

CITY OF RALEIGH  
PLANS AUTHORIZED FOR CONSTRUCTION

Plans for the proposed use have been reviewed for general compliance with applicable codes. This limited review, and authorization for construction is not to be considered to represent total compliance with all legal requirements for development and construction. The property owner, design consultants, and contractors are each responsible for compliance with all applicable City, State and Federal laws. This specific authorization below is not a permit, nor shall it be construed to permit any violation of City, State or Federal Law. All construction must be in accordance with all Local, State and Federal Rules and Regulations.

**Electronic Approval:** This approval is being issued electronically. This approval is valid only upon the signature of a City of Raleigh Review Officer below. The City will retain a copy of the approved plans. Any work authorized by this approval must proceed in accordance with the plans kept on file with the City. This electronic approval may not be edited once issued. Any modification to this approval once issued will invalidate this approval.

City of Raleigh Development Approval: 03/24/2023 Jenna Hurley  
City of Raleigh Review Officer

DRAWING LIST	
SHEET NUMBER	DRAWING TITLE

00 GENERAL	
G0	COVER SHEET & DRAWING LIST

01 STRUCTURAL	
S1	FOUNDATION PLAN
S2	CRAWLSPACE FRAMING
S3	FIRST FLOOR FRAMING
S4	SECOND FLOOR FRAMING
S5	ROOF FRAMING PLAN
SD1	STRUCTURAL DETAILS
SD2	STRUCTURAL DETAILS
SD3	CONSTRUCTION SPECIFICATIONS

02 ARCHITECTURAL	
A1.1	1ST FLOOR PLAN
A1.2	2ND FLOOR PLAN
A1.3	ROOF PLAN & DETAILS
A2.1	EXTERIOR ELEVATIONS
A2.2	EXTERIOR ELEVATIONS
A3.1	SECTIONS
A3.2	SECTIONS
A4.1	REFLECTED CEILING PLANS
A5.1	ENLARGED PLANS
A6.1	INTERIOR ELEVATIONS
A7.1	DETAILS
A7.2	DETAILS

PLANS ARE DESIGNED TO MEET THE REQUIREMENTS OF THE NORTH CAROLINA RESIDENTIAL CODE, 2018 EDITION					
ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CITY OF RALEIGH STANDARDS AND SPECIFICATIONS					
CLIMATE ZONE	FENESTRATION U-FACTOR	SKYLIGHT U-FACTOR	CEILING R-VALUE	WOOD FRAME WALL R-VALUE	SLAB R-VALUE & DEPTH
4	U-0.35/ SHGC-0.30	U-0.60	38	15/ 13 + 2.5	10, 2FT.

- GENERAL NOTES:**
- ALL WALLS ARE DRAWN AT 4-1/2" UNLESS NOTED OTHERWISE
  - ALL DIMENSIONS ARE TO FACE OF STUD, UNLESS NOTED OTHERWISE
  - LOCATION AND NUMBER OF DETECTORS SHALL CONFORM TO N.E.C. **MOUNT DETECTORS ON WALL AT VAULTED CEILINGS.**
  - ALL BEDROOMS MUST HAVE AT LEAST ONE WINDOW WHICH CONFORMS TO R-310 OF THE N.C. BLDG. CODE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY CHOSEN WINDOWS MEET EGRESS REQUIREMENTS, AS MANUFACTURERS VARY.
  - WINDOW SIZES AND HEAD HEIGHTS ARE SHOWN ON ELEVATION SHEETS.
  - ALL RAILINGS MUST COMPLY w/ 2018 NC BLDG CODE SECTIONS R301.5, R311.7, R312 #3.**

CHAMBERLAIN HOUSE

810 CHAMBERLAIN ST  
RALEIGH, NC 27607

CONSTRUCTION/PERMIT SET  
NOVEMBER 25, 2022

REVISION 1 PER CITY COMMENTS  
FEBRUARY 15, 2023

810 CHAMBERLAIN

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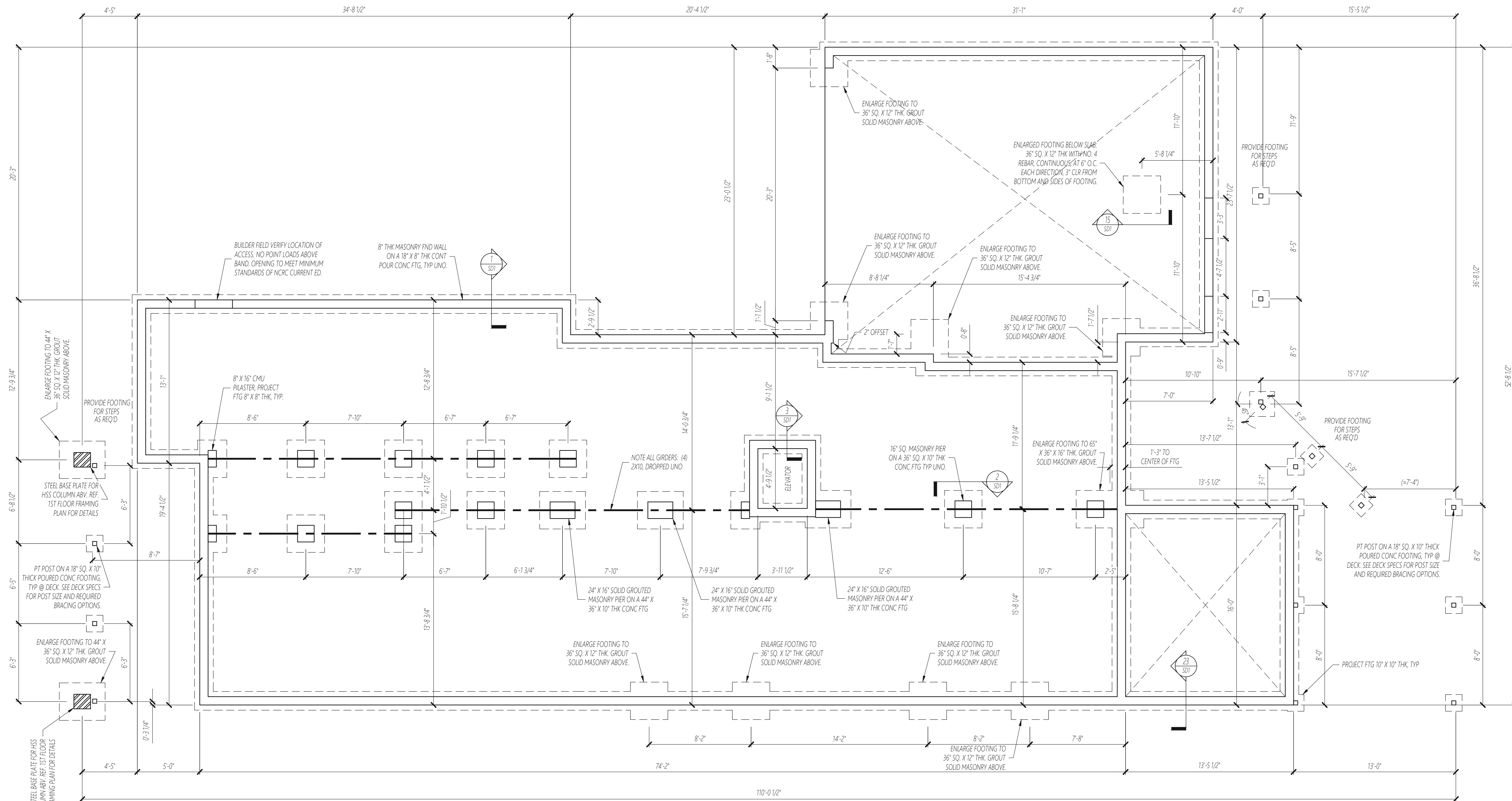
REV 1: 02-15-2023



NICK HAMMER ARCHITECT  
120 N KING CHARLES RD | RALEIGH, NC  
P 919.900.7070 | nick@nickhammer.com  
Nick Hammer, North Carolina, License No. 11216

COVER SHEET & DRAWING LIST

G0



FOUNDATION PLAN

$1/4" = 1'-0"$

## COMMON WORD ABBREVIATIONS

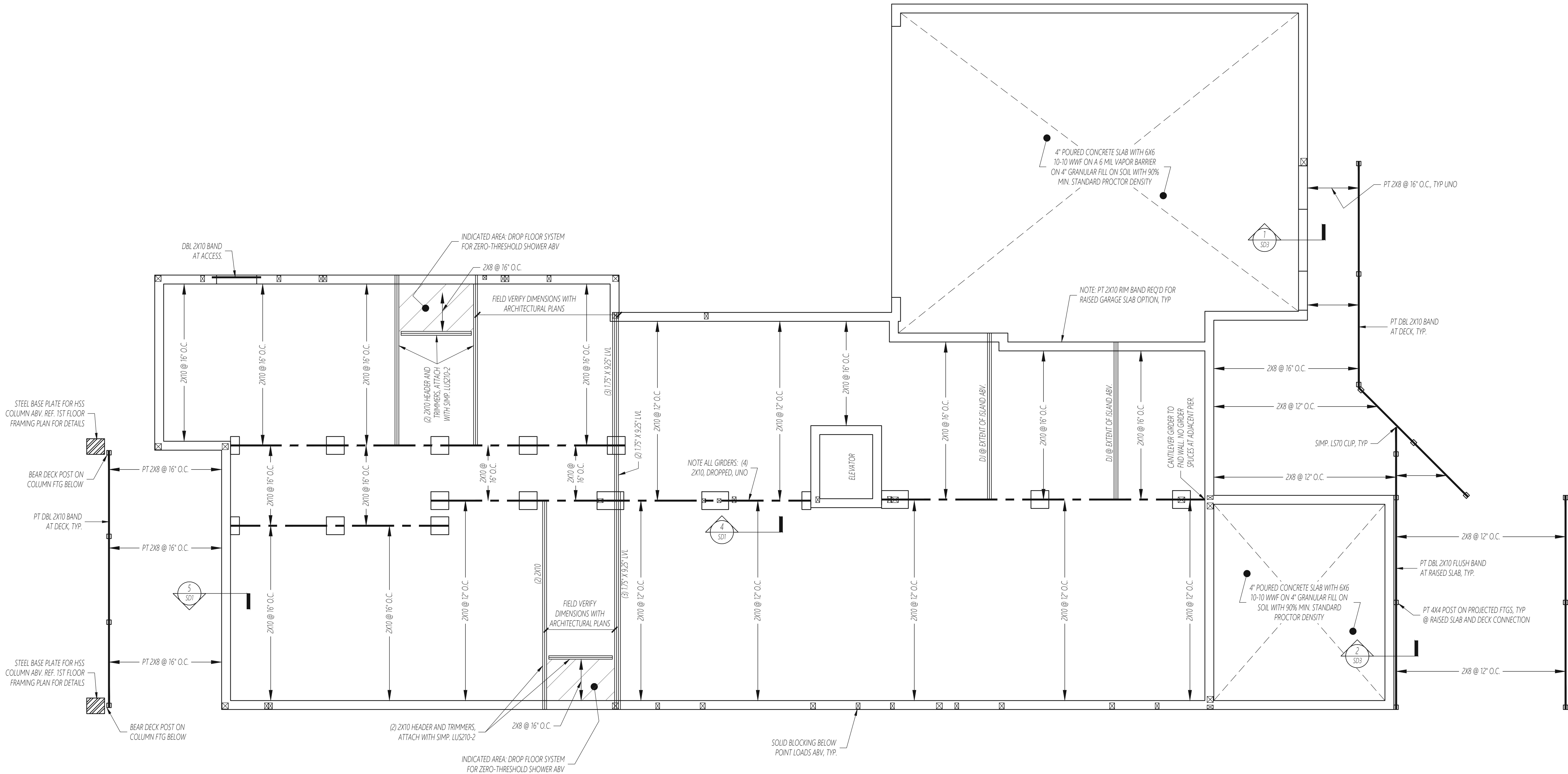
-SEE CONSTRUCTION SPECIFICATION FOR LIST OF COMMON WORD ABBREVIATIONS USED ON STRUCTURAL PLANS.

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FOUNDATION NOTES

- FOUNDATION WALL HEIGHT AND BACKFILL LIMITATIONS ARE TO BE GOVERNED BY THE NCRBC, LATEST EDITION.
- BUILDER IS TO VERIFY WALL THICKNESS, REBAR SIZE, AND REBAR SPACING IF REQUIRED BY WALL HEIGHT AND BACKFILL CONDITIONS.
- EXTERIOR PERIMETER DIMENSIONS ARE ASSUMED TO BE OUT TO OUT OF SHEATHING, BUILDER TO OFFSET SILL PLATE AS REQ'D FOR FRAMING ABV.





CRAWL SPACE FRAMING PLAN  
1/4" = 1'-0"

COMMON WORD ABBREVIATIONS

-SEE CONSTRUCTION SPECIFICATION FOR LIST OF COMMON WORD ABBREVIATIONS USED ON STRUCTURAL PLANS.

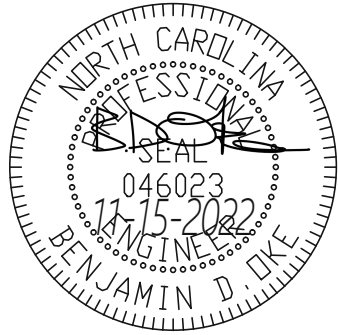
WOOD FRAMING NOTES

ALL FLOORS

-SOLID SAWN WOOD FRAMING DESIGN IS BASED ON NO. 1 /NO. 2 SPRUCE-PINE-FIR FOR RAFTERS, JOISTS, STUDS, WOOD BEAMS, WOOD GIRDERS, ETC., TYP UNO.  
-P.T. SOLID SAWN WOOD FRAMING DESIGN IS BASED ON NO. 2 SOUTHERN YELLOW PINE FOR POSTS, JOISTS, STUDS, WOOD BEAMS, WOOD GIRDERS, ETC., TYP UNO.  
-SOLID SAWN WOOD FRAMING SUBSTITUTION ALLOWED ONLY BY PERMISSION OF ENGINEER OF RECORD.

ADDITIONAL JOISTS

-NON-LOAD BEARING WALLS, BUILT-INS, AND CABINETY ON THE FLOOR ABOVE THAT ARE PARALLEL TO THE FRAMING SYSTEM ON THIS SHEET SHALL HAVE AN ADDITIONAL JOIST PLACED BELOW, TYP UNO, BUILDER TO INSTALL AS REQUIRED, FIELD VERIFY DIMENSIONS



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**engineering**

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PATEL RESIDENCE  
STRUCTURAL ADDENDUM  
810 CHAMBERLAIN

ENG: BDO

DATE: 11-15-2022

REV:

PROJECT NO.

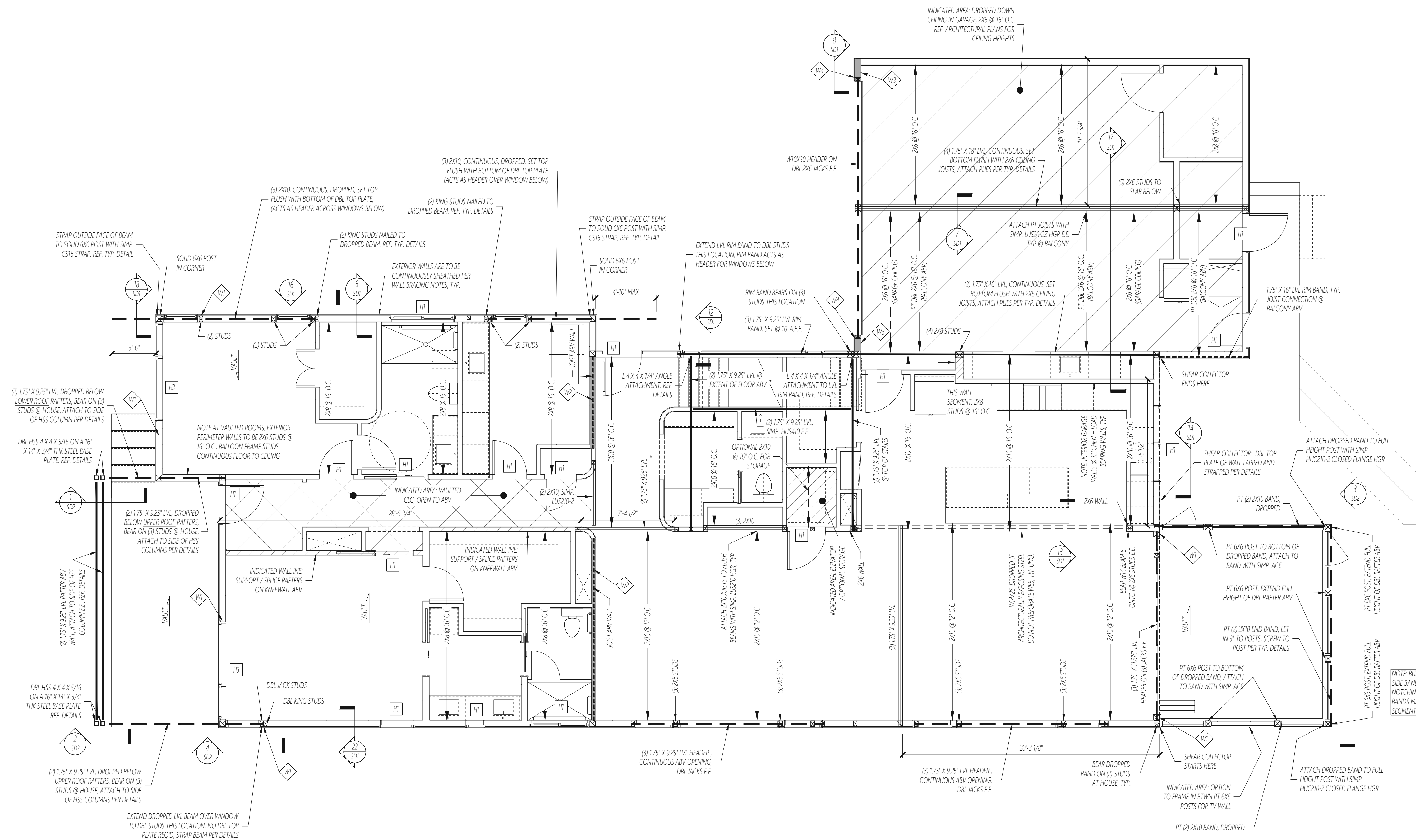
2212037

SHEET NO.

S2

2 of 8





### WALL BRACING

THIS FLOOR ONLY

ALL EXTERIOR STUD WALLS ARE TO BE BRACED WITH CONTINUOUSLY SHEATHED WOOD STRUCTURAL PANELING (METHOD CS-WSP), 3/8" MINIMUM THICKNESS, NAILED TO STUDS WITH 8d NAILS @ 6" O.C. AT PANEL EDGES, AND 12" O.C. IN PANEL FIELD.

ALL BRACED WALLS SHALL BE SECURED WITH A CONTINUOUS RIM JOIST, ADDITIONAL JOIST, OR FULL HEIGHT BLOCKING ABOVE AND BELOW BRACED WALL PANEL. JOIST / BLOCKING SHALL BE ATTACHED WITH 8d TOENAILS @ 6" O.C. ALONG TOP OF WALL AND (3) 16d NAILS @ 16" O.C. ALONG BOTTOM OF WALL. HORIZONTAL BLOCKING IS REQUIRED AT PANEL JOINTS IN BRACED WALL PANELS.

EXTERIOR BRACED WALLS:  
-CONTINUOUS PERIMETER SHEATHING = 288'

SHADED WALLS = INTERIOR BRACED WALLS AND EXTERIOR WALLS WITH ALTERNATIVE BRACING METHODS

W1 - SIMPSON CS16 STRAP, 24" LONG CENTERED AT SUBFLOOR, SECURED AS UPLIFT DEVICE TO CORNER STUDS OR KING/JACKS STUDS. STRAP STUD TO RIM JOIST BELOW, WHEN INSTALLING ON OUTSIDE OF OSB SHEATHING, USE 10d NAILS.

W2 - INTERIOR BRACED WALL WITH 3/8" MIN. THICKNESS WOOD STRUCTURAL PANELING, (1) SIDE ATTACH WSP TO STUD WALL WITH 8d NAILS @ 6" O.C. AT PANEL EDGES, 12" O.C. IN PANEL FIELD. BLOCK AT ALL PANEL EDGES.

W3 - SHEATH BOTH SIDES OF STUD WALL WITH 7/16 APA RATED OSB, NAILED TO STUDS WITH 8d NAILS @ 4" O.C. AT PANEL EDGES, 12" O.C. IN PANEL FIELD.

W4 - SIMPSON LTP2 HOLDDOWN SECURED AS UPLIFT DEVICE TO CORNER STUDS OR KING/JACKS STUDS. ATTACH TO FOUNDATION OR SLAB THROUGH P.T. SILL PLATE WITH 1/2" DIA. ANCHOR BOLT.

NOTES:  
-WALL BRACING SHALL BE INSTALLED IN ACCORDANCE WITH SECT. R602.10.3 OF THE 2018 NCR.  
-WHERE A BUILDING OR PORTIONS THEREOF DOES NOT COMPLY WITH SECT. R602.10.3, ALTERNATIVE METHODS OF BRACING HAVE BEEN DESIGNED IN ACCORDANCE TO ENGINEERING DESIGN PER SECT. R602.10.5 OF THE 2018 NCR.

NOTE: BUILDER PERMITTED TO MATCH SIDE BANDS TO PT (2) 2X10 END BAND. NOTCHING NOT REQ'D AT SIDE BANDS. BANDS MAY BE INSTALLED AS SEGMENTS IN BTWN POST BAYS

### HEADER SCHEDULE

THIS FLOOR ONLY

- H1: (2) 2X10 ON (1) JACK E.E.  
H2: (2) 1.75" X 9.25" LVL ON (2) JACKS E.E.  
H3: (3) 2X10'S ON (1) 2X6 JACK E.E.  
H4: (3) 1.75" X 9.25" LVL'S ON (2) 2X6 JACKS E.E.

NOTES:  
-HEADERS IN NON LOAD BEARING INTERIOR WALLS ARE NOT LABELED AND SHALL BE FRAMED ACCORDING TO ACCEPTED CONSTRUCTION PRACTICE.

### KING STUD SCHEDULE

EXTERIOR WALLS ONLY, ALL FLOORS

MAX OPENING DIMENSION	NO. KING STUDS E.E. 2X4 WALL	NO. KING STUDS E.E. 2X6 WALL
≤3'	1	1
4'	2	1
8'	3	2
12'	5	2
16'	6	3
18'	7	4

NOTES:  
-NO. OF KING STUDS LISTED ABOVE BASED ON A 10' NOMINAL WALL HEIGHT AND 16" O.C. STUD SPACING.  
-SPANS BASED ON ROUGH OPENINGS. FOR SPANS BTWN DIMENSIONS LISTED ABOVE ROUND UP FOR NO. OF KING STUDS UNO.

### ADDITIONAL JOISTS

-NON-LOAD BEARING WALLS, BUILT-INS, AND CABINETRY ON THE FLOOR ABOVE THAT ARE PARALLEL TO THE FRAMING SYSTEM ON THIS SHEET SHALL HAVE AN ADDITIONAL JOIST PLACED BELOW, TYP UNO, BUILDER TO INSTALL AS REQUIRED, FIELD VERIFY DIMENSIONS

### NO. OF STUDS FOR BEAM SUPPORT

ALL FLOORS

BEAM TYPE	NO. OF STUDS AT E.E. OF BEAM, TYP UNO
SAWN	
(2)-PLY SAWN BEAM	2
(3)-PLY SAWN BEAM	3
(2)-PLY LVL BEAM	3
LVL	
(3)-PLY LVL BEAM	4
(4)-PLY LVL BEAM	5

NOTES:  
-SINGLE PLY LVL BEAMS AND XIS TO BE SUPPORT BY SINGLE STUD AT EACH END, TYP  
-WHERE BEAMS BEAR PARALLEL TO WALL, BEARING LENGTH OF BEAM AND NO. OF STUDS TO EXTEND ALONG LENGTH OF WALL IN PARALLEL DIRECTION, TYP UNO.

### COMMON WORD ABBREVIATIONS

-SEE CONSTRUCTION SPECIFICATION FOR LIST OF COMMON WORD ABBREVIATIONS USED ON STRUCTURAL PLANS.

### WOOD FRAMING NOTES

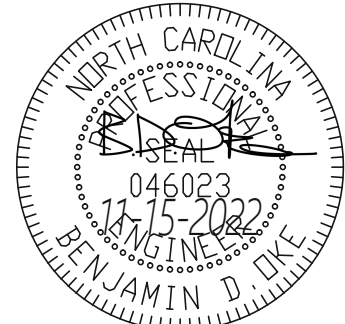
ALL FLOORS

-SOLID SAWN WOOD FRAMING DESIGN IS BASED ON NO. 1, NO. 2 SPRUCE-PINE-FIR FOR RAFTERS, JOISTS, STUDS, WOOD BEAMS, WOOD GIRDERS, ETC. TYP UNO.  
-P.T. SOLID SAWN WOOD FRAMING DESIGN IS BASED ON NO. 2 SOUTHERN YELLOW PINE FOR POSTS, JOISTS, STUDS, WOOD BEAMS, WOOD GIRDERS, ETC. TYP UNO.  
-SOLID SAWN WOOD FRAMING SUBSTITUTION ALLOWED ONLY BY PERMISSION OF ENGINEER OF RECORD.

### 1ST FLOOR FRAMING PLAN

WALLS AND CEILING

1/4" = 1'-0"



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PATEL RESIDENCE  
STRUCTURAL ADDENDUM  
810 CHAMBERLAIN

ENG: BDO

DATE: 11-15-2022

REV:

PROJECT NO.

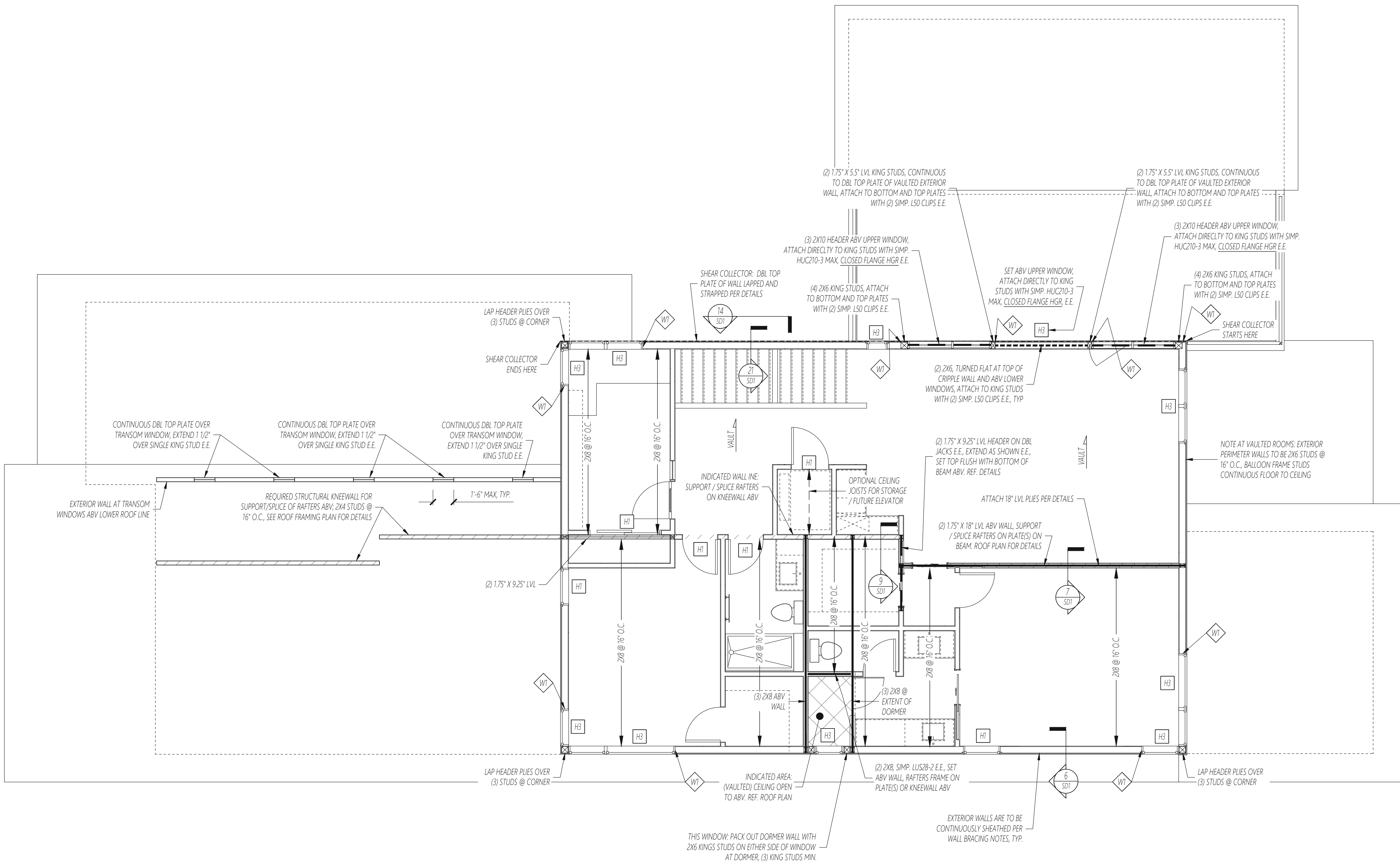
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SHEET NO.

S3

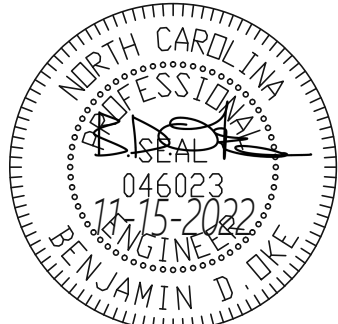
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2ND FLOOR FRAMING PLAN

WALLS AND CEILING  
1/4" = 1'-0"



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PATEL RESIDENCE  
STRUCTURAL ADDENDUM  
810 CHAMBERLAIN

COMMON WORD ABBREVIATIONS

-SEE CONSTRUCTION SPECIFICATION FOR LIST OF COMMON WORD ABBREVIATIONS USED ON STRUCTURAL PLANS.

WOOD FRAMING NOTES

ALL FLOORS

-SOLID SAWN WOOD FRAMING DESIGN IS BASED ON NO. 1/NO. 2 SPRUCE-PINE-FIR FOR RAFTERS, JOISTS, STUDS, WOOD BEAMS, WOOD GIRDERS, ETC., TYP UNO.  
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NO. OF STUDS FOR BEAM SUPPORT

ALL FLOORS

	BEAM TYPE	NO. OF STUDS AT E.E. OF BEAM, TYP UNO
	SAWN	(2)-PLY SAWN BEAM 2 (3)-PLY SAWN BEAM 3 (2)-PLY LVL BEAM 3 (3)-PLY LVL BEAM 4 (4)-PLY LVL BEAM 5

NOTES:  
-SINGLE PLY LVL BEAMS AND JOISTS TO BE SUPPORT BY SINGLE STUD AT EACH END, TYP.  
-WHERE BEAMS BEAR PARALLEL TO WALL, BEARING LENGTH OF BEAM AND NO. OF STUDS TO EXTEND ALONG LENGTH OF WALL IN PARALLEL DIRECTION, TYP UNO.

HEADER SCHEDULE

THIS FLOOR ONLY

H1: (2) 2X10 ON (1) JACK E.E.  
H2: (2) 1.75" X 9.25" LVL ON (2) JACKS E.E.  
H3: (3) 2X10'S ON (1) 2X6 JACK E.E.  
H4: (3) 1.75" X 9.25" LVL'S ON (2) 2X6 JACKS E.E.

NOTES:  
-HEADERS IN NON LOAD BEARING INTERIOR WALLS ARE NOT LABELED AND SHALL BE FRAMED ACCORDING TO ACCEPTED CONSTRUCTION PRACTICE.

KING STUD SCHEDULE

EXTERIOR WALLS ONLY, ALL FLOORS

MAX OPENING DIMENSION	NO. KING STUDS E.E. 2X4 WALL	NO. KING STUDS E.E. 2X6 WALL
≤3'	1	1
4'	2	1
8'	3	2
12'	5	2
16'	6	3
18'	7	4

NOTES:  
-NO. OF KING STUDS LISTED ABOVE BASED ON A 10' NOMINAL WALL HEIGHT AND 16" O.C. STUD SPACING.  
-SPANS BASED ON ROUGH OPENINGS. FOR SPANS BTWN DIMENSIONS LISTED ABOVE ROUND UP FOR NO. OF KING STUDS UNO.

WALL BRACING

THIS FLOOR ONLY

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EXTERIOR BRACED WALLS:  
-CONTINUOUS PERIMETER SHEATHING = xxx'

SHADED WALLS = INTERIOR BRACED WALLS AND EXTERIOR WALLS WITH ALTERNATIVE BRACING METHODS

W1 - SIMPSON CS16 STRAP, 24" LONG, CENTERED AT SUBFLOOR, SECURED AS UPLIFT DEVICE TO CORNER STUDS OR KING/JACKS STUDS. STRAP STUD TO RIM JOIST BELOW. WHEN INSTALLING ON OUTSIDE OF OSB SHEATHINGS, USE 10d NAILS.

