

COOPER 3-RALE

RALEIGH - LOT 00.0022 CAMPBELL RIDGE SF
(MODEL# 1777)

ELEVATION 7 - GL

113 Alden Way

INDEX

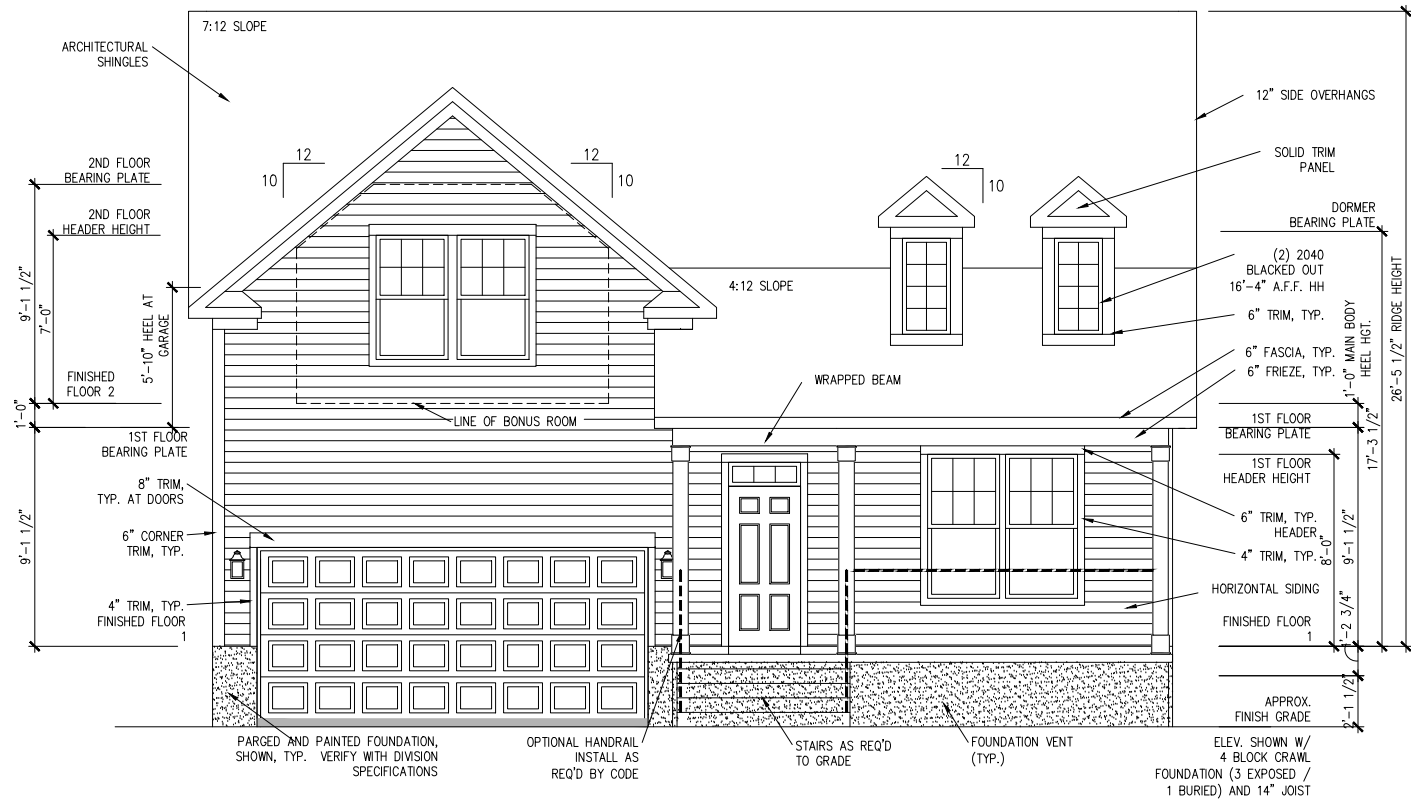
[illegible]The logo for DRB HOMES, featuring the letters "DRB" in a large, bold, black sans-serif font, with the word "HOMES" in a smaller, blue, sans-serif font directly beneath it.

AREA CALCULATIONS

ELEVATION 7	HEATED	COVERED / UNHEATED	UNCOVERED
FIRST FLOOR	1777 SF		
GARAGE		394 SF	
FRONT PORCH – ELEVATION 7		204 SF	
OPTIONS			
BONUS ROOM	430 SF		
BEDROOM 4	168 SF		
SCREENED PORCH		120 SF	
REAR FIREPLACE	10 SF		
TOTAL	2385 SF	718 SF	

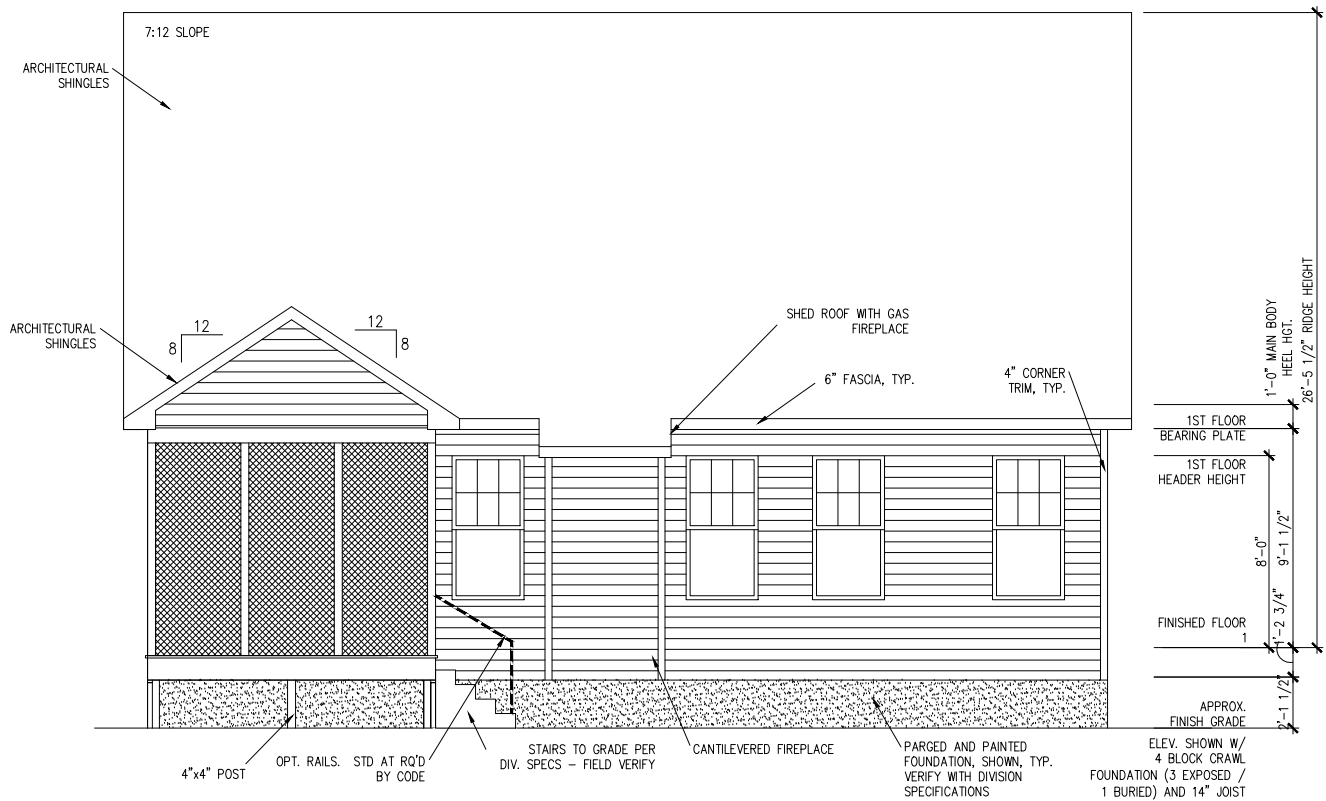
LOT SPECIFIC

[illegible]



FRONT ELEVATION 7

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



REAR ELEVATION 7

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

MASTER PLAN INFORMATION			UPDATED DATE
REVISION	DATE		
4-RALE	02-24-2022		02-19-2025

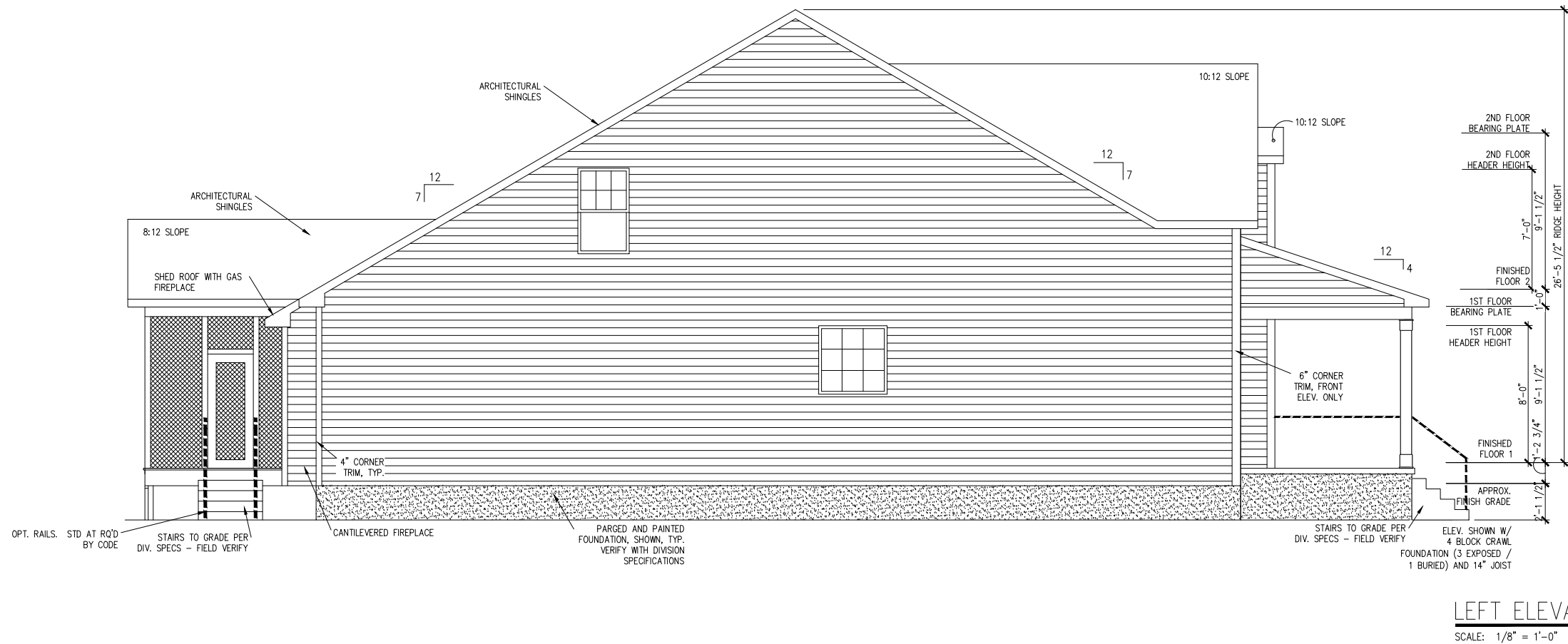
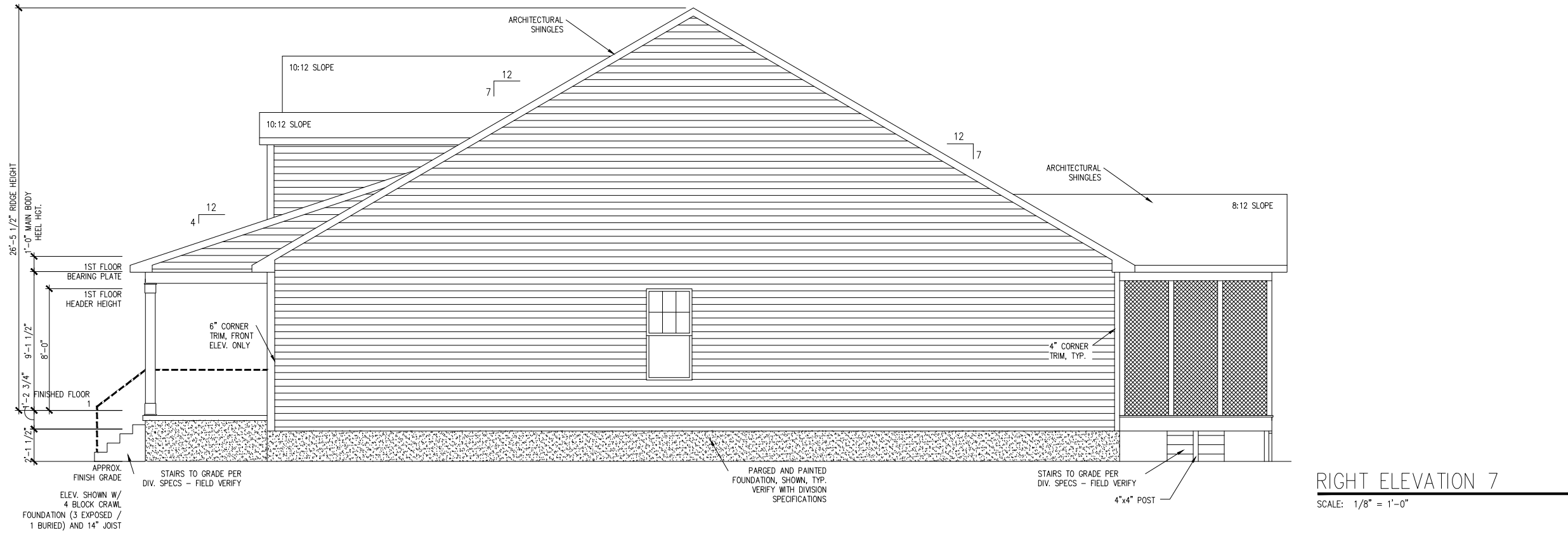
DRAWN BY:	ITS
DATE:	07/21/2025
PLAN NO.	1777

DRB
HOMES

HOUSE NAME:
COOPER 3

DRAWING TITLE
FRONT & REAR ELEVATIONS

SHEET No.
A1.1



FILE: Lot_00.0022 updated 8-7-25.dwg DATE: 7/21/2025 11:50 AM

MASTER PLAN INFORMATION			
REVISION	DATE	UPDATED DATE	
4-RAL	02-24-2022	02-19-2025	

DRAWN BY:	ITS
DATE:	07/21/2025
PLAN NO.	1777

DRB
HOMES

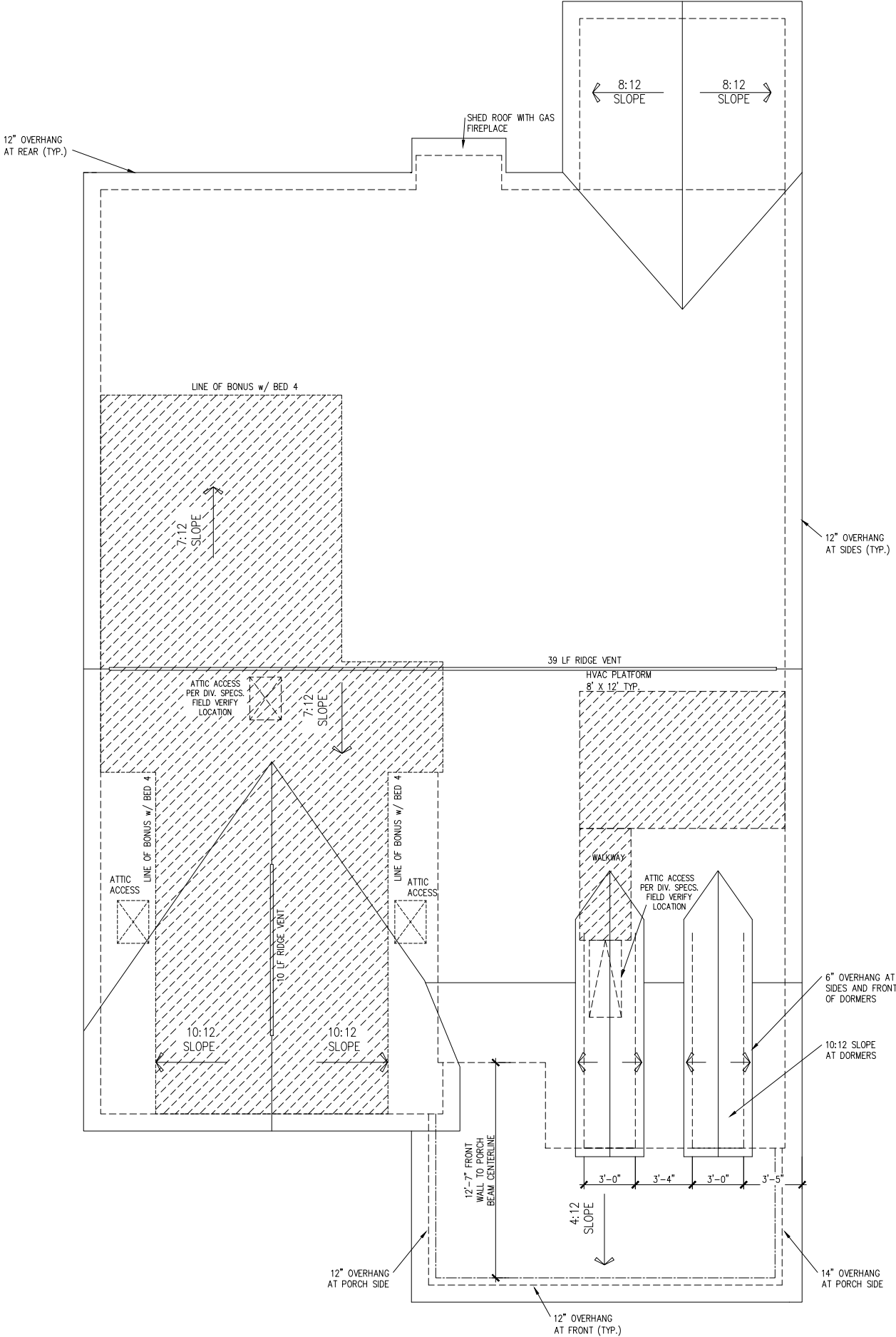
HOUSE NAME:
COOPER 3

DRAWING TITLE
RIGHT & LEFT ELEVATIONS

SHEET No.
A1.2

ROOF VENTILATION CALCULATIONS:

