

# TRANSYLVANIA COUNTY EMERGENCY SERVICES BASE BREVARD, NORTH CAROLINA

## APPROX. ELEVATION = 2150'

### DRAWING INDEX

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#### TYPICAL ABBREVIATIONS

A.B.	ANCHOR BOLT	H.S.	HEADED STUD
ADPL	ADDITIONAL	HSS	HOLLOW STRUCTURAL SECTION
ARCHL.	ARCHITECTURAL	JST.	JOIST
BM.	BEAM	JT.	JOINT
B.P.	BASE PLATE	LT.	LIGHT
BRG.	BEARING	MAS.	MASONRY
BSMT.	BASEMENT	MAX.	MAXIMUM
BTM.	BOTTOM	MECH.	MECHANICAL
BTR.	BETTER	MANUF.	MANUFACTURER
C.I.P.	CAST IN PLACE	MIN.	MINIMUM
C.J.	CONTROL OR CONSTRUCTION JOINT	NOM.	NOMINAL
CLR.	CLEAR	N.T.S.	NOT TO SCALE
CMU	CONCRETE MASONRY UNIT	O.H.	OPPOSITE HAND
COL.	COLUMN	O.C.	ON CENTER
COMP.	COMPOSITE	P.C.	PRECAST OR PILE CAP
CONC.	CONCRETE	PL.	PLATE
CONST.	CONSTRUCTION	PREFAB.	PREFABRICATED
CONT.	CONTINUOUS	PRESTR.	PRESSURE TREATED
COORD.	COORDINATE	REF.	REFERENCE
DET.	DETAIL	REINF.	REINFORCEMENT
DIA.	DIAMETER	SECT.	SECTION
DWG.	DRAWING	SIM.	SIMILAR
E.B.	EXPANSION BOLT	STD.	STANDARD
E.O.S.	EDGE OF SLAB	STL.	STEEL
E.O.W.	EDGE OF WALL	STRUCT.	STRUCTURAL
EQ.	EQUAL	SQ.	SQUARE
ELEV.	ELEVATION	T.O.S.	TOP OF SLAB / TOP OF STEEL
EXIST.	EXISTING	T.O.W.	TOP OF WALL
E.W.	EACH WAY	TRANS.	TRANSVERSE
F.F.	FINISHED FLOOR	TYP.	TYPICAL
FIN.	FINISHED	U.O.N.	UNLESS OTHERWISE NOTED
FLR.	FLOOR	V.I.F.	VERIFY IN FIELD
FND.	FOUNDATION	VERT.	VERTICAL
FTG.	FOOTING	WF.	WIDE FLANGE
GALV.	GALVANIZED	WOLM.	WOLMANIZED
H.C.	HOLLOW CORE	WT.	WEIGHT
HORIZ.	HORIZONTAL	W.W.F.	WELDED WIRE FABRIC
H.D.G.	HOT DIP GALVANIZED		

#### 2018 APPENDIX B: STRUCTURAL DESIGN

DESIGN LOADS:

IMPORTANCE FACTORS: SNOW (L) 1.20  
SEISMIC (I<sub>s</sub>) 1.50

LIVE LOADS: ROOF 20 psf  
MEZZANINE 100 psf  
FLOOR N/A psf

GROUND SNOW LOAD: 15 PSF

WIND LOAD: ULTIMATE WIND SPEED 120 MPH (ASCE-7)  
EXPOSURE CATEGORY B

SEISMIC DESIGN CATEGORY:  A  B  C  D

PROVIDE THE FOLLOWING SEISMIC DESIGN PARAMETERS:  
RISK CATEGORY (TABLE 1604.5)  I  II  III  IV  
SPECTRAL RESPONSE ACCELERATION S<sub>s</sub> 0.33 %g S<sub>1</sub> 0.9 %g  
SITE CLASSIFICATION (ASCE 7)  A  B  C  D  E  F

BASIC STRUCTURAL SYSTEM (CHECK ONE)  
 BEARING WALL  DUAL W/SPECIAL MOMENT FRAME  
 BUILDING FRAME  DUAL W/INTERMEDIATE R/C OR SPECIAL STEEL  
 MOMENT FRAME  INVERTED PENDULUM  
 SIMPLIFIED  EQUIVALENT LATERAL FORCE  DYNAMIC

ANALYSIS PROCEDURE: ARCHITECTURAL, MECHANICAL, COMPONENTS ANCHORED?  YES  NO

LATERAL DESIGN CONTROL: EARTHQUAKE  WIND

SOIL BEARING CAPACITIES:  
FIELD TEST (PROVIDE COPY OF TEST REPORT) 2000 psf  
PRESUMPTIVE BEARING CAPACITY \_\_\_\_\_ psf  
PILE SIZE, TYPE, AND CAPACITY \_\_\_\_\_

#### STRUCTURAL NOTES

**A. GENERAL**

- THE PROVIDED DRAWINGS ARE LIMITED TO THE ITEMS SPECIFIED HEREIN. NO OPINION IS OFFERED, AND NONE SHOULD BE INFERRED REGARDING OTHER ASPECTS OF THIS STRUCTURE, OR THE STRUCTURES TAKEN AS A WHOLE. ANY ASSOCIATED REMEDIES EXPRESSED OR REFERENCED ARE EXCLUSIVE TO THE ITEMS SPECIFIED HEREIN. NO WARRANTY IS EXPRESSED OR IMPLIED.
- THE DRAWINGS CONTAINED HEREIN, IN-WHOLE OR IN-PART, REMAIN THE PROPERTY OF MEDLOCK & ASSOCIATES ENGINEERING, PA. THE DRAWINGS MAY NOT BE USED, TRANSFERRED OR REPRODUCED FOR ANY PROJECT OTHER THAN THAT SPECIFIED WITHIN THE DRAWINGS WITHOUT WRITTEN CONSENT FROM MEDLOCK & ASSOCIATES ENGINEERING, PA.
- ALL WORK SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF THE INTERNATIONAL BUILDING CODE, AS ADOPTED AND SUPPLEMENTED BY LOCAL REGULATIONS.
- PROTECTION AND SAFETY: THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR AND SHALL COMPLY THE PROTECTION AND SAFETY REQUIREMENTS OF THE STATE OF NORTH CAROLINA STATE BUILDING CODE, FEDERAL LAWS AND ALL LOCAL REGULATIONS. THE ENGINEER OR HIS EMPLOYEES ARE NOT RESPONSIBLE FOR SAFETY AND PROTECTION PROCEDURES ON THIS PROJECT.
- THE GENERAL CONTRACTOR AND ALL SUBCONTRACTORS SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, LEVELS AND SITE CONDITIONS PRIOR TO START OF CONSTRUCTION. THEY SHALL REPORT ANY ERRORS, DISCREPANCIES OR INCONSISTENCIES TO THE ARCHITECT / ENGINEER (A/E) PRIOR TO COMMENCING WORK. THE GENERAL CONTRACTOR AND ALL SUBCONTRACTORS SHALL LAYOUT THEIR WORK FROM ESTABLISHED REFERENCE POINTS AND SHALL BE RESPONSIBLE FOR ALL MEASUREMENTS AND ELEVATIONS IN CONNECTION WITH THEIR WORK.
- IN THE EVENT ANY OMISSIONS OR ERRORS APPEAR IN THE DRAWINGS, SPECIFICATIONS OR OTHER DOCUMENTS, THE GENERAL CONTRACTOR SHALL NOTIFY THE STRUCTURAL ENGINEER IN WRITING OF SUCH ERRORS OR OMISSIONS PRIOR TO PROCEEDING WITH WORK WHICH MAY BE IN QUESTION. IF THE GENERAL CONTRACTOR OR ANY SUBCONTRACTORS FAIL TO GIVE SUCH NOTICE, HE SHALL BE HELD RESPONSIBLE FOR THE RESULTS OF ANY SUCH ERRORS OR OMISSIONS AND THE COST OF RECTIFYING THE SAME.
- NO CHANGES TO THE INFORMATION SHOWN ON THE DRAWINGS OR SUBSTITUTIONS OF MATERIALS SHALL BE MADE WITHOUT THE SPECIFIC WRITTEN APPROVAL OF THE STRUCTURAL ENGINEER.
- DESIGN INFORMATION SHOWN ON THE DRAWINGS PROVIDE OVERALL DIMENSIONAL PARAMETERS AND DESCRIBE ELEMENTS TO BE CONSTRUCTED AND ARE IN-PART DIAGRAMMATIC. THE DRAWINGS ARE NOT INTENDED TO BE SCALED FOR ROUGH-IN MEASUREMENTS OR TO SERVE AS SHOP DRAWINGS OR PORTIONS THEREOF.
- PRE-ENGINEERED WOOD MEMBERS SUCH AS TRUSSES OR SIMILAR BUILDING ELEMENTS SHALL BE DESIGNED BY THE MANUFACTURER UNLESS OTHERWISE NOTED ON THE PLANS. ALL LOADING AND DEFLECTION CRITERIA SHALL BE COORDINATED WITH THE OWNER OR ARCHITECT DIRECTLY FOR APPROVAL.
- ALL INFORMATION REGARDING PRE-ENGINEERED BUILDING COMPONENTS (EG: MANUF. TRUSS LAYOUT AND LOADING) SHALL BE PROVIDED TO ENGINEER OF RECORD FOR COORDINATION AND LOAD VERIFICATION PRIOR TO CONSTRUCTION.
- NO SHOP DRAWINGS SHALL BE SUBMITTED FOR ARCHITECTURAL / STRUCTURAL ENGINEER REVIEW UNTIL AFTER THEY HAVE BEEN REVIEWED AND NOTED FOR CONSTRUCTION METHOD, DIMENSIONING AND OTHER TRADE REQUIREMENTS BY THE CONTRACTOR AND STAMPED WITH THE CONTRACTOR'S APPROVAL SEAL. THE STRUCTURAL ENGINEER ASSUMES NO RESPONSIBILITY FOR DIMENSIONS, QUANTITIES, ERRORS OR OMISSIONS AS A RESULT OF CHECKING AND REVIEWING ANY SHOP DRAWINGS. ANY ERRORS OR OMISSIONS SHALL BE RECTIFIED BY THE CONTRACTOR, IRRESPECTIVE OF RECEIPT, CHECKING OR REVIEW OF DRAWINGS BY STRUCTURAL ENGINEER REGARDLESS IF WORK IS DONE IN ACCORDANCE WITH SUCH DRAWINGS.
- THE REVIEW OF ALL STRUCTURAL SUBMITTALS BY THE STRUCTURAL ENGINEER OF RECORD SHALL BE TO INSURE THE THE INTENT HAS BEEN UNDERSTOOD AND THAT THE SPECIFIED CRITERIA HAVE BEEN USED. A COPY OF ALL STRUCTURAL SUBMITTALS WILL BE RETAINED FOR RECORD KEEPING PURPOSES ONLY, WHERE CRITICAL DIMENSIONS CANNOT BE DETERMINED FROM THE PLANS OR WHERE NEW WORK ADJOINS EXISTING CONSTRUCTION, OR WHERE ONE MATERIAL ADJOINS AN IN-PLACE MATERIAL, THE CONTRACTOR SHALL TAKE FIELD MEASUREMENTS AS REQUIRED TO COMPLETE SHOP DRAWINGS AND INSTALLATION. REPORT ANY DISCREPANCIES EXCEEDING 3% BETWEEN FIELD MEASURED DIMENSIONS AND SCALED DRAWING DIMENSIONS TO ARCHITECT BEFORE PROCEEDING WITH THE WORK.
- ARCHITECT AND CONTRACTOR SHALL COORDINATE DOOR AND WINDOW OPENINGS AND INTERIOR AND EXTERIOR FINISHES.
- DEMOLITION SHALL INCLUDE REMOVAL, TRANSPORT AND DISPOSAL OF ALL WASTE MATERIAL RELATED TO THE CONSTRUCTION OF THE PROJECT TO AN APPROVED FACILITY.

**B. DESIGN LOADS**

LIVE LOADS:  
ROOF..... 20 PSF  
MEZZANINE..... 100 PSF  
FLOOR..... 100 PSF

DEAD LOADS:  
ROOF..... 19 PSF  
FLOOR (MEZZANINE)..... 12 PSF

SNOW LOADS:  
GROUND..... 15 PSF

WIND LOADS:  
ULTIMATE WIND SPEED ..... 120 MPH

- ALL STRUCTURAL ELEMENTS DESIGNED TO SUSTAIN SPECIFIED DEAD AND LIVE LOADS IN COMBINATION SO AS TO PRODUCE THE MOST CRITICAL CONDITIONS.
- PRE-ENGINEERED SYSTEMS AND COMPONENTS SHALL BE DESIGNED BASED ON THE MINIMUM LOAD REQUIREMENT PER ASCE-7 AND THE ABOVE BASIC LOAD PARAMETERS.
- WHERE CONFLICTS OCCUR BETWEEN NOTES OR DRAWINGS, THE CONTRACTOR SHALL NOT PROCEED WITH THE AFFECTED WORK UNTIL THE STRUCTURAL ENGINEER ISSUES A CLARIFICATION.
- THE STRUCTURAL CONTRACT DRAWINGS SHALL NOT BE USED AS TEMPLATES FOR SHOP DRAWINGS UNLESS EXPLICIT APPROVAL IS PROVIDED BY THE STRUCTURAL ENGINEER IN ADVANCE OF ANY SUBMITTALS. SUBMITTALS RECEIVED THAT HAVE USED THE DRAWINGS WITHOUT APPROVAL WILL BE REJECTED WITHOUT REVIEW.

