

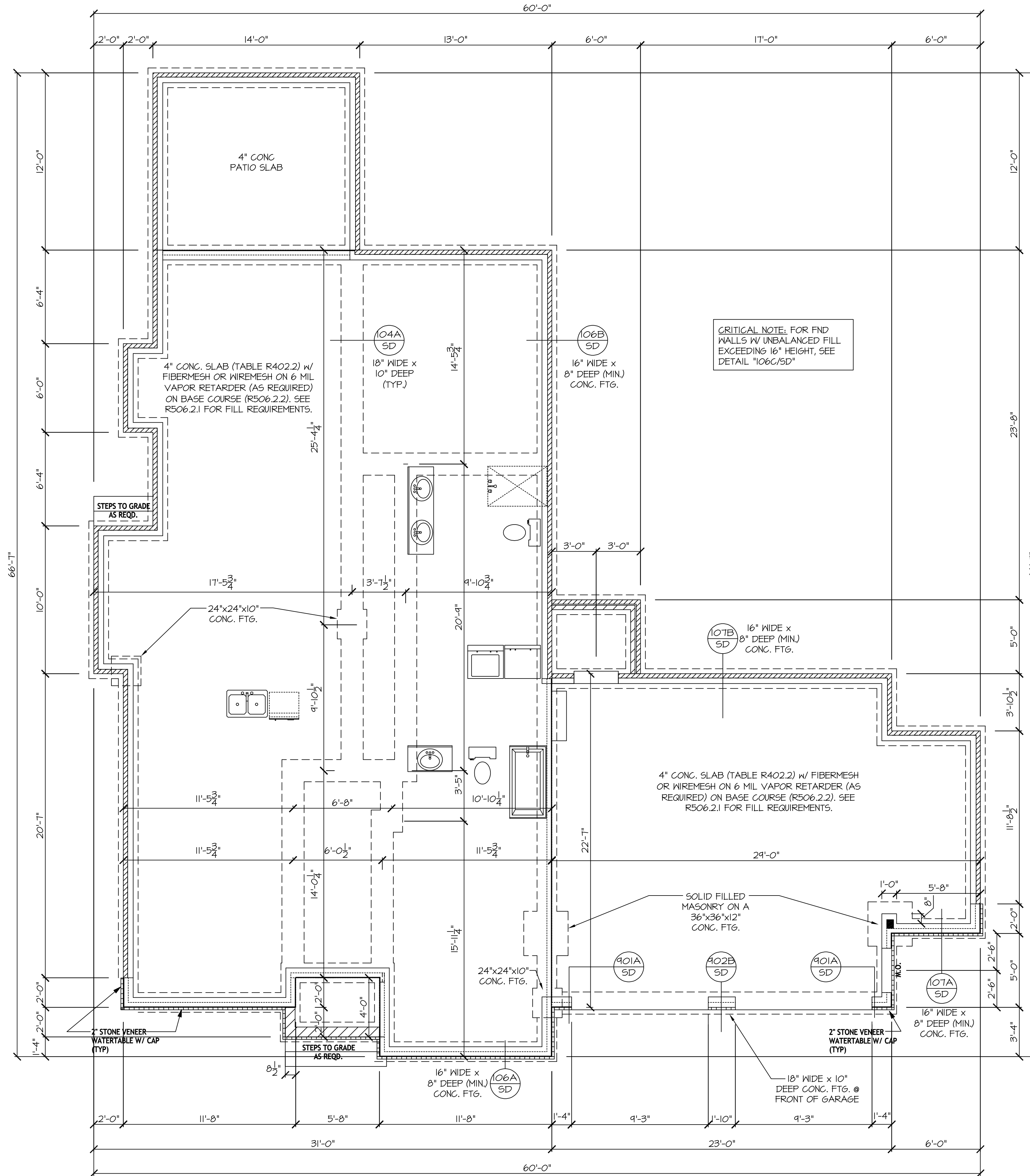


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Phone: (919) 878-1617  
License: C-4772  
www.southernengineers.com

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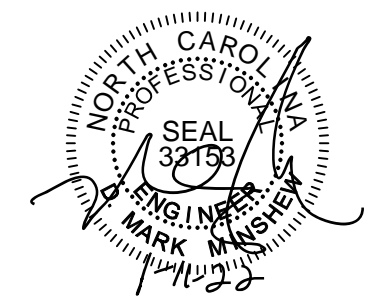
**Robertson Residence**  
Lot 20, Prince Place  
HALCYON HOMES, LLC



FOUNDATION STRUCTURAL PLAN

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

REFER TO "SD" SHEET(S) FOR STANDARD DETAILS AND STRUCTURAL NOTES



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**FRAMING NOTES**

- NC (2018 NRCRC), Wind: 115-120 mph
- BRACING METHOD AND TYPE: CONTINUOUSLY SHEATHED WSP, CS-WSP. NOTE THAT THE WALL BRACING AMOUNT PROVIDED ON THE PLANS (DETAILS AND SPECIFICATIONS) IS GREATER THAN THE AMOUNT OF WALL BRACING REQUIRED BY SECTION R602.10 OF THE CODE. SEE NOTES BELOW FOR DETAILS AND SPECIFICATIONS FOR WALL BRACING AND WALL FRAMING.
  - EXTERIOR WALL SHEATHING: WALLS SHALL BE BRACED BY SHEATHING WALLS ON ALL STORIES WITH WOOD STRUCTURAL PANEL SHEATHING (WSP) (EXPOSURE B: 1/8", EXPOSURE C: 15/32"). SHEATHING SHALL BE ATTACHED WITH 8d NAILS AT A 6"/12" NAILING PATTERN (6" OC AT PANEL EDGES AND 12" OC AT INTERMEDIATE SUPPORTS). INSTALL BLOCKING AT ALL PANEL EDGES.
  - WSP SHEATHING SHALL EXTEND TO THE UPPERMOST DOUBLE BEARING PLATE. BLOCK AT ROOF PER SECTION R602.10.4.5 AND ATTACH BRACED WALLS PER CODE. WSP SHEATHING BETWEEN FLOORS SHALL BE SPLICED ALONG CONTINUOUS BAND OR THE WSP SHEATHING MAY BE SPLICED ACROSS STUDS (CONTINUOUS ACROSS FLOOR SYSTEM) WITH BLOCKING AT PANEL EDGES. (MINIMUM 12" BEYOND FLOOR BREAK) OR OTHER APPROVED METHOD.
  - "HD" = HOLD-DOWN: HOLD-DOWN DEVICE (NOTED AS "HD" ON PLANS) SHALL BE AN ASD FOUND CAPACITY ASSEMBLY AS NOTED ON PLANS. SEE DETAILS FOR HD ASSEMBLY.  
• \*\*GROUND/FIRST FLOOR: USE "HD HOLD-DOWN DETAIL" ON SD SHEET (OR EQUIV.)  
• \*\*UPPER FLOORS: ATTACH BASE OF KING STUD WITH A SIMPSON C522 STRAP DOWN ACROSS THE BAND AND DOWN TO A STUD BELOW OR HEADER BELOW. EXTEND STRAP 1" MIN ALONG EACH STUD (OR HEADER) AND ATTACH EACH END W/ (1) 8d NAILS.
  - INTERIOR BRACED WALL: (NOTED AS "IBW" ON PLANS) ATTACH 1/2" GYPSUM BOARD (GB) ON EACH SIDE OF WALL WITH A MIN. OF 5d COOLER NAILS OR #6 SCREWS @ 7" O.C. ALONG THE EDGES AND AT INTERMEDIATE SUPPORTS.
  - INTERIOR BRACED WALL-WOOD STRUCTURAL PANEL: (NOTED AS "IBW-WSP" ON PLANS), ATTACH ONE SIDE WITH 3/8" WSP SHEATHING WITH 8d NAILS AT A 6"/12" NAILING PATTERN (6" OC AT PANEL EDGES AND 12" OC AT INTERMEDIATE SUPPORTS). INSTALL BLOCKING AT ALL PANEL EDGES. ATTACH GB OVER WSP AS REQUIRED. ATTACH OPPOSITE SIDE WITH 1/2" GB WITH A MIN. OF 5d COOLER NAILS OR #6 SCREWS @ 7" OC ALONG THE EDGES AND AT INTERMEDIATE SUPPORTS.

**HEADER/BEAM & COLUMN NOTES**

- ALL EXTERIOR AND LOAD BEARING HEADERS SHALL BE MIN. (2)2x6 (4" WALL) OR (3)2x6 (6" WALL) WITH (1) SUPPORT STUD, UNLESS NOTED OTHERWISE.
- THE NUMBER SHOWN AT BEAM AND HEADER SUPPORTS INDICATES THE NUMBER OF SUPPORT STUDS REQUIRED IN STUD POCKET OR COLUMN. THE NUMBER OF KING STUDS AT EACH END OF HEADERS IN EXTERIOR WALLS SHALL BE ACCORDING TO ITEM "d" IN TABLE R602.3(5) OR AS BELOW PER NCD01 COMMENTARY "KING STUDS AT WALL OPENINGS" REVISED 1-4-2020:  
• UP TO 3' SPAN: (1) KING STUD  
• OVER 3' UP TO 6' SPAN: (2) KING STUDS  
• OVER 6' UP TO 9' SPAN: (3) KING STUDS  
• OVER 9' UP TO 12' SPAN: (4) KING STUDS  
• OVER 12' UP TO 15' SPAN: (5) KING STUDS

**TRUSS SYSTEM REQUIREMENTS**

- NC (2018 NRCRC), Wind: 115-120 mph
- TRUSS SYSTEM LAYOUTS (PLACEMENT PLANS) SHALL BE DESIGNED IN ACCORDANCE WITH SEALED STRUCTURAL PLANS. ANY NEED TO CHANGE TRUSSES SHALL BE COORDINATED WITH SOUTHERN ENGINEERS.
  - TRUSS SCHEMATICS (PROFILES) SHALL BE PREPARED AND SEALED BY TRUSS MANUFACTURER.
  - ALL TRUSSES SHALL BE DESIGNED FOR BEARING ON SPF #2 OR #3 PLATES OR LEDGERS (UNO).
  - ALL REQUIRED ANCHORS FOR TRUSSES DUE TO UPLIFT OR BEARING SHALL MEET THE REQUIREMENTS AS SPECIFIED ON THE TRUSS SCHEMATICS.

