MIDDLETON-RALE

RALEIGH - LOT 00.0086 THE FARM AT NEILL'S CREEK

(MODEL# 2183)

ELEVATION 6 - GL

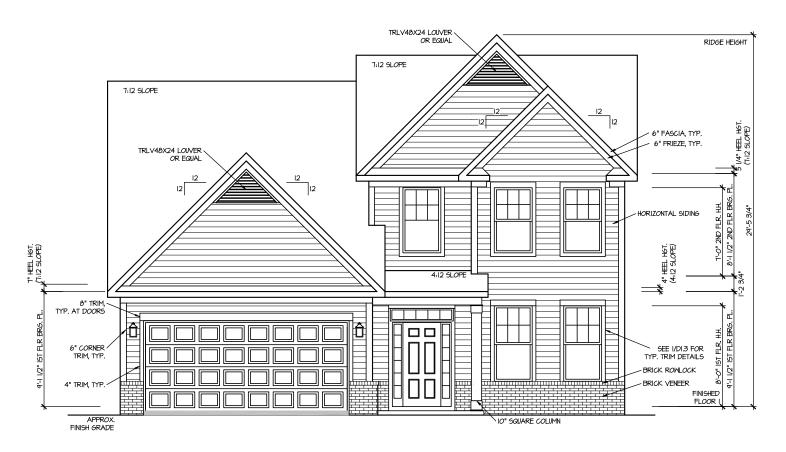
HOMES

AREA CALCULATIONS ELEVATION 6	HEATED	COVERED / UNHEATED	UNCOVERED
FIRST FLOOR	1495 SF	31111271123	01100121120
GARAGE	1490 01	417 SF	
GARAGE			
FRONT PORCH - ELEV. 6		45 SF	
SECOND FLOOR	692 SF		
TOTAL	2187 SF	462 SF	
			1
			+
			+

95 WINDING CREEK DRIVE

LOT	SPECIFIC	
1	LOT 00.0086	
	201 00.0000	MIDDLETON REV. RALE 1 FLEVATION 6
2	ADDRESS	MIDDLETON REV. RALE 1 ELEVATION 6 95 WINDING CREEK DR LILLINGTON, NC 27546
	ADDICESS	95 WINDING CILLINGTON, NC 27540
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FRONT ELEVATION 6 SCALE: 1/8" = 1'-0"

7:12 SLOPE 6" FASCIA, TYP. 4'-1 1/2" IST FLR BRG. PL. 8'-0" IST FLR. H.H. 4" CORNER L TRIM, TYP. 5

REAR ELEVATION 6

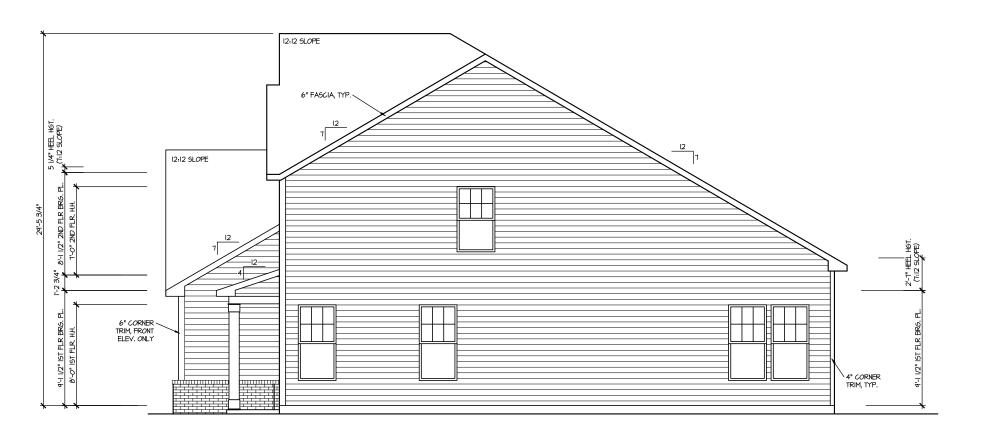
UPDATED DATE 02-03-2023 DRAWN BY: DATE: 12/19/2023

PLAN NO. 2183

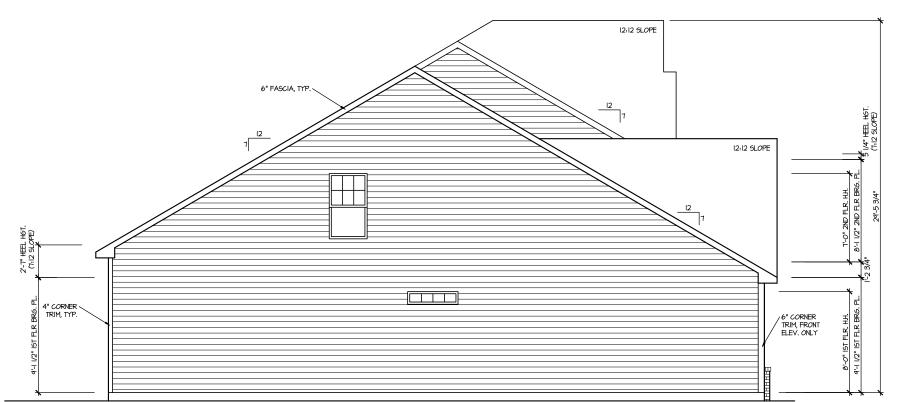


FRONT & REAR ELEVATIONS

HOUSE NAME:
MIDDLETON
DRAWING TITLE



RIGHT ELEVATION 6 SCALE: 1/8" = 1'-0"



LEFT ELEVATION 6
SCALE: 1/8" = 1'-0"



RIGHT & LEFT ELEVATIONS

DATE: 12/19/2023 PLAN NO. 2183

HOUSE NAME:
MIDDLETON
DRAWING TITLE

ROOF VENTILATION CALCULATIONS:
ROOF AREA = 2102 SQ. FT.
OVERAL BEGINED VENTILATION.
10 SQ. FT.
110 300 = 1401 SQ. FT.
110 300 = 1501 SQ. FT.
110 300 = 1500 - 150 SQ. FT. (1 TO 300)
NET FREE AREA OF VENTED SOFFIT = 5.1 SQ. IN / LINEAR FT.
NET FREE AREA OF RIDGE VENT = 16 SQ. IN / LINEAR FT.

LOPER VENTING, (BOTTOM 2/3 RDS)

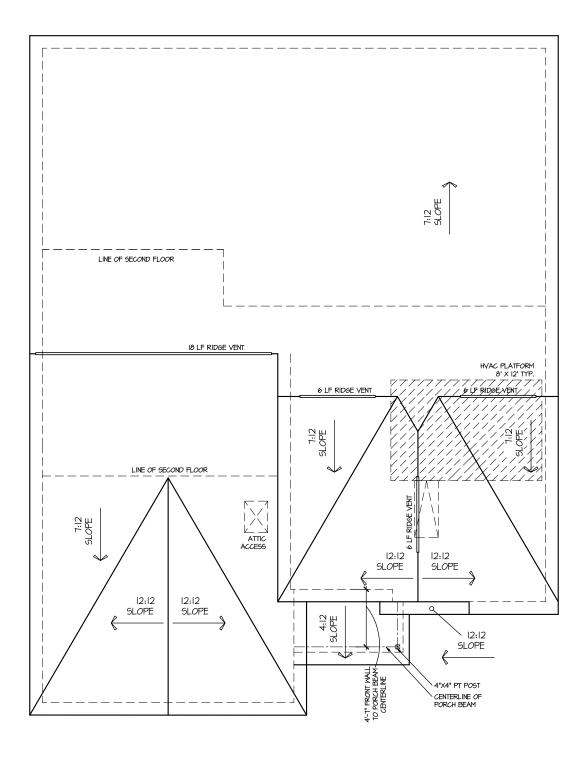
14 LINEAR FIETE OF SOFFIT X 5.1 50, IN. = 2.43 50, FT.

IMPERS VENTING, (TOP 1/3) 50, IN. = 2.43 50, FT.

1/4/0 50, T. EFFLERS 150% - 8/05, IN. = 45 50, FT.

