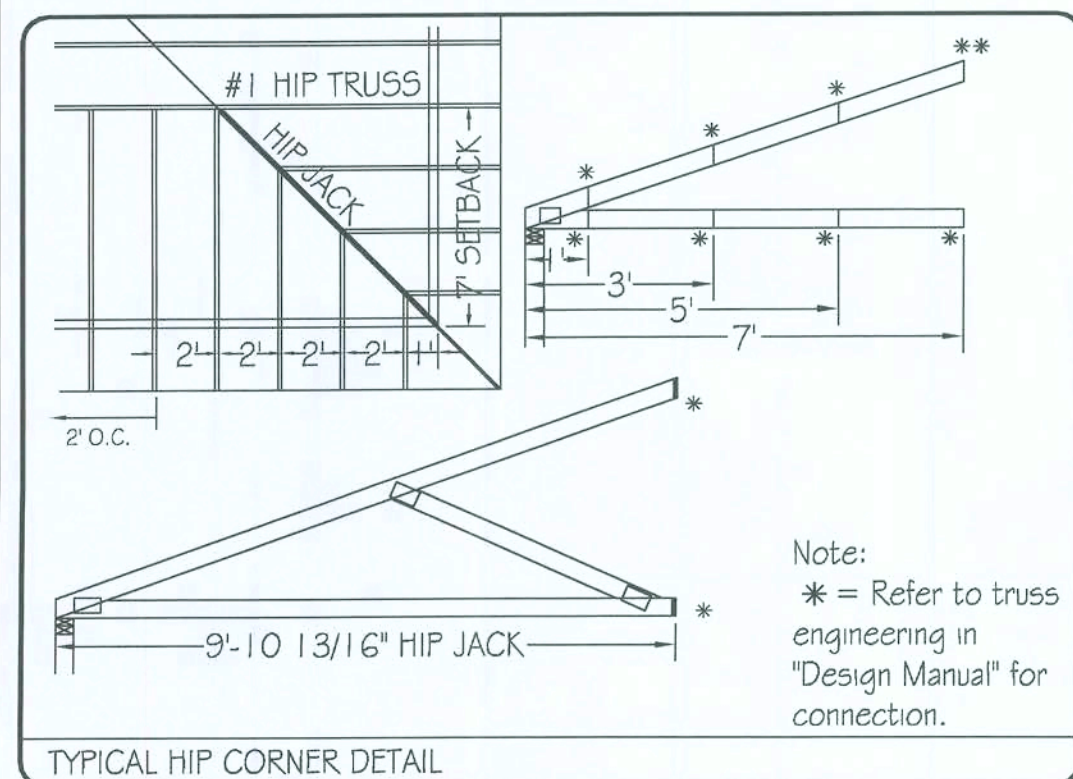




MAGURA CONSTRUCTION
WADE HORNSBY RESIDENCE

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

ROOF
TRUSS
LAYOUT

R:\Robbins\Jobs\07070790\070790DOC5\070790.dwg, 1/26/07 2:26:58 PM, ARCH D (24.00 x 36.00 Inches), 0.25:12, ralph

"ATTENTION"

1. LIMITED RESPONSIBILITY OF ROOF TRUSS MANUFACTURER. SEE WTCA 1-1995 SECTION 6.0, FOUND IN DESIGN MANUAL.

2. WARNING FAILURE TO FOLLOW RECOMMENDATIONS IN "BCSI-B-1" MAY RESULT IN SERIOUS INJURY, LOSS OF LIFE, OR PROPERTY DAMAGE.

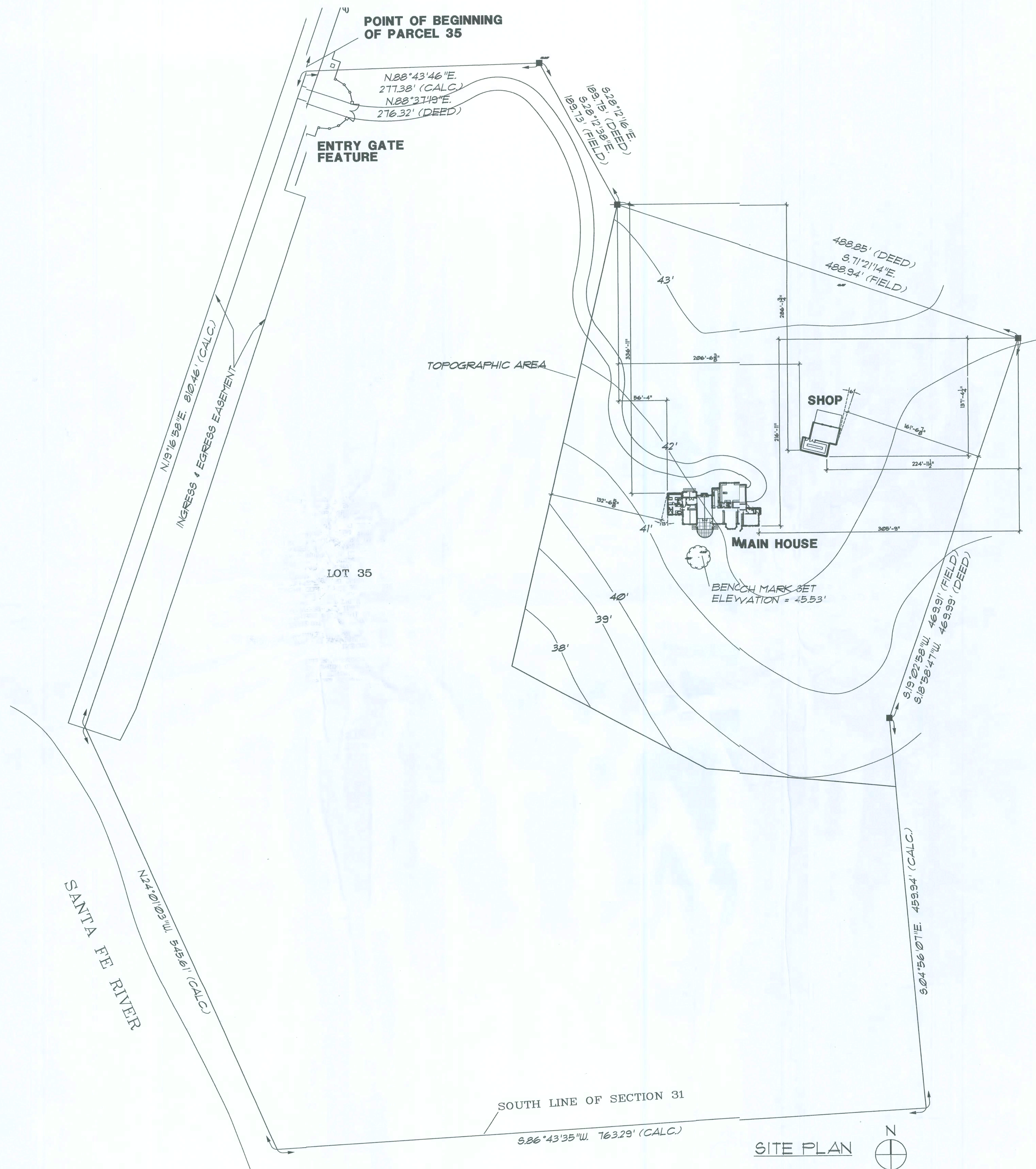
3. CUSTOMER TO VERIFY ALL DIMENSIONS, BEARING HEIGHTS, PITCHES AND ALL INFORMATION REGARDING THE DESIGN AND FABRICATION OF TRUSS SYSTEM.

4. DO NOT OVERLOAD TRUSSES w/ SHEETROCK / SHEATHING OR OTHER BUILDING MATERIALS.

5. TRUSSES ARE NOT MARKED IN ANY WAY TO IDENTIFY THE FREQUENCY, OR LOCATION OF TEMPORARY ERECTION BRACING. ALL TEMPORARY BRACING SHALL COMPLY WITH THE LATEST EDITION OF BCSI-B1 PUBLISHED BY THE TRUSS PLATE INSTITUTE FOUND IN THE DESIGN MANUAL.

6. NON-LOAD BEARING WALLS TO BE SINGLE TOP PLATED, TO PREVENT LOAD TRANSFER TO THESE WALLS. A 1x4 MAY BE USED AS SECOND TOP PLATE.

Page	of	Salesman: SCOTT DANIELS		REVISION DATE:	REVISION	REV BY: CHK BY:
Initial Checks:		BH	CAD: JC	1		
Design:				2		
Job: # 070790			Date: 1/1/407	3		
File: R:\Jobs\0707070790				4		



DESCRIPTION: PARCEL 3/5
A PART OF THE S 1/2 OF SECTION 31, TOWNSHIP 7 SOUTH, RANGE 17 EAST, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:
COMMENCE AT THE NW CORNER OF THE SW 1/4 OF SAID SECTION 31 AND RUN THENCE S01°41'00"E, A DISTANCE OF 73.07 FEET;
THENCE N89°22'58"E, A DISTANCE OF 816.00 FEET; THENCE S01°45'20"E, A DISTANCE OF 436.30 FEET; THENCE N89°30'00"E, A
DISTANCE OF 590.18 FEET; THENCE S19°18'59"E, A DISTANCE OF 244.64 FEET TO THE POINT OF BEGINNING; THENCE A88°37'19"E,
A DISTANCE OF 276.32 FEET; THENCE S28°12'16"E, A DISTANCE OF 189.75 FEET; THENCE S71°21'14"E, 488.85 FEET; THENCE
S18°58'47"W, 465.99 FEET; THENCE S04°56'07"E, A DISTANCE OF 459.94 FEET TO THE SOUTHWEST LINE OF SAID SECTION 31;
THENCE S86°43'35"W, ALONG SAID SOUTHWEST LINE, A DISTANCE OF 763.29 FEET; THENCE N24°01'03"W, A DISTANCE OF 545.61 FEET; THENCE
N41°59'58"E, A DISTANCE OF 810.46 FEET TO THE POINT OF BEGINNING. COLUMBIA COUNTY, FLORIDA. PARCEL CONTAINS 22.85
ACRES, MORE OR LESS.

[illegible]

GENERAL NOTES:

- 01.) ALL WORK SHALL COMPLY WITH APPLICABLE CODES AND ORDINANCES.
- 02.) THIS PROJECT HAS BEEN DESIGNED IN ACCORDANCE WITH THE 2004 EDITION OF THE FLORIDA BUILDING CODE RESIDENTIAL AND THE 2005 & 2006 SUPPLEMENTS
- 03.) ALL WORK SHALL BE PERFORMED IN A FIRST CLASS WORKMANLIKE MANNER.

AREA TABULATION:

<u>MAIN HOUSE</u>	
A/C AREA	2892 SF.
GARAGE	563 SF.
COVERED ENTRY	110 SF.
COVERED LANAI	236 SF.
<u>TOTAL</u>	<u>3801 SF.</u>

SHOP
AREA 1181 S.F.

SITE PLAN



Engle Lawrence

SITE PLAN

SITE PLAN

SCALE 1"=60'

MR. AND MRS. WADE HORNSBY

FLORIDA

the lawrence group

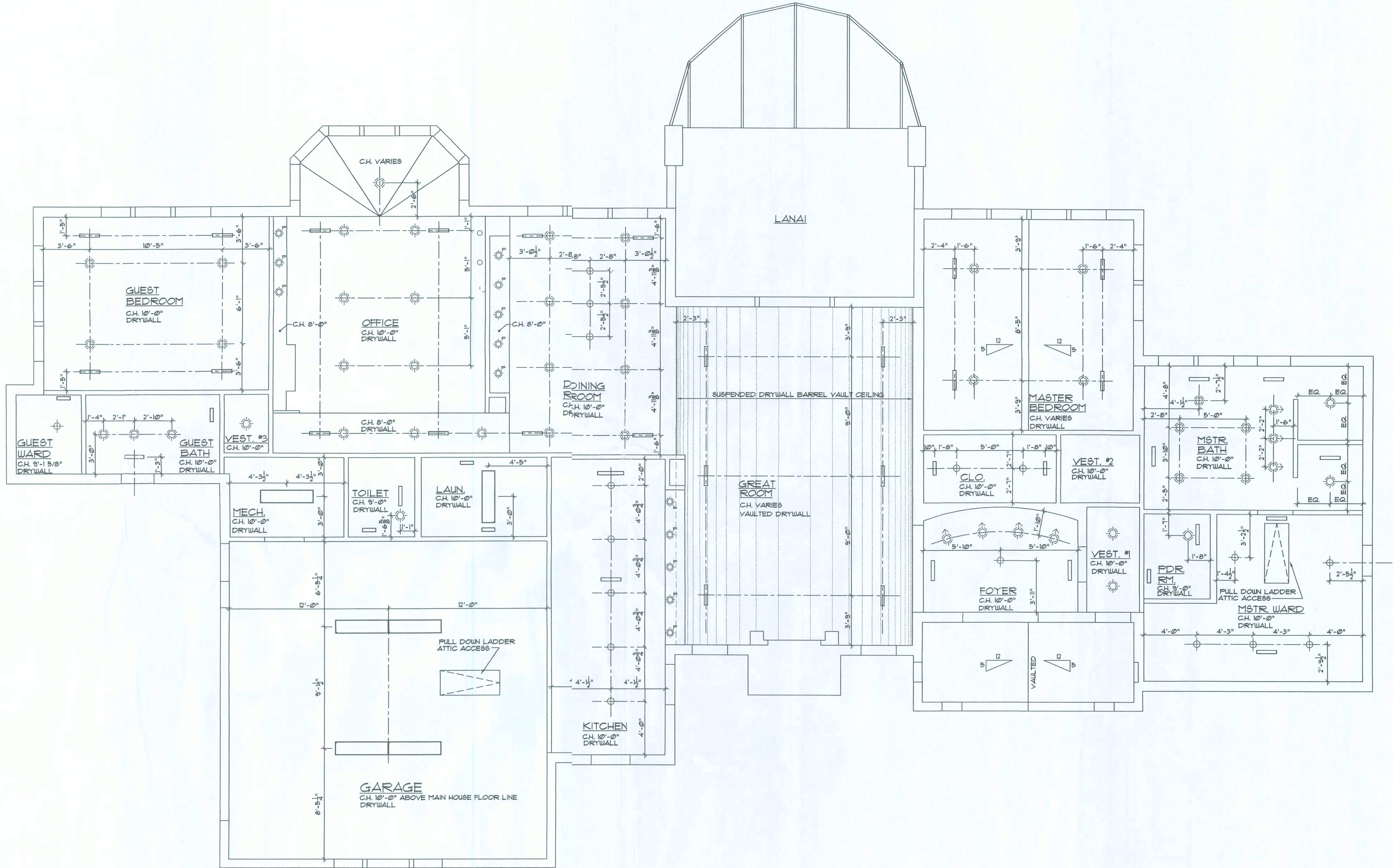
ARCHITECTS 205 WORTH AVENUE, PALM BEACH, FLORIDA 33480 P.H. (561) 655-0670

△			
△			
△			
△	1-1-08	PERMIT ISSUE	

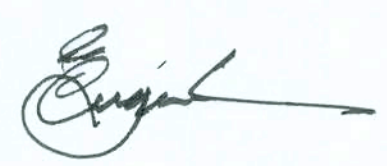
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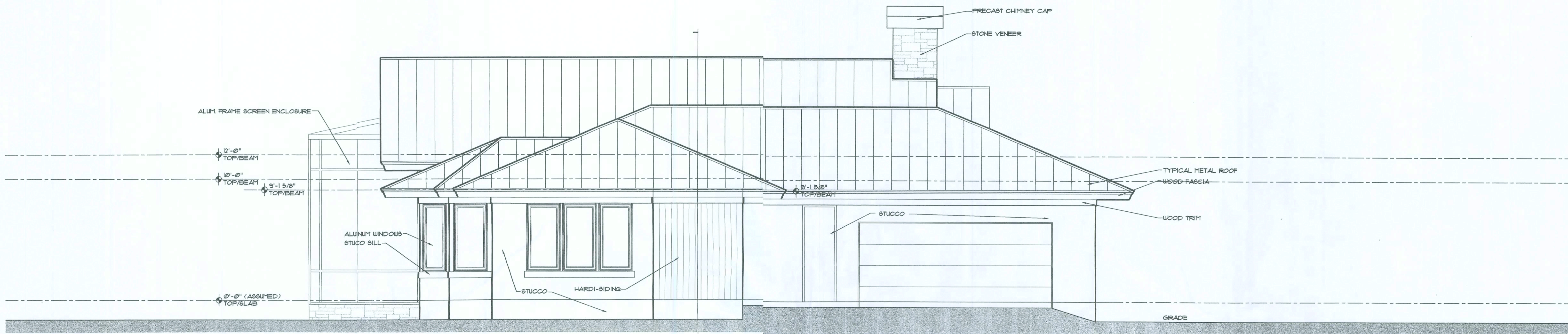
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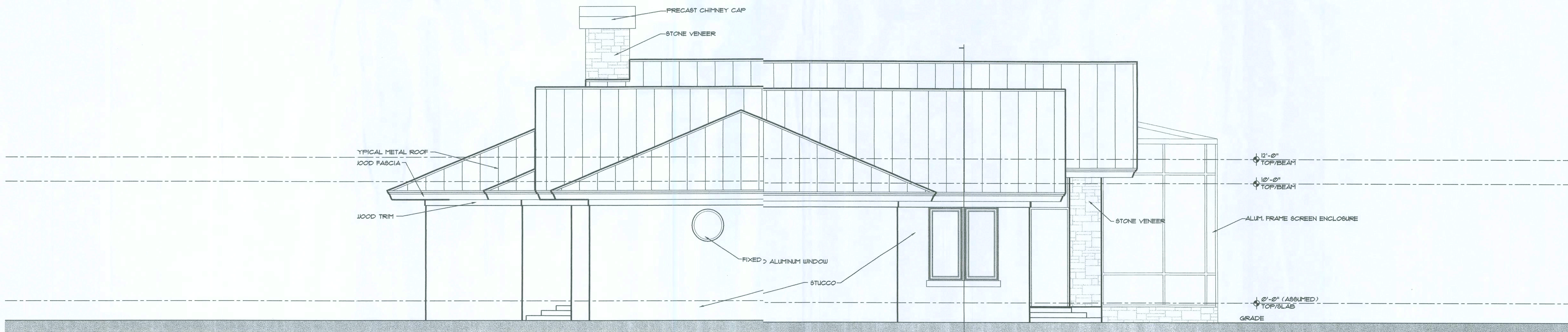
Wade Hornsby





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

NOTE:
- ALL EXTERIOR SILLS TO BE SLOPED, TYPICAL
- ALL EXTERIOR WOOD TRIM AND FASCIA TO BE "HARDI BOARD" TYPICAL



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

Engel

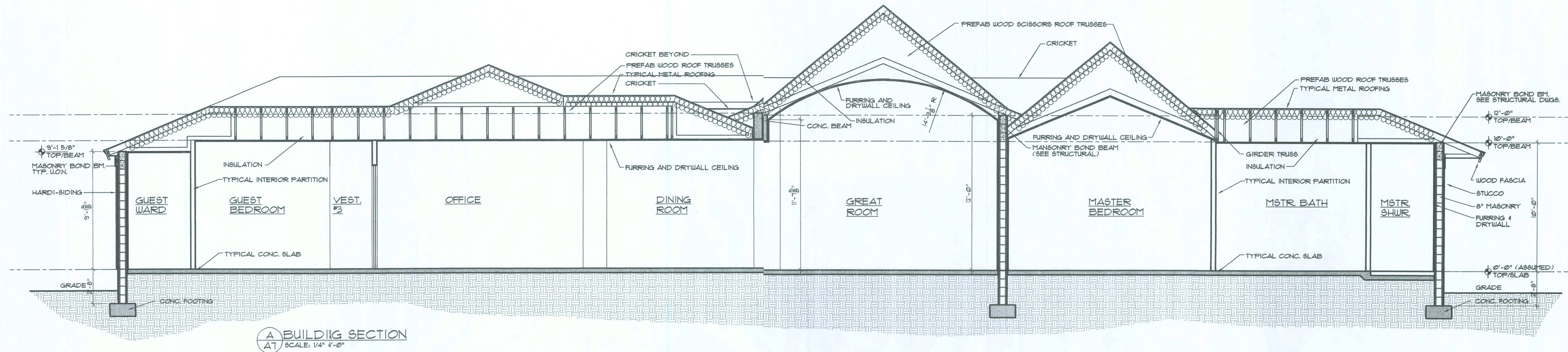
1-1-08	PERMIT ISSUE
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NEW RESIDENCE FOR
MR. AND MRS. WADE HORNSBY
HIGH SPRINGS, FLORIDA

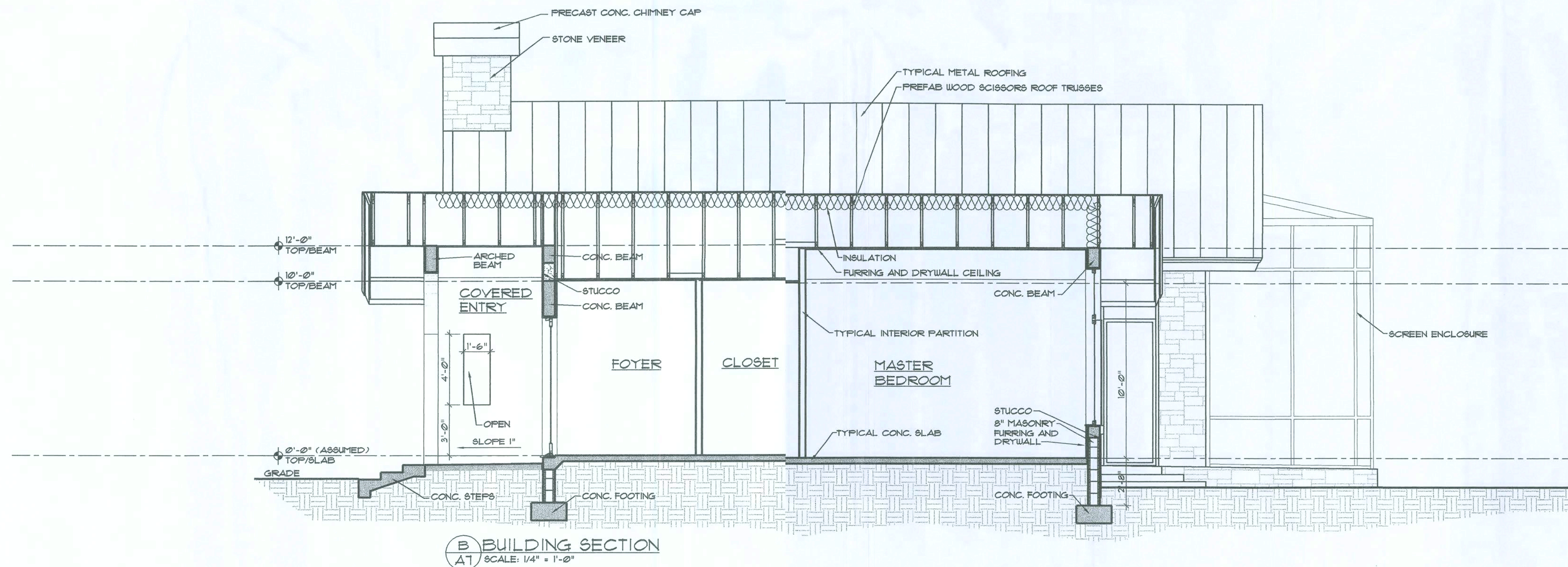
SIDE ELEVATIONS
SCALE: 1/4" = 1'-0"

A6
6004



A BUILDING SECTION
A1 SCALE: 1/4" = 1'-0"

NOTE:
- ALL EXTERIOR SILLS TO BE SLOPED, TYPICAL
- ALL EXTERIOR WOOD TRIM AND FASCIA TO BE "HARDI BOARD" TYPICAL



B BUILDING SECTION
B1 SCALE: 1/4" = 1'-0"

NEW RESIDENCE FOR

MR. AND MRS. WADE HORNSBY

HIGH SPRINGS,

FLORIDA

SECTIONS

SCALE AS NOTED

A7

6004

the lawrence group

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PERMIT ISSUE

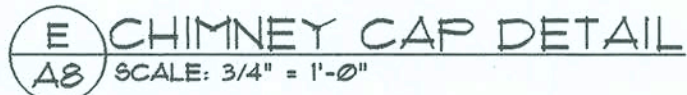
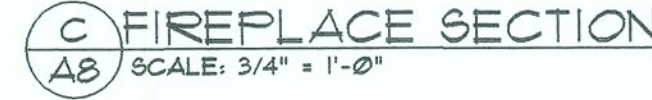
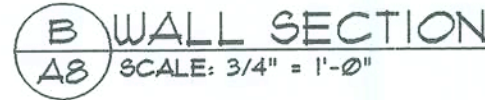
1-108

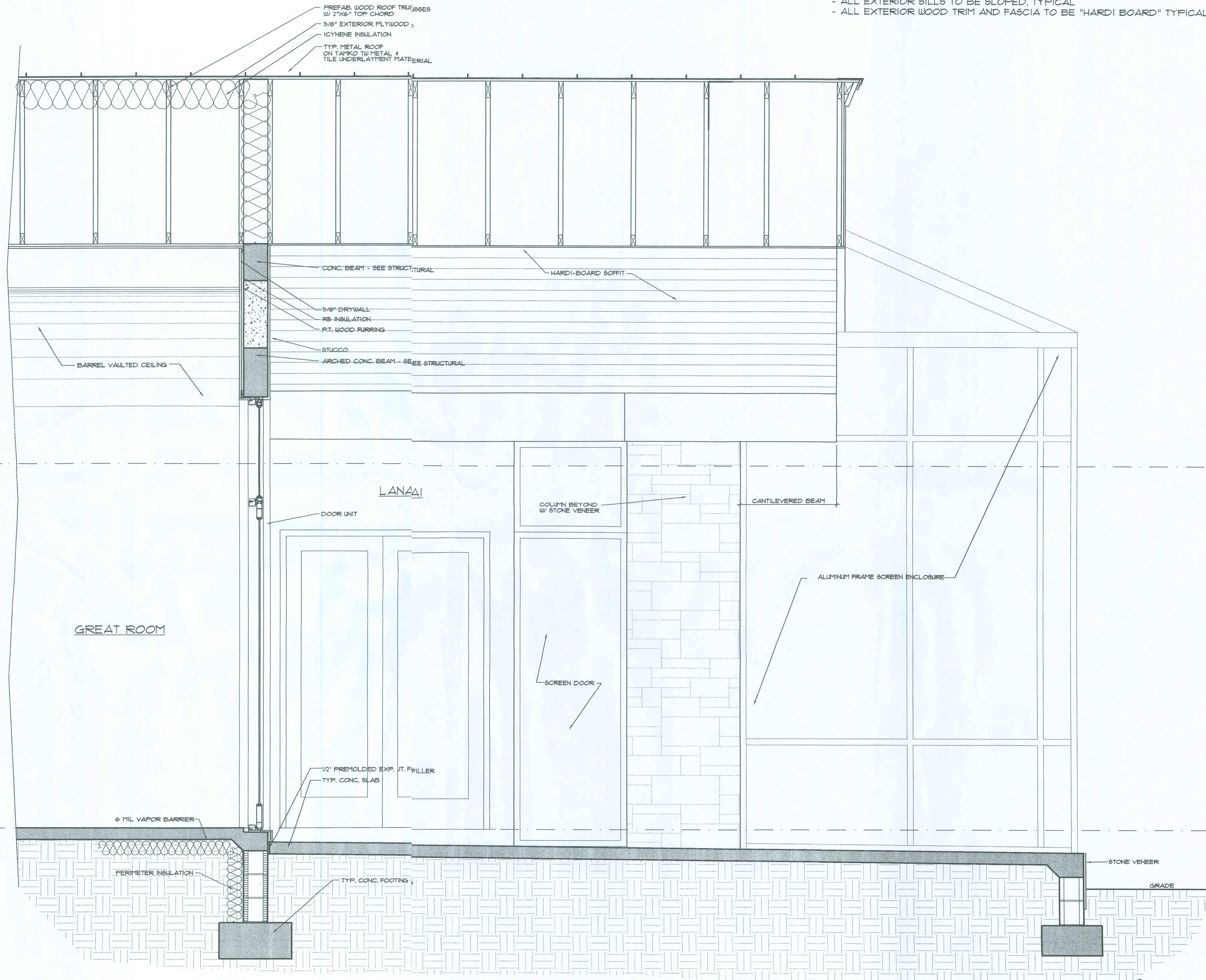
1-108

Signature

NOTE:

- ALL EXTERIOR SILLS TO BE SLOPED, TYPICAL
- ALL EXTERIOR WOOD TRIM AND FASCIA TO BE "HARDY BOARD" TYPICAL





NOTE:
- ALL EXTERIOR SILLS TO BE SLOPED, TYPICAL
- ALL EXTERIOR WOOD TRIM AND FASCIA TO BE "HARDI BOARD" TYPICAL

A WALL SECTION
A9 SCALE: 3/4" = 1'-0"

Signature

WALL SECTIONS
SCALE AS NOTED

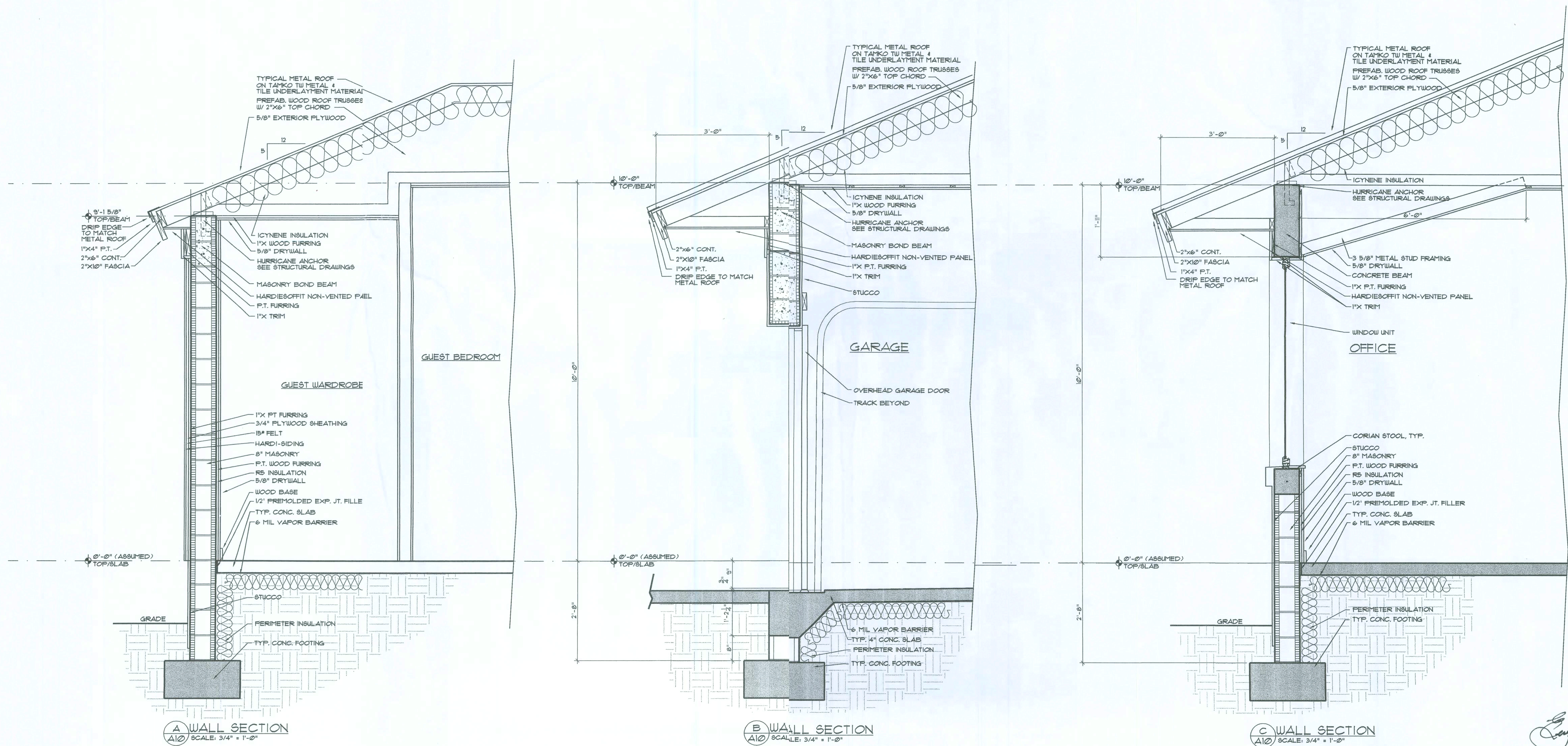
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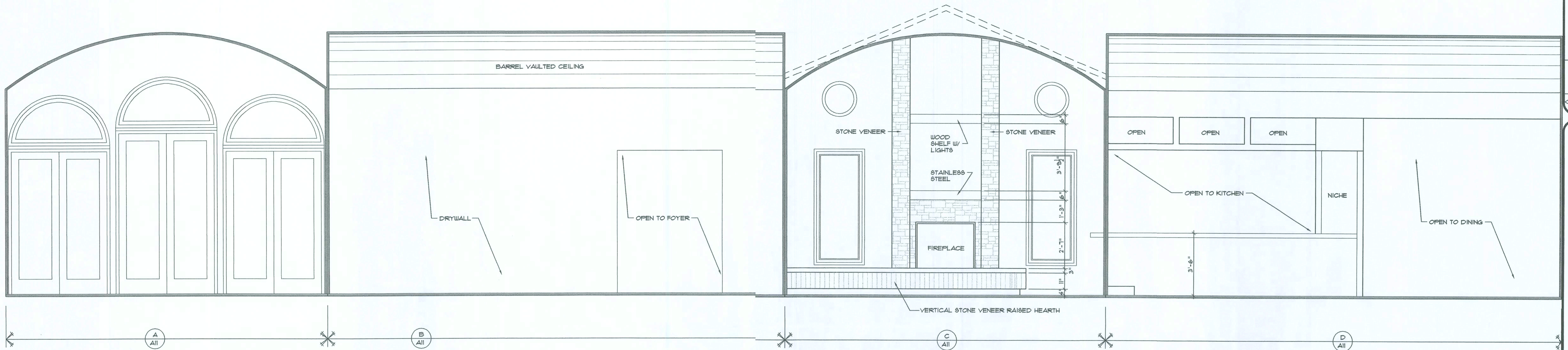
6004

NEW RESIDENCE FOR
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HIGH SPRINGS, FLORIDA

