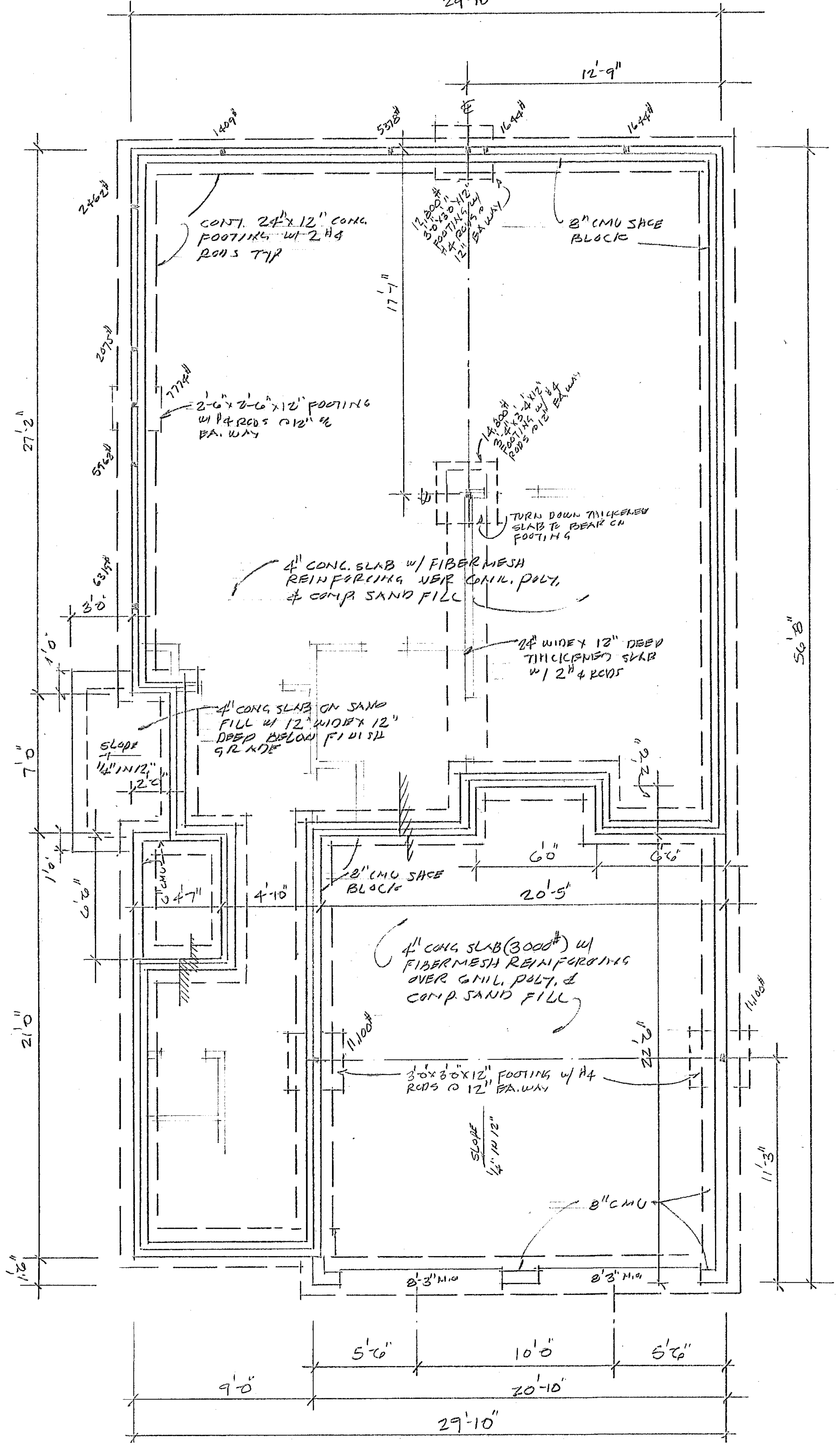

FOUNDATION PLAN 1/4"=1'-0"