ROOF AREA = 2492 SQ. FT.
OVERALL REQUIRED VENTILATION:
1 TO 150 = 16.61 SQ. FT.
1 TO 300 = 8.31 SQ. FT.
50-BOX IN TOP THIRD = 4.15 - 6.65 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.
LOWER VENTING: (BOTTOM 2/3 ROOF)
74 LINEAR FEET OF SOFFIT X 5.7 SQ. IN. = 2.93 SQ. FT.
UPPER VENTING: (TOP 1/3 ROOF)
49 LINEAR FEET OF RIDGE X 18 SQ. IN. = 6.13 SQ. FT.
6.13 SQ. FT. BETWEEN 50% - 80%
(1 TO 300 ALLOWED)
TOTAL ROOF VENTILATION: 9.06 SQ. FT. > 8.31 SQ. FT. (REQ'D)



ROOF PLAN ELEV. 7

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

MASTER PLAN INFORMATION		
REVISION	DATE	UPDATED DATE
4-RAL	02-24-2022	02-19-2025

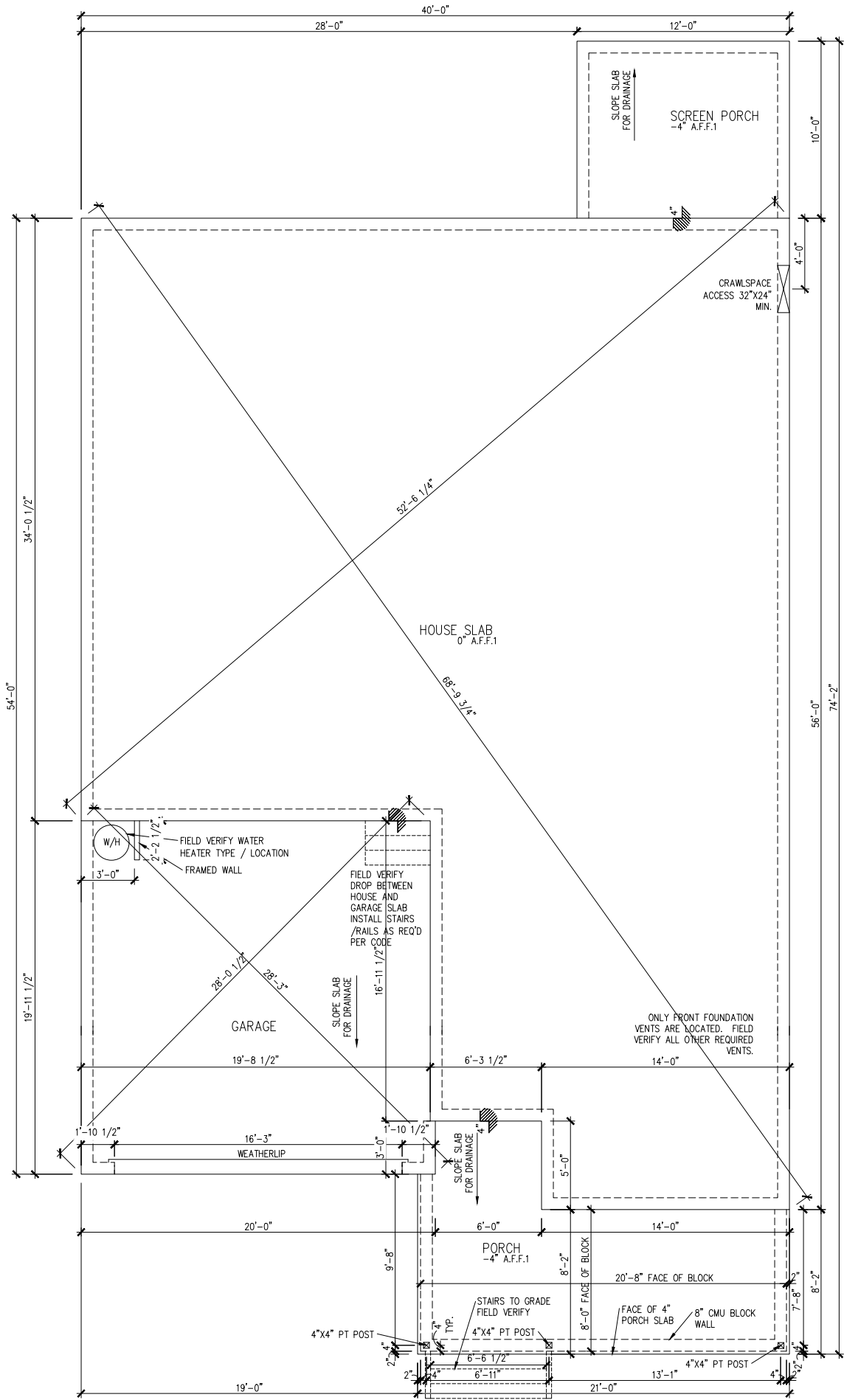
DRAWN BY:	ITS
DATE:	07/21/2025
PLAN NO.	1777



HOUSE NAME:	COOPER 3
DRAWING TITLE	ROOF PLAN

SHEET No.	A1.3
-----------	------

CRAWLSPACE VENT CALCULATIONS ALL ELEVATIONS
CRAWL AREA = 1776 SQ. FT.
OVERALL REQUIRED VENTILATION:
1 SQ. IN. PER 1 SQ. FT. = 1776 SQ. IN.
NET FREE AREA OF VENT = 72 SQ. IN. PER VENT
WITTEN AUTOMATIC VENT OAL-1 OR EQUAL
VENTING REQUIREMENT:
1776 SQ. IN. / 72 SQ. IN. = 24.7 VENTS = 25 VENTS
ONLY VENTS ON THE FRONT ELEVATION ARE SHOWN. ALL
OTHERS TO BE FIELD LOCATED.
VENTS SHALL BE INSTALLED PER R322.2.2 - R322.2.2.1
MIN. (2) VENTS PER ENCLOSED SPACE
VENTS TO BE INSTALLED ON MIN. OF (2) WALLS PER
ENCLOSED SPACE
BOTTOM OF VENTS INSTALLED MAX. OF 12" ABOVE FIN.
EXTERIOR GRADE



ELEVATION 7
CRAWL SPACE PLAN

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

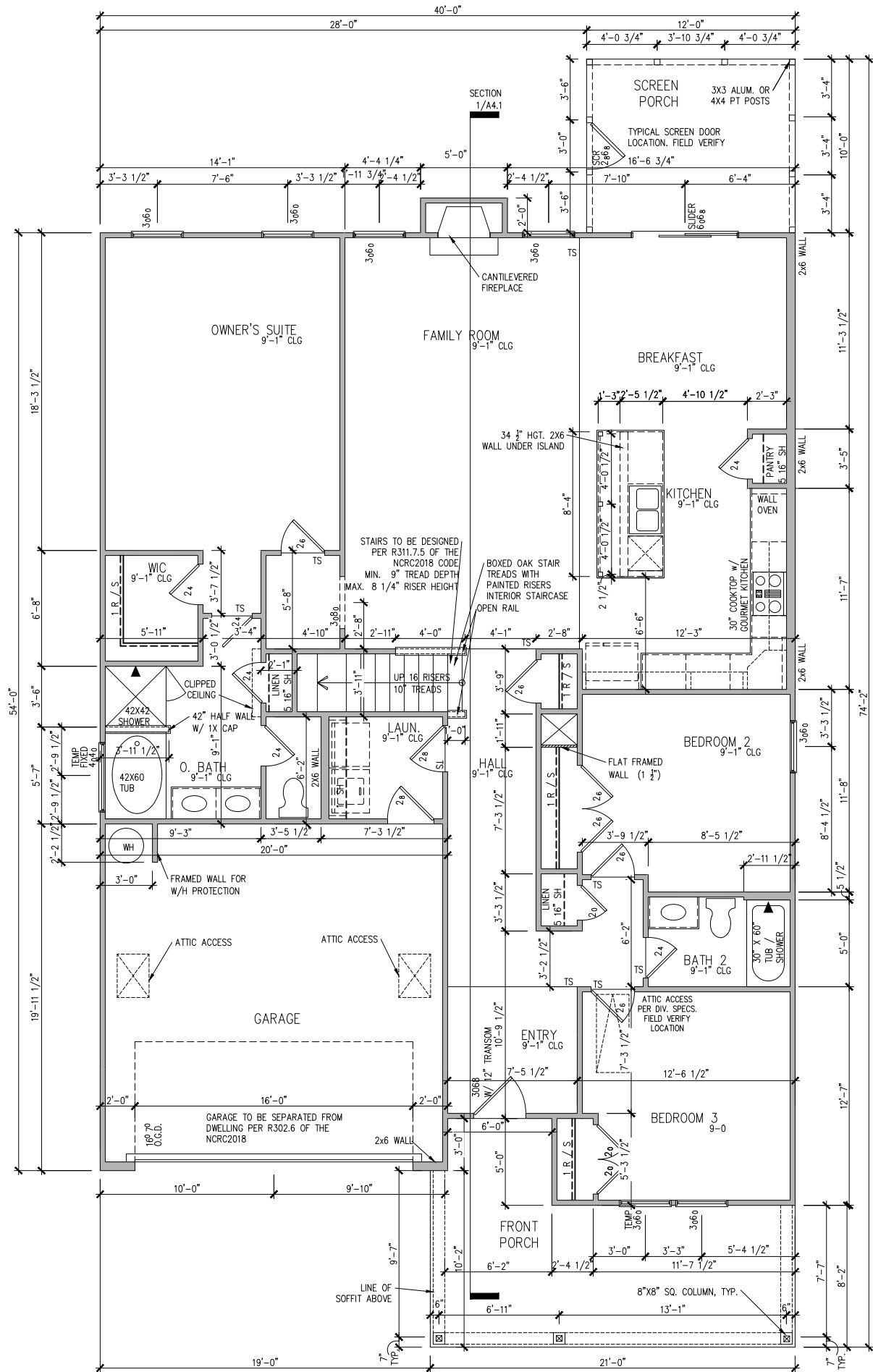
MASTER PLAN INFORMATION		
REVISION	DATE	UPDATED DATE
4-RALE	02-24-2022	02-19-2025

DRAWN BY:	ITS
DATE:	07/21/2025
PLAN NO.	1777



HOUSE NAME:	COOPER 3
DRAWING TITLE	CRAWL SPACE PLAN

SHEET No.	A2.1
-----------	------



ELEVATION 7
FIRST FLOOR PLAN

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

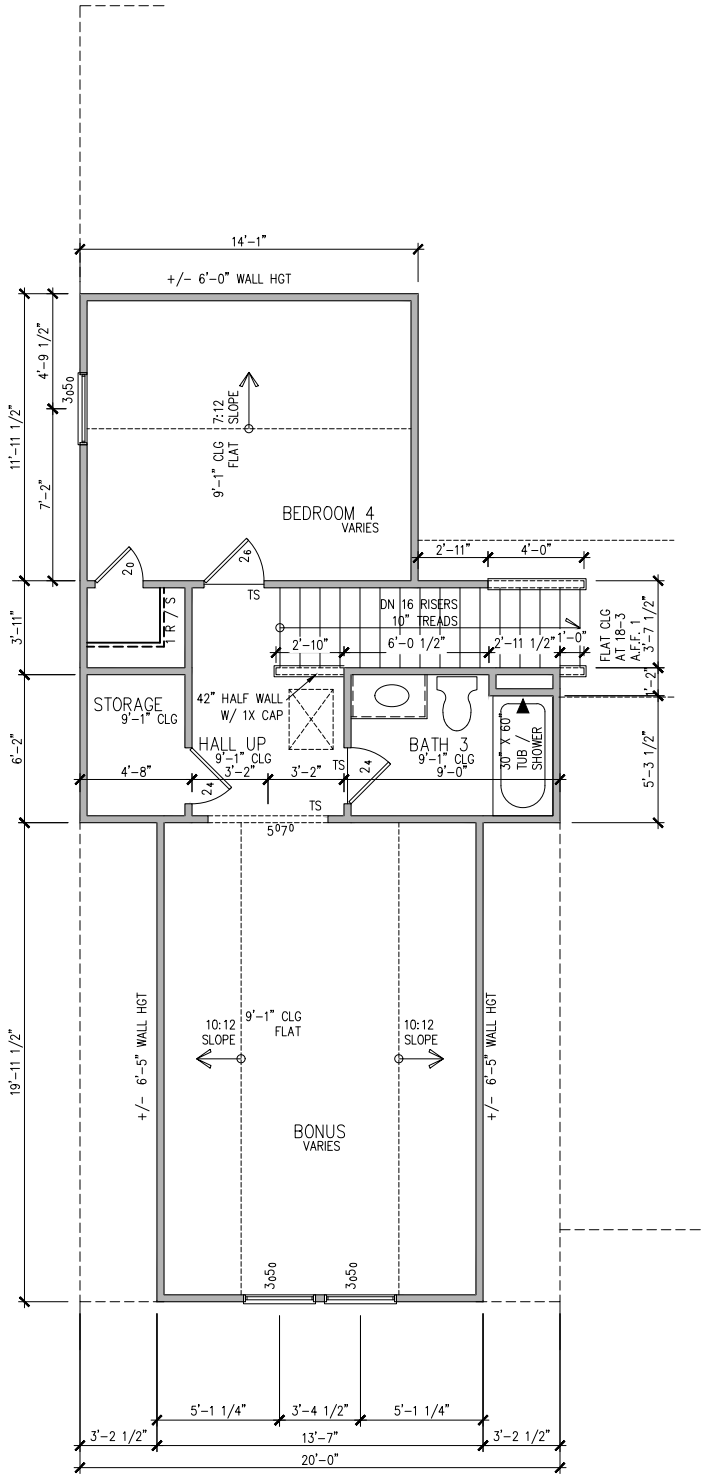
MASTER PLAN INFORMATION			
REVISION	DATE	UPDATED DATE	
4-RALE	02-24-2022	02-19-2025	