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1-108
PERMIT ISSUE

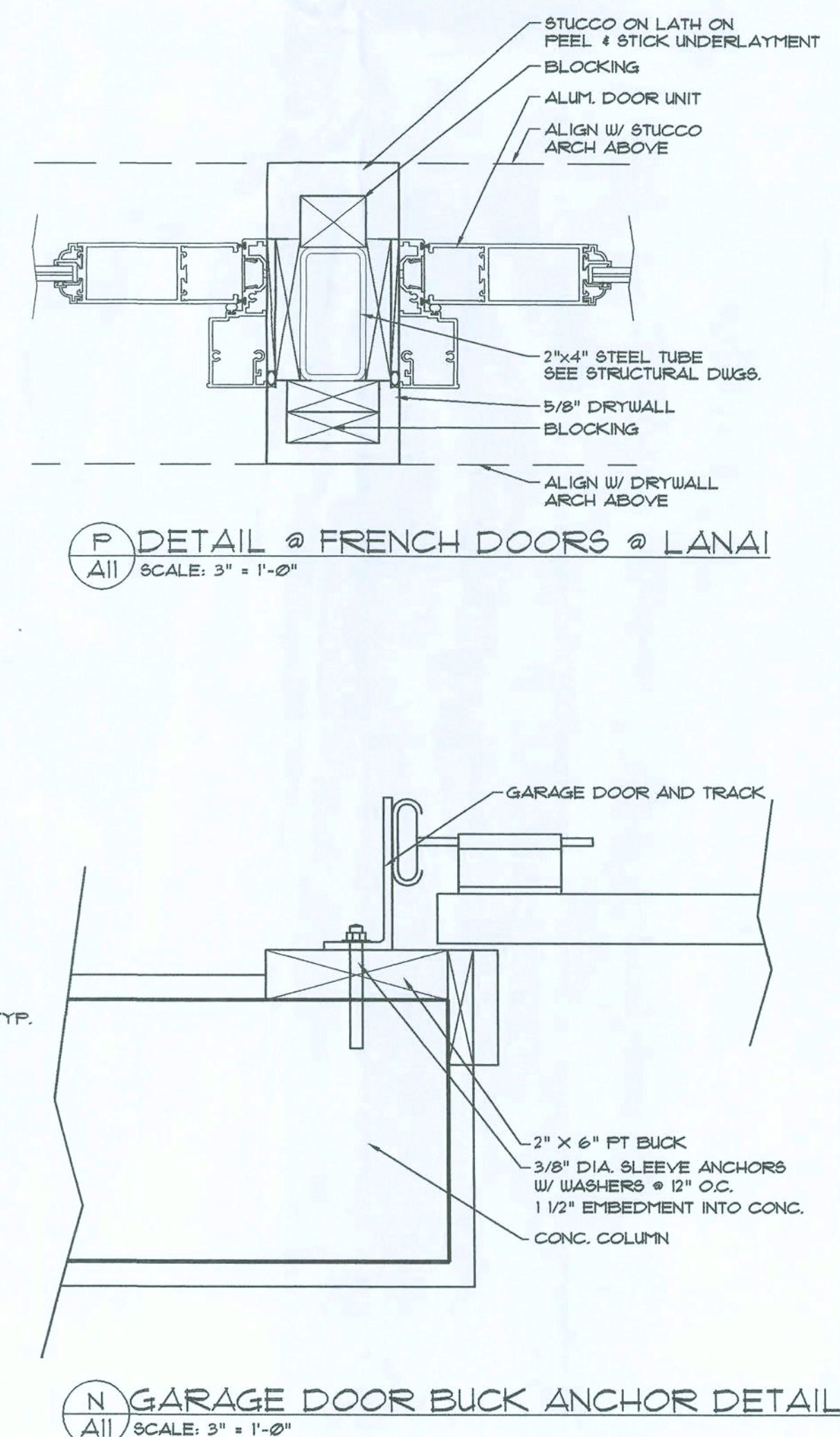
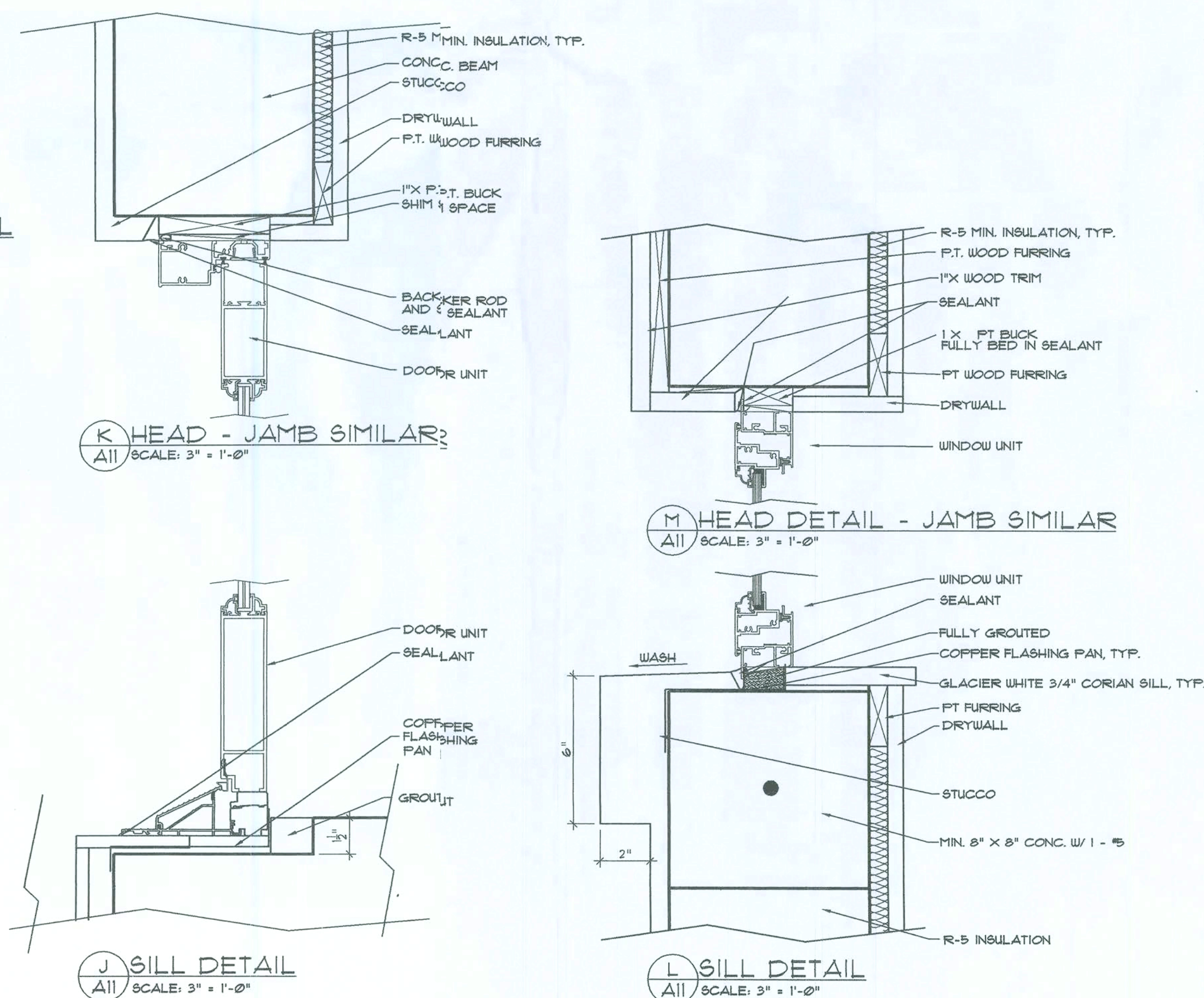
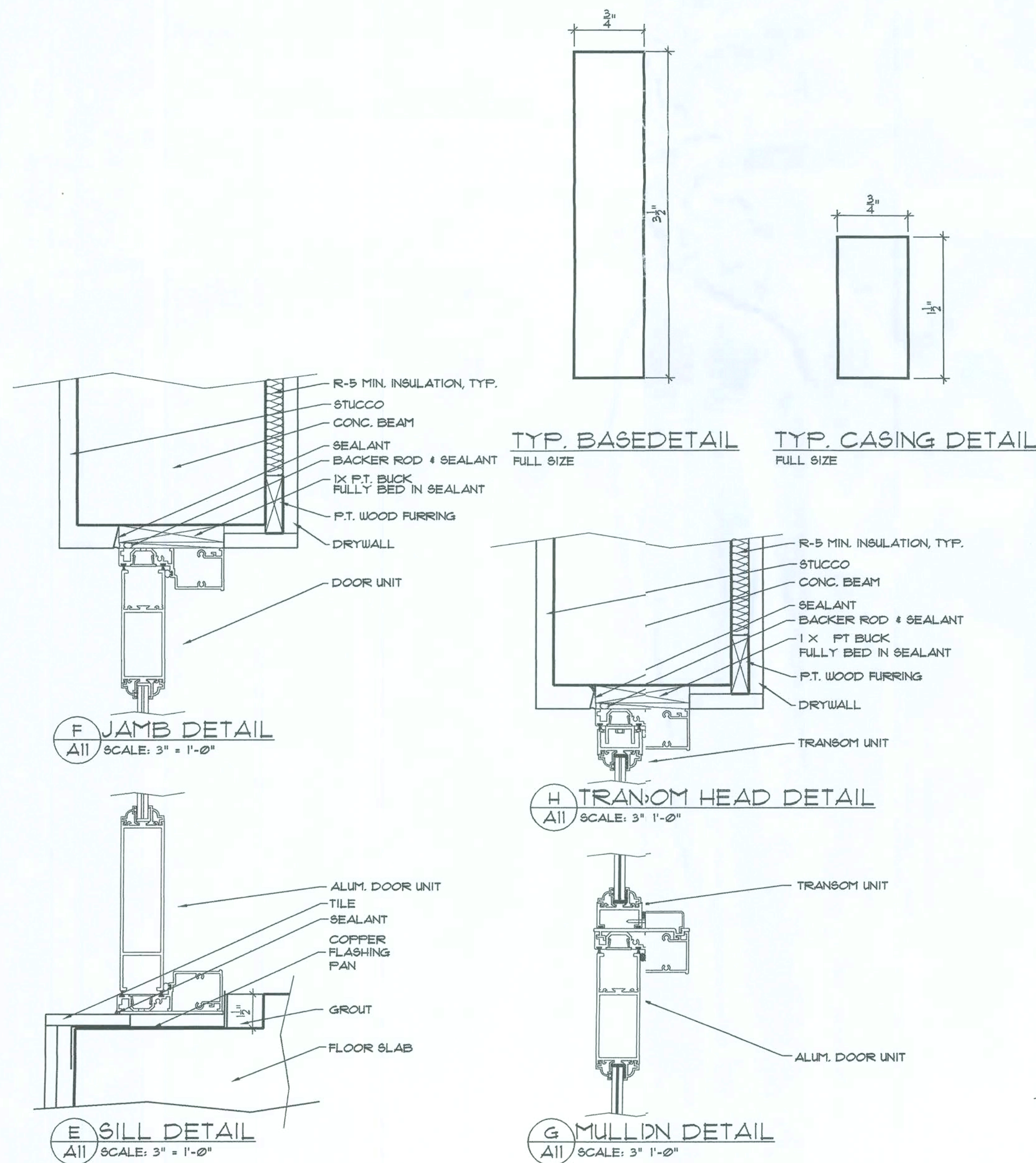




GREAT ROOM
SCALE: 3/8" = 1'-0"

NOTE:

- ALL WOOD IN CONTACT WITH CONCRETE TO BE PRESSURE TREATED



DETAILS AND
INTERIOR ELEVATIONS
SCALE AS NOTED

A11

6004

NEW RESIDENCE FOR
MR. AND MRS. WADE HORNSBY
HIGH SPRINGS, FLORIDA

the lawrence group
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PERMIT ISSUE

1-1-08

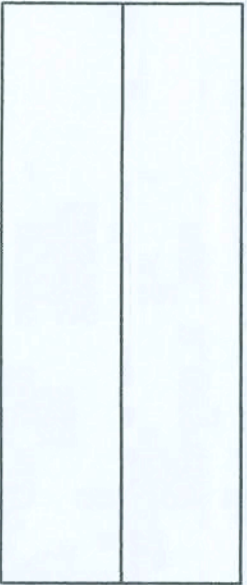
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EXTERIOR GLAZED DOOR AND WINDOW SCHEDULE		
MARK	TYPE	REMARKS
(1)	A	
(2)	B	
(3)	B	
(4)	C	
(5)	D	
(6)	S	
(7)	D	
(8)	E	
(9)	F	
(10)	F	
(11)	F	
(12)	F	
(13)	F	
(14)	F	
(15)	F	
(16)	F	
(17)	H	
(18)	H	
(19)	H	
(20)	F	
(21)	F	
(22)	G	
(23)	G	
(24)	G	
(25)	J	
(26)	K	
(27)	NOT USED	
(28)	L	
(29)	NOT USED	
(30)	K	
(31)	NOT USED	
(32)	N	
(33)	P	
(34)	N	
(35)	G	
(36)	G	
(37)	G	
(38)	G	
(39)	G	
(40)	Q	
(41)	Q	
(42)	Q	
(43)	Q	
(44)	Q	
(45)	Q	
(46)	Q	
(47)	Q	
(48)	Q	
(49)	Q	
(50)	Q	
(51)	Q	
(52)	Q	
(53)	Q	
(54)	Q	
(55)	Q	
(56)	Q	
(57)	Q	
(58)	Q	
(59)	Q	
(60)	Q	
(61)	Q	
(62)	Q	
(63)	Q	
(64)	Q	
(65)	Q	
(66)	Q	
(67)	Q	
(68)	Q	
(69)	Q	
(70)	Q	
(71)	Q	
(72)	Q	
(73)	Q	
(74)	Q	
(75)	Q	
(76)	Q	
(77)	Q	
(78)	Q	
(79)	Q	
(80)	Q	
(81)	Q	
(82)	Q	
(83)	Q	
(84)	Q	
(85)	Q	
(86)	Q	
(87)	Q	
(88)	Q	
(89)	Q	
(90)	Q	
(91)	Q	
(92)	Q	
(93)	Q	
(94)	Q	
(95)	Q	
(96)	Q	
(97)	Q	
(98)	Q	
(99)	Q	
(100)	Q	

ROOM FINISH SCHEDULE					
SPACE	FLOOR	BASE	WALLS	CEILING	REMARKS
FOYER	WOOD	WOOD	DRYWALL	DRYWALL	
GREAT ROOM	WOOD	WOOD	DRYWALL	DRYWALL	
DINING	WOOD	WOOD	DRYWALL	DRYWALL	
KITCHEN	WOOD	WOOD	DRYWALL	DRYWALL	
LAUNDRY	WOOD	WOOD	DRYWALL	DRYWALL	
GARAGE	CONCRETE	NONE	DRYWALL	STUCCO	
TOILET	WOOD	WOOD	DRYWALL	DRYWALL	
OFFICE	WOOD	WOOD	DRYWALL	DRYWALL	
MECHANICAL	CONCRETE	NONE	DRYWALL	STUCCO	
VESTIBULE #3	WOOD	WOOD	DRYWALL	DRYWALL	
GUEST BATH	CERAMIC TILE	CERAMIC TILE	CERAMIC TILE	DRYWALL	
GUEST BEDROOM	WOOD	WOOD	DRYWALL	DRYWALL	
GUEST WARD	WOOD	WOOD	DRYWALL	DRYWALL	
VESTIBULE #1	WOOD	WOOD	DRYWALL	DRYWALL	
POWDER ROOM	WOOD	WOOD	DRYWALL	DRYWALL	
VESTIBULE #2	WOOD	WOOD	DRYWALL	DRYWALL	
CLOSET	WOOD	WOOD	DRYWALL	DRYWALL	
MASTER BEDROM	WOOD	WOOD	DRYWALL	DRYWALL	
MASTER BATH	CERAMIC TILE	CERAMIC TILE	CERAMIC TILE	DRYWALL	
MASTER WARD	WOOD	WOOD	DRYWALL	DRYWALL	
ENTRY	CONCRETE	NONE	DRYWALL	STUCCO	
LOGGIA	CONCRETE	NONE	DRYWALL	STUCCO / STONE	

NOTE:
WHERE DRYWALL IS INDICATED, USE LEVEL 5 DRYWALL FINISH, TYP.

INTERIOR DOOR SCHEDULE				
NO	DOOR	TYPE	FRAME	THRESHOLD
SIZE				
(1)	NOT USED			
(2)	3'-0"X8'-0"	2		
(3)	3'-0"X8'-0"	2		
(4)	16'-0"X1'-0"	4		
(5)	2'-6"X8'-0"	3		
(6)	2'-4"X8'-0"	2		
(7)	2'-4"X8'-0"	2		
(8)	2'-8"X8'-0"	2		
(9)	2'-4"X8'-0"	2		
(10)	2'-8"X8'-0"	2		
(11)	2'-4"X8'-0"	2		
(12)	2'-8"X8'-0"	2		
(13)	2'-4"X8'-0"	2		
(14)	2'-8"X8'-0"	2		
(15)	2'-4"X8'-0"	2		
(16)	2'-8"X8'-0"	2		
(17)	2'-4"X8'-0"	2		
(18)	2'-8"X8'-0"	2		
(19)	2'-4"X8'-0"	2		
(20)	2'-8"X8'-0"	2		
(21)	2'-4"X8'-0"	2		
(22)	2'-8"X8'-0"	2		
(23)	2'-4"X8'-0"	2		
(24)	2'-8"X8'-0"	2		
(25)	2'-4"X8'-0"	2		
(26)	2'-8"X8'-0"	2		
(27)	2'-4"X8'-0"	2		
(28)	2'-8"X8'-0"	2		
(29)	2'-4"X8'-0"	2		
(30)	2'-8"X8'-0"	2		
(31)	2'-4"X8'-0"	2		
(32)	2'-8"X8'-0"	2		
(33)	2'-4"X8'-0"	2		
(34)	2'-8"X8'-0"	2		
(35)	2'-4"X8'-0"	2		
(36)	2'-8"X8'-0"	2		
(37)	2'-4"X8'-0"	2		
(38)	2'-8"X8'-0"	2		
(39)	2'-4"X8'-0"	2		
(40)	2'-8"X8'-0"	2		
(41)	2'-4"X8'-0"	2		
(42)	2'-8"X8'-0"	2		
(43)	2'-4"X8'-0"	2		
(44)	2'-8"X8'-0"	2		
(45)	2'-4"X8'-0"	2		
(46)	2'-8"X8'-0"	2		
(47)	2'-4"X8'-0"	2		
(48)	2'-8"X8'-0"	2		
(49)	2'-4"X8'-0"	2		
(50)	2'-8"X8'-0"	2		
(51)	2'-4"X8'-0"	2		
(52)	2'-8"X8'-0"	2		
(53)	2'-4"X8'-0"	2		
(54)	2'-8"X8'-0"	2		
(55)	2'-4"X8'-0"	2		
(56)	2'-8"X8'-0"	2		
(57)	2'-4"X8'-0"	2		
(58)	2'-8"X8'-0"	2		
(59)	2'-4"X8'-0"	2		
(60)	2'-8"X8'-0"	2		
(61)	2'-4"X8'-0"	2		
(62)	2'-8"X8'-0"	2		
(63)	2'-4"X8'-0"	2		
(64)	2'-8"X8'-0"	2		
(65)	2'-4"X8'-0"	2		
(66)	2'-8"X8'-0"	2		
(67)	2'-4"X8'-0"	2		
(68)	2'-8"X8'-0"	2		
(69)	2'-4"X8'-0"	2		
(70)	2'-8"X8'-0"	2		
(71)	2'-4"X8'-0"	2		
(72)	2'-8"X8'-0"	2		
(73)	2'-4"X8'-0"	2		
(74)	2'-8"X8'-0"	2		
(75)	2'-4"X8'-0"	2		
(76)	2'-8"X8'-0"	2		
(77)	2'-4"X8'-0"	2		
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(96)	2'-8"X8'-0"	2		
(97)	2'-4"X8'-0"	2		
(98)	2'-8"X8'-0"	2		
(99)	2'-4"X8'-0"	2		
(100)	2'-8"X8'-0"	2		



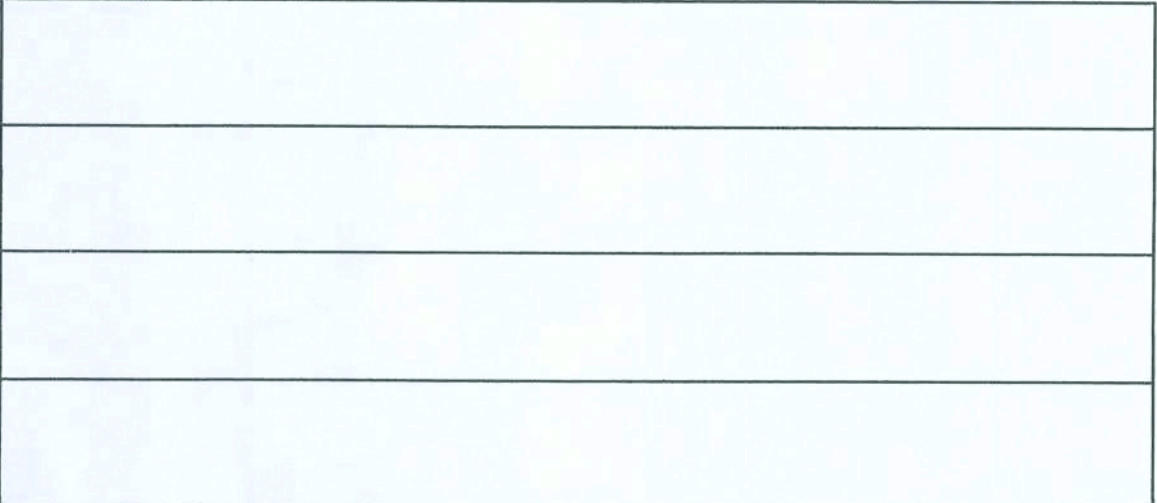
TYPE 1
FLUSH PANEL
INTERIOR DOOR
1 3/4" THICK
STAIN GRADE
WOOD FRAME



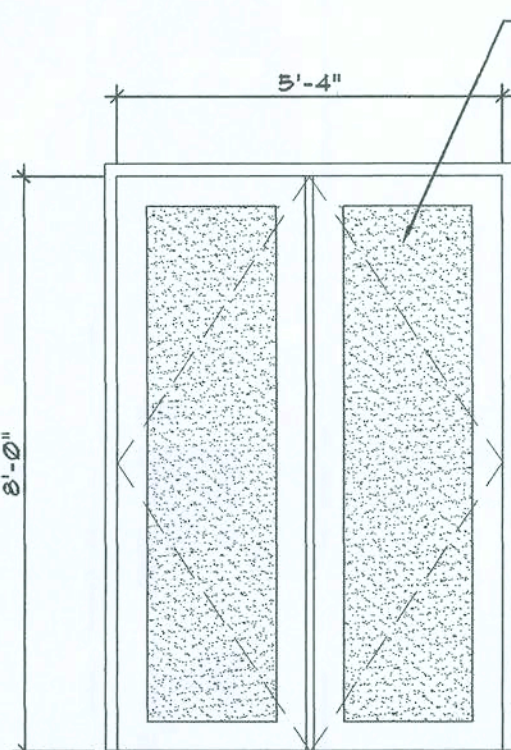
TYPE 2
FLUSH PANEL
INTERIOR DOOR
1 3/4" THICK
STAIN GRADE
WOOD FRAME



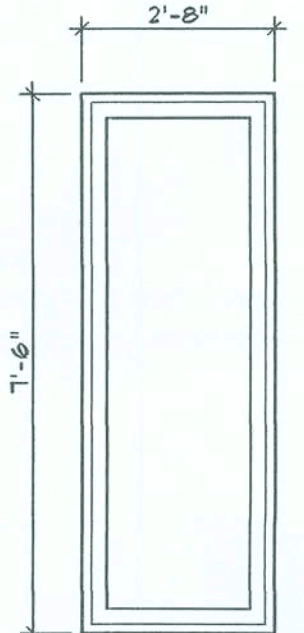
TYPE 3
FLUSH PANEL
EXTERIOR DOOR
1 3/4" THICK
ALUMINUM FRAME
WEATHERSTRIPPING



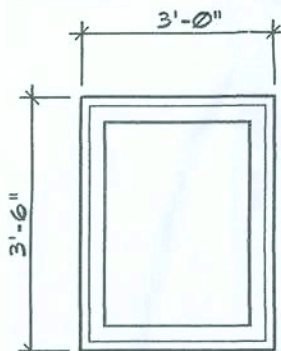
TYPE 4
OVERHEAD ROLLING STEEL GARAGE DOOR



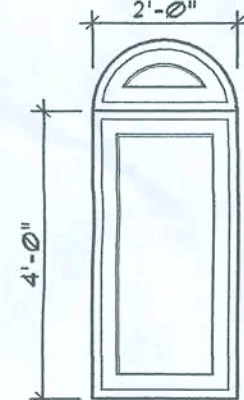
TYPE A
MAHOGANY & GLASS
EXTERIOR DOOR
WEATHERSTRIPPING
ALUMINUM THRESHOLD
ASTRAGAL



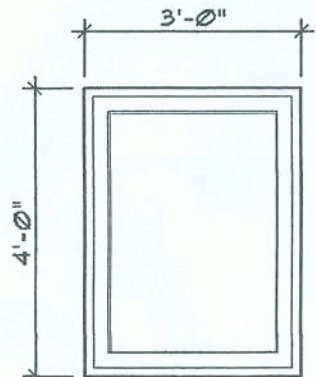
TYPE B
ALUMINUM CASEMENT
IMPACT RESISTANT RATED



TYPE C
ALUMINUM CASEMENT
IMPACT RESISTANT RATED



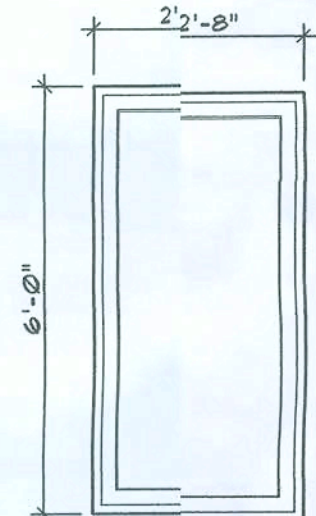
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IMPACT RESISTANT RATED



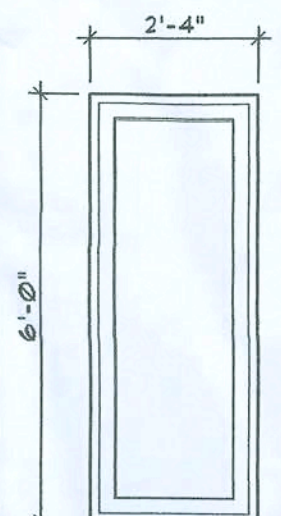
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ALUMINUM CASEMENT
IMPACT RESISTANT RATED



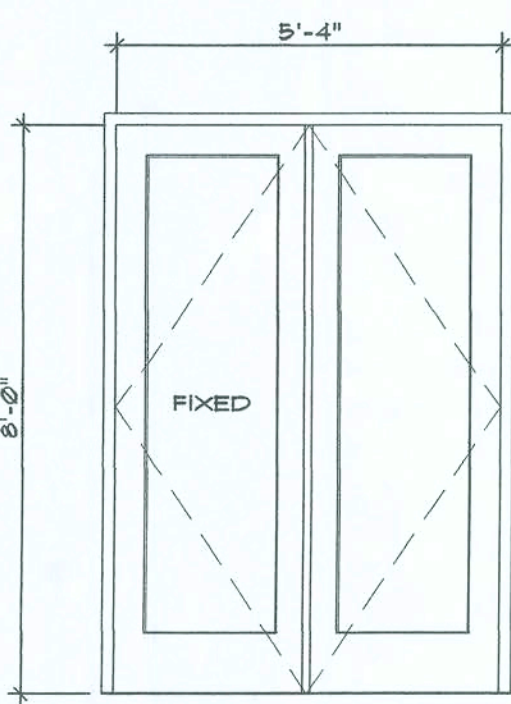
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ALUMINUM CASEMENT
IMPACT RESISTANT RATED



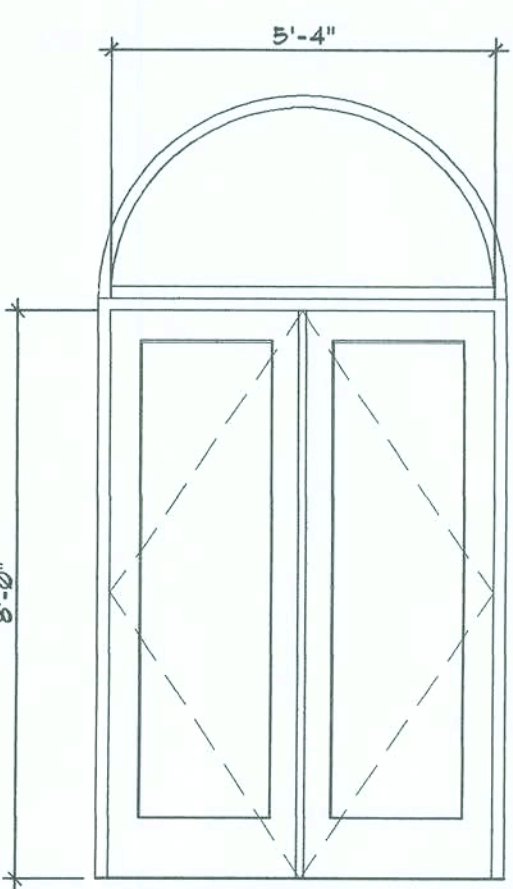
TYPE G
ALUMINUM CASEMENT
IMPACT RESISTANT RATED



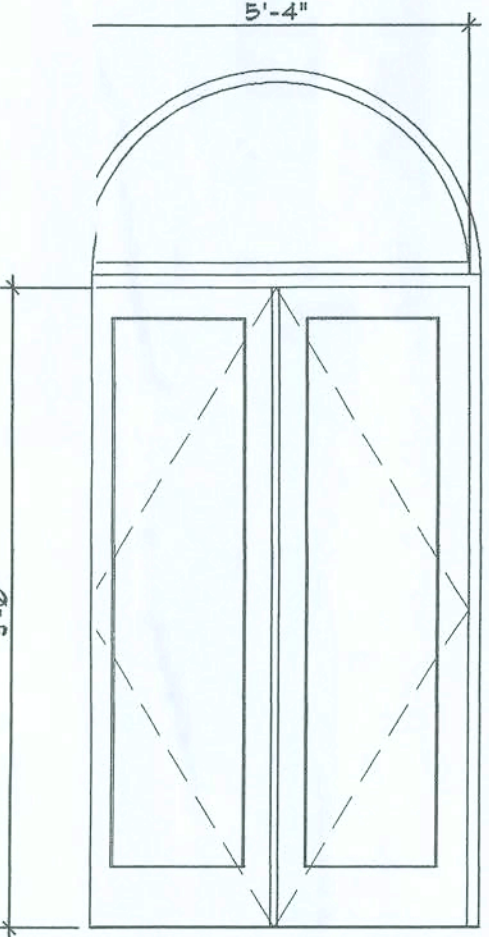
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ALUMINUM CASEMENT
IMPACT RESISTANT RATED



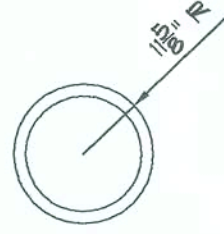
TYPE J
ALUMINUM / GLASS
EXTERIOR DOOR
WEATHERSTRIPPING
ALUMINUM THRESHOLD
ASTRAGAL
SEE PLAN FOR ACTIVE LEAF



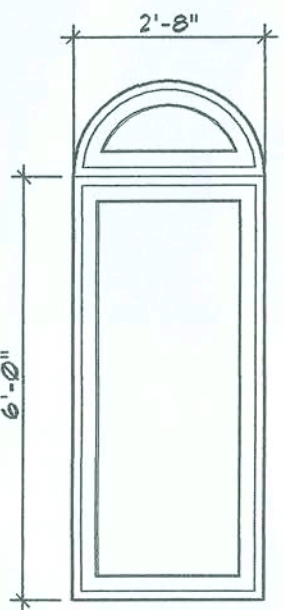
TYPE K
ALUMINUM / GLASS
EXTERIOR DOOR
WEATHERSTRIPPING
ALUMINUM THRESHOLD
ASTRAGAL
TRANSOM



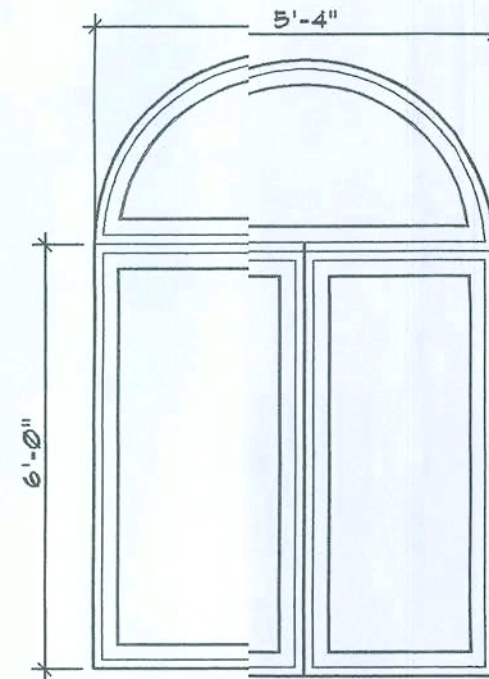
TYPE L
ALUMINUM / GLASS
INTERIOR DOOR
WEATHERSTRIPPING
ALUMINUM THRESHOLD
ASTRAGAL
TRANSOM