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DATE: 3-4-19

DESIGN BY: CWJ

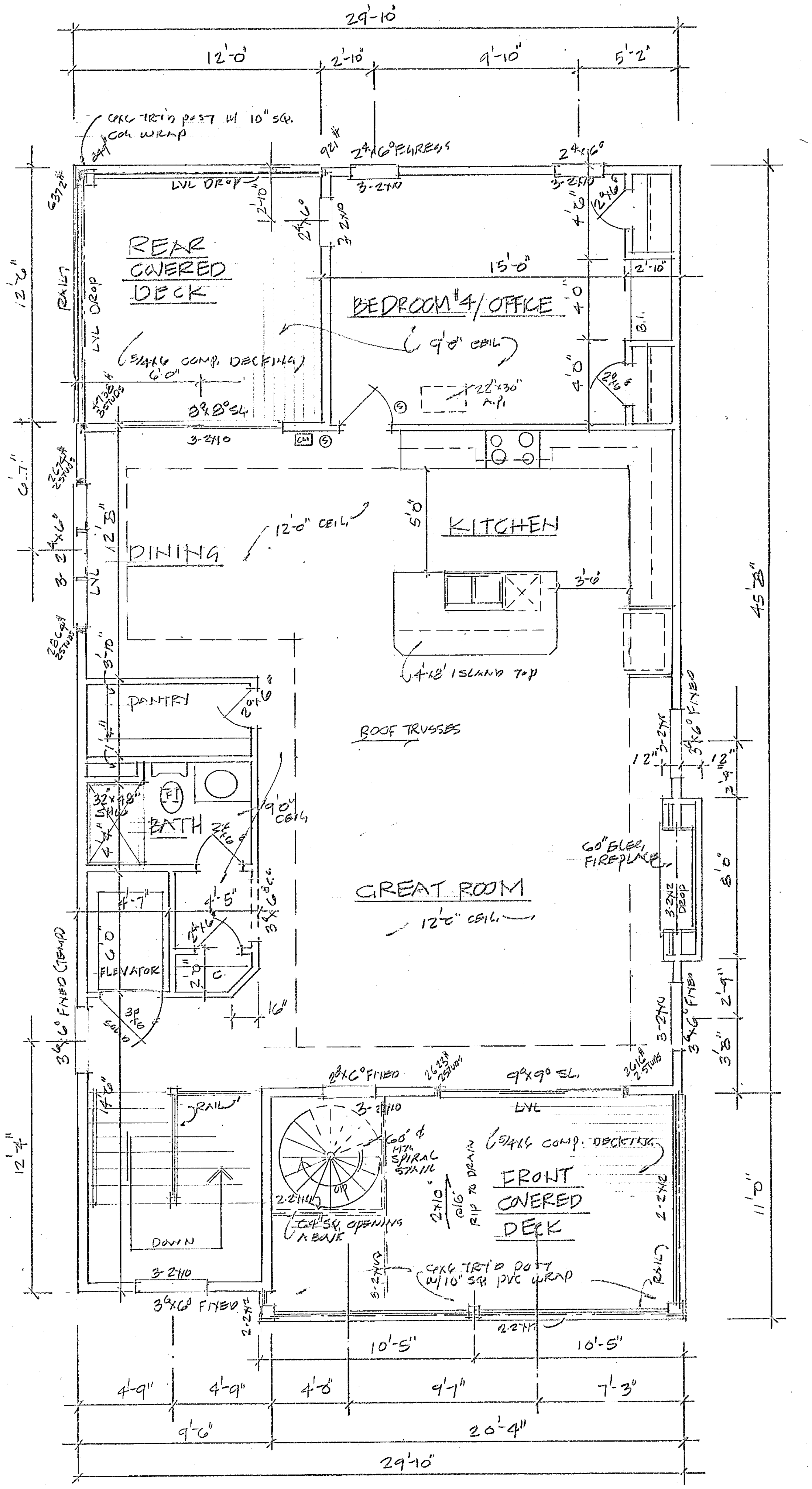
DRAWN BY: CWJ

Three Story Beach Home
J F Schoch Builder

REVISIONS

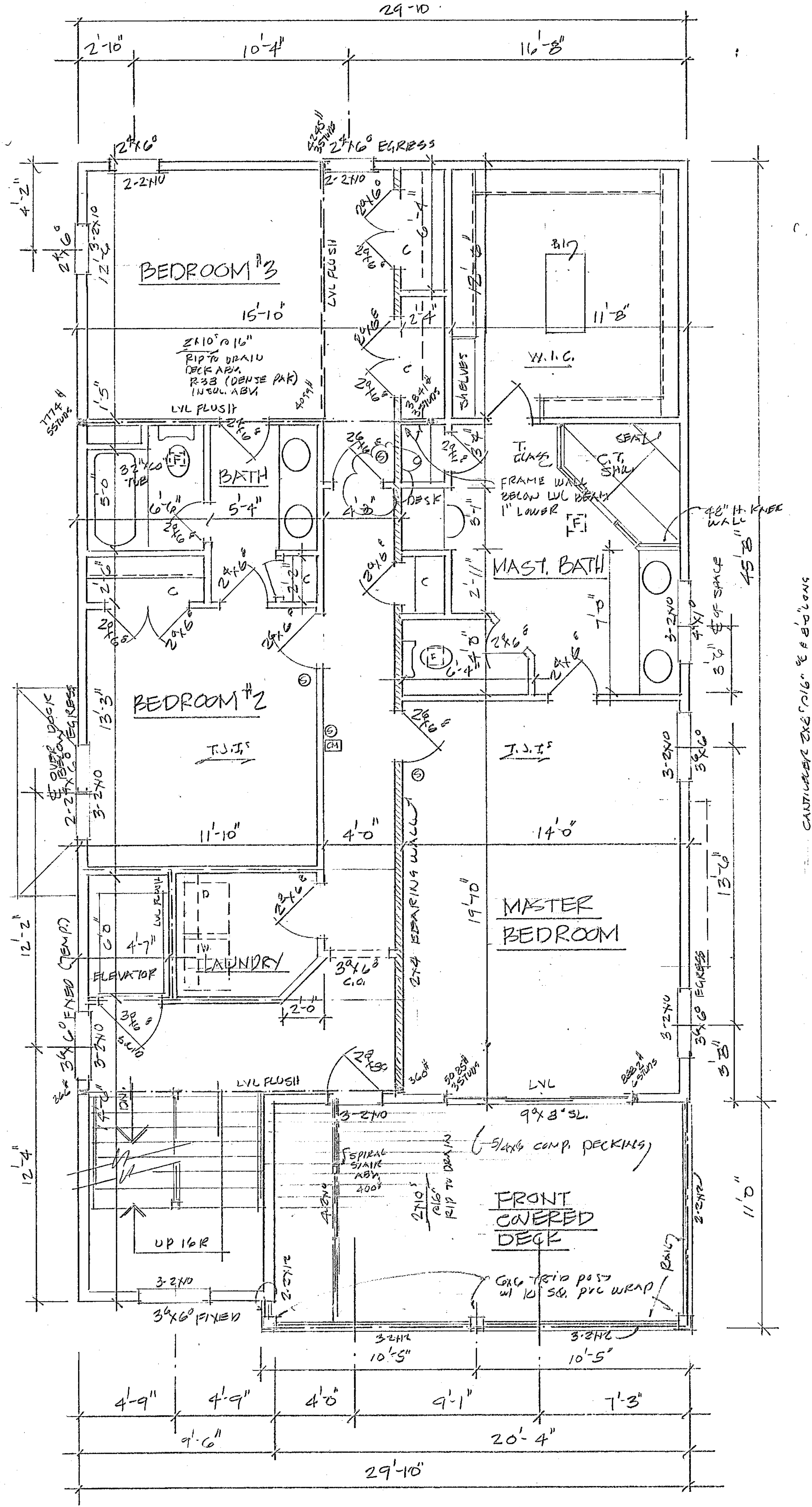
JOB NO. 1907

SHEET NO. 1/6



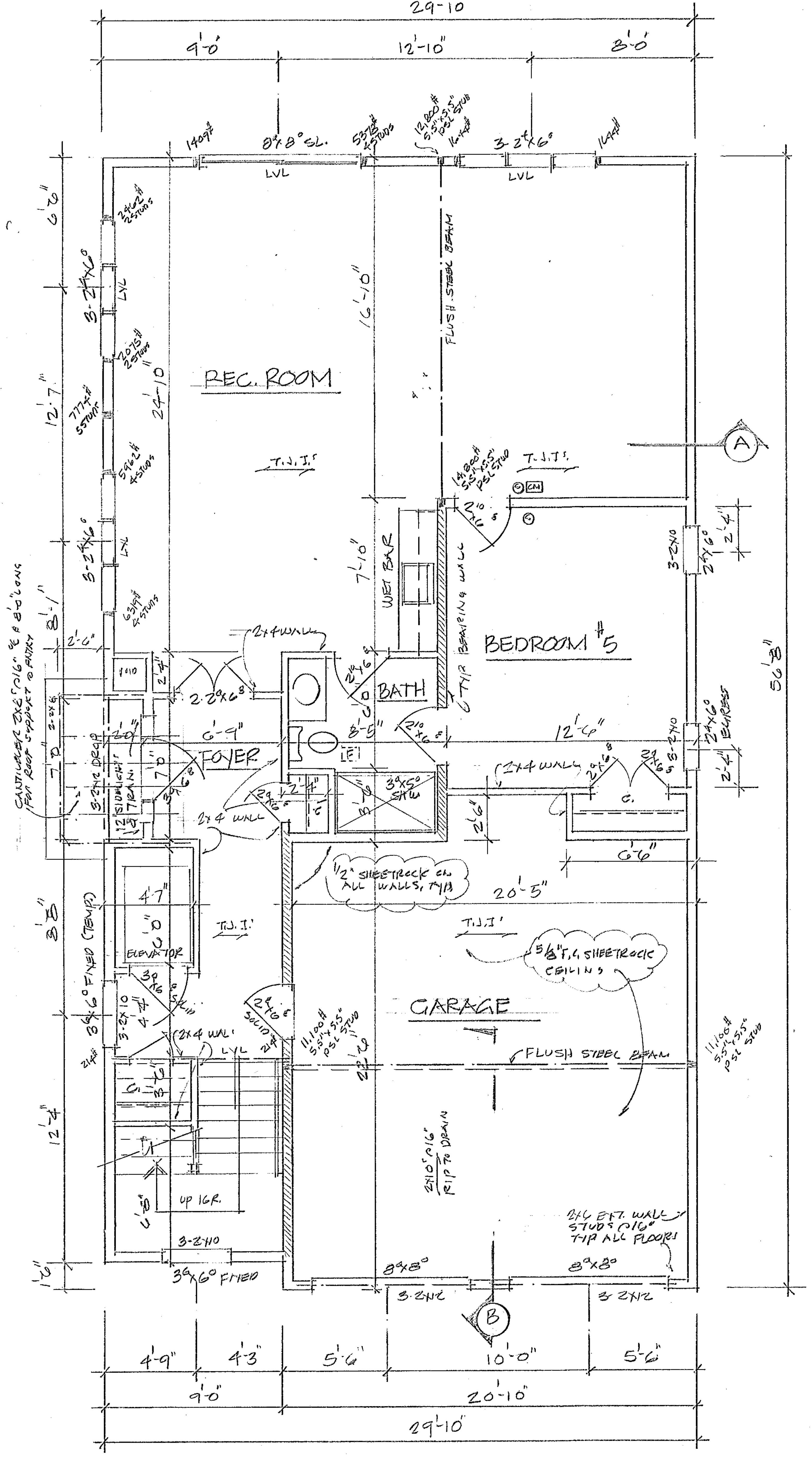
THIRD FLOOR PLAN 1/4"=1'-0"

12'-0" CEILINGS @ G.R./DINING & KIT./9'-0" CEILINGS @ BR.#4
SET WINDOWS @ 8'-0" TYP



SECOND FLOOR PLAN 1/4"=1'-0"

9'-0" CEILINGS - SET WINDOWS @ 8'-0" TYP.



FIRST FLOOR PLAN 1/4"=1'-0"

9'-0" CEILINGS - SET WINDOWS @ 8'-0" TYP.

NOTE:
PROVIDE 5/8" F.C. SHEETROCK @ WALLS & CEILING @ ELEVATOR SHAFT.

FIRST FLOOR	1190 SQ. FT.
SECOND FLOOR	1458 SQ. FT.
THIRD FLOOR	1308 SQ. FT.
DECKS	596 SQ. FT.
GARAGE	475 SQ. FT.

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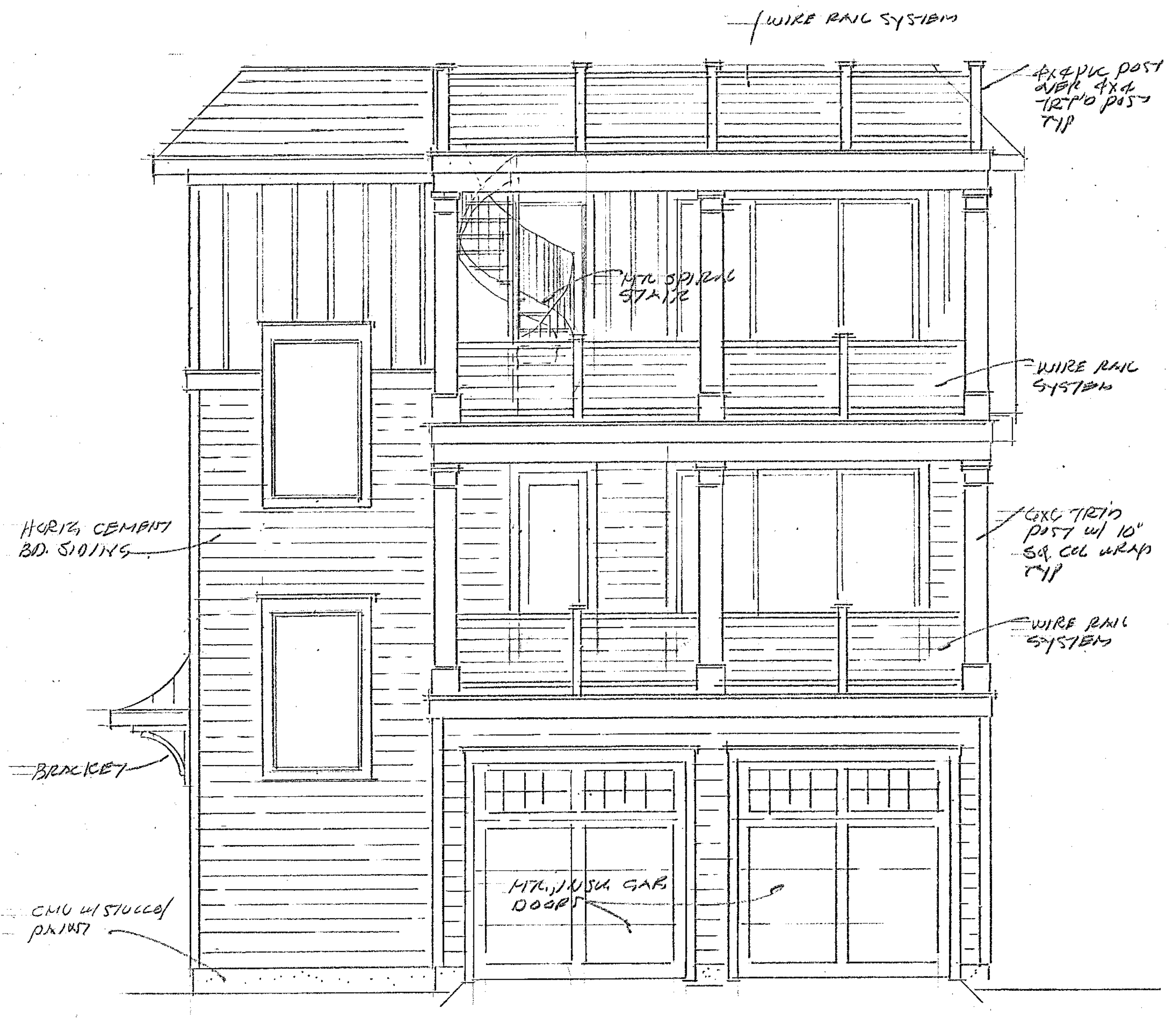
Three Story Beach Home
J F Schoch Builder

