MIDDLETON-RALE

RALEIGH - LOT 00.0022 THE FARM AT NEILL'S CREEK

(MODEL# 2183)

ELEVATION 3.1- GR

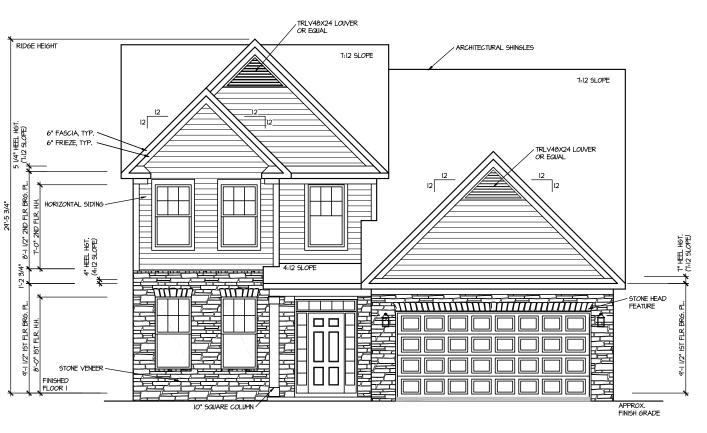
INDEX



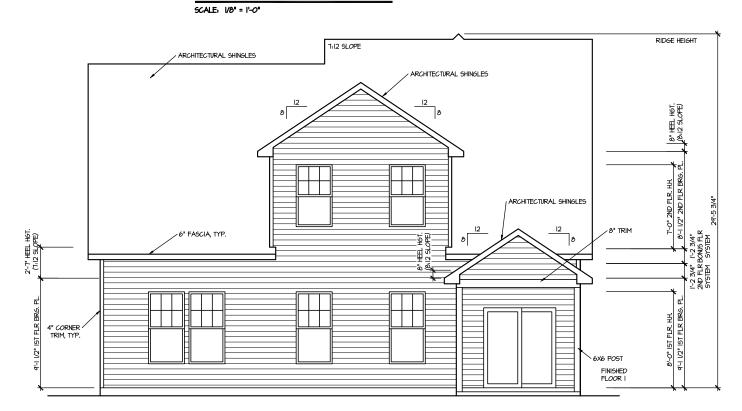
ADEA CALCIII ATIONS			
<u>area calculations</u>		COVERED /	
ELEVATION 3.1	HEATED	UNHEATED	UNCOVERED
FIRST FLOOR	1495 SF		
GARAGE		417 SF	
FRONT PORCH - ELEVATION 3.1		45 SF	
SECOND FLOOR	692 SF		
OPTIONS			
BONUS ROOM	310 SF		
COVERED PORCH		124 SF	
4' REAR EXTENSION	160 SF		
BONUS ROOM ADD W/ 4' REAR EXT	61 SF		
TOTAL	2718 SF	586 SF	

230 Peach Grove Way

$\blacksquare \sqcap \cap \top$	SPECIFIC	
1	LOT 00 0022	THE FARM AT NEILL'S CREEK
'	LOT 00.0022	THE FARM AT NEILES CIVER
		MIDDLETON REV. RALE 2 ELEVATION 3.1
2	ADDRESS	230 PEACH GROVE WAY LILLINGTON, NC 27546
	ADDITESS	250 FEACH GROVE WAT EIEEINGTON, INC 27540
I		
I		
I		
L		
1		
H		
1		
L		
-		
-		
I		
L		
1		
I		
—	1	
1		
L		
1		
1		
L		
1		
	I .	



FRONT ELEVATION 3.1



REAR ELEVATION 3.1

SCALE: 1/8" = 1'-0"

HOUSE NAME:
MIDDLETON

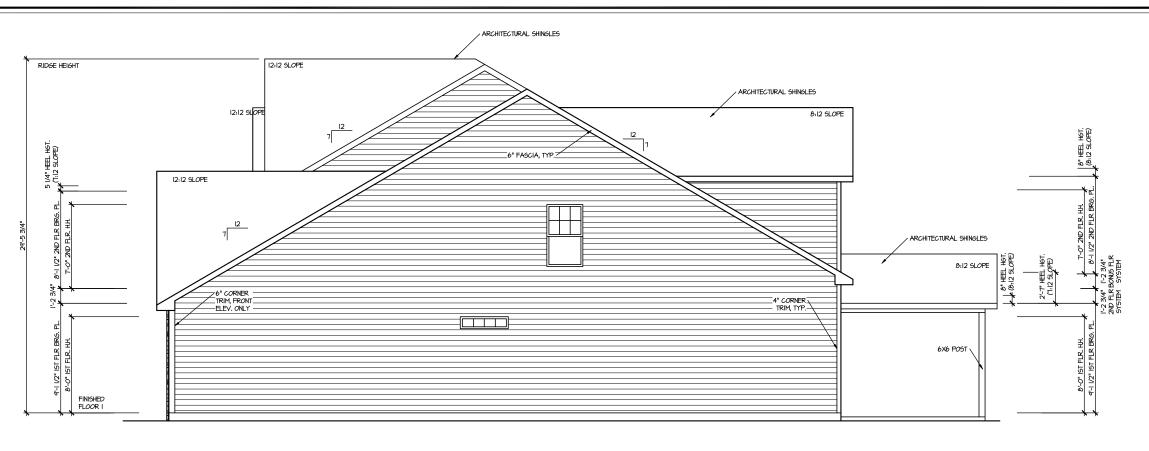
BRAWING TITLE
FRONT & REAR ELEVATIONS

SHEET No.

DRAWN BY: ITS DATE: 07/09/2025

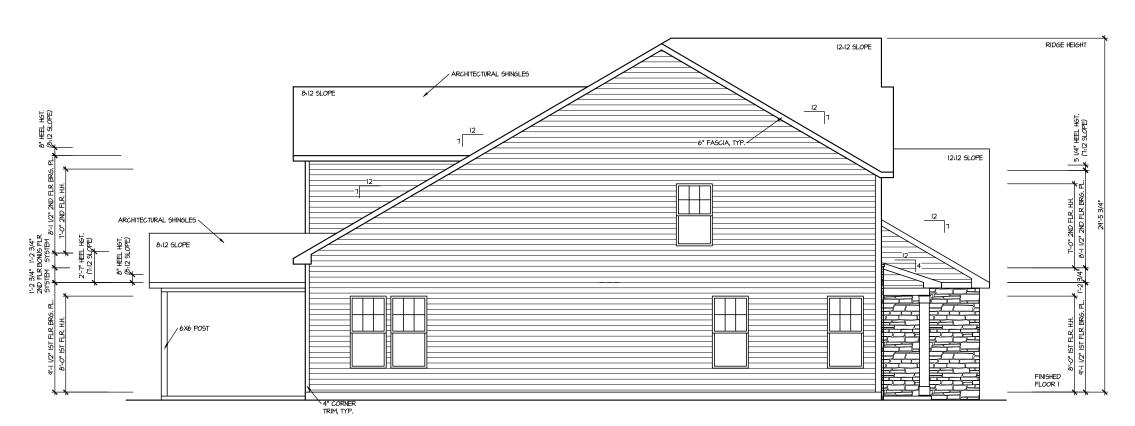
PLAN NO. 2183

E: Lot 00.0022.dwg DATE: 7/9/2025 10:10 AM



RIGHT ELEVATION 3.1

SCALE: 1/8" = 1'-0"



LEFT ELEVATION 3.I

CALE: 1/8" = 1'-0"

DRAWN BY:
ITS
DATE:
07/09/2025
PLAN NO.
2183



HOUSE NAME:
MIDDLETON
DRAWING TITLE
RIGHT & LEFT ELEVATIONS

LIEET N

SHEET No.

ROOF VENTILATION CALCULATIONS: ROOF AREA = 2102 SQ. FT. OVERALL REGULED VENTILATION. 1 TO 800 = 14.01 SQ. FT. 1 TO 800 = 1.01 SQ. FT. 1 TO 800 = 1.01 SQ. FT. 50-80% IN 10P THIRD = 350 - 5.61 SQ. FT. (1 TO 300) NET FREE AREA OF VENTED SOFFIT = 5.7 SQ. IN / LINEAR FT. NET FREE AREA OF RIDGE VENT = 18 SQ. IN/ LINEAR FT. LOPER VENTINS. (BOTTOM 2/3 P.D.)

74 LINEAR FEET OF SOFFIT X S.T. 50, IN. = 249 SQ. FT.
IMPERS VENTINS. (TOP J. 28 DI SQ. IN. = 45 SQ. FT.
40.5 SQ. T. EET/EET SQ. 8-208

TOTAL ROOF VENTILATION. 149 SQ. FT. > 10,I SQ. FT. (RQTD)

8:12 SLOPE SLOPE 8:12 SL*O*PE 8:12 SLOPE 7:12 5LOPE LINE OF SECOND FLOOR 16 LF RIDGE VENT 6 LF RIDGE VENT 6 LF RIDGE VENT LINE OF SECOND FLOOR ATTIC ACCESS 7:12 5LOPE 12:12 SLOPE 12:12 SLOPE 12:12 SL*O*PE 12:12 SL*O*PE 12:12 / SLOPE 4"X4" PT POST /

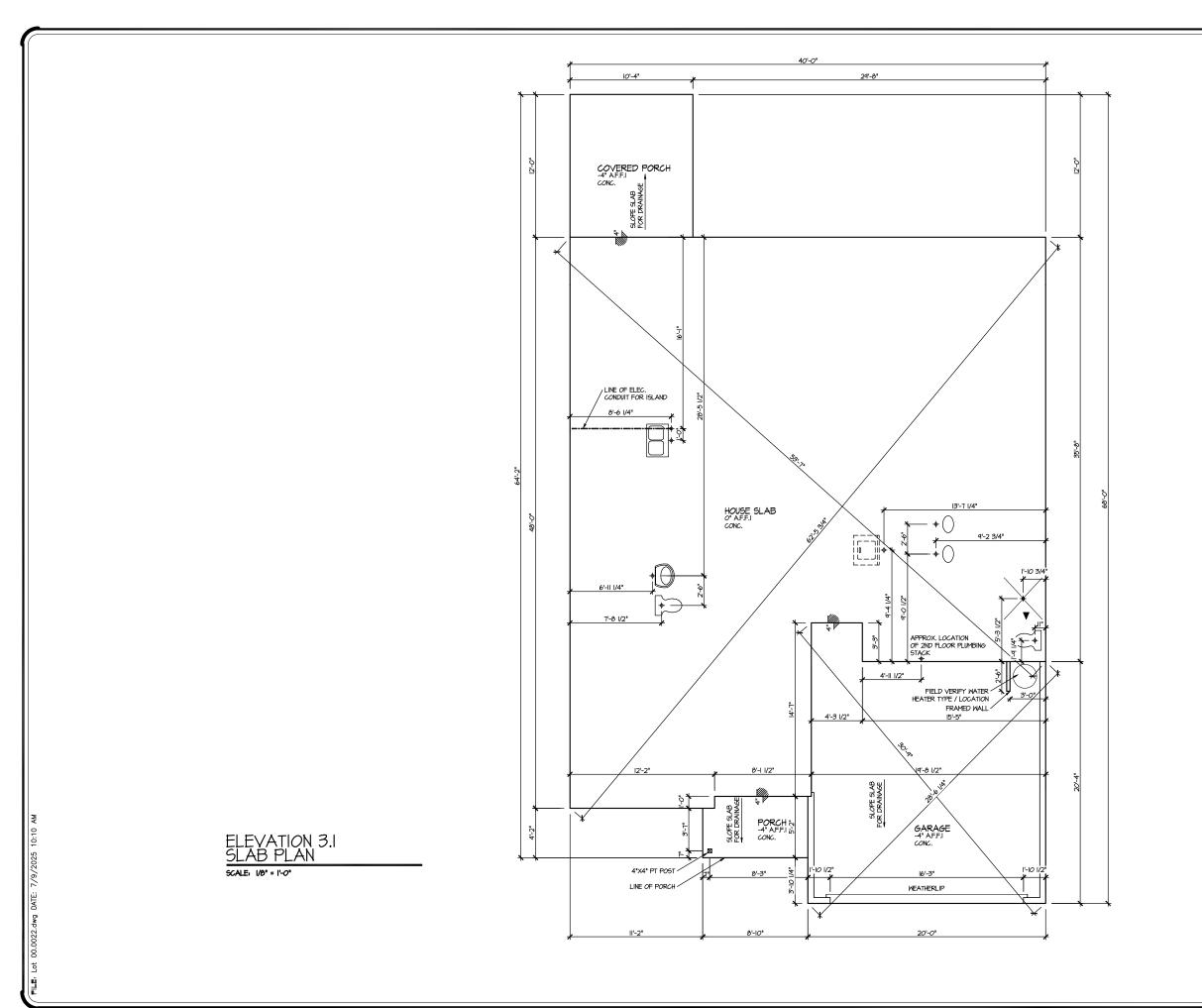
ROOF PLAN ELEV. 3.1

DRAWN BY: DATE: 07/09/2025 PLAN NO. 2183



HOUSE NAME:
MIDDLETON
DRAWING TITLE
ROOF PLAN

SHEET No.



