MALBEC-RALE

RALEIGH - LOT 00.0032 THE FARM AT NEILL'S CREEK

(MODEL# 1930)

ELEVATION 5.1 - GR

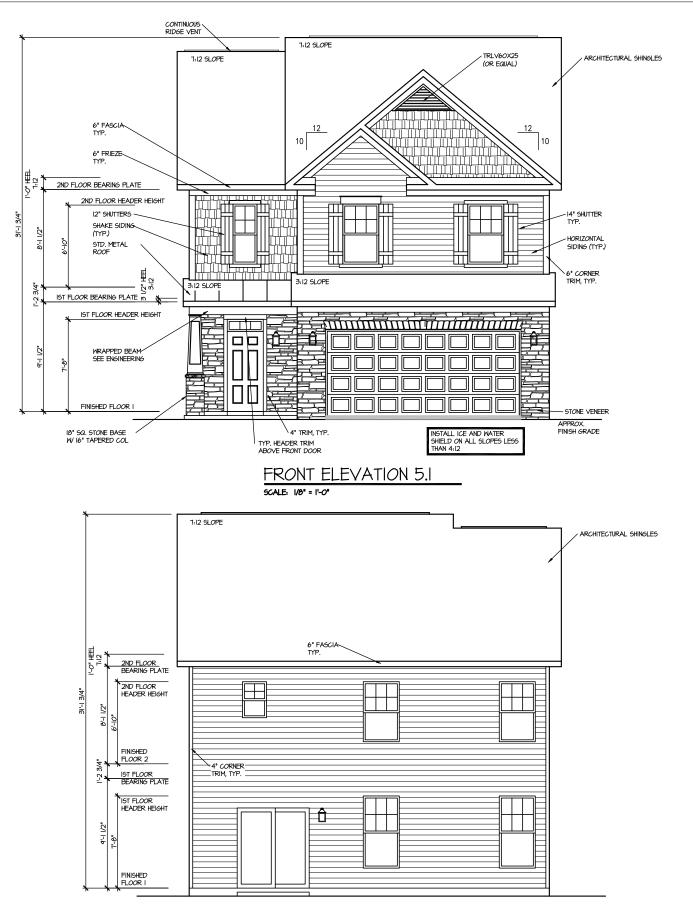


<u>AREA CALCULATIONS</u>		00)/5050 /	
ELEVATION 5.1	HEATED	COVERED / UNHEATED	UNCOVERED
		UNHEATED	UNCOVERED
FIRST FLOOR	885 SF		
GARAGE		448 SF	
FRONT PORCH - ELEVATION 5.1		60 SF	
SECOND FLOOR	1100 SF		
TOTAL	1985 SF	508 SF	

364 Peach Grove Way

1.0 T		
<u>LOT</u>	<u>SPECIFIC</u>	
1	LOT 00.0032	THE FARM AT NEILL'S CREEK
		MALBEC REV. RALE 1 ELEVATION 5.1
2	ADDRESS	364 PEACH GROVE WAY LILLINGTON, NC 27546
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REAR ELEVATION 5.1

| MASTER PLAN INFORMATION | REVISION | DATE | DATE

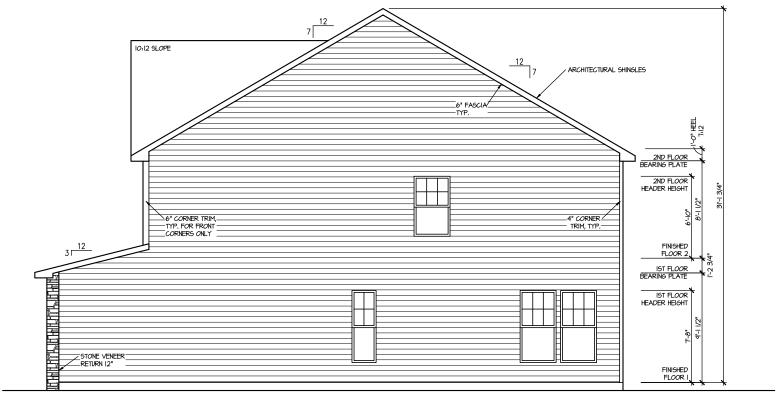
DRAWN BY:
ITS

DATE:
02/20/2025

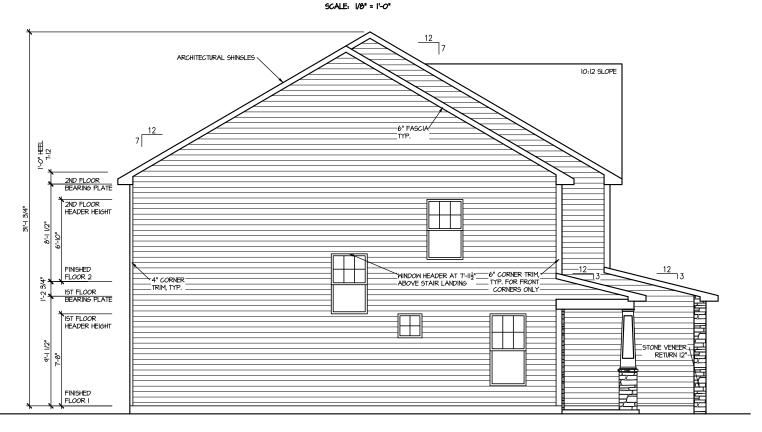
PLAN NO.
1930



HOUSE NAME:
MALBEC
DRAWING TITLE
FRONT & REAR ELEVATIONS



RIGHT ELEVATION 5.1



LEFT ELEVATION 5.1

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

DRAWN BY: DATE: 02/20/2025

PLAN NO. 1930



ELEVATIONS

HOUSE NAME:
MALBEC
DRAWING TITLE
RIGHT & LE

UPPER ROOF VENTILATION CALCULATIONS:

ROOF AREA = 1244 50. FT.

OCERAL REGULED VENTILATION.

1 10 300 - 30 4 50. FT.

1 0 50-00 N 10 70 THIRD = 2.08 - 332 50. FT. (1 TO 300)

SOCON IN 10F THIRD = 2.08 - 332 50. FT. (1 TO 300)

NET FREE AREA OF VENTILES DESTITE = 5.1 SO. IN / LINEAR FT.

NET FREE AREA OF RIDGE VENTI = 10 50. IN/ LINEAR FT. LOHER VINTINS. (BOTTOM 2/3 RDS)
65 LINEAR FIELT OF SOFFIT X 5.1 50, IN = 2.51 50, FT, UPTER VINTINS. (RDG 1/3 RD)
26 LINEAR FIELT OF RIDGE X 16 50, IN = 3.25 50, FT, 3.55 50, FT, EVEN EDS 50% - 50%
1017AL ROOF VENILATION, 5.02 50, FT, > 4.15 50, FT, (RGTD)

HVAC PLATFORM 8' X 12' TYP. 7 LF RIDGE VENT 19 LF RIDGE VENT L___. ATTIC ACCESS 12" OVERHANG ((TYP.) IO:12 SLOPE 10:12 SLOPE 3:12 5LOPE 6" OVERHANG LINE OF PORCH BEAM 3:12 5LOPE 6" OVERHANG 6" OVERHANG