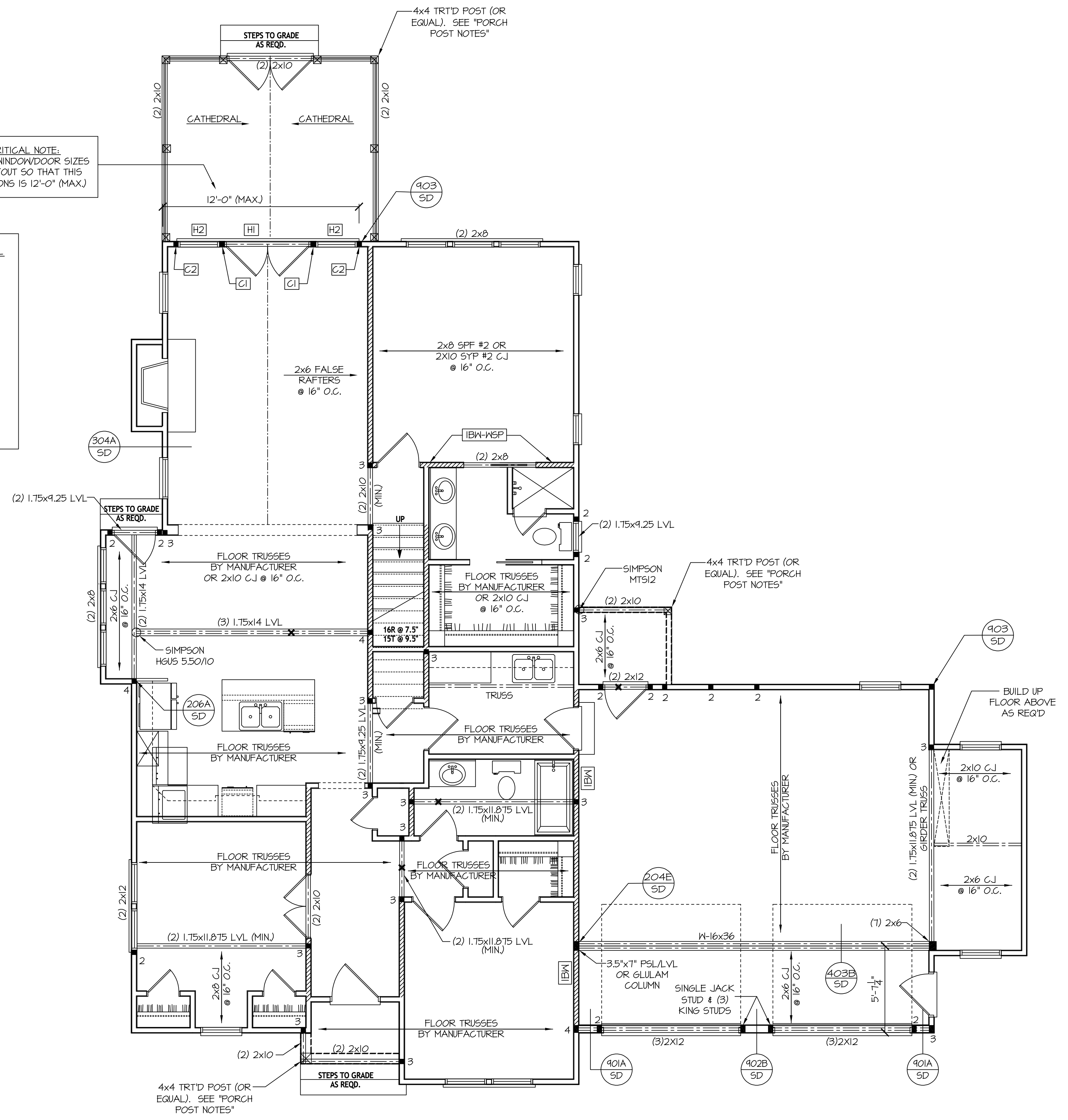
**PORCH POST NOTES:**

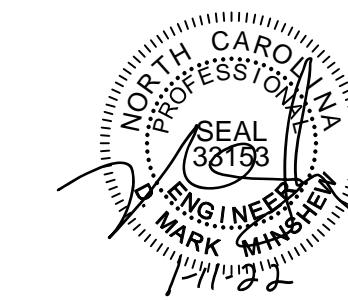
- 4x4 (6x6) TRTD POST (OR EQUAL).
- ATTACH TRUSSES (RAFTERS) AT PORCH WITH HURRICANE CONNECTORS.
- POST CAP: SIMPSON AC4-MAX (AC6-MAX)
- POST CAP AT CORNER: (2) SIMPSON LCE4 (MITER HEADER AT CORNER). HIGH WIND; ADD (1) SIMPSON H6.
- POST BASE: SIMPSON ABU44 (ABU66).
- ANCHOR: 3/4" ANCHOR (REVISED 7/13/22). 3/2" CNU; 3/4" ANCHOR (EXTEND TO FOOTING - HIGH WIND ONLY)
- POST BASE, WOOD FOUNDATION: (2) SIMPSON CS16 STRAPS AT POSTS. EXTEND 12" ONTO EACH POST (UPPER AND LOWER) OR TO GIRDER.
- NOTE: EQUIVALENT POST CAP AND BASE ACCEPTABLE.

**GREAT ROOM GABLE END WALL**

- G1 (3)2x6 COLUMN CONTINUOUS FROM BOTTOM PLATE TO BOTTOM OF RAFTERS. ATTACH AT TOP AND BOTTOM W/ A SIMPSON L550.
- G2 SINGLE JACK STUD AND (2) CONTINUOUS 2x6 KING STUDS.
- H1 (3)2x10 HEADER. ATTACH TO (3)2x6 COLUMNS AT EACH END W/ A SIMPSON #H6 HEADER HANGER.
- H2 (3)2x8 HEADER. ATTACH TO CONTINUOUS (3)2x6 COLUMN W/ A SIMPSON #H6 HEADER HANGER.