| MASTER PLAN INFORMATION | MASTER PLAN INFO

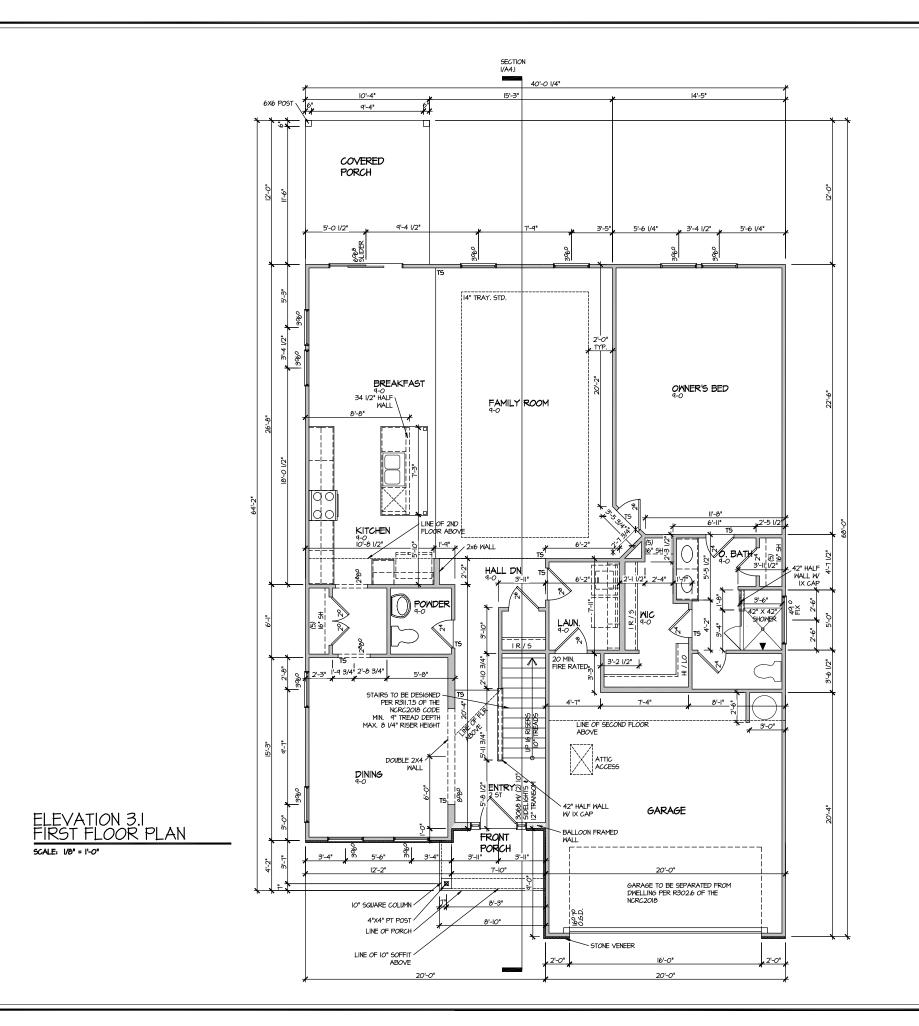
DRAWN BY: ITS DATE: 07/09/2025 PLAN NO. 2183



HOUSE NAME:
MIDDLETON
DRAWING TITLE
SLAB PLAN

SHEET No.

A2.



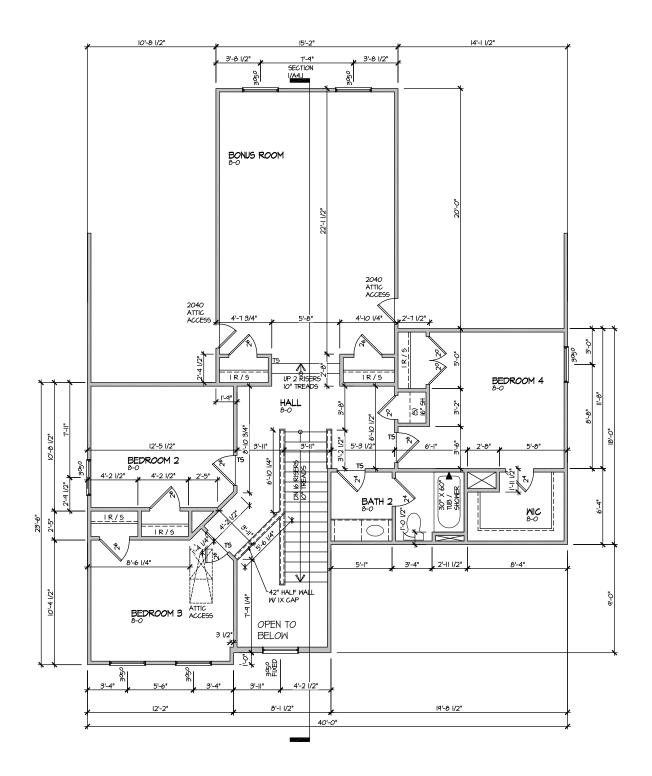
DRAWN BY:

DATE: 07/09/2025 PLAN NO. 2183



HOUSE NAME:
MIDDLETON
DRAWING TITLE
FIRST FLOOR P

SHEET No. A3.



ELEVATION 3.1 SECOND FLOOR PLAN SCALE: 1/0" = 1'-0"

: 00.0022.dwg DATE: 7/9/2025 10:10 AM

FLOOR PLAN

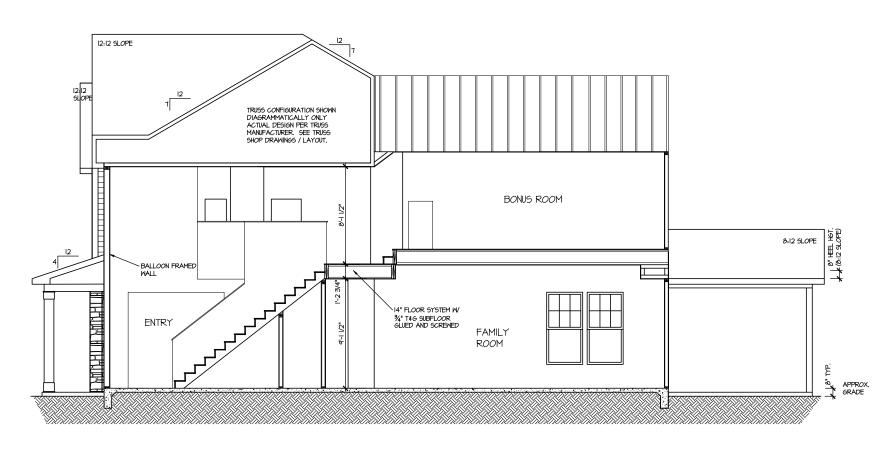
DRAWN BY: ITS DATE: 07/09/2025

PLAN NO. 2183

HOUSE NAME:
MIDDLETON
DRAWING TITLE
SECOND FLOOR

SHEET No.

A3.2



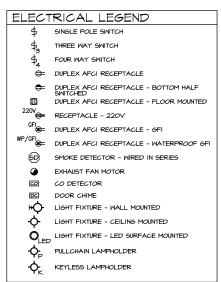
SECTION 1 SCALE: 1/8" = 1'-0"

DRAWN BY: DATE: 07/09/2025 PLAN NO. 2183

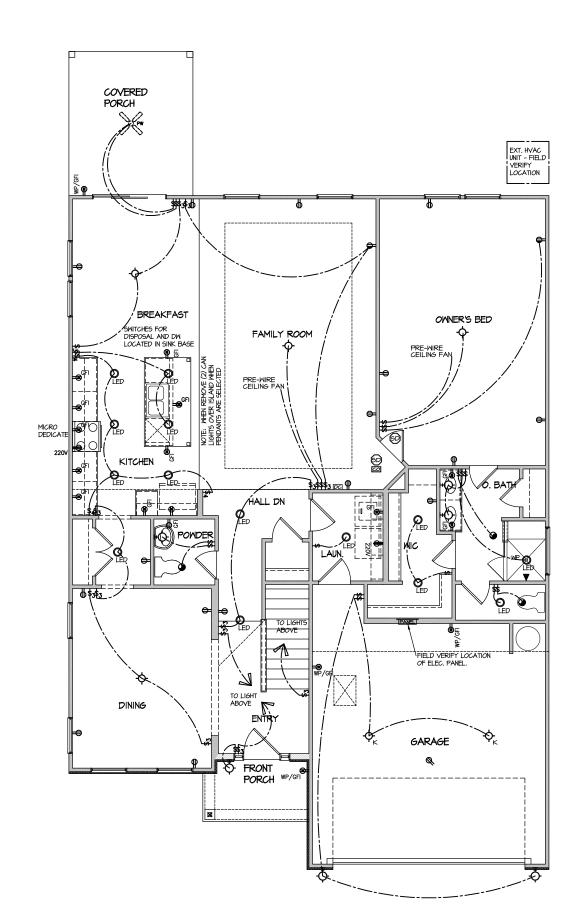


SECTION HOUSE NAME:
MIDDLETON
DRAWING TITLE
BUILDING SECTION

SHEET No. A4.1



NOTE: ALL ELECTRICAL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE ADOPTED VERSION OF THE NATIONAL ELECTRICAL CODE, THE LOCAL POWER COMPANY AND TO ALL APPLICABLE LOCAL REGULATIONS.



ELECTRICAL PLAN FIRST FLOOR - ELEV. 3.1 SCALE: 1/8" = 1'-0" | MASTER PLAN INFORMATION | MASTER PLAN INFO

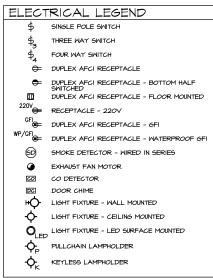


OR ELECTRICAL

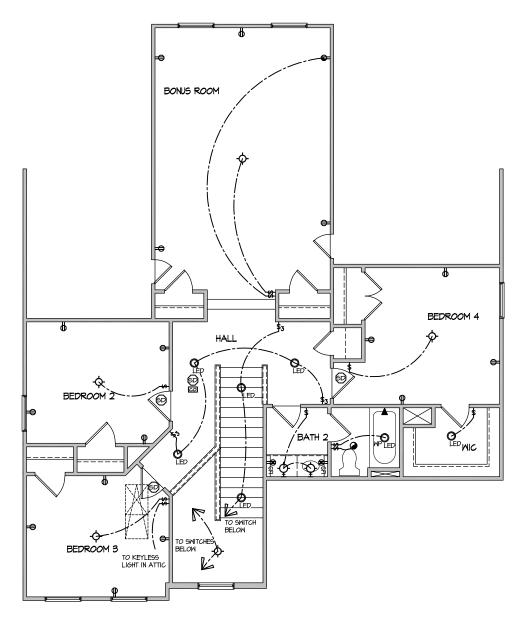
HOUSE NAME:
MIDDLETON
DRAWING TITLE
FIRST FLOOR EI

SHEET No.

== No. == |.|



NOTE: ALL ELECTRICAL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE ADOPTED VERSION OF THE NATIONAL ELECTRICAL CODE, THE LOCAL PONER COMPANY AND TO ALL APPLICABLE LOCAL REGULATIONS.

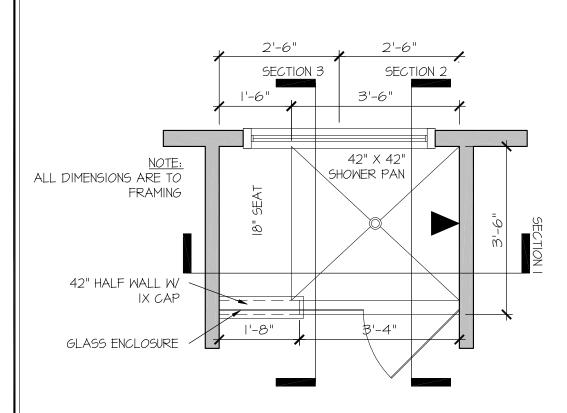


ELECTRICAL PLAN SECOND FLOOR - ELEV. 3.1 SCALE: 1/8" = 1'-0"

SHEET No.

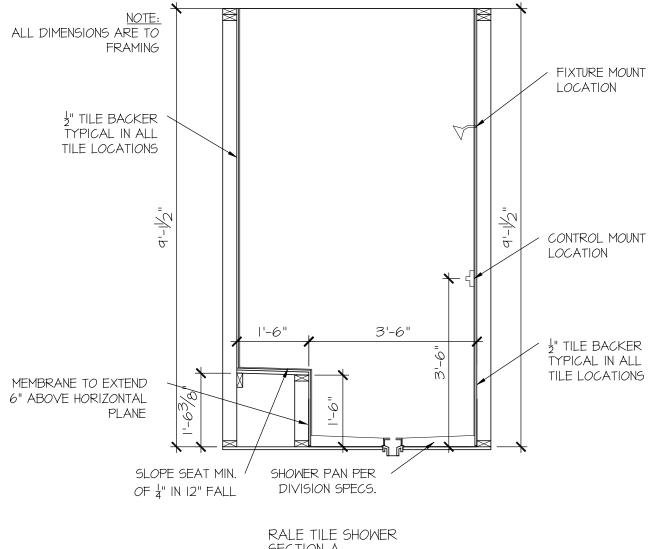
DRAWN BY: ITS DATE: 07/09/2025

PLAN NO. 2183



RALE TILE SHOWER 42" X 42" W 18" SEAT

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



SECTION A

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

CONSULTANT LOGO

DRAWN BY: L. BEAVERS DATE: 9/1/22 PLAN NO.

