

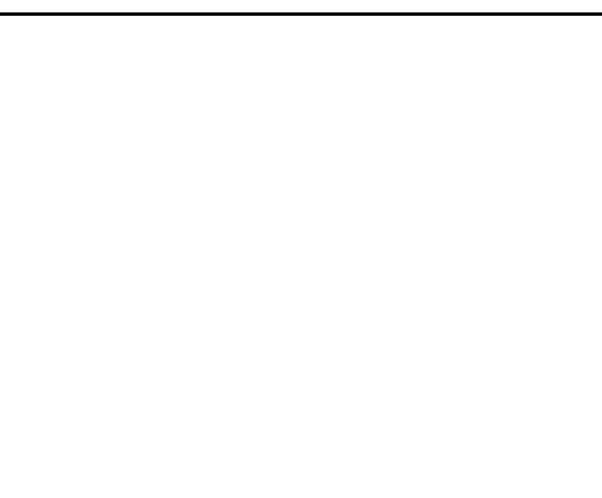
CAMPO RESIDENCE

Michael & Shelia Campo

Bustard Road
Lansdale, PA 19446

Worcester Township, Montgomery County

NEW RESIDENCE



PROJECT NO.		DRAWN BY		CHK'D BY	
B2262		EMH		EMH	
NO.	DATE	BY	ISSUE		
1	07-15-05	EMH	ISSUED FOR REVIEW		
2	08-25-05	EMH	ISSUED FOR BID/PRICING		
3	10-11-05	EMH	ISSUED FOR PERMIT		
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14					
15					

APPROVED BY	CURRENT DATE
Robin J. Kohn, AIA	October 11, 2005

Campo Residence

LOT #30 BUSTARD ROAD
LANSDALE, PA 19446

WORCESTER TWP.
MONTGOMERY COUNTY

SHEET TITLE

TITLE SHEET

SHEET NUMBER

T-1

REV

3

LEGEND

ADJ. ADJUSTABLE	MIN. MINIMUM	USGS U.S. GEOLOGICAL SURVEY
AGL. ABOVE GROUND LEVEL	MTL. METAL	WWF. WELDED WIRE FABRIC
AMSL. ABOVE MEAN SEA LEVEL	NC. NOT IN CONTRACT	A-1. ANTENNA MARK NUMBER
APPROX. APPROXIMATE	NTS. NOT TO SCALE	(E). EXISTING
CAB. CABINET	OC. ON CENTER	(N). NEW
CONC. CONCRETE	OHP. OVERHEAD POWER	(P). PROPOSED
CONT. CONTINUOUS	OHT. OVERHEAD TELCO	C. CENTERLINE
CONST. CONSTRUCTION	PWR. POWER	E. PLATE
COAX. COAXIAL	SF. SQUARE FOOT	B/W. BARBED WIRE
CJ. CONSTRUCTION JOINT	SHT. SHEET	C/L. CHAINLINK
DIA. DIAMETER	SM. SIMILAR	#. DIAMETER
DTL. DETAIL	SS. STAINLESS STEEL	H. HEIGHT
DWG. DRAWING	STL. STEEL	W. WIDTH
EA. EACH	TELO. TELEPHONE COMPANY	D. DEPTH
ELEC. ELECTRIC	TO. TOP OF	W/ WITH
ELEV. ELEVATION	TYP. TYPICAL	
EQ. EQUAL	UON. UNLESS OTHERWISE NOTED	
EQUIP. EQUIPMENT	VERT. VERTICAL	
EXT. EXTERIOR	VF. VERIFY IN FIELD	
FF. FINISH FLOOR	XFMR. TRANSFORMER	
FTG. FOOTING		
GA. GAUGE		
GALV. GALVANIZED		
GC. GENERAL CONTRACTOR		
GRND. GROUND		
HORIZ. HORIZONTAL		
INT. INTERIOR		
L.G. LONG		
MAX. MAXIMUM		
MFG. MANUFACTURER		

SECTION NUMBER

2

SHEET NUMBER

DRAWING SECTION

4

SECTION NUMBER

S-1

SHEET NUMBER

DETAIL

5

SECTION NUMBER

E-1

SHEET NO.

DETAIL ENLARGEMENT

2

REVISION NUMBER

DATUM ELEVATION

MATCH LINE

(TB) TEST BORING

(WP) WORK POINT

(DP) DATUM POINT

CAST IN PLACE OR PRE-CAST CONCRETE

CRUSHED STONE, GRAVEL OR POROUS FILL

STEEL

LIGHT WEIGHT CONCRETE

PLASTER CEMENT, SAND, GROUT

METAL, ALUMINUM, ETC.

EARTH UNDISTURBED

ROCK OR STONE

CONCRETE MASONRY UNIT

EARTH BACK FILL

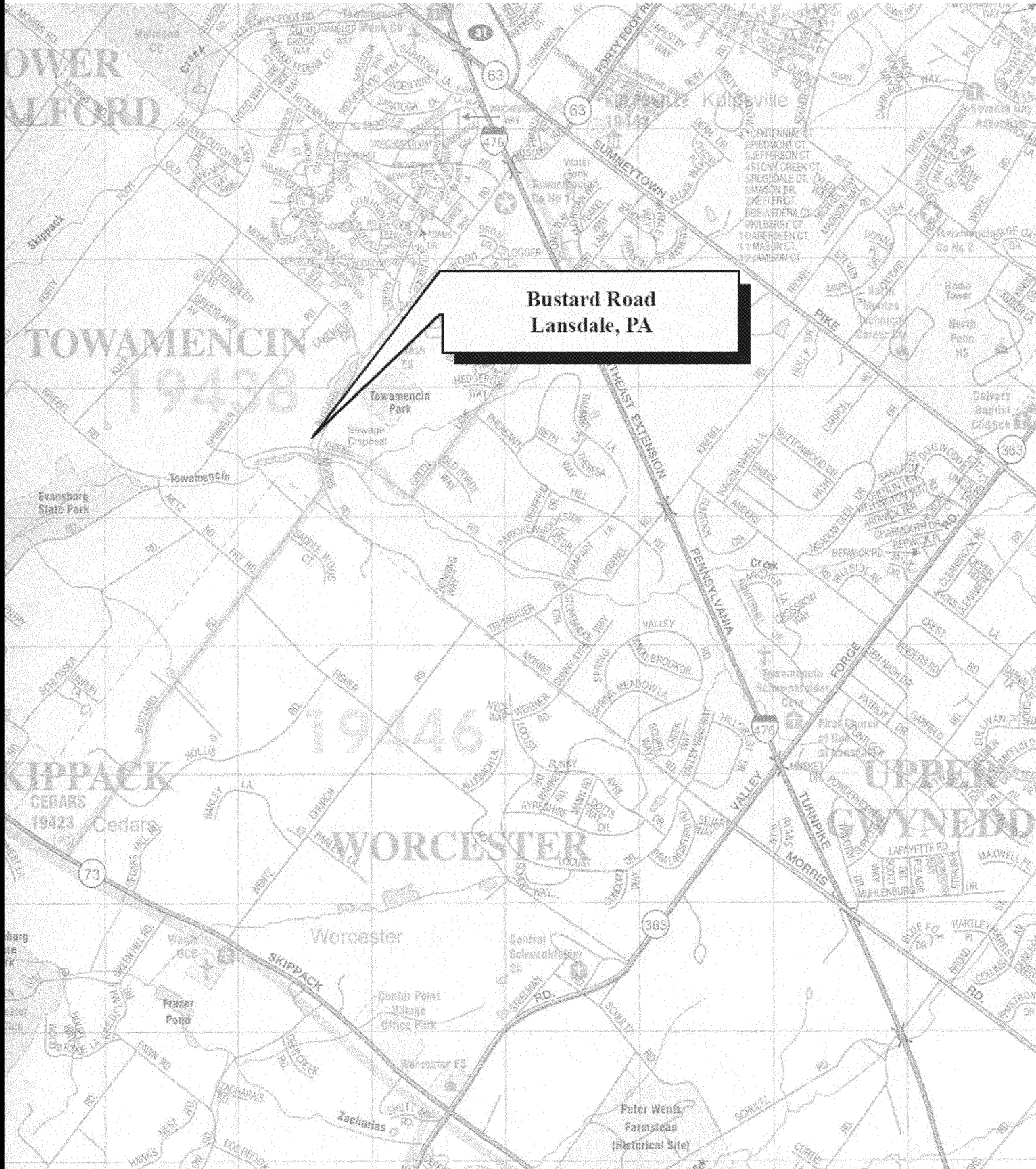
RIGID INSULATION

BRICK

DRAWING INDEX

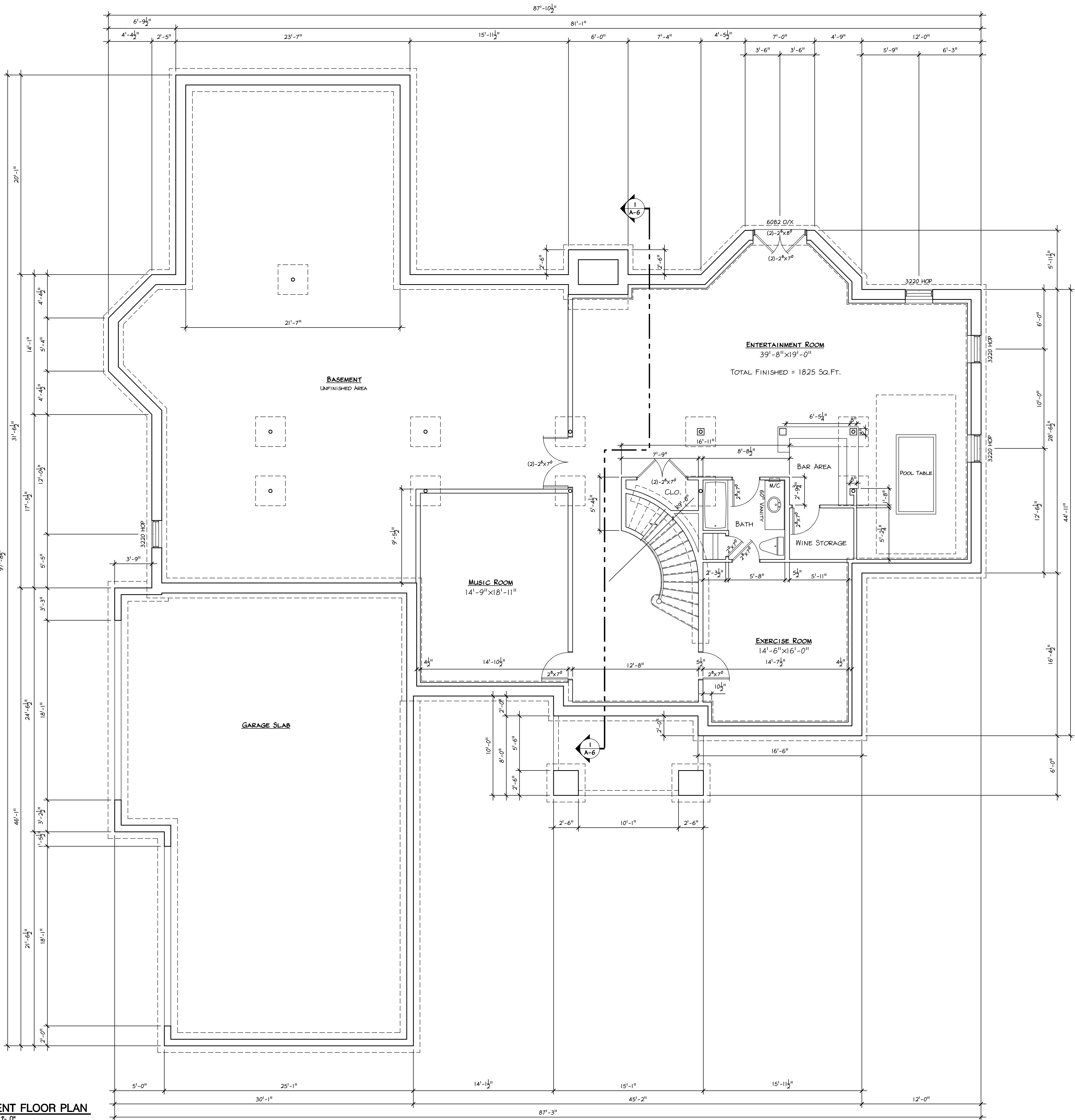
T-1	TITLE SHEET
SP-1	SITE PLAN (BY OTHERS)
A-1	BASEMENT PLAN
A-2	FIRST FLOOR PLAN
A-3	SECOND FLOOR PLAN
A-4	FRONT & SIDE ELEVATIONS
A-5	REAR & SIDE ELEVATIONS
S-1	FIRST FLOOR FRAMING PLAN
S-2	FOUNDATION PLAN
S-3	SECOND FLOOR FRAMING PLAN
S-4	ROOF FRAMING PLAN
S-5	SECTIONS
S-6	NOTES & DETAILS
E-1	ELECTRICAL - BASEMENT
E-2	ELECTRICAL - FIRST FLOOR
E-3	ELECTRICAL - SECOND FLOOR

VICINITY MAP



GENERAL NOTES

- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITION OF THE IBC CODE ADOPTED BY CHARLESTOWN TOWNSHIP, CHESTER COUNTY IN THE COMMONWEALTH OF PENNSYLVANIA.
- GENERAL CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS, STRUCTURE AND MATERIALS, AND SHALL BRING ANY DISCREPANCIES TO THE IMMEDIATE ATTENTION OF THE ARCHITECT.
- ALL FOOTING EXCAVATION SHALL BE CARRIED A MINIMUM OF 18" INTO SOLID UNDISTURBED SOIL HAVING A MINIMUM BEARING CAPACITY OF 3,000 PSF. BOTTOMS OF ALL FOOTINGS SHALL BE A MINIMUM OF 3'-0" BELOW FINISHED GRADE.
- ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,500 PSI AFTER 28 DAYS.
- 4" DIAMETER PVC PERFORATED FOOTING DRAINS SHALL BE INSTALLED IN GRAVEL BEDS WITH FABRIC WRAP PROTECTION AT OWNERS' / CONTRACTOR'S OPTION.
- STRUCTURAL BEAMS AND COLUMNS SHALL BE WPA SELECT STRUCTURAL HEM/FIR NO. 1 HAVING A FB OF 975 PSI. FLOOR AND CEILING JOISTS AND RAFTERS SHALL BE WPA #2 GRADE HEM/FIR HAVING A FB OF 850 PSI. WALL STUDS SHALL BE WPA #2 GRADE HEM/FIR HAVING A FB OF 675 PSI.
- ALL EXTERIOR DECKING, POSTS, AND JOISTS SHALL BE PRESSURE-TREATED U.N.O.
- WOOD SILLS ON CONCRETE OR CMU SHALL BE PRESSURE-TREATED AND PROVIDED WITH TERMITE SHIELDS AT ALL FOUNDATION WALLS.
- ALL EXTERIOR NAILS, BOLTS, ANCHORS, AND HANGERS SHALL BE STAINLESS STEEL OR TRIPLE HOT DIPPED GALVANIZED.
- DOUBLE FLOOR JOISTS SHALL BE INSTALLED UNDER ALL PARTITIONS WHICH ARE PARALLEL TO JOISTS.
- ALL JOISTS SHALL HAVE SOLID BRIDGED AT 6'-0" O.C. (MAX.). JOISTS SPANNING LESS THAN 12'-0" SHALL BE BRIDGED AT MIDSPAN.
- SHADED PARTITIONS INDICATE 2X6 STUDS.
- DARKENED POSTS INDICATE 2 STUD MINIMUM, UNLESS NOTED OTHERWISE.
- ALL CORNERS OF THE STRUCTURE SHALL BE SHEATHED WITH 1/2" APA RATED SHEATHING, EXPOSURE 1 NAILED WITH 6d COMMON NAILS 6" O.C. (MAX.) AT PANEL EDGES AND 12" O.C. (MAX.) AT INTERMEDIATE SUPPORTS. BALANCE OF SHEATHING SHALL BE AT OWNER / BUILDER'S OPTION.
- BUILDING SHALL BE SHEATHED WITH (MIN.) 30# ASPHALT-IMPREGNATED FELT OR TYVEK HOUSE WRAP.
- WINDOW SIZES ARE BASED UPON PELLA WINDOWS. ALL GLAZING OVER 9 SQUARE FEET AND/OR WITHIN 18" OF FLOOR AND IN HAZARDOUS LOCATIONS SHALL BE TEMPERED.
- ALL STUD FRAMED WALLS GREATER THAN 8'-6" VERTICALLY SHALL BE LATERALLY BRACED AT THE MIDPOINT WITH SOLID BLOCKING.
- INTERIOR PARTITIONS SHALL RECEIVE 1/2" (MIN.) GYPSUM DRYWALL.
- NO BACKFILLING OR ROUGH GRADING SHALL BE DONE UNTIL THE CONCRETE FOUNDATION AND SLAB HAS CURED FOR A MINIMUM OF 14 DAYS.
- ALL DIMENSIONS ARE TO ROUGH STUD FACE, CONCRETE OR C.M.U. FACE, AND EXTERIOR SHEATHING FACE.
- MASONRY AND STONE VENEERS SHALL BE ANCHORED TO SHEATHING WITH GALVANIZED CORRUGATED METAL TIES AT 32" O.C. HORIZONTALLY AND 16" O.C. VERTICALLY. FLASHING SHALL EXTEND BELOW MASONRY OR STONE AT ALL SILLS; WEEP HOLES SHALL BE PROVIDED AT 4'-0" O.C. AT BASE OF CAVITY.
- METAL HEAD FLASHING SHALL BE INSTALLED IN ALL WINDOWS THAT ARE NOT LOCATED IMMEDIATELY BELOW AN 8" (MINIMUM) EAVE PROJECTION. MINIMUM 6" WIDE 30# BUILDING PAPER FLASHING SHALL BE INSTALLED AROUND ALL PRIMED WOOD WINDOWS.
- ALLOW A MINIMUM OF 8" BETWEEN THE TOP OF FOUNDATION AND GRADE AND A MINIMUM OF 6" BETWEEN FINISH GRADE AND SHEATHING OR SIDING.
- ALL SMOKE DETECTORS SHALL BE INTERCONNECTED. ALL DETECTORS SHALL HAVE A PRIMARY 120 VOLT SUPPLY AND A SECONDARY SYSTEM CONSISTING OF A BATTERY BACK-UP.
- CONSULT MANUFACTURER SPECIFICATIONS OF ENGINEERED LUMBER. PAY PARTICULAR ATTENTION TO ASSEMBLY OF MULTIPLE MEMBER BEAMS, NAILING PROCEDURES & CUT OUTS FOR UTILITIES.
- GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION AND ACCOMMODATION OF HVAC, PLUMBING, AND ELECTRICAL SYSTEMS. NO STRUCTURAL OR ARCHITECTURAL CHANGES SHALL BE MADE WITHOUT PRIOR APPROVAL BY THE ARCHITECT.



GENERAL NOTES:

- ALL INTERIOR WALLS SHALL BE 2x4 STUDS AT 16" O.C. MAXIMUM UNLESS NOTED OTHERWISE.
- ALL EXTERIOR WALLS SHALL BE 2x6 STUDS AT 16" O.C. MAXIMUM UNLESS NOTED OTHERWISE.
- INSTALLATION OF FRAMING SHALL COMPLY WITH ALL APPLICABLE CODES AND LOCAL ORDINANCES.
- WHERE DRAWINGS ARE IN CONFLICT WITH OTHER DRAWINGS, CONTRACTOR SHALL NOTIFY THE ARCHITECT.
- PROVIDE SOLID BRIDGING AT 1/3 INTERVALS OF SPAN. (TYP. ALL JOISTS)

FLOOR AREA

	GROSS AREA	NET AREA	
BASEMENT	2030	1816	Sq.Ft.
FIRST FLOOR	3771	3618	Sq.Ft.
SECOND FLOOR	2809	2629	Sq.Ft.
TOTAL	8610	8063	Sq.Ft.
GARAGE	1279	1204	Sq.Ft.
TOTAL	1279	1204	Sq.Ft.

NOTE:

ALL WINDOWS & SKYLIGHTS SHALL BE PELLA DESIGNER SERIES W/ SMARTSASH II & LOW-E GLASS.
ALL DIMENSIONS ARE TO ROUGH STUD FACE, CONCRETE OR C.M.U. FACE, AND EXTERIOR SHEATHING FACE.

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Campo Residence
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WORCESTER TWP.
MONTGOMERY COUNTY

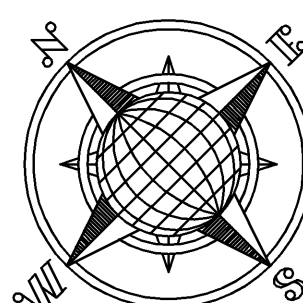
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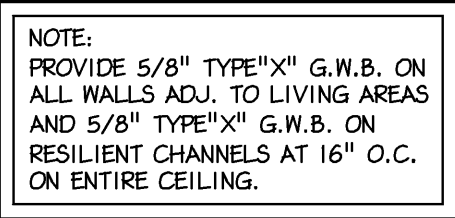
BASEMENT FLOOR PLAN

SHEET NUMBER

A-1

REV
3





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NOTE

ALL WINDOWS & SKYLIGHTS SHALL BE PELLA
DESIGNER SERIES W/ SMARTSASH II & LOW-E
GLASS
ALL DIMENSIONS ARE TO ROUGH STUD FACE,
CONCRETE OR C.M.U. FACE, AND EXTERIOR
SHEATHING FACE.

