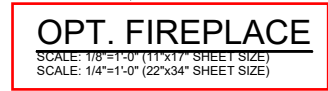
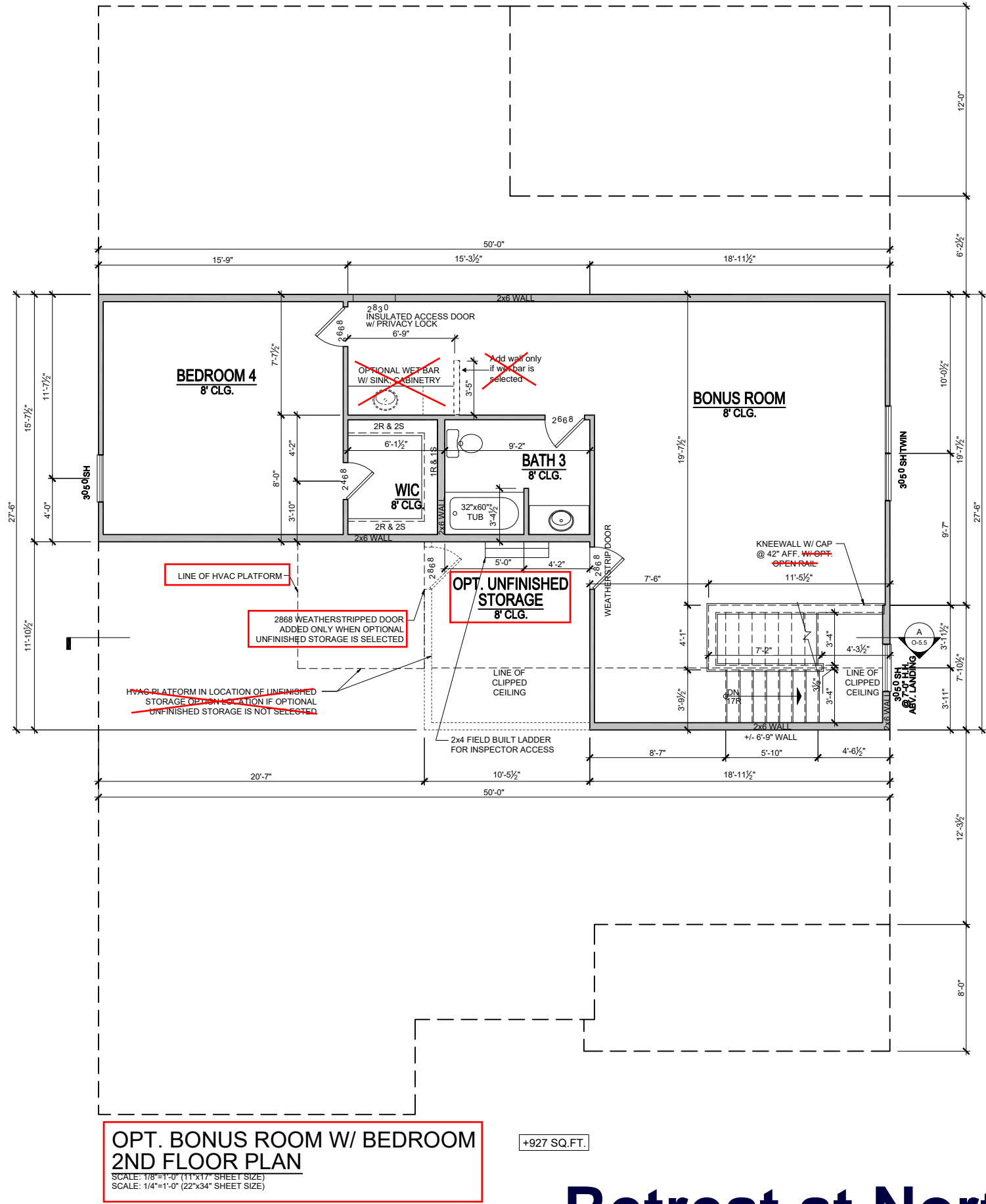


**NOTE; PROPANE TANK
TO BE SET
5' FROM VENTS
10' FROM IGNITION**

[illegible]

[illegible]



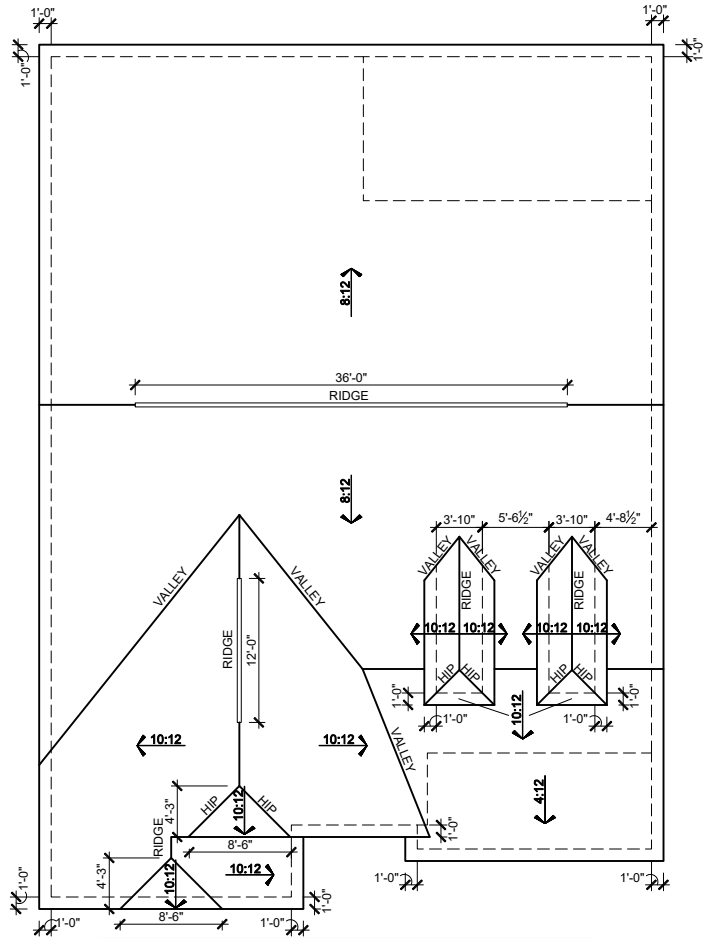
OPT. BONUS ROOM W/ BEDROOM
2ND FLOOR PLAN
SCALE: 1/8"=1'-0" (11"x17" SHEET SIZE)
SCALE: 1/4"=1'-0" (22"x34" SHEET SIZE)

+927 SQ.FT.

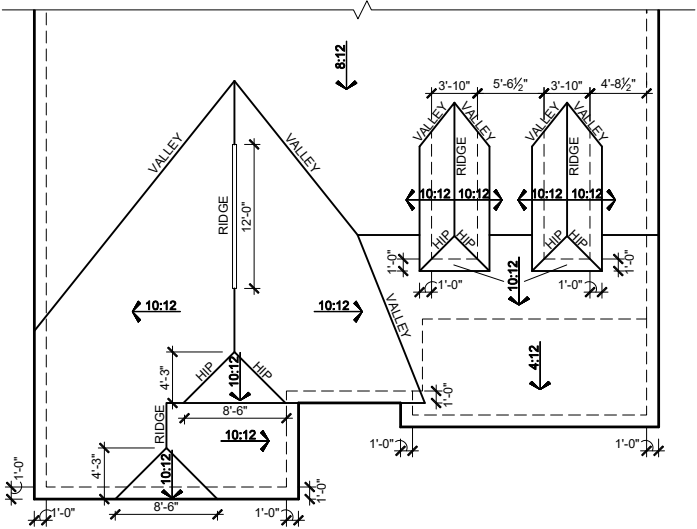
Retreat at North Main OP Lot 4

MODEL		MAGNOLIA		RELEASE DATE	09-14-2023		1/8" = 1'-0"		<div> DAVIDSON HOMES Your Community Builder</div>		<div> MAIN STREET <i>Designs</i> Main Street Designs of Georgia, LLC www.MainStreetDesigns.LLC.com 3050 Royal Blvd. South, Suite 135 Alpharetta, GA 30022 O. (404) 996-5722</div>		REVISION NUMBER	
DRAWING TITLE		PROJECT NUMBER		---										
PLAN OPTIONS		OPTION NO.												
OPTION DESCRIPTION														
2ND FLOOR BONUS W/ BED														
SHEET NO.				O-6.3										

Retreat at North Main OP Lot 4



ELEVATION -B- ROOF PLAN
SCALE: 1/16"=1'-0" (11"x17" SHEET SIZE)
SCALE: 1/8"=1'-0" (22"x34" SHEET SIZE)



OPT. SIDE LOAD GARAGE
ELEVATION B - ROOF PLAN
SCALE: 1/16"=1'-0" (11"x17" SHEET SIZE)
SCALE: 1/8"=1'-0" (22"x34" SHEET SIZE)

ATTIC VENT CALCULATIONS

NOTES:

- GENERAL CONTRACTOR SHALL VERIFY THE NET FREE VENTILATION OF THE VENT PRODUCT SELECTED BY OWNER. VERIFY WITH MANUFACTURER OF HIGH AND LOW VENTS TO BE USED FOR MINIMUM CALCULATED VENTS REQUIRED. THE REQUIRED VENTILATION SHALL BE MAINTAINED. PROVIDE INSULATION STOP SUCH THAT INSULATION DOES NOT OBSTRUCT FREE AIR MOVEMENT AS REQUIRED BY THE BUILDING OFFICIAL. ALL OVERLAP FRAMED ROOF AREAS SHALL HAVE
- OPENINGS BETWEEN THE ADJACENT ATTICS IN THE ROOF SHEATHING (AS ALLOWED BY THE STRUCTURAL ENGINEER) TO ALLOW PASSAGE AND ATTIC VENTILATION BETWEEN THE TWO OR ISOLATED ATTIC SPACES SHALL BE VENTED INDEPENDENTLY TO CBC REQUIREMENTS.
- PER DEVELOPER, AT ALL CANTILEVERED FLOORS, CANTILEVERED ARCHITECTURAL POP-OUTS, AND ANY DOUBLE FRAMING PROJECTIONS THAT ARE SEPARATED FROM THE VENTING CALCULATIONS SHOWN ABOVE, PROVIDE A CONTINUOUS 2" CORROSION RESISTANT SOFFIT VENT AT UNDERSIDE OF FRAMED ELEMENT.
- ALL ROOF DRAINAGE SHALL BE PIPED TO STREET OR APPROVED DRAINAGE FACILITY.
- DASHED LINES INDICATE WALL BELOW.
- LOCATE GUTTER AND DOWNSPOUTS PER BUILDER.
- PITCHED ROOFS AS NOTED.
- TRUSS MANUFACTURER SHALL SUBMIT STRUCTURAL CALCS AND SHOP DRAWINGS TO THE BUILDER'S GENERAL CONTRACTOR AND BUILDING DEPARTMENT FOR REVIEW PRIOR TO FABRICATIONS.
- ALL PLUMBING VENTS SHALL BE COMBINED INTO A MINIMUM AMOUNT OF ROOF PENETRATIONS. ALL ROOF PENETRATIONS SHALL OCCUR TO THE REAR OF THE MAIN RIDGE

MAIN ROOF

3359 SQ FT UNDER ROOF ATTIC 300 SQ FT / 1 SQ FT = 11.20 SQ FT VENTILATION			
RIDGE VENTS 18 SQ IN = (.125 SQ FT) SOFFIT VENTS 9 SQ IN = (.0625 SQ FT) BOX VENTS 50 SQ IN = (.347 SQ FT)			
11.20 SQ FT x	50%	5.598 SQ FT OF RIDGE	
11.20 SQ FT x	50%	5.598 SQ FT OF SOFFIT	
RIDGE VENT 5.598 SQ FT = 44.8 FEET OF RIDGE VENT 0.125 SQ FT SOFFIT VENT 5.598 SQ FT = 89.6 FEET OF SOFFIT VENT 0.0625 SQ FT			
ACTUAL RIDGE VENT PROVIDED		48 FEET	
ACTUAL SOFFIT VENT PROVIDED		85 FEET	
NUMBER OF BOX VENTS NEEDED (REQ - ACTUAL x .347)		-1.1 COUNT (NEGATIVE = 0)	

FACADE PERCENTAGES		
MATERIALS	S.F.	%
SIDING	186	45
SHAKE	85	21
BOARD & BATT	0	0
HARDI BOARD	0	0
STONE VENEER	142	34
BRICK VENEER	0	0
TOTAL=		413 100
MASONRY % =		34

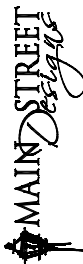
ATTIC VENT CALCULATIONS

MAIN ROOF

3399 SQ FT UNDER ROOF ATTIC 300 SQ FT / 1 SQ FT = 11.33 SQ FT VENTILATION			
RIDGE VENTS 18 SQ IN = (.125 SQ FT) SOFFIT VENTS 9 SQ IN = (.0625 SQ FT) BOX VENTS 50 SQ IN = (.347 SQ FT)			
11.33 SQ FT x	50%	5.665 SQ FT OF RIDGE	
11.33 SQ FT x	50%	5.665 SQ FT OF SOFFIT	
RIDGE VENT 5.665 SQ FT = 45.3 FEET OF RIDGE VENT 0.125 SQ FT SOFFIT VENT 5.665 SQ FT = 90.6 FEET OF SOFFIT VENT 0.0625 SQ FT			
ACTUAL RIDGE VENT PROVIDED		48 FEET	
ACTUAL SOFFIT VENT PROVIDED		85 FEET	
NUMBER OF BOX VENTS NEEDED (REQ - ACTUAL x .347)		-0.9 COUNT (NEGATIVE = 0)	

FACADE PERCENTAGES		
MATERIALS	S.F.	%
SIDING	207	42
SHAKE	85	17
BOARD & BATT	0	0
HARDI BOARD	0	0
STONE VENEER	198	41
BRICK VENEER	0	0
TOTAL=		491 100
MASONRY % =		41

REVISION NUMBER



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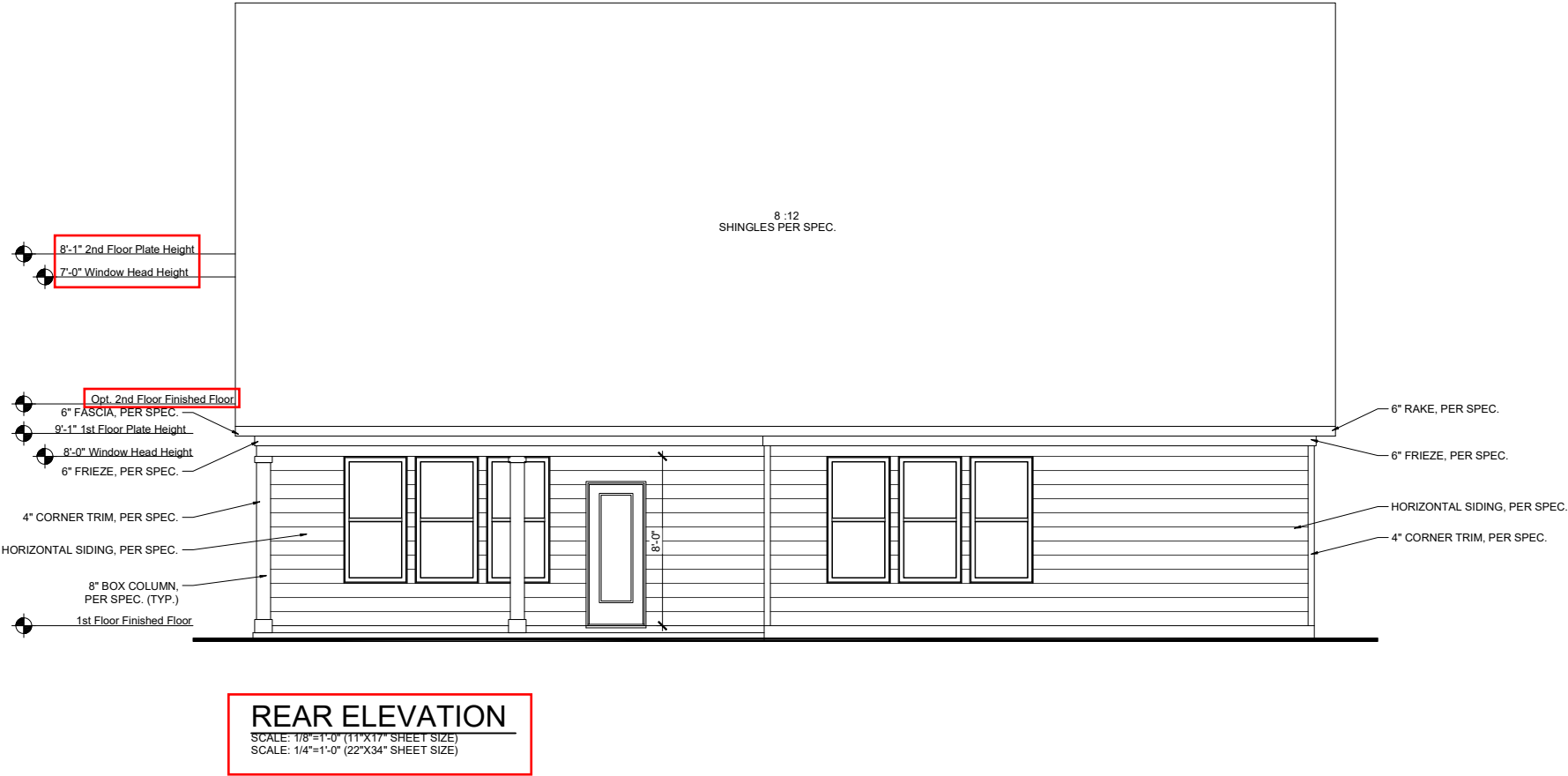
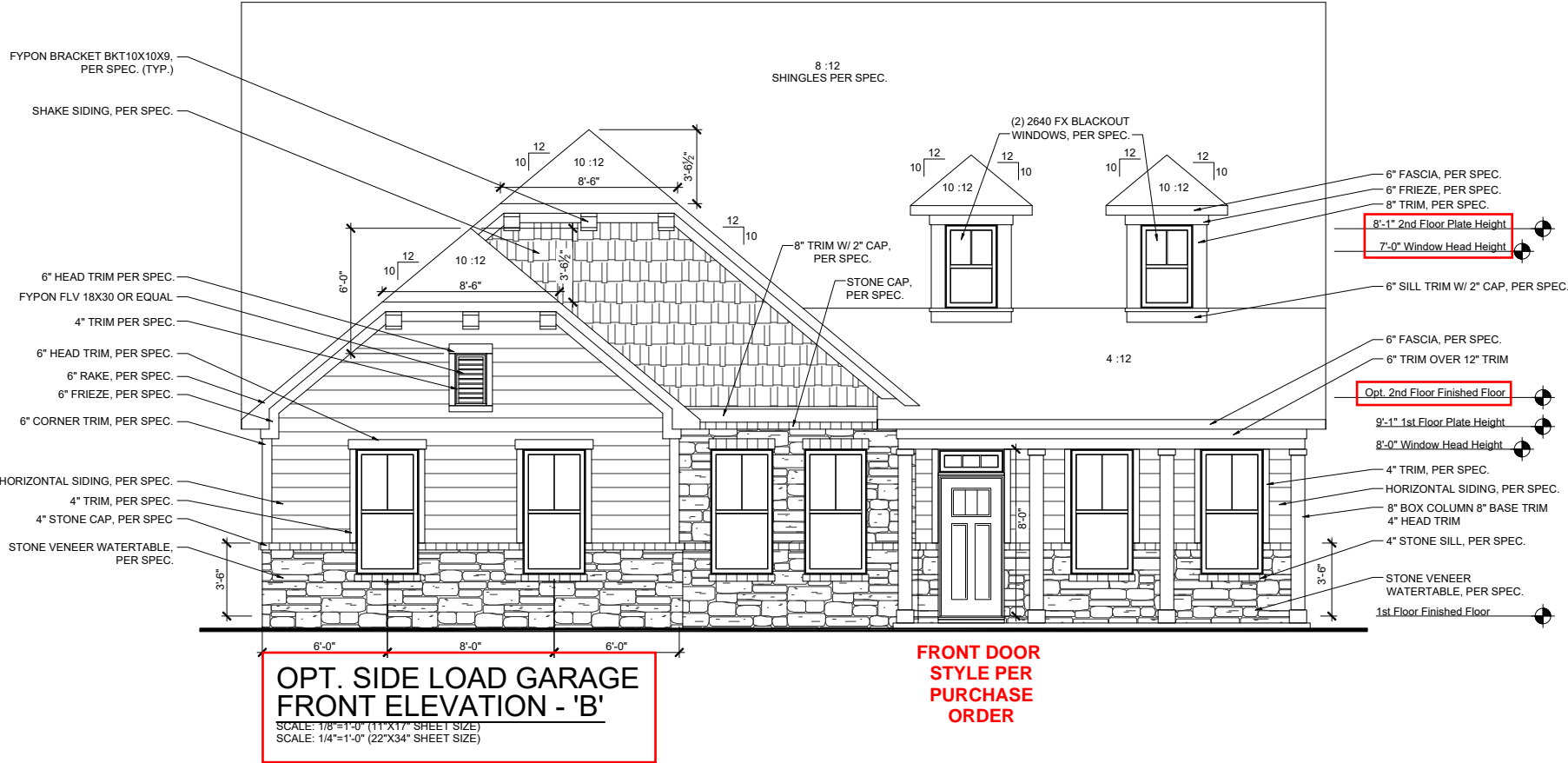
1/8"=1'-0"