11 X 17 SCALE

24 X 36 SCALE



DETAIL SHOWER RALE

SHEET No.



SEAL

DRAWN BY:
L. BEAVERS
DATE: 9/1/22

PLAN NO.

24 X 36 SCALE

~ "

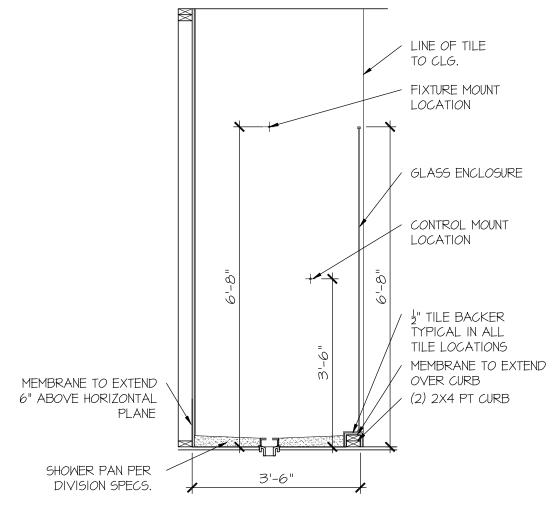


E ILE SHOWER DETAIL

OUSE NAME:

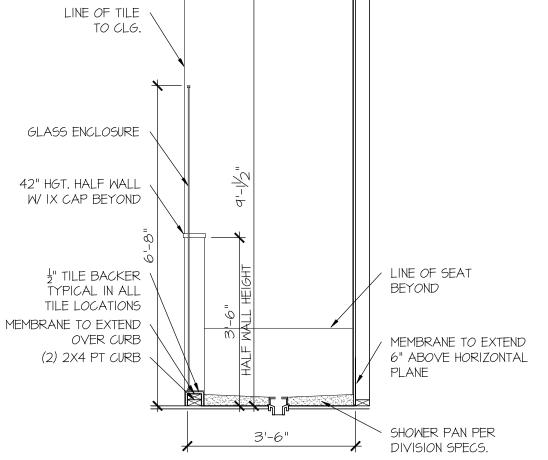
SHEET No.

P||.2



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





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

FOUNDATION

- DESIGN IS BASED ON 2018 NORTH CAROLINA STATE BUILDING CODE: RESIDENTIAL CODE.
- FOOTING DESIGN 2,000 PSF ALLOWABLE SOIL BEARING PRESSURE IS ASSUMED. BUILDER/CONTRACTOR MUST VERIFY.
- FASTEN 2x SILL PLATES TO FND WITH A MINIMUM OF 2 ANCHORS PER PLATE, 12" MAX, FROM PLATE ENDS - UTILIZING
- 1/2" DIA. ANCHOR BOLTS 6'-0" O.C, 7" MIN. EMBEDMENT
- (CONC), 15" MIN EMBERMENT (CMU)
- SIMPSON MASA ANCHOR STRAPS @ 6'-0" O.C. (CONC) SIMPSON MAB23 ANCHOR STRAPS @ 2'-8" O.C. (CMU)
- (REFER TO DETAILS FOR IO' TALL WALL ANCHOR REQUIREMENTS) ALL LUMBER EXPOSED TO WEATHER OR IN CONTACT W/ CONCRETE OR CMU SHALL BE PRESERVATIVE TREATED SOUTHERN PINE #2.
- BUILDER TO VERIEY CORROSION-RESISTANCE COMPATIBILITY OF HARDWARE & FASTENERS IN CONTACT W/ PRESERVATIVE-TREATED WOOD, CONTACT LUMBER & HARDWARE SUPPLIERS TO COORD.
- BASEMENT INTERIOR BEARING WALLS & EXTERIOR WALK-OUT BASEMENT WALLS SHALL BE 2x6 @ 16" O.C. SPF OR SYP, "STUD" GRADE OR BETTER.
- CONCRETE DESIGN BASED ON ACL 318 CONCRETE SHALL ATTAIN THE FOLLOWING MIN. COMPRESSIVE STRENGTHS IN 28 DAYS, U.N.O.:
 - 4,000 psi: FOUNDATION WALLS 2,500 psi: FOOTINGS & INTERIOR SLABS ON GRADE 3,000 psi: GARAGE & EXTERIOR SLABS ON GRADE
- BASEMENT FOUNDATION WALL DESIGN BASED ON:
- . 4' OR IO' HEIGHT (AS NOTED ON PLANS
- TALLER WALLS MUST BE ENGINEERED. • NOMINAL WIDTH (91/2" FOR 10" THICK WALL)
- BASEMENT WALL DESIGN IS BASED ON 60 PCF BACKFILL SOIL TYPE CLASSIFICATIONS (SC, ML-CL, OR CL).
- BASEMENT WALLS SHALL BE BRACED, PRIOR TO BACKELLING, BY
- ADEQUATE TEMPORARY BRACING OR INSTALL 1st FLOOR DECK PROVIDE (2) #5 BARS AROUND ALL SIDES OF OPENINGS IN
- CONCRETE BSMT. FND. WALL WITH 2" CLEAR. REINFORCEMENT SHALL EXTEND 12" PAST CORNER OF OPENING IN ALL DIRECTIONS.
- FOR OPENINGS UP TO 36", PROVIDE MINIMUM 10" CONCRETE DEPTH OVER OPENING OR (3)2x10 w/ (2)2x6 JACK STUDS, U.N.O.
- · LARGER OPENINGS SHALL BE PER PLAN
- ALL CONCRETE EXPOSED TO THE WEATHER SHALL NOT HAVE LESS THAN 5% OR MORE THAN 7% AIR ENTRAINMENT
- ALL FOOTINGS SHALL BEAR AT LEAST 12" BELOW FINISH GRADE. FOOTINGS AND SLABS ON GRADE SHALL BEAR ON VIRGIN SOIL OR 95% COMPACTED FILL
- PROVIDE CONTROL JOINTS AT ALL INSIDE CORNERS OF SLAB EDGES, AND OTHER LOCATIONS WHERE SLAB CRACKS ARE LIKELY TO DEVELOP.
- JOINTS SHALL BE LOCATED @ 10'-0" O.C. (RECOMMENDED) OR 15'-0" O.C. (MAXIMUM)
- JOINT GRID PATTERN SHALL BE AS CLOSE TO SQUARES AS POSSIBLE (I:I RATIO), WITH A MAXIMUM OF I:15 RATIO
- CONTROL JOINTS SHALL NOT BE INSTALLED IN STRUCTURAL SI ABS
- CONCRETE MASONRY UNITS (CMU) SHALL BE ASTM C90 WITH A MIN. COMPRESSIVE STRENGTH OF 1900 psi (Fm=1500 psi), MORTAR SHALL BE ASTM C270, TYPE S. CMU DESIGN PER ACI 530 \$ 530.1.
- CMU FOUNDATION WALLS SHALL HAVE 'DUR-O-WALL' HORIZONTAL JOINT REINFORCEMENT (OR EQUAL) - 9 GA. MINIMUM @ 16" O.C.
- PROVIDE 2x6 (MIN.) x 16" LONG P.T. PLATE ON TOP OF ALL CRAW SPACE PIERS. ALL PIERS SHALL BE FASTENED PER ANCHORAGE SPECIFICATIONS NOTED ABOVE. TOP 2 COURSES (MIN.) OF PIER TO BE GROUTED SOLID (8 COURSE MAX. PIER HEIGHT).
- PROVIDE 2x6 P.T. PLATE ON INTERIOR CRAWL SPACE WALLS, FASTENED PER ANCHORAGE SPECIFICATION NOTED ABOVE. TOP 2 COURSES (MIN.) OF WALL TO BE GROUTED SOLID (8 COURSE MAX. WALL HEIGHT)
- DIMENSIONS BY OTHERS, BUILDER TO VERIFY.

DESCRIPTION OF BLDG. ELEMENT 3"x0.131" NAILS

DOUBLE TOP PLATE NAILS © 24" O.C.

DOUBLE TOP PLATE LAP SPLICE (4) NAILS IN LAPPED AREA

DIST TO SOLE PLATE

BLK'G. BTWN. JOISTS TO

TERSECTING WALLS

RIM TO TOP PLATE

OUBLE STUD

DLE PLATE TO JOIST/BLK'G UD TO SOLE PLATE

FOP PLATE LAP @ CORNERS &

ONLY ACCEPTABLE WHERE * ARE SHOWN)

• BUILDER TO VERIFY THAT MODEL HAS BEEN ADEQUATELY TREATED BY A LICENSED AND BONDED PEST CONTROL COMPANY FOR SUBTERRANEAN TERMITES. METHOD AND TYPE OF TREATMENT TO BE DETERMINED BY PEST CONTROL COMPANY

CONNECTION SPECIFICATIONS (TYP. U.N.O.)

(3) TOFNAILS

(3) NAILS @ 4" o.c

TOFNAILS @ 8" C

* 2½"x0.113 IS AN ACCEPTABLE ALTERNATIVE TO A 3"x0.120", SAME SPACING OR NUMBER OF NAILS.

(3) TOENAILS

(2) NAILS

NAII S @ 24" a

GENERAL STRUCTURAL NOTES

- DESIGN IS BASED ON 2018 NORTH CAROLINA STATE BUILDING CODE
- WOOD FRAME ENGINEERING IS BASED ON NDS, "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION" - LATEST EDITION.
- DESIGN LOADS

DEAD = 7 PSF T.C., IO PSF B.C. LIVE = 16 PSF

LOAD DURATION FACTOR = 1.25

FLOOR LIVE = 40 PSF (30 PSF @ SLEEPING AREAS) DEAD = 10 PSF (1-JOISTS & SOLID SAWN) IO PSF T.C., 5 PSF B.C. (TRUSSES) (ADD'L IO PSF @ TILE)

LATERAL 120 MPH, EXPOSURE B. SEISMIC A/B.

2,000 PSF ASSUMED ALLOWABLE BEARING PRESSURE (TO BE VERIFIED BY BUILDER)

GENERAL FRAMING

- ALL TYP. NAIL FASTENER REQUIREMENTS ARE NOTED IN STANDARD CONNECTIONS TABLE OR ON PLANS ALL NAILS SPECIFIED ARE MIN NAILS SHALL BE INSTALLED PER MANUFACTURER'S REQUIREMENTS FOR MAX CHARTED CAPACITY, NOTE: HANGERS USE COMMON NAIL DIAMETERS NOT TYPICAL FRAMING GUN NAILS.
- REFER TO FASTENING SCHEDULE TABLE R602.3(I) FOR ALL CONNECTIONS, TYP. U.N.O.
- EXT & INT BRG WALLS SHALL BE 2x4 OR 2x6 (AS SHOWN ON PLAN • 16" O.C. SPF OR SYP "STUD" GRADE LUMBER, OR BETTER, U.N.O.
 - WALLS OVER 12' TALL SHALL BE PER PLAN.
- ALL HEADERS, BEAMS & OTHER STRUCTURAL MEMBERS SHALL BE SPRICE-PINE-FIR #2 (SPE) OR SOUTHERN PINE #2 (SYP) LUMBER, OR BETTER (KILN-DRIED). ALL HEADERS HAVE BEEN DESIGNED BASED ON CALCULATED LOADS & SIZED ACCORDINGLY. CODE TABLES HAVE NOT BEEN USED.
- ALL NON-BEARING INTERIOR STUD WALLS SHALL BE CONSTRUCTED. WITH 2x 'STUD' GRADE MEMBERS SPACED @ 16" O.C. (MAX., U.N.O.)
- . HEADERS IN NON-LOAD BEARING WALLS SHALL BE (1)2x4/6 FLAT @ OPENINGS UP TO 4', (2)2x4/6 FLAT UP TO 8'
- ALL FRAMING LUMBER SHALL BE DRIED TO 15% MC (KD-15).
- ENGINEERED LUMBER BEAMS TO MEET OR EXCEED THE FOLLOWING: 'L9L' - Fb=2325 psi; Fv=3I0 psi; E=I.55xI0^6 psi
- 'LVL' Fb=2600 psi; Fv=285 psi; E=2.0x10^6 psi
- 'PSL' FB=2900 PSI: FV=290 PSI: E=2.0XI0^6 PSI M+K SHALL BE FULLY INDEMNIFIED FOR ANY AND ALL ISSUES RESULTING FROM OR RELATED TO ANY BUILDING COMPONENT IF THE OWNER DOES NOT SUBMIT THE COMPONENT SHOP DRAWINGS TO M+K FOR STRUCTURAL REVIEW PRIOR TO FABRICATION, DELIVERY, OR
- FOR 2 & 3 PLY BEAMS OF FOUAL WIDTH FASTEN PLIES TOGETHER WITH 3 ROWS OF 3"x0.120" NAILS @ 8" O/C OR 2 ROWS 1/4"x31/5" SIMPSON SD5 SCREWS (OR 3½," TRUSSLOK SCREWS) @ 16" O/C. USE A MINIMUM OF 3 ROWS FOR BEAM DEPTHS OF 14" OR GREATER. APPLY FASTENING AT BOTH FACES FOR 3-PLY CONDITION. LOCATE TOP & BOTTOM NAILS/SCREWS 2" FROM EDGE. SOLID 3 1/2" OR 5 1/4" BEAMS ARE ACCEPTABLE. USE 2 ROWS OF NAILS FOR 2x6 \$ 2x8
- FOR 4 PLY BEAMS OF EQUAL WIDTH, FASTEN PLIES TOGETHER WITH 3 ROWS OF 1/2 "x6" SIMPSON SDS SCREWS (OR 6 3/4" TRUSSLOK SCREWS) @ 16" O/C. USE A MINIMUM OF 4 ROWS FOR BEAM DEPTHS OF 14" OR GREATER APPLY FASTENING AT BOTH FACES (ONE SIDE ONLY FOR TRUSSLOK SCREWS). LOCATE TOP AND BOTTOM SCREW 2" FROM EDGE, A SOLID 7" BEAM IS ACCEPTABLE.
- ALL HEADERS SHALL BE SUPPORTED BY (1)2x JACK STUD & (1)2x KING STUD, MINIMUM.
- THE NUMBER OF STUDS SPECIFIED AT A SUPPORT INDICATES THE NUMBER OF JACK STUDS REQUIRED UNO...
- ALL MULTI-PLY STUDS TO BE FASTENED TOGETHER W/ 3"X0.I3I" NAILS @ 24" O.C. (MIN.), EACH PLY.
- PROVIDE SOLID BLOCKING IN FLOOR SYSTEM UNDER ALL POSTS CONTINUOUS TO FND./BEARING. BLOCKING TO MATCH POST ABOVE • FASTEN 2V WOOD PLATES TO TOP FLANGE OF STEEL BEAMS WITH
- P.A.F.'s ('HILTI' X-CF PINS OR EQUAL) @ 16" O.C. STAGGERED, OR I/2" DIA. BOLTS @ 48" O.C. STAGGERED.