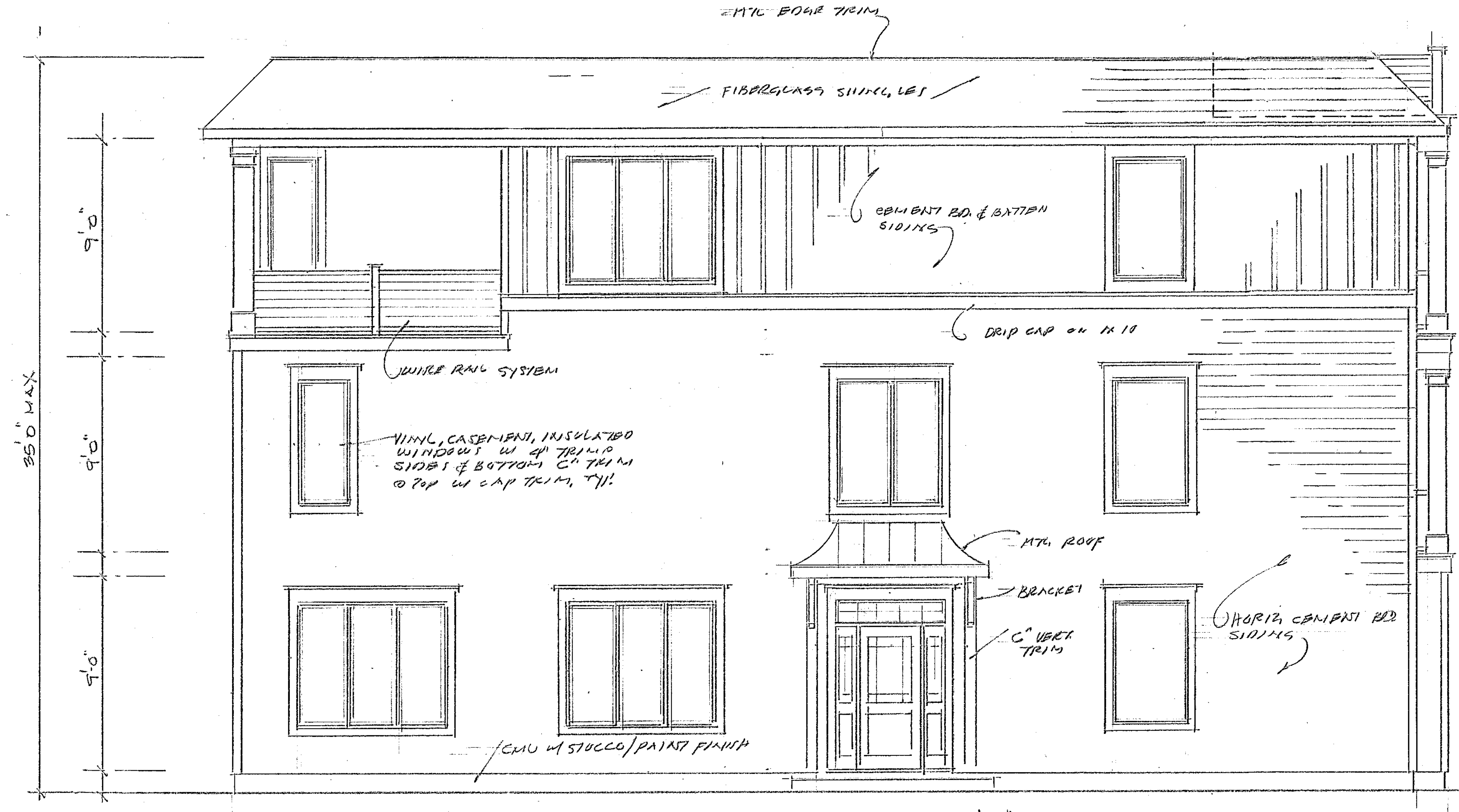
REVISIONS
4-3-19
5-25-21

JOB NO. 1907

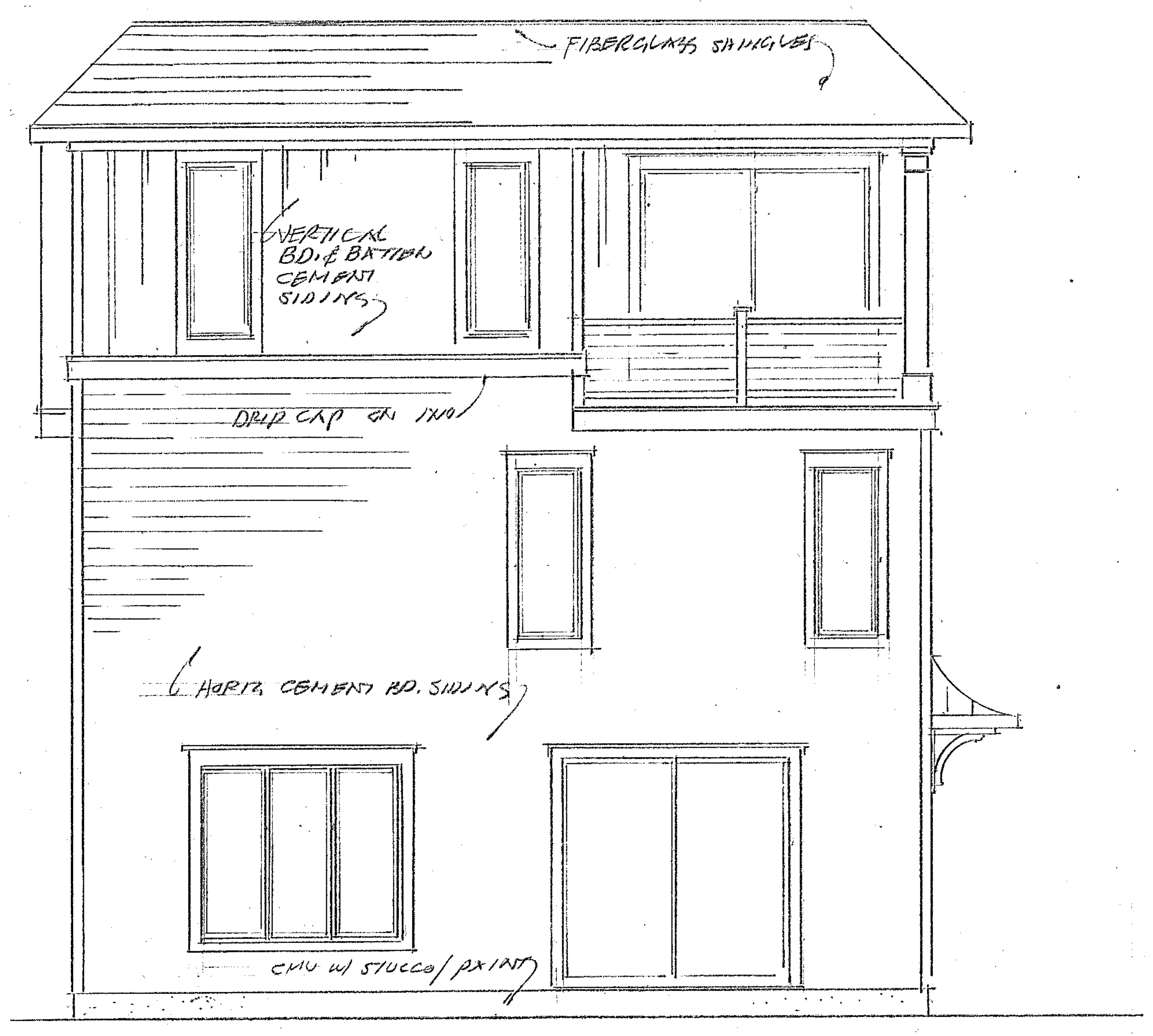
SHEET NO. 2/6



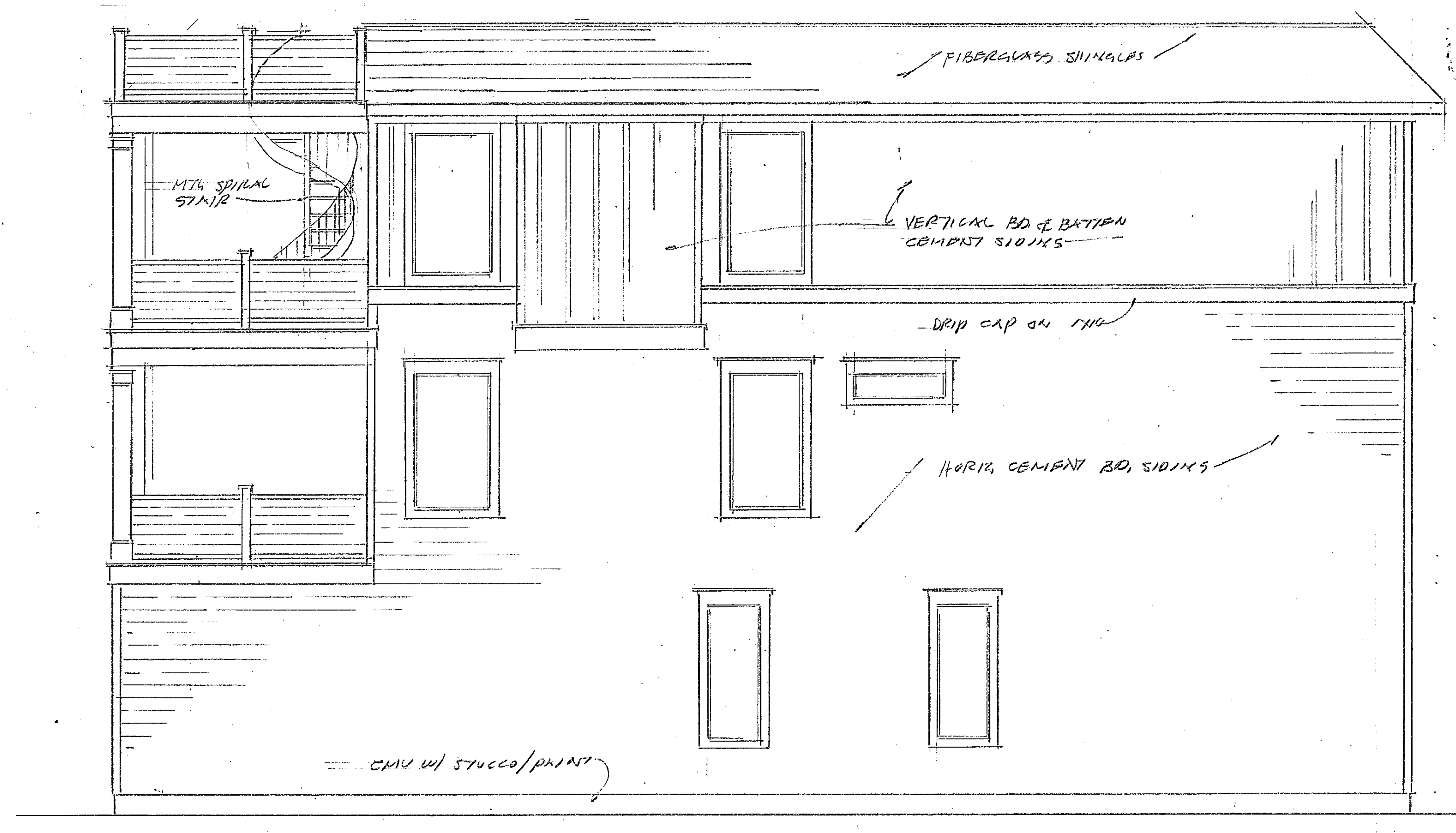
FRONT ELEVATION 1/4"-1'-0"



LEFT SIDE ELEVATION 1/4"-1'-0"



REAR ELEVATION 1/4"=1'-0"



RIGHT SIDE ELEVATION 1/4"=1'-0"

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DRAWN BY: CWJ

Three Story Beach Home

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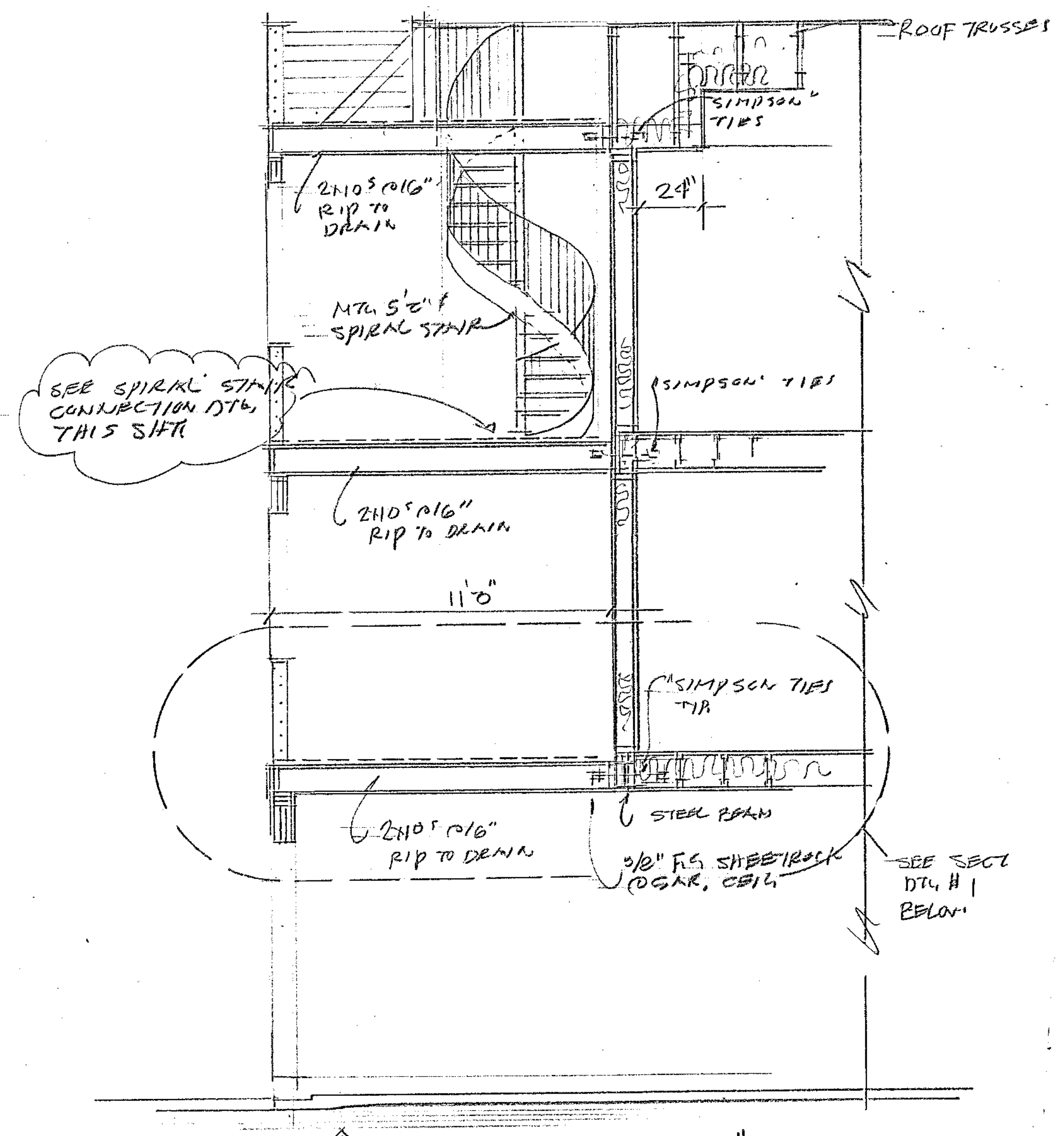
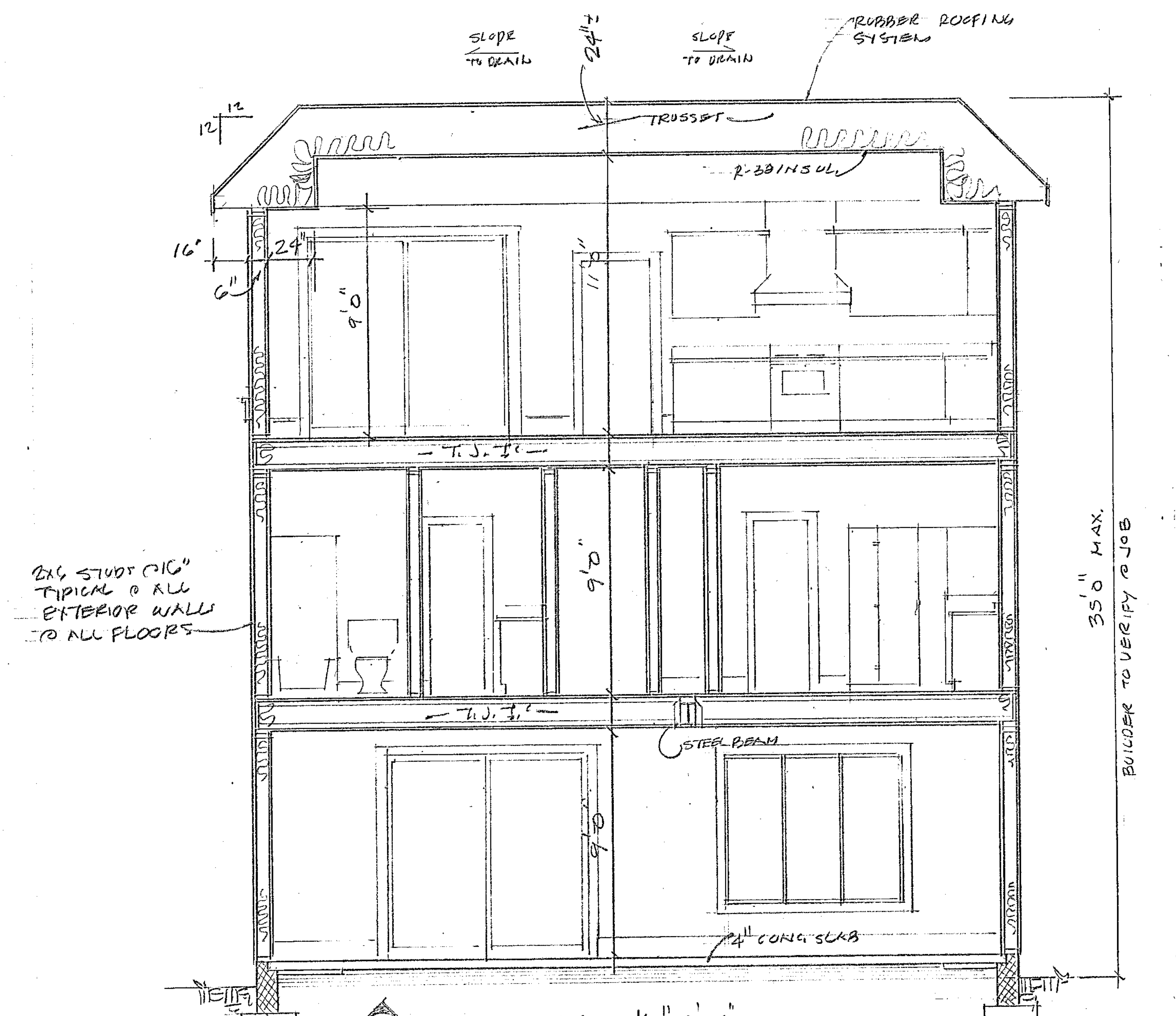
REVISIONS

