

# BENSON II

HARRINGTON PLACE  
LOT 65

PLAN ID 110122.0101



110 VILLAGE TRAIL SUITE 215  
WOODSTOCK, GA. 30188

DRAWING INDEX	
A0.0	COVER SHEET
A1.1	FRONT ELEVATIONS
A2.1	SIDE & REAR ELEVATIONS
A3.1	SLAB FOUNDATION
A5.1	FIRST FLOOR PLANS & DETAILS
A5.2	SECOND FLOOR PLANS & DETAILS
A6.1	ROOF PLANS
A7.2-A7.3	ELECTRICAL PLANS

AREA TABULATION	
FIRST FLOOR	726
SECOND FLOOR	1087
TOTAL	1813
GARAGE	408
FRONT PORCH (COVERED)	76
REAR PATIO	120

PLAN REVISIONS			
DATE	BY	REVISION	PAGE #
12/9/2022	AW	Prototype walk revisions - see revision sheet	A5.1, A5.2, A5.2.1, A7.2, A7.3, A7.3.1
9/21/2023	BB	Removed tub and shower sizes from all affected pages	A5.2, A5.2.1

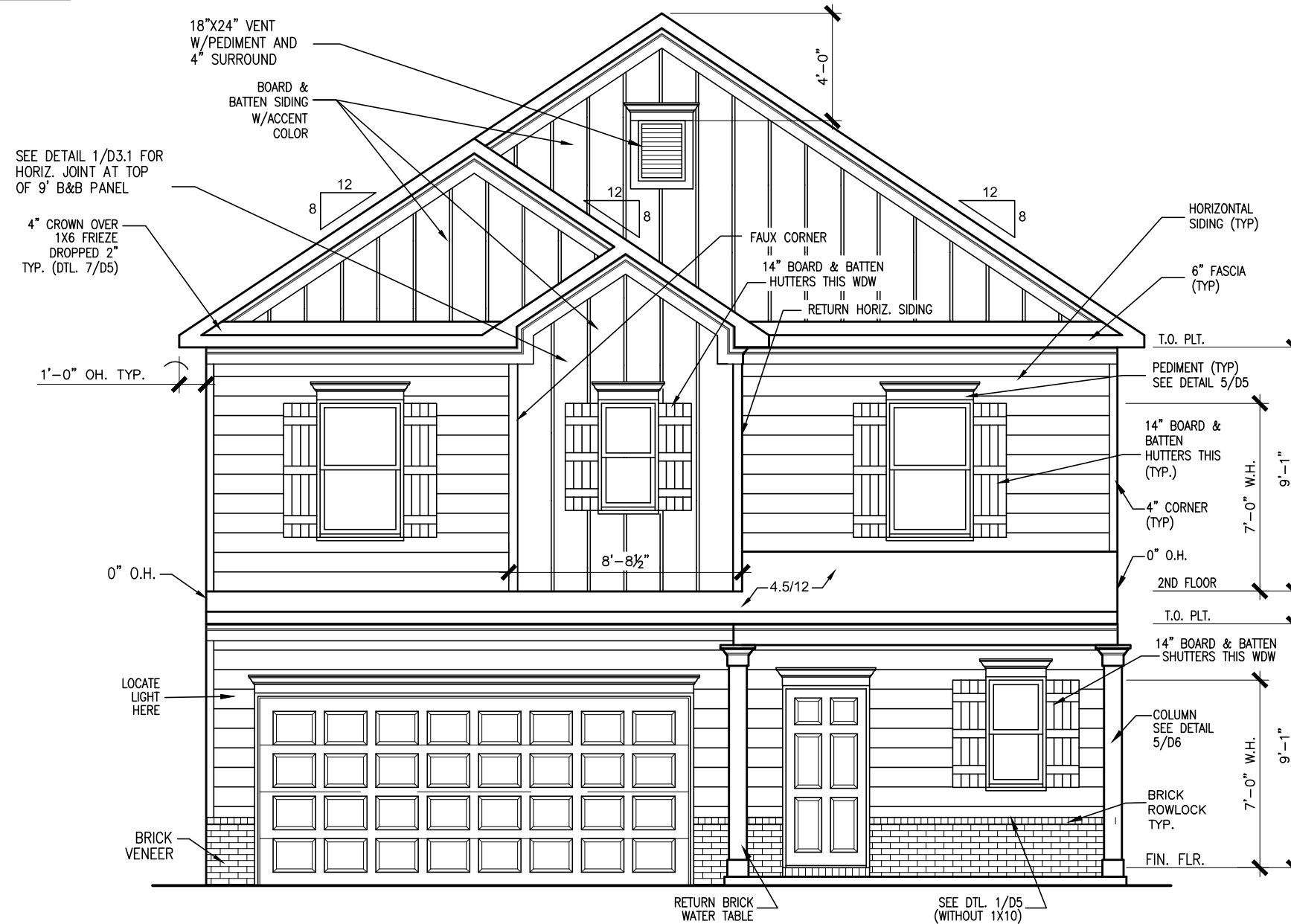
**GOVERNMENTAL CODES & STANDARDS**  
HOME TO BE BUILT TO CONFORM TO ALL APPLICABLE LOCAL CODES, PRACTICES AND STANDARDS

**BUILDING CODE ANALYSIS / DESIGN CRITERIA**  
HOME TO BE BUILT TO MEET OR EXCEED ALL LOCAL CODES AND DESIGN CRITERIA

ALL NON-MASONRY RETURNS TO BE HORIZONTAL SIDING

SEE SHEET D3 OF SDH TYPICAL DETAILS FOR SOFFIT DETAILS PER SOFFIT MATERIAL

# HARRINGTON PLACE LOT 65



FRONT ELEVATION "B"

SCALE: 3/16"=1'-0"

BY	REVISION	DATE
#	#	#
#	#	#
#	#	#
#	#	#
#	#	#



ELEVATIONS  
FRONT ELEVATION  
BENSON II

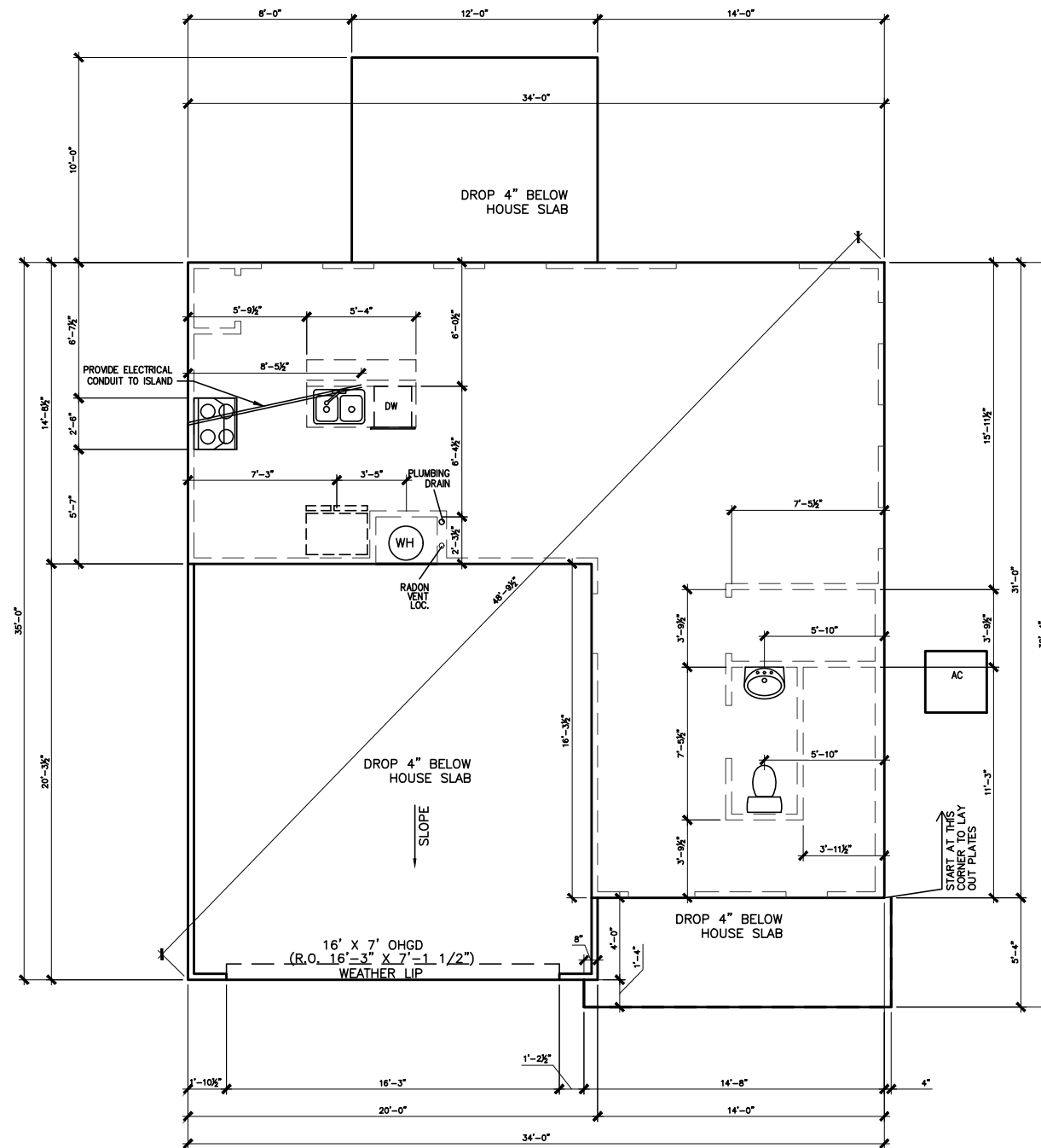
SMITH DOUGLAS HOMES  
110 VILLAGE TRAIL  
SUITE 115  
WOODSTOCK, GA 30188  
www.smithdouglas.com

SMITH DOUGLAS HOMES expressly reserves its property rights in these plans and drawings. These plans and related drawings are not to be reproduced without written consent from SMITH DOUGLAS HOMES.

BY: AAP	CH: AW
DATE: 11/13/2024	
FACADE OPT: B	
PLAN ID:	
FND: ALL	ELEV: B
PAGE NO: A1.1	



# HARRINGTON PLACE LOT 65



SLAB PLAN

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

\*RADON VENT PROVIDED PER LOCAL CODE

REFER TO DETAIL 3/D1 FOR BRICK LEDGE DETAIL WHEN BRICK VENEER IS CHOSEN

DATE	REVISION	BY
#	#	#
#	#	#
#	#	#
#	#	#
#	#	#



FOUNDATION PLAN  
SLAB PLAN  
BENSON II

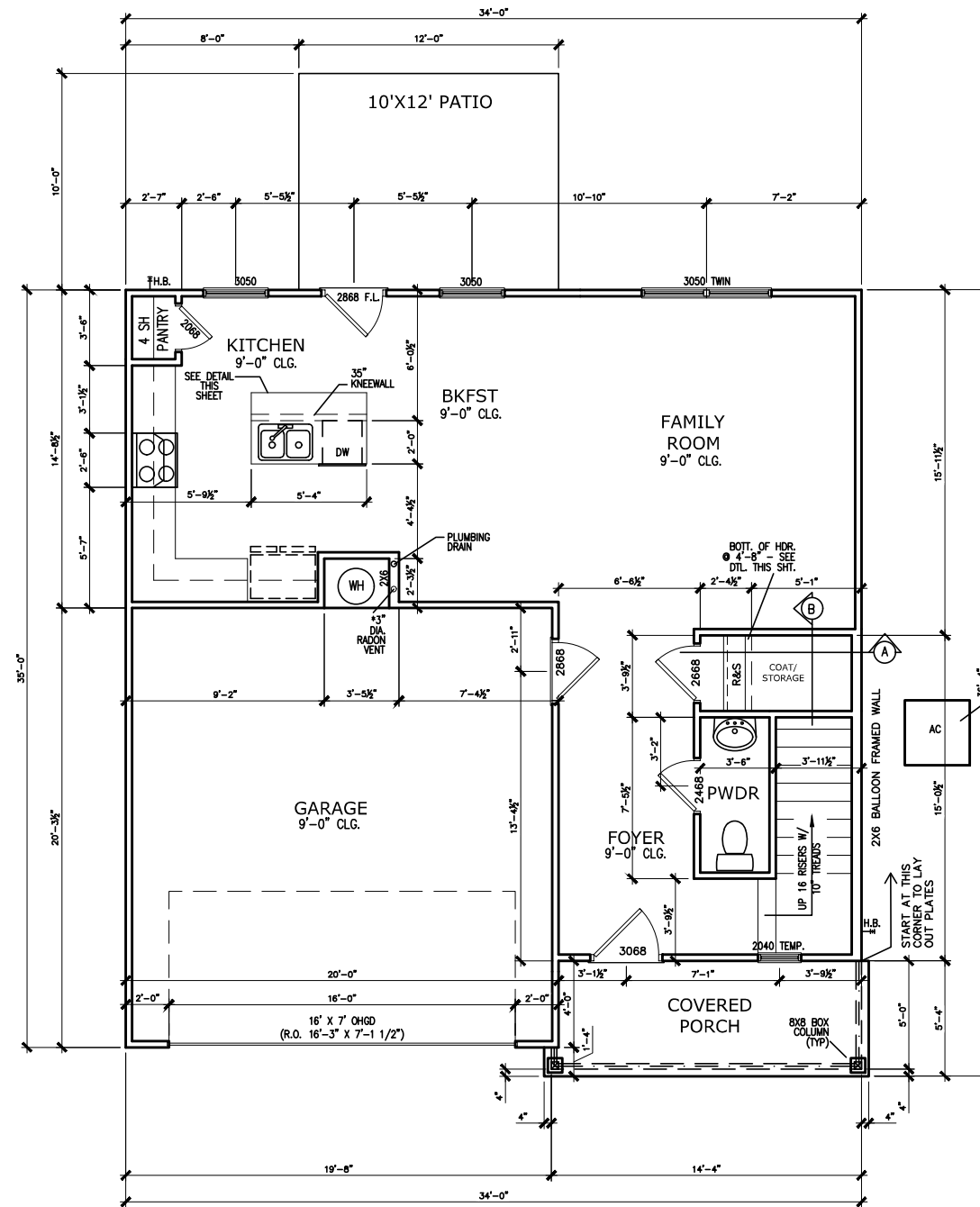
SMITH DOUGLAS HOMES  
110 VILLAGE TRAIL  
SUITE 115  
WOODSTOCK, GA 30188  
www.smithdouglas.com

SMITH DOUGLAS HOMES expressly reserves its property rights in these plans and drawings. These plans and related drawings are not to be reproduced without written consent from SMITH DOUGLAS HOMES.

BY: AAP	CH: AW
DATE: 11/13/2024	
FACADE OPT: B	
PLAN ID:	
FND: ALL	ELEV: B
PAGE NO: A3.1	

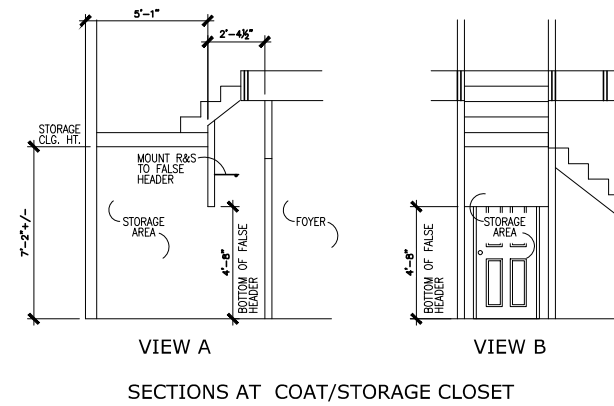
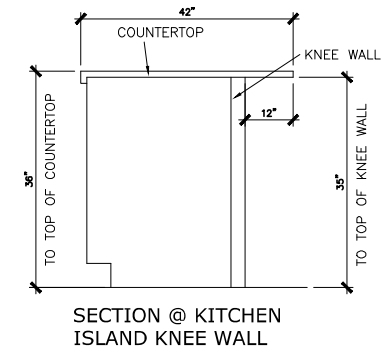


# HARRINGTON PLACE LOT 65



FIRST FLOOR PLAN

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



\*RADON VENT PROVIDED  
PER LOCAL CODE

BY	REVISION	DATE
#	#	#
#	#	#
#	#	#
#	#	#
#	#	#



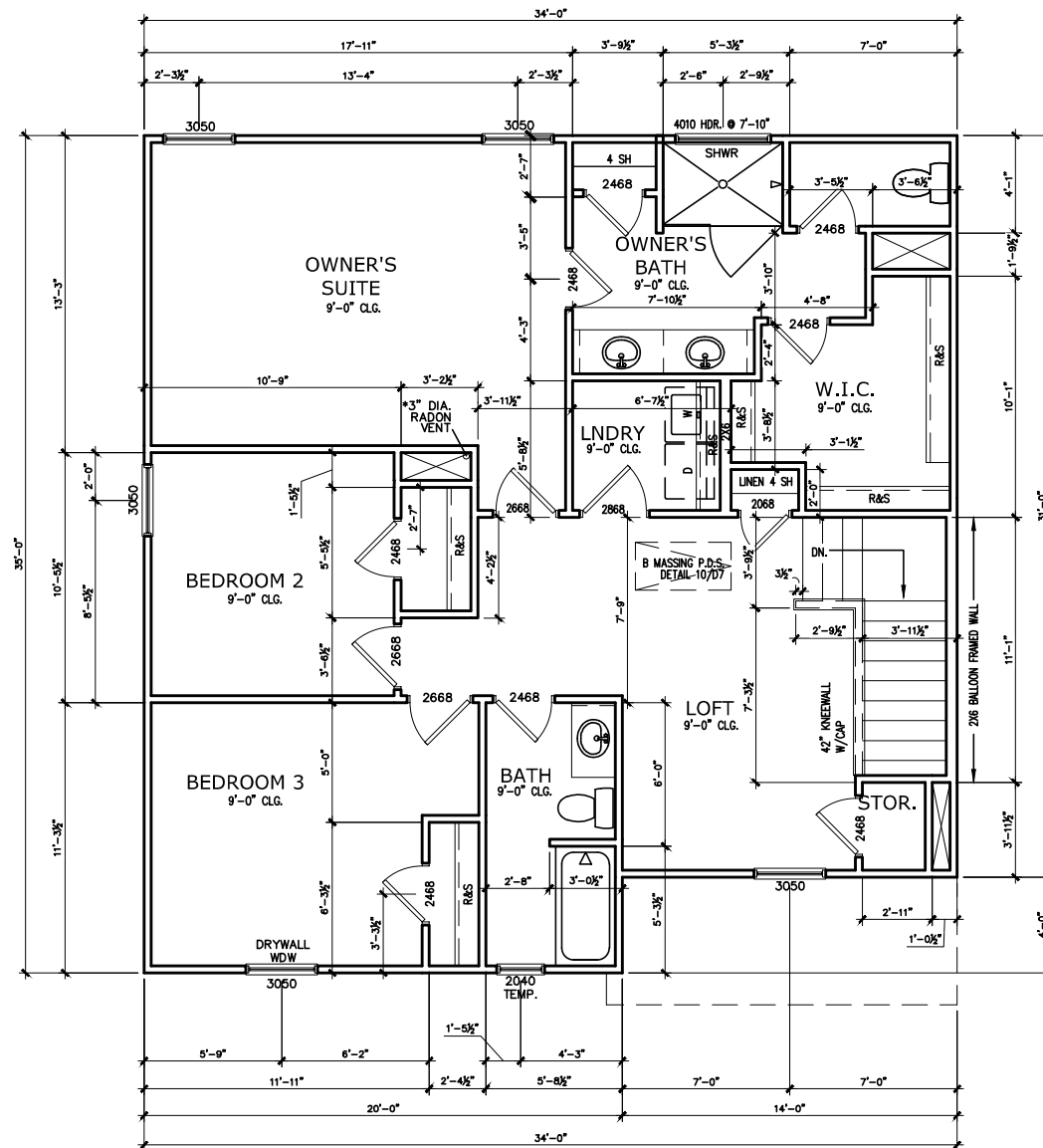
FLOOR PLAN  
FIRST FLOOR  
BENSON II

SMITH DOUGLAS HOMES  
110 VILLAGE TRAIL  
SUITE 115  
WOODSTOCK, GA 30188  
www.smithdouglas.com

SMITH DOUGLAS HOMES expressly reserves its property rights in these plans and drawings. These plans and related drawings are not to be reproduced without written consent from SMITH DOUGLAS HOMES.