DRAWN BY:	ITS
DATE:	07/21/2025
PLAN NO.	1777



HOUSE NAME:	COOPER 3
DRAWING TITLE	FIRST FLOOR PLAN

SHEET No.	A3.1
-----------	------



ELEVATION 7
SECOND FLOOR PLAN

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

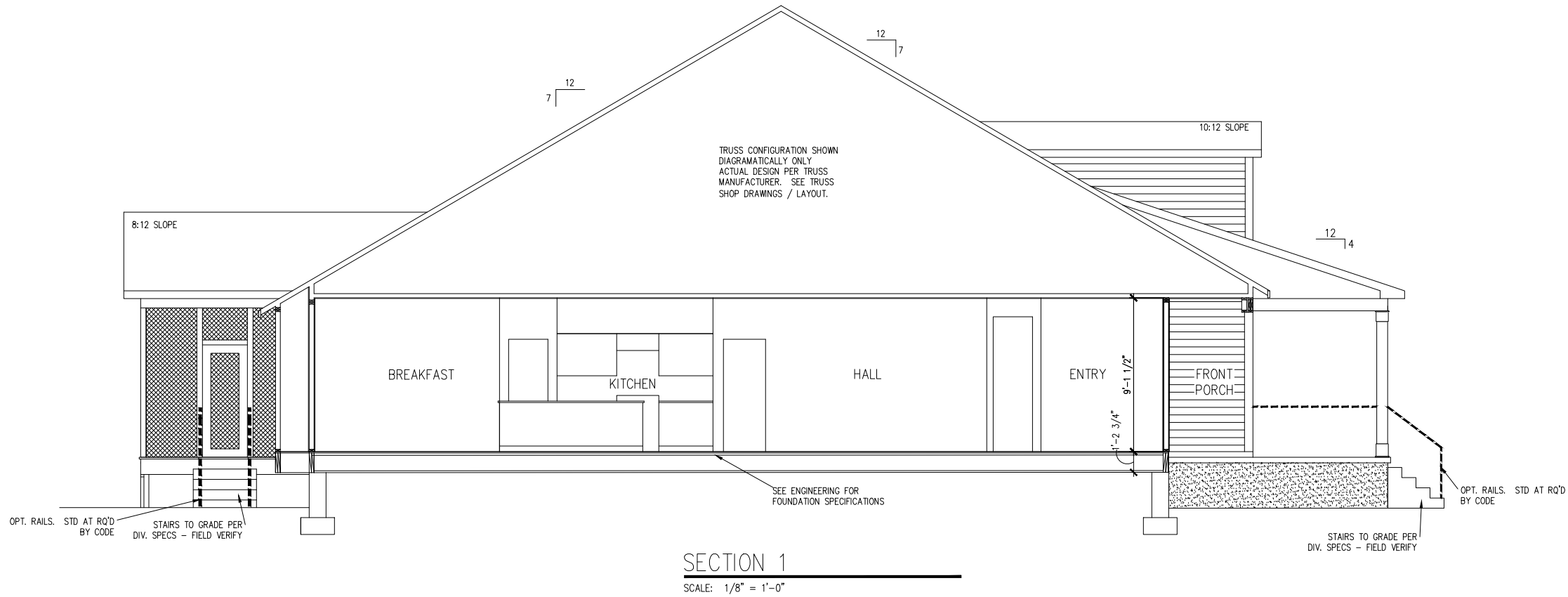
MASTER PLAN INFORMATION			
REVISION	DATE	UPDATED DATE	
4-RALE	02-24-2022	02-19-2025	

DRAWN BY:	ITS
DATE:	07/21/2025
PLAN NO.	1777



HOUSE NAME:	COOPER 3
DRAWING TITLE	SECOND FLOOR PLAN

SHEET No.	A3.2
-----------	------



FILE: Lot_00.0022 updated 8-7-25.dwg DATE: 7/21/2025 11:50 AM

MASTER PLAN INFORMATION			
REVISION	DATE	UPDATED DATE	
4-RALE	02-24-2022	02-19-2025	

DRAWN BY:	ITS
DATE:	07/21/2025
PLAN NO.	1777

DRB HOMES

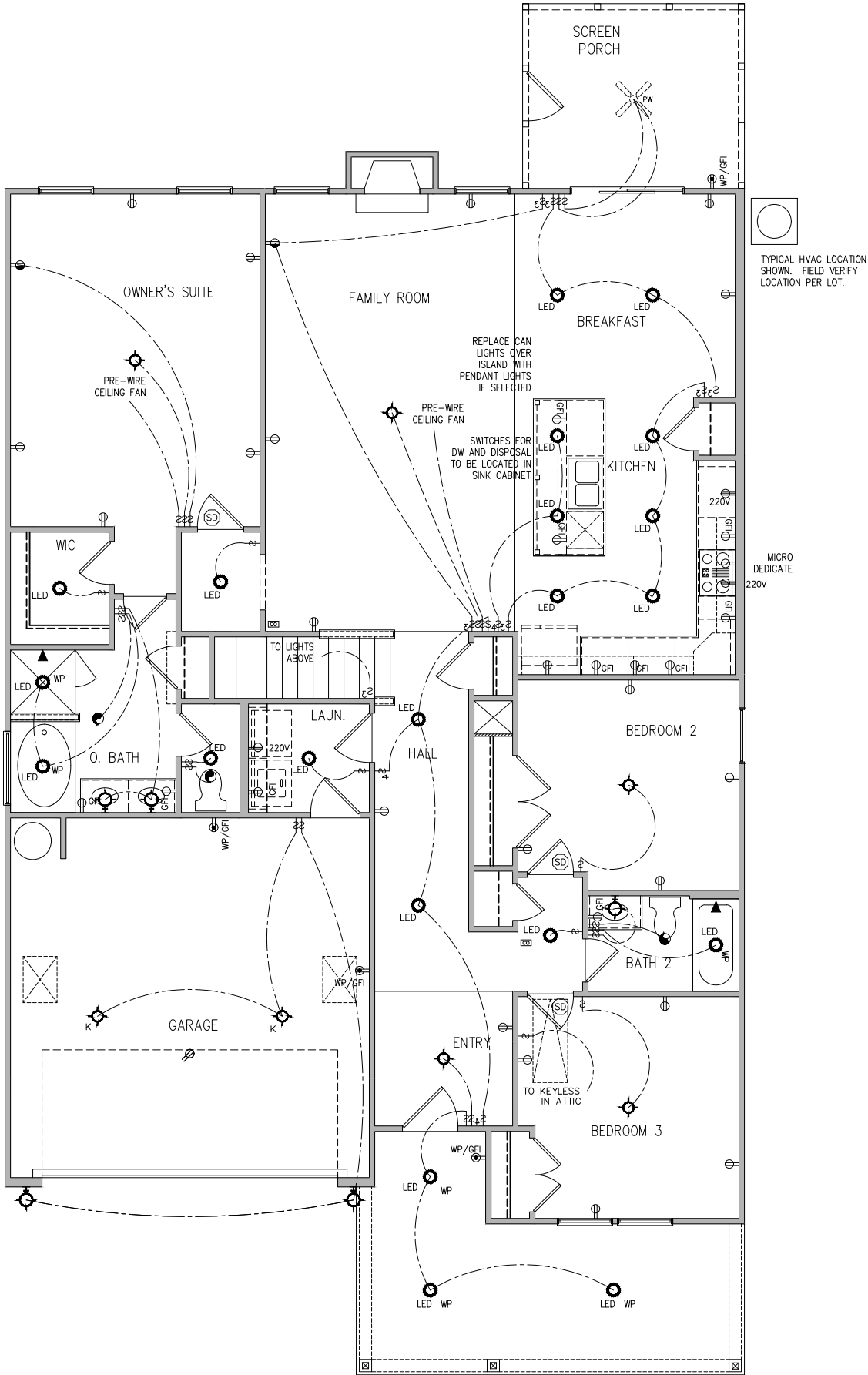
HOUSE NAME:	COOPER 3
DRAWING TITLE	BUILDING SECTION

SHEET No.	A4.1
-----------	------

ELECTRICAL LEGEND

- SINGLE POLE SWITCH
- THREE WAY SWITCH
- FOUR WAY SWITCH
- DUPLEX AFCI RECEPTACLE
- DUPLEX AFCI RECEPTACLE - BOTTOM HALF SWITCHED
- DUPLEX AFCI RECEPTACLE - FLOOR MOUNTED
- RECEPTACLE - 220V
- DUPLEX AFCI RECEPTACLE - GFI
- DUPLEX AFCI RECEPTACLE - WATERPROOF GFI
- SMOKE DETECTOR - WIRED IN SERIES
- EXHAUST FAN MOTOR
- CO DETECTOR
- DOOR CHIME
- LIGHT FIXTURE - WALL MOUNTED
- LIGHT FIXTURE - CEILING MOUNTED
- LIGHT FIXTURE - RECESSED CAN
- 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. 7

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

MASTER PLAN INFORMATION		
REVISION	DATE	UPDATED DATE
4-RALE	02-24-2022	02-19-2025

DRAWN BY:	ITS
DATE:	07/21/2025
PLAN NO.	1777



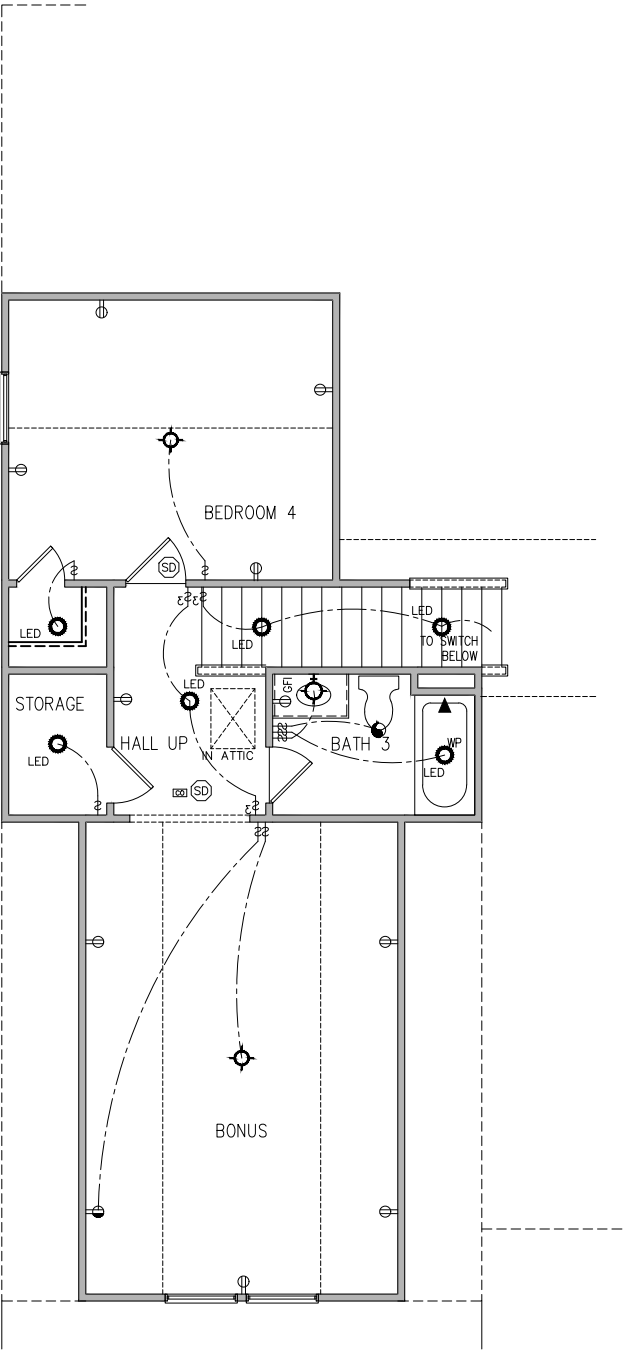
HOUSE NAME:	COOPER 3
DRAWING TITLE	FIRST FLOOR ELECTRICAL

SHEET No.	E1.1
-----------	------

ELECTRICAL LEGEND

-  SINGLE POLE SWITCH
-  THREE WAY SWITCH
-  FOUR WAY SWITCH
-  DUPLEX AFCI RECEPTACLE
-  DUPLEX AFCI RECEPTACLE - BOTTOM HALF SWITCHED
-  DUPLEX AFCI RECEPTACLE - FLOOR MOUNTED
-  RECEPTACLE - 220V
-  DUPLEX AFCI RECEPTACLE - GFI
-  DUPLEX AFCI RECEPTACLE - WATERPROOF GFI
-  SMOKE DETECTOR - WIRED IN SERIES
-  EXHAUST FAN MOTOR
-  CO DETECTOR
-  DOOR CHIME
-  LIGHT FIXTURE - WALL MOUNTED
-  LIGHT FIXTURE - CEILING MOUNTED
-  LIGHT FIXTURE - RECESSED CAN
-  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
SECOND FLOOR – ELEV. 7
SCALE: 1/8" = 1'-0"

MASTER PLAN INFORMATION		
REVISION	DATE	UPDATED DATE
4-RALE	02-24-2022	02-19-2025

DRAWN BY:	ITS
DATE:	07/21/2025
PLAN NO.	1777



HOUSE NAME:	COOPER 3
DRAWING TITLE	SECOND FLOOR ELECTRICAL

SHEET No.	E1.2
-----------	------

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

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	(4) NAILS IN LAPPED AREA	(1) NAILS IN LAPPED AREA
TOP PLATE LAP @ CORNERS & INTERSECTING WALLS	(2) NAILS	(2) NAILS

* 3/8"x0.113 IS AN ACCEPTABLE ALTERNATIVE TO A 3"x0.120", SAME SPACING OR NUMBER OF NAILS. (ONLY ACCEPTABLE WHERE * ARE SHOWN)

LEGEND

- INTERIOR BEARING WALL
- BEARING WALL ABOVE
- BEAM / HEADER
- INDICATES SHEAR WALL & EXTENT
- EXTENT OF OVERFRAMING
- METAL HANGER
- 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
UP TO 3'-0"	(1)2x4 FLAT	(1)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.)

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 AND ITS COMPONENTS DURING CONSTRUCTION. THIS INCLUDES, BUT IS NOT LIMITED TO, THE ADDITION OF NECESSARY SHORING, SHEETING, TEMPORARY BRACINGS, 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, INCLUDING, 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 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/FLUSH BEAMS DO NOT EXCEED THE FOLLOWING:

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

GENERAL STRUCTURAL NOTES

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

DESIGN LOADS:

ROOF	DEAD = 7 PSF T.C., 10 PSF B.C. LIVE = 16 PSF LOAD DURATION FACTOR = 1.25
FLOOR	LIVE = 40 PSF (30 PSF @ SLEEPING AREAS) DEAD = 10 PSF (I-JOISTS & SOLID SAWN) 10 PSF T.C., 5 PSF B.C. (TRUSSES) (ADD'L 10 PSF @ TILE)

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

SOIL 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) @ 16" O.C. SFF OR STYP "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 (SPP) OR SOUTHERN PINE #2 (STP) 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:

- LSL - Fb=2325 psi; Fv=310 psi; E=1.58x10⁶ psi
- LVL - Fb=2600 psi; Fv=285 psi; E=2.0x10⁶ psi
- PSL - Fb=2400 psi; Fv=240 psi; E=2.0x10⁶ psi

- MK 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 MK 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 @ 8" O/C OR 2 ROWS 1/4"x3/8" SIMPSON SDS SCREWS (OR 3/8" 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 MEMBERS.

- FOR 4 PLY BEAMS OF EQUAL WIDTH, FASTEN PLIES TOGETHER WITH 3 ROWS OF 1/4"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 SCREWS 2" FROM EDGE. A SOLID 1" 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, 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 1/2" DIA. BOLTS @ 48" O.C. STAGGERED.

- ALL EXTERIOR 4x4 WOOD POSTS SHALL HAVE SIMPSON BC52-2/4 CAP & ABW44Z BASE, 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 MK FOR MARBLE FLOOR DESIGNS)
- AT I-JOIST FLOORS, PROVIDE 1 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 1 (OR APPROVED EQUAL) WITH TONGUE AND GROOVE EDGES. FASTEN TO FRAMING MEMBERS W/ GLUE AND
- 2 1/2" x 0.131" NAILS @ 6" o.c. @ PANEL EDGES & @ 12" o.c. FIELD.
- 2 3/8" x 0.120" NAILS @ 4" O.C. @ PANEL EDGES & @ 8" O.C. FIELD.
- 2 3/8" x 0.113" 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) H25T 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.O.

- ERECT AND INSTALL ROOF TRUSSES PER NTCA & TP1'S BC51 I-08 "GUIDE TO GOOD PRACTICE FOR HANDLING, INSTALLING & BRACING OF METAL PLATE CONNECTED WOOD TRUSSES."

