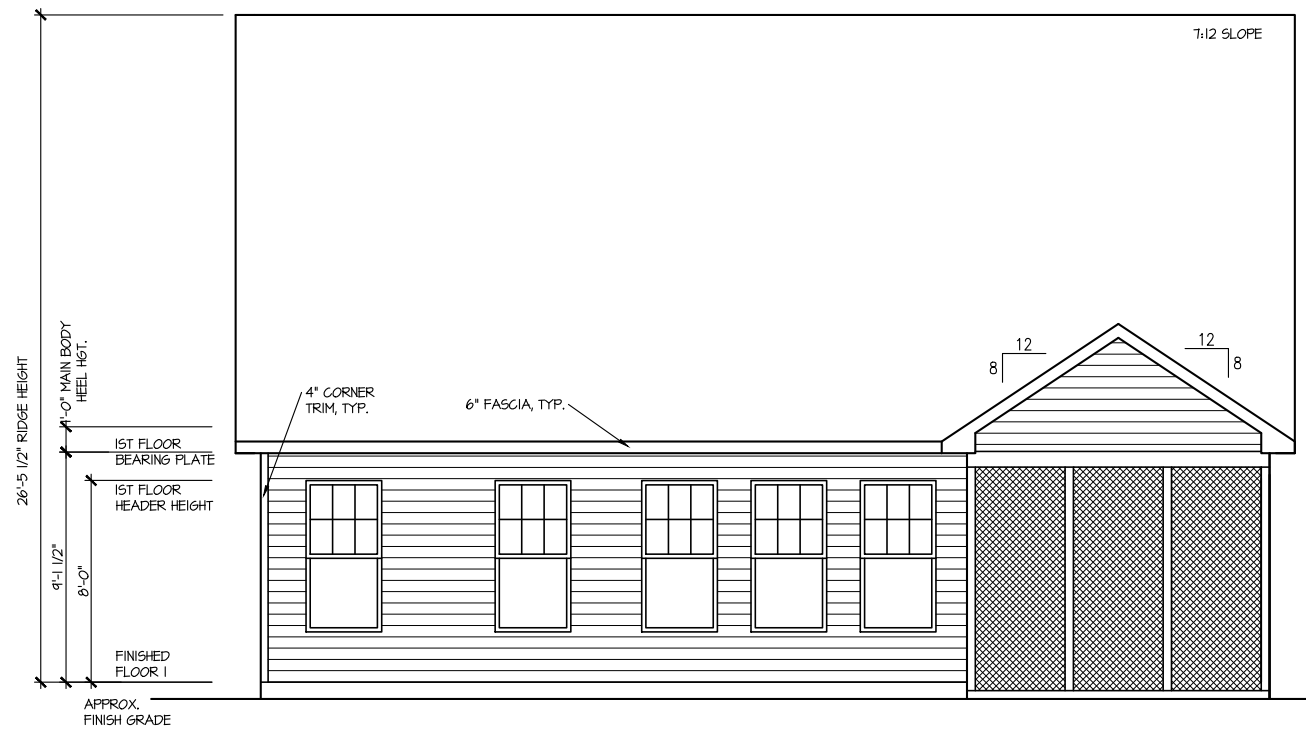


FRONT ELEVATION 9

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



REAR ELEVATION 9

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

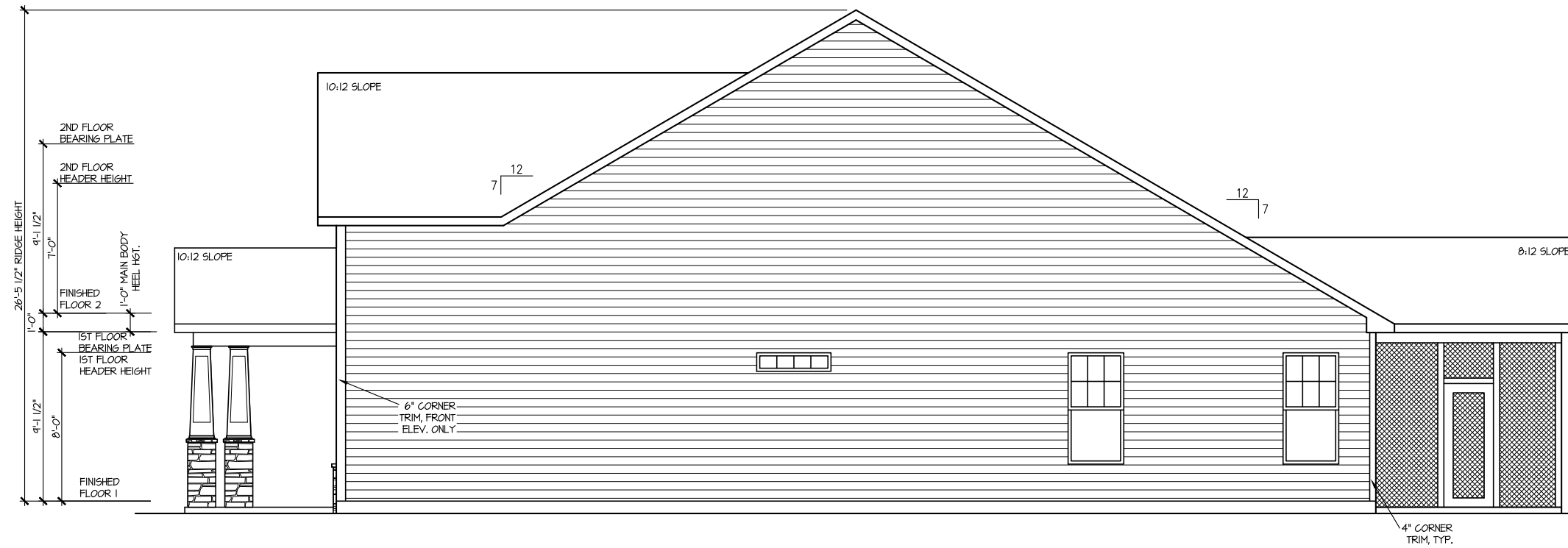
MASTER PLAN INFORMATION	
REVISION	DATE
4-RALE	2-24-2022
UPDATED DATE	4-20-2022

DRAWN BY: ITS
 DATE: 07/29/2022
 PLAN NO. 1777



HOUSE NAME: COOPER 3
 DRAWING TITLE: FRONT & REAR ELEVATIONS

SHEET No. A.1



RIGHT ELEVATION 9

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



LEFT ELEVATION 9

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

MASTER PLAN INFORMATION	
REVISION	DATE
4-RALE	2-24-2022
UPDATED DATE	4-20-2022

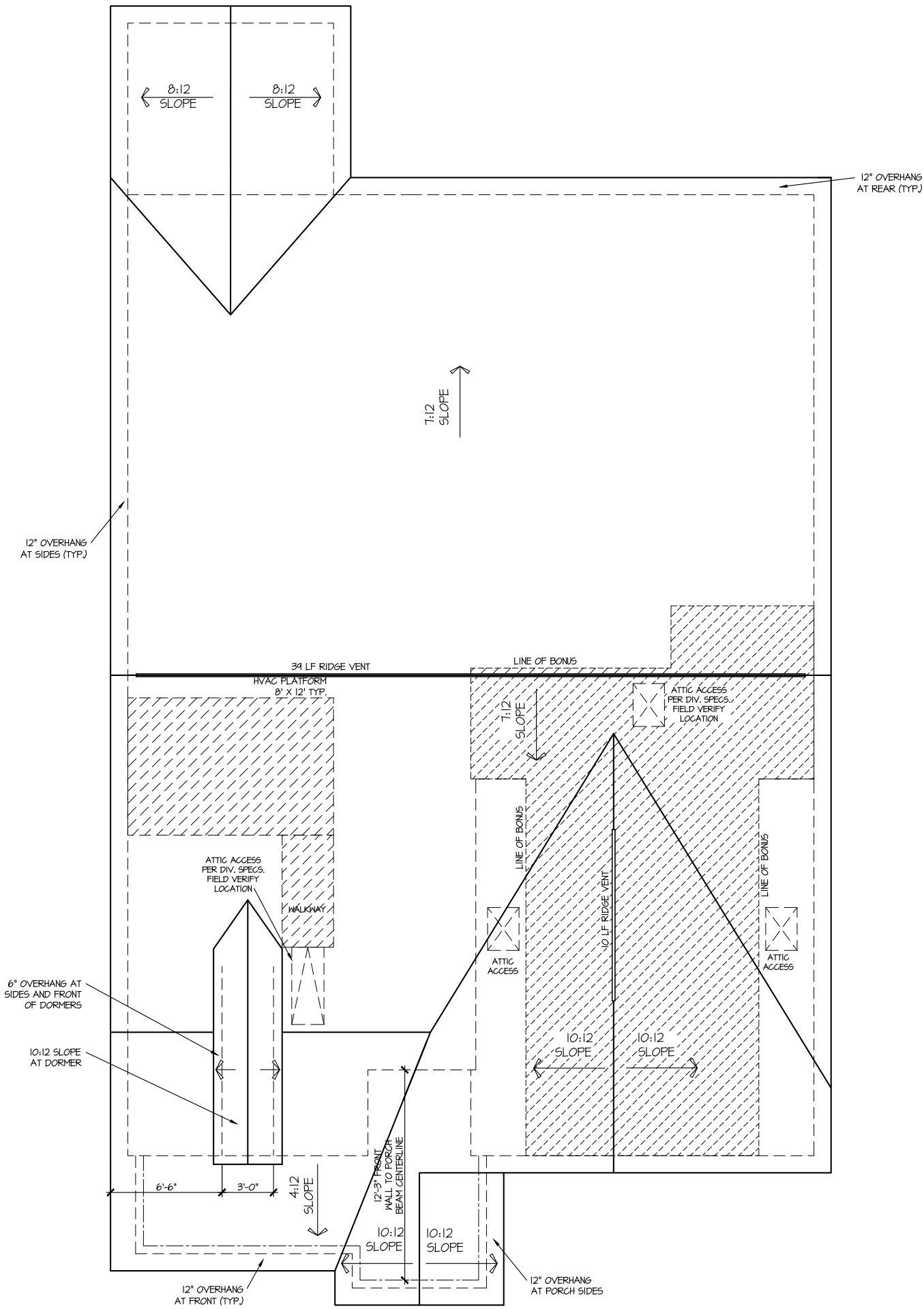
DRAWN BY: ITS
 DATE: 07/29/2022
 PLAN NO. 1777



HOUSE NAME: COOPER 3
 DRAWING TITLE: RIGHT & LEFT ELEVATIONS

SHEET No. A1.2

ROOF VENTILATION CALCULATIONS:
 ROOF AREA = 2466 SQ. FT.
 OVERALL REQUIRED VENTILATION:
 1 TO 150 = 16.44 SQ. FT.
 1 TO 300 = 8.22 SQ. FT.
 50-80% IN TOP THIRD = 4.11 - 6.16 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.
 LOWER VENTING (BOTTOM 2/3 RDS)
 14 LINEAR FEET OF SOFFIT X 5.1 SQ. IN. = 2.43 SQ. FT.
 UPPER VENTING (TOP 1/3 RD)
 44 LINEAR FEET OF RIDGE X 16 SQ. IN. = 6.13 SQ. FT.
 6.13 SQ. FT. BETWEEN 50% - 80%
 (1 TO 300 ALLOWED)
 TOTAL ROOF VENTILATION: 1.81 SQ. FT. > 8.22 SQ. FT. (R01D)



ROOF PLAN ELEV. 9
 SCALE: 1/8" = 1'-0"

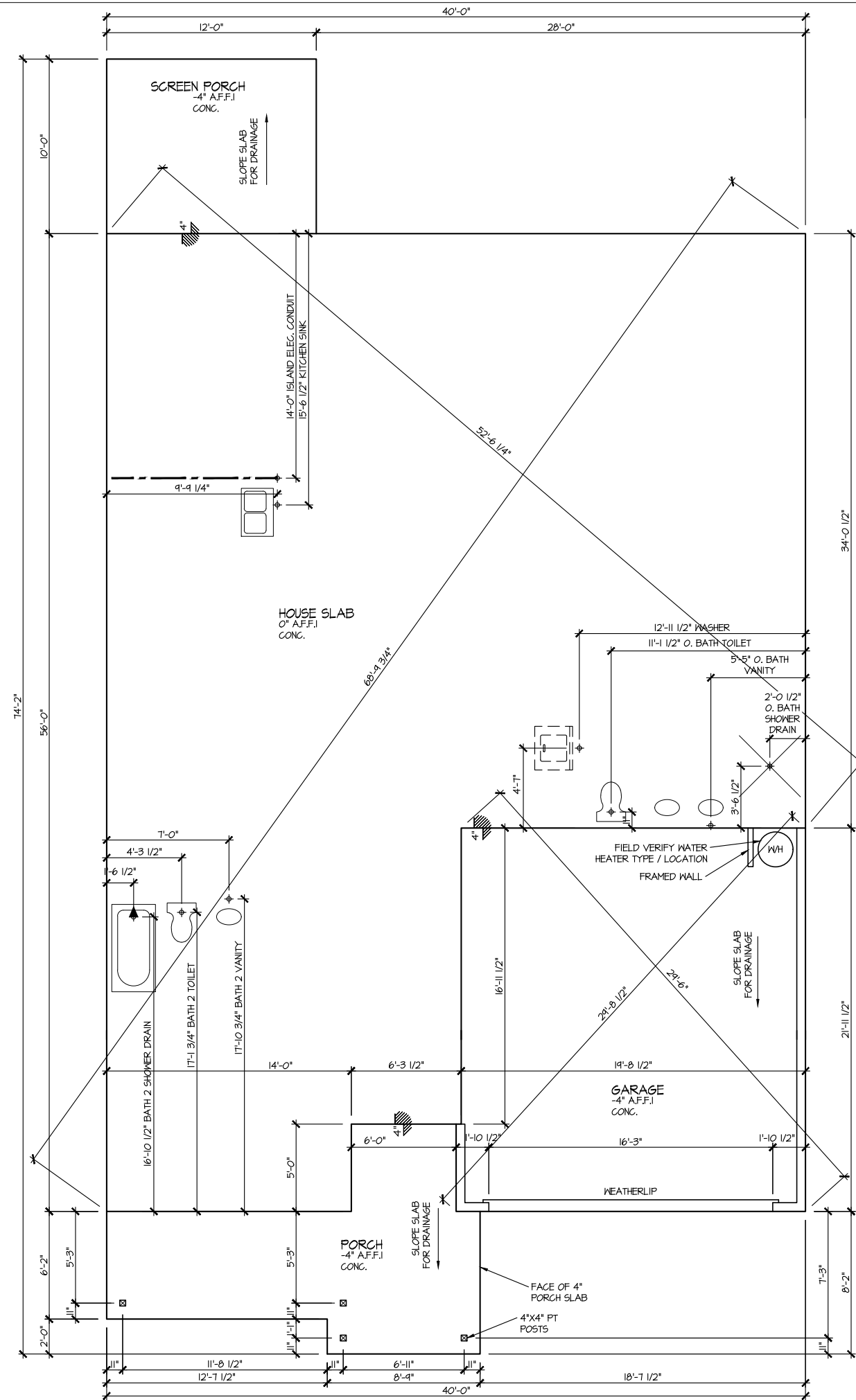
MASTER PLAN INFORMATION	
REVISION	DATE
4-RALE	2-24-2022
UPDATED DATE	4-20-2022

DRAWN BY: ITS
 DATE: 07/29/2022
 PLAN NO. 1777



HOUSE NAME: COOPER 3
 DRAWING TITLE: ROOF PLAN

SHEET No. A13



**ELEVATION 9
SLAB PLAN**
SCALE: 1/8" = 1'-0"

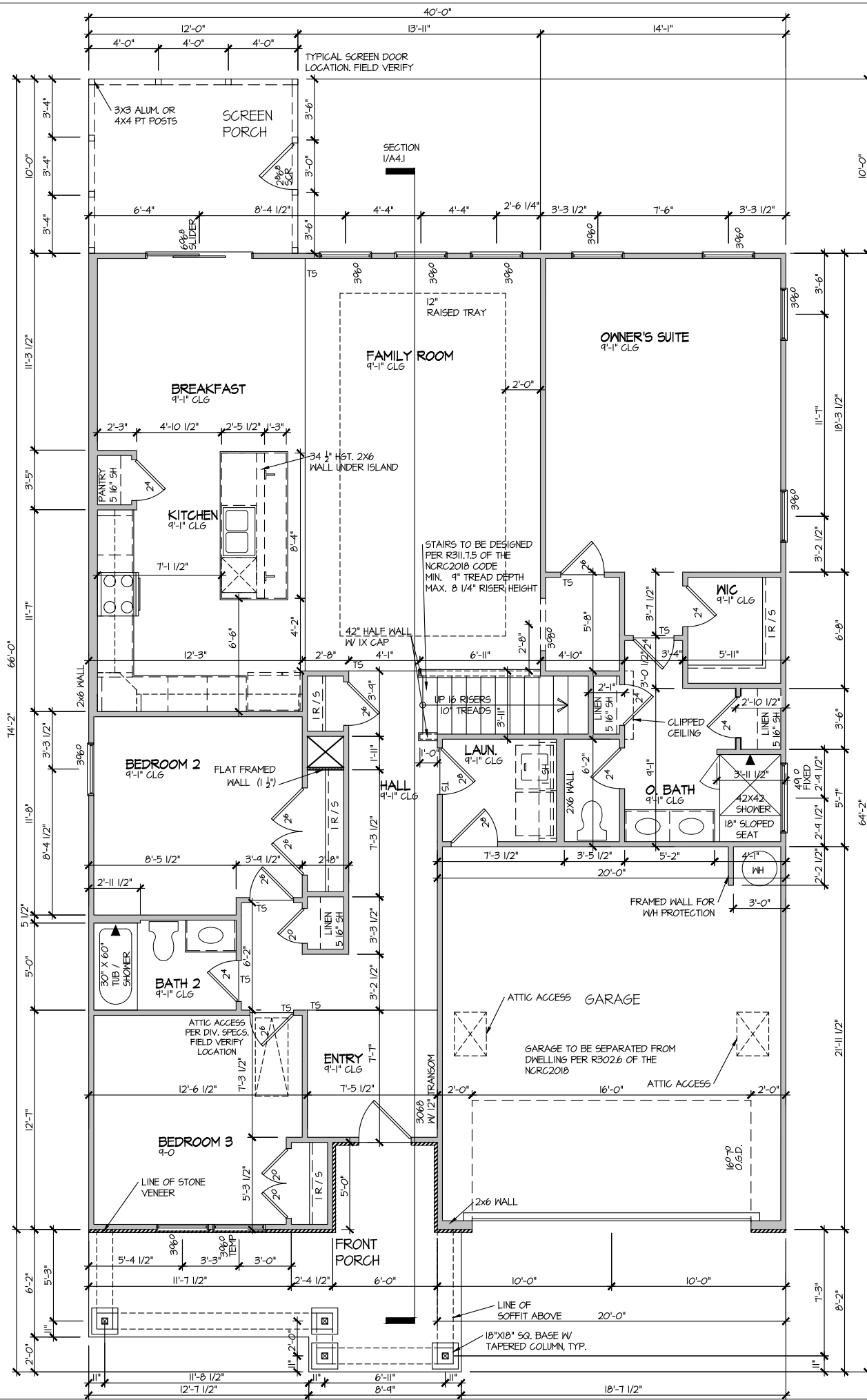
MASTER PLAN INFORMATION	
REVISION	DATE
4-RALE	2-24-2022
UPDATED DATE	4-20-2022

DRAWN BY:	ITS
DATE:	07/29/2022
PLAN NO.	1777



HOUSE NAME:	COOPER 3
DRAWING TITLE	SLAB PLAN

SHEET No.	A2.1
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ELEVATION 9
 FIRST FLOOR PLAN
 SCALE: 1/8" = 1'-0"