JOB NO. 1907

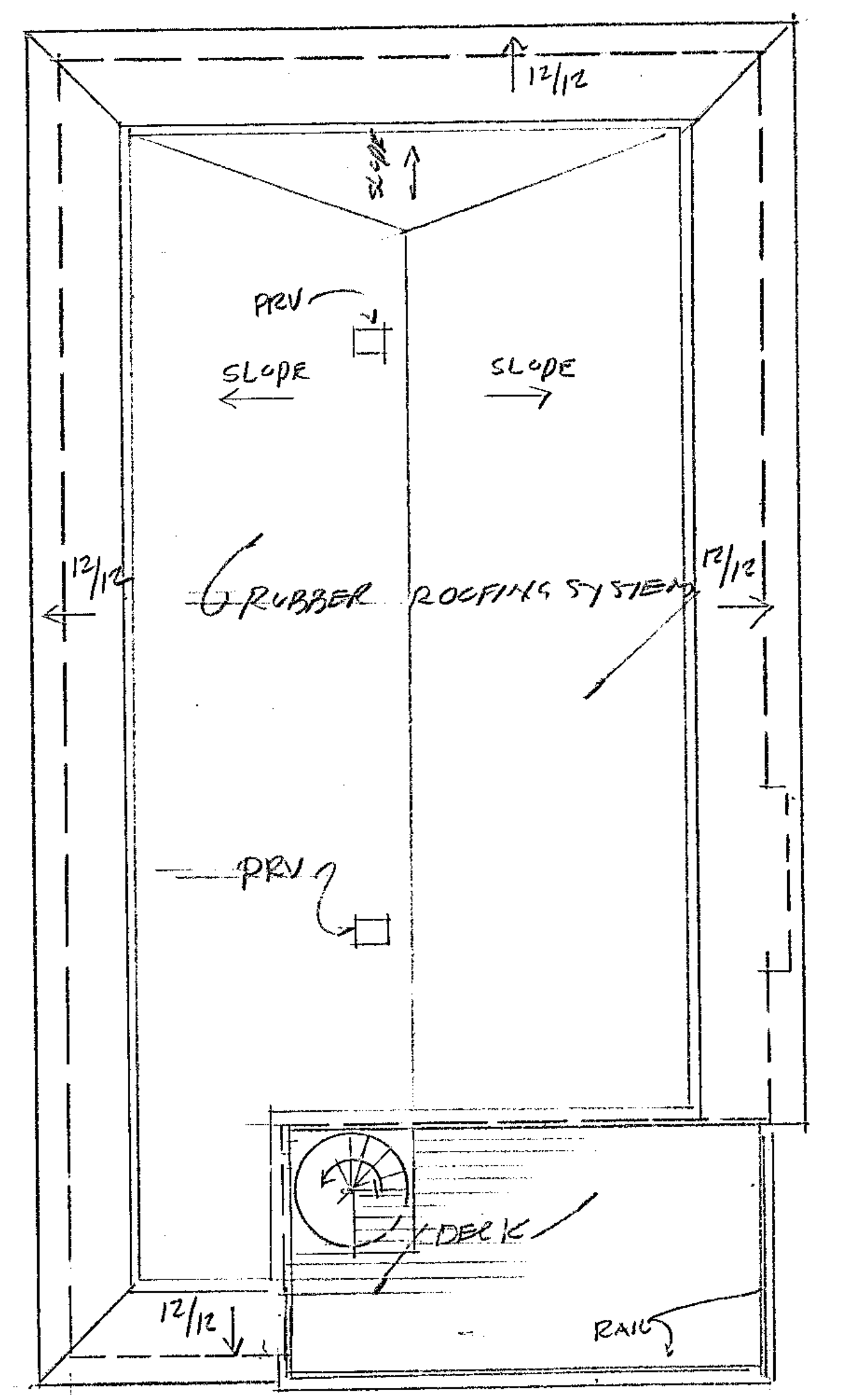
SHEET NO. 3/6



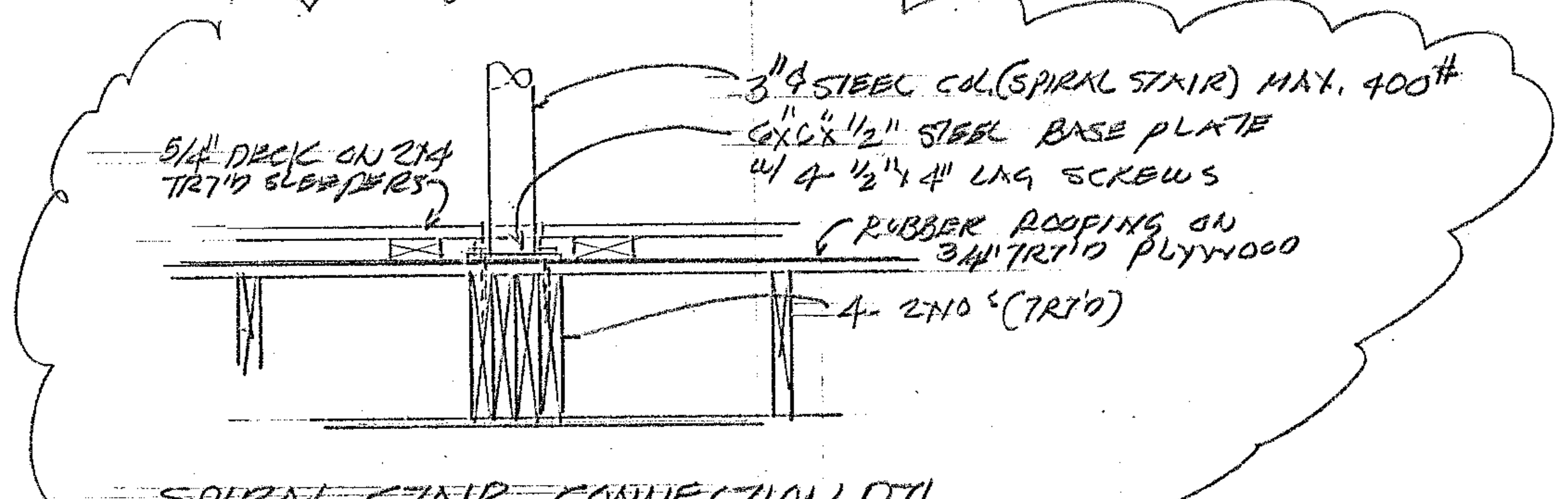
B SECTION 1/4"=1'-0"



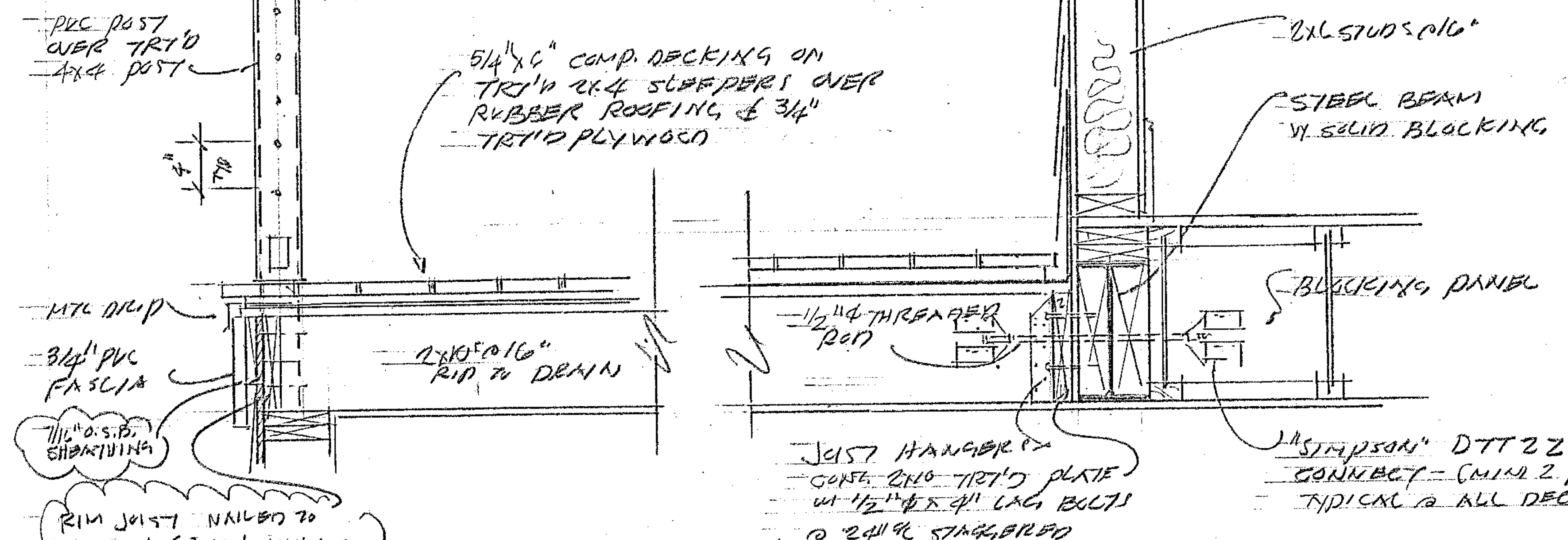
A SECTION 1/4"=1'-0"



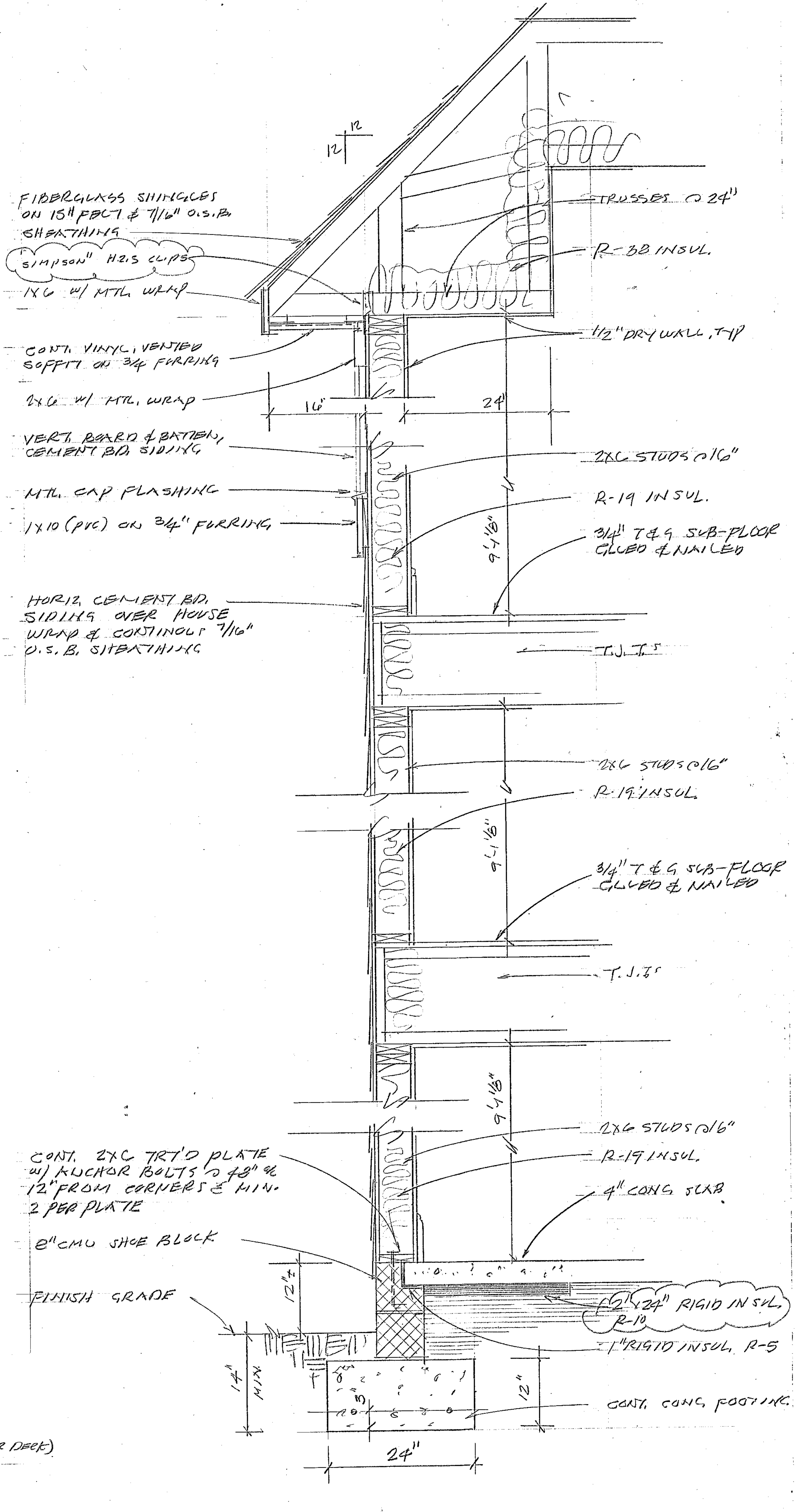
ROOF PLAN 1/8"=1'-0"



