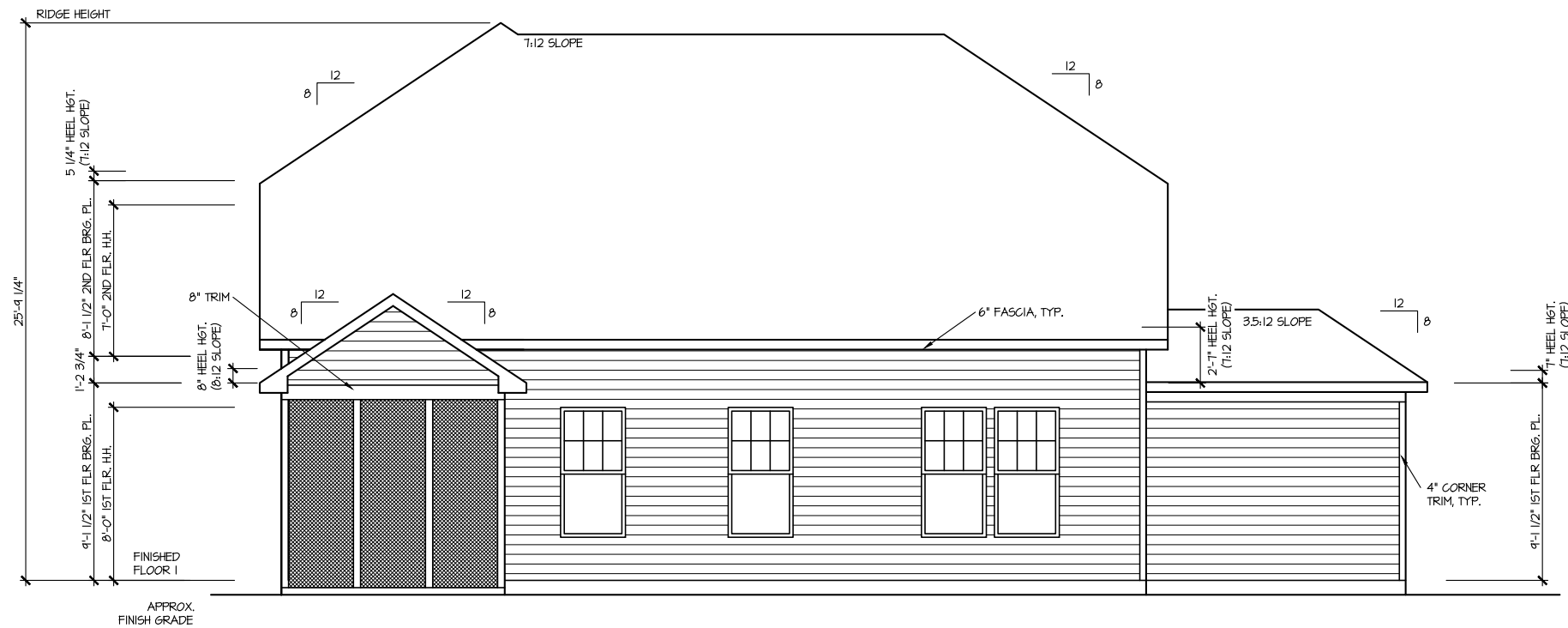


FRONT ELEVATION 10
SCALE: 1/8" = 1'-0"



REAR ELEVATION 10
SCALE: 1/8" = 1'-0"

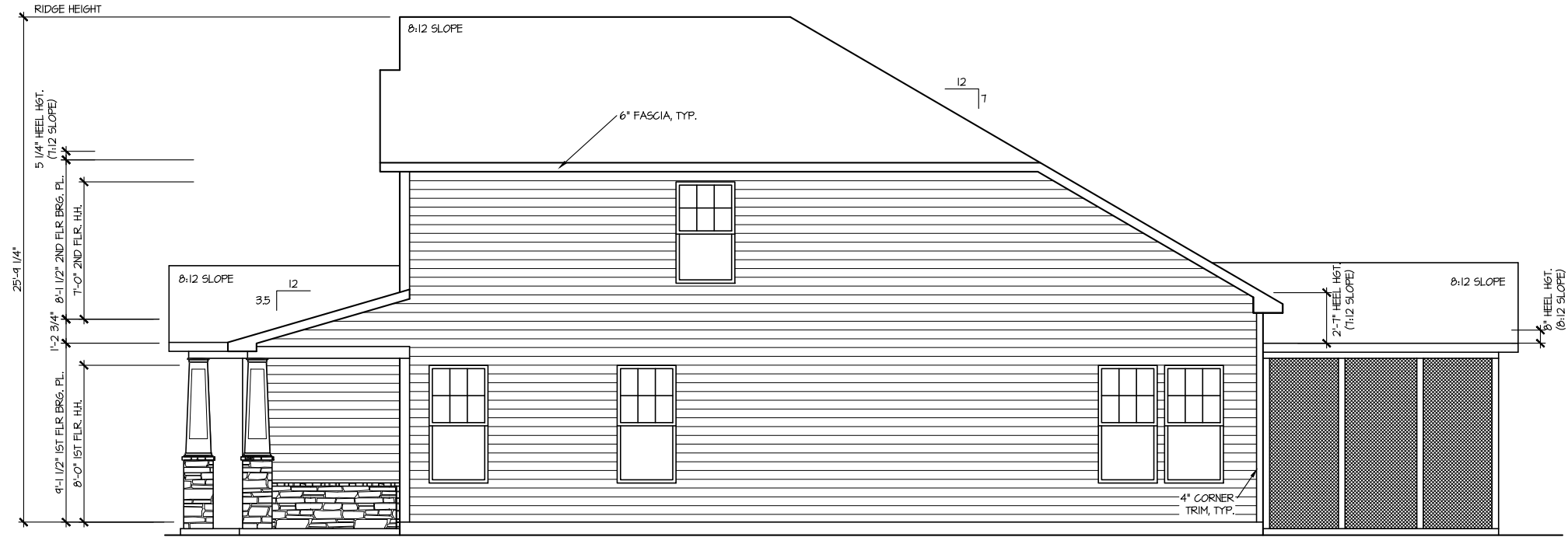
MASTER PLAN INFORMATION		UPDATED DATE
REVISION	DATE	02-03-2023
1 - RALE	10-12-2018	

DRAWN BY:	ITS
DATE:	04/03/2023
PLAN NO.	2183



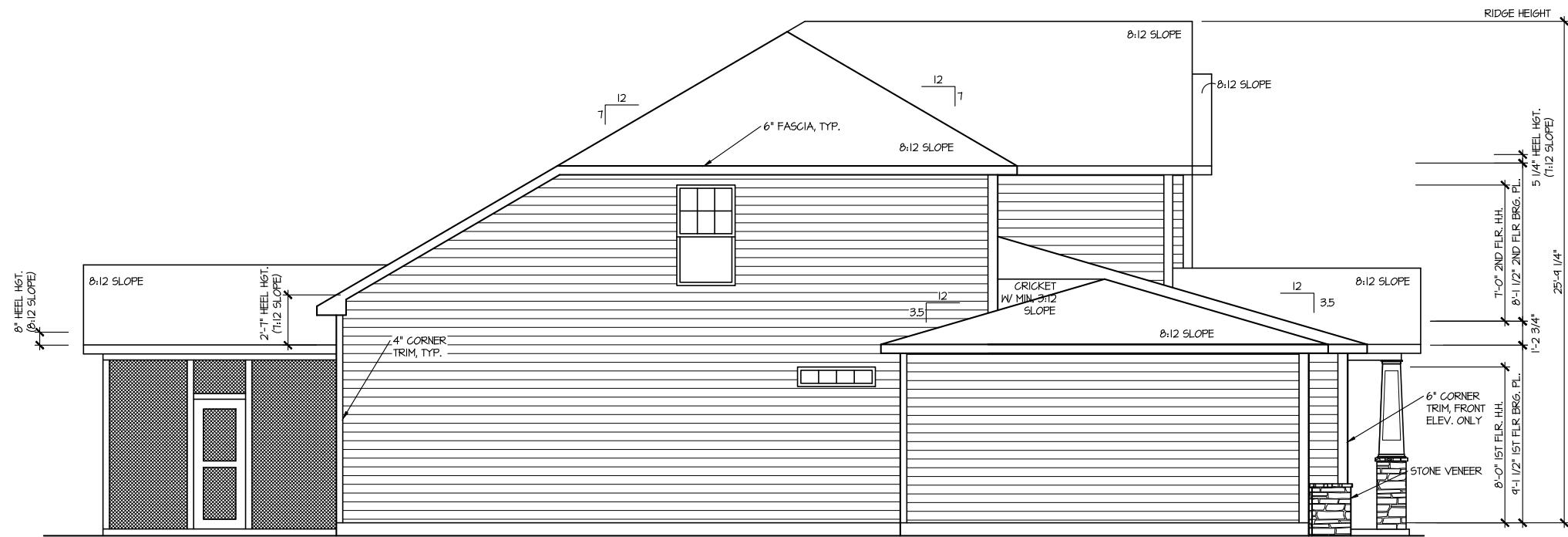
HOUSE NAME:	MIDDLETON
DRAWING TITLE	FRONT & REAR ELEVATIONS

SHEET No.	A.I.
-----------	------



RIGHT ELEVATION 10

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



LEFT ELEVATION 10

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

MASTER PLAN INFORMATION
REVISION DATE
1-RALE 10-12-2018

UPDATED DATE
02-03-2023

DRAWN BY:
ITS

DATE:
04/03/2023

PLAN NO.
2183

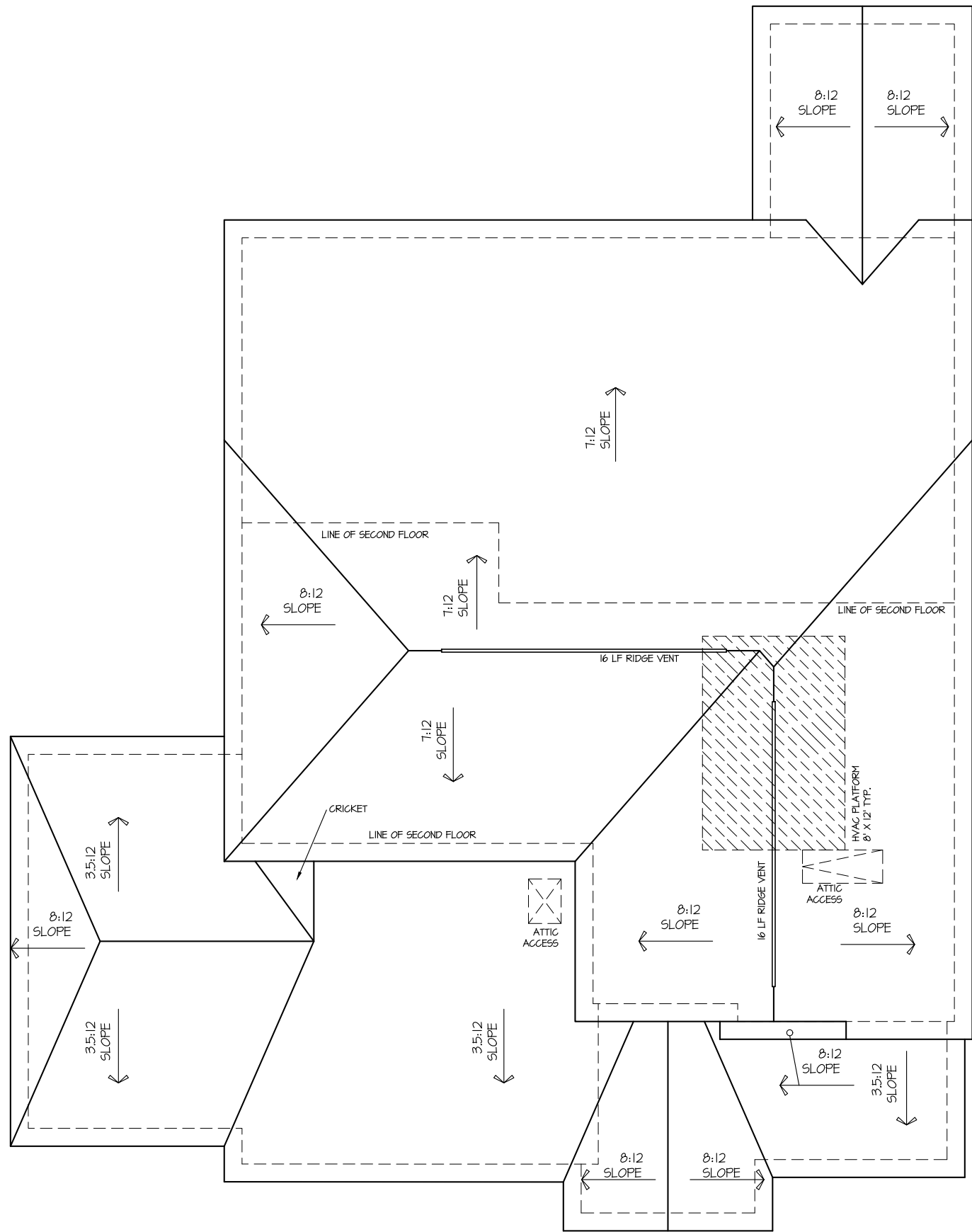


HOUSE NAME:
MIDDLETON
DRAWING TITLE
RIGHT & LEFT ELEVATIONS

SHEET No.

A1.2

ROOF VENTILATION CALCULATIONS:
 ROOF AREA = 1127 SQ. FT.
 OVERALL REQUIRED VENTILATION:
 1 TO 150 = 11.51 SQ. FT.
 1 TO 300 = 5.76 SQ. FT.
 50-80% IN TOP THIRD = 2.29 - 4.61 SQ. FT. (1 TO 300)
 NET FREE AREA OF VENTED SOFFIT = 5.7 SQ. IN. / LINEAR FT.
 NET FREE AREA OF RIDGE VENT = 10 SQ. IN. / LINEAR FT.
 LOWER VENTING (BOTTOM 2/3 RISE)
 1/4 LINEAR FEET OF SOFFIT X 5.7 SQ. IN. = 4.71 SQ. FT.
 UPPER VENTING (TOP 1/3 RISE)
 32 LINEAR FEET OF RIDGE X 10 SQ. IN. = 4.0 SQ. FT.
 4.00 SQ. FT. BETWEEN 50% - 80%
 (1 TO 300 ALLOWED)
 TOTAL ROOF VENTILATION: 8.71 SQ. FT. > 5.76 SQ. FT. (REQ'D)



ROOF PLAN ELEV. 10
 SCALE: 1/8" = 1'-0"

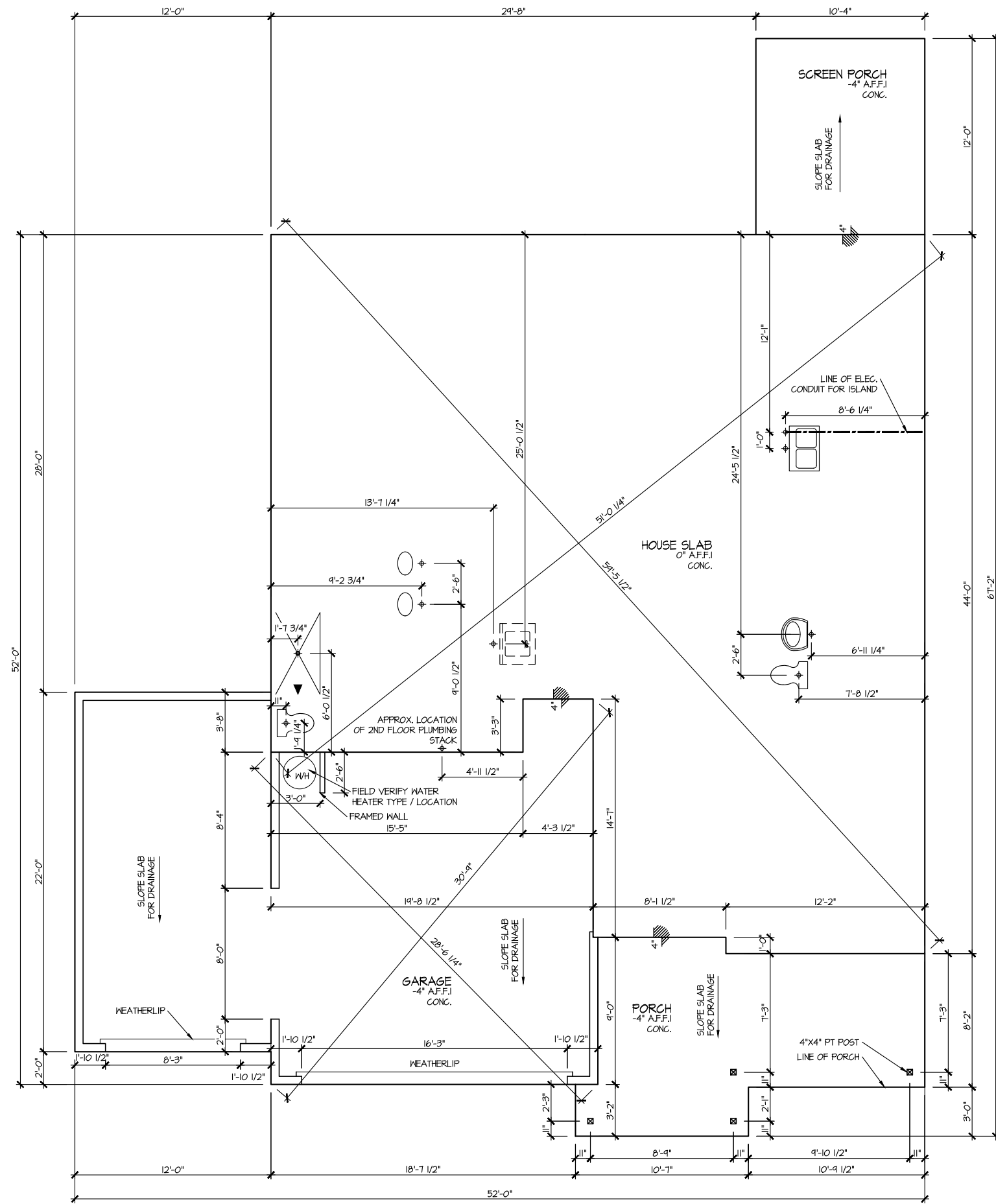
MASTER PLAN INFORMATION	
REVISION	DATE
1-PALE	10-12-2018
UPDATED DATE	02-03-2023

DRAWN BY: ITS
 DATE: 04/03/2023
 PLAN NO. 2183



HOUSE NAME: MIDDLETON
 DRAWING TITLE: ROOF PLAN

SHEET No. A13



**ELEVATION 10
SLAB PLAN**
SCALE: 1/8" = 1'-0"

MASTER PLAN INFORMATION

REVISION	DATE	UPDATED DATE
1 - RALE	10-12-2018	02-03-2023

DRAWN BY:
ITS

DATE: 04/03/2023

PLAN NO.
2183



HOUSE NAME:
MIDDLETON

DRAWING TITLE

SLAB PLAN

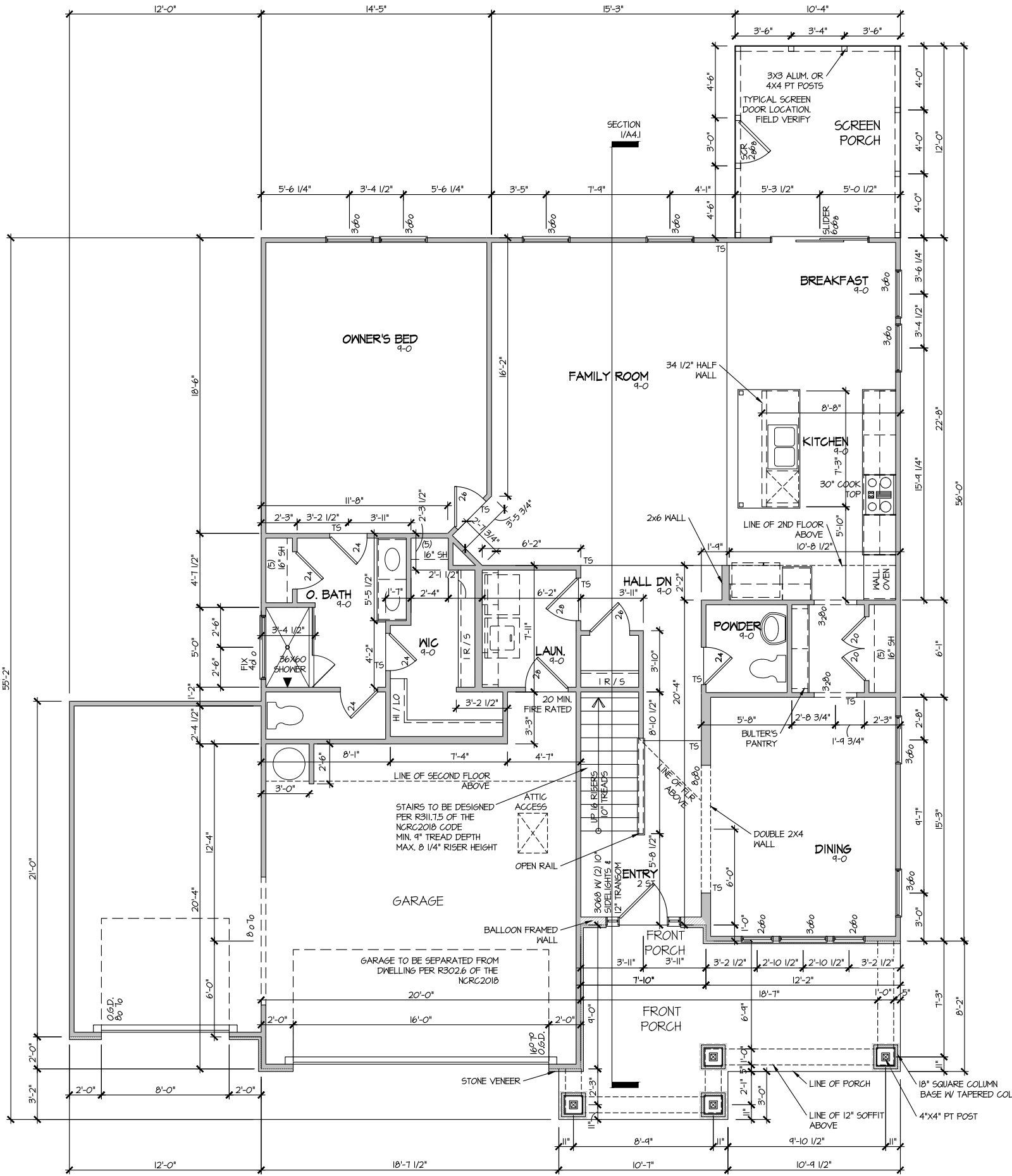
SHEET No.

A2.1

FILE: Lot 00.0136.dwg DATE: 4/3/2023 11:11 AM

ELEVATION 10 FIRST FLOOR PLAN

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



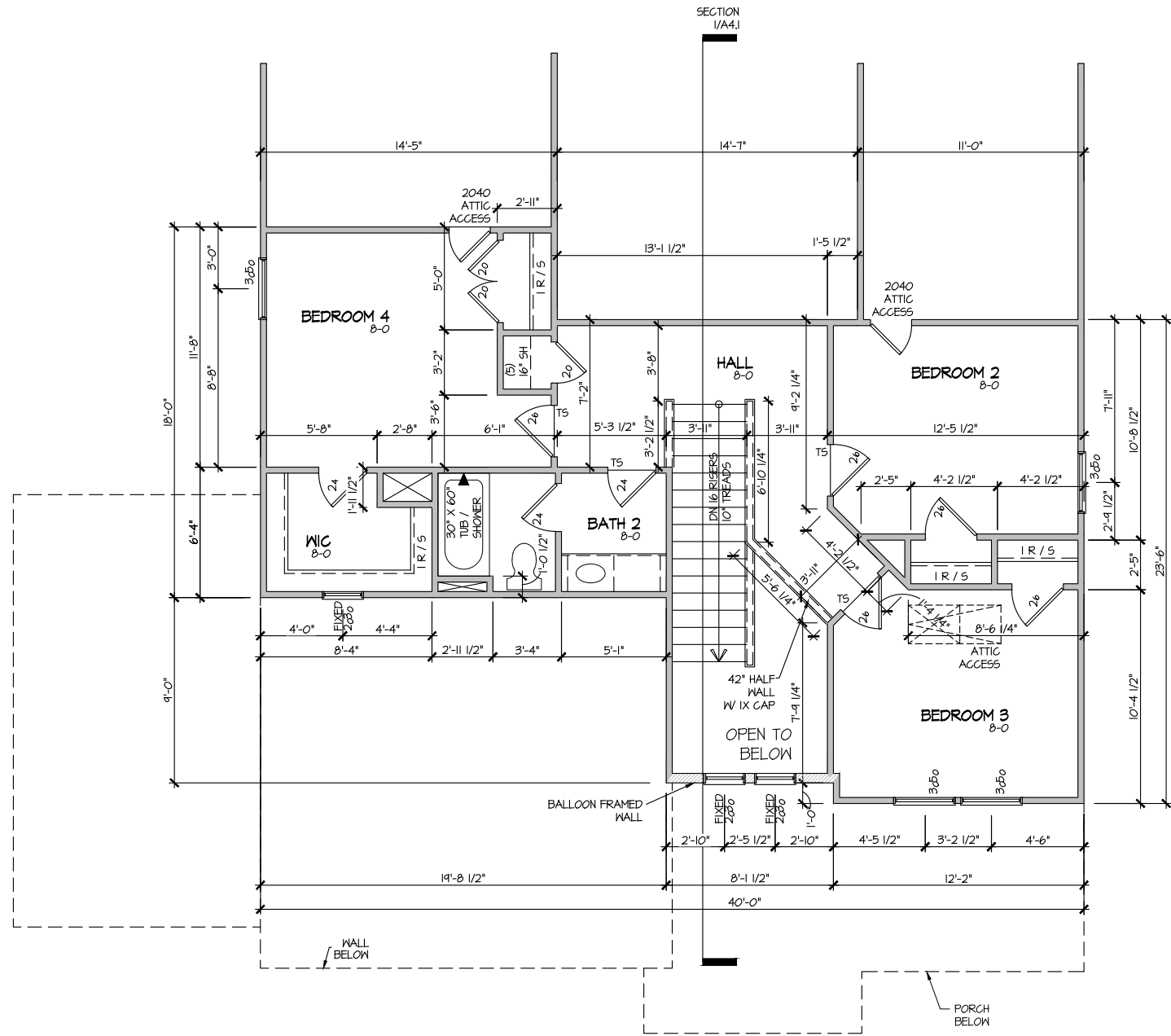
MASTER PLAN INFORMATION	
REVISION	DATE
1 - RALE	10-12-2018
UPDATED DATE	02-03-2023

DRAWN BY:	ITS
DATE:	04/03/2023
PLAN NO.	2183



HOUSE NAME:	MIDDLETON
DRAWING TITLE	FIRST FLOOR PLAN

SHEET No.	A3.1
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ELEVATION 10
 SECOND FLOOR PLAN
 SCALE: 1/8" = 1'-0"

