

HARRINGTON

CEDAR POINTE
LOT 0026



SMITH DOUGLAS HOMES

QUALITY | INTEGRITY | VALUE

PLAN ID 040121.1201

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	1104
SECOND FLOOR	1461
TOTAL	2565
GARAGE	396
FRONT PORCH (COVERED)	91
REAR PATIO	120

PLAN REVISIONS			
DATE	BY	REVISION	PAGE #
10/12/2023	SL	REMOVE 1.5" FURR IN DOWN BATH	A3.1-A8.1
10/20/2021	AW	Prototype walk revisions - see revision sheet	A5.1, A5.2, A7.2, A7.3
4/4/2002	AW	Changed finished basement bath plumbing wall from 2x6 to 2x4	A4.2
3/10/2023	AW	PCR #5180 Added 1 outlet to optional B-5 or Study ILO Living	A7.2
9/26/2023	CLJ	Removed Shower & Tub sizes from all affected pages	A5.1.1 & A5.2

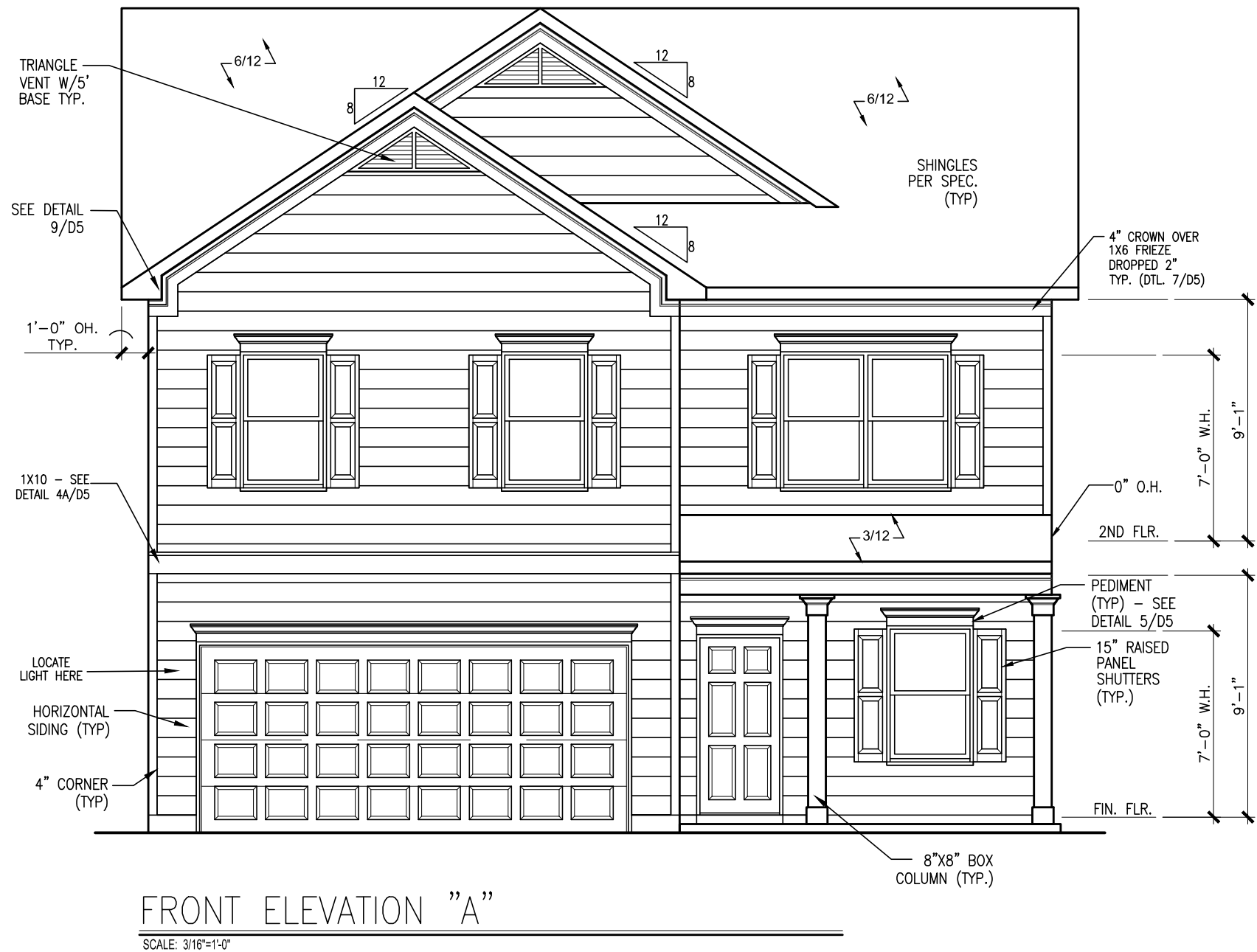
GOVERNMENTAL CODES & STANDARDS
HOME TO BE BUILT TO CONFORM TO ALL APPLICABLE LOCAL CODES, PRACTICES AND STANDARDS

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

CEDAR POINTE
LOT 0026



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



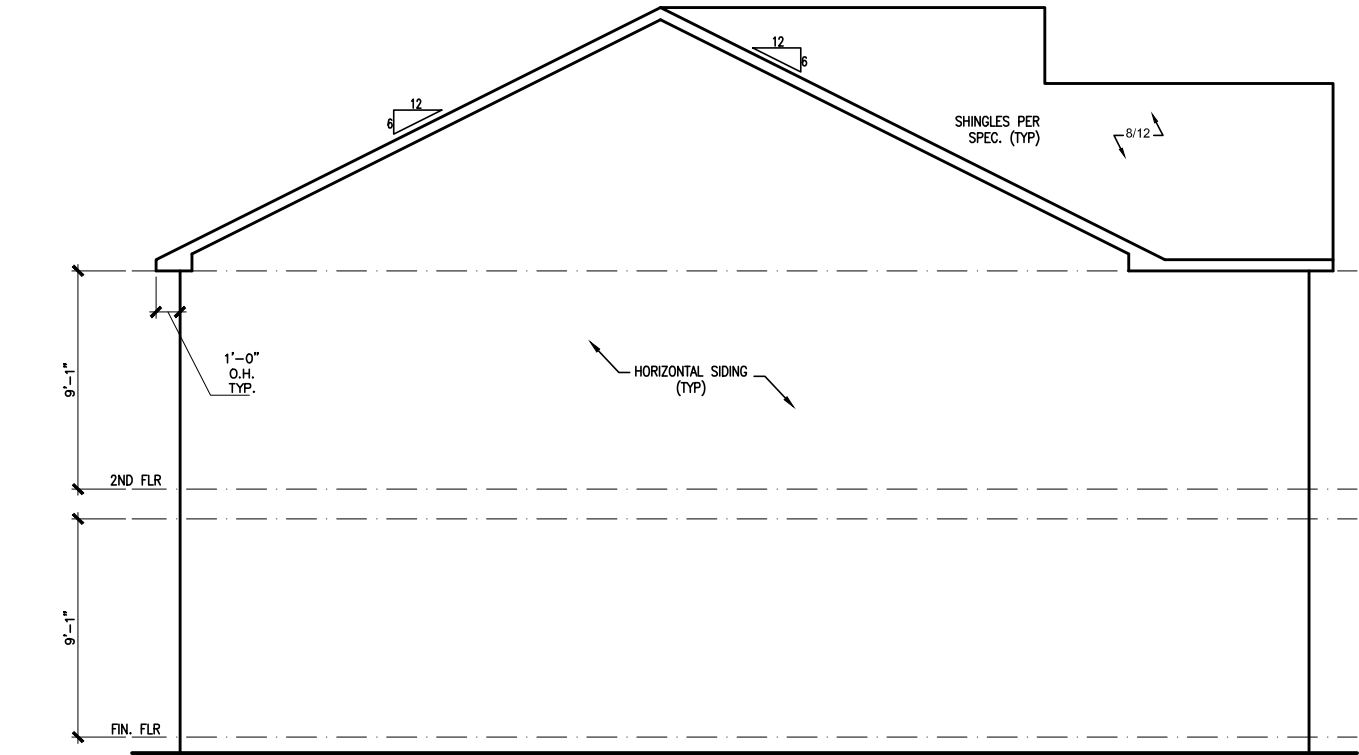
ELEVATIONS
FRONT ELEVATION
HARRINGTON

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.

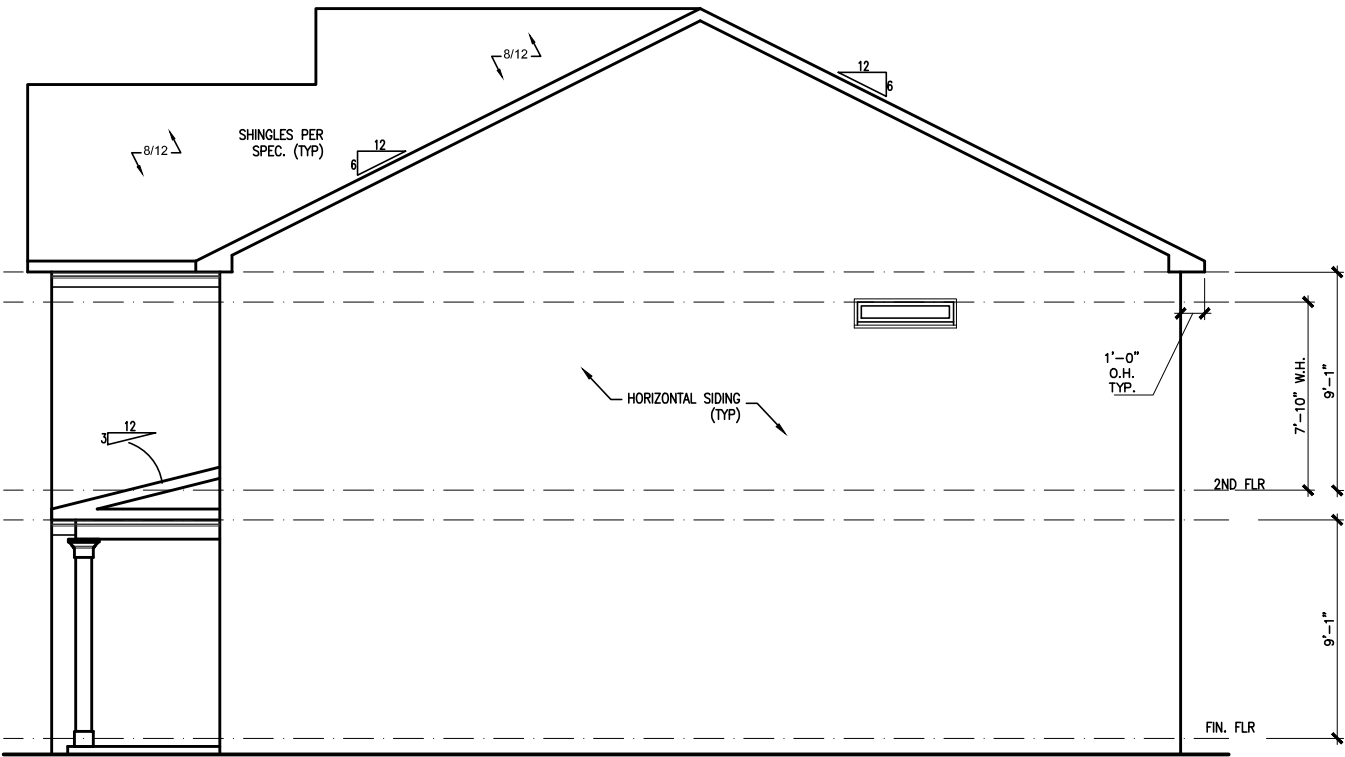
BY:	BI	CH:	AW
DATE:	4/29/25		
FACADE OPT:	A		
PLAN ID:			
PND:	ALL	RELEV:	A
PAGE NO:	A1.1		

CEDAR POINTE
LOT 0026



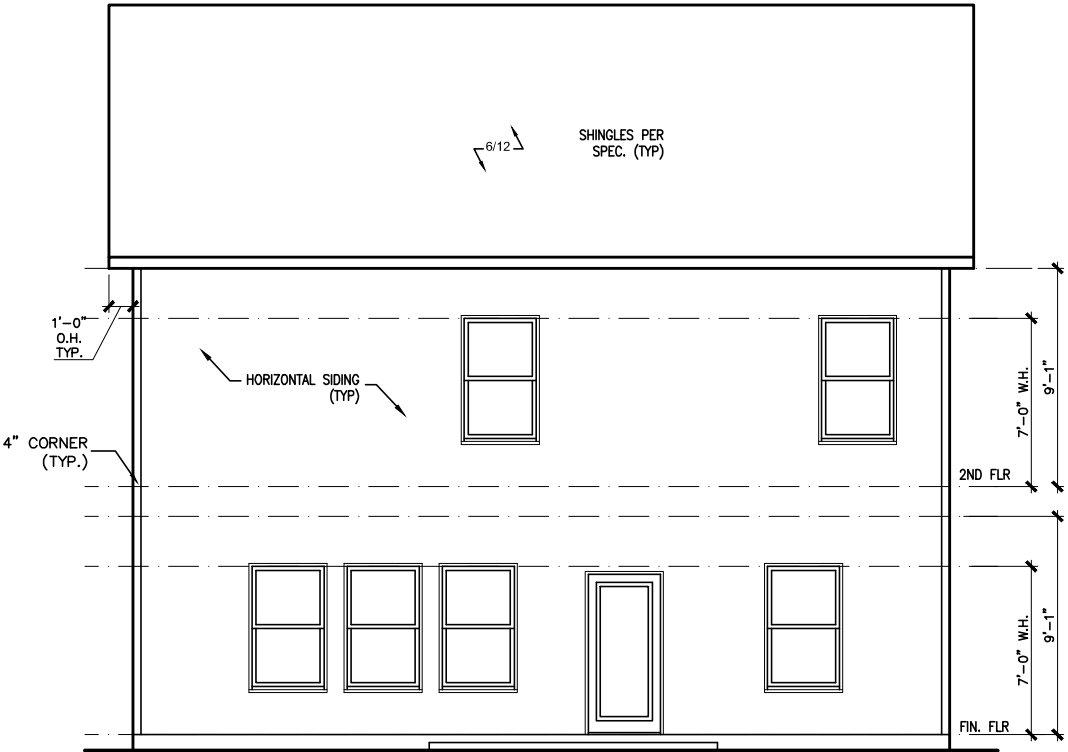
LEFT ELEVATION "A"

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



RIGHT ELEVATION "A"

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



REAR ELEVATION "A"

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

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

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

ELEVATIONS
SIDES AND REAR
HARRINGTON

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: BI

CH: AW

DATE: 4/29/25

FACADE OPT: A

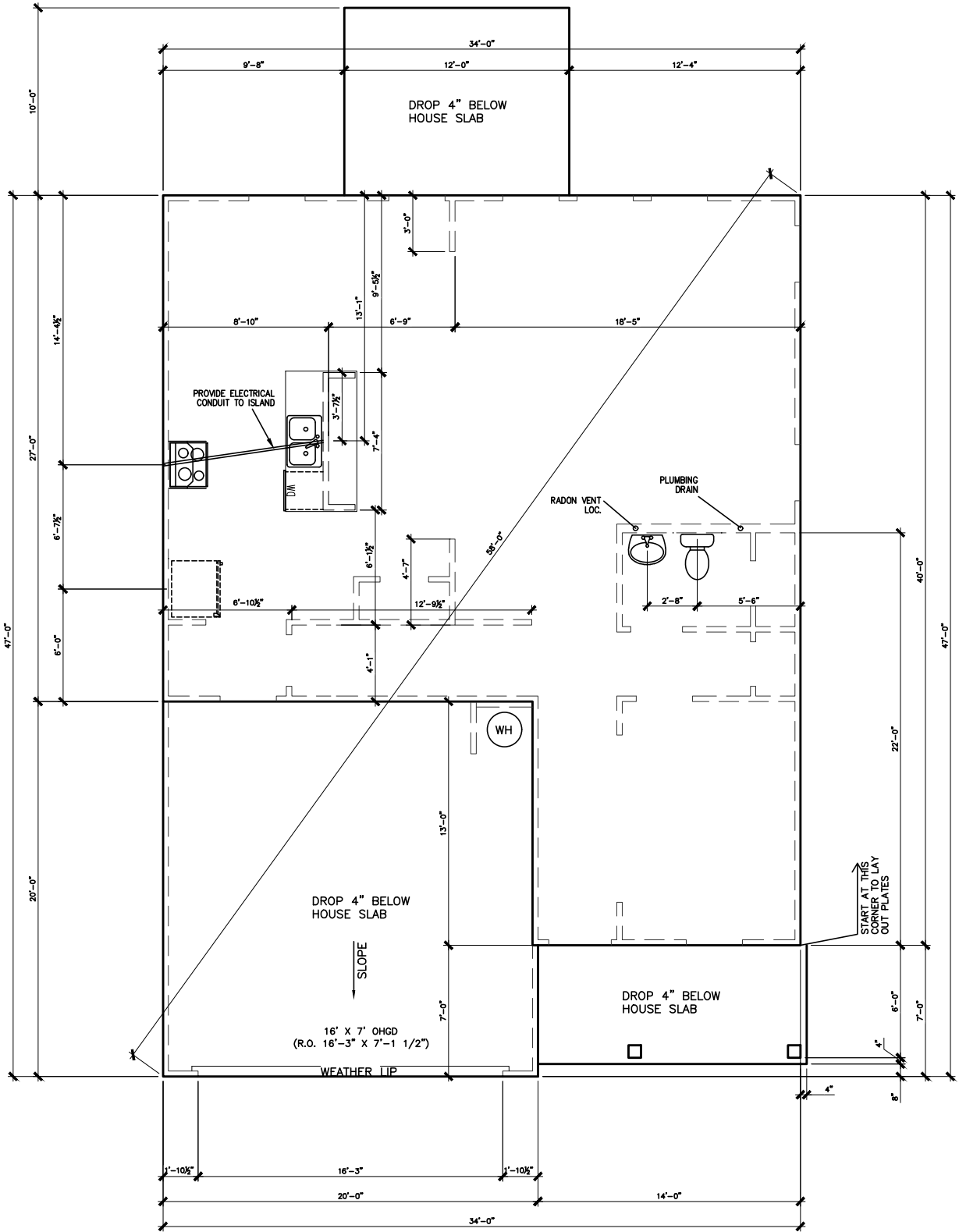
PLAN ID:

PND: ALL

RELEV: A

PAGE NO: A2.1

CEDAR POINTE
LOT 0026



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	BY	REVISION
#	#	#
#	#	#
#	#	#
#	#	#
#	#	#

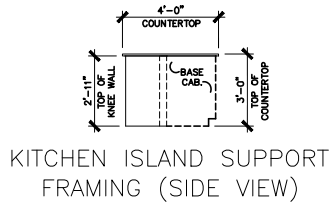
**SMITH DOUGLAS HOMES**
QUALITY | INTEGRITY | VALUE

FOUNDATION PLAN
SLAB PLAN
HARRINGTON

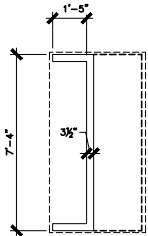
SMITH DOUGLAS HOMES
110 VILLAGE TRAIL
SUITE 115
WOODSTOCK, GA 30188
www.smithdouglas.com

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.