SPIRAL STAIR CONNECTION DTL.
1"=1'-0"



SECTION DETAIL #1 @ DECK 1"=1'-0"



TYPICAL WALL SECTION 1"=1'-0"

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DATE: 3-4-19
DESIGN BY: CWJ
DRAWN BY: CWJ

Three Story Beach Home
J F Schoch Builder

REVISIONS
4-3-19
4-18-19

JOB NO. 1907

SHEET NO. 4/6

GENERAL NOTES

1. Construction materials and installation shall comply with the 2015 edition of The International Residential Code and any applicable regulations of the City.
2. This structure is designed for wind exposure B, 130 MPH.
3. Buildings shall be use group R5 and type of construction shall be 5B.
4. Buildings shall be founded on undisturbed soil having a minimum bearing capacity of 1,500 psf. Soil conditions are the responsibility of the contractor.
5. Roof live load 20 # per sq. ft. / dead load 10 # per sq. ft.
6. Floor live load 40 # per sq. ft. / dead load 10# per sq. ft.
   30# per sq. ft. / dead load 10# per sq. ft.. (At sleeping areas.)
7. Attic live load 20# per sq. ft. / dead load 10 # per sq. ft.
8. See site plan for finish floor elevation. Min. 12" above flood plain.
9. All bedroom windows shall meet the egress code requirements as set forth in the 2015 IRC. With the window open, there shall be a net free area of 5.7 sq. ft. for both first and second floor windows. Clear opening height shall be 24" and clear opening width shall be 20". All egress window sills shall not be more than 44" above the floor. Window sills in dwelling units, where the opening of an operable window is located more than 72" above the finished grade or surface below, the lowest part of the clear opening shall be a minimum of 24" above the finished floor of the room in which the window is located. Glazing between the floor and 24" shall be fixed or have openings through which a 4" diameter sphere cannot pass.
10. All windows shall be insulated, having a U value of minimum .35
11. Dimensions shown on floor plans are taken from outside face of sheathing to inside face of studs.
12. Contractor shall verify and check all notes and dimensions shown on plans before starting construction.
13. All concrete footings shall be 3,000 psi placed in virgin soil.
14. See tables R602.7(1) and R602.7(2) for allowable interior and exterior header and girder spans. Interior bearing walls for first and second floors are shaded. See plans for locations. These walls shall be constructed, framed and fire blocked as specified for exterior walls.
15. Interior bearing walls for first and second floors are shaded. See plans for locations. These walls shall be constructed, framed and fire blocked as specified for exterior walls.
16. Maximum height of all 2x4 stud walls not to excel 10'-0".
17. All stud walls to have a min. 1 ½" dbl. top plate and a single 1 ½" bottom plate. Stud walls bearing on concrete slabs to have treated bottom plates.
18. All floor, ceiling, studs and rafter material to be #2 Southern Pine or better.
19. Provide dbl. joist below all parallel walls.
20. All exterior plywood sheathing to be laid vertically with no horizontal joints within 12" of floor or ceiling except at rafter bearing and at first floor of slab construction. Sheathing at gable ends to overlap top plate at ceiling line a min. of 12".
21. This structure shall be fully sheathed with ½" plywood and will be fastened to studs as per table R602.3(1).
22. Framing at braced wall lines. A load path for lateral forces shall be provided between floor framing and braced wall panels located above or below a floor, as specified in Section R602.10 Where joist are perpendicular to the braced wall lines above, blocking shall be provided under and in line with the braced wall panels. Where joist are perpendicular to braced wall lines below, blocking shall be provided over and in line with the braced wall panels. Where joist are parallel to braced wall lines above or below, a rim joist or other parallel framing member shall be provided at the wall to permit fastening per Table R602.3(1).
23. The end of wood joist, beams or girders shall have not less than 1 ½" of bearing and not less than 3" of bearing on masonry, except where supported by a 1 x 4 ribbon strip and nailed to an adjacent stud or by an approved metal hanger.
24. Fasteners for pressure treated wood or fire treated wood shall be galvanized or stainless steel.
25. Anchor bolts at slab construction shall be ½" dia. At 6'-0" o/c with a min. of two bolts per plate section with one bolt not more than 12" from corner or less than 7 bolt diameters from end of plate section. Anchor bolts shall extend into masonry a minimum of 7".
26. CMU piers at foundations used to support girders shall not be greater in height than four times their least dimension. Unless they are filled solid with type M, S or N mortar. Hollow piers shall be capped with a 4" solid CMU or filled solid with concrete or mortar.
27. Fire blocking shall be provided to cut off concealed draft openings both vertical and horizontal and form an effective fire barrier between stories, between top story and the roof space. Fire blocking shall be provided in wood frame construction in the following locations:
    a. Concealed spaces of a stud wall, including furred spaces.
    b. Vertically at ceiling and floor levels and horizontally at intervals not exceeding 10'-0".
    c. Dropped ceilings and soffits.
    d. Stair stringers at top and bottom of the run.
    e. Around vents, pipes and ducts at ceiling and floor levels with approved materials.
    f. Cornices of a two family dwelling at a line of dwelling unit separation.
28. When there is unusable space both above and below the concealed space of a floor/ceiling assembly, draft stops shall be installed so that the area concealed does not exceed 1,000 sq. ft.
29. All openings in exterior walls shall have a minimum 25# psf. Positive and minimum 25# psf. negative design rating. Vehicular access doors shall be tested in accordance with either ASTM E 330 or ANSI/ DASMA 108, and shall meet the acceptance criteria of ANSI/DASMA 108.
30. Roof areas where pitches are from 4/12 to 2/12 shall have two layers of 15# felt. Asphalt shingles shall be installed in accordance with Section R905.2.6.
31. Floor and roof truss plans and details to be provided by truss supplier.
32. Any wall penetrations to mechanical equipment in garage shall be fire stopped as per code.
33. If garage finish floor is below flood plain, flood vents shall be installed as per manufacturer's instructions.
34. Garage ceilings to be finished with one layer of 5/8" Type X sheetrock. Garage walls to be finished with minimum ½" reg. sheetrock.
35. Heating, cooling, electrical and plumbing shall be designed and installed to comply with all applicable codes.
36. All showers and tubs with showers to have non-absorbent wall surfaces. This non-absorbent surface shall extend to a height of not less than 6'-0" above the floor.
37. Provide lighting at all interior and exterior stairs and exterior doors. Where lighting outlets are installed in interior stairways, there shall be a wall switch at each floor level to control the lighting outlet where the stairway has six or more risers. The illumination of exterior stairways shall be controlled from inside the dwelling unit.
38. All exterior doors from heated spaces to be insulated.
39. Smoke detectors shall be installed in and adjacent to all sleeping areas as per code and all wired together. Provide battery backup.
40. Provide a minimum of 3'x3' landing outside of all exterior doors where there are more than three risers required. Landing not required in garage area.
41. Perimeter insulation at concrete slabs to be a minimum R-10 and 24" wide.
42. Weep-holes shall be provided in outside width of masonry walls at a maximum spacing of 33" on center. Weep-holes shall not be less than 3/16" in diameter. Weep-holes shall be located immediately above the flashing.
43. All metal, pre-fabricated gas fireplaces shall be installed as per manufacturer's instructions.
44. All wood used in open decks shall be salt treated.
45. An approved carbon monoxide alarm shall be installed outside of each separate sleeping area in the immediate vicinity of the bedrooms.
46. A fire extinguisher having a rating of 2-A: 10-B: C or an approved equivalent type of fire extinguisher shall be installed in the kitchen area.
47. Access panels to the attic through the ceiling shall be insulated same as the ceiling and have weather stripping at all edges.
48. Access panels to the attic through the walls shall be insulated same as the wall and have weather stripping at all edges.
49. All roof shingles used in a wind zone of 110 mph or greater are required to be classified using ASTM D3161 CLASS F or ASTM D 7158 CLASS G or H. R905.2.4.1.
50. All rafter uplift connectors must be installed per manufacturer installation instructions.
51. All ducts, air handlers, filter boxes and building cavities used as ducts shall be sealed. Joints and seams shall comply with Section M1601.4.1 of the IRC. Verification of compliance with this section shall be in accordance with either Section N1103.2.2.1 or Section N1103.2.2.2. Required thermo envelope must be maintained including all walls, floors, knee walls, ceilings, access / hatches and required fenestration U-factors. N1102.1. Minimum U-factor or 0.35.