NOTES:  
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ENG: BDO

DATE: 11-15-2022

REV:

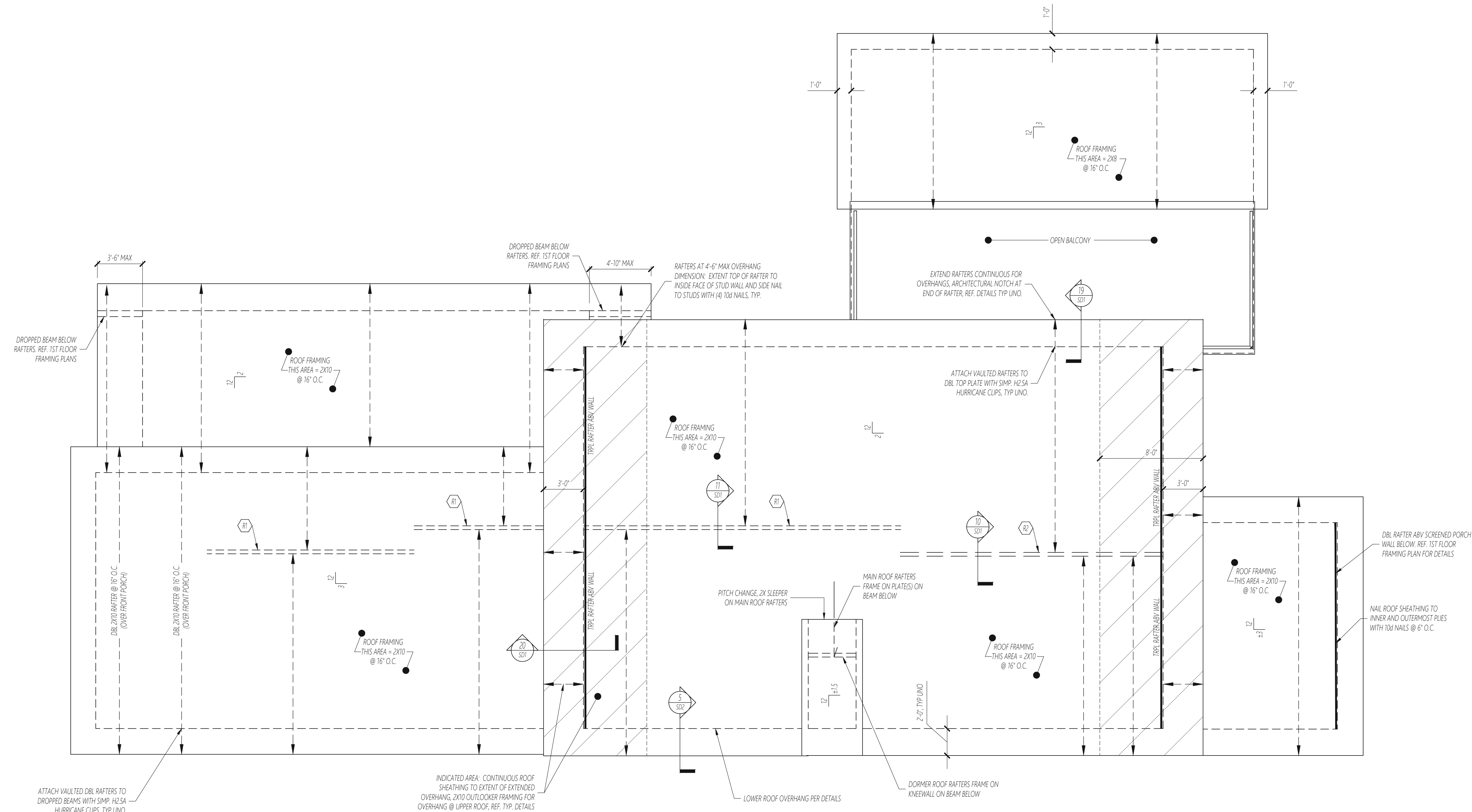
PROJECT NO.

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SHEET NO.

S4

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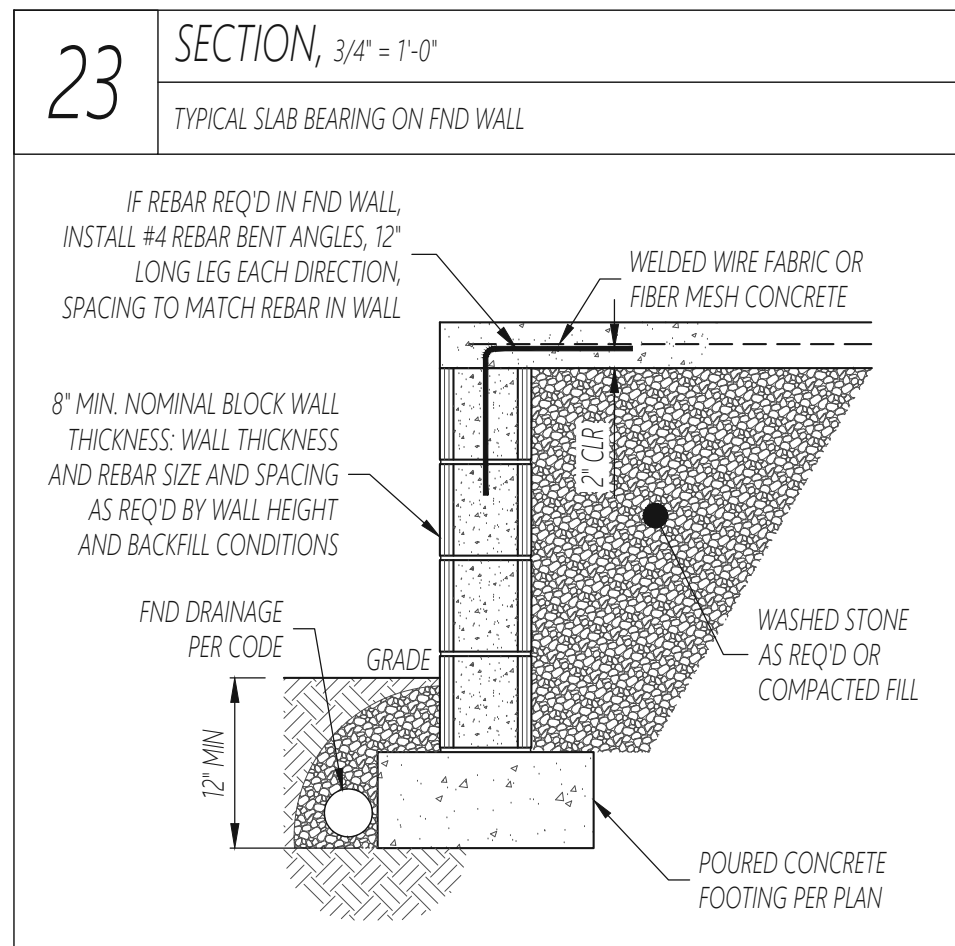
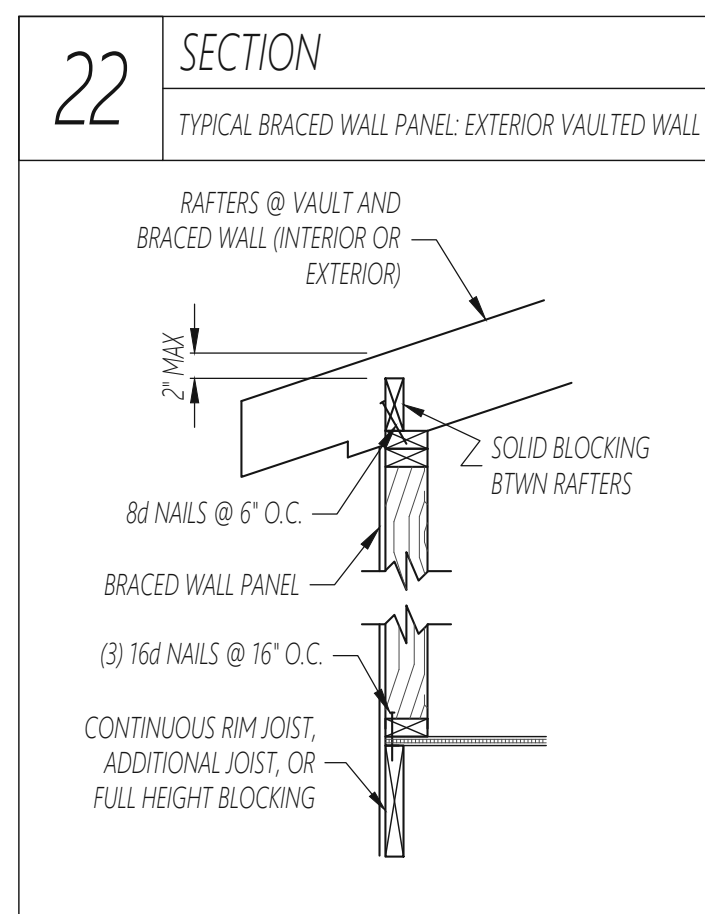
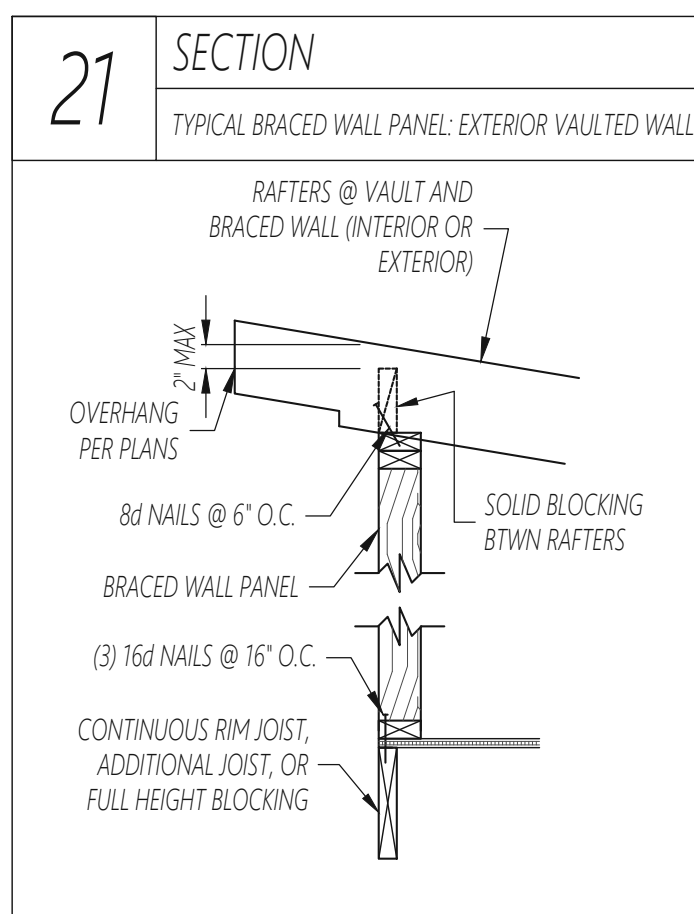
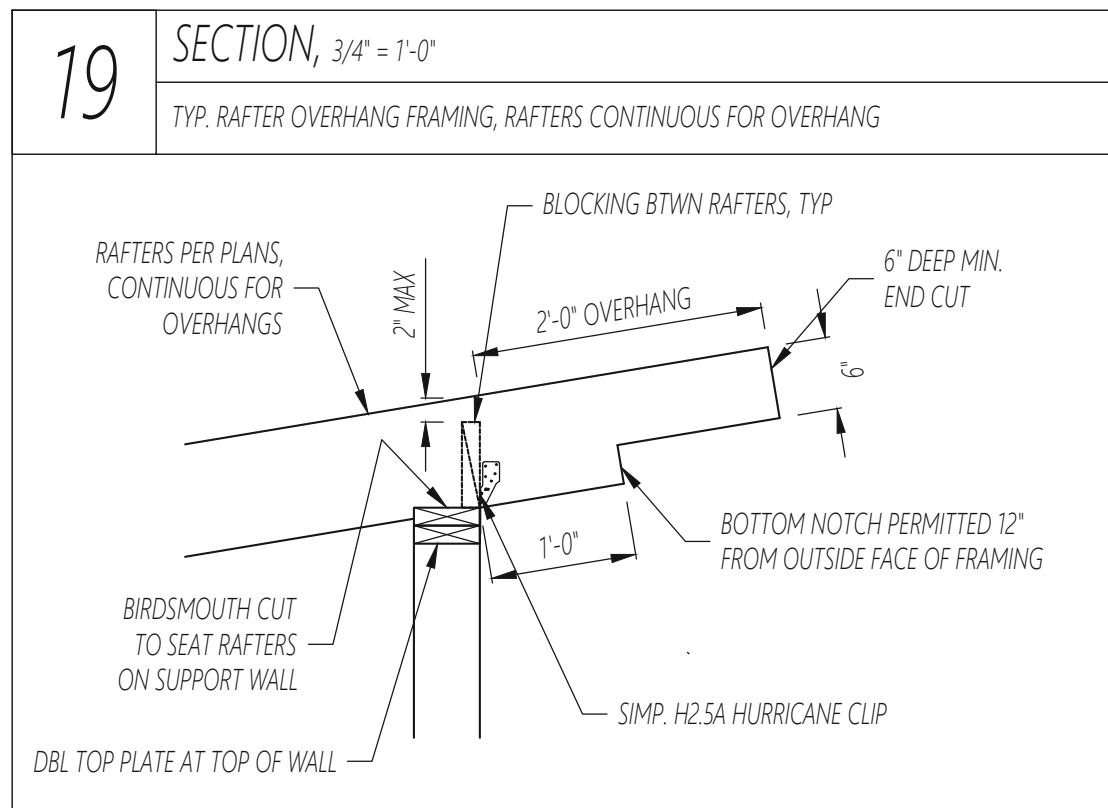
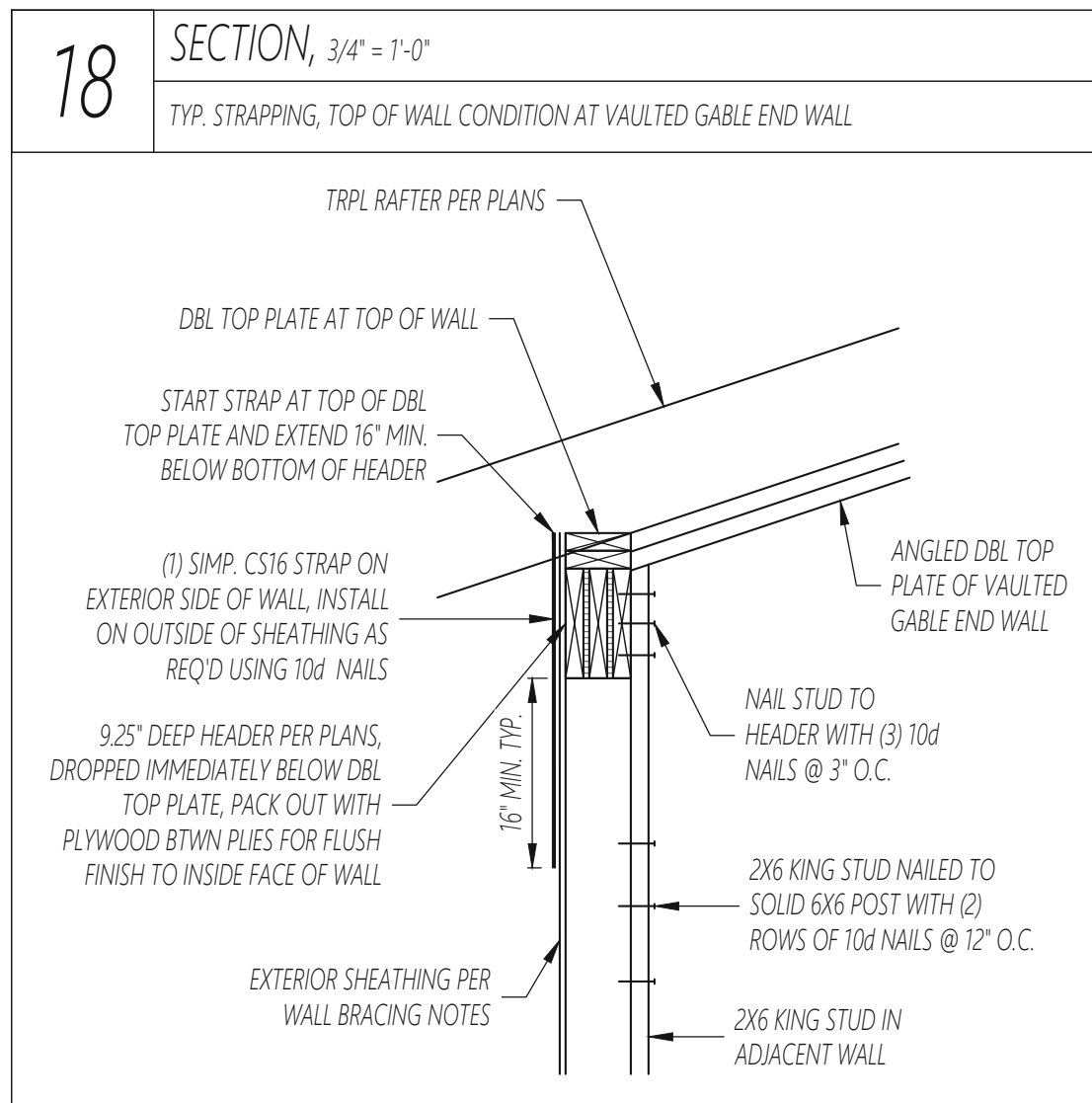
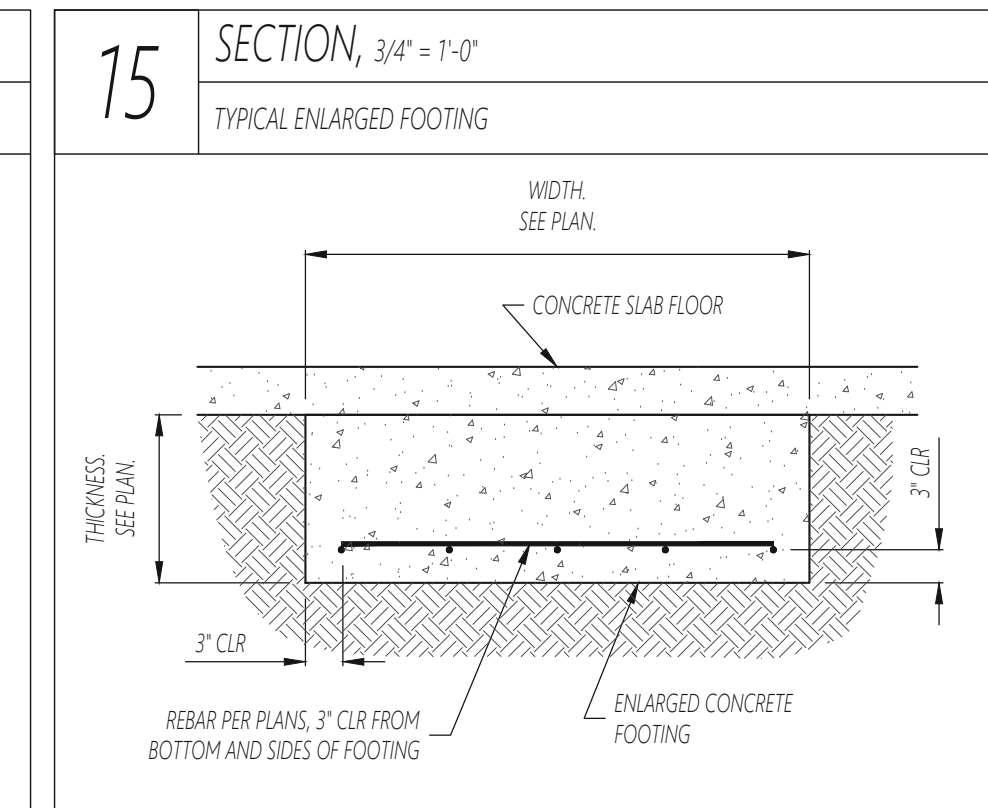
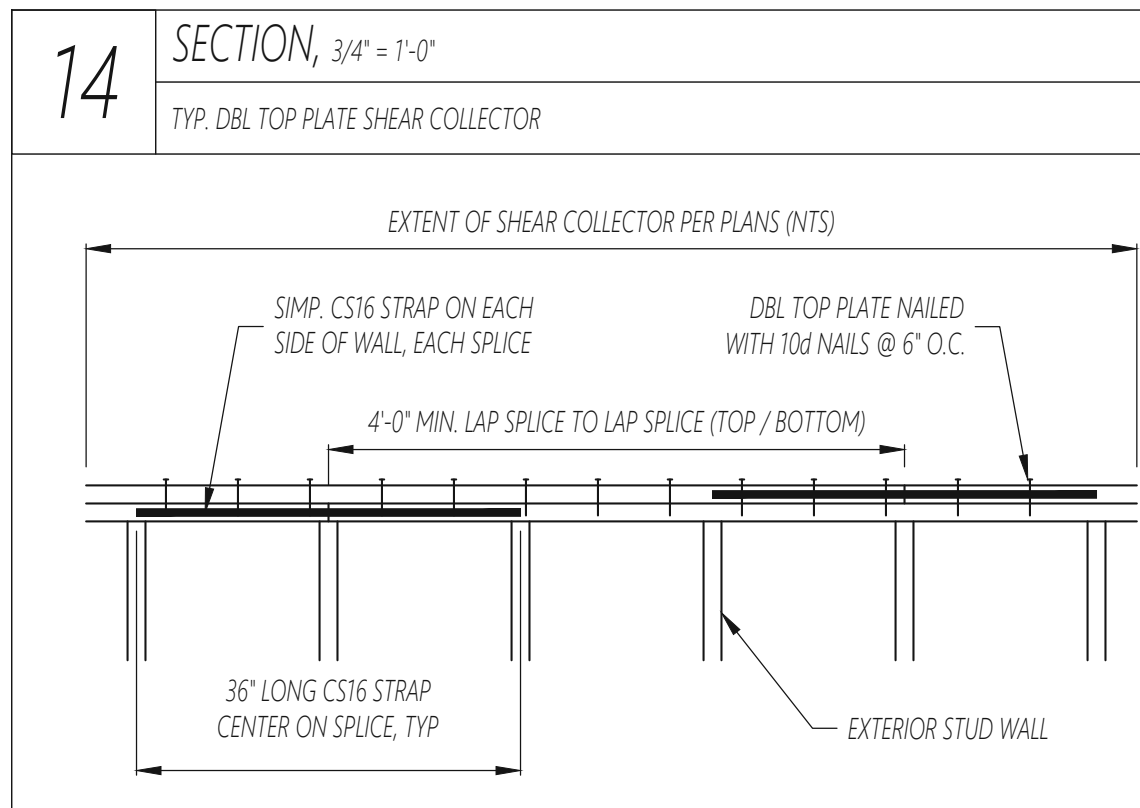
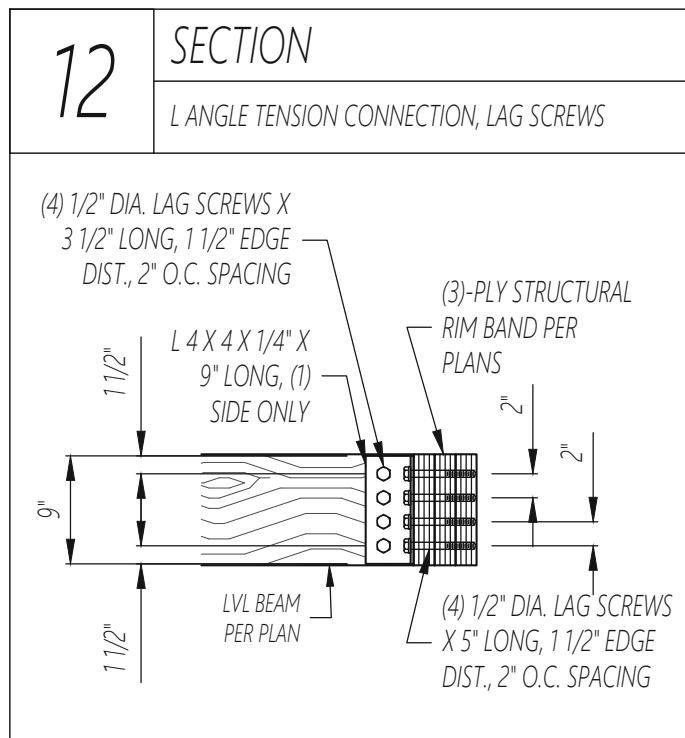
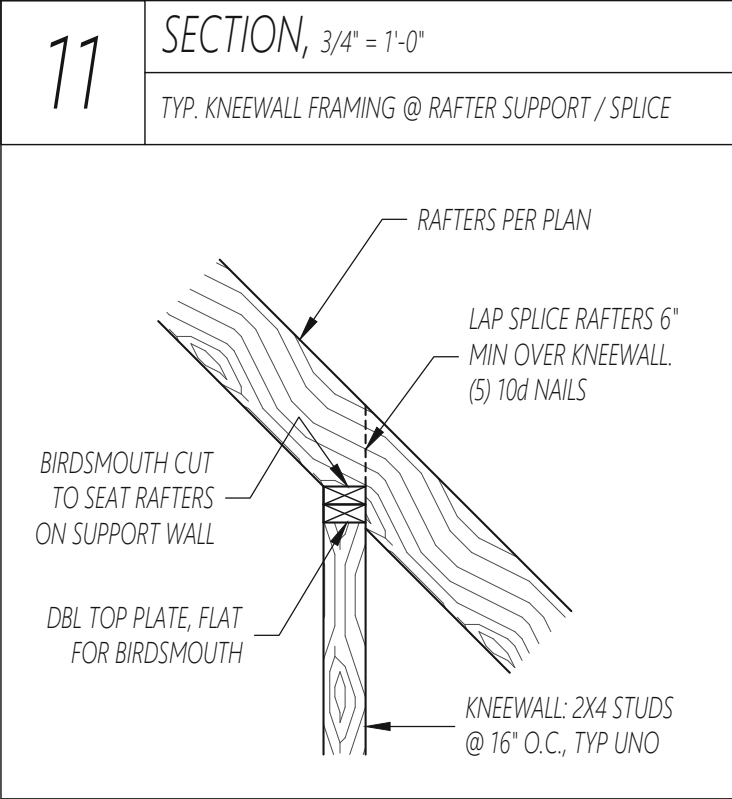
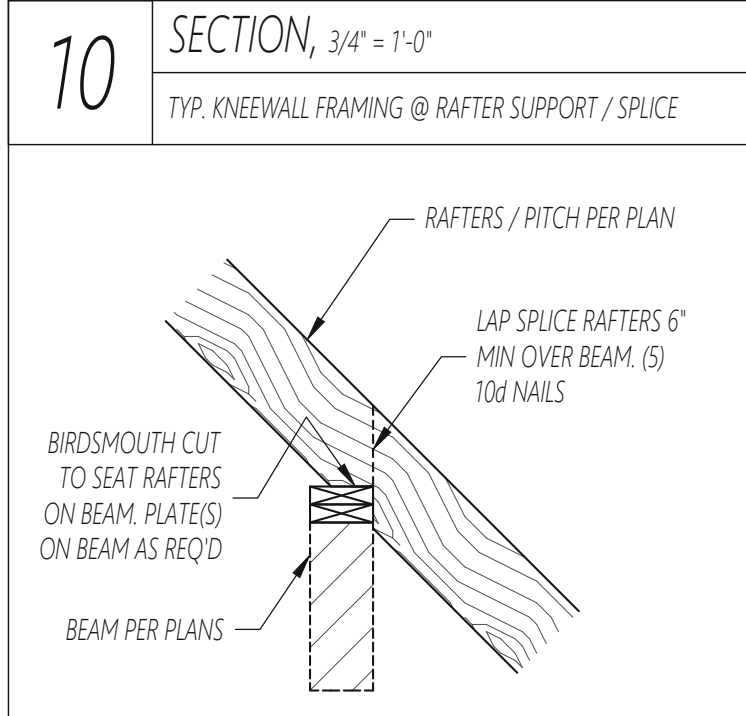
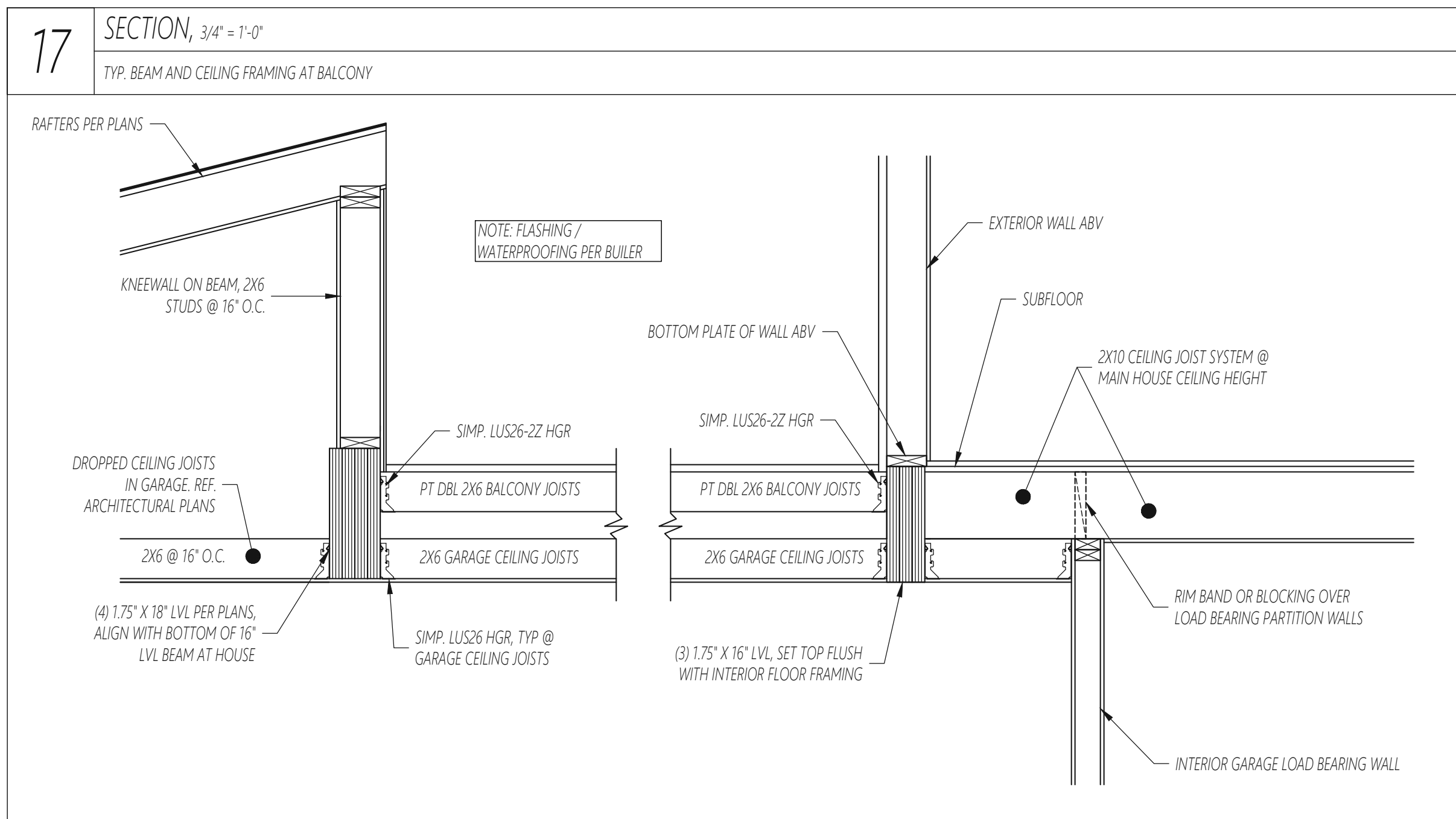
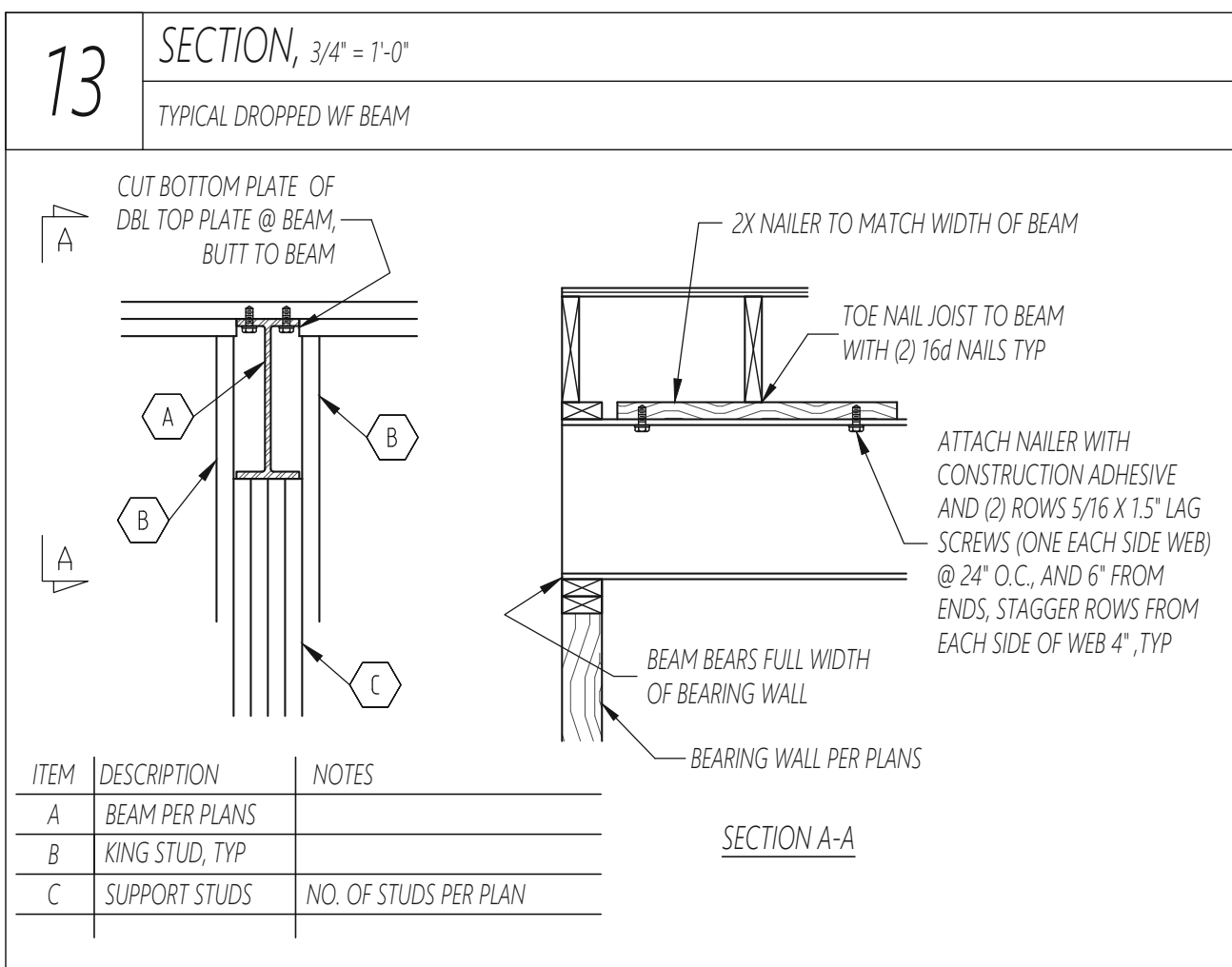
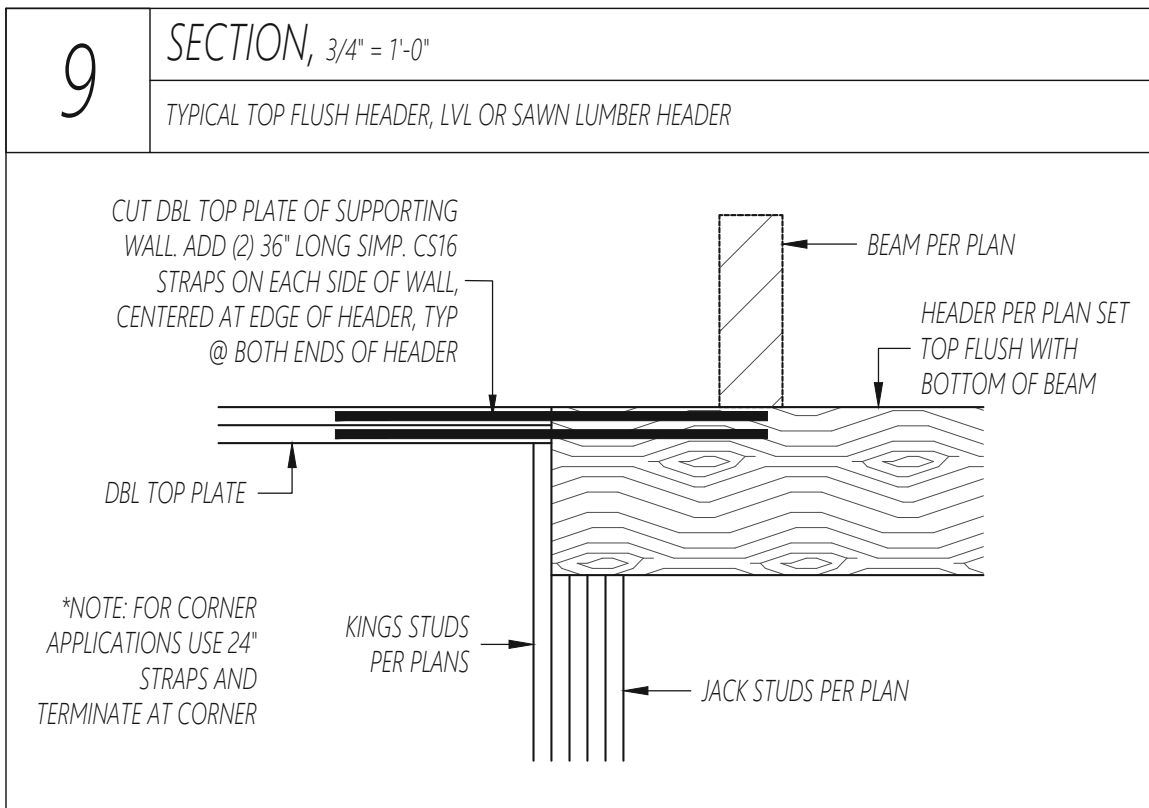
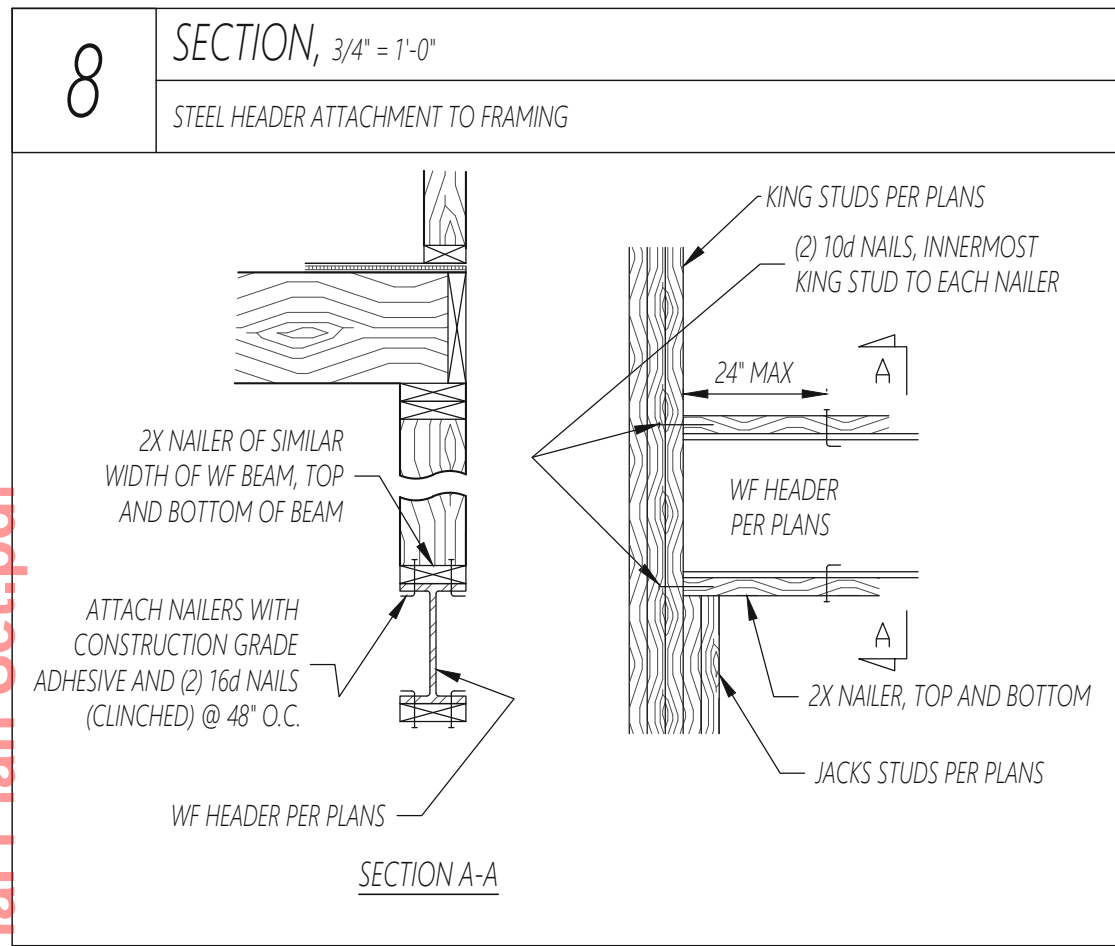
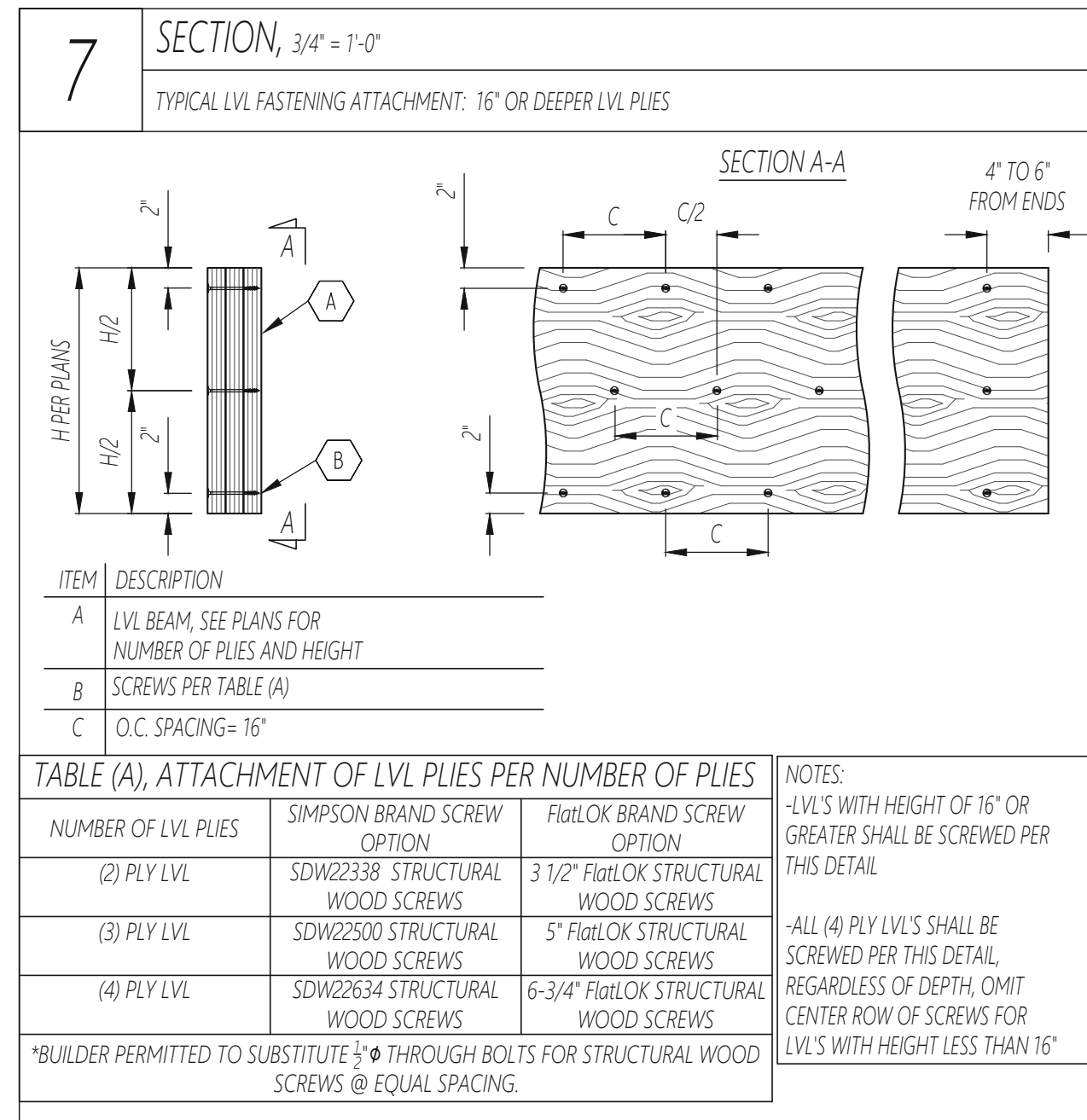
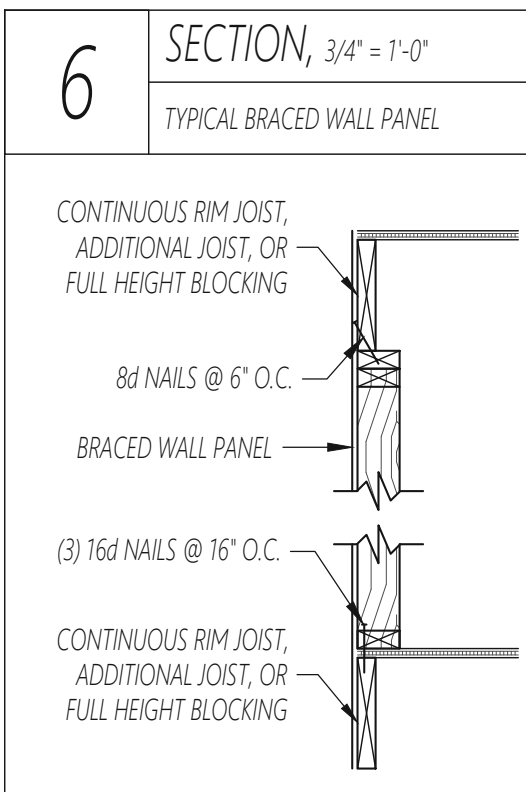
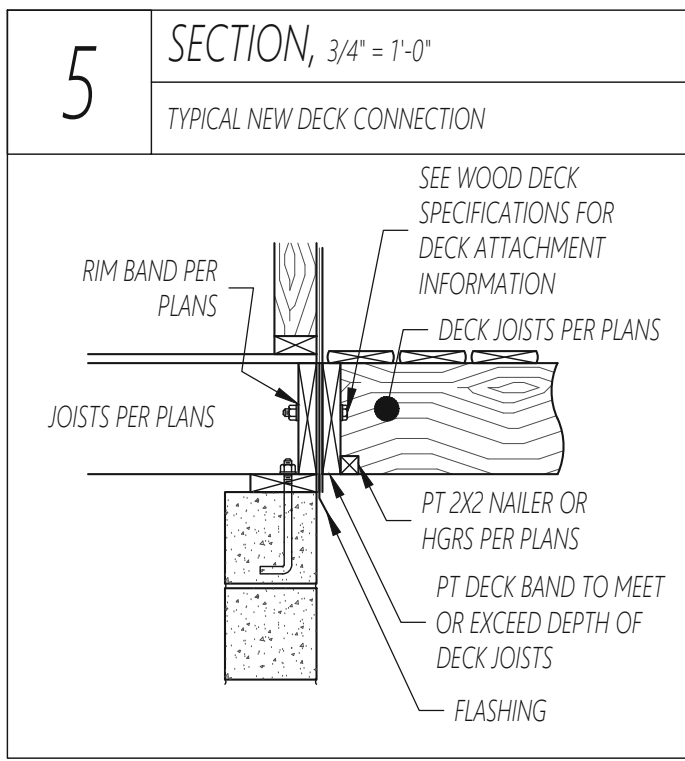
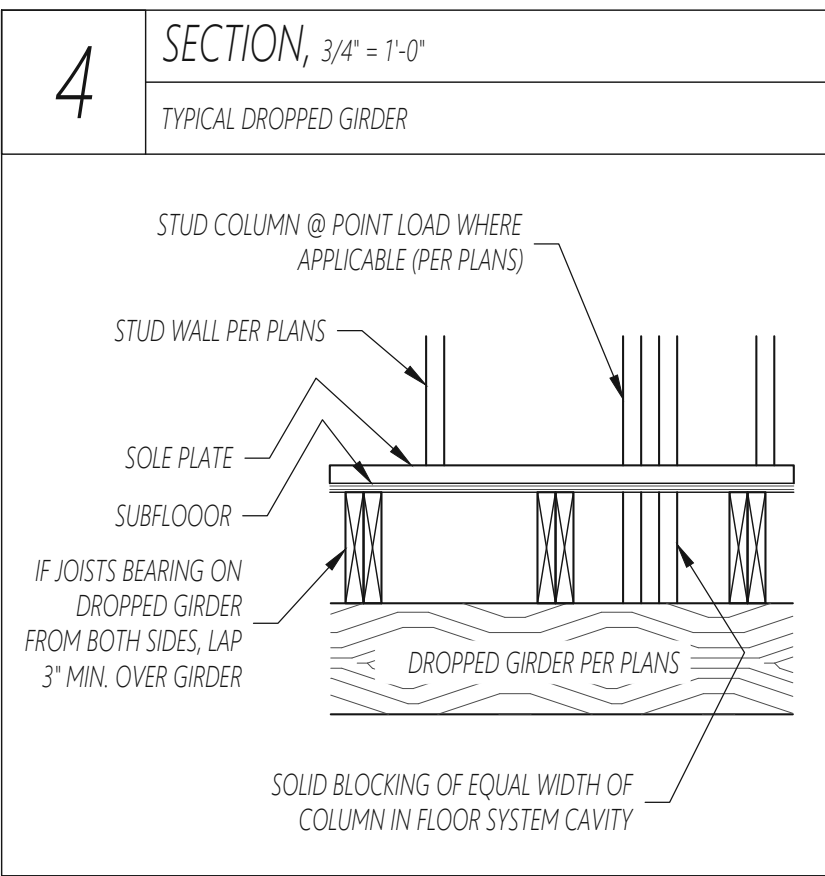
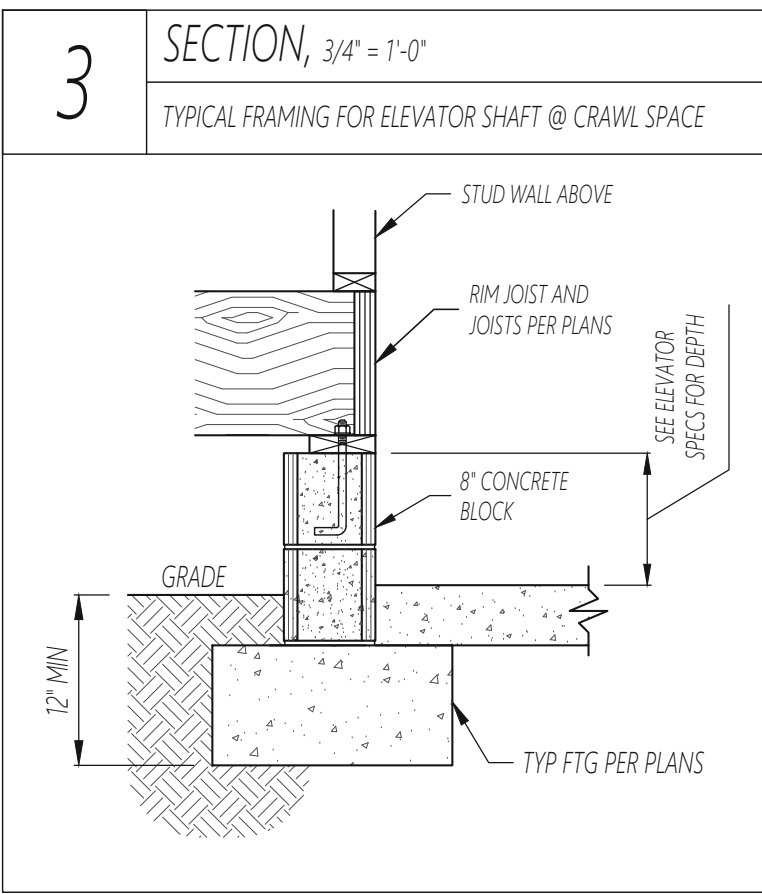
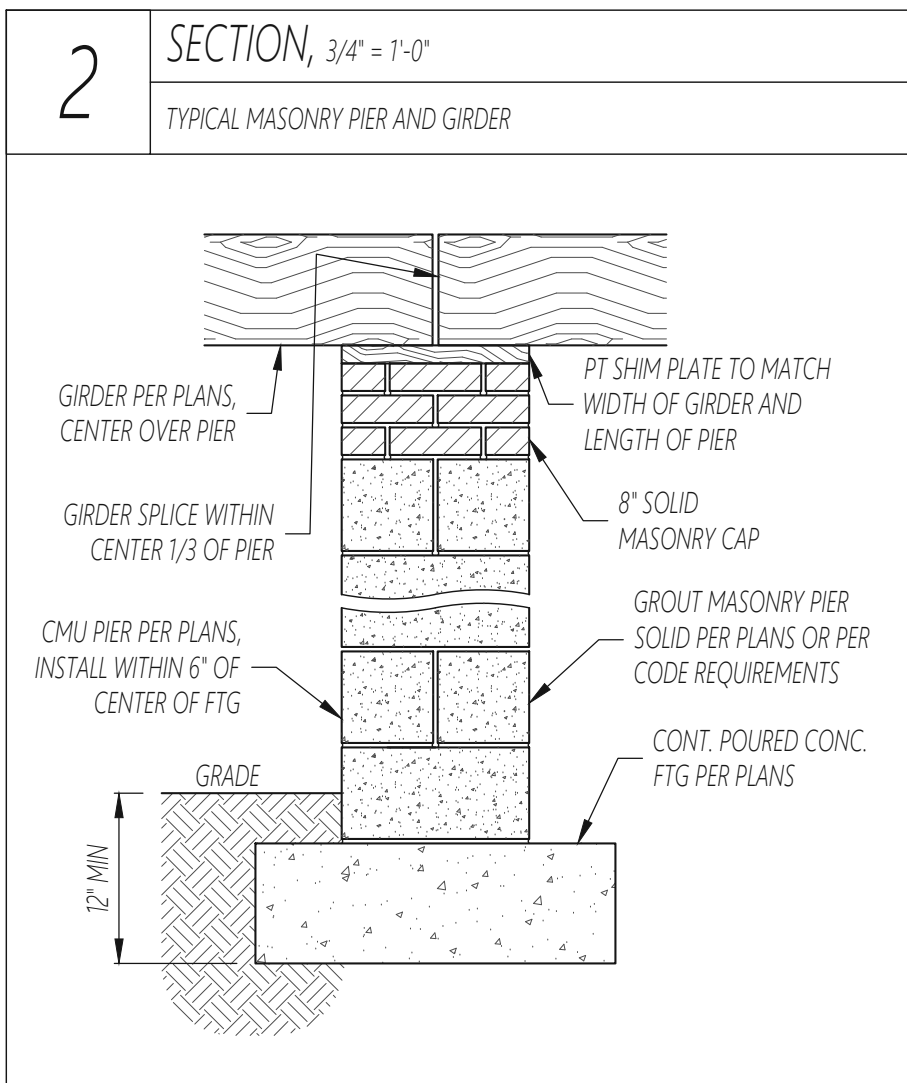
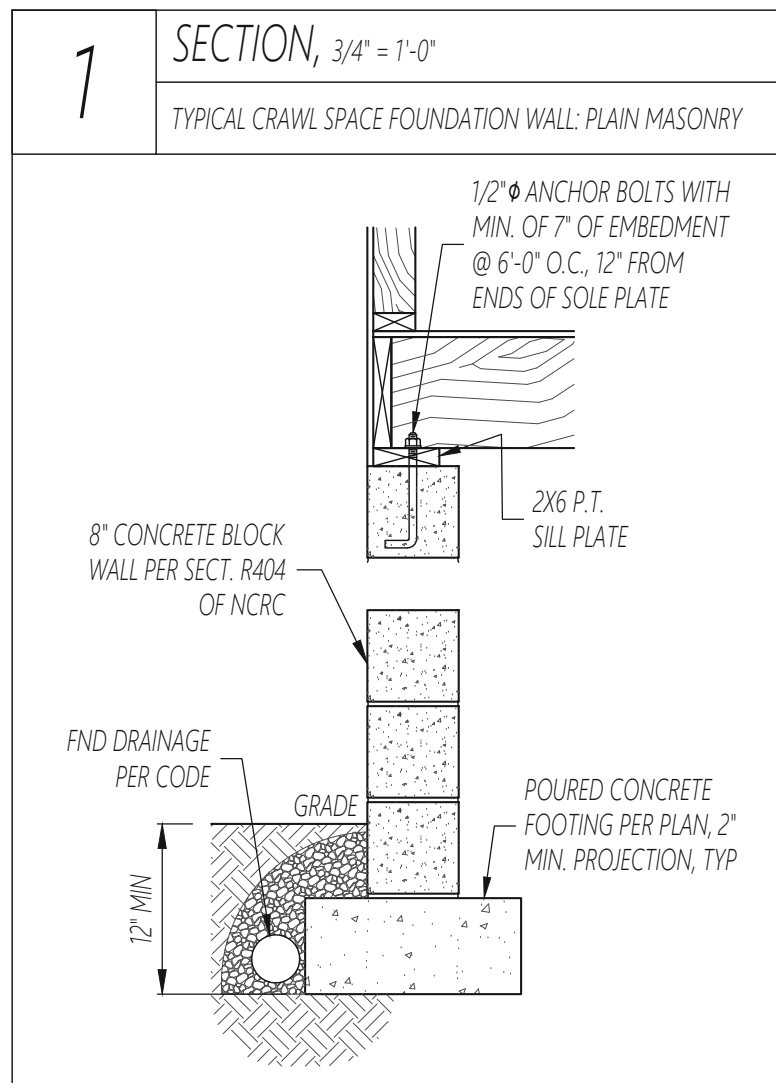
ROOF FRAMING PLAN