Robin J. Kohn, AIA
Commonwealth of Pennsylvania
License No. RA-11327-X

Contact Person:
Edward M. Happ
(610) 917-8831

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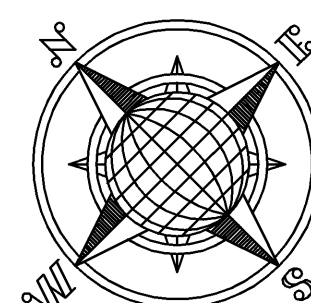
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FIRST FLOOR PLAN

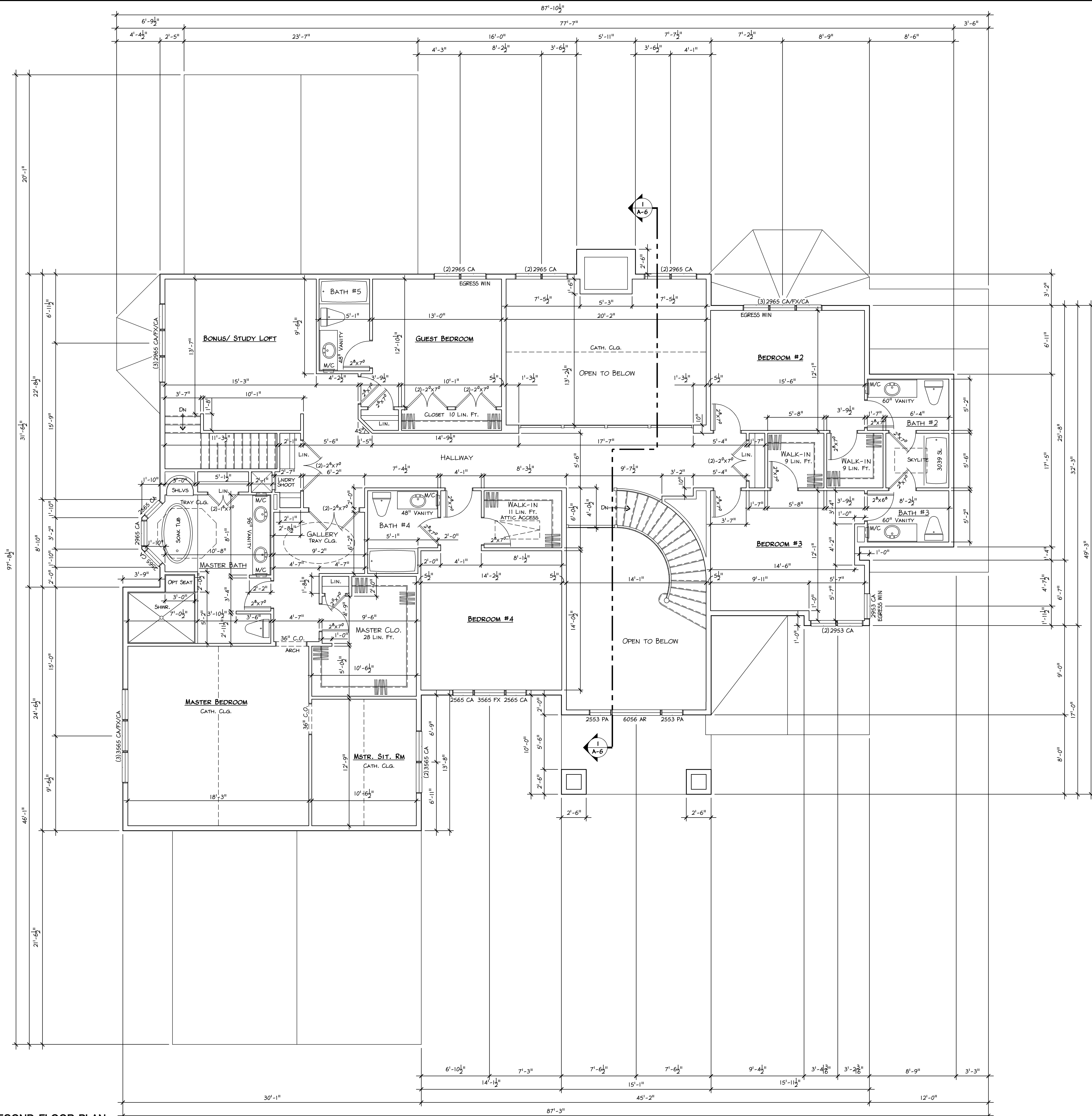
SHEET NUMBER

A-2

R



1 SECOND FLOOR PLAN
A-3 Scale: 1/4" = 1'-0"



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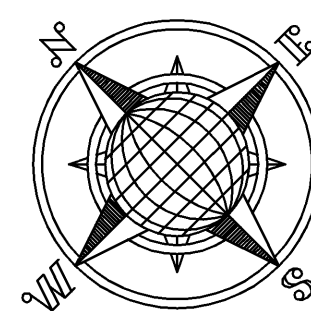
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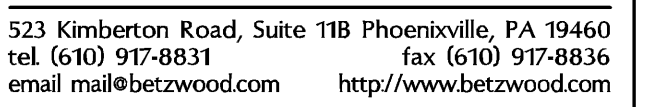
SECOND FLOOR PLAN

SHEET NUMBER

A-3

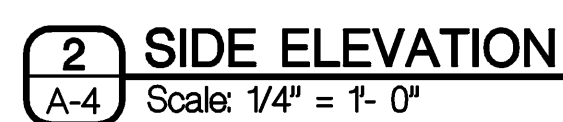
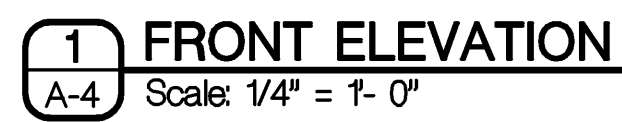
REV
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Contact Person:
Edward M. Happ
(610) 917-8831

- 10.1 GABLE END LOUVER
FYFON - OPEN W/ SCREEN (U.N.O.)
- 10.2 8x8 GARAGE DOORS
HOWELL-DOR - CUSTOM
- 10.3 FIBERGLASS SCREENING
SET IN ALUM. OR WOOD FRAME
- 10.4 WROUGHT IRON BALCONY
SEE PLAN FOR SIZE



APPROVED BY	CURRENT DATE
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A-4

EV
3

ELEVATION KEYNOTES

3.0 CONCRETE

- 3.1 CONCRETE PAVERS
- 3.2 CEMENT STUCCO OR DRYVIT FINISHING SYSTEM
- 3.3 CEMENT STUCCO OR DRYVIT FINISHING SYSTEM / BUILD-UP TRIM

4.0 MASONRY

- 4.1 ASHLAR FLAGSTONE
- 4.2 VENEER BRICK
- 4.3 GLEN GARY - HERRINGBONE PATTERN

6.0 WOODS AND PLASTICS

- 6.1 BEADED VINYL HORIZONTAL SIDING CERTAINTED® - CAROLINA BEADED
- 6.2 SHIP-LAP VINYL SIDING CERTAINTED®
- 6.3 GABLE END / BARGEBOARD TRIM PYPON - MOLDING (CROWN)
- 6.4 GABLE END / FREEZE TRIM PYPON - MOLDING (CROWN)
- 6.5 FASCIA TRIM PYPON - MOLDING (CROWN)
- 6.6 FASCIA / FREEZE TRIM PYPON - MOLDING (CROWN)
- 6.7 BAY / DORMER FASCIA TRIM PYPON - MOLDING (CROWN)
- 6.8 BAY / DORMER GABLE END TRIM PYPON - MOLDING (CROWN)
- 6.9 WINDOW / DOOR HEADER PYPON - MOLDING
- 6.10 DORMER HEAD TRIM PYPON - DORMER
- 6.11 WINDOW / DOOR SIDE TRIM PYPON - DORMER
- 6.12 WINDOW SHUTTERS PYPON - RAISED PANEL
- 6.13 WINDOW SILL EXTENSIONS PYPON - MOLDING
- 6.14 WINDOW PANELS PYPON - RAISED PANEL
- 6.15 COLUMN - PLAIN TAPERED 12" DIA. ROUND - RED CEDAR
- 6.16 LATTICE FIBERGLASS OR CEMENTITIOUS
- 6.17 2x8 JOIST - DECORATIVE RED CEDAR
- 6.18 2x2 PURLIN RED CEDAR
- 6.19 PRESSURE TREATED WOOD RAILING, BALUSTERS & POSTS
- 6.20 PRESSURE TREATED 4x4 COLUMN & 2x4 MID-RAIL
- 6.21 PYPON MOLDING / 1 X TRIM

7.0 THERMAL & MOISTURE PROTECTION

- 7.1 ROOF SHINGLES - ARCHITECTURAL STYLE (30 YR. WARRANTY)
- 7.2 RIDGE VENT - BENJAMIN OB DYKE XTRACTOR VENT - SERIES: X18
- 7.3 FLASHING - 16oz COPPER

10.0 SPECIALTIES

- 10.1 GABLE END LOUVER PYPON - OPEN W/ SCREEN (U.N.O.)
- 10.2 8x8 GARAGE DOORS HOWELL-DOR - CUSTOM
- 10.3 FIBERGLASS SCREENING SET IN ALUM. OR WOOD FRAME
- 10.4 WROUGHT IRON BALCONY SEE PLAN FOR SIZE



1 REAR ELEVATION

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



2 SIDE ELEVATION

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

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CHK'D BY EMH

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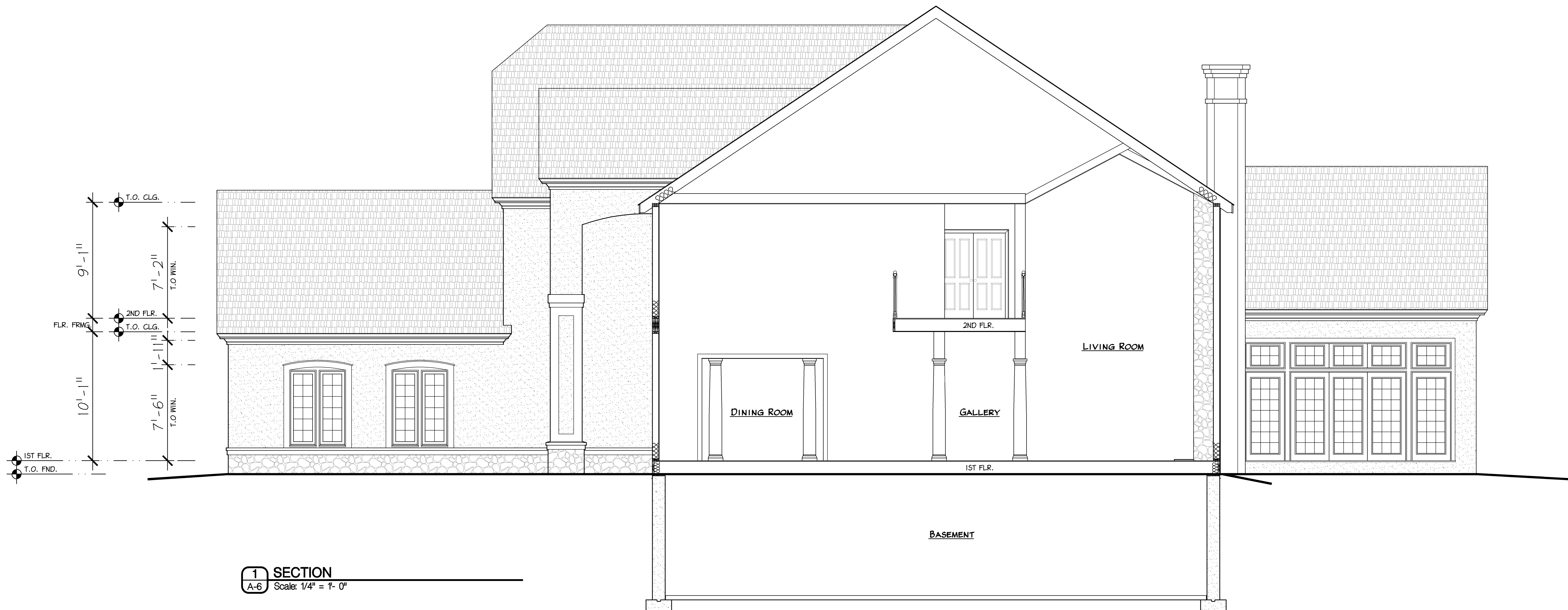
ELEVATIONS

SHEET NUMBER

A-5

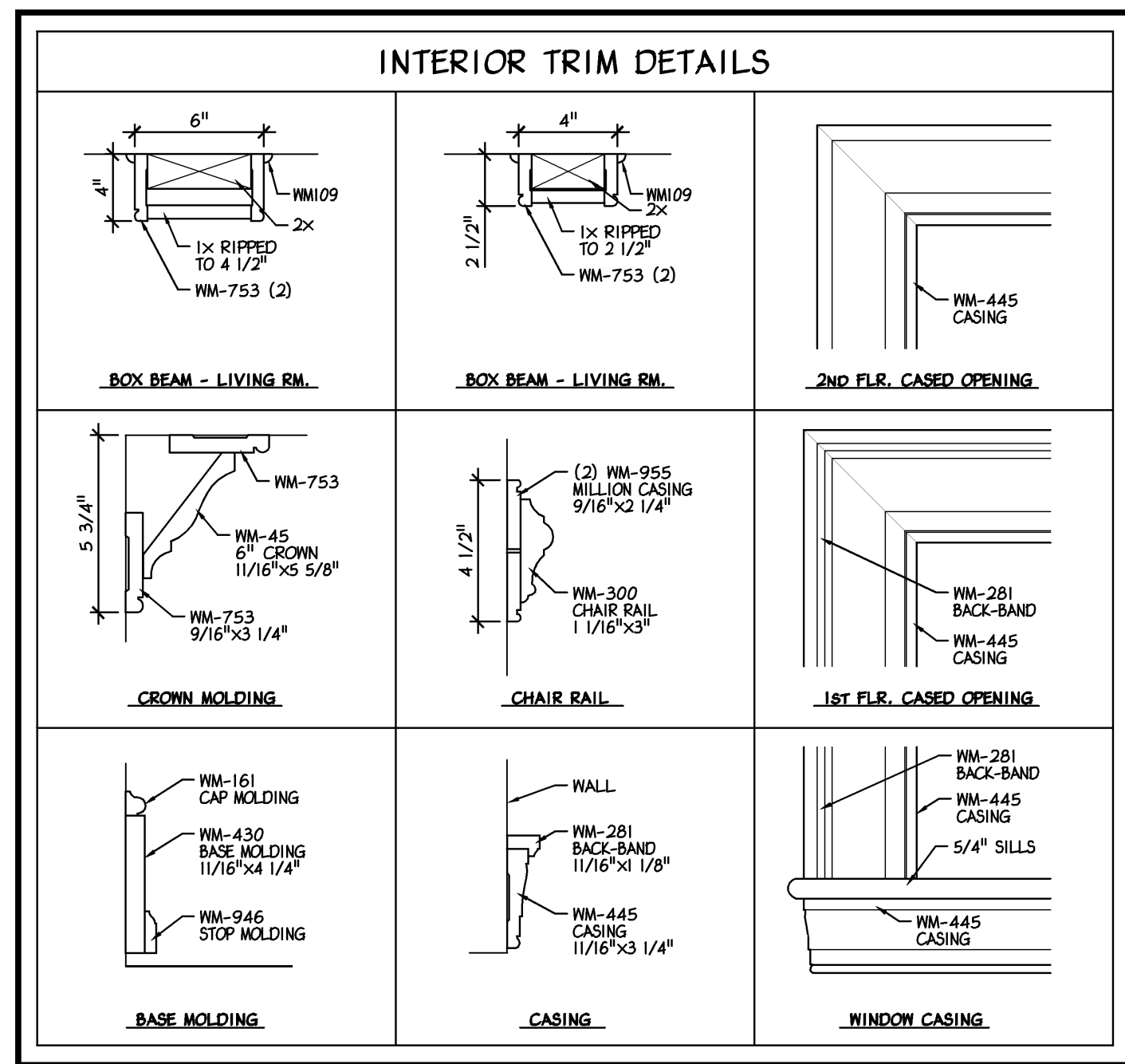
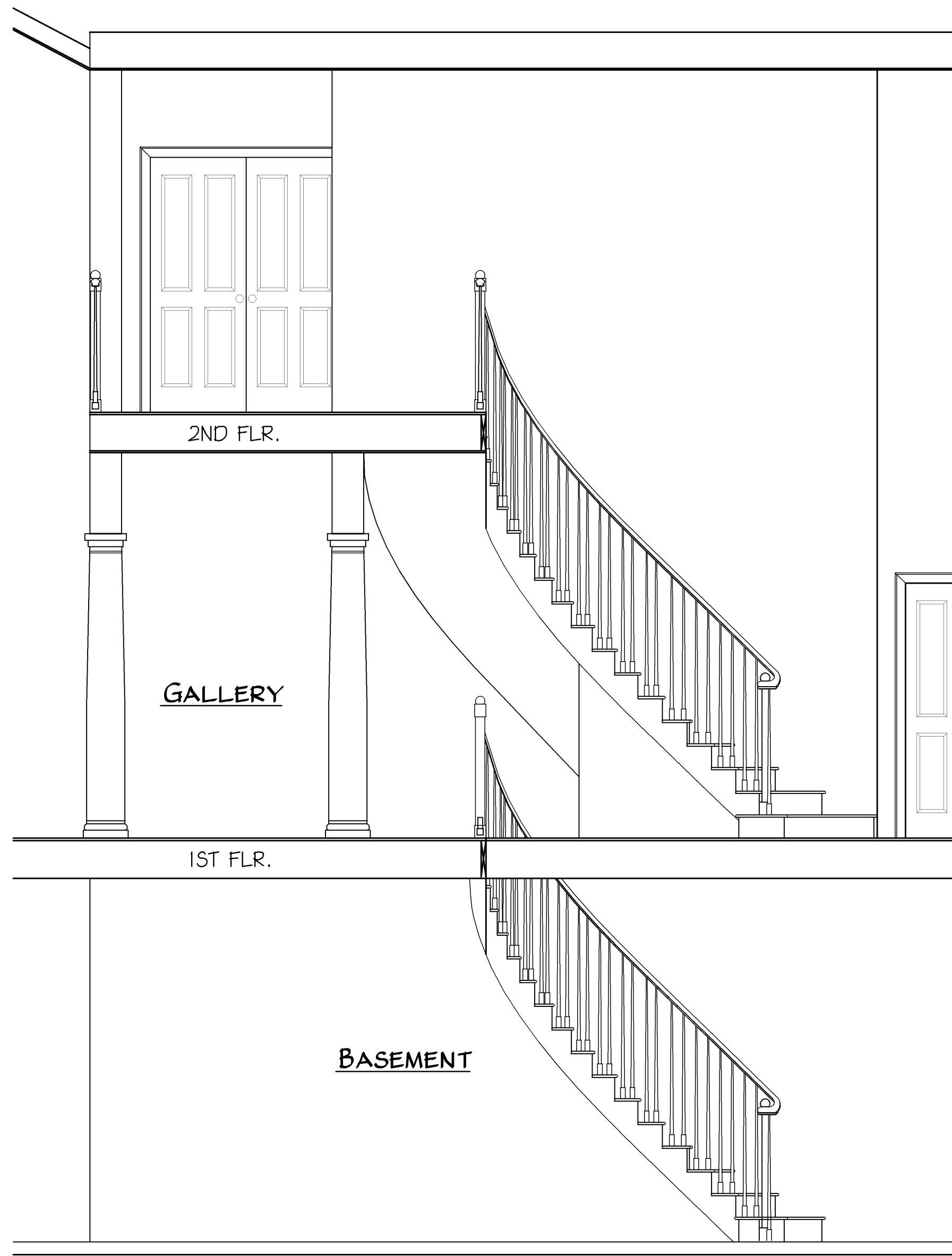
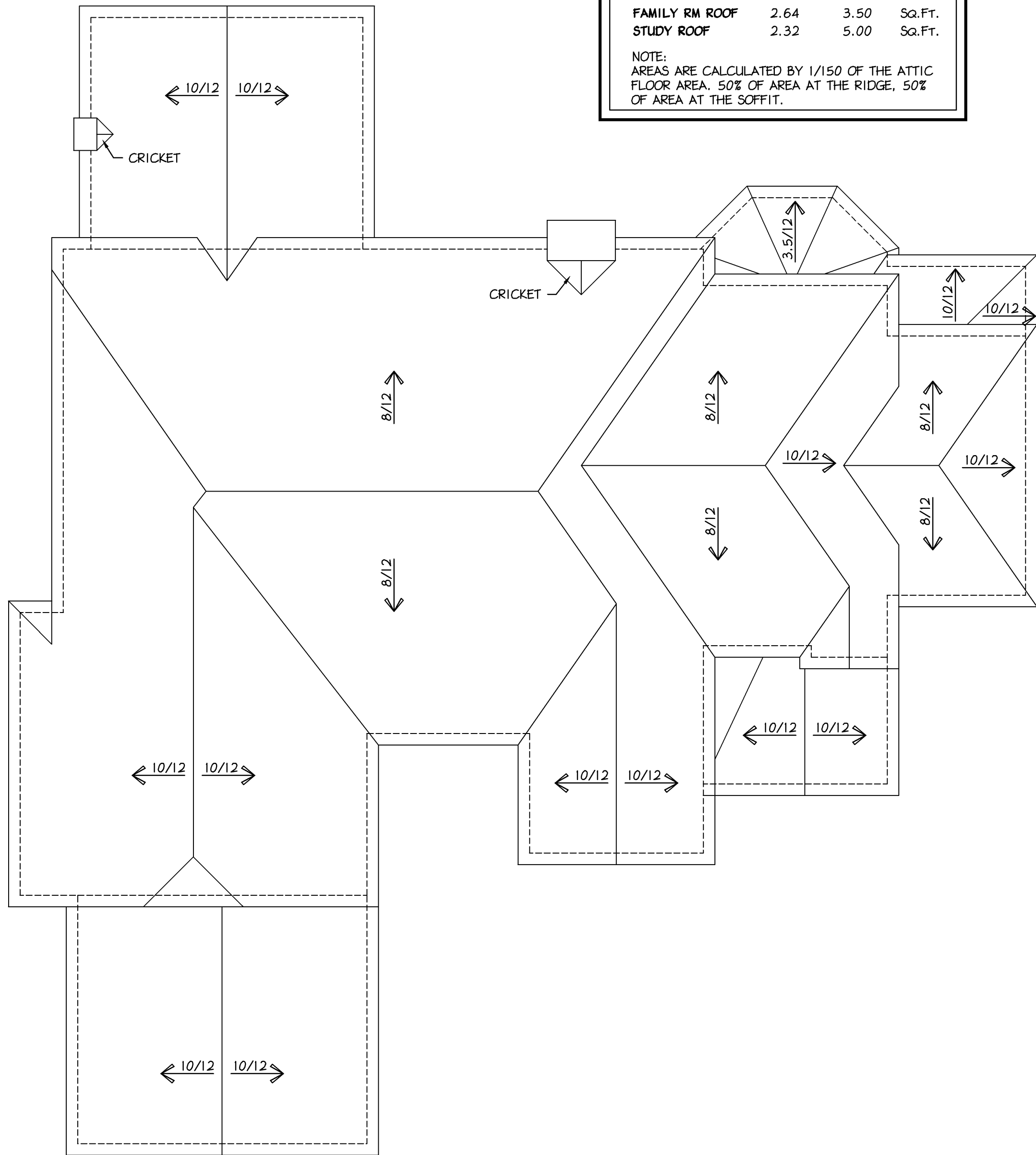
REV

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ATTIC VENTILATION			
	REQUIRED	PROVIDED	
MAIN ROOF	7.37	10.25	Sq.Ft.
GARAGE ROOF	5.84	8.25	Sq.Ft.
FAMILY RM ROOF	2.64	3.50	Sq.Ft.
STUDY ROOF	2.32	5.00	Sq.Ft.