**C. FOOTINGS / FOUNDATIONS**

- FOUNDATION DESIGN IS BASED ON AN ALLOWABLE SOIL BEARING PRESSURE OF 2,000 PSF BASED ON PRELIMINARY ESTIMATE OF AGGREGATE PIER CONSTRUCTION PROVIDED BY WURSTER BETTERGROUND. THE GENERAL CONTRACTOR IS TO ENGAGE AN AGGREGATE PIER SUB CONTRACTOR FOR DESIGN OF AGGREGATE PIERS TO MEET THE DESIGN ASSUMPTIONS. THE AGGREGATE PIER ENGINEER SHALL BE LICENSED IN THE STATE OF NORTH CAROLINA.
- PRIOR TO CONSTRUCTION, SUB GRADE CONDITIONS USED AS DESIGN PARAMETERS SHALL BE TESTED AND EVALUATED BY A GEOTECHNICAL ENGINEER LICENSED IN NORTH CAROLINA. ALLOW STRUCTURAL ENGINEER TO REVIEW GEOTECHNICAL REPORT PRIOR TO CONSTRUCTION.
- FOUNDATION CONDITIONS DIFFERENT TO DESIGN PARAMETERS OR TO THE GEOTECHNICAL REPORT SHALL BE REPORTED TO THE STRUCTURAL AND GEOTECHNICAL ENGINEER BEFORE FURTHER CONSTRUCTION IS ATTEMPTED.
- THE DESIGN EXCLUDES GLOBAL STABILITY OR ANY OTHER GROUND CONDITIONS. COMPETENT, GLOBAL STABILITY, OR ANY OTHER SUB GRADE CONDITIONS SHALL BE DETERMINED BY A GEOTECHNICAL ENGINEER LICENSED IN NORTH CAROLINA.
- IT SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO ENGAGE THE SERVICES OF A GEOTECHNICAL ENGINEER LICENSED IN THE STATE OF NORTH CAROLINA PRIOR TO AND DURING CONSTRUCTION AS REQUIRED BY LOCAL ORDINANCE IN AREAS DESIGNATED AS "STEEP SLOPE", "HIGH HAZARD OR MODERATE HAZARD" OR "HIGH ELEVATION OVERLAY DISTRICTS". THE GEOTECHNICAL ENGINEER SHALL PREPARE A REPORT DESCRIBING SUB-GRADE CONDITIONS, AND PERFORM GLOBAL STABILITY ANALYSIS AS REQUIRED BY LOCAL ORDINANCE. RECOMMENDATIONS BASED ON GEOTECHNICAL TESTING AND EVALUATION SHALL BE PRESENTED TO THE AUTHORITY HAVING JURISDICTION FOR REVIEW WITH THE PERMIT APPLICATION. PRIOR TO FINAL APPROVAL BY THE JURISDICTION HAVING AUTHORITY, THE GEOTECHNICAL ENGINEER SHALL PREPARE A REPORT CERTIFYING THE DESIGN RECOMMENDATIONS WERE FOLLOWED DURING CONSTRUCTION.
- IT SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO ENGAGE THE SERVICES OF THE STRUCTURAL ENGINEER OF RECORD TO CONDUCT SPECIAL INSPECTIONS DURING CONSTRUCTION OF SITE RETAINING WALLS WITHIN THE CITY OF ASHEVILLE AND BUNCOMBE COUNTY AS REQUIRED BY LOCAL ORDINANCE.
- THE BOTTOM OF ALL EXTERIOR FOOTINGS SHALL BE A MINIMUM OF 24" BELOW FINISHED GRADE, UNLESS OTHERWISE NOTED.
- ALL FOOTINGS SHALL BEAR ON UNDISTURBED NATIVE SOIL OR ENGINEERED FILL PER GEOTECHNICAL ENGINEER SPECIFICATIONS.
- THE GENERAL CONTRACTOR SHALL USE THE STRUCTURAL DRAWINGS TOGETHER WITH THE ARCHITECTURAL, CIVIL, MECHANICAL AND ELECTRICAL DRAWINGS TO LOCATE FOOTING STEPS, DEPRESSED SLABS, SLOPES, DRAINS, OUTLETS, RECESSES, OPENINGS, BOLT SETTINGS, SLEEVES, DIMENSIONS, ETC. ANY POTENTIAL CONFLICTS SHALL BE REPORTED IN WRITING TO THE ARCHITECT / ENGINEER (A/E) BEFORE PROCEEDING WITH THE WORK.
- PROVIDE 4" x 8" PERFORATED PVC DRAIN PIPE ENCASED IN #57 WASHED STONE AND WRAPPED IN FILTER FABRIC LOCATED ALONG EXTERIOR SIDE OF ALL PERIMETER FOUNDATION WALLS ATOP OF WALL FOOTING UNLESS OTHERWISE NOTED OR SHOWN; INSTALL PIPE WITH A MIN. 1% SLOPE TO DAYLIGHT (TYP)
- CRAWL SPACE ACCESS DIMENSIONS AND LOCATIONS PER NC BUILDING CODE UNLESS OTHERWISE NOTED OR SHOWN. NUMBER OF CRAWL SPACE VENTS AND LOCATION PER NC BUILDING CODE. PROVIDE MIN. (1)-#4 HORIZ. BAR ABOVE AND BELOW ALL OPENINGS IN FOUNDATION WALLS GREATER THAN 24" WIDE UNLESS OTHERWISE NOTED OR SHOWN. EXTEND HORIZ. REINF. 24" MIN. PAST OPENING. ENSURE SINGLE VERT. BAR (MATCH SIZE WITH VERT. WALL REINF. PER PLANS) EACH SIDE ADJACENT TO OPENING.
- PRIOR TO BACKFILLING, ALL RETAINING WALLS, EXCEPT THOSE DESIGNATED AS CANTILEVERS, SHALL BE SHORED UNTIL RESTRAINING FLOOR FRAMING IS IN PLACE AND CONCRETE HAS CURED FOR A MINIMUM OF 14 DAYS.

**D. CONCRETE AND REINFORCING STEEL**

- WORK SHALL CONFORM TO THE LATEST EDITIONS OF ACI SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS (ACI 301) AND BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318). CONCRETE SHALL HAVE THE FOLLOWING MINIMUM COMPRESSIVE STRENGTH (f'<sub>c</sub>) AT 28 DAYS:  
FOOTINGS..... 3000 PSI  
INTERIOR SLAB ON GRADE..... 4000 PSI  
EXTERIOR SLABS AND WALKS..... 4500 PSI  
FOUNDATION WALLS..... 3000 PSI
- ALL EXTERIOR CONCRETE SHALL CONTAIN ENTRAINED AIR IN ACCORDANCE WITH ACI 318, TABLE 4.4.1.
- CONCRETE REINFORCEMENT BARS SHALL CONFORM TO ASTM A615, GRADE 60. REINFORCEMENT DESIGNATED AS CONTINUOUS SHALL LAP 57 BAR DIAMETER UNLESS NOTED OTHERWISE
- WELDED WIRE FABRIC (WWF) SHALL CONFORM TO ASTM A 1064, LATEST REVISION.
- SUPPORT REINFORCING MATERIAL ON SUITABLE CHAIRS OR CEMENTITIOUS BLOCKS SO AS NOT TO DISPLACE DURING PLACEMENT OF CONCRETE.
- PROVIDE 3" MINIMUM CONCRETE COVER TO REINFORCEMENT WHEN CONCRETE IS PLACED AGAINST EARTH, 1 1/2" MINIMUM COVER ELSEWHERE UNLESS OTHERWISE NOTED.
- CONCRETE SHALL BE CURED FOR 7 DAYS OR CURED BY USING AN APPROVED MEMBRANE CURING COMPOUND.
- THE CONTRACTOR SHALL VERIFY IN THE FIELD THE TYPE AND LOCATION OF ALL EMBEDDED ITEMS INCLUDING ANCHOR BOLTS, PIPES, SLEEVES, CONDUIT, ETC., PRIOR TO PLACING CONCRETE.
- REINFORCEMENT NOT FULLY ENCASED BY CONCRETE SHALL BE EPOXY COATED.

**E. MASONRY**

- DESIGN, MATERIAL AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH "BUILDING CODE REQUIREMENTS FOR CONCRETE MASONRY STRUCTURES" ACI 530.1 / ASCE 6, LATEST REVISION.
- ALL CONCRETE MASONRY UNITS SHALL BE HOLLOW CONCRETE UNITS OF ULTIMATE COMPRESSIVE STRENGTH OF 1500 PSI. GRADE N, ASTM C 90. MORTAR SHALL BE TYPE S, MEETING ASTM C 270.
- LAP ALL REINFORCING STEEL 48 BAR DIAMETERS, OR 2'-0" MINIMUM AT SPLICES. REINFORCEMENT SHALL BE PLACED AT THE CENTER OF CELLS UNLESS OTHERWISE IN THE DETAILS WHEN REINFORCEMENT IS LOCATED ADJACENT TO A CELL FACE, PROVIDE 3/4" CLEARANCE AND SUPPORT REBAR IN PLACE WITH SPACERS OR POSITIONERS AS REQUIRED. SPLICE REINFORCEMENT AS INDICATED ONLY.
- GROUT SHALL BE IN ACCORDANCE WITH ASTM C476, STANDARD SPECIFICATIONS FOR GROUT OF MASONRY OR 3000 PSI "PEA GRAVEL" CONCRETE PER SPECIFICATIONS.
- ALL VERTICAL REINFORCING BARS SHALL BE ANCHORED IN THE FOOTING, THICKENED SLAB, BEAM OR LINTEL SUPPORTING THE WALL AT THE TOP AND BOTTOM WITH STANDARD HOOKS OR BENDS AND SHALL BE CONTINUOUS THROUGHOUT THE HEIGHT OF THE WALL, WITH LAP SPLICES OF AT LEAST 48 BAR DIAMETERS FOR GRADE 60 REINFORCING STEEL OR AT LEAST 40 BAR DIAMETERS FOR GRADE 40 REINFORCING STEEL. MEETING ASTM A615.
- LAPPED BARS SHALL BE SECURED WITH WIRE TIES OR OTHER MEANS TO ENSURE THAT THE BAR IS NOT DISPLACED DURING GROUT PLACEMENT.
- GROUT ALL CELLS CONTAINING VERTICAL REINFORCEMENT IN 5'-0" MAX LIFTS. ALIGNMENT OF CELLS ARE TO BE INSPECTED AND APPROVED PRIOR TO PLACEMENT OF GROUT.
- GROUT ALL CELLS BELOW FINISHED GRADE.
- PROVIDE HORIZONTAL BOND BEAMS WITH (1) CONT. #5 BAR @ 32" O.C. VERTICALLY. AT CORNERS OF WALLS PROVIDE 36" x 36" #5 BENT BAR IN BOND BEAM
- ALL PRECAST OR POURED LINTELS SHALL BE REINFORCED WITH TWO #4 TOP & BOTTOM BARS WITH #3 TIES @ 12" O.C. AT A MINIMUM AND HAVE A 16" MINIMUM MASONRY END BEARING.
- MASONRY WORK SHALL BE INSPECTED IN ACCORDANCE WITH ACI 530 QUALITY ASSURANCE LEVEL B.

