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MANUF, **ACTURED** ROOF TRUSS NOTE UNO.

WOOD

FRAMING NOTE

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CONTI

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Stud walls

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oc UNO. ₃ 2x6 @ 16"oc UNO.

ith the

- Manufactured roof trusses are @ 24"oc
- Refer to plan for roof truss type. Refer dimensions, slopes, span, drainage, etc. the drawings. to Architectural drawings for shape, overhang, Location of bearing points are as indicated on
- Manufacturer shall provide the following: Truss calculations, prepared and signed by a licensed Civil or Structural Engineer (State of California). Truss calculations and design drawings shall be per Section 2303.4 of the 2007 CBC and shall be provided for each truss profile type, showing truss design profile, all live and dead loading conditions, and specify all truss hangers required at truss supported conditions. The truss layout plan shall show all truss types, truss placement locations, and all truss—to—truss connections. Truss calculations shall be based upon loads, bearing points, and conditions specified herein. No uplift reactions at support points due to application of vertical live or dead loads are allowed. Truss layout, truss profiles, location of girder trusses, and bearing locations shall be as shown on the structural plans. The Contractor shall verify truss dimensions, mechanical loads and locations, etc., and affix his review stamp prior to submittal to Architect/Engineer.
- Changes made in truss layout or truss configurations requiring additional engineering review and/or detailing will be considered a substitution and extra services. The Contractor shall be responsible for cost of investigating and reviewing the adequacy and/or acceptability of such substitution.

13.

Provide Solid blocking @ 8'-0"oc

max for

≗

12.

Joists and rafters are per plan, conditions) at flush beams UNO. for 2×10).

with "LU" . Hanger :

gers (use "HU" hangers at to be correct full size for

HSS or pipe columns in stud walls are details for other requirements.

to be

7/S1.2 UNO.

10.

All mechanical supply and return openings

9.

For roof drainage, top of framing

between

not

ed points is a straight line.

JNO. PEN per **F/-** to vns to be full height a

be between framing UNO.

post sizes are to match beam ior walls and interior shear walls.

15. 1 4.

Provide additional joist below all or adjacent to

non-structur

Ċī

5. Round holes in steel plates to be 1/6" oversized. than bolt diameter and have a length of 2 times slotted length is indicated on the details (VSH or hole. Bolt holes in wood shall be round and 1/2" with nut when required by finished and 1" maxim washers under head and nut where bolt bears on exposed conditions or as indicated.

d. Slotted holes in steel plates shall be 1/6" wider nes the bolt diameter. The direction of the or HSH). Install bolt at the centerline of the 1/2" oversized. Cut off bolt threaded end flush 1/2 cimum for nut otherwise. Provide standard cut on wood. Use plate or malleable iron washers at

- The Contractor shall submit truss submittal package to the Architect/Engineer for review and comment. Following Architect/Engineer review, Contractor shall then submit reviewed truss submittal to the Building Department for review. Truss fabrication shall not commence until approval is received from the Building Department.
- Truss top chord to be 2x6, minimum Truss manufacturer shall provide hangers and connectors truss, truss to beam, and beam to truss connections.

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- Truss manufacturer to provide vertical as required. web member at truss
- Manufactured roof truss design loads:

 A. Top Chord Dead Load = 13 psf Live Load = 20 psf

 B. Bottom Chord Dead Load = 6 psf Live Load = 10 psf
 (bottom chord live load does not act simultaneously with other

 C. Attics with two or more adjacent trusses with the same web cocontaining a rectangle 42 inches high by 24 inches wide or grechord live load of 20 psf at these locations.

 D. Special loads and concentrated loads are as noted on the draw

17.

is required in as detailed.

enclosed

16.

The Contractor shall verify that the moisture the requirements of the specifications at the Contractor shall provide allowance for differen

ontent of all framing lumber and plywood meet ime of installation and at close—in. The all shrinkage between floors, etc.

Drill blocking and ledgers

.8

SAD for ceiling info.

required provide

joists per

10/S1.2, UNO.

- are as noted on the drawings. b configuration capable of greater shall have a bottom
- The positions, weights, and methods of attachment of all mechanical units, plumbing, fire sprinklers, etc. shall be included in the design of the trusses manufacturer and shall be verified by the Architect. SAD for attic access and Additional trusses or special designed trusses may be required. All "gable have clear space between webs for wall vent. Size to match Architectural s, electrical fixtures, es by the truss s size and locations. e end trusses" to all drawings.
- Superimposed loads from the jack trusses or secondary framing (i.e. California furred ceilings, etc.) shall be included in the design of supporting trusses. r a maximum shall include of 1/2" total horizontal deflection deflection calculations with the framing,

10.

9.

Truss manufacturer shall review and design "gable end trusses" for DL combination with DL from end walls, parapets, soffit framing members, finishes, etc., including wind load perpendicular to truss.

œ

:

- Bottom chord truss members having a gyp board ceiling attached shall with a maximum variation of $1/4^{\circ}$ in $10^{\circ}-0^{\circ}$ in any direction. "Scissor" type trusses (SC) shall be designed for under dead plus live loads. Truss manufacturer shop drawing submittal.
- Truss members and components shall not be cut, notched, in any way without written concurrence and approval of an

13.

CONCRETE MASONRY UNIT NOTES

Concrete masonry unit construction shall be per 2/\$1.3 UNO. Use double possible and single open end otherwise. All cells to be grouted solid. All running bond.

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- Dowels from foundation are to match size and alignment with the wall vertical reinforcement. Extend dowels from foundation into wall to provide minimum lap with wall vertical reinforcement. Install dowel bars per plan and 1/S1.3. All dowels to extend to the lowest foundation reinforcement and end with a standard hook. Special inspection required for retaining wall foundation dowels per D/-.
- Provide
- Provide (2)
- ≧
- typical UNO.
- Provide sash units at all openings
- SAD

99

- reinforcing shall be per schedule below and **2/\$1.3** UNO. 2007 CBC Table 1704.5.1 and project specifications.
- #5 in bond bea units at the of ≗

- Set all ledger and connector bolts 3/81.3. grout around

- 6.
- Reinforcing steel shall be bent and lapped at all positioned and tied prior to grouting.

- An inverted bond unit is to be placed at the foundation level and at the bottom of each lift to facilitate clean out. Clean outs shall be provided as necessary in the bond unit level.

I

П SHEAR WALL SCHEDULE

and LL from roofs in and all architectural

- Field nailing to be 12"oc UNO. PEN = Plywood/OSB edge nailing. Block all edges with 3x material where nailing is 4"oc
- All plywood nails to be common requirements. See #5
- All exterior walls not designated as shear wall to be shear wall type 'A'.
- Shear wall lengths, where noted, are minimum dimensions. SAD for actual wall lengths. Do not locate hold-downs
- Edge nail wall sheathing to studs or posts wi Holdown refers to Simpson Strong Tie per **8/S1.2** and **9/S1.2** . See plans th hold—downs.
- Portions of interior wall surfaces adjacent to full, uninterrupted length per note #4 or with an even wall surface for finish materials. specified shear gypsum board
- walls more than joints. one vertical panel in h eight shall have staggered horizontal or vertical
- Where panels are either side, panel be 3x or thicker a ed on both faces of a version shall be offset to fall ails on each side shall wall and nail spacing is less than on different framing members or be staggered.

Ü

- Anchor bolts for shear walls shall include steel plate washers, a minimum of 0.229 inch by 3 inches square in size, between the sill plate and nut. The hole in the plate washer is permitted to be diagonally slotted with a width of up to $\frac{3}{6}$ larger than the bolt diameter and a slot length not to exceed $1\frac{3}{4}$ ", provided a standard cut washer is placed between the plate washer and the nut. Anchor bolts to be placed a minimum of $4\frac{1}{2}$ " and a maximum of 12" from ends of all sill plates and at notches in sill plates.

12.

	HS SH	SHEAR WALL SCHEDULE	CHEDULE	
WS	APA RATED SHEATHING NAILING (PEN) ANCHORAGE (See note 11.)	NAILING (PEN)	ANCHORAGE (See note 11.)	REMARKS
$\langle \Psi \rangle$	15/32" (32/16) EXP 1	8d @ 6"oc	%"ø @ 48"oc	
$\langle B \rangle$	15/32" (32/16) EXP 1	8d @ 4"oc	%"ø @ 32"oc*	
$\langle c \rangle$	15/32" (32/16) EXP 1	8d @ 3"oc	%"ø @ 24"oc*	5%"ø @ 24"oc* 3x min at all ply edge
(Q)	(D) 15/32" (32/16) EXP 1	8d @ 2"oc	8d @ 2"oc 5%"ø @ 16"oc	splices & July Sill blaces

bolt spacing is

O

 \triangleright

CRITERIA

Roof Live Lo

20 psf (Reducible)

Wind Data:

Internal wind pressure coefficient Design pressure for components

t (GCpi) = ± 0.18 and cladding by a

others:

Seismic Importance Factor: 1.0
Occupancy category: Il
Mapped spectral response accelerations:
Site class: D

c force resisting system(s)

1.0;

SS

δ

0.6

resisting system(s): Vodification factor(s): shear: 28.2k

Wood R =

Floor Live

40 psf

Design Code:

2007 California

Building

Code (CBC)

Foundation Design

All soils work shall be done in accordance with the specifications, the requirements of the Geotechnical Report noted below and Chapter 18 of the 2007 CBC. All foundations shall bear on firm, undisturbed, native soils or engineered fill at or exceeding depths shown on the drawings. Engineered fill to be compacted per Geotechnical report. Increase fill and or footing depth as required by Geotechnical Engineer. All footing excavations shall be as neat as practicable. Over—excavations in width shall be filled with concrete, and in depth may be filled with lean concrete or compacted approved backfill. All loose soils shall be removed from excavations prior to placement of reinforcing or concrete. Geotechnical Report by:

- of adjacent footings are different provide stepped footing per
 - PJC and Associates Job No. 4628.01 Dated: April 9, 2010
- Use 5%" diameter x 12" (18" at curbs) anchor bolts (AB) at 48"oc where not otherwise noted. Minimum embedment into concrete is 7" (excluding curb) unless detailed otherwise. Anchor bolts are to be tied in place prior to placement of concrete. See shear wall schedule for additional requirements. Minimum two anchor bolts per sill piece. Typical Slabs:
- Residence Slab: 5" concrete reinforced with #4 @ 16"oc at mid-depth over vapor retarder (per specifications) and 6" minimum free draining compacted rock per specifications on subgrade per the Geotechnical recommendations, and as approved by the Geotechnical Engineer. Do not drive concrete trucks or large screed machines on vapor barrier without additional buffer material and approval from the Structural Engineer.
- Garage/Garden Shed Slab: 4" concrete reinforced with #3 @ 16"oc at mid-depth over vapor retarder (per specifications) and 6" minimum free draining compacted rock per specifications on 12" low to non-expansive fill per the Geotechnical recommendations, and as approved by the Geotechnical Engineer. Do not drive concrete trucks or large screed machines on vapor barrier without additional buffer material and approval from Structural Engineer.
- Refer to inserts, s and **6/S** r to Architectural and Plumbing drawings for depressed slabs for Architectural flooring orts, sloped slabs to drain and pipes or conduits at slab. See **7/\$1.1** at depressed slab **6/\$1.1** for pipes and conduits.
- Provide control joints (or construction/dowel joints at contractor's option; no dowels joints at exposed concrete, SAD for locations) as shown on plan (15'-0" oc max. UNO; 10'-0" max at exposed concrete, SAD for locations) per **5/S1.1** Install joints to divide slab into rectangular areas with long dimension less than 1.5 x short dimension. Install joints at face of studs of wall where possible. Submit joint layout plan for review prior to placement.
- Do not undercut existing foundations. Notify Engineer for review and possible revisions, if existing foundation conditions are not as shown.
- Top of footing elevations to be determined by the contractor based on information from Civil drawings, Geotechnical report, Landscape, etc.
- SPECIAL INSPECTION BY OWNER'S TESTING AGENCY

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- Special inspections and testing shall be performed by an approved agency in accordance with California Building Code (CBC) Sections 1703, 1704, 1707 and 1708, and with the Statement of Special Inspections as required by CBC Sections 1704.1.1 and 1705 for building structural elements summarized as follows: Shop fabrication of structural load—bearing members and assemblies per CBC Section 1704.2 or alternatively, approved fabricators shall submit a certificate of compliance per CBC Section 1704.2.2 including glu—lam beam inspection certificates.
- Structural steel construction per CBC Sections 1704.3, 1707.1, 1708.4 and Table 1704.3 including material identification, shop and field welding, and installation of high-strength bolts.
- Masonry construction per CBC Section 1704.5, 1708.1, 1708.3 & Table 1704.5.1 (Level Special Inspection) compressive strength, block laying procedures, mortar preparation, reinforcement size and grade, reinforcement placement, grout preparation and grout placement, and anchor bolt type, size and placement.
- Wood construction per CBC Sections 1704.6 and 1707.3 including nailing, bolting and anchoring of all drag struts, top plate splices, ledger splices, Simpson hardware, braces and holdowns, and nailing, bolting and anchoring of all shearwalls, shear panels and diaphragms where the fastener spacing of the sheathing is 4" apart or less.
- Soils per CBC Section 1704.7, Table 1704.7 and the approved soils report including subgrade preparation, foundation bearing materials and depth of excavations, and verification, placement and testing of controlled fill where total depth exceeds 12". Special cases per CBC Section 1704.13 and product ICC reports for all structural materials and systems required to be installed in accordance with additional manufacturer's instructions that prescribe requirements not contained in the CBC or referenced standards including post—installed anchor bolts in concrete and CMU, and pre—manufactured shear panels and braced frames.

WOOD FRAMING NOTE

- are 1/S1.2 and 3/S1.2 where
- The General Contractor shall measure glulam beam sizes and cambers as delivered to the job site and shall report findings to the Engineer prior to erection. Provide 3,500 ft. radius camber on all simple span glulam beams UNO. All beams and joists (excluding I joists) shall be seat cut for full uniform bearing at supports, including beam seats and column caps. Maximum seat cut for sawn lumber is d/4, UNO.
- Typical Sheathing:

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SHEET INDEX

AND

SPECIFICATIONS

- Floor Sheathing: 23/32" T&G APA rated sheathing (48/24) Exp 1 with 8d @ 6"oc edges (PEN) and 12"oc field UNO on plans. Lay perpendicular to & glue to framing members immediately prior to full nailing (DO NOT SPOT NAIL). Block edges with 2x4 laid flat as noted on the plans and details. No panels less than 24" wide shall be used. Sloping Roof Sheathing: 15/32" APA rated sheathing (32/16) Exp 1 with 8d @ 6"oc edges (PEN) and 12"oc field UNO on plans. (8d X 1½" @ 6"oc (or 14ga staples @ 4"oc) PEN + 12"oc field where roof ply over 2x decking, see **K/SO.2** for additional requirements.) Lay perpendicular to framing members. Provide ply clips at unsupported edges unless noted to be blocked on plans. No panels less than 24" wide shall be used.
- All nails shall be common wire full round head nails. 16d sinker nails may be substituted for 16d common nails at rough framing UNO. Pneumatically driven nails meeting size requirements are acceptable. Nail must not be overdriven. See #1/\$1.2 for sheathing nailing requirements. All nailing not noted or detailed otherwise shall be per J/\$0.2. Nail length to be sufficient to meet CBC penetration requirements. Nails into pressure treated material to be galvanized. MINIMUM NAIL TYPICAL NAIL APPLICATION.

\$0.1 \$1.2 \$1.2 \$1.3 \$2.3 \$2.3 \$5.4 \$5.5 \$5.5 \$5.5 \$5.5

SECOND FLOOR AND LOWER ROOF F
UPPER ROOF FRAMING PLAN
FOUNDATION DETAILS
FOUNDATION DETAILS
MEZZANINE/FLOOR FRAMING DETAILS
MEZZANINE/FLOOR FRAMING DETAILS

FRAMING

PLAN

SCALE

NONE

STRUCTURAL GENERAL NOTES

MÊZZANINE, MEZZANINE, ROOF FRAM

DETAILS DETAILS

ROOF POOF

DETAILS
DETAILS
FRAME AND COMPRESSION RING DETAILS
ONS AND DETAILS

STRUCTURAL GENERAL NOTES AND STRUCTURAL SPECIFICATIONS
TYPICAL CONCRETE DETAILS
TYPICAL WOOD FRAMING DETAILS
TYPICAL CMU DETAILS
FOUNDATION PLAN
SECOND FLOOR AND LOWER ROOF

WIND NAID	DIAMETER	LENGTH	UNO
16d COMMON	0.162"	3 1/2"	FRAMING
16d SINKER	0.148"	3 1/4"	FRAMING
10d COMMON	0.148"	3"	FRAMING
10d COMMON	0.148"	2 1/2"	SHEATHING

1/S1.2 ONO SHEATHING

GENERAL NOTES

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- Refer to project s sheets **S1.1** and **S1.2** for standard details specifications for materials and methods.
- Building di (SAD) for attention of work. All and submi Drawing: by the dimensions shown are for general reference only. Some all actual building dimensions. Any discrepancies or of the Architect/Engineer so clarification can be reall dimensions related to existing conditions shall be mitted in writing to the Architect/Engineer for review. and fit shall e Architectural drawings re to be brought to the side prior to commencing erified by the contractor prior to construction.
- Details condition not fully or specifically shown shall be of same
- Refer to Architectural drawings for sidewalk slabs
- engineering for deferred approval items to Architect/Engineer for review and all to the Building Department for approval prior to fabrication. Deferred I items shall be designed and detailed by manufacturer to accommodate tall and vertical movements as noted in structural drawings. General contractor view and approve dimensions and details shown on the shop drawings prior to al. Manufacturer to provide drawings and calculations prepared and signed by a Licensed Civil or Structural Engineer for the following items, unless noted
- Elevator Structural design and drawings of elevator guides, rails, supports, etc., shall be provided by the elevator manufacturer/supplier. Conform to CAL OSHA and California Building Code requirements. See specifications. Roof Trusses
- ectrical, plumbing, and site utility systems with the sonsibility to the General Contractor. Use details **2/S1.1**, **1.2** and **6/S1.2**. At conditions where these details do not ructural Engineer prior to installation. At conditions echanical, plumbing, electrical or site utilities affect actural Engineer prior to installation.
- Shoring and bracing design, materials and installation shall be provided by the General Contractor, and shall be adequate for all loads. Leave in place as long as may be required for safety and until final structural construction is completed. veights and locations of mechanical units with Mechanical Engineer prior to ent. Units varying over 10% in weight shall be reviewed by the Structural or prior to installation (mechanical weights shown are maximum). Contractor nechanical unit sizes and weights as installed prior to installation of special to ensure correct placement under curbs, etc.

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WADEDESIGN

ARCHITECTS

location.

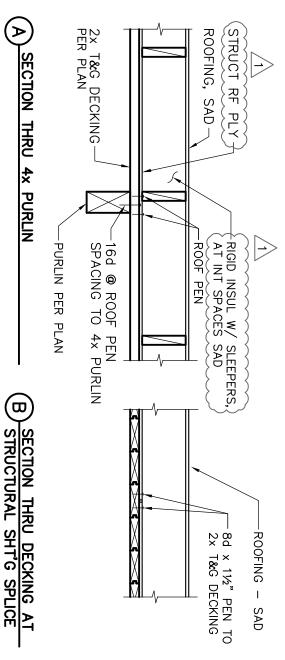
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VIATIONS MAMETER D WOOD ISS STRAND LUN VENEER LUN POUNDS PER SQUARE FOOT POUNDS PER SQUARE INCH PARALLEL STRAND LUMBER PAREL TIE BAR PRESSURE TREATED DOUGLAS FIR WELDED THREADED STUD WELDED WIRE FABRIC RIFY IN FIELD RTICAL SLOTTED HOLE DE FLANGE STEEL BEAM ICTURAL AR WALL METRICAL AND BOTTOM SUE AND GROOVE CAN STANDARD BEAM RCHITECTURAL WINGS STRUCTURAL AINLESS STEEL UMBING DRAWIN HEADED STUD RICAL DRAV



B SECTION THRU DECKING AT STRUCTURAL SHT'G SPLICE

A

VIEW

PURLIN BELOW

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DEDONO TO LOIST TOT NAIL TAOL THE	
OR (2) 16d	
BLOCKING BETWEEN STUDS, EACH END TOE NAILS(2) 10d	
TO JOIST OR RAFTER BEARINGS — TOE NAILS EA SIDE(2) 10d	
TO JOIST OR RAFTERS — TOE NAILS EA SIDE, EA END(2) 10d	
BLOCKING BETWEEN JOISTS OR RAFTERS:	
FOR EACH ADDITIONAL 4 INCHES OF DEPTH OF JOIST(1) 16d	
EIGHT (8) INCH JOISTS OR LESS(3) 16d	
TRUSSES, JOISTS OR RAFTERS TO SIDE OF STUDS	
TOE NAILS EACH SIDE(2) 10d	
TRUSSES, JOISTS OR RAFTERS AT ALL BEARING POINTS	
RIM JOIST TO TOP PL, TOE NAIL10d @ 6"oc	
MINIMUM NAILING SCHEDULE	