MASTER PLAN INFORMATION	
REVISION	DATE
4-RALE	2-24-2022
UPDATED DATE	4-20-2022

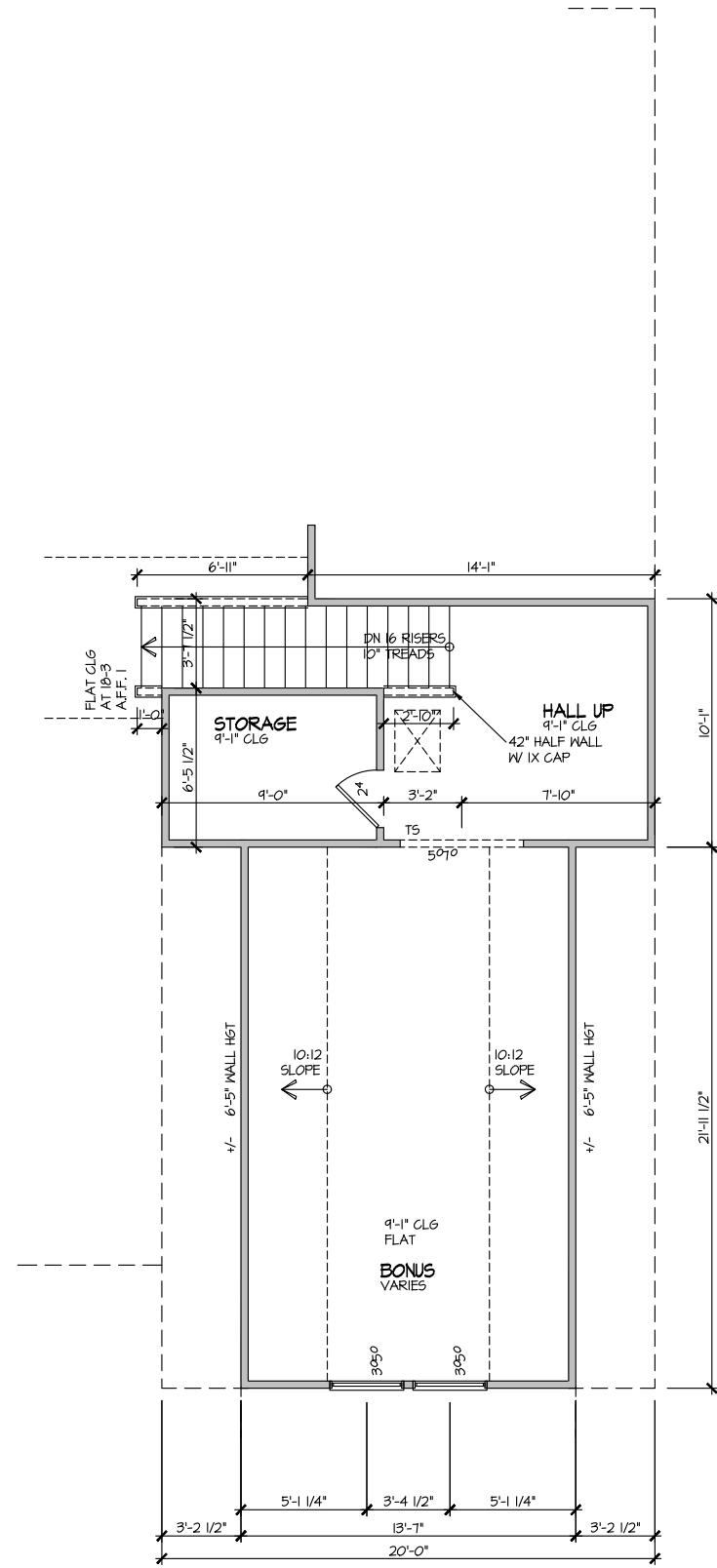
DRAWN BY:	ITS
DATE:	07/29/2022
PLAN NO.	1777



HOUSE NAME:	COOPER 3
DRAWING TITLE	FIRST FLOOR PLAN

SHEET No.	A3.1
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FILE: Lot 00.0121.dwg DATE: 7/29/2022 12:08 PM



**ELEVATION 9
SECOND FLOOR PLAN**

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

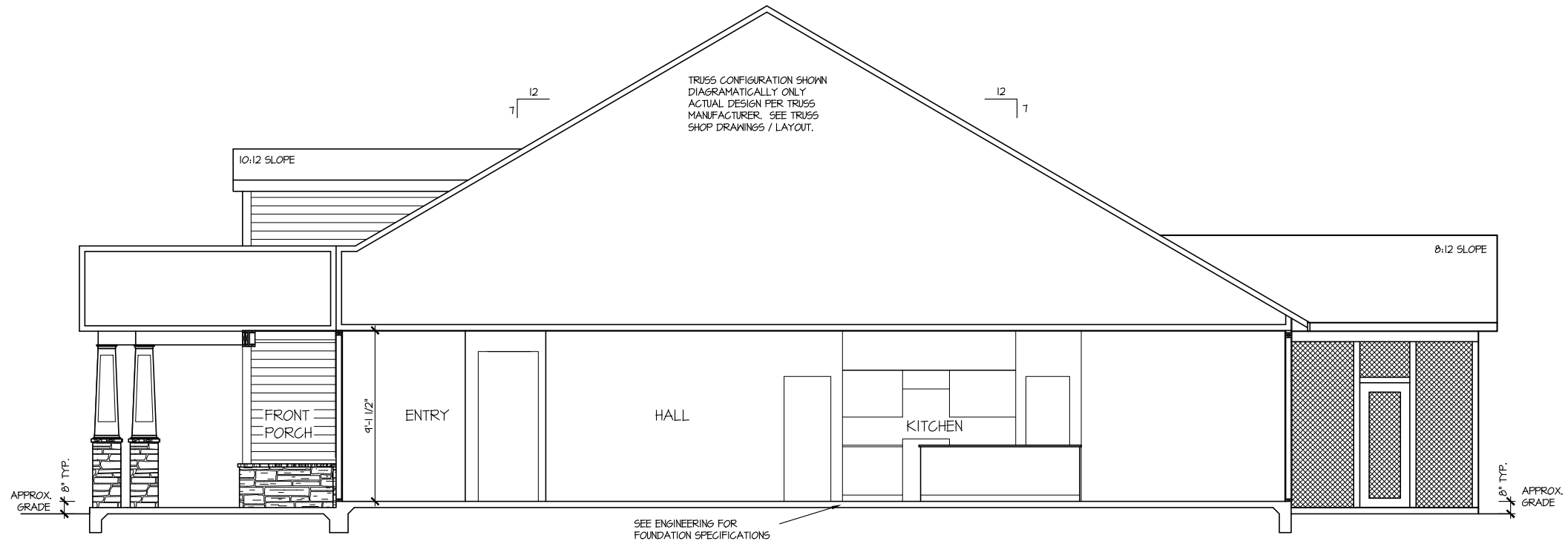
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REVISION	DATE
4-RALE	2-24-2022
UPDATED DATE	4-20-2022

DRAWN BY:	ITS
DATE:	07/29/2022
PLAN NO.	1777



HOUSE NAME:	COOPER 3
DRAWING TITLE	SECOND FLOOR PLAN

SHEET No.
A3.2



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

MASTER PLAN INFORMATION	
REVISION	DATE
4-RALE	2-24-2022
UPDATED DATE	4-20-2022

DRAWN BY:	ITS
DATE:	07/29/2022
PLAN NO.	1777



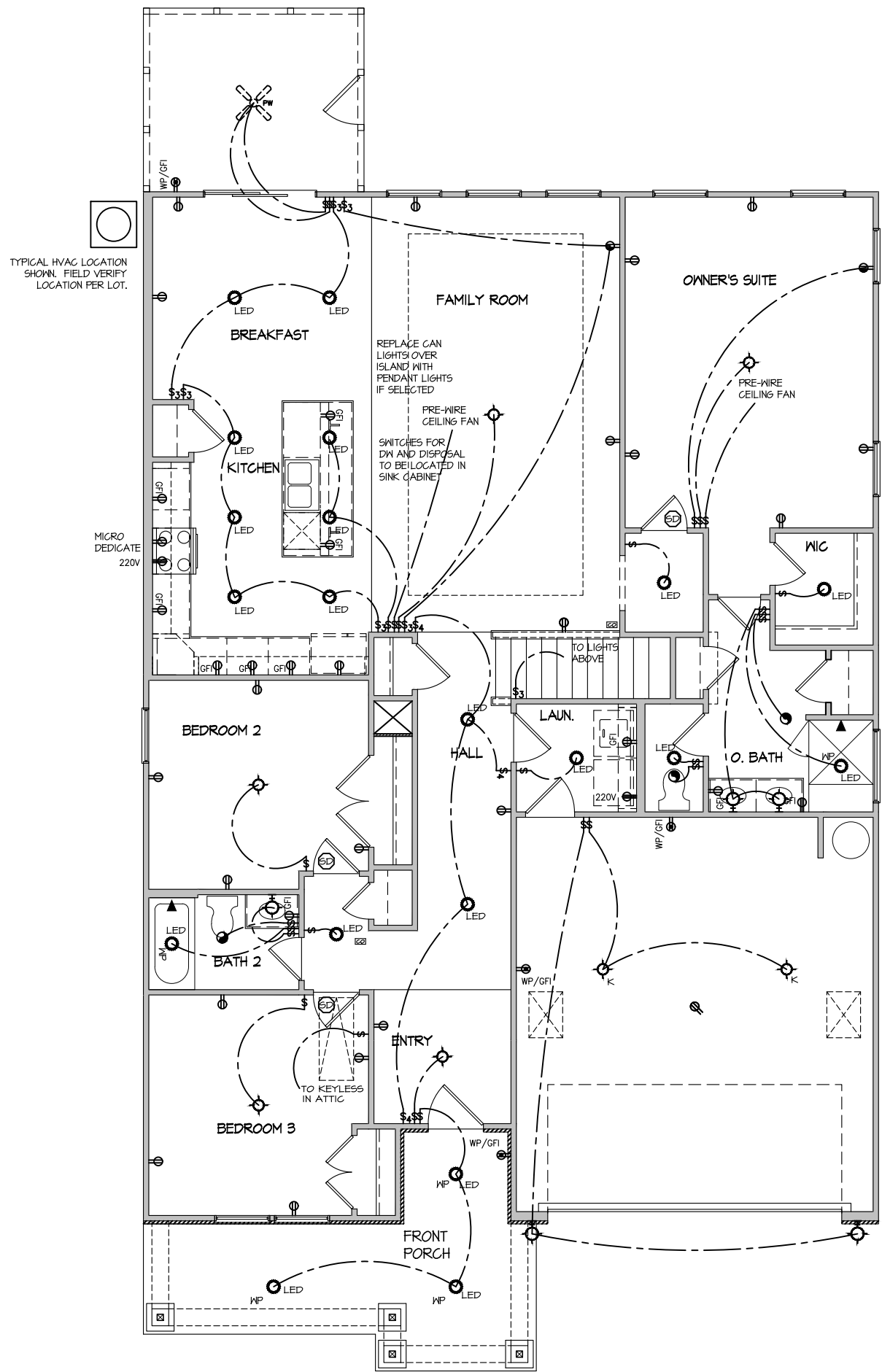
HOUSE NAME:	COOPER 3
DRAWING TITLE	BUILDING SECTION

SHEET No.
 A4.1

ELECTRICAL LEGEND

- ⊕ SINGLE POLE SWITCH
- ⊕₃ THREE WAY SWITCH
- ⊕₄ 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
- ⊕ LIGHT FIXTURE - WALL MOUNTED
- ⊕ LIGHT FIXTURE - CEILING MOUNTED
- ⊕ LED 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. 9
 SCALE: 1/8" = 1'-0"

MASTER PLAN INFORMATION	
REVISION	DATE
4-RALE	2-24-2022
UPDATED DATE	4-20-2022

DRAWN BY:	ITS
DATE:	07/29/2022
PLAN NO.	1777



HOUSE NAME:	COOPER 3
DRAWING TITLE	FIRST FLOOR ELECTRICAL

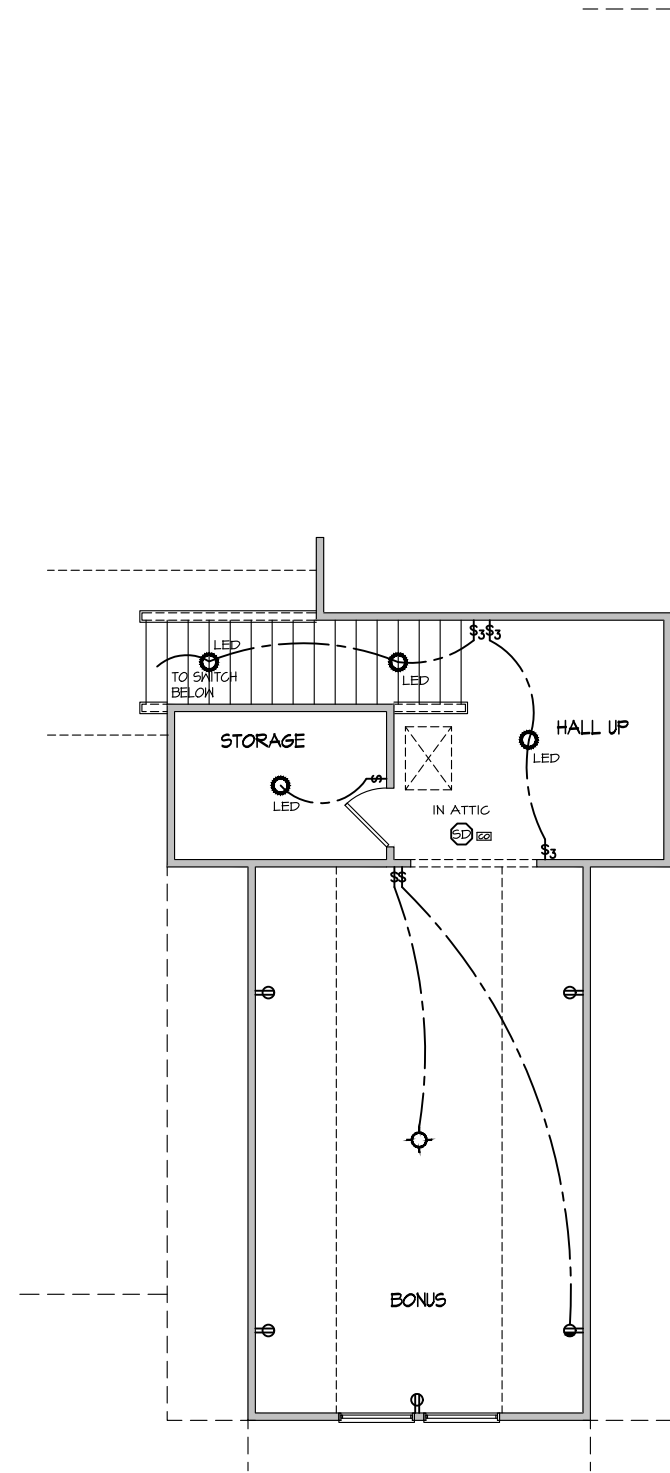
SHEET No.	E.I.
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FILE: Lot 00.0121.dwg DATE: 7/29/2022 12:06 PM

ELECTRICAL LEGEND

- Ⓢ SINGLE POLE SWITCH
- Ⓢ₃ THREE WAY SWITCH
- Ⓢ₄ FOUR WAY SWITCH
- ⓈⓈ DUPLEX AFCI RECEPTACLE
- ⓈⓈⓈ DUPLEX AFCI RECEPTACLE - BOTTOM HALF SWITCHED
- ⓈⓈⓈ DUPLEX AFCI RECEPTACLE - FLOOR MOUNTED
- 220V Ⓢ RECEPTACLE - 220V
- GF Ⓢ DUPLEX AFCI RECEPTACLE - GFI
- WP/GF Ⓢ 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
- Ⓢ LED LIGHT FIXTURE - LED SURFACE MOUNTED
- Ⓢ P FULLCHAIN LAMPHOLDER
- Ⓢ K 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. 9
 SCALE: 1/8" = 1'-0"

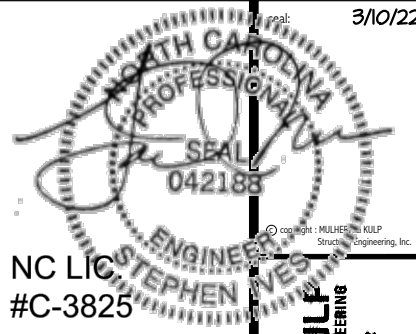
MASTER PLAN INFORMATION		UPDATED DATE
REVISION	DATE	4-20-2022
4-RALE	2-24-2022	

DRAWN BY:	ITS
DATE:	07/29/2022
PLAN NO.	1777



HOUSE NAME:	COOPER 3
DRAWING TITLE	SECOND FLOOR ELECTRICAL

SHEET No.	E1.2
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NC LIC #C-3825

MULHERN+KULP RESIDENTIAL STRUCTURAL ENGINEERING



M&K project number: 126-21030

project mgr: JTR

drawn by: KL

issue date: 08-20-21

REVISIONS:

date: initial:

03/09/22 JTS



STRUCTURAL NOTES COOPER 3 MODEL RALEIGH, NC

sheet:

50.0

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.
FASTEN 2x4/6 SILL PLATES TO FND WITH A MINIMUM OF 2 ANCHORS PER PLATE...

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

GENERAL FRAMING

- ALL TYP. NAIL FASTENER REQUIREMENTS ARE NOTED IN STANDARD CONNECTIONS TABLE OR ON PLANS.
REFER TO FASTENING SCHEDULE TABLE R602.3(I) FOR ALL CONNECTIONS, TYP. UNO.
EXT. & INT. BRG WALLS SHALL BE 2x4 OR 2x6 (AS SHOWN ON PLANS) @ 16" O.C. SFF OR 5YP "STUD" GRADE LUMBER OR BETTER...

FLOOR FRAMING

- I-JOISTS/TRUSSES SHALL BE DESIGNED BY MANUF. TO MEET OR EXCEED L/480 LIVE LOAD DEFLECTION CRITERIA.
METAL HANGERS SHALL BE SPECIFIED BY MANUFACTURER, UNO.
I-JOIST/TRUSS SHOP DWGS. SHALL BE SUBMITTED TO ARCH. & ENG. FOR REVIEW AND APPROVAL PRIOR TO FABRICATION OR DELIVERY.

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.
METAL HANGERS SHALL BE SPECIFIED BY THE MANUFACTURER, UNO.

HOLD-DOWN SCHEDULE

Table with 2 columns: SYMBOL and SPECIFICATION. Includes HD-1 (SIMPSON HTT4 HOLD-DOWN), HD-2 (SIMPSON MSTC66 STRAP TIE), and HD-3 (SIMPSON STHD14RJ HOLD-DOWN).

ALTERNATIVE TO S61B24 ANCHOR BOLT SPECIFICATION:
* UTILIZE SIMPSON "SET" EPOXY SYSTEM TO FASTEN 3/8" DIA. THREADED ROD INTO CONCRETE FOUNDATION.

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

Table with 3 columns: SPAN, 2x4 NON-BEARING PARTITION WALL, and 2x6 NON-BEARING PARTITION WALL. Rows include spans up to 3'-0", 6'-0", and 8'-0".

NOTES:
* 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:
120 MPH WIND IN 2018 NC SBC: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 R301.3 OF THE 2018 NC SBC: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 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 NC SBC: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/ 8d NAILS @ 6" O.C. AT EDGES & @ 12" O.C. IN THE PANEL FIELD.
HORIZONTAL BLOCKING OF EXT. WALLS/SHEAR WALL PANEL EDGES IS NOT REQUIRED BY THIS DESIGN EXCEPT FOR THOSE AREAS SPECIFICALLY NOTED.
ALL EXT. WALLS SHALL BE CONTINUOUSLY SHEATHED AND ARE CONSIDERED SHEAR WALLS.
ALT. STAPLE CONNECTION SPEC: 1 1/2" 16 GA STAPLES (1/8" CROWN) @ 3" O.C. AT EDGES & @ 6" O.C. IN FIELD.

