



NORTH-FRONT ELEVATION 1-A

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



WEST-SIDE ELEVATION 1-B

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



SOUTH-REAR ELEVATION 1-C

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



EAST-SIDE ELEVATION 1-D

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

TOTAL LIVING AREA: 2,636 sq.ft.
FIRST FLOOR: 1,420 sq.ft.
SECOND FLOOR: 1,216 sq.ft.
DECKS: 932 sq.ft.
BEDROOMS: 3
FULL BATHS: 2
HALF BATHS: 1

HOUSE
ENGINEERING, P.C.

P.O. BOX 466
KITTY HAWK, NORTH CAROLINA 27949
OFFICE: (252) 261-8253
e-mail: rick@houseengineering.net

ELEVATIONS

for:

Richard Dyer

Property Location:
**Lot 2T, Waverly Phase 1,
Church Neck, Northampton County, Virginia**

ENGINEER SEAL

Frederick A. House
FREDERICK A. HOUSE
Lic. No. 030978
8/19/21
PROFESSIONAL ENGINEER

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APPROVALS

DATE

DRAWN B. MORRIS 8/17/2021

CHECKED R. HOUSE 8/17/2021

ENGINEER R. HOUSE 8/17/2021

SUBMITTED R. HOUSE

RECEIVED

ENGINEER'S SEAL APPLIES
ONLY TO STRUCTURAL COMPONENTS.

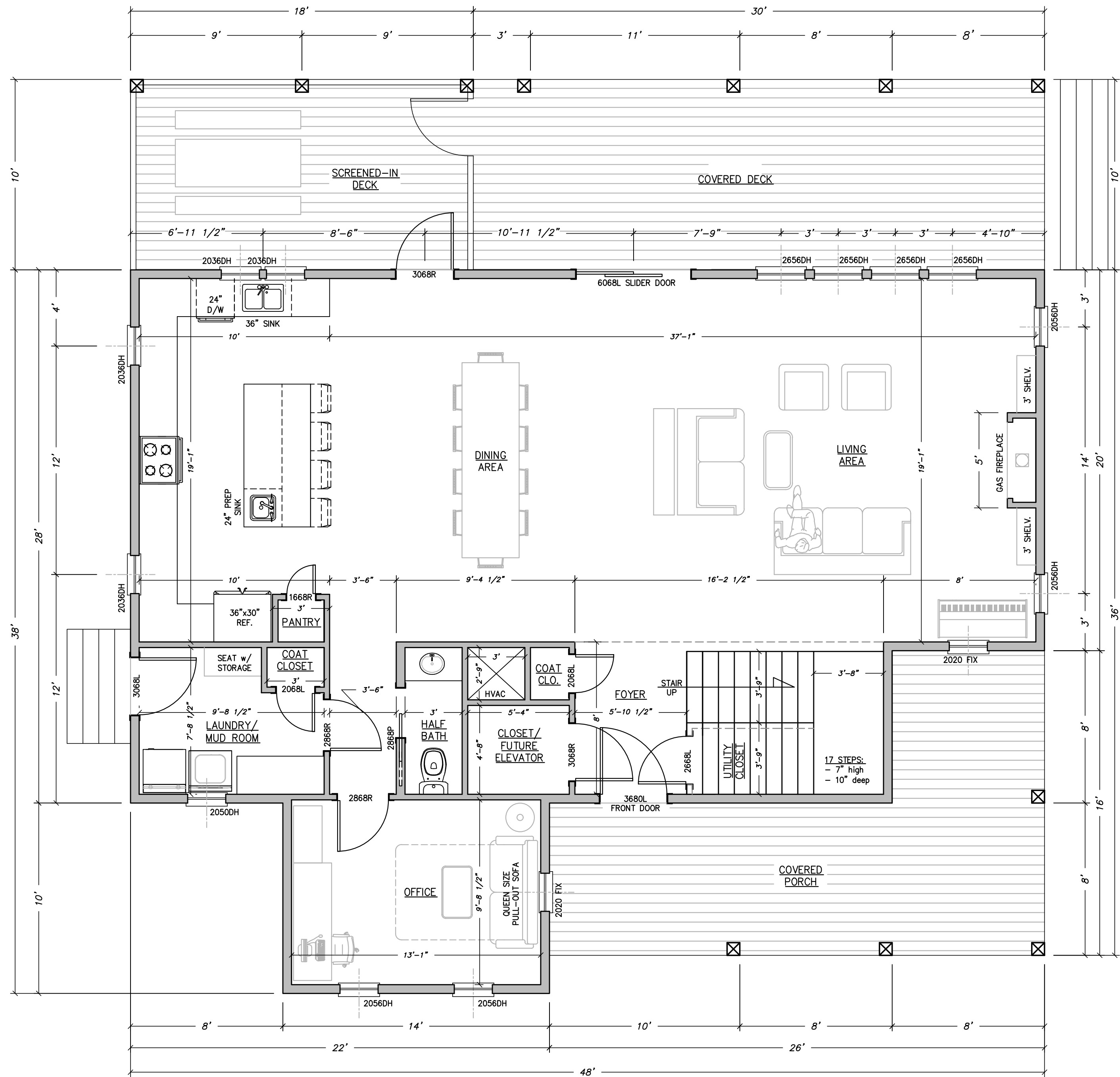
PROJECT
CONTACTS:

APPLICABLE DRAWING TOLERANCES

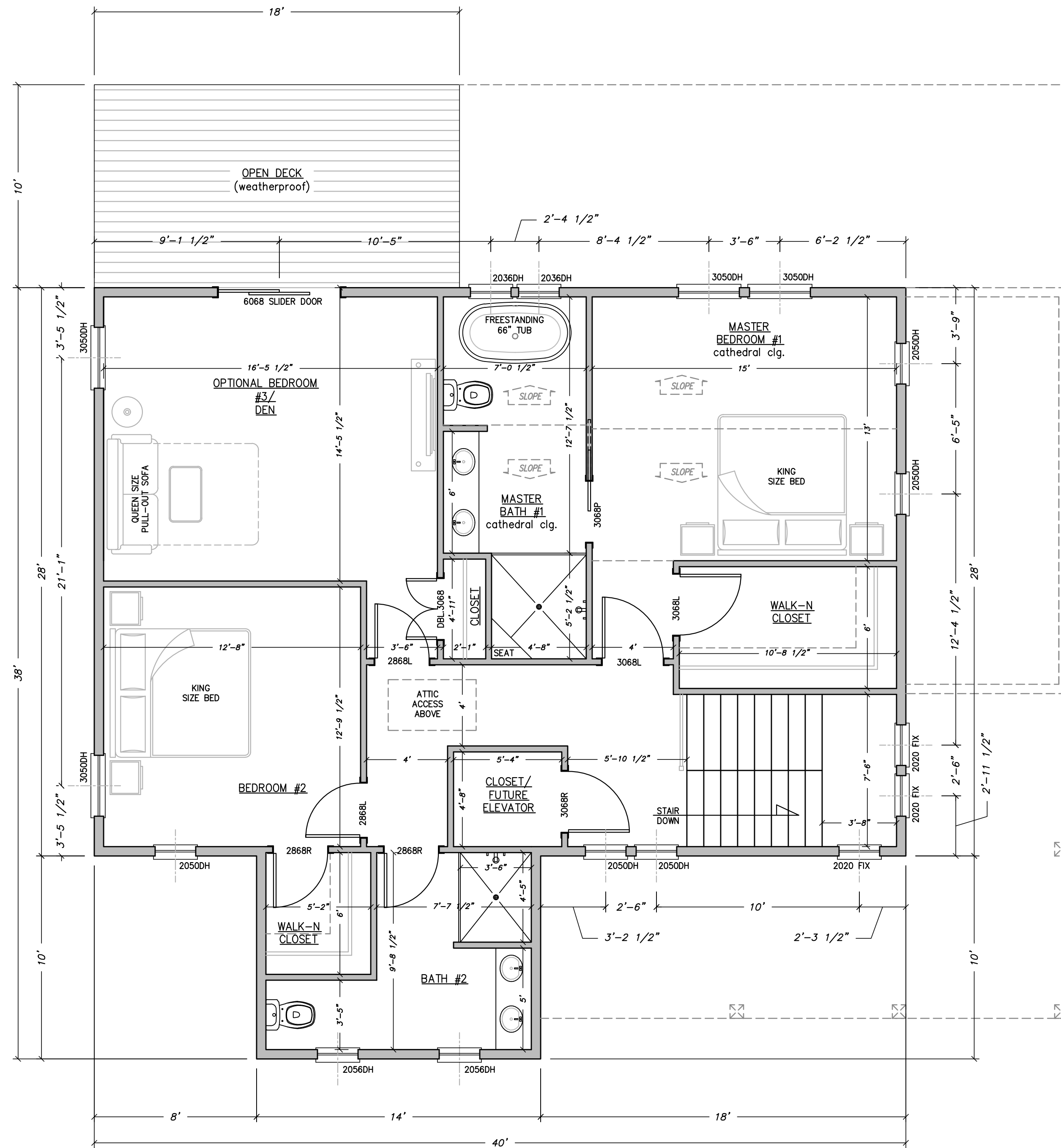
SIZE	PROJECT NUMBER	REV	SHEET NO.
D	216490	-	1
			OF
			6

CAD FILENAME: 216490_Dyer

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



FIRST FLOOR PLAN 2-A
SCALE: 1/4"=1'-0"



SECOND FLOOR PLAN 2-B
SCALE: 1/4"=1'-0"

TOTAL LIVING AREA: 2,636 sq.ft.
FIRST FLOOR: 1,420 sq.ft.
SECOND FLOOR: 1,216 sq.ft.
DECKS: 932 sq.ft.
BEDROOMS: 3
FULL BATHS: 2
HALF BATHS: 1

Door Schedule:			
SIZE	QTY.	TYPE	NOTES
166BR	1	INTERIOR	
206BL	2	INTERIOR	
286BL	2	INTERIOR	
286BR	4	INTERIOR	
306BL	2	INTERIOR	
306BR	2	INTERIOR	
286BP	1	INTERIOR	POCKET DOOR
306BP	1	INTERIOR	POCKET DOOR
DBL.306B	1	INTERIOR	DOUBLE OUT-SWING DOOR
306BL	1	EXTERIOR	HALF LITE; SIDE ENTRY
306BR	1	EXTERIOR	FULL LITE; BACK PORCH
3680L	1	EXTERIOR	HALF LITE; MAIN ENTRY
606BSL	1	EXTERIOR	SLIDER DOOR; TOP DECK
606BSL	1	EXTERIOR	SLIDER DOOR; BACK DECK w/ 12" TRANSOM ABOVE

NOTE: 1. ALL EXTERIOR DOOR HEIGHTS TO BE INSTALLED AT 6'-8" UNLESS NOTED OTHERWISE.
2. ALL INTERIOR DOOR HEIGHTS TO BE INSTALLED AT 6'-8" UNLESS NOTED OTHERWISE.
3. ALL CLARIFICATIONS ARE TO BE DIRECTED TO THE CONTRACTOR/OWNER FOR SELECTION.

