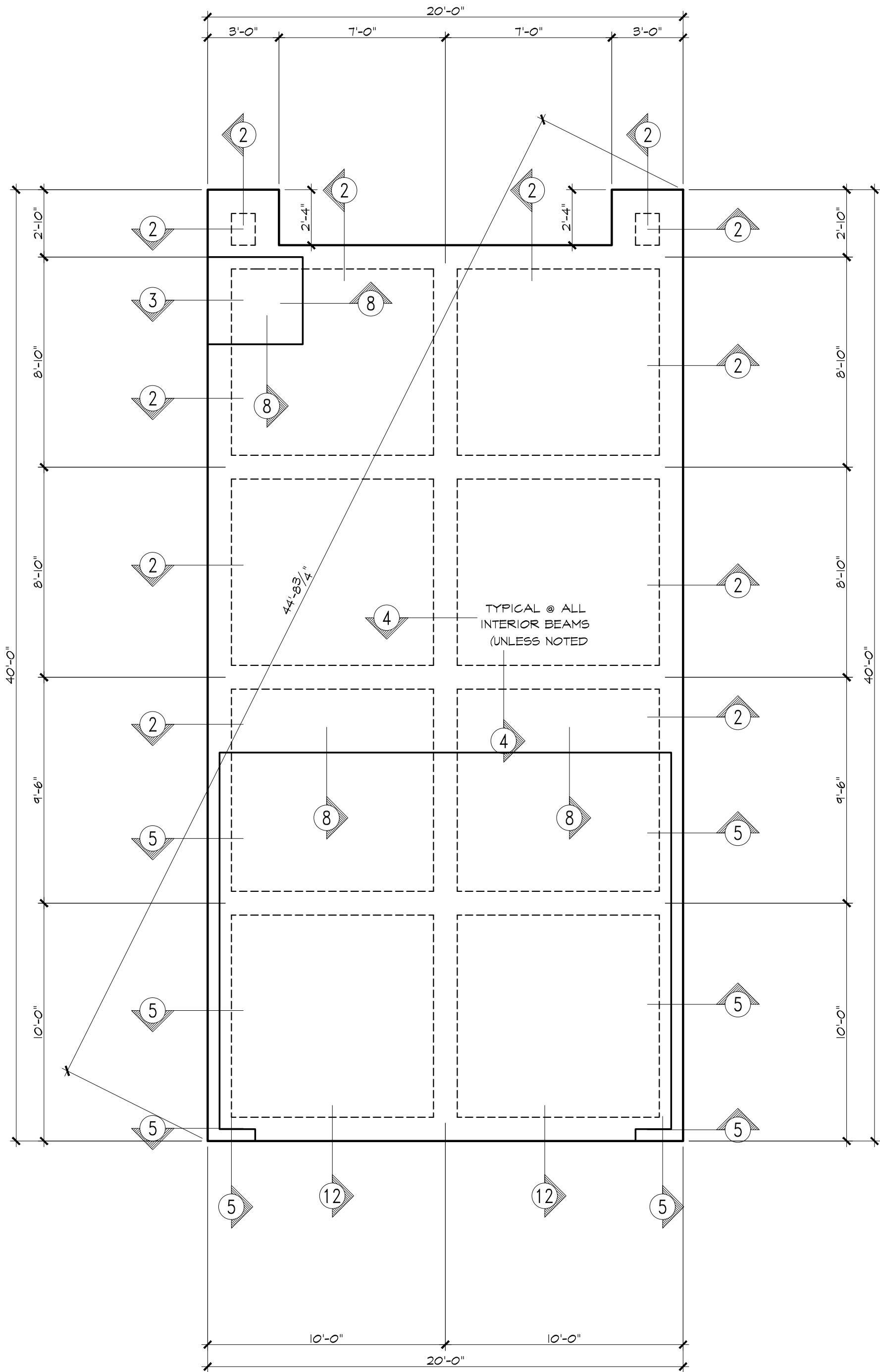


MASTER PROJECT "A"

ADDRESSES:

- 6503 HIGHLAND LANDING LANE
- 6511 HIGHLAND LANDING LANE
- 6515 HIGHLAND LANDING LANE
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- 6533 HIGHLAND LANDING LANE
- 6537 HIGHLAND LANDING LANE



FOUNDATION PLAN

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

SUBGRADE PREPARATION & FILL:

1. PREPARE THE SUBSOIL BY STANDARD PRACTICES OR SOIL TEST REPORT, PRESUMPTIVE SOIL BEARING VALUE TO MEET CONDITIONS IN TABLE R401.4.1 OF 2021 IRC: 1500 LBS/SF.
2. REMOVE ALL VEGETATION, TREE STUMPS AND ROOTS FROM THE AREA WITHIN THE BUILDING LINE.
3. REMOVE 24" TOPSOIL AND REPLACE WITH PROPERLY STRUCTURAL FILL WITH 6" LAYERS AND COMPACT TO 95% STANDARD PROCTOR (ASTM D698). STRUCTURAL FILL SHALL BE A SANDY MATERIAL WITH A LIQUID LIMIT BELOW 40 AND A PLASTICITY INDEX BETWEEN 1 AND 20. EXTEND FILL 5' BEYOND THE OUTSIDE OF THE GRADE BEAM.
4. GRADE SITE TO PROMOTE POSITIVE DRAINAGE AWAY FROM THE BUILDING AREA BOTH DURING AND AFTER CONSTRUCTION.
5. THE ELEVATION OF THE TOP OF THE SLAB SHALL BE A MINIMUM OF TWELVE (12) INCHES ABOVE THE HIGHEST NATURAL GRADE ELEVATION AT THE PERIMETER OF THE SLAB.
6. THE SLAB AREA SHALL BE FREE OF TOPSOIL UNCONTROLLED EXISTING MAN-MADE FILL AND SOIL CONTAINING ORGANIC MATTER.

WINDSTORM NOTES:

WIND LOADS FOR A BASIC WIND SPEED OF VULT= 130 MPH WITH 3-SEC. GUST WITH EXPOSURE B AND AN IMPORTANCE FACTOR 1.0.

DESIGN CRITERIA NOTE:

1. PER APPLICATION, (DESIGN CRITERIA) (2021 IRC). BUILDINGS AND STRUCTURES, AND ALL PARTS THEREOF, SHALL BE CONSTRUCTED TO SAFETY SUPPORT ALL LOADS, INCLUDING DEAD LOADS, LIVE LOADS, ROOF LOADS, FLOOD LOADS, SNOW LOADS, WIND LOADS AND SEISMIC LOADS AS PRESCRIBED BY 2021 IRC.

NOTE: NOTE THE DESIGN IS PER 2021 IRC.

POST BASE SCHEDULE:

POST BOLTED SIZE	SIMPSON EMBEDDED POST BASE	SIMPSON POST BASE
4"x4"	CB44	ABU44
6"x6"	CB66	ABU66
8"x8"	CB88	ABU88

SITE DRAINAGE NOTE:

THE FOUNDATION IS A LOAD CARRYING SYSTEM FOR STRUCTURAL PURPOSES ONLY AND IS NOT INTENDED TO SUPPLEMENT DRAINAGE OR WATER MOVEMENT SYSTEM ON THE SITE. DRAINAGE DESIGN IS BEYOND THE SCOPE OF WORK OF THE STRUCTURAL ENGINEER OF RECORD. THE FOUNDATION DESIGN IS PREDICATED ON PROPER FINAL GRADING BY OTHERS TO ENSURE ADEQUATE DRAINAGE AND CONFORMANCE WITH THE STRUCTURAL FOUNDATION DETAILS.

FIELD NOTES:

1. CONTRACTOR SHALL VERIFY ALL FIELD EXISTING CONDITIONS PRIOR TO CONSTRUCTION, NOTIFY DESIGNER AND ENGINEER IN THE EVENT OF DISCREPANCIES OR UNEXPECTED CONDITIONS BEFORE BEGINNING OR FABRICATING ANY WORK.
2. VERIFY WITH THE OWNER AND ARCHITECT THE FIXTURES AND MAJOR EQUIPMENT LOCATION AND REQUIREMENT.
3. CONTRACTOR SHALL FIELD VERIFY FINISH FLOOR ELEVATIONS WITH CIVIL ENGINEER.

NOTE:

1. THIS FOUNDATION IS DESIGNED FOR WORST NORMAL CASE SOIL, WHICH IS USC TYPE CH WITH A BEARING CAPACITY OF 1500 PSF AS PER TABLE R401.4.1 OF THE 2021 IRC.

MASTER PROJECT "A"

HIGHLAND LANDING LN.
HOUSTON, TX. 77091

3h Engineering & Construction, Inc.