RELEASE DATE 09-14-2023	PROJECT NUMBER -----	OPTION NO. -----
----------------------------	-------------------------	---------------------

MODEL MAGNOLIA	DRAWING TITLE EXT. ELEV/ ROOF PLAN	OPTION DESCRIPTION ELEVATION - B
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SHEET NO.
A-2.0B

Retreat at North Main OP Lot 4



REVISION NUMBER	

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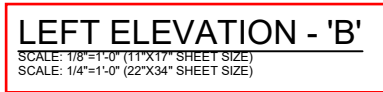
Alpharetta, GA 30022

O. (404) 946-5722

DAVIDSON
HOMES

Your Community Builder

1/8" = 1'-0"	
RELEASE DATE 09-14-2023	PROJECT NUMBER -----
OPTION NO. -----	
MODEL MAGNOLIA	DRAWING TITLE EXT. ELEV/ ROOF PLAN
	OPTION DESCRIPTION ELEVATION - B
SHEET NO. A-2.1B	

[illegible]

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DAVIDSON
HOMES
Your Community Builder

$$1/8'' = 1' - 0''$$

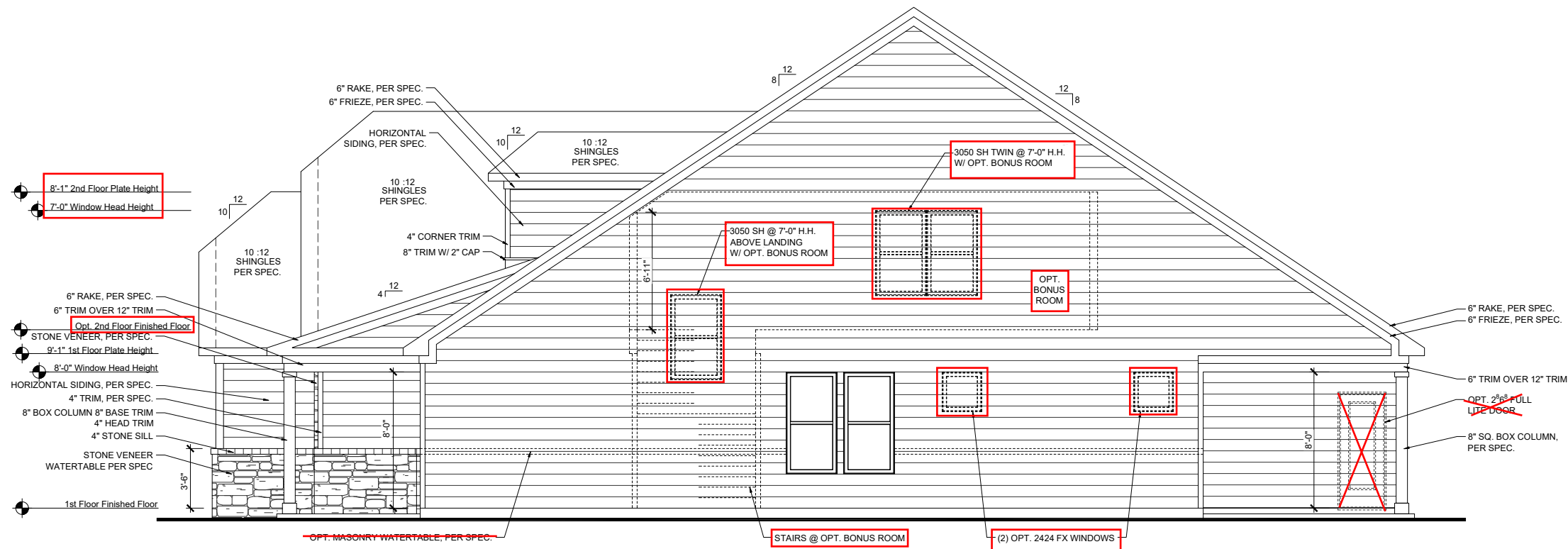
09-14-2023
PROJECT NUMBER

OPTION NO.

MAGNOLIA
DRAWING TITLE SIDE ELEVATIONS
OPTION DESCRIPTION ELEVATION - B

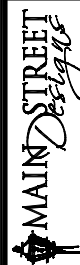
A-2.2B

Retreat at North Main OP Lot 4



RIGHT ELEVATION - 'B'
SCALE: 1/8"=1'-0" (11"X17" SHEET SIZE)
SCALE: 1/4"=1'-0" (22"X34" SHEET SIZE)

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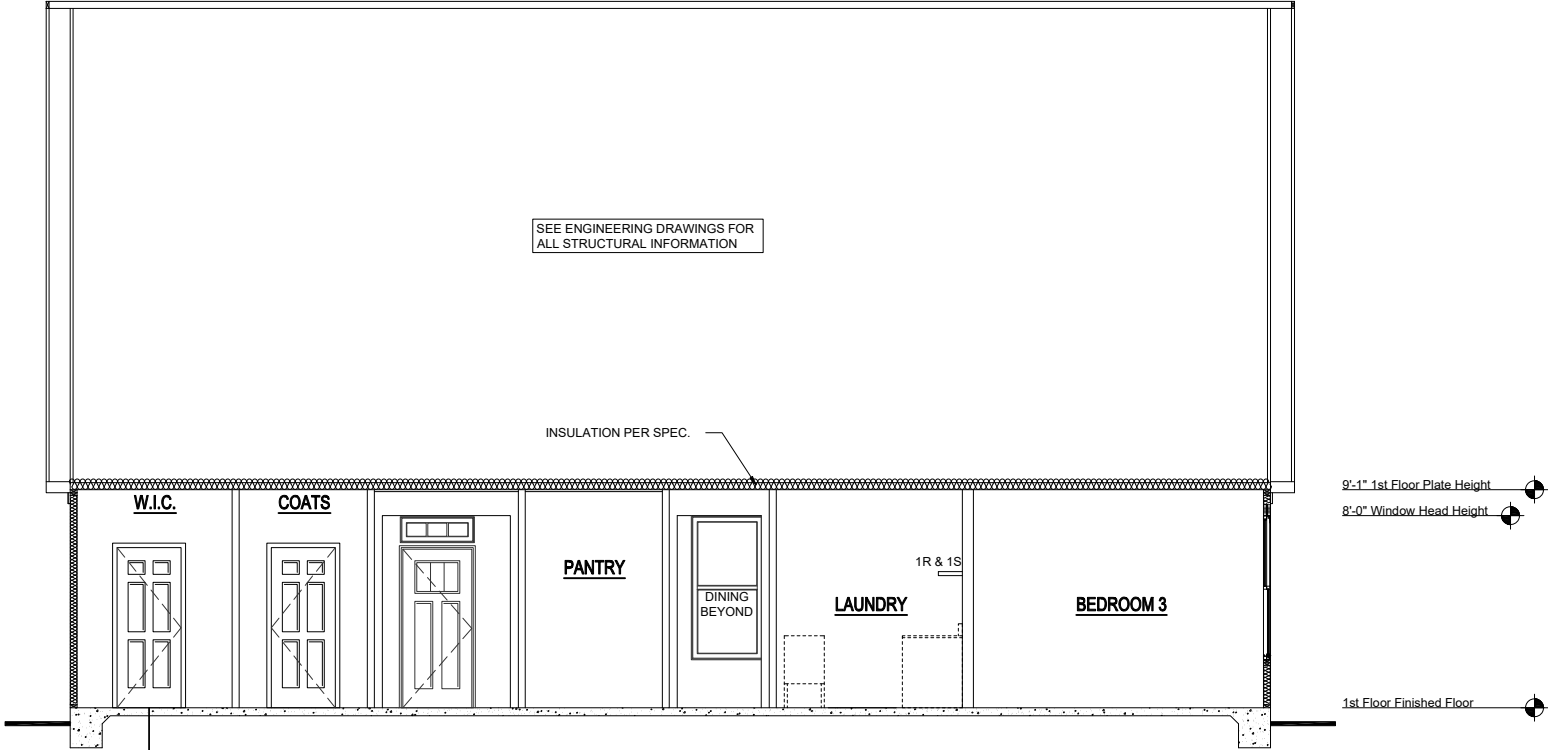
1/8"=1'-0"

RELEASE DATE	09-14-2023
PROJECT NUMBER	---
OPTION NO.	---

MODEL	MAGNOLIA
DRAWING TITLE	SIDE ELEVATIONS
OPTION DESCRIPTION	ELEVATION - B

SHEET NO.
A-2.3B

Retreat at North Main OP Lot 4

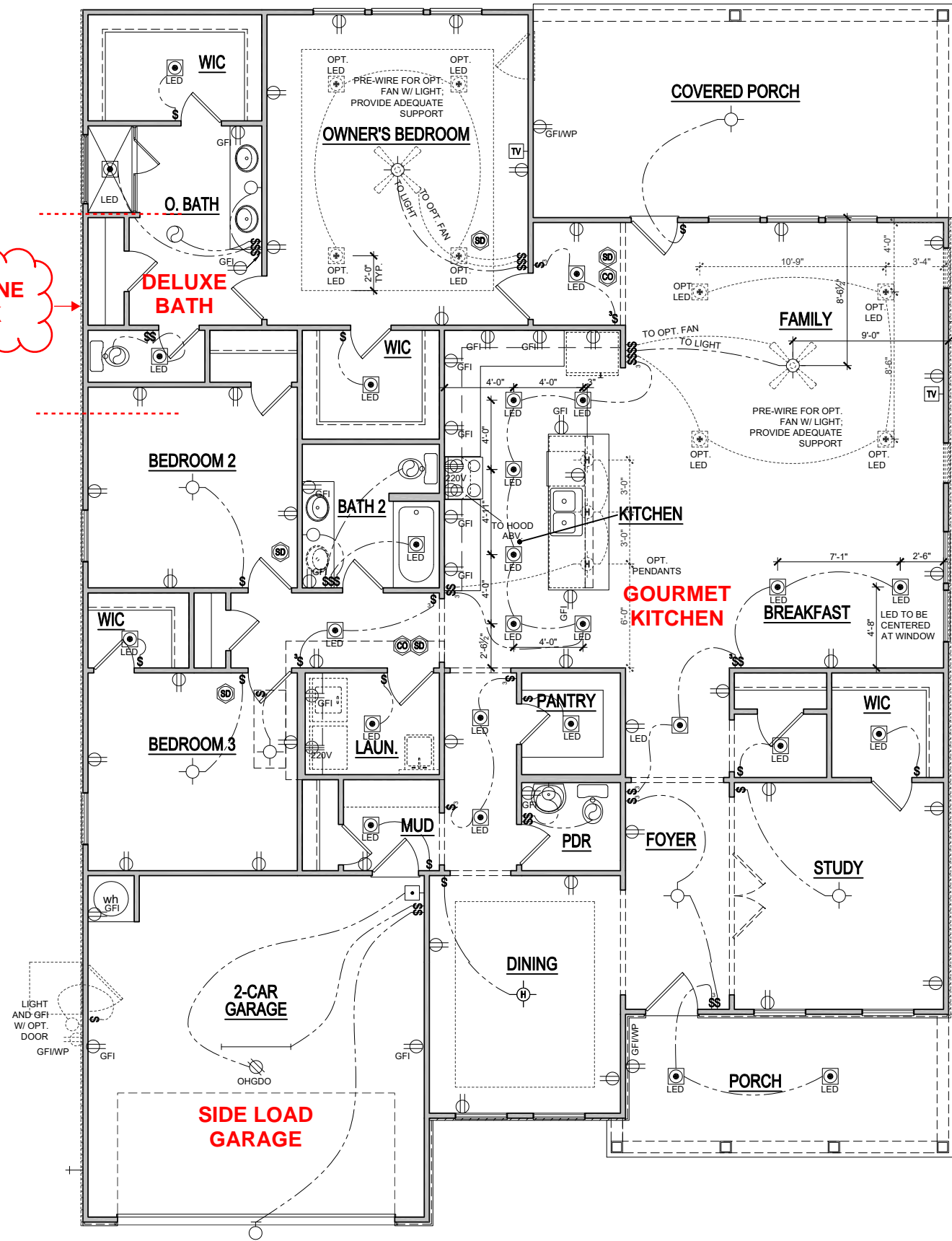


SECTION - A @ SLAB
SCALE: 1/8"=1'-0" (11"x17" SHEET SIZE)
SCALE: 1/4"=1'-0" (22"x34" SHEET SIZE)

SHEET NO.		A-3.0B	
MODEL		MAGNOLIA	
DRAWING TITLE		BUILDING SECTIONS	
OPTION DESCRIPTION		OPTION NO.	
RELEASE DATE		09-14-2023	
PROJECT NUMBER		-----	
1/8" = 1'-0"			
		 DAVIDSON HOMES Your Community Builder	
		 Main Street Designs of Georgia, LLC www.MainStreetDesignsLLC.com 3050 Royal Blvd. South, Suite 135 Alpharetta, GA 30022 O. (404) 996-5722	
		REVISION NUMBER	

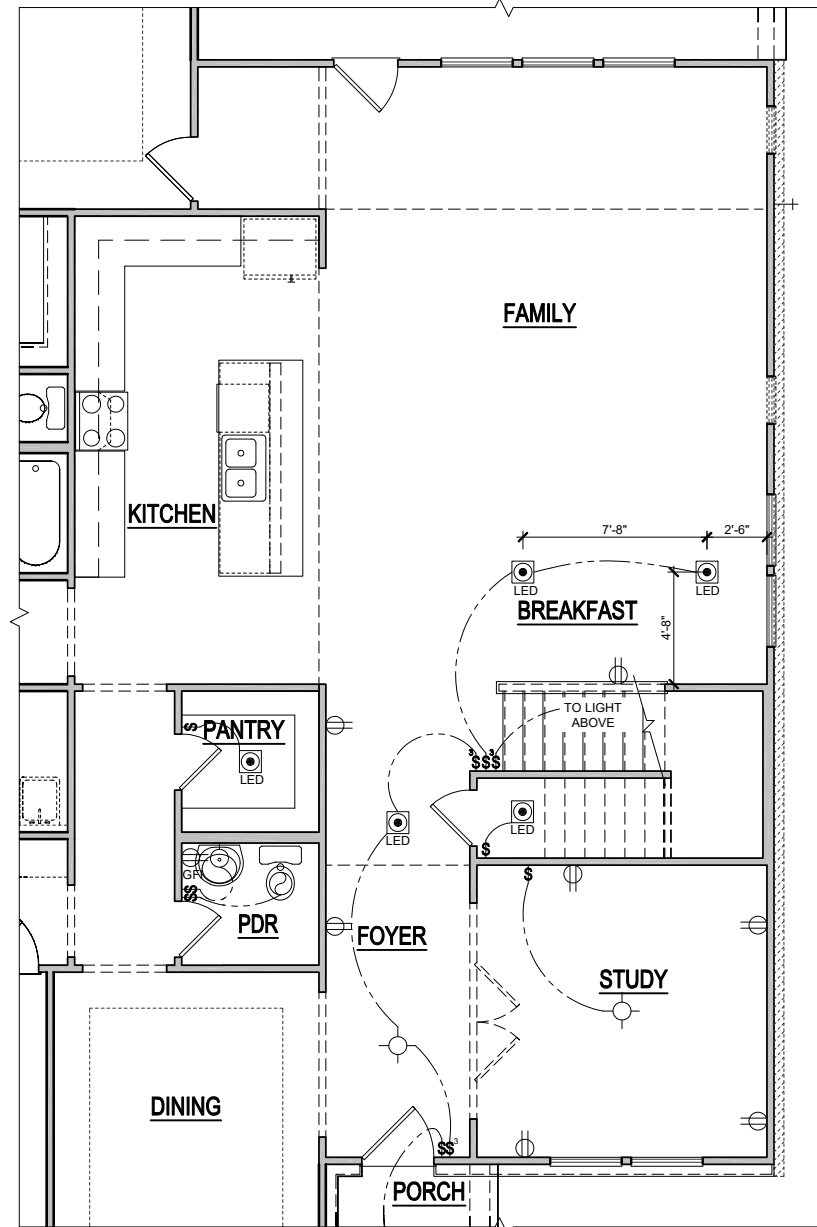
NOTE: PROPANE TANK
TO BE SET
5' FROM VENTS
10' FROM IGNITION

PROPANE
TANK



ELEVATION - B
FIRST FLOOR ELECTRICAL PLAN
SCALE: 1/8"=1'-0" (11"x17" SHEET SIZE)
SCALE: 1/4"=1'-0" (22"x34" SHEET SIZE)

SEE PAGE E-1.1B FOR
OPTIONS:
SIDE LOAD GARAGE
GOURMET KITCHEN
FIREPLACE W/ BUILT-INS
&
DELUXE BATH



STAIRS AT OPT. BONUS ROOM
ELECTRICAL PLAN
SCALE: 1/8"=1'-0" (11"x17" SHEET SIZE)
SCALE: 1/4"=1'-0" (22"x34" SHEET SIZE)

ELECTRICAL KEY

- CEILING RECEP.
- DUPLEX RECEP.
- SPLIT SWITCHED RECEP.
- FLOOR RECEP
- QUADPLEX RECEP
- GROUND FAULT RECEP
- WEATHER PROOF RECEP
- 220v RECEP
- EXHAUST FAN
- EXHAUST FAN / LIGHT
- EXHAUST FAN / HEAT LIGHT
- LED CAN
- VAPOR PROTECTED LIGHT
- CEILING LIGHT
- HANGING CEILING LIGHT
- WALL LIGHT
- WALL SCONCE LIGHT
- SINGLE SWITCH
- 3-WAY SWITCH
- 4-WAY SWITCH
- DIMMER SWITCH
- CABLE T.V. JACK
- BUTTON
- PHONE JACK
- DIRECT WIRE
- SECURITY SYSTEM PHONE JACK
- SMOKE DETECTOR
- CARBON MONOXIDE DETECTOR
- ELECTRICAL PANEL
- DISCONNECT SWITCH
- ELECTRIC METER
- 1 TUBE FLUORESCENT
- 2 TUBE FLUORESCENT
- FLOOD LIGHT
- CHIMES
- CEILING FAN
- CEILING FAN W/ LIGHT

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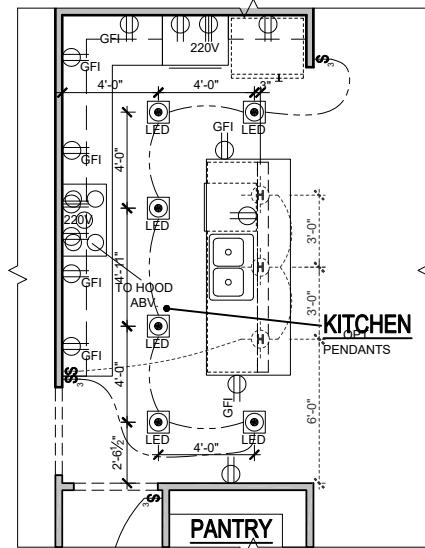
1/8"=1'-0"

RELEASE DATE
09-14-2023
PROJECT NUMBER
OPTION NO.