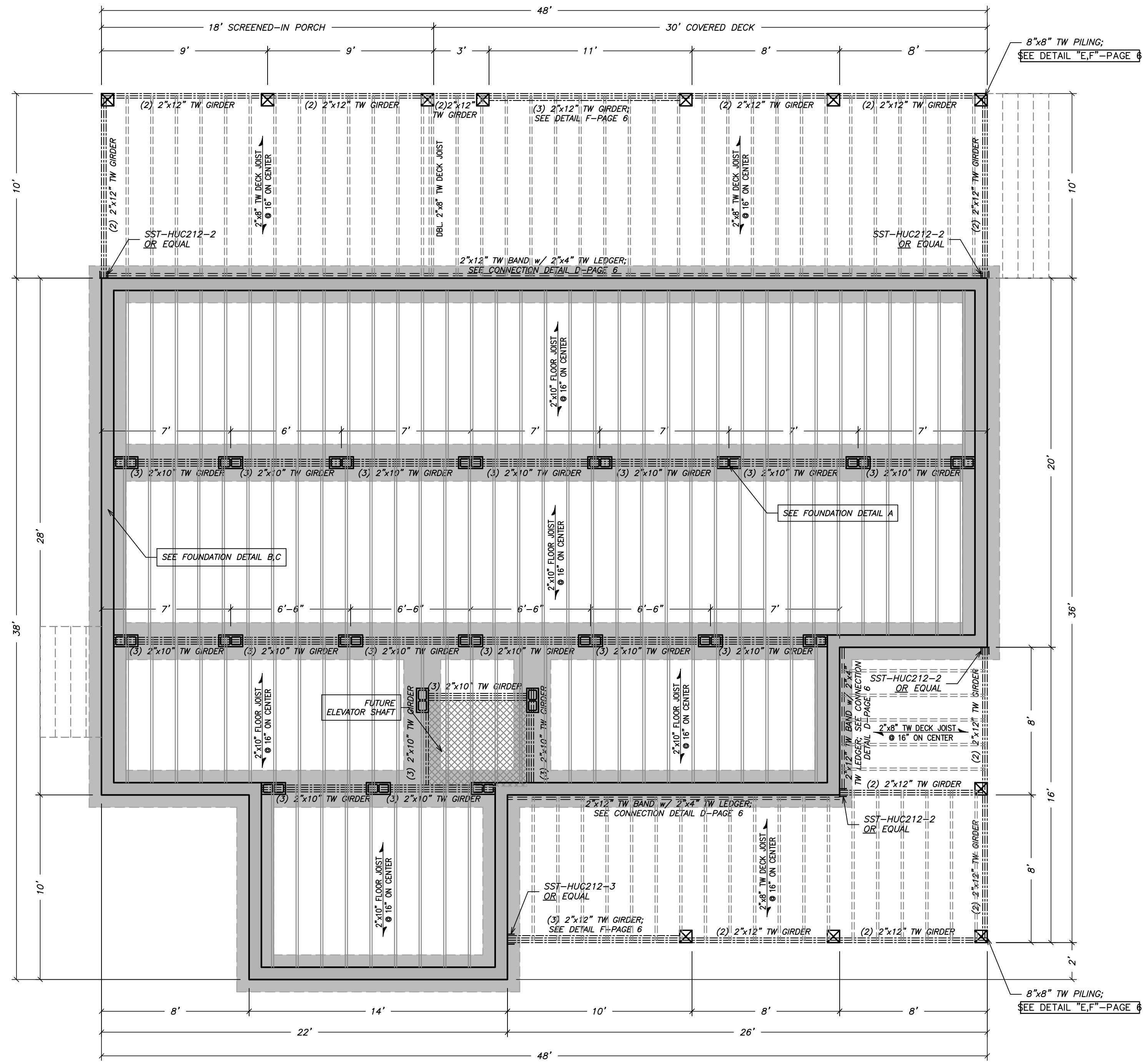
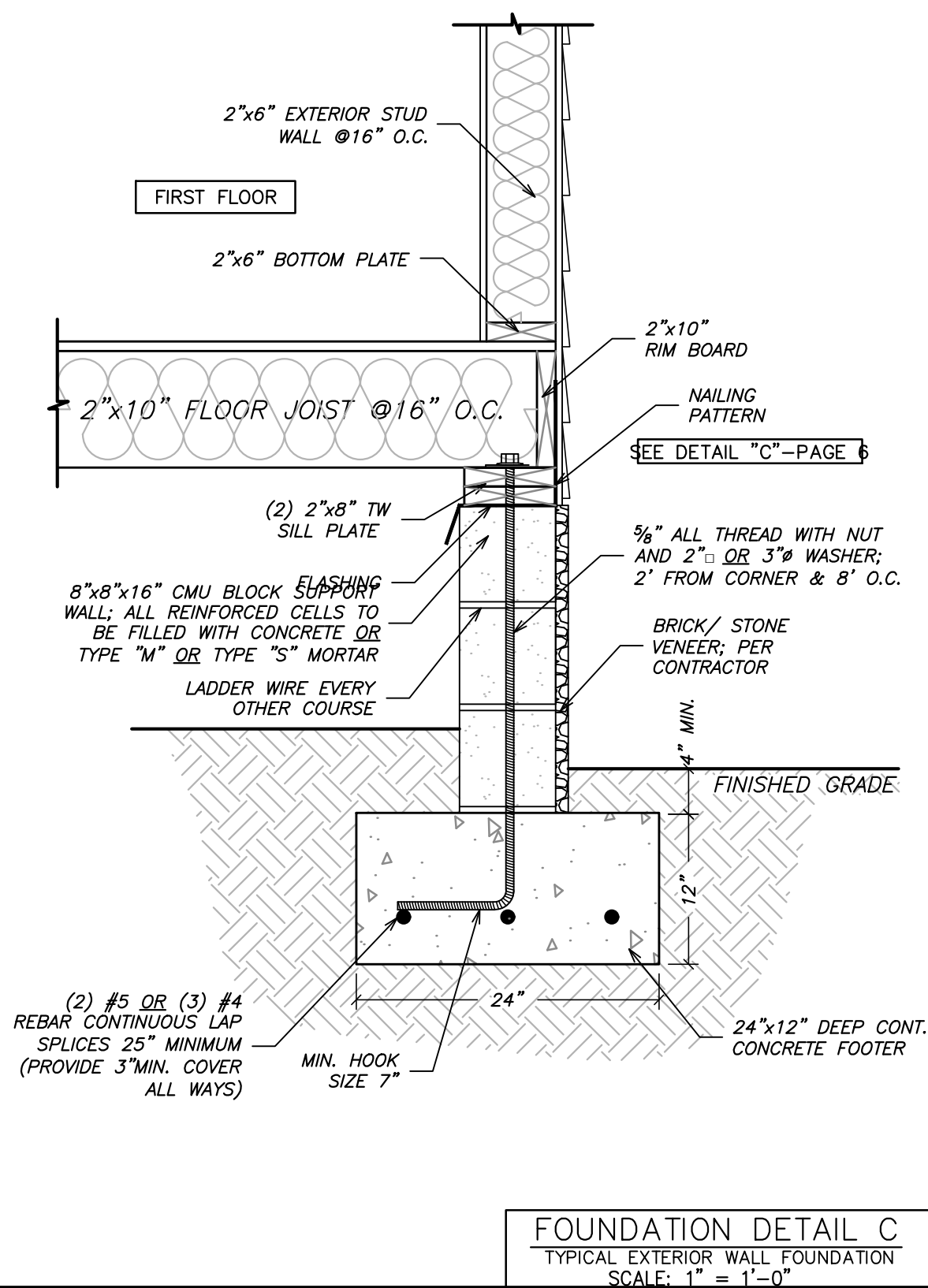
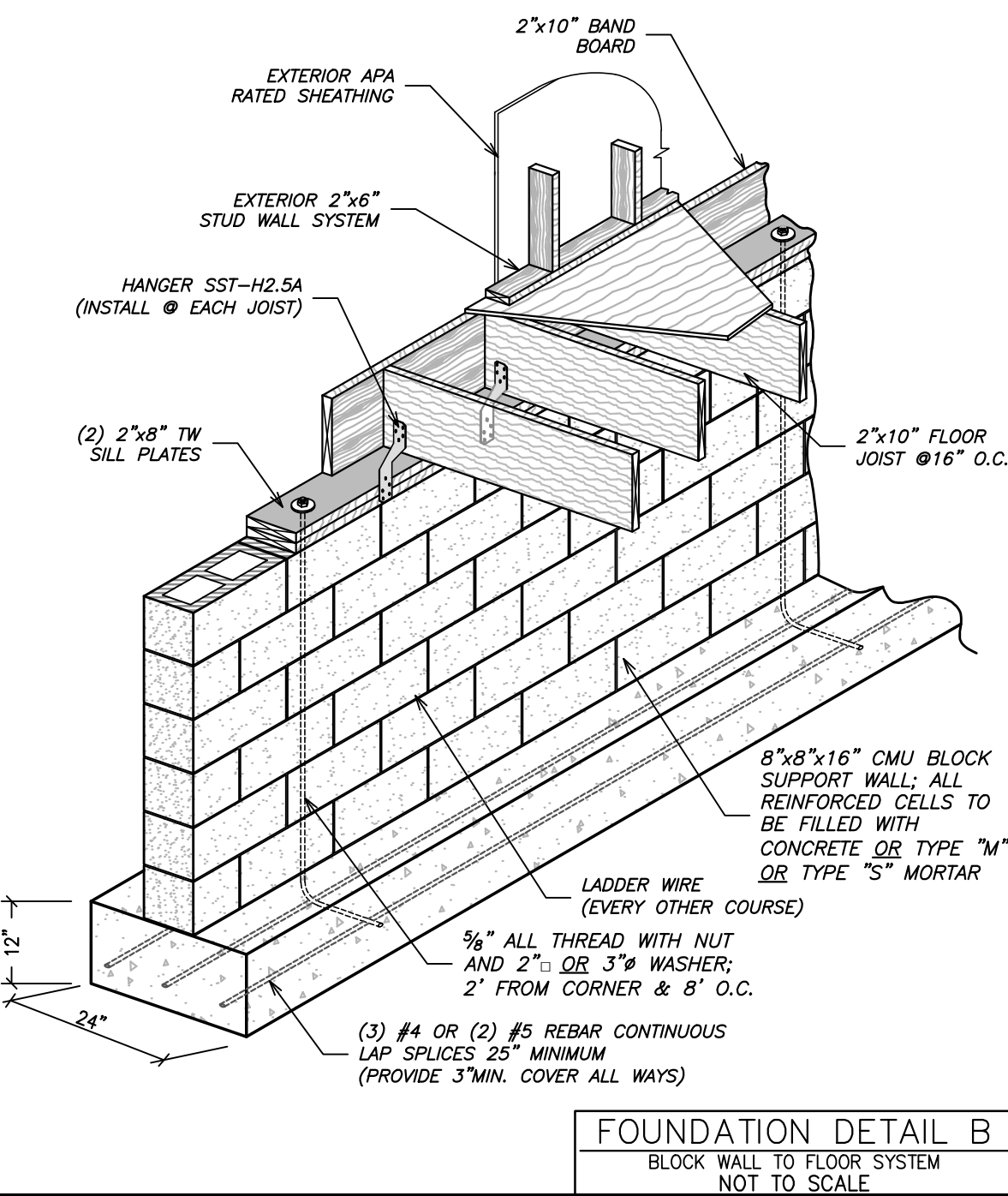
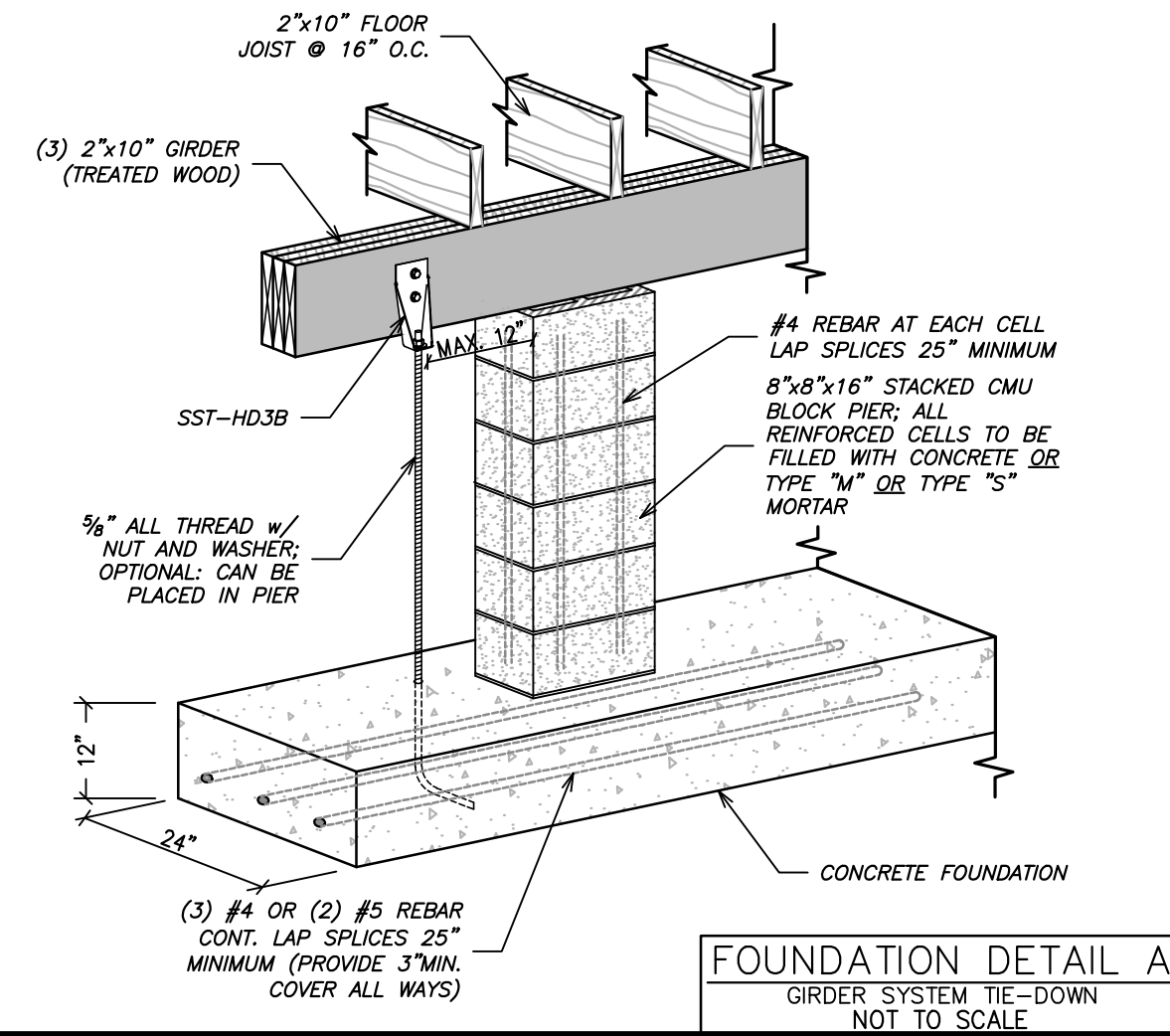
Window Schedule:					
MARK	QTY.	TYPE	ROUGH OPENING WIDTH	HEIGHT	NOTE
2020FIX	5	FIXED	24"	24"	
2036DH	6	DBL. HUNG	24"	42"	
2050DH	6	DBL. HUNG	24"	60"	
2056DH	6	DBL. HUNG	24"	66"	
2856DH	4	DBL. HUNG	30"	66"	
3050DH	4	DBL. HUNG	36"	60"	