BLOCKED PANEL EDGES

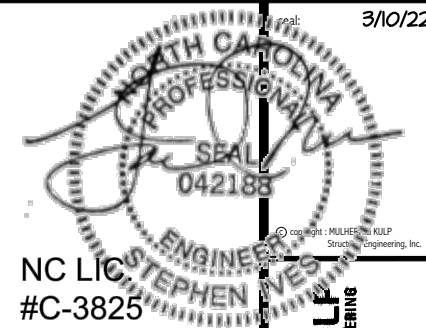
- AT DESIGNATED AREAS - FASTEN SHEATHING W/ 8d NAILS @ 6" O.C. AT ALL PANEL EDGES AND 12" O.C. IN THE PANEL FIELD OR 1 1/2" 16 GA STAPLES (1/8" CROWN) @ 3" O.C. AT EDGES & @ 6" O.C. IN FIELD. ALL SHEATHING PANELS SHALL BE ORIENTED AND INSTALLED FULL HEIGHT OF SHEAR WALL OR 2x HORIZONTAL BLOCKING SHALL 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, UNO.
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/ 10d NAILS @ 4" O.C. (THRU ONE SIDE ONLY)
INDICATES EXTENT OF INT. OSB SHEARWALL OR 3" O.C. OSB SHEARWALL.
INDICATES HOLD-DOWN BELOW



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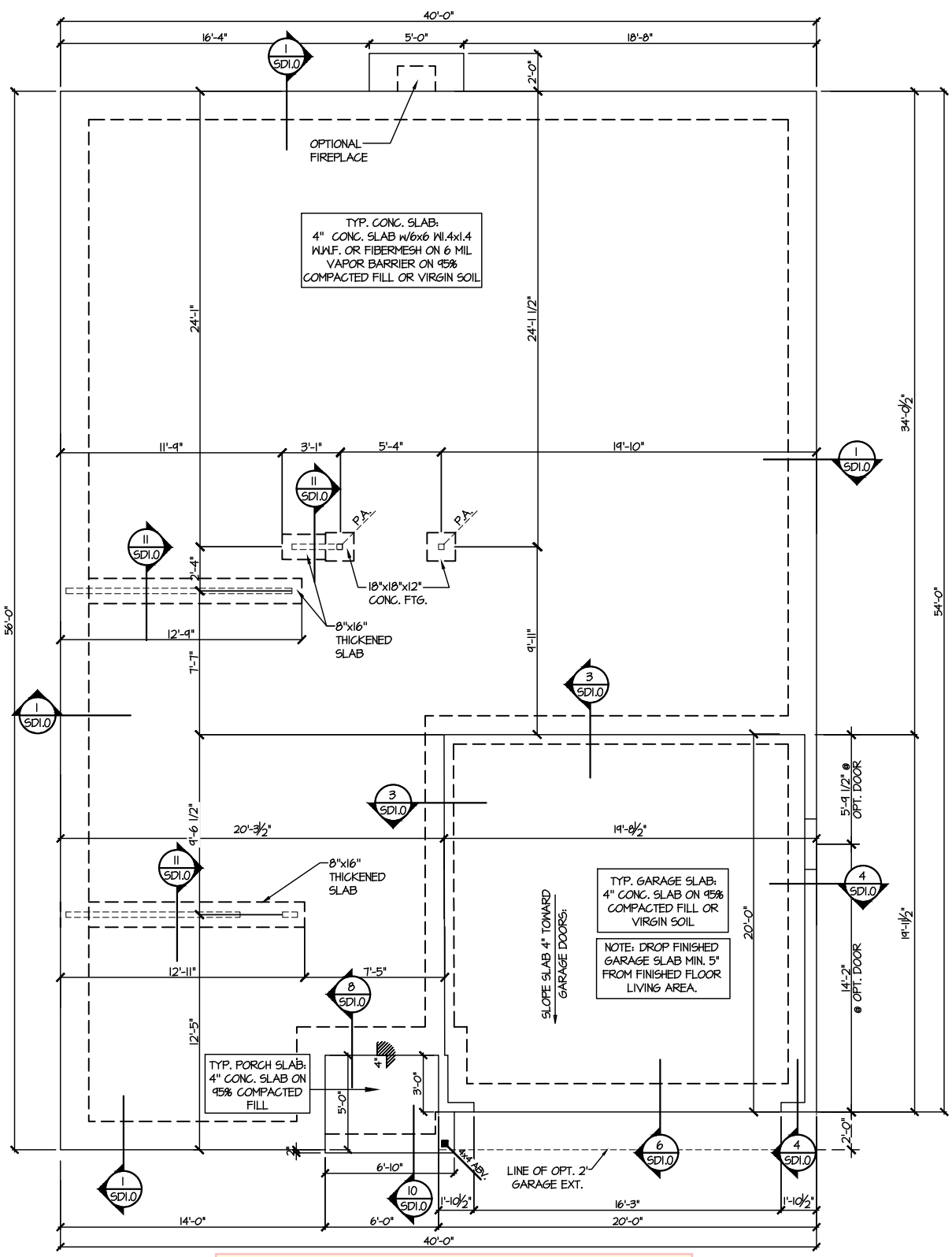
M&K project number:
126-21030
project mgr: JTR
drawn by: KL
issue date: 08-20-21

REVISIONS:
date: initial:
03/09/22 JTS

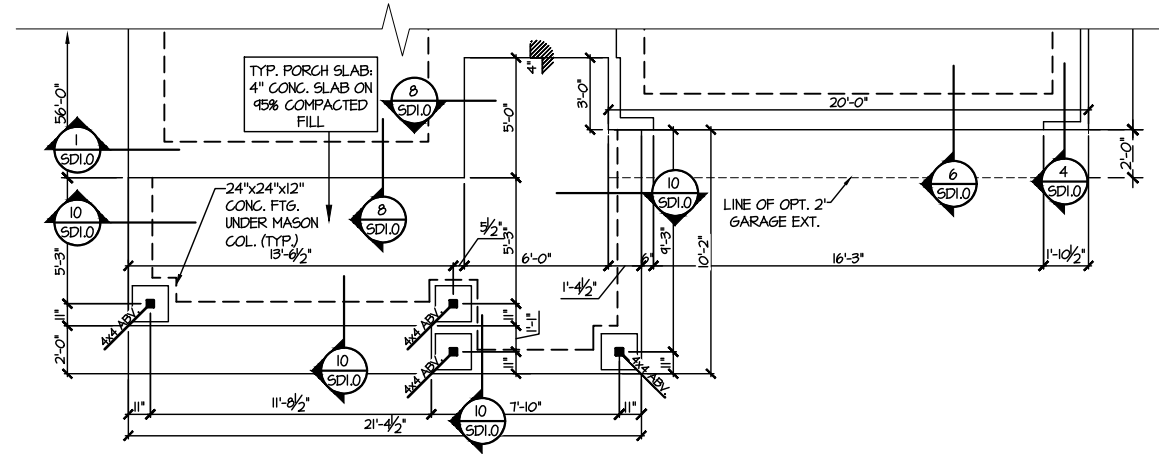


FOUNDATION PLANS
COOPER 3 MODEL
RALEIGH, NC

sheet: RIGHT HAND
S1.0



1 MONO SLAB FOUNDATION PLAN
SCALE: 1/8"=1'-0"
ELEV. #1

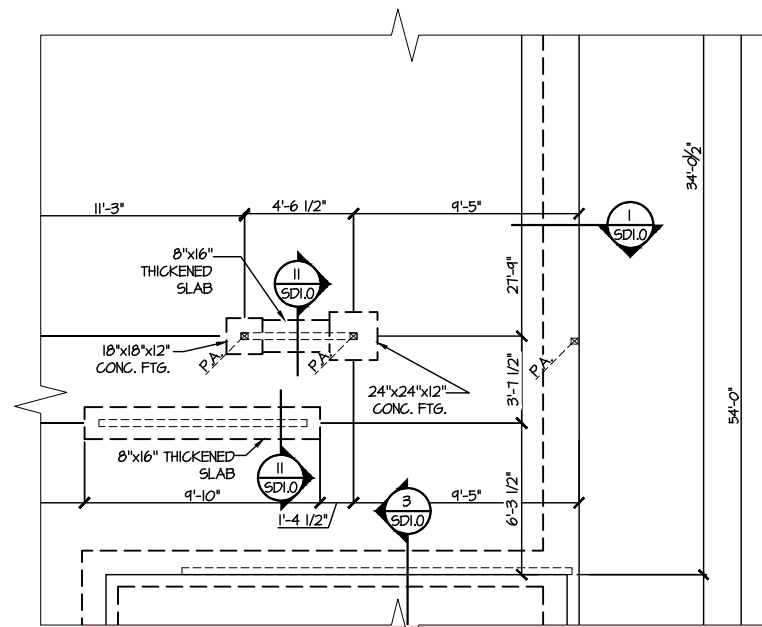


5 PARTIAL MONO SLAB FOUNDATION PLAN
SCALE: 1/8"=1'-0"
ELEVATION #5

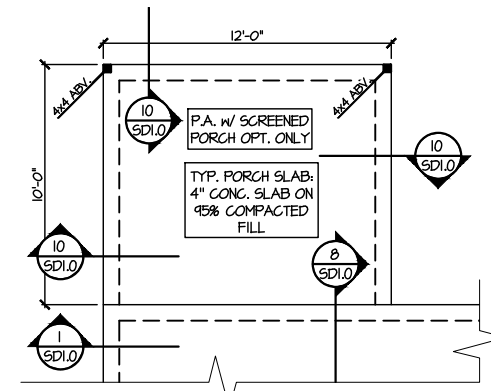
LEGEND

- ▬ 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 S.O. FOR
TYPICAL STRUCTURAL NOTES
& SCHEDULES



1 PARTIAL MONO SLAB FOUNDATION PLAN
OPTIONAL BONUS ROOM
 SCALE: 1/8"=1'-0"
 ELEV. #1 SHOWN - ALL ELEV. SIM.



3 PARTIAL MONO SLAB FOUNDATION PLAN
 SCALE: 1/8"=1'-0"
 OPTIONAL PATIO & SCREENED PORCH

LEGEND

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

REFER TO 50.0 FOR TYPICAL STRUCTURAL NOTES & SCHEDULES

3/10/22

SEAL 042188

NC LIC #C-3825

MULHERN+KULP ENGINEERS

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M&K project number: 126-21030
 project mgr: JTR
 drawn by: KL
 issue date: 08-20-21

REVISIONS:

date:	initial:
03/09/22	JTS

DRB GROUP
 DRB GROUP
 DRB CONSULTING

FOUNDATION PLANS
 COOPER 3 MODEL
 RALEIGH, NC

sheet: RIGHT HAND
S1.1

REFER TO 50.0 FOR
TYPICAL STRUCTURAL NOTES
& SCHEDULES

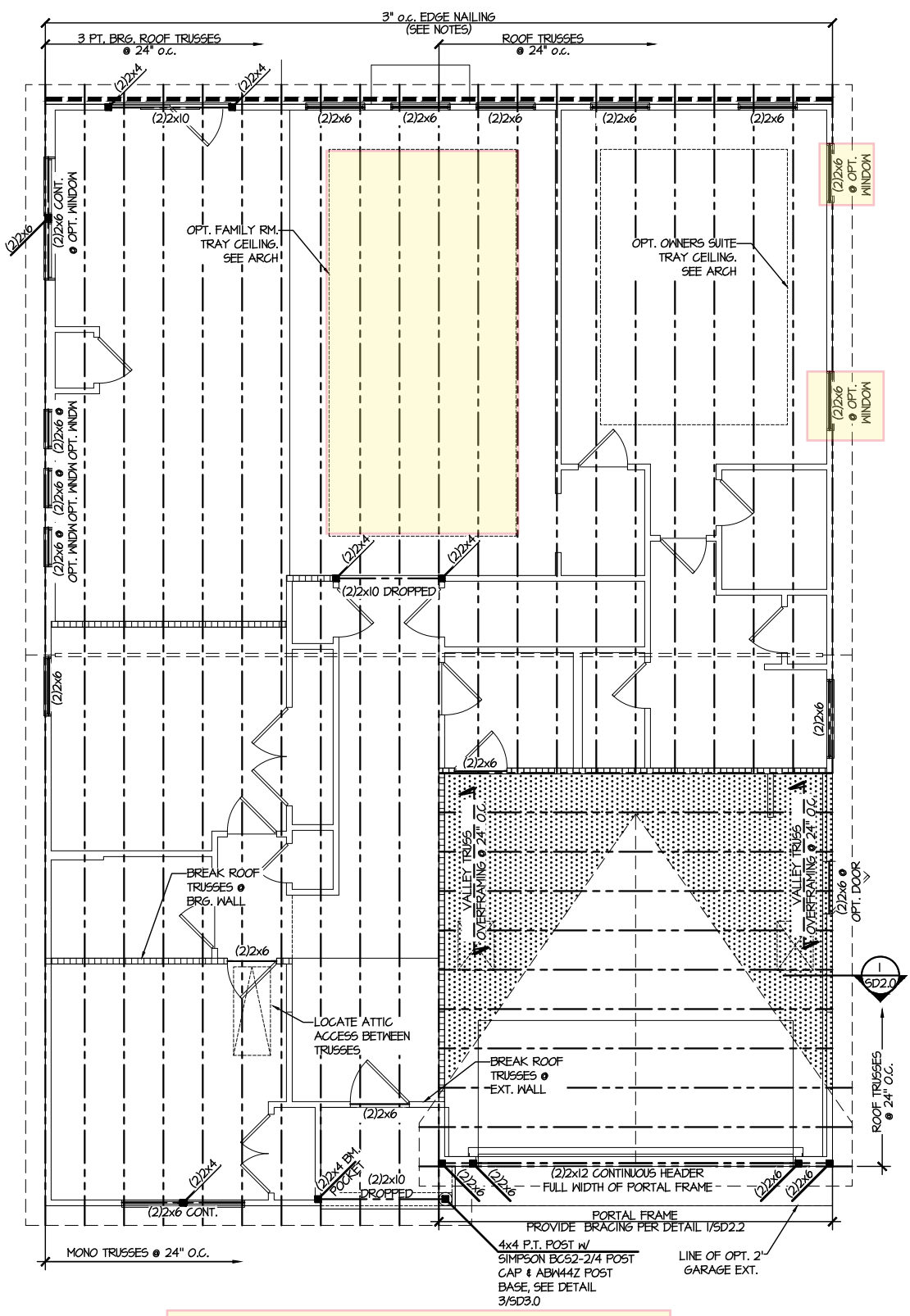
LEGEND

- ▣ INTERIOR BEARING WALL
- ▤ BEARING WALL ABOVE
- ▬ BEAM / HEADER
- - - INDICATES SHEAR WALL & EXTENT
- ▨ EXTENT OF OVERFRAMING
- ⊥ L METAL HANGER
- * INDICATES POST ABOVE, PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.
- ▶ INDICATES HOLD-DOWN OR STRAP. REFER TO SCHEDULE.

SEAL
042188
ENGINEER
STEPHEN LIVES
#C-3825

NC LIC
#C-3825

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

ELEVATION #1
(SIM. @ OPT.
DELUXE OWN. BATH
TILE SHOWER
& ROMAN BATH)

FILE: RLH - 40' Cooper 3 - Structural DATE: 3/10/2022 1:22 PM

M&K project number:
126-21030

project mgr: **JTR**

drawn by: **KL**

issue date: **08-20-21**

REVISIONS:

date:	initial:
03/09/22	JTS

DRB DRB GROUP
DRB FIELDING
DRB CENTRAL

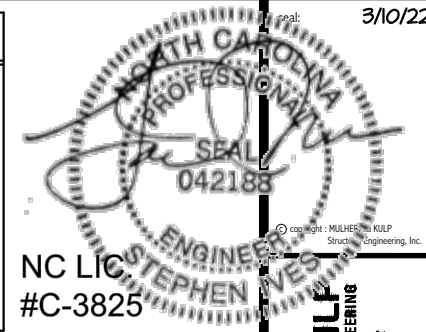
ROOF FRAMING PLANS
COOPER 3 MODEL
RALEIGH, NC

sheet: RIGHT HAND
S4.0

REFER TO 50.0 FOR
TYPICAL STRUCTURAL NOTES
& SCHEDULES

LEGEND

- [Pattern] INTERIOR BEARING WALL
- [Pattern] BEARING WALL ABOVE
- [Pattern] BEAM / HEADER
- [Pattern] INDICATES SHEAR WALL & EXTENT
- [Pattern] 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.



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M&K project number:
126-21030
project mgr: JTR
drawn by: KL
issue date: 08-20-21

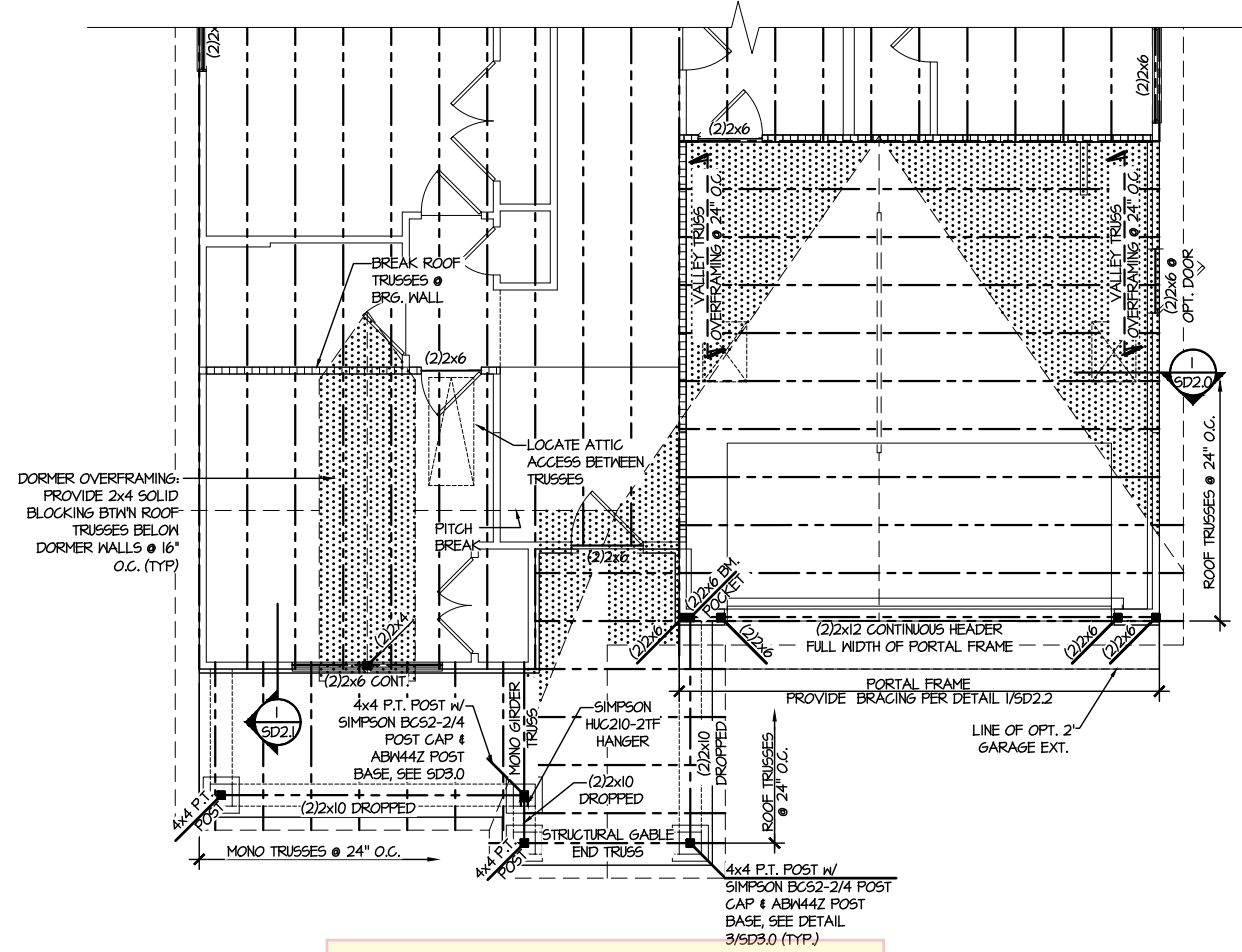
REVISIONS:
date: initial:

03/09/22 ITS



ROOF FRAMING PLANS
COOPER 3 MODEL
RALEIGH, NC

sheet: RIGHT HAND
S4.1



DORMER OVERFRAMING:
PROVIDE 2x4 SOLID
BLOCKING BTWN ROOF
TRUSSES BELOW
DORMER WALLS @ 16"
O.C. (TYP)

3 PARTIAL ROOF FRAMING PLAN
SCALE: 1/8"=1'-0" ELEVATION #4

ENGINEERED BEAM MATERIAL SCHEDULE

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

SD2.1J/SD2.IT REFERS TO SD2.1JA/SD2.ITA FOR LVL/PSL/LSL BEAMS OR SD2.1JB/SD2.ITB FOR FLITCH BEAMS OR SD2.1JC/SD2.ITC FOR STEEL BEAMS

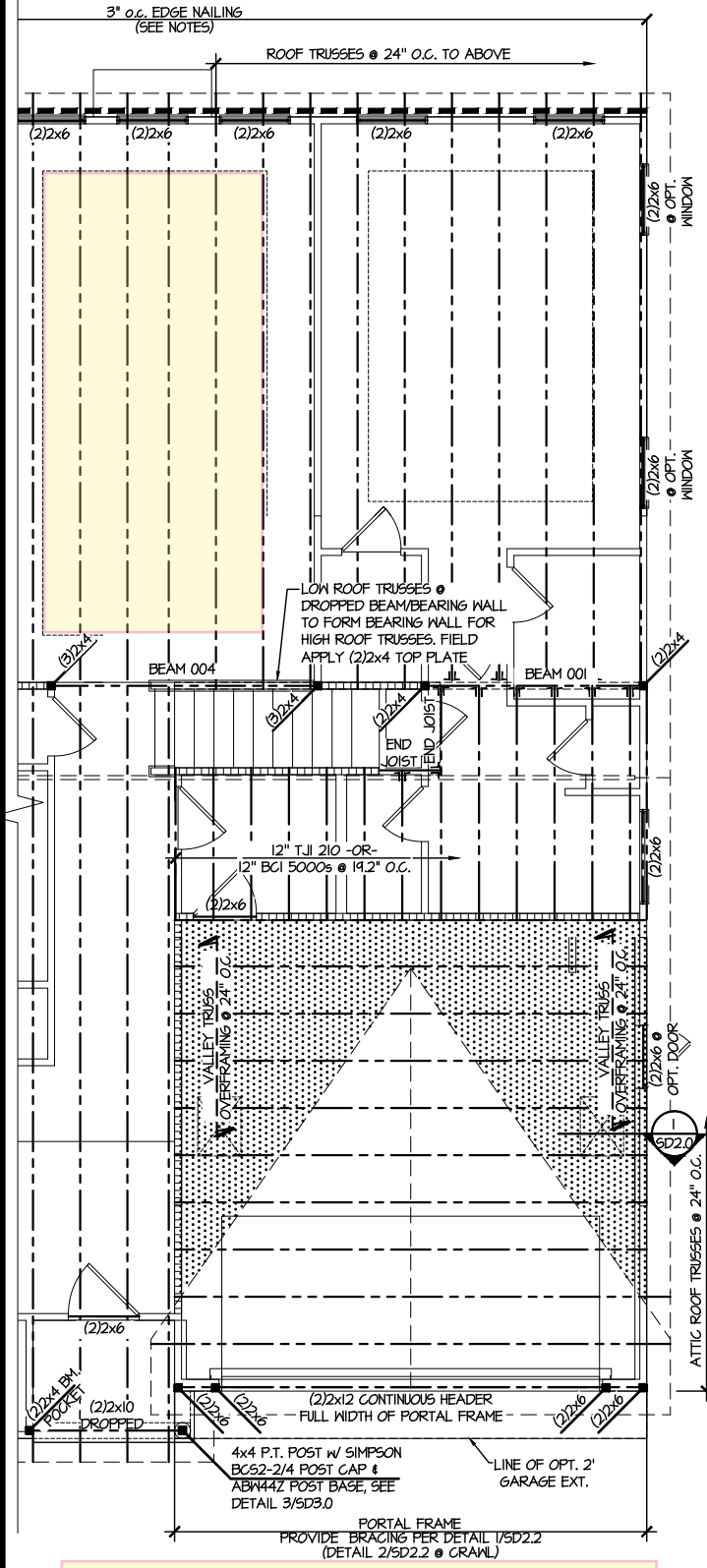
REFER TO 50.0 FOR TYPICAL STRUCTURAL NOTES & SCHEDULES

SD2.0 & SD2.I REFERS TO SD2.0J & SD2.IJ FOR I-JOIST FLOOR FRAMING OR SD2.0T & SD2.IT FOR TRUSS FLOOR FRAMING

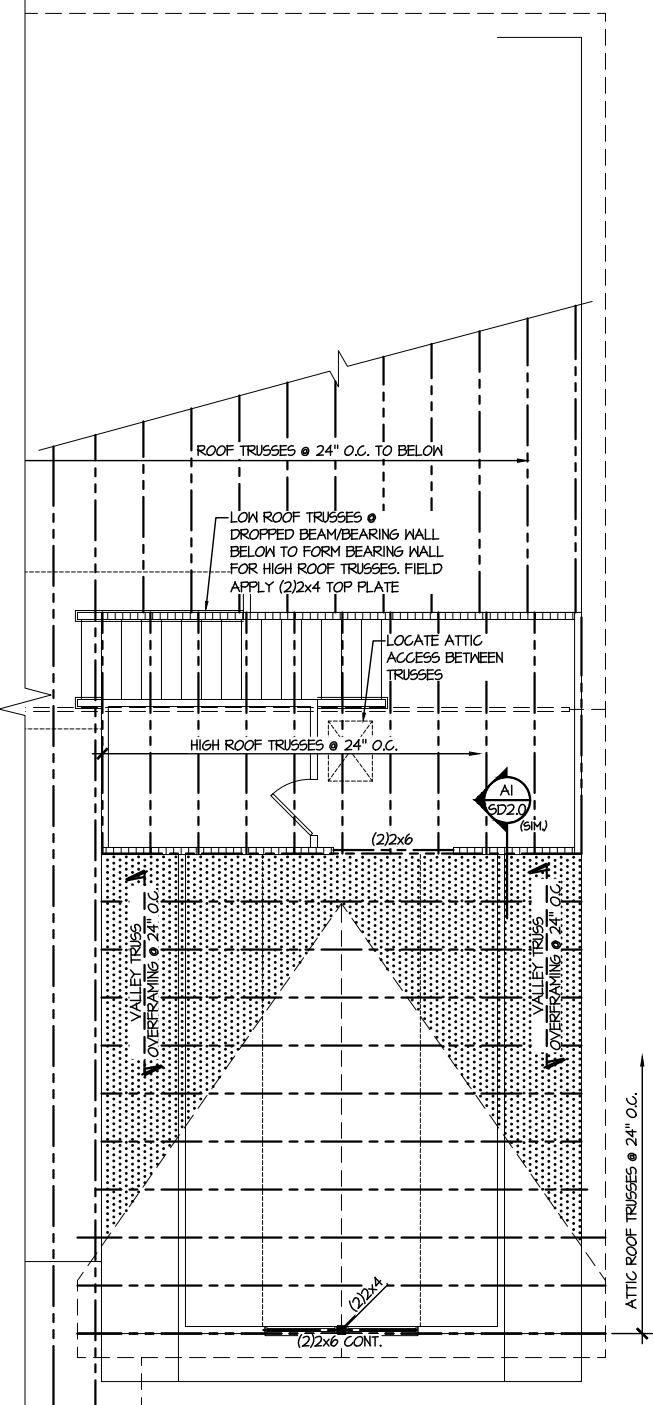
LEGEND

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

Professional Seal: NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 042188
 NC LIC #C-3825
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 300 Dorothea Ave, Building 4 - Asheville, PA 18002
 P 215-696-8801 E mulhern@mulhernkulp.com



1 PARTIAL 2ND FLOOR FRAMING PLAN OPTIONAL BONUS ROOM
 SCALE: 1/8"=1'-0" ELEV #1 SHOWN - ALL ELEV. SIMILAR



2 PARTIAL ROOF FRAMING PLAN OPTIONAL BONUS ROOM
 SCALE: 1/8"=1'-0" ELEV #1 SHOWN - ALL ELEV. SIMILAR

M&K project number: 126-21030
 project mgr: JTR
 drawn by: KL
 issue date: 08-20-21

REVISIONS:
 date: initial:
 03/09/22 ITS

DRB GROUP
 DRB GROUP
 FIELDING DAY RYAN
 CONSULTANTS

OPTION FRAMING PLANS
 COOPER 3 MODEL
 RALEIGH, NC

ENGINEERED BEAM MATERIAL SCHEDULE

BEAM NUMBER	LVL OPTION	PSL OPTION	LSL OPTION	FLITCH OPTION	STEEL OPTION
001	(2)3/4"x11 1/2" - F	3/2"x11 1/2" - F	(3)3/4"x11 1/2" - F	(2)2x12 + (1) 3/8"x11 1/2" STEEL FLITCH PLATES - F	M2x14 - F
002	(3)3/4"x11 1/2" - F	3/2"x11 1/2" - F	(4)3/4"x11 1/2" - F	(2)2x12 + (1) 3/8"x11 1/2" STEEL FLITCH PLATES - F	M2x14 - F
003	(2)3/4"x11 1/2" - F	3/2"x11 1/2" - F	(3)3/4"x11 1/2" - F	(2)2x12 + (1) 3/8"x11 1/2" STEEL FLITCH PLATES - F	M2x14 - F
004	(2)3/4"x11 1/2" - D	3/2"x11 1/2" - D	(2)3/4"x11 1/2" - D	(2)2x10 + (1) 3/8"x11 1/2" STEEL FLITCH PLATES - D	M2x10 - 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/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.

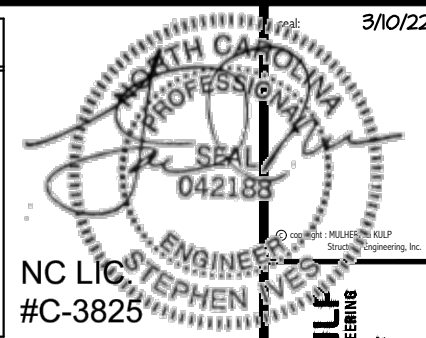
SD2.1J/SD2.IT REFERS TO SD2.1JA/SD2.ITA FOR LVL/PSL/LSL BEAMS OR SD2.1JB/SD2.ITB FOR FLITCH BEAMS OR SD2.1JC/SD2.ITC FOR STEEL BEAMS

REFER TO 50.0 FOR TYPICAL STRUCTURAL NOTES & SCHEDULES

SD2.0 & SD2.I REFERS TO SD2.0J & SD2.IJ FOR I-JOIST FLOOR FRAMING OR SD2.0T & SD2.IT FOR TRUSS FLOOR FRAMING

LEGEND

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



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M&K project number: 126-21030

project mgr: JTR
drawn by: KL
issue date: 08-20-21

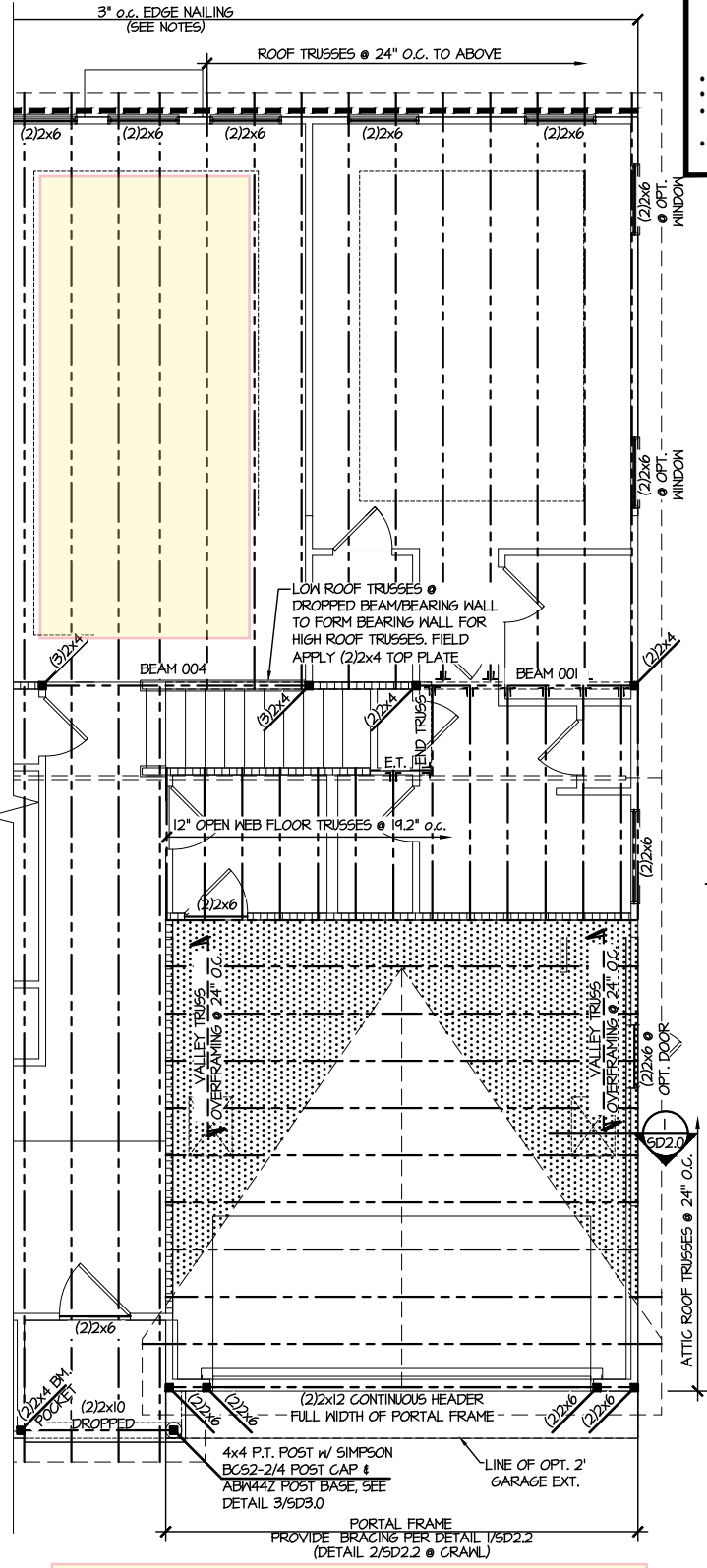
REVISIONS:

date:	initial:
03/09/22	JTS

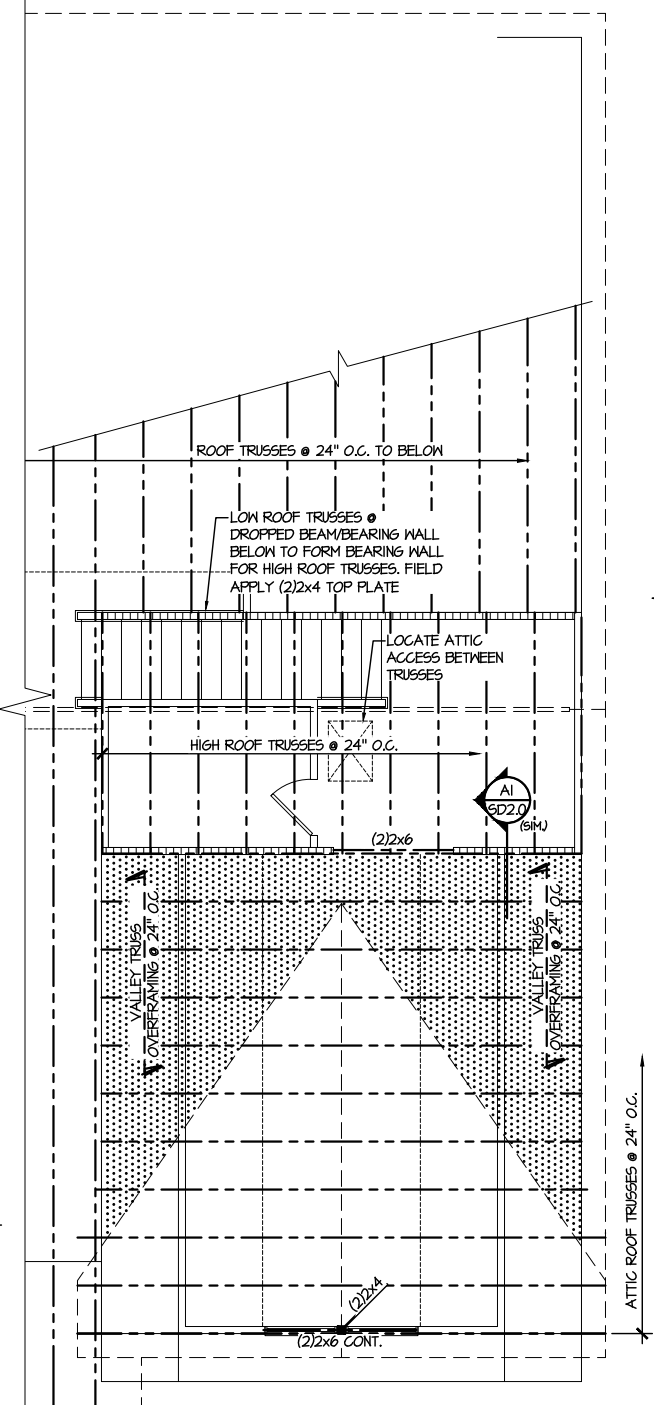
DRB GROUP
DRB GROUP
FIELDING DAY RYAN BUILDERS

OPTION FRAMING PLANS
COOPER 3 MODEL
RALEIGH, NC

sheet: RIGHT HAND
S5.0T



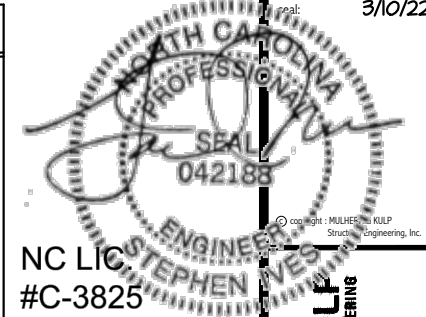
1 PARTIAL 2ND FLOOR FRAMING PLAN OPTIONAL BONUS ROOM
SCALE: 1/8"=1'-0" ELEV #1 SHOWN - ALL ELEV. SIMILAR



2 PARTIAL ROOF FRAMING PLAN OPTIONAL BONUS ROOM
SCALE: 1/8"=1'-0" ELEV #1 SHOWN - ALL ELEV. SIMILAR

REFER TO 50.0 FOR
TYPICAL STRUCTURAL NOTES
& SCHEDULES

LEGEND	
• [dotted pattern]	INTERIOR BEARING WALL
• [dashed pattern]	BEARING WALL ABOVE
• [solid line]	BEAM / HEADER
• [dashed line]	INDICATES SHEAR WALL & EXTENT
• [dotted pattern]	EXTENT OF OVERFRAMING
• [T-shaped symbol]	METAL HANGER
• [asterisk symbol]	INDICATES POST ABOVE, PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.
• [triangle symbol]	INDICATES HOLD-DOWN OR STRAP. REFER TO SCHEDULE.



