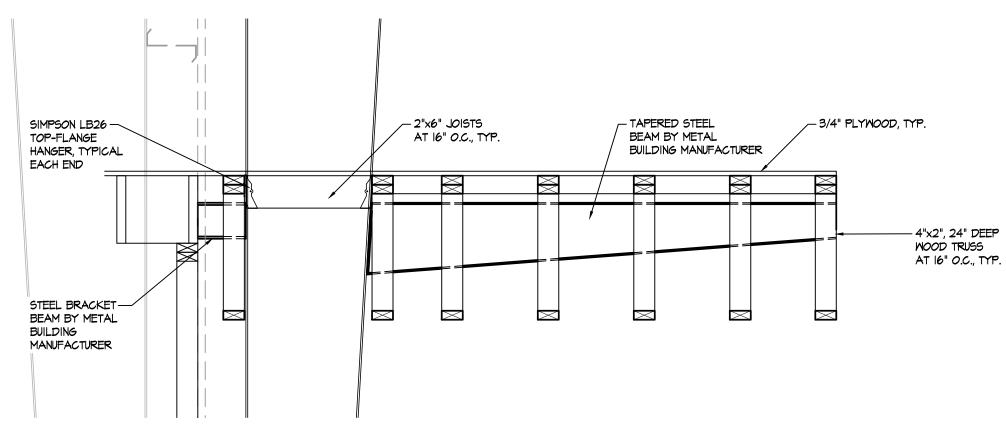
TYP. SLAB EDGE FOOTING AT CONCRETE APRON

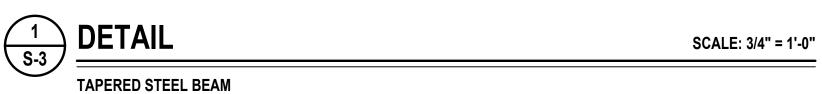


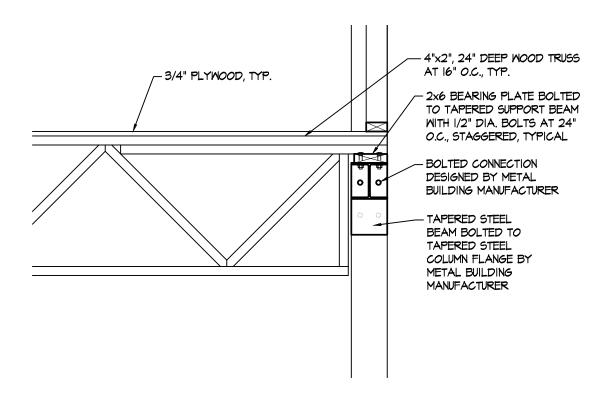


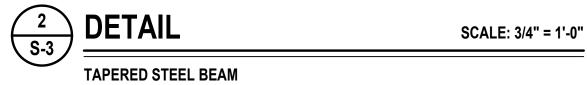


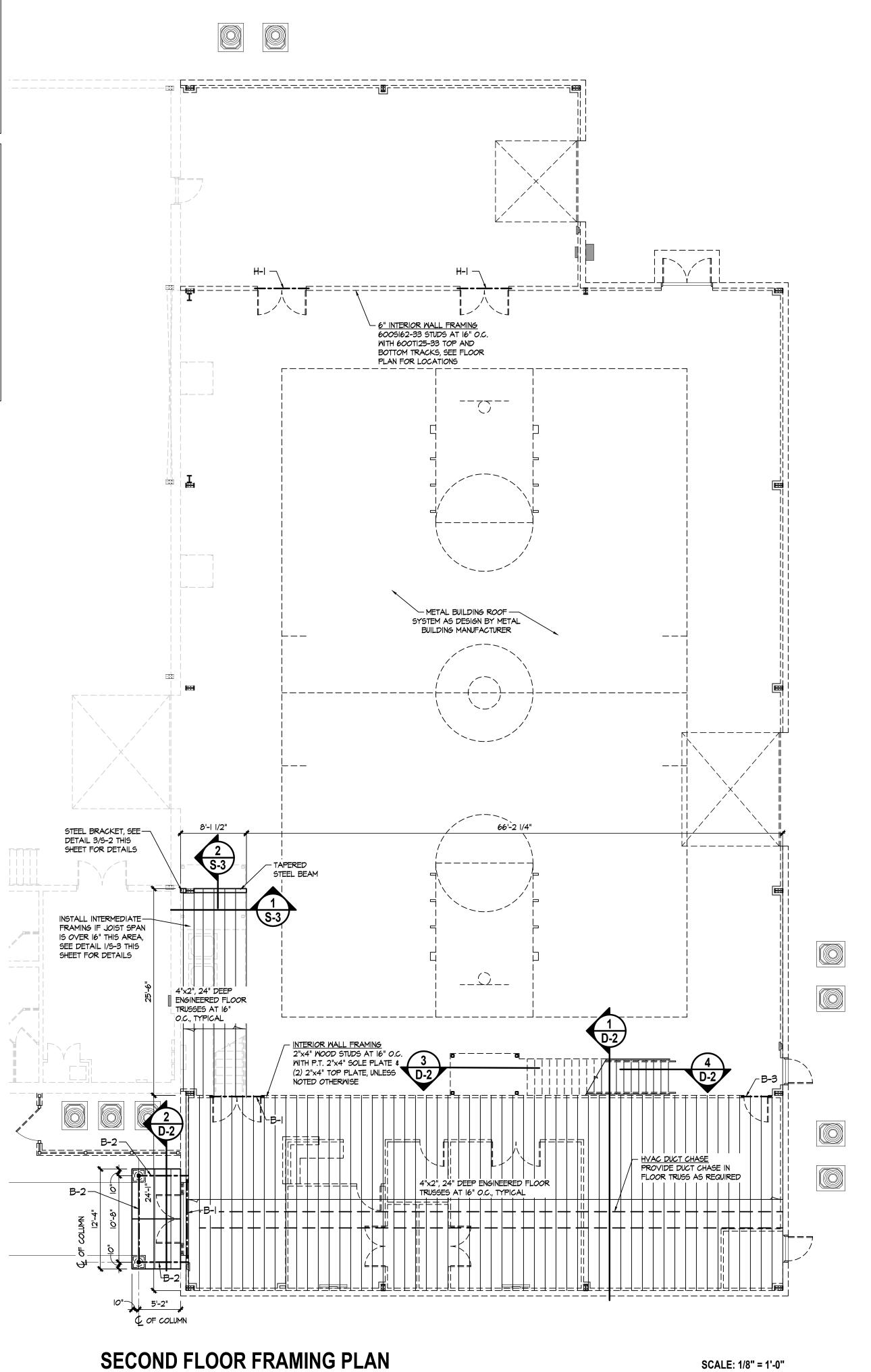






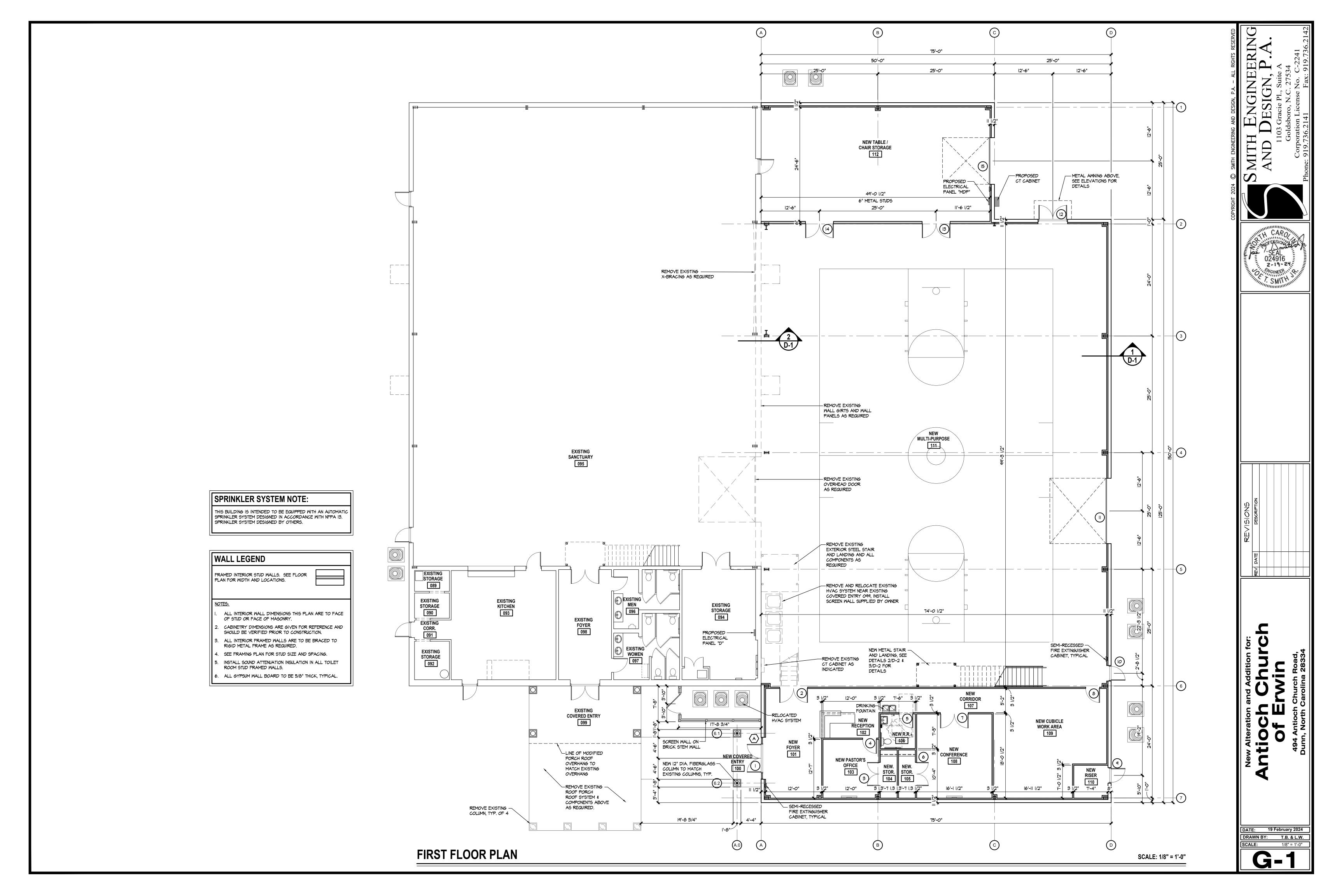


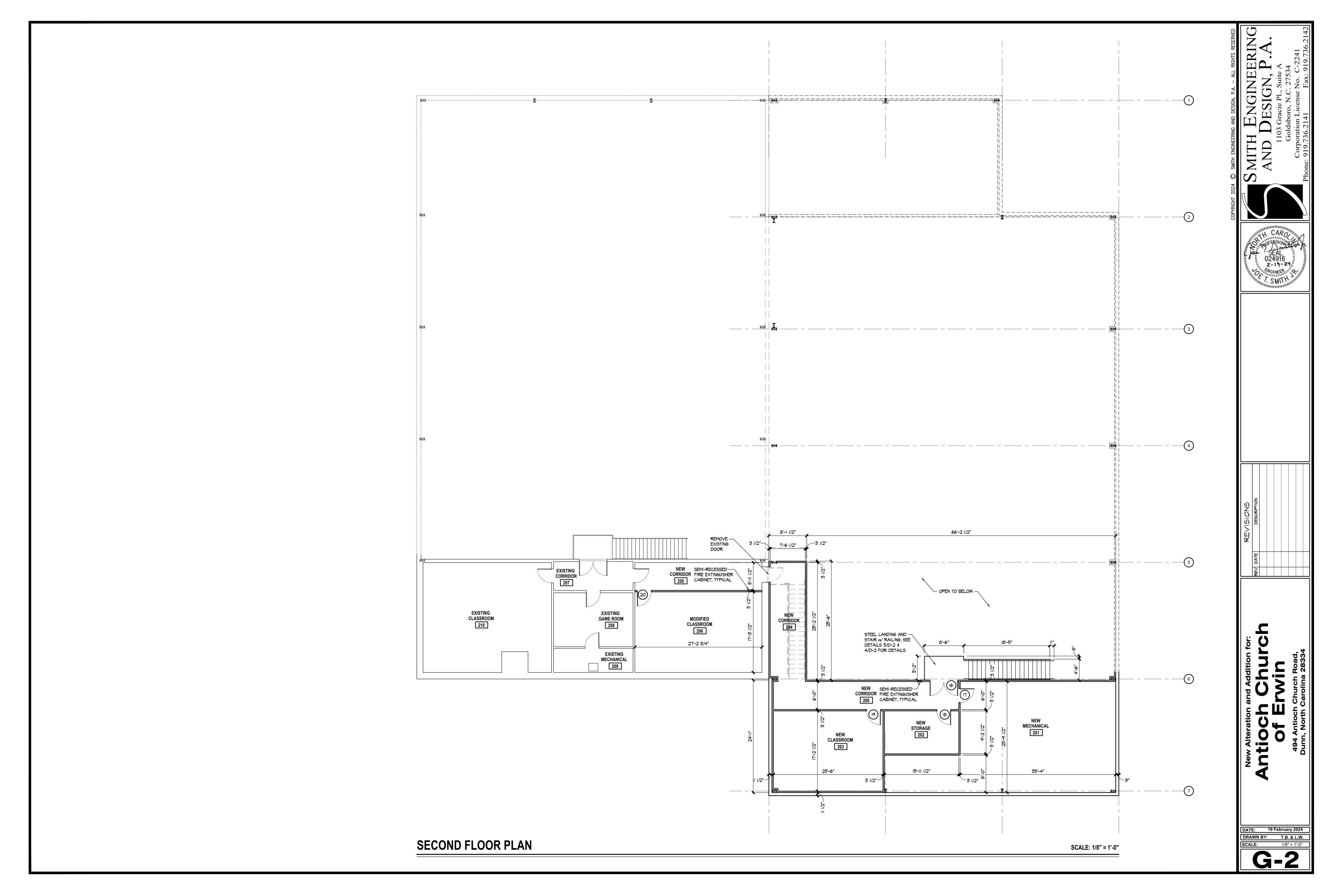




DATE: 19 February 2024

DRAWN BY: T.B. & L.W.





													D	00	RS	SCI	16	EDU	JL	Ε				
															HAf	RDW	4RE	•						
NUMBER		Do	OORS				F	RAME			HINGES 1/2 PAIR SPRING HINGES B.B. HINGES		DEADBOLT LOCK ENTRY LOCK	PRIVACY LOCK	PASSAGE LOCK PUSH/PUL	FLOOR/CEILING BOLT	MALL STOP	FLOOR STOP PANIC DEVICE	KICKPLATE		WEATHER-STRIPPING SWEEP	WITH DOOR		
ヹ	SIZE	THICKNESS	LABEL/ RATING	MATERIAL	ELEV	MATERIAL	ELEV	HEAD	JAMB	SILL	1 2 3	4	5 6	7	8 9	10	II	12 13	14	15	16 17	18	19	REMARKS
	2-3/0×7/0	1 3/4"	-	ALUMINUM	DE-6	ALUMINUM	FE-2	-	-	-	3	4			9			13		15	16 17			DEADBOLT LOCK TO HAVE INTERIOR THUMB BOLT.
2	2-3/0×1/0	1 3/4"	-	MOOD	DE-3	H. METAL	FE-2	-	-	-	1	4	6					12 13						
3	2-2/6×7/0	1 3/4"	-	MOOD	DE-8	H. METAL	FE-3	-	-	-	1				8									
4	3/0x7/0	1 3/4"	-	MOOD	DE-2	H. METAL	FE-I	-	-	-	1		6				11							
5	3/0x7/0	1 3/4"	-	MOOD	DE-2	H. METAL	FE-I	-	-	-	1			7			П							
6	2-2/6×7/0	1 3/4"	-	MOOD	DE-8	H. METAL	FE-3	-	-	-	1				8									
7	2-3/0x7/0	1 3/4"	-	MOOD	DE-3	H. METAL	FE-2	-	-	-	1		6					12						
8	3/0x7/0	1 3/4"	-	MOOD	DE-2	H. METAL	FE-I	-	-	-	1	4	6					12						
9	3/0x7/0	1 3/4"	-	H. METAL	DE-4	H. METAL	FE-I	-	-	-	3		6					12		15	16 17	'		
10	3/0x7/0	1 3/4"	-	H. METAL	DE-4	H. METAL	FE-I	-	-	-	3	4	6					12 13		15	16 17	'		
Ш	14/0x12/0	2"	-	STEEL	DE-7	-	-	-	-	-												18		PROVIDE INSULATED PANELS
12	2-3/0×7/0	1 3/4"	-	H. METAL	DE-5	H. METAL	FE-2	-	-	-	3	4			9			12 13		15	16 17			
13	2-3/0×7/0	1 3/4"	-	MOOD	DE-8	H. METAL	FE-I	-	-	-	1	4	6					12						
14	2-3/0×7/0	1 3/4"	-	MOOD	DE-8	H. METAL	FE-I	-	-	-	1	4	6					12						
15	10/0x10/0	2"	-	STEEL	DE-7	-	-	-	-	-												18		PROVIDE INSULATED PANELS
16	2-3/0×7/0	1 3/4"	-	MOOD	DE-3	H. METAL	FE-2	-	-	-	1	4			8									
17	3/0x7/0	1 3/4"	-	MOOD	DE-I	H. METAL	FE-I	-	-	-	1		6											
18	3/0x7/0	1 3/4"	-	MOOD	DE-I	H. METAL	FE-I	-	-	-	1		6					12						
19	3/0x7/0	1 3/4"	-	MOOD	DE-2	H. METAL	FE-I	-	-	-	1	4	6				П	12						
20	3/0x7/0	1 3/4"	-	MOOD	DE-2	H. METAL	FE-I	-	-	-	1	4	6				П	12						
								-	-	-														
								-	-	-														

FLUSH HOLLOW METAL

DE-4

SEE SCHEDULE

DE-5

FLUSH HOLLOW METAL

SEE SCHEDULE

DE-3

- 3"x33" GLASS VISION PANEL

(SEE SCHED. FOR FIRE RATING)

— FLUSH SOLID-CORE WOOD

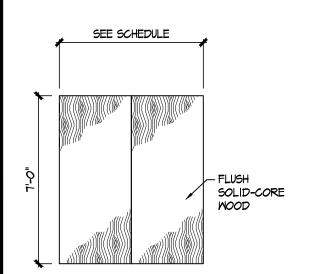
DE-2

— 3"x33" D-H-90 FIRE RATED

GLASS VISION PANEL

FLUSH SOLID-CORE WOOD

		SEE SCHEDULE
SEE SCHEDULE	•	SEE SCHEDULE
T T	SEE SCHEDULE	
DE-6	•	DE-7



FLUSH SOLID-CORE WOOD

SEE SCHEDULE

DE-I

**DOOR ELEVATIONS** 

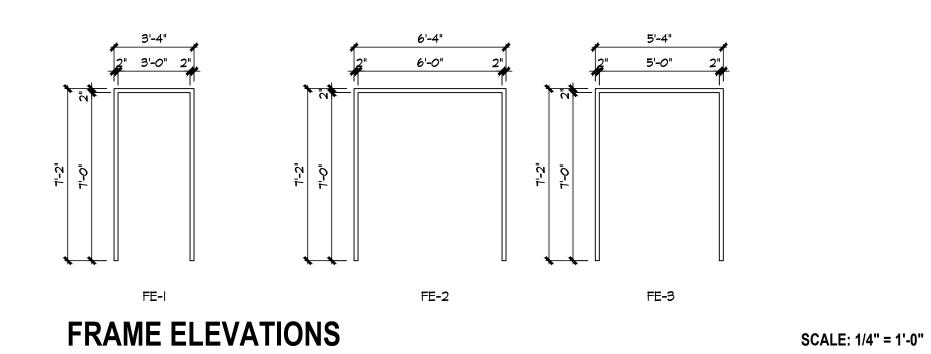
SCALE: 1/4" = 1'-0"

				WIN	DOW SCH	EDULE		
MARK	SIZE (MxH)	DESCRIPTION	LABEL / RATING	ELEV	FRAME	FRAME COLOR	GLAZING	REMARKS
A	9/8×9/4	FIXED STOREFRONT		ME-I	ALUMINUM	TBD	CLEAR, INSULATING	MAXIMUM U-FACTOR = 0.45



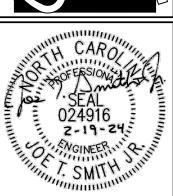
# WINDOW ELEVATION

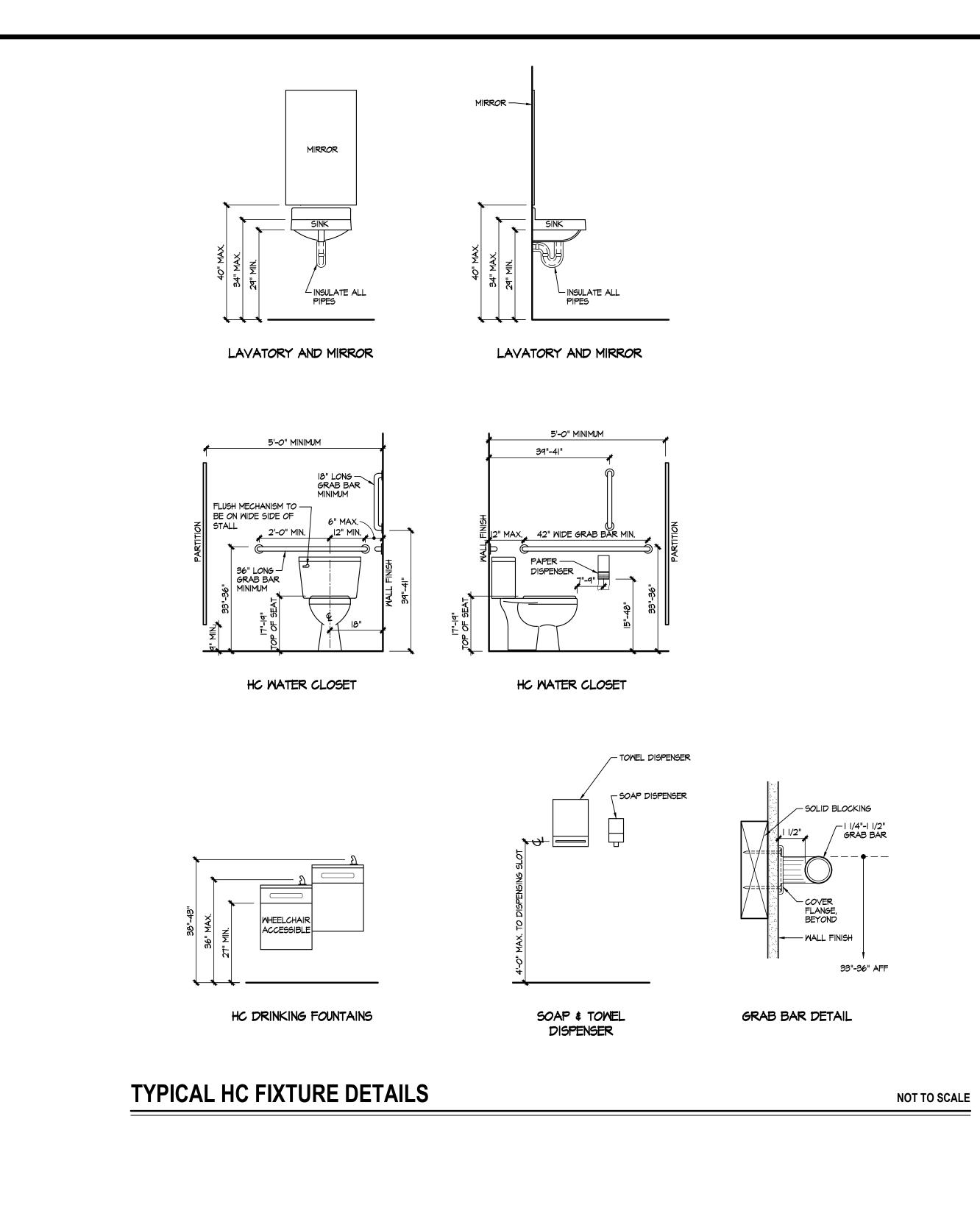
SCALE: 1/4" = 1'-0"



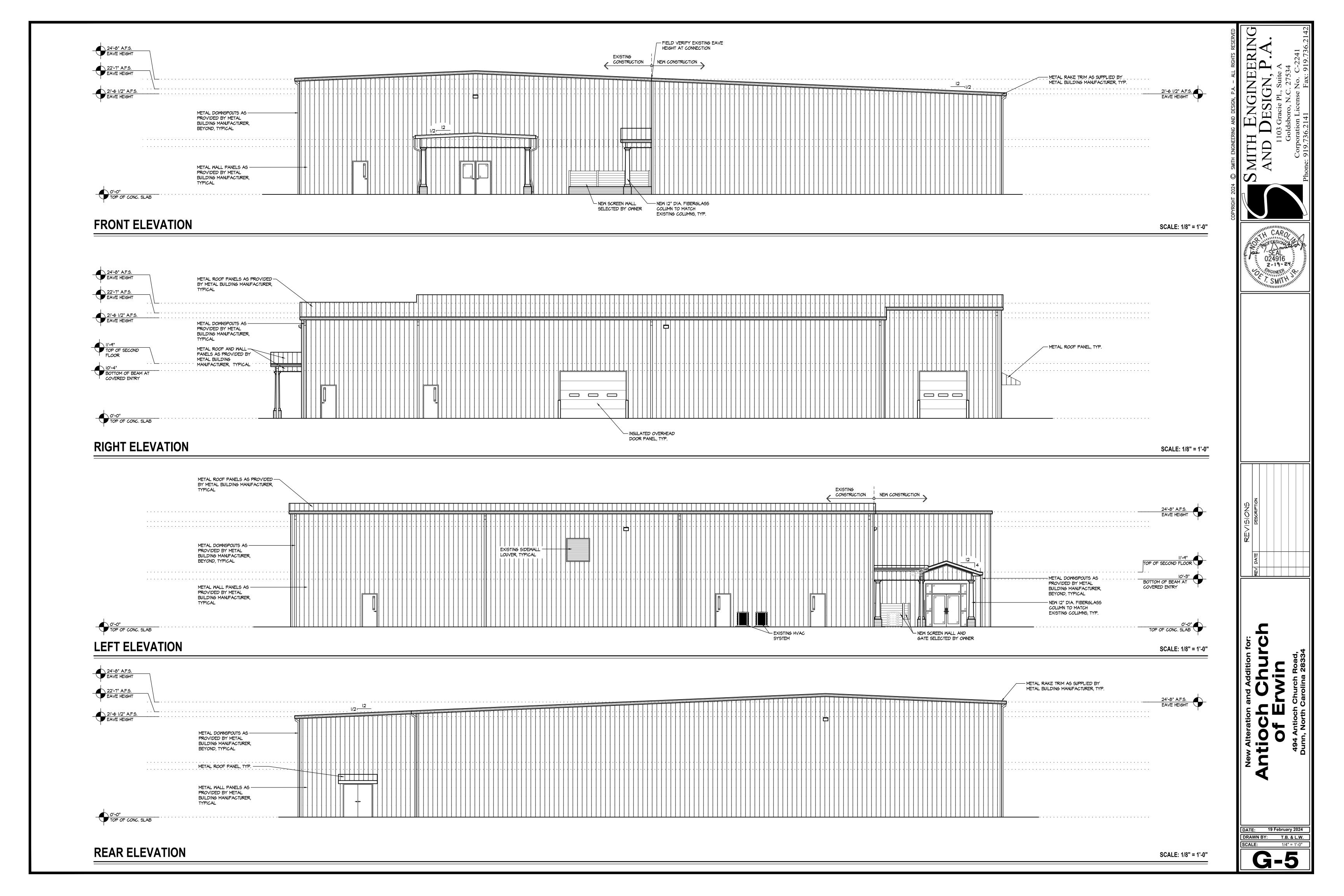
# TYPICAL DOOR AND WINDOW SCHEDULE NOTES:

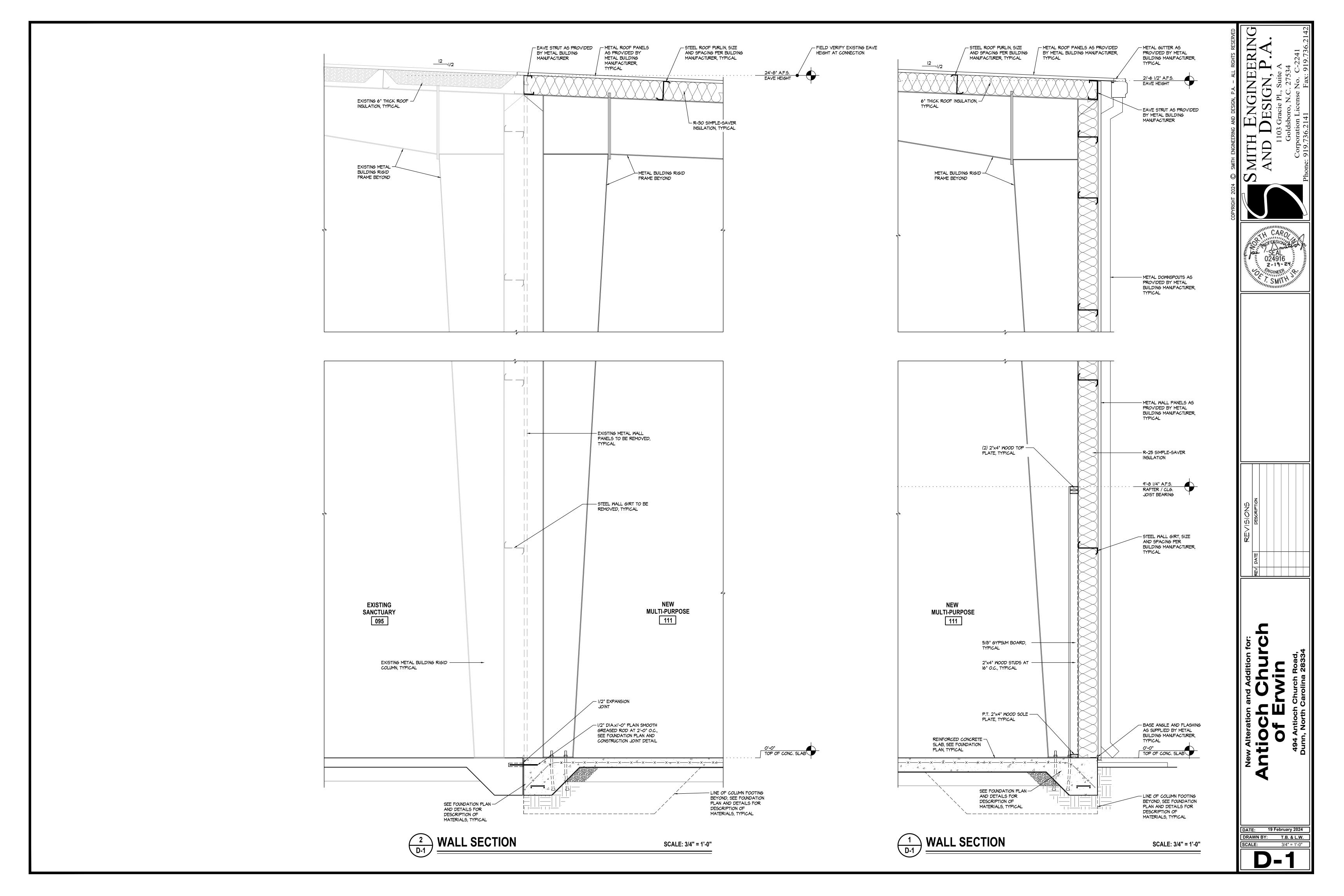
- I. HARDWARE SHALL MEET ALL APPLICABLE HANDICAP CODES.
- ALL HOLLOW METAL DOOR FRAMES SHALL BE FULLY WELDED TYPE, FACTORY PRIMED AND FIELD PAINTED. INSTALL PER MANUFACTURER, PROVIDE ALL FRAMING AS REQUIRED FOR PROPER INSTALLATION AND OPERATION.
- 3. "T" = TEMPERED GLAZING.
- 4. VERIFY FRAME DIMENSIONS IN FIELD.

