

**GENERAL NOTES:**

**APPLICABLE CODES:**

- A. These general notes apply to all structural drawings. This project is designed in accordance with the International Building Code (IBC), 2015 Edition and the 'Minimum Design Loads for Buildings and Other Structures' (ASCE/SEI 7-10).
- B. All material and workmanship shall be in accordance with applicable provisions of the codes specified above.

**LOADS USED IN DESIGN:**

- A. Gravity Loading
  - Roof Snow Load . . . . . 5 psf
  - Roof Live Load . . . . . 20 psf
  - Roof Dead Load . . . . . 15 psf
  - Floor & Deck Live Load . . . . . 40 psf
  - Floor Dead Load . . . . . 10 psf
  - Deck Dead Load . . . . . 15 psf
- B. Wind Loading
  - Velocity Ultimate (3 sec gust) . . . . . 115 mph
  - Exposure . . . . . C
  - Risk Factor . . . . . II
  - Internal Pressure Coeff., GCpi . . . . . -0.18 / 0.18 (Enclosed)
- C. Seismic
  - Sds . . . . . 0.072
  - Sd1 . . . . . 0.049
  - Site Class . . . . . D
  - Seismic Group . . . . . A
  - Fa . . . . . 1.6
  - Fv . . . . . 2.4
  - SMs . . . . . 0.108
  - SM1 . . . . . 0.074

**COORDINATION:**

- A. DO NOT SCALE PLANS. The layout shown is based solely on the architectural plans by Brown Designs project no. CSTM-2879, not dated and plans provided by Danny Bess received March 16, 2020. Changes affecting the layout shown must be specific and clearly conveyed to GreenWorks Engineering and Consulting in written form as a change for inclusion into these plans.
- B. Contractor and/or client shall verify all dimensions and layout prior to construction. All dimensions shall be checked against the architectural plans referenced above and any discrepancies shall be brought to the attention of the Architect and Engineer of Record immediately. Refer to mechanical, electrical and architectural plans for openings not shown on the structural plans.
- C. Shop drawings shall be prepared by the fabricator. Copying of these construction documents for use as shop drawings will not be permitted.
- D. All temporary shoring shall be the responsibility of the contractor.
- E. Design is based on the current applicable building codes listed above and shall be void if the building code at the time of construction changes from the codes listed above.

**CONCRETE:**

- A. Concrete has been designed and shall be constructed in accordance with the American Concrete Institute 'Building Code Requirement Reinforced Concrete' and 'Specifications for Structural Concrete for Buildings' (ACI 318 and ACI 301) latest editions. Section 1.3 "Inspection" of ACI 318 is deleted in its entirety, see 'Field Observations' paragraph. All concrete shall be of stone aggregate, unless noted otherwise.
- B. Concrete Mixes: See specifications for any additional durability requirements.
  - Mix 'A' For Slabs on Grade
    - 4,000 psi minimum compressive strength at 28 days.
    - Type I/II Cement, minimum of 540 pounds per cubic yard.
    - Fly Ash not allowed.
    - 1" maximum aggregate size.
    - 3% maximum entrained air.
    - 4" maximum slump (8" with super-plasticizer).
    - Water reducing agent (use in accordance with manufacturer's recommendations).
  - Mix 'B' For Footings, Grade Beams, and Miscellaneous Concrete
    - 3,500 psi minimum compressive strength at 28 days.
    - Type I/II Cement, minimum of 470 pounds per cubic yard.
    - 3/4" maximum aggregate size.
    - 6% maximum entrained air.
    - 4" maximum slump (8" with super-plasticizer).
- C. Reinforcing shall be new billet steel conform to ASTM A615, grade 60, except ties shall be grade 40. Provide not less than (2) #4 around all sides of all openings in concrete and extend 2'-0" past edges of openings. No splices of reinforcement are permitted except as detailed or authorized by the Engineer of Record. Where permitted use contact lap splices, (36) bar diameters minimum.
- D. For the proper placement of the reinforcement provide chairs, bolsters, additional reinforcement, and accessories necessary to support the reinforcement at the positions shown on plans. Support of reinforcement on form ties, wood, brick, brickbat or other unacceptable material, will not be permitted.
- E. Grout under base plates and bearing plates shall be high strength, non-shrink, non-metallic grout with a minimum compressive strength, at 28 days, of 7,500 psi.
- F. Reinforcement shall be placed so that the following minimum concrete cover is provided, unless noted otherwise.
  - 1) Concrete poured against earth. . . . . 3" Clear
  - 2) Formed surfaces exposed to earth or weather.
    - a) #6 Bars and larger. . . . . 2" Clear
    - b) #5 Bars and smaller. . . . . 1-1/2" Clear
  - 3) Concrete not exposed to earth or weather. . . . . 3/4" Clear
  - 4) Beams, columns, ties, stirrups or spirals around primary reinforcement, or primary reinforcement with no ties, stirrups or spirals. . . . . 1-1/2" Clear
  - 5) Slabs. . . . . Placed at center (U.N.O.)
- G. Welded Wire Fabric (WWF) shall conform to ASTM A185. Provide WWF in flat sheets, rolled sheets are not allowed. Where permitted use contact lap splices, (50) bar diameters minimum.
- H. Foundation walls below grade shall have backfill placed equally on both sides until the required levels are reached. Walls shall be appropriately shored when backfill is placed on one side only.
- I. Additional (2) #4 bars (one each face) with a 2'-0" projection shall be placed diagonally across the corners of all openings and at vertical steps in walls unless otherwise detailed on plans.
- J. The contractor is responsible for determining when it is safe to remove forms and/or shoring. Forms and shoring must not be removed until the walls are strong enough to support their own weight and any superimposed loads. For foundation walls, this typically requires 12 hours of cumulative curing time at a temperature of 50° F or more. Concrete must be adequately covered during cold periods to maintain this surface temperature. Due to varying weather conditions, alternative curing processes, and the use of Type I/II cement, GreenWorks Engineering suggests forms remain in place a minimum of 3 days to assure this performance specification has been met. When forms are stripped there must be no excessive deflection, distortion, discoloration and no evidence of damage to the concrete. Adequate thermal protection of the concrete shall be continued after stripping for a cumulative period of 48 hours at 50° F, or more, after the initial pour. See applicable notes for specifications on when to backfill foundation walls.

**K. Field Quality Control**

- 1) Reference standard: ACI 301 Chapters 16 and 17, in latest edition.
- 2) Slump tests: The contractor shall provide necessary equipment and shall make test in conformity with ASTM C143. The contractor shall make slump tests on the first concrete truck of each pour and as often as deemed necessary by the contractor to maintain the required slump when directed by the Architect or Engineer of Record.
- 3) Control tests:
  - a) Control tests of concrete work shall be made on every 50 cubic yards or fraction thereof of concrete placed and, in any case, minimum of once during each day's pour.
  - b) Each test shall consist of four standard 6" test cylinders cast and cured in accordance with ASTM C31 and ASTM C172.
  - c) Sample concrete at point of placement.
  - d) One cylinder shall be tested at the end of 7 days after placing, two cylinders shall be tested at 28 days after placing and the remaining cylinder shall be stored until its disposition is determined by the Architect.
  - e) In general, remaining cylinder will be tested only when previous test reports indicated unsatisfactory results.
  - f) Tests on remaining cylinder shall be at the expense of the contractor.
  - g) Architect and /or Engineer of Record reserves the right to stop future concrete work when the 7 or 28 day tests indicate unsatisfactory results until, in the opinion of the Architect and/or Engineer of Record, proper corrective measures have been taken to insure quality concrete in future work and corrections deemed necessary have been made.
  - h) Tests shall be made at time control tests are taken and so stated in reports to determine slump, air content, unit weight and temperature of concrete.
  - i) All tests shall be made in accordance with ASTM C138 or ASTM C231.
- 4) Slab tolerance: Maintain surface flatness with maximum variation of 1/8" in 20 feet.

**STRUCTURAL STEEL:**

- A. Structural steel, including cast in angles, plates or other sections shall be detailed and erected in accordance with the American Institute of Steel Construction (AISC) Specifications and Code of Standard Practice, latest edition.
- B. All wide flange and channel structural steel shall conform to ASTM A992. All HSS members shall conform to ASTM A500, Grade-B. Pipe columns shall conform to ASTM A53, Grade-B. All other structural shapes and miscellaneous steel shall conform to ASTM A36 unless otherwise noted.
- C. Column base plates shall be set on 1 1/2" non-shrink high density grout with a minimum of (4) 3/4"Ø x 1'-0" anchor bolts, unless noted otherwise.
- D. Shop connections shall be welded with E70xx electrodes and ground smooth where exposed. Field connections shall be made with bolts conforming to ASTM A325N unless otherwise noted. Field welds shall be made with E70xx electrodes. All welding shall be in accordance with AWS "Structural Welding Code", latest edition and performed by certified, licensed welder.
- E. All beam connections not detailed on the drawings shall be standard framed beam connections as shown in Table II and III of the AISC "Manual of Steel Construction", latest edition, designed to carry the full capacity of the uniformly loaded member, unless noted otherwise.
- F. Headed stud anchors shall conform to AWS D1.1 and shall be automatically end welded.
- G. Steel stairs to be detailed and designed by others unless noted otherwise. Stair detailer shall provide shop drawings and calculations prepared and stamped by a structural engineer registered in the state of Texas, for review by the Engineer of Record to verify they conform to the requirements of the basic structure. Fabrication shall not proceed until completion of shop drawing review by the Engineer of Record.
- H. All exposed structural steel shall be hot dipped galvanized.
- I. Field Quality Control: Inspect in accordance with AISC specifications. Materials engineer shall visually inspect all field welded connections and visually inspect all bolted connections to ascertain that all welds, bolts, nuts and required washers have been installed and are of proper type and that all facing surfaces have been brought into snug contact.