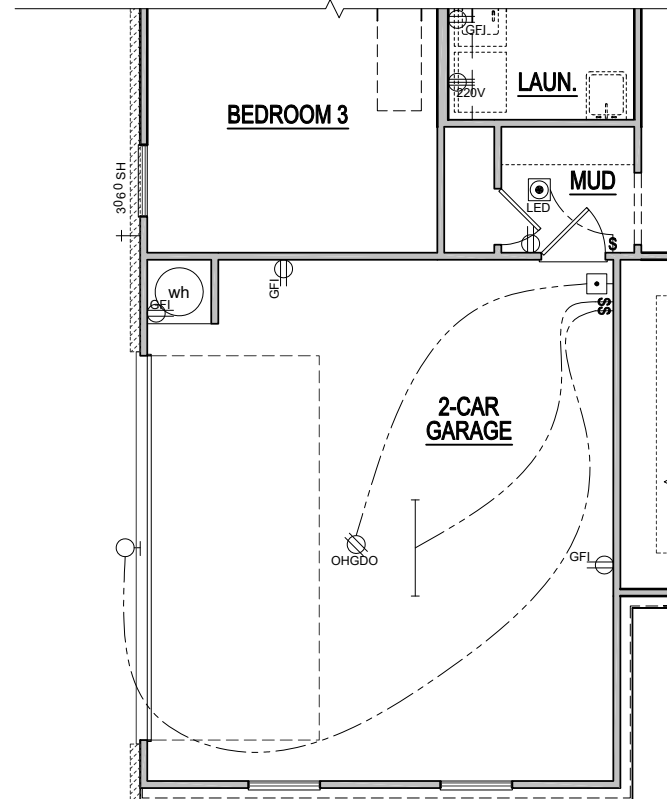
MODEL
MAGNOLIA
DRAWING TITLE
1ST FLOOR ELCEC. PLAN
OPTION DESCRIPTION
ELEVATION - B

SHEET NO.
E-1.0B

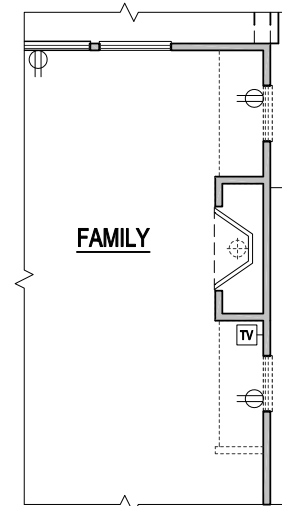
Retreat at North Main OP Lot 4



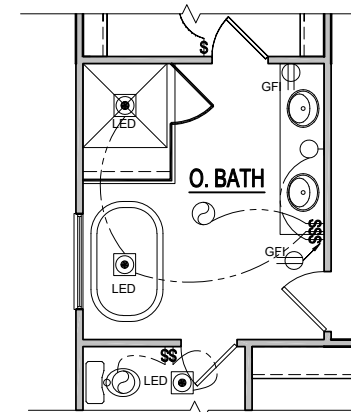
OPT. GOURMET KITCHEN
SCALE: 1/8"=1'-0" (11"x17" SHEET SIZE)
SCALE: 1/4"=1'-0" (22"x34" SHEET SIZE)



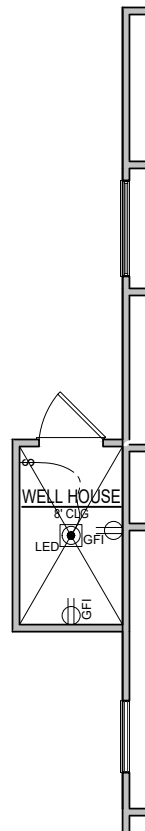
OPT. SIDE LOAD GARAGE
1st FLOOR ELECTRICAL PLAN
SCALE: 1/8"=1'-0" (11"x17" SHEET SIZE)
SCALE: 1/4"=1'-0" (22"x34" SHEET SIZE)



OPT. FIREPLACE
SCALE: 1/8"=1'-0" (11"x17" SHEET SIZE)
SCALE: 1/4"=1'-0" (22"x34" SHEET SIZE)



OPT. DELUXE BATH
SCALE: 1/8"=1'-0" (11"x17" SHEET SIZE)
SCALE: 1/4"=1'-0" (22"x34" SHEET SIZE)



FIRST FLOOR ELECTRICAL PLAN - WELLHOUSE
SCALE: 1/8"=1'-0" (11"x17" SHEET SIZE)
SCALE: 1/4"=1'-0" (22"x34" SHEET SIZE)

ELECTRICAL KEY

- CEILING RECEP.
- DUPLEX RECEP.
- SPLIT SWITCHED RECEP.
- FLOOR RECEP
- QUADPLEX RECEP
- GROUND FAULT RECEP
- WEATHER PROOF RECEP
- 220v RECEP
- EXHAUST FAN
- EXHAUST FAN / LIGHT
- EXHAUST FAN / HEAT LIGHT
- LED CAN
- VAPOR PROTECTED LIGHT
- CEILING LIGHT
- HANGING CEILING LIGHT
- WALL LIGHT
- WALL SCONCE LIGHT
- SINGLE SWITCH
- 3-WAY SWITCH
- 4-WAY SWITCH
- DIMMER SWITCH
- CABLE T.V. JACK
- BUTTON
- PHONE JACK
- DIRECT WIRE
- SECURITY SYSTEM PHONE JACK
- SMOKE DETECTOR
- CARBON MONOXIDE DETECTOR
- ELECTRICAL PANEL
- DISCONNECT SWITCH
- ELECTRIC METER
- 1 TUBE FLUORESCENT
- 2 TUBE FLUORESCENT
- FLOOD LIGHT
- CHIMES
- CEILING FAN
- CEILING FAN W/ LIGHT

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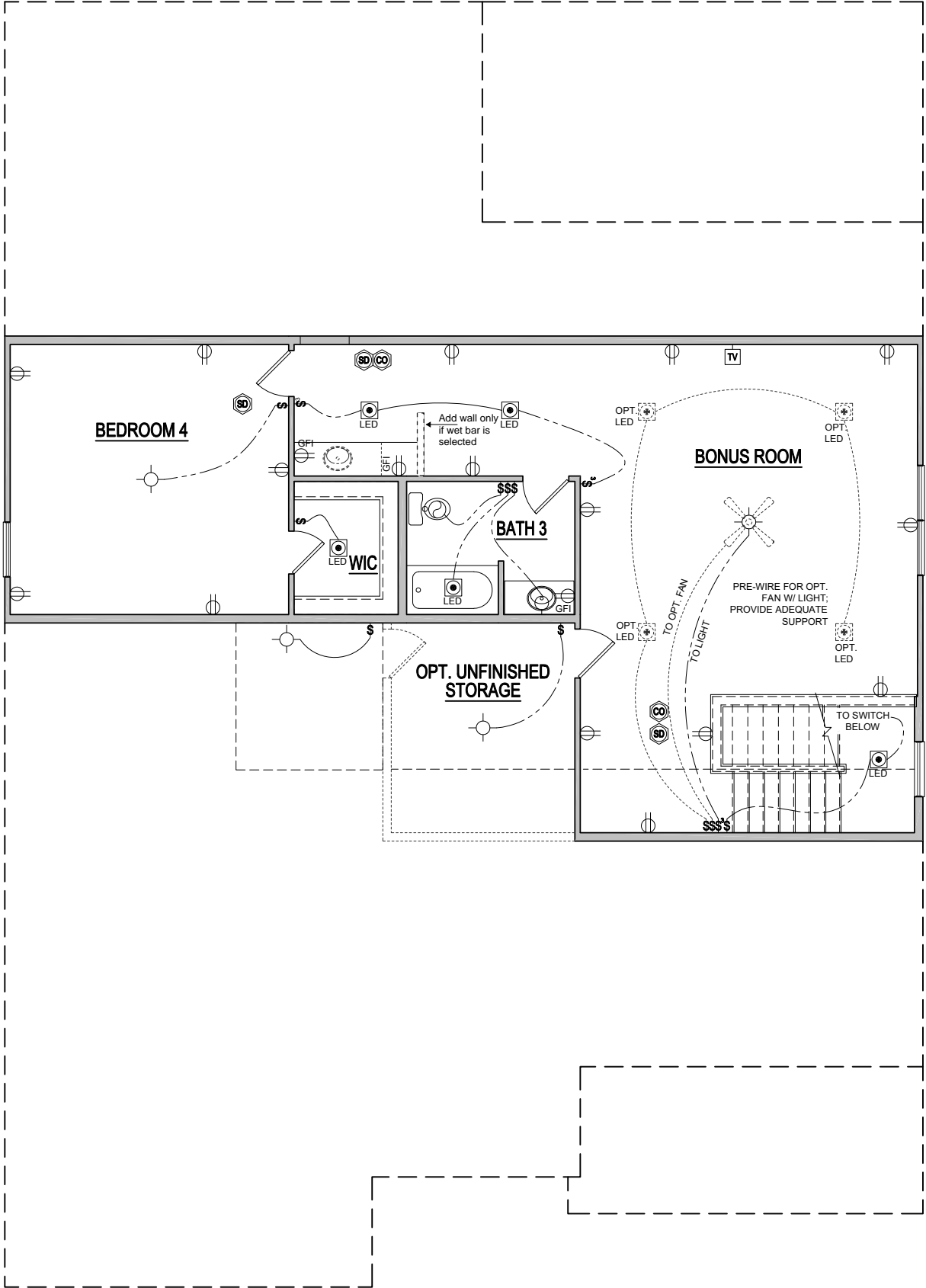
1/8"=1'-0"

RELEASE DATE
09-14-2023
PROJECT NUMBER
OPTION NO.

MODEL
MAGNOLIA
DRAWING TITLE
1ST FLOOR ELCEC. PLAN
OPTION DESCRIPTION
ELEVATION - B

SHEET NO.
E-1.1B

Retreat at North Main OP Lot 4

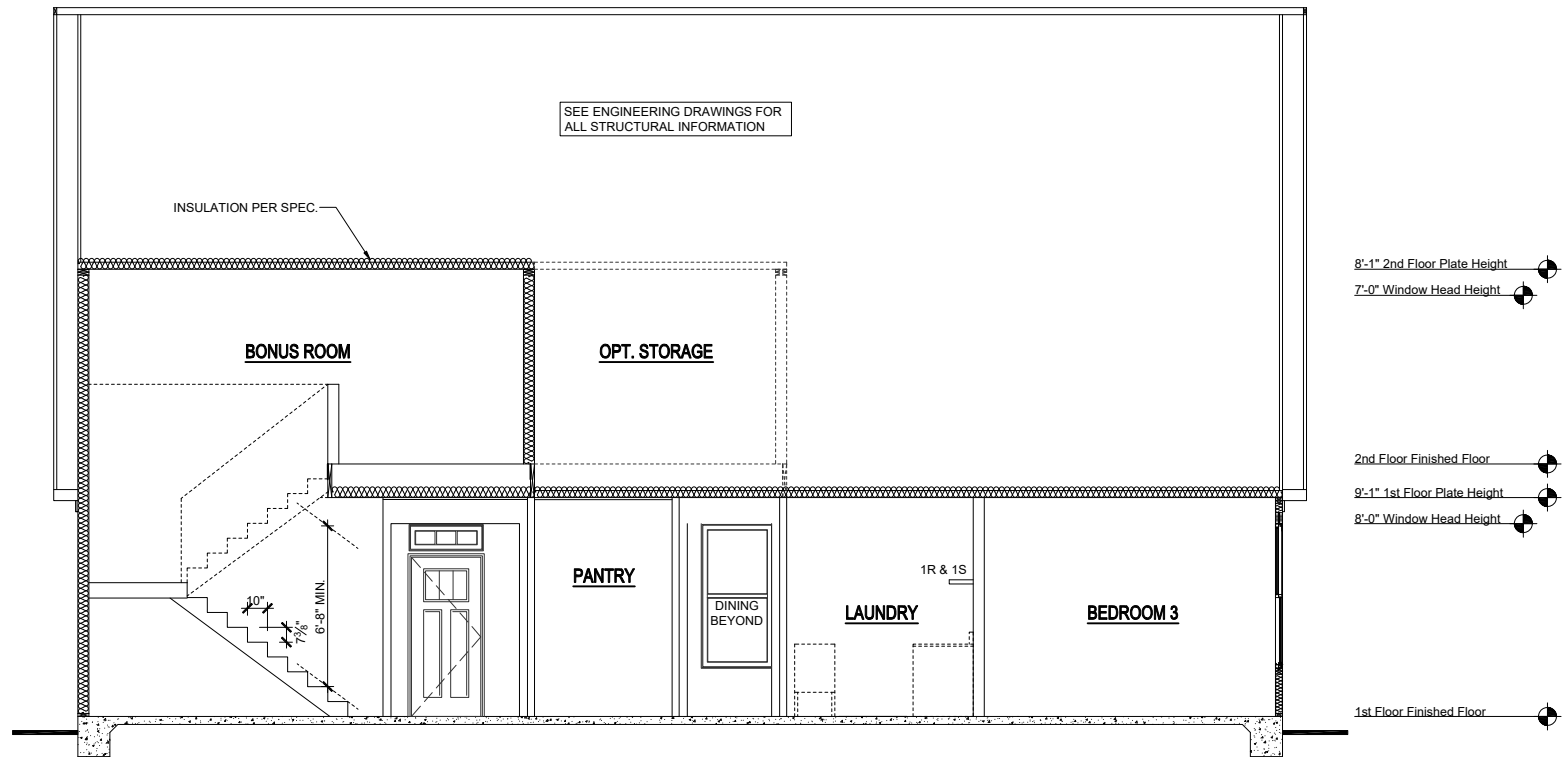


OPT. BONUS ROOM W/ BEDROOM
2ND FLOOR ELECTRICAL

SCALE: 1/8"=1'-0" (11"x17" SHEET SIZE)
SCALE: 1/4"=1'-0" (22"x34" SHEET SIZE)

Retreat at North Main OP Lot 4

<div>MODEL</div> <div>MAGNOLIA</div>		RELEASE DATE	<div>1/8" = 1' - 0"</div>		<div><div>DAVIDSON HOMES</div>Your Community Builder</div>	<div><div>MAIN STREET Designs</div></div> <div>Main Street Designs of Georgia, LLC</div> <div>www.MainStreetDesigns.LLC.com</div> <div>3050 Royal Blvd. South, Suite 135</div> <div>Alpharetta, GA 30022</div> <div>O. (404) 996-5722</div>	
		PROJECT NUMBER					
		OPTION NO.					
		2ND FLOOR BONUS W/ BED					
		SHEET NO.					



SECTION - A @ OPT. 2ND FLOOR BONUS ROOM

SCALE: 1/8"=1'-0" (11"X17" SHEET SIZE)

SCALE: 1/4"=1'-0" (22"X34" SHEET SIZE)

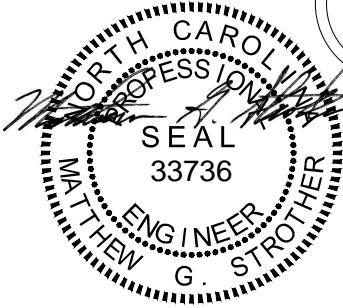
Retreat at North Main OP Lot 4

<div>MODEL</div> <div>MAGNOLIA</div>		RELEASE DATE	<div>1/8" = 1'-0"</div>		<div><div>DAVIDSON HOMES</div><div>Your Community Builder</div></div>	<div><div>MAIN STREET Designs</div><div>Main Street Designs of Georgia, LLC www.MainStreetDesigns.LLC.com 3050 Royal Blvd. South, Suite 135 Alpharetta, GA 30022 O. (404) 996-5722</div></div>	REVISION NUMBER	
		09-14-2023						
		DRAWING TITLE						
		PROJECT NUMBER						
		SECTION						
<div>SHEET NO.</div> <div>O-6.5</div>		OPTION DESCRIPTION	OPT. BONUS ROOM & BSMT					
		OPTION NO.						

NOTE; PROPANE TANK
TO BE SET
5' FROM VENTS
10' FROM IGNITION

PROPANE
TANK

SCALE NOTE:
LARGE FORMAT PRINTS ARE TO SCALE AS NOTED.
11" x 17" PRINTS ARE ONE HALF THE NOTED SCALE



11/15/2023

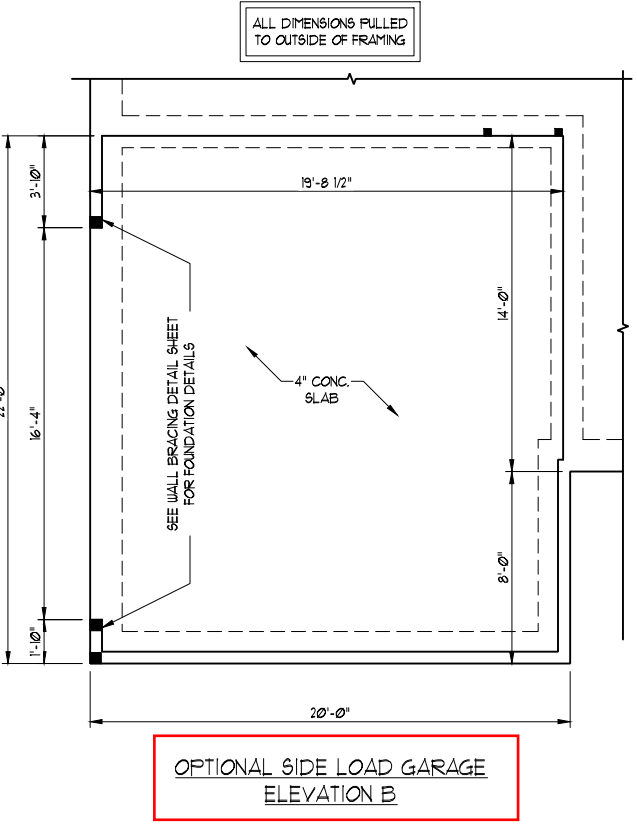
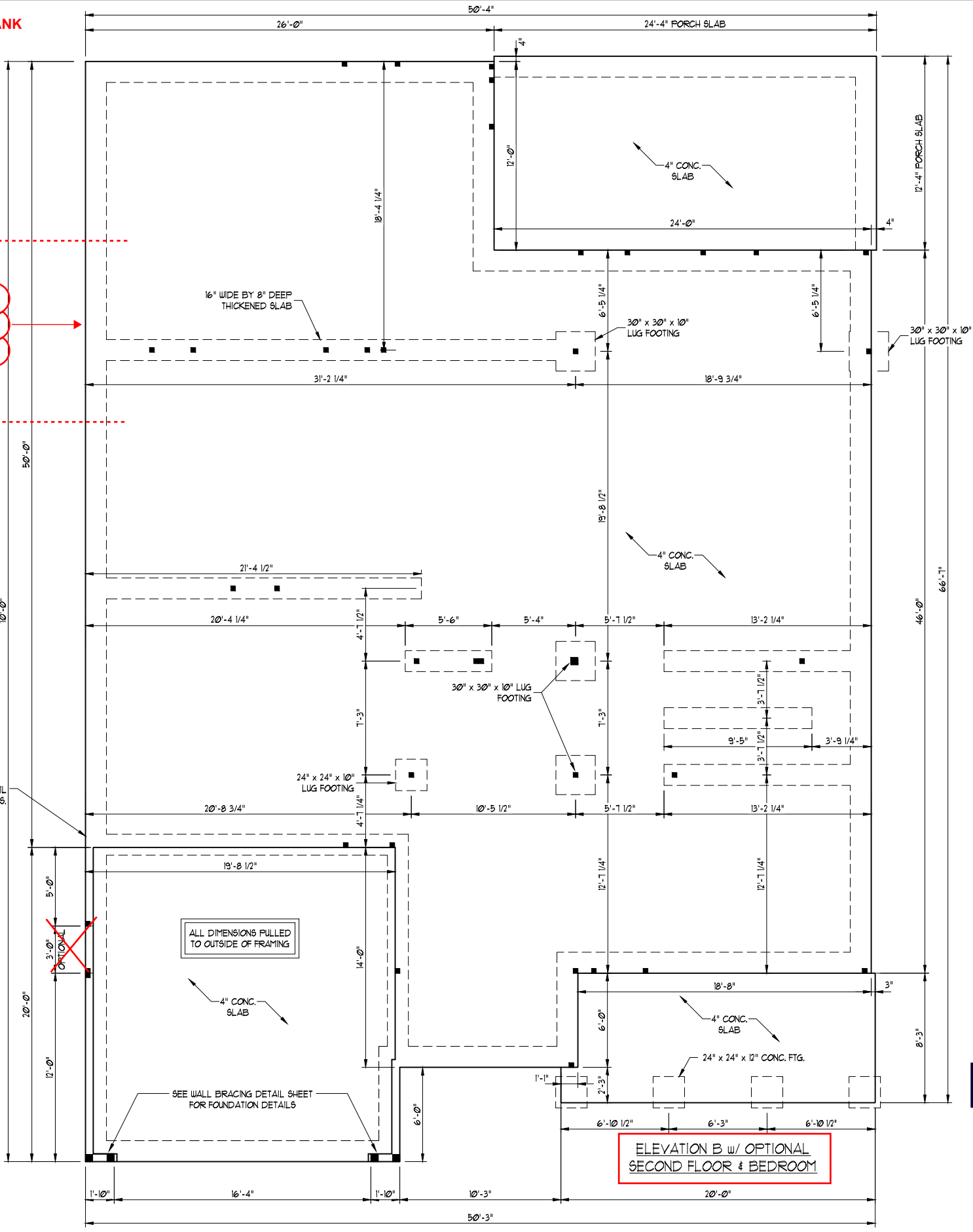
- 120 MPH ULTIMATE DESIGN WIND SPEED
NOTES FOR LESS THAN
30' MEAN ROOF HEIGHT:
- ENGINEER'S SEAL APPLIES ONLY TO STRUCTURAL COMPONENTS. ENGINEER'S SEAL DOES NOT CERTIFY DIMENSIONAL ACCURACY OR ARCHITECTURAL LAYOUT INCLUDING ROOF SYSTEM.
 - STRUCTURAL DESIGN PER NORTH CAROLINA RESIDENTIAL CODE, 2018 EDITION.
 - INSTALL 1/2" ANCHOR BOLTS 6'-0" O.C. AND WITHIN 1'-0" FROM END OF EACH CORNER. ANCHOR BOLTS MUST EXTEND A MINIMUM OF 1' INTO MASONRY OR CONCRETE. LOCATE BOLT WITHIN MIDDLE THIRD OF PLATE WIDTH.
 - MEAN ROOF HEIGHT IS LESS THAN 30 FEET.
 - EXTERIOR WALLS DESIGNED FOR 120 MPH WINDS.
 - WALL CLADDING DESIGNED FOR +5.5 PSF AND -10 PSF (+/- INDICATE POSITIVE / NEGATIVE PRESSURE (TYP)).
 - ROOF CLADDING DESIGNED FOR +42 PSF AND -18 PSF FOR ROOF PITCHES 1/2 TO 12/12 AND +36 PSF AND -16 PSF FOR ROOF PITCHES 12/12 TO 24/12.
 - INSTALL 1/8" OSB SHEATHING ON ALL EXTERIOR WALLS OF ALL STORIES IN ACCORDANCE WITH SECTION R602.10.3 OF THE NRC, 2018 EDITION. SEE THE WALL BRACING NOTES AND DETAILS SHEET FOR MORE INFORMATION.
 - ENERGY EFFICIENCY COMPLIANCE AND INSULATION VALUES OF THE BUILDING TO BE IN ACCORDANCE WITH CHAPTER 11 OF THE NRC, 2018 EDITION.
 - REFER TO NOTES AND DETAIL SHEETS FOR ADDITIONAL STRUCTURAL INFORMATION.