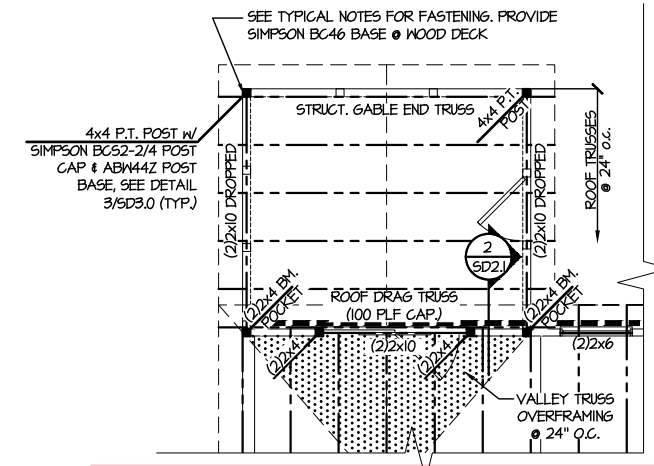
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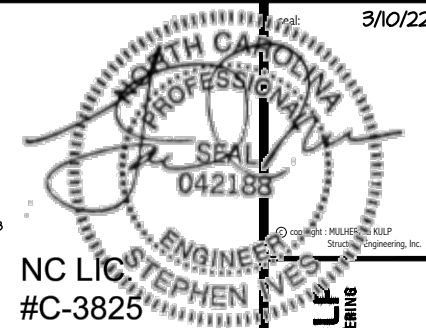


**2 PARTIAL ROOF FRAMING PLAN
OPTIONAL SCREENED PORCH**
SCALE: 1/8"=1'-0" ELEV #1 SHOWN - ALL ELEV. SIMILAR



OPTION FRAMING PLANS
COOPER 3 MODEL
RALEIGH, NC

sheet: RIGHT HAND
S5.1



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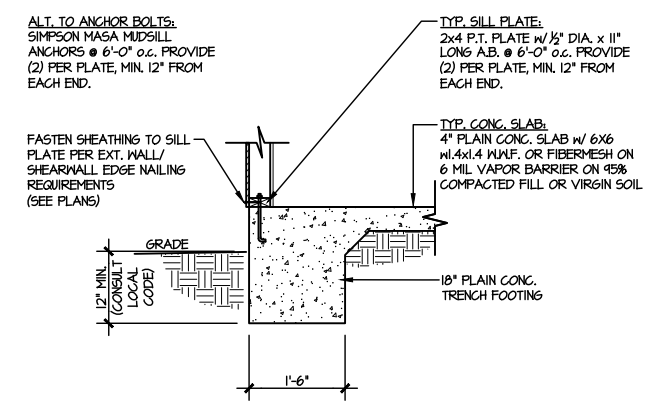
M&K project number:
126-21030
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date: initial:
03/09/22 JTS

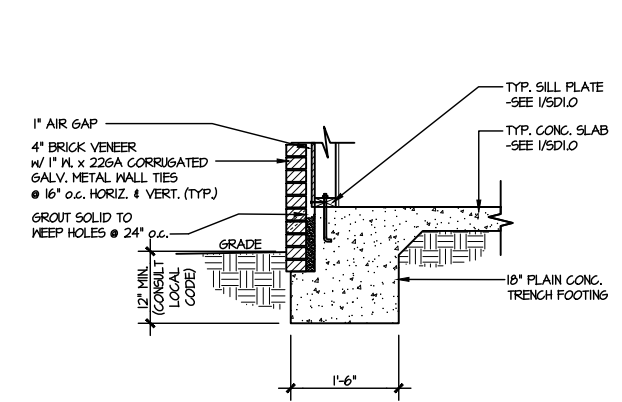


FOUNDATION DETAILS
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RALEIGH, NC

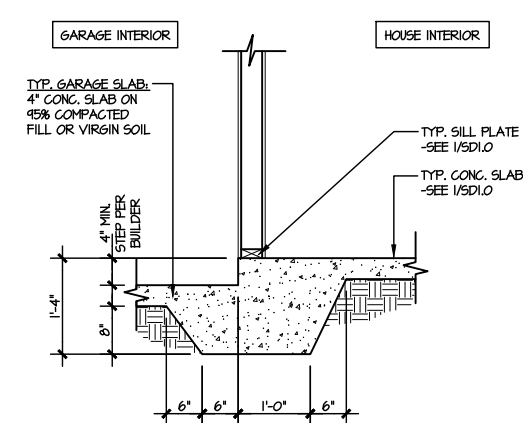
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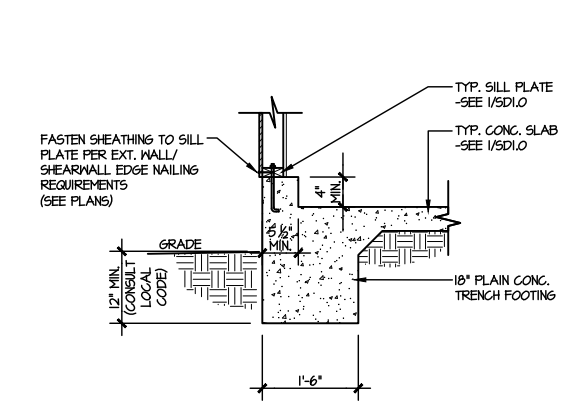
1 TYPICAL SLAB ON GRADE PERIMETER FOOTING
SCALE: 3/8"=1'-0"



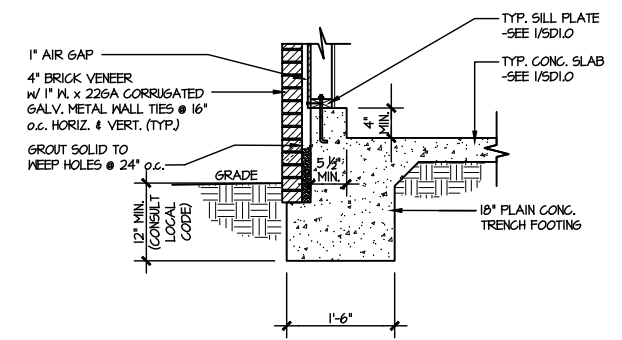
2 TYPICAL SLAB ON GRADE PERIMETER FOOTING
SCALE: 3/8"=1'-0" W/ BRICK VENEER



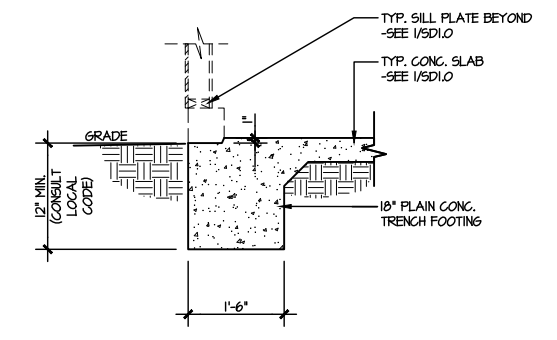
3 TYPICAL MONOLITHIC INTERIOR GARAGE FOOTING
SCALE: 3/8"=1'-0"



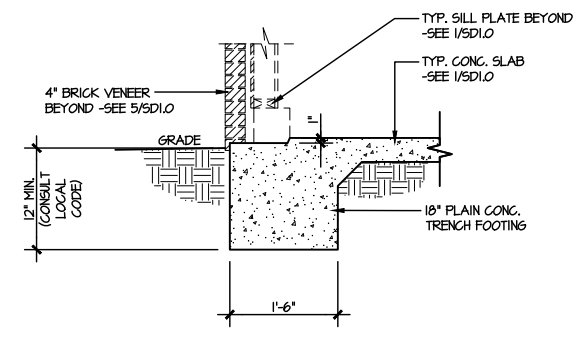
4 TYPICAL SLAB ON GRADE GARAGE PERIMETER FOOTING
SCALE: 3/8"=1'-0"



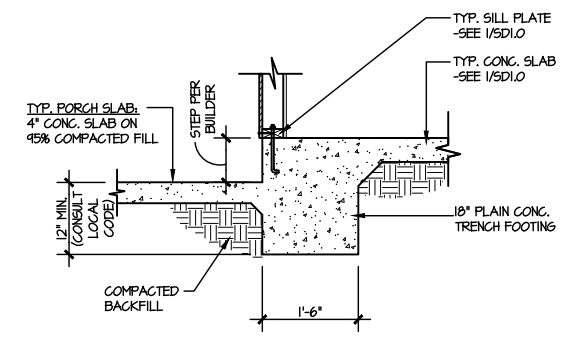
5 TYPICAL SLAB ON GRADE GARAGE PERIMETER FOOTING
SCALE: 3/8"=1'-0" W/ BRICK VENEER



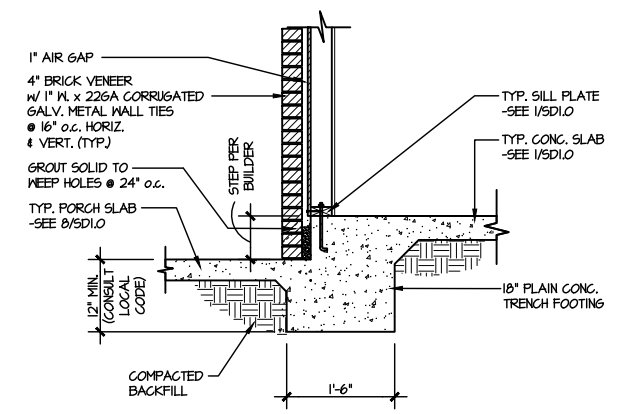
6 TYPICAL SLAB ON GRADE GARAGE ENTRY @ PERIMETER FOOTING
SCALE: 3/8"=1'-0"



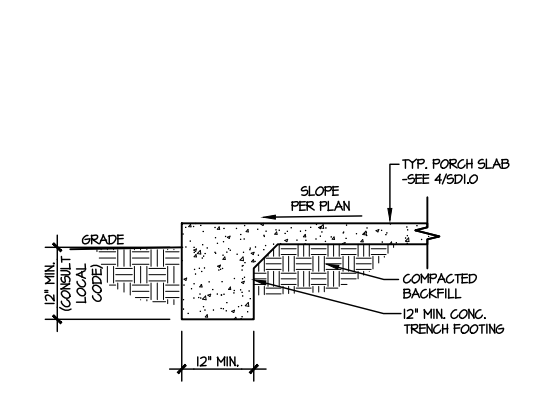
7 TYPICAL SLAB ON GRADE GARAGE ENTRY @ PERIMETER FOOTING
SCALE: 3/8"=1'-0" W/ BRICK VENEER



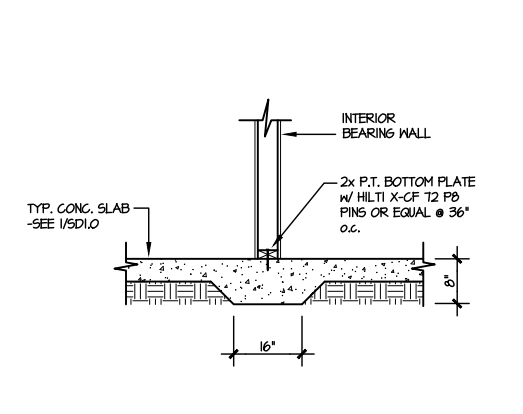
8 TYPICAL SLAB ON GRADE PERIMETER FOOTING @ PORCH/PATIO
SCALE: 3/8"=1'-0"



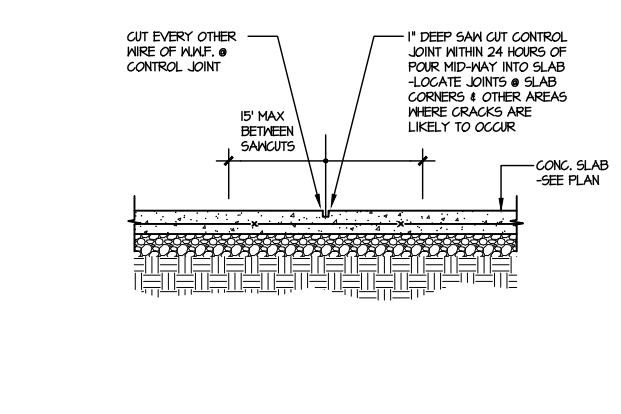
9 TYPICAL SLAB ON GRADE PERIMETER FOOTING @ PORCH/PATIO
SCALE: 3/8"=1'-0" W/ BRICK VENEER



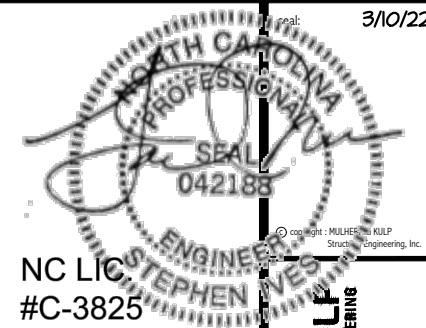
10 TYPICAL FOOTING @ PORCH SLAB
SCALE: 3/8"=1'-0"



11 TYPICAL THICKENED SLAB @ INTERIOR BEARING WALL
SCALE: 3/8"=1'-0"



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



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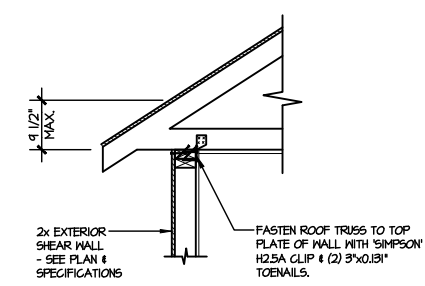
M&K project number:
126-21030
project mgr: JTR
drawn by: KL
issue date: 08-20-21

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date: initial:
03/09/22 JTS

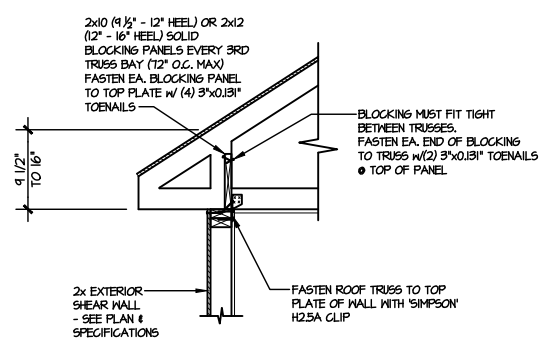


FRAMING DETAILS
COOPER 3 MODEL
RALEIGH, NC

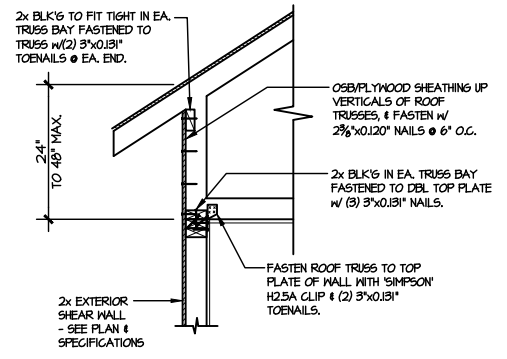
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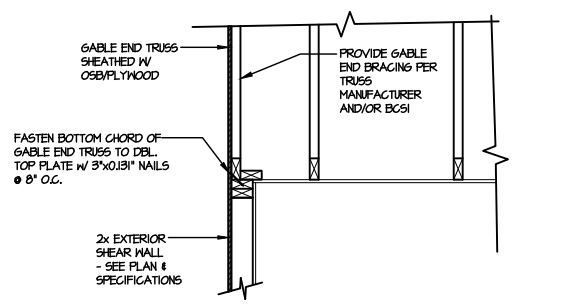
(A1) TYPICAL SHEAR TRANSFER DETAIL @ ROOF
SCALE: 3/8"=1'-0"
HEEL HEIGHT LESS THAN 4 1/2"
NO BLOCKING REQ'D



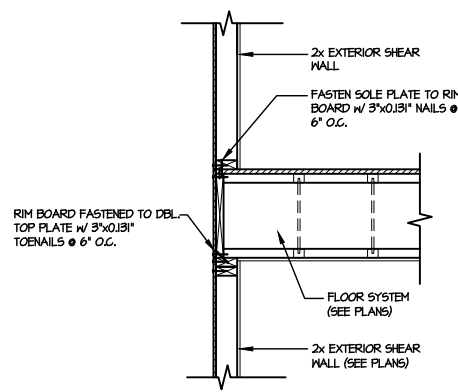
(A2) TYPICAL SHEAR TRANSFER DETAIL @ ROOF
SCALE: 3/8"=1'-0"
HEEL HEIGHT BETWEEN 4 1/2" - 16"
BLOCKING REQ'D



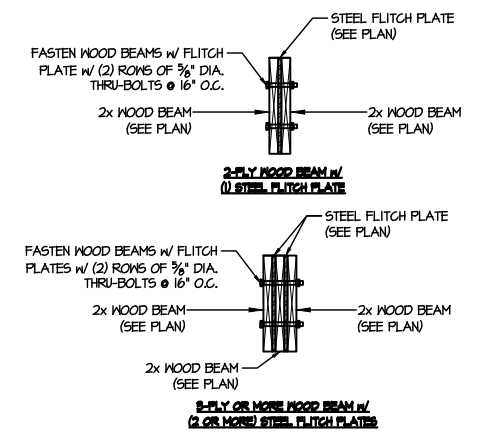
(A3) TYPICAL SHEAR TRANSFER DETAIL @ RAISED HEEL TRUSS
SCALE: 3/8"=1'-0"
HEEL HEIGHT UP TO 48" MAX.



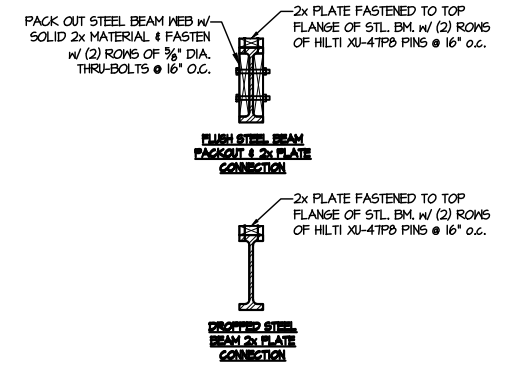
(B) TYPICAL GABLE END DETAIL
SCALE: 3/8"=1'-0"



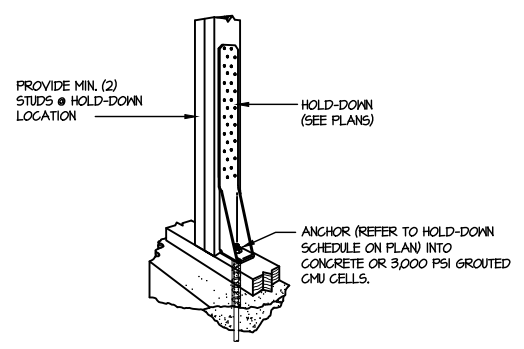
(C) TYPICAL SHEAR TRANSFER DETAIL BETWEEN FLOORS @ EXTERIOR WALL
SCALE: 3/8"=1'-0"



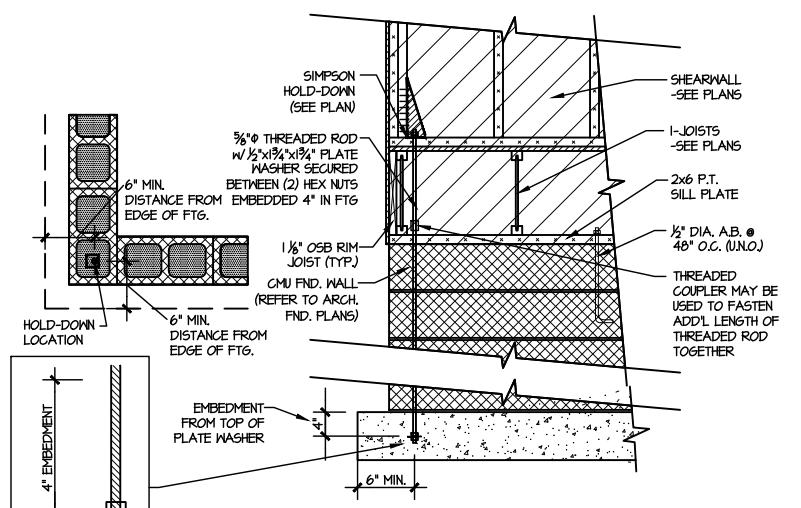
(D) TYPICAL FLITCH BEAM CONNECTION DETAIL
SCALE: 3/4"=1'-0"



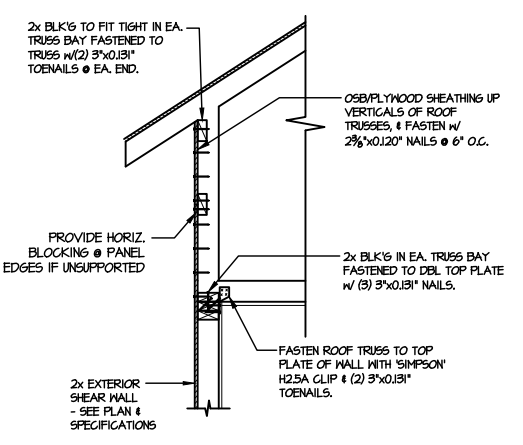
(E) TYPICAL STEEL BEAM CONNECTION DETAIL
SCALE: 3/4"=1'-0"



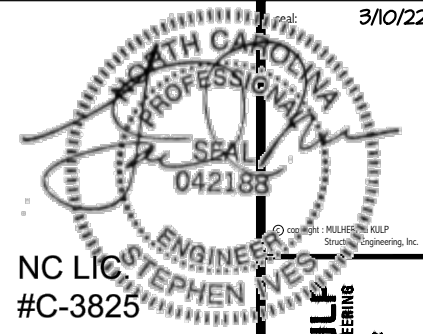
(F1) TYPICAL HOLD DOWN INSTALLATION
SCALE: N.T.S.