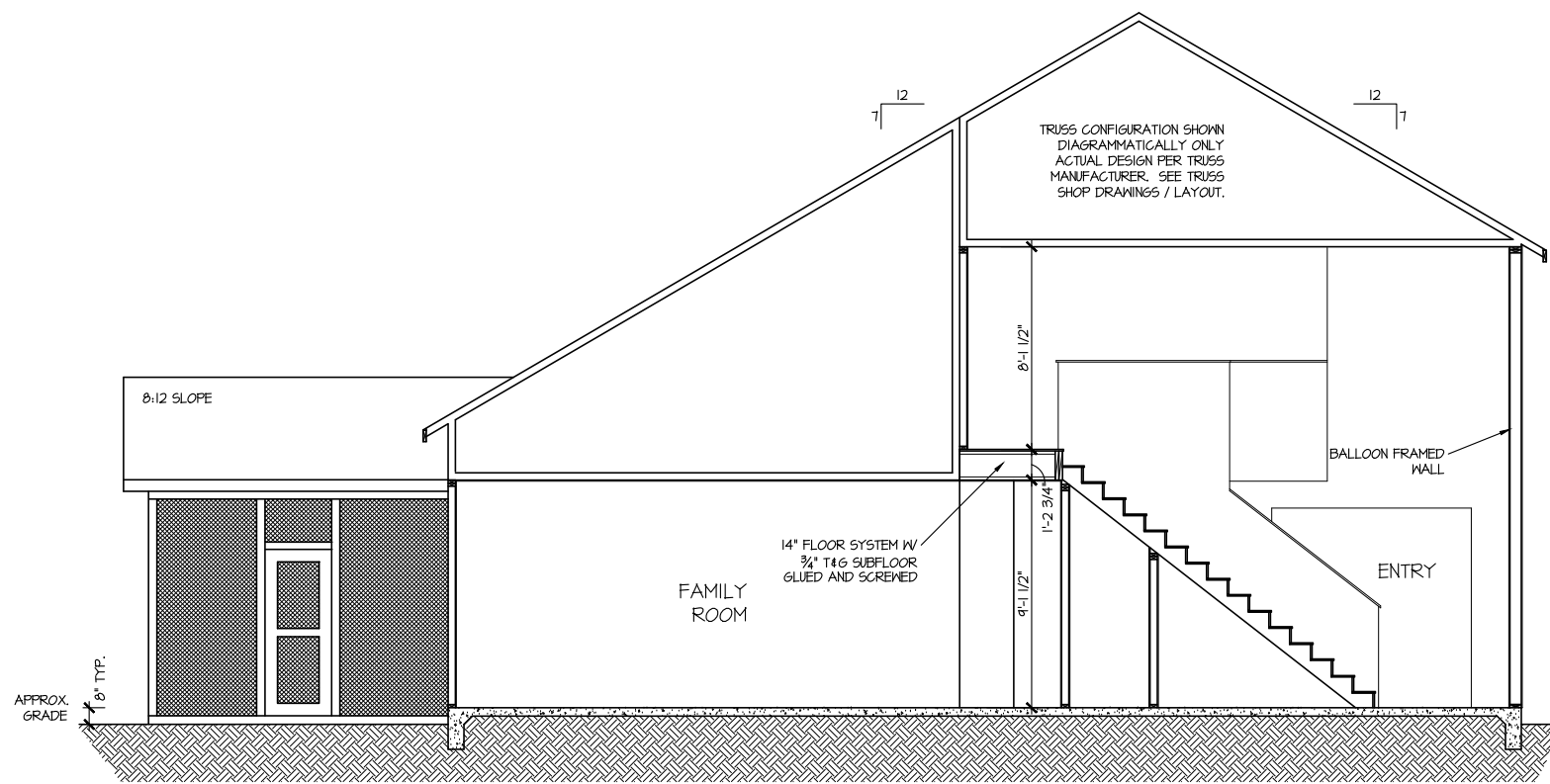
MASTER PLAN INFORMATION	
REVISION	DATE
1 - RALE	10-12-2018
	UPDATED DATE
	02-03-2023

DRAWN BY:	ITS
DATE:	04/03/2023
PLAN NO.	2183



HOUSE NAME:	MIDDLETON
DRAWING TITLE	SECOND FLOOR PLAN

SHEET No.
 A3.2



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

MASTER PLAN INFORMATION		UPDATED DATE
REVISION	DATE	
1 - RALE	10-12-2018	02-03-2023

DRAWN BY:	ITS
DATE:	04/03/2023
PLAN NO.	2183



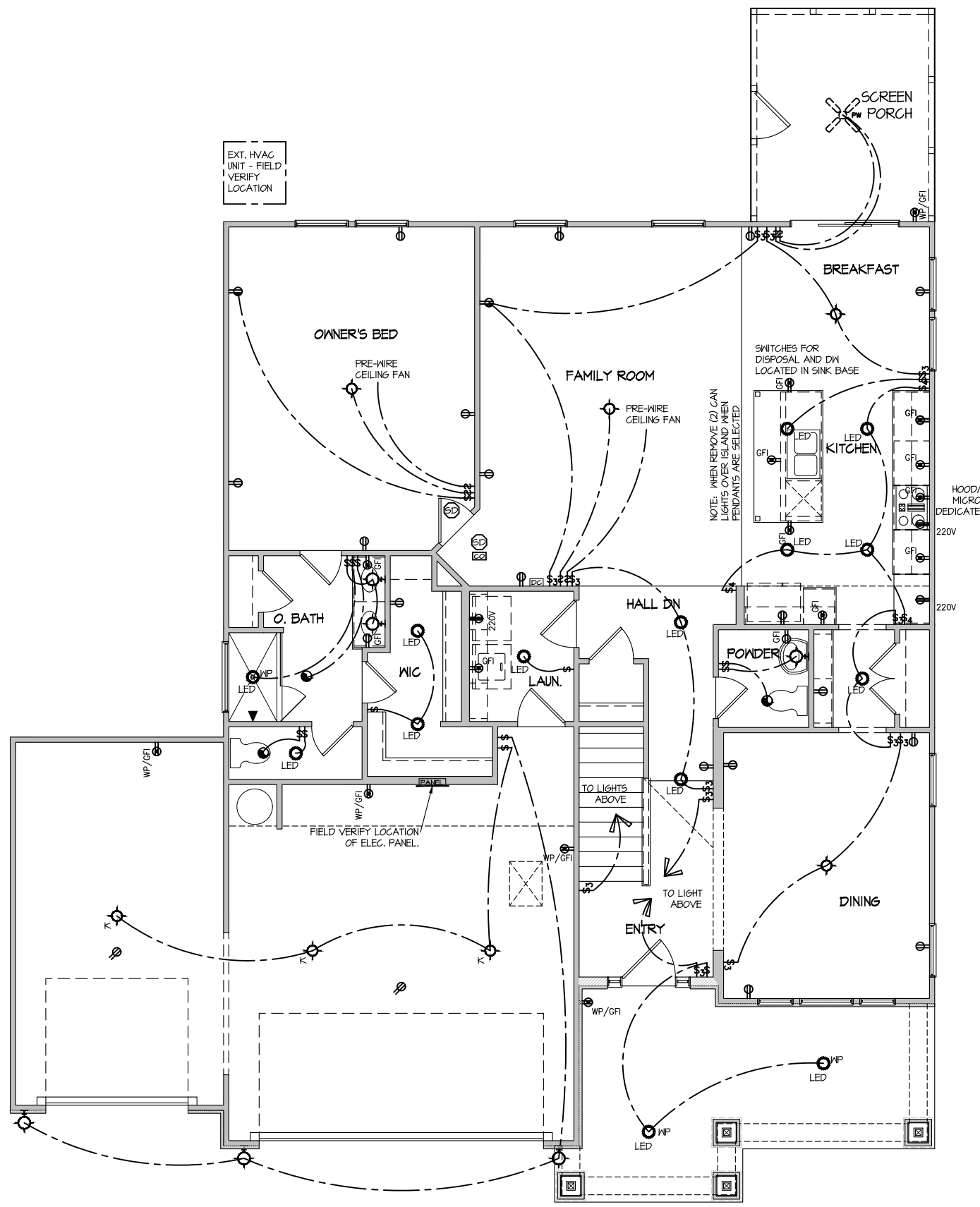
HOUSE NAME:	MIDDLETON
DRAWING TITLE	BUILDING SECTION

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
- SD 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 PULLCHAIN 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
FIRST FLOOR - ELEV. 10
 SCALE: 1/8" = 1'-0"

MASTER PLAN INFORMATION	
REVISION	DATE
1-RALE	10-12-2018
UPDATED DATE	02-03-2023

DRAWN BY:	ITS
DATE:	04/03/2023
PLAN NO.	2183



HOUSE NAME:	MIDDLETON
DRAWING TITLE	FIRST FLOOR ELECTRICAL

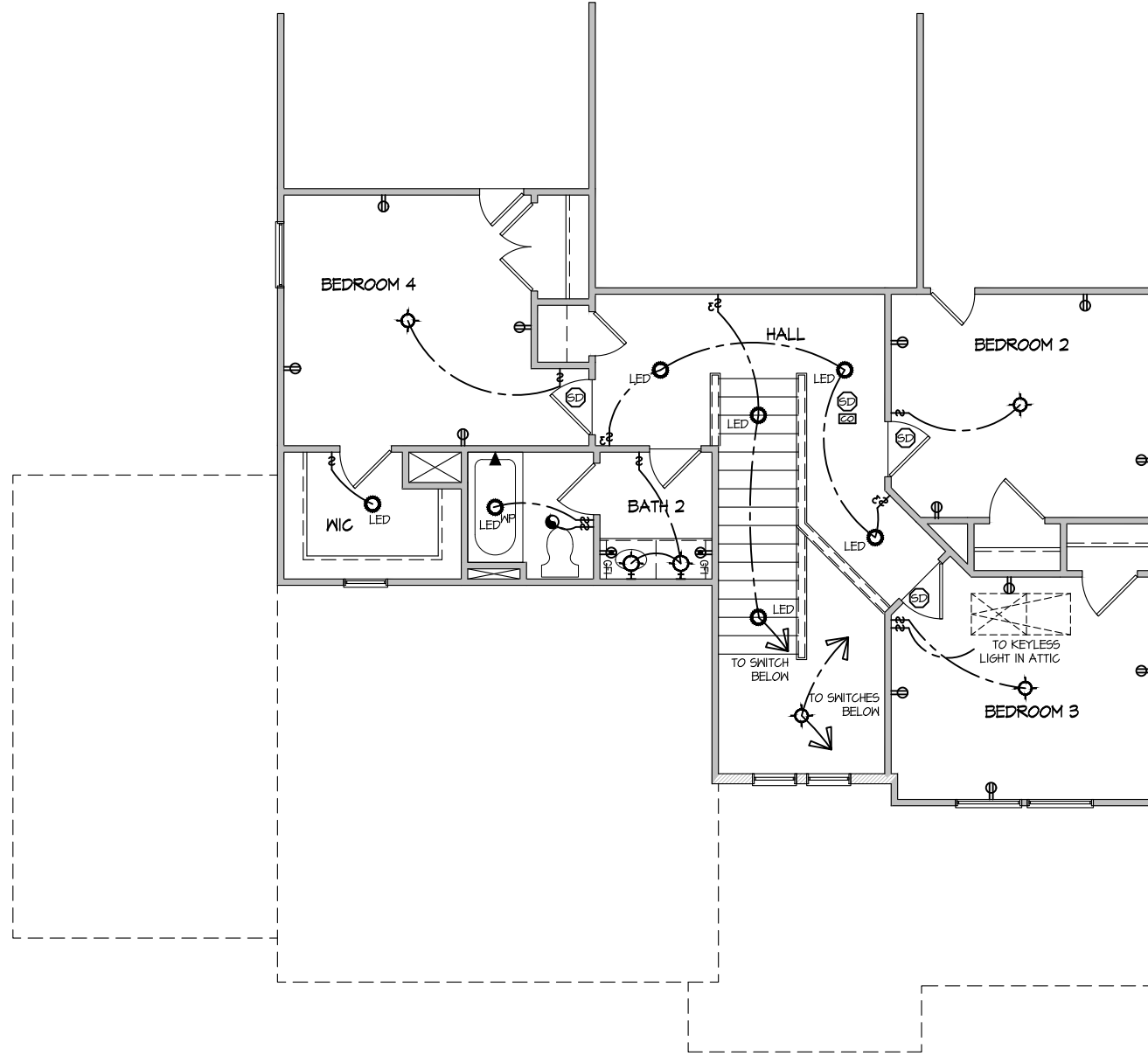
SHEET No.	E.I.
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FILE: Lot 00.0136.dwg DATE: 4/3/2023 11:11 AM

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
- Ⓢ FULLCHAIN 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. 10
 SCALE: 1/8" = 1'-0"

MASTER PLAN INFORMATION		UPDATED DATE
REVISION	DATE	
1 - RALE	10-12-2018	
		02-03-2023

DRAWN BY: ITS
 DATE: 04/03/2023
 PLAN NO. 2183



HOUSE NAME: MIDDLETON
 DRAWING TITLE: SECOND FLOOR ELECTRICAL

SHEET No. E1.2

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

Table with 3 columns: DESCRIPTION OF BLDG. ELEMENT, 3"x0.131" NAILS, 3"x0.120" NAILS. Rows include JOIST TO SOLE PLATE, SOLE PLATE TO JOIST/BLK'G, STUD TO SOLE PLATE, etc.

LEGEND

- Interior bearing wall, bearing wall above, beam/header, indicates shear wall & extent, extent of overframing, metal hanger, etc.

NON-BEARING HEADER SCHEDULE

Table with 3 columns: SPAN, 2x4 NON-BEARING PARTITION WALL, 2x6 NON-BEARING PARTITION WALL. Rows include UP TO 3'-0", UP TO 6'-0", UP TO 8'-0".

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.

STRUCTURAL DESIGN AND SPECIFICATIONS ASSUME THAT ALL SUPPORTING AND NON-SUPPORTING ELEMENTS IN CONTACT WITH FLOOR FRAMING ARE LEVEL.

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.

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.

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.

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, U.N.O.

ROOF FRAMING

- BAY WINDOWS & SHED ROOFS (UP TO 6' SPAN) CAN BE 2x4 OR 2x6 RAFTERS & CEILING JOISTS @ 16/24" O.C.

LATERAL BRACING & SHEAR WALL SHEATHING SPECIFICATIONS

THIS MODEL HAS BEEN DESIGNED TO RESIST LATERAL FORCES RESULTING FROM: 120 MPH WIND IN 2018 NCSBC-RC

THE DESIGN WAS COMPLETED PER 2015 IBC (SECTION 1609) & ASCE 7-10, AS PERMITTED BY R301.3 OF THE 2018 NCSBC-RC.

DESIGN WIND UPLIFT LOADS HAVE BEEN CALCULATED UTILIZING ASCE 7-10 (ACCEPTED ENGINEERING PRACTICE) AS ALLOWED PER 2018 NCSBC-RC SECTION R802.11.1.1.

EXT. WALL SHEATHING SPECIFICATION

- 7/16" OSB OR 15/32" PLYWOOD: FASTEN SHEATHING W/ 2"x0.131" NAILS @ 6" O.C. AT EDGES @ 12" O.C. IN THE PANEL 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.

3" O.C. EDGE NAILING

- AT DESIGNATED AREAS - FASTEN PANEL EDGES OF WOOD STRUCTURAL WALL SHEATHING TO FRAMING W/ 8d NAILS @ 3" O.C.

NOTES

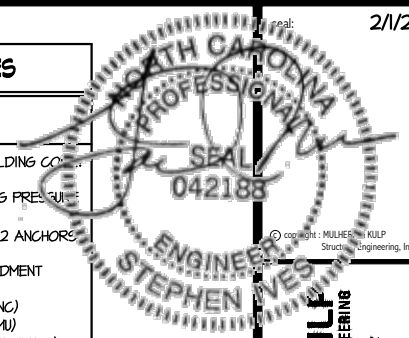
- SEE CONNECTION SPECIFICATIONS CHART FOR STANDARD SHEAR TRANSFER DETAILING. DESIGN ASSUMES 16" O.C. MAX. STUD SPACING, U.N.O.

- INDICATES EXTENT OF INT. OSB SHEARNALL OR 3" O.C. OSB SHEARNALL. INDICATES HOLDDOWN BELOW

GENERAL STRUCTURAL NOTES

FOUNDATION

- DESIGN IS BASED ON 2018 NORTH CAROLINA STATE BUILDING CODE-RESIDENTIAL CODE. FOOTING DESIGN - 2000 PSF ALLOWABLE SOIL BEARING PRESSURE IS ASSUMED.



MULHERN+KULP RESIDENTIAL STRUCTURAL ENGINEERING 300 Bechtel Ave. Building 17 - Raleigh, NC 27607



M&K project number: 126-21018 project mgr: JTR drawn by: MDH issue date: 07-16-21

REVISIONS: date: initial: 01/13/22 MDH 02/01/23 JTS

DRB HOMES

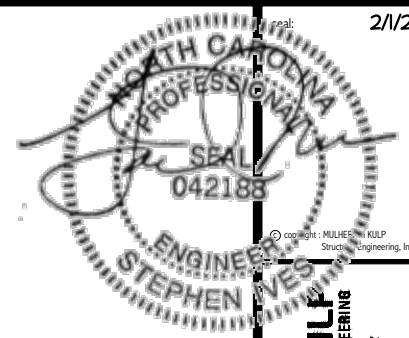
STRUCTURAL NOTES MIDDLETON MODEL RALEIGH, NC

SO.0

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

LEGEND

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



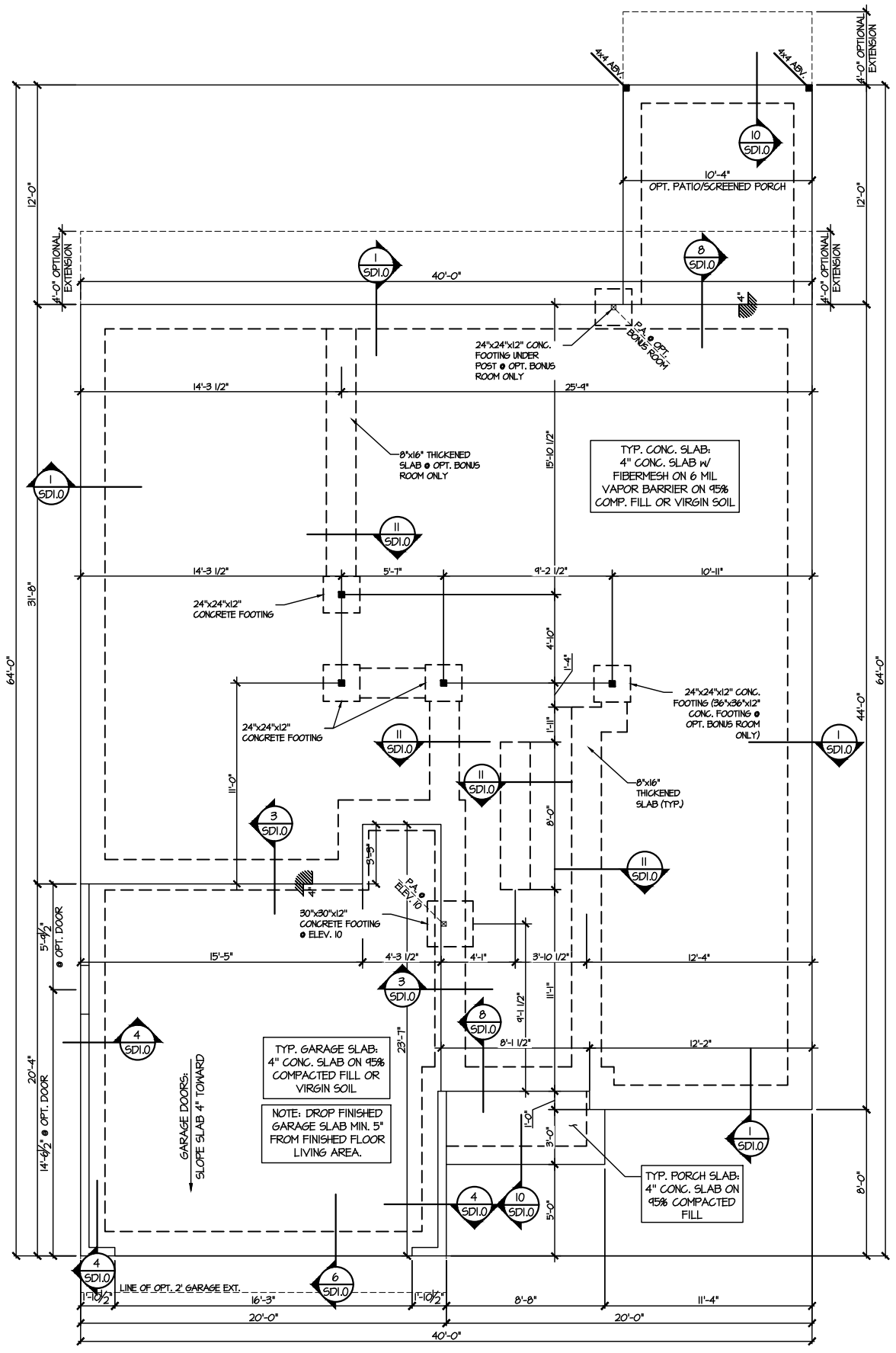
MULHERN+KULT
RESIDENTIAL STRUCTURAL ENGINEERING
300 Beaverville Ave., Building 4 - Raleigh, NC 27602
919-886-8881 - mulhern+kult.com
N.C. LIC. #C-38325

MSG project number:
126-21018
project mgr: JTR
drawn by: MDH
issue date: 07-16-21
REVISIONS:
date: initial:
01/13/22 MDH
02/01/23 ITS



FOUNDATION PLANS
MIDDLETON MODEL
RALEIGH, NC

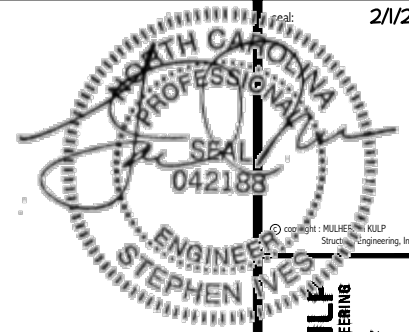
sheet: LEFT HAND
S1.0



1 MONO SLAB FOUNDATION PLAN
SCALE: 1/8"=1'-0" ELEVATION 1.1
OPTIONAL SCREENED PORCH SHOWN

REFER TO SO.0 FOR
TYPICAL STRUCTURAL NOTES
& SCHEDULES

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



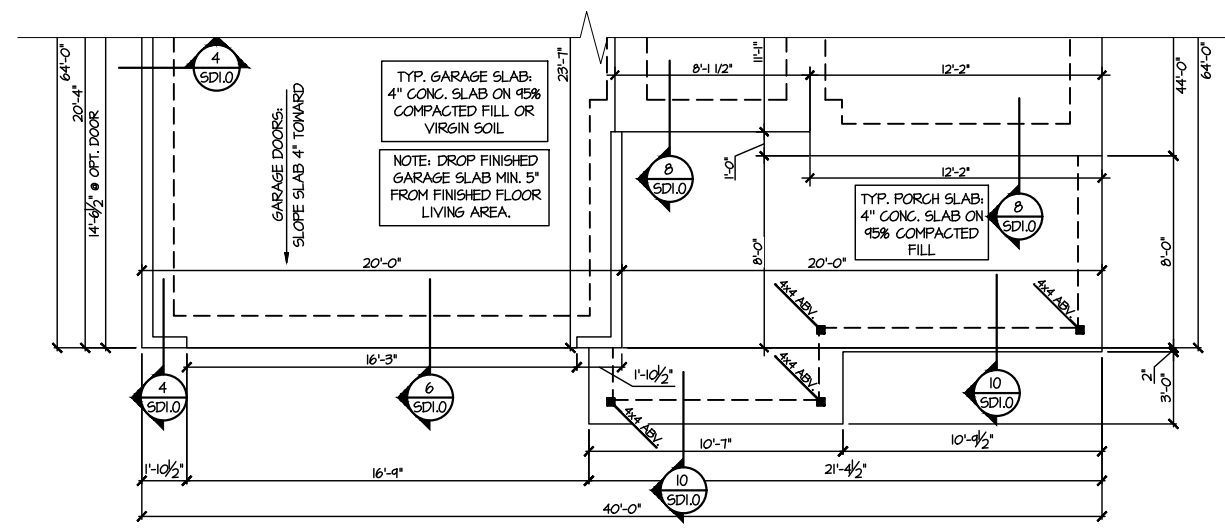
MULHERN+KULT
RESIDENTIAL STRUCTURAL ENGINEERING
300 Blandville Ave. Building 6 - Durham, NC 27702
P: 919-486-8881 F: 919-486-8882
www.mulhernkult.com
NC LIC. #C-3825

M&K project number:	126-21018
project mgr:	JTR
drawn by:	MDH
issue date:	07-16-21
REVISIONS:	
date:	initial:
01/13/22	MDH
02/01/23	JTS

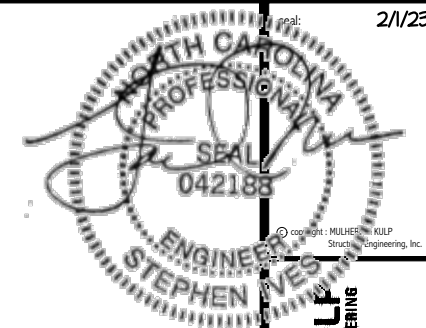


FOUNDATION PLANS
MIDDLETON MODEL
RALEIGH, NC

sheet: LEFT HAND
S1.1



2 PARTIAL MONO SLAB FOUNDATION PLAN
SCALE: 1/8"=1'-0" ELEVATIONS #10



MULHERN+KULP
RESIDENTIAL STRUCTURAL ENGINEERING
300 Remick Ave., Building 4 - Asheville, PA 18002
P 215-946-0001 - mulhern@mkulpe.com
NC LIC. #C-3825

M&K project number:
126-21018
project mgr: JTR
drawn by: MDH
issue date: 07-16-21
REVISIONS:
date: initial:
01/13/22 MDH
02/01/23 JTS



FLOOR FRAMING PLANS
MIDDLETON MODEL
RALEIGH, NC

sheet: LEFT HAND
S3.0J

ENGINEERED BEAM MATERIAL SCHEDULE

BEAM NUMBER	LVL OPTION	PSL OPTION	LSL OPTION	FLITCH OPTION	STEEL OPTION
001	(2)3/4"x11 1/8" - H	3/2"x11 1/8" - H	(2)3/4"x11 1/8" - H	(2)2x12 + (1) 1/2"x11 1/4" STEEL FLITCH PLATE - H	N/A
001A	(2)3/4"x11 1/8" - H	3/2"x11 1/8" - H	(2)3/4"x11 1/8" - H	(2)2x12 + (1) 1/2"x11 1/4" STEEL FLITCH PLATE - H	N/A
002	(2)3/4"x10" - FT	3/2"x10" - FT	N/A	(3)2x12 + (2) 1/2"x11 1/4" STEEL FLITCH PLATES - FB	W12x14 - F
003	(2)3/4"x14" - F	3/2"x14" - F	(2)3/4"x14" - F	(2)2x12 + (1) 1/2"x11 1/4" STEEL FLITCH PLATE - FB	W12x14 - F
004	(2)3/4"x14" - F	3/2"x14" - F	(2)3/4"x14" - F	(2)2x12 + (1) 1/2"x11 1/4" STEEL FLITCH PLATE - FB	W12x14 - F
005	(2)3/4"x14" - F	3/2"x14" - F	(2)3/4"x14" - F	(2)2x12 + (1) 1/2"x11 1/4" STEEL FLITCH PLATE - FB	W12x14 - F
006	(2)3/4"x14" - F	3/2"x14" - F	(2)3/4"x14" - F	(2)2x12 + (1) 1/2"x11 1/4" STEEL FLITCH PLATE - FB	W12x14 - F
007	(2)3/4"x11 1/8" - F	3/2"x11 1/8" - F	(2)3/4"x11 1/8" - F	(2)2x12 + (1) 1/2"x11 1/4" STEEL FLITCH PLATE - F	W10x12 - F
008	(2)3/4"x14" - F	3/2"x14" - F	(2)3/4"x14" - F	(2)2x12 + (1) 1/2"x11 1/4" STEEL FLITCH PLATE - FB	W12x14 - F
009	(3)3/4"x10" - FT	3/2"x10" - FT	N/A	(4)2x12 + (3) 1/2"x11 1/4" STEEL FLITCH PLATES - FB	W12x26 - F
010	(3)3/4"x20" - FT	3/2"x20" - FT	N/A	(4)2x12 + (3) 3/8"x11 1/4" STEEL FLITCH PLATES - FB	W12x35 - F
011	(2)3/4"x11 1/8" - FB	3/2"x11 1/8" - FB	(2)3/4"x14" - FB	(2)2x12 + (1) 1/2"x11 1/4" STEEL FLITCH PLATE - FB	W10x12 - FB