3"x0120" NAII S (3) TOENAILS*

(3) NAILS @ 4" o.c

TOFNAILS @ 6" ac

(II) NAILS IN LAPPED AREA (2) NAILS

(3) TOENAILS*

NAILS @ 16" 0.0

NAILS @ 16" 0.0

• ALL EXTERIOR 4x4 WOOD POSTS SHALL HAVE SIMPSON BCS2-2/4

I-JOISTS/TRUSSES SHALL BE DESIGNED BY MANUF. TO MEET OR EXCEED 1 /480 LIVE LOAD DEFLECTION CRITERIA (EXCLUDES MARBLE FLOORS - CONTACT M&K FOR MARBLE FLOOR DESIGNS)

FLOOR FRAMING

- AT I-JOIST FLOORS, PROVIDE I I/8" MIN, OSB RIM BOARD. • METAL HANGERS SHALL BE SPECIFIED BY MANUFACTURER, U.N.O.
- FLOOR SHEATHING SHALL BE 23/32" A.P.A. RATED 'STURD-I-FLOOR' 24" O.C. EXPOSURE I (OR APPROVED EQUAL) WITH TONGUE AND
- GROOVE EDGES. FASTEN TO FRAMING MEMBERS W GLUE AND 2 1 x 0.131 NAILS @ 6"o.c. @ PANEL EDGES & @ 12"o.c. FIELD.
- 2 3" × 0120" NAILS @ 4" OC @ PANEL EDGES & @ 8" OC FIELD 2 3" x 0.113" NAILS @ 3" O.C. @ PANEL EDGES & @ 6" O.C. IN FIELD.
- \$6 × 2" MIN. SCREWS @ 6" O.C. @ PANEL EDGES \$ @ 12" O.C. FIELD.

ROOF FRAMING

- BAY WINDOWS & SHED ROOFS (UP TO 6' SPAN) CAN BE 2x4 OR 2x6 RAFTERS & CEILING JOISTS @ 16/24" O.C.
- FASTEN EACH ROOF TRUSS TO TOP PLATE W SIMPSON H2.5T CLIP (OR APPROVED EQUAL) © ALL BEARING POINTS. PROVIDE (2) H2.5T CLIPS AT 2-PLY GIRDER TRUSSES, (3) H2.5T CLIPS AT 3-PLY GIRDER TRUSSES & ROOF BEAMS - AT ALL BEARING POINTS.
- METAL HANGERS SHALL BE SPECIFIED BY THE MANUFACTURER, U.N.O
- ERECT AND INSTALL ROOF TRUSSES PER WTCA & TPI'S BCSI I-08 "GUIDE TO GOOD PRACTICE FOR HANDLING, INSTALLING & BRACING OF METAL PLATE CONNECTED WOOD TRUSSES."
- SUPPORT PORCH & SHORT SPAN ROOF TRUSSES (MAX 7' SPAN) W 2x4 LEDGER FASTENED TO:
 - RIM BOARD W (2) 3"x0.131" NAILS @ 16" O.C. MAX. (1-JOISTS) TRUSS VERTICALS w/ (3) 3"x0.131" NAILS \bullet 19.2" O.C. MAX. (FLOOR TRUSSES)
- ROOF SHEATHING SHALL BE 1/16" A.P.A. RATED SHEATHING 24/16 EXPOSURE I (OR APPROVED EQUAL). FASTEN TO FRAMING MEMBERS w/ 2 * x 0.131" NAILS @ 6"04. @ PANEL EDGES & @ 12" O.C. FIELD.
- -w/2 🐉 x 0.120" NAILS 🙍 4"0 a. 🙍 PANEL FDGES 🕻 🗖 8" 0 a. FIELD. - W/ 2 🖥 x 0.113" NAILS @ 3"o.c. @ PANEL EDGES 🛊 @ 6" O.C. FIELD.

HOLD-DOWN SCHEDULE

SYMBOL	SPECIFICATION
► HD-I	SIMPSON HTT4 HOLD-DOWN * (%" DIA. ANCHOR)
► HD-2	SIMPSON MSTC66 STRAP TIE (CENTER STRAP ON FLOOR SYSTEM UN.O.) -OR- MSTC66B3 ALTERNATE
▶ HD-3	SIMPSON STHDI4/STHDI4RJ

* UTILIZE THE SSTB24 ANCHOR BOLT @ ALL MONOSLAB & INTERIOR RAISED SLAB (I.E. THICKENED SLABS, FOOTINGS) CONDITIONS. MINIMUM 24" MIN. FOOTING THICKNESS REQUIRED. POXY-SET ALTERNATE FOR MONOSLAB & INTERIOR RAISED SLAB

CONDITIONS ONLY: UTILIZE SIMPSON 'SET' EPOXY SYSTEM TO FASTEN THREADED ROD INTO CONCRETE FOUNDATION, PROVIDE IO" (FOR 5/8" DIA.) OR 15" (FOR 1/8" DIA.) MIN EMBEDMENT INTO CONCRETE INSTALL PER MANUF. INSTRUCTIONS. MINIMUM 16" FOOTING THICKNESS REQ'D. DO NOT LOCATE ANCHORS WITHIN I 3/4" OF EDGE OF CONCRETE.

ADDITIONAL NOTES FOR TRUSS & I-JOIST MANUFACTURER

ROOF TRUSS FLOOR TRUSS AND ENGINEERED JOISTS SHALL BE DESIGNED TO MEET THE DIFFERENTIAL DEFLECTION CRITERIA BELOW, UNLESS OTED OTHERWISE ON PLAN.

TRUSSES/JOISTS SHALL BE DESIGNED SO THAT DIFFERENTIAL DEFLECTION BETWEEN AD JACENT PARALLEL TRUSSES/JOISTS OR GIRDER TRUSSES/FLUSH BEAMS DO NOT EXCEED THE FOLLOWING: ROOF TRUSSES:

- I/4" DEAD LOAD
- FLOOR TRUSSES, ATTIC TRUSSES, & I-JOISTS: 1/8" DEAD LOAD
- FI OOR TRUSSES & ATTIC TRUSSES ADJACENT TO
- LIMIT ABSOLUTE TRUSS DEFLECTION TO 3/16" DEAL LOAD. (NOT DIFFERENTIAL DEFLECTION)

ALTERNATE F.J MANUFACTURERS

FLOOR LIGISTS BY MANUFACTURER'S OTHER THAN THOSE SHOWN ON PLAN SHALL CONFORM TO THE APA PERFORMANCE RELATED I-JOISTS DESIGN AND CONSTRUCTION GUIDE, MINIMUM JOIST PROPERTIES INCLUDING, BUT NOT LIMITED TO, ALLOWABLE SHEAR, ALLOWARIE MOMENT STRENGTH AND STIFFNESS SHALL MEET OR EXCEED THOSE LISTED FOR THE PRI-60 SERIES I-JOISTS. ALL ALLOWABLE HOLES, BEARING STIFFENERS, AND JOIST TO JOIST CONNECTIONS ARE PER THE JOIST MANUFACTURER.

LATERAL BRACING & SHEAR WALL SHEATHING SPECIFICATIONS

THIS MODEL HAS BEEN DESIGNED TO RESIST LATERAL FORCES RESULTING FROM.

0 MPH WIND IN 2018 NCSBC:RO (120 MPH WIND SPEED IN ASCE 7-10 WIND MAP, PER IRC R301211) EXP. B, RISK CAT. 2 & SEISMIC CAT. A/B.

THE DESIGN WAS COMPLETED PER 2015 IBC (SECTION 1609) & ASCE 7-10. AS PERMITTED BY R301.13 OF THE 2018 NGSBG:RG, OR THE SIMPLIFIED PRESCRIPTIVE PROCEDURE IN ACCORDANCE WITH THE 2015 IRC IF THE PARAMETERS OF SECTION R60212 COMPLY ACCORDINGLY, THIS MODEL, AS DOCUMENTED AND DETAILED HEREWITHIN, IS ADEQUATE TO RESIST

THE CODE REQUIRED LATERAL FORCES.

DESIGN WIND UPLIFT LOADS HAVE BEEN CALCULATED UTILIZING ASCE 7-10 (ACCEPTED ENGINEERING PRACTICE) AS ALLOWED PER 2018 NGSBG:RG SECTION R802.II.I.I. THIS MODEL HAS BEEN DETAILED WHERE REQUIRED & ENGINEERED TO RESIST THE WIND UPLIFT LOAD PATH PER SECTIONS R602.3.5 R802.II.

EXT. WALL SHEATHING SPECIFICATION

- 1/16" OSB OR 15/32" PLYWOOD: FASTEN SHEATHING W 2 3/8"x0.II3" NAILS @ 6" O.C. AT EDGES \$ @ 12" O.C. IN THE PANEL FIELD. TYP, U.N.O
- HORIZONTAL BLOCKING OF EXT. WALL/SHEAR WALL PANEL EDGES IS NOT REQUIRED BY THIS DESIGN EXCEPT FOR THOSE AREAS SPECIFICALLY NOTED.
- ALL EXT. WALLS SHALL BE CONTINUOUSLY SHEATHED AND ARE CONSIDERED SHEAR WALLS.
- ALT. STAPLE CONNECTION SPEC: 1½" 16 GA STAPLES (1/6" CROWN) @ 3" O.C. AT EDGES & @ 6" O.C IN FIELD.

BLOCKED PANEL EDGES

AT DESIGNATED AREAS - FASTEN SHEATHING w/ 2 %" x 0.113" NAILS @ 6" O.C. AT ALL PANEL EDGES AND 12" O.C. IN THE PANEL FIELD OR 1 %" 16 GA STAPLES (%" CROWN) @ 3" O.C. AT EDES & @ 6"
O.C. IN FIELD. ALL SHEATHING PANELS SHALL BE
ORIENTED AND INSTALLED FULL HEIGHT OF SHEAR WALL OR 2x HORIZONTAL BLOCKING SHALL BE PROVIDED TO SUPPORT ALL UNSUPPORTED PANEL EDGES & EDGE FASTENING.

3" O.C. EDGE NAILING

 AT DESIGNATED AREAS - FASTEN PANEL EDGES OF WOOD STRUCTURAL WALL SHEATHING TO FRAMING w/ 8d NAILS @ 3" O.C. NO STAPLE ALTERNATIVE AVAILABLE AT THIS SPEC. ALL SHEATHING PANELS SHALL BE ORIENTED AND INSTALLED FULL HEIGHT OF SHEAR WALL OR 2x HORIZONTAL BLOCKING SHALL BE PROVIDED TO SUPPORT UNSUPPORTED PANEL EDGES AND 3" O.C. EDGE FASTENING.

