

KITCHEN CABINETS

√ ABOVE (TYP.)

---H--**-**----

<u>OPTIONAL KITCHEN</u>





1. 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).

 3. 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.

 4. FOUNDATION ANCHORAGE TO COMPLY WITH SECTION 4504 OF THE NORTH CAROLINA
- RESIDENTIAL CODE, 2018 EDITION.

 5. MEAN ROOF HEIGHT IS LESS THAN 30 FEET.

 6. WALL CLADDING DESIGNED FOR +24.3 PSF AND

 -32 PSF (+/- INDICATE POSITIVE / NEGATIVE

 PRESSURE (TYP).
- -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

ROOF CLADDING DESIGNED FOR +22.2 PSF AND

- EXTERIOR WALLS.

 9. 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.

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

- ENGINEER'S SEAL APPLIES ONLY TO STRUCTURAL COMPONENTS. ENGINEER'S SEAL DOES NOT CERTIFY DIMENSIONAL ACCURACY OR ARCHITECTURAL LAYOUT INCLUDING ROOF SYSTEM.
- 2. STRUCTURAL DESIGN PER NORTH CAROLINA RESIDENTIAL CODE, 2018 EDITION.
 3. 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"
- MIDDLE THIRD OF PLATE WDTH.

 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 -2

INTO MASONRY OR CONCRETE. LOCATE BOLT WITHIN

- PSF (+/- INDICATE POSITIVE / NEGATIVE
 PRESSURE (TYP).
 7. 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
- 7/12.

 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.
- 9. 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.
 - STRUCTURAL NOTES:
- . ALL FRAMING LUMBER TO BE #2 SPF (UNO). ALL TREATED LUMBER TO BE #2 SYD (UNO)
- 2. PROVIDE DOUBLE OR TRIPLE JOIST UNDER ALL WALLS PARALLEL TO FLOOR JOISTS WHERE NOTED ON THE PLANS.
- 3. SQUARES DENOTE POINT LOADS WHICH REQUIRE SOLID BLOCKING TO GIRDER OR FOUNDATION.
- 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 ADDITIONAL STRUCTURAL INFORMATION.

| LEGEND | | | |
|--------|------------------------|--|--|
| CONT | CONTINUOUS | | |
| XJ | EXTRA JOIST | | |
| 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 | | |

S-1a crawl foundation plan

DATE: OCTOBER 15, 2024

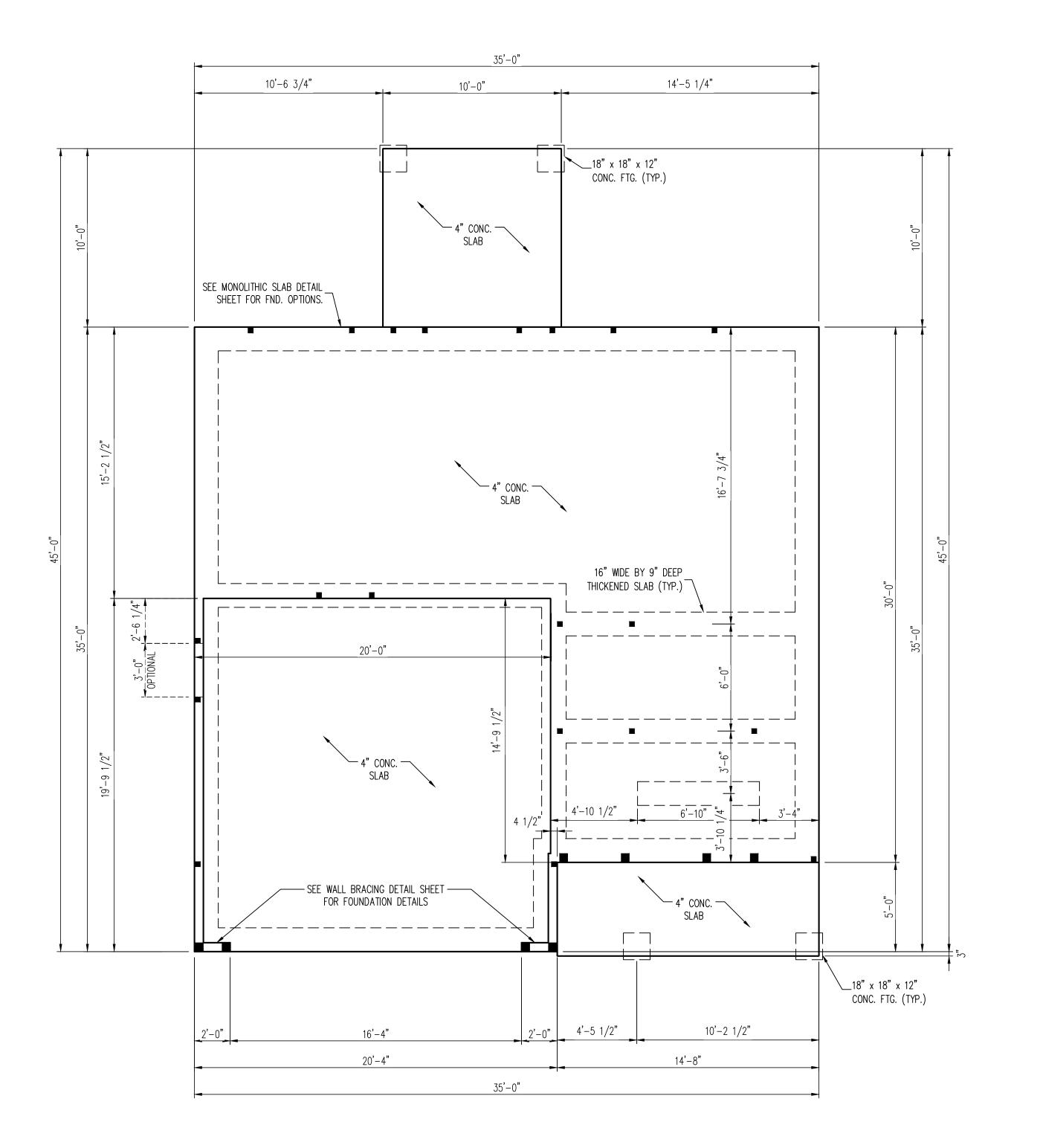
SCALE: 1/4" = 1'-0"

DRAWN BY: NS

ENGINEERED BY: WFB

Soll Color C

LYON SCOT GROUP



150 MPH ULTIMATE DESIGN WIND SPEED

NOTES FOR LESS THAN

30' MEAN ROOF HEIGHT:

I. 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).

3. 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.

4. FOUNDATION ANCHORAGE TO COMPLY WITH SECTION 4504 OF THE NORTH CAROLINA RESIDENTIAL CODE, 2018 EDITION.

5. MEAN ROOF HEIGHT IS LESS THAN 30 FEET.

6. 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.

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.

WALLS TO BE BRACED IN ACCORDANCE WITH SECTION R602.10 OF THE NORTH CAROLINA

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

- ENGINEER'S SEAL APPLIES ONLY TO STRUCTURAL
 COMPONENTS. ENGINEER'S SEAL DOES NOT CERTIFY
 DIMENSIONAL ACCURACY OR ARCHITECTURAL
- LAYOUT INCLUDING ROOF SYSTEM.

 2. STRUCTURAL DESIGN PER NORTH CAROLINA RESIDENTIAL CODE, 2018 EDITION.
- 3. 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
 PRESSURE (TYP).
 7. 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 7/12.

 8 INSTALL 7/16" OSB SHEATHING ON ALL EXTERIOR
- 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.

 9. 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.

| _ | | | |
|---|--------|-----------------------|--|
| | LEGEND | | |
| | CONT | CONTINUOUS | |
| | XJ | EXTRA JOIST | |
| | 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 OTHERWIS | |



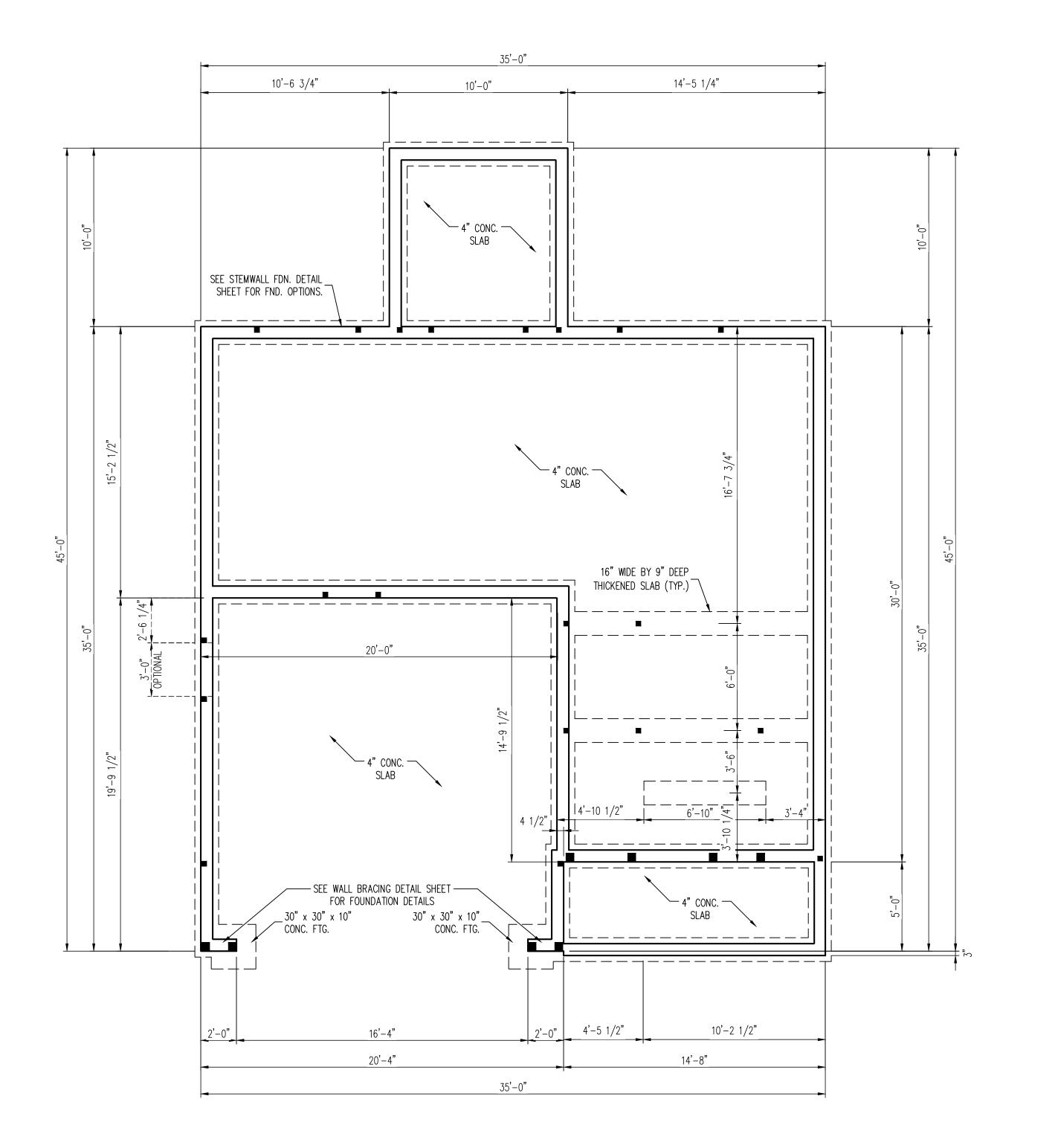
DATE: OCTOBER 15, 2024

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

DRAWN BY: NS

ENGINEERED BY: WFB

S-1b mono slab foundation plan



150 MPH ULTIMATE DESIGN WIND SPEED

NOTES FOR LESS THAN

30' MEAN ROOF HEIGHT:

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COMPONENTS. ENGINEER'S SEAL DOES NOT
CERTIFY DIMENSIONAL ACCURACY OR
ARCHITECTURAL LAYOUT INCLUDING ROOF
SYSTEM

2. STRUCTURAL DESIGN PER NORTH CAROLINA
RESIDENTIAL CODE, 2018 EDITION WITH SPECIAL
CONSIDERATION TO CHAPTER 45 ("HIGH WIND
ZONES" FOR 150 MPH WINDS).