SPECIFICATIONS CONTINUED

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STRUCTURAL

SPECIFICATIONS

CONCRETE CONSTRUCTION

PLYWOOD/ORIENTED STRAND BOARD (OSB) SHEATHING

- OSB with equivalent thickness and span rating may be used in lieu of plywood OSB shall conform to PS-2. Structural plywood shall conform to the most current versions of PS-1 or PS-2. All panels shall have an exterior exposure rating and bear the trademark of the American Plywood Association (APA). Plywood sheets shall be spliced along centerline of framing member with nailing spaced not less than %" from edge of sheets. Gun nailing and nails to be approved by the Engineer prior to use. Plywood nails of common wire with full round heads are required.
- GLUE-LAMINATED BEAMS
- Submit shop drawings to Architect and Engineer for review prior to fabrication. Provide AITC certificate of inspection or equivalent to Architect and Building Department prior to erection. All glue—laminated beams shall be Douglas Fir, Combination 24F—V4 for simple spans; Combination 24F—V8 for continuous beams and cantilevers. Appearance to be industrial, manufactured with exterior glue conforming to the 2007 CBC, Section 2303.

NON-STRUCTURAL Lean Concrete for Backfill

STRUCTURAL Interior Slab on Grade

3,000 (4,000 56 days) designed for (2,500)

1"×#4

#3

note

#3*

Water To ent Ratio

Foundations

3,000 designed for (2,500)

1"×#4

0.53

4.0+1.0 Fly Ash

3.0

Exterior Slab Grade (Walks

on and Patios)

2,000

0.55

4.5

Contractor to submit ready mix

receipts to

green

point rater

PARALLEL STRAND LUMBER (PSL)

PSL shall conform to the following minimum properties: Fc=2900 PSI Parallel Fb=2900 PSI Ft=2250 PSI E=2.0xE06 PSI Fc=650 PSI Perpendicular Fv=290 PSI

- LAMINATED VENEER LUMBER AND LAMINATED STRAND LUMBER (LVL AND LSL)
- MANUFACTURED ROOF TRUSSES All laminated veneer lumber used for beams or joists shall be 1.9E, Fb=2600 psi minimum with minimum width of 1¾" and depth to match joists UNO. All laminated strand lumber used for rims or blocking shall be 1.3E, Fb=1700psi minimum with minimum width of 1½" and depth to match joists.

Under slab val thickness; 0.0 One acceptabl

apor retarder to be ASTM E 1745 performance Classification A; 15 mil minimum 025 U.S. permeance. Install per ASTM E 1643 and manufacturers recommendations ble product is Stego Wrap 15—mil vapor barrier.

Concrete mix design for interior slabs on grade to have 25% for cement on a 1 to 1 ratio with a minimum of 6.1 sacks c yard. Maximum W.C.R. to be 45%. Reduce total sand and b

% to 35% fly ash Type F of cementitious material blend sand as much as I

substituted per cubic practical.

Concrete mix design and testing shall meet the requirements of Section 1903, 1905 and 1704 of the 2007 CBC, and these specifications. Cement to be in accordance with ASTM C-150 type II. Aggregate to meet ASTM C-33.

Reinforcing steel shall conform to ASTM A-615, Grade 60 for #4 and larger bars and Grade 40 for #3. Steel shall be kept clean and free of rust. Submit shop drawings for review prior to installation.

Manufacturer shall submit the following: Calculations and layout "key" plan both prepared and signed by a licensed Civil or Structural Engineer (State of California). The calculations must include a design profile and hanger for each truss and a layout "key" plan indicating the location of each truss type within the structure. Shop drawings including a lay out plan shall show all truss types, locations, profiles and hangers as called for in the calculations. Calculations shall be based upon loads, bearing points and conditions specified here in. No bearing points shall be assumed to have "uplift" capacity. Submit calculations and shop drawings to the Architect/Engineer for review and submittal to the Building Official for approval prior to fabrication. General Contractor shall review and approve dimensions and details shown on the shop drawings prior to submittal to the Architect/Engineer.

CONCRETE MASONRY CONSTRUCTION (CMU)

- Concrete masonry units shall be medium or lightweight Grade N conforming to ASTM C90, latest version. Units to be double open end where possible and single open end otherwise. All cells to be grouted solid. Compressive strength of masonry at 28 days, F'm, shall be 1,500 psi.
- Grout type shall be course conforming to ASTM C476, latest version, having a compressive strength of 2,000 PSI minimum in 28 days and shall have 7 sacks of cement per cubic yard minimum. Add 1 pound Sika Grout Aid per sack of cement up to 6 pounds maximum per cubic yard.
- Reinforcing steel shall be bent and lapped at all corners and intersections. The minimum lap splice shall be per drawings. All steel, including embeds, shall be positioned and tied. Mortar shall be 1500 PSI minimum Type M or S conforming to ASTM C270, latest version and proportioned or with property specifications per Tables 2103.8(1) or 2103.8(2) of the 2007 CBC, Chapter 21.

Grout shall be placed in 48" lifts maximum without clean outs. Maximum lift is 8'-0" with clean outs. Grout for each pour shall be stopped 1½" below the top of the last course of block. All grout to be thoroughly consolidated by vibrating immediately after

STRUCTURAL

Mechanical co Report, UNO.

Anchor bolts

A307 headed bolts.

(No

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Lock (ER-5064)

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Slabs and oth shall be kept immediately a applied, slab s type that will

her concrete shall be kept continuously wet for 48 hours, a damp for 7 days after placement. Slabs shall have cure/fter finishing if other finishes are not affected. When cure shall be kept continuously wet or covered with curing pape not be detrimental to sealers to be applied later.

Welded wire

γith

ASTM A-185,

Mac	Squ	ر د	≨	Steel
Machine BoltsASTM A-307 (MB) or ASTM A-3	Square and Rectangular HSSASTM A-500 Grade B fy=46ksi	L Shapes & Plates ASTM A-36 or 572 GR50	WF ASTM A-992 or 572 GR50	Steel Grades:
A-307 (MB) or ASTM $A-3$	A-500 Grade B fy=46ksi	A-36 or 572 GR50	A-992 or 572 GR50	

- shall conform to the Anchor bolt holes shall be СВС
- Welding electrometal arc, F7: E7XT-XX for : Bolt holes shall be $\mathcal{H}_6{}''$ larger in diameter than the bolt. diameter than the anchor bolt. and electrodes shall welds only), ER70Sl be E70XX -X for gas
- All structural shall be subn welds shall be inspected and certified by a qualified testing mitted to the Architect and the Building Department. agency. Certification
- Temporary shoring and bracing shall be used and may be subjected. Leave temporary bracing and for safety, AND until final framing construction is column base plates to be Master in a "fluid" state). Builders d shall be adequate for shoring in place as s completed. Master Flow #713 (7000 loads to which it as may be required PSI at 28 days
- Drilled expansi (ESR—1917). Grout under of when placed on concrete bolts are Concrete inserts and Simpson Strong Bolt (ESR-1771) or Hilti Kwik ferrule loop inserts are by Burke Concrete Com

WOOD CONSTRUCTION (CARPENTRY)

PE MATERIAL DOUGLAS FIR - #2	2x JOISTS, RAFTERS DOUGLAS FIR - #2	4x POSTS & BEAMS DOUGLAS FIR - #1	6x BEAMS DOUGLAS FIR - #1	6x POSTS DOUGLAS FIR - #1	SAWN LUMBER MEMBER SPECIES AND MINIMUM GRADE, UNO	and posts to be free of heart center (FOHC). Other materials shall be as shown below:	or Western Wood Products Association (WWPA) showing grade mark or approved equal.	Each piece of lumber shall bear the stamp of the West Coast Lumber Inspection Bureau
# 2	#2	# 1	# 1	# 1		er mate	ing gro	West C
900	900	1000	1350	1200	F _b (PSI)	erials sho	ıde mark	oast Lum
180	180	180	170	170	F_b (PSI) F_V (PSI) E (PSI)	all be as	or app	nber Insp
1.6x10 ⁶	1.6x10 ⁶	1.7×10 ⁶	1.6x10 ⁶	1.6×10 ⁶	E (PSI)	shown be	roved equ	ction Bur
						low:	<u>а</u> .	eau (

- shall be the responsibility of the Contractor to assure that the maximum ood at the time of installation shall be not more than 19%. TUDS \leq 10' HEIGHT DOUGLAS FIR - STUD 700 180 1.4×10° TUDS > 10' HEIGHT DOUGLAS FIR - #2 900 180 1.6×10° moisture
- Nails to be of 3%" may be sulsplit. Nails as applications showing the substitution of of common wire where nailing is specified on the drawings. 16d sinker nails 0.148 x substituted for 16d common nails UNO. Pre—drill nail holes where wood tends to as specified on plans and including in PTDF material containing ammonia in exterior shall be type 304 or 316 stainless steel. Nails used in exterior applications or in shall be hot—dipped galvanized per ASTM A153.

....(4) 8d(3) 16d(3) 16d(3) 16d @ 12"oc

(2) 8d (2) 16d (2) 16d (3) 16d AT 45° SLANT, 4 AT 90° TO SUPPORTS

- Metal framing clips, hangers, etc. are by Simpson Strong Tie, 4120 Dublin Blvd. Dublin, CA, Catalog C-2009. Nailing shall be in accordance with the manufacturer's instructions with a nail provided for each punched hole UNO. Connectors as specified on plans and those in contact with PTDF material containing ammonia in exterior applications shall be type 304 or 316 stainless steel. All other connectors used in exterior applications or 22 interior PTDF shall be HDG (minimum 2.0 oz/ft) or ZMAX (minimum 1.85 oz/ft per ASTM 653). In applications where non-ammonia treated wood is dry when installed and will remain 2 dry in-service a coating thickness of .9 oz/ft may be used.
- Bolts shall be u bolt projection i be ½2" larger th bolt heads would Nuts shall be till construction. Do contact with PT stainless steel.