NOTES

- SEE CONNECTION SPECIFICATIONS CHART FOR STANDARD SHEAR TRANSFER DETAILING, IF ADDITIONAL CAPACITY IS REQUIRED BY DESIGN, IT WILL BE SPECIFICALLY NOTED ON PLAN.
- DESIGN ASSUMES 16" O.C MAX. STUD SPACING, U.N.O.
- ALL STRUCTURAL PANELS ARE TO BE DIRECTLY APPLIED TO STUD FRAMING.
- PRE-MANUFACTURED PANELIZED WALLS: FASTEN TOGETHER END STUDS OF WALL PANELS SHEATHED W/ OSB OR PLYWOOD W/ 3" x 0.120" NAILS @ 4" O.C. (THRU ONE SIDE ONLY)

INDICATES EXTENT OF INT. OSB SHEARWAL OR 3" O.C. OSB SHEARWALL INDICATES HOLDOWN BELOW

3 FT. MAX L3"x3"x%" I2 FT, MAX L4"x3"x/4" 20 FT. MAX L5"x31/2"x3/6" 3 FT, MAX L4"x4"x/4" 1 I2 FT, MAX L5"x3½"x¾" I6 FT. MAX L6"x3K"x3%" I2 FT, MAX L6"x3½"x%; 9'-6" 2 FT. MAX L7"x4"x6" **

L3"x3"x/4"

L8"x4"x½" **

VENEER LINTEL SCHEDULE

20 FT. MAX

3 FT. MAX

3'-0"

- I LINILEST 16' SHALL HAVE 2' MIN. BEARING 16' SHALL HAVE 2' MIN. BEARING 16' SHALL HAVE 5' MIN. BEARING 16' SHALL NOT BE FASTINED BACK TO HEADER. 16' SHALL BE FASTINED BACK TO WOOD HEADER. IN WALL **04**0°0.c.
- w/k_2^* Dia. x 3 k_2^* Long Lag screws in 2* Long vertically slotted holes, max, veneer ht. Applies to any portion of Brick over the
- HORIZONTAL LEG MAY BE CUT IN THE FIELD TO BE 3 以 WIDE OVER THE BEARING LENGTH ONLY. THIS IS TO ALLOW FOR MORTAR JOINT
- NISHING: E STRICTURAL PLANS FOR ANY LINTEL CONDITION NOT COMPASSED BY THE ABOVE PARAMETERS, FOR ANY LINTEL STENED BACK TO BEAM, FASTENERS SHALL MAINTAIN A 2½" NIMAM) CLEAR DISTANCE FROM BOTTOM OF BEAM. UEEN VENEER USE L4x3x/4". BY," VENEER ONLY, SEE PLAN FOR VENEER SUPPORT IF

MEANS & METHODS NOTES

STRUCTURE IS DESIGNED TO BE SELF SUPPORTING AND STABLE AFTER THE BUILDING IS FINISHED AND ALL PLAN, DETAIL, AND NOTE SPECIFICATIONS HAVE BEEN COMPLETED. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE THE ERECTION PROCEDURES AND SEQUENCE TO INSURE THE SAFETY OF THE BUILDING AND ITS COMPONENTS DURING CONSTRUCTION. THIS INCLUDES, BUT IS NOT LIMITED TO, THE ADDITION OF SHORING, SHEETING, BRACING, GUYS, AND TIE-DOWNS, CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SHORING AND BRACING REQUIRED TO STABILIZE AND PROTECT EXISTING AND ADJACENT STRUCTURES AND SYSTEMS DURING COURSE OF DEMOLITION AND CONSTRUCTION OF THE PROJECT

STRUCTURAL DESIGN AND SPECIFICATIONS ASSUME THAT ALL SUPPORTING AND NON-SUPPORTING ELEMENTS IN CONTACT WITH FLOOR FRAMING ARE LEVEL. NCLUDING, BUT NOT LIMITED TO; FOUNDATIONS, SLABS ON GRADE, BEAMS, WALLS, AND NON-BEARING ELEMENTS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY LEVELNESS AND MAKE ADJUSTMENTS AS NECESSARY INCLUDING CONSIDERATION OF THOSE AREAS THAT MAY BE WITHIN CONTRACTUAL, INDUSTR OR WARRANTY TOLERANCES.

LEGEND

- IIIIIIII INTERIOR BEARING WALL
- □===□ BFARING WALL ABOVE - BEAM / HEADER
- ■ INDICATES SHEAR WALL & EXTENT EXTENT OF OVERFRAMING
- * INDICATES POST ABOVE, PROVIDE SOLID

BLOCKING UNDER POST OR JAMB ABOVE

INDICATES HOLD-DOWN OR STRAP. REFER TO SCHEDULE.

NON-BEARING HEADER SCHEDULE

SPAN	2x4 NON-BEARING	2x6 NON-BEARING	
SPAN	PARTITION WALL	PARTITION WALL	
UP TO 3'-0"	(I)2x4 FLAT	(I)2x6 FLAT	
UP TO 6'-0"	(2)2x4	(3)2x4	
UP TO 8'-0"	(2)2x6	(3)2x6	
UP TO 12'-0"	(2)2x8	(3)2x8	

NOTES:

• ALL NON-BEARING INTERIOR STUD WALLS SHALL BE CONSTRUCTED WITH 2x 'STUD' GRADE MEMBERS SPACED @ 24" O.C. (MAX.)

ENGINEERED BEAM MATERIAL SCHEDULE

BEAM NUMBER	LYL OPTION	PSL OPTION	LSL OPTION	FLITCH OPTION	STEEL OPTION
001	(2)134"x1176" - H	3½"xII⅓" - H	(2)134"x1136" - H	(2)2xl2 + (l) ½"xll½" STEEL FLITCH PLATE - H	N/A
00IA	(2)13/4"x117/6" - H	3½"xII%" - H	(2)134"x1136" - H	(2)2xi2 + (l) ½"xil¼" STEEL FLITCH PLATE - H	N/A
002	(2)134"x18" - FT	51/4"×18" - FT	N/A	(3)2xi2 + (2)片"xi片" Steel Flitch Plates - FB	WI2xI9 - F
003	(2)13/4"x14" - F	3½"xl4" - F	(2)19/4"x14" - F	(2)2xi2 + (I) ¼"xil¼" STEEL FLITCH PLATE - FB	WI2xI4 - F
004	(2)13/4"×14" - F	3½"x14" - F	(2)13/4"x14" - F	(2)2xi2 + (I) ¼"xil¼" STEEL FLITCH PLATE - FB	WI2xI4 - F
005	(2)134"×14" - F	3½"x 4" - F	(2)13/4"×14" - F	(2)2xi2 + (I) ¼"xil¼" STEEL FLITCH PLATE - FB	WI2xI4 - F
006	(2)134"×14" - F	3½"x 4" - F	(2)13/4"×14" - F	(2)2xi2 + (I) ¼"xil¼" STEEL FLITCH PLATE - FB	WI2xI4 - F
007	(2)1¾"×11%" - F	3½"xII%" - F	(2) % "x % " - F	(2)2xi2 + (i) ¼"xil¼" STEEL FLITCH PLATE - F	WI0x12 - F
000	(2)13/4"×14" - F	3½"x 4" - F	(2)194"×14" - F	(2)2xi2 + (I) ¼"xil¼" STEEL FLITCH PLATE - FB	WI2xI4 - F
004	(3)134"x18" - FT	5¼"xl8" - FT	N/A	(4)2xl2 + (3) ½"xll¼" STEEL FLITCH PLATES - FB	WI2x26 - F
010	(3)13/4"×20" - FT	5¼"x20" - FT	N/A	(4)2xi2 + (3) %"xil以" STEEL FLITCH PLATES - FB	WI2x35 - F
OII	(2)134"×1176" - FB	3½"xII%" - FB	(2)194"x14" - FB	(2)2xl2 + (l) ¼"xll¼" STEEL FLITCH PLATE - FB	WIOxI2 - FB

- BEAM NOTATION
- "F" INDICATES FLUSH BEAM
- "FT" INDICATES FLUSH TOP BEAM "FB" INDICATES FLUSH BOTTOM BEAM "D" INDICATES DROPPED BEAM
- "I" INDICATES DROPPED OPENING HEADER
 REFER TO DETAIL D/SD2.0 FOR TYPICAL FLITCH BEAM CONNECTIONS
 REFER TO DETAIL E/SD2.0 FOR TYPICAL STEEL BEAM CONNECTIONS
- FOR FLUSH TOP BEAMS PROVIDE 2X STACKED PLATES BENEATH BEAM AS REQ'D. FASTEN
- PLATES IN SUCCESSION W (2) 3"XO.120" NAILS @ 8" O.C.
- FOR FLUSH BOTTOM BEAMS PROVIDE 2x STACKED PLATES ATOP BEAM AS REQ'D, FASTEN PLATES IN SUCCESSION W/ (2) 3"XO.120" NAILS @ 8" O.C.

SESSIO

H CAR

ERN+KUI

Y

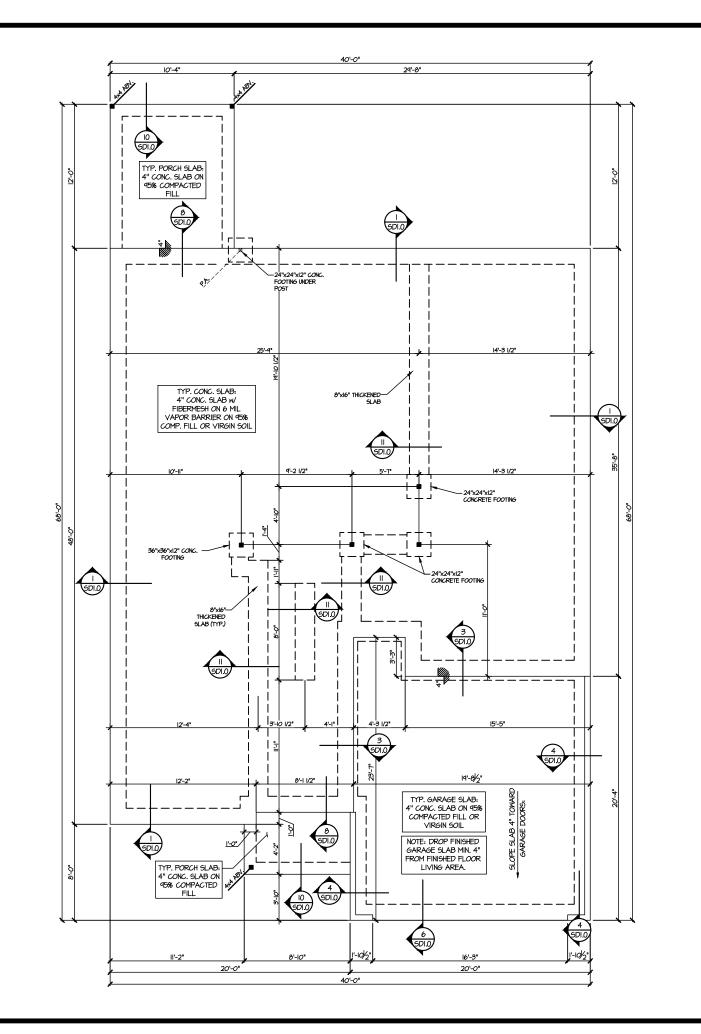
1&K project numbe 126-22076

JTR rawn by: sue date: 07-11-2

REVISIONS initial:

 \simeq \bigcap \mathcal{S} ZEIL 1 AT MIDDLE RM

LO



H CAR

MUCHERN+KULP **y**

M&K project number: 126-22076

JTR drawn by: issue date: 07-11-25

REVISIONS:

initial:

CREEK ANS

LEGEND

- IIIIIIII INTERIOR BEARING WALL
- □===□ BEARING WALL ABOVE

MONO SLAB FOUNDATION PLAN
SCALE: 1/8"=1"-0"

- BEAM / HEADER
- = = INDICATES SHEAR WALL & EXTENT
- EXTENT OF OVERFRAMING
- JL METAL HANGER
- * INDICATES POST ABOVE, PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE,
- INDICATES HOLD-DOWN OR STRAP. REFER TO SCHEDULE.

REFER TO SO.O FOR TYPICAL STRUCTURAL NOTES & SCHEDULES

OUNDATION

S1.

FARM AT NEIL'S Lot 22 - Middleton 3.1 raleigh, nc



MULHERN+KU Y

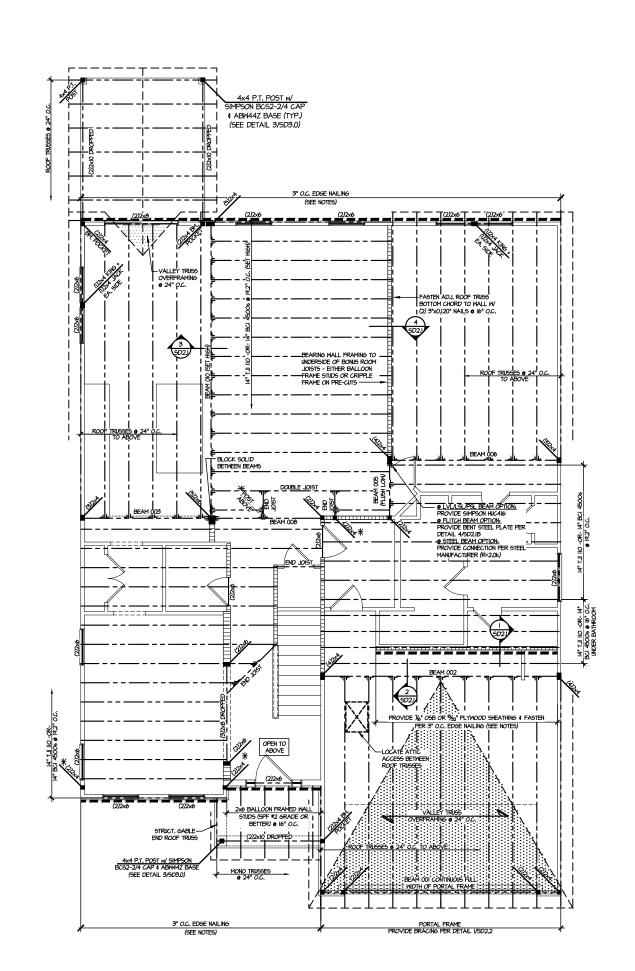
M&K project number: 126-22076

JTR frawn by: ssue date: 07-11-25

REVISIONS

initial:

NEILS A AT NEI FARM LOT 22 - M RALEIGH, D



ALTERNATE F.J MANUFACTURERS

FLOOR JOISTS BY MANUFACTURER'S OTHER THAN THOSE SHOWN ON

PROPERTIES INCLUDING, BUT NOT LIMITED TO, ALLOWABLE SHEAR, ALLOWABLE MOMENT, STRENGTH, AND STIFFNESS, SHALL MEET OR

EXCEED THOSE LISTED FOR THE PRI-60 SERIES I-JOISTS, ALL ALLOWABLE HOLES, BEARING STIFFENERS, AND JOIST TO JOIST CONNECTIONS ARE PER THE JOIST MANUFACTURER.