3. BUILDER IS TO PROVIDE FRAMING CONNECTIONS
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4. FOUNDATION ANCHORAGE TO COMPLY WITH
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7. ROOF CLADDING DESIGNED FOR +22.2 PSF AND

7. 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

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8. 7/16" OSB SHEATHING IS REQUIRED ON ALL

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.

10. ENERGY EFFICIENCY COMPLIANCE AND INSULATION VALUES OF THE BUILDING TO BE IN ACCORDANCE

WITH CHAPTER 11 OF THE NCRC, 2018 EDITION.

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

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 2. STRUCTURAL DESIGN PER NORTH CAROLINA RESIDENTIAL CODE, 2018 EDITION.
- 3. 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
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- 4. MEAN ROOF HEIGHT IS LESS THAN 30 FEET.
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- FOR MORE INFORMATION.

 9. 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.

| | LEGEND |
|------|------------------------|
| CONT | CONTINUOUS |
| XJ | EXTRA JOIST |
| 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: OCTOBER 15, 2024

SCALE: 1/4" = 1'0"

DRAWN BY: NS

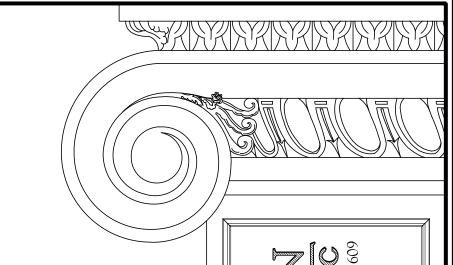
ENGINEERED BY: WFB



S-1c stem wall foundation plan

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

| AT LACIT LIND OF | TILADERS IN EXTERIOR WALL |
|-----------------------|----------------------------------------------------------------------|
| 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 |
| | HEADER SPAN (FEET) UP TO 3' > 3' TO 6' > 6' TO 9' > 9' TO 12' |



BRACED WALL DESIGN NOTES:

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

PANELS." CONTRACTOR IS TO INSTALL 7/16" OSB ON ALL EXTERIOR WALLS

- ATTACHED WITH 1 1/4" LONG #6 SCREWS OR 1 5/8" LONG 5d COOLER NAILS SPACED 7" O.C. ALONG PANEL EDGES AND IN THE FIELD. BRACED WALL DESIGN APPLIED IN WIND ZONES UP TO 130 MPH. FOR HIGH WIND ZONES, BRACED WALLS ARE TO BE CONSTRUCTED IN ACCORDANCE
- WITH CHAPTER 45 OF THE NCRC 2018 EDITION. SEE NOTES AND DETAIL SHEETS FOR ADDITIONAL BRACED WALL

| | LEGEND |
|------|------------------------|
| CONT | CONTINUOUS |
| XT | EXTRA TRUSS |
| 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 |

STRUCTURAL NOTES:

- ALL FRAMING LUMBER TO BE SPF #2 (UNO). ALL TREATED LUMBER TO BE SYP #2 (UNO.)
- 2. ALL LOAD BEARING HEADERS TO BE (2) 2 x 6
- 3. INSTALL 2 x 4 @ 16" O.C. BLOCKING BETWEEN ADJACENT TRUSSES UNDER WALLS PARALLEL TO FLOOR TRUSSES WHERE WALL LENGTH EXCEEDS 1/3 OF TRUSS SPAN (SEE DETAIL THIS SHEET). TRUSS DESIGNER TO DESIGN ADJACENT TRUSSES FOR ADDITIONAL LOADING FROM WALLS.
- WINDOW AND DOOR HEADERS TO BE SUPPORTED w/ (1) JACK STUD AND (1) KING STUD EA. END (UNO.). SEE TABLE R602.7.5 FOR ADDITIONAL KING STUD REQUIREMENTS.
- SQUARES DENOTE POINT LOADS WHICH REQUIRE SOLID BLOCKING TO GIRDER OR FOUNDATION. ALL SQUARES TO BE (2) STUDS (UNO.)
- 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
- ALL 4 x 4 POSTS SHALL BE ANCHORED TO SLABS w/ SIMPSON ABU44 POST BASES (OR EQUAL) AND 6 x 6 POSTS w/ ABU66 POST BASES (OR EQUAL) (UNO). ALL 4 x 4 AND 6 x 6 POSTS TO BE INSTALLED WITH 700 LB CAPACITY UPLIFT CONNECTORS AT TOP (UNO.)
- FOR FIBERGLASS, ALUMINUM, OR COLUMN ENG. BY OTHERS, SECURE TO SLAB w/ (2) METAL ANGLES USING 2" CONC. SCREWS. FASTEN ANGLES TO COLUMNS w/ 1/4" THROUGH BOLTS w/ NUTS AND WASHERS. LOCATE ANGLES ON OPPOSITE SIDES OF COLUMN. THROUGH BOLTS MUST BE INSTALLED PRIOR TO SETTING COLUMN.
- 10. REFER TO NOTES AND DETAIL SHEETS FOR ADDITIONAL STRUCTURAL INFORMATION.



(2) 2 x 8 FLUSH AT LANDING

∕ OF SECOND FLOOR

2 x 4 @ 12" O.C. BALLOON FRAMED

STAIR WALL FROM LANDING TO CEILING

OR w/ HIGH WIND: (2) 2 x 4 @ 12" O.C.

LANDING TO CEILING OF SECOND FLOOR

BALLOON FRAMED STAIR WALL FROM

2 x 8 @ 16" O.C. @ LANDING. FRAME

JOISTS INTO WALL WITH 2 x 8 BAND

2 x 6 @ 16" O.C. BALLOON FRAMED

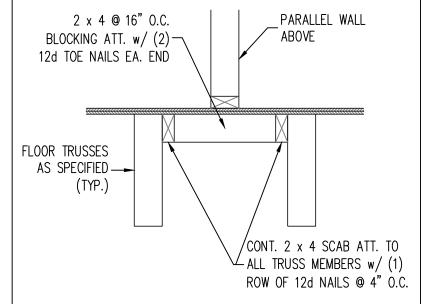
4 x 4 TRTD. POST

MIN. (TYP.)

AND EXTEND SUBFLOOR FULLY ACROSS.

─STAIR WALL <u>OR w/ HIGH WIND:</u> 2 x 6 @

12" O.C. BALLOON FRAMED STAIR WALL



TRUSS BLOCKING DETAIL INSTALL 2 x 4 @ 16" O.C. BLOCKING BETWEEN ADJACENT TRUSSES UNDER WALLS PARALLEL TO FLOOR TRUSSES WHERE WALL LENGTH EXCEEDS 1/3 OF TRUSS SPAN. TRUSS DESIGNER TO DESIGN ADJACENT TRUSSES FOR ADDITIONAL LOADING FROM WALLS.

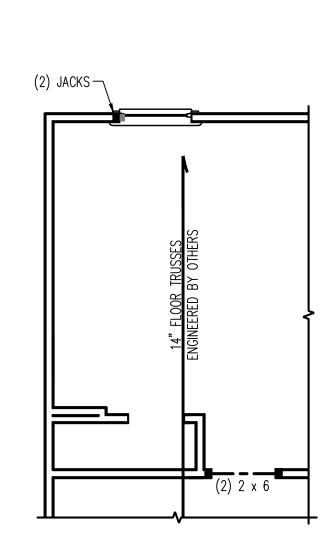
ENGINEERED BY: WFB

DATE: OCTOBER 15, 2024

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

DRAWN BY: NS

SECOND FLOOR FRAMING PLAN



6 x 6 TRTD. POST

(2) JACKS ─

TRELLIS ENG. __ BY OTHERS

MIN. (TYP.)

ROOF TRUSSES ENG

(2) 2 x 12 w/ (2) JACKS EA. ÉND

(3) 1 3/4" x 16" LVL CONT. CORNER TO CORNER w/ (3) 2 x 6 JACKS EA. BRG. PT.

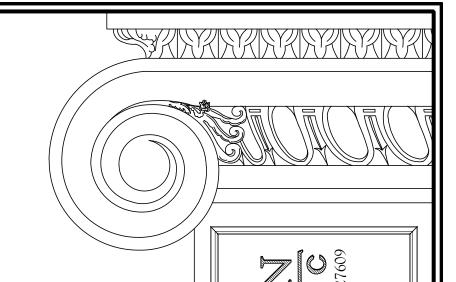
GARAGE PORTAL FRAME. SEE METHOD — PF WALL BRACING DETAIL

(2) 2 x 10 w/ (2) JACKS EA. END

(2) 2 x 10

(3) 2 x 6

OPTIONAL KITCHEN



BRACED WALL DESIGN NOTES:

- 1. BRACED WALL DESIGN PER SECTION R602.10.5 "WALL BRACING BY ENGINEERED DESIGN" OF THE NCRC 2018 EDITION USING BRACING MATERIALS AND METHODS LISTED IN TABLE R602.10.1 ALONG WITH ALTERNATIVE MATERIALS AND METHODS THAT COMPLY WITH ACCEPTED ENGINEERING PRACTICE. BRACED WALL DESIGN IS NOT PRESCRIPTIVE.

 2. SHEATH ALL EXTERIOR WALLS w/ 7/16" OSB TO PROVIDE CS—WSP WALL
- BRACING THAT WILL BRACE THE STRUCTURE FOR ALL LATERAL LOADS AS REQUIRED BY THE NCRC 2018 EDITION.

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

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

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

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

STRUCTURAL NOTES:

- 1. ALL FRAMING LUMBER TO BE SPF #2 (UNO). ALL TREATED LUMBER TO BE SYP #2 (UNO.)
- 2. ALL LOAD BEARING HEADERS TO BE (2) 2 x 6 (UNO).
 3. WINDOW AND DOOR HEADERS TO BE SUPPORTED w/ (1)
- JACK STUD AND (1) KING STUD EA. END (UNO.). SEE TABLE R602.7.5 FOR ADDITIONAL KING STUD REQUIREMENTS.