 ASTM A153. unfinished machine bolts per ASTM-307. Length of bolts shall be such that the in is not less than $\frac{1}{16}$ nor more than $\frac{1}{2}$ past end of nut. Bolt holes in wood shall than bolt sizes (UNO). Provide standard cut washers under head and nut where ould bear on wood. Use malleable iron washers where exposed to view or noted. Itightened when placed and retightened before closing in of walls or other Do not crush wood when tightening. Bolts as specified on plans and those in PTDF material containing ammonia in exterior applications shall be type 304 or 316 PTDF material containing ammonia in exterior shall be hot-dipped galvanized per , 316 per

Wood against (PTDF) with 0...

ncrete shall be Alkaline/Copper/Quaternary (ACQ) Pressure minimum to 0.40 maximum pcf retention level.

Decking mate

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exposed

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weather

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PTDF

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SCALE . . NONE

STRUCTURAL SPECIFICATIONS

05.01.10 07.08.10 09.17.10

rawn By hecked By roject No.

(WCLIB) Beams

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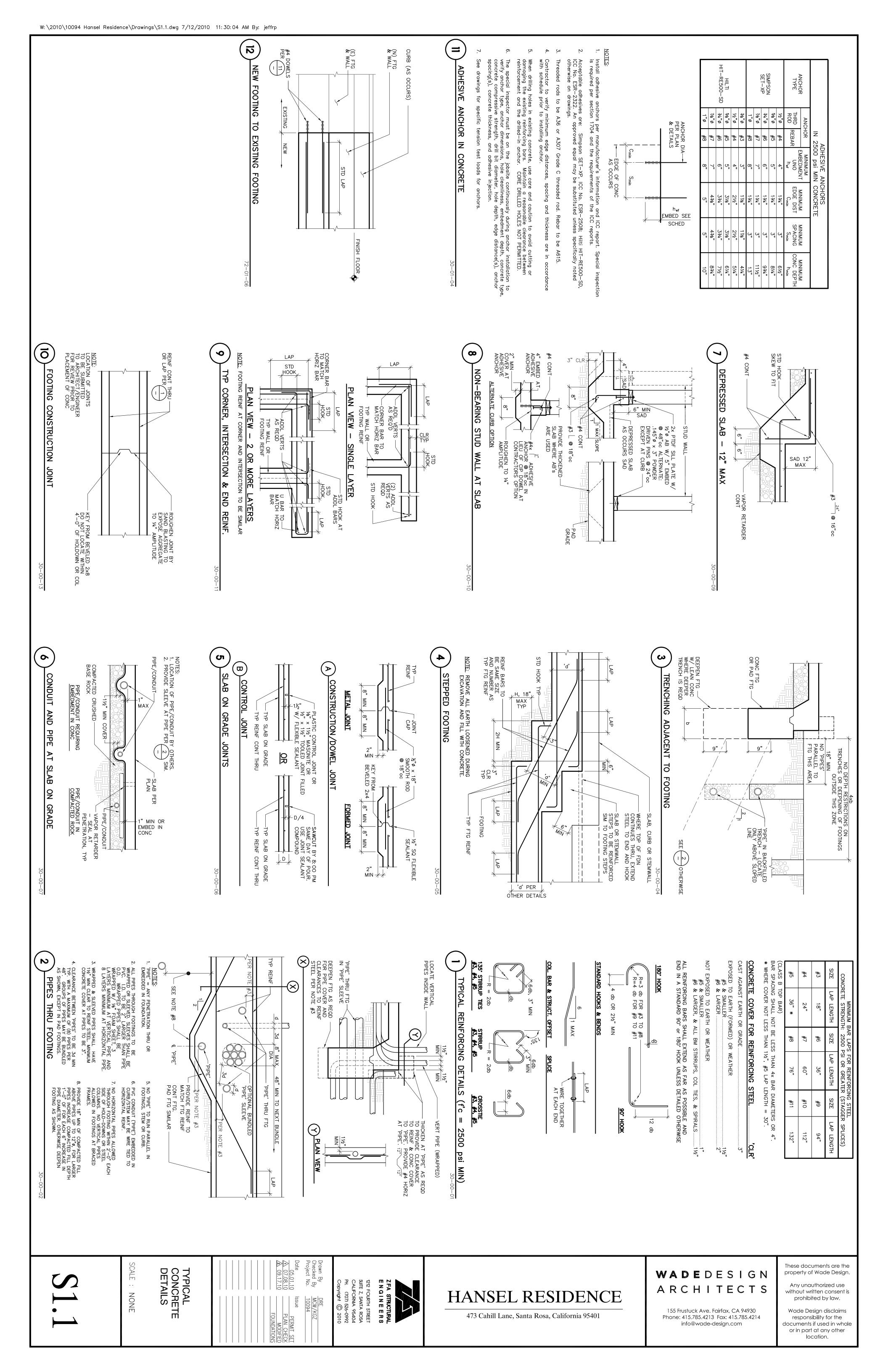
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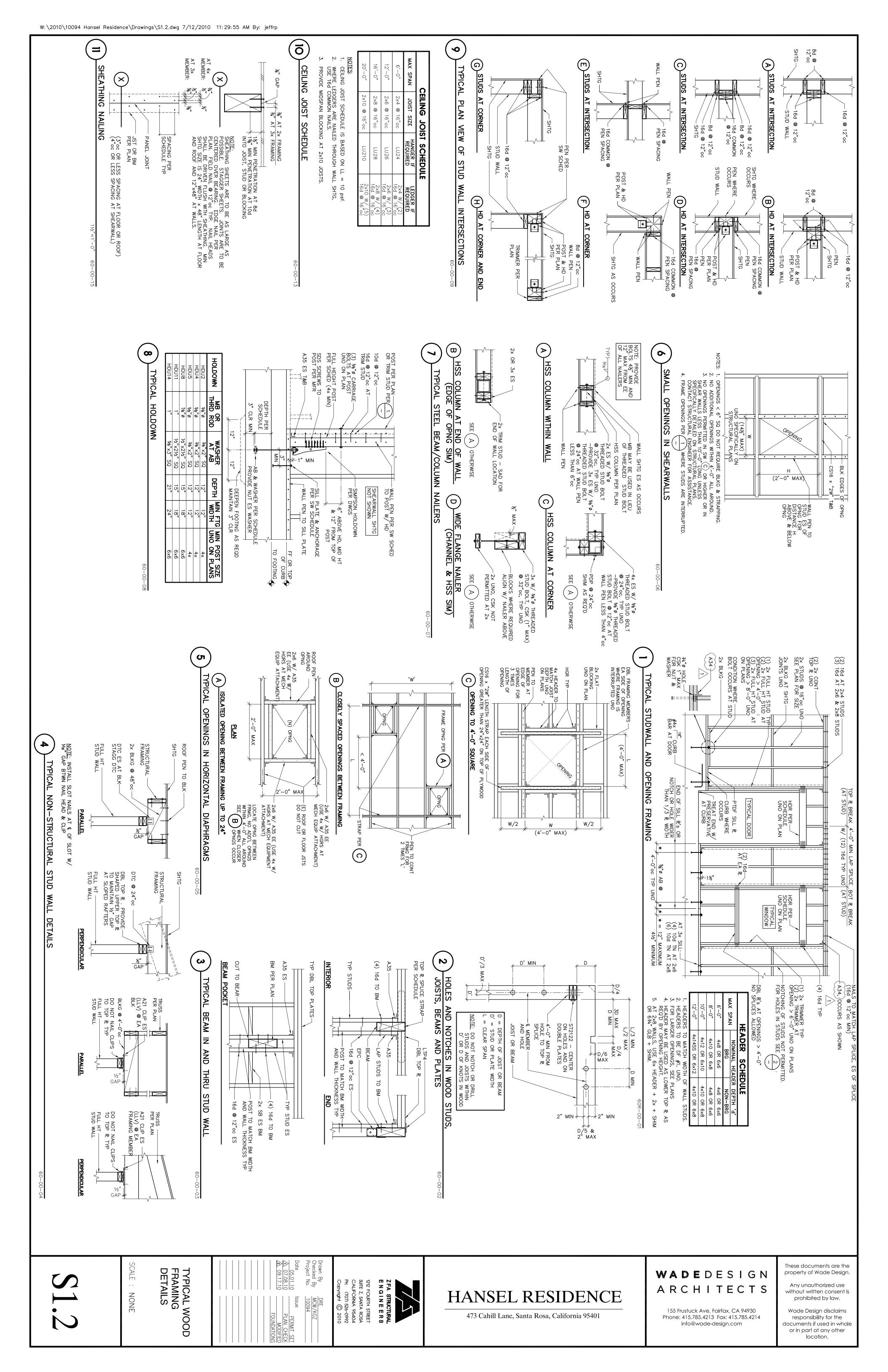
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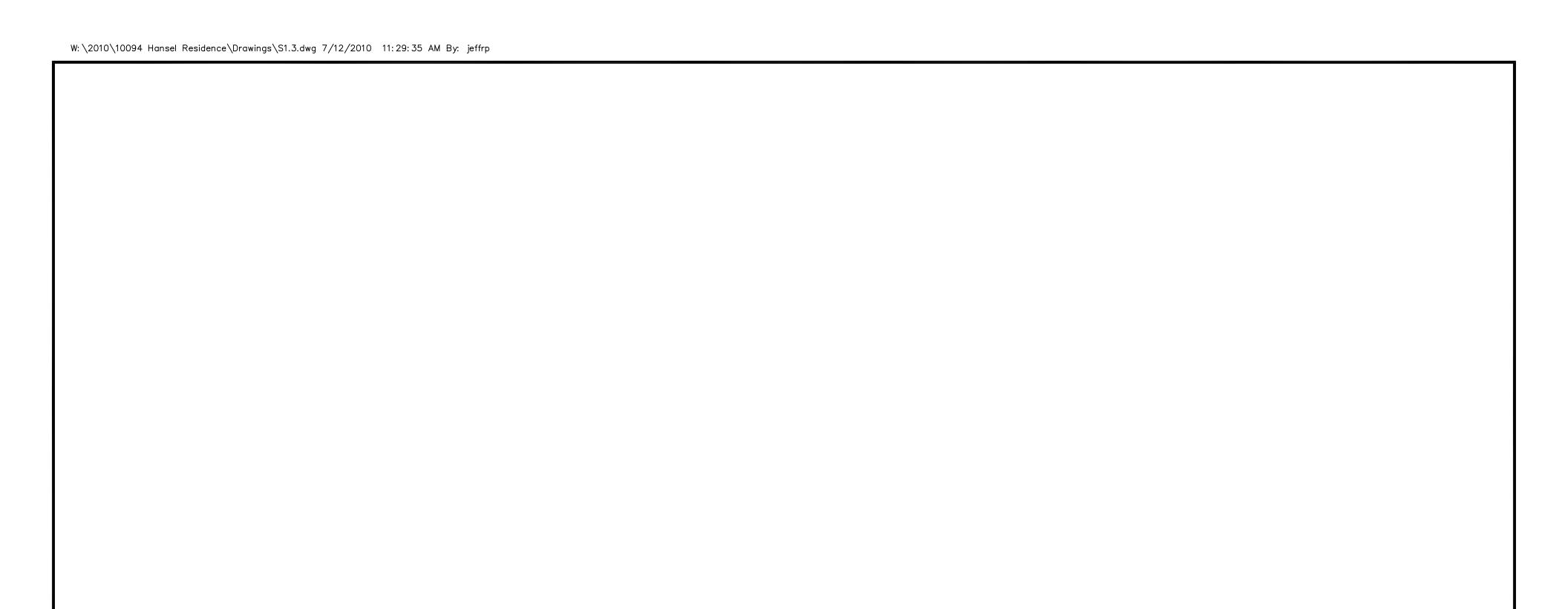
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HEADED ———— ANCHOR BOLT 8" CMU WALL EMBEDMENT 51/2" 16" MIN PILASTER EMBEDMENT 12" —ADD'L HORIZ.

