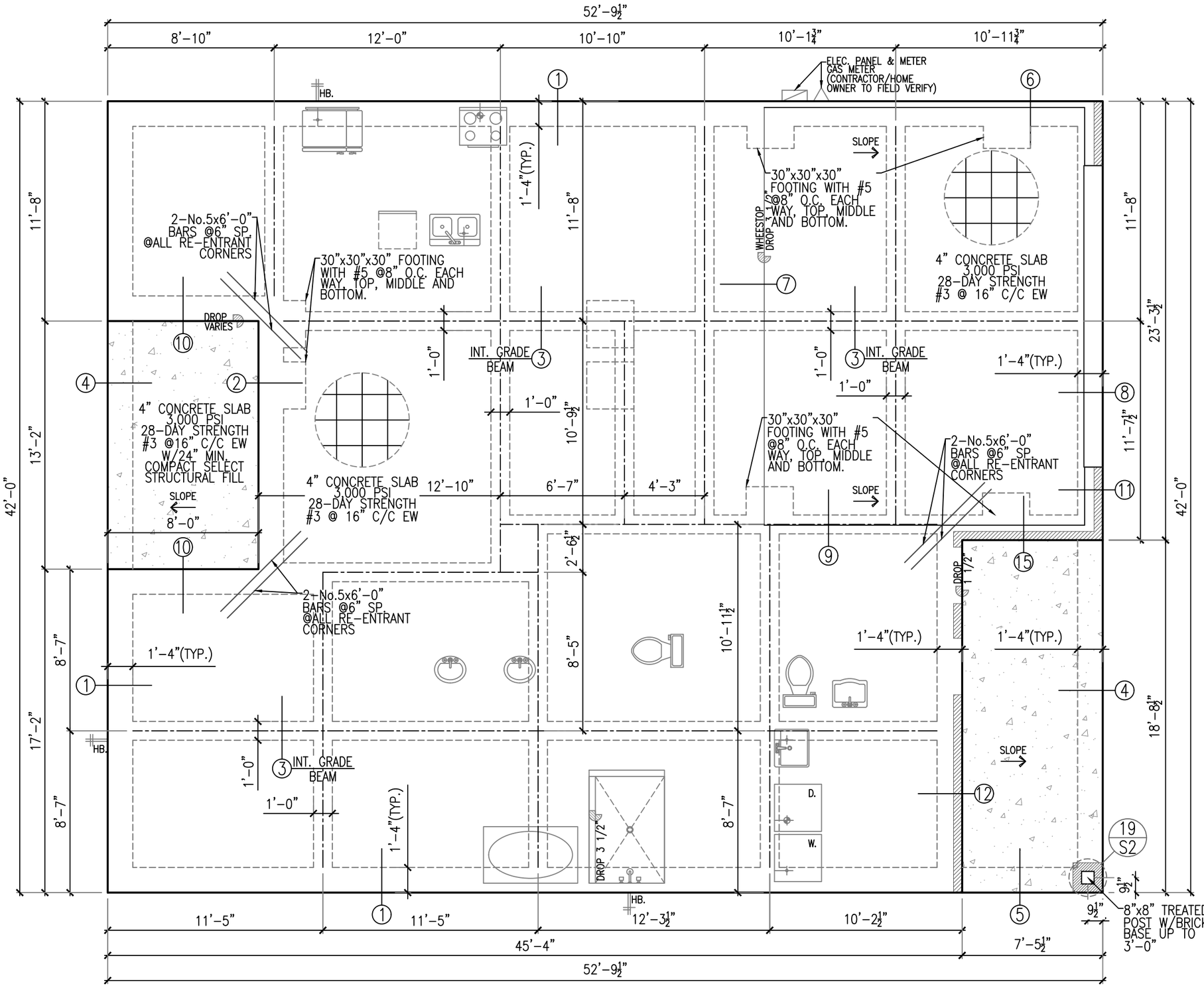

FOUNDATION PLAN NOTES
SEE NOTES ON SHEET "S2"

FOUNDATION PLAN

SCALE: 3/16" = 1'-0"

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69194
LICENSED
PROFESSIONAL ENGINEER
FIRM REGISTRATION # 4266

06-14-2024

PROJECT: DENIS GARCIA

ADDRESS: 576 MAGNOLIA POINT DRIVE
HUFFMAN, TX 77336

SHEET NO.

S1

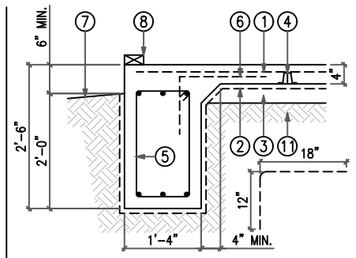
GENERAL FOUNDATION NOTES:

1. GENERAL NOTES:
   A. THESE GENERAL NOTES SHALL APPLY TO THE STRUCTURAL DRAWINGS, UNLESS OTHERWISE NOTED.
   B. UNLESS OTHERWISE INDICATED, ALL DETAILS OF DESIGN, WORKMANSHIP AND MATERIALS SHALL CONFORM TO THE LATEST EDITION OF THE INTERNATIONAL RESIDENTIAL CODE IRC–2021 (ADOPTED OCTOBER 25, 2023), WITH CITY OF HOUSTON AMENDMENTS, SOUTHERN BUILDING CODE, TEXAS WIND STORM BUILDING STORM CODE, TEXAS WIND STORM CONSTRUCTION GUIDELINES AND LOCAL BUILDING CODES.

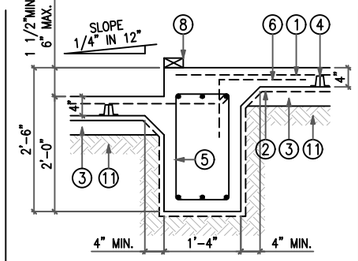
2. FOUNDATION NOTES:
   A. SEE FOUNDATION PLAN FOR LOCATIONS OF BEAMS, BELLBOTTOMS, DROPS, ETC. THE CONTRACTOR SHALL VERIFY OVERALL DIMENSIONS AND PLUMBING LOCATION PRIOR TO POURING CONCRETE.
   B. ALL FOUNDATION EXCAVATION TO BE CARRIED TO UNDISTURBED MATERIAL OR PLACED IN APPROVED ENGINEERED FILL. EXCAVATIONS SHALL BE FREE OF LOOSE MATERIAL AND WATER.
   C. OVER EXCAVATION OF MATERIALS SHALL BE BACKFILLED WITH CONCRETE.
   D. ALL BACKFILL AROUND FOOTINGS, BEHIND WALLS AND UNDER SLABS SHALL BE COMPACTED. SEE SOIL REPORT FOR SITE PREPARATION SPECIFICATIONS, IF AVAILABLE.
   E. BACKFILLS AGAINST FOUNDATION WALLS WILL NOT BE PERMITTED UNTIL THE WALL HAS REACHED 28 DAY STRENGTH AND ALL SUPPORTING STRUCTURE IS IN PLACE.
   F. STEP FOOTING AT A RATIO OF ONE VERTICAL TO TWO HORIZONTAL, WITH A MAXIMUM VERTICAL STEP OF 2'–0" (U.N.O.).
   G. WATERPROOFING OF FOUNDATIONS AND RETAINING WALLS SHALL BE THE RESPONSIBILITY OF THE OWNER OR CONTRACTOR AND IS NOT THE RESPONSIBILITY OF THE ENGINEER.
   H. ANY UNUSAL SITE CONDITIONS (e.g. LOOSE FILL, SUBSURFACE WATER, ETC.) SHALL BE REPORTED TO THE ENGINEER.
   I. CONCRETE AND REINFORCING FOR DRILLED FOOTINGS SHALL BE PLACED IMMEDIATELY AFTER EXCAVATION.
   J. ALL PIPES THROUGH EXTERIOR GRADE BEAMS SHALL BE SLEEVED. ALL PIPES SHALL BE LOCATED AT MID–DEPTH OF GRADE BEAMS. SIZE OF SLEEVES SHALL NOT EXCEED 1/3 OVERALL DEPTH OF GRADE BEAM. SPACING OF SLEEVES SHALL NOT BE CLOSER THAN 5 DIAMETERS ON THE CENTER.

3. REINFORCING CONCRETE:
   A. REINFORCING CONCRETE SHALL CONFORM TO APPLICABLE REQUIREMENTS OF THE IRC–2021 (ADOPTED OCTOBER 25, 2023) AND A.C.I. STANDARD 318.
   B. ALL CONCRETE USED IN FOUNDATIONS AND SLABS ON GRADE SHALL HAVE A 28 DAY COMPRESSIVE STRENGTH OF NOT LESS THAN 3000 psi.
   C. THE MAXIMUM SLUMP SHALL NOT EXCEED 5 INCHES.
   D. PROVIDE #3's @ 16" ON CENTER EACH WAY IN ALL SLABS ON GRADE, PLACED 1 1/2" DOWN FROM TOP OF SLAB, UNLESS OTHERWISE NOTED.
   E. PROVIDE WELDED WIRE FABRIC IN FLAT SHEETS, NOT IN ROLLS.
   F. PROVIDE CONTROL JOINTS IN ALL EXPOSED SLABS ON GRADE. THE MAXIMUM SPACING OF CONTROL JOINTS SHALL BE 20'–0" O.C., UNLESS OTHERWISE NOTED.
   G. POUR SLAB IN STRIP POURS, NOT IN CHECKERBOARD PATTERN.
   H. PROVIDE VERTICAL CONTROL JOINTS IN ALL CONCRETE WALLS. THE MAXIMUM SPACING OF CONTROL JOINTS SHALL BE 20'–0", UNLESS OTHERWISE NOTED. CUT ALTERNATE HORIZONTAL REINFORCING BARS, EACH FACE.
   I. ADDITIVES CONTAINING CALCIUM CHLORIDE SHALL NOT BE USED.