1/4/0 50, T. EFFLERS 150% - 8/05,

TOTAL ROOF VENTILATION, 1.43 50, FT. > 1,01 50, FT. (RQTD)



ROOF PLAN ELEV. 6

MASTER PLAN INFORMATION

MASTER PLAN INFORMATION

REVISION DATE

11-RALE 10-12-2018

DATE: 10-12-2018

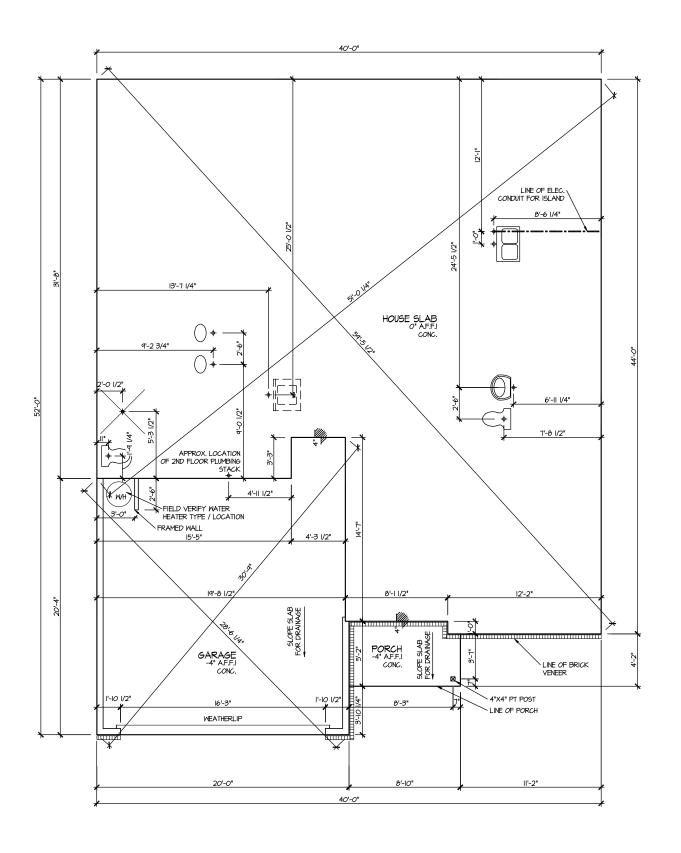
DATE: 512-2018



HOUSE NAME:
MIDDLETON
DRAWING TITLE
ROOF PLAN

SHEET No.

AI.3



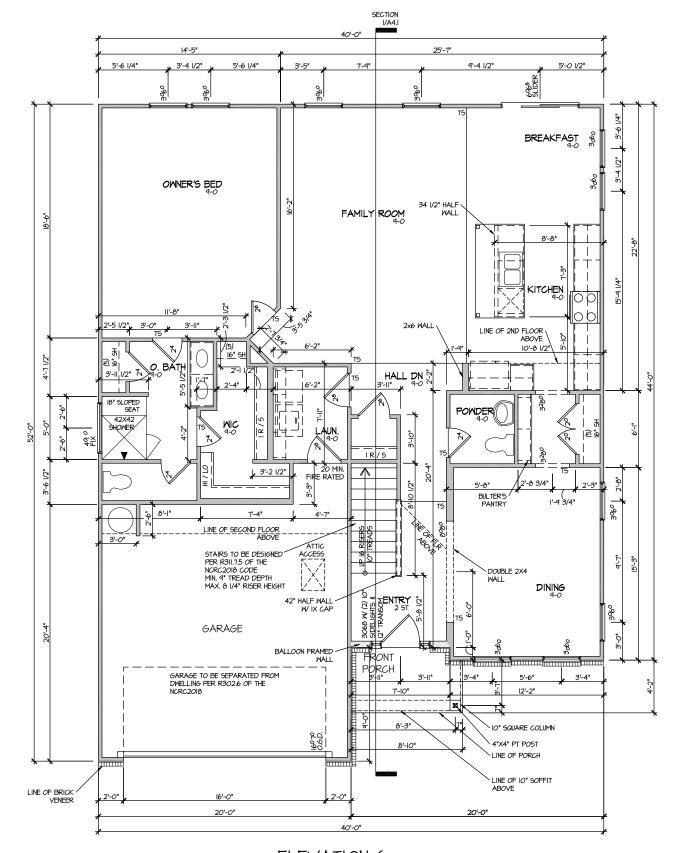
ELEVATION 6 SLAB PLAN SCALE: 1/8" = 1'-0"

"ILE: Lot 00.0086.dwg DATE: 12/19/2023 10:49 AM

| MASTER PLAN INFORMATION | MASTER PLAN INFORMATION | REVISION | DATE | 10-12-2018 | DATE | DATE



HOUSE NAME:
MIDDLETON
DRAWING TITLE
SLAB PLAN



ELEVATION 6 FIRST FLOOR PLAN SCALE: 1/0" = 1'-0"

: Lot 00.0086.dwg DATE: 12/19/2023 10:49 AN

SHEET No.

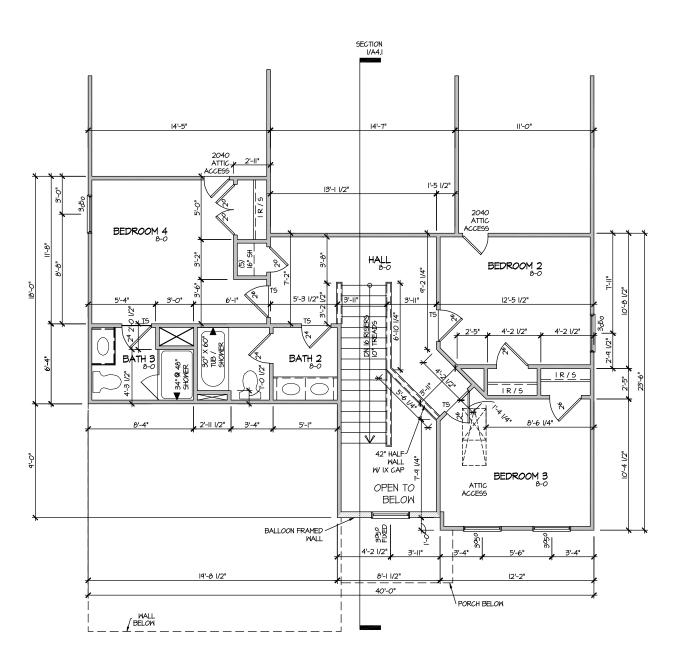
HOUSE NAME:
MIDDLETON
DRAWING TITLE

FIRST FLOOR PLAN

DRAWN BY:

DATE: 12/19/2023

PLAN NO. 2183



ELEVATION 6 SECOND FLOOR PLAN SCALE: VO' = 1'-0'

E: Lot 00.0086.dwg DATE: 12/19/2023 10:49 AM

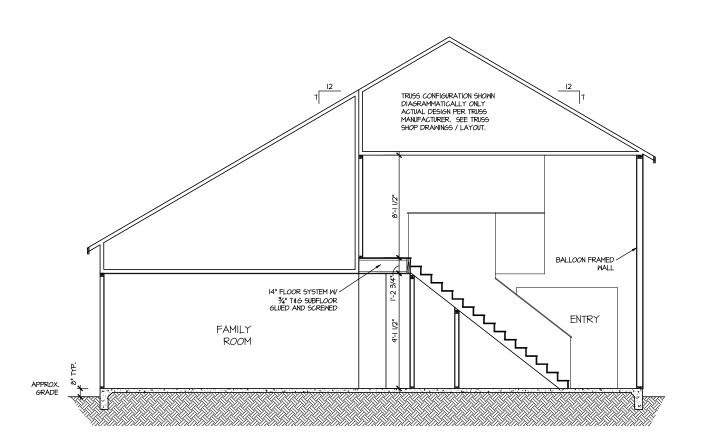
HOUSE NAME:
MIDDLETON
DRAWING TITLE

SECOND FLOOR PLAN

UPDATED DATE 02-03-2023

DRAWN BY: ITS DATE: 12/19/2023 PLAN NO. 2183

A3.2

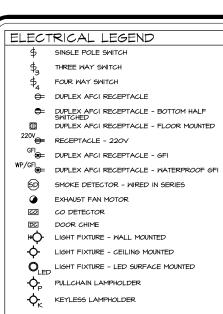


SECTION I

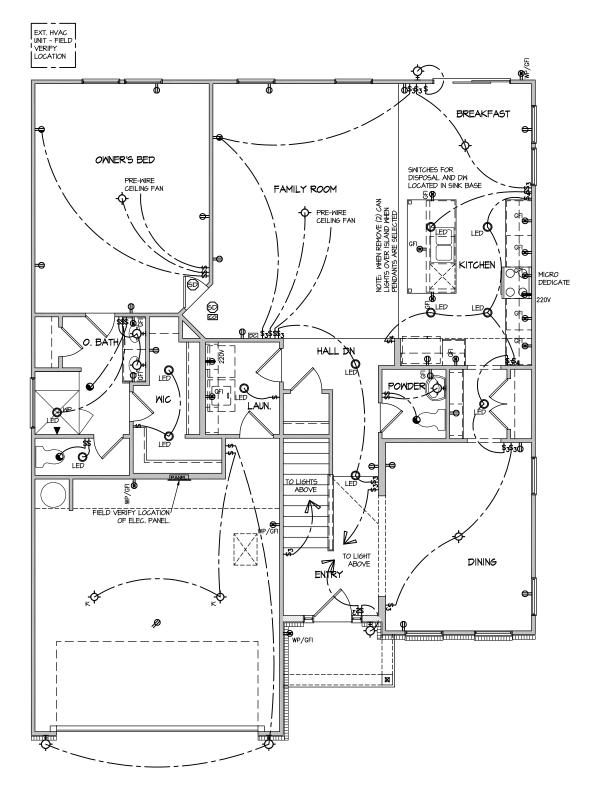
UPDATED DATE 02-03-2023 DRAWN BY: DATE: 12/19/2023 PLAN NO. 2183

HOUSE NAME:
MIDDLETON
DRAWING TITLE
BUILDING SECTION

SHEET No. A4.I



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.