**F. STRUCTURAL LUMBER**

- ALL STRUCTURAL LUMBER SHALL CONFORM TO THE MOST CURRENT APPLICABLE SPECIFICATIONS OF THE AMERICAN INSTITUTE OF TIMBER CONSTRUCTION.
- ALL BEAM AND HEADER STUDS SHALL HAVE FULL AND CONTINUOUS BEARING DOWN TO FOUNDATION.
- ALL PERIMETER WALLS SHALL BE AS CALLED OUT ON THE FOUNDATION PLAN WITH DOUBLE TOP PLATE. PROVIDE SOLID HORIZONTAL BLOCKING EVERY 1/2 HEIGHT OF WALL.
- ALL INTERIOR BEARING WALLS SHALL BE AS CALLED OUT ON THE FOUNDATION PLAN WITH DOUBLE TOP PLATE. PROVIDE SOLID HORIZONTAL BLOCKING EVERY 1/2 HEIGHT OF WALL.
- ANCHOR P.T. WALL PLATES TO FOUNDATION WITH 5/8" Ø F1554, GRADE 36, HEADED ANCHOR BOLTS @ 32" O.C. & 6" MIN. FROM CORNERS; TYPICAL, U.O.N. SMOOTH "J" BOLTS ARE NOT AN ACCEPTABLE ANCHORING SYSTEM. EMBED 8" MINIMUM INTO FOUNDATION WALL. SIMPSON PAB8 ANCHOR BOLTS ARE AN ACCEPTABLE ALTERNATE. FURNISH ADDITIONAL SIMPSON BPS5/8-3 PLATE WASHER AT PLYWOOD SHEAR WALL SILL BOLTS. ATTACH BEARING WALL PLATES TO SILL PLATES AND BLOCKING W/ (2) 1/6d NAILS @ 8" O.C.; TYP, U.O.N.
- ALL EXTERIOR SIMPSON STRONG-TIE CONNECTORS SHALL HAVE A MEDIUM LEVEL OF CORROSION RESISTANCE AT MINIMUM (E.G. "Z-MAX" OR "HDG" HOT DIPPED GALVANIZED). THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE COMPATIBILITY OF CORROSION RESISTANT COATED CONNECTORS WITH ALL FASTENERS AND PRESERVATIVE-TREATED WOOD MEMBERS IN CONTACT WITH CONNECTOR.
- ALL EXTERIOR WOOD POSTS SHALL BE PRESSURE TREATED.
- PROVIDE 3" MIN. BEARING FOR ALL STRUCTURAL WOOD BEAMS AND HEADERS UNLESS OTHERWISE NOTED OR SHOWN ON THE PLANS.
- ALL SUB-FLOOR SHEATHING SHALL BE T & G 3/4" THICK APA RATED SHEATHING EXPOSURE 1 GLUED & NAILED W/ 10d NAILS @ 6" o.c. AT EDGE OF SHEATHING AND 10d NAILS @ 12" o.c. AT INTERMEDIATE MEMBERS.
- ALL ROOF SHEATHING SHALL BE 5/8" THICK APA RATED SHEATHING EXPOSURE 1 WITH 10d NAILS @ 3" O.C. AT EDGE OF SHEATHING AND 10d NAILS @ 12" O.C. AT INTERMEDIATE MEMBERS.
- ALL EXTERIOR WALLS SHEATHING (EXCEPT SHEAR WALLS) SHALL BE 1/2" THICK APA RATED SHEATHING EXPOSURE 1 ATTACHED TO 2x STUD WALLS WITH 10d NAILS @ 6" O.C. AT EDGE OF SHEATHING INCLUDING TOP AND BOTTOM PLATE AND 10d NAILS @ 12" O.C. AT INTERMEDIATE MEMBERS.
- ALL SHEAR WALL SHEATHING SHALL BE 1/2" THICK APA STRUCTURAL 1 RATED SHEATHING EXPOSURE 1 ATTACHED TO 2x STUD WALL WITH 10d NAILS AT EDGE OF SHEATHING PER SHEARWALL SCHEDULE (INCLUDING TOP AND BOTTOM PLATE) AND 10d NAILS @ 12" O.C. AT INTERMEDIATE MEMBERS.
- ENGINEERED STRUCTURAL WOOD PRODUCTS (I.E. PSL, LVL), SHALL HAVE THE MINIMUM STRUCTURAL PROPERTIES AS FOLLOW:  
PSL (BEAM) PSL (COL.) LVL(BEAM) GLULAM (24F-V5, SP/SP)  
-FLEXURAL STRESS (F<sub>b</sub>): 2,900 PSI 2,400 PSI 2,600 PSI 2,400 PSI, BOT. & TOP  
-MODULES OF ELASTICITY (E): 2,000 KSI 1,800 PSI 2,000 KSI 1,700 KSI  
-COMP. PARALLEL TO GRAIN (F<sub>c</sub>-PRL): 2,900 PSI 2,500 PSI 2,510 PSI 1,600 PSI  
-COMP. PERP. TO GRAIN (F<sub>c</sub>-PERP): 750 PSI 425 PSI 750 PSI 740 PSI, BOT. & TOP  
-SHEAR PARALLEL TO GRAIN (F<sub>v</sub>): 290 PSI 190 PSI 285 PSI 300 PSI
- CONNECTORS - PER SIMPSON STRONG-TIE COMPANY

**G. PREFABRICATED WOOD TRUSSES**

- FURNISH WHERE INDICATED ON PLAN. TRUSSES SHALL BE DESIGNED IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF LATEST EDITION OF NATIONAL DESIGN SPECIFICATIONS FOR WOOD CONSTRUCTION (NDS) OF THE AMERICAN FOREST AND PAPER ASSOCIATION (AF & PA), AND DESIGN SPECIFICATIONS FOR METAL PLATE CONNECTED WOOD TRUSSES (ANSI/TPI 1) OF THE TRUSS PLATE INSTITUTE (TPI), AND CODE OF JURISDICTION.
- MANUFACTURER TRUSSES IN THE CONFIGURATION SHOWN. MOISTURE CONTENT OF LUMBER SHALL BE NO GREATER THAN 19 PERCENT AT THE TIME OF FABRICATION.
- DESIGN LOADS: ROOF TRUSSES  
TOP CHORD DL = 5 PSF  
TOP CHORD LL = 20 PSF  
BTM CHORD DL = 10 PSF  
BTM CHORD LL = 0 PSF
- TRUSS SHOP DRAWINGS SHALL BE SUBMITTED TO ARCHITECT (AND/OR STRUCTURAL ENGINEER) FOR REVIEW AND SHALL INCLUDE A MINIMUM OF THE FOLLOWING INFORMATION:  
a. SPAN, DEPTH OR SLOPE, AND SPACING OF TRUSSES  
b. REQUIRED BEARING WIDTH  
c. DESIGN LOADS  
d. DESIGN STRESSES IN EACH MEMBER  
e. CONCENTRATED LOADS AND THEIR POINTS OF APPLICATION  
f. REACTIONS (INCLUDING LOCATION AND DIRECTION)  
g. PLATE TYPE, THICKNESS/GAGE (20 GAGE, MIN), SIZE AND LOCATION AT EACH JOINT  
h. LOAD ADJUSTMENT FACTORS  
i. WIND AND SEISMIC CRITERIA  
j. LUMBER SIZE, SPECIES AND GRADE FOR EACH MEMBER  
k. LOCATION OF ANY REQUIRED CONTINUOUS LATERAL BRACING  
l. CALCULATED DEFLECTION RATIO AND/OR MAX DEFLECTION FOR LIVE AND TOTAL LOAD  
m. LOCATION OF JOINTS  
n. CONNECTION REQUIREMENTS FOR: TRUSS-TO-TRUSS GIRDERS, TRUSS PLY-TO-PLY, AND FIELD SPLICES  
o. SEAL AND REGISTRATION NUMBER OF A CIVIL OR STRUCTURAL ENGINEER, LICENSED IN STATE WHERE TRUSSES ARE TO BE INSTALLED. SHALL APPEAR ON EACH TRUSS DESIGN AND ON THE TRUSS LAYOUT PLAN PREPARED BY THE TRUSS MANUFACTURER OR FABRICATOR
- TRUSSES SHALL BE HANDLED DURING FABRICATION, DELIVERY AND AT JOBSITE SO AS NOT TO BE SUBJECT TO EXCESSIVE BENDING. TRUSSES SHALL BE UNLOADED ON SMOOTH GROUND TO AVOID LATERAL STRAIN. TRUSSES SHALL BE PROTECTED FROM DAMAGE THAT MIGHT RESULT FROM ON-SITE ACTIVITIES AND ENVIRONMENTAL CONDITIONS. PREVENT TOPPLING WHEN BANDING IS REMOVED. TRUSSES SHALL BE SET AND SECURED LEVEL AND PLUMB, AND IN CORRECT LOCATION. HANDLE DURING INSTALLATION IN ACCORDANCE WITH LATEST VERSION OF BUILDING COMPONENT SAFETY INFORMATION (BCSI 1) FROM TPI, AND ANSI/TPI 1. INSTALLATION SHALL BE CONSISTENT WITH GOOD WORKMANSHIP AND GOOD BUILDING PRACTICES AND SHALL BE RESPONSIBILITY OF TRUSS INSTALLER.
- APPARENT DAMAGE TO TRUSSES, IF ANY, SHALL BE REPORTED TO MANUFACTURER PRIOR TO INSTALLATION. TRUSSES SHALL BE HELD IN CORRECT ALIGNMENT UNTIL SPECIFIED PERMANENT BRACING IS INSTALLED.
- CUTTING AND ALTERING OF TRUSSES IS NOT PERMITTED. CONCENTRATED LOADS SHALL NOT BE PLACED ATOP TRUSSES UNTIL ALL SPECIFIED BRACING HAS BEEN INSTALLED AND DECKING IS PERMANENTLY NAILED IN PLACE. SPECIFICALLY AVOID STACKING FULL BUNDLES OF DECKING OR OTHER HEAVY MATERIALS ONTO UNSHEATHED TRUSSES.
- OVERBUILD FRAMING SHALL BE GABLE END TYPE TRUSSES SPACED AT 24" ON CENTER. PLYWOOD ROOF SHEATHING SHALL BE INSTALLED ON SUPPORTING TRUSSES OR WOOD JOISTS PRIOR TO INSTALLING OVERBUILD FRAMING.
- FURNISH AND INSTALL ONE HURRICANE ANCHOR AT EACH END OF EACH ROOF TRUSS, UNLESS OTHERWISE NOTED ON PLANS OR DETAILS.

**H. STRUCTURAL STEEL**

- STEEL WORK SHALL CONFORM TO THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS, NINTH EDITION.
- STRUCTURAL STEEL: DESIGN PER CURRENT EDITION A.I.S.C. AS FOLLOWS  
WITH ONE SHOP COAT OF PAINT.  
ROLLED SHAPES..... ASTM A-992  
PLATES, ANGLES, AND BARS..... ASTM A-36  
TUBES..... ASTM A-500 GR. B  
ANCHOR BOLTS (A.B.S.)..... ASTM F-1554, GRADE 36  
USE ONLY WHERE SPECIFICALLY CALLED FOR.
- SUBMIT SHOP DRAWINGS FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.
- ALL EXTERIOR STEEL SHALL BE COATED IN INDUSTRIAL ENAMEL TOUCH-UP DAMAGED SURFACED AFTER ERECTION.
- AT ANCHOR BOLTS, THE NUT SHALL BE DRAWN TIGHT AND PROJECTING THREADS UPSET.
- ALL WELDS SHALL CONFORM TO AWS D1.1, LATEST EDITION, BY CERTIFIED WELDERS. FOR ASTM A 36 STEEL, USE CLASS E70XX SERIES ELECTRODES FOR MANUAL SHIELDED METAL ARC WELDING. WELDED FIELD CONNECTIONS WILL BE ACCEPTED ONLY WHERE SPECIFICALLY SHOWN ON THE DRAWINGS OR APPROVED BY THE ENGINEER IN WRITING. CONNECTIONS SHALL BE DESIGNED IN ACCORDANCE WITH AISI VOLUME II, CONNECTIONS MANUAL OF STEEL CONSTRUCTION, LATEST EDITION.
- STEEL SURFACES TO BE FIELD WELDED SHALL BE CLEANED THOROUGHLY AND PRIMER REMOVED PRIOR TO WELDING. FOR FIELD WELDS EXPOSED TO THE ELEMENTS, COAT WELDS AND AREAS OF REMOVED PRIMER WITH INDUSTRIAL ENAMEL OCE WELDING (AND INSPECTION OF WELDS, IF REQUIRED) IS COMPLETED.
- FIELD VERIFY SITE CONDITIONS PRIOR TO FABRICATION OF STEEL WORK.

Project No:  
**796622**

**S0.1**  
1 OF 9

Drawing Title:  
**STRUCTURAL NOTES, DRAWING INDEX**

TRANSYLVANIA COUNTY  
EMERGENCY SERVICES BASE

NORTH CAROLINA  
BREVARD

REVISIONS/SUBMISSIONS

CONSTRUCTION SET

Date: --/--

No.

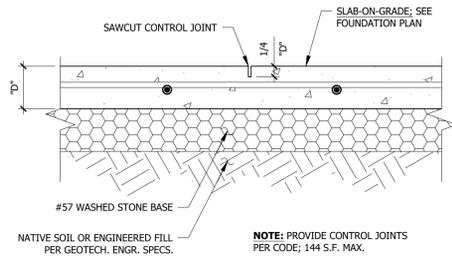
Designer: CHR  
Drawn: PLY  
Checked: TJD

Reviewer: CHR  
Scale: AS NOTED  
Date: 09-21-22

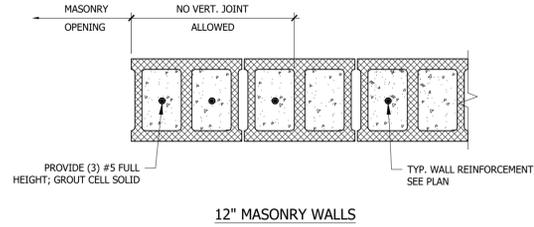
53 Asheland Avenue,  
Suite 101  
Asheville, NC 28801  
Phone#: (828) 232-4448  
Fax#: (828) 232-5224  
NC Cert. # C-3133

MEDLOCK & ASSOCIATES  
ENGINEERING, P.A.