BY: AAP	CH: AW
DATE: 11/13/2024	
FACADE OPT: B	
PLAN ID:	
FND: ALL	BLEV: B
PAGE NO: A5.1	

# HARRINGTON PLACE LOT 65



SECOND FLOOR PLAN

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

\*RADON VENT PROVIDED  
PER LOCAL CODE

REFER TO MANUFACTURER'S SPECS.  
FOR DRAIN LOCATIONS ON DETAIL  
SHEETS D12, D12.1, D12.2 & D12.3

DATE	REVISION	BY



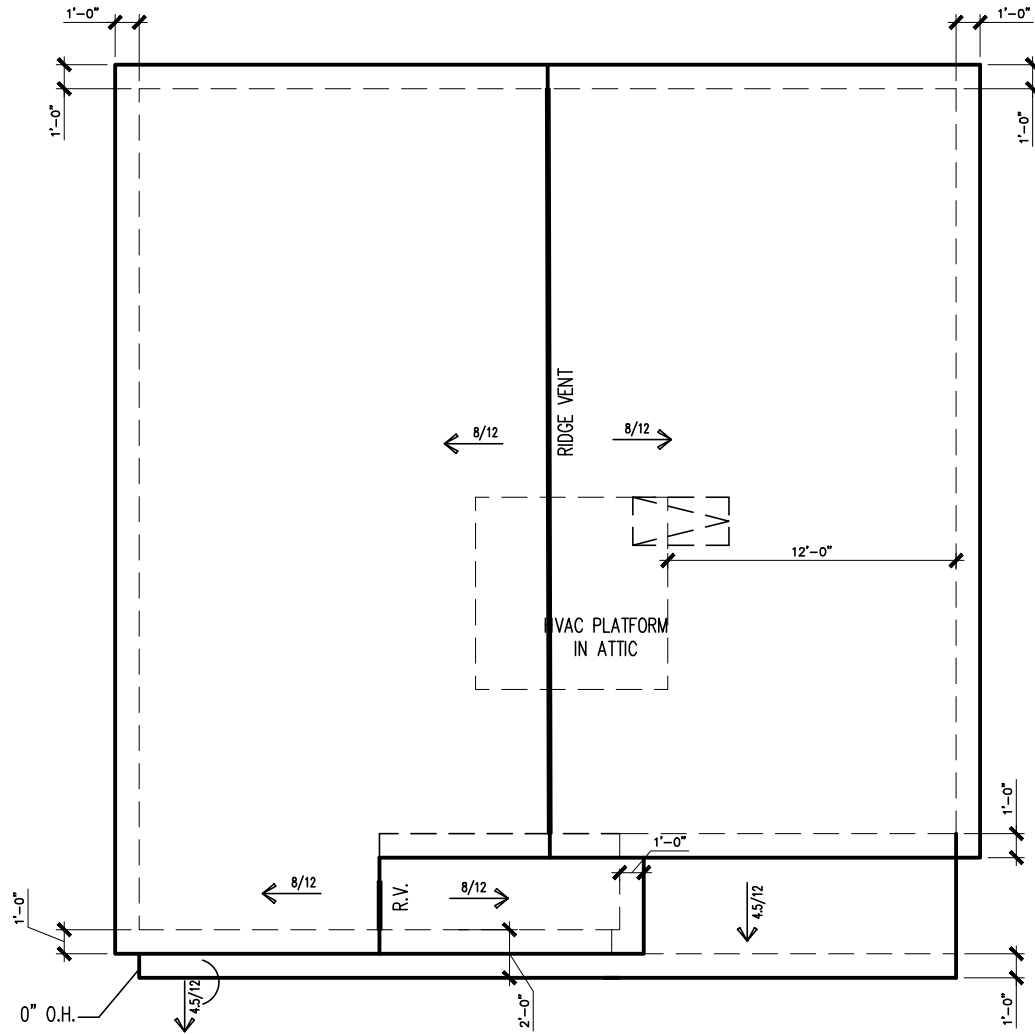
FLOOR PLAN  
SECOND FLOOR  
BENSON II

SMITH DOUGLAS HOMES  
110 VILLAGE TRAIL  
SUITE 115  
WOODSTOCK, GA 30188  
www.smithdouglas.com

SMITH DOUGLAS HOMES  
expressly reserves its  
property rights in these  
plans and drawings.  
These plans and related  
drawings are not to be  
reproduced without written  
consent from SMITH  
DOUGLAS HOMES.

BY: AAP	CH: AW
DATE: 11/13/2024	
FACADE OPT: B	
PLAN ID:	
FND: ALL	ELEV: B
PAGE NO: A5.2	

# HARRINGTON PLACE LOT 65



ROOF LAYOUT "B"

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

DATE	REVISION	BY
#	#	#
#	#	#
#	#	#
#	#	#
#	#	#



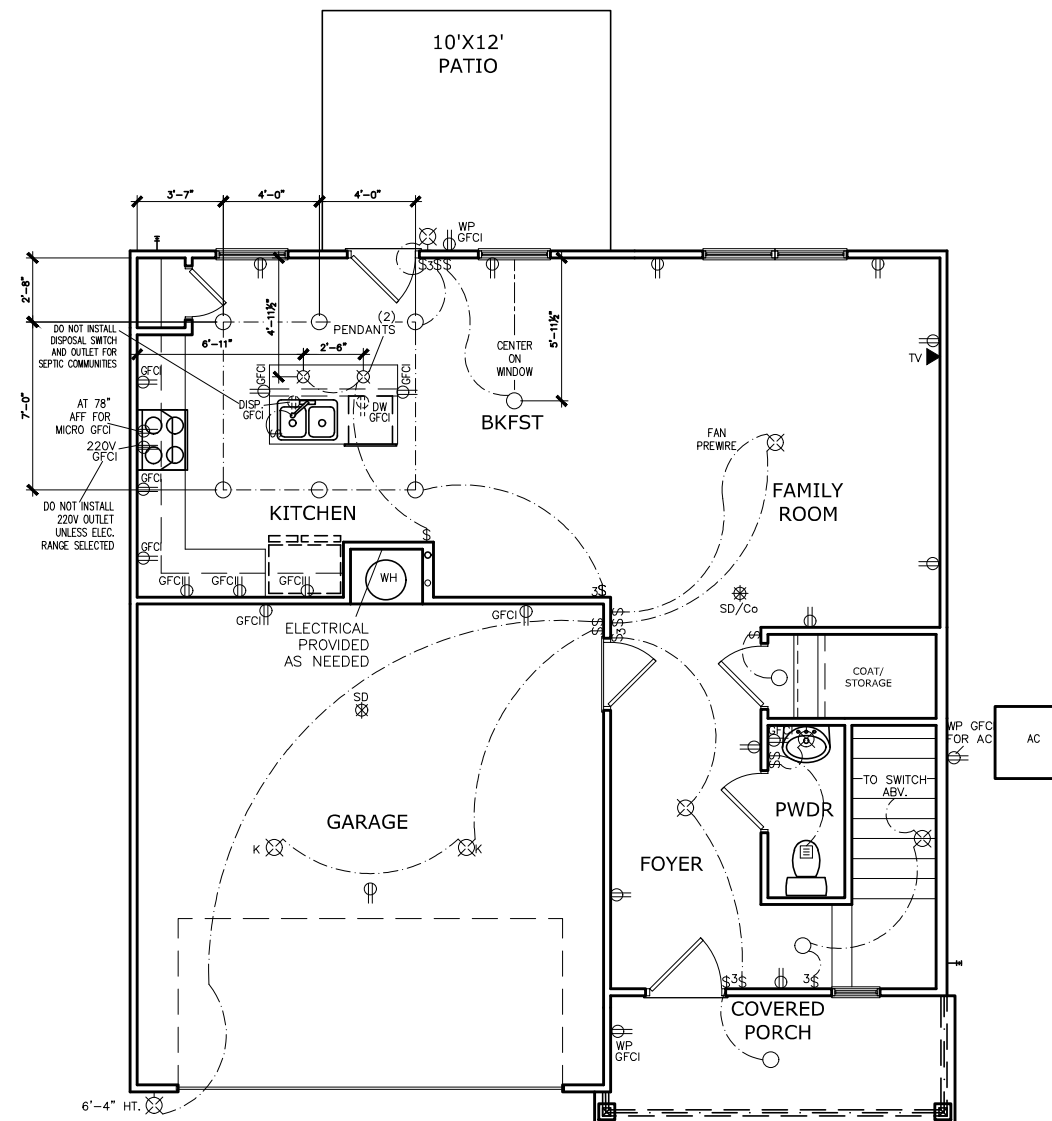
ROOF PLAN  
ROOF PLAN  
BENSON II

SMITH DOUGLAS HOMES  
110 VILLAGE TRAIL  
SUITE 115  
WOODSTOCK, GA 30188  
www.smithdouglas.com

SMITH DOUGLAS HOMES expressly reserves its property rights in these plans and drawings. These plans and related drawings are not to be reproduced without written consent from SMITH DOUGLAS HOMES.

BY: AAP	CH: AW
DATE: 11/13/2024	
FACADE OPT: B	
PLAN ID:	
FND: ALL	ELEV: B
PAGE NO: A6.1	

# HARRINGTON PLACE LOT 65



FIRST FLOOR ELECTRICAL PLAN

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

ELECTRICAL LEGEND			
\$	SWITCH	TV	TV
\$3	3 WAY SWITCH	⊕	120V RECEPTACLE
\$4	4 WAY SWITCH	⊕	120V SWITCHED RECEPTACLE
⊗	CEILING FIXTURE	⊕	220V RECEPTACLE
⊕	KEYLESS	⊕	GFCI OUTLET
⊗	WALL MOUNT FIXTURE	⊕	ARCH FAULT CIRCUIT INTERRUPTER
⊕	CEILING FIXTURE	†	GAS LINE
⊕	FLEX CONDUIT	†	WATER LINE
CH	CHIMES	⊥	HOSE BIBB
PH	TELEPHONE	⊕	FLOOD LIGHT
SD/Co	SMOKE DETECTOR & CARBON MONOXIDE	⊕	1x4 LUMINOUS FIXTURE
SO	SECURITY OUTLET	⊕	CEILING FAN
□	GARAGE DOOR OPENER	⊕	ELECTRICAL WIRING
⊕	EXHAUST FAN	⊕	CEILING FIXTURE
⊕	FAN/LIGHT		
ELECTRICAL PLANS TO FOLLOW ALL LOCAL CODES			
APPROX. FIXTURE HGTS (MEASURED FROM BOTTOM OF FIXTURE)			
BREAKFAST/DINING ROOM	63" ABOVE FINISHED FLOOR		
KITCHEN PENDANT LIGHTS	33" ABOVE COUNTER TOP		
TWO STORY FOYER FIXTURE	96" ABOVE FINISHED FLOOR		
CEILING FAN	96" ABOVE FINISHED FLOOR		
FLOOD LIGHT	10' MAX. ABOVE FIN. FLOOR		

NOTE: FINAL PLACEMENT OF PHONE/CABLE T.B.D. ON SITE BY THE BUILDER

BY	REVISION	#	#	#	#	#	#



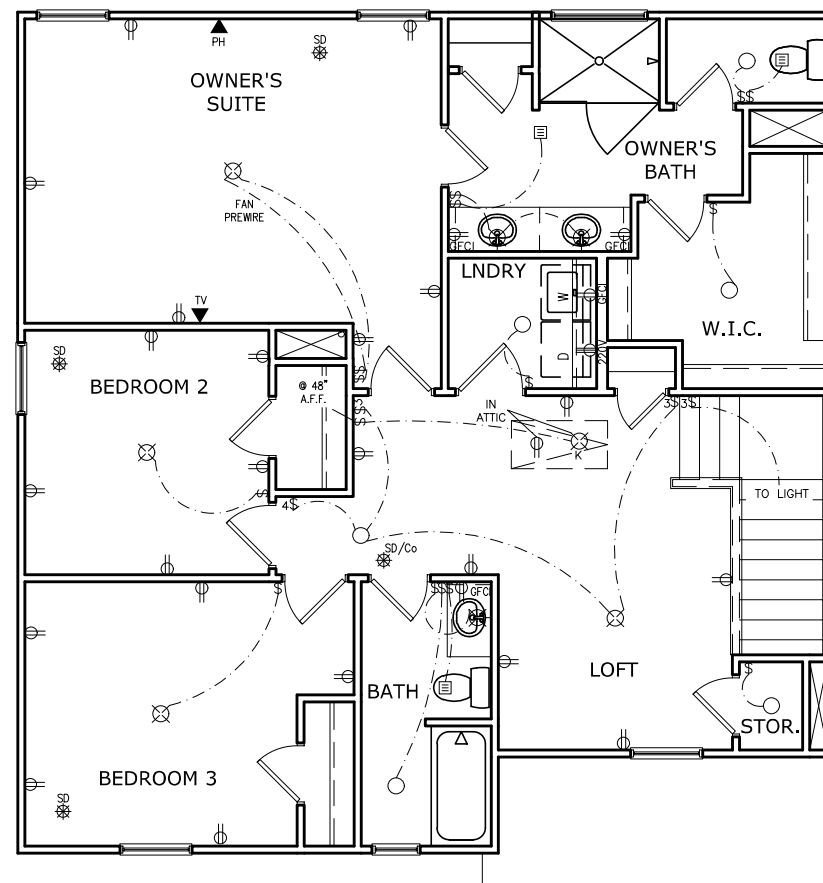
ELECTRICAL PLAN  
FIRST FLOOR  
BENSON II

SMITH DOUGLAS HOMES  
110 VILLAGE TRAIL  
SUITE 115  
WOODSTOCK, GA 30188  
www.smithdouglas.com

SMITH DOUGLAS HOMES expressly reserves its property rights in these plans and drawings. These plans and related drawings are not to be reproduced without written consent from SMITH DOUGLAS HOMES.

BY: AAP	CH: AW
DATE: 11/13/2024	
FACADE OPT: B	
PLAN ID:	
FND: ALL	ELEV: B
PAGE NO: A7.2	

# HARRINGTON PLACE LOT 65



SECOND FLOOR ELECTRICAL PLAN

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

ELECTRICAL LEGEND			
§	SWITCH	TV	TV
§3	3 WAY SWITCH	⊕	120V RECEPTACLE
§4	4 WAY SWITCH	⊕	120V SWITCHED RECEPTACLE
⊗	CEILING FIXTURE	⊕	220V RECEPTACLE
⊕	KEYLESS	⊕	GFCI OUTLET
⊕	WALL MOUNT FIXTURE	⊕	ARCH FAULT CIRCUIT INTERRUPTER
○	CEILING FIXTURE	†	GAS LINE
●	FLEX CONDUIT	†	WATER LINE
CH	CHIMES	⊥	HOSE BIBB
PH	TELEPHONE	⊕	FLOOD LIGHT
SD/Co	SMOKE DETECTOR & CARBON MONOXIDE	⊕	1x4 LUMINOUS FIXTURE
SO	SECURITY OUTLET	⊕	CEILING FAN
□	GARAGE DOOR OPENER	—	ELECTRICAL WIRING
⊕	EXHAUST FAN	⊕	CEILING FIXTURE
⊕	FAN/LIGHT		
ELECTRICAL PLANS TO FOLLOW ALL LOCAL CODES			
APPROX. FIXTURE HGTS (MEASURED FROM BOTTOM OF FIXTURE)			
BREAKFAST/DINING ROOM	63" ABOVE FINISHED FLOOR		
KITCHEN PENDANT LIGHTS	33" ABOVE COUNTER TOP		
TWO STORY FOYER FIXTURE	96" ABOVE FINISHED FLOOR		
CEILING FAN	96" ABOVE FINISHED FLOOR		
FLOOD LIGHT	10' MAX. ABOVE FIN. FLOOR		

NOTE: FINAL PLACEMENT OF PHONE/CABLE T.B.D. ON SITE BY THE BUILDER

DATE	REVISION	BY



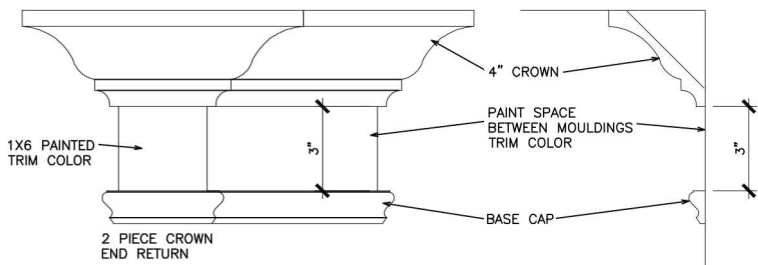
ELECTRICAL PLAN  
SECOND FLOOR  
BENSON II

SMITH DOUGLAS HOMES  
110 VILLAGE TRAIL  
SUITE 115  
WOODSTOCK, GA 30188  
www.smithdouglas.com

SMITH DOUGLAS HOMES expressly reserves its property rights in these plans and drawings. These plans and related drawings are not to be reproduced without written consent from SMITH DOUGLAS HOMES.

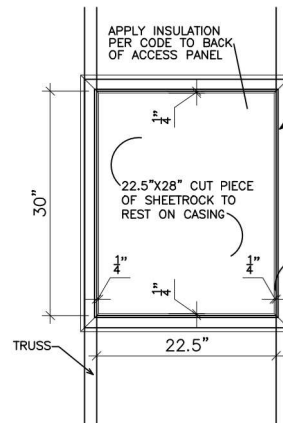
BY: AAP	CH: AW
DATE: 11/13/2024	
FACADE OPT: B	
PLAN ID:	
FND: ALL	BLV: B
PAGE NO: A7.3	

REFER TO LOT SPECIFIC PLAN TO DETERMINE WHICH DETAILS APPLY



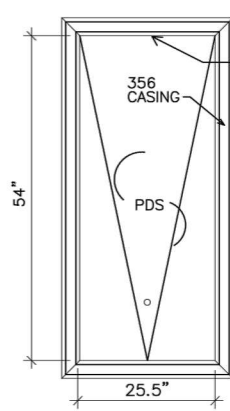
**TYPICAL TWO PIECE CROWN**

N.T.S.



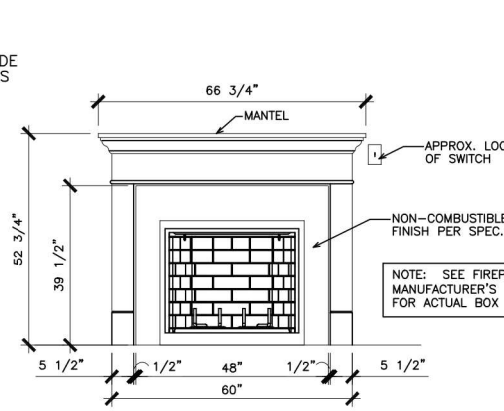
**SCUTTLE HOLE DETAIL**

N.T.S.



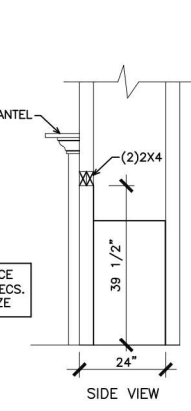
**PDS TRIM DETAIL**

N.T.S.



**GAS/ELECTRIC FIREPLACE DETAIL WITH WESCOTT WOOD MANTEL**

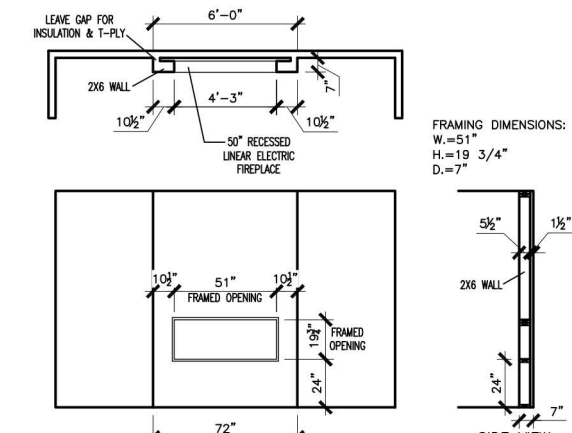
N.T.S.



NOTE: SEE FIREPLACE MANUFACTURER'S SPECS. FOR ACTUAL BOX SIZE

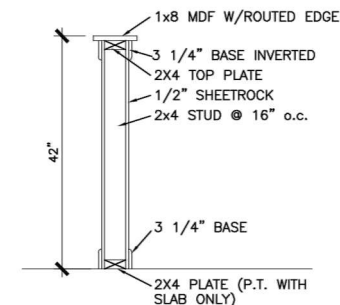
ELECTRIC FRAMING DIMENSIONS:  
W.=37"  
D.=24"  
H.=31 1/4"

GAS FRAMING DIMENSIONS:  
W.=37"  
D.=24"  
H.=34 3/4"



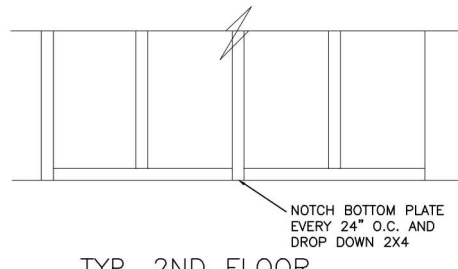
**LINEAR ELECTRIC FIREPLACE DETAIL**

N.T.S.



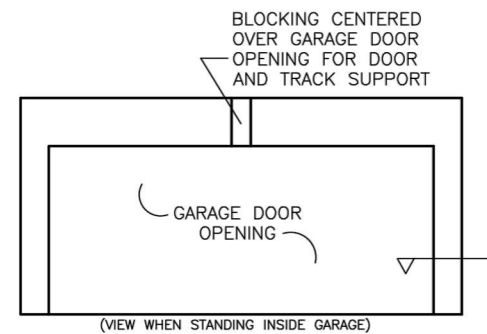
**TYP. KNEEWALL SECTION**

N.T.S.



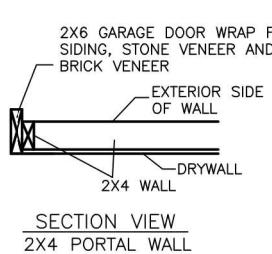
**TYP. 2ND FLOOR KNEEWALL STABILITY**

N.T.S.



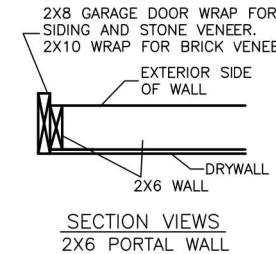
**TYP. GARAGE WRAP & BLOCKING**

N.T.S.



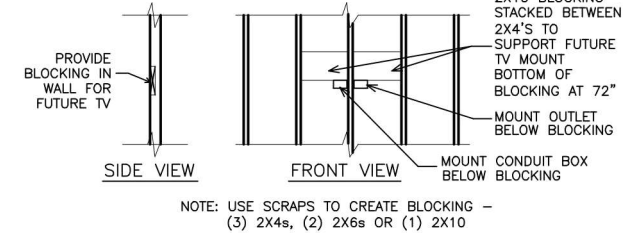
**SECTION VIEW 2X4 PORTAL WALL**

N.T.S.



**SECTION VIEWS 2X6 PORTAL WALL**

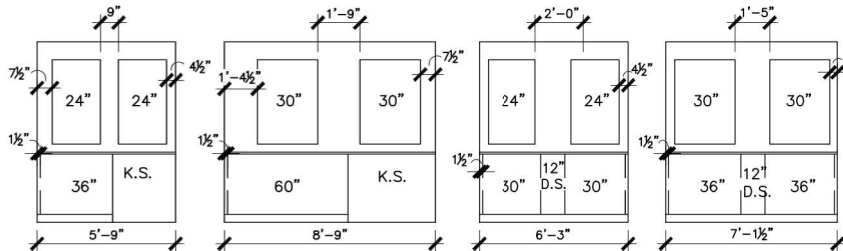
N.T.S.