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333 EAST SIX FORKS ROAD, SUITE 180 BALEIGH, NC 27609
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N.C. LICENSE NO.: C-1733

MAGNOLIA
DAVIDSON HOMES

DATE: NOVEMBER 15, 2023
SCALE: 1/4" = 1'-0"
DRAWN BY: MAIN STREET DESIGNS
ENGINEERED BY: WFB

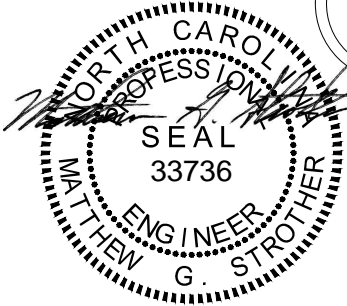
S-1.2j
MONO SLAB
FOUNDATION PLAN



Retreat at North Main OP Lot 4

Retreat at North Main OP Lot 4

SCALE NOTE:
LARGE FORMAT PRINTS ARE TO SCALE AS NOTED.
11" x 17" PRINTS ARE ONE HALF THE NOTED SCALE



11/15/2023

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ENGINEERING, INC**
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N.C. LICENSE NO.: C-1733

MAGNOLIA
DAVIDSON HOMES

BRACED WALL DESIGN NOTES:

- BRACED WALL DESIGN PER SECTION R602.10.5 "WALL BRACING BY ENGINEERED DESIGN" OF THE NCRC 2018 EDITION USING BRACING MATERIALS AND METHODS LISTED IN TABLE R602.10.1 ALONG WITH ALTERNATIVE MATERIALS AND METHODS THAT COMPLY WITH ACCEPTED ENGINEERING PRACTICE. BRACED WALL DESIGN IS NOT PRESCRIPTIVE.
- SHEATH ALL EXTERIOR WALLS W/ 7/16" OSB TO PROVIDE CS-WSP WALL BRACING THAT WILL BRACE THE STRUCTURE FOR ALL LATERAL LOADS AS REQUIRED BY THE NCRC 2018 EDITION.
- CS-WSP REFERS TO "CONTINUOUSLY SHEATHED WOOD STRUCTURAL PANELS." CONTRACTOR IS TO INSTALL 7/16" OSB ON ALL EXTERIOR WALLS ATTACHED W/ 8d NAILS SPACED 6" O.C. ALONG PANEL EDGES AND 12" O.C. IN THE FIELD.
- GB REFERS TO "GYPSUM BOARD." CONTRACTOR IS TO INSTALL 1/2" (MIN.) GYPSUM BOARD ON BOTH SIDES OF WALL WHERE NOTED ON THE PLANS ATTACHED WITH 1 1/4" LONG #6 SCREWS OR 1 5/8" LONG 5d COOLER NAILS SPACED 7" O.C. ALONG PANEL EDGES AND IN THE FIELD.
- BRACED WALL DESIGN APPLIED IN WIND ZONES UP TO 130 MPH. FOR HIGH WIND ZONES, BRACED WALLS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH CHAPTER 45 OF THE NCRC 2018 EDITION.
- SEE NOTES AND DETAIL SHEETS FOR ADDITIONAL BRACED WALL INFORMATION.

STRUCTURAL NOTES:

- ALL FRAMING LUMBER TO BE SFF #2 OR SYP #2 (UNO). ALL TREATED LUMBER TO BE SYP #2 (UNO).
- ALL LOAD BEARING HEADERS TO BE (2) 2 x 6 SFF #2 OR SYP #2 (KILN DRIED) (UNO).
- INSTALL AN EXTRA JOIST UNDER WALLS PARALLEL TO FLOOR JOISTS WHERE NOTED ON THE PLANS.
- WINDOW AND DOOR HEADERS TO BE SUPPORTED W/ (1) JACK STUD AND (1) KING STUD EA. END (UNO). SEE TABLE R602.15 FOR ADDITIONAL KING STUD REQUIREMENTS.
- SQUARES DENOTE POINT LOADS WHICH REQUIRE SOLID BLOCKING TO GIRDER OR FOUNDATION. ALL SQUARES TO BE (2) STUDS (UNO).
- ALL 4 x 4 POSTS SHALL BE ANCHORED TO SLABS W/ SIMPSON ABU44 POST BASES (OR EQUAL) AND 6 x 6 POSTS W/ ABU66 POST BASES (OR EQUAL) (UNO). ALL 4 x 4 AND 6 x 6 POSTS TO BE INSTALLED WITH 100 LB CAPACITY UPLIFT CONNECTORS AT TOP (UNO).
- FOR FIBERGLASS, ALUMINUM, OR COLUMN ENG. BY OTHERS, SECURE TO SLAB W/ (2) METAL ANGLES USING 2" CONC. SCREWS. FASTEN ANGLES TO COLUMNS W/ 1/4" THROUGH BOLTS W/ NUTS AND WASHERS. LOCATE ANGLES ON OPPOSITE SIDES OF COLUMN. THROUGH BOLTS MUST BE INSTALLED PRIOR TO SETTING COLUMN.
- REFER TO NOTES AND DETAIL SHEETS FOR ADDITIONAL STRUCTURAL INFORMATION.

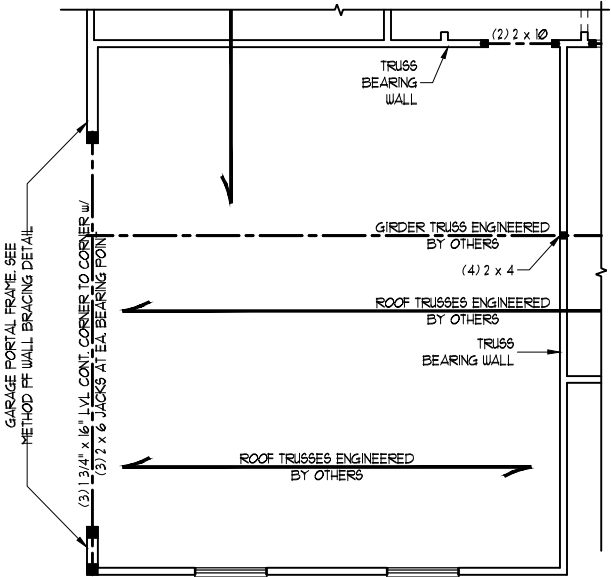
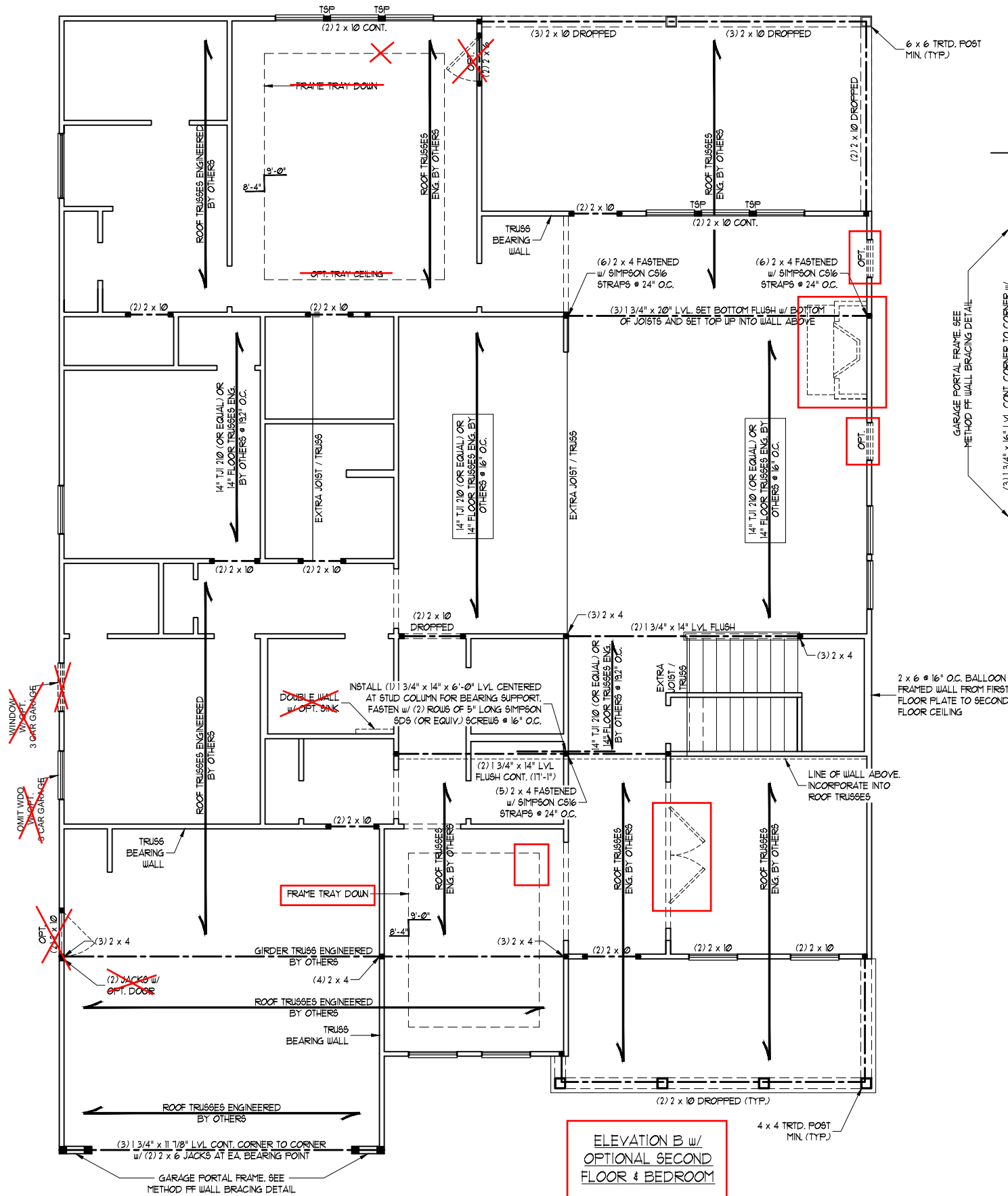
"TSP" INDICATES TRIPLE STUD POCKET BETWEEN WINDOW UNITS.

TABLE R602.15
MINIMUM NUMBER OF FULL HEIGHT KING STUDS
AT EACH END OF HEADERS IN EXTERIOR WALLS

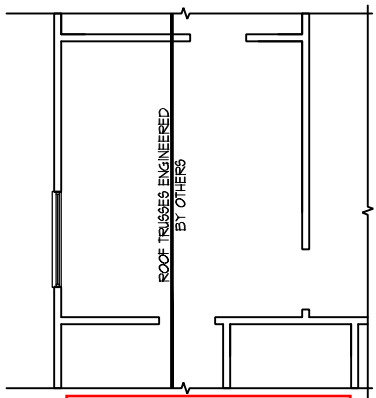
HEADER SPAN (FEET)	MINIMUM NUMBER OF FULL HEIGHT STUDS (KINGS)
UP TO 3'	1
> 3' TO 6'	2
> 6' TO 9'	3
> 9' TO 12'	4
> 12' TO 15'	5

NOTE:

BCI 5000s-18 JOISTS MAY BE INSTALLED IN LIEU OF TJI 210 JOISTS AT THE DEPTH AND SPACING INDICATED ON THE STRUCTURAL PLANS



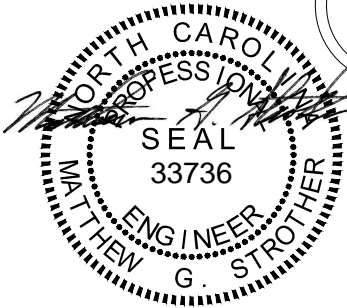
OPTIONAL SIDE LOAD GARAGE
ELEVATION B



OPTIONAL DELUXE BATH

ELEVATION B w/
OPTIONAL SECOND
FLOOR & BEDROOM

SCALE NOTE:
LARGE FORMAT PRINTS ARE TO SCALE AS NOTED.
11" x 17" PRINTS ARE ONE HALF THE NOTED SCALE



11/15/2023

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MAGNOLIA
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- BRACED WALL DESIGN NOTES:**
1. BRACED WALL DESIGN PER SECTION R602.10.5 "WALL BRACING BY ENGINEERED DESIGN" OF THE NCRC 2018 EDITION USING BRACING MATERIALS AND METHODS LISTED IN TABLE R602.10.1 ALONG WITH ALTERNATIVE MATERIALS AND METHODS THAT COMPLY WITH ACCEPTED ENGINEERING PRACTICE. BRACED WALL DESIGN IS NOT PRESCRIPTIVE.
 2. SHEATH ALL EXTERIOR WALLS w/ 7/16" OSB TO PROVIDE CS-WSP WALL BRACING THAT WILL BRACE THE STRUCTURE FOR ALL LATERAL LOADS AS REQUIRED BY THE NCRC 2018 EDITION.
 3. CS-WSP REFERS TO "CONTINUOUSLY SHEATHED WOOD STRUCTURAL PANELS." CONTRACTOR IS TO INSTALL 7/16" OSB ON ALL EXTERIOR WALLS ATTACHED w/ 8d NAILS SPACED 6" O.C. ALONG PANEL EDGES AND 12" O.C. IN THE FIELD.
 4. GB REFERS TO "GYPSUM BOARD." CONTRACTOR IS TO INSTALL 1/2" (MIN.) GYPSUM BOARD ON BOTH SIDES OF WALL WHERE NOTED ON THE PLANS ATTACHED WITH 1 1/4" LONG #6 SCREWS OR 1 5/8" LONG 5d COOLER NAILS SPACED 7" O.C. ALONG PANEL EDGES AND IN THE FIELD.
 5. BRACED WALL DESIGN APPLIED IN WIND ZONES UP TO 130 MPH. FOR HIGH WIND ZONES, BRACED WALLS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH CHAPTER 45 OF THE NCRC 2018 EDITION.
 6. SEE NOTES AND DETAIL SHEETS FOR ADDITIONAL BRACED WALL INFORMATION.

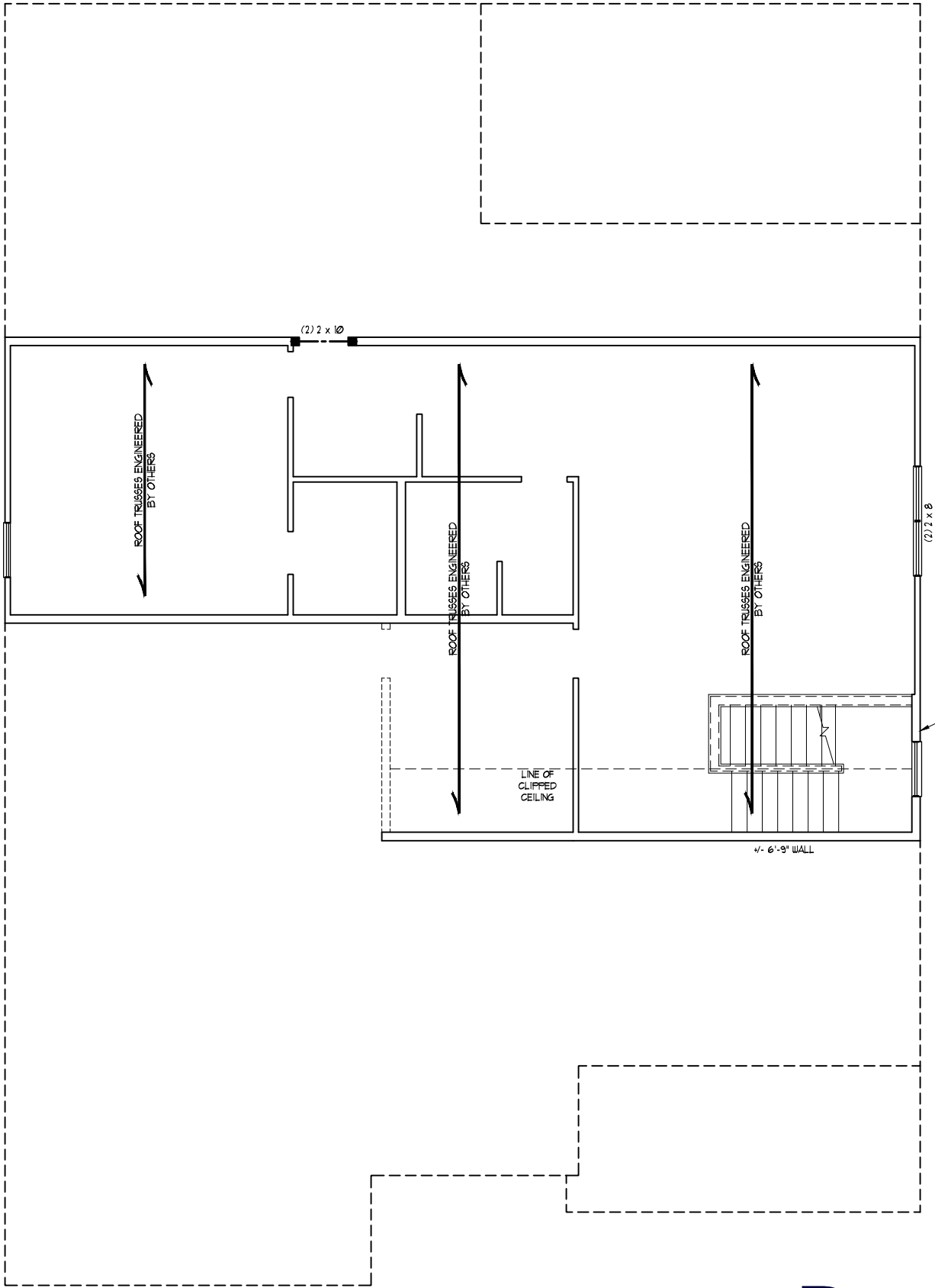
- STRUCTURAL NOTES:**
1. ALL FRAMING LUMBER TO BE #2 SPF OR #2 SYP (UNO).
 2. ALL LOAD BEARING HEADERS TO BE (2) 2 x 6 (UNO).
 3. WINDOW AND DOOR HEADERS TO BE SUPPORTED w/ (1) JACK STUD AND (1) KING STUD EA. END (UNO). SEE TABLE R602.15 FOR ADDITIONAL KING STUD REQUIREMENTS.
 4. SQUARES DENOTE POINT LOADS WHICH REQUIRE SOLID BLOCKING TO GIRDER OR FOUNDATION. SQUARES TO BE (2) STUDS (UNO).
 5. REFER TO NOTES AND DETAIL SHEETS FOR ADDITIONAL STRUCTURAL INFORMATION.