4. REINFORCING STEEL:
   A. ALL REINFORCING STEEL SHALL CONFORM TO ASTM A615 GRADE 60 UNLESS OTHERWISE INDICATED, EXCEPT #3 OR SMALLER MAY BE ASTM A615 GRADE 40.
   B. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185.
   C. ALL REINFORCING STEEL SHALL BE ACCURATELY LOCATED AND ADEQUATELY SECURED IN POSITION BEFORE AND DURING PLACEMENT OF CONCRETE.
   D. ALL DETAILS OF FABRICATION AND INSTALLATION OF REINFORCING STEEL SHALL BE IN ACCORDANCE WITH THE ACI MANUAL OF STANDARD PRACTICE.
   E. LAP REINFORCING BAR SPLICES 40 BAR DIAMETERS, UNLESS OTHERWISE NOTED. (SPLICE REINFORCING STEEL 36" WHEN ALL BARS ARE SPLICED AT ANY ONE POINT).
   F. BEND ALL HORIZONTAL BEAM AND WALL BARS 40 BAR DIAMETERS AROUND ALL CORNERS, OR 40 BAR DIAMETERS, SPLICE CORNER BARS, UNLESS OTHERWISE NOTED.
   G. PROVIDE VERTICAL AND HORIZONTAL REINFORCING BARS IN CONCRETE AND MASONRY WALLS TO CONFORM TO THE MINIMUM PROVISIONS OF ACI 318, SECTION 14.3, UNLESS OTHERWISE NOTED.
   H. PROVIDE THE FOLLOWING MINIMUM CONCRETE COVER OVER REINFORCING STEEL:
   CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH.....3"
   CONCRETE EXPOSED TO EARTH OR WEATHER.....1 1/2"
   CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH EARTH.....3/4"



1 FOUNDATION SECTION & NOTES
NOT TO SCALE



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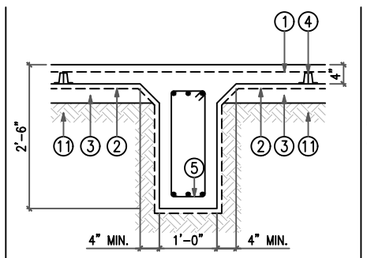

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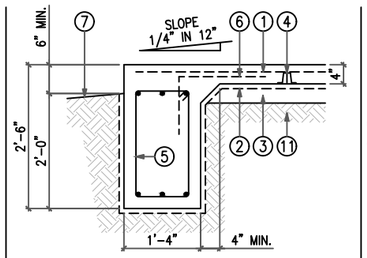

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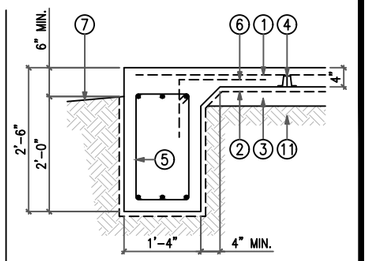

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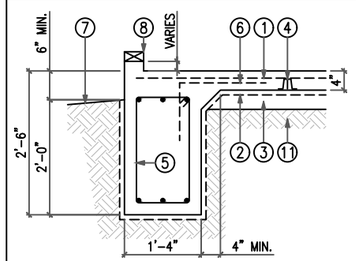

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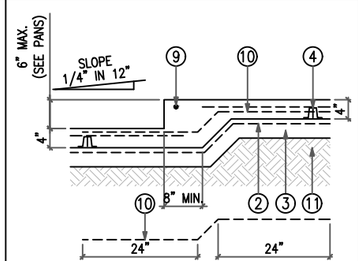

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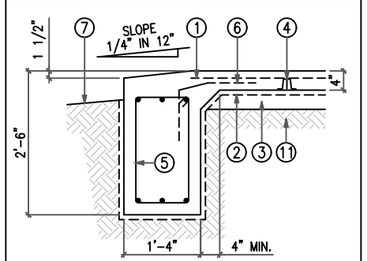

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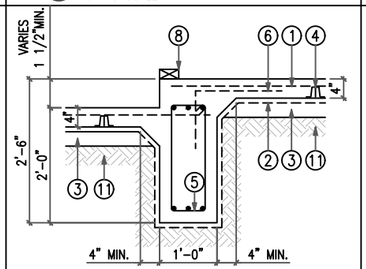

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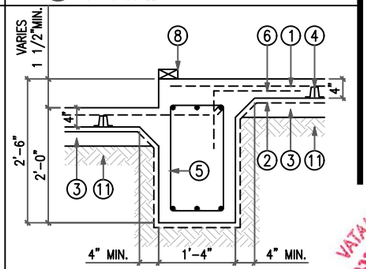

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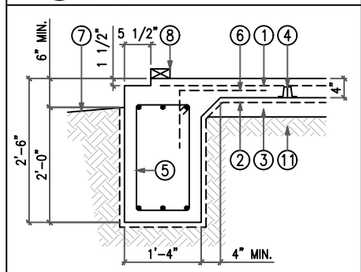

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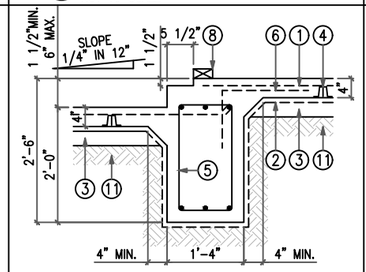

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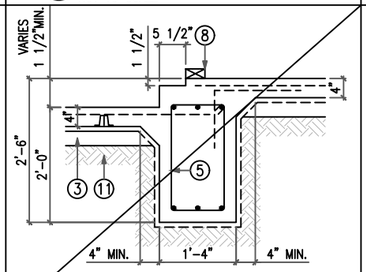

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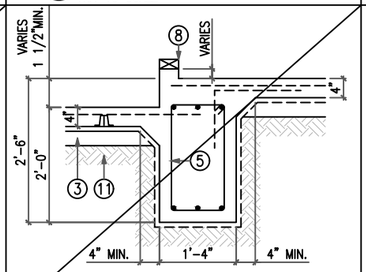

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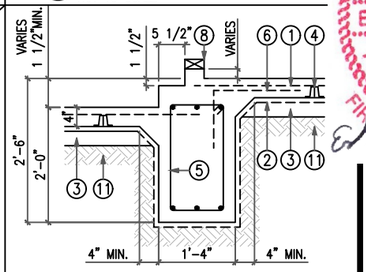

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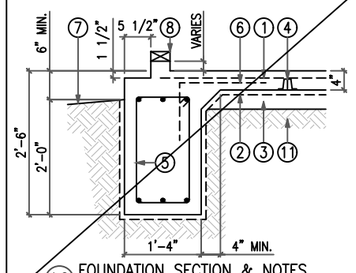

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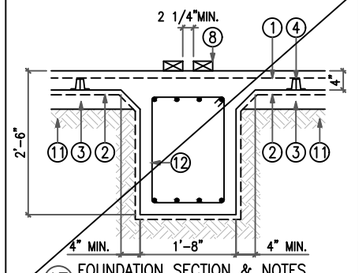

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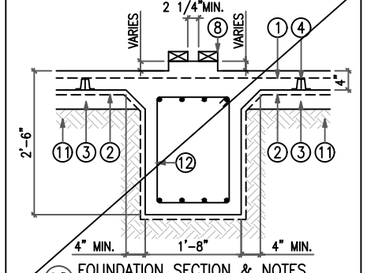

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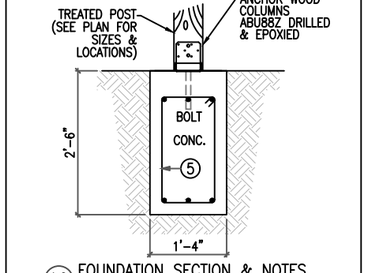


19 FOUNDATION SECTION & NOTES
NOT TO SCALE

FOUNDATION BUBBLE NOTES

1. #3 @ 16" O.C. EA. WAY
2. 6 MIL POLYETHYLENE VAPOR BARRIOR EXTEND FOR FULL COVERAGE UNDER ENTIRE FLOOR SLAB
3. 4" SAND LEVELING LAYER
4. REINFORCING SUPPORT CHAIR AT 48" ON CENTER EACH WAY
5. 3 – CONTINUOUS #5 BARS TOP & BOTTOM WITH #3 STIRUUPS @18" O.C.
6. #4 DOWEL WITH 12"x18" LEGS AT 24" O.C.
7. FINISH GRADE: SLOPE PER SITEWORK
8. 2" x PLATE
9. 1 – CONTINUOUS #5 BAR
10. #4 REBAR–TIE AT 16" O.C.
11. COMPACT SELECT FILL MIN. 24" OR PER SOIL REPORT
12. 4 – CONTINUOUS #5 BARS TOP & BOTTOM WITH #3 STIRUUPS @18" O.C.