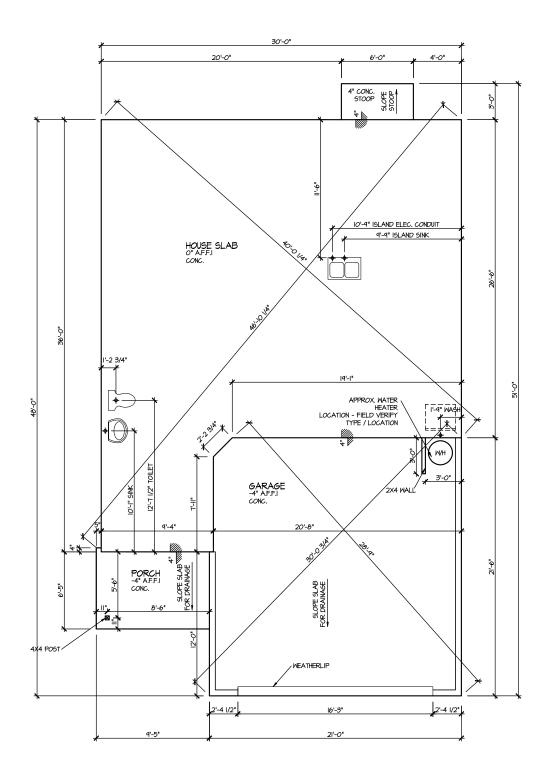
ROOF PLAN ELEV. 5.1 scale 1/8" = 1'-0"

UPDATED DATE 04-17-2024 DRAWN BY:

DATE: 02/20/2025 PLAN NO. 1930



HOUSE NAME:
MALBEC
DRAWING TITLE
ROOF PLAN



		UPDATED DATE	04-17-2024				
	MASTER PLAN INFORMATION	DATE	07-06-2018				
	MASTER PL	REVISION DATE	1-RALE				
Ī	DR.	AWN	I B	Y: ITS	/20	25	

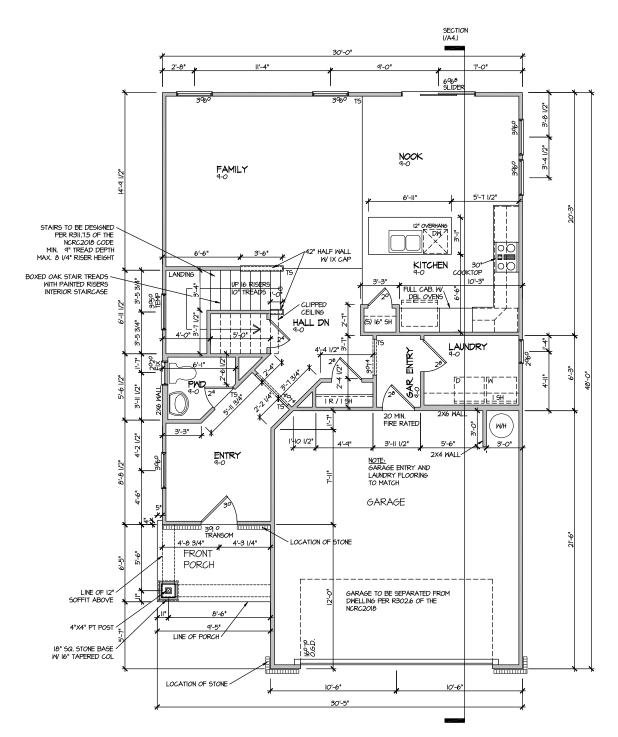
PLAN NO. 1930



HOUSE NAME:
MALBEC
DRAWING TITLE
SLAB PLAN

SHEET No. A2.1

ELEVATION 5.1 SLAB PLAN SCALE: 1/8" = 1'-0"



ELEVATION 5.I FIRST FLOOR PLAN SCALE: 1/8" = 1'-0"

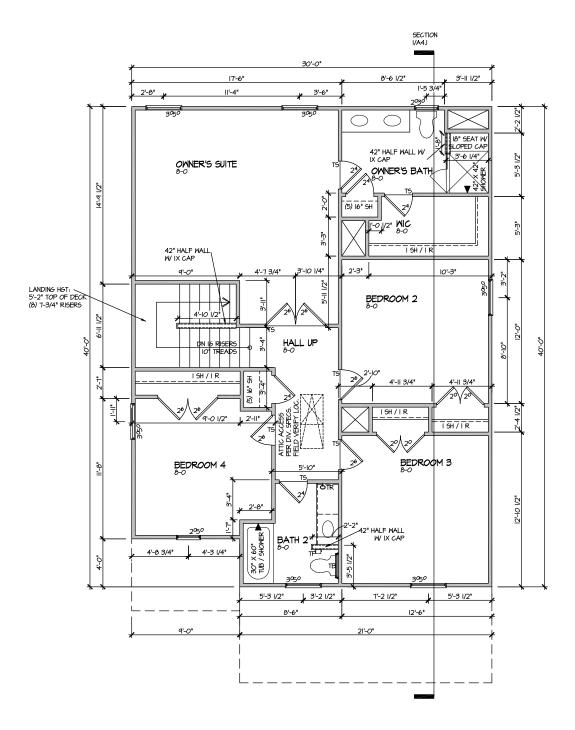
DRAWN BY: DATE: 02/20/2025 PLAN NO. 1930



HOUSE NAME:
MALBEC
DRAWING TITLE
FIRST FLO

SHEET No.

A3.



ELEVATION 5.1 SECOND FLOOR PLAN SCALE: 1/8" = 1'-0"

DRAWN BY:

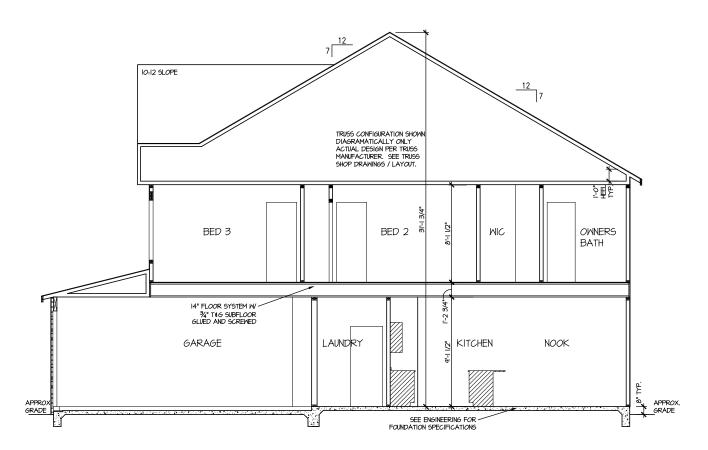
DATE: 02/20/2025 PLAN NO. 1930



HOUSE NAME:
MALBEC
DRAWING TITLE
SECOND FL

SHEET No.

A3.2



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

UPDATED DATE 04-17-2024 DRAWN BY:

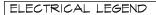
DATE: 02/20/2025

PLAN NO. 1930



SECTION HOUSE NAME:
MALBEC
DRAWING TITLE
BUILDING SI

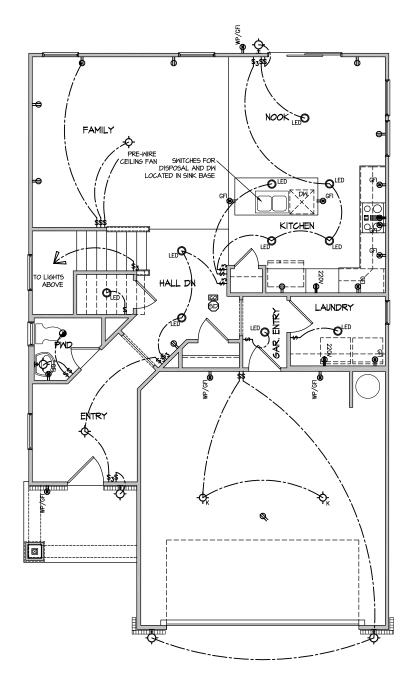
SHEET No. **A4**.