- SUPPORT PORCH & SHORT SPAN ROOF TRUSSES (MAX 1' SPAN) W/ 2x4 LEDGER (U.N.O.) FASTENED TO:
- RIM BOARD W/ (2) 3"x0.131" NAILS @ 16" O.C. MAX. (I-JOISTS)
- TRUSS VERTICALS W/ (3) 3"x0.131" NAILS @ 14" O.C. MAX. (FLOOR TRUSSES)

- ROOF SHEATHING SHALL BE 7/16" A.P.A. RATED SHEATHING 24/16 EXPOSURE 1 (OR APPROVED EQUAL). FASTEN TO FRAMING MEMBERS
- W/ 2 1/4" x 0.131" NAILS @ 6" o.c. @ PANEL EDGES & @ 12" O.C. FIELD.
- W/ 2 3/8" x 0.120" NAILS @ 4" o.c. @ PANEL EDGES & @ 8" O.C. FIELD.
- W/ 2 3/8" x 0.113" NAILS @ 3" o.c. @ PANEL EDGES & @ 6" O.C. FIELD.

HOLD-DOWN SCHEDULE

SYMBOL	SPECIFICATION
HD-1	SIMPSON HTT4 HOLD-DOWN @ 1/6" DIA. ANCHOR
HD-2	SIMPSON MSTC66 STRAP TIE (CENTER STRAP ON FLOOR SYSTEM U.N.O.) -OR- MSTC66B3 ALTERNATE
HD-3	SIMPSON STHD14/STHD14RJ

- UTILIZE THE S5TB24 ANCHOR BOLT @ ALL MONOSLAB & INTERIOR RAISED SLAB (I.E. THICKENED SLABS, FOOTINGS) CONDITIONS. MINIMUM 24" MIN. FOOTING THICKNESS REQUIRED.
EPOXY-SET ALTERNATE FOR MONOSLAB & INTERIOR RAISED SLAB CONDITIONS ONLY: UTILIZE SIMPSON SET EPOXY SYSTEM TO FASTEN THREADED ROD INTO CONCRETE FOUNDATION. PROVIDE 10" (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 1 3/4" OF EDGE OF CONCRETE.

VENEER LINTEL SCHEDULE

SPAN (MAX)	HEIGHT OF VENEER ABOVE LINTEL	STEEL ANGLE SIZE
3'-0"	20 FT. MAX	L3"x3"x1/4"
6'-0"	3 FT. MAX	L3"x3"x1/4"
	12 FT. MAX	L4"x3"x1/4"
	20 FT. MAX	L5"x3"x3/8"
8'-0"	3 FT. MAX	L4"x4"x1/4" *
	12 FT. MAX	L5"x3"x3/8"
	16 FT. MAX	L6"x3"x3/8"
9'-6"	12 FT. MAX	L6"x3"x3/8"
	2 FT. MAX	L7"x4"x1/2" **
16'-0"	3 FT. MAX	L8"x4"x1/2" **

ALL LINTELS:

- SHALL SUPPORT 2 3/8" - 3 1/2" VENEER W/ 40 psf MAXIMUM HEIGHT.
- <16' SHALL HAVE 4" MIN. BEARING
- >16' SHALL HAVE 8" MIN. BEARING
- <16' SHALL NOT BE FASTENED BACK TO HEADER.
- >16' SHALL BE FASTENED BACK TO WOOD BLOCKING IN WALL @48" o.c. w/ 1/2" DIA. x 3 1/2" LONG LAG SCREWS IN 2" LONG VERTICALLY SLOTTED HOLES.
- MAX. 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 1/2" 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 BACK TO BEAM, FASTENERS SHALL MAINTAIN A 2 1/2" (MINIMUM) CLEAR DISTANCE FROM BOTTOM OF BEAM.
- FOR GREEN VENEER USE L4x3x1/4".
- ** FOR 3 1/2" VENEER ONLY. SEE PLAN FOR VENEER SUPPORT IF VENEER < 3 1/2" THICK.

LATERAL BRACING & SHEAR WALL SHEATHING SPECIFICATIONS

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

120 MPH WIND IN 2018 NCSEB: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 1604) & ASCE 7-10, AS PERMITTED BY R301.1.3 OF THE 2018 NCSEB:RC, OR THE SIMPLIFIED PRESCRIPTIVE PROCEDURE IN ACCORDANCE WITH THE 2015 IRC IF THE PARAMETERS OF SECTION R602.12 COMPLY. ACCORDINGLY, THIS MODEL, AS DOCUMENTED AND DETAILED HEREIN, 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 NCSEB:RC SECTION R802.11.1.1. THIS MODEL HAS BEEN DETAILED WHERE REQUIRED & ENGINEERED TO RESIST THE WIND UPLIFT LOAD PATH PER SECTIONS R602.3.5 & R802.11.

EXT. WALL SHEATHING SPECIFICATION

- 7/16" OSB OR 15/32" PLYWOOD:
FASTEN SHEATHING W/ 2 3/8"x0.113" NAILS @ 6" O.C. AT EDGES & @ 12" O.C. IN THE PANEL FIELD. TYP. U.N.O.
- HORIZONTAL BLOCKING OF EXT. WALL/SHEAR WALL 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: 1 1/2" 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 3/8" x 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 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 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 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, 1" 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 10' 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 @ 16" O.C. SFF OR STYP, "STUD" GRADE OR BETTER.

- CONCRETE DESIGN BASED ON ACI 318. CONCRETE SHALL ATTAIN THE FOLLOWING MIN. COMPRESSIVE STRENGTHS IN 28 DAYS, U.N.O.:
f'c = 4,000 psi: FOUNDATION WALLS
2,500 psi: FOOTINGS & INTERIOR SLABS ON GRADE
3,000 psi: GARAGE & EXTERIOR SLABS ON GRADE
fy = 60,000 psi

- BASEMENT FOUNDATION WALL DESIGN BASED ON:
• 9' OR 10' HEIGHT (AS NOTED ON PLANS)
- TALLER WALLS MUST BE ENGINEERED.
• NOMINAL WIDTH (1 1/2" FOR 10' THICK WALL).

- BASEMENT WALL DESIGN IS BASED ON 60 PCF BACKFILL SOIL TYPE CLASSIFICATIONS (SC, ML-CL, OR GL).
- 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 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 1% 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 (1:1 RATIO), WITH A MAXIMUM OF 1:1.5 RATIO
- CONTROL JOINTS SHALL NOT BE INSTALLED IN STRUCTURAL SLABS

- CONCRETE MASONRY UNITS (CMU) SHALL BE ASTM C90 WITH A MIN. COMPRESSIVE STRENGTH OF 1900 psi (F'm=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 CRAWL 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).

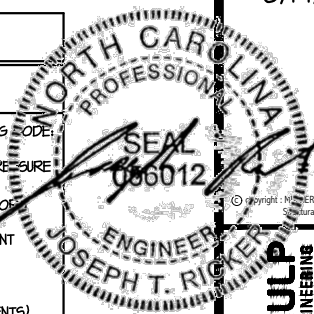
- PROVIDE 2x6 P.T. PLATE ON INTERIOR CRAWL SPACE WALLS, FASTENED PER ANCHORAGE SPECIFICATION NOTED ABOVE. TOP 2 COURSES (MIN) OF WALL TO BE GROUTED SOLID (8 COURSE MAX. WALL HEIGHT)

- DIMENSIONS BY OTHERS, BUILDER TO VERIFY.

- 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.

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

seal: 8/14/25



MULHERN+KULP
RESIDENTIAL STRUCTURAL ENGINEERING



M&K project number:

126-24045

project mgr: JTR

drawn by: GTK

issue date: 07-29-25

REVISIONS:

date: initial:
2025-08-14
CAPTURED/REPLACED NFG

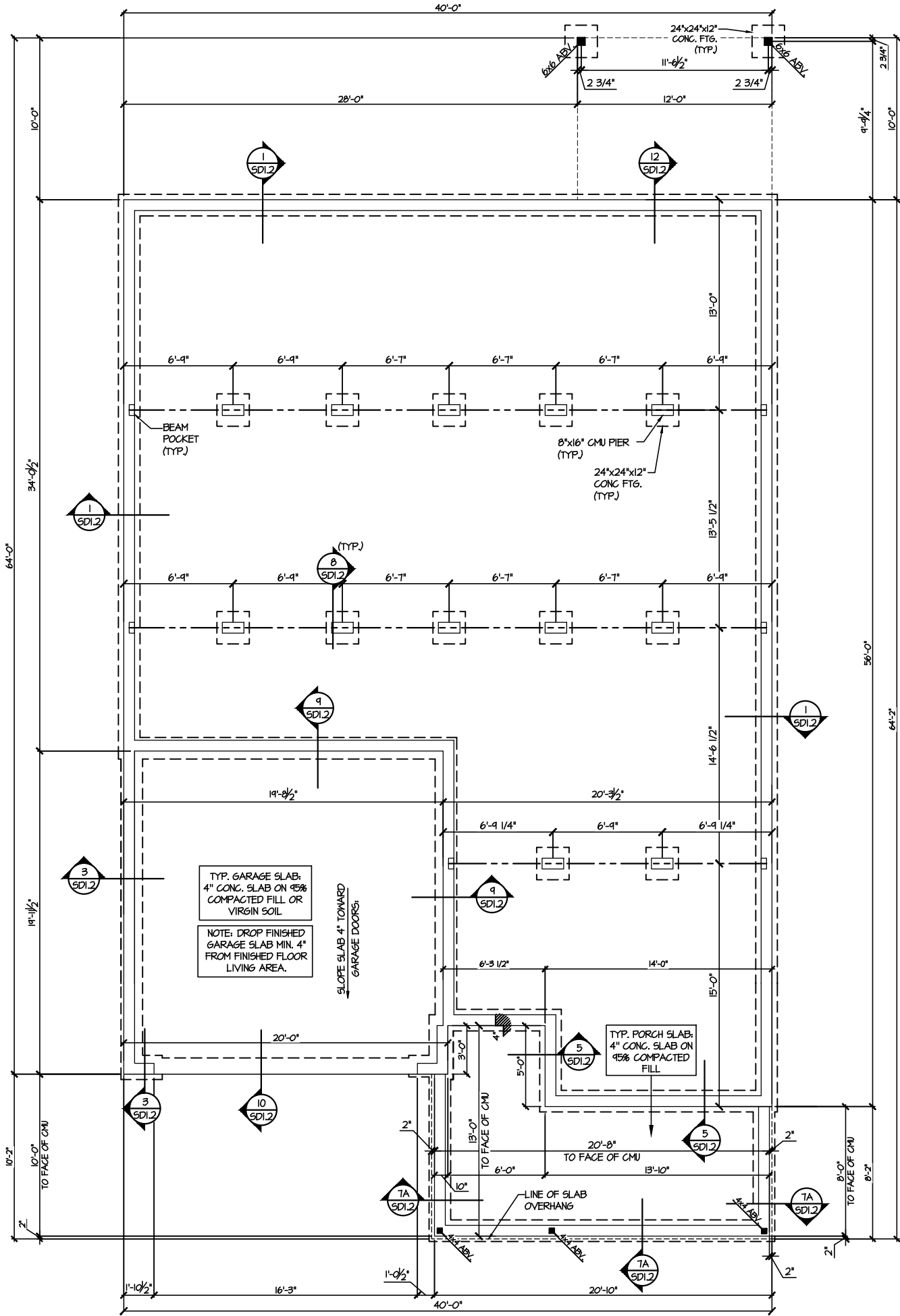
DR3 HOMES

GENERAL NOTES
CAMPBELL RIDGE
LOT 22 - COOPER 3 - 7
RALEIGH, NC

sheet:

S0.0

CRAWLSPACE FOUNDATION PLAN
SCALE: 1/8"=1'-0"

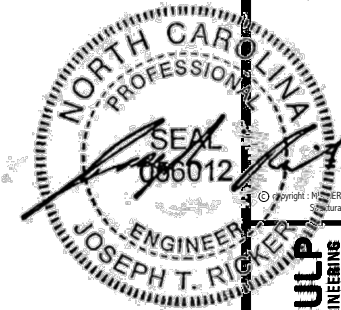


HOLD-DOWN SCHEDULE	
SYMBOL	SPECIFICATION
▶ HD-1	SIMPSON HTT4 HOLD-DOWN * (5/8" DIA. ANCHOR)
▶ HD-2	SIMPSON MSTC66 STRAP TIE (CENTER STRAP ON FLOOR SYSTEM UNLO.) -OR- MSTC66B3 ALTERNATE
▶ HD-3	SIMPSON 5THD14/5THD14RJ

* UTILIZE THE 56T824 ANCHOR BOLT @ ALL MONOSLAB & INTERIOR RAISED SLAB (I.E. THICKENED SLABS, FOOTINGS) CONDITIONS. MINIMUM 24" MIN. FOOTING THICKNESS REQUIRED.
EPOXY-SET ALTERNATE FOR MONOSLAB & INTERIOR RAISED SLAB CONDITIONS ONLY. UTILIZE SIMPSON SET EPOXY SYSTEM TO FASTEN THREADED ROD INTO CONCRETE FOUNDATION. PROVIDE 10" (FOR 5/8" DIA.) OR 15" (FOR 1/2" DIA.) MIN. EMBEDMENT INTO CONCRETE. INSTALL PER MANUF. INSTRUCTIONS. MINIMUM 16" FOOTING THICKNESS REQ'D. DO NOT LOCATE ANCHORS WITHIN 1 3/4" OF EDGE OF CONCRETE.

LEGEND	
•	INTERIOR BEARING WALL
•	BEARING WALL ABOVE
•	BEAM / HEADER
•	INDICATES SHEAR WALL & EXTENT
•	EXTENT OF OVERFRAMING
•	1L METAL HANGER
•	INDICATES POST ABOVE. PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.
▶	INDICATES HOLD-DOWN OR STRAP. REFER TO SCHEDULE.

REFER TO S.O. FOR
TYPICAL STRUCTURAL NOTES
& SCHEDULES



MULHERN+KULP
RESIDENTIAL STRUCTURAL ENGINEERING
300 DOWNSIDE AVE. BUILDING 4 - RALEIGH, NC 27607
P 252-508-5081 • mulhern+kulp.com
NC LICENSE #C-3825

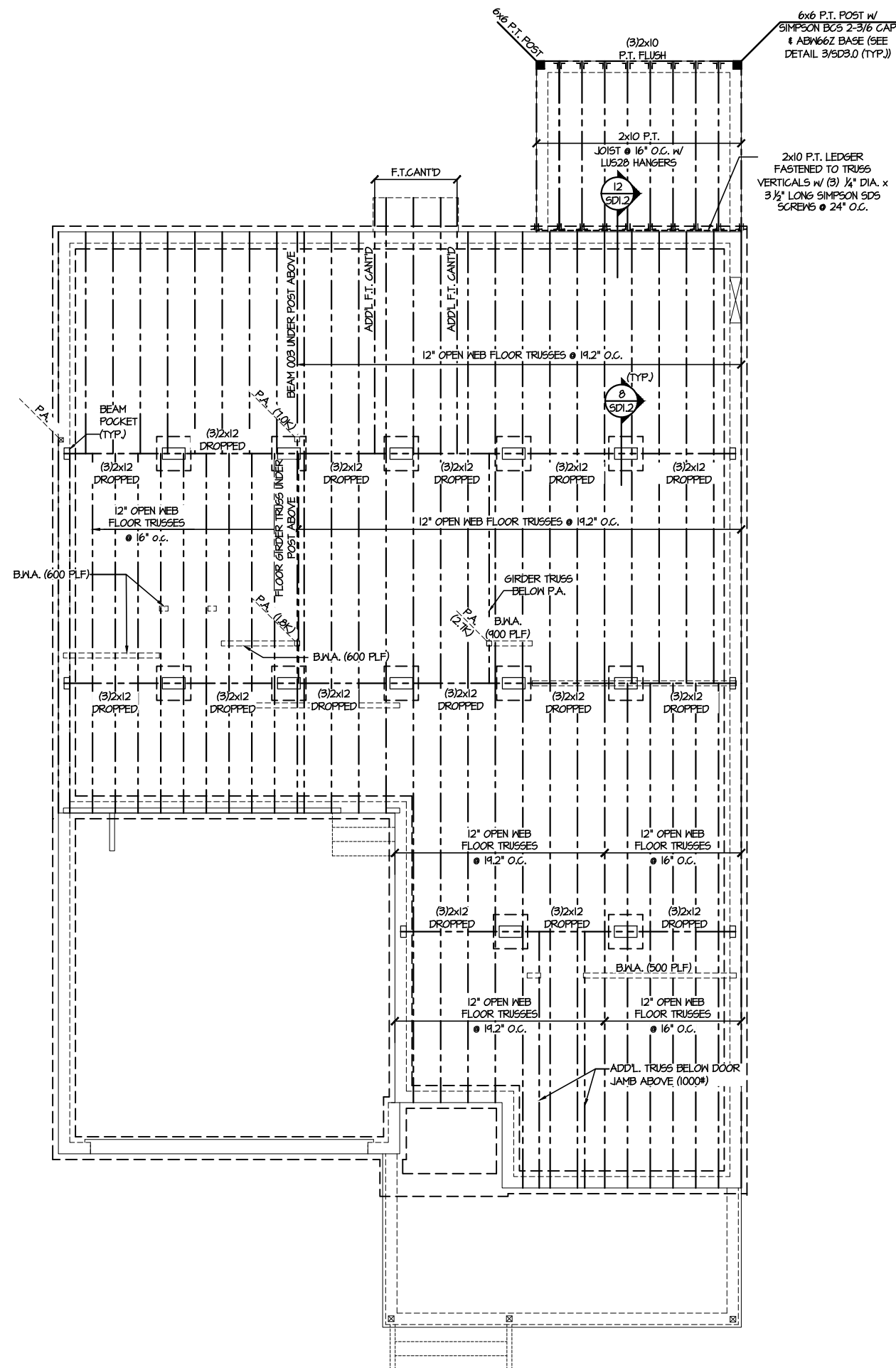
M&K project number:
126-24045
project mgr: JTR
drawn by: GTK
issue date: 07-29-25