TABLE R401.41 PRESUMPTIVE LOAD–BEARING VALUES OF FOUNDATION MATERIAL

CLASS OFF MATERIAL	LOAD–BEARING PRESSURE	
CRYSTALLINE BEDROCK	12,000	
SEDIMENTARY AND FOLIATED ROCK	4,000	
SANDY GRAVEL AND/OR GRAVEL (GW AND GP)	3,000	
SAND, SILTY SAND, CLAYEY SAND, SILTY GRAVEL CLAYEY GRAVEL (SW, SP, SM, SC, GM, AND GC)	2,000	
CLAY, SANDY CLAY, SILTY CLAY, CLAYEY SILT, SILT AND SANDY SILT (CL, ML, MH, AND CH)	1,500b	●

FOR SI: 1 POUND PER SQUARE FOOT = 0.0479 KPA.
a. WHEN SOIL TESTS ARE REQUIRED BY SECTION R401.4, THE ALLOWABLE BEARING CAPACITIES OF THE SOIL SHALL BE PART OF THE RECOMMENDATIONS.
b. WHERE THE BUILDING OFFICIAL DETERMINES THAT IN–PLACE SOILS WITH AN ALLOWABLE BEARING CAPACITY OF LESS THAN 1,500 PSF ARE LIKELY TO BE PRESENT AT THE SITE, THE ALLOWABLE BEARING CAPACITY SHALL BE DETERMINED BY A SOILS INVESTIGATION.

NOTE:
STRUCTURAL FILL MATERIALS SHOULD CONSIST OF A CLAYEY SAND OR INACTIVE LEAN CLAY FREE OF ORGANIC OR OTHER DELETERIOUS MATERIALS, HAVE A LIQUID LIMIT NOT GREATER THAN 35, AND PLASTICITY INDEX BETWEEN 8 AND 20. STRUCTURAL FILL SHOULD BE PLACED IN MAXIMUM LOOSE LIFTS OF 8 INCHES AND SHOULD BE COMPACTED TO AT LEAST 95% OF MAXIMUM DRY DENSITY AT MOISTURE CONTENT WITHIN ± 3% OF THE OPTIMUM MOISTURE CONTENT AS DETERMINED BY ASTM D–698.

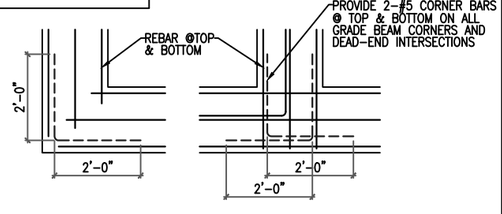
NOTE:
TO THE BEST OF MY KNOWLEDGE, THE SOIL IS ADEQUATE FOR THE SIZE AND LOADS OF THE PROPOSED HOUSE. THE FOUNDATION IF CONSTRUCTED AS SHOWN IN THE PERMIT. DRAWING WOULD BE IN CONFORMANCE WITH THE SPECIFICATIONS AND THE APPLICABLE WORKMANSHIP PROVISION OF THE IRC–2021 (ADOPTED OCTOBER 25, 2023) BUILDING CODE.

NOTE:
1. SEE ARCHITECTURAL DWGS. FOR PLUMBING, EMBEDED ITEMS, RECESES UTILITIES ETC.
2. COORDINATE ALL DIMENSIONS (IF REQUIRED) WITH ARCHITECTURAL DRAWINGS.
3. CONTRACTOR PLEASE VERIFY ALL WALK DOOR AND O.H. DOOR LOCATIONS.
4. SEE STRUCTURAL DWGS FOR ANCHORS, ETC.
5. VERIFY FOUNDATION SLOPES WHERE REQUIRED

NOTE:
F.F. ELEV. NOT LESS THAN 12" ABOVE NEAREST SANITARY SEWER MANHOLE RIM, OR 4" ABOVE THE CROWN OF STREET, EXCEPT ON FLOOD ZONE TO BE VERIFIED WITH APPLICABLE CODE REQUIREMENTS FOR FINISH FLOOR ELEVATION.

NOTE:
CONTRACTOR TO VERIFY FOUNDATION FOOTPRINT WITH ARCHITECTURAL PLAN PRIOR TO CONSTRUCTION

NOTE:
TERMITE TREATMENT R318 SHALL BE PROVIDED AS CHEMICAL TERMITICIDE TREATMENT



TYPICAL BAR PLACING DETAILS @ CORNER & INTERSECTION
NOT TO SCALE

FOUNDATION DETAILS

SCALE: N.T.S.

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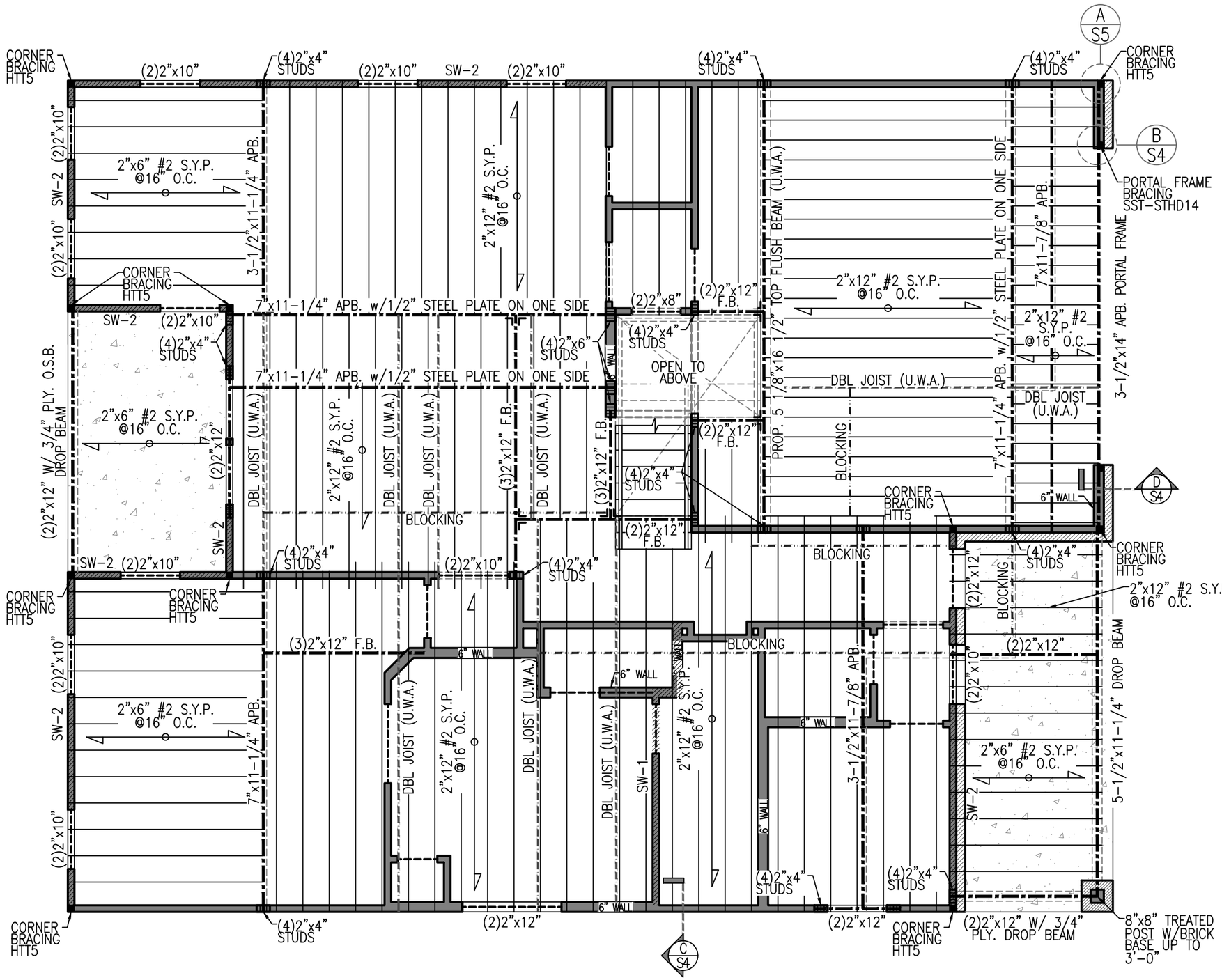
06-14-2024

PROJECT: DENIS GARCIA
ADDRESS: 576 MAGNOLIA POINT DRIVE
HUFFMAN, TX 77336

SHEET NO.
S2



CEILING FRAMING PLAN NOTES
SEE NOTES ON SHEET "S5"

CEILING FRAMING PLAN

1ST. FLOOR

SCALE: 3/16" = 1'-0"