**TYP. TV WALL PREP**

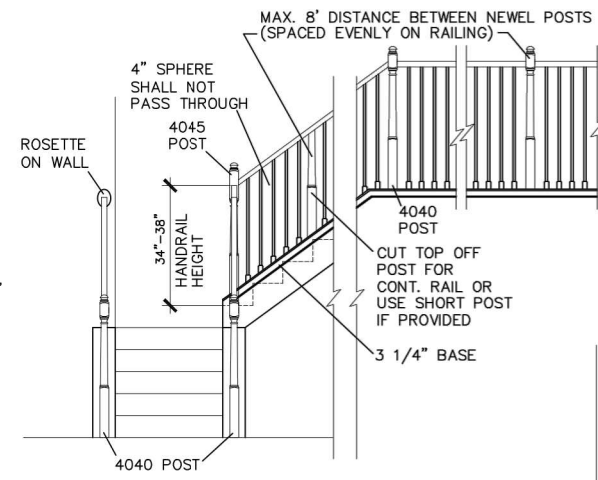
N.T.S.

- MIRRORS ARE TO BE CENTERED ON THE CABINET OR KNEESPACE BELOW.
- SPACE BETWEEN MIRROR AND WALL/CABINET END, MAY NOT MATCH ON EACH SIDE
- MIRRORS ARE LIMITED TO 2 SIZES: 24" & 30"
  - VANITIES 30" & SMALLER RECEIVE THE 24" WIDE MIRROR.
  - VANITIES 33" & LARGER RECEIVE THE 30" WIDE MIRROR.
  - HEIGHTS DO NOT CHANGE.
  - SEE P.O. FOR EXACT WIDTH.
- SEE THE BELOW EXAMPLE DRAWINGS. DIMENSIONS ARE APPROXIMATE.



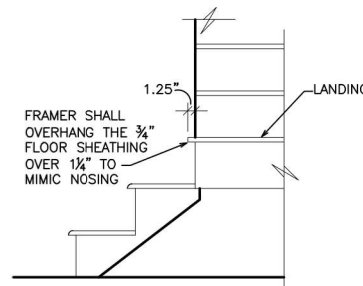
**TYPICAL SPLIT MIRROR SCENARIOS**

N.T.S.



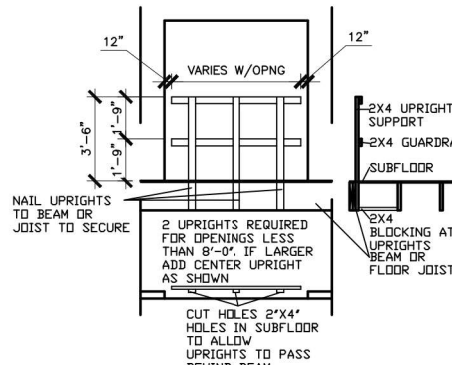
**HANDRAIL/POST DETAIL @ STAIRS**

N.T.S.



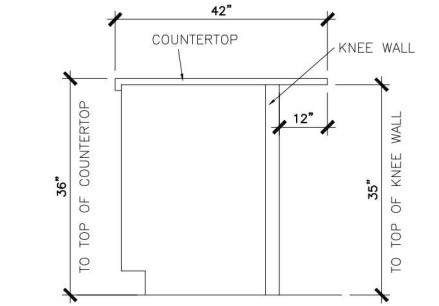
**BOX STEP OVERHANG**

N.T.S.



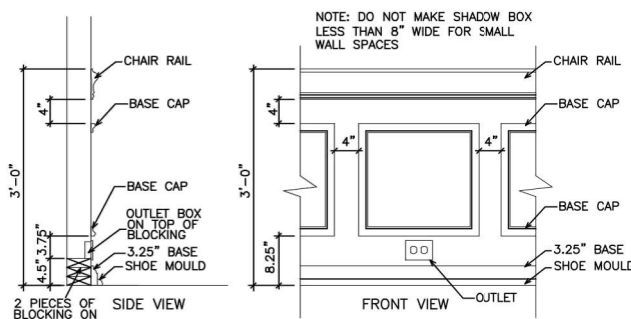
**GUARD RAIL DTL. AS REQ'D**

N.T.S.



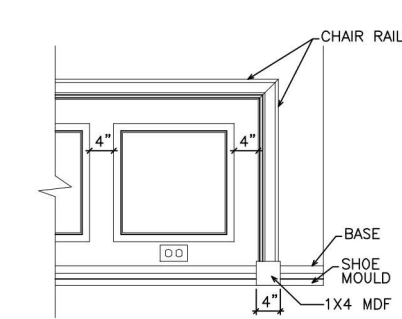
**SECTION @ ISLAND KNEEWALL**

N.T.S.



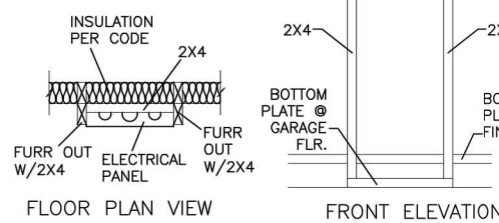
**TYPICAL CHAIR RAIL & SHADOW BOX DETAIL**

N.T.S.



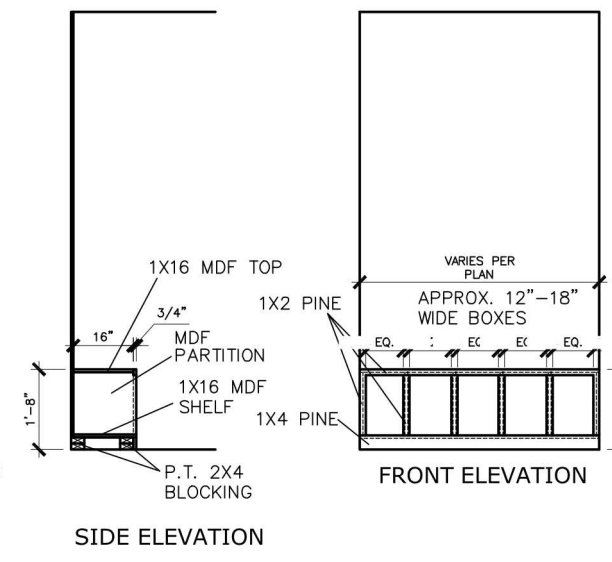
**CHAIR RAIL END TRIM DETAIL**

N.T.S.



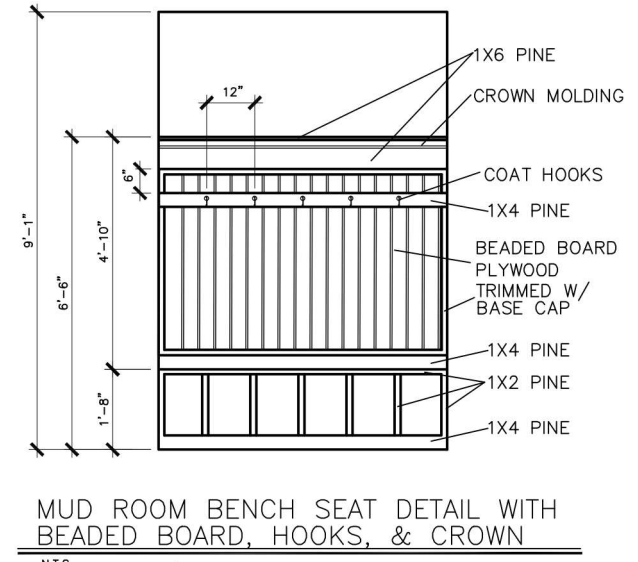
**ELECTRICAL PANEL DETAIL**

N.T.S.



**MUD ROOM BENCH SEAT DETAIL**

N.T.S.



**MUD ROOM BENCH SEAT DETAIL WITH BEADED BOARD, HOOKS, & CROWN**

N.T.S.

(IF TRIM CHOSEN WITHOUT BENCH CONTINUE TO FLOOR)

© SMITH DOUGLAS HOMES 2023

BY	REVISION	DATE

**SMITH DOUGLAS HOMES**  
QUALITY | INTEGRITY | VALUE

**INTERIOR TRIM DETAILS**

SMITH DOUGLAS HOMES  
110 VILLAGE TRAIL  
SUITE 215  
WOODSTOCK, GA 30188  
www.smithdouglas.com

SMITH DOUGLAS HOMES expressly reserves its property rights in these plans and drawings. These plans and related drawings are not to be reproduced without written consent from SMITH DOUGLAS HOMES.

BY:	CH:
DATE:	6/13/23
FAÇADE OPT:	
PLAN ID:	
FND:	ELEV:
PAGE NO:	D1.1





MULHERN+KULP RESIDENTIAL STRUCTURAL ENGINEERING 35025 Beaufort Parkway, Suite 105 - Albemarle, NC 28822 919-777-8974 - mulhern@mulhernkulp.com NC License # C-3825

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, DOUBLE STUD, TOP PLATE LAP @ CORNERS, etc.

\* 2 5/8"x0.113 IS AN ACCEPTABLE ALTERNATIVE TO A 3"x0.120", SAME SPACING OR NUMBER OF NAILS. (ONLY ACCEPTABLE WHERE \* ARE SHOWN)

ADDITIONAL NOTES FOR TRUSS & I-JOIST MANUFACTURER

ROOF TRUSS AND ENGINEERED JOISTS SHALL BE DESIGNED TO MEET THE DEFLECTION CRITERIA BELOW, UNLESS NOTED OTHERWISE ON PLAN. MULHERN & KULP CANNOT BE HELD RESPONSIBLE FOR ANY STRUCTURAL ISSUES RELATED TO ANY BUILDING COMPONENT IF COMPONENT SHOP DRAWINGS ARE NOT SUBMITTED TO MK FOR REVIEW PRIOR TO FABRICATION, DELIVERY, OR INSTALLATION.

VENEER LINTEL SCHEDULE

Table with 3 columns: SPAN (MAX), HEIGHT OF VENEER ABOVE LINTEL, STEEL ANGLE SIZE. Rows for spans 3'-0", 6'-0", 8'-0", 9'-6".

ALL LINTELS - SHALL SUPPORT 2 3/4" - 3 1/2" VENEER W/ 40 PSI MAXIMUM WEIGHT. < 18" SHALL HAVE 4" MIN. BEARING. < 30" SHALL HAVE 8" MIN. BEARING. < 48" SHALL NOT BE FASTENED BACK TO HEADER.

GENERAL STRUCTURAL NOTES

FOUNDATION

- DESIGN IS BASED ON 2018 NCBC-RESIDENTIAL CODE & 2018 IRC WITH SOUTH CAROLINA AMENDMENTS. FOOTING DESIGN - 2,000 PSF NET ALLOWABLE SOIL BEARING PRESSURE IS ASSUMED. BUILDER/CONTRACTOR MUST VERIFY. FASTEN 2x4/6 SILL PLATES TO CONC FND WITH A MINIMUM OF 2 ANCHORS PER PLATE, 12" MAX. FROM PLATE ENDS - UTILIZING: 1/2" DIA. ANCHOR BOLTS @ 6'-0" O.C., 7" MIN. EMBEDMENT. F44 ANCHOR STRAPS @ 6'-0" O.C.

LATERAL/WALL BRACING & WALL SHEATHING SPECIFICATIONS

THIS MODEL HAS BEEN DESIGNED TO RESIST LATERAL FORCES RESULTING FROM: 120MPH WIND IN 2018 NCBC-RC & 120MPH WIND SPEED IN ASCE 7 (120 MPH WIND SPEED IN ASCE 7 WIND MAP, PER IRC R301.2.1.1) EXP. B, RISK CAT. 2 & SEISMIC CAT. A/B.

THE DESIGN WAS COMPLETED PER 2015 & 2018 IBC (SECTION 1604) & ASCE 7, AS PERMITTED BY R301.1.3 OF THE 2018 NCBC-RC & 2018 IRC. ACCORDINGLY, THIS MODEL, AS DOCUMENTED AND DETAILED HEREWITHIN, IS ADEQUATE TO RESIST THE CODE REQUIRED LATERAL FORCES.

DESIGN WIND UPLIFT LOADS HAVE BEEN CALCULATED UTILIZING ASCE 7 (ACCEPTED ENGINEERING PRACTICE) AS ALLOWED PER 2018 NCBC-RC & 2018 IRC SECTION R802.1.1.1. THIS MODEL HAS BEEN DETAILED WHERE REQUIRED & ENGINEERED TO RESIST THE WIND UPLIFT LOAD PATH PER SECTIONS R602.3.5 & R802.1.1.

EXT. WALL SHEATHING SPECIFICATION

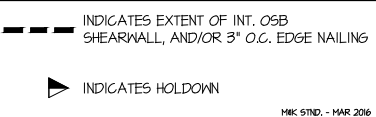
- 7/16" OSB OR 15/32" PLYWOOD: FASTEN SHEATHING W/ 2 3/8"x0.113 NAILS @ 6" O.C. AT EDGES & @ 12" O.C. IN THE PANEL FIELD. (TYP. U.N.O.) ALL SHEATHING PANELS SHALL BE ORIENTED VERTICALLY (LONG DIRECTION PARALLEL TO STUDS) AND INSTALLED FULL HEIGHT OF SHEAR WALL - OR - 2x HORIZONTAL BLOCKING SHALL BE PROVIDED TO SUPPORT ALL UNSUPPORTED PANEL EDGES & EDGE FASTENING.

3" O.C. EDGE NAILING

- AT DESIGNATED AREAS - FASTEN PANEL EDGES OF WOOD STRUCTURAL WALL SHEATHING TO FRAMING W/ 2 3/8" x 0.113" NAILS @ 3" O.C. AND 12" O.C. IN THE PANEL FIELD NO STAPLE ALTERNATIVE AVAILABLE AT THIS SPEC. ALL SHEATHING PANELS SHALL BE ORIENTED VERTICALLY (LONG DIRECTION PARALLEL TO STUD) AND INSTALLED FULL HEIGHT OF SHEAR WALL - OR - 2x HORIZONTAL BLOCKING SHALL BE PROVIDED TO SUPPORT UNSUPPORTED PANEL EDGES AND 3" O.C. EDGE FASTENING.

NOTES

- SEE CONNECTION SPECIFICATIONS CHART FOR STANDARD SHEAR TRANSFER DETAILING. IF ADDITIONAL CAPACITY IS REQUIRED BY DESIGN, IT WILL BE SPECIFICALLY NOTED ON PLAN. DESIGN ASSUMES 16" O.C. MAX. STUD SPACING, U.N.O. ALL STRUCTURAL PANELS ARE TO BE DIRECTLY APPLIED TO STUD FRAMING. PRE-MANUFACTURED PANELIZED WALLS: FASTEN TOGETHER END STUDS OF WALL PANELS SHEATHED W/ OSB OR PLYWOOD W/ 3" x 0.120" NAILS @ 4" O.C. (THRU ONE SIDE ONLY)



NON-BEARING HEADER SCHEDULE

Table with 3 columns: SPAN, 2x4 NON-BEARING PARTITION WALL, 2x6 NON-BEARING PARTITION WALL. Rows for spans 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.)

FLOOR FRAMING

- I-JOISTS SHALL BE DESIGNED BY MANUF. TO MEET OR EXCEED L/480 LIVE LOAD DEFLECTION CRITERIA. EXCLUDES STONE/MARBLE OR NET BED CONSTRUCTED FLOORS - CONTACT MK FOR EXCLUDED FLOOR DESIGNS. PER THE GUIDELINES OF THE TILE COUNCIL OF NORTH AMERICA (TCNA HANDBOOK), IT SHALL BE THE FLOOR FINISH INSTALLER'S RESPONSIBILITY TO VERIFY THAT THE FINISHES TO BE INSTALLED MATCH THE DESIGN CRITERIA NOTED ABOVE (UNDER 'DESIGN LOADS'). FLOOR SYSTEMS & SHEATHING HAVE BEEN DESIGNED TO SUPPORT ADDITIONAL DEAD LOAD FROM CERAMIC TILE (EXCLUDING MARBLE OR STONE). HOWEVER, IT SHALL BE THE FLOOR FINISH INSTALLER'S RESPONSIBILITY TO PROVIDE PROPER UNDERLAYMENT, UNCOUPLING MEMBRANE AND MORTAR/GROUT PER THE ASSEMBLY DESIGNATIONS IN THE TCNA HANDBOOK (TILE COUNCIL OF NORTH AMERICA).

ROOF FRAMING

- ROOF SHEATHING SHALL BE 7/16" A.P.A. RATED SHEATHING 24/16 EXPOSURE 1 (OR APPROVED EQUAL). FASTEN TO FRAMING MEMBERS - W/ 2 3/8" x 0.131" NAILS @ 6" O.C. PANEL EDGES & @ 12" O.C. FIELD. - W/ 2 3/8" x 0.120" NAILS @ 4" O.C. PANEL EDGES & @ 8" O.C. FIELD. - W/ 2 3/8" x 0.113" NAILS @ 3" O.C. PANEL EDGES & @ 6" O.C. FIELD. WITHIN 48" OF ALL ROOF EDGES, RIDGES, & HIPS FASTEN ROOF SHEATHING FIELDS PER EDGE NAILING SPEC. FASTEN EACH ROOF TRUSS TO TOP PLATE W/ USP RTIA CLIP (OR APPROVED EQUAL) @ ALL BEARING POINTS. PROVIDE (2) RTIA CLIPS AT 2-PLY GIRDER TRUSSES, (3) RTIA CLIPS AT 3-PLY GIRDER TRUSSES & ROOF BEAMS - AT ALL BEARING POINTS. METAL HANGERS SHALL BE SPECIFIED BY THE MANUFACTURER, U.N.O. ROOF TRUSS SHOP DWGS. SHALL BE SUBMITTED TO ARCH & ENG. FOR REVIEW AND APPROVAL PRIOR TO FABRICATION OR DELIVERY. ERECT AND INSTALL ROOF TRUSSES PER WTCA & TPI'S BC51 I "GUIDE TO GOOD PRACTICE FOR HANDLING, INSTALLING & BRACING OF METAL PLATE CONNECTED WOOD TRUSSES." SUPPORT SHORT SPAN ROOF TRUSSES W/ 2x4 LEDGER FASTENED TO FRAMING W/ (2) 3" x 0.120" NAILS @ 16" O.C. (UP TO 7' SPAN).

MEANS & METHODS NOTES

THE STRUCTURE IS DESIGNED TO BE SELF SUPPORTING AND STABLE AFTER THE BUILDING IS FINISHED AND ALL PLAN, DETAIL, AND NOTE SPECIFICATIONS HAVE BEEN COMPLETED. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE THE ERECTION PROCEDURES AND SEQUENCE TO INSURE THE SAFETY OF THE BUILDING AND ITS COMPONENTS DURING CONSTRUCTION. THIS INCLUDES, BUT IS NOT LIMITED TO, THE ADDITION OF NECESSARY SHORING, SHEETING, TEMPORARY BRACING, GUYS, AND TIE-DOWNS. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SHORING AND BRACING REQUIRED TO STABILIZE AND PROTECT EXISTING AND ADJACENT STRUCTURES AND SYSTEMS DURING COURSE OF DEMOLITION AND CONSTRUCTION OF THE PROJECT.

STRUCTURAL DESIGN AND SPECIFICATIONS ASSUME THAT ALL SUPPORTING AND NON-SUPPORTING ELEMENTS IN CONTACT WITH FLOOR FRAMING ARE LEVEL, INCLUDING, BUT NOT LIMITED TO; FOUNDATIONS, SLABS ON GRADE, BEAMS, WALLS, AND NON-BEARING ELEMENTS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY LEVELNESS AND MAKE ADJUSTMENTS AS NECESSARY, INCLUDING CONSIDERATION OF THOSE AREAS THAT MAY BE WITHIN CONTRACTUAL, INDUSTRY, OR WARRANTY TOLERANCES.