NOTE:
AREAS ARE CALCULATED BY 1/150 OF THE ATTIC FLOOR AREA, 50% OF AREA AT THE RIDGE, 50% OF AREA AT THE SOFFIT.



ROOM FINISH SCHEDULE									
					MATERIAL CODE				
SPACE	LEVEL	FLOOR	WALL	CEILING	FLR. / BASE	WALL	CEILING		
FOYER	1ST	2	A	•	1	CPT / WD	A	G.W.B.	1
LIVING ROOM	1ST	2	A	•	1	H WD / WD	B	MR G.W.B.	2
DINING ROOM	1ST	2	A	•	1	CT / WD	C	CT	3
KITCHEN	1ST	3	A	•	1	CT / CT	D	WD PANEL	4
FAMILY ROOM	1ST	1	A	•	1	VNLT / WD	E	BRICK	5
BREAKFAST ROOM	1ST	2	A	•	1	CONC.	F	5/8" X 3/4" GIB	6
PORCH ROOM	1ST	3	A	•	1	SUBFLR.	G	UNFINISHED	7
MUD ROOM	1ST	3	A	•	1	P.T. WD	H	WD TAG	8
GARAGE	1ST	6	ASF	•	1	11'-1" S			
LAUNDRY	1ST	3	A	•	1	10'-1" S			
BUTLERS PANTRY	1ST	2	A	•	1	10'-1" S			
MASTER SUITE #1	1ST	2	A	•	1	10'-1" S			
MSR #1 SITTING	1ST	2	A	•	1	10'-1" S			
MSR #1 BATH	1ST	3	B	•	1	10'-1" S			
MSR #1 CLOSET	1ST	2	A	•	1	10'-1" S			
MASTER SUITE #2	2ND	1	A	•	1	16'-1" S			
MSR #2 BATH	2ND	3	B	•	1	9'-1" S			
MSR #2 CLOSET	2ND	1	A	•	1	9'-1" S			
MSR #2 SITTING	2ND	2	A	•	1	9'-1" S			
BEDROOM #3	2ND	1	A	•	1	9'-1" S			
BEDROOM #4	2ND	1	A	•	1	9'-1" S			
BEDROOM #5	2ND	1	A	•	1	9'-1" S			
GUEST BEDROOM	2ND	1	A	•	1	9'-1" S			
2ND FLR BATHS	2ND	3	B	•	1	9'-1" S			

MATERIAL GLOSSARY			
CPT	CARPET	CERAMIC TILE	
CONC.	CONCRETE		
G.W.B.	GYPSPUM WALL BOARD		
H WD	HARDWOOD FLOOR		
MR G.W.B.	MOISTURE RESISTANT G.W.B.		
VT	SHEET VINYL TILE		
WD TAG	WOOD TONGUE & GROOVE		

PROJECT NO.		DRAWN BY		CHK'D BY	
B2282		EMH		EMH	
NO.	DATE	BY	ISSUE		
1	07-15-05	EMH	ISSUED FOR REVIEW		
2	08-25-05	EMH	ISSUED FOR BID/PHOSG		
3	10-11-05	EMH	ISSUED FOR PERMIT		
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APPROVED BY		CURRENT DATE			
Robin J. Kohn, AIA		October 11, 2005			

Campo Residence
LOT #30 BUSTARD ROAD
LANSDALE, PA 19446
WORCESTER TWP.
MONTGOMERY COUNTY

SHEET TITLE
SECTIONS &
ROOF PLAN

SHEET NUMBER

A-6

REV
3

DIVISION 1 - GENERAL CONDITIONS

WORK COVERED BY CONTRACT DOCUMENTS

The Project consists of construction of a two story home, attached garage and site work including drives, walks and paving. The first story is approximately 3200 sf of conditioned area and the second story contains 1600 sf with a 1600 sf loft conditioned basement area. The total framed area for the home is 8200 sf.

1. Project Location: Bustard Road, Worcester Township, Montgomery County, Pennsylvania
2. Owner: Mike and Sheila Campo

CONTRACTOR USE OF PREMISES

General: During the construction period the Contractor shall have full use of the premises for construction operations. Including use of the site. The Contractor's use of the premises is limited only by the Owner's right to perform work or to retain other Contractors on portions of the Project.

ALLOWANCES

This Section includes administrative and procedural requirements governing allowances.

Selected materials and equipment are specified in the Contract Documents by allowances. In some cases, these allowances include installation. Allowances have been established in lieu of additional requirements and to defer selection of actual materials and equipment to a later date when additional information is available for evaluation. If necessary, additional requirements will be issued by Change Order.

SELECTION AND PURCHASE

1. At the earliest practical date after oward of the Contract, advise the Architect of the date when the final selection and purchase of each product or system described by an allowance must be completed to avoid delaying the Work.
2. At the Architect's request, obtain proposals for each allowance for use in making final selections. Include recommendations that are relevant to performing the Work.

APPLICATION FOR PAYMENT

Coordinate the Schedule of Values and Applications for Payment with the Contractor's Construction Schedule, Submittal Schedule and List of Subcontractors.

Submit the Schedule of Values for the project to the Architect at the earliest possible date but no later than seven (7) days before the date scheduled for the first submittal of the initial Application for Payment.

Arrange the Schedule of Values in tabular form with separate columns to indicate the following for each item listed:

- a. Related Specification Section or Division
- b. Description of Work
- c. Name of Subcontractor
- d. Name of Manufacturer or Fabricator
- e. Name of Supplier

Provide a breakdown of the Contract Sum in sufficient detail to facilitate continued evaluation of Applications for Payment and progress reports. Break principal subcontract amounts down into several line items.

INDUSTRY STANDARDS

Applicability of Standards: Except where the Contract Documents include more stringent requirements, applicable construction industry standards have the same force and effect as if bound or copied directly into the Contract Documents to the extent referenced. Such standards are made part of the Contract Documents by reference.

DIVISION 2 - SITEMORK

PROTECT VEGETATION to remain; remove stump to 2 feet below finish grade.

ACCESS: Provide temporary road onsite.

DRAINAGE: Temporary grading, ditching, pumping, culvert if needed.

SURVEY: By Owner as required by contractor.

EARTHWORK

SELECT FILL: 95% density; liquid 30-45; plasticity 7-20; stone max 3"; sand acceptable only if no head of water possible.

ORDINARY FILL: Free of organic topsoil, trash, debris, large stone.

TOPSOIL: Remove 6", save for reuse or convert to select fill with lim.

Note: refer to structural specifications for additional building pad information. Follow the more stringent specification if there are conflicts between this specification and structural.

EXCAVATION FOR BUILDING:

CONSTRAINT: Angle of repose 45° for soil; shore and dewater.

FOOTINGS: Adjust contract if earth unsuitable remove infill.

LINE STABILIZATION: Per State Department of Highway and Public Transportation Item 264.

LANDSCAPE GRADING (min 1/8" per foot slope) Sprinkle to compact 3" topsoil smooth; stone max 1"; allow 1" turf, fill.

FLEXIBLE BASE

SUBGRADE COMPACTION 95% at optimum moisture, 6" depth.

SLOPE (SURFACE, BASE AND SUB-BASE): Minimum 1/16" per foot.

PAVING Asphalt

(minimum 1/16" per foot slope)

TERMITE TREATMENT

WARRANTY: 5 years;; replace termite damage to building and contents.

APPLICATOR: Bonded; licensed.

DIVISION 3 - CONCRETE

CAST-IN-PLACE CONCRETE

All reinforced concrete shall be furnished and installed in accordance with the current ACI-318 "Building Code Requirements for Reinforced Concrete.

Concrete shall have a minimum 28 day compressive strength of 3,500 psi.

Cement shall be Portland Cement conforming to ASTM C150 - TYPE II.

Reinforcing steel shall conform to ASTM-A615 Grade 60. Welded wire fabric shall be 6x6, #10/10 and conform with ASTM A-185.

In on-grade concrete slabs the W.W.F. reinforcement shall be located midway in the slab thickness.

All exterior concrete to be air-entrained. Provide 5% ± 1% air entrainment. Air entrainment to be in accordance with ACI 301. No other admixture shall be used unless approved by the Engineer.

Provide concrete reinforcing bars at footing locations where soil is engineered fill. Bars shall be (3)#4, at the bottom with a minimum of 2" concrete cover, unless noted otherwise. Concrete reinforcing bars are not required at footings bearing on undisturbed soil with a bearing capacity of 2,000 psf unless noted otherwise on the drawings.

The top of all concrete surfaces shall be true level with a smooth float finish, unless otherwise noted. Exterior walking surfaces shall receive a broom finish. All dimensions shall be within ± 1/8 inch.

Provisions must be taken to protect all concrete work from frost damage with special attention paid to footings and other on-grade construction prior to backfilling and enclosing the building.

Anchor bolts shall be galvanized 5/8" diameter (min.) - 12" imbedded for concrete walls - 18" imbedded for CMU walls. Placement of anchor bolts shall be 6'-0" O.C. (max.) intermediate spacing, minimum 2 bolts per plate section 12" (min.) from plate end. Approved galvanized stop anchors may be substituted for anchor bolt method.

Provide 6 mil polyethylene vapor barrier membrane complying with ASTM D-2103 under slabs where indicated on drawings.

All reinforcement, embedded steel, inserts and all other embedded items shall be in place before the start of concrete placement.

DIVISION 4 - UNIT MASONRY

ACCESSORY AND MORTAR

MORTAR Type S lime; admix OM by Omixon or Hydrocide by Sonneborn; color inorganic (if any) Fire brick mortar at fireplace.

MIX Type S hi strength. No chloride.

REINFORCE 9 gauge deformed galvanized; smooth crosswire; at max 24"; width 2" less than nominal wall.

IE corner and veneer 24 gauge x 7/8" corrugated 3" into masonry at 24" x 16" or 15".

FLEXIBLE ANCHOR min 3"x3"x3/16" diam. At 16" (or Dowelet by Heckman)

BRICKWORK (fireplace)

PROVIDE SAMPLES Firebrick

GRADE MW: Type FBS: modular, Firebrick and fireproof mortar.

LAY damp saw exposed cut; miter corner; fill bed and vertical joint relay with fresh mortar; at base or ledge.

CLEAN: protect adjacent; protect edge and corner.

TOOL 3/8" concave joint in running bond (1/3 for king-size)

DIVISION 5 - METALS

SHEET METAL FABRICATIONS - REFERENCE HVAC DUCT WORK

DIVISION 6 - WOOD AND PLASTICS

ROUGH CARPENTRY

1. All lumber except as noted shall be stress graded minimum No.2 medium grade kiln dried hem/fir (see structural for additional information).

2. All plywood roof decking shall be a minimum 5/8" thick C-C exterior = DFPA grade that complies with APA performance rated sheathing (40/20 exposure) with 6d nails at 6" on edge and 12" on immediate framing unless noted otherwise on drawings. Slobber plywood joint.

3. For plywood roof deck spanning 19.2" or greater, install Simpson or equal, pldclips on horizontal joint at mid-span between each roof rafter.

4. All plywood floor decking shall be minimum A-D exterior - DFPA grade with nails at 6" on edge and 10" on intermediate framing unless noted otherwise on drawings.

5. Provide treated wood for any framing exposed to weather or moisture conditions.

6. Bridging, Fire Stops and Blocking to comply with governing building code.

7. At all exterior walls, uplift tie down sheet metal anchors shall be spaced at a maximum of 32 inches on center. Anchors shall be used at:

a. Ground level sill plate to wall stud.

b. Wall stud to wall stud connection past floor cap and floor plates

c. Wall stud to roof trusses

8. Lumber shall bear an appropriate inspection Bureau grade mark. Plywood shall bear American Plywood Association grade mark.

9. Delivery and Storage: Keep materials under cover and dry. Protect against exposure to weather and contact with damp or wet surfaces. Stack lumber as well as plywood and other panels; provide for air circulation within and around stacks and under temporary coverings including polyethylene and similar material. For lumber and plywood pressure treated with water-borne chemicals, sticker between each course to provide air circulation.

10. Coordination: Fit carpentry work to other work; scribe and cope as required for accurate fit. Correlate location of luring, fasteners and similar supports to allow attachment of other work including window treatment, finish carpentry, architectural woodwork, coordinate locations with interior design drawings.

11. Lumber Standards: Manufacturer lumber to comply with PS 20 "American Softwood Lumber Standard" and with applicable grading rules of inspection agencies certified by American Lumber Standards Committee's (ALSC) Board of Review.

12. Provide dressed lumber, S4S, unless otherwise indicated.

13. Provide seasoned lumber with 19% maximum moisture content at time of dressing and shipment for sizes 2" or less in nominal thickness, unless otherwise indicated.

14. For framing provide the following grade and species:

i. Structural beams and columns shall be WPA Select Structural No.1 grade, hem/fir. Having a fb=975 psi

ii. Floor, ceiling joist and rafters shall be WPA No.2 grade, hem/fir. Having a fb=850 psi.

iii. Wall studs shall be WPA No.2 grade, hem/fir. Having a fb=675 psi.

14. Provide wood for support or attachment of other work including bucks, nailers, blocking, furring, girders, stripping and similar members. Provide lumber of sizes indicated, worked into shapes shown.

15. Provide Backing Panels: For mounting electrical or telephone equipment, provide fire retardant, treated plywood panels with grade designation, APA C-D PLUGGED INT with exterior glue, in thickness not less than 3/4".

16. Miscellaneous Materials"

A. Fasteners and Anchors: Provide size, type material and finish as indicated and as recommended by applicable standards, complying with applicable Federal Specifications or nails, staples, screws, bolts, nuts, washers and anchoring devices. Provide metal hangers and framing anchors of the size and type recommended by the manufacturer for each use including recommended nails.

B. Where rough carpentry work is exposed to weather, in ground contact, or in an area of high relative humidity, provide fasteners and anchorages with a hot-dip zinc coating (ASTMA 153).

17. Wood Treatment by Pressure Process:

A. Preservative Treatment: Where lumber or plywood is indicated as "Trt-Wd" or "Treated", or is specified herein to be treated, comply with applicable requirements of AWPA Standards C2 (Lumber) and C9 (Plywood) and of AWPB Standards listed below. Mark each treated item with the AWPB Quality Mark Requirements.

i. Pressure-treat above-ground items with water-borne preservatives to comply with AWPB LP-2. After treatment, kiln-dry lumber and plywood to a maximum moisture content, respectively, of 19% and 15%. Treat indicated items and the following:

1. Nailers, curbs, blocking, stripping and similar members in connection with flashing, and at windows and window systems.

ii. Complete fabrication of treated items prior to treatment, where possible. If cut after treatment, coat cut surfaces with heavy brush coat of some chemical used for treatment and to comply with AWPA M4. Inspect each piece of lumber or plywood after drying and discard damaged or defective pieces.

EXECUTION

Installation, General:

A. Discard units of material with defects which might impair quality of work and units which are too small to use in fabricating work with minimum joints or optimum joint arrangement.

B. Set carpentry work to required levels and lines, with members plumb and true and accurately cut and fitted.

C. Securely attach carpentry work to substrate by anchoring and fastening as shown and as required by recognized standards. Countersink nail heads on exposed carpentry work and fill holes.

D. Use common wire nails, except as otherwise indicated. Use finishing nails for finish work. Select fasteners of size that will not penetrate members where opposite side will be exposed to view or will receive finish materials. Make tight connections between members. Install fasteners without splitting of wood; pre-drill as required.

Wood Grounds, Nailers, Blocking and Sleepers:

A. Provide wherever shown and where required for screeding or attachment of other work. Form to shapes as shown and cut as required for true line and level of work to be attached. Coordinate location with other work involved.

B. Attach to substrates as required to support applied loading. Countersink bolts and nuts flush with surfaces, unless otherwise indicated.

Wood Furring: Install plumb and level with closure strips at edges and openings. Shim with wood as required for tolerance of finished work.

PREFABRICATED TRUSSES

Prefabricated timber trusses shall be designed for loads on a horizontal projection as follows:

Snow Load Per township Code

Top Chord Live Load Per Township Code

Top Chord Dead Load Per Township Code

Bottom Chord Dead Load 15 PSF

Bottom Chord Live Load 15 PSF

Total load deflection not to exceed 1/240 of the span

Top Chord Wind Load

Windward Side -25 PSF (for upward load, design shall consider wind load in conjunction with 90% of dead loads as stated above).

Leeward Side -25 PSF (for upward load, design shall consider wind load in conjunction with 90% of dead load as stated above).

Trusses shall be designed in accordance with the local governing building code. Truss members shown on details are minimum size and number to be used. Truss layout as shown on drawings is not to be deviated from unless approved by the Structural Engineer. All lumber shall be stress graded lumber #2 S.T.F.I.D. minimum. All metal connection press plates shall be sized for 125% of member forces with no increase in plate values or decreases of member loads for duration of loading or other factors. Minimum size of plates shall be 15 sq. in., having a minimum bite of 2 1/2 inches on any member measured along the centerline of webs and perpendicular to chord axes. No plate joint shall have more than one plate per truss side. Truss manufacturer shall submit for review, truss fabrication and erection drawings, truss design data and design calculations - all to be sealed by a registered structural engineer licensed in the state of Pennsylvania. The truss design data shall include lumber species, grade and size of each member, design loading and design of all connections. The truss manufacturer shall design and include all truss accessories, and design and shop permanent and temporary bridging and bracing, to be installed by the erector, on the erection drawings.

Roof Truss: minimum top and bottom chord member is 2x6. Maximum clear span, top chord: 11'-0" for 2x6; 14'-0" for 2x4. Maximum clear span bottom chord 13'-0" for 2x6.

STRUCTURAL GLUED LAMINATED TIMBER

1. Product data including specifications and installation instructions covering lumber, adhesives, fabrication process, preservative treatment, accessories and protection.

2. Shop drawings showing full dimensions for each member and layout of entire structural system. Show large-scale details of connections, connectors and other accessories. Indicate species and laminating combination, adhesive type and other variables in required Work.

A. Show loading section sizes, assumed design values, stress diagrams and calculations and similar information needed for analysis.

3. Standards: Comply with ANSI/AITC A 190.1 "Structural Glued Laminated Timber".

4. Manufacturer Qualification: Provide factory-glued structural units, produced by an AITC-licensed firm qualified to apply the AITC Quality Inspection mark.

5. Factory-mark each piece of glued laminated structural units with AITC Quality Inspected mark.

6. Engineer Qualifications: A professional engineer who is legally authorized to practice in jurisdiction where project is located and experienced in providing engineering services toward the installation and successful in-service performance of glulam units similar to the Project in material, design and extent.

7. Finish: Finish fabricated assemblies with rust-inhibitive primer.

8. Wet-Use Finish: Where wet-use glulam work is indicated, finish fabricated assemblies with hot-dip zinc coating (ASTM A 153), including bolts and other fasteners.

9. End-Cut Sealing: Immediately, after end-cutting each member to final length, and after wood treatment (if any), apply a saturation coat of end sealer to ends and other cross-cut surface, keeping surfaces flood-coated for not less than 10 minutes.

10. Seal Coat: After fabricating and sanding each unit, and end-coat sealing, apply a heavy saturation coat of penetrating sealer on surfaces of each unit, except for treated wood where treatment has included a water repellent.

INSTALLATION

1. General: Install miscellaneous steel connectors, anchors and accessories.

2. Plan and execute erection procedures so that close fit and neat appearance of joints and structure as a whole will not be impaired. When hoisting members into place, use padded or non-marring slings, and protect corners with wood blocking.

3. Adequately brace members as they are placed to maintain safe position until full stability is provided.

FINISH CARPENTRY

ARCHITECTURAL WOODWORK (fabricated wood product, hardwood)

STANDARD: Architectural Grade Quality Standards of the Architect Woodwork Industry by AWI

SUBMIT shop drawings; sample plastic laminate, natural finish species.

TRIM: Standard; max 9 ft. ease exposed edge.

SOLID STOCK: Moisture 8-13% oven dry weight; close grain for point grade.

PLASTIC LAMINATE: 1/16" w/balance sheet; core 3/4" B plywood.

EXECUTION: To accurately force fit; scarf joint; cope/miter corner, scribe.

NAILING: Concave; set for putty; at 12-24"; double if width over 4"; hot-dip galvanize, cadmium or aluminum for exterior, except stainless steel for exterior natural.

CABINET: 3/4" thick except 1/2" drawer side, back; 1/4" drawer bottom, cabinet back; shelf 7/8" for 3 1/2 ft. or 1-1/16" to 4 ft. Door layover. Base 4" hi by 3" toe space and 1/2" recess at cabinet end. Hardware to be selected by owner.

INTERIOR ARCHITECTURAL WOODWORK:

Follow AWI Architectural Grade Quality Standards

DIVISION 7 - THERMAL AND MOISTURE PROTECTION

ROOFING & UNDERLAYMENT:

Shingles shall be Asphalt and Fiberglass composite designer series, conforming to U.L. Class "A" Fire Resistance, ASTM D3462 and ASTM D3462 Type 1 with a 30 year (min.) limited manuf. warranty. Shingles shall be installed as per manufacturer's instructions. Shingles shall be manufactured by Owens Corning corporation or approved equal (approved by Owner & Architect). Color selection by Owner.