REVISIONS:
date: initial:
2025-08-14
CRAWLSPACE PRELIM KFG

DRB
HOMES

FOUNDATION PLANS
CAMPBELL RIDGE
LOT 22 - COOPER 3 - 7
RALEIGH, NC

sheet:
S1.0



BEAM NUMBER	LVL OPTION	PSL OPTION	LSL OPTION	FLITCH OPTION	STEEL OPTION
001	(2)3/4"x11/8" - F	3/5"x11/8" - F	(3)3/4"x11/8" - F	(2)2x12 + (1) 3/8"x11/4" STEEL FLITCH PLATES - F	M12x14 - F
002	(3)3/4"x11/8" - F	5/4"x11/8" - F	(4)3/4"x11/8" - F	(2)2x12 + (1) 3/8"x11/4" STEEL FLITCH PLATES - F	M12x14 - F
003	(2)3/4"x11/8" - F	3/5"x11/8" - F	(3)3/4"x11/8" - F	(2)2x12 + (1) 3/8"x11/4" STEEL FLITCH PLATES - F	M12x14 - F
004	(2)3/4"x11 1/4" - D	3/5"x11 1/4" - D	(2)3/4"x11/8" - D	(2)2x10 + (1) 3/8"x11/4" STEEL FLITCH PLATES - D	M8x10 - D

- 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
- REFER TO DETAIL D/S/D2.0 FOR TYPICAL FLITCH BEAM CONNECTIONS
- REFER TO DETAIL E/S/D2.0 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"x10,120" NAILS @ 8" O.C.
- FOR FLUSH BOTTOM BEAMS PROVIDE 2X STACKED PLATES ATOP BEAM AS REQ'D. FASTEN PLATES IN SUCCESSION W/ (2) 3"x10,120" NAILS @ 8" O.C.

LEGEND

-  INTERIOR BEARING WALL
-  BEARING WALL ABOVE
-  BEAM / HEADER
-  INDICATES SHEAR WALL & EXTENT
-  EXTENT OF OVERFRAMING

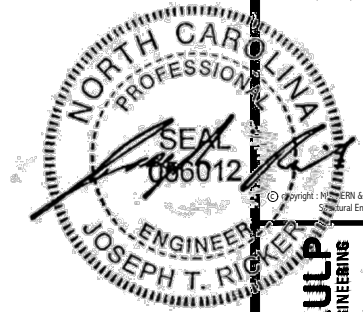
11. METAL HANGER

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

 INDICATES HOLD-DOWN OR STRAP.
REFER TO SCHEDULE.

REFER TO 50.0 FOR
TYPICAL STRUCTURAL NOTES
& SCHEDULES

seal: 8/14/25



MULHERN+KULP
RESIDENTIAL STRUCTURAL ENGINEERING
300 Riverside Ave., Building 4 - Ardmore, PA 19002
P 215-696-3081 • info@mulhernkulp.com
NC LICENSE #C-3825

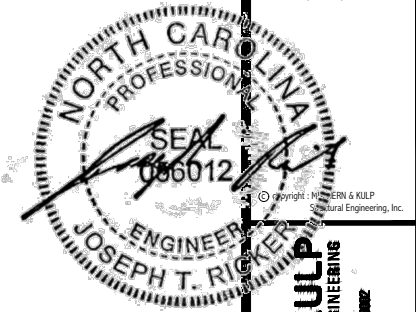
M&K project number:
126-24045

project mgr: JTR
drawn by: GTK
issue date: 07-29-25

REVISIONS:	
date:	initial:
2025-08-14	
CANTILEVERED PREPLACE	KFG

FLOOR FRAMING PLANS
CAMPBELL RIDGE
LOT 22 - COOPER 3 - 7
RALEIGH, NC

sheet:
\$2.0



MULHERN+KULP
RESIDENTIAL STRUCTURAL ENGINEERING



K project number:
126-24045

Project mgr: JTR
 Drawn by: GTK
 Issue date: 07-29-25

VISIONS:	
name:	initial:
DOB: 08-14	
WEAVER FIREPLACE	KFG

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

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.
REFER TO SCHEDULE.

REFER TO SO.0 FOR
TYPICAL STRUCTURAL NOTES
& SCHEDULES

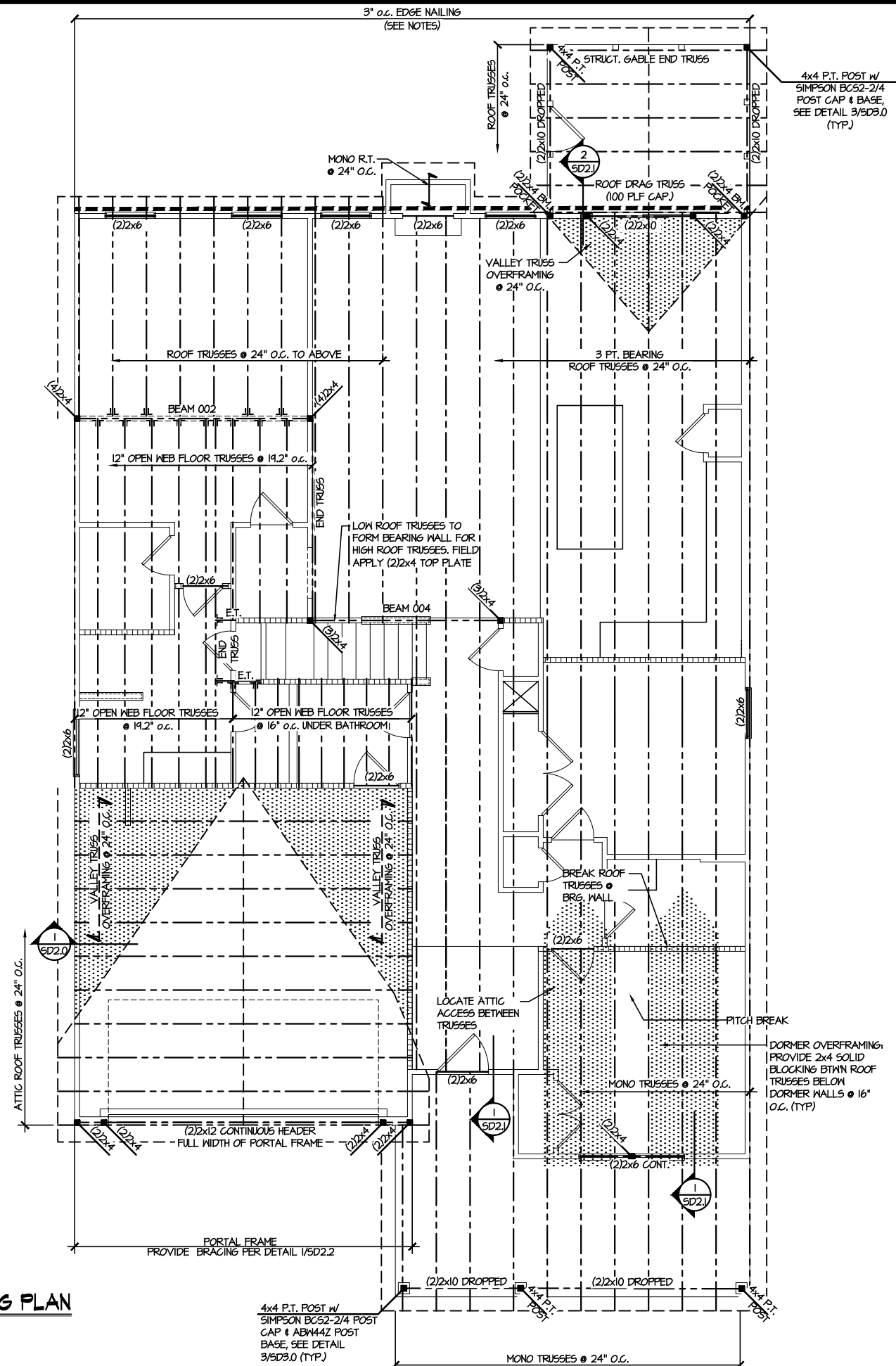
ENGINEERED BEAM MATERIAL SCHEDULE

BEAM NUMBER	LVL OPTION	PSL OPTION	LSL OPTION	FLITCH OPTION	STEEL OPTION
001	(2)3/4"x11'6" - F	3/5"x11'6" - F	(3)1/2"x11'6" - F	(2)2x12 + (1) 3/4"x1/4" STEEL FLITCH PLATES - F	W12x14 - F
002	(3)3/4"x11'6" - F	5/8"x11'6" - F	(4)1/2"x11'6" - F	(2)2x12 + (1) 3/4"x1/4" STEEL FLITCH PLATES - F	W12x14 - F
003	(2)3/4"x11'6" - F	3/5"x11'6" - F	(3)1/2"x11'6" - F	(2)2x12 + (1) 3/4"x1/4" STEEL FLITCH PLATES - F	W12x14 - F
004	(2)1/2"x11'4" - D	3/5"x11'4" - D	(2)1/2"x11'6" - D	(2)2x10 + (1) 3/4"x1/4" STEEL FLITCH PLATES - D	M10x10 - D

- BEAM NOTATION:
 - "F" INDICATES FLUSH BEAM
 - "TF" INDICATES FLUSH TOP BEAM
 - "FB" INDICATES FLUSH BOTTOM BEAM
 - "D" INDICATES DROPPED BEAM
 - "H" 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"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.

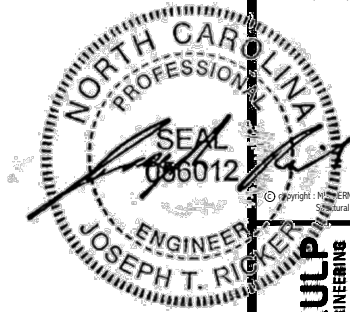
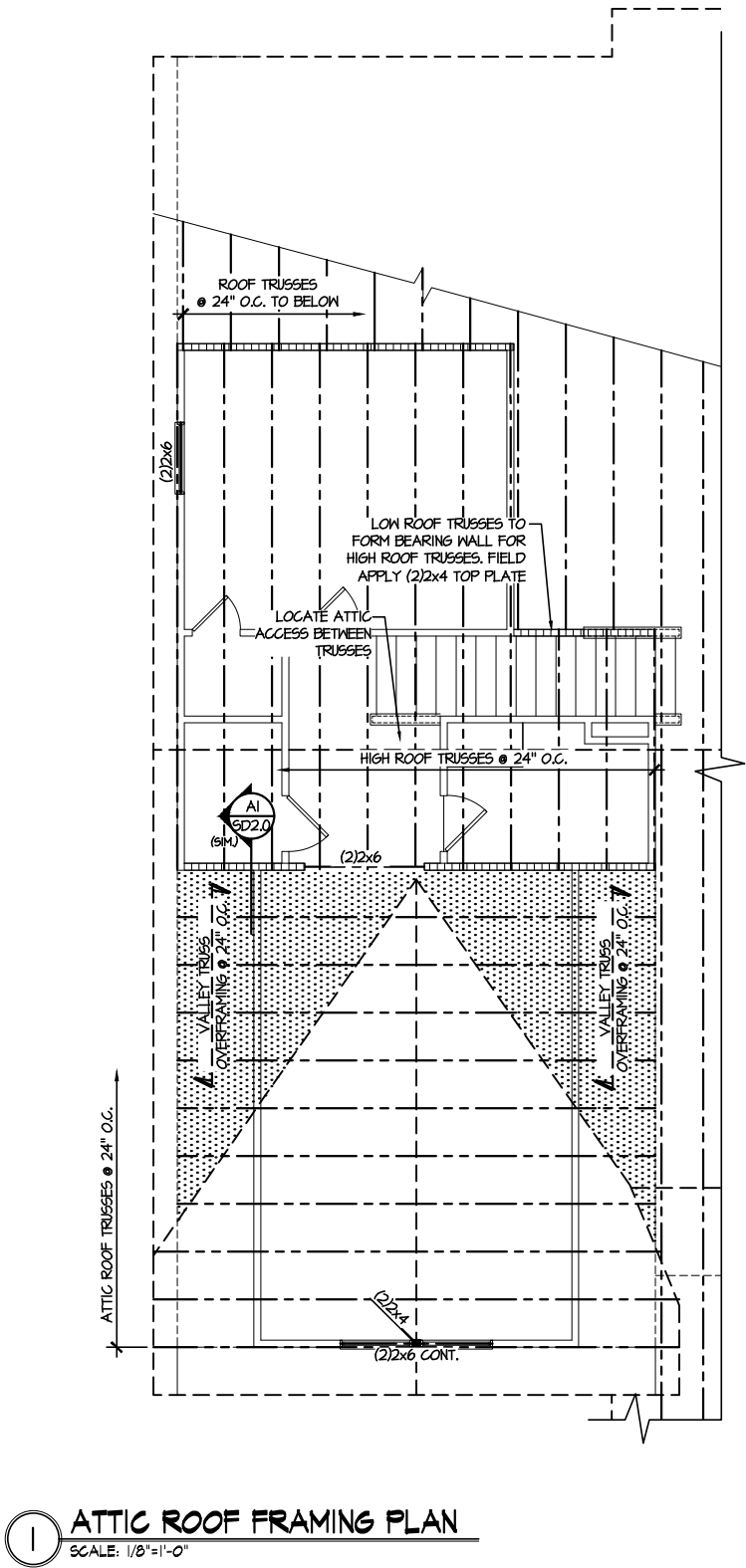
LOOKING FOR A HOME? CALL TODAY!
CAMPBELL RIDGE
 LOT 22 - COOPER 3 - 7
 RALEIGH, NC

et:
S3.0



2ND FLOOR / LOW ROOF FRAMING PLAN

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



MULHERN+KULP
RESIDENTIAL STRUCTURAL ENGINEERING
300 Duneside Ave., Building 4 - Asheville, NC 28802
P: 252-592-5000 - mulhern+kulp.com
NC LICENSE #C-3825

M&K project number:
126-24045

project mgr: JTR
drawn by: GTK
issue date: 07-29-25

REVISIONS:	
date:	initial:
2025-08-14 CAMPBELL RIDGE REPLACES	KFG



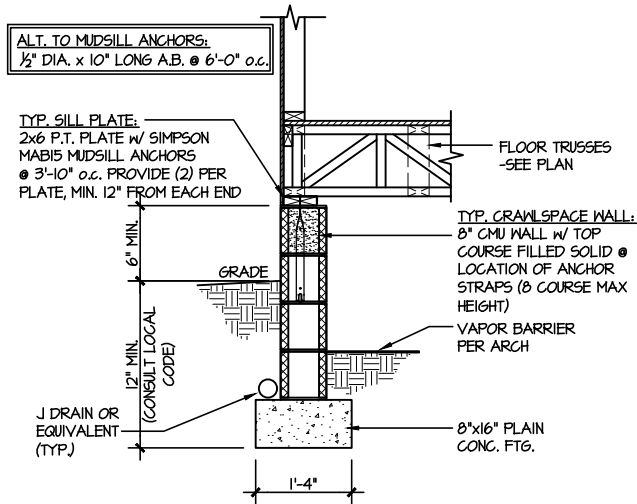
ROOF FRAMING PLANS
CAMPBELL RIDGE
LOT 22 - COOPER 3 - 7
RALEIGH, NC

sheet:
S4.0

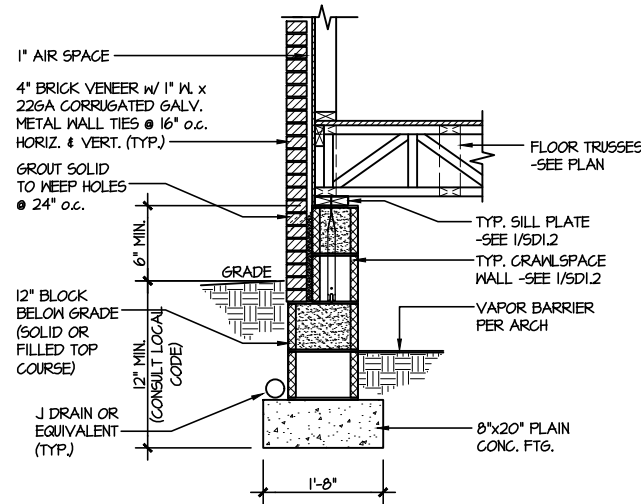
LEGEND

- INTERIOR BEARING WALL
- BEARING WALL ABOVE
- BEAM / HEADER
- INDICATES SHEAR WALL & EXTENT
- EXTENT OF OVERFRAMING
- 1L METAL HANGER
 - INDICATES POST ABOVE. PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.
 - INDICATES HOLD-DOWN OR STRAP. REFER TO SCHEDULE.