TABLE R602.15
MINIMUM NUMBER OF FULL HEIGHT KING STUDS
AT EACH END OF HEADERS IN EXTERIOR WALLS

HEADER SPAN (FEET)	MINIMUM NUMBER OF FULL HEIGHT STUDS (KINGS)
UP TO 3'	1
> 3' TO 6'	2
> 6' TO 9'	3
> 9' TO 12'	4
> 12' TO 15'	5

DATE: NOVEMBER 15, 2023
SCALE: 1/4" = 1'-0"
DRAWN BY: MAIN STREET DESIGNS
ENGINEERED BY: WFB

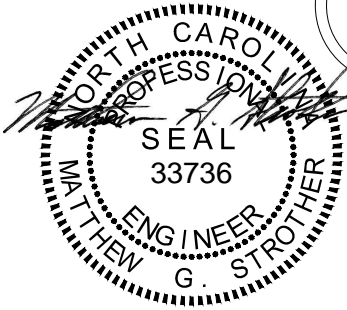
S-4b
CEILING
FRAMING PLAN



OPTIONAL 2ND FLOOR w/ BEDROOM

Retreat at North Main OP Lot 4

SCALE NOTE:
LARGE FORMAT PRINTS ARE TO SCALE AS NOTED.
11" x 17" PRINTS ARE ONE HALF THE NOTED SCALE



11/15/2023

STRUCTURAL NOTES:

1. ALL FRAMING LUMBER TO BE $\frac{1}{2}$ SFF OR $\frac{1}{2}$ SYP (UNO).
2. STICK FRAME OVER-FRAMED ROOF SECTIONS W/ 2 x 8 RIDGES, 2 x 6 RAFTERS @ 16" O.C. AND FLAT 2 x 10 VALLEYS OR USE VALLEY TRUSSES.
3. FASTEN FLAT VALLEYS TO RAFTERS OR TRUSSES WITH SIMPSON H25A HURRICANE TIES @ 32" O.C. MAX. PASS HURRICANE TIES THROUGH NOTCH IN ROOF SHEATHING. EACH RAFTER IS TO BE FASTENED TO THE FLAT VALLEY WITH A MIN. OF (6) 12d TOE NAILS.
4. REFER TO SECTION R802.11 OF THE 2018 NRC FOR REQUIRED UPLIFT RESISTANCE AT RAFTERS AND TRUSSES.
5. REFER TO NOTES AND DETAIL SHEETS FOR ADDITIONAL STRUCTURAL INFORMATION.

NOTE: REFER TO ARCHITECTURAL DRAWINGS FOR ROOF PITCHES, PLATE HEIGHTS, DIMENSIONS, OVERHANG WIDTHS, AND ATTIC VENT CALCS.

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MAGNOLIA
DAVIDSON HOMES

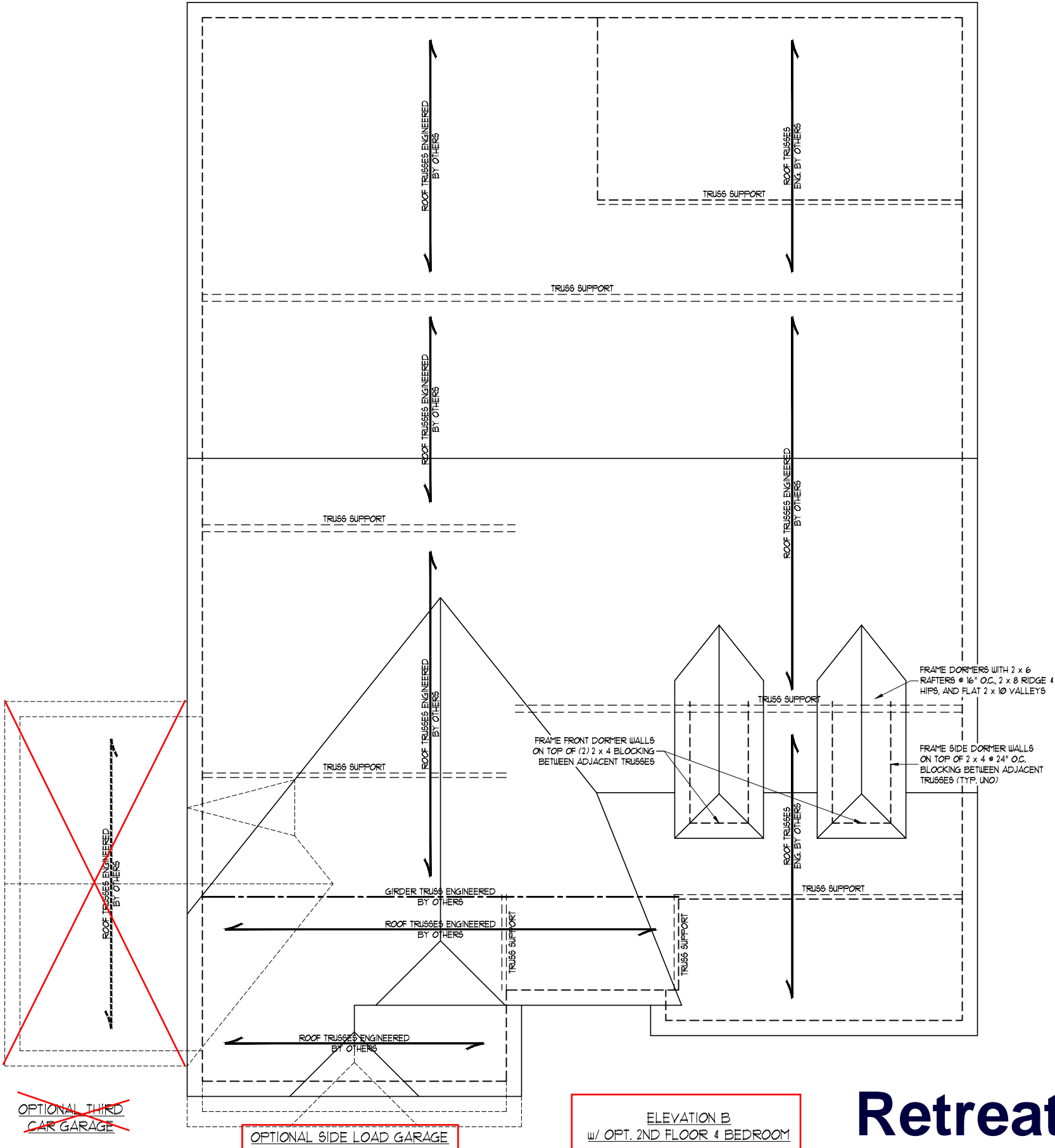
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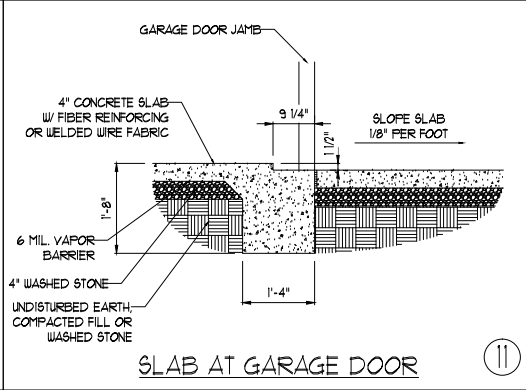
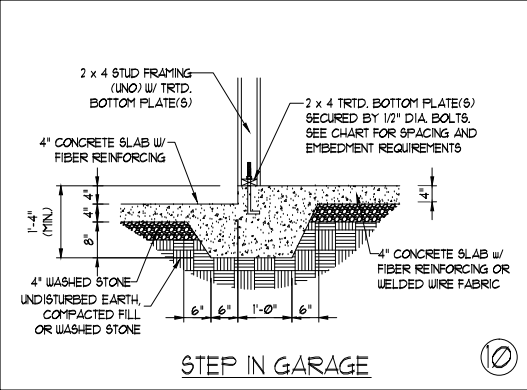
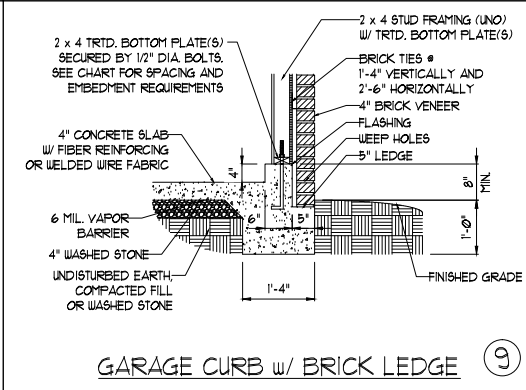
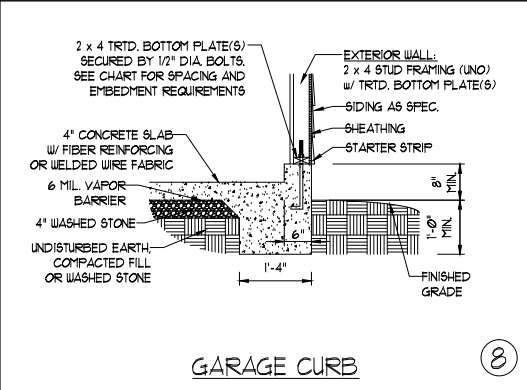
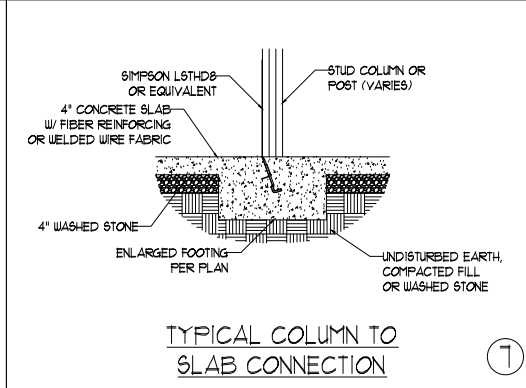
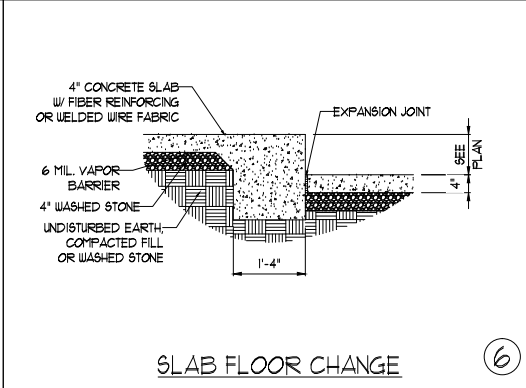
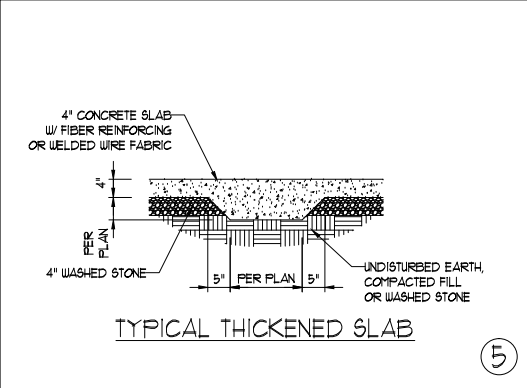
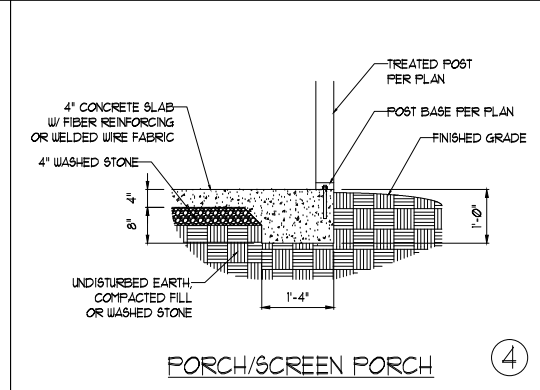
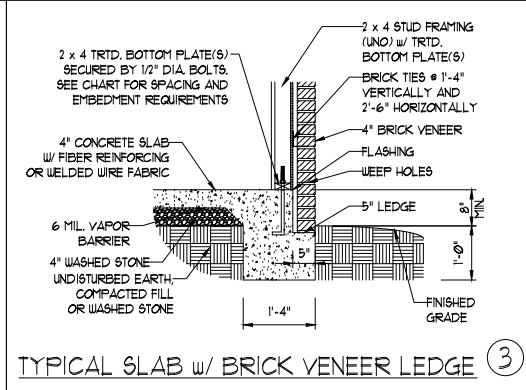
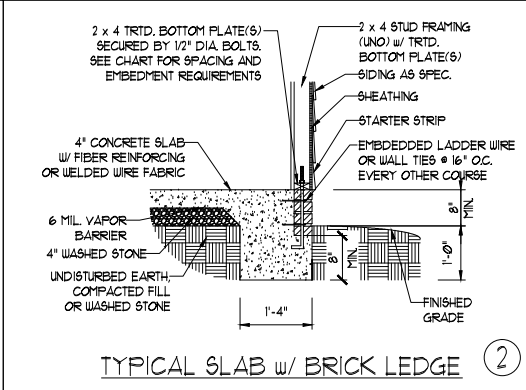
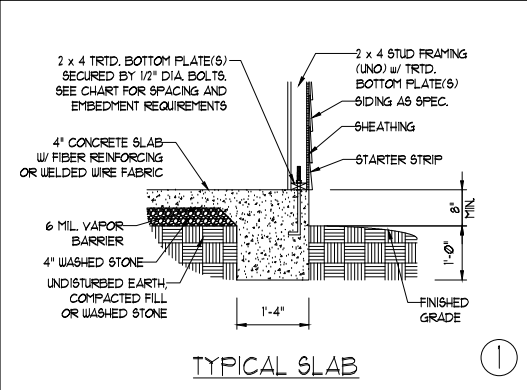
DRAWN BY: MAIN STREET DESIGNS

ENGINEERED BY: WFB

S-5.2c
ROOF FRAMING
PLAN

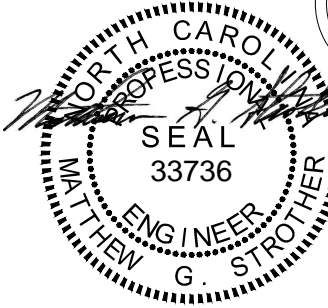


Retreat at North Main OP Lot 4



ANCHOR SPACING AND EMBEDMENT			NOTE: THREADED ROD WITH EPOXY, SIMPSON TITEN HD. OR APPROVED ANCHORS SPACED AS REQUIRED TO PROVIDE EQUIVALENT ANCHORAGE TO 1/2" DIAMETER ANCHOR BOLTS MAY BE USED IN LIEU OF 1/2" ANCHOR BOLTS.
WIND ZONE	120 MPH	130 MPH	
SPACING	6'-0" O.C. INSTALL MIN. (2) ANCHORS PER PLATE SECTION AND (1) ANCHOR WITHIN 12" OF CORNERS	4'-0" O.C. INSTALL MIN. (2) ANCHORS PER PLATE SECTION AND (1) ANCHOR WITHIN 12" OF CORNERS	
EMBEDMENT	7"	15" INTO MASONRY 7" INTO CONCRETE	

SCALE NOTE:
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MAGNOLIA
DAVIDSON HOMES

Retreat at North Main OP Lot 4

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DATE: NOVEMBER 15, 2023
SCALE: 1/4" = 1'-0"
DRAWN BY: MAIN STREET DESIGNS
ENGINEERED BY: WFB

D-1
MONO SLAB
FOUNDATION DETAILS

GENERAL NOTES

1. ENGINEER'S SEAL APPLIES ONLY TO STRUCTURAL COMPONENTS INCLUDING ROOF RAFTERS, HIPs, VALLEYS, RIDGES, FLOORS, WALLS, BEAMS, HEADERS, COLUMNS, CANTILEVERS, OFFSET LOAD BEARING WALLS, PIERS, GIRDER SYSTEM AND FOOTING. ENGINEER'S SEAL DOES NOT CERTIFY DIMENSIONAL ACCURACY OF ARCHITECTURAL LAYOUT INCLUDING ROOF. ENGINEER'S SEAL DOES NOT APPLY TO I-JOIST OR FLOOR/ROOF TRUSS LAYOUT DESIGN AND ACCURACY.
2. ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF THE NORTH CAROLINA RESIDENTIAL CODE (NCRC), 2018 EDITION, PLUS ALL LOCAL CODES AND REGULATIONS. THE STRUCTURAL ENGINEER IS NOT RESPONSIBLE FOR, AND WILL NOT HAVE CONTROL OF, CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES, OR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE CONSTRUCTION WORK. NOR WILL THE ENGINEER BE RESPONSIBLE FOR THE CONTRACTORS FAILURE TO CARRY OUT THE CONSTRUCTION WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
3. STRUCTURAL DESIGN BASED ON THE PROVISIONS OF THE NCRC, 2018 EDITION (R301.4 - R301.7)

DESIGN CRITERIA:	LIVE LOAD (PSF)	DEAD LOAD (PSF)	DEFLECTION (IN)
ATTIC WITH LIMITED STORAGE	20	10	L/240 (L/360 w/ BRITTLE FINISHES)
ATTIC WITHOUT STORAGE	10	10	L/360
DECKS	40	10	L/360
EXTERIOR BALCONIES	40	10	L/360
FIRE ESCAPES	40	10	L/360
HANDRAILS/GUARDRAILS	200 LB OR 50 (PLF)	10	L/360
PASSENGER VEHICLE GARAGE	50	10	L/360
ROOMS OTHER THAN SLEEPING ROOM	40	10	L/360
SLEEPING ROOMS	30	10	L/360
STAIRS	40	10	L/360
WIND LOAD	(BASED ON TABLE R302(4) WIND ZONE AND EXPOSURE)		
GROUND SNOW LOAD: Pg	20 (PSF)		

- I-JOIST SYSTEMS DESIGNED WITH 12 PSF DEAD LOAD AND DEFLECTION (IN) OF L/480
- FLOOR TRUSS SYSTEMS DESIGNED WITH 15 PSF DEAD LOAD
4. FOR 115 AND 120 MPH WIND ZONES, FOUNDATION ANCHORAGE IS TO COMPLY WITH SECTION R403.1.6 OF THE NCRC, 2018 EDITION. FOR 130 MPH, 140 MPH, AND 150 MPH WIND ZONES, FOUNDATION ANCHORAGE IS TO COMPLY WITH SECTION 4504 OF THE NCRC, 2018 EDITION.
5. ENERGY EFFICIENCY COMPLIANCE AND INSULATION VALUES OF THE BUILDING TO BE IN ACCORDANCE WITH CHAPTER 11 OF THE NCRC, 2018 EDITION.