 4. SQUARES DENOTE POINT LOADS WHICH REQUIRE SOLID
- BLOCKING TO GIRDER OR FOUNDATION. ALL SQUARES TO BE (2) STUDS (UNO.)

 5. 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.
- 7. 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

| T |
|-----------------------------------------------|
| MINIMUM NUMBER OF FUI HEIGHT STUDS (KINGS) |
| 1 |
| 2 |
| 3 |
| 4 |
| 5 |
| |

| _ | | |
|---|------|------------------------|
| | | LEGEND |
| | CONT | CONTINUOUS |
| | XT | EXTRA TRUSS |
| | TS | TRUSS SUPPORT |
| | 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 |
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| | | |



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

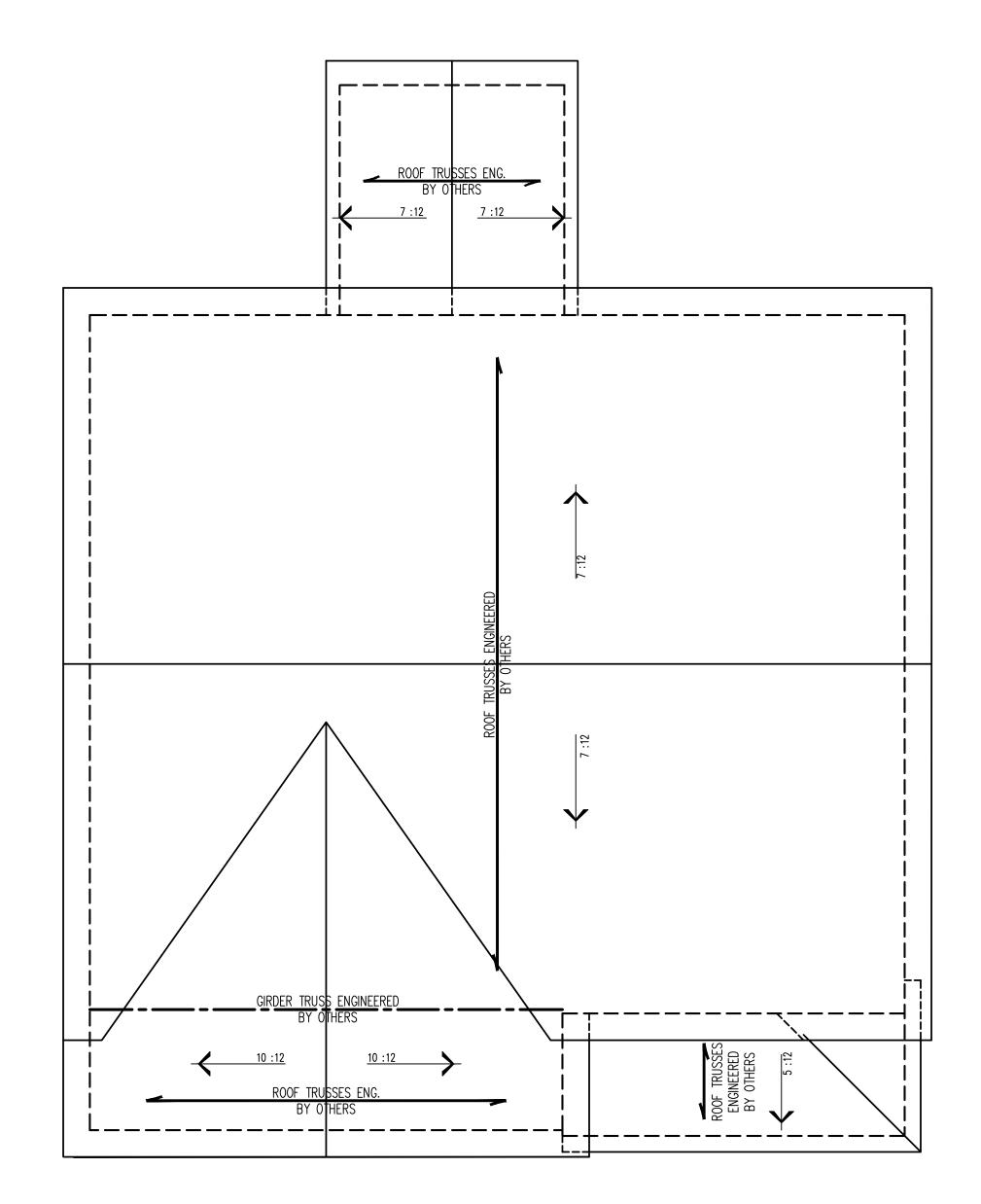
DRAWN BY: NS

ENGINEERED BY: WFB

S-3
ATTIC FLOOR
FRAMING PLAN

 $(2) 2 \times 10 \text{ w}/(2)$ $(2) 2 \times 10 \text{ w}/(2)$ JACKS EA. ÉND JACKS EA. END OR w/ ELEV B: OR w/ ELEV B: $(2) 2 \times 12 \text{ w}/(2)$ $(2) 2 \times 12 \text{ w}/(2)$ JACKS EA. END JACKS EA. END LOCATE ATTIC ACCESS PER— BUILDER $\sqcup \sqcup \sqcup$ ROOF TRUSSES ENG. BY OTHERS w/ ELEV. B ROOF TRUSSES ENG. BY OTHERS w/ ELEV. B 2 x 4 @ 12" O.C. BALLOON FRAMED STAIR WALL FROM 2 x 6 WALL OR 2 x 4 LANDING TO CEILING $(4) 2 \times 6$ WALL FURRED OUT TO — OR w/ HIGH WIND: $(2) 2 \times 4 \otimes$ — BÁLLOON FRAMED MATCH STAIRWELL WIDTH 12" O.C. BALLOON FRAMED STAIR STUDS w/ ELEV. B WALL FROM LANDING TO CEILING GIRDER TRUSS ENG. BY OTHERS

w/ (4) 2 x 4 EA. END (2) 2 x 6 (3) 2 x 6 $\sqrt{3}$ 2 x 6 JACKS AND 2 x 6 @ 16" O.C. BALLOON ROOF TRUSSES ENG (3) 2 x 6 KING STUDS _FRAMED STAIR WALL FROM BELOW BÁLLOON FRAMED EACH OR w/ HIGH WIND: 2 x 6 @ 12" END OF THESE WINDOWS O.C. BALLOON FRAMED STAIR WALL FROM BELOW LOWER PLATE HEIGHT.
SEE ARCH SHEETS LOWER PLATE HEIGHT.
SEE ARCH SHEETS



<u>ELEVATION A</u>



- . ALL FRAMING LUMBER TO BE #2 SPF (UNO). 2. CIRCLES DENOTE (3) 2 x 4 POSTS FOR ROOF
- SUPPORT.

 3. FRAME DORMER WALLS ON TOP OF DOUBLE OR
- TRIPLE RAFTERS.
- TRIPLE RAFTERS.

 4. HIP SPLICES ARE TO BE SPACED A MIN. OF

 8'-0". FASTEN MEMBERS WITH THREE ROWS OF
- 12d NAILS @ 16" O.C. (TYP.)

 5. STICK FRAME OVER-FRAMED ROOF SECTIONS W/
 2 x 8 RIDGES, 2 x 6 RAFTERS @ 16" O.C. AND
- FLAT 2 x 10 VALLEYS OR USE VALLEY TRUSSES.

 6. FASTEN FLAT VALLEYS TO RAFTERS OR TRUSSES WITH SIMPSON H2.5A HURRICANE TIES @ 32" O.C. MAX. PASS HURRICANE TIES THROUGH NOTCH IN ROOF SHEATHING. EACH RAFTER IS TO BE FASTENED TO THE FLAT VALLEY WITH A MIN. OF
- (6) 12d TOE NAILS.

 7. REFER TO SECTION R802.11 OF THE 2018 NCRC FOR REQUIRED UPLIFT RESISTANCE AT RAFTERS AND TRUSSES.
- 8. REFER TO NOTES AND DETAIL SHEETS FOR ADDITIONAL STRUCTURAL INFORMATION.

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

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

LYON COT GROUP

DATE: OCTOBER 15, 2024

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

DRAWN BY: NS

ENGINEERED BY: WFB

S-4a ROOF FRAMING PLAN



ELEVATION B

STRUCTURAL NOTES:

- ALL FRAMING LUMBER TO BE #2 SPF (UNO). 2. CIRCLES DENOTE (3) 2 x 4 POSTS FOR ROOF
- SUPPORT.
- . FRAME DORMER WALLS ON TOP OF DOUBLE OR TRIPLE RAFTERS.
- H. HIP SPLICES ARE TO BE SPACED A MIN. OF
- 8'-0". FASTEN MEMBERS WITH THREE ROWS OF 12d NAILS @ 16" O.C. (TYP.)
- . STICK FRAME OVER-FRAMED ROOF SECTIONS W/ 2 x 8 RIDGES, 2 x 6 RAFTERS @ 16" O.C. AND FLAT 2 x 10 VALLEYS OR USE VALLEY TRUSSES.
- FASTEN FLAT VALLEYS TO RAFTERS OR TRUSSES WITH SIMPSON H2.5A HURRICANE TIES @ 32" O.C. MAX. PASS HURRICANE TIES THROUGH NOTCH IN ROOF SHEATHING. EACH RAFTER IS TO BE FASTENED TO THE FLAT VALLEY WITH A MIN. OF
- (6) 12d TOE NAILS. REFER TO SECTION R802.11 OF THE 2018 NCRC FOR REQUIRED UPLIFT RESISTANCE AT RAFTERS AND TRUSSES.
- REFER TO NOTES AND DETAIL SHEETS FOR ADDITIONAL STRUCTURAL INFORMATION.

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

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

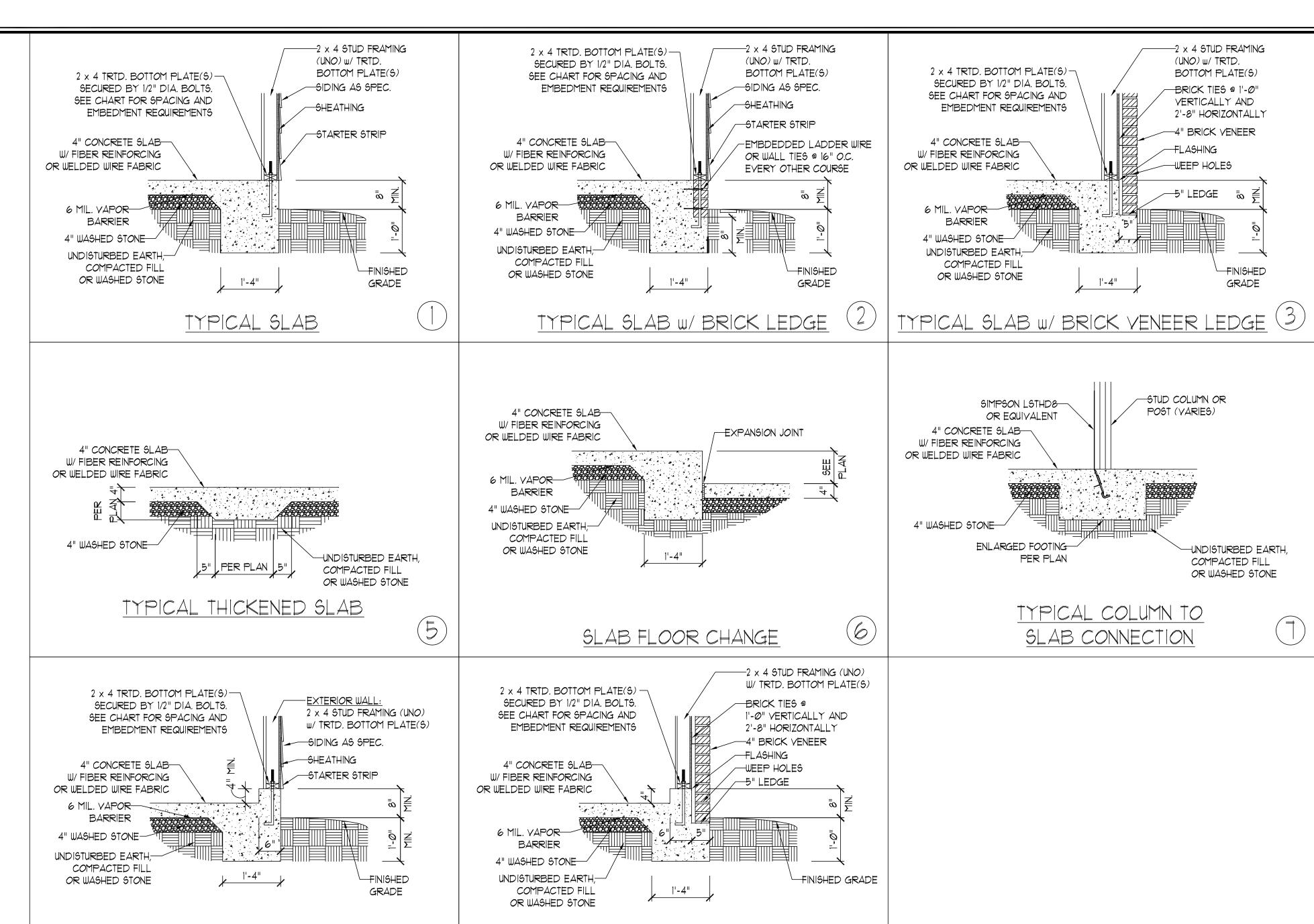
DATE: OCTOBER 15, 2024

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

DRAWN BY: NS

ENGINEERED BY: WFB

S-4b ROOF FRAMING PLAN



GARAGE CURB W/ BRICK LEDGE

1'-4"

SLAB AT GARAGE DOOR

THREADED ROD WITH EPOXY,

TO PROVIDE EQUIVALENT

LIEU OF 1/2" ANCHOR BOLTS.