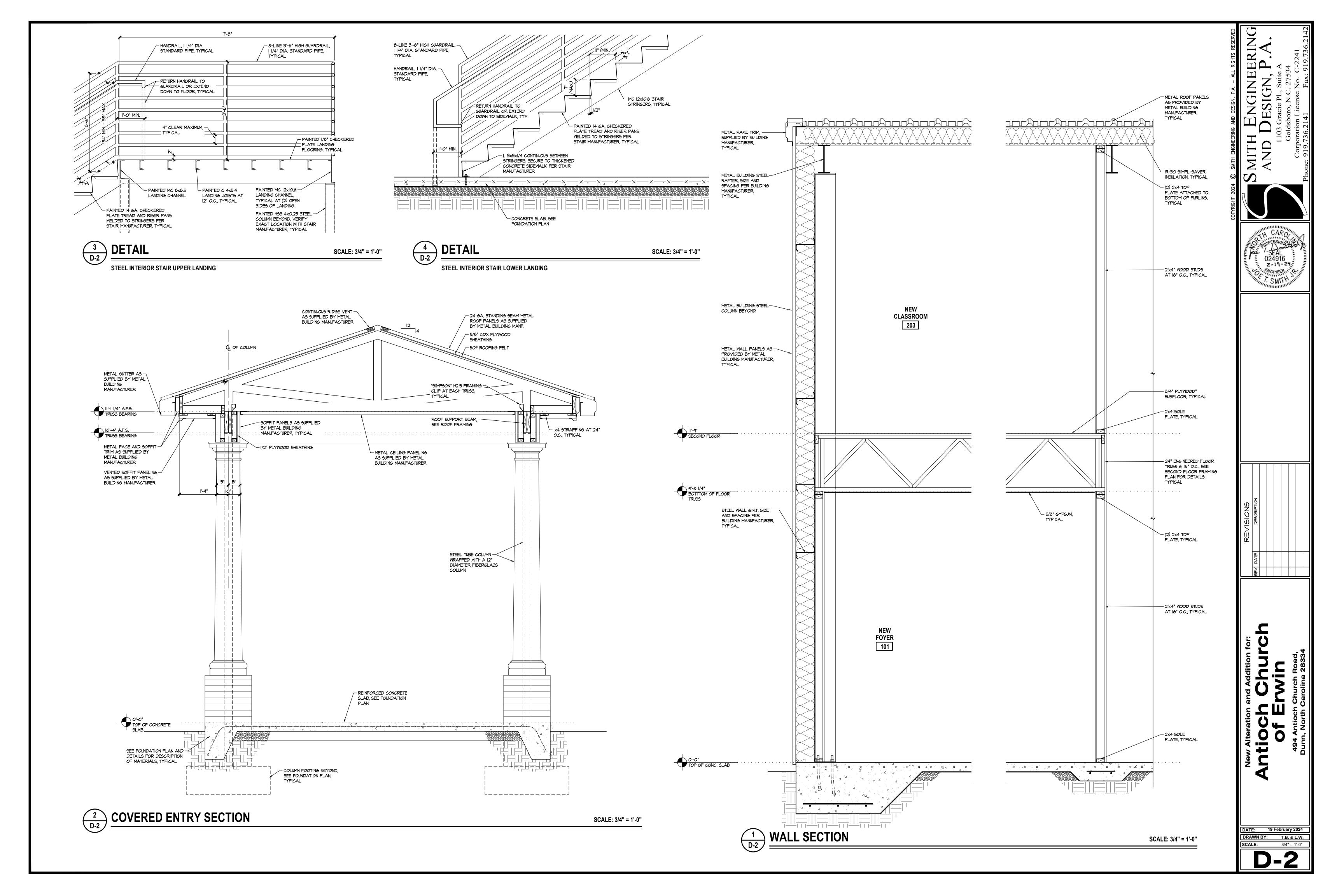


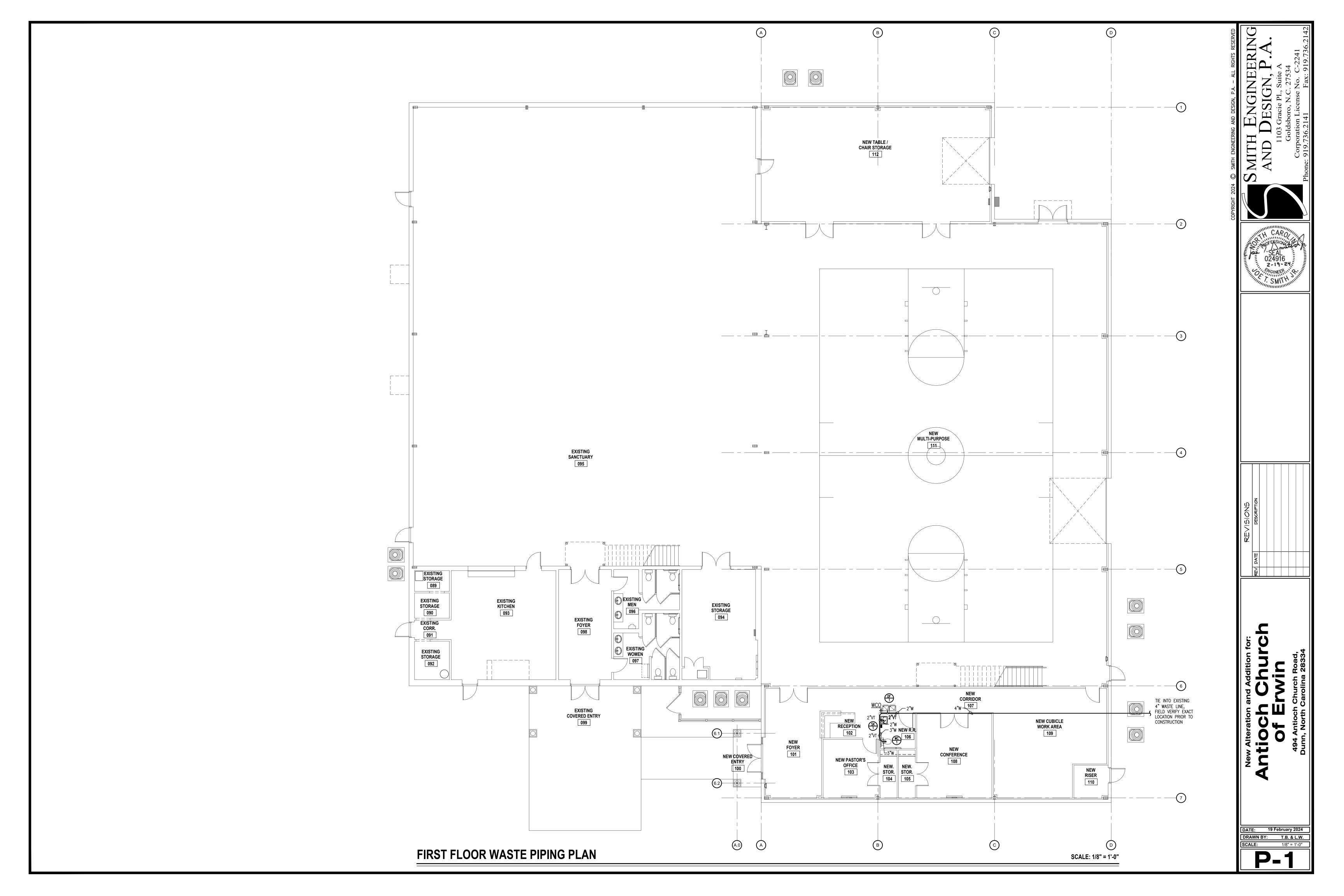


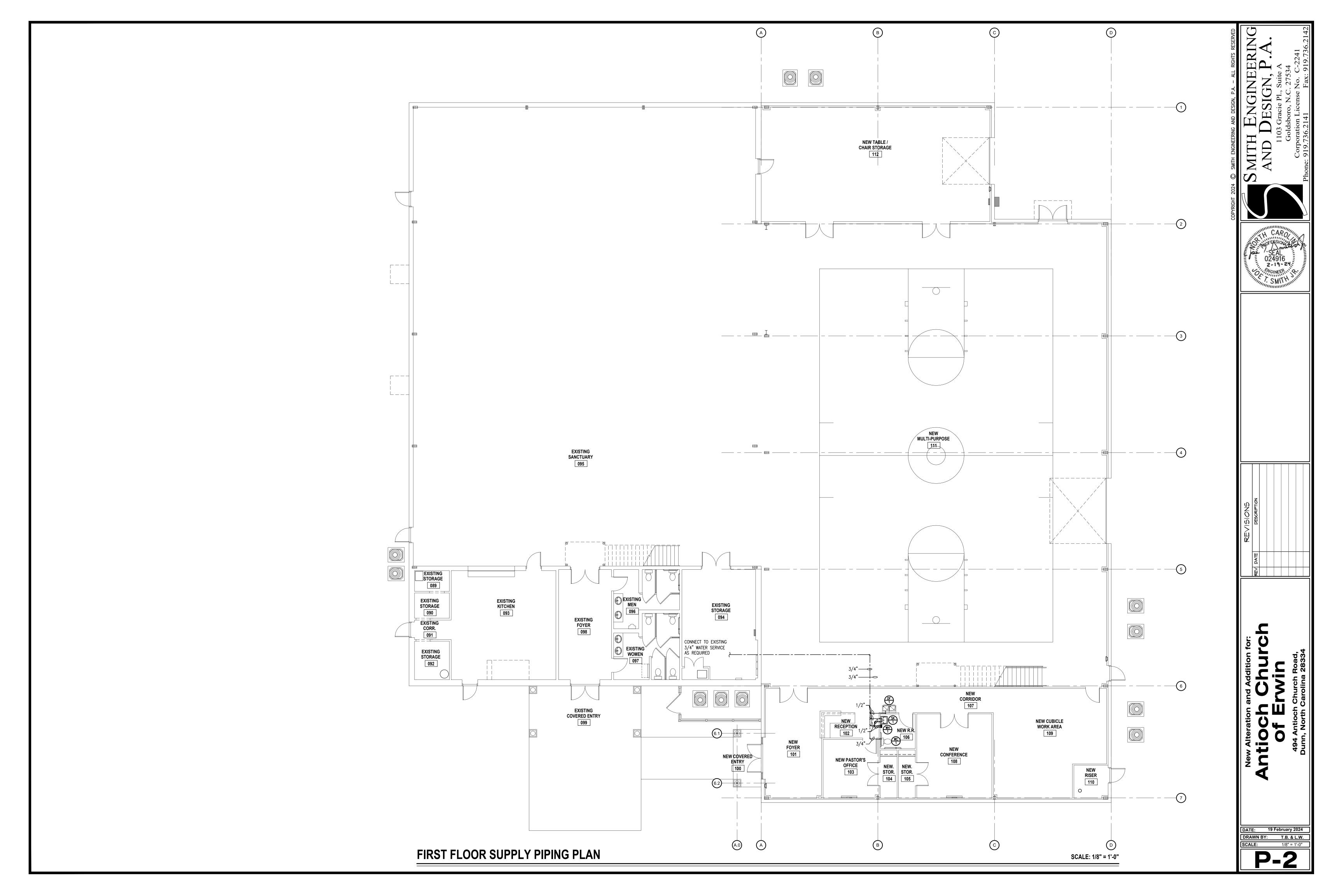
	TOILET ACCESSORY SCHEDULE												
MARK	DESCRIPTION	MANUFACTURER	MODEL #	REMARKS									
TA-I	PAPER HOLDER	AMERICAN SPECIALTIES	0263-1										
TA-2	TOWEL DISPENSER	AMERICAN SPECIALTIES	0210										
TA-3	SOAP DISPENSER	AMERICAN SPECIALTIES	0345										
TA-4	MIRROR	AMERICAN SPECIALTIES	8287	72"Mx42"H									
TA-5	GRAB BARS (ACCESSIBLE TOILET LOCATIONS)	AMERICAN SPECIALTIES	3800P	TYPE-01 18", 36", 42"									











## PLUMBING NOTES:

- 1. PLUMBING PLANS ARE INTENDED TO PROVIDE INFORMATION FOR INSTALLATION OF A COMPLETE PLUMBING SYSTEM. PROVIDE ALL ESSENTIAL LABOR, MATERIALS & DEVICES REQUIRED TO PRODUCE A QUALITY END PRODUCT.
- 2. CONTRACTOR SHALL REVIEW & BECOME FAMILIAR WITH THE WORK OF ALL TRADES FOR PURPOSES OF COORDINATION AND ROUTING. CONTRACTOR SHALL PROVIDE REQUIRED PLANNING, COORDINATION AND SEQUENCING OF PLUMBING INSTALLATION WITH BUILDING COMPONENTS AND OTHER TRADES.
- 3. COORDINATE CONNECTION OF PLUMBING SYSTEMS WITH SITE UTILITIES AND SERVICES. P.C. SHALL EXTEND WATER SUPPLY LINE 5—FEET OUTSIDE OF BUILDING AND EXTEND BUILDING DRAIN 10—FEET OUTSIDE OF BUILDING & PROVIDE 2—WAY CLEANOUT.
- 4. COORDINATE ROOF VENT LOCATIONS WITH OUTSIDE AIR INTAKES OF HVAC UNITS TO MAINTAIN A MINIMUM CLEARANCE OF 10 FEET.
- 5. ALL WORK SHALL COMPLY WITH LOCAL, STATE & ADA CODES. WORKMANSHIP SHALL MEET OR EXCEED INDUSTRY STANDARDS.
- 6. DRAIN, WASTE & VENT (DWV) PIPING SHALL BE ASTM D 1784, SOLID-WALL, SCHEDULE 40 PVC WITH SOCKET TYPE FITTINGS AND SOLVENT-WELDED JOINTS. FOAM CORE PIPING IS NOT ACCEPTABLE.
- 7. ABOVE GRADE WATER PIPING SHALL BE ASTM F 877, CROSS-LINKED POLYETHYLENE (PEX) PLASTIC TUBING.
- 8. WATER SERVICE PIPING SHALL BE ASTM D 1784, PRESSURE-RATED SCHEDULE 40 PVC WITH PVC FITTINGS AND SOLVENT-WELDED JOINTS.
- 9. INDIVIDUAL SUPPLY AND DRAIN CONNECTIONS SIZES ARE NOT INDICATED ON PLANS FOR CLARITY. SIZE EACH TO SUIT RESPECTIVE FIXTURE.
- 10. WATER PIPING INSTALLED IN UNCONDITIONED SPACE SHALL BE INSULATED WITH FOAM INSULATION WITH A MINIMUM R VALUE OF 6.5.
- 11. DOMESTIC HOT WATER, HOT WATER RETURN & COLD WATER PIPING SHALL BE INSULATED WITH FIBERGLASS AND FOIL & PAPER JACKET AS FOLLOWS:

RUNOUTS 3/4" OR LESS: 1/2" THICK
PIPING 3/4" TO 2" 1" THICK
PIPING 2 1/2" & LARGER: 1 1/2" THICK
ALL HWR PIPING: 1" THICK

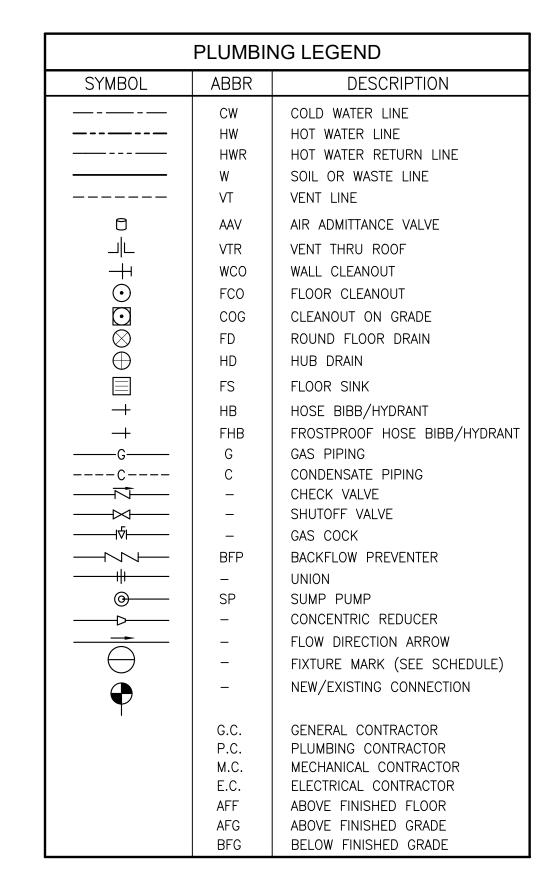
- 12. WATER PIPING ON OUTSIDE WALLS AND IN CEILING SHALL BE LOCATED BETWEEN BUILDING INSULATION AND CONDITIONED SPACE.
- 13. PROVIDE SHUTOFF VALVES AT EACH MAIN BRANCH LINE. VALVES SHALL BE INSTALLED IN A READILY ACCESSIBLE LOCATION. PROVIDE CEILING ACCESS DOORS WHERE REQUIRED TO ACCESS SERVICABLE VALVES LOCATED ABOVE GYPBOARD CEILINGS.
- 14. UNLESS NOTED OTHERWISE ALL VALVES SHALL BE FULL PORT BRONZE OR BRASS BALL VALVES WITH THREADED OR SWEAT CONNECTIONS AS APPLICABLE TO THE CONNECTING PIPING.
- 15. PIPING PASSING THROUGH CONCRETE/MASONRY WALLS OR FLOORS SHALL BE PROTECTED AGAINST EXTERNAL CORROSION BY PROTECTIVE SHEATHING OR WRAPPING.
- 16. INSTALL SCHEDULE 40 PIPE SLEEVE TWO SIZES LARGER AT PENETRATIONS THROUGH FOUNDATION WALLS. SEAL SLEEVE TIGHT TO FOUNDATION WALL.
- 17. PROVIDE INSULATION EQUAL TO MCGUIRE PROWRAP ON P-TRAP ASSEMBLIES AND HOT & COLD WATER PIPING FOR LAVATORIES WITH EXPOSED PIPING.
- 18. VERIFY FINAL LOCATIONS FOR ROUGH-INS WITH FIELD MEASUREMENTS AND WITH THE REQUIREMENTS OF THE ACTUAL EQUIPMENT TO BE CONNECTED.
- 19. INSTALL PLUMBING FIXTURES AND EQUIPMENT LEVEL & PLUMB. ROUTE PIPING PARALLEL & PERPENDICULAR TO OTHER BUILDING SYSTEMS AND COMPONENTS.
- 20. INSTALL EQUIPMENT TO FACILITATE SERVICING, MAINTENANCE & REPAIR IN ACCORDANCE WITH MFG'S WRITTEN INSTALLATION INSTRUCTIONS AS WELL AS SPECIFIC INSTRUCTIONS ON PLANS.
- 21. DWV AND WATER DISTRIBUTION PIPING SHALL BE TESTED IN ACCORDANCE WITH NC PLUMBING CODE SECTION 312.

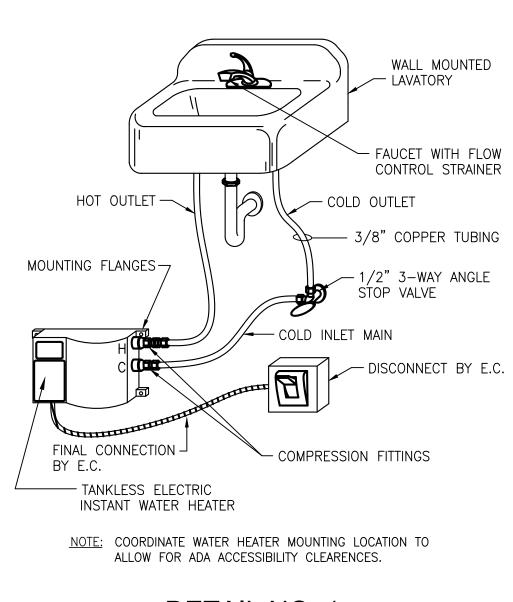
		PLUN	MBING	FIXTU	JRE SCHEDULE
FIX NO	DESCRIPTION	CW	HW	WASTE	REFERENCE MODEL NO.
WC-1	WATER CLOSET FLUSH TANK (SEE NOTE) ADA	1/2"	_	3"	AMERICAN STANDARD CADET III 17"H EL 1.6 SEAT: CHURCH MODEL 9500CT (OPEN FRONT) COLOR: WHITE
SK-1	LAVATORY WALL HUNG ADA & NON—ADA	1/2"	1/2"	1 1/4"	AMERICAN STANDARD 0355.012 LUCERNE FAUCET: DELTA MODEL 501WFHGMHDF STRAINER: MCGUIRE MODEL 155A COLOR: WHITE
DF-1	DRINKING FOUNTAIN SPLIT LEVEL ADA & NON—ADA	1/2"	_	1 1/4"	OASIS P8AMSL 400W 120V/1ø 5.0 FLA

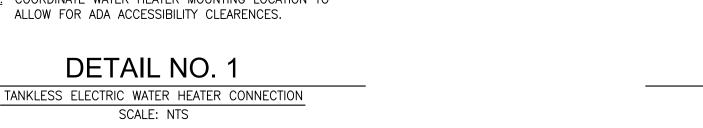
NOTE:

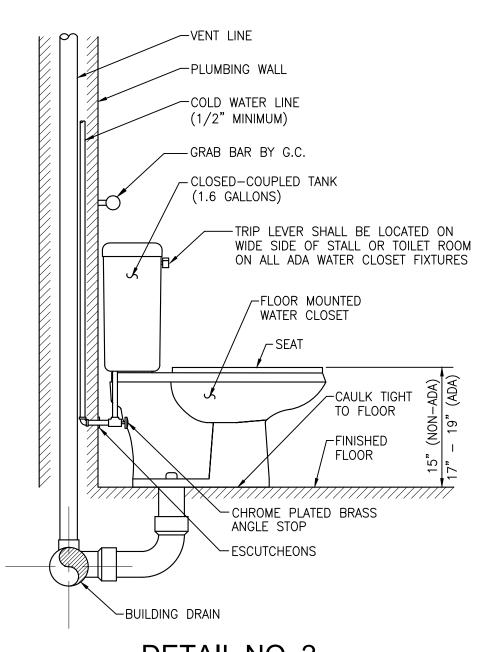
P.C. SHALL COORDINATE ADA WATER CLOSET TRIP LEVER TO BE LOCATED ON WIDE SIDE OF STALL OR TOILET ROOM.

	ELECTRIC WATER HEATER SCHEDULE												
//ARK	SIZE	GPM	TEMP. RISE	KW	VOLT/PH	FLA	CW CONN.	HW CONN.	MANF.	MODEL	WEIGHT		
VH−1	_	0.25	82 DEG. F	2.4	120/1ø		3/8"	3/8"	EEMAX	SPEX2412	2.75		



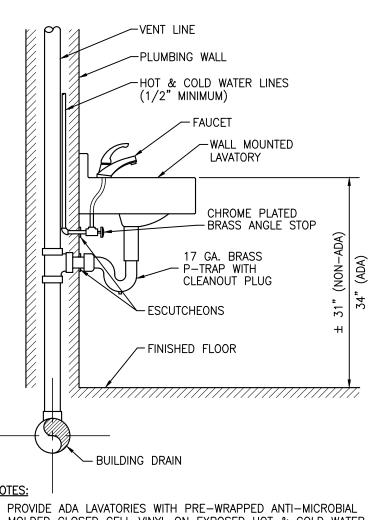






DETAIL NO. 2

FLOOR MOUNTED WATER CLOSET WITH FLUSH TANK
SCALE: NTS



PROVIDE ADA LAVATORIES WITH PRE-WRAPPED ANTI-MICROBIAL MOLDED CLOSED CELL VINYL ON EXPOSED HOT & COLD WATER AND DRAIN LINES.

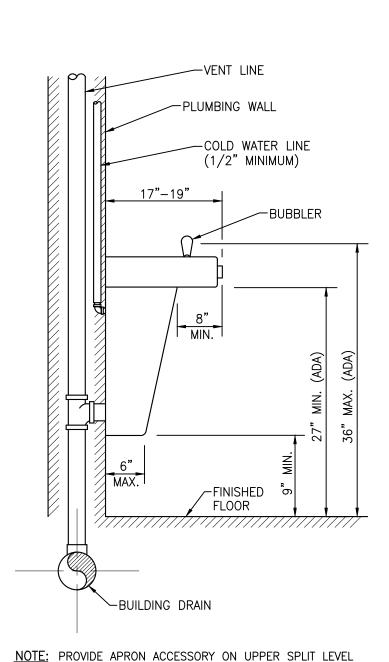
 WATER SUPPLY INLETS AND RISERS SHALL BE BRASS OR COPPER

(CHROME PLATED WHERE EXPOSED TO VIEW).

DETAIL NO. 3

WALL MOUNTED LAVATORY

SCALE: NTS



UNITS WHEN INSTALLED IN NON-RECESSED APPLICATIONS.

DETAIL NO. 4

WALL MOUNTED DRINKING FOUNTAIN

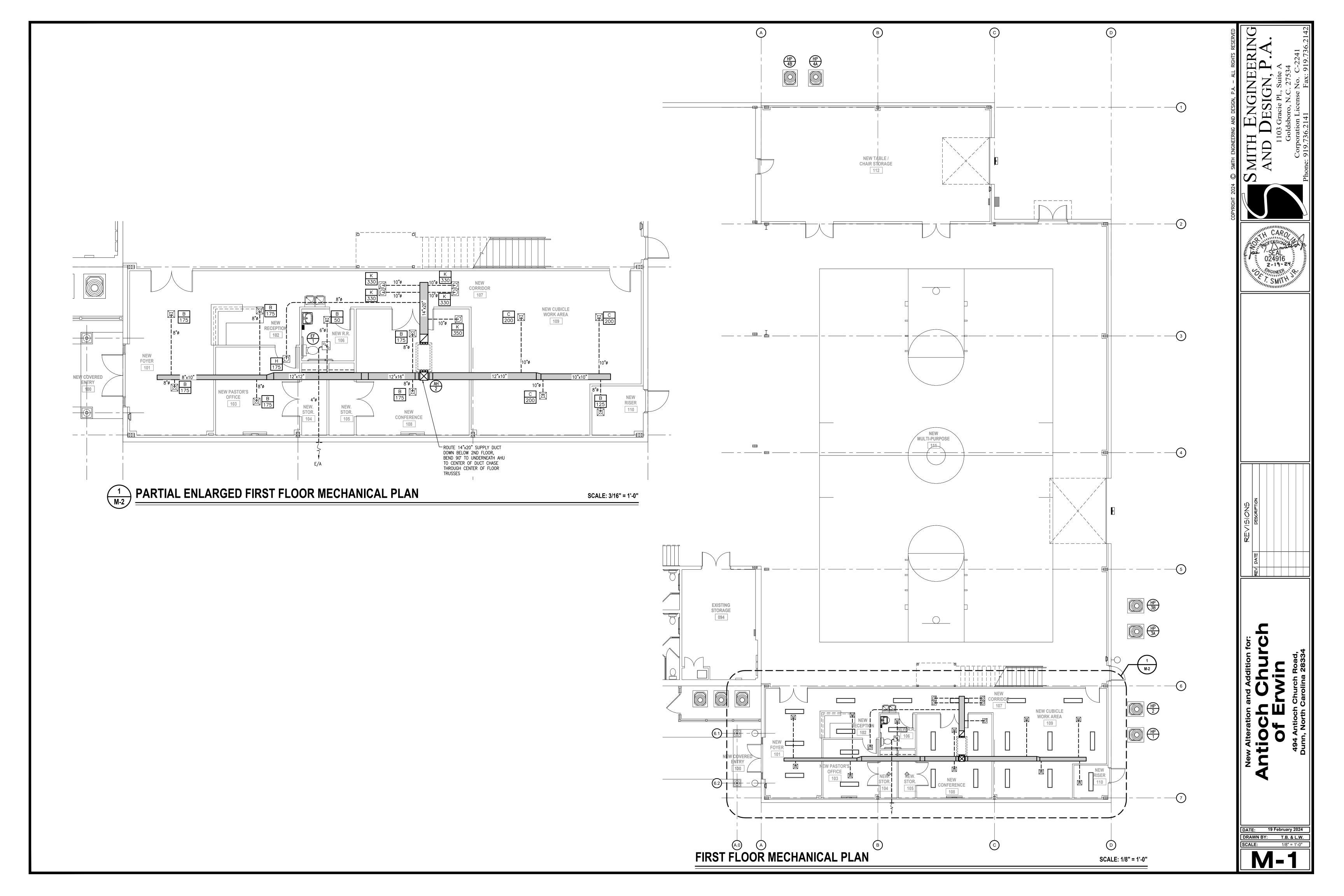
SCALE: NTS

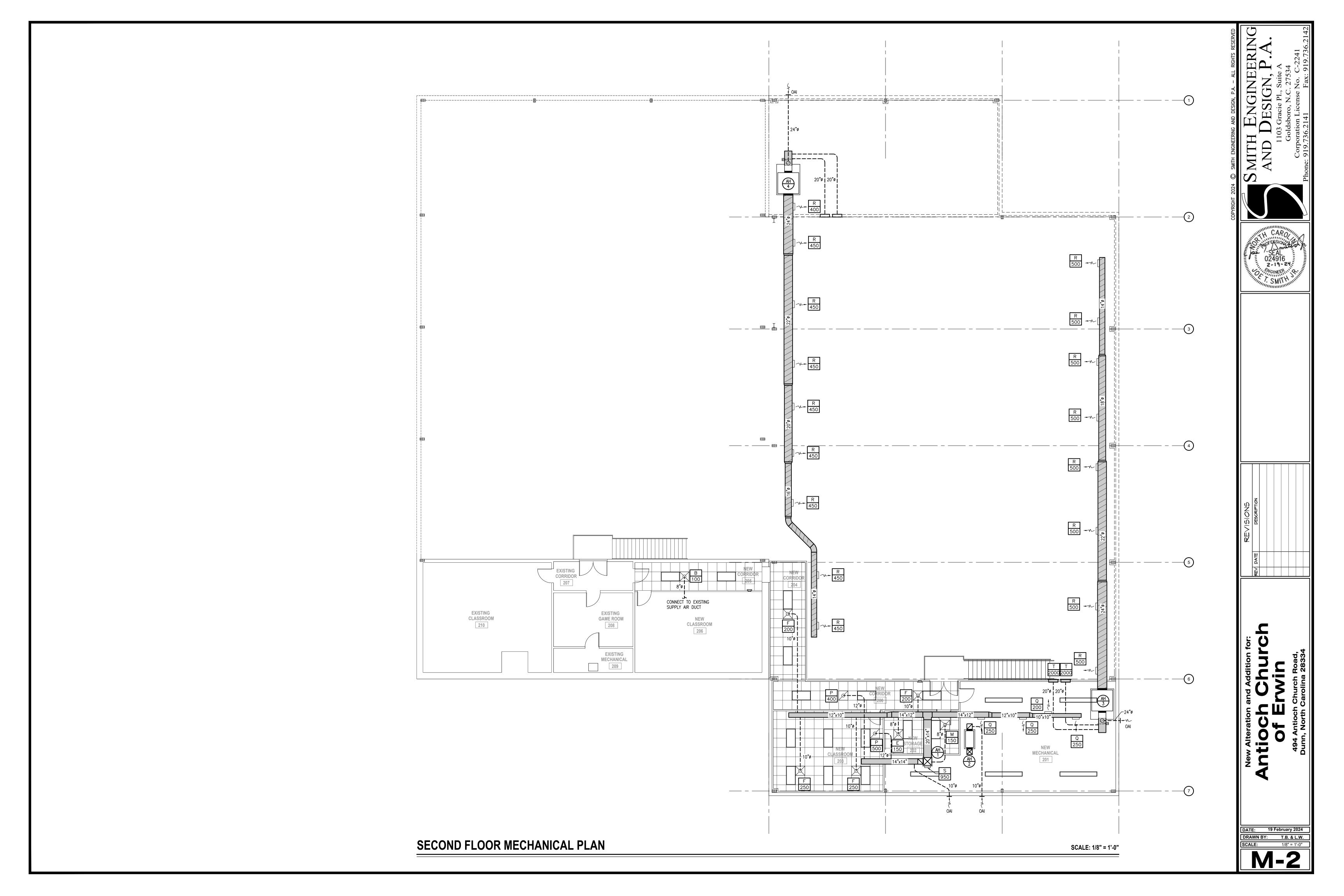
Antioch Churc
of Erwin

DATE: 19 February 2024

DRAWN BY: T.B. & L.W.

SCALE: AS NOTED





	HVAC LEGEND
24×12  24×12  8"ø	RIGID RECTANGULAR DUCT RIGID RECTANGULAR DUCT WITH LINER RIGID ROUND DUCT FLEXIBLE DUCT OFFSET UP IN DIRECTION OF AIR FLOW OFFSET DOWN IN DIRECTION OF AIR FLOW 90° ELBOW WITH TURNING VANES FLEXIBLE CONNECTION MANUAL VOLUME DAMPER
M V S V AD 8x8	MOTOR OPERATED DAMPER  SMOKE DETECTOR WITH ACCESS DOOR  ACCESS DOOR VERTICAL OR HORIZONTAL  SIDEWALL GRILLE WITH 45° TAP
	BRANCH DUCT WITH 45° TAP  SUPPLY DIFFUSER WITH ROUND NECK RETURN/EXHAUST GRILLE W/ROUND NECK INLINE DUCT FAN ROOF CAP, INTAKE
	ROOF CAP, EXHAUST  PITCHED ROOF JACK, EXHAUST  POWERED ROOF EXHAUSTER  CEILING EXHAUST FAN
	UNIT HEATER  WALL THERMOSTAT FOR SYSTEM NO. 3  CEILING MOUNTED SMOKE DETECTOR  DUCT SMOKE DETECTOR REMOTE STATION
B 2000 —————————————————————————————————	AIR DISTRIBUTION MARK "B", 200 CFM EQUIPMENT MARK (SEE SCHEDULES) FLOW DIRECTION ARROW GAS PIPING CONDENSATE PIPING REFRIGERANT PIPING GATE VALVE GAS COCK UNION REDUCER
G.C. P.C. M.C. E.C. AFF AFG UNO BOD TOD	GENERAL CONTRACTOR PLUMBING CONTRACTOR MECHANICAL CONTRACTOR ELECTRICAL CONTRACTOR ABOVE FINISHED FLOOR ABOVE FINISHED GRADE UNLESS NOTED OTHERWISE BOTTOM OF DUCT TOP OF DUCT

## **MECHANICAL NOTES:**

- 1. MECHANICAL PLANS ARE INTENDED TO PROVIDE INFORMATION FOR INSTALLATION OF A COMPLETE OPERATING MECHANICAL SYSTEM. PROVIDE ALL ESSENTIAL LABOR, MATERIALS & DEVICES REQUIRED TO PRODUCE A QUALITY END PRODUCT.
- 2. CONTRACTOR SHALL REVIEW & BECOME FAMILIAR WITH THE WORK OF ALL TRADES FOR PURPOSES OF COORDINATION AND ROUTING. CONTRACTOR SHALL PROVIDE REQUIRED PLANNING, COORDINATION AND SEQUENCING OF HVAC INSTALLATION WITH BUILDING COMPONENTS AND OTHER TRADES.
- 3. ALL WORK SHALL COMPLY WITH LOCAL, STATE & NATIONAL CODES. WORKMANSHIP SHALL MEET OR EXCEED INDUSTRY STANDARDS.
- 4. PROTECT ALL NEW MATERIALS FROM THE WEATHER IN STORAGE TRAILERS OR PROVIDE SUITABLE COVERING.
- 5. FABRICATE AND INSTALL DUCT PER SMACNA STANDARDS FOR 2-INCH WC WITH GALVANIZED METAL (26 GAUGE MINIMUM). ALL RADIUS ELBOWS & TEES SHALL HAVE CENTERLINE RADIUS OF 1.5 X DUCT WIDTH. ALL SQUARE ELBOWS & TEES SHALL HAVE TURNING VANES. PRIOR TO FABRICATION, MECHANICAL CONTRACTOR SHALL FIELD VERIFY STRUCTURAL OBSTRUCTIONS & CEILING SPACE LIMITATIONS AND MAKE NECESSARY DUCT MODIFICATIONS INCLUDING CHANGING OF ASPECT RATIOS, ADDING OFFSETS, AND SHIFTING LOCATIONS. PROTECT DUCT BY STORING IN A CLEAN AND DRY ENVIRONMENT PRIOR TO INSTALLATION. COVER ENDS OF EXPOSED WORK AT THE END OF EVERY SHIFT.
- 6. SPIRAL DUCT SHALL BE SINGLE WALL WITH PAINT GRIP.
- 7. ALL DUCT JOINTS, SEAMS & BRANCH TAKEOFFS SHALL BE SEALED AIR-TIGHT WITH DUCT SEALANT EQUAL TO HARDCAST IRON-GRIP OR FOIL-GRIP TAPE EQUAL TO HARDCAST AFG-1402.
- 8. ROUND RUNOUTS SHALL HAVE SPIN-INS WITH DAMPERS, RECTANGULAR BRANCH DUCTS SHALL HAVE 45 DEGREE TAPS WITH AIR EXTRACTORS AND ALL TEES SHALL HAVE SPLITTER DAMPERS. PROVIDE ANY OTHER DEVICES REQUIRED TO BALANCE AIR SYSTEM.
- 9. FLEX DUCT SHALL HAVE METALIZED VAPOR BARRIER WITH MIN. R-VALUE OF 5.0. BOTH ENDS SHALL BE SECURED WITH NYLON BANDS
- 10. RIGID ROUND AND RECTANGULAR DUCT SHALL BE EXTERNALLY INSULATED WITH 2-INCH THICK 3/4 LB. DENSITY FIBERGLASS BLANKET WITH FSK VAPOR BARRIER AND A MIN. R-VALUE OF 6.5. STAPLE AND SEAL ALL JOINTS WITH 4-INCH WIDE METALIZED DUCT TAPE EQUAL TO SHURFLEX SF-683.
- 11. INSULATE & SEAL ALL GRILLE & DIFFUSER NECKS TO MAINTAIN VAPOR BARRIER AND ELIMINATE CONDENSATION.

AND METALIZED DUCT TAPE PER MFG'S RECOMMENDATIONS AND IN ACCORDANCE WITH U.L. 181B.