TABLE R602.3(1)
FASTENING SCHEDULE

ITEM	DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER[a, b, c]	SPACING AND LOCATION
		Roof	
1	Blocking between ceiling joists or rafters to top plate	4-8d box (2½" × 0.113") or 3-8d common (2½" × 0.131"); or 3-10d box (3" × 0.128"); or 3-3" × 0.131" nails	Toe nail
2	Ceiling joists to top plate	4-8d box (2½" × 0.113"); or 3-8d common (2½" × 0.131"); or 3-10d box (3" × 0.128"); or 3-3" × 0.131" nails	Per joist, toe nail
3	Ceiling joist not attached to parallel rafter, laps over partitions [see Sections R802.3.1, R802.3.2 and Table R802.5.1(9)]	4-10d box (3" × 0.128"); or 3-16d common (3½" × 0.162"); or 4-3" × 0.131" nails	Face nail
4	Ceiling joist attached to parallel rafter (heel joint) [see Sections R802.3.1 and R802.3.2 and Table R802.5.1(9)]	Table R802.5.2	Face nail
5	Collar tie to rafter, face nail or 1¼" × 20 ga. ridge strap to rafter	4-10d box (3" × 0.128"); or 3-10d common (3" × 0.148"); or 4-3" × 0.131" nails	Face nail each rafter
6	Rafter or roof truss to plate	3-16d box nails (3½" × 0.135"); or 3-10d common nails (3" × 0.148"); or 4-10d box (3" × 0.128"); or 4-3" × 0.131" nails	2 toe nails on one side and 1 toe nail on opposite side of each rafter or truss[i]
7	Roof rafters to ridge, valley or hip rafters or roof rafter to minimum 2" ridge beam	4-16d (3½" × 0.135"); or 3-10d common (3½" × 0.148"); or 4-10d box (3" × 0.128"); or 4-3" × 0.131" nails	Toe nail
		3-16d box 3½" × 0.135"); or 2-16d common (3½" × 0.162"); or 3-10d box (3" × 0.128"); or 3-3" × 0.131" nails	End nail
		Wall	
8	Stud to stud (not at braced wall panels)	16d common (3½" × 0.162")	24" o.c. face nail
		10d box (3" × 0.128"); or 3" × 0.131" nails	16" o.c. face nail
9	Stud to stud and abutting studs at intersecting wall corners (at braced wall panels)	16d box (3½" × 0.135"); or 3" × 0.131" nails	12" o.c. face nail
		16d common (3½" × 0.162")	16" o.c. face nail
10	Built-up header (2" to 2" header with ½" spacer)	16d common (3½" × 0.162")	16" o.c. each edge face nail
		16d box (3½" × 0.135")	12" o.c. each edge face nail
11	Continuous header to stud	5-8d box (2½" × 0.113"); or 4-8d common (2½" × 0.131"); or 4-10d box (3" × 0.128")	Toe nail
12	Top plate to top plate	16d common (3½" × 0.162")	16" o.c. face nail
		10d box (3" × 0.128"); or 3" × 0.131" nails	12" o.c. face nail
13	Double top plate splice for SDCs A-D_2 with seismic braced wall line spacing < 25'	8-16d common (3½" × 0.162"); or 12-16d box (3½" × 0.135"); or 12-10d box (3" × 0.128"); or 12-3" × 0.131" nails	Face nail on each side of end joint (minimum 24" lap splice length each side of end joint)
	Double top plate splice SDCs D_0, D_1, or D_2; and braced wall line spacing ≥ 25'	12-16d (3½" × 0.135")	
14	Bottom plate to joist, rim joist, band joist or blocking (not at braced wall panels)	16d common (3½" × 0.162")	16" o.c. face nail
		16d box (3½" × 0.135"); or 3" × 0.131" nails	12" o.c. face nail
15	Bottom plate to joist, rim joist, band joist or blocking (at braced wall panel)	3-16d box (3½" × 0.135"); or 2-16d common (3½" × 0.162"); or 4-3" × 0.131" nails	3 each 16" o.c. face nail 2 each 16" o.c. face nail 4 each 16" o.c. face nail
16	Top or bottom plate to stud	4-8d box (2½" × 0.113"); or 3-16d box (3½" × 0.135"); or 4-8d common (2½" × 0.131"); or 4-10d box (3" × 0.128"); or 4-3" × 0.131" nails	Toe nail
		3-16d box (3½" × 0.135"); or 2-16d common (3½" × 0.162"); or 3-10d box (3" × 0.128"); or 3-3" × 0.131" nails	End nail
17	Top plates, laps at corners and intersections	3-10d box (3" × 0.128"); or 2-16d common (3½" × 0.162"); or 3-3" × 0.131" nails	Face nail
18	1" brace to each stud and plate	3-8d box (2½" × 0.113"); or 2-8d common (2½" × 0.131"); or 2-10d box (3" × 0.128"); or 2 staples 1¾"	Face nail
19	1" × 6" sheathing to each bearing	3-8d box (2½" × 0.113"); or 2-8d common (2½" × 0.131"); or 2-10d box (3" × 0.128"); or 2 staples, 1" crown, 16 ga., 1¾" long	Face nail
20	1" × 8" and wider sheathing to each bearing	3-8d box (2½" × 0.113"); or 3-8d common (2½" × 0.131"); or 3-10d box (3" × 0.128"); or 3 staples, 1" crown, 16 ga., 1¾" long	Face nail
		Wider than 1" × 8" 4-8d box (2½" × 0.113"); or 3-8d common (2½" × 0.131"); or 3-10d box (3" × 0.128"); or 4 staples, 1" crown, 16 ga., 1¾" long	
		Floor	
21	Joist to sill, top plate or girder	4-8d box (2½" × 0.113"); or 3-8d common (2½" × 0.131"); or 3-10d box (3" × 0.128"); or 3-3" × 0.131" nails	Toe nail
22	Rim joist, band joist or blocking to sill or top plate (roof applications also)	8d box (2½" × 0.113")	4" o.c. toe nail
		8d common (2½" × 0.131"); or 10d box (3" × 0.128"); or 3" × 0.131" nails	6" o.c. toe nail
23	1" × 6" subfloor or less to each joist	3-8d box (2½" × 0.113"); or 2-8d common (2½" × 0.131"); or 3-10d box (3" × 0.128"); or 2 staples, 1" crown, 16 ga., 1¾" long	Face nail
		Floor	
24	2" subfloor to joist or girder	3-16d box (3½" × 0.135"); or 2-16d common (3½" × 0.162")	Blind and face nail
25	2" planks (plank & beam—floor & roof)	3-16d box (3½" × 0.135"); or 2-16d common (3½" × 0.162")	At each bearing, face nail
26	Band or rim joist to joist	3-16d common (3½" × 0.162") 4-10 box (3" × 0.128"), or 4-3" × 0.131" nails; or 4-3" × 14 ga. staples, 7/16" crown	End nail
27	Built-up girders and beams, 2-inch lumber layers	20d common (4" × 0.192"); or	Nail each layer as follows: 32" o.c. at top and bottom and staggered.
		10d box (3" × 0.128"); or 3" × 0.131" nails	24" o.c. face nail at top and bottom staggered on opposite sides
		And: 2-20d common (4" × 0.192"); or 3-10d box (3" × 0.128"); or 3-3" × 0.131" nails	Face nail at ends and at each splice
28	Ledger strip supporting joists or rafters	4-16d box (3½" × 0.135"); or 3-16d common (3½" × 0.162"); or 4-10d box (3" × 0.128"); or 4-3" × 0.131" nails	At each joist or rafter, face nail
29	Bridging to joist	2-10d (3" × 0.128")	Each end, toe nail

ITEM	DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER[a, b, c]	SPACING OF FASTENERS: Edges (inches)[h]	SPACING OF FASTENERS: Intermediate supports[c, e] (inches)
	Wood structural panels, subfloor, roof and interior wall sheathing to framing and particleboard wall sheathing to framing [see Table R602.3(3) for wood structural panel exterior wall sheathing to wall framing]			
30	⅜" – ½"	6d common (2" × 0.113") nail (subfloor, wall)[i] 8d common (2½" × 0.131") nail (roof)	6	12[f]
31	19/32" – 1"	8d common nail (2½" × 0.131")	6	12[f]
32	1⅛" – 1¼"	10d common (3" × 0.148") nail; or 8d (2½" × 0.131") deformed nail	6	12
	Other wall sheathing[g]			
33	½" structural cellulosic fiberboard sheathing	1½" galvanized roofing nail, 7/16" head diameter, or 1" crown staple 16 ga., 1¼" long	3	6
34	25/32" structural cellulosic fiberboard sheathing	1¾" galvanized roofing nail, 7/16" head diameter, or 1" crown staple 16 ga., 1¼" long	3	6
35	½" gypsum sheathing[d]	1½" galvanized roofing nail; staple galvanized, 1½" long; 1¼" screws, Type W or S	7	7
36	⅝" gypsum sheathing[d]	1¾" galvanized roofing nail; staple galvanized, 1⅝" long; 1⅝" screws, Type W or S	7	7
	Wood structural panels, combination subfloor underlayment to framing			
37	¾" and less	6d deformed (2" × 0.120") nail; or 8d common (2½" × 0.131") nail	6	12
38	⅞" – 1"	8d common (2½" × 0.131") nail; or 8d deformed (2½" × 0.120") nail	6	12
39	1⅛" – 1¼"	10d common (3" × 0.148") nail; or 8d deformed (2½" × 0.120") nail	6	12

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 mile per hour = 0.447 m/s; 1 ksi = 6.895 MPa.

a. Nails are smooth-common, box or deformed shanks except where otherwise stated. Nails used for framing and sheathing connections shall have minimum average bending yield strengths as shown: 80 ksi for shank diameter of 0.192 inch (20d common nail), 90 ksi for shank diameters larger than 0.142 inch but not larger than 0.177 inch, and 100 ksi for shank diameters of 0.142 inch or less.
b. Staples are 16 gage wire and have a minimum 7/16-inch on diameter crown width.
c. Nails shall be spaced at not more than 6 inches on center at all supports where spans are 48 inches or greater.
d. Four-foot by 8-foot or 4-foot by 9-foot panels shall be applied vertically.
e. Spacing of fasteners not included in this table shall be based on Table R602.3(2).
f. Where the ultimate design wind speed is 130 mph or less, nails for attaching wood structural panel roof sheathing to gable end wall framing shall be spaced 6 inches on center. Where the ultimate design wind speed is greater than 130 mph, nails for attaching panel roof sheathing to intermediate supports shall be spaced 6 inches on center for minimum 48-inch distance from ridges, eaves and gable end walls; and 4 inches on center to gable end wall framing.
g. Gypsum sheathing shall conform to ASTM C1396 and shall be installed in accordance with GA 253. Fiberboard sheathing shall conform to ASTM C208.
h. Spacing of fasteners on floor sheathing panel edges applies to panel edges supported by framing members and required blocking and at floor perimeters only. Spacing of fasteners on roof sheathing panel edges applies to panel edges supported by framing members and required blocking. Blocking of roof or floor sheathing panel edges perpendicular to the framing members need not be provided except as required by other provisions of this code. Floor perimeter shall be supported by framing members or solid blocking.
i. Where a rafter is fastened to an adjacent parallel ceiling joist in accordance with this schedule, provide two toe nails on one side of the rafter and toe nails from the ceiling joist to top plate in accordance with this schedule. The toe nail on the opposite side of the rafter shall not be required.

Header Insulation; Gaps in headers must be insulated to a minimum of R-3.

Wall Corner Cavity; Gaps in corners must be insulated to a minimum of R-3.

TABLE R602.3(3)
REQUIREMENTS FOR WOOD STRUCTURAL PANEL WALL SHEATHING USED TO RESIST WIND PRESSURES[a, b, c]

MINIMUM NAIL: Size	MINIMUM NAIL: Penetration (inches)	MINIMUM WOOD STRUCTURAL PANEL SPAN RATING	MINIMUM NOMINAL PANEL THICKNESS (inches)	MAXIMUM WALL STUD SPACING (inches)	PANEL NAIL SPACING: Edges (inches o.c.)	PANEL NAIL SPACING: Field (inches o.c.)	ULTIMATE DESIGN WIND SPEED V_{ult} (mph) Wind exposure category: B	C	D
6d Common (2.0" × 0.113")	1.5	24/0	⅜	16	6	12	140	115	110
8d Common (2.5" × 0.131")	1.75	24/16	7/16	16	6	12	170	140	135
				24	6	12	140	115	110

For SI: 1 inch = 25.4 mm, 1 mile per hour = 0.447 m/s.

a. Panel strength axis parallel or perpendicular to supports. Three-ply plywood sheathing with studs spaced more than 16 inches on center shall be applied with panel strength axis perpendicular to supports.
b. Table is based on wind pressures acting toward and away from building surfaces in accordance with Section R301.2. Lateral bracing requirements shall be in accordance with Section R602.10.
c. Wood structural panels with span ratings of Wall-16 or Wall-24 shall be permitted as an alternate to panels with a 24/0 span rating. Plywood siding rated 16 o.c. or 24 o.c. shall be permitted as an alternate to panels with a 24/16 span rating. Wall-16 and Plywood siding 16 o.c. shall be used with studs spaced not more than 16 inches on center.

TABLE R602.3(4)
ALLOWABLE SPANS FOR PARTICLEBOARD WALL SHEATHING[a]

THICKNESS (inch)	GRADE	STUD SPACING (inches): When siding is nailed to studs	STUD SPACING (inches): When siding is nailed to sheathing
⅜	M-1 Exterior glue	16	—
½	M-2 Exterior glue	16	16

For SI: 1 inch = 25.4 mm.

a. Wall sheathing not exposed to the weather. If the panels are applied horizontally, the end joints of the panel shall be offset so that four panel corners will not meet. All panel edges must be supported. Leave a 1/16-inch gap between panels and nail not less than ⅜ inch from panel edges.

TABLE R602.7(1)
GIRDER SPANS[a] AND HEADER SPANS[a] FOR EXTERIOR BEARING WALLS
(Maximum spans for Douglas Fir-larch, Hem-fir, Southern Pine and Spruce-pine-fir[b] and required number of jack studs)