**CRITICAL NOTE:**  
ADJUST WINDOW/DOOR SIZES OR LAYOUT SO THAT THIS DIMENSIONS IS 12'-0" (MAX.)





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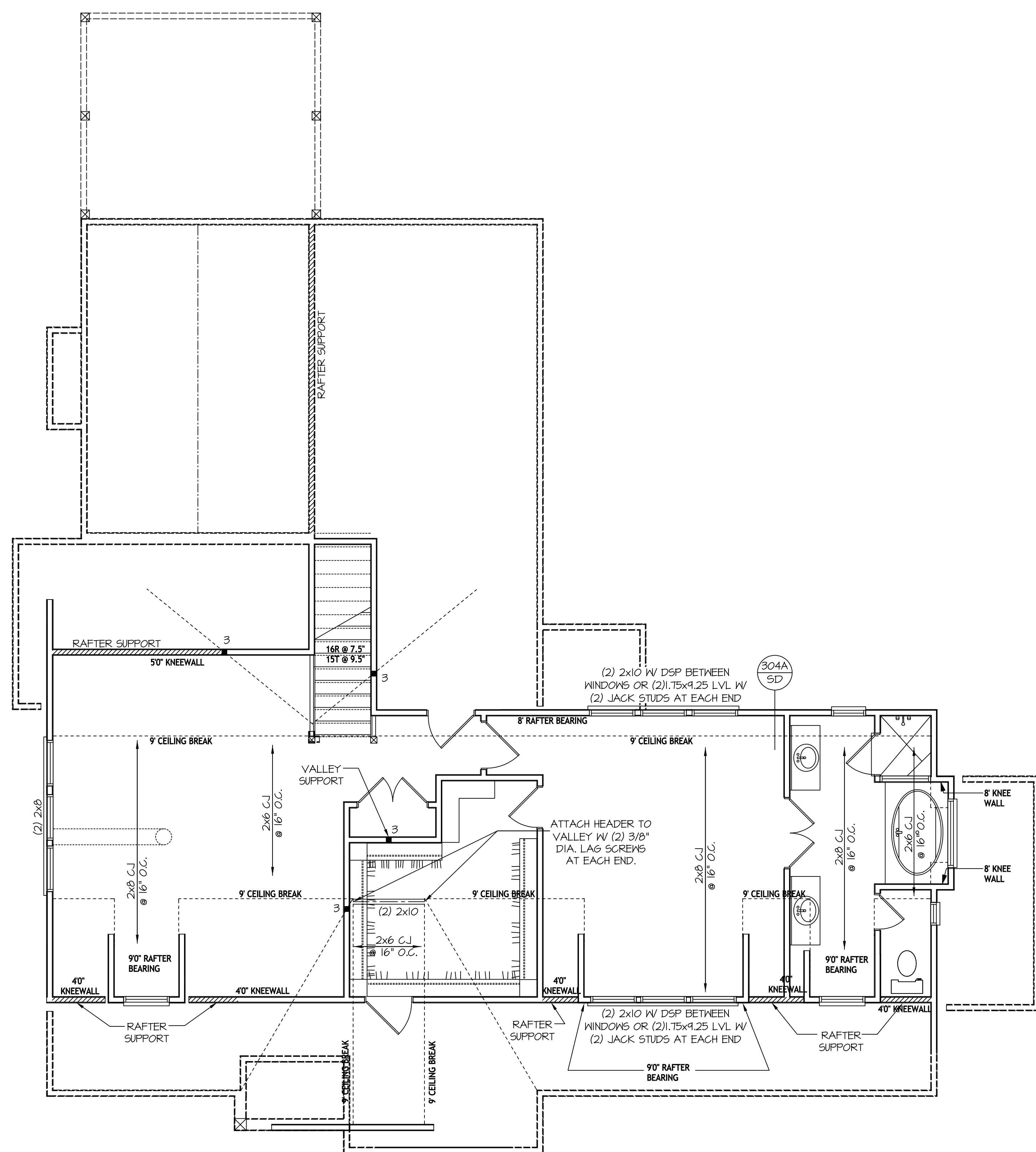
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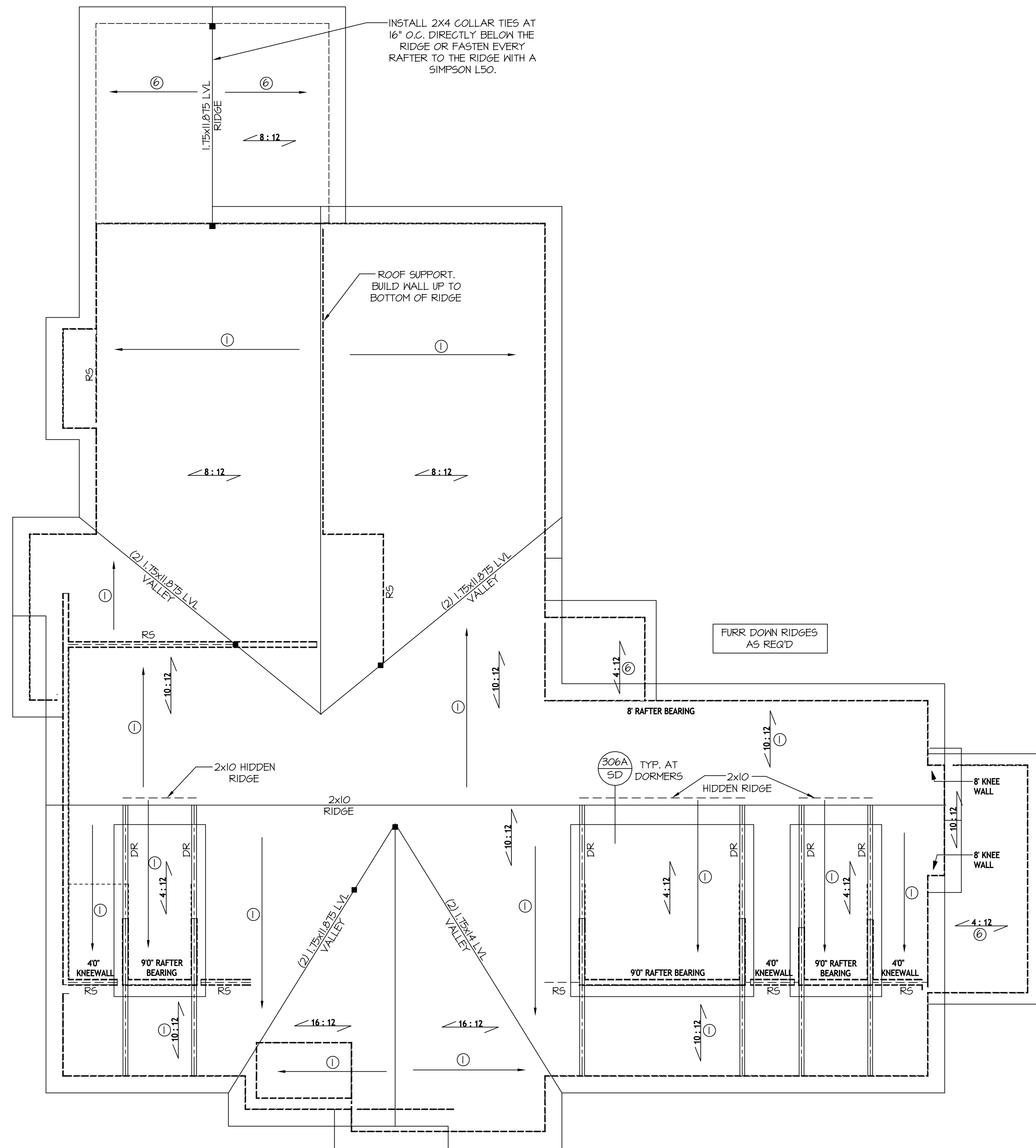
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Lot 20, Prince Place  
**HALCYON HOMES, LLC**

- FRAMING NOTES**  
NC (2018 NGR-C), Wind: 115-120 mph
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  - EXTERIOR WALL SHEATHING: WALLS SHALL BE BRACED BY SHEATHING WALLS ON ALL STORIES WITH WOOD STRUCTURAL PANEL SHEATHING (WSP) (EXPOSURE B: 1/16", EXPOSURE C: 15/32"). SHEATHING SHALL BE ATTACHED WITH 8d NAILS AT A 6"/12" NAILING PATTERN (6" OC AT PANEL EDGES AND 12" OC AT INTERMEDIATE SUPPORTS). INSTALL BLOCKING AT ALL PANEL EDGES.
  - WSP SHEATHING SHALL EXTEND TO THE UPPERMOST DOUBLE BEARING PLATE. BLOCK AT ROOF PER SECTION R602.10.4.5 AND ATTACH BRACED WALLS PER CODE. WSP SHEATHING BETWEEN FLOORS SHALL BE SPLICED ALONG CONTINUOUS BAND OR THE WSP SHEATHING MAY BE SPLICED ACROSS STUDS (CONTINUOUS ACROSS FLOOR SYSTEM) WITH BLOCKING AT PANEL EDGES. (MINIMUM 12" BEYOND FLOOR BREAK) OR OTHER APPROVED METHOD.
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• \*\*GROUND/FIRST FLOOR: USE "HD HOLD-DOWN DETAIL" ON SD SHEET (OR EQUIV.)  
• \*\*UPPER FLOORS: ATTACH BASE OF KING STUD WITH A SIMPSON C522 STRAP DOWN ACROSS THE BAND AND DOWN TO A STUD BELOW OR HEADER BELOW. EXTEND STRAP 1" MIN ALONG EACH STUD (OR HEADER) AND ATTACH EACH END W/ (1) 8d NAILS.
  - INTERIOR BRACED WALL: (NOTED AS "IBW" ON PLANS) ATTACH 1/2" GYPSUM BOARD (GB) ON EACH SIDE OF WALL WITH A MIN. OF 5d COOLER NAILS OR #6 SCREWS @ 7" O.C. ALONG THE EDGES AND AT INTERMEDIATE SUPPORTS.
  - INTERIOR BRACED WALL-WOOD STRUCTURAL PANEL: (NOTED AS "IBW-WSP" ON PLANS), ATTACH ONE SIDE WITH 3/8" WSP SHEATHING WITH 8d NAILS AT A 6"/12" NAILING PATTERN (6" OC AT PANEL EDGES AND 12" OC AT INTERMEDIATE SUPPORTS). INSTALL BLOCKING AT ALL PANEL EDGES. ATTACH GB OVER WSP AS REQUIRED. ATTACH OPPOSITE SIDE WITH 1/2" GB WITH A MIN. OF 5d COOLER NAILS OR #6 SCREWS @ 7" OC ALONG THE EDGES AND AT INTERMEDIATE SUPPORTS.

- HEADER/BEAM & COLUMN NOTES**
- ALL EXTERIOR AND LOAD BEARING HEADERS SHALL BE MIN. (2)2x6 (4" WALL) OR (3)2x6 (6" WALL) WITH (1) SUPPORT STUD, UNLESS NOTED OTHERWISE.
  - THE NUMBER SHOWN AT BEAM AND HEADER SUPPORTS INDICATES THE NUMBER OF SUPPORT STUDS REQUIRED IN STUD POCKET OR COLUMN. THE NUMBER OF KING STUDS AT EACH END OF HEADERS IN EXTERIOR WALLS SHALL BE ACCORDING TO ITEM "1" IN TABLE R602.3(5) OR AS BELOW PER NCDOL COMMENTARY "KING STUDS AT WALL OPENINGS" REVISED 1-4-2020:  
•• UP TO 3' SPAN: (1) KING STUD  
•• OVER 3' UP TO 6' SPAN: (2) KING STUDS  
•• OVER 6' UP TO 9' SPAN: (3) KING STUDS  
•• OVER 9' UP TO 12' SPAN: (4) KING STUDS  
•• OVER 12' UP TO 15' SPAN: (5) KING STUDS



**SECOND FLOOR STRUCTURAL PLAN**  
SCALE: 1/4" = 1'-0"  
REFER TO "SD" SHEET(S) FOR STANDARD DETAILS AND STRUCTURAL NOTES



- ROOF FRAMING NOTES:**  
NC (2018 NRC): Wind: 115-120 mph
- ① 2x8 RAFTERS @ 16" O.C. WITH 2x10 RIDGE, UNO.
  - ② (2) 2x10 OR 1.75x1.875 LVL HIP, (2) 2x10 HIPs MAY BE SPLICED WITH A MIN. 6'-0" OVERLAP AT CENTER
  - ③ (2) 2x10 OR 1.75x9.25 LVL VALLEY, DO NOT SPLICE VALLEYS
  - ④ 1.75x1.875 LVL OR (2) 1.75x9.25 LVL VALLEY
  - ⑤ FALSE FRAME VALLEY ON 2x10 FLAT PLATE
  - ⑥ 2x6 RAFTERS @ 16" O.C. W/ 2x8 RIDGE, UNO.
  - ⑦ 2x10 RAFTERS @ 16" O.C. W/ 2x12 RIDGE, UNO.
  - ⑧ EXTEND RIDGE 12" BEYOND INTERSECTION
- "SR" = SINGLE RAFTER
  - "DR" = DOUBLE RAFTER
  - "TR" = TRIPLE RAFTER
  - "RS" = ROOF SUPPORT
  - "■" = (3) STUD OR 4x4 POST FOR ROOF SUPPORT (USE 2x6 STUDS OR 6x6 POST FOR SUPPORT OVER 10'-0" IN HEIGHT)
  - ATTACH VAULTED RAFTERS WITH HURRICANE CLIPS; SIMPSON "H-2.5A" OR EQUIVALENT, TIES TO BE INSTALLED ON THE OUTSIDE FACE OF FRAMING.
  - INSTALL RAFTER TIES AND COLLAR TIES PER SECTION R802.3.1 OF THE 2018 NC RESIDENTIAL CODE.