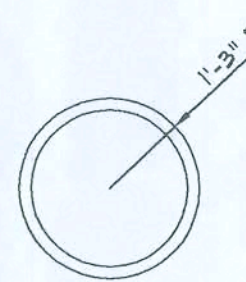
TYPE M
ALUMINUM
FIXED GLASS



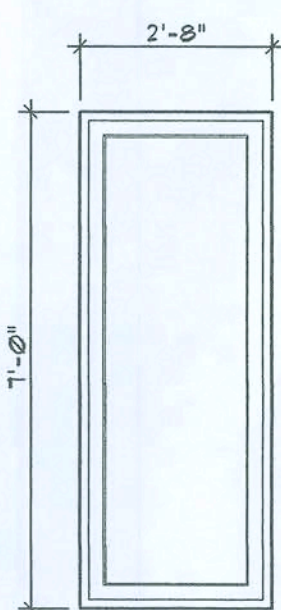
TYPE N
ALUMINUM CASEMENT
IMPACT RESISTANT RATED
TRANSOM



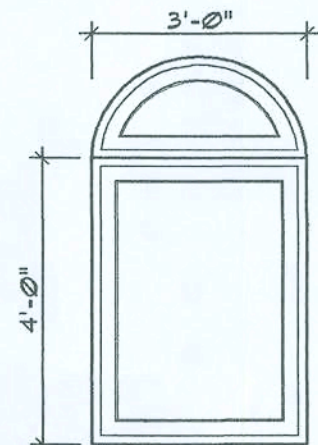
TYPE P
ALUMINUM CASEMENT
IMPACT RESISTANT RATED
TRANSOM



TYPE Q
ALUMINUM
FIXED GLASS



TYPE R
ALUMINUM CASEMENT
IMPACT RESISTANT RATED

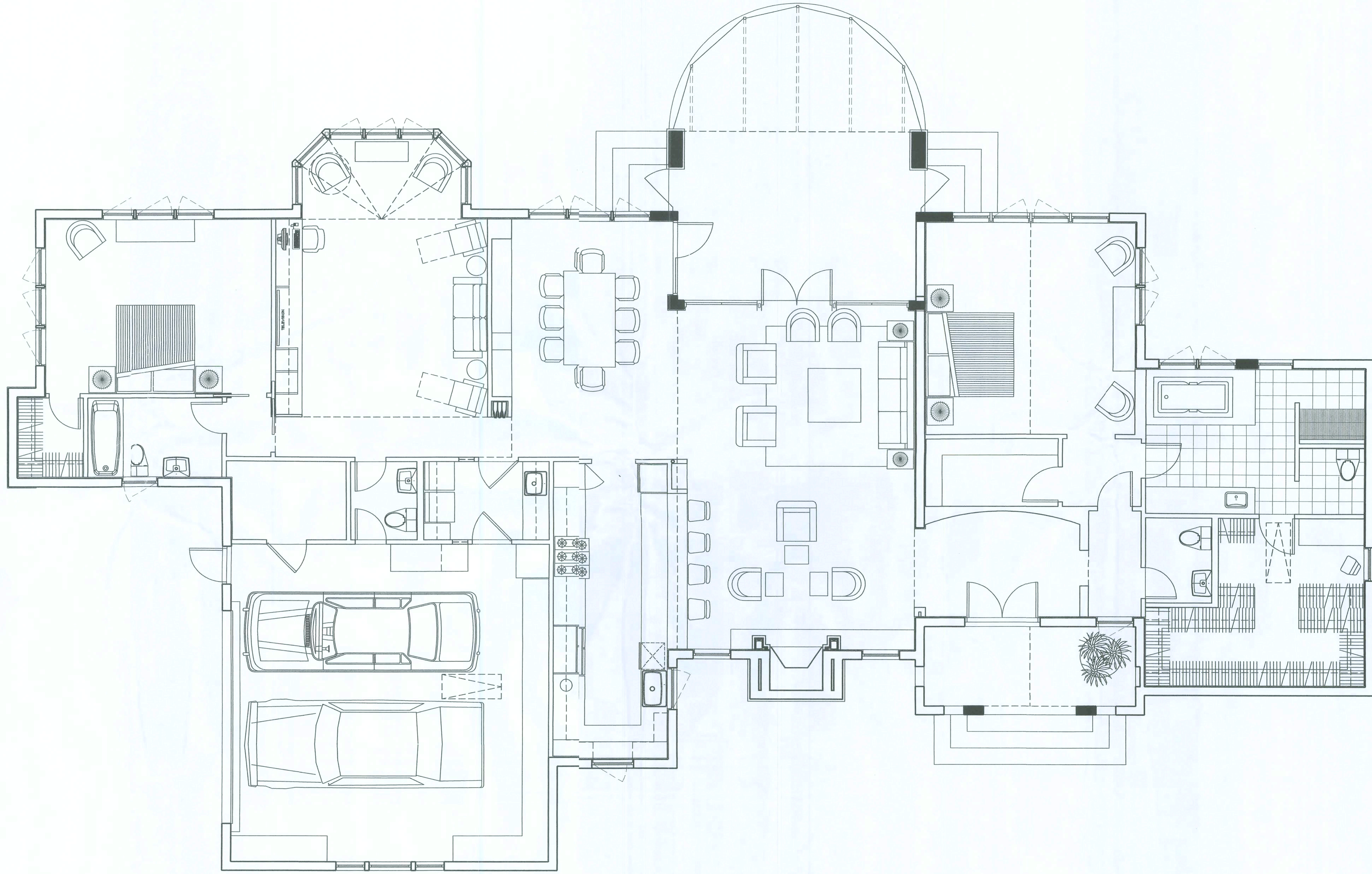


TYPE S
ALUMINUM CASEMENT
IMPACT RESISTANT RATED

WINDOW/DOOR TYPES
NOTE:
SEE FLOOR PLAN FOR HAND OF WINDOWS

Signature

:\6004\SCHEME 2\DESIGN DEV\WORKING\PERMIT PLAN.DWG, FURNITURE PLAN, 12/31/2007 5:08:14 AM, BZE, JON



Lawrence

FURNITURE PLAN

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

A13

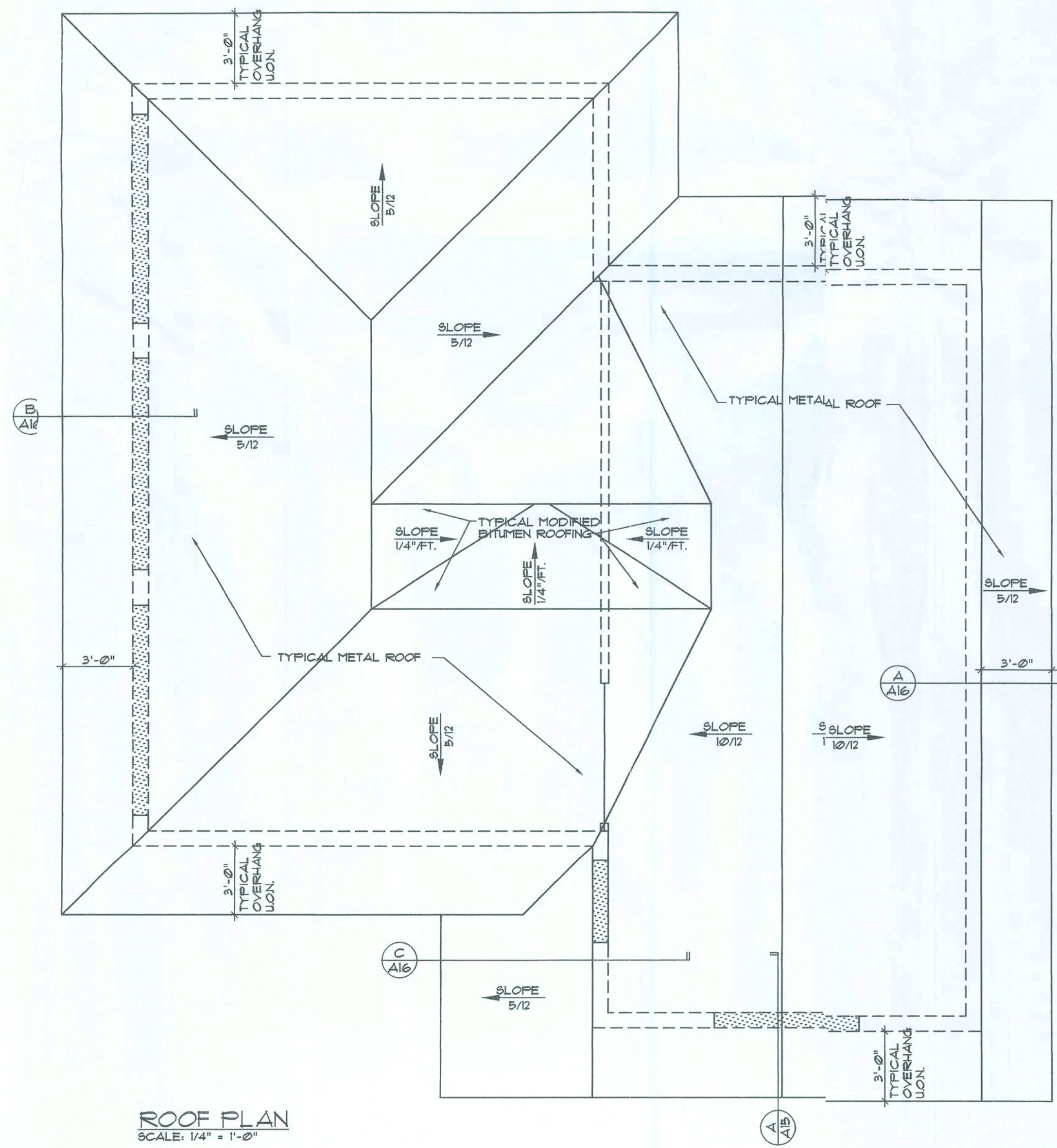
NEW RESIDENCE FOR
MR. AND MRS. WADE HORNSBY
HIGH SPRINGS, FLORIDA

the lawrence group
ARCHITECTS 203 WORTH AVENUE, PALM BEACH, FLORIDA 33480 P.H. (561) 655-0870

1-1-08

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8004



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

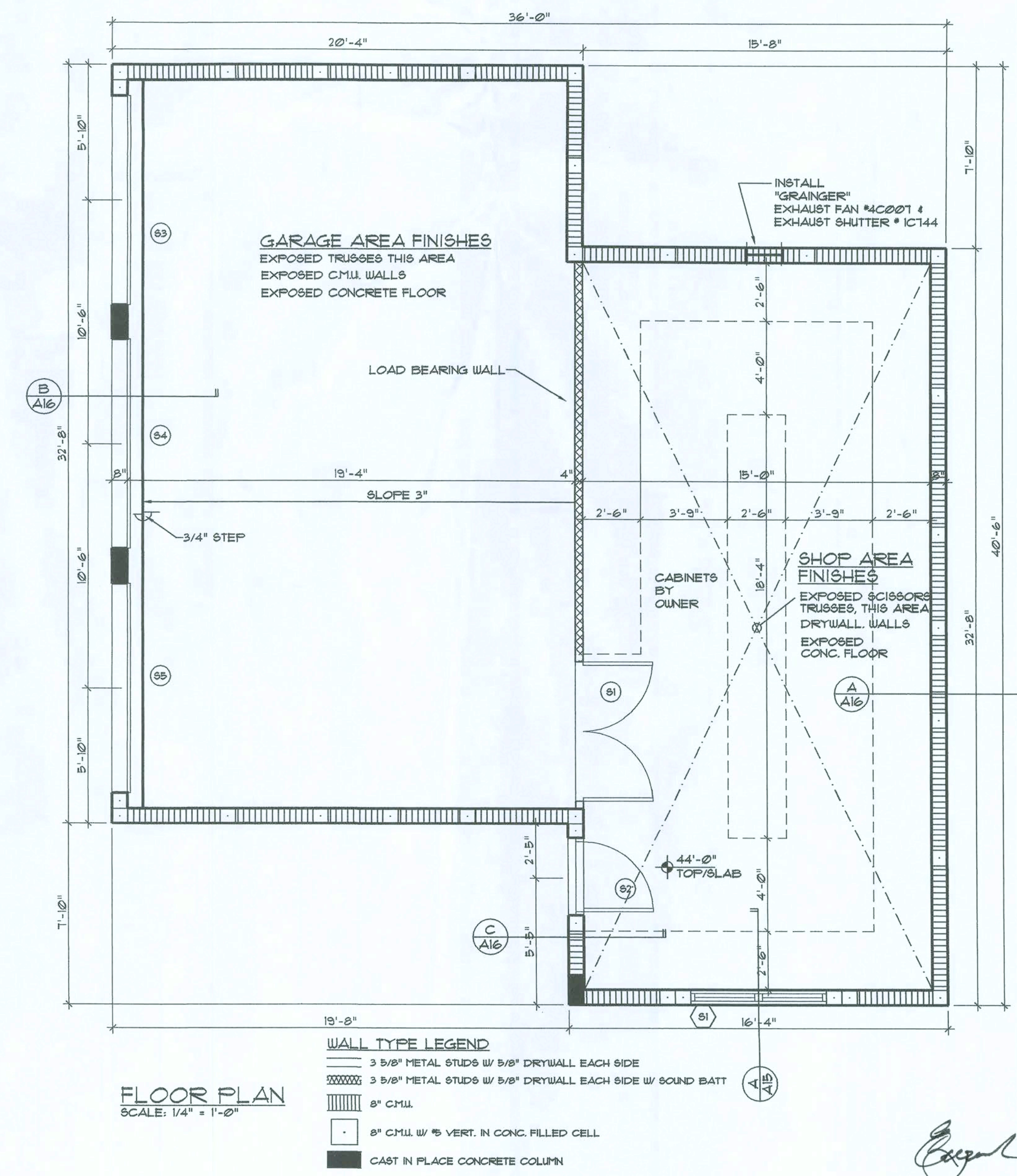
WINDOW SCHEDULE		
MARK	TYPE	REMARKS
(S1)	A	

TYPE A
ALUMINUM CASEMENT
W/ FIXED TRANSOM
IMPACT RESISTANT RATED

DOOR SCHEDULE					
NO.	DOOR		FRAME	THRESHOLD	REMARKS
	SIZE	TYPE			
(D1)	FR 3'-0"X8'-0"	1			
(D2)	3'-0"X8'-0"	1			
(D3)	3'-0"X8'-0"	2			
(D4)	3'-0"X8'-0"	2			
(D5)	3'-0"X8'-0"	2			

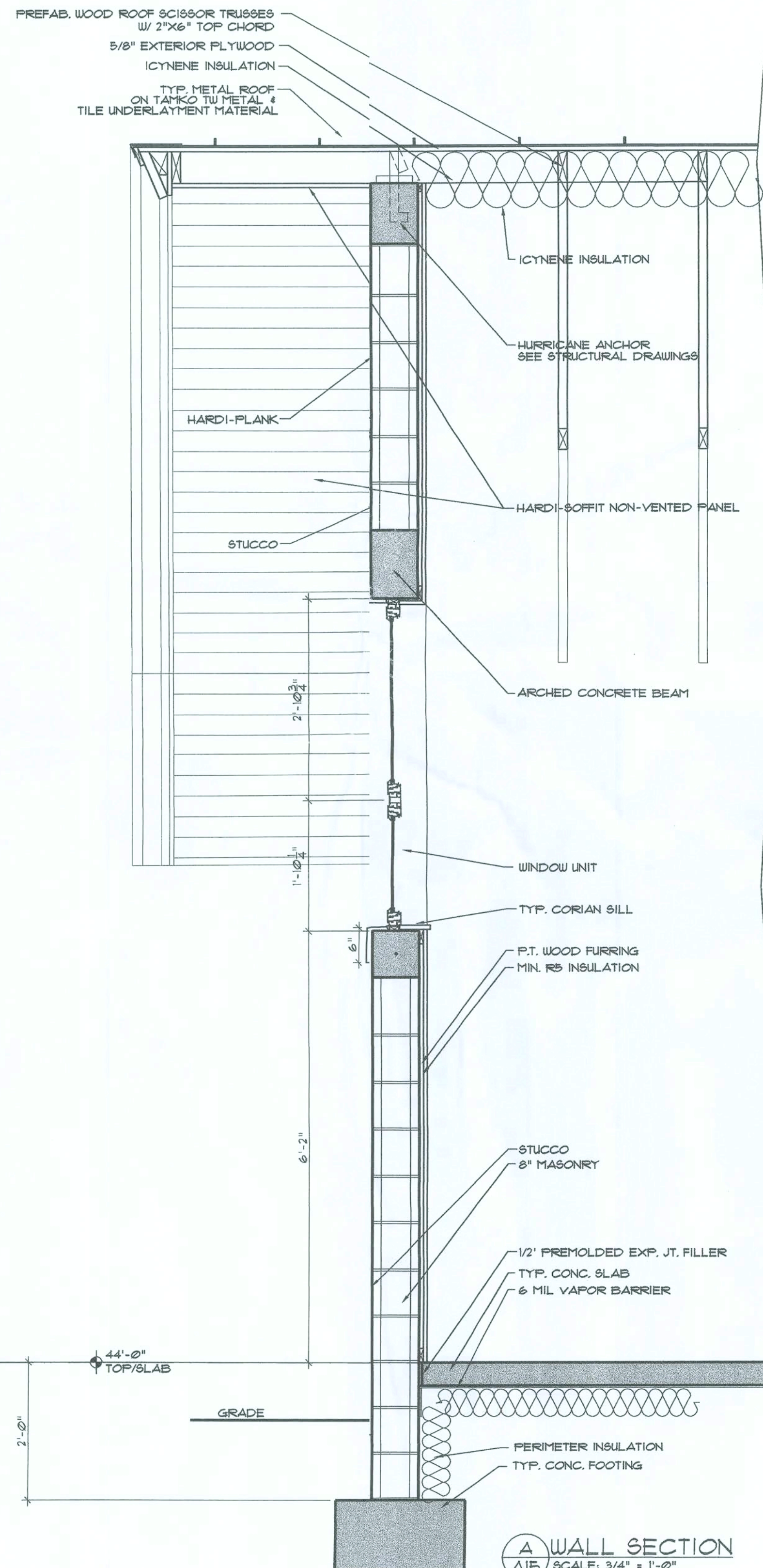
TYPE 1
EXTERIOR
FLUSH PANEL
HOLLOW METAL DOOR
1 3/4" THICK
HOLLOW METAL FRAME
WEATHERSTRIPPING

TYPE 2
OVERHEAD ROLLING STEEL GARAGE DOOR
HEAVY DUTY ELECTRIC OPERATOR
(2) REMOTE TRANSMITTERS

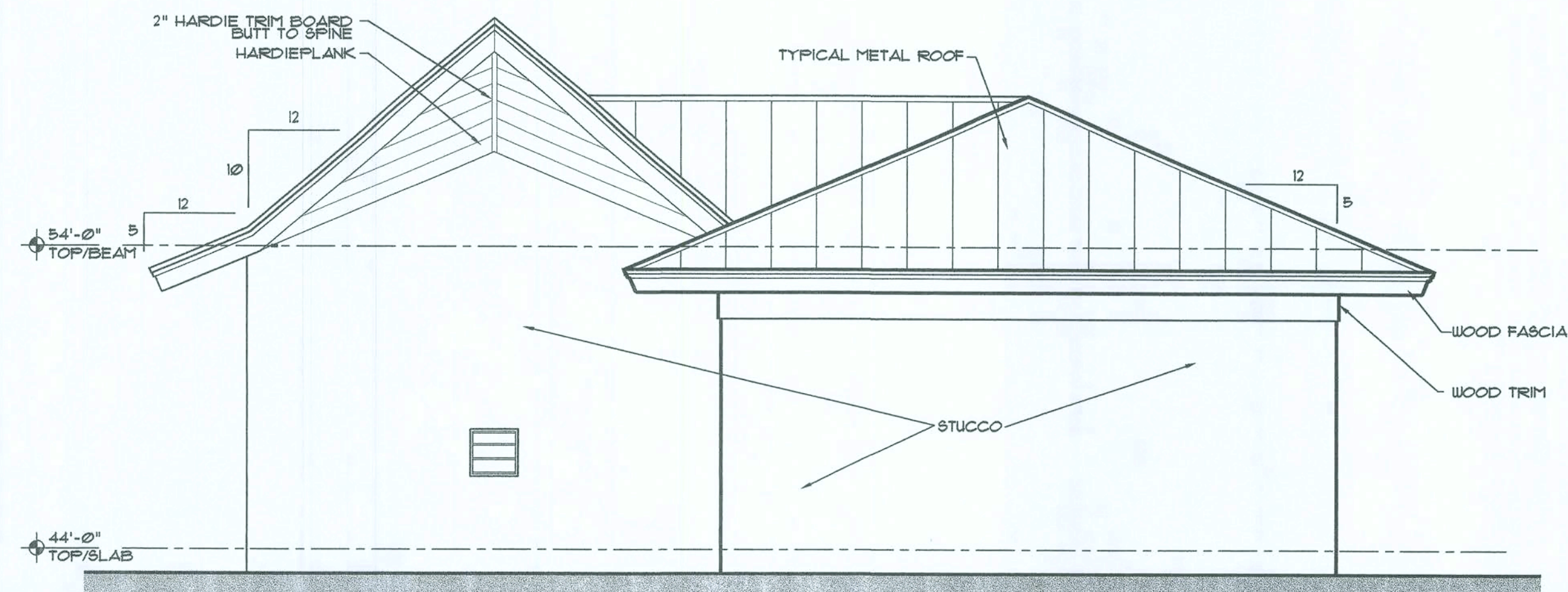


FLOOR PLAN
SCALE: 1/4" = 1'-0"

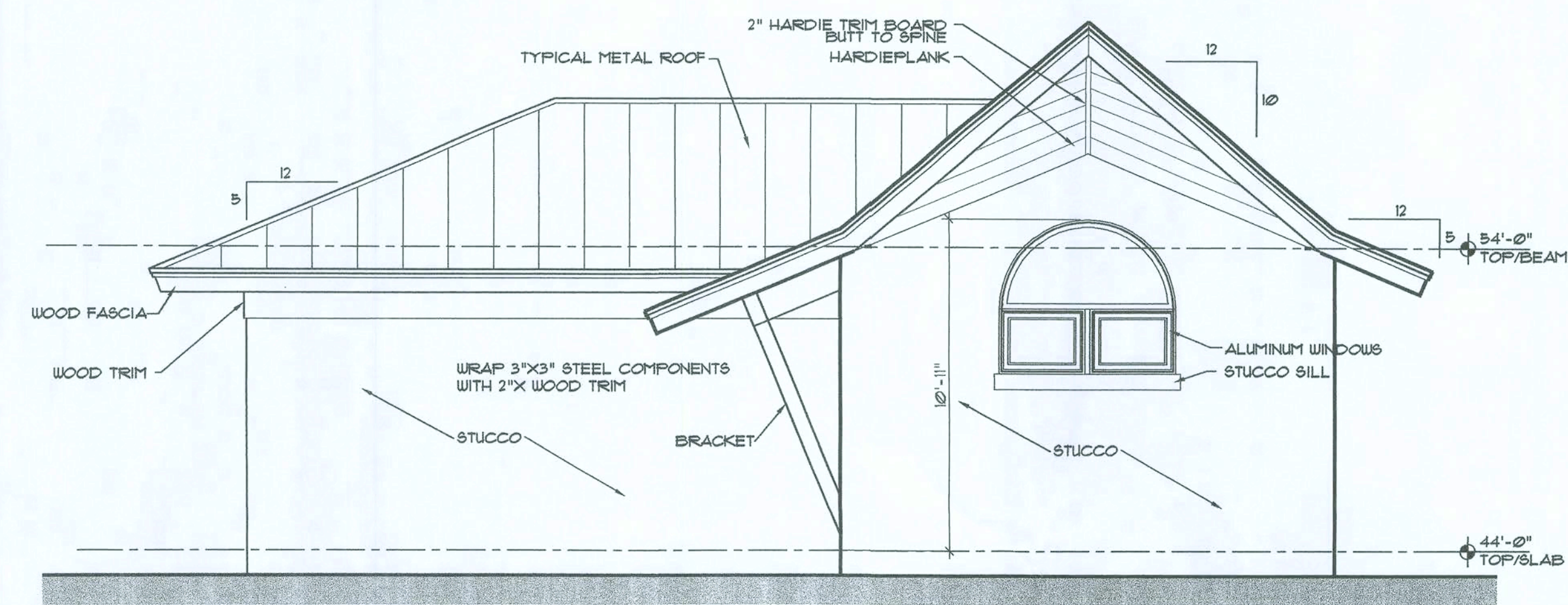
- WALL TYPE LEGEND**
- 3 5/8" METAL STUDS W/ 5/8" DRYWALL EACH SIDE
 - 3 5/8" METAL STUDS W/ 5/8" DRYWALL EACH SIDE W/ SOUND BATT
 - 6" CMU
 - 6" CMU W/ 5\"/> 6" CMU W/ 5" VERT. IN CONC. FILLED CELL
 - CAST IN PLACE CONCRETE COLUMN



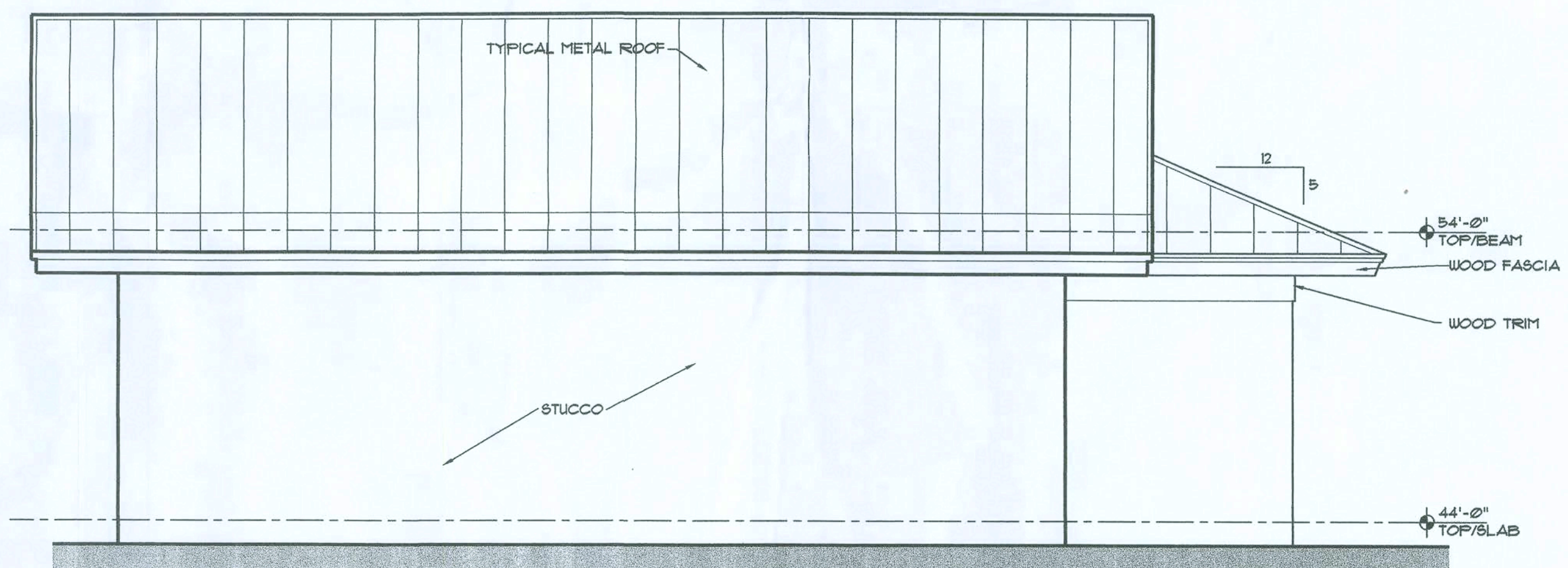
A WALL SECTION
SCALE: 3/4" = 1'-0"



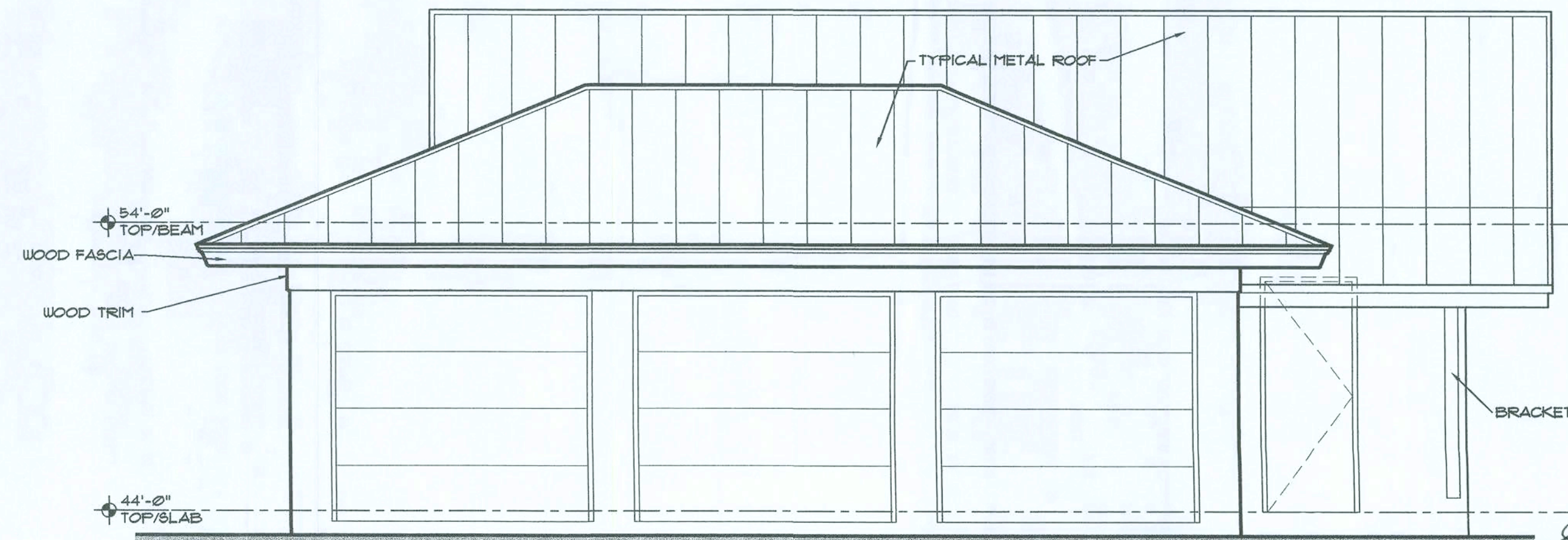
WEST ELEVATION
SCALE: 1/4" = 1'-0"



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



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



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

Elegant

SHOP

A15

SHOP ELEVATIONS
WALL SECTION
SCALE AS NOTED

MR. AND MRS. WADE HORNSBY

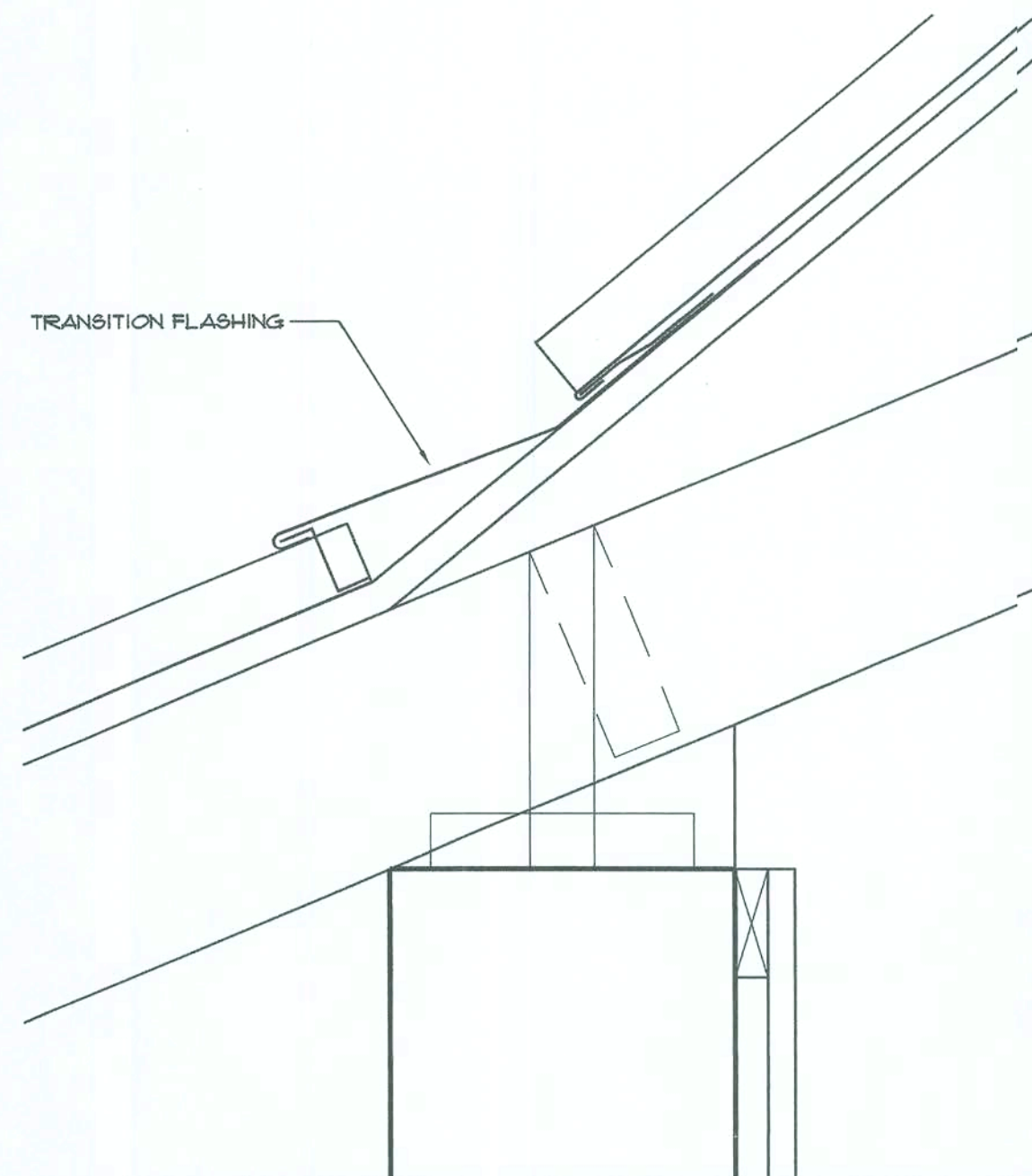
COLUMBIA COUNTY

FLORIDA

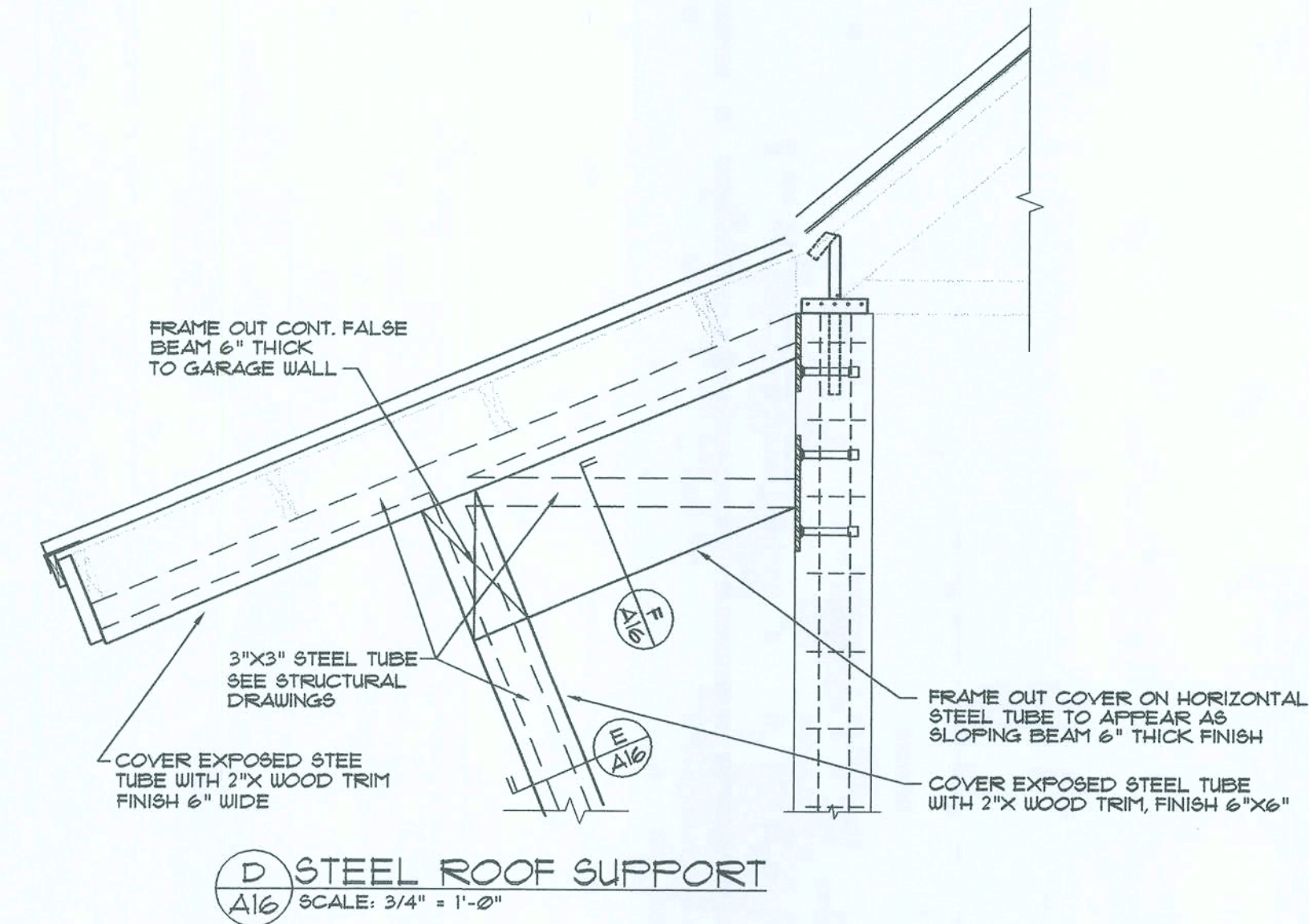
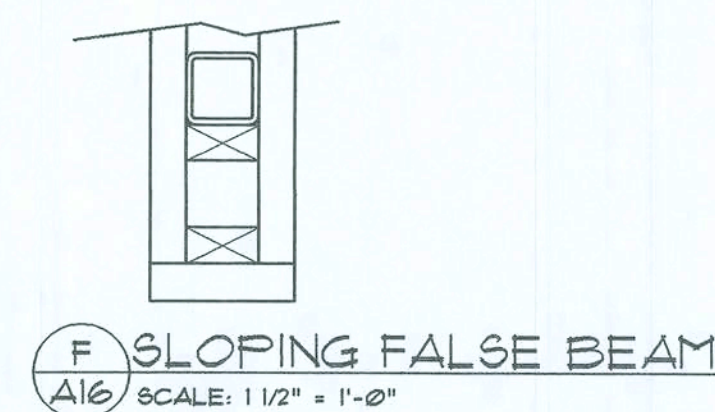
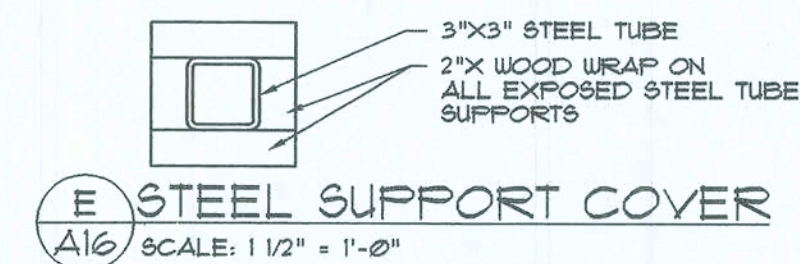
the lawrence group