GENERAL STRUCTURAL NOTES

- DESIGN IS BASED ON 2018 NCBC-RESIDENTIAL CODE & 2018 IRC WITH SOUTH CAROLINA AMENDMENTS. WOOD FRAME ENGINEERING IS BASED ON NDS, "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION" - LATEST EDITION. DESIGN LOADS: ROOF LIVE = 20 PSF DEAD = 7 PSF T.C., 10 PSF B.C. LOAD DURATION FACTOR = 1.25 FLOOR LIVE = 40 PSF (30 PSF @ SLEEPING AREAS) DEAD = 10 PSF (1-JOISTS) ADD'L 10 PSF @ CERAMIC TILE IN BATHS & LAUND. SOIL 2,000 PSF ASSUMED ALLOWABLE BEARING PRESSURE (TO BE VERIFIED BY BUILDER)

GENERAL FRAMING

- ALL TYP. NAIL FASTENER REQUIREMENTS ARE NOTED IN STANDARD CONNECTIONS TABLE (IRC TABLE R602.3(1)) OR ON PLANS. ALL NAILS SPECIFIED ARE MIN DIAMETER AND LENGTH REQUIRED FOR CONNECTION. ALL HANGER NAILS SHALL BE INSTALLED PER MANUFACTURER'S REQUIREMENTS FOR MAX CHARTED CAPACITY. NOTE: HANGERS USE COMMON NAIL DIAMETERS NOT TYPICAL FRAMING GUN NAILS. EXT. & INT. BEARING WALLS SHALL BE 2x4 OR 2x6 (AS SHOWN ON PLANS) @ 16" O.C. SPF/SP 'STUD' GRADE LUMBER, OR BETTER, U.N.O. WALLS OVER 12' TALL SHALL BE PER PLAN. ALL INTERIOR BEARING WALLS ARE ASSUMED TO BE SHEATHED W/ GYP WALL BOARD (ONE SIDE MIN.) OR PROVIDE MID HT. BLOCKING. ALL HEADERS, BEAMS & OTHER STRUCTURAL MEMBERS SHALL BE SPRUCE-PINE-FIR #2 (SPF) OR SOUTHERN PINE #2 (SP) LUMBER, OR BETTER. SUPPORT ALL HEADERS/ BEAMS W/ (1) 2x JACK STUD & (1) 2x KING STUD, MINIMUM. - THE NUMBER OF STUDS SPECIFIED AT A SUPPORT INDICATES THE NUMBER OF JACK STUDS REQUIRED, U.N.O. ALL NON-BEARING INTERIOR STUD WALLS SHALL BE CONSTRUCTED WITH 2x 'STUD' GRADE MEMBERS SPACED @ 24" O.C. (MAX., U.N.O.) HEADERS IN NON-LOAD BEARING WALLS SHALL BE: (1) 2x4/6 FLAT @ OPENINGS UP TO 4', (2) 2x4/6 FLAT UP TO 8'. ALL FRAMING LUMBER SHALL BE DRIED TO 15% MC (KD-15). ENGINEERED LUMBER BEAMS TO MEET OR EXCEED THE FOLLOWING: 'LVL' - Fb=2600 psi; Fv=285 psi; E=2.0x10^6 psi ENGINEERED LUMBER POSTS TO MEET OR EXCEED THE FOLLOWING: 'LVL' - Fb=2400 psi; FcII=2500 psi; E=1.8x10^6 psi FOR 2 & 3 PLY BEAMS OF EQUAL 1 3/4" MAX. WIDTH, FASTEN PLIES TOGETHER WITH 3 ROWS OF 3"x0.120" NAILS @ 8" O.C. OR 2 ROWS USP W635 SCREWS (OR 3/8" TRUSSLOK SCREWS) @ 16" O.C. USE A MINIMUM OF 4 ROWS FOR BEAM DEPTHS OF 14" OR GREATER. APPLY FASTENING AT BOTH FACES FOR 3-PLY CONDITION. LOCATE TOP & BOTTOM NAILS/SCREWS 2" FROM EDGE. SOLID 3 1/2" OR 5 1/4" BEAMS ARE ACCEPTABLE. USE 2 ROWS OF NAILS FOR 2x6 & 2x8 MEMBERS. FOR 4 PLY BEAMS OF EQUAL 1 3/4" MAX. WIDTH, FASTEN PLIES TOGETHER WITH 3 ROWS OF USP W66 SCREWS (OR 6 3/4" TRUSSLOK SCREWS) @ 16" O.C. USE A MINIMUM OF 4 ROWS FOR BEAM DEPTHS OF 14" OR GREATER. APPLY FASTENING AT BOTH FACES (ONE SIDE ONLY FOR TRUSSLOK SCREWS). LOCATE TOP AND BOTTOM SCREWS 2" FROM EDGE. A SOLID 7" BEAM IS ACCEPTABLE. PROVIDE SOLID BLOCKING IN FLOOR SYSTEM UNDER ALL POSTS CONTINUOUS TO FND/BEARING. BLOCKING TO MATCH POST ABOVE. ALL EXTERIOR 4x4 WOOD POSTS SHALL HAVE USP BC522-4 CAP & PA44E BASE, U.N.O. CORROSION NOTES: BUILDER RESPONSIBLE TO DETERMINE CORROSION-RESISTANCE REQUIREMENTS AND COMPATIBILITY OF HARDWARE, FASTENERS AND CONNECTORS FOR ENVIRONMENTAL EXPOSURE AND IN CONTACT W/ PRESERVATIVE-TREATED WOOD OF ACTUAL FINAL CONDITIONS AND SOURCED MATERIALS. CONTACT LUMBER & HARDWARE SUPPLIERS TO COORD. ALL FASTENERS AND CONNECTORS EXPOSED TO SALT WATER (WITHIN 300' OF SALT WATER SHORELINE, INCLUDING VENTED SPACES) SHALL BE STAINLESS STEEL.

GENERAL STRUCTURAL NOTES BENSON II MODEL 120 MPH WIND ZONE NORTH CAROLINA

Harrington Lot 65

SO.0

Mulhern+Kulp project number:  
**256-22019**

project mgr: **SMK**  
 drawn by: **RAP**  
 issue date: **01.13.2023**

REVISIONS:

date:	initial:

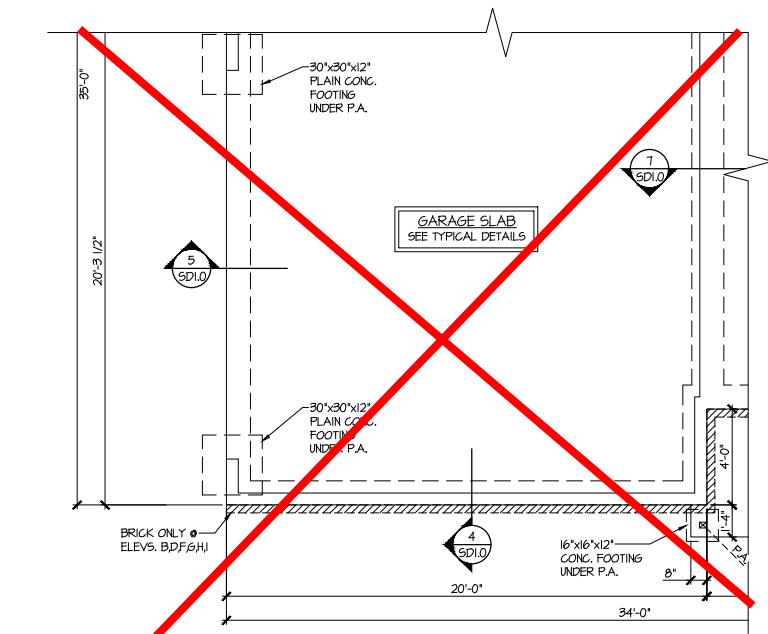
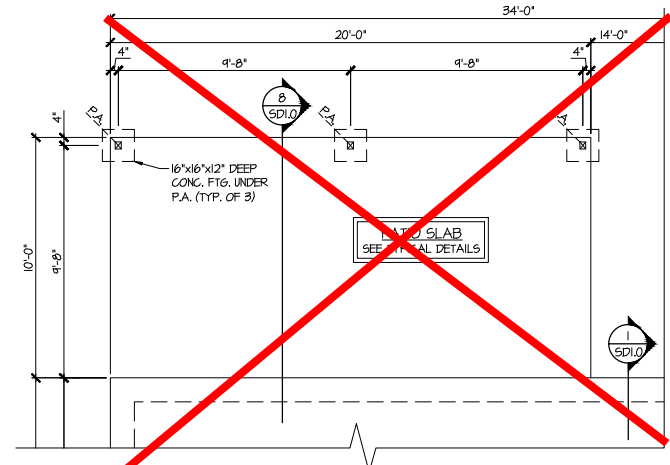
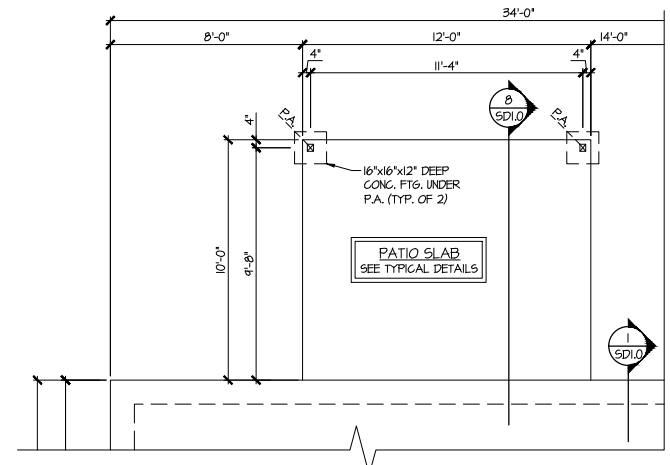
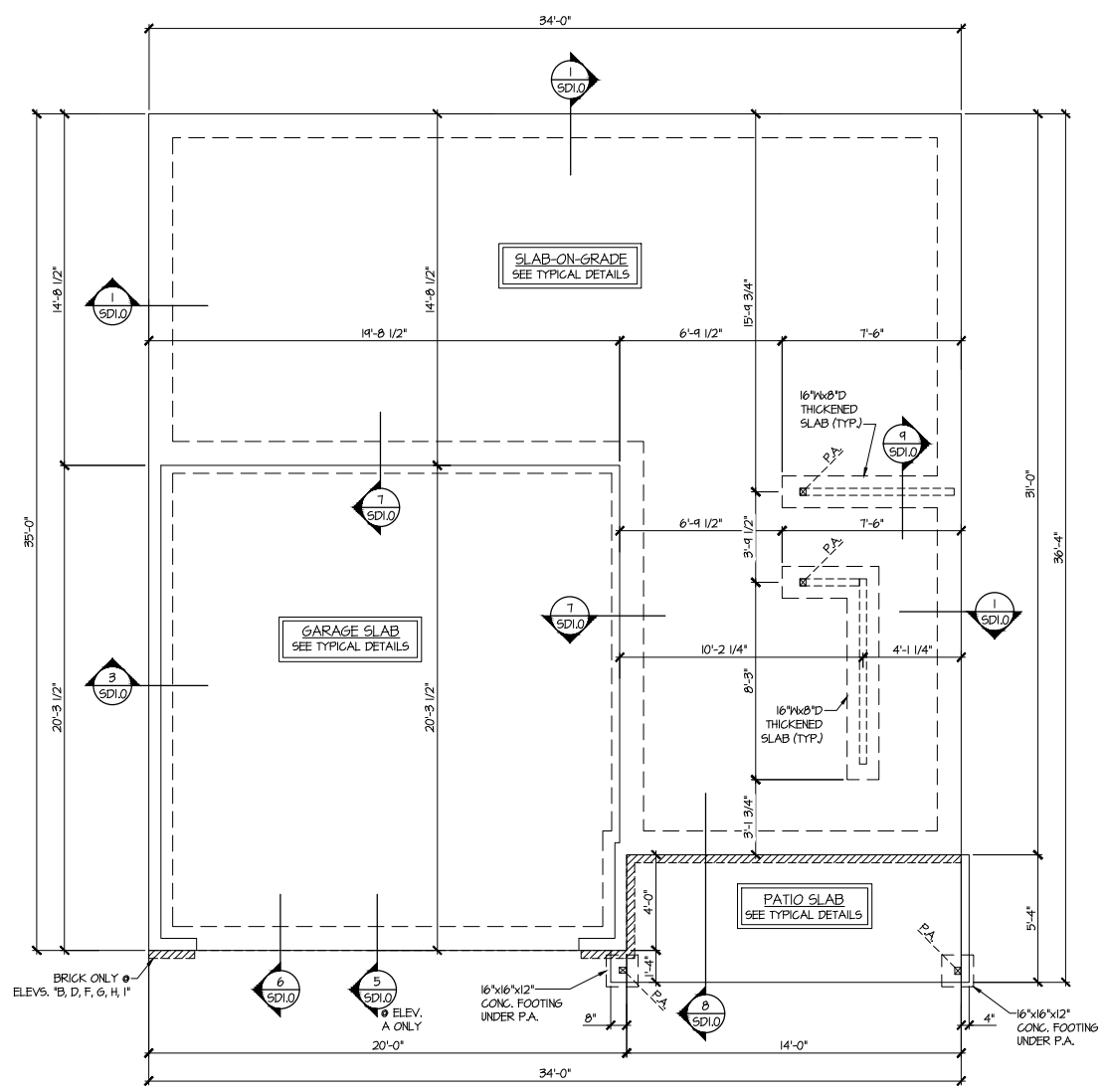
SMITH DOUGLAS  
 HOMES

**Harrington  
 Lot 65**

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

MONO-SLAB FOUNDATION  
 BENSON II MODEL  
 120 MPH WIND ZONE  
 NORTH CAROLINA

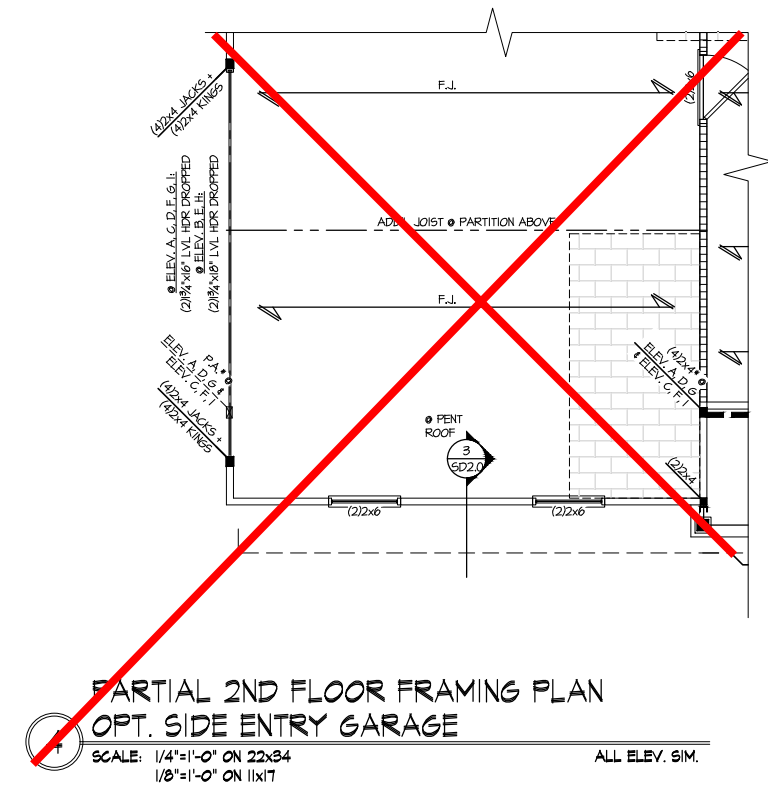
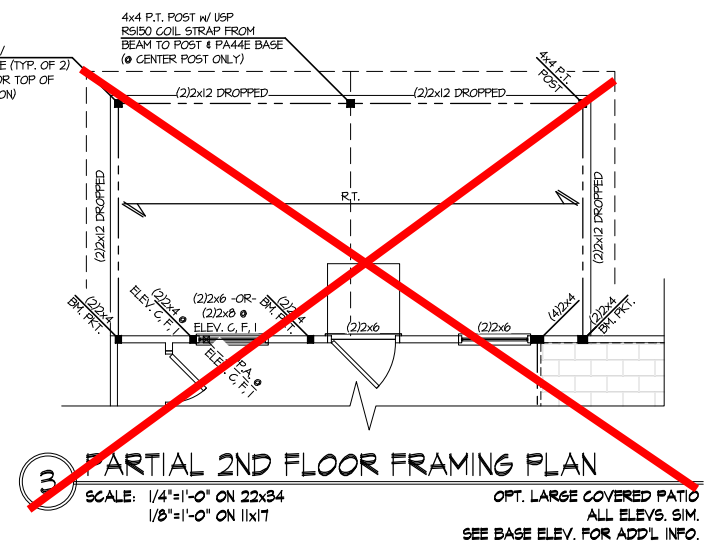
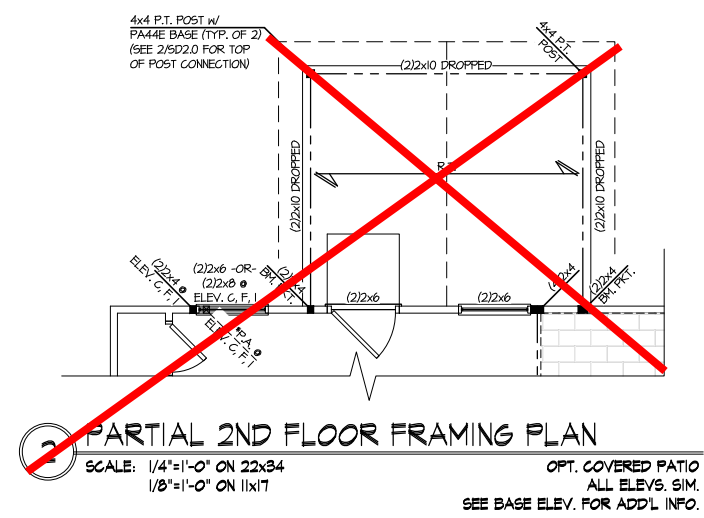
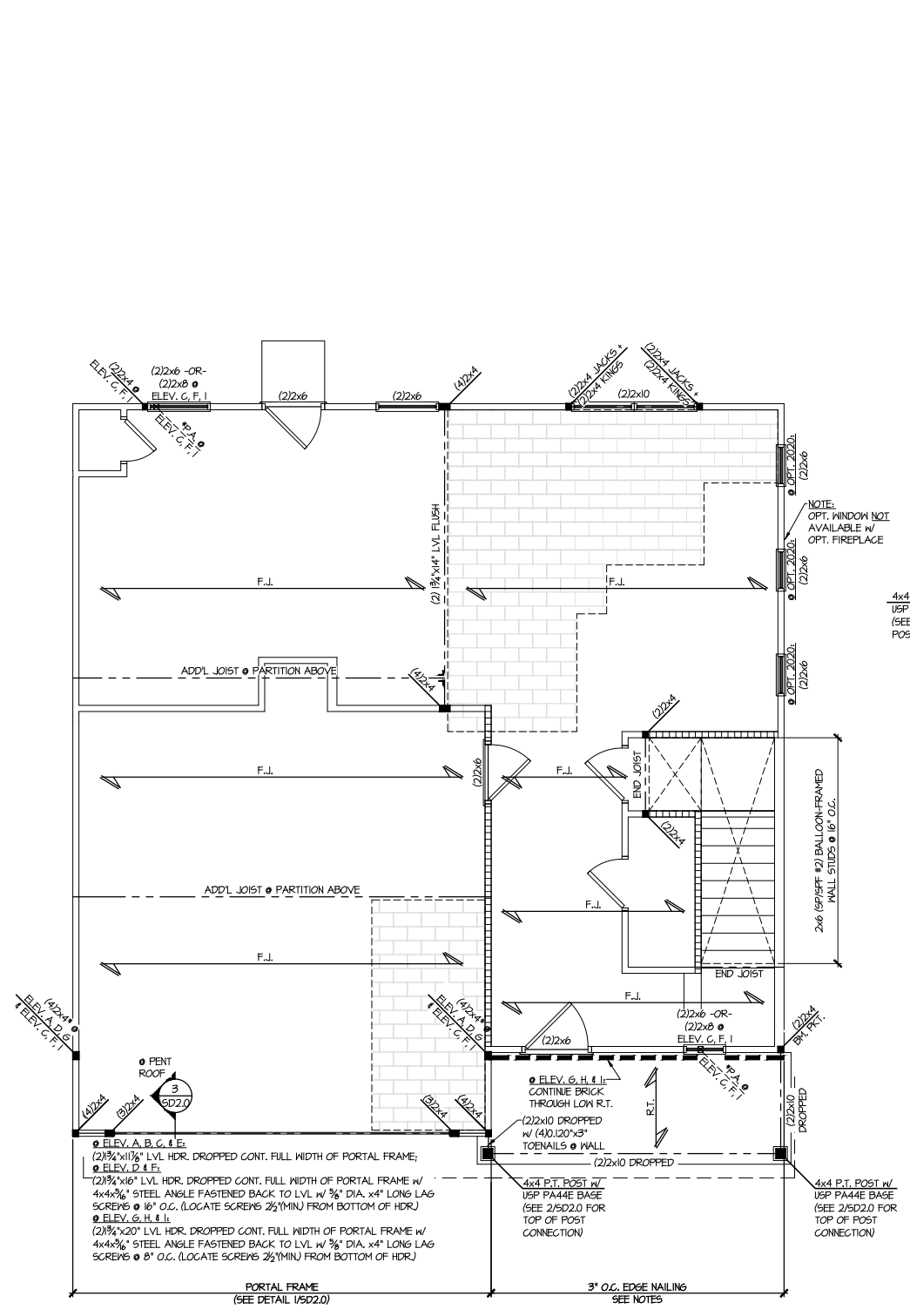
sheet:  
**S1.0M**



**LEGEND**

- R.T. INDICATES ROOF TRUSSES @ 24" O.C. PER ROOF. MANUF. (TYP. U.N.O.)
- O.F. INDICATES TRUSS OVERFRAMING @ 24" O.C. (TYP. U.N.O.)
- F.I. INDICATES 14" DEEP FLOOR I-JOISTS @ 24" O.C. MAX. JOIST SERIES AND SPACING SHALL BE THE RESPONSIBILITY OF THE MANUFACTURER. NOTE: 14" FLOOR TRUSSES @ 24" O.C. MAX. IS AN ACCEPTABLE ALTERNATE FLOOR SYSTEM.
- INDICATES LOCATIONS OF POTENTIAL TILE FLOOR. JOIST MANUFACTURER SHALL DESIGN FLOOR SYSTEM FOR ADD'L 10 PSF DEAD LOAD AT THESE LOCATIONS.
- INTERIOR BEARING WALL
- BEARING WALL ABOVE (B.W.A.)
- BEAM/HEADER
- JL METAL HANGER
- \* INDICATES POST ABOVE (P.A.) PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.





**Harrington Lot 65**

THIS LEVEL HAS BEEN DESIGNED FOR 9'-1" PLATE HEIGHT  
 REFER TO S.O.0 FOR TYPICAL STRUCTURAL NOTES & SCHEDULES

LEGEND	
R.T.	INDICATES ROOF TRUSSES @ 24" O.C. PER ROOF. MANUF. (TYP. UNO.)
O.F.	INDICATES TRUSS OVERFRAMING @ 24" O.C. (TYP. UNO.)
F.J.	INDICATES 14" DEEP FLOOR I-JOISTS @ 24" O.C. MAX. JOIST SERIES AND SPACING SHALL BE THE RESPONSIBILITY OF THE MANUFACTURER. NOTE: 14" FLOOR TRUSSES @ 24" O.C. MAX. IS AN ACCEPTABLE ALTERNATE FLOOR SYSTEM
	INDICATES LOCATIONS OF POTENTIAL TILE FLOOR. JOIST MANUFACTURER SHALL DESIGN FLOOR SYSTEM FOR ADD'L 10 PSF DEAD LOAD AT THESE LOCATIONS.
	INTERIOR BEARING WALL
	BEARING WALL ABOVE (B.W.A)
	BEAM/HEADER
	METAL HANGER
	INDICATES POST ABOVE (P.A.) PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.