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

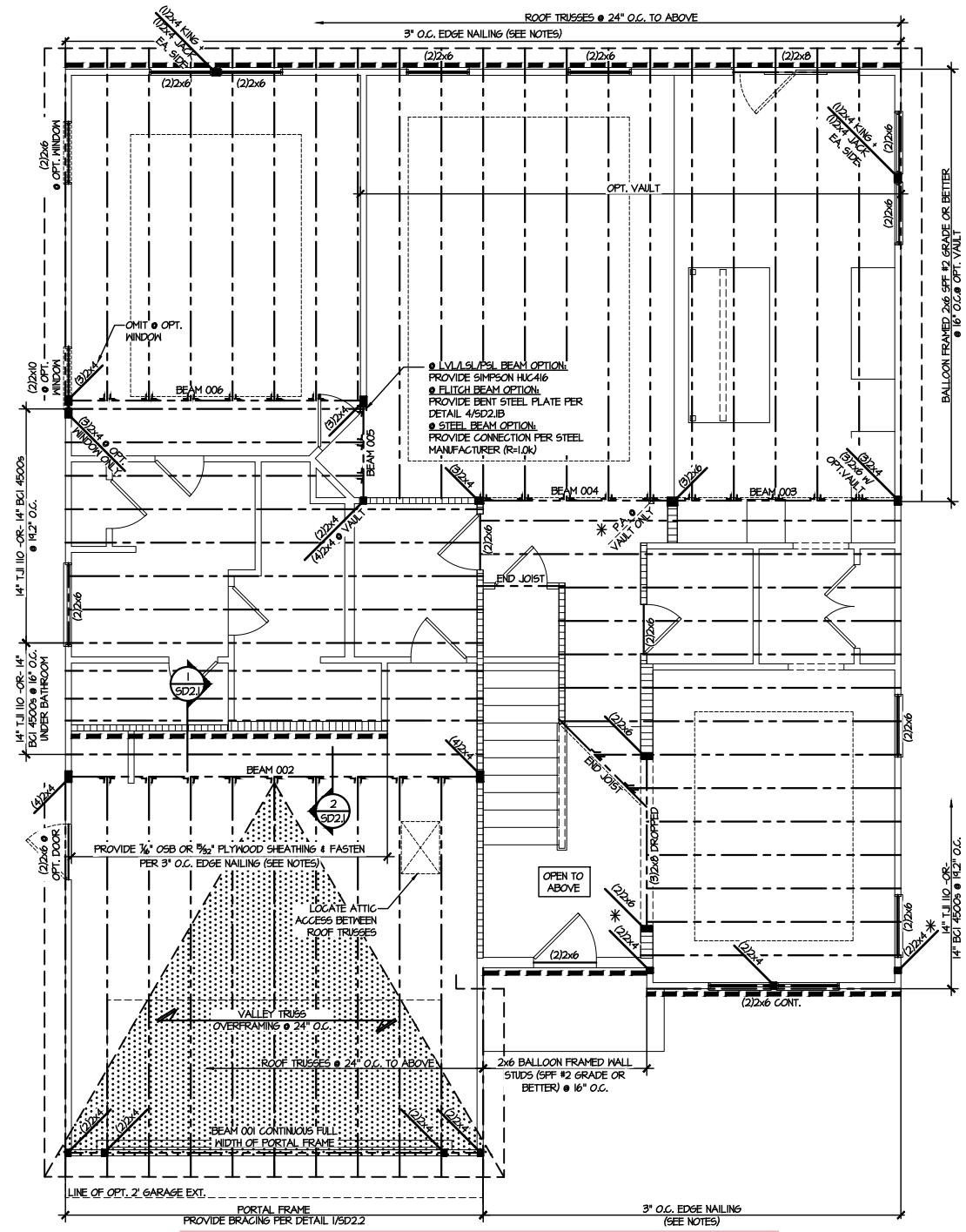
LEGEND

- 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.

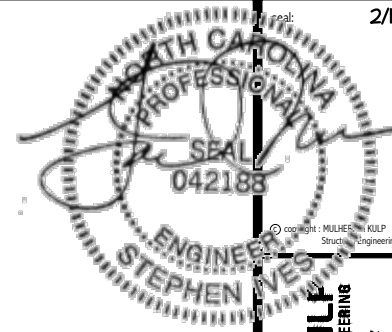
REFER TO SO.0 FOR TYPICAL STRUCTURAL NOTES & SCHEDULES

SD2.0 & SD2.1 REFERS TO SD2.0J & SD2.1J FOR 1-JOIST FLOOR FRAMING OR SD2.0T & SD2.1T FOR TRUSS FLOOR FRAMING

SD2.1J/SD2.1T REFERS TO SD2.1JA/SD2.1TA FOR LVL/PSL/LSL BEAMS OR SD2.1JB/SD2.1TB FOR FLITCH BEAMS OR SD2.1JC/SD2.1TC FOR STEEL BEAMS



2ND FLOOR FRAMING PLAN - 1-JOISTS
SCALE: 1/8"=1'-0"
ELEVATION #1



ENGINEERED BEAM MATERIAL SCHEDULE

BEAM NUMBER	LVL OPTION	PSL OPTION	LSL OPTION	FLITCH OPTION	STEEL OPTION
001	(2)3/4"x11 1/8" - H	3 1/2"x11 1/8" - H	(2)3/4"x11 1/8" - H	(2)2x12 + (1) 1/2"x11 1/8" STEEL FLITCH PLATE - H	N/A
001A	(2)3/4"x11 1/8" - H	3 1/2"x11 1/8" - H	(2)3/4"x11 1/8" - H	(2)2x12 + (1) 1/2"x11 1/8" STEEL FLITCH PLATE - H	N/A
002	(2)3/4"x18" - FT	5/4"x18" - FT	N/A	(3)2x12 + (2) 1/2"x11 1/8" STEEL FLITCH PLATES - FB	W12x19 - F
003	(2)3/4"x14" - F	3 1/2"x14" - F	(2)3/4"x14" - F	(2)2x12 + (1) 1/2"x11 1/8" STEEL FLITCH PLATE - FB	W12x14 - F
004	(2)3/4"x14" - F	3 1/2"x14" - F	(2)3/4"x14" - F	(2)2x12 + (1) 1/2"x11 1/8" STEEL FLITCH PLATE - FB	W12x14 - F
005	(2)3/4"x14" - F	3 1/2"x14" - F	(2)3/4"x14" - F	(2)2x12 + (1) 1/2"x11 1/8" STEEL FLITCH PLATE - FB	W12x14 - F
006	(2)3/4"x14" - F	3 1/2"x14" - F	(2)3/4"x14" - F	(2)2x12 + (1) 1/2"x11 1/8" STEEL FLITCH PLATE - FB	W12x14 - F
007	(2)3/4"x11 1/8" - F	3 1/2"x11 1/8" - F	(2)3/4"x11 1/8" - F	(2)2x12 + (1) 1/2"x11 1/8" STEEL FLITCH PLATE - F	W10x12 - F
008	(2)3/4"x14" - F	3 1/2"x14" - F	(2)3/4"x14" - F	(2)2x12 + (1) 1/2"x11 1/8" STEEL FLITCH PLATE - FB	W12x14 - F
009	(3)3/4"x18" - FT	5/4"x18" - FT	N/A	(4)2x12 + (3) 1/2"x11 1/8" STEEL FLITCH PLATES - FB	W12x26 - F
010	(3)3/4"x20" - FT	5/4"x20" - FT	N/A	(4)2x12 + (3) 3/8"x11 1/8" STEEL FLITCH PLATES - FB	W12x35 - F
011	(2)3/4"x11 1/8" - FB	3 1/2"x11 1/8" - FB	(2)3/4"x14" - FB	(2)2x12 + (1) 1/2"x11 1/8" STEEL FLITCH PLATE - FB	W10x12 - FB

BEAM NOTATION:

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

- 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.

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.

REFER TO SO.O FOR TYPICAL STRUCTURAL NOTES & SCHEDULES

SD2.0 & SD2.1 REFERS TO SD2.0J & SD2.1J FOR I-JOIST FLOOR FRAMING OR SD2.0T & SD2.1T FOR TRUSS FLOOR FRAMING

SD2.1J/SD2.1T REFERS TO SD2.1JA/SD2.1TA FOR LVL/PSL/LSL BEAMS OR SD2.1JB/SD2.1TB FOR FLITCH BEAMS OR SD2.1JC/SD2.1TC FOR STEEL BEAMS

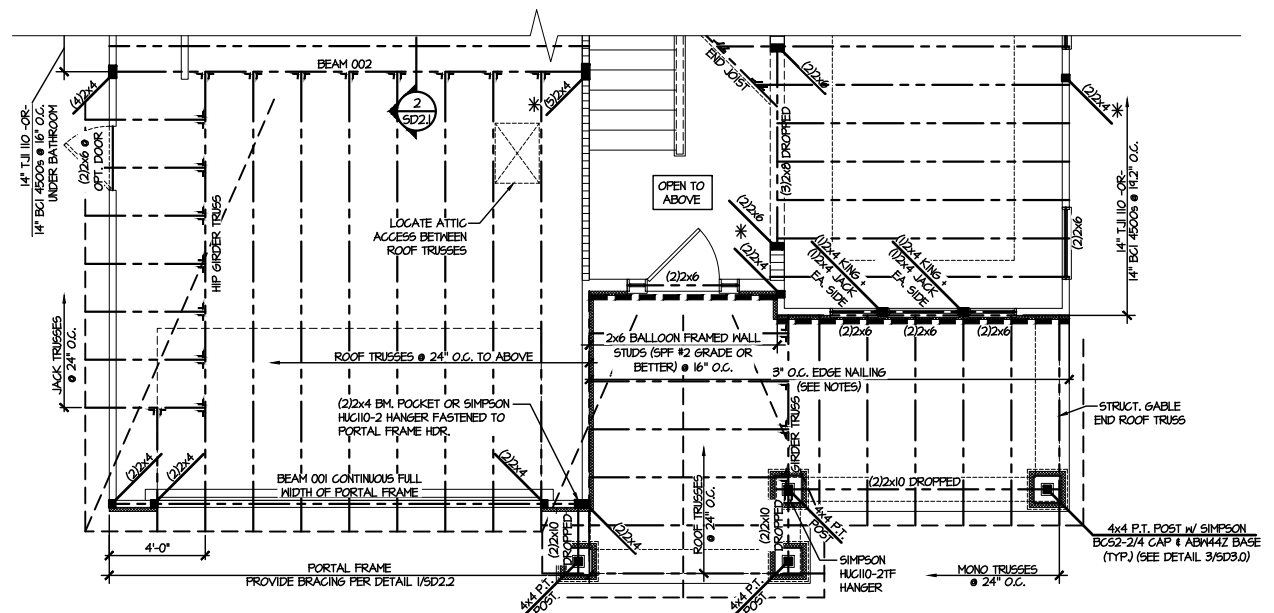
MULHERN+KULT
RESIDENTIAL STRUCTURAL ENGINEERING

300 Bechtel Ave. Building 6 - Number 1A, 18002
P.O. Box 688888 - Charlotte, NC 28268
N.C. LIC. #C-3825

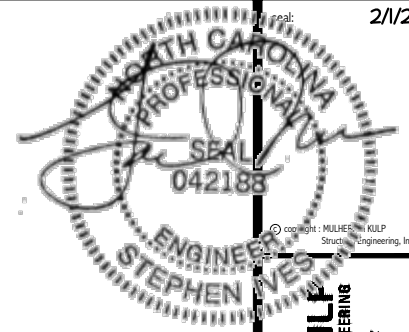
M&K project number:	126-21018
project mgr:	JTR
drawn by:	MDH
issue date:	07-16-21
REVISIONS:	
date:	initial:
01/13/22	MDH
02/01/23	JTS



FLOOR FRAMING PLANS
MIDDLETON MODEL
RALEIGH, NC



3 PARTIAL 2ND FLOOR FRAMING PLAN - I-JOIST
SCALE: 1/8"=1'-0" ELEVATION #10



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RESIDENTIAL STRUCTURAL ENGINEERING
300 Beaverville Ave., Building 4 - Raleigh, PA 19002
P: 252-486-8881 F: 252-486-8882
NC LIC. #C-3825



MS&K project number:
126-21018
project mgr: JTR
drawn by: MDH
issue date: 07-16-21
REVISIONS:
date: initial:
01/13/22 MDH
02/01/23 JTS



OPTION FRAMING PLANS
MIDDLETON MODEL
RALEIGH, NC

sheet: LEFT HAND
S5.0J

ENGINEERED BEAM MATERIAL SCHEDULE

BEAM NUMBER	LVL OPTION	PSL OPTION	LSL OPTION	FLITCH OPTION	STEEL OPTION
001	(2)3/4"x11 7/8" - H	3/2"x11 7/8" - H	(2)3/4"x11 7/8" - H	(2)2x12 + (1) 1/2"x11 1/4" STEEL FLITCH PLATE - H	N/A
001A	(2)3/4"x11 7/8" - H	3/2"x11 7/8" - H	(2)3/4"x11 7/8" - H	(2)2x12 + (1) 1/2"x11 1/4" STEEL FLITCH PLATE - H	N/A
002	(2)3/4"x10" - FT	5/4"x10" - FT	N/A	(3)2x12 + (2) 1/2"x11 1/4" STEEL FLITCH PLATES - FB	W12x19 - F
003	(2)3/4"x14" - F	3/2"x14" - F	(2)3/4"x14" - F	(2)2x12 + (1) 1/2"x11 1/4" STEEL FLITCH PLATE - FB	W12x14 - F
004	(2)3/4"x14" - F	3/2"x14" - F	(2)3/4"x14" - F	(2)2x12 + (1) 1/2"x11 1/4" STEEL FLITCH PLATE - FB	W12x14 - F
005	(2)3/4"x14" - F	3/2"x14" - F	(2)3/4"x14" - F	(2)2x12 + (1) 1/2"x11 1/4" STEEL FLITCH PLATE - FB	W12x14 - F
006	(2)3/4"x14" - F	3/2"x14" - F	(2)3/4"x14" - F	(2)2x12 + (1) 1/2"x11 1/4" STEEL FLITCH PLATE - FB	W12x14 - F
007	(2)3/4"x11 7/8" - F	3/2"x11 7/8" - F	(2)3/4"x11 7/8" - F	(2)2x12 + (1) 1/2"x11 1/4" STEEL FLITCH PLATE - F	W10x12 - F
008	(2)3/4"x14" - F	3/2"x14" - F	(2)3/4"x14" - F	(2)2x12 + (1) 1/2"x11 1/4" STEEL FLITCH PLATE - FB	W12x14 - F
009	(3)3/4"x10" - FT	5/4"x10" - FT	N/A	(4)2x12 + (3) 1/2"x11 1/4" STEEL FLITCH PLATES - FB	W12x26 - F
010	(3)3/4"x20" - FT	5/4"x20" - FT	N/A	(4)2x12 + (3) 3/8"x11 1/4" STEEL FLITCH PLATES - FB	W12x35 - F
011	(2)3/4"x11 7/8" - FB	3/2"x11 7/8" - FB	(2)3/4"x14" - FB	(2)2x12 + (1) 1/2"x11 1/4" STEEL FLITCH PLATE - FB	W10x12 - FB

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

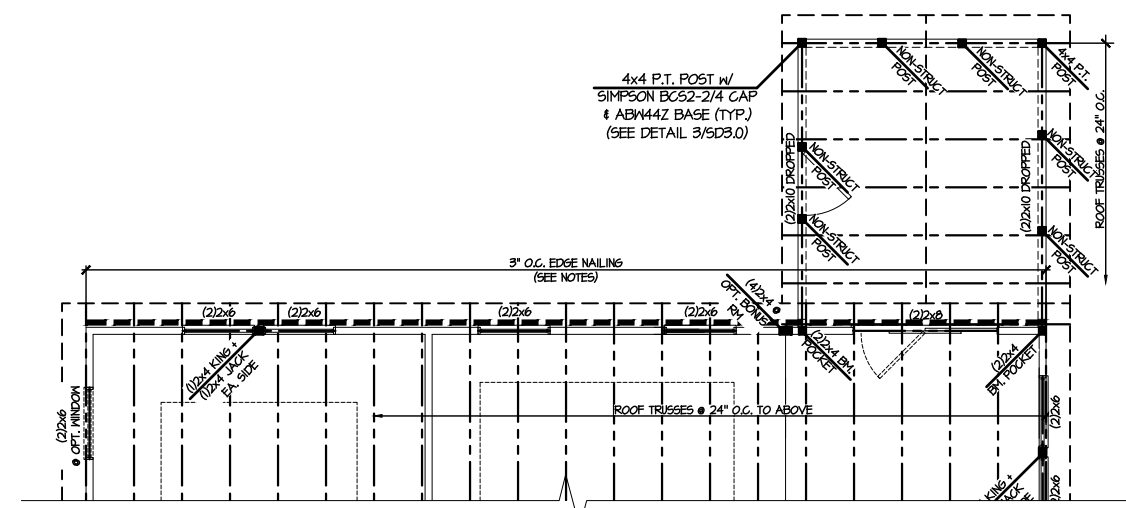
LEGEND

- 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.

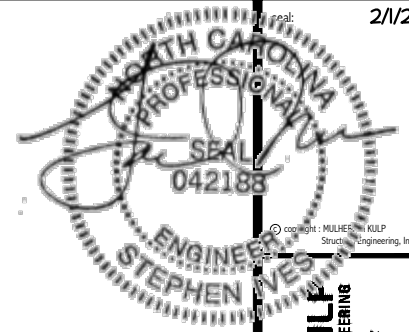
REFER TO S0.0 FOR TYPICAL STRUCTURAL NOTES & SCHEDULES

SD2.0 & SD2.1 REFERS TO SD2.0J & SD2.1J FOR I-JOIST FLOOR FRAMING OR SD2.0T & SD2.1T FOR TRUSS FLOOR FRAMING

SD2.1J/SD2.1T REFERS TO SD2.1JA/SD2.1TA FOR LVL/PSL/LSL BEAMS OR SD2.1JB/SD2.1TB FOR FLITCH BEAMS OR SD2.1JC/SD2.1TC FOR STEEL BEAMS



4 PARTIAL 2ND FLOOR FRAMING PLAN
OPTIONAL SCREENED PORCH - 1-JOISTS
SCALE: 1/8"=1'-0"
ELEV. #1 SHOWN - ALL ELEV. SIM.



MULHERN+KULT
RESIDENTIAL STRUCTURAL ENGINEERING
300 Bechtold Ave. Building 4 - Raleigh, PA 10002
P: 252-848-8881 F: 252-848-8882
N.C. LIC. #C-3825



M&K project number:	126-21018
project mgr:	JTR
drawn by:	MDH
issue date:	07-16-21
REVISIONS:	
date:	initial:
01/13/22	MDH
02/01/23	JTS

DRB
HOMES

OPTION FRAMING PLANS
MIDDLETON MODEL
RALEIGH, NC

sheet: LEFT HAND
S5.2J

ENGINEERED BEAM MATERIAL SCHEDULE

BEAM NUMBER	LVL OPTION	PSL OPTION	LSL OPTION	FLITCH OPTION	STEEL OPTION
001	(2)3/4"x11 1/2" - H	3/2"x11 1/2" - H	(2)3/4"x11 1/2" - H	(2)2x12 + (1) 1/2"x11 1/4" STEEL FLITCH PLATE - H	N/A
001A	(2)3/4"x11 1/2" - H	3/2"x11 1/2" - H	(2)3/4"x11 1/2" - H	(2)2x12 + (1) 1/2"x11 1/4" STEEL FLITCH PLATE - H	N/A
002	(2)3/4"x10" - FT	5/4"x10" - FT	N/A	(3)2x12 + (2) 1/2"x11 1/4" STEEL FLITCH PLATES - FB	W12x14 - F
003	(2)3/4"x14" - F	3/2"x14" - F	(2)3/4"x14" - F	(2)2x12 + (1) 1/2"x11 1/4" STEEL FLITCH PLATE - FB	W12x14 - F
004	(2)3/4"x14" - F	3/2"x14" - F	(2)3/4"x14" - F	(2)2x12 + (1) 1/2"x11 1/4" STEEL FLITCH PLATE - FB	W12x14 - F
005	(2)3/4"x14" - F	3/2"x14" - F	(2)3/4"x14" - F	(2)2x12 + (1) 1/2"x11 1/4" STEEL FLITCH PLATE - FB	W12x14 - F
006	(2)3/4"x14" - F	3/2"x14" - F	(2)3/4"x14" - F	(2)2x12 + (1) 1/2"x11 1/4" STEEL FLITCH PLATE - FB	W12x14 - F
007	(2)3/4"x11 1/2" - F	3/2"x11 1/2" - F	(2)3/4"x11 1/2" - F	(2)2x12 + (1) 1/2"x11 1/4" STEEL FLITCH PLATE - F	W10x12 - F
008	(2)3/4"x14" - F	3/2"x14" - F	(2)3/4"x14" - F	(2)2x12 + (1) 1/2"x11 1/4" STEEL FLITCH PLATE - FB	W12x14 - F
009	(3)3/4"x10" - FT	5/4"x10" - FT	N/A	(4)2x12 + (3) 1/2"x11 1/4" STEEL FLITCH PLATES - FB	W12x26 - F
010	(3)3/4"x20" - FT	5/4"x20" - FT	N/A	(4)2x12 + (3) 3/8"x11 1/4" STEEL FLITCH PLATES - FB	W12x35 - F
011	(2)3/4"x11 1/2" - FB	3/2"x11 1/2" - FB	(2)3/4"x14" - FB	(2)2x12 + (1) 1/2"x11 1/4" STEEL FLITCH PLATE - FB	W10x12 - FB

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

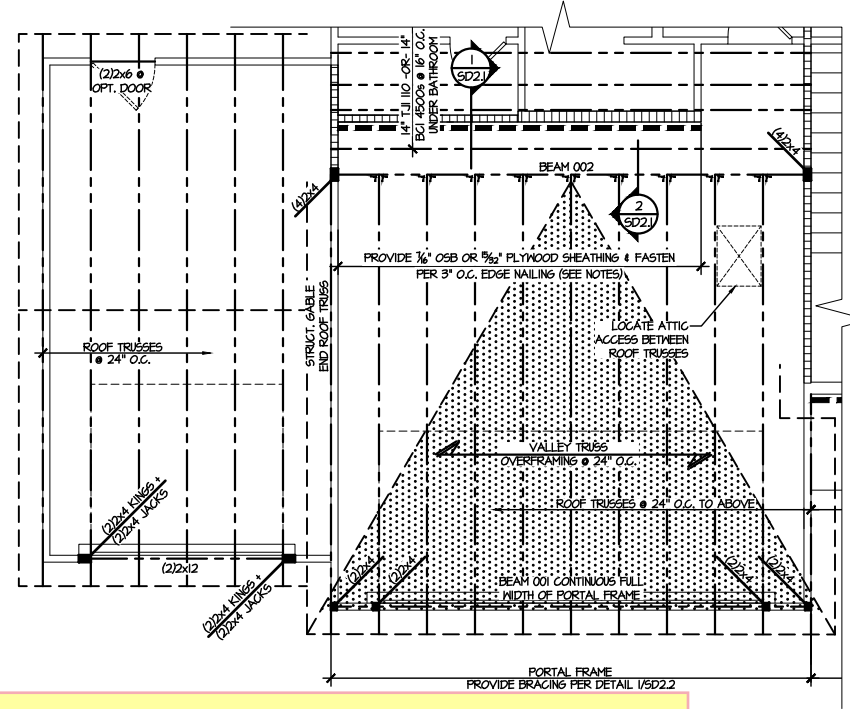
LEGEND

- 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.

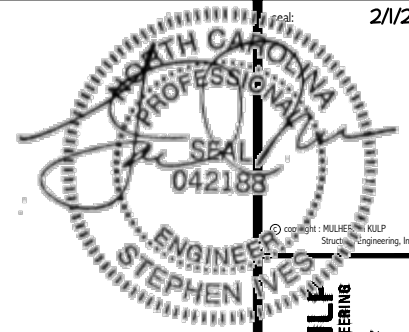
REFER TO SO.0 FOR TYPICAL STRUCTURAL NOTES & SCHEDULES

SD2.0 & SD2.1 REFERS TO SD2.0J & SD2.1J FOR I-JOIST FLOOR FRAMING OR SD2.0T & SD2.1T FOR TRUSS FLOOR FRAMING

SD2.1J/SD2.1T REFERS TO SD2.1JA/SD2.1TA FOR LVL/PSL/LSL BEAMS OR SD2.1JB/SD2.1TB FOR FLITCH BEAMS OR SD2.1JC/SD2.1TC FOR STEEL BEAMS



3 PARTIAL 2ND FLOOR FRAMING PLAN
OPTIONAL 3RD CAR GARAGE - I-JOISTS
SCALE: 1/8"=1'-0"
ELEV. #1 SHOWN
ELEVS. #2-#4, & #6 SIM.