- SINGLE POLE SWITCH
- THREE WAY SWITCH
- \$ FOUR WAY SWITCH
- ⇒ DUPLEX AFCI RECEPTACLE
- DUPLEX AFCI RECEPTACLE BOTTOM HALF SWITCHED
- DUPLEX AFCI RECEPTACLE FLOOR MOUNTED
- 220V RECEPTACLE 220V
- GFI DUPLEX AFCI RECEPTACLE GFI
- WP/GFI DUPLEX AFCI RECEPTACLE WATERPROOF GFI
- SMOKE DETECTOR WIRED IN SERIES
- EXHAUST FAN MOTOR
- CO DETECTOR
- DOOR CHIME
- HO- LIGHT FIXTURE WALL MOUNTED
- LIGHT FIXTURE CEILING MOUNTED
- OLED LIGHT FIXTURE LED SURFACE MOUNTED
- PULLCHAIN LAMPHOLDER
- √

 KEYLESS LAMPHOLDER

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. 5.1

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

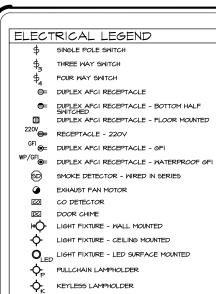
HOUSE NAME:
MALBEC
DRAWING TITLE
FIRST FLOC

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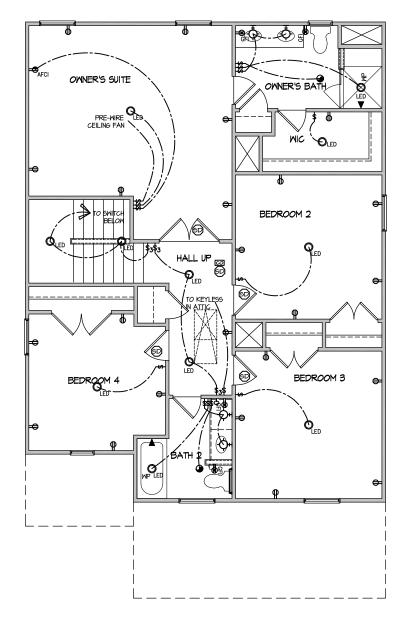
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DRAWN BY:

DATE: 02/20/2025 PLAN NO. 1930



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 SECOND FLOOR - ELEV. 5.1 SCALE: 1/0" = 1'-0"

DRAWN BY: ITS DATE: 02/20/2025 PLAN NO. 1930

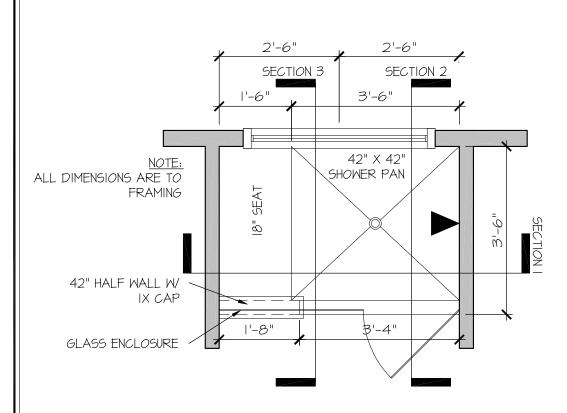


D FLOOR ELECTRICAL

HOUSE NAME:
MALBEC
DRAWING TITLE
SECOND F

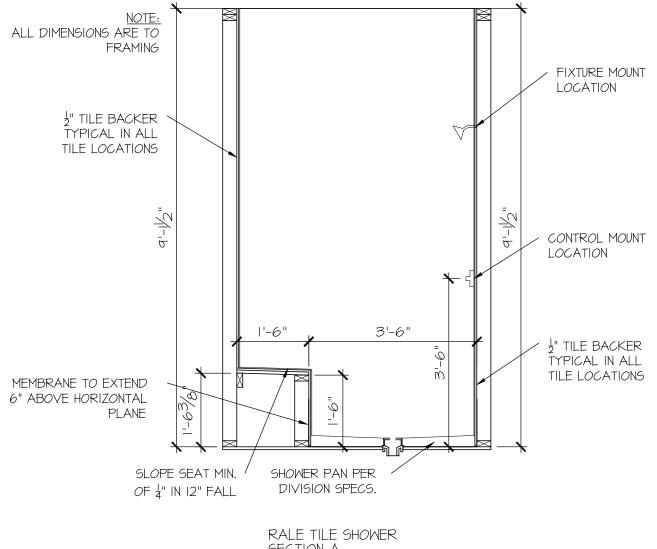
SHEET No.

E1.2



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

~ "

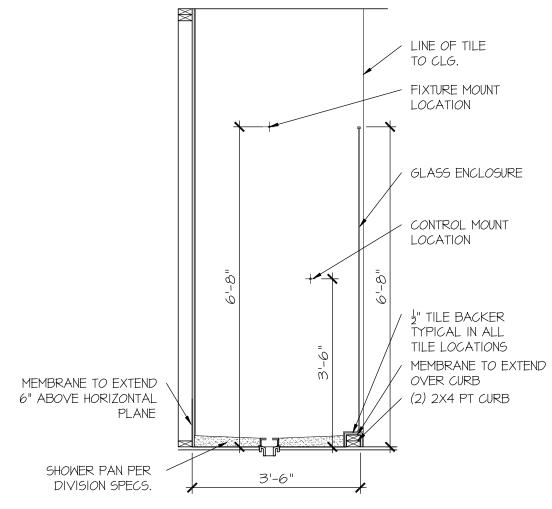


E ILE SHOWER DETAIL

OUSE NAME:

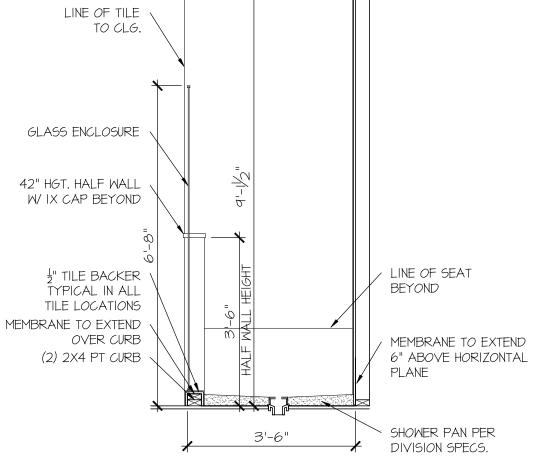
SHEET No.

P||.2



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





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

WOOD FRAME ENGINEERING IS BASED ON NDS, "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION" - LATEST EDITION.