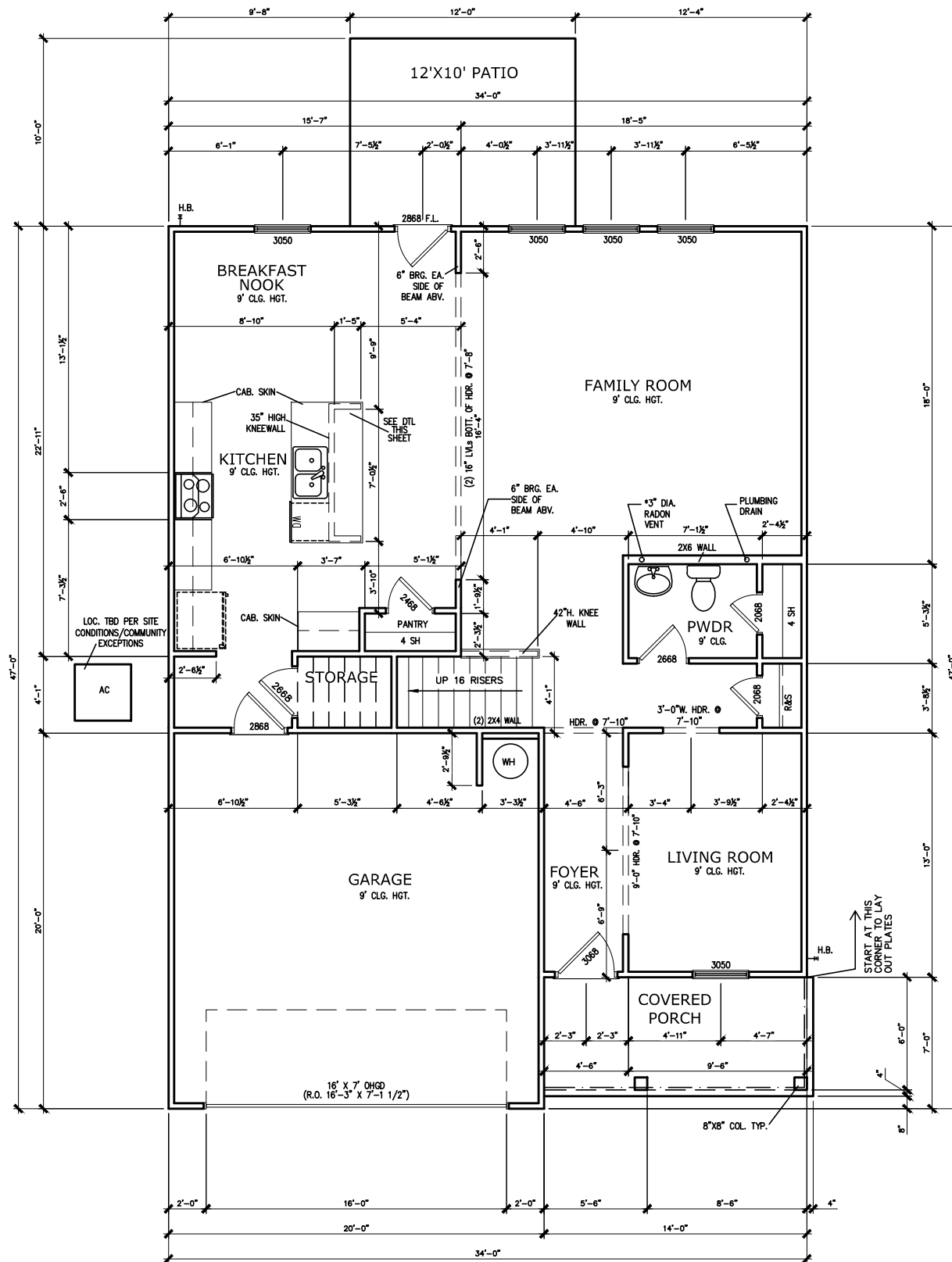
BY:	BI	CH:	AW
DATE:	4/29/25		
FACADE OPT:	A		
PLAN ID:			
PND:	ALL	RELEV:	A
PAGE NO:	A3.1		



KITCHEN ISLAND SUPPORT
FRAMING (SIDE VIEW)



KITCHEN ISLAND SUPPORT
FRAMING (PLAN VIEW)



FIRST FLOOR PLAN

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

CEDAR POINTE LOT 0026

*RADON VENT PROVIDED
PER LOCAL CODE

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

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

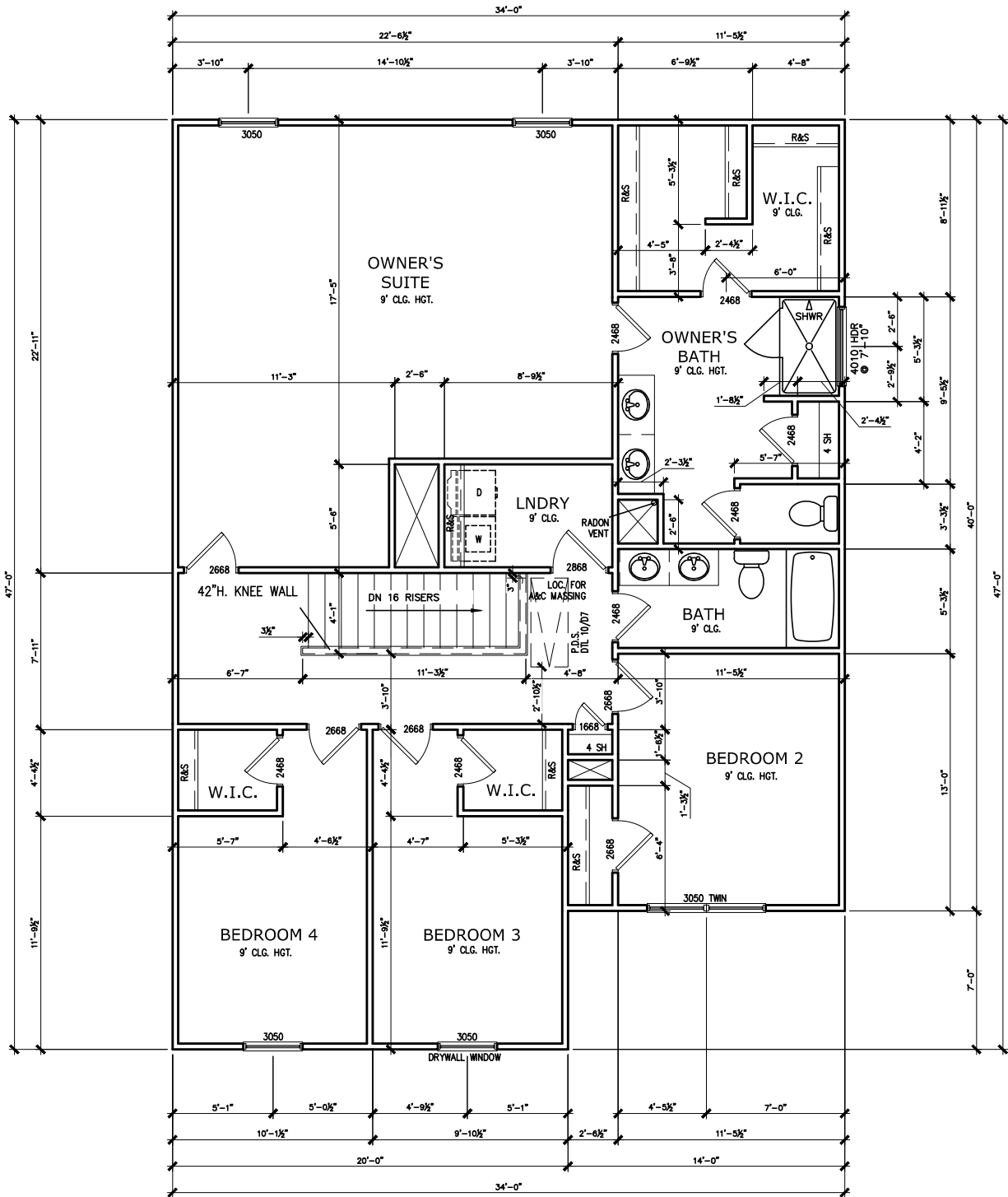
FLOOR PLAN
FIRST FLOOR
HARRINGTON

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:	BI	CH:	AW
DATE:	4/29/25		
FACADE OPT:	A		
PLAN ID:			
PND:	ALL	RELEV:	A
PAGE NO:	A5.1		

CEDAR POINTE
LOT 0026



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	BY	REVISION
#	#	#
#	#	#
#	#	#
#	#	#
#	#	#
#	#	#

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

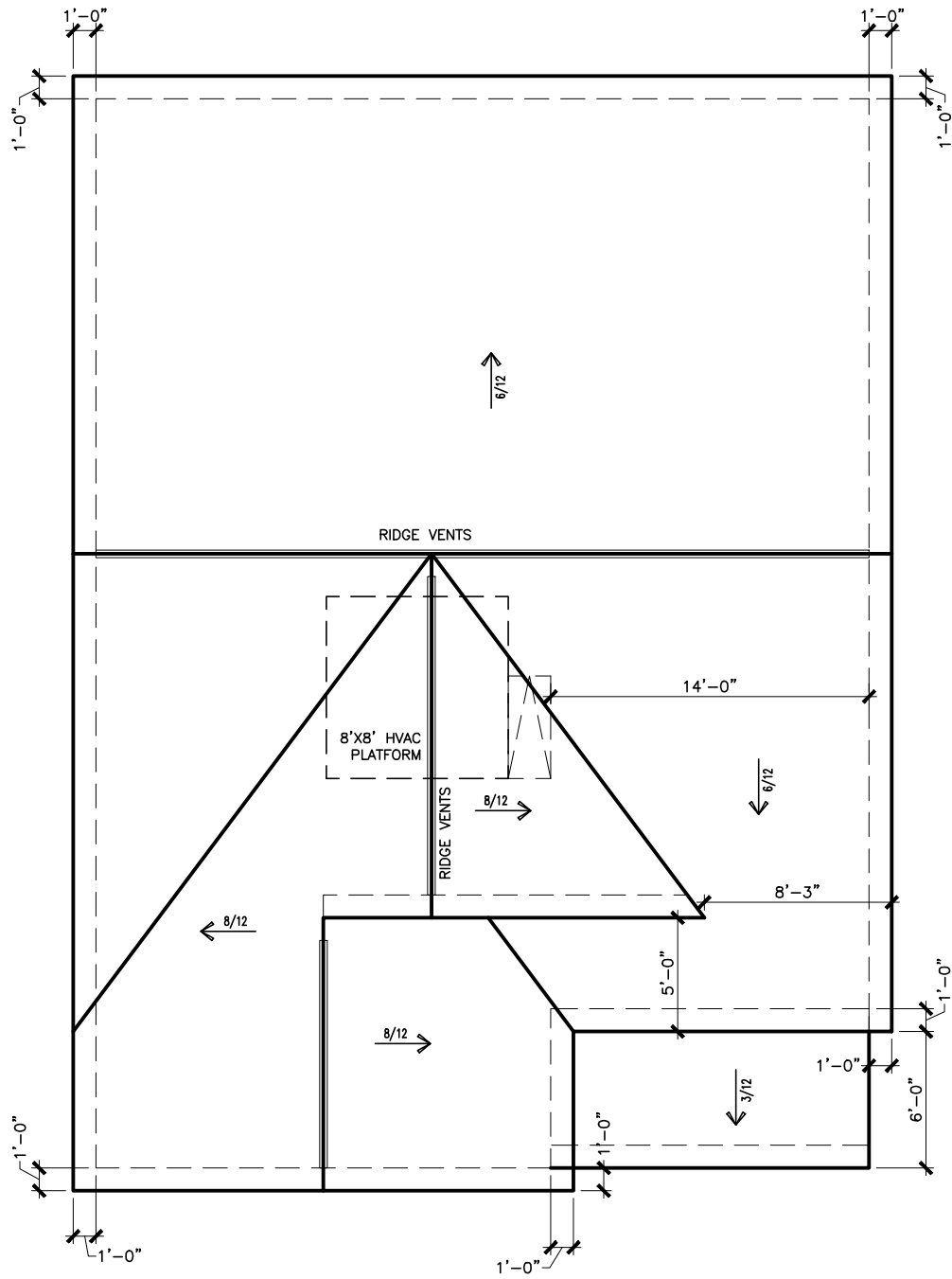
FLOOR PLAN
SECOND FLOOR
HARRINGTON

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:	BI	CH:	AW
DATE:	4/29/25		
FACADE OPT:	A		
PLAN ID:			
PND:	ALL	RELEV:	A
PAGE NO:	A5.2		

CEDAR POINTE
LOT 0026



ROOF PLAN "A"

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

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

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

ROOF PLAN

ROOF PLAN

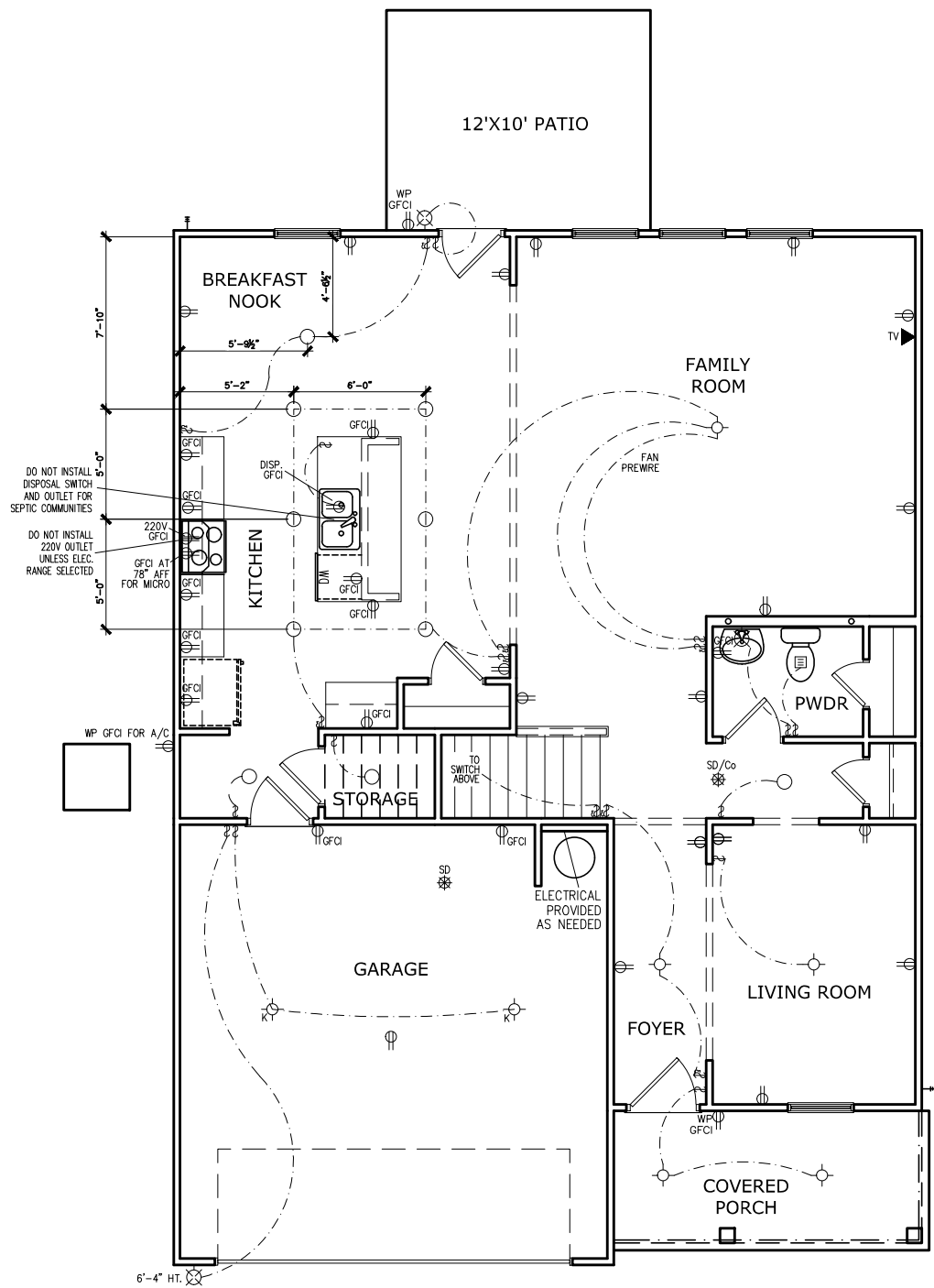
HARRINGTON

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:	BI	CH:	AW
DATE:	4/29/25		
FACADE OPT:	A		
PLAN ID:			
PND:	ALL	RELEV:	A
PAGE NO:	A6.1		

CEDAR POINTE
LOT 0026



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
⊕ _K	KEYLESS	⊕ _{GFCI}	GFCI OUTLET
⊗ _W	WALL MOUNT FIXTURE	⊕ _{AFCI}	ARCH FAULT CIRCUIT INTERRUPTER
○	CEILING FIXTURE	† _{GL}	GAS LINE
●	FLEX CONDUIT	† _{WL}	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		
≡	EXHAUST FAN	—	ELECTRICAL WIRING
⊕	FAN/LIGHT	⊕	CEILING FIXTURE
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	#					

SMITH DOUGLAS HOMES

QUALITY | INTEGRITY | VALUE

ELECTRICAL PLAN

FIRST FLOOR

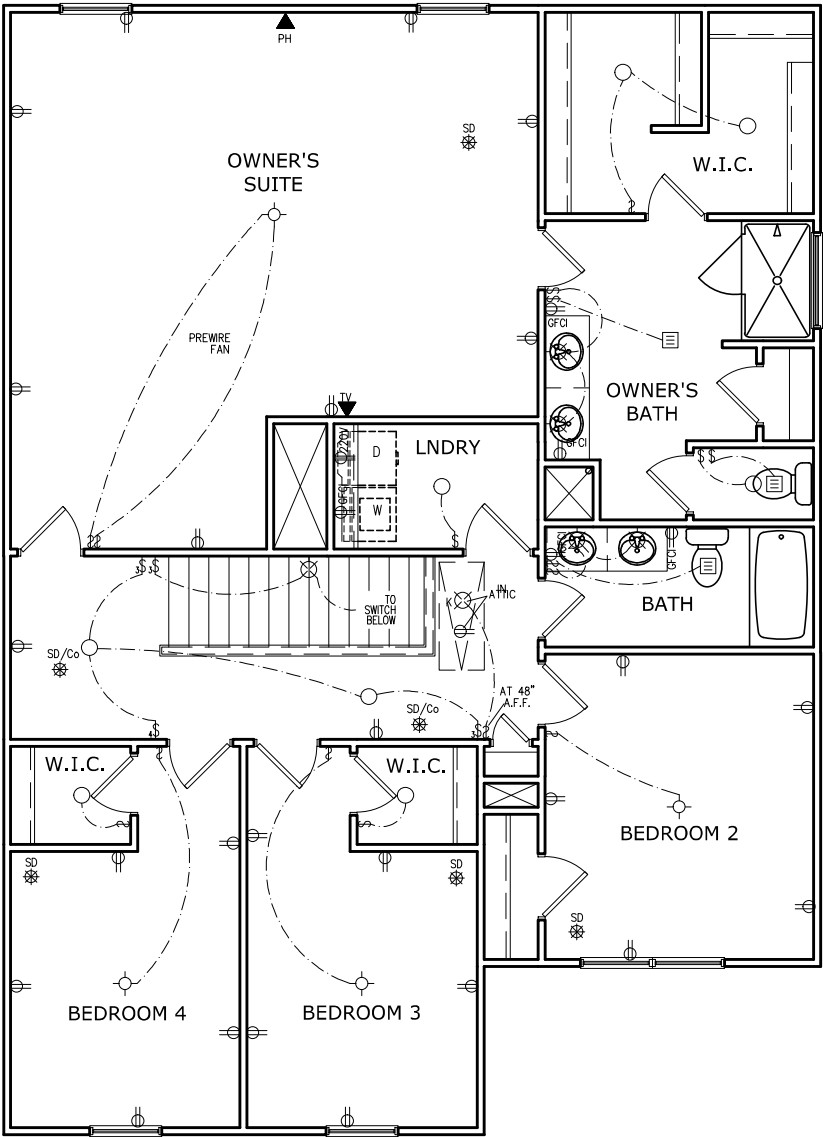
HARRINGTON

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

SMITH DOUGLAS HOMES
expressly reserves it's
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:	BI	CH:	AW
DATE:	4/29/25		
FACADE OPT:	A		
PLAN ID:			
PND:	ALL		
RELEV:	A		
PAGE NO:	A7.2		

