

SUMMARY

PROJECT INFO NAME OF PROJECT: PROJECT ADDRESS: PROPOSED USE:

LOT 78 DUCKS LANDING / CC 2058C 416 BLACK DUCK LANDING RESIDENTIAL

CAYINESS & CATES, INC

CODE COMPLIANCE: 2018 NC STATE RESIDENTIAL BUILDING CODE MUNICIPALITY: HARNETT COUNTY

120 SF

GAS COMMUNITY: DESIGNER: TODD TUCKER, AIBD, CPBD 910-366-2636

SPACE DATA: FIRST FLOOR: SECOND FLOOR: <u>1155 SF</u> TOTAL HEATED: 2058 SF FRONT PORCH:

OVERALL BUILDING HEIGHT 31'-2" WITH CRAWL SPACE FOUNDATION

<u>DESIGN LOADS</u>

20 PSF LIVE, 20 PSF DEAD ROOF LOADS: ATTIC LOADS: 20 PSF LIVE, WHERE INDICATED (SEE TRUSS DWGS) FIRST FLOOR: 40 PSF LIVE, IO PSF DEAD

FOR ASCE 7-10, RISK CATEGORY II, EXPOSURE "B", 120 mph ALL GARAGE PORTAL WALLS TO BE FRAMED WITH 2x6 STUDS

ATTIC VENT CALCULATIONS R806

30 PSF LIVE, I5 PSF DEAD

FRONT PORCH ATTIC AREA: <u>106</u> SF R806.2 EXCEPTIONS | & 2 REAR PORCH ATTIC AREA: 120 SF

SECOND FLOOR ATTIC AREA: 1338 S.F. RIDGE VENTS*: 79 L.F. / 10 S.F. (67%) SOFFIT VENT*: 88 L.F. / 5 S.F. (33%)

* CALCS BASED ON VENT FREE AREA OF 18 S.I., FOR RIDGE & 9 S.I. FOR SOFFIT (PLF)

FOUNDATION NOTES

CRAWL SPACE GRADE MINIMUM 12" BELOW GIRDER / 18" BELOW JOISTS PROVIDE VAPOR BARRIER FOR CRAWL SPACE 3. FIELD-LOCATE CRAWL SPACE ACCESS, SIZED PER CODE

FOUNDATION VENT CALCULATIONS R408

CRAWL SPACE AREA: <u>903</u> SF

I SQUARE FOOT OF VENT PER 1500 SF OF FOUNDATION AREA*

INSTALL VENT WITH MINIMUM OF 60 SQUARE INCHES NET FREE AREA

403 / 1500 = 0.6 TOTAL SQUARE FEET OR MINIMUM 2 VENTS PLUS VENTS @ CORNERS

* CALCS BASED ON USING A VAPOR RETARDER & INSTALLING A VENT WITHIN 36" OF EA CORNER

ENERGY COMPLIANCE (CHAPTER ELEVEN)

4A HARNETT COUNTY CLIMATE ZONE:

CHAPTER II ENERGY EFFICIENCY COMPLIANCE (CHECK ONE) PRESCRIPTIVE CODE

PERFORMANCE

CEILING INSULATION: WALL INSULATION: FLOOR INSULATION:

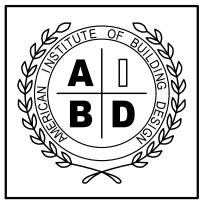
RI5 FOR ZONE 3 / RI9 FOR ZONE 4 RI9 FOR CRAWL SPACE / RIO FOR SLAB

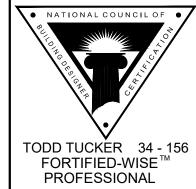
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LIST OF SYMBOLS				
SECTION X	SECTION MARK	12:12	SLOPE UP PITCH	
SECTION ————————————————————————————————————	DETAIL MARK		EARTH	
X TITLE SCALE	TITLE MARK	XXXXXXX	INSULATION	
	INTERIOR BEARING WALL		STANDARD WALL	



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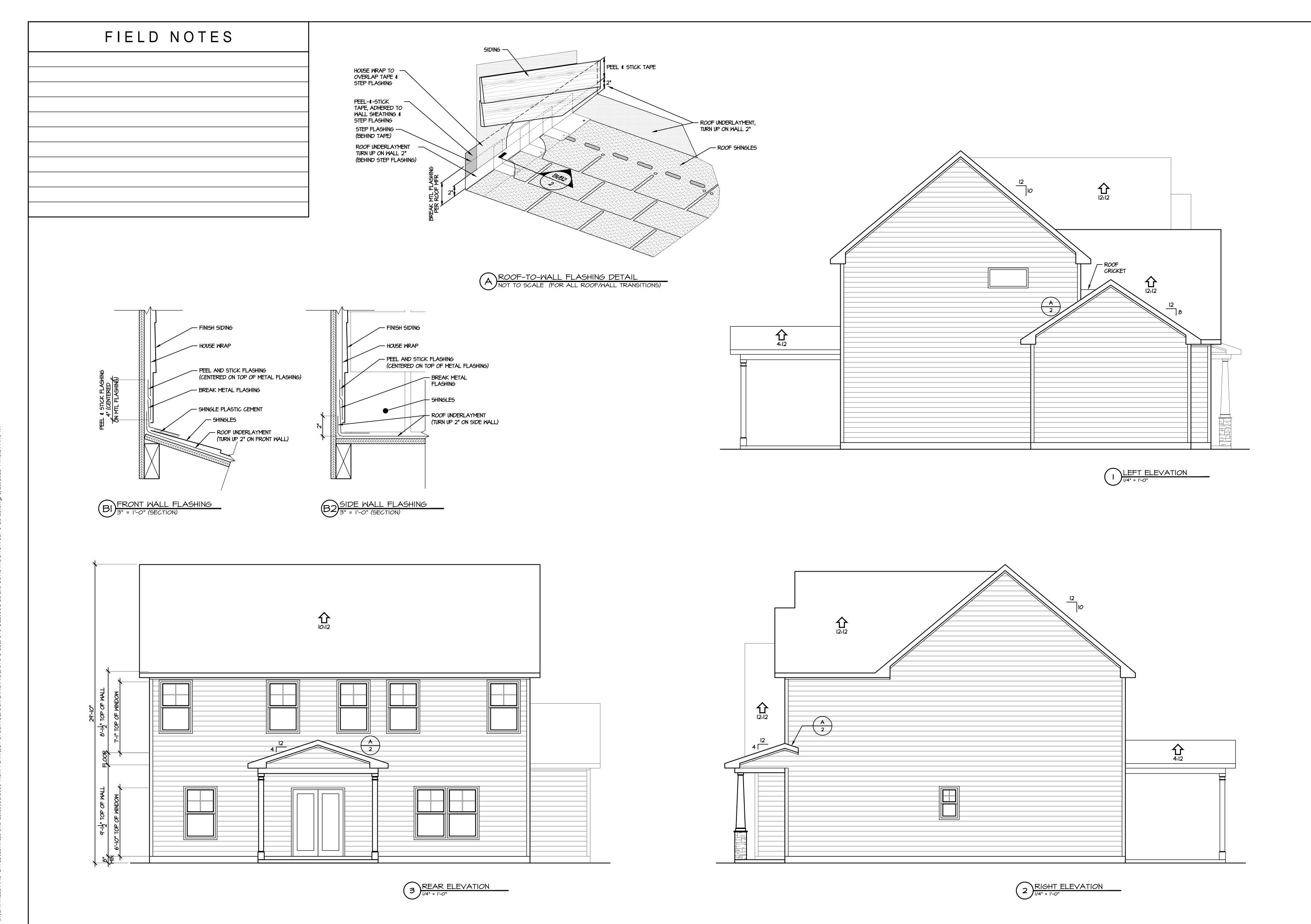


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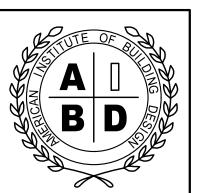
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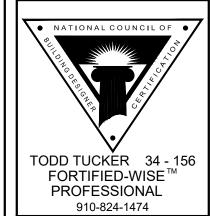


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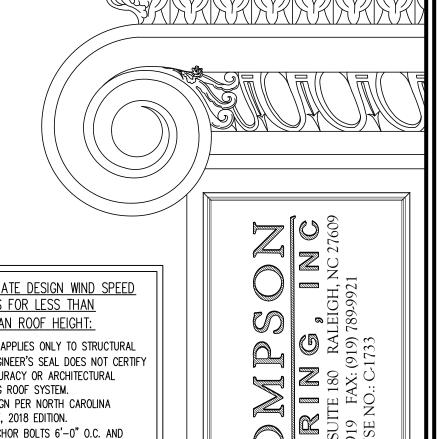
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DATE: SEPTEMBER 2024



120 MPH ULTIMATE DESIGN WIND SPEED NOTES FOR LESS THAN <u>30' MEAN ROOF HEIGHT:</u>

- ENGINEER'S SEAL APPLIES ONLY TO STRUCTURAL COMPONENTS. ENGINEER'S SEAL DOES NOT CERTIFY DIMENSIONAL ACCURACY OR ARCHITECTURAL LAYOUT INCLUDING ROOF SYSTEM.
- STRUCTURAL DESIGN PER NORTH CAROLINA RESIDENTIAL CODE, 2018 EDITION.
- . INSTALL 1/2" ANCHOR BOLTS 6'-0" O.C. AND WITHIN 1'-0" FROM END OF EACH CORNER. ANCHOR BOLTS MUST EXTEND A MINIMUM OF 7" INTO MASONRY OR CONCRETE. LOCATE BOLT WITHIN MIDDLE THIRD OF PLATE WIDTH.
- 4. MEAN ROOF HEIGHT IS LESS THAN 30 FEET. 5. EXTERIOR WALLS DESIGNED FOR 120 MPH WINDS. 6. WALL CLADDING DESIGNED FOR +15.5 PSF AND -20 PSF (+/- INDICATE POSITIVE / NEGATIVE
- ROOF CLADDING DESIGNED FOR +14.2 PSF AND -18 PSF FOR ROOF PITCHES 7/12 TO 12/12 AND +10 PSF AND -36 PSF FOR ROOF PITCHED 2.25/12 TO

PRESSURE (TYP).

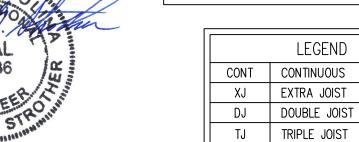
- 8. INSTALL 7/16" OSB SHEATHING ON ALL EXTERIOR WALLS OF ALL STORIES IN ACCORDANCE WITH SECTION R602.10.3 OF THE NCRC, 2018 EDITION. SEE THE WALL BRACING NOTES AND DETAILS SHEET FOR MORE INFORMATION.
- . ENERGY EFFICIENCY COMPLIANCE AND INSULATION VALUES OF THE BUILDING TO BE IN ACCORDANCE WITH CHAPTER 11 OF THE NCRC, 2018 EDITION. 10. REFER TO NOTES AND DETAIL SHEETS FOR ADDITIONAL STRUCTURAL INFORMATION.