**WOOD:**

- A. Framing lumber shall be Southern Pine (unless noted otherwise) and as follows or better:
  - 2x4 studs . . . . . Stud Grade
  - 2x6 or larger studs. . . . . #2 Grade
  - Plates. . . . . #3 Grade
  - Joists and Rafters . . . . . #2 Grade
  - 2x and 4x Beams . . . . . #2 Grade
  - 6x or larger Beams . . . . . #1 Grade Beam and Stringer
  - Glue-Lam Beams . . . . . 24F-V4 DF/DF unless noted otherwise
  - Posts. . . . . #1 Grade Post and Timber
  - LVL . . . . . 2.0 E - Fb 2800
- B. All wood construction shall be in conformance with the provisions of "The National Design Specification for Wood Construction", latest edition.
- C. Laminated Veneer Lumber (LVL) and prefab joists shall be manufactured by 'TrusJoist' or equivalent or shall meet APA Performance Standards, and installed per manufacturers specifications. Supplier shall furnish shop drawings showing all joists, bridging, blocking and miscellaneous accessories for review by the structural engineer prior to fabrication.
- D. Where not otherwise shown on plans, all nailing or screwing shall be as indicated in the current Building Code. All sheathing must be nailed. Adhesives **SHALL NOT** be used in place of nailing.
- E. Metal connectors to be provided by 'Simpson Strong-Tie' or equivalent.
- F. APA rated OSB may be used in lieu of plywood with prior approval from Engineer of Record.
- G. Minimum treatment for pressure treated lumber shall be as follows:
  - 1) Wood not in contact with soil . . . . . 0.25 ACQ
  - 2) Wood in contact with soil . . . . . 0.40 ACQ
- H. Pressure treated lumber that has been cut shall be site treated at each cut.
- I. Bolt holes in lumber shall be drilled as bolt diameter plus 1/16".

**METAL WOOD FRAMING HARDWARE:**

- A. All metal wood framing hardware shall be provided by 'Simpson Strong-Tie' or equivalent.
- B. All metal hardware shall be installed per manufacturer's recommendations.
- C. All metal fasteners and hardware in contact with pressure treated lumber shall be Hot Dipped Galvanized or ZMax coated (G=185).

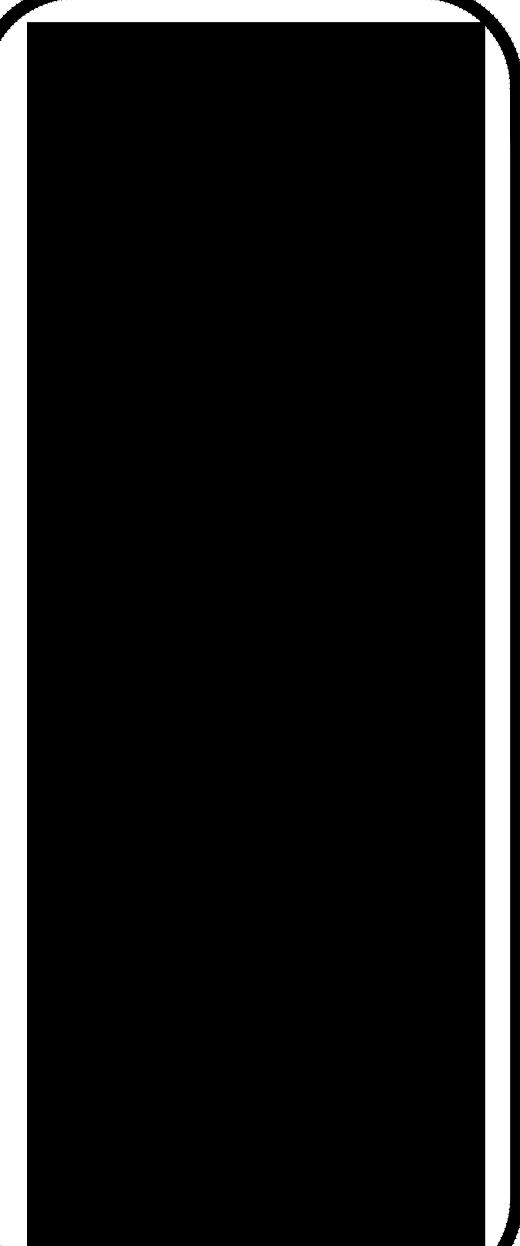
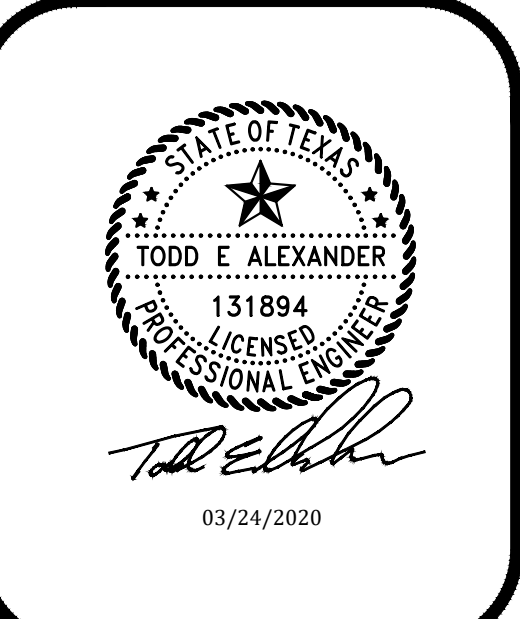
**SHEATHING and DECKING:**

- A. Roof sheathing/decking shall be a minimum of 7/16" thick CDX plywood or APA rated O.S.B. C-D interior grade with exterior glue. Minimum panel span rating of 48/24.
- B. Floor sheathing/decking shall be a minimum of 23/32" thick CDX plywood or APA rated O.S.B. C-D interior grade with exterior glue. Minimum panel span rating of 48/24.
- C. Gypsum sheathing for shear walls shall be a minimum of 1/2" thick and free of imperfections and shall conform to ASTM C79.
- D. Exterior wall sheathing shall be a minimum of 7/16" thick plywood or APA rated O.S.B.

**WIRE NAILS:**

- A. Nail installation and materials shall be in compliance with A.I.T.C., NDS, and all applicable building code requirements.
- B. Gun nails may be used in lieu of hand nailing. Gun nail substitutions shall be as follows:
  - 8d . . . . . 0.113" x 2.5"
  - 10d . . . . . 0.123" x 3.0"
  - 12d . . . . . 0.123" x 3.25"
  - 16d . . . . . 0.133" x 3.5"
- C. Nails shall have a minimum penetration of 10 times the wire diameter unless noted otherwise on the plans.
- D. Edge distance for all nails shall be a minimum of 4 times the wire diameter unless noted otherwise on the plans.
- E. All nails listed /specified on the plans shall be Common.

STRUCTURAL LEGEND	
	DETAIL # OR LETTER
	SHEET DETAIL IS ON
	Ø DIAMETER
	(D) DROPPED BEAM
	B1 BEAM/HDR SCHEDULE
	E.N. EDGE NAILING
	S1 SHEAR WALL SCHEDULE
	EXIST. EXISTING
	C1 COL/POST SCHEDULE
	F.F. FINISH FLOOR
	(F) FLUSH BEAM
	G.T. GIRDER TRUSS
	HSS HOLLOW STRUCTURAL SECTION
	K KING STUD
	K.P. KING POST
	L.L.H. LONG LEG HORIZONTAL
	L.L.V. LONG LEG VERTICAL
	LVL LAMINATED VENEER LUMBER
	O.C. ON CENTER
	O.S.B. ORIENTED STRAND BOARD
	PL PLATE
	P.T. PRESSURE TREATED
	REV REVERSE
	R.S. RING SHANK
	SIM SIMILAR
	S.P.N. SILL PLATE NAILING
	T TRIMMER
	TYP TYPICAL
	U.N.O. UNLESS NOTED OTHERWISE



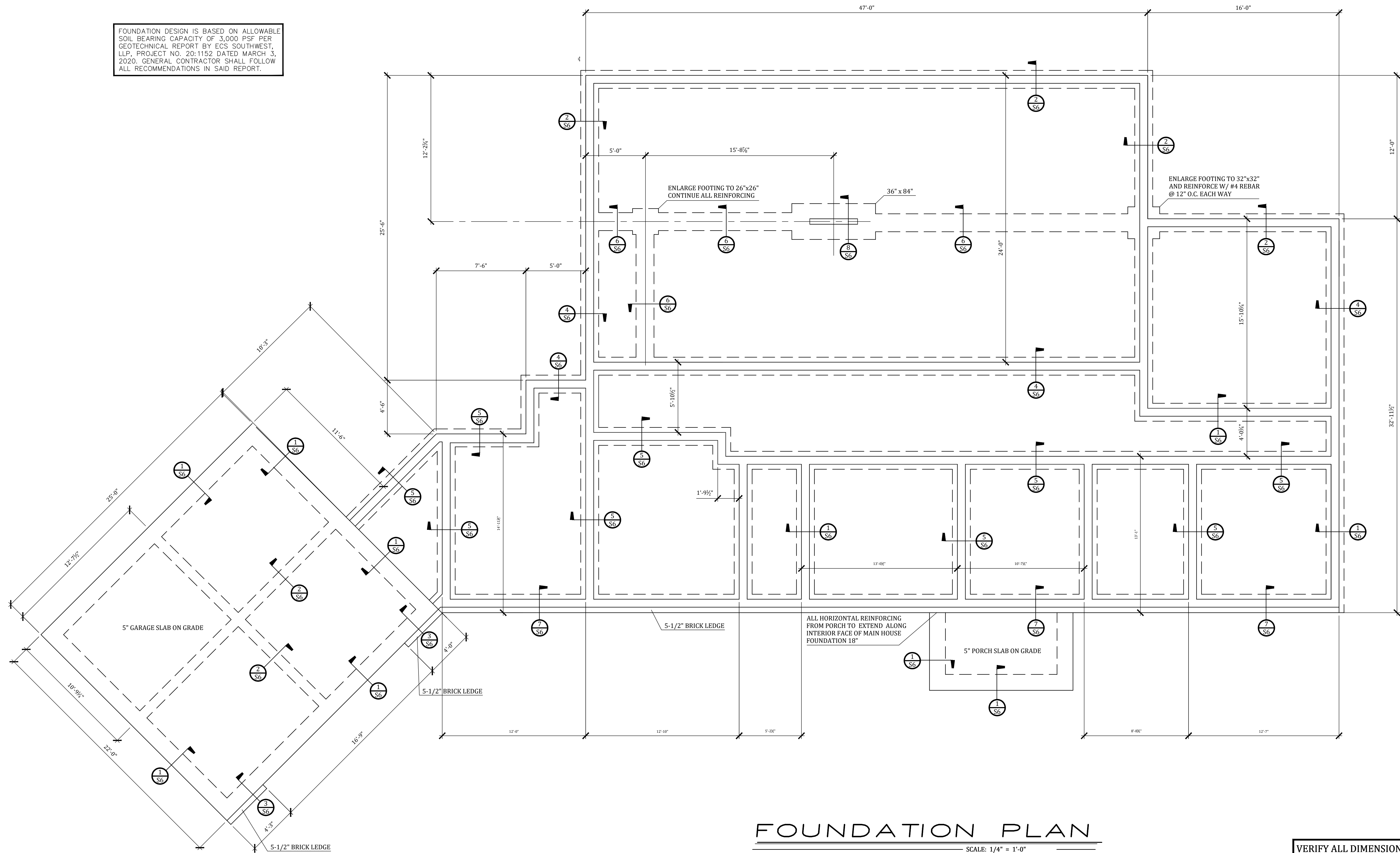
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 DRAWN BY: TEA  
 PRINTING: DATE:  
 SUBMITTAL 03/24/2020