ROOF

DEAD = 1 PSF T.C., IO PSF B.C. LOAD DURATION FACTOR = 1.25

LIVE = 40 PSF (30 PSF @ SLEEPING AREAS) DEAD = 10 PSF (1-JOISTS & SOLID SAWN) (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 DIAMETER AND LENGTH REQUIRED FOR CONNECTION. ALL HANGER 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(1) FOR ALL CONNECTIONS, TYP, U.N.O.
- EXT. & INT. BRG WALLS SHALL BE 2x4 OR 2x6 (AS SHOWN ON PLANS)
 I6" O.C. SPF OR SYP "STUD" GRADE LUMBER, OR BETTER, UN.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" OC (MAX. UNO) . HEADERS IN NON-LOAD BEARING WALLS SHALL BE: (I)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).
- PENGINEERED LUMBER BEAMS TO MEET OR EXCEED THE FOLLOWING:
 - "LSL" Fb=2325 psi: Fv=3I0 psi: E=L55xI0^6 psi • 'LVL' - Fb=2600 psi; Fv=285 psi; E=2.0xl0^6 psi
 - 'PSL' FB=2900 PSI; FV=290 PSI; E=2.0XI0^6 PSI
- M+K SHALL BE FULLY INDEMNIFIED FOR ANY AND ALL ISSUES OWNER DOES NOT SUBMIT THE COMPONENT SHOP DRAWINGS TO M+K FOR STRUCTURAL REVIEW PRIOR TO FABRICATION, DELIVERY, OR INSTALLATION.
- FOR 2 & 3 PLY BEAMS OF EQUAL WIDTH, FASTEN PLIES TOGETHER WITH 3 ROWS OF 3"X0.120" NAILS \odot 8" O/C OR 2 ROWS $\frac{1}{4}$ "X3 $\frac{1}{2}$ " SIMPSON SDS SCREWS (OR 3 $\frac{1}{4}$ " TRUSSLOK SCREWS) \odot 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 1/2" BEAMS ARE ACCEPTABLE. USE 2 ROWS OF NAILS FOR 2x6 \$ 2x8 MEMBERS
- FOR 4 PLY BEAMS OF EQUAL WIDTH, FASTEN PLIES TOGETHER WITH 3 ROWS OF $\mbox{\it k}^{*}$ "x6" SIMPSON SDS SCREWS (OR 6 $\mbox{\it k}^{*}$ " 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 KING STID MINIMIM - 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 & ABM44Z BASE, U.N.O.

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

FLOOR FRAMING

I-JOISTS/TRUSSES SHALL BE DESIGNED BY MANUF. 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"o.c. @ PANEL EDGES € @ 12"o.c. FIELD. 2 3 × 0.120 NAILS @ 4" O.C. @ PANEL EDGES \$ @ 8" O.C. FIELD.
- 2 3" × O II3" NAII S @ 3" O C @ PANEL EDGES & @ 6" O C IN FIELD
- #6 x 2" MIN. SCREMS @ 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 FACH ROOF TRUSS TO TOP PLATE W/ SIMPSON H2.5T CLIP (OR APPROVED EQUAL) • ALL BEARING POINTS. PROVIDE (2) H2.51 CLIPS AT 2-PLY GIRDER TRUSSES (3) H25T CLIPS AT 3-PLY GIRDER TRUSSES & ROOF BEAMS - AT ALL BEARING POINTS
- METAL HANGERS SHALL BE SPECIFIED BY THE MANUFACTURER, U.N.C
- 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 @ 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" x 0.131" NAILS @ 6"o.c. @ PANEL EDGES \$ @ 12" O.C. FIELD. - w/ 2 🖁 × 0.120" NAILS • 4"o.c. • PANEL EDGES \$ • 8" O.C. FIELD. - W 2 3" 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	

* <u>UTILIZE THE 95TB24 ANCHOR BOLT</u> • ALL MONOSLAB & INTERIOR RAISED SLAB (I.E. THICKENED SLABS, FOOTINGS) CONDITIONS, MINIMUM 24" MIN. COTING THICKNESS REQUIRED

EPOXY-SET ALTERNATE FOR MONOSLAB & INTERIOR RAISED SLAB ONDITIONS ONLY. UTILIZE SIMPSON 'SET' EPOXY SYSTEM TO FASTE THREADED ROD INTO CONCRETE FOUNDATION, PROVIDE 10" (FOR 5/8" DIA.) OR 15" (FOR 7/8" DIA.) MIN. EMBEDMENT INTO CONCRETE.

NSTALL PER MANUF, INSTRUCTIONS, MINIMUM 16" FOOTING THICKNESS REQ'D. DO NOT LOCATE ANCHORS WITHIN I 3/4" OF EDGE OF CONCRETE.

SD2. | REFERS TO SD2. | A FOR LVL/PSL/LSL BEAMS OR SD2.IB FOR FLITCH BEAMS OR SD2.IC FOR STEEL BEAMS

3"x0.120" NAILS (3) TOENAILS*

(3) NAILS @ 4" o.c 3) TOENAILS*

(3) NAILS TOENAILS **0** 6" O.C

(II) NAILS IN LAPPED ARE

(3) TOFNAIL S*

NAILS @ 16" o

NAII 5 @ 16" 00

LATERAL BRACING & SHEAR

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

(120 MPH WIND SPEED IN ASCE 7-10 WIND MAP. PER IRC R30L2LI)

SECTION 1609) & ASCE 7-10, AS PERMITTED BY R30113 OF THE 2018 NCSBC-RC OR THE SIMPLIFIED PRESCRIPTIVE PROCEDURE IN ACCORDANCE WITH THE 2015 IRC IF THE PARAMETERS OF SECTION R602.12 COMPLY. THE CODE REQUIRED LATERAL FORCES.

DESIGN WIND UPLIFT LOADS HAVE BEEN NCSBC:RC SECTION R802.II.I. THIS MODEL HAS TO RESIST THE WIND UPLIFT LOAD PATH PER SECTIONS R60235& R80211

EXT. WALL SHEATHING SPECIFICATION

- HORIZONTAL BLOCKING OF EXT. WALL/SHEAR WALL PANEL EDGES IS NOT REQUIRED BY THIS DESIGN EXCEPT FOR THOSE AREAS SPECIFICALLY NOTED.
- AND ARE CONSIDERED SHEAR WALLS.
- ALT. STAPLE CONNECTION SPEC: 1/5" 16 GA STAPLES

BLOCKED PANEL EDGES

AT DESIGNATED AREAS - FASTEN SHEATHING w/ 2 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 WALL OR 2x HORIZONTAL BLOCKING SHALL BE 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. NO STAPLE ALTERNATIVE AVAILABLE AT THIS SPEC. ALL SHEATHING PANELS SHALL BE ORIENTED AND INSTALLED FULL HEIGHT HEAR 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 SHEARWALL OR 3" O.C. OSB SHEARWALL

INDICATES HOLDOWN BELOW

VENEER LINTEL SCHEDULE

(MAX)	ABOVE LINTEL	STEEL ANGLE SIZE	
3'-0"	20 FT. MAX	L3"x3"x/4"	
	3 FT. MAX	L3"x3"x/4"	
6'-0"	I2 FT. MAX	L4"x3"x/4"	
	20 FT. MAX	L5"x3½"x¾"	
	3 FT. MAX	L4"x4"x¼" *	
8'-O"	I2 FT. MAX	L5"x3½"x¾"	
	I6 FT. MAX	L6"x31/2"x3%"	
9'-6"	I2 FT. MAX	L6"x3½"x%;"	
16'-0"	2 FT. MAX	L7"x4"x½" **	
	3 FT. MAX	L8"x4"x½" **	

LL LINTELS:

- SHALL SUPPORT 2 %" 3½" VENEER w/ 40 psf MAXIMUM WEIGHT. 16' SHALL HAVE 4" MIN. BEARING
- 16' SHALL HAVE 8" MIN. BEARING 16' SHALL NOT BE FASTENED BACK TO HEADER. 6' SHALL BE FASTENED BACK TO WOOD HEADER IN WALL #48"0
- w/ ½" DIA, x 3 ½" LONG LAG SCREMG IN 2" LONG VERTICALLY SLOTTED HOLES. X. VENEER HT. APPLIES TO ANY PORTION OF BRICK OVER THE
- OPENING. ALL LINTELS SHALL BE LONG LEG VERTICAL. WHEN SUPPORTING VENEER < 3° WIDE THE EXTERIOR TOE OF THE
- HORIZONTAL LEG MAY BE CUT IN THE FIELD TO BE 3 ¼" WIDE OVER THE BEARING LENGTH ONLY, THIS IS TO ALLOW FOR MORTAR JOINT
- FINISHING.
 SEE STRUCTURAL PLANS FOR ANY LINTEL CONDITION NOT ENCOMPASSED BY THE ABOVE PARAMETERS, FOR ANY LINTEL FASTENED SHACK TO DEAM FASTENEDS SHALL MAINTAIN A 2½ (MINIMA) CLEAR DISTANCE FROM BOTTOM OF BEAM. FOR GWEEN VENEER USE L4x3x/4". FOR 31/4" VENEER ONLY, SEE PLAN FOR VENEER SUPPORT IF

LEGEND

- 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.

NON-BEARING HEADER SCHEDULE

SPAN	2x4 NON-BEARING PARTITION WALL	2x6 NON-BEARING 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)2×6
UP TO 12'-0"	(2)2x8	(3)2x8
Norte.		

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

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:
- (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 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 60.000 psi
- BASEMENT FOUNDATION WALL DESIGN BASED ON:
- · 9' OR 10' HEIGHT (AS NOTED ON PLAN - TALLER WALLS MUST BE ENGINEERED
- NOMINAL WIDTH (9 1/2" 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, BY ADEQUATE TEMPORARY BRACING OR INSTALL 1st 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 10" CONCRETE
- DEPTH OVER OPENING OR (3)2x10 W/ (2)2x6 JACK STUDS, U.N.C 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
 - 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: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 SHALL
- BE ASTM C270, TYPE S. CMU DESIGN PER ACI 530 \$ 530.I. CMU FOUNDATION WALLS SHALL HAVE 'DUR-O-WALL' HORIZONTAL JOINT REINFORCEMENT (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 VERIEY 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

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 DETERMINE THE ERECTION PROCEDURES SEQUENCE TO INSURE THE SAFETY OF THE BUILDING INCLUDES, BUT IS NOT LIMITED TO, THE ADDITION OF NECESSARY 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, INDUSTRY OR WARRANTY TO FRANCES

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 AD JACENT PARALLEL TRUSSES/JOISTS OR GIRDER TRUSSES/FLUS BEAMS DO NOT EXCEED THE FOLLOWING: ROOF TRUSSES:

LOAD. (NOT DIFFERENTIAL DEFLECTION)

I/4" DEAD LOAD

FLOOR TRUSSES, ATTIC TRUSSES, & I-JOISTS: 1/8" DEAD LOAD FLOOR TRUSSES & ATTIC TRUSSES AD JACENT TO FLOOR FRAMING BY OTHERS: LIMIT ABSOLUTE TRUSS DEFLECTION TO 3/16" DEAL sue date: 02-27-2 REVISIONS initial:

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1&K project numbe

rawn by:

126-22076

JTR

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1 AT MALBEC ARM

INTERSECTING WALLS

DESCRIPTION OF BLDG. ELEMENT 3"x0.131" NAILS JOIST TO SOLE PLATE (3) TOENAILS SOLE PLATE TO JOIST/BLK'S TOP OR SOLE PLATE TO STU OENAILS @ 8" o BLK'G. BTWN. JOISTS TO TOP PL. (3) TOENAILS DOUBLE TOP PLATE NAII S @ 24" a DOUBLE TOP PLATE LAP SPLICE (9) NAILS IN LAPF

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

WALL SHEATHING SPECIFICATIONS

O MPH WIND IN 2018 NCSBC:RC

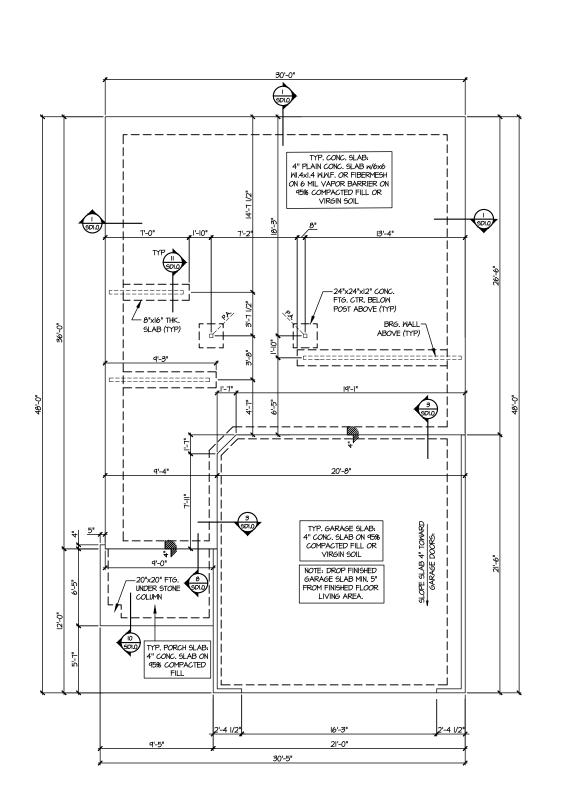
EXP. B. RISK CAT. 2 & SEISMIC CAT. A/B. THE DESIGN WAS COMPLETED PER 2015 IBC

CCORDINGLY, THIS MODEL, AS DOCUMENTED AND DETAILED HEREWITHIN, IS ADEQUATE TO RESIST

CALCULATED UTILIZING ASCE 7-10 (ACCEPTED ENGINEERING PRACTICE) AS ALLOWED PER 2018 BEEN DETAILED WHERE REQUIRED & ENGINEERED

- 7/16" OSB OR 15/32" PLYWOOD: FASTEN SHEATHING W/ 2 ¾"x0.II3" NAILS @ 6" O.C. AT EDGES & @ I2" O.C. IN THE PANEL FIELD. TYP, U.N.O.
- ALL EXT. WALLS SHALL BE CONTINUOUSLY SHEATHED
- (1/6" CROWN) @ 3" O.C. AT EDGES & @ 6" O.C IN FIELD.

%" x 0.113" NAILS @ 6" O.C. AT ALL PANEL EDGES ORIENTED AND INSTALLED FULL HEIGHT OF SHEAR PROVIDED TO SUPPORT ALL UNSUPPORTED PANEL



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

3/4/25 "H CAR MUCHERN+KULP

RESIDENTIAL STRUCTURAL ENGINEERING

Y

M&K project number: 126-22076

JTR drawn by: issue date: 02-27-2

REVISIONS:

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OUNDATION PLANS

FARM AT NEIL'S CREEK LOT 32 - MALBEC 5.1 RALEIGH, NC

REFER TO SO.O FOR TYPICAL STRUCTURAL NOTES **S1.0** & SCHEDULES

LEGEND

• == 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.