ARCHITECTS 205 WORTH AVENUE, PALM BEACH, FLORIDA 33480 P.H. (561) 855-0870

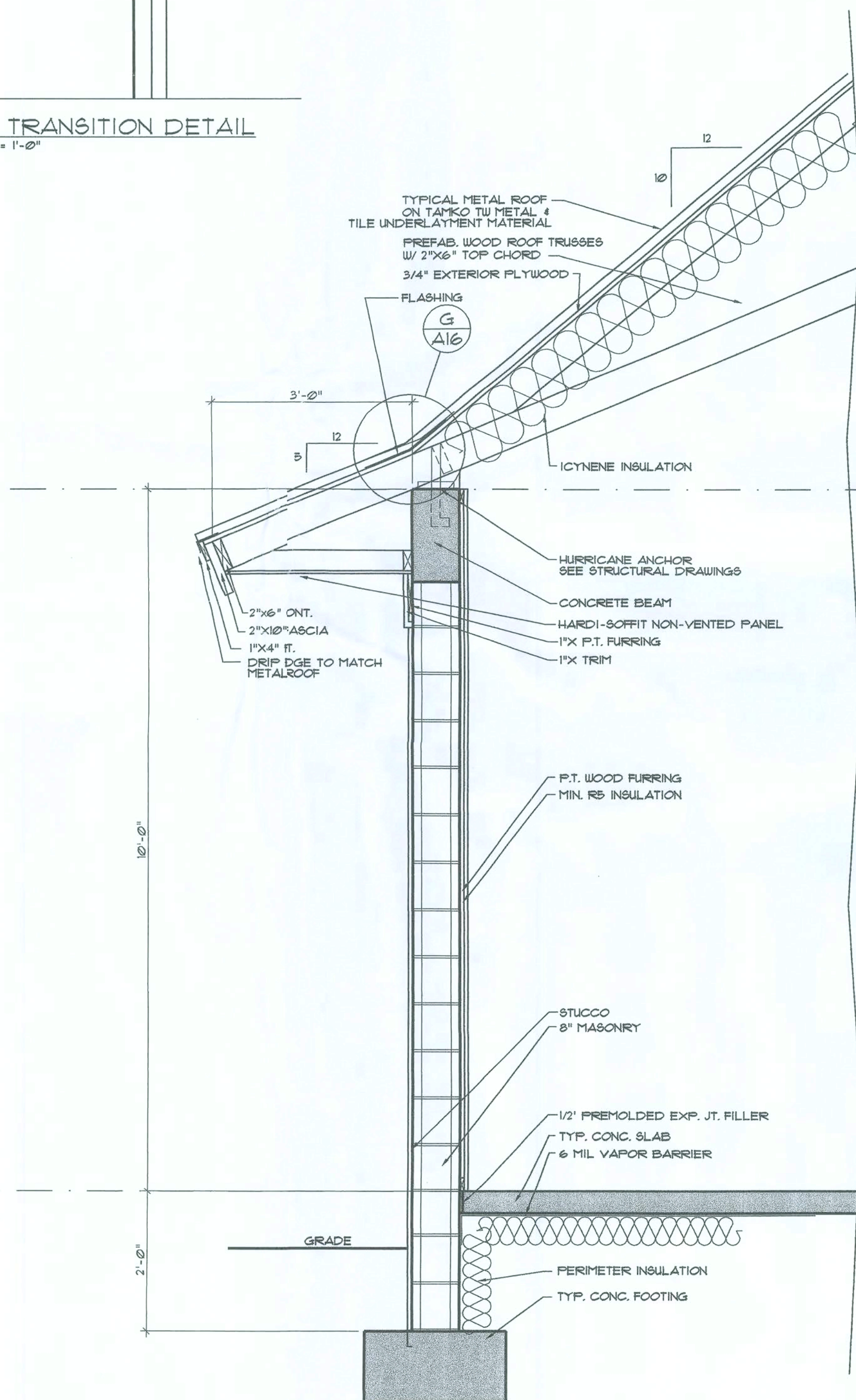
1-1-08	PERMIT ISSUE
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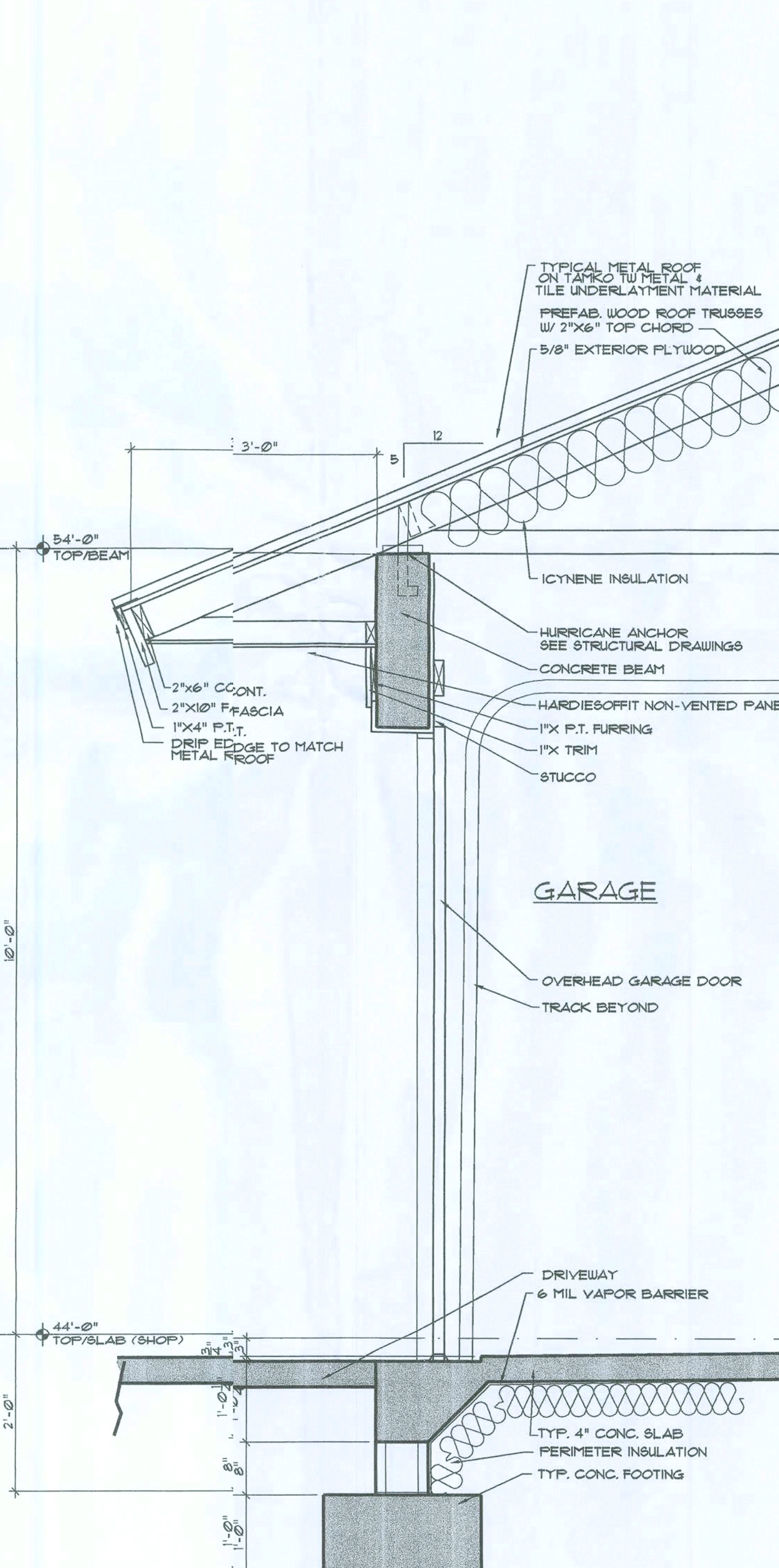
G ROOF TRANSITION DETAIL
A16 SCALE: 3" = 1'-0"



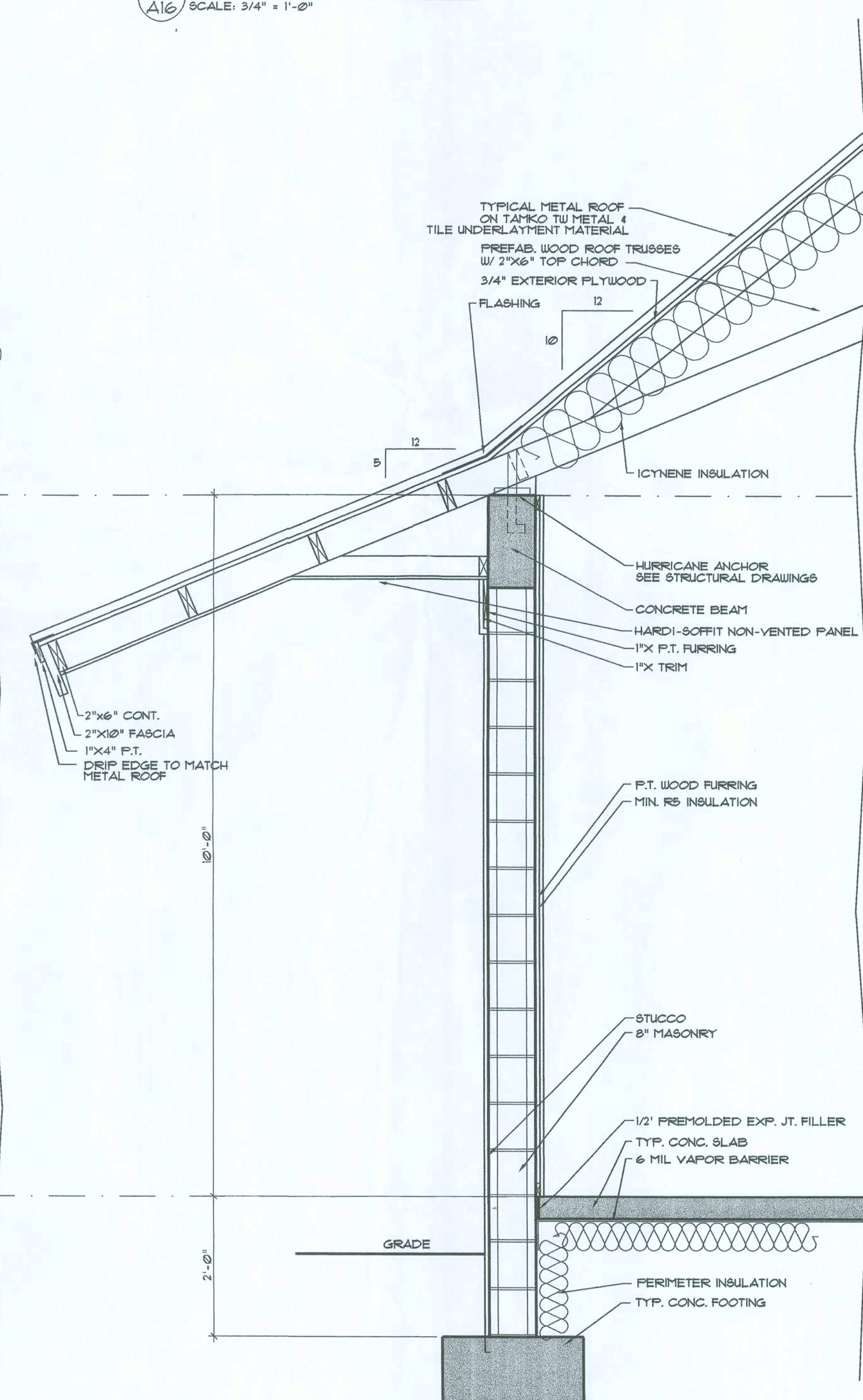
D STEEL ROOF SUPPORT
A16 SCALE: 3/4" = 1'-0"



A WALL SECTION
A16 SCALE: 3/4" = 1'-0"



B WALL SECTION
A16 SCALE: 3/4" = 1'-0"



C WALL SECTION
A16 SCALE: 3/4" = 1'-0"

SHAW

SHOP A16

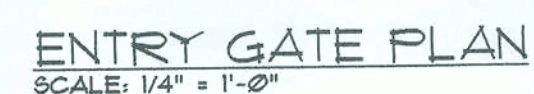
WALL SECTIONS
SCALE: 3/4" = 1'-0"

MR. AND MRS. WADE HORNSBY
COLUMBIA COUNTY
FLORIDA

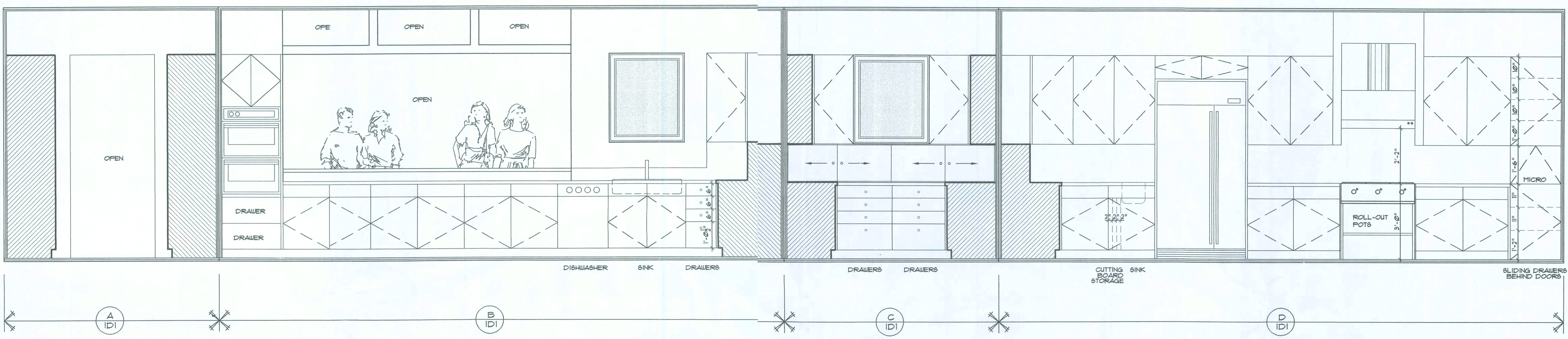
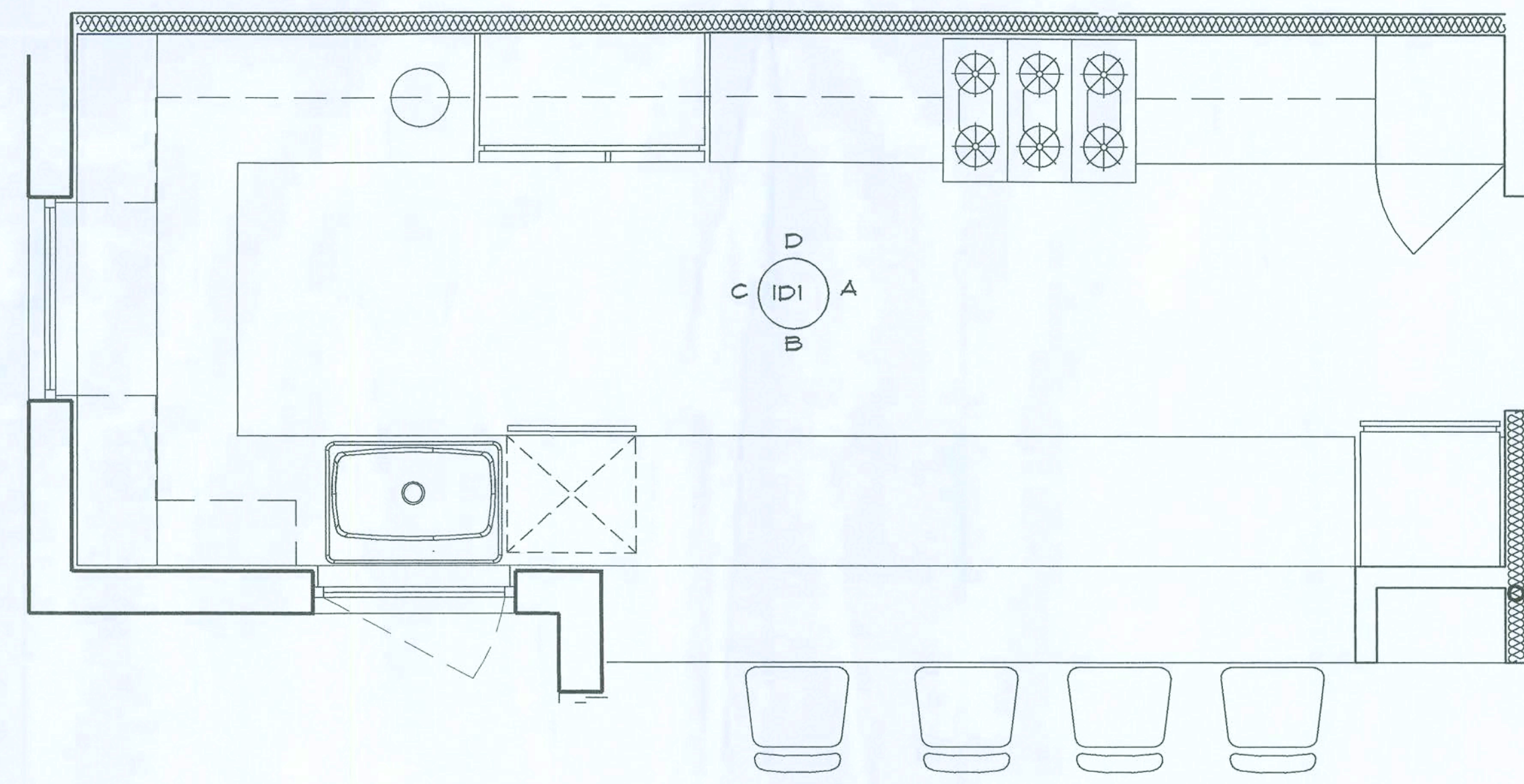
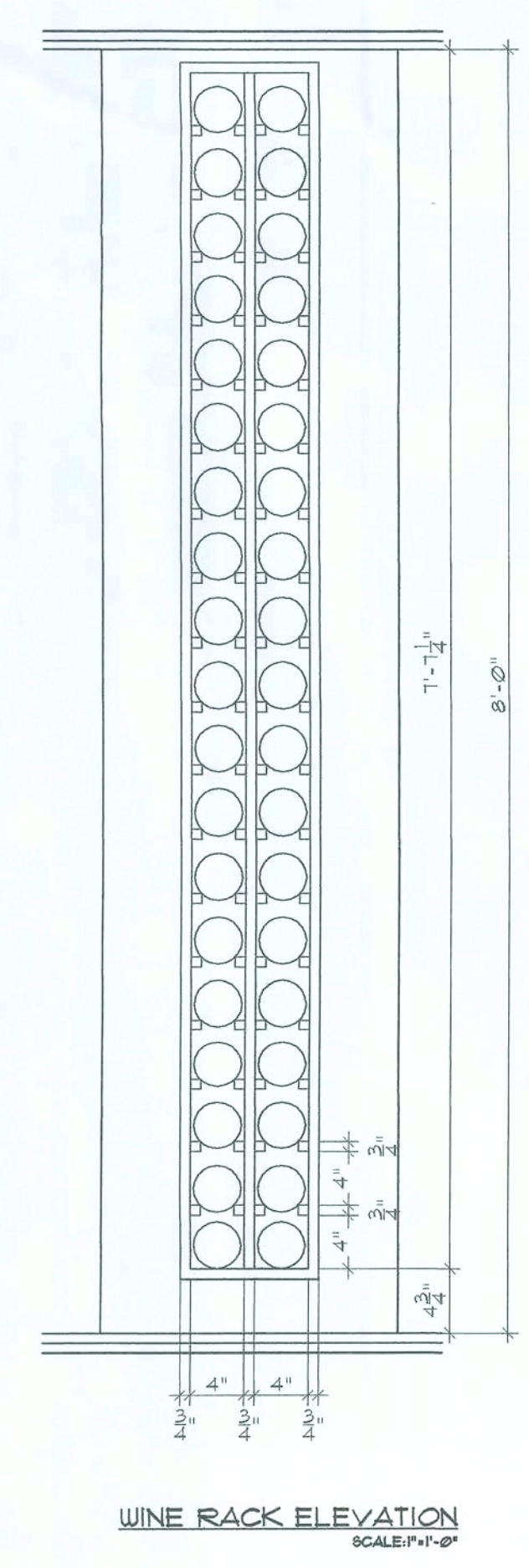
the lawrence group
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6004



KITCHEN



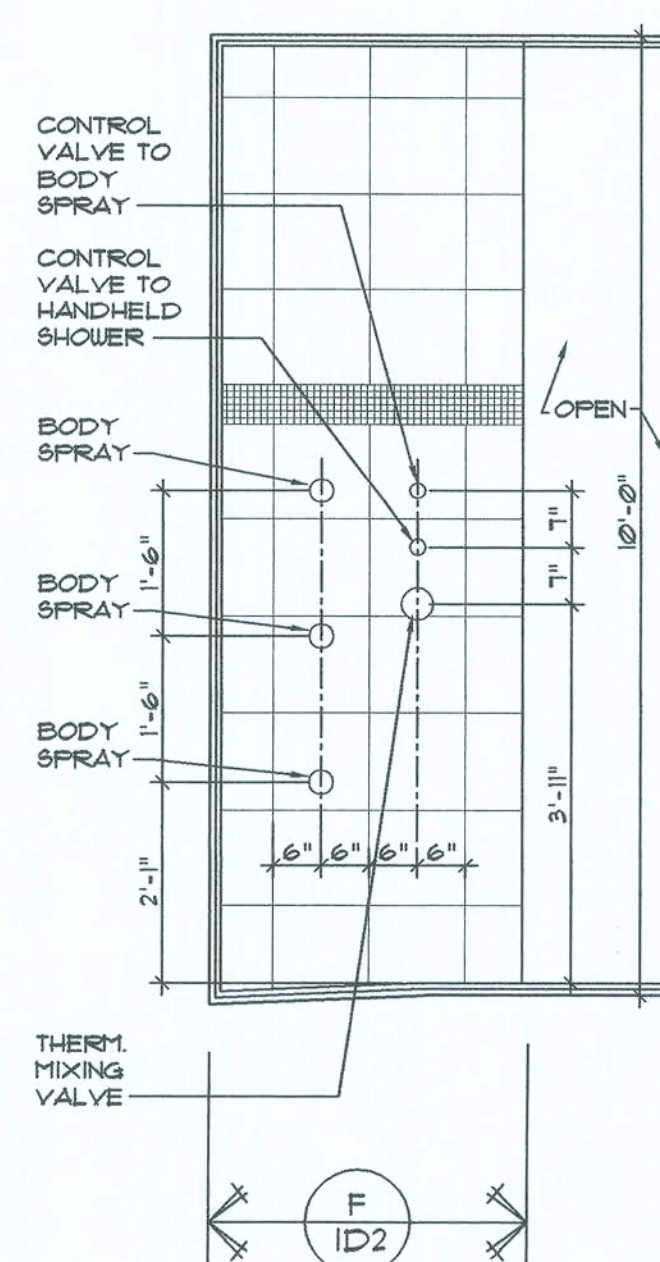
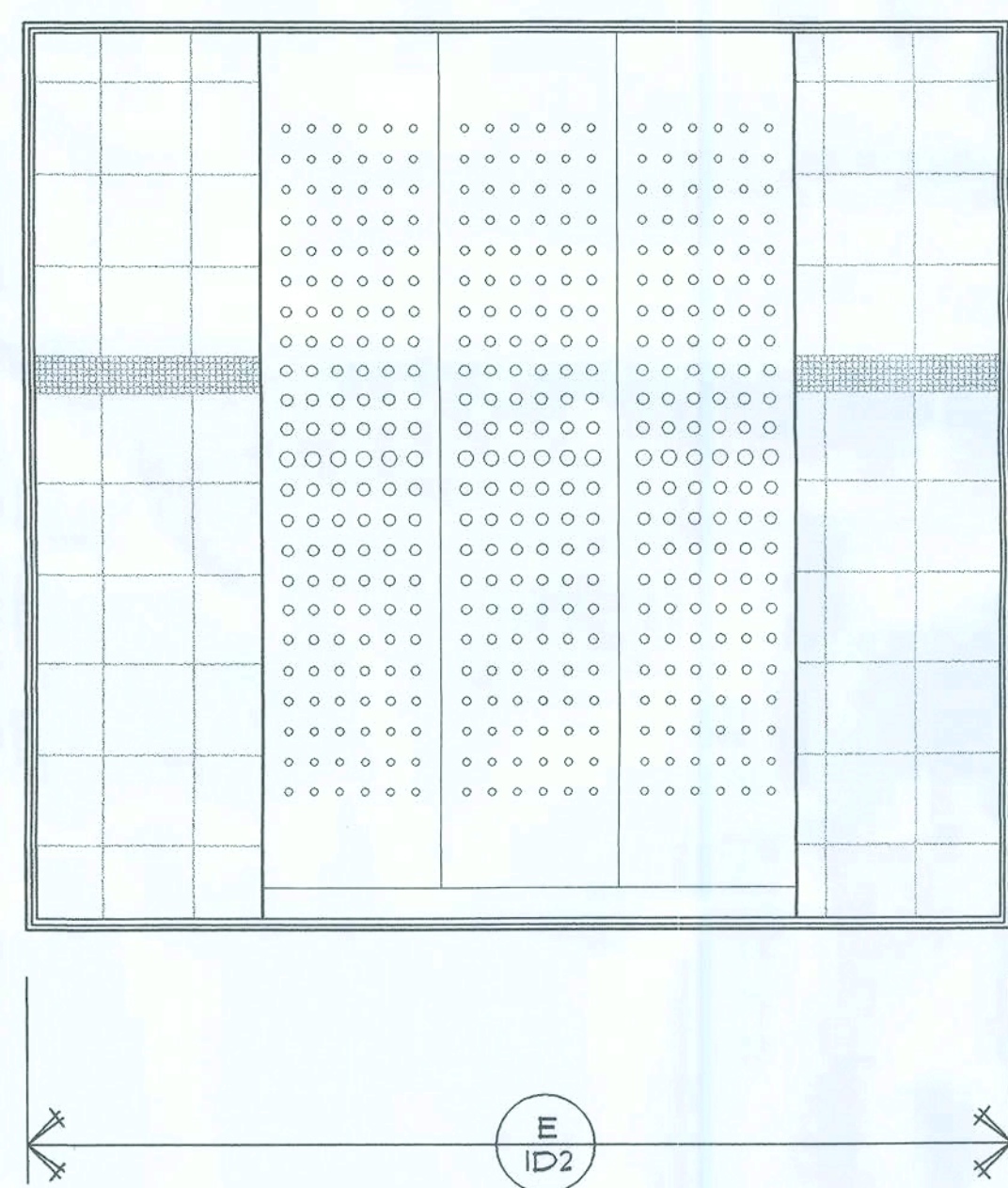
Signature

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

NEW RESIDENCE FOR
MR. AND MRS. WADE HORNSBY
HIGH SPRINGS, FLORIDA

the lawrence group
ARCHITECTS 205 WORTH AVENUE, PALM BEACH, FLORIDA 33480 P.H. (561) 856-0870

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INTERIORS

SCALE 1/2"=1'-0"

HIGH SPRINGS,

NEW RESIDENCE FOR

FLORIDA

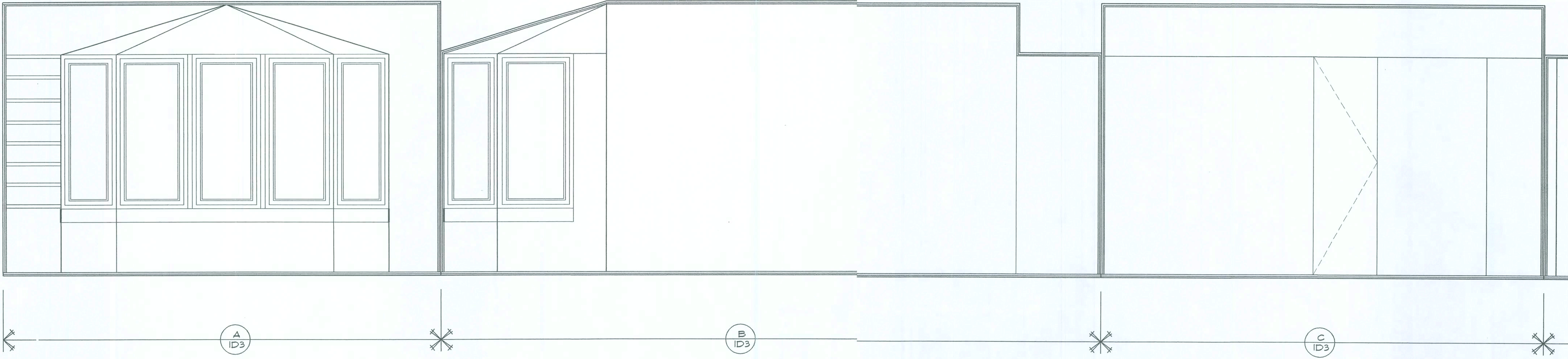
the lawrence group

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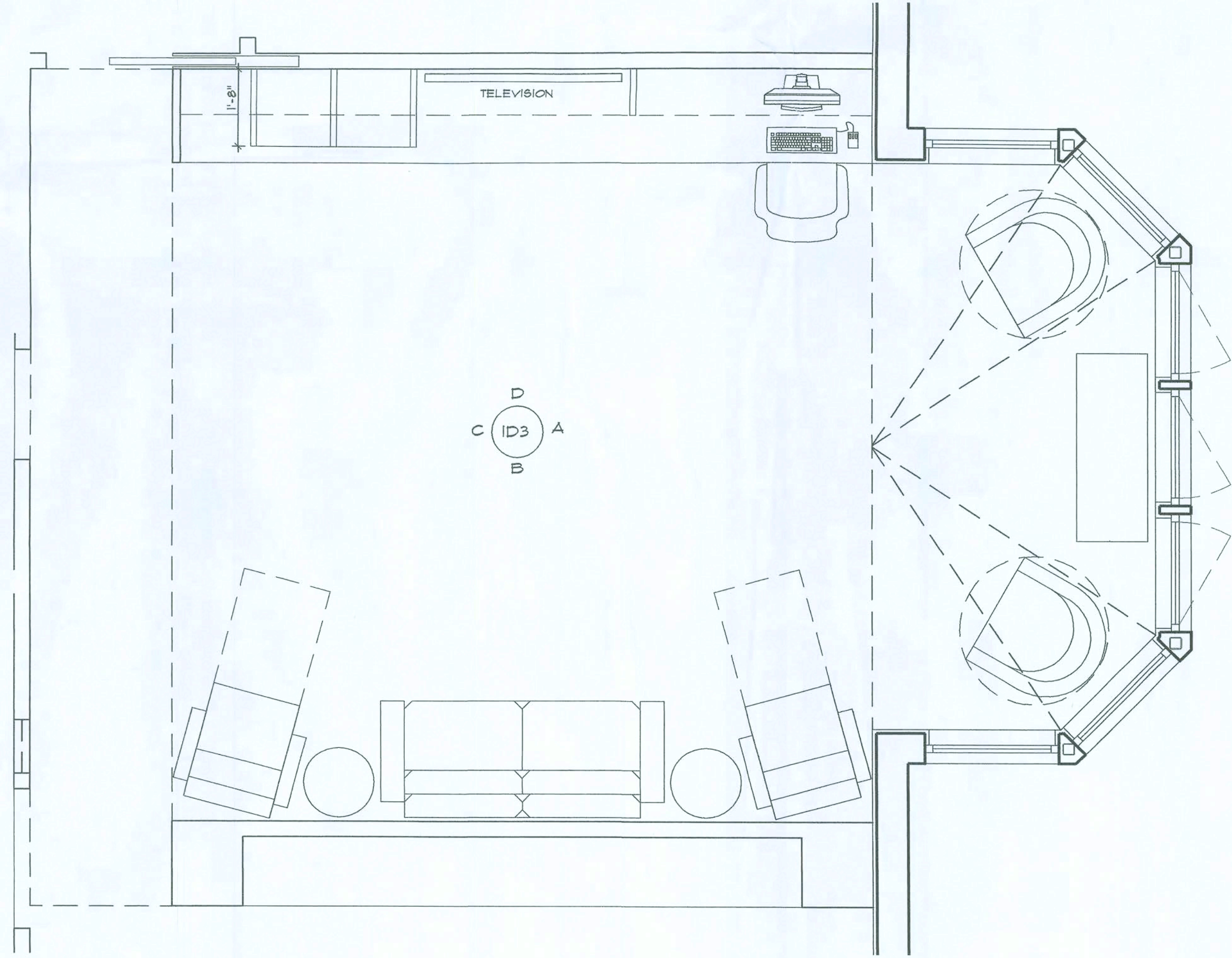
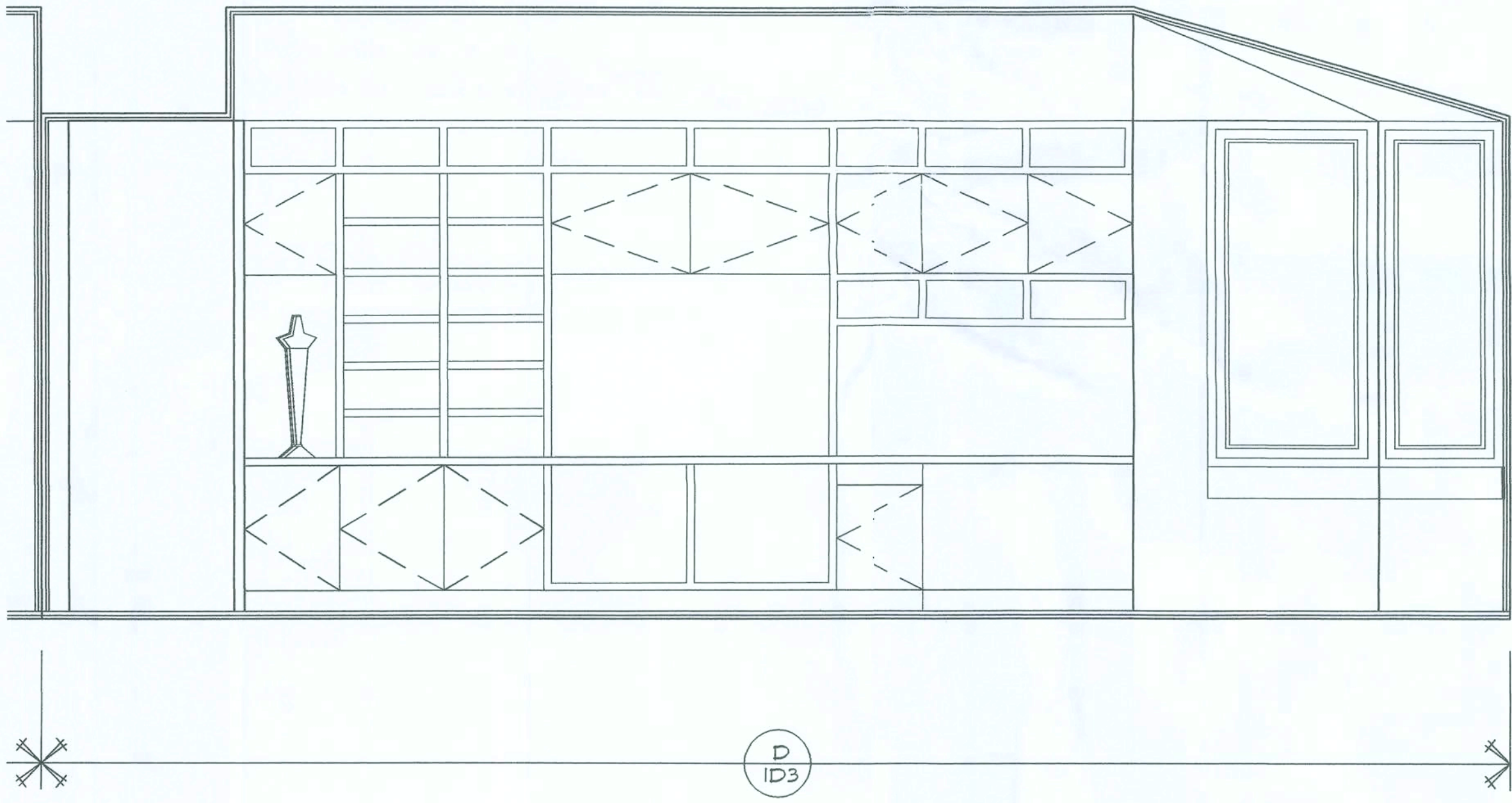
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ID2