SIMPSON TITEN HD, OR APPROVED

ANCHORS SPACED AS REQUIRED

ANCHOR BOLTS MAY BE USED IN

ANCHORAGE TO 1/2" DIAMETER

NOTE:

SLOPE SLAB 1/8" PER FOOT

GARAGE DOOR JAMB

4" CONCRETE SLAB

W/ FIBER REINFORCING

OR WELDED WIRE FABRIC

6 MIL. VAPOR BARRIER

4" WASHED STONE

UNDISTURBED EARTH,-

COMPACTED FILL OR

130 MPH

4'-Ø" O.C.

INSTALL MIN. (2) ANCHORS PER

PLATE SECTION AND (1)

ANCHOR WITHIN 12" OF CORNERS

15" INTO MASONRY

7" INTO CONCRETE

WASHED STONE

8

GARAGE CURB

STEP IN GARAGE

120 MPH

6'-Ø" O.C.

INSTALL MIN. (2) ANCHORS PER

PLATE SECTION AND (1)

ANCHOR WITHIN 12" OF CORNERS

7"

 -2×4 TRTD. BOTTOM PLATE(S)

EMBEDMENT REQUIREMENTS

ANCHOR SPACING AND EMBEDMENT

SECURED BY 1/2" DIA. BOLTS. SEE CHART FOR SPACING AND

-4" CONCRETE SLAB W/ FIBER REINFORCING OR

WELDED WIRE FABRIC

2 x 4 STUD FRAMING (UNO) W/ TRTD.

BOTTOM PLATE(S)

4" CONCRETE-SLAB W/ FIBER REINFORCING

4" WASHED STONE-

WIND ZONE

SPACING

EMBEDMENT

UNDISTURBED EARTH,-

COMPACTED FILL
OR WASHED STONE

-TREATED POST PER PLAN 4" CONCRETE SLAB POST BASE PER PLAN W/ FIBER REINFORCING OR WELDED WIRE FABRIC -FINISHED GRADE 4" WASHED STONE UNDISTURBED EARTH, COMPACTED FILL OR WASHED STONE PORCH/SCREEN PORCH

SLAB ETAIL MONOLITHIC FOUNDATION D

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DATE: AUGUST 30, 2022 SCALE: NTS DRAWN BY: JST ENGINEERED BY: JST FOUNDATION

DETAILS

STEM WALI FOUNDATION DE

DATE: AUGUST 30, 2022 SCALE: NTS DRAWN BY: JST

ENGINEERED BY: JST

FOUNDATION

DETAILS

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under N.C. Statute § 89C-23

| MASONRY STEMWALL SPECIFICATIONS | | | | |
|---------------------------------|--------------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| WALL HEIGHT | MASONRY WALL TYPE | | | |
| (FEET) | 8" CMU | 4" BRICK AND 4" CMU | 4" BRICK AND 8" CMU | 12" CMU |
| 2 AND BELOW | UNGROUTED | GROUT SOLID | UNGROUTED | UNGROUTED |
| 3 | UNGROUTED | GROUT SOLID | UNGROUTED | UNGROUTED |
| 4 | GROUT SOLID | GROUT SOLID w/ #4 REBAR @ 48" O.C. | GROUT SOLID | GROUT SOLID w/ #4 REBAR @ 64" O.C. |
| 5 | GROUT SOLID w/ #4 REBAR @ 36" O.C. | NOT APPLICABLE | GROUT SOLID w/ #4 REBAR @ 36" O.C. | GROUT SOLID w/ #4 REBAR @ 64" O.C. |
| 6 | GROUT SOLID w/ #4 REBAR @ 24" O.C. | NOT APPLICABLE | GROUT SOLID w/ #4 REBAR @ 24" O.C. | GROUT SOLID w/ #4 REBAR @ 64" O.C. |
| 7 AND GREATER | ENGINEERED DESIGN BASED ON SITE CONDITIONS | | | |

STRUCTURAL NOTES:

- 1) WALL HEIGHT MEASURED FROM TOP OF FOOTING TO TOP OF THE WALL.
- 2) TIE MULTIPLE WYTHES TOGETHER WITH LADDER WIRE AT 16" O.C. VERTICALLY.
- 3) CHART APPLICABLE FOR HOUSE FOUNDATION ONLY, CONSULT ENGINEER FOR DESIGN OF GARAGE FOUNDATION NOT COMMON TO HOUSE.
- 4) BACKFILL OF CLEAN #57 / #67 WASHED STONE IS ALLOWABLE.
- 5) BACKFILL OF WELL DRAINED OR SAND GRAVEL MIXTURE SOILS (45 PSF/FT BELOW GRADE) CLASSIFIED AS GROUP I ACCORDING TO UNIFIED SOILS CLASSIFICATION SYSTEM IN ACCORDANCE WITH TABLE R405.1 OF THE 2018 NORTH CAROLINA RESIDENTIAL CODE ARE ALLOWABLE.
- 6) PREP SLAB PER <u>R506.2.1</u> AND <u>R506.2.2</u> BASE AND <u>EXCEPTION</u> OF 2018 NORTH CAROLINA RESIDENTIAL CODE.
- 1) MINIMUM 24" LAP SPLICE LENGTH.
- 8) LOCATE REBAR IN CENTER OF FOUNDATION WALL.
- 9) WHERE REQUIRED, FILL BLOCK SOLID WITH TYPE "S" MORTAR OR 3000 PSI GROUT. USE OF "LOW LIFT GROUTING" METHOD REQUIRED WHEN FILLING WALLS WITH GROUT AT HEIGHTS OF 5' AND GREATER.

| 2 x 4 STUD FRAMING (UNO) W/ TRID. BOTTOM PLATE(S) 2 x 4 TRID. BOTTOM PLATE(S) SECURED BY 1/2" DIA BOLTS. SEE CHART FOR SPACING AND EMBEDMENT REQUIREMENTS 4" CONCRETE SLAB W/ FIBER REINFORCING OR WELDED WIRE FABRIC 6 MIL. VAPOR BARRIER 4" WASHED STONE UNDISTURBED EARTH, COMPACTED FILL OR WASHED STONE TOP TWO COURSES OF STEM WALL AND ALL CELLS W/ REINFORCEMENT TO BE FILLED SOLID. BRICK TIES S 1'-0" VERTICALLY AND 2'-8" HORIZONTALLY 4" BRICK VENEER FLASHING FLASHING WEEP HOLES WEER MOTHER COURSE COURSE COURSE COURSE CHART FOR SPACING 20" WIDE BY S" DEEP CONT. CONC. FTG. | 2 x 4 STUD FRAMING (UNO) W TRTD. BOTTOM PLATE(\$) 3CURED BY 1/2" DIA BOLTS. SEE CHART FOR SPACING AND EMBEDMENT REQUIREMENTS 4" CONCRETE SLAB W FIBER REINFORCING OR WELDED WIRE FABRIC 4" WASHED STONE UNDISTURBED EARTH, COMPACTED FILL OR WASHED STONE TOP TWO COURSES OF STEM WALL AND ALL CELLS W REINFORCEMENT TO BE FILLED SOLID. SHEATHING SHEATHING OPTIONAL 4" BRICK VENEER WATERTABLE WEEP HOLES WALL REINFORCEMENT, SEE CHART FOR SPACING FOR OPTIONAL BRICK WATERTABLE, INCREASE TO 20" WIDE BY 8" DEEP CONT. CONC. FTG. |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| STEM WALL FDN. W/ BRICK DETAIL (3) | STEM WALL FDN. W/ OPTIONAL BRICK WATERTABLE DETAIL (4) |

-SIDING AS SPEC.

-LADDER WIRE IN TOP TWO

-OPTIONAL BRICK VENEER

COURSES (w/ VENEER ONLY)

FINISHED GRADE

EVERY OTHER

─8" CMU BLOCK

COURSE

-WALL REINFORCEMENT, SEE

CHART FOR SPACING

-16" WIDE BY 8" DEEP

CONT. CONC. FTG.

STEM WALL FDN. DETAIL

-SHEATHING

| Γ | | | | |
|------------------------------|-----------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|-------------------|
| ANCHOR SPACING AND EMBEDMENT | | |) EMBEDMENT | \rfloor N |
| | WIND ZONE | 120 MPH | 130 MPH | T |
| | SPACING | 6'-0" O.C. INSTALL MIN. (2) ANCHORS PER PLATE SECTION AND (1) ANCHOR WITHIN 12" OF CORNERS | 4'-0" O.C. INSTALL MIN. (2) ANCHORS PER PLATE SECTION AND (1) ANCHOR WITHIN 12" OF CORNERS | 5 A To A |
| | EMBEDMENT | 7" | 15" INTO MASONRY 7" INTO CONCRETE | |

2 x 4 STUD FRAMING (UNO)— W/ TRTD. BOTTOM PLATE(S)

2 x 4 TRTD. BOTTOM PLATE(S)—

SECURED BY 1/2" DIA. BOLTS.

SEE CHART FOR SPACING AND

THICKENED SLAB-

4" CONCRETE SLAB-

6 MIL. VAPOR-

UNDISTURBED EARTH,

COMPACTED FILL OR WASHED STONE

TOP TWO COURSES OF STEM WALL AND-

ALL CELLS W/ REINFORCEMENT TO BE

FILLED SOLID.

4" WASHED STONE

W/ FIBER REINFORCING OR WELDED WIRE FABRIC

NOT REQUIRED

EMBEDMENT REQUIREMENTS

NOTE:

2 x 4 STUD FRAMING (UNO) W/ TRTD. BOTTOM PLATE(S)

2 x 4 TRTD. BOTTOM PLATE(6)-

SECURED BY 1/2" DIA. BOLTS.

SEE CHART FOR SPACING AND EMBEDMENT REQUIREMENTS

4" CONCRETE SLAB
W/ FIBER REINFORCING
WIRE FABRIC

OR WELDED WIRE FABRIC

4" WASHED STONE

6 MIL. VAPOR-BARRIER

UNDISTURBED EARTH,

COMPACTED FILL

OR WASHED STONE

TOP TWO COURSES OF STEM WALL AND-

ALL CELLS W/ REINFORCEMENT TO BE

FILLED SOLID.

BRICK TIES @

1'-0" VERTICALLY AND

-LADDER WIRE

EVERY OTHER

-12" CMU BLOCK

(4)

COURSE

-WALL REINFORCEMENT,

└-20" WIDE BY 8" DEEP

CONT. CONC. FTG.