Provide and install one layer No. 30 Asphalt saturated unperforated organic felt complying with ASTM D226 Type 1, 36" wide, approximate weight 36 lbs. per square; under roof shingles, lapping succeeding courses 2" (min.). In addition to felt underlayment provide a continuous strip of ice protection underlayment of No. 90 Asphalt roll roofing along the eaves to a point 12" (min.) beyond wall line. Provide No. 90 Asphalt roll roofing at the valleys. At alternate Local Valleys provide two (2) layers No. 15 organic felt under shingles or one (1) layer No. 30 organic felt. Alternate for ice protection is 40 mil self adhered ice & water shield protection mat.

SIDING & TRIM: James Hardi cement fiber building products. Follow Manufacturer recommendations for installation and finish.

INSTALLATION, BATT AND BLANKET:

FIBER, COVER: Mineral wool or glass fiber; 1 face foil if shown; UL Label

THERMAL RESISTANCE: R19 (6") exterior wall, R30 (9") under roof deck.

INSTALLATION: Fit snug; permanently retain by galvanized wire if open face.

INSPECTION: Do not cover until approved.

JOINT SEALING (max. 1/2" thick)

SUPPLIER: DAP, Dow Corning, GE

EXPOSED: Acrylic, butyl, polysulfide, silicone or urethane. Oil, linseed, asphaltic and coal tar base type unacceptable. Filler plastic or rubber.

CONSEALED: Linseed oil or other oil base nonskinning; or exposed type.

APPLICATION: Tool joint concave. Promptly remove overrun with solvent.

ROOF METAL (roof flashing)

STANDARD: SMACNA Manual

WARRANT for 2 years against leak, wrinkle and deterioration.

GALVANIZE: Hot-dip min 1.25 oz. Zinc psf; Paintstrip by Armco or equal.

ITEM: Gutter & pater pipe, valley, rake, drip, gable or ridge vent, filler.

DIVISION 8 - DOORS AND WINDOWS

DOOR WOOD FLUSH (installed by finish carpentry)

STANDARD: NWMA Residential

SOLID CORE: Wood plain or frame; particle board density C; mineral (fire)

FINISH: Stain grade wood; natural finish species fill open grain.

GLAZING (govern glass)

STANDARD: Mirror Q2 plate or float Q3 per FS DD Q4510; wind per ANSI 58.1.

Mirror (unframed plate): Electroplate copper warranted 5 years; ease, polish, seal 100%; mastic 35%; block at 1/4 pt; clamp KV 227 bot; 278 top.

SAFETY: Tempered or laminated; per code and governing authority.

HARDWARE, WEATHERSTRIP (except for cabinet, special opening, window)

SUBMIT: Schedule, brochure, template to door, sample label per Drawing.

ALLOWANCE: Purchase and deliver ready to install.

KEY, PACK MARK: Each item separate; key as directed.

SECTIONAL OVERHEAD AND COILING

ALLOWANCE Per owner selection

DIVISION 9 - FINISHES

GYPSUM DRYWALL (or wood framing)

STANDARD: Recommended Specifications by Gypsum Association.

MATERIAL: As shown by USG or equal; trip golv. Outside corner and to butt other material; float flange unless exposed type shown.

ATTACH: Joint at support; ceiling board across joist. Plane, parallel and at 90°. Nail at 12", double in field; vertical edge at 8".

FINISH Smooth to joint invisible when painted; tape and fill above ceiling.

FLOORING WOOD

STANDARD: Natural Oak Flooring Manufacturer's Association

FLOORING: Allowance

SUBFLOOR: 1-1/8" plywood

INSTALLATION: Blind nail at 12"; sand level; finish specified below.

PAINTING

WARRANT for one year against defect like noticeable discolor, mildew, peel, crack, blister, chalk, irregular sheen change, softness, tackiness.

SUBMIT requested color, texture swatch.

SUPPLIER: MAB, Sherwin Williams or approved others.

SHEEN (GLOSS READING AT 60°F): Flat 10+/- 3, Satin 40 +/-5, Semi gloss 60 +/-5, gloss 90 or more.

SUBSTRATE: Starting work signifies acceptance of surface.

PROTECT other work, replace damage.

PREPARE: Wood: smooth, clean, sap sealed, compatibly filled. Steel: remove grease, oil, dirt and dust; touch up shop primer with compatible or same product; remove rust to bright metal before retouch. Concrete: verify compatibility with curing product; remove dust and oxidized separating compound. Provide normal minor patching and alkali neutralization. Drywall: clean, dry, smooth.

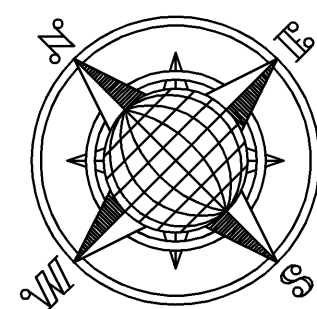
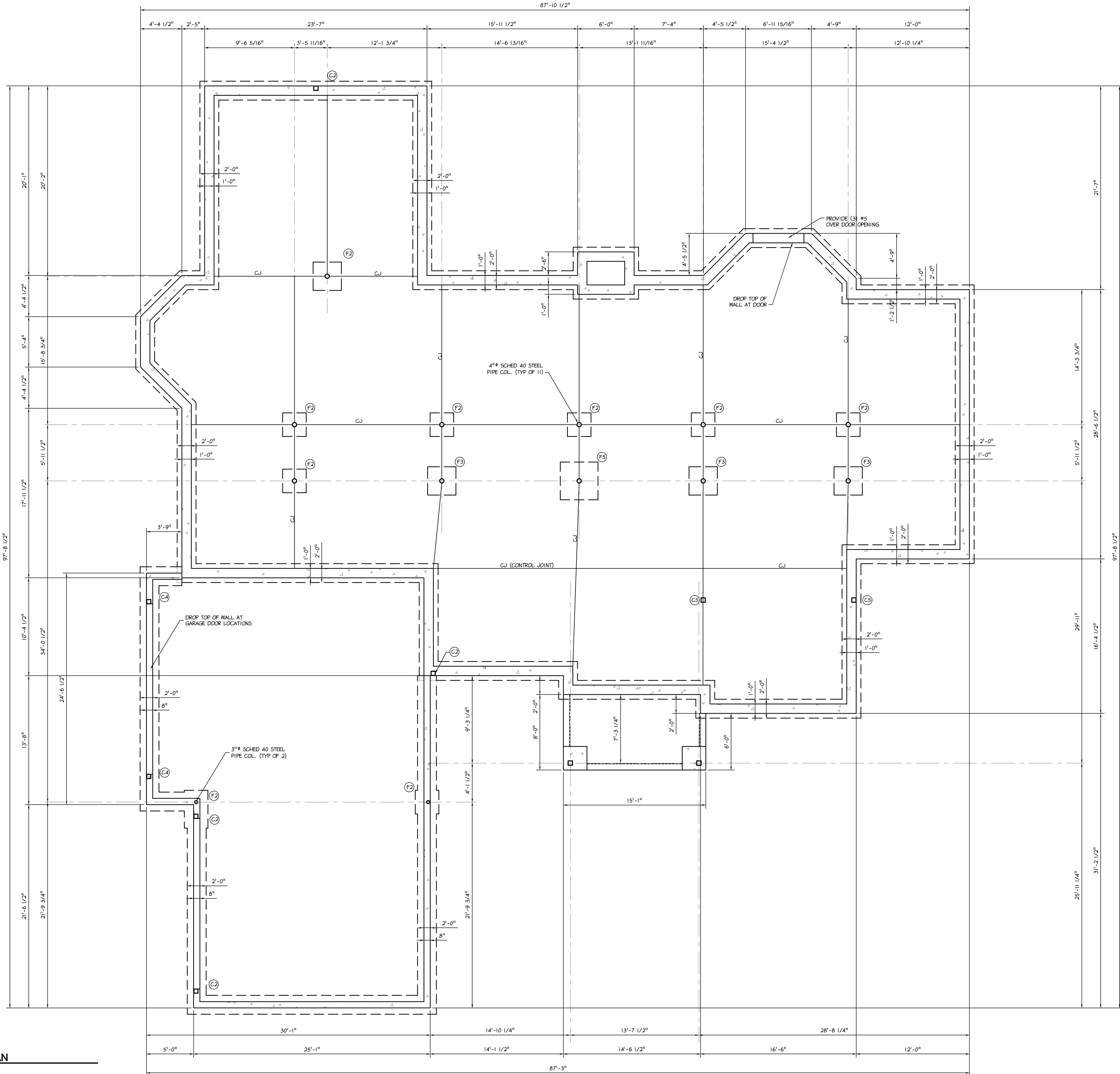
DRY THICKNESS (by Tooke Mark II gage) (min. 2 coat dry measure): Exterior 5 mils; interior 5 mils; 4 mils if lacquer or varnish; 0 if stain, oil.

APPLICATION with proper consistency and touch, so paint flows free of brush and roller mark, bubble, dust, run, sag and holiday. Spread evenly.

APPEARANCE: Uniform color, texture and sheen.

NEATNESS: Do not smear, spatter or overrun adjoining color or material. Cut in lines straight.

1 FOUNDATION PLAN
S-1 Scale: 1/4" = 1'- 0"



Betzwood Associates PC
Architects & Engineers
Robin J. Kohn, AIA
Jeffrey M. Thoms, P.E.
Kegs W. Kubit, PE

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL ENGINEER
JEFFREY M. THOMS
No. PE060309

Note: Certification not valid unless original stamp and signature appear on the project title sheet.
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Jeffrey M. Thoms, P.E.
Commonwealth of Pennsylvania
License No. PE060309

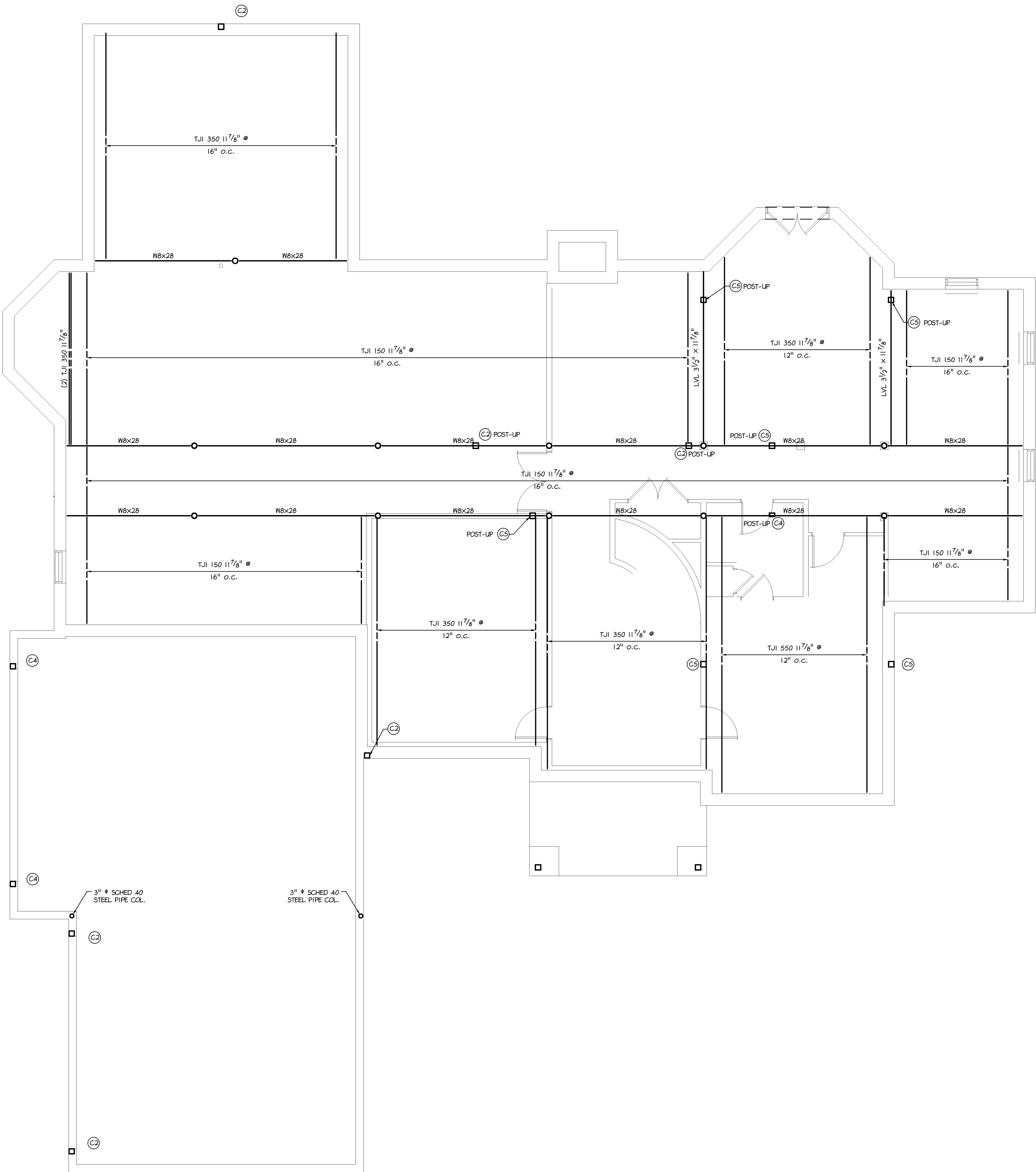
Contact Person:
Edward M. Happ
(610) 917-8831

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Robin J. Kohn, AIA		October 11, 2005	

Campo Residence
LOT #30 BUSTARD ROAD
LANSDALE, PA 19446
WORCHESTER TWP.
MONTGOMERY COUNTY

SHEET TITLE
FOUNDATION PLAN

SHEET NUMBER
S-1
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Betzwood Associates PC
Architects & Engineers
Robin J. Kohn, AIA
Regis W. Kubir, PE



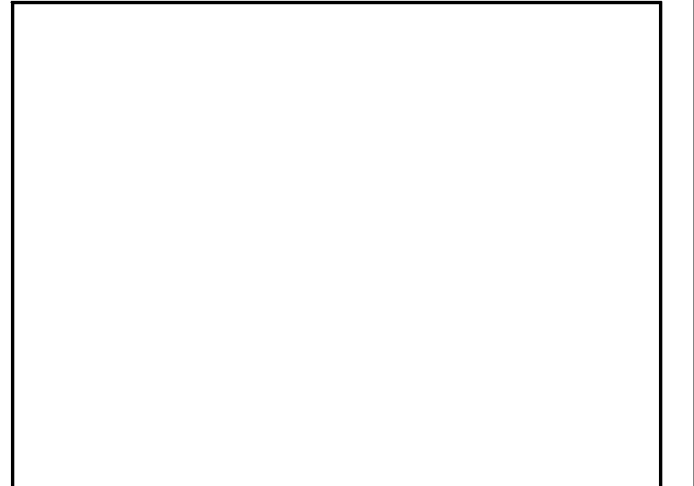
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LOT #30 BUSTARD ROAD
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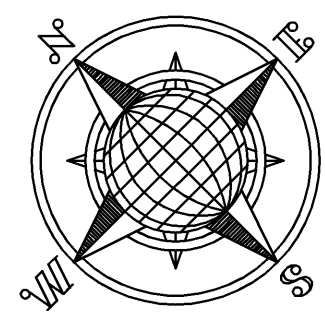
FIRST FLOOR
FRAMING PLAN

SHEET NUMBER

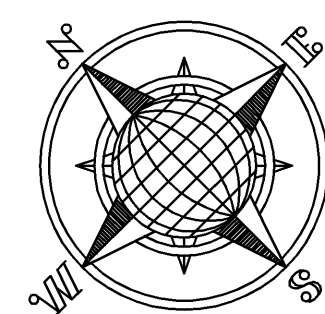
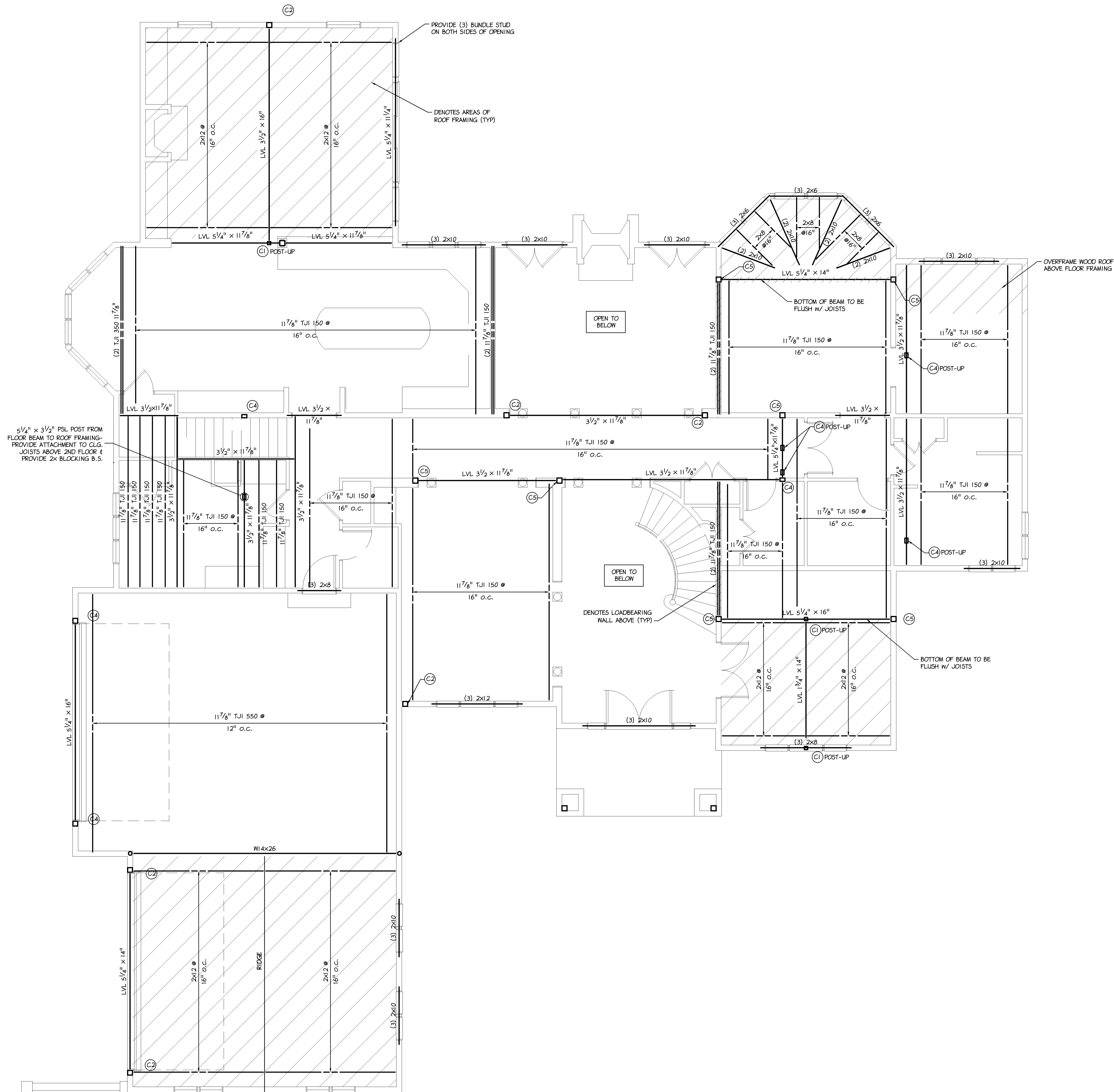
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1 SECOND FLOOR FRAMING PLAN
S-3 Scale: 1/4" = 1'-0"