FRAMING NOTE: ALL DIMENSIONAL LUMBER ON THIS SHEET MAY BE SPF #2 OR SYP #2, UNLESS SPECIFICALLY NOTED OTHERWISE.

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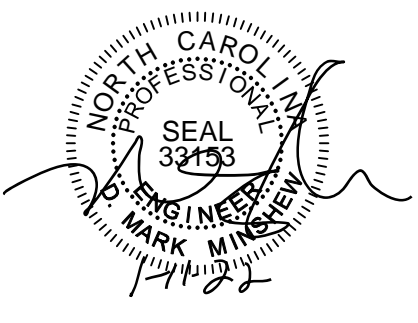
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**ROOF STRUCTURAL PLAN**

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

REFER TO "SD" SHEET(S) FOR STANDARD DETAILS AND STRUCTURAL NOTES

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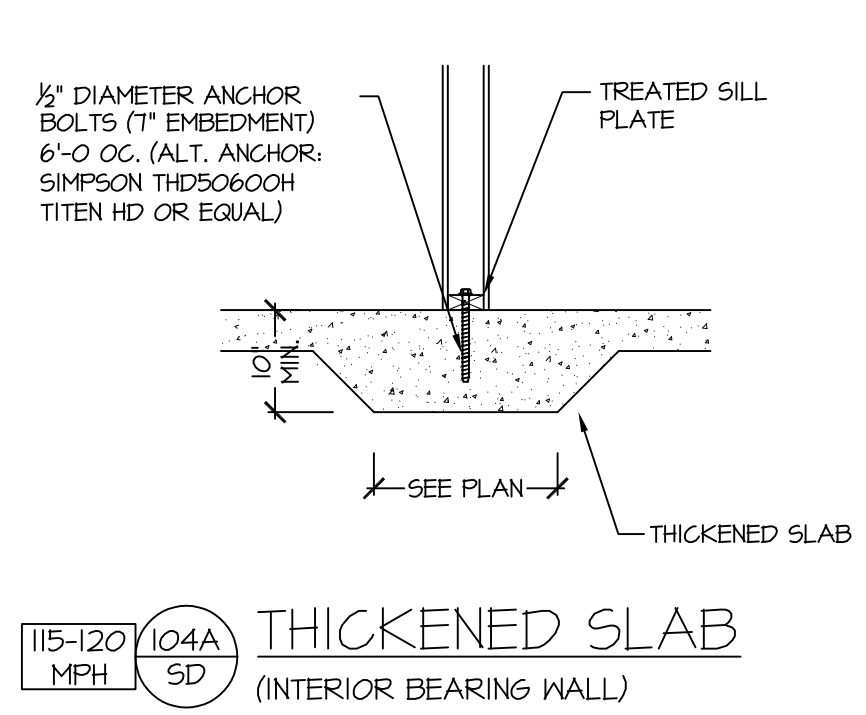
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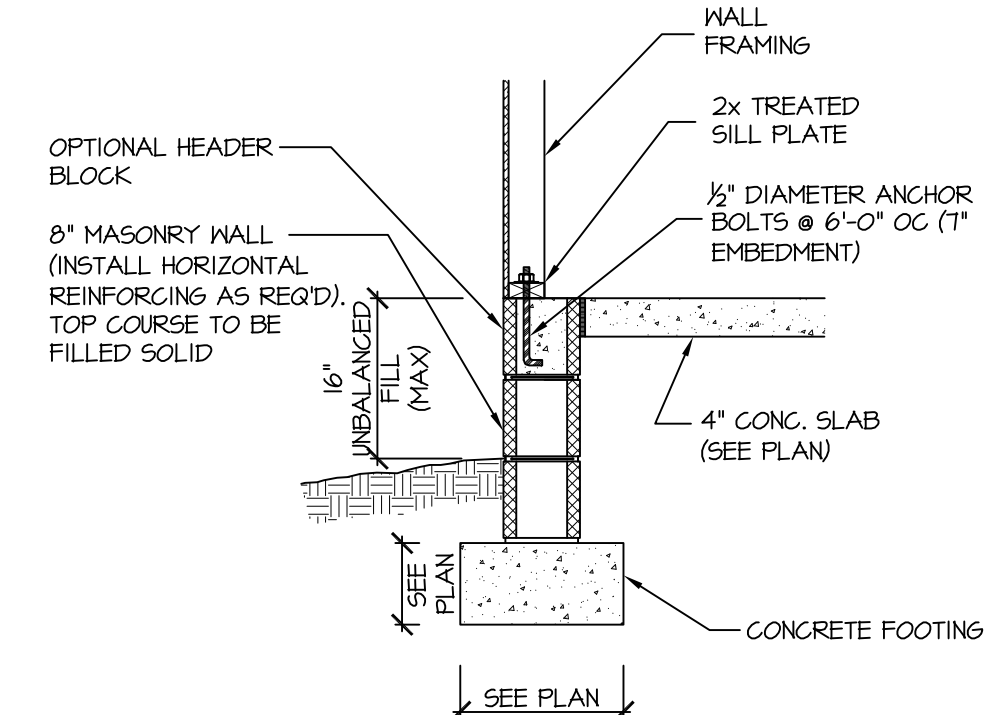
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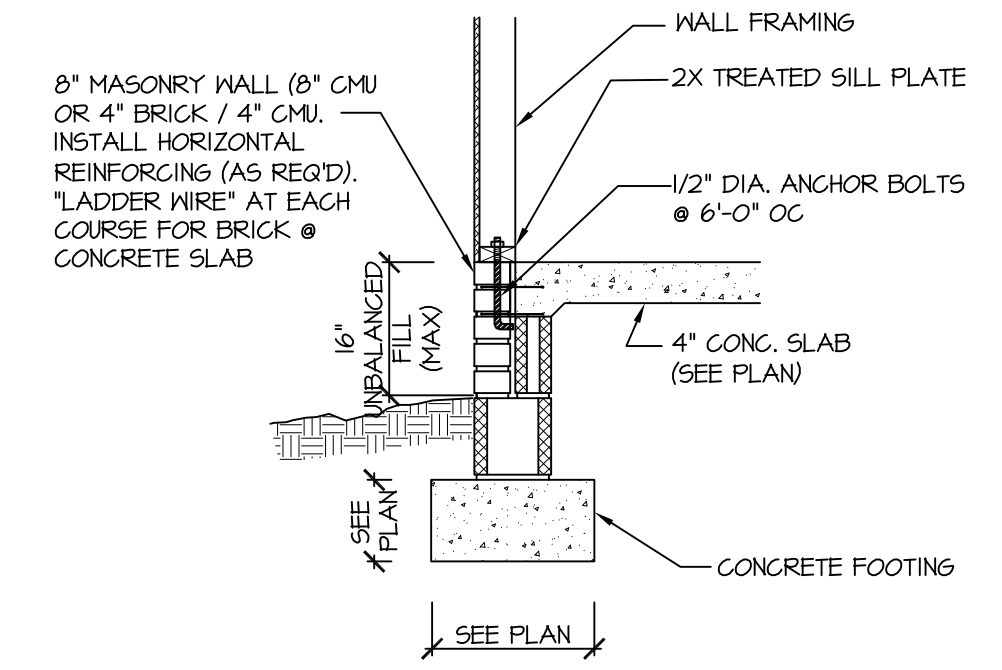
**SD**



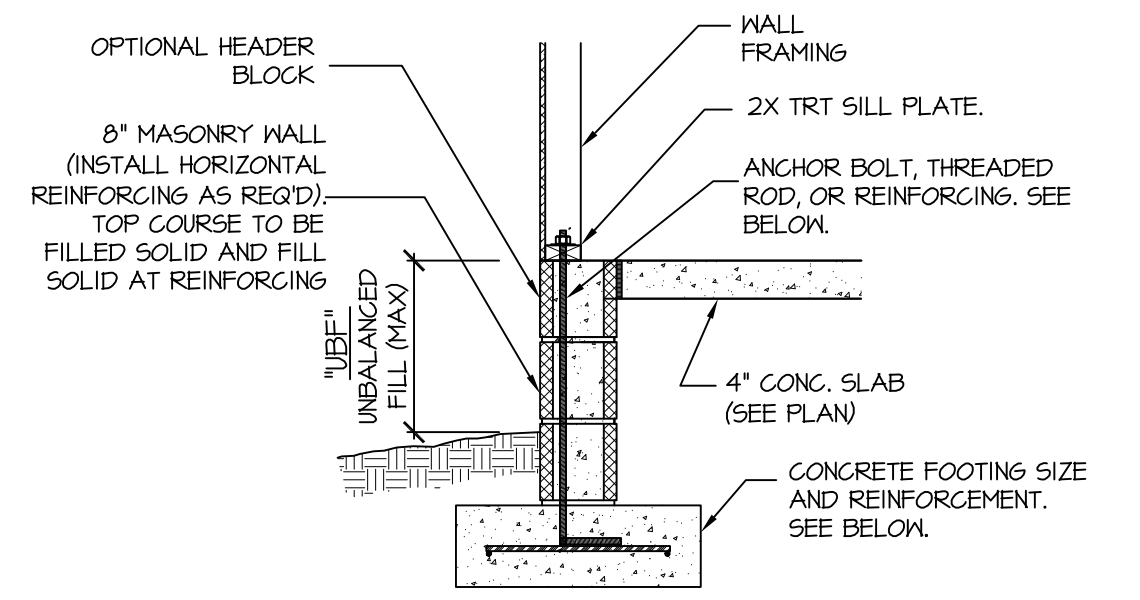
**115-120** **104A**  
**MPH** **SD**  
**THICKENED SLAB**  
(INTERIOR BEARING WALL)