**MULHERN+KULP**  
RESIDENTIAL STRUCTURAL ENGINEERING  
3825 Brevardville Parkway, Suite 105 - Alamogordo, NC 28522  
919-777-8974 - mulhern+kulp.com  
NC License # C-3825

Mulhern+Kulp project number:  
**256-22019**  
project mgr: **SMK**  
drawn by: **RAP**  
issue date: **01.13.2023**  
REVISIONS:  
date: \_\_\_\_\_ initial: \_\_\_\_\_

**SMITH DOUGLAS  
HOMES**

**1ST FLOOR WALL BRACING PLAN**  
**BENSON II MODEL**  
120 MPH WIND ZONE  
NORTH CAROLINA

sheet:  
**S2.0LM**

**LATERAL/WALL BRACING & WALL SHEATHING SPECIFICATIONS**

THIS MODEL HAS BEEN DESIGNED TO RESIST LATERAL FORCES RESULTING FROM:  
**120MPH WIND IN 2018 NC SBC:RC & 120MPH WIND IN 2018 IRC**  
(120 MPH WIND SPEED IN ASCE 7 WIND MAP, PER IRC R301.2.1.1) EXP. B, RISK CAT. 2 & SEISMIC CAT. A/B.

THE DESIGN WAS COMPLETED PER 2015 & 2018 IBC (SECTION 1609) & ASCE 7, AS PERMITTED BY R301.1.3 OF THE 2018 NC SBC:RC & 2018 IRC. ACCORDINGLY, THIS MODEL, AS DOCUMENTED AND DETAILED HEREWITHIN, IS ADEQUATE TO RESIST THE CODE REQUIRED LATERAL FORCES.

DESIGN WIND UPLIFT LOADS HAVE BEEN CALCULATED UTILIZING ASCE 7 (ACCEPTED ENGINEERING PRACTICE) AS ALLOWED PER 2018 NC SBC:RC & 2018 IRC SECTION R602.1.1.1. THIS MODEL HAS BEEN DETAILED WHERE REQUIRED & ENGINEERED TO RESIST THE WIND UPLIFT LOAD PATH PER SECTIONS R602.3.54 R602.11.

**EXT. WALL SHEATHING SPECIFICATION**

- 1/16" OSB OR 15/32" PLYWOOD:  
FASTEN SHEATHING w/ 2 3/8"x0.113 NAILS @ 6" O.C. AT EDGES & @ 12" O.C. IN THE PANEL FIELD. (TYP. UNO.)
- ALL SHEATHING PANELS SHALL BE ORIENTED VERTICALLY (LONG DIRECTION PARALLEL TO STUDS) AND INSTALLED FULL HEIGHT OF SHEAR WALL - OR - 2x HORIZONTAL BLOCKING SHALL BE PROVIDED TO SUPPORT ALL UNSUPPORTED PANEL EDGES & EDGE FASTENING.
- ALL EXT. WALLS SHALL BE CONTINUOUSLY SHEATHED AND ARE CONSIDERED SHEAR WALLS.
- ALT. STAPLE CONNECTION SPEC: 1 3/4" 16 GA STAPLES (1/16" CROWN) @ 3" O.C. AT EDGES & @ 6" O.C. IN FIELD.

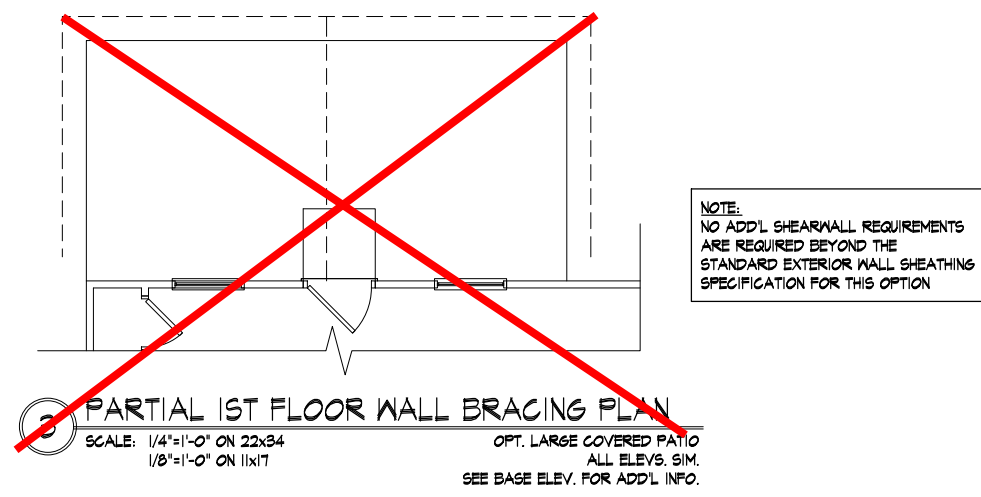
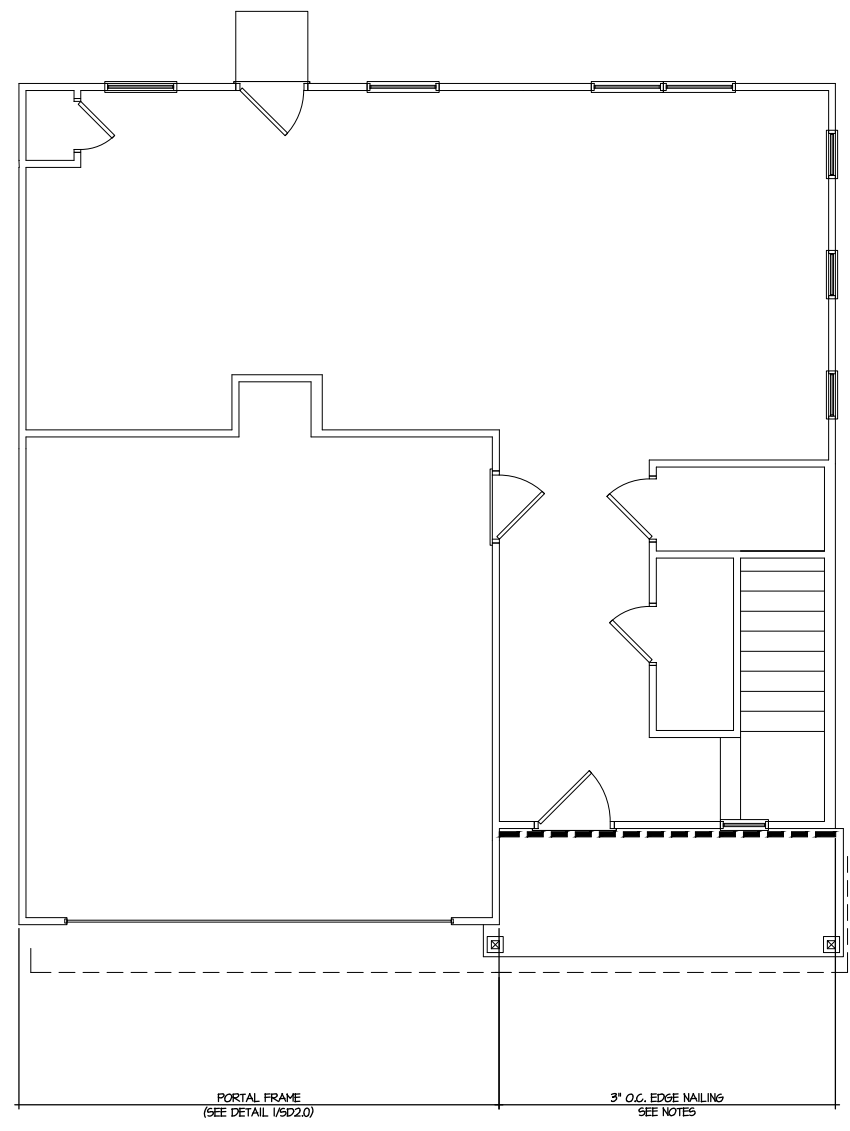
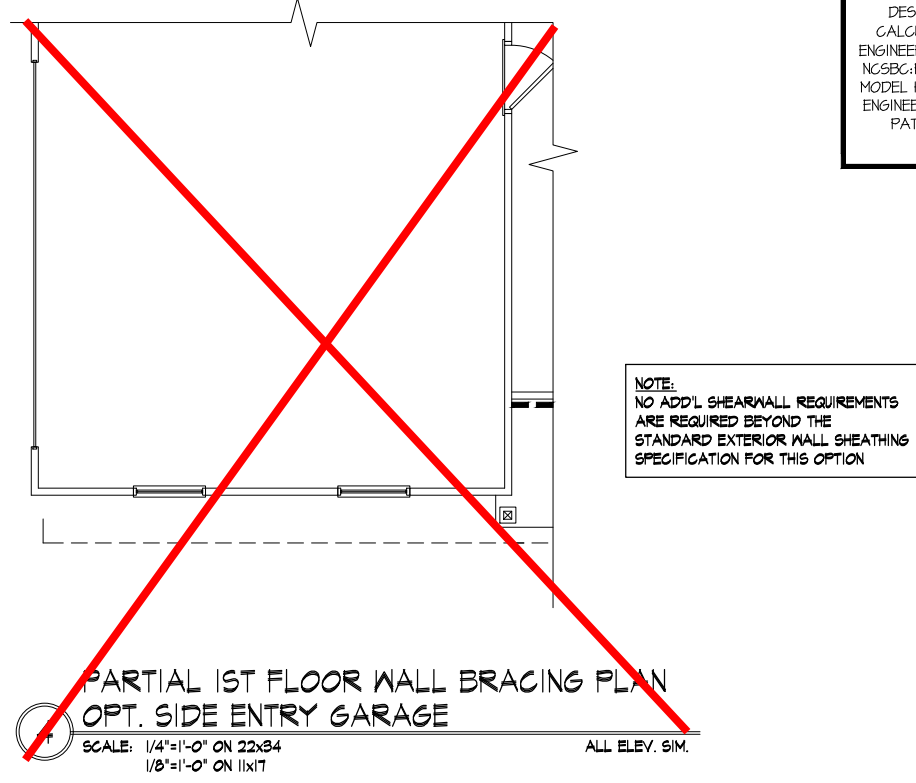
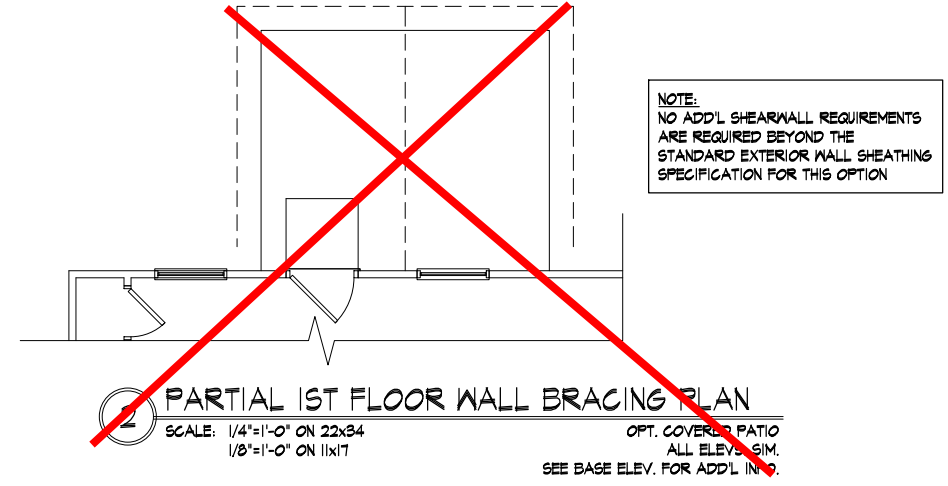
**3" O.C. EDGE NAILING**

- AT DESIGNATED AREAS - FASTEN PANEL EDGES OF WOOD STRUCTURAL WALL SHEATHING TO FRAMING w/ 2 3/8" x 0.113" NAILS @ 3" O.C. AND 12" O.C. IN THE PANEL FIELD. NO STAPLE ALTERNATIVE AVAILABLE AT THIS SPEC. ALL SHEATHING PANELS SHALL BE ORIENTED VERTICALLY (LONG DIRECTION PARALLEL TO STUD) AND INSTALLED FULL HEIGHT OF SHEAR WALL - OR - 2x HORIZONTAL BLOCKING SHALL BE PROVIDED TO SUPPORT UNSUPPORTED PANEL EDGES AND 3" O.C. EDGE FASTENING.

**NOTES**

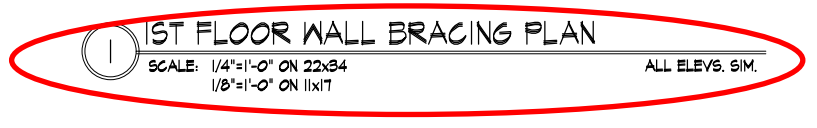
- SEE CONNECTION SPECIFICATIONS CHART FOR STANDARD SHEAR TRANSFER DETAILING. IF ADDITIONAL CAPACITY IS REQUIRED BY DESIGN, IT WILL BE SPECIFICALLY NOTED ON PLAN.
- DESIGN ASSUMES 16" O.C. MAX. STUD SPACING, UNO.
- ALL STRUCTURAL PANELS ARE TO BE DIRECTLY APPLIED TO STUD FRAMING.
- PRE-MANUFACTURED PANELIZED WALLS: FASTEN TOGETHER END STUDS OF WALL PANELS SHEATHED w/ OSB OR PLYWOOD w/ 3" x 0.120" NAILS @ 4" O.C. (THRU ONE SIDE ONLY)

--- INDICATES EXTENT OF INT. OSB SHEARWALL, AND/OR 3" O.C. EDGE NAILING  
▶ INDICATES HOLDDOWN



**LEGEND**

- R.T. INDICATES ROOF TRUSSES @ 24" O.C. PER ROOF. MANUF. (TYP. UNO.)
- O.F. INDICATES TRUSS OVERFRAMING @ 24" O.C. (TYP. UNO.)
- F.L. INDICATES 14" DEEP FLOOR I-JOISTS @ 24" O.C. MAX. JOIST SERIES AND SPACING SHALL BE THE RESPONSIBILITY OF THE MANUFACTURER. NOTE: 14" FLOOR TRUSSES @ 24" O.C. MAX. IS AN ACCEPTABLE ALTERNATE FLOOR SYSTEM
- INDICATES LOCATIONS OF POTENTIAL TILE FLOOR. JOIST MANUFACTURER SHALL DESIGN FLOOR SYSTEM FOR ADD'L 10 PSF DEAD LOAD AT THESE LOCATIONS.
- INTERIOR BEARING WALL
- BEARING WALL ABOVE (B.W.A.)
- BEAM/HEADER
- METAL HANGER
- INDICATES POST ABOVE (P.A.) PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.

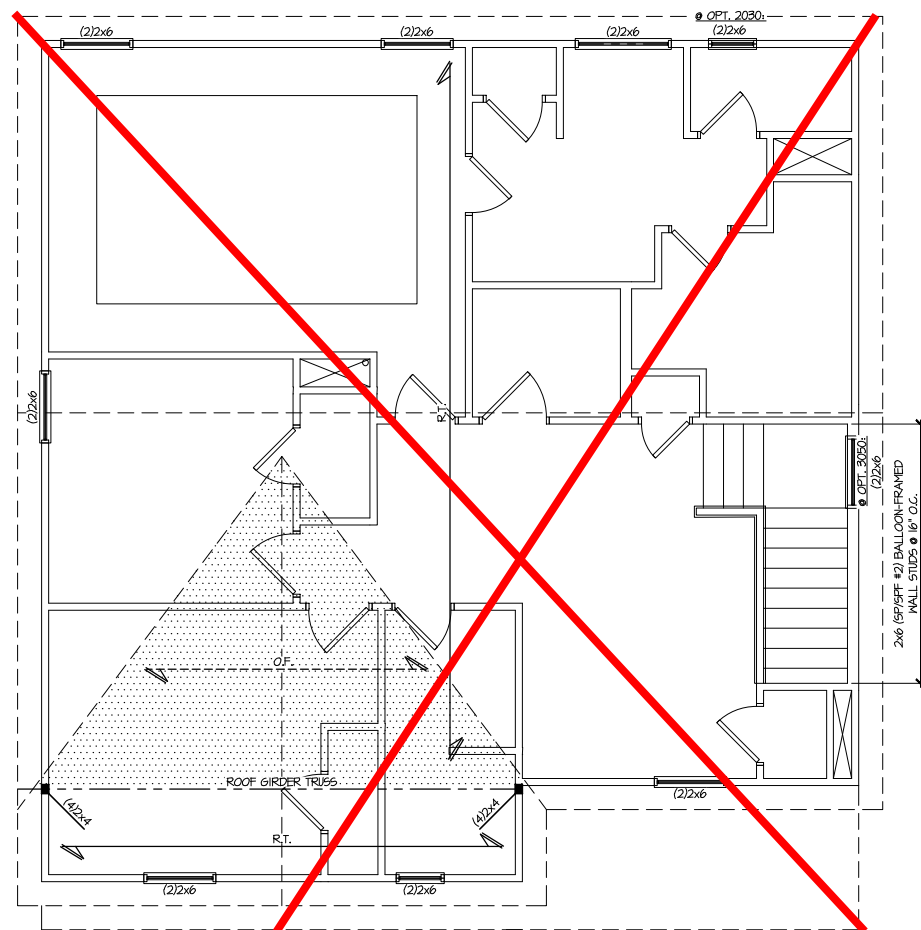


**Harrington  
Lot 65**

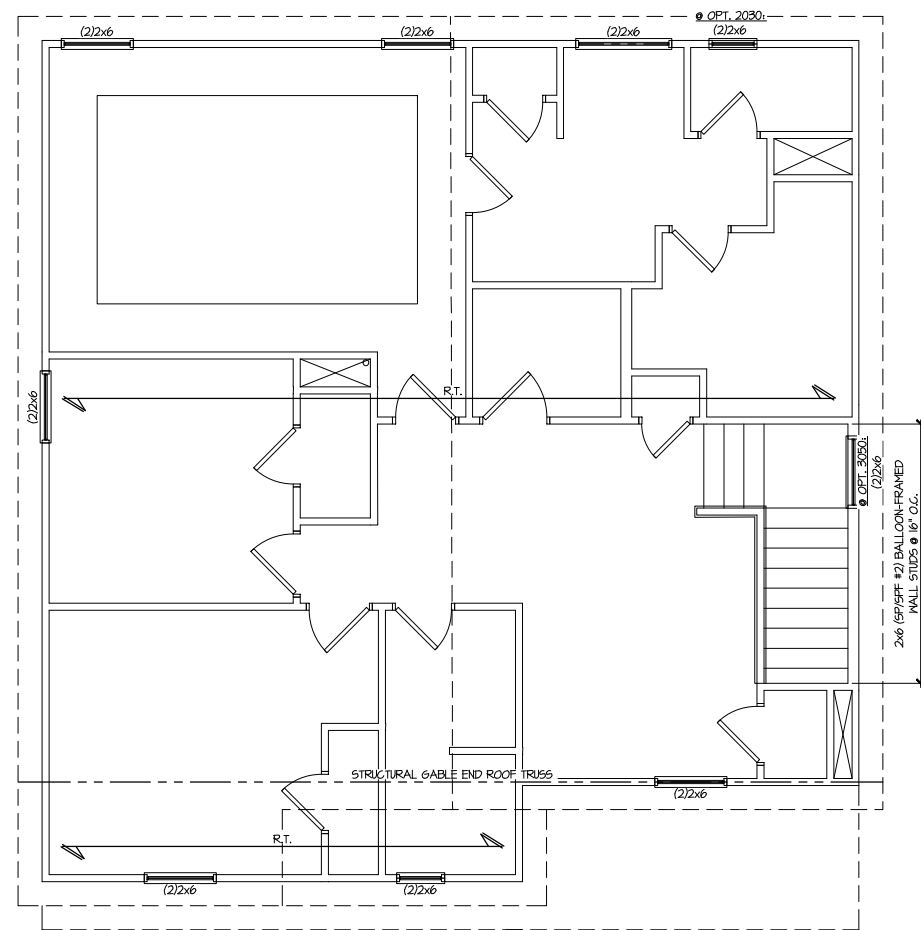
THIS LEVEL HAS BEEN DESIGNED FOR 9'-1" PLATE HEIGHT  
REFER TO S.O. FOR TYPICAL STRUCTURAL NOTES & SCHEDULES

**Harrington  
 Lot 65**

THIS LEVEL HAS BEEN DESIGNED  
 FOR 9'-1" PLATE HEIGHT  
 REFER TO S.O. FOR TYPICAL  
 STRUCTURAL NOTES & SCHEDULES



**1 ROOF FRAMING PLAN**  
 SCALE: 1/4"=1'-0" ON 22x34  
 1/8"=1'-0" ON 11x17  
 ELEV. A  
 ELEVS. D & G SIM.



**2 ROOF FRAMING PLAN**  
 SCALE: 1/4"=1'-0" ON 22x34  
 1/8"=1'-0" ON 11x17  
 ELEV. B  
 ELEVS. E & H SIM.

**LEGEND**

- R.T. INDICATES ROOF TRUSSES @ 24" O.C. PER ROOF. MANUF. (TYP. UNO.)
- O.F. INDICATES TRUSS OVERFRAMING @ 24" O.C. (TYP. UNO.)
- F.I. INDICATES 14" DEEP FLOOR I-JOISTS @ 24" O.C. MAX. JOIST SERIES AND SPACING SHALL BE THE RESPONSIBILITY OF THE MANUFACTURER. NOTE: 14" FLOOR TRUSSES @ 24" O.C. MAX. IS AN ACCEPTABLE ALTERNATE FLOOR SYSTEM.
- [Pattern] INDICATES LOCATIONS OF POTENTIAL TILE FLOOR. JOIST MANUFACTURER SHALL DESIGN FLOOR SYSTEM FOR ADD'L 10 PSF DEAD LOAD AT THESE LOCATIONS.
- [Pattern] INTERIOR BEARING WALL
- [Pattern] BEARING WALL ABOVE (B.W.A.)
- [Pattern] BEAM/HEADER
- JL METAL HANGER
- \* INDICATES POST ABOVE (P.A.) PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.