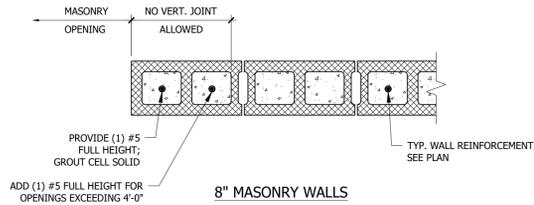
STRUCTURAL • CONSULTING • CONSTRUCTION ASSISTANCE



**1**  
S0.2  
SAWCUT CONTROL JOINT DETAIL (TYP.)  
SCALE: 1-1/2"=1'-0"

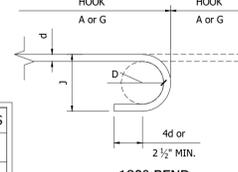


**12" MASONRY WALLS**

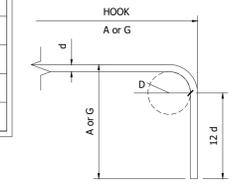


**8" MASONRY WALLS**

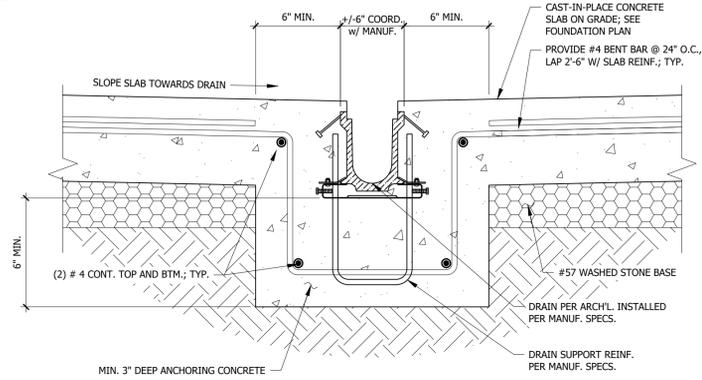
BAR SIZE	d	180° HOOKS			90° HOOKS	
		D	A OR G	J	A OR G	A OR G
#3	3/8"	2 1/4"	5"	3"	6"	
#4	1/2"	3"	6"	4"	8"	
#5	5/8"	3 3/4"	7"	5"	10"	
#6	3/4"	4 1/2"	8"	6"	1'-0"	
#7	7/8"	5 1/4"	10"	7"	1'-2"	
#8	1"	6"	11"	8"	1'-4"	



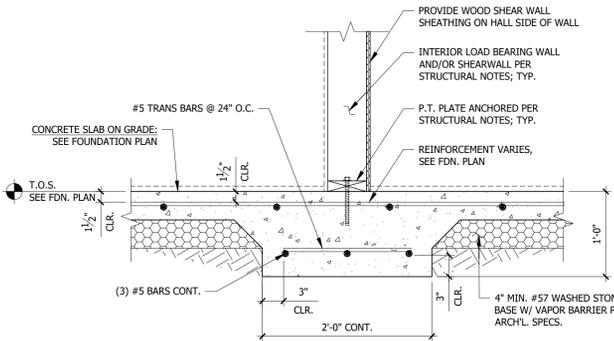
**180° BEND**



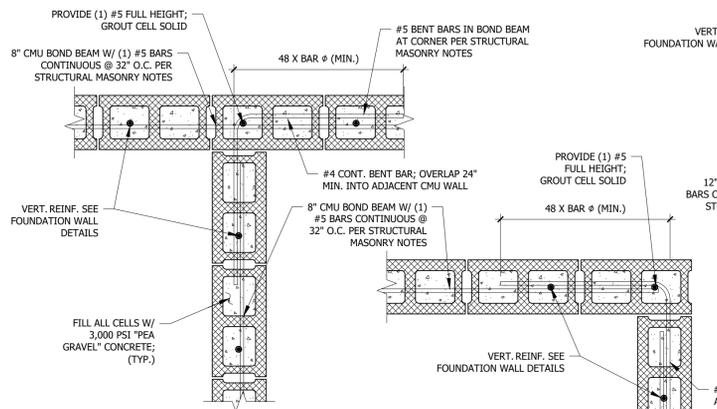
**90° BEND**



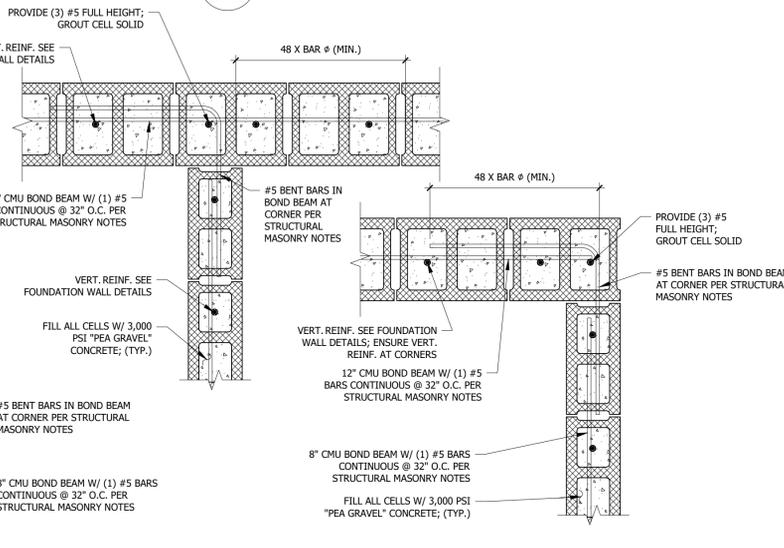
**4**  
S0.2  
TRENCH DRAIN SECTION (TYP.)  
SCALE: 1-1/2"=1'-0"



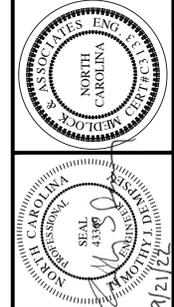
**5**  
S0.2  
THICKENED SLAB DETAIL (TYP.)  
SCALE: 1"=1'-0"



**6**  
S0.2  
8" CMU WALL CORNER BOND BEAM DETAIL (TYP.)  
SCALE: 1"=1'-0"



**7**  
S0.2  
12" CMU WALL CORNER BOND BEAM DETAIL (TYP.)  
SCALE: 1"=1'-0"



**CONSTRUCTION SET**

Reviewed: CHR AS NOTED  
Scale: AS NOTED  
Date: 09-21-22  
Designed: CHR  
Drawn: PLY  
Checked: TJD  
53 Asheland Avenue,  
Suite 101  
Asheville, NC 28801  
Phone#: (828) 232-4448  
Fax#: (828) 232-5224  
NC Cert. # C-3133



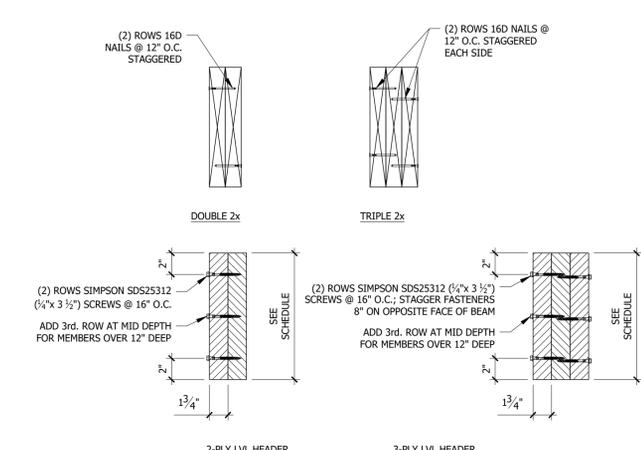
STRUCTURAL • CONSULTING • CONSTRUCTION ASSISTANCE

Project No:  
796622  
Drawing Title:  
TYPICAL FOUNDATION DETAILS  
2 OF 9  
S0.2  
BREVARD  
NORTH CAROLINA  
TRANSLYVANIA COUNTY  
EMERGENCY SERVICES BASE

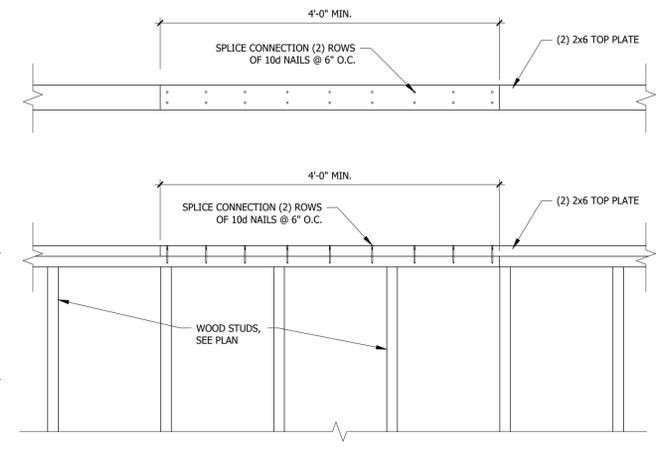
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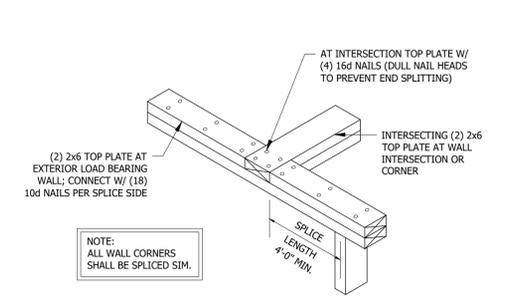
REVISIONS/SUBMISSIONS



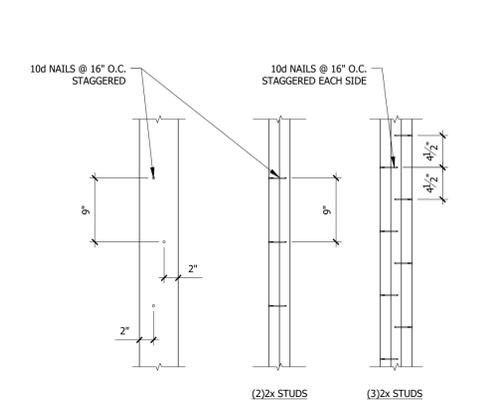
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S0.3  
SCALE: 1-1/2"=1'-0"



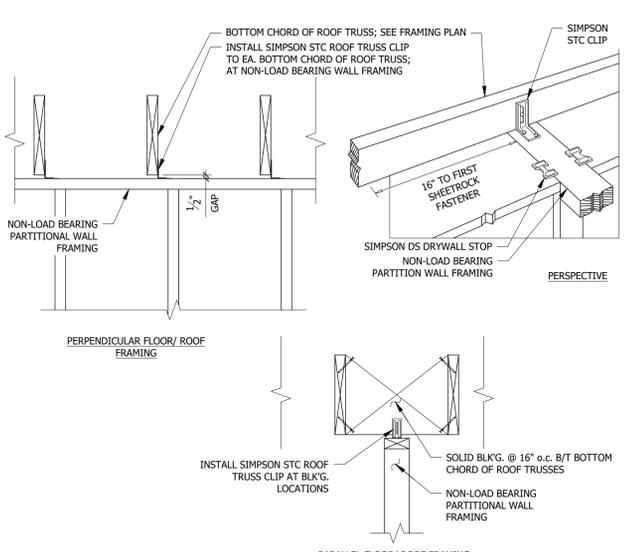
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S0.3  
SCALE: 1"=1'-0"



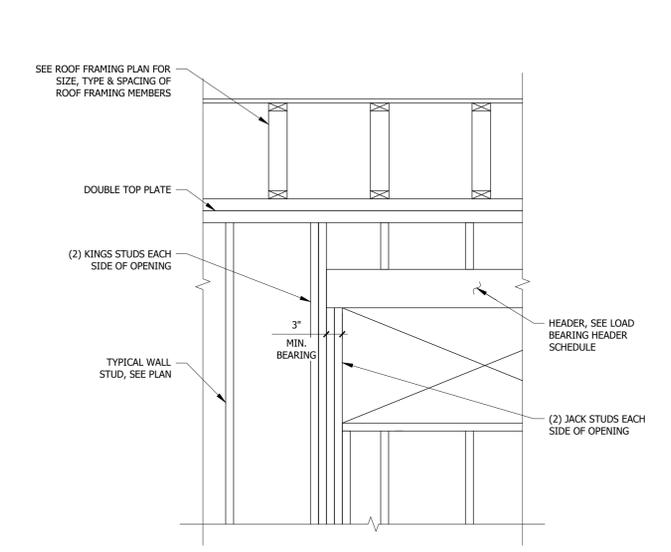
**3**  
S0.3  
SCALE: 1"=1'-0"



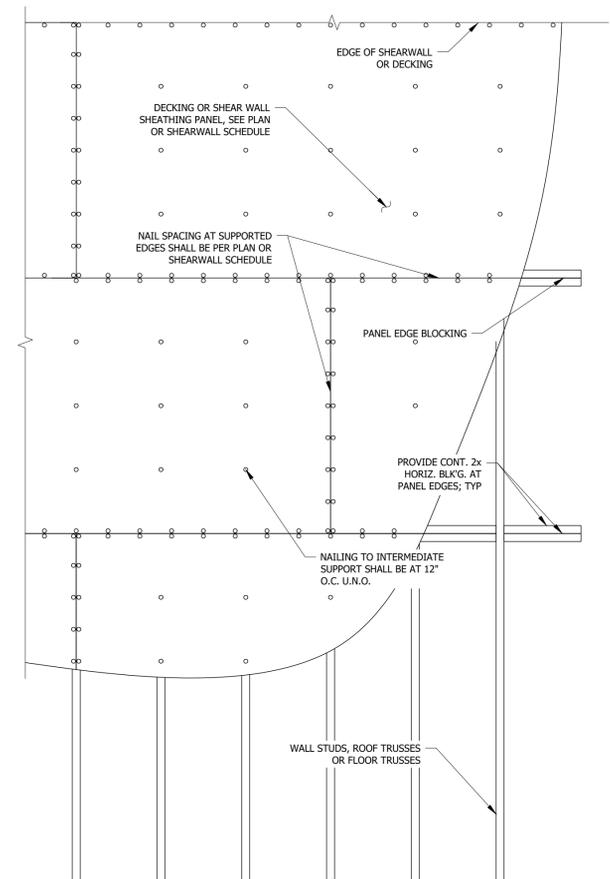
**4**  
S0.3  
SCALE: 1"=1'-0"