(F2) TYPICAL CMU FOUNDATION HOLD-DOWN INSTALLATION
SCALE: N.T.S. (CORNER SHOWN - APPLICABLE TO ALL CONDITIONS)



(I) TYPICAL SHEAR TRANSFER DETAIL @ RAISED HEEL TRUSS
SCALE: 3/8"=1'-0"
HEEL HEIGHT GREATER THAN 48"



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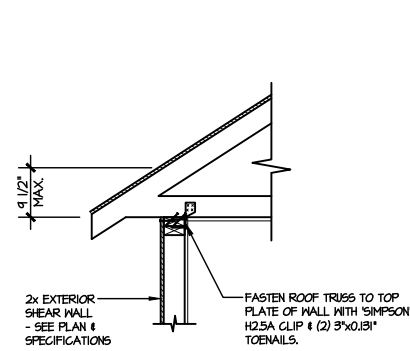
M&K project number:
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REVISIONS:
date: initial:
03/09/22 JTS

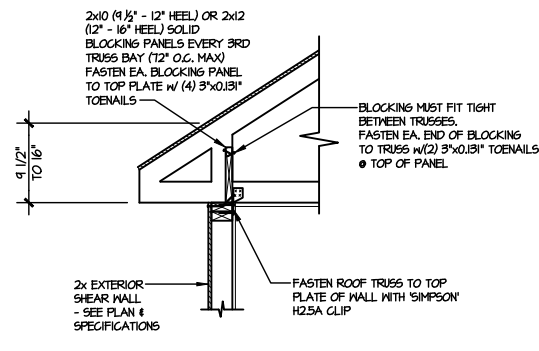


FRAMING DETAILS
COOPER 3 MODEL
RALEIGH, NC

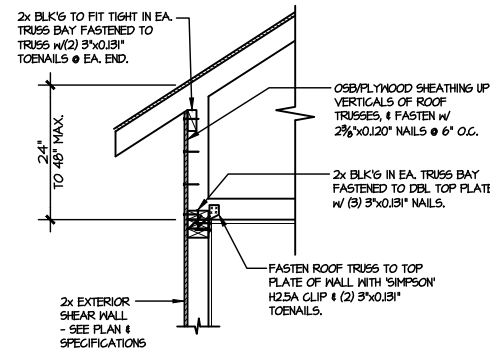
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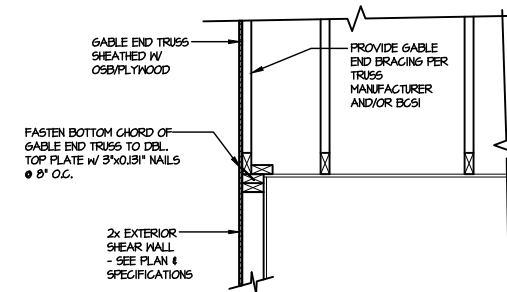
A1 TYPICAL SHEAR TRANSFER DETAIL @ ROOF
SCALE: 3/8"=1'-0"
HEEL HEIGHT LESS THAN 9 1/2"
NO BLOCKING REQ'D



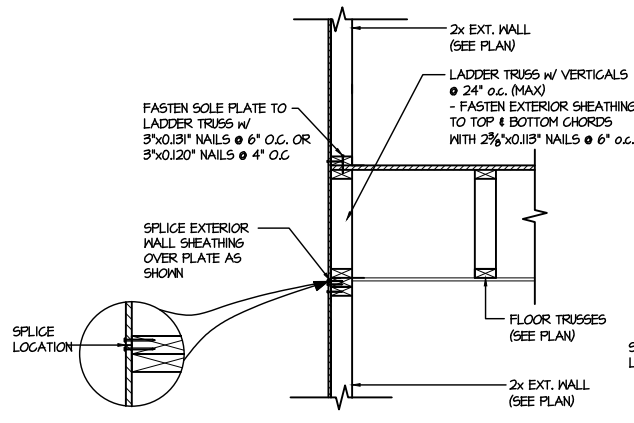
A2 TYPICAL SHEAR TRANSFER DETAIL @ ROOF
SCALE: 3/8"=1'-0"
HEEL HEIGHT BETWEEN 9 1/2" - 16"
BLOCKING REQ'D



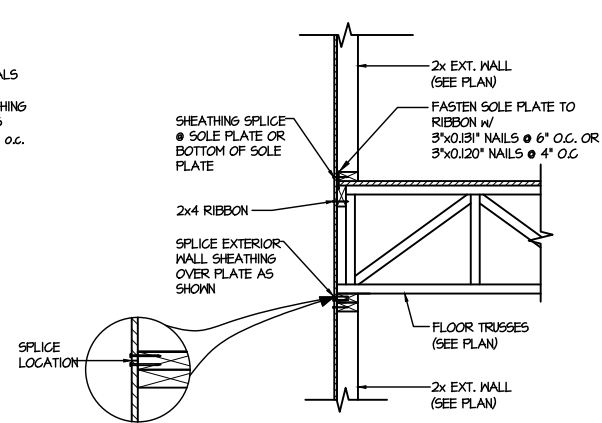
A3 TYPICAL SHEAR TRANSFER DETAIL @ RAISED HEEL TRUSS
SCALE: 3/8"=1'-0"
HEEL HEIGHT UP TO 48" MAX.



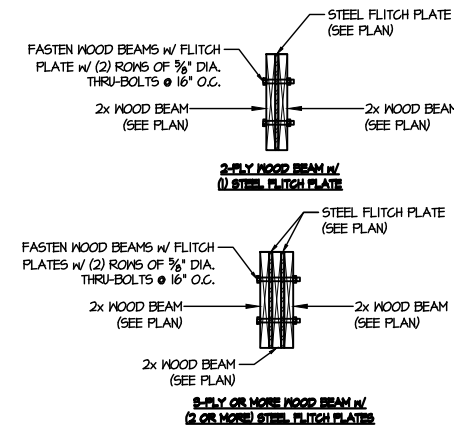
B TYPICAL GABLE END DETAIL
SCALE: 3/8"=1'-0"



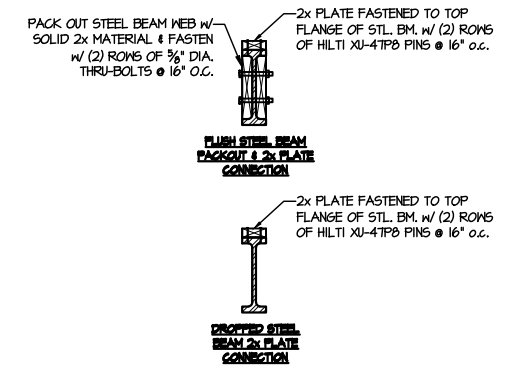
C1 TYPICAL SHEAR TRANSFER DETAIL BETWEEN FLOORS @ EXTERIOR WALL
SCALE: 3/8"=1'-0"
PARALLEL FRAMING



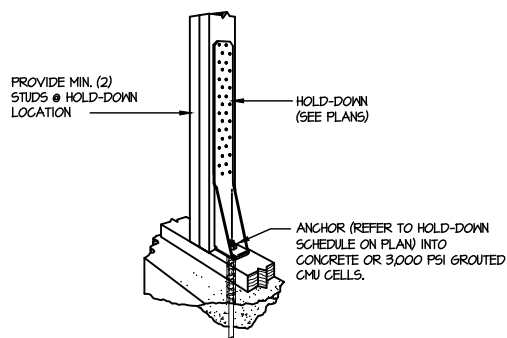
C2 TYPICAL SHEAR TRANSFER DETAIL BETWEEN FLOORS @ EXTERIOR WALL
SCALE: 3/8"=1'-0"
PERPENDICULAR FRAMING



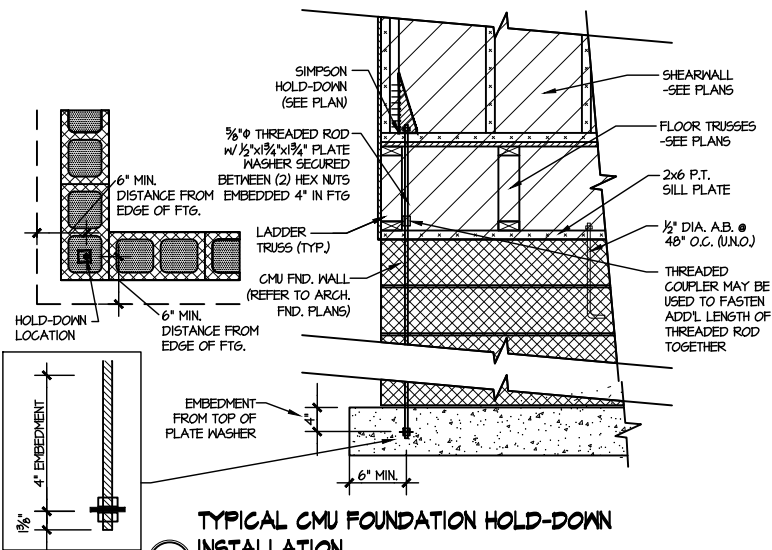
D TYPICAL FLITCH BEAM CONNECTION DETAIL
SCALE: 3/4"=1'-0"



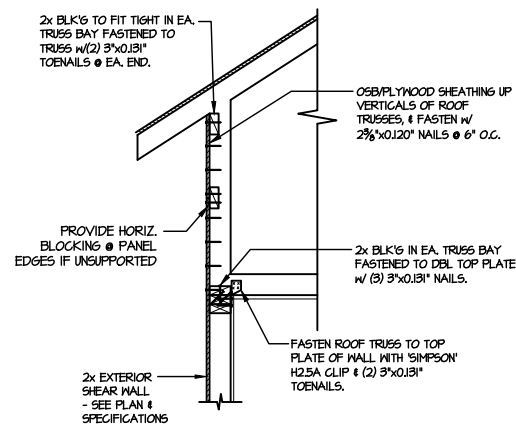
E TYPICAL STEEL BEAM CONNECTION DETAIL
SCALE: 3/4"=1'-0"



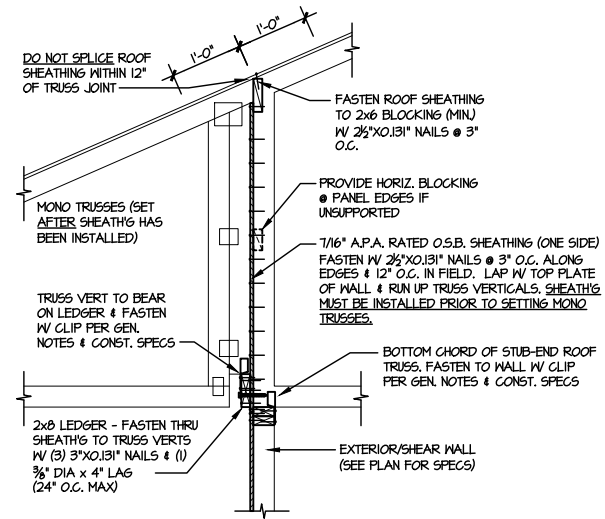
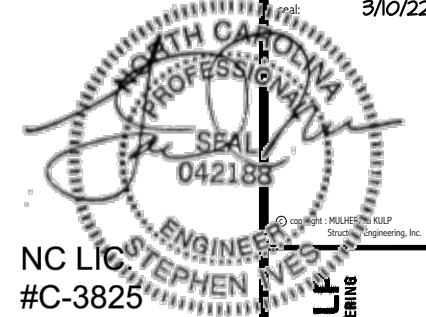
F1 TYPICAL HOLD DOWN INSTALLATION
SCALE: N.T.S.



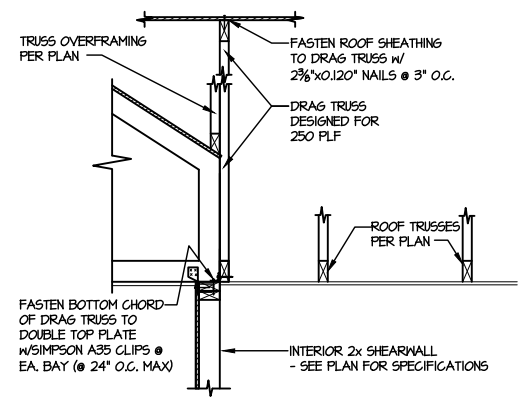
F2 TYPICAL CMU FOUNDATION HOLD-DOWN INSTALLATION
SCALE: N.T.S.
(CORNER SHOWN - APPLICABLE TO ALL CONDITIONS)



I TYPICAL SHEAR TRANSFER DETAIL @ RAISED HEEL TRUSS
SCALE: 3/8"=1'-0"
HEEL HEIGHT GREATER THAN 48"



1 SHEAR TRANSFER DETAIL @ BREAK IN TRUSSES OVER SHEAR WALL
SCALE: 3/4"=1'-0" - 22-84
3/8"=1'-0" - 11d7



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

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300 Beaverville Ave., Building 4 - Asheville, PA 17002
P 215-546-8800 - mulhern+kulp.com

MGK project number:
126-21030

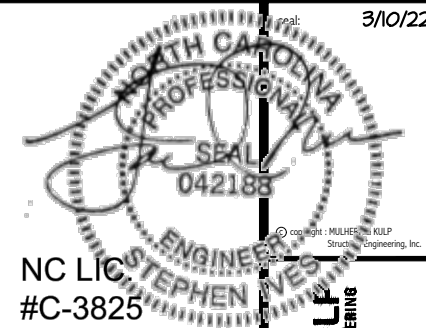
project mgr: JTR
drawn by: KL
issue date: 08-20-21

REVISIONS:

date:	initial:
03/09/22	JTS

FRAMING DETAILS
COOPER 3 MODEL
RALEIGH, NC

sheet:
SD2.1



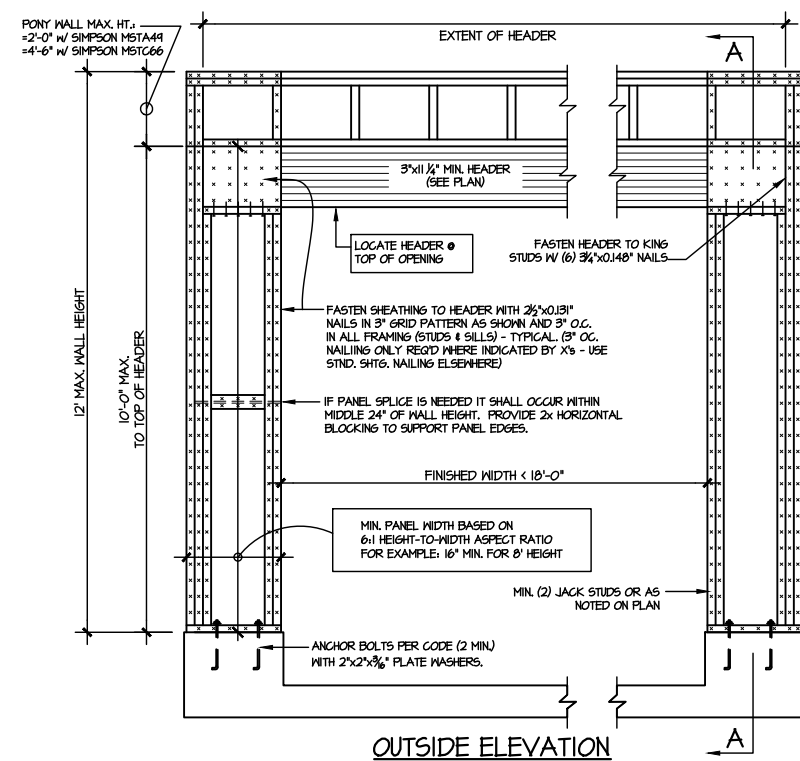
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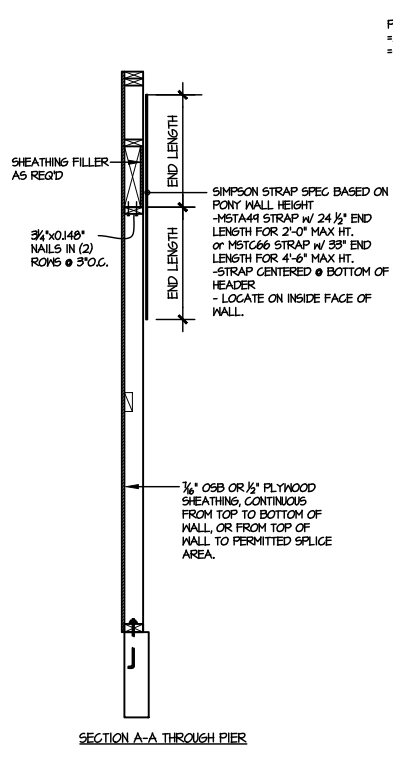