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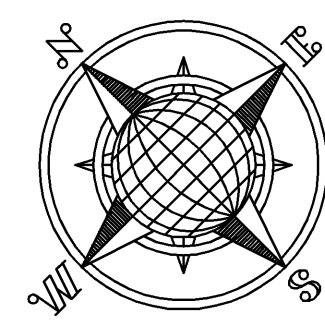
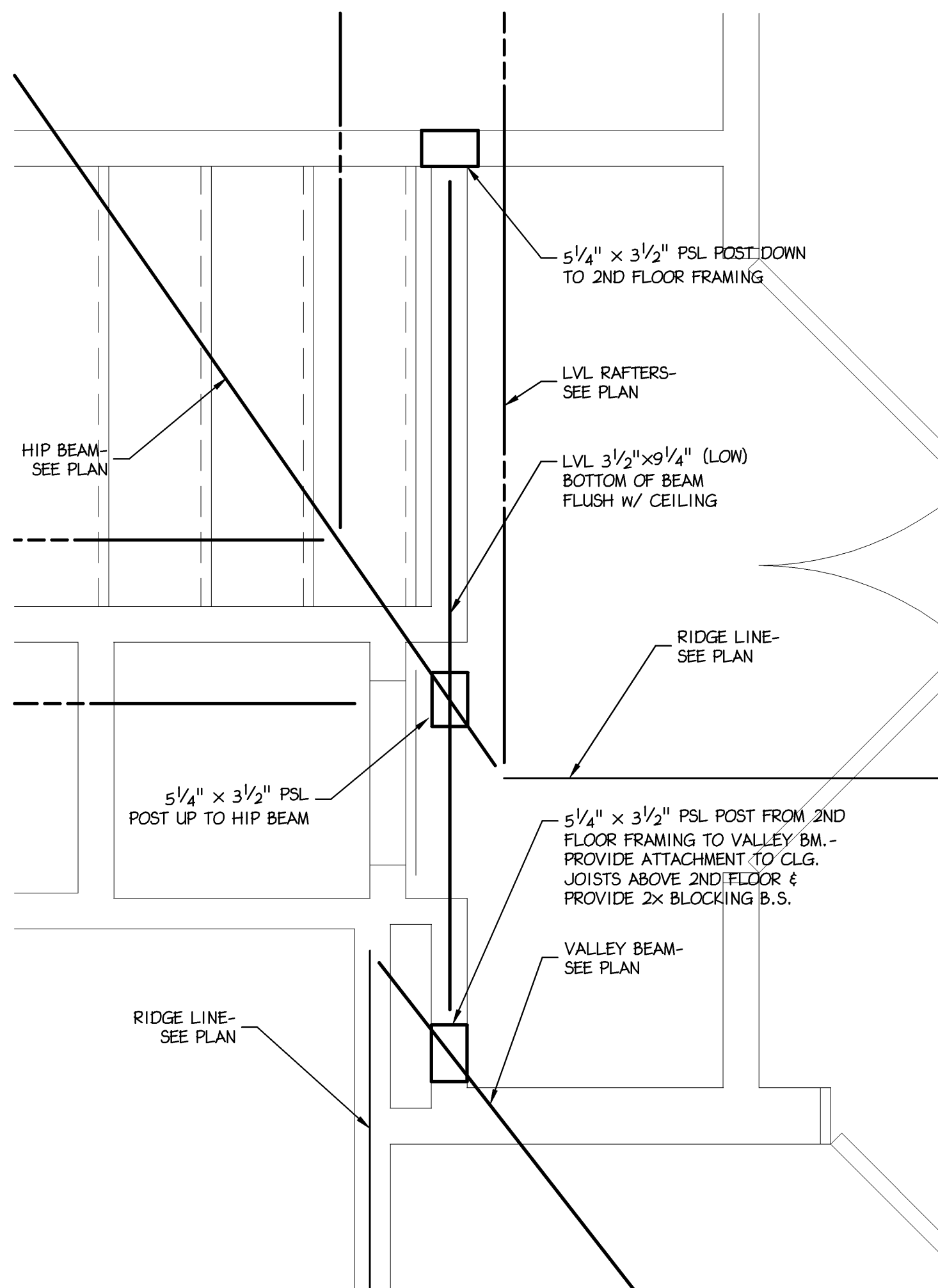
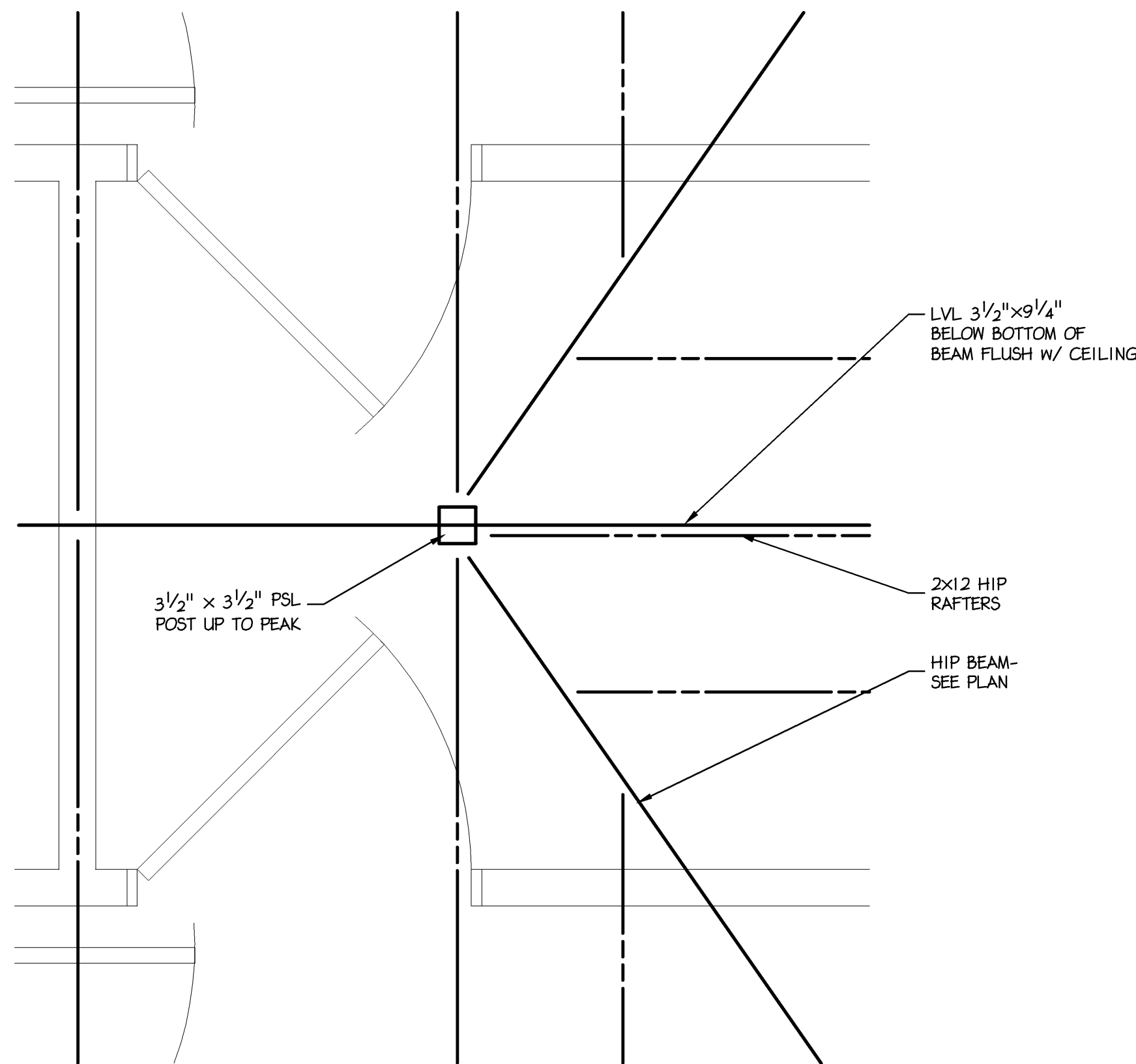
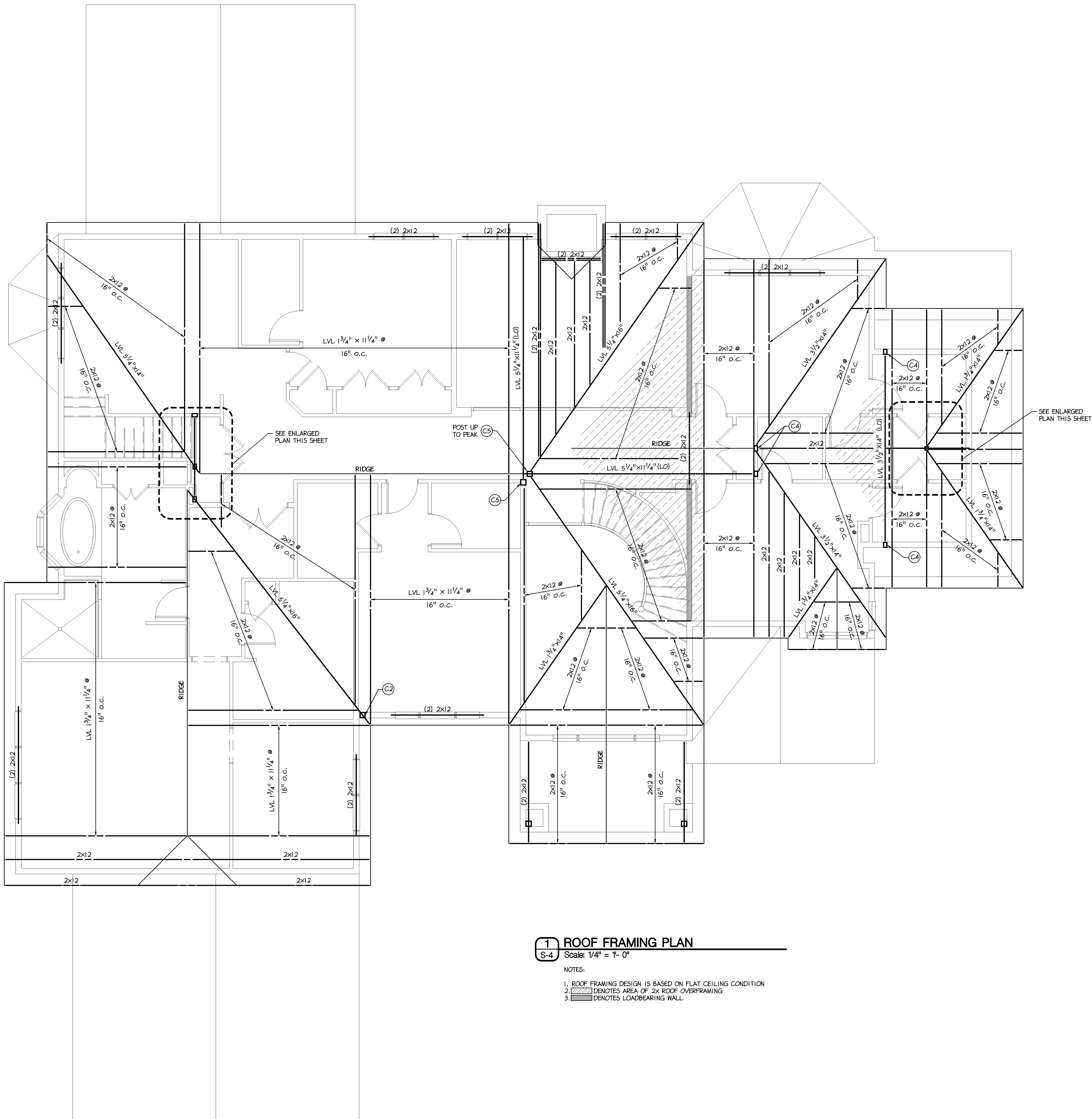
Contact Person:
Edward M. Happ
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APPROVED BY		CURRENT DATE	
Robin J. Kohn, AIA		October 11, 2005	

Campo Residence
LOT #30 BUSTARD ROAD
LANSDALE, PA 19446
WORCHESTER TWP.
MONTGOMERY COUNTY

SHEET TITLE
SECOND FLOOR
FRAMING PLAN

SHEET NUMBER
S-3
REV
3



Betzwood Associates PC
Architects & Engineers
Robin J. Kohn, AIA
Jeffrey M. Thoms, P.E.
Regis W. Kubit, PE