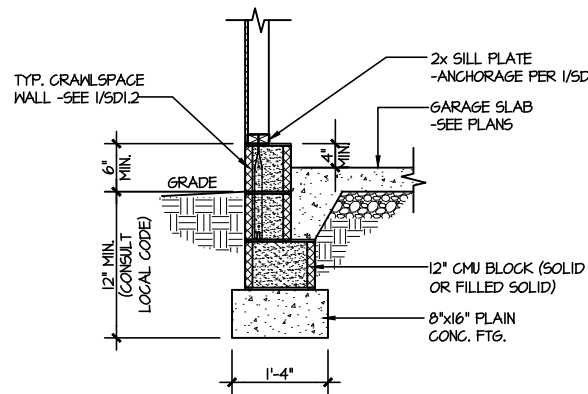
**REFER TO S0.0 FOR
TYPICAL STRUCTURAL NOTES
& SCHEDULES**



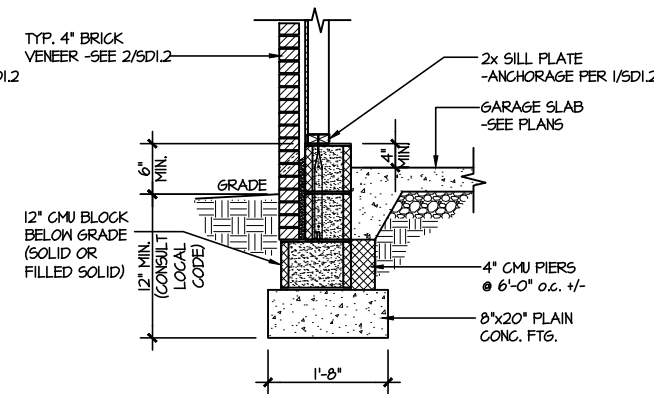
1 TYPICAL CRAWLSPACE FOUNDATION
SCALE: 3/8"=1'-0"



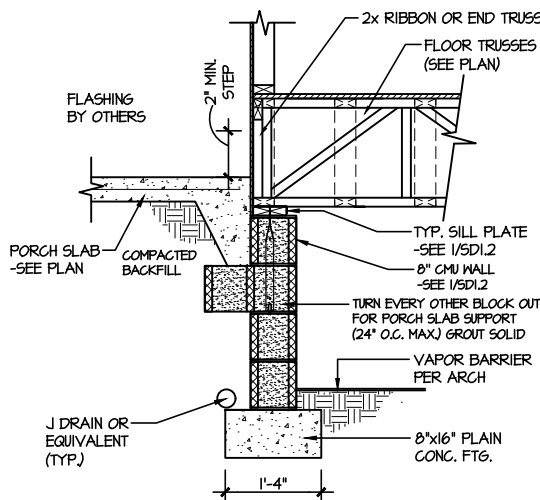
2 TYPICAL CRAWLSPACE FOUNDATION
SCALE: 3/8"=1'-0" W/ BRICK VENEER



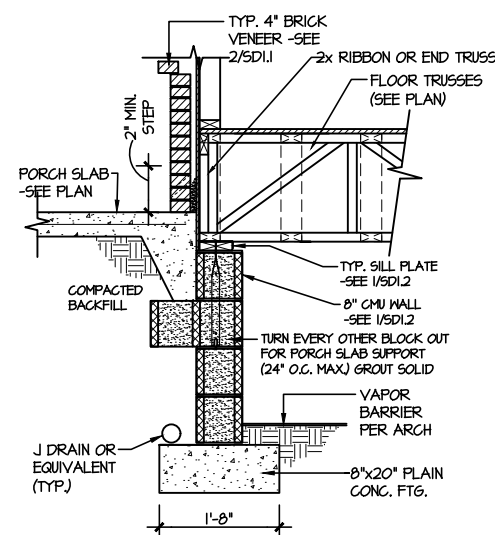
3 TYPICAL GARAGE FOUNDATION
SCALE: 3/8"=1'-0"



4 TYPICAL GARAGE FOUNDATION
SCALE: 3/8"=1'-0" W/ BRICK VENEER

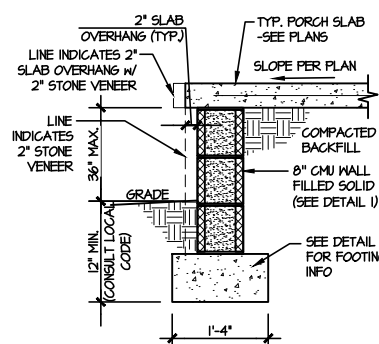


5 TYPICAL CRAWLSPACE FOUNDATION @ PORCH/PATIO SLAB
SCALE: 3/8"=1'-0"
(REFER TO DETAIL 12 FOR WOOD PORCH OPTION)

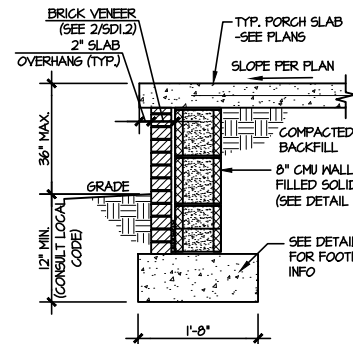


6 TYPICAL CRAWLSPACE FOUNDATION @ PORCH/PATIO SLAB
SCALE: 3/8"=1'-0" W/ BRICK VENEER

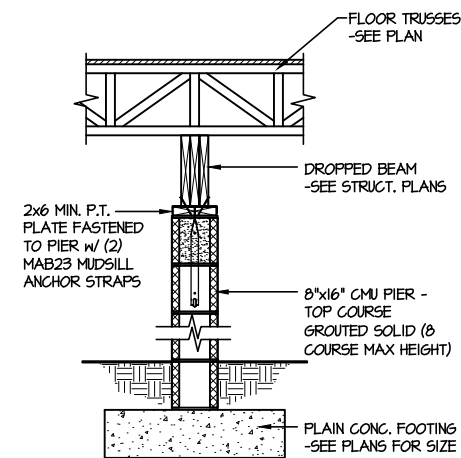
PLAIN CONC. FOOTINGS AS DIMENSIONED & SHOWN ARE MINIMUM SIZES REQUIRED & HAVE BEEN ENGINEERED. ADDITION OF CONTINUOUS REBAR OR LARGER FOOTINGS MAY BE PROVIDED AT THE DISCRETION OF THE BUILDER.



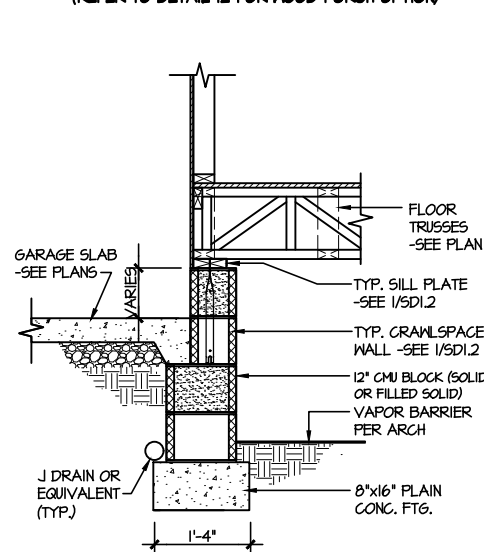
7A TYP. FOOTING @ PORCH SLAB
SCALE: 3/8"=1'-0"



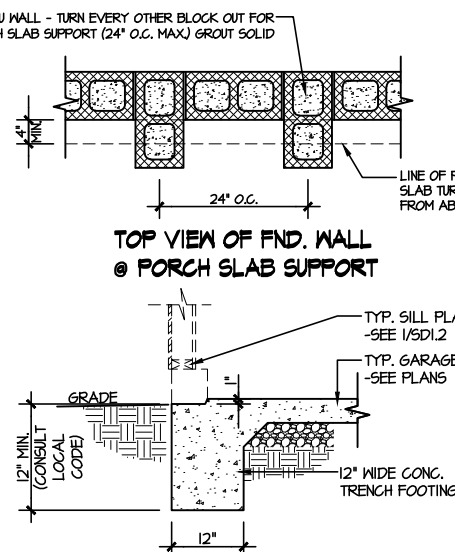
7B TYP. FOOTING @ PORCH SLAB
SCALE: 3/8"=1'-0" W/ BRICK VENEER



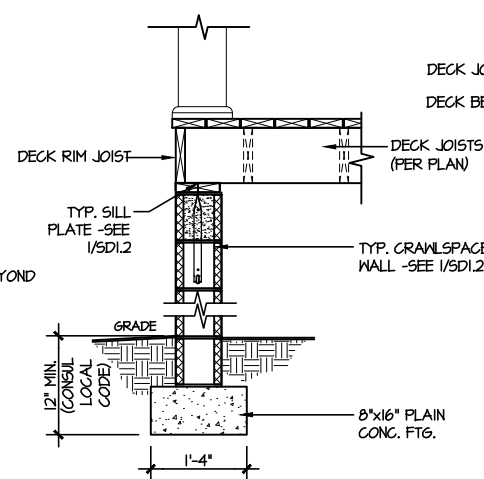
8 TYPICAL CRAWLSPACE FND. @ INTERIOR PIER
SCALE: 3/8"=1'-0"



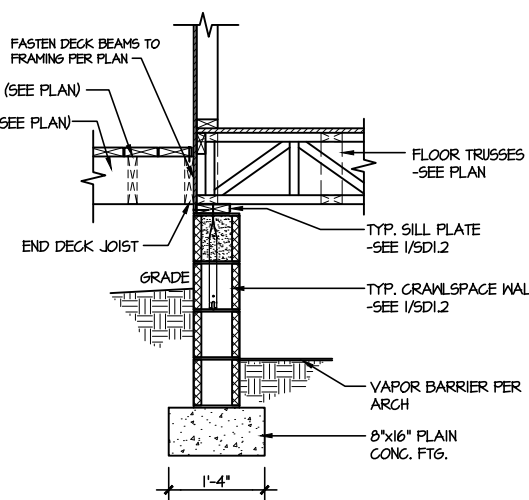
9 TYPICAL CRAWLSPACE FOUNDATION @ GARAGE
SCALE: 3/8"=1'-0"



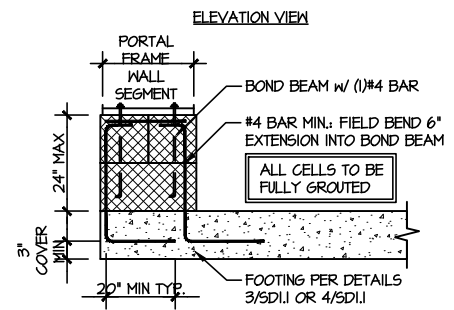
10 TYPICAL SLAB ON GRADE GARAGE ENTRY @ PERIMETER FOOTING
SCALE: 3/8"=1'-0"



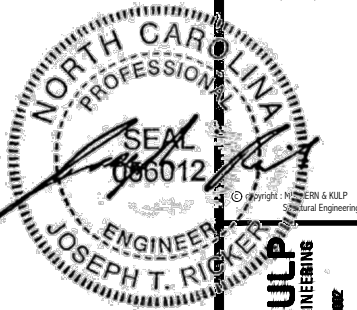
11 TYPICAL CRAWLSPACE FOUNDATION @ WOOD PORCH/DECK PERIMETER
SCALE: 3/8"=1'-0"



12 TYPICAL CRAWLSPACE FOUNDATION @ WOOD PORCH/DECK
SCALE: 3/8"=1'-0"



A GARAGE PORTAL FRAME STEM WALL REINFORCEMENT
SCALE: 3/8"=1'-0"