- 12. CONDENSATE TRAPS FOR ALL AC UNITS SHALL BE SIZED AS RECOMMENDED BY UNIT MFG. CONDENSATE PIPING AND TRAPS SHALL BE SCHEDULE 40 PVC ROUTED TO DRYWELL OR STORM DRAIN. INSULATE INTERIOR PIPING WITH 1/2 INCH THICK UNICELLULAR INSULATION.
- 13. REFRIGERANT PIPING SHALL BE TYPE ACR COPPER WITH SILVER SOLDERED JOINTS. INSTALL PER EQUIPMENT INSTALLATION INSTRUCTIONS. INSULATION SHALL BE 1-INCH THICK MINIMUM.
- 14. ALL PIPING SHALL BE SUPPORTED & SECURED WITH SUITABLE HANGERS, STRAPS OR PIPE STANDS. SUPPORT WITH NO DROOPS OR SAGS. ALL HANGERS AND ATTACHMENTS SHALL BE PLATED, GALVANIZED OR PAINTED. PROVIDE ISOLATION ON PIPING OF DISSIMILIAR MATERIALS.
- 15. PIPE INSULATION SHALL BE FIBERGLASS WITH FOIL AND PAPER JACKET. INSULATION ON PIPING 1" & SMALLER SHALL BE 1-INCH THICK; 1 1/4" TO 2" SHALL BE 1 1/2-INCH THICK AND 2 1/2" & LARGER SHALL BE 2-INCH THICK. MAINTAIN VAPOR BARRIER ON ALL COLD PIPING.
- 16. POWER WIRING, DISCONNECTS & STARTERS NOT FURNISHED WITH HVAC EQUIPMENT AND FINAL CONNECTIONS SHALL BE BY THE E.C.
- 17. CONTROL WIRING, RELAYS AND INTERLOCKING DEVICES SHALL BE PROVIDED BY THE M.C.
- 18. UL LISTED DUCT SMOKE DETECTORS & RAIL SWITCHES SHALL BE FURNISHED & WIRED BY THE FIRE ALARM CONTRACTOR AND DUCT SMOKE DETECTORS INSTALLED BY THE M.C.. RAIL SWITCHES SHALL BE REQUIRED WHERE DETECTORS ARE NOT READILY ACCESSIBLE. FIRE ALARM AHU SHUT DOWN CIRCUITS SHALL BE WIRED FROM THE FACP TO A TERMINATION POINT, ADJACENT TO THE FACP BY THE FIRE ALARM CONTRACTOR. AHU CONTROL WIRING FROM THE TERMINATION POINT TO THE EQUIPMENT SHALL BE BY THE M.C.. THE FIRE ALARM CONTRACTOR SHALL TEST ALL SMOKE DETECTORS.
- 19. TEMPERATURE CONTROLS FOR EACH HEATING-COOLING SYSTEM SHALL CONSIST OF AN ELECTRONIC PROGRAMMABLE HEATING-COOLING THERMOSTAT WITH HEAT-OFF-COOL-AUTO SYSTEM SWITCH & AUTO-ON FAN SWITCH. MOUNT THERMOSTATS 48-INCHES A.F.F.
- 20. INSTALL EQUIPMENT TO FACILITATE SERVICING, MAINTENANCE & REPAIR IN ACCORDANCE WITH MANUFACTURE'S INSTALLATION INSTRUCTIONS AS WELL AS SPECIFIC INSTRUCTIONS ON PLANS.
- 21. PROVIDE FLEX CONNECTORS AT ALL DUCT TO EQUIPMENT CONNECTIONS NOT HAVING INTERNALLY ISOLATED FANS.
- 22. CONTRACTOR SHALL BALANCE AIR SYSTEM TO QUANTITIES INDICATED ON PLANS AND PROVIDE TYPE WRITTEN REPORT WITH 0&M
- 23. CONTRACTOR SHALL PROVIDE BUILDING OWNER WITH A COMPLETE OPERATING & MAINTENANCE MANUAL INCLUDING EQUIPMENT BASIC DATA, CONTROL INFORMATION, ROUTINE MAINTENANCE ACTIONS AND SERVICE AGENCIES NAME, PHONE NUMBER & ADDRESS.
- 24. PROVIDE MOTORIZED DAMPERS AT OUTSIDE AIR INTAKES.

# MECHANICAL SYSTEM, SERVICE SYSTEMS AND EQUIPMENT

METHOD OF COMPLIANCE:

PRESCRIPTIVE ⋈ ENERGY COST BUDGET □

THERMAL ZONE \_\_\_\_\_4A\_\_\_\_ EXTERIOR DESIGN CONDITIONS WINTER DRY BULB 16° SUMMER DRY BULB 94° INTERIOR DESIGN CONDITIONS WINTER DRY BULB 72° SUMMER DRY BULB 75° RELATIVE HUMIDITY 50%

MECHANICAL CONDITIONING SYSTEM UNITARY

SEE MECHANICAL SCHEDULES DESCRIPTION OF UNIT HEATING EFFICIENCY SEE MECHANICAL SCHEDULES COOLING EFFICIENCY SEE MECHANICAL SCHEDULES HEAT OUTPUT OF UNIT SEE MECHANICAL SCHEDULES COOLING OUTPUT OF UNIT SEE MECHANICAL SCHEDULES

TOTAL BOILER OUTPUT, IF OVERSIZED STATE REASON N/A

TOTAL CHILLER OUTPUT, IF OVERSIZED STATE REASON N/A

LIST EQUIPMENT EFFICIENCIES <u>SEE MECHANICAL SCHEDULES</u>

EQUIPMENT SCHEDULES WITH MOTORS (MECHANICAL SYSTEMS) MOTOR HORSEPOWER: <u>SEE MECHANICAL SCHEDULES</u> NUMBER OF PHASES: <u>SEE MECHANICAL SCHEDULES</u> MINIMUM EFFICIENCY: SEE MECHANICAL SCHEDULES SEE MECHANICAL SCHEDULES MOTOR TYPE:

NUMBER OF POLES: SEE MECHANICAL SCHEDULES

				HE	EAT	PUN	1P (I	NDC	OR UNI	T) SCH	EDL	JLE			
MARK		SUPP	LY FAN		COO	LING	CAPAC	ITY	AUX. HEAT	VOLT/PH	МСА	MOCP	MANF.	MODEL	WEIGHT
IVIAINN		OA CFM		MTR HP			SEN		@ 240V	,	IVICA	IVIOCI			
AH-1	2000	300	0.5"	1	60.0	MBH	45.5	MBH	9.6 KW	240/1ø	58	60A	TRANE	TEM3A0C60S51	170 LBS.
AH-2	2000	300	0.5"	1	60.0	MBH	45.5	MBH	9.6 KW	240/1ø	58	60A	TRANE	TEM3A0C60S51	170 LBS.
AH-3	4000	500	0.5"	2	120.2	MBH	98.5	MBH	17.3 KW	240/1ø	101	110A	TRANE	TWE12041B	475 LBS.
AH-4	4000	500	0.5"	2	120.2	MBH	98.5	MBH	17.3 KW	240/1ø	101	110A	TRANE	TWE12041B	475 LBS.

- PROVIDE THE FOLLOWING OPTIONS AND ACCESSORIES:
- SINGLE POINT WIRING CONNECTION
- 7-DAY PROGRAMMABLE THERMOSTAT WITH LOCKOUT FUNCTION CONTROL TRANSFORMER BAYTFMR018 (AH-3 & AH-4)
- ECONOMIZER (AH-3 & AH-4)

			Н	EAT P	UMF	OU)	ITDC	OR L	JNIT)	) SCHE	DULE	
MARK	EAT(DB)	МОМ	CAP	VOLT/PH	MCA	моср	MIN.	RATING	COP	MANF.	MODEL	WEIGHT
HP-1	95°	5.0	TONS	240/1ø	35	60A	14	SEER	3.1	TRANE	4TWB4060E1	295 LBS
HP-2	95°	5.0	TONS	240/1ø	35	60A	14	SEER	3.1	TRANE	4TWB4060E1	295 LBS
HP-3A	95°	5.0	TONS	240/1ø	35	60A	14	SEER	3.1	TRANE	4TWB4060E1	295 LBS
HP-3B	95°	5.0	TONS	240/1ø	35	60A	14	SEER	3.1	TRANE	4TWB4060E1	295 LBS
HP-4A	95°	5.0	TONS	240/1ø	35	60A	14	SEER	3.1	TRANE	4TWB4060E1	295 LBS
HP-4B	95°	5.0	TONS	240/1ø	35	60A	14	SEER	3.1	TRANE	4TWB4060E1	295 LBS
				,								

1. PROVIDE THE FOLLOWING OPTIONS AND ACCESSORIES:

 COMPRESSOR ANTI SHORT CYCLE DELAY - LOW AMBIENT CONTROL TO 55°

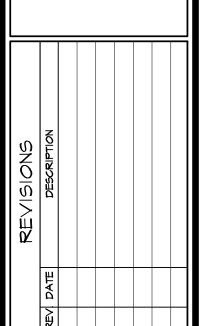
			Е	EXHA	USTI	FAN	SCH	EDULE			
MARK	TYPE	CFM	SP	MTR HP	VOLT/PH	FLA	MANF.	MODEL	SONES	WEIGHT	NOTES
EF-1	CEILING	109	0.125"	87W	120/1ø	1.1	BROAN	L100	0.9	22 LBS	1,2,3

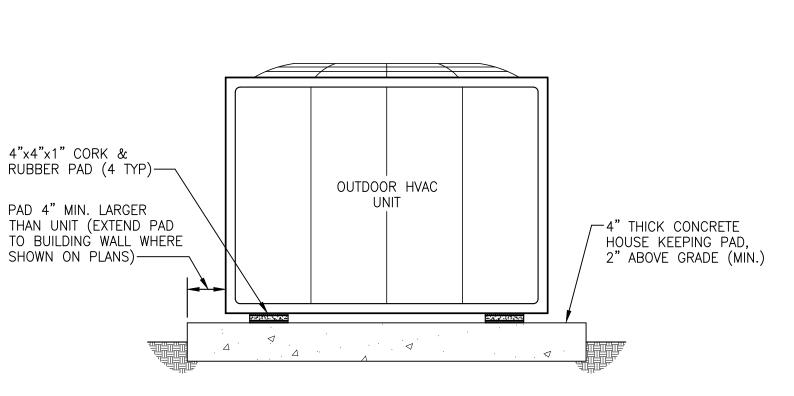
- 1. INTERLOCK EXHAUST FANS WITH LIGHT SWITCHES BY E.C.
- 2. PROVIDE WITH DISC, BDD, BIRD SCREEN & ROOF CAP. 3. DUCT FAN TO BUILDING EXTERIOR.

		AIR	DIST	RIBUTION	ON SO	CHEC	ULE			
MADIC	OEM DANIOE			_	1		1	NANE	Luopei	NOTE
MARK	CFM RANGE	TYPE	FACE	NECK	PATTERN	MAT'L	FINISH	MANF.	MODEL	NOTE:
Α	0-90	SURFACE -LOUVER SUPPLY	6X6	6ø	4-WAY	STEEL	WHITE ENAMEL	H&C	SRE	_
В	100-195	SURFACE -LOUVER SUPPLY	9X9	8ø	4-WAY	STEEL	WHITE ENAMEL	H&C	SRE	_
С	200-305	SURFACE -LOUVER SUPPLY	12X12	10ø	4-WAY	STEEL	WHITE ENAMEL	H&C	SRE	_
D	0-95	T-BAR - LOUVERED SUPPLY	24X24	6ø	4-WAY	STEEL	WHITE ENAMEL	H&C	HVS	1
E	100-195	T-BAR - LOUVERED SUPPLY	24X24	8ø	4-WAY	STEEL	WHITE ENAMEL	H&C	HVS	1
F	200-340	T-BAR - LOUVERED SUPPLY	24X24	10ø	4-WAY	STEEL	WHITE ENAMEL	H&C	HVS	1
Н	80-175	SURFACE-RET AIR	12X12	8ø		STEEL	WHITE ENAMEL	H&C	672	_
J	180-300	SURFACE-RET AIR	14X14	10ø	_	STEEL	WHITE ENAMEL	H&C	672	_
K	305-510	SURFACE-RET AIR	16X16	12ø	_	STEEL	WHITE ENAMEL	H&C	672	_
L	0-75	T-BAR - PERF RETURN	24x24	6ø	_	STEEL	WHITE ENAMEL	H&C	RENPS	1
М	80-175	T-BAR - PERF RETURN	24x24	8ø	_	STEEL	WHITE ENAMEL	H&C	RENPS	1
Ν	180-300	T-BAR - PERF RETURN	24x24	10ø	_	STEEL	WHITE ENAMEL	H&C	RENPS	1
Р	305-510	T-BAR - PERF RETURN	24x24	12ø		STEEL	WHITE ENAMEL	H&C	RENPS	1
Q	200-250	SURFACE SUPPLY	12x6	_	2-WAY	STEEL	WHITE ENAMEL	H&C	821	
R	400-500	SURFACE SUPPLY	20x8	_	2-WAY	STEEL	WHITE ENAMEL	H&C	SVH	
S	705-1000	SURFACE-RET AIR	24x24	SEE PLANS	LOUVER	STEEL	WHITE ENAMEL	H&C	672	
T	2000-2350	SURFACE-RET AIR	30X36	SEE PLANS	LOUVER	STEEL	WHITE ENAMEL	H&C	RH45	
				1						

1. PROVIDE WITH MOLDED FIBERGLASS BACK. NECK SIZES TO MATCH ROUND RUNOUT SIZES ON PLANS.

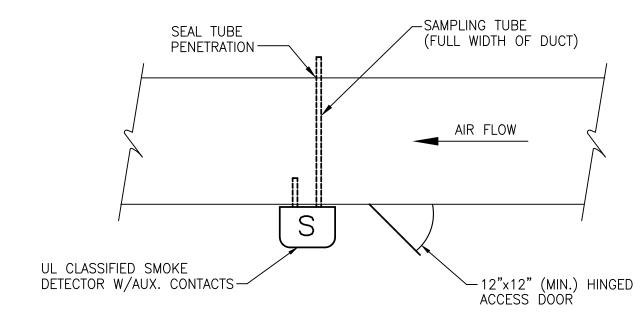






NOTE: MAINTAIN EQUIPMENT MFG'S. RECOMMENDED CLEARANCES AND A MINIMUM OF 6" BEYOND SPLASH LINE OF ROOF OVERHANG.

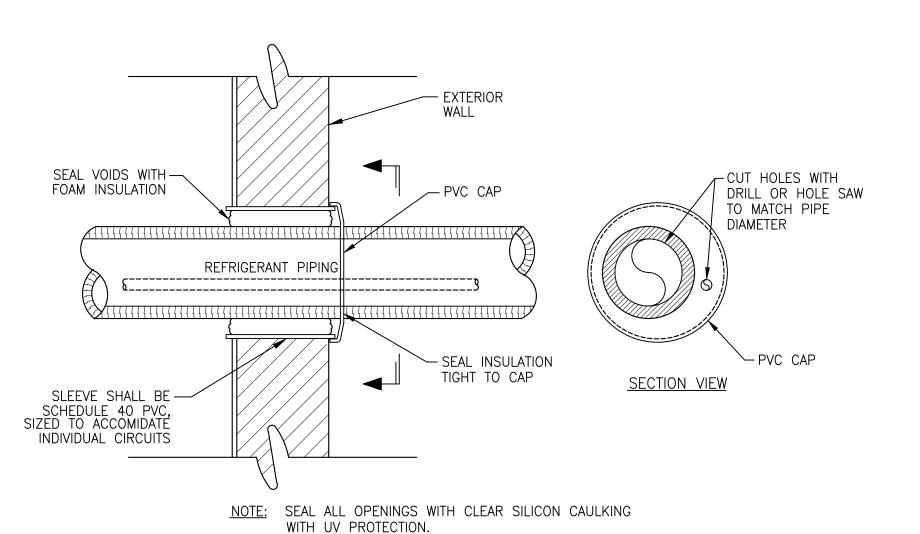
# DETAIL NO. 1 OUTDOOR HVAC UNIT INSTALLATION SCALE: NTS



- 1. EXTEND SAMPLING TUBE SUCH THAT IT PENETRATES FAR SIDE OF THE DUCT. USE INTERMEDIATE SUPPORT IF DUCT EXCEEDS 36". PENETRATION SHALL BE SEALED AIRTIGHT.
- 2. LOCATE SMOKE DETECTOR IN RETURN DUCT UPSTREAM OF OUTSIDE AIR INTAKE IN NON-TURBULANT AIRSTREAM. INSTALL PER MFG'S. DETAILED INSTALLATION INSTRUCTIONS.
- 3. SAMPLING TUBE SHALL BE LEVEL OR SLOPING DOWN AWAY FROM DETECTOR.
- 4. PROVIDE WITH REMOTE ALARM HORN, ALARM LED, TROUBLE LED, AND TEST/ RESET SWITCH. LOCATE 84" AFF OVER SYSTEM THERMOSTAT OR WHERE SHOWN ON PLANS. LABEL "AIR DUCT DETECTOR REMOTE STATION". INSTALLATION SHALL BE IN ACCORDANCE WITH N.C. MECHANICAL CODE SECTION 606.4.1 AND NFPA 90A.

# DETAIL NO. 4

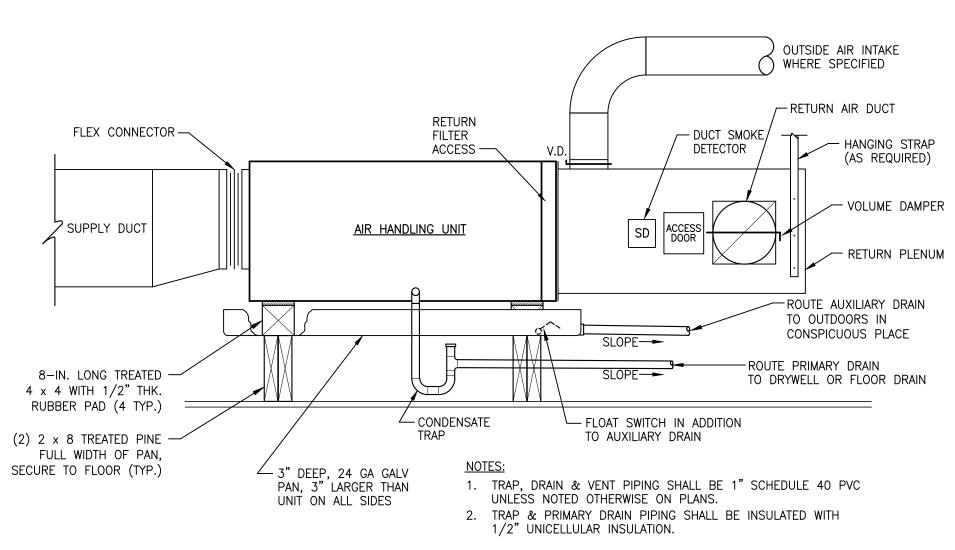
DUCT SMOKE DETECTOR NOT CONNECTED TO FIRE ALARM PANEL SCALE: NTS



DETAIL NO. 7

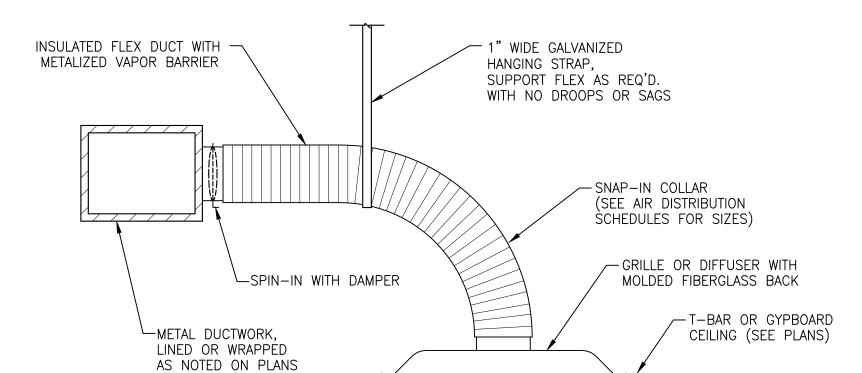
REFRIGERANT PIPE PENETRATION - EXTERIOR WALL

SCALE: NTS



DETAIL NO. 2 ATTIC MOUNTED AIR HANDLING UNIT

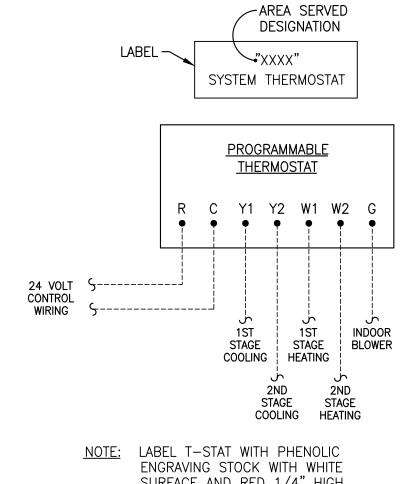
SCALE: NTS



- 1. SECURE ENDS OF FLEX WITH NYLON BANDS AND 3" WIDE METALIZED DUCT TAPE.
- 2. INSULATE & SEAL ALL GRILLE & DIFFUSER NECKS TO MAINTAIN VAPOR BARRIER AND ELIMINATE CONDENSATE.

# DETAIL NO. 5

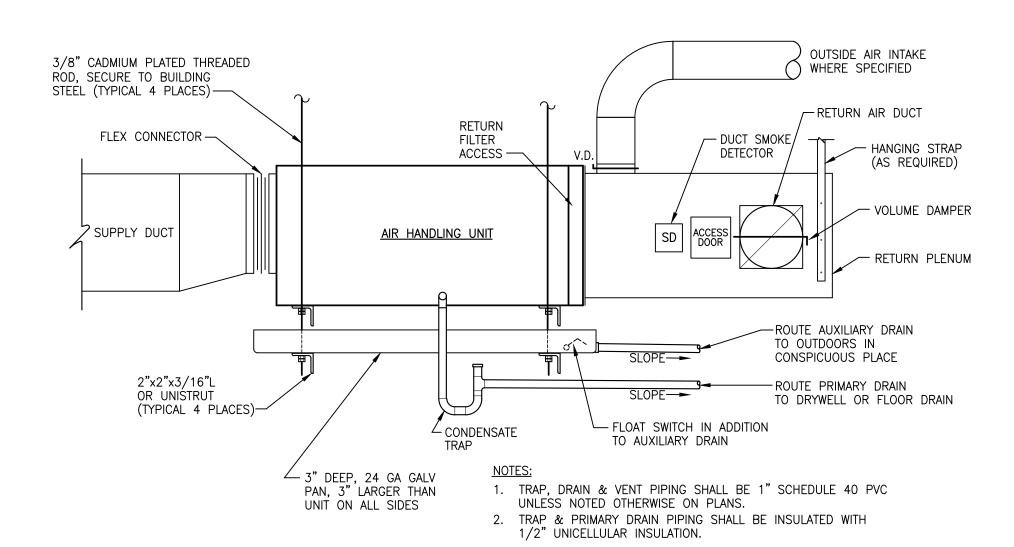
AIR DISTRIBUTION INSTALLATION SCALE: NTS



SURFACE AND RED 1/4" HIGH LETTERING.