FOOTING AND FOUNDATION NOTES

1. FOUNDATION DESIGN BASED ON A MINIMUM ALLOWABLE BEARING CAPACITY OF 2000 PSF. CONTACT GEOTECHNICAL ENGINEER IF BEARING CAPACITY IS NOT ACHIEVED.
2. FOR ALL CONCRETE SLABS AND FOOTINGS, THE AREA WITHIN THE PERIMETER OF THE BUILDING ENVELOPE SHALL HAVE ALL VEGETATION, TOP SOIL, AND FOREIGN MATERIAL REMOVED. FILL MATERIAL SHALL BE FREE OF VEGETATION AND FOREIGN MATERIAL. THE FILL SHALL BE COMPACTED TO ASSURE UNIFORM SUPPORT OF THE SLAB, AND EXCEPT WHERE APPROVED, THE FILL DEPTHS SHALL NOT EXCEED 24" FOR CLEAN SAND OR GRAVEL. A 4" THICK BASED COURSE CONSISTING OF CLEAN GRADED SAND OR GRAVEL SHALL BE PLACED. A BASE COURSE IS NOT REQUIRED WHERE A CONCRETE SLAB IS INSTALLED ON WELL-DRAINED OR SAND-GRAVEL MIXTURE SOILS CLASSIFIED AS GROUP 1, ACCORDING TO THE UNITED SOIL CLASSIFICATION SYSTEM IN ACCORDANCE WITH TABLE R405.1 OF THE NCRC, 2018 EDITION.
3. PROPERLY DEWATER EXCAVATION PRIOR TO POURING CONCRETE WHEN BOTTOM OF CONCRETE SLAB IS AT OR BELOW WATER TABLE. IF APPLICABLE, 3/4" - 1" DEEP CONTROL JOINTS ARE TO BE SAUED WITHIN 4 TO 12 HOURS OF CONCRETE FINISHING AND WALL LOCATIONS HAVE BEEN MARKED. ADJUST WHERE NECESSARY.
4. CONCRETE SHALL CONFORM TO SECTION R402.2 OF THE NCRC, 2018 EDITION. CONCRETE REINFORCING STEEL TO BE ASTM A615 GRADE 60, WELDED WIRE FABRIC TO BE ASTM A185. MAINTAIN A MINIMUM CONCRETE COVER AROUND REINFORCING STEEL OF 3" IN FOOTINGS AND 1 1/2" IN SLABS. FOR POURED CONCRETE WALLS, CONCRETE COVER FOR REINFORCING STEEL MEASURED FROM THE INSIDE FACE OF THE WALL SHALL NOT BE LESS THAN 3/4". CONCRETE COVER FOR REINFORCING STEEL MEASURED FROM THE OUTSIDE FACE OF THE WALL SHALL NOT BE LESS THAN 1 1/2" FOR #5 BARS OR SMALLER, AND NOT LESS THAN 2" FOR #6 BARS OR LARGER.
5. MASONRY UNITS TO CONFORM TO ACE 530/ASCE 5/TMS 402. MORTAR SHALL CONFORM TO ASTM C270.
6. THE UNSUPPORTED HEIGHT OF MASONRY PIERS SHALL NOT EXCEED FOUR TIMES THEIR LEAST DIMENSION FOR UNFILLED HOLLOW CONCRETE MASONRY UNITS AND TEN TIMES THEIR LEAST DIMENSION FOR SOLID OR SOLID FILLED PIERS. PERS MAY BE FILLED SOLID WITH CONCRETE OR TYPE M OR S MORTAR. PIERS AND WALLS SHALL BE CAPPED WITH 8" OF SOLID MASONRY.
7. THE CENTER OF EACH OF THE PIERS SHALL BEAR IN THE MIDDLE THIRD OF ITS RESPECTIVE FOOTING. EACH GIRDER SHALL BEAR IN THE MIDDLE THIRD OF THE PIERS.
8. ALL CONCRETE AND MASONRY FOUNDATION WALLS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE PROVISIONS OF SECTION R404 OF THE NCRC, 2018 EDITION OR IN ACCORDANCE WITH ACI 318, ACI 332, NCMA TR68-A OR ACE 530/ASCE 5/TMS 402. MASONRY FOUNDATION WALLS ARE TO BE REINFORCED PER TABLE R404.1.(1), R404.1.(2), R404.1.(3), OR R404.1.(4) OF THE NCRC, 2018 EDITION. CONCRETE FOUNDATION WALLS ARE TO BE REINFORCED PER TABLE R404.1.(5) OF THE NCRC, 2018 EDITION. STEP CONCRETE FOUNDATION WALLS TO 2 x 6 FRAMED WALLS AT 16" O.C. WHERE GRADE PERMITS (UNO).

FRAMING NOTES

1. ALL FRAMING LUMBER SHALL BE #2 SPF (Fb = 875 PSI, Fv = 375 PSI, E = 1600000 PSI) OR #2 SYP (Fb = 975 PSI, Fv =175 PSI, E = 1600000 PSI) MINIMUM UNLESS NOTED OTHERWISE (UNO). ALL TREATED LUMBER SHALL BE #2 SYP MINIMUM UNLESS NOTED OTHERWISE (UNO).
2. LAMINATED VENEER LUMBER (LVL) SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES: Fb =2600 PSI, Fv = 285 PSI, E = 1900000 PSI. LAMINATED STRAND LUMBER (LSL) SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES: Fb = 2325 PSI, Fv = 310 PSI, E = 1550000 PSI. PARALLEL STRAND LUMBER (PSL) UP TO 1" DEPTH SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES: Fc = 2500 PSI, E =1800000 PSI. PARALLEL STRAND LUMBER (PSL) MORE THAN 1" DEPTH SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES: Fc = 2900 PSI, E = 2000000 PSI. INSTALL ALL CONNECTIONS PER MANUFACTURER'S SPECIFICATIONS.
3. STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING ASTM SPECIFICATIONS

A. W AND WT SHAPES: ASTM A992

B. CHANNELS AND ANGLES: ASTM A36

C. PLATES AND BARS: ASTM A36

D. HOLLOW STRUCTURAL SECTIONS: ASTM A500 GRADE B

E. STEEL PIPE: ASTM A53, GRADE B, TYPE E OR S
4. STEEL BEAMS SHALL BE SUPPORTED AT EACH END WITH A MINIMUM BEARING LENGTH OF 3 1/2" AND FULL FLANGE WIDTH (UNO). PROVIDE SOLID BEARING FROM BEAM SUPPORT TO FOUNDATION. BEAMS SHALL BE ATTACHED AT THE BOTTOM FLANGE TO EACH SUPPORT AS FOLLOWS (UNO):

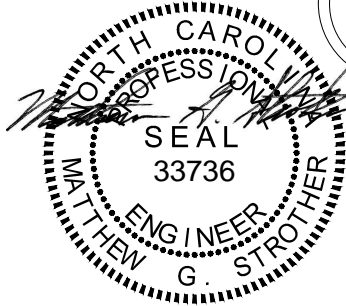
A. WOOD FRAMING (2) 1/2" DIA. x 4" LONG LAG SCREWS

B. CONCRETE (2) 1/2" DIA. x 4" WEDGE ANCHORS

C. MASONRY (FULLY GROUTED) (2) 1/2" DIA. x 4" LONG SIMPSON TITEN HD ANCHORS

LATERAL SUPPORT IS CONSIDERED ADEQUATE PROVIDING THE JOISTS ARE TOE NAILED TO THE 2x NAILER ON TOP OF THE STEEL BEAM, AND THE 2x NAILER IS SECURED TO THE TOP OF THE STEEL BEAM w/ (2) ROWS OF SELF TAPPING SCREWS # 16" O.C. OR (2) ROWS OF 1/2" DIAMETER BOLTS # 16" O.C. IF 1/2" BOLTS ARE USED TO FASTEN THE NAILER, THE STEEL BEAM SHALL BE FABRICATED w/ (2) ROWS OF 9/16" DIAMETER HOLES # 16" O.C.
5. SQUARES DENOTE POINT LOADS WHICH REQUIRE SOLID BLOCKING TO GIRDER OR FOUNDATION. SHADED SQUARES DENOTE POINT LOADS FROM ABOVE WHICH REQUIRE SOLID BLOCKING TO SUPPORTING MEMBER BELOW.
6. ALL LOAD BEARING HEADERS TO CONFORM TO TABLE R602.7.(1) AND R602.7.(2) OF THE NCRC, 2018 EDITION OR BE (2) 2 x 6 WITH (1) JACK AND (1) KING STUD EACH END (UNO), WHICHEVER IS GREATER. ALL HEADERS TO BE SECURED TO EACH JACK STUD WITH (4) 8d NAILS. ALL BEAMS TO BE SUPPORTED WITH (2) STUDS AT EACH BEARING POINT (UNO). INSTALL KING STUDS PER SECTION R602.1.5 OF THE NORTH CAROLINA RESIDENTIAL CODE, 2018 EDITION.
7. ALL BEAMS, HEADERS, OR GIRDER TRUSSES PARALLEL TO WALL ARE TO BEAR FULLY ON (1) JACK OR (2) STUDS MINIMUM OR THE NUMBER OF JACKS OR STUDS NOTED. ALL BEAMS OR GIRDER TRUSSES PERPENDICULAR TO WALL AND SUPPORTED BY (3) STUDS OR LESS ARE TO HAVE 1 1/2" MINIMUM BEARING (UNO). ALL BEAMS OR GIRDER TRUSSES PERPENDICULAR TO WALL AND SUPPORTED BY MORE THAN (3) STUDS OR OTHER NOTED COLUMN ARE TO BEAR FULLY ON SUPPORT COLUMN FOR ENTIRE WALL DEPTH (UNO). BEAM ENDS THAT BUTT INTO ONE ANOTHER ARE TO EACH BEAR EQUAL LENGTHS (UNO).
8. FLITCH BEAMS SHALL BE BOLTED TOGETHER USING 1/2" DIAMETER BOLTS (ASTM A307) WITH WASHERS PLACED AT THREADED END OF BOLT. BOLTS SHALL BE SPACED AT 24" CENTERS (MAXIMUM), AND STAGGERED AT TOP AND BOTTOM OF BEAM (2" EDGE DISTANCE), WITH (2) BOLTS LOCATED AT 6" FROM EACH END (UNO).
9. ALL I-JOIST OR TRUSS LAYOUTS ARE TO BE IN COMPLIANCE WITH THE OVERALL DESIGN SPECIFIED ON THE PLANS. ALL DEVIATIONS ARE TO BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD PRIOR TO INSTALLATION.
10. BRACED WALL PANELS SHALL BE CONSTRUCTED ACCORDING TO THE NORTH CAROLINA RESIDENTIAL CODE 2018 EDITION WALL BRACING CRITERIA. THE AMOUNT, LENGTH, AND LOCATION OF BRACING SHALL COMPLY WITH ALL APPLICABLE TABLES IN SECTION R602.10.
11. PROVIDE DOUBLE JOIST UNDER ALL WALLS PARALLEL TO FLOOR JOISTS. PROVIDE SUPPORT UNDER ALL WALLS PARALLEL TO FLOOR TRUSSES OR I-JOISTS PER MANUFACTURER'S SPECIFICATIONS. INSTALL BLOCKING BETWEEN JOISTS OR TRUSSES FOR POINT LOAD SUPPORT FOR ALL POINT LOADS ALONG OFFSET LOAD LINES.
12. FOR ALL HEADERS SUPPORTING BRICK VENEER THAT ARE LESS THAN 8'-0" IN LENGTH, REST A 6" x 4" x 5/16" STEEL ANGLE WITH 6" MINIMUM EMBEDMENT AT SIDES FOR BRICK SUPPORT (UNO). FOR ALL HEADERS 8'-0" AND GREATER IN LENGTH, BOLT A 6" x 4" x 5/16" STEEL ANGLE TO HEADER WITH 1/2" LAG SCREWS AT 12" O.C. STAGGERED FOR BRICK SUPPORT. FOR ALL BRICK SUPPORT AT ROOF LINES, BOLT A 6" x 4" x 5/16" STEEL ANGLE TO (2) 2 x 10 BLOCKING INSTALLED w/ (4) 12d NAILS EA. PLY BETWEEN WALL STUDS WITH (2) ROWS OF 1/2" LAG SCREWS AT 12" O.C. STAGGERED AND IN ACCORDANCE WITH SECTION R703.8.2.1 OF THE NCRC, 2018 EDITION.
13. FOR STICK FRAMED ROOFS: CIRCLES DENOTE (3) 2 x 4 POSTS FOR ROOF MEMBER SUPPORT. HIP SPLICES ARE TO BE SPACED A MINIMUM OF 8'-0". FASTEN MEMBERS WITH THREE ROWS OF 12d NAILS AT 16" O.C. FRAME DORMER WALLS ON TOP OF DOUBLE OR TRIPLE RAFTERS AS SHOWN (UNO).
14. FOR TRUSSED ROOFS: FRAME DORMER WALLS ON TOP OF 2 x 4 LADDER FRAMING AT 24" O.C. BETWEEN ADJACENT ROOF TRUSSES. STICK FRAME OVER-FRAMED ROOF SECTIONS WITH 2 x 8 RIDGES, 2 x 6 RAFTERS AT 16" O.C. AND FLAT 2 x 10 VALLEYS (UNO).
15. ALL 4 x 4 AND 6 x 6 POSTS TO BE INSTALLED WITH 100 LB CAPACITY UPLIFT CONNECTORS TOP AND BOTTOM (UNO). POSTS MAY BE SECURED USING ONE SIMPSON H6 OR LT912 UPLIFT CONNECTOR FASTENED TO THE BAND AT THE BOTTOM AND THE BEAM AT THE TOP OF EACH POST. ONE 16" SECTION OF SIMPSON C916 COIL STRAPPING WITH (8) 8d HDG NAILS AT EACH END MAY BE USED IN LIEU OF EACH TWIST STRAP IF DESIRED. FOR MASONRY OR CONCRETE FOUNDATION USE SIMPSON POST BASE.

SCALE NOTE:
LARGE FORMAT PRINTS ARE TO SCALE AS NOTED.
11" x 17" PRINTS ARE ONE HALF THE NOTED SCALE



11/15/2023

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MAGNOLIA
DAVIDSON HOMES

DATE: NOVEMBER 15, 2023

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

DRAWN BY: MAIN STREET DESIGNS

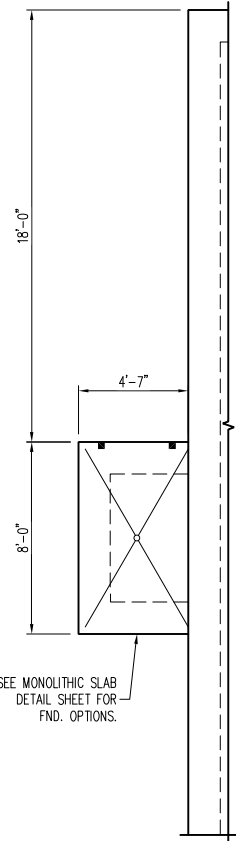
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D-5
STANDARD
STRUCTURAL NOTES

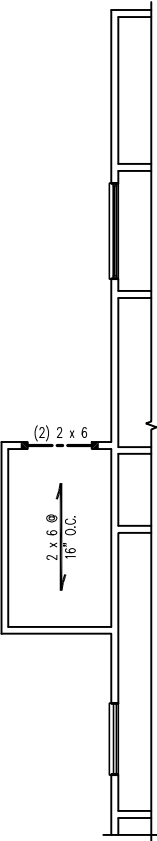
Retreat at North Main OP Lot 4

Retreat at North Main OP Lot 4



FOUNDATION PLAN

- 120 MPH ULTIMATE DESIGN WIND SPEED**
NOTES FOR LESS THAN
30' MEAN ROOF HEIGHT:
- ENGINEER'S SEAL APPLIES ONLY TO STRUCTURAL COMPONENTS. ENGINEER'S SEAL DOES NOT CERTIFY DIMENSIONAL ACCURACY OR ARCHITECTURAL LAYOUT INCLUDING ROOF SYSTEM.
 - STRUCTURAL DESIGN PER NORTH CAROLINA RESIDENTIAL CODE, 2024 EDITION.
 - INSTALL 1/2" ANCHOR BOLTS 6'-0" O.C. AND WITHIN 1'-0" FROM END OF EACH CORNER. ANCHOR BOLTS MUST EXTEND A MINIMUM OF 7" INTO MASONRY OR CONCRETE. LOCATE BOLT WITHIN MIDDLE THIRD OF PLATE WIDTH.
 - MEAN ROOF HEIGHT IS LESS THAN 30 FEET.
 - EXTERIOR WALLS DESIGNED FOR 120 MPH WINDS.
 - ROOF AND WALL CLADDING DESIGNED FOR WIND PRESSURES PER TABLE R301.2.1(1) OF THE 2024 NRC.
 - INSTALL 7/16" OSB SHEATHING ON ALL EXTERIOR WALLS OF ALL STORIES IN ACCORDANCE WITH SECTION R602.10 OF THE NRC, 2024 EDITION. SEE THE WALL BRACING NOTES SHEET FOR MORE INFORMATION.
 - ENERGY EFFICIENCY COMPLIANCE AND INSULATION VALUES OF THE BUILDING TO BE IN ACCORDANCE WITH CHAPTER 11 OF THE NRC, 2024 EDITION.
 - REFER TO NOTES SHEET FOR ADDITIONAL STRUCTURAL INFORMATION.



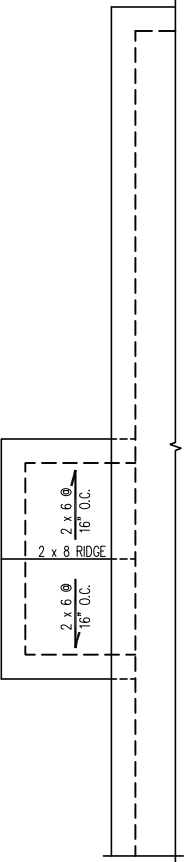
FRAMING PLAN

- BRACED WALL DESIGN NOTES:**
- WALL BRACING IS BY ENGINEERED DESIGN PER SECTION R301.1.3 "ENGINEERED DESIGN" OF THE NRC 2024 EDITION USING BRACING MATERIALS AND METHODS LISTED IN TABLE R602.10.4 ALONG WITH ALTERNATIVE MATERIALS AND METHODS THAT COMPLY WITH ACCEPTED ENGINEERING PRACTICE. BRACED WALL DESIGN IS NOT PRESCRIPTIVE.
 - SHEATH ALL EXTERIOR WALLS w/ 7/16" OSB TO PROVIDE CS-WSP WALL BRACING THAT WILL BRACE THE STRUCTURE FOR ALL LATERAL LOADS AS REQUIRED BY THE NRC 2024 EDITION.
 - CS-WSP REFERS TO "CONTINUOUSLY SHEATHED WOOD STRUCTURAL PANELS." CONTRACTOR IS TO INSTALL 7/16" OSB ON ALL EXTERIOR WALLS WITH HORIZONTAL JOINTS BLOCKED. ATTACH SHEATHING w/ 8d NAILS SPACED 6" O.C. ALONG PANEL EDGES AND 12" O.C. IN THE FIELD INCLUDING TOP AND BOTTOM PLATES.
 - GB REFERS TO "GYPSUM BOARD." CONTRACTOR IS TO INSTALL 1/2" (MIN.) GYPSUM BOARD ON BOTH SIDES OF WALL (UNO) WHERE NOTED ON THE PLANS ATTACHED WITH 1 1/4" LONG #6 SCREWS OR 1 5/8" LONG 5d COOLER NAILS SPACED 7" O.C. ALONG PANEL EDGES AND IN THE FIELD INCLUDING TOP AND BOTTOM PLATES. WHERE METHOD GB PANELS ARE INSTALLED HORIZONTALLY, BLOCKING OF HORIZONTAL JOINTS IS NOT REQUIRED.
 - BRACED WALL DESIGN APPLIED IN WIND ZONES UP TO 130 MPH. FOR HIGH WIND ZONES, BRACED WALLS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH CHAPTER 45 OF THE NRC 2024 EDITION.
 - SEE NOTES AND DETAIL SHEETS FOR ADDITIONAL BRACED WALL INFORMATION.

- STRUCTURAL NOTES:**
- ALL FRAMING LUMBER TO BE SPF #2 (UNO). ALL TREATED LUMBER TO BE SYP #2 (UNO). REFER TO SECTION R802.11 OF THE 2024 NRC FOR REQUIRED UPLIFT RESISTANCE AT RAFTERS AND TRUSSES.
 - ALL LOAD BEARING HEADERS TO BE (2) 2 x 10 SPF #2 OR SYP #2 (KILN DRIED) (UNO). HEADERS HAVE BEEN DESIGNED BASED ON CALCULATED LOADS. CODE TABLES HAVE NOT BEEN USED.
 - WINDOW AND DOOR HEADERS TO BE SUPPORTED w/ (1) JACK STUD AND (1) KING STUD EA. END (UNO.). SEE TABLE R602.7.5 FOR ADDITIONAL KING STUD REQUIREMENTS.
 - SQUARES DENOTE POINT LOADS WHICH REQUIRE SOLID BLOCKING TO GIRDER OR FOUNDATION. ALL SQUARES TO BE (2) STUDS (UNO.).
 - REFER TO NOTES SHEET FOR ADDITIONAL STRUCTURAL INFORMATION.

TABLE R602.7.5
MINIMUM NUMBER OF FULL HEIGHT KING STUDS
AT EACH END OF HEADERS IN EXTERIOR
WALLS IN 120/130 MPH WIND ZONES

HEADER SPAN (FEET)	MINIMUM NUMBER OF FULL HEIGHT STUDS (KINGS)
UP TO 4'	1
> 4' TO 8'	2
> 8' TO 14'	3
> 14' TO 18'	4



ROOF PLAN

- STRUCTURAL NOTES:**
- ALL FRAMING LUMBER TO BE #2 SPF (UNO).
 - STICK FRAME OVER-FRAMED ROOF SECTIONS W/ 2 x 8 RIDGES, 2 x 6 RAFTERS @ 16" O.C. AND FLAT 2 x 10 VALLEYS.
 - FASTEN FLAT VALLEYS TO RAFTERS WITH SIMPSON H2.5A HURRICANE TIES @ 32" O.C. MAX. PASS HURRICANE TIES THROUGH NOTCH IN ROOF SHEATHING. EACH RAFTER IS TO BE FASTENED TO THE FLAT VALLEY WITH A MIN. OF (6) 12d TOE NAILS.
 - REFER TO SECTION R802.11 OF THE 2024 NRC FOR REQUIRED UPLIFT RESISTANCE AT RAFTERS.
 - REFER TO NOTES SHEET FOR ADDITIONAL STRUCTURAL INFORMATION.