FRAMING DETAILS
COOPER 3 MODEL
RALEIGH, NC

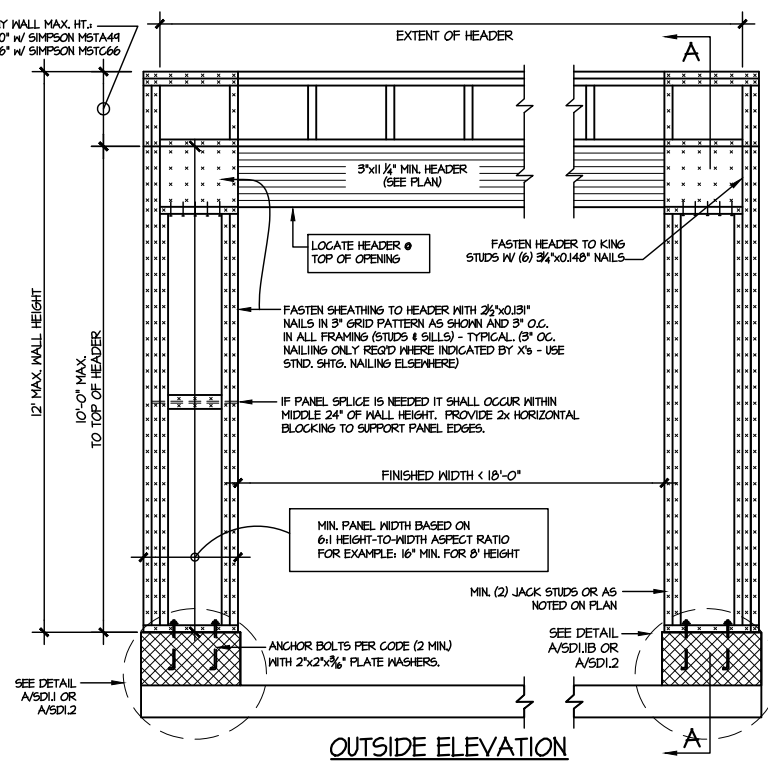
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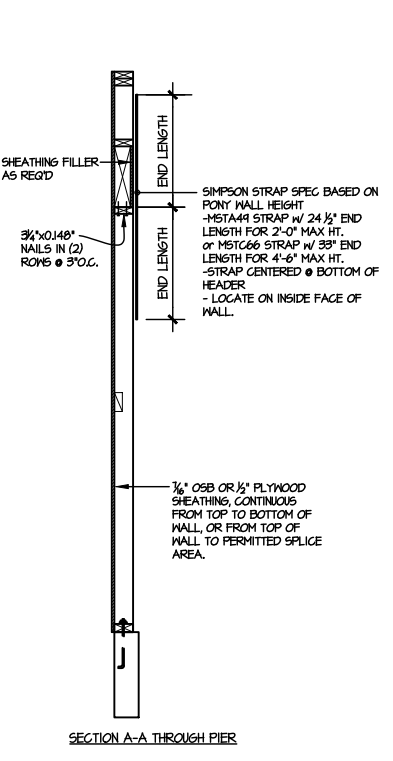
OUTSIDE ELEVATION



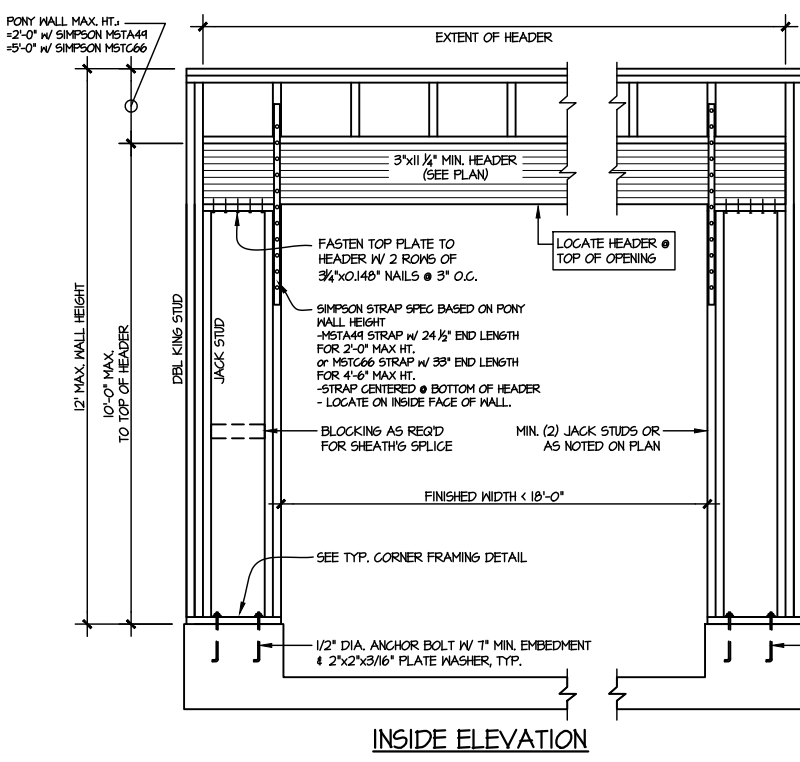
SECTION A-A THROUGH PIER



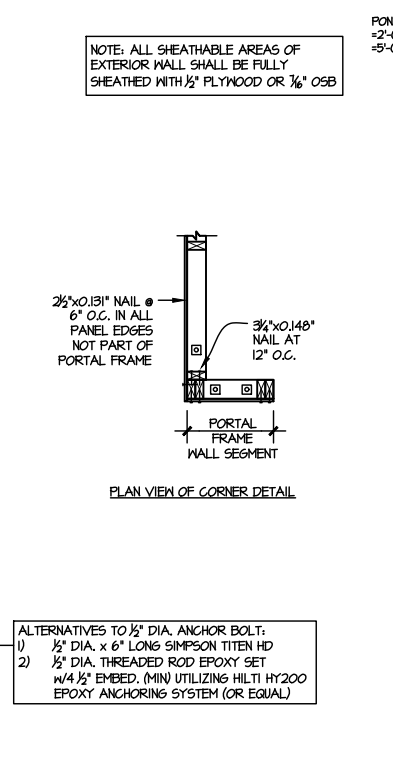
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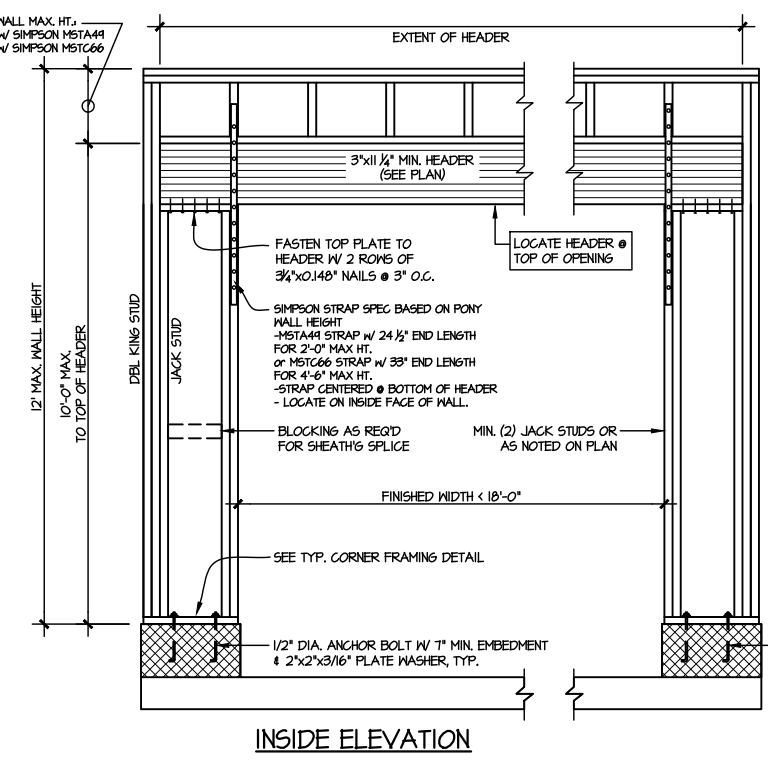
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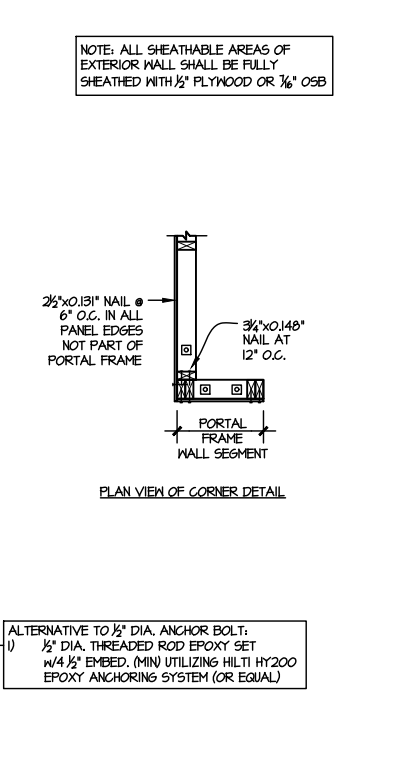
INSIDE ELEVATION



PLAN VIEW OF CORNER DETAIL



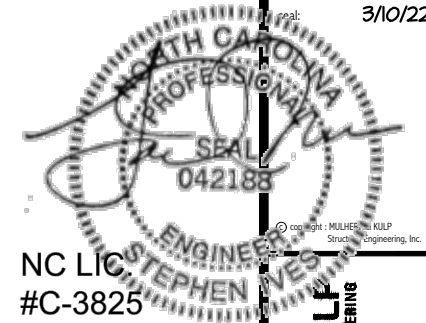
INSIDE ELEVATION



PLAN VIEW OF CORNER DETAIL

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

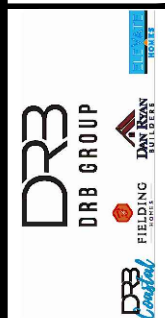
TWO SIDED GARAGE PORTAL FRAME BRACING ELEVATION ON CMU STEM
SCALE: N.T.S.



NC LIC #C-3825

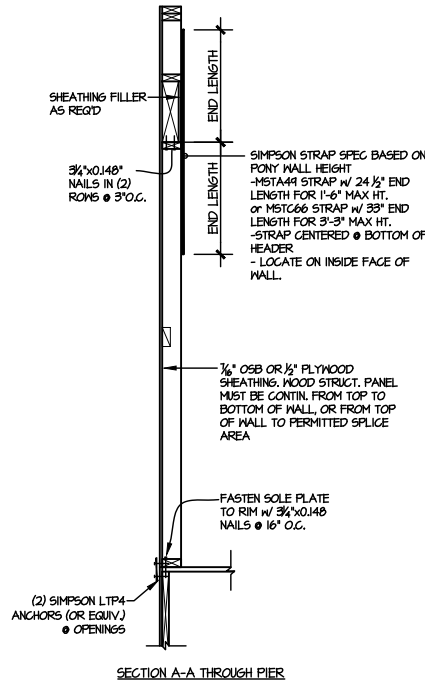
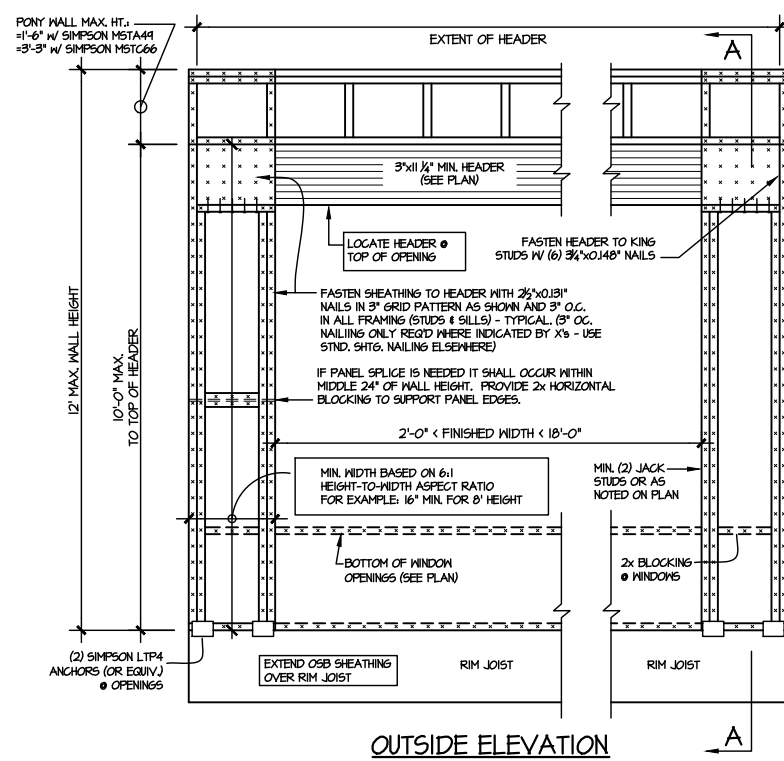
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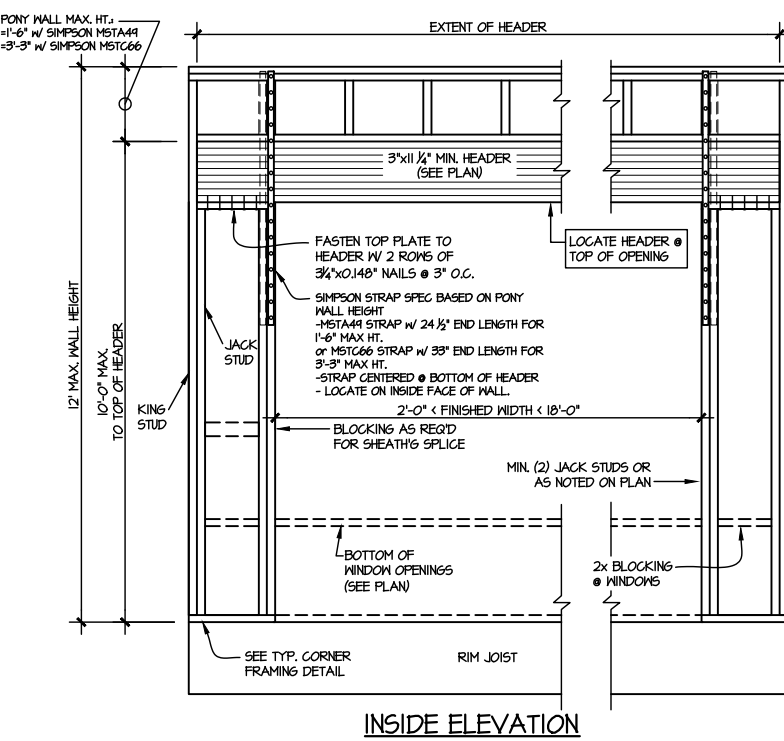
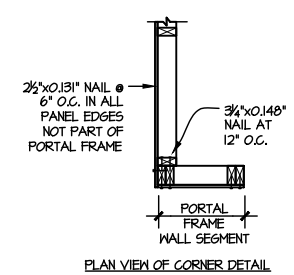


FRAMING DETAILS
COOPER 3 MODEL
RALEIGH, NC

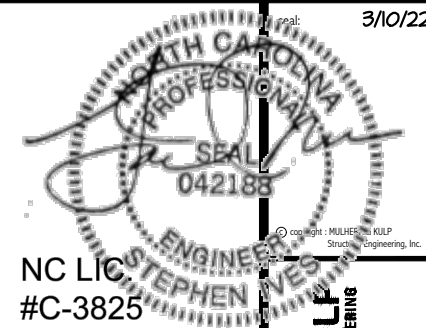
sheet:
SD2.3



NOTE: ALL SHEATHABLE AREAS OF EXTERIOR WALL SHALL BE FULLY SHEATHED WITH 1/2" PLYWOOD OR 3/8" OSB



1 DOOR/WINDOW PORTAL FRAME BRACING ELEVATION
SCALE: N.T.S.



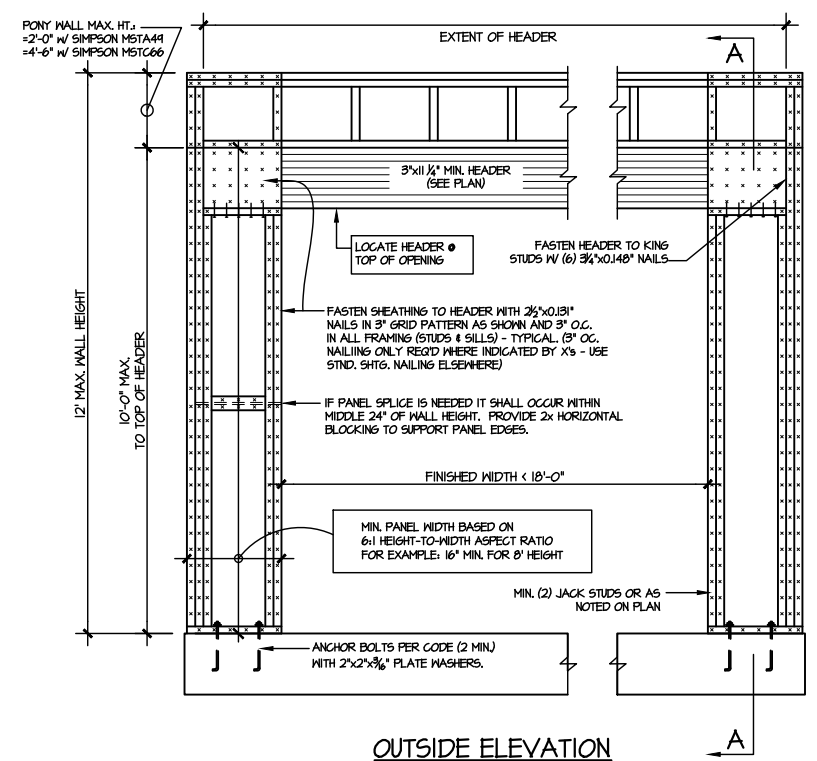
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M&K project number:
126-21030
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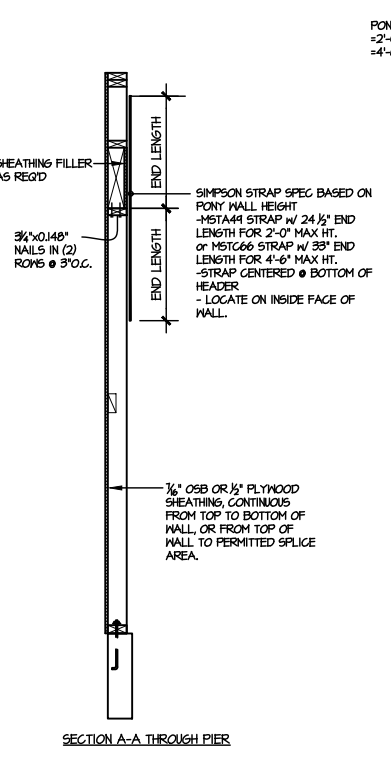


FRAMING DETAILS
COOPER 3 MODEL
RALEIGH, NC

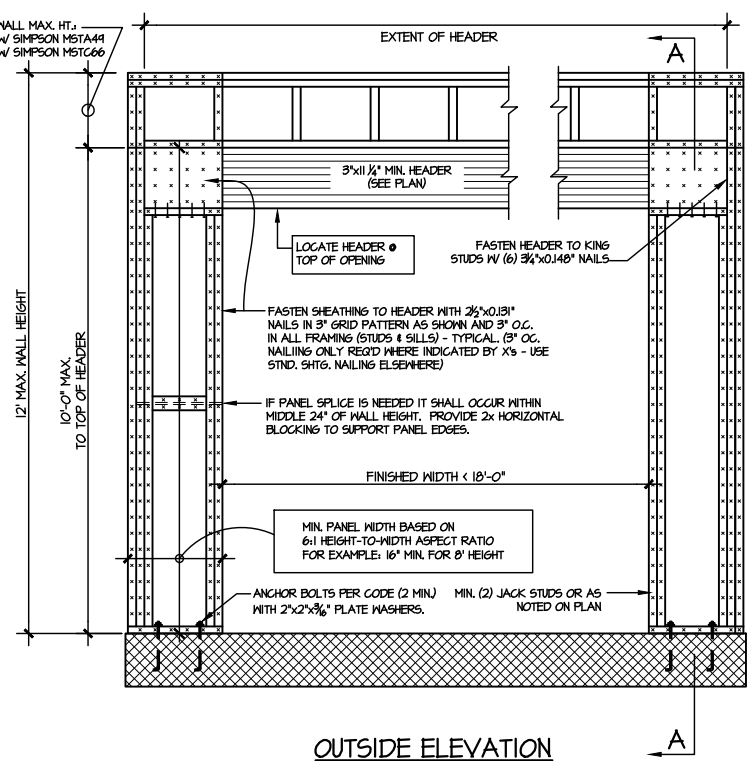
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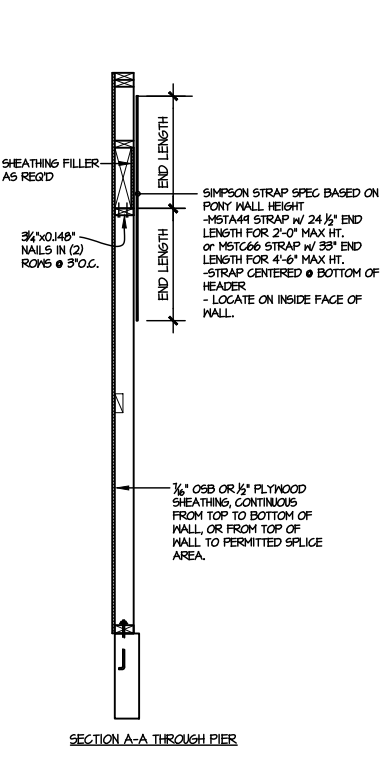
OUTSIDE ELEVATION