REVISION: DATE:

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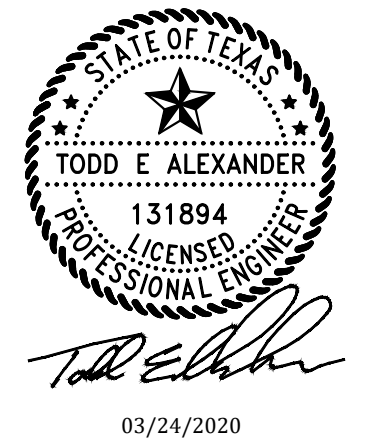


FOUNDATION DESIGN IS BASED ON ALLOWABLE SOIL BEARING CAPACITY OF 3,000 PSF PER GEOTECHNICAL REPORT BY ECS SOUTHWEST, LLP, PROJECT NO. 20:1152 DATED MARCH 3, 2020. GENERAL CONTRACTOR SHALL FOLLOW ALL RECOMMENDATIONS IN SAID REPORT.



**FOUNDATION PLAN**  
SCALE: 1/4" = 1'-0"

VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION



ENGINEER:	TEA
DRAWN BY:	TEA
PRINTING:	DATE:
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REVISION:	DATE:

BEAM / HEADER SCHEDULE	
NOTE: MEMBERS ARE ASSUMED TO BE DROPPED UNLESS NOTED OTHERWISE	
B1	(2) 2x6
B2	(2) 2x8
B3	(2) 2x10
B4	(2) 2x12
B5	(1) 1-3/4" x 7-1/4" 2.0E-2800 DF LVL
B6	(2) 1-3/4" x 7-1/4" 2.0E-2800 DF LVL
B7	(1) 1-3/4" x 9-1/2" 2.0E-2800 DF LVL
B8	(2) 1-3/4" x 9-1/2" 2.0E-2800 DF LVL
B9	(3) 1-3/4" x 9-1/2" 2.0E-2800 DF LVL
B10	(2) 1-3/4" x 11-7/8" 2.0E-2800 DF LVL
B11	(1) 1-3/4" x 14" 2.0E-2800 DF LVL
B12	(2) 1-3/4" x 14" 2.0E-2800 DF LVL
B13	(3) 1-3/4" x 14" 2.0E-2800 DF LVL
B14	(1) 14" TJI I-JOISTS SERIES 110
B15	(2) 14" TJI I-JOISTS SERIES 110
B16	(3) 2x8
B17	(1) 2x6 RAFTER BEAM
B18	(1) 2x8 RAFTER BEAM
B19	W 12x72
B20	(3) 1-3/4" x 11-7/8" 2.0E-2800 DF LVL

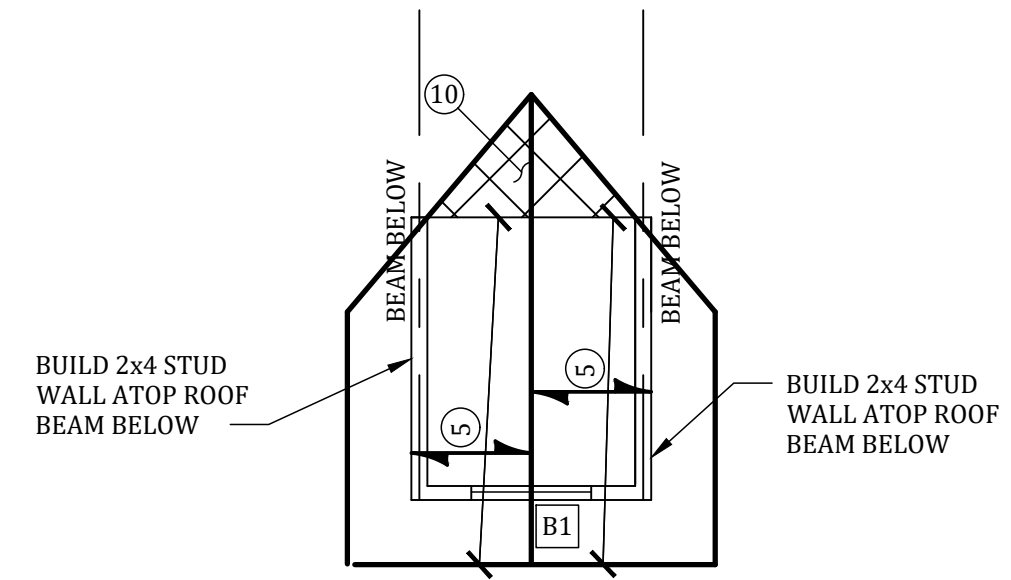
COLUMN SCHEDULE	
NOTE: COLUMN CALLOUTS SHOWN @ ENDS OF WINDOWS / DOORS TO BE INTERPRETED AS TRIMMER/JACK STUD	
C1	(2) 2x4
C2	(3) 2x4
C3	(4) 2x4
C4	(2) 2x6
C5	(3) 2x6
C6	(4) 2x6
C7	8x8 POST
C8	(8) 2x6
C9	HSS 5x5x1/4 (STEEL COLUMN)
C10	4x4 PRESSURE TREATED

HANGER SCHEDULE	
NOTE: HANGERS SHALL BE SIMPSON STRONG-TIE HANGERS OR EQUIVALENT	
H1	LRU210Z
H2	LRU28Z
H3	LRU26Z
H4	LUS26
H5	LUS28
H6	ITS1.81/14 PLACED UPSIDE DOWN WITH THE TOP FLANGE AT THE BOTTOM OF THE RIM BOARD
H7	HU414
H8	HUC28-2 (INVERTED FLANGES)
H9	IUS1.81/14
H10	HUC26-2 (INVERTED FLANGES)
H11	LUS210
H12	TJC37

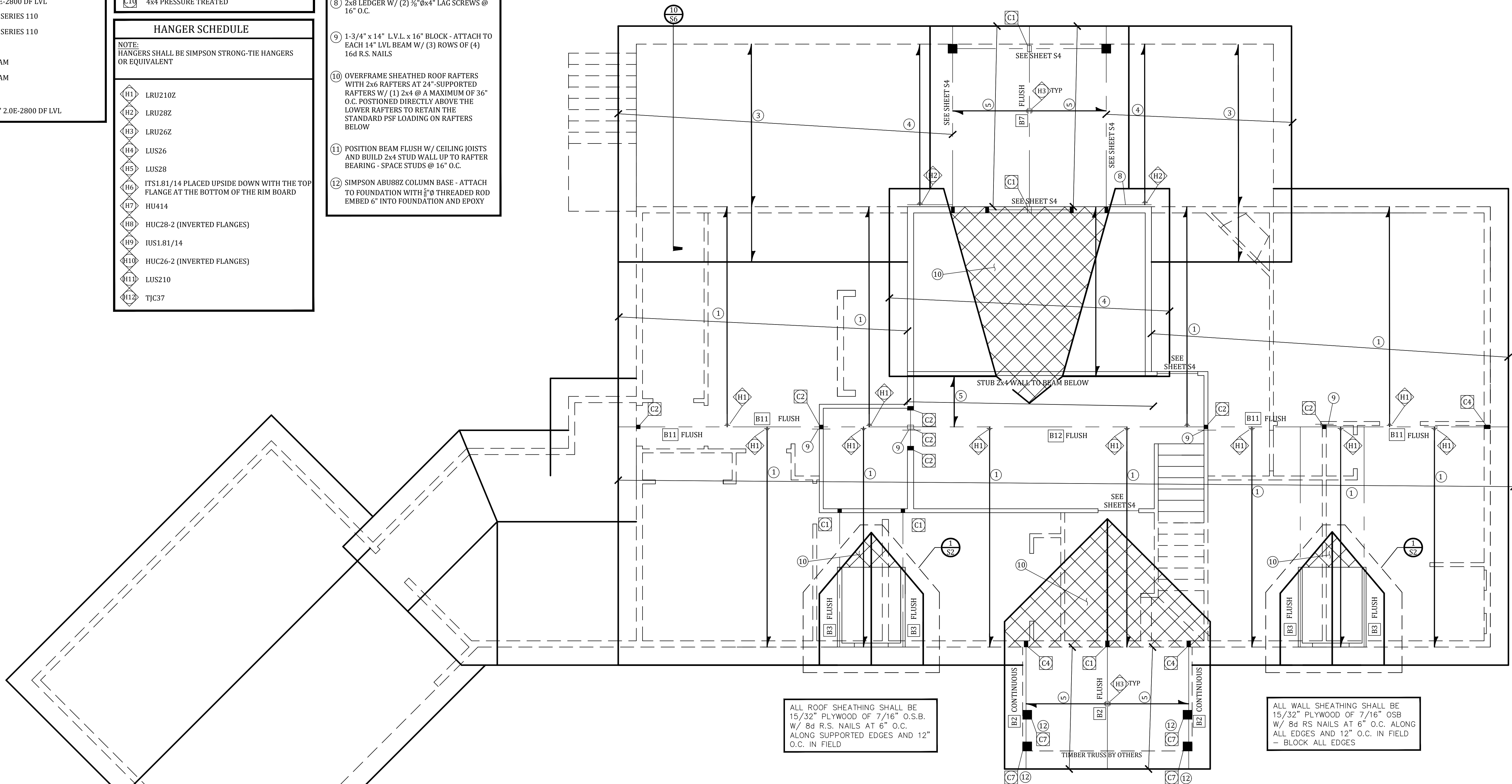
- PLAN NOTES**
- 2x10 SP#2 RAFTERS @ 24" O.C.
  - 2x8 SP#2 RAFTERS @ 24" O.C. - ALIGN WITH UPPER RAFTERS ABOVE
  - 2x8 SP#2 RAFTERS @ 24" O.C. - ALIGN WITH UPPER RAFTERS ABOVE
  - 2x8 SP#2 RAFTERS @ 24" O.C.
  - 2x6 SP#2 RAFTERS @ 24" O.C.
  - 2x6 SP#2 RAFTERS @ 24" O.C. - ATTACH W/ (3) 16d R.S. NAILS TOE-NAILED EACH END
  - 2x6 LEDGER W/ (2) 3/8" Øx4" LAG SCREWS @ 16" O.C.
  - 2x8 LEDGER W/ (2) 3/8" Øx4" LAG SCREWS @ 16" O.C.
  - 1-3/4" x 14" L.V.L. x 16" BLOCK - ATTACH TO EACH 14" LVL BEAM W/ (3) ROWS OF (4) 16d R.S. NAILS
  - OVERFRAME SHEATHED ROOF RAFTERS WITH 2x6 RAFTERS AT 24" SUPPORTED RAFTERS W/ (1) 2x4 @ A MAXIMUM OF 36" O.C. POSITIONED DIRECTLY ABOVE THE LOWER RAFTERS TO RETAIN THE STANDARD PSF LOADING ON RAFTERS BELOW
  - POSITION BEAM FLUSH W/ CEILING JOISTS AND BUILD 2x4 STUD WALL UP TO RAFTER BEARING - SPACE STUDS @ 16" O.C.
  - SIMPSON ABUB8Z COLUMN BASE - ATTACH TO FOUNDATION WITH 3/8" Ø THREADED ROD EMBED 6" INTO FOUNDATION AND EPOXY