MULHERN+KULT
RESIDENTIAL STRUCTURAL ENGINEERING
300 Beaverville Ave., Building 4 - Raleigh, NC 27602
P: 919-848-8881 F: 919-848-8882
N.C. LIC. #C-38825



M&K project number:
126-21018

project mgr: JTR
drawn by: MDH
issue date: 07-16-21

REVISIONS:

date:	initial:
01/13/22	MDH
02/01/23	JTS

DRB
HOMES

OPTION FRAMING PLANS
MIDDLETON MODEL
RALEIGH, NC

sheet: LEFT HAND
S5.3J

ENGINEERED BEAM MATERIAL SCHEDULE

BEAM NUMBER	LVL OPTION	PSL OPTION	LSL OPTION	FLITCH OPTION	STEEL OPTION
001	(2)3/4"x11 7/8" - H	3 1/2"x11 7/8" - H	(2)3/4"x11 7/8" - H	(2)2x12 + (1) 1/2"x11 1/4" STEEL FLITCH PLATE - H	N/A
001A	(2)3/4"x11 7/8" - H	3 1/2"x11 7/8" - H	(2)3/4"x11 7/8" - H	(2)2x12 + (1) 1/2"x11 1/4" STEEL FLITCH PLATE - H	N/A
002	(2)3/4"x18" - FT	5/4"x18" - FT	N/A	(3)2x12 + (2) 1/2"x11 1/4" STEEL FLITCH PLATES - FB	W12x14 - F
003	(2)3/4"x14" - F	3 1/2"x14" - F	(2)3/4"x14" - F	(2)2x12 + (1) 1/2"x11 1/4" STEEL FLITCH PLATE - FB	W12x14 - F
004	(2)3/4"x14" - F	3 1/2"x14" - F	(2)3/4"x14" - F	(2)2x12 + (1) 1/2"x11 1/4" STEEL FLITCH PLATE - FB	W12x14 - F
005	(2)3/4"x14" - F	3 1/2"x14" - F	(2)3/4"x14" - F	(2)2x12 + (1) 1/2"x11 1/4" STEEL FLITCH PLATE - FB	W12x14 - F
006	(2)3/4"x14" - F	3 1/2"x14" - F	(2)3/4"x14" - F	(2)2x12 + (1) 1/2"x11 1/4" STEEL FLITCH PLATE - FB	W12x14 - F
007	(2)3/4"x11 7/8" - F	3 1/2"x11 7/8" - F	(2)3/4"x11 7/8" - F	(2)2x12 + (1) 1/2"x11 1/4" STEEL FLITCH PLATE - F	W10x12 - F
008	(2)3/4"x14" - F	3 1/2"x14" - F	(2)3/4"x14" - F	(2)2x12 + (1) 1/2"x11 1/4" STEEL FLITCH PLATE - FB	W12x14 - F
009	(3)3/4"x18" - FT	5/4"x18" - FT	N/A	(4)2x12 + (3) 1/2"x11 1/4" STEEL FLITCH PLATES - FB	W12x26 - F
010	(3)3/4"x20" - FT	5/4"x20" - FT	N/A	(4)2x12 + (3) 3/8"x11 1/4" STEEL FLITCH PLATES - FB	W12x35 - F
011	(2)3/4"x11 7/8" - FB	3 1/2"x11 7/8" - FB	(2)3/4"x14" - FB	(2)2x12 + (1) 1/2"x11 1/4" STEEL FLITCH PLATE - FB	W10x12 - FB

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

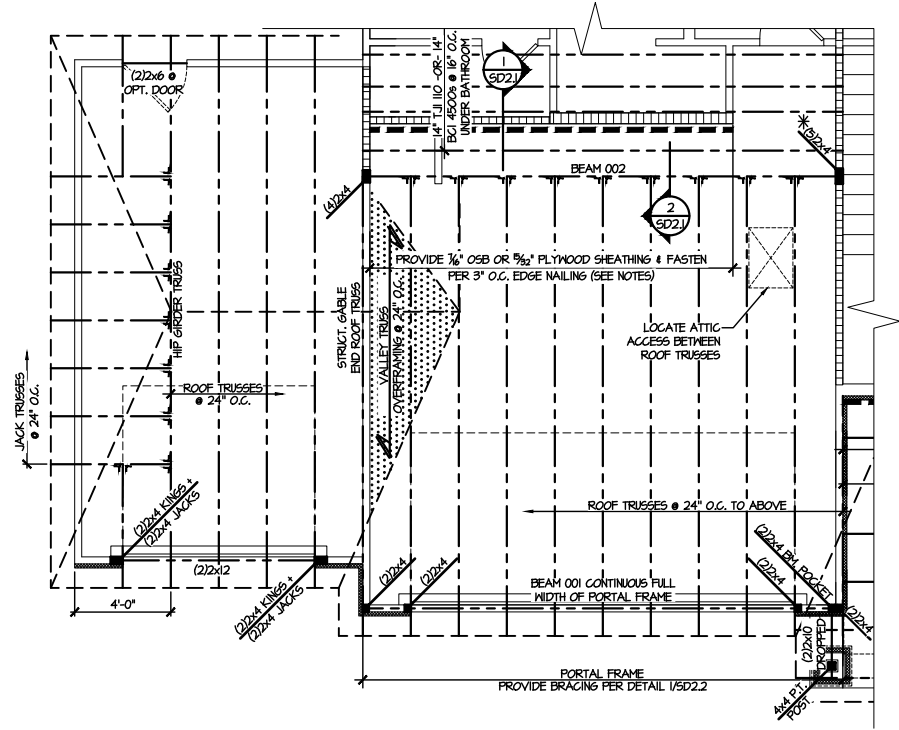
LEGEND

- 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.

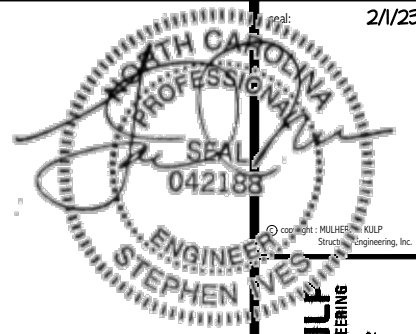
REFER TO 50.0 FOR TYPICAL STRUCTURAL NOTES & SCHEDULES

SD2.0 & SD2.1 REFERS TO SD2.0J & SD2.1J FOR I-JOIST FLOOR FRAMING OR SD2.0T & SD2.1T FOR TRUSS FLOOR FRAMING

SD2.1J/SD2.1T REFERS TO SD2.1JA/SD2.1TA FOR LVL/PSL/LSL BEAMS OR SD2.1JB/SD2.1TB FOR FLITCH BEAMS OR SD2.1JC/SD2.1TC FOR STEEL BEAMS



3 PARTIAL 2ND FLOOR FRAMING PLAN
OPTIONAL 3RD CAR GARAGE - I-JOISTS
SCALE: 1/8"=1'-0"
ELEV. #0 SHOWN



MULHERN+KULP
RESIDENTIAL STRUCTURAL ENGINEERING
300 Remounts Ave., Building 4 - Asheville, PA 19002
P 215-946-0001 • mulhern+kulp.com
NC LIC. #C-3825

M&K project number:
126-21018
project mgr: JTR
drawn by: MDH
issue date: 07-16-21
REVISIONS:
date: initial:
01/13/22 MDH
02/01/23 JTS



FLOOR FRAMING PLANS
MIDDLETON MODEL
RALEIGH, NC

sheet: LEFT HAND
S3.0T

ENGINEERED BEAM MATERIAL SCHEDULE

BEAM NUMBER	LVL OPTION	PSL OPTION	LSL OPTION	FLITCH OPTION	STEEL OPTION
001	(2)3/4"x11 1/8" - H	3 1/2"x11 1/8" - H	(2)3/4"x11 1/8" - H	(2)2x12 + (1) 1/2"x11 1/4" STEEL FLITCH PLATE - H	N/A
001A	(2)3/4"x11 1/8" - H	3 1/2"x11 1/8" - H	(2)3/4"x11 1/8" - H	(2)2x12 + (1) 1/2"x11 1/4" STEEL FLITCH PLATE - H	N/A
002	(2)3/4"x10" - FT	3 1/2"x10" - FT	N/A	(3)2x12 + (2) 1/2"x11 1/4" STEEL FLITCH PLATES - FB	W12x14 - F
003	(2)3/4"x14" - F	3 1/2"x14" - F	(2)3/4"x14" - F	(2)2x12 + (1) 1/2"x11 1/4" STEEL FLITCH PLATE - FB	W12x14 - F
004	(2)3/4"x14" - F	3 1/2"x14" - F	(2)3/4"x14" - F	(2)2x12 + (1) 1/2"x11 1/4" STEEL FLITCH PLATE - FB	W12x14 - F
005	(2)3/4"x14" - F	3 1/2"x14" - F	(2)3/4"x14" - F	(2)2x12 + (1) 1/2"x11 1/4" STEEL FLITCH PLATE - FB	W12x14 - F
006	(2)3/4"x14" - F	3 1/2"x14" - F	(2)3/4"x14" - F	(2)2x12 + (1) 1/2"x11 1/4" STEEL FLITCH PLATE - FB	W12x14 - F
007	(2)3/4"x11 1/8" - F	3 1/2"x11 1/8" - F	(2)3/4"x11 1/8" - F	(2)2x12 + (1) 1/2"x11 1/4" STEEL FLITCH PLATE - F	W10x12 - F
008	(2)3/4"x14" - F	3 1/2"x14" - F	(2)3/4"x14" - F	(2)2x12 + (1) 1/2"x11 1/4" STEEL FLITCH PLATE - FB	W12x14 - F
009	(3)3/4"x10" - FT	3 1/2"x10" - FT	N/A	(4)2x12 + (3) 1/2"x11 1/4" STEEL FLITCH PLATES - FB	W12x26 - F
010	(3)3/4"x20" - FT	3 1/2"x20" - FT	N/A	(4)2x12 + (3) 3/8"x11 1/4" STEEL FLITCH PLATES - FB	W12x35 - F
011	(2)3/4"x11 1/8" - FB	3 1/2"x11 1/8" - FB	(2)3/4"x14" - FB	(2)2x12 + (1) 1/2"x11 1/4" STEEL FLITCH PLATE - FB	W10x12 - FB

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

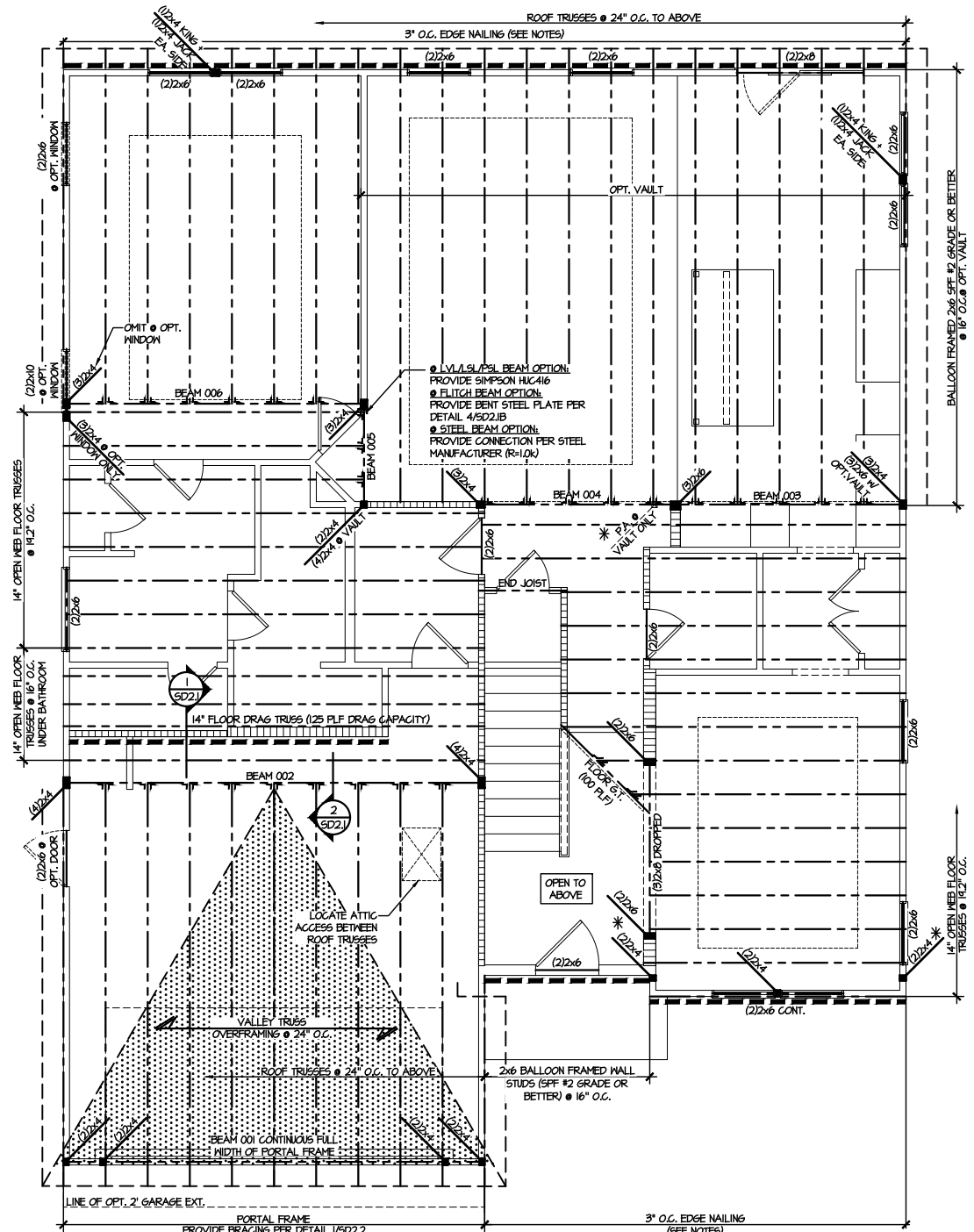
LEGEND

- ▬ 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.

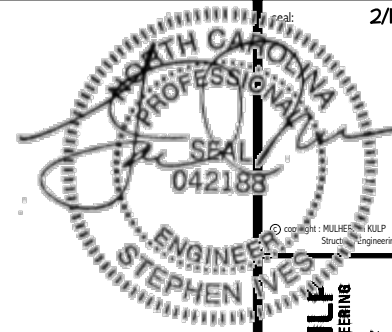
REFER TO SO.0 FOR TYPICAL STRUCTURAL NOTES & SCHEDULES

SD2.0 & SD2.1 REFERS TO SD2.0J & SD2.1J FOR I-JOIST FLOOR FRAMING OR SD2.0T & SD2.1T FOR TRUSS FLOOR FRAMING

SD2.1J/SD2.1T REFERS TO SD2.1JA/SD2.1TA FOR LVL/PSL/LSL BEAMS OR SD2.1JB/SD2.1TB FOR FLITCH BEAMS OR SD2.1JC/SD2.1TC FOR STEEL BEAMS



1 2ND FLOOR FRAMING PLAN - TRUSSES
SCALE: 1/8"=1'-0"
ELEVATION #1



ENGINEERED BEAM MATERIAL SCHEDULE

BEAM NUMBER	LVL OPTION	PSL OPTION	LSL OPTION	FLITCH OPTION	STEEL OPTION
001	(2)3/4"x11 1/2" - H	3/2"x11 1/2" - H	(2)3/4"x11 1/2" - H	(2)2x12 + (1) 1/2"x11 1/2" STEEL FLITCH PLATE - H	N/A
001A	(2)3/4"x11 1/2" - H	3/2"x11 1/2" - H	(2)3/4"x11 1/2" - H	(2)2x12 + (1) 1/2"x11 1/2" STEEL FLITCH PLATE - H	N/A
002	(2)3/4"x18" - FT	5/4"x18" - FT	N/A	(3)2x12 + (2) 1/2"x18" STEEL FLITCH PLATES - FB	W12x19 - F
003	(2)3/4"x14" - F	3/2"x14" - F	(2)3/4"x14" - F	(2)2x12 + (1) 1/2"x14" STEEL FLITCH PLATE - FB	W12x14 - F
004	(2)3/4"x14" - F	3/2"x14" - F	(2)3/4"x14" - F	(2)2x12 + (1) 1/2"x14" STEEL FLITCH PLATE - FB	W12x14 - F
005	(2)3/4"x14" - F	3/2"x14" - F	(2)3/4"x14" - F	(2)2x12 + (1) 1/2"x14" STEEL FLITCH PLATE - FB	W12x14 - F
006	(2)3/4"x14" - F	3/2"x14" - F	(2)3/4"x14" - F	(2)2x12 + (1) 1/2"x14" STEEL FLITCH PLATE - FB	W12x14 - F
007	(2)3/4"x11 1/2" - F	3/2"x11 1/2" - F	(2)3/4"x11 1/2" - F	(2)2x12 + (1) 1/2"x11 1/2" STEEL FLITCH PLATE - F	W10x12 - F
008	(2)3/4"x14" - F	3/2"x14" - F	(2)3/4"x14" - F	(2)2x12 + (1) 1/2"x14" STEEL FLITCH PLATE - FB	W12x14 - F
009	(3)3/4"x18" - FT	5/4"x18" - FT	N/A	(4)2x12 + (3) 1/2"x18" STEEL FLITCH PLATES - FB	W12x26 - F
010	(3)3/4"x20" - FT	5/4"x20" - FT	N/A	(4)2x12 + (3) 3/8"x18" STEEL FLITCH PLATES - FB	W12x35 - F
011	(2)3/4"x11 1/2" - FB	3/2"x11 1/2" - FB	(2)3/4"x14" - FB	(2)2x12 + (1) 1/2"x11 1/2" STEEL FLITCH PLATE - FB	W10x12 - FB

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

- ### 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.O FOR TYPICAL STRUCTURAL NOTES & SCHEDULES

SD2.0 & SD2.1 REFERS TO SD2.0J & SD2.1J FOR I-JOIST FLOOR FRAMING OR SD2.0T & SD2.1T FOR TRUSS FLOOR FRAMING

SD2.1J/SD2.1T REFERS TO SD2.1JA/SD2.1TA FOR LVL/PSL/LSL BEAMS OR SD2.1JB/SD2.1TB FOR FLITCH BEAMS OR SD2.1JC/SD2.1TC FOR STEEL BEAMS

MULHERN+KULT
RESIDENTIAL STRUCTURAL ENGINEERING
300 Beaverville Ave. Building 4 - Raleigh, PA 19002
P: 215-686-8881 F: 215-686-8882
N.C. LIC. #C-38825

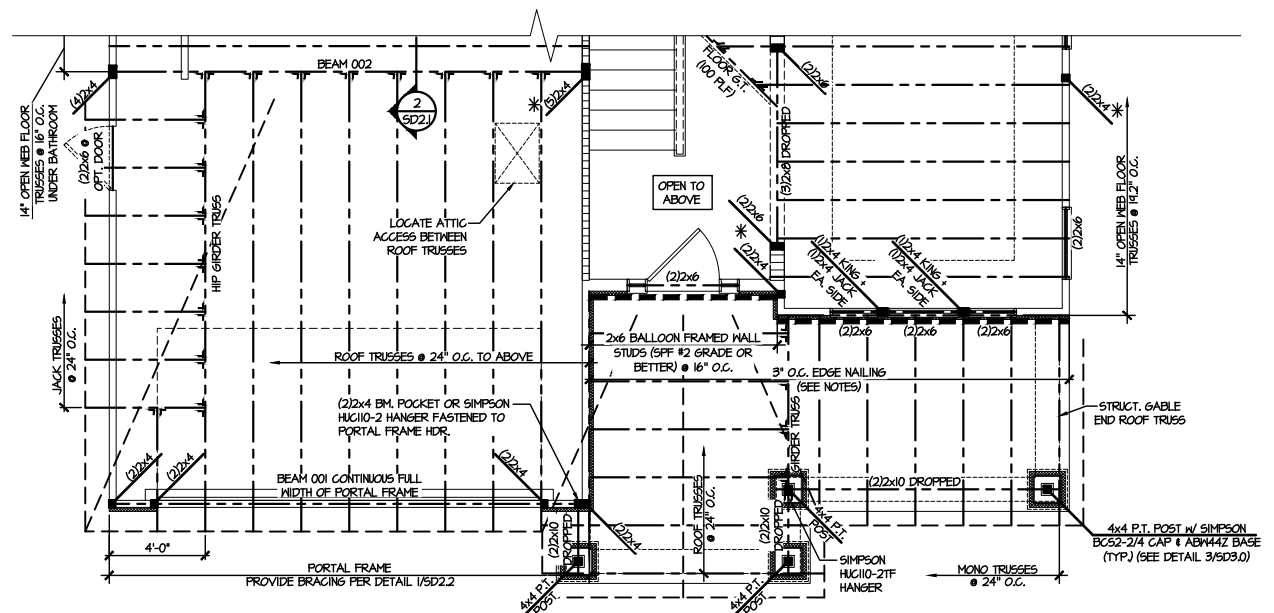
MS&K project number: 126-21018
project mgr: JTR
drawn by: MDH
issue date: 07-16-21

REVISIONS:
date: initial:
01/13/22 MDH
02/01/23 JTS

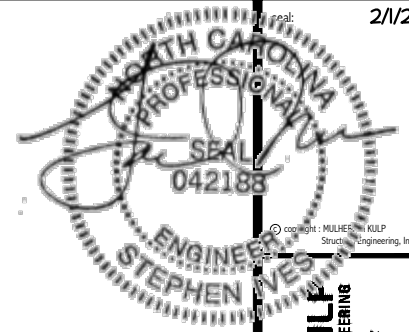


FLOOR FRAMING PLANS
MIDDLETON MODEL
RALEIGH, NC

sheet: LEFT HAND
S3.1T



3 PARTIAL 2ND FLOOR FRAMING PLAN - TRUSSES
SCALE: 1/8"=1'-0"
ELEVATION #10



REGISTERED PROFESSIONAL ENGINEER
STRUCTURAL ENGINEERING

MULHERN+KULT
RESIDENTIAL STRUCTURAL ENGINEERING
300 Beaverville Ave., Building 4 - Raleigh, NC 27602
P: 919-848-8881 F: 919-848-8882
NC LIC. #C-38825



MS&K project number:
126-21018
project mgr: JTR
drawn by: MDH
issue date: 07-16-21
REVISIONS:
date: initial:
01/13/22 MDH
02/01/23 ITS

DRB
HOMES

OPTION FRAMING PLANS
MIDDLETON MODEL
RALEIGH, NC

sheet: LEFT HAND
S5.0T

ENGINEERED BEAM MATERIAL SCHEDULE

BEAM NUMBER	LVL OPTION	PSL OPTION	LSL OPTION	FLITCH OPTION	STEEL OPTION
001	(2)3/4"x11 7/8" - H	3/2"x11 7/8" - H	(2)3/4"x11 7/8" - H	(2)2x12 + (1) 1/2"x11 7/8" STEEL FLITCH PLATE - H	N/A
001A	(2)3/4"x11 7/8" - H	3/2"x11 7/8" - H	(2)3/4"x11 7/8" - H	(2)2x12 + (1) 1/2"x11 7/8" STEEL FLITCH PLATE - H	N/A
002	(2)3/4"x18" - FT	5/4"x18" - FT	N/A	(3)2x12 + (2) 1/2"x11 7/8" STEEL FLITCH PLATES - FB	W12x19 - F
003	(2)3/4"x14" - F	3/2"x14" - F	(2)3/4"x14" - F	(2)2x12 + (1) 1/2"x11 7/8" STEEL FLITCH PLATE - FB	W12x14 - F
004	(2)3/4"x14" - F	3/2"x14" - F	(2)3/4"x14" - F	(2)2x12 + (1) 1/2"x11 7/8" STEEL FLITCH PLATE - FB	W12x14 - F
005	(2)3/4"x14" - F	3/2"x14" - F	(2)3/4"x14" - F	(2)2x12 + (1) 1/2"x11 7/8" STEEL FLITCH PLATE - FB	W12x14 - F
006	(2)3/4"x14" - F	3/2"x14" - F	(2)3/4"x14" - F	(2)2x12 + (1) 1/2"x11 7/8" STEEL FLITCH PLATE - FB	W12x14 - F
007	(2)3/4"x11 7/8" - F	3/2"x11 7/8" - F	(2)3/4"x11 7/8" - F	(2)2x12 + (1) 1/2"x11 7/8" STEEL FLITCH PLATE - F	W10x12 - F
008	(2)3/4"x14" - F	3/2"x14" - F	(2)3/4"x14" - F	(2)2x12 + (1) 1/2"x11 7/8" STEEL FLITCH PLATE - FB	W12x14 - F
009	(3)3/4"x18" - FT	5/4"x18" - FT	N/A	(4)2x12 + (3) 1/2"x11 7/8" STEEL FLITCH PLATES - FB	W12x26 - F
010	(3)3/4"x20" - FT	5/4"x20" - FT	N/A	(4)2x12 + (3) 3/8"x11 7/8" STEEL FLITCH PLATES - FB	W12x35 - F
011	(2)3/4"x11 7/8" - FB	3/2"x11 7/8" - FB	(2)3/4"x14" - FB	(2)2x12 + (1) 1/2"x11 7/8" STEEL FLITCH PLATE - FB	W10x12 - FB

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

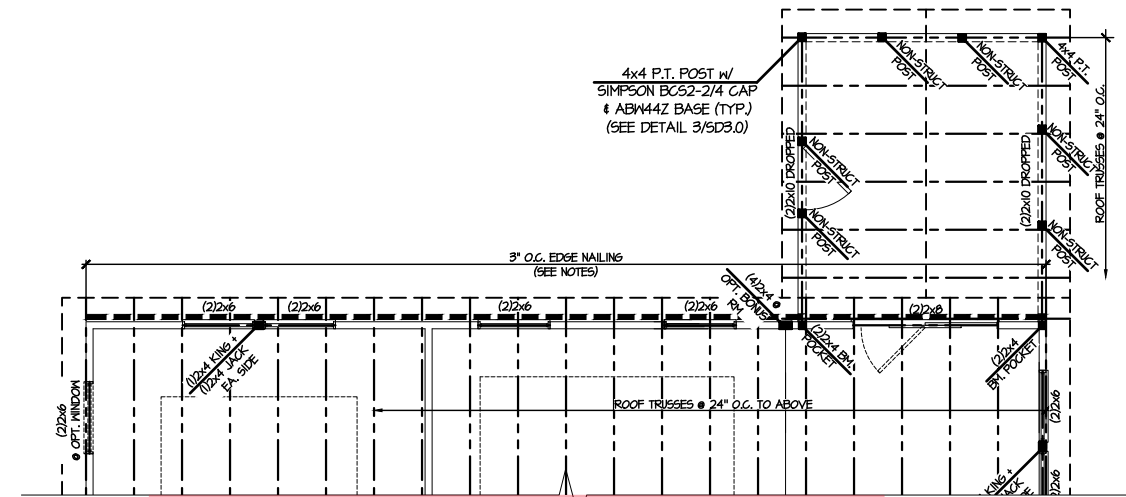
LEGEND

- 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.