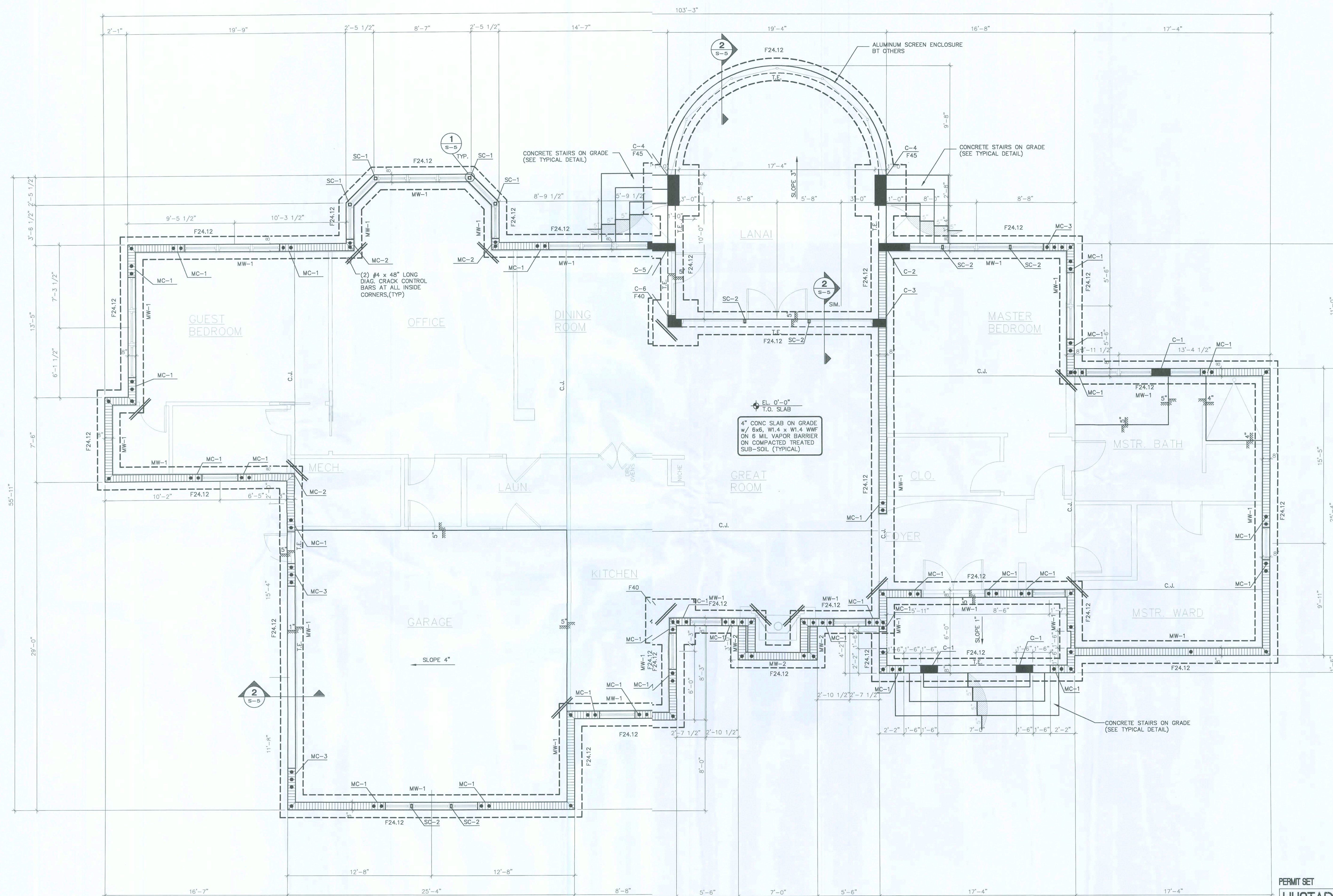
6004



OFFICE



Engel



FOUNDATION PLAN

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



PERMIT SET

HUSTAD CA 9843
 STRUCTURAL ENGINEERING, LLC
 756 VIA TOSCANA
 WELLINGTON, FLORIDA 33414
 (561) 798-7750 Office
 (561) 798-7752 Fax

David L. Hustad
DAVID L. HUSTAD, P.E.
 STRUCTURAL ENGINEER
 FL PE LIC. #44996
 FL SI LIC. #6986745 01/02/08

FOUNDATION PLAN

SCALE: AS NOTED

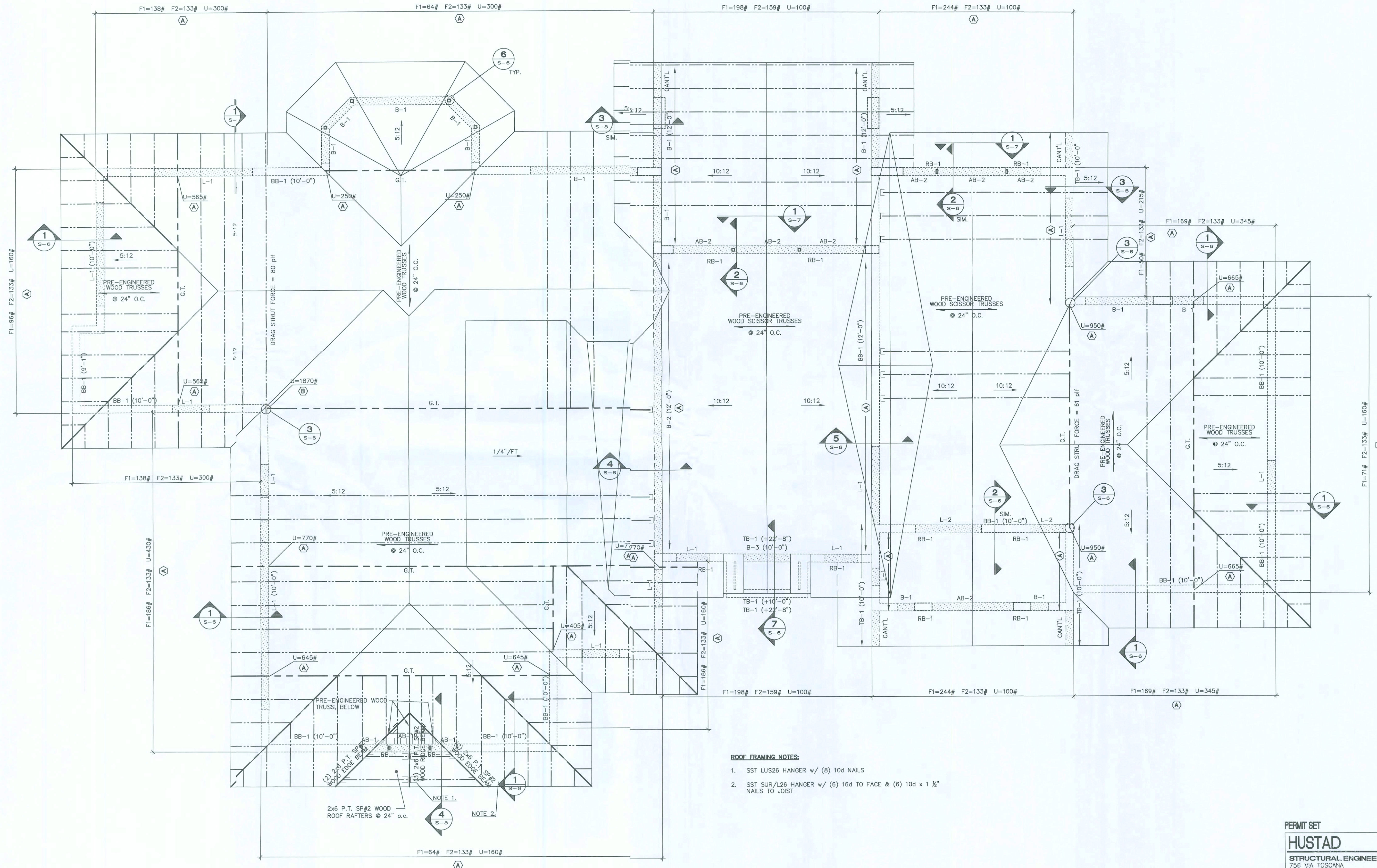
S-1

6004

MR. AND MRS. WADE HORNSBY

FLORIDA

the lawrence group
 ARCHITECTS 205 NORTH AVENUE, PALM BEACH, FLORIDA 33480 P.H. (561) 655-0670



ROOF FRAMING PLAN

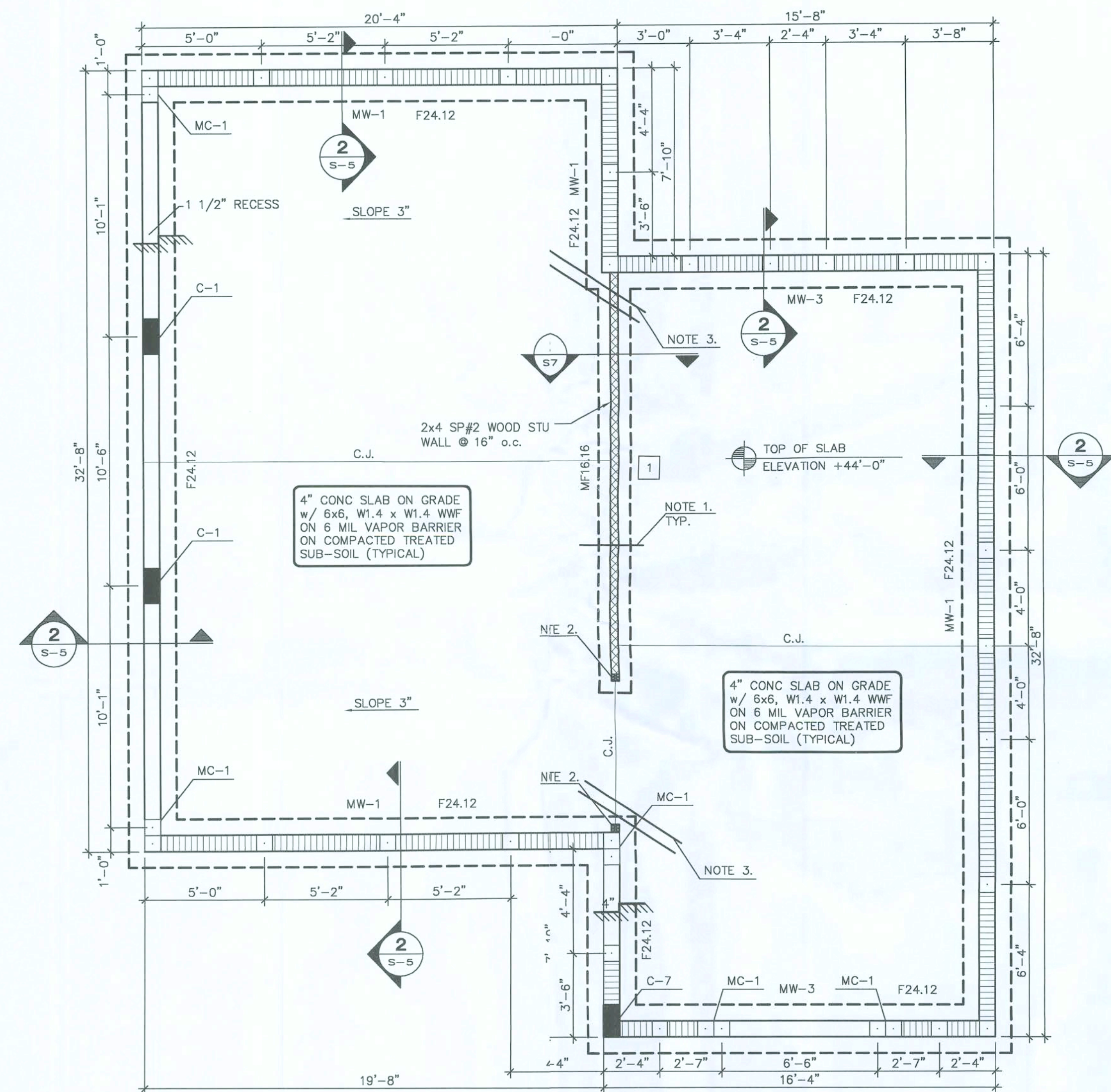
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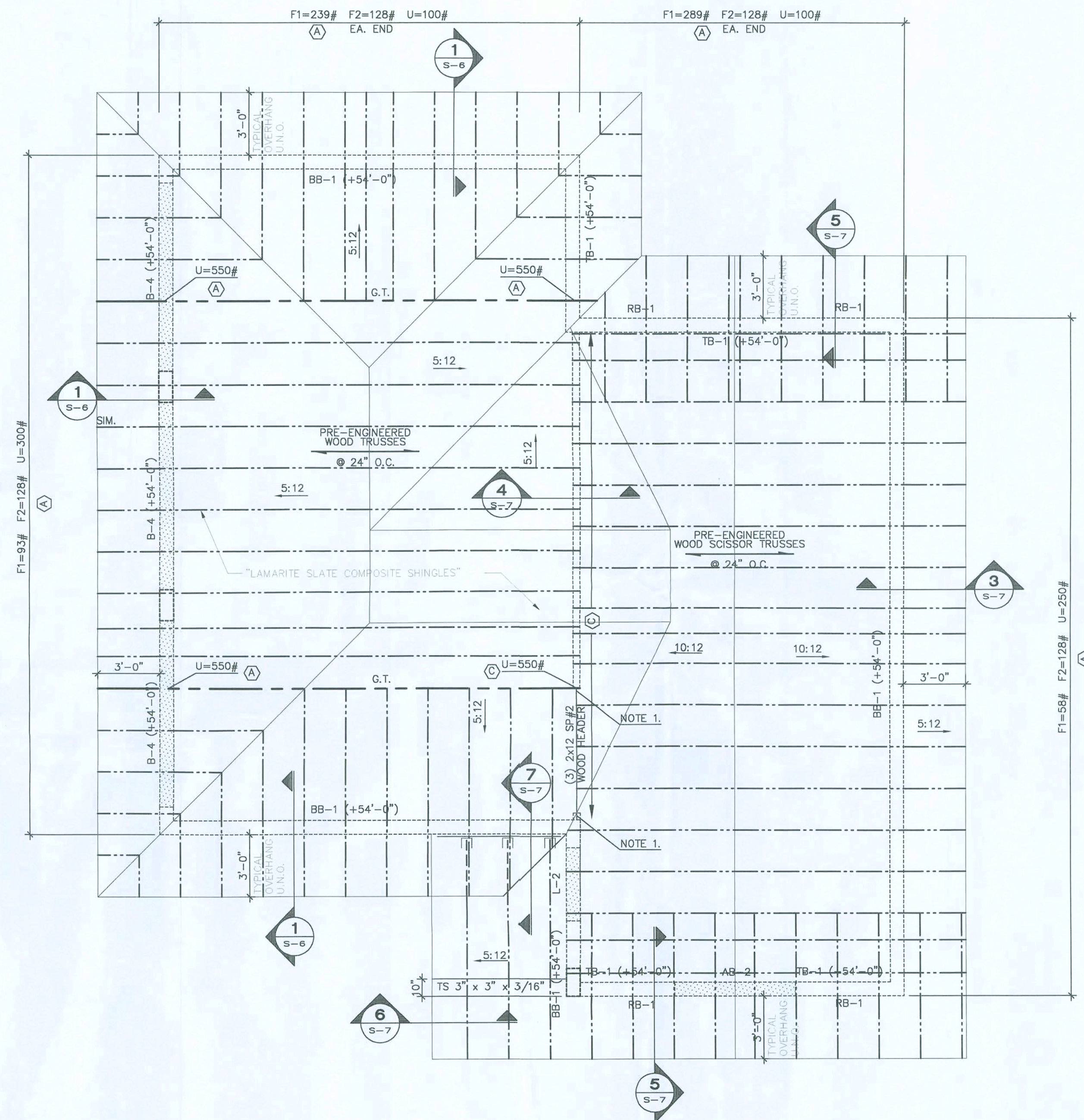
HUSTAD CA 9843
STRUCTURAL ENGINEERING, LLC
756 VIA TOSCANA
WELLINGTON, FLORIDA 33414
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David L. Hustad
DAVID L. HUSTAD, P.E.
STRUCTURAL ENGINEER
FL PE LIC. #44896
FL SI LIC. #6986745 01/02/08



FOUNDATION PLAN NOTES:

- 1.) #4 x 3'-0" LONG TOP TRANSFER BAR @ 4' o.c.
- 2.) (2) 2x4 SP#2 WOOD STUD COLUMNS w/ SS HTT16 w/ 3/8"~ EXP. ANCHOR x 0'-8" EMBED & (18) 16d NAILS
- 3.) (2) #4 x 48" LONG CRACK CONTROL BARS INSIDE CORNERS, TYP.



ROOF FRAMING PLAN NOTES:

- 1.) SST ECCQ5-4SDS2.5 w/ (30) 1/2" x 2 1/2" SCREWS

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David L. Hustad
DAVID L. HUSTAD, P.E.
 STRUCTURAL ENGINEER
 FL PE LIC. #44986
 FL SI LIC. #6986745 01/02/08

SHOP PLANS

SCALE: AS NOTED

S-3

6004

MR. AND MRS. WADE HORNSBY

COLUMBIA COUNTY

the lawrence group

ARCHITECTS 205 WORTH AVENUE, PALM BEACH, FLORIDA 33480 P.H. (561) 655-0670

xx/xx/07

STRUCTURAL NOTES

CODES AND STANDARDS

- WIND LOADS AS PER ASCE 7-05/EDITION, FOR A 110-MPH WIND SPEED, EXPOSURE B, 1.00 IMPORTANCE FACTOR, AND AN INTERIOR PRESSURE COEFFICIENT +0.18 AND -0.18.
- THE PROJECT WAS DESIGNED IN ACCORDANCE WITH THE:
 - FLORIDA BUILDING CODE 2004 EDITION, ENCLOSED.
 - BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318/2005 EDITION).
 - MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES (ACI 315/ 2005 EDITION).
 - SPECIFICATION FOR THE DESIGN, FABRICATION & ERECTION OF STRUCTURAL STEEL FOR BUILDINGS (AMERICAN INSTITUTE OF STEEL CONSTRUCTION) AISC ASD/ 9TH EDITION.
 - SPECIFICATION FOR STRUCTURAL CONCRETE FOR BUILDINGS, ACI 301/2005 EDITION.
 - ASCE 7-05.

ARCHITECTURAL AND MECHANICAL DRAWINGS:

- THE STRUCTURAL DRAWINGS ARE PART OF THE CONTRACT DOCUMENTS AND DO NOT BY THEMSELVES PROVIDE ALL THE INFORMATION REQUIRED TO PROPERLY COMPLETE THE PROJECT STRUCTURE. THE GENERAL CONTRACTOR SHALL CONSULT THE ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS AND COORDINATE THE INFORMATION CONTAINED IN THESE DRAWINGS WITH THE STRUCTURAL DRAWINGS TO PROPERLY CONSTRUCT THE PROJECT.
- REFER TO ARCHITECTURAL, MECHANICAL OR ELECTRICAL DRAWINGS FOR ADDITIONAL OPENINGS, DEPRESSIONS, FINISHES, INSERTS, BOLTS SETTINGS, DRAINS, REGLETS, ETC.
- BEFORE ORDERING ANY MATERIALS OR DOING ANY WORK, THE CONTRACTOR SHALL VERIFY ALL MEASUREMENTS TO PROPERTY SIZE OR FIT THE WORK. NO EXTRA CHARGE OR COMPENSATION WILL BE ALLOWED BY THE OWNER RESULTING FROM THE CONTRACTOR'S FAILURE TO COMPLY WITH THIS REQUIREMENT.
- DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER BEFORE PROCEEDING WITH ANY WORK.

SECTIONS AND DETAILS:

ALL DETAILS, SECTIONS AND NOTES SHOWN ON THE DRAWINGS ARE TO BE TYPICAL AND SHALL APPLY TO SIMILAR SITUATIONS ELSEWHERE UNLESS OTHERWISE SHOWN.

SPECIALTY ENGINEERED PRODUCTS

- THE GENERAL CONTRACTOR IS RESPONSIBLE TO COORDINATE THE PROPER SUBMISSION OF SPECIALTY ENGINEERED SHOP DRAWINGS WHICH SHALL BE SIGNED AND SEALED BY AN ENGINEER REGISTERED IN THE STATE OF FLORIDA. IT IS THE GENERAL CONTRACTOR'S RESPONSIBILITY TO ASSURE THAT THE SPECIALTY ENGINEERED SHOP DRAWINGS ARE SUBMITTED IN A TIMELY MANNER SO AS TO ALLOW REVIEWING AND RESUBMISSIONS AS REQUIRED. ALL SPECIALTY ENGINEERED PRODUCTS SHALL BE DESIGNED FOR THE APPROPRIATE GRAVITY LOADS AND WIND LOADS INCLUDING UPLIFT AND LATERAL LOADS. INTERIOR SPECIALTY PRODUCTS SHALL BE DESIGNED FOR LATERAL LOADS TO ASSURE STABILITY. SPECIALTY ENGINEERED PRODUCTS SHALL BE, BUT ARE NOT LIMITED TO, THE FOLLOWING:
 - LIGHT GAUGE METAL FRAMING INCLUDING, BUT NOT LIMITED TO, SOFFITS, CLADDING, CEILING, ETC.
 - MISCELLANEOUS METALS INCLUDING STEEL STAIRS, MECHANICAL EQUIPMENT SUPPORTS, FRAMES THAT SUPPORT MACHINES, PIPES OR OTHER STRUCTURAL METAL USED FOR SUPPORT OF MECHANICAL SYSTEMS.
 - MISCELLANEOUS HANGARS, METAL FRAMES, LADDERS, RIGGING, HANGING WALLS, METAL RAILINGS, GLAZING FRAMES, CLADDING SUCH AS STONE, PRECAST, ALUMINUM, METAL PANELS, CABLE BARRIER SYSTEMS, ETC. OR ANY OTHER MISCELLANEOUS PRODUCT REQUIRED BY THE ARCHITECTURAL OR MECHANICAL CONSTRUCTION DOCUMENTS.

FOUNDATION

- ALL SITE PREPARATION AND EXCAVATION WORK IS TO BE PERFORMED IN STRICT ACCORDANCE WITH THE RECOMMENDATIONS WITHIN THE SOILS AND FOUNDATIONS INVESTIGATION REPORT PREPARED BY REGISTERED SOILS ENGINEER.
- THE BUILDING SITE SHOULD BE EXCAVATED TO THE DEPTH AND EXTENT INDICATED IN THE SOILS REPORT. ALL SUBGRADES SHALL BE APPROVED IN WRITING BY THE SOILS ENGINEER PRIOR TO BACKFILLING.
- BOTTOM OF FOOTINGS ASSUMED TO BEAR ON SOIL CAPABLE OF SAFELY SUPPORTING 2,500 PSF.
- SOILS SUPPORTING ALL FOOTINGS MUST BE INSPECTED AND APPROVED BY A REGISTERED SOILS ENGINEER BEFORE COMMENCING WORK. APPROVAL IN WRITING MUST INDICATE THE SOIL IS ADEQUATE TO SAFELY SUSTAIN SPECIFIED SOIL BEARING PRESSURE.
- TOP OF ALL EXTERIOR FOOTINGS SHALL BE MINIMUM 12-INCHES BELOW EXTERIOR FINISH GRADE.
- EXCAVATION & BACKFILL:
 - ALL EXCAVATION SHALL BE KEPT DRY. EXCAVATE TO DEPTHS AND DIMENSIONS INDICATED. TAKE EVERY PRECAUTION TO GUARD AGAINST ANY MOVEMENT OR SETTLEMENT OF ADJACENT STRUCTURES, UTILITIES, PIPING, ETC.
 - PROVIDE ANY BRACING OR SHORING NECESSARY TO AVOID SETTLEMENT OR DISPLACEMENT OF EXISTING FOUNDATION OR STRUCTURES.
- CENTERLINE OF FOOTINGS: SHALL COINCIDE WITH CENTERLINE OF COLUMNS UNLESS OTHERWISE NOTED ON DRAWINGS.
- DIMENSIONS: ALL DIMENSIONS AND ELEVATIONS SHOWN ON THE STRUCTURAL DRAWINGS MUST BE VERIFIED AND COORDINATED WITH THE ARCHITECTURAL DRAWINGS BY THE CONTRACTOR BEFORE PROCEEDING WITH THE CONSTRUCTION. DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT OR ENGINEER IN WRITING BEFORE PROCEEDING WITH ANY WORK.

CONCRETE

- CONCRETE ELEMENTS TO HAVE THE FOLLOWING STRENGTHS:
 - FOUNDATIONS 3,000 PSI
 - SLAB-ON-GRADE 3,000 PSI
 - COLUMNS 3,000 PSI
 - BEAMS 3,000 PSI
 - TIE BEAMS 3,000 PSI
 - MASONRY GROUT 3,000 PSI
- ALL OTHER CONCRETE TO BE 3,000 PSI UNLESS NOTED OTHERWISE.
- ALL CONCRETE SHALL BE READY MIX, HAVE A MINIMUM COMPRESSIVE STRENGTH OF:
 - 3,000 PSI @ 28 DAYS AND HAVE A MINIMUM OF 517 LBS. OF CEMENT PER CUBIC YARD.
 - SUMPS SHALL BE 4" MINIMUM AND 6" MAXIMUM.
- CONCRETE SHALL HAVE 2 PERCENT AIR ENTRAINMENT.
- ALL CONCRETE TO HAVE MAXIMUM WATER/CEMENT RATIO OF 0.55.
- JOB SITE WATER SHALL NOT BE ADDED.
- ALL CONCRETE WORK SHALL COMPLY WITH THE REQUIREMENTS OF THE ACI BUILDING CODE (ACI 318/ 2005 EDITION), THE ACI DETAILING MANUAL (ACI 315/ 2005 EDITION), AND THE SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS (ACI 301/2005 EDITION).

- SUBMIT ALL REINFORCING STEEL SHOP DRAWINGS FOR APPROVAL PRIOR TO ANY FABRICATION.
- CONCRETE COVER FOR REINFORCING STEEL SHALL BE AS REQUIRED BY THE 1995 ACI SPECIFICATIONS.
- WELDED WIRE FABRIC SHALL COMPLY WITH ASTM A 185, UNLESS OTHERWISE SPECIFIED. PLACE FABRIC 2" CLEAR FROM TOP OF THE SLAB IN SLAB ON GRADE AND SUPPORT ON SLAB BOLSTERS SPACED AT 3'-0" O.C.
- REQUIREMENTS:
 - ALL REINFORCING STEEL SHALL BE MANUFACTURED FROM HIGH STRENGTH BILLET STEEL CONFORMING TO ASTM DESIGNATION A 615 GRADE 60.
- LAP ALL BARS MINIMUM 48 DIAMETERS UNLESS OTHERWISE NOTED ON DRAWINGS. LAP ALL WWP A MINIMUM OF 6 INCHES (UNLESS OTHERWISE NOTED).
- REINFORCING BARS:
 - AT CORNERS OF CONCRETE WALLS, BEAMS AND CONTINUOUS WALL FOOTINGS, PROVIDE MATCHING HORIZONTAL BARS X 5'-0" BENT BAR FOR EACH HORIZONTAL BAR SCHEDULED AT EACH FACE.
 - WHERE COLUMNS ARE AN INTEGRAL PART OF CONCRETE WALLS, WALL REINFORCEMENT SHALL BE CONTINUOUS THRU THE COLUMNS.
 - ALL HOOKS SHOWN IN REINFORCEMENT SHALL BE ACI RECOMMENDED HOOKS UNLESS OTHERWISE NOTED.

CONCRETE INT'D

REINFORCING BARS:

- CONTRACTOR SHALL INCLUDE IN HIS BASE BID THE COST OF 2,500 LBS. OF ADDITIONAL #5 REINFORCING STEEL, INCLUDING FABRICATION, BENDING, FURNISHING AND PLACING. THIS EXTRA STOCK SHALL BE FURNISHED AND USED FOR SPECIAL CONDITIONS AS DIRECTED BY THE ARCHITECT, THE ARCHITECT'S AGENT OR BY THE OWNER'S CONSTRUCTION SUPERVISOR. THE PRICE OF THE UNUSED EXTRA STOCK SHALL BE CREDITED TO THE OWNER'S ACCOUNT.
- CONSTRUCTION JOINTS IN STRUCTURAL SLABS AND BEAMS SHALL BE AT MID-SPAN AND KEY JOINTS WITH REINFORCING CONTINUOUS ACROSS JOINT, AND ADDITIONAL SHEAR FRICTIOREINFORCING.

STEEL

- ALL STRUCTURAL STEEL SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH THE LATEST AC CODE. STRUCTURAL STEEL SHALL CONFORM TO:
 - ASTM SPECIFICATION A 36 FOR PLATES.
 - ALL STL TUBING SHALL CONFORM TO ASTM SPECIFICATION A 500 GRADE B (FY=46 KSI).
 - ASTM SPECIFICATION A 992 GRADE 50 FOR BEAMS.
 - ALL STL TO HAVE A SHOP COAT OF RUST INHIBITIVE PAINT.
 - DELETE/AMT ON ALL STEEL TO RECEIVE SPRAYED ON FIREPROOFING OR CONCRETE ENCASEMENT.
 - ALL ML/CAMBER TO BE ORIENTED UPWARD DURING FABRICATION AND ERECTION.
- ALL SHOT AND FIELD WELDING SHALL BE PERFORMED BY WELDERS QUALIFIED, AS DESCRIBED IN "AMERICAN WELDING SOCIETY'S STANDARD QUALIFICATION PROCEDURE" (AWS D1.1), TO PERFORM THE TYPE OF WORK REQUIRED.
- ALL ALUMINUM AND STEEL MEMBERS TO BE TREATED OR PROPERLY SEPARATED TO PREVENT GALVANIC AND CORROSIVE EFFECTS.
- ALL STEEL WELDING RODS SHALL BE E70XX ELECTRODES.
- SUBMIT L STEEL SHOP DRAWINGS FOR APPROVAL PRIOR TO ANY FABRICATION.
- EQUIPME' SUPPORTS:
 - PROVIDE ALTERNATIVE STEEL NOT INDICATED ON PLAN AS REQUIRED FOR THE INSTALLATION OF MECHANICAL EQUIPMENT AND MATERIALS, INCLUDING ANGLES, CHANNELS, BEAMS, HANGERS, ETC. DO NOT SUPPORT EQUIPMENT OR PIPING FROM METAL DECKING.
- DECK SUPPORTS:
 - PROVIDE 1/2 BENT PLATES AT ALL HIPs, VALLEYS, SKEWED BEAMS AND OTHER AREAS FOR DECK SUPPORT.