NOTE: REFER TO ARCHITECTURAL DRAWINGS FOR ROOF PITCHES, PLATE HEIGHTS, DIMENSIONS, OVERHANG WIDTHS, AND ATTIC VENT CALCS.



5/8/2025

LEGEND	
CONT	CONTINUOUS
TS	TRUSS SUPPORT
EA	EACH
FON	FOUNDATION
FTG	FOOTING
OC	ON CENTER
SPF	SPRUCE PINE FIR
SYP	SOUTHERN YELLOW PINE
TRTD	PRESSURE TREATED
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE

WELL HOUSE OPTION
RETREAT AT NORTH MAIN 004
MAGNOLIA B
DAVIDSON HOMES

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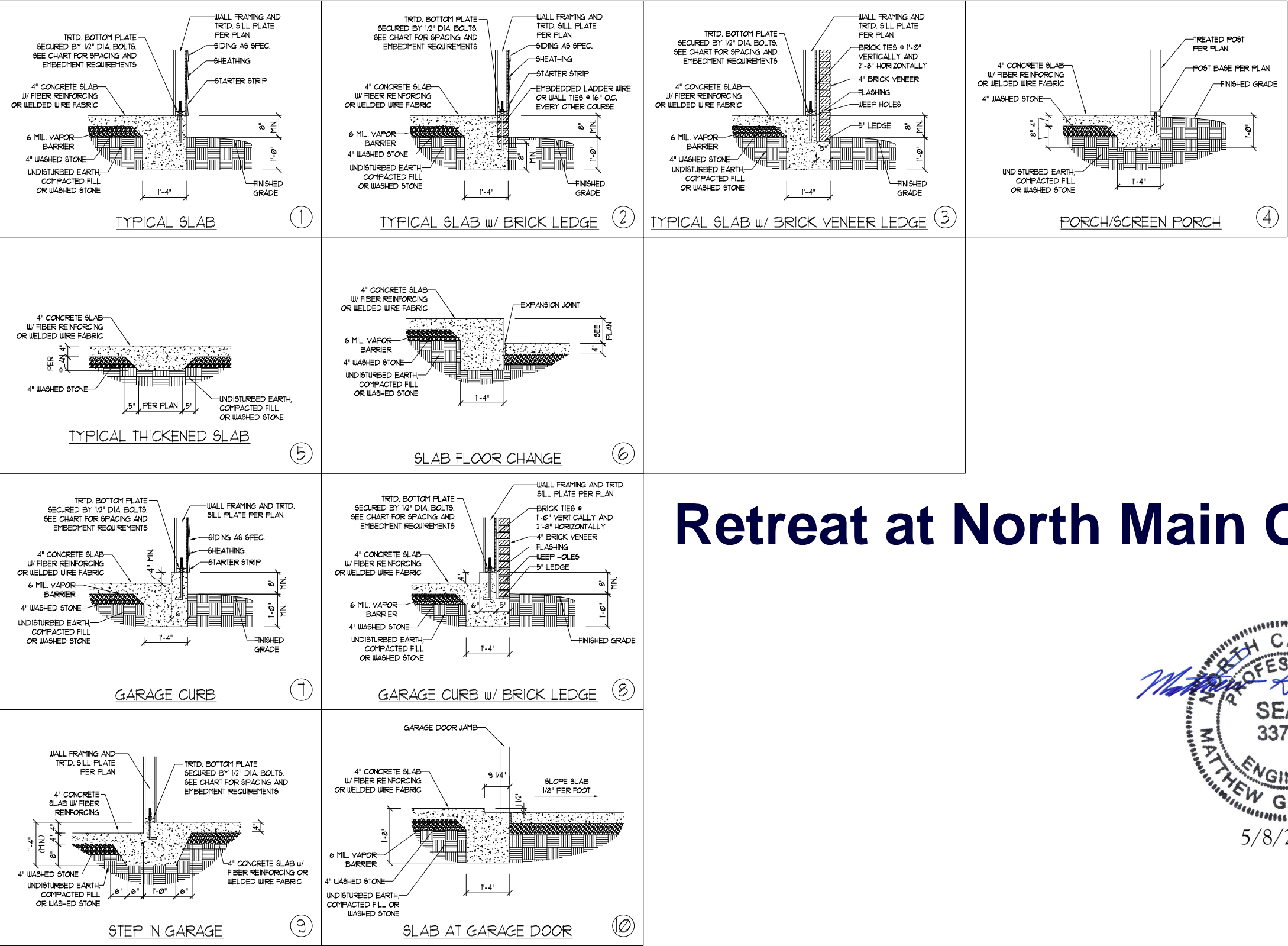
DATE: MAY 9, 2025

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

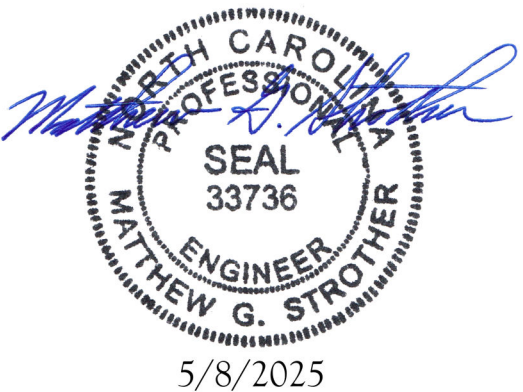
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ENGINEERED BY: MCS

S-1
FOUNDATION, FRAMING,
AND ROOF PLANS



Retreat at North Main OP Lot 4



ANCHOR SPACING AND EMBEDMENT			NOTE: THREADED ROD WITH EPOXY, SIMPSON TITEN HD, OR APPROVED ANCHORS SPACED AS REQUIRED TO PROVIDE EQUIVALENT ANCHORAGE TO 1/2" DIAMETER ANCHOR BOLTS MAY BE USED IN LIEU OF 1/2" ANCHOR BOLTS.
WIND ZONE	120 MPH	130 MPH	
SPACING	6'-0" O.C. INSTALL MIN. (2) ANCHORS PER PLATE SECTION AND (1) ANCHOR WITHIN 12" OF CORNERS	4'-0" O.C. INSTALL MIN. (2) ANCHORS PER PLATE SECTION AND (1) ANCHOR WITHIN 12" OF CORNERS	
EMBEDMENT	7"	15" INTO MASONRY 7" INTO CONCRETE	

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MONOLITHIC SLAB
FOUNDATION DETAILS

DATE: NOVEMBER 1, 2024
SCALE: NTS
DRAWN BY: JST
ENGINEERED BY: JST

FOUNDATION
DETAILS

SCALE NOTE:
LARGE FORMAT PRINTS ARE TO SCALE AS NOTED.
11" x 17" PRINTS ARE ONE HALF THE NOTED SCALE

GENERAL NOTES

- ENGINEER'S SEAL APPLIES ONLY TO STRUCTURAL COMPONENTS INCLUDING ROOF RAFTERS, HIPs, VALLEYS, RIDGES, FLOORS, WALLS, BEAMS, HEADERS, COLUMNS, CANTILEVERS, OFFSET LOAD BEARING WALLS, PIERS, GIRDER SYSTEM AND FOOTING. ENGINEER'S SEAL DOES NOT CERTIFY DIMENSIONAL ACCURACY OF ARCHITECTURAL LAYOUT INCLUDING ROOF. ENGINEER'S SEAL DOES NOT APPLY TO I-JOIST OR FLOOR/ROOF TRUSS LAYOUT DESIGN AND ACCURACY.
- ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF THE NORTH CAROLINA RESIDENTIAL CODE (NCR), 2024 EDITION, PLUS ALL LOCAL CODES AND REGULATIONS. THE STRUCTURAL ENGINEER IS NOT RESPONSIBLE FOR, AND WILL NOT HAVE CONTROL OF, CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES, OR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE CONSTRUCTION WORK. NOR WILL THE ENGINEER BE RESPONSIBLE FOR THE CONTRACTORS FAILURE TO CARRY OUT THE CONSTRUCTION WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- STRUCTURAL DESIGN BASED ON THE PROVISIONS OF THE NCR, 2024 EDITION (R301.4 – R301.7)

DESIGN CRITERIA:	LIVE LOAD (PSF)	DEAD LOAD (PSF)	DEFLECTION (IN)
ATTIC WITH LIMITED STORAGE	20	10	L/240 (L/360 w/ BRITTLE FINISHES)
ATTIC WITHOUT STORAGE	10	10	L/360
DECKS	40	10	L/360
EXTERIOR BALCONIES	40	10	L/360
FIRE ESCAPES	40	10	L/360
HANDRAILS/GUARDRAILS	200	10	L/360
PASSENGER VEHICLE GARAGE	50	10	L/360
ROOMS OTHER THAN SLEEPING ROOM	40	10	L/360
SLEEPING ROOMS	30	10	L/360
STAIRS	40	10	L/360
WIND LOAD	(BASED ON TABLE R301.2(4) WIND ZONE AND EXPOSURE)		
GROUND SNOW LOAD: Pg	20 (PSF)		
SEISMIC DESIGN CATEGORY:	B		

- I-JOIST SYSTEMS DESIGNED WITH 12 PSF DEAD LOAD AND DEFLECTION (IN) OF L/480
- FLOOR TRUSS SYSTEMS DESIGNED WITH 15 PSF DEAD LOAD

- CLADDING DESIGNED FOR:

120 MPH WIND ZONE			
		POS. (PSF) PRESSURE	NEG. (PSF) PRESSURE
GABLE ROOF CLADDING	FLAT ROOF	+ 6.3	– 44.5
	2.25 TO 5/12	+ 9.6	– 49.8
	5 TO 7/12	+ 11.6	– 41.9
	7 TO 12/12	+ 14.2	– 35.3
HIP ROOF CLADDING	2.25 TO 5/12	+ 11.6	– 36.6
	5 TO 7/12	+ 11.6	– 28.7
	7 TO 12/12	+ 11.1	– 35.6
WALL CLADDING		+ 15.5	– 20.8

140 MPH WIND ZONE			
		POS. (PSF) PRESSURE	NEG. (PSF) PRESSURE
GABLE ROOF CLADDING	FLAT ROOF	+ 8.6	– 60.6
	2.25 TO 5/12	+ 13.1	– 67.8
	5 TO 7/12	+ 15.8	– 57
	7 TO 12/12	+ 19.4	– 48
HIP ROOF CLADDING	2.25 TO 5/12	+ 15.8	– 49.8
	5 TO 7/12	+ 15.8	– 39.1
	7 TO 12/12	+ 15.1	– 48.4
WALL CLADDING		+ 21.1	– 28.3

130 MPH WIND ZONE			
		POS. (PSF) PRESSURE	NEG. (PSF) PRESSURE
GABLE ROOF CLADDING	FLAT ROOF	+ 7.4	– 52.2
	2.25 TO 5/12	+ 11.3	– 58.4
	5 TO 7/12	+ 13.6	– 49.2
	7 TO 12/12	+ 16.7	– 41.4
HIP ROOF CLADDING	2.25 TO 5/12	+ 13.6	– 43
	5 TO 7/12	+ 13.6	– 33.7
	7 TO 12/12	+ 13	– 41.7
WALL CLADDING		+ 18.2	– 24.4

150 MPH WIND ZONE			
		POS. (PSF) PRESSURE	NEG. (PSF) PRESSURE
GABLE ROOF CLADDING	FLAT ROOF	+ 9.9	– 69.6
	2.25 TO 5/12	+ 15	– 77.8
	5 TO 7/12	+ 18.1	– 65.4
	7 TO 12/12	+ 22.2	– 55.2
HIP ROOF CLADDING	2.25 TO 5/12	+ 18.1	– 57.2
	5 TO 7/12	+ 18.1	– 44.9
	7 TO 12/12	+ 17.3	– 55.6
WALL CLADDING		+ 24.3	– 32.5

- FOR 115 AND 120 MPH WIND ZONES, FOUNDATION ANCHORAGE IS TO COMPLY WITH SECTION R403.1.6 OF THE NCR, 2024 EDITION. FOR 130 MPH, 140 MPH, AND 150 MPH WIND ZONES, FOUNDATION ANCHORAGE IS TO COMPLY WITH SECTION 4504 OF THE NCR, 2024 EDITION.
- ENERGY EFFICIENCY COMPLIANCE AND INSULATION VALUES OF THE BUILDING TO BE IN ACCORDANCE WITH CHAPTER 11 OF THE NCR, 2024 EDITION.

FOOTING AND FOUNDATION NOTES

- FOUNDATION DESIGN BASED ON A MINIMUM ALLOWABLE BEARING CAPACITY OF 2000 PSF. CONTACT GEOTECHNICAL ENGINEER IF BEARING CAPACITY IS NOT ACHIEVED.
- FOR ALL CONCRETE SLABS AND FOOTINGS, THE AREA WITHIN THE PERIMETER OF THE BUILDING ENVELOPE SHALL HAVE ALL VEGETATION, TOP SOIL AND FOREIGN MATERIAL REMOVED. FILL MATERIAL SHALL BE FREE OF VEGETATION AND FOREIGN MATERIAL. THE FILL SHALL BE COMPACTED TO ASSURE UNIFORM SUPPORT OF THE SLAB, AND EXCEPT WHERE APPROVED, THE FILL DEPTHS SHALL NOT EXCEED 24" FOR CLEAN SAND OR GRAVEL. EXCEPTION: #57 OR #67 STONE MAY BE USED AS FILL FOR MAXIMUM DEPTH OF 4 FEET WITHOUT CONSOLIDATION. A 4" THICK BASED COURSE CONSISTING OF CLEAN GRADED SAND OR GRAVEL SHALL BE PLACED. A BASE COURSE IS NOT REQUIRED WHERE A CONCRETE SLAB IS INSTALLED ON WELL-DRAINED OR SAND-GRAVEL MIXTURE SOILS CLASSIFIED AS GROUP 1, ACCORDING TO THE UNITED SOIL CLASSIFICATION SYSTEM IN ACCORDANCE WITH TABLE R405.1 OF THE NCR, 2024 EDITION.
- PROPERLY DEWATER EXCAVATION PRIOR TO POURING CONCRETE WHEN BOTTOM OF CONCRETE SLAB IS AT OR BELOW WATER TABLE. IF APPLICABLE, 3/4" – 1" DEEP CONTROL JOINTS ARE TO BE SAWED WITHIN 4 TO 12 HOURS OF CONCRETE FINISHING AND WALL LOCATIONS HAVE BEEN MARKED. ADJUST WHERE NECESSARY.
- CONCRETE SHALL CONFORM TO SECTION R402.2 OF THE NCR, 2024 EDITION. CONCRETE REINFORCING STEEL TO BE ASTM A615 GRADE 60. WELDED WIRE FABRIC TO BE ASTM A185. MAINTAIN A MINIMUM CONCRETE COVER AROUND REINFORCING STEEL OF 3" IN FOOTINGS AND 1 1/2" IN SLABS. FOR POURED CONCRETE WALLS, CONCRETE COVER FOR REINFORCING STEEL MEASURED FROM THE INSIDE FACE OF THE WALL SHALL NOT BE LESS THAN 3/4". CONCRETE COVER FOR REINFORCING STEEL MEASURED FROM THE OUTSIDE FACE OF THE WALL SHALL NOT BE LESS THAN 1 1/2" FOR #5 BARS OR SMALLER, AND NOT LESS THAN 2" FOR #6 BARS OR LARGER.

- MASONRY UNITS TO CONFORM TO ACE 530/ASCE 5/TMS 402. MORTAR SHALL CONFORM TO ASTM C270.
- THE UNSUPPORTED HEIGHT OF MASONRY PIERS SHALL NOT EXCEED FOUR TIMES THEIR LEAST DIMENSION FOR UNFILLED HOLLOW CONCRETE MASONRY UNITS AND TEN TIMES THEIR LEAST DIMENSION FOR SOLID OR SOLID FILLED PIERS. PIERS MAY BE FILLED SOLID WITH CONCRETE OR TYPE M OR S MORTAR. PIERS AND WALLS SHALL BE CAPPED WITH 8" OF SOLID MASONRY.
- THE CENTER OF EACH OF THE PIERS SHALL BEAR IN THE MIDDLE THIRD OF ITS RESPECTIVE FOOTING. EACH GIRDER SHALL BEAR IN THE MIDDLE THIRD OF THE PIERS.
- ALL CONCRETE AND MASONRY FOUNDATION WALLS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE PROVISIONS OF SECTION R404 OF THE NCR, 2024 EDITION OR IN ACCORDANCE WITH ACI 318, ACI 332, NOMA TR68-A OR ACE 530/ASCE 5/TMS 402. MASONRY FOUNDATION WALLS ARE TO BE REINFORCED PER TABLE R404.1.1(1), R404.1.1(2), R404.1.1(3), OR R404.1.1(4) OF THE NCR, 2024 EDITION. CONCRETE FOUNDATION WALLS ARE TO BE REINFORCED PER TABLE R404.1.2(8) OF THE NCR, 2024 EDITION. STEP CONCRETE FOUNDATION WALLS TO 2 x 6 FRAMED WALLS AT 16" O.C. WHERE GRADE PERMITS (UNO).

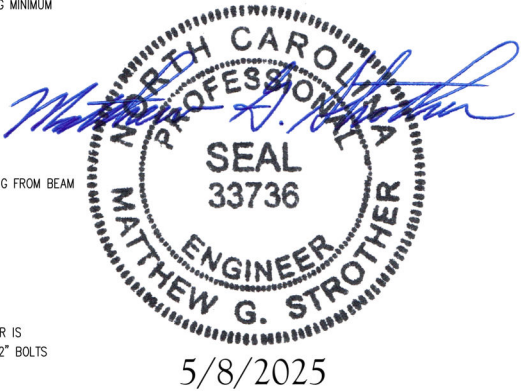
FRAMING NOTES

- ALL FRAMING LUMBER SHALL BE #2 SPF MINIMUM (Fb = 875 PSI, Fv = 375 PSI, E = 1600000 PSI) UNLESS NOTED OTHERWISE (UNO). ALL TREATED LUMBER SHALL BE #2 SYP MINIMUM (Fb = 975 PSI, Fv =175 PSI, E = 1600000 PSI) UNLESS NOTED OTHERWISE (UNO).
- LAMINATED VENEER LUMBER (LVL) SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES: Fb =2600 PSI, Fv = 285 PSI, E = 1900000 PSI. LAMINATED STRAND LUMBER (LSL) SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES: Fb = 2325 PSI, Fv = 310 PSI, E = 1550000 PSI. PARALLEL STRAND LUMBER (PSL) UP TO 7" DEPTH SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES: Fc = 2500 PSI, E =1800000 PSI. PARALLEL STRAND LUMBER (PSL) MORE THAN 7" DEPTH SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES: Fc = 2900 PSI, E = 2000000 PSI. INSTALL ALL CONNECTIONS PER MANUFACTURER'S SPECIFICATIONS.
- STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING ASTM SPECIFICATIONS
 - W AND WT SHAPES: ASTM A992
 - CHANNELS AND ANGLES: ASTM A36
 - PLATES AND BARS: ASTM A36
 - HOLLOW STRUCTURAL SECTIONS: ASTM A500 GRADE B
 - STEEL PIPE: ASTM A53, GRADE B, TYPE E OR S
- STEEL BEAMS SHALL BE SUPPORTED AT EACH END WITH A MINIMUM BEARING LENGTH OF 3 1/2" AND FULL FLANGE WIDTH (UNO). PROVIDE SOLID BEARING FROM BEAM SUPPORT TO FOUNDATION. BEAMS SHALL BE ATTACHED AT THE BOTTOM FLANGE TO EACH SUPPORT AS FOLLOWS (UNO):
 - WOOD FRAMING (2) 1/2" DIA. x 4" LONG LAG SCREWS
 - CONCRETE (2) 1/2" DIA. x 4" WEDGE ANCHORS
 - MASONRY (FULLY GROUTED) (2) 1/2" DIA. x 4" LONG SIMPSON TITEN HD ANCHORS
 - STEEL PIPE COLUMN (4) 3/4" DIA. A325 BOLTS OR 3/16" FILLET WELD

LATERAL SUPPORT IS CONSIDERED ADEQUATE PROVIDING THE JOISTS ARE TOE NAILED TO THE 2x NAILER ON TOP OF THE STEEL BEAM, AND THE 2x NAILER IS SECURED TO THE TOP OF THE STEEL BEAM w/ (2) ROWS OF SELF TAPPING SCREWS @ 16" O.C. OR (2) ROWS OF 1/2" DIAMETER BOLTS @ 16" O.C. IF 1/2" BOLTS ARE USED TO FASTEN THE NAILER, THE STEEL BEAM SHALL BE FABRICATED w/ (2) ROWS OF 9/16" DIAMETER HOLES @ 16" O.C.