PROFESSIONAL ENGINEER
JEFFREY M. THOMS
No. PE060309

Note: Certification not valid unless original stamp and signature appear on the project title sheet.
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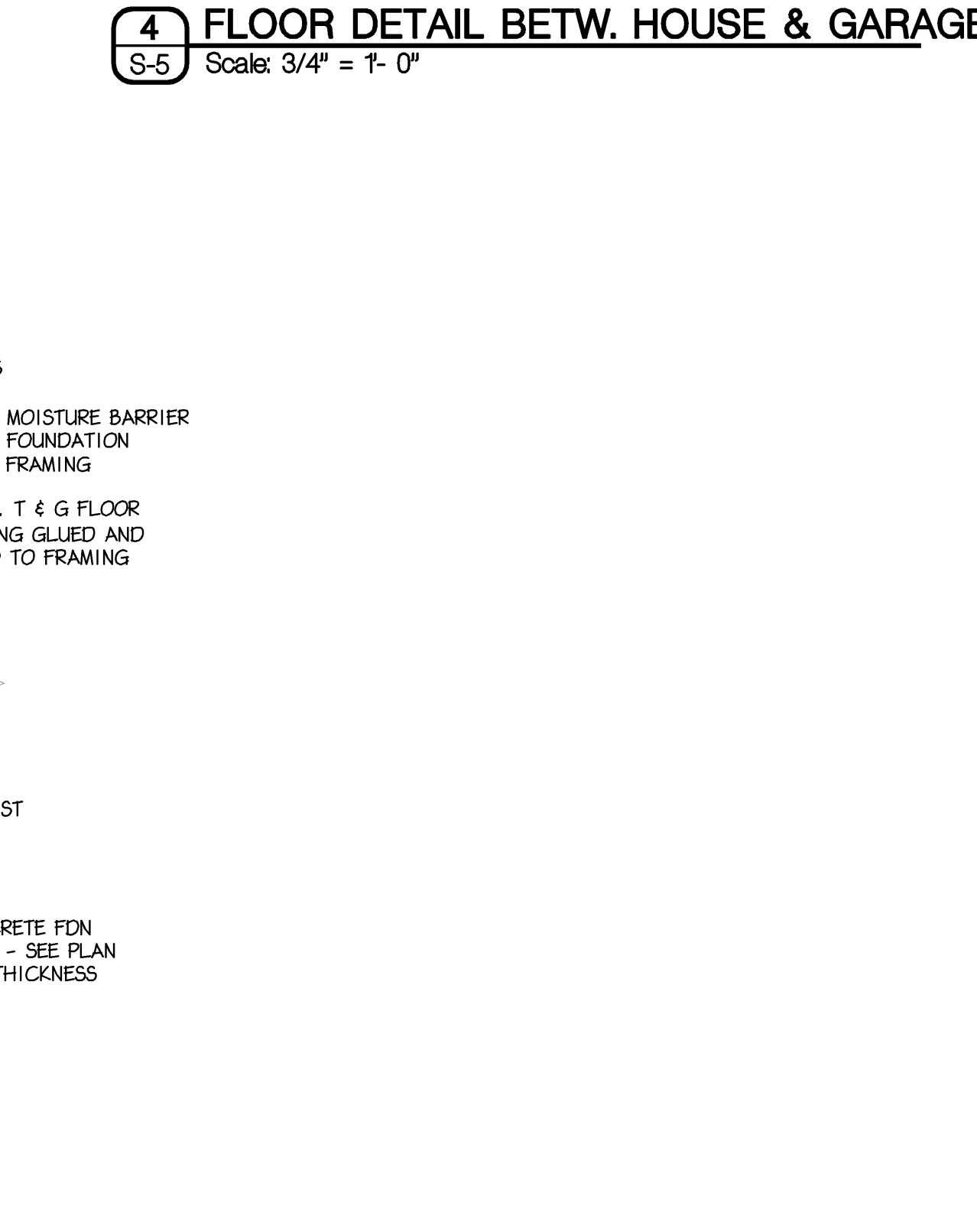
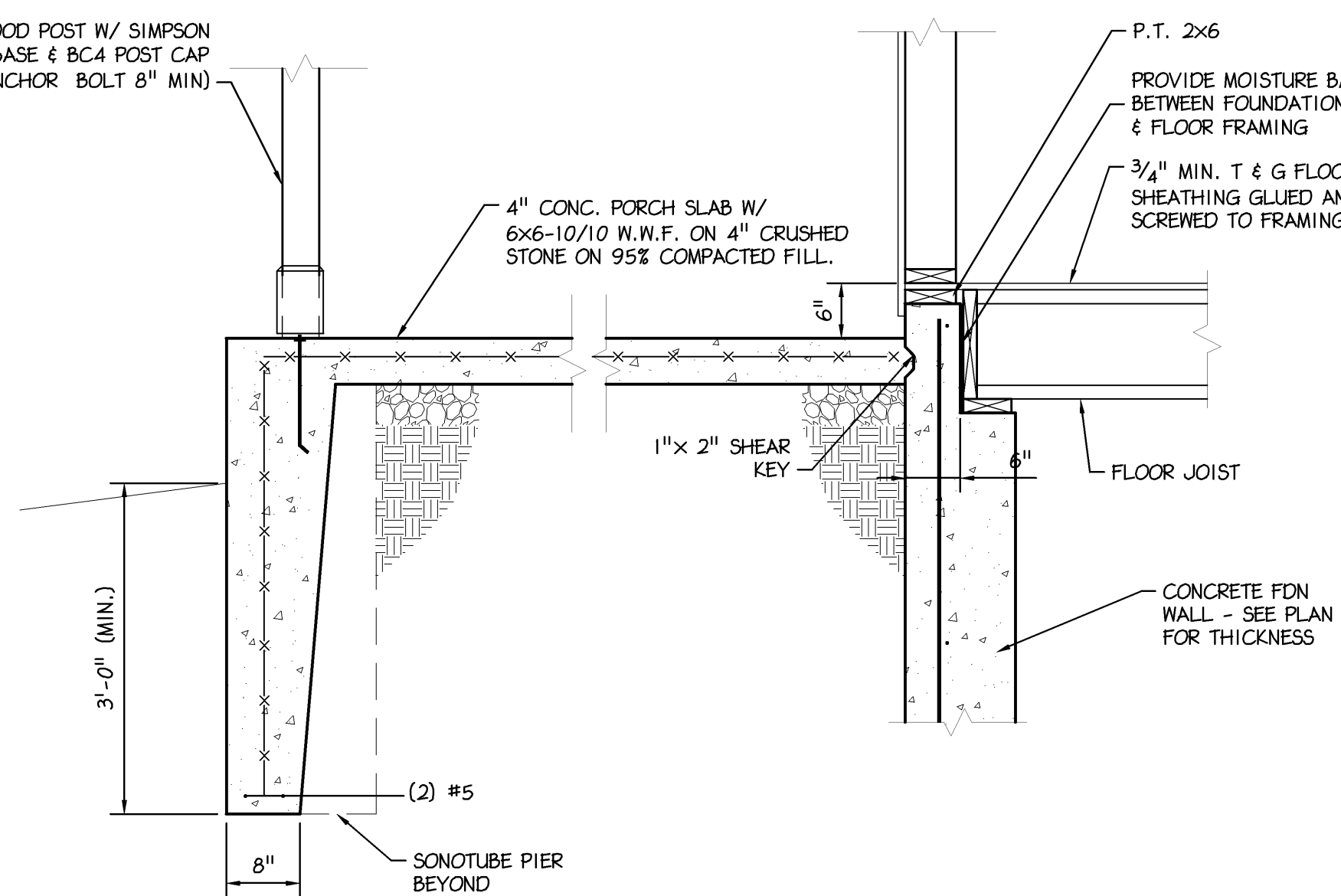
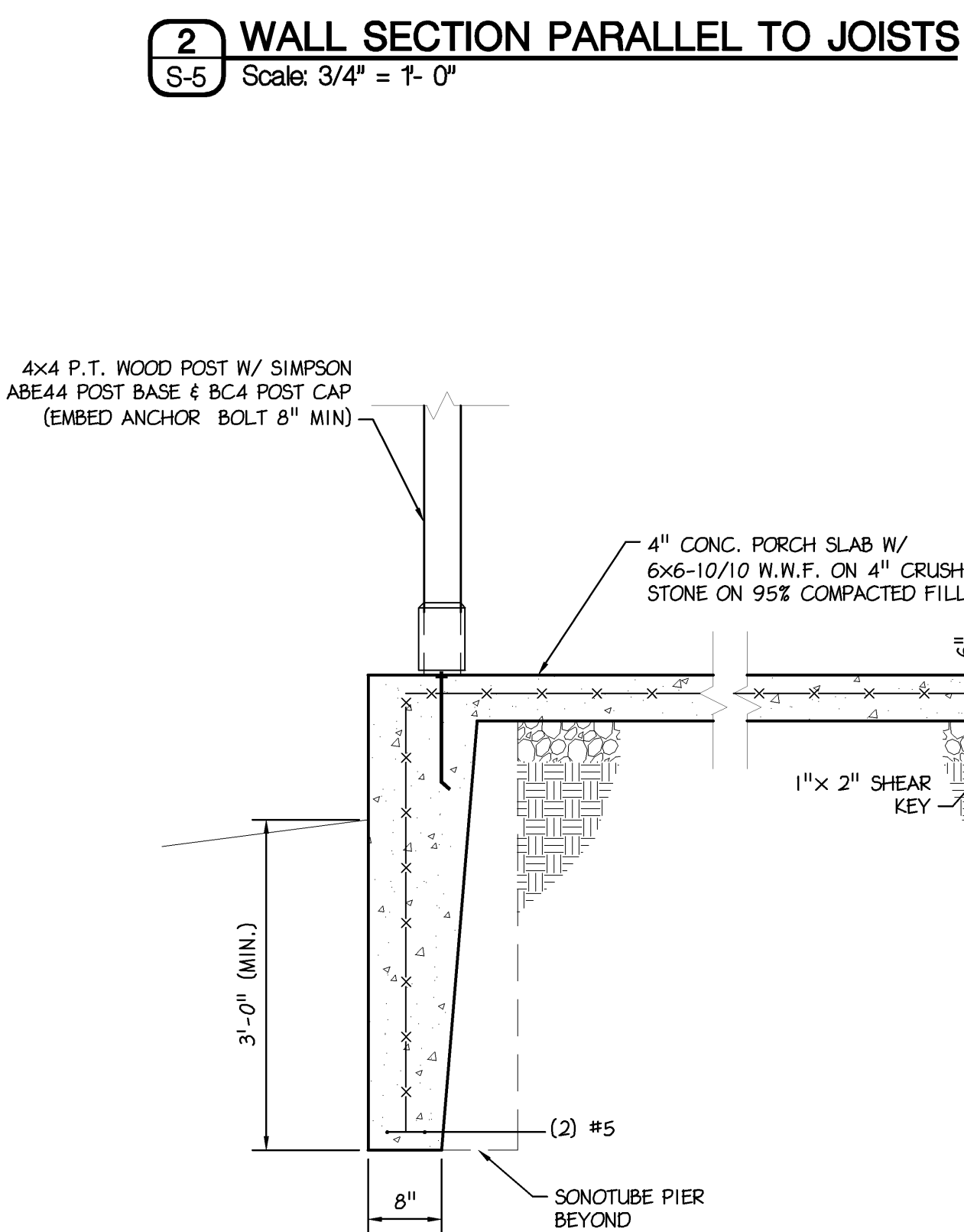
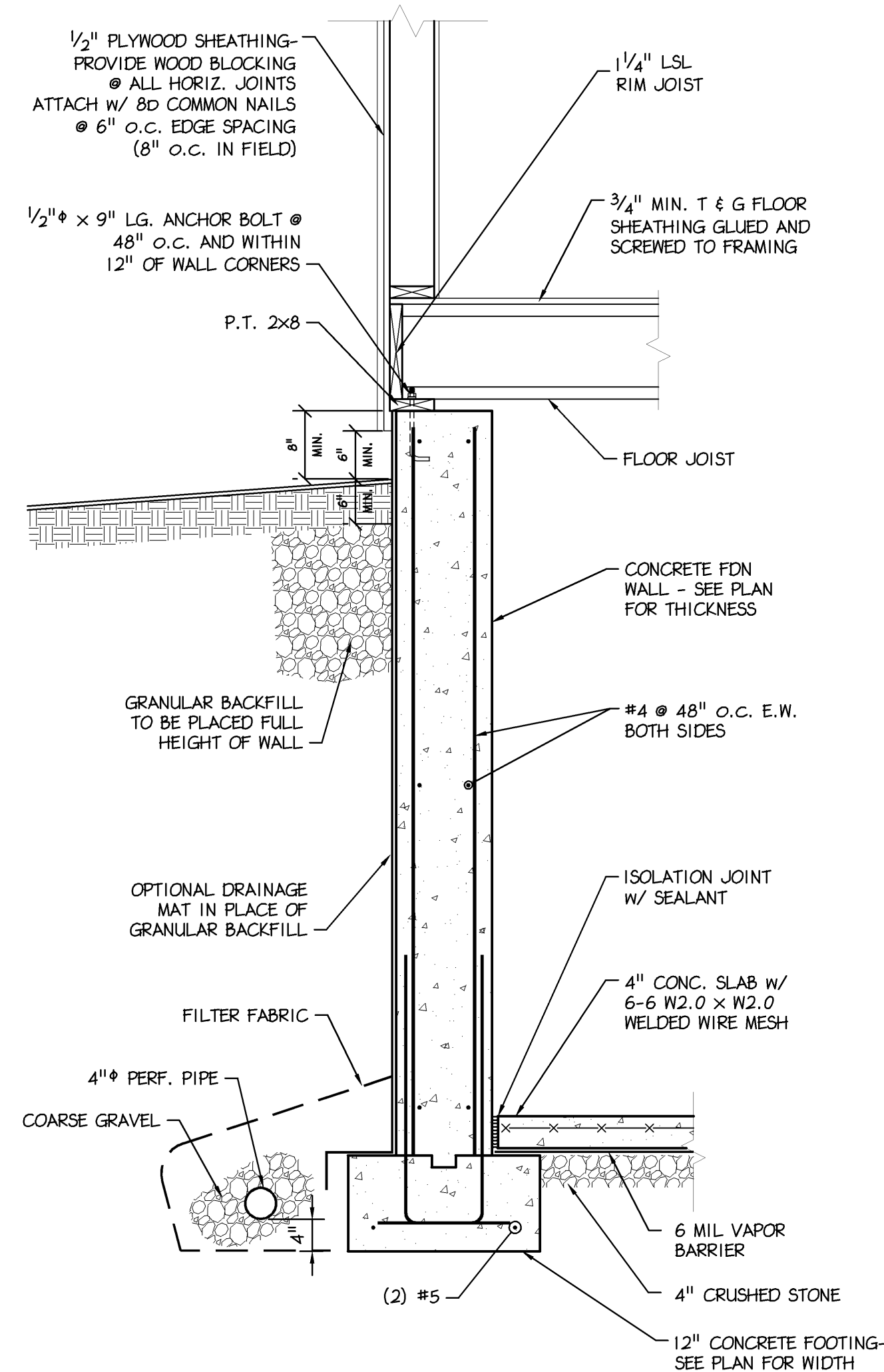
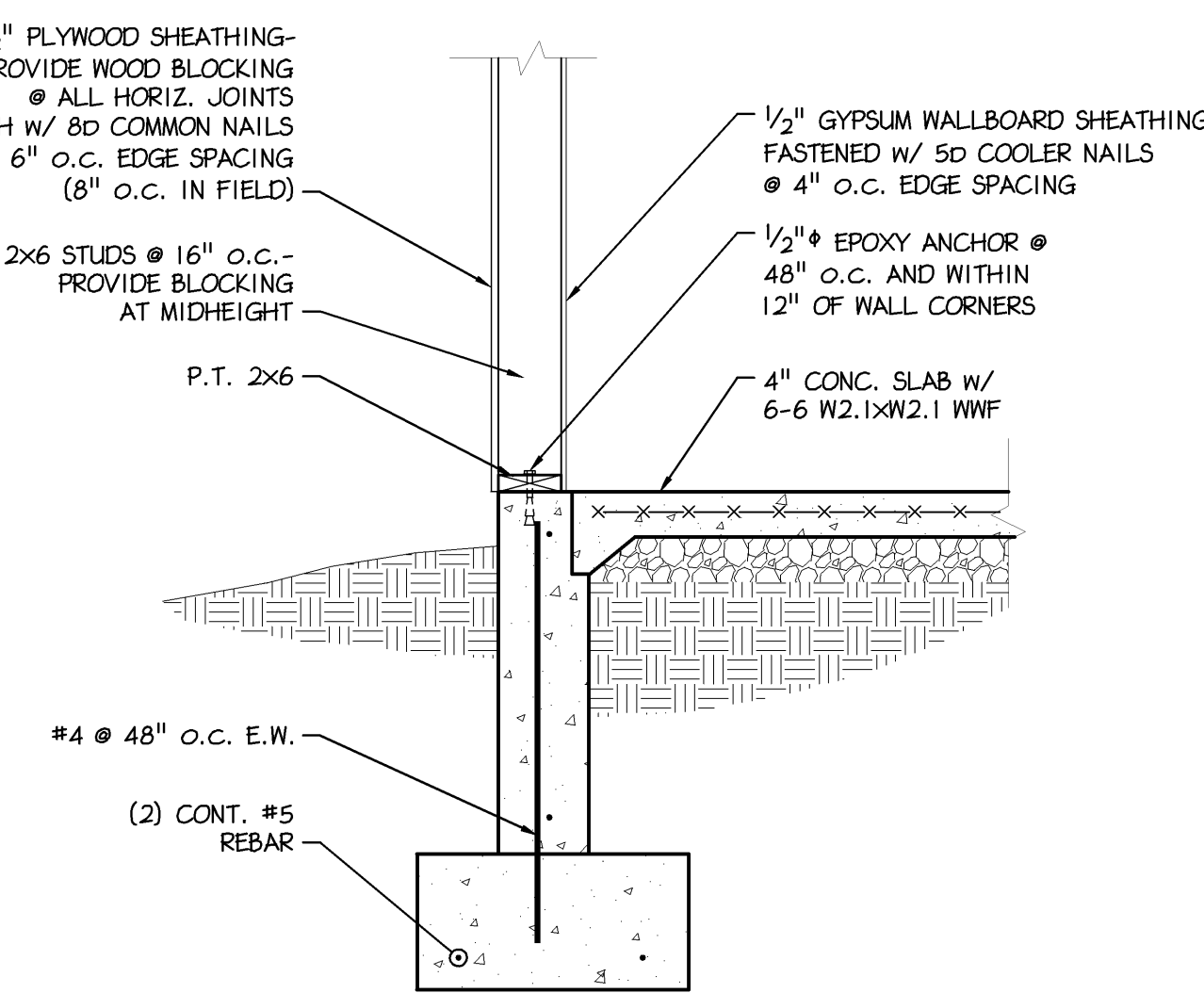
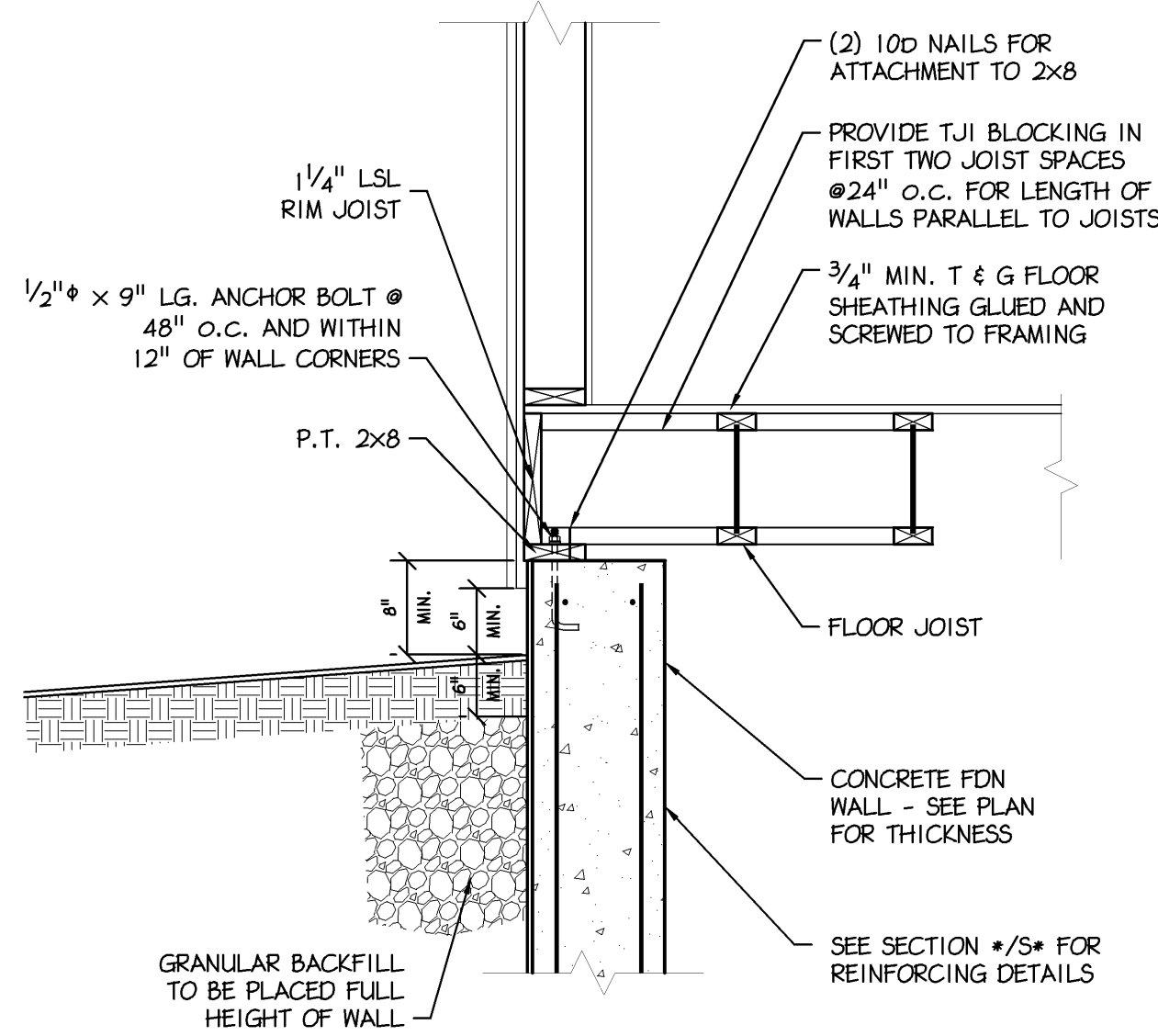
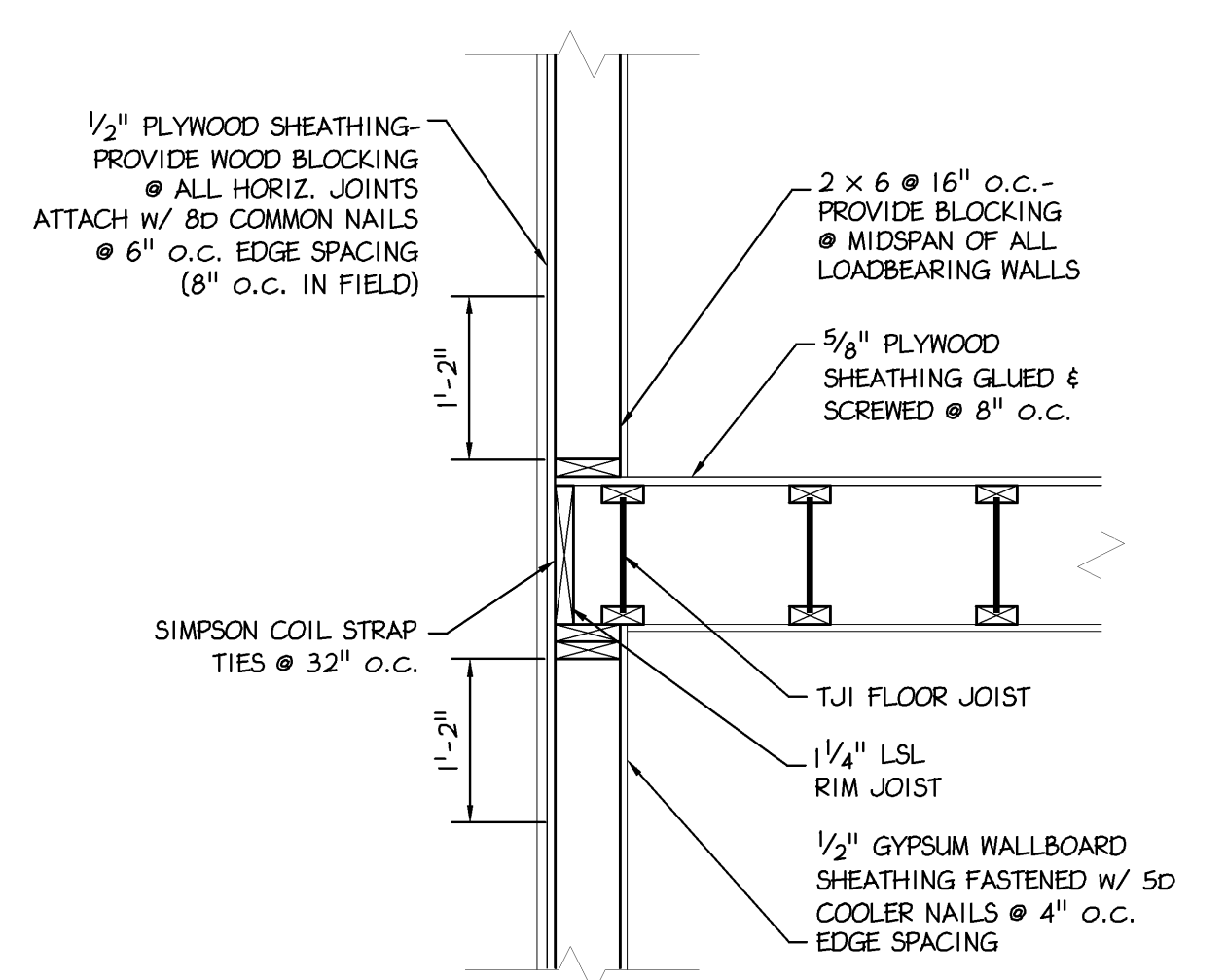
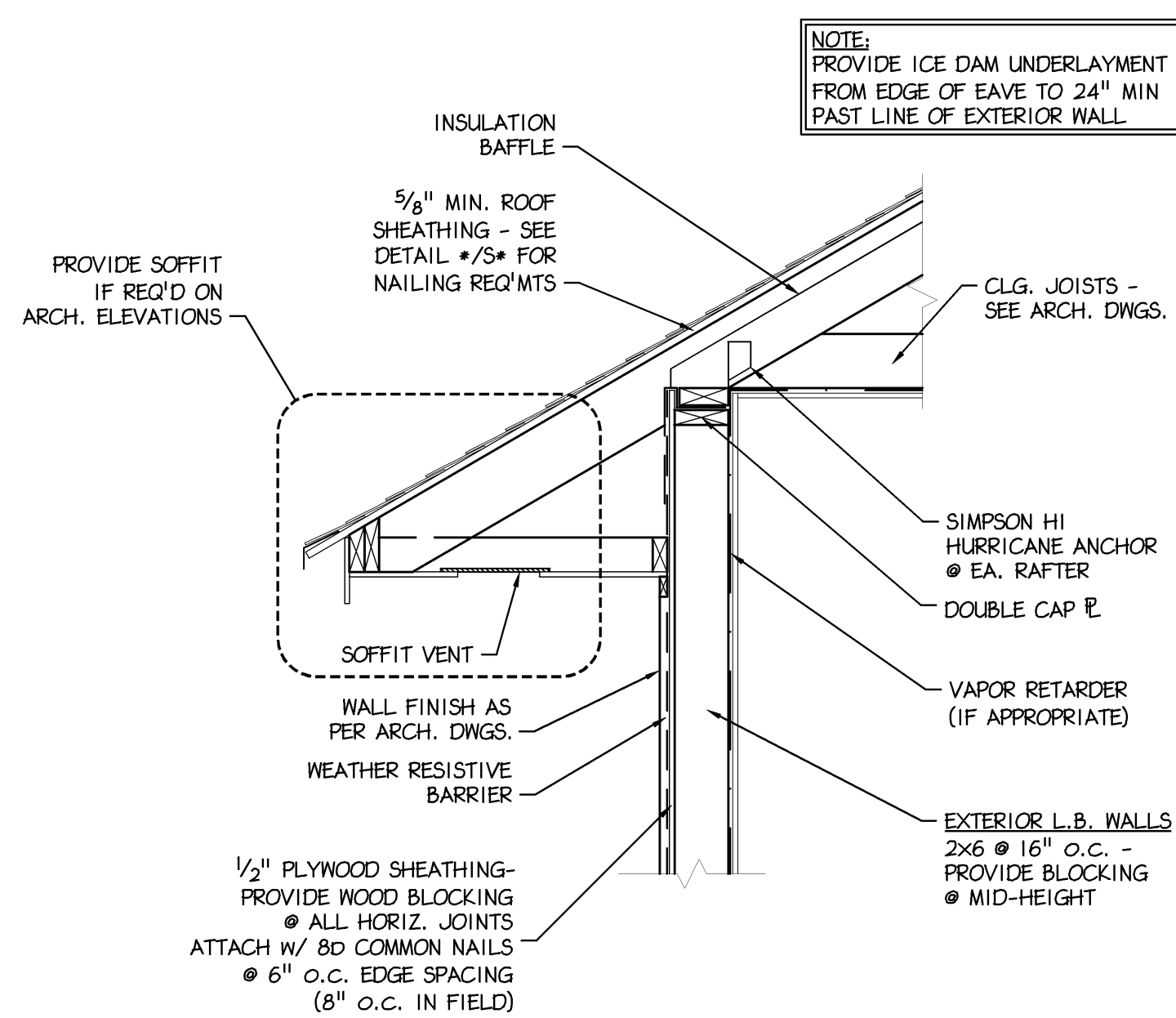
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Campo Residence
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MONTGOMERY COUNTY

SHEET TITLE
ROOF FRAMING PLAN

SHEET NUMBER
S-4
REV
3



5 SECTION AT PORCH S-5 Scale: 3/4\"

LIVE LOADS APPLICABLE CODE: IBC 2003

FLOOR LIVE LOADS
LIVE LOAD40 PSF (LIVING AREAS)
30 PSF (SLEEPING AREAS)
60 PSF (DECK)
100 PSF
SEE DRAWINGSSTAIRWAY LIVE LOAD
MECHANICAL UNIT LOAD20 PSF (MIN)
JEFFREY M. THOMS
30 PSF + SNOW DRIFT
30 PSF
25 PSF
1.0
1.0
1.0

WIND LOAD

BASIC WIND SPEED - V (3-SEC. GUST):
WIND LOAD IMPORTANCE FACTOR:
WIND LOAD EXPOSURE CATEGORY:
INTERNAL PRESSURE COEFFICIENT:
WIND DESIGN PRESSURE:90 MPH
1.0
B
± 0.25
25 PSF

SEISMIC LOAD

SEISMIC DESIGN CATEGORY:
SEISMIC USE GROUP:
SPECTRAL RESPONSE COEFFICIENT - SDS:
SPECTRAL RESPONSE COEFFICIENT - SDI:
SITE CLASS:
BASIC SEISMIC FORCE RESISTING SYSTEM:C
I
0.339
0.133
D
LIGHT FRAME WALLS
W/ SHEAR PANELS

ANALYSIS PROCEDURE:

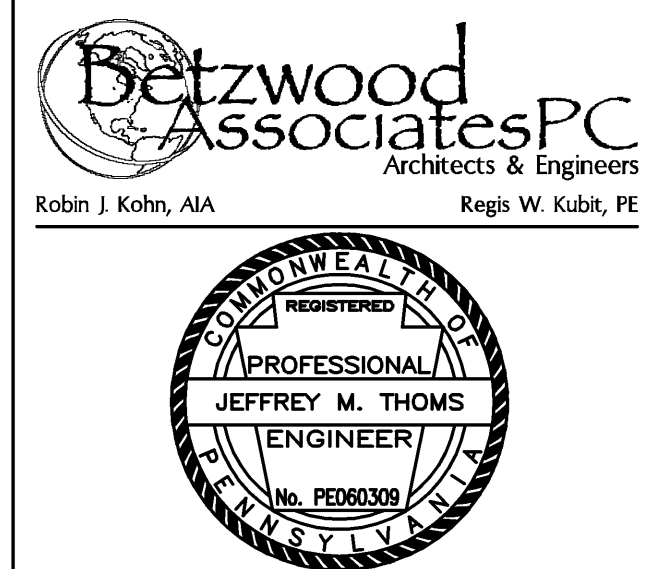
EQUIVALENT LATERAL
FORCE PROCEDUREWIND LOAD CONTROLS DESIGNS
FOR LATERAL FORCES

FOUNDATION NOTES

- FOUNDATION SOIL BEARING PRESSURE: 3000 PSF
- FOUNDATION SHALL BE PLACED ON VIRGIN SOIL AT ELEVATIONS INDICATED ON DRAWINGS.
- THE ENGINEER SHALL APPROVE ALL BEARING STRATA PRIOR TO PLACEMENT OF THE CONCRETE FOOTINGS.
- INSTALL CRACK CONTROL OR CONSTRUCTION JOINTS AT 30-FOOT MAXIMUM CENTERS IN WALLS. LOCATIONS SHALL BE APPROVED BY ENGINEER.
- TOP OF FOOTING ELEVATIONS ARE NOTED (000.00').
- TOP OF PIER OR WALL ELEVATIONS ARE NOTED (000.00').
- ALL TOPSOIL, SOIL FILL, AND SOFT SUBSOIL SHALL BE REMOVED AND, IF NECESSARY, REPLACED WITH COMPACTED LOAD-BEARING FILL MATERIALS. TEST PITS OR SOIL BORINGS SHALL BE CONDUCTED TO DETERMINE THE LOCATION OF THE VIRGIN SOIL.
- ANY UNDERCUT AND REPLACEMENT WITH COMPACTED LOAD-BEARING FILL SHALL EXTEND LATERALLY BEYOND FOOTINGS A DISTANCE AT LEAST EQUAL TO THE DEPTH OF THE UNDERCUT.
- AFTER UNDERCUTTING AND REMOVAL OF UNSUITABLE SOIL, THE EXPOSED UNDERLYING RESIDUAL SOILS IN THE PROPOSED BUILDING AREA SHALL BE PROFFERED AND COMPACTED. SOFT AND/OR UNSTABLE AREAS DISCLOSED BY THE PROFFERING SHALL BE ROLLED UNTIL STABILITY IS OBTAINED OR UNTIL FURTHER UNDERCUT TO FIRM MATERIAL IS REACHED.
- FOOTINGS SHALL BE BASED ON STIFF SUBSOIL OR LOAD-BEARING FILL MATERIALS WITH A MINIMUM DEPTH OF AT LEAST TWO FEET OR ONE-HALF THE FOOTING WIDTH, WHICHEVER IS GREATER, BELOW THE FOUNDATION BEARING LEVEL.
- PLACE LOAD-BEARING FILL MATERIALS IN LAYERS NOT MORE THAN EIGHT INCHES IN LOOSE THICKNESS FOR MATERIAL COMPACTED BY HEAVY COMPACTION EQUIPMENT, AND NOT MORE THAN FOUR INCHES IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HAND-OPERATED TAMPERS. FILL MATERIAL SHALL BE MOISTENED OR AERATED AS NECESSARY.
- EACH LIFT SHALL BE COMPACTED TO AN AVERAGE DRY DENSITY OF NOT LESS THAN 98% OF THE MAXIMUM DRY DENSITY ACCORDING TO ASTM D698 (STANDARD PROCTOR) FOR ALL FOOTING AND FLOOR SUBGRADES.
- THE SUB-FLOOR MATERIALS SHALL CONSIST OF AT LEAST FOUR TO SIX INCHES OF GRAVEL OR CRUSHED STONE. THE SUB-FLOOR MATERIALS SHALL BE COMPACTED BY AT LEAST FOUR COVERAGES OF A HEAVY-DUTY VIBRATORY ROLLER OR UNTIL NO FURTHER COMPACTION IS OBSERVED. SEE THE DRAWINGS AND SPECIFICATIONS FOR THE VAPOR BARRIER SIZE, TYPE AND LOCATION.
- IN AREAS WHERE SOFT/LOOSE ZONES OR POSSIBLE VOIDS EXIST AT DEPTH, NOTIFY THE STRUCTURAL ENGINEER IMMEDIATELY. SUCH AREAS SHOULD BE UNDERCUT AND REPLACED WITH COMPACTED LOAD-BEARING FILL, OR FLOWABLE CONCRETE FILL AS DIRECTED BY THE DESIGN PROFESSIONAL. IN ADDITION, FOOTINGS SHOULD BE OVERSIZED AND PROPORTIONED FOR A REDUCED ALLOWABLE BEARING CAPACITY, AS DETERMINED BY THE STRUCTURAL ENGINEER, TO BETTER DISTRIBUTE FOUNDATION LOADS AND SPAN ANY LOCALIZED SOFT/LOOSE ZONE OR VOID AREAS.