TYPE FIRM NO. F-18626
HOUSTON, TEXAS
info@3h-engineering
p. 281-519-3150



DATE :
08/09/2024

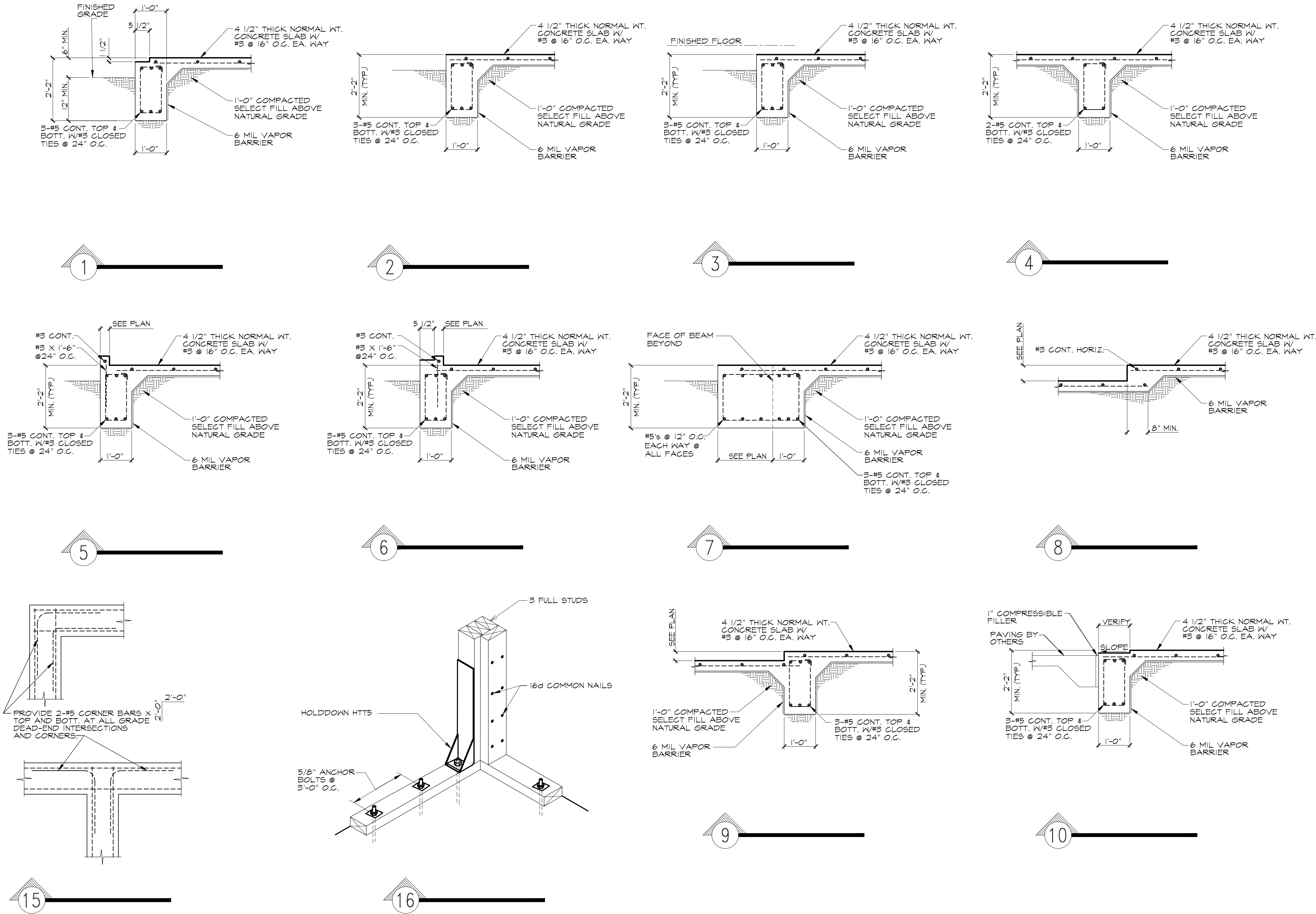
SCALE:
1/4" = 1'-0"

DESCRIPTION:

FOUNDATION
PLAN

SHEET
S1.0

- NOTES:
1. FOUNDATION:
- A. ALL FOUNDATION EXCAVATION TO BE CARRIED TO UNDISTURBED MATERIAL OR PLACED IN APPROVED ENGINEERED FILL. EXCAVATIONS SHALL BE FREE OF LOOSE MATERIAL AND WATER.
- B. OVER EXCAVATION OF MATERIALS SHALL BE BACK FILLED WITH CONCRETE.
- C. ALL BACK FILL AROUND FOOTINGS BEHIND WALLS, AND UNDER SLABS SHALL BE COMPACTED IN 6" LIFTS AND NO LESS THAN 95% MAXIMUM DENSITY.
- D. BACK FILLING AGAINST FOUNDATION WALLS SHALL NOT BE PERMITTED UNTIL THE FOUNDATION HAS REACHED 10 DAY STRENGTH.
- E. STEP FOOTINGS AT A RATIO OF ONE VERTICAL TO TWO HORIZONTAL, WITH A MAXIMUM VERTICAL STEP OF 2'-6" (U.N.O.).
- F. WATERPROOFING OF FOUNDATIONS AND RETAINING WALLS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND NOT THE ENGINEER.
- G. ANY UNUSUAL SITE CONDITIONS (E.G. LOOSE FILL, SUBSURFACE WATER, ETC.) SHALL BE REPORTED TO THE ENGINEER.
- H. CONCRETE AND REINFORCING FOR DRILLED FOOTINGS SHALL BE PLACED IMMEDIATELY AFTER EXCAVATION.
- I. ALL PIPES THROUGH EXTERIOR GRADE BEAMS SHALL BE SLEEVED. ALL PIPES SHALL BE LOCATED AT MID DEPTH OF GRADE BEAM. SIZE OF SLEEVES SHALL NOT EXCEED 1/3 OVERALL DEPTH OF GRADE BEAM. SPACING OF SLEEVES SHALL NOT BE CLOSER THAN 3 DIAMETERS ON CENTER (EXCEPT WATER SERVICE LINE AND FLOOR DRAIN).
3. REINFORCED CONCRETE:
- A. REINFORCED CONCRETE SHALL CONFORM TO APPLICABLE REQUIREMENTS OF THE 2021 IRC.
- B. ALL CONCRETE USED IN FOUNDATION AND SLAB ON GRADE SHALL HAVE A 28 DAY COMPRESSIVE STRENGTH OF NO LESS THAN 5,000 PSI.
- C. THE MAXIMUM SLUMP SHALL NOT EXCEED 6 INCHES.
- D. PROVIDE #3 @ 16" O.C. EACH WAY IN ALL SLABS ON GRADE, PLACED 1 1/2" DOWN FROM THE TOP OF SLAB, SUPPORTED BY CHAIRS AT 48" O.C. EACH WAY (U.N.O.).
- E. PROVIDE CONTROL JOINTS IN ALL EXPOSED SLABS ON GRADE. THE MAXIMUM SPACING OF CONTROL JOINTS SHALL BE 20'-0" O.C. (U.N.O.).
- F. FOUR SLAB IN STRIP JOINTS NOT IN CHECKERBOARD PATTERN.
- G. PROVIDE VERTICAL CONTROL JOINTS IN ALL CONCRETE WALLS. THE MAXIMUM SPACING OF CONTROL JOINTS SHALL BE 20'-0" O.C. (U.N.O.). CUT ALTERNATE HORIZONTAL REINFORCING BARS, EACH FACE.
- H. ADDITIVES CONTAINING CALCIUM CHLORIDE SHALL NOT BE USED.
4. REINFORCING STEEL:
- A. ALL REINFORCING STEEL SHALL CONFORM TO ASTM A615 GRADE 60 (U.N.O.), EXCEPT #3 OR SMALLER MAY BE ASTM A615 GRADE 40.
- B. ALL REINFORCING STEEL SHALL BE ACCURATELY LOCATED AND ADEQUATELY SECURED IN POSITION BEFORE AND DURING PLACEMENT OF CONCRETE.
- C. ALL DETAILS OF FABRICATION AND INSTALLATION OF REINFORCING STEEL SHALL BE IN ACCORDANCE WITH THE ACI MANUAL OF STANDARD PRACTICE.
- D. LAP REINFORCING BAR SPLICES 40 BAR DIAMETERS (U.N.O.). SPLICE TOP BARS AT MID SPAN. SPLICE BOTTOM BARS OVER SUPPORTS.
- E. BEND ALL HORIZONTAL BEAM AND WALL BARS 40 BAR DIAMETERS AROUND ALL CORNERS (U.N.O.).
- F. PROVIDE VERTICAL AND HORIZONTAL REINFORCING BARS IN CONCRETE AND MASONRY WALLS TO CONFORM TO THE MINIMUM PROVISIONS OF ACI 318, SECTION 14.3. (U.N.O.).
- G. PROVIDE THE FOLLOWING MINIMUM CONCRETE COVER OVER REINFORCING STEEL:
CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH 4"
CONCRETE EXPOSED TO EARTH OR WEATHER 2"
CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND . . . 3/4"
5. WOOD FRAMING:
- A. ALL FRAMING LUMBER SHALL BE SOUTHERN YELLOW PINE #2 OR BETTER (U.N.O.). STUDS AND PLATES MAY BE CONSTRUCTION GRADE MATERIAL.
- B. PLYWOOD SHEATHING SHALL BE MANUFACTURED WITH EXTERIOR GLUE IN ACCORDANCE WITH REQUIREMENTS OF THE AMERICAN PLYWOOD ASSOCIATION STANDARD PSI-B3. THE GRADE, THICKNESS AND PANEL IDENTIFICATION INDEX SHALL BE AS SHOWN ON THE PLANS.
- C. ALL GLUE LAMINATED BEAMS SHALL BE STRESS GRADE 2800F (U.N.O.).
- D. ALL FRAMING CLIPS AND TIES SHALL BE SIMPSON "STRONG TIE".
- E. MINIMUM NAILING FOR CONNECTIONS NOT INDICATED ON THE PLANS SHALL BE IN ACCORDANCE WITH 2021 IRC WOOD FRAME CONSTRUCTION MANUAL.
- F. TRUSS JOINTS SHALL BE MANUFACTURED AND INSTALLED IN ACCORDANCE WITH THE 2021 IRC.
- G. ALL NAILS SHALL BE COMMON (U.N.O.). NAIL GUN DRIVEN NAILS.
- H. POSTS USED FOR BEAM OR GIRDER SUPPORTS SHALL HAVE FULL BEARING TO THE FOUNDATION (U.N.O.).
- I. TIMBER SIZES PRESCRIBED ARE MINIMUM. LARGER SIZES MAY BE SUBSTITUTED. DETAILED CONNECTIONS MAY REQUIRE MODIFICATION IF SUBSTITUTIONS ARE MADE.
- J. FLUSH FRAMED WOOD JOISTS SHALL BE ATTACHED TO SUPPORTING BEAMS WITH STEEL JOIST HANGERS OR PRESSURE BLOCKED.
6. MISCELLANEOUS STRUCTURES:
- TEMPORARY CONSTRUCTION BRACING, FORM WORK, CHIMNEYS, STAIRS, BUILT-IN CABINET WORK, AND FIXTURES HAVE NOT BEEN REVIEWED BY THE STRUCTURAL ENGINEER OF RECORD FOR LOAD CARRYING CAPACITY, STABILITY, RESISTANCE TO LATERAL LOADS (INCLUDING WIND AND SEISMIC), AND CONNECTIONS TO SUPPORT ELEMENTS.