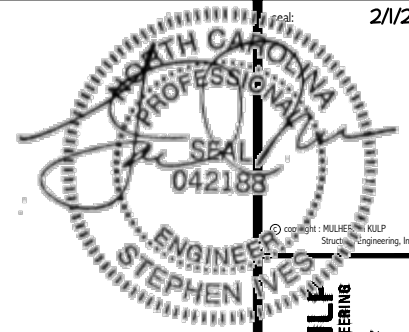
REFER TO SO.O FOR TYPICAL STRUCTURAL NOTES & SCHEDULES

SD2.0 & SD2.1 REFERS TO SD2.0J & SD2.1J FOR I-JOIST FLOOR FRAMING OR SD2.0T & SD2.1T FOR TRUSS FLOOR FRAMING

SD2.1J/SD2.1T REFERS TO SD2.1JA/SD2.1TA FOR LVL/PSL/LSL BEAMS OR SD2.1JB/SD2.1TB FOR FLITCH BEAMS OR SD2.1JC/SD2.1TC FOR STEEL BEAMS



4 PARTIAL 2ND FLOOR FRAMING PLAN
OPTIONAL SCREENED PORCH - TRUSSES
SCALE: 1/8"=1'-0"
ELEV. #1 SHOWN - ALL ELEV. SIM.



MULHERN+KULT
RESIDENTIAL STRUCTURAL ENGINEERING
300 Bechtold Ave. Building 1 - Raleigh, NC 27602
P: 919-876-8881 F: 919-876-8882
N.C. LIC. #C-3825



MS&K project number:
126-21018

project mgr: JTR
drawn by: MDH
issue date: 07-16-21

REVISIONS:

date:	initial:
01/13/22	MDH
02/01/23	JTS



OPTION FRAMING PLANS
MIDDLETON MODEL
RALEIGH, NC

sheet: LEFT HAND
S5.2T

ENGINEERED BEAM MATERIAL SCHEDULE

BEAM NUMBER	LVL OPTION	PSL OPTION	LSL OPTION	FLITCH OPTION	STEEL OPTION
001	(2)3/4"x11 1/8" - H	3 1/2"x11 1/8" - H	(2)3/4"x11 1/8" - H	(2)2x12 + (1) 1/2"x11 1/4" STEEL FLITCH PLATE - H	N/A
001A	(2)3/4"x11 1/8" - H	3 1/2"x11 1/8" - H	(2)3/4"x11 1/8" - H	(2)2x12 + (1) 1/2"x11 1/4" STEEL FLITCH PLATE - H	N/A
002	(2)3/4"x10" - FT	5/4"x10" - FT	N/A	(3)2x12 + (2) 1/2"x11 1/4" STEEL FLITCH PLATES - FB	W12x14 - F
003	(2)3/4"x14" - F	3 1/2"x14" - F	(2)3/4"x14" - F	(2)2x12 + (1) 1/2"x11 1/4" STEEL FLITCH PLATE - FB	W12x14 - F
004	(2)3/4"x14" - F	3 1/2"x14" - F	(2)3/4"x14" - F	(2)2x12 + (1) 1/2"x11 1/4" STEEL FLITCH PLATE - FB	W12x14 - F
005	(2)3/4"x14" - F	3 1/2"x14" - F	(2)3/4"x14" - F	(2)2x12 + (1) 1/2"x11 1/4" STEEL FLITCH PLATE - FB	W12x14 - F
006	(2)3/4"x14" - F	3 1/2"x14" - F	(2)3/4"x14" - F	(2)2x12 + (1) 1/2"x11 1/4" STEEL FLITCH PLATE - FB	W12x14 - F
007	(2)3/4"x11 1/8" - F	3 1/2"x11 1/8" - F	(2)3/4"x11 1/8" - F	(2)2x12 + (1) 1/2"x11 1/4" STEEL FLITCH PLATE - F	W10x12 - F
008	(2)3/4"x14" - F	3 1/2"x14" - F	(2)3/4"x14" - F	(2)2x12 + (1) 1/2"x11 1/4" STEEL FLITCH PLATE - FB	W12x14 - F
009	(3)3/4"x10" - FT	5/4"x10" - FT	N/A	(4)2x12 + (3) 1/2"x11 1/4" STEEL FLITCH PLATES - FB	W12x26 - F
010	(3)3/4"x20" - FT	5/4"x20" - FT	N/A	(4)2x12 + (3) 3/8"x11 1/4" STEEL FLITCH PLATES - FB	W12x35 - F
011	(2)3/4"x11 1/8" - FB	3 1/2"x11 1/8" - FB	(2)3/4"x14" - FB	(2)2x12 + (1) 1/2"x11 1/4" STEEL FLITCH PLATE - FB	W10x12 - FB

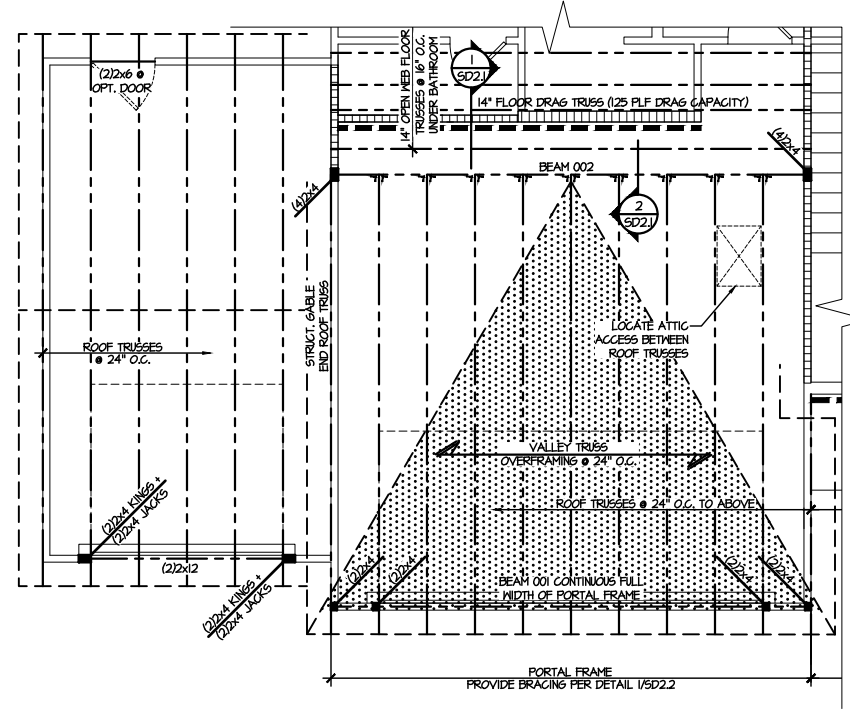
- BEAM NOTATION:
 - "F" INDICATES FLUSH BEAM
 - "FT" INDICATES FLUSH TOP BEAM
 - "FB" INDICATES FLUSH BOTTOM BEAM
 - "D" INDICATES DROPPED BEAM
 - "H" INDICATES DROPPED OPENING HEADER
- REFER TO DETAIL D/SD2.0 FOR TYPICAL FLITCH BEAM CONNECTIONS
- REFER TO DETAIL E/SD2.0 FOR TYPICAL STEEL BEAM CONNECTIONS
- 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.

- 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.

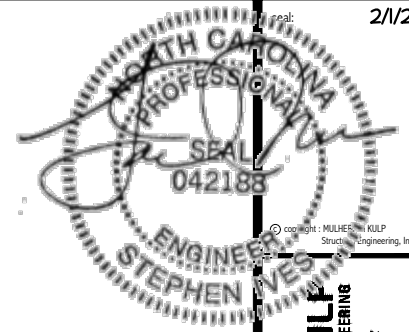
REFER TO 50.0 FOR TYPICAL STRUCTURAL NOTES & SCHEDULES

SD2.0 & SD2.1 REFERS TO SD2.0J & SD2.1J FOR I-JOIST FLOOR FRAMING OR SD2.0T & SD2.1T FOR TRUSS FLOOR FRAMING

SD2.1J/SD2.1T REFERS TO SD2.1JA/SD2.1TA FOR LVL/PSL/LSL BEAMS OR SD2.1JB/SD2.1TB FOR FLITCH BEAMS OR SD2.1JC/SD2.1TC FOR STEEL BEAMS



**3 PARTIAL 2ND FLOOR FRAMING PLAN
OPTIONAL 3RD CAR GARAGE - TRUSSES**
SCALE: 1/8"=1'-0"
ELEV. #1 SHOWN
ELEVS. #2-#4, & #6 SIM.



MULHERN+KULT
RESIDENTIAL STRUCTURAL ENGINEERING
300 Beardslee Ave. Building 4 - Raleigh, NC 27608
P: 919-848-8881 F: 919-848-8882
www.mulhernkult.com



MS&K project number:
126-21018
project mgr: JTR
drawn by: MDH
issue date: 07-16-21
REVISIONS:
date: initial:
01/13/22 MDH
02/01/23 JTS

DRB
HOMES

OPTION FRAMING PLANS
MIDDLETON MODEL
RALEIGH, NC

sheet: LEFT HAND
S5.3T

ENGINEERED BEAM MATERIAL SCHEDULE

BEAM NUMBER	LVL OPTION	PSL OPTION	LSL OPTION	FLITCH OPTION	STEEL OPTION
001	(2)3/4"x11 7/8" - H	3 1/2"x11 7/8" - H	(2)3/4"x11 7/8" - H	(2)2x12 + (1) 1/2"x11 3/4" STEEL FLITCH PLATE - H	N/A
001A	(2)3/4"x11 7/8" - H	3 1/2"x11 7/8" - H	(2)3/4"x11 7/8" - H	(2)2x12 + (1) 1/2"x11 3/4" STEEL FLITCH PLATE - H	N/A
002	(2)3/4"x10" - FT	5/4"x10" - FT	N/A	(3)2x12 + (2) 1/2"x11 3/4" STEEL FLITCH PLATES - FB	W12x19 - F
003	(2)3/4"x14" - F	3 1/2"x14" - F	(2)3/4"x14" - F	(2)2x12 + (1) 1/2"x11 3/4" STEEL FLITCH PLATE - FB	W12x14 - F
004	(2)3/4"x14" - F	3 1/2"x14" - F	(2)3/4"x14" - F	(2)2x12 + (1) 1/2"x11 3/4" STEEL FLITCH PLATE - FB	W12x14 - F
005	(2)3/4"x14" - F	3 1/2"x14" - F	(2)3/4"x14" - F	(2)2x12 + (1) 1/2"x11 3/4" STEEL FLITCH PLATE - FB	W12x14 - F
006	(2)3/4"x14" - F	3 1/2"x14" - F	(2)3/4"x14" - F	(2)2x12 + (1) 1/2"x11 3/4" STEEL FLITCH PLATE - FB	W12x14 - F
007	(2)3/4"x11 7/8" - F	3 1/2"x11 7/8" - F	(2)3/4"x11 7/8" - F	(2)2x12 + (1) 1/2"x11 3/4" STEEL FLITCH PLATE - F	W10x12 - F
008	(2)3/4"x14" - F	3 1/2"x14" - F	(2)3/4"x14" - F	(2)2x12 + (1) 1/2"x11 3/4" STEEL FLITCH PLATE - FB	W12x14 - F
009	(3)3/4"x10" - FT	5/4"x10" - FT	N/A	(4)2x12 + (3) 1/2"x11 3/4" STEEL FLITCH PLATES - FB	W12x26 - F
010	(3)3/4"x20" - FT	5/4"x20" - FT	N/A	(4)2x12 + (3) 3/8"x11 3/4" STEEL FLITCH PLATES - FB	W12x35 - F
011	(2)3/4"x11 7/8" - FB	3 1/2"x11 7/8" - FB	(2)3/4"x14" - FB	(2)2x12 + (1) 1/2"x11 3/4" STEEL FLITCH PLATE - FB	W10x12 - FB

- BEAM NOTATION:
 - "F" INDICATES FLUSH BEAM
 - "FT" INDICATES FLUSH TOP BEAM
 - "FB" INDICATES FLUSH BOTTOM BEAM
 - "D" INDICATES DROPPED BEAM
 - "H" INDICATES DROPPED OPENING HEADER
- REFER TO DETAIL D/SD2.0 FOR TYPICAL FLITCH BEAM CONNECTIONS
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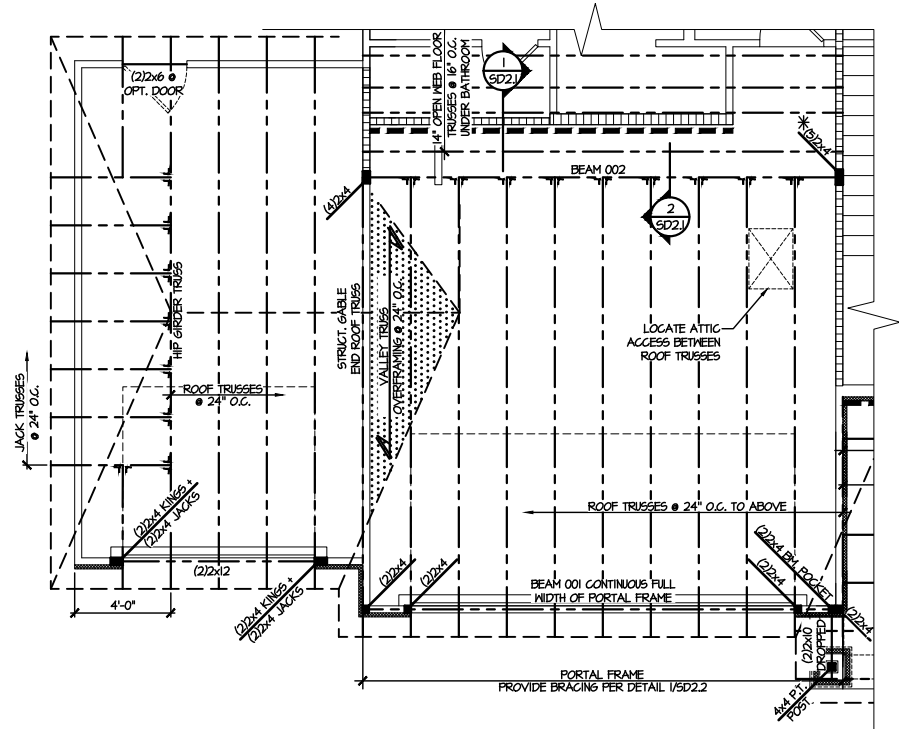
LEGEND

- 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.

REFER TO 50.0 FOR TYPICAL STRUCTURAL NOTES & SCHEDULES

SD2.0 & SD2.1 REFERS TO SD2.0J & SD2.1J FOR I-JOIST FLOOR FRAMING OR SD2.0T & SD2.1T FOR TRUSS FLOOR FRAMING

SD2.1J/SD2.1T REFERS TO SD2.1JA/SD2.1TA FOR LVL/PSL/LSL BEAMS OR SD2.1JB/SD2.1TB FOR FLITCH BEAMS OR SD2.1JC/SD2.1TC FOR STEEL BEAMS



**3 PARTIAL 2ND FLOOR FRAMING PLAN
OPTIONAL 3RD CAR GARAGE - TRUSSES**
SCALE: 1/8"=1'-0"
ELEV. #0 SHOWN

ENGINEERED BEAM MATERIAL SCHEDULE

BEAM NUMBER	LVL OPTION	PSL OPTION	LSL OPTION	FLITCH OPTION	STEEL OPTION
001	(2)3/4"x11 1/8" - H	3/2"x11 1/8" - H	(2)3/4"x11 1/8" - H	(2)2x12 + (1) 1/2"x11 1/4" STEEL FLITCH PLATE - H	N/A
001A	(2)3/4"x11 1/8" - H	3/2"x11 1/8" - H	(2)3/4"x11 1/8" - H	(2)2x12 + (1) 1/2"x11 1/4" STEEL FLITCH PLATE - H	N/A
002	(2)3/4"x18" - FT	5/4"x18" - FT	N/A	(3)2x12 + (2) 1/2"x11 1/4" STEEL FLITCH PLATES - FB	W12x19 - F
003	(2)3/4"x14" - F	3/2"x14" - F	(2)3/4"x14" - F	(2)2x12 + (1) 1/2"x11 1/4" STEEL FLITCH PLATE - FB	W12x14 - F
004	(2)3/4"x14" - F	3/2"x14" - F	(2)3/4"x14" - F	(2)2x12 + (1) 1/2"x11 1/4" STEEL FLITCH PLATE - FB	W12x14 - F
005	(2)3/4"x14" - F	3/2"x14" - F	(2)3/4"x14" - F	(2)2x12 + (1) 1/2"x11 1/4" STEEL FLITCH PLATE - FB	W12x14 - F
006	(2)3/4"x14" - F	3/2"x14" - F	(2)3/4"x14" - F	(2)2x12 + (1) 1/2"x11 1/4" STEEL FLITCH PLATE - FB	W12x14 - F
007	(2)3/4"x11 1/8" - F	3/2"x11 1/8" - F	(2)3/4"x11 1/8" - F	(2)2x12 + (1) 1/2"x11 1/4" STEEL FLITCH PLATE - F	W10x12 - F
008	(2)3/4"x14" - F	3/2"x14" - F	(2)3/4"x14" - F	(2)2x12 + (1) 1/2"x11 1/4" STEEL FLITCH PLATE - FB	W12x14 - F
009	(3)3/4"x18" - FT	5/4"x18" - FT	N/A	(4)2x12 + (3) 1/2"x11 1/4" STEEL FLITCH PLATES - FB	W12x26 - F
010	(3)3/4"x20" - FT	5/4"x20" - FT	N/A	(4)2x12 + (3) 3/8"x11 1/4" STEEL FLITCH PLATES - FB	W12x35 - F
011	(2)3/4"x11 1/8" - FB	3/2"x11 1/8" - FB	(2)3/4"x14" - FB	(2)2x12 + (1) 1/2"x11 1/4" STEEL FLITCH PLATE - FB	W10x12 - FB

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

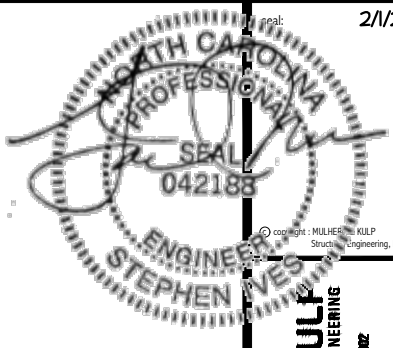
REFER TO S0.0 FOR TYPICAL STRUCTURAL NOTES & SCHEDULES

SD2.0 & SD2.1 REFERS TO SD2.0J & SD2.1J FOR I-JOIST FLOOR FRAMING OR SD2.0T & SD2.1T FOR TRUSS FLOOR FRAMING

SD2.1J/SD2.1T REFERS TO SD2.1JA/SD2.1TA FOR LVL/PSL/LSL BEAMS OR SD2.1JB/SD2.1TB FOR FLITCH BEAMS OR SD2.1JC/SD2.1TC 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.



MULHERN+KULT
RESIDENTIAL STRUCTURAL ENGINEERING
308 Blandside Ave. Building 4 - Asheville, PA, 18002
p: 215-666-0001 - mulhern+kult.com
NC LIC. #C-3825

M&K project number: 126-21018

project mgr: JTR
drawn by: MDH
issue date: 07-16-21

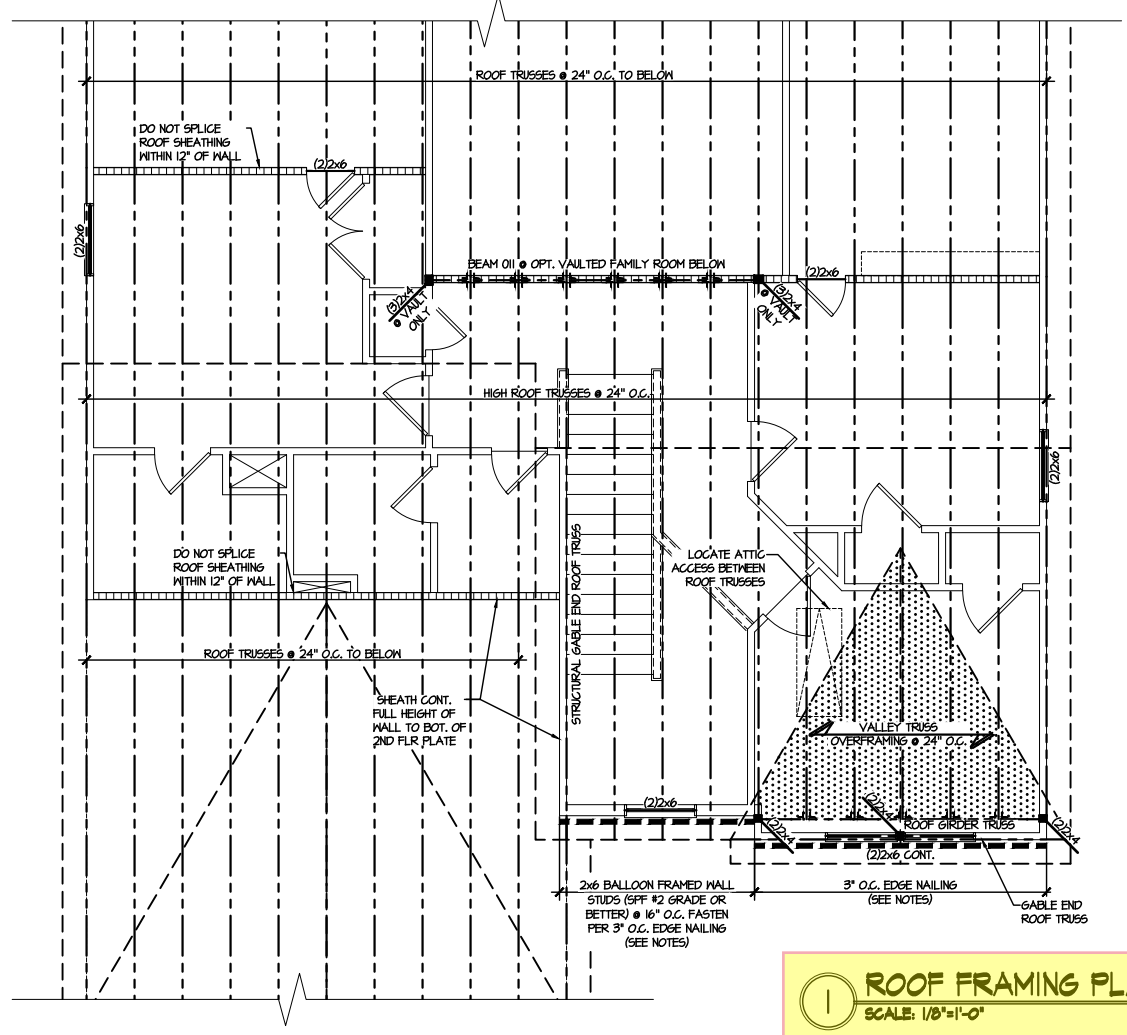
REVISIONS:

date:	initial:
01/13/22	MDH
02/01/23	JTS



ROOF FRAMING PLANS
MIDDLETON MODEL
RALEIGH, NC

sheet: LEFT HAND
S4.0



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

ENGINEERED BEAM MATERIAL SCHEDULE

BEAM NUMBER	LVL OPTION	PSL OPTION	LSL OPTION	FLITCH OPTION	STEEL OPTION
001	(2)3/4"x11 1/8" - H	3/2"x11 1/8" - H	(2)3/4"x11 1/8" - H	(2)2x12 + (1) 1/2"x11 1/8" STEEL FLITCH PLATE - H	N/A
001A	(2)3/4"x11 1/8" - H	3/2"x11 1/8" - H	(2)3/4"x11 1/8" - H	(2)2x12 + (1) 1/2"x11 1/8" STEEL FLITCH PLATE - H	N/A
002	(2)3/4"x10" - FT	5/4"x10" - FT	N/A	(3)2x12 + (2) 1/2"x11 1/8" STEEL FLITCH PLATES - FB	W12x19 - F
003	(2)3/4"x14" - F	3/2"x14" - F	(2)3/4"x14" - F	(2)2x12 + (1) 1/2"x11 1/8" STEEL FLITCH PLATE - FB	W12x14 - F
004	(2)3/4"x14" - F	3/2"x14" - F	(2)3/4"x14" - F	(2)2x12 + (1) 1/2"x11 1/8" STEEL FLITCH PLATE - FB	W12x14 - F
005	(2)3/4"x14" - F	3/2"x14" - F	(2)3/4"x14" - F	(2)2x12 + (1) 1/2"x11 1/8" STEEL FLITCH PLATE - FB	W12x14 - F
006	(2)3/4"x14" - F	3/2"x14" - F	(2)3/4"x14" - F	(2)2x12 + (1) 1/2"x11 1/8" STEEL FLITCH PLATE - FB	W12x14 - F
007	(2)3/4"x11 1/8" - F	3/2"x11 1/8" - F	(2)3/4"x11 1/8" - F	(2)2x12 + (1) 1/2"x11 1/8" STEEL FLITCH PLATE - F	W10x12 - F
008	(2)3/4"x14" - F	3/2"x14" - F	(2)3/4"x14" - F	(2)2x12 + (1) 1/2"x11 1/8" STEEL FLITCH PLATE - FB	W12x14 - F
009	(3)3/4"x10" - FT	5/4"x10" - FT	N/A	(4)2x12 + (3) 1/2"x11 1/8" STEEL FLITCH PLATES - FB	W12x26 - F
010	(3)3/4"x20" - FT	5/4"x20" - FT	N/A	(4)2x12 + (3) 3/8"x11 1/8" STEEL FLITCH PLATES - FB	W12x35 - F
011	(2)3/4"x11 1/8" - FB	3/2"x11 1/8" - FB	(2)3/4"x14" - FB	(2)2x12 + (1) 1/2"x11 1/8" STEEL FLITCH PLATE - FB	W10x12 - FB

- **BEAM NOTATION:**
 - "F" INDICATES FLUSH BEAM
 - "FT" INDICATES FLUSH TOP BEAM
 - "FB" INDICATES FLUSH BOTTOM BEAM
 - "D" INDICATES DROPPED BEAM
 - "H" INDICATES DROPPED OPENING HEADER
- REFER TO DETAIL D/SD2.0 FOR TYPICAL FLITCH BEAM CONNECTIONS
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- 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.

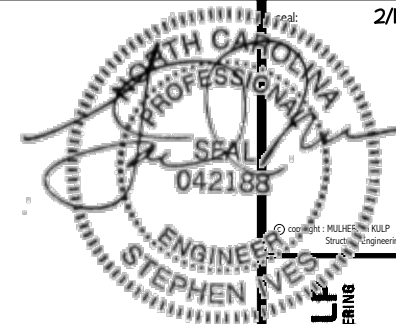
REFER TO S.O. FOR TYPICAL STRUCTURAL NOTES & SCHEDULES

SD2.0 & SD2.1 REFERS TO SD2.0J & SD2.1J FOR I-JOIST FLOOR FRAMING OR SD2.0T & SD2.1T FOR TRUSS FLOOR FRAMING

SD2.1J/SD2.1T REFERS TO SD2.1JA/SD2.1TA FOR LVL/PSL/LSL BEAMS OR SD2.1JB/SD2.1TB FOR FLITCH BEAMS OR SD2.1JC/SD2.1TC FOR STEEL BEAMS

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.