**115-120** **106A**  
**MPH** **SD**  
**STEM WALL SLAB FOOTING**  
(SIDING OR EQUAL)



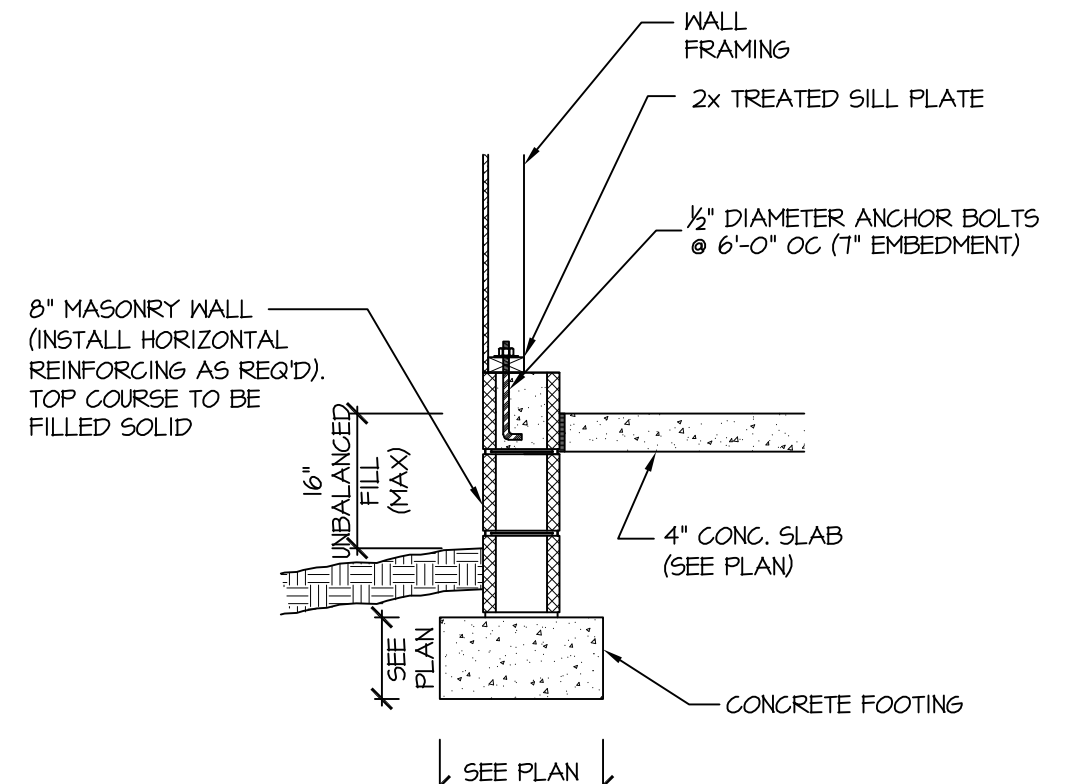
**115-120** **106B**  
**MPH** **SD**  
**STEM WALL SLAB FOOTING**  
(SIDING W/ BRICK SKIRT)



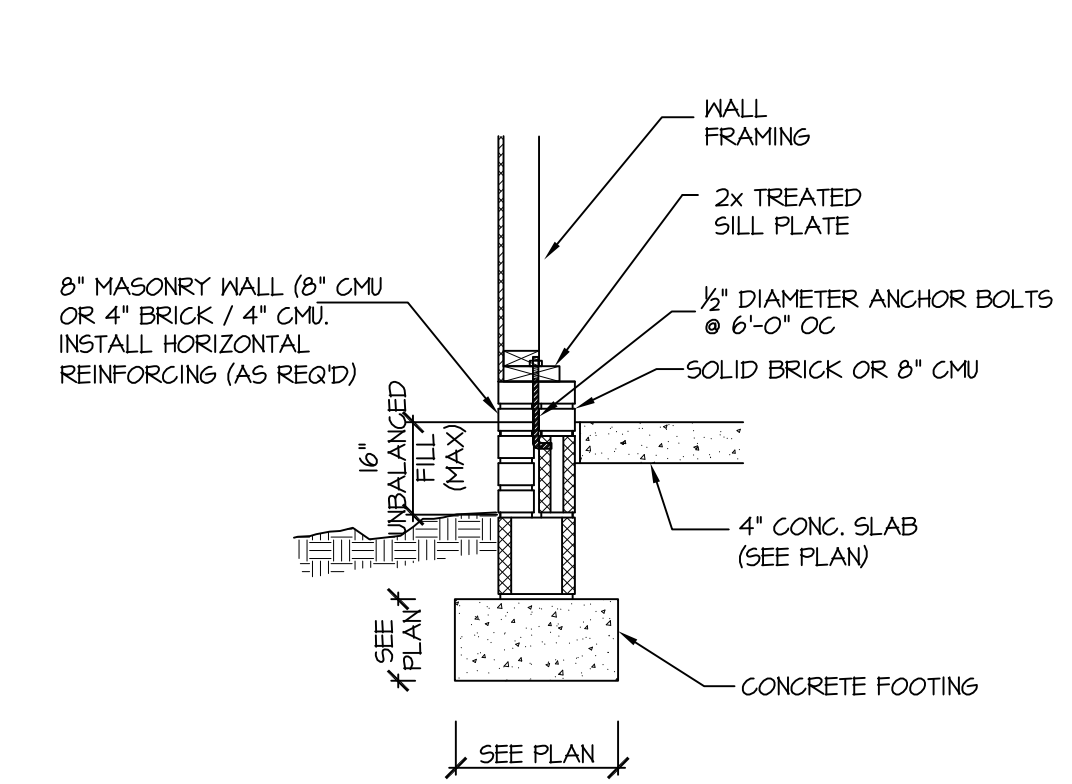
- \*UBF\* = UP TO 16" → 1/2" DIAM ANCHOR BOLT (EMBED 1") @ 6'-0" O.C. 16" WIDE BY 8" DEEP (MIN) CONG. FTG.
- \*UBF\* = 16" UP TO 24" → 1/2" DIAM ANCHOR BOLT (EMBED 1") @ 6'-0" O.C. REINFORCE WALL W/ #5 BAR @ 48" O.C. W/ 75" LEG INTO FTG. OR INSTALL 3/8" THREADED ROD W/ 15" LEG @ 48" O.C. WITH WASHERS 24" WIDE BY 10" DEEP CONG. FTG. REINFORCED W/ (3) #4 BAR OR (2) #5 BAR CONTINUOUS WITH #4 TIES @ 48" O.C.
- \*UBF\* = 24" UP TO 48" → 1/2" DIAM ANCHOR BOLT (EMBED 1") @ 6'-0" O.C. REINFORCE WALL W/ #5 BAR @ 24" O.C. W/ 15" LEG INTO FTG. 32" WIDE BY 12" DEEP CONG. FTG. REINFORCED W/ (4) #4 BAR OR (3) #5 BAR CONTINUOUS WITH #4 TIES @ 24" O.C.

**115-120** **106C**  
**MPH** **SD**  
**STEM WALL SLAB FOOTING**  
(SIDING OR EQUAL)

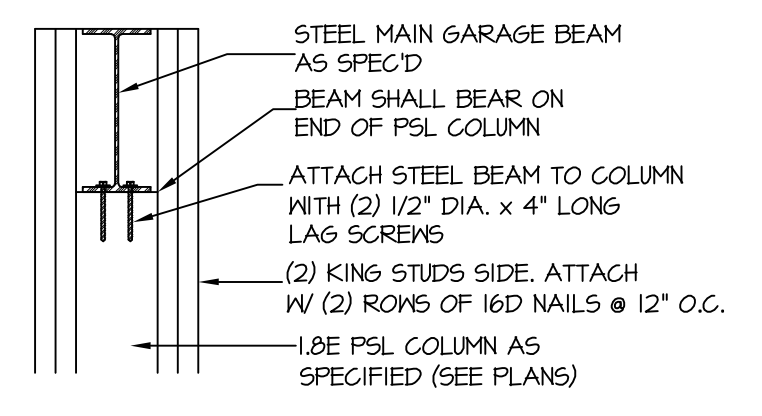
**CRITICAL NOTE:** FOR FND WALLS W/ UNBALANCED FILL EXCEEDING 16" HEIGHT, SEE DETAIL "106C/SD"



**115-120** **107A**  
**MPH** **SD**  
**STEM WALL SLAB @ GARAGE**  
(SIDING OR EQUAL)



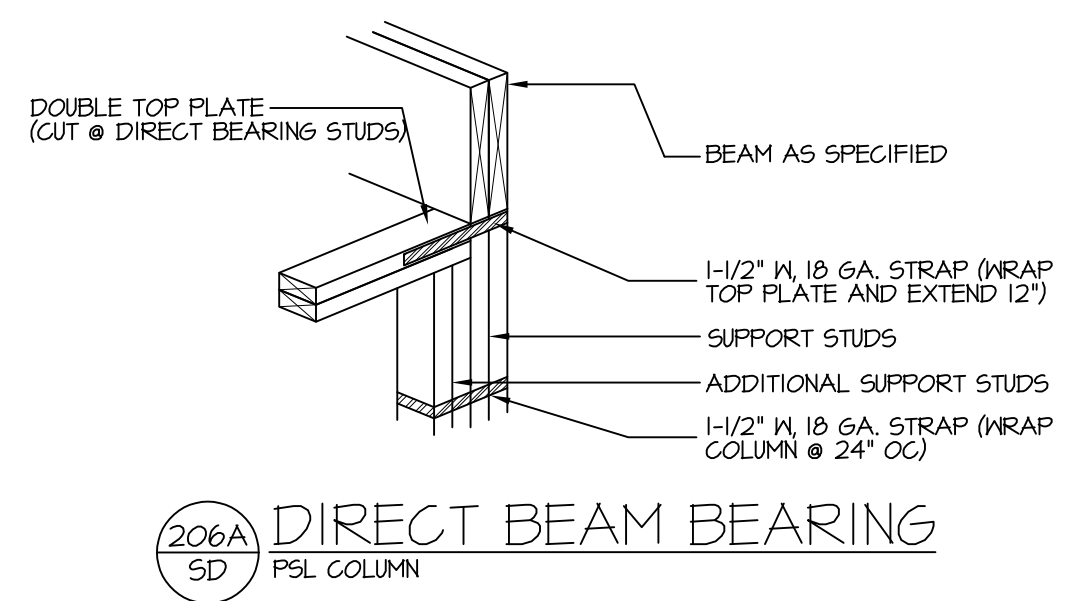
**115-120** **107B**  
**MPH** **SD**  
**STEM WALL SLAB @ GARAGE**  
(SIDING W/ BRICK SKIRT)