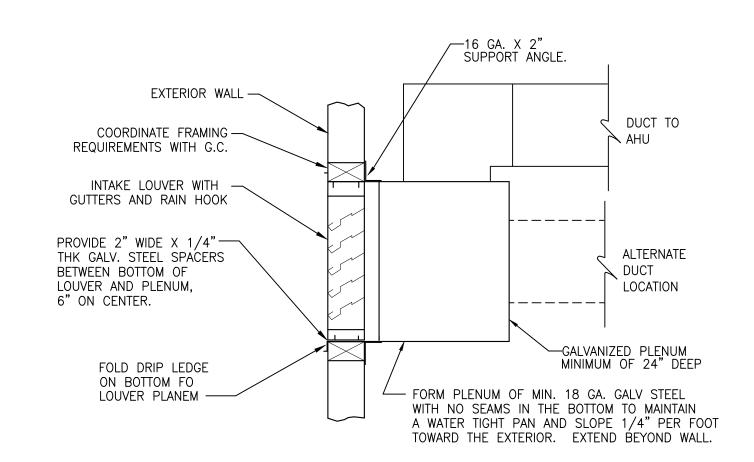
# DETAIL NO. 8

THERMOSTAT INSTALLATION SCALE: NTS



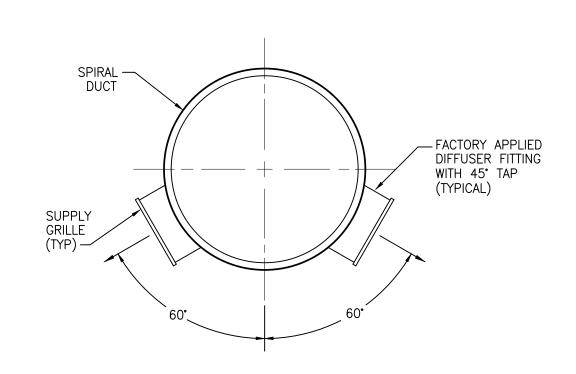
DETAIL NO. 3

ABOVE CEILING AIR HANDLING UNIT SCALE: NTS

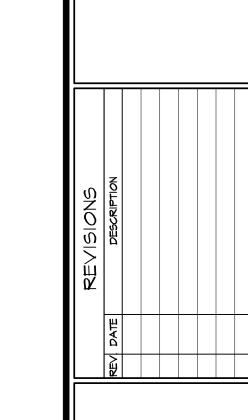


DETAIL NO. 6 MAKE-UP AIR LOUVER INSTALLATION

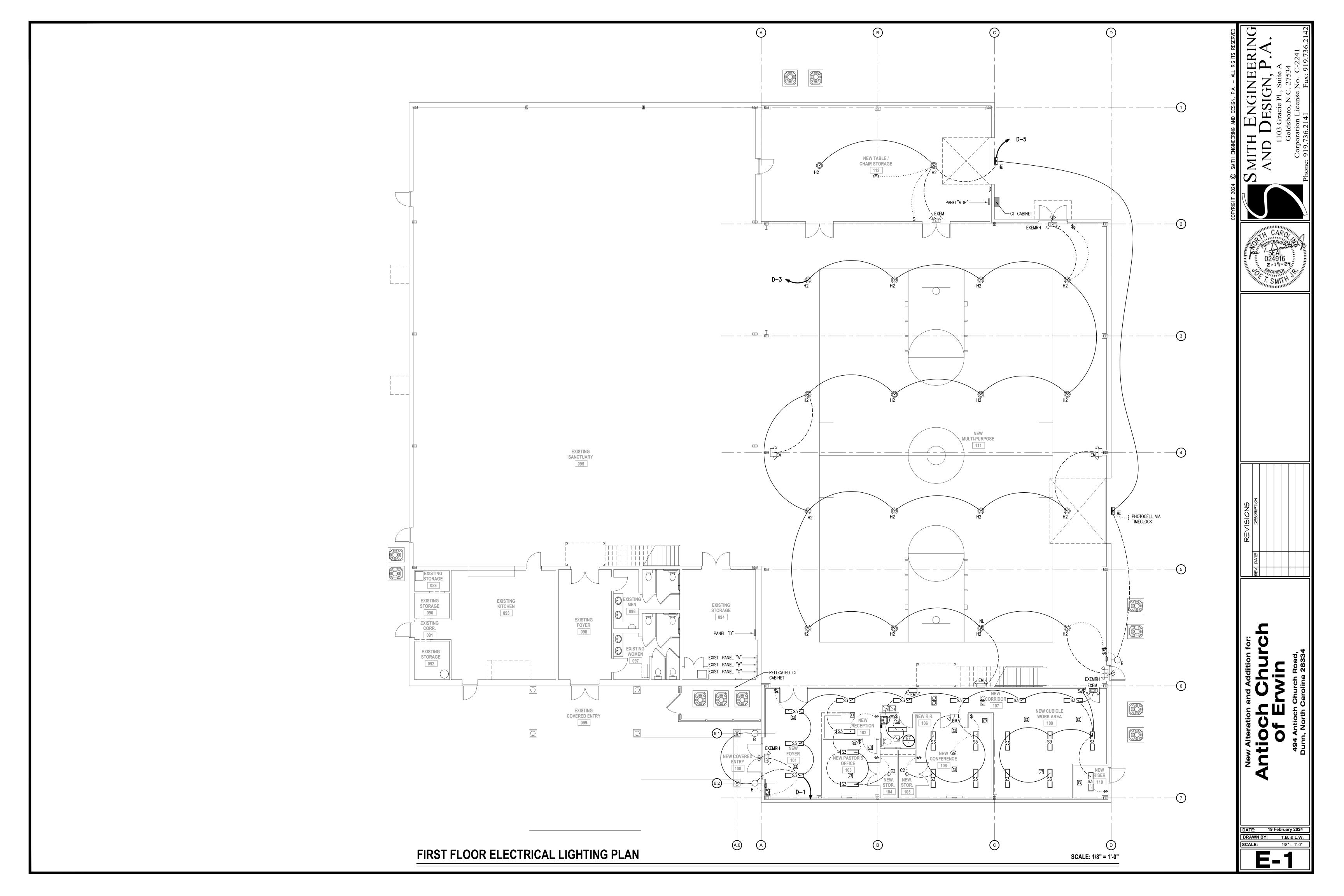
SCALE: NTS

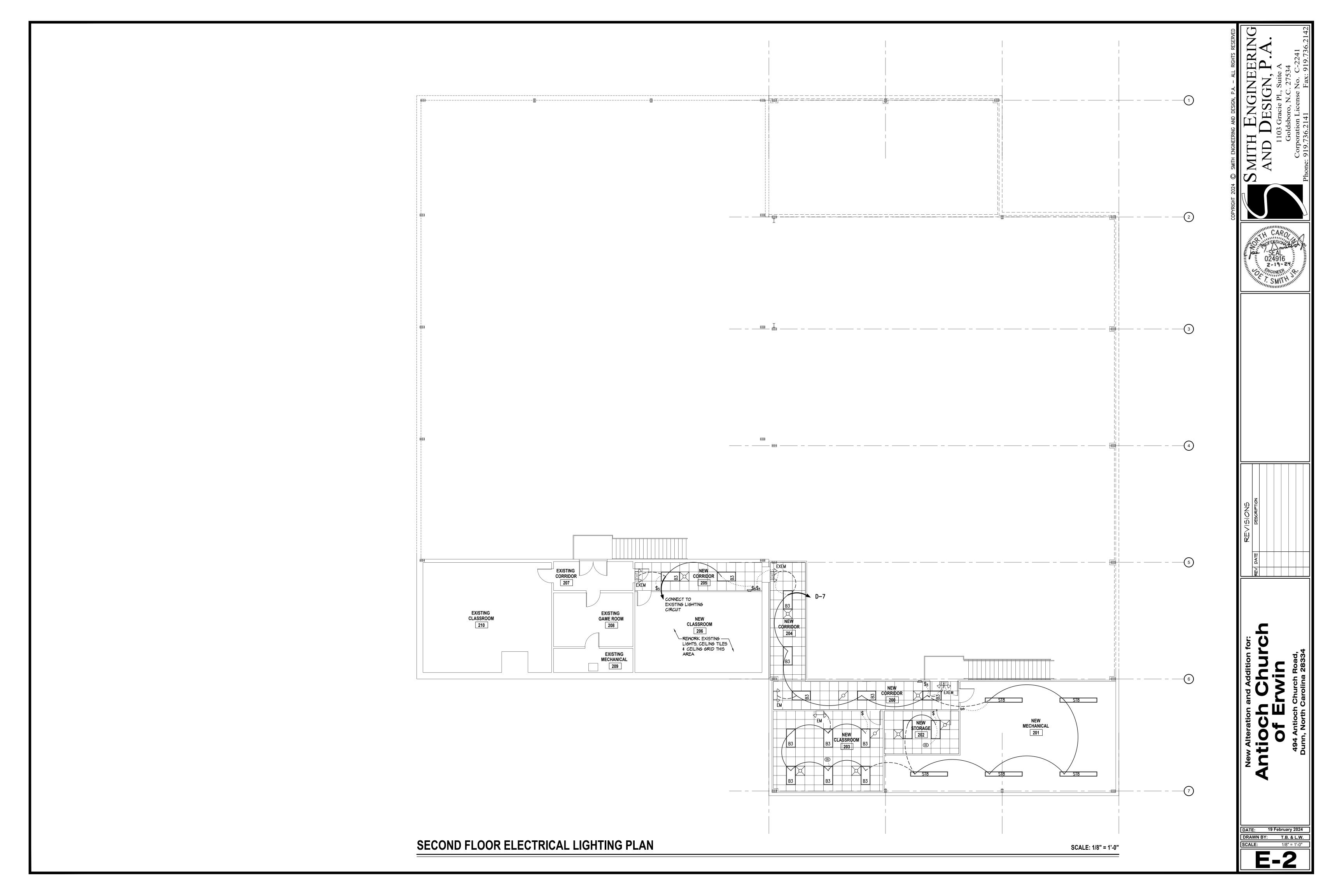


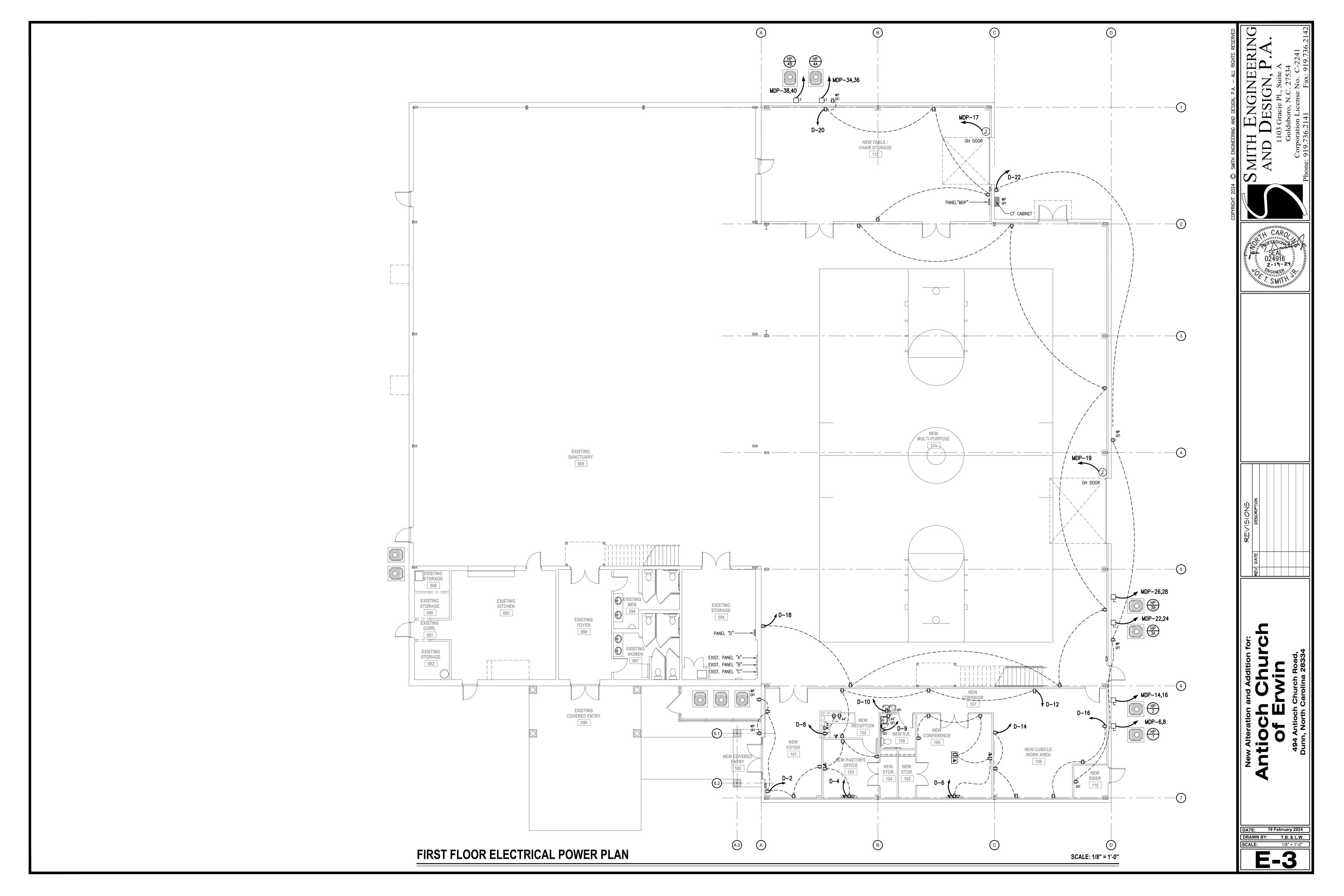
DETAIL NO. 9 GRILLE ARRANGEMENT IN SPIRAL DUCT SCALE: NTS

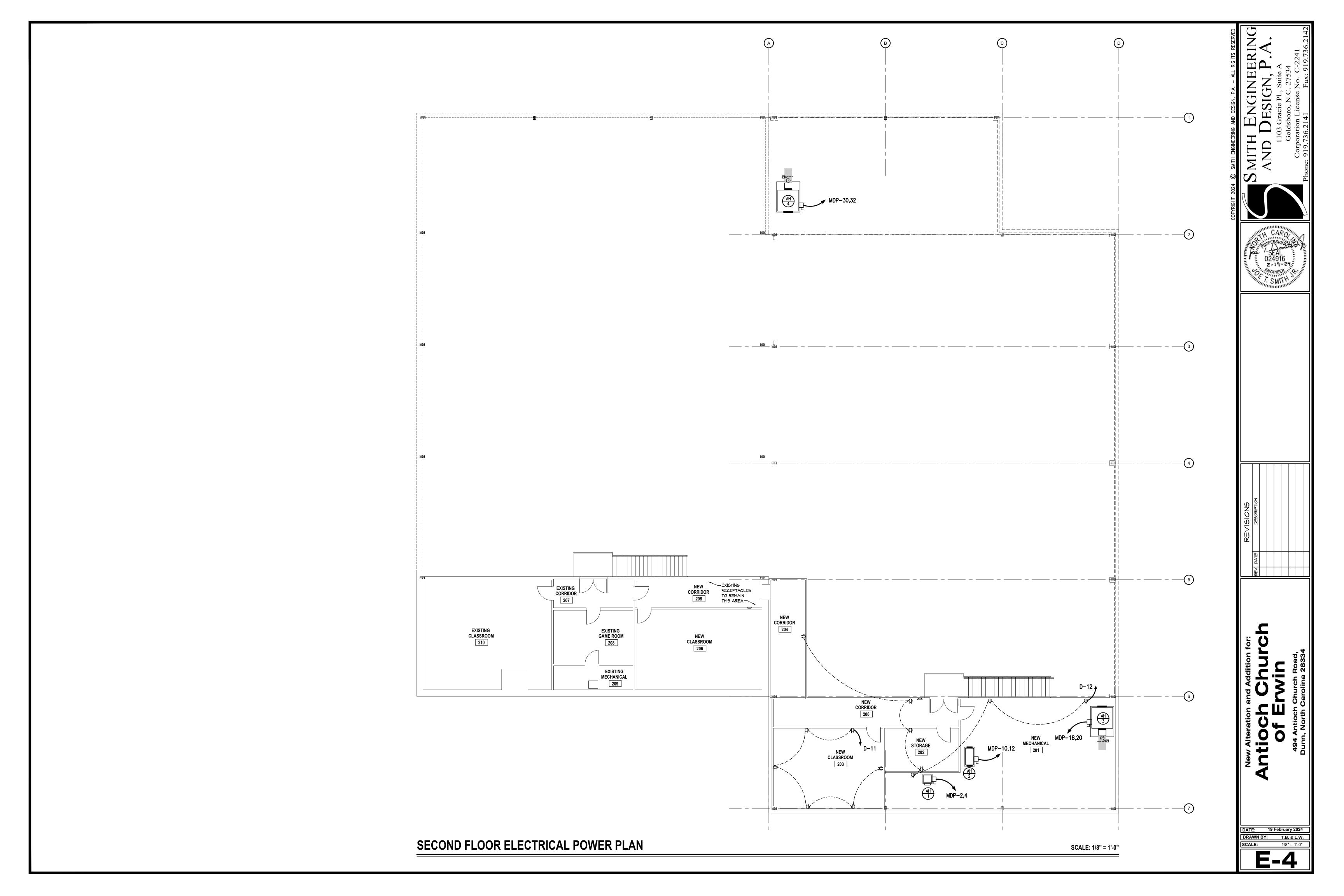


DATE: 19 February 2024 DRAWN BY: T.B. & L.W. SCALE: AS NOTED







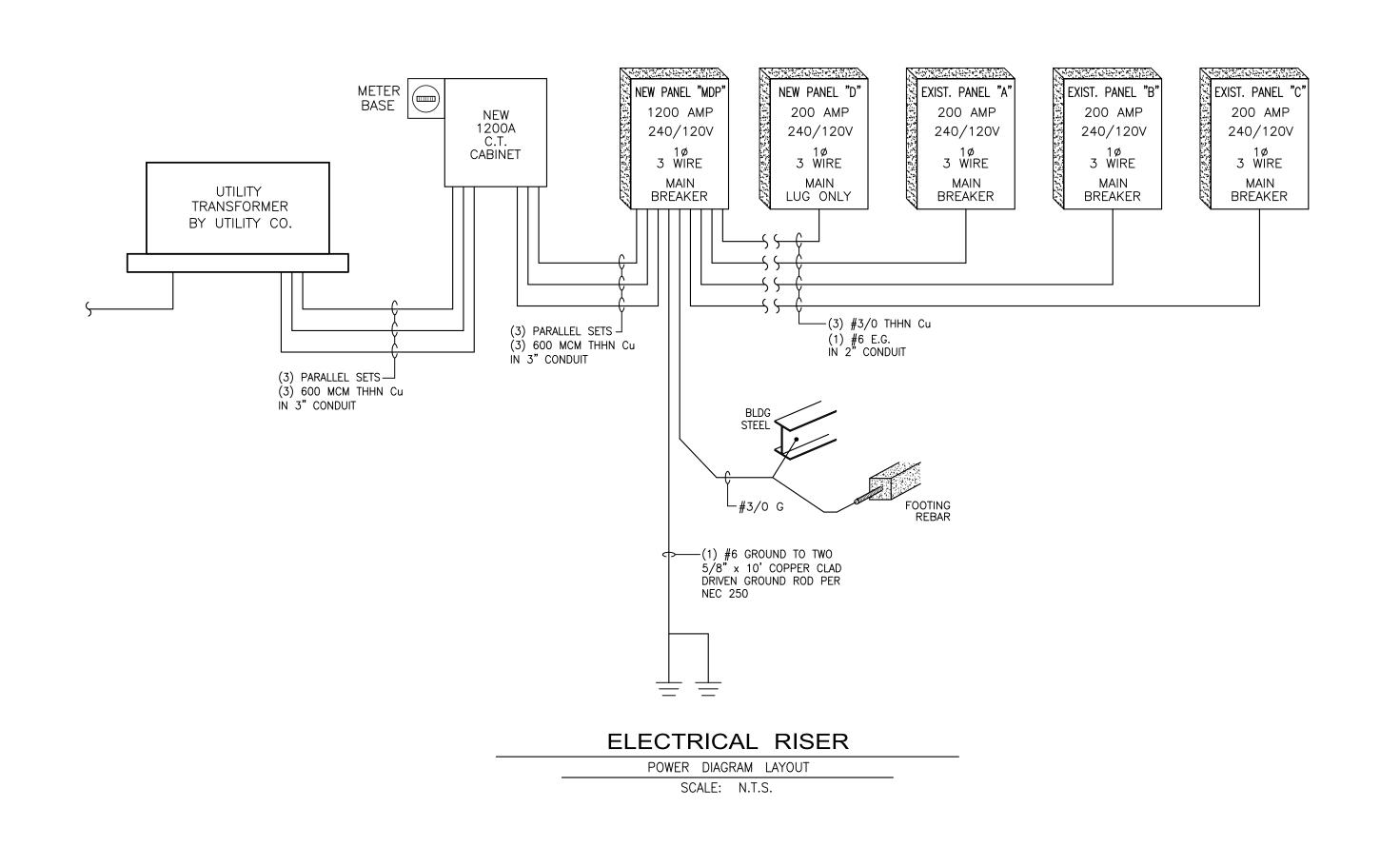


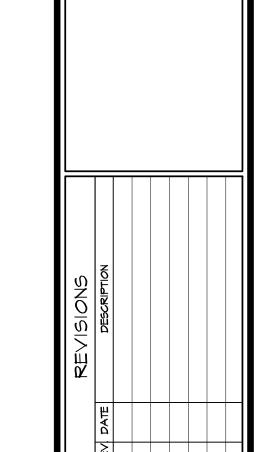
	PA	NEI	LBOARD	SCHE	EDU	ILE		
PANEL "MDP"	SURFACE MOUNTED		SERVICE ENTR	ANCE RATE	D	1200 AMP	1ø, 3 WIRE	
MAIN BREAKER	BOTTOM FEED		22kw	AIC		240/120 VOLT		
NEMA 1	COPPER BUS							
LOAD SERVED	WIRE SIZE	CKT NO.	PHA: A 200	SE B   60	CKT NO.	WIRE SIZE	LOAD SERVED	
EXISTING PANEL "A"	3/0	1 3	200	60	2 4	#6	AH-1	
EXISTING PANEL "B"	3/0	5 7	200	60	6 8	#6	HP-1	
EXISTING PANEL "C"	3/0	9	200	60	10	#6	AH-2	
PANEL "D"	3/0	13 15	200	110	14	#6	HP-2	
OVERHEAD DOOR	12	17	20	110	18	// 0	ALL 7	
OVERHEAD DOOR	12	19	20	60	20	#2	AH-3	
		21 23			22 24	#6	HP-3A	
		25		60	26			
		27			28	#6	HP-3B	
		29		110	30	#2	AH-4	
		31		60	32	π Δ	711-4	
		33		<del>                                     </del>	34	#6	HP-4A	
		35		60	36	# <sup>O</sup>	ПР—4А	
		37	-		38	#6	HP-4B	
		39		<u></u>	40	# <sup>O</sup>	ΠΓ−4D	
		41			42			

NOTE:	<b>VERIFY</b>	BREAKER	AND	CONDUCTOR	SIZES	WITH	EQUIPMENT	MANUFACTURER	PRIOR	TO	INSTALLATION	

	PA	NE	LBOARI	O SCH	EDU	LE	
PANEL "D"	SURFACE MOUNTED		SERVICE ENTF	200 AMP	1ø, 3 WIRE		
MAIN LUG ONLY	BOTTOM FEED		22kw	AIC		120/240 VOLT	
NEMA 1	COPPER BUS						
LOAD SERVED	WIRE SIZE	CKT NO.	PHA A 20	SE B   20	CKT NO.	WIRE SIZE	LOAD SERVED
LIGHTS	#12	1	20	20	2	#12	RECEPTACLES
LIGHTS	#12	3	20	20	4	#12	RECEPTACLES
LIGHTS	#12	5	20	20	6	#12	RECEPTACLES
LIGHTS	#12	7	20	20	8	#12	RECEPTACLES
WATER HEATER	#12	9	20	20	10	#12	RECEPTACLES
RECEPTACLES	#12	11	20	20	12	#12	RECEPTACLES
RECEPTACLES	#12	13	20	20	14	#12	RECEPTACLES
FACP PANEL	#12	15	20	20	16	#12	RECEPTACLES
		17	20	20	18	#12	RECEPTACLES
		19		20	20	#12	RECEPTACLES
		21			22	#12	RECEPTACLES
		23			24		
		25			26		
		27			28		
		29			30		
		31			32		
		33			34		
		35			36		
		37			38		
		39			40		
		41			42		

NOTE: VERIFY BREAKER AND CONDUCTOR SIZES WITH EQUIPMENT MANUFACTURER PRIOR TO INSTALLATION





Alteration and Addition for:
ioch Church
of Erwin

DATE: 19 February 2024

DRAWN BY: T.B. & L.W.

SCALE: AS NOTED

# ELECTRICAL NOTES:

- 1. ELECTRICAL PLANS ARE INTENDED TO PROVIDE INFORMATION FOR INSTALLATION OF A COMPLETE ELECTRICAL SYSTEM. PROVIDE ALL ESSENTIAL LABOR, MATERIALS & DEVICES REQUIRED TO PRODUCE A QUALITY END PRODUCT.
- 2. CONTRACTOR SHALL REVIEW & BECOME FAMILIAR WITH THE WORK OF ALL TRADES FOR PURPOSES OF COORDINATION AND ROUTING. CONTRACTOR SHALL PROVIDE REQUIRED PLANNING, COORDINATION AND SEQUENCING OF ELECTRICAL INSTALLATION WITH BUILDING COMPONENTS AND OTHER TRADES.
- 3. ALL WORK SHALL COMPLY WITH THE NATIONAL ELECTRICAL CODE (NEC). WORKMANSHIP SHALL MEET OR EXCEED INDUSTRY STANDARDS.
- 4. PROTECT ALL NEW MATERIALS FROM THE WEATHER IN STORAGE TRAILERS OR PROVIDE SUITABLE
- 5. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL DISCONNECTS, STARTERS, DEVICES AND ELECTRICAL COMPONENTS UNLESS SPECIFICALLY NOTED AS PROVIDED BY OTHERS.
- 6. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL LINE AND LOAD SIDE WIRING INCLUDING ALL TERMINATIONS TO EQUIPMENT PROVIDED UNDER OTHER TRADES. POWER WIRING TO CONTROL DEVICES SHALL BE PROVIDE BY E.C.. INTERLOCK WIRING SHALL BE PROVIDED BY THE CONTRACTOR INSTALLING THE CONTROL DEVICE.
- 7. ALL WIRING, PANELBOARDS, DEVICES AND OTHER LIKE MATERIALS SHALL BE UL LISTED & LABELED. ALL MATERIALS SHALL MEET THE NEC FOR THE INTENDED USE AND INSTALLED IN ACCORDANCE WITH THE NEC.
- 8. PROVIDE THHN/THWN COPPER WIRE. PROVIDE A MINIMUM WIRE SIZE OF #12. ALL WIRE #8 AND LARGER SHALL BE STRANDED. CONDUCTORS AND CONDUIT ON PLANS AND SCHEDULES REFLECT AMPACITIES PER NEC 310-16 75C RATING. CONTRACTOR SHALL VERIFY ALL TERMINATIONS, LUGS, ETC. ARE RATED FOR USE PER NEC 110-4C. OTHERWISE PROVIDE CONDUCTOR AND CONDUIT SIZED PER LOWEST TEMPERATURE RATING OF ANY TERMINATION WITHIN A CIRCUIT. A SEPERATE INSULATED EQUIPMENT GROUNDING CONDUCTOR SHALL BE PROVIDED FOR ALL CIRCUITS.
- 9. PROVIDE MC CABLE FOR ALL SINGLE PHASE BRANCH CIRCUITS 30 AMPS AND SMALLER. PROVIDE CONDUIT FOR ALL OTHER WIRING. EMT OR RIGID SHALL BE USED WHERE EXPOSED TO PHYSICAL DAMAGE. CONDUIT ABOVE GRADE SHALL BE STEEL. CONDUIT BELOW GRADE MAY BE PVC CHANGING TO STEEL IN THE ELBOW TURNING UP. EMT SHALL NOT BE USED IN DIRECT CONTACT WITH THE EARTH OR WHERE EXPOSED TO SEVERE PHYSICAL DAMAGE. FITTINGS ON STEEL CONDUIT SHALL BE COMPRESSION TYPE.
- 10. PROVIDE ONE-INCH EMPTY CONDUITS EXTENDING ABOVE CEILING FOR ALL TELEPHONE AND DATA OUTLETS SHOWN ON PLANS. PROVIDE PROTECTIVE BUSHINGS ON ENDS OF CONDUIT. ALL CABLING IS PROVIDED BY OTHERS.
- 11. PROVIDE 3/4-INCH EMPTY CONDUITS TERMINATING ABOVE THE CEILING FOR ALL HVAC THERMOSTATS. JUNCTION BOXES SHALL MATCH ORIENTATION OF THERMOSTATS PROVIDED BY M.C.. MOUNT JUNCTION BOXES 48-INCHES A.F.F. UNLESS NOTED OTHERWISE. PROVIDE PROTECTIVE BUSHINGS ON ENDS OF CONDUIT.
- 12. PANELBOARDS FOR SERVICE ENTRANCE SHALL BE SERVICE ENTRANCE RATED. PROVIDE NEMA 3R PANELBOARDS WHERE LOCATED OUTSIDE. PROVIDE NEUTRAL AND GROUNDING BARS IN ALL PANELBOARDS UNLESS NOTED OTHERWISE. GROUND ALL SERVICE ENTRANCE PANELS IN ACCORDANCE WITH THE NEC.
- 13. PROVIDE TYPE WRITTEN PANEL SCHEDULES IN EACH PANEL INDICATING THE LOAD DESCRIPTION FOR EACH BREAKER. LABEL PANELS ON PANEL FACE WITH PHENOLIC LABELS INDICATING PANEL NUMBER OR LETTER DESIGNATION, VOLTAGE AND PHASE.
- 14. PROVIDE FUSED AND NON-FUSED DISCONNECT SWITCHES AS INDICATED ON PLANS. DISCONNECTS LOCATED OUTSIDE SHALL BE NEMA-3R. PROVIDE REJECTION CLIPS IN FUSED DISCONNECTS.
- 15. PROVIDE HORSEPOWER RATED STARTERS AND DISCONNECTS WHEN CONNECTED TO MOTORS. STARTERS SHALL BE PROVIDED WITH OVERLOAD SIZED TO MATCH MOTOR RATINGS.
- 16. PROVIDE LIGHTING AS SCHEDULED IN THE FIXTURE SCHEDULE OR OTHERWISE NOTED ON PLANS. LIGHTING INSTALLED IN SUSPENDED CEILINGS SHALL BE SUPPORTED INDEPENDENTLY OF THE CEILING GRID SYSTEM.
- 17. PROVIDE EMERGENCY AND EXIT LIGHTS AS SHOWN ON PLANS. POWER SHALL BE PROVIDED FROM LIGHTING CIRCUITS ON THE UNSWITCHED LEG OF THE CIRCUIT SUCH THAT POWER TO THE EMERGENCY AND EXIT LIGHTS IS NOT DISCONNECTED WHEN NORMAL LIGHTING IS OFF. EXTERIOR EMERGENCY LIGHTS SHALL BE WIRED SUCH THAT PHOTOCELL AND/OR TIME CLOCK OPERATION DOES NOT DISCONNECT POWER TO BATTERIES.
- 18. RECEPTACLES SHALL BE 20 AMP, 120V UNLESS NOTED OTHERWISE.
- 19. RECEPTACLES ABOVE COUNTERTOPS AND ADJACENT TO SINKS & LAVATORIES SHALL BE GROUND
- 20. RECEPTACLES INSTALLED OUTSIDE SHALL BE GROUND FAULT WITH "IN USE" WEATHERPROOF COVERS.
- 21. WALL SWITCHES SHALL BE SINGLE POLE, 20 AMP, 120/277V.
- 22. PROVIDE STANDARD SIZE WALL PLATES FOR ALL DEVICES AND BLANK WALL PLATES FOR JUNCTION BOXES. WALL PLATES SHALL BE HIGH IMPACT, SMOOTH NYLON, COLOR TO MATCH DEVICE.
- 23. GUARANTEE ALL EQUIPMENT, MATERIALS AND INSTALLATION FREE OF DEFECTS FOR A PERIOD OF 1-YEAR AFTER DATE OF ACCEPTANCE.

	LIGHT FIXTURE SCHEDULE											
MARK	DESCRIPTION	TYPE	LAMP NO.	WATTS	BALLAST TYPE	NO.	FIXTURE INPUT WATTS	VOLTS	LUMENS	NOTES		
В	WALL MOUNTED FIXTURE	LED	_	_	-	_	50 MAX.	120	2500 MAX.	FIXTURE SELECTED BY OWNER U.L. LISTED FOR WET/DAMP LOCATIONS		
B2	2x4 LAY-IN TROFFER	LED	_	32	-	_	32	120	3900			
В3	2x4 LAY-IN TROFFER	LED	_	47	-	_	47	120	5500			
C2	6" RECESSED DOWNLIGHT	LED	-	30	-	_	30	120	2550			
S3	4' SURF. MOUNTED LED	LED	_	50	-	_	50	120	6500			
ST8	8' SUSPENDED LED STRIP	LED	_	68	-	_	68	120	8800			
W1	WALL PAK	LED	_	48	-	_	48	120	4768			
EX	EXIT LIGHT	LED	1	1	-	_	1	120	_			
EXEM	EXIT/EMER. LIGHT	(LED) PAR	2	6	-	_	12	120	_			
EXEMRH	EXIT/EMER. LIGHT WITH REMOTE HEADS	(LED) PAR	4	6	-	_	24	120	_			
EM	EMERGENCY LIGHT	(LED) PAR	2	6	-	_	12	120	_			

- 1. PROVIDE EXIT LIGHTS WITH SINGLE OR DOUBLE-FACE AS REQUIRED, CHEVRON DIRECTIONAL INDICATORS, MOUNTING BRACKETS & NICKEL CADMIUM BATTERY BACKUP.
- 2. PROVIDE ALL FIXTURES WITH LAMPS OF MODERATE TONE (3500K) AND GOOD CRI (COLOR RENDERING INDEX).
- 3. FIXTURES SHOWN WITH DIAGONAL LINES SHALL OPERATE ALL TIMES AS NIGHT LIGHTS.
- 4. PROVIDE FIXTURES BY LITHONIA, COLUMBIA, HUBBLE, OR EQUAL PRODUCT.

# **ELECTRICAL SYSTEM AND EQUIPMENT**

METHOD OF COMPLIANCE:

PRESCRIPTIVE 🛛 PERFORMANCE TRADE-OFF

## LIGHTING SCHEDULE

LAMP TYPE REQUIRED IN FIXTURE	SEE LIGHTING SCHEDULE ON PLANS
NUMBER OF LAMPS IN FIXTURE	11
BALLAST TYPE USED IN THE FIXTURE	11
NUMBER OF BALLASTS IN THE FIXTURE	n
TOTAL WATTAGE PER FIXTURE	"

EQUIPMENT SCHEDULES WITH MOTORS (NOT USED FOR MECHANICAL SYSTEMS)

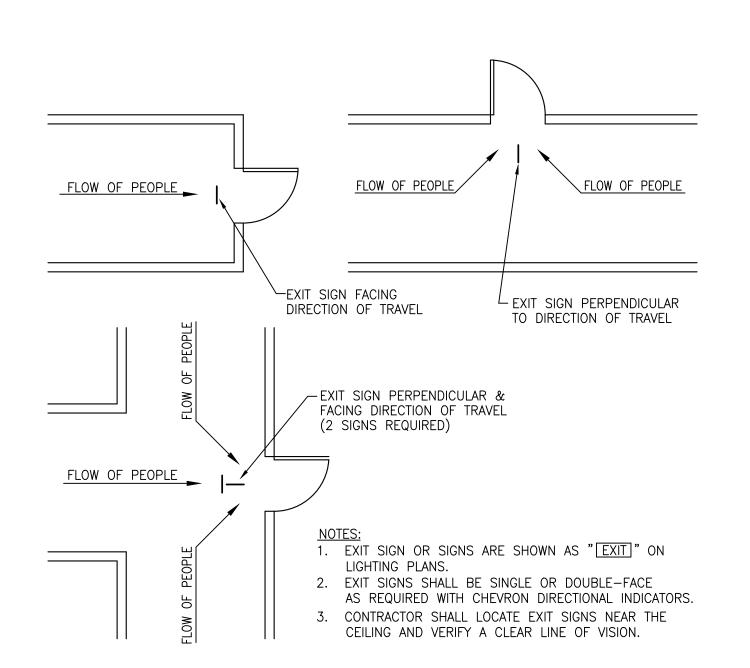
MOTOR HORSEPOWER	N/A - NO MOTORS LARGER THAN 1 HP SPECIFIED ON THESE PLANS
NUMBER OF PHASES	OTHER THAN AS LISTED IN MECHANICAL SCHEDULES
MINIMUM EFFICIENCY	
MOTOR TYPE	
# OF POLES _	

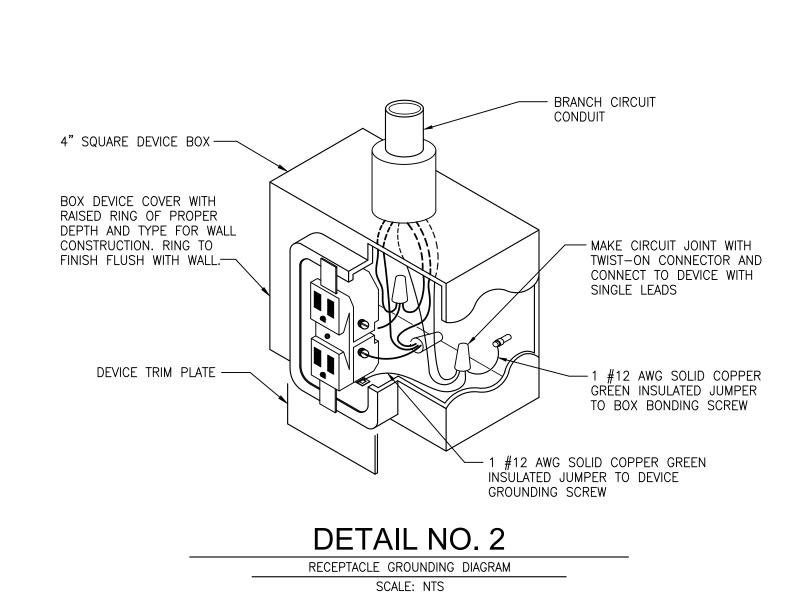
	ELECTRICAL LEGE	$\overline{ND}$
SYM.	DESCRIPTION	REMARKS
<b>(</b>	JUNCTION BOX	DOUBLE GANG UNO
T	THERMOSTAT JUNCTION BOX	MOUNT 48" TOD AFF UNO
□┐	NON-FUSED DISCONNECT	_
$\square_1$	FUSED DISCONNECT	-
$\boxtimes_1$	COMBINATION STARTER	_
<u>(S)</u>	OCCUPANCY SENSOR	_
\$	SWITCH	MOUNT 48" TOD AFF
\$ <sub>DPST</sub>	DOUBLE POLE SINGLE THROW SWITCH	MOUNT 48" TOD AFF
\$ <sub>SPDT</sub>	SINGLE POLE DOUBLE THROW SWITCH	MOUNT 48" TOD AFF
\$ <sub>D</sub>	FLUORESCENT DIMMER SWITCH	MOUNT 48" TOD AFF COORDINATE WITH BALLAST
\$ <sub>D3</sub>	FLUORESCENT 3-WAY DIMMER SWITCH	MOUNT 48" TOD AFF COORDINATE WITH BALLAST
\$ <sub>D</sub>	1000W INCANDESCENT DIMMER SWITCH	MOUNT 48" TOD AFF
\$ <sub>D3</sub>	1000W INCANDESCENT 3-WAY DIMMER SWITCH	MOUNT 48" TOD AFF
\$ <sub>D</sub>	2000W INCANDESCENT DIMMER SWITCH	MOUNT 48" TOD AFF
\$ <sub>D3</sub>	2000W INCANDESCENT 3-WAY DIMMER SWITCH	MOUNT 48" TOD AFF
\$ <sub>P</sub>	PILOT LIGHT SWITCH	MOUNT 48" TOD AFF
\$ <sub>T</sub>	15-MINUTE TIMER SWITCH W/HOLD	_
\$3	3 WAY SWITCH	MOUNT 48" TOD AFF
\$4	4 WAY SWITCH	MOUNT 48" TOD AFF
\$ <sub>K</sub>	KEYED SWITCH	MOUNT 48" TOD AFF
\$ <sub>K3</sub>	KEYED 3-WAY SWITCH	MOUNT 48" TOD AFF
\$ <sub>M</sub>	MANUAL MOTOR STARTER SWITCH	MOUNT AS REQUIERD
Ф	RECEPTACLE	MOUNT 16" BOD AFF
<b>b</b>	UPS RECEPTACLE	MOUNT 16" BOD AFF
ЫG	ISOLATED GROUND RECEPTACLE	MOUNT 16" BOD AFF
₩ <sub>GFI</sub>	GROUND FAULT RECEPTACLE	MOUNT 6" ABV. COUNTER
₩P GFI	GROUND FAULT, WEATHERPROOF RECEPT.	MOUNT 24" BOD AFG
Ů <sub>CLG</sub>	CEILING RECEPTACLE	_
₩ <sub>TR</sub>	TAMPER RESISTANT RECEPTACLE	_
₩ WAFI	ARC FAULT RECEPTACLE	MOUNT 16" BOD AFF
₩ <sub>FLR</sub>	FLOOR RECEPTACLE	_
8	DOUBLE DUPLEX RECEPTACLE	-
⊕•	HOSPITAL GRADE RECEPTACLE	VERIFY RECEPTACLE HEIGHTS WITH OWNER
∯ <sub>GFI</sub>	HOSPITAL GRADE GROUND FAULT RECEPTACLE	VERIFY RECEPTACLE HEIGHTS WITH OWNER
P1	DRY TYPE TRANSFORMER	_
TVSS	TRANSIENT VOLTAGE SURGE PROTECTOR	_
CKT #	CIRCUIT IDENTIFIER	_
ALS	ASSISTIVE LISTENING SYSTEM	SYSTEM SHALL BE PERMANENTLY INSTALLED
ARA MASTER	AREA OF RESCUE ASSISTANCE MASTER STATION	LOCATE AT MAIN ENTRANCE
ARA	AREA OF RESCUE ASSISTANCE DEVICE	MOUNT 48" TOD AFF
▼	PHONE OUTLET	DOUBLE GANG UNO
1	DATA/PHONE OUTLET	DOUBLE GANG UNO
CATV	CABLE TELEVISION OUTLET	SINGLE GANG UNO
NOTES	<u>S:</u>	

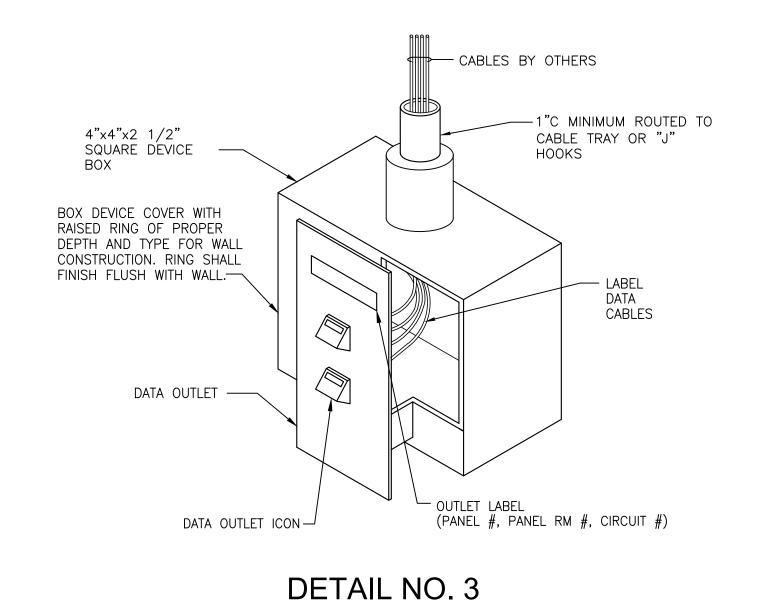
- 1. STANDARD MOUNTING HEIGHTS OF DEVICES SHALL BE AS LISTED IN LEGEND. SPECIFIC MOUNTING HEIGHT OF A DEVICE MAY VARY AS NOTED ON PLANS. 2. E.C. SHALL COORDINATE COLOR SELECTION OF DEVICES AND COVERPLATES
- WITH ARCHITECT, OWNER AND/OR G.C. 3. PROVIDE EQUIPMENT SHOWN BY HUBBELL, PASS & SEYMOUR, COOPER WIRING DEVICES, OR EQUAL PRODUCT.
- 4. OPERATING DEVICES AND OPERABLE PARTS OF OPERATING DEVICES SUCH AS LIGHT SWITCHES, RECEPTACLES, THERMOSTATS, ALARMS, ETC., SHALL BE LOCATED WITHIN REACH RANGES AS SPECIFIED PER ANSI A117.1-2009.

# ABBREVIATIONS:

ADDITE VIA THOUSE	
G.C.	GENERAL CONTRACTOR
P.C.	PLUMBING CONTRACTOR
M.C.	MECHANICAL CONTRACTOR
E.C.	ELECTRICAL CONTRACTOR
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
UNO	UNLESS NOTED OTHERWISE
Ę.	CENTERLINE OF DEVICE
BOD	BOTTOM OF DEVICE
TOD	TOP OF DEVICE

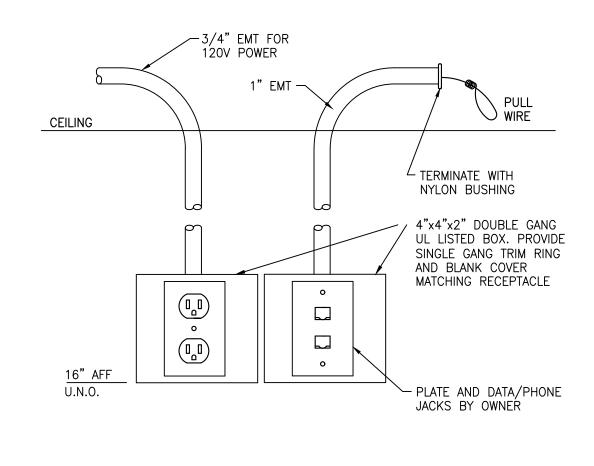






DATA OUTLET

SCALE: NTS

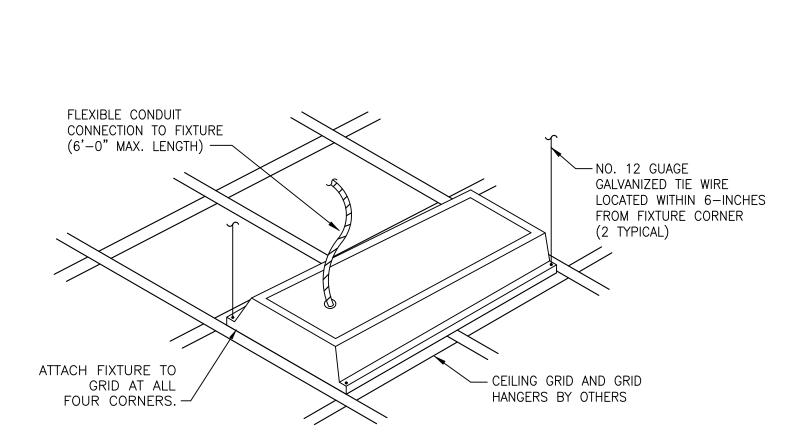


FINISHED FLOOR

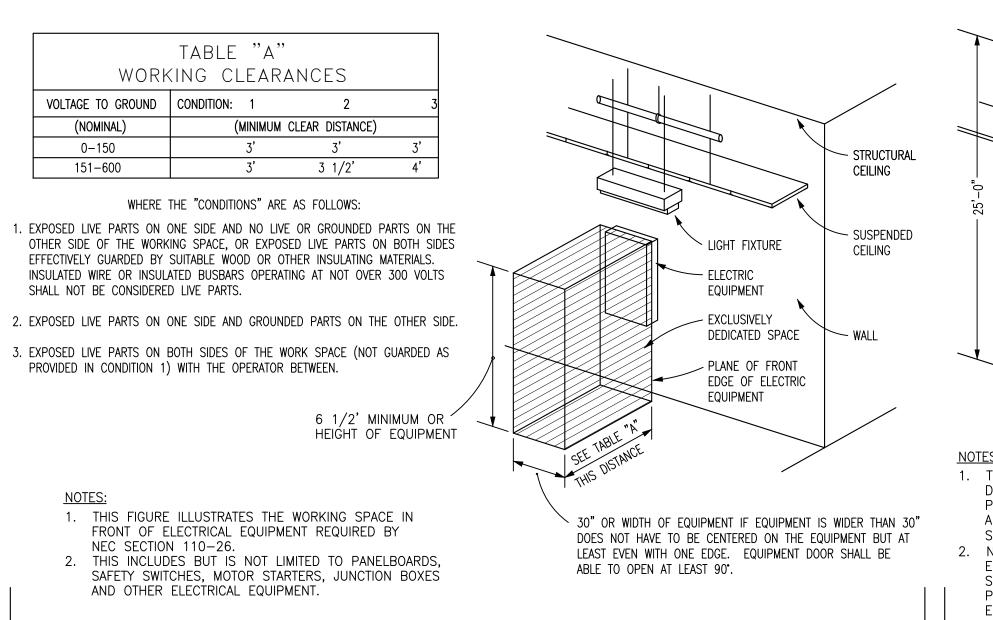
DETAIL NO. 4 POWER/DATA/PHONE OUTLET

SCALE: NTS

DETAIL NO. 1 LOCATIONS OF EXIT SIGNS SCALE: NTS



DETAIL NO. 5 TYPICAL RECESSED FIXTURE SUPPORT SCALE: NTS



ALL ELECTRIC EQUIPMENT

1. THIS FIGURE ILLUSTRATES THE ADDITIONAL EXCLUSIVELY DEDICATED SPACE REQUIRED OVER AND UNDER PANELBOARDS FOR CABLES, RACEWAYS, ETC. TO AND FROM PANELBOARDS REQUIRED BY NEC SECTION 110-26.

NO PIPING, DUCTWORK OR EQUIPMENT FOREIGN TO THE ELECTRICAL EQUIPMENT OR ARCHITECTURAL APPURTENANCES SHALL BE PERMITTED TO BE INSTALLED IN, ENTER OR PASS THROUGH THE DEDICATED SPACES SHOWN. FOR EXCEPTIONS SEE NEC SECTION 110-26f.

DEDICATED SPACE CONTINUES - THROUGH SUSPENDED CEILING TO 6' ABOVE ELECTRICAL EQUIPMENT OR

IS LOWER.