- SQUARES DENOTE POINT LOADS WHICH REQUIRE SOLID BLOCKING TO GIRDER OR FOUNDATION. SHADED SQUARES DENOTE POINT LOADS FROM ABOVE WHICH REQUIRE SOLID BLOCKING TO SUPPORTING MEMBER BELOW.
- ALL LOAD BEARING HEADERS TO CONFORM TO TABLE R602.7(1) AND R602.7(2) OF THE NCR, 2024 EDITION OR BE (2) 2 x 6 WITH (1) JACK AND (1) KING STUD EACH END (UNO), WHICHEVER IS GREATER ALL HEADERS TO BE SECURED TO EACH JACK STUD WITH (4) 8d NAILS. ALL BEAMS TO BE SUPPORTED WITH (2) STUDS AT EACH BEARING POINT (UNO). INSTALL KING STUDS PER SECTION R602.7.5 OF THE NORTH CAROLINA RESIDENTIAL CODE, 2024 EDITION.
- ALL BEAMS, HEADERS, OR GIRDER TRUSSES PARALLEL TO WALL ARE TO BEAR FULLY ON (1) JACK OR (2) STUDS MINIMUM OR THE NUMBER OF JACKS OR STUDS NOTED. ALL BEAMS OR GIRDER TRUSSES PERPENDICULAR TO WALL AND SUPPORTED BY (3) STUDS OR LESS ARE TO HAVE 1 1/2" MINIMUM BEARING (UNO). ALL BEAMS OR GIRDER TRUSSES PERPENDICULAR TO WALL AND SUPPORTED BY MORE THAN (3) STUDS OR OTHER NOTED COLUMN ARE TO BEAR FULLY ON SUPPORT COLUMN FOR ENTIRE WALL DEPTH (UNO). BEAM ENDS THAT BUTT INTO ONE ANOTHER ARE TO EACH BEAR EQUAL LENGTHS (UNO).
- FLITCH BEAMS SHALL BE BOLTED TOGETHER USING 1/2" DIAMETER BOLTS (ASTM A307) WITH WASHERS PLACED AT THREADED END OF BOLT. BOLTS SHALL BE SPACED AT 24" CENTERS (MAXIMUM), AND STAGGERED AT TOP AND BOTTOM OF BEAM (2" EDGE DISTANCE), WITH (2) BOLTS LOCATED AT 6" FROM EACH END (UNO).
- ALL I-JOIST OR TRUSS LAYOUTS ARE TO BE IN COMPLIANCE WITH THE OVERALL DESIGN SPECIFIED ON THE PLANS. ALL DEVIATIONS ARE TO BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD PRIOR TO INSTALLATION.
- BRACED WALL PANELS SHALL BE CONSTRUCTED ACCORDING TO THE NORTH CAROLINA RESIDENTIAL CODE 2024 EDITION WALL BRACING CRITERIA. THE AMOUNT, LENGTH, AND LOCATION OF BRACING SHALL COMPLY WITH ALL APPLICABLE TABLES IN SECTION R602.10.
- PROVIDE DOUBLE JOIST UNDER ALL WALLS PARALLEL TO FLOOR JOISTS. PROVIDE SUPPORT UNDER ALL WALLS PARALLEL TO FLOOR TRUSSES OR I-JOISTS PER STRUCTURAL PLAN. INSTALL BLOCKING BETWEEN JOISTS OR TRUSSES FOR POINT LOAD SUPPORT FOR ALL POINT LOADS ALONG OFFSET LOAD LINES.
- FOR ALL HEADERS SUPPORTING BRICK VENEER THAT ARE LESS THAN 8'-0" IN LENGTH, REST A 6" x 4" x 5/16" STEEL ANGLE WITH 6" MINIMUM EMBEDMENT AT SIDES FOR BRICK SUPPORT (U.N.O.). FOR ALL HEADERS 8'-0" AND GREATER IN LENGTH, BOLT A 6" x 4" x 5/16" STEEL ANGLE TO HEADER WITH 1/2" LAG SCREWS AT 12" O.C. STAGGERED FOR BRICK SUPPORT. FOR ALL BRICK SUPPORT AT ROOF LINES, BOLT A 6" x 4" x 5/16" STEEL ANGLE TO (2) 2 x 10 BLOCKING INSTALLED w/ (4) 12d NAILS EA. PLY BETWEEN WALL STUDS WITH (2) ROWS OF 1/2" LAG SCREWS AT 12" O.C. STAGGERED AND IN ACCORDANCE WITH SECTION R703.8.2.1 OF THE NCR, 2024 EDITION.
- FOR STICK FRAMED ROOFS: CIRCLES DENOTE (3) 2 x 4 POSTS FOR ROOF MEMBER SUPPORT. HIP SPLICES ARE TO BE SPACED A MINIMUM OF 8'-0". FASTEN MEMBERS WITH THREE ROWS OF 12d NAILS AT 16" O.C. FRAME DORMER WALLS ON TOP OF DOUBLE OR TRIPLE RAFTERS AS SHOWN (UNO).
- FOR TRUSSED ROOFS: FRAME DORMER WALLS ON TOP OF 2 x 4 LADDER FRAMING AT 24" O.C. BETWEEN ADJACENT ROOF TRUSSES. STICK FRAME OVER-FRAMED ROOF SECTIONS WITH 2 x 8 RIDGES, 2 x 6 RAFTERS AT 16" O.C. AND FLAT 2 x 10 VALLEYS (UNO).
- ALL 4 x 4 AND 6 x 6 POSTS TO BE INSTALLED WITH 700 LB CAPACITY UPLIFT CONNECTORS TOP AND BOTTOM (UNO). POSTS MAY BE SECURED TO WOOD FRAMING WITH SIMPSON CS16 COIL STRAPPING WITH 9" END LENGTHS OR (2) 6" LONG SIMPSON SDS SCREWS (OR EQUAL) DRIVEN AT AN ANGLE FROM OPPOSITE SIDES. FOR MASONRY OR CONCRETE FOUNDATION USE SIMPSON POST BASE.
- CONSTRUCT ALL WOOD DECKS ACCORDING TO CHAPTER 47-WOOD DECKS.

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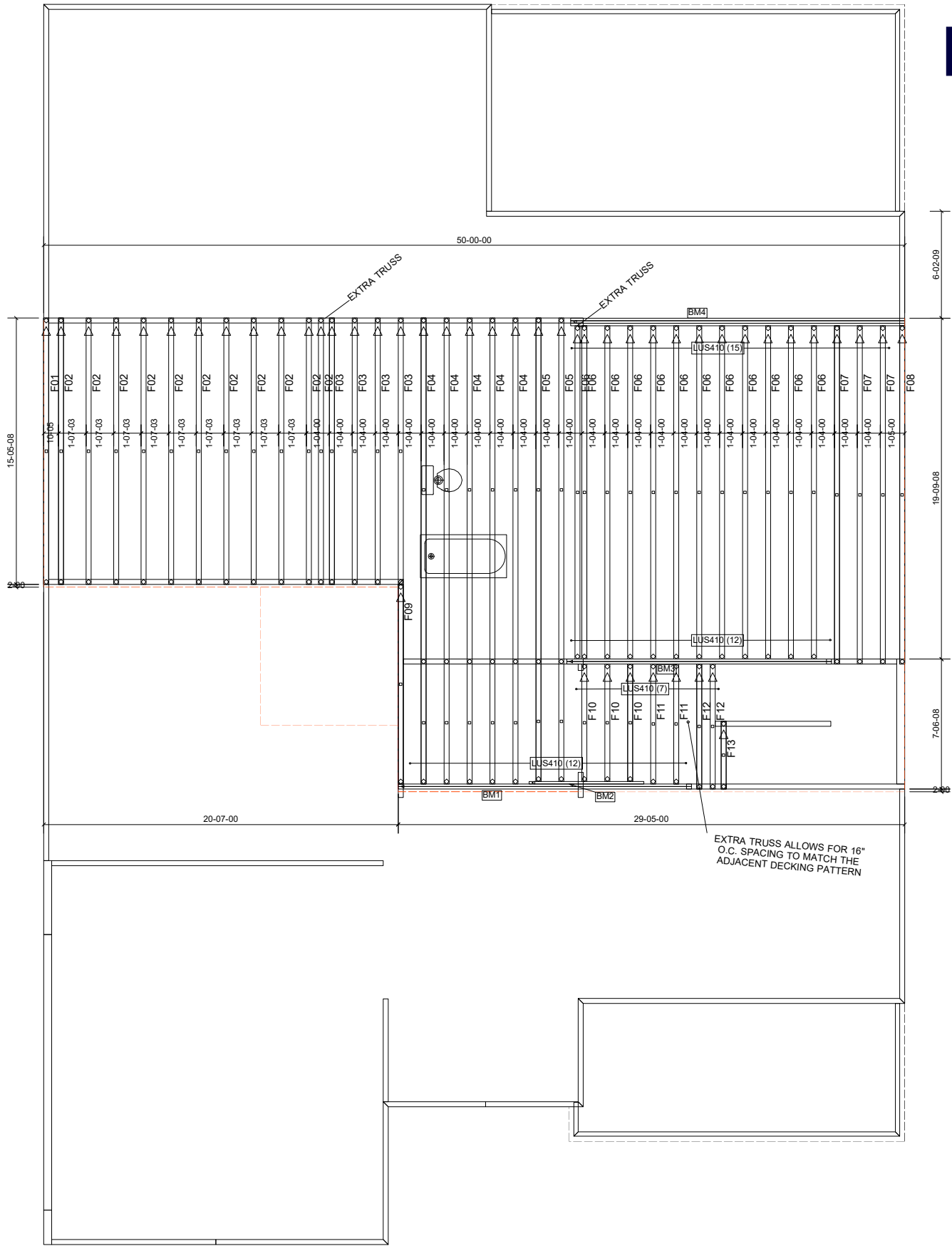
STANDARD STRUCTURAL NOTES

DATE: NOVEMBER 4, 2024
DRAWN BY: JST
ENGINEERED BY: JST

STRUCTURAL
NOTES

Retreat at North Main OP Lot 4

Retreat at North Main OP Lot 4



FLOOR TRUSS PLACEMENT

FLOOR BEAMS (ENG BY OTHERS)				
PlotID	Length	Product	Plies	Net Qty
BM1	18-00-00	1-3/4" x 14" LVL	2	2
BM2	8-00-00	1-3/4" x 14" LVL	1	1
BM3	16-00-00	1-3/4" x 14" LVL	2	2
BM4	20-00-00	1-3/4" x 20" LVL	3	3

HANGER LIST		
FLOOR	LUS410	46
ROOF	LUS26	15

ALL WALL DIMENSIONS ARE TO FACE OF STUDS PER FRAMING NOTE (1) PAGE CS-1.0.
EXTEND BEAMS WHERE NECESSARY TO ACCOMMODATE HANGER FLANGES.
B2 & B3 TRUSSES ARE DESIGNED TO CARRY STICK-FRAMED DORMERS ABOVE.
ALL TRUSS-TO-BEAM CONNECTORS ARE SIMPSON LUS410.
ALL TRUSS-TO-GIRDER (G6G) CONNECTORS ARE SIMPSON LUS26.
OTHERS TO PROVIDE 2x MATERIAL AS SILL PLATES AND DOUBLE TOP PLATES IN WALLS
WHERE THE END BLOCKS OF A-, B-, AND C- TRUSSES WILL ACT AS WALL STUDS.



84 Components
200 Emmett Rd
Dunn NC 28334
United States
Office: (910) 892-8400

Davidson Homes

4 Retreat At North Main

4 Retreat At North Main - ROOF

Job# - P02623-25487

Location	2383-Dunn
Designer	James McIntyre

DO NOT CUT, NOTCH, OR BORE HOLES
UNLESS SPECIFIC, WRITTEN PERMISSION IS
PROVIDED BY AN AUTHORIZED REPRESENTATIVE OF
84 LUMBER.

TRUSS INSTALLATION REQUIRES TEMPORARY AND
PERMANENT BRACING. GENERAL GUIDANCE IS
PROVIDED IN SBCA DOC's
B-1 and B-3. THESE ARE INCLUDED WITH EACH JOB
IN YOUR TRUSS PACKET.

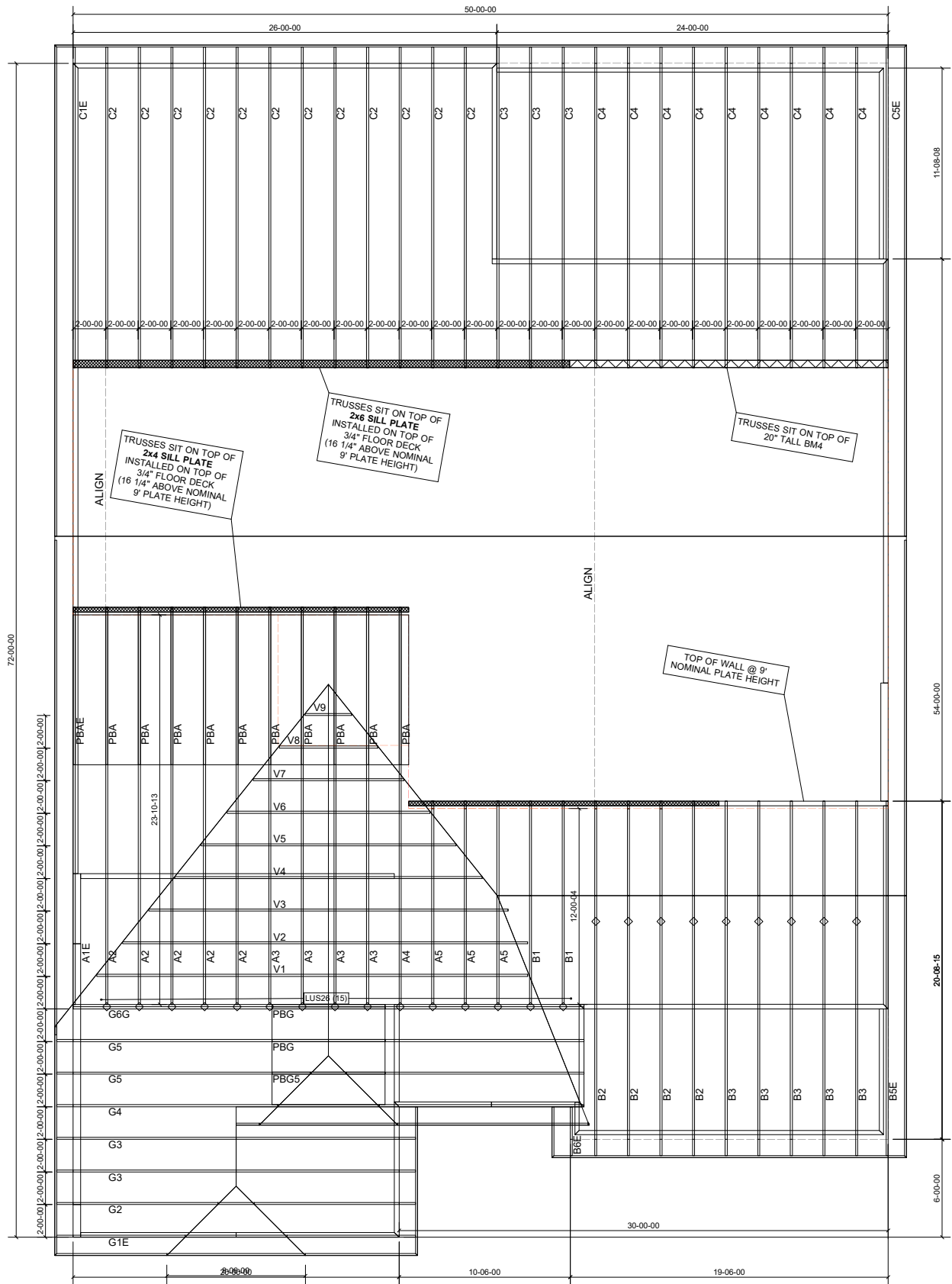
Sheet # 1 of 1

Roof Truss
Placement Plan

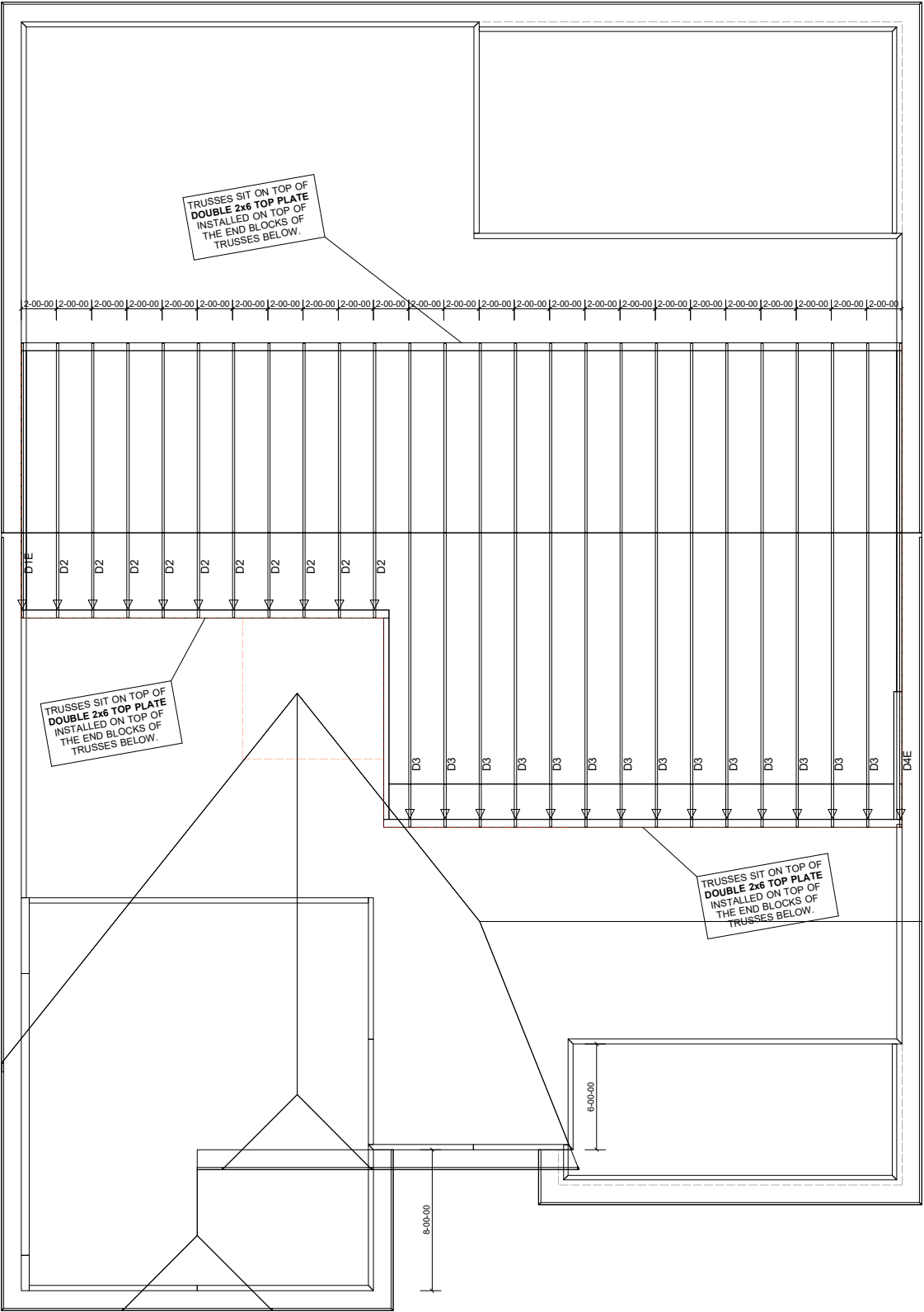
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DESIGNED DATE

5/20/2025



LOWER ROOF TRUSS PLACEMENT



UPPER ROOF TRUSS PLACEMENT

HANGER LIST		
FLOOR	LUS410	46
ROOF	LUS26	15

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Sheet # 1 of 1

Roof Truss
Placement Plan

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DESIGNED DATE

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