150 MPH ULTIMATE DESIGN WIND SPEED NOTES FOR LESS THAN <u>30' MEAN ROOF HEIGHT:</u>

- ENGINEER'S SEAL APPLIES ONLY TO STRUCTURAL COMPONENTS. ENGINEER'S SEAL DOES NOT CERTIFY DIMENSIONAL ACCURACY OR ARCHITECTURAL LAYOUT INCLUDING ROOF
- STRUCTURAL DESIGN PER NORTH CAROLINA RESIDENTIAL CODE, 2018 EDITION WITH SPECIAL CONSIDERATION TO CHAPTER 45 ("HIGH WIND ZONES" FOR 150 MPH WINDS).
- BUILDER IS TO PROVIDE FRAMING CONNECTIONS AS REQUIRED BY CHAPTER 45 ("HIGH WIND ZONES" FOR 150 MPH WINDS) OF THE NORTH CAROLINA RESIDENTIAL CODE, 2018 EDITION. FOUNDATION ANCHORAGE TO COMPLY WITH
- SECTION 4504 OF THE NORTH CAROLINA RESIDENTIAL CODE, 2018 EDITION. MEAN ROOF HEIGHT IS LESS THAN 30 FEET. WALL CLADDING DESIGNED FOR +24.3 PSF AND
- -32 PSF (+/- INDICATE POSITIVE / NEGATIVE PRESSURE (TYP). ROOF CLADDING DESIGNED FOR +22.2 PSF AND -28 PSF FOR ROOF PITCHES 7/12 TO 12/12
- AND +14 PSF AND -57 PSF FOR ROOF PITCHED 2.25/12 TO 7/12. 7/16" OSB SHEATHING IS REQUIRED ON ALL
- EXTERIOR WALLS. WALLS TO BE BRACED IN ACCORDANCE WITH
- SECTION R602.10 OF THE NORTH CAROLINA RESIDENTIAL CODE, 2018 EDITION AND AS NOTED ON PLANS.
- ENERGY EFFICIENCY COMPLIANCE AND INSULATION VALUES OF THE BUILDING TO BE IN ACCORDANCE WITH CHAPTER 11 OF THE NCRC, 2018 EDITION.

STRUCTURAL NOTES: . ALL FRAMING LUMBER TO BE #2 SPF

- (UNO). ALL TREATED LUMBER TO BE #2 SYP (UNO.) 2. INSTALL AN EXTRA OR DOUBLE JOIST
- UNDER WALLS PARALLEL TO FLOOR JOISTS WHERE NOTED ON THE PLANS. 3. SQUARES DENOTE POINT LOADS WHICH REQUIRE SOLID BLOCKING TO GIRDER OR
- 4. SHADED PIERS TO BE FILLED SOLID. 5. INSTALL LADDER WIRE @ 16" O.C. TO
- SECURE MULTIPLE WYTHE FOUNDATION WALLS TOGETHER. 6. REFER TO NOTES AND DETAIL SHEETS FOR \parallel ADDITIONAL STRUCTURAL INFORMATION.



NOTE: BCI 4500s-1.8 JOISTS MAY BE INSTALLED IN LIEU OF TJI 110 JOISTS AT THE DEPTH AND SPACING INDICATED ON THE PLAN

DJ DOUBLE JOIST TJ TRIPLE JOIST EA EACH FDN FOUNDATION FTG FOOTING OC ON CENTER SPF SPRUCE PINE FIR SYP SOUTHERN YELLOW PINE TRTD PRESSURE TREATED TYP TYPICAL UNO UNLESS NOTED OTHERWISE

DATE: SEPTEMBER 30, 2024 SCALE: 1/4" = 1'-0" DRAWN BY: TT

ENGINEERED BY: JAG

S-1a CRAWL FOUNDATION PLAN

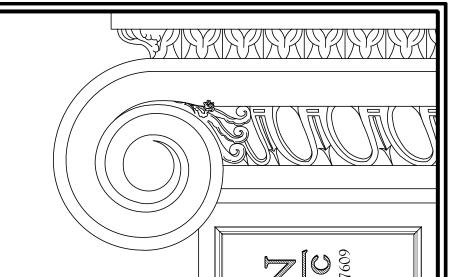
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	18" x	REBAR (OR TWO #5 BARS) THE BOTTOM OF THE FTG. BY FDN. ON 16" WIDE BY 8 CONC. FTG. (TYP.), OR FOR 8" FDN. ON 24" WIDE BY 8 CONC. FTG. REINFORCED w/ REBAR (OR TWO #5 BARS) THE BOTTOM OF THE FTG. BE OVERLAPPED 25" MIN. (TYPICAL WALL SECTION.	R "HIGH WIND ZONES" B" DEEP CONT. / THREE #4 AT 3" ABOVE SPLICES MUST
15'-0"	11 7/8" TJJ 110 @ 19.2" 0.C. (OR EQUAL) 11 7/8" TJJ 110 @ 19.2" 11 7/8" TJJ 110 @ 19.2" 22,2,2,2,2,3,3,4,4,4,4,4,4,4,4,4,4,4,4,4,	8	
13'-1 3/4"	30" x 30" x 10" CONC. FTG. 30" x 30" x 10" CONC. FTG. 4" CONC. SLAB GROUT ALL CELLS SOLID OVER ENLARGED FOOTING	0'-10 1/4"	BASE COLUMN: 14" x ER (INCLUDING VENEER) 12" CONC. FTG. (TYP.)
	1'-10" 16'-4" 20'-0" 38'-0"	FOR OPT BRICK VENEER: 11'-0" 12" FDN. ON 20" WIDE BY 8" E CONC. FTG. (TYP. FOR BRICK V OR FOR "HIGH WIND ZONES" 12 24" WIDE BY 8" DEEP CONT. C REINFORCED WITH THREE #4 RE TWO #5 BARS) AT 3" ABOVE TI OF THE FTG. SPLICES MUST BE 25" MIN. (TYP.) SFE TYPICAL M	/ENEER), 2″ FDN. ON ONC. FTG. EBAR (OR HE BOTTOM OVERLAPPED



25" MIN. (TYP.) SEE TYPICAL WALL SECTION.



BRACED WALL DESIGN NOTES:

INFORMATION.

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

WIND ZONES, BRACED WALLS ARE TO BE CONSTRUCTED IN ACCORDANCE

WITH CHAPTER 45 OF THE NCRC 2018 EDITION. 6. SEE NOTES AND DETAIL SHEETS FOR ADDITIONAL BRACED WALL

LINTEL SCHEDULE FOR		
BRICK/NATURAL STONE SUPPORT		
LENGTH (FT.)	SIZE OF LINTEL	
UP TO 4 FT.	L 3 1/2 x 3 1/2 x 1/4	
4-8	L 5 x 3 1/2 x 5/16 LLV	
8 AND GREATER	L 6 x 4 x 5/16 LLV	

BRICK SUPPORT NOTES:

- LINTEL SCHEDULE APPLIES TO ALL OPENINGS IN BRICK VENEER (UNO). SEE ARCH DWGS. FOR SIZE AND LOCATION OF OPENINGS. (LLV) = LONG LEG VERTICAL
- 3. LENGTH = CLEAR OPENING
- 4. EMBED ALL ANGLE IRONS MIN. 4" EACH SIDE INTO | VENEER TO PROVIDE BEARING.
- 5. FOR ALL HEADERS 8'-0" AND GREATER IN LENGTH, ATTACH STEEL ANGLE TO HEADER W/ 1/2" LAG SCREWS @ 12" O.C. STAGGERED.
- 6. FOR ALL BRICK SUPPORT @ ROOF LINES, FASTEN (2) 2 x 10 BLOCKING BETWEEN STUDS w/(4)12d NAILS PER PLY. FASTEN A 6" x 4" x 5/16" STEEL ANGLE TO (2) 2 x 10 BLOCKING w/(2)1/2" LAG SCREWS @ 12" O.C. STAGGERED. SEE SECTION R703.8.2.1 OF THE 2018 NCRC FOR ADDITIONAL BRICK SUPPORT INFORMATION. PRECAST REINFORCED CONCRETE LINTELS

9/30/2024

ENGINEERED BY OTHERS MAY BE USED IN LIEU OF STEEL LINTELS.

STRUCTURAL NOTES:

- ALL FRAMING LUMBER TO BE #2 SPF
- ALL LOAD BEARING HEADERS TO BE (2) 2 x 6 (UNO).
- WINDOW AND DOOR HEADERS TO BE SUPPORTED w/ (1) JACK STUD AND (1) KING STUD EA. END (UNO.). SEE TABLE R602.7.5 FOR ADDITIONAL KING STUD REQUIREMENTS.
- SQUARES DENOTE POINT LOADS WHICH REQUIRE SOLID BLOCKING TO GIRDER OR FOUNDATION. SQUARES TO BE (2) STUDS
- FOR HIGH WIND ZONES, ALL EXTERIOR WALLS TO BE SHEATHED WITH 7/16" OSB SHEATHING WITH JOINTS BLOCKED AND SECURED WITH 8d NAILS AT 3" O.C. ALONG EDGES AND 6" O.C. IN THE FIELD.
- FOR HIGH WIND ZONES, SECURE ALL EXTERIOR WALL SHEATHING PANELS TO DOUBLE TOP PLATES, BANDS, JOISTS, AND GIRDERS WITH (2) ROWS OF 8d NAILS STAGGERED AT 3" O.C. PANELS SHALL EXTEND 12" BEYOND CONSTRUCTION JOINTS AND SHALL OVERLAP GIRDERS AND DOUBLE
- SILL PLATES THEIR FULL DEPTH. SPECIFIED SIMPSON STRONG-TIE PRODUCTS MAY BE SUBSTITUTED WITH THOSE MANUFACTURED BY USP STRUCTURAL CONNECTORS PROVIDED THAT THE LOAD CAPACITY AND FUNCTION IS EQUIVALENT. REFER TO NOTES AND DETAIL SHEETS FOR ADDITIONAL STRUCTURAL INFORMATION.