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

JL METAL HANGER

MUCHERN+KULP

RESIDENTIAL STRUCTURAL ENGINEERING



M&K project number 126-22076

JTR drawn by: issue date: 02-27-2

REVISIONS:

initial:

REFER TO SO.O FOR TYPICAL STRUCTURAL NOTES & SCHEDULES

SD2.I REFERS TO SD2.IA FOR LVL/PSL/LSL BEAMS OR SD2.IB FOR FLITCH BEAMS OR SD2.IC FOR STEEL BEAMS

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.

ENGINEERED BEAM MATERIAL SCHEDULE

BEAM NUMBER	LVL OPTION	PSL OPTION	LSL OPTION	FLITCH OPTION	STEEL OPTION
001	(3)194"×18" - FT	5¼"xl8" - FT	N/A	(4)2xi2 + (3) 片"xil片" STEEL FLITCH PLATES - FB	WI2x26 - F
002	(2)13/4"×14" - F	3½"xl4" - F	(3)13/4"×14" - F	(2)2xl2 + (1)从"xl以" STEEL FLITCH PLATES - FB	WI2xI4 - F

- BEAM NOTATION: "F" INDICATES FLUSH BEAM "FT" INDICATES FLUSH TOP BEAM "FB" INDICATES FLUSH BOTTOM BEAM
- 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.

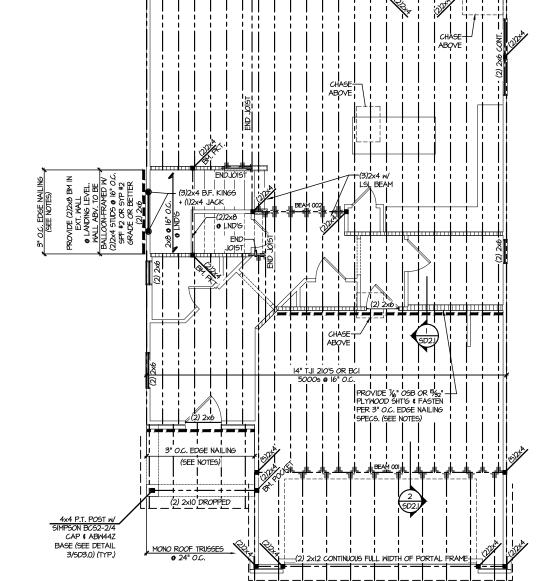
- "H" INDICATES FLUSH BOTTOM BEAM
- "D" INDICATES DROPPED BEAM
- "H" INDICATES DROPPED OPENING HEADER
REFER TO DETAIL D/SD2.0 FOR TYPICAL FILTCH BEAM CONNECTIONS
REFER TO DETAIL E/SD2.0 FOR TYPICAL STEEL BEAM CONNECTIONS
FOR FLUSH TOP BEAMS PROVIDE 2X STACKED PLATES BENEATH BEAM AS REQ'D. FASTEN
PLATES IN SUCCESSION W (2) 3"X01.20" NAILS @ 8" O.C.

RAMING FARM AT NE LOT 32 - MALBEC 5.1 RALEIGH, NC OOR

S2.0

CREEK

NEIL'S



3" O.C. EDGE NAILING (SEE NOTES)

14" TJI 210'S OR BCI 5000's @ 16" O.C.

2ND FLOOR FRAMING PLAN

MUCHERN+KULP

RESIDENTIAL STRUCTURAL ENSINEERING

STRUCTURAL ARTINITY THE PROPERTY OF THE PROP



M&K project number: 126-22076

JTR drawn by: issue date: 02-27-25

REVISIONS:

initial:

CREEK

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

LEGEND

• = = 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.

 INTERIOR BEARING WALL ● □===□ BEARING WALL ABOVE

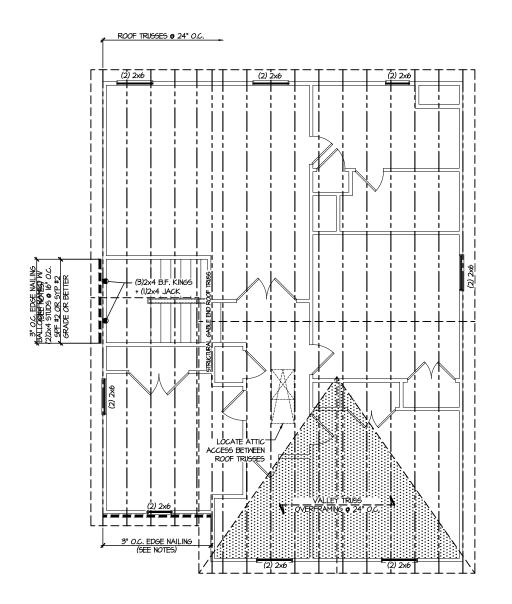
• ---- BEAM / HEADER

JL METAL HANGER

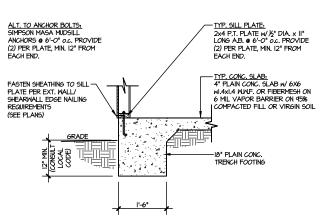
RAMING P

FARM AT NEIL'S (LOT 32 - MALBEC 5.1)
RALEIGH, NC ROOF

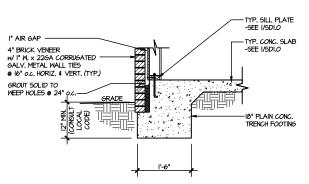
S3.0



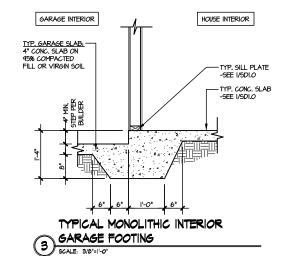
ROOF FRAMING PLAN

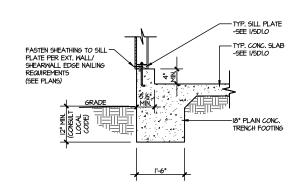




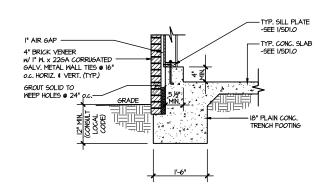


TYPICAL SLAB ON GRADE PERIMETER FOOTING w/ BRICK VENEER

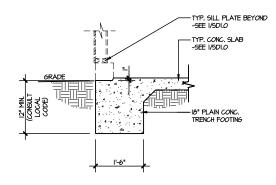




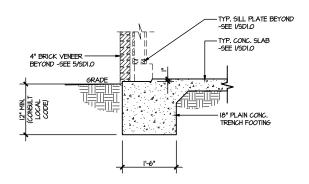
TYPICAL SLAB ON GRADE GARAGE PERIMETER FOOTING