NOTE: 1. ALL WINDOWS TO BE INSTALLED WITH HEAD HEIGHT AT 6'-8" UNLESS NOTED OTHERWISE.
2. ALL CLARIFICATIONS ARE TO BE DIRECTED TO THE CONTRACTOR/OWNER FOR SELECTION.
3. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ROUGH OPENING DIMENSIONS
AND ACTUAL UNIT SIZES AND QUANTITIES.
4. ALL BEDROOMS TO HAVE MIN. 1 WINDOW OR DOOR MEETING NC EGRESS REQUIREMENTS.
CONTRACTOR TO VERIFY.

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FLOOR PLAN
for:
Richard Dyer
Property Location:
**Lot 2T, Waverly Phase 1,
Church Neck, Northampton County, Virginia**

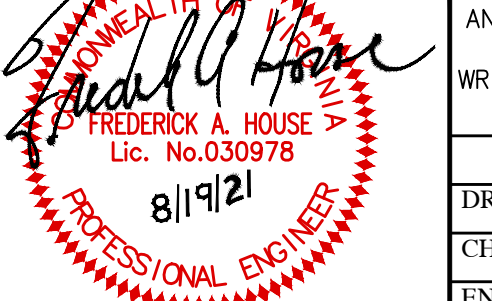
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PROJECT CONTACTS:		APPLICABLE DRAWING TOLERANCES	
SIZE D	PROJECT NUMBER 216490	REV -	SHEET NO. 2 OF 6
CAD FILENAME: 216490_Dyer		SCALE: 1/4" = 1'-0"	

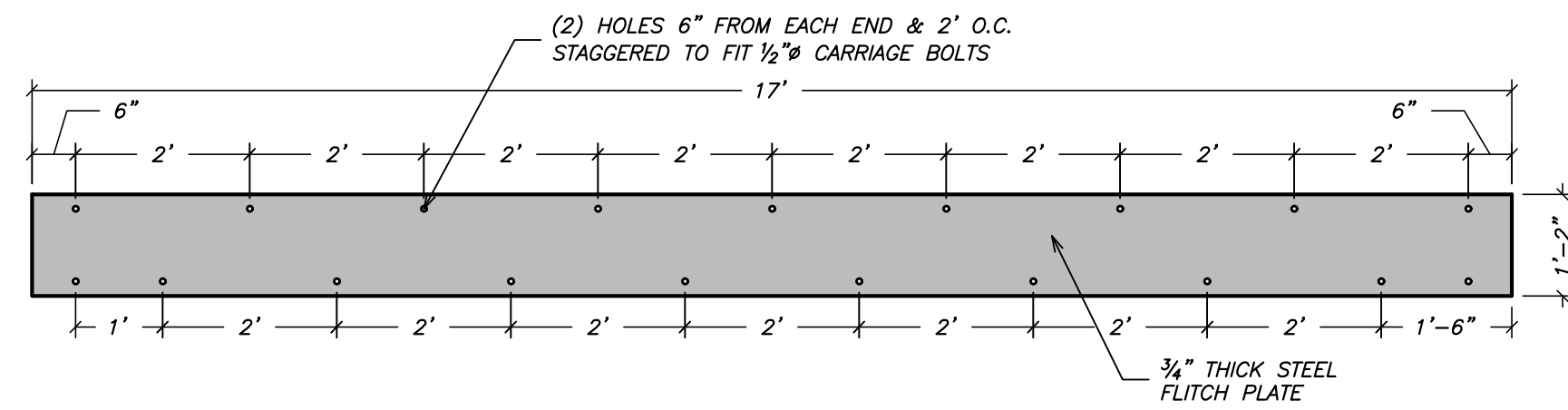


- LEGEND:**
- ☒ 8"x8" TW PILING - EMBEDMENT SEE NOTE 11
 - ☐ 8"x8"x16" CMU PIER
 - ==== 2"x10" OR 2"x12" TW GIRDER LINE
 - ▬ CONT. CMU FOUNDATION WALL
 - ▬ 24"x12"d CONT. FOOTER

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FOUNDATION AND FLOOR FRAMING PLAN
for:
Richard Dyer
Property Location:
**Lot 2T, Waverly Phase 1,
Church Neck, Northampton County, Virginia**

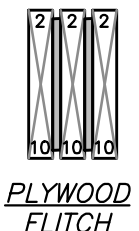
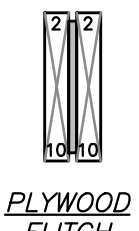
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PROJECT CONTACTS:		DRAWN	B. MORRIS 8/17/2021
		CHECKED	R. HOUSE 8/17/2021
		ENGINEER	R. HOUSE 8/17/2021
		SUBMITTED	R. HOUSE
		RECEIVED	
APPLICABLE DRAWING TOLERANCES			
SIZE	PROJECT NUMBER	REV	SHEET NO.
D	216490	-	3
CAD FILENAME: 216490_Dyer		SCALE: 1/4" = 1'-0"	OF 6