EXCLUSIVELY

- Panelboard

- EXCLUSIVELY

DEDICATED SPACE

DEDICATED SPACE

STRUCTURAL CEILING, WHICHEVER

- STRUCTURAL

SUSPENDED

CEILING

CEILING

PANELBOARDS

DETAIL NO. 6

DEDICATED WORKING SPACE REQUIREMENTS SCALE: NTS

DATE: 19 February 2024 DRAWN BY: T.B. & L.W.

WILLIAM CAROLINA

024916 2-19-24

# SEQUENCE OF OPERATION

UPON THE ACTIVATION OF A PULL STATION OR FLOW OF WATER IN A FIRE PROTECTION LINE, THE FACP SHALL RESPOND BY ACTIVATING AUDIO/VISUAL ALARMS, STOPPING APPROPRIATE AHU'S, AND SENDING AN EXTERNAL SIGNAL TO THE PROPER DESIGNATED RECIPIENT.

UPON THE CLOSING OF VALVES SERVING THE FIRE PROTECTION SYSTEM. THE FACP SHALL RESPOND BY

UPON THE CLOSING OF VALVES SERVING THE FIRE PROTECTION SYSTEM, THE FACP SHALL RESPOND BY ACTIVATING A SUPERVISORY SIGNAL AT THE FACP, INDICATING THE ACTUAL DEVICE ACTIVATED AND SENDING AN EXTERNAL SIGNAL TO THE PROPER DESIGNATED RECIPIENT.

UPON THE GROUNDING, OPENING OR MALFUNCTION OF A CIRCUIT CONDUCTOR, THE FIRE ALARM PANEL SHALL RESPOND BY ACTIVATING A TROUBLE SIGNAL AT THE FACP.

UPON THE DETECTION OF SMOKE BY AN AREA SMOKE DETECTOR, THE FACP SHALL RESPOND BY PERFORMING ALARM VERIFICATION AND THEN EITHER RESETTING OR PROCEEDING TO ACTIVATE AUDIO/VISUAL ALARMS, STOPPING APPROPRIATE AHU'S AND SENDING AN EXTERNAL SIGNAL TO THE PROPER DESIGNATED RECIPIENT SIMULTANEOUSLY.

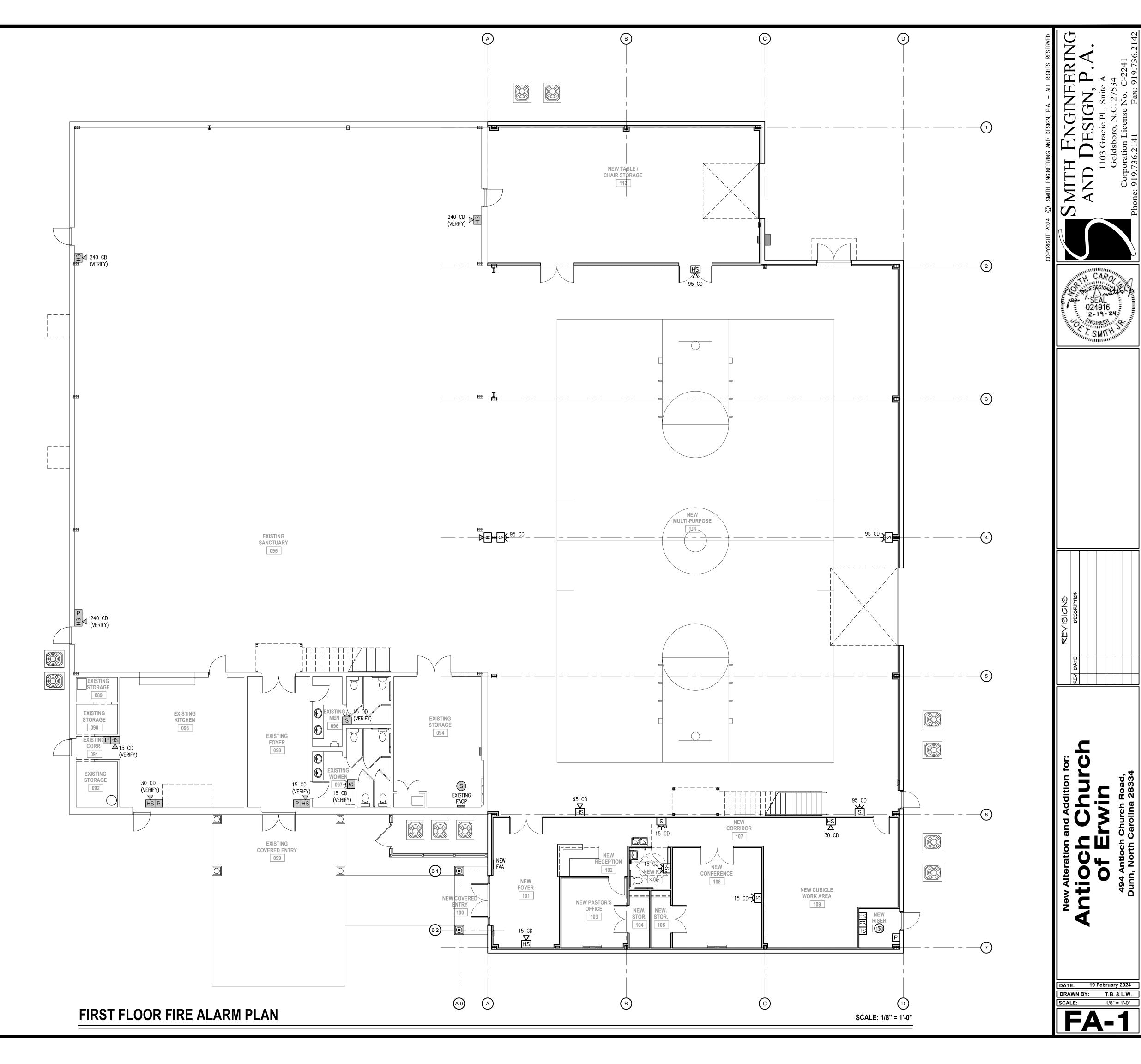
A SUPERVISED "AHU SHUTDOWN DEFEAT" SWITCH SHALL BE PROVIDED IN OR ADJACENT TO THE FACP. THE SWITCH SHALL REACTIVATE AHU'S AND CAUSE A "TROUBLE" INDICATION WHEN IT'S PLACED IN THE OFF-NORMAL SHUTDOWN DEFEATED POSITION.

# FIRE ALARM NOTES

FIRE ALARM PLANS ARE INTENDED TO PROVIDE INFORMATION FOR INSTALLATION OF A COMPLETE SYSTEM. PROVIDE ALL ESSENTIAL LABOR, MATERIALS & DEVICES REQUIRED TO PRODUCE A QUALITY FND PRODUCT

- 2. FIRE ALARM CONTRACTOR SHALL REVIEW & BECOME FAMILIAR WITH THE WORK OF ALL TRADES FOR PURPOSES OF COORDINATION AND ROUTING. CONTRACTOR SHALL PROVIDE REQUIRED PLANNING, COORDINATION AND SEQUENCING OF FIRE ALARM INSTALLATION WITH BUILDING COMPONENTS AND OTHER TRADES.
- 3. ALL WORK SHALL COMPLY WITH THE LOCAL FIRE CODE, THE NATIONAL ELECTRICAL CODE (NEC) AND NFPA 72. WORKMANSHIP SHALL MEET OR EXCEED INDUSTRY STANDARDS.
- 4. FIRE ALARM CONTRACTOR SHALL VERIFY THAT SECONDARY SUPPLY HAS SUFFICIENT CAPACITY TO OPERATE FOR 24 HOURS WHEN SYSTEM IS FUNCTIONING IN A NON-ALARM CONDITION. AT THE END OF THAT PERIOD, THE SECONDARY SUPPLY SHALL BE CAPABLE OF OPERATING IN ALARM MODE FOR 5 MINUTES. FIRE ALARM INSTALLER SHALL CERTIFY CALCULATED CAPACITY TO DRIVE THE SYSTEM PER NFPA 72 ON FORM FOR RECORD OF COMPLETION.
- 5. ALL WIRING, DEVICES AND OTHER LIKE MATERIALS SHALL BE UL LISTED & LABELED.
- 6. CONDUIT SHALL BE EMT WITH COMPRESSION TYPE FITTINGS WHERE EXPOSED OR AS REQUIRED BY LOCAL AUTHORITY HAVING JURISDICTION.
- 7. FIRE ALARM CONTRACTOR SHALL PROVIDE AN ADDRESS MAP AT ANNUNICATOR AND MAIN FACP LOCATIONS. PROVIDE FRAMED OPERATING INSTRUCTIONS AT MAIN FACP.
- 8. VISUAL NOTIFICATION APPLIANCES MUST BE SYNCHRONIZED WHERE MORE THAN TWO APPLIANCES CAN BE VIEWED AT THE SAME TIME.
- 9. AUDIBLE NOTIFICATION APPLIANCE SOUND LEVELS SHALL BE FIELD—TESTED. SOUND LEVEL SHALL BE 15 dBA MINIMUM ABOVE AMBIENT SOUND LEVEL IN ROOM OR SPACE; OR 5 dBA ABOVE ANY MAXIMUM SOUND LEVEL HAVING A 60 SECOND MINIMUM DURATION WHICHEVER IS LOUDER. SOUND PATTERN SHALL BE OF THREE BEAT TEMPORAL PATTERN.
- 10. AREA HEAT AND SMOKE DETECTORS SHALL BE LOCATED NO CLOSER THAN 3-FT. FROM SUPPLY AIR DIFFUSERS. ADJUST LOCATIONS IN FIELD AS REQUIRED AND MAINTAIN MAXIMUM SPACING LIMITATIONS PER NFPA 72.

	FIRE ALARM LEGEND										
SYMBOL	DESCRIPTION	REMARKS									
<b>V</b> ∃	AUDIBLE NOTIFICATION APPLIANCE "HORN" (120 dBA MAX.)	MOUNT BOTTOM OF DEVICE 90" ABOVE FINISH FLOOR									
<b>V</b> HS	AUDIBLE / VISUAL NOTIFICATION APPLIANCE "HORN STROBE" (120 dBA MAX. & CANDELA AS NOTED)	MOUNT BOTTOM OF DEVICE 90" ABOVE FINISH FLOOR									
SH	EXISTING AUDIBLE / VISUAL NOTIFICATION APPLIANCE "HORN STROBE" (VERIFY 120 dBA MAX. & CANDELA AS NOTED)										
	AUDIBLE / VISUAL NOTIFICATION APPLIANCE "HORN STROBE" (120 dBA MAX. & CANDELA AS NOTED)	CEILING MOUNTED DEVICE									
<b>★</b> S	VISUAL NOTIFICATION APPLIANCE "STROBE" (CANDELA AS NOTED)	MOUNT BOTTOM OF DEVICE 90" ABOVE FINISH FLOOR									
s	EXISTING VISUAL NOTIFICATION APPLIANCE "STROBE" (VERIFY CANDELA AS NOTED)										
¥©¥	VISUAL NOTIFICATION APPLIANCE "STROBE" (CANDELA AS NOTED)	CEILING MOUNTED DEVICE									
Р	MANUAL ALARM PULL STATION	MOUNT TOP OF DEVICE 48" ABOVE FINISH FLOOR									
Р	EXISTING MANUAL ALARM PULL STATION										
<u>S</u>	AREA SMOKE DETECTOR	CEILING MOUNTED UNLESS NOTED OTHERWISE									
S	EXISTING AREA SMOKE DETECTOR										
©	AREA CARBON MONOXIDE DETECTOR	CEILING MOUNTED UNLESS NOTED OTHERWISE									
<b>S</b> D	HVAC DUCT SMOKE DETECTOR	MOUNTED IN RETURN DUCT									
SD	EXISTING HVAC DUCT SMOKE DETECTOR										
<b>SB</b> >	BEAM SMOKE DETECTOR SYSTEM (Tx/Rx WITH REFLECTOR)	BOD 12" MIN. FROM CLG. / BOD 10' MIN30' MAX. FROM FLOOR									
$\bigoplus$	AREA HEAT DETECTOR	CEILING MOUNTED UNLESS NOTED OTHERWISE									
PS	POWER SUPPLY UNIT										
TS	FIRE SPRINKLER TAMPER SWITCH	SEE PLANS FOR LOCATION									
FS	FIRE SPRINKLER FLOW SWITCH	SEE PLANS FOR LOCATION									
FACP	FIRE ALARM CONTROL PANEL	SEE PLANS FOR LOCATION									
FAA	FIRE ALARM ANNUNCIATOR	SEE PLANS FOR LOCATION									
BPS	BATTERY POWER SUPPLY	SEE PLANS FOR LOCATION									





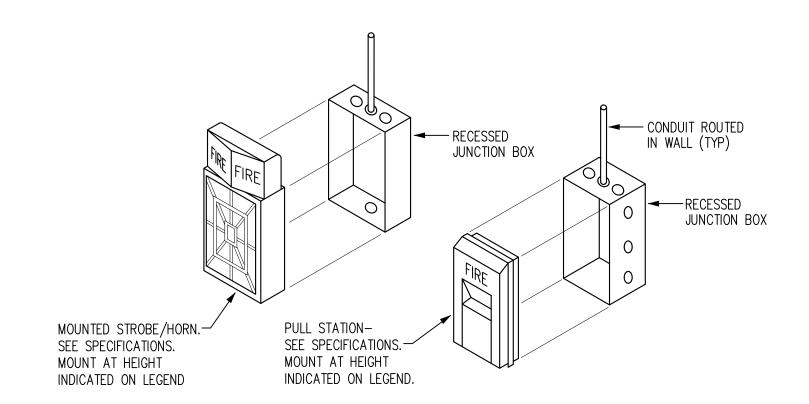
# NOTES:

1. PHENOLIC LABEL, 4" WIDE x 2" IN HEIGHT, SUPPLIED BY THE ELECTRICAL CONTRACTOR, RED IN COLOR WITH WHITE LETTERING (1/2" HIGH).

- INSERT PANEL DESIGNATION AT "X" LOCATION. AND BLACK LETTERING (1/4" HIGH).
- 3. INSERT CIRCUIT DESIGNATION AT "XX" LOCATION.
  AND BLACK LETTERING (1/4"HIGH).

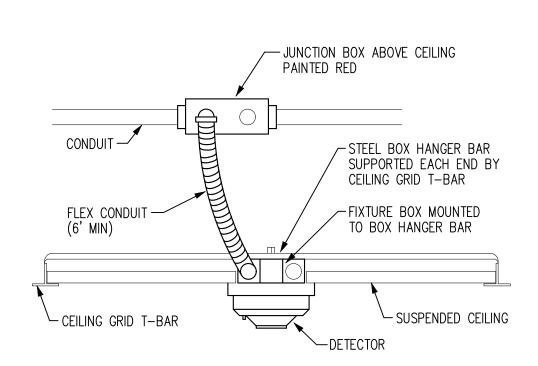
# DETAIL NO. 1

FIRE ALARM PANEL LABEL
SCALE: NTS



# DETAIL NO. 2

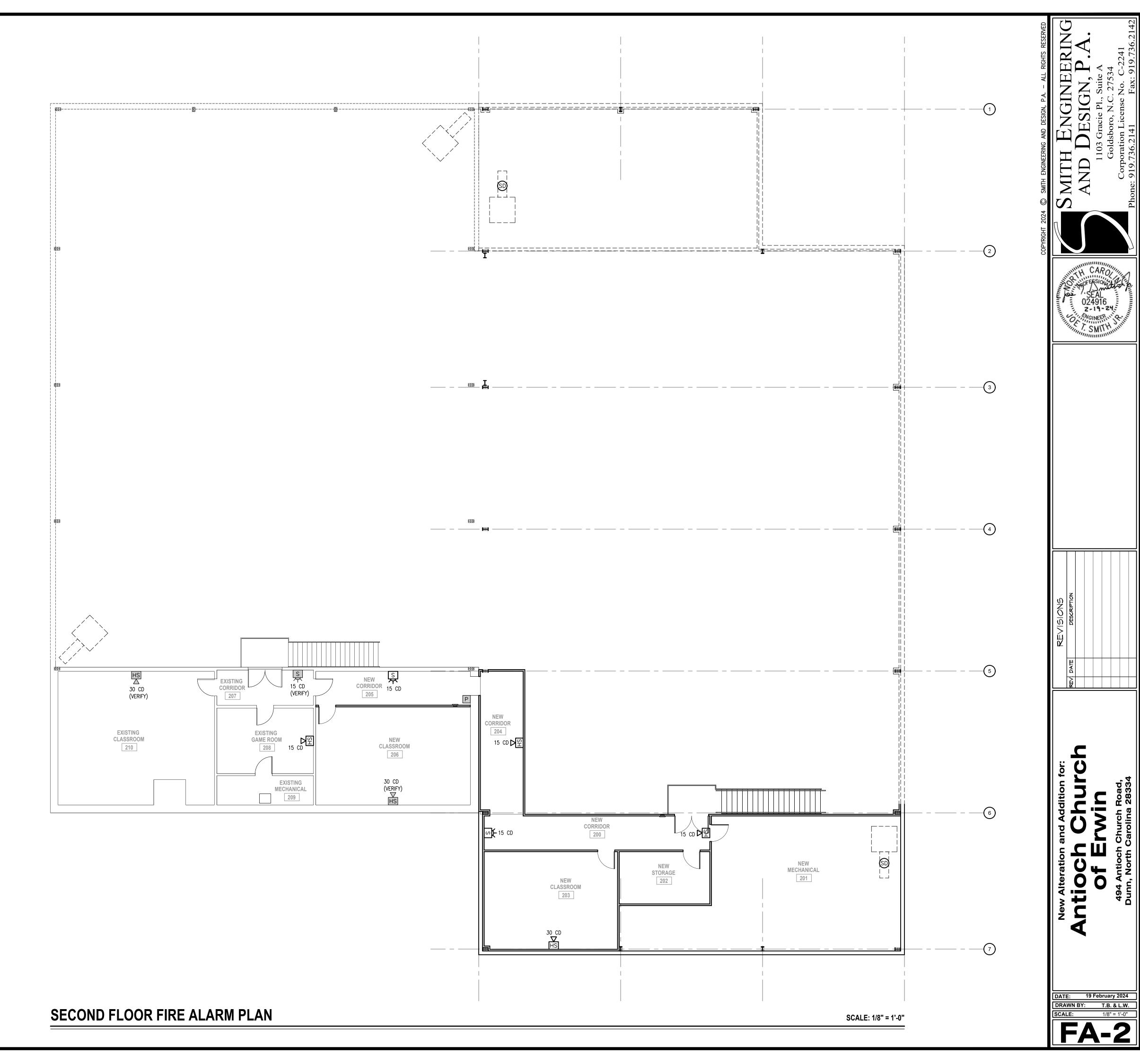
FIRE ALARM DEVICE MOUNTING

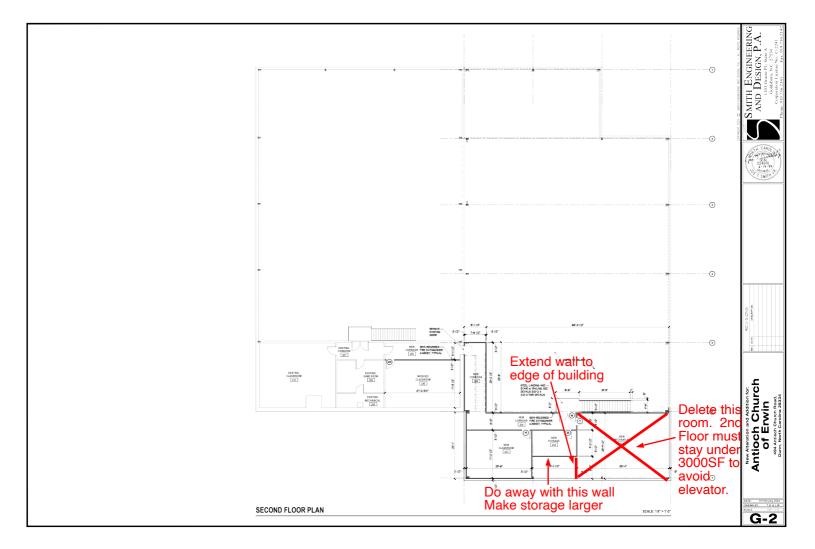


# DETAIL NO. 3

TYPICAL CEILING MOUNTED SMOKE DETECTOR

SCALE: NTS







## INLAND BUILDINGS

2141 SECOND AVENUE S.W. CULLMAN, ALABAMA 35055 PHONE: 800-438-1606

FAX: 800-438-1626 www.inlandbuildings.com

## BUILDING DESCRIPTION

BUILDING SIZE:	<u> 75.00' x 125.00' x 20.46' x 23.58' SLC</u>	<i>PE:</i> 0.5:12
BUILDING SIZE:	50.00' x 25.00' x 21.50' x 23.58' <i>SLC</i>	PE: 0.5:12
BUILDING SIZE:	SLC	PE:
BUILDING SIZE:	SLC	PE:
	· .	·

(BUILDING DIMENSIONS ARE NOMINAL, REFER TO PLANS)

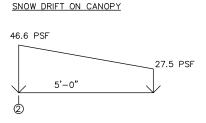
This is to certify that this structure is designed utilizing the loads indicated and applied as required by the building code shown below. The certification is limited to the structural design of the framing and covering parts manufactured by the building manufacturer and is specified in the contract. Accessory items such as doors, window, louvers, translucent panels, and ventilators are not included. Also excluded are other parts of the project not provided by the building manufacturer such as foundations, masonry walls, mechanical equipment and erection of the building. The building should be erected on a properly designed foundation in accordance with the building manufacturer's design manual, the attached drawings and good erection practices.

Design Code NCBC 18	de 11003.	
General Loads	BUILDING "A"	BUILDING "B"
Roof Dead Load (D)	<u>2.50</u> psf	<u>2.50</u> psf
Roof Collateral Load (C)	5.00 psf	5.00 psf
Roof Live Load (Lr) Tributary Live Load Reduction	<u>20.00</u> psf No	<u>20.00</u> psf No
Snow Load		
Flat-Roof Snow Load (Pf)	<u>7.7000</u> psf	psf
Ground Snow Load (Pg)	10.0000 psf 11.0000 psf	10.0000 psf psf
Min. Snow (Low Slope) (Pmin) Snow Exposure Factor (Ce)	1.0000 1.0000	1.0000 psi
Snow Load Importance Factor (Is)	1.1000	1.1000
Thermal Factor (Ct)	1.00	1.00
Wind Load Wind Speed (V 3S)	N/A	N/A
Wind Speed (V 33) Wind Speed (Vult & Vasd)	130.0000 mph 100.6975 mph	130.0000 mph 100.6975 mph
Occupancy / Risk Category	III- High	I <u>II High</u>
Wind Exposure Category Internal Pressure Coefficient (GCpi)	<u>B</u> +/- 0.18	<u>B</u> +/- 0.18
Wind Enclosure	Enclosed	Enclosed
Wind Importance Factor	<u>N/A</u>	<u>N/A</u>
Seismic Load	1.25	1.25
Seismic Importance Factor (le) Spectral Response Accelerations (Ss and S1)	0.1810 0.0850	0.1840 0.0860
Site Class	D 0.4370	D
Spectral Response Coeffecients (Sds and Sd1) Seismic Design Category	0.1360 C	<u>0.19626764</u> 8 <u>0.13760068</u> 8 C
Basic Seismic—Force—Resisting System(s) *	<u>-</u>	<del></del>
	Longitudinal Lateral	Longitudinal Lateral
Total Design Base Shear (V)	7.91 Kips 8.66 Kips 0.0805	1.23 Kips 0.64 Kips 0.0805
Seismic Response Coefficient(s) (Cs) Response Modification Factor(s) (R)	3.0000 3.0000	3.0000 3.0000

\* Steel Systems not Specifically Detailed for Seismic Resistance

Analysis Procedure: Equivalent Lateral Force

ADDITIONAL LOADS:
BEAM ONLY BY IBS TO SUPPORT WOOD JOISTS BY OTHERS @ LINE 5A LOADS: 100 PSF LIVE LOAD 20 PSF LIVE LOAD



### PANEL, TRIM AND FRAMING INFORMATION ROOF PANELS TRIM COLOR: Bone White (Kynar COLOR: Bone White (Ky TYPE: PBR GAUGUL90 CERTIFICATION: GAUGE: 26 COLOR: Galvalume RAKE Yes 6 & 3.5 in. Simple Saver(By Others) EAVE: GUTTER: DOWNSPOUT: COLOR: INSULATION: Bone White (Kynar) N/A MASTIC: Wide COLOR: VALLEY GUTTER: IF STANDING SEAM: CLIP TYPE: HEADER: COLOR: Bone White (Kynar COLOR: Bone White (Kynar SILL: JAMB: WALL PANELS COLOR: Bone White (Kynar COLOR: Bone White (Ky BASE TRIM: TYPE: PBR | GAUGE: 26 | COLOR: Bone White (Kynar) | INSULATION: 8 in. Simple Saver(By Others) COLOR: COLOR: LINER. CANOPY SOFFIT PANELS FASCIA SILL: COLOR: TYPE: PBU GAUGE: 26 COLOR: TBD CAP TRIM: COLOR:

PRIMARY FRAMING

(MAIN FRAMES & ENDWALL FRAMES) Red-Oxide (WIND COLUMNS & BENTS)

SECONDARY FRAMING

(GIRTS, EAVE STRUTS, PURLINS DOOR/FRAMED OPNG. & CLIPS ETC.) Red-0xide

CANOPY ROOF PANELS

TYPE: PBR GAUGE: 26 COLOR: TBD

For Permit These drawings, being For permit, are be definition Not final In that, as a minimum, piece marks are Not identified. Only drawings issued "For Construction" can be considered complete.

Loads, as noted, are as given within order documents And are applied in general accordance with the applicable provisions of the model code And/Or specification indicated. Neither the manufacturer nor the certifying engineer declares Or attests that the loads as designated are proper for local provisions that may apply Or for site specific parameters. The manufacturer's engineer's certification is limited to designs supplied by and/or engineer of record for the overall construction project.
DN 10

This metal building system is designed as enclosed. All exterior components (i.e. doors, windows, vents, etc.) must be designed to withstand the specified wind loading for the design of components and cladding in accordance with the specified building code. Doors are to be closed when a maximum of 50% of design wind velocity is reached.

X-Bracing is to be installed to a taut condition with all slack removed. Do not tighten beyond this state.

The framing as shown at the REW Line 7 & LEW Line 1 is not designed for future expansion. Corresponding frame reactions are calculated based upon actual tributary area.

DN 27

Per ASCE 7—10 this structure qualifies and was designed as a fully enclosed structure.

The framed opening support members provided are designed ONLY for wind load forces exerted "normal (perpendicular) to the opening". No additional loads are included.

INLAND BUILDINGS - 2141 SECOND AVENUE S.W. CULLMAN, ALABAMA 35055

THE ENGINEER WHOSE SEAL APPEARS HEREON IS RETAINED BY INLAND BUILDINGS

FRED F. RADFAR P.E. 30 WINDERMERE LANE HOUSTON, TEXAS 77063 fred@radfarpe.com THESE DRAWINGS AND THE METAL BUILDING THEY REPRESENT ARE THE PRODUCT OF NORTH CAROLINA LICENSE #010295 EXP. 12/31/24

DATE TH CAROLI TEESSION 010295

	SYSTEMS AND IS NOT THE ENGINEER OF RECORD FOR THIS	S PRO	DJECT.					<u> </u>		
	DRAWING STATUS			REVISIONS				INLAND	BUIL	DINGS
F0	OR APPROVAL:	NO.	DATE	DESCRIPTION	BY	CK'E	\nle	2141 SECOND AVENUE		MAN, AL. 35055
L ∓	HESE DRAWINGS, BEING FOR APPROVAL, ARE BY DEFINITION NOT	Α	7/11/24	FOR PERMIT	SDP	RD	Till	PHONE: 80	0.438.1606 0.438.1626	
PI	NAL, AND ARE FOR CONCEPTUAL REPRESENTATION ONLY. THEIR JRPOSE IS TO CONFIRM PROPER INTERPRETATION OF THE PROJECT						BUILD		buildings.com	
	OCUMENTS. ONLY DRAWINGS ISSUED "FOR CONSTRUCTION" CAN BE DISIDERED AS COMPLETE.						DESCRIPTION	ON COVER PAGE	SIZE	REFER TO C1
	OR PERMIT: HESE DRAWINGS, BEING FOR PERMIT, ARE BY DEFINITION NOT FINAL						OWNER OR PROJECT	R Antioch Church of Erwin	CUSTOMER	MCPHAIL METAL STRUCTURES
_ IN	THAT, AS A MINIMUM, PIECE MARKINGS ARE NOT IDENTIFIED. ONLY					_	JOBSITE	494 ANTIOCH CHURCH RD	ADDRESS	1478 CARROLL STORE ROAD
	RAWINGS ISSUED "FOR CONSTRUCTION" CAN BE CONSIDERED AS DMPLETE.						LOCATION	DUNN, NC 28334		AUTRYVILLE, NC 28318
E	OR CONSTRUCTION:						CAD BY	ENG'R BY DATE SCALE	JOB NO.	PH BLDG. DESC. SHEET NO. ISSUE
FI	NAL DRAWINGS.						SDP	FR 7/11/24 N.T.S.	19881:	2 C1 of 2 A

IAS Certification Accredited Certification # MB-205

DRAWING INDEX

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C2 OF 2 NOTES PAGE

0 F3 OF 5 REACTIONS

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A E7 OF 14 CROSS SECTION

A E8 OF 14 CROSS SECTION

A E9 OF 14 SIDEWALL ELEVATION A E10 OF 14 SIDEWALL ELEVATION

A E11 OF 14 SIDEWALL ELEVATION

A E12 OF 14 ENDWALL ELEVATION

A E13 OF 14 ENDWALL ELEVATION

A E14 OF 14 ENDWALL ELEVATION

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A D2 OF 5 DETAIL PAGES

A D3 OF 5 DETAIL PAGES

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DESCRIPTION

PAGE

ISSUE

Α

### GENERAL NOTES

- The seal that appears on these drawings is the seal of the engineer for this building manufacturer who is NOT the engineer of record.

  This building manufacturer is not responsible for errors, omissions or damages incurred in the erection of building components, nor for the inspection of erected components to ascertain same.
- 3. Temporary bracing must be installed by erector to provide adequate stability during erection. Bracing indicated on the erection drawings is critical to the stability of the completed structure and shall not be
- removed. 4. Wall and liner panels are an integral part of the structural system. Unauthorized removal of panels is
- 5. "Oil—canning", a perceived waviness inherent to light gauge metal, may exist. This condition does not affect the finish or structural integrity of the panel, and is therefore not a cause for rejection.

trim identification number

affect the finish or structural integrity or the pulse, who is successful. 6. Trim part marks are as shown: ex.  $\frac{FL-32-20^{-2}}{L}$  trim length in feet and inches.

### APPROVAL NOTES

The following conditions apply in the event that these drawings are used as approval drawings:

- A) It is imperative that any changes to these drawings:
- Be made in contrasting ink.
- Have all instances of change clearly indicated.
- Be legible and unambiguous.
- B) Dated signature is required on all pages.
- C) Manufacturer reserves the right to re—submit drawings with extensive or complex changes required to avoid misfabrications. This may impact the delivery schedule.

  D) Approval of these drawings indicates conclusively that the manufacturer has correctly interpreted the
- requirements, and further constitutes agreement that the building as drawn, or as drawn with indicated changes represents the total of the materials to be supplied by manufacturer.

  E) Any changes noted on the drawings not in conformance with the terms and requirements of the Any challege includ on the drawings not in contract between manufacturer and its customer are not binding on manufacturer unless subsequently specifically acknowledged and agreed to in writing by change order or separate documentation. Manufacturer recognizes that rubber stamps are routinely used in indicating approval, disapproval, rejection, or mere review of the drawings submitted. However, manufacturer does not accept changes or additions to contractual terms and conditions that may appear with the use of a stamp or similar indication of approval, disapproval, etc. Such language applied to the manufacturer's drawings by the customer, architect, engineer, or any other party will be considered as unacceptable alterations to these drawing notes, and will not alter the contractual rights and obligations existing between manufacturer and its

The building manufacturer has a commitment to manufacture quality building components that can be safely erected, however, the safety commitment and job site practices of the erector are beyond the safely erected, however, the safety commitment and job site practices of the refector are beyond the control of the building manufacturer. It is strongly recommended that safe working conditions and accident prevention practices be the top priority of any job site. Local, state and federal safety and health standards, whether standard statutory or customary, should always be followed to help insure worker safety. Make certain all employees know the safest and most productive way of erecting a building. Emergency procedures should be known to all employees. Daily meetings highlighting safetyprocedures are also recommended. The use of hard hats, rubber sole shoes for roof work, proper equipment for handling material, and safety nets where applicable, are recommended.

### BOLT TIGHTENING

The proper tightening and inspection of all fasteners is the responsibility of the erector. All high strength (A325, A490) bolts and nuts must be tightened by the "turn-of the nut" method unless otherwise specified by the end customer in the contract documents. Inspection of high strength bolt and nut installation by other than the erector must also be specified in the contract documents and the erector is responsible for ensuring that the installation and inspection procedures are compatible prior to the start of erection. (MBMA 2006 iv 6.9)

## BUILDER/CONTRACTOR RESPONSIBILITIES

It is the responsibility of the builder/contractor to insure that all project plans and specifications comply with the applicable requirements of any governing building authorities. The supplying of sealed engineering data and drawings for the metal building system does not imply or constitute an agreement that the building manufacturer or its design engineer is acting as the engineer of record or design professional for a construction project. The contractor must secure all required approval and permits from the appropriate agency as required. Approval of the manufacturer's drawings and calculations indicate that the building manufacturer correctly interpreted and applied the requirements of the contract drawings and specifications. (sect. 4.4.1 AISC code of standard practices, 13th ed.) Where discrepancies exist between the manufacturer's structural steel plans and the plans for other trades, the structural steel plans shall govern. (sect. 3.3 AISC code of standard practice 13th ed.) Design considerations of any material in the structure which are not furnished by the building manufacturer are the responsibility of the contractors and engineers other than the building manufacturer's engineer unless specifically indicated. The contractor is responsible for all erection of steel and associated work in compliance with the building manufacturer's "for erection installation" drawings. Products shipped to builder or his customer shall be inspected by builder immediately upon arrival. Claims for shortages or defective material, if not packaged, must be made to the manufacturer in writing within five (5) days after receipt of the shipment. However, if a defect is of such nature that reasonable visual inspection would fall to disclose it, then the claim must be made within five (5) days after the builder learns of the defect. The manufacturer will not be liable for any defect unless claim is made one (1) year after date of the original shipment by the manufacturer to builder or his customer. The manufacturer will be given a reasonable opportunity to inspect defective materials upon receipt of claim by builder. If a defect is of such nature that it can be remedied by a field operation at the job site without the necessity of returning the material to the manufacturer, then upon written authorization of the manufacturer, the builder may repair or cause the material to be repaired and the manufacturer will reimburse the builder for the cost of the repair in accordance with the written authorization. Unless noted otherwise, all bracing as shown and provided by the manufacturer for this building is required and shall be installed by the erector as a permanent part of the structure. Temporary supports, such as temporary guys, braces, false work, cribbing or other elements required for the erection operation will be determined and furnished and installed by the erector. These temporary supports will secure the steel framing, or any partly assembled steel framing, against loads comparable in intensity to those for which the structure was designed, resulting from wind, seismic forces and erection operations, but not the loads resulting from the performance of work by or the acts of others, nor such unpredictable loads as those due to tornado, explosion or collision. (sect. 7.10.3 AISC code of standard practice, 13th ed.) Design of gutter and downspout is a function of the rainfall intensity and area to be drained. Design such nature that reasonable visual inspection would fail to disclose it, then the claim must be made within ed.) Design of gutter and downspout is a function of the rainfall intensity and area to be drained. Design parameters utilized are in accordance with the 2006 low rise building systems manual and/or the 12th edition of the architectural graphic standards, as applicable. Proper owner maintenance dictates that the drainage system be kept free of debris and/or ice at all times to ensure proper function of the autter and downspout. In those cases where the owner/tenant of a property is unwilling or unable to provide proper maintenance, elimination of gutter should be considered as an alternative.