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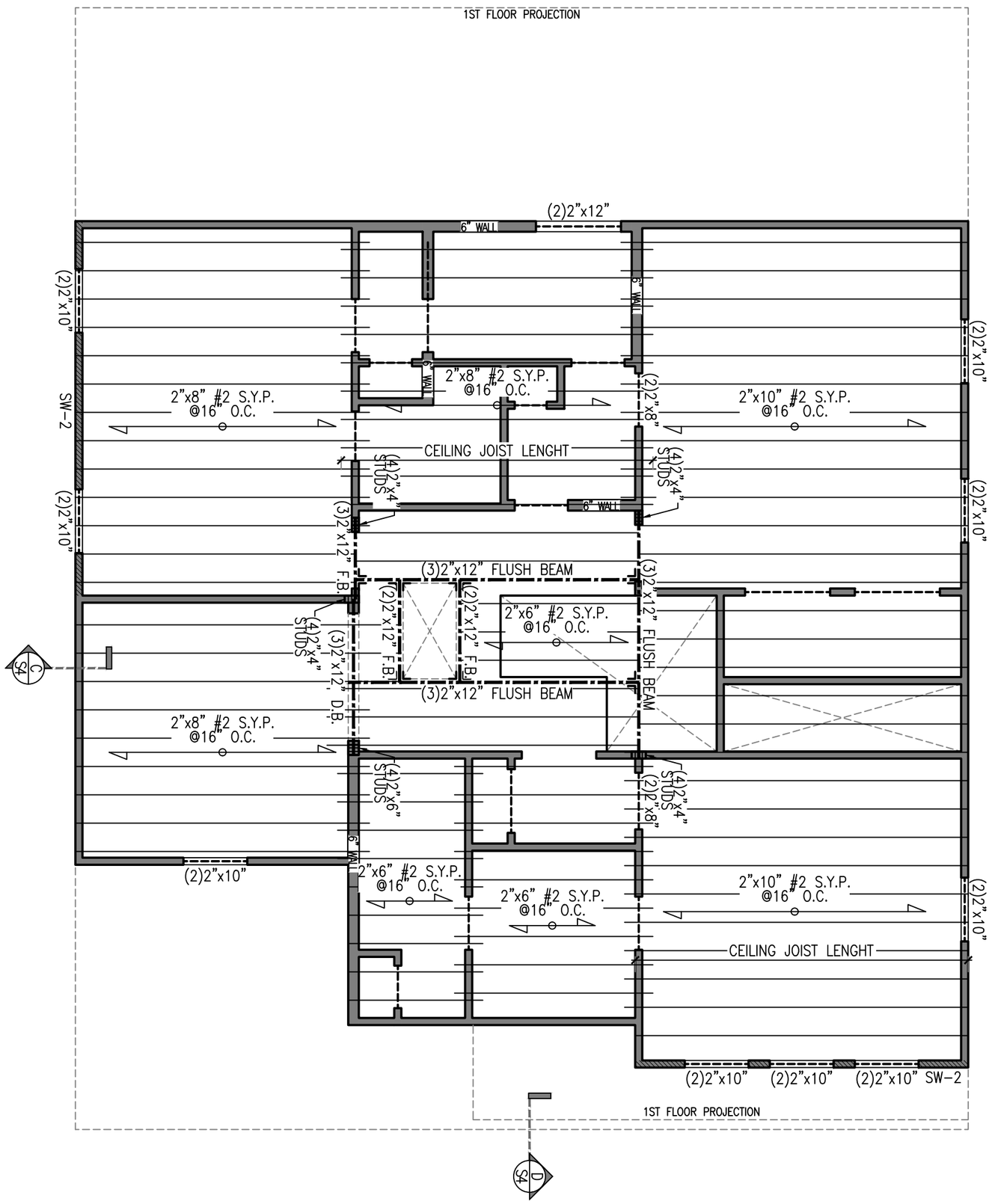
SHEET NO.

S3

CEILING FRAMING PLAN NOTES
SEE NOTES ON SHEET "S5"



CEILING FRAMING PLAN

2ND. FLOOR

SCALE: 3/16" = 1'-0"

SHEET NO.

S4

PROJECT:

DENIS GARCIA

ADDRESS:

576 MAGNOLIA POINT DRIVE

HUFFMAN, TX 77336

06-14-2024

VATANI CONSULTING ENGINEERS
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ESHRAGHOLLAH VATANI
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CEILING FRAMING NOTES:

(UNLESS OTHERWISE NOTED)
1. CEILING JOISTS – S.Y.P. #2
2. TYP. CEILING JOIST – 2"x6" @16" O.C. (U.N.O.)
3. ALL BEAMS AND HEADERS SHALL BE S.Y.P. #2

USE	LIVE LOAD
ATTICS W/ LIMITED STORAGE	20
ATTIC W/O STORAGE	10
DECKS	40
EXTERIOR BALCONIES	60
FIRE ESCAPES	40
GUARDRAILS AND HANDRAILS	200i
GUARDRAILS IN-FILL COMPONENTS	50i
PASSENGER VEHICLE GARAGES	50a
ROOMS OTHER THAN SLEEPING ROOMS	40
SLEEPING ROOMS	30
STAIRS	40c

DESIGN LOADS:

LIVE LOAD = 20 PSF.
DEAD LOAD = 10 PSF.
WIND LOAD = 131 MPH
3 – SECOND GUST

HEADER SCHEDULE:

(UNLESS OTHERWISE NOTED)

SPAN	HEADER
2'-6" OR LESS	2-2x4's
4'-6" OR LESS	2-2x6's
6'-0" OR LESS	2-2x8's
7'-6" OR LESS	2-2x10's

NOTE:

1. PROVIDE DOUBLE/TRIPLE JOIST UNDER ALL WALL TO JOIST & UNDER EACH POINT LOAD.
2. PROVIDE BLOCKING UNDER ALL WALLS THAT RUN PERPENDICULAR TO THE FLOOR JOIST. BLOCKING WILL BE MIN. 2-2x8 OR 2-2xJOIST DEPTH.

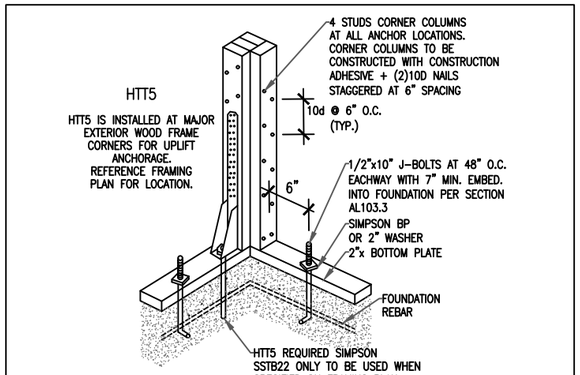
NOTE:

1. A.P.B.= ANTHONY'S POWER BEAM 3000 Fb OR EQUAL
2. ALL EXTERIOR HEADERS TO BE 2-2X10 UNLESS OTHERWISE NOTED
3. ALL INTERIOR HEADERS TO BE 2-2X8 UNLESS OTHERWISE NOTED

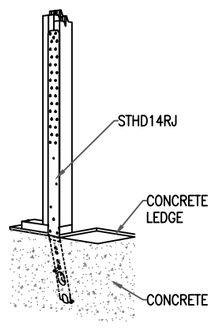
SHEAR WALL SCHEDULE

		HOLD-DOWN
SW-1	1 LAYER OF 1/2 " APA STRUCTURAL 1 RATED SHEATHING ONE SIDE EXP 1 W/ BD NAILS @ 3" O.C. EDGES 6" FIELD.	HDU5/ HTT5
SW-2	1 LAYER OF 1/2 " APA STRUCTURAL 1 RATED SHEATHING BOTH SIDES EXP 1 W/ BD NAILS @ 3" O.C. EDGES 6" FIELD.	HDU5/ HTT5

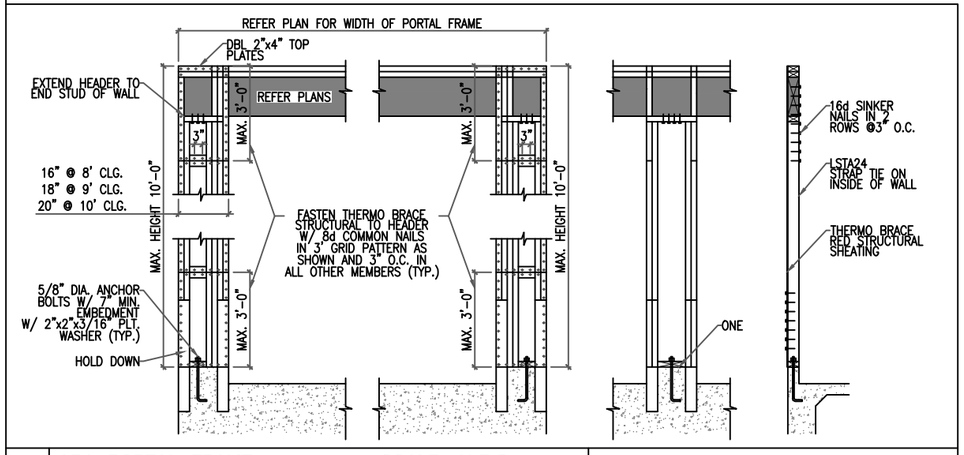
- ALL SHEAR WALLS SHALL BE EXTENDED UP TO FLOOR DECK ABOVE.
- PROVIDE 1/2 " PLYWOOD OR OSB STRUCTURAL PANEL AT ALL EXTERIOR WALLS.
- FOR INSTALLATION PROCEDURE PLEASE REFER TO SIMPSON CATALOGUE
- ALL EXTERIOR WALLS ARE SW-1 UNLESS NOTED OTHERWISE