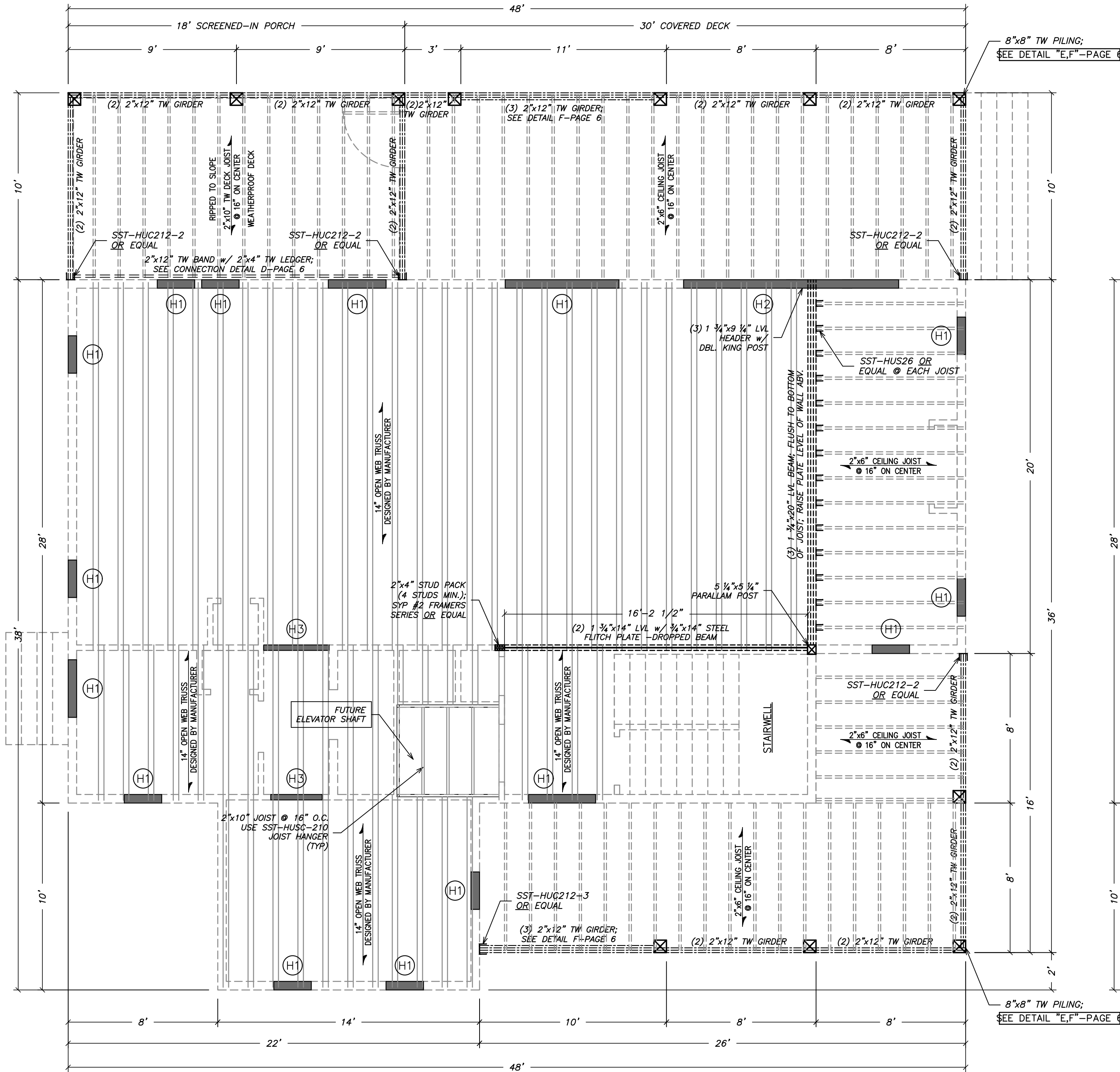


STEEL FLITCH PLATE DETAIL 4-C

SCALE: 1/2"=1'-0"

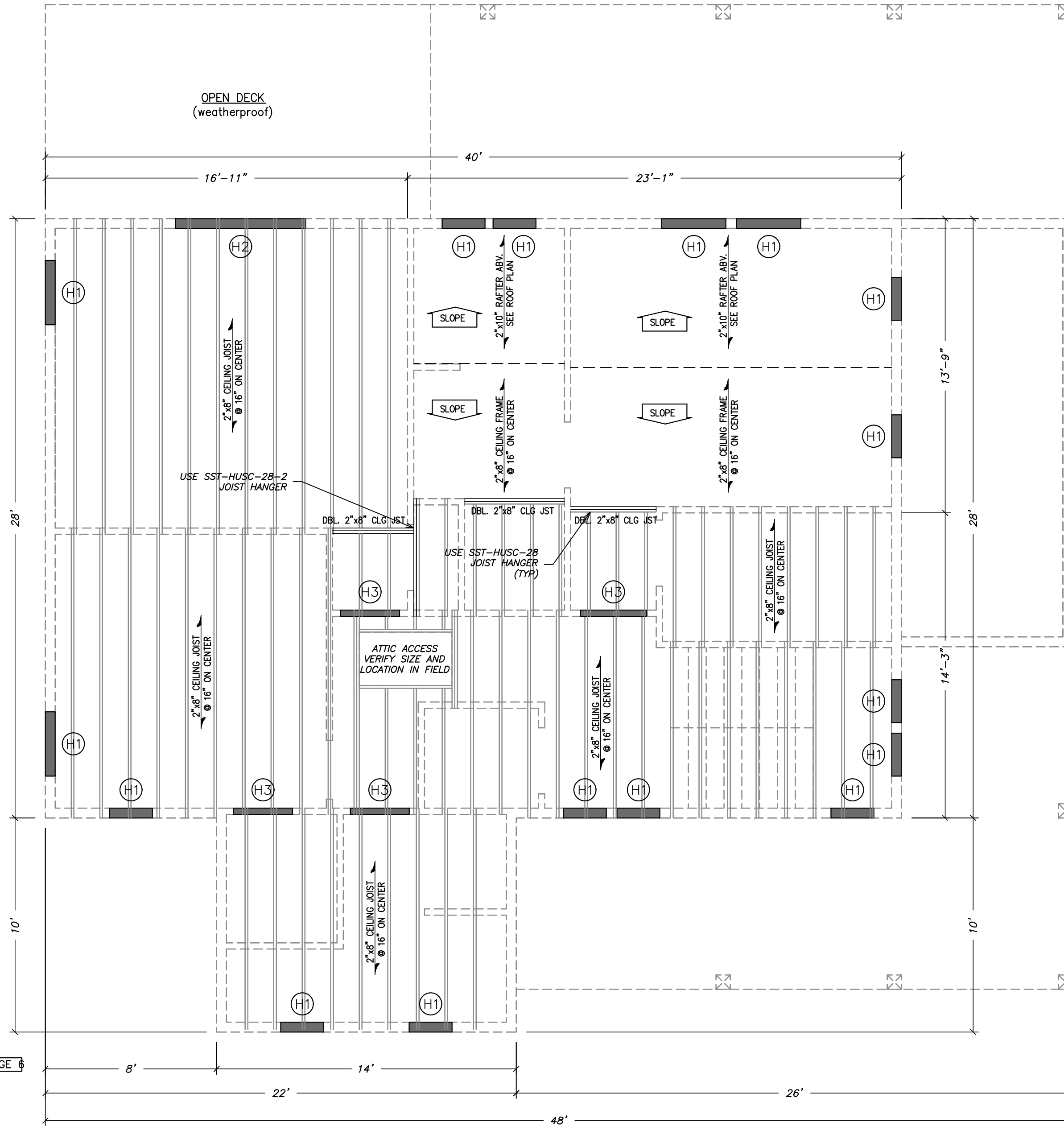
Header Schedule:

WALL	DESCRIPTION	MARK	SUPPORT
2"x6" WALL	 (3) 2"x10" w/ (2) APA RATED SHEATHING BETWEEN 2"x10" MEMBERS; APA RATED SHEATHING TO BE GLUED AND SCREWED w/(2) SST-SDWS SCREWS (OR EQUAL) x5" @ 8" O.C.	(H1)	1 JACK STUD EACH END
		(H2)	2 JACK STUD EACH END
2"x4" WALL	 (2) 2"x10" w/ APA RATED SHEATHING BETWEEN 2"x10" MEMBERS; APA RATED SHEATHING TO BE GLUED AND SCREWED w/(2) SST-SDWS SCREWS (OR EQUAL) x3" @ 8" O.C.	(H3)	1 JACK STUD EACH END
		(H4)	2 JACK STUD EACH END



SECOND FLOOR FRAMING PLAN 4-A

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



CEILING FRAMING PLAN 4-B

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

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FLOOR & CEILING FRAMING PLAN

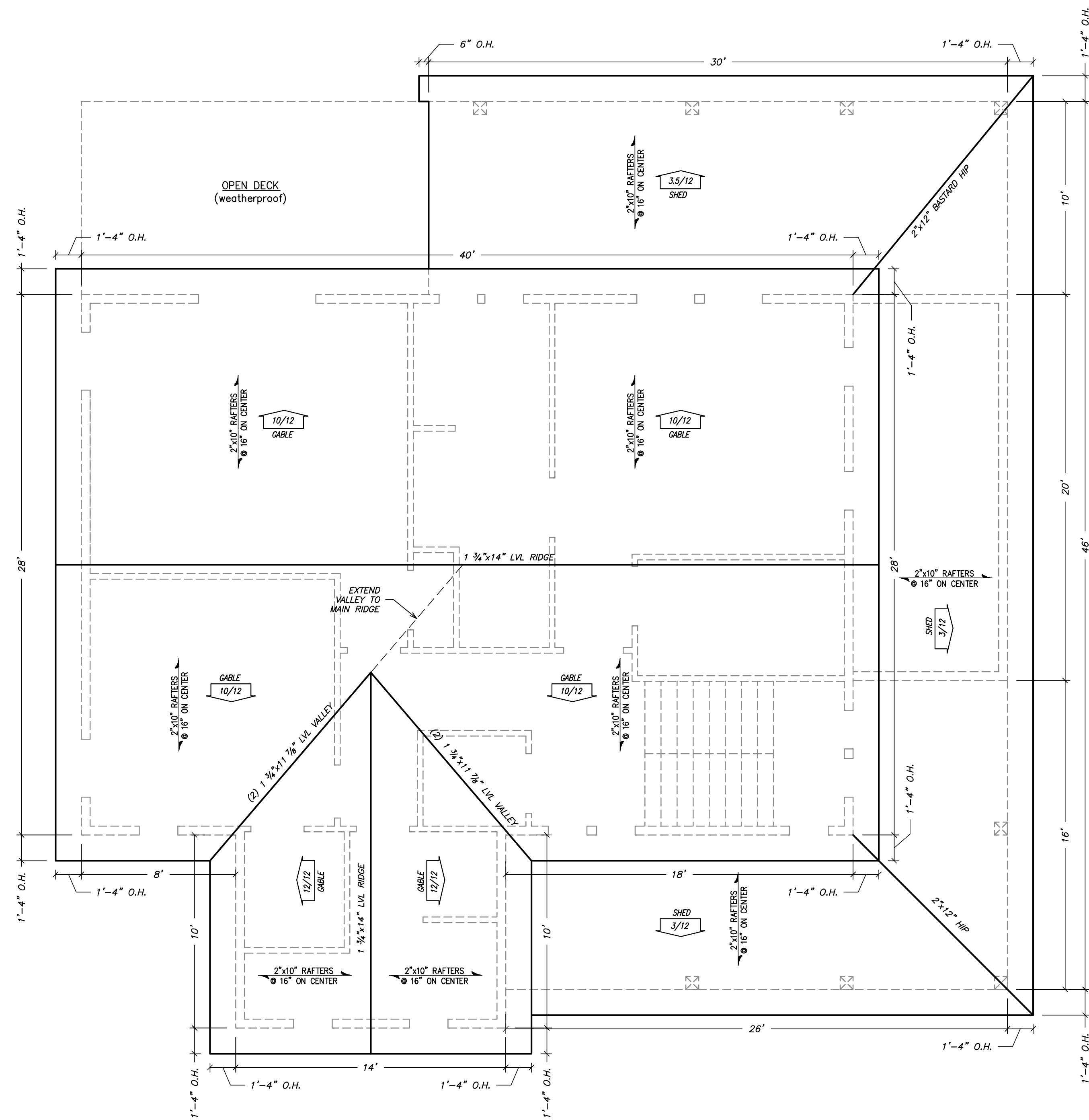
for:

Richard Dyer

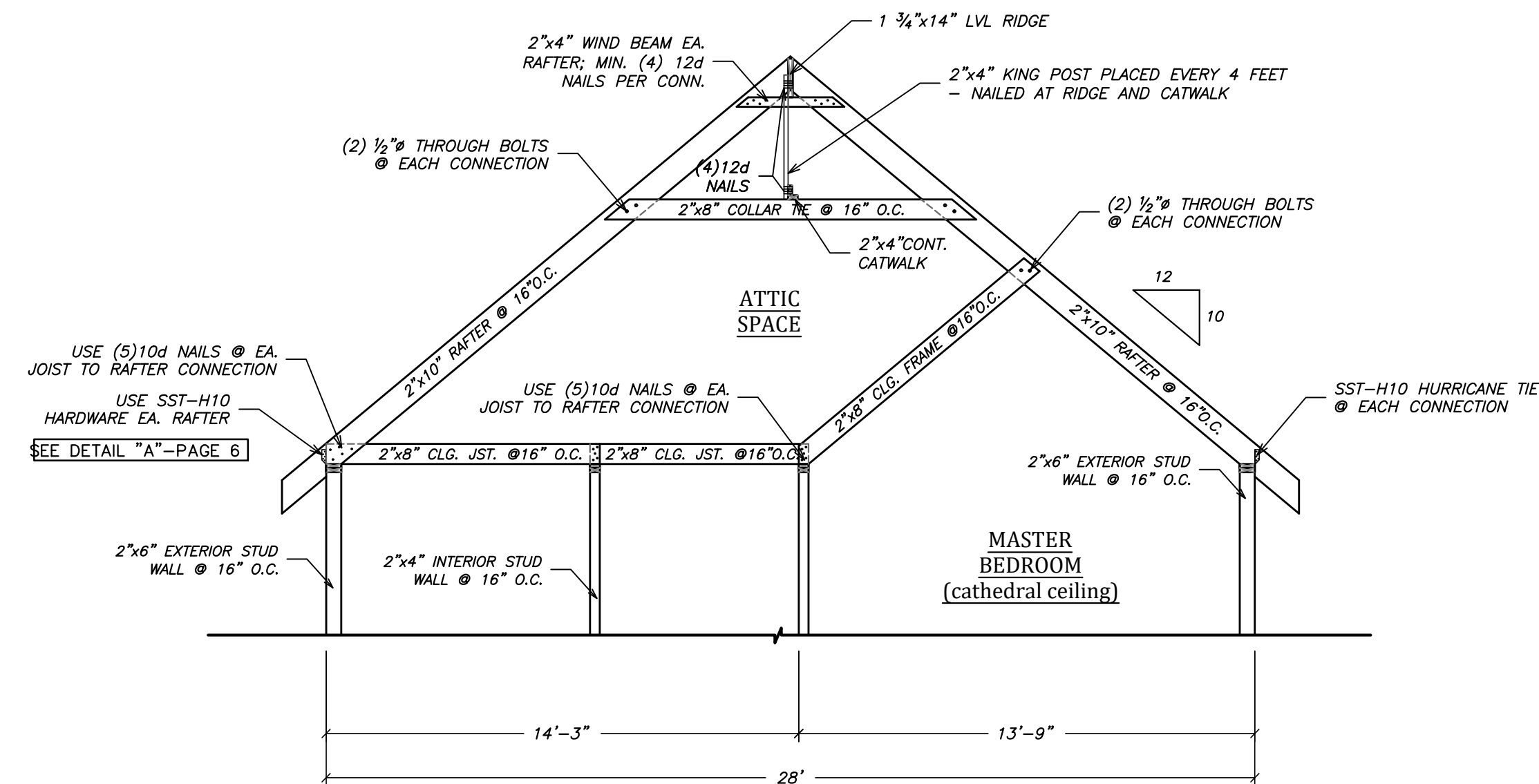
Property Location:

**Lot 2T, Waverly Phase 1,
Church Neck, Northampton County, Virginia**

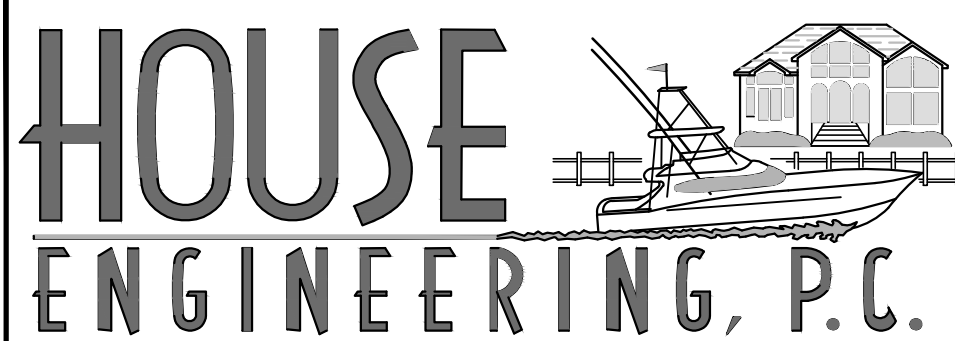
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APPROVALS	DATE
DRAWN B. MORRIS	8/17/2021
CHECKED R. HOUSE	8/17/2021
ENGINEER R. HOUSE	8/17/2021
SUBMITTED R. HOUSE	
RECEIVED	
ENGINEER'S SEAL APPLIES ONLY TO STRUCTURAL COMPONENTS.	
PROJECT CONTACTS:	APPLICABLE DRAWING TOLERANCES
SIZE D	PROJECT NUMBER 216490
	REV -
CAD FILENAME: 216490_Dyer	SHEET NO. 4 OF 6
	SCALE: 1/4" = 1'-0"



ROOF FRAMING PLAN 5-A
SCALE: 1/4"=1'-0"



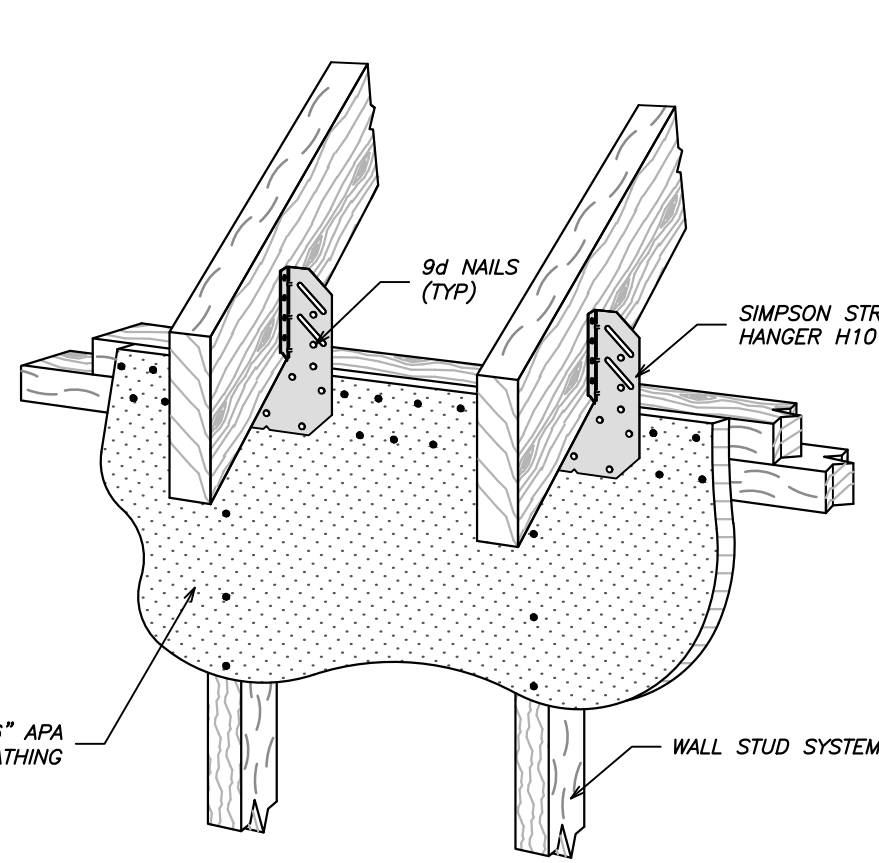
VAULTED CEILING FRAMING 5-B
SCALE: 1/4"=1'-0"