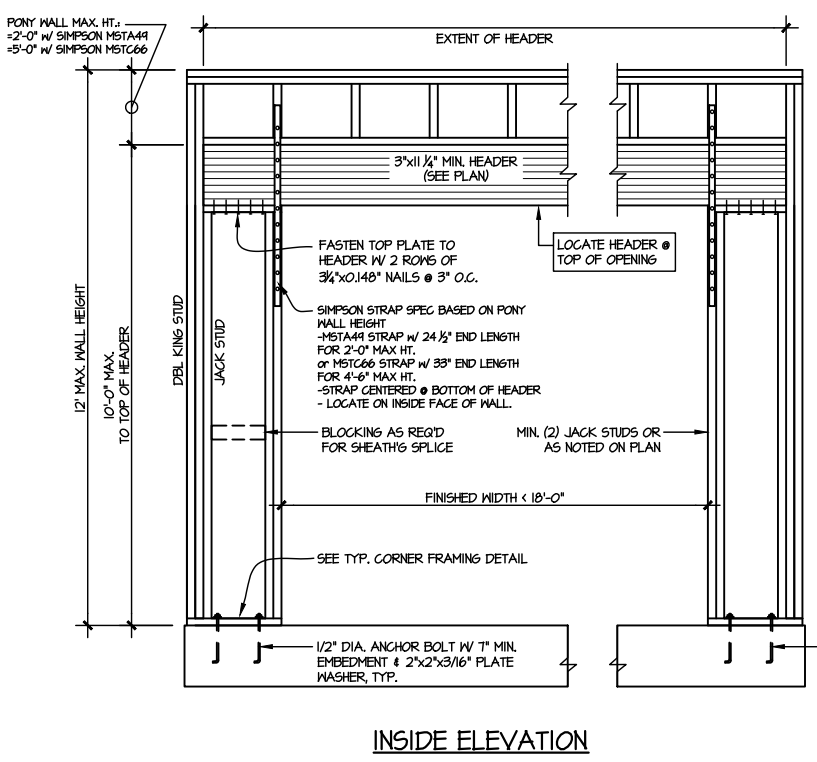
SECTION A-A THROUGH PIER



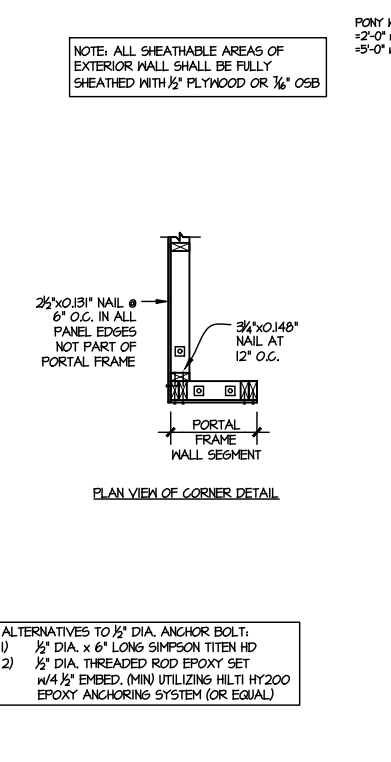
OUTSIDE ELEVATION



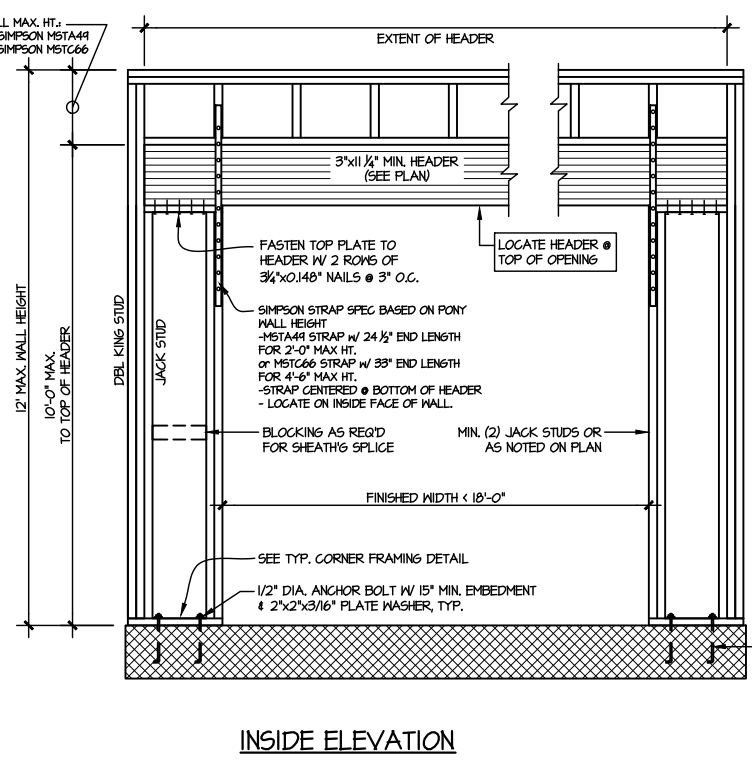
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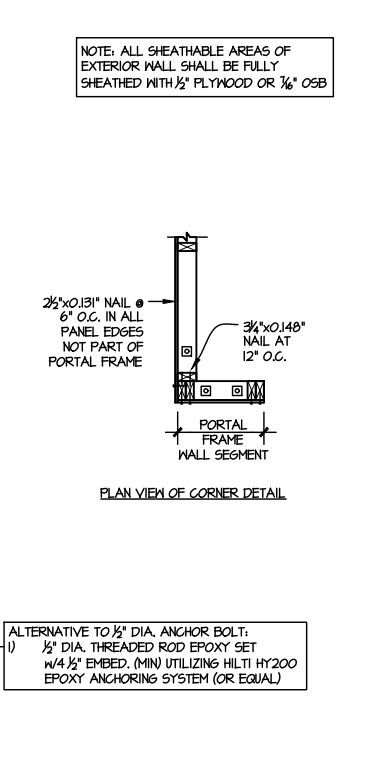
INSIDE ELEVATION



PLAN VIEW OF CORNER DETAIL



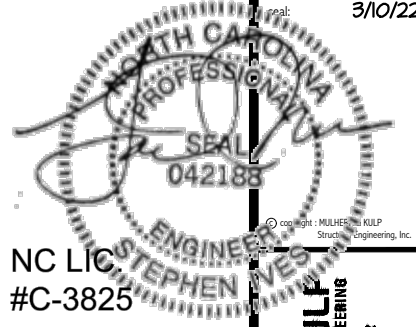
INSIDE ELEVATION



PLAN VIEW OF CORNER DETAIL

1 TWO SIDED PORTAL FRAME BRACING
ELEVATION ON CONCRETE STEM
SCALE: N.T.S.

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



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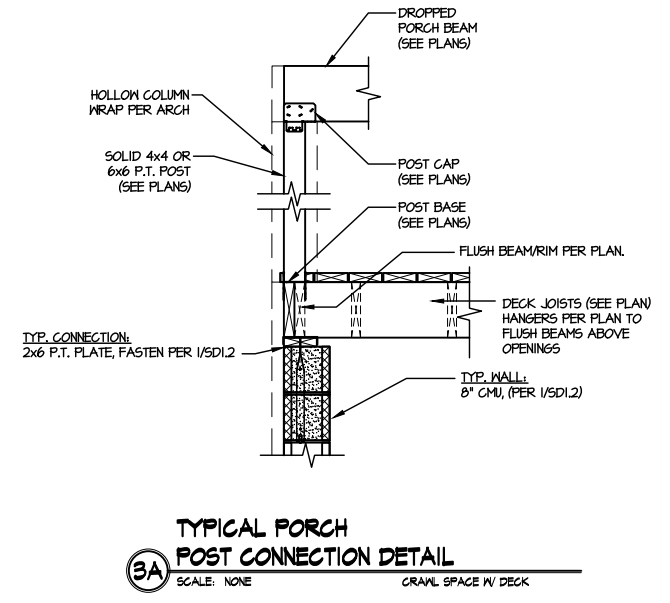
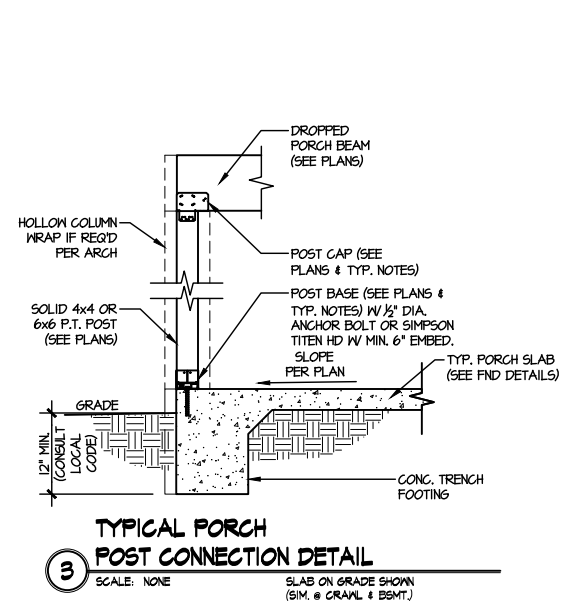
M&K project number:
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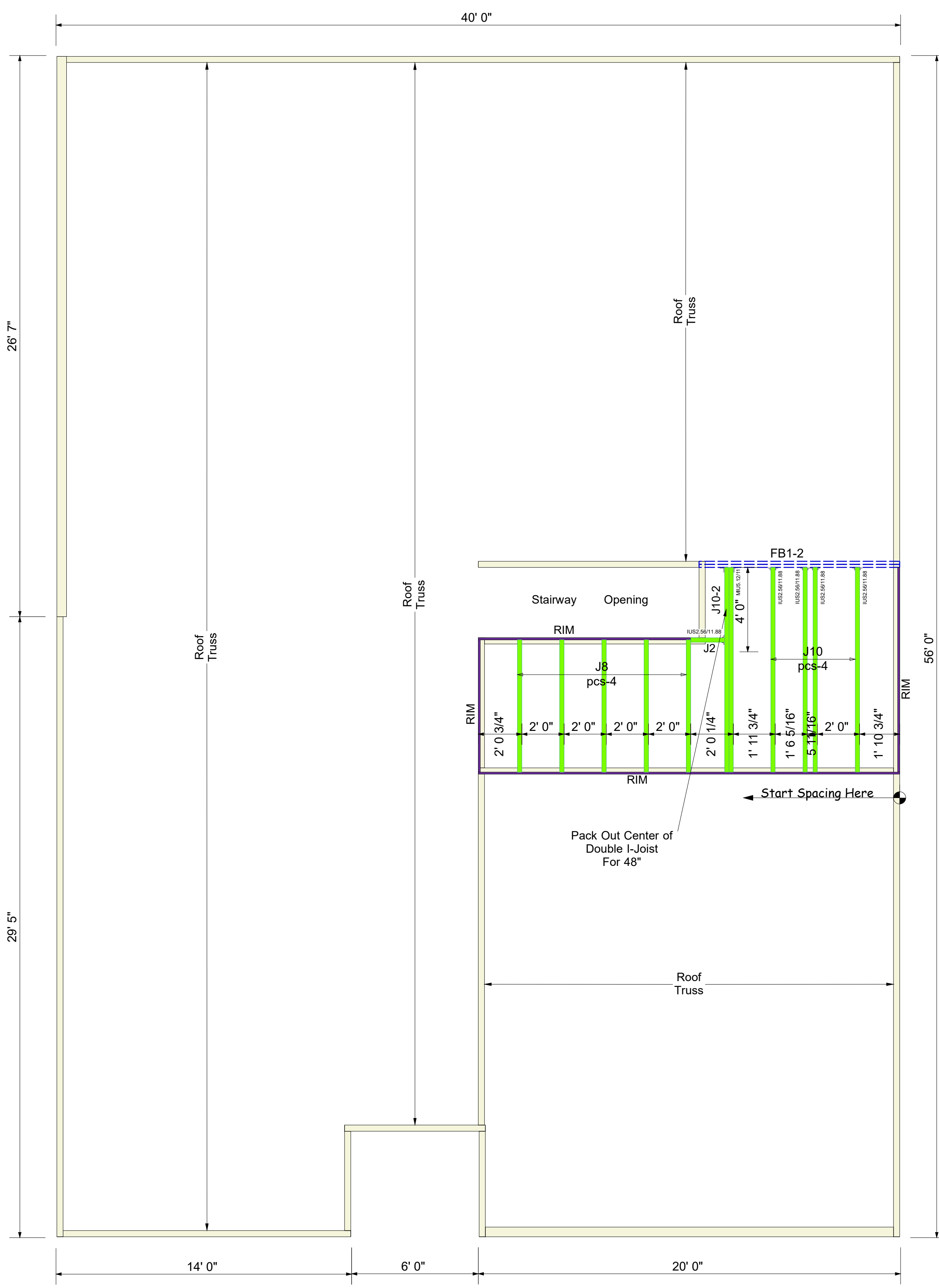
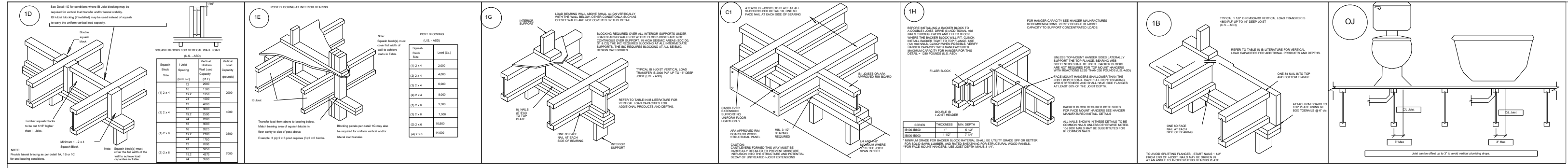
REVISIONS:
 date: initial:
 03/09/22 JTS



FRAMING DETAILS
 COOPER 3 MODEL
 RALEIGH, NC

sheet:
SD3.0





Connector Summary		
Qty	Manuf	Product
5	Simpson	IUS2.56/11.88
1	Simpson	MIU5.12/11

Products						
PlotID	Length	Product	Piles	Net Qty	Fab Type	
J10	10' 0"	11 7/8" PJI-40	1	4	MFD	
J10-2	10' 0"	11 7/8" PJI-40	2	2	MFD	
J8	8' 0"	11 7/8" PJI-40	1	5	MFD	
J2	2' 0"	11 7/8" PJI-40	1	1	MFD	
FB1-2	10' 0"	2.0 RigidLam DF LVL 1-3/4 x 11-7/8	2	2	FF	
RIM	12' 0"	1 1/8" x 11 7/8" APA Rim Board	1	4	FF	

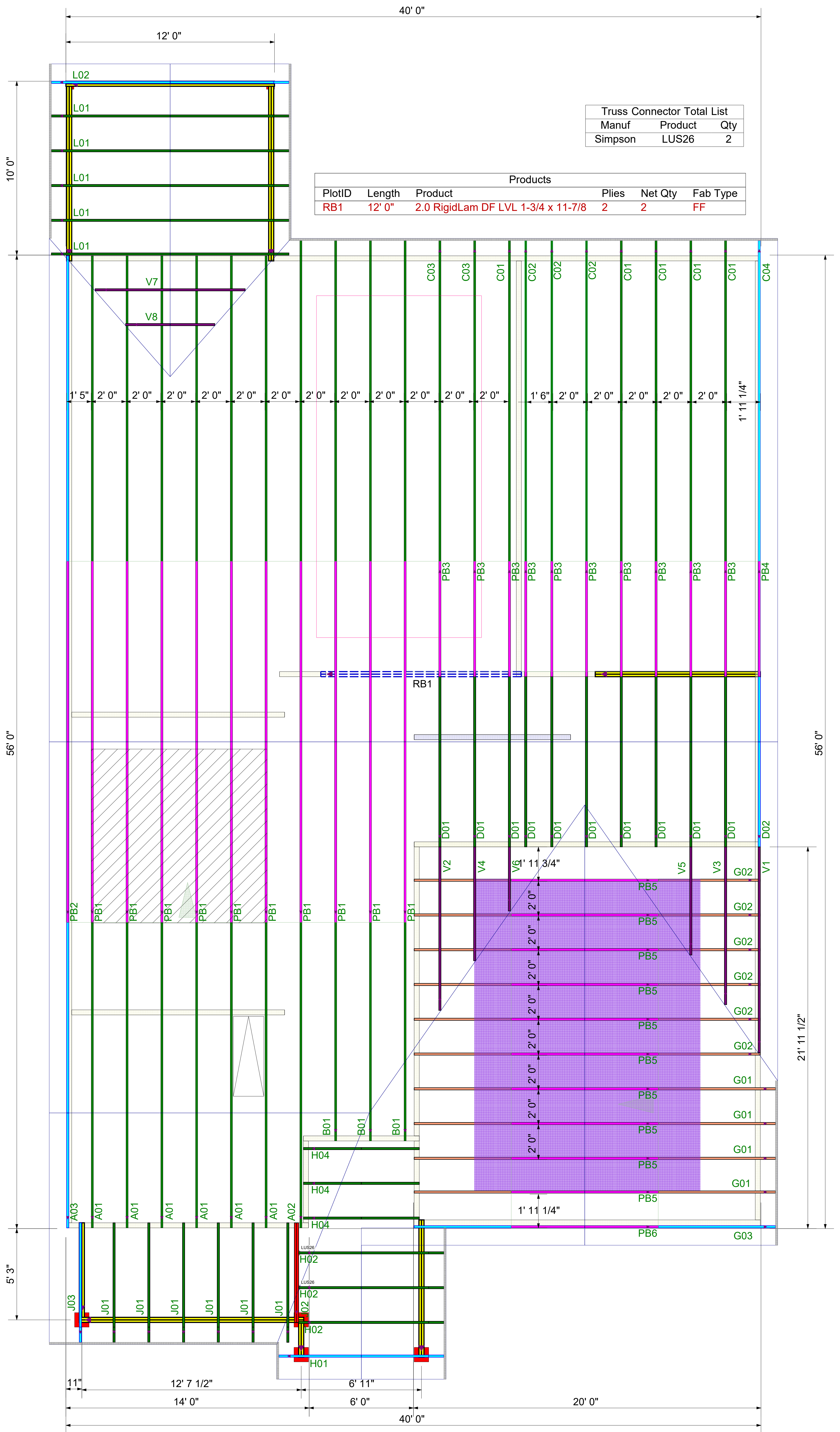
BLOCK SOLID UNDER ALL POST /POINT LOADS FROM ABOVE - TYPICAL AT ALL LOCATIONS

2nd Floor I-Joist
DRAWING SCALE : NTS

PROJECT NUMBER 22080003	REVISIONS	
SHEET NUMBER 1 / 1	DATE 08.03.22	BY RKW

DRB Homes NC LLC
121 Farm at Neills Creek (Cooper3 9-GRFE)
2nd FLOOR I-JOIST PLACEMENT PLAN





Truss Connector Total List		
Manuf	Product	Qty
Simpson	LUS26	2

Products					
PlotID	Length	Product	Plies	Net Qty	Fab Type
RB1	12' 0"	2.0 RigidLam DF LVL 1-3/4 x 11-7/8	2	2	FF

ROOF LAYOUT
DRAWING SCALE : NTS

PROJECT NUMBER 22080003	REVISIONS	
SHEET NUMBER 1 / 1	DATE 8-4-22	BY ND

DRB GROUP
COOPER 9 - 121 FARM AT NEILLS CREEK
ROOF TRUSS LAYOUT