STEM WALL FDN. W/ BRICK AND CURB (2)

SEE CHART FOR SPACING

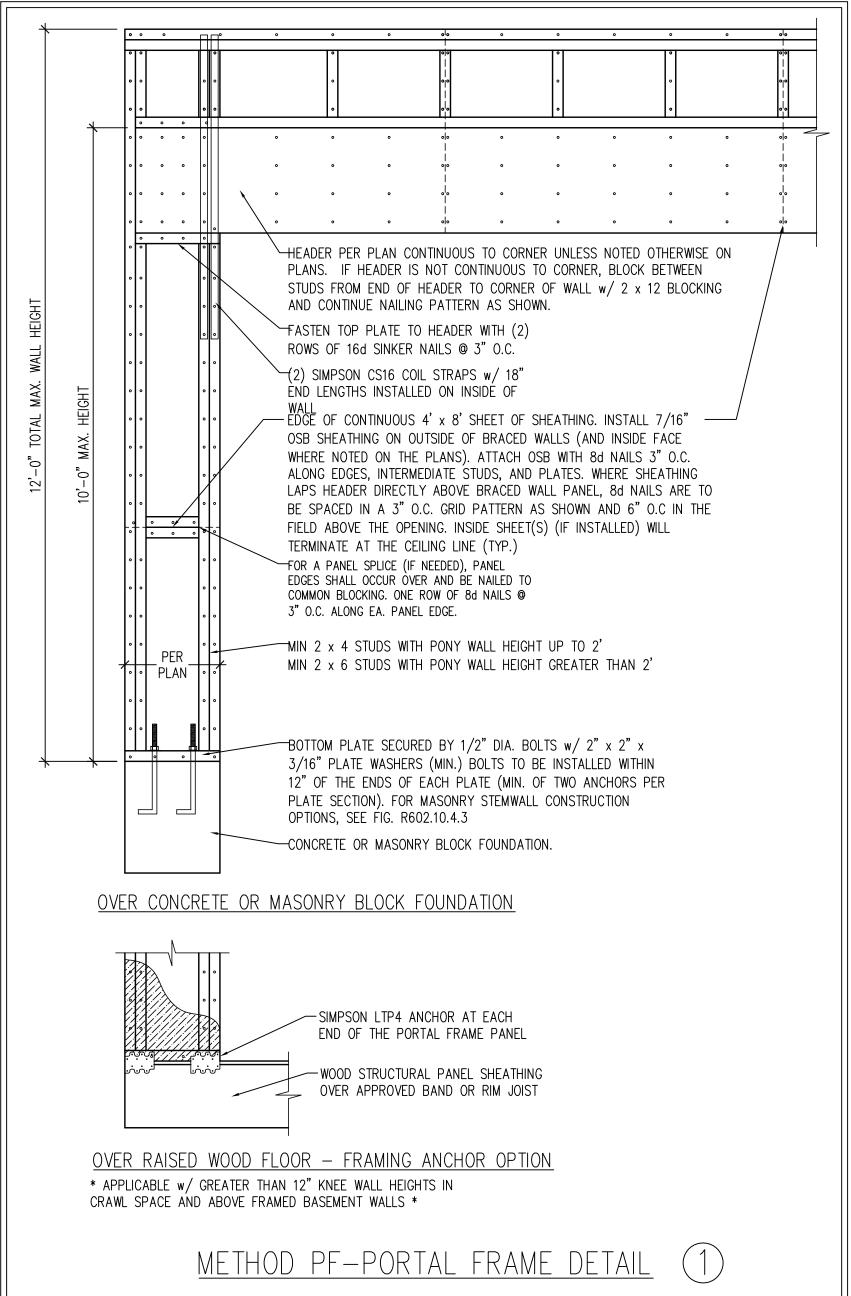
2'-8" HORIZONTALLY

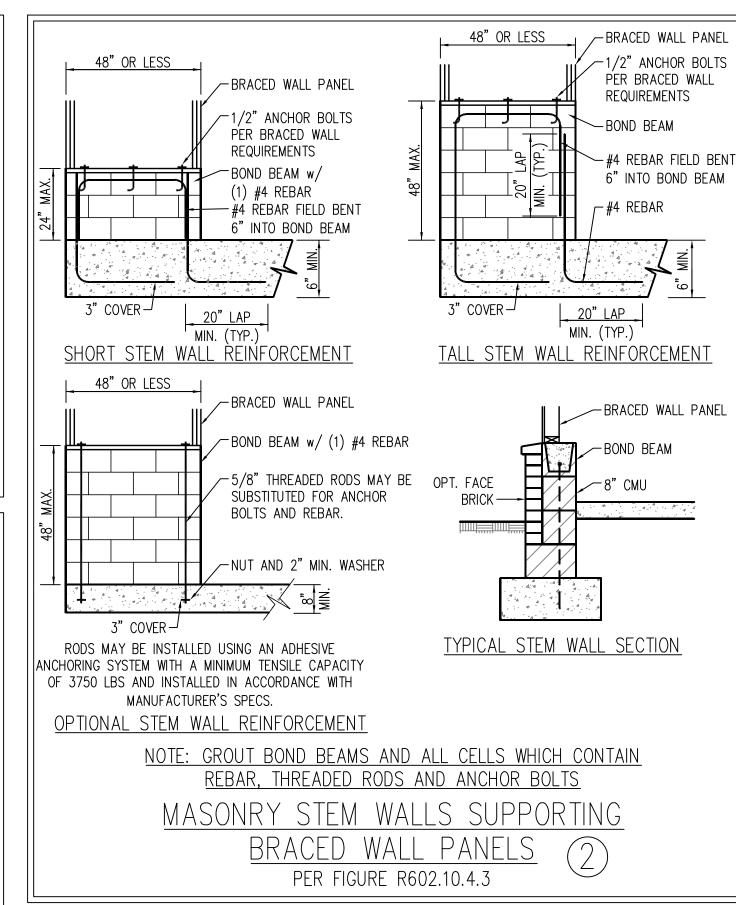
-4" BRICK VENEER

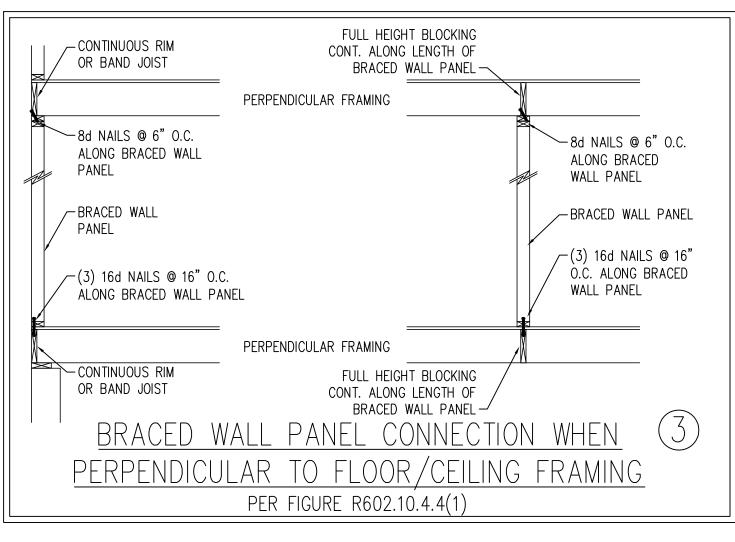
WEEP HOLES

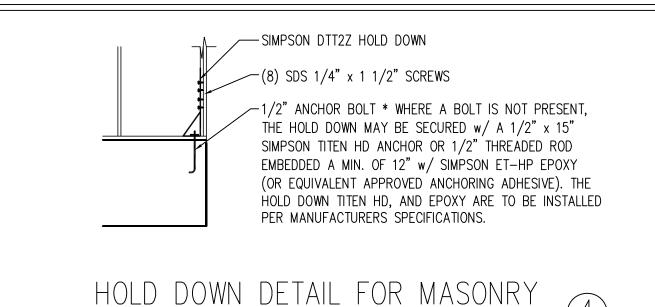
THREADED ROD WITH EPOXY, SIMPSON TITEN HD, OR APPROVED ANCHORS SPACED AS REQUIRED TO PROVIDE EQUIVALENT ANCHORAGE TO 1/2" DIAMETER ANCHOR BOLTS MAY BE USED IN LIEU OF 1/2" ANCHOR BOLTS.

- 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 *

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BRACED WALL LINE -

-CONTINUOUS RIM OR BAND JOIST

8d NAILS @ 6" O.C. ALONG

BRACED WALL PANEL

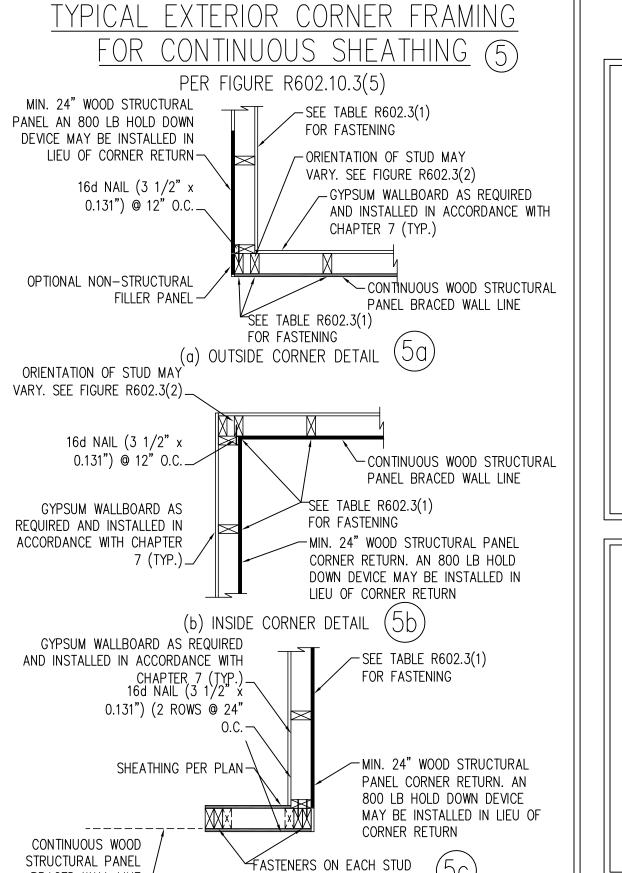
✓ BRACED WALL PANEL

-(3) 16d NAILS @ 16" O.C.

ALONG BRACED WALL PANEL

CONTINUOUS RIM w/ FINGER

JOISTS OR DBL. BAND JOIST



AT EACH PANEL EDGE

BRACED WALL PANEL CONNECTION WHEN PARALLEL (6)

MEMBER DIRECTLY ABOVE

-8d NAILS @ 6" O.C. ALONG

√(3) 16d NAILS @ 16" O.C.