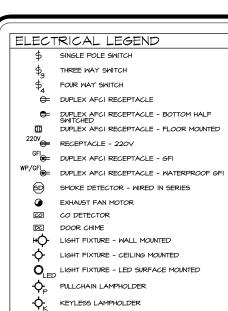
ELECTRICAL PLAN FIRST FLOOR - ELEV. 6 SCALE: 1/8" = 1'-0"

UPDATED DATE 02-03-2023 DRAWN BY: DATE: 12/19/2023

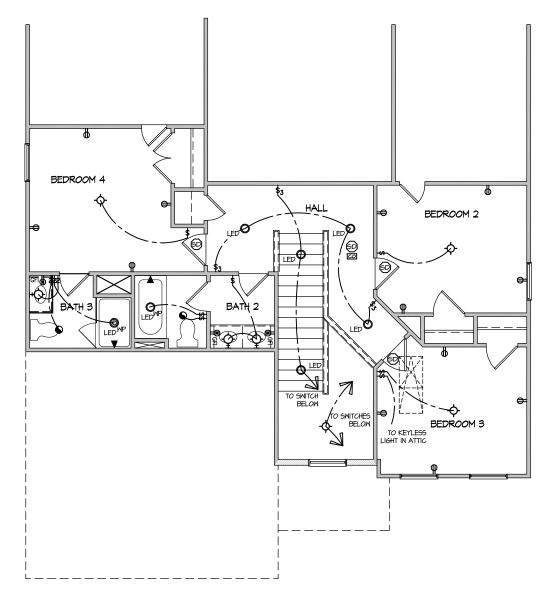
PLAN NO. 2183



FLOOR ELECTRICAL HOUSE NAME:
MIDDLETON



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



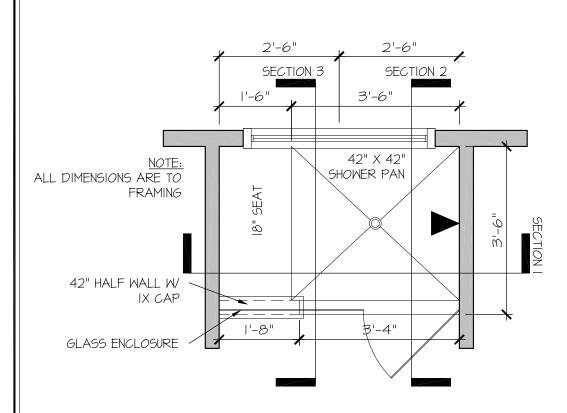
ELECTRICAL PLAN SECOND FLOOR - ELEV. 6 SCALE: 1/8" = 1'-0"

SECOND FLOOR ELECTRICAL HOUSE NAME:
MIDDLETON
DRAWING TITLE SHEET No.

UPDATED DATE 02-03-2023

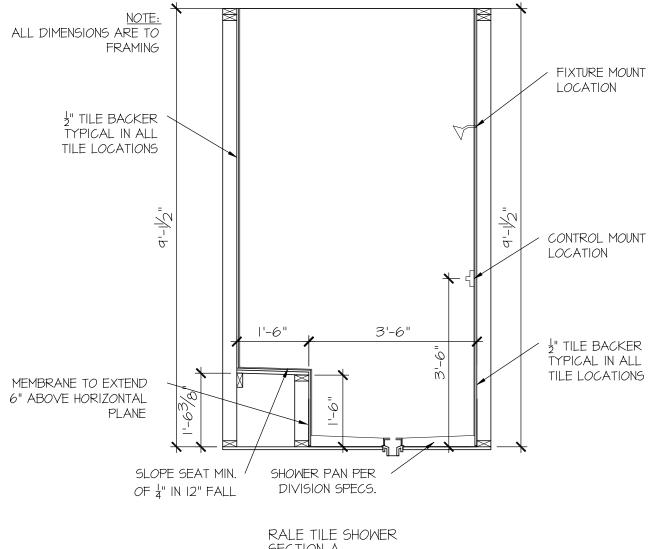
DRAWN BY:

DATE: 12/19/2023 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



SEAL

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

PLAN NO.

24 X 36 SCALE

~ "

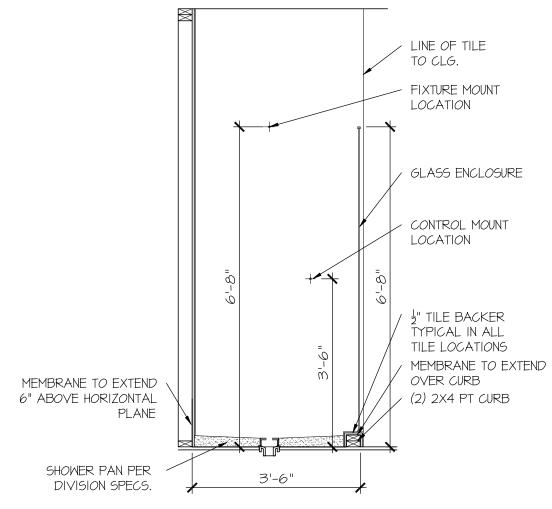


E ILE SHOWER DETAIL

OUSE NAME:

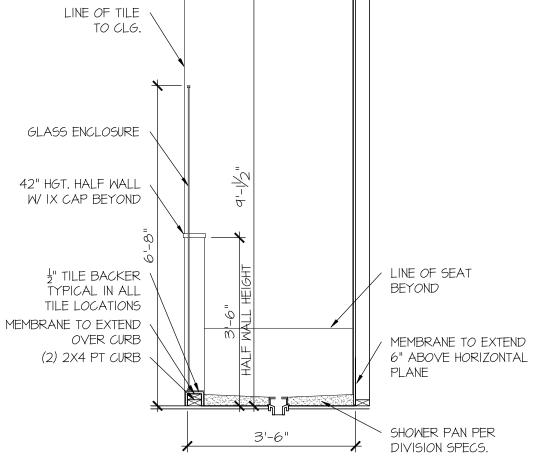
SHEET No.

P||.2



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





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

DESCRIPTION OF BLDG, ELEMENT	3"x0.131" NAILS	3"x0.120" NAILS
JOIST TO SOLE PLATE	(3) TOENAILS	(3) TOENAILS*
SOLE PLATE TO JOIST/BLK'G.	(3) NAILS 🛭 4" O.C.	(3) NAILS 🛭 4" O.C.
STUD TO SOLE PLATE	(2) TOENAILS	(3) TOENAILS*
TOP OR SOLE PLATE TO STUD	(2) NAILS	(3) NAILS
RIM TO TOP PLATE	TOENAILS @ 8" O.C.	TOENAILS @ 6" O.C.*
BLK'G. BTWN. JOISTS TO TOP PL.	(3) TOENAILS	(3) TOENAILS*
DOUBLE STUD	NAILS @ 24" o.c.	NAILS @ 16" O.C.
DOUBLE TOP PLATE	NAILS ⊘ 24" o.c.	NAILS @ 16" o.c.
DOUBLE TOP PLATE LAP SPLICE	(9) NAILS IN LAPPED AREA	(II) NAILS IN LAPPED AREA
TOP PLATE LAP @ CORNERS € INTERSECTING WALLS	(2) NAILS	(2) NAILS

2½'x0.113 IS AN ACCEPTABLE ALTERNATIVE TO A 3'x0.120', SAME SPACING OR NUMBER OF NAILS. (ONLY ACCEPTABLE WHERE * ARE SHOWN)

MEANS & METHODS NOTES

THE 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 ITS COMPONENTS DURING CONSTRUCTION. THIS INCLUDES, BUT IS NOT LIMITED TO, THE ADDITION OF NECESSARY SHORING, SHEETING, TEMPORARY 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 ELEMENT IN CONTACT WITH FLOOR FRAMING ARE LEVEL, NCLUDING, BUT NOT LIMITED TO: FOUNDATIONS. SLABS ON GRADE, BEAMS, WALLS, AND NON-BEARING FLEMENTS IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY LEVELNESS AND MAKE ADJUSTMENTS AS NECESSARY, INCLUDING CONSIDERATION OF THOSE AREAS THAT MAY BE WITHIN CONTRACTUAL, INDUSTRY OR WARRANTY TOLERANCES.