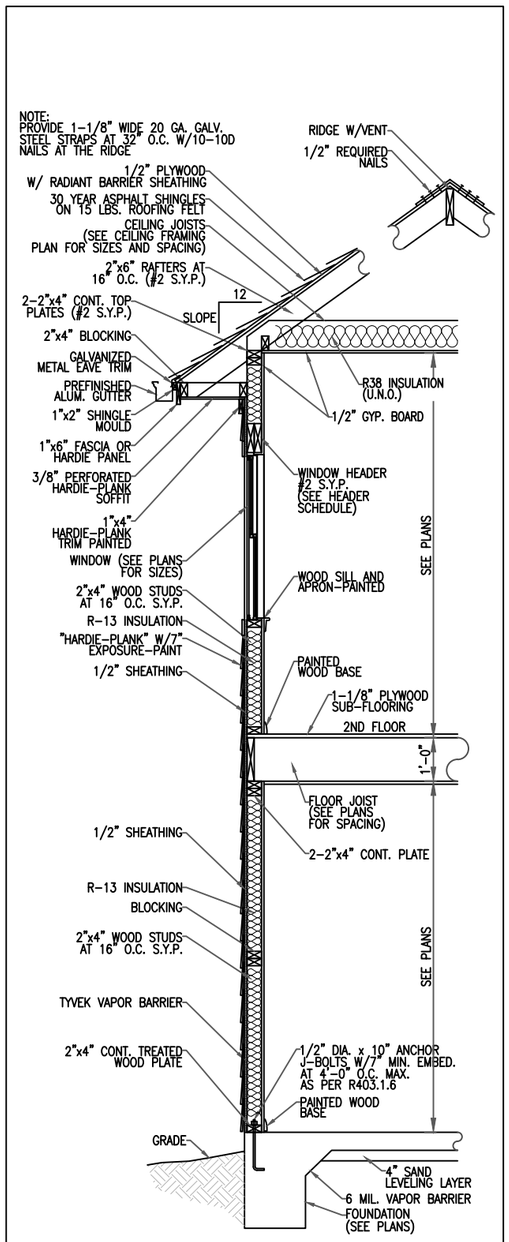
A | CORNER BRACING



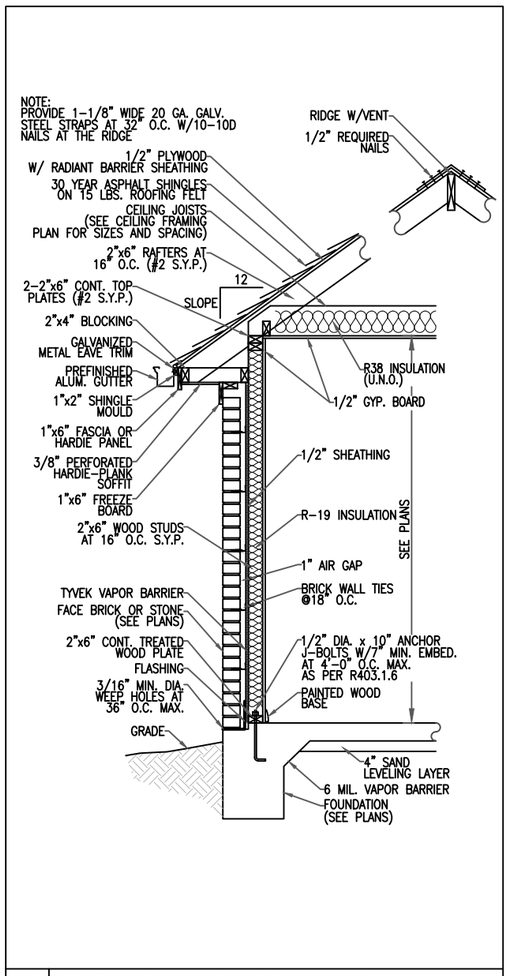
B | PORTAL FRAME BRACING



APA PORTAL FRAME SCALE: N.T.S. | **INSTALL WSW PORTAL FRAMES AS PER MANUFACTURERS SPECS.



C | 2-STORY SIDING WALL SECTION



D | 1-STORY BRICK WALL SECTION

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STATE OF TEXAS
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PROFESSIONAL ENGINEER
REGISTRATION # 42866

06-14-2024

PROJECT: DENIS GARCIA
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HUFFMAN, TX 77336

SHEET NO.
S5

ROOF NOTES:

1. ALL SLOPES FROM FRONT TO BACK ELEVATIONS ARE SEE PLAN / 12 PITCH AND SHALL HAVE 16" OVERHANG FROM FRAME UNLESS NOTED OTHERWISE.
2. ALL SLOPES FROM SIDE TO SIDE ELEVATIONS ARE SEE PLAN / 12 PITCH AND SHALL HAVE 16" OVERHANG FROM FRAME UNLESS NOTED OTHERWISE.
3. ALL RAKE OVERHANGS SHALL BE 16" FROM FINISH WALL UNLESS NOTED OTHERWISE.
4. ALL RAFTERS SHALL BE#2-2 X 6 @ 16" O.C. OR BETTER UNLESS NOTED OTHERWISE.
5. PROVIDE VALLEY FLASHING WHERE ROOF PITCHES CHANGE AND WHERE ROOF INTERSECTS WITH VERTICAL SURFACES.
6. GUTTERS AND DIVERTERS TO BE PROVIDED BY CONTRACTORS AS REQUIRED. (SEE CUSTOMER)
7. CONTRACTORS SHALL PROVIDE ADEQUATE ATTIC VENTILATION PER BUILDING CODES THROUGH CONTINUOUS SOFFIT VENTS TO RIDGE OR TURBINE VENTS. (VERIFY WITH OWNER)

TABLE A-23-B ROOF AND FLOOR ANCHORAGE AT EXTERIOR WALLS

BASIC WIND SPEED X 1.81 FOR KNOTS	LOCATION	NUMBER OF NAILS EXPOSURE B	EXPOSURE C	EXPOSURE D
80	ROOF TO WALL	6-8d	8-8d	8-10d
	FLOOR TO FLOOR	—	4-10d	6-10d
	FLOOR TO FOUNDATION	—	4-10d	4-10d
90	ROOF TO WALL	8-8d	8-10d	10-10d
	FLOOR TO FLOOR	—	6-10d	8-10d
	FLOOR TO FOUNDATION	—	4-10d	6-10d
100	ROOF TO WALL	8-10d	10-10d	12-10d
	FLOOR TO FLOOR	6-10d	8-10d	10-10d
	FLOOR TO FOUNDATION	4-10d	6-10d	8-10d
131	ROOF TO WALL	10-10d	12-10d	12-10d
	FLOOR TO FLOOR	8-10d	10-10d	10-10d
	FLOOR TO FOUNDATION	6-10d	8-10d	8-10d

FOR FLOOR TO FOUNDATION ANCHORAGE, SEE SECTION 2365.5.4
NUMBER OF COMMON NAILS LISTED IS TOTAL REQUIRED FOR EACH TIE STRAP. THE TIE STRAPS SHALL BE SPACED AT 48" ON CENTER ALONG THE LENGTH OF THE WALL.
THE NUMBER OF NAILS ON EACH SIDE OF THE ROOF OR FLOOR PLATE JOINTS SHALL BE EQUAL.
NAILS SHALL BE SPACED TO AVOID SPLITTING THE WOOD, SEE FIGURES A-23-1 FOR ILLUSTRATIONS OF THESE TIE STRAPS.

TABLE A-23-C RIDGE TIE-STRAP NAILING

BASIC WIND SPEED X 1.81 FOR KNOTS	NUMBER OF NAILS EXPOSURE B	EXPOSURE C	EXPOSURE D
80	6-10d	8-10d	10-10d
90	8-10d	10-10d	12-10d
100	10-10d	12-10d	14-10d
131	12-10d	14-10d	16-10d

NOTE: CORROSION RESISTANT STEEL TIE STRAP 1 1/8" X 0.036" (129MMx0.91MM) 0.036 INCH (0.91MM) (NO 20 GALVANIZED SHEET GAGE) AS 48" (1219MM) ON CENTER TYPICAL.

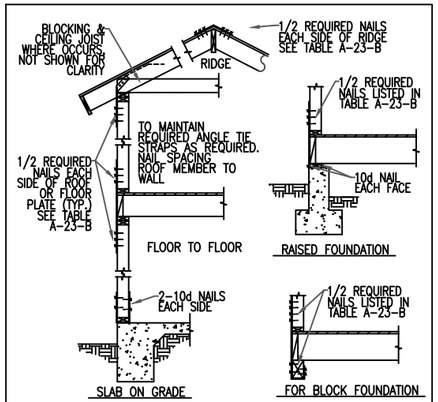


FIG. A-23-1 COMPLETE LOAD PATH DETAILS

NOTE:

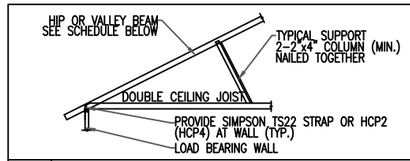
1. 2"x6" @ 16" O.C. ALL NEW RAFTERS SYP. #2 GRADE OR BETTER (U.N.O.)
2. COORDINATE ALL DIMENSIONS, RECESS AND DROPS W/ ARCHITECTURAL DWGS

NOTE:

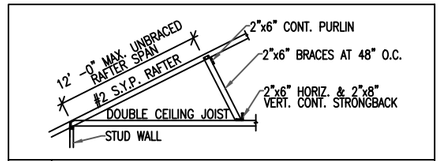
PLEASE REFER TO DETAIL 22-01-R FOR SPECIFICATIONS TO BE IN COMPLIANCE WITH SOLAR READY PROVISION OF APPENDIX U OF THE 2021 IRC.