MASTER PROJECT "A"

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6537 HIGHLAND LANDING LANE

FOUNDATION DETAILS

NOT TO SCALE

MASTER PROJECT "A"
HIGHLAND LANDING LN.
HOUSTON, TX 77091

3h Engineering & Construction, Inc.
TPE FIRM NO. F-18626
HOUSTON, TEXAS
info@3h-engineering
713-519-3150



DATE :
08/09/2024

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

DESCRIPTION:

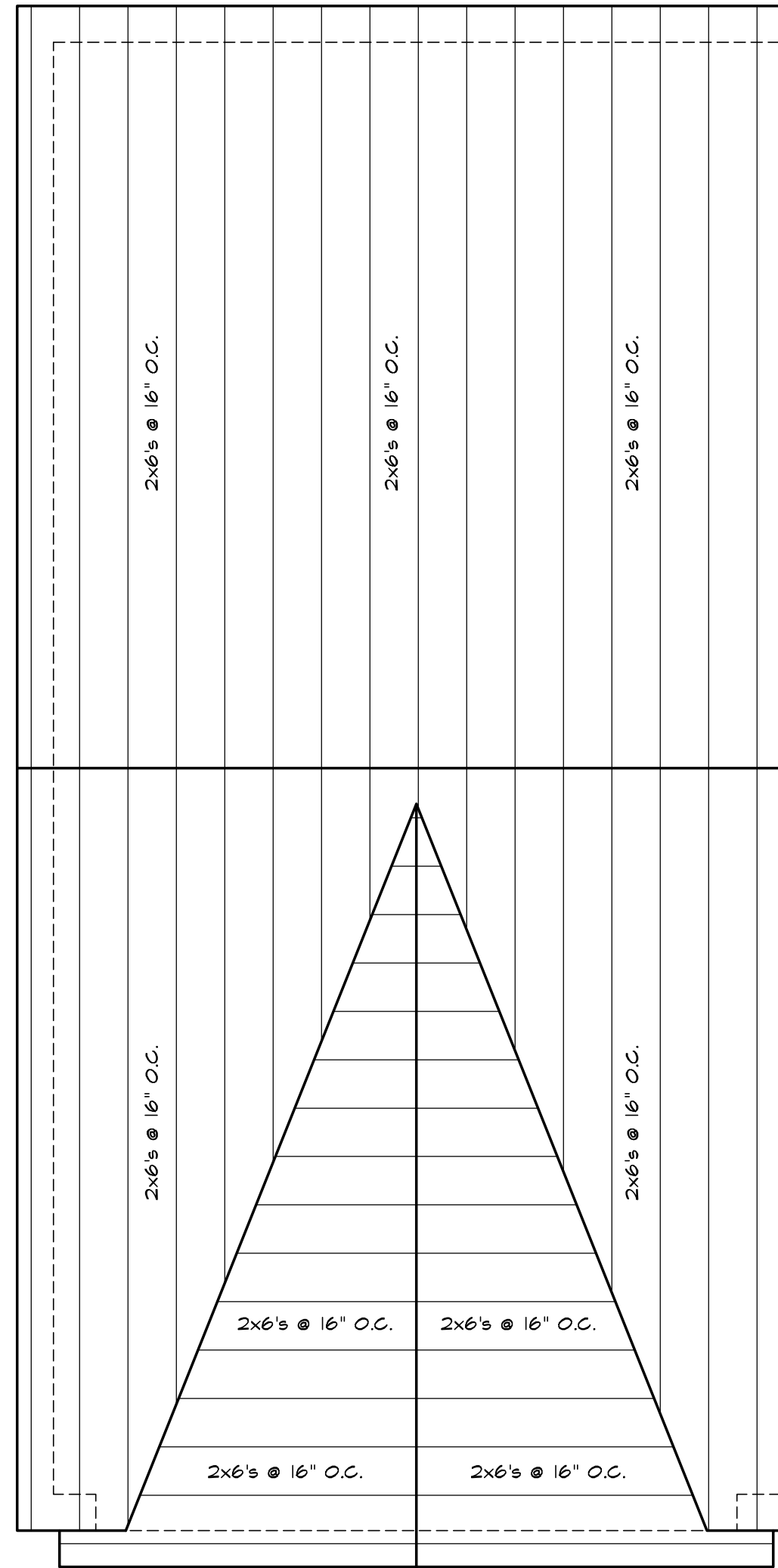
FOUNDATION
DETAILS

SHEET

S2.0

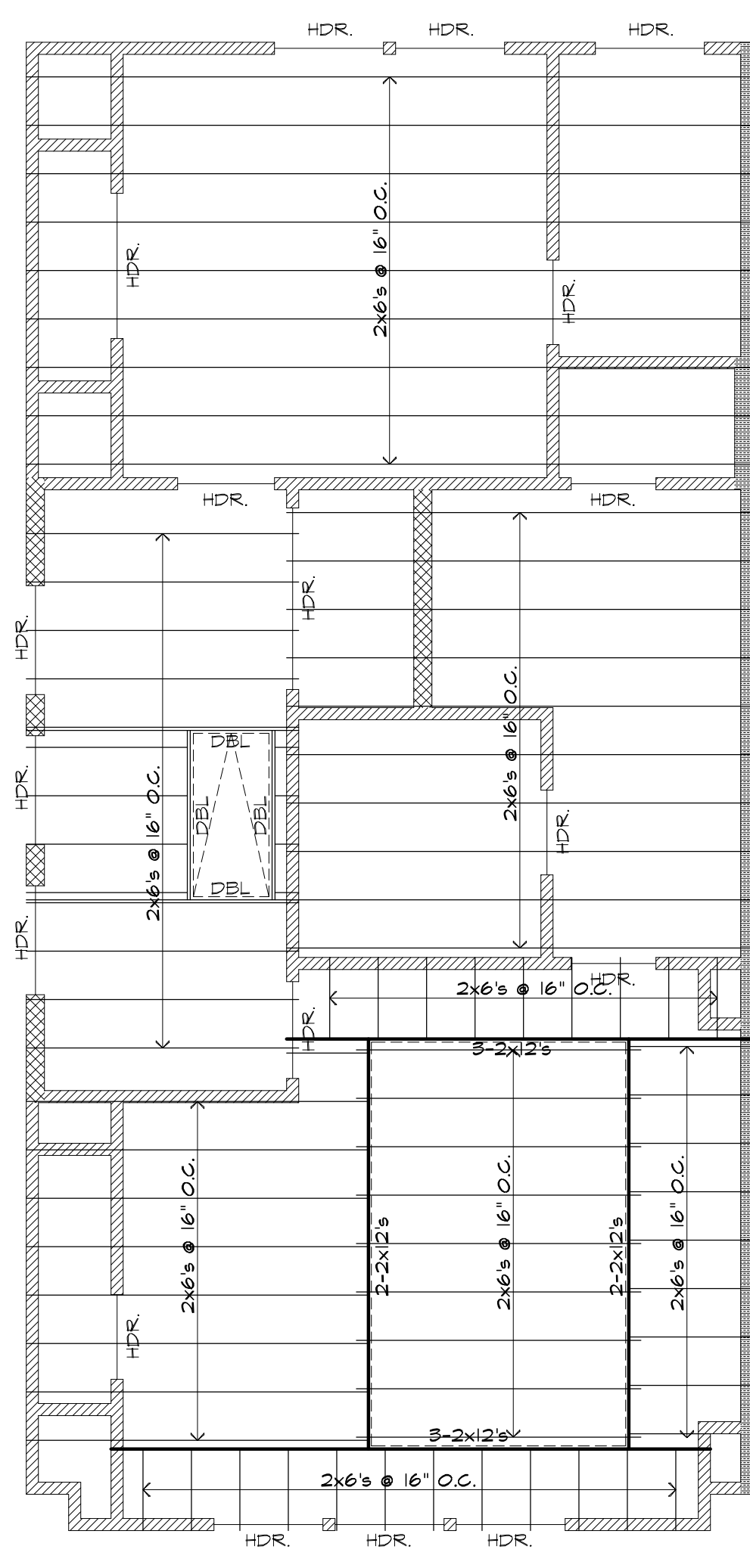
ROOF FRAMING NOTES:

1. USE 2x6 RAFTERS AT 16" O.C. #2 S.Y.P. (11'-6" MAX. SPAN) UNLESS NOTED OTHERWISE ON PLAN.
2. ALL RIDGE, HIP AND VALLEY RAFTERS TO BE ONE SIZE LARGER THAN MEMBER SUPPORTED.
3. DESIGNS BASED ON 20 PSF LIVE LOAD / 10 PSF DEAD LOAD 1/240.
4. USE 2x6's @ 12" O.C. #2 S.Y.P. AT ALL DORMER LOCATIONS.
5. RAFTERS & CEILING JOISTS SHALL BE TIED IN ACCORDANCE WITH THE 2021 INTERNATIONAL RESIDENTIAL CODE WITH TEXAS REVISIONS.
 - A. CEILING JOISTS AND RAFTERS SHALL BE NAILED TO EACH OTHER WHERE POSSIBLE AND THE ASSEMBLY SHALL BE NAILED TO THE TOP PLATE IN AN ADEQUATE MANNER TO SECURE THE ROOF FRAMING TO THE WALLS.
 - B. WHERE CEILING JOIST ARE NOT PARALLEL TO RAFTERS, A STRONG-BACK SHALL BE INSTALLED TO THE FOOT OF EVERY THIRD RAFTER AS A MINIMUM TO PROVIDE A CONTINUOUS TIE ACROSS THE BUILDING. THE SPACING BETWEEN RAFTER TIE-BACKS SHALL NOT EXCEED 48'.
6. PROVIDE 2x6 PURLIN BRACING AT THE APPROXIMATE LOCATIONS SHOWN OR TO LOAD BEARING WALLS AND BEAMS TO SUPPORT RAFTERS AS NECESSARY TO KEEP THE MAXIMUM RAFTER SPANS FROM BEING EXCEEDED.
7. PROVIDE 2x6 COLLAR TIES LESS THAN 1/3 DOWN FROM RIDGE @ MAXIMUM SPACING OF 48' O.C.



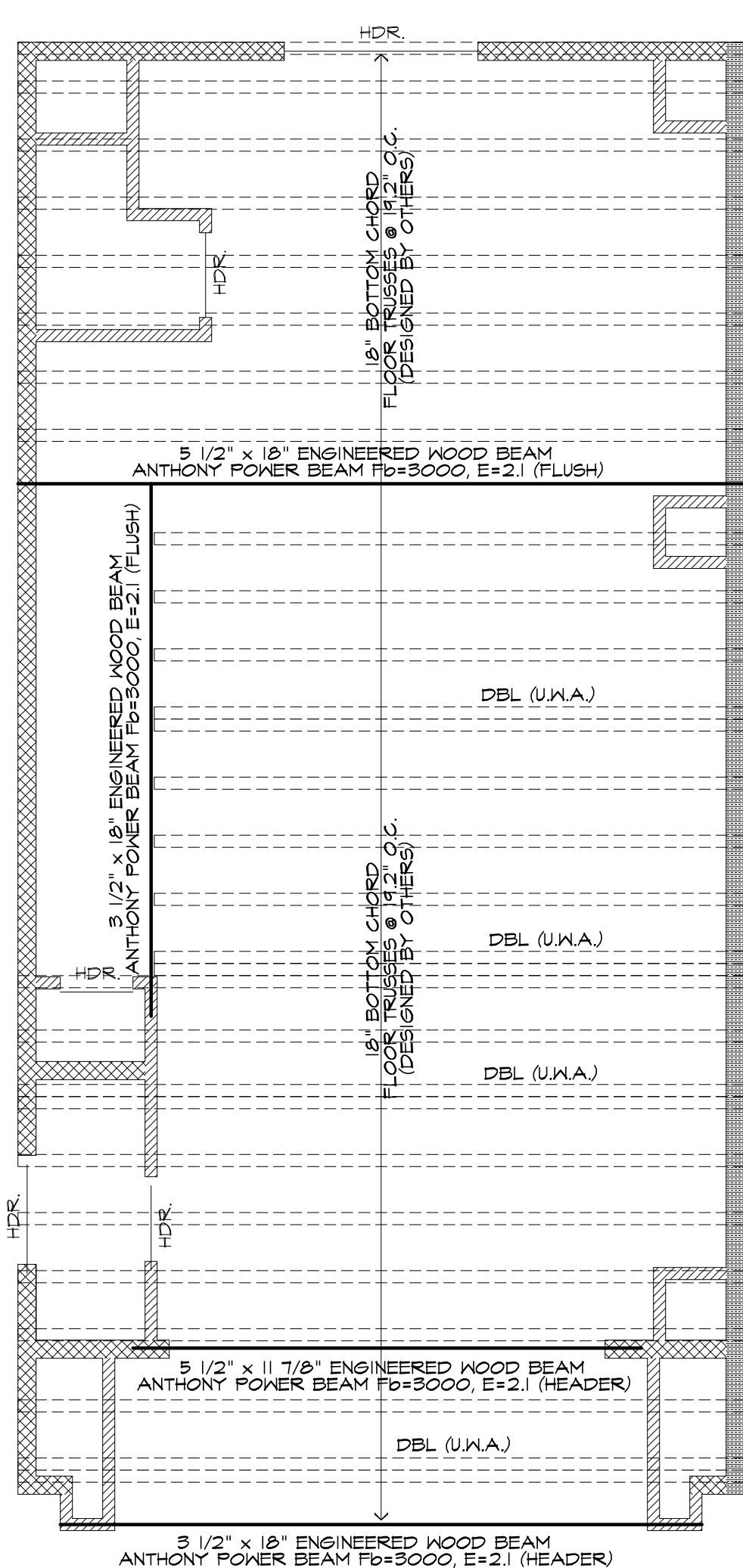
ROOF FRAMING

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



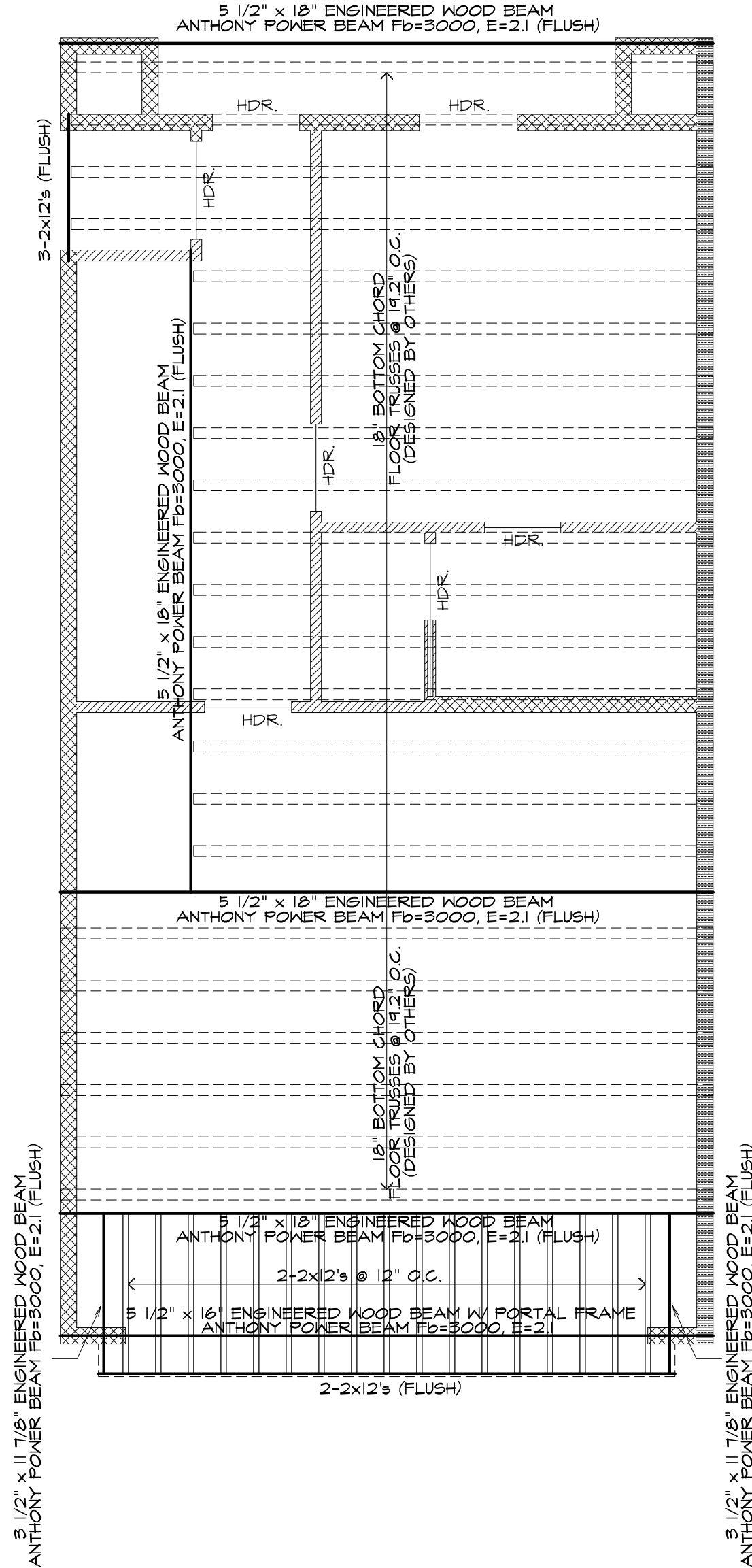
THIRD FLOOR
CEILING FRAMING

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



SECOND FLOOR
CEILING FRAMING

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



FIRST FLOOR
CEILING FRAMING

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

MASTER PROJECT "A"