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 NOTED OTHERWISE ON PLAN.

TRUSSES/JOISTS SHALL BE DESIGNED SO THAT DIFFERENTIAL DEFLECTION BETWEEN ADJACENT PARALLEL TRUSSES/JOISTS OR GIRDER TRUSSES/FLUS BEAMS DO NOT EXCEED THE FOLLOWING:

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

VENEER LINTEL SCHEDULE

SPAN (MAX)	HEIGHT OF VENEER ABOVE LINTEL	Steel angle size
3'-0"	20 FT. MAX	L3'x3'x¼'
	3 FT. MAX	L3'x3'x/4"
6'-0"	I2 FT. MAX	L4"x3"x/4"
	20 FT. MAX	L5"x3½"x%"
8'-0"	3 FT. MAX	L4"x4"x/4" *
5-0	I2 FT. MAX	L5"x3½"x%"
	I6 FT. MAX	L6"x3½"x¾"
4'-6"	I2 FT. MAX	L6"x3%"x%"
16'-0"	2 FT. MAX	L7"x4"x½" **
	3 FT. MAX	L8"x4"x½" **

ALL SUPPORT 2 %" - 3 ½" VENEER W 40 pet MAXIMUM WEIGHT Y SHALL HAVE 4" MIN BEARING Y SHALL HAVE A" MIN BEADNIL

SALL SHYCKET 4.75 - 29, TUTCHER TO THE PERMISSION OF SALL HAVE OF MINE DEPARTMENT OF SALL HAVE OF

N VENEER USE L4x3x44". VENEER ONLY SEE PLAN FOR VENEER SUPPORT IF VENEER < 3½" THICK

GENERAL STRUCTURAL NOTES

- DESIGN IS BASED ON 2018 NORTH CAROLINA STATE BUILDING CODE: RESIDENTIAL CODE.
- WOOD FRAME ENGINEERING IS BASED ON NOS "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION" - LATEST EDITION.

FLOOR

ROOF DEAD = 7 PSF T.C., IO PSF B.C.

LOAD DURATION FACTOR = 1.25

LIVE = 40 PSF (30 PSF @ SLEEPING AREAS) DEAD = 10 PSF (I-JOISTS & SOLID SAWN) IO PSF T.C., 5 PSF B.C. (TRUSSES)

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

2,000 PSE ASSUMED ALLOWABLE BEARING

GENERAL FRAMING

- ALL TYP, NAIL FASTENER REQUIREMENTS ARE NOTED IN STANDARD CONNECTIONS TABLE OR ON PLANS. ALL NAILS SPECIFIED ARE MIN DIAMETER AND LENGTH REQUIRED FOR CONNECTION, ALL HANGER FOR MAX CHARTED CAPACITY. NOTE: HANGERS USE COMMON NAIL DIAMETERS NOT TYPICAL FRAMING GUN NAILS.
- REFER TO FASTENING SCHEDULE TABLE R602.3(1) FOR ALL CONNECTIONS TYP IINO
- EXT. & INT. BRG WALLS SHALL BE 2x4 OR 2x6 (AS SHOWN ON PLANS @ 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 SPRUCE-PINE-FIR #2 (SPF) 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., UN.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:
 - 'LSL' Fb=2325 pei; Fv=3I0 pei; E=1.55xI0^6 pei
 'LVL' Fb=2600 pei; Fv=285 pei; E=2.0xI0^6 pei
- 'PSL' FB=2400 PSI; FV=240 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
- INSTALL ATION FOR 2 \$ 3 PLY BEAMS OF EQUAL WIDTH, FASTEN PLIES TOGETHER WITH 3 ROWS OF 3"x0.120" NAILS @ 8" O/C OR 2 ROWS 1/4"x31/2" SIMPSON SDS SCREWS (OR 3/5" 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 $3\,k_2$ " OR $5\,k_4$ " 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 14"x6" SIMPSON SDS SCREWS (OR 6 34" 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 SCREWS 2" FROM EDGE. A SOLID 7" BEAM IS ACCEPTABLE.
- ALL HEADERS SHALL BE SUPPORTED BY (1)2x JACK STUD & (1)2x
- THE NUMBER OF STUDS SPECIFIED AT A SUPPORT INDICATES THE NUMBER OF JACK STUDS REQUIRED, U.N.O.,
- ALL MULTI-PLY STUDS TO BE FASTENED TOGETHER W/ 3"X0,131" 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 2x 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.
- ALL EXTERIOR 4x4 WOOD POSTS SHALL HAVE SIMPSON BCS2-2/4 CAP & ABW44Z BASE, UN.O.

FLOOR FRAMING

- I- DISTS/TRUSSES SHALL BE DESIGNED BY MANUE TO MEET OR EXCEED L/480 LIVE LOAD DEFLECTION CRITERIA. (EXCLUDES MARBLE FLOORS - CONTACT M&K FOR MARBLE FLOOR DESIGNS)
- AT I-JOIST FLOORS, PROVIDE I 1/8" 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 ½" x 0.131" NAILS @ 6"0x. @ PANEL EDGES \$ @ 12"0x. FIELD. - 2 🖁 × 0.120 NAILS • 4" O.C. • PANEL EDGES € • 8" O.C. FIELD.
- 2 3 × O.II3" NAILS @ 3" O.C. @ PANEL EDGES & @ 6" O.C. IN FIELD. - #6 x 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 H25T CLIP (OR APPROVED EQUAL) @ ALL BEARING POINTS. PROVIDE (2) H2.51 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.
- PRECT AND INSTALL ROOF TRUSSES PER WICA & TPL'S BOSI 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 @ 19.2" O.C. MAX. (FLOOR TRUSSES)
- ROOF SHEATHING SHALL BE 7/16" A.P.A. RATED SHEATHING 24/16 EXPOSURE I (OR APPROVED EQUAL). FASTEN TO FRAMING MEMBERS
- W 2 ½" × 0.131" NAILS 6"O.C. PANEL EDGES € 12" O.C. FIELD.
- W 2 🖁 × 0.120" NAILS @ 4"0&. @ PANEL EDGES \$ @ 8" 0&. FIELD.
- W/ 2 🖁 × 0.113" NAILS 3"O.C. PANEL EDGES € 6" O.C. FIELD.

HOLD-DOWN SCHEDULE

SYMBOL	SPECIFICATION
№ HD-I	SIMPSON HTT4 HOLD-DOWN *
► HD-2	SIMPSON MSTC66 STRAP TIE (CENTER STRAP ON FLOOR SYSTEM UN.O.) (PRE-BENT MSTC66 ALT. WHEN SPECIFIED)
▶ HD-3	SIMPSON STHD14/14RJ HOLD-DOWN

ALTERNATIVE TO SSTB24 ANCHOR BOLT SPECIFICATION: UTILIZE SIMPSON "SET" EPOXY SYSTEM TO FASTEN % DIA. THREADED ROD INTO CONCRETE FOUNDATION. PROVIDE 12" MIN. EMBEDMENT INTO CONCRETE. INSTALL PER MANUE, RECOMMENDATIONS, DO NOT LOCATE ANCHORS WITHIN I 3/4" OF EDGE OF FOUNDATION

LEGEND

- 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.

NON-BEARING HEADER SCHEDULE

SPAN	2x4 NON-BEARING PARTITION WALL	2x6 Non-Bearing Partition Wall
IP TO 3'-0"	(I)2x4 FLAT	(I)2x6 FLAT
IP TO 6'-0"	(2)2x4	(3)2x4
IP TO 8'-0"	(2)2x6	(3)2×6

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

LATERAL BRACING & SHEAR WALL SHEATHING SPECIFICATIONS

THIS MODEL HAS BEEN DESIGNED TO RESIST LATERAL FORCES RESULTING FROM:) MPH WIND IN 2018 NCSBC:RC

(120 MPH WIND SPEED IN ASCE 7-10 WIND MAP, PER IRC R301,2,1,1) EXP. B. RISK CAT. 2 & SEISMIC CAT. A/B

THE DESIGN WAS COMPLETED PER 2015 IBC (SECTION 1609) & ASCE 7-10, AS PERMITTED BY R301.1.3 OF THE 2018 NCSBC:RC, OR THE SIMPLIFIED PRESCRIPTIVE PROCEDURE IN ACCORDANCE WITH THE 2015 IRC IF THE PARAMETERS OF SECTION R602.12 COMPLY CCORDINGLY, 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 IIII 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

- 7/16" OSB OR 15/32" PLYWOOD: FASTEN SHEATHING W/ 2 3/"x0.II3" NAILS @ 6" O.C. AT EDGES & @ 12" O.C. IN THE PANEL FIELD. TYP, UN.O.
- HORIZONTAL BLOCKING OF EXT. WALL/SHEAR WALL PANEL EDGES IS NOT REQUIRED BY THIS DESIGN EXCEPT FOR THOSE AREAS SPECIFICALLY NOTED.
- EXT. WALLS SHALL BE CONTINUOUSLY SHEATHED AND ARE CONSIDERED SHEAR WALLS.
- ALT. STAPLE CONNECTION SPEC: 15" 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 %" × 0.113" NAILS • 6" O.C. AT ALL PANEL EDGES AND 12" O.C. IN THE PANEL FIELD OR 1 3/4" 16 GA STAPLES (1/6" CROWN) @ 3" O.C. AT EDGES \$ @ 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 √ 8d NAILS @ 3" O.C. <u>NO STAPLE ALTERNATIVE</u> AVAILABLE AT THIS SPEC, ALL SHEATHING PANELS 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.