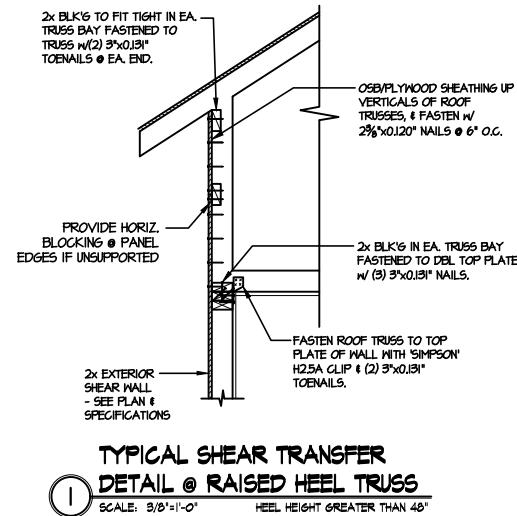
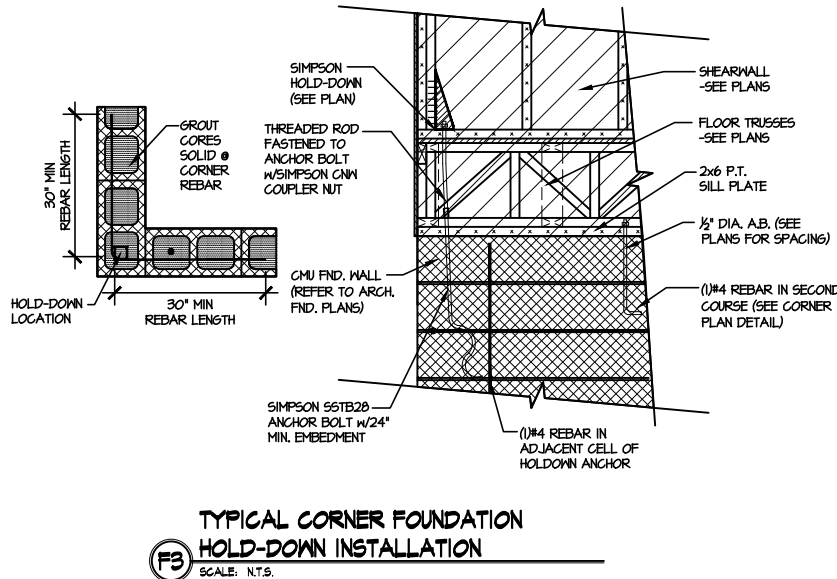
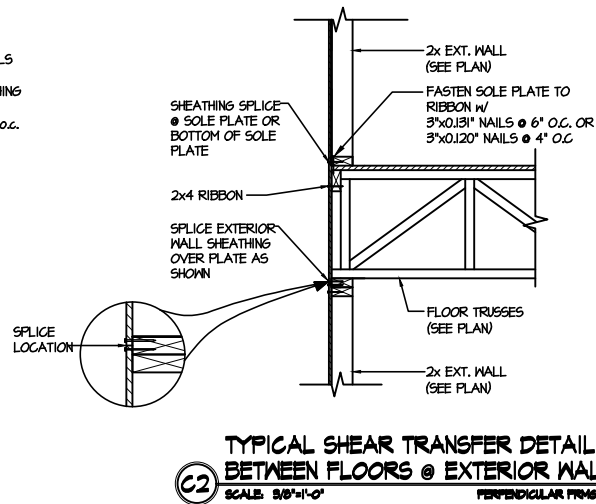
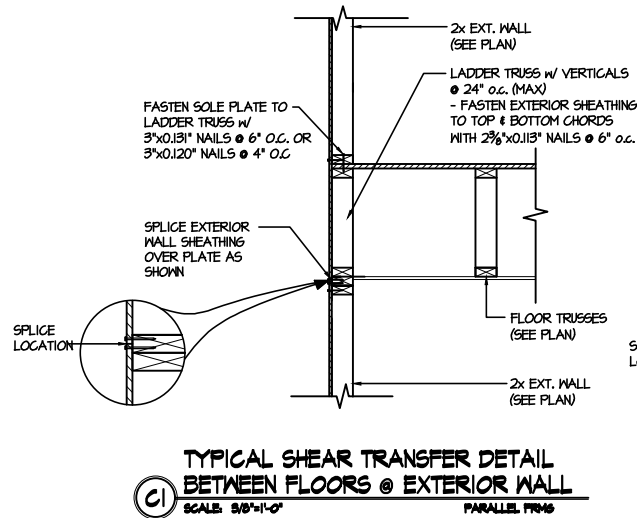
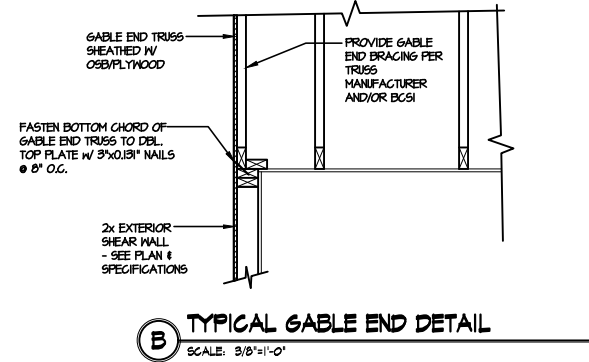
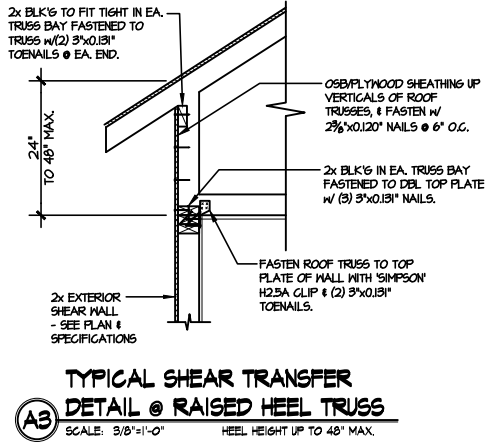
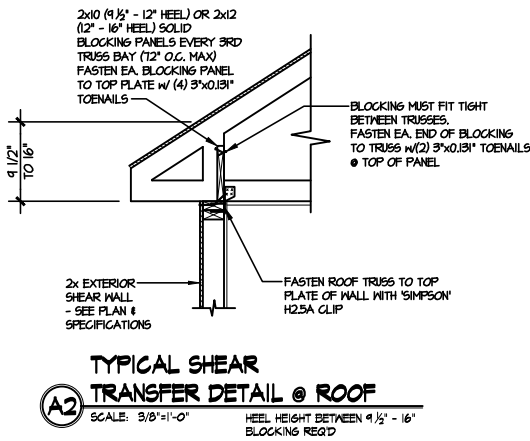
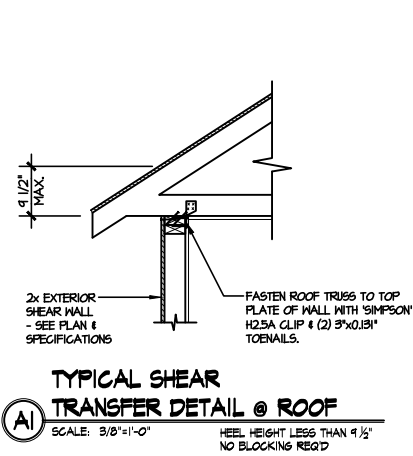
MULHERN+KULP
RESIDENTIAL STRUCTURAL ENGINEERING
300 Dismalside Ave. Building 4 - Raleigh, NC 27607
P: 252-698-2000 • mulhern+kulp.com
NC LICENSE #C-3825

M&K project number:
126-24045
project mgr: JTR
drawn by: GTK
issue date: 07-29-25
REVISIONS:
date: initial:
2025-08-14 CAPT/LEB/HF/PLA NFG

DRB HOMES

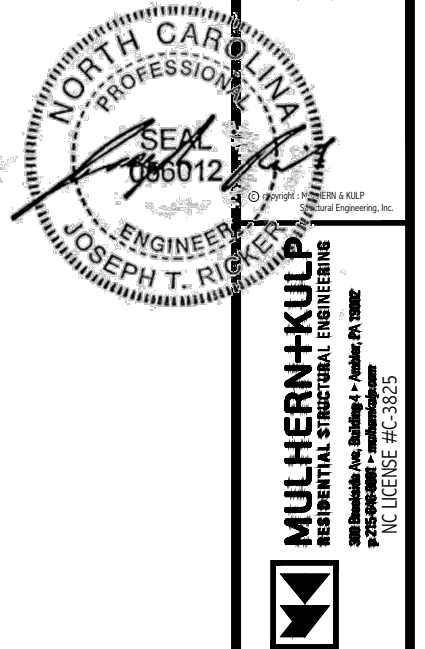
FOUNDATION DETAILS
CAMPBELL RIDGE
LOT 22 - COOPER 3 - 7
RALEIGH, NC

sheet:
SD1.2



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.



8/14/25

MULHERN+KULP
RESIDENTIAL STRUCTURAL ENGINEERING
300 Dismal Ave. Building 4 - Raleigh, NC 27602
P: 252-592-2000 - mulhern+kulp.com
NC LICENSE #C-3825

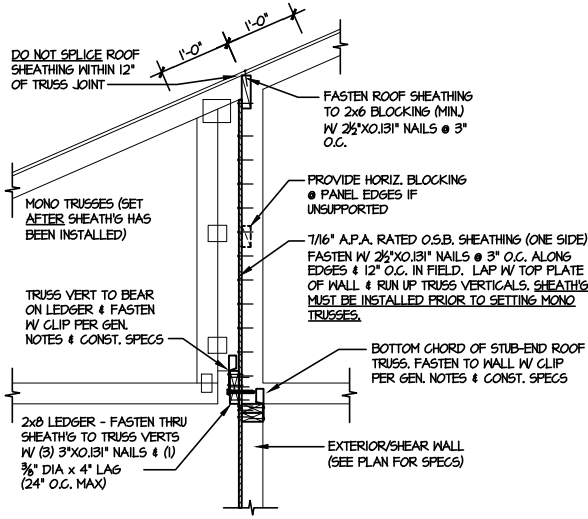
M&K project number: 126-24045
project mgr: JTR
drawn by: GTK
issue date: 07-29-25

REVISIONS:
date: initial:
2025-08-14
CAMPBELL RIDGE REPLACEMENT
NFG

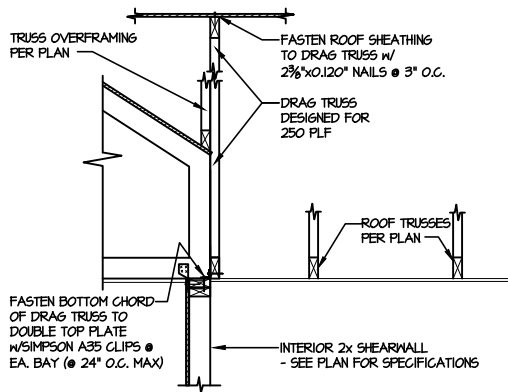
DRB
HOMES

FRAMING DETAILS
CAMPBELL RIDGE
LOT 22 - COOPER 3 - 7
RALEIGH, NC

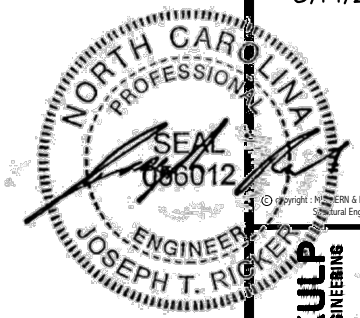
sheet:
SD2.0



1 SHEAR TRANSFER DETAIL @
BREAK IN TRUSSES OVER SHEAR WALL
SCALE: 3/4"=1'-0" - 2204
3/8"=1'-0" - 1b17



2 SHEAR TRANSFER DETAIL
AT INTERIOR SHEARWALL BELOW
SCALE: 3/4"=1'-0"



seal: 8/14/25

MULHERN+KULP
RESIDENTIAL STRUCTURAL ENGINEERING
300 Duncasville Ave., Building 4 - Asheville, NC 28802
P: 252-698-2001 • mulhern+kulp.com
NC LICENSE #C-3825

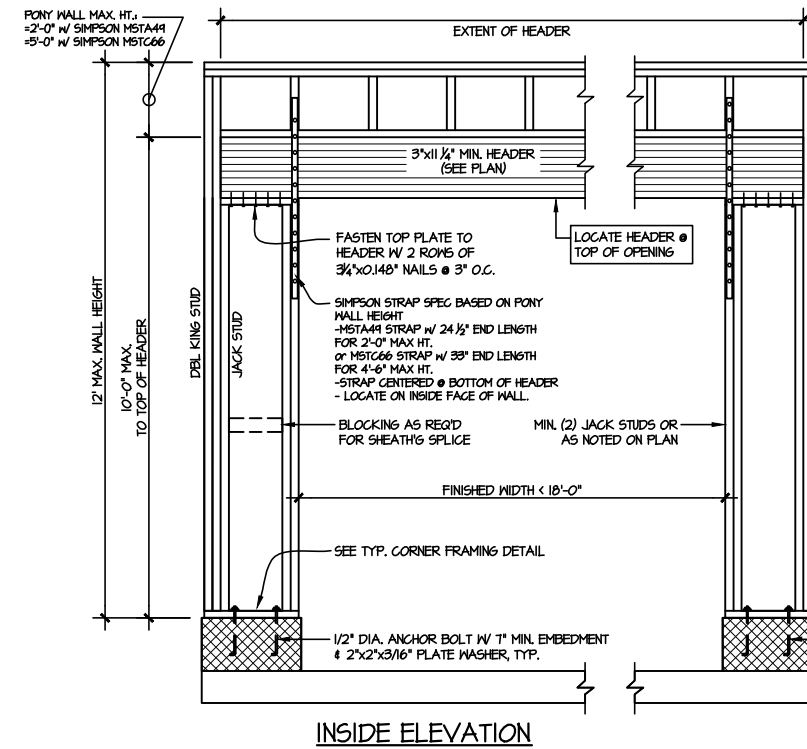
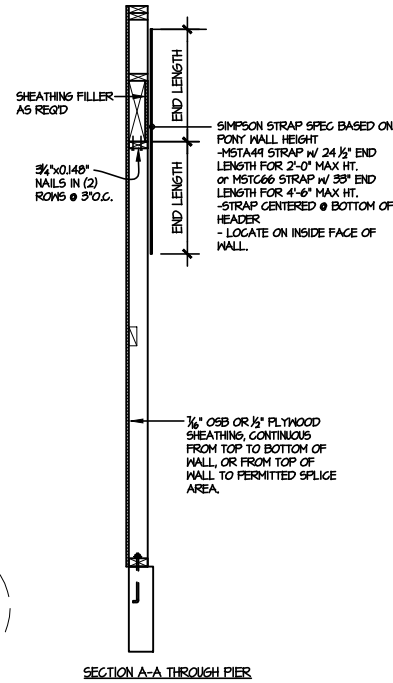
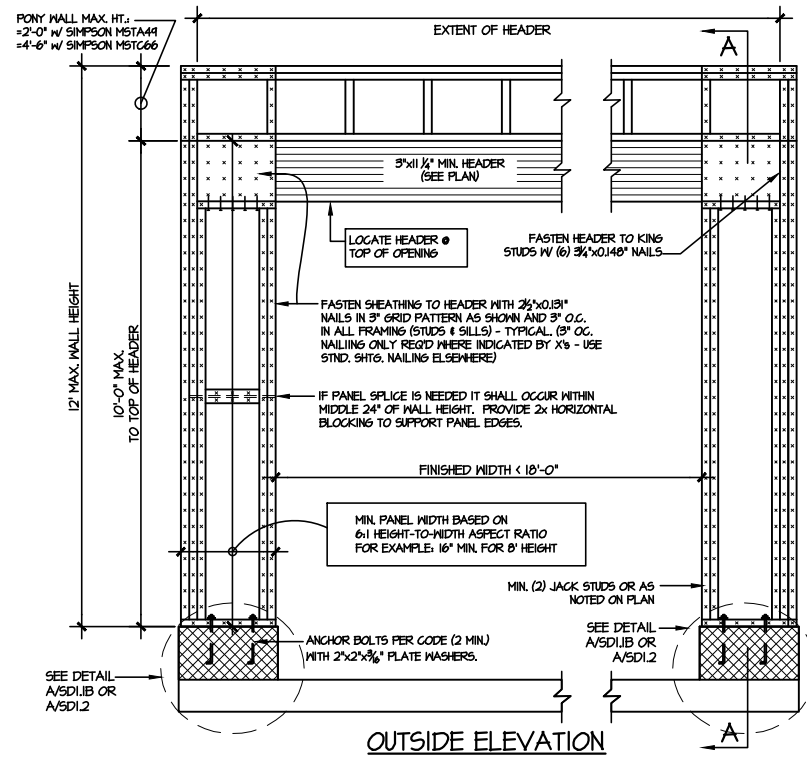
M&K project number:
126-24045
project mgr: JTR
drawn by: GTK
issue date: 07-29-25

REVISIONS:	
date:	initial:
2025-08-14 CAMPBELL RIDGE REPLACES	KFG

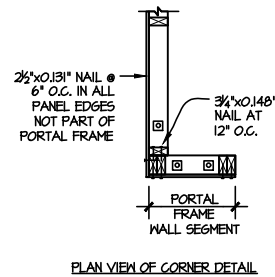


FRAMING DETAILS
CAMPBELL RIDGE
LOT 22 - COOPER 3 - 7
RALEIGH, NC

sheet:
SD2.1

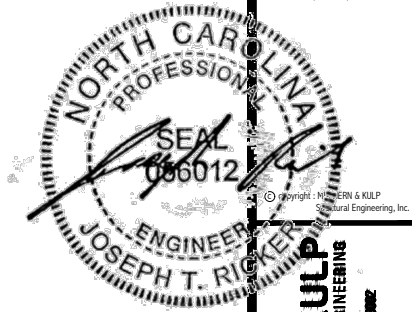


NOTE: ALL SHEATHABLE AREAS OF EXTERIOR WALL SHALL BE FULLY SHEATHED WITH 1/2" PLYWOOD OR 1/8" OSB



ALTERNATIVE TO 1/2" DIA. ANCHOR BOLT:
1/2" DIA. THREADED ROD EPOXY SET W/ 4 1/2" EMBED. (MIN) UTILIZING HILTI HY200 EPOXY ANCHORING SYSTEM (OR EQUAL)

TWO SIDED GARAGE PORTAL FRAME BRACING
ELEVATION ON CMU STEM
SCALE: N.T.S.