MASONRY

- MASONRY UNITS SHALL BE ASTM C 90 GRADE N WITH MINIMUM COMPRESSIVE STRENGTH OF 2,000 PSIN NET AREA OF INDIVIDUAL UNITS. ALL CMU SHALL BE LAID IN A FULL BED OF MORTAR IRUNNING BOND (U.N.O.).
- FOLLOWING ARE THE BLOCK STRENGTHS REQUIRED:
 - ASTM G0 - 2,000 PSI ON NET AREA OF INDIVIDUAL UNITS
 - ALL MORR SHALL BE TYPE S (OR TYPE M)
- IN ACCORDANCE WITH ASTM SPECIFICATION C270
- WITH A MINIMUM COMPRESSIVE STRENGTH OF 1,800 PSI AT 28 DAYS, (2500 WITH TYPE M).
- GROUT SHALL BE A HIGH SLUMP MIX
 - IN ACCORDANCE WITH ASTM SPECIFICATION C476
- HAVING MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI
- ALL CONCRETE MASONRY BEARING AND SHEAR WALLS SHALL BE CONSTRUCTED AND INSPECTED BY A QUALIFIED ENGINEER IN ACCORDANCE WITH THE "BUILDING CODE REQUIREMENT FOR MASONRY STRUCTURES" (ACI 530/ASCE 5/TMS 402) AND "SPECIFICATIONS FOR MASONRY STRUCTURES" (ACI 530.1/ASCE 6/TMS 602/ 2005 EDITIONS.
- PROVIDE IT DIPPED GALVANIZED LADDER TYPE HORIZONTAL JOINT REINFORCEMENT (9 GA.) AT 4" ON CENTER VERTICAL IN ALL MASONRY WALLS. PROVIDE DOVE TAIL SLOT ANCHORST CONCRETE COLUMNS.
- PROVIDE INTROL JOINTS IN MASONRY WALLS AT A SPACING OF 50' + O.C. AND ALIGN WITH ARCHITECTURAL CONTROL JOINTS.
- EPOXY GROUT SHALL BE NON-SHRINK HIGH CREEP RESISTANT, AND SHALL HAVE THE FOLLOWING MINIMUM ALLOWABLE PROPERTIES:
 - TENSILE STRENGTH, ASTM C 30: 1,500 PSI
 - FLEXURAL STRENGTH, ASTM C 580: 4,000 PSI
 - COMPRESSIVE STRENGTH, ASTM C 579: 1,600 PSI/7 DAYS.

WOOD

- ALL STRUCTURAL WOOD MEMBERS ARE DESIGNED AS "DRY-USE". MOISTURE CONTENT MUST BE 19% OR LESS. STORE WOOD FRAMING ABOVE GROUND AND UNDERPANS WITH PROPER AIR CIRCULATION.
- ALL LUMBER SHALL BE SOUTHERN PINE SPECIES #2 GRADE OR APPROVED EQUAL ALLOWABLE DESIGN STRESSES SHALL FOLLOW NATIONAL DESIGN SPECIFICATION (NDS) (LATEST EDITION).
- PROVIDE SP BORATE PRESSURE TREATED LUMBER IN ACCORDANCE WITH AWPA STANDARDS TO A MINIMUM 0.40 PCF RETENTION WHERE LUMBER IS IN CONTACT WITH INCRETE/MASONRY OR OUTSIDE OF BUILDING.
- PLYWOOD SHEATHING:
 - OOD: Use 5/8" 40/20 RATED, EXP. 1, PLYWOOD SHEATHING.
 - EE FRAMING PLANS FOR NAILING AND/OR BLOCKING REQUIREMENTS. USE 8" x 10" LONG X 4'-0" WIDE SHEETS WITH LENGTH ACROSS FRAMING. STAGGER PANEL END JOINTS 4'-0" TYP., ALLOW 1/8" SPACE ALONG PANEL EDGES AND END JOINTS.
 - EE FRAMING PLANS FOR DIAPHRAGM NAILING TYPE, SIZE, SPACING AND LOCATIONS.
- WOOD CONNECTIONS - ALL NAILS USED FOR STRUCTURAL FRAMING MEMBERS SHALL BE COMMON WIRE, U.N.O. ALL NAILS, TRUSS HANGERS, TRUSS ANCHORS AND STRAPS SHALL BE SST3000 TYPE 316L STAINLESS STEEL OR EQUAL FOR CORROSIVE RESISTANCE. ALL METAL STRAPS MUST BE INSTALLED WITH EQUAL LENGTHS ABOVE THE JOINT LINE. USE SIMPSON STRONG-TIE CONNECTOR PRODUCTS OR APPROVED EQUAL. THE NAILING WILL NOT BE PERMITTED.

CONCRETE COVER SCHEDULE

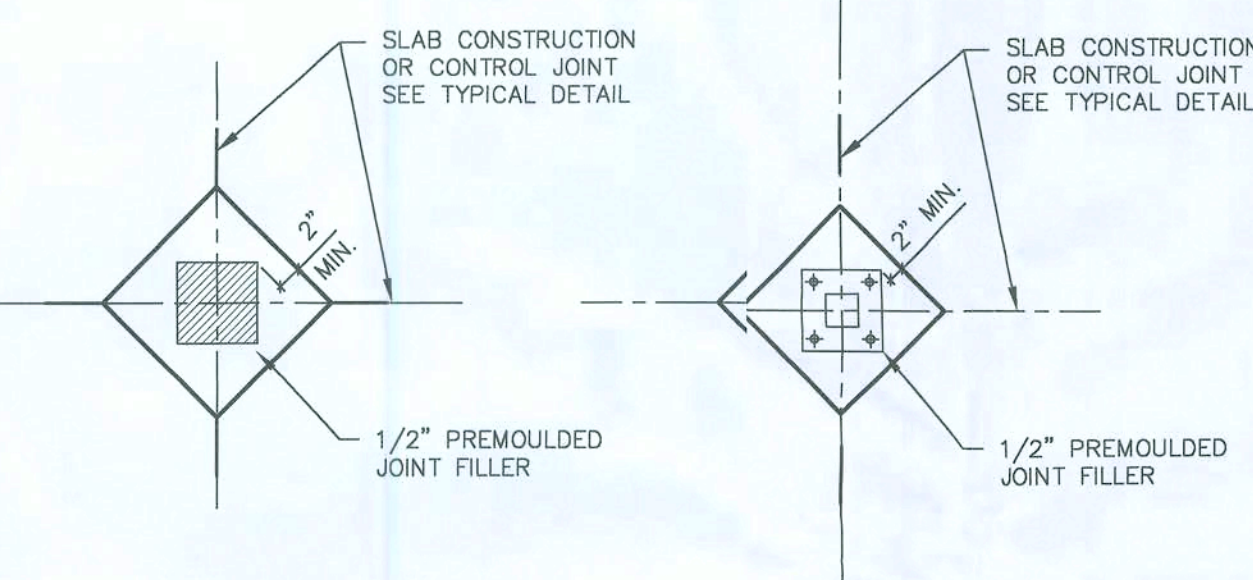
CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH:	3"
CONCRETE EXPOSED TO EARTH OR WEATHER:	2"
#6 OR LARGER	1 1/2"
#5 OR SMALLER	
CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND: SLABS, WALLS, JOISTS (#11 AND SMALLER)	3/4"
BEAMS, COLUMNS (PRIMARY REINF., TIES, STIRRUPS, SPIRALS)	1 1/2"
CONCRETE FOR COASTAL CONSTRUCTION EXTERIOR CONDITIONS	2"
WALL & SLABS	
OTHER MEMBERS	2 1/2"

DESIGN LOAD SCHEDULE

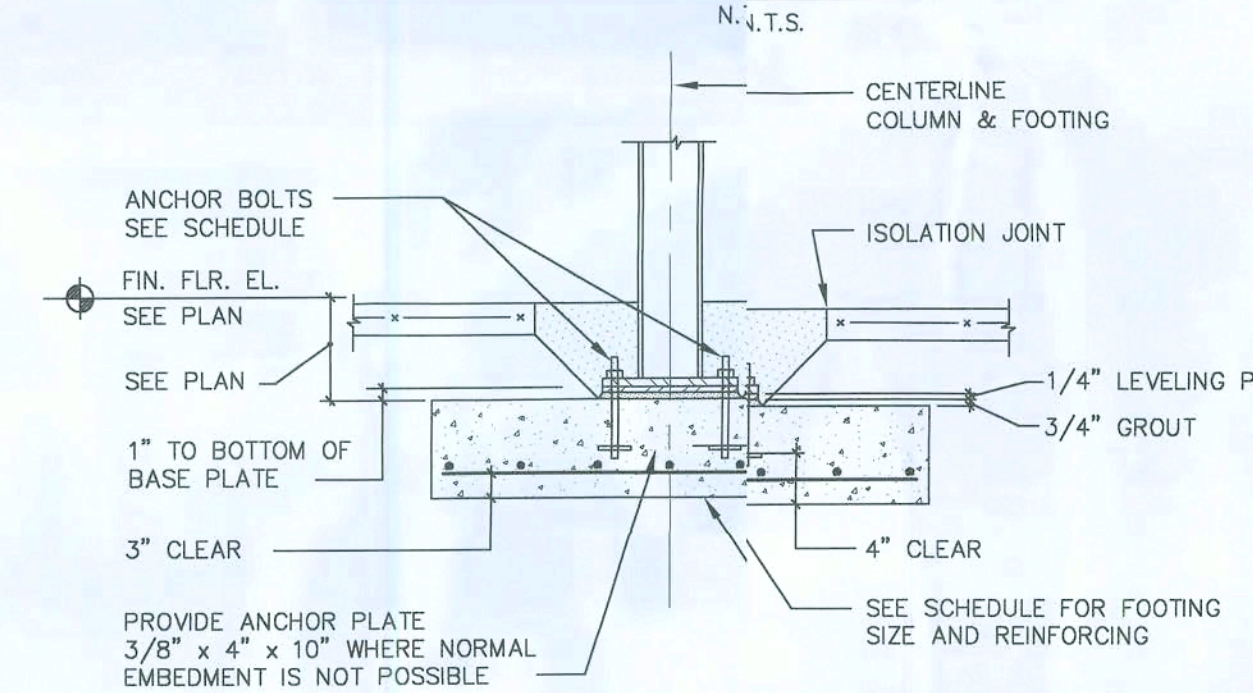
WIND SPEED	110 MPH
TOTAL DEAD LOAD	25 PSF
TOTAL LIVE LOAD	30 PSF
TOTAL LOAD	55 PSF

WOOD TRUSSES

- WOOD ROOF TRUSSES:
 - ARE TO BE DESIGNED FOR THE WOOD FABRICATOR BY A PROFESSIONAL SPECIALTY ENGINEER REGISTERED IN THE STATE OF FLORIDA. SEALED CALCULATIONS AND LAYOUT DRAWINGS ARE TO BE SUBMITTED FOR APPROVAL. TRUSS FABRICATOR TO PROVIDE ALL TRUSS-TO-TRUSS HANGERS AS REQUIRED TO RESIST GRAVITY AND UPLIFT REACTION.
- WOOD TRUSSES SHALL BE BRACED AND ERECTED IN ACCORDANCE WITH THE "TRUSS PLATE INSTITUTE" HANDLING, INSTALLING AND BRACING OF WOOD TRUSSES: COMMENTARY AND RECOMMENDATIONS, HIB (1991 EDITION). BRACING IN THE PLANE OF THE WEB IS REQUIRED:
 - THE TRUSS FABRICATOR SHALL PROVIDE AND LOCATE CONTINUOUS LATERAL BRACING FOR EACH TRUSS WEB MEMBER AS REQUIRED.
 - LATERAL BRACING SHALL BE RESTRAINED BY DIAGONAL BRACING (MIN. 2" THICK NOMINAL LUMBER). THIS BRACING IS TO BE CONTINUOUS.
 - A MINIMUM OF TWO ROWS OF DIAGONAL BRACING IS REQUIRED, ONE AT EACH VERTICAL WEB MEMBER CLOSEST TO BEARING LOCATIONS.
- THE BOTTOM CHORDS SHALL BE BRACED BY CONTINUOUS LATERAL BRACING SPACED AT 8'-0" ON CENTER WITH A CEILING ATTACHED TO BOTTOM OF TRUSSES. IF NO CEILING IS ATTACHED TO BOTTOM OF TRUSSES, BRACING SHALL BE MINIMUM 2X4 @ 3'-6" ON CENTER NAILED TO THE TOP OF THE BOTTOM CHORD. DIAGONALS SHALL BE PLACED AT 45 DEGREES TO THE LATERAL BRACES SHALL BE LOCATED AT EACH END. IF BUILDING EXCEEDS 80 FEET IN LENGTH, DIAGONAL BRACING SHOULD BE REPEATED AT 20 FOOT INTERVALS.
- TOP CHORD BRACING:
 - IF PLYWOOD DECKING IS APPLIED DIRECTLY TO TOP CHORD, PROPERLY LAPPED AND NAILED TO DEVELOP TENSILE ACTION, BRACING IS NOT REQUIRED.
 - IF PURLINS ARE USED, DIAGONAL TOP CHORD BRACING IS REQUIRED AT EACH END. IF BUILDING EXCEEDS 80 FEET IN LENGTH, DIAGONAL BRACING SHOULD BE REPEATED AT 20-FOOT INTERVALS.
- DO NOT CUT, DRILL OR NOTCH ROOF TRUSSES WITHOUT WRITTEN APPROVAL FROM TRUSS ENGINEER. COORDINATE MECHANICAL, ELECTRICAL, PLUMBING, ETC. SIZES AND LOCATIONS WITH TRUSS LAYOUT PRIOR TO ERECTION.
- TRUSSES SHALL BE MANUFACTURED & DESIGNED IN ACCORDANCE WITH NATIONAL DESIGN SPECIFICATION (N) FOR WOOD CONSTRUCTION, AF & PA, AND NATIONAL DESIGN STANDARD FOR METAL PLATE CONNECTED WOOD TRUSS CONSTRUCTION, ANSI/TPI 1-1995, AND THE LOCAL CODE JURISDICTIONS.
- DO NOT OVERLOAD ROOF TRUSSES WITH BUILDING MATERIALS.
- CONNECTOR PLATES SHALL BE MANUFACTURED BY A WITCA MEMBER PLATE SUPPLIER AND SHALL MEET OR EXCEED ASTM A 653/A653M REQUIREMENTS FOR STRUCTURAL STEEL.
- WOOD TRUSS MANUFACTURER TO DESIGN BOTTOM CHORDS OF WOOD TRUSSES AT ALL ATTIC AREAS FOR A MINIMUM 10 PSF LIVE LOAD. BOTTOM CHORDS OF WOOD ATTIC TRUSSES TO BE DESIGNED FOR 250 PSF MINIMUM LIVE LOAD.



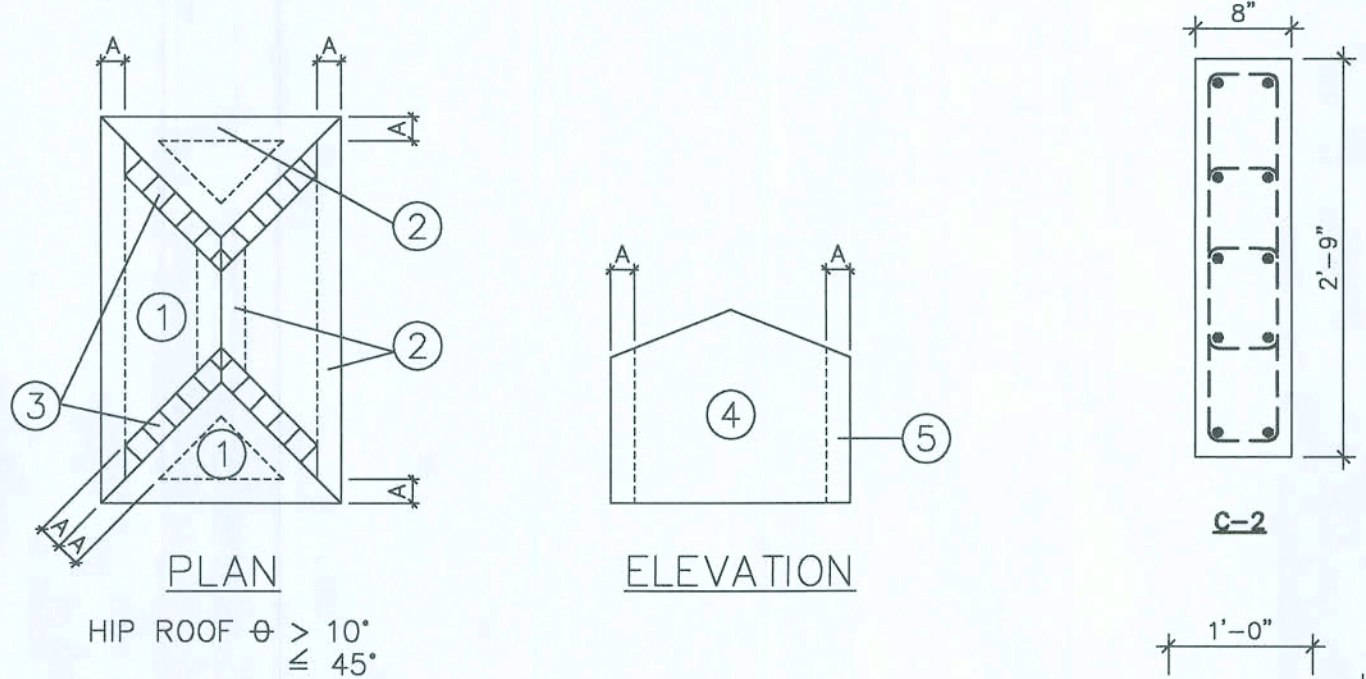
TYPICAL ISOLATION JOINTS CONCRETE AND STEEL



TYPICAL STEEL COLUMN FOOTING

WIND LOAD SCHEDULE - FLAT ROOF					
COMPONENTS & CLADDING	ROOF WIND LOADS			WALL WIND LOADS (SEE NOTE 1)	
	ROOF AREA (10 s.f.)	(2)	(3)	WALL AREA (50 s.f.)	(5)
PRESSURE (PSF)	+10.0	+10.0	+10.0	+19.5	+19.5
SUCTION (PSF)	-21.8	-36.5	-55.0	-21.3	-24.6

- EXTERIOR GLAZED OPENINGS IN BUILDINGS SHALL COMPLY WITH FBC 2004 SECTION 1609 BY EITHER BEING DESIGNED FOR IMPACT RESISTANCE OR BEING PROTECTED BY IMPACT PROTECTIVE SYSTEMS.
- CORNER DISTANCE, A = 5.0 FEET



DOOR & WINDOW WIND PRESSURE (PSF)

SIZE OF WALL OPENING (SQ. FT.)	WALL AREA	
	(4)	(5)
0-10	+21.8 / -23.8	+21.8 / -29.1
11-20	+21.6 / -23.5	+21.6 / -28.9
21-30	+20.7 / -22.6	+20.7 / -27.0
31-40	+20.2 / -22.0	+20.2 / -25.9
41-50	+19.8 / -21.6	+19.8 / -25.2
51-60	+19.5 / -21.3	+19.5 / -24.5
61-75	+19.2 / -21.1	+19.2 / -24.0
76-100	+18.9 / -20.7	+18.9 / -23.4
101-125	+18.5 / -20.3	+18.5 / -22.6
126-150	+18.2 / -20.0	+18.2 / -22.0
151-200	+17.9 / -19.8	+17.9 / -21.5

NOTES:

- WIND DESIGN PER FLORIDA BUILDING CODE 2004 EDITION.
- WIND LOADS AS PER ASCE 7-02/EDITION, FOR A 110-MPH WIND SPEED, EXPOSURE B, 1.00 IMPORTANCE FACTOR, AND AN INTERIOR PRESSURE COEFFICIENT +0.18 AND -0.18.
- +/- INDICATES WIND PRESSURE
- INDICATES WIND SUCTION
- WALL DISTANCE A = 5.0 FT (COMPONENTS AND CLADDING)
- FOR WALL OPENINGS BETWEEN THOSE GIVEN ABOVE THE LOAD MAY BE INTERPOLATED, OTHERWISE USE THE LOAD ASSOCIATED WITH THE LOWER WALL OPENING AREA.
- EXTERIOR GLAZED OPENINGS IN BUILDINGS SHALL COMPLY WITH FBC-2004 BY EITHER BEING DESIGNED FOR IMPACT RESISTANCE OR BEING PROTECTED BY IMPACT PROTECTIVE SYSTEMS

ROOF SHEATHING NAILING SCHEDULE

NAIL SIZE	NAIL SPACING	ZONE
8d RING SHANK	6" @ EDGES, 6" @ INTERMEDIATE SUPPORTS	ROOF (1) (2)
8d RING SHANK	4" @ EDGES, 6" @ INTERMEDIATE SUPPORTS	ROOF (3)

CORNER DISTANCE, A = 5.0 FEET

METAL PLATE CONNECTED WOOD ROOF TRUSS CONNECTOR SCHEDULE

MARK	MANUFACTURER	MODEL DESIGNATION	STATE (FL) OR LOCAL APPROVAL NUMBER	STATE APPROVAL FILE (PDF) NAME OR OTHER REFERENCE DOCUMENT NAME	UPLIFT		LATERAL LOAD				FASTENERS	COMBINED STRESS INDEX
					CALCULATED LOAD	ALLOWABLE CAPACITY	CALCULATED LOAD	ALLOWABLE CAPACITY	CALCULATED LOAD	ALLOWABLE CAPACITY		
(A)	SIMPSON STRONG TIE CONNECTORS	HETAL 20	1901.21	NER469.PDF	770	1810	186	415	133	1100	(15) 10d x 1 1/2"	63%
(B)	SIMPSON STRONG TIE CONNECTORS	(2) HETAL20	1901.16	-	1870	2500	186	1055	133	1305	(14) 18d	78%
(C)	SIMPSON STRONG TIE CONNECTORS	H10	1423.20	-	205	905	-	-	-	-	(16) 8d x 1 1/2"	23%

PLYWOOD SHEARWALL SCHEDULE

MARK	THICKNESS	GRADE	NAILING	STUDS	FLOOR SILL	FND. SILL	SHEARWALL END POST	HOLDDOWN 2nd/Fnd	ALLOW SHEAR (plf)
(1)	19/32"	APA RATED 40/20, EXP. 1	10d NAILS @ 6" O.C. (FIELD) 10d NAILS @ 4" O.C. (EDGES)	2x4, #2 SP @ 16" O.C.	2x4 W/ (2) ROWS OF 16d NAILS @ 9" O.C.	2x4 P.T. W/ 1/4" P.T.C. x 3" LONG W/ SST BP5/8-3 @ 8" O.C.	(2) 2x4, #2 SP	HTT22 W/ 12" EMBED	715

- NOTES:
- ALL PANEL EDGES BACKED WITH 2 INCH NOMINAL OR WIDER FRAMING.
 - ALL NAILS ARE COMMON, TYPICAL.
 - STRICTLY FOLLOW ALL SST MANUFACTURER'S GUIDELINES AND INSTRUCTIONS FOR INSTALLATION OF CONNECTORS.

STEEL COLUMN SCHEDULE

MARK	SIZE	BASE PL	EXP. ANCHORS	REM
SC-1	15 3' x 3' x 3/8"	9x9x3/4"	(4) 5/8" @ EXP. ANCHOR x 0'-8" EMBED	DETAIL 1/S-5
SC-2	15 4' x 2' x 3/8"	9x9x3/4"	(4) 5/8" @ EXP. ANCHOR x 0'-8" EMBED	DETAIL 1/S-5 (SM)

FOOTING SCHEDULE

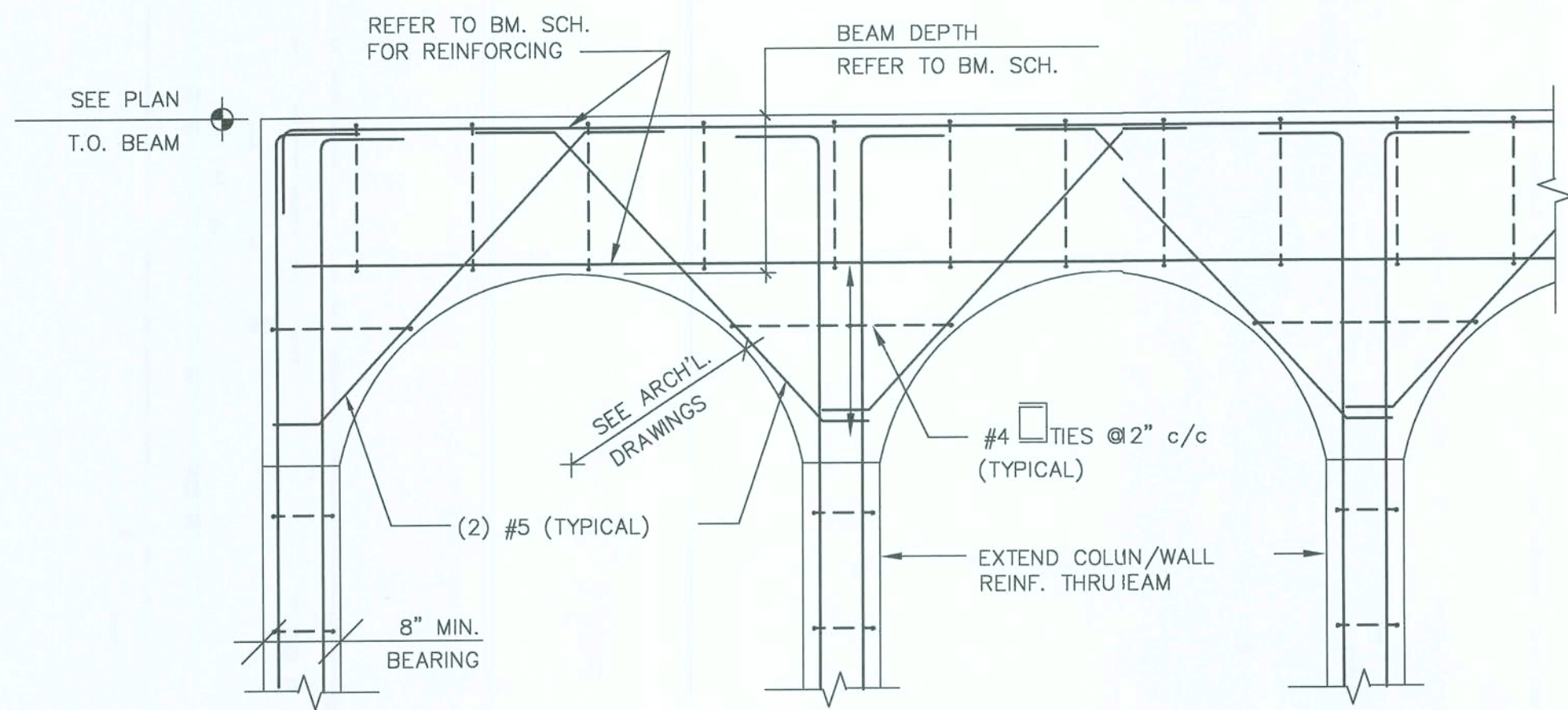
MARK	SIZE	REINFORCING	REM
F24.12	2'-0" x 12" x CONT.	3 #5 x CONT. & #4 TRANSVERSE BARS @ 24" o.c.	-
MF16.16	1'-4" x 16" x CONT.	3 #5 x CONT. BOTT.	-
F40	4'-0" x 4'-0" x 12"	(4) #5 EA. WAY TOP & BOTT.	-
F45	4'-6" x 4'-6" x 12"	(5) #5 EA. WAY TOP & BOTT.	-

CONCRETE/MASONRY COLUMN SCHEDULE

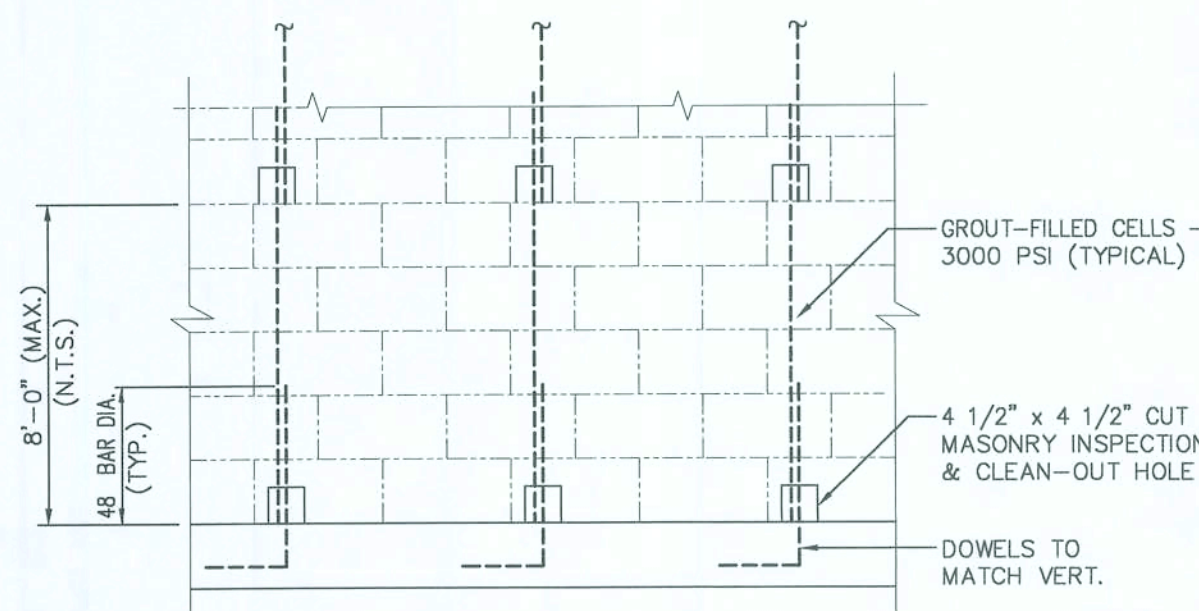
MARK	SIZE (inches)	VERT. REINF.	TIES	SPACING	REMARKS
C-1	8 x 18 (MIN)	6 #5	#3	@ 8" O.C.	CONC.
C-2	8 x 33	10 #5	#3	@ 8" O.C.	CONC.
C-3	8 x 14	4 #5	#3	@ 8" O.C.	CONC.
C-4	12 x 32	10 #6	#3	@ 10" O.C.	CONC.
C-5	8 x 24	8 #5	#3	@ 8" O.C.	CONC.
C-6	SEE DETAIL	8 #5	#3	@ 8" O.C.	CONC.
C-7	8 x 16	6 #5	#3	@ 8" O.C.	CONC.
MC-1	8 x 16	2 #5	-	-	MASONRY
MC-2	8 x 12 "O" BLOCK	2 #5	-	-	MASONRY
MC-3	8 x 24	3 #5	-	-	MASONRY

BEAM SCHEDULE

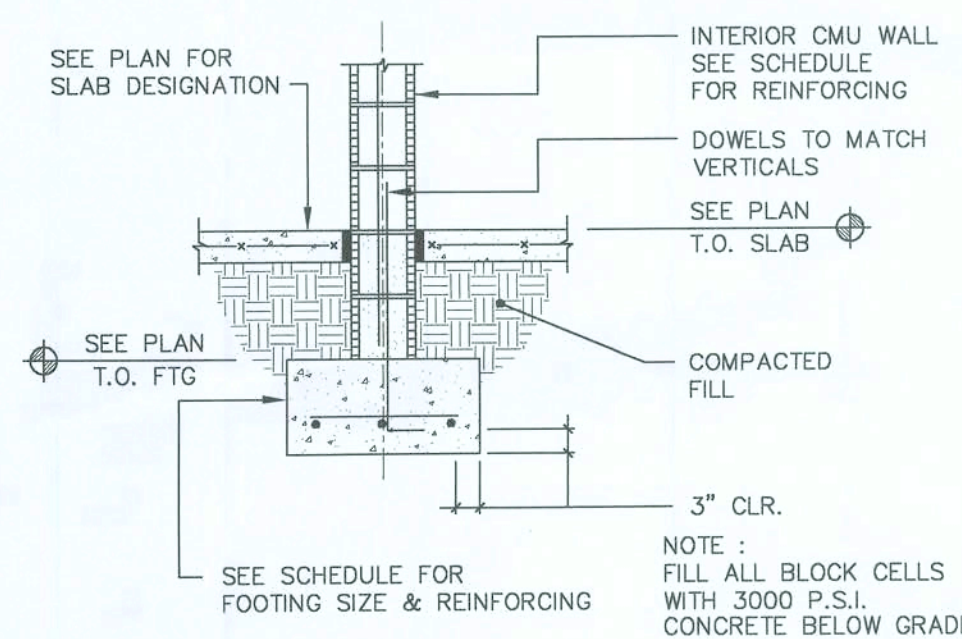
MARK	SIZE BxH (inches)	REINFORCING			STIRRUPS		REMARKS
		BOTT	TOP	INT	TIES	SPACING	
B-1	8 x 22	2 #5	2 #5	2 #5	#3	@ 8" O.C.	—
B-2	8 x 24	2 #7	2 #5	2 #5	#3	@ 10" O.C.	—
B-3	8 x 16	2 #5	2 #5	—	#3	@ 8" O.C.	—
B-4	8 x 28 (MIN)	2 #5	2 #5	2 #5	#3	@ 8" O.C.	—
AB-1	8 x 10	2 #5	2 #5	—	#3	@ 8" O.C.	ARCH BEAM
AB-2	8 x 16 (MIN)	2 #5	2 #5	—	#3	@ 8" O.C.	ARCH BEAM
RB-1	8 x 12 (MIN)	—	—	2 #5	#3	@ 24" O.C.	RAKE BEAM
TB-1	8 x 16	2 #5	2 #5	—	#3	@ 24" O.C.	TIE BEAM
BB-1	8 x 16	1 #5	1 #5	—	—	—	BOND BEAM
L-1	8 x 24	1 #5	1 #5	—	—	—	8F24 1B/1T
L-2	8 x 12	1 #5	1 #5	—	—	—	8F12 1B/1T