- 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 SHEARWALL OR 3" O.C. OSB SHEARWALL.

INDICATES HOLDOWN BELOW

GENERAL STRUCTURAL NOTES

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 2x4/6 SILL PLATES TO FND WITH A MINIMUM OF 2 ANCHORS PER PLATE, 12" MAX. FROM PLATE ENDS - UTILIZING
- . I/2" DIA. ANCHOR BOLTS @ 6'-0" O.C, 7" MIN. EMBEDMENT (CONC), 15" MIN, EMBEDMENT (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 VERIFY 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 \bullet 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
- 60.000 psi BASEMENT FOUNDATION WALL DESIGN BASED ON:
- . 9' OR 10' 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 BACKFILLING, B ADEQUATE TEMPORARY BRACING OR INSTALL IST FLOOR DECK. PROVIDE (2) #5 BARS AROUND ALL SIDES OF OPENINGS IN
- CONCRETE BOMT, END. WALL WITH 2" CLEAR, REINFORCEMENT SHALL EXTEND 12" PAST CORNER OF OPENING IN ALL DIRECTIONS.
- FOR OPENINGS UP TO 36". PROVIDE MINIMUM IO" CONCRETE DEPTH OVER OPENING OR (3)2x10 W (2)2x6 JACK STUDS, U.N.O
- ALL CONCRETE EXPOSED TO THE WEATHER SHALL NOT HAVE LESS THAN 5% OR MORE THAN 7% AIR ENTRAINMENT.

LARGER OPENINGS SHALL BE PER PLAN.

- 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
- 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 (1:1 RATIO), WITH A MAXIMUM OF 1:1.5 RATIO · CONTROL JOINTS SHALL NOT BE INSTALLED IN STRUCTURAL
- CONCRETE MASONRY UNITS (CMU) SHALL BE ASTM C90 WITH A MIN COMPRESSIVE STRENGTH OF 1900 psi (Fm=1500 psi), MORTAR SHALI BE ASTM C270, TYPE S. CMU DESIGN PER ACI 530 \$ 530.1.
- CMU FOUNDATION WALLS SHALL HAVE 'DUR-O-WALL' HORIZONTAL JOINT REINFORGEMENT (OR EQUAL) - 9 GA, MINIMUM @ 16" O.C.
- PROVIDE 2x8 x 16" LONG PT. PLATE ON TOP OF ALL CRAWL SPACE PIERS. ALL PIERS SHALL BE GROUTED SOLID.
- PROVIDE 2x6 P.T. PLATE ON INTERIOR CRAWL SPACE WALLS. FASTENED PER ANCHORAGE SPECIFICATION NOTED ABOVE.

DIMENSIONS BY OTHERS, BUILDER TO VERIFY.

• 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.

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STRUCTURAL ENGINEER 3



1&K project numbe 126-22076

ITF frawn by: LAN ssue date: 12-19-23

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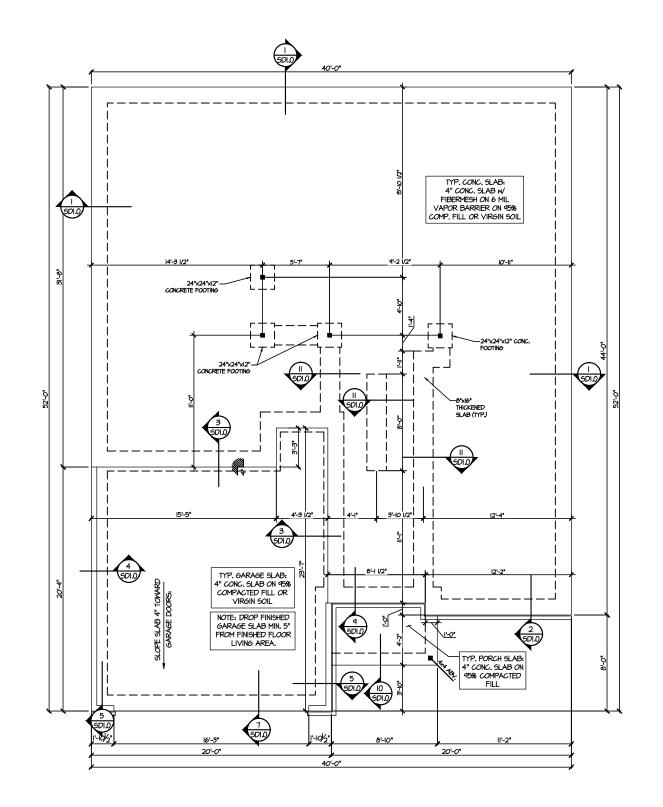
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1/12/24

M&K project number: 126-22076

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REVISIONS:

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FARM AT NEIL'S CREEK LOT 86 - MIDDLETON 6 RALEIGH, NC FOUNDATION PLANS

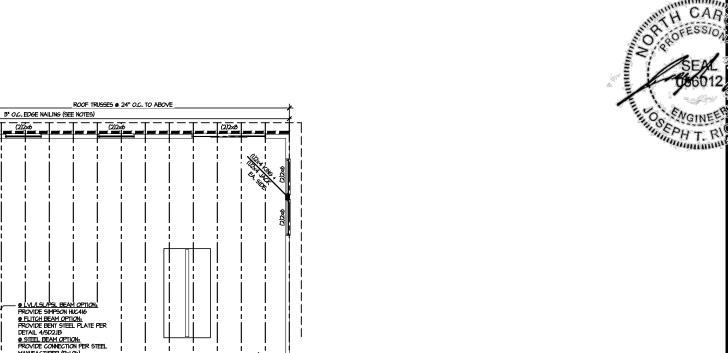
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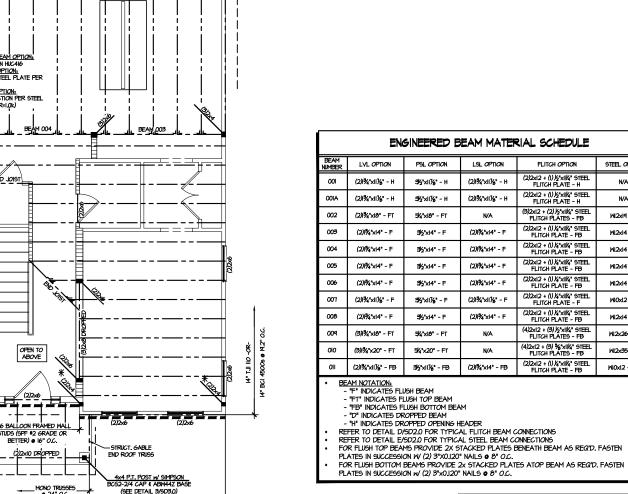
LEGEND

- IIIIIII INTERIOR BEARING WALL
- □===□ BEARING WALL ABOVE
- --- 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

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





LEGEND

- INTERIOR BEARING WALL
- □===□ BEARING WALL ABOVE
- BEAM / HEADER
- ullet 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

2ND FLOOR FRAMING PLAN

PORTAL FRAME PROVIDE BRACING PER DETAIL I/SD2.2

CREEK NEIL'S ETON 6 OOF FRAMING MIDDLETON AT FARM LOT 86 - M LOT

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MULHERN+KULI RESIDENTIAL STRUCTURAL ENSINEERIN

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M&K project number: 126-22076

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WI2xI9 - F

WI2xI4 - F

WI2xI4 - F

WI2xI4 - F

WIOxI2 - F

WI2xI4 - F

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M&K project number: 126-22076 JTR LAN drawn by: ssue date: 12-19-23

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ROOF FRAMING PLANS

LEGEND

• = = INDICATES SHEAR WALL & EXTENT EXTENT OF OVERFRAMING

* INDICATES POST ABOVE, PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.