### Ship To: LUIS MARTINEZ 5487 FM 744 **PAWNDE, TX, 71576** Truck ID: EXPRESS Description BUILDING SERVICE RF1-2 BUILT UP SECTION 10' 7.5/8" 12345 RF2-1 BUILT UP SECTION 8' 3-7/16" 125.0 12345 3 896790 ENDWALL COLUMN 8X35C1 9' 10-15/1 EC-2 ENDWALL COLUMN 8X35C16 11' 8-7/16' 33.3 12345 9 896790 ER-2 NDWALL RAFTER 8X35C14 8' 9-5/8' 12345 896790 LEFT ENDWAL 26GA PRR ENDWALL PANEL 14' 9-1/2 12345 LEFT ENDWALL 26GA PBR ENDWALL PANEL 13' 9-1/2" 12345 39 896790 12" 9-1/2" 12345 UNDLE ZEE BUNDLE ZEE ZEE 8 X 2-3/8 X 2-1/8 16GA RED OXID 17 896790 ZEE 8 X 2-3/8 X 2-1/8 16GA RED OXIDE 12" 7-1/2" 12345 ZEE 8 X 2-3/8 X 2-1/8 16GA RED OXIDE 4" 3-1/2" 11.7 12345 19 896790 ZEE 8 X 2-3/8 X 2-1/8 16GA RED OXIDE 20 896790 8' 1-1/2" 22.0 12345 R PANEL OUTSIDE CLOSURE STRIP 36\* 12345 81 896790 TUBE CAULKING SILICONE CLEAR 10.3 OZ TUBE 12 X 1-1/4 SELF DRILLING CARBON SCREW LIGHT STONE 0.0 12345 91 896790 FL-31 26GA EAVE TRIM - (ALL PANELS) - LIGHT STONE SMP FL-21 26GA SCULTUR STONE SMP FL-10 26GA CORNER TRIM - OUTSIDE ("R" AND "A" 4 10°0° PANEL) DESERT SAND SMP PACKING LIST EXAMPLE

Job Number COLD FORM AND PANEL LABEL Customer ABC CONSTRUCTION 12345 PART NAME LENGTH QTY DESCRIPTION 07522 PO Number LEFT ENDWALL 26 GA. PBR SIDEWALL PANEL 14' 9-1/2" 2 LEFT ENDWALL 26 GA. PBR SIDEWALL PANEL 13' 9-1/2" 2 PA12E9697B4 LEFT ENDWALL 26 GA. PBR SIDEWALL PANEL 12' 9-1/2" 2

TRIM BUNDLE AND WAREHOUSE LABEL C126431 Carton ID-**ABC CONSTRUCTION** Customer 12345 Job Number -

Packing List: 12345

BUNDLE LABEL EXAMPLES

BUILT UP, STRUCTURAL AND FAB. COLD FORM LABEL Job Number 12345 **RF1-1** 

STRAIGHT BILL OF LADING - SHORT FORM - ORIGINAL - NOT NEGOTIABLE DATE BOB'S BUILDING o/o LARRY UNDERWOO 3387 DELTA RD HUEYTOWN, AL 35023 17612 BROWN RD HOUSTON, TX Route: Order # 12345 Ship Status: Order Type: ABC Building Trailer # 50582 Addi Order#s **COD AMOUNT: \$0.00** KIND OF PACKAGES, DESCRIPTION OF ARTICLES. CLASS OR RATI SPECIAL MARKS, AND EXCEPTIONS TOTAL WEIGHT (LBS) 35,260 Any alteration, addition, or ensure in the bill of lading shall be made with the special notation hereon of the party issuaing this Bill of Lading, THIS MATERIAL MUST BE DELIVERED BY

BILL OF LADING EXAMPLE

TRIM PIECE LABEL Piece Mark -12345 -

> ORTH CARO TESSION 010295

PIECE LABEL EXAMPLES

FOR CONSTRUCTION: FINAL DRAWINGS.

THESE DRAWINGS AND THE METAL BUILDING THEY REPRESENT ARE THE PRODUCT OF INLAND BUILDINGS - 2141 SECOND AVENUE S.W. CULLMAN, ALABAMA 35055 THE ENGINEER WHOSE SEAL APPEARS HEREON IS RETAINED BY INLAND BUILDINGS

30 WINDERMERE LANE HOUSTON, TEXAS 77063 fred@radfarpe.com NORTH CAROLINA LICENSE #010295 EXP. 12/31/24

FRED F. RADFAR P.E.

SYSTEMS AND IS NOT THE ENGINEER OF RECORD FOR THIS PROJECT. DRAWING STATUS INLAND BUILDINGS FOR APPROVAL:

THESE DRAWNICS, BEING FOR APPROVAL, ARE BY DEFINITION NOT THESE DRAWNICS, BEING FOR APPROVAL, ARE BY DEFINITION NOT FINAL, AND ARE FOR CONCEPTUAL REPRESENTATION ONLY. THEIR PURPOSE IS TO CONFIRM PROPER INTERPRETATION OF THE PROJECT DOCUMENTS. ONLY DRAWNICS ISSUED "FOR CONSTRUCTION" CAN BE CONSIDERED AS COMPLETE.

FOR PERMIT.

THESE DRAWNICS, BEING FOR PERMIT, ARE BY DEFINITION NOT FINAL IN THAT, AS A MINIMUM, PIECE MARKINGS ARE NOT IDENTIFIED. ONLY DRAWNICS ISSUED "FOR CONSTRUCTION" CAN BE CONSIDERED AS COMPLETE. 2141 SECOND AVENUE S.W. CULLMAN, AL. 35055 PHONE: 800.438.1606 FAX: 800.438.1626 A 7/11/24 FOR PERMIT SDP RD DESCRIPTION NOTES PAGE SIZE REFER TO C1 OWNER OR Antioch Church of Erwin CUSTOMER MCPHAIL METAL STRUCTURES JOBSITE 494 ANTIOCH CHURCH RD ADDRESS 1478 CARROLL STORE ROAD DUNN, NC 28334 AUTRYVILLE, NC 28318 CAD BY FNG'R BY JOB NO PH BLDG, DESC. SHEET NO. ISSUE SDP FR 7/11/24 N.T.S. 198812

## PRODUCT CERTIFICATION

The building manufacturer is member of the Metal Building Manufacturers Associations.

The building manufacturer's fabrication and products are covered by one or more of the following certification:

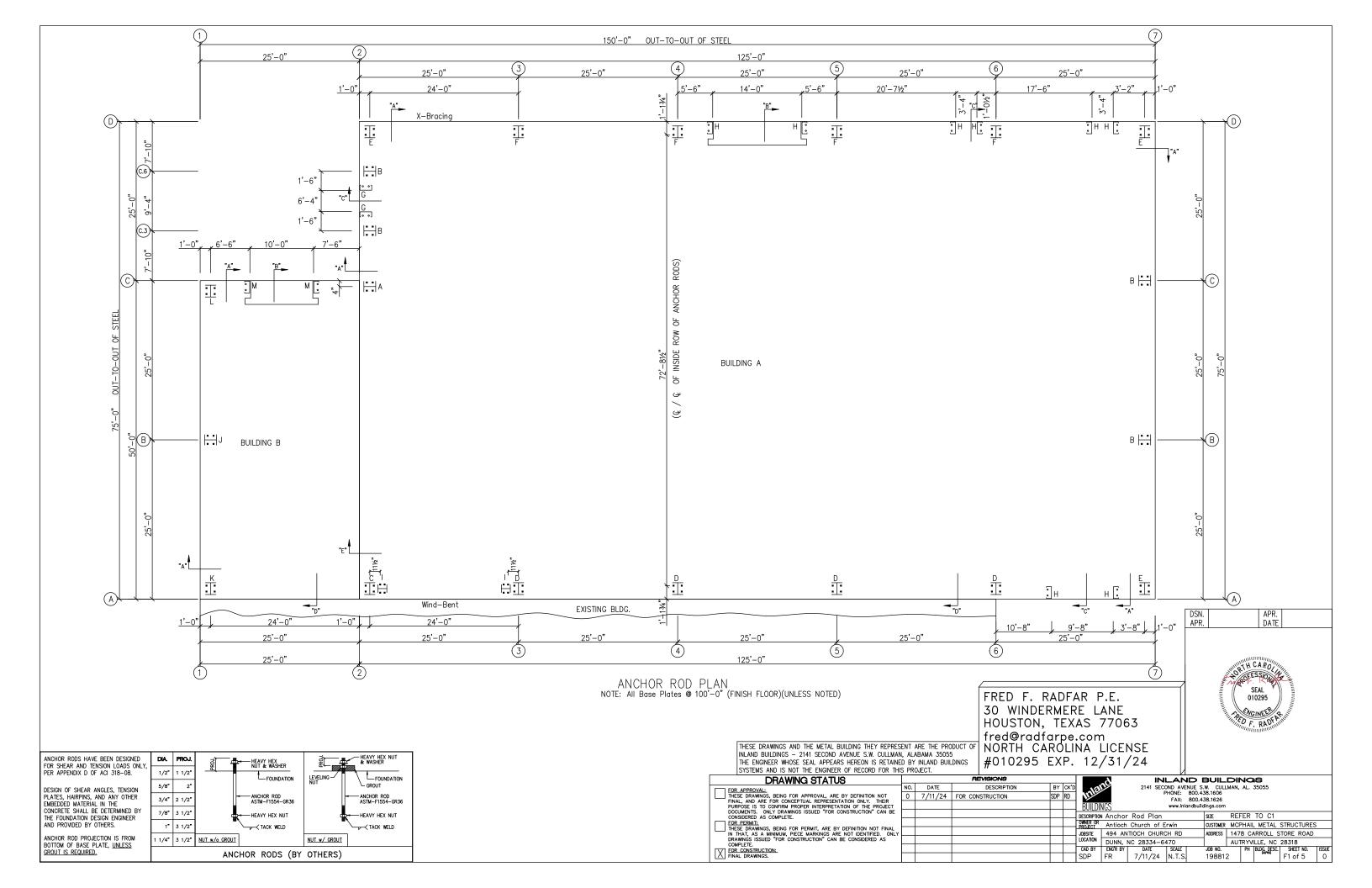
1. Approved fabricator of prefabricated buildings and components. Reference IAS(MB-205)

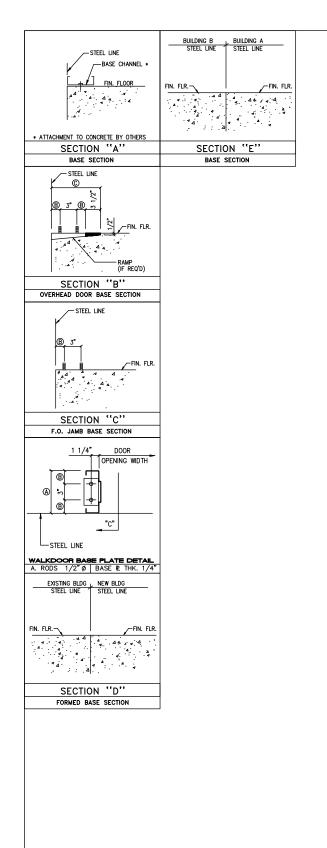
2. City of Houston approved fabricator (registration no. 964)

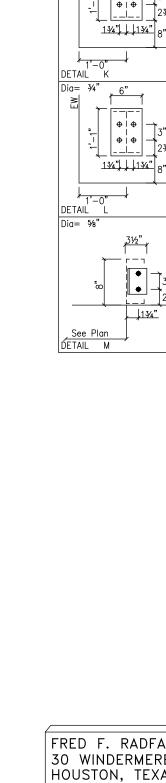
## International Buildina Code (IBC)

Material properties of steel plate used in the fabrication of primary rigid frames, and primary structural exclusive of cold—formed sections, confo to ASTM—A529 or A—572. Flanges with thickness of 1"or less and width of 12"or less conformed to A—529 with minimum yield point of 55,000 to ASTM-A529 or A-572. Flanges with thickness of 1"or less and width of 12"or less conformed to A-529 with minimum yield point of 55,000 PSI. Flanges greater than 3"in thickness and 12" in width conformed to A-572 with min. yield point of 50,000 PSI. Flanges with a thickness conform to ASTM-A53 type E, Grade B with a min. yield point 35,000. Material properties of hot rolled steel members conform to the requirements of ASTM-A932 or A-572 with a min. yield point of 50,000 PSI. Material properties of cold formed light gauge steel members conform to ASTM-A1011 Grade 55 with a min. yield point of 50,000 PSI. Material properties of cold formed light gauge steel members conform to ASTM-A1011 Grade 55 with a min. yield point of 55,000 PSI. Material properties of roof/wall sheeting, bose material is 55% aluminum-zinc alloy in accordance with AZ55 for unpainted or AZ50 for painted specification.Cable utilized for bracing conforms to ASTM A475.Cable bracing is to be installed to a tout condition with all slack removed. Rod & angle utilized for bracing members conform to ASTM A36. Structural joints with ASTM A-325 high strength bolts, where indicated on the drawings, shall be assembled and the fasteners tightened in accordance with the bolt tightening procedure per MBMA "96 IV 6.9. All joints will be assembled without washers unless otherwise noted. All steel members except bolts, fasteners & cable shall receive one shop coat of iron oxide corrosion inhibitive primer, meeting the performance requirements of SSPC paint Specification #15.

Shop & field inspections and associated fees are the responsibility of the contractor, unless stipulated otherwise in the contract.







Dia= 3/4"

FRED F. RADFAR P.E. 30 WINDERMERE LANE HOUSTON, TEXAS 77063 fred@radfarpe.com NORTH CAROLINA LICENSE #010295 EXP. 12/31/24



FRAMED OPENING WIDTH	F.O. SIZE	QTY.	SHOP LOCATE	FIELD LOCATE	TYPE/REMARKS
1 3/4"	10'-0" X 10'-0"	1	Х		FOR O.H. DOOR (BY OTHER
<u>→ , , , , , , , , , , , , , , , , , , ,</u>	14'-0" X 12'-0"	1	Х		FOR O.H. DOOR (BY OTHER
	9'-8" X 9'-4"	1	Х		FOR WINDOW (BY OTHERS
B) T	3'-4" X 7'-2"	2	Х		FOR WALKDOOR (BY OTHER
m	6'-4" X 7'-2"	1	Х		FOR WALKDOOR (BY OTHER
ا ك ا					

FRAMED OPENING ANCHOR ROD DETAIL
A. RODS 5/8"Ø | BASE 12 THK. 1/4"

FRAMED OPENING SCHEDULE

DRAWING STATUS
FOR APPROVAL:  THESE DRAWINGS, BEING FOR APPROVAL, ARE BY DEFINITION NOT FINAL, AND ARE FOR CONCEPTUAL REPRESENTATION ONLY. THEIR PURPOSE IS TO CONFIRM PROPER INTERPRETATION OF THE PROJECT DOCUMENTS. ONLY DRAWINGS ISSUED "FOR CONSTRUCTION" CAN BE CONSIDERED AS COMPLETE.

THESE DRAWINGS AND THE METAL BUILDING THEY REPRESENT ARE THE PRODUCT OF

NO. DATE

0 7/11/24 FOR CONSTRUCTION

DESCRIPTION

INLAND BUILDINGS — 2141 SECOND AVENUE S.W. CULLMAN, ALABAMA 35055 THE ENGINEER WHOSE SEAL APPEARS HEREON IS RETAINED BY INLAND BUILDINGS

SYSTEMS AND IS NOT THE ENGINEER OF RECORD FOR THIS PROJECT.

FOR PERMIT:	
THESE DRAWINGS, BEING FOR PERMIT, ARE BY DEFINITION NOT FINAL	Г
IN THAT, AS A MINIMUM, PIECE MARKINGS ARE NOT IDENTIFIED. ONLY	⊢
DRAWINGS ISSUED "FOR CONSTRUCTION" CAN BE CONSIDERED AS	
COMPLETE.	Н
FOR CONSTRUCTION:	
FINAL DRAWINGS.	Г

	И
	INLAND BUILDINGS
land	2141 SECOND AVENUE S.W. CULLMAN, AL. 35
10	PHONE: 800.438.1606
	EAV. 800 470 4000

134" | 134" | 8'

13/4"

See Plan

DETAIL F

DETAIL

Dia= 5/8"

See Plan

DETAIL H

 $\Diamond$ 

ΕW

DETAIL

DETAIL

81/4"

81/4"

**⊕** | ⊕

13/4" 13/4" 8"

13/4" 13/4" 8"

13/4" 13/4"

DETAIL

Dia= 3/4"

1'-0" DETAIL C

See Plan

DETAIL D

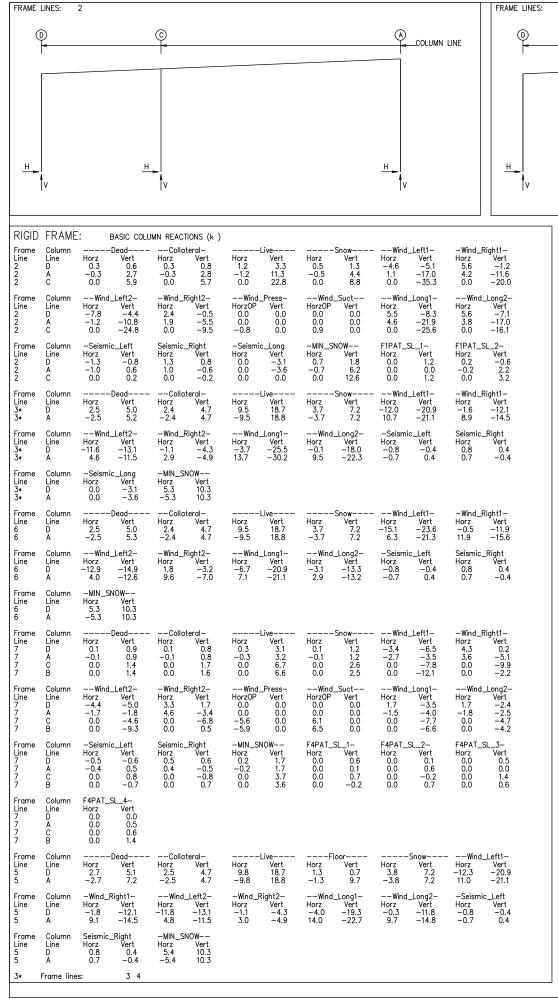
DETAIL E

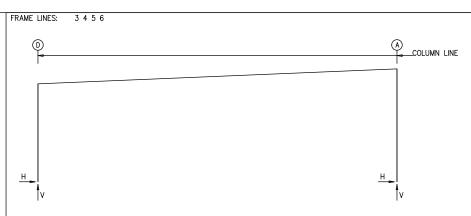
Dia= 3/4"

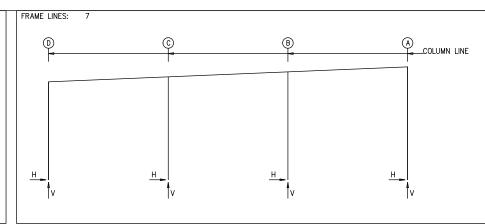
DETAIL A

SDP RD FAX: 800.438.1626 www.inlandbuildings.com DESCRIPTION ANCHOR BOLT DETAILS SIZE REFER TO C1 MCPHAIL METAL STRUCTURES 1478 CARROLL STORE ROAD AUTRYVILLE, NC 28318
PH BLDG, DESC. SHEET NO.
F2 of 5

		OWNER OR PROJECT	Antioch	Church of E	rwin	CUSTOMER	٨
		JOBSITE	494 AN	TIOCH CHURC	CH RD	ADDRESS	1
		LOCATION	DUNN.	NC 28334-6	470		7
		CAD BY	ENG'R BY	DATE	SCALE	JOB NO.	_
		SDP	FR	7/11/24	N.T.S.	198812	







RIGID	FRAME:		MAXIMUM	REACTIO	NS, AN	CHOR ROL	OS, & BAS	E PLAT	ES				
Frm Line	Col Line	Load Id	Hmax H	umn_Reac V Vmax	tions(k Load Id	) - Hmin H	V Vmin	Bolt Qty	t(in) Dia	Base Width	e_Plate(in) Length	Thick	Grout (in)
2	D	4 5	4.0 4.0	0.7 6.3	8 10	-4.5 3.4	-2.3 -4.6	4	0.750	6.000	13.50	0.500	0.0
2	Α	11 1	2.6 -1.8	-2.5 16.8	12 10	-2.0 2.6	14.4 -11.5	4	0.750	8.000	16.50	0.500	0.0
2	С	14 1	0.5 0.0	-21.0 34.5	15 6	-0.5 0.0	-21.0 -17.7	4	0.750	6.000	8.000	0.625	0.0

RIGID	FRAME:		MAXIMUM	1 REACTIO	NS, AN	CHOR RO	DS, & BAS	E PLA	TES				
Frm Line	Col Line	Load Id	Hmax H	umn_Read V Vmax	tions(k Load Id	) Hmin H	V Vmin	Bol Qty	t(in) Dia	Base Width	e_Plate(in) Length	Thick	Grout (in)
3*	D	1	14.4	28.4	6 10	-5.7 -0.7	-9.5 -12.3	4	0.750	8.000	13.50	0.500	0.0
3*	Α	10 1	6.8 -14.4	-15.0 28.7	1 10	-14.4 6.8	28.7 -15.0	4	0.750	10.00	13.50	0.500	0.0
3*	Frame lin	ies:	3 4										

RIGID	FRAME:		MAXIMUM	REACTIO	NS, AN	CHOR RC	DS, & BAS	E PLA	ΓES				
Frm Line	Col Line	Load Id	Hmax H	ımn_Reac V Vmax	tions(k Load Id	) Hmin H	V Vmin	Bol Qty	t(in) Dia	Base Width	Plate(in) Length	Thick	Grout (in)
5	D	1	15.0	28.5	6	-5.8	-9.5	4	0.750	8.000	13.50	0.500	0.0
5	Α	11 13	6.8 -13.5	-9.3 33.2	1 11	-15.0 6.8	30.7 -9.3	4	0.750	10.00	13.50	0.500	0.0

RI	GID	FRAME:		MAXIMUM	REACTIO	NS, AN	CHOR RO	DS, & BAS	E PLA	ΓES				
	Frm Line	Col Line	Load Id	Hmax H	umn_Read V Vmax	ctions(k Load Id	Hmin H	V Vmin	Bol Qty	t(in) Dia	Base Width	e_Plate(in) Length	) Thick	Grout (in)
	6	D	1	14.4	28.4	6	-7.6	-11.1	4	0.750	8.000	13.50	0.500	0.0
	6	Α	7 1	5.7 -14.4	-6.2 28.8	1 6	-14.4 2.3	28.8 -9.6	4	0.750	10.00	13.50	0.500	0.0

RIGID	FRAME:		MAXIMUM	REACTIO	NS, AN	CHOR RO	DS, & BAS	E PLA	TES				
Frm Line		Load Id	Hmax H	umn_Read V Vmax	ctions(k Load Id	) Hmin H	V Vmin	Bol Qty	t(in) Dia	Base Width	e_Plate(in) Length	Thick	Grout (in)
7	D	3 1	2.6 0.4	1.0 4.7	8 6	-2.6 -2.0	-2.5 -3.4	4	0.750	6.000	13.50	0.500	0.0
7	Α	9 1	2.7 -0.4	-1.5 4.9	2 7	-1.7 2.1	-1.2 -2.5	4	0.750	6.000	13.50	0.500	0.0
7	С	16 1	3.7 0.0	-5.6 9.8	15 7	-3.3 0.0	-5.6 -5.1	4	0.750	6.000	8.000	0.500	0.0
7	В	16 1	3.9 0.0	-5.6 9.7	15 6	-3.5 0.0	-5.6 -6.4	4	0.750	6.000	8.000	0.500	0.0

<u>BUILDING A</u>

FRED F. RADFAR P.E.

30 WINDERMERE LANE
HOUSTON, TEXAS 77063
fred@radfarpe.com
NORTH CAROLINA LICENSE
THE ENGINEER WHOSE SEAL APPEARS HEREON IS RETAINED BY INLAND BUILDINGS

#010295 EXP. 12/31/24



INLAND BUILDINGS — 2141 SECOND AVENUE S.W. CULLMAN THE ENGINEER WHOSE SEAL APPEARS HEREON IS RETAINE SYSTEMS AND IS NOT THE ENGINEER OF RECORD FOR THI	N, AL	ABAMA 35055 INLAND BUIL	j	#010295											
DRAWING STATUS			RE	EVISIONS					1	NLAN	D BUIL		VQS		
FOR APPROVAL:	NO.	DATE		DESCRIPTION	BY	CK'D	nla		2141 9		IUE S.W. CUL	LMAN,	AL. 35055		
THESE DRAWINGS, BEING FOR APPROVAL, ARE BY DEFINITION NOT	FOR CON	ISTRUCTION	SDP	RD	Title				800.438.1606 800.438.1626						
FINAL, AND ARE FOR CONCEPTUAL REPRESENTATION ONLY. THEIR PURPOSE IS TO CONFIRM PROPER INTERPRETATION OF THE PROJECT							BUILDI	100			ndbuildings.com				
DOCUMENTS. ONLY DRAWINGS ISSUED "FOR CONSTRUCTION" CAN BE						+									
CONSIDERED AS COMPLETE.	-				_	-	DESCRIPTION	i Reacti	ons		SIZE	REF	FER TO C1		
FOR PERMIT: THESE DRAWINGS, BEING FOR PERMIT, ARE BY DEFINITION NOT FINAL							OWNER OR PROJECT	Antioch	Church o	f Erwin	CUSTOMER	MCF	PHAIL METAL	STRUCTURE	ES
IN THAT, AS A MINIMUM, PIECE MARKINGS ARE NOT IDENTIFIED. ONLY							JOBSITE	494 AN	тосн сн	JRCH RD	ADDRESS	147	8 CARROLL	STORE ROAL	D
DRAWINGS ISSUED "FOR CONSTRUCTION" CAN BE CONSIDERED AS COMPLETE.							LOCATION	DUNN.	NC 28334	-6470		AUT	RYVILLE, NO	28318	
FOR CONSTRUCTION:					CAD BY	ENG'R BY	DATE	SCALE	JOB NO.		PH BLDG DES	C. SHEET NO.	ISSUE		
FINAL DRAWINGS.							SDP	FR	7/11/2	4 N.T.S.	19881	2	(ALPHA)	F3 of 5	10

# | Frm | Col | Dead | Collat | ---Live --- | ---Snow --- | Snow Drift | Wind Press | Wind Suct | Long | Line | Line | Vert | Vert | Horz | Vert | Horz | Vert | Horz | Vert | Horz | Vert | Vert

WIND BEN	IT RE	ACTIO	NS										
		— W	all — Line	Col Line	Wind Horz	± Read d(k ) Vert	ctions Seismi Horz	c(k ) Vert	Bol Qty	t(in) Dia	Base_ Width	Plate(in) Length	Thick
Н	Н	F_SW F_SW	A	2 3	4.2 4.2	8.6 8.6	2.0 2.0	4.1 4.1	4 4	0.750 0.750	8.000 8.000	16.000 16.000	0.500 0.500
√v	tv												

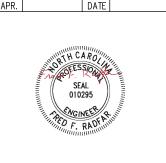
NOTES	FOR REACTIONS								
the	ding reactions are based on following building data:  Width (ft) Length (ft) Eave Height (ft) Roof Slope (rise/12) Dead Load (psf ) Collateral Load (psf ) Live Load (psf ) Snow Load (psf ) Wind Speed (mph ) Wind Code Exposure Closure Importance Wind Importance Seismic Seismic Sone Seismic Cone Seismic Cone Seismic Cone	= 75.0 = 125.0 = 20.5/23.6 = 0.5 = 2.5 = 5.0 = 20.0 = 7.7 = 130.0 = NCBC 18 = B = Enclosed = N/A = 1.25 = C = 0.29							

Wa	II — Line	- Col Line		Reactind — Vert	ions(k ) - —Sei Horz	smic - Vert		_Shear /ft) Seis	Note
L_EW F_SW R_EW	2 A 7 D	2,3	7.0		7.0	7.4			(h) (a) (h)
B_SW D 3,2 7.9 6.2 3.9 3.1  (a)Wind bent in bay (h)Rigid frame at endwall									
Reactio Reactio	ns for n valu	seismic es shown	represe are un	nt shea factore	r force, d	Eh			

BUILDING A

FRED F. RADFAR P.E.

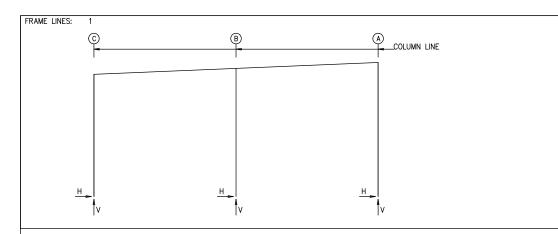
30 WINDERMERE LANE
HOUSTON, TEXAS 77063
fred@radfarpe.com
NORTH CAROLINA LICENSE
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STSTEMS AND IS NOT THE ENGINEER OF RECORD FOR THE	I U															
DRAWING STATUS			RE\	/ISIONS			.A	INLAND BUILDINGS								
FOR APPROVAL:	NO.	DATE								UE S.W. CULLMAN, AL. 35055						
THESE DRAWINGS, BEING FOR APPROVAL, ARE BY DEFINITION NOT	0	7/11/24	FOR CONS	TRUCTION	SDP	RD	707	PHONE: 800.438.1606								
FINAL, AND ARE FOR CONCEPTUAL REPRESENTATION ONLY. THEIR PURPOSE IS TO CONFIRM PROPER INTERPRETATION OF THE PROJECT							RIIID	FAX: 800.438.1626								
DOCUMENTS. ONLY DRAWINGS ISSUED "FOR CONSTRUCTION" CAN BE											SIZE REFER TO C1					
CONSIDERED AS COMPLETE.								DESCRIPTION Reactions  DWNER OR Antioch Church of Erwin				CUSTOMER MCPHAIL METAL STRUCTURES				
THESE DRAWINGS, BEING FOR PERMIT, ARE BY DEFINITION NOT FINAL							OWNER OR PROJECT									
IN THAT, AS A MINIMUM, PIECE MARKINGS ARE NOT IDENTIFIED. ONLY DRAWINGS ISSUED "FOR CONSTRUCTION" CAN BE CONSIDERED AS							JOBSITE LOCATION					1478 C				
COMPLETE.							DUNN, NC 28334-6470					AUTRYVILLE, NC 28318				
FINAL DRAWINGS.						-	CAD BY	ENG'R BY		SCALE	JOB NO.	PH	BLDG. DESC.	SHEET NO.	ISSUE	
FINAL DRAWINGS.							SDP	FK	7/11/24	N.T.S.	198812			F4 of 5	101	



RIGID	FRAME:		MAXIMUM	REACTION	NS, AN	CHOR RO	DS, & BASE	E PLA	TES				
Frm Line	Col Line	Load Id	Hmax H	mn_Read V Vmax	tions(k Load Id	) Hmin H	V Vmin	Bol Qty	t(in) Dia	Base Width	e_Plate(in) Length	Thick	Grout (in)
1	С	3 1	2.0 0.5	0.1 4.7	6 4	-2.2 -1.6	-1.6 -2.6	4	0.750	6.000	13.00	0.500	0.0
1	Α	7 1	2.6 -0.5	-1.1 5.0	2 5	-1.8 2.1	-0.5 -2.0	4	0.750	8.000	13.00	0.500	0.0
1	В	8 1	4.9 0.0	-5.3 10.0	9 4	-4.4 0.0	-5.3 -4.7	4	0.750	6.000	8.500	0.500	0.0

RIGID	FRAME		BASIC COL	UMN REAC	TIONS (k )								
Frame Line 1 1	Column Line C A B	 Horz 0.1 -0.1 0.0	-Dead Vert 0.8 1.1 1.5	Collo Horz 0.1 -0.1 0.0	teral- Vert 0.8 0.8 1.7	Horz 0.3 -0.3 0.0	Live Vert 3.1 3.1 6.8	Horz 0.1 -0.1 0.0	Snow Vert 1.2 1.2 2.6	Wind Horz -2.7 -2.9 0.0	_Left1- Vert -5.1 -2.7 -9.4	−Wind_ Horz 3.2 3.5 0.0	Right1- Vert -1.2 -4.5 -4.7
Frame Line 1 1	Column Line C A B	Wind Horz -3.7 -2.0 0.0	I_Left2- Vert -3.5 -1.1 -6.6	-Wind_ Horz 2.2 4.5 0.0	Right2- Vert 0.5 -2.9 -1.9	Wind HorzOP 0.0 0.0 -7.4	_Press- Vert 0.0 0.0 0.0	Wind_ HorzOP 0.0 0.0 8.1	_Suct Vert 0.0 0.0 0.0	Wind Horz 1.7 -1.5 0.0	_Long1- Vert -3.8 -3.9 -6.9	Wind Horz 1.7 -1.8 0.0	_Long2- Vert -2.6 -2.5 -4.1
Frame Line 1 1	Column Line C A B	-Seism Horz -0.3 -0.3 0.0	ic_Left Vert -0.2 0.3 -0.1	Seismic Horz 0.3 0.3 0.0	_Right Vert 0.2 -0.3 0.1	-Seismi Horz 0.0 0.0 0.1	c_Long Vert 0.0 0.0 0.0	F1PAT_S Horz 0.0 0.0 0.0	SL_1- Vert 0.6 0.0 0.7	F1PAT_S Horz 0.0 0.0 0.0	SL_2- Vert 0.0 0.6 0.6		

BUILDING BRACING REACTIONS	
Wall Col	Note (h) (j) (j) (j)
(h)Rigid frame at endwall (j) Longitudal Bracing Forces Transfered To Bldg. A	
Reactions for seismic represent shear force, Eh Reaction values shown are unfactored	