REINFORCING SET IN
BOND UNIT TIE TO BOLT.

WHERE BOLTS ARE ON
SLOPE ADD #4 × 12"
AT EACH AB -1/2" MIN CLR FOR GROUT -EMBEDMENT PER SCHEDULE TIE BAR TO AB

CONDUIT OR PIPE IN UNREINF CELLS ONLY (UNLESS DETAILED OTHERWISE). PROVIDE 1/2" CLR FROM ANY REINF DO NOT TIE TO HORIZ REINF 8" CMU LINTEI 8" CMU (PLAN CORNER BARS (2) TO MATCH WALL REINF UNO ON DWGS TYP HORIZ STL IN BOND
UNIT-BEND & LAP AS NOTED
AT CORNERS & INTERSECTIONS VIEW) TYPICAL HORIZONTAL LINTEL BARS
(2) #5 MIN UNO - EXTEND 48" BEYOND O
- LINTEL UNIT OR SASH UNIT PER DWGS
- (2) LINTEL BARS MAX PER
HORIZONTAL LAYER SINGLE LAYER TYP VERT TRIM AT OPGS (2) #5
(MIN UNO) FULL WALL HT W/ FTG
DOWELS TO MATCH. STAGGER
TRIM BAR LAPS 24" MIN.
MAXIMUM OF 2 TRIM BARS PER CELL VERT REINF END HORIZ BAR W/ STD VERT HOOK 3%" CLR MIN 5%" CLR MAX

BARS LOCATED IN
THE SAME CELL

TYPICAL LAP SPLICE DES OTHERWISE PLICE SPECIAL * 22½" 30" 38" 45" 53" 60" LAP SPLICES -BARS

24 BAR dia's
OR MORE OR
SEE NOTE #4

-DOWEL W/
-STD HOOK MIN CLEARANCES OF
REINFORCING STEEL
CMU TO BAR½" MIN
BAR TO BAR2"MIN NOTE:

TYPICAL BEND RADIUS'
AND STD HOOKS ARE PER
CONC REINFORCING NOTES
AND DETAILS IN MASONRY WALLS * DENOTES "SPECIAL" REQUIREMENTS FOR LAP SPLICES AS FOLLOWS: 1. TRIM BARS PER (2),
2. HORIZ BARS WHERE NOTED.
3. VERTICAL PILASTER REINFORCING
4. BARS SPACED CLOSER THAN 3" (2" MIN)
AND SPLICE ENDS OR BEGINNINGS ARE
LESS THAN 24 BAR dia's APART
5. BARS DESIGNATED AS GRADE 60
6. WHERE VERTICAL REINF BARS ARE
SPLICED WITHIN THE MIDDLE 1/3
OF THE WALL HEIGHT BETWEEN
FLOORS OR FLOOR & ROOF.

NOTE:

1. USE TEMPLATE TO SET ALL BOLTS.

2. EMBEDMENT TOLERANCE IS ±½" AND AS REQUIRED FOR CLEARANCE TO CMU.

3. AB'S SHALL PROJECT NOT LESS THAN ¼" OR MORE THAN 1" BEYOND NUT.
REMOVE EXCESS THREADS WHERE NUT IS TO BE COUNTERSUNK FLUSH

BOLT EMBEDMENT SCHEDULE

TYPICAL CMU DETAILS

SCALE

. .

NONE

Drawn By Checked By Project No.

TYP REINF

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VERT STL W/ 180° 12" HOOK OR #3∐m TO MATCH VERT REINF SPACING

OPNG

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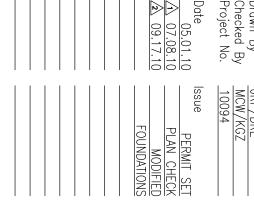
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FOUNDATION PLAN

NMOHS



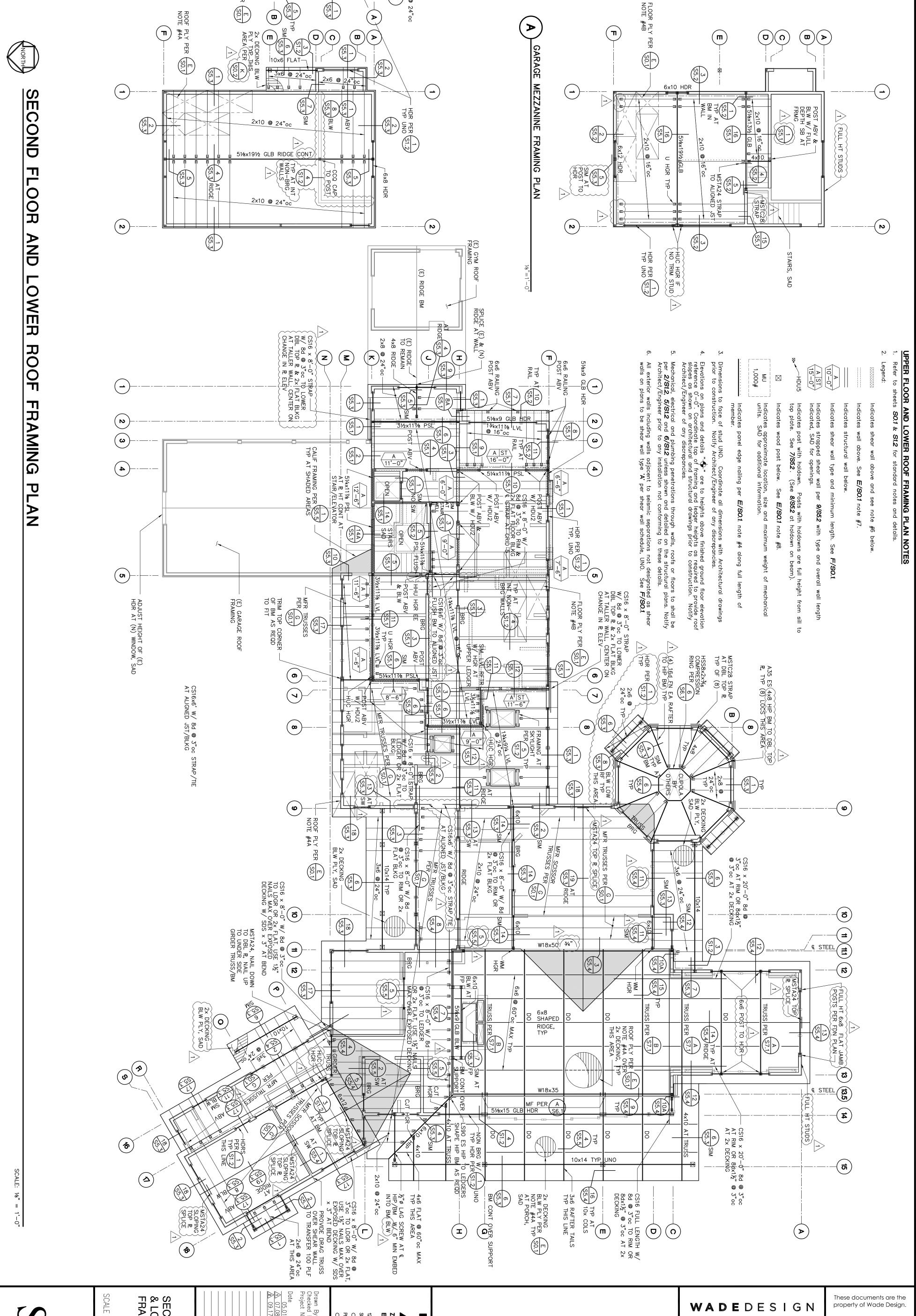
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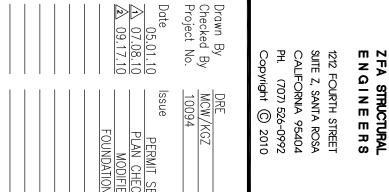


SECOND FLOOR & LOWER ROOF FRAMING PLAN

. .