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$\frac{1}{4}" = 1'-0"$

<h2 style="text-align: center;"><u>COMMON WORD ABBREVIATIONS</u></h2> <p>-SEE CONSTRUCTION SPECIFICATION FOR LIST OF COMMON WORD ABBREVIATIONS USED ON STRUCTURAL PLANS.</p>
<h2 style="text-align: center;"><u>WOOD FRAMING NOTES</u></h2> <p style="text-align: center;"><u>ALL FLOORS</u></p> <p>-SOLID SAWN WOOD FRAMING DESIGN IS BASED ON NO. 1 /NO. 2 SPRUCE-PINE-FIR FOR RAFTERS, JOISTS, STUDS, WOOD BEAMS, WOOD GIRDEBS, ETC., TYP. UNO.</p> <p>- P.T. SOLID SAWN WOOD FRAMING DESIGN IS BASED ON NO. 2 SOUTHERN YELLOW PINE FOR POSTS, JOISTS, STUDS, WOOD BEAMS, WOOD GIRDEBS, ETC., TYP. UNO.</p> <p>-SOLID SAWN WOOD FRAMING SUBSTITUTION ALLOWED ONLY BY PERMISSION OF ENGINEER OF RECORD.</p>
<h2 style="text-align: center;"><u>FRAMING SCHEDULE</u></h2> <p style="text-align: center;"><u>ROOF ONLY</u></p> <p>R1: SUPPORT/SPICE RAFTERS ON KNEEWALL BELOW</p> <p>R2: SUPPORT/SPICE RAFTERS ON BEAM BELOW. PLATE(S) ON BEAM AS REQ'D</p> <p>-----</p> <p><u>FRAMING NOTES:</u></p> <p>-CONTRACTOR IS TO VERIFY ALL ROOF PITCHES, OVERHANGS, AND KNEEWALL HEIGHTS PRIOR TO CONSTRUCTION.</p>





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PATEL RESIDENCE  
STRUCTURAL ADDENDUM  
810 CHAMBERLAIN

ENG: BDO  
DATE: 11-15-2022  
REV:

PROJECT NO.  
2212037

SHEET NO.  
SD1  
6 of 8

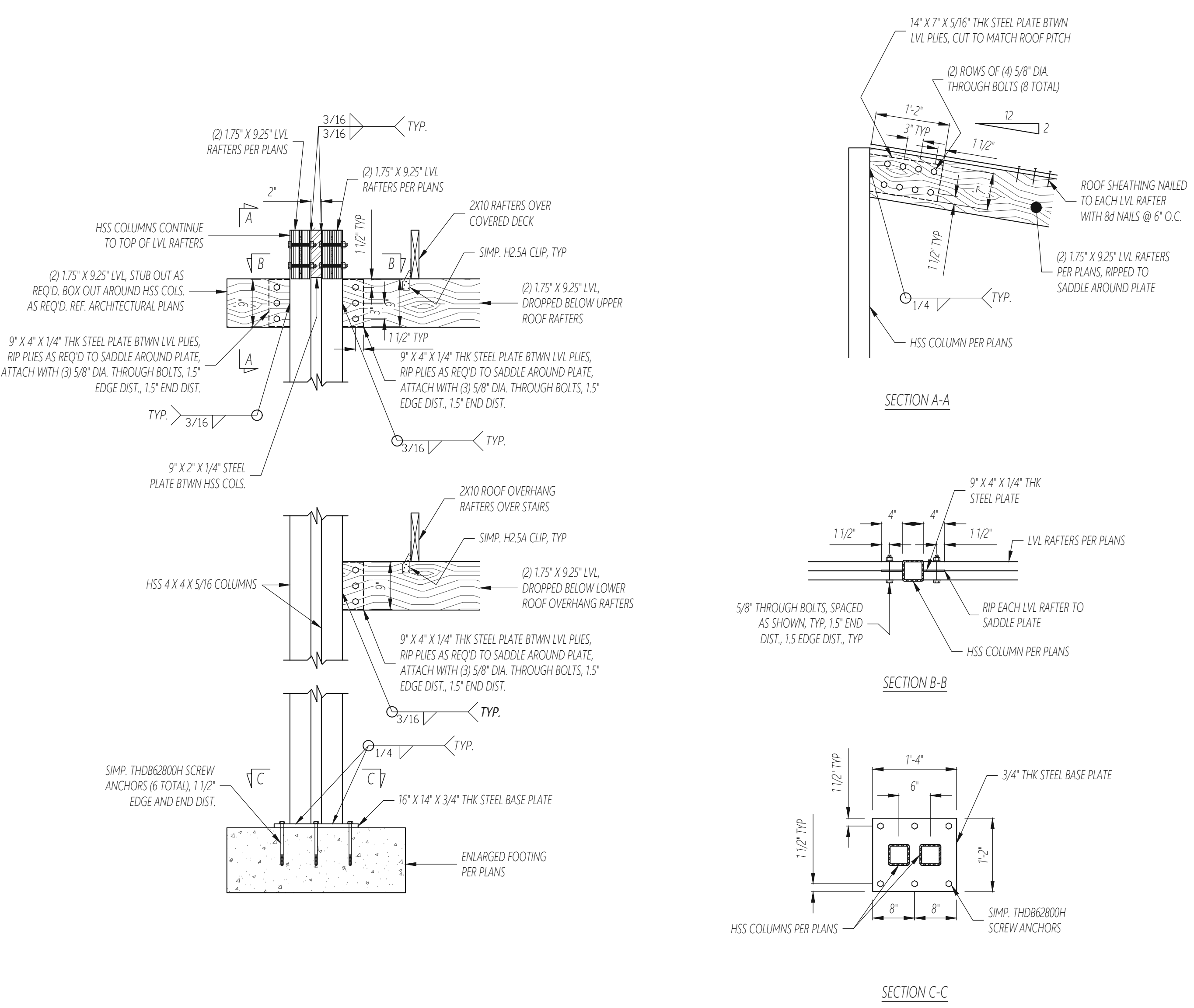


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1

SECTION, 3/4" = 1'-0"

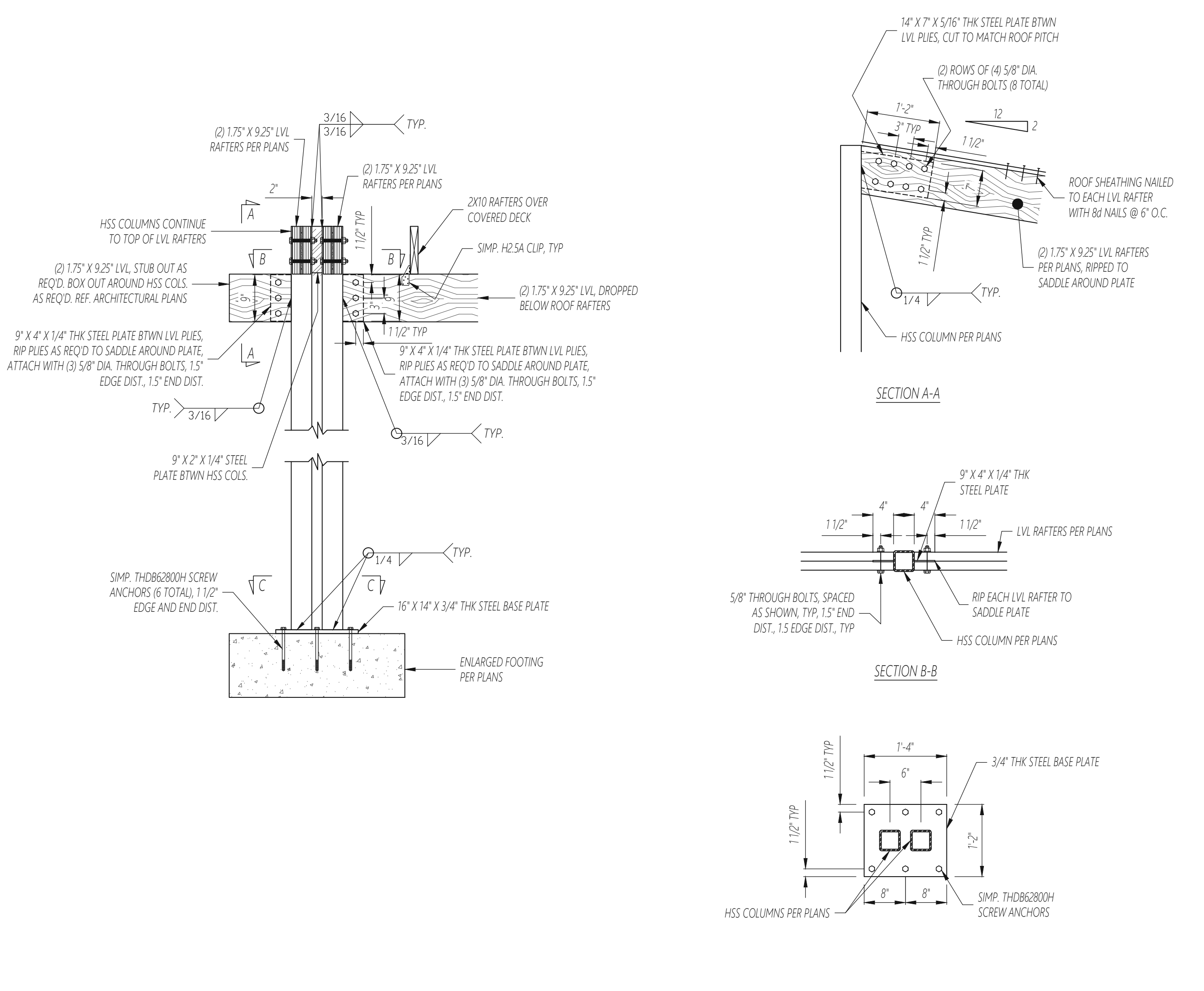
DBL HSS COLUMN CONSTRUCTION AT LVL RAFTERS AND UPPER AND LOWER RAFTER SUPPORT BEAMS



2

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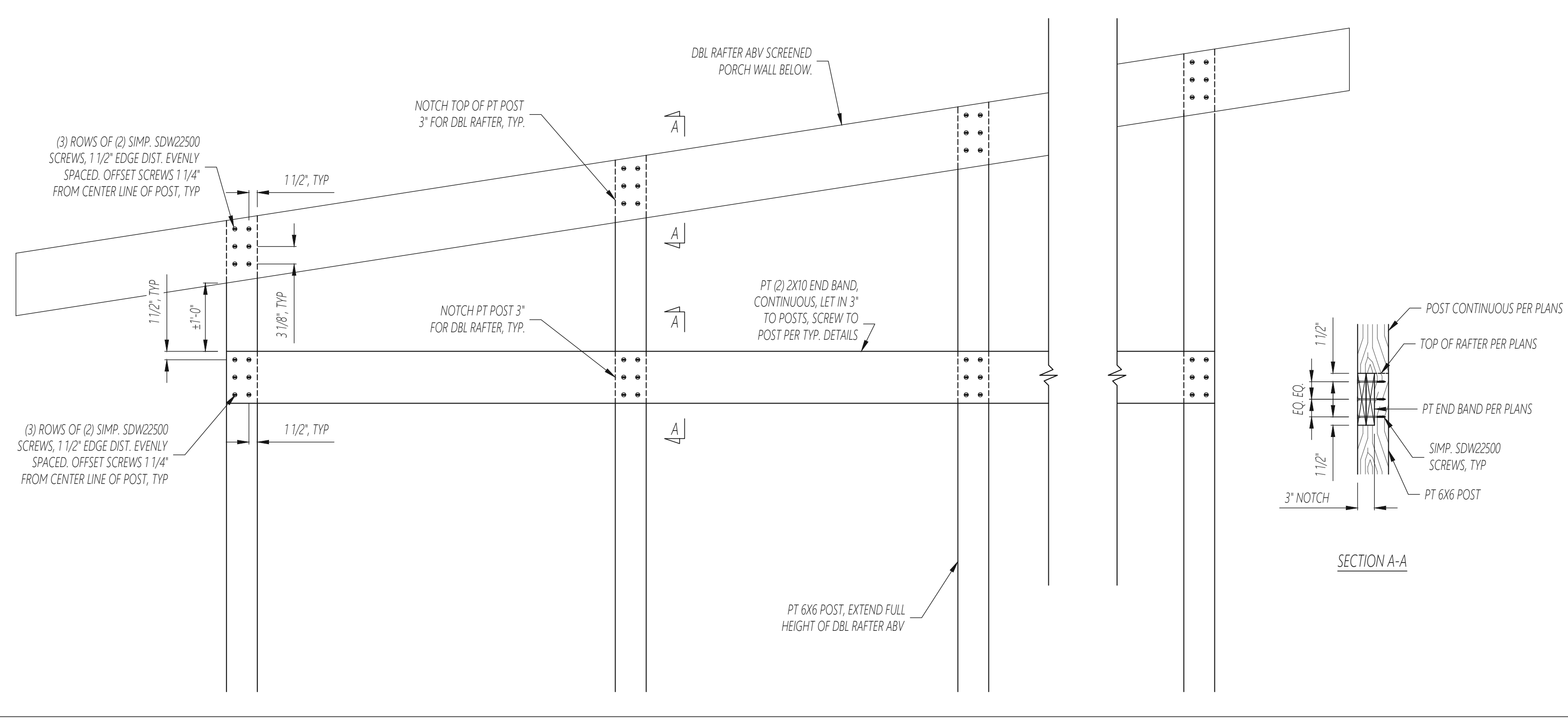
DBL HSS COLUMN CONSTRUCTION AT LVL RAFTERS AND UPPER AND LVL BEAM DROPPED BELOW RAFTERS