ALL EXTERIOR WALLS TO BE 2x6 STUDS AT 16" O.C.

ALL INTERIOR WALLS TO BE 2x4 STUDS AT 16" O.C. - U.N.O.



**1 DORMER ROOF**  
S2 SCALE: 1/4" = 1'-0"

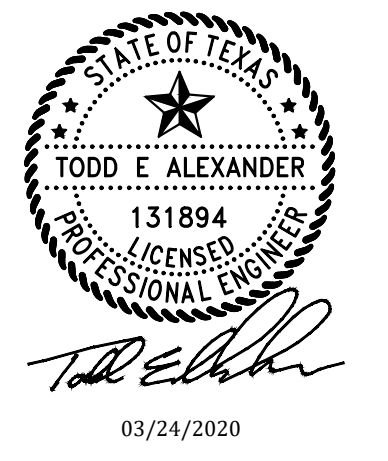


ALL ROOF SHEATHING SHALL BE 15/32" PLYWOOD OF 7/16" O.S.B. W/ 8d R.S. NAILS AT 6" O.C. ALONG SUPPORTED EDGES AND 12" O.C. IN FIELD

ALL WALL SHEATHING SHALL BE 15/32" PLYWOOD OF 7/16" OSB W/ 8d RS NAILS AT 6" O.C. ALONG ALL EDGES AND 12" O.C. IN FIELD - BLOCK ALL EDGES

**UPPER ROOF FRAMING PLAN**  
SCALE: 1/4" = 1'-0"

**GREENWORKS**  
ENGINEERING & CONSULTING  
600 N Pearl Street  
Suite 51900  
Dallas, Texas 75201  
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BEAM / HEADER SCHEDULE	
NOTE: MEMBERS ARE ASSUMED TO BE DROPPED UNLESS NOTED OTHERWISE	
B1	(2) 2x6
B2	(2) 2x8
B3	(2) 2x10
B4	(2) 2x12
B5	(1) 1-3/4" x 7-1/4" 2.0E-2800 DF LVL
B6	(2) 1-3/4" x 7-1/4" 2.0E-2800 DF LVL
B7	(1) 1-3/4" x 9-1/2" 2.0E-2800 DF LVL
B8	(2) 1-3/4" x 9-1/2" 2.0E-2800 DF LVL
B9	(3) 1-3/4" x 9-1/2" 2.0E-2800 DF LVL
B10	(2) 1-3/4" x 11-7/8" 2.0E-2800 DF LVL
B11	(1) 1-3/4" x 14" 2.0E-2800 DF LVL
B12	(2) 1-3/4" x 14" 2.0E-2800 DF LVL
B13	(3) 1-3/4" x 14" 2.0E-2800 DF LVL
B14	(1) 14" TJI I-JOISTS SERIES 110
B15	(2) 14" TJI I-JOISTS SERIES 110
B16	(3) 2x8
B17	(1) 2x6 RAFTER BEAM
B18	(1) 2x8 RAFTER BEAM
B19	W 12x72
B20	(3) 1-3/4" x 11-7/8" 2.0E-2800 DF LVL

COLUMN SCHEDULE	
NOTE: COLUMN CALLOUTS SHOWN @ ENDS OF WINDOWS / DOORS TO BE INTERPRETED AS TRIMMER/JACK STUD	
C1	(2) 2x4
C2	(3) 2x4
C3	(4) 2x4
C4	(2) 2x6
C5	(3) 2x6
C6	(4) 2x6
C7	8x8 POST
C8	(8) 2x6
C9	HSS 5x5x1/4 (STEEL COLUMN)
C10	4x4 PRESSURE TREATED

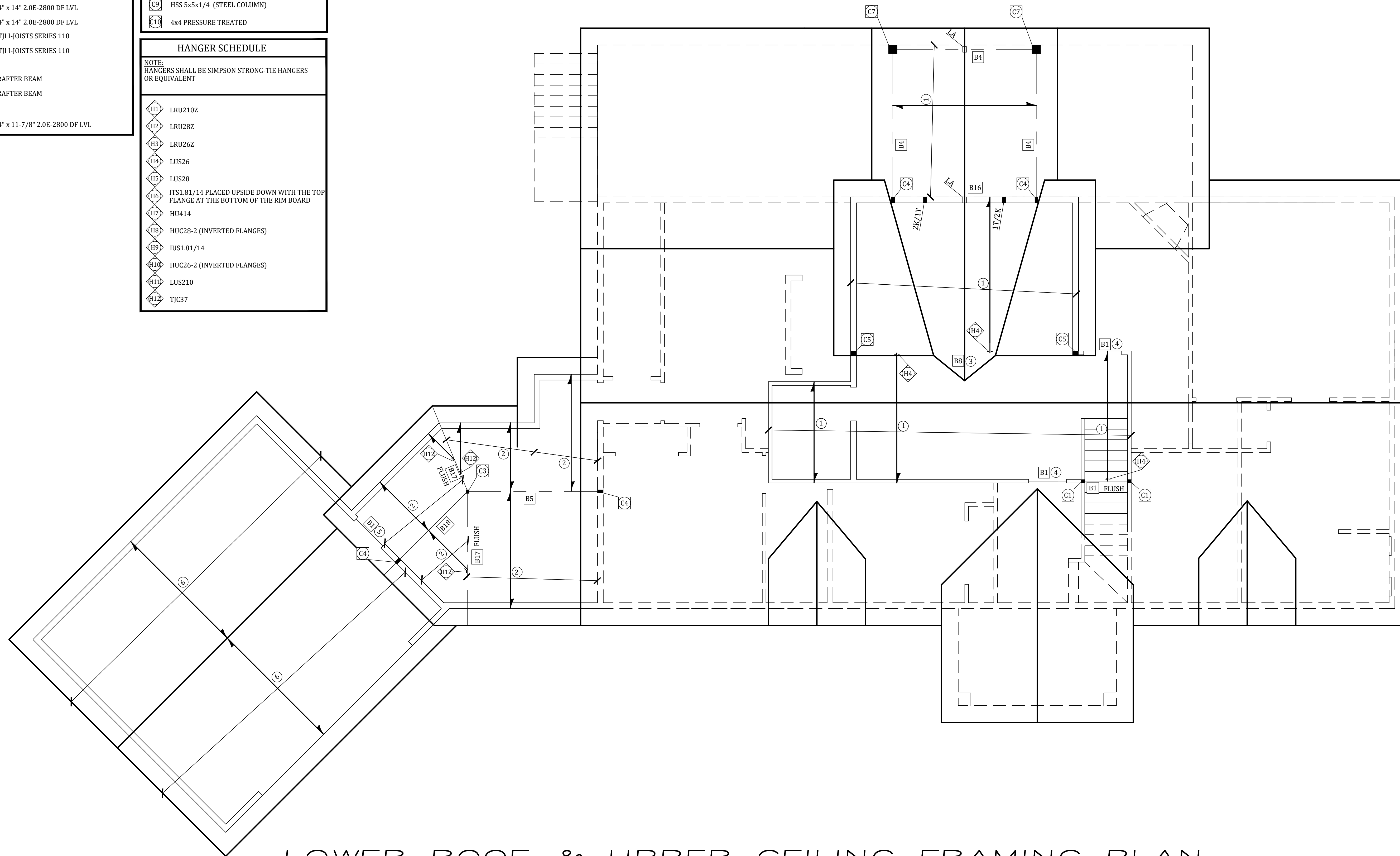
HANGER SCHEDULE	
NOTE: HANGERS SHALL BE SIMPSON STRONG-TIE HANGERS OR EQUIVALENT	
H1	LRU210Z
H2	LRU28Z
H3	LRU26Z
H4	LUS26
H5	LUS28
H6	ITS1.81/14 PLACED UPSIDE DOWN WITH THE TOP FLANGE AT THE BOTTOM OF THE RIM BOARD
H7	HU414
H8	HUC28-2 (INVERTED FLANGES)
H9	IUS1.81/14
H10	HUC26-2 (INVERTED FLANGES)
H11	LUS210
H12	TJC37

PLAN NOTES	
1	2x6 SP#2 CEILING JOISTS @ 24" O.C.
2	2x6 SP#2 RAFTERS @ 24" O.C.
3	POSITION BEAM FLUSH W/ CEILING JOISTS AND BUILD 2x4 STUD WALL UP TO RAFTER BEARING - SPACE STUDS @ 16" O.C.
4	(1) 2x4 TRIMMER AND (1) 2x4 KING STUD EACH END
5	(1) 2x6 TRIMMER AND (1) 2x6 KING STUD EACH END
6	2x8 SP#2 RAFTERS @ 24" O.C.