ADDITIONAL FRAMING

BRACED WALL PANEL

MEMBER DIRECTLY BELOW

ALONG BRACED WALL PANEL

BRACED WALL PANEL

BRACED WALL PANEL

BRACED WALL PANEL

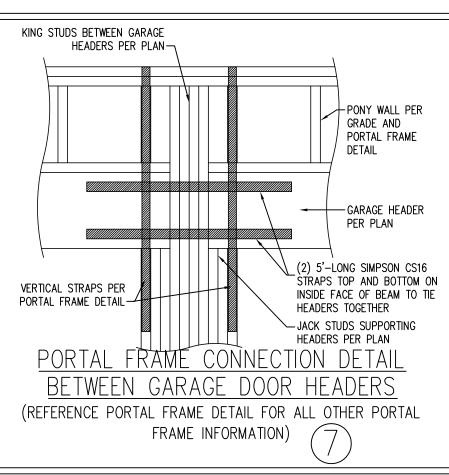
TO FLOOR/CEILING FRAMING

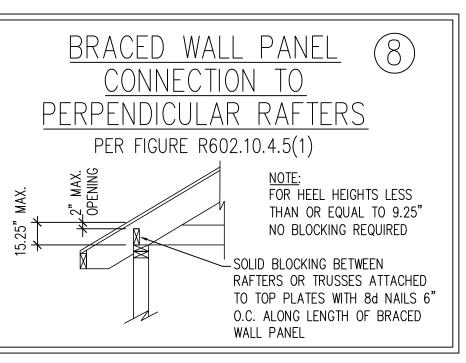
PER FIG. R602.10.4.4(2)

ADDITIONAL FRAMING

(c) GARAGE DOOR CORNER DETAIL (SEE PLAN FOR ADDITIONAL

STRUCTURAL INFORMATION OR ALTERNATE CONFIGURATIONS)





FULL HEIGHT BLOCKING @

BRACED WALL PANEL

16" O.C. ALONG LENGTH OF

TOE NAIL (3) 8d NAILS AT

EA. BLOCKING MEMBER

-BRACED WALL PANEL

 \sim (3) 16d NAILS @ 16"

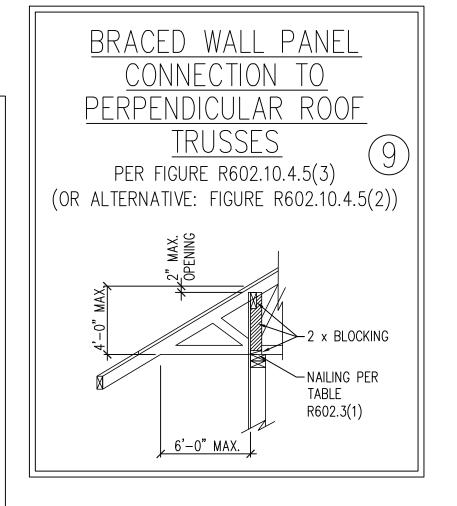
(2) 16d NAILS EA. SIDE

O.C. AT EA. BLOCKING

FULL HEIGHT BLOCKING @

BRACED WALL PANEL

16" O.C. ALONG LENGTH OF



DRAWN BY: JST

ENGINEERED BY: JST

BRACED WALL NOTES AND DETAILS AND PF DETAIL

33736 10/15/2024

ANI

BRACING

DATE: AUGUST 30, 2022 SCALE: 1/4" = 1'-0"

FRAMING 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.

GENERAL NOTES

- 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.

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- 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).

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.

STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING ASTM SPECIFICATIONS

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

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

A. WOOD FRAMING (2) 1/2" DIA. x 4" LONG LAG SCREWS (2) 1/2" DIA. x 4" WEDGE ANCHORS B. CONCRETE (2) 1/2" DIA. x 4" LONG SIMPSON TITEN HD ANCHORS C. MASONRY (FULLY GROUTED) (4) 3/4" DIA. A325 BOLTS OR 3/16" FILLET WELD D. STEEL PIPE COLUMN

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.

S

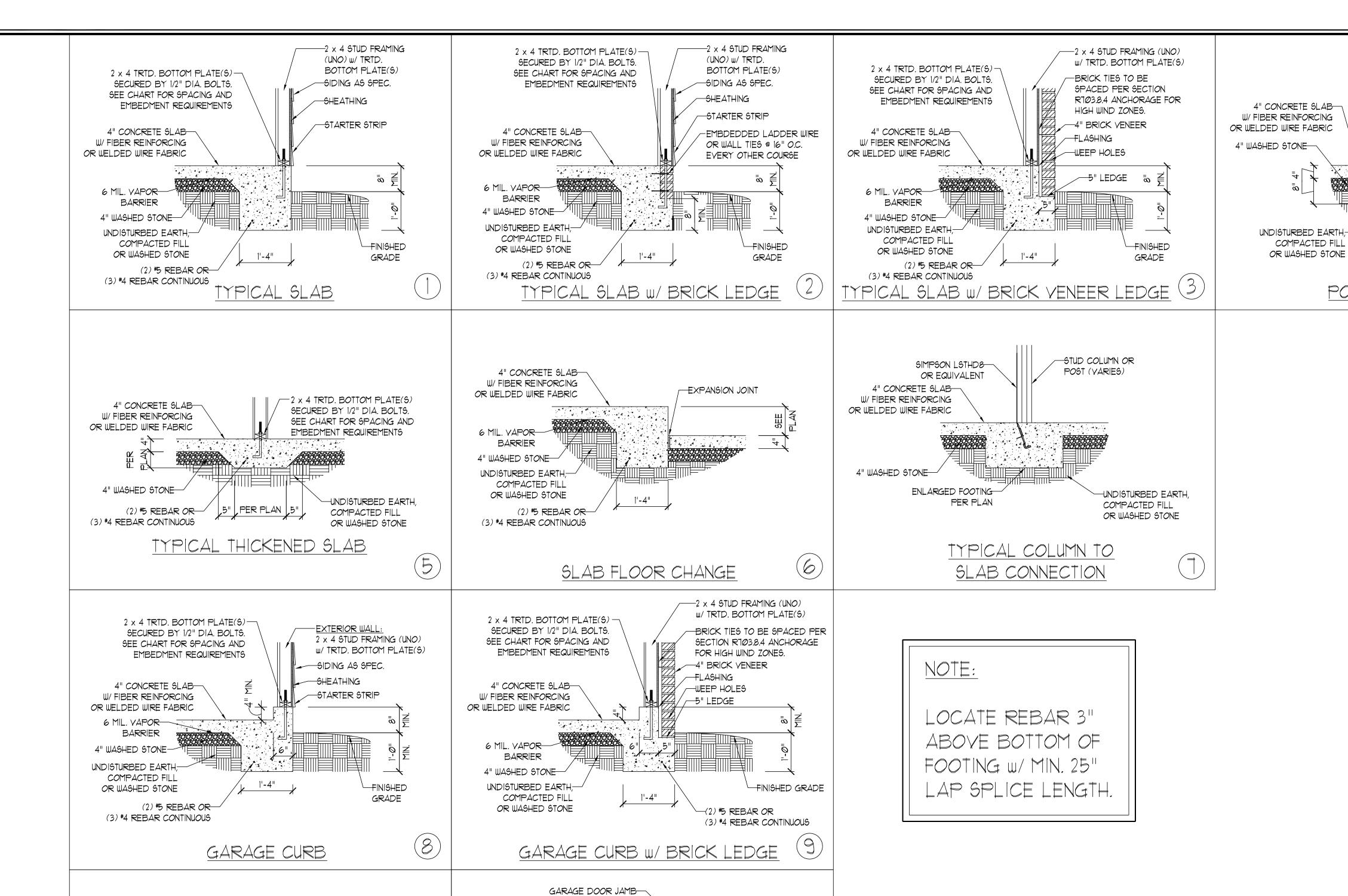


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STRUCTURAL NOTES



SLOPE SLAB 1/8" PER FOOT

(2) #5 REBAR OR
(3) #4 REBAR CONTINUOUS

NOTE:

THREADED ROD WITH EPOXY,

TO PROVIDE EQUIVALENT

SIMPSON TITEN HD, OR APPROVED

ANCHORS SPACED AS REQUIRED

ANCHORAGE TO 1/2" DIAMETER

LIEU OF 1/2" ANCHOR BOLTS.

ANCHOR BOLTS MAY BE USED IN

2 x 4 STUD FRAMING (UNO) W/ TRTD.

BOTTOM PLATE(S)

4" CONCRETE-SLAB W/ FIBER REINFORCING

4" WASHED STONE-

WIND ZONE

SPACING

EMBEDMENT

UNDISTURBED EARTH,

COMPACTED FILL OR WASHED STONE

 -2×4 TRTD. BOTTOM PLATE(S)

SECURED BY 1/2" DIA. BOLTS. SEE CHART FOR SPACING AND

EMBEDMENT REQUIREMENTS

1'-Ø"

STEP IN GARAGE

140 MPH

6'-0" O.C. w/ DBL. SILL PLATE OR 1'-9" O.C w/

SINGLE SILL PLATE w/ 2" x 2" x 1/8" WASHERS

INSTALL MIN. (2) ANCHORS PER PLATE SECTION

AND (1) ANCHOR WITHIN 12" OF CORNERS

-4" CONCRETE SLAB W/ FIBER REINFORCING OR

WELDED WIRE FABRIC

(3) *4 REBAR CONTINUOUS

ANCHOR SPACING AND EMBEDMENT

-(2) #5 REBAR OR

4" CONCRETE SLAB-W/ FIBER REINFORCING

150 MPH

6'-0" O.C. w/ DBL. SILL PLATE OR 1'-6" O.C w/

SINGLE SILL PLATE W/ 2" x 2" x 1/8" WASHERS

INSTALL MIN. (2) ANCHORS PER PLATE SECTION

AND (1) ANCHOR WITHIN 12" OF CORNERS

1'-4"

SLAB AT GARAGE DOOR

OR WELDED WIRE FABRIC

6 MIL. VAPOR BARRIER

4" WASHED STONE

UNDISTURBED EARTH,-

COMPACTED FILL OR

WASHED STONE



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-TREATED POST

POST BASE PER PLAN

-FINISHED GRADE

PER PLAN

-(2) #5 REBAR OR

PORCH/SCREEN PORCH

(3) #4 REBAR CONTINUOUS

SPEED WIND DETA DESIGN V DATION I ULTIMATE I SLAB FOUNI 140 MPH - 150 MPH MONOLITHIC

Z:\CAD Drawings\Details and Notes\Foundation Details\Mono slab foundation details_HIGH WIND_8-22.dwg, 8/30/2022 2:05:13 PM, Craig Amos

DATE: AUGUST 30, 2022 SCALE: NTS DRAWN BY: JST

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FOUNDATION

DETAILS



MPH - 150 | STEM 40

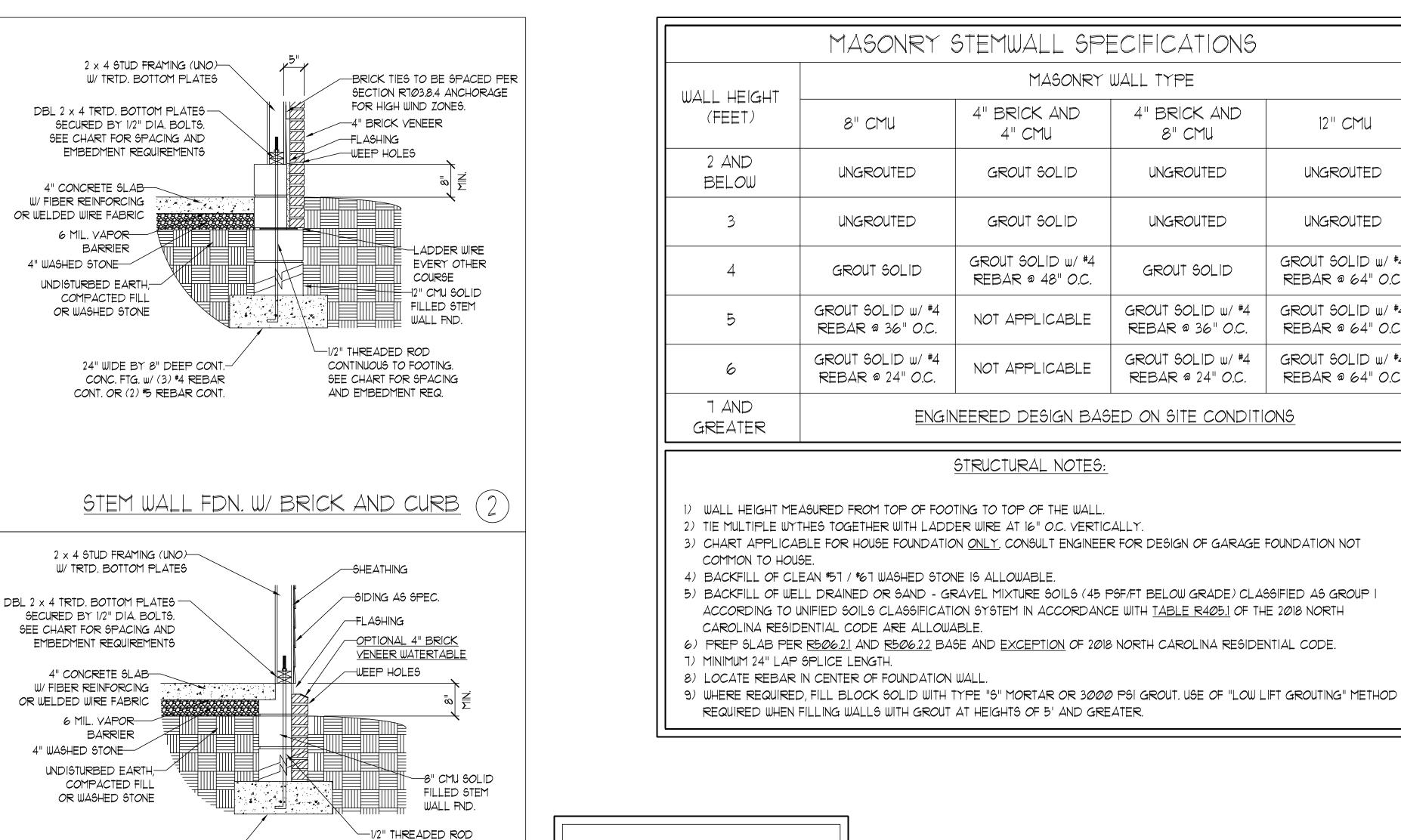
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10/15/2024