NOTE:

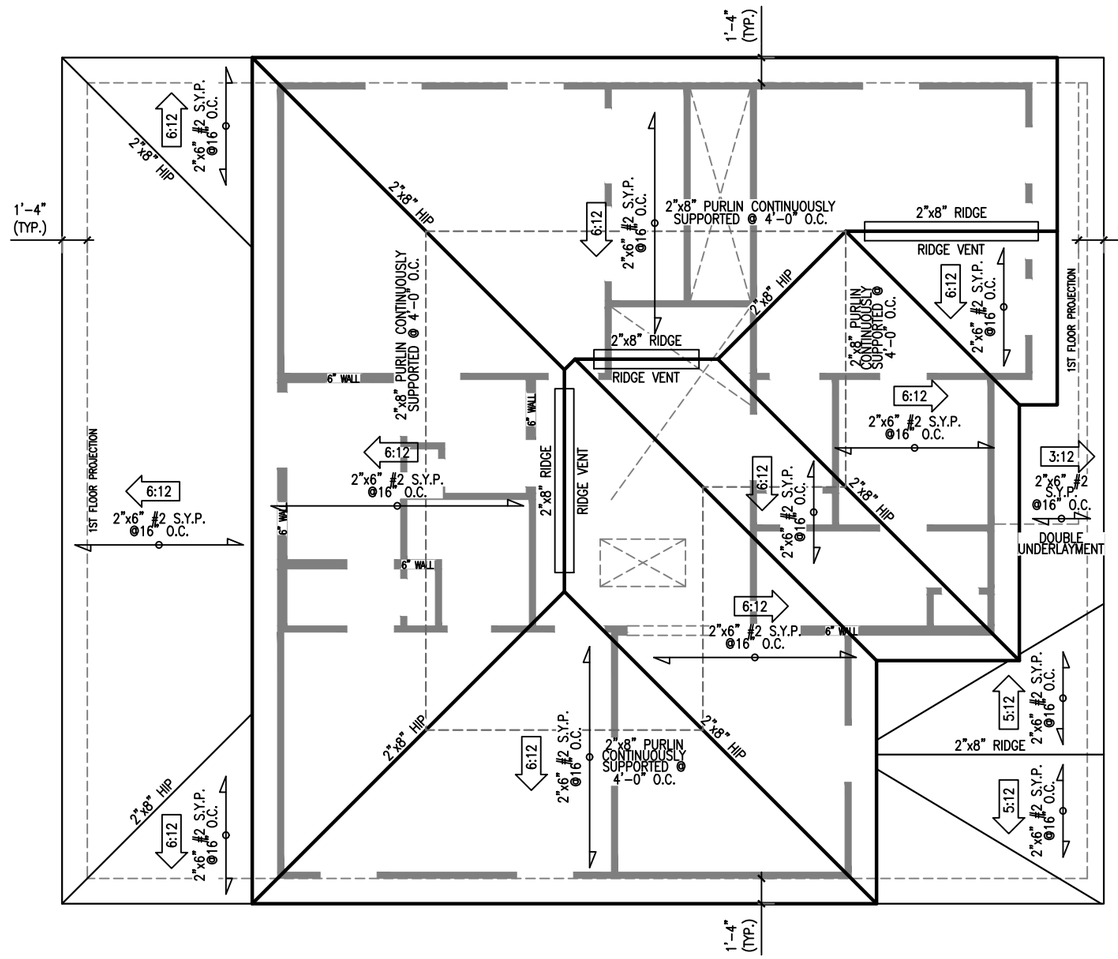
1. PROVIDE 2"x6" PURLIN BRACING WITH 2"x4" "T" COLUMN MINIMUM BRACED BACK TO LOAD BEARING WALL OR FLOAT BEAM.
2. PROVIDE 2"x6" COLLAR BEAMS @ EVERY OTHER RAFTER @ 3' TO 4' BELOW RIDGE LINE.
3. RIDGE, HIP, AND VALLEY RAFTERS TO BE NEXT SIZE LARGER THAN CONNECTING MEMBER



HIP OR VALLEY BEAM BRACING



RAFTER BRACING DETAIL



ROOF FRAMING PLAN

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

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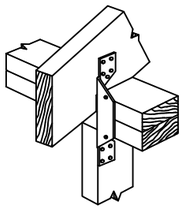
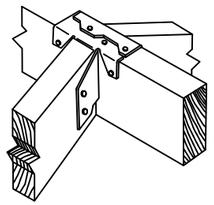
SHEET NO.
S6



5– 8d TO RAFTERS

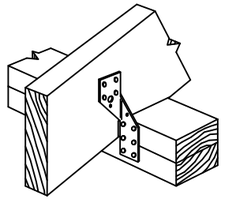
5– 8d TO STUDS

SIMPSON STRONG-TIE H2



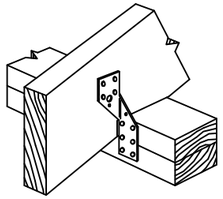
4–10d X 1 1/2" TO RIDGE BEAM
4–10d X 1 1/2" TO RAFTER

SIMPSON STRONG-TIE RR



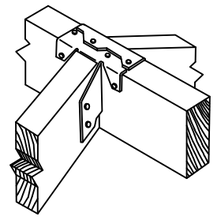
5–8d TO RAFTER
5–8d TO PLATES

SIMPSON STRONG-TIE H2.5



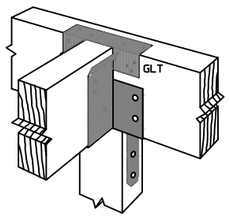
4– 8d X 1 1/2" IN STUD
4– 8d X 1 1/2" IN PLATE

SIMPSON STRONG-TIE H2.5



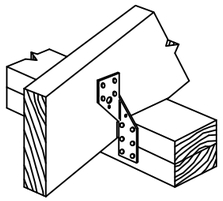
4– 8d X 1 1/2" IN STUD
4– 8d X 1 1/2" IN PLATE

SIMPSON STRONG-TIE RR



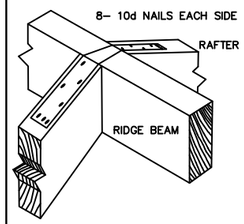
SIMPSON STRONG–TIE CC WITH GLT

SIMPSON STRONG-TIE GLT

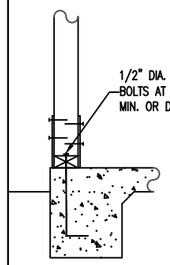


3–16d NAILS IN PLATES
1– 8d NAIL IN EACH STUD

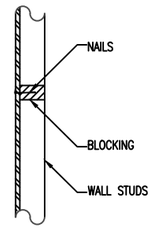
SIMPSON STRONG-TIE H2.5



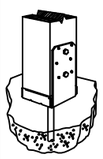
SIMPSON STRONG-TIE LSTA



TYP. SLAB ON GRADE ANCHOR

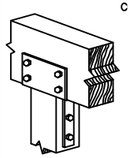


SECTION



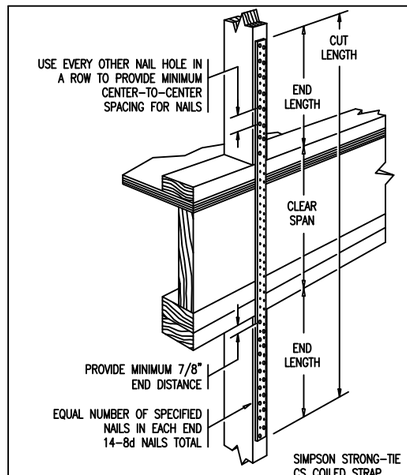
COLUMN SIZE	CONNECTOR
4"	ABU44Z
6"	ABU66Z
8"	ABU88Z
10"	ABU1010Z
12"	ABU1212Z

SIMPSON STRONG COLUMN BASE



COLUMN SIZE	BEAM SIZE	CONNECTOR
4"	4"	CC44
6"	4"	CC46
8"	4"	CC48
4"	6"	CC64
6"	6"	CC66
8"	6"	CC68
4"	8"	CC84
6"	8"	CC86
8"	8"	CC88

SIMPSON STRONG COLUMN CAP



DESIGN LOADS:

LIVE LOAD = 20 PSF.
DEAD LOAD = 10 PSF.
WIND LOAD = 131 MPH
3 – SECOND GUST

NOTES:

1. INSTALL HURRICANE STRAPS PER DETAILS D1 THRU D4
2. FOR STRAPS FOR MATCHING RAFTERS SEE D5.
3. WHERE RAFTERS ARE STAGGARED USE DETAIL RR ON D2.
4. WHERE RAFTERS AND STUDS MATCH USE DETAIL H2 ON D1.
5. WHERE STUD MATCH FROM THE FIRST FLOOR TO THE SECOND FLOOR USE CS ON D1.
6. WHERE RAFTERS DO NOT MATCH TO STUDS USE H2 ON D2.
7. TO TIE STUDS TO TOP PLATE WHERE RAFTERS DO NOT MATCH USE RSP4 ON D3.
8. CONNECT STUDS TO BOTTOM PLATE PER RSP4 ON D3.
9. ALL WALLS SHALL HAVE DIAGONAL BRACING PER WW ON D4. ALTERNATE BRACING IS 1X4 LET–IN FROM TOP PLATE TO BOTTOM PLATE.

FASTENER SCHEDULE FOR STRUCTURAL MEMBERS
TABLE R602.3(1)

DESCRIPTION OF BUILDING ELEMENTS	NUMBER & TYPE OF FASTENER a,b,c,d	SPACING OF FASTENERS
Joist to sill or girder, toe nail	3–8d	–
1"x6" subfloor or less to each joist, face nail	2–8d 2 staples, 1–3/4	–
2" subfloor to joist or girder, blind & face nail	2–16d	–
Sole plate to joist or blocking, face nail	16d	16" O.C.
Top or sole plate to stud, end nail	2–16d	–
Stud to sole plate, toe nail	4–8d or 2–16d	–
Double studs, face nail	16d	24" O.C.
Double top plates, face nail	16d	16" O.C.
Sole plate to joist or blocking at braced wall panels	3–16d	16" O.C.
Double top plates, minimum 48" offset of end joints, face nail in lapped area	8–16d	–
Blocking between joists or rafters to top plate, toe nail	3–8d	–
Rim joist to top plate, toe nail	8d	6" O.C.
Top plates, laps at corners & intersections, face nail	2–10d	–
Built–up header, two pieces with 1/2" spacer	16d	16" O.C. along each edge
Continued header, two pieces	16d	16" O.C. along each edge
Ceiling joists to plate, toe nail	3–8d	–
Continuous header to stud, toe nail	4–8d	–
Ceiling joist, laps over partitions, face nail	3–16d	–
Ceiling joist to parallel rafters, face nail	3–10d	–
Rafter to plate, toe nail	3–8d	–
1" brace to each stud & plate, face nail	2–8d 2 staples, 1–3/4	–
1"x6" sheathing to each bearing, face nail	2–8d 2 staples, 1–3/4	–
1"x8" sheathing to each bearing, face nail	2–8d 3 staples, 1–3/4	–
Wider than 1"x8" sheathing to each bearing, face nail	3–8d 4 staples, 1–3/4	–
Built–up corner studs	16d	24" O.C.
Built–up girders & beams, 2–inch lumber layers	20d	Nail each layer as follows: 32"O.C. at top & bottom & staggered. Two nails at ends & at each splice
2" planks	2–16d	At each bearing
Roof rafters to ridge, valley or hip rafters: toe nail face nail	 4–16d 3–10d	 – –
Rafter ties to rafters, face	3–8d	–
Wood structural panels, subfloor, roof & wall sheathing to framing, & particleboard wall sheathing to framing		
5/16 – 1/2	6d common nail (subfloor, wall) 8d common nail (roof)	6	12 [g]
19/32 – 1	8d common nail	6	12 [g]
1–1/8 –1–1/4	10d common nail or 8d deformed nail	6	12

BRACING DETAILS | SCALE: N.T.S.