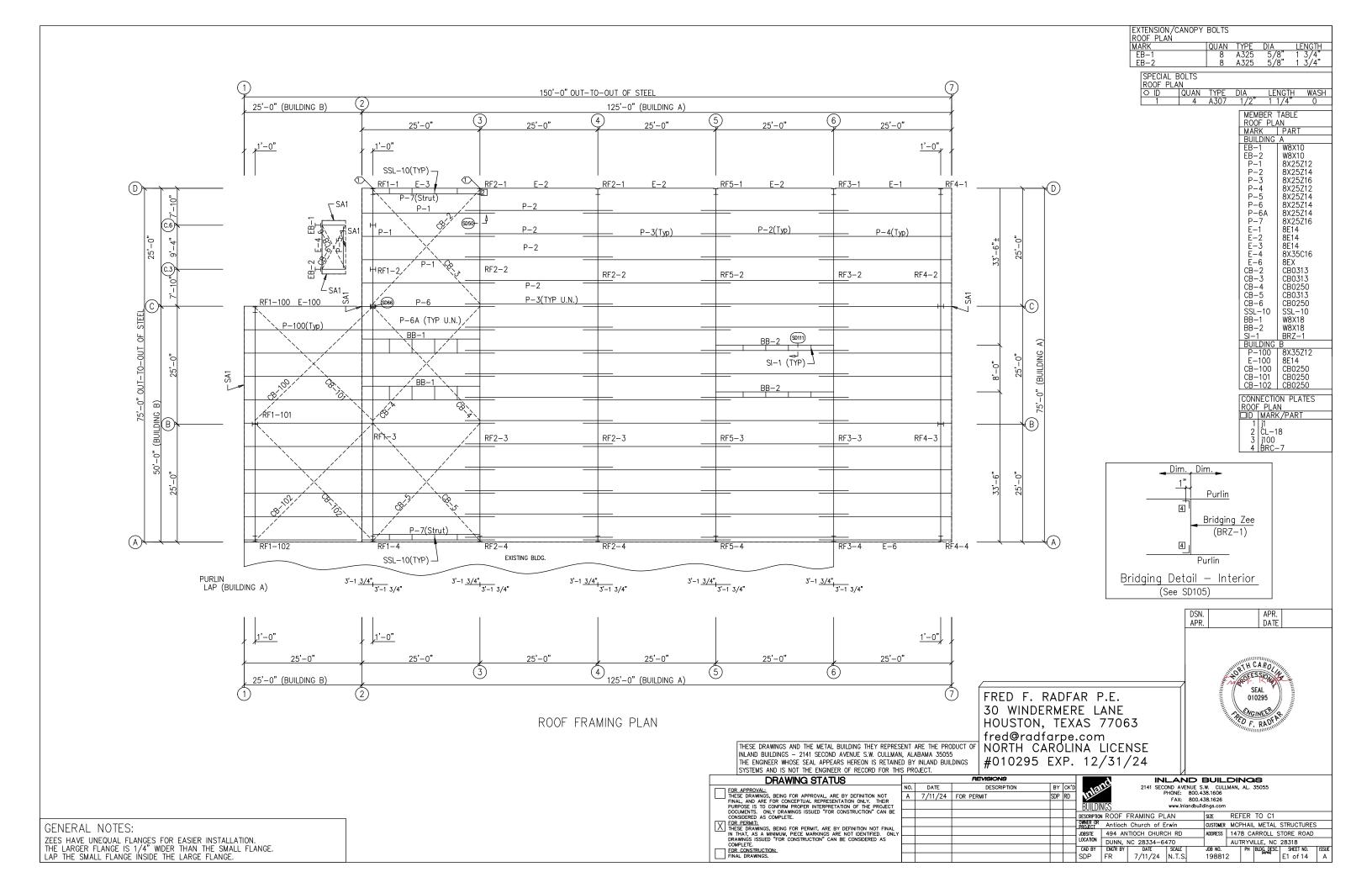
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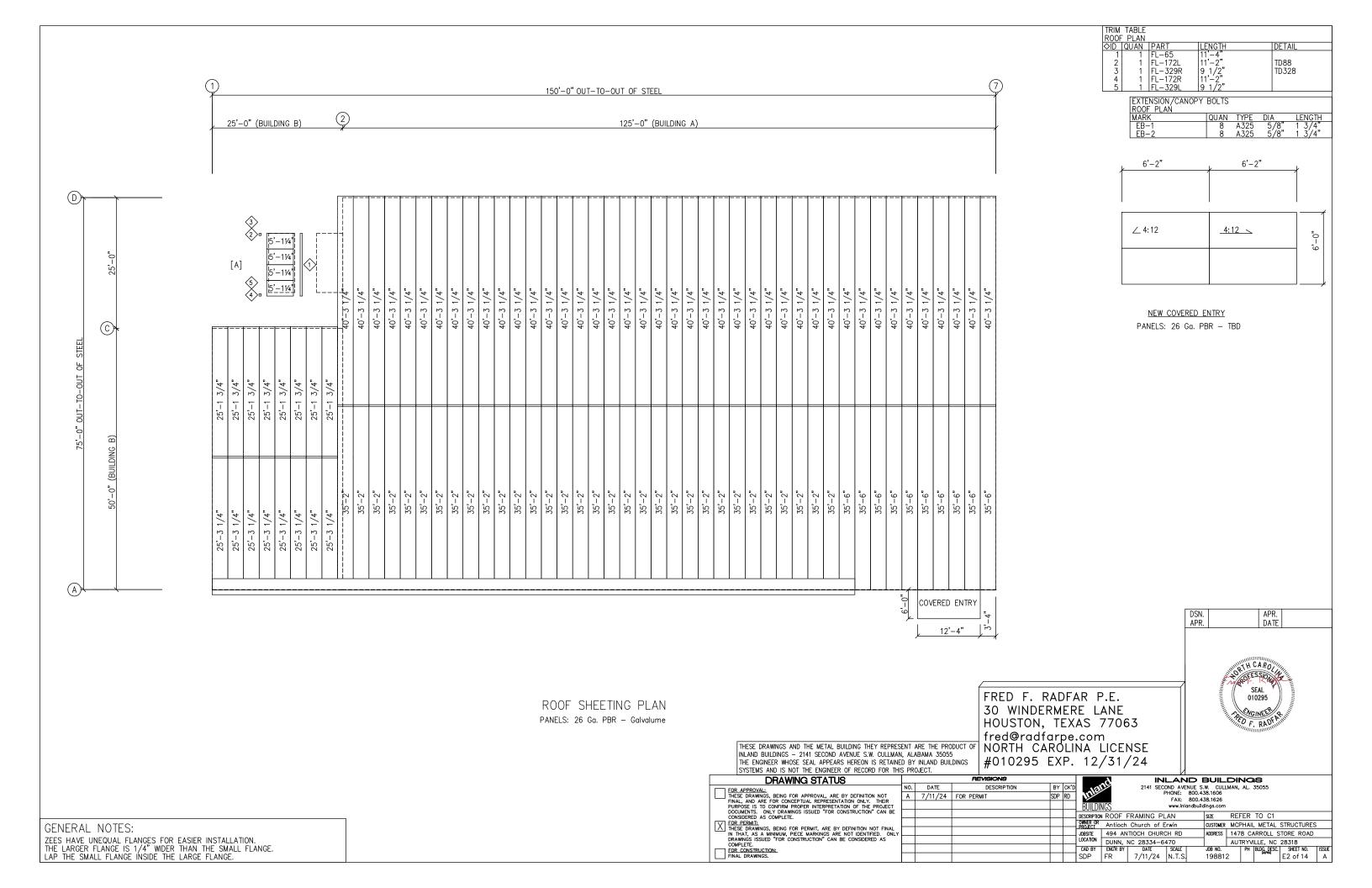
BUILDING B

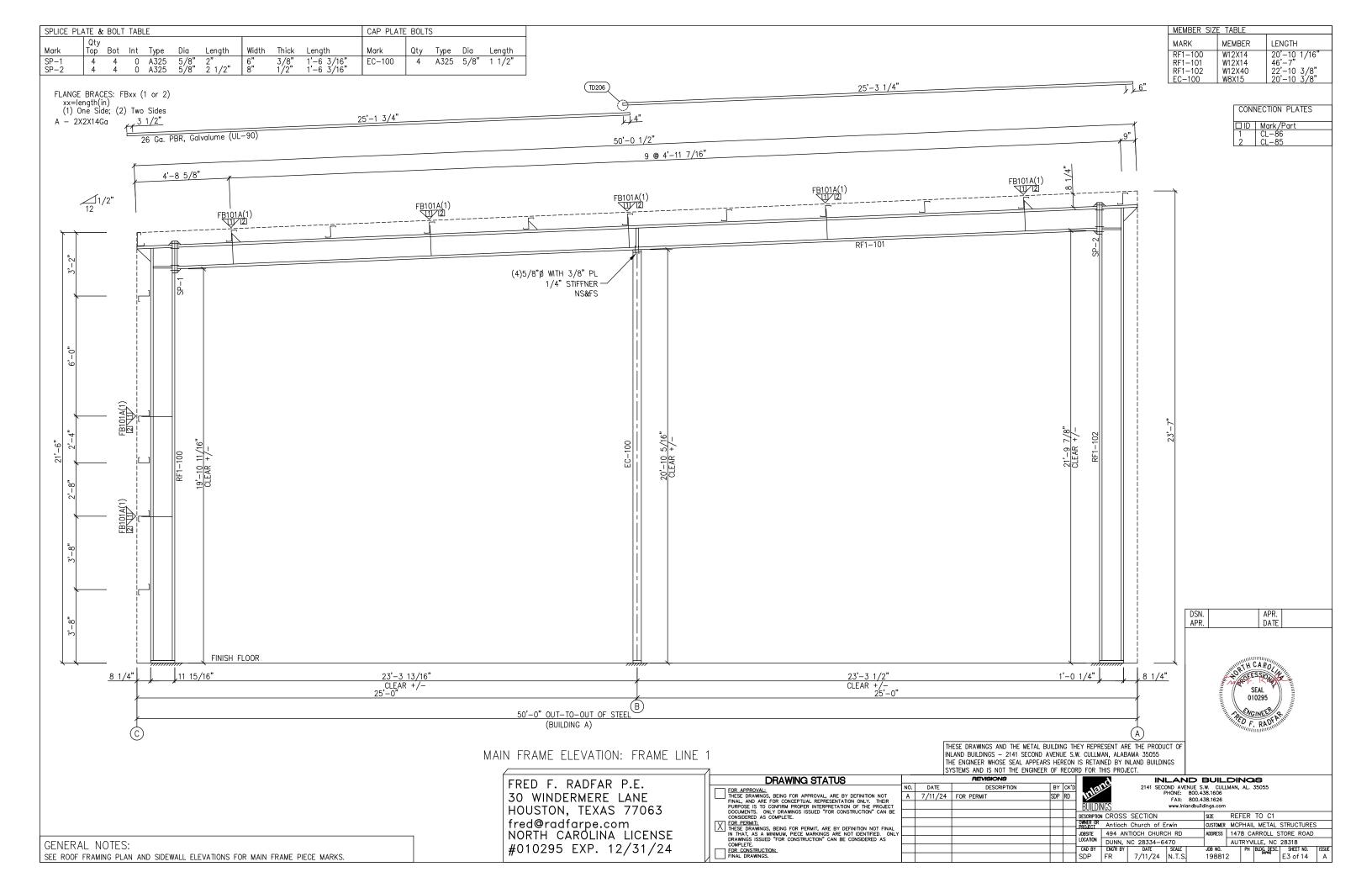
FRED F. RADFAR P.E. 30 WINDERMERE LANE HOUSTON, TEXAS 77063 fred@radfarpe.com NORTH CAROLINA LICENSE THE ENGINEER WHOSE SEAL APPEARS HEREON IS RETAINED BY INLAND BUILDINGS SYSTEMS AND IS NOT THE ENGINEER OF RECORD FOR THIS PROJECT.

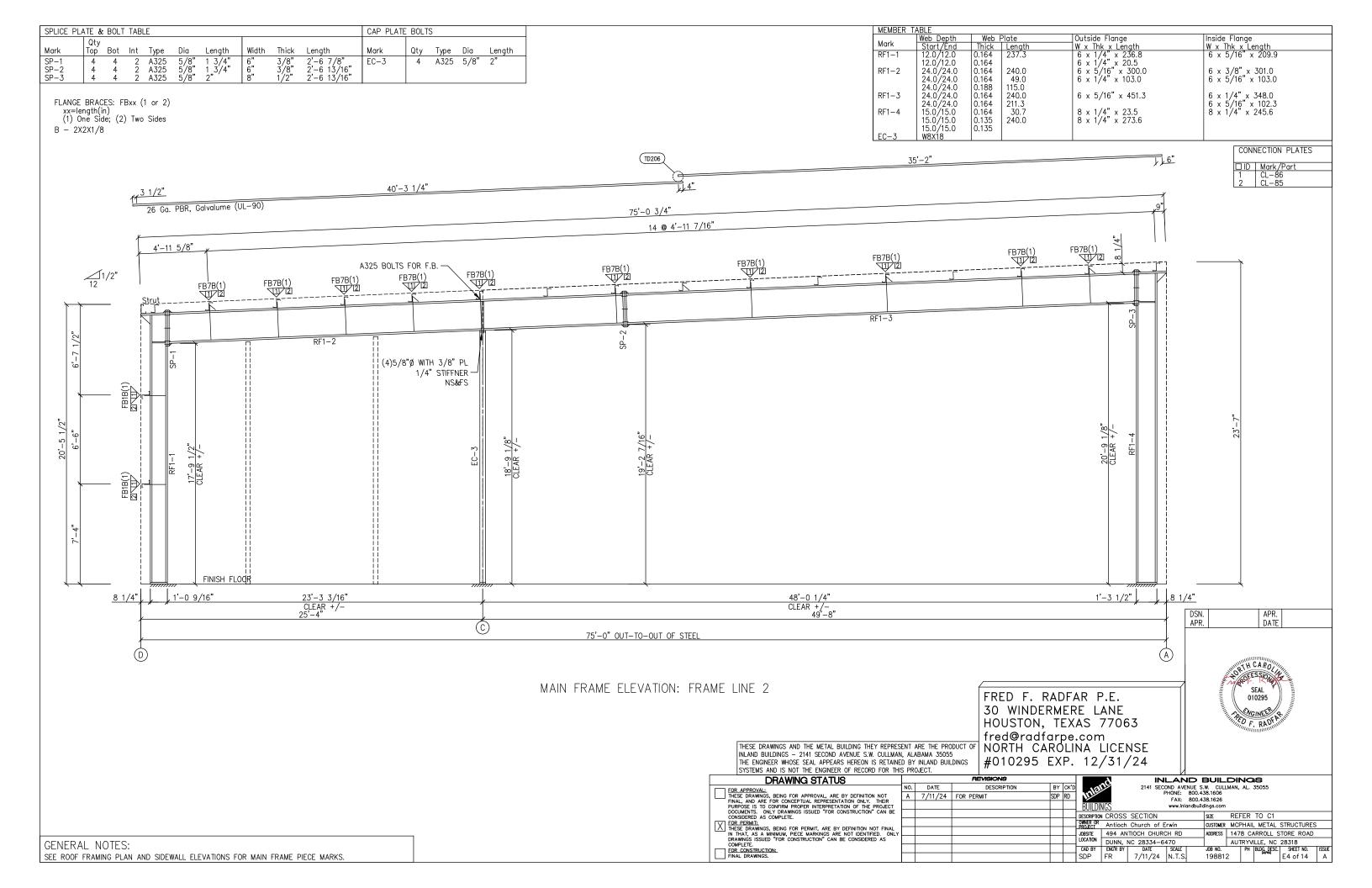


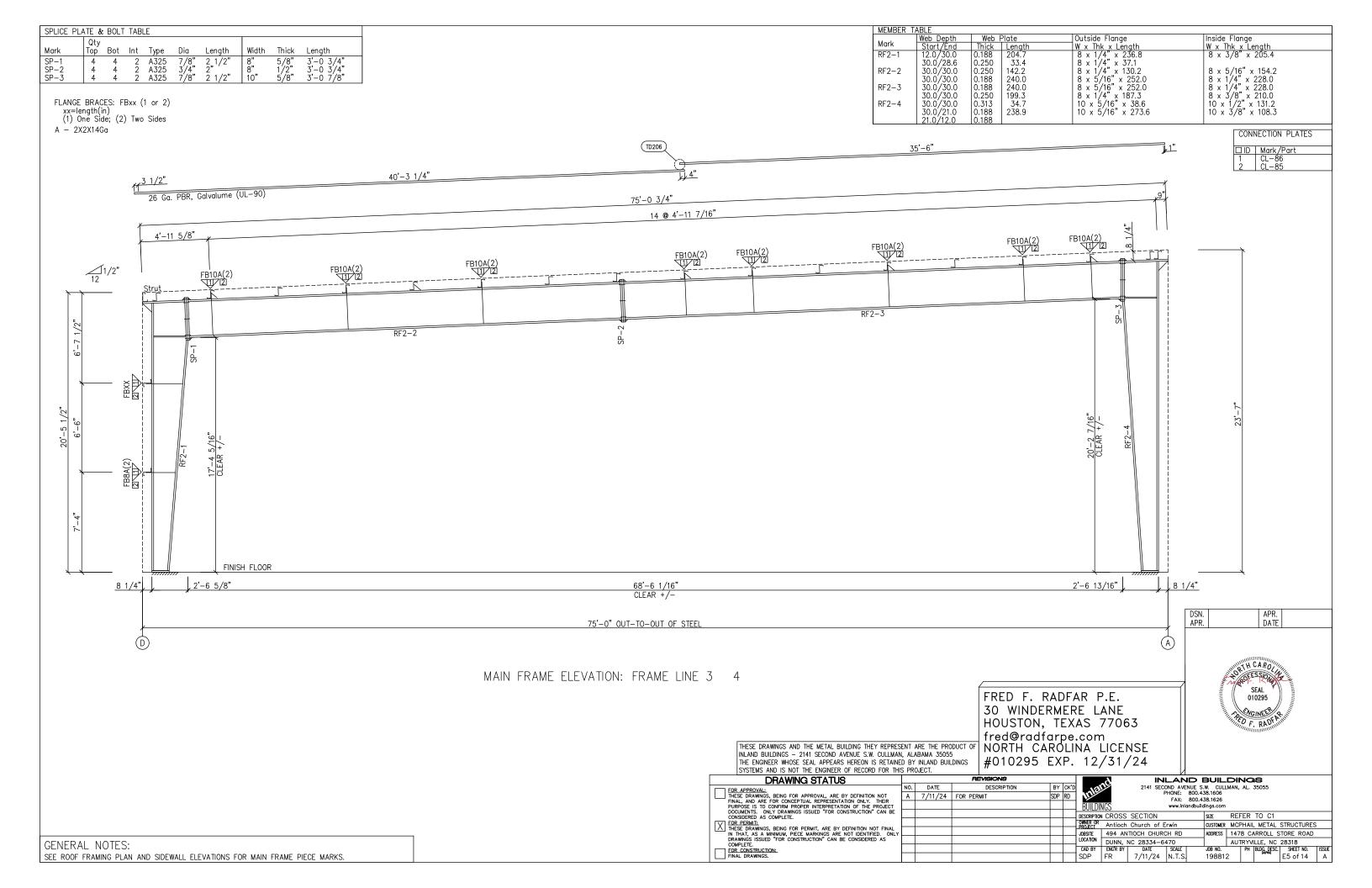
	3131EM3 AND IS NOT THE ENGINEER OF RECORD FOR THIS																
	DRAWING STATUS			EVISIONS					INLAND BUILDINGS								
	OR APPROVAL:	NO.	DATE		DESCRIPTION	BY	CK'D	1010			OND AVENUE S		IAN, AL.	35055			
	HESE DRAWINGS, BEING FOR APPROVAL, ARE BY DEFINITION NOT	0	7/11/24	FOR CON	NSTRUCTION	SDP	RD	Title		,	PHONE: 800.4 FAX: 800.4						
	INAL, AND ARE FOR CONCEPTUAL REPRESENTATION ONLY. THEIR PURPOSE IS TO CONFIRM PROPER INTERPRETATION OF THE PROJECT							BUILDI	NGS		www.inlandbuil						
	OCUMENTS. ONLY DRAWINGS ISSUED "FOR CONSTRUCTION" CAN BE								N Reactio	ne		SIZE	REFER	TO C1			
	OR PERMIT:							OWNER OR PROJECT		Church of E					STRUCTURES		
	HESE DRAWINGS, BEING FOR PERMIT, ARE BY DEFINITION NOT FINAL									TIOCH CHURC					STORE ROAD		
	N THAT, AS A MINIMUM, PIECE MARKINGS ARE NOT IDENTIFIED. ONLY DRAWINGS ISSUED "FOR CONSTRUCTION" CAN BE CONSIDERED AS						1	JOBSITE LOCATION				H H					
	COMPLETE.					_				NC 28334-6				VILLE, NC		1	
	OR CONSTRUCTION:							CAD BY	ENG'R BY	DATE	SCALE	JOB NO.	PH	BLDG. DESC.	SHEET NO.	ISSUE	
F	INAL DRAWINGS.							SDP	FR	7/11/24	N.T.S.	198812		1	F5 of 5	0	