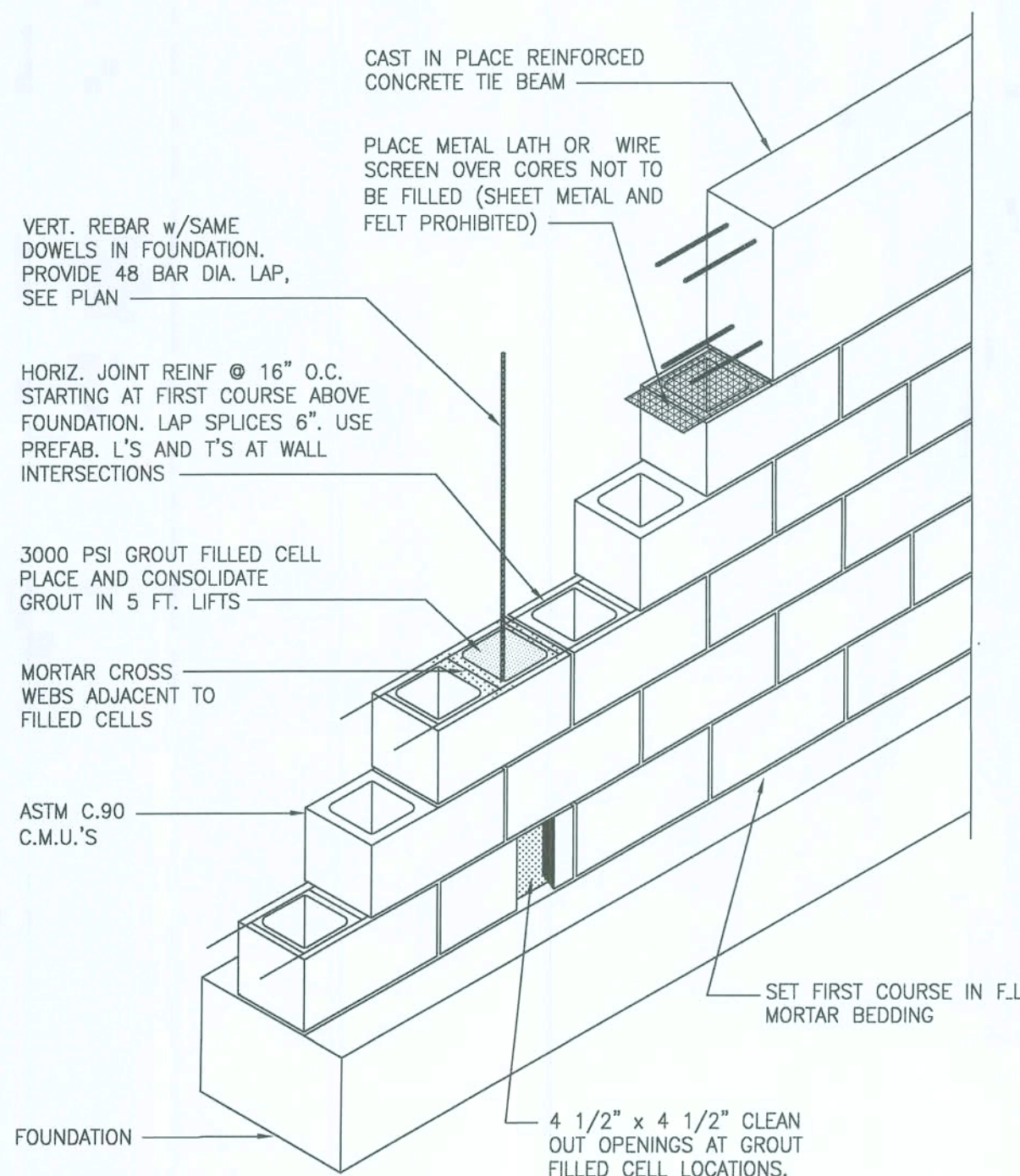
TYPICAL ARCHED BEAM/ CONC. COLUMN DETAIL
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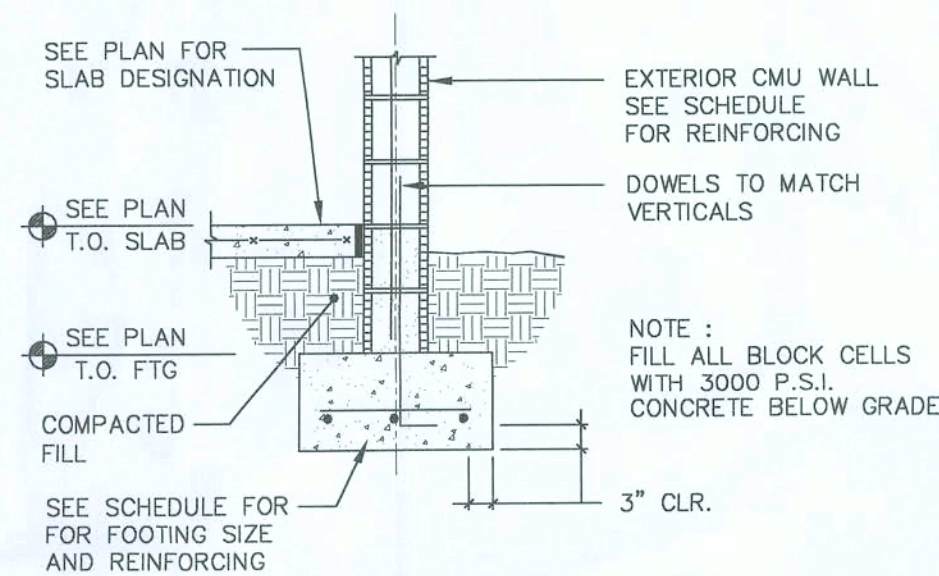
TYPICAL MASONRY FILLED CELL DETAIL
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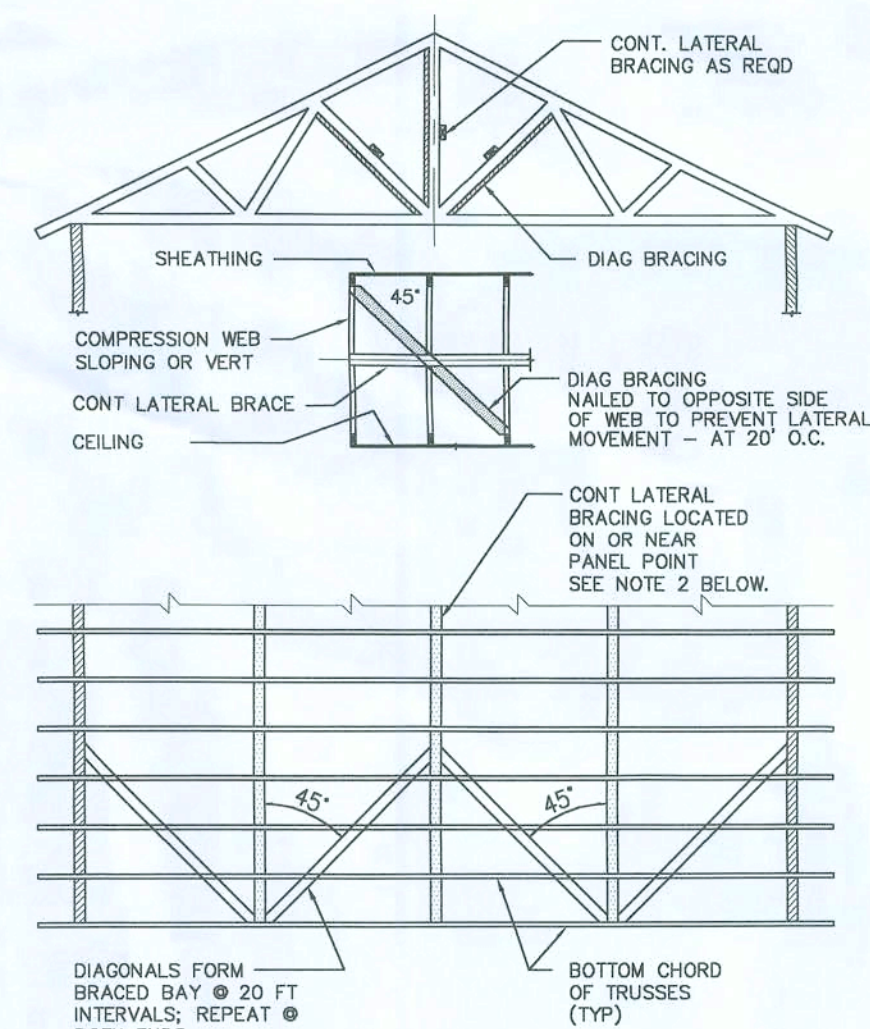
TYPICAL INTERIOR WALL FOOTING
N.T.S.



TYPICAL MASONRY WALL CONSTRUCTION
N.T.S.

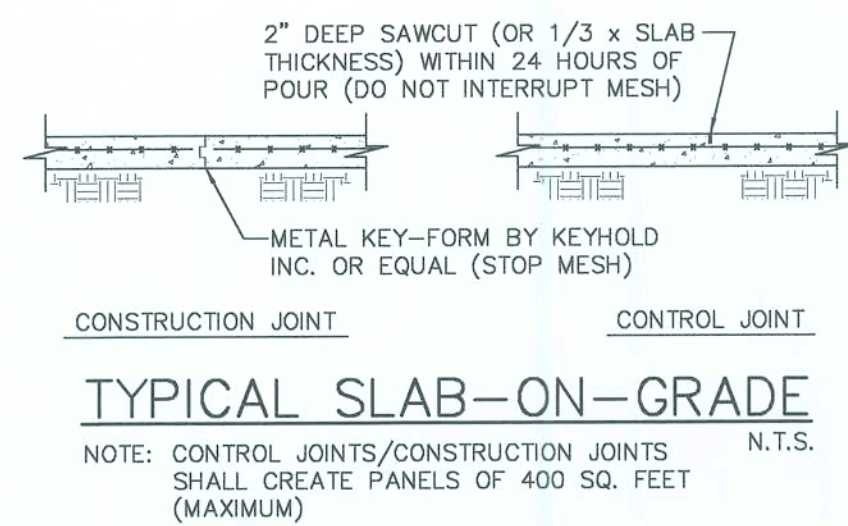


TYPICAL EXTERIOR WALL FOOTING
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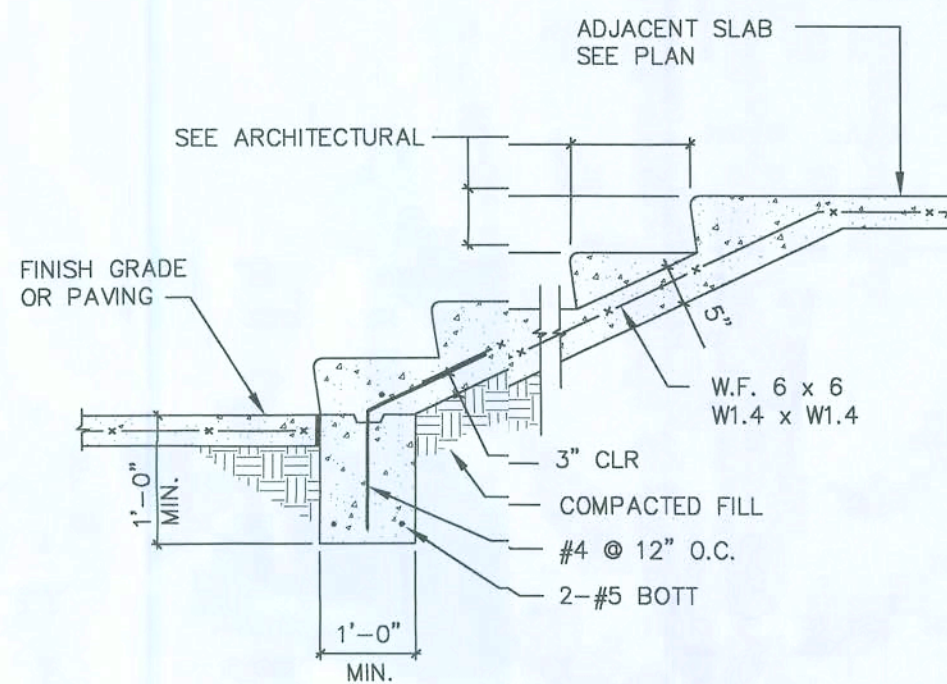


- WOOD TRUSSES SHALL BE BRACED AND ERECTED IN ACCORDANCE WITH THE "TRUSS PLATE INSTITUTE" BRACING WOOD TRUSSES: COMMENTARY AND RECOMMENDATIONS, HIB-91, BRACING IN THE PLAN OF THE WEB MEMBERS :
 - THE TRUSS FABRICATOR SHALL PROVIDE AND LOCATE CONTINUOUS LATERAL BRACING FOR EACH TRUSS WEB MEMBER AS REQUIRED.
 - LATERAL BRACING SHALL BE RESTRAINED BY DIAGONAL BRACING (MIN. 2" THICK NOMINAL LUMBER), THIS BRACING IS TO BE CONTINUOUS.
 - A MINIMUM OF TWO ROWS OF DIAGONAL BRACING IS REQUIRED, ONE AT EACH VERTICAL WEB MEMBER CLOSEST TO BEARING LOCATIONS.
- THE BOTTOM CHORDS SHALL BE BRACED BY CONTINUOUS LATERAL BRACING SPACED AT 8'-0" O. C. WITH A CEILING ATTACHED TO BOTTOM OF TRUSSES. OR IF NO CEILING IS ATTACHED TO BOTTOM OF TRUSSES BRACING SHALL BE MIN. 2 x 4 @ 36" O.C. NAILED TO THE TOP OF THE BOTTOM CHORD. DIAGONALS PLACED AT 45° TO THE LATERAL BRACES SHALL BE LOCATED AT EACH END. IF BUILDING EXCEEDS 60 FEET IN LENGTH, DIAGONAL BRACING SHOULD BE REPEATED AT 20 FOOT INTERVALS.
- TOP CHORD BRACING :
 - IF PLYWOOD DECKING IS APPLIED DIRECTLY TO TOP CHORD, PROPERLY LAPPED AND NAILED TO DEVELOP DIAPHRAGM ACTION, BRACING IS NOT REQUIRED.
 - IF PURLINS ARE USED, DIAGONAL TOP CHORD BRACING IS REQUIRED AT EACH END. IF BUILDING EXCEEDS 80 FEET IN LENGTH, DIAGONAL BRACING SHOULD BE REPEATED AT 20 FOOT INTERVALS.

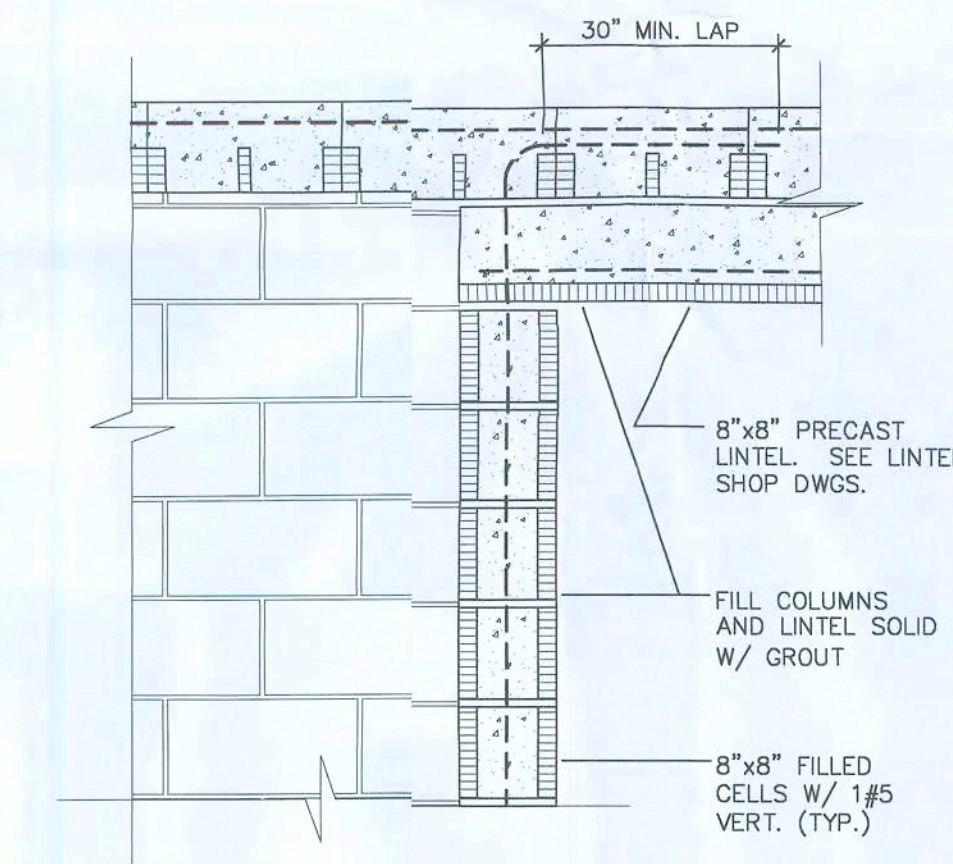
WOOD TRUSS BRACING DETAIL



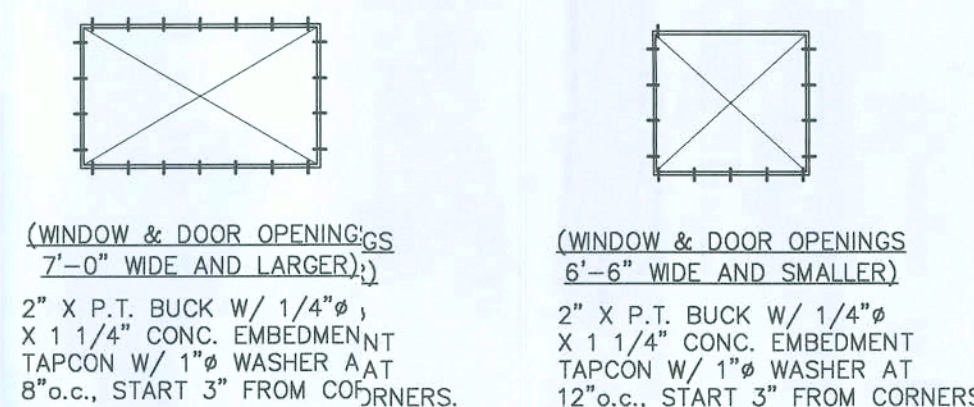
TYPICAL SLAB-ON-GRADE
N.T.S.



TYPICAL CONCRETE STAIR ON GRADE
N.T.S.



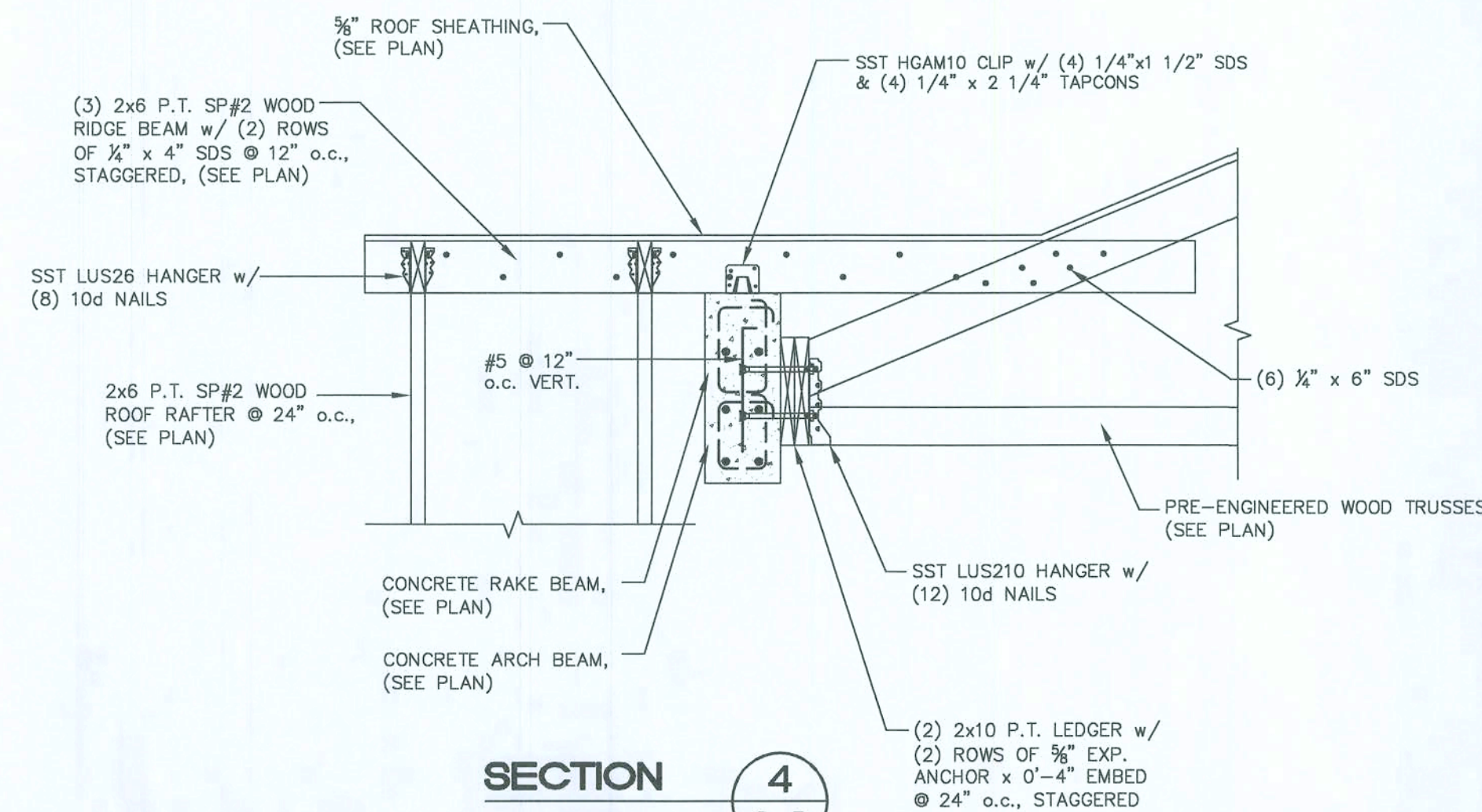
TYPICAL LINTEL ON COLUMN DETAIL
N.T.S.



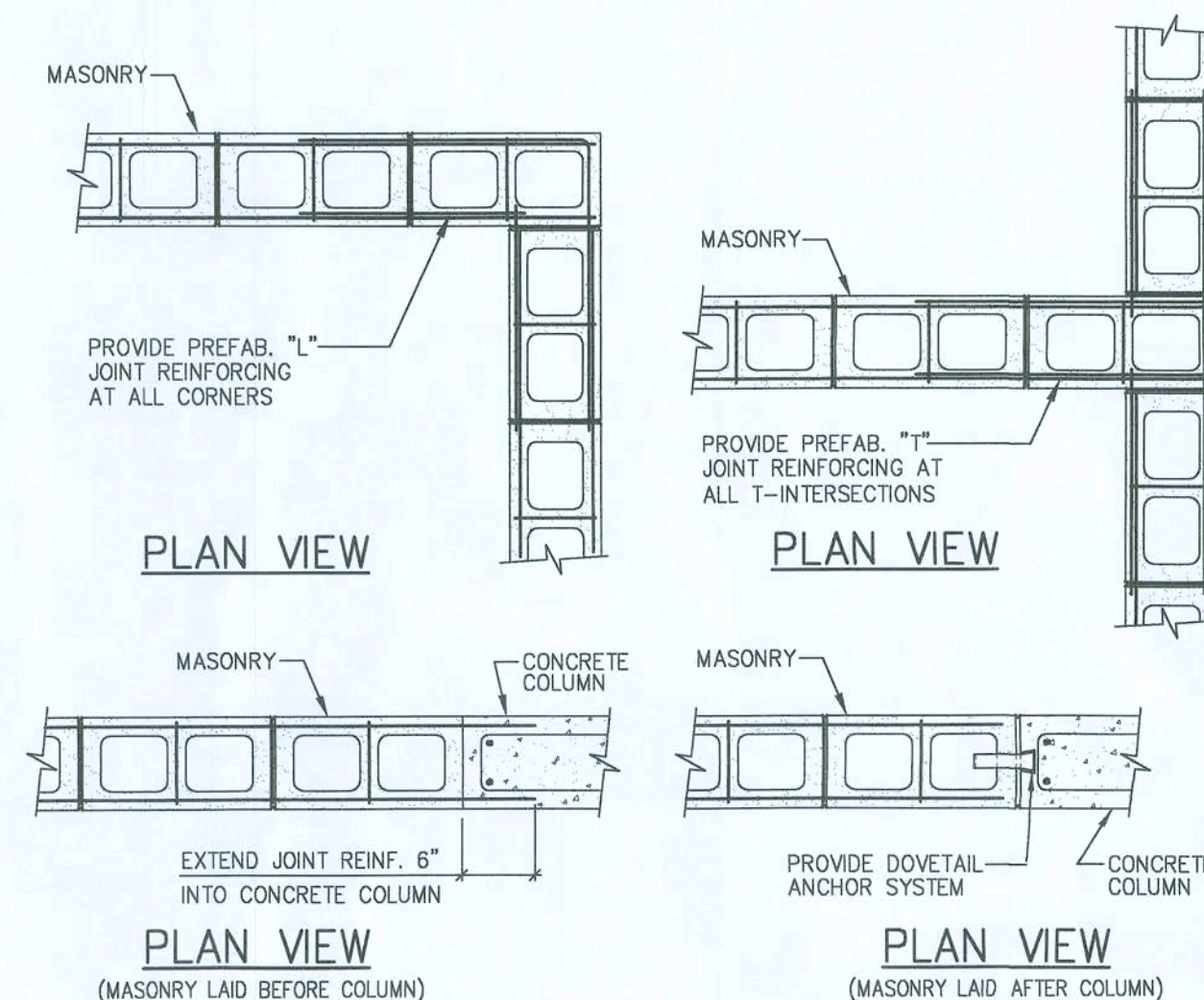
BUCKS TO BE FASTENED HORIZONTALLY AND VERTICALLY TO CONCRETE BEAMS AND COLUMNS OR CONCRETE FILLED MASONRY. G.C. TO COORDINATE OPENING DIMENSIONS.

TYPICAL WOOD BUCK TO CONCRETE CONNECTION DETAIL

- EXTERIOR GLAZED OPENINGS IN BUILDINGS SHALL COMPLY WITH FBC 2004, SECTION 1609 BY EITHER BEING DESIGNED FOR IMPACT RESISTANCE OR BEING PROTECTED BY IMPACT PROTECTIVE SYSTEMS.

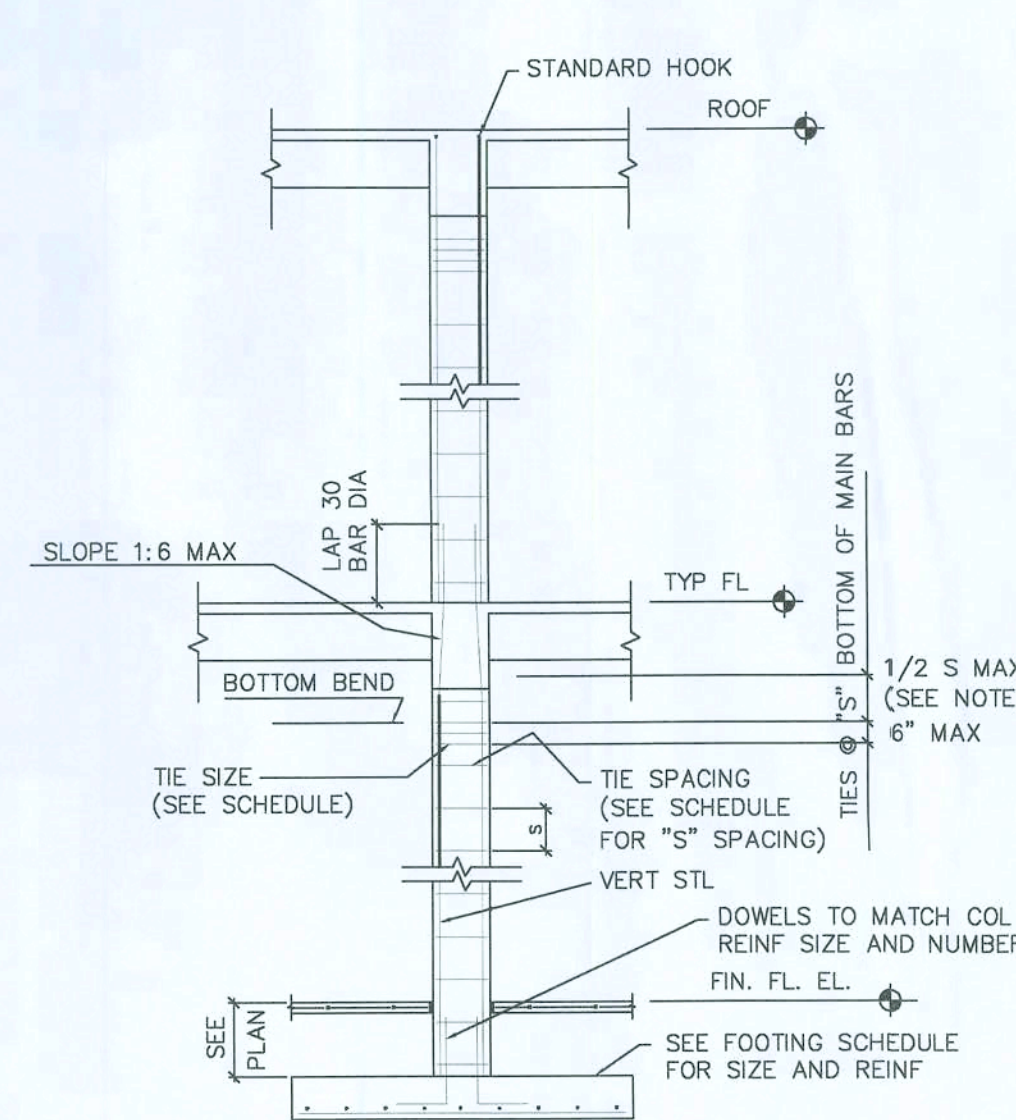


SECTION 4
3/4" = 1'-0"



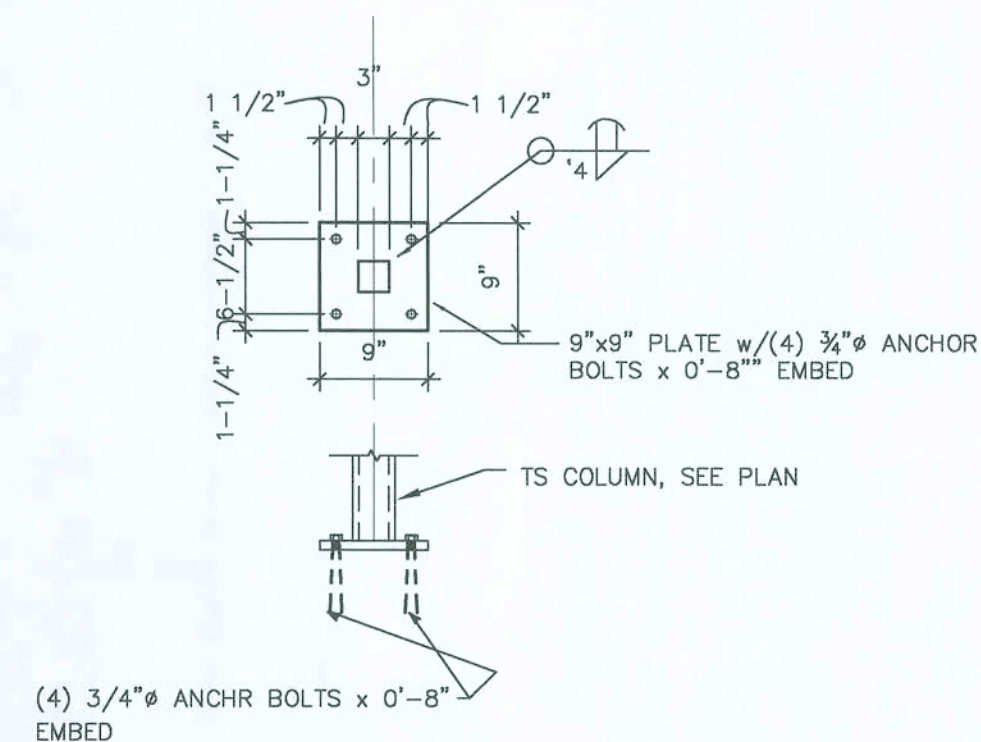
TYPICAL MASONRY DETAILS
N.T.S.

THICKENED EDGE (T.E.)
N.T.S.

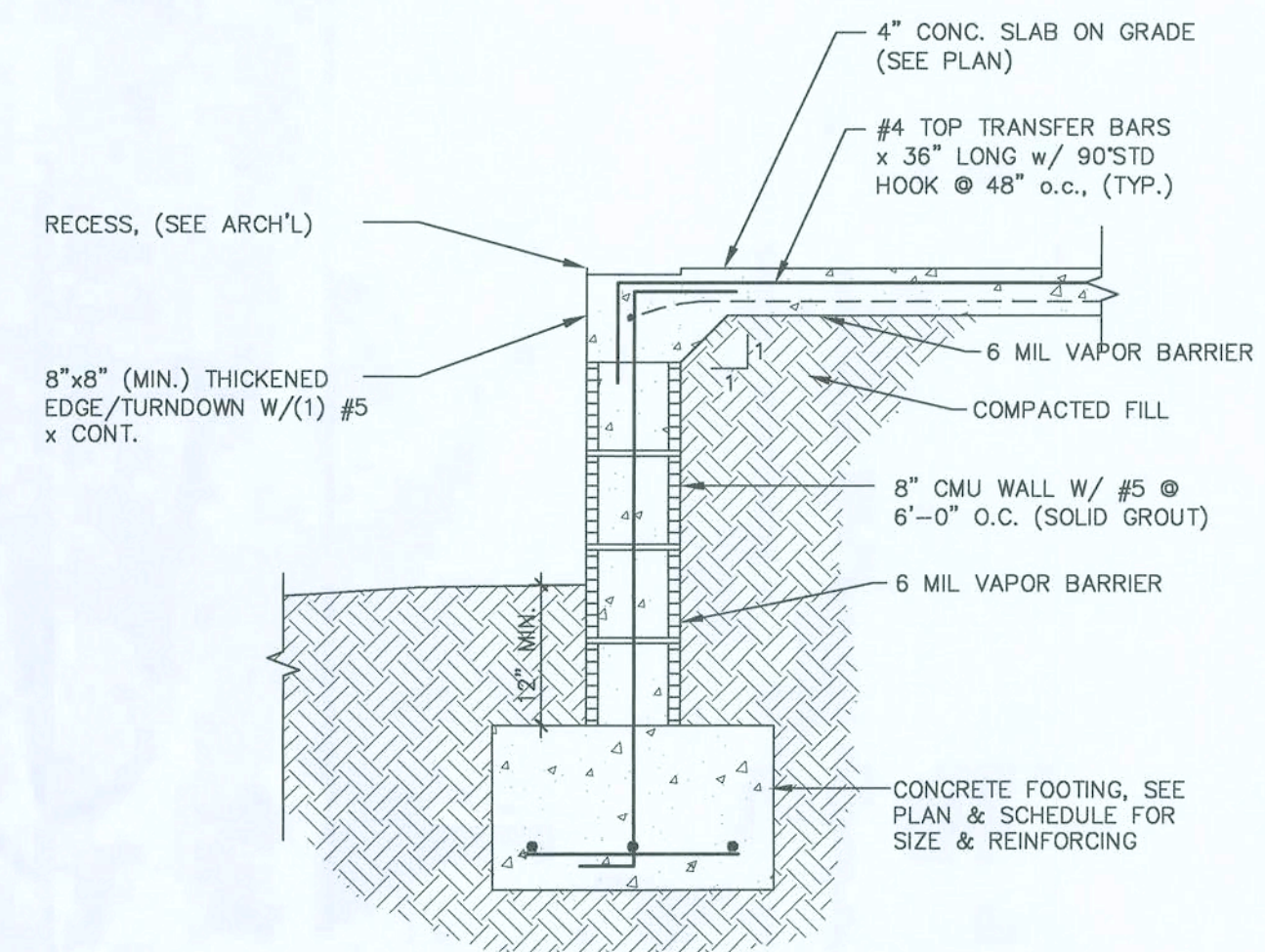


- NOTE:
- ADD EXTRA TIES IF THE DISTANCE BETWEEN BOTTOM LAYER OF SLAB REINFORCEMENT AND LOWER POINT OF OFFSET BENT IS MORE THAN 1/2 S (HALF SCHED. TIES SPACING).