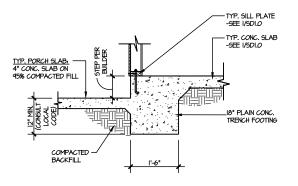
TYPICAL SLAB ON GRADE GARAGE 5 PERIMETER FOOTING w/ BRICK VENEER



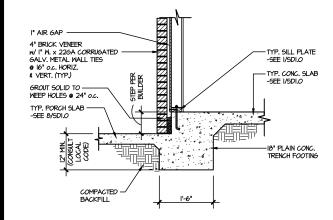
TYPICAL SLAB ON GRADE GARAGE 6 ENTRY @ PERIMETER FOOTING



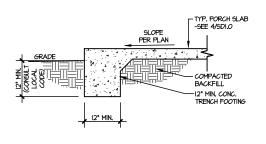
TYPICAL SLAB ON GRADE GARAGE TENTRY @ PERIMETER FOOTING



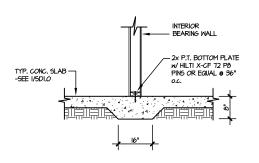
TYPICAL SLAB ON GRADE PERIMETER 8 FOOTING @ PORCH/PATIO



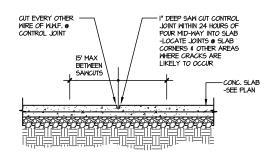
TYPICAL SLAB ON GRADE PERIMETER



TYPICAL FOOTING @ PORCH SLAB



TYPICAL THICKENED SLAB @ INTERIOR BEARING WALL



TYPICAL CONTROL JOINT

SCALE: 8/8'=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

drawn by:

REVISIONS

JTR

JAD

initial:

ssue date: 02-27-2

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SEPH T. R

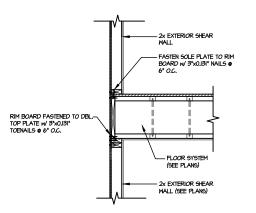
NEIL ON 1 AT MALBEC ARM

LOT

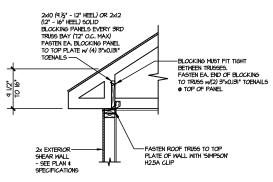
TYPICAL SHEAR

TRANSFER DETAIL @ ROOF

SCALE: 3/8"=1"-0" HEEL HEIGHT LESS THAN HEEL HEIGHT LESS THAN 9½" NO BLOCKING REQ'D

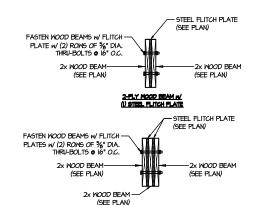


TYPICAL SHEAR TRANSFER DETAIL BETWEEN FLOORS @ EXTERIOR WALL
SCALE: 3/6"=1"-0"



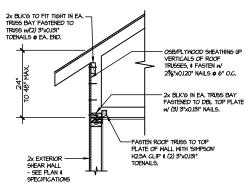
TYPICAL SHEAR

TRANSFER DETAIL @ ROOF
SCALE: 3/8"=1"-0" HEEL HEIGHT BETWEEN 9 1/2 HEEL HEIGHT BETWEEN 9½" - 16" BLOCKING REQ'D

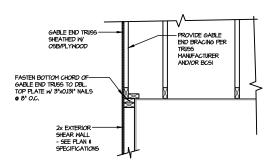


TYPICAL FLITCH BEAM CONNECTION DETAIL SCALE 344-1-67

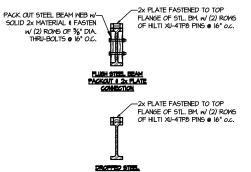
S-FLY OR MORE WOOD BEAM IN/ (2 OR MORE) STEEL FLITCH PLATES



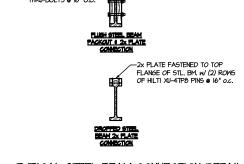
TYPICAL SHEAR TRANSFER DETAIL @ RAISED HEEL TRUSS



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



TYPICAL STEEL BEAM CONNECTION DETAIL SCALE SIAN-IN-OF



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.

 \bigcup DETAILS NEIL'S (C 5.1 FARM AT N LOT 32 - MALBEC 5. RALEIGH, NC

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3/4/25

MULHERN+KULP

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M&K project number

drawn by:

REVISIONS:

126-22076

issue date: 02-27-2

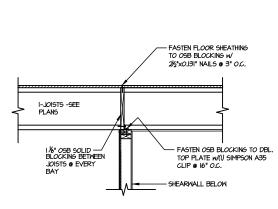
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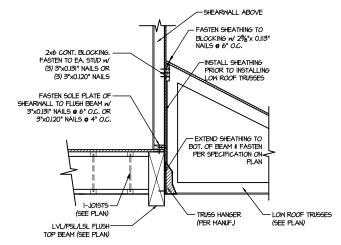
H CAR

SEPHT. R

SD2.0







SHEAR TRANSFER DETAIL @ 2 EXTERIOR SHEARWALL ABOVE

3/4/25 TH CAR SEPH T. RI

MULHERN+KULP

RESIDENTIAL SURFACE

SUBSECULATION PARTICULAR

SUBSECULATION PARTICULAR

PASS SECTION

NOC LICENSE #C-3825



M&K project number: 126-22076

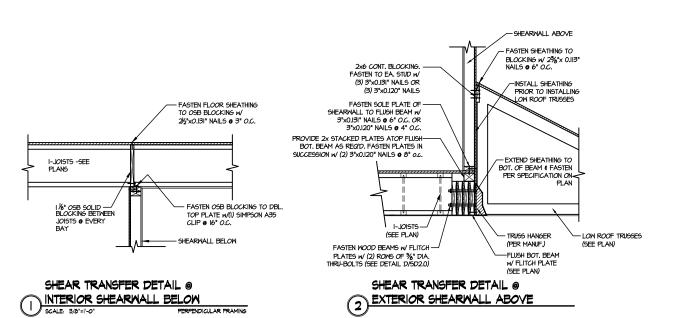
> project mgr: JTR drawn by: JAD issue date: 02-27-25

REVISIONS:

initial:

FARM AT NEIL'S CREEK LOT 32 - MALBEC 5.1 RALEIGH, NC FRAMING DETAILS

SD2.1A



1 - Neil's Creek - Lot 32 - Structurals DATE: 3/4/2025 10:11 AM

MULHERN+KULP
RESIDENTIAL STRUCTURAL ENGINEERING
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M&K project number: 126-22076

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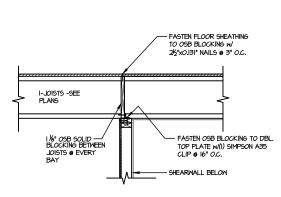
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FRAMING DETAILS
FARM AT NEIL'S CREEK
LOT 32 - MALBEC 5.1
RALEIGH, NC

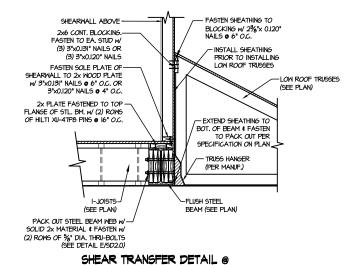
SD2.1B



SHEAR TRANSFER DETAIL @

INTERIOR SHEARWALL BELOW

SCALE: 8/0"=1"-0" PERPENDICULAR FRAMING



2 EXTERIOR SHEARWALL ABOVE



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project mgr: JTR drawn by: JAD issue date: 02-27-25