TABLE R602.7.5 MINIMUM NUMBER OF FULL HEIGHT KING STUDS AT EACH END OF HEADERS IN EXTERIOR WALLS

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

LEGEND		
CONT	CONTINUOUS	
XT	EXTRA TRUSS	
XJ	EXTRA JOIST	
DJ	DOUBLE JOIST	
TJ	TRIPLE JOIST	
EA	EACH	
()	NUMBER OF STUDS	
DSP	DOUBLE STUD POCKET	
TSP	TRIPLE STUD POCKET	
OC	ON CENTER	
SPF	SPRUCE PINE FIR	
SYP	SOUTHERN YELLOW PINE	
TRTD	PRESSURE TREATED	
TYP	TYPICAL	
UNO	UNLESS NOTED OTHERWISE	

NOTE: BCI 4500s-1.8 JOISTS MAY BE INSTALLED IN LIEU OF TJI 110 JOISTS AT THE DEPTH AND SPACING INDICATED ON THE PLAN

CONT	CONTINUOUS
XT	EXTRA TRUSS
XJ	EXTRA JOIST
DJ	DOUBLE JOIST
TJ	TRIPLE JOIST
EA	EACH
()	NUMBER OF STUDS
DSP	DOUBLE STUD POCKET
TSP	TRIPLE STUD POCKET
OC	ON CENTER
SPF	SPRUCE PINE FIR
SYP	SOUTHERN YELLOW PINE
TRTD	PRESSURE TREATED
TYP	TYPICAL

SECOND FLOOR FRAMING PLAN

DATE: SEPTEMBER 30, 2024

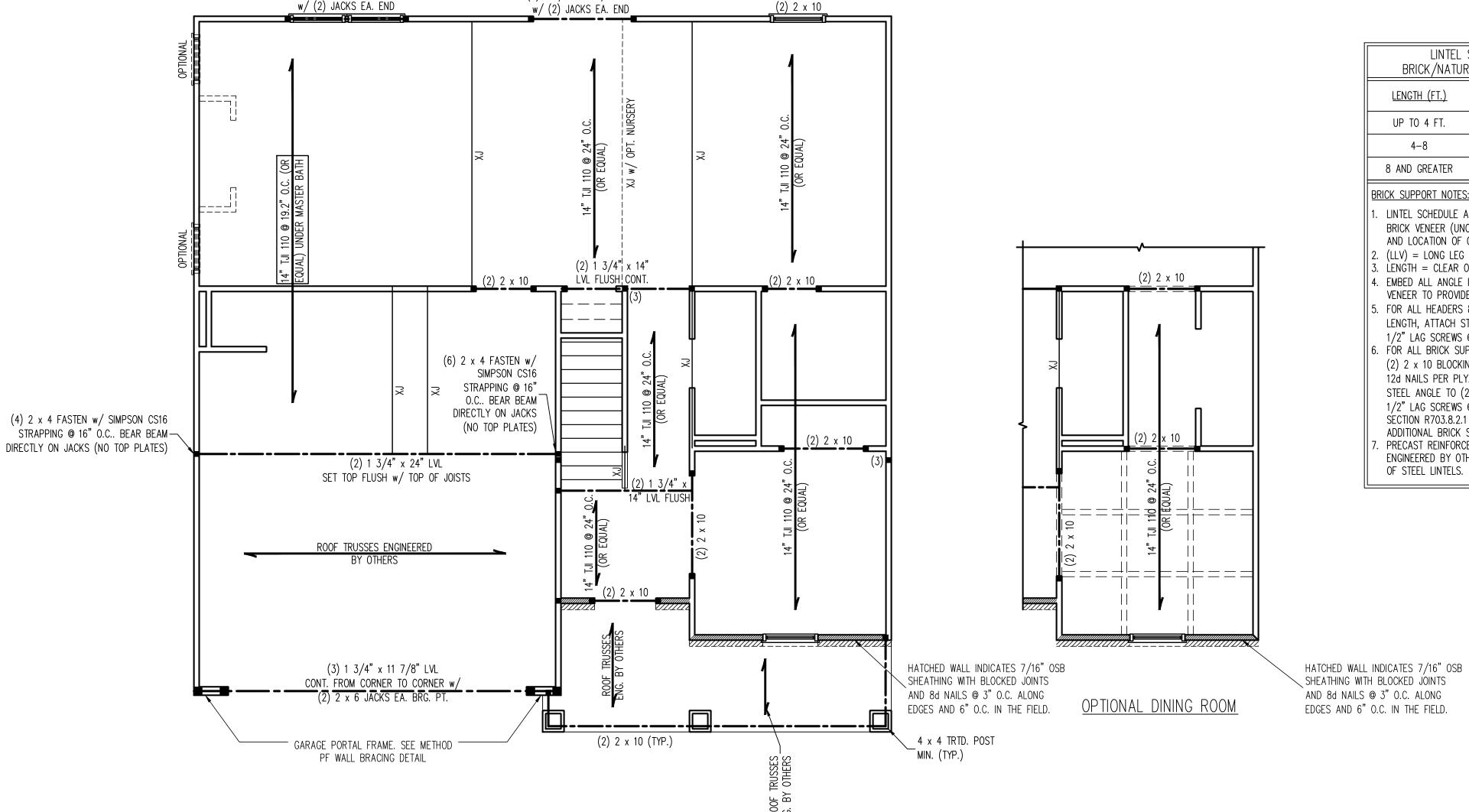
SCALE: 1/4" = 1'-0"

ENGINEERED BY: JAG

DRAWN BY: TT

S 3

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(2) 1 3/4" x 9 1/4" LVL

(2) 1 3/4" x 9 1/4" LVL

w/ (2) JACKS EA. END

OPTIONAL TRANSOM

FIRST FLOOR PLAN

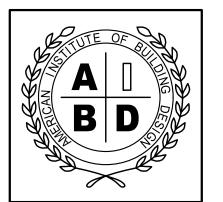
SECOND FLOOR PLAN

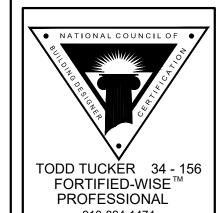
1/4" = 1'-0"



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PLAN NO:

CC2058

SEPTEMBER 2024

REVISIONS:

ELECTRICAL NOTES:
I. INSTALL LOW-WATTAGE LED LIGHTING IN

SMALL CLOSETS PER 2023 NCEC ARTICLE 410.2 & ARTICLE 410.16 2. INSTALL SMART KEYPAD DEADBOLT-FRONT

BATHROOM LIGHT SWITCH NOTES:

 FIRST LIGHT SWITCH TO VANITY LIGHT (CLOSEST TO DOOR)
 SECONDARY SWITCHES TO RECESSED TUB/SHOWER/PANTRY LIGHTS, ETC.

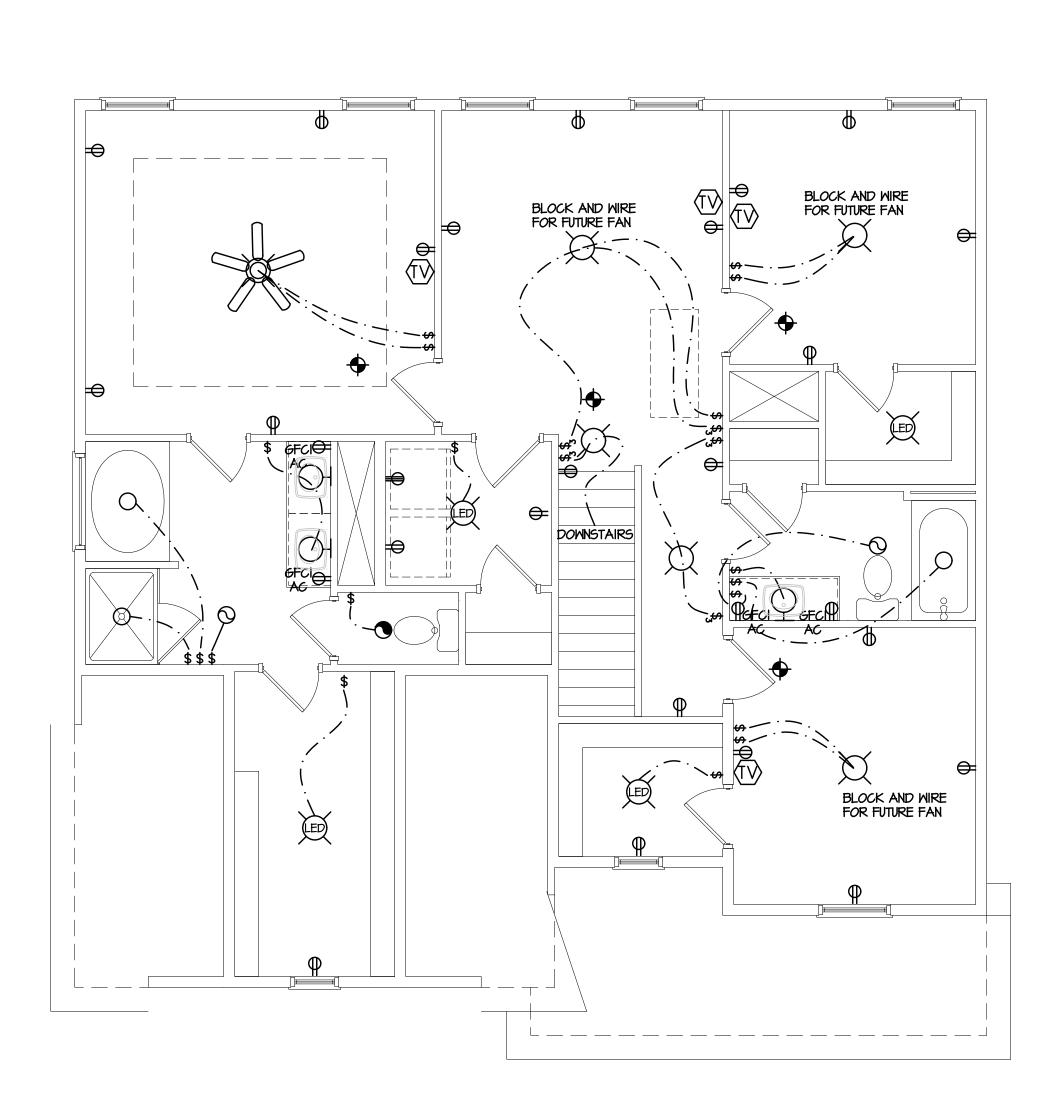
3. FINAL SWITCH TO FAN (FURTHEST FROM DOOR)

SMOKE DETECTOR NOTES:

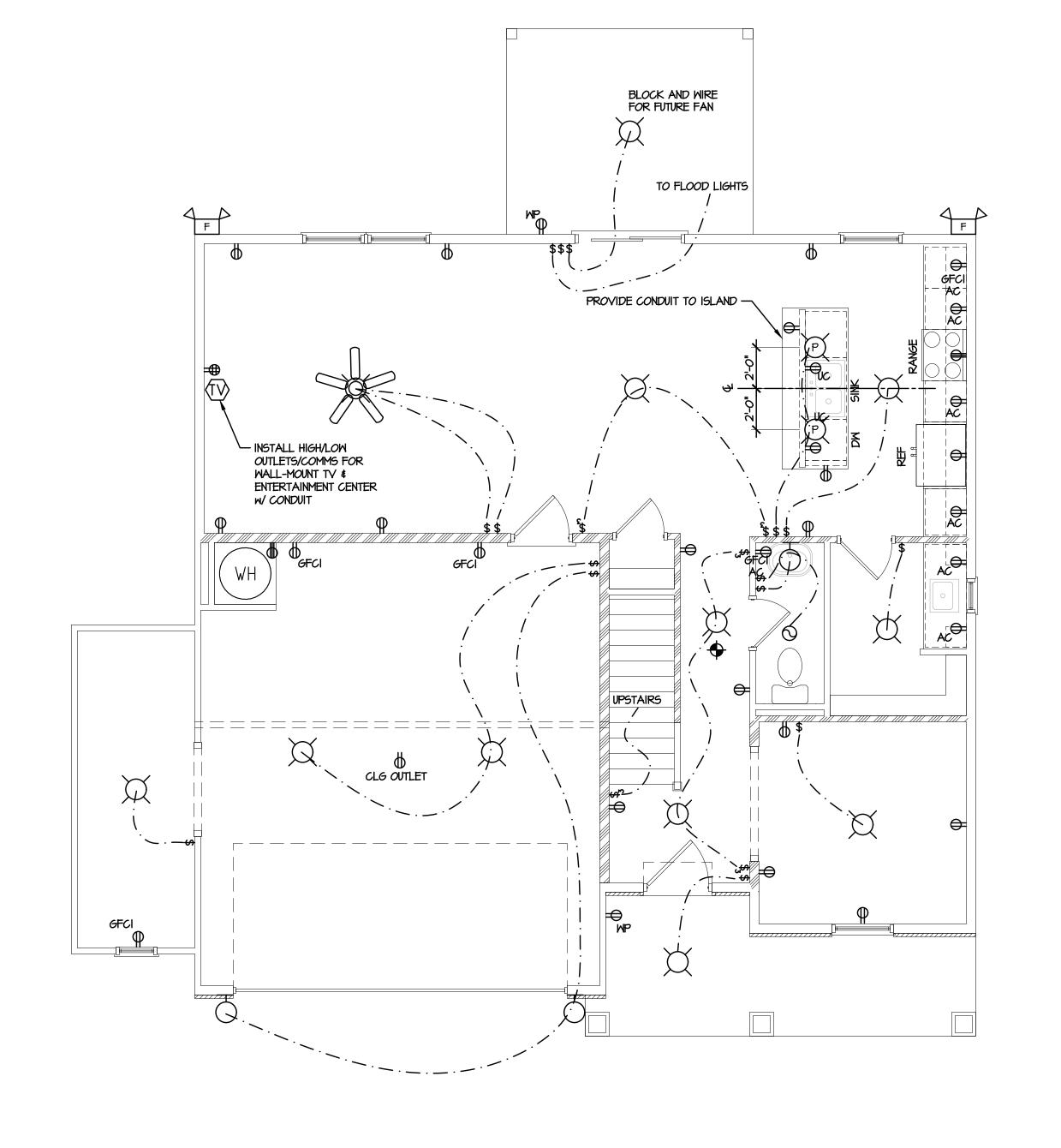
I. INSTALL SMOKE DETECTORS ON EVERY LEVEL, IN ALL SLEEPING
AND GUEST ROOMS, AND OUTSIDE OF EACH SLEEPING ROOM, NO
GREATER THAN 21' FROM ANY DOOR TO A SLEEPING ROOM [2022
NFPA 72, 24.8.1.1]

- 2. WHERE AN INTERIOR FLOOR LEVEL EXCEEDS 1000 SQUARE FEET, SMOKE ALARMS SHALL BE INSTALLED WHERE ALL POINTS FALL WITHIN 30' OF TRAVEL DISTANCE OR ONE SMOKE ALARM PER 500 SQUARE FEET. FOR VAULTED CEILINGS OVER MULTIPLE LEVELS, SMOKE ALARMS IN THE UPPER LEVEL NEAR THE CATHEDRAL SHALL BE CONSIDERED AS PART OF THE LOWER FLOOR PROTECTION [2022 NFPA 12, 29.8.1.3, 29.8.1.3.1 and 29.8.1.3.2]
- 3. MAINTAIN 120" MIN FROM KITCHEN COOKING APPLIANCES [2022
- NFPA 72, 29.11.3.4(5)]
 4. MAINTAIN 36" MIN FROM A BATHROOM DOOR CONTAINING A TUB
- OR SHOWER [2022 NFPA 72, 29.II.3.4(6)]
 5. MAINTAIN 36" MIN FROM A SUPPLY REGISTER OF A FORCED HEATING/COOLING SYSTEM AND OUTSIDE OF THE DIRECT AIRFLOW [2022 NFPA 72, 29.II.3.4(7)]
- 6. MAINTAIN 36" MIN FROM TIP OF CEILING FAN BLADE [2019 NFPA T2, 29.11.3.4(8)]
- WHERE STAIRS LEAD TO AN ABOVE-OCCUPIABLE LEVEL, A SMOKE DETECTOR SHALL BE LOCATED SO THAT RISING SMOKE IN THE STAIRWAY CANNOT BE BLOCKED BY AN INTERVENING DOOR [2019 NFPA 72, 29.11.3.4(9)]
- 8. PLACE SMOKE DETECTORS AT HIGHEST POINT OF TRAY CEILING [2019 NFPA 72, 29.11.3.4(11)]

	ELECTRICAL LEGEND					
	CEILING FAN	l		USB PORT	↔	SINGLE POLE SWITCH
		$\left\{ \right\}$	$\langle T \rangle$	COMMUNICATIONS	⇔ °	DIMMER SWITCH
	CEILING FAN W/ LIGHT		\(\rightarrow \)	UL APPROVED SMOKE / CO DETECTOR	♦ °	3 WAY SMITCH
			(5)	SURROUND SOUND CEILING SPEAKER	₩4	4 WAY SMITCH
	FLUORESCENT LIGHT],,	(DC)	DOOR CONTACT	# AC UC	DUPLEX OUTLET ABOVE COUNTER UNDER COUNTER
Ю	WALL MOUNT LIGHT	S				EXTERIOR DUPLEX OUTLET
X	SURFACE LIGHT	OPTIONS	(M)>	DIRECTIONAL MOTION SENSOR	—————————————————————————————————————	1/2 HOT DUPLEX OUTLET
	PENDANT LIGHT	18			_	ON SMITCH
	LED LIGHT	VOLTAGE	K/P	SECURITY KEYPAD	⊕ GFC	GROUND FAULT CIRCUIT INTERRUPT DUPLEX OUTLET
	UNDER-WALL-CABINET LIGHT	LOM-VC	S/P	20" ON-Q ENCLOSURE HOUSING PHONE, CABLE, ALARM & REQUIRES		QUAD OUTLET
F	FLOOD LIGHTS			IIOV OUTLET		FLOOR OUTLET
0	RECESS LIGHT		SST	SURROUND SOUND TERMINATION POINT-PHONE, CABLE, SS & FUTURE	<u> </u>	I LOOK OVILLI
	LIGHT / EXHAUST FAN COMBO EXHAUST FAN	1		PIPE WILL TERMINATE IN ONE PHONE/CABLE JACK & SPOUT PLATE	₩	220 V OUTLET





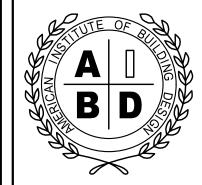


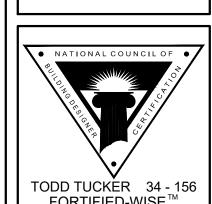


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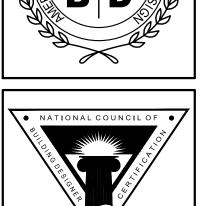
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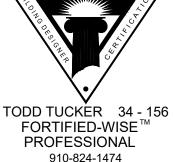
REVISIONS:



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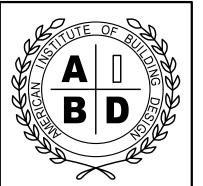


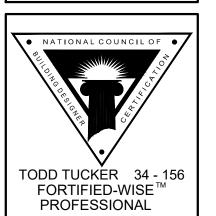


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CC2058

SEPTEMBER 2024







BRACED WALL DESIGN NOTES:

- BRACED WALL DESIGN PER SECTION R602.10.5 "WALL BRACING BY ENGINEERED DESIGN" OF THE NCRC 2018 EDITION USING BRACING MATERIALS AND METHODS LISTED IN TABLE R602.10.1 ALONG WITH ALTERNATIVE MATERIALS AND METHODS THAT COMPLY WITH ACCEPTED ENGINEERING PRACTICE. BRACED WALL DESIGN IS NOT PRESCRIPTIVE.
 SHEATH ALL EXTERIOR WALLS w/ 7/16" OSB TO PROVIDE CS-WSP WALL
- BRACING THAT WILL BRACE THE STRUCTURE FOR ALL LATERAL LOADS AS REQUIRED BY THE NCRC 2018 EDITION.

 3. CS-WSP REFERS TO "CONTINUOUSLY SHEATHED WOOD STRUCTURAL"
- PANELS." CONTRACTOR IS TO INSTALL 7/16" OSB ON ALL EXTERIOR WALLS ATTACHED w/ 8d NAILS SPACED 6" O.C. ALONG PANEL EDGES AND 12" O.C. IN THE FIELD.

 4. GB REFERS TO "GYPSUM BOARD." CONTRACTOR IS TO INSTALL 1/2" (MIN.)
- GYPSUM BOARD ON BOTH SIDES OF WALL WHERE NOTED ON THE PLANS
 ATTACHED WITH 1 1/4" LONG #6 SCREWS OR 1 5/8" LONG 5d COOLER
 NAILS SPACED 7" O.C. ALONG PANEL EDGES AND IN THE FIELD.

 5. BRACED WALL DESIGN APPLIED IN WIND ZONES UP TO 130 MPH. FOR HIGH
 WIND ZONES, BRACED WALLS ARE TO BE CONSTRUCTED IN ACCORDANCE
- WITH CHAPTER 45 OF THE NCRC 2018 EDITION.

 6. SEE NOTES AND DETAIL SHEETS FOR ADDITIONAL BRACED WALL INFORMATION.

STRUCTURAL NOTES:

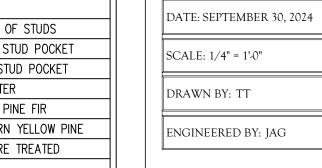
- 1. ALL FRAMING LUMBER TO BE #2 SPF (UNO).
- ALL LOAD BEARING HEADERS TO BE (2) 2 x 6 (UNO).
 WINDOW AND DOOR HEADERS TO BE
- SUPPORTED w/ (1) JACK STUD AND (1)
 KING STUD EA. END (UNO.). SEE TABLE
 R602.7.5 FOR ADDITIONAL KING STUD
 REQUIREMENTS.
- 4. SQUARES DENOTE POINT LOADS WHICH REQUIRE SOLID BLOCKING TO GIRDER OR FOUNDATION. SQUARES TO BE (2) STUDS (UNO.)
- FOR HIGH WIND ZONES, ALL EXTERIOR
 WALLS TO BE SHEATHED WITH 7/16" OSB
 SHEATHING WITH JOINTS BLOCKED AND
 SECURED WITH 8d NAILS AT 3" O.C. ALONG
- EDGES AND 6" O.C. IN THE FIELD.

 6. FOR HIGH WIND ZONES, SECURE ALL EXTERIOR WALL SHEATHING PANELS TO DOUBLE TOP PLATES, BANDS, JOISTS, AND GIRDERS WITH (2) ROWS OF 8d NAILS STAGGERED AT 3" O.C. PANELS SHALL EXTEND 12" BEYOND CONSTRUCTION JOINTS AND SHALL OVERLAP GIRDERS AND DOUBLE SILL PLATES THEIR FULL DEPTH.
- SPECIFIED SIMPSON STRONG—TIE PRODUCTS
 MAY BE SUBSTITUTED WITH THOSE
 MANUFACTURED BY USP STRUCTURAL
 CONNECTORS PROVIDED THAT THE LOAD
 CAPACITY AND FUNCTION IS EQUIVALENT.
- REFER TO NOTES AND DETAIL SHEETS FOR ADDITIONAL STRUCTURAL INFORMATION.