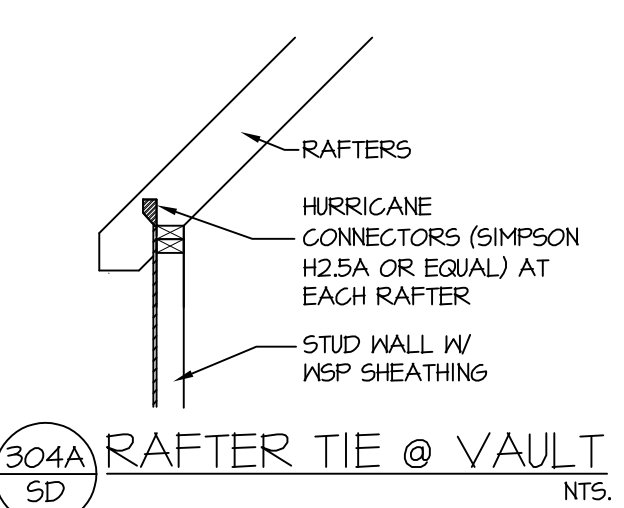
**204E**  
**SD**  
**TYP. GARAGE BEAM BEARING**  
NTS

**STRUCTURAL NOTES**

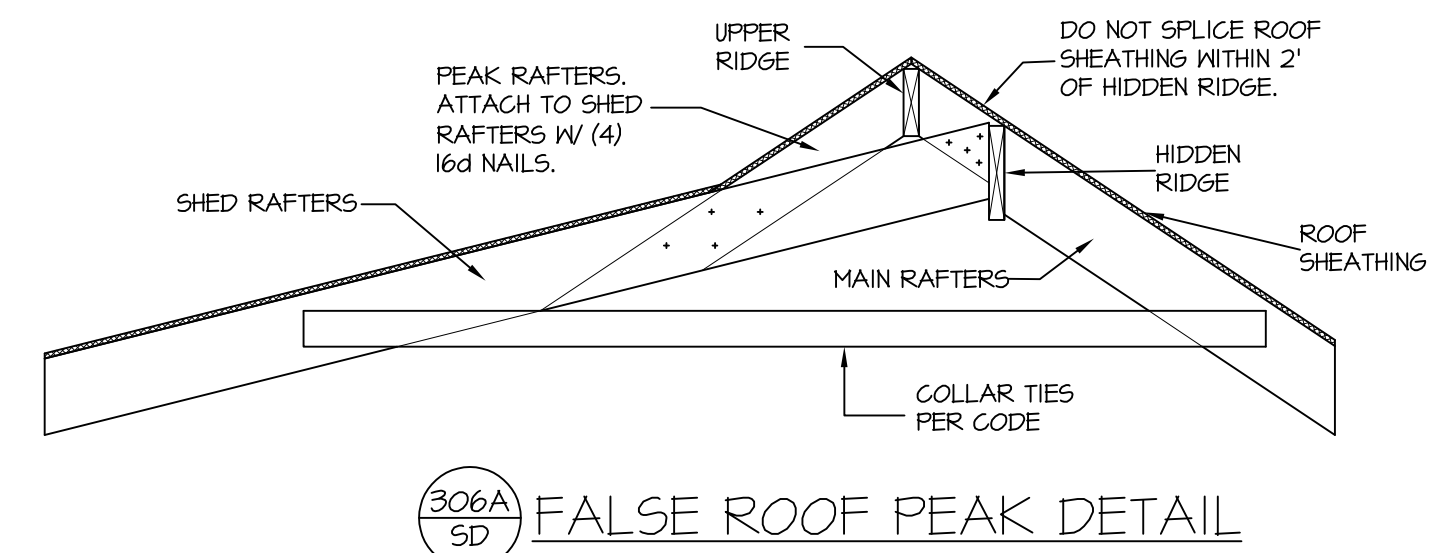
- NC (2018 NGRCC); Wind: 115-120 mph
- ENGINEER'S SEAL APPLIES ONLY TO STRUCTURAL COMPONENTS INCLUDING ROOF RAFTERS, HIPs, VALLEYS, RIDGES, FLOORS, WALLS, BEAMS AND HEADERS, COLUMNS, CANTILEVERS, OFFSET LOAD BEARING WALLS, PIER & GIRDER SYSTEM, FOOTING, AND PILING SYSTEM. ENGINEER'S SEAL DOES NOT CERTIFY DIMENSIONAL ACCURACY OR ARCHITECTURAL LAYOUT INCLUDING ROOF SYSTEM. ALL REQUIREMENTS FOR PROFESSIONAL CERTIFICATION SHALL BE PROVIDED BY THE APPROPRIATE PROFESSIONAL. SOUTHERN ENGINEERS, P.A. CERTIFIES ONLY THE STRUCTURAL COMPONENTS AS SPECIFICALLY STATED.
  - ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF THE 2018 NC RESIDENTIAL CODE, 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 FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE CONSTRUCTION WORK, NOR WILL THE ENGINEER BE RESPONSIBLE FOR THE CONTRACTOR'S FAILURE TO CARRY OUT THE CONSTRUCTION WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. "CONSTRUCTION REVIEW" SERVICES ARE NOT PART OF OUR CONTRACT. ALL MEMBERS SHALL BE FRAMED, ANCHORED, TIED AND BRACED IN ACCORDANCE WITH GOOD CONSTRUCTION PRACTICE AND THE BUILDING CODE.
  - DESIGN LOADS (LISTED AS: LIVE LOAD, DEAD LOAD, DEFLECTION)
    - ROOFS OTHER THAN SLEEPING ROOMS: (40 PSF, 10 PSF, L/360)
    - SLEEPING ROOMS: (30 PSF, 10 PSF, L/360)
    - ATTIC WITH PERMANENT STAIR: (40 PSF, 10 PSF, L/360)
    - ATTIC WITHOUT PERMANENT STAIR: (20 PSF, 10 PSF, L/360)
    - ATTIC WITHOUT STORAGE: (10 PSF, 10 PSF, L/240)
    - STAIRS: (40 PSF, 10 PSF, L/360)
    - EXTERIOR BALCONIES: (60 PSF, 10 PSF, L/360)
    - DECKS: (40 PSF, 10 PSF, L/360)
    - GUARDRAILS AND HANDRAILS: (200 LBS)
    - PASSENGER VEHICLE GARAGES: (50 PSF, 10 PSF, L/360)
    - FIRE ESCAPES: (40 PSF, 10 PSF, L/360)
    - SNOW: (20 PSF)
  - WALLS SHALL BE BRACED BY SHEATHING WALLS ON ALL STORIES WITH WOOD STRUCTURAL PANELS. SEE FRAMING NOTES FOR THICKNESS AND NAILING REQUIREMENTS.
  - SEE APPENDIX M (DCA6) FOR EXTERIOR DECK REQUIREMENTS INCLUDING ATTACHMENTS FOR LATERAL LOADS.
  - CONCRETE SHALL HAVE A MINIMUM 28 DAY STRENGTH OF 3000 PSI AND A MAXIMUM SLUMP OF 5 INCHES UNLESS NOTED OTHERWISE (INO). AIR ENTRAINMENT PER TABLE 402.2. ALL CONCRETE SHALL BE PROPORTIONED, MIXED, HANDLED, SAMPLED, TESTED, AND PLACED IN ACCORDANCE WITH ACI STANDARDS. ALL SAMPLES FOR PUMPING SHALL BE TAKEN FROM THE EXIT END OF THE PUMP. CONTROL JOINTS IN SLABS SHALL BE SPACED ON A GRID OF +30 TIMES THE DEPTH (D). CONTROL JOINTS SHALL BE SAWN TO A DEPTH OF 1/2" (IE, 4" CONCRETE SLABS SHALL HAVE 1/2" DEEP CONTROL JOINTS SAWN IN SLAB ON A +10'-0" x +10'-0" GRID).
  - ALLOWABLE SOIL BEARING PRESSURE ASSUMED TO BE 2000 PSF. THE CONTRACTOR MUST CONTACT A GEOTECHNICAL ENGINEER AND THE STRUCTURAL ENGINEER IF UNSATISFACTORY SUBSURFACE CONDITIONS ARE ENCOUNTERED. THE SURFACE AREA ADJACENT TO THE FOUNDATION WALL SHALL BE PROVIDED WITH ADEQUATE DRAINAGE, AND SHALL BE GRADED SO AS TO DRAIN SURFACE WATER AWAY FROM FOUNDATION WALLS.
  - ALL FRAMING LUMBER SHALL BE SYP #2 (Fb = 875 PSI) UNLESS NOTED OTHERWISE (INO). ALL TREATED LUMBER SHALL BE SYP # 2. PLATE MATERIAL MAY BE SYP # 3 OR SYP #3 (Fcuperp) = 425 PSI - MIN.
  - L.V.L. SHALL BE LAMINATED VENEER LUMBER: Fb=2600 PSI, Fv=285 PSI, E=1.9x10<sup>6</sup> PSI.
    - 4.1. P.S.L. SHALL BE PARALLEL STRAND LUMBER: Fb=2400 PSI, Fv=240 PSI, E=2.0x10<sup>6</sup> PSI.
    - 4.2. L.S.L. SHALL BE LAMINATED STRAND LUMBER: Fb=2250 PSI, Fv=400 PSI, E=1.5x10<sup>6</sup> PSI. INSTALL ALL CONNECTIONS PER MANUFACTURERS INSTRUCTIONS.
  - ALL ROOF TRUSSES AND I-JOIST LAYOUTS SHALL BE PREPARED IN ACCORDANCE WITH THE SEALED STRUCTURAL DRAWINGS. TRUSSES AND I-JOISTS SHALL BE INSTALLED ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS. ANY CHANGE IN TRUSSES OR I-JOIST LAYOUT SHALL BE COORDINATED WITH SOUTHERN ENGINEERS.
  - ALL STRUCTURAL STEEL SHALL BE ASTM A-36. STEEL BEAMS SHALL BE SUPPORTED AT EACH END WITH A MINIMUM BEARING LENGTH OF 3 1/2" INCHES AND FULL FLANGE WIDTH. PROVIDE SOLID BEARING FROM BEAM SUPPORT TO FOUNDATION. BEAMS SHALL BE ATTACHED TO EACH SUPPORT WITH TWO LAG SCREWS (1/2" DIAMETER x 4" LONG). LATERAL SUPPORT IS CONSIDERED ADEQUATE PROVIDING THE JOIST ARE TOE NAILED TO THE SOLE PLATE, AND SOLE PLATE IS NAILED OR BOLTED TO THE BEAM FLANGE @ 48" O.C. ALL STEEL TUBING SHALL BE ASTM A500.
  - REBAR SHALL BE DEFORMED STEEL, ASTM615, GRADE 60. LAP ALL REBAR SPLICES 30 BAR DIAMETERS.
  - FLITCH BEAMS SHALL BE BOLTED TOGETHER USING (2) ROWS OF 1/2" DIAMETER BOLTS (ASTM A325) WITH WASHERS PLACED UNDER THE THREADED END OF BOLT. BOLTS SHALL BE SPACED AT 24" O.C. (MAX) AND STAGGERED AT THE TOP AND BOTTOM OF BEAM (2" EDGE DISTANCE), WITH 2 BOLTS LOCATED AT 6" FROM EACH END.
  - BRICK LINTELS (WHEN REQUIRED) SHALL BE 3 1/2"x3 1/2"x1/4" STEEL ANGLE FOR UP TO 6'-0" SPAN AND 6"x4"x5/16" STEEL ANGLE WITH 6" LEG VERTICAL FOR SPANS UP TO 9'-0". SEE PLANS FOR SPANS OVER 9'-0". SEE ALSO SECTION R103.B.3 LINTELS.