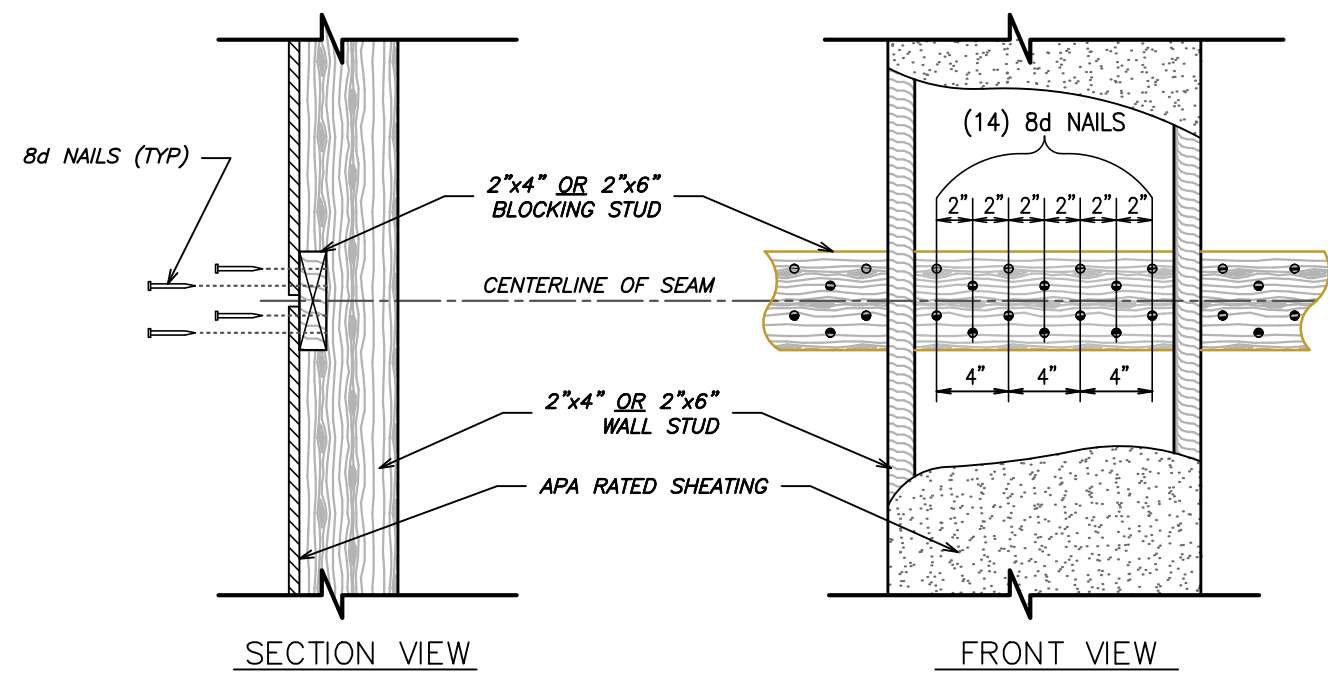
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ROOF FRAMING PLAN
for:
Richard Dyer
Property Location:
**Lot 2T, Waverly Phase 1,
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	APPROVALS		DATE
	DRAWN	B. MORRIS	8/17/2021
	CHECKED	R. HOUSE	8/17/2021
	ENGINEER	R. HOUSE	8/17/2021
ENGINEER'S SEAL APPLIES ONLY TO STRUCTURAL COMPONENTS.	SUBMITTED		R. HOUSE
	RECEIVED		
PROJECT CONTACTS:	APPLICABLE DRAWING TOLERANCES		
SIZE	PROJECT NUMBER	REV	SHEET NO.
D	216490	-	5 OF 6
CAD FILENAME: 216490_Dyer		SCALE: 1/4" = 1'-0"	



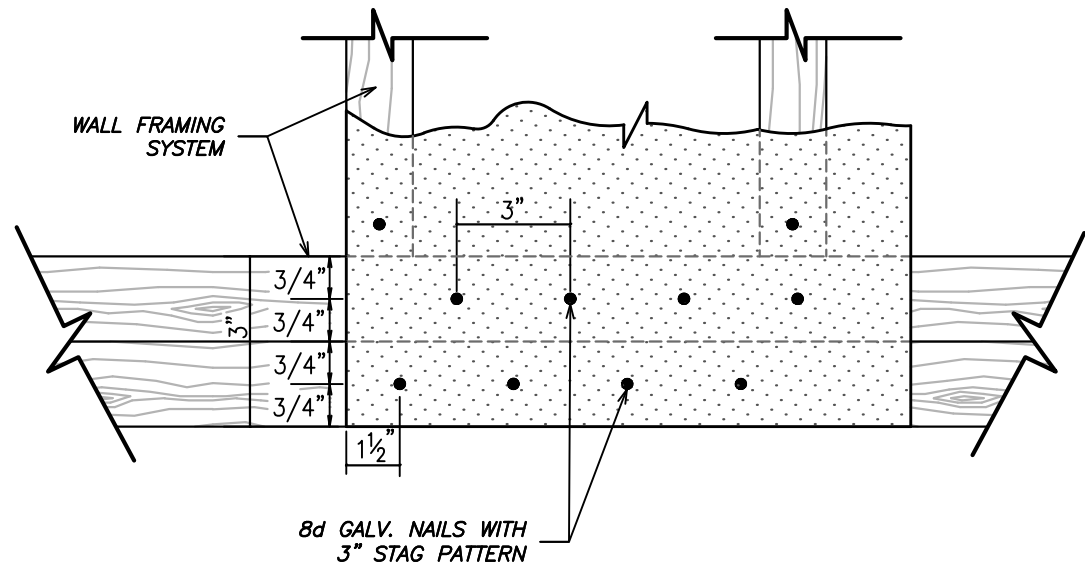
CONNECTION DETAIL A
TO TOP PLATE TIE DOWN CONNECTION
NOT TO SCALE



BLOCKING NOTES:

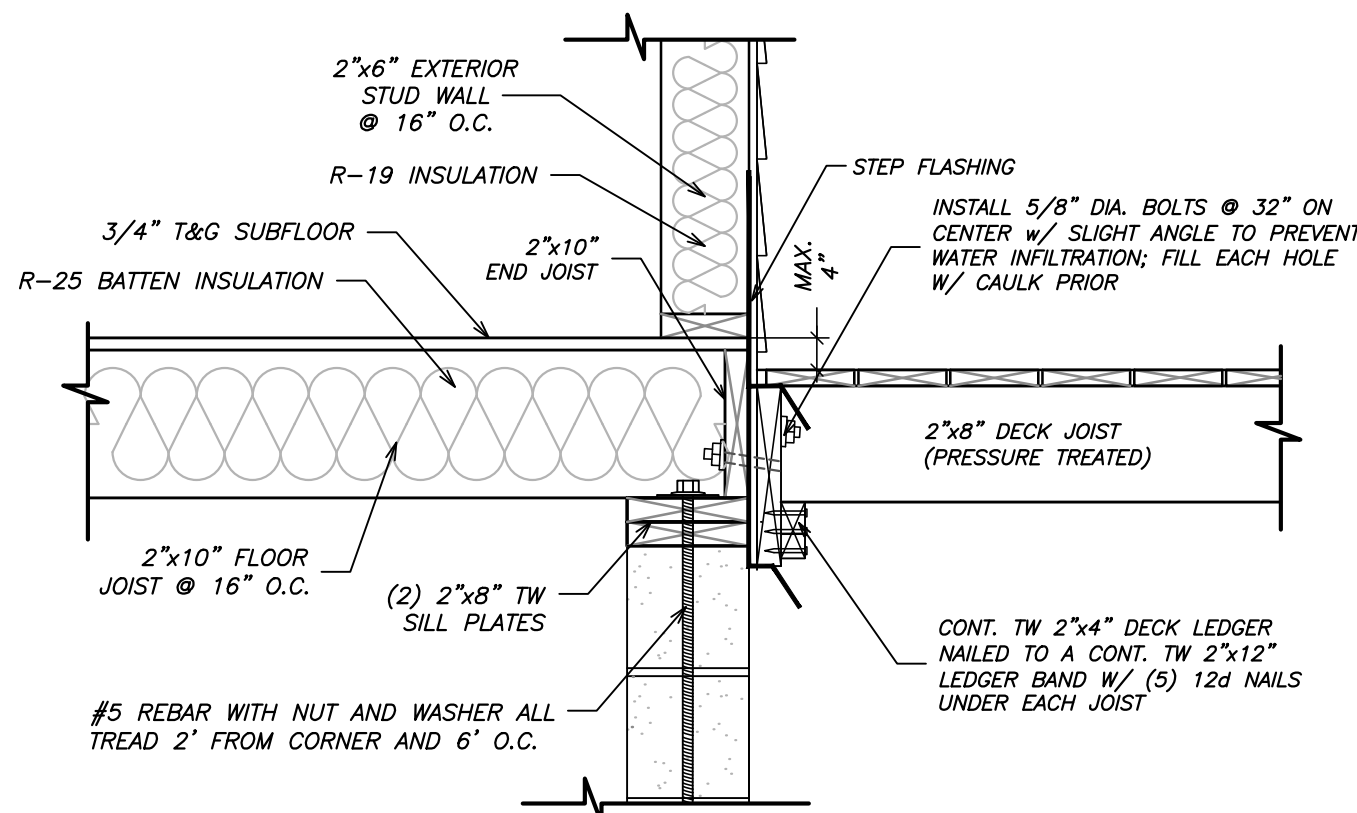
- BLOCKING DETAIL TO BE USED FOR HORIZONTAL and VERTICAL ORIENTATION OF APA RATED SHEATHING.
- BLOCK ALL SEAMS WHERE STUD SPACING IS GREATER THAN 8".
- NAIL HEADS TO BE SET FLUSH WITH FACE OF SHEATHING.

CONNECTION DETAIL B
BLOCKING DETAIL
SCALE: 1" = 1'-0"



SEE IBC 2018 EDITION TABLE 2306.2.1(1)

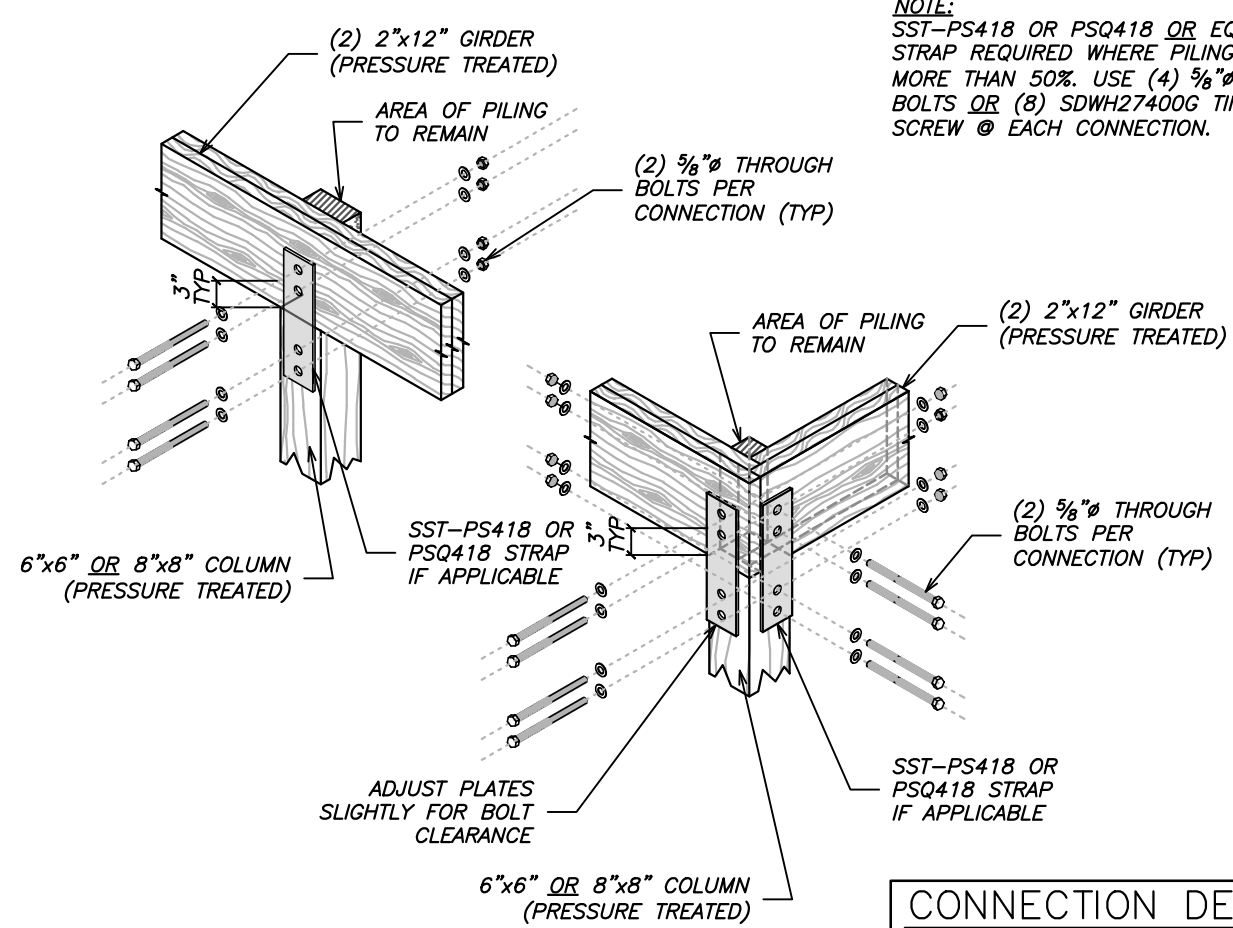
CONNECTION DETAIL C
SHEATHING TO DOUBLE PLATE NAILING PATTERN
SCALE: 1" = 1'-0"