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6533 HIGHLAND LANDING LANE
6537 HIGHLAND LANDING LANE

FRAMING NOTES:

1. ALL LUMBER SHALL BE STAMPED WITH THE GRADE MARK OF AN APPROVED TESTING AGENCY.
2. DOUBLE STUD FOR OPENINGS LESS THAN 4' WIDE AND TRIPLE STUD FOR OPENINGS 4' WIDE OR LARGER.
3. PROVIDE A CONTINUOUS TIE ACROSS BUILDING WITH STRONGBACKS ON ALL JOIST SPANS OVER 7'-6" AND TWO STRONGBACKS ON ALL JOIST SPANS OVER 15'-0". STRONGBACKS SHALL BE ONE 2x6 VERTICAL AND ONE 2x4 FLAT, PERPENDICULAR TO JOISTS AND NAIL TO EACH JOIST.
4. PROVIDE 1/8" EXTERIOR GRADE PLYWOOD SHEATHING BRACING FROM TOP OF DOUBLE TOP PLATE TO BOTTOM PLATE (U.N.O.).
5. THE NUMBER OF WALL STUDS @ BEARING POINTS OF 2x MEMBER BEAMS SHALL EXCEED THE NUMBER OF MEMBERS IN THE BEAM BY ONE. THE CENTERLINE OF THE BEAM SHALL BE THE CENTERLINE OF THE SUPPORTING WALL STUDS.
6. ALL STRUCTURAL LUMBER HAS BEEN DESIGNED BASED ON SOUTHERN YELLOW PINE OF THE FOLLOWING MINIMUM GRADES AND ALLOWABLE STRESSES AS PER THE SOUTHERN PINE COUNCIL (ANY CHANGES IN SPECIES OR GRADES MUST BE COMPENSATED ACCORDINGLY).

STUDS	#5 OR BETTER
BEAMS, GIRDERS	#2 OR BETTER
ALL OTHER LUMBER	#2 OR BETTER
7. HEADER SCHEDULE, ALLOWABLE SPANS FOR #2 S.Y.P. HEADERS OVER OPENINGS IN EXTERIOR WALLS ARE AS FOLLOWS:

WIDTH OF ROOF STRUCTURE	HEADER SIZE	MAXIMUM SPAN
UP TO 28'-0"	2-2x8	4'-6"
	2-2x10	5'-6"
	2-2x12	6'-4"
28'-0" TO 36'-0"	2-2x6	3'-2"
	2-2x8	4'-0"
	2-2x10	4'-11"
	2-2x12	5'-8"
WIDTH OF FLOOR STRUCTURE	HEADER SIZE	MAXIMUM SPAN
UP TO 20'-0"	2-2x6	3'-6"
	2-2x8	4'-5"
	2-2x10	5'-5"
	2-2x12	6'-5"
20'-0" TO 28'-0"	2-2x6	3'-0"
	2-2x8	3'-10"
	2-2x10	4'-8"
	2-2x12	5'-5"

THESE HEADERS AND SPANS ARE ASSUMING UNIFORMLY DISTRIBUTED LOAD REQUIREMENT TO 1/2 THE WIDTH MULTIPLIED BY THE APPLICABLE LOAD. IF CONCENTRATED LOADS FROM THE BEAMS OR OPENINGS ABOVE ARE APPLIED TO THESE HEADERS, SPECIAL ANALYSIS WILL BE REQUIRED.
8. FOUNDATION PLATES OR SILLS SHALL BE BOLTED TO THE FOUNDATION WITH 5/8" DIAMETER ANCHOR BOLTS EMBEDDED AT LEAST 1" INTO CONCRETE - MAXIMUM 3'-0" O.C. - MINIMUM 2 BOLTS PER PIECE WITH ONE BOLT LOCATED WITHIN 12" OF END OF EACH PIECE - PROVIDE 3" WASHER @ TOP OF PLATE.
9. ALL EXTERIOR WALL SOLE PLATES TO BE SET IN SEALANT.
10. ALL WOOD IN CONTACT WITH CONCRETE OR EXPOSED TO WEATHER SHALL BE TREATED LUMBER.
11. PROVIDE BRICK TIES OF 22 GAUGE 1/8" CORRUGATED METAL - 3" INTO MASONRY @ 16" HORIZONTALLY & 12" VERTICALLY.
12. PROVIDE MASONRY KEEP HOLES 32" O.C. AT BASE OR LEDGE.

GENERAL FRAMING NOTES:

1. CONTRACTOR/OWNER SHALL VERIFY FIELD DIMENSIONS AND DETAILS. NOTIFY THE PROJECT OF ANY DISCREPANCY AND REVIEW FOR RECOMMENDATIONS OR REVISIONS IF NECESSARY. ALL CONSTRUCTION PROCEDURES SHALL CONFORM TO LOCAL CODES AND OSHA GUIDELINES.
2. CONTRACTOR/OWNER IS RESPONSIBLE FOR SELECTION AND CORRECT APPLICATION OF ALL MATERIALS FOR CONSTRUCTION.
3. THIS RAFTERS LAYOUT DESIGNED TO SUPPORT COMPOSITION ROOF SHINGLES ONLY UNO. PLEASE CONSULT ENGINEER IF ANY OTHER TYPE OF ROOF COVERING IS TO BE USED.
4. FIELD VERIFY EXISTING CONDITIONS PRIOR TO CONSTRUCTION, NOTIFY DESIGNER AND ENGINEER IN THE EVENT OF DISCREPANCIES OR UNEXPECTED CONDITIONS.
5. VERIFY WITH THE OWNER AND ARCHITECT THE FIXTURES AND MAJOR EQUIPMENT LOCATION AND REQUIREMENT.

WINDSTORM NOTES:

WIND LOADS FOR A BASIC WIND SPEED OF VULT= 130 MPH WITH 3 SEC. GUST WITH EXPOSURE B AND AN IMPORTANCE FACTOR 1.0.

DESIGN CRITERIA NOTE:

1. R301 APPLICATION, (DESIGN CRITERIA) (2021 IRC), BUILDINGS AND STRUCTURES, AND ALL PARTS THEREOF, SHALL BE CONSTRUCTED TO SAFETY SUPPORT ALL LOADS, INCLUDING DEAD LOADS, LIVE LOADS, ROOF LOADS, FLOOD LOADS, SNOW LOADS, WIND LOADS AND SEISMIC LOADS AS PRESCRIBED BY 2021 IRC.

NOTE: NOTE THE DESIGN IS PER 2021 IRC.

DESIGN LOADS:

ROOF LIVE LOAD:	20 psf
ROOF DEAD LOAD:	10 psf
CEILING LIVE LOAD:	20 psf
CEILING DEAD LOAD:	10 psf
WIND LOAD:	130 mph

ATTIC ACCESS NOTE:

PROVIDE ATTIC ACCESS WITH PULL DOWN STAIRWAY WITH CLEAR OPENING NOT LESS THAN 30 INCH BY 34 INCH WITH 22 INCHES OF CLEAR HEADROOM AND A LOAD CAPACITY NOT LESS THAN 350 POUNDS (2021 I.R.C. AS AMENDED BY THE C.O.H.)

MASTER PROJECT "A"

HIGHLAND LANDING LN.
HOUSTON, TX. 77091

3H Engineering & Construction, Inc.