TABLE R602.7.5 MINIMUM NUMBER OF FULL HEIGHT KING STUDS AT EACH END OF HEADERS IN EXTERIOR WALLS

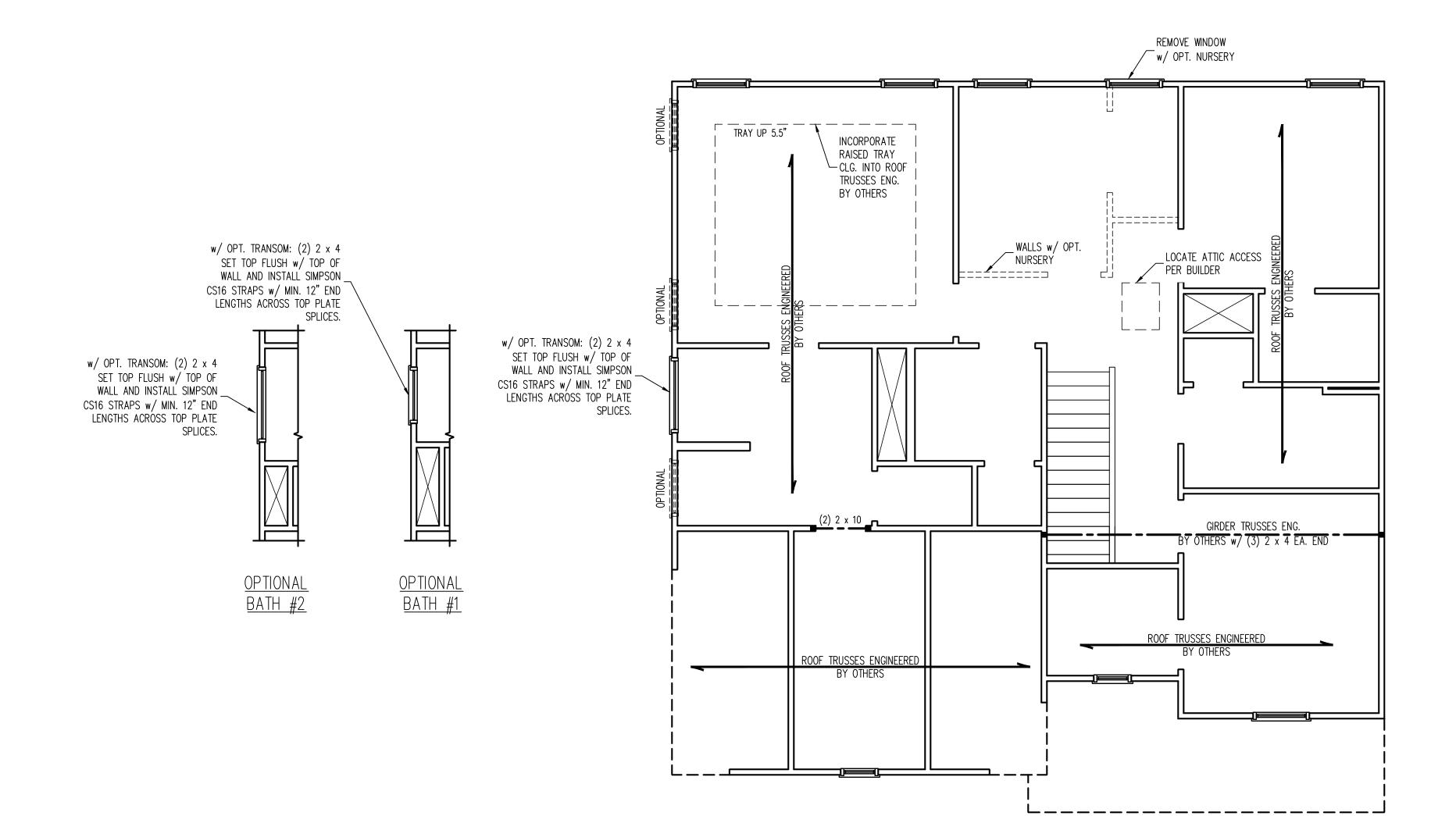
HEADER SPAN (FEET)	MINIMUM NUMBER OF FULL HEIGHT STUDS (KINGS)
UP TO 3'	1
> 3' TO 6'	2
> 6' TO 9'	3
> 9' TO 12'	4
> 12' TO 15'	5

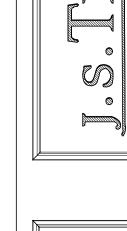
	LEGEND		
CONT	CONTINUOUS		
XT	EXTRA TRUSS		
XJ	EXTRA JOIST		
DJ	DOUBLE JOIST		
TJ	TRIPLE JOIST		
EA	EACH		
()	NUMBER OF STUDS		
DSP	DOUBLE STUD POCKET		
TSP	TRIPLE STUD POCKET		
OC	ON CENTER		
SPF	SPRUCE PINE FIR		
SYP	SOUTHERN YELLOW PINE		
TRTD	PRESSURE TREATED		
TYP	TYPICAL		
UNO	UNO UNLESS NOTED OTHERWISE		



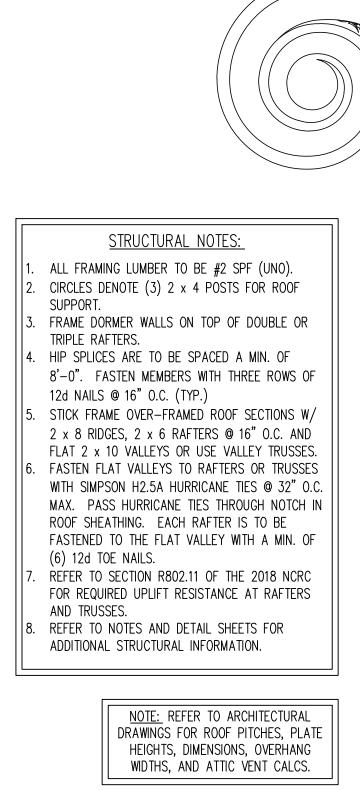
S-3
ATTIC FLOOR
FRAMING PLAN







CC 2058 VINESS & CATES



F-----

ROOF TRUSSES ENGINEERED

ROOF TRUSSES ENGINEERED

LEGEND XR EXTRA RAFTER XT EXTRA TRUSS DR DOUBLE RAFTER TR TRIPLE RAFTER RS RAFTER SUPPORT TS TRUSS SUPPORT CONT CONTINUOUS EA EACH OC ON CENTER SPF | SPRUCE PINE FIR SYP SOUTHERN YELLOW PINE TYP TYPICAL
UNO UNLESS NOTED OTHERWISE

CC 2058 AVINESS & CA



DATE: SEPTEMBER 30, 2024 SCALE: 1/4" = 1'-0" DRAWN BY: TT ENGINEERED BY: JAG

ROOF FRAMING PLAN

CC 2058 SAVINESS & CA

DATE: SEPTEMBER 30, 2024

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

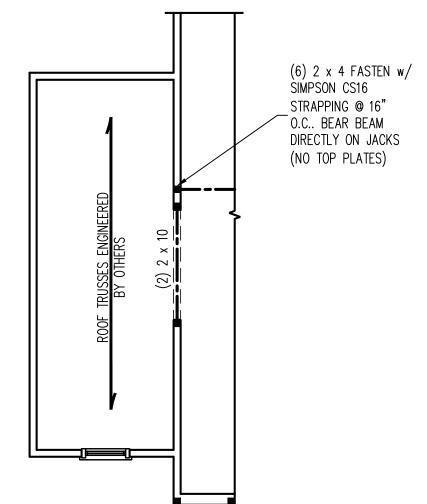
DRAWN BY: TT ENGINEERED BY: JAG

WORK GARAGE

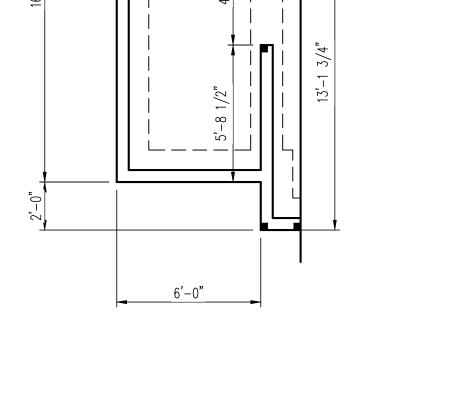
ROOF FRAMING PLAN

30" x 30" x 10" CONC. FTG. 6'-0"