3

SECTION, 3/4" = 1'-0"

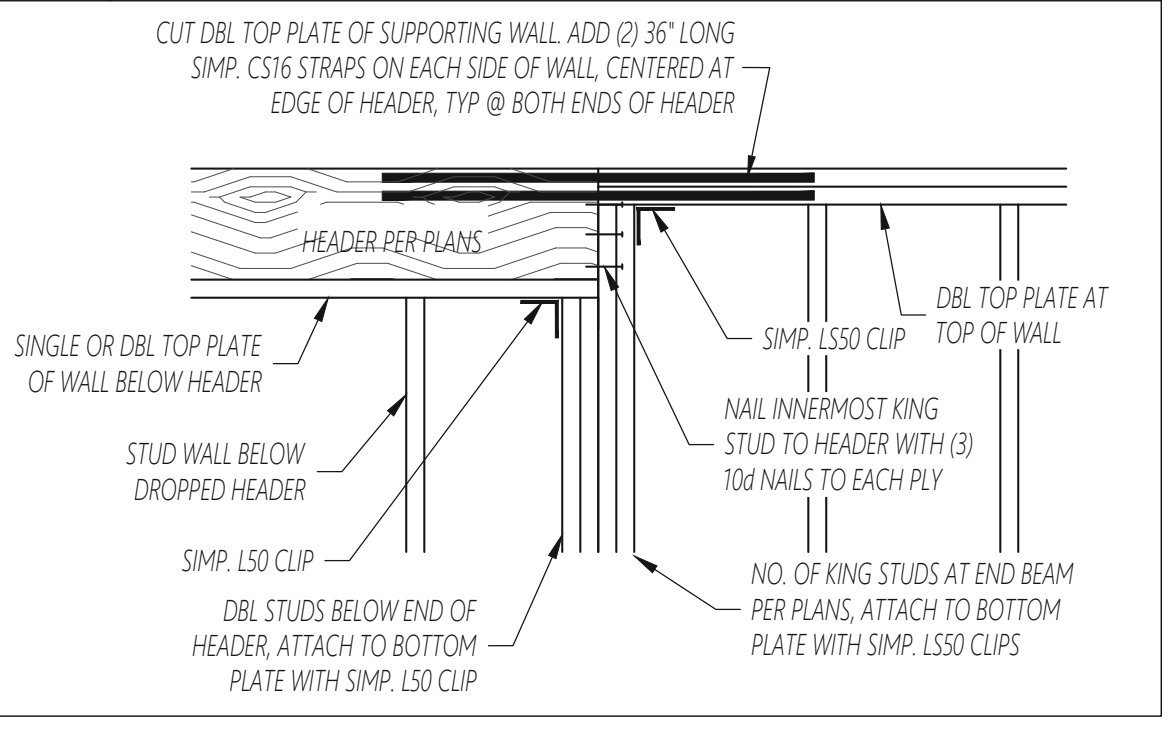
TYPICAL PT 6X6 POST, DBL RAFTER, AND END BAND FRAMING FOR SCREENED PORCH



4

SECTION, 3/4" = 1'-0"

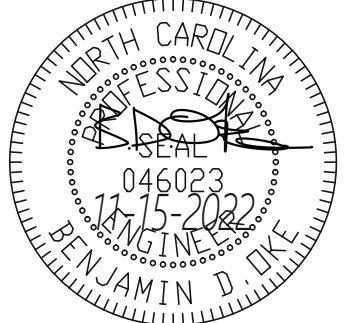
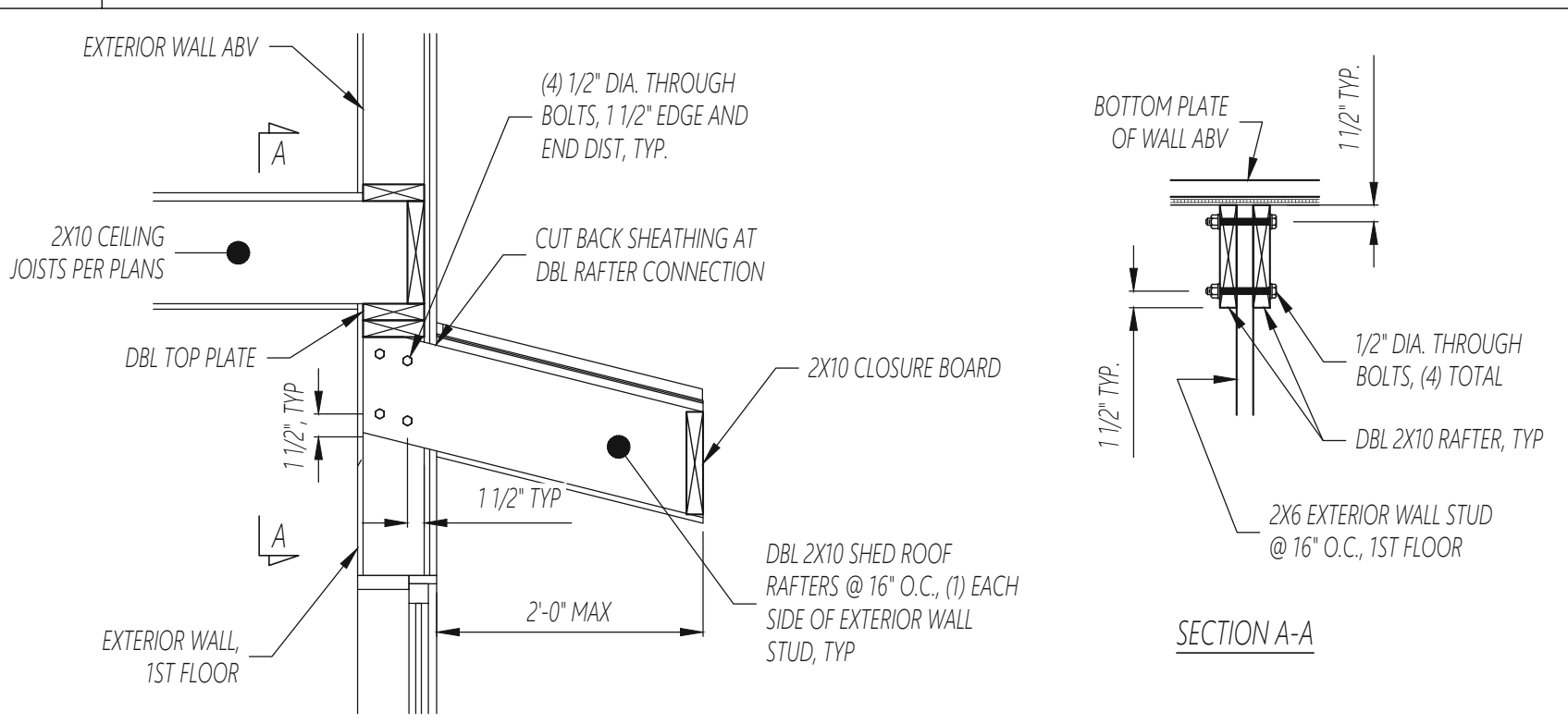
TYP. TOP OF WALL FRAMING AND STRAPPING AT RAISED HEADER NO DBL TOP PLATE



5

SECTION, 3/4" = 1'-0"

TYP. TOP OF WALL FRAMING AND STRAPPING AT RAISED HEADER NO DBL TOP PLATE



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REV:

PROJECT NO.  
2212037

SHEET NO.  
SD2  
7 of 8



# CONSTRUCTION SPECIFICATIONS

## GENERAL NOTES

- GN.01: CONSTRUCTION SHALL MEET THE REQUIREMENTS OF THE NORTH CAROLINA RESIDENTIAL CODE 2018 ED. ALL WORK IS TO BE DONE IN STRICT ACCORDANCE WITH STATE AND LOCAL CODES.
- GN.02: METHODS, PROCEDURES AND SEQUENCES OF CONSTRUCTION ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO MAINTAIN AND INSURE THE INTEGRITY OF THE STRUCTURE AT ALL STAGES OF CONSTRUCTION.

## DIMENSIONS

DM.01: DIMENSIONS SHOWN SHALL GOVERN OVER SCALE ON THESE DRAWINGS.

## DESIGN LOADS

DL.01: DESIGN LOADS SHALL CONFORM WITH THE TABLE BELOW

USE	LIVE LOAD (PSF)
UNINHABITABLE ATTIC WITHOUT STORAGE, LESS THAN 42" HEADROOM	10
UNINHABITABLE ATTIC WITH LIMITED STORAGE	20
HABITABLE ATTIC / ATTIC WITH FIXED STAIR ACCESS	30
COMMON AREAS / SLEEPING ROOMS	40
EXTERIOR BALCONIES / DECKS	40
FIRE ESCAPES	40
STAIRS	40
ROOF	20
PASSENGER VEHICLE GARAGE	50
GUARDRAILS AND HANDRAILS	200
GUARDRAIL IN-FILL COMPONENTS	50

- \* A UNIFORMLY DISTRIBUTED DEAD LOAD OF 10 PSF SHALL BE APPLIED TO USE CATEGORIES LISTED ABOVE UNLESS NOTED OTHERWISE.
- \* A UNIFORMLY DISTRIBUTED DEAD LOAD OF 5 PSF SHALL BE APPLIED TO VAULTED CEILING AREAS.
- \* THE CONTRACTOR IS RESPONSIBLE FOR INDICATING ON PLANS ALL AREAS REQUIRING A DESIGN FOR INCREASED DEAD LOAD SUCH AS TILED FLOOR AREAS OR SLATE ROOF COVERINGS. FOR ALL AREAS NOT INDICATED ON PLANS, THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THE DEAD LOAD DOES NOT EXCEED THE 10 PSF DESIGN LIMITATION.

- DL.02: INTERIOR WALLS: 5 PSF LATERAL.
- DL.03: BASIC WIND DESIGN VELOCITY,  $V_{ultimate}$  OF 115 MPH.
- DL.04: LOAD DURATION FACTOR FOR ROOF STRUCTURAL MEMBERS IS 1.15.
- DL.05: SOIL BEARING CAPACITY 2000 PSF (PRESUMPTIVE).

## WOOD CONSTRUCTION

- WC.01: SOLID SAWN WOOD FRAMING DESIGN IS BASED ON NO. 1, NO. 2 SPRUCE PINE FIR FOR JOISTS, RAFTERS, WOOD GIRDERS / BEAMS, ETC. PRESSURE TREATED WOOD FRAMING DESIGN IS BASED ON NO. 2 SOUTHERN YELLOW PINE FOR POSTS, JOISTS, RAFTERS, WOOD GIRDERS/BEAMS, ETC.
- WC.02: STUDS SHALL BE SPRUCE PINE FIR NO.1 / NO. 2 OR EQUAL TYP UNDO.
- WC.03: LUMBER IN CONTACT WITH THE GROUND, CONCRETE OR MASONRY SHALL BE PRESSURE TREATED IN ACCORDANCE WITH AHPA STANDARD C-15. ALL OTHER DISTRIBUTED LUMBER SHALL BE TREATED IN ACCORDANCE WITH AHPA STANDARD C-2 OR BY ANY METHOD GIVING EQUAL PROTECTION. THE BUILDING CODE OFFICE MAY ALSO APPROVE A NATURAL DECAY RESISTANT WOOD PER SECTION 19-6A1.
- WC.04: LAMINATED VENEER LUMBER (LVL) DESIGN IS BASED ON MICROLAM 1.9E MINIMUM DESIGN STRESS VALUES AS FOLLOWS:  $E = 1,966 \text{ PSI}$ ,  $F_b = 2600 \text{ PSI}$ ,  $F_v = 285 \text{ PSI}$ ,  $F_c = 750 \text{ PSI}$
- WC.05: PARALLEL STRAND LUMBER (PSL) DESIGN IS BASED ON PARALLAM 1.8E MINIMUM DESIGN STRESS VALUES AS FOLLOWS:  $E = 1,866 \text{ PSI}$ ,  $F_b = 2400 \text{ PSI}$ ,  $F_v = 190 \text{ PSI}$ ,  $F_c = 545 \text{ PSI}$
- WC.06: LAMINATED STRAND LUMBER (LSL) DESIGN IS BASED ON TIMBERSTRAND 1.3E MINIMUM DESIGN STRESS VALUES AS FOLLOWS:  $E = 1,386 \text{ PSI}$ ,  $F_b = 1700 \text{ PSI}$ ,  $F_v = 425 \text{ PSI}$ ,  $F_c = 710 \text{ PSI}$
- WC.07: SOLID SAWN, LVL, AND PSL BEAMS BEARING ONTO A STUD WALL SHALL BEAR THE FULL WIDTH OF THE SUPPORTING WALL. WHEN FRAMED PERPENDICULAR TO THE WALL AND, IN ALL CASES, SHALL BE SUPPORTED ON A GANGED STUD COLUMN SUCH THAT THE GANGED NUMBER OF STUDS IS AT LEAST AS WIDE AS THE BEAM BEING SUPPORTED OR, WHEN FRAMED PARALLEL TO THE WALL, SHALL BEAR ON (2) STUDS MINIMUM FOR SAWN BEAMS AND (3) STUDS MINIMUM FOR LVL AND PSL BEAMS, UNDO.
- WC.08: SINGLE LVL OR SOLID SAWN MEMBERS OF 175" OR LESS WIDTH, BEARING ONTO A STUD WALL, SHALL BEAR 2" MINIMUM ONTO THE WALL AND SHALL BE SUPPORTED BY (1) ADDITIONAL STUD.
- WC.09: SOLID SAWN LUMBER PILES THAT ARE GANGED TO FORM UP TO A (4) PLY A BEAM SHALL HAVE ADJACENT PILES IN THE BEAM FASTENED TOGETHER WITH (3) ROWS OF 100 NAILS @ 16" O.C. INSTALLED ON (1) OUTER SIDE OF A (2) PLY BEAM AND INSTALLED (1) OUTER SIDE AND ON EACH ADJACENT PLY OF A (3) OR MORE GANGED PLY BEAM, TYP UNDO.
- WC.10: LVL PILES THAT ARE GANGED TO FORM UP TO A (3) PLY BEAM, LESS THAN 16" IN DEPTH, SHALL HAVE ADJACENT PILES IN THE BEAM FASTENED TOGETHER WITH (3) ROWS OF 120 NAILS @ 12" O.C. INSTALLED ON (1) OUTER SIDE OF A (2) PLY BEAM AND INSTALLED ON BOTH OUTER SIDES OF A (3) PLY BEAM. LVL BEAMS 16" DEEP OR GREATER OR (4) OR MORE GANGED PILES SHALL BE FASTENED AS INDICATED ON PLANS.
- WC.11: TYPICAL STUD WALL FRAMING SHALL BE 2X4 STUDS SPACED AT 16" O.C. OR, OF A WIDTH, OR SPACING AS INDICATED OTHERWISE ON PLANS. STUD WALLS SHALL BE FRAMED CONTINUOUS, WITHOUT BREAK, ALONG THE HEIGHT OF THE WALL AND SHALL CONSIST OF A SOLE PLATE AT THE BOTTOM OF THE WALL AND A DOUBLE TOP PLATE AT THE TOP OF THE WALL. DISCONTINUITIES IN A STUD WALL SHALL NOT OCCUR EXCEPT AS REQUIRED FOR DOOR OR WINDOW OPENINGS. THE KING STUDS FOR SUCH OPENINGS SHALL BE CONTINUOUS.
- WC.12: THE REQUIRED NUMBER OF KING STUDS FOR EXTERIOR HEADERS IN 2X4 STUD WALLS SHALL BE DETERMINED BY NCSCB TABLE 602.3(5)(a) UNLESS NOTED OTHERWISE ON PLANS. FOR 2X6 OR WIDER STUD WALLS THE REQUIRED NUMBER OF KING STUDS FOR EXTERIOR HEADERS WALLS SHALL BE EQUAL TO 1/2 THE AMOUNT OF STUDS AS INDICATED BY THE TABLE LISTED ABOVE.
- WC.13: STUDS THAT ARE GANGED TO FORM A LOAD BEARING COLUMN OR A COLUMN TRANSFERRING LOAD FROM ONE FLOOR TO THE NEXT SHALL HAVE ADJACENT STUDS WITHIN THE COLUMN NAILLED TOGETHER WITH (2) ROWS OF 100 NAILS AT 8" O.C. (3) ROWS OF 160 NAILS @ 8" O.C. FOR 2X6 OR 2X10 STUDS). ALL COLUMNS SHALL PROVIDE A CONTINUOUS LOAD PATH DOWN TO THE FOUNDATION OR OTHER ENGINEERED STRUCTURAL ELEMENTS INCLUDING SOLID BLOCKING OF EQUAL WIDTH OF THE COLUMN PROVIDED WITHIN THE DEPTH OF THE FLOOR SYSTEM CAVITY.
- WC.14: NAILS SHALL BE COMMON WIRE NAILS TYP UNDO.
- WC.15: LAG SCREWS SHALL CONFORM TO ANSI/ASME STANDARD B18.21-1981.
- WC.16: PILOT HOLES SHALL BE USED FOR LAG SCREW INSTALLATION AND SHALL BE BORED ACCORDING TO NDS SPECIFICATIONS.
- WC.17: BOLTS AND LAG SCREWS USED FOR BOLTING WOOD MEMBERS SHALL HAVE STANDARD WASHERS INSTALLED FOR THE NUTS AND BOLT / SCREW HEADS.

## STEEL CONSTRUCTION

- ST.01: STRUCTURAL STEEL SHALL MEET THE REQUIREMENTS OF THE AISC SPECIFICATION FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS.
- ST.02: HOLLOW STRUCTURAL SECTIONS (HSS) SHALL CONFORM TO ASTM A500 GRADE C.
- ST.03: ALL OTHER STRUCTURAL STEEL SHALL CONFORM TO ASTM A592 MINIMUM GRADE TYP UNDO.
- ST.04: BOLTS SHALL CONFORM TO ASTM A307 MINIMUM GRADE TYP UNDO.
- ST.05: WELDING ELECTRODES SHALL BE E70XX.
- ST.06: ALL WELDING SHALL BE PERFORMED BY AN AWS CERTIFIED WELDER.
- ST.07: REBAR SHALL BE DEFORMED STEEL CONFORMING TO ASTM A615 GRADE 60 TYP UNDO.
- ST.08: STEEL FLITCH PLATE BEAMS SHALL CONSIST OF A CONTINUOUS STEEL PLATE BOLTED BETWEEN TWO PIECES OF CONTINUOUS LUMBER PLATE AND LUMBER AS SIZED PER PLANS. BOLT ASSEMBLY TOGETHER USING 1/2"  $\Phi$  THROUGH BOLTS SPACED AT 24" O.C. STAGGERED TOP TO BOTTOM OF BEAM. MAINTAIN A 2" EDGE DISTANCE. PLACE TWO BOLTS, ONE ABOVE THE OTHER, 6" FROM EACH END OF THE BEAM.
- ST.09: ALL STEEL, HSS, AND STEEL FLITCH PLATE BEAMS BEARING ONTO A STUD WALL SHALL BEAR THE FULL WIDTH OF THE SUPPORTING WALL WHEN FRAMED PERPENDICULAR TO THE WALL AND, IN ALL CASES, SHALL BE SUPPORTED ON A GANGED STUD COLUMN SUCH THAT THE GANGED NUMBER OF STUDS IS AT LEAST AS WIDE AS THE BEAM BEING SUPPORTED OR, WHEN FRAMED PARALLEL TO THE WALL, SHALL BEAR ON (3) STUDS MINIMUM UNDO.

## MASONRY CONSTRUCTION

- MS.01: MASONRY CONSTRUCTION SHALL CONFORM TO THE SPECIFICATIONS OF ACI 305-95, LATEST EDITION.
- MS.02: CONCRETE MASONRY UNITS SHALL CONFORM TO ASTM C 90 OR ASTM C 55.
- MS.03: MORTAR SHALL BE TYPE M OR S CONFORMING TO ASTM C 476.
- MS.04: ALL LOAD BEARING MASONRY UNITS SHALL BE LAID IN A RUNNING BOND, TYP.
- MS.05: MASONRY PLASTERS SHALL BE BLOCK BONDED TO THE MASONRY WALL IMMEDIATELY ADJACENT, TYP.
- MS.06: THE MAXIMUM HEIGHT OF HOLLOW AND SOLID GROUTED MASONRY UNITS USED IN MASONRY PIER CONSTRUCTION SHALL CONFORM WITH THE TABLE BELOW

LEAST PIER DIMENSION	MAX HEIGHT FOR HOLLOW UNITS	MAX HEIGHT FOR SOLID UNITS
8"	32"	80"
12"	48"	120"
16"	64"	160"
20"	80"	NA
24"	96"	NA

## CONCRETE CONSTRUCTION

- CN.01: REINFORCED CAST IN PLACE CONCRETE SHALL BE PROPORTIONED, MIXED AND PLACED IN ACCORDANCE WITH THE SPECIFICATIONS OF ACI 318, LATEST EDITION.
- CN.02: ALL CONCRETE INCLUDING CONCRETE FOR FOOTINGS, IS TO BE CAST IN PLACE, TYP UNDO.
- CN.03: CAST IN PLACE CONCRETE SHALL BE NORMAL WEIGHT CONCRETE AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS TYP UNDO.
- CN.04: WHERE CAST IN PLACE CONCRETE WALLS RETAIN 4 FEET OR MORE OF UNBALANCED FILL, THEY SHALL BE Laterally SUPPORTED AT THE TOP AND BOTTOM BEFORE BACKFILLING.

## SUBSTITUTIONS

- SBO.01: SYNTHETIC POLYPROPYLENE FIBRILLATED MICRO FIBERS, FIBER SIZE AND DOSAGE RATE PER MANUFACTURER'S SPECIFICATION, MAY BE USED IN LIEU OF WELDED WIRE FABRIC IN GROUND SUPPORTED SLAB CONSTRUCTION.
- SBO.02: SOLID SAWN LUMBER SPECIES AND GRADE SUBSTITUTION IS ALLOWED ONLY BY WRITTEN AUTHORIZATION OF SUBSTITUTION BY ENGINEER OF RECORD.
- SBO.03: ENGINEERED WOOD BEAM AND JOIST SUBSTITUTION IS ALLOWED PROVIDED THAT THE CONTRACTOR OR THE LUMBER SUPPLIER RESPONSIBLE FOR THE SUBSTITUTION PROVIDES DOCUMENTATION AT THE TIME OF INSPECTION DEMONSTRATING THAT THE MATERIAL SUBSTITUTION MEETS OR EXCEEDS THE MINIMUM DESIGN SPECIFICATIONS OF THE ENGINEERED WOOD BEAMS OR JOISTS NOTED ON THE SEALED SET OF ENGINEERED PLANS. IN ALL CASES, THE JOIST SPACING NOTED ON THE SEALED SET OF PLANS IS TO REMAIN THE SAME.
- SBO.04: ALL OTHER UNAUTHORIZED SUBSTITUTIONS AND / OR DEVIATIONS ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. FAILURE OF THE CONTRACTOR TO CONFORM TO THE STRUCTURAL DRAWINGS SHALL VOID THE ENGINEER'S SEAL AND THE FIRM'S LIABILITY UNLESS CHANGES TO THE STRUCTURAL PLANS ARE APPROVED BY THE ENGINEER OF RECORD.

## LEGAL DISCLAIMER / MISCELLANEOUS NOTES

- THE ELECTRONIC DISTRIBUTION OF THIS DOCUMENT TO PARTIES OTHER THAN THE INTENDED CLIENT AND / OR DIGITAL MODIFICATION OF THIS DOCUMENT IN ANY WAY IS PROHIBITED AND SHALL VOID THE ENGINEER OF RECORD'S SEAL.
- OKÉ NICHOLS ENGINEERING, INC. DOES NOT PERFORM FENESTRATION, ROOF VENT, OR ATTIC CALCULATIONS OR ANY OTHER AREA CALCULATIONS THAT ARE NOT RELATED TO STRUCTURAL ENGINEERING.
- TRUSSES ARE TO BE DESIGNED BY OTHERS AS AN ENGINEER REGISTERED IN NORTH CAROLINA. FINAL TRUSS DRAWING SHOULD BE SUBMITTED TO OKÉ NICHOLS ENGINEERING, INC. FOR REVIEW PRIOR TO CONSTRUCTION.
- REVIEW SETS SHALL BE PROVIDED TO THE CLIENT TO ENSURE THAT THE SCOPE OF WORK HAS BEEN COMPLETED IN CONFORMANCE WITH THE CLIENT'S PREFERENCES. CLIENT APPROVAL OF REVIEW SETS SHALL INDICATE THAT THE CLIENT HAS ADEQUATELY REVIEWED THE SET OF DRAWINGS AND ACKNOWLEDGES THAT THE SCOPE OF WORK HAS BEEN COMPLETED TO THE CLIENT'S SATISFACTION. UPON APPROVAL OF REVIEW SETS, THE SEALED SET OF PLANS IS ISSUED AND SHALL BE CONSIDERED FINALIZED CONSTRUCTION DOCUMENTS.
- THE BUILDER IS RESPONSIBLE FOR REVIEWING ALL PLANS PRIOR TO CONSTRUCTION, AND IN THE CASE OF EXISTING CONSTRUCTION, VERIFYING ALL EXISTING CONDITIONS DURING DEMOLITION PRIOR TO CONSTRUCTION.

## COMMON ABBREVIATIONS

ABV	ABOVE	FND	FOUNDATION	THK	THICK
BE	BOTH ENDS	FTG	FOOTING	TYP	TYPICAL
BTWN	BETWEEN	HOG	HOT DIPPED GALVANIZED	TRPL	TRIPLE
CJ	CEILING JOIST	HGR	HANGER	TSP	TRIPLE STUD POCKET
CMHC	CONCRETE	LVL	LAMINATED VENEER LUMBER	UNO	UNLESS NOTED OTHERWISE
CONT	CONTINUOUS	NQ	NUMBER	V.I.F.	VERIFY IN FIELD
CS	CONTINUOUS SHEATHING	NTS	NOT TO SCALE	WF	WIDE FLANGE BEAM
DA	DIAMETER	O.C.	ON CENTER	XI	EXTRA JOIST
DBL	DOUBLE	PSL	PARALLEL STRAND LUMBER		
DJ	DOUBLE JOIST	PT	PRESSURE TREATED		
DSP	DOUBLE STUD POCKET	REF	REFERENCE		
E.F.	EACH END	SMP	SIMPSON		
FLR	FLOOR	SQ	SQUARE		

# WOOD DECK SPECIFICATIONS

## GENERAL NOTES

- GN.01: A DECK IS AN EXPOSED EXTERIOR WOOD FLOOR STRUCTURE WHICH MAY BE ATTACHED TO THE STRUCTURE OR FREESTANDING. ROOFED PORCHES (OPEN OR SCREENED-IN) MAY BE CONSTRUCTED USING THESE PROVISIONS.
- GN.02: 1) ALL NAILS AND BOLTS ARE TO BE HOT DIPPED GALVANIZED. BOLTS SHALL BE THROUGH BOLTS UNDO. NAILS MUST PENETRATE THE SUPPORTING STRUCTURE BAND A MINIMUM OF 1-1/2".
- GN.03: THE MINIMUM EDGE DISTANCE FOR ALL BOLTS SHALL BE 2 1/2".

## FOOTERS

- FO.01: SUPPORT POSTS SHALL BE SUPPORTED BY A FOOTING, AND MUST REST WITHIN THE CENTER 1/3 OF FOOTER.
- FO.02: TOP OF FOOTER SHALL BE LEVEL FOR FULL BEARING SUPPORT OF POST, AND SHALL HAVE A MINIMUM DEPTH 12" BELOW FINISHED GRADE.

## FLASHING

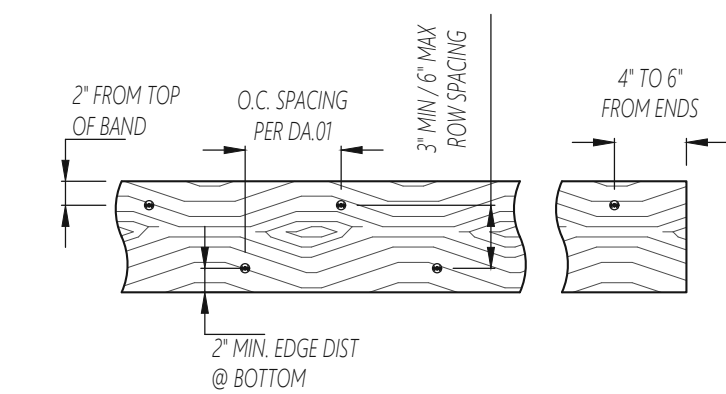
- FO.01: WHEN ATTACHED TO A STRUCTURE, THE STRUCTURE TO WHICH ATTACHED SHALL HAVE A TREATED WOOD BAND FOR THE LENGTH OF THE DECK, OR CORROSION-RESISTANT FLASHING SHALL BE USED TO PREVENT MOISTURE FROM COMING IN CONTACT WITH THE UNTREATED FRAMING OF THE STRUCTURE. ALUMINUM FLASHING SHALL NOT BE USED IN CONJUNCTION WITH DECK CONSTRUCTION. THE DECK BAND AND THE STRUCTURE BAND SHALL BE CONSTRUCTED IN CONTACT WITH EACH OTHER EXCEPT ON BRICK VENEER STRUCTURES AND WHERE PLYWOOD SHEATHING IS REQUIRED AND PROPERLY FLASHED. SONGS SHALL NOT BE INSTALLED BETWEEN THE STRUCTURE AND THE DECK BAND. IF ATTACHED TO A BRICK STRUCTURE, NEITHER THE FLASHING NOR A TREATED BAND FOR BRICK VENEER STRUCTURE IS REQUIRED. IN ADDITION, THE TREATED DECK BAND SHALL BE CONSTRUCTED IN CONTACT WITH THE BRICK VENEER. FLASHING SHALL BE INSTALLED PER FIGURE AM103 OF THE NCRC 2012 ED.

## DECK ATTACHMENT

DA.01: WHEN THE DECK IS ATTACHED TO THE STRUCTURE THE FOLLOW SCHEDULE SHALL APPLY:

FASTENER METHOD	MATERIAL SPECIFICATION	UP TO 8' MAX JOIST SPAN	UP TO 16' MAX JOIST SPAN
BOLTING AND NAILING	5/8" DIA. (HDG) THROUGH BOLT AND 12d NAILS	(1) BOLT @ 42" O.C. AND (2) NAILS @ 8" O.C.	(1) BOLT @ 20" O.C. AND (3) NAILS @ 6" O.C.
SCREW FASTENERS	Ledger OK BRAND STRUCTURAL WOOD SCREWS 3-5/8" UP TO 5' LONG	(2) ROWS STAGGERED @ 16" O.C. PER FIGURE DA.01.1	(2) ROWS STAGGERED @ 8" O.C. PER FIGURE DA.01.1
SCREW FASTENERS	SIMPSON BRAND SONGS24000B STRUCTURAL WOOD SCREWS	(2) ROWS STAGGERED @ 16" O.C. PER FIGURE DA.01.1	(2) ROWS STAGGERED @ 8" O.C. PER FIGURE DA.01.1

FIGURE DA.01.1: SCREW FASTENER INSTALLATION REQUIREMENTS



DA.02: WHEN THE DECK IS ATTACHED TO BRICK VENEER THE FOLLOW SCHEDULE SHALL APPLY:

FASTENER METHOD	MATERIAL SPECIFICATION	UP TO 8' MAX JOIST SPAN	UP TO 16' MAX JOIST SPAN
BOLTING AND NAILING	5/8" DIA. (HDG) THROUGH BOLT	(1) BOLT @ 28" O.C.	(1) BOLT @ 16" O.C.

- DA.03: IF THE DECK BAND IS SUPPORTED BY A 1/2" MINIMUM MASONRY LEDGE ALONG THE FOUNDATION WALL, 5/8"  $\Phi$  BOLTS SPACED @ 48" O.C. MAY BE USED FOR SUPPORT.
- DA.04: OTHER MEANS OF SUPPORT, SUCH AS JOIST HANGERS, MAY BE USED TO CONNECT DECK JOISTS TO A TREATED STRUCTURE BAND.
- DA.05: GIRDERS SHALL BE TOP OF POST MOUNTED PER FIG. AM105.1(1) OF THE 2018 NCRC.

## FLOOR DECKING

- FD.01: FLOOR DECKING SHALL BE NO. 2 GRADE TREATED SOUTHERN PINE OR EQUIVALENT, THE MINIMUM FLOOR DECKING THICKNESS SHALL BE AS FOLLOWS.