M&K project number: 126-24045

project mgr: JTR

drawn by: GTK

issue date: 07-29-25

REVISIONS:

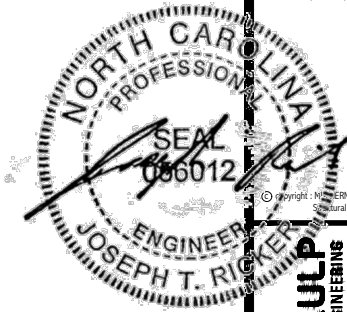
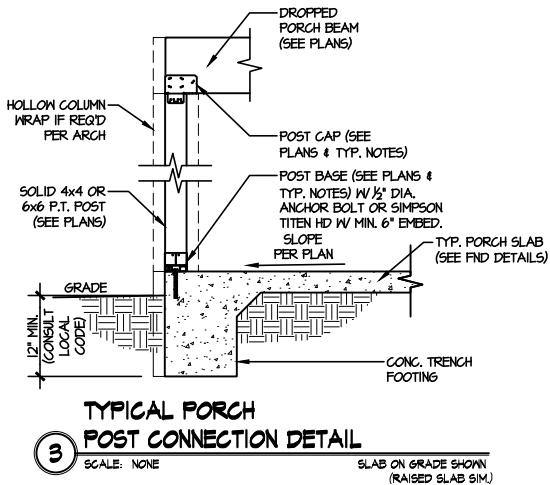
date: initial:

2025-08-14 CAPTIVE/REV REPLACE KFG

DRB HOMES

FRAMING DETAILS
CAMPBELL RIDGE
LOT 22 - COOPER 3 - 7
RALEIGH, NC

sheet: SD2.2





MULHERN+KULP
RESIDENTIAL STRUCTURAL ENGINEERING
300 Duneside Ave., Building 4 - Asheville, NC 28802
P 252-698-5081 • mulhern+kulp.com
NC LICENSE #C-3825

M&K project number:
126-24045

project mgr: JTR
drawn by: GTK
issue date: 07-29-25

REVISIONS:	
date:	initial:
2025-08-14 CAMPBELL RIDGE REPLACES	KFG



FRAMING DETAILS

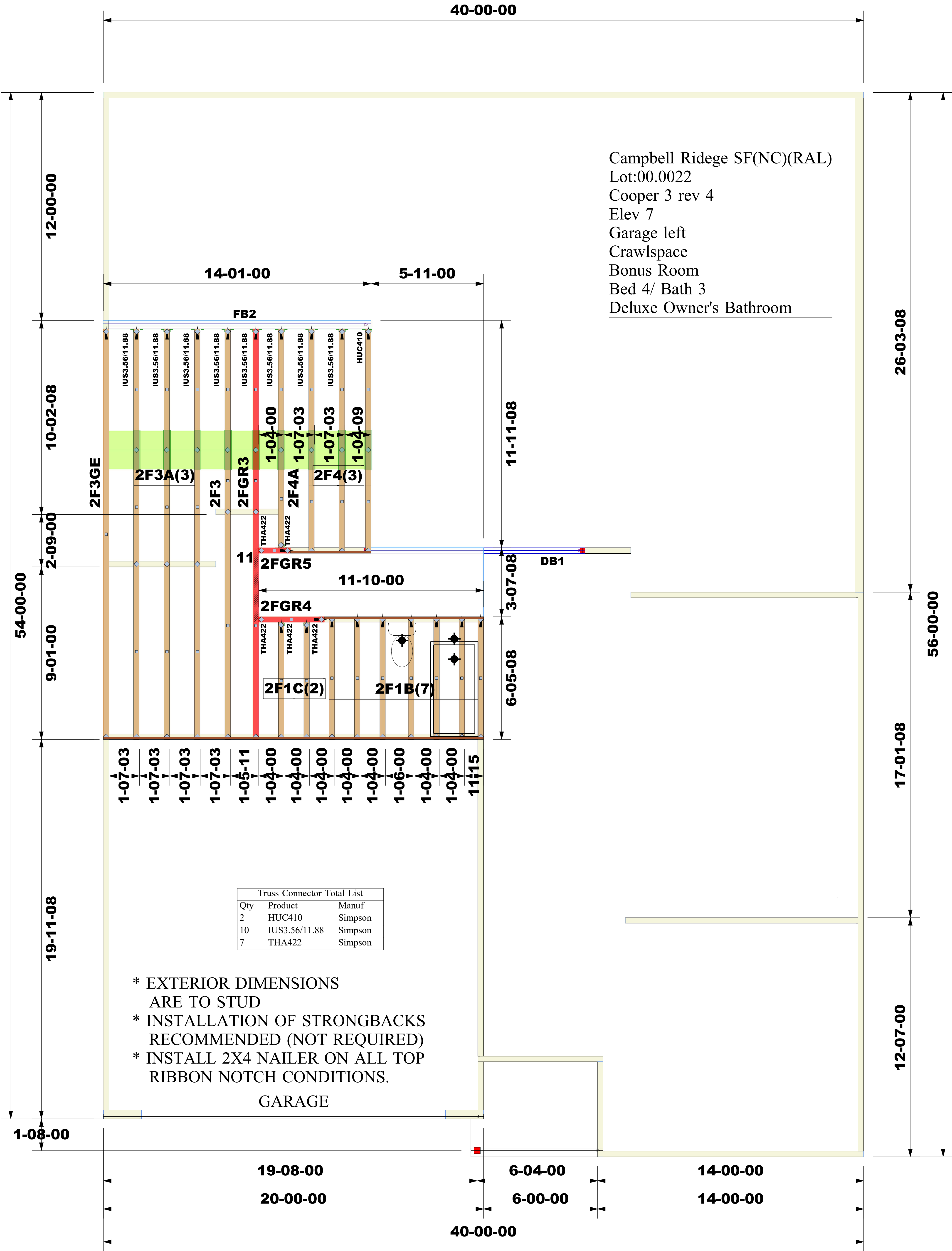
CAMPBELL RIDGE

LOT 22 - COOPER 3 - 7

RALEIGH, NC

sheet:

SD3.0



Campbell Ridge SF(NC)(RAL)
Lot:00.0022
Cooper 3 rev 4
Elev 7
Garage left
Crawlspace
Bonus Room
Bed 4/ Bath 3
Deluxe Owner's Bathroom

Truss Connector Total List		
Qty	Product	Manuf
2	HUC410	Simpson
10	IUS3.56/11.88	Simpson
7	THA422	Simpson

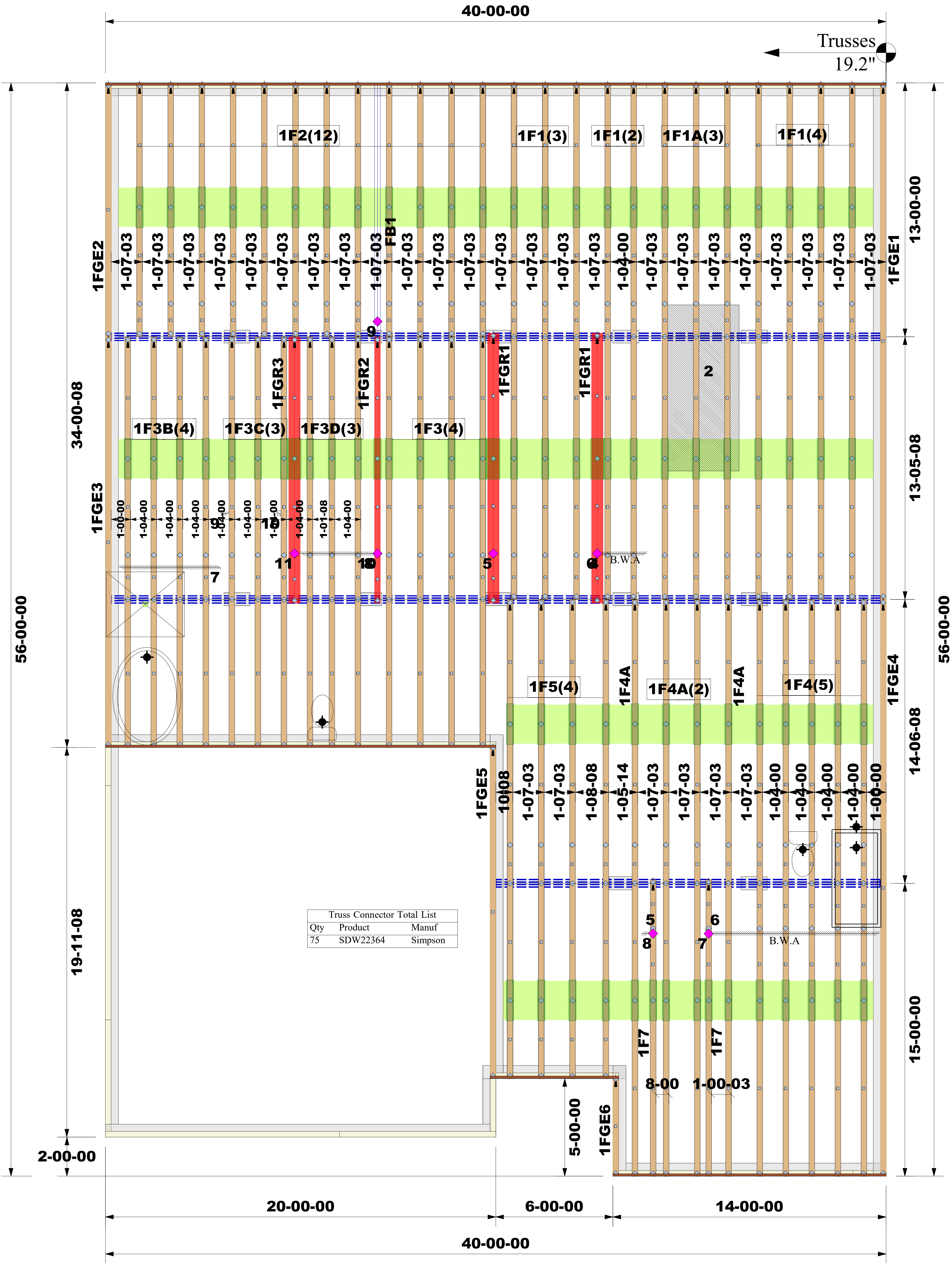
- * EXTERIOR DIMENSIONS ARE TO STUD
- * INSTALLATION OF STRONGBACKS RECOMMENDED (NOT REQUIRED)
- * INSTALL 2X4 NAILER ON ALL TOP RIBBON NOTCH CONDITIONS.

GARAGE

Products				
Net Qty	Plies	Product	Length	PlotID
3	3	1 3/4" x 11 7/8" (2.0E 3100) LVL	16'-00"-00	FB2
2	2	1 3/4" x 11 7/8" (2.0E 3100) LVL	14'-00"-00	FB1
2	2	1 3/4" x 11 7/8" (2.0E 3100) LVL	12'-00"-00	DB1

OPTIONAL BONUS ROOM
W/ BEDROOM FRAMING

ELEV. 7



- * EXTERIOR DIMENSIONS ARE TO STUD
- * INSTALLATION OF STRONGBACKS RECOMMENDED (NOT REQUIRED)
- * INSTALL 2X4 NAILER ON ALL TOP RIBBON NOTCH CONDITIONS.

1ST FLOOR FRAMING
CRAWL SPACE

Job #:

2507-2448

Designer:

Rajkumar yadav

Sales Rep:

Robbie Zarobinski

WARNING:
CONVENTIONAL FRAMING, ERECTION AND/OR PERMANENT BRACING IS NOT THE RESPONSIBILITY OF THE TRUSS DESIGNER, PLATE MANUFACTURER, OR THE TRUSS MANUFACTURER. PERSONS ERECTING TRUSSES ARE CAUTIONED TO SEEK PROFESSIONAL ADVICE REGARDING THE ERECTION BRACING WHICH IS ALWAYS REQUIRED TO PREVENT TOPPLING AND DOMINOING DURING ERECTION, AND PERMANENT BRACING WHICH MAY BE REQUIRED IN SPECIFIC APPLICATIONS. SEE "BRACING WOOD TRUSSES COMMENTARY AND RECOMMENDATIONS" (BCSI 1) FOR FURTHER INFORMATION.

TRUSSES SHALL BE INSTALLED IN A STRAIGHT AND PLUMB POSITION WHERE NO SHEATHING IS APPLIED DIRECTLY TO TOP AND/OR BOTTOM CHORDS, THEY SHALL BE BRACED AS SPECIFIED ON THE ENGINEERED DESIGN. TRUSSES SHALL BE HANDLED WITH REASONABLE CARE DURING ERECTION TO PREVENT DAMAGE OR PERSONAL INJURY.

NOTE:
IT IS THE RESPONSIBILITY OF THE BUILDING DESIGNER OR ARCHITECT TO PROVIDE AN APPROPRIATE CONNECTION FOR TRUSSES TO SUPPORTING STRUCTURE PER REACTIONS SHOWN ON TRUSS ENGINEERING. SPECIAL CONSIDERATIONS FOR MECHANICAL EQUIPMENT AND/OR PLUMBING (AND THEIR CONNECTIONS) IN TRUSS SPACE MUST BE DIAGRAMMED BY BUILDER ON APPROVED TRUSS LAYOUT PRIOR TO FABRICATION.

THIS COMPANY IS A TRUSS MANUFACTURER WHOSE RESPONSIBILITIES ARE LIMITED TO THOSE DESCRIBED IN WTCA 1-1995 "DESIGN RESPONSIBILITIES". ACCORDINGLY, IT DISCLAIMS ANY RESPONSIBILITIES AND/OR LIABILITY FOR THE CONSTRUCTION DESIGN, DRAWINGS, DOCUMENTS INCLUDING THE INSTALLATION, AND BRACING OF TRUSSES MANUFACTURED BY THIS COMPANY.

Customer: DRB Raleigh

Job Name: Campbell Ridge Lot 00.0022 OWF

Lot #: 00.0022

Model Name: Cooper 3

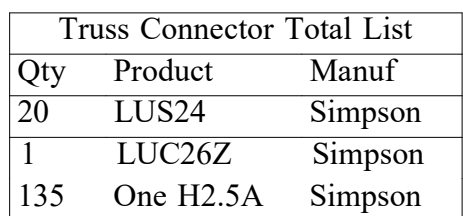


Third-Party Quality Assurance Licensee
TPI Plant W974

Structural, LLC
201 Poplar Avenue
Thurmont, MD 21788
Phone: 301-271-7591



ROOF FRAMING PLAN



Job #:

2507-2450

Designer:
Savvy Nath
Sales Rep:

Robbie Zarobinski

WARNING:

CONVENTIONAL FRAMING, ERECTION AND/OR PERMANENT BRACING IS NOT THE RESPONSIBILITY OF THE TRUSS DESIGNER, PLATE MANUFACTURER, OR THE TRUSS MANUFACTURER. PERSONS ERECTING TRUSSES ARE CAUTIONED TO SEEK PROFESSIONAL ADVICE REGARDING THE ERECTION BRACING WHICH IS ALWAYS REQUIRED TO PREVENT TOPPLING AND DOMINOING DURING ERECTION; AND PERMANENT BRACING WHICH MAY BE REQUIRED IN SPECIFIC APPLICATIONS. SEE "BRACING WOOD TRUSSES COMMENTARY AND RECOMMENDATIONS" (BCSI 1) FOR FURTHER INFORMATION.

TRUSSES SHALL BE INSTALLED IN A STRAIGHT AND PLUMB POSITION WHERE NO SHEATHING IS APPLIED DIRECTLY TO TOP AND/OR BOTTOM CHORDS, THEY SHALL BE BRACED AS SPECIFIED ON THE ENGINEERED DESIGN. TRUSSES SHALL BE HANDLED WITH REASONABLE CARE DURING ERECTION TO PREVENT DAMAGE OR PERSONAL INJURY.

NOTE:

IT IS THE RESPONSIBILITY OF THE BUILDING DESIGNER OR ARCHITECT TO PROVIDE AN APPROPRIATE CONNECTION FOR TRUSSES TO SUPPORTING STRUCTURE PER REACTIONS SHOWN ON TRUSS ENGINEERING. SPECIAL CONSIDERATIONS FOR MECHANICAL EQUIPMENT AND/OR PLUMBING (AND THEIR CONNECTIONS) IN TRUSS SPACE MUST BE DIAGRAMMED BY BUILDER ON APPROVED TRUSS LAYOUT PRIOR TO FABRICATION.

THIS COMPANY IS A TRUSS MANUFACTURER WHOSE RESPONSIBILITIES ARE LIMITED TO THOSE DESCRIBED IN WTCA 1-1995 "DESIGN RESPONSIBILITIES". ACCORDINGLY, IT DISCLAIMS ANY RESPONSIBILITIES AND/OR LIABILITY FOR THE CONSTRUCTION DESIGN, DRAWINGS, DOCUMENTS INCLUDING THE INSTALLATION, AND BRACING OF TRUSSES MANUFACTURED BY THIS COMPANY.

Customer: DRB Raleigh

Job Name: Campbell Ridge SF Lot 22 ROOF

Lot #: Lot 00.0022

Model Name: Cooper III Rev. 4



Structural, LLC
201 Poplar Avenue
Thurmont, MD 21788
Phone: 301-271-7591