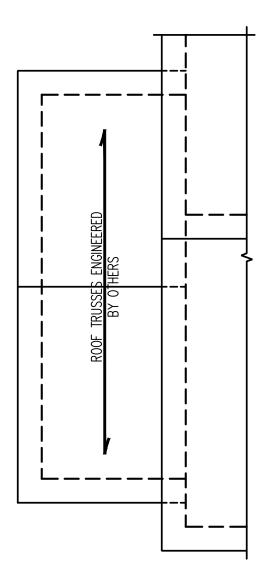
CRAWL SPACE AND STEM WALL

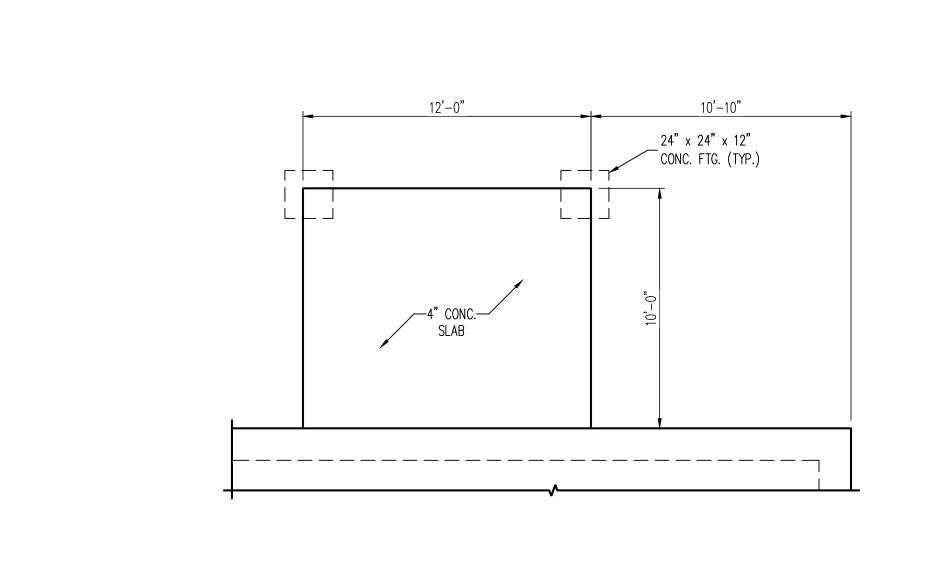


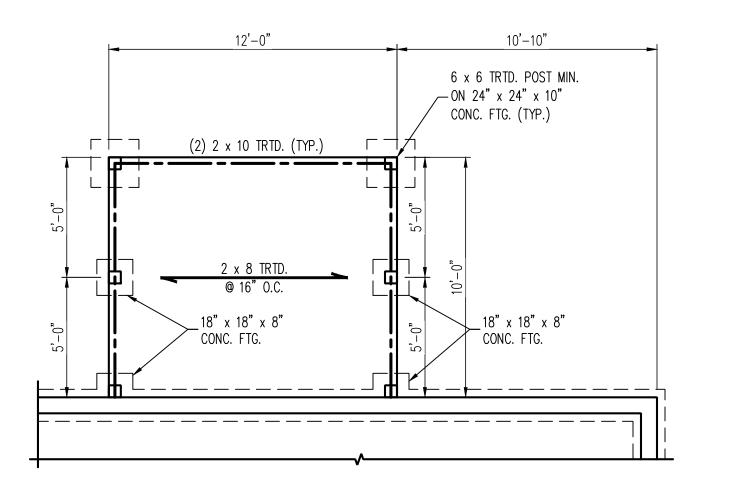
FRAMING PLAN



MONO SLAB



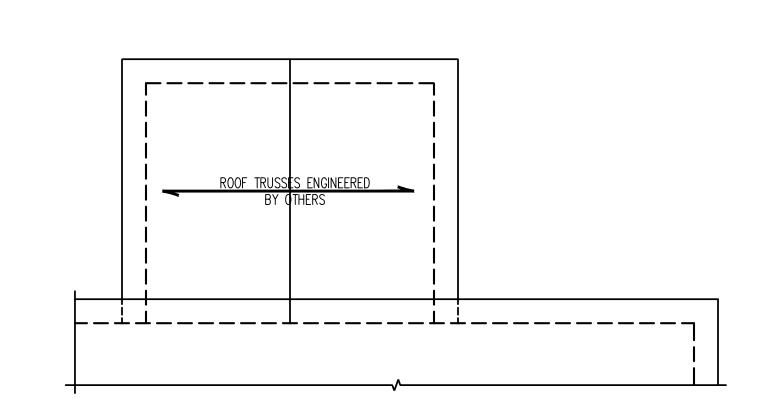




CRAWL SPACE MONO SLAB STEM WALL

12'-0"

10'-10"



4 x 4 TRTD. POST MIN. w/ WOOD FRAMED PORCH OPTION, SECURE BOTTOM OF POST TO FRAMING BELOW W/ (2) SIMPSON CS16 COIL STRAPS w/ 9" END LENGTHS (2) 2 x 10 (TYP.) ROOF TRUSSES ENGINEERED BY OTHERS (2) 1 3/4" x 9 1/4" LVL w/ (2) JACKS EA. END OPTIONAL 6'-0" DOOR

> FRAMING PLAN ROOF FRAMING PLAN



DRAWN BY: TT ENGINEERED BY: JAG S-10 10' PORCH

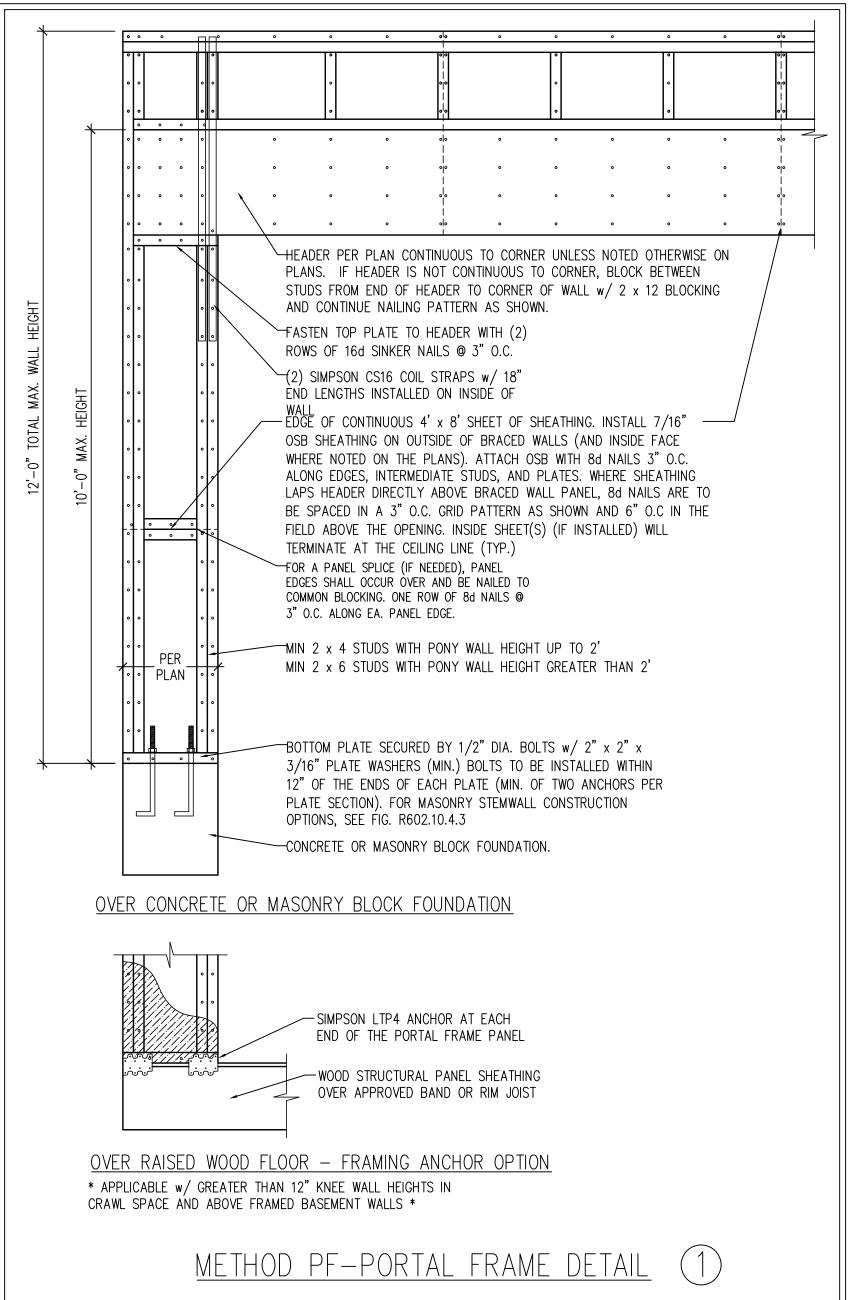
CC 2058 AVINESS & C.

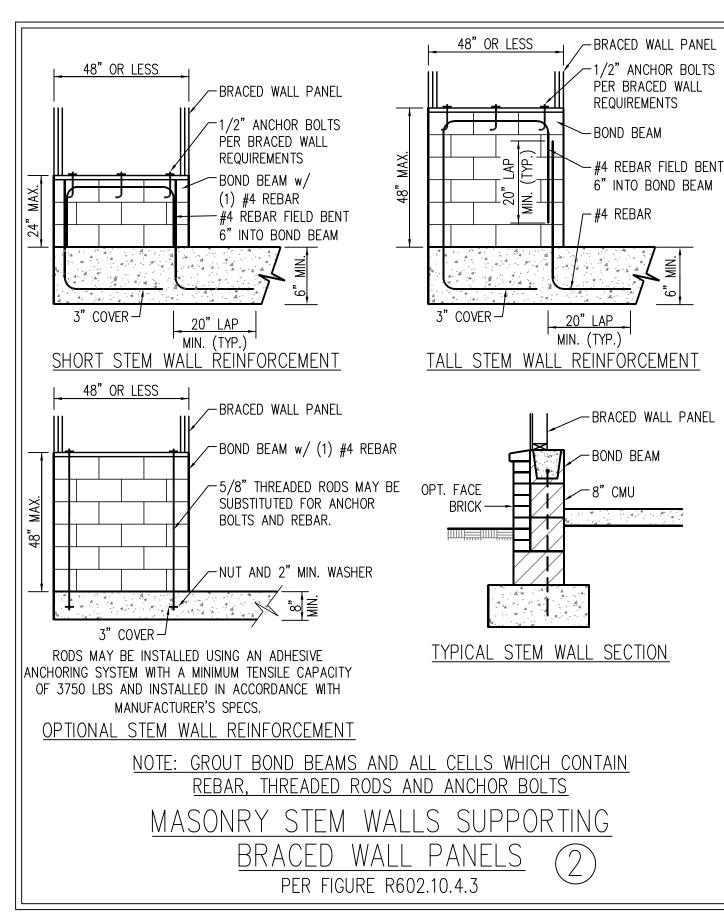
DATE: SEPTEMBER 30, 2024

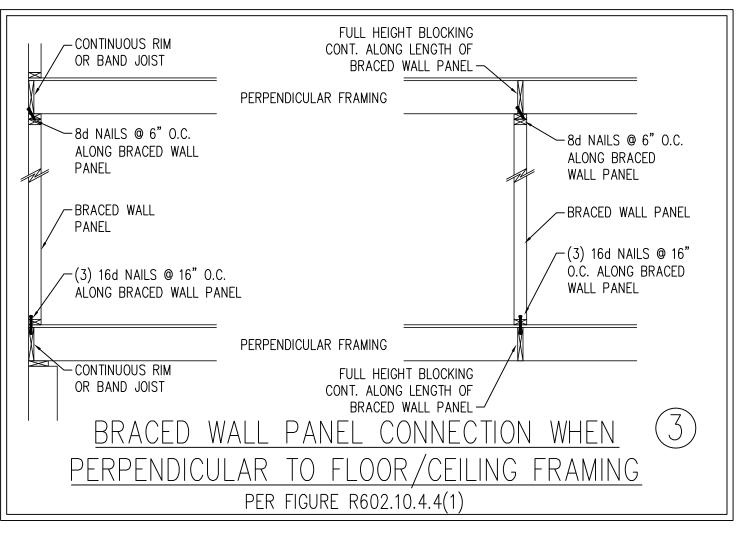
SCALE: 1/4" = 1'-0"

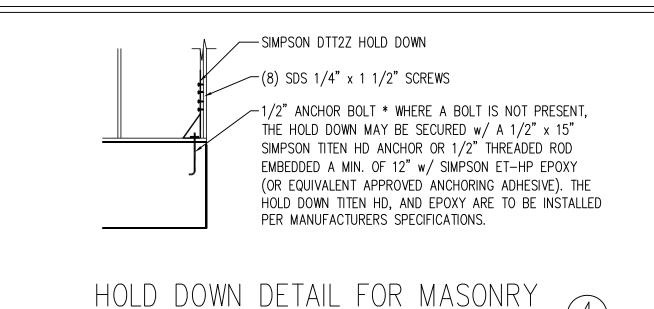
GENERAL WALL BRACING NOTES:

- WALL BRACING DESIGNED IN ACCORDANCE WITH CHAPTER 6 OF THE 2018 NC RESIDENTIAL BUILDING CODE (NCRC). TABLES AND FIGURES REFERENCED ARE FROM THE 2018 NCRC.
- SEE THIS SHEET FOR GENERAL DETAILS. REFER TO THE 2018 NCRC FOR ADDITIONAL INFORMATION AS NEEDED BRACED EXTERIOR WALLS SUPPORTING ROOF TRUSSES AND RAFTERS, INCLUDING STORIES BELOW THE TOP FLOOR, HAVE BEEN DESIGNED PER R602.3.5 (3). WALL SHEATHING AND FASTENERS HAVE BEEN DESIGNED TO RESIST COMBINED UPLIFT AND SHEAR FORCES IN ACCORDANCE WITH ACCEPTED ENGINEERED PRACTICE.
- SEE STRUCTURAL SHEETS FOR BRACED WALL LOCATIONS, DIMENSIONS, HOLD DOWN TYPE AND LOCATIONS, BRACED WALL LINE KEY WITH WALL DESIGN SUMMARY OF REQUIRED/PROVIDED TOTALS FOR EACH WALL LINE AND ANY SPECIAL NOTES OR REQUIREMENTS 5. ALL EXTERIOR WALLS ARE TO BE SHEATHED WITH CS-WSP IN ACCORDANCE WITH SECTION R602.10.3 UNLESS NOTED OTHERWISE.
- 6. ALL EXTERIOR AND INTERIOR WALLS TO HAVE 1/2" GYPSUM INSTALLED. WHEN NOT USING METHOD "GB", GYPSUM TO BE FASTENED PER TABLE R702.3.5. METHOD GB TO BE FASTENED PER TABLE R602.10.1
- 7. CS-WSP REFERS TO THE "CONTINUOUS SHEATHING WOOD STRUCTURAL PANELS" WALL BRACING METHOD. 7/16" OSB SHEATHING IS TO BE INSTALLED ON ALL EXTERIOR WALLS ATTACHED w/ 6d COMMON NAILS OR 8d (2 1/2" LONG x 0.113" DIAMETER) NAILS SPACED 6" O.C. ALONG PANEL EDGES AND 12" O.C. IN THE FIELD (U.N.O.).
- GB REFERS TO THE "GYPSUM BOARD" WALL BRACING METHOD. 1/2" (MIN.) GYPSUM WALL BOARD IS TO BE INSTALLED ON BOTH SIDES OF THE BRACED WALL FASTENED WITH 1 1/4" SCREWS OR 1 5/8" NAILS SPACED 7" O.C. ALONG PANEL EDGES INCLUDING TOP AND BOTTOM PLATES AND INTERMEDIATE SUPPORTS (U.N.O.). VERIFY ALL FASTENER OPTIONS FOR 1/2" AND 5/8" GYPSUM PRIOR TO CONSTRUCTION. FOR INTERIOR FASTENER OPTIONS SEE TABLE R702.3.5. FOR EXTERIOR FASTENER OPTIONS SEE TABLE R602.3(1). EXTERIOR GB TO BE INSTALLED VERTICALLY.
- REQUIRED BRACED WALL LENGTH FOR EACH SIDE OF THE CIRCUMSCRIBED RECTANGLE ARE INTERPOLATED PER TABLE R602. 10.3. METHOD CS-WSP CONTRIBUTES ITS ACTUAL LENGTH, METHOD GB CONTRIBUTES .5 ITS ACTUAL LENGTH, AND METHOD PF



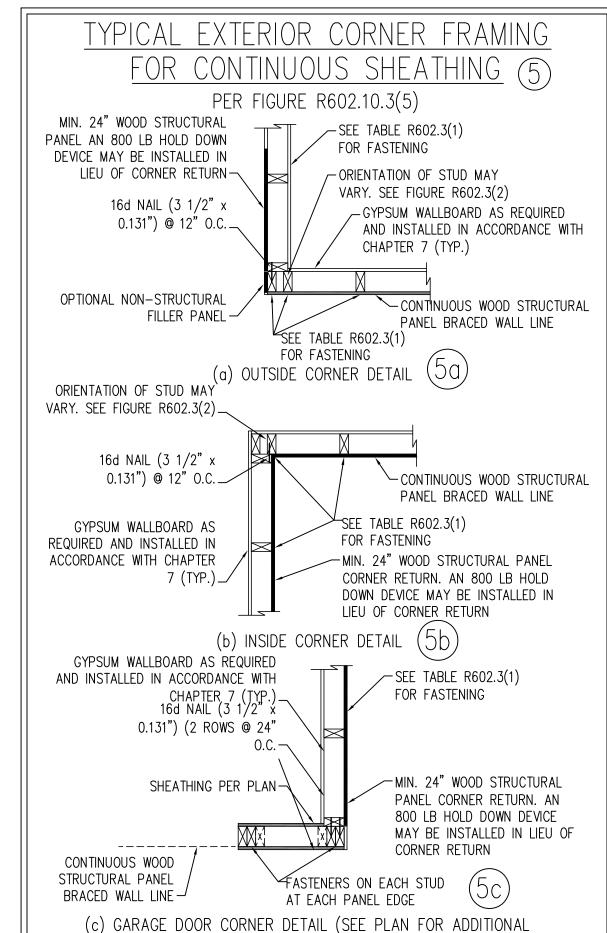




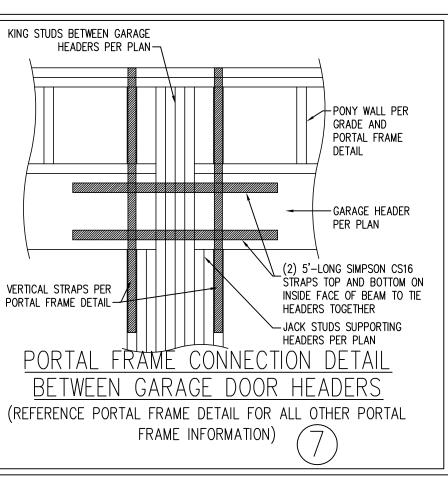


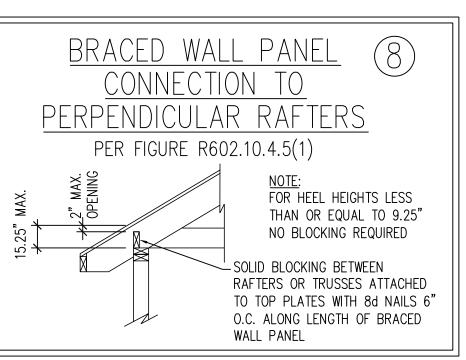
FOUNDATION OR MONOLITHIC SLAB

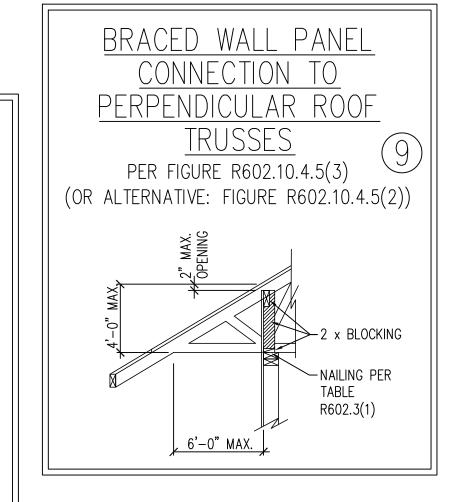
* APPLICABLE ONLY WHERE SPECIFIED ON PLAN *

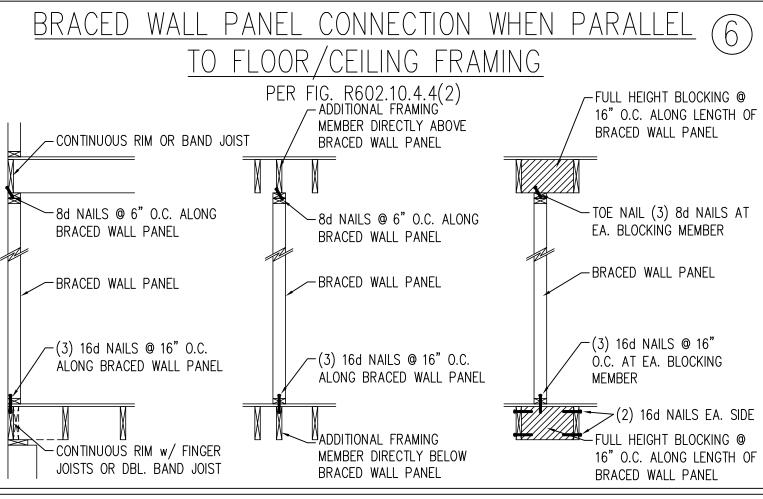


STRUCTURAL INFORMATION OR ALTERNATE CONFIGURATIONS)