JOIST SPACING	DECKING
12" O.C.	1" S4S
16" O.C.	1" T&G
24" O.C.	1 1/4" S4S
32" O.C.	2" S4S

## POST HEIGHT

PH.01: MAXIMUM HEIGHT OF DECK SUPPORT POSTS IS AS FOLLOWS:

POST SIZE	MAX POST HEIGHT
4X4	8'
6X6	20'
ENGINEERED	20' +

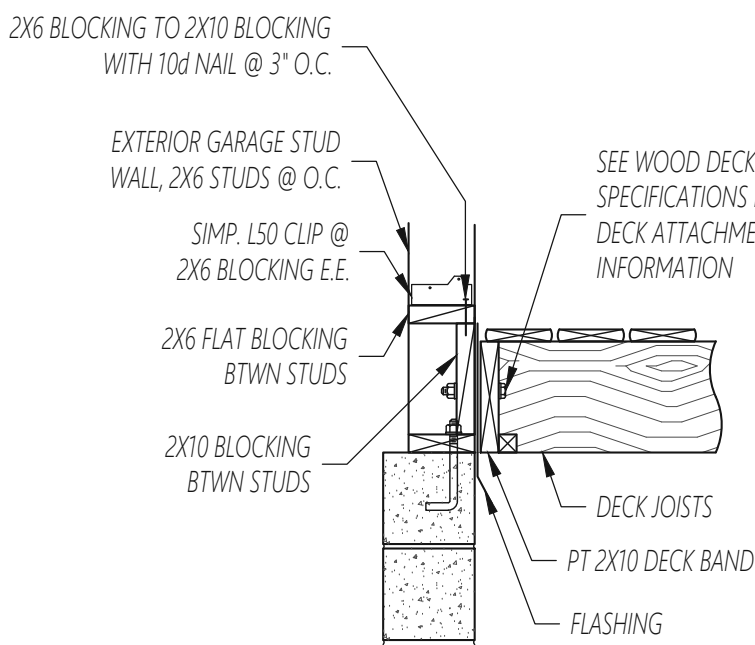
- NOTES: 1) THIS TABLE IS BASED ON NO. 2 TREATED SOUTHERN PINE POSTS.
- 2) POST HEIGHT IS FROM TOP OF FOOTING TO BOTTOM OF GIRDER.

## DECK BRACING

- DB.01: DECKS SHALL BE BRACED TO PROVIDE LATERAL STABILITY BY ONE OF THE FOLLOWING METHODS:
- (A) WHEN THE DECK FLOOR HEIGHT IS LESS THAN 4'-0" AND THE DECK IS ATTACHED TO THE STRUCTURE PER THE DECK ATTACHMENT SECTION OF THESE SPECIFICATIONS, LATERAL BRACING IS NOT REQUIRED.
- (B) 4X4 WOOD KNEE BRACES MAY BE PROVIDED ON EACH COLUMN IN BOTH DIRECTIONS. THE KNEE BRACES SHALL ATTACH TO EACH POST AT A POINT NOT LESS THAN 1/3 OF THE POST LENGTH FROM THE TOP OF THE POST AND THE BRACES SHALL BE ANGLED BETWEEN 45° AND 60° FROM THE HORIZONTAL. KNEE BRACES SHALL BE ATTACHED AT THE ENDS TO THE GIRDER AND THE POST WITH ONE - 5/8"  $\Phi$  BOLT.
- (C) FOR FREE STANDING DECKS WITHOUT KNEE BRACES OR DIAGONAL BRACING, LATERAL STABILITY MAY BE PROVIDED BY EMBEDDING THE POSTS IN CONCRETE IN ACCORDANCE WITH THE FOLLOWING:
- | POST SIZE | TRIBUT. AREA | POST HEIGHT | EMB. DEPTH | CONC. DIAM. |
|-----------|--------------|-------------|------------|-------------|
| 4X4       | 48 SQ. FT.   | 4'-0"       | 2'-6"      | 1'-0"       |
| 6X6       | 120 SQ. FT.  | 6'-0"       | 3'-6"      | 1'-8"       |
- (D) 2X6 DIAGONAL CROSS BRACING SHALL BE PROVIDED IN TWO PERPENDICULAR DIRECTIONS FOR FREE STANDING DECKS OR PARALLEL TO THE STRUCTURE AT THE EXTERIOR COLUMN LINE FOR ATTACHED DECKS. THE BRACES SHALL BE ATTACHED TO THE POSTS WITH ONE - 5/8"  $\Phi$  BOLT AT EACH END OF THE BRACE.

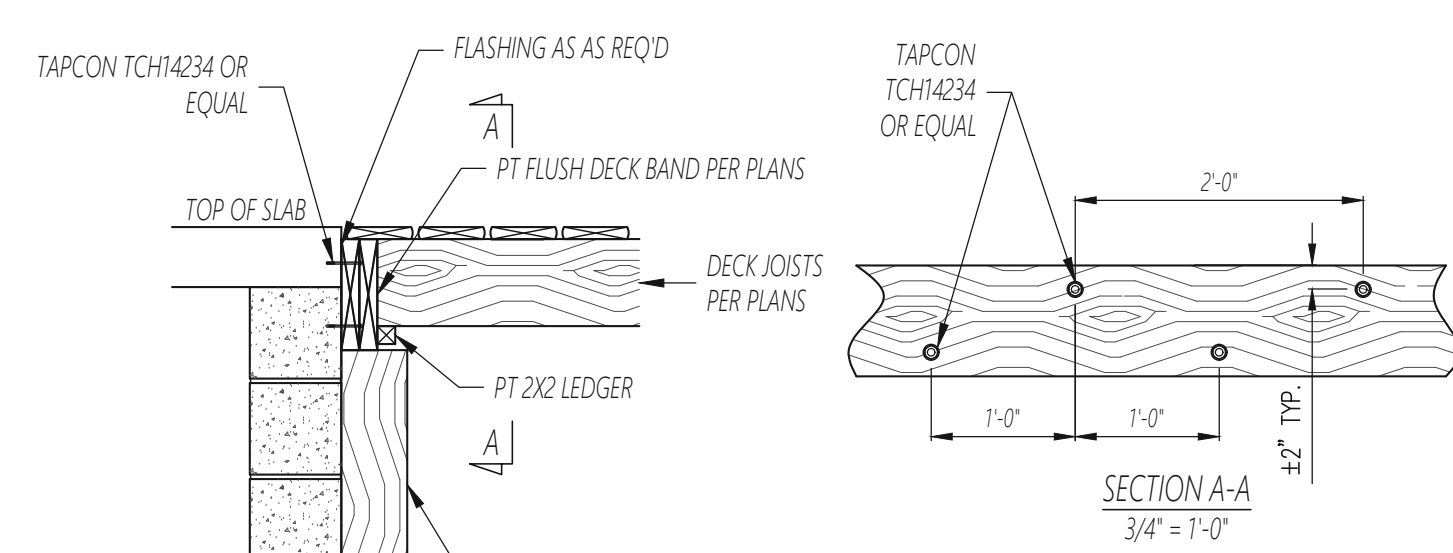
## SECTION

TYPICAL DECK CONNECTION @ GARAGE



## SECTION

TYPICAL DECK CONNECTION @ PORCH SLAB AND BRICK VENEER WITH FLUSH DECK BAND



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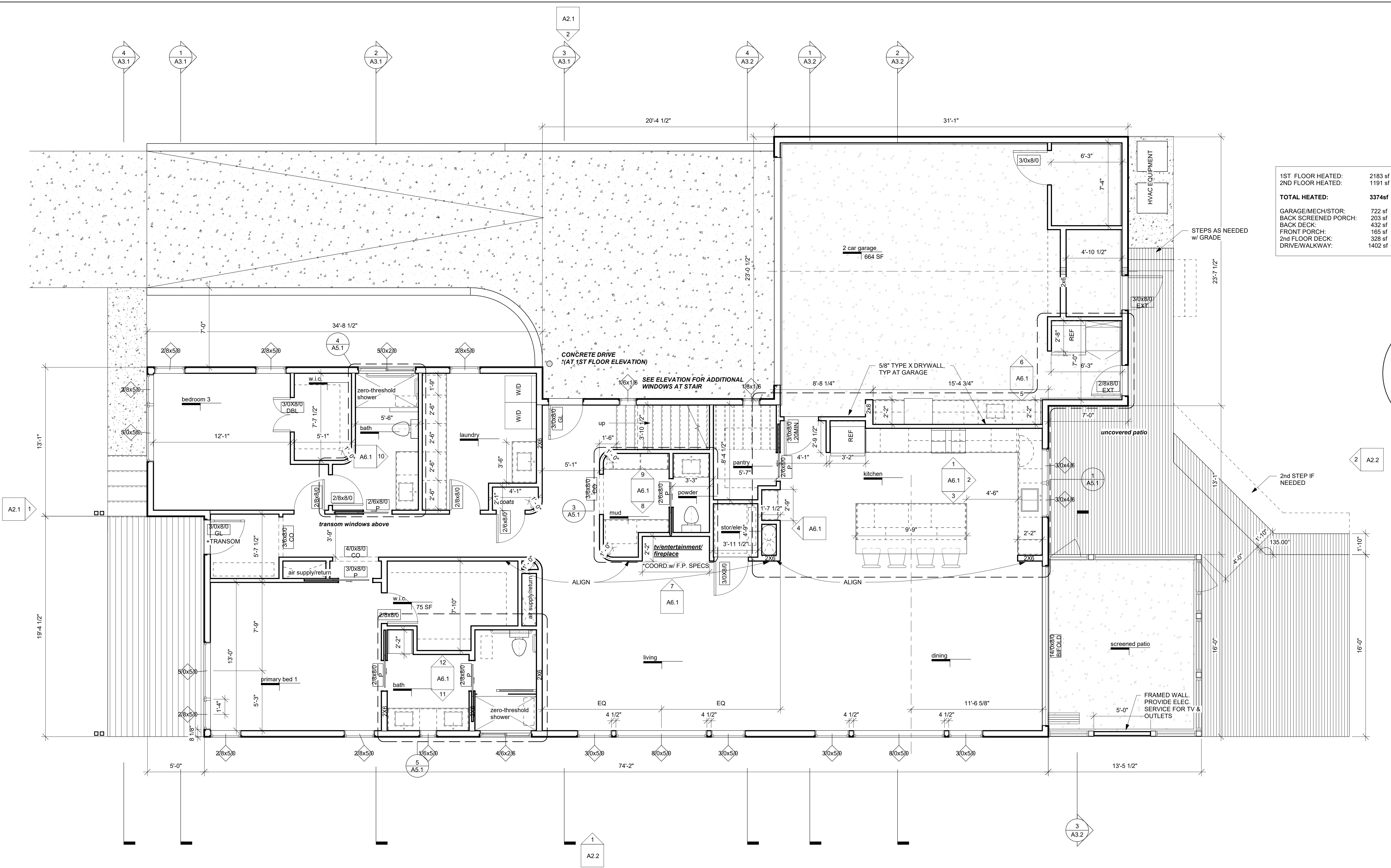
PATEL RESIDENCE  
STRUCTURAL ADDENDUM  
810 CHAMBERLAIN

ENG: BDO  
DATE: 11-15-2022  
REV:

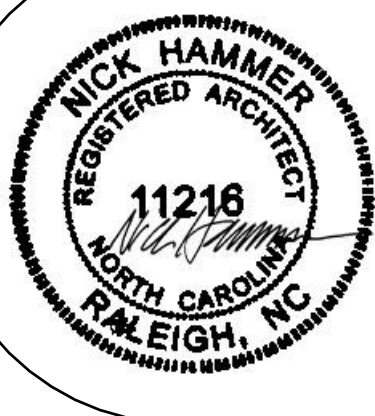
PROJECT NO.  
2212037

SHEET NO.  
SD3





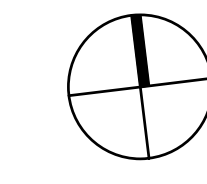
1ST FLOOR HEATED:	2183 sf
2ND FLOOR HEATED:	1191 sf
<b>TOTAL HEATED:</b>	<b>3374sf</b>
GARAGE/MECH/STOR:	722 sf
BACK SCREENED PORCH:	203 sf
BACK DECK:	432 sf
FRONT PORCH:	165 sf
2nd FLOOR DECK:	328 sf
DRIVE/WALKWAY:	1402 sf



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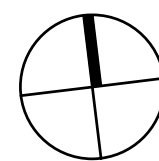
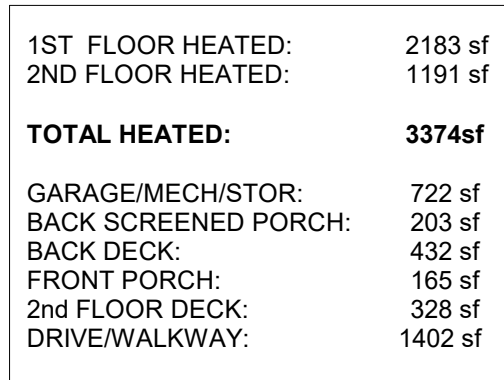
1ST FLOOR PLAN

**1** 1st Floor  
A1.1 SCALE: 1/4" = 1'-0"

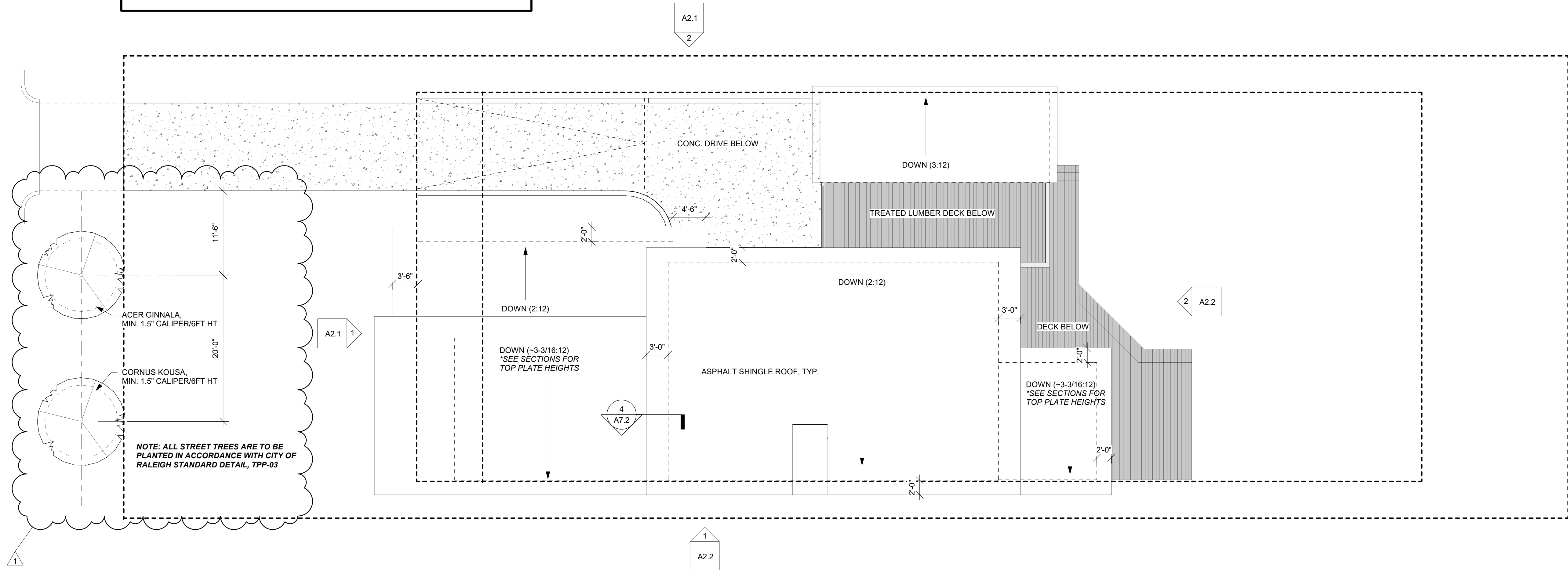


A1.1









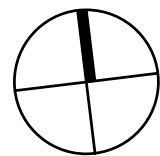
1ST FLOOR HEATED:	2183 sf
2ND FLOOR HEATED:	1191 sf
<b>TOTAL HEATED:</b>	<b>3374sf</b>
GARAGE/MECH/STOR:	722 sf
BACK SCREENED PORCH:	203 sf
BACK DECK:	432 sf
FRONT PORCH:	155 sf
2nd FLOOR DECK:	328 sf
DRIVE/WALKWAY:	1402 sf

REV 1: 02-15-2023



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ROOF PLAN & DETAILS

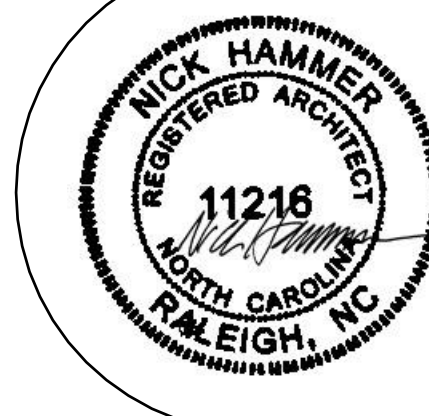


A1.3

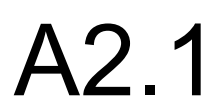
**1** ROOF PLAN & ARCHITECTURAL  
SITE PLAN  
A1.3 SCALE: 1/8" = 1'-0"



## A2.1



**1** Front Elevation (West)  
A2.1 SCALE: 1/4" = 1'-0"







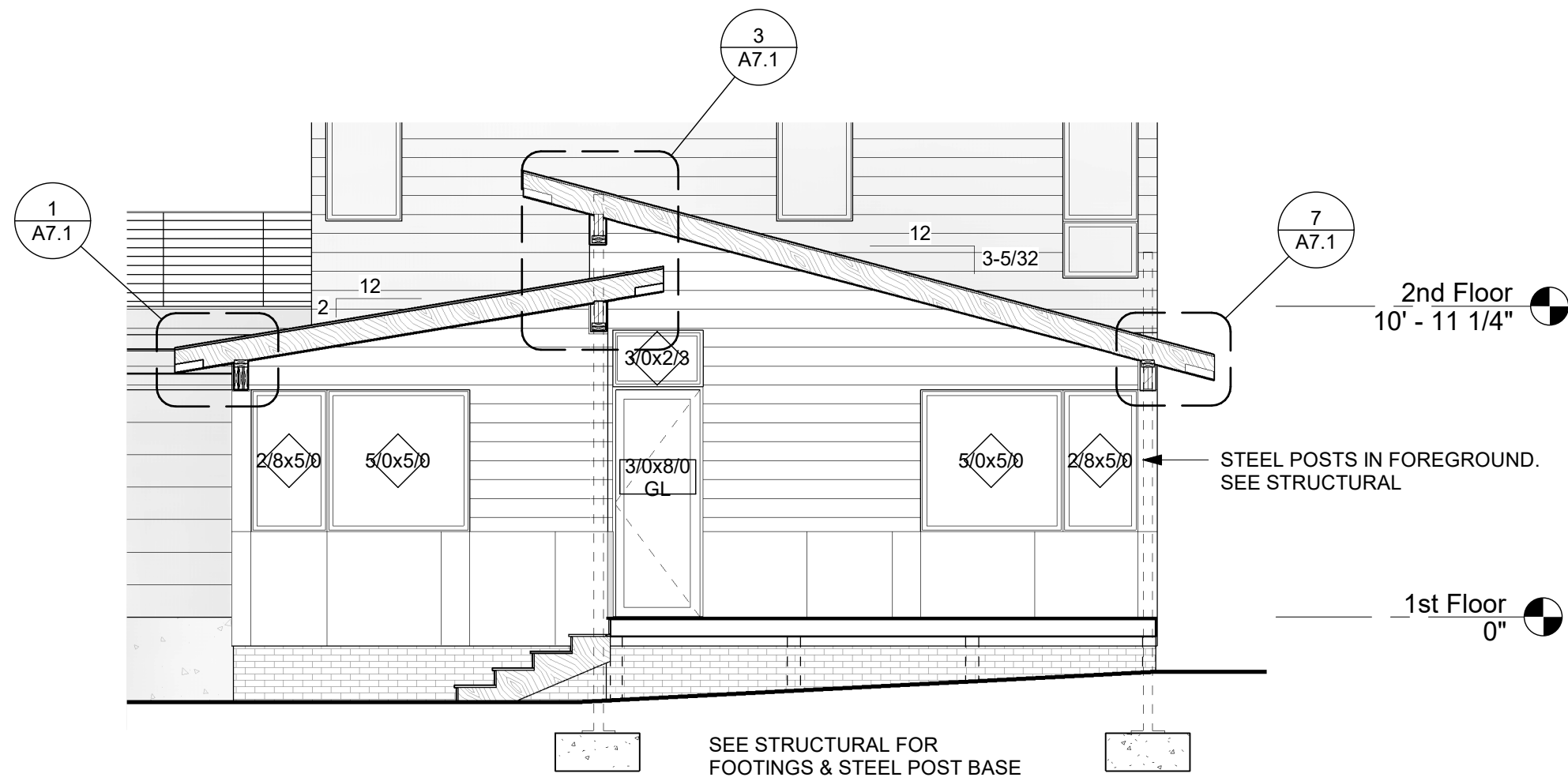
Architectural elevation drawing of a two-story building. The drawing includes the following details and annotations:

- Roof:** ASPHALT SHINGLE ROOF, BASE FLASHING.
- Left Side:**
  - (2X) FASCIA TRIM & DRIP EDGE, TYP.
  - HARDIE PANEL SIDING AT "POP UP"
  - ALUM GUTTER & DOWNSPOUT
  - HARDIE TRIM(1") ACCENT AT CORNER
  - (2X) FASCIA TRIM & DRIP EDGE, TYP.
  - ALUM GUTTER & DOWNSPOUT
  - SCREENED PORCH & DECK TREATED LUMBER FRAMING. SEE STRUCTURAL
- Windows:**
  - Top Left: 2/8x5/0, 5/0x5/0, 2/8x2/0, EGRESS.
  - Top Right: 2/8x3/0, 2/8x3/0, 2/8x5/0, 2/8x5/0.
  - Bottom Left: 3/0x4/6, 3/0x4/6.
  - Bottom Right: 2/8x8/0 EXT, 3/0x8/0 EXT.
- Right Side:**
  - HARDIE PANEL SIDING w/ REGLETS AT VERTICAL JOINTS
  - HORIZONTAL LAP SIDING, 5" EXPOSURE
  - PAINTED METAL RAILING. NOTE: ALL RAILINGS MUST COMPLY w/ 2018 NC BLDG CODE SECTIONS R301.5, R311.7, R312 #3.
  - GUTTER & DOWNSPOUT (ALT: SCUPPER BOX)
  - HARDIE PANEL SIDING
  - ASPHALT SHINGLE ROOF
  - (2X) FASCIA TRIM & DRIP EDGE
  - ALUM GUTTER & DOWNSPOUT
  - HORIZONTAL LAP SIDING, 5" EXPOSURE
  - HVAC EQUIPMENT
- Dimensions & Levels:**
  - 4 A7.2
  - 9' 1/2"
  - 8'-0"
  - 8'-0"
  - MAX BLDG HEIGHT 26' - 2 1/4"
  - T.O. top plate 19' - 11 3/4"
  - 2nd Floor 10' - 11 1/4"
  - 1st Floor 0"
- Notes:**
  - SEE PERMIT DATA SHEET FOR GRADE ELEVATION
  - SEE PERMIT DATA SHEET FOR GRADE ELEVATION
  - CMU FOUNDATION WALL, PARGE

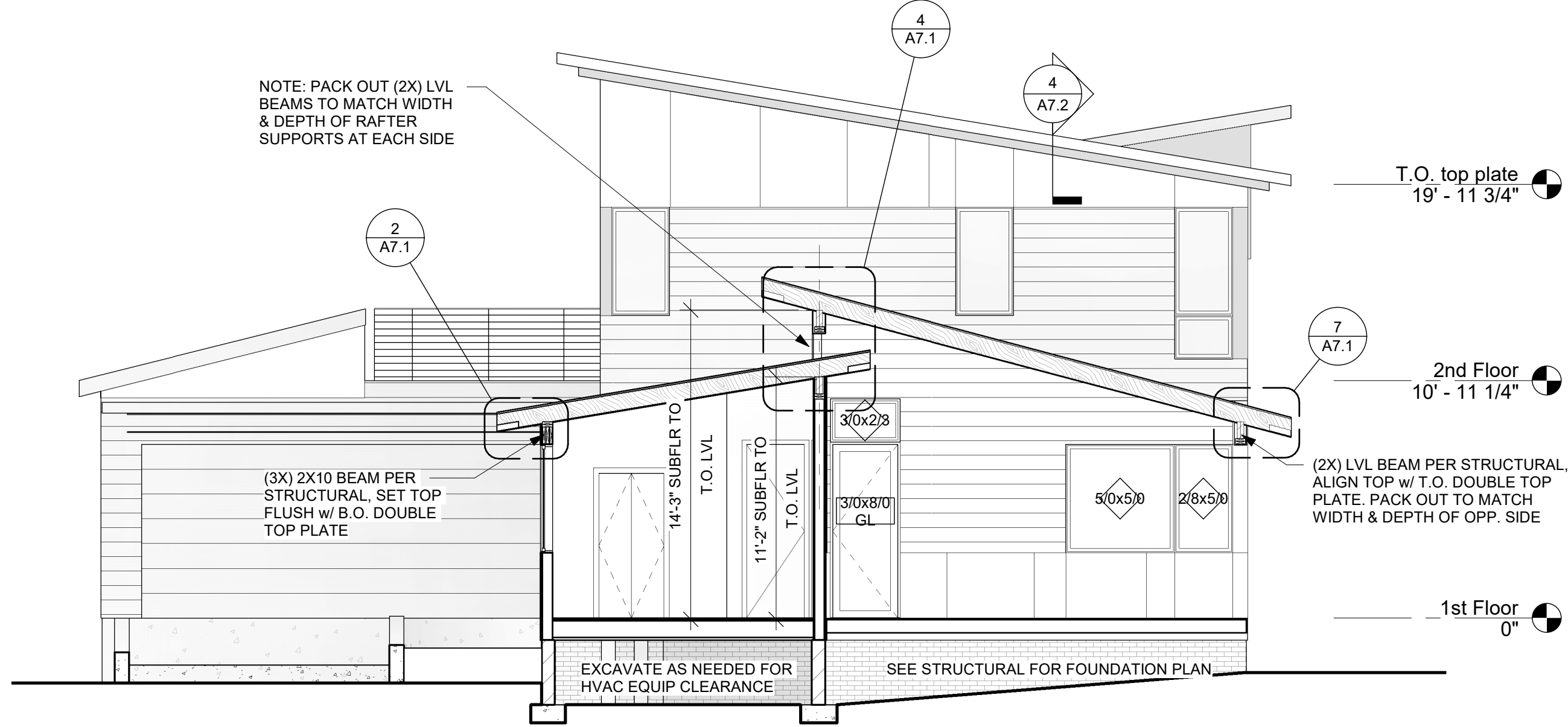
[illegible]