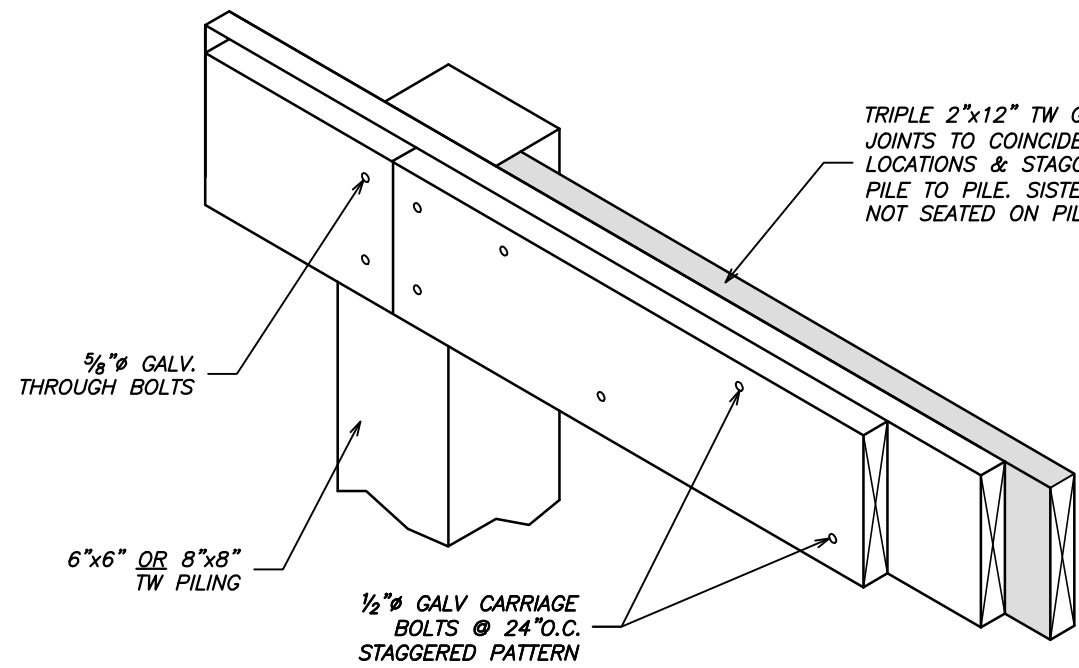
FLASHING NOTES:

- MINIMUM #30 TAR PAPER TO BE INSTALLED BEHIND FLASHING. TAR PAPER SHALL BE FULL DEPTH OF FLASHING.
- FLASHING SHALL EXTEND UNDERNEATH SIDING ABOVE DECK A MIN. 2"
- FLASHING SHALL BE BETWEEN BANDS FOR FULL DEPTH AND KICK OUT UNDERNEATH MIN. 1 1/2"

CONNECTION DETAIL D
DECK TO HOUSE FLASHING & WATERPROOFING
SCALE: 1" = 1'-0"

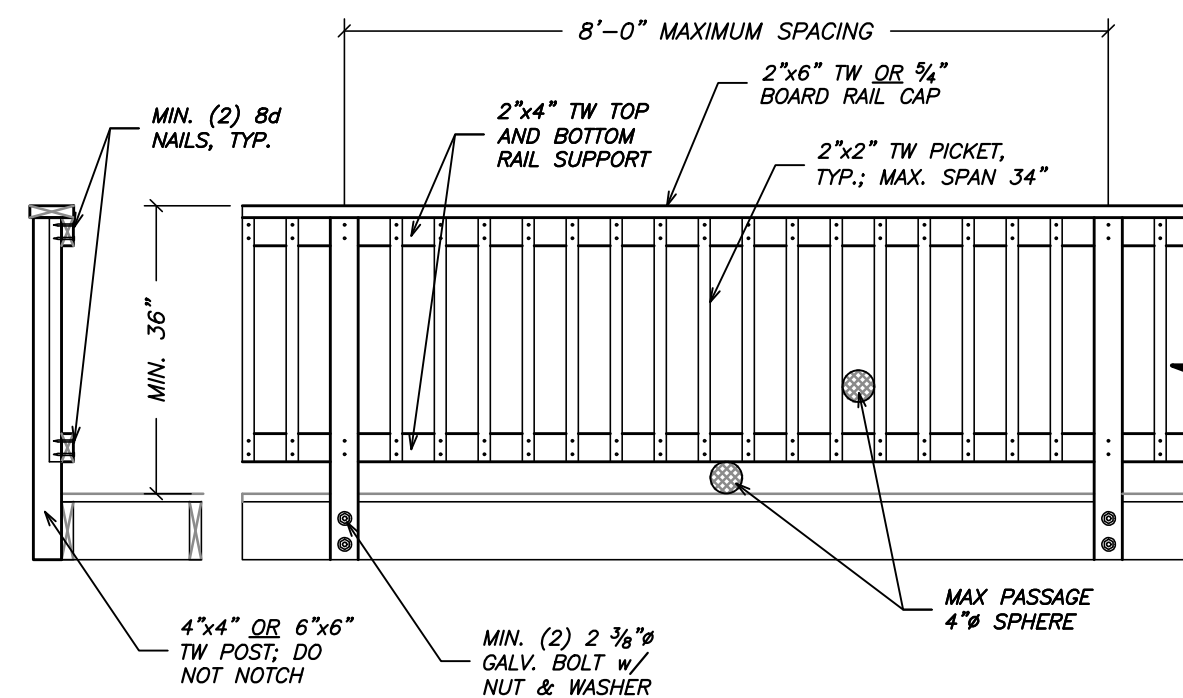


CONNECTION DETAIL E
GIRDER-PILING CONNECTION
SCALE: 1/2" = 1'-0"



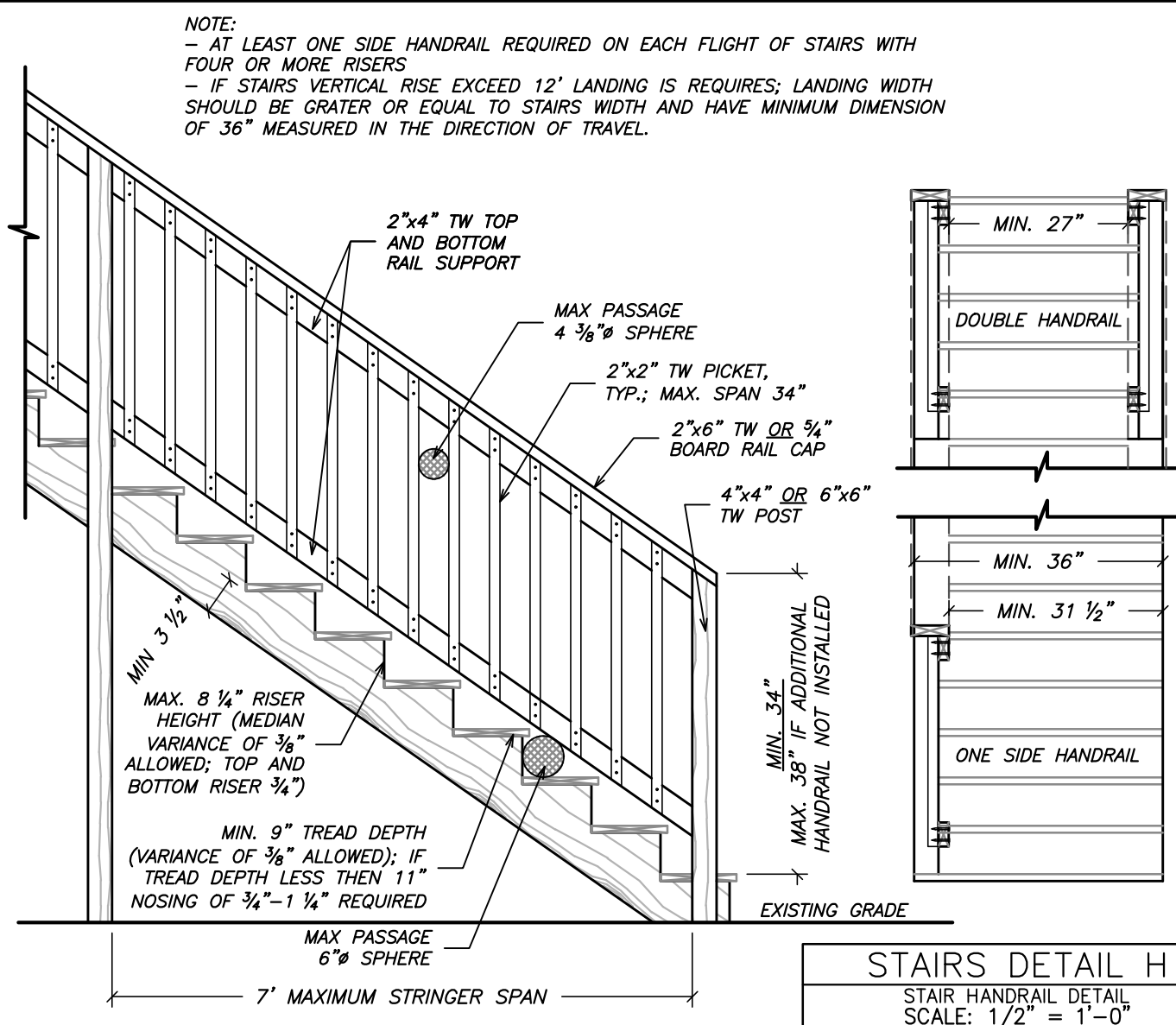
OPTIONAL TRIPLE GIRDER CONNECTION:
TRIPLE 2x12 TW GIRDER JOINTS TO COINCIDE W/PILE LOCATIONS & SCREWED FROM PILE TO PILE. SISTERED 2x12 NOT SEATED ON PILING; USE (2) SST-SDWS22x4 @ 12" O.C. (MIN. 2" SCREW CLARENCE)