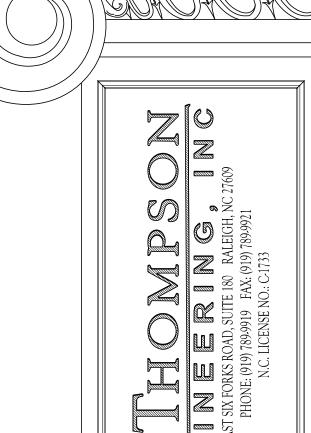








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ANI BRACING

DATE: AUGUST 30, 2022

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

DRAWN BY: JST

ENGINEERED BY: JST

BRACED WALL NOTES AND DETAILS AND PF DETAIL

9/30/2024

Soll MERION PSOL AST SIX FORKS ROAD, SUITE 180 RALEIGH, NC 2' PHONE: (919) 789-9919 FAX: (919) 789-9921

DARD STRUCTURAL NOTES

DATE: AUGUST 30, 2022

DRAWN BY: JST

SEAL

33736

9/30/2024

ENGINEERED BY: JST

STRUCTURAL

NOTES

GENERAL NOTES

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

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

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

FOOTING AND FOUNDATION NOTES

- 1. FOUNDATION DESIGN BASED ON A MINIMUM ALLOWABLE BEARING CAPACITY OF 2000 PSF. CONTACT GEOTECHNICAL ENGINEER IF BEARING CAPACITY IS NOT ACHIEVED.
- 2. FOR ALL CONCRETE SLABS AND FOOTINGS, THE AREA WITHIN THE PERIMETER OF THE BUILDING ENVELOPE SHALL HAVE ALL VEGETATION, TOP SOIL AND FOREIGN MATERIAL REMOVED. FILL MATERIAL SHALL BE FREE OF VEGETATION AND FOREIGN MATERIAL. THE FILL SHALL BE COMPACTED TO ASSURE UNIFORM SUPPORT OF THE SLAB, AND EXCEPT WHERE APPROVED, THE FILL DEPTHS SHALL NOT EXCEED 24" FOR CLEAN SAND OR GRAVEL. A 4" THICK BASED COURSE CONSISTING OF CLEAN GRADED SAND OR GRAVEL SHALL BE PLACED. A BASE COURSE IS NOT REQUIRED WHERE A CONCRETE SLAB IS INSTALLED ON WELL—DRAINED OR SAND—GRAVEL MIXTURE SOILS CLASSIFIED AS GROUP 1, ACCORDING TO THE UNITED SOIL CLASSIFICATION SYSTEM IN ACCORDANCE WITH TABLE R405.1 OF THE NCRC, 2018 EDITION.
- 3. PROPERLY DEWATER EXCAVATION PRIOR TO POURING CONCRETE WHEN BOTTOM OF CONCRETE SLAB IS AT OR BELOW WATER TABLE. IF APPLICABLE, 3/4" 1" DEEP CONTROL JOINTS ARE TO BE SAWED WITHIN 4 TO 12 HOURS OF CONCRETE FINISHING AND WALL LOCATIONS HAVE BEEN MARKED. ADJUST WHERE NECESSARY.
- 4. CONCRETE SHALL CONFORM TO SECTION R402.2 OF THE NCRC, 2018 EDITION. CONCRETE REINFORCING STEEL TO BE ASTM A615 GRADE 60. WELDED WIRE FABRIC TO BE ASTM A185. MAINTAIN A MINIMUM CONCRETE COVER AROUND REINFORCING STEEL OF 3" IN FOOTINGS AND 1 1/2" IN SLABS. FOR POURED CONCRETE WALLS, CONCRETE COVER FOR REINFORCING STEEL MEASURED FROM THE INSIDE FACE OF THE WALL SHALL NOT BE LESS THAN 3/4". CONCRETE COVER FOR REINFORCING STEEL MEASURED FROM THE OUTSIDE FACE OF THE WALL SHALL NOT BE LESS THAN 1 1/2" FOR #5 BARS OR SMALLER, AND NOT LESS THAN 2" FOR #6 BARS OR LARGER.
- 5. MASONRY UNITS TO CONFORM TO ACE 530/ASCE 5/TMS 402. MORTAR SHALL CONFORM TO ASTM C270.
- 6. THE UNSUPPORTED HEIGHT OF MASONRY PIERS SHALL NOT EXCEED FOUR TIMES THEIR LEAST DIMENSION FOR UNFILLED HOLLOW CONCRETE MASONRY UNITS AND TEN TIMES THEIR LEAST DIMENSION FOR SOLID OR SOLID FILLED PIERS. PERS MAY BE FILLED SOLID WITH CONCRETE OR TYPE M OR S MORTAR. PIERS AND WALLS SHALL BE CAPPED WITH 8" OF SOLID MASONRY.
- 7. THE CENTER OF EACH OF THE PIERS SHALL BEAR IN THE MIDDLE THIRD OF ITS RESPECTIVE FOOTING, EACH GIRDER SHALL BEAR IN THE MIDDLE THIRD OF THE PIERS.
- 8. ALL CONCRETE AND MASONRY FOUNDATION WALLS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE PROVISIONS OF SECTION R404 OF THE NCRC, 2018 EDITION OR IN ACCORDANCE WITH ACI 318, ACI 332, NCMA TR68—A OR ACE 530/ASCE 5/TMS 402. MASONRY FOUNDATION WALLS ARE TO BE REINFORCED PER TABLE R404.1.1(1), R404.1.1(2), R404.1.1(3), OR R404.1.1(4) OF THE NCRC, 2018 EDITION. CONCRETE FOUNDATION WALLS ARE TO BE REINFORCED PER TABLE R404.1.1(5) OF THE NCRC, 2018 EDITION. STEP CONCRETE FOUNDATION WALLS TO 2 x 6 FRAMED WALLS AT 16" O.C. WHERE GRADE PERMITS (UNO).

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- 1. ALL FRAMING LUMBER SHALL BE #2 SPF MINIMUM (Fb = 875 PSI, Fv = 375 PSI, E = 1600000 PSI) UNLESS NOTED OTHERWISE (UNO). ALL TREATED LUMBER SHALL BE #2 SYP MINIMUM (Fb = 975 PSI, Fv = 175 PSI, E = 1600000 PSI) UNLESS NOTED OTHERWISE (UNO).
- 2. LAMINATED VENEER LUMBER (LVL) SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES: Fb = 2600 PSI, Fv = 285 PSI, E = 1900000 PSI. LAMINATED STRAND LUMBER (LSL) SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES: Fb = 2325 PSI, Fv = 310 PSI, E = 1550000 PSI. PARALLEL STRAND LUMBER (PSL) UP TO 7" DEPTH SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES: Fc = 2500 PSI, E = 1800000 PSI. PARALLEL STRAND LUMBER (PSL) MORE THAN 7" DEPTH SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES: Fc = 2900 PSI, E = 2000000 PSI. INSTALL ALL CONNECTIONS PER MANUFACTURER'S SPECIFICATIONS.

FRAMING NOTES

3. STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING ASTM SPECIFICATIONS

Α.	W AND WT SHAPES:	ASTM A992
B.	CHANNELS AND ANGLES:	ASTM A36
C.	PLATES AND BARS:	ASTM A36
D.	HOLLOW STRUCTURAL SECTIONS:	ASTM A500 GRADE B
E.	STEEL PIPE:	ASTM A53, GRADE B, TYPE E OR

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

A. WOOD FRAMING

B. CONCRETE

C. MASONRY (FULLY GROUTED)

D. STEEL PIPE COLUMN

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

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

(2) 1/2" DIA. x 4" LONG SIMPSON TITEN HD ANCHORS

(4) 3/4" DIA. A325 BOLTS OR 3/16" FILLET WELD

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

- 5. SQUARES DENOTE POINT LOADS WHICH REQUIRE SOLID BLOCKING TO GIRDER OR FOUNDATION. SHADED SQUARES DENOTE POINT LOADS FROM ABOVE WHICH REQUIRE SOLID BLOCKING TO SUPPORTING MEMBER BELOW.
- 6. ALL LOAD BEARING HEADERS TO CONFORM TO TABLE R602.7(1) AND R602.7(2) OF THE NCRC, 2018 EDITION OR BE (2) 2 x 6 WITH (1) JACK AND (1) KING STUD EACH END (UNO), WHICHEVER IS GREATER ALL HEADERS TO BE SECURED TO EACH JACK STUD WITH (4) 8d NAILS. ALL BEAMS TO BE SUPPORTED WITH (2) STUDS AT EACH BEARING POINT (UNO). INSTALL KING STUDS PER SECTION R602.7.5 OF THE NORTH CAROLINA RESIDENTIAL CODE, 2018 EDITION.
- 7. ALL BEAMS, HEADERS, OR GIRDER TRUSSES PARALLEL TO WALL ARE TO BEAR FULLY ON (1) JACK OR (2) STUDS MINIMUM OR THE NUMBER OF JACKS OR STUDS NOTED. ALL BEAMS OR GIRDER TRUSSES PERPENDICULAR TO WALL AND SUPPORTED BY (3) STUDS OR LESS ARE TO HAVE 1 1/2" MINIMUM BEARING (UNO). ALL BEAMS OR GIRDER TRUSSES PERPENDICULAR TO WALL AND SUPPORTED BY MORE THAN (3) STUDS OR OTHER NOTED COLUMN ARE TO BEAR FULLY ON SUPPORT COLUMN FOR ENTIRE WALL DEPTH (UNO). BEAM ENDS THAT BUTT INTO ONE ANOTHER ARE TO EACH BEAR EQUAL LENGTHS (UNO).
- 8. FLITCH BEAMS SHALL BE BOLTED TOGETHER USING 1/2" DIAMETER BOLTS (ASTM A307) WITH WASHERS PLACED AT THREADED END OF BOLT. BOLTS SHALL BE SPACED AT 24" CENTERS (MAXIMUM), AND STAGGERED AT TOP AND BOTTOM OF BEAM (2" EDGE DISTANCE), WITH (2) BOLTS LOCATED AT 6" FROM EACH END (UNO).
- 9. ALL I-JOIST OR TRUSS LAYOUTS ARE TO BE IN COMPLIANCE WITH THE OVERALL DESIGN SPECIFIED ON THE PLANS. ALL DEVIATIONS ARE TO BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD PRIOR TO INSTALLATION.
- 10. BRACED WALL PANELS SHALL BE CONSTRUCTED ACCORDING TO THE NORTH CAROLINA RESIDENTIAL CODE 2018 EDITION WALL BRACING CRITERIA. THE AMOUNT, LENGTH, AND LOCATION OF BRACING SHALL COMPLY WITH ALL APPLICABLE TABLES IN SECTION R602.10.
- 11. PROVIDE DOUBLE JOIST UNDER ALL WALLS PARALLEL TO FLOOR JOISTS. PROVIDE SUPPORT UNDER ALL WALLS PARALLEL TO FLOOR TRUSSES OR I—JOISTS PER MANUFACTURER'S SPECIFICATIONS. INSTALL BLOCKING BETWEEN JOISTS OR TRUSSES FOR POINT LOAD SUPPORT FOR ALL POINT LOADS ALONG OFFSET LOAD LINES.
- 12. FOR ALL HEADERS SUPPORTING BRICK VENEER THAT ARE LESS THAN 8'-0" IN LENGTH, REST A 6" x 4" x 5/16" STEEL ANGLE WITH 6" MINIMUM EMBEDMENT AT SIDES FOR BRICK SUPPORT (U.N.O). FOR ALL HEADERS 8'-0" AND GREATER IN LENGTH, BOLT A 6" x 4" x 5/16" STEEL ANGLE TO HEADER WITH 1/2" LAG SCREWS AT 12" O.C. STAGGERED FOR BRICK SUPPORT. FOR ALL BRICK SUPPORT AT ROOF LINES, BOLT A 6" x 4" x 5/16" STEEL ANGLE TO (2) 2 x 10 BLOCKING INSTALLED w/ (4) 12d NAILS EA. PLY BETWEEN WALL STUDS WITH (2) ROWS OF 1/2" LAG SCREWS AT 12" O.C. STAGGERED AND IN ACCORDANCE WITH SECTION R703.8.2.1 OF THE NCRC, 2018 EDITION.
- 13. FOR STICK FRAMED ROOFS: CIRCLES DENOTE (3) 2 x 4 POSTS FOR ROOF MEMBER SUPPORT. HIP SPLICES ARE TO BE SPACED A MINIMUM OF 8'-0". FASTEN MEMBERS WITH THREE ROWS OF 12d NAILS AT 16" O.C. FRAME DORMER WALLS ON TOP OF DOUBLE OR TRIPLE RAFTERS AS SHOWN (UNO).
- 14. FOR TRUSSED ROOFS: FRAME DORMER WALLS ON TOP OF 2 x 4 LADDER FRAMING AT 24" O.C. BETWEEN ADJACENT ROOF TRUSSES. STICK FRAME OVER-FRAMED ROOF SECTIONS WITH 2 x 8 RIDGES, 2 x 6 RAFTERS AT 16" O.C. AND FLAT 2 x 10 VALLEYS (UNO).
- 15. ALL 4 x 4 AND 6 x 6 POSTS TO BE INSTALLED WITH 700 LB CAPACITY UPLIFT CONNECTORS TOP AND BOTTOM (UNO.) POSTS MAY BE SECURED USING ONE SIMPSON H6 OR LTS12 UPLIFT CONNECTOR FASTENED TO THE BAND AT THE BOTTOM AND THE BEAM AT THE TOP OF EACH POST. ONE 16" SECTION OF SIMPSON CS16 COIL STRAPPING WITH (8) 8d HDG NAILS AT EACH END MAY BE USED IN LIEU OF EACH TWIST STRAP IF DESIRED. FOR MASONRY OR CONCRETE FOUNDATION USE SIMPSON POST BASE.