NAILING DETAILS | SCALE: N.T.S.

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SHEET NO.
S7

FLOOR FRAMING NOTES:

1. FLOOR JOIST – SYP #2
2. TYP. FLOOR JOIST – 2X12 @ 16" O.C. U.N.O.
3. TYP. SHEATHING –1 1/8" 48/24 APA RATED T & G GLUED & NAILED W/10 D @ 6" EDGES & 10" FIELD
4. ALL BEAMS AND HEADERS SHALL BE SYP #2
5. PROVIDE 2– 2X12 HEADERS AT ALL FIRST LEVEL OPENINGS U.N.O.
6. DOUBLE JOIST UNDER ALL NON LOAD–BEARING PARTITIONS
7. ALL FLUSH BEAM – TO – BEAM CONNECTIONS SHALL BE SIMPSON HGB OR HGLT (U.N.O.)
8. DL = 10 PSF LL = 40 PSF

CEILING FRAMING NOTES

1. CEILING JOISTS– SYP #2
2. TYP. CEILING JOIST– 2X6 @ 16" O.C. U.N.O.
3. ALL BEAMS AND HEADERS SHALL BE SYP #2
4. HEADER SCHEDULE:

SPAN	HEADER
2'–6"	2 – 2x4
4'–6"	2 – 2X6
6'–0"	2 – 2X8
7'–6"	2 – 2X10

5. ALL FLUSH BEAM – TO – BEAM CONNECTIONS SHALL BE SIMPSON HGB OR HGLT (U.N.O.).
6. DL = 10 PSF LL = 20 PSF

GENERAL NOTE

FRAMING DESIGN CRITERIA BASED ON 2017 NFPA SPAN TABLES FOR JOISTS AND RAFTERS, AND SPIB GRADING RULES. VERIFY ALL DIMENSIONS, DROPS, OFFSETS, BRICKLEDGES, INSERTS AND OPENINGS WITH ARCHITECTURAL DRAWINGS.

STUD WALL FRAMING NOTE

FRAME EXTERIOR LOAD–BEARING STUD WALLS WITH UNBRACED HEIGHT GREATER THAN 10'–0" WITH 2X6 STUDS @ 16" O.C.
FRAME INTERIOR LOAD–BEARING STUD WALLS WITH UNBRACED HEIGHT GREATER THAN 10–0" WITH 2 – 2x4 STUDS @ 16" O.C. OR 2X6 STUDS @ 16" O.C.
STUD WALLS SHALL BE DIAGONALLY BRACED w/ 1 X 4 LET–IN AT EACH END, AT 25' MAX. SPACING BETWEEN WALL
STRAP TIES MST @ SECOND FLOOR AND ROOF, SPACED @ 32" O.C. H3 CONNECTORS AT SILL PLATE @ 16" O.C. ENDS.

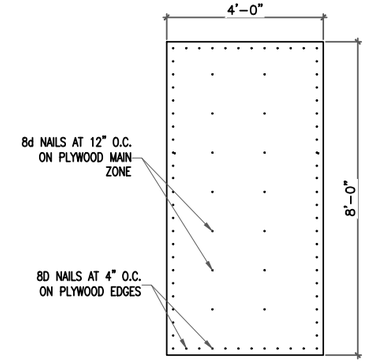
GENERAL FRAMING NOTES

1. HIP, VALLEY, AND RIDGE SHALL ALWAYS BE ONE SIZE LARGER THAN RAFTERS.
2. PROVIDE COLLAR TIES AT UPPER 1/3 DISTANCE BETWEEN RIDGE BOARD AND JOIST AT 32" O.C.
3. ALL RAFTERS 2X6 AT 16" O.C. UNLESS OTHERWISE NOTED.
4. DOUBLE FLOOR JOIST UNDER ALL PARTITIONS PARALLEL TO JOIST BELOW.
5. PROVIDE CROSSBRIDGING AT 8'–0" O.C. ON ALL 2X12 JOISTS.
6. PROVIDE RAFTER TIES AT ALL PLATES WHERE JOIST ARE PERPENDICULAR TO RAFTERS.
7. PROVIDE 2– 2X6 STRONGBACK ON SPANS OVER 10'–0".
8. ALL STRUCTURAL FRAMING SHALL HAVE A 19% MAXIMUM MOISTURE CONTENT AT TIME OF INSTALLATION.
9. STUD WALLS EXCEEDING 10'–0" SHALL HAVE FIRESTOPS
10. THE MAXIMUM UNSUPPORTED SPAN FOR 2 X 6 RAFTERS SHALL BE 10'–7". RAFTERS ARE TO BE SUPPORTED BY CONTINUOUS 2 X 6 BRACES AT 48" O.C. MAXIMUM ANGLE FOR 2 x 6 BRACES = 45 deg FROM VERT. MAXIMUM UNSUPPORTED LENGTH FOR 2 X 6 BRACES = 8'. ALL ROOF BRACING TO BE SUPPORTED BY A WALL, 2–2 X 6 STRONGBACK SUPPORTED BY JOISTS OR (2) 2 X 12 DEPENDING ON CEILING JOIST DIRECTION (PROVIDE BLOCKING AT BRACE LOCATIONS), (U.N.O.). PROVIDE 2 X 6 COLLAR TIES 48" O.C. IN THE UPPER THIRD OF THE RAFTERS, (U.N.O.).
11. PROVIDE 26 GA. GALVANIZED IRON FLASHING AT ALL VALLEYS, HIPS, AND RIDGES WHERE APPLICABLE. ALSO APPLY FOR PIPES PROJECTING THROUGH ROOF WITH FLANGE AND EXTEND FLANGE 8" BEYOND SLEEVE.
12. ALL BEAM AND HEADER MATERIAL SHALL BE #2 SD19 SYP. ALL RAFTERS AND JOIST MATERIAL SHALL BE #2 SD19 SYP.
13. ALL WALL STUD SHALL BE STUD GRADE SD19 FIR 16" O.C.
14. ALL STEEL SHALL CONFORM TO ASTM A–36.
15. ROOF LIVE LOAD = 20 PSF, SECOND FLOOR LIVE LOAD = 40 PSF, CEILING LIVE LOAD = 10 PSF.
    WIND LOAD 131 MPH
    ROOF DECKING SHALL BE 1/2" EXPOSURE 1 (CDX) OR WAFERBOARD APA RATED SHEATHING (24/0). SECOND FLOOR DECKING SHALL BE APA 1 1/8 PLYWOOD OR 2X6 T & G INSTALLED DIAGONALLY.
16 FRAMING CONNECTORS SHALL BE SIMPSON STRONG–TIE MTS12 @ 32" O.C.

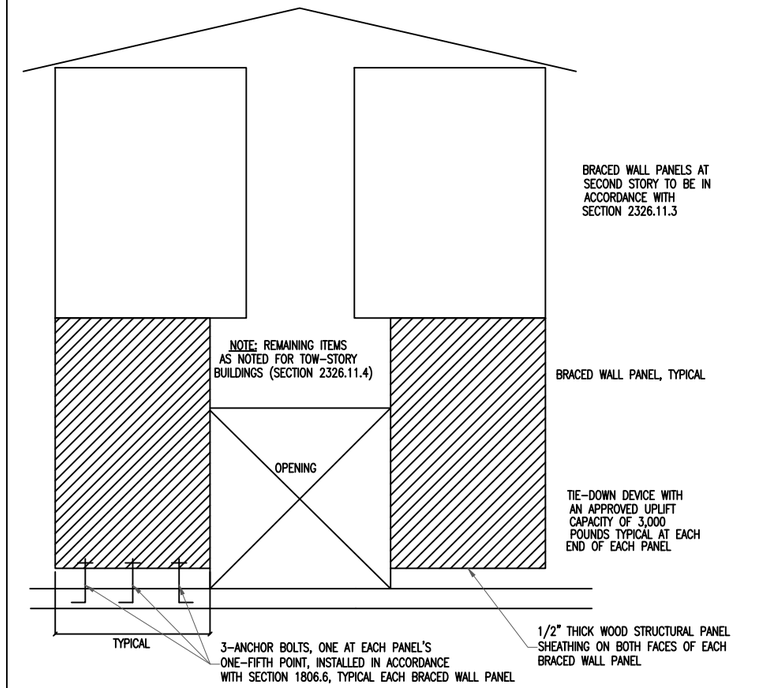
1. CORNER SHEATHING (FROM CORNER TO A DISTANCE 8'–0" FROM CORNER) PROVIDE 1/2" PLYWOOD SHEATHING. BLOCK ALL UNSUPPORTED EDGES OF SHEATHING. NAIL W/ 8d NAILS AT 4" O.C. EDGES, 12" O.C. FIELD.
2. ALL EXTERIOR WALL TO USE 1/2" O.S.B. (MIN) NAIL 4" O.C. AT EDGES, & 12" O.C. AT FIELD W/8d NAILS TYP. (U.N.O.)
3. INSTALLATION: DRIVE NAILS FLUSH. DO NOT PENETRATE THE SURFACE OF THE SHEATHING.