**5**  
S0.3  
SCALE: 1"=1'-0"



**6**  
S0.3  
SCALE: 3/4"=1'-0"



**7**  
S0.3  
SCALE: 3/4"=1'-0"

DESIGNATION	SHEATHING	EDGE NAILING PATTERN (10d COMMON)	END POSTS	HOLD DOWN ANCHORS EA. END	HOLD DOWN ANCHOR BOLT DIAMETER	SILL PLATE TO FOUNDATION	HOLD DOWN ANCHOR BOLT EMBEDMENT	REMARKS
SWA	SEE STRUCTURAL LUMBER NOTES	6" @ EDGES 12" IN FIELD	(2) 2x6	DTT1Z	3/8"ø	3/8"ø @ 16" O.C.	HOLD DOWN ANCHOR BOLT 4" MIN. EMBEDMENT	
SWB	SEE STRUCTURAL LUMBER NOTES	6" @ EDGES 12" IN FIELD	(3) 2x4	DTT1Z	3/8"ø	3/8"ø @ 16" O.C.	HOLD DOWN ANCHOR BOLT 4" MIN. EMBEDMENT	
SWC	SEE STRUCTURAL LUMBER NOTES	6" @ EDGES 12" IN FIELD	(2) 2x6	DTT2Z	1/2"ø	3/8"ø @ 16" O.C. (TOP OF MASONRY WALL)	HOLD DOWN ANCHOR BOLT 5" MIN. EMBEDMENT	ANCHOR EMBEDMENT IS INTO TOP OF MASONRY WALL

**REVISIONS/SUBMISSIONS**

No.	Date

**ASSOCIATES ENGINEERS ARCHITECTS**  
NORTH CAROLINA  
MEDLOCK & ASSOCIATES ENGINEERS, P.A.

**CONSTRUCTION SET**

DESIGNED: CHR  
DRAWN: PLY  
CHECKED: TJD  
REVIEWED: CHR  
SCALE: AS NOTED  
DATE: 09-21-22

53 Ashland Avenue,  
Suite 101  
Asheville, NC 28801  
Phone#: (828) 232-4448  
Fax#: (828) 232-5224  
NC Cert. # C-3133

**MEDLOCK & ASSOCIATES ENGINEERS, P.A.**

STRUCTURAL • CONSULTING • CONSTRUCTION ASSISTANCE

TRANSLYVANIA COUNTY  
EMERGENCY SERVICES BASE

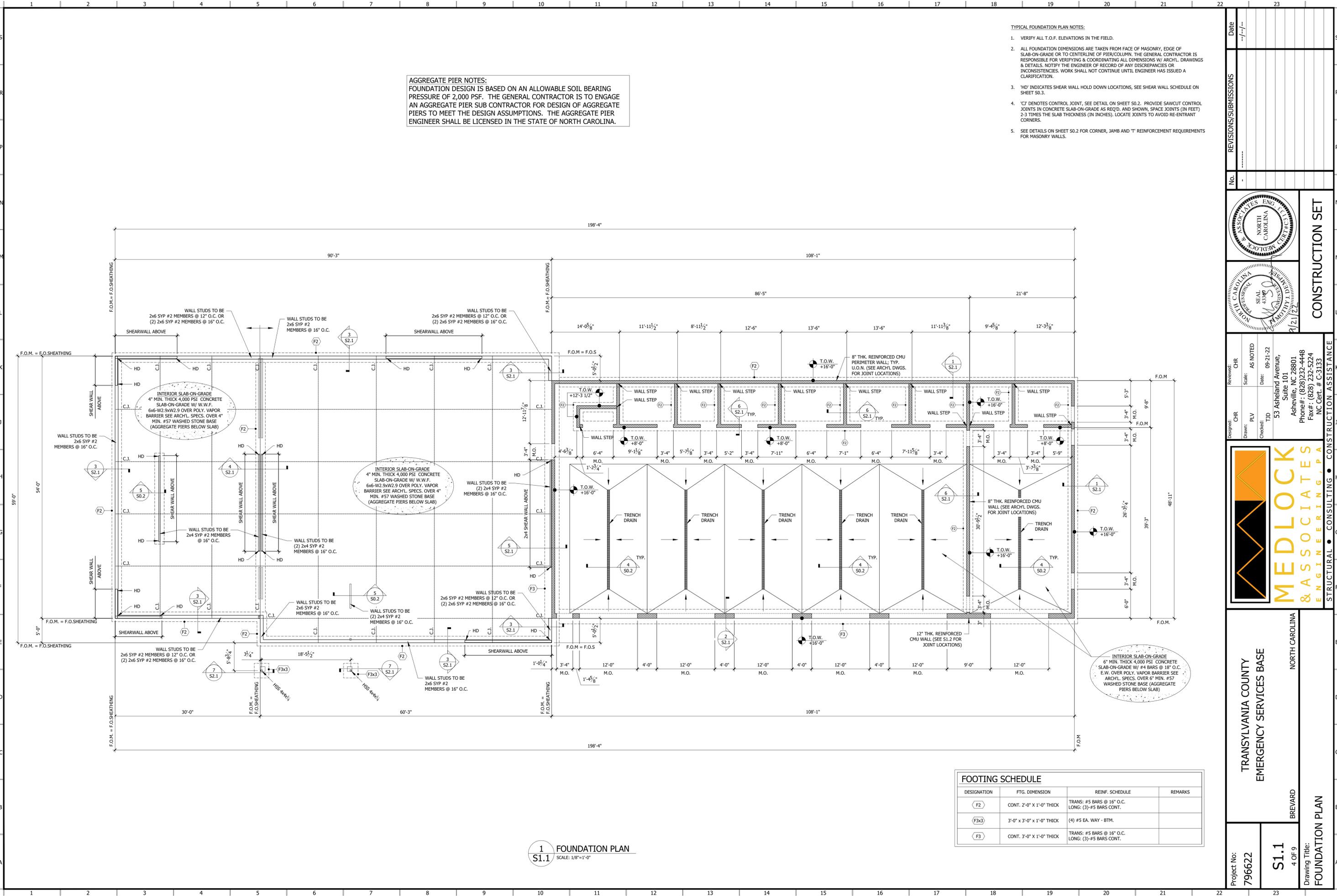
NORTH CAROLINA  
BREWARD

Project No: 796622  
Drawing Title: TYPICAL FRAMING DETAILS  
S0.3  
3 OF 9

**AGGREGATE PIER NOTES:**  
 FOUNDATION DESIGN IS BASED ON AN ALLOWABLE SOIL BEARING PRESSURE OF 2,000 PSF. THE GENERAL CONTRACTOR IS TO ENGAGE AN AGGREGATE PIER SUB CONTRACTOR FOR DESIGN OF AGGREGATE PIERS TO MEET THE DESIGN ASSUMPTIONS. THE AGGREGATE PIER ENGINEER SHALL BE LICENSED IN THE STATE OF NORTH CAROLINA.

**TYPICAL FOUNDATION PLAN NOTES:**

1. VERIFY ALL T.O.F. ELEVATIONS IN THE FIELD.
2. ALL FOUNDATION DIMENSIONS ARE TAKEN FROM FACE OF MASONRY, EDGE OF SLAB-ON-GRADE OR TO CENTERLINE OF PIER/COLUMN. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR VERIFYING & COORDINATING ALL DIMENSIONS W/ ARCH'L. DRAWINGS & DETAILS. NOTIFY THE ENGINEER OF RECORD OF ANY DISCREPANCIES OR INCONSISTENCIES. WORK SHALL NOT CONTINUE UNTIL ENGINEER HAS ISSUED A CLARIFICATION.
3. 'HD' INDICATES SHEAR WALL HOLD DOWN LOCATIONS, SEE SHEAR WALL SCHEDULE ON SHEET S0.3.
4. 'CJ' DENOTES CONTROL JOINT, SEE DETAIL ON SHEET S0.2. PROVIDE SAWCUT CONTROL JOINTS IN CONCRETE SLAB-ON-GRADE AS REQ'D. AND SHOWN, SPACE JOINTS (IN FEET) 2-3 TIMES THE SLAB THICKNESS (IN INCHES). LOCATE JOINTS TO AVOID RE-ENTRANT CORNERS.
5. SEE DETAILS ON SHEET S0.2 FOR CORNER, JAMB AND 'T' REINFORCEMENT REQUIREMENTS FOR MASONRY WALLS.



DESIGNATION	FTG. DIMENSION	REINF. SCHEDULE	REMARKS
F2	CONT. 2'-0" X 1'-0" THICK	TRANS: #5 BARS @ 16" O.C. LONG: (3)-#5 BARS CONT.	
F3x	3'-0" X 3'-0" X 1'-0" THICK	(4) #5 EA. WAY - BTM.	
F3	CONT. 3'-0" X 1'-0" THICK	TRANS: #5 BARS @ 16" O.C. LONG: (3)-#5 BARS CONT.	

**1 FOUNDATION PLAN**  
 S1.1 SCALE: 1/8"=1'-0"

Project No:  
**796622**

Drawing Title:  
**S1.1 FOUNDATION PLAN**

TRANSYLVANIA COUNTY  
EMERGENCY SERVICES BASE

NORTH CAROLINA

BREVARD

Date  
--/--

REVISIONS/SUBMISSIONS

No.

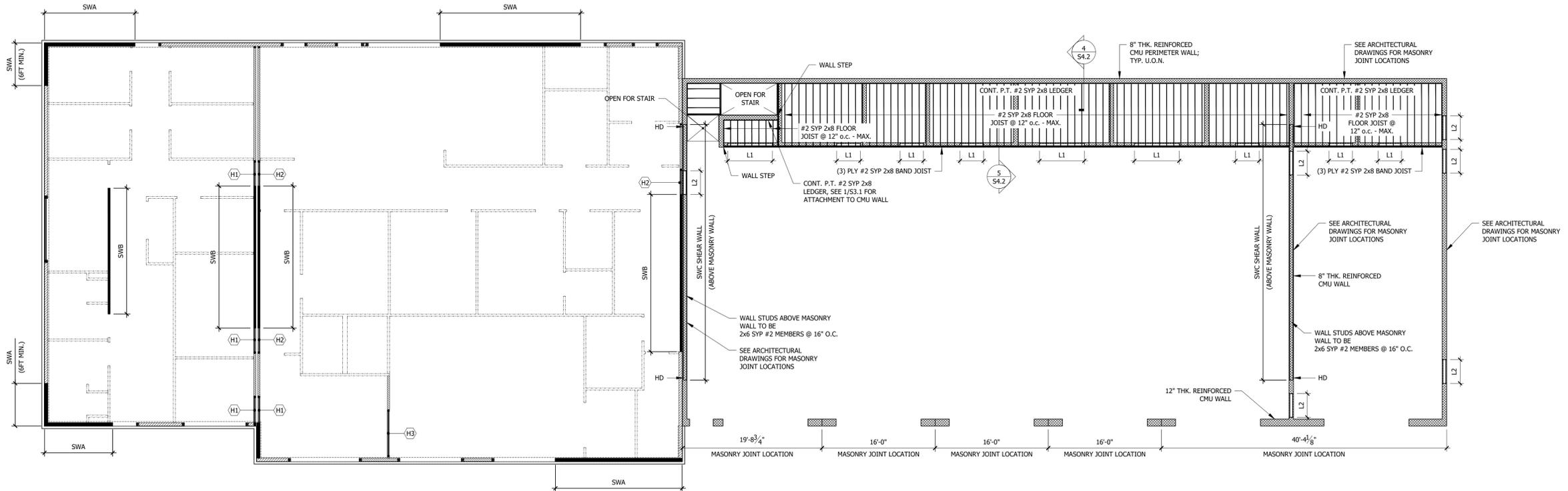
**MEDLOCK & ASSOCIATES ENGINEERING, P.A.**

STRUCTURAL • CONSULTING • CONSTRUCTION ASSISTANCE

55 Ashland Avenue,  
Suite 101  
Asheville, NC 28801  
Phone#: (828) 232-4448  
Fax#: (828) 232-5224  
NC Cert. # C-3133

**CONSTRUCTION SET**

- TYPICAL FRAMING PLAN NOTES:
- 'SW#' DENOTES PLYWOOD SHEARWALL. REFER TO PLYWOOD SHEARWALL SCHEDULE SHEET 50.3.
  - 'HD' DENOTES SHEARWALL HOLD DOWN LOCATION, REFER TO PLYWOOD SHEARWALL SCHEDULE ON SHEET 50.3.
  - ALL PERIMETER HEADERS TO HAVE MIN. (2) 2X JACK STUDS & (1) KING STUD, U.O.N.
  - ALL PERIMETER LOAD-BEARING WALLS AND SHEAR WALLS STUDS ARE TO BE FULL HT. AND SHALL BE BALLOON FRAMED FROM PLATE TO PLATE, THERE SHALL BE NO SPLICES AT CEILING JOISTS.
  - SEE ARCH'L. DRAWINGS FOR ALL WINDOW AND DOOR OPENING LOCATIONS AND REQ'D. ROUGH OPENING SIZES; TYP..
  - SEE ARCH'L. FOR INTERIOR PARTITION WALL TYPES AND LOCATIONS; U.O.N. TYP.
  - VERIFY ALL WALL PLATE ELEVATIONS WITH ARCH'L. DWG'S.
  - PRE-ENGINEERED SCISSOR ROOF TRUSSES TO HAVE A MAXIMUM HORIZONTAL DEAD LOAD DEFLECTION OF  $\frac{1}{2}$ " AND A MAXIMUM HORIZONTAL ROOF LIVE LOAD DEFLECTION OF  $\frac{1}{2}$ ".
  - PRE-ENGINEERED FLAT BTM. CHORD LATERAL DRAG ROOF TRUSSES SHALL BE DESIGNED FOR THE FOLLOWING HORIZONTAL WORKING FORCES: WIND LOAD = 1.6 KIP, SEISMIC LOAD = 1.5 KIP