CEDAR POINTE
LOT 0026



ELECTRICAL LEGEND			
\$	SWITCH	TV	TV
\$3	3 WAY SWITCH	⊕	120V RECEPTACLE
\$4	4 WAY SWITCH	⊕	120V SWITCHED RECEPTACLE
⊗	CEILING FIXTURE	⊕	220V RECEPTACLE
⊕K	KEYLESS	⊕GFCI	GFCI OUTLET
⊗	WALL MOUNT FIXTURE	⊕AFCI	ARCH FAULT CIRCUIT INTERRUPTER
○	CEILING FIXTURE	†GL	GAS LINE
●	FLEX CONDUIT	†WL	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

SECOND FLOOR ELECTRICAL PLAN

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

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

SMITH DOUGLAS HOMES

QUALITY | INTEGRITY | VALUE

ELECTRICAL PLAN

SECOND FLOOR

HARRINGTON

SMITH DOUGLAS HOMES

110 VILLAGE TRAIL

SUITE 115

WOODSTOCK, GA 30188

www.smithdouglas.com

SMITH DOUGLAS HOMES expressly reserves it's 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: BI CH: AW

DATE: 4/29/25

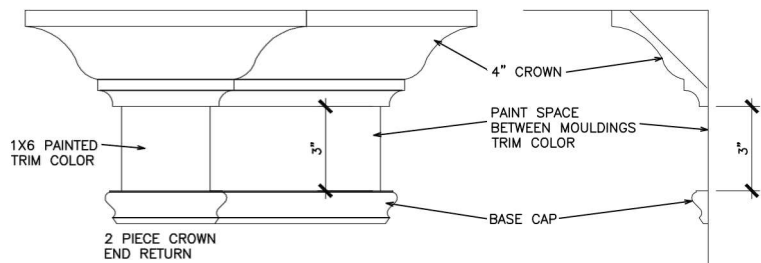
FACADE OPT: A

PLAN ID:

PNL: ALL RLEV: A

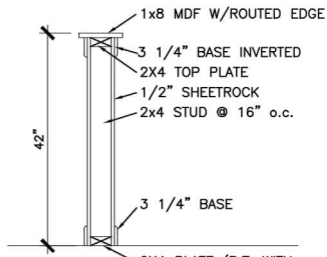
PAGE NO: A7.3

REFER TO LOT SPECIFIC PLAN TO
DETERMINE WHICH DETAILS APPLY



TYPICAL TWO PIECE CROWN

N.T.S.



TYP. KNEEWALL SECTION

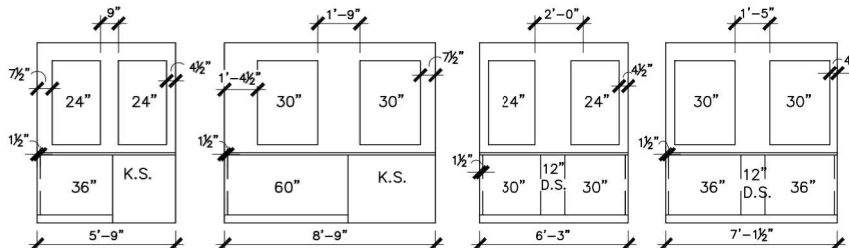
N.T.S.



TYP. 2ND FLOOR KNEE WALL STABILITY

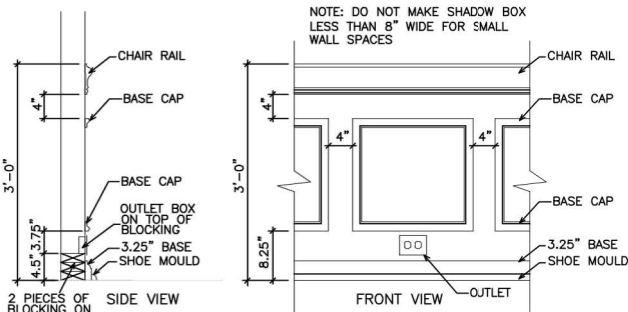
N.T.S.

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



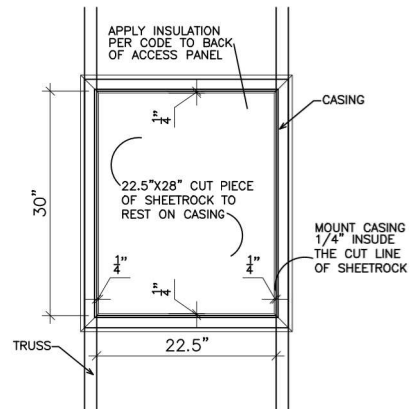
TYPICAL SPLIT MIRROR SCENARIOS

N.T.S.



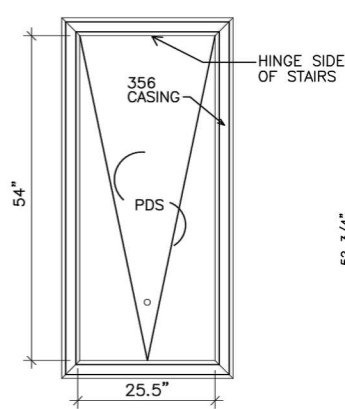
TYPICAL CHAIR RAIL & SHADOW BOX DETAIL

N.T.S.



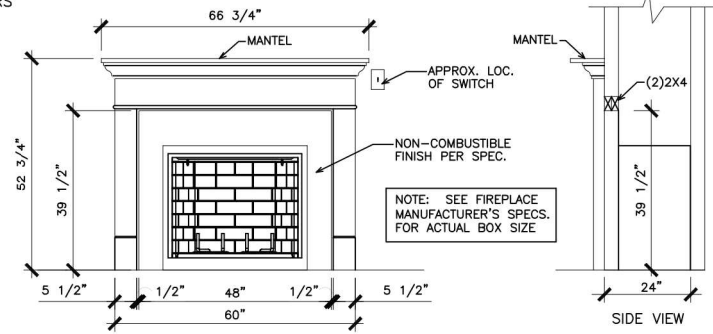
SCUTTLE HOLE DETAIL

N.T.S.



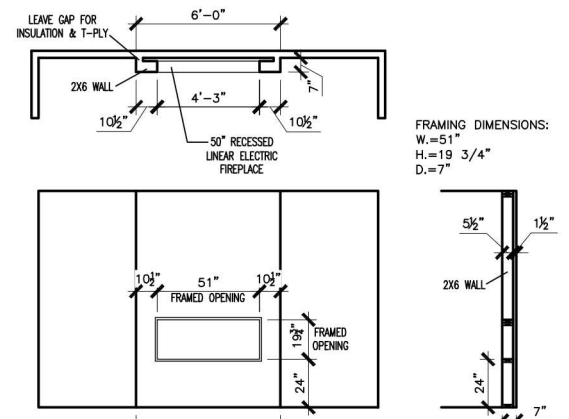
PDS TRIM DETAIL

N.T.S.



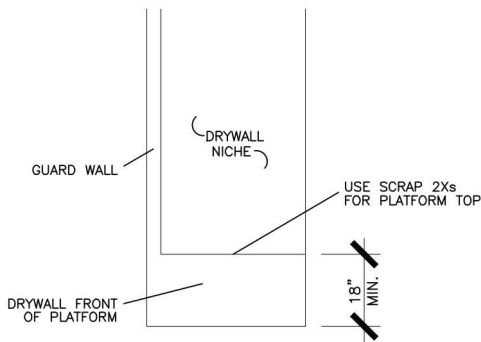
GAS/ELECTRIC FIREPLACE DETAIL
WITH WESCOTT WOOD MANTEL

N.T.S.



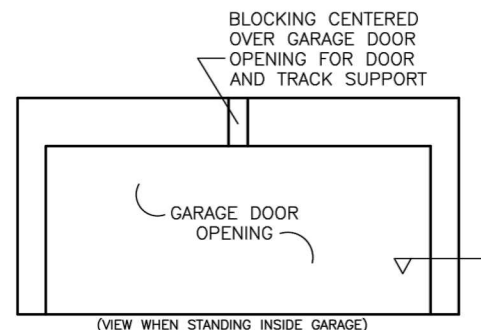
LINEAR ELECTRIC FIREPLACE DETAIL

N.T.S.



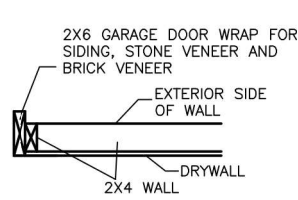
SITE BUILT PLATFORM
TO RAISE WATER HEATER

N.T.S.

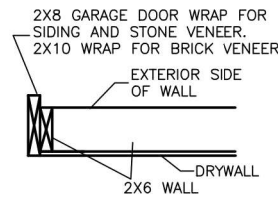


TYP. GARAGE WRAP & BLOCKING

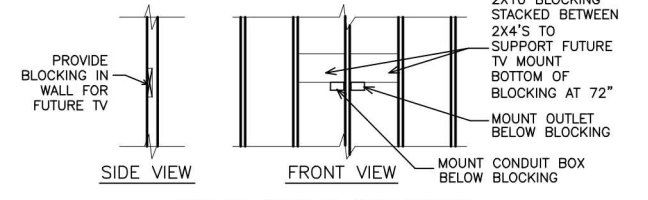
N.T.S.



SECTION VIEW
2X4 PORTAL WALL

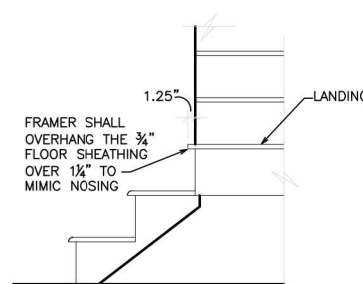


SECTION VIEWS
2X6 PORTAL WALL



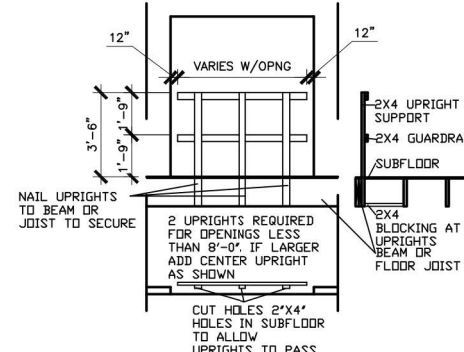
TYP. TV WALL PREP

N.T.S.



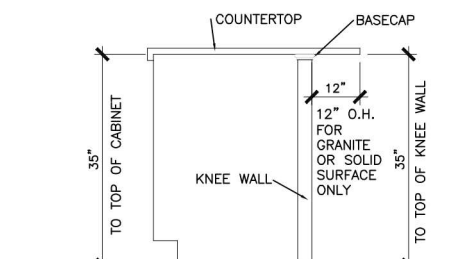
BOX STEP OVERHANG

N.T.S.



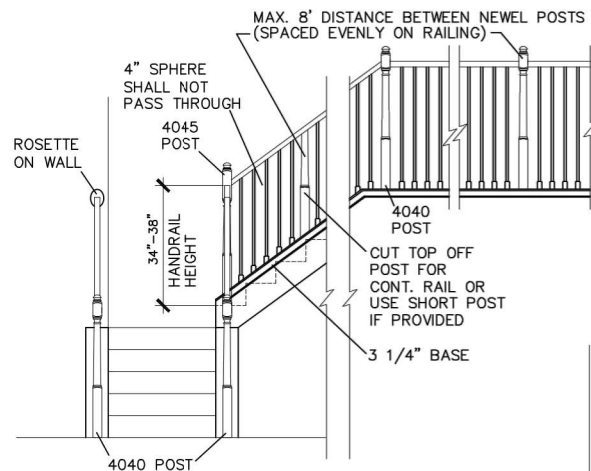
GUARD RAIL DTL. AS REQ'D

N.T.S.



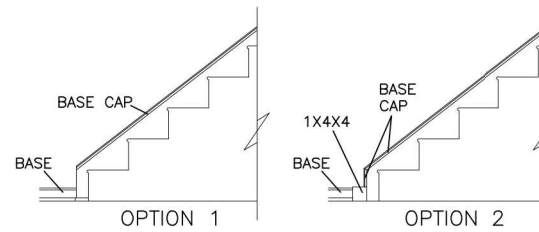
SECTION @ ISLAND KNEEWALL

N.T.S.



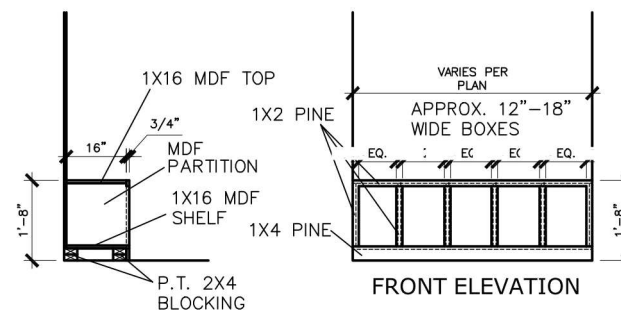
HANDRAIL/POST DETAIL @ STAIRS

N.T.S.



STAIR TRIM DETAILS

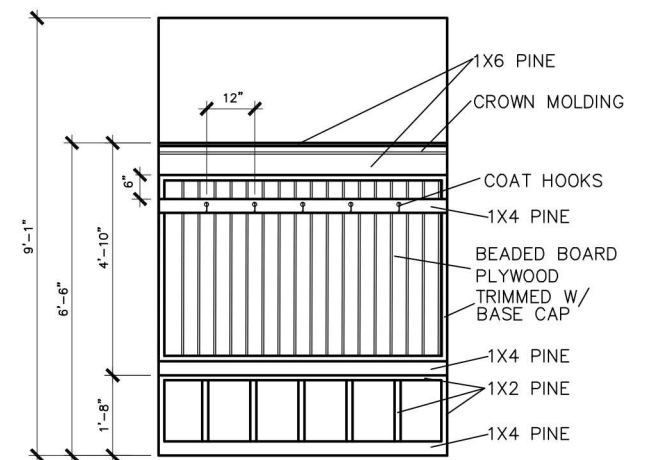
N.T.S.



SIDE ELEVATION

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
FACADE OPT:	
PLAN ID:	
FND:	ELEV:
PAGE NO:	D1.1

CONNECTION SPECIFICATIONS (TYP. U.N.O.)		
DESCRIPTION OF BLDG. ELEMENT	3"x0.131" NAILS	3"x0.120" NAILS
JOIST TO SOLE PLATE	(3) TOENAILS	(3) TOENAILS*
SOLE PL. TO JOIST/RIM OR BLK'G	NAILS @ 4" O.C.	NAILS @ 4" O.C.
STUD TO PLATE	(4) TOENAILS/ (3)END NAILS	(4) TOENAILS/ (4)END NAILS*
RIM TO TOP PLATE	TOENAILS @ 6" O.C.	TOENAILS @ 4" O.C.*
BLK'G. BTWN. JOISTS TO TOP PL.	(3) TOENAILS EA. END	(3) TOENAILS EA. END*
DOUBLE STUD	NAILS @ 16" O.C.	NAILS @ 16" O.C.
DOUBLE TOP PLATE	NAILS @ 12" O.C.	NAILS @ 8" O.C.
DOUBLE TOP PLATE LAP SPLICE	(12) NAILS IN LAPPED AREA (24" MIN.)	(15) NAILS IN LAPPED AREA (24" MIN.)
TOP PLATE LAP @ CORNERS & INTERSECTING WALLS	(3) NAILS	(3) NAILS
RAFTER/TRUSS TO TOP PLATE	(4) TOENAILS + (1) SIMPSON H25T TOENAILS @ 8" O.C.	(4) TOENAILS + (1) SIMPSON H25T TOENAILS @ 6" O.C.
GAB. END TRUSS TO DBL. TOP PL.	2x10 BLK EVERY 3RD BAY FASTENED TO DBL. TOP PLATE w/ TOENAILS @ 6" O.C.	2x10 BLK EVERY 3RD BAY FASTENED TO DBL. TOP PLATE w/ TOENAILS @ 4" O.C.
R.T. w/ HEEL HT. 9 1/4" TO 12"	2x12 BLK EVERY 3RD BAY FASTENED TO DBL. TOP PLATE w/ TOENAILS @ 6" O.C.	2x12 BLK EVERY 3RD BAY FASTENED TO DBL. TOP PLATE w/ TOENAILS @ 4" O.C.
R.T. w/ HEEL HT. 12" TO 16"	LAP WALL SHTG. w/ DBL. TOP PL. & INSTALL ON TRUSS VERT. - FASTEN w/ NAILS @ 6" O.C.	LAP WALL SHTG. w/ DBL. TOP PL. & INSTALL ON TRUSS VERT. - FASTEN w/ NAILS @ 6" O.C.*
R.T. w/ HEEL HT. UP TO 24"	LAP WALL SHTG. w/ DBL. TOP PL. & INSTALL ON TRUSS VERT. - FASTEN w/ NAILS @ 6" O.C. PROVIDE 2x BLK @ EA. BAY AT TOP OF HEEL	LAP WALL SHTG. w/ DBL. TOP PL. & INSTALL ON TRUSS VERT. - FASTEN w/ NAILS @ 6" O.C. PROVIDE 2x BLK @ EA. BAY AT TOP OF HEEL*
WALL TO FOUNDATION	WALL SHTG. LAP w/ SILL PL. & FASTENED PER SHEAR WALL FASTENING SPEC.	
* 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 TRUSSES 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.