CONCRETE NOTES

- REINFORCED CONCRETE CONSTRUCTION SHALL BE IN ACCORDANCE WITH ACI 318, LATEST EDITION.
- CONCRETE MATERIALS: $F_c = 4000$ psi FOR SLABS, ALL OTHER CONCRETE: $F_c = 3000$ psi
CEMENT: ASTM C150, TYPE I
AGGREGATE: ASTM C33
WATER: ASTM C94
EXTERIOR CONCRETE MIX: WATER CEMENT RATIO, 0.45 (AIR-ENTRAINED TO 4.5 % MIN)
INTERIOR CONCRETE MIX: WATER CEMENT RATIO, 0.50
- REINFORCING MATERIALS:
REINFORCING BARS: ASTM A615, GRADE 60, DEFORMED
4. REINFORCING BARS SHALL BE LAPPED A MINIMUM OF 36 BAR DIAMETERS.
5. MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCEMENT AS FOLLOWS:
CAST AGAINST EARTH: 3" CLEAR
CONCRETE EXPOSED TO EARTH OR WATER: 2" CLEAR
ALL OTHER CONCRETE: 3/4" CLEAR
6. MINIMUM CONCRETE SLAB REINFORCEMENT SHALL BE AS FOLLOWS:
3/2" FLOOR SLAB ON METAL DECK: 66-W2.9xW2.9
4" FLOOR SLAB ON GRADE: 66-W2.9xW2.9
5" FLOOR SLAB ON GRADE: 44-W4.0xW4.0
6" FLOOR SLAB ON GRADE: #4 REBAR @ 12" O.C., E.W.
7. COLD-WEATHER PLACING SHALL COMPLY WITH THE PROVISIONS OF ACI-306R. THE USE OF CALCIUM CHLORIDE, SALT, AND OTHER MATERIALS CONTAINING ANTI-FREEZE AGENTS OR CHEMICAL ACCELERATORS SHALL NOT BE PERMITTED UNLESS OTHERWISE ACCEPTED IN THE MIX DESIGN.
8. HOT-WEATHER PLACING SHALL COMPLY WITH THE PROVISIONS OF ACI-305.



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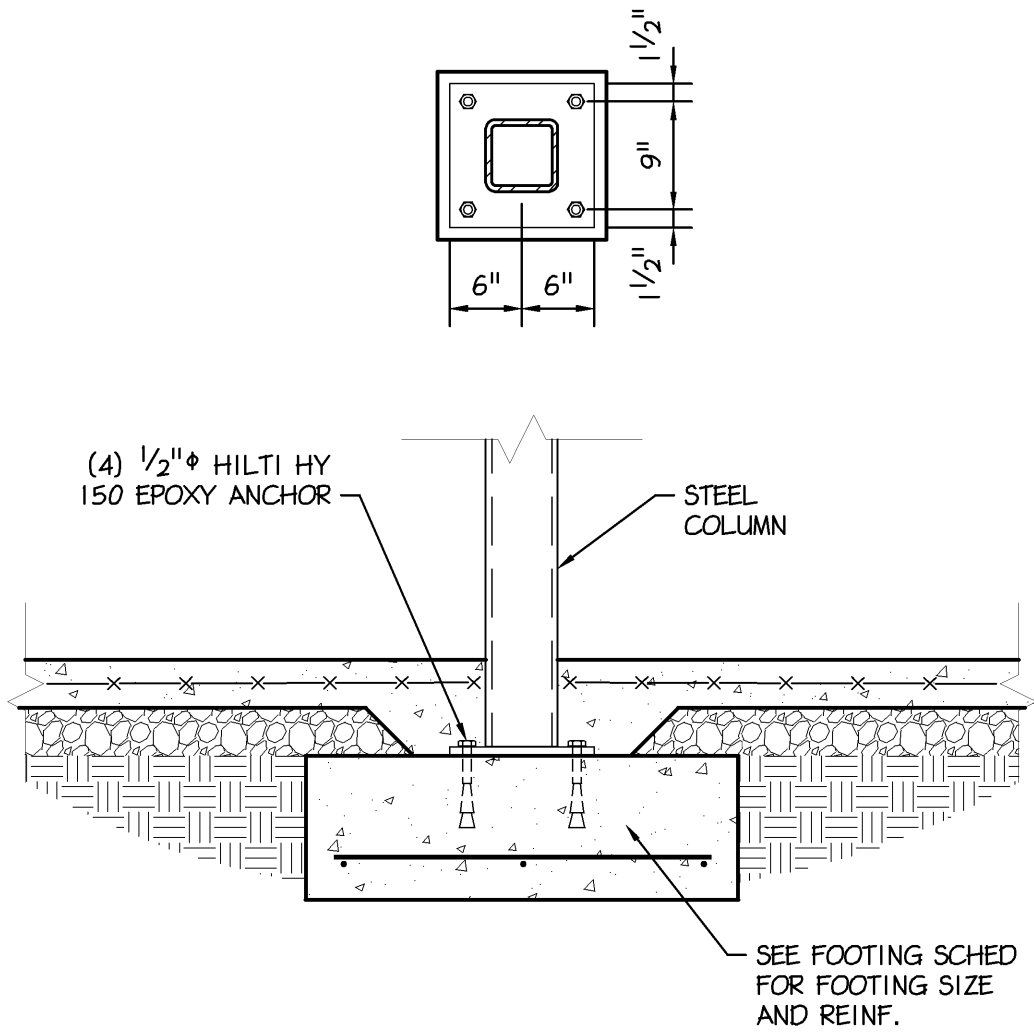
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STRUCTURAL SECTIONS

SHEET NUMBER

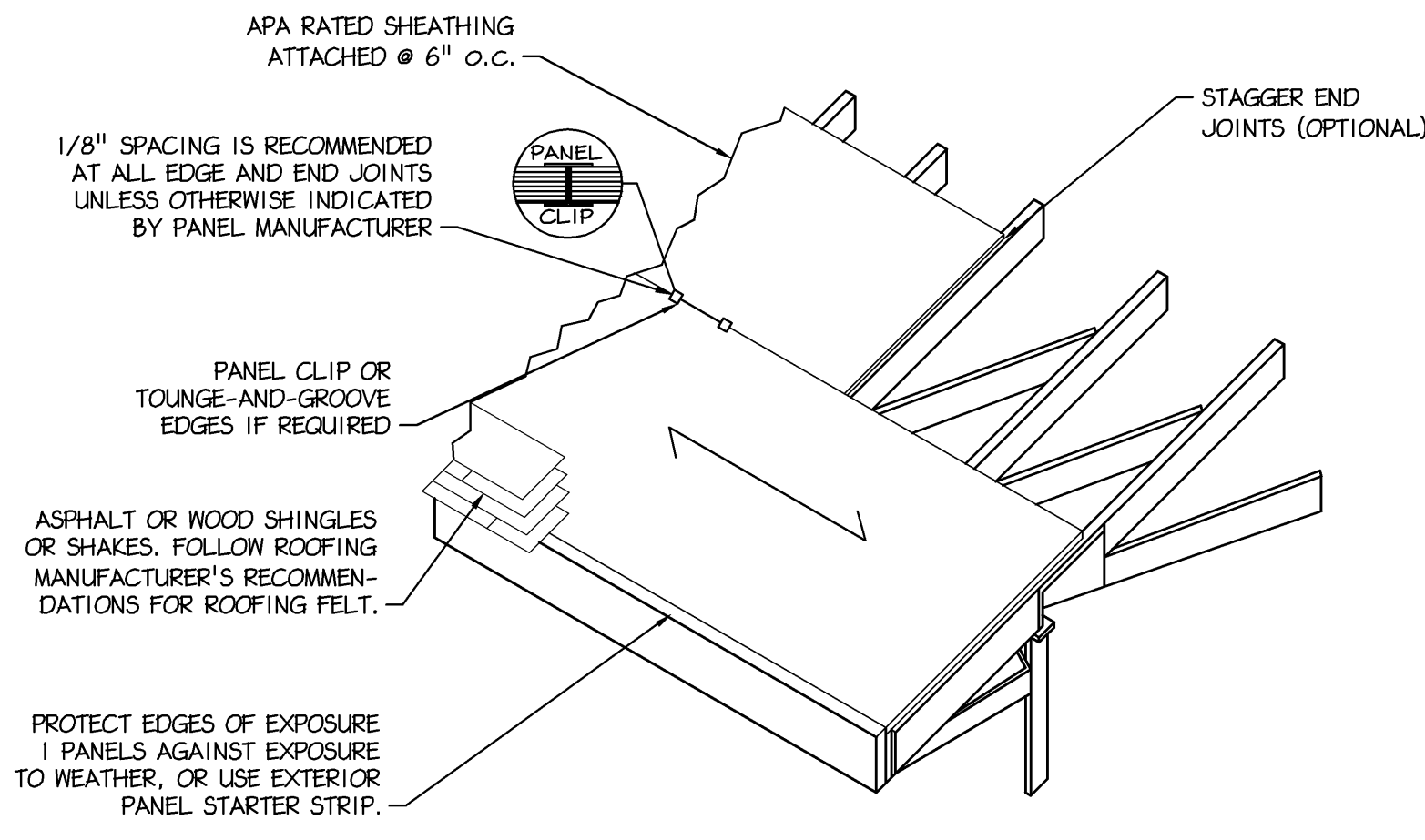
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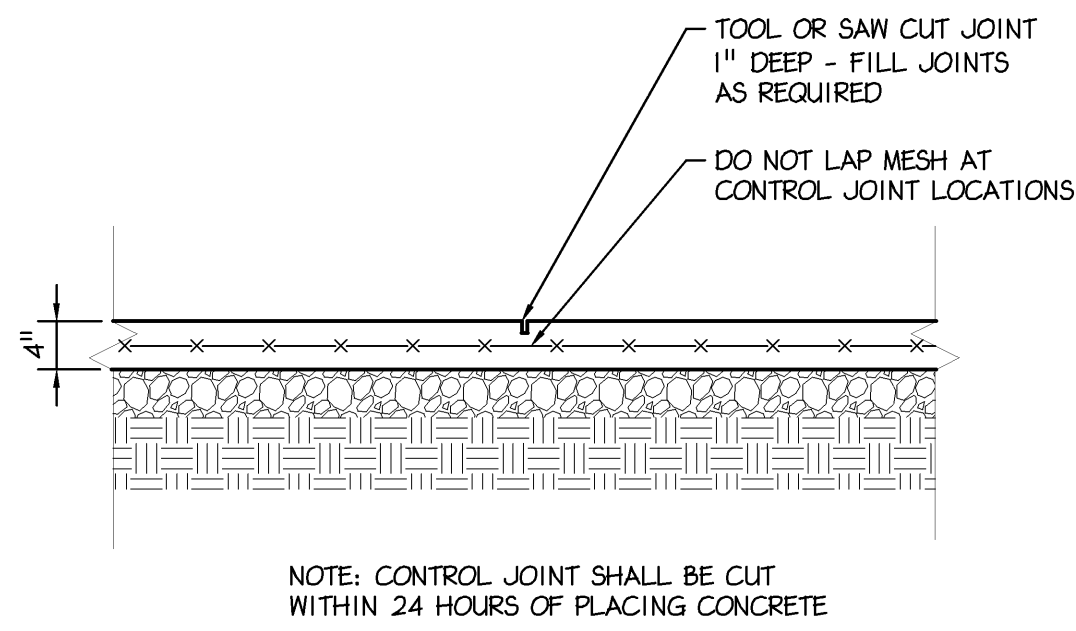
1 POST FOOTING DETAIL

S-6 Scale: 3/4" = 1'-0"



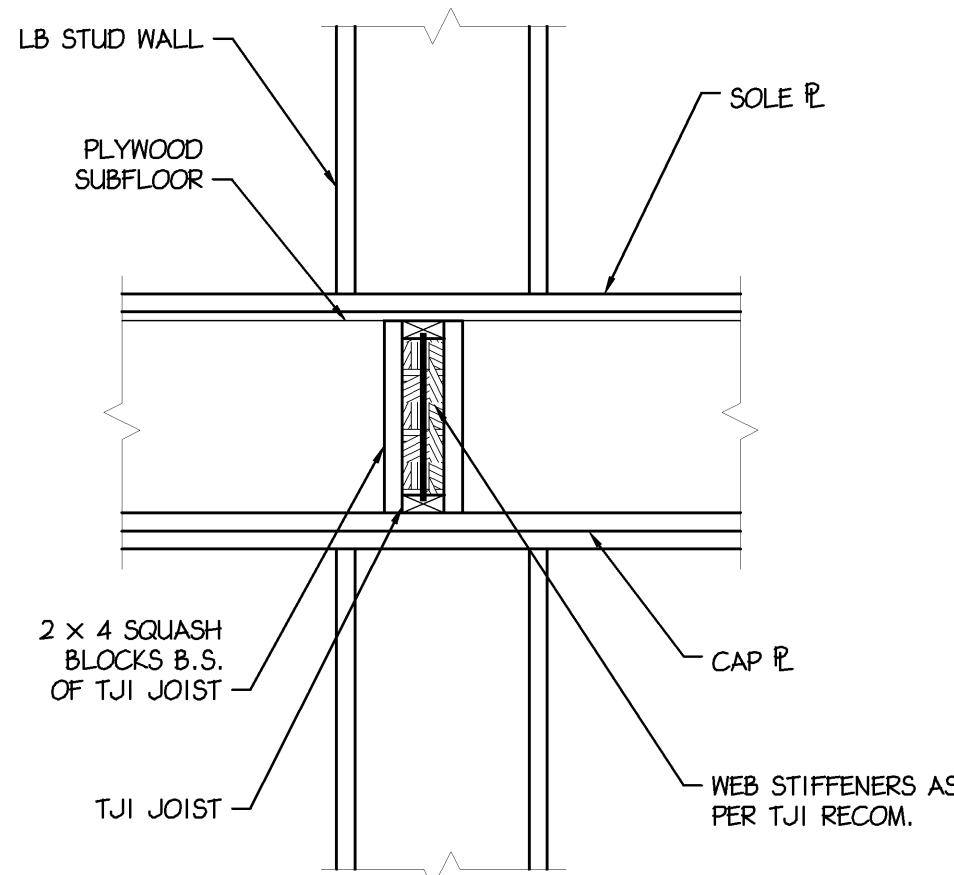
2 PANEL ROOF SHEATHING DETAIL

S-6 Scale: 3/4" = 1'-0"



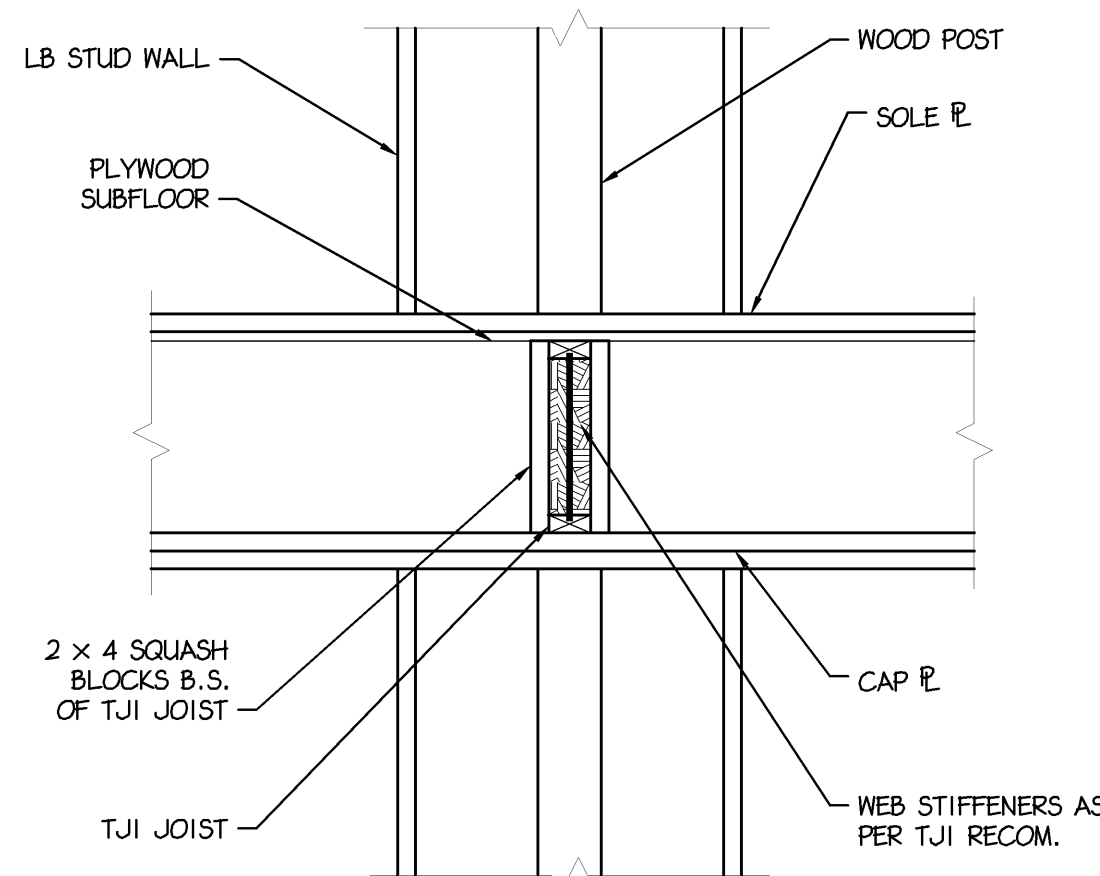
3 CONTROL JOINT DETAIL

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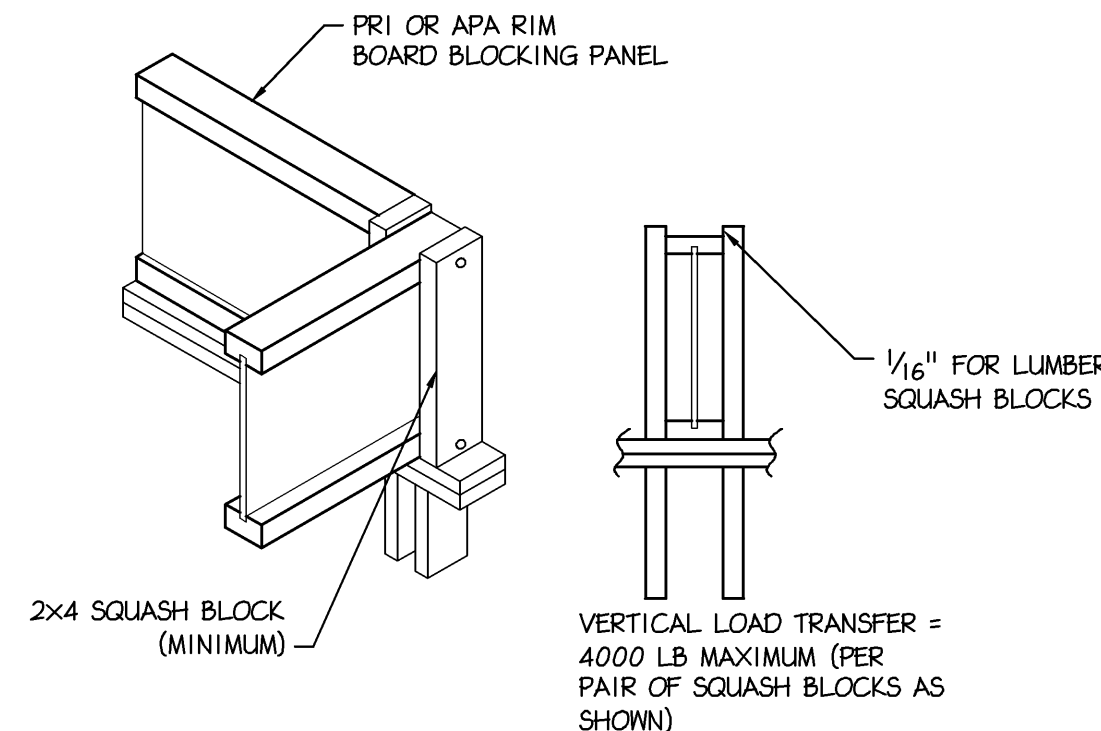
4 TJI WEB STIFFENER DETAIL