GIRDERS AND HEADERS SUPPORTING	SIZE	30 psf, 12 ft: Span[f]	NJ[d]	30, 24: Span[f]	NJ[d]	30, 36: Span[f]	NJ[d]	50, 12: Span[f]	NJ[d]	50, 24: Span[f]	NJ[d]	50, 36: Span[f]	NJ[d]	70, 12: Span[f]	NJ[d]	70, 24: Span[f]	NJ[d]	70, 36: Span[f]	NJ[d]
Roof and ceiling	1-2 × 6	4-0	1	3-1	2	2-7	2	3-5	1	2-8	2	2-3	2	3-0	2	2-4	2	2-0	2
	1-2 × 8	5-1	2	3-11	2	3-3	2	4-4	2	3-4	2	2-10	2	3-10	2	3-0	2	2-6	3
	1-2 × 10	6-0	2	4-8	2	3-11	2	5-2	2	4-0	2	3-4	2	4-7	2	3-6	3	3-0	3
	1-2 × 12	7-1	2	5-5	2	4-7	3	6-1	2	4-8	3	3-11	3	5-5	2	4-2	3	3-6	3
	2-2 × 4	4-0	1	3-1	1	2-7	1	3-5	1	2-7	1	2-2	1	3-0	1	2-4	1	2-0	1
	2-2 × 6	6-0	1	4-7	1	3-10	1	5-1	1	3-11	1	3-3	2	4-6	1	3-6	2	2-11	2
	2-2 × 8	7-7	1	5-9	1	4-10	2	6-5	1	5-0	2	4-2	2	5-9	1	4-5	2	3-9	2
	2-2 × 10	9-0	1	6-10	2	5-9	2	7-8	2	5-11	2	4-11	2	6-9	2	5-3	2	4-5	2
	2-2 × 12	10-7	2	8-1	2	6-10	2	9-0	2	6-11	2	5-10	2	8-0	2	6-2	2	5-2	3
	3-2 × 8	9-5	1	7-3	1	6-1	1	8-1	1	6-3	1	5-3	2	7-2	1	5-6	2	4-8	2
	3-2 × 10	11-3	1	8-7	1	7-3	2	9-7	1	7-4	2	6-2	2	8-6	1	6-7	2	5-6	2
	3-2 × 12	13-2	1	10-1	2	8-6	2	11-3	2	8-8	2	7-4	2	10-0	2	7-9	2	6-6	2
	4-2 × 8	10-11	1	8-4	1	7-0	1	9-4	1	7-2	1	6-0	1	8-3	1	6-4	1	5-4	2
	4-2 × 10	12-11	1	9-11	1	8-4	1	11-1	1	8-6	1	7-2	2	9-10	1	7-7	2	6-4	2
	4-2 × 12	15-3	1	11-8	1	9-10	2	13-0	1	10-0	2	8-5	2	11-7	1	8-11	2	7-6	2
Roof, ceiling and one center-bearing floor	1-2 × 6	3-3	1	2-7	2	2-2	2	3-0	2	2-4	2	2-0	2	2-9	2	2-2	2	1-10	2
	1-2 × 8	4-1	2	3-3	2	2-9	2	3-9	2	3-0	2	2-6	3	3-6	2	2-9	2	2-4	3
	1-2 × 10	4-11	2	3-10	2	3-3	3	4-6	2	3-6	3	3-0	3	4-1	2	3-3	3	2-9	3
	1-2 × 12	5-9	2	4-6	3	3-10	3	5-3	2	4-2	3	3-6	3	4-10	3	3-10	3	3-3	4
	2-2 × 4	3-3	1	2-6	1	2-2	1	3-0	1	2-4	1	2-0	1	2-8	1	2-2	1	1-10	1
	2-2 × 6	4-10	1	3-9	1	3-3	2	4-5	1	3-6	2	3-0	2	4-1	1	3-3	2	2-9	2
	2-2 × 8	6-1	1	4-10	2	4-1	2	5-7	2	4-5	2	3-9	2	5-2	2	4-1	2	3-6	2
	2-2 × 10	7-3	2	5-8	2	4-10	2	6-8	2	5-3	2	4-5	2	6-1	2	4-10	2	4-1	2
	2-2 × 12	8-6	2	6-8	2	5-8	2	7-10	2	6-2	2	5-3	3	7-2	2	5-8	2	4-10	3
	3-2 × 8	7-8	1	6-0	1	5-1	2	7-0	1	5-6	2	4-8	2	6-5	1	5-1	2	4-4	2
	3-2 × 10	9-1	1	7-2	2	6-1	2	8-4	1	6-7	2	5-7	2	7-8	2	6-1	2	5-2	2
	3-2 × 12	10-8	2	8-5	2	7-2	2	9-10	2	7-8	2	6-7	2	9-0	2	7-1	2	6-1	2
	4-2 × 8	8-10	1	6-11	1	5-11	1	8-1	1	6-4	1	5-5	2	7-5	1	5-11	1	5-0	2
	4-2 × 10	10-6	1	8-3	2	7-0	2	9-3	1	7-7	2	6-5	2	8-10	1	7-0	2	6-0	2
	[illegible]	[illegible]																	
Roof, ceiling and one clear span floor	[illegible]	[illegible]																	

GIRDERS AND HEADERS SUPPORTING	SIZE	GROUND SNOW LOAD (psf)[e] 30 / 50 / 70; Building width[c] (feet) 12, 24, 36: Span[f], NJ[d]
Roof, ceiling and two center-bearing floors	[illegible]	[illegible]
Roof, ceiling and two clear span floors	[illegible]	[illegible]

For SI: 1 inch = 25.4 mm, 1 pound per square foot = 0.0479 kPa.

a. Spans are given in feet and inches.
b. Spans are based on the minimum design properties for No. 2 grade lumber of Douglas Fir-Larch, Hem-Fir, Southern Pine, and Spruce-Pine Fir.
c. Building width is measured perpendicular to the ridge. For widths between those shown, spans are permitted to be interpolated.
d. NJ - Number of jack studs required to support each end. Where the number of required jack studs equals one, the header is permitted to be supported by an approved framing anchor attached to the full-height wall stud and to the header.
e. Use 30 psf ground snow load for cases in which ground snow load is less than 30 psf and the roof live load is equal to or less than 20 psf.
f. Spans are calculated assuming the top of the header or girder is laterally braced by perpendicular framing. Where the top of the header or girder is not laterally braced (e.g. cripple studs bearing on the header), tabulated spans for headers consisting of 2×8, 2×10, or 2×12 sizes shall be multiplied by 0.70 or the header shall be designed.

TABLE R602.7(2)
GIRDER SPANS[a] AND HEADER SPANS[a] FOR INTERIOR BEARING WALLS
(Maximum spans for Douglas Fir-larch, Hem-fir, Southern Pine and Spruce-pine-fir[b] and required number of jack studs)

HEADERS AND GIRDERS SUPPORTING	SIZE	BUILDING WIDTH[c] (feet) 12: Span[a]	12: NJ[d]	24: Span[a]	24: NJ[d]	36: Span[a]	36: NJ[d]
One floor only	2-2 × 4	4-1	1	2-10	1	2-4	1
	2-2 × 6	6-1	1	4-4	1	3-6	1
	2-2 × 8	7-9	1	5-5	1	4-5	2
	2-2 × 10	9-2	1	6-6	2	5-3	2
	2-2 × 12	10-9	1	7-7	2	6-3	2
	3-2 × 8	9-8	1	6-10	1	5-7	1
	3-2 × 10	11-5	1	8-1	1	6-7	2
	3-2 × 12	13-6	1	9-6	2	7-9	2
	4-2 × 8	11-2	1	7-11	1	6-5	1
	4-2 × 10	13-3	1	9-4	1	7-8	1
	4-2 × 12	15-7	1	11-0	1	9-0	2
Two floors	2-2 × 4	2-7	1	1-11	1	1-7	1
	2-2 × 6	3-11	1	2-11	2	2-5	2
	2-2 × 8	5-0	1	3-8	2	3-1	2
	2-2 × 10	5-11	2	4-4	2	3-7	2
	2-2 × 12	6-11	2	5-2	2	4-3	3
	3-2 × 8	6-3	1	4-7	2	3-10	2
	3-2 × 10	7-5	1	5-6	2	4-6	2
	3-2 × 12	8-8	2	6-5	2	5-4	2
	4-2 × 8	7-2	1	5-4	1	4-5	2
	4-2 × 10	8-6	1	6-4	2	5-3	2
	4-2 × 12	10-1	1	7-5	2	6-2	2

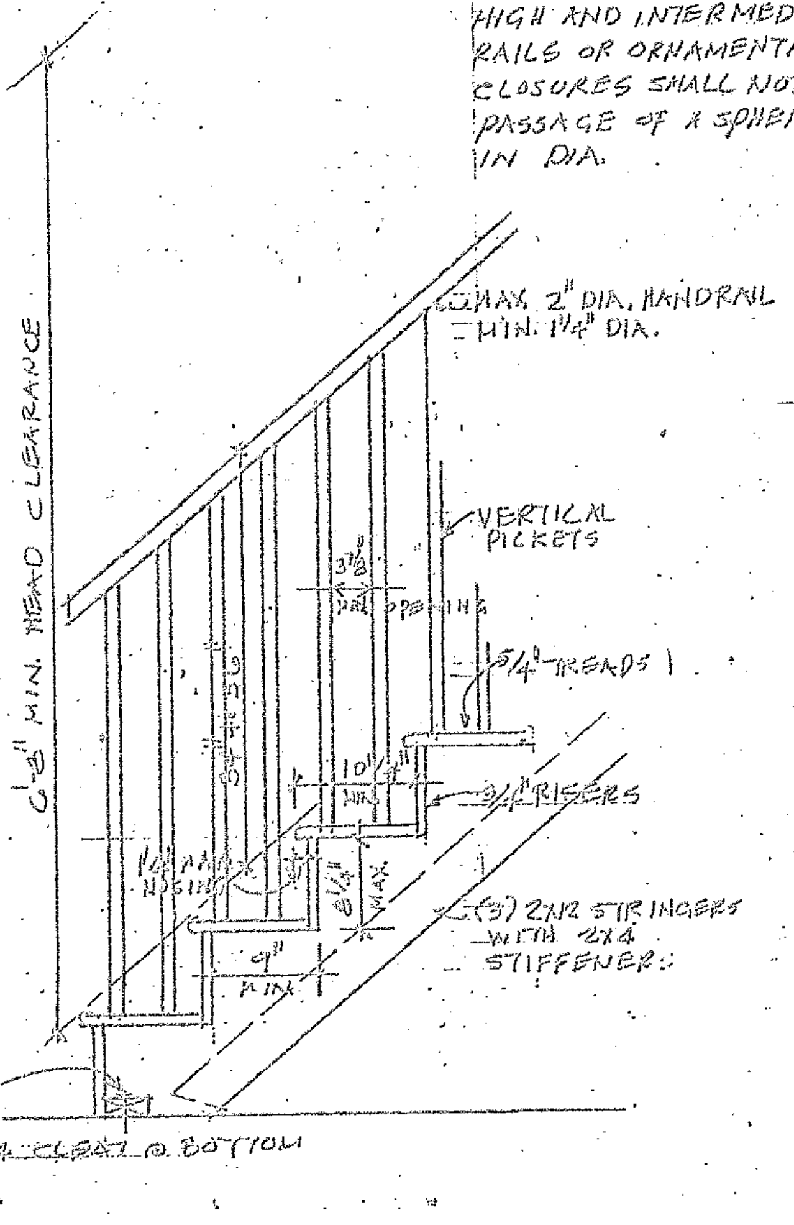
For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

a. Spans are given in feet and inches.
b. Spans are based on the minimum design properties for No. 2 grade lumber of Douglas Fir-Larch, Hem-Fir, Southern Pine, and Spruce-Pine Fir.
c. Building width is measured perpendicular to the ridge. For widths between those shown, spans are permitted to be interpolated.
d. NJ = Number of jack studs required to support each end. Where the number of required jack studs equals one, the header is permitted to be supported by an approved framing anchor attached to the full-height wall stud and to the header.
e. Spans are calculated assuming the top of the header or girder is laterally braced by perpendicular framing. Where the top of the header or girder is not laterally braced (e.g., cripple studs bearing on the header), tabulated spans for headers consisting of 2 × 8, 2 × 10, or 2 × 12 sizes shall be multiplied by 0.70 or the header shall be designed.

R602.7.5 Supports for headers. Headers shall be supported on each end with one or more jack studs or with approved framing anchors in accordance with Table R602.7(1) or R602.7(2). The full-height stud adjacent to each end of the header shall be end nailed to each end of the header with four-16d nails (3.5 inches × 0.135 inches). The minimum number of full-height studs at each end of a header shall be in accordance with Table R602.7.5.

TABLE R602.7.5
MINIMUM NUMBER OF FULL HEIGHT STUDS
AT EACH END OF HEADERS IN EXTERIOR WALLS

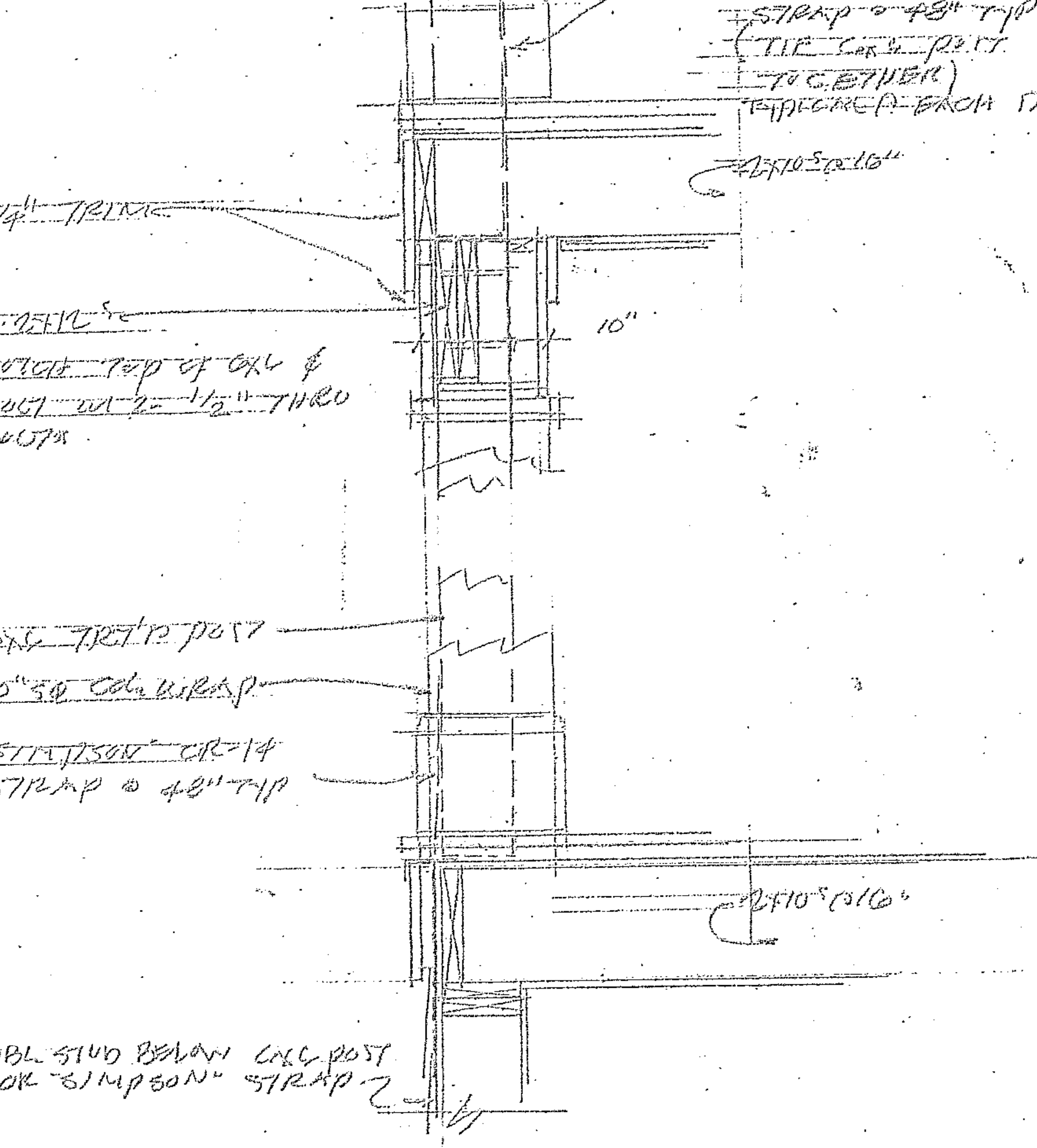
HEADER SPAN (feet)	MAXIMUM STUD SPACING (inches) [per Table R602.3(5)]: 16	24
≤ 3'	1	1
4'	2	1
8'	3	2
12'	5	3
16'	6	4



TYPICAL INTERIOR STAIR DETAIL
NO SCALE

R311.7.8.3 Grip-size. Required handrails shall be of one of the following types or provide equivalent graspability.