WIND STORM NOTES:

1. RAFTER HURRICANE TIES– CONNECT ALTERNATE RAFTERS TO SUPPORTS WITH SIMPSON H2.5 HURRICANE TIE
2. ALIGN OPPOSING RAFTERS @ RIDGE AND CONNECT WITH SIMPSON LSTA STRAPS TIE WITH 10–10d NAILS (5 EA. SIDE)
3. ROOF BRACING– 2 X 6 PURLIN WITH 2 X 4 BRACE @ 48" O.C. TO BEAM OR WALL BELOW
4. ALL BEAM CONNECTIONS SIMPSON HGB OR HGLT
5. PROVIDE FULL BEARING UNDER BEAMS CONTINUOUSLY TO FOUNDATION
7. DL– 5 PSF LL 10 PSF
   UNIFORM DIST. LOAD FROM WALL ABOVE #/LF
   POINT LOAD FROM WALL OR COLUMN ABOVE #
   ALL NON LOAD BEARING TRUSSES @ 120 #/LF MIN.
   PLUS LOAD FROM WALL ABOVE
   ALL FLUSH BEAM CONNECTIONS SIMPSON HGB OR HGLT
   ALL FLUSH STEEL TO STEEL BEAMS CONNECTIONS
   2– L 4" X 4" X 1/4" X 9' WITH
   6– 3/4" ø A307 BOLTS



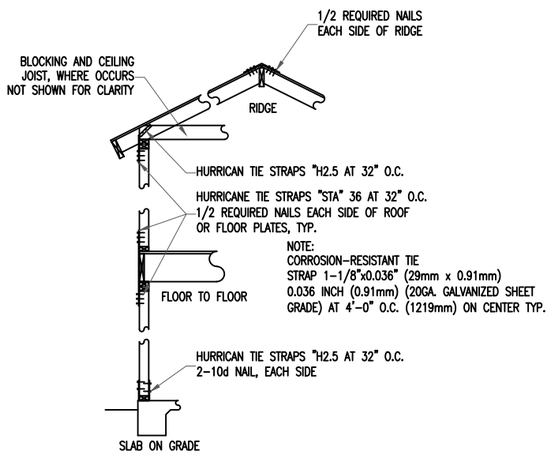
4'x8' FASTENER PATTERN



DETAIL FOR SHEAR WALL PANEL

NOTES:

1. ALL EXTERIOR CORNER WALLS SHALL HAVE A MINIMUM OF ONE LAYER OF 1/2" PLYWOOD SHEATHING (STRUCTURAL GRADE) WITH 8d NAILS @ 4"O.C.
2. SEE DETAIL FOR SHEAR WALLS. PROVIDE THE SHEATHING/NAILING PATTERN AS INDICATED ON THESE DRAWINGS.
3. 1/2" DRYWALL WITH 5d COOLER NAILS @ 7"O.C. AT EDGES PROVIDE THIS AS STANDARD CONSTRUCTION FOR BOTH SIDES OF ALL INTERIOR STUD WALLS.
4. PROVIDE BLOCKING AT ALL SHEATHING EDGES. PROVIDE DOUBLE STUDS w/ SIMPSON HTT5 AT EACH END OF THE SHEAR WALL.
5. PROVIDE 1/2"ø ANCHOR BOLTS @ 4'–0" MAX. OR AT LEAST 2 BOLTS IN THE MIDDLE OF EACH SHEAR WALL WITH 7 INCHES OF EMBEDMENT
6. PROVIDE CONTINUOUS HURRICANE CLIPS FROM ROOF TO FOUNDATION AS REQUIRED BY LOCAL BUILDING CODE.
7. PROVIDE ONE LAYER OF 1/2" OSB SHEATHING (STRUCTURAL GRADE) AT A MAXIMUM DISTANCE OF 25'–0" ON ALL EXTERIOR WALLS.



WIND STORM TIE–DOWNS SECTION

BEAMS:

(IF APPLICABLE) STEEL FLITCH BEAMS BE CONSTRUCTED WITH TWO ROWS OF 1/2" DIAM. BOLTS SPACED AT 24" O/C AND STAGGERED TOP AND BOTTOM (PROVIDE (2) BOLTS AT EACH END OF BEAM). HOLES SHALL BE 9/16" O AND DRILLED. EDGE CLEARANCE SHALL BE 1 1/2" FOR ALL BOLTS. WHEN ONE FLITCH BEAM IS "TEED" INTO ANOTHER THE BEAM SHALL BE SUPPORTED BY A SIMPSON EG5 HANGER. EDGE CLEARANCE SHALL BE 1–1/2" FOR ALL BOLTS. WOOD SHALL BE #2 KD 19 AND BOTH STEEL AND WOOD SHALL BE CONTINUOUS.
TRIPLE SECOND FLOOR JOISTS UNDER PARTITION WALLS ABOVE (U.N.O.).
ALL JOISTS FRAMING TO BEAMS SHALL BE SUPPORTED BY SIMPSON U JOIST METAL HANGERS (U.N.O.). ALL BEAMS FRAMING TO BEAMS SHALL BE SUPPORTED BY SIMPSON B/HB METAL HANGERS (U.N.O.).
ALL BEAMS FRAMING TO WALLS ARE TO BE SUPPORTED BY A MINIMUM OF (2) 2 X 4 OR (2) 2 X 6 STUDS UNLESS OTHERWISE NOTED.
HEADER SCHEDULE AS FOLLOWS (USE (2) 2 X 12'S WITH 1/2" PLYWOOD (U.N.O.) FOR FIRST FLOOR HEADERS):

SIZE	MAXIMUM SPAN	SIZE	MAXIMUM SPAN
2–2 X 6	4' – 6"	2–2 X 10	7' – 6"
2–2 X 8	6' – 0"	2–2 X 12	9' – 0"

THE NUMBER AND SIZE OF NAILS USED TO CONNECT WOOD MEMBERS SHALL BE ACCORDING TO TABLE 25Q OF THE HOUSTON/UBC BUILDING CODE IS APPLICABLE (U.N.O.). MULTIPLE STUDS SHALL BE GLUED AND NAILED WITH 10D NAILS 24" O.C. MULTIPLE JOISTS SHALL BE GLUED AND NAILED WITH 3–16D NAILS 12" O.C. THERE SHALL BE NO SPLICES.
STUD WALLS 14' OR HIGHER SHALL HAVE 2 X 6, (2) 2 X 4 OR 4 X 4 STUDS AT 16" O.C. WALLS SUPPORTING TWO FLOORS ABOVE SHALL BE 2 X 6, (2) 2 X 4 OR 4 X 4 STUDS AT 16" O.C.
GLUED LAM. BEAMS TO BE SOUTHERN PINE AND INSTALLED PER THE AMERICAN INSTITUTE OF TIMBER CONSTRUCTION. FY = 2400 PSI, FV = 165 PSI, E = 1,800 PSI.
CONTRACTOR/OWNER SHALL VERIFY FIELD DIMENSIONS AND DETAILS, NOTIFY THE PROJECT ARCHITECT/ENGINEER OF ANY DISCREPANCY FOR REVIEW RECOMMENDATIONS AND REVIEW RECOMMENDATIONS AND REVISE THEM, IF NECESSARY. ALL CONSTRUCTION PROCEDURES SHALL CONFORM TO LOCAL CODES AND OSHA GUIDELINES.

SHEAR WALL SCHEDULE

(1) ADJUST TO COMPLY WITH MAX. DISTANCE OF 25'–0" O.C.

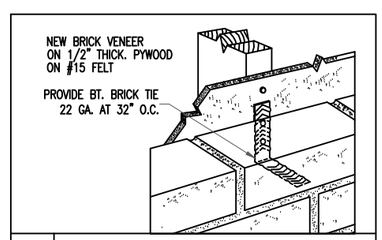
TYPE	SHEATHING / NAILING PATTERN
***|	(1) LAYER OF 1/2" STRUCTURAL PLYWOOD w/ 8d NAILS @ 4"O.C. AT ALL EDGES (TO USE)
2	(1) LAYER OF 1/2" STRUCTURAL PLYWOOD w/ 8d NAILS @ 2.5"O.C. AT ALL EDGES
3	(2) LAYER OF 1/2" STRUCTURAL PLYWOOD w/ 10d NAILS @ 4"O.C. AT ALL EDGES
4	(2) LAYER OF 1/2" STRUCTURAL PLYWOOD w/ 10d NAILS @ 2.5"O.C. AT ALL EDGES
5	SEE DETAIL FOR SHEAR WALL #5
6	SEE DETAIL FOR SHEAR WALL #6

ROOF AND FLOOR ANCHORAGE AT EXTERIOR WALLS

BASIC WIND SPEED (MPH) x 1.61 FOR KPH	LOCATION	NUMBER OF NAILS LOCATION B	C	D
131	ROOF TO WALL	10–10d	12–10d	12–10d
	FLOOR TO FLOOR	8–10d	10–10d	10–10d
	FLOOR TO FOUNDATION	6–10d	8–10d	8–10d

RIDGE TIE–STRAP NAILING

BASIC WIND SPEED (MPH) x 1.61 FOR KPH	NUMBER OF NAILS EXPOSURE B	C	D
131	12–10d	14–10d	16–10d



BRICK–TIE DETAIL

GENERAL NOTES

SCALE: N.T.S.

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S8