**MULHERN+KULP**  
RESIDENTIAL STRUCTURAL ENGINEERING  
3025 Shallowford Park (W), Suite 105 - Alpharetta, GA 30022  
770-777-8974 - mulhern+kulp.com  
NC License # C-3825

Mulhern+Kulp project number:  
**256-22019**  
project mgr: **SMK**  
drawn by: **RAP**  
issue date: **01.13.2023**  
REVISIONS:  
date: initial:

**SMITH DOUGLAS  
HOMES**

**2ND FLOOR WALL BRACING PLAN**  
**BENSON II MODEL**  
120 MPH WIND ZONE  
NORTH CAROLINA

sheet:  
**S3.0LM**

**LATERAL/WALL BRACING & WALL SHEATHING SPECIFICATIONS**

THIS MODEL HAS BEEN DESIGNED TO RESIST LATERAL FORCES RESULTING FROM:  
**120MPH WIND IN 2018 NC SBC:RC & 120MPH WIND IN 2018 IRC**  
(120 MPH WIND SPEED IN ASCE 7 WIND MAP, PER IRC R301.2.1.1) EXP. B, RISK CAT. 2 & SEISMIC CAT. A/B.

THE DESIGN WAS COMPLETED PER 2015 & 2018 IBC (SECTION 1609) & ASCE 7, AS PERMITTED BY R301.1.3 OF THE 2018 NC SBC:RC & 2018 IRC. ACCORDINGLY, THIS MODEL, AS DOCUMENTED AND DETAILED HEREWITHIN, IS ADEQUATE TO RESIST THE CODE REQUIRED LATERAL FORCES.

DESIGN WIND UPLIFT LOADS HAVE BEEN CALCULATED UTILIZING ASCE 7 (ACCEPTED ENGINEERING PRACTICE) AS ALLOWED PER 2018 NC SBC:RC & 2018 IRC SECTION R802.11.1.1. THIS MODEL HAS BEEN DETAILED WHERE REQUIRED & ENGINEERED TO RESIST THE WIND UPLIFT LOAD PATH PER SECTIONS R602.3.54 R802.11.

**EXT. WALL SHEATHING SPECIFICATION**

- 1/16" OSB OR 15/32" PLYWOOD:  
FASTEN SHEATHING W/ 2 3/8" x 0.113" NAILS @ 6" O.C. AT EDGES & @ 12" O.C. IN THE PANEL FIELD. (TYP. UNO.)
- ALL SHEATHING PANELS SHALL BE ORIENTED VERTICALLY (LONG DIRECTION PARALLEL TO STUDS) AND INSTALLED FULL HEIGHT OF SHEAR WALL - OR - 2x HORIZONTAL BLOCKING SHALL BE PROVIDED TO SUPPORT ALL UNSUPPORTED PANEL EDGES & EDGE FASTENING.
- ALL EXT. WALLS SHALL BE CONTINUOUSLY SHEATHED AND ARE CONSIDERED SHEAR WALLS.
- ALT. STAPLE CONNECTION SPEC: 1 3/4" 16 GA STAPLES (1/16" CROWN) @ 3" O.C. AT EDGES & @ 6" O.C. IN FIELD.

**3" O.C. EDGE NAILING**

- AT DESIGNATED AREAS - FASTEN PANEL EDGES OF WOOD STRUCTURAL WALL SHEATHING TO FRAMING W/ 2 3/8" x 0.113" NAILS @ 3" O.C. AND 12" O.C. IN THE PANEL FIELD. NO STAPLE ALTERNATIVE AVAILABLE AT THIS SPEC. ALL SHEATHING PANELS SHALL BE ORIENTED VERTICALLY (LONG DIRECTION PARALLEL TO STUD) AND INSTALLED FULL HEIGHT OF SHEAR WALL - OR - 2x HORIZONTAL BLOCKING SHALL BE PROVIDED TO SUPPORT UNSUPPORTED PANEL EDGES AND 3" O.C. EDGE FASTENING.

**NOTES**

- SEE CONNECTION SPECIFICATIONS CHART FOR STANDARD SHEAR TRANSFER DETAILING. IF ADDITIONAL CAPACITY IS REQUIRED BY DESIGN, IT WILL BE SPECIFICALLY NOTED ON PLAN.
- DESIGN ASSUMES 16" O.C. MAX. STUD SPACING, UNO.
- ALL STRUCTURAL PANELS ARE TO BE DIRECTLY APPLIED TO STUD FRAMING.
- PRE-MANUFACTURED PANELIZED WALLS: FASTEN TOGETHER END STUDS OF WALL PANELS SHEATHED W/ OSB OR PLYWOOD W/ 3" x 0.120" NAILS @ 4" O.C. (THRU ONE SIDE ONLY)

--- INDICATES EXTENT OF INT. OSB SHEARWALL, AND/OR 3" O.C. EDGE NAILING  
▶ INDICATES HOLDDOWN

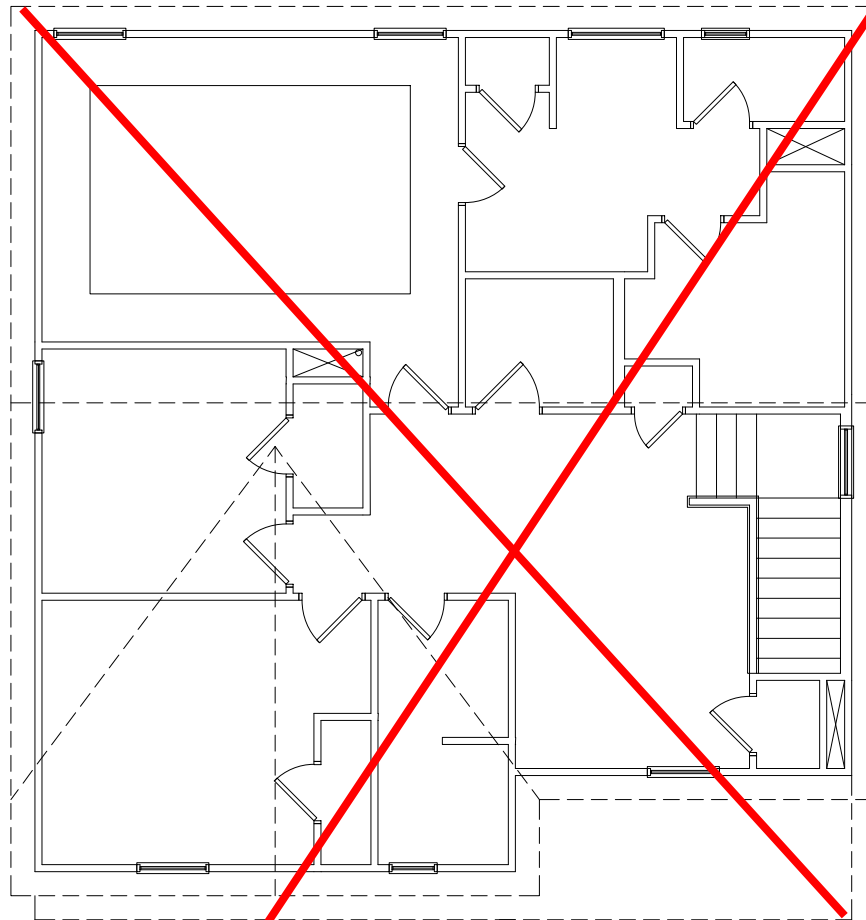
**Harrington  
Lot 65**

THIS LEVEL HAS BEEN DESIGNED FOR 9'-1" PLATE HEIGHT

REFER TO S0.0 FOR TYPICAL STRUCTURAL NOTES & SCHEDULES

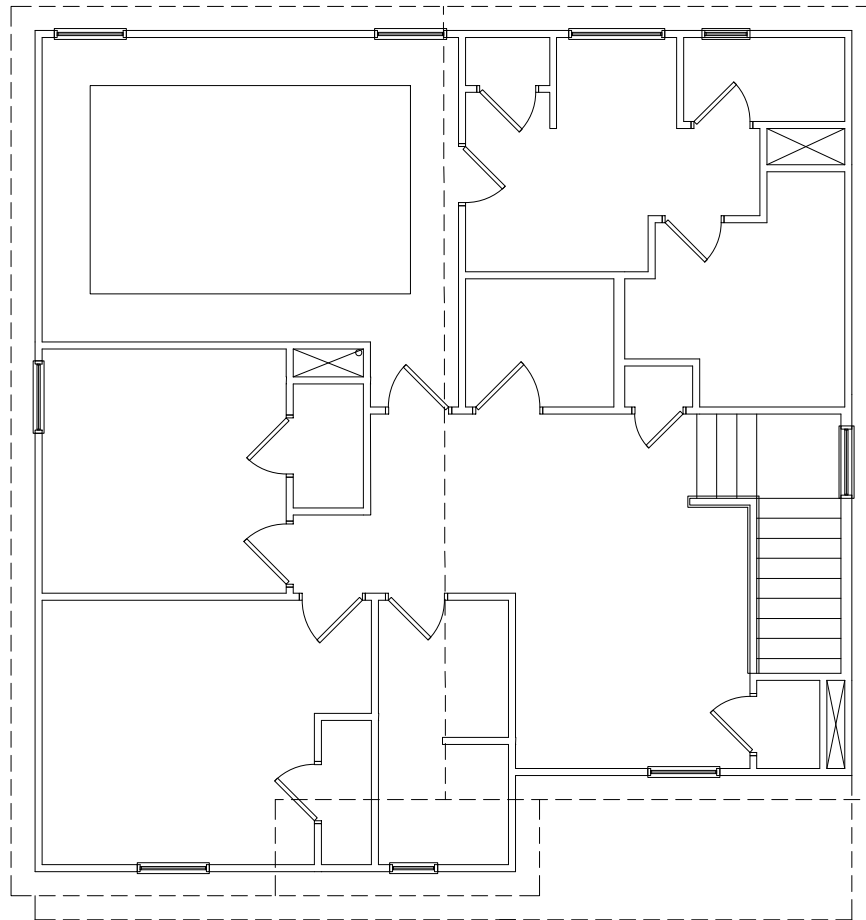
**LEGEND**

- R.T. INDICATES ROOF TRUSSES @ 24" O.C. PER ROOF. MANUF. (TYP. UNO.)
- O.F. INDICATES TRUSS OVERFRAMING @ 24" O.C. (TYP. UNO.)
- F.L. INDICATES 14" DEEP FLOOR I-JOISTS @ 24" O.C. MAX. JOIST SERIES AND SPACING SHALL BE THE RESPONSIBILITY OF THE MANUFACTURER. NOTE: 14" FLOOR TRUSSES @ 24" O.C. MAX. IS AN ACCEPTABLE ALTERNATE FLOOR SYSTEM
- INDICATES LOCATIONS OF POTENTIAL TILE FLOOR. JOIST MANUFACTURER SHALL DESIGN FLOOR SYSTEM FOR ADD'L 10 PSF DEAD LOAD AT THESE LOCATIONS.
- INTERIOR BEARING WALL
- BEARING WALL ABOVE (B.W.A.)
- BEAM/HEADER
- METAL HANGER
- INDICATES POST ABOVE (P.A.) PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.



NOTE:  
NO ADD'L SHEARWALL REQUIREMENTS ARE REQUIRED BEYOND THE STANDARD EXTERIOR WALL SHEATHING SPECIFICATION FOR THIS ELEVATION

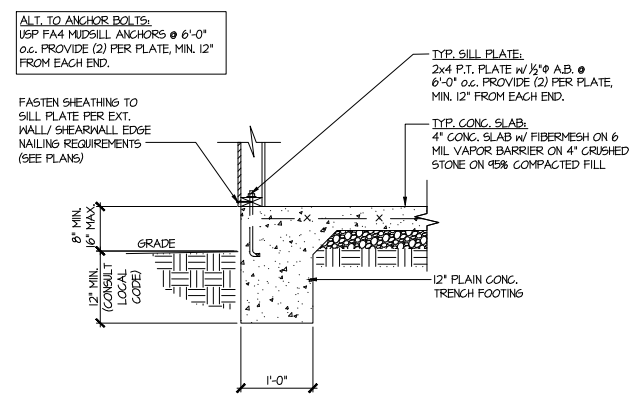
**1 2ND FLOOR WALL BRACING PLAN**  
SCALE: 1/4"=1'-0" ON 22x34  
1/8"=1'-0" ON 11x17  
ELEV. A  
ELEVS. D & G SIM.



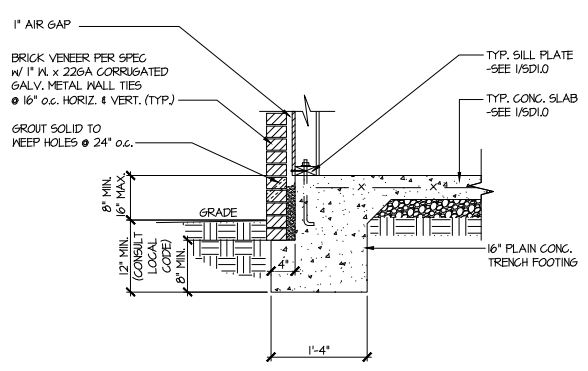
NOTE:  
NO ADD'L SHEARWALL REQUIREMENTS ARE REQUIRED BEYOND THE STANDARD EXTERIOR WALL SHEATHING SPECIFICATION FOR THIS ELEVATION

**2 2ND FLOOR WALL BRACING PLAN**  
SCALE: 1/4"=1'-0" ON 22x34  
1/8"=1'-0" ON 11x17  
ELEV. B  
ELEVS. E & H SIM.

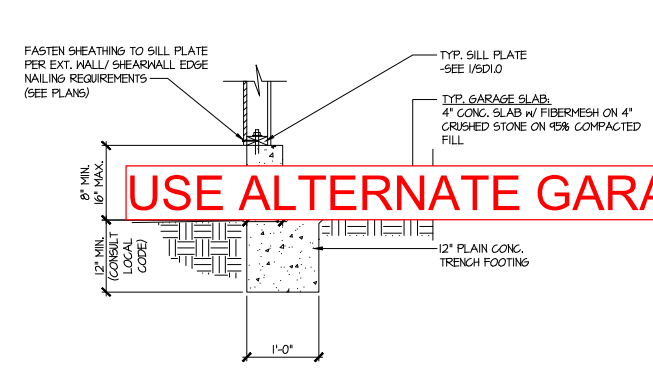




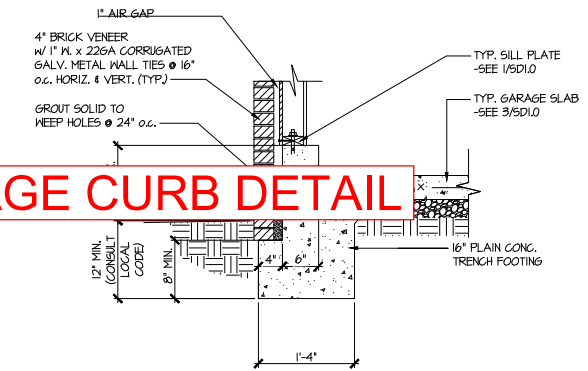
1 TYPICAL SLAB ON GRADE PERIMETER FOOTING



2 TYPICAL SLAB ON GRADE PERIMETER FOOTING w/ BRICK VENEER

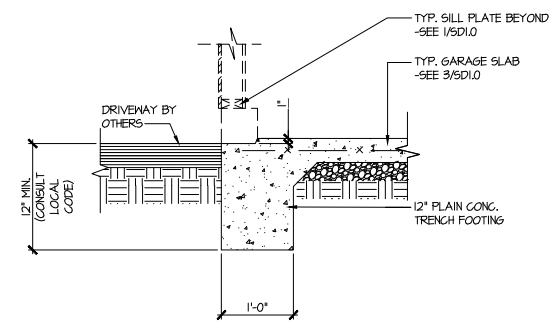


3 TYPICAL SLAB ON GRADE GARAGE PERIMETER FOOTING

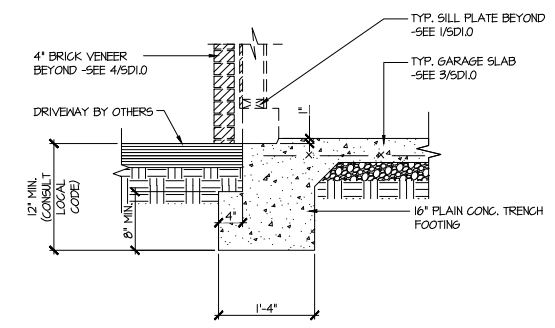


4 TYPICAL SLAB ON GRADE GARAGE PERIMETER FOOTING w/ BRICK VENEER

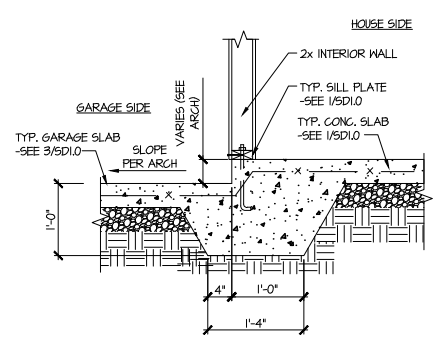
**USE ALTERNATE GARAGE CURB DETAIL**



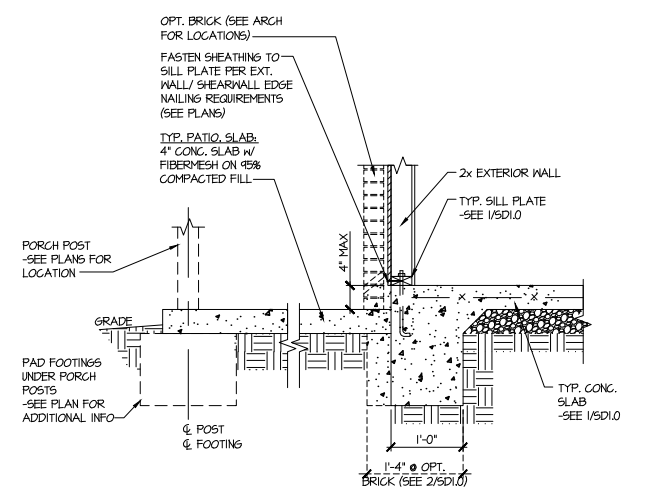
5 TYPICAL SLAB ON GRADE GARAGE ENTRY @ PERIMETER FOOTING



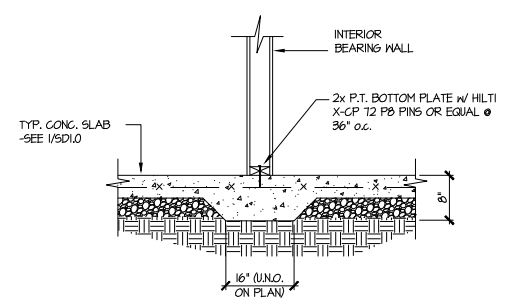
6 TYPICAL SLAB ON GRADE GARAGE ENTRY @ PERIMETER FOOTING w/ BRICK VENEER



7 TYPICAL MONOLITHIC INTERIOR GARAGE FOOTING



8 TYPICAL SLAB ON GRADE PERIMETER FOOTING @ PORCH/PATIO



9 TYPICAL THICKENED SLAB @ INTERIOR BEARING WALL

**MULHERN+KULP**  
 RESIDENTIAL STRUCTURAL ENGINEERING  
 3825 Bessieville Park (West), Suite 105 - Alpharetta, GA 30022  
 770-777-8974 - mulhern+kulp.com  
 NC License # C-3825

Mulhern+Kulp project number:  
 256-22019  
 project mgr: SMK  
 drawn by: RAP  
 issue date: 01.13.2023

REVISIONS:

date:	initial:

SMITH DOUGLAS  
 HOMES

FOUNDATION DETAILS  
 BENSON II MODEL  
 120 MPH WIND ZONE  
 NORTH CAROLINA

Harrington  
 Lot 65

sheet:  
**SD1.0**



**MULHERN+KULP**  
RESIDENTIAL STRUCTURAL ENGINEERING

3625 Brookside Parkway, Suite 165, Alpharetta, GA 30022 ▶ p 770-777-0074 ▶ mulhernkulp.com

August 18, 2023

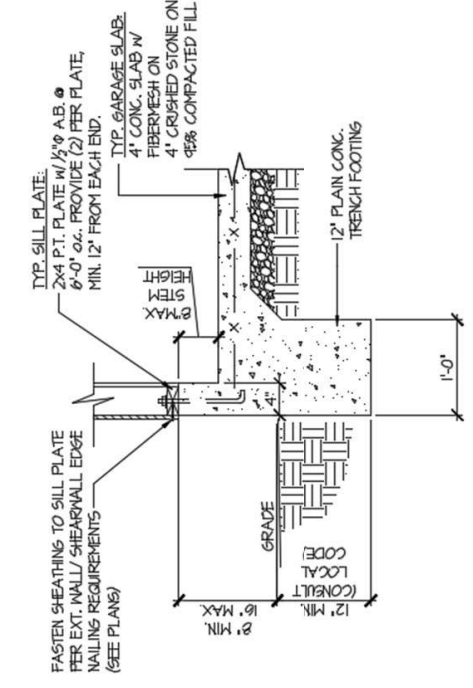
Jody Hunt  
Director of Product Development  
**SMITH DOUGLAS HOMES**  
110 Village Trail, Suite 215  
Woodstock, GA 30188

**ALTERNATE GARAGE CURB DETAIL**  
Smith Douglas Homes

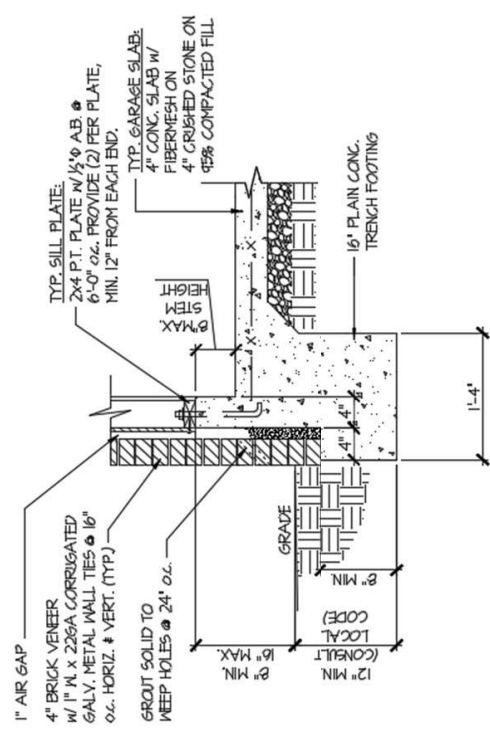
*Reference*  
*Current Structural Plans prepared by Mulhern & Kulp*

Jody:

Pursuant to your request, we have prepared this letter to address the “Alternate Garage Curb Details”, prepared by Mulhern & Kulp for Smith Douglas Homes shown below. The foundation details shown below call for a 4” wide curb with a maximum of 8” stem wall height; these are an acceptable alternative to the 6” wide curb at the garage per M&K foundation details 3 & 4 on sheet SD-1.0 at 2x4 garage wall locations.