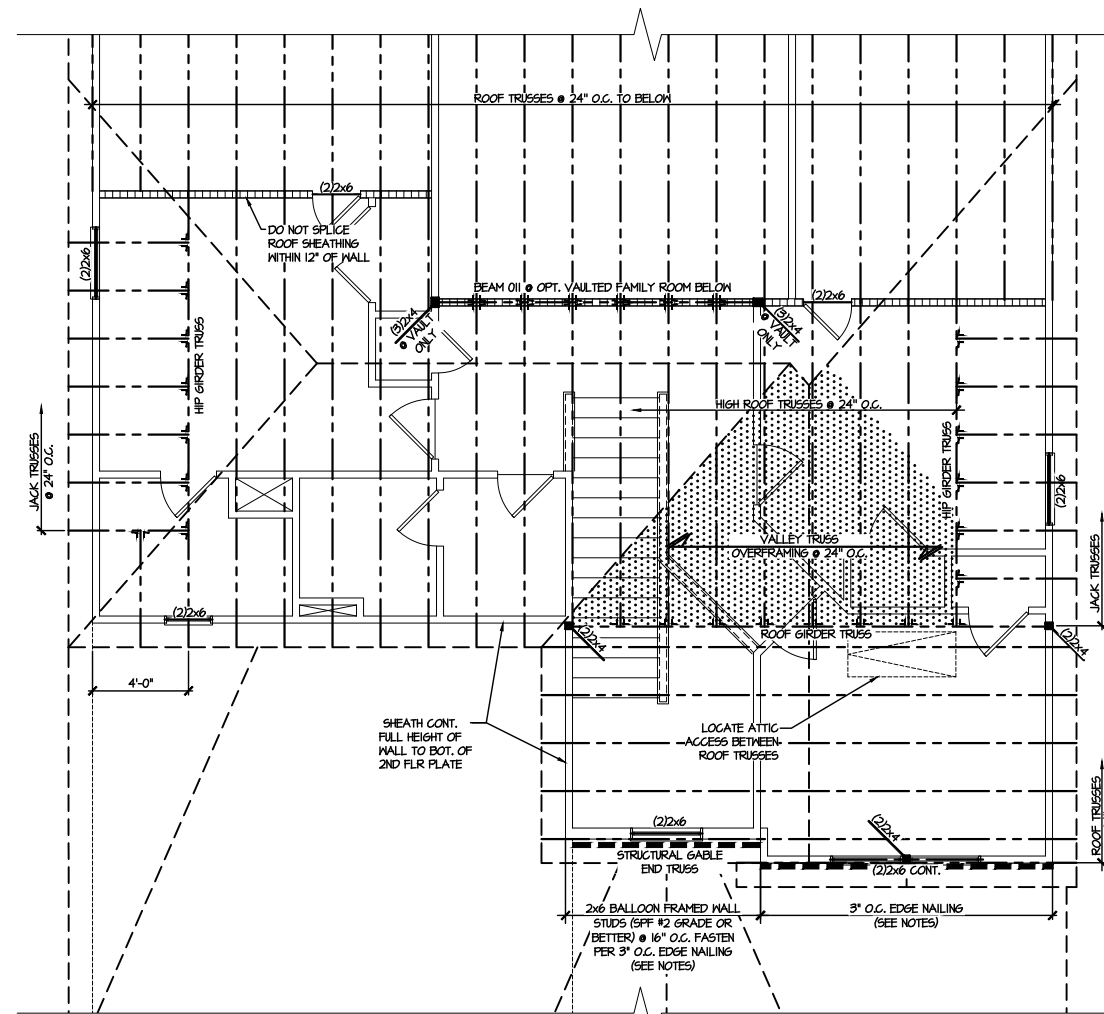
MULHERN+KULT
RESIDENTIAL STRUCTURAL ENGINEERING
300 Bechtel Ave. Building 1 - Raleigh, PA 10002
P: 252-498-0881 F: 252-498-0882
N.C. LIC. #C-3825

MS&K project number:
126-21018
project mgr: JTR
drawn by: MDH
issue date: 07-16-21
REVISIONS:
date: initial:
01/13/22 MDH
02/01/23 JTS

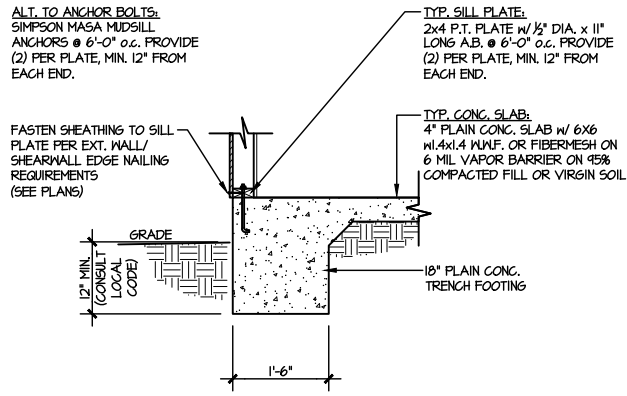


ROOF FRAMING PLANS
MIDDLETON MODEL
RALEIGH, NC

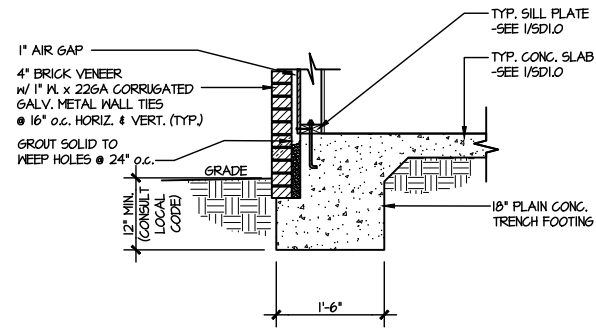
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S4.1



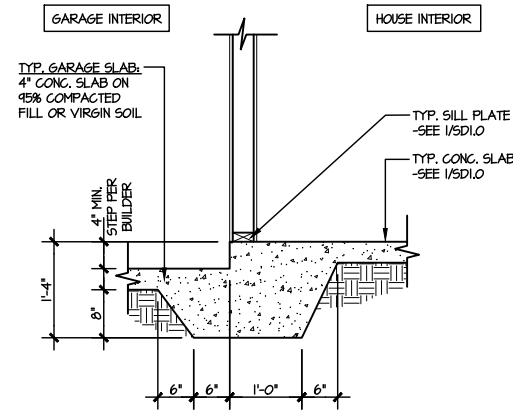
2 ROOF FRAMING PLAN
SCALE: 1/8"=1'-0" ELEVATIONS #10



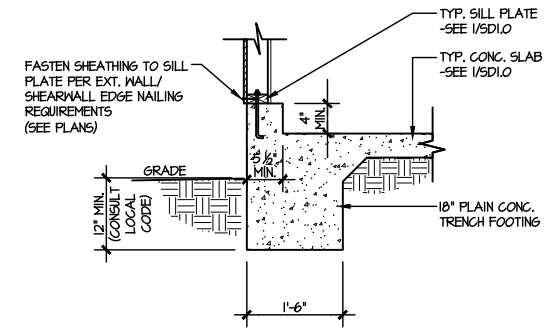
1 TYPICAL SLAB ON GRADE PERIMETER FOOTING
SCALE: 3/8"=1'-0"



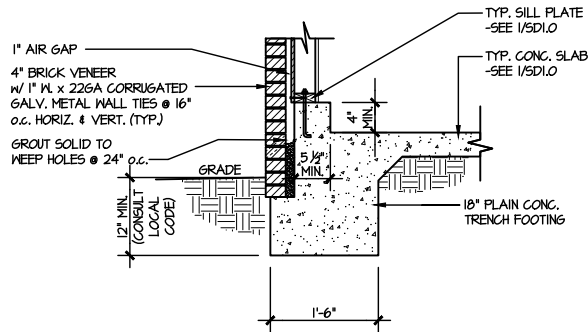
2 TYPICAL SLAB ON GRADE PERIMETER FOOTING w/ BRICK VENEER
SCALE: 3/8"=1'-0"



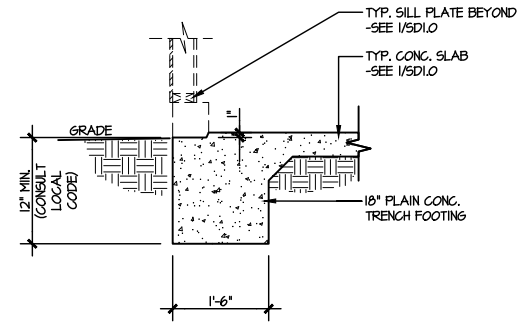
3 TYPICAL MONOLITHIC INTERIOR GARAGE FOOTING
SCALE: 3/8"=1'-0"



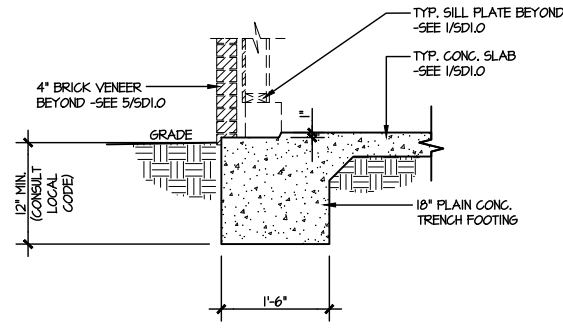
4 TYPICAL SLAB ON GRADE GARAGE PERIMETER FOOTING
SCALE: 3/8"=1'-0"



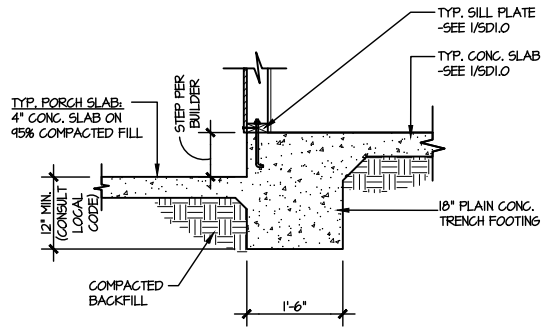
5 TYPICAL SLAB ON GRADE GARAGE PERIMETER FOOTING w/ BRICK VENEER
SCALE: 3/8"=1'-0"



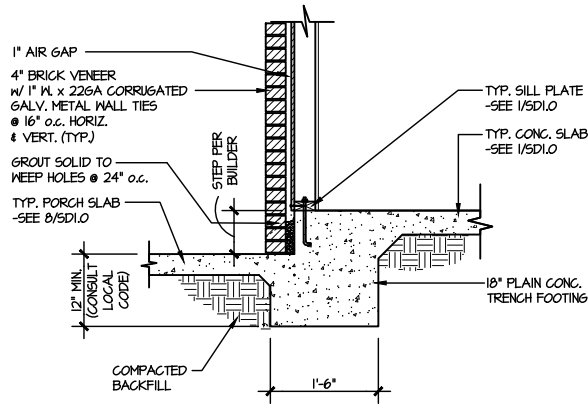
6 TYPICAL SLAB ON GRADE GARAGE ENTRY @ PERIMETER FOOTING
SCALE: 3/8"=1'-0"



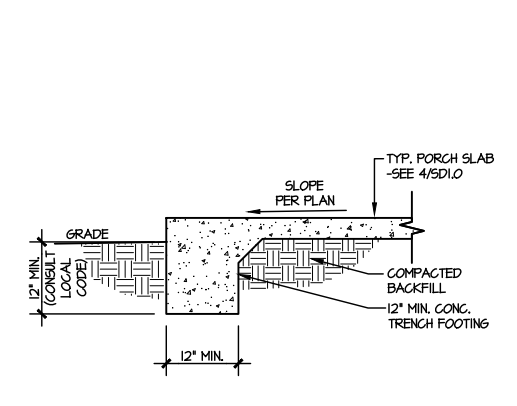
7 TYPICAL SLAB ON GRADE GARAGE ENTRY @ PERIMETER FOOTING w/ BRICK VENEER
SCALE: 3/8"=1'-0"



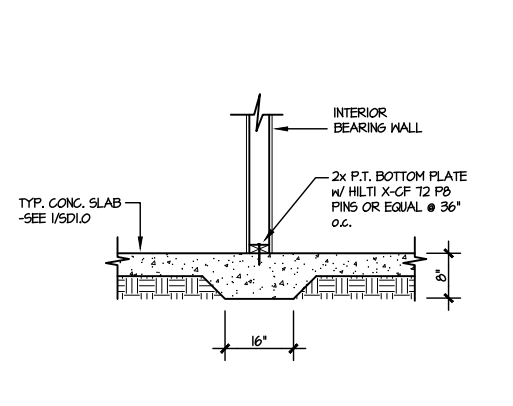
8 TYPICAL SLAB ON GRADE PERIMETER FOOTING @ PORCH/PATIO
SCALE: 3/8"=1'-0"



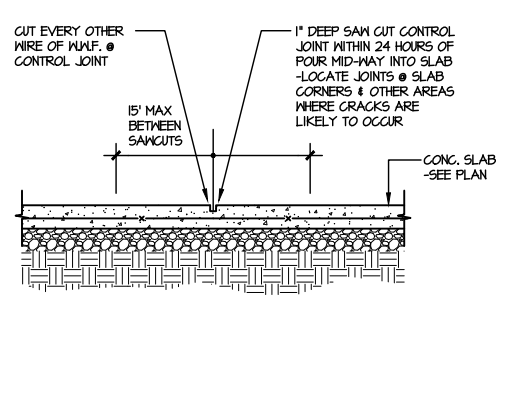
9 TYPICAL SLAB ON GRADE PERIMETER FOOTING @ PORCH/PATIO w/ BRICK VENEER
SCALE: 3/8"=1'-0"



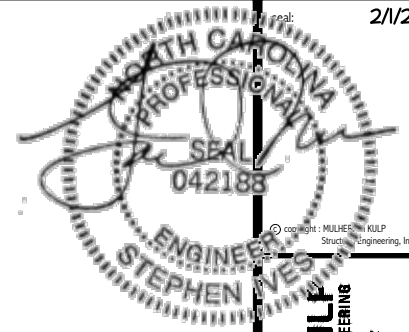
10 TYPICAL FOOTING @ PORCH SLAB
SCALE: 3/8"=1'-0"



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



A TYPICAL CONTROL JOINT
SCALE: 3/8"=1'-0"



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RESIDENTIAL STRUCTURAL ENGINEERING
300 Bechtel Ave. Building 1 - Durham, NC 27704
P: 252-486-8881 F: 252-486-8882
N.C. LIC. #C-3825

M&K project number: 126-21018

project mgr: JTR
drawn by: MDH
issue date: 07-16-21

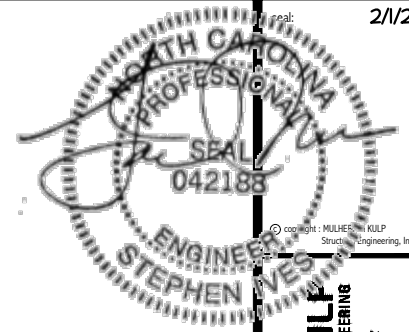
REVISIONS:

date:	initial:
01/13/22	MDH
02/01/23	JTS

DRB
HOMES

FOUNDATION DETAILS
MIDDLETON MODEL
RALEIGH, NC

sheet: **SD1.0**



MULHERN+KULT
RESIDENTIAL STRUCTURAL ENGINEERING
300 Beaverville Ave., Building 4 - Raleigh, NC 27602
P: 919-848-8881 F: 919-848-8882
NC LIC. # C-3825

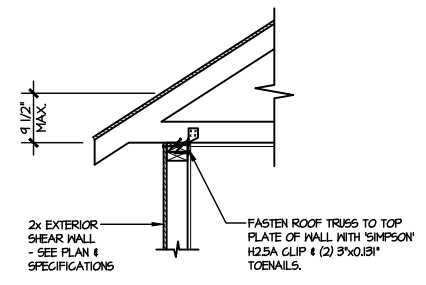


M&K project number:	126-21018
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REVISIONS:	
date:	initial:
01/13/22	MDH
02/01/23	JTS

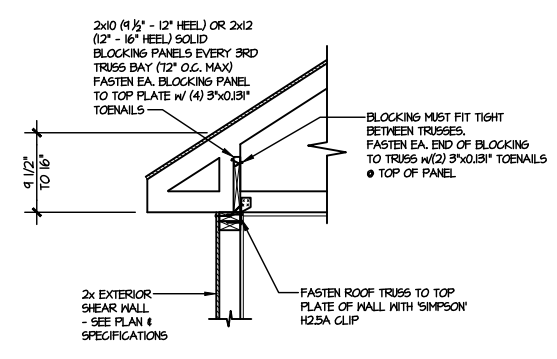
DRB
HOMES

FRAMING DETAILS
MIDDLETON MODEL
RALEIGH, NC

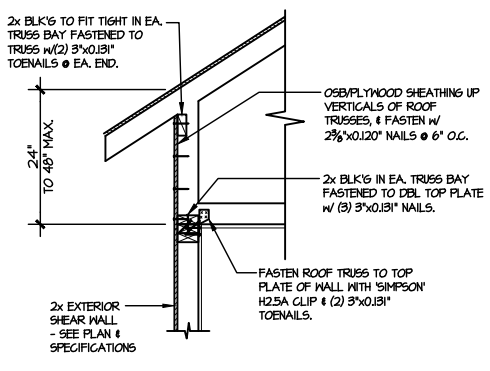
sheet:
SD2.0J



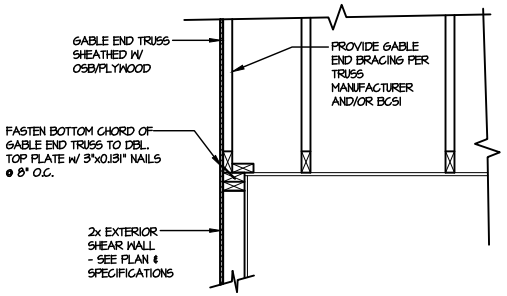
A1 TYPICAL SHEAR TRANSFER DETAIL @ ROOF
SCALE: 3/8\"/>



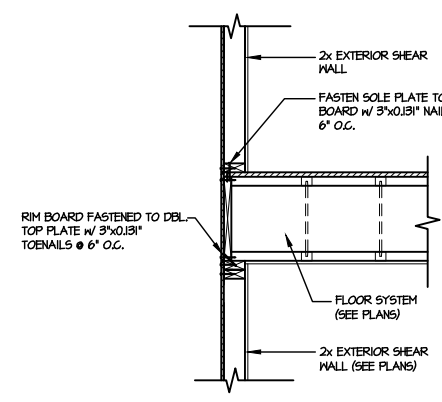
A2 TYPICAL SHEAR TRANSFER DETAIL @ ROOF
SCALE: 3/8\"/>



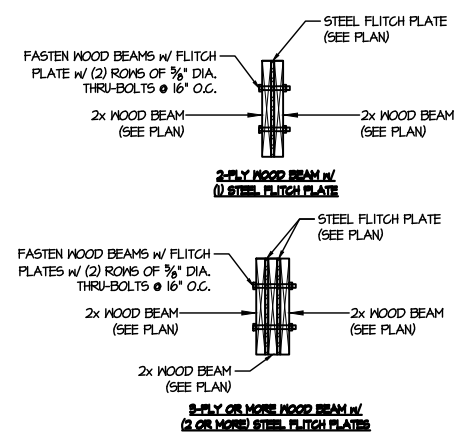
A3 TYPICAL SHEAR TRANSFER DETAIL @ RAISED HEEL TRUSS
SCALE: 3/8\"/>



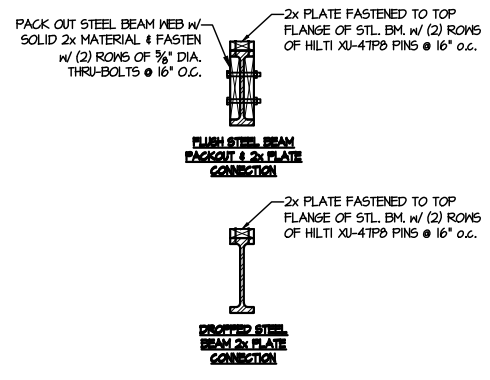
B TYPICAL GABLE END DETAIL
SCALE: 3/8\"/>



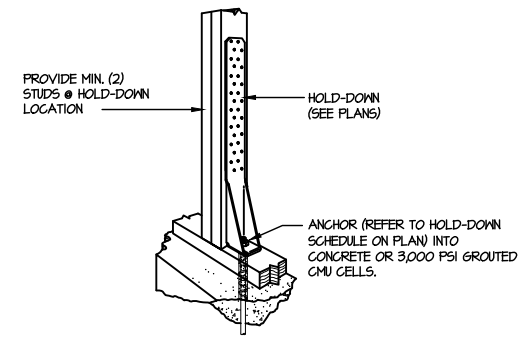
C TYPICAL SHEAR TRANSFER DETAIL BETWEEN FLOORS @ EXTERIOR WALL
SCALE: 3/8\"/>



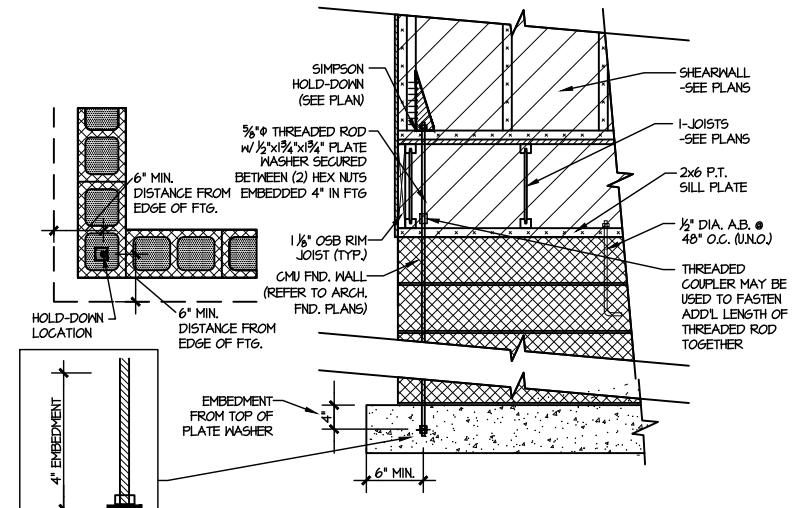
D TYPICAL FLITCH BEAM CONNECTION DETAIL
SCALE: 3/4\"/>



E TYPICAL STEEL BEAM CONNECTION DETAIL
SCALE: 3/4\"/>

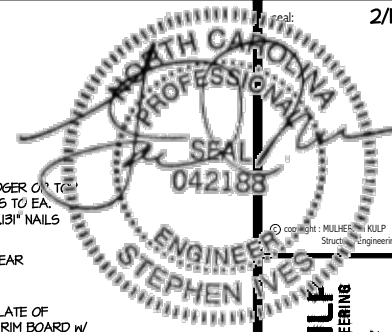


F1 TYPICAL HOLD DOWN INSTALLATION
SCALE: N.T.S.

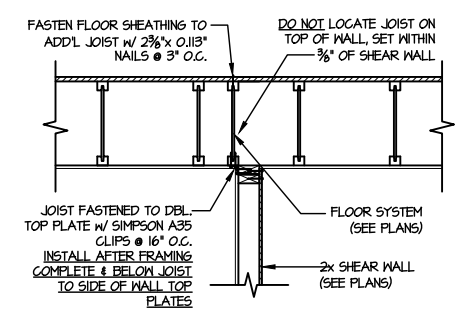


F2 TYPICAL CMU FOUNDATION HOLD-DOWN INSTALLATION
SCALE: N.T.S. (CORNER SHOWN - APPLICABLE TO ALL CONDITIONS)

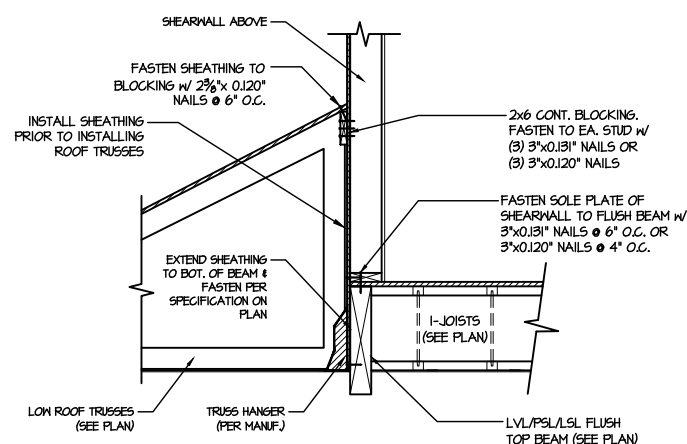
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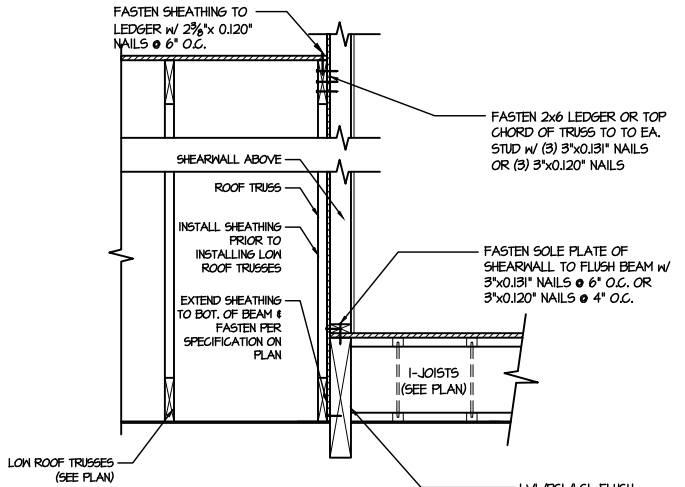
MULHERN+KULT
RESIDENTIAL STRUCTURAL ENGINEERING
300 Beaverville Ave., Building 1 - Raleigh, NC 27602
P: 919-886-8881 F: 919-886-8882
N.C. LIC. # C-3825



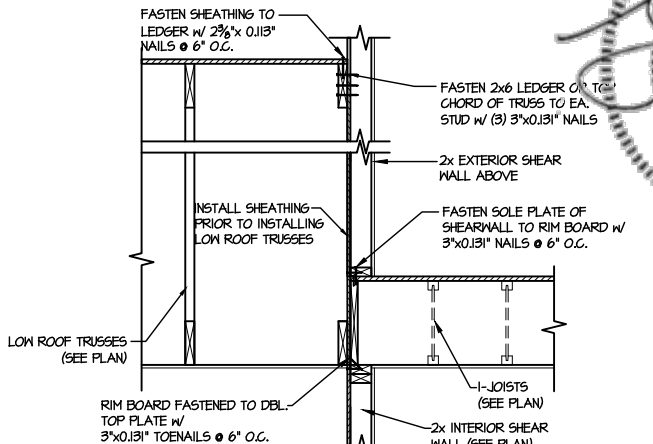
1 SHEAR TRANSFER DETAIL @ INTERIOR SHEARWALL BELOW
SCALE: 3/4"=1'-0"
PARALLEL TO FRAMING
ONLY READ WHERE NOTED ON PLAN



2 SHEAR TRANSFER DETAIL @ EXTERIOR SHEARWALL ABOVE
SCALE: 3/8"=1'-0"



3 SHEAR TRANSFER DETAIL @ EXTERIOR SHEARWALL ABOVE
SCALE: 3/8"=1'-0"



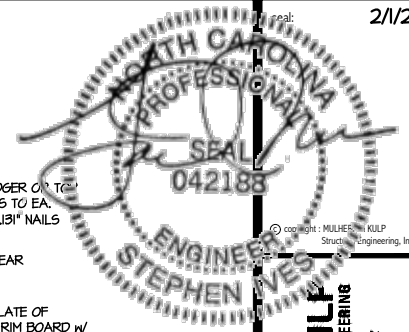
4 TYPICAL SHEAR TRANSFER DETAIL BETWEEN FLOORS @ INTERIOR WALL
SCALE: 3/4"=1'-0"

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.