1. Type I. Handrails with a circular cross section shall have an outside diameter of not less than 1¼ inches (32 mm) and not greater than 2 inches (51 mm). If the handrail is not circular, it shall have a perimeter dimension of not less than 4 inches (102 mm) and not greater than 6¼ inches (160 mm) with a cross section of dimension of not more than 2¼ inches (57 mm). Edges shall have a radius of not less than 0.01 inch (0.25 mm).
2. Type II. Handrails with a perimeter greater than 6¼ inches (160 mm) shall have a graspable finger recess area on both sides of the profile. The finger recess shall begin within a distance of ¾ inch (19 mm) measured vertically from the tallest portion of the profile and achieve a depth of not less than 5/16 inch (8 mm) within ⅞ inch (22 mm) below the widest portion of the profile. This required depth shall continue for not less than ⅜ inch (10 mm) to a level that is not less than 1¾ inches (45 mm) below the tallest portion of the profile. The width of the handrail above the recess shall be not less than 1¼ inches (32 mm) and not more than 2¾ inches (70 mm). Edges shall have a radius of not less than 0.01 inch (0.25 mm).



UPLIFT CONNECTION DETAIL @ DECK COLS.
1"=1'-0"

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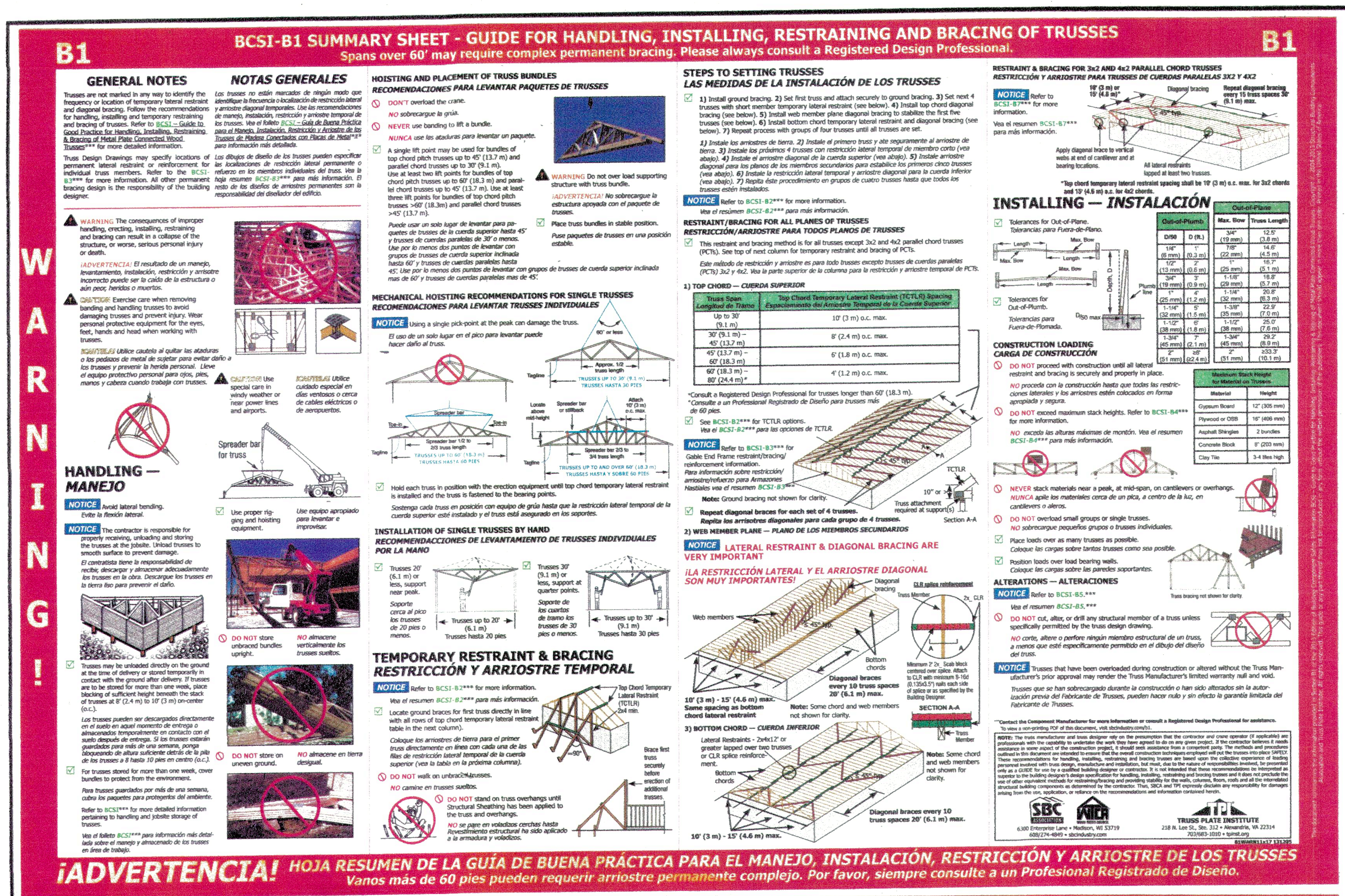
DATE: 3-4-19
DESIGN BY: CWJ
DRAWN BY: CWJ

Three Story Beach Home
J F Schoch Builder

REVISED 5/25/21

JOB NO. 1907
SHEET NO. 5/6

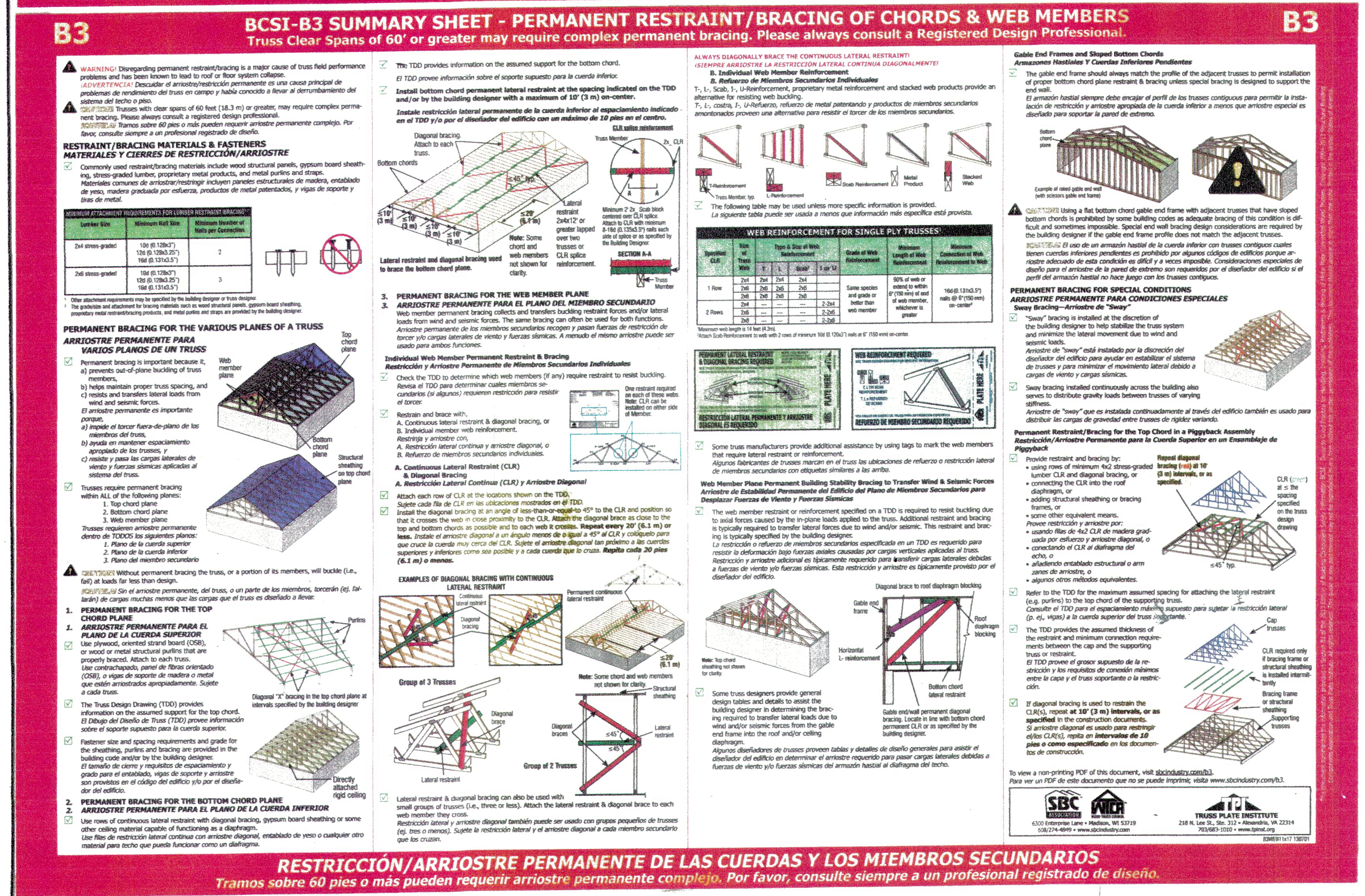


B1 BCSI-B1 SUMMARY SHEET - GUIDE FOR HANDLING, INSTALLING, RESTRAINING AND BRACING OF TRUSSES B1

Spans over 60' may require complex permanent bracing. Please always consult a Registered Design Professional.

¡ADVERTENCIA! HOJA RESUMEN DE LA GUÍA DE BUENA PRÁCTICA PARA EL MANEJO, INSTALACIÓN, RESTRICCIÓN Y ARRIOSTRE DE LOS TRUSSES

Vanos más de 60 pies pueden requerir arriostre permanente complejo. Por favor, siempre consulte a un Profesional Registrado de Diseño.



B3 BCSI-B3 SUMMARY SHEET - PERMANENT RESTRAINT/BRACING OF CHORDS & WEB MEMBERS B3

Truss Clear Spans of 60' or greater may require complex permanent bracing. Please always consult a Registered Design Professional.

RESTRICCIÓN/ARRIOSTRE PERMANENTE DE LAS CUERDAS Y LOS MIEMBROS SECUNDARIOS

Tramos sobre 60 pies o más pueden requerir arriostre permanente complejo. Por favor, consulte siempre a un profesional registrado de diseño.

Recommended Simpson Up Lift Connectors

All are based on Spruce Top Plate Lumber Values
Carrying Capacity is increased with SYP Top Plate

Uplift (in pounds)	Connector
0 - 160	Nailing Schedule
160 - 535	(1) H2.5A
535 - 1070	(2) H2.5A
1070 - 1245	(1) HTS-20
1246 - 1780	(1) HTS20 & (1) H2.5A
1780 - 2490	(2) HTS20
2490 - 7185	* SEE BELOW
7185 and Above	ENG. DESIGN

* Depending on amount of load either (1) or (2) VGT connectors. These will always be paired with HDU4"s.

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DATE: 3-4-19
DESIGN BY: C.W.J.
DRAWN BY: C.W.J.

Three Story Beach Home
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625718