ALL WALL SHEATHING SHALL BE 15/32" PLYWOOD OF 7/16" OSB W/ 8d RS NAILS AT 6" O.C. ALONG ALL EDGES AND 12" O.C. IN FIELD - BLOCK ALL EDGES

ALL EXTERIOR WALLS TO BE 2x6 STUDS AT 16" O.C.

ALL INTERIOR WALLS TO BE 2x4 STUDS AT 16" O.C. - U.N.O.

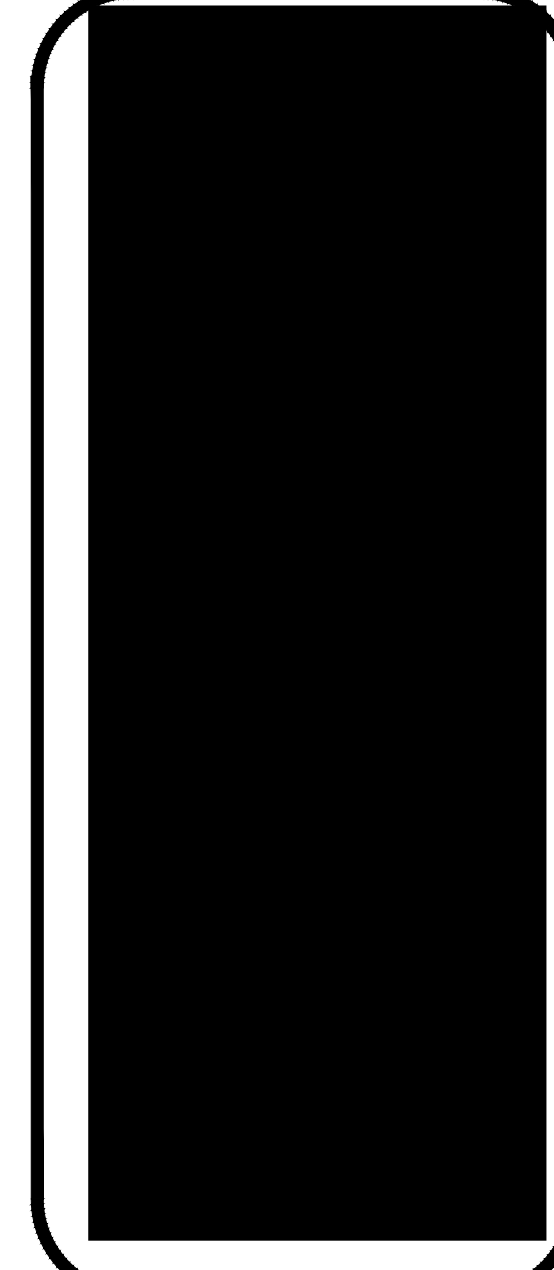


**LOWER ROOF & UPPER CEILING FRAMING PLAN**

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

**GREENWORKS**  
ENGINEERING & CONSULTING  
600 N Pearl Street  
Suite 51900  
Dallas, Texas 75201  
Texas Eng. Firm: 20170 (855) 349-6757

STATE OF TEXAS  
TODD E. ALEXANDER  
131894  
LICENSED PROFESSIONAL ENGINEER  
*Todd Alexander*  
03/24/2020



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OF 7  
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BEAM / HEADER SCHEDULE	
NOTE: MEMBERS ARE ASSUMED TO BE DROPPED UNLESS NOTED OTHERWISE	
B1	(2) 2x6
B2	(2) 2x8
B3	(2) 2x10
B4	(2) 2x12
B5	(1) 1-3/4" x 7-1/4" 2.0E-2800 DF LVL
B6	(2) 1-3/4" x 7-1/4" 2.0E-2800 DF LVL
B7	(1) 1-3/4" x 9-1/2" 2.0E-2800 DF LVL
B8	(2) 1-3/4" x 9-1/2" 2.0E-2800 DF LVL
B9	(3) 1-3/4" x 9-1/2" 2.0E-2800 DF LVL
B10	(2) 1-3/4" x 11-7/8" 2.0E-2800 DF LVL
B11	(1) 1-3/4" x 14" 2.0E-2800 DF LVL
B12	(2) 1-3/4" x 14" 2.0E-2800 DF LVL
B13	(3) 1-3/4" x 14" 2.0E-2800 DF LVL
B14	(1) 14" TJI I-JOISTS SERIES 110
B15	(2) 14" TJI I-JOISTS SERIES 110
B16	(3) 2x8
B17	(1) 2x6 RAFTER BEAM
B18	(1) 2x8 RAFTER BEAM
B19	W 12x72
B20	(3) 1-3/4" x 11-7/8" 2.0E-2800 DF LVL

COLUMN SCHEDULE	
NOTE: COLUMN CALL OUTS SHOWN @ ENDS OF WINDOWS / DOORS TO BE INTERPRETED AS TRIMMER/JACK STUD	
C1	(2) 2x4
C2	(3) 2x4
C3	(4) 2x4
C4	(2) 2x6
C5	(3) 2x6
C6	(4) 2x6
C7	8x8 POST
C8	(8) 2x6
C9	HSS 5x5x1/4 (STEEL COLUMN)
C10	4x4 PRESSURE TREATED

HANGER SCHEDULE	
NOTE: HANGERS SHALL BE SIMPSON STRONG-TIE HANGERS OR EQUIVALENT	
H1	LRU210Z
H2	LRU28Z
H3	LRU26Z
H4	LUS26
H5	LUS28
H6	ITS1.81/14 PLACED UPSIDE DOWN WITH THE TOP FLANGE AT THE BOTTOM OF THE RIM BOARD
H7	HU414
H8	HUC28-2 (INVERTED FLANGES)
H9	IUS1.81/14
H10	HUC26-2 (INVERTED FLANGES)
H11	LUS210
H12	TJC37

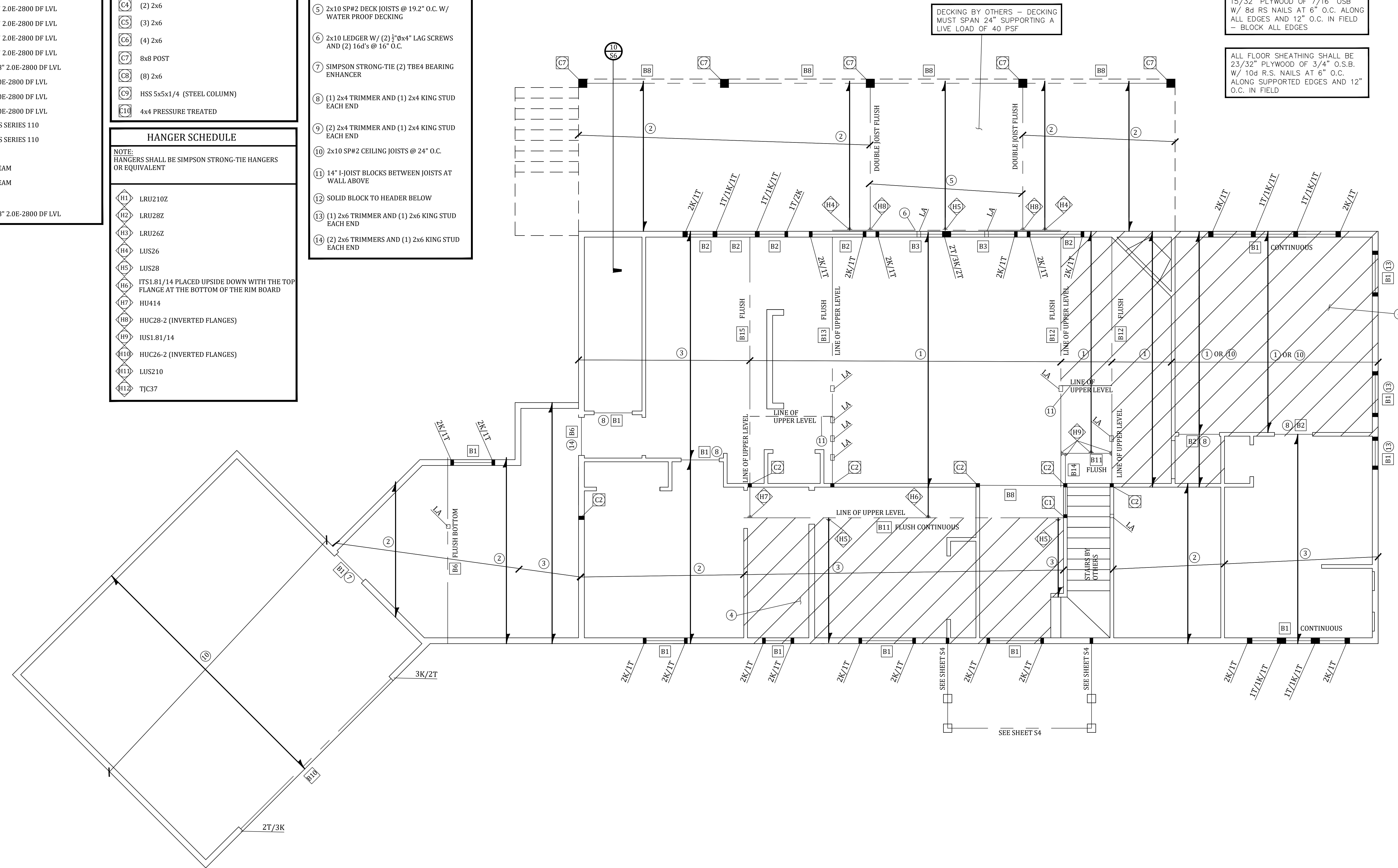
- PLAN NOTES**
- 14" TJI I-JOIST SERIES 110 @ 16" O.C.
  - 2x6 SP#2 CEILING JOISTS @ 24" O.C.
  - 2x8 SP#2 CEILING JOISTS @ 24" O.C.
  - MECHANICAL ROOM CEILING JOISTS DESIGNED FOR FLOOR LOAD
  - 2x10 SP#2 DECK JOISTS @ 19.2" O.C. W/ WATER PROOF DECKING
  - 2x10 LEDGER W/ (2) 1/2" Øx4" LAG SCREWS AND (2) 16d's @ 16" O.C.
  - SIMPSON STRONG-TIE (2) TBE4 BEARING ENHANCER
  - (1) 2x4 TRIMMER AND (1) 2x4 KING STUD EACH END
  - (2) 2x4 TRIMMER AND (1) 2x4 KING STUD EACH END
  - 2x10 SP#2 CEILING JOISTS @ 24" O.C.
  - 14" I-JOIST BLOCKS BETWEEN JOISTS AT WALL ABOVE
  - SOLID BLOCK TO HEADER BELOW
  - (1) 2x6 TRIMMER AND (1) 2x6 KING STUD EACH END
  - (2) 2x6 TRIMMERS AND (1) 2x6 KING STUD EACH END

ALL EXTERIOR WALLS TO BE 2x6 STUDS AT 16" O.C.