FOUNDATION DETAILS



| ANCHOR SPACING AND EMBEDMENT | | | NOTE: | |
|------------------------------|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|
| | WIND ZONE | 140 MPH | 150 MPH | THREADED ROD |
| | SPACING | 1'-9" O.C. W/ DBL. SILL PLATE W/ 2" x 2" x 1/8" WASHERS INSTALL MIN. (2) ANCHORS PER PLATE SECTION AND (1) ANCHOR WITHIN 12" OF CORNERS | 1'-6" O.C. w/ DBL. SILL PLATE w/ 2" x 2" x 1/8" WASHERS INSTALL MIN. (2) ANCHORS PER PLATE SECTION AND (1) ANCHOR WITHIN 12" OF CORNERS | APPROVED AND REQUIRED TO P EQUIVALENT AND DIAMETER ANCH BE USED IN LIEU |
| | EMBEDMENT | RODS CONTINUOUS FROM FOOTING UP THROUGH SILL PLATE W/ 7" MINIMUM CONCRETE EMBEDMENT | RODS CONTINUOUS FROM FOOTING UP THROUGH SILL PLATE W/ 7" MINIMUM CONCRETE EMBEDMENT | BOLTS. |

(3)

2 x 4 STUD FRAMING (UNO)— W/ TRTD. BOTTOM PLATES

-SIDING AS SPEC.

-LADDER WIRE IN TOP TWO

-OPTIONAL BRICK VENEER

COURSES (W/ VENEER ONLY)

-FINISHED GRADE

LADDER WIRE

EVERY OTHER

-8" CMU SOLID

FILLED STEM

WALL FND.

-1/2" THREADED ROD

CONTINUOUS TO FOOTING.

SEE CHART FOR SPACING

-BRICK TIES TO BE SPACED PER

LADDER WIRE

EVERY OTHER

-12" CMU SOLID

FILLED STEM

24" WIDE BY 8" DEEP CONT .-

CONC. FTG. w/(3) #4 REBAR

STEM WALL FDN. W/ OPTIONAL

BRICK WATERTABLE DETAIL

CONT. OR (2) #5 REBAR CONT.

WALL FND.

1/2" THREADED ROD

CONTINUOUS TO FOOTING.

SEE CHART FOR SPACING

AND EMBEDMENT REQ.

COURSE

SECTION R703.8.4 ANCHORAGE

FOR HIGH WIND ZONES.

-4" BRICK VENEER

-FLASHING

WEEP HOLES

AND EMBEDMENT REQ.

COURSE

-SHEATHING

DBL 2 x 4 TRTD. BOTTOM PLATES-

SECURED BY 1/2" DIA. BOLTS.

SEE CHART FOR SPACING AND

THICKENED SLAB

4" CONCRETE SLAB W/ FIBER REINFORCING

6 MIL. VAPOR-

UNDISTURBED EARTH;

BARRIER

COMPACTED FILL

24" WIDE BY 8" DEEP CONT.

CONC. FTG. w/(3) #4 REBAR

STEM WALL FON. DETAIL

CONT. OR (2) #5 REBAR CONT.

2 x 4 STUD FRAMING (UNO)

W/ TRTD. BOTTOM PLATES

DBL 2 x 4 TRTD. BOTTOM PLATES -

SECURED BY 1/2" DIA. BOLTS.

EMBEDMENT REQUIREMENTS

SEE CHART FOR SPACING AND

4" CONCRETE SLAB-

6 MIL. VAPOR-

UNDISTURBED EARTH;

COMPACTED FILL OR WASHED STONE

24" WIDE BY 8" DEEP CONT .-

CONC. FTG. w/ (3) #4 REBAR

STEM WALL FDN. W/ BRICK DETAIL

CONT. OR (2) #5 REBAR CONT.

BARRIER

W/ FIBER REINFORCING

OR WELDED WIRE FABRIC

4" WASHED STONE

OR WASHED STONE

OR WELDED WIRE FABRIC

4" WASHED STONE

NOT REQUIRED

EMBEDMENT REQUIREMENTS

DD WITH EPOXY OR NCHORS SPACED AS PROVIDE NCHORAGE TO 1/2" CHOR BOLTS MAY EU OF 1/2" ANCHOR

CONTINUOUS TO FOOTING.

AND EMBEDMENT REQ.

SEE CHART FOR SPACING

(4)

NOTE:

LOCATE REBAR 3" ABOVE BOTTOM OF FOOTING W/MIN. 25" LAP SPLICE LENGTH.

| - 1 | |
|-----|--------------------------------------|
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MASONRY STEMWALL SPECIFICATIONS

4" BRICK AND

4" CMU

GROUT SOLID

GROUT SOLID

GROUT SOLID w/ #4

REBAR @ 48" O.C.

NOT APPLICABLE

NOT APPLICABLE

STRUCTURAL NOTES:

8" CMU

UNGROUTED

UNGROUTED

GROUT SOLID

MASONRY WALL TYPE

ENGINEERED DESIGN BASED ON SITE CONDITIONS

4" BRICK AND

8" CMU

UNGROUTED

UNGROUTED

GROUT SOLID

GROUT SOLID w/ #4

REBAR @ 36" O.C.

GROUT SOLID w/ #4

REBAR @ 24" O.C.

12" CMU

UNGROUTED

UNGROUTED

GROUT SOLID w/ #4

REBAR @ 64" O.C.

GROUT SOLID w/ #4

REBAR @ 64" O.C.

GROUT SOLID w/ #4

REBAR @ 64" O.C.



SPE WIND ETAILS MPH ULTIMATE BRACING NOTES MPH - 150 | WALL |

DATE: AUGUST 30, 2022

40

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D-2 BRACED WALL NOTES AND DETAILS AND PF DETAIL

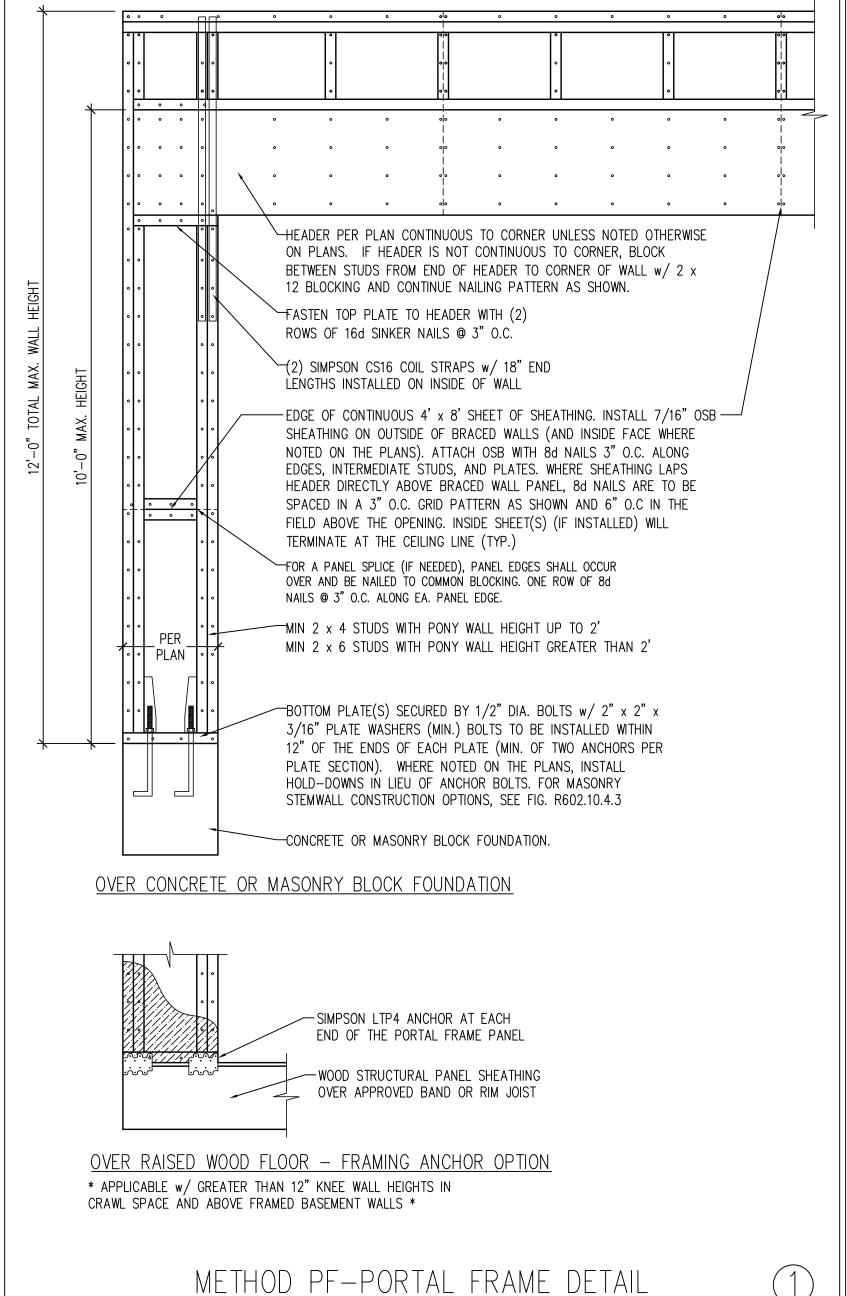
GENERAL WALL BRACING NOTES:

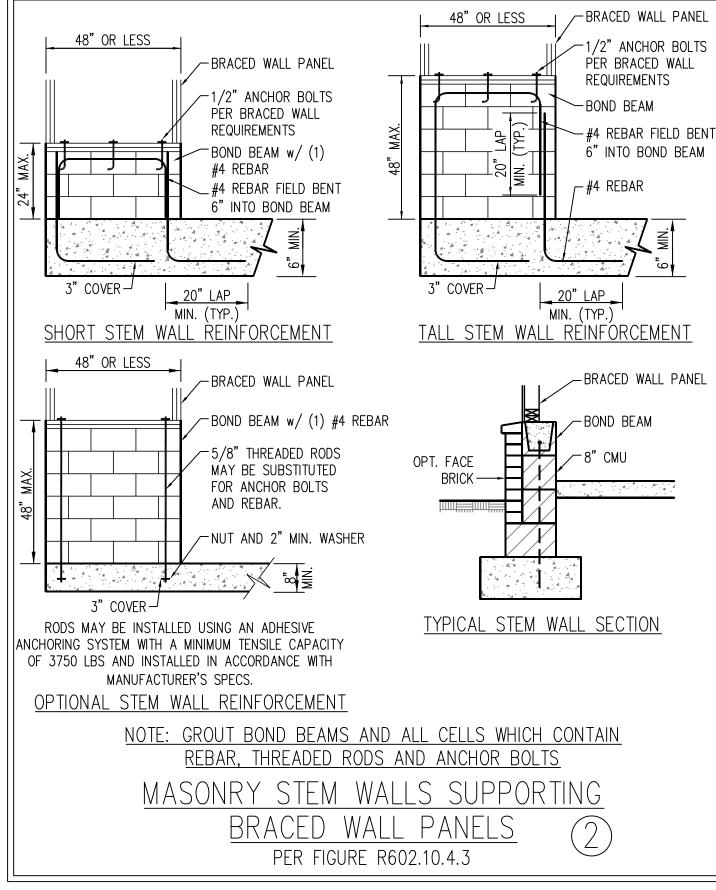
1. WALL BRACING DESIGNED IN ACCORDANCE WITH CHAPTER 6 AND CHAPTER 45 OF THE 2018 NC RESIDENTIAL BUILDING CODE (NCRC). TABLES AND FIGURES REFERENCED ARE FROM THE 2018 NCRC. 2. SEE THIS SHEET FOR GENERAL DETAILS. REFER TO THE 2018 NCRC FOR ADDITIONAL INFORMATION AS NEEDED.