TYPE FIRM NO. F-18626
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P. 281-818-3160



DATE :
08/09/2024

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

DESCRIPTION:

FRAMING
PLANS

SHEET
S3.0

MASTER PROJECT "A"

ADDRESSES:

6503 HIGHLAND LANDING LANE

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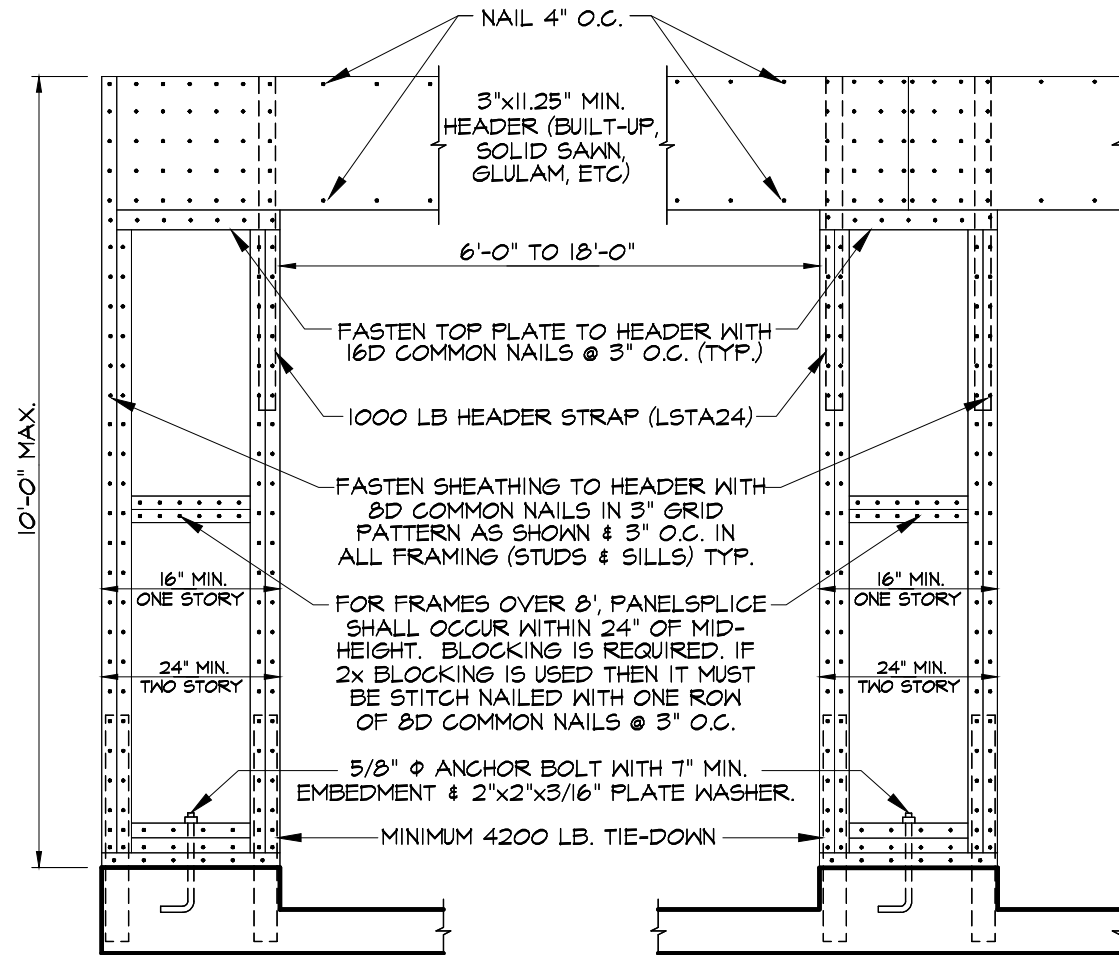
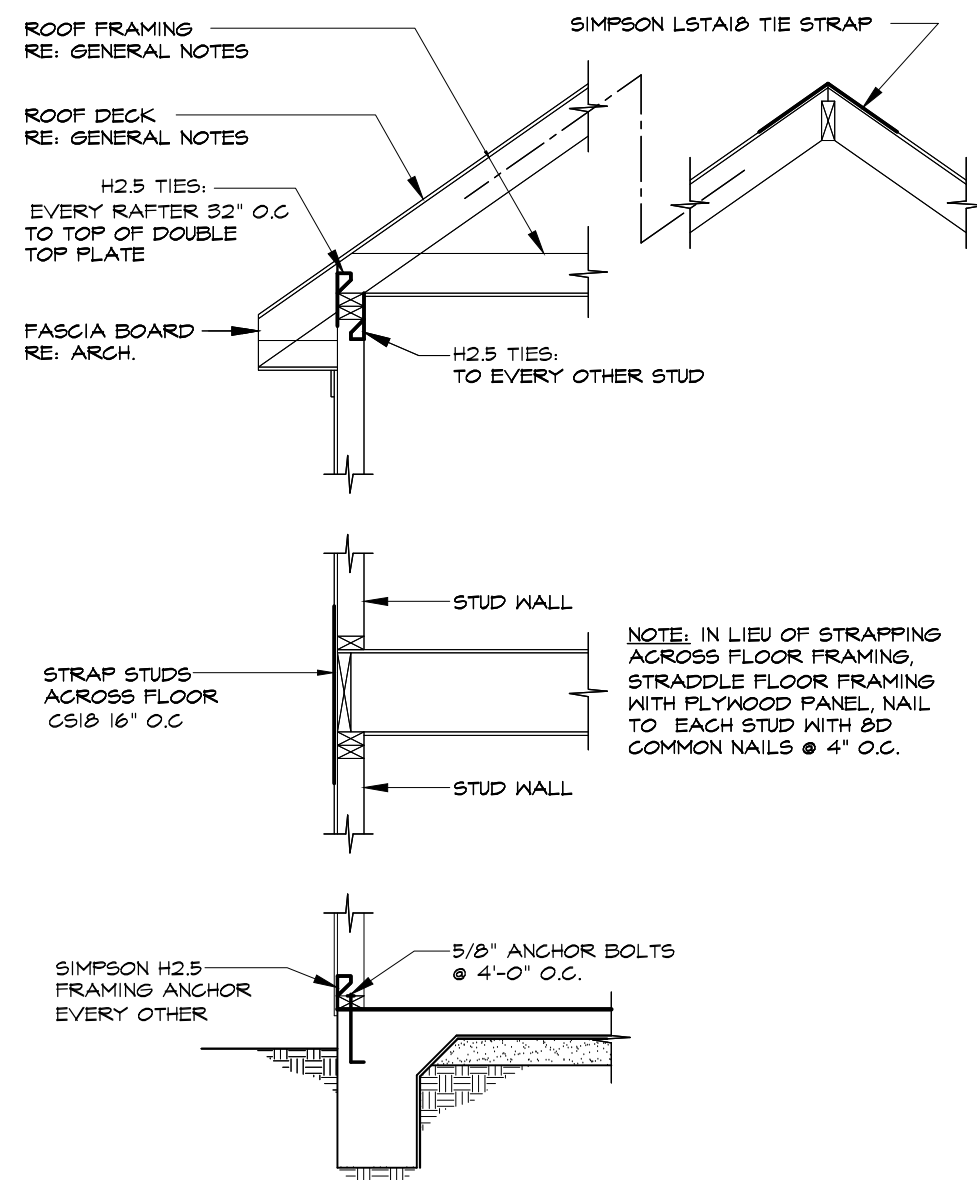
6517 HIGHLAND LANDING LANE

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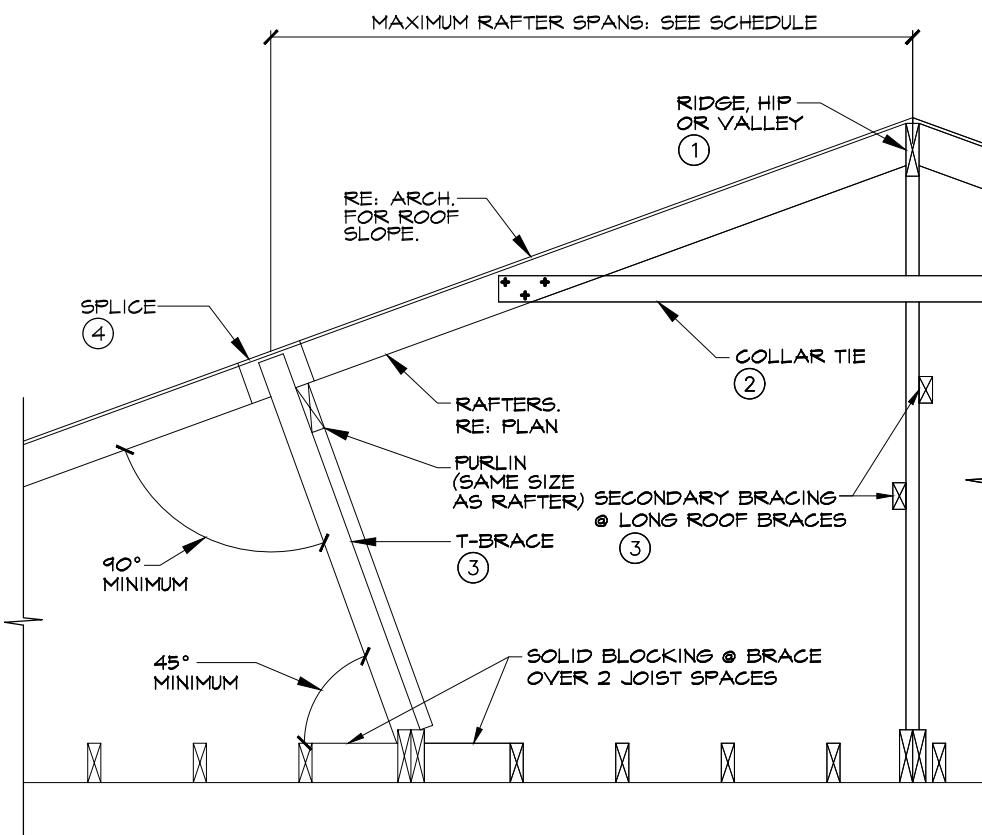
6533 HIGHLAND LANDING LANE