ALL INTERIOR WALLS TO BE 2x4 STUDS AT 16" O.C. - U.N.O.

ALL WALL SHEATHING SHALL BE 15/32" PLYWOOD OF 7/16" OSB W/ 8d RS NAILS AT 6" O.C. ALONG ALL EDGES AND 12" O.C. IN FIELD - BLOCK ALL EDGES

ALL FLOOR SHEATHING SHALL BE 23/32" PLYWOOD OF 3/4" O.S.B. W/ 10d R.S. NAILS AT 6" O.C. ALONG SUPPORTED EDGES AND 12" O.C. IN FIELD



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TODD E. ALEXANDER  
131894  
LICENSED PROFESSIONAL ENGINEER

*T. Alexander*

03/24/2020

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PROJ. No. 16522

**FLOOR & LOWER CEILING FRAMING PLAN**

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



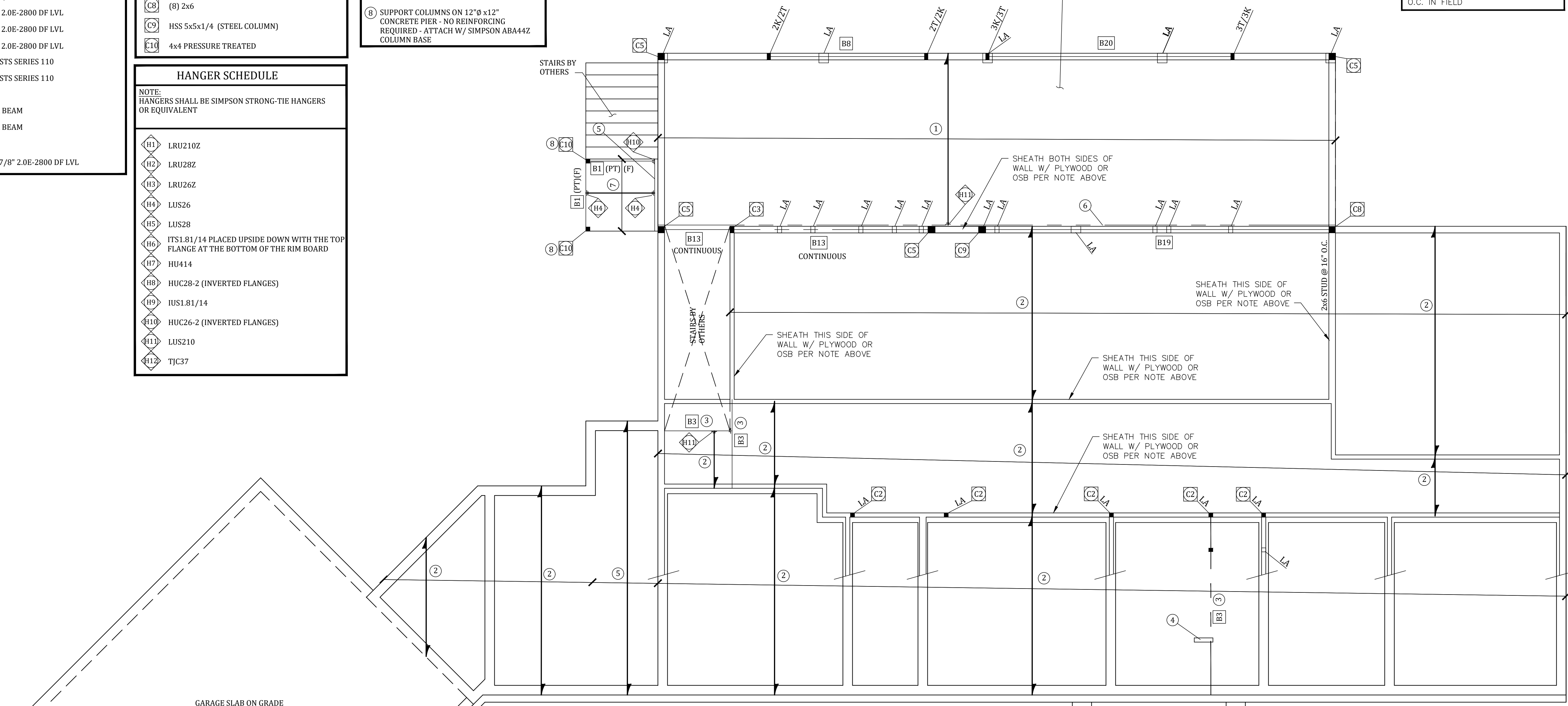
BEAM / HEADER SCHEDULE	
NOTE: MEMBERS ARE ASSUMED TO BE DROPPED UNLESS NOTED OTHERWISE	
B1	(2) 2x6
B2	(2) 2x8
B3	(2) 2x10
B4	(2) 2x12
B5	(1) 1-3/4" x 7-1/4" 2.0E-2800 DF LVL
B6	(2) 1-3/4" x 7-1/4" 2.0E-2800 DF LVL
B7	(1) 1-3/4" x 9-1/2" 2.0E-2800 DF LVL
B8	(2) 1-3/4" x 9-1/2" 2.0E-2800 DF LVL
B9	(3) 1-3/4" x 9-1/2" 2.0E-2800 DF LVL
B10	(2) 1-3/4" x 11-7/8" 2.0E-2800 DF LVL
B11	(1) 1-3/4" x 14" 2.0E-2800 DF LVL
B12	(2) 1-3/4" x 14" 2.0E-2800 DF LVL
B13	(3) 1-3/4" x 14" 2.0E-2800 DF LVL
B14	(1) 14" TJI I-JOISTS SERIES 110
B15	(2) 14" TJI I-JOISTS SERIES 110
B16	(3) 2x8
B17	(1) 2x6 RAFTER BEAM
B18	(1) 2x8 RAFTER BEAM
B19	W 12x72
B20	(3) 1-3/4" x 11-7/8" 2.0E-2800 DF LVL

COLUMN SCHEDULE	
NOTE: COLUMN CALLOUTS SHOWN @ ENDS OF WINDOWS / DOORS TO BE INTERPRETED AS TRIMMER/JACK STUD	
C1	(2) 2x4
C2	(3) 2x4
C3	(4) 2x4
C4	(2) 2x6
C5	(3) 2x6
C6	(4) 2x6
C7	8x8 POST
C8	(8) 2x6
C9	HSS 5x5x1/4 (STEEL COLUMN)
C10	4x4 PRESSURE TREATED

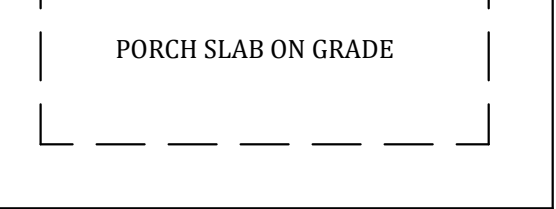
HANGER SCHEDULE	
NOTE: HANGERS SHALL BE SIMPSON STRONG-TIE HANGERS OR EQUIVALENT	
H1	LRU210Z
H2	LRU28Z
H3	LRU26Z
H4	LUS26
H5	LUS28
H6	ITS1.81/14 PLACED UPSIDE DOWN WITH THE TOP FLANGE AT THE BOTTOM OF THE RIM BOARD
H7	HU414
H8	HUC28-2 (INVERTED FLANGES)
H9	IUS1.81/14
H10	HUC26-2 (INVERTED FLANGES)
H11	LUS210
H12	TJC37

- PLAN NOTES**
- 2x10 SP#2 DECK JOISTS @ 19.2" O.C. W/ WATER PROOF DECKING
  - 2x10 SP#2 FLOOR JOISTS @ 16" O.C.
  - FLUSH BEAM
  - 2x10 BLOCKS BETWEEN FLOOR JOISTS AT LOAD BEARING WALL ABOVE
  - 2x6 PRESSURED TREATED LEDGER W/ (1) 1/2" x 4" LAG SCREWS AT 16" O.C.
  - 2x10 LEDGER W/ (2) 1/2" x 4" LAG SCREWS AND (2) 16d's @ 16" O.C.
  - 2x6 PRESSURE TREATED SP#2 DECK JOISTS @ 24" O.C.
  - SUPPORT COLUMNS ON 12" x 12" CONCRETE PIER - NO REINFORCING REQUIRED - ATTACH W/ SIMPSON ABA44Z COLUMN BASE