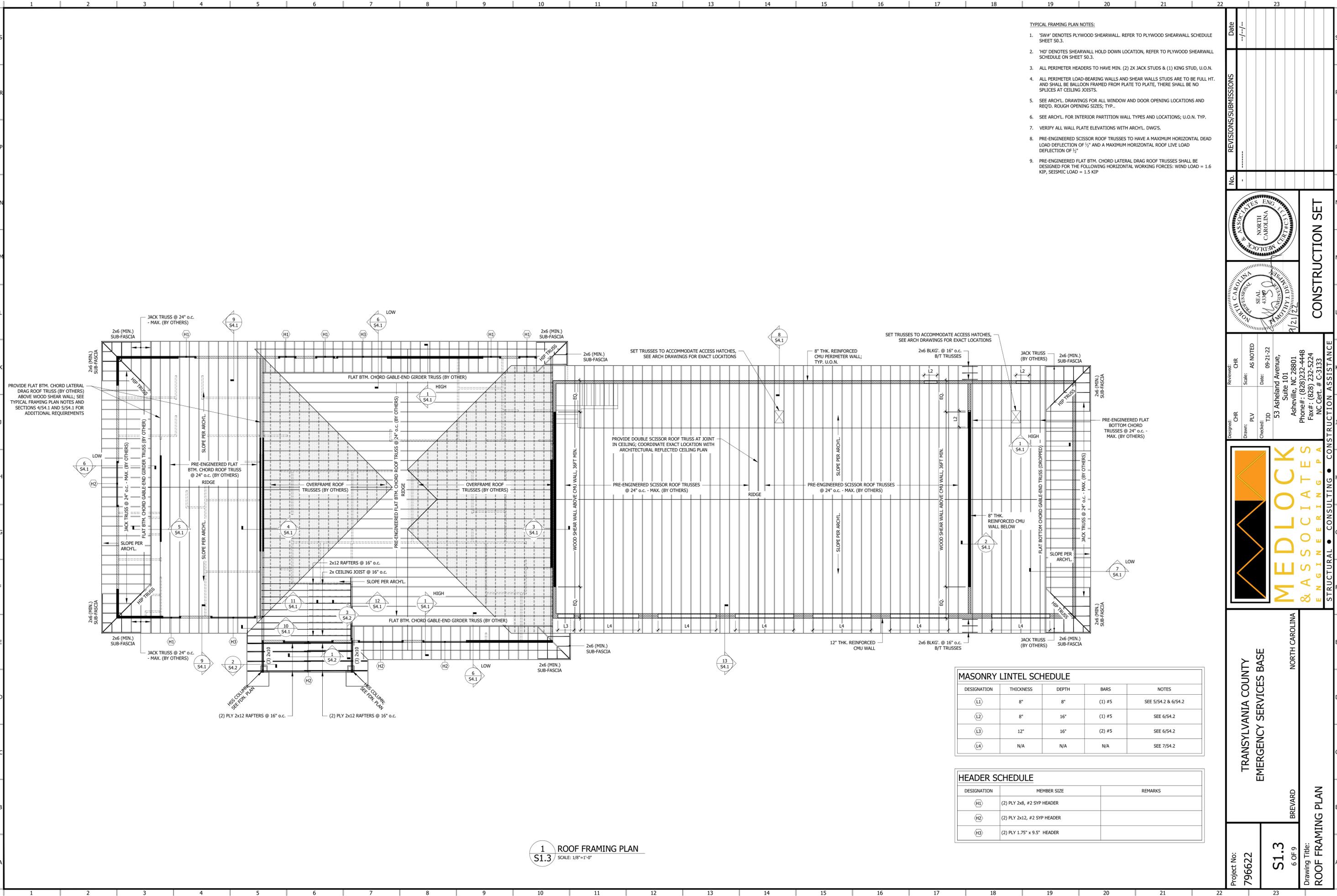


MASONRY LINTEL SCHEDULE				
DESIGNATION	THICKNESS	DEPTH	BARs	NOTES
(L1)	8"	8"	(1) #5	SEE 5/54.2 & 6/54.2
(L2)	8"	16"	(1) #5	SEE 6/54.2
(L3)	12"	16"	(2) #5	SEE 6/54.2
(L4)	N/A	N/A	N/A	SEE 7/54.2

HEADER SCHEDULE		
DESIGNATION	MEMBER SIZE	REMARKS
(H1)	(2) PLY 2x8, #2 SYP HEADER	
(H2)	(2) PLY 2x12, #2 SYP HEADER	
(H3)	(2) PLY 1.75" x 9.5" HEADER	

**1** MEZZANINE FLOOR FRAMING PLAN  
**S1.2** SCALE: 1/8"=1'-0"

Date --/--	REVISED/SUBMISSIONS	No.			<b>CONSTRUCTION SET</b>
Reviewed: CHR	Scale: AS NOTED	Date: 09-21-22	53 Asheland Avenue, Suite 101 Asheville, NC 28801 Phone#: (828) 232-4448 Fax#: (828) 232-5224 NC Cert. # C-3133		
Designed: CHR	Drawn: PLY	Checked: TJD	<b>MEDLOCK &amp; ASSOCIATES ENGINEERING, P.A.</b> STRUCTURAL • CONSULTING • CONSTRUCTION ASSISTANCE		
TRANSYLVANIA COUNTY EMERGENCY SERVICES BASE		NORTH CAROLINA		BREVARD	
Project No: <b>796622</b>		Drawing Title: <b>MEZZANINE FLOOR FRAMING PLAN</b>		<b>S1.2</b> 5 OF 9	



- TYPICAL FRAMING PLAN NOTES:
1. "SW" DENOTES PLYWOOD SHEARWALL. REFER TO PLYWOOD SHEARWALL SCHEDULE SHEET S0.3.
  2. "HD" DENOTES SHEARWALL HOLD DOWN LOCATION, REFER TO PLYWOOD SHEARWALL SCHEDULE ON SHEET S0.3.
  3. ALL PERIMETER HEADERS TO HAVE MIN. (2) 2X JACK STUDS & (1) KING STUD, U.O.N.
  4. ALL PERIMETER LOAD-BEARING WALLS AND SHEAR WALLS STUDS ARE TO BE FULL HT. AND SHALL BE BALLOON FRAMED FROM PLATE TO PLATE, THERE SHALL BE NO SPLICES AT CEILING JOISTS.
  5. SEE ARCH'L. DRAWINGS FOR ALL WINDOW AND DOOR OPENING LOCATIONS AND REQ'D. ROUGH OPENING SIZES; TYP..
  6. SEE ARCH'L. FOR INTERIOR PARTITION WALL TYPES AND LOCATIONS; U.O.N. TYP.
  7. VERIFY ALL WALL PLATE ELEVATIONS WITH ARCH'L. DWGS.
  8. PRE-ENGINEERED SCISSOR ROOF TRUSSES TO HAVE A MAXIMUM HORIZONTAL DEAD LOAD DEFLECTION OF 1/2" AND A MAXIMUM HORIZONTAL ROOF LIVE LOAD DEFLECTION OF 1/2"
  9. PRE-ENGINEERED FLAT BTM. CHORD LATERAL DRAG ROOF TRUSSES SHALL BE DESIGNED FOR THE FOLLOWING HORIZONTAL WORKING FORCES: WIND LOAD = 1.6 KIP, SEISMIC LOAD = 1.5 KIP

No.	REVISIONS/SUBMISSIONS	Date

**MEDLOCK & ASSOCIATES**  
ENGINEERING, P.A.  
NORTH CAROLINA  
CONSTRUCTION SET

Reviewed: CHR AS NOTED  
Scale: AS NOTED  
Date: 09-21-22  
Designed: CHR  
Drawn: PLY  
Checked: TJD  
53 Asheville Avenue,  
Suite 101  
Asheville, NC 28801  
Phone#: (828) 232-4448  
Fax#: (828) 232-5224  
NC Cert. # C-3133

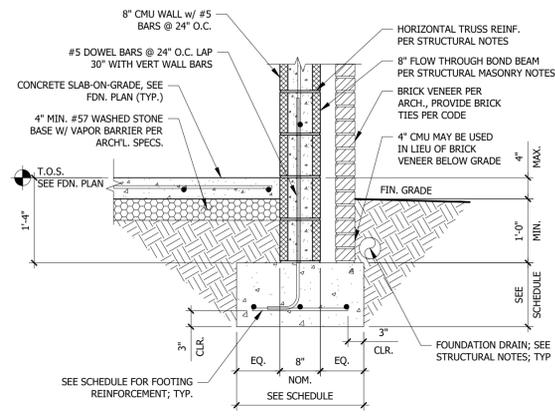
**MEDLOCK & ASSOCIATES**  
ENGINEERING, P.A.  
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Project No: 796622  
Drawing Title: ROOF FRAMING PLAN  
S1.3  
6 OF 9  
BREVARD  
TRANSYLVANIA COUNTY  
EMERGENCY SERVICES BASE  
NORTH CAROLINA

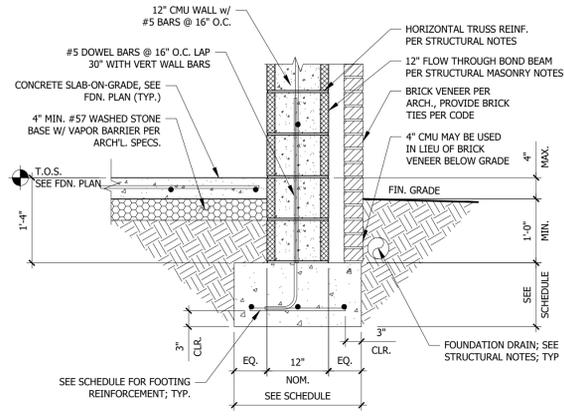
DESIGNATION	THICKNESS	DEPTH	BARs	NOTES
(L1)	8"	8"	(1) #5	SEE 5/S4.2 & 6/S4.2
(L2)	8"	16"	(1) #5	SEE 6/S4.2
(L3)	12"	16"	(2) #5	SEE 6/S4.2
(L4)	N/A	N/A	N/A	SEE 7/S4.2

DESIGNATION	MEMBER SIZE	REMARKS
(H1)	(2) PLY 2x8, #2 SYP HEADER	
(H2)	(2) PLY 2x12, #2 SYP HEADER	
(H3)	(2) PLY 1.75" x 9.5" HEADER	

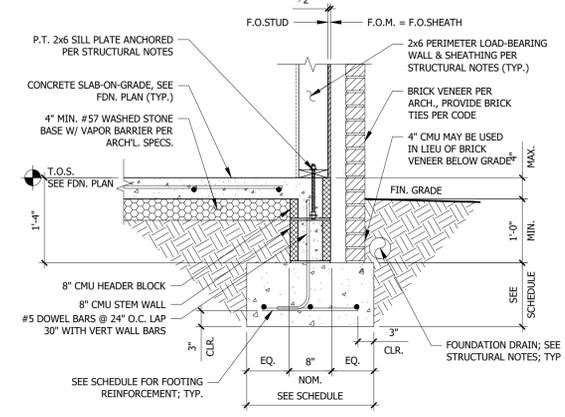
**1** ROOF FRAMING PLAN  
SCALE: 1/8"=1'-0"



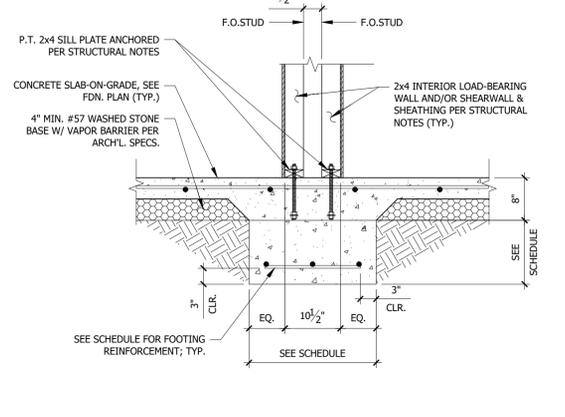
**1 FOUNDATION DETAIL**  
S2.1 SCALE: 3/4"=1'-0"