**4** front porch1  
A3.1 SCALE: 3/16" = 1'-0"

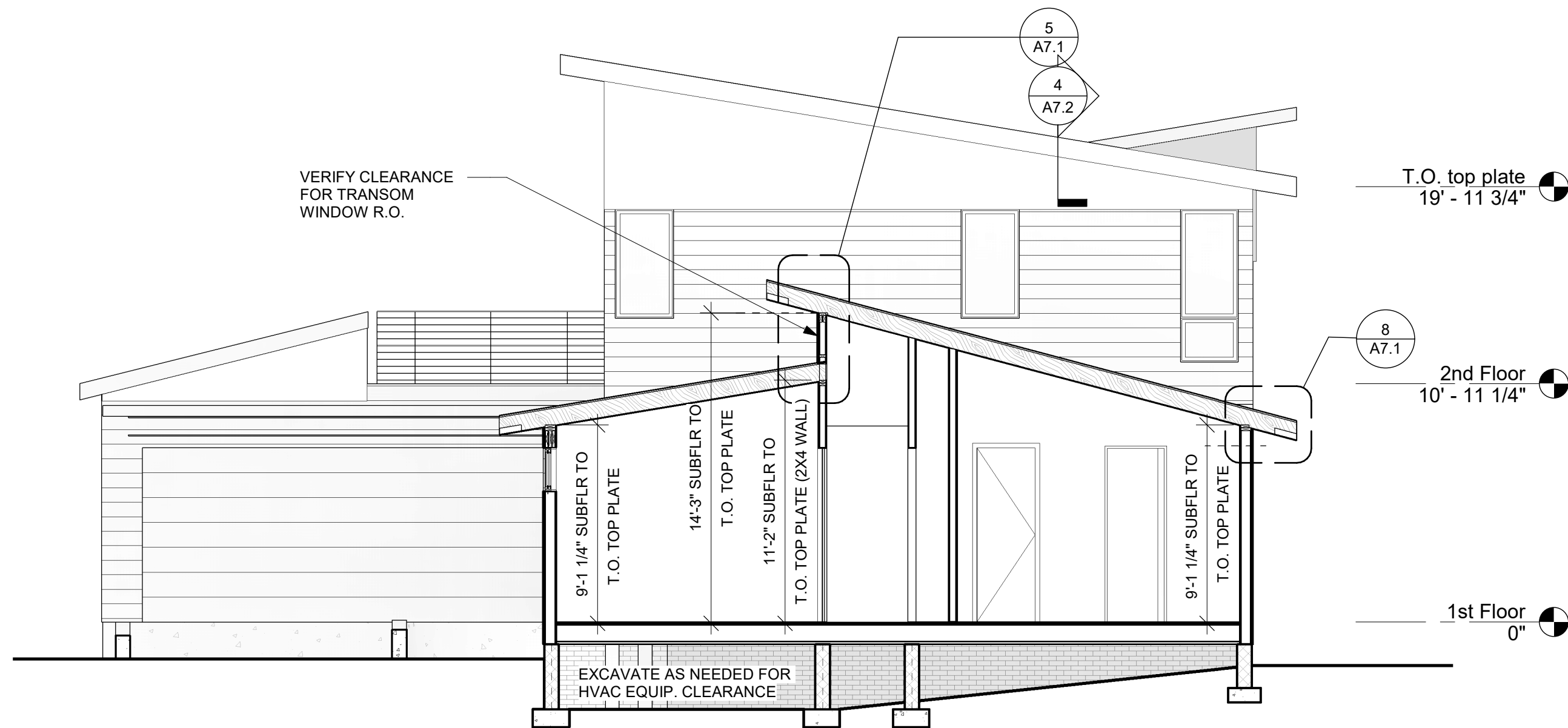


**1** front porch  
A3.1 SCALE: 3/16" = 1'-0"

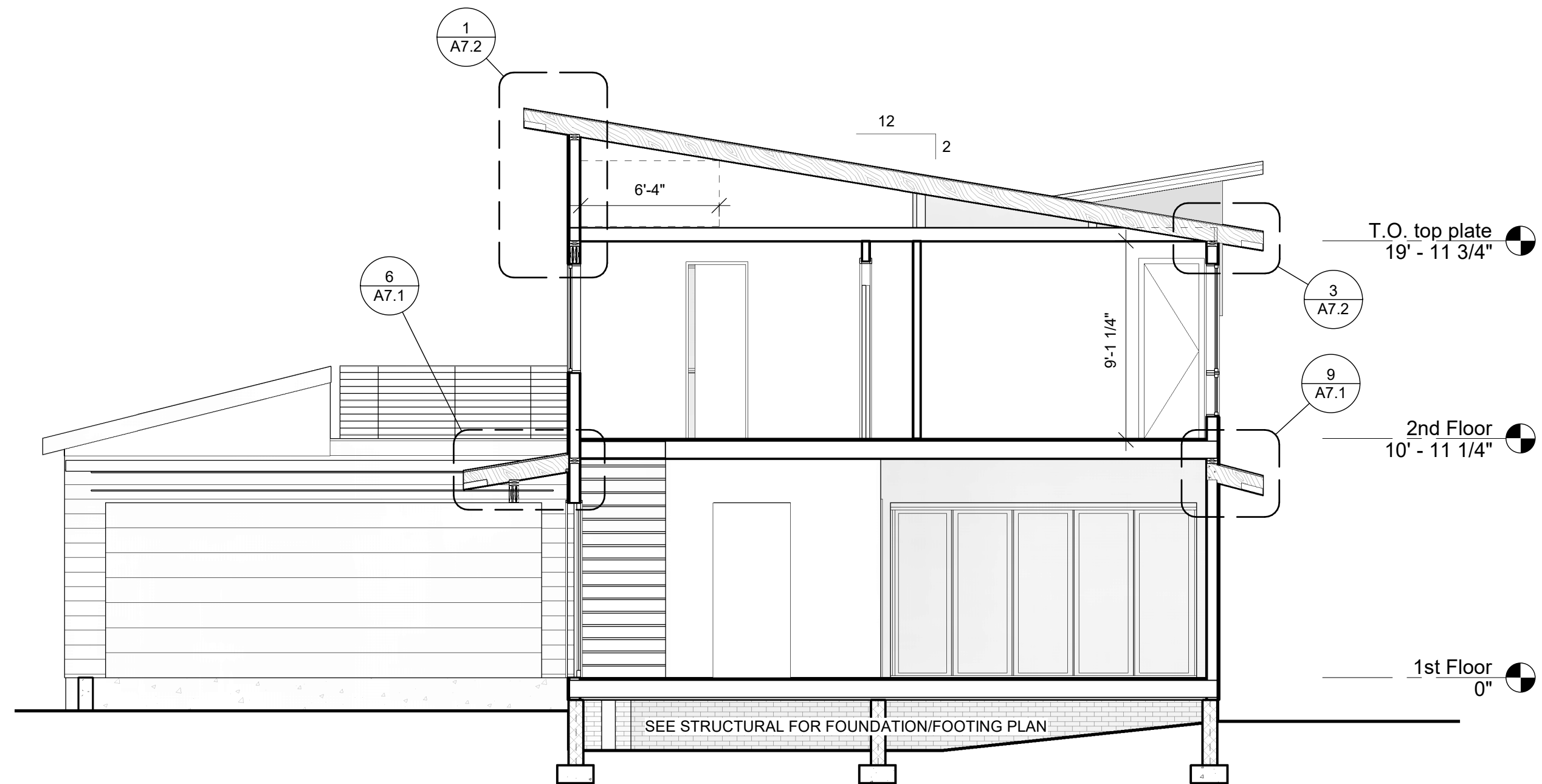


**NOTE: BUILDING SECTIONS FOR REFERENCE ONLY. SEE STRUCTURAL DRAWINGS FOR FOUNDATION AND FRAMING DESIGN & DETAILS**

**2** front bedrooms  
A3.1 SCALE: 3/16" = 1'-0"



**3** parking pad & living1  
A3.1 SCALE: 3/16" = 1'-0"

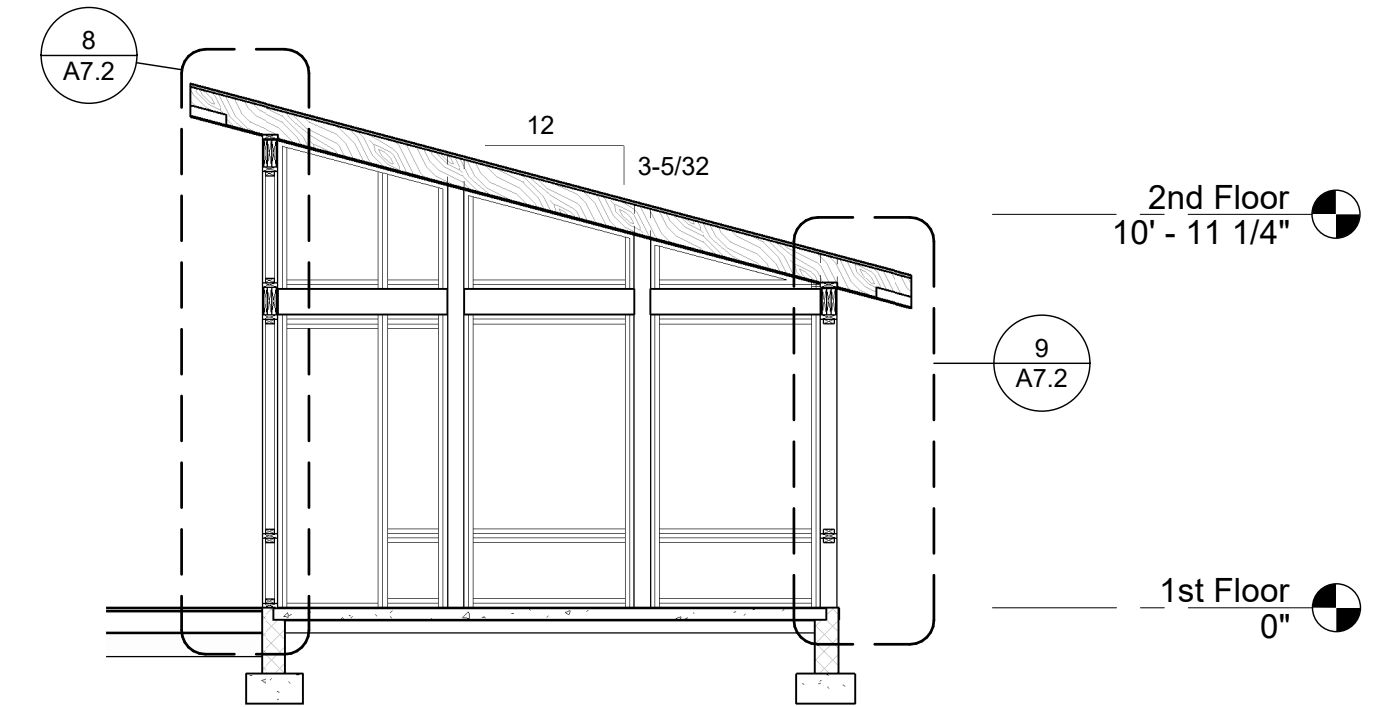
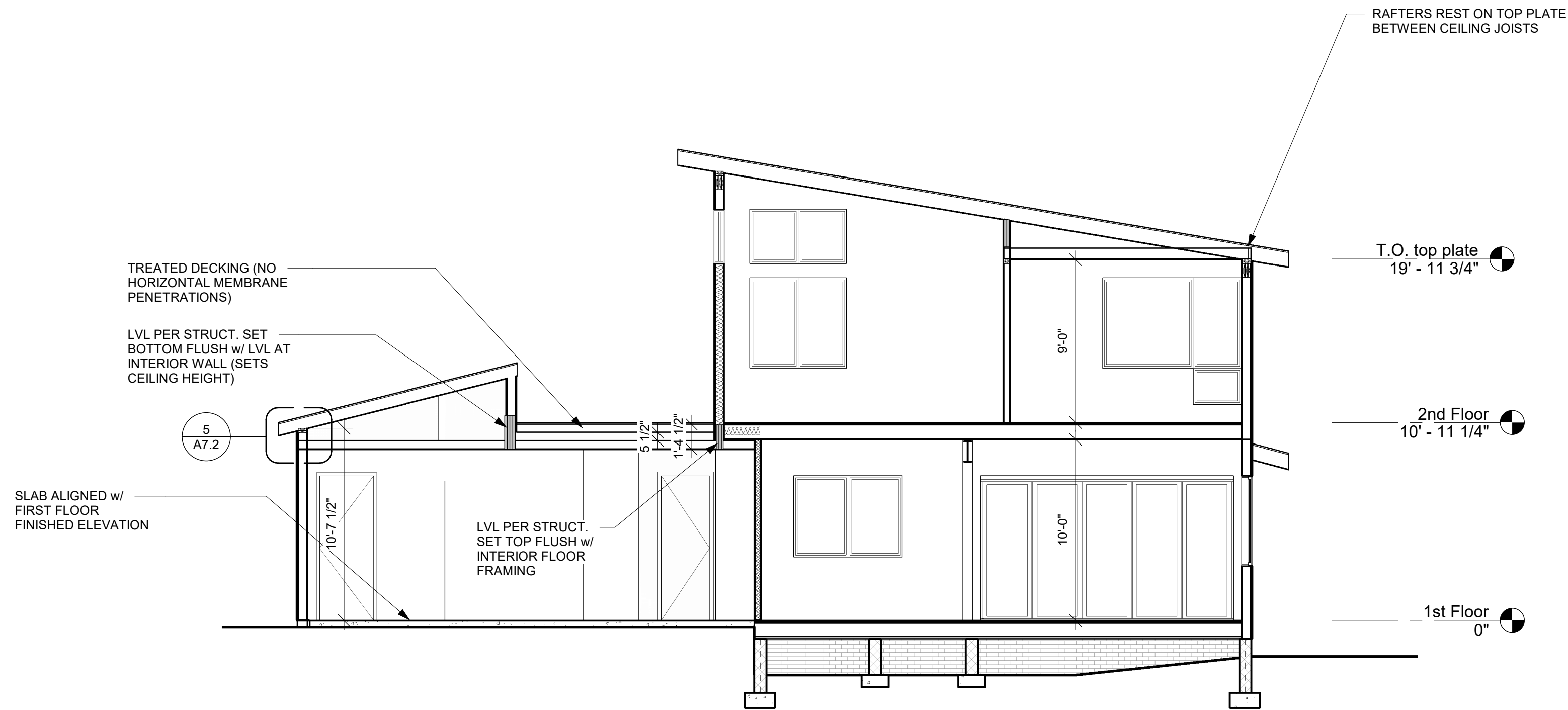
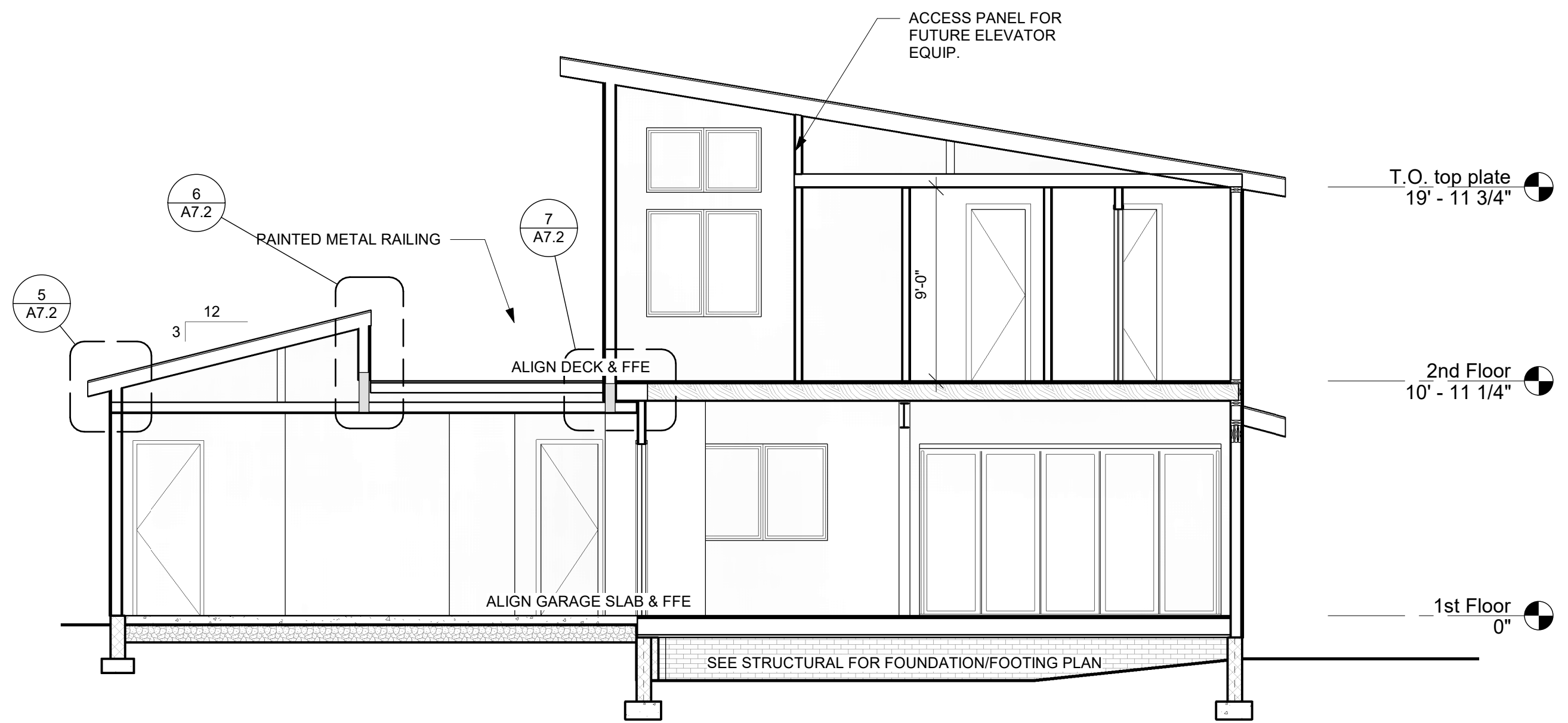
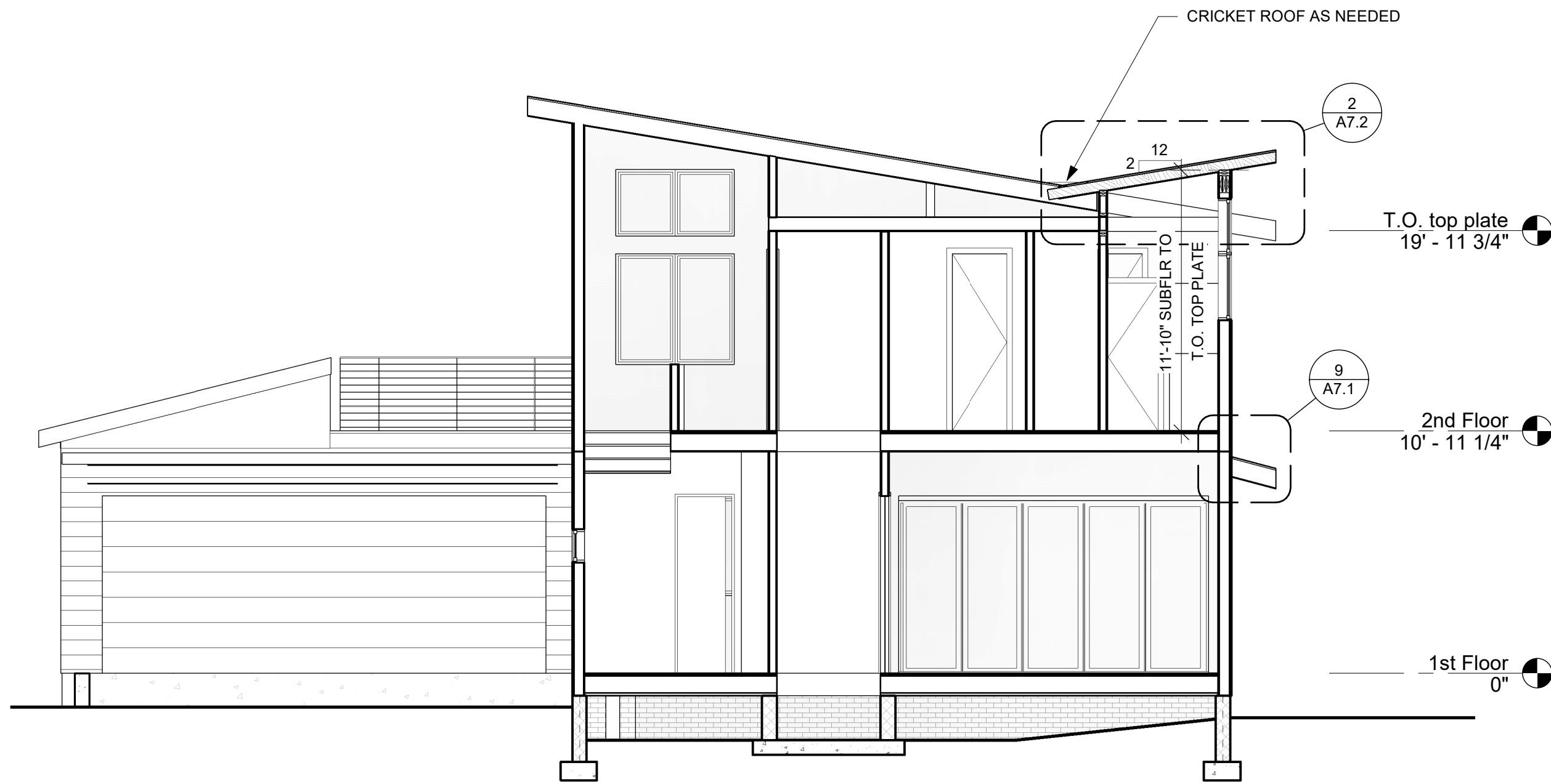


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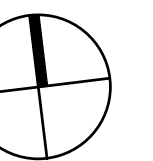
810 CHAMBERLAIN  
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SECTIONS

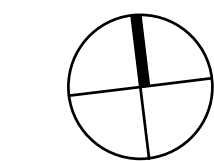
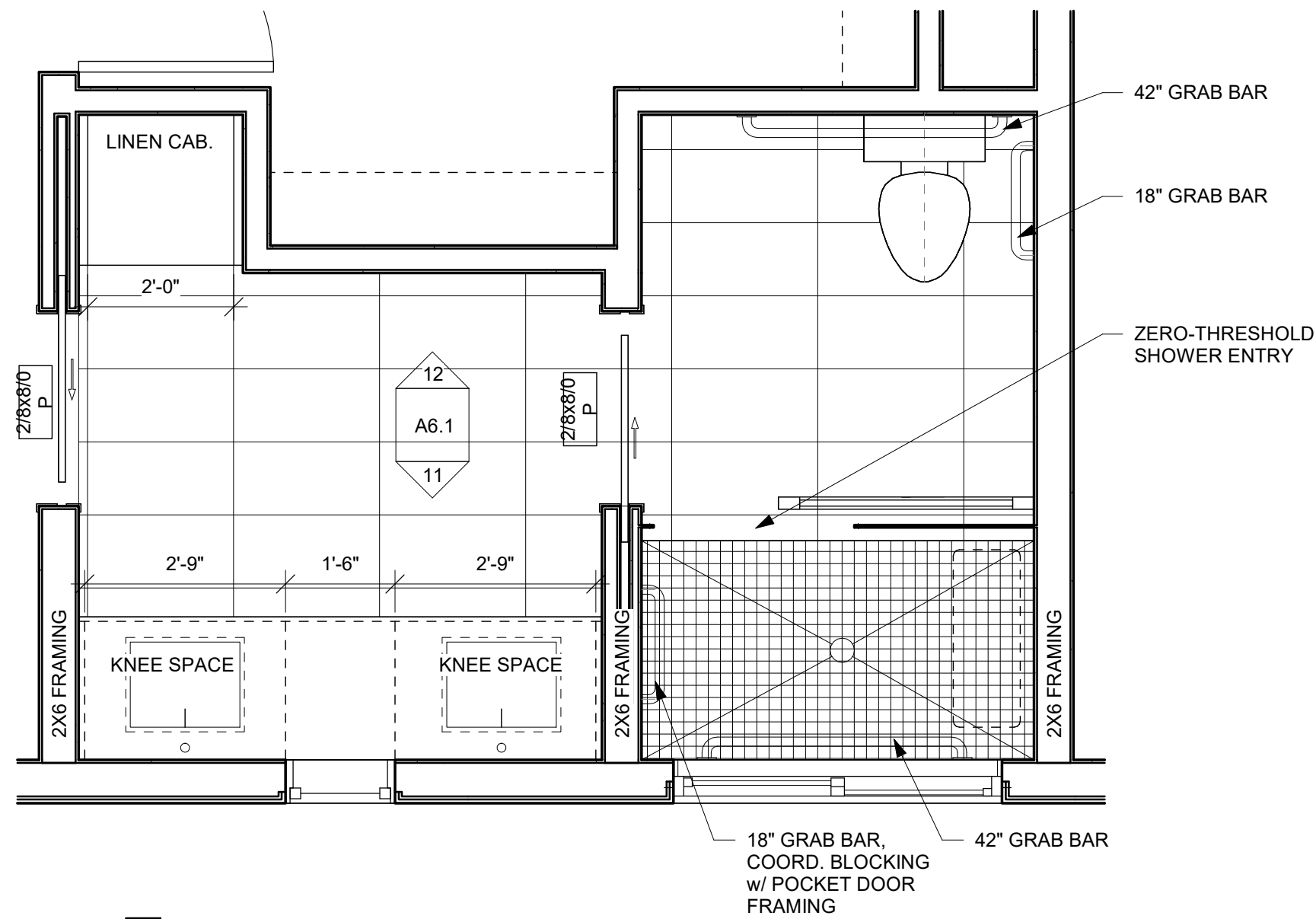
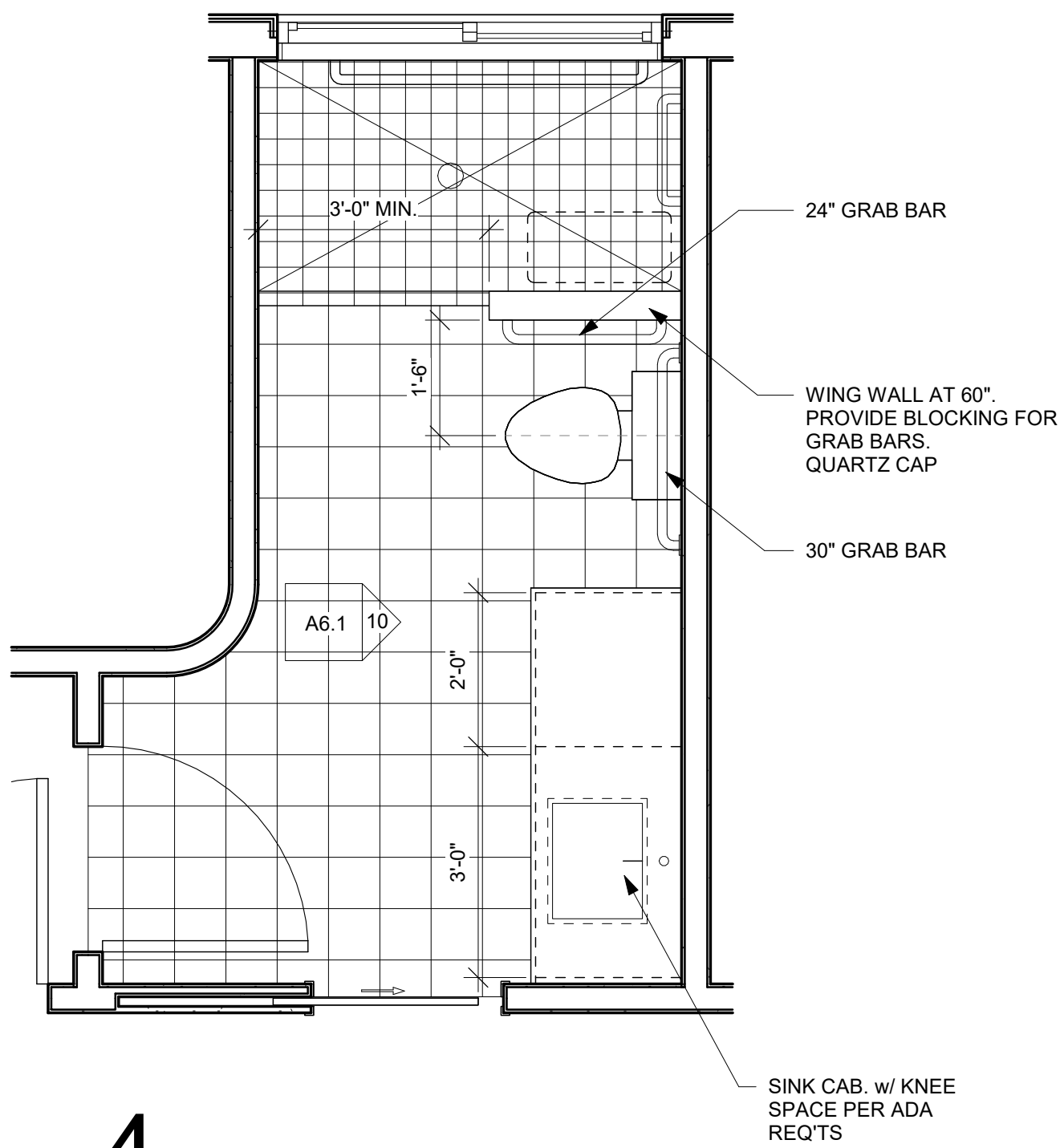
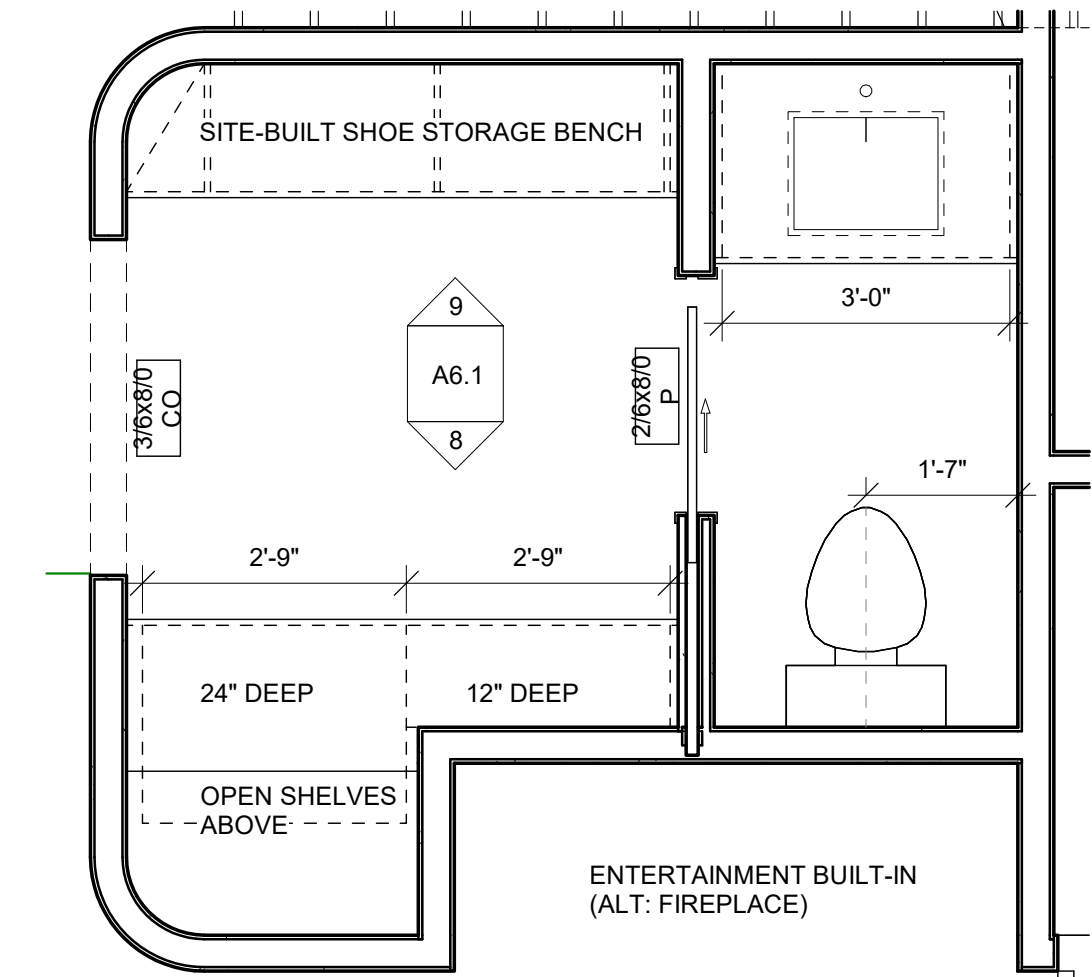
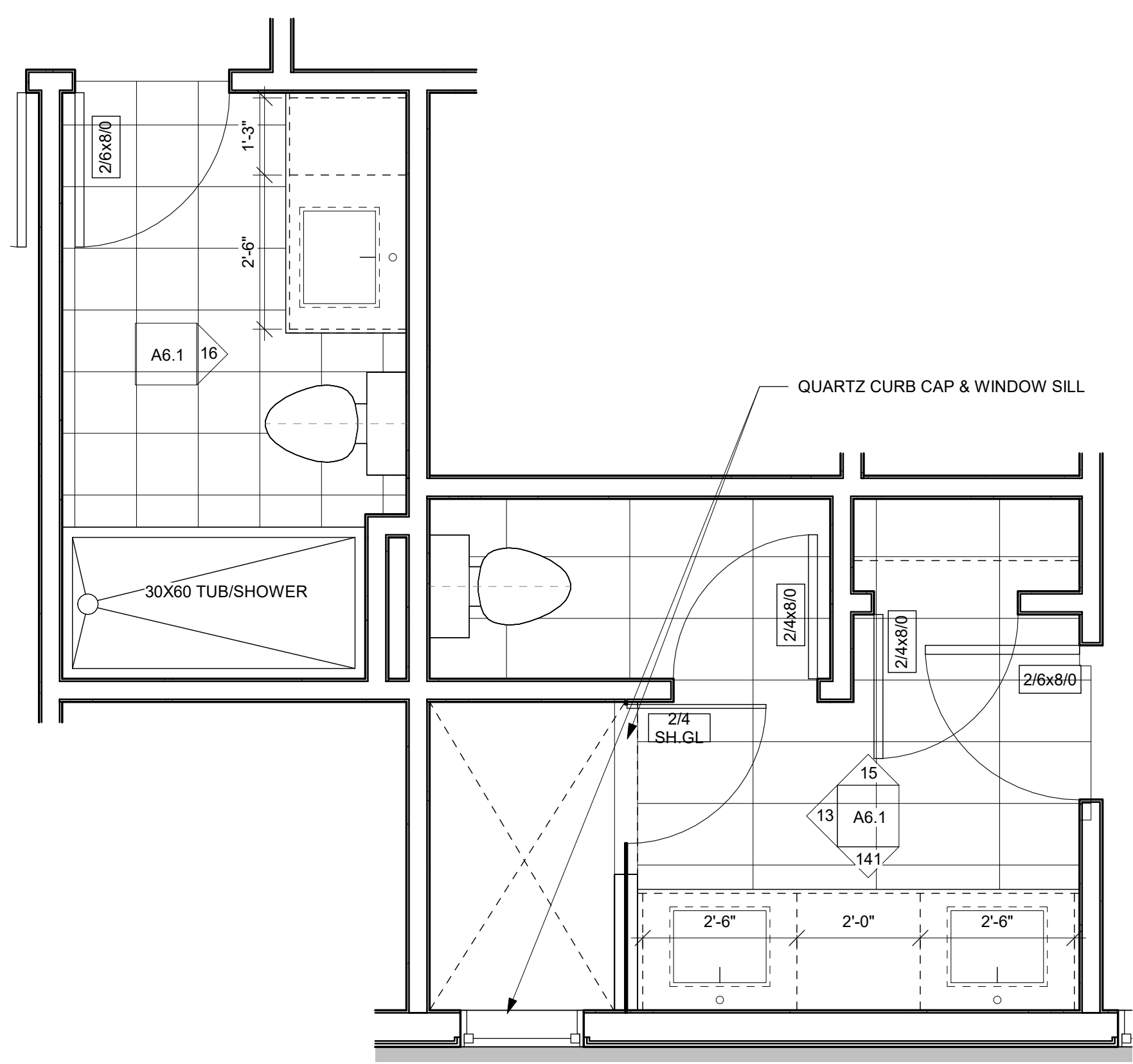
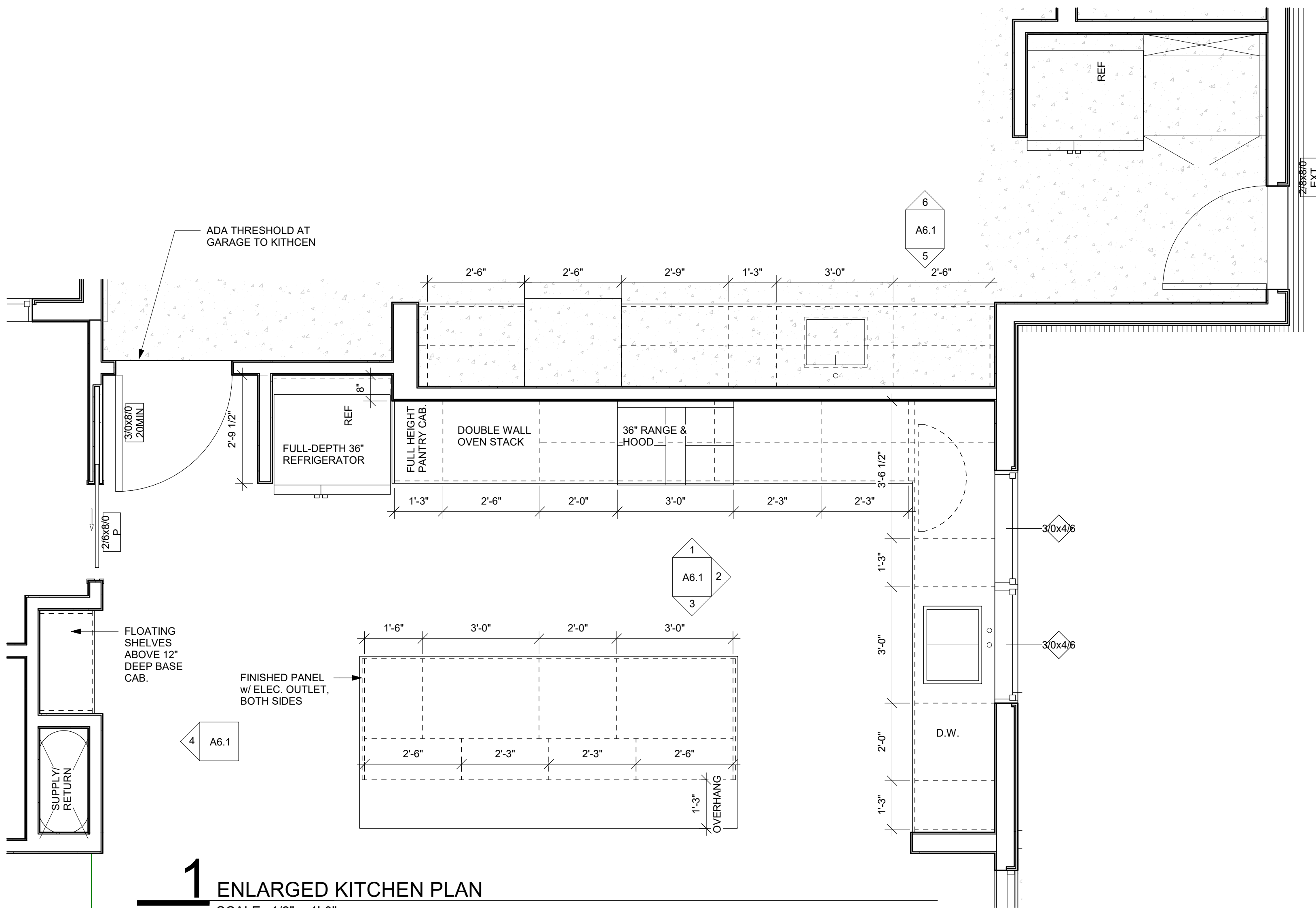