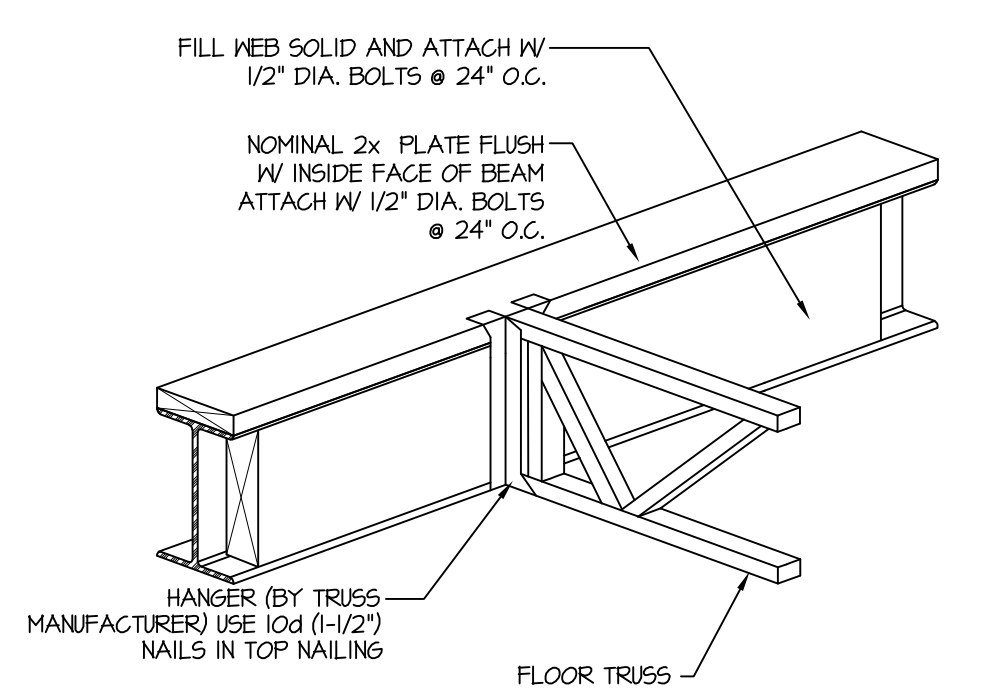
**206A**  
**SD**  
**DIRECT BEAM BEARING**  
PSL COLUMN



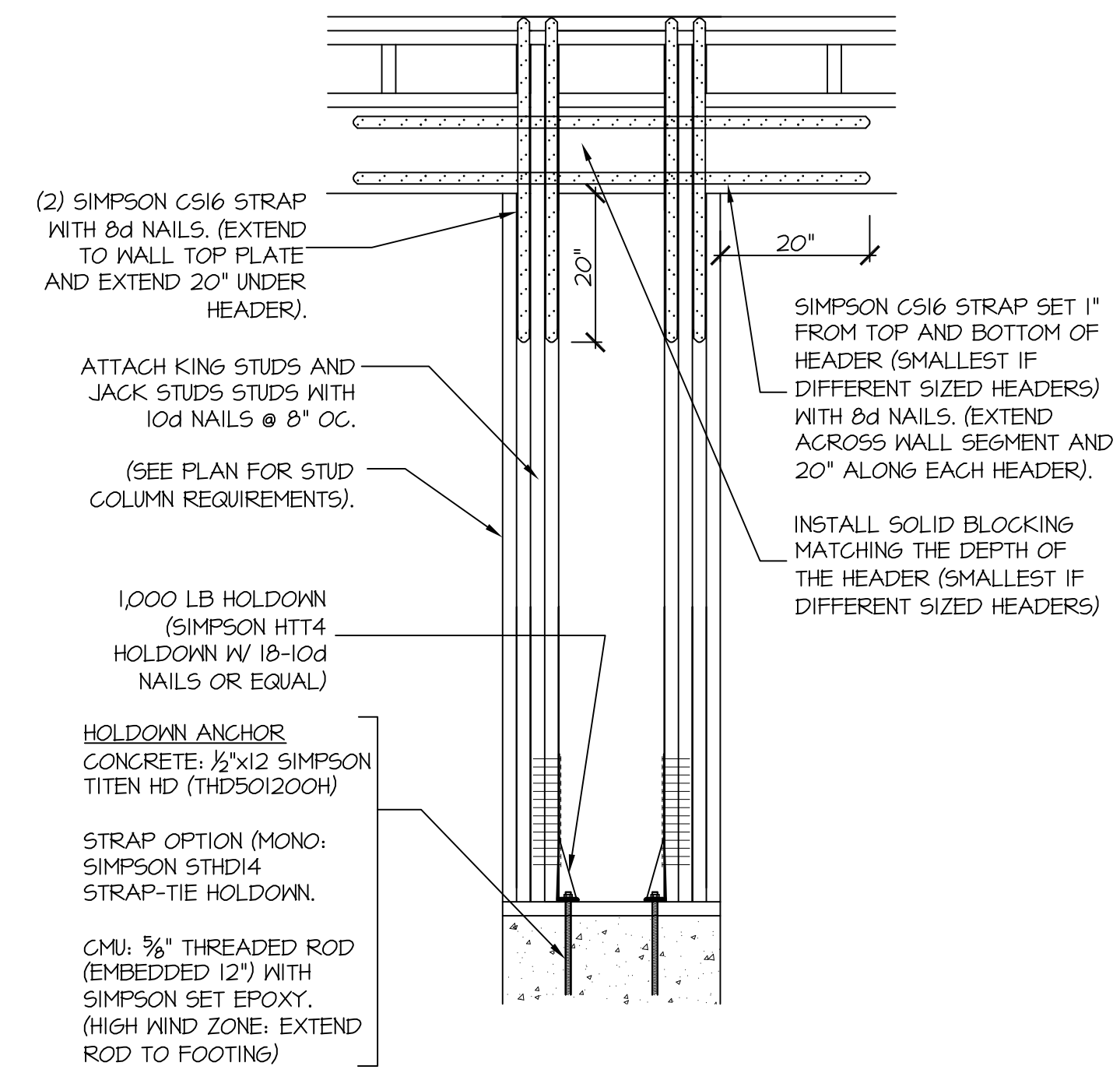
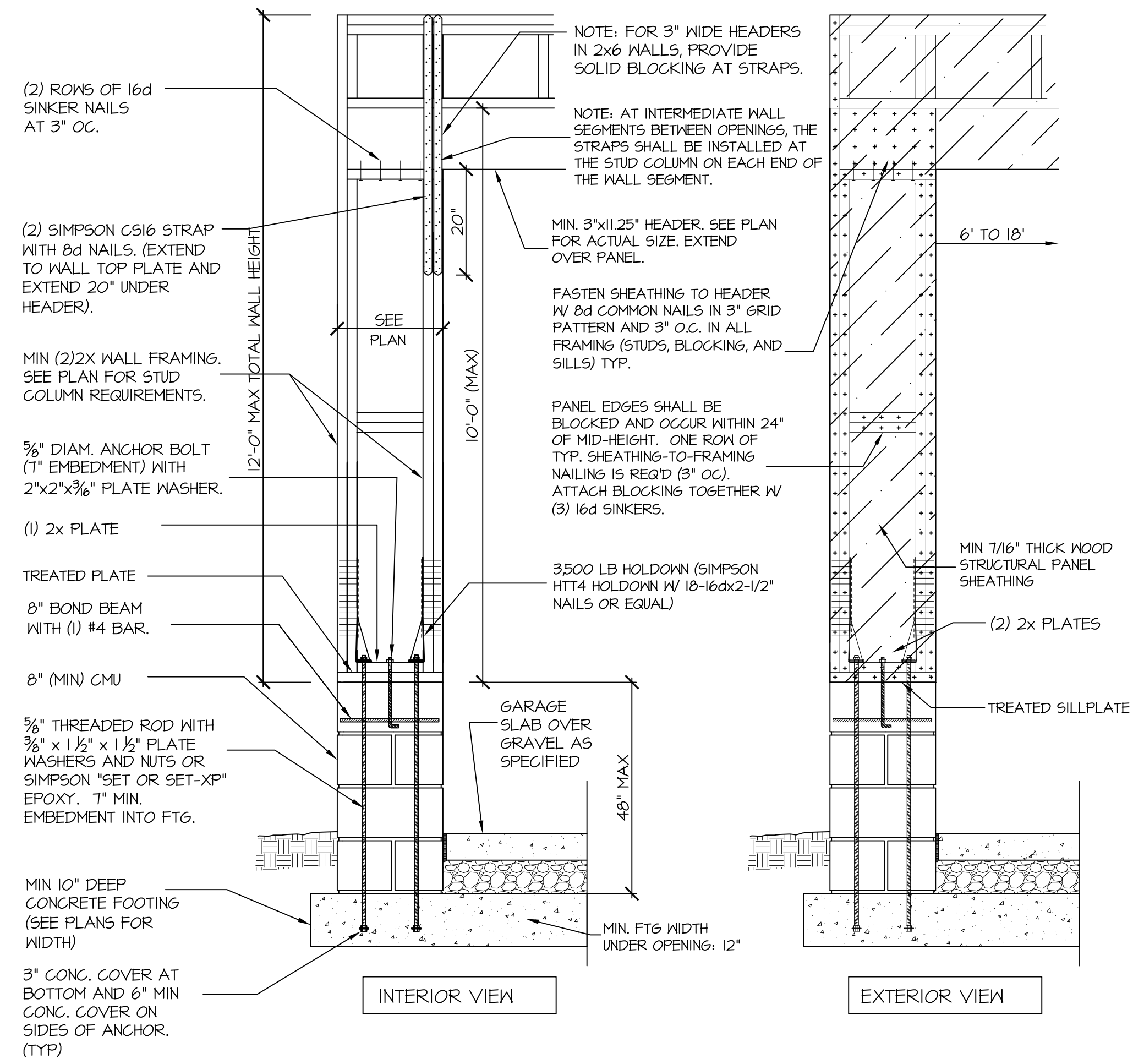
**304A**  
**SD**  
**RAFTER TIE @ VAULT**  
NTS.