CONNECTION DETAIL F
TRIPLE GIRDER BOLTING
NOT TO SCALE

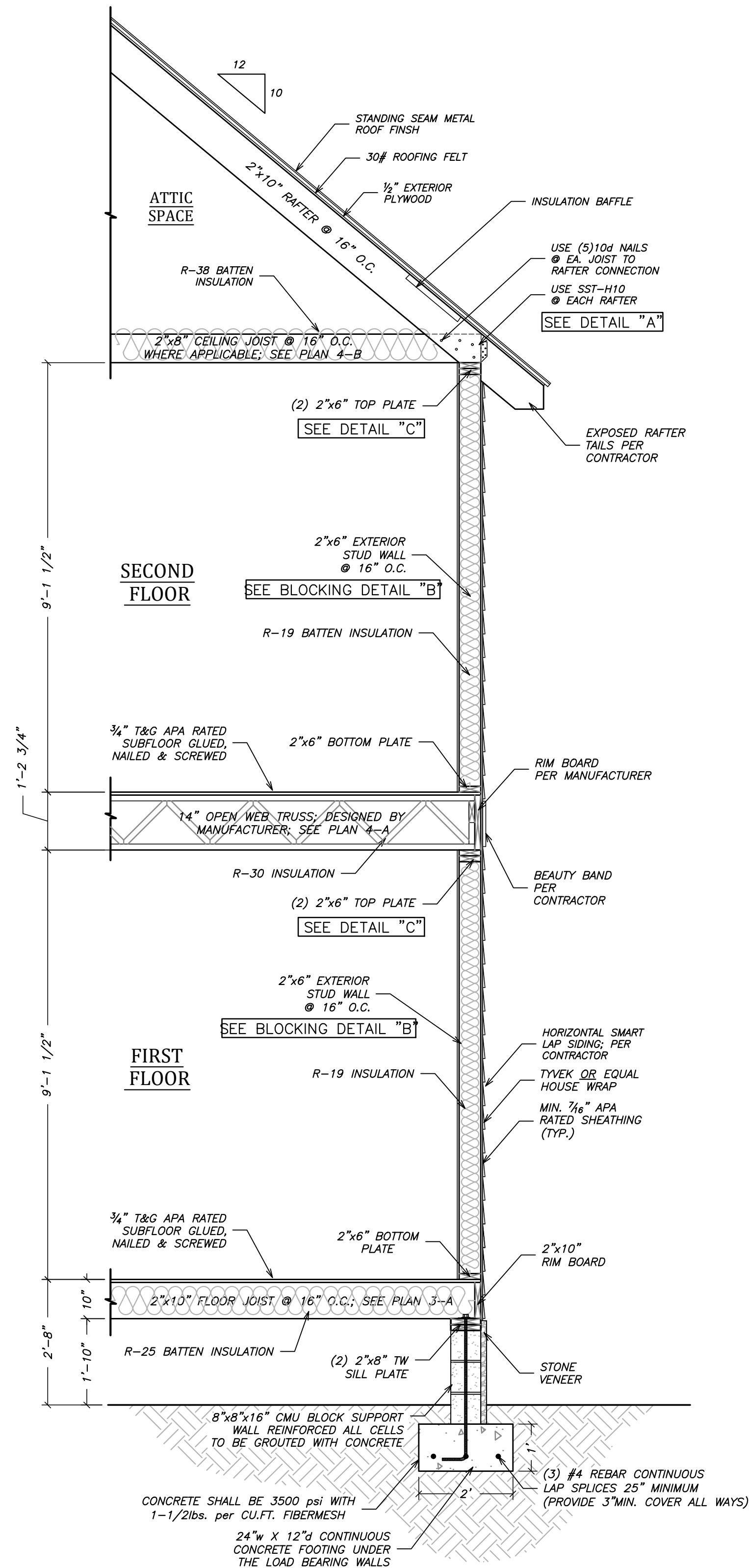


NOTE:
- GUARDRAIL REQUIRED ON DECKS LOCATED MORE THEN 30" MEASURED VERTICALLY TO THE TOP OF FLOOR OR GRADE

CONNECTION DETAIL G
GUARDRAIL DETAIL
SCALE: 1/2" = 1'-0"



STAIRS DETAIL H
STAIR HANDRAIL DETAIL
SCALE: 1/2" = 1'-0"



TYPICAL WALL SECTION 6-A
SCALE: 1/2" = 1'-0"

STRUCTURAL NOTES:

- ENGINEER'S SEAL APPLIES ONLY TO STRUCTURAL SYSTEMS AND COMPONENTS NOTED INCLUDING WALL, BEAMS & HEADERS, COLUMNS, CANTILEVERS, OFFSET LOAD BEARING WALLS, PIER AND GIRDER SYSTEMS, AND FOUNDATION UNLESS OTHERWISE SPECIFIED. ENGINEER'S SEAL DOES NOT CERTIFY DIMENSIONAL ACCURACY OR ARCHITECTURAL LAYOUT.
- ALL CONSTRUCTION TO CONFORM TO THE LATEST REQUIREMENTS NOTED OF VA STATE RESIDENTIAL CODE (2018 EDITION) WITH SPECIAL CONSIDERATION GIVEN TO CHAPTER 45 REGARDING HIGH WIND ZONES AND CHAPTER 46 REGARDING COASTAL AND FLOOD PLAIN CONSTRUCTION STANDARDS PLUS ALL LOCAL CODES AND REGULATIONS.
- ALL FRAMING LUMBER TO BE SPP #2 (Fb=875psi) UNLESS OTHERWISE SPECIFIED. GIRDERS TO BE SYP #2 TREATED IN ACCORDANCE WITH AWPA U1.
- PRESUMPTIVE SOIL BEARING CAPACITY ASSUMED TO BE 1 ton/sf AS PER NC STATE RESIDENTIAL CODE (2018 EDITION) - TABLE 401.4.1 FOR LOOSE SAND. PRESUMPTIVE PILE BEARING CAPACITY IS ASSUMED TO BE 1/2 ton/sf OF EMBEDMENT. NOTIFY ENGINEER IN THE EVENT THAT ACTUAL SOIL CONDITIONS DIFFER.
- BEAMS & HEADERS TO BE SUPPORTED AT ENDS AS FOLLOWS: (1) 2x4" or (1) 2x6" STUD COLUMN FOR 6'-0" MAX. BEAM SPAN; (2) STUDS FOR BEAM SPAN > 6'-0" UNLESS OTHERWISE SPECIFIED. ALL BEARING HEADERS & HEADERS OVER 6'-0" LONG TO BE (2) 2x10" or (3) 2x12" UNLESS OTHERWISE SPECIFIED. PROVIDE SOLID BEARING FROM BEAM TO FOUNDATION.
- ALL RAFTERS TO BE SECURED AT WALL PLATE WITH SST-H10 AND AT RIDGE WITH 2x6" COLLAR TIES WITH (4) 12d NAILS PER CONNECTION. SEE DETAIL FOR FURTHER INSTALLATION DETAIL. ALL HIP AND VALLEYS TO BE SECURED TO WALL PLATE AND AT ALL POSTS WITH SST-CS-16.
- STRUCTURAL SHEATHING TO BE MIN. 7/16" APA-RATED SHEATHING ATTACHED TO STUDS w/ 8d NAILS @ 3" CENTERS AT PANEL EDGES AND AT 6" CENTERS AT INTERMEDIATE SUPPORTS. ALL PANEL EDGES TO BE SUPPORTED BY BLOCKING. SEE BLOCKING DETAIL FOR FURTHER INSTALLATION DETAILS.
- OPENING ATTACHMENT TO WALL STUDS TO BE DESIGNED BY MANUFACTURER OR OTHERS. OPENING CONFIGURATIONS TO BE VERIFIED FOR INTENDED USE IN HIGH WIND ZONES. OPENINGS IN MULTIPLE CONFIGURATIONS TO BE SELF SUPPORTING. MULLIONS TO BE DESIGNED BY MANUFACTURER OR OTHERS. REFER TO 2018 NC STATE RESIDENTIAL BUILDING CODE SECTION R.4502 FOR REQUIRED DESIGN GLAZING PRESSURE. MAXIMUM MEAN ROOF HEIGHT=35'.
- UTILIZE (2) 5/8" DIA. GALVANIZED STEEL BOLTS AT EACH PILING TO GIRDER CONNECTION UNLESS OTHERWISE NOTED. PILING SHOULD NOT BE NOTCHED SO THAT THE CROSS-SECTION IS REDUCED BY 50% UTILIZE 4x10x3/16" GALVANIZED STRAP WITH (4) 5/8" DIA. GALVANIZED STEEL THROUGH BOLTS AT EACH GIRDER TO PILING CONNECTION WHERE PILING NOTCHED MORE THAN 50%.
- ALL FRAMING BELOW BASE FLOOD ELEVATION TO BE TREATED IN ACCORDANCE WITH SECTION R.317 OF THE 2018 NC RESIDENTIAL BUILDING CODE.
- FOR "A" AND "AE" FLOOD ZONE MINIMUM EMBEDMENT TO BE 8' BELOW GRADE FOR "V" AND "VE" FLOOD ZONES MINIMUM EMBEDMENT TO BE 1'6" or (-) 5' MSL WHICHEVER IS LEAST.
- OPEN WEB FLOOR TRUSS SYSTEM TO BE DESIGNED BY MANUFACTURER.

DESIGN LOAD TABLE			
DESIGN LOADS (psf)	LIVE LOAD	DEAD LOAD	DEFLECTION
FLOOR/PRIMARY DWELLING	40	10	1/480
FLOOR (BEDROOMS)	30	10	1/360
ATTIC (WITH STORAGE)	20	10	1/240
ATTIC (NO STORAGE)	10	5	1/240
ROOF	20	10	1/240
CATHERED CEILING	20	15	1/240
EXTERIOR DECKS	50	10	1/360
WIND LOADS	BASED ON 140mph WIND VELOCITY		

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TYPICAL WALL SECTION & DETAILS
for:

Richard Dyer

Property Location:
**Lot 2T, Waverly Phase 1,
Church Neck, Northampton County, Virginia**

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PROJECT CONTACTS:		CHECKED	R. HOUSE 8/17/2021
		ENGINEER	R. HOUSE 8/17/2021
		SUBMITTED	R. HOUSE
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