REFER TO SO.O FOR

TYPICAL STRUCTURAL NOTES

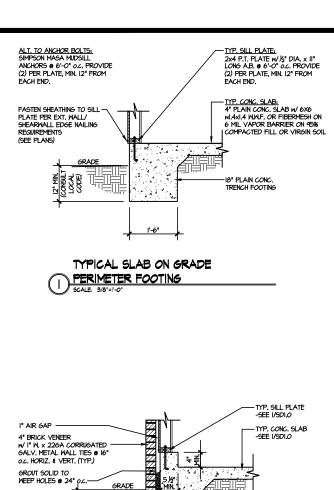
& SCHEDULES

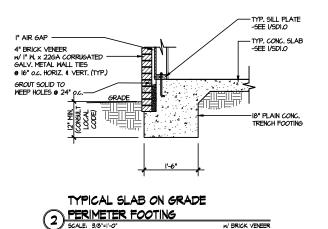
INDICATES HOLD-DOWN OR STRAP. REFER TO SCHEDULE.

 INTERIOR BEARING WALL ● □===□ BEARING WALL ABOVE • --- BEAM / HEADER

FARM AT NEIL'S CREEK LOT 86 - MIDDLETON 6 RALEIGH, NC

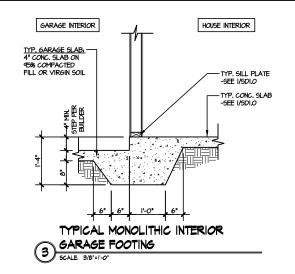
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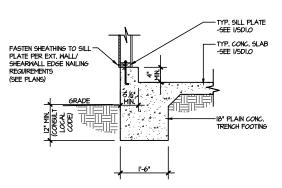




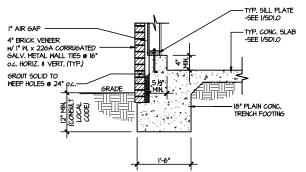
SCALE: 3/8"=1"-0"

w/ BRICK VENEER

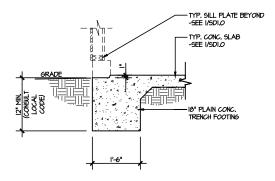




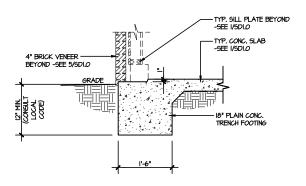
TYPICAL SLAB ON GRADE GARAGE 4 PERIMETER FOOTING



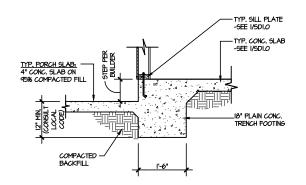




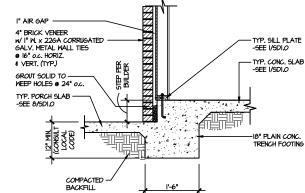




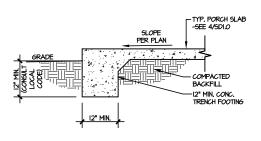
TYPICAL SLAB ON GRADE GARAGE ENTRY @ PERIMETER FOOTING



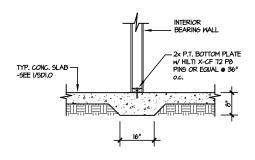
TYPICAL SLAB ON GRADE PERIMETER B FOOTING @ PORCH/PATIO



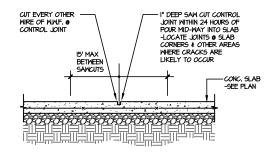
TYPICAL SLAB ON GRADE PERIMETER POOTING @ PORCH/PATIO



TYPICAL FOOTING @ PORCH SLAB



TYPICAL THICKENED SLAB @ INTERIOR BEARING WALL



A SCALE: 3/8"=1"-0" LOCATE @ 15'-O" o.c. MAX. OR CORNERS WHERE CRACKS LIKELY TO DEVELOP

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.

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M&K project number 126-22076

ssue date: 12-19-23

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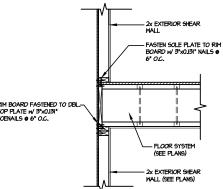
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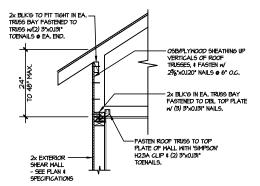


TYPICAL SHEAR TRANSFER DETAIL

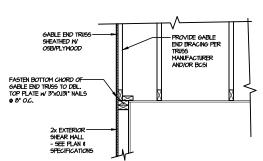
2xIO (9 ½" - 12" HEEL) OR 2xI2 (12" - 16" HEEL) OR DUID BLOCKING PANELS EVERY 3RD TRUSS BAY (12" O.C. MAX) FASTEN EA. BLOCKING PANEL TO TOP PLATE W (4) 3"xOJ3" TOENAILS -BLOCKING MUST FIT TIGHT
BETWEEN TRUSSES.
FASTEN EA, END OF BLOCKING
TO TRUSS W(2) 3"X0.131" TOENAILS
• TOP OF PANEL -Fasten Roof Truss to top Plate of Wall With 'SIMPson' H25A CLIP 2x EXTERIOR— SHEAR WALL - SEE PLAN & SPECIFICATIONS

TYPICAL SHEAR TRANSFER DETAIL @ ROOF

SCALE: 3/6"=1"-0" HEEL HEIGHT BETWEEN 9 /9 HEEL HEIGHT BETWEEN 9½" - 16" BLOCKING REQ'D



TYPICAL SHEAR TRANSFER DETAIL @ RAISED HEEL TRUSS
SCALE: 9/8"="-0" HEEL HEIGHT UP TO 48" MAX.



TYPICAL GABLE END DETAIL SCALE: 3/8"=1-0"

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FRAMING DETAILS
FARM AT NEIL'S CREEK
LOT 86 - MIDDLETON 6
RALEIGH, NC

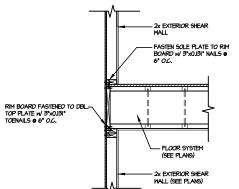
NUMBERED DETAILS ARE PLAN

WHERE SPECIFICALLY INDICATED

("CUT") ON THE PLANS.

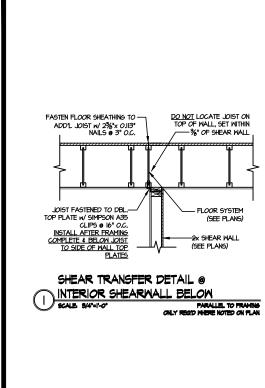
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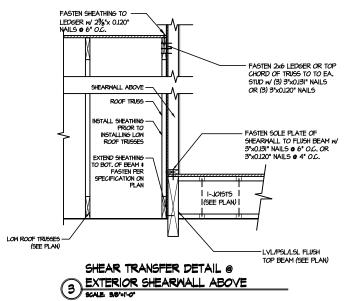


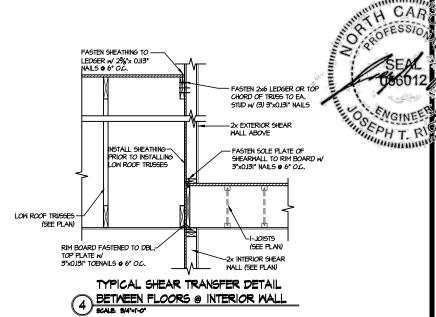
BETWEEN FLOORS @ EXTERIOR WALL

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



SHEARWALL ABOVE -FASTEN SHEATHING TO BLOCKING W/ 23/8"x 0.120" NAILS • 6" O.C. - 2x6 *co*nt. Blocking. Fasten to Ea. Stud W (3) 3"x0.131" nails or INSTALL SHEATHING -PRIOR TO INSTALLING ROOF TRUSSES (3) 3"x0J20" NAILS -FASTEN SOLE PLATE OF SHEARWALL TO FLUSH BEAM W/ 3"XO.131" NAILS **©** 6" O.C. OR 3"x0,120" NAILS • 4" O.C. EXTEND SHEATHING -TO BOT, OF BEAM \$ FASTEN PER SPECIFICATION ON PLAN | I-JOISTS || ||(SEE PLAN)|| LOW ROOF TRUSSES (SEE PLAN) -LVL/P9L/L9L FLU9H TOP BEAM (SEE PLAN) SHEAR TRANSFER DETAIL @ EXTERIOR SHEARMALL ABOVE





M&K project number: 126-22076

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JTR drawn by: LAN ssue date: 12-19-23

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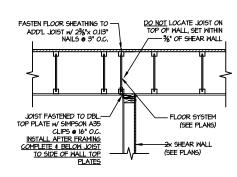
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FRAMING DETAIL FARM AT NEI LOT 86 - MIDDLETON LOT 86 - N RALEIGH,