AS

NMOHS



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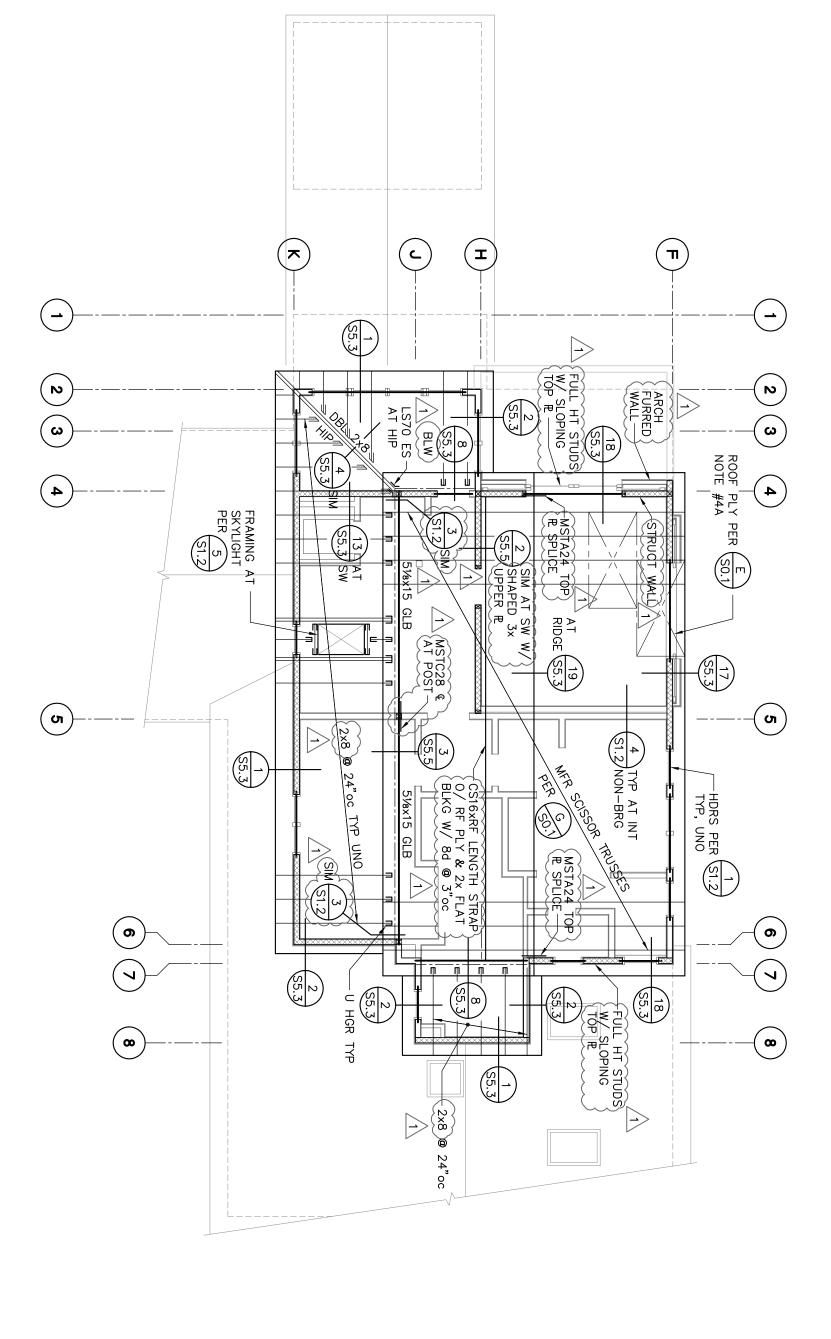
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UPPER NG



UPPER ROOF FRAMING PLAN NOTES1. Refer to sheets SO.1 & S1.2 for standard

Indicates approximate location, size and units. SAD for additional information.

M∪ 1,000#

 \boxtimes

Indicates panel edge member. Coordinate all dimensions with Architectural drawings itect/Engineer of any discrepancies.

nailing per **E/S0.1** note

prior to construction. Notify Archit prior to construction. Notify Archit Elevations on plans and details reference 0'-0". Coordinate top of slopes as shown on architectural ar Architect/Engineer of any discrepan Mechanical, electrical and plumbing penetrations through walls, roofs or floors to shall be per **2/S1.2**, **5/S1.2** and **6/S1.2** unless shown and detailed on the structural plans. Notify Architect/Engineer prior to any installation not conforming to these details. * are to heights above finished ground floor elevation of framing and ledger heights as required to provide roof and structural drawings prior to construction. Notify ancies.

All exterior walls including walls adjacent to seismic separations not designated as shear walls on plans to be shear wall type ${}^{\prime}\!A{}^{\prime}$ per shear wall schedule, UNO. See F/SO.1.