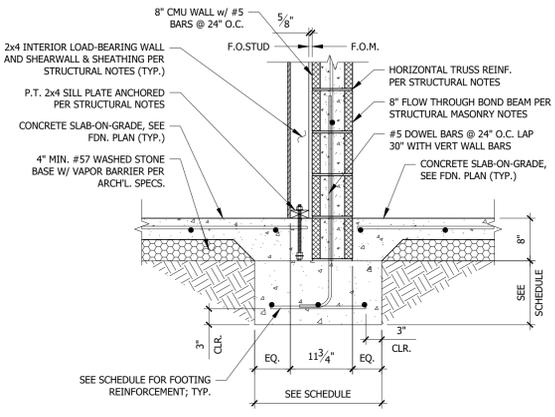
**2 FOUNDATION DETAIL**  
S2.1 SCALE: 3/4"=1'-0"



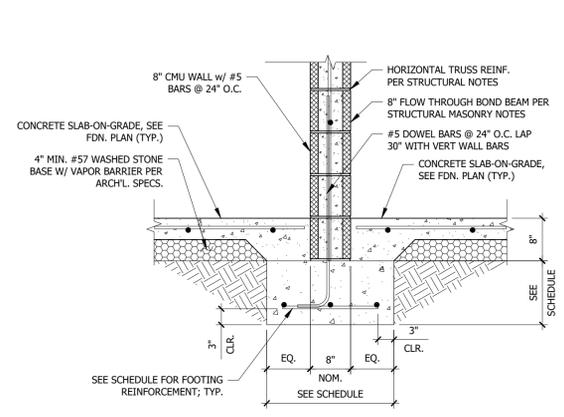
**3 FOUNDATION DETAIL**  
S2.1 SCALE: 3/4"=1'-0"



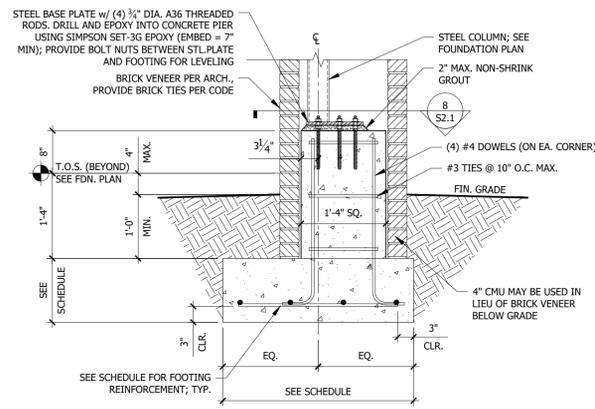
**4 FOUNDATION DETAIL**  
S2.1 SCALE: 3/4"=1'-0"



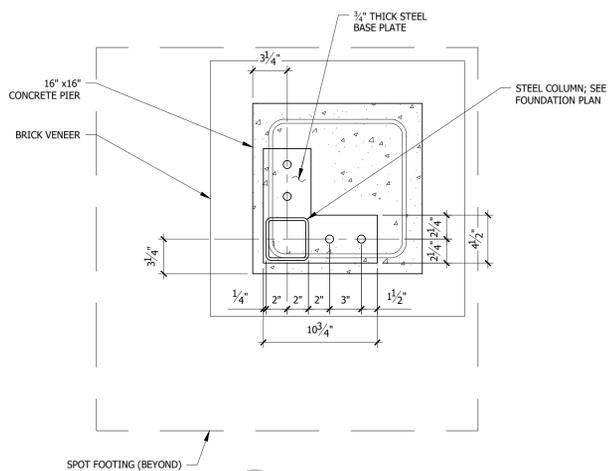
**5 FOUNDATION DETAIL**  
S2.1 SCALE: 3/4"=1'-0"



**6 FOUNDATION DETAIL**  
S2.1 SCALE: 3/4"=1'-0"

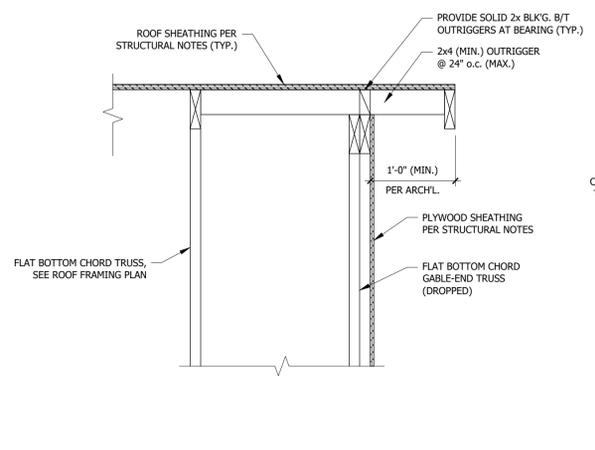


**7 FOUNDATION DETAIL**  
S2.1 SCALE: 3/4"=1'-0"

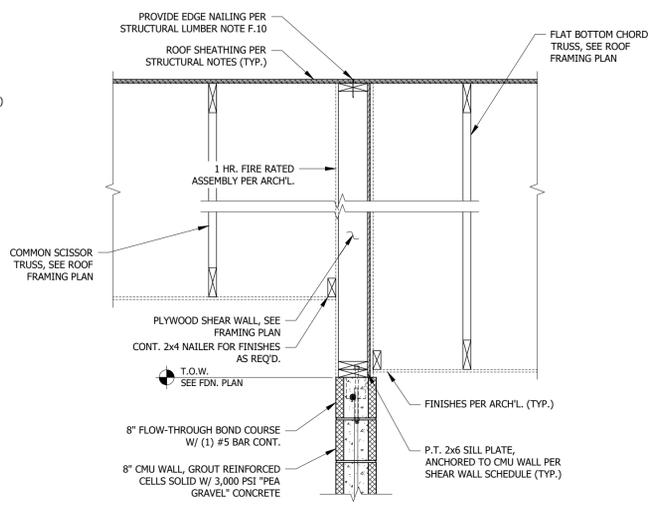


**8 ENLARGED PLAN**  
S2.1 SCALE: 1-1/2"=1'-0"

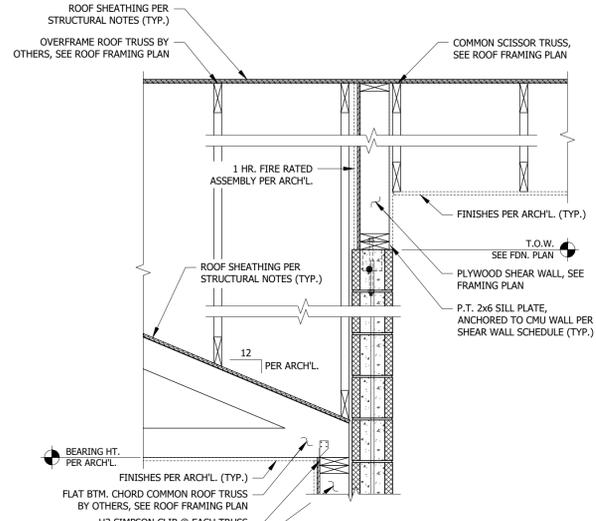
		<b>CONSTRUCTION SET</b>
Project No: <b>796622</b>	Drawing Title: <b>FOUNDATION DETAILS</b>	TRANSVANVIA COUNTY EMERGENCY SERVICES BASE NORTH CAROLINA BREVARD
Drawing No: <b>S2.1</b> 7 OF 9	Date: 09-21-22	
MEDLOCK & ASSOCIATES ENGINEERING, P.A. 53 Ashland Avenue, Suite 101 Asheville, NC 28801 Phone#: (828) 232-4448 Fax#: (828) 232-5224 NC Cert. # C-3133		CONSTRUCTION ASSISTANCE



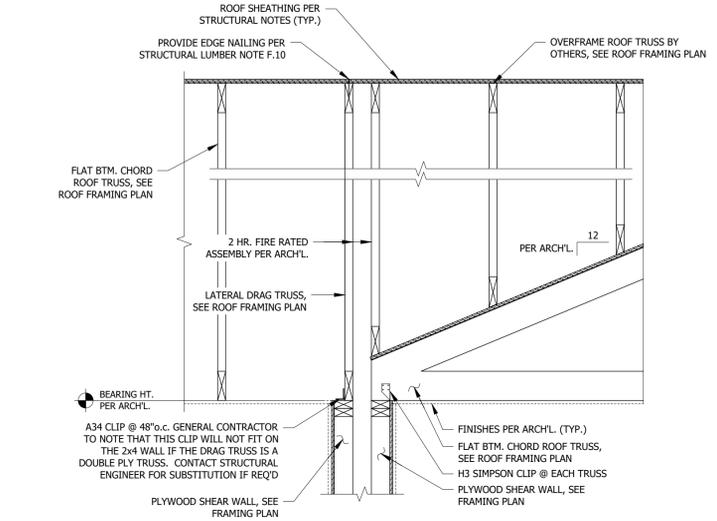
**1**  
**S4.1**  
SCALE: 1"=1'-0"



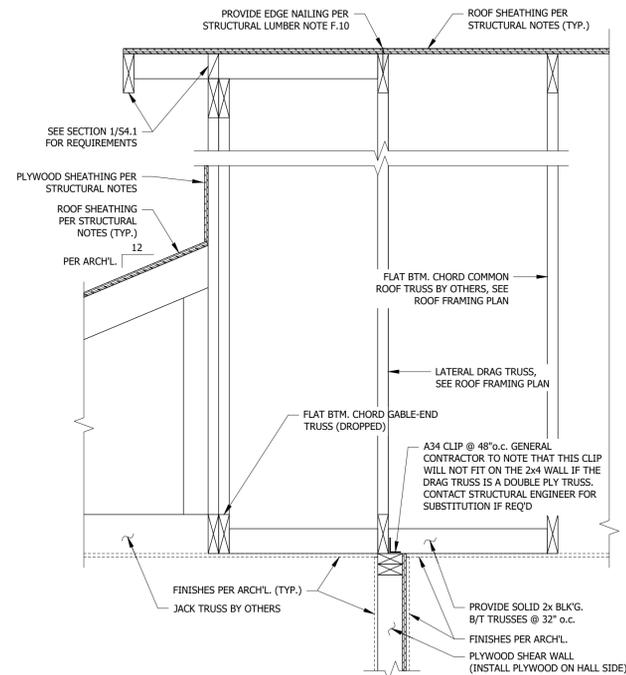
**2**  
**S4.1**  
SCALE: 3/4"=1'-0"



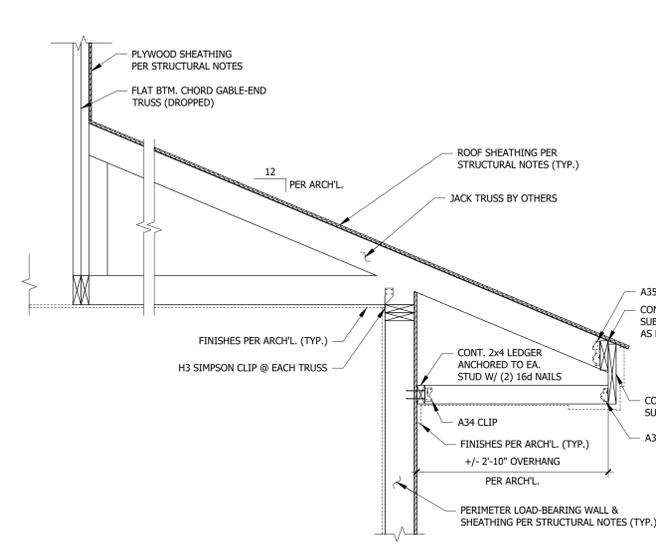
**3**  
**S4.1**  
N.T.S.



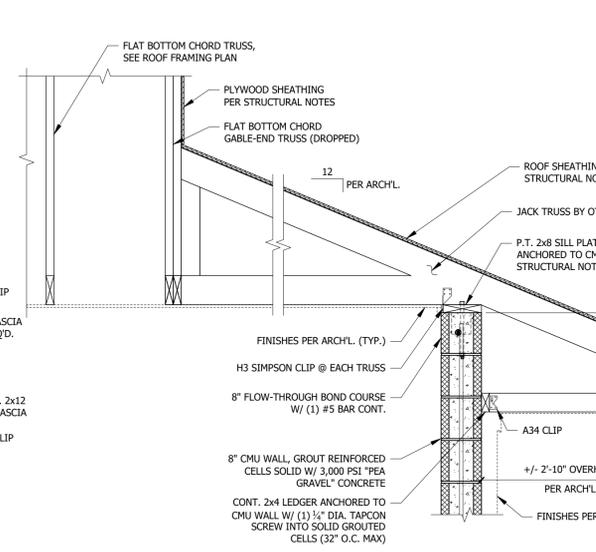
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**S4.1**  
N.T.S.