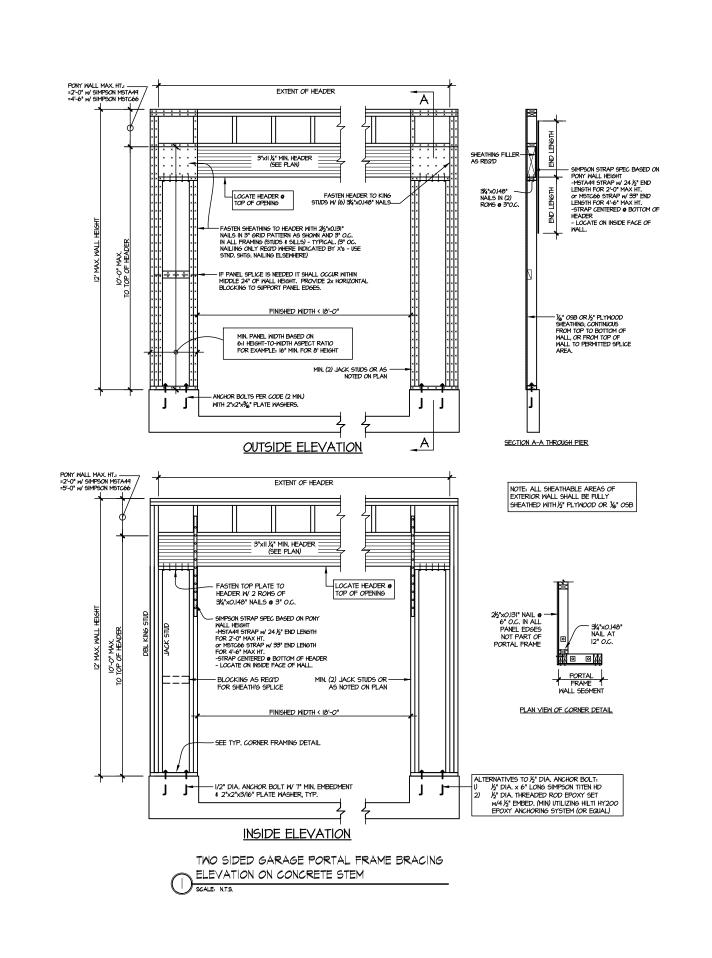
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date: initial:

FRAMING DETAILS
FARM AT NEIL'S CREEK
LOT 32 - MALBEC 5.1
RALEIGH, NC

sheet:

SD2.1C



SEAL OSCOLATION SERVE SUPPLIES OF THE PROPERTY OF THE PROPERTY

MULHERN+KULP
RESIDENTIAL STRUCTURAL ENGINEERING
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P 2515-654-6011 - Anthory PA 19902
P 2515-654-6011 - Anthory PA 19902

M&K project number

M&K project number: 126-22076

project mgr: JTR drawn by: JAD issue date: 02-27-25

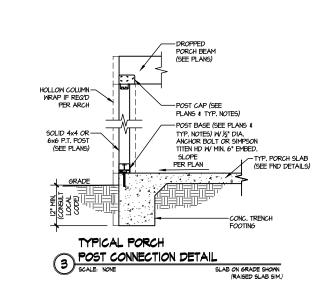
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FRAMING DETAILS
FARM AT NEIL'S CREEK
LOT 32 - MALBEC 5.1
RALEIGH, NC

sheet:



M&K project number: 126-22076

project mgr: JTR drawn by: JAD issue date: 02-27-25

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FRAMING DETAILS
FARM AT NEIL'S CREEK
LOT 32 - MALBEC 5.1
RALEIGH, NC

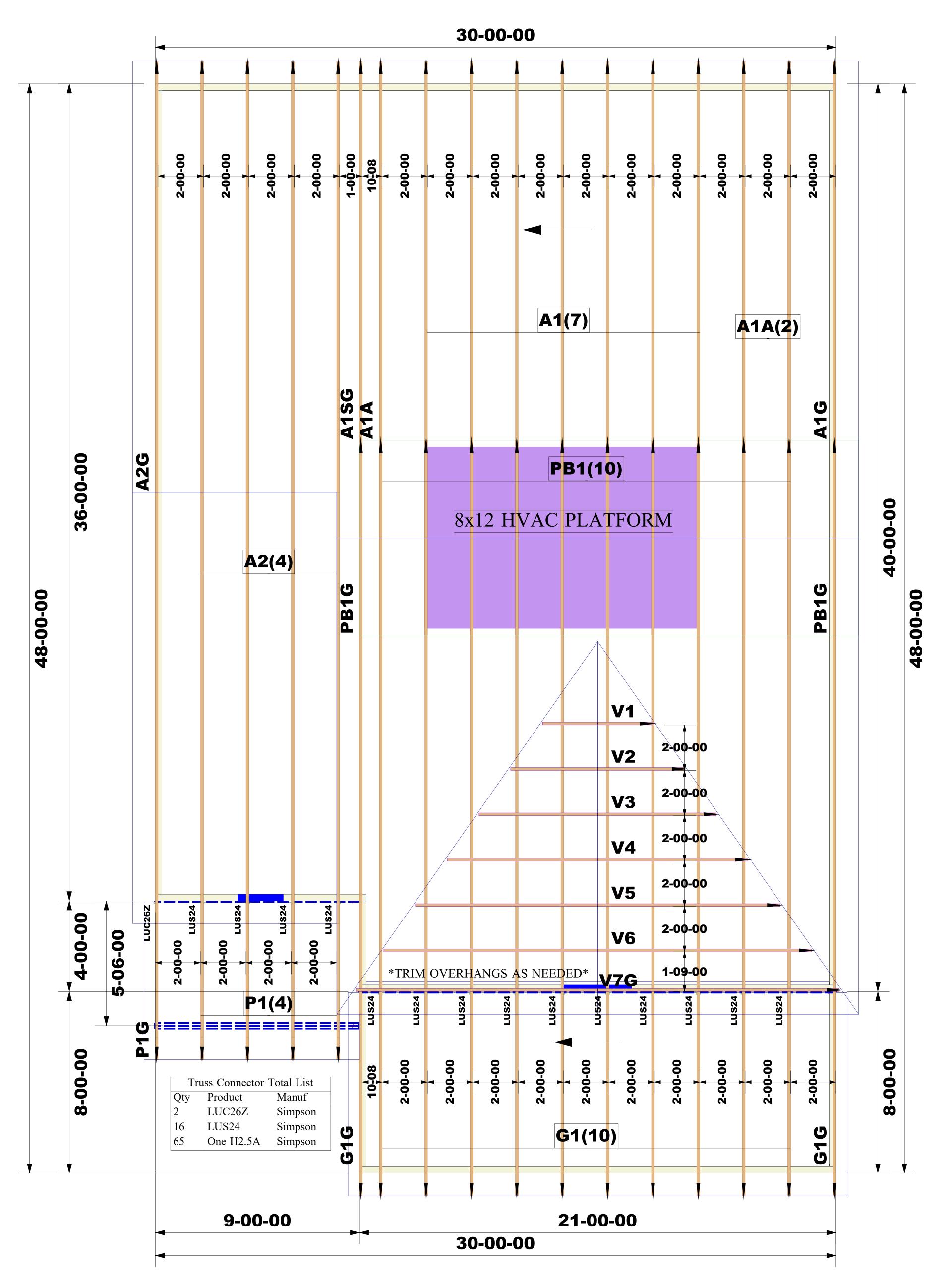
SD3.0

ROOF TRUSS LAYOUT

SCALE: NTS

*2' O/C U.N.O.
*EXT. DIMENSIONS TO STUD

The Farm at Neill's Creek (NC)(RAL) Lot 00.0032 Phase Model- 1930-1- Malbec Garage Right Side



ELEV 5