SCALE

AS

SHOWN

UPPER ROOF FRAMING PLAN

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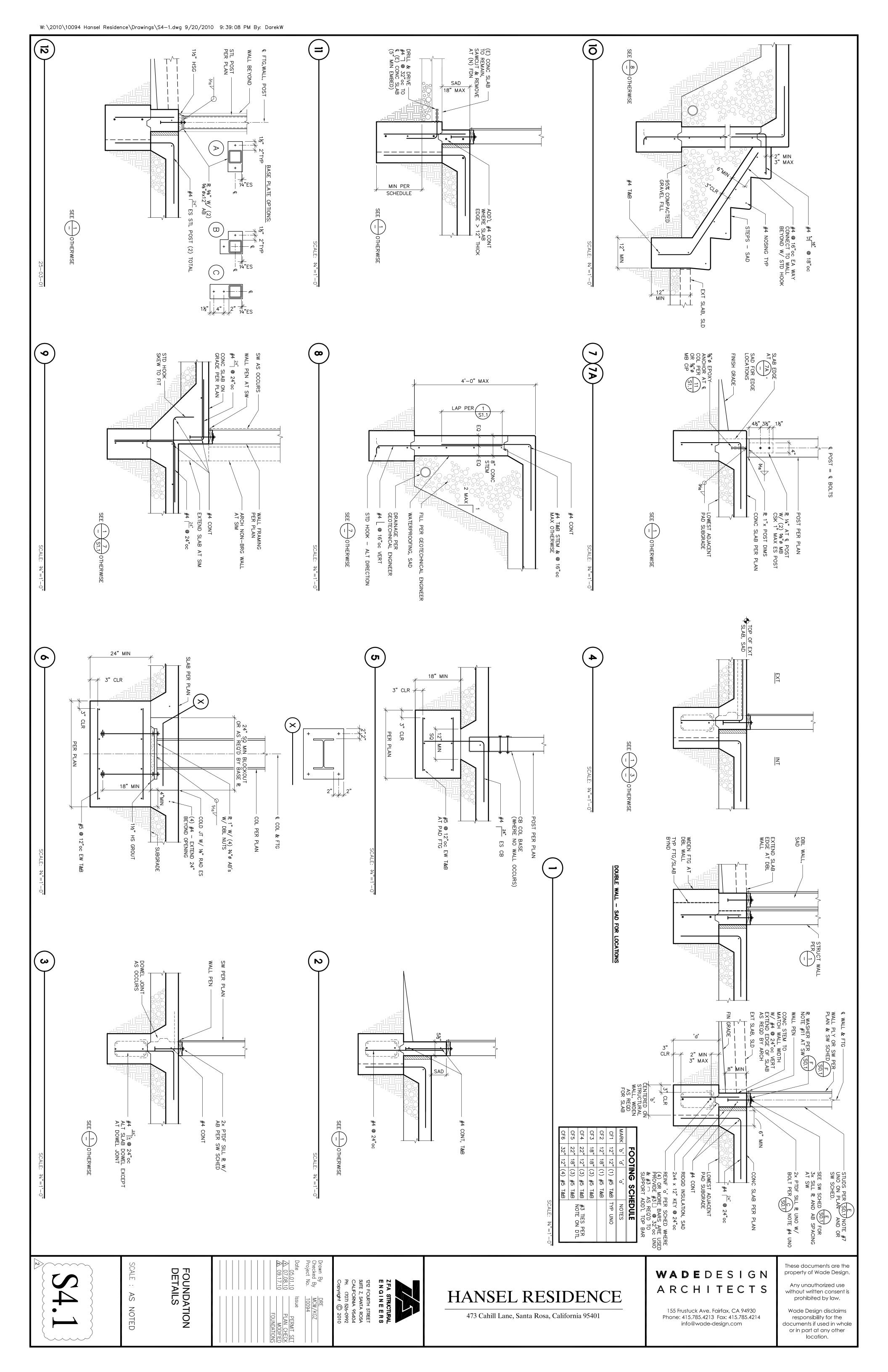
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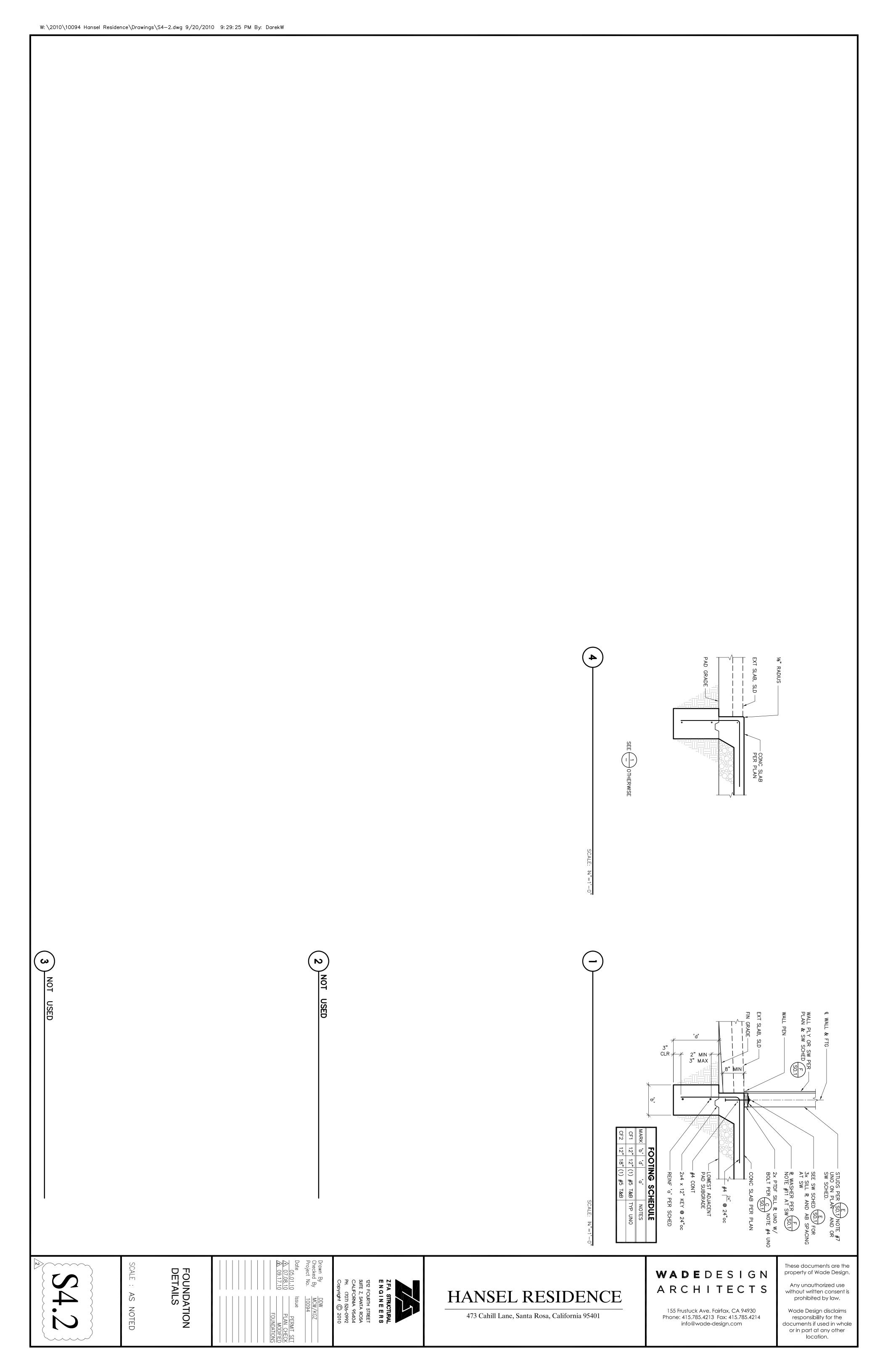
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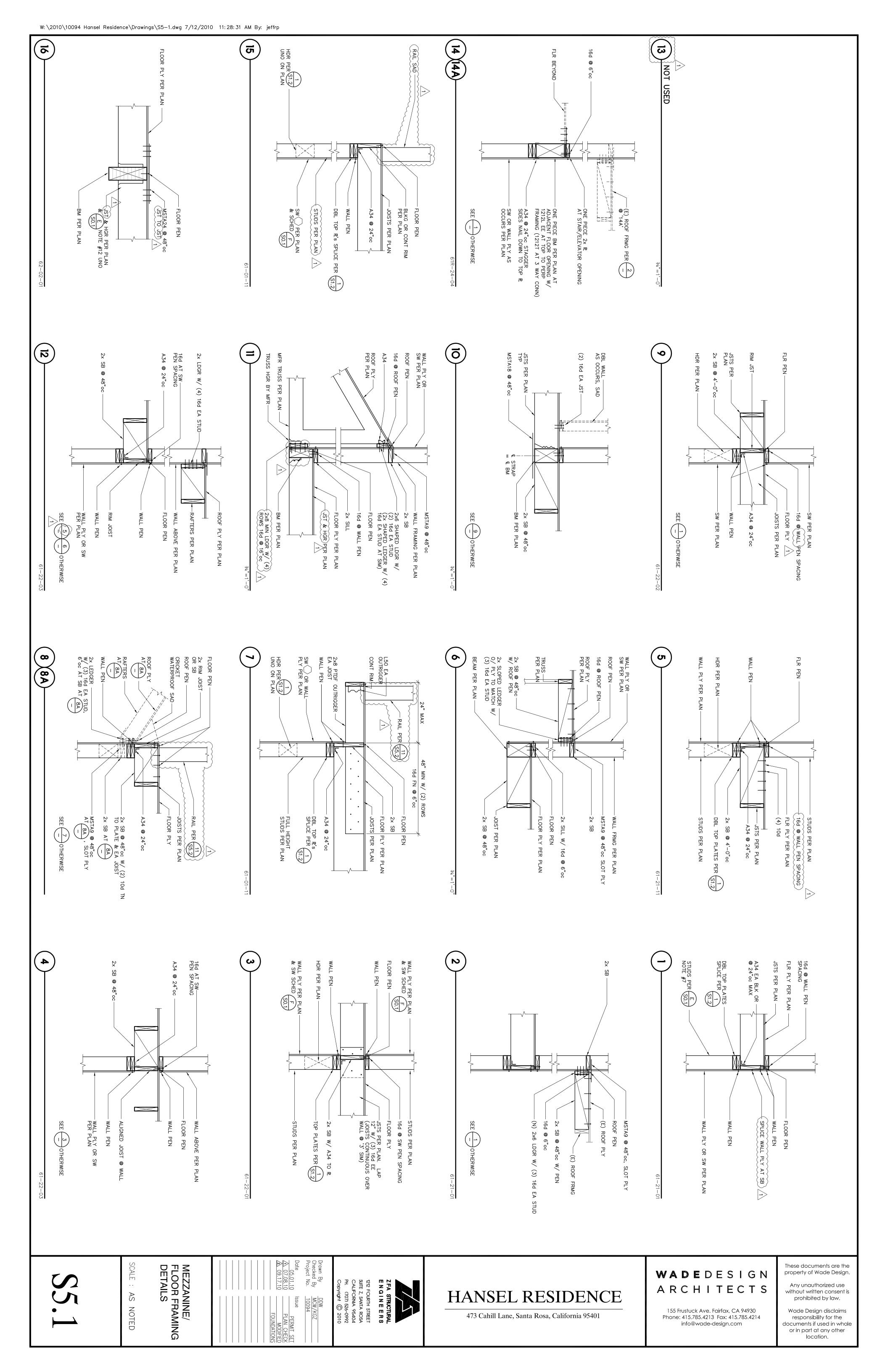
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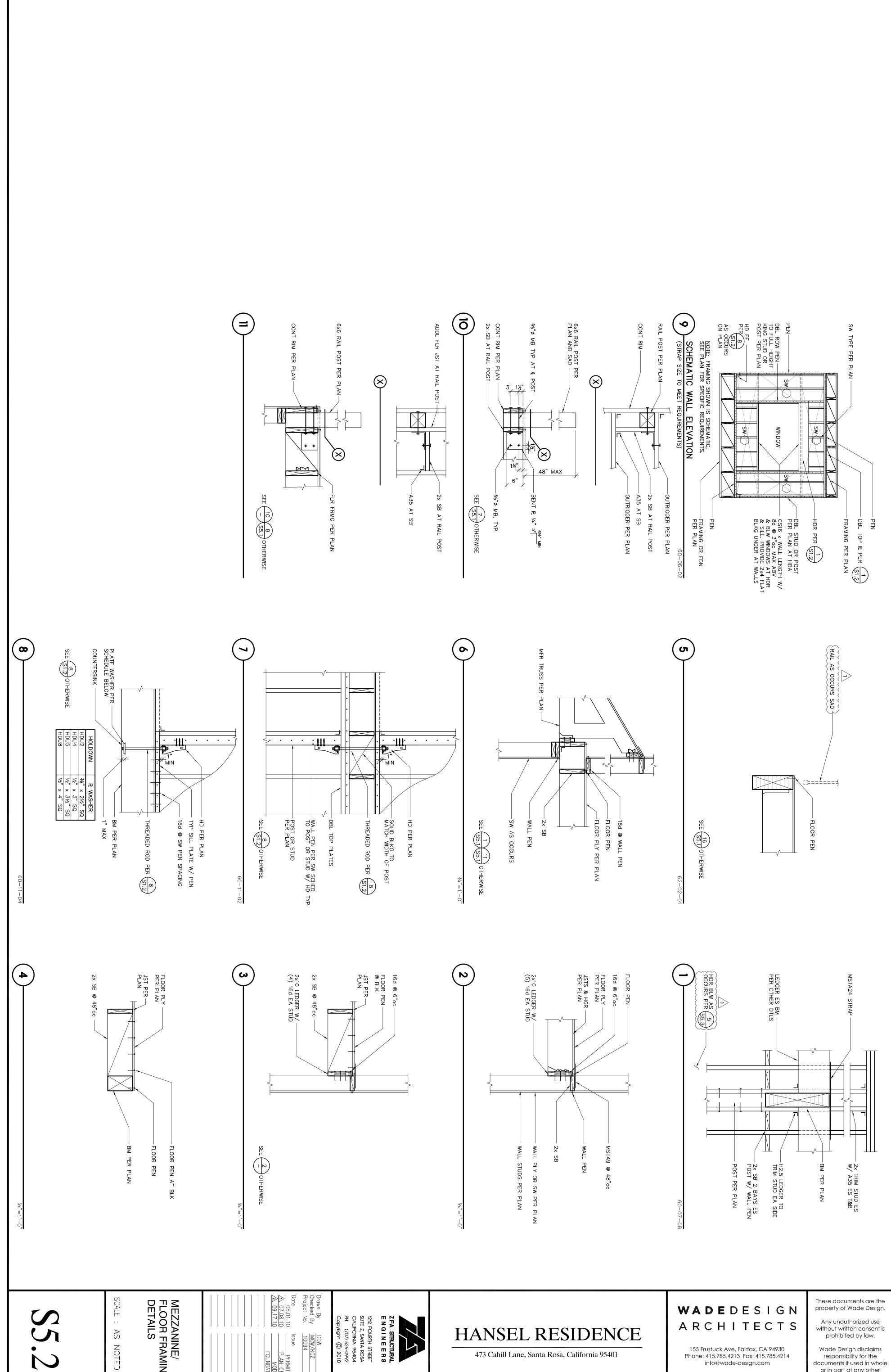
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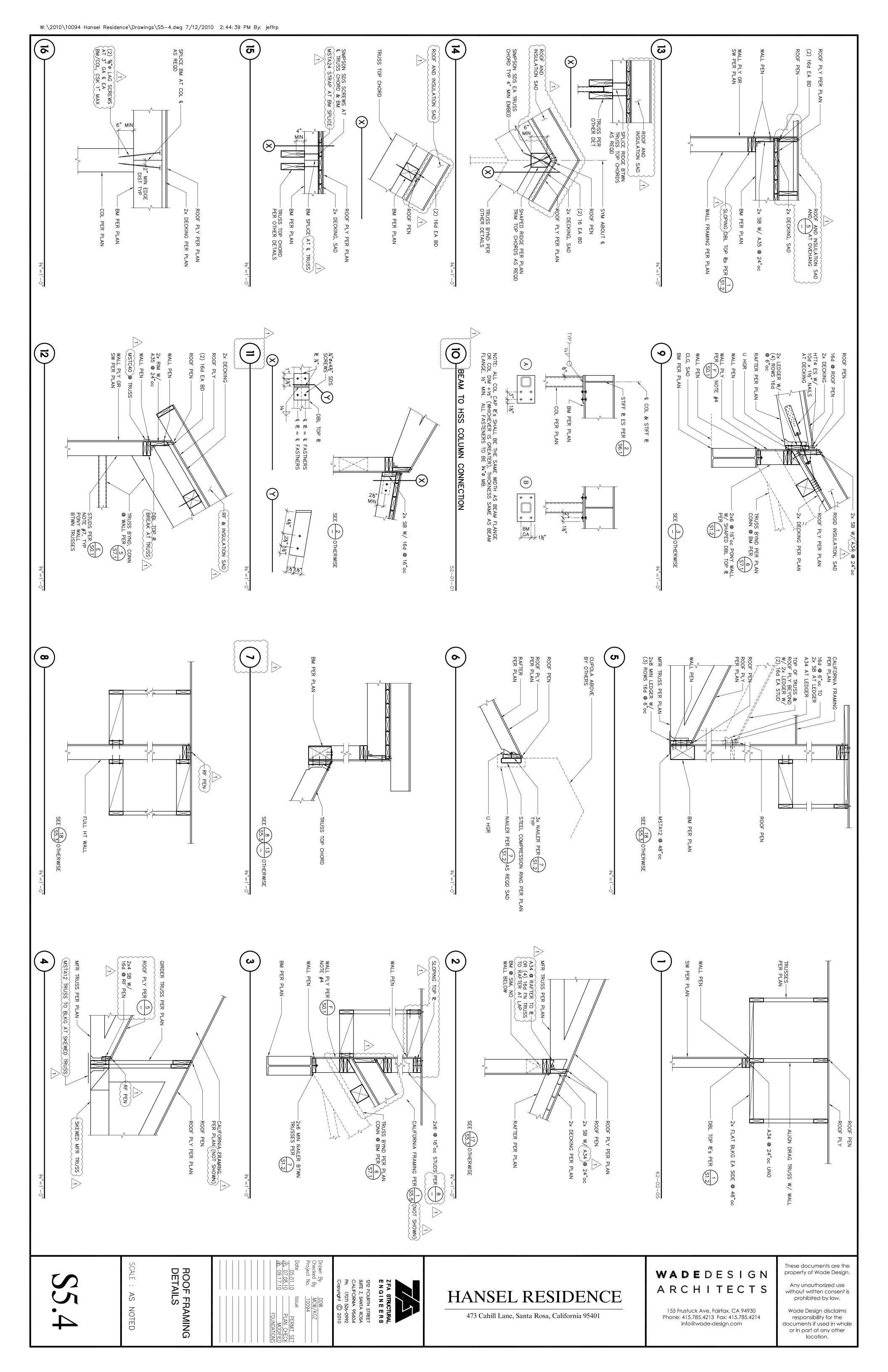