TRUSSES/JOISTS SHALL BE DESIGNED SO THAT DIFFERENTIAL DEFLECTION BETWEEN ADJACENT PARALLEL TRUSSES/JOISTS OR GIRDER TRUSSES/FLUSH BEAMS DO NOT EXCEED THE FOLLOWING:

A. ROOF TRUSSES:
1/4" DEAD LOAD

B. ATTIC TRUSSES, & I-JOISTS:
1/8" DEAD LOAD

ABSOLUTE DEAD LOAD DEFLECTION OF ATTIC TRUSSES WHEN ADJACENT TO FLOOR FRAMING BY OTHERS SHALL BE LIMITED TO 3/16". (NOT DIFFERENTIAL DEFLECTION)

VENEER LINTEL SCHEDULE

SPAN (MAX)	HEIGHT OF VENEER ABOVE LINTEL	STEEL ANGLE SIZE
3'-0"	20 FT. MAX	L3"x3"x4"
	3 FT. MAX	L3"x3"x4"
6'-0"	12 FT. MAX	L4"x3"x4"
	20 FT. MAX	L5"x3 1/2"x3 1/2"
8'-0"	3 FT. MAX	L4"x4"x4" *
	12 FT. MAX	L5"x3 1/2"x3 1/2"
9'-6"	16 FT. MAX	L6"x3 1/2"x3 1/2"
	12 FT. MAX	L6"x3 1/2"x3 1/2"

ALL LINTELS:
- SHALL SUPPORT 2 3/4" - 3 1/2" VENEER w/ 40 psf MAXIMUM HEIGHT.
- @ 8" SHALL HAVE 4" MIN. BEARING
- @ 16" SHALL HAVE 8" MIN. BEARING
- @ 16" SHALL NOT BE FASTENED BACK TO HEADER.
- @ 16" SHALL BE FASTENED BACK TO WOOD HEADER IN WALL @48"o.c. w/ 1/2" DIA. x 3 1/2" LONG LAG SCREWS IN 2" LONG VERTICALLY SLOTTED HOLES.
- MAX. VENEER HT. APPLIES TO ANY PORTION OF BRICK OVER THE OPENING.
- ALL LINTELS SHALL BE LONG-LEG VERTICAL.
- WHEN SUPPORTING VENEER < 3" WIDE THE EXTERIOR TOE OF THE HORIZONTAL LEG MAY BE CUT IN THE FIELD TO BE 3/4" WIDE OVER THE BEARING LENGTH ONLY. THIS IS TO ALLOW FOR MORTAR JOINT FINISHING.
- SEE STRUCTURAL PLANS FOR ANY LINTEL CONDITION NOT ENCOMPASSED BY THE ABOVE PARAMETERS.
* FOR QUEEN VENEER USE L4x3 1/2".

MK STD. - MAY 2016

GENERAL STRUCTURAL NOTES

FOUNDATION

- DESIGN IS BASED ON 2018 NCSCB-RESIDENTIAL CODE
- 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., 1" MIN. EMBEDMENT
 - FA4 ANCHOR STRAPS @ 6'-0" O.C.
- FASTEN 2x10 SILL PLATES TO PRECAST BSMT WALLS WITH A MINIMUM OF 2 ANCHORS PER PLATE, 12" MAX. FROM PLATE ENDS - UTILIZING:
 - 1/2" DIA. BOLTS @ 2'-0" O.C.
- ALL LUMBER EXPOSED TO WEATHER OR IN CONTACT W/ PERIMETER FOUNDATION SHALL BE PRESERVATIVE TREATED SOUTHERN PINE #2.
- BUILDER TO VERIFY CORROSION-RESISTANCE COMPATIBILITY OF HARDWARE & FASTENERS IN CONTACT W/ PRESERVATIVE-TREATED WOOD. CONTACT LUMBER & HARDWARE SUPPLIERS TO COORD.
- FOUNDATION WALLS & FOOTINGS SHALL BE PLAIN CONCRETE, U.N.O.
- CONCRETE DESIGN BASED ON ACI 318. CONCRETE SHALL ATTAIN THE FOLLOWING MIN. COMPRESSIVE STRENGTHS IN 28 DAYS, U.N.O.:
 - F_c = 4,000 psi: FOUNDATION WALLS
 - 3,000 psi: FOOTINGS & INTERIOR SLABS ON GRADE
 - 3,500 psi: GARAGE & EXTERIOR SLABS ON GRADE
 - f_y = 60,000 psi
- BASEMENT FOUNDATION WALL DESIGN BASED ON:
 - 8' OR 9' HEIGHT (AS NOTED ON PLANS)
 - TALLER WALLS MUST BE ENGINEERED.

- BASEMENT WALL DESIGN IS BASED ON 30 OR 45 PCF BACKFILL SOIL TYPE CLASSIFICATIONS:
 - 30 PCF TYPE (GM, GP, SM, SP)
 - 45 PCF TYPE (GM, GC, SM, SM-SC, ML)
 - IMPORTANT - IF 60 PCF SOIL TYPE (SC, ML-CL, OR CL) IS UTILIZED FOR BACKFILL, CONTACT MULHERN & KULP FOR FURTHER EVALUATION OF FOUNDATION DESIGN.
- BASEMENT WALLS SHALL BE BRACED, PRIOR TO BACKFILLING, BY ADEQUATE TEMPORARY BRACING OR INSTALL 1st FLOOR DECK.
- ALL CONCRETE EXPOSED TO THE WEATHER SHALL NOT HAVE LESS THAN 5% OR MORE THAN 7% AIR ENTRAINMENT.
- ALL FOOTINGS SHALL BEAR BELOW FROST LINE (TYP.) OR 12" MIN IN REGIONS WHERE CODE FROST DEPTH IS NOT APPLICABLE. CONSULT SOILS REPORT OR BUILDING DEPT. FOR MINIMUM DEPTH BELOW GRADE.
- FOOTINGS AND SLABS ON GRADE SHALL BEAR ON VIRGIN SOIL OR 95% COMPACTED FILL.
- PROVIDE CONTROL JOINTS AT ALL INSIDE CORNERS OF SLAB EDGES, AND OTHER LOCATIONS WHERE SLAB CRACKS ARE LIKELY TO DEVELOP.
 - JOINTS SHALL BE LOCATED @ 10'-0" O.C. (RECOMMENDED) OR 15'-0" O.C. (MAXIMUM)
 - JOINT GRID PATTERN SHALL BE AS CLOSE TO SQUARES AS POSSIBLE (1:1 RATIO), WITH A MAXIMUM OF 1:1.5 RATIO
 - CONTROL JOINTS SHALL NOT BE INSTALLED IN STRUCTURAL SLABS
- TYPICAL REINFORCEMENT DETAILS: PROVIDE 3" MIN. CLEAR COVER WHERE CAST AGAINST EARTH, 1 1/2" MIN. CLEAR COVER AGAINST FORMS. LAP ALL REBAR 48 BAR DIAMETERS MIN. (24" FOR #4 BARS) & BEND BARS AND LAP AT CORNERS. PROVIDE 6" HOOK INTO SUPPORTING FOOTINGS WHEN FOOTINGS INTERSECT.

- DIMENSIONS BY OTHERS, BUILDER TO VERIFY.

MK STD. - MAY 2012

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.J. INDICATES 14" DEEP FLOOR I-JOISTS (24" O.C. MAX SPACING). JOIST SERIES AND SPACING SHALL BE THE RESPONSIBILITY OF THE JOIST MANUFACTURER
- D.J. INDICATES 2x8 P.T. DECK JOISTS @ 16" O.C. (MAX.)
- 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.N.A.)
- BEAM/HEADER
- METAL HANGER
- INDICATES POST ABOVE (P.A.) PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.

LATERAL/WALL BRACING & WALL SHEATHING SPECIFICATIONS

THIS MODEL HAS BEEN DESIGNED TO RESIST LATERAL FORCES RESULTING FROM:
120MPH WIND IN 2018 NCSCB-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 1604) & ASCE 7, AS PERMITTED BY R301.1.3 OF THE 2018 NCSCB-RC & 2018 IRC. IF THE PARAMETERS OF SECTION R602.12 COMPLY. ACCORDINGLY, THIS MODEL, AS DOCUMENTED AND DETAILED HEREWITHIN, IS ADEQUATE TO RESIST THE CODE REQUIRED LATERAL FORCES.

DESIGN WIND UPLIFT LOADS HAVE BEEN CALCULATED UTILIZING ASCE 7 (ACCEPTED ENGINEERING PRACTICE) AS ALLOWED PER 2018 NCSCB-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 R602.3.5 & R802.11.

EXT. WALL SHEATHING SPECIFICATION

- 7/16" OSB OR 1/32" 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.
- ALL EXT. WALLS SHALL BE CONTINUOUSLY SHEATHED AND ARE CONSIDERED SHEAR WALLS.
- ALT. STAPLE CONNECTION SPEC: 1 3/4" 16 GA STAPLES (1/6" 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, U.N.O.
- ALL STRUCTURAL PANELS ARE TO BE DIRECTLY APPLIED TO STUD FRAMING.
- PRE-MANUFACTURED PANELIZED WALLS:
 - FASTEN TOGETHER END STUDS OF WALL PANELS SHEATHED w/ OSB OR PLYWOOD w/ 3" x 0.120" NAILS @ 4" O.C. (THRU ONE SIDE ONLY)

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

MK STD. - MAR 2016

HOLD-DOWN SCHEDULE

SYMBOL	SPECIFICATION
HD-1	SIMPSON HIT4 HOLD-DOWN *

* UTILIZE SIMPSON "SET" EPOXY SYSTEM TO FASTEN 3/8" DIA. THREADED ROD INTO CONCRETE FOUNDATION. PROVIDE 12" MIN. EMBEDMENT INTO CONCRETE. INSTALL PER MANUF. RECOMMENDATIONS. DO NOT LOCATE ANCHORS WITHIN 1 3/4" OF EDGE OF FOUNDATION.

FLOOR FRAMING

- I-JOISTS SHALL BE DESIGNED BY MANUF. TO MEET OR EXCEED L/480 LIVE LOAD DEFLECTION CRITERIA. (EXCLUDES STONE/MARBLE OR WET 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).
- AT I-JOIST FLOORS, PROVIDE 1" MIN. OSB RIM BOARD.
- METAL HANGERS SHALL BE SPECIFIED BY MANUFACTURER, U.N.O.
- I-JOIST SHOP DWGS. SHALL BE SUBMITTED TO ARCH. & ENG. FOR REVIEW AND APPROVAL PRIOR TO FABRICATION OR DELIVERY.
- FLOOR SHEATHING SHALL BE 23/32" A.P.A. RATED 'STUD-I-FLOOR' 24" O.C. EXPOSURE 1 (OR APPROVED EQUAL) WITH TONGUE AND GROOVE EDGES. FASTEN TO FRAMING MEMBERS w/ GLUE AND
 - 2 1/8" x 0.131" NAILS @ 6"o.c. @ PANEL EDGES & @ 12"o.c. FIELD.
 - 2 3/8" x 0.120" NAILS @ 4" O.C. @ PANEL EDGES & @ 8" O.C. FIELD.
 - 2 3/8" x 0.113" NAILS @ 3" O.C. @ PANEL EDGES & @ 6" O.C. IN FIELD.

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 1/8" 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 RT1A CLIP (OR APPROVED EQUAL) @ ALL BEARING POINTS. PROVIDE (2) RT1A CLIPS AT 2-PLY GIRDER TRUSSES, (3) RT1A 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 ITCA & TP1'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 1" SPAN).

MK STD. - MAR 2016

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 NCSCB-RESIDENTIAL CODE
- 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.G.
 - LOAD DURATION FACTOR = 1.25
 - FLOOR
 - LIVE = 40 PSF (30 PSF @ SLEEPING AREAS)
 - DEAD = 10 PSF (I-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 R602.3.11) 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=2.0x10⁶ psi
- ENGINEERED LUMBER POSTS TO MEET OR EXCEED THE FOLLOWING:
 - 'LVL' - Fb=2400 psi; FcII=2500 psi; E=1.8x10⁶ 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 W535 SCREWS (OR 3 1/2" 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 W56 SCREWS (OR 6 3/4" TRUSSLOK SCREWS) @ 16" O/C. USE A MINIMUM OF 4 ROWS FOR BEAM DEPTHS OF 14" OR GREATER. APPLY FASTENING AT BOTH FACES (ONE SIDE ONLY FOR TRUSSLOK SCREWS). LOCATE TOP AND BOTTOM SCREWS 2" FROM EDGE. A SOLID 1" BEAM IS ACCEPTABLE.
- 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.

MK STD. - MAR 2016



MULHERN+KULP
RESIDENTIAL STRUCTURAL ENGINEERING



Mulhern+Kulp project number:

256-21012

project mgr:

SMK

drawn by:

MJF

issue date:

02-21-22

REVISIONS:

date:	initial:
11/22/21	MJF
04/01/22	SMK
STEEL GARAGE HEADERS UPDATED	

SMITH DOUGLAS HOMES

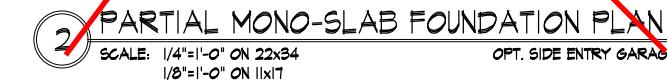
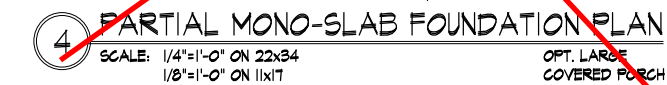
SMITH DOUGLAS HOMES

GENERAL STRUCTURAL NOTES
HARRINGTON MODEL
JOHNSTON COUNTY, NC

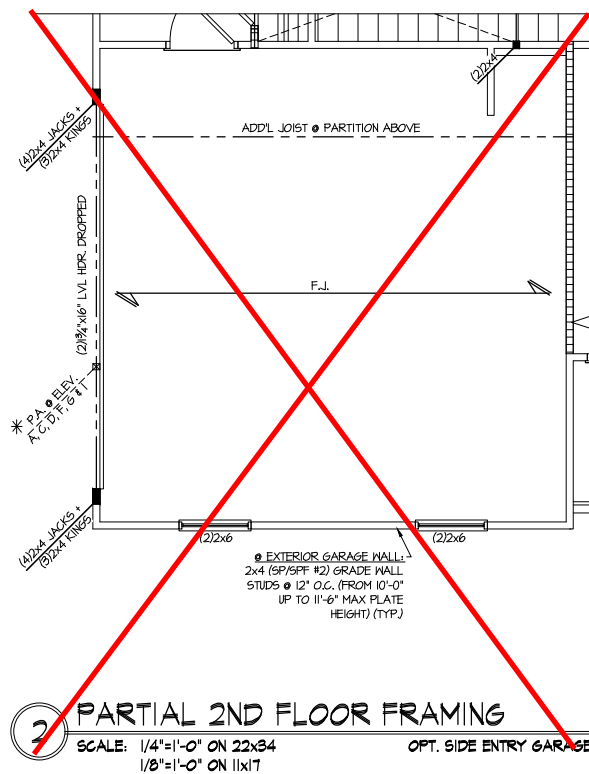
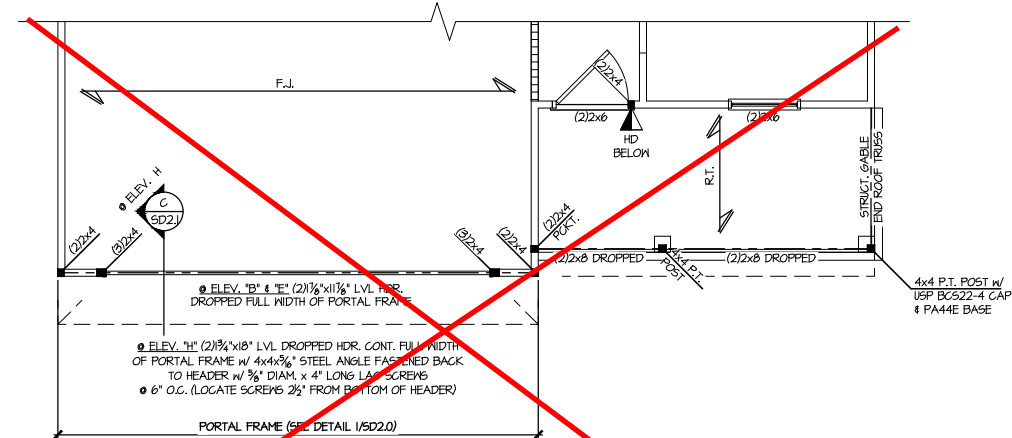
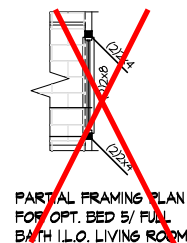
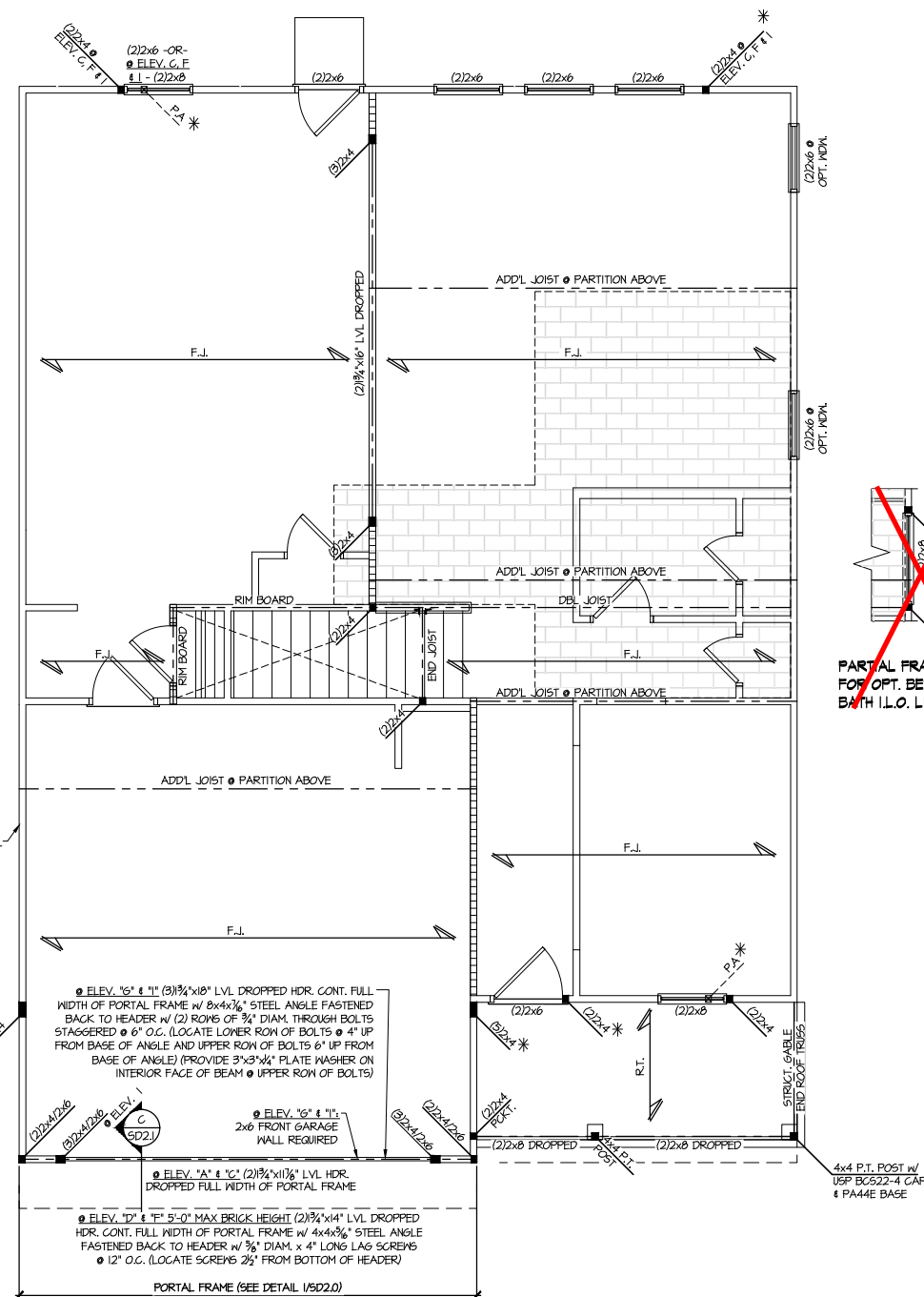
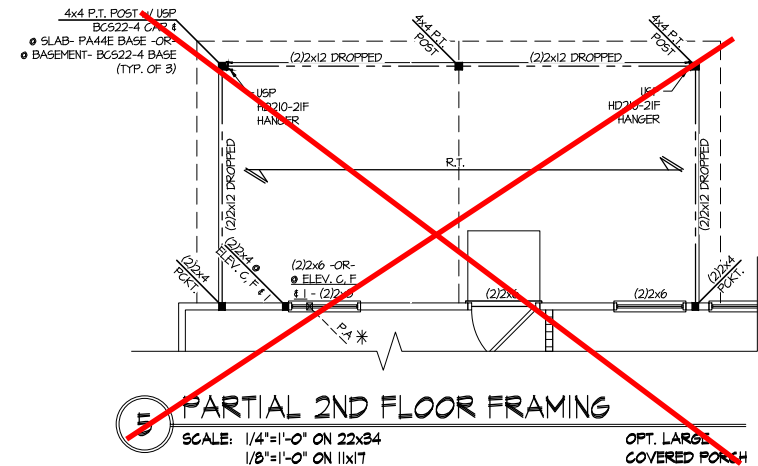
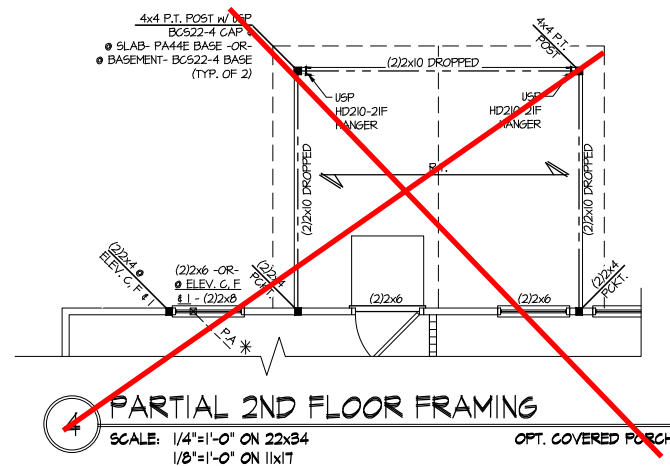
sheet:

Cedar Pointe
LOT 26

S0.0



- Cedar Point
LOT 26**
- REFER TO 50.0 FOR TYPICAL
STRUCTURAL NOTES & SCHEDULES



Cedar Pointe
LOT 26

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

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

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 SPACING). JOIST SERIES AND SPACING SHALL BE THE RESPONSIBILITY OF THE JOIST MANUFACTURER
- D.J. INDICATES 2x8 P.T. DECK JOISTS @ 16" O.C. (MAX)
- 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
- J.L. METAL HANGER
- * INDICATES POST ABOVE (P.A.) PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.

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. 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 (1/6" 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 HOLDOWN
MKC STD. - MAR 2016

Cedar Pointe
LOT 26

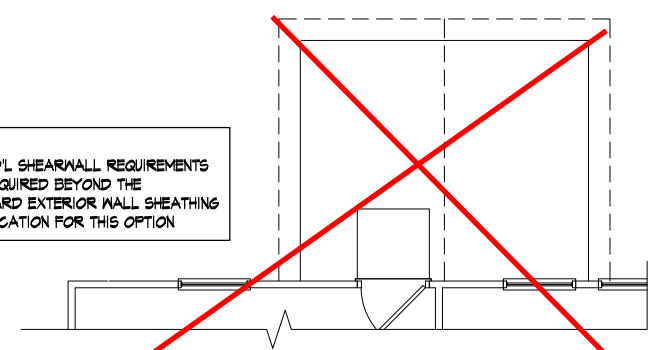
REFER TO 50.0 FOR TYPICAL
STRUCTURAL NOTES & SCHEDULES

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

LEGEND

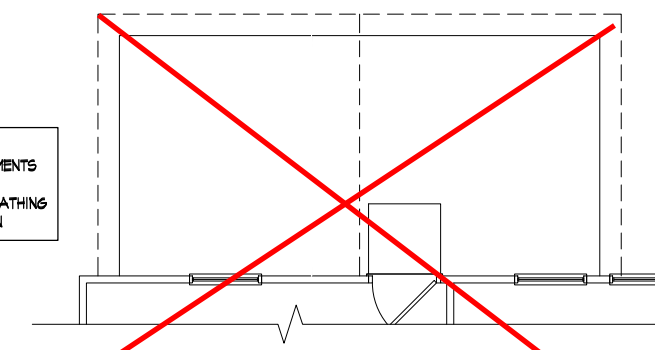
- R.T. INDICATES ROOF TRUSSES @ 24" O.C. PER ROOF. MANUF. (TYP. UNO.)
- O.F. INDICATES TRUSS OVERFRAMING @ 24" O.C. (TYP. UNO.)
- F.J. INDICATES 14" DEEP FLOOR I-JOISTS (24" O.C. MAX SPACING). JOIST SERIES AND SPACING SHALL BE THE RESPONSIBILITY OF THE JOIST MANUFACTURER
- D.J. INDICATES 2x8 P.T. DECK JOISTS @ 16" O.C. (MAX.)
- 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
- J.L. 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 OPTION

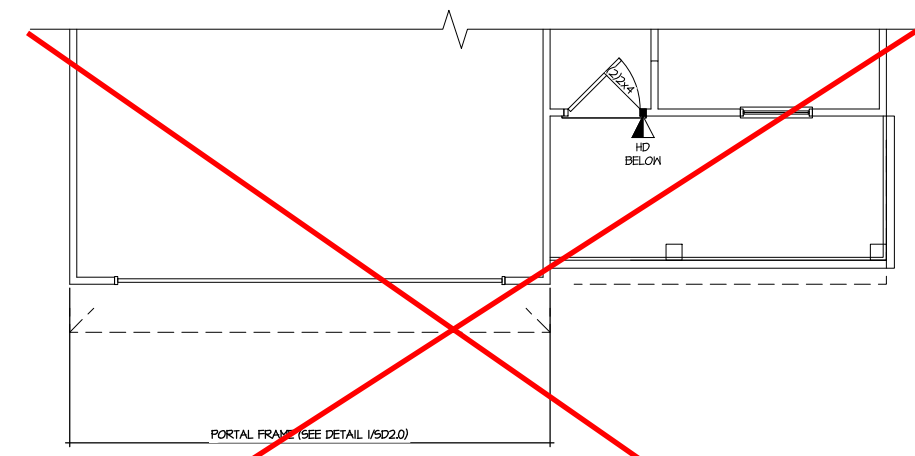


4 PARTIAL 1ST FLOOR WALL BRACING PLAN
SCALE: 1/4"=1'-0" ON 22x34
1/8"=1'-0" ON 11x17 OPT. COVERED PORCH

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

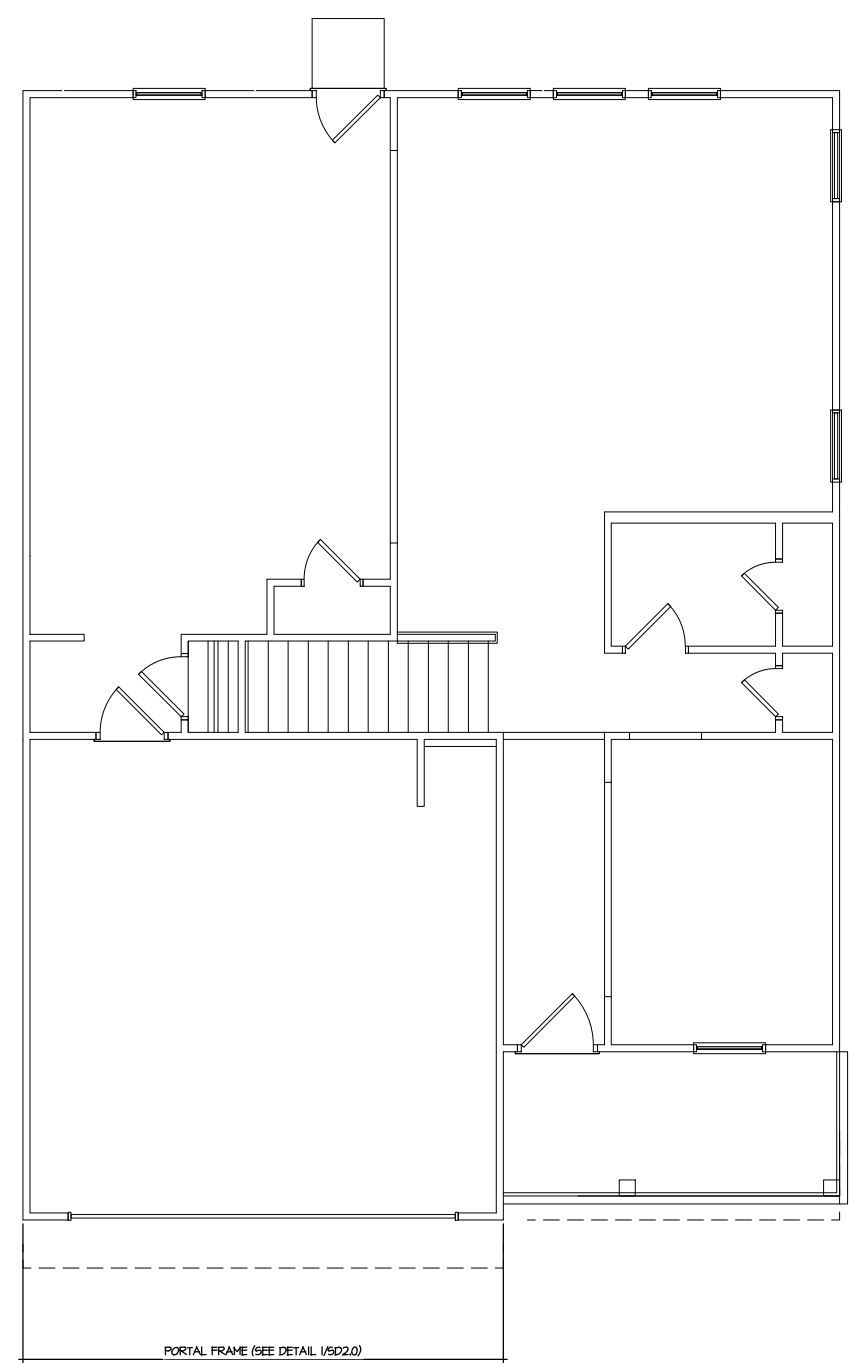
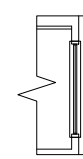


5 PARTIAL 1ST FLOOR WALL BRACING PLAN
SCALE: 1/4"=1'-0" ON 22x34
1/8"=1'-0" ON 11x17 OPT. LARGE COVERED PORCH



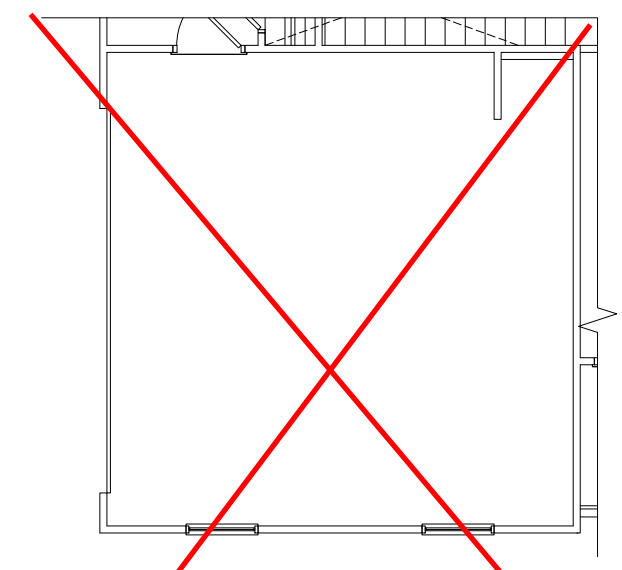
3 PARTIAL 1ST FLOOR WALL BRACING PLAN
SCALE: 1/4"=1'-0" ON 22x34
1/8"=1'-0" ON 11x17 ELEV. B, E & F
(SEE ELEV. A FOR ADD'L INFO)

PARTIAL FRAMING PLAN
FOR OPT. BED 5/ FULL
BATH I.L.O. LIVING ROOM



1 1ST FLOOR WALL BRACING PLAN
SCALE: 1/4"=1'-0" ON 22x34
1/8"=1'-0" ON 11x17 ELEV. A, C, D, F, G & I

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



2 PARTIAL 1ST FLOOR WALL BRACING PLAN
SCALE: 1/4"=1'-0" ON 22x34
1/8"=1'-0" ON 11x17 OPT. SIDE ENTRY GARAGE

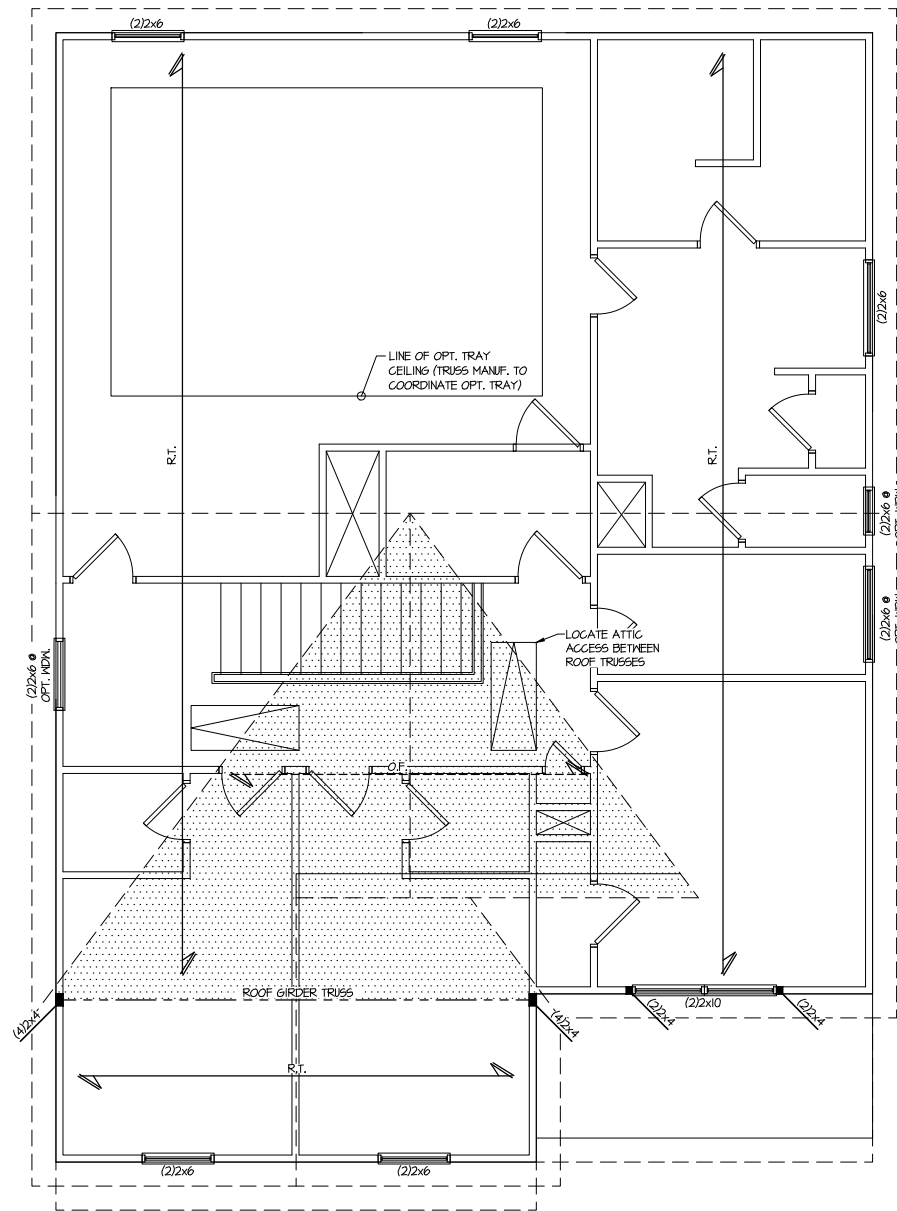
LATERAL/WALL BRACING & WALL
SHEATHING SPECIFICATIONS

THIS MODEL HAS BEEN DESIGNED TO RESIST
LATERAL FORCES RESULTING FROM:
120MPH WIND IN 2018 NCSBC-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 NCSBC-RC & 2018 IRC. IF THE
PARAMETERS OF SECTION R602.12 COMPLY.
ACCORDINGLY, THIS MODEL, AS DOCUMENTED AND
DETAILED HEREWITHIN, IS ADEQUATE TO RESIST THE
CODE REQUIRED LATERAL FORCES.

DESIGN WIND UPLIFT LOADS HAVE BEEN
CALCULATED UTILIZING ASCE 7 (ACCEPTED
ENGINEERING PRACTICE) AS ALLOWED PER 2018
NCSBC-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 R602.3.5 & R802.11.

MKC STD. - MAR 2016



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

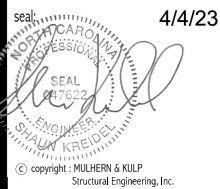
**Cedar Pointe
LOT 26**

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

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

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.J. INDICATES 14" DEEP FLOOR I-JOISTS (24" O.C. MAX SPACING). JOIST SERIES AND SPACING SHALL BE THE RESPONSIBILITY OF THE JOIST MANUFACTURER
- D.J. INDICATES 2x8 P.T. DECK JOISTS @ 16" O.C. (MAX)
- 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.