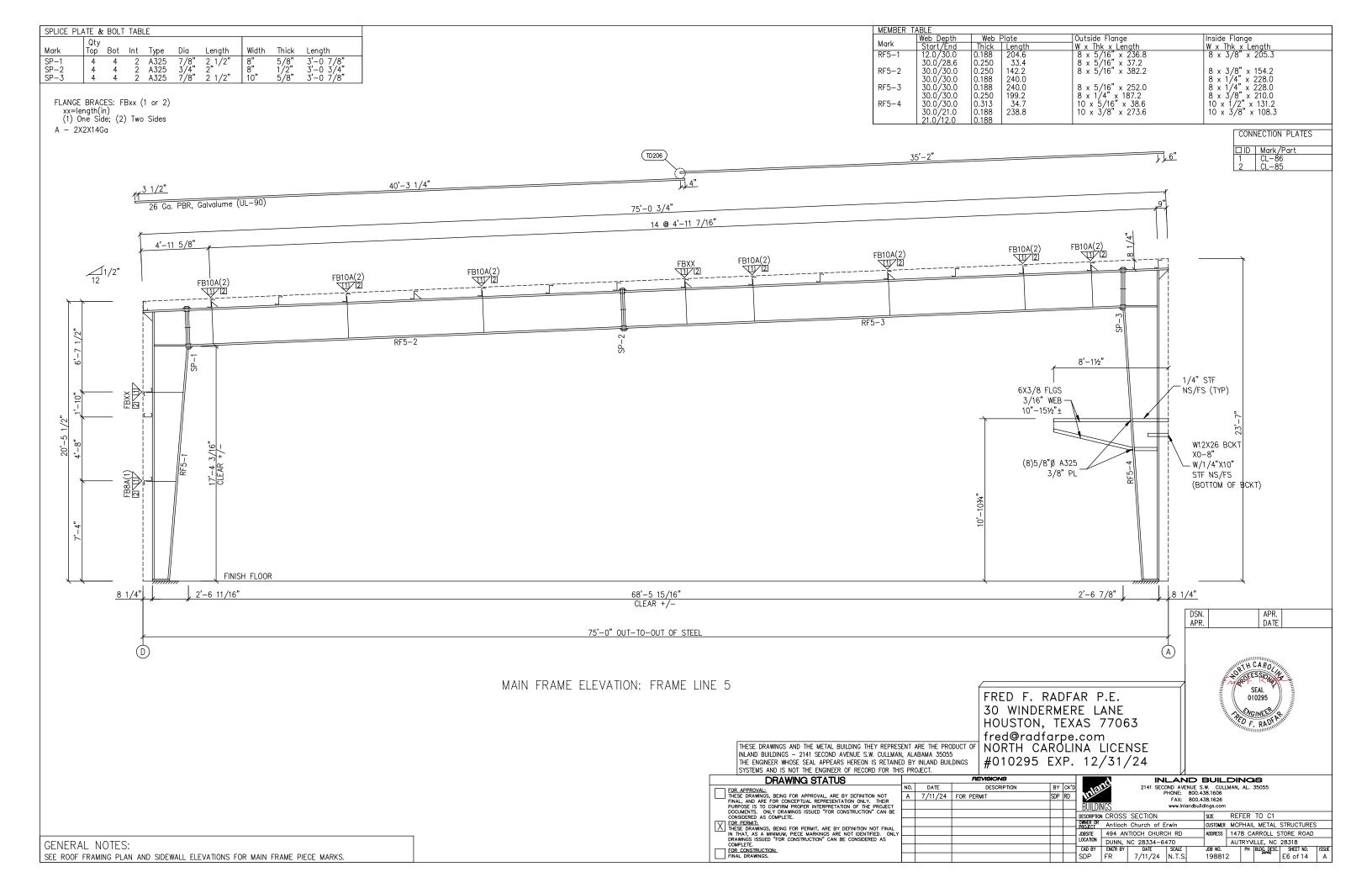


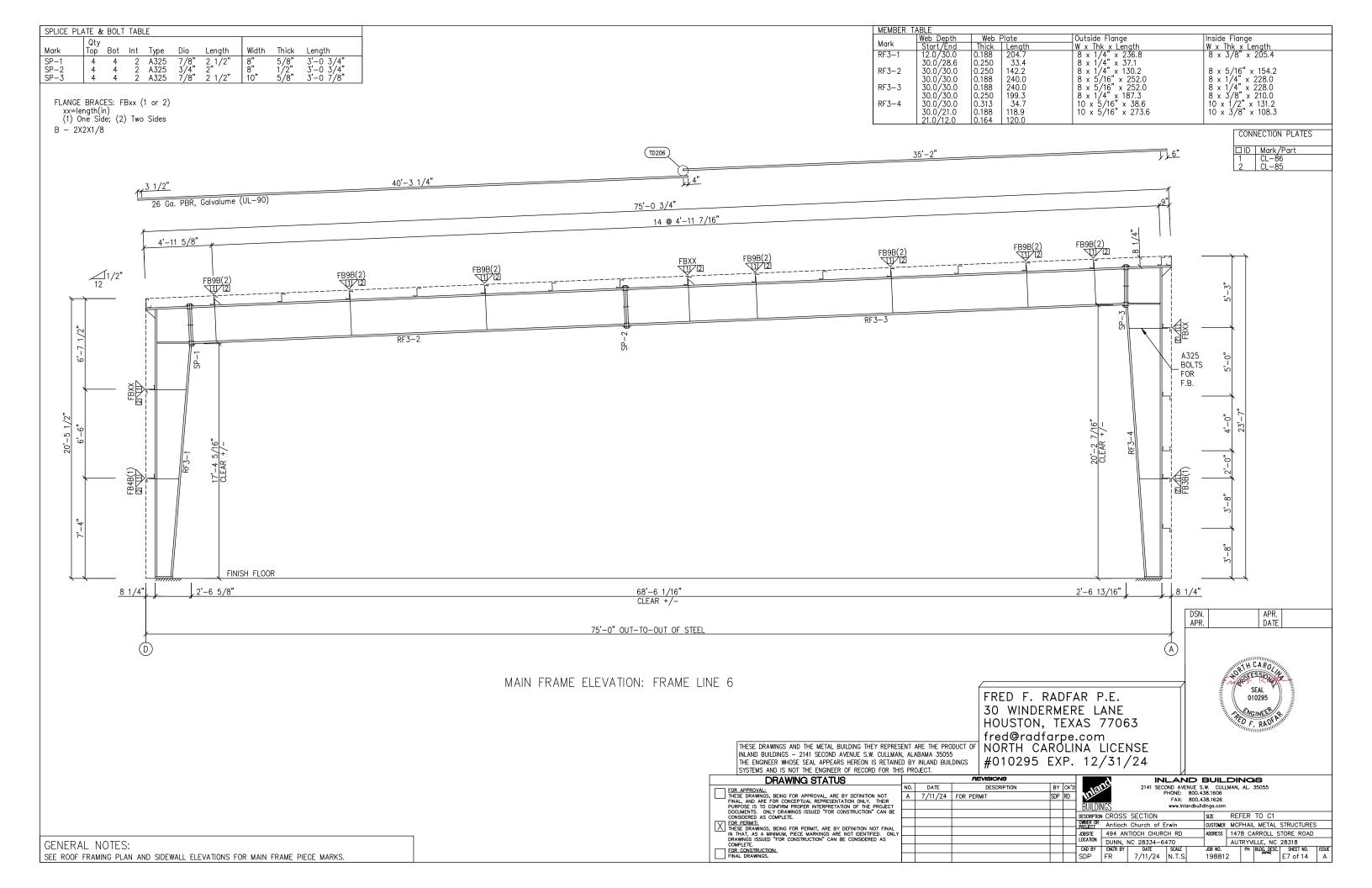


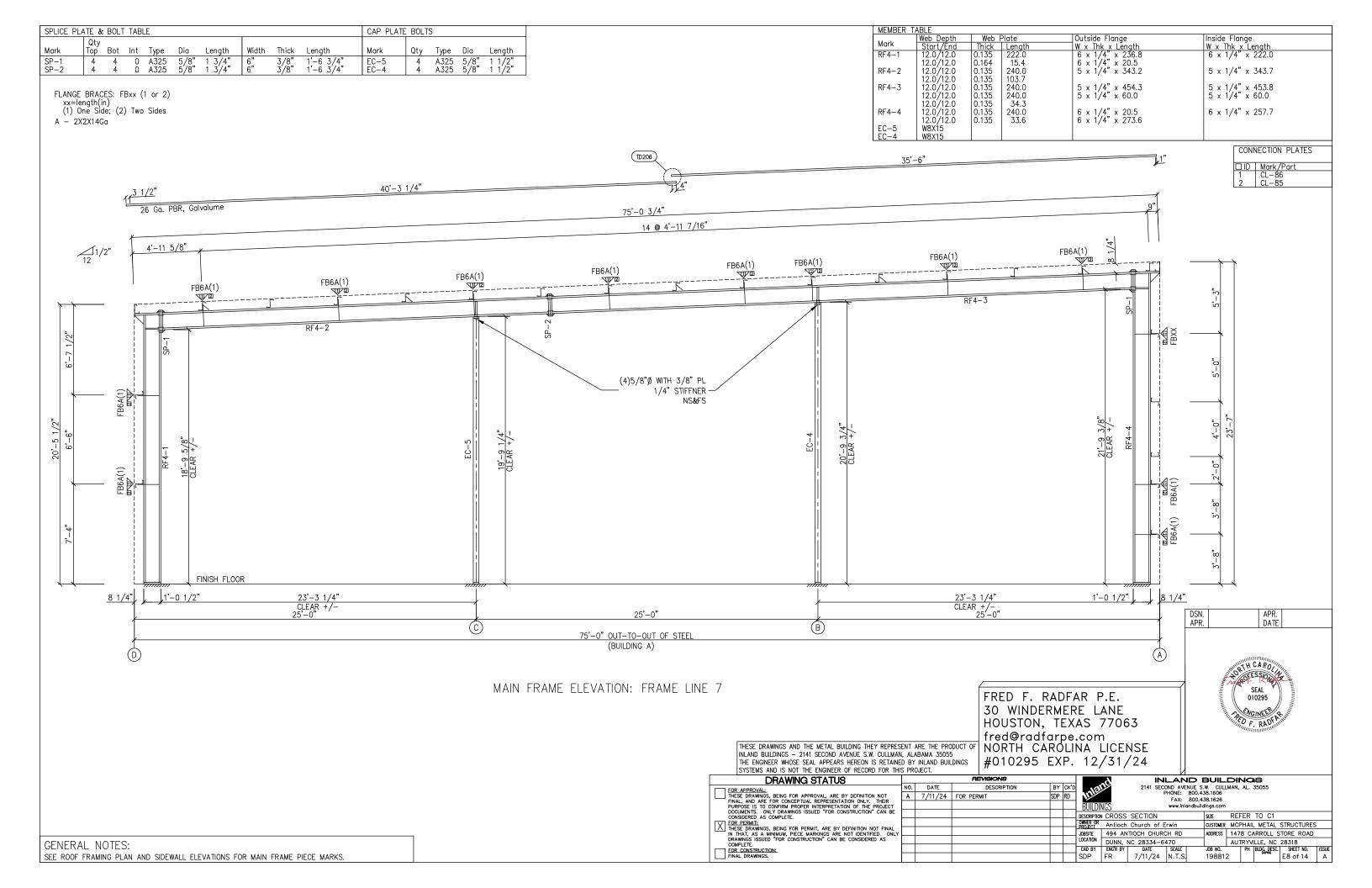


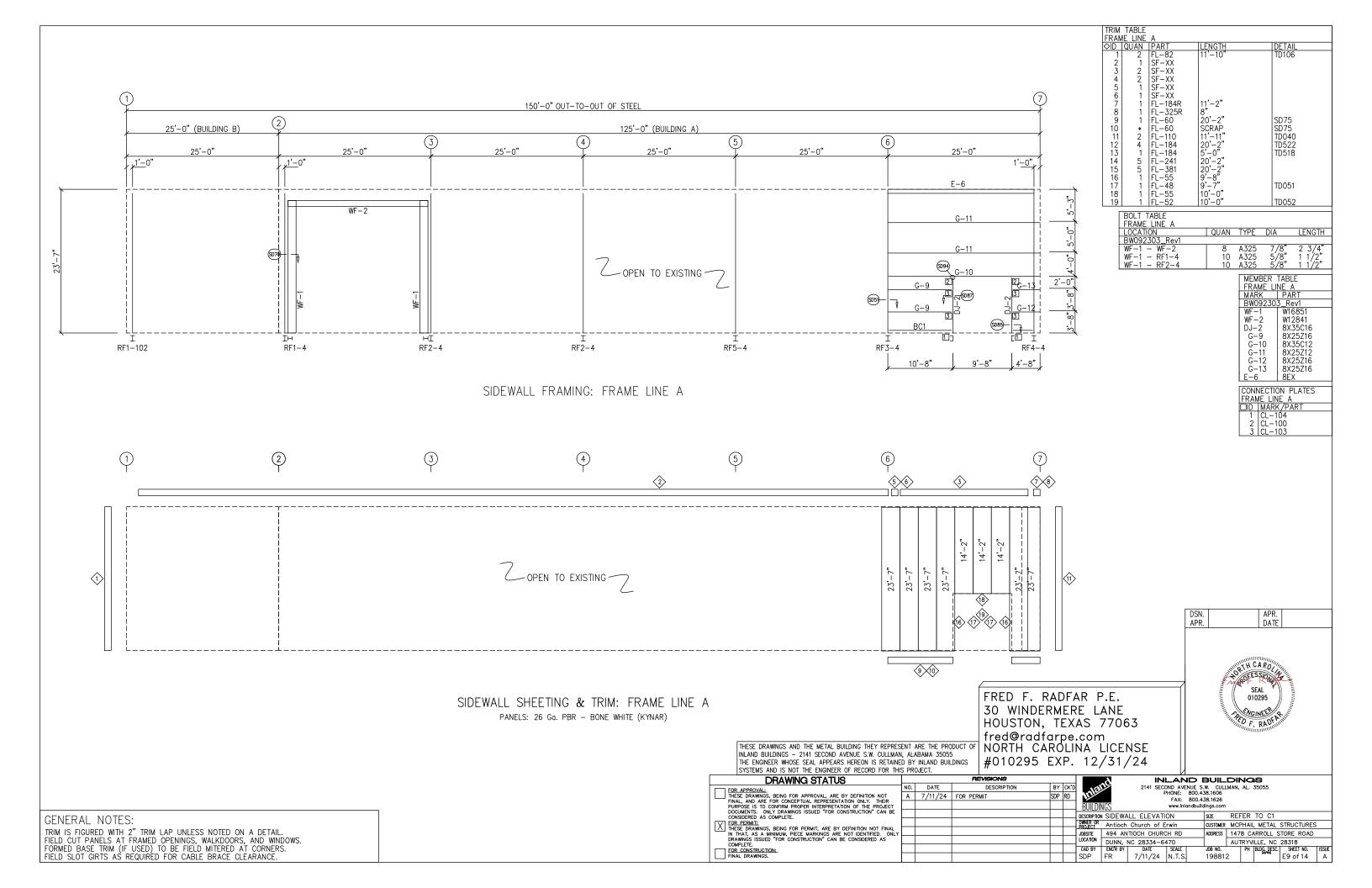


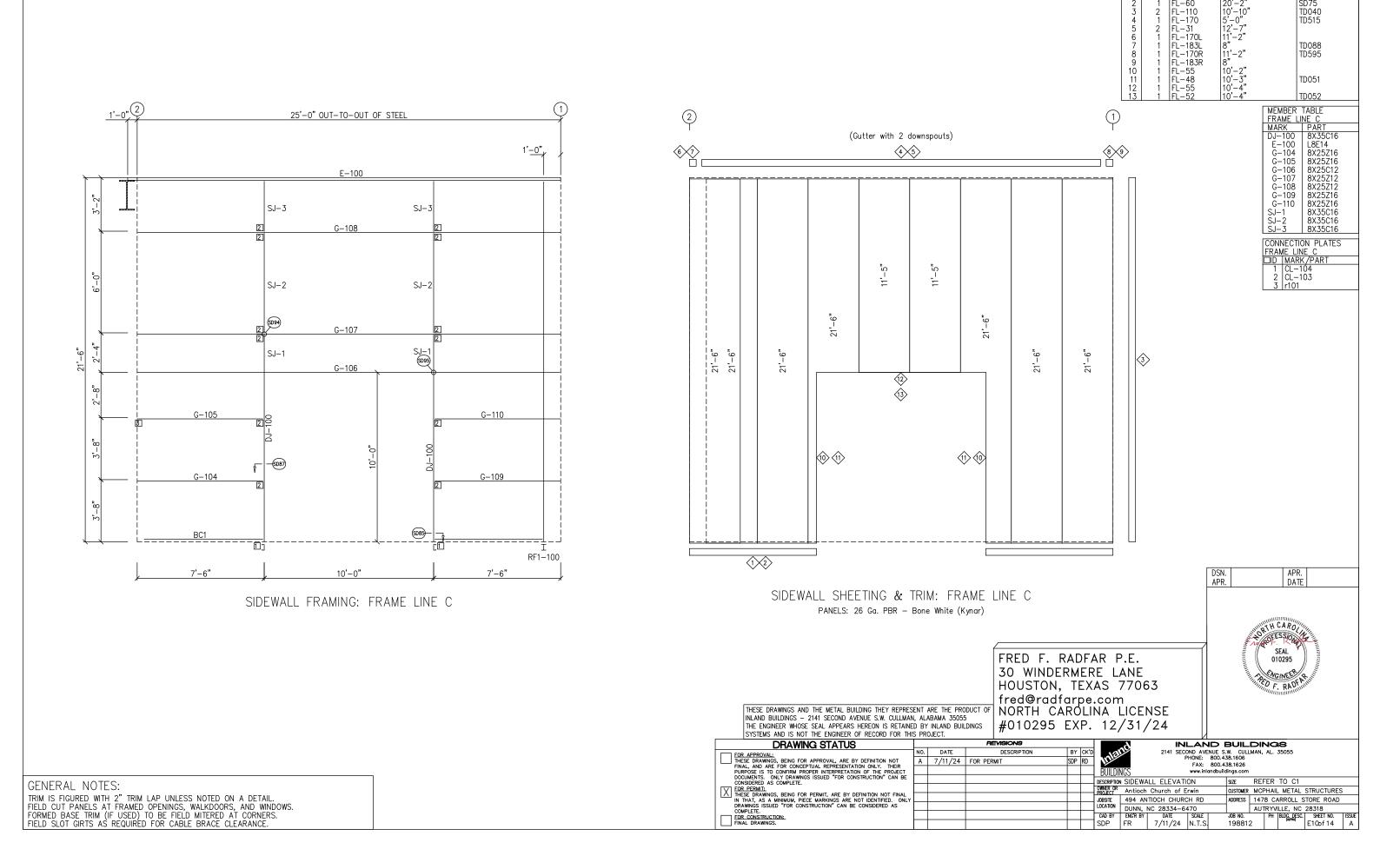




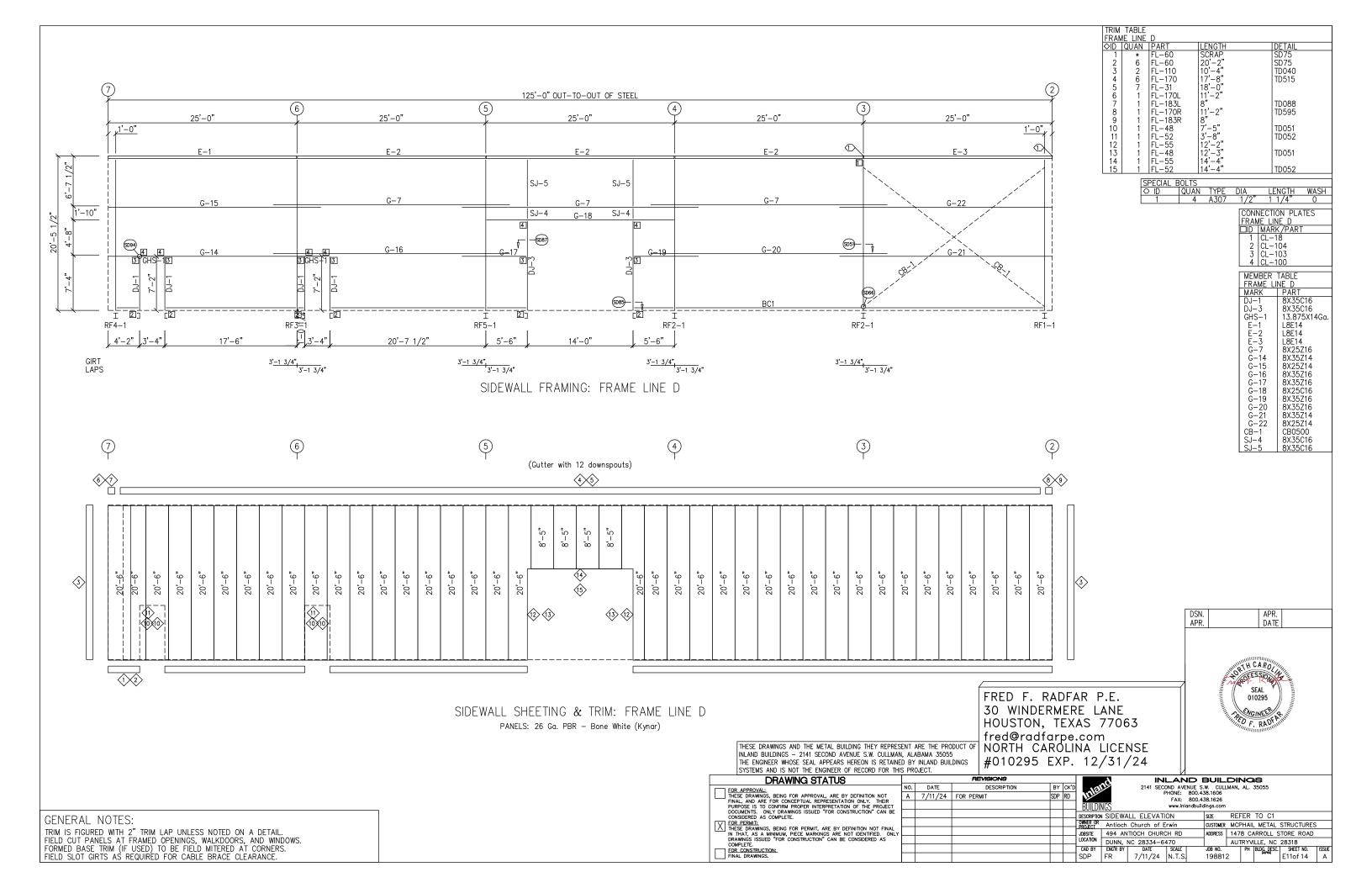


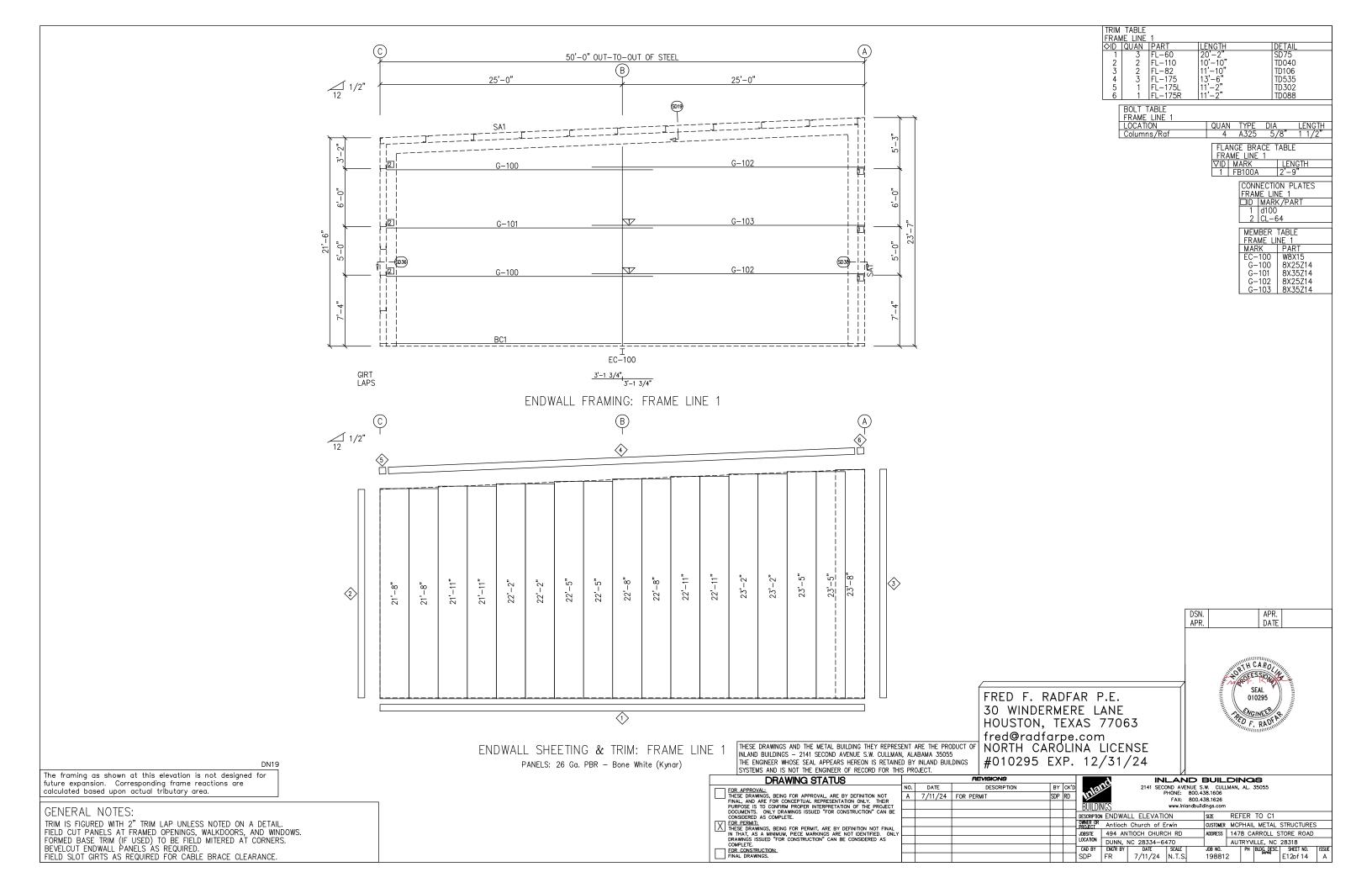


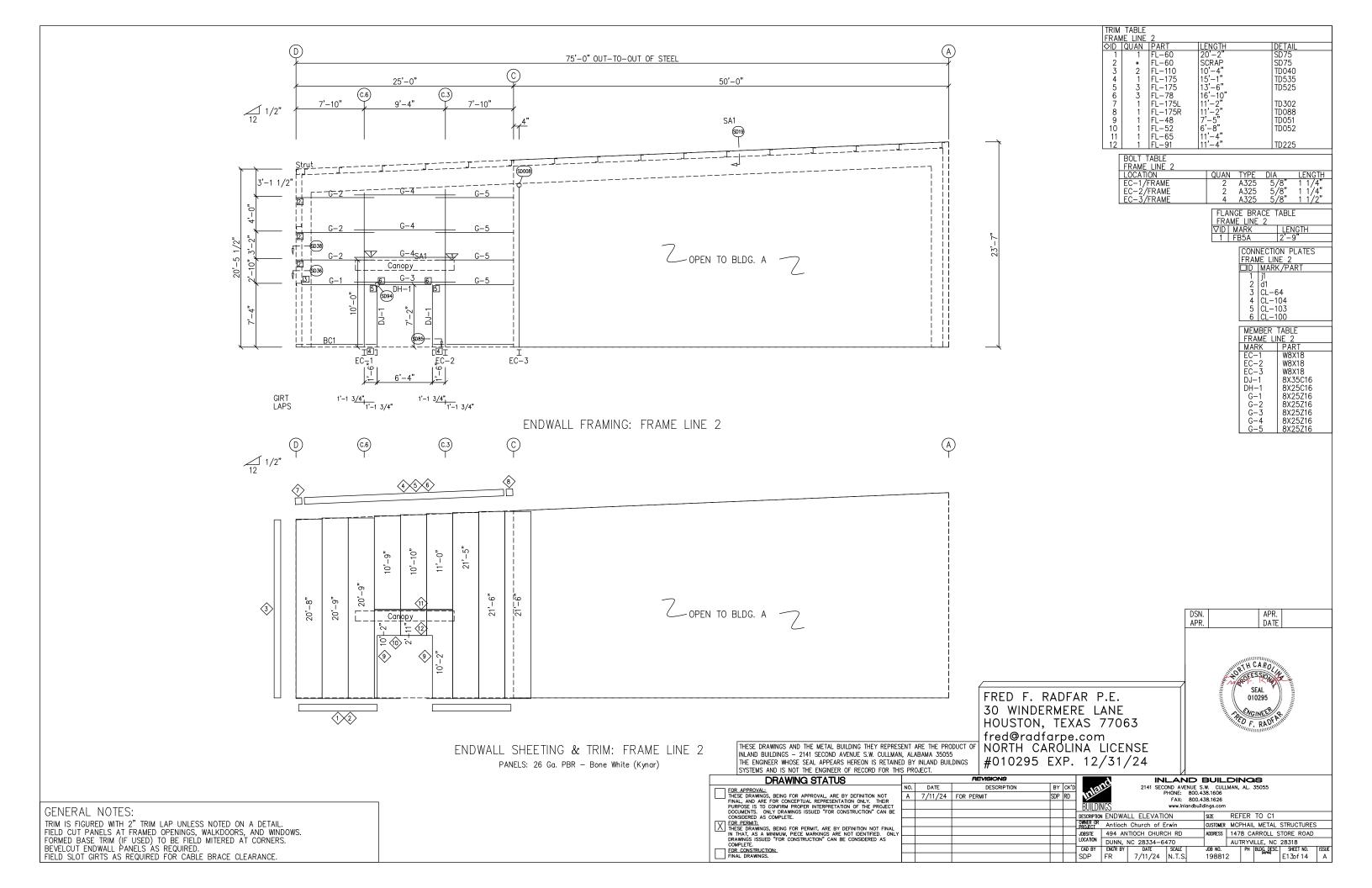


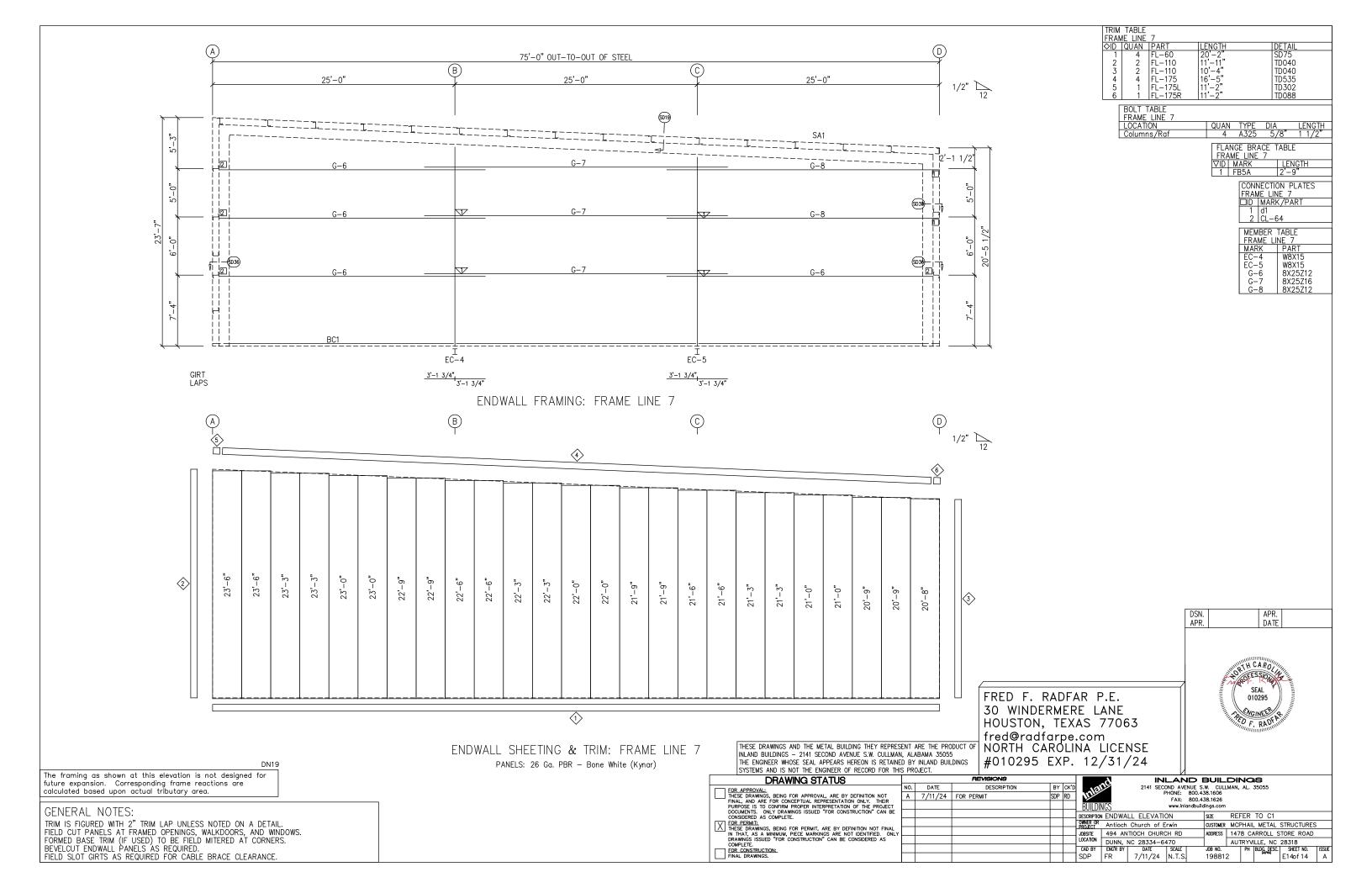


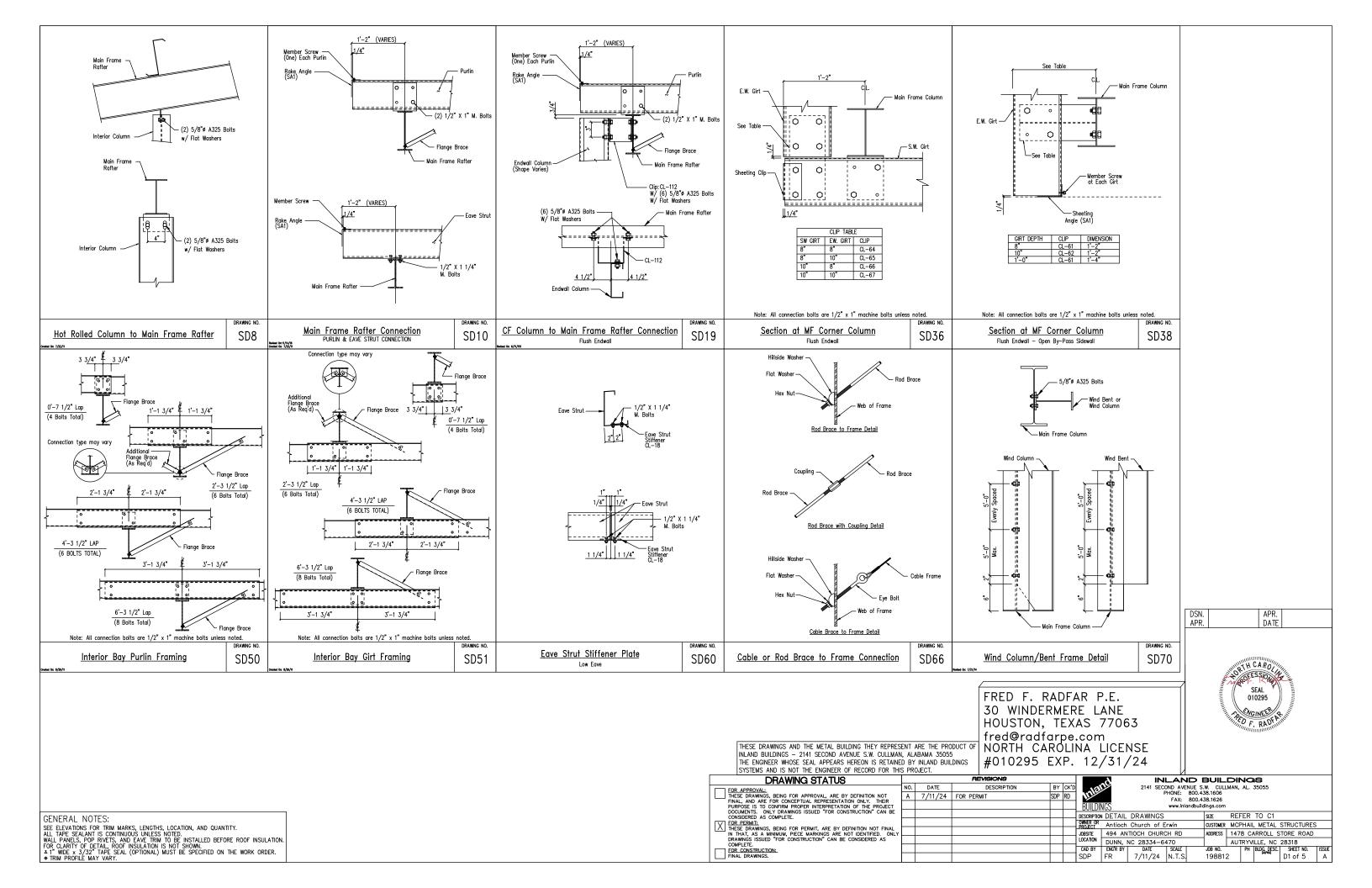
FRAME LINE C

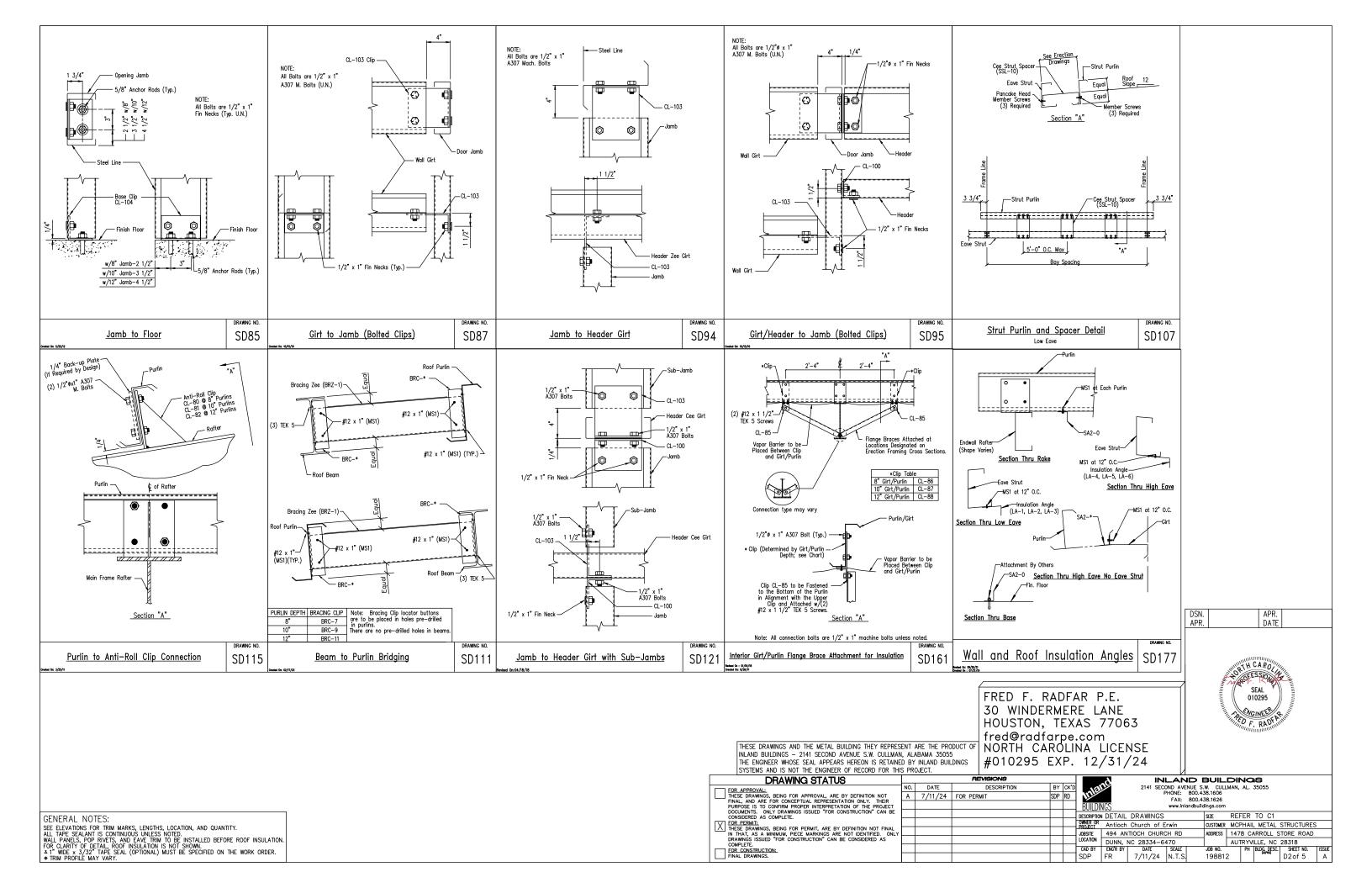


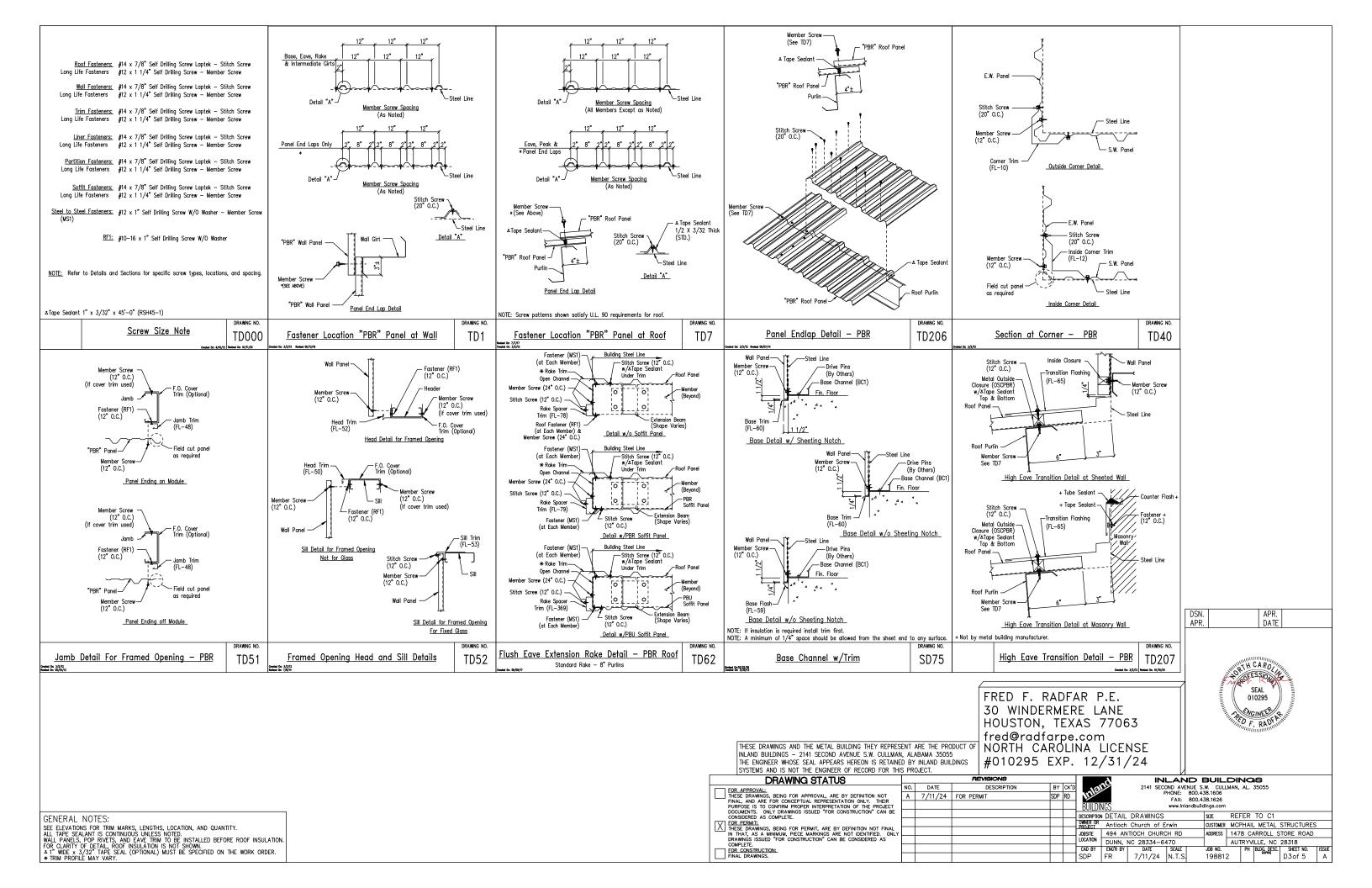


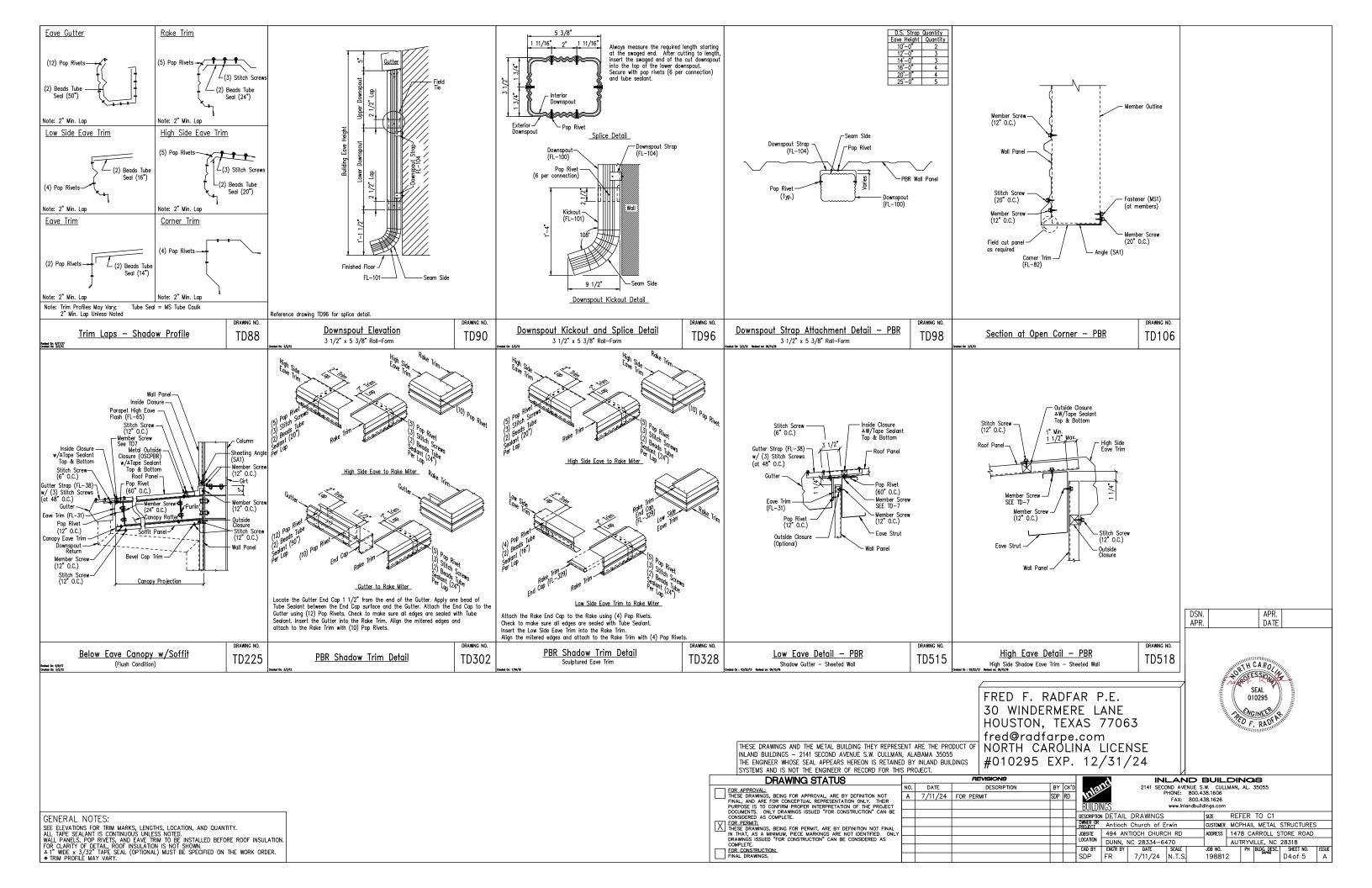


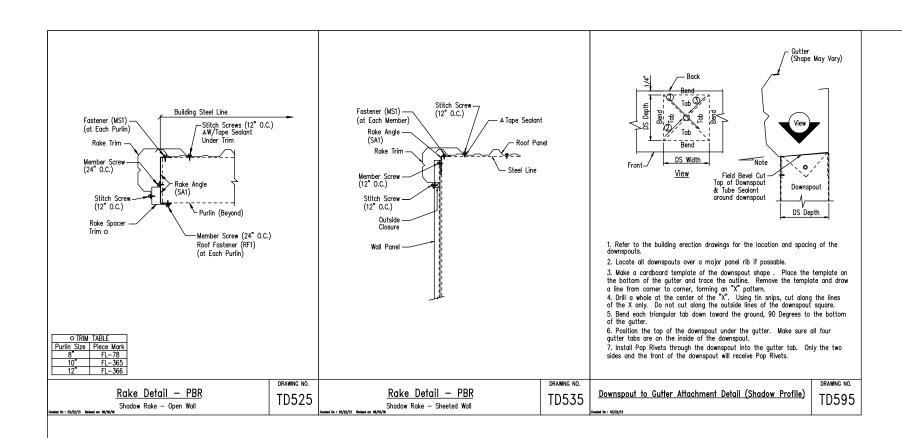












GENERAL NOTES:

SEE ELEVATIONS FOR TRIM MARKS, LENGTHS, LOCATION, AND QUANTITY.
ALL TAPE SEALANT IS CONTINUOUS UNLESS NOTED.
WALL PANELS, POP RIVETS, AND EAVE TRIM TO BE INSTALLED BEFORE ROOF INSULATION.
FOR CLARITY OF DETAIL, ROOF INSULATION IS NOT SHOWN.

A 1" MOR X 3/32" TAPE SEAL (OPTIONAL) MUST BE SPECIFIED ON THE WORK ORDER.

\* TRIM PROFILE MAY VARY.

TH CAROUSE 010295

HOUSTON, TEXAS 77063 THESE DRAWINGS AND THE METAL BUILDING THEY REPRESENT ARE THE PRODUCT OF INLAND BUILDINGS – 2141 SECOND AVENUE S.W. CULLMAN, ALABAMA 35055
THE ENGINEER WHOSE SEAL APPEARS HEREON IS RETAINED BY INLAND BUILDINGS

WORTH CAROLINA LICENSE

#010295 EXP. 12/31/24

fred@radfarpe.com

FRED F. RADFAR P.E.

30 WINDERMERE LANE

	SYSTEMS AND IS NOT THE ENGINEER OF RECORD FOR THIS	,,				_, ,		И									
	DRAWING STATUS			RE	REVISIONS				. 8	IN	LAND	ND BUILDINGS					
□ F0	R APPROVAL:	NO.	DATE		DESCRIPTION		CK'[		lane		OND AVENUE S		MAN, AL. 35	055			
THESE DRAWINGS, BEING FOR APPROVAL, ARE BY DEFINITION NOT			7/11/24	FOR PER	MIT	SDP	RD	70				DNE: 800.438.1606 FAX: 800.438.1626					
PU	FINAL, AND ARE FOR CONCEPTUAL REPRESENTATION ONLY. THEIR PURPOSE IS TO CONFIRM PROPER INTERPRETATION OF THE PROJECT							BUIL	LDINGS								
	DOCUMENTS. ONLY DRAWINGS ISSUED "FOR CONSTRUCTION" CAN BE CONSIDERED AS COMPLETE.							DESCRIF	IPTION DETAIL	DRAWINGS		SIZE	REFER T	O C1			
	R PERMIT: USE DRAWINGS, BEING FOR PERMIT, ARE BY DEFINITION NOT FINAL							OWNER PROJEC	CT Antioch	Church of E	Erwin	CUSTOMER	MCPHAIL	METAL STRUCTU	IRES		
IN	THAT, AS A MINIMUM, PIECE MARKINGS ARE NOT IDENTIFIED. ONLY							JOBSITE		10CH CHUR	CH RD	ADDRESS	1478 CAR	ROLL STORE RO	)AD		
	AWINGS ISSUED "FOR CONSTRUCTION" CAN BE CONSIDERED AS MPLETE.							LOCATIO	DUNN, N	C 28334-6	470		AUTRYVILI	E, NC 28318			
□ E0	CONSTRUCTION:							CAD B		DATE	SCALE	JOB NO.	PH BI	DG. DESC. SHEET N			
L FIN	AL DRAWINGS.							SDP	FR	7/11/24	N.T.S.	198812	2	D5of 5	, А		