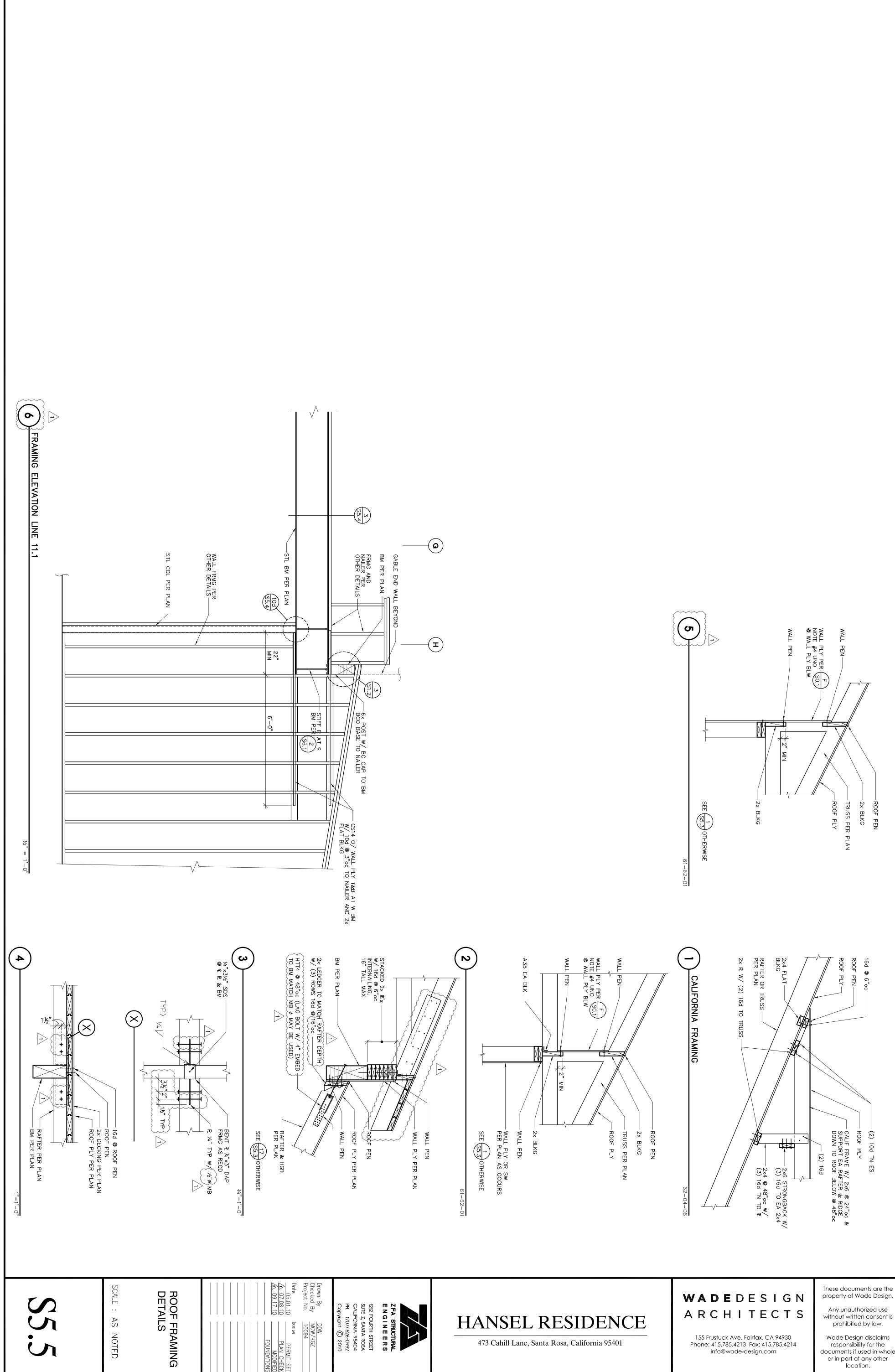


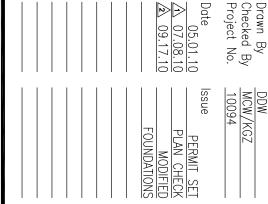
MEZZANINE/ FLOOR FRAMING DETAILS

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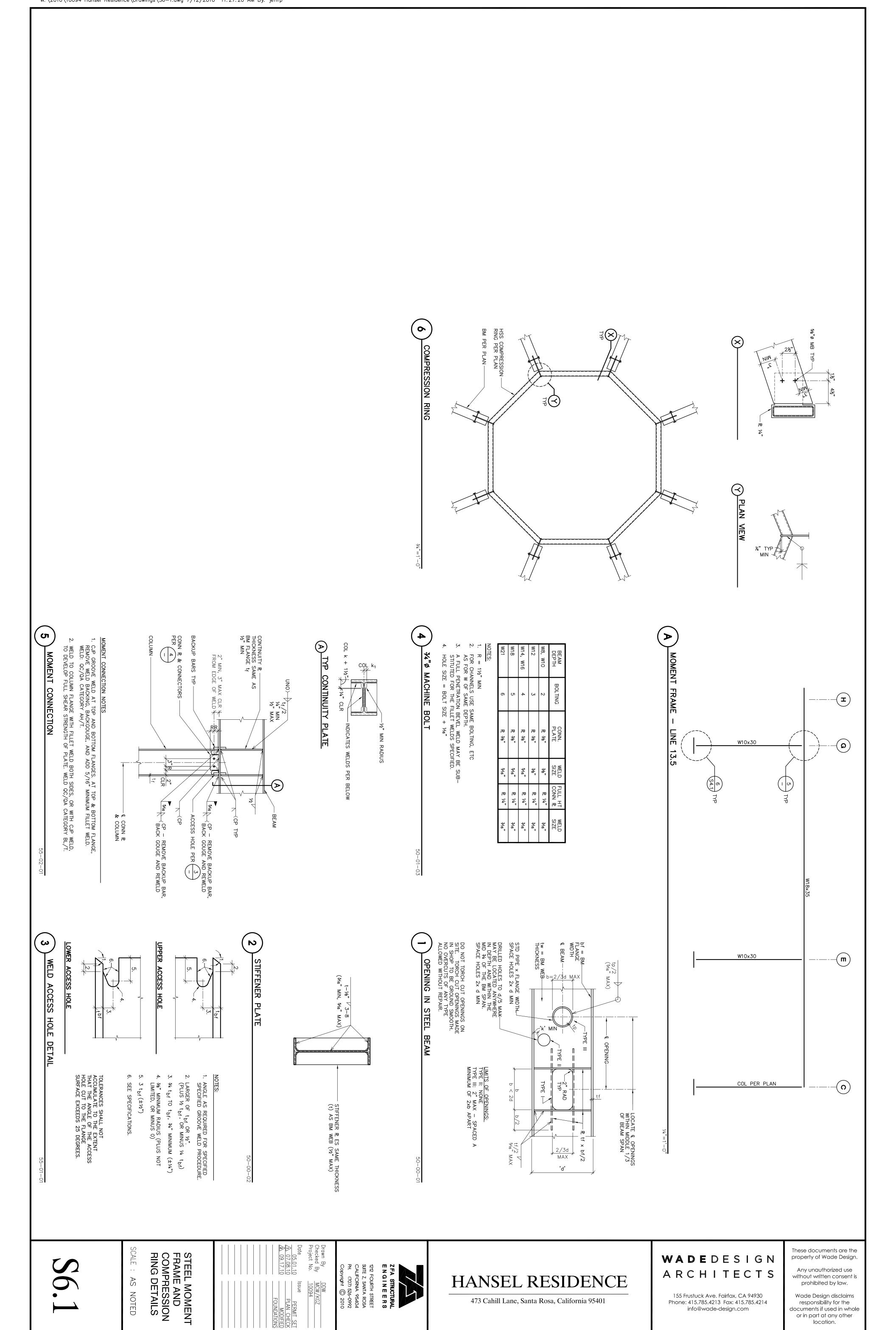




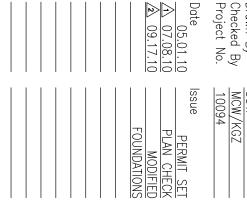
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TRUSS ELEVATIONS AND DETAILS . . AS NOTED





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