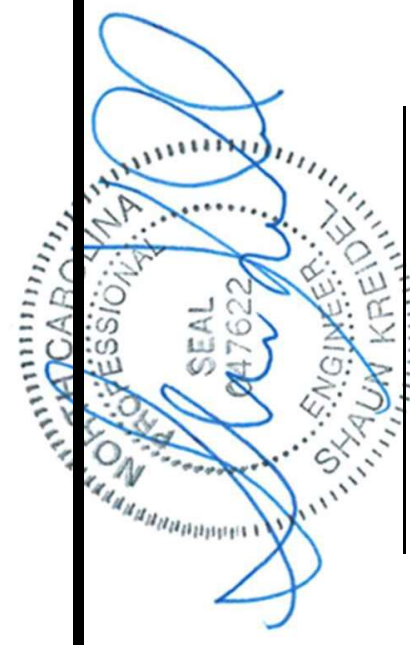
**(A)** TYPICAL SLAB ON GRADE GARAGE PERIMETER FOOTING



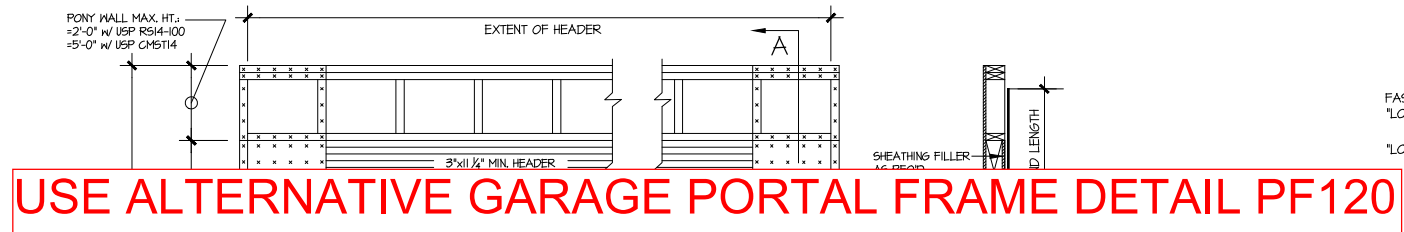
**(B)** TYPICAL SLAB ON GRADE GARAGE PERIMETER FOOTING

Please feel free to call if you have any questions.

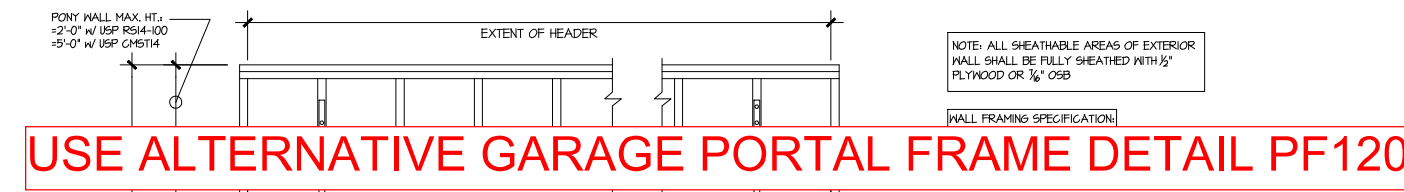
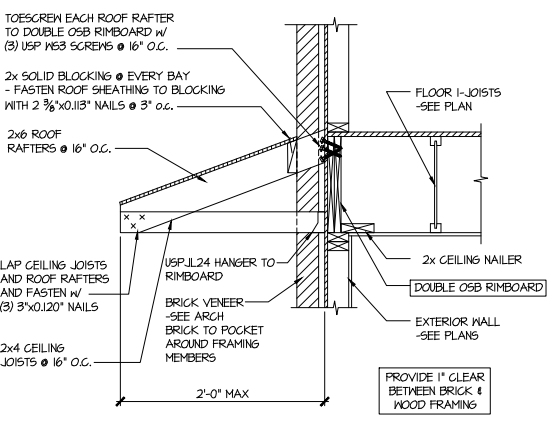
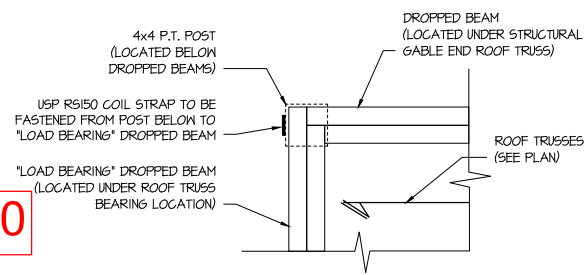
Respectfully,  
**MULHERN & KULP STRUCTURAL ENGINEERING, INC.**  
NC License # C-3825  
Shaun M. Kreidel, P.E. Project Manager + Atlanta Office Director



Signature + Seal 08/18/2023



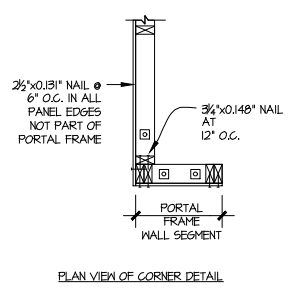
**USE ALTERNATIVE GARAGE PORTAL FRAME DETAIL PF120**



**USE ALTERNATIVE GARAGE PORTAL FRAME DETAIL PF120**

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

WALL FRAMING SPECIFICATION



**GARAGE PORTAL FRAME BRACING ELEVATION**  
 SCALE: N.T.S.  
 BOTH SIDES OF GARAGE DOOR  
 115 MPH WIND SPEED (ULT)

**MULHERN+KULP**  
 RESIDENTIAL STRUCTURAL ENGINEERING  
 3025 Bluechick Parkway, Suite 105 - Alpharetta, GA 30022  
 770-777-8974 - mulhern+kulp.com  
 NC License # C-3825

Mulhern+Kulp project number:  
 256-22019

project mgr: SMK  
 drawn by: RAP  
 issue date: 01.13.2023

REVISIONS:

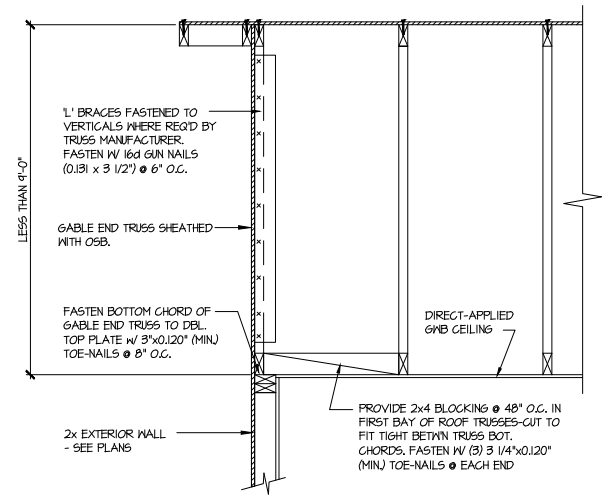
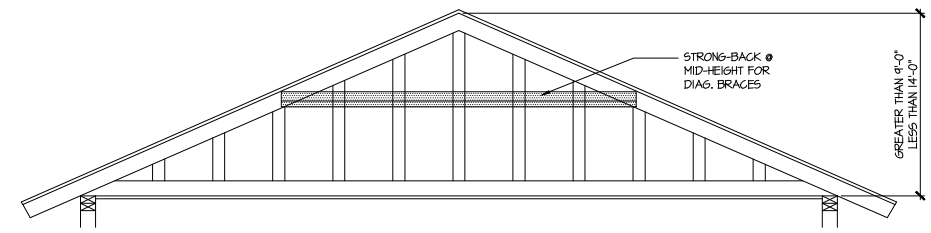
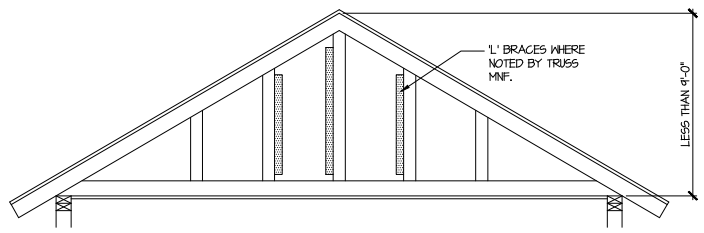
date:	initial:

SMITH DOUGLAS  
 HOMES

FRAMING DETAILS

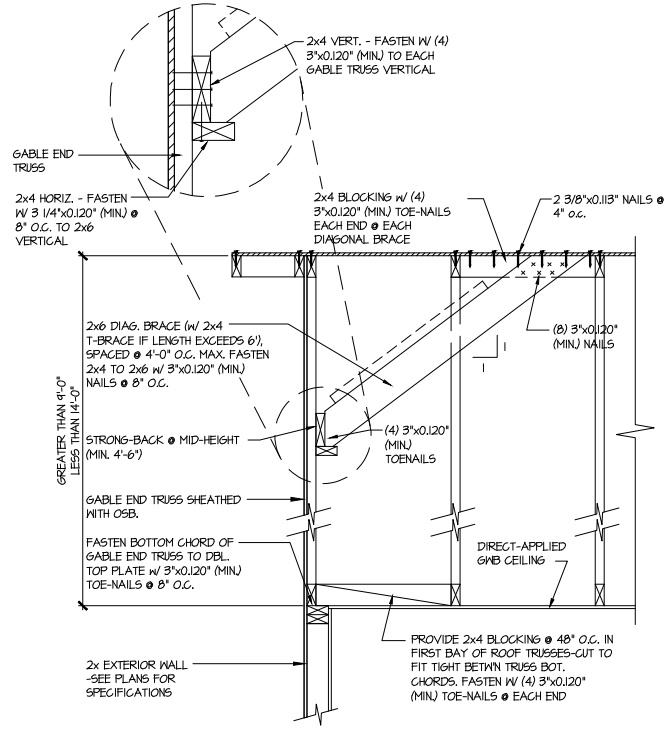
**BENSON II MODEL**

120 MPH WIND ZONE  
 NORTH CAROLINA



**A** TYPICAL GABLE END BRACING DETAIL  
 SCALE: NONE  
 REQ'D @ GABLE END TRUSS  
 HEIGHT UP TO 9'-0"

BRACE GABLE END TRUSSES PER ABOVE DETAIL WHEN GABLE HEIGHT IS LESS THAN 9'-0". 1' BRACES REQUIRED WHERE NOTED BY TRUSS MANUFACTURER.



**B** TYPICAL GABLE END BRACING DETAIL  
 SCALE: NONE  
 REQ'D @ GABLE END TRUSS  
 HEIGHT BETWEEN 9'-0" TO 14'-0"

BRACE GABLE END TRUSSES PER ABOVE DETAIL WHEN GABLE HEIGHT EXCEEDS 9'-0". 1' BRACES NOT REQUIRED.

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.

**MULHERN+KULP**  
 RESIDENTIAL STRUCTURAL ENGINEERING  
 3025 Shallowford Park (West), Suite 105 - Alpharetta, GA 30022  
 770-777-8974 - mulhern+kulp.com  
 NC License # C-3825

Mulhern+Kulp project number:  
 256-22019  
 project mgr: SMK  
 drawn by: RAP  
 issue date: 01.13.2023

REVISIONS:  
 date: initial:

SMITH DOUGLAS  
 HOMES

FRAMING DETAILS  
 BENSON II MODEL  
 120 MPH WIND ZONE  
 NORTH CAROLINA

Harrington  
 Lot 65

sheet:  
**SD2.1**





**MULHERN+KULP**  
RESIDENTIAL STRUCTURAL ENGINEERING

3625 Brookside Parkway, Suite 165, Alpharetta, GA 30022 ▶ p 770-777-0074 ▶ mulhernkulp.com

July 28, 2023

Jody Hunt  
Director of Product Development  
**SMITH DOUGLAS HOMES**  
110 Village Trail, Suite 215  
Woodstock, GA 30188

**ALTERNATE GARAGE PORTAL FRAME DETAIL**  
Smith Douglas Homes

**Reference**

*“Alternate Garage Portal Frame Detail” on sheet PF-120 & PF-130, prepared by Mulhern & Kulp dated 07/28/2023 - attached*

Jody:

Pursuant to your request, we have prepared this letter to address the “*Alternate Garage Portal Frame Detail*”, prepared by Mulhern & Kulp for Smith Douglas Homes.

The “*Alternate Garage Portal Frame Detail*” on sheet “PF-120” is an acceptable alternative portal frame design for anywhere in North Carolina with a wind speed less than or equal to 120mph ultimate wind speed per ASCE 7-16. The “*Alternate Garage Portal Frame Detail*” on sheet “PF-130” is an acceptable alternative portal frame design for anywhere in North Carolina with a wind speed less than or equal to 130mph ultimate wind speed per ASCE 7-16. These details only apply to structural plans that have been designed by Mulhern& Kulp. It is the responsibility of “SDH” to provide the correct “*Alternate Garage Portal Frame Detail*”, to the building department that matches the jurisdiction’s wind speed requirements.

**Please feel free to call if you have any questions.**

---

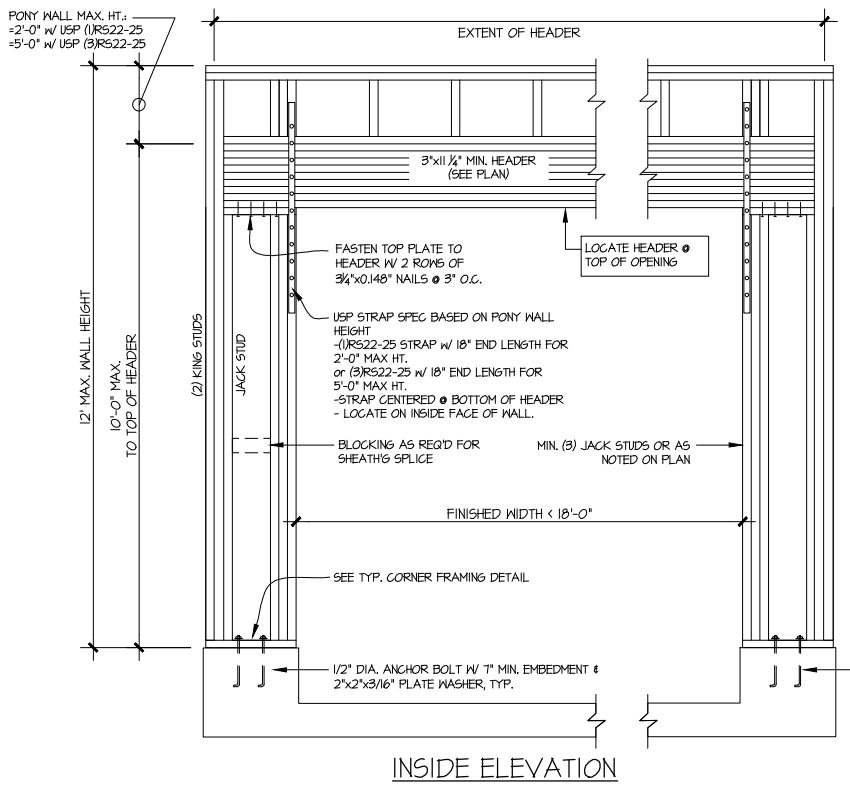
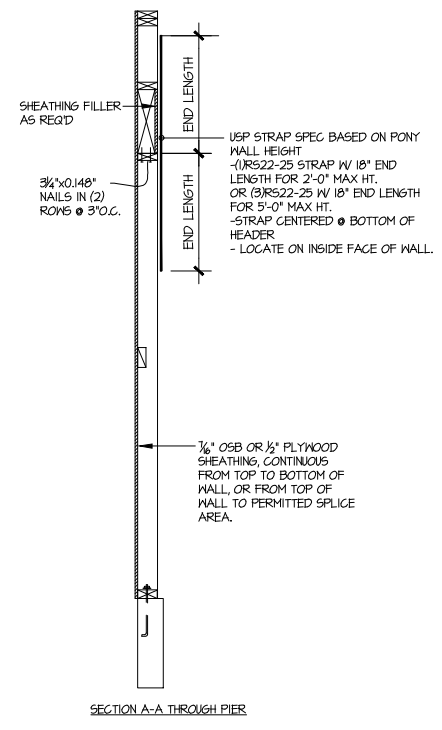
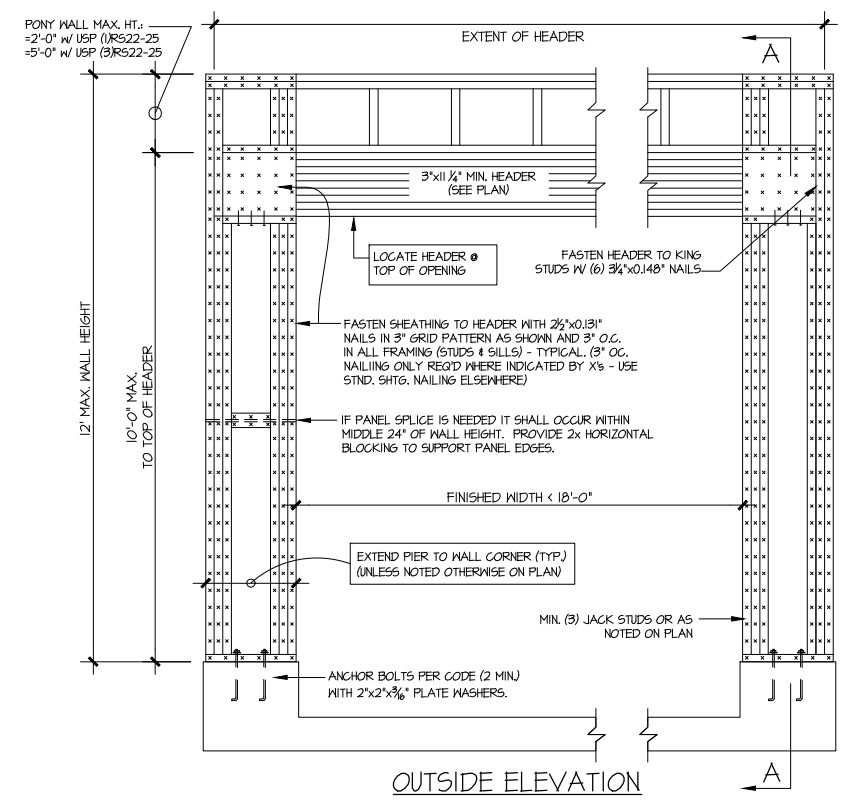
Respectfully,

**MULHERN & KULP STRUCTURAL ENGINEERING, INC.**

NC License # C-3825

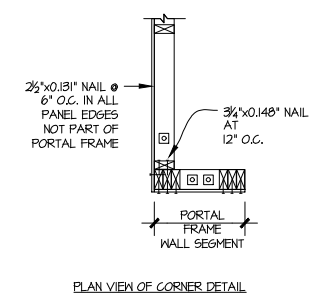
Shaun M. Kreidel, P.E. *Project Manager + Atlanta Office Director*

Signature + Seal 07/28/2023



NOTE: ALL SHEATHABLE AREAS OF EXTERIOR WALL SHALL BE FULLY SHEATHED WITH 1/2" PLYWOOD OR 3/4" OSB

WALL FRAMING SPECIFICATION:  
2x4 WALL: USE SFF #2 GRADE STUDS (OR BETTER)  
2x6 WALL: USE SFF #1UD GRADE STUDS (OR BETTER)



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

# A ALTERNATE GARAGE PORTAL FRAME BRACING ELEVATION

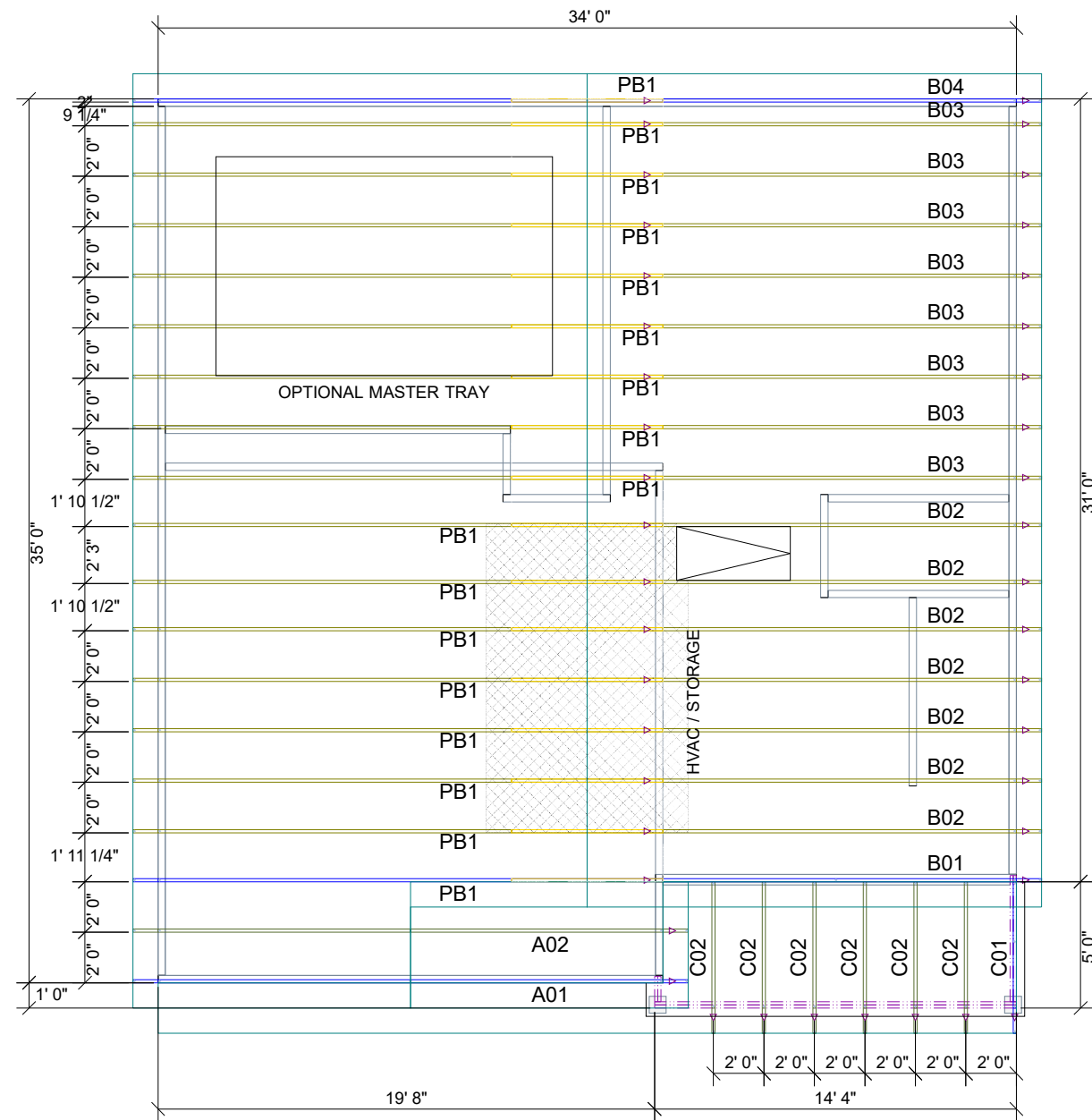
SCALE: N.T.S.