S-6 Scale: 3/4" = 1'-0"



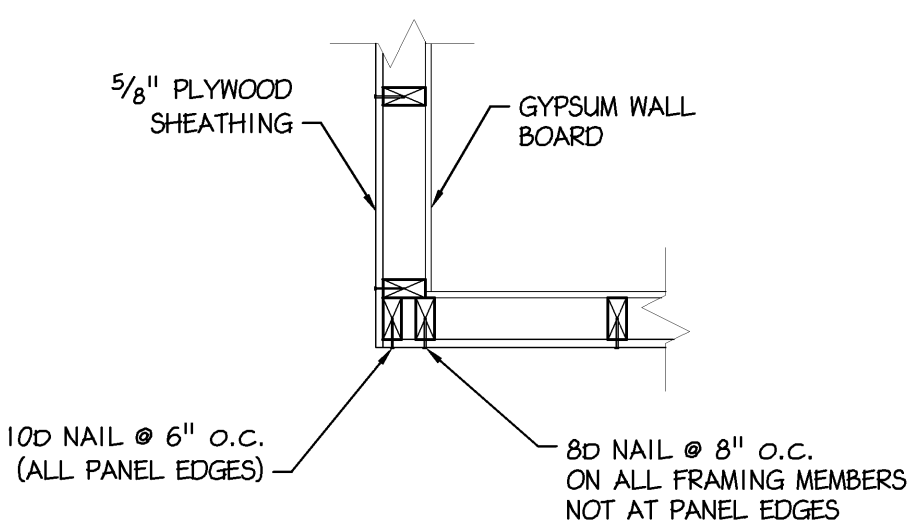
5 TJI WEB STIFFENER • POST

S-6 Scale: 3/4" = 1'-0"



6 TJI SQUASH BLOCK DETAIL

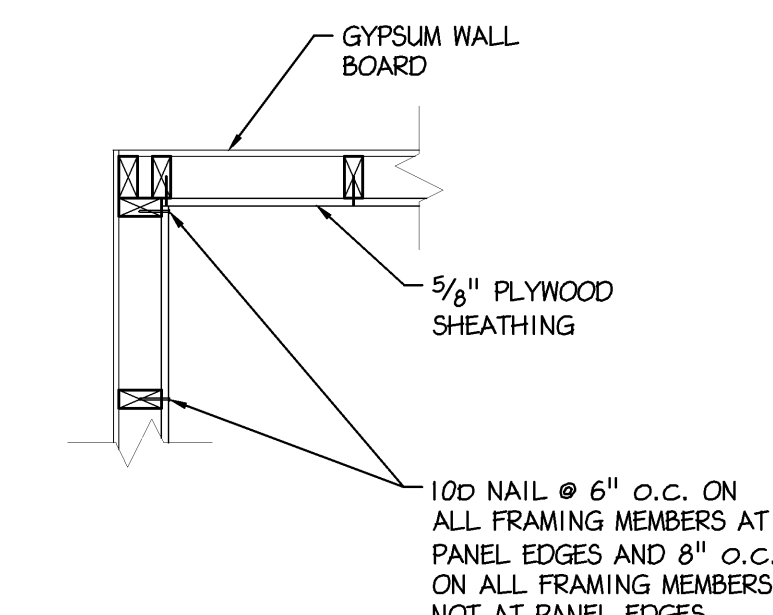
S-6 Scale: NTS



7 WALL CORNER DETAILS

7 WALL CORNER DETAILS

S-6 Scale: 3/4" = 1'-0"



8 BEAM CONN. DETAIL

8 BEAM CONN. DETAIL

S-6 Scale: 3/4" = 1'-0"

COLUMN FOOTING SCHEDULE		
MARK	SIZE	REINF.
(F1)	2'-0" x 2'-0" x 1'-0"	2 #5 (E.W.)
(F2)	2'-6" x 2'-6" x 1'-0"	2 #5 (E.W.)
(F3)	3'-0" x 3'-0" x 1'-0"	3 #5 (E.W.)
(F4)	4'-0" x 2'-6" x 1'-0"	#5 @ 12" O.C. (E.W.)
(F5)	4'-0" x 4'-0" x 1'-0"	4 #5 (E.W.)

WOOD POST SCHEDULE	
MARK	SIZE
(C1)	(3) 2x4 BUNDLE STUD
(C2)	(3) 2x6 BUNDLE STUD
(C3)	PSL 3 1/2" x 3 1/2"
(C4)	PSL 3 1/2" x 5 1/4"
(C5)	PSL 5 1/4" x 5 1/4"

STRUCTURAL STEEL NOTES

- STRUCTURAL STEEL CONSTRUCTION SHALL BE IN ACCORDANCE WITH AISC'S 'CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES' AND 'SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS - ALLOWABLE STRESS DESIGN', LATEST EDITION.
- STEEL MATERIALS

W-SHAPES:	ASTM A 992,	Fy=50,000 PSI
CHANNELS, ANGLES	ASTM A 36,	Fy=36,000 PSI
PLATE AND BAR	ASTM A 36,	Fy=36,000 PSI
COLD-FORMED HOLLOW	ASTM A 500,	GRADE B
STRUCTURAL SECTIONS	ASTM A 501,	Fy=46,000 PSI
HOT-FORMED HOLLOW	ASTM A 501,	Fy=46,000 PSI
STRUCTURAL SECTIONS	ASTM A 53,	TYPE E OR S
STEEL PIPE	GRADE B,	Fy=36,000 PSI
- CONNECTOR MATERIALS:

BOLTS	ASTM F1852, TYPE 1, TENSION CONTROL HIGH STRENGTH BOLT-NUT-WASHER ASSEMBLY WITH HEX OR ROUND HEADS AND SPLINED ENDS. COMPLY WITH AWS REQUIREMENT.
WELDING ELECTRODES	ASTM F1554, GRADE 36, Fy=36,000 PSI
UNHEADED ANCHOR RODS	ASTM F1554, GRADE 36, Fy=36,000 PSI
- BEAM-TO-BEAM AND BEAM-TO-COLUMN CONNECTIONS SHALL BE AISC STANDARD FULL DEPTH CONNECTIONS, UNLESS NOTED OTHERWISE. WHERE REACTIONS ARE INDICATED ON THE DRAWINGS, THE CONNECTION SHALL BE PROVIDED BY THE FABRICATOR. DETAILS AND CALCULATIONS, PREPARED BY A LICENSED ENGINEER, SHALL BE PART OF THE SHOP DRAWING SUBMISSION.
- ALL CONNECTIONS SHALL BE HIGH-STRENGTH FRICTION BOLTS OR WELDS OF EQUAL STRENGTH. ANCHOR BOLTS AND FIELD CONNECTIONS OF GIRTS FOR SHEAR SHALL BE UNFINISHED BOLTS.
- ELEVATION OF TOP OF STEEL MEMBERS ARE NOTED (+/-).
- STEEL JOISTS SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH LATEST AISC AND SJI SPECIFICATIONS.
- JOIST BRIDGING SHALL BE DESIGNED AND INSTALLED ACCORDING TO THE LATEST SJI SPECIFICATIONS. BRIDGING SHALL NOT BE MODIFIED WITHOUT THE APPROVAL OF THE STRUCTURAL ENGINEER.
- METAL DECKING SHALL BE INSTALLED IN 3 SPAN CONDITIONS MINIMUM.

TIMBER NOTES

- ALL WOOD FRAMING SHALL BE FABRICATED, ERECTED, AND BRACED IN ACCORDANCE WITH THE NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION, LATEST EDITION.
- ALL SAWN LUMBER SHALL BE HEA-FIR, 19% MAXIMUM MOISTURE CONTENT OR BETTER. THE MINIMUM DESIGN VALUES SHALL BE:

Fb = 1000 PSI
Fv = 75 PSI
FC = 1350 PSI
E = 1,300,000 PSI

 MINIMUM DESIGN VALUES FOR PARALLAM MEMBERS SHALL BE:

Fb = 2900 PSI
Fv = 290 PSI
FC = 2900 PSI
E = 2,000,000 PSI

 MINIMUM DESIGN VALUES FOR LVL MEMBERS SHALL BE:

Fb = 2850 PSI
Fv = 285 PSI
FC = 2750 PSI
E = 2,000,000 PSI
- ALL STEEL TIMBER FASTENINGS AND JOIST HANGERS SHALL BE A MINIMUM OF 16 GA. GALVANIZED STEEL WITH A RATED LOAD CAPACITY EQUAL TO OR EXCEEDING THE IMPOSED LOADING REQUIREMENTS.
- ALL WOOD PLATES BEARING ON MASONRY OR CONCRETE WALLS SHALL BE PRESSURE TREATED LUMBER UNLESS NOTED OTHERWISE.
- ALL DOUBLE JOISTS SHALL BE SPIKED TOGETHER WITH 100 NAILS @ 16" O.C. ALL DOUBLE TJI JOISTS SHALL BE ATTACHED AS PER MANUFACTURERS RECOMMENDATIONS.
- ALL WOOD BEAMS MADE UP OF 3 OR MORE MEMBERS SHALL BE BOLTED TOGETHER WITH 1/2" BOLTS @ 32" O.C.
- ALL PLYWOOD ROOF SHEATHING SHALL BE SECURED WITH PLY CLIPS AT CENTERLINE OF PLYWOOD SPAN AND AT ALL EDGES PARALLEL TO SPAN.
- PLYWOOD SHEATHING SHALL BE CONTINUOUS OVER A MINIMUM OF 3 SPANS.
- PLYWOOD SHALL BE SECURED USING 80 NAILS.
- ALL PLYWOOD SHALL MEET THE REQUIREMENTS OF THE PLYWOOD DESIGN SPECIFICATIONS AS PUBLISHED BY THE AMERICAN PLYWOOD ASSOCIATION AND THE REQUIREMENTS OF THE AMERICAN INSTITUTE OF TIMBER CONSTRUCTION, LATEST EDITION.
- WOOD TRUSS JOISTS ARE TO BE DESIGNED BY THE MANUFACTURER, ALL CALCULATIONS SHALL BE SEALED BY A REGISTERED ENGINEER AND SHALL BE SUBMITTED FOR APPROVAL BY THE STRUCTURAL ENGINEER.

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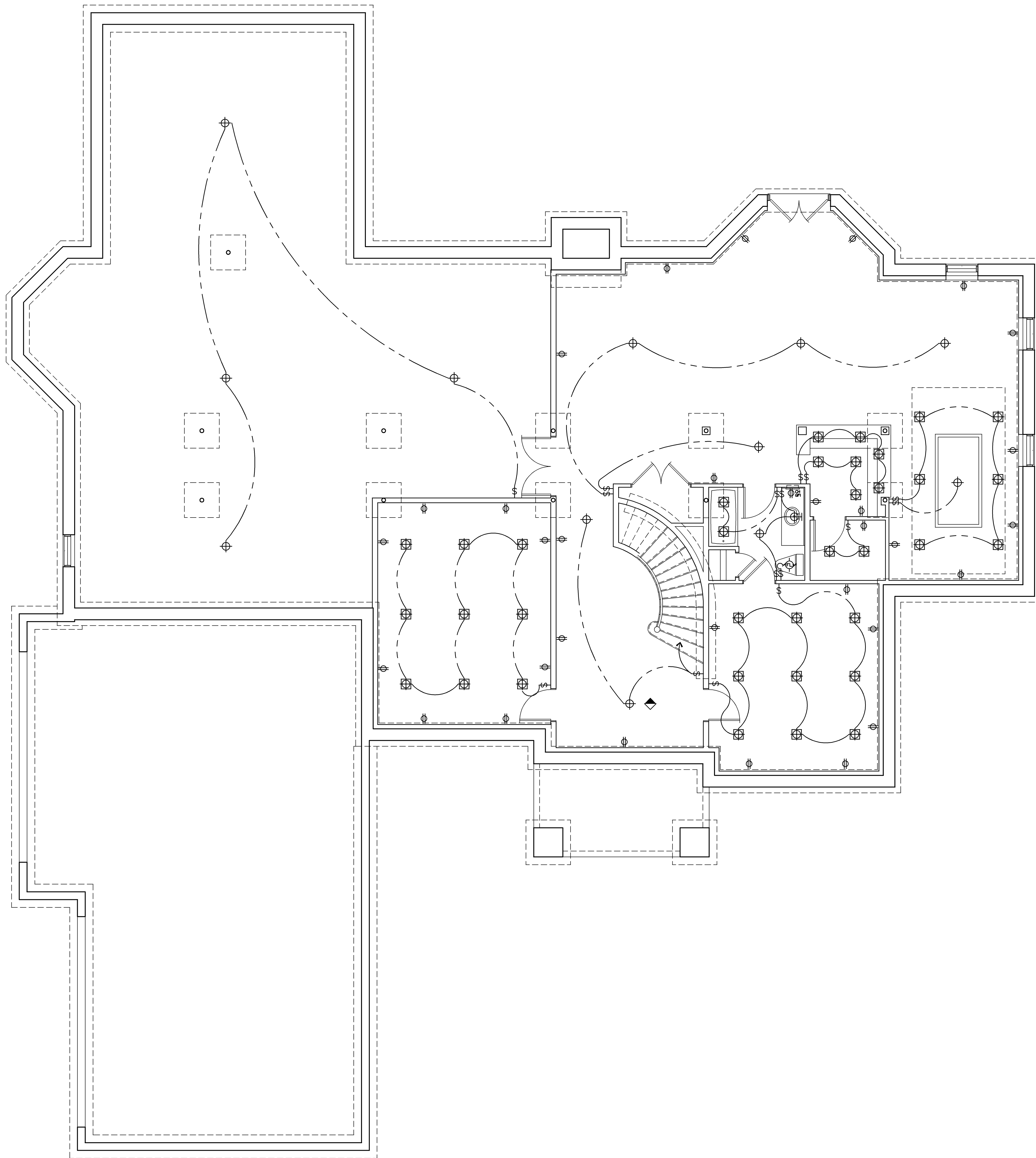
STRUCTURAL DETAILS & NOTES

S-6

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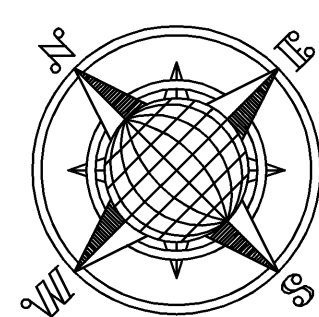
1 BASEMENT FLOOR PLAN
E-1 Scale: 1/4" = 1'- 0"



ELECTRICAL SYMBOLS

- SINGLE POLE SWITCH
- THREE (3) POLE SWITCH
- FOUR (4) POLE SWITCH
- RECSTAT SWITCH
- DUPLEX OUTLET
- DUPLEX OUTLET GROUND FAULT INTERRUPTED
- DUPLEX OUTLET SPLIT WIRED TO SWITCH
- DUPLEX OUTLET WATER PROOF GROUND FAULT
- DUPLEX OUTLET WITH SWITCH
- 220 SERVICE OUTLET
- JUNCTION BOX
- CEILING LIGHT FIXTURE
- RECESSED CEILING LIGHT FIXTURE
- WALL LIGHT FIXTURE
- GARBAGE DISPOSAL
- CEILING EXHAUST FAN
- WALL EXHAUST FAN
- TELEPHONE OUTLET
- DATA/INTERNET PORT
- TELEVISION OUTLET
- THERMOSTAT
- CENTRAL VAC INLET PORT
- DOOR BELL BUTTON
- DOOR BELL CHIMES
- SMOKE DETECTOR
- ELECTRIC PANEL
- ELECTRIC METER
- ALARM KEYPAD
- FLUORESCENT FIXTURE
- FLUORESCENT STRIP FIXTURE

NOTES:
- CH INDICATES COUNTER HEIGHT
- DIMENSIONS ADJACENT TO SYMBOL INDICATES HEIGHT ABOVE FINISH FLOOR.



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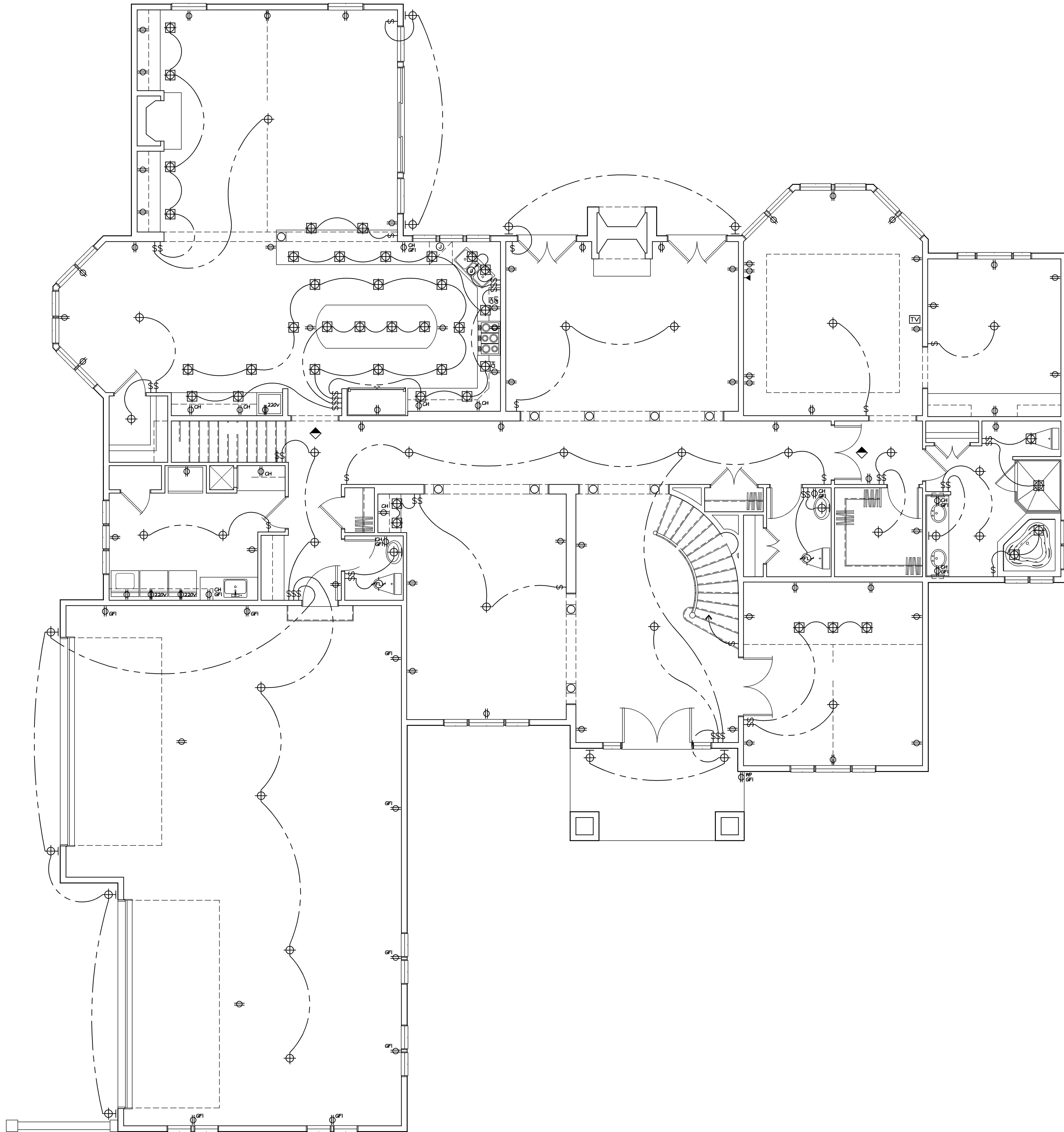
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2	08-25-05	EMH	ISSUED FOR BID/PRICING	
3	10-11-05	EMH	ISSUED FOR PERMIT	
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SHEET TITLE
ELECTRICAL
BASEMENT FLOOR PLAN

SHEET NUMBER
E-1
REV
3



ELECTRICAL SYMBOLS

SINGLE POLE SWITCH

THREE (3) POLE SWITCH

FOUR (4) POLE SWITCH

REOSTAT SWITCH

DUPLEX OUTLET

DUPLEX OUTLET
GROUND FAULT INTERRUPTED

DUPLEX OUTLET
SPLIT WIRED TO SWITCH

DUPLEX OUTLET
WATER PROOF GROUND FAULT

DUPLEX OUTLET WITH SWITCH

220 SERVICE OUTLET

JUNCTION BOX

CEILING LIGHT FIXTURE

RECESSED CEILING
LIGHT FIXTURE

WALL LIGHT FIXTURE

GARBAGE DISPOSAL

CEILING EXHAUST FAN

WALL EXHAUST FAN

TELEPHONE OUTLET

DATA/INTERNET PORT

TELEVISION OUTLET

THERMOSTAT

CENTRAL VAC INLET PORT

DOOR BELL BUTTON

DOOR BELL CHIMES

SMOKE DETECTOR

ELECTRIC PANEL

ELECTRIC METER

ALARM KEYPAD

FLUORESCENT FIXTURE

FLUORESCENT STRIP FIXTURE

NOTES:

- CH INDICATES COUNTER HEIGHT

- DIMENSIONS ADJACENT TO SYMBOL

INDICATES HEIGHT ABOVE FINISH FLOOR.

Robin J. Kohn, AIA
Commonwealth of Pennsylvania
License No. RA-11327-X

Contact Person:
Edward M. Happ
(610) 917-8831

PROJECT NO.		DRAWN BY	CHK'D BY
B2262		EMH	EMH
NO.	DATE	BY	ISSUE
1	07-15-05	EMH	ISSUED FOR REVIEW
2	08-25-05	EMH	ISSUED FOR BID/PRICING
3	10-11-05	EMH	ISSUED FOR PERMIT
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
APPROVED BY		CURRENT DATE	
Robin J. Kohn, AIA		October 11, 2005	

Campo Residence
LOT #30 BUSTARD ROAD
LANSDALE, PA 19446

WORCESTER TWP.
MONTGOMERY COUNTY

SHEET TITLE

ELECTRICAL
FIRST FLOOR PLAN

SHEET NUMBER

E-2

REV
3