Mulhern+Kulp project number:
256-21012

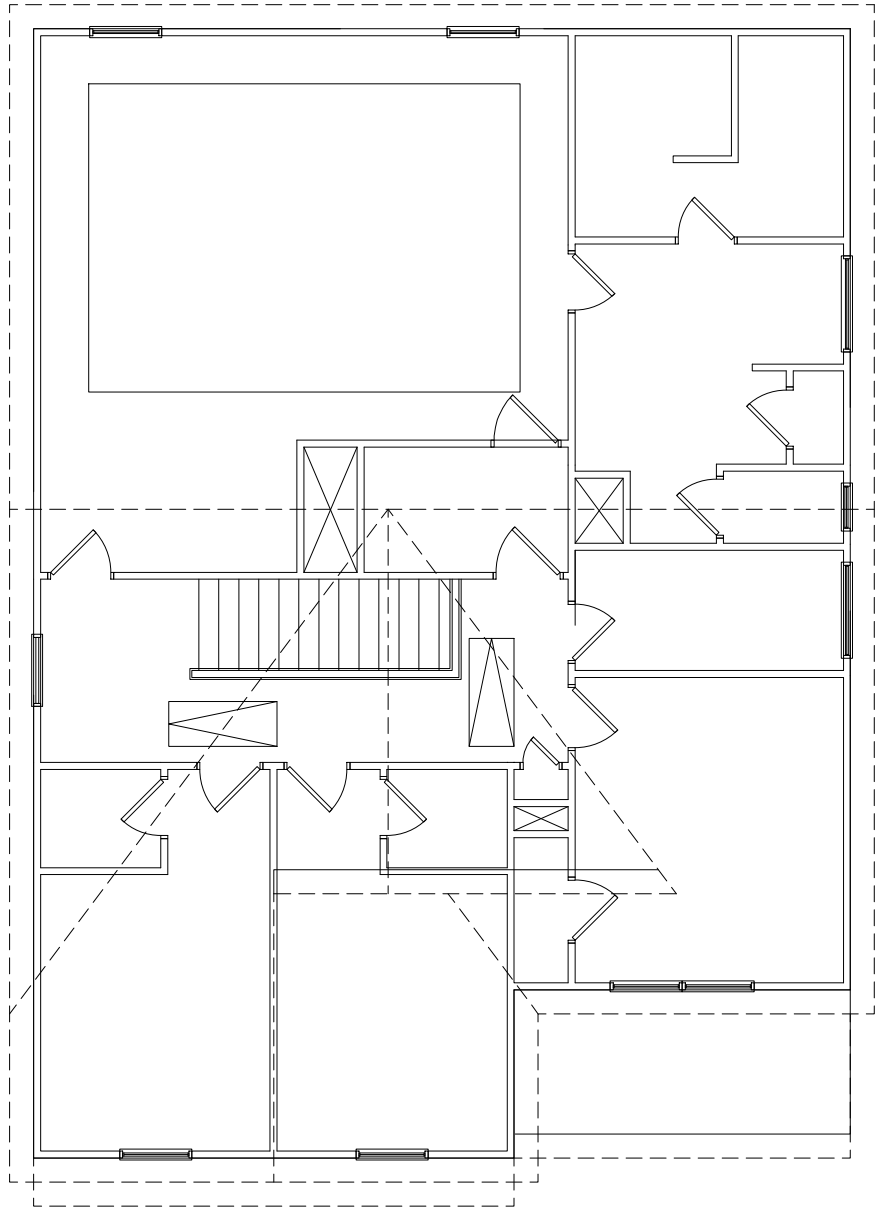
project mgr: **SMK**
drawn by: **MJF**
issue date: **02-21-22**

REVISIONS:
date: initial:
11/22/21 MJF
1/22/22 MODIFIED PLANS ADDED
04/01/22 SHMM
STEEL GARAGE HEADERS UPDATED

SMITH DOUGLAS
HOMES

ROOF FRAMING PLAN
HARRINGTON MODEL
JOHNSTON COUNTY, NC

sheet:
S4.0M



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

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

LATERAL/WALL BRACING & WALL SHEATHING SPECIFICATIONS

THIS MODEL HAS BEEN DESIGNED TO RESIST LATERAL FORCES RESULTING FROM:
120MPH WIND IN 2018 NCSBG: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 1604) & ASCE 7, AS PERMITTED BY R301.1.3 OF THE 2018 NCSBG:RC & 2018 IRC. IF THE PARAMETERS OF SECTION R602.12 COMPLY. ACCORDINGLY, THIS MODEL, AS DOCUMENTED AND DETAILED HEREWITHIN, IS ADEQUATE TO RESIST THE CODE REQUIRED LATERAL FORCES.

DESIGN WIND UPLIFT LOADS HAVE BEEN CALCULATED UTILIZING ASCE 7 (ACCEPTED ENGINEERING PRACTICE) AS ALLOWED PER 2018 NCSBG: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 R602.3.5 & R802.11.

M/KC STD. - MAR 2016

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. 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 (1/6" 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 HOLDOWN

M/KC STD. - MAR 2016

**Cedar Pointe
LOT 26**

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

REFER TO S.O. 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 SPACING). JOIST SERIES AND SPACING SHALL BE THE RESPONSIBILITY OF THE JOIST MANUFACTURER
- D.J. INDICATES 2x8 P.T. DECK JOISTS @ 16" O.C. (MAX.)
- 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.

4/4/23
Seal
SHAUN KREIDEL
Professional Engineer
Copyright © MULHERN & KULP
Structural Engineering, Inc.

MULHERN+KULP
RESIDENTIAL STRUCTURAL ENGINEERING
3625 Shallowford Parkway, Suite 105 • Alpharetta, GA 30022
970-777-8874 • info@mulhernkulp.com
NC License # C-3825

Mulhern+Kulp project number:
256-21012

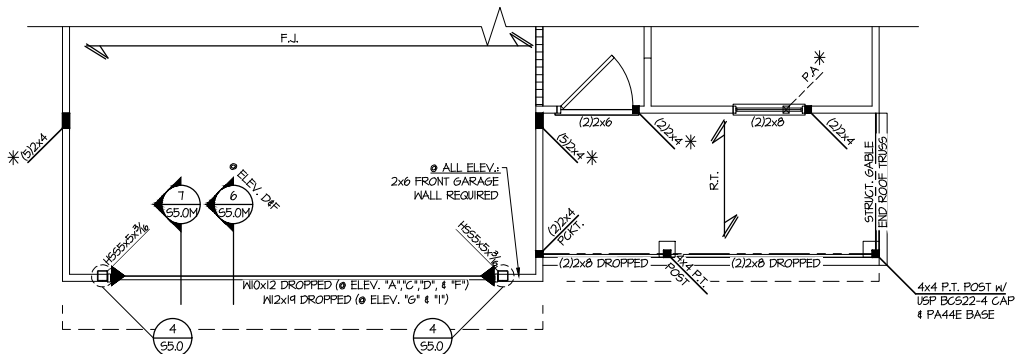
project mgr: **SMK**
drawn by: **MJF**
issue date: **02-21-22**

REVISIONS:
date: 11/22/21 initial: MJF
11/22/21 REVISIONS PLANS ADDED
04/01/22 STEEL GARAGE HEADERS UPDATED SHM

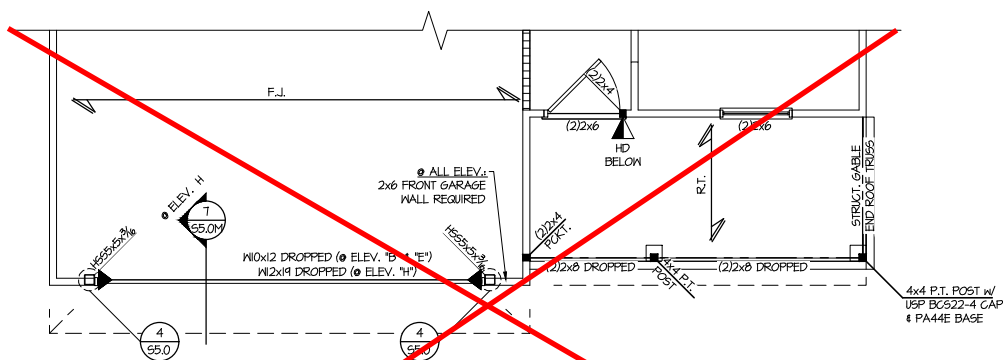
SMITH DOUGLAS
HOMES

2ND FLOOR WALL BRACING PLAN
HARRINGTON MODEL
JOHNSTON COUNTY, NC

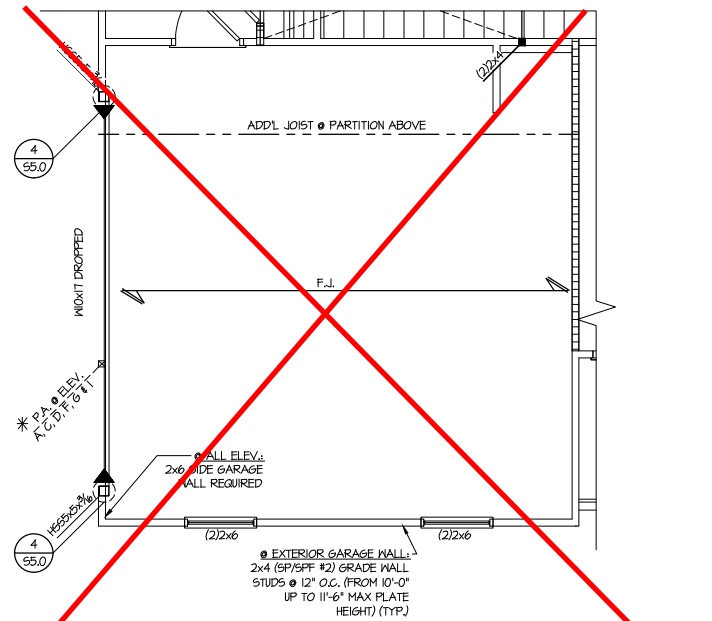
sheet:
S4.0ML



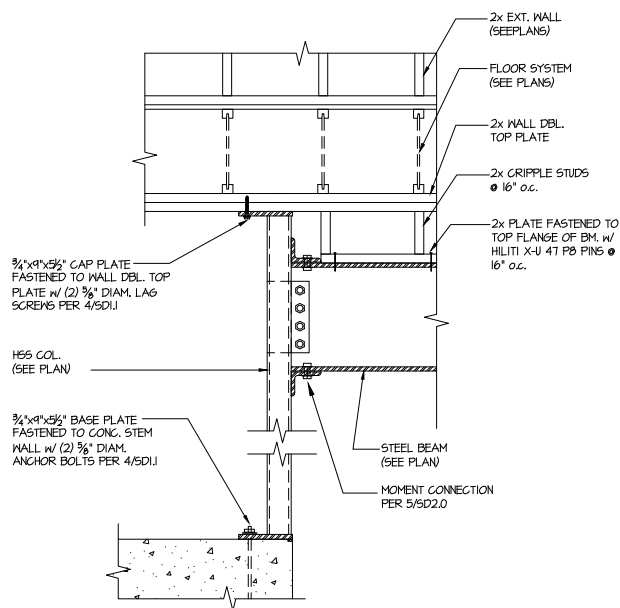
1 PARTIAL 2ND FLOOR FRAMING PLAN
SCALE: 1/4"=1'-0" ON 22x34
1/8"=1'-0" ON 11x17 ELEV. A, C, D, F, & I



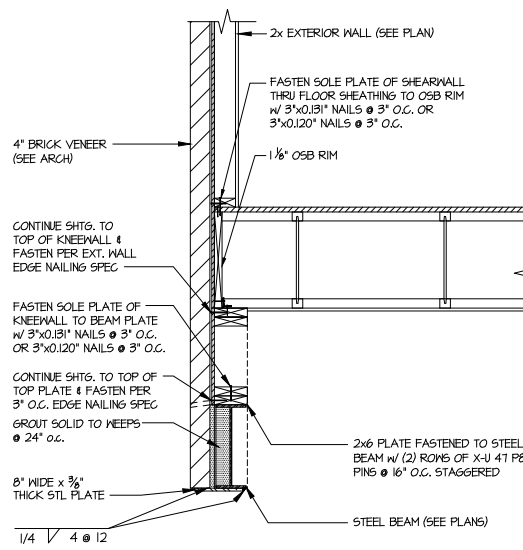
2 PARTIAL 2ND FLOOR FRAMING PLAN
SCALE: 1/4"=1'-0" ON 22x34
1/8"=1'-0" ON 11x17 ELEV. B, E, & H



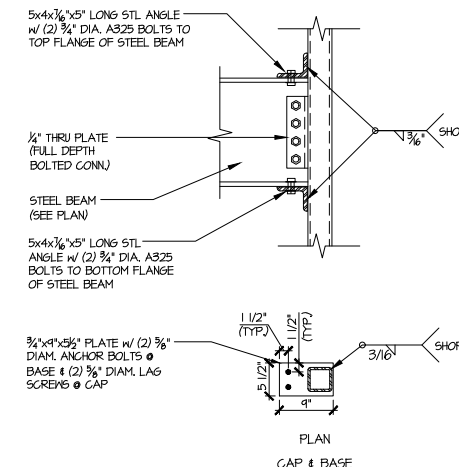
3 PARTIAL 2ND FLOOR FRAMING PLAN
SCALE: 1/4"=1'-0" ON 22x34
1/8"=1'-0" ON 11x17 OPT. SIDE ENTRY GARAGE



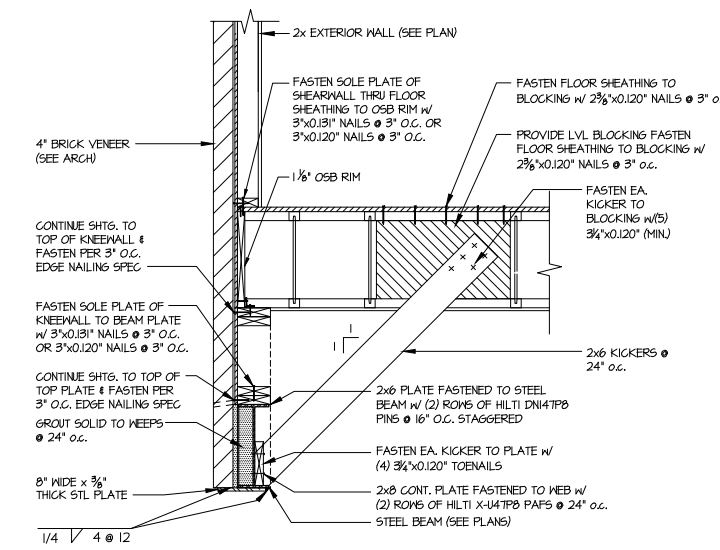
4 STEEL MOMENT FRAME ELEVATION
SCALE: 3/4"=1'-0"



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



5 STEEL CONNECTION DETAIL
SCALE: 3/4"=1'-0" H55 COLUMN



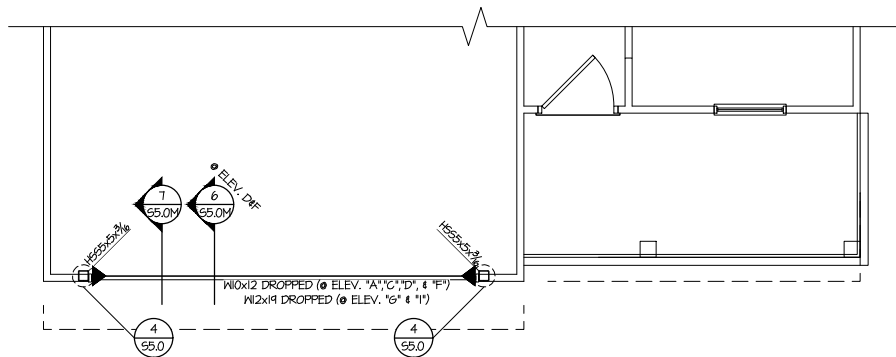
7 DETAIL
SCALE: 3/8"=1'-0"

NOTE:
REFER TO STRUCTURAL MASTER SET, PREPARED BY
MULHERN & KULP, DATED 02-21-22 FOR ADDL. INFO.

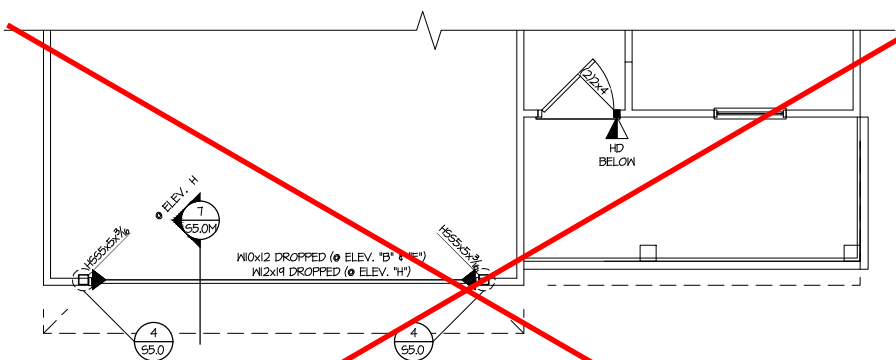
**Cedar Pointe
LOT 26**

LEGEND

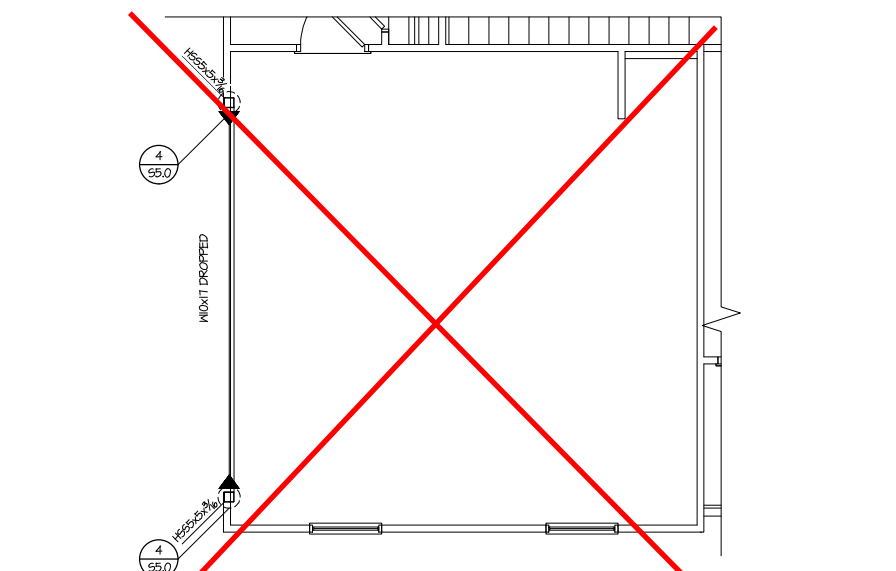
- R.T. INDICATES ROOF TRUSSES @ 24" O.C. PER ROOF. MANUF. (TYP. UNO.)
- O.F. INDICATES TRUSS OVERFRAMING @ 24" O.C. (TYP. UNO.)
- F.J. INDICATES 14" DEEP FLOOR I-JOISTS (24" O.C. MAX SPACING). JOIST SERIES AND SPACING SHALL BE THE RESPONSIBILITY OF THE JOIST MANUFACTURER
- D.J. INDICATES 2x8 P.T. DECK JOISTS @ 16" O.C. (MAX.)
- INDICATES LOCATIONS OF POTENTIAL TILE FLOOR. JOIST MANUFACTURER SHALL DESIGN FLOOR SYSTEM FOR ADDL 10 PSF DEAD LOAD AT THESE LOCATIONS.
- INTERIOR BEARING WALL
- BEARING WALL ABOVE (B.W.A.)
- BEAM/HEADER
- J.L. METAL HANGER
- * INDICATES POST ABOVE (P.A.) PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.