FRAMING DETAILS
MIDDLETON MODEL
RALEIGH, NC



MULHERN+KULT
RESIDENTIAL STRUCTURAL ENGINEERING

300 Bechtel Ave. Building 1 - Raleigh, NC 27608
P: 919-886-8881 F: 919-886-8882
N.C. LIC. # C-38325



MS&K project number:
126-21018

project mgr: JTR
drawn by: MDH
issue date: 07-16-21

REVISIONS:

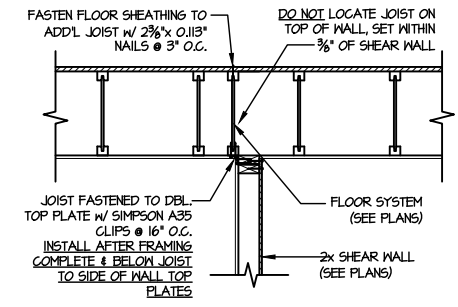
date:	initial:
01/13/22	MDH
02/01/23	JTS



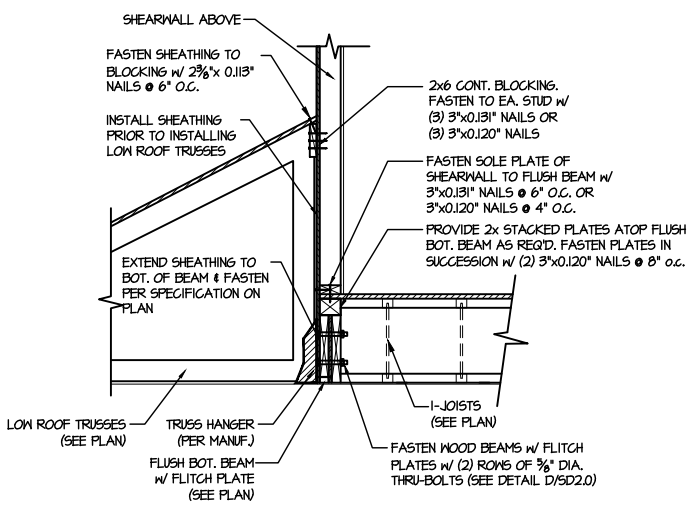
FRAMING DETAILS
MIDDLETON MODEL
RALEIGH, NC

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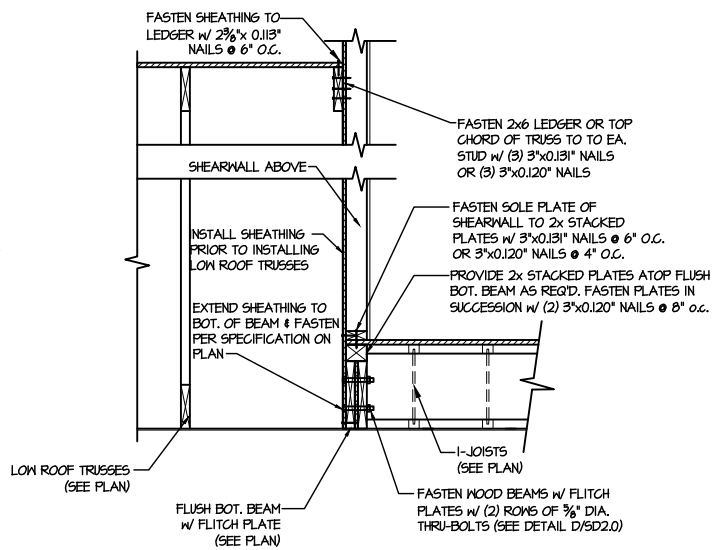
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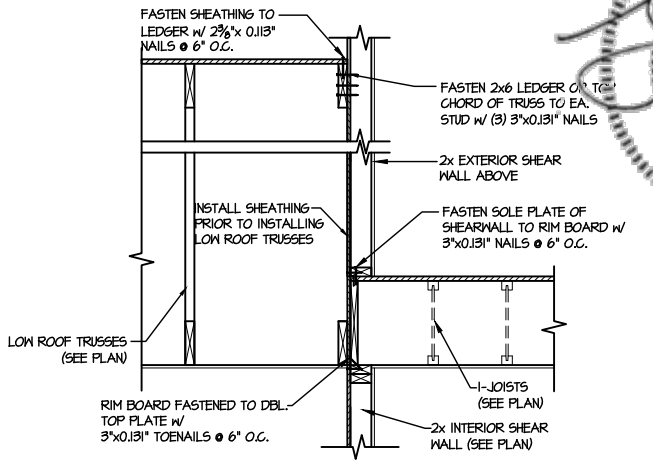
1 SHEAR TRANSFER DETAIL @ INTERIOR SHEARWALL BELOW
SCALE: 3/4"=1'-0"
PARALLEL TO FRAMING
ONLY REQUIRED WHERE NOTED ON PLAN



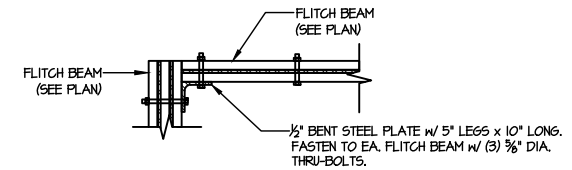
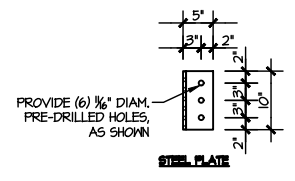
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SCALE: 3/8"=1'-0"



2 SHEAR TRANSFER DETAIL @ EXTERIOR SHEARWALL ABOVE
SCALE: 3/8"=1'-0"



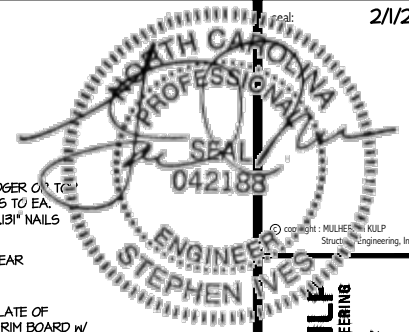
3 TYPICAL SHEAR TRANSFER DETAIL BETWEEN FLOORS @ INTERIOR WALL
SCALE: 3/4"=1'-0"



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

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RESIDENTIAL STRUCTURAL ENGINEERING

300 Beaverville Ave., Building 1 - Raleigh, NC 27602
P: 252-496-8881 F: 252-496-8882
N.C. LIC. # C-38325



MS&K project number:
126-21018

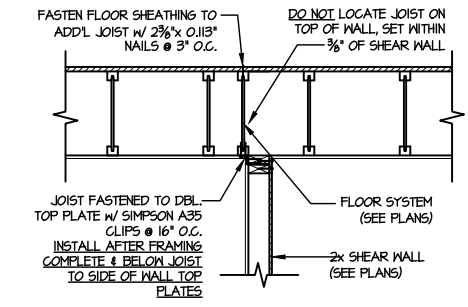
project mgr: JTR
drawn by: MDH
issue date: 07-16-21

REVISIONS:	
date:	initial:
01/13/22	MDH
02/01/23	JTS

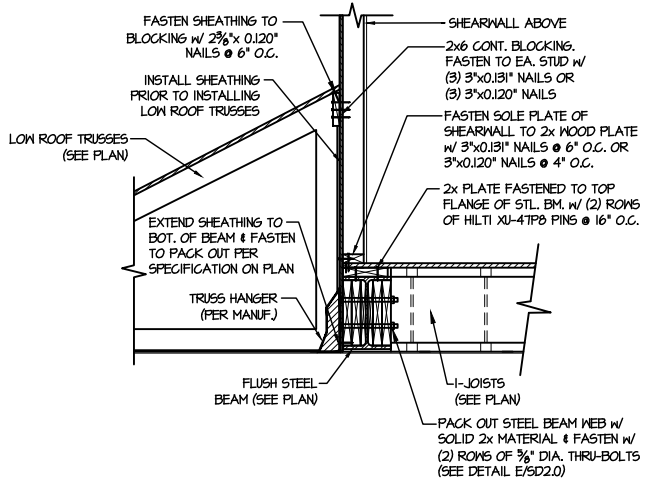


FRAMING DETAILS
MIDDLETON MODEL
RALEIGH, NC

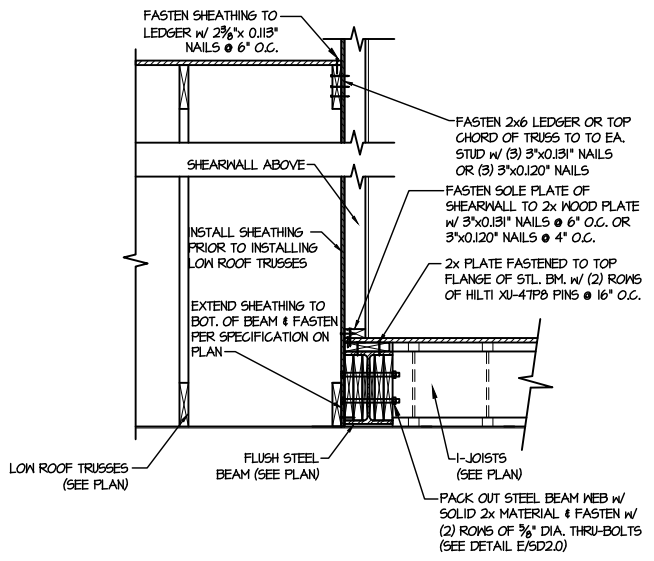
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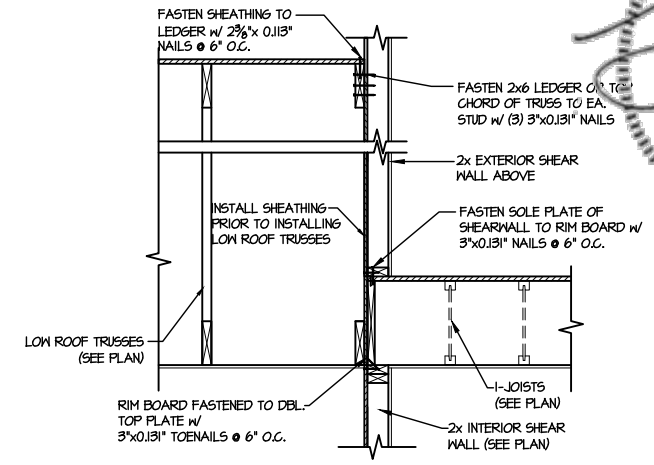
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SCALE: 3/4"=1'-0"
PARALLEL TO FRAMING
ONLY READ WHERE NOTED ON PLAN



2 SHEAR TRANSFER DETAIL @ EXTERIOR SHEARWALL ABOVE
SCALE: 3/8"=1'-0"

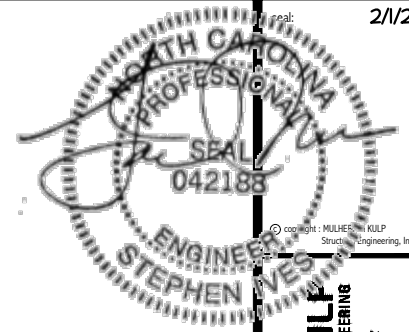


2 SHEAR TRANSFER DETAIL @ EXTERIOR SHEARWALL ABOVE
SCALE: 3/8"=1'-0"

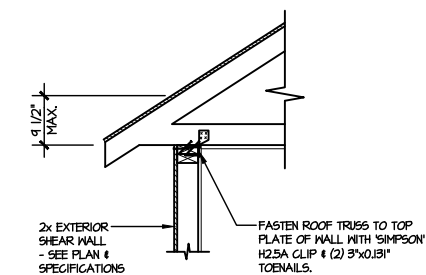


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SCALE: 3/4"=1'-0"

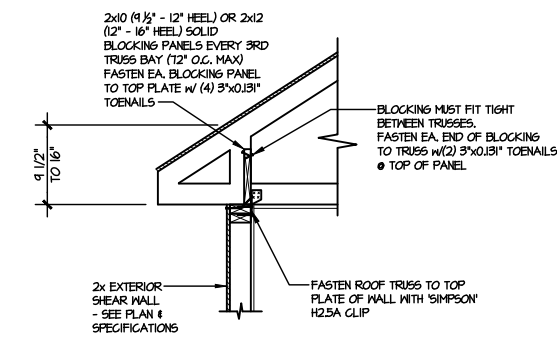
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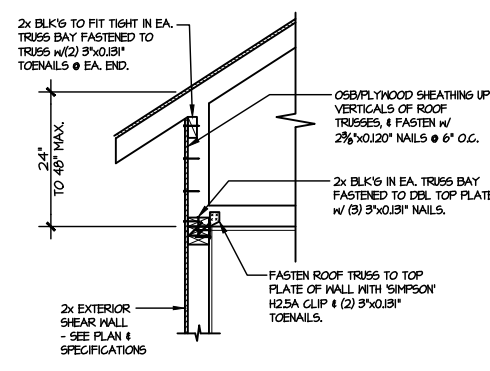
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NC LIC. #C-3825



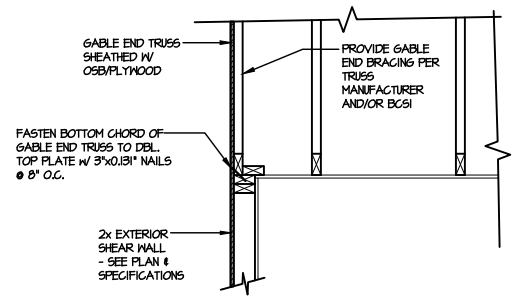
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SCALE: 3/8\"/>



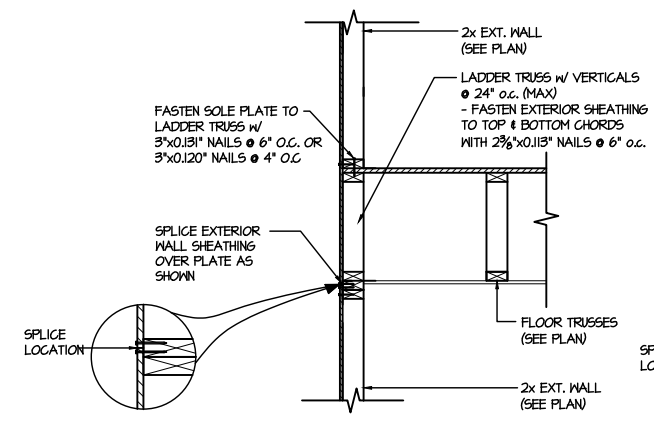
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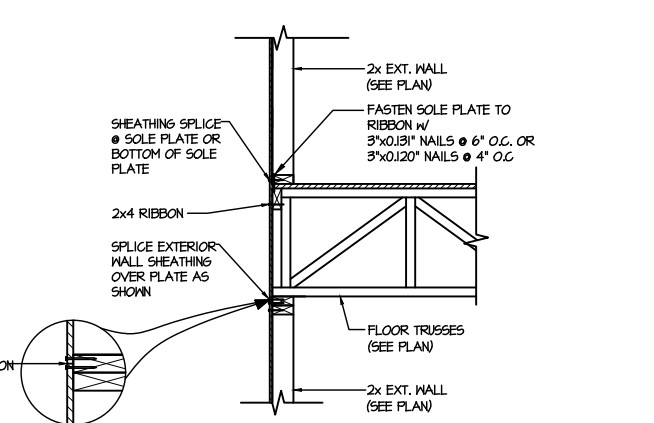
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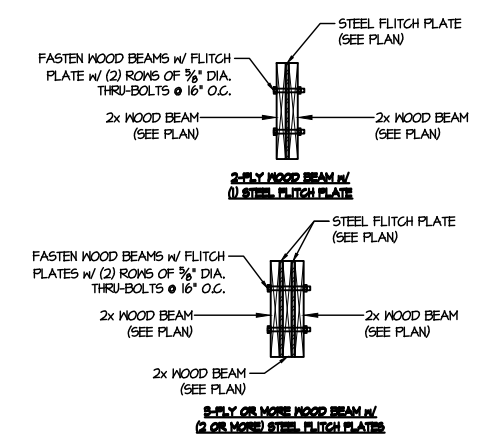
B TYPICAL GABLE END DETAIL
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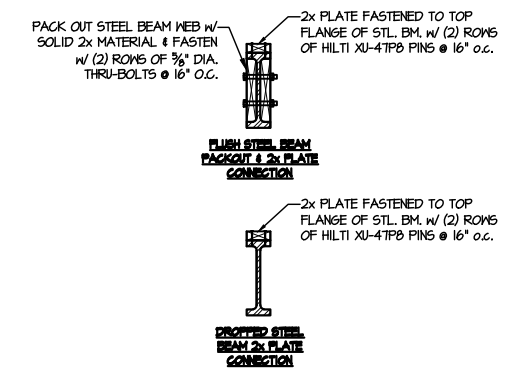
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SCALE: 3/8\"/>



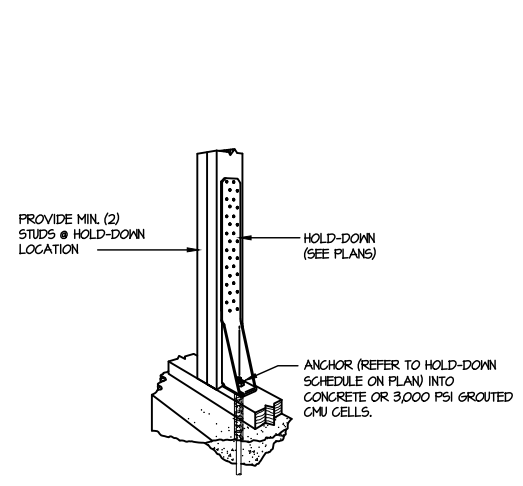
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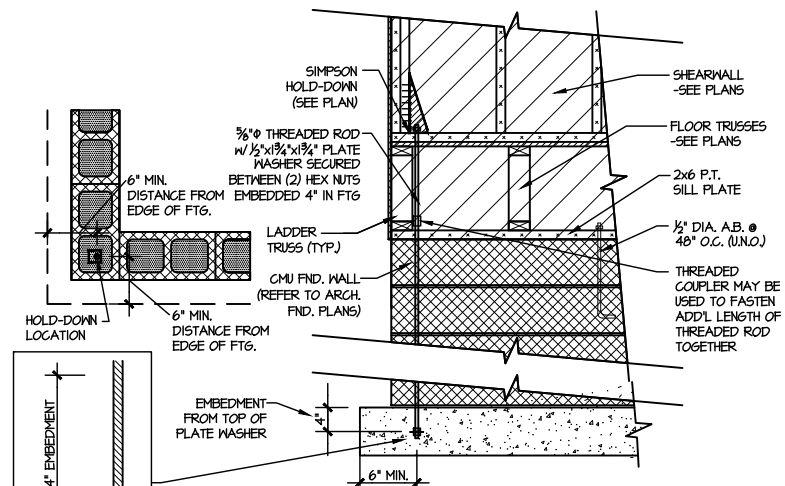
D TYPICAL FLITCH BEAM CONNECTION DETAIL
SCALE: 3/4\"/>



E TYPICAL STEEL BEAM CONNECTION DETAIL
SCALE: 3/4\"/>



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)

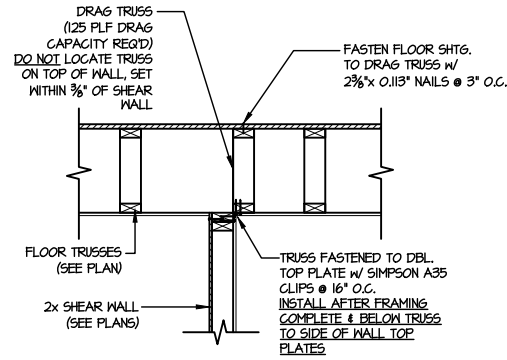
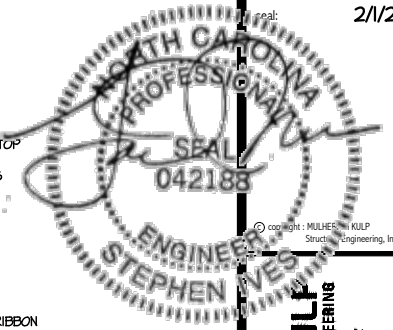
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M&K project number:	126-21018
project mgr:	JTR
drawn by:	MDH
issue date:	07-16-21
REVISIONS:	
date:	initial:
01/13/22	MDH
02/01/23	JTS

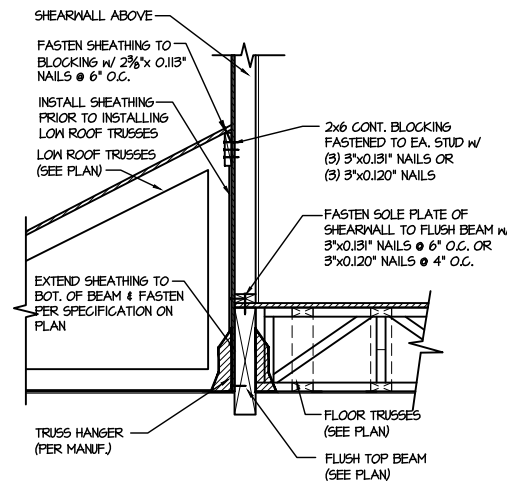
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FRAMING DETAILS
MIDDLETON MODEL
RALEIGH, NC

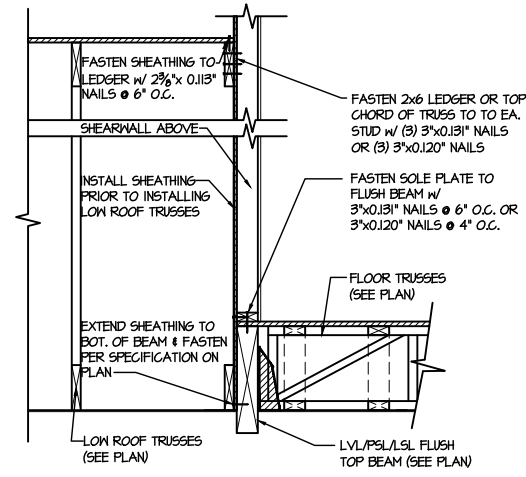
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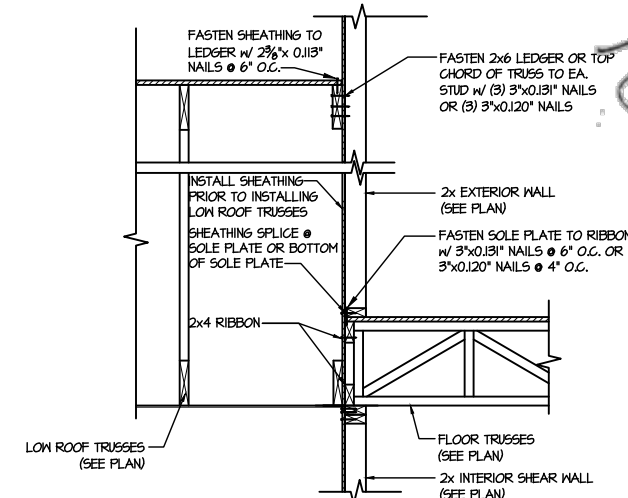
1 SHEAR TRANSFER DETAIL @ INTERIOR SHEAR WALL
SCALE: 5/8"=1'-0" PARALLEL FRAMING



2 SHEAR TRANSFER DETAIL @ EXTERIOR SHEARWALL ABOVE
SCALE: 5/8"=1'-0"



3 SHEAR TRANSFER DETAIL @ EXTERIOR SHEARWALL ABOVE
SCALE: 5/8"=1'-0"



4 TYPICAL SHEAR TRANSFER DETAIL BETWEEN FLOORS @ INTERIOR WALL
SCALE: 5/8"=1'-0"

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RESIDENTIAL STRUCTURAL ENGINEERING
300 Beaverville Ave., Building 1 - Raleigh, PA 19002
P: 215-696-8881 F: 215-696-8882
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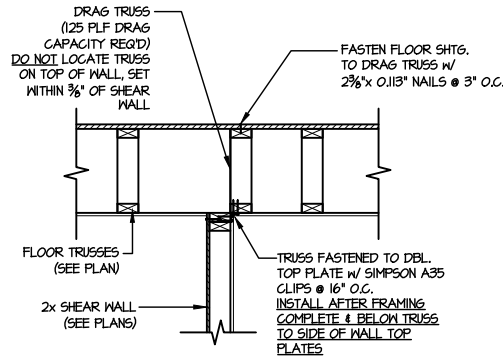
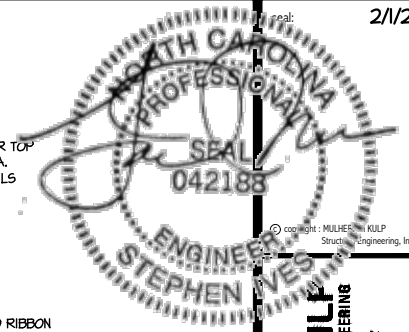
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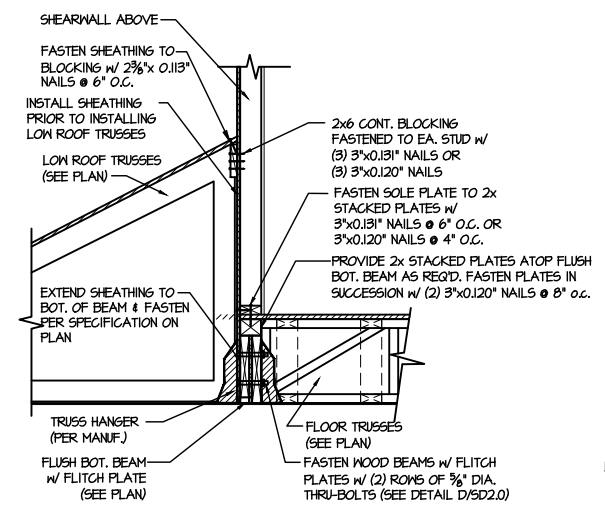
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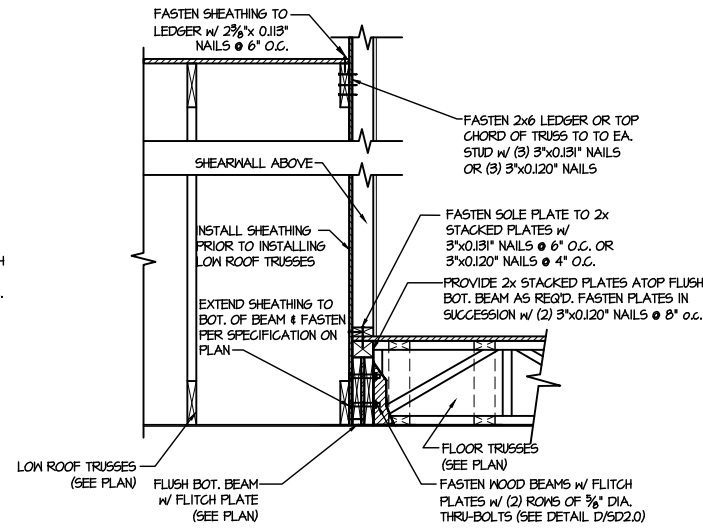
FRAMING DETAILS
MIDDLETON MODEL
RALEIGH, NC



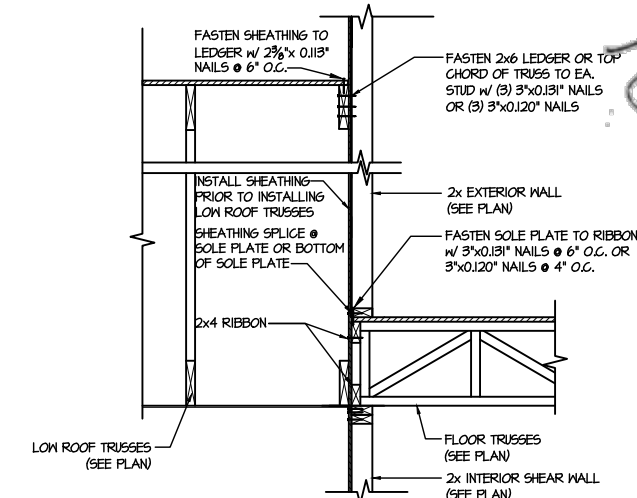
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SCALE: 3/4"=1'-0" PARALLEL FRAMING