6537 HIGHLAND LANDING LANE



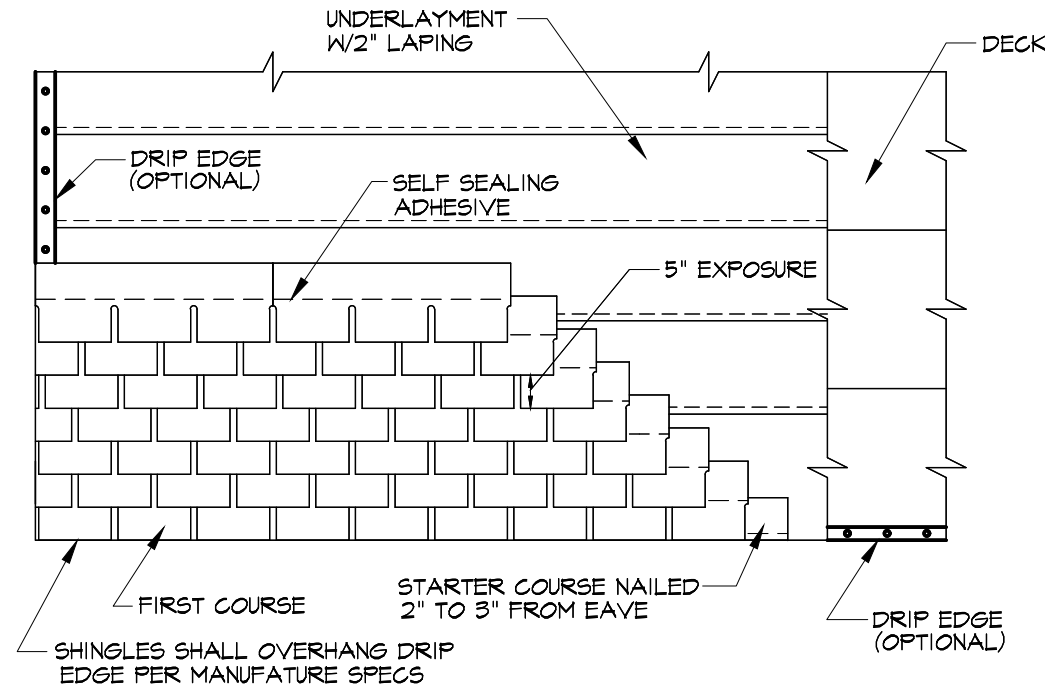
4 PORTAL FRAME BRACING DETAIL

1 TYPICAL WIND STRAPPING DETAIL

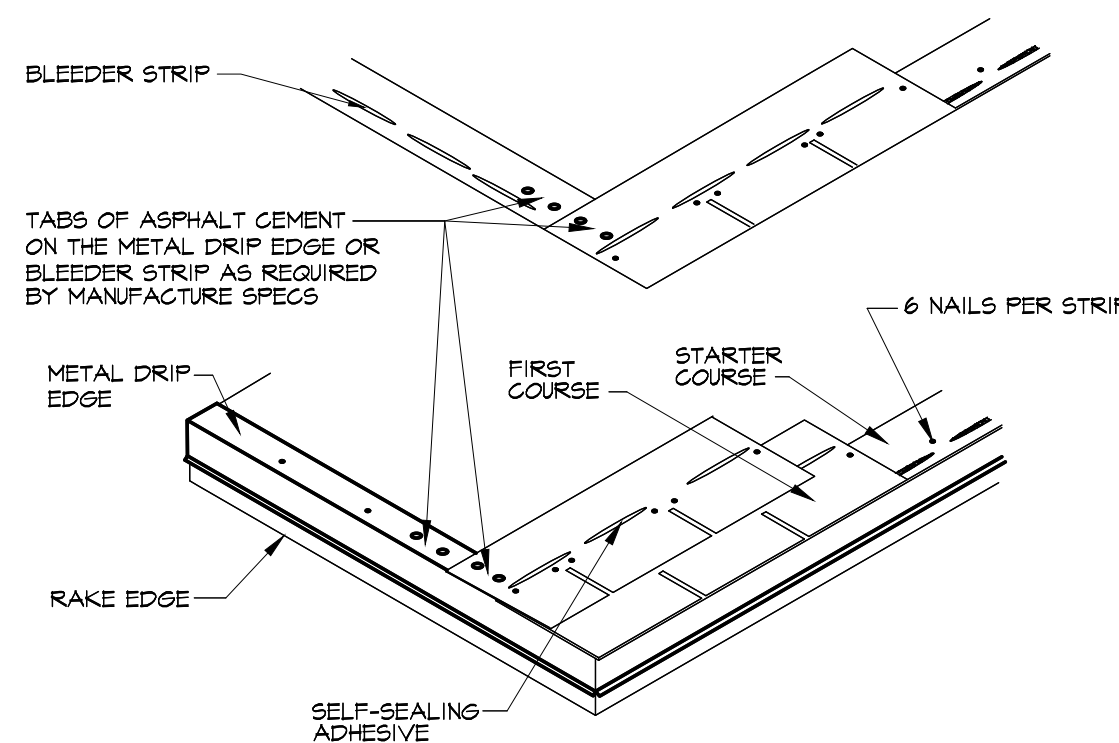


NOTES:

- 1) **RIDGE BOARD, HIP RAFTER OR VALLEY RAFTER:**
DEPTH SHALL BE THE LARGEST OF THE FOLLOWING:
A. THE SIZE DEEPER THAN THE LARGEST RAFTER FRAMING INTO IT (2x LUMBER).
B. DEPTH OF CUT END OF RAFTER.
- 2) **COLLAR TIES:**
2x4 COLLAR TIES LOCATED @ UPPER ONE THIRD OF ROOF (EVENLY EVERY RAFTER).
- 3) **T-BRACE:**
A. RE: TYPICAL DETAILS BELOW
MAXIMUM BRACING @ FOLLOWING:
1. EVERY FOURTH RAFTER @ 2x4 CUT PURLIN.
2. EVERY SECOND BRACING @ 2x4 HIP @ 8'-0" VALLEY @ 8'-0" O.G. MAX.
C. BRACE SHALL BEAR ON AN INTERIOR WALL, BEAM OR STRONG-BACK (DOUBLE, 2 SIZES LARGER THAN JOIST).
- 4) **RAFTER & RIDGE SPLICES:**
A. LOCATED SPLICE OVER A PURLIN OR SUPPORT ADDITIONAL BRACE @ SPLICE
B. KNUCKLE BRACING @ SPLICE



5 COMPOSITION SHINGLE APPLICATION



6 STARTER COURSE APPLICATION

3 TYPICAL OUTLOOKER DETAIL

NAILING SCHEDULE			
JOINT DESCRIPTION	NUMBER OF COMMON NAILS	NUMBER OF BOX NAILS	NAIL SPACING
ROOF FRAMING			
RAFTER TO TOP PLATE (TOE-NAILED) RE: WFCM TABLE 3.4A	3-8D	3-10D	PER RAFTER
CEILING JOIST TO TOP PLATE (TOE-NAILED) RE: WFCM TABLE 3.4A	3-8D	3-10D	PER JOIST
CEILING JOIST TO PARALLEL RAFTER (FACE-NAILED) RE: WFCM TABLE 3.9A	6-16D	6-40D	EACH LAP
CEILING JOIST LAPS OVER PARTITIONS (FACE-NAILED) RE: WFCM TABLE 3.9A	6-16D	6-40D	EACH LAP
COLLAR TIE TO RAFTER (FACE-NAILED) RE: WFCM TABLE 3.6A	4-8D	4-10D	PER TIE
BLOCKING TO RAFTER (TOE-NAILED)	2-8D	2-10D	EACH END
RIM BOARD TO RAFTER (END-NAILED)	2-16D	3-16D	EACH END
WALL FRAMING			
TOP PLATE TO TOP PLATE (FACE-NAILED)	2-16D	2-16D	PER FOOT
TOP PLATE AT INTERSECTIONS (FACE-NAILED)	4-16D	3-16D	JOINTS-EACH SIDE
STUD TO STUD (FACE-NAILED)	2-16D	2-16D	24" O.C.
HEADER TO HEADER (FACE-NAILED)	16D	16D	16" O.C. ALONG EDGES
TOP OR BOTTOM PLATE TO STUD RE: WFCM TABLE 3.5A	2-16D	2-40D	PER STUD
BOTTOM PLATE TO FLOOR JOIST, BAND JOIST, ENDJOIST OR BLOCKING (FACE-NAILED)	2-16D	2-16D	PER FOOT
FLOOR FRAMING			
(TOE-NAILED) JOIST TO SILL, TOP PLATE OR GIRDER	4-8D	4-10D	PER JOIST
BRIDGING TO JOIST (TOE-NAILED)	2-8D	2-10D	EACH END
BLOCKING TO JOIST (TOE-NAILED)	2-8D	2-10D	EACH END
(TOE-NAILED) BLOCKING TO SILL OR TOP PLATE	3-16D	4-16D	EACH BLOCK
LEDGER STRIP TO BEAM (FACE-NAILED)	3-16D	4-16D	EACH JOIST
JOIST ON LEDGER TO BEAM (TOE-NAILED)	3-8D	3-10D	PER JOIST
BAND JOIST TO JOIST (END-NAILED)	3-16D	4-16D	PER JOIST
(END-NAILED) BAND JOIST TO SILL OR TOP PLATE	2-16D	3-16D	PER FOOT
ROOF SHEATHING			
STRUCTURAL PANELS (RE:TABLE 3.10) INTERIOR ZONE EXTERIOR ZONE	8D 8D	10D 10D	6" EDGE / 12" FIELD 4" EDGE / 6" FIELD
DIAGONAL BOARD SHEATHING 1"x6" OR 1"x8" 1"x10" OR WIDER	2-8D 3-8D	2-10D 3-10D	PER SUPPORT PER SUPPORT
CEILING SHEATHING			
GYPSUM WALLBOARD	5D COOLERS	5D COOLERS	7" EDGE / 10" FIELD
WALL SHEATHING			
STRUCTURAL PANELS (RE:TABLE 3.11) INTERIOR ZONE EXTERIOR ZONE	8D 8D	10D 10D	6" EDGE / 12" FIELD 4" EDGE / 6" FIELD
FIBERBOARD PANELS 7/16" 25/32"	6D 8D	- -	3" EDGE / 6" FIELD 3" EDGE / 6" FIELD
GYPSUM WALLBOARD	5D COOLERS	5D COOLERS	7" EDGE / 10" FIELD
HARDBOARD (RE: TABLE 3.11)	8D	8D	6" EDGE / 12" FIELD
PATRICLEBOARD PANELS	8D	8D	SEE MANUFACTURER
DIAGONAL BOARD SHEATHING 1"x6" OR 1"x8" 1"x10" OR WIDER	2-8D 3-8D	2-10D 3-10D	PER SUPPORT PER SUPPORT
FLOOR SHEATHING			
STRUCTURAL PANELS 1" OR LESS GREATER THAN 1"	8D 10D	10D 16D	6" EDGE / 12" FIELD 6" EDGE / 6" FIELD
DIAGONAL BOARD SHEATHING 1"x6" OR 1"x8" 1"x10" OR WIDER	2-8D 3-8D	2-10D 3-10D	PER SUPPORT PER SUPPORT