- ALL EXTERIOR WALLS TO BE 2x6 STUDS AT 16" O.C.
- ALL INTERIOR WALLS TO BE 2x4 STUDS AT 16" O.C. - U.N.O.
- ALL WALL SHEATHING SHALL BE 15/32" PLYWOOD OF 7/16" OSB W/ 8d RS NAILS AT 6" O.C. ALONG ALL EDGES AND 12" O.C. IN FIELD - BLOCK ALL EDGES
- ALL FLOOR SHEATHING SHALL BE 23/32" PLYWOOD OF 3/4" O.S.B. W/ 10d R.S. NAILS AT 6" O.C. ALONG SUPPORTED EDGES AND 12" O.C. IN FIELD



GARAGE SLAB ON GRADE



PORCH SLAB ON GRADE

PLACE A DOUBLE JOIST UNDER WALLS ABOVE OR 2x10 BLOCKS AT 36" O.C. BETWEEN JOISTS AT WALLS ABOVE

ALL SILL PLATES TO BE PRESSURE TREATED SP #2 AND MATCH THE WALL SIZE ABOVE - (2x4 MINIMUM SIZE TO BE USED)

ANCHOR BOLTS SHALL BE 3/8" GALVANIZED J-BOLTS @ 48" O.C. W/ A MINIMUM EMBEDMENT OF 8"

OPTIONALLY 3/8" GALVANIZED THREADED ROD CAN BE SUBSTITUTED FOR THE J-BOLT - EMBED THE THREADED ROD 8" AND EPOXY W/ SIMPSON STRONG-TIE SET-XP EPOXY THE J-BOLTS CAN BE

# MAIN FLOOR FRAMING PLAN

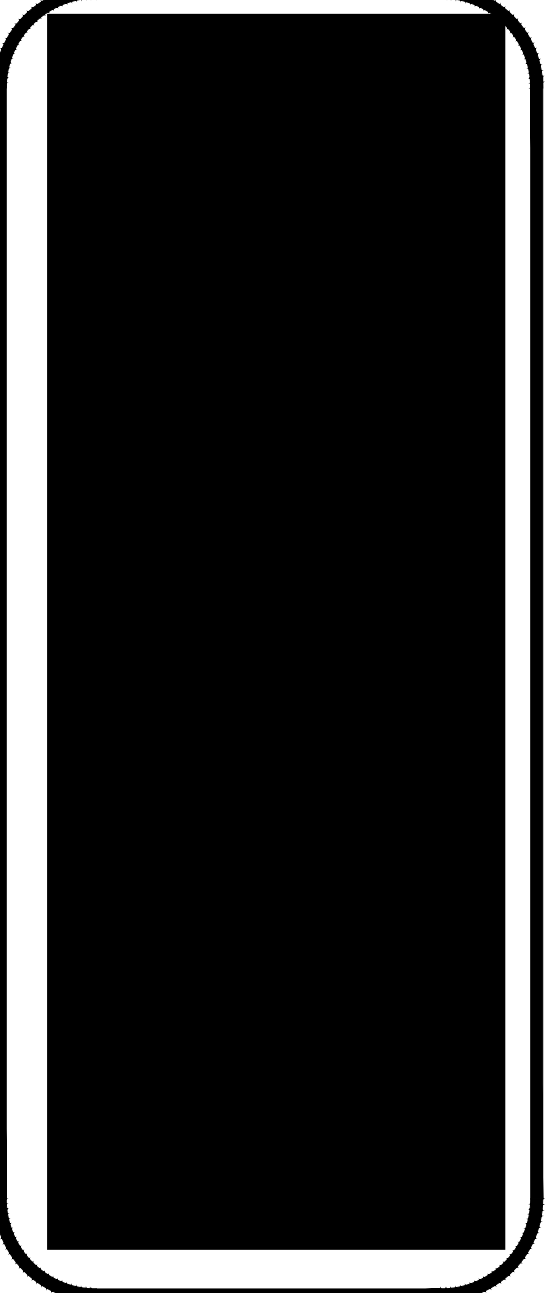
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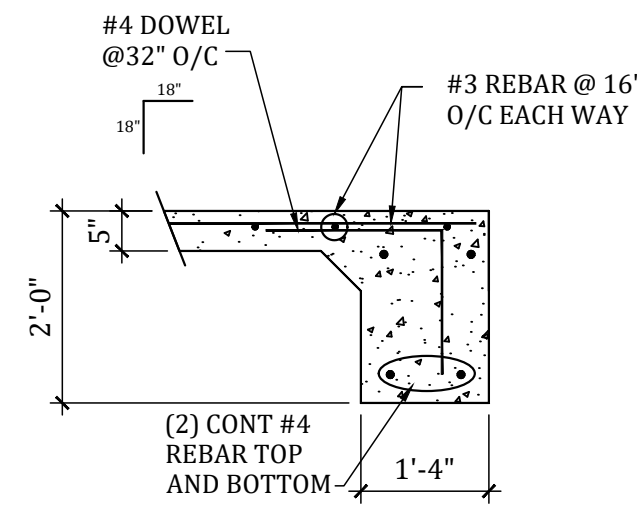
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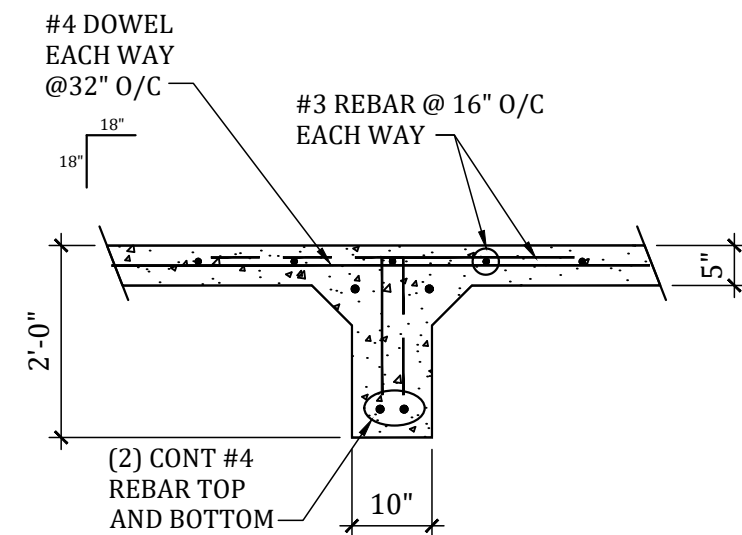
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OF 7