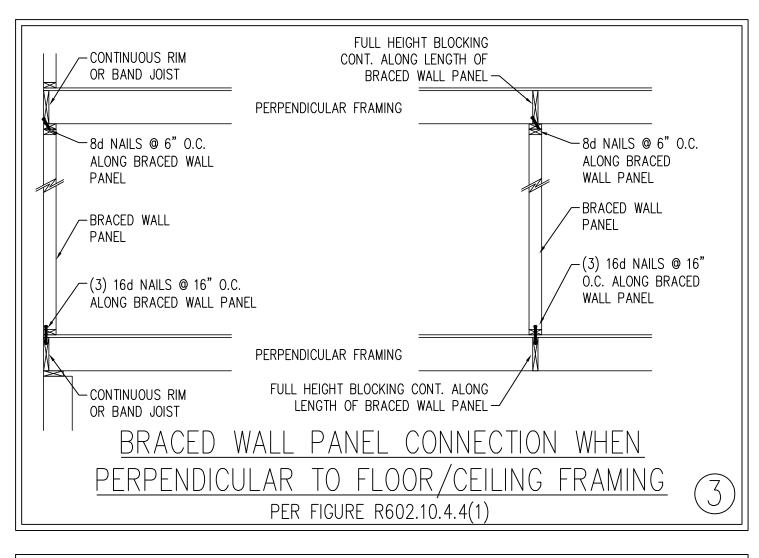
3. SEE STRUCTURAL SHEETS FOR BRACED WALL LOCATIONS, DIMENSIONS, HOLD DOWN TYPE AND LOCATIONS. AND ANY SPECIAL NOTES OR REQUIREMENTS 4. ALL EXTERIOR WALLS ARE TO BE SHEATHED WITH 7/16" OSB WITH BLOCKING AT ALL SHEATHING JOINTS AND 8d NAILS AT 3"

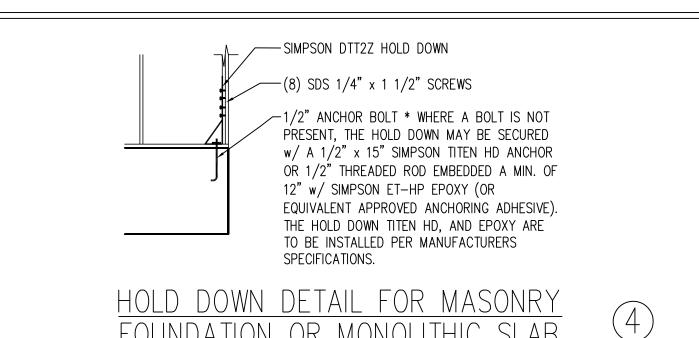
O.C. ALONG EDGES AND 6" O.C. IN THE FIELD UNLESS NOTED OTHERWISE 5. SECURE ALL EXTERIOR WALL SHEATHING PANELS TO DOUBLE TOP PLATES, BAND JOISTS, AND GIRDERS WITH (2) ROWS OF 8d NAILS STAGGERED AT 3" O.C.. PANELS SHALL EXTEND 12" BEYOND CONSTRUCTION JOINTS AND SHALL OVERLAP GIRDERS AND

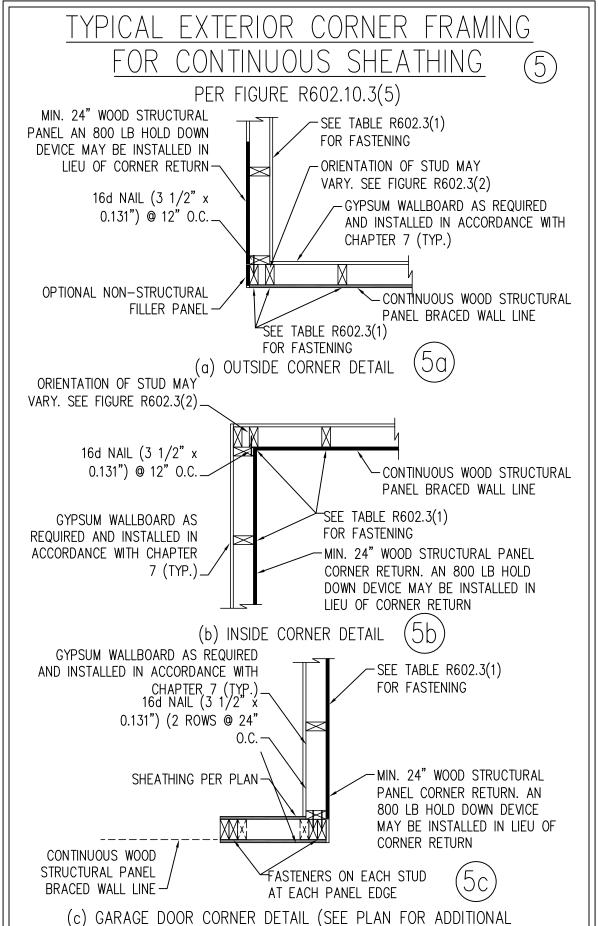
SILL PLATES THEIR FULL DEPTH. 6. ALL EXTERIOR WALLS TO BE SHEATHED ON INSIDE FACE WITH 1/2" GYPSUM BOARD PER TABLE R702.3.5 (UNO)



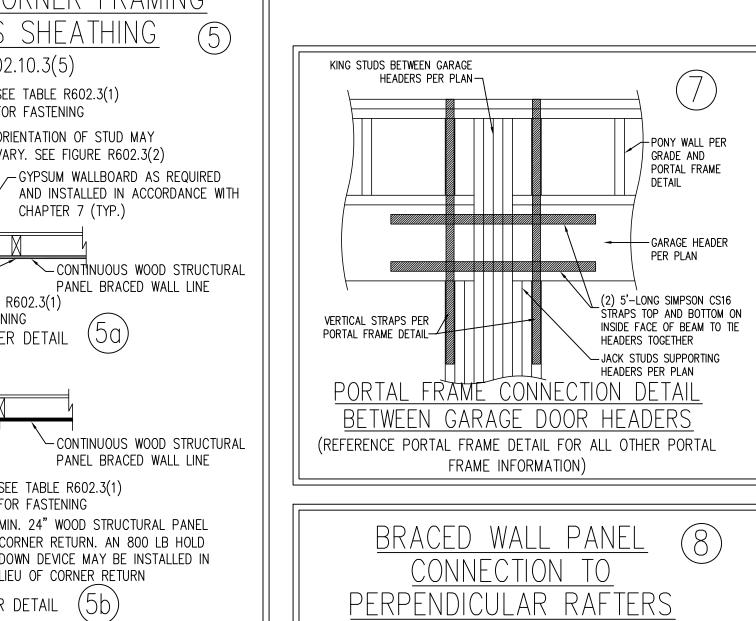




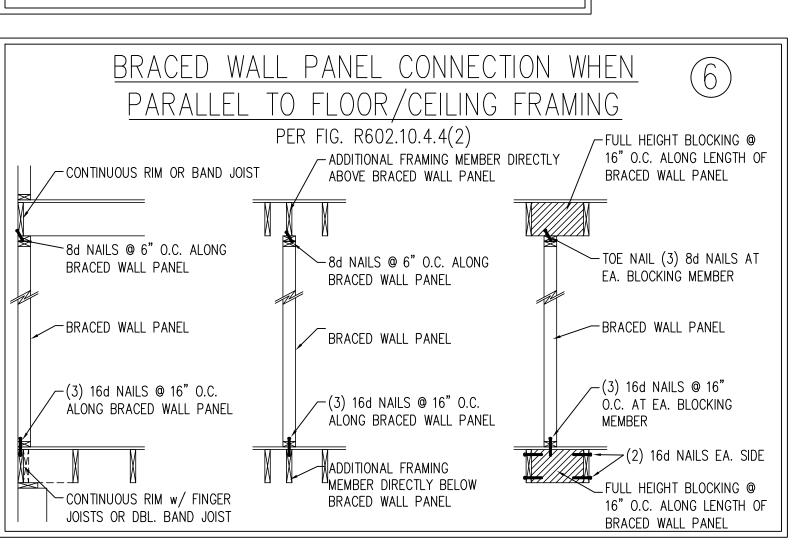


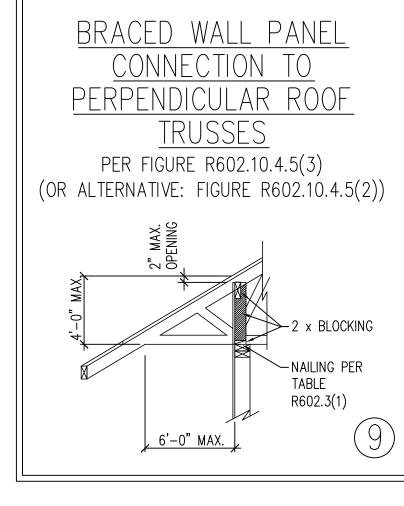


STRUCTURAL INFORMATION OR ALTERNATE CONFIGURATIONS)



PER FIGURE R602.10.4.5(1)





FOR HEEL HEIGHTS LESS

THAN OR EQUAL TO 9.25"

NO BLOCKING REQUIRED

RAFTERS OR TRUSSES ATTACHED

TO TOP PLATES WITH 8d NAILS 6"

O.C. ALONG LENGTH OF BRACED

SOLID BLOCKING BETWEEN

WALL PANEL



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FOUNDATION OR MONOLITHIC SLAB * APPLICABLE ONLY WHERE SPECIFIED ON PLAN *

S

DATE: AUGUST 30, 2022

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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.

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- 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).

FRAMING NOTES

- 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.
- 3. STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING ASTM SPECIFICATIONS

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

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

| A. WOOD FRAMING | (2) 1/2" DIA. x 4" LONG LAG SCREWS |
|----------------------------|-------------------------------------------------|
| B. CONCRETE | (2) 1/2" DIA. x 4" WEDGE ANCHORS |
| C. MASONRY (FULLY GROUTED) | (2) 1/2" DIA. x 4" LONG SIMPSON TITEN HD ANCHOR |
| D. STEEL PIPE COLUMN | (4) 3/4" DIA. A325 BOLTS OR 3/16" FILLET WELD |

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

- 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.

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