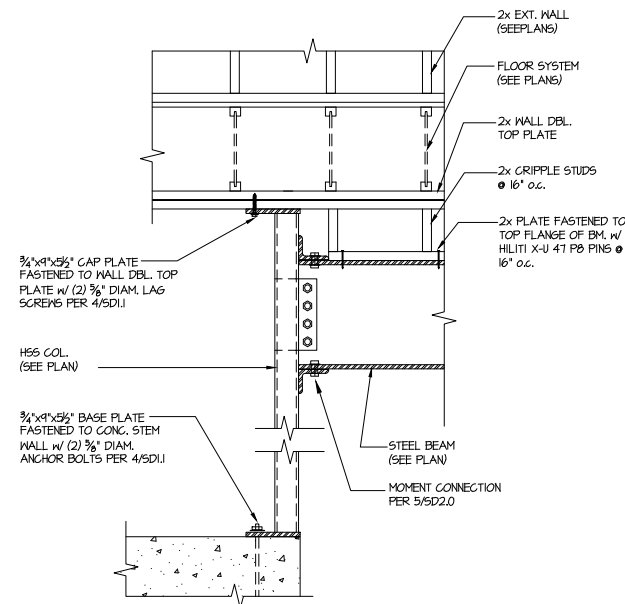
1 PARTIAL 1ST FLOOR WALL BRACING PLAN
 SCALE: 1/4"=1'-0" ON 22x34
 1/8"=1'-0" ON 11x17
 ELEV. A, C, D, F, G & I



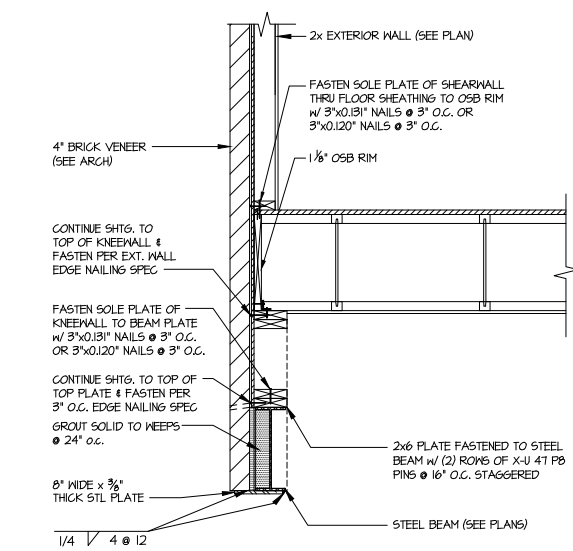
2 PARTIAL 1ST FLOOR WALL BRACING PLAN
 SCALE: 1/4"=1'-0" ON 22x34
 1/8"=1'-0" ON 11x17
 ELEV. B, E & H



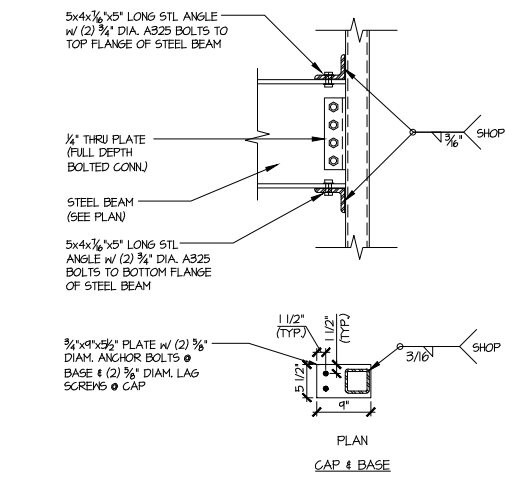
3 PARTIAL 1ST FLOOR WALL BRACING PLAN
 SCALE: 1/4"=1'-0" ON 22x34
 1/8"=1'-0" ON 11x17
 OPT. SIDE ENTRY GARAGE



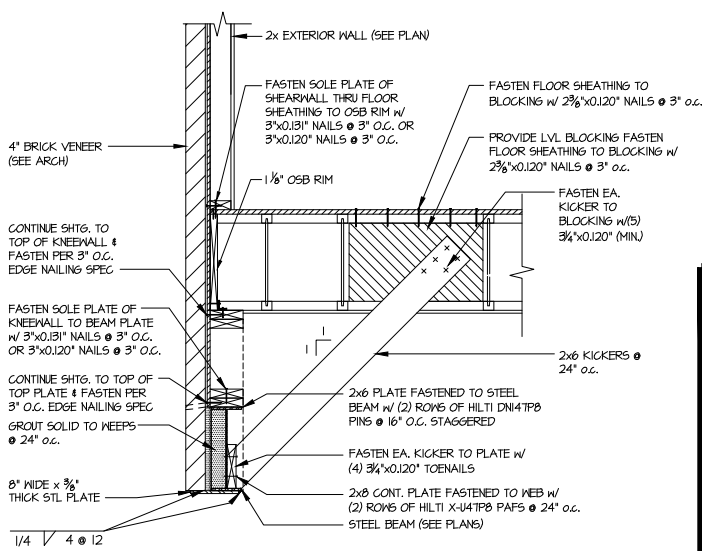
4 STEEL MOMENT FRAME ELEVATION
 SCALE: 3/4"=1'-0"



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



5 STEEL CONNECTION DETAIL
 SCALE: 3/4"=1'-0"



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

LATERAL/WALL BRACING & WALL SHEATHING SPECIFICATIONS

THIS MODEL HAS BEEN DESIGNED TO RESIST LATERAL FORCES RESULTING FROM:
120MPH WIND IN 2018 NCSBG: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 1604) & ASCE 7, AS PERMITTED BY R301.1.3 OF THE 2018 NCSBG:RC & 2018 IRC. IF THE PARAMETERS OF SECTION R602.12 COMPLY. ACCORDINGLY, THIS MODEL, AS DOCUMENTED AND DETAILED HEREWITHIN, IS ADEQUATE TO RESIST THE CODE REQUIRED LATERAL FORCES.

DESIGN WIND UPLIFT LOADS HAVE BEEN CALCULATED UTILIZING ASCE 7 (ACCEPTED ENGINEERING PRACTICE) AS ALLOWED PER 2018 NCSBG:RC & 2018 IRC SECTION R802.11.1. THIS MODEL HAS BEEN DETAILED WHERE REQUIRED & ENGINEERED TO RESIST THE WIND UPLIFT LOAD PATH PER SECTIONS R602.3.5 & R802.11.

EXT. WALL SHEATHING SPECIFICATION

- 7/16" OSB OR 15/32" PLYWOOD:
 FASTEN SHEATHING w/ 2 3/8"x0.133 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 (1/4" 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 0.133" 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 HOLDOWN

Cedar Pointe LOT 26

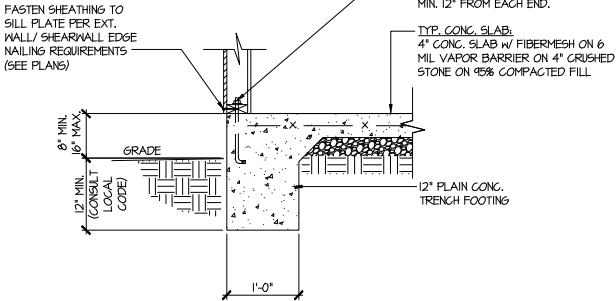
NOTE:
 REFER TO STRUCTURAL MASTER SET, PREPARED BY MULHERN & KULP, DATED 02-21-22 FOR ADD'L. INFO.

LEGEND

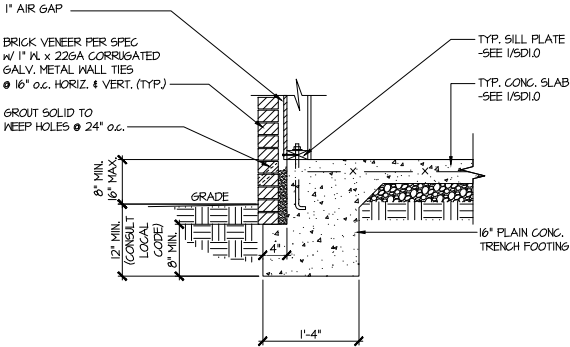
- R.T. INDICATES ROOF TRUSSES @ 24" O.C. PER ROOF. MANUF. (TYP. UNO.)
- O.F. INDICATES TRUSS OVERFRAMING @ 24" O.C. (TYP. UNO.)
- F.J. INDICATES 14" DEEP FLOOR I-JOISTS (24" O.C. MAX SPACING). JOIST SERIES AND SPACING SHALL BE THE RESPONSIBILITY OF THE JOIST MANUFACTURER
- D.J. INDICATES 2x8 P.T. DECK JOISTS @ 16" O.C. (MAX.)
- 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
- J.L. METAL HANGER
- * INDICATES POST ABOVE (P.A.) PROVIDE SOLID BLOCKING UNDER POST OR JAMB ABOVE.

USE ALTERNATE GARAGE CURB
DETAIL FOR 2X4 WALLS AS NEEDED

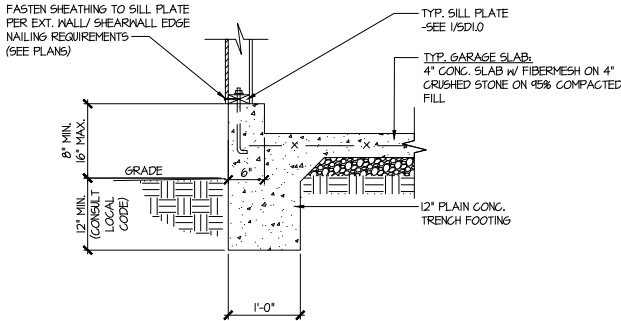
ALT. TO ANCHOR BOLTS:
USP FA4 MUDSILL ANCHORS @ 6'-0"
o.c. PROVIDE (2) PER PLATE, MIN. 12"
FROM EACH END.



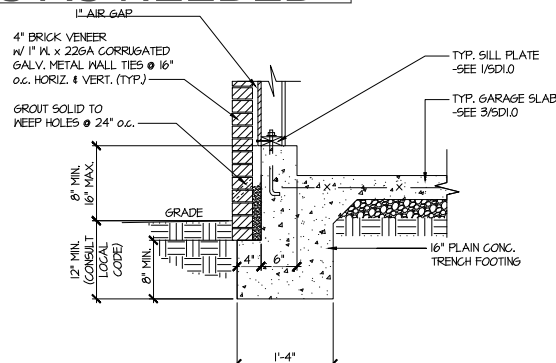
1 TYPICAL SLAB ON GRADE
PERIMETER FOOTING



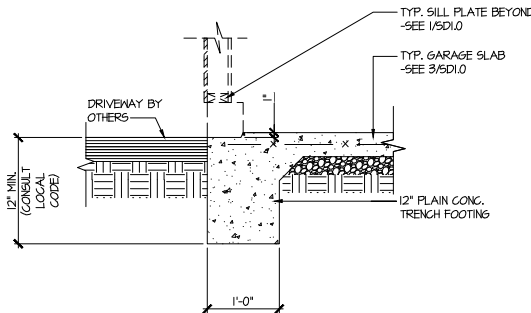
2 TYPICAL SLAB ON GRADE
PERIMETER FOOTING
w/ BRICK VENEER



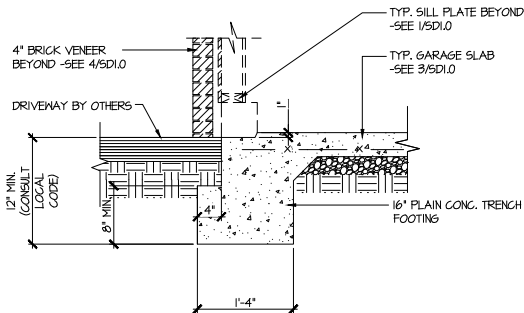
3 TYPICAL SLAB ON GRADE GARAGE
PERIMETER FOOTING



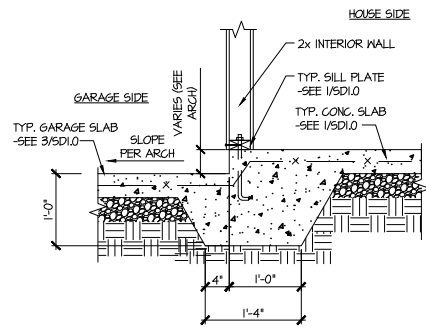
4 TYPICAL SLAB ON GRADE GARAGE
PERIMETER FOOTING
w/ BRICK VENEER



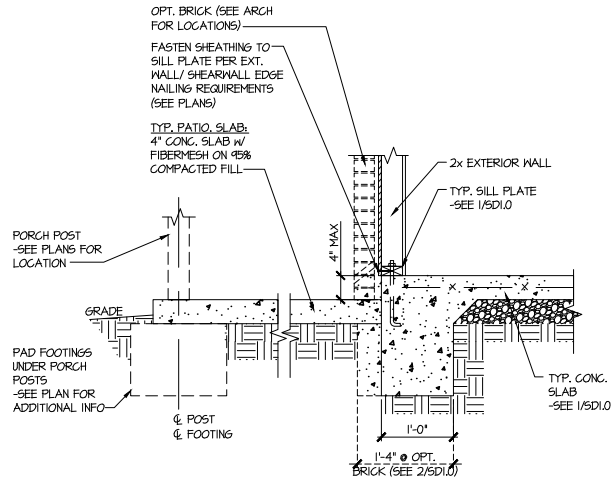
5 TYPICAL SLAB ON GRADE GARAGE
ENTRY @ PERIMETER FOOTING



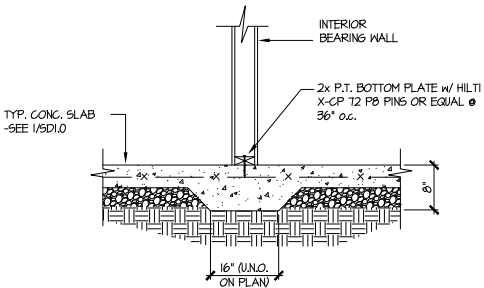
6 TYPICAL SLAB ON GRADE GARAGE
ENTRY @ PERIMETER FOOTING
w/ BRICK VENEER



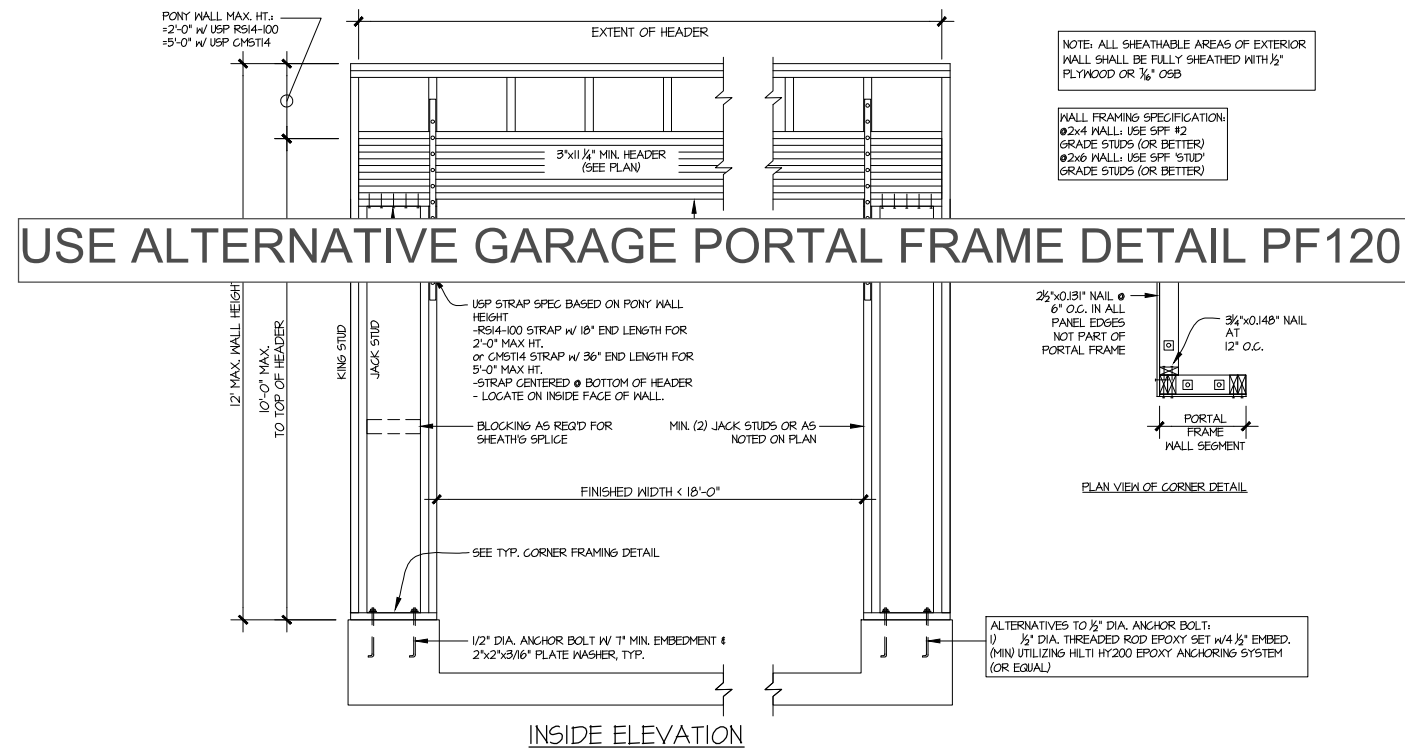
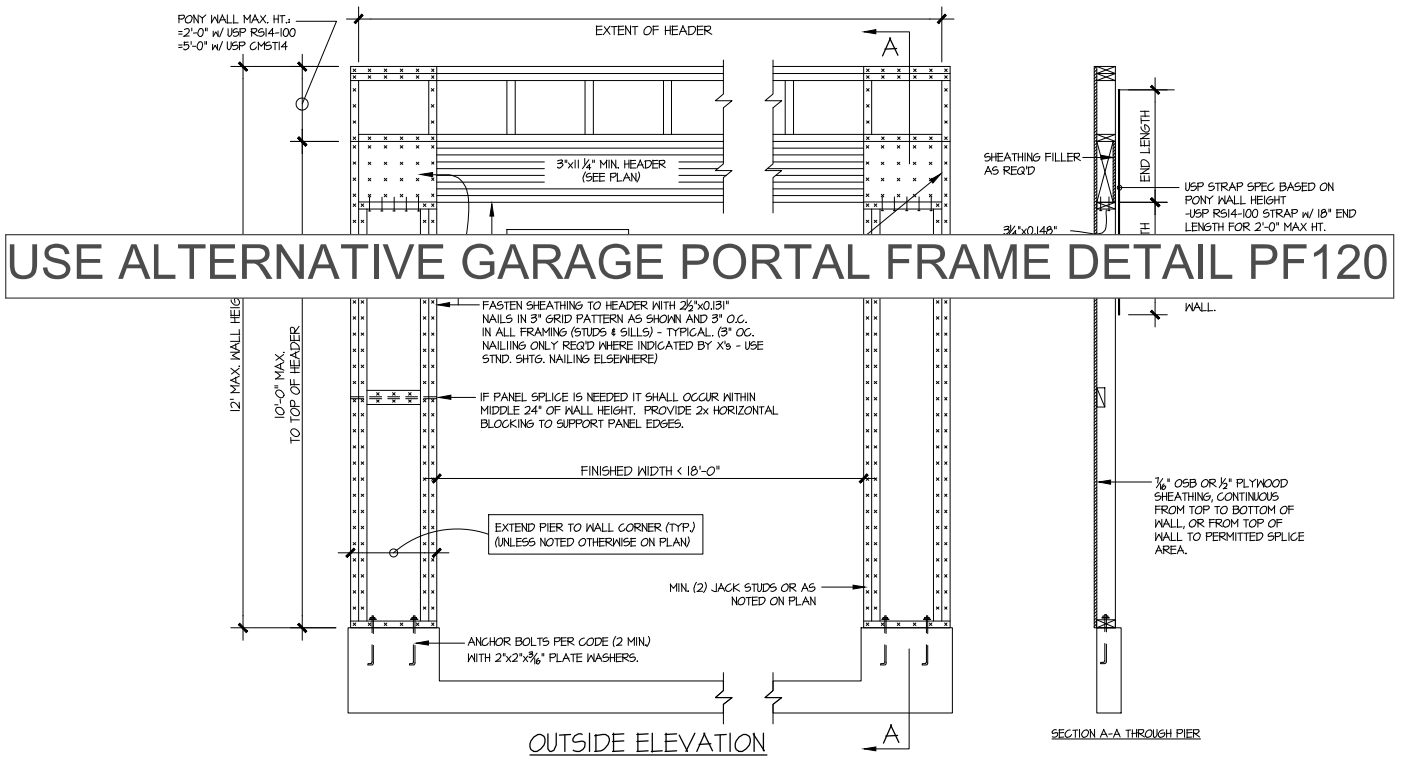
7 TYPICAL MONOLITHIC INTERIOR
GARAGE FOOTING



8 TYPICAL SLAB ON GRADE PERIMETER
FOOTING @ PORCH/PATIO



9 TYPICAL THICKENED SLAB @
INTERIOR BEARING WALL



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

Cedar Pointe
LOT 26

4/4/23

seal

MULHERN + KULP

REGISTERED PROFESSIONAL ENGINEER

SHAUN KREIDEL

ENGINEER

copyright : MULHERN & KULP
Structural Engineering, Inc.