SPECIFIC AND ARE ONLY REQUIRED WHERE SPECIFICALLY INDICATED ("CUT") ON THE PLANS. SD2.1A

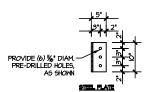
NUMBERED DETAILS ARE PLAN

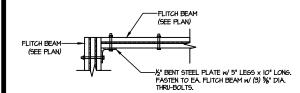
LETTERED DETAILS ARE TYPICAL FOR THIS HOME & SHALL BE IMPLEMENTED IN ALL APPLICABLE AREAS. THESE



SHEAR TRANSFER DETAIL @ INTERIOR SHEARWALL BELOW
SCALE, 8/4"=1"-0" PARA

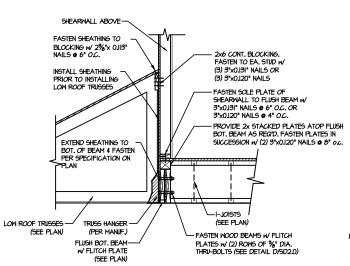
PARALLEL TO FRAMING ONLY REQUIREMENTED ON PLAN



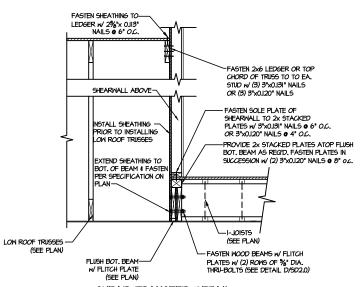


TYPICAL FLITCH BEAM TO FLITCH BEAM CONNECTION DETAIL

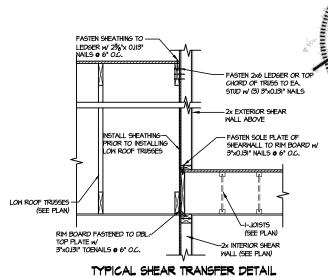
SCALE: 8/4"=1"-0"



SHEAR TRANSFER DETAIL @ 2 EXTERIOR SHEARWALL ABOVE SCALE \$46"=1"-0"



SHEAR TRANSFER DETAIL @ EXTERIOR SHEARWALL ABOVE



BETWEEN FLOORS @ INTERIOR WALL

1/12/24

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1&K project number: 126-22076

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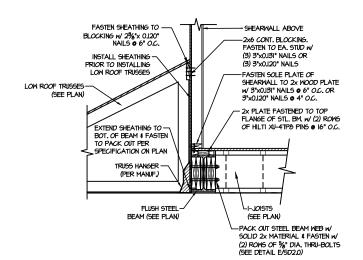
CREEK NEIL'S (LETON 6 RAMING DETAIL MIDDLETON ATFARM A LOT 86 - MI

SD2.1B

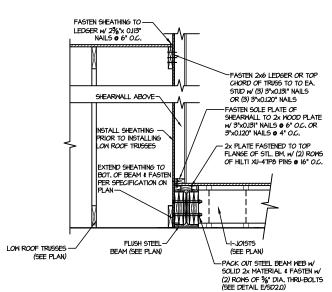
LETTERED DETAILS ARE TYPICAL FOR THIS HOME & SHALL BE IMPLEMENTED IN ALL APPLICABLE AREAS. THESE DETAILS ARE NOT "CUT" ON THE PLANS.

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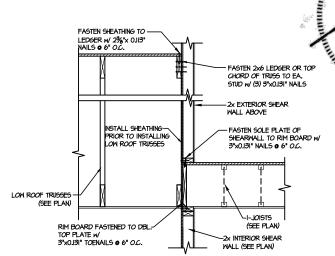
SHEAR TRANSFER DETAIL @ INTERIOR SHEARMALL BELOW



SHEAR TRANSFER DETAIL @ EXTERIOR SHEARWALL ABOVE



SHEAR TRANSFER DETAIL @ EXTERIOR SHEARWALL ABOVE



TYPICAL SHEAR TRANSFER DETAIL 3 BETWEEN FLOORS @ INTERIOR WALL

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M&K project number: 126-22076

drawn by:

REVISIONS:

JTR

LAN ssue date: 12-19-23

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RAMING DETAIL NEIL'S (A AT NEII - MIDDLETON FARM / LOT 86 - MI LOT 86 - N RALEIGH,

SD2.1C

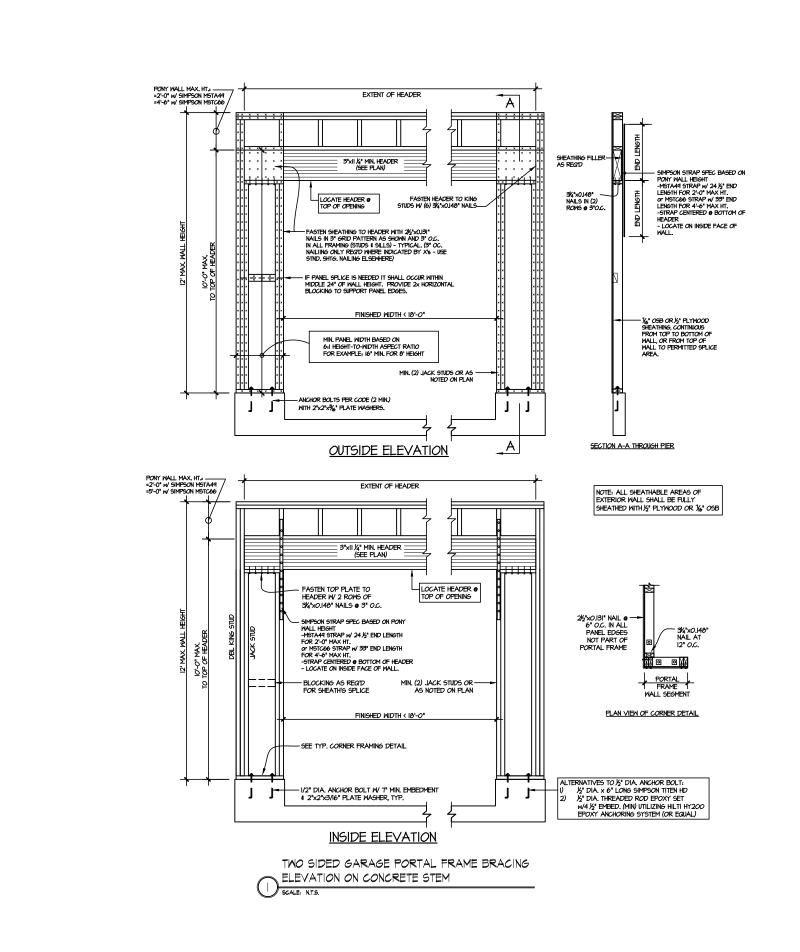
NUMBERED DETAILS ARE PLAN

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M&K project number: 126-22076

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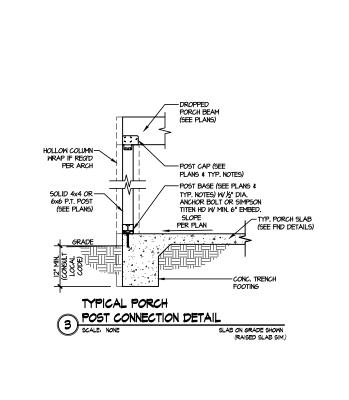
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CREEK FRAMING DETAILS