A3.2

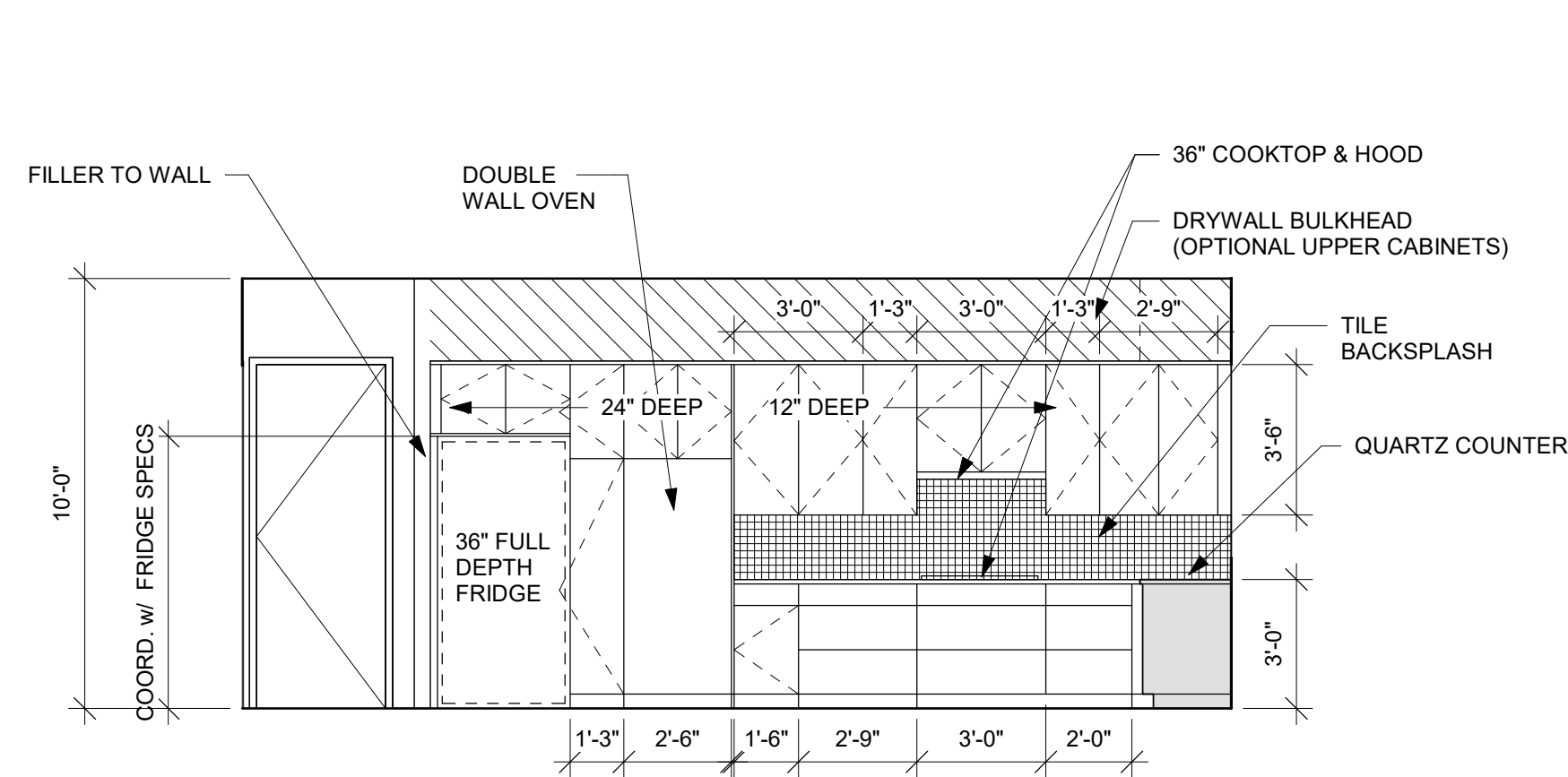




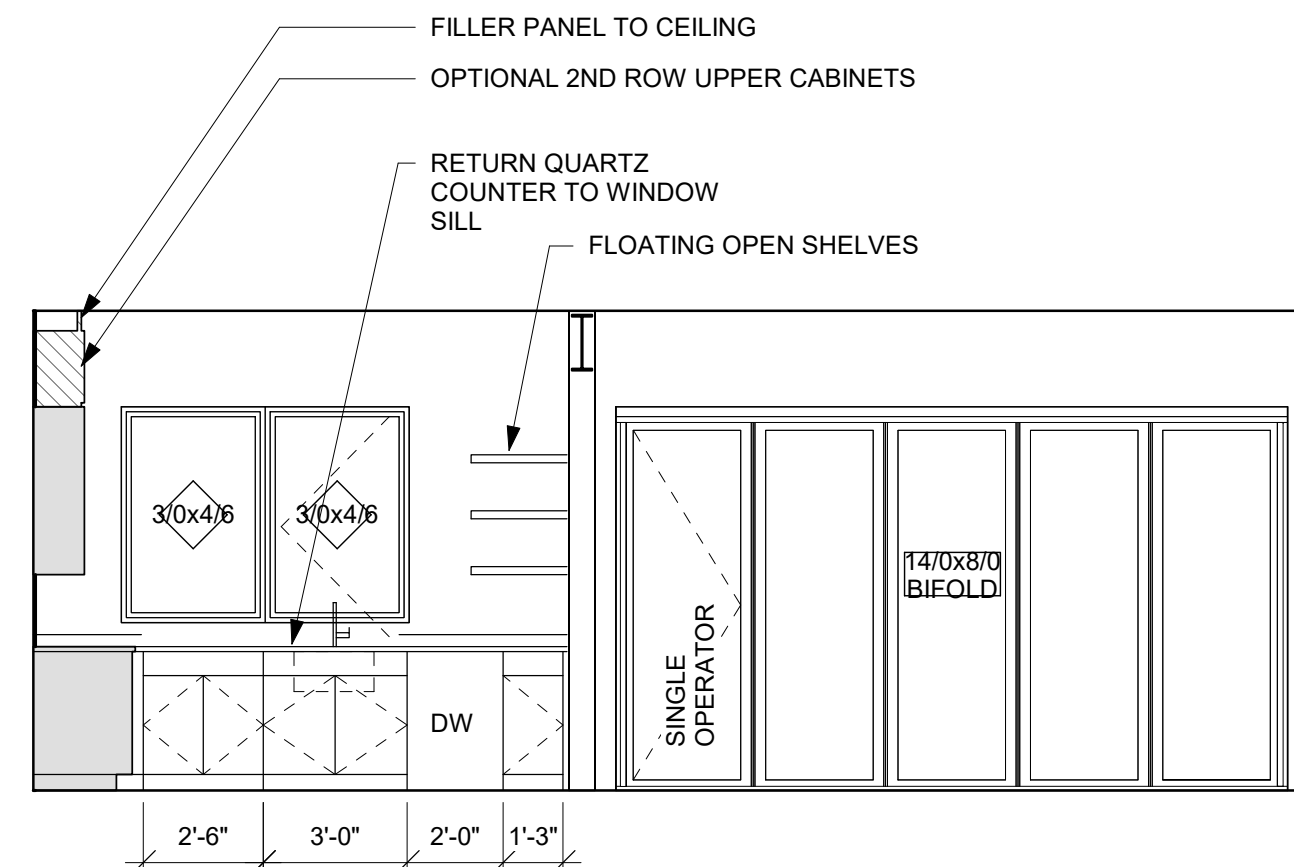




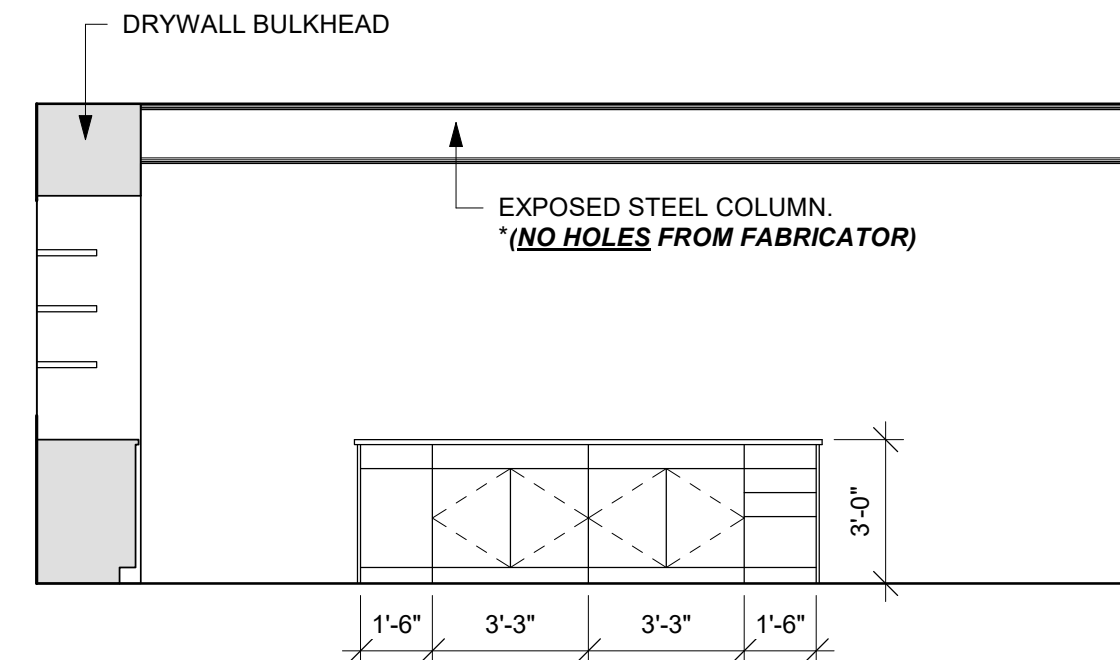




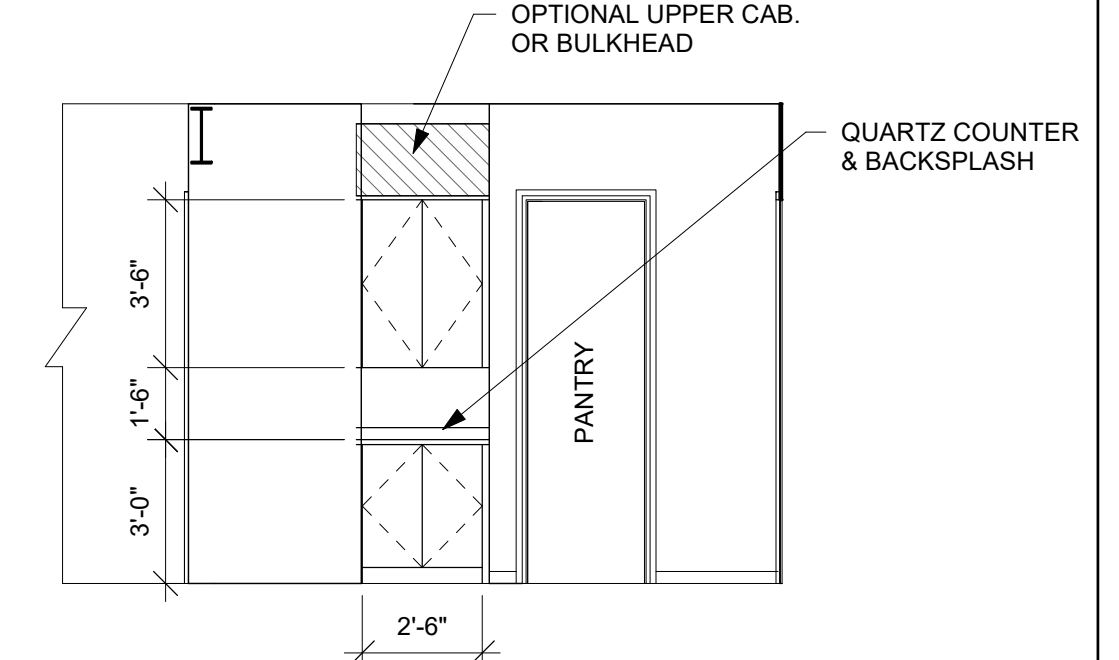
**1** KITCHEN COOKING WALL  
A6.1 SCALE: 1/4" = 1'-0"



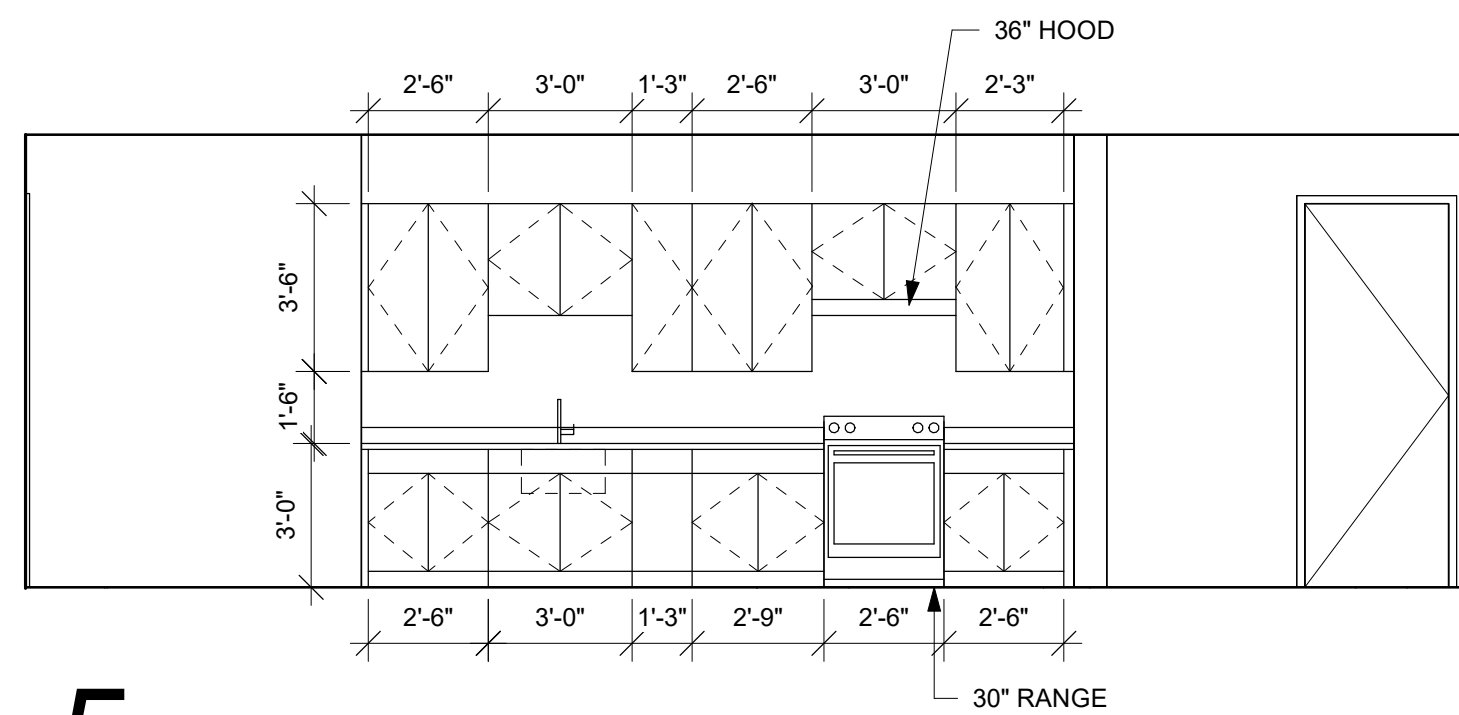
**2** KITCHEN SINK WALL  
A6.1 SCALE: 1/4" = 1'-0"



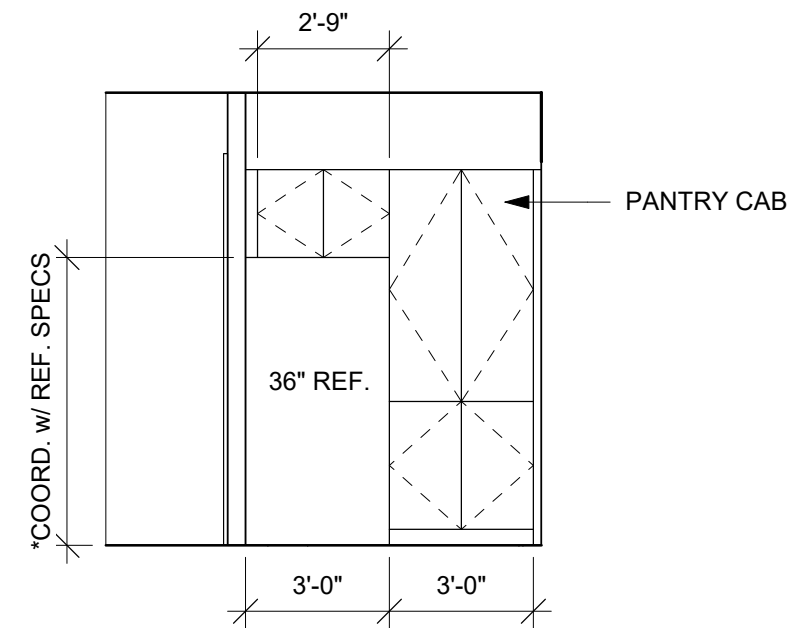
**3** KITCHEN ISLAND FRONT  
A6.1 SCALE: 1/4" = 1'-0"



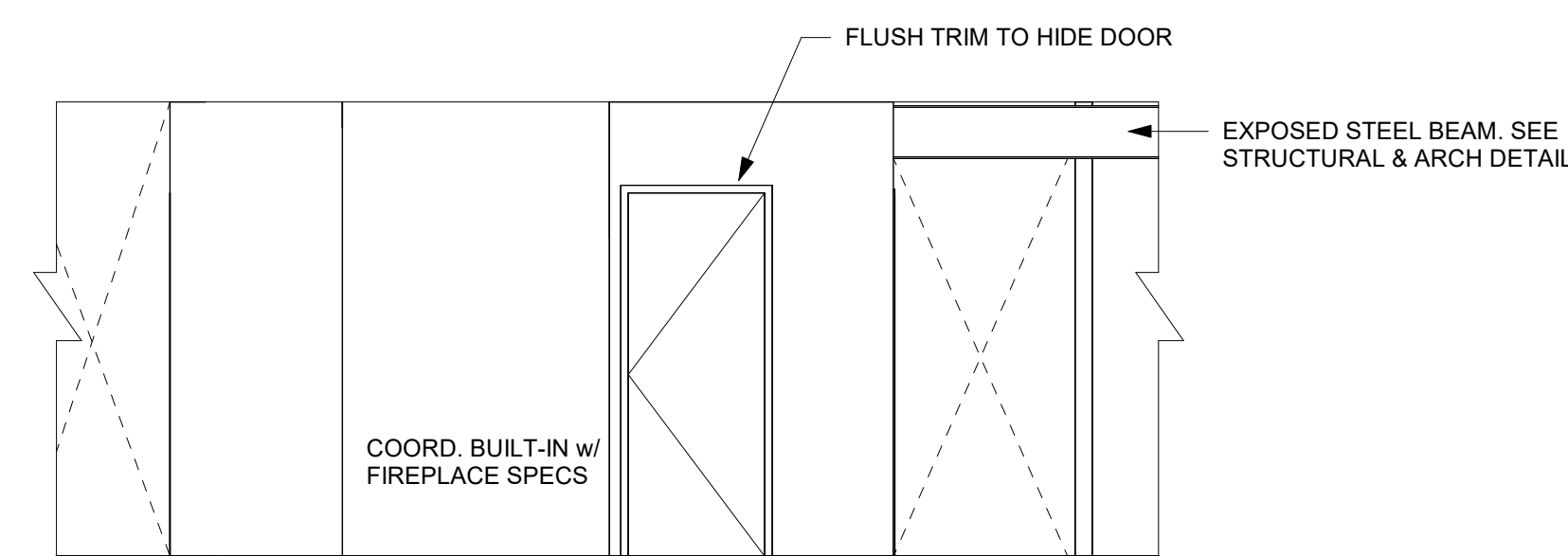
**4** KITCHEN PANTRY WALL  
A6.1 SCALE: 1/4" = 1'-0"



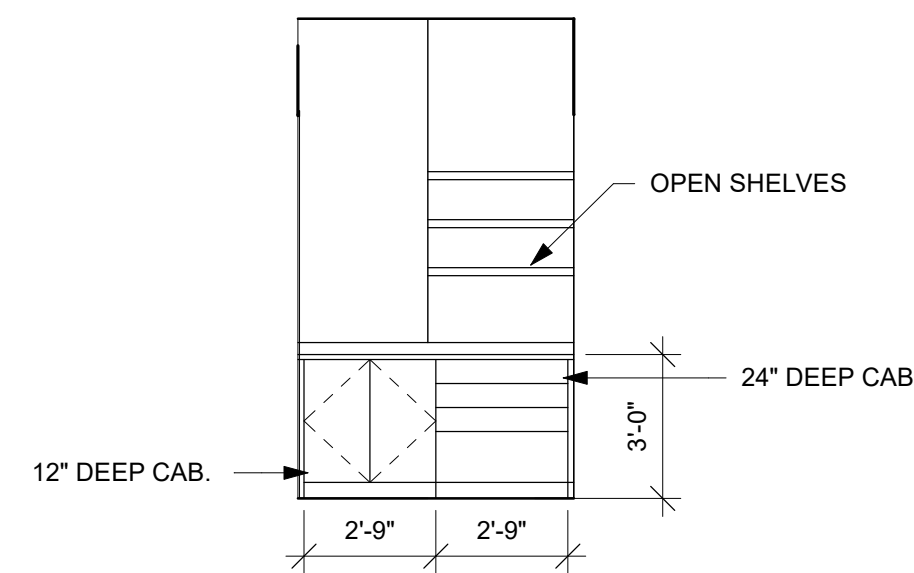
**5** SPICE KITCHEN  
A6.1 SCALE: 1/4" = 1'-0"



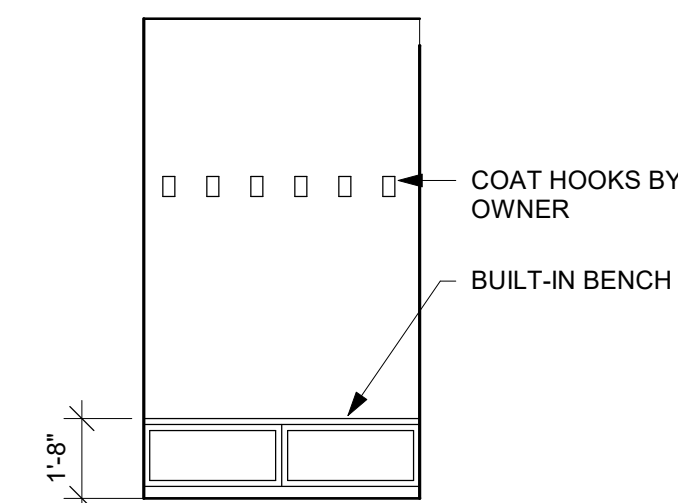
**6** SPICE KITCHEN FRIDGE  
A6.1 SCALE: 1/4" = 1'-0"



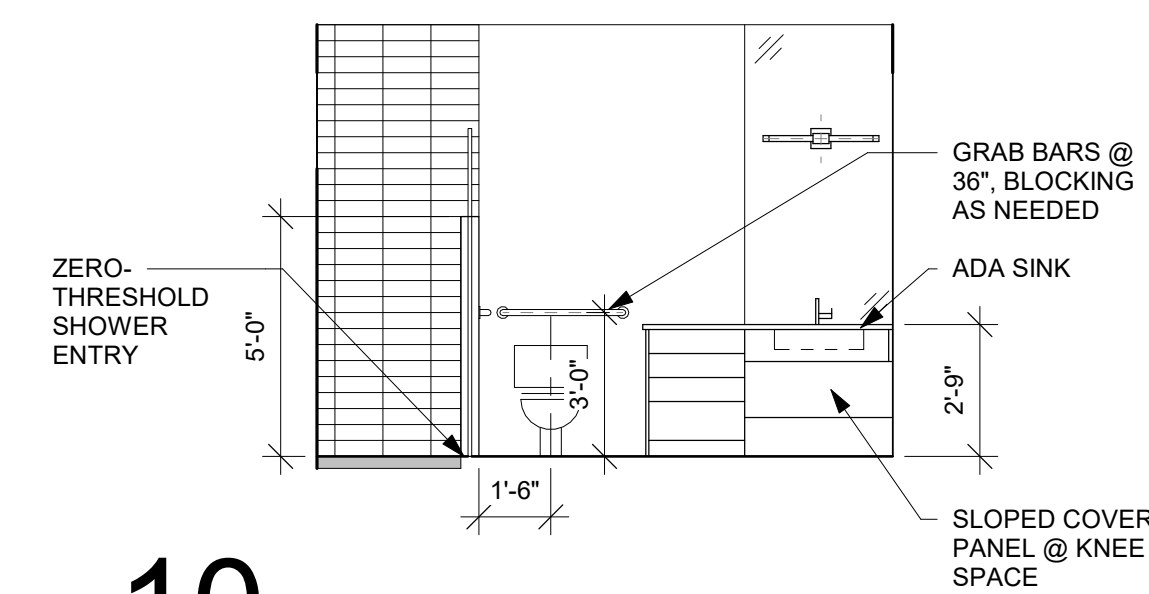
**7** LIVING ROOM  
A6.1 SCALE: 1/4" = 1'-0"



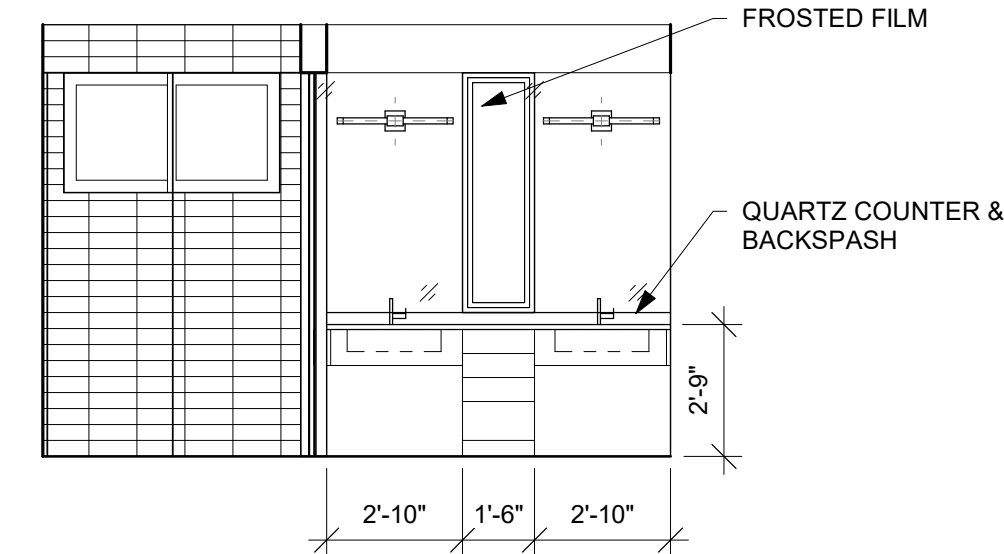
**8** POWDER/MUD 1  
A6.1 SCALE: 1/4" = 1'-0"



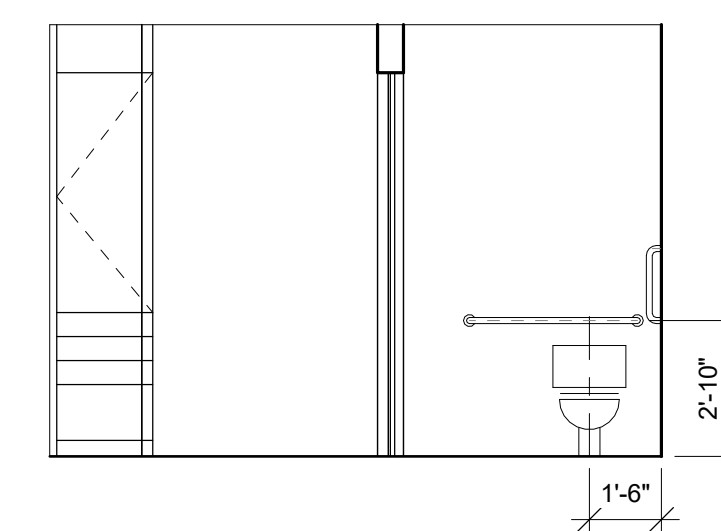
**9** POWDER/MUD 2  
A6.1 SCALE: 1/4" = 1'-0"



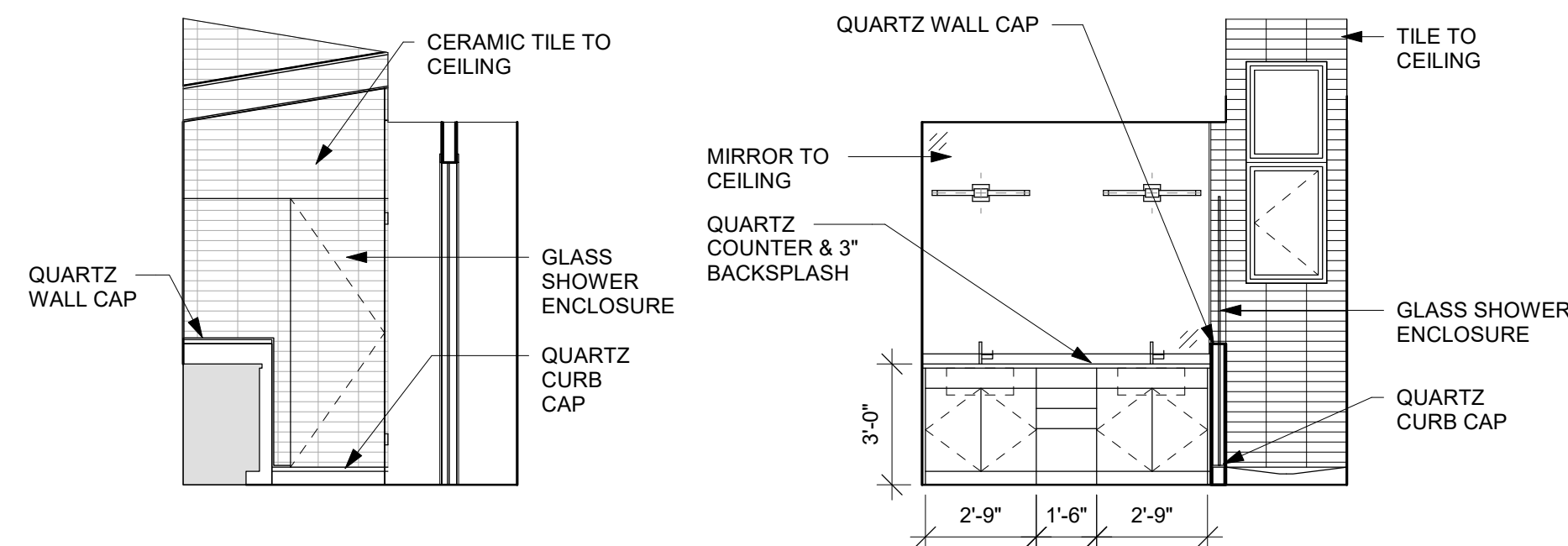
**10** 1ST FLR BATH1  
A6.1 SCALE: 1/4" = 1'-0"



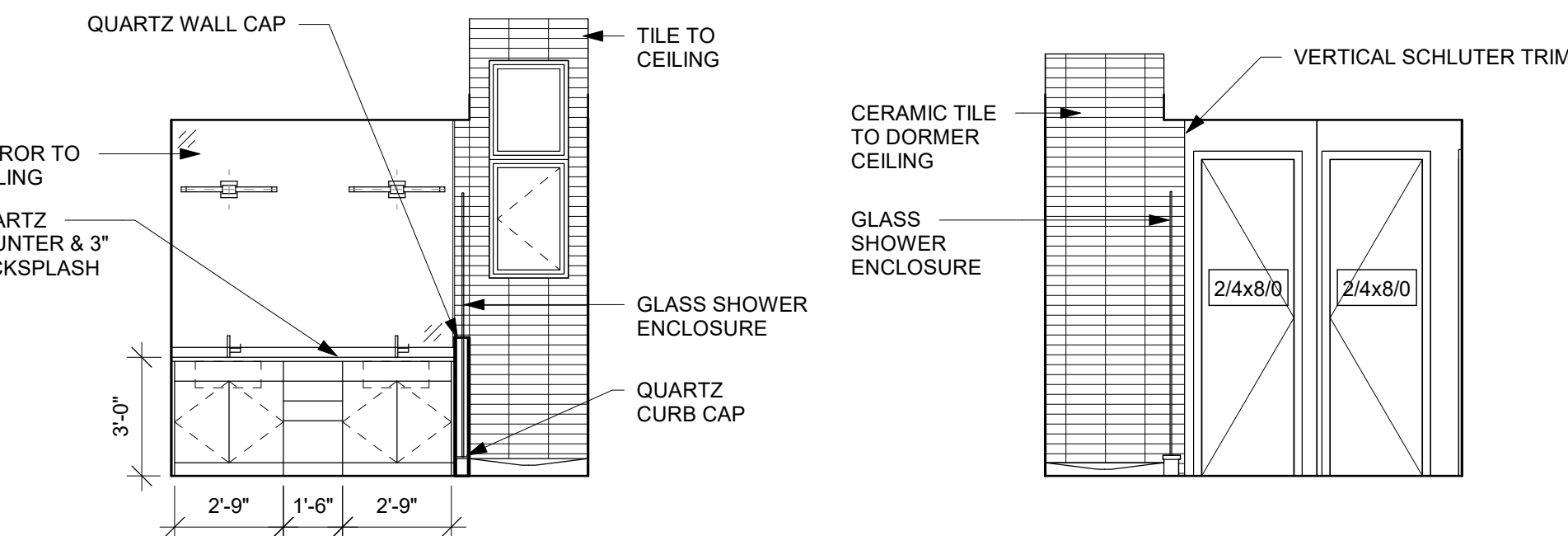
**11** PRIMARY BATH VANITY/SHOWER1  
A6.1 SCALE: 1/4" = 1'-0"



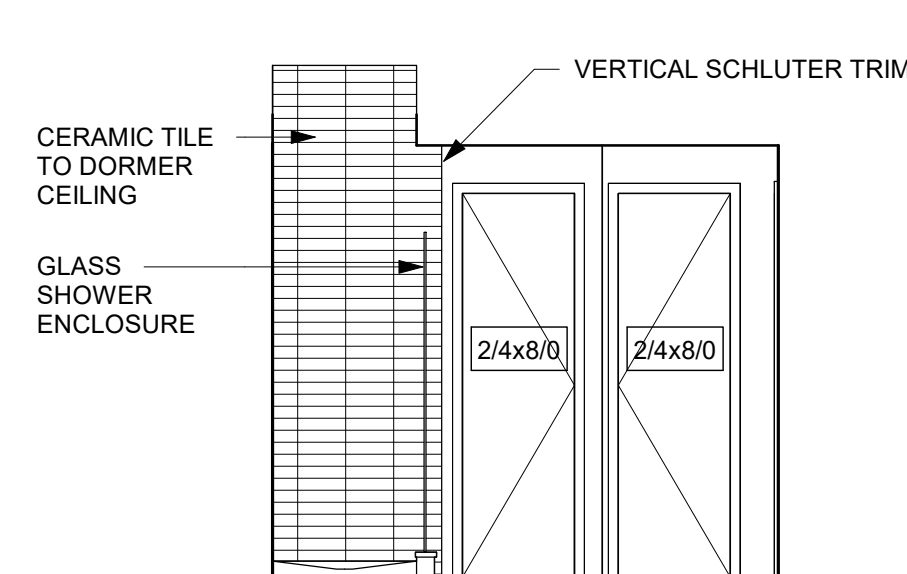
**12** PRIMARY BATH TOILET1  
A6.1 SCALE: 1/4" = 1'-0"



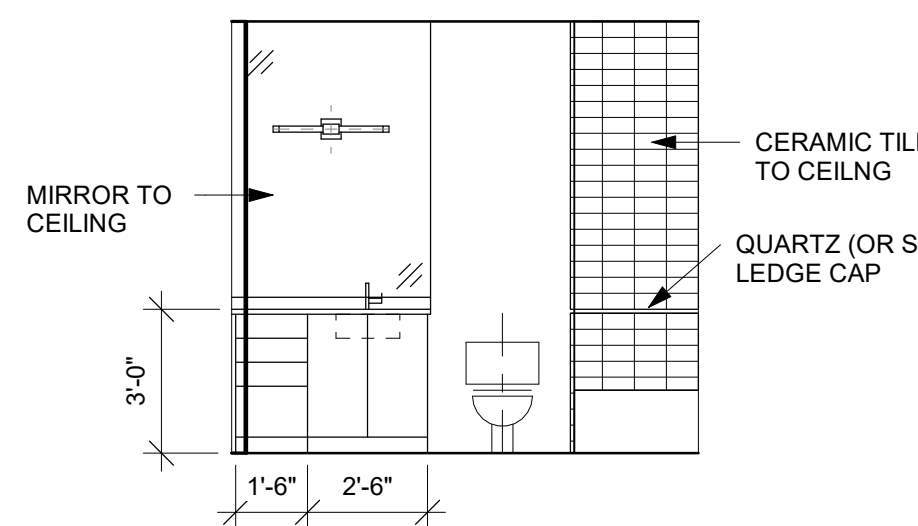
**13** 2ND FL BATH SHOWER  
A6.1 SCALE: 1/4" = 1'-0"