PLAN SHALL CONFORM TO THE APA PERFORMANCE RELATED I-JOISTS DESIGN AND CONSTRUCTION GUIDE. MINIMUM JOIST

2ND FLOOR/LOW ROOF FRAMING PLAN SCALE: 1/8"=1'-0"

LVL OPTION PSL OPTION LSL OPTION FLITCH OPTION STEEL OPTION 001 (2)13/4"×117/4" - H (2)|%"x||%" - H '2)2xi2 + (I) 片"xi以" STEEL FLITCH PLATE - H 36"xII%" - H N/A 00IA (2)134"×11%" - H (2)13/4"×113/6" - H NΑ 3½"xII%" - H 3)2xl2 + (2) ゟ"xlik|" STEEL FLITCH PLATES - FB 002 (2)13/4"x18" - FT (2)2xl2 + (l) 从"xll以" STEEL FLITCH PLATE - FB 003 (2)13/4"×14" - F (2)13/4"x14" - F WI2xI4 - F (2)2xi2 + (i) 从"xii以" Steel Flitch Plate - FB 004 (2)13/4"×14" - F 3½"xl4" - F (2)13/4"×14" - F WI2xI4 - F (2)2xi2 + (i) ¼"xil¼" STEEL FLITCH PLATE - FB 005 (2)134"x14" - F (2)13/4"×14" - F WI2xI4 - F 36"xI4" - F 006 (2)13/4"x14" - F (2)13/4"x14" - F WI2xI4 - F 3/5"xI4" - F (2)2xl2 + (I) ¼"xll¼" STEEL FLITCH PLATE - F 007 (2)1¾"x11%" - F (2)134"x1136" - F 3½"x11%" - F (2)2xl2 + (l) 以"xl以" STEEL FLITCH PLATE - FB 008 (2)13/4"×14" - F (2)13/4"×14" - F WI2xI4 - F '4)2xi2 + (3) ½"xil¼" STEEL FLITCH PLATES - FB 009 (3)13/4"x18" - FT 5¼"xl8" - FT NΑ WI2x26 - F (4)2xl2 + (3) %"xll4" STEEL FLITCH PLATES - FB 010 (3)13/4"x20" - FT 5¼"x20" - FT N/A WI2x35 - F

ENGINEERED BEAM MATERIAL SCHEDULE

(2)13/4"x111/6" - FB

- BEAM NOTATION: "F" INDICATES FLUSH BEAM "FT" INDICATES FLUSH TOP BEAM
- "FB" INDICATES FLUSH BOTTOM BEAM
- "D" INDICATES DROPPED BEAM "H" INDICATES DROPPED OPENING HEADER

3½"x11%" - FB

- REFER TO DETAIL D'592.0 FOR TYPICAL FLITCH BEAM CONNECTIONS
 REFER TO DETAIL E/592.0 FOR TYPICAL STEEL BEAM CONNECTIONS
 FOR FLUSH TOP BEAMS PROVIDE 2X STACKED PLATES BENEATH BEAM AS REQ'D. FASTEN

(2)13/4"x14" - FB

(2)2xl2 + (I) ¼"xll¼" STEEL FLITCH PLATE - FB

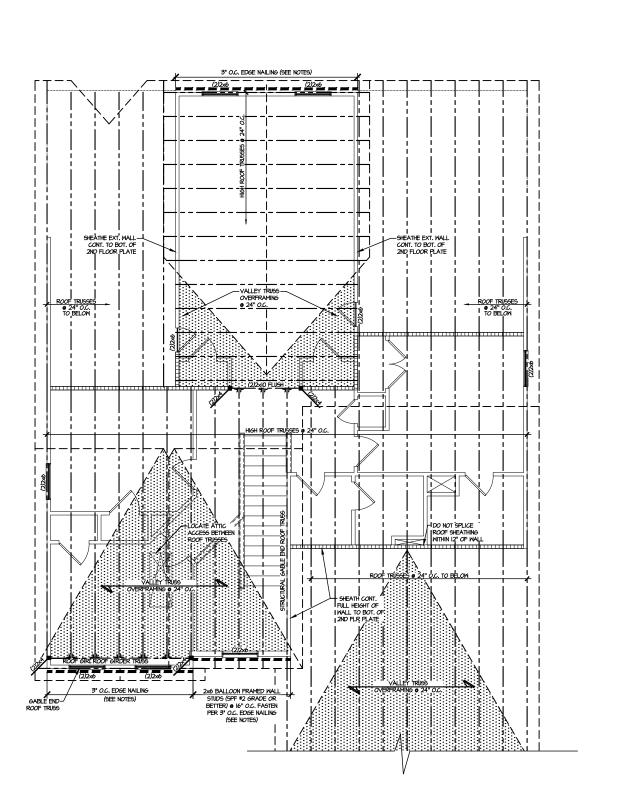
WIOxI2 - FB

- PLATES IN SUCCESSION W (2) 3"X0,120" NAILS @ 8" O.C.
- FOR FLUSH BOTTOM BEAMS PROVIDE 2x STACKED PLATES ATOP BEAM AS REQ'D. FASTEN PLATES IN SUCCESSION w/ (2) 3"x0.120" NAILS 8" O.C.

LEGEND

- IIIIII INTERIOR BEARING WALL
- □===□ BEARING WALL ABOVE
- ---- BEAM / HEADER
- = = INDICATES SHEAR WALL & EXTENT EXTENT OF OVERFRAMING
- * INDICATES POST ABOVE. PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.
- INDICATES HOLD-DOWN OR STRAP. REFER TO SCHEDULE.

REFER TO SO.O FOR TYPICAL STRUCTURAL NOTES & SCHEDULES



7/15/25 "H CAR MUCHERN+KULP

RESIDENTIAL STRUCTURAL ENSINEERING

STRUCTURAL ARTINITY THE PROPERTY OF THE PROP



M&K project number: 126-22076

JTR drawn by: issue date: 07-11-25

REVISIONS:

initial:

CREEK FARM AT NEIL'S (LOT 22 - MIDDLETON 3.1)
RALEIGH, NC

OOF

LEGEND

HIGH ROOF FRAMING PLAN

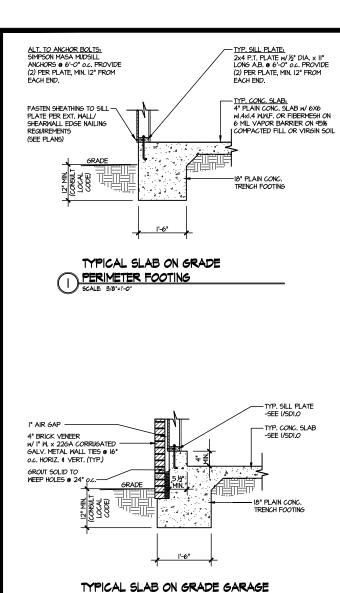
- INTERIOR BEARING WALL
- □===□ BEARING WALL ABOVE
- ---- BEAM / HEADER
- \bullet = = INDICATES SHEAR WALL & EXTENT
- EXTENT OF OVERFRAMING
- JL METAL HANGER

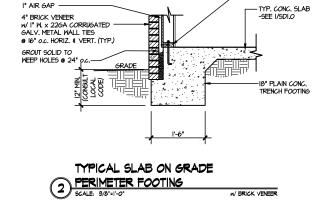
SCALE: 1/8"=1'-0"

- * INDICATES POST ABOVE. PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.
- INDICATES HOLD-DOWN OR STRAP. REFER TO SCHEDULE.

REFER TO SO.O FOR TYPICAL STRUCTURAL NOTES \$ SCHEDULES

S3.0



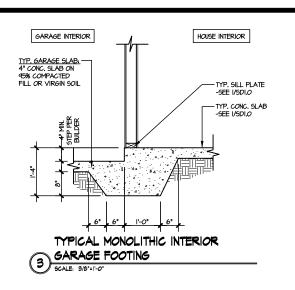


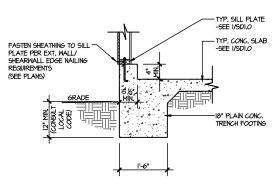
TYP, SILL PLATE -SEE I/SDI.O

-TYP. SILL PLATE BEYOND -SEE I/SDI.O

- TYP. CONC. SLAB

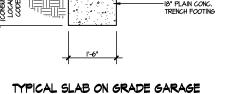
-SEE I/SDI.0

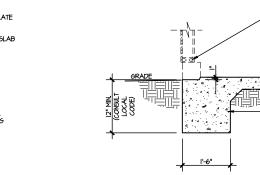




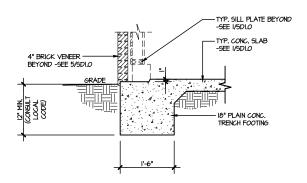
PERIMETER FOOTING

SCALE: 3/8"=1"-0"

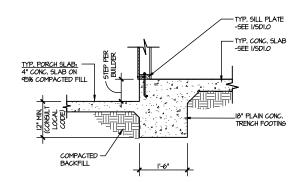




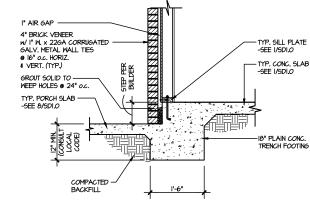




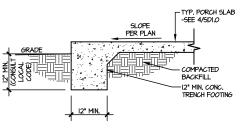




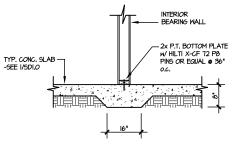
TYPICAL SLAB ON GRADE PERIMETER 8 FOOTING @ PORCH/PATIO SCALE: 3/8"=1'-0"



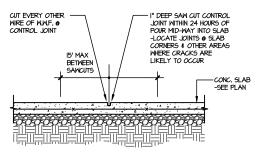




TYPICAL FOOTING @ PORCH SLAB









LETTERED DETAILS ARE TYPICAL FOR THIS HOME & SHALL BE IMPLEMENTED IN ALL APPLICABLE AREAS. THESE DETAILS ARE NOT "CUT" ON THE PLANS.

NUMBERED DETAILS ARE PLAN SPECIFIC AND ARE ONLY REQUIRED WHERE SPECIFICALLY INDICATED ("CUT") ON THE PLANS.

NEIL Z O AT ARM LOT

7/15/2

STRUCTURAL ENGINEER

M&K project number: 126-22076

ssue date: 07-11-2!

frawn by:

REVISIONS

JTR

initial:

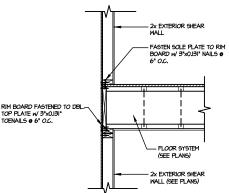
TH CAR

SEPH T. R

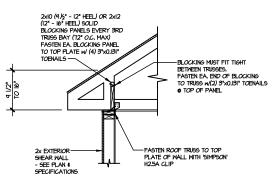
OFESSIO

5 PERIMETER FOOTING
SCALE: 3/6"=1"-0"

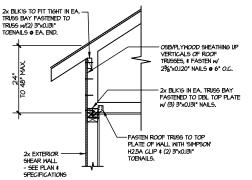
TYPICAL SHEAR TRANSFER DETAIL @ ROOF SCALE: 3/8'=1'-0' HEEL HEIGHT LESS THAN HEEL HEIGHT LESS THAN 9½" NO BLOCKING REQ'D



TYPICAL SHEAR TRANSFER DETAIL BETWEEN FLOORS @ EXTERIOR WALL
SCALE: 3/0'=|-0'









- Steel Flitch Plate (See Plan)

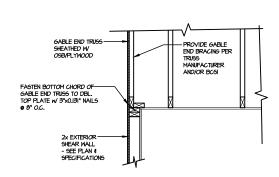
-2x WOOD BEAM

(SEE PLAN)

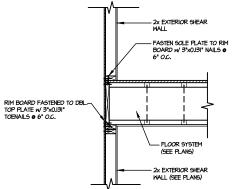
- Steel Flitch Plate (See Plan)

-2x WOOD BEAM

(SEE PLAN)









S-FLY OR MORE WOOD SEAM W/ (2 OR MORE) STEEL FLITCH FLATES

FASTEN WOOD BEAMS W/ FLITCH

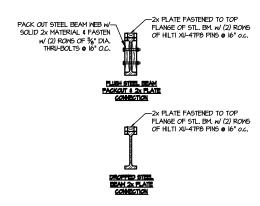
PLATE w/ (2) ROWS OF 5/8" DIA. THRU-BOLTS @ 16" O.C.