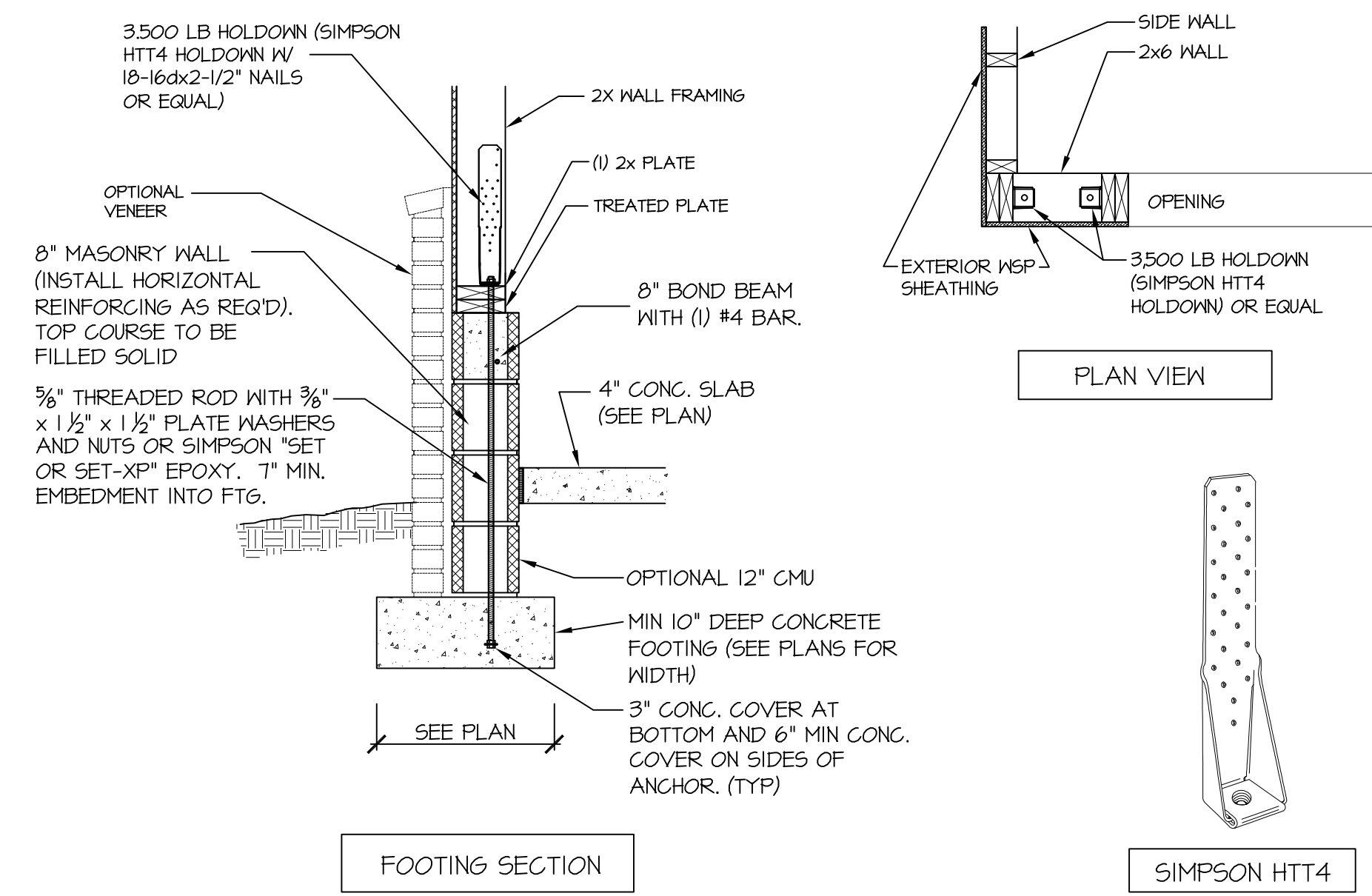
**306A**  
**SD**  
**FALSE ROOF PEAK DETAIL**  
NTS.



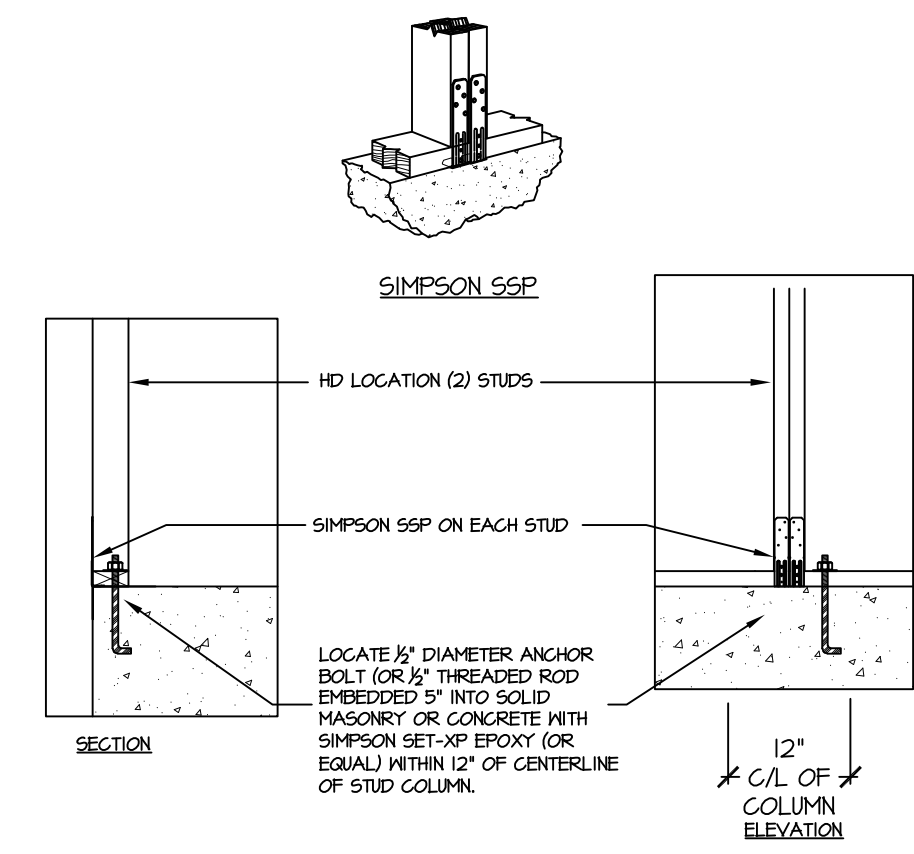
**403B**  
**SD**  
**FLOOR TRUSS @ STEEL BEAM**  
NTS



902B SD DUAL END CONDITION DETAIL (FOR USE WITH APA PORTAL FRAME CONDITION OR AS OTHERWISE SPECIFIED) DETAIL AND APPLICATION BASED ON APA TT-100F WITH USE OF TABLE 1 FOR APA PORTAL FRAME WITH HOLD-DOWN CAPACITIES.



SECTION 901A SD APA PORTAL FRAME W/ HOLD-DOWNS DETAIL AND APPLICATION BASED ON APA TT-100F WITH USE OF TABLE 1 FOR APA PORTAL FRAME WITH HOLD-DOWN CAPACITIES.



903 SD BRACED WALL END CONDITION "HD" HOLD-DOWN DETAIL NOTE: SIMPSON DTT-1Z IS ACCEPTABLE ALTERNATE NOTE: ALTERNATE HD HOLD-DOWN DEVICES OR SYSTEMS MAY BE USED TO MEET THE CODE REQUIRED 800 LB CAPACITY IN LIEU OF THE ABOVE DETAIL.



PROJECT # 21-3445

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