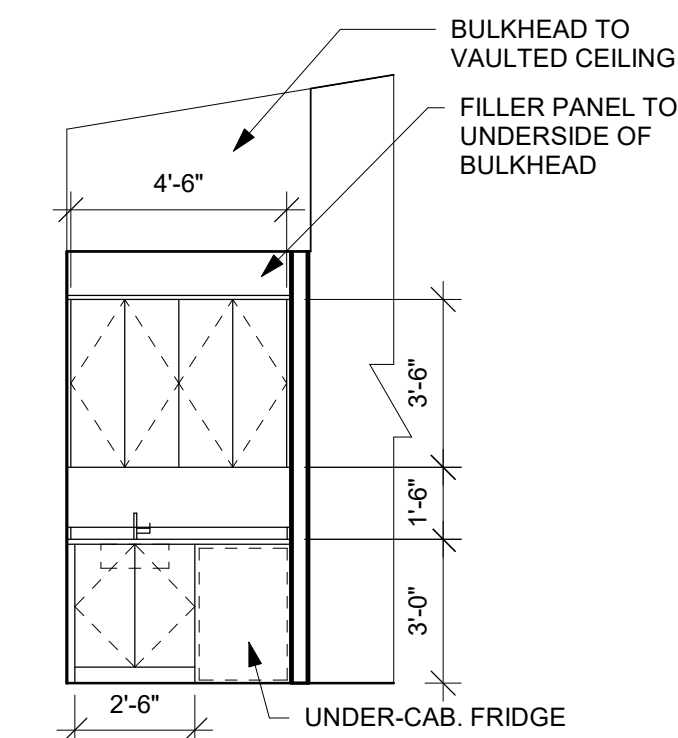
**14** 2ND FLR BATH VANITY  
A6.1 SCALE: 1/4" = 1'-0"



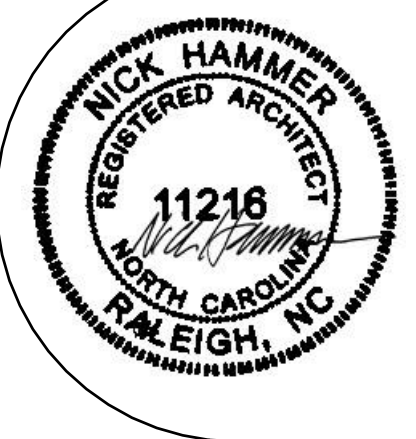
**15** 2ND FLR BATH  
A6.1 SCALE: 1/4" = 1'-0"



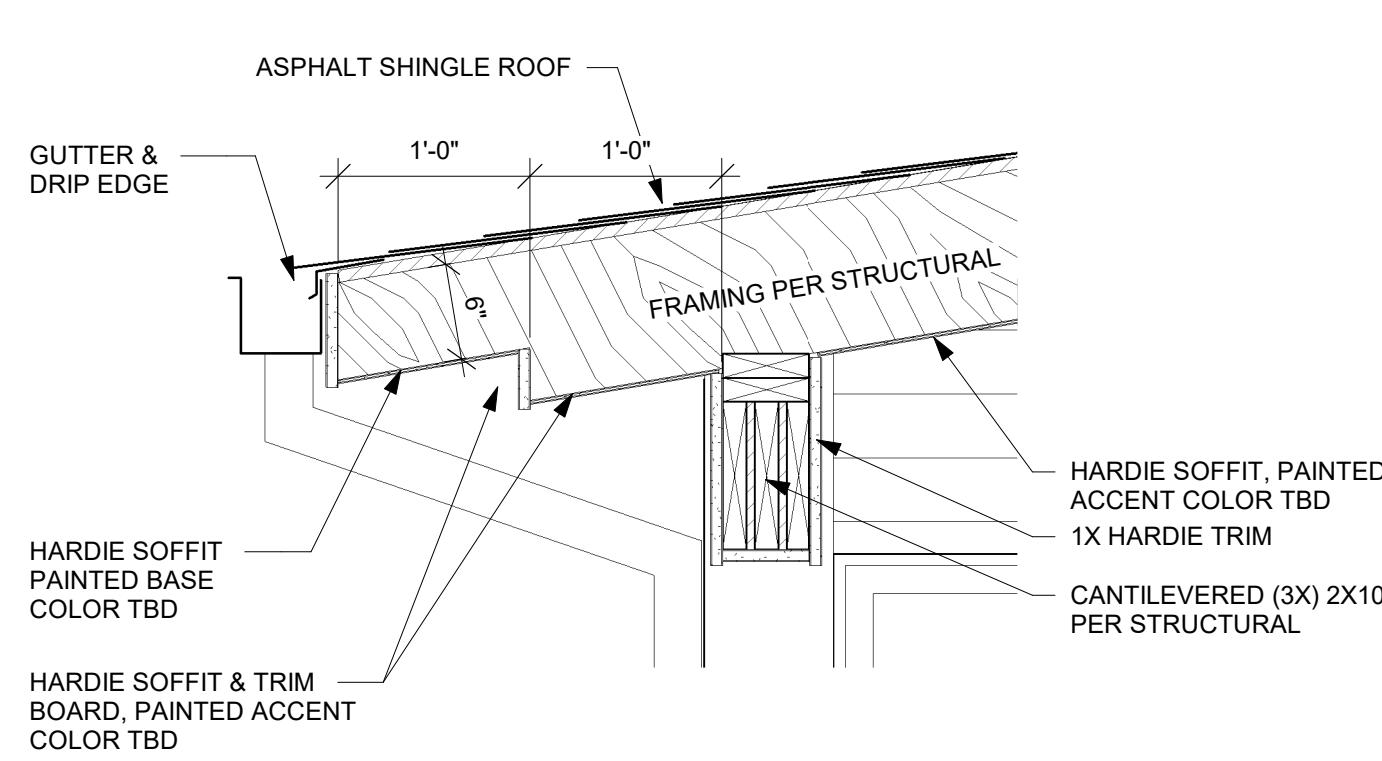
**16** 2ND FLOOR HALL BATH  
A6.1 SCALE: 1/4" = 1'-0"



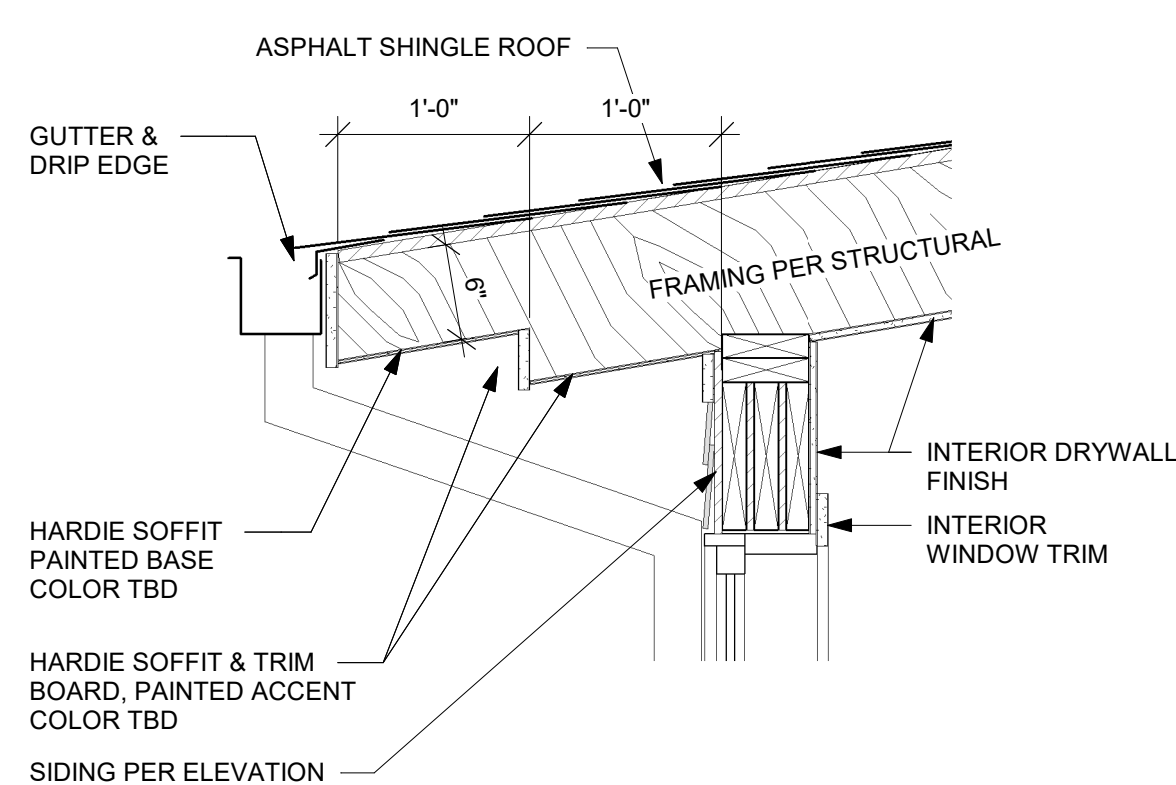
**17** Elevation 1 - b  
A6.1 SCALE: 1/4" = 1'-0"



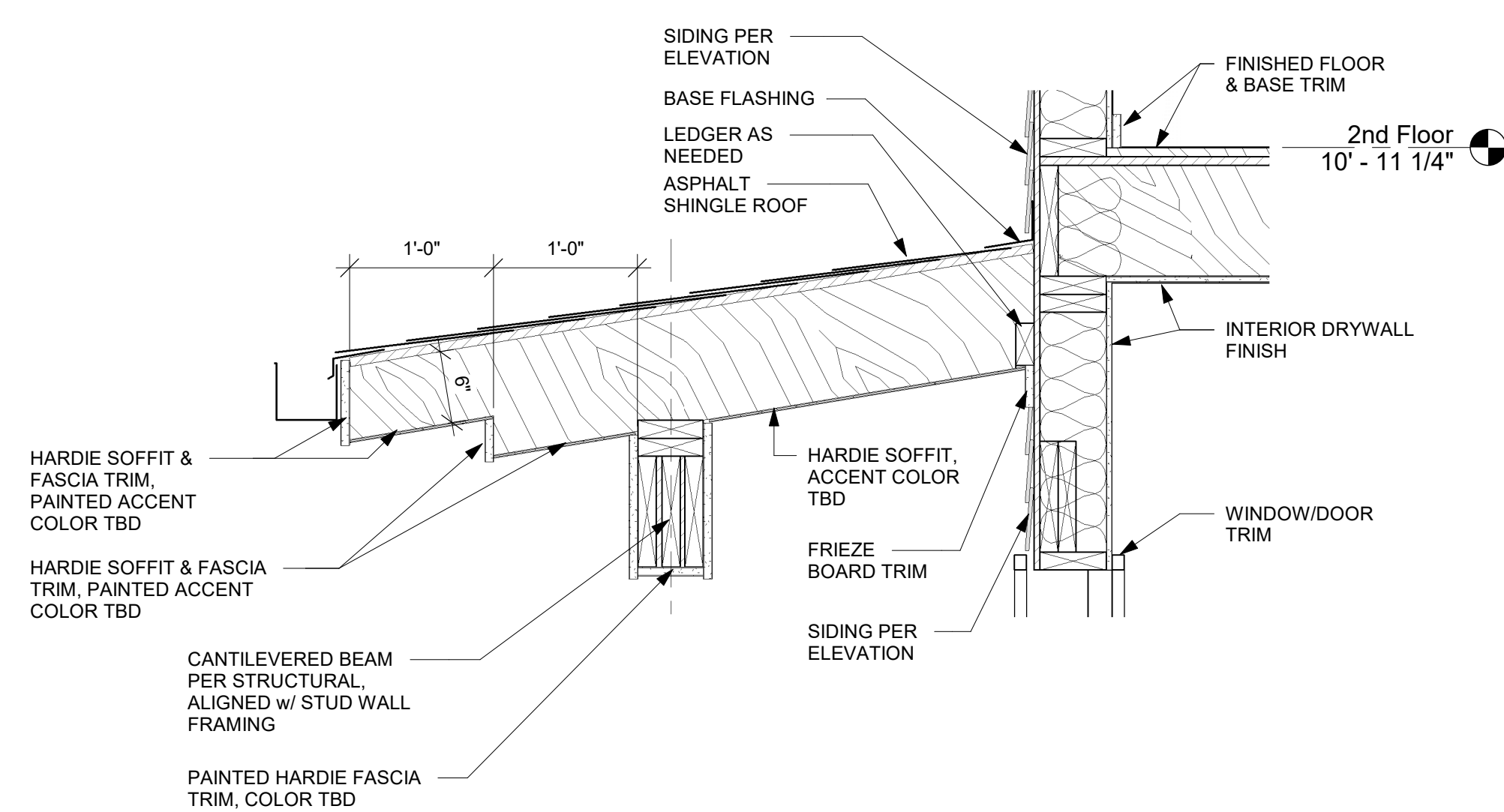




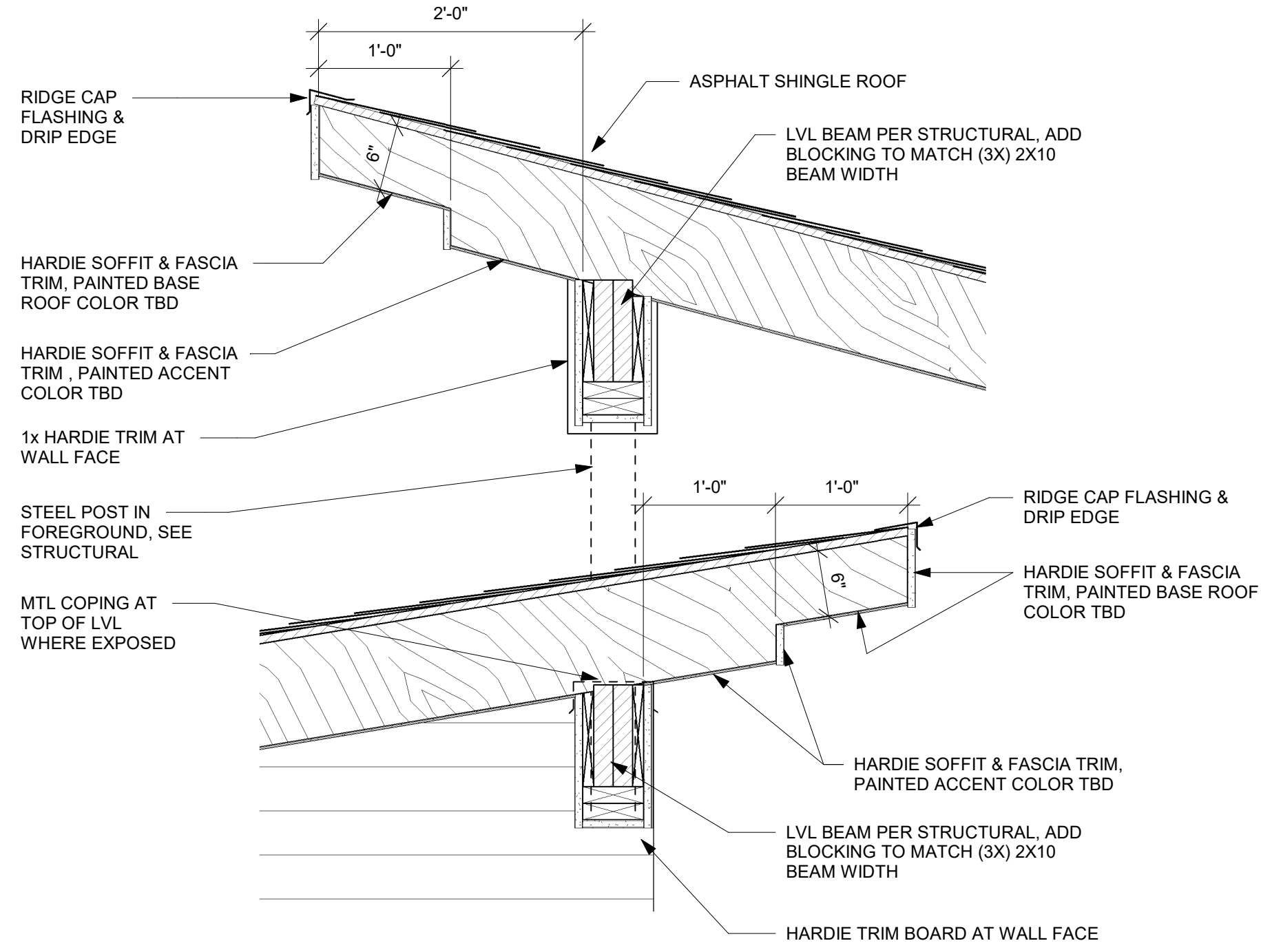
**1** Detail 18  
A7.1 SCALE: 1" = 1'-0"



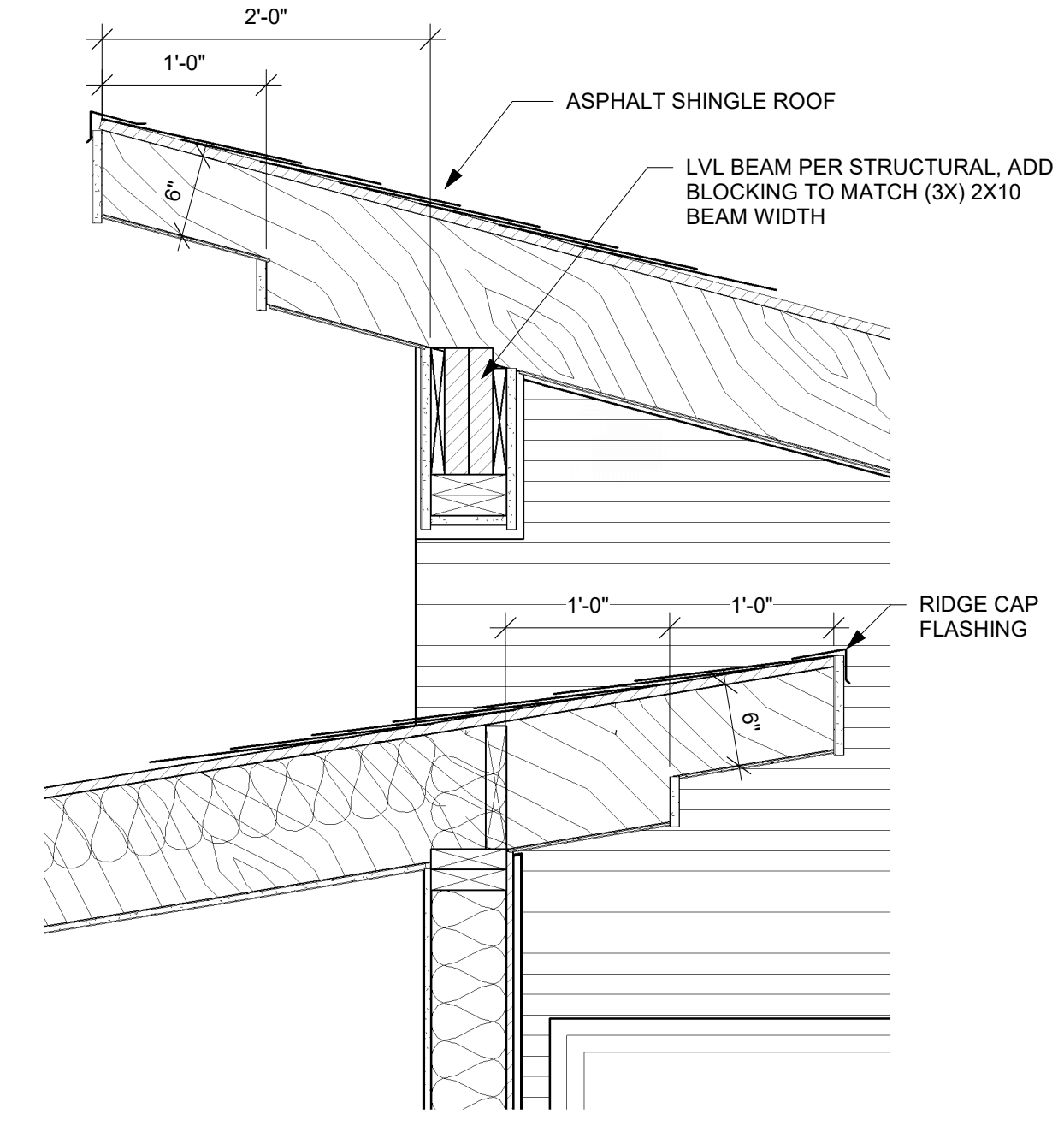
**2** Detail 15  
A7.1 SCALE: 1" = 1'-0"



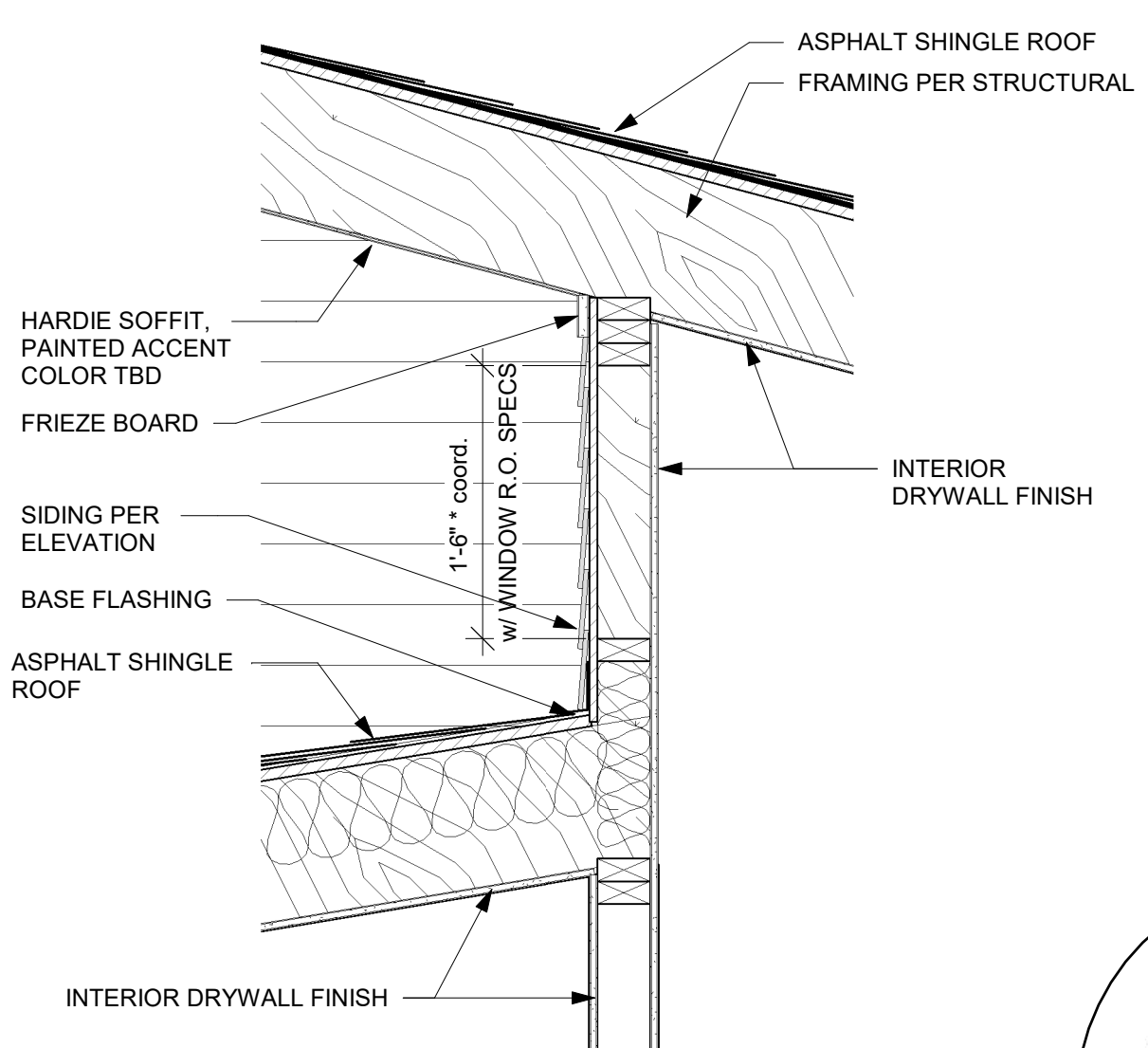
**6** Detail 21  
A7.1 SCALE: 1" = 1'-0"



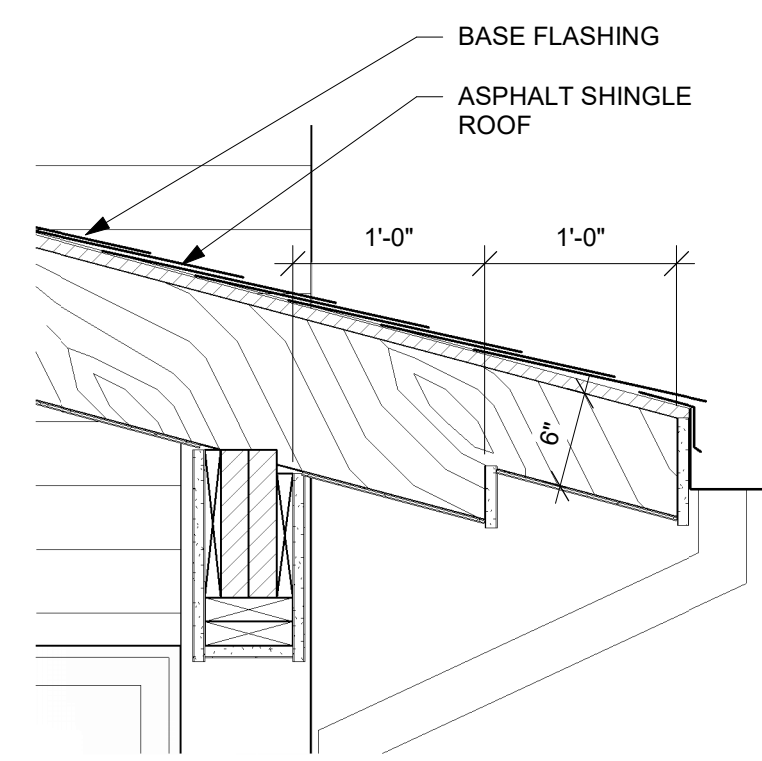
**3** Detail 19  
A7.1 SCALE: 1" = 1'-0"



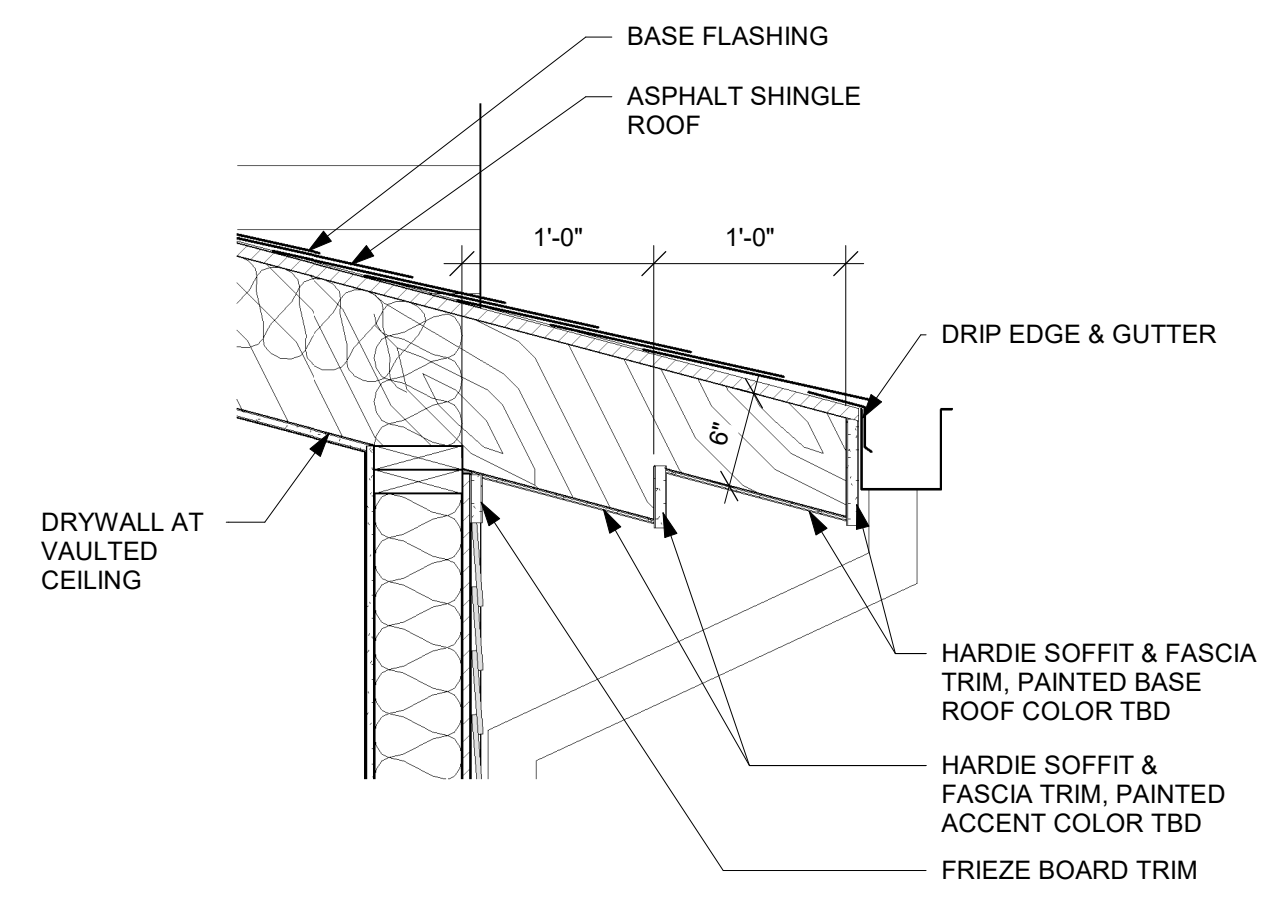
**4** Detail 10  
A7.1 SCALE: 1" = 1'-0"



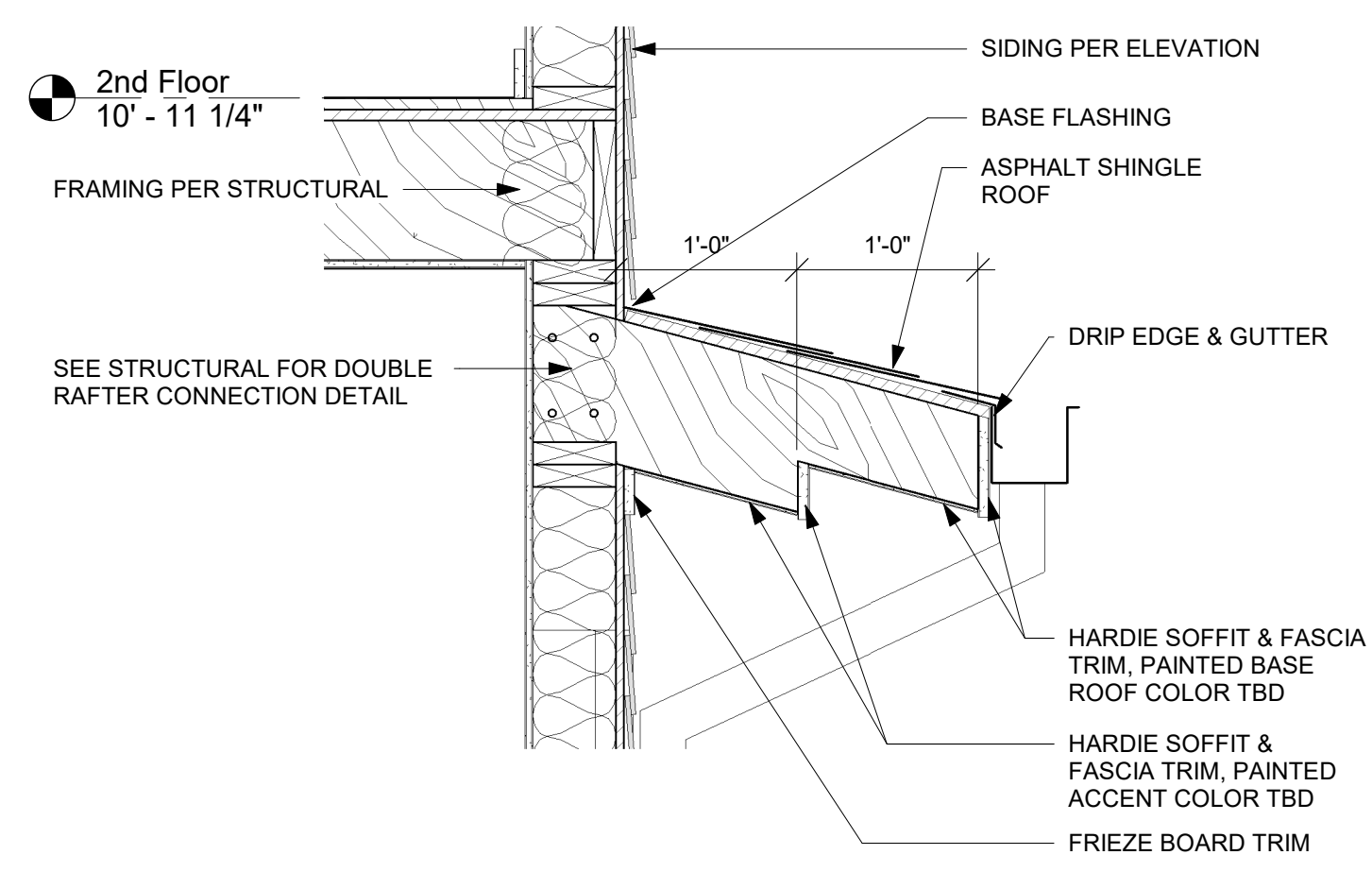
**5** Detail 8  
A7.1 SCALE: 1" = 1'-0"



**7** Detail 20  
A7.1 SCALE: 1" = 1'-0"



**8** Detail 9  
A7.1 SCALE: 1" = 1'-0"



**9** Detail 22  
A7.1 SCALE: 1" = 1'-0"