FARM AT NEIL'S LOT 86 - MIDDLETON 6 LOT 86 - N RALEIGH,

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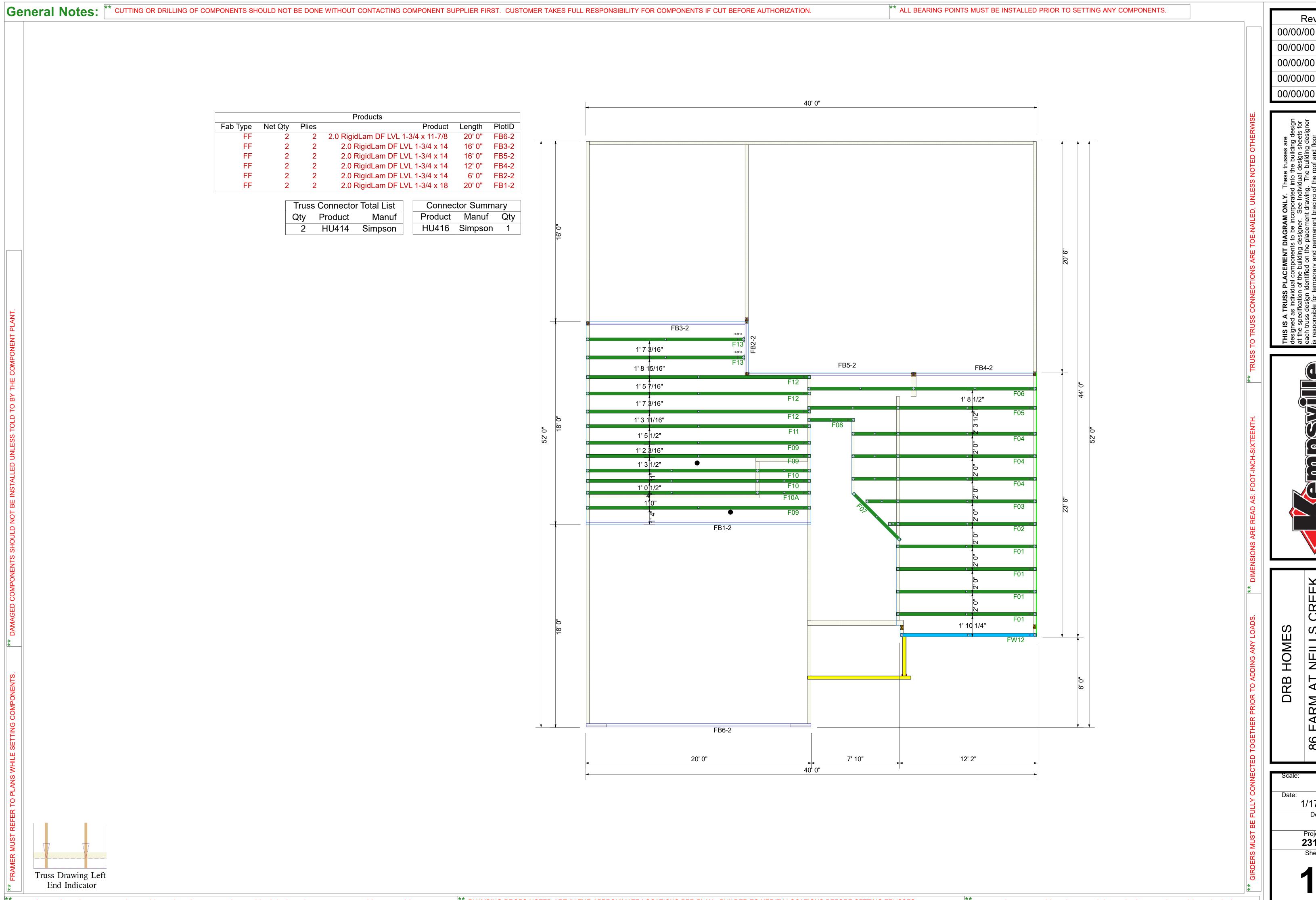
M&K project number: 126-22076

JTR LAN drawn by: LAN issue date: 12-19-23



FRAMING DETAILS
FARM AT NEIL'S CREEK
LOT 86 - MIDDLETON 6

SD3.0



Revisions 00/00/00 Name 00/00/00 Name 00/00/00 Name 00/00/00 Name

00/00/00 Name

1/17/2024 Designer: ND Project Number: **23120149** Sheet Number:

General Notes:

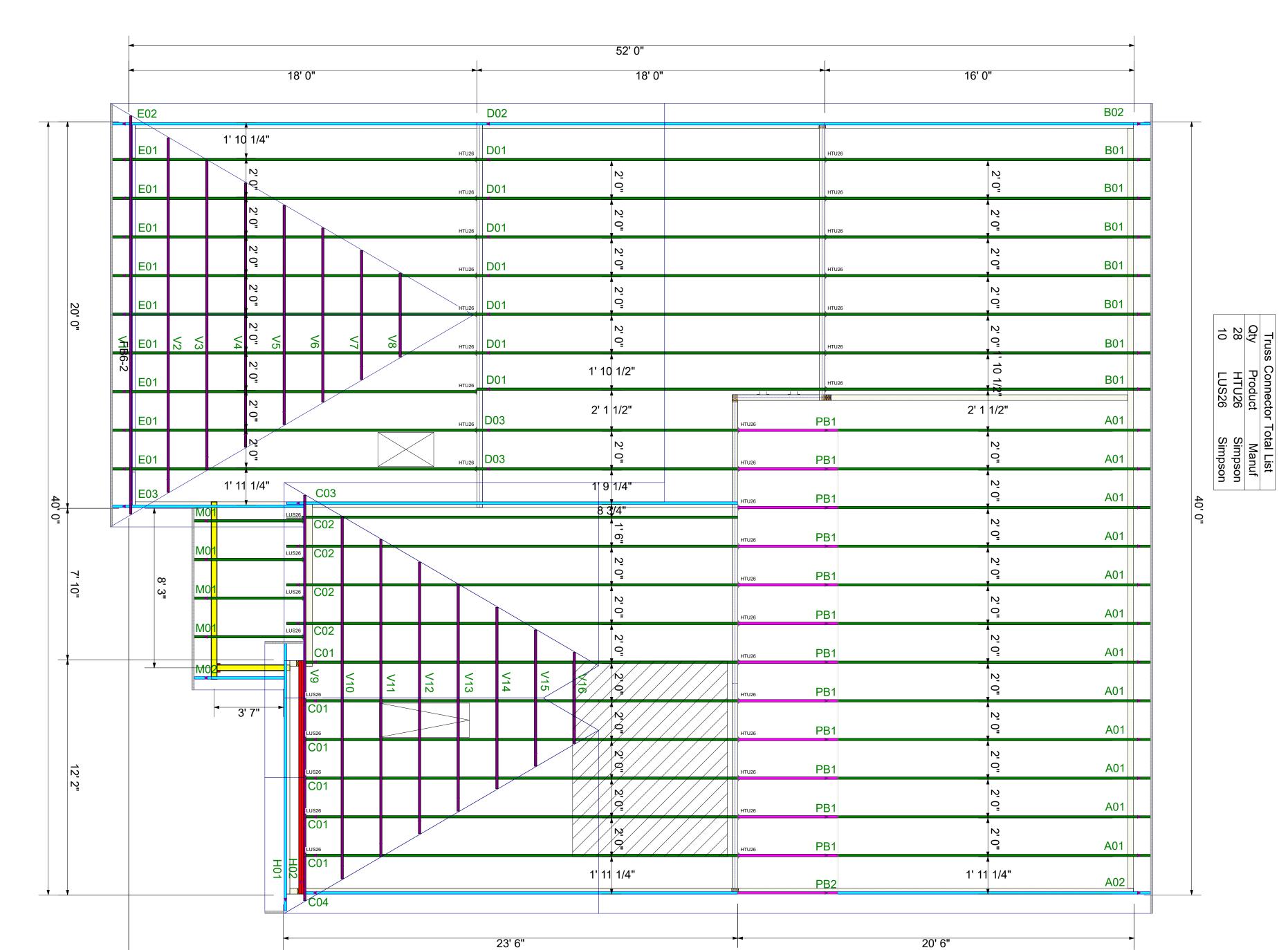
** CUTTING OR DRILLING OF COMPONENTS SHOULD NOT BE DONE WITHOUT CONTACTING COMPONENT SUPPLIER

FIRST. CUSTOMER TAKES FULL RESPONSIBILITY FOR COMPONENTS IF CUT BEFORE AUTHORIZATION.

** ALL BEARING POINTS MUST BE INSTALLED PRIOR TO SETTING ANY COMPONENTS.

Drawing Left nd Indicator

REFER TO FINAL TRUSS ENGINEERING SHEETS FOR PLY TO PLY CONNECTIONS



44' 0"

52' 0"

** GIRDERS MUST BE FULLY CONNECTED TOGETHER PRIOR TO ADDING ANY LOADS.

** DIMENSIONS ARE READ AS: FOOT-INCH-SIXTEENTH.

** TRUSS TO TRUSS CONNECTIONS ARE TOE-NAILED, UNLESS NOTED OTHERWISE.

1/17/2024 Project Number: 23120149
Sheet Number: Designer: NTS

DRB HOMES

8' 0"

86 FARM AT NEILLS CREEK MIDDLETON 6

COMPONENT **PLACEMENT PLAN**



THIS IS A TRUSS PLACEMENT DIAGRAM ONLY. These trusses are designed as individual components to be incorporated into the building design at the specification of the building designer. See Individual design sheets for each truss design identified on the placement drawing. The building designer is responsible for temporary and permanent bracing of the roof and floor systems and for the overall structure. The design of the truss support structure including headers, beams, walls, and columns is the responsibility of the building designer. For general guidance regarding the bracing, consult the building designer. For general guidance regarding the bracing, consult "Bracing of Wood Truss" available from the Truss Plate Institute, 583 D'Onifrio Drive: Madison, WI 53179

Revisions	sions
00/00/00	Name
00/00/00	Name