NOTES:

1. CORROSION-RESISTANT SIDING OR CASING NAILS CONFORMING TO THE REQUIREMENTS OF 2021 IRC.
2. CORROSION-RESISTANT ROOFING NAILS WITH 7/16" Ø HEAD AND 1 1/2" LONG
3. CORROSION-RESISTANT, LARGE HEAD.

GENERAL NOTES FOR WOOD FRAMING

- THE PROJECT DESIGN COMPLIES WITH THE WIND LOAD PROVISIONS FOR CONVENTIONAL CONSTRUCTION FOR A 30 MPH, 5-SECOND GUST WIND SPEED AS PER THE 2021 INTERNATIONAL RESIDENTIAL CODE.
2. **TIMBER GRADES:**
- | | |
|---------------------|---|
| A. ROOF RAFTERS: | NO. 2 SOUTHERN YELLOW PINE, KD, S4S (U.N.O.). |
| B. FLOOR JOIST: | NO. 2 SOUTHERN YELLOW PINE, KD, S4S (U.N.O.). |
| C. BEAMS & HEADERS: | NO. 1 SOUTHERN YELLOW PINE, KD, S4S |
| D. STUDS: | STUD GRADE, SYP, KD, S4S |
| E. MOIST POSTS: | NO. 2 SOUTHERN YELLOW PINE, SURFACE GREEN. |
3. **JOIST:**
- A. JOIST BLOCKING:
- 1) JOIST SHALL BE Laterally SUPPORTED AT EACH END AND AT EACH SPACING BY SOLID BLOCKING EXCEPT WHERE THE ENDS OF JOIST ARE NAILED INTO A HEADER, BAND/RIM JOIST, OR TO AN ADJOINING STUD. SOLID BLOCKING SHALL NOT BE LESS THAN TWO INCHES IN THE THICKNESS AND SHALL MATCH THE DEPTH OF THE JOISTS.
 - 2) PROVIDE SOLID BLOCKING UNDER ALL BEARING WALLS PERPENDICULAR TO THE DIRECTION OF THE JOIST
 - 3) PROVIDE DOUBLE JOIST UNDER ALL BEARING WALLS PARALLEL TO THE DIRECTION OF THE JOIST (U.N.O.).
- B. JOIST BRIDGING:
- 1) PROVIDE BRIDGING AT ALL FLOOR JOIST AT SPACING NOT TO EXCEED 8'-0".
- C. JOIST HOLES AND NOTCHES:
- 1) NOTCHES IN TOP OR BOTTOM OF JOISTS SHALL NOT EXCEED ONE SIXTH (1/6) THE JOIST DEPTH AND SHALL NOT BE LOCATED WITHIN MIDDLE THIRD OF THE SPAN.
 - 2) HOLES SHALL NOT BE CLOSER THAN 2" TO TOP OR BOTTOM OF JOIST, THE DIAMETER OF ANY HOLE SHALL, NOT EXCEED ONE FOURTH (1/4) THE JOIST DEPTH UNLESS APPROVED BY THE ENGINEER.
4. **BEAMS AND HEADERS:**
- A. BUILT-UP BEAMS MADE UP OF A NUMBER OF 2x LUMBER SHALL BEAR ON A SOLID LAUNCH STUD COLUMN THAT IS AT LEAST 125 x WIDER THAN THE BEAM. THE CENTERLINE OF THE BEAM SHALL BE THE CENTERLINE OF THE SUPPORTING LAUNCH STUD COLUMN.
- B. ALL BUILT-UP BEAMS SHALL BE FASTENED AS FOLLOWS:
- 1) FOR MAXIMUM HORIZONTAL SPACING OF BOLTS:
 - a. 2'-0" @ 2x12
 - b. 2'-0" @ 2x10
 - c. 2'-0" @ 2x8
 - d. 2'-0" @ 2x6
 - e. 1'-0" @ 2x4
 - 2) TOP & BOTTOM, STAGGER, EA. FACE
 - 3) 2x12 16" NAILS @ 12"
 - 4) 2x10 16" NAILS @ 12"
 - 5) 2x8 16" NAILS @ 12"
 - 6) 2x6 16" NAILS @ 12"
 - 7) 2x4 16" NAILS @ 12"
- C. ALL DOOR AND WINDOW HEADERS (OR HEADERS AT ANY OTHER OPENING) THAT ARE NOT SPECIFIED ON PLANS SHALL BE AS FOLLOWS:
- 1) FLOOR FRAMING: 2x12
 - 2) CEILING FRAMING: 2x10
 - 3) MINIMUM BEARING OF ANY BEAM OR HEADER AT A STUD WALL IS 3".
5. **STUD WALLS:**
- A. STUDS SHALL BE AS FOLLOWS:
- 1) 2x4 @ 16" AT ALL FLOORS IN ONE OR TWO STORY STRUCTURES.
 - 2) 2x6 @ 16" AT ALL STUD WALLS AT FIRST FLOOR AREAS DIRECTLY BELOW A THIRD FLOOR.
- B. PROVIDE A MINIMUM OF TWO STUDS AT EACH SIDE OF OPENING LARGER THAN 4'-0". FULL HEIGHT OF WALL (KING STUD).
- C. MAXIMUM STUD WALL HEIGHT SHALL BE AS FOLLOWS:
- 1) 2x4 STUDS @ 16" O.C. 10'-0"
 - 2) 2x6 STUDS @ 16" O.C. 18'-0"
- D. BLOCKING & LATERAL STRUCTURES:
- 1) PROVIDE BLOCKING AND/OR TEMPORARY CROSS BRACING AS REQUIRED TO ENSURE STUD STRAIGHTNESS ACCORDING TO SPECIFIED TOLERANCES.
 - 2) MAXIMUM TOLERANCE FOR STUD STRAIGHTNESS IN EITHER DIRECTION IS 1/4" PER TEN FEET OF STUD HEIGHT.
6. **ROOF DECK:**
- A. MINIMUM THICKNESS SHALL BE 1/2" THICK CDX PLYWOOD.
 - B. ORIENTED STRAND BOARD (OSB) MAY BE USED IN LIEU OF PLYWOOD.
 - C. MINIMUM NAILING SHALL BE AS REQUIRED BY THE WIND CODE (SEE ROOF FRAMING PLAN NOTES).
 - D. PLYWOOD GLIPS SHALL BE INSTALLED @ ROOF DECKING TO RESULT IN A 1/8" GAP BETWEEN ALL PANEL EDGES. PROVIDE 1 GLIP PER SPAN (JOIST SPACING). GLIPS SHALL BE SIMPSON PSLC, TO MATCH CORRESPONDING PLYWOOD THICKNESS.
7. **PLYWOOD FLOOR DECK:**
- A. PLYWOOD SHALL BE 1/8" THICK AND SHALL BE STANDARD C-D EXTERIOR GRADE
- B. LAY PANELS IN A STAGGERED PATTERN.
- C. BLOCK ALL EDGES WITH 2x STUDS.
- D. GLUE & NAIL TO FRAMING MEMBERS AS FOLLOWS:
- 1) GLUE SHALL CONFORM TO APA SPECIFICATION AF+01, APPLIED IN A CONTINUOUS BEAD & IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
 - 2) ALL NAILS SHALL BE 8D RING OR SCREEN SHANK.
 - 3) NAIL SPACING SHALL BE AS FOLLOWS:
 - a. O.C. @ PANEL EDGES
 - b. 12" O.C. @ INTERMEDIATE SUPPORTS
8. **CONNECTIONS AND FASTENERS:**
- A. CONNECTIONS SHALL BE AS MANUFACTURED BY SIMPSON STRONG-TIE

MASTER PROJECT "A"
HIGHLAND LANDING LN.
HOUSTON, TX. 77091



DATE :
08/09/2024

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

DESCRIPTION:

FRAMING DETAILS

SHEE-

S4.0

N.T.S.