BOTH SIDES OF GARAGE DOOR  
120 MPH WIND SPEED (ULT)

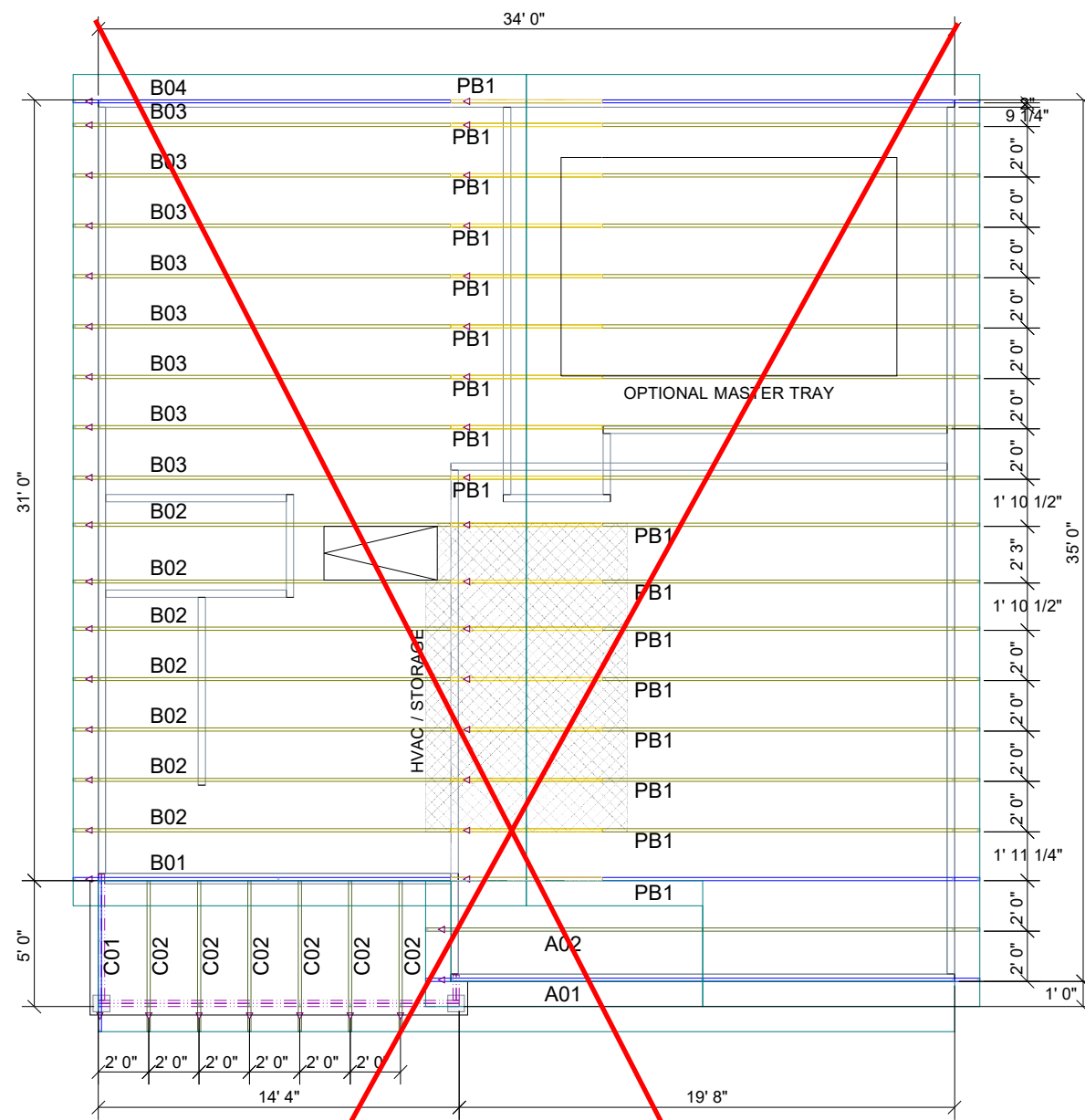
Harrington  
Lot 65

THIS IS A TRUSS PLACEMENT DIAGRAM (TPD) ONLY, NOT AN ENGINEERED DOCUMENT. Trusses are designed as individual building components to be incorporated into the building design at the specification of the building designer. See individual truss design drawings (TDDs) for each truss design identified on the TPD. The Contractor is responsible for the temporary bracing of the roof and floor system, and the building designer is responsible for the permanent bracing of the roof and floor system and the overall structure. The design of the support structure including but not limited to headers, beams, walls, and columns is also the responsibility of the building designer. For general guidance regarding installation and bracing, consult "Building Component Safety Information (BCSI)" available from the SBC Association (www.sbc.com). It is the responsibility of the General Contractor to verify that the provided component layout matches the final intended construction plans, loading conditions, and use. If they do not, it is the responsibility of the General Contractor to notify UFP and provide plans containing the latest specifications and designs. UFP will not be responsible for plan changes by others after final approval of shop drawings, or for errors or modifications made on-site during construction. DO NOT CUT, NOTCH, DRILL, OR OTHERWISE "REPAIR" MANUFACTURED TRUSSES IN ANY WAY WITHOUT PRIOR WRITTEN AUTHORIZATION BY A LICENSED PROFESSIONAL DESIGNATED BY UFP. The Framing is responsible to verify all dimensions, including adjusting member spacing within tolerances to allow for the drop and rise of plumbing/HVAC, unless noted otherwise. Truss-to-wall connections, if shown, are for uplift only and do not consider lateral loads. All connectors on this project are to be installed per the connector manufacturer's specifications. All connectors shown that are not truss-to-truss are suggestions only and are to be verified by the Building Designer or Engineer of Record for suitability to this particular project. UFP accepts no responsibility for the specific application or suitability of any connector that is not truss-to-truss as they apply to this specific structure.

PLACEMENT PLAN



**BENSON II BEH ROOF**



**BENSON II BEH ROOF**

△ INDICATES LEFT END OF TRUSS SCALE: N.T.S

REVISIONS	DATE	DESCRIPTION	DSN

DESIGNER  
LAYOUT DATE  
ARCH DATE  
STRUC DATE

HATCOCK  
10/07/2023

JOB # - MASTER

-SMITH DOUGLAS

-BENSON II BEH ROOF

This drawing is property of UFP Site Built, LLC. Any unauthorized use of this document without written permission is prohibited. UFP relinquishes ownership of delivered product upon delivery. Owner of product must obtain UFP's authorization prior to any alteration or modification of product. UFP will not be held responsible for any unauthorized modifications done or costs incurred without prior written authorization from UFP.



**UFP SITE BUILT**  
A UFP INDUSTRIES COMPANY

Burlington, NC  
Chesapeake, VA  
Clinton, NC  
Conway, SC  
Jefferson, GA

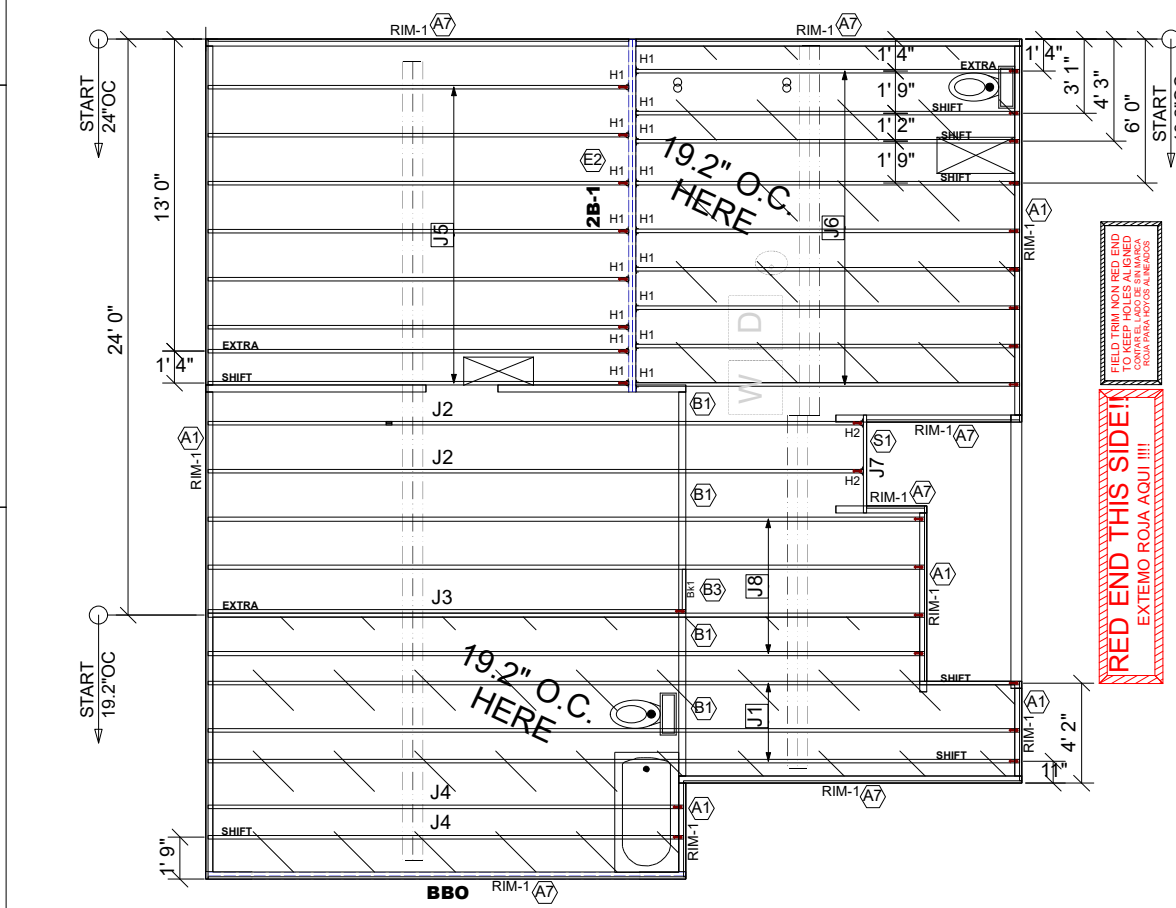
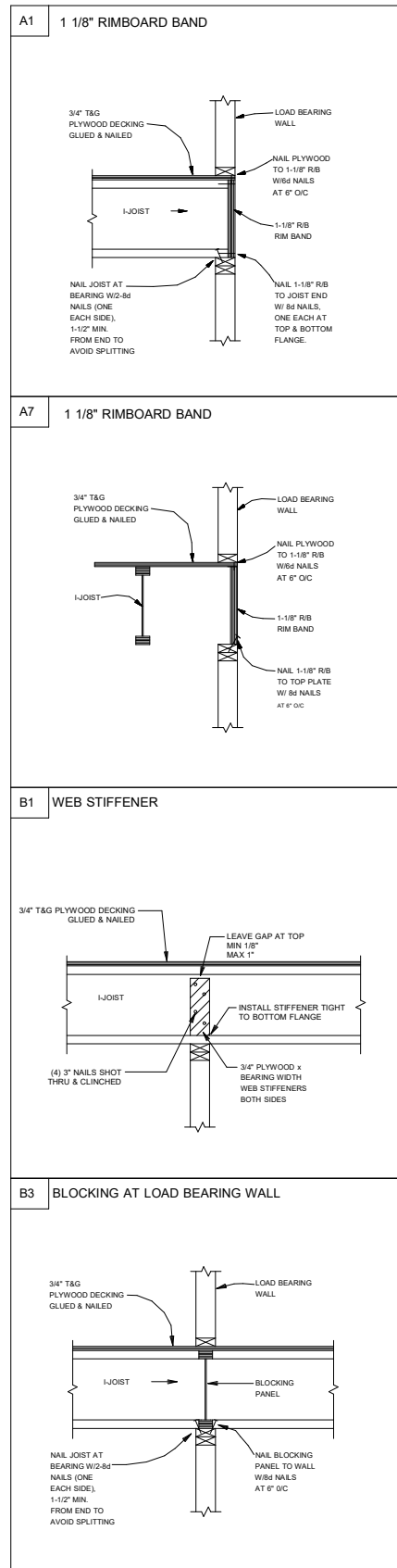
Locust, NC  
Liberty, NC  
Ooltewah, TN  
Pearisburg, VA  
Stanfield, NC

Customer Service (800) 476-9356



THIS IS AN ENGINEERED WOOD PRODUCT (EWP) MEMBER PLACEMENT DIAGRAM ONLY; NOT AN ENGINEERED DOCUMENT. EWP members are designed as individual building components to be incorporated into the building design at the specification of the building designer. The Contractor is responsible for the temporary bracing of the floor system, and the building designer is responsible for the permanent bracing and blocking of the floor system and the overall structure. The design of the support structure including but not limited to headers, beams, walls, and columns is also the responsibility of the building designer. It is the responsibility of the General Contractor to notify UFP and provide plans containing the latest specifications and designs. UFP will not be responsible for plan changes by others after final approval of shop drawings, or for errors or modifications made on-site during construction. DO NOT CUT, NOTCH, DRILL, OR OTHERWISE "REPAIR" EWP MEMBERS IN ANY WAY WITHOUT PRIOR WRITTEN AUTHORIZATION BY A LICENSED PROFESSIONAL DESIGNATED BY UFP. The Framing is responsible to verify all dimensions, including adjusting member spacing within tolerances to allow for the drop and rise of plumbing/HVAC, unless noted otherwise. All connectors on this project are to be installed per the connector manufacturer's specifications. All connectors shown that are not joist to joist are suggestions only and are to be verified by the Building Designer or Engineer of Record for suitability to this particular project. UFP accepts no responsibility for the specific application or suitability of any connector that is not joist to joist as they apply to this specific structure.

## 2ND FLOOR PLACEMENT PLAN



Products					
PlotID	Length	Product	Piles	Net Qty	Fab Type
J1	34' 0"	14" TJ@ 110	1	3	MFD
J2	28' 0"	14" TJ@ 110	1	2	MFD
J3	20' 0"	14" TJ@ 110	1	1	MFD
J4	20' 0"	14" TJ@ 110	1	2	MFD
J5	18' 0"	14" TJ@ 110	1	8	MFD
J6	16' 0"	14" TJ@ 110	1	9	MFD
J7	5' 0"	14" TJ@ 110	1	1	MFD
J8	30' 0"	14" TJ@ 210	1	4	MFD
2B-1	15' 0"	1 3/4" x 14" 2.0E Microllam® LVL	2	2	MFD
RIM-1	16' 0"	1 1/8" x 14" TJ@ Rim Board	1	9	MFD
Bk1	2' 0"	14" TJ@ 110	1	1	MFD

Connector Summary			
PlotID	Qty	Manuf	Product
H1	17	MITek	IHFL1714
H2	2	MITek	TFL1714

- GENERAL NOTES:**
- 1.) TOP CHORD OF JOISTS ARE PAINTED RED AT NUMBERED END. PLACE PAINTED END AS NOTED ON PLAN.
  - 2.) FOLLOW SPECIAL SPACING AND LOCATION DIMENSIONS FOR EXTRAS OR SHIFTED JOISTS AS SHOWN ON PLAN.
  - 3.) ALL INTERIOR WALL PLATES MUST BE LEVEL WITH OUTSIDE WALL TOP PLATES.
  - 4.) DO NOT STACK CONSTRUCTION LOADS ON UN-BRACED JOISTS.
  - 5.) PROVIDE SOLID SUPPORT BELOW ALL BEAM AND HEADER BEARING POINTS IN WALL AND JOIST SPACES CONTINUOUS DOWN TO THE FOUNDATION.
  - 6.) LOCATE CRIPPLE STUDS IN JOIST SPACE DIRECTLY BELOW HEADER JACKS AT ALL FIRST FLOOR EXTERIOR DOOR LOCATIONS.
  - 7.) INSTALL NAILS IN ALL HOLES PROVIDED IN JOIST HANGERS EXCEPT AT BOTTOM CHORD SEAT. PLACE A DAB OF GLUE IN THE HANGER SEAT BEFORE SETTING JOISTS.
  - 8.) IMPORTANT NOTE! NO STRUCTURAL ANALYSIS OF CONVENTIONAL HEADERS HAS BEEN CONDUCTED IF NOT NOTED. THEY ARE CONSIDERED TO BE ADEQUATE TO SUPPORT THE APPLIED LOADS.

**PLAN LEGEND**

**1B-, 2B-** INDICATES BEAM ABOVE TOP PLATE (FLUSH WITH FLOOR SYSTEM)

**H-, 1H-, GDH-** INDICATES BEAM BELOW TOP PLATE (DROPPED BELOW FLOOR SYSTEM)

\*BEAMS MAY PROTRUDE ABOVE OR BELOW DECKING OR TOP PLATE RESPECTIVELY, REFER TO DETAIL IF BEAM IS A DIFFERENT DEPTH THAN FLOOR SYSTEM

**—** SINGLE PLY BEAM (ADD LINE FOR EACH ADDITIONAL PLY)

**SHIFT** SHIFT JOIST TO MISS PLUMBING, ALIGN WWALL OR SUPPORT FURNITURE

**EXTRA** A JOIST ADDED TO THE LAYOUT IN ADDITION TO THE ON CENTER JOISTS

**DOUBLE** TWO JOISTS SIDE BY SIDE (ONLY ASSEMBLED IF NOTED)

**FRAMER NOTE**

--- DENOTES DUCT HOLE RUNS

ALL DIMENSIONS TO CENTERLINE UNLESS OTHERWISE NOTED

• Avoid Plumbing Drops

**FRAMER NOTE**

1. GLUE AND NAIL PLYWOOD SUBFLOOR TO BEAMS AND GIRDERS AT 6" O/C WHERE NO WALL IS ABOVE.
2. FILL HANGER SEAT WITH GLUE BEFORE SETTING JOIST IN HANGER. FILL ROUND HOLES WITH NAILS.

**CRITICAL !!**

INSTALL 2X4 SQUASH BLOCKS IN FLOOR TRUSS SPACE BELOW ALL EXTERIOR DOOR HEADER JACKS. CUT 1/16" TALLER THAN TRUSS.

**FIELD VERIFY DIMENSIONS TO JOISTS LOCATED UNDER WALLS!!**

# 2ND FLOOR LAYOUT

**FIELD TRIM NON RED END TO KEEP HOLES ALIGNED**  
 CONTAR EL LADO DE SIN MARCA ROJA PARA HOYOS ALINEADOS

**FIELD LOCATE PLUMBING DROPS/CAN LIGHTS, ETC... PRIOR TO JOIST SECUREMENT TO AVOID INTERFERENCE.**

**LAYOUT FOR 19.2" O/C**

1= 19-3/16"	9= 172-13/16"
2= 38-3/8"	10= 192"
3= 57-5/8"	11= 211-3/16"
4= 76-13/16"	12= 230-3/8"
5= 96"	13= 249-13/16"
6= 115-3/16"	14= 268-13/16"
7= 134-3/8"	15= 288"
8= 153-5/8"	

**UFP SITE BUILT**  
 A UFP INDUSTRIES COMPANY

Burlington, NC Locust, NC  
 Chesapeake, VA Liberty, NC  
 Clinton, NC Ooltewah, TN  
 Conway, SC Pearisburg, VA  
 Jefferson, GA Stanfield, NC

Customer Service (800) 476-9356



This drawing is property of UFP Site Built, LLC. Any unauthorized use of this document without written permission is prohibited. UFP relinquishes ownership of delivered product upon delivery. Owner of product must obtain UFP's authorization prior to any alteration or modification of product. UFP will not be held responsible for any unauthorized modifications done or costs incurred without prior written authorization from UFP.

**Smith Douglas Homes**

**Benson II 2nd Floor**

REVISIONS	DATE	DESCRIPTION	DSN

DESIGNER PB2  
 LAYOUT DATE 11/5/2024  
 ARCH DATE 9/1/2022  
 STRUC DATE 7/14/2023  
 JOB #: 24110189F2

SCALE: 1/8"=1'