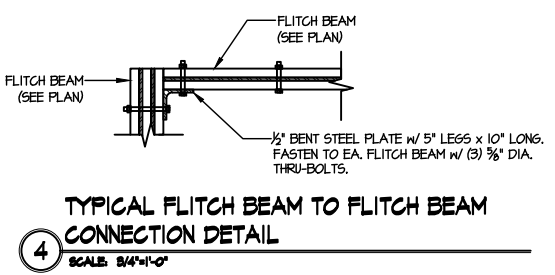
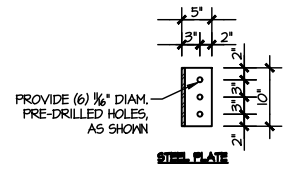
2 SHEAR TRANSFER DETAIL @ EXTERIOR SHEARWALL ABOVE
SCALE: 3/8"=1'-0"



3 SHEAR TRANSFER DETAIL @ EXTERIOR SHEARWALL ABOVE
SCALE: 3/8"=1'-0"



4 TYPICAL SHEAR TRANSFER DETAIL BETWEEN FLOORS @ INTERIOR WALL
SCALE: 3/4"=1'-0"



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

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P: 215-684-8881 F: 215-684-8882
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MS&K project number:
126-21018

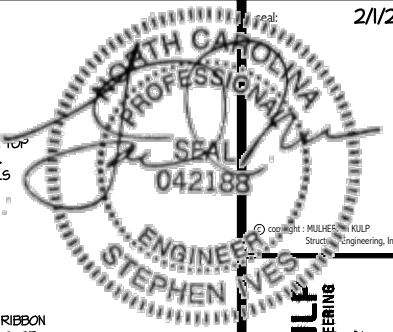
project mgr: JTR
drawn by: MDH
issue date: 07-16-21

REVISIONS:

date:	initial:
01/13/22	MDH
02/01/23	JTS



FRAMING DETAILS
MIDDLETON MODEL
RALEIGH, NC



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300 Beaverville Ave., Building 1 - Raleigh, NC 27601
919-848-8881 - mulhern@mulhernkult.com
N.C. LIC. #C-3825



MS&K project number:
126-21018

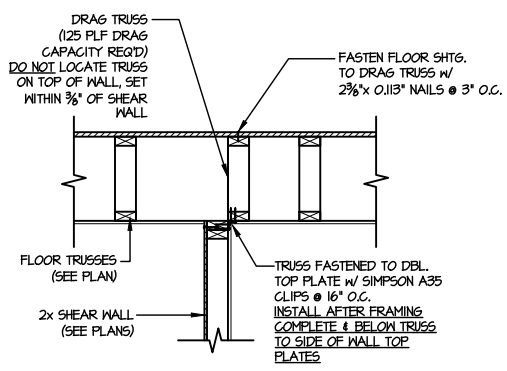
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issue date: 07-16-21

REVISIONS:	date:	initial:
01/13/22	MDH	
02/01/23	JTS	

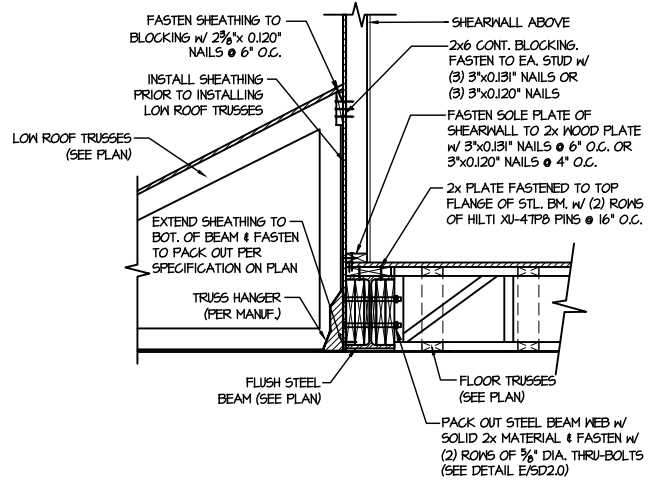


FRAMING DETAILS
MIDDLETON MODEL
RALEIGH, NC

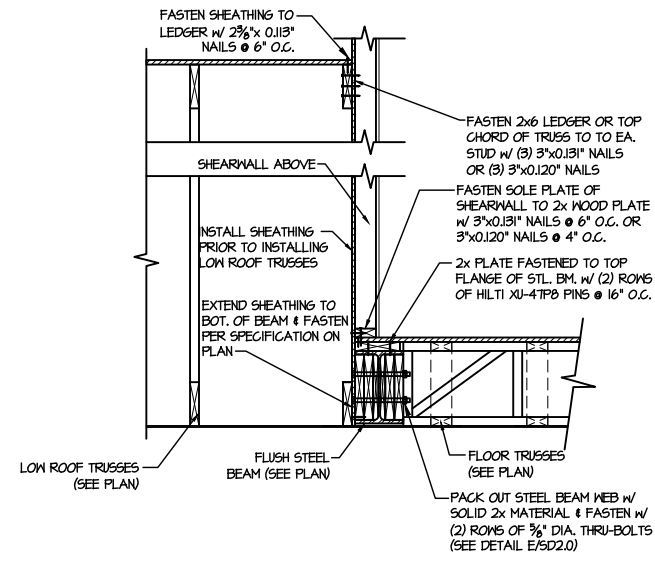
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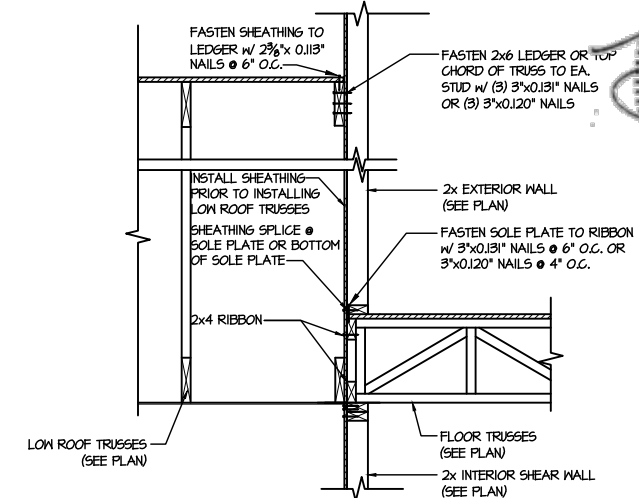
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SHEAR TRANSFER DETAIL
@ INTERIOR SHEAR WALL
SCALE: 3/4"=1'-0"
PARALLEL FRAMING



2
SHEAR TRANSFER DETAIL @
EXTERIOR SHEARWALL ABOVE
SCALE: 3/8"=1'-0"

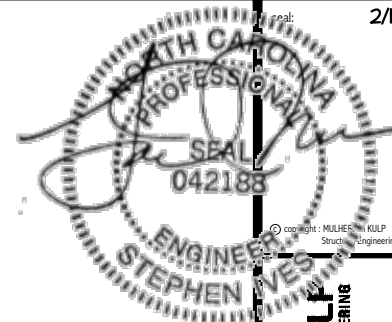


3
SHEAR TRANSFER DETAIL @
EXTERIOR SHEARWALL ABOVE
SCALE: 3/8"=1'-0"



4
TYPICAL SHEAR TRANSFER DETAIL
BETWEEN FLOORS @ INTERIOR WALL
SCALE: 3/4"=1'-0"

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Structural Engineering, Inc.

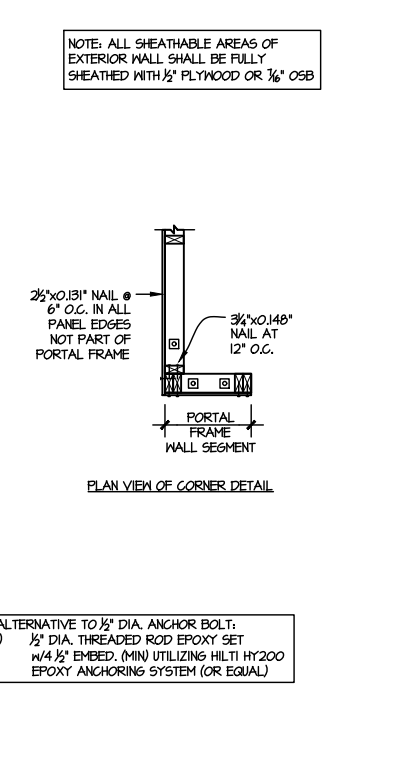
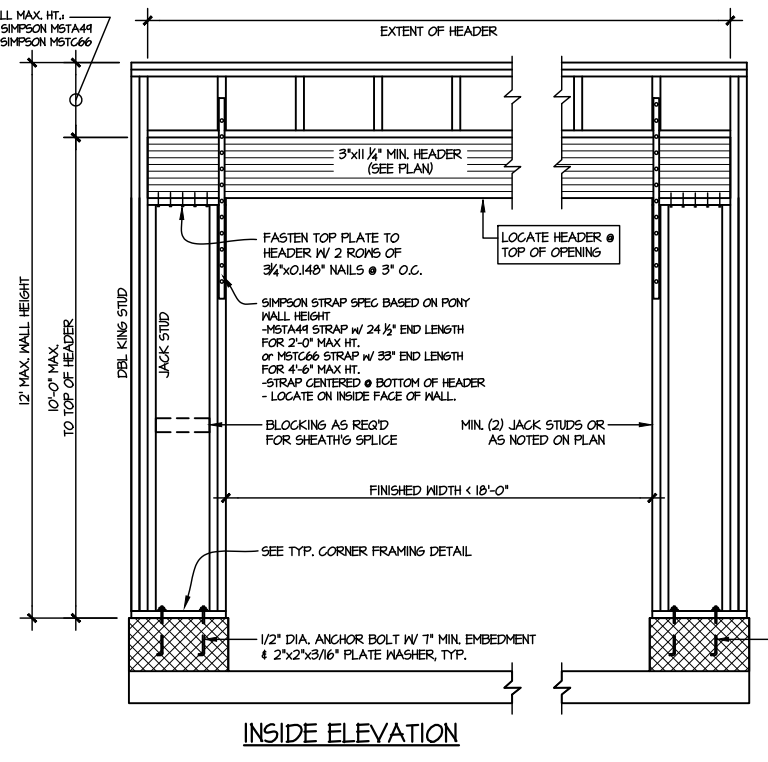
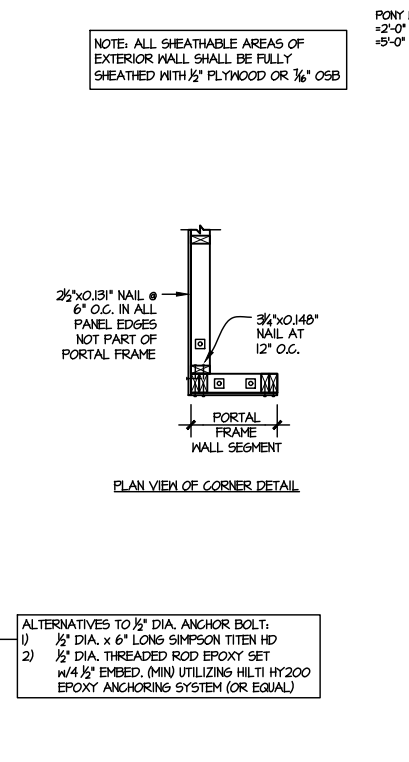
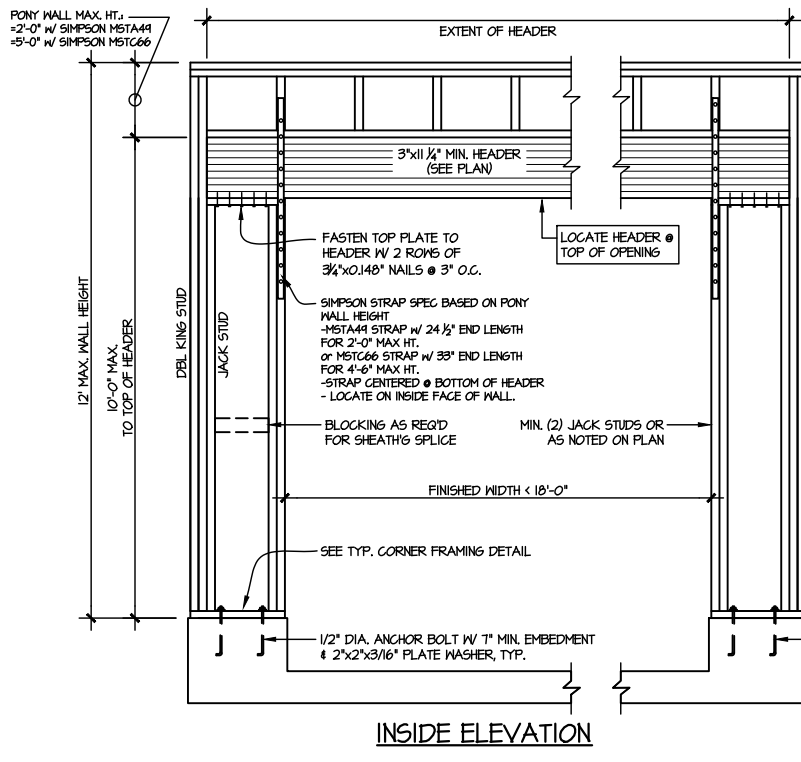
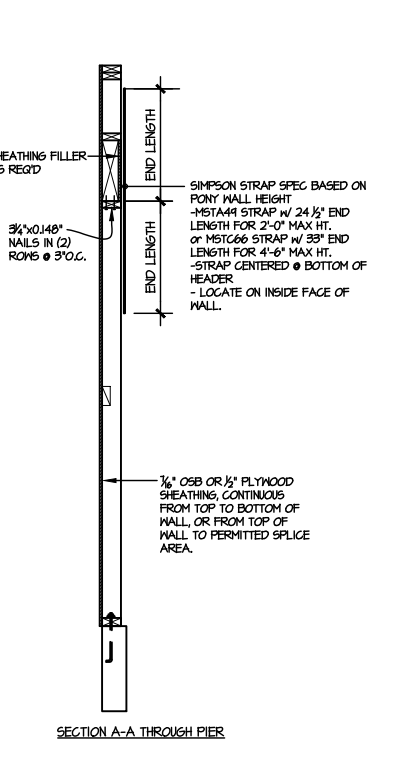
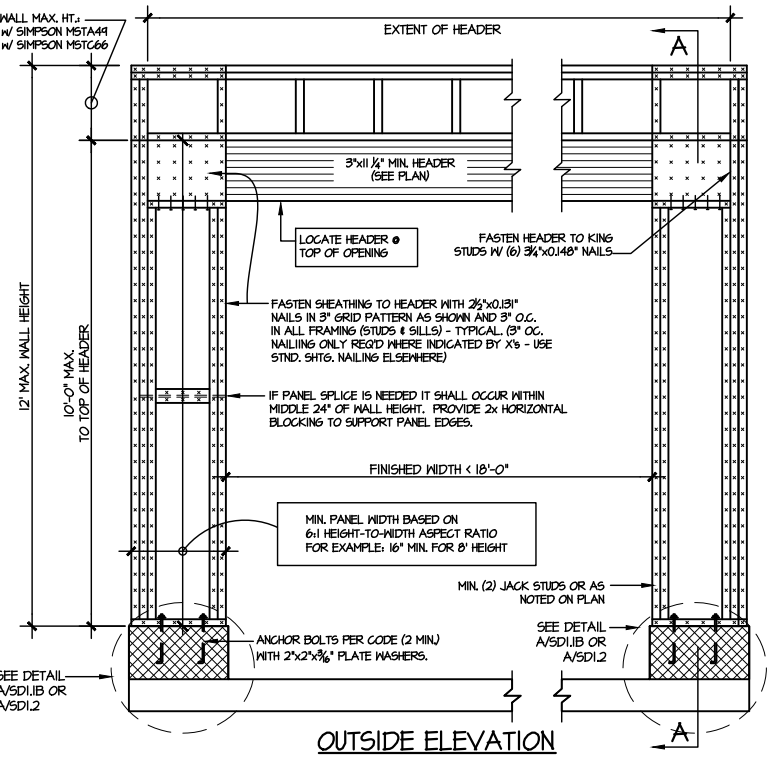
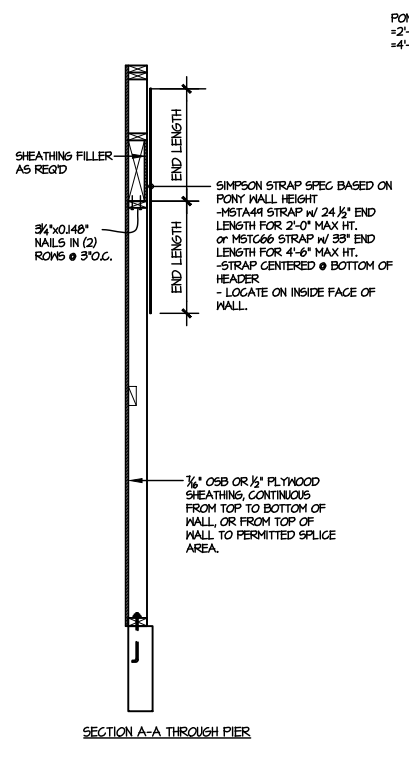
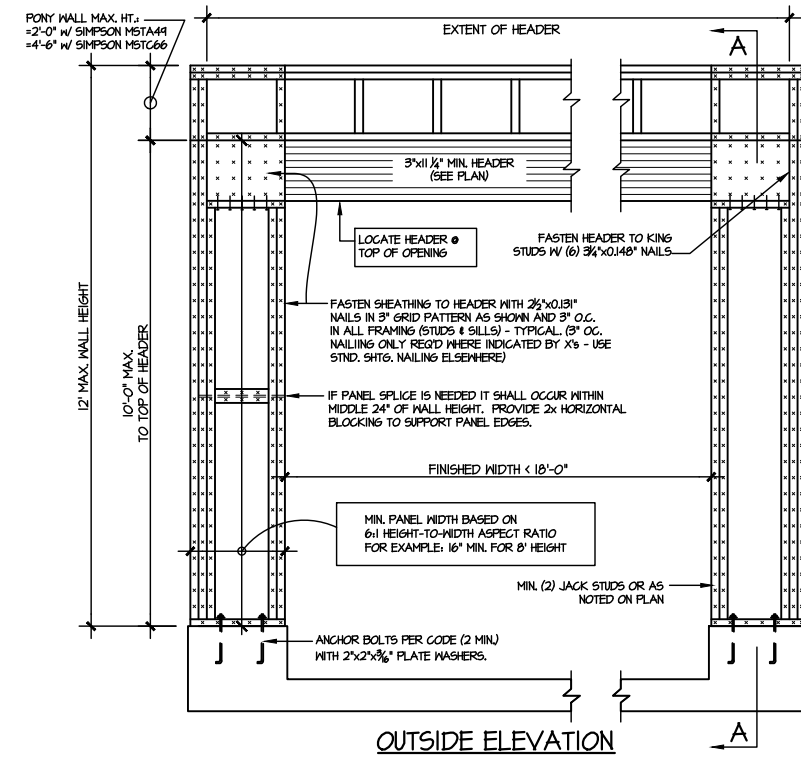
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300 Beaverville Ave., Building 1 - Raleigh, NC 27602
P: 919-848-8881 F: 919-848-8882
N.C. LIC. #C-3825

MS&K project number:
126-21018
project mgr: JTR
drawn by: MDH
issue date: 07-16-21
REVISIONS:
date: initial:
01/13/22 MDH
02/01/23 JTS



FRAMING DETAILS
MIDDLETON MODEL
RALEIGH, NC

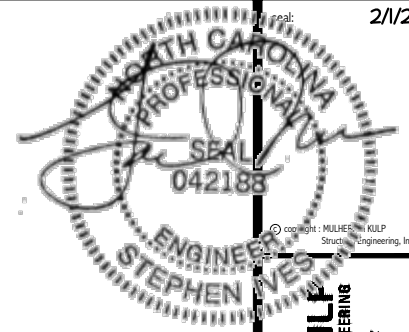
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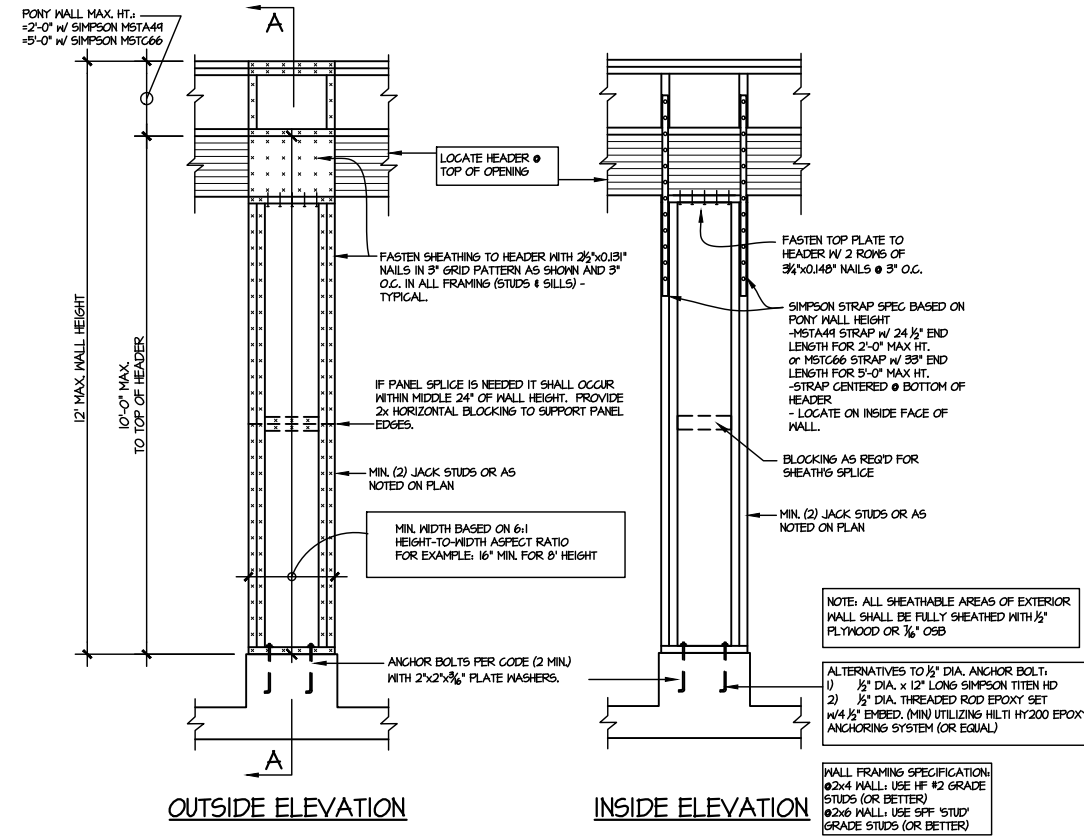
ALTERNATIVES TO 1/2" DIA. ANCHOR BOLT:
1) 1/2" DIA. x 6" LONG SIMPSON TITEN HD
2) 1/2" DIA. THREADED ROD EPOXY SET w/ 4 1/2" EMBED. (MIN) UTILIZING HILTI HY200 EPOXY ANCHORING SYSTEM (OR EQUAL)

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

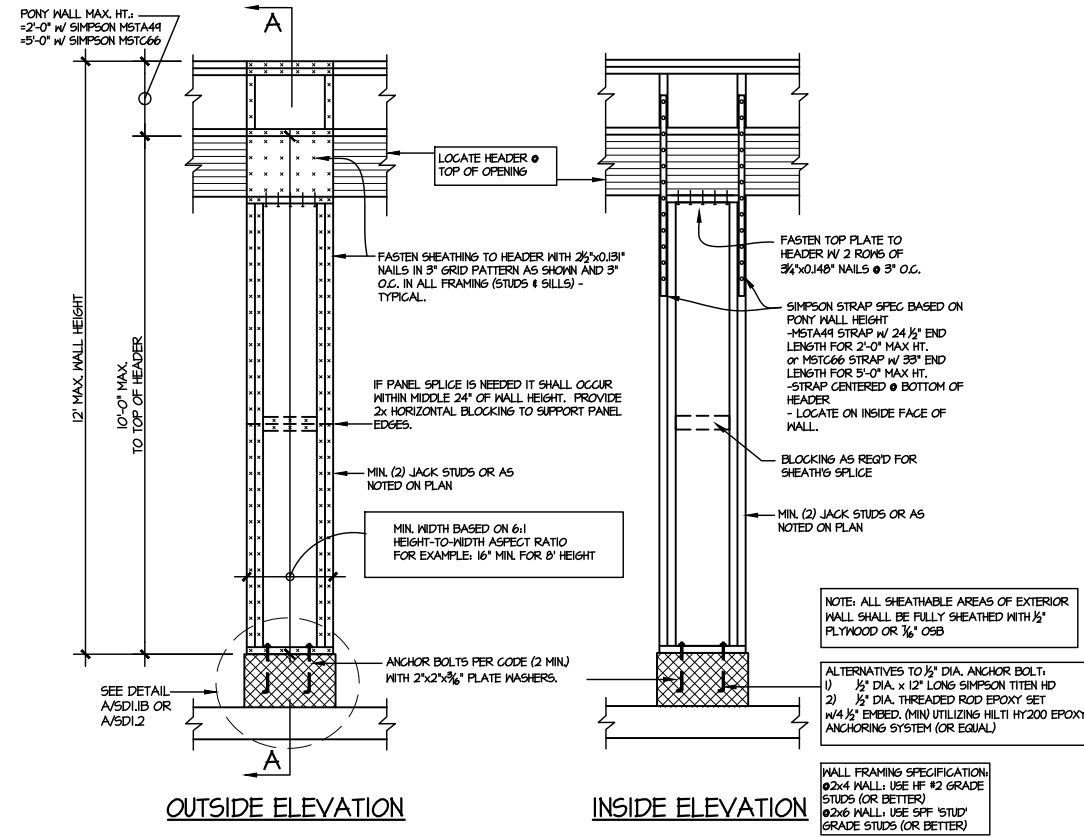
(B) TWO SIDED GARAGE PORTAL FRAME BRACING ELEVATION ON CMU STEM
SCALE: N.T.S.



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IA GARAGE PORTAL FRAME BRACING ELEVATION
SCALE: N.T.S. CENTER PIER BETWEEN 2 GARAGE DOORS
CONCRETE STEM



IB GARAGE PORTAL FRAME BRACING ELEVATION
SCALE: N.T.S. CENTER PIER BETWEEN 2 GARAGE DOORS
CMU STEM

MS&K project number:
126-21018

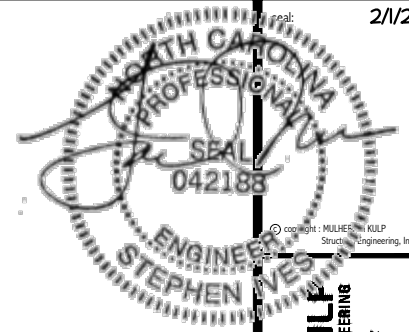
project mgr: JTR
drawn by: MDH
issue date: 07-16-21

REVISIONS:

date:	initial:
01/13/22	MDH
02/01/23	JTS



FRAMING DETAILS
MIDDLETON MODEL
RALEIGH, NC



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P: 919-486-8881 F: 919-486-8882
N.C. LIC. # C-3825



MS&K project number:
126-21018
project mgr: JTR
drawn by: MDH
issue date: 07-16-21

REVISIONS:	
date:	initial:
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FRAMING DETAILS
MIDDLETON MODEL
RALEIGH, NC

sheet:
SD3.0