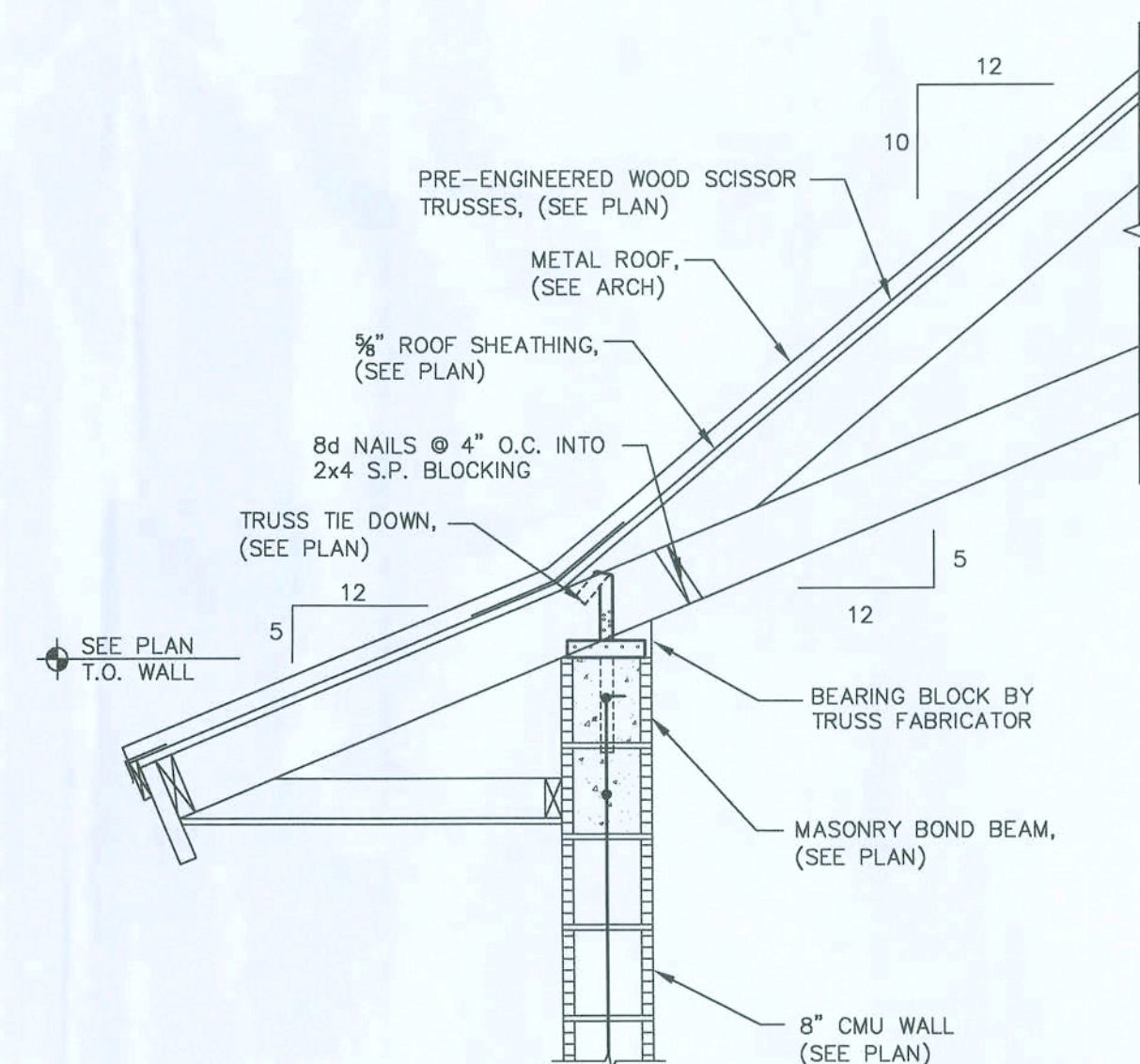
TYPICAL CONCRETE COLUMN DETAIL
N.T.S.



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



SECTION 2
3/4" = 1'-0"

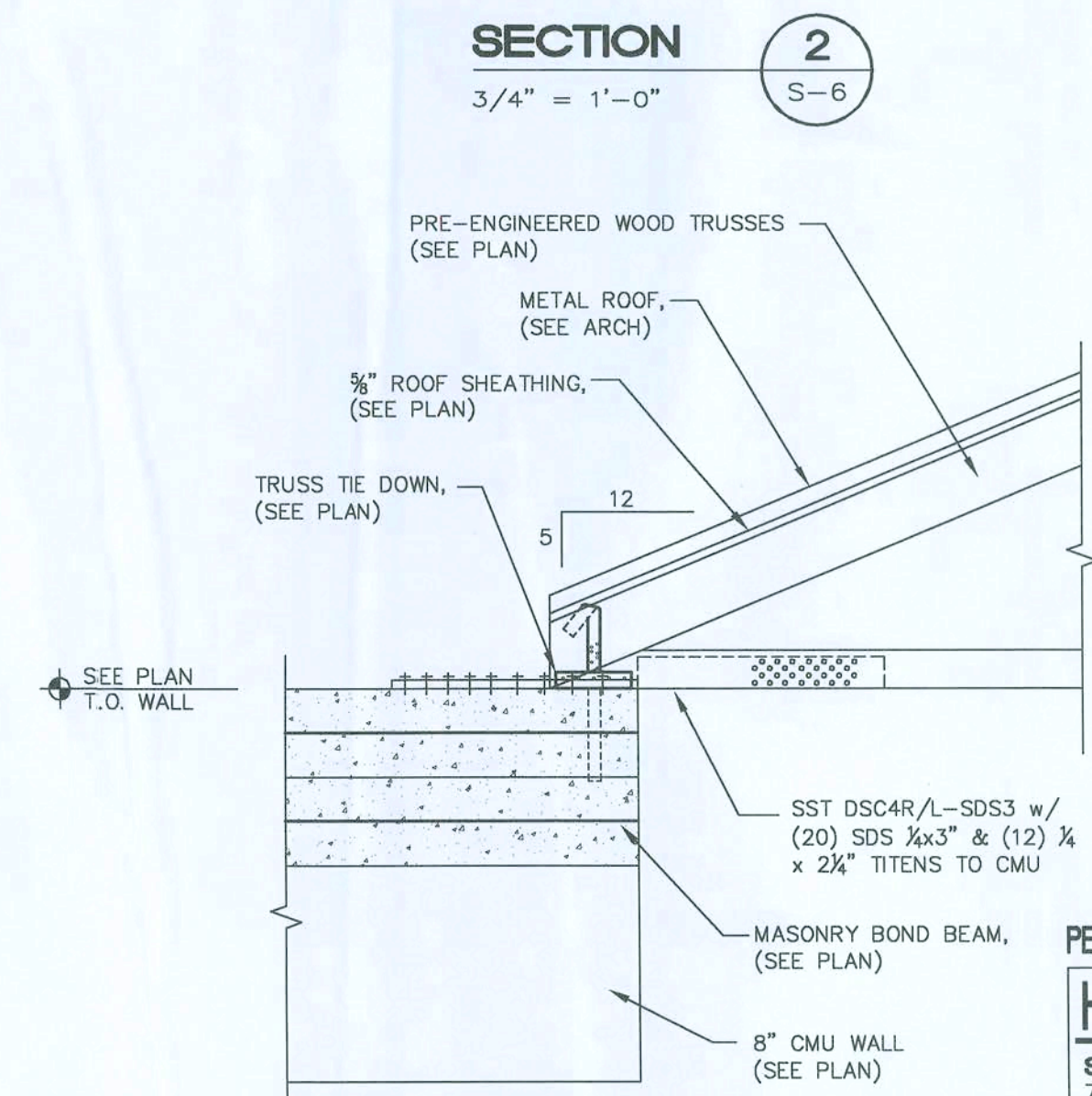
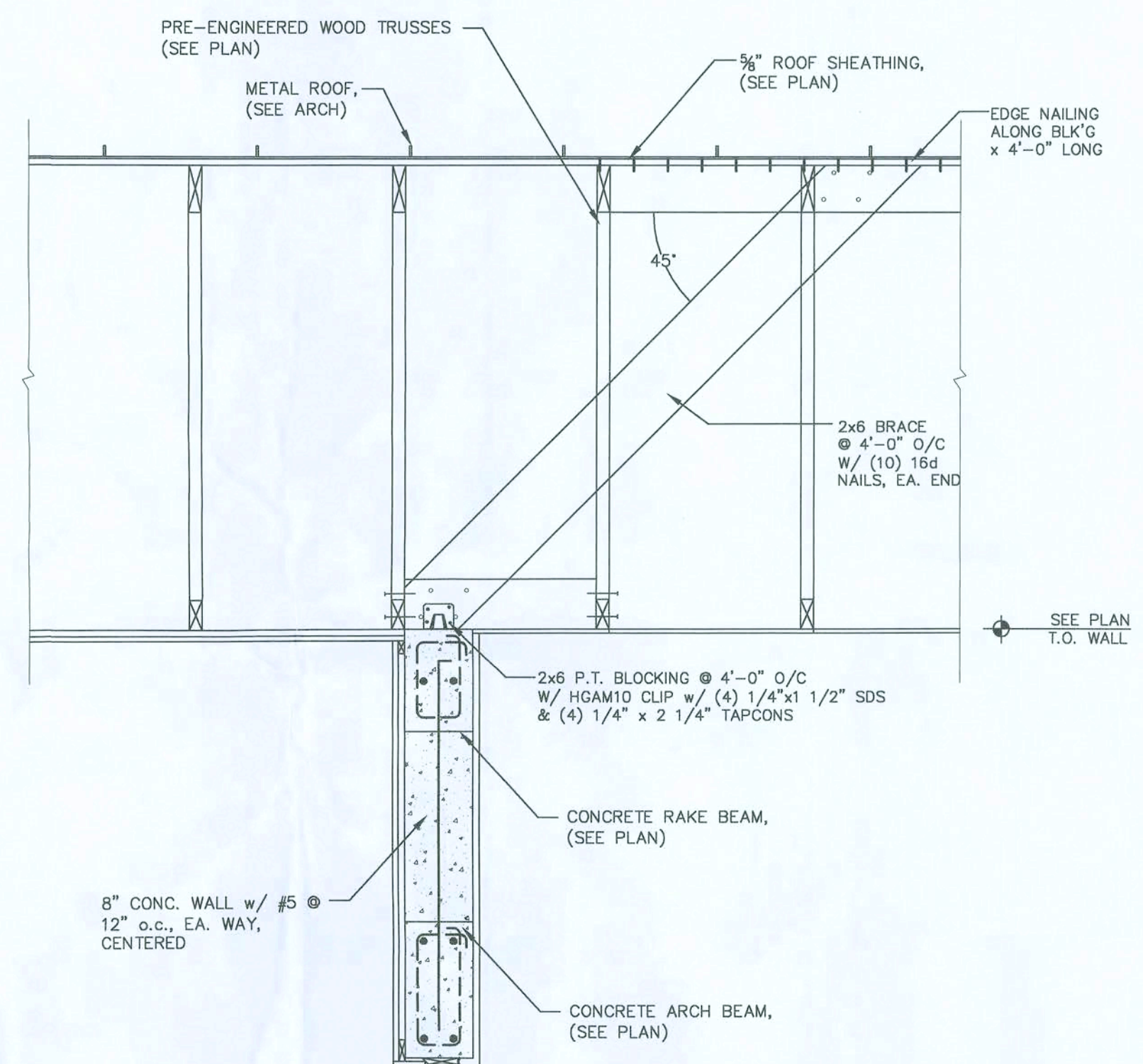
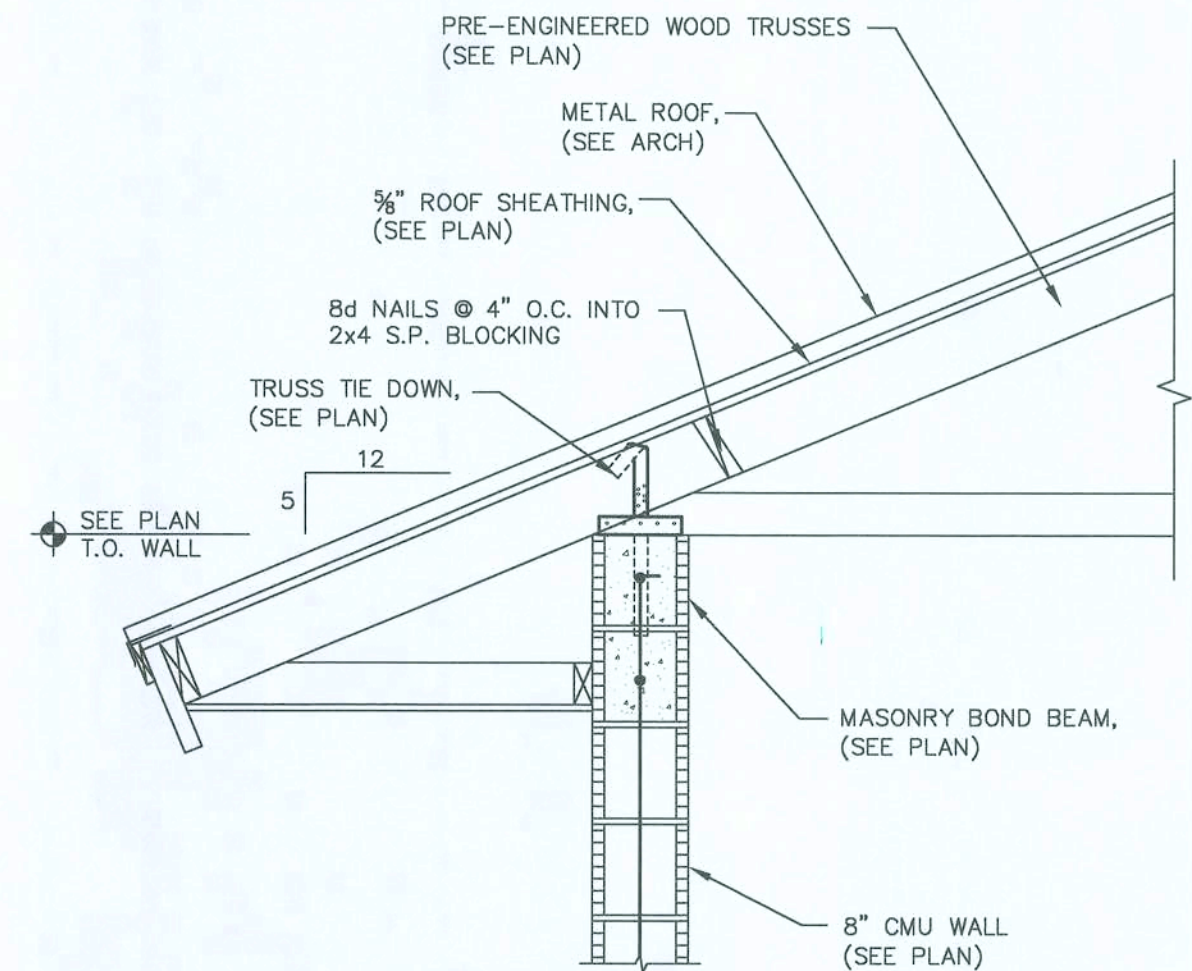
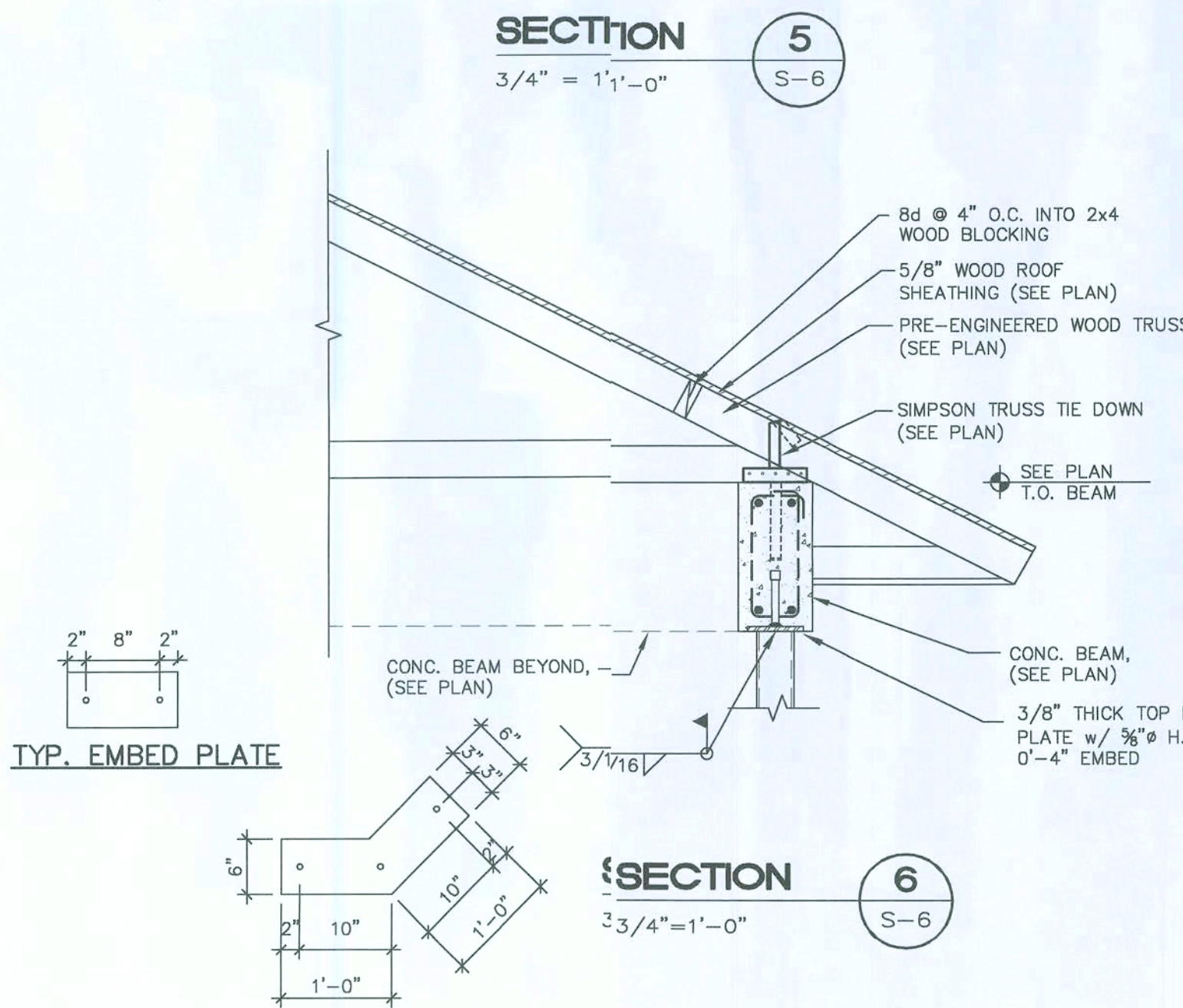
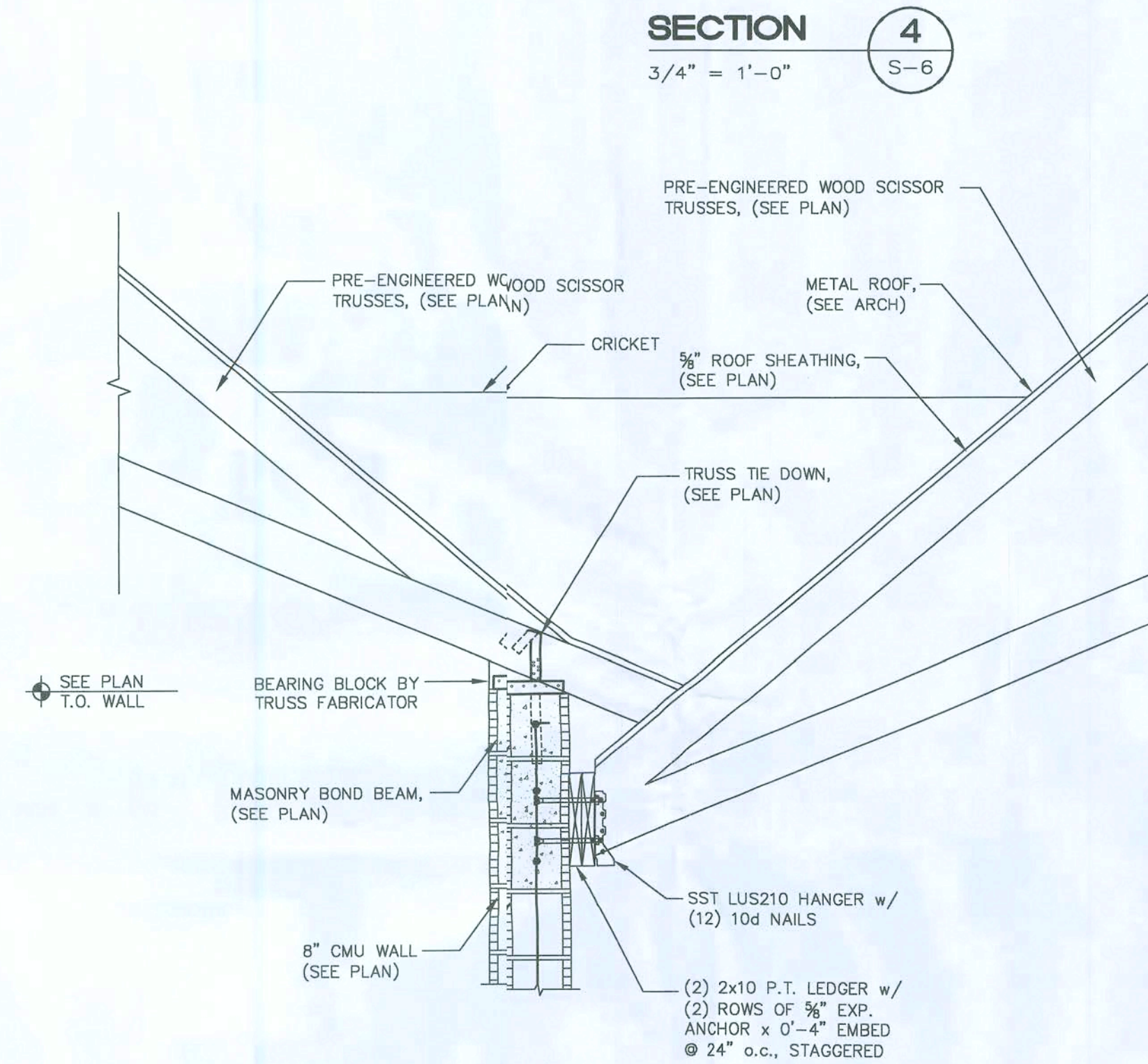
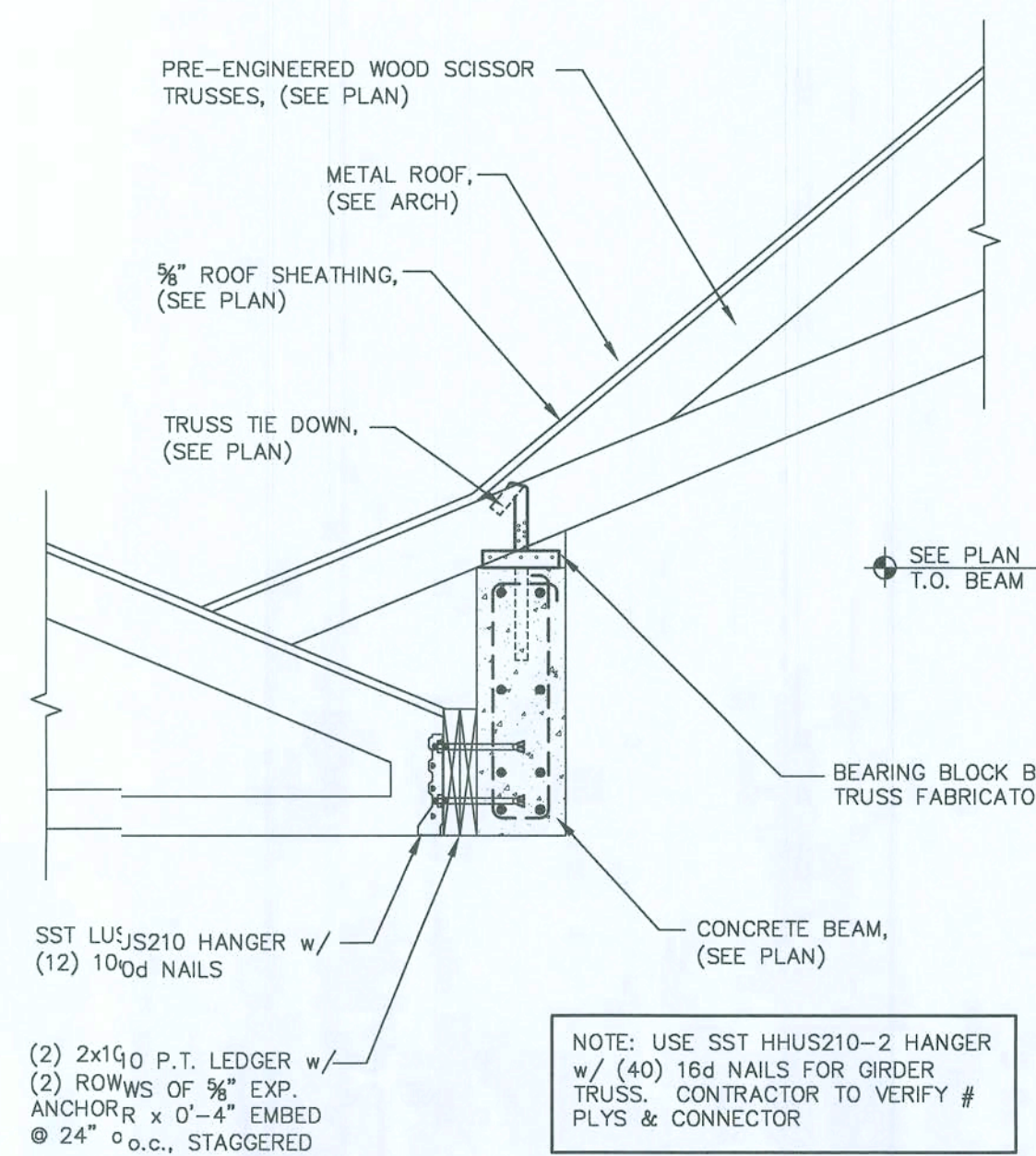
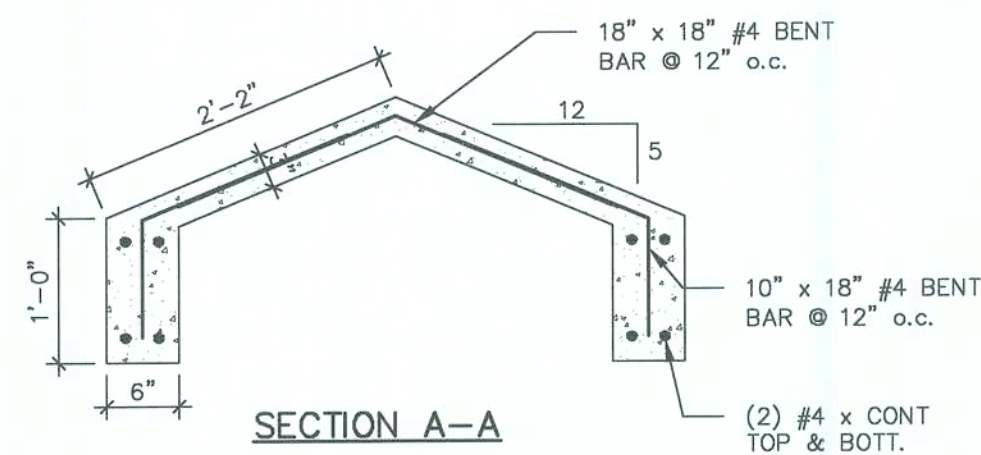
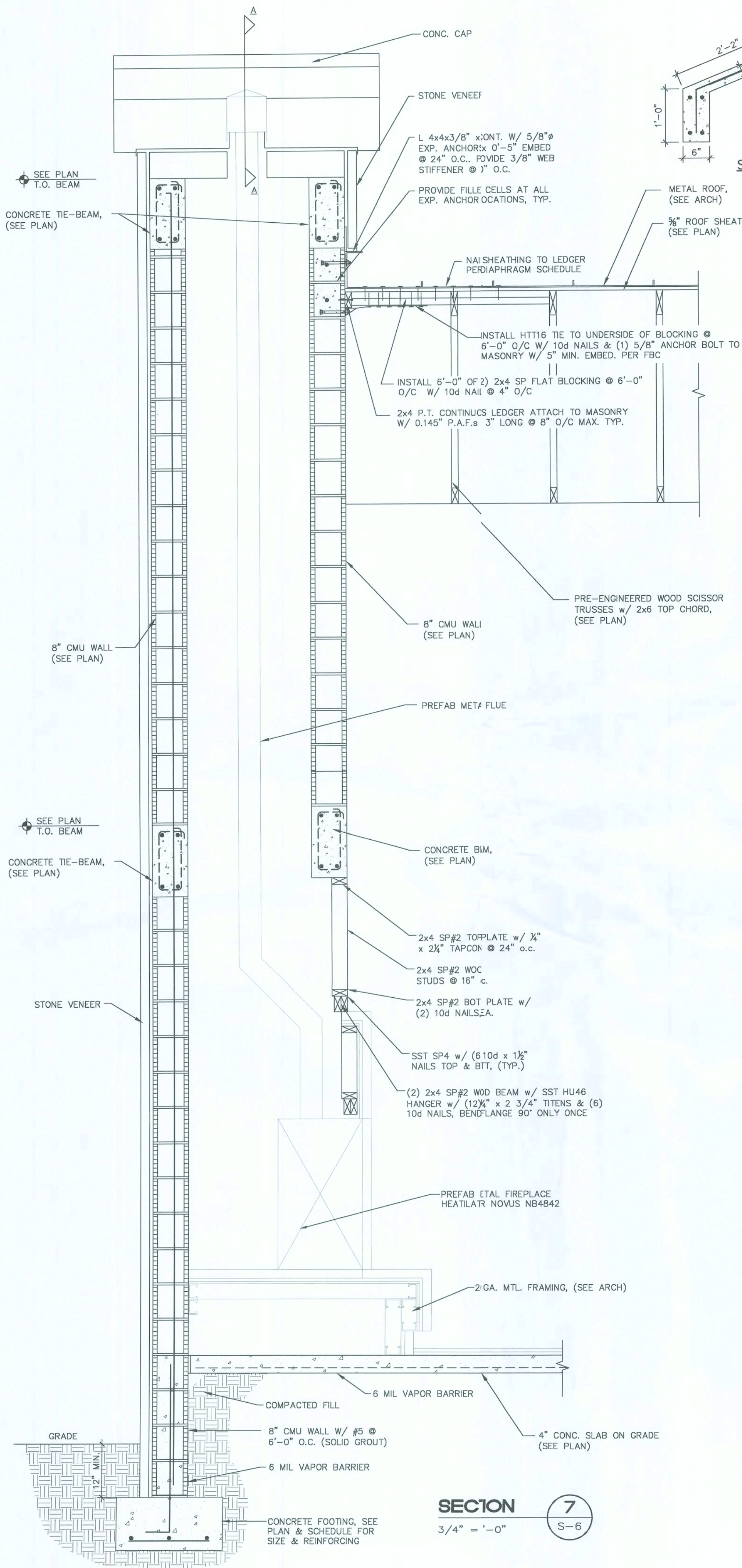


SECTION 3
3/4" = 1'-0"

PERMIT SET

HUSTAD CA 9843
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David L. Hustad
DAVID L. HUSTAD, P.E.
STRUCTURAL ENGINEER
FL PE LIC. #44996
FL SI LIC. #6986745 01/02/08



PERMIT SET

HUSTAD CA 9843

STRUCTURAL ENGINEERING, LLC

756 VIA TOSCANA

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David L. Hustad

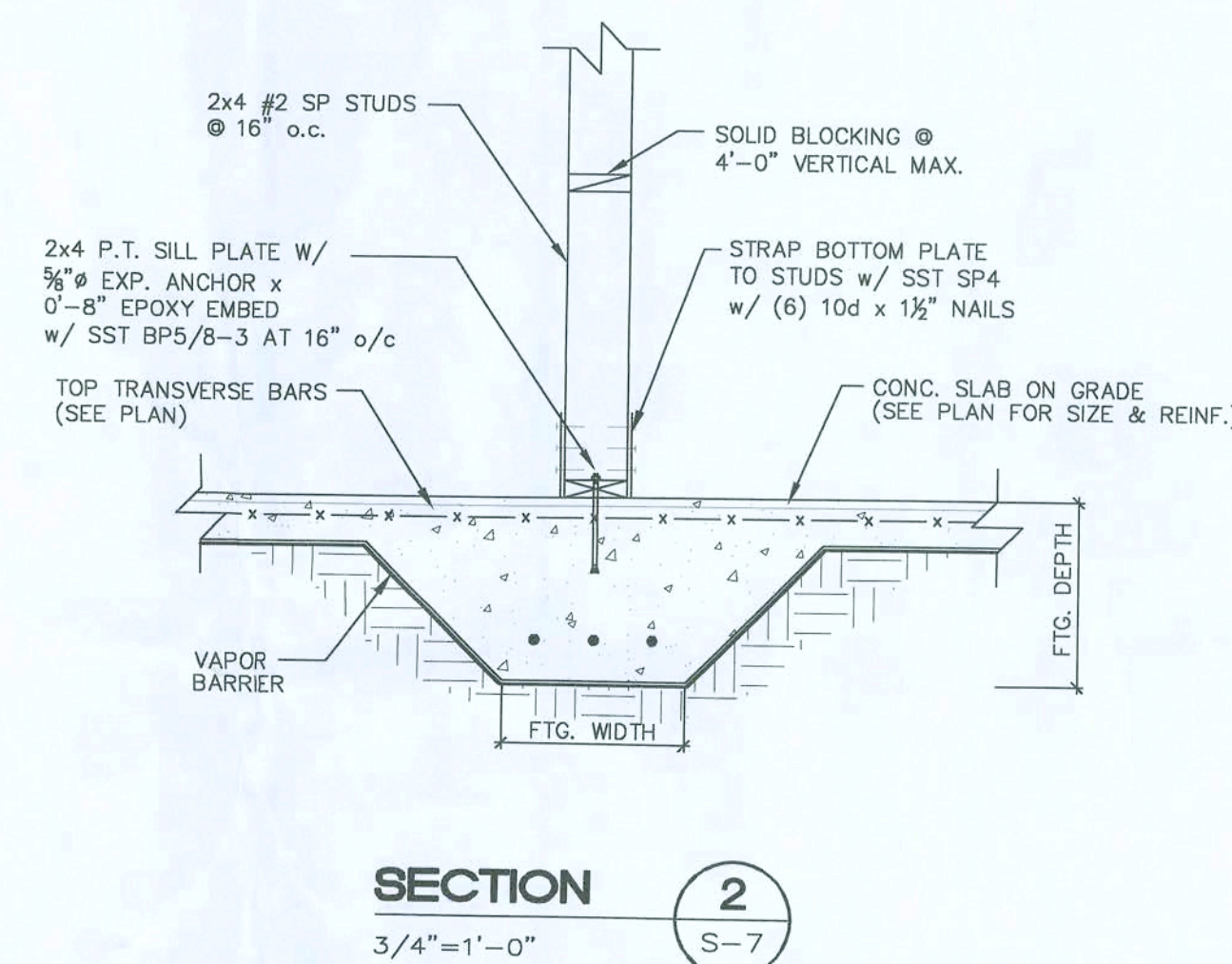