MULHERN+KULP

RESIDENTIAL STRUCTURAL ENGINEERING

3825 Shallowford Parkway, Suite 105 • Alpharetta, GA 30022

770-777-8874 • mulhern+kulp.com

NC License # C-3825

Mulhern+Kulp project number:
256-21012

project mgr: SMK
drawn by: MJF
issue date: 02-21-22

REVISIONS:
date: initial:
11/22/21 MJF
MISSING PLANS ADDED
04/01/22 SHM
STEEL GARAGE HEADERS UPDATED

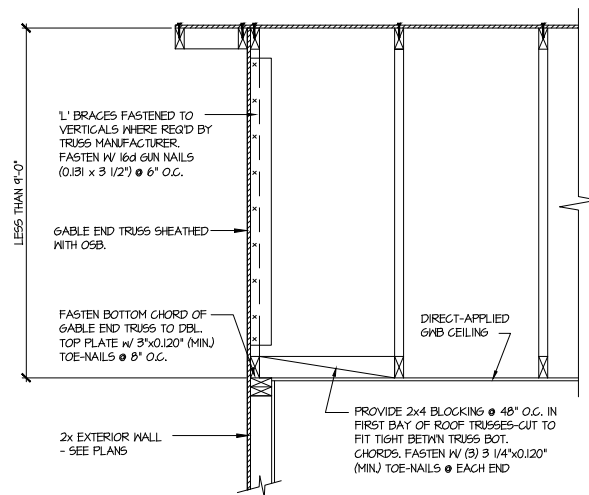
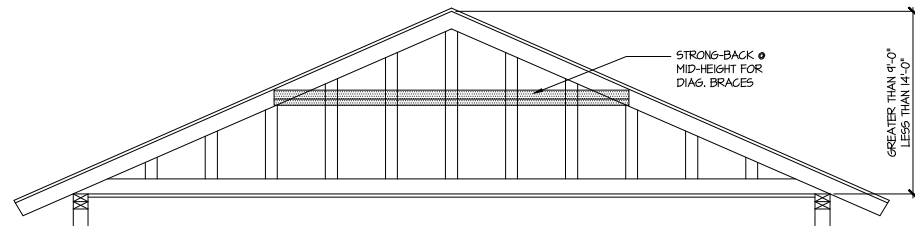
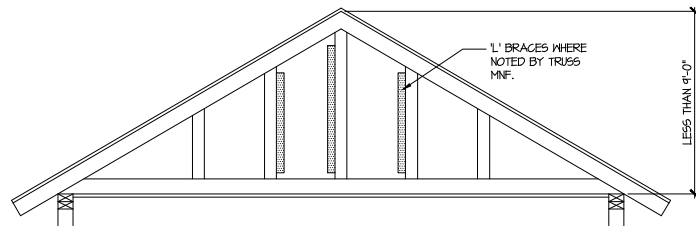
SMITH DOUGLAS
HOMES

FRAMING DETAILS

HARRINGTON MODEL

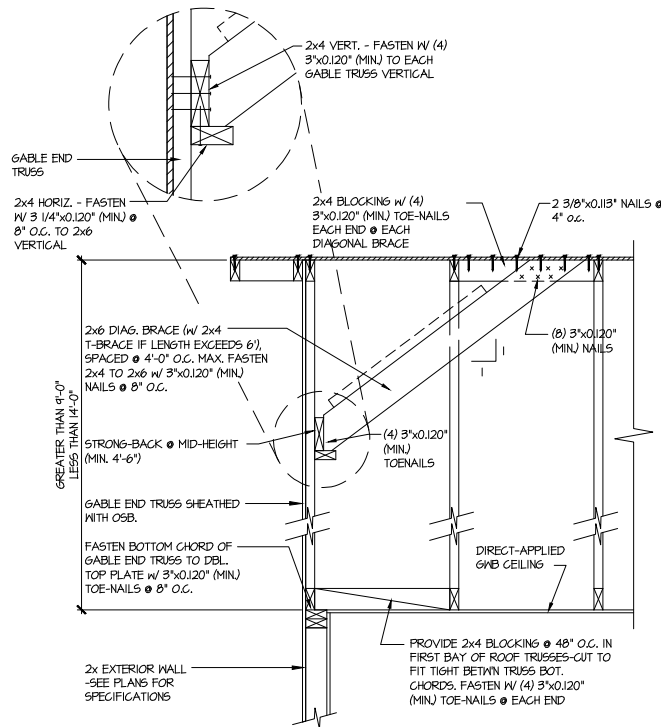
JOHNSTON COUNTY, NC

sheet:
SD2.0



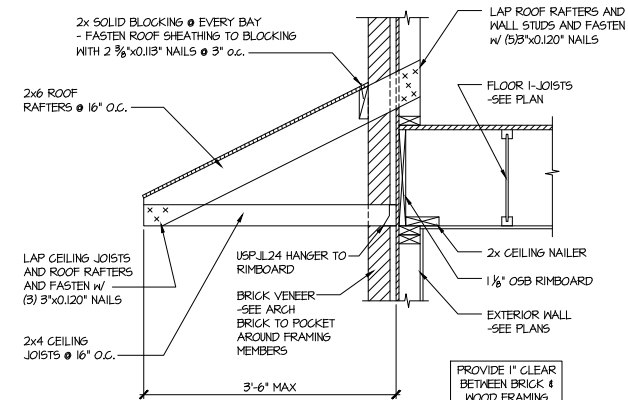
A TYPICAL GABLE END BRACING DETAIL
SCALE: NONE
REQ'D @ GABLE END TRUSS HEIGHT UP TO 9'-0"

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.



C DETAIL @ PENT ROOF
SCALE: 3/4"=1'-0"

LETTERED DETAILS ARE TYPICAL FOR THIS HOME & SHALL BE IMPLEMENTED IN ALL APPLICABLE AREAS. THESE DETAILS ARE NOT "CUT" ON THE PLANS.

NUMBERED DETAILS ARE PLAN SPECIFIC AND ARE ONLY REQUIRED WHERE SPECIFICALLY INDICATED ("CUT") ON THE PLANS.

Cedar Pointe
LOT 26



MULHERN+KULP
RESIDENTIAL STRUCTURAL ENGINEERING
3825 Shallowford Parkway, Suite 105 • Alpharetta, GA 30022
3776-777-8874 • info@mulhernkulp.com
NC License # C-3825

Mulhern+Kulp project number:
256-21012

project mgr: **SMK**
drawn by: **MJF**
issue date: **02-21-22**

REVISIONS:
date: initial:
11/22/21 MJF
04/01/22
04/01/22
STEEL GARAGE HEADERS UPDATED

SMITH DOUGLAS
HOMES

FRAMING DETAILS
HARRINGTON MODEL
JOHNSTON COUNTY, NC

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



Mulhern+Kulp project number:
256-23000

project mgr: SMK
drawn by: RAP
issue date: 07.28.2023

REVISIONS:
date: initial:

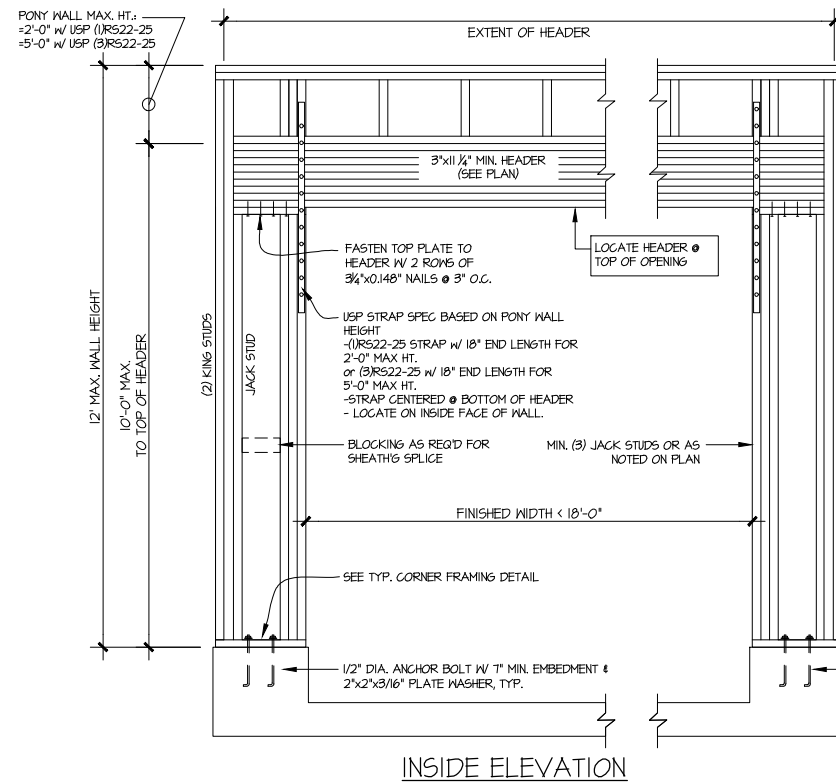
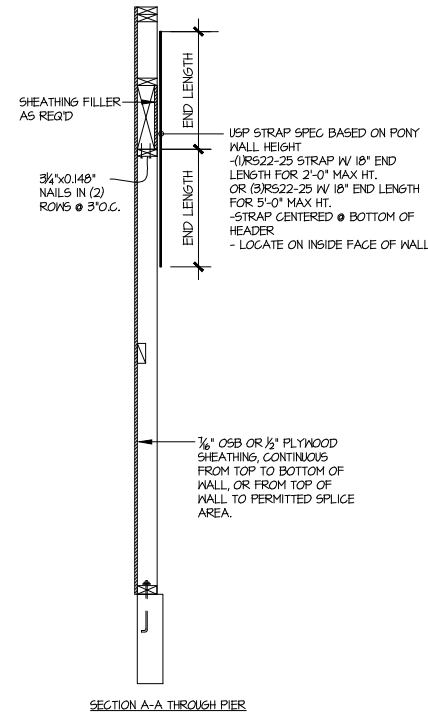
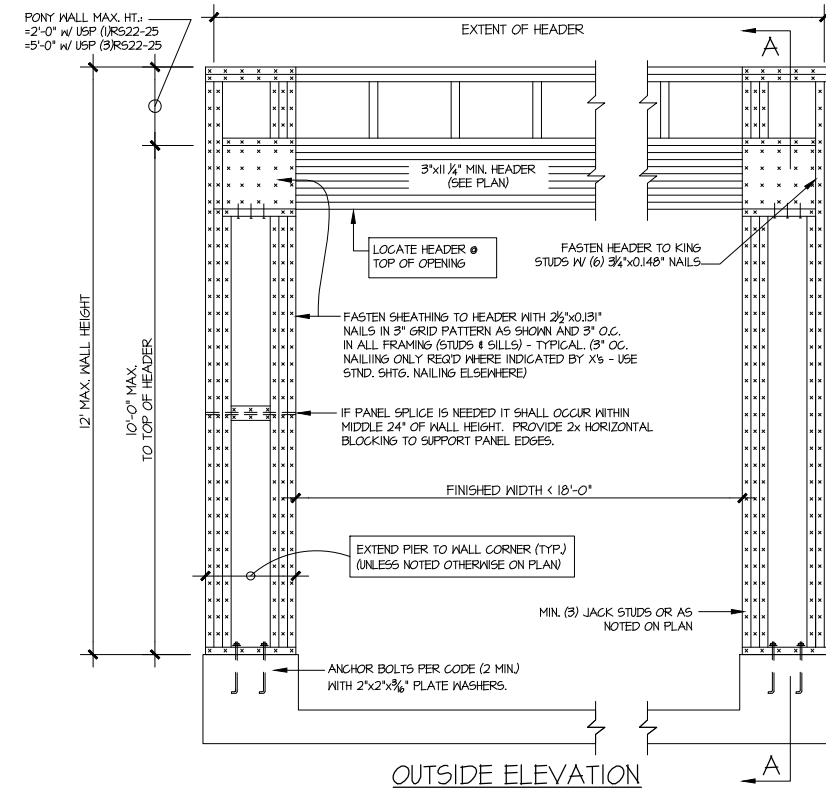
SMITH DOUGLAS
HOMES

ALTERNATE PORTAL FRAME

PORTAL FRAME

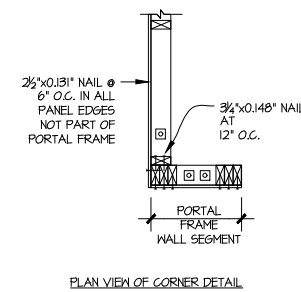
sheet:

PF-120



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

WALL FRAMING SPECIFICATION:
2x4 WALL: USE SFF #2 GRADE STUDS (OR BETTER)
2x6 WALL: USE SFF 'STUD' 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.
(MIN. UTILIZING HILTI HY200 EPOXY ANCHORING SYSTEM (OR EQUAL))



ALTERNATE GARAGE PORTAL FRAME BRACING ELEVATION

SCALE: N.T.S.

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

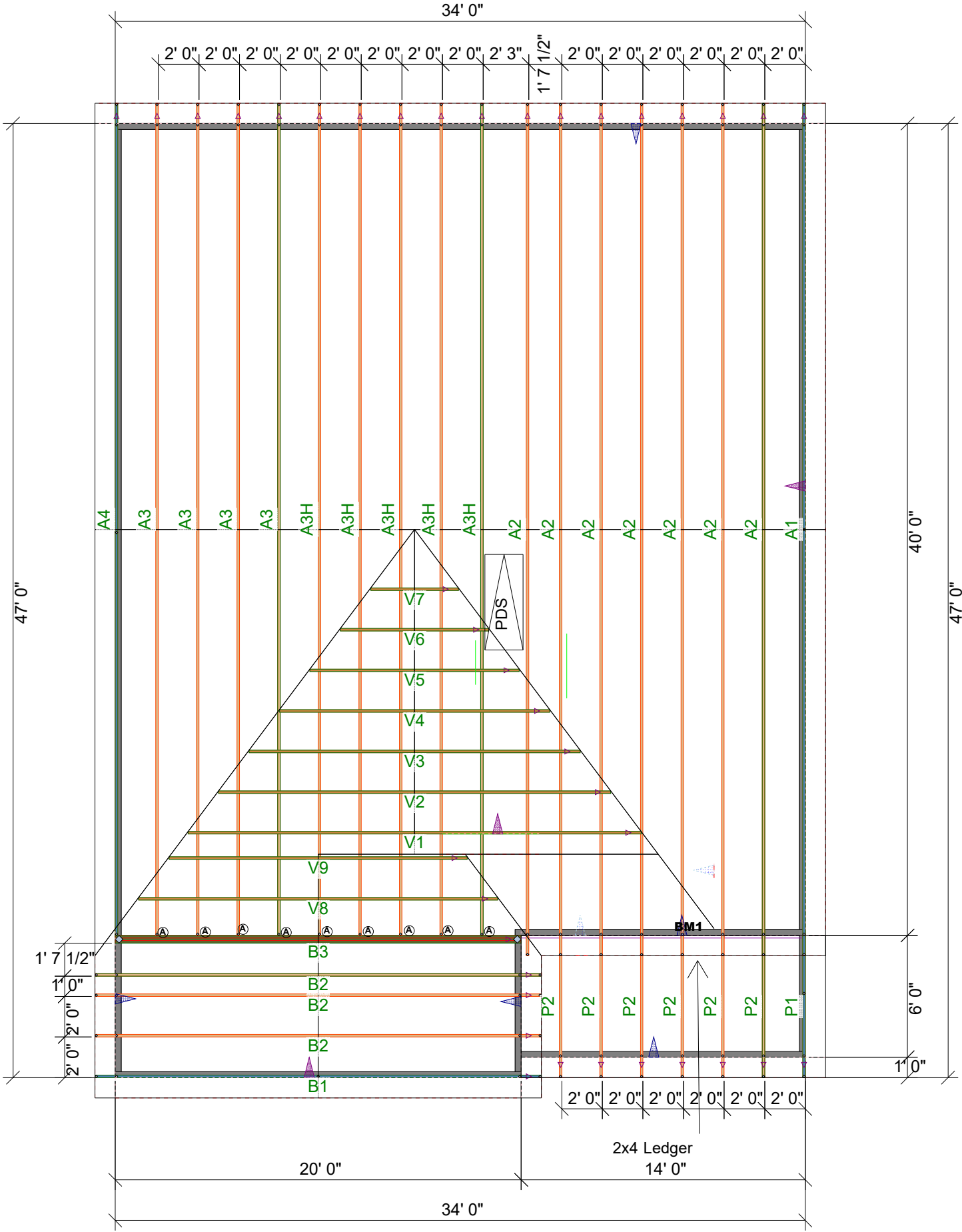
Cedar Pointe
LOT 26

THIS IS A TRUSS/COMPONENT 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 (TDD's) for each truss design identified on the TPD. The building designer is responsible for temporary and permanent bracing of the roof and floor system and for 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.sbcassociation.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

9	FACE MOUNT HANGER	HUS26	A
---	-------------------	-------	---

HARRINGTON ADG



SCALE: N.T.S

ROOF AREA: 2007.53 ft² _ RIDGE LINE: 64 ft _ VALLEY LINES: 61.48 _ HIP LINES:4.94 _ △ Indicates Left End of Truss

REVISIONS		DSN
DATE	DESCRIPTION	
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
DESIGNER JNN		
LAYOUT DATE 11/21/2021		
ARCH DATE		
STRUC DATE		
JOB #: MASTER		

SMITH DOUGLAS RALEIGH

HARRINGTON ADG



Trustraxufp.com

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 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.