FASTEN WOOD BEAMS W/ FLITCH -

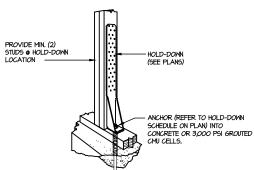
(SEE PLAN)

PLATES w/ (2) ROWS OF 3/8" DIA. THRU-BOLTS @ 16" O.C. 2x WOOD BEAM

2x WOOD BEAM



TYPICAL STEEL BEAM CONNECTION DETAIL SCALE 344-1-07



TYPICAL HOLD DOWN INSTALLATION SCALE: NTS.

LETTERED DETAILS ARE TYPICAL FOR THIS HOME & SHALL BE IMPLEMENTED IN ALL APPLICABLE AREAS. THESE

NUMBERED DETAILS ARE PLAN SPECIFIC AND ARE ONLY REQUIRED WHERE SPECIFICALLY INDICATED ("CUT") ON THE PLANS.

SCHEDULE ON PLAN) INTO CONCRETE OR 3,000 PSI GROUTED CMU CELLS.

DETAILS ARE NOT "CUT" ON THE PLANS.

NEIL'S (ETON 3.1 A AT NEI Ŋ FARM LOT 22 - M RALEIGH, 1

 \simeq \bigcup

7/15/2

MULHERN+KULP
RESIDENTIAL STRUCTURAL ENGINEERING

Y

M&K project number: 126-22076

issue date: 07-11-2

drawn by:

REVISIONS:

JTR

initial:

H CAR

SEPH T. R

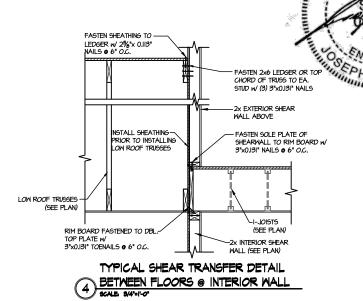
SHEAR TRANSFER DETAIL @ PARALLEL TO FRAMING ONLY REGO WHERE NOTED ON PLAN

FASTEN SHEATHING TO BLOCKING W 2% "x 0.120" NAILS 6 6" O.C. - 2x6 CONT. BLOCKING. FASTEN TO EA. STUD w/ (3) 3"x0.131" NAILS OR INSTALL SHEATHING -PRIOR TO INSTALLING ROOF TRUSSES (3) 3"x0.120" NAILS -FASTEN SOLE PLATE OF SHEARWALL TO FLUSH BEAM W 3"x0.131" NAILS @ 6" O.C. OR 3"x0.120" NAILS @ 4" O.C. EXTEND SHEATHING TO BOT. OF BEAM & FASTEN PER SPECIFICATION ON PLAN || (SEE PLAN) || LOW ROOF TRUSSES (SEE PLAN) -LVL/P9L/L9L FLU9H TOP BEAM (SEE PLAN)

> SHEAR TRANSFER DETAIL @ EXTERIOR SHEARWALL ABOVE

FASTEN SHEATHING TO LEDGER W/ 23%"x 0.120" NAILS @ 6" O.C. - FASTEN 2x6 LEDGER OR TOP CHORD OF TRUSS TO TO EA. STUD w/ (3) 3*x0.131" NAILS OR (3) 3*x0.120" NAILS SHEARWALL ABOVE — INSTALL SHEATHING — PRIOR TO INSTALLING LOW ROOF TRUSSES | I-JOISTS | (SEE PLAN) LOW ROOF TRUSSES -(SEE PLAN) - LVL/PSL/LSL FLUSH TOP BEAM (SEE PLAN)

SHEAR TRANSFER DETAIL @ EXTERIOR SHEARMALL ABOVE



M&K project number: 126-22076

Y

MULHERNHAKUL
RESIDENTIAL STRUCTURAL ENGINEER

7/15/2

H CAR

JTR frawn by: issue date: 07-11-2

REVISIONS:

initial:

CREE DETAILS

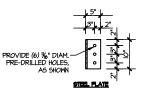
FARM AT NEIL'S C LOT 22 - MIDDLETON 3.1 RALEIGH, NC RAMING

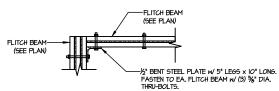
SD2.1A

LETTERED DETAILS ARE TYPICAL FOR THIS HOME & SHALL BE IMPLEMENTED IN ALL APPLICABLE AREAS. THESE DETAILS ARE NOT "CUT" ON THE PLANS.

NUMBERED DETAILS ARE PLAN SPECIFIC AND ARE ONLY REQUIRED WHERE SPECIFICALLY INDICATED ("CUT") ON THE PLANS.

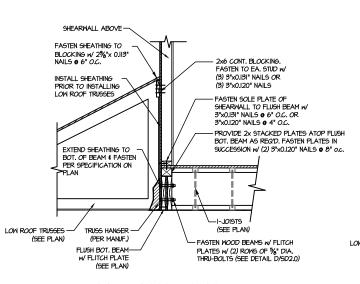
SHEAR TRANSFER DETAIL @ INTERIOR SHEARWALL BELOW
SCALE: S/4"=1"40" PARA PARALLEL TO FRAMING ONLY REQTO WHERE NOTED ON PLAN



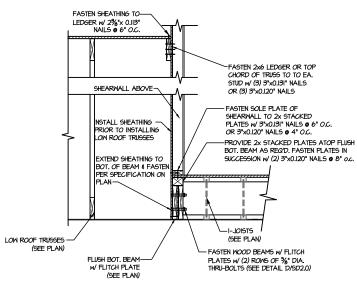


CONNECTION DETAIL

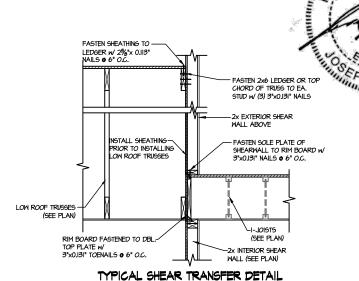
SCALE 9/4"=1"-0"



SHEAR TRANSFER DETAIL @ EXTERIOR SHEARWALL ABOVE SCALE. S/0°-1'-0"



SHEAR TRANSFER DETAIL @ 2 EXTERIOR SHEARWALL ABOVE



3 BETWEEN FLOORS @ INTERIOR MALL

M&K project number: 126-22076

Y

MULHERN+KU

MESIDENTIAL STRUCTURAL ENGINE

7/15/25

H CAR

JTR frawn by: ssue date: 07-11-25

REVISIONS

initial:

 \simeq \bigcup DETAIL NEIL'S A AT NEI Ü FARM LOT 22 - M RALEIGH, 1

SD2.1B

LETTERED DETAILS ARE TYPICAL FOR THIS HOME & SHALL BE IMPLEMENTED IN ALL APPLICABLE AREAS. THESE DETAILS ARE NOT "CUT" ON THE PLANS.

NUMBERED DETAILS ARE PLAN SPECIFIC AND ARE ONLY REQUIRED WHERE SPECIFICALLY INDICATED ("CUT") ON THE PLANS.

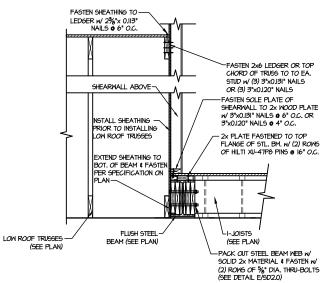
SHEAR TRANSFER DETAIL @
INTERIOR SHEARWALL BELOW
SCALE 9/4"-1"-0"
OULY REED MERRE NOTED ON FLAM

FASTEN SHEATHING TO -BLOCKING W/ 23/8"x 0.120" NAILS @ 6" O.C. -2x6 CONT. BLOCKING. FASTEN TO EA. STUD w/ INSTALL SHEATHING -PRIOR TO INSTALLING LOW ROOF TRUSSES (3) 3"x0.131" NAILS OR (3) 3"x0.120" NAILS -FASTEN SOLE PLATE OF SHEARWALL TO 2x WOOD PLATE w/ 3"x0.i3i" NAILS @ 6" O.C. OR LOW ROOF TRUSSES-3"x0.120" NAILS • 4" O.C. - 2x PLATE FASTENED TO TOP FLANGE OF STL. BM. w/ (2) ROWS OF HILTI XU-4TP8 PINS @ 16° O.C. EXTEND SHEATHING TO -BOT. OF BEAM & FASTEN TO PACK OUT PER SPECIFICATION ON PLAN TRUSS HANGER -(PER MANUF.) BEAM (SEE PLAN) (SEE PLAN) -PACK OUT STEEL BEAM WEB w/ SOLID 2x MATERIAL & FASTEN w/ (2) ROWS OF "\$" DIA. THRU-BOLTS (SEE DETAIL E/SD2.0)

SHEAR TRANSFER DETAIL @

EXTERIOR SHEARWALL ABOVE

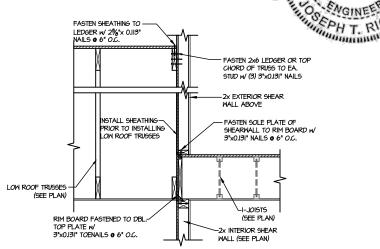
SCALE 500-1-0*



SHEAR TRANSFER DETAIL @

EXTERIOR SHEARWALL ABOVE

SCALE SIGNIFICATION



TYPICAL SHEAR TRANSFER DETAIL

BETWEEN FLOORS @ INTERIOR WALL

SCALE 8/4"-1"-0"

HOMES

7/15/2

MULHERN+KUL RESIDENTIAL STRUCTURAL ENGINEER SUBMOMENTA NO BAILING 14 PARING PATE 698 600 1 PARING PARING NOT IL CENNE #4C-3825

Y

M&K project number: 126-22076

ssue date: 07-11-25

frawn by:

REVISIONS

JTR

initial:

H CAR

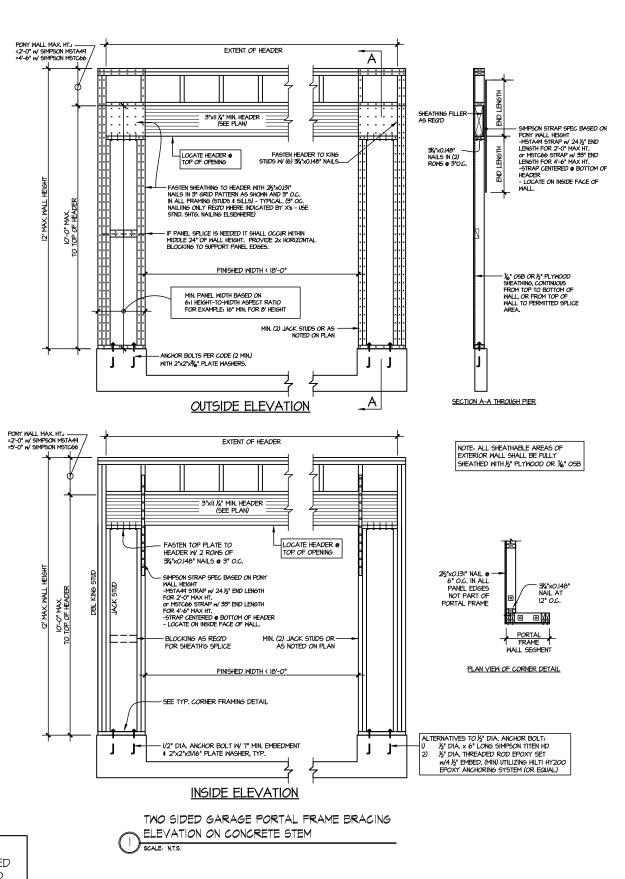
FARM AT NEIL'S CREEI Lot 22 - Middleton 3.1 raleigh, nc

SD2.1C

LETTERED DETAILS ARE TYPICAL FOR THIS HOME & SHALL BE IMPLEMENTED IN ALL APPLICABLE AREAS. THESE DETAILS ARE NOT "CUT" ON THE PLANS.

NUMBERED DETAILS ARE PLAN SPECIFIC AND ARE ONLY REQUIRED WHERE SPECIFICALLY INDICATED ("CUT") ON THE PLANS.

LETTERED DETAILS ARE TYPE
THIS HOME & SHALL BE IMPLE



FILE: RLH - Neil's Greek - Lot 22 - Structurals DATE: 7/15/2025 3:05 F

LETTERED DETAILS ARE TYPICAL FOR THIS HOME & SHALL BE IMPLEMENTED IN ALL APPLICABLE AREAS. THESE DETAILS ARE NOT "CUT" ON THE PLANS.