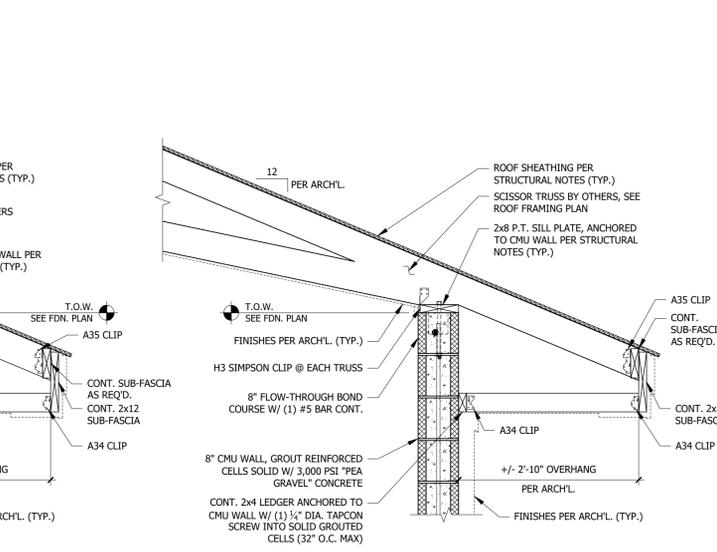
**5**  
**S4.1**  
SCALE: 1"=1'-0"



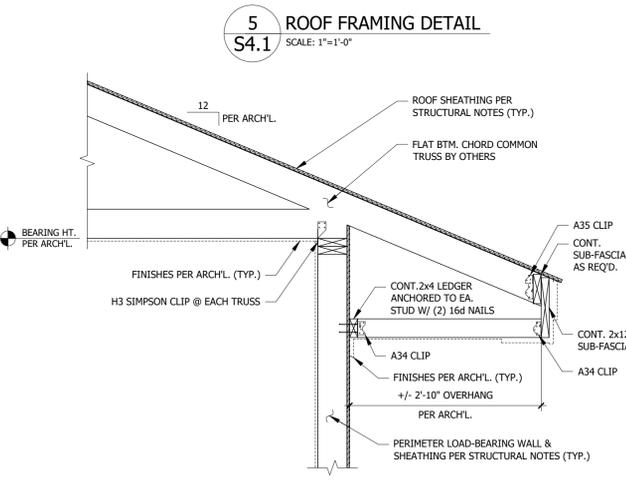
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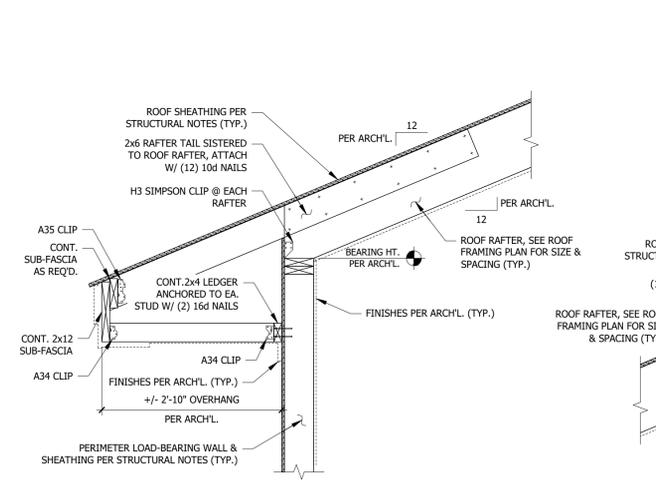
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SCALE: 3/4"=1'-0"



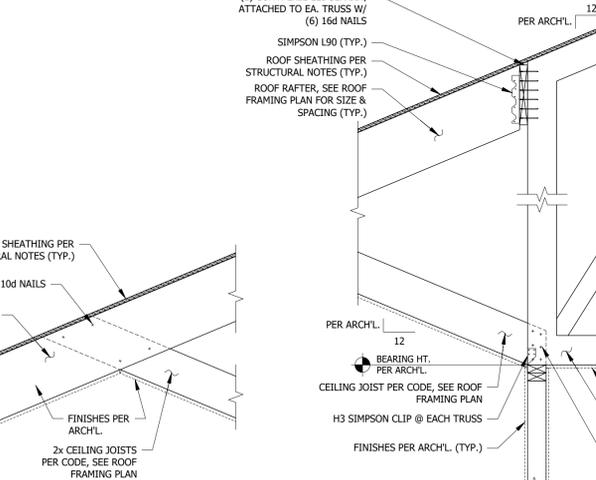
**8**  
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SCALE: 3/4"=1'-0"



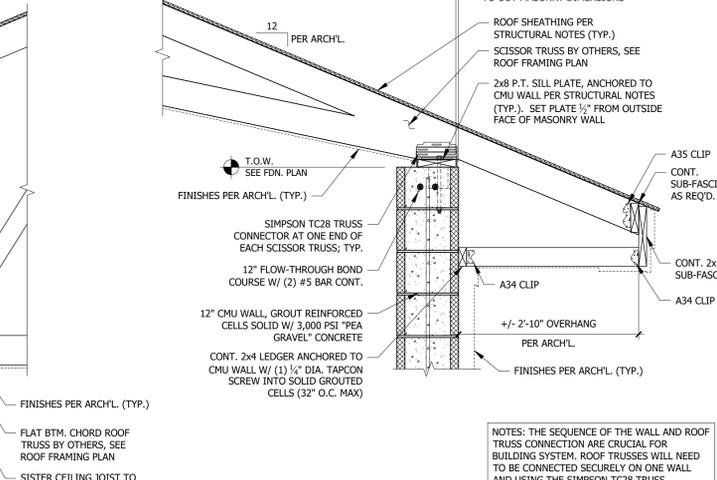
**9**  
**S4.1**  
SCALE: 3/4"=1'-0"



**10**  
**S4.1**  
SCALE: 3/4"=1'-0"

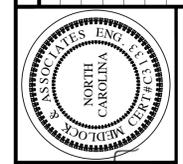


**11**  
**S4.1**  
SCALE: 3/4"=1'-0"



**12**  
**S4.1**  
SCALE: 3/4"=1'-0"

NOTES: THE SEQUENCE OF THE WALL AND ROOF TRUSS CONNECTION ARE CRUCIAL FOR BUILDING SYSTEM. ROOF TRUSSES WILL NEED TO BE CONNECTED SECURELY ON ONE WALL AND USING THE SIMPSON TC28 TRUSS CONNECTOR ON THE OPPOSITE WALL. ALLOW THE TRUSSES TO SETTLE IN PLACE PRIOR TO INSTALLING THE TRUSS SCREWS.



Reviewed: CHR AS NOTED 09-21-22  
 Scale: AS NOTED  
 Date: 09-21-22  
 Design: CHR TJD  
 Drawn: PLY  
 Check: 09-21-22  
 53 Asheland Avenue,  
 Suite 101  
 Asheville, NC 28801  
 Phone#: (828) 232-4448  
 Fax#: (828) 232-5224  
 NC Cert. # C-3133



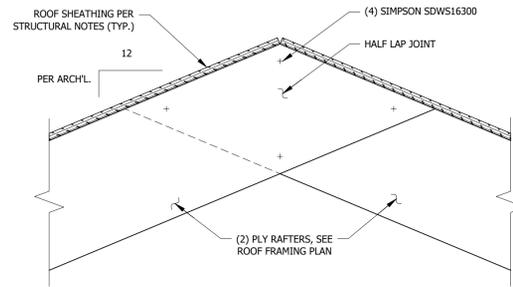
TRANSLYVANIA COUNTY  
 EMERGENCY SERVICES BASE  
 NORTH CAROLINA  
 BREWARD

Project No: 796622  
**S4.1**  
 8 OF 9  
 Drawing Title:  
**ROOF FRAMING DETAILS**

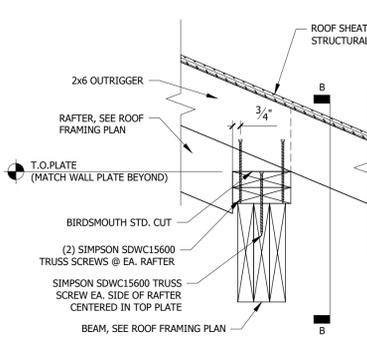
CONSTRUCTION SET

CONSTRUCTION ASSISTANCE

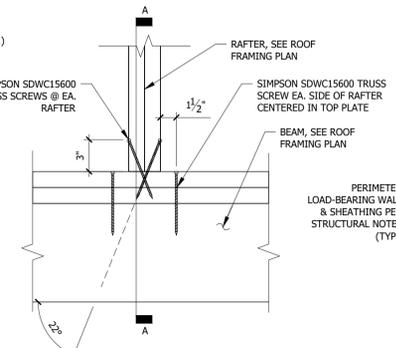
ROOF FRAMING DETAILS



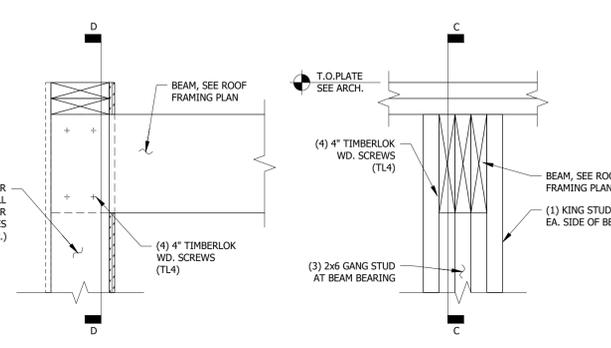
**1**  
**S4.2** ROOF FRAMING DETAIL  
SCALE: 1-1/2"=1'-0"



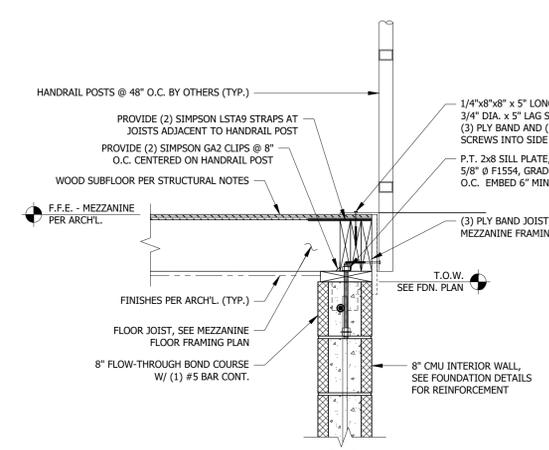
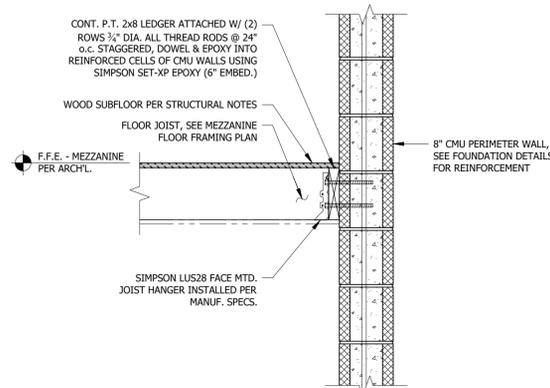
**2**  
**S4.2** ROOF FRAMING DETAIL  
SCALE: 1-1/2"=1'-0"



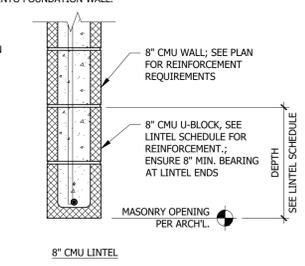
**3**  
**S4.2** ROOF BEAM BEARING DETAIL  
SCALE: 1-1/2"=1'-0"



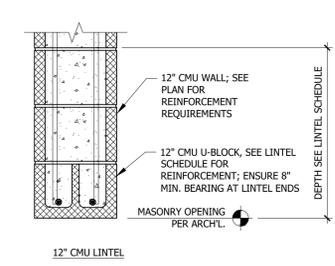
**4**  
**S4.2** LEDGER DETAIL  
SCALE: 1"=1'-0"



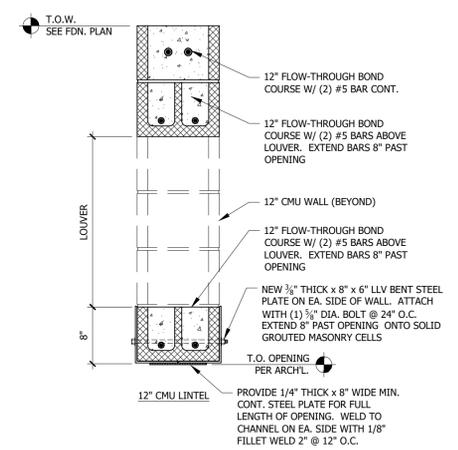
**5**  
**S4.2** FLOOR FRAMING DETAIL  
SCALE: 1"=1'-0"



**6**  
**S4.2** MASONRY LINTEL DETAILS  
SCALE: 1"=1'-0"



**7**  
**S4.2** STEEL LINTEL DETAILS  
SCALE: 1"=1'-0"



Date: --/--	
REVISIONS/SUBMISSIONS	
No.	
<b>CONSTRUCTION SET</b>	
Reviewed: CHR Scale: AS NOTED Date: 09-21-22	Designer: CHR Drawn: PLY Checked: TJD
53 Asheland Avenue, Suite 101 Asheville, NC 28801 Phone#: (828) 232-4448 Fax#: (828) 232-5224 NC Cert. # C-3133	
<b>MEDLOCK &amp; ASSOCIATES</b> ENGINEERING, P.A.	
STRUCTURAL • CONSULTING • CONSTRUCTION ASSISTANCE	
TRANSYLVANIA COUNTY EMERGENCY SERVICES BASE	
NORTH CAROLINA BREVARD	
Project No: <b>796622</b>	Drawing Title: <b>ROOF &amp; MEZZANINE FRAMING DETAILS</b>
S4.2 9 OF 9	