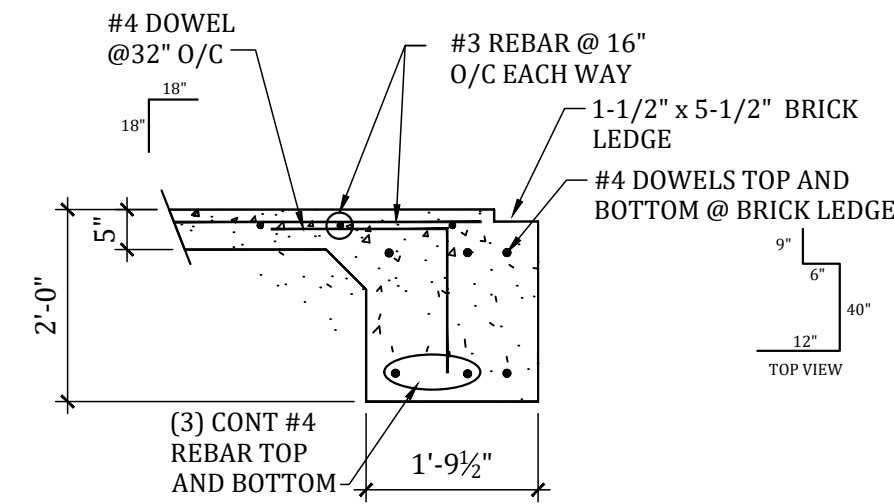
PROJ. No. 16522



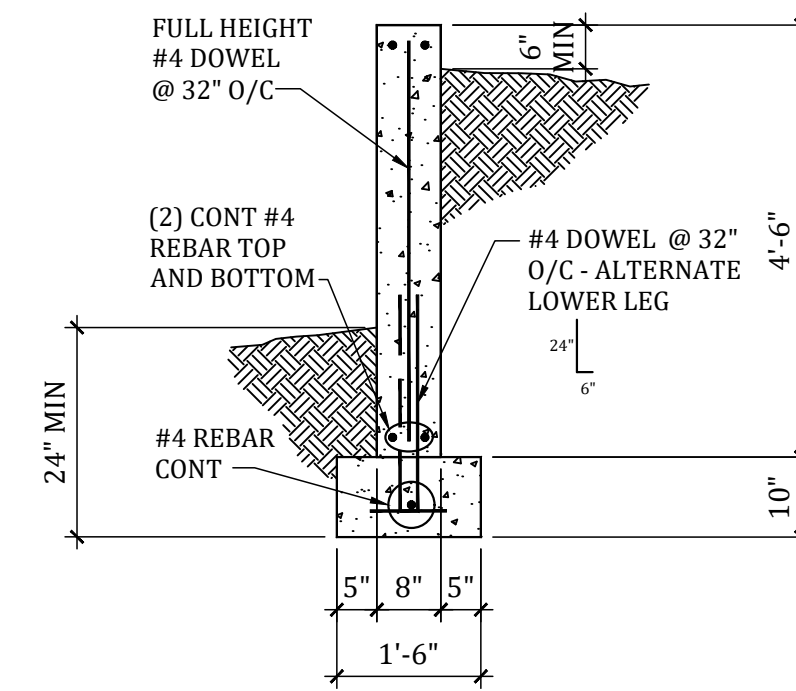
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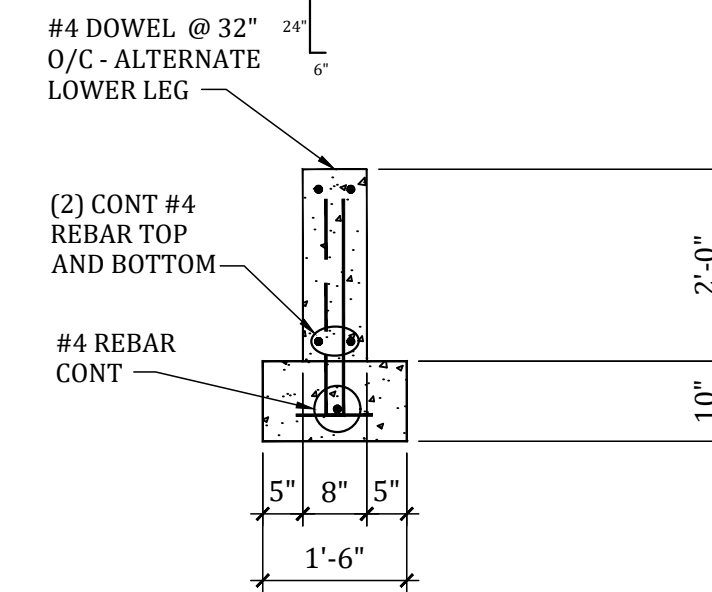
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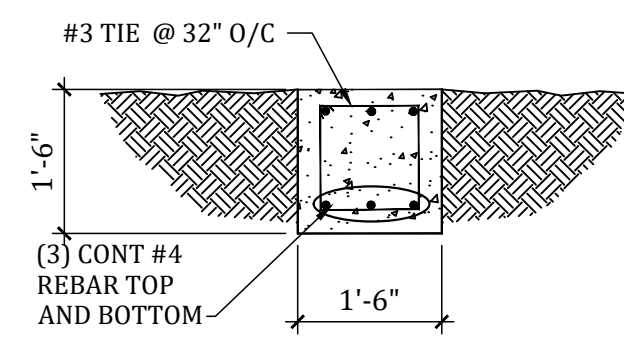
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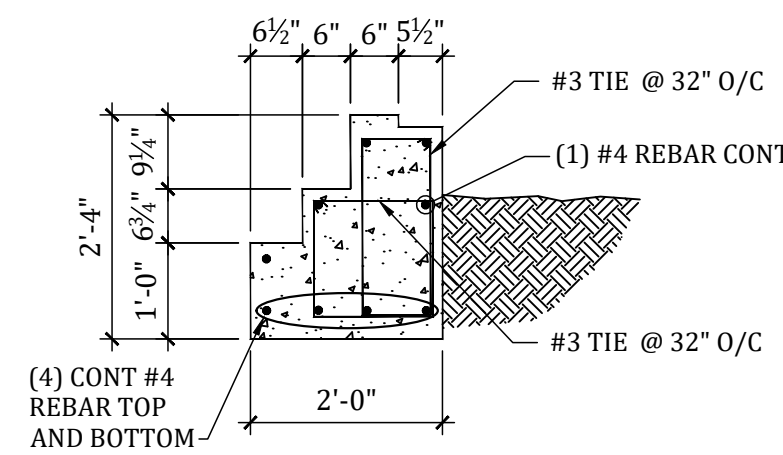
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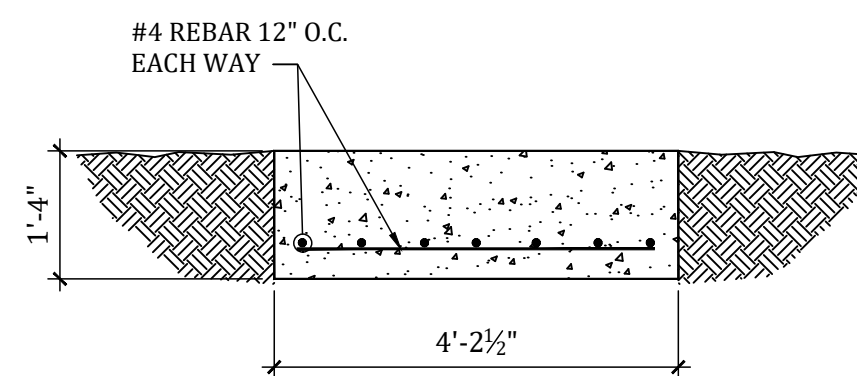
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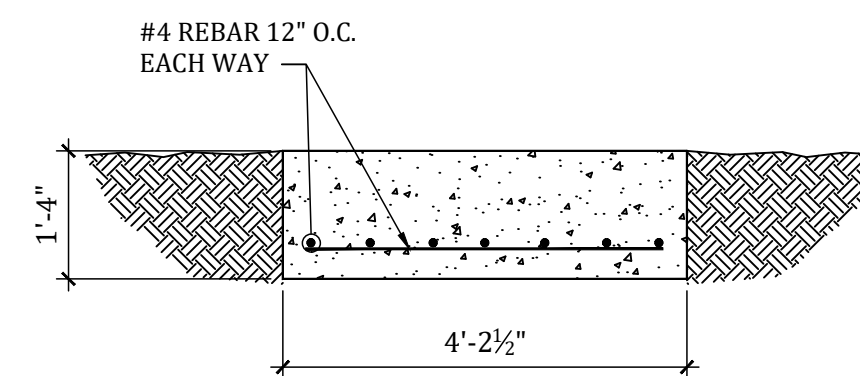
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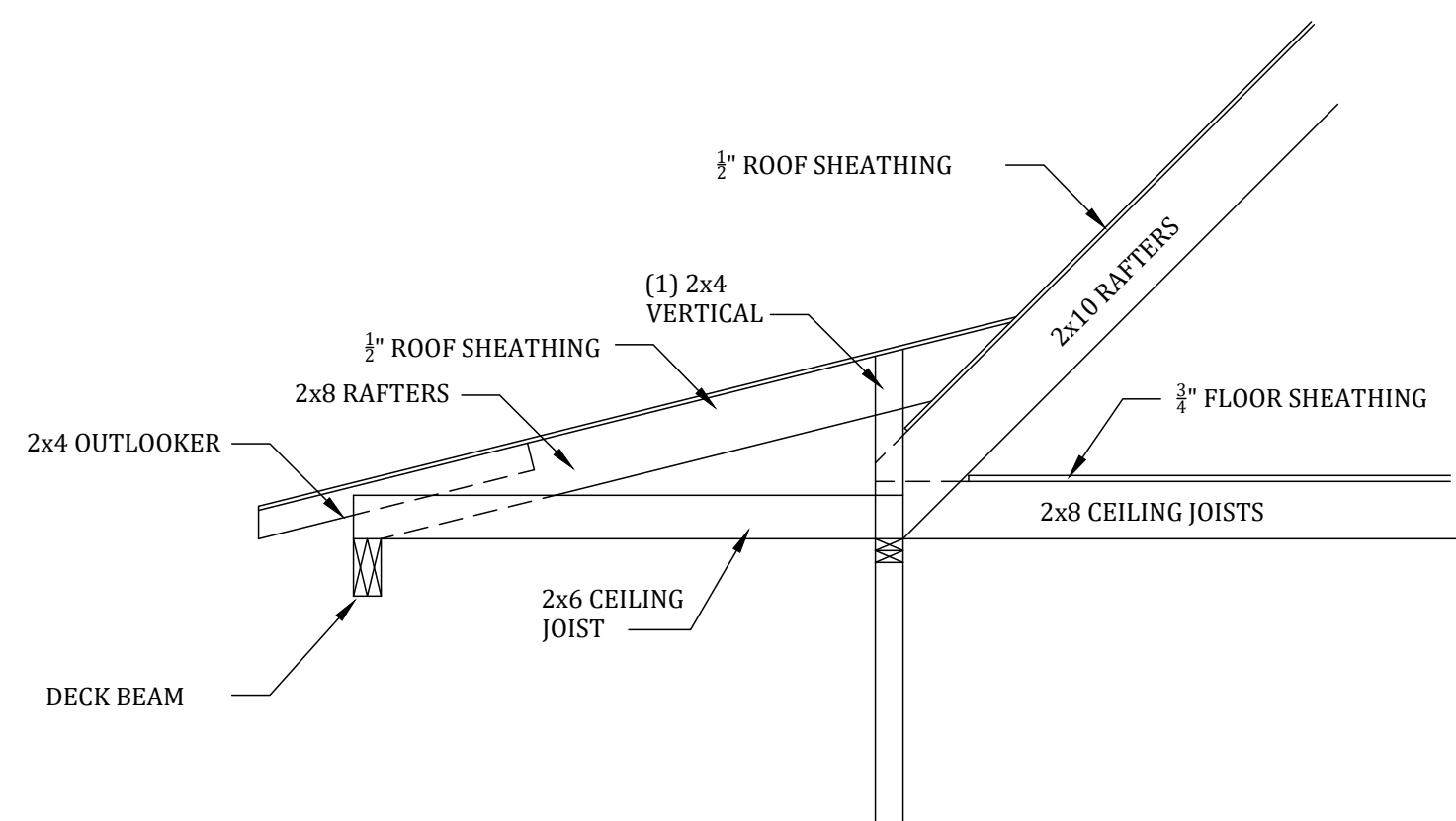
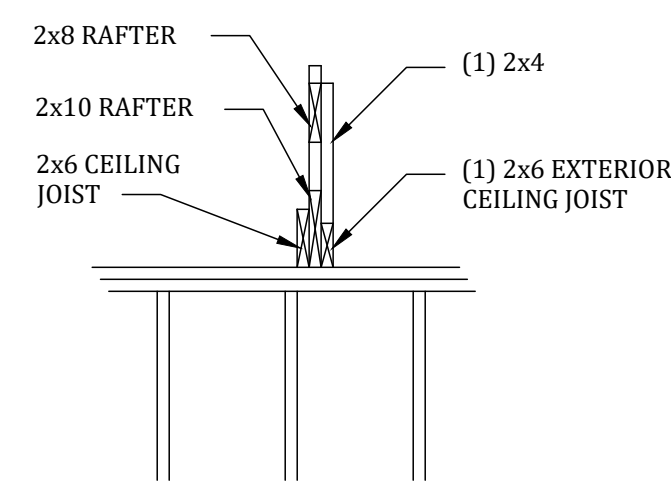
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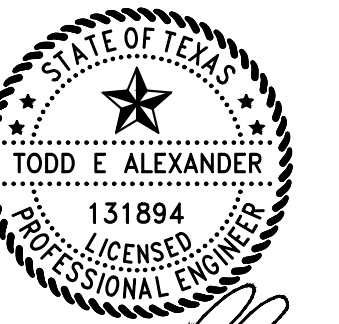
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9  
S6  
DETAIL  
SCALE: 1/2" = 1'-0"



10  
S6  
DETAIL  
SCALE: 1/2" = 1'-0"



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