NUMBERED DETAILS ARE PLAN SPECIFIC AND ARE ONLY REQUIRED WHERE SPECIFICALLY INDICATED ("CUT") ON THE PLANS. MUCHERN+KULP

RESIDENTAL STRUCTURAL ENSINEERING
300 Desiciate Ave Balling 4 Author, PA 19002
p. 2555-94-94-91-19002

7/15/2

TH CAR

M&K project number: 126-22076

project mgr: JTR drawn by: NLD issue date: 07-11-25

REVISIONS:

date: initial:

HO M ES

FARM AT NEIL'S CREEK LOT 22 - MIDDLETON 3.1
RALEIGH, NC

SD2.2

JTR drawn by: issue date: 07-11-25

FARM AT NEIL'S CREEK LOT 22 - MIDDLETON 3.1 RALEIGH, NC

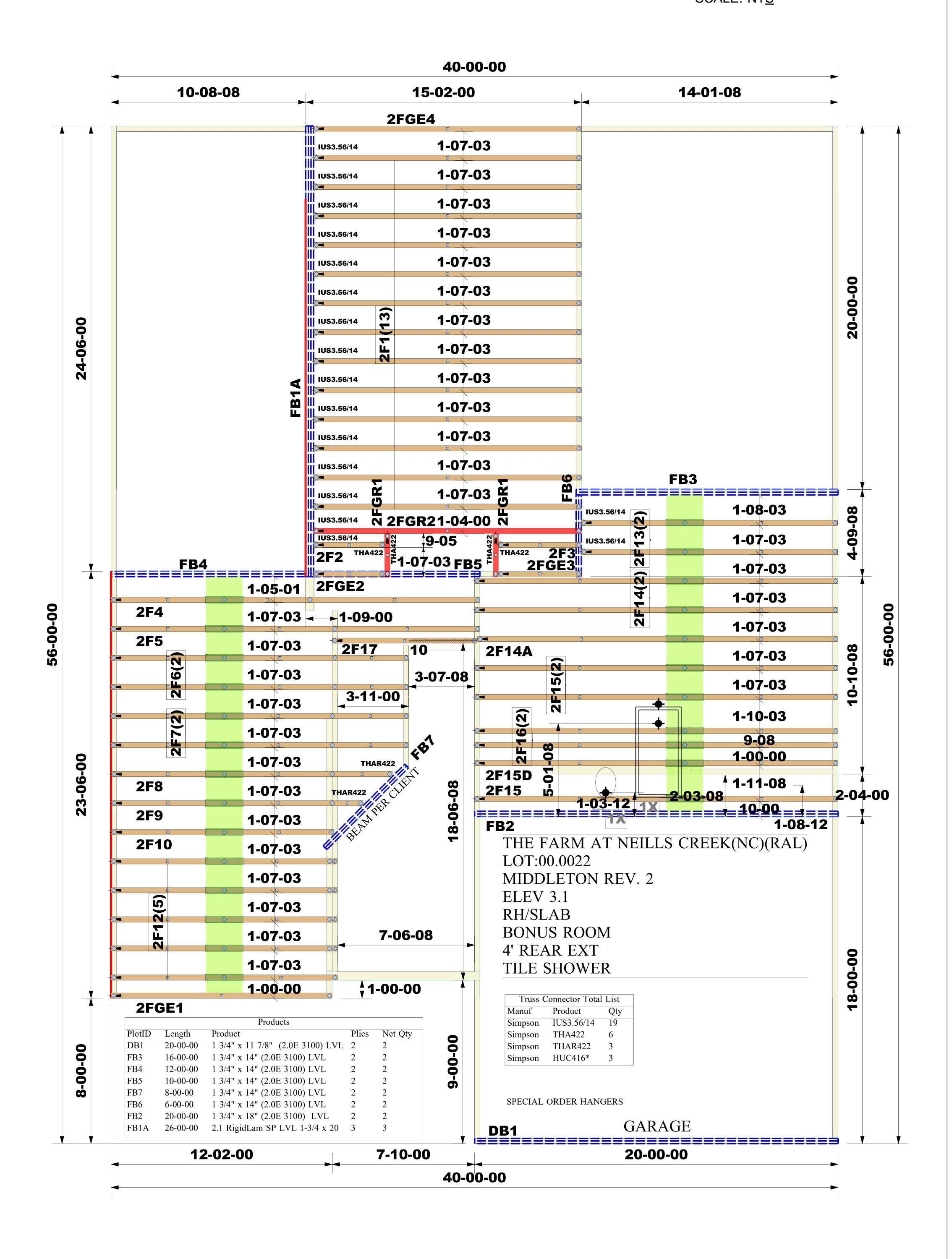
SD3.0

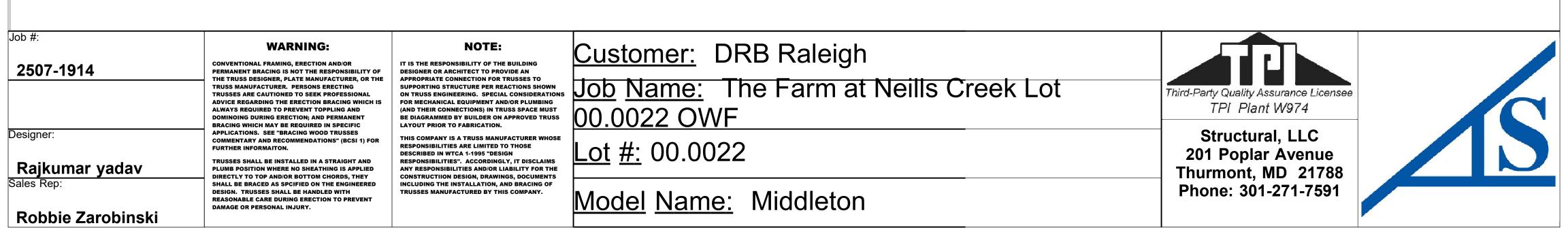
HOLLOW COLUMN-WRAP IF REQ'D PER ARCH -POST CAP (SEE PLANS & TYP. NOTES) POST BASE (SEE PLANS &
TYP. NOTES) W/½" DIA.
ANCHOR BOLT OR SIMPSON
TITEN HD W/MIN. 6" EMBED.
SLOPE
TYPER PLAN
(SE SOLID 4x4 OR-6x6 P.T. POST (SEE PLANS) TYP. PORCH SLAB (SEE FND DETAILS) -CONC. TRENCH FOOTING

TYPICAL PORCH
POST CONNECTION DETAIL
SCALE: NONE SLAB ON GRADE SHOW SLAB ON GRADE SHOWN (SIM. e CRAWL & BSMT.)

LETTERED DETAILS ARE TYPICAL FOR THIS HOME & SHALL BE IMPLEMENTED IN ALL APPLICABLE AREAS. THESE DETAILS ARE NOT "CUT" ON THE PLANS.

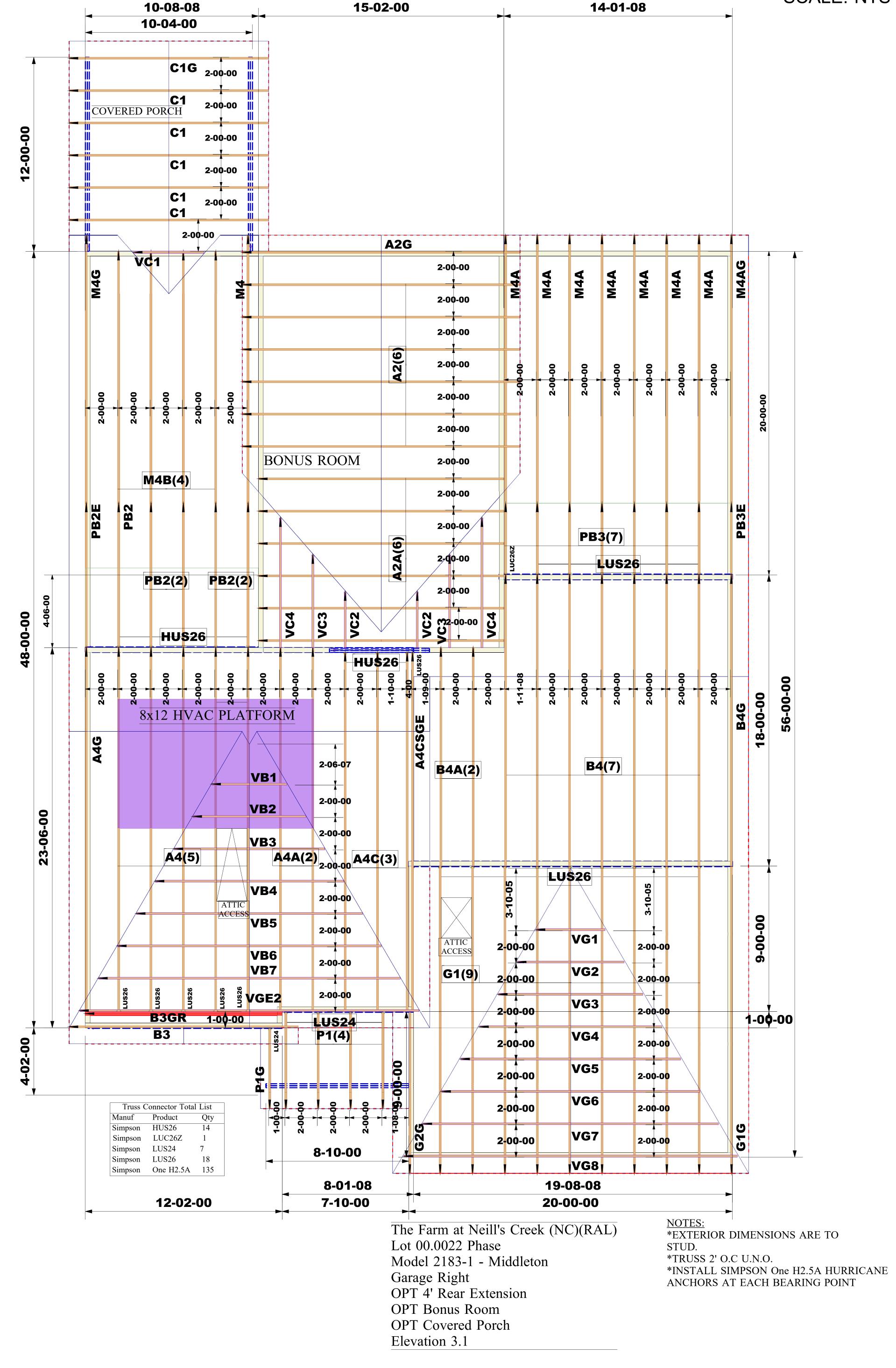
NUMBERED DETAILS ARE PLAN SPECIFIC AND ARE ONLY REQUIRED WHERE SPECIFICALLY INDICATED ("CUT") ON THE PLANS.





ROOF TRUSS LAYOUT

SCALE: NTS



Job #: **WARNING: NOTE:** IT IS THE RESPONSIBILITY OF THE BUILDING 2507-1916 PERMANENT BRACING IS NOT THE RESPONSIBILITY OF DESIGNER OR ARCHITECT TO PROVIDE AN THE TRUSS DESIGNER, PLATE MANUFACTURER, OR THE APPROPRIATE CONNECTION FOR TRUSSES TO SUPPORTING STRUCTURE PER REACTIONS SHOWN TRUSS MANUFACTURER. PERSONS ERECTING TRUSSES ARE CAUTIONED TO SEEK PROFESSIONAL ON TRUSS ENGINEERING. SPECIAL CONSIDERATIONS ADVICE REGARDING THE ERECTION BRACING WHICH I FOR MECHANICAL EQUIPMENT AND/OR PLUMBING ALWAYS REQUIRED TO PREVENT TOPPLING AND (AND THEIR CONNECTIONS) IN TRUSS SPACE MUST BE DIAGRAMMED BY BUILDER ON APPROVED TRUSS LAYOUT PRIOR TO FABRICATION. DOMINOING DURING ERECTION; AND PERMANENT **BRACING WHICH MAY BE REQUIRED IN SPECIFIC** APPLICATIONS. SEE "BRACING WOOD TRUSSES Designer: THIS COMPANY IS A TRUSS MANUFACTURER WHOSE RESPONSIBILITIES ARE LIMITED TO THOSE DESCRIBED IN WTCA 1-1995 "DESIGN TRUSSES SHALL BE INSTALLED IN A STRAIGHT AND RESPONSIBILITIES". ACCORDINGLY, IT DISCLAIMS **Abhijit Bera** PLUMB POSITION WHERE NO SHEATHING IS APPLIED ANY RESPONSIBILITIES AND/OR LIABILITY FOR THE DIRECTLY TO TOP AND/OR BOTTOM CHORDS. THEY CONSTRUCTION DESIGN. DRAWINGS. DOCUMENTS INCLUDING THE INSTALLATION, AND BRACING OF SHALL BE BRACED AS SPCIFIED ON THE ENGINEERED DESIGN. TRUSSES SHALL BE HANDLED WITH TRUSSES MANUFACTURED BY THIS COMPANY.

REASONABLE CARE DURING ERECTION TO PREVENT

DAMAGE OR PERSONAL INJURY.

Robbie Zarobinski

Customer: DRB Raleigh

Job Name: The Firm at Neill's Creek

<u>ot #:</u> 00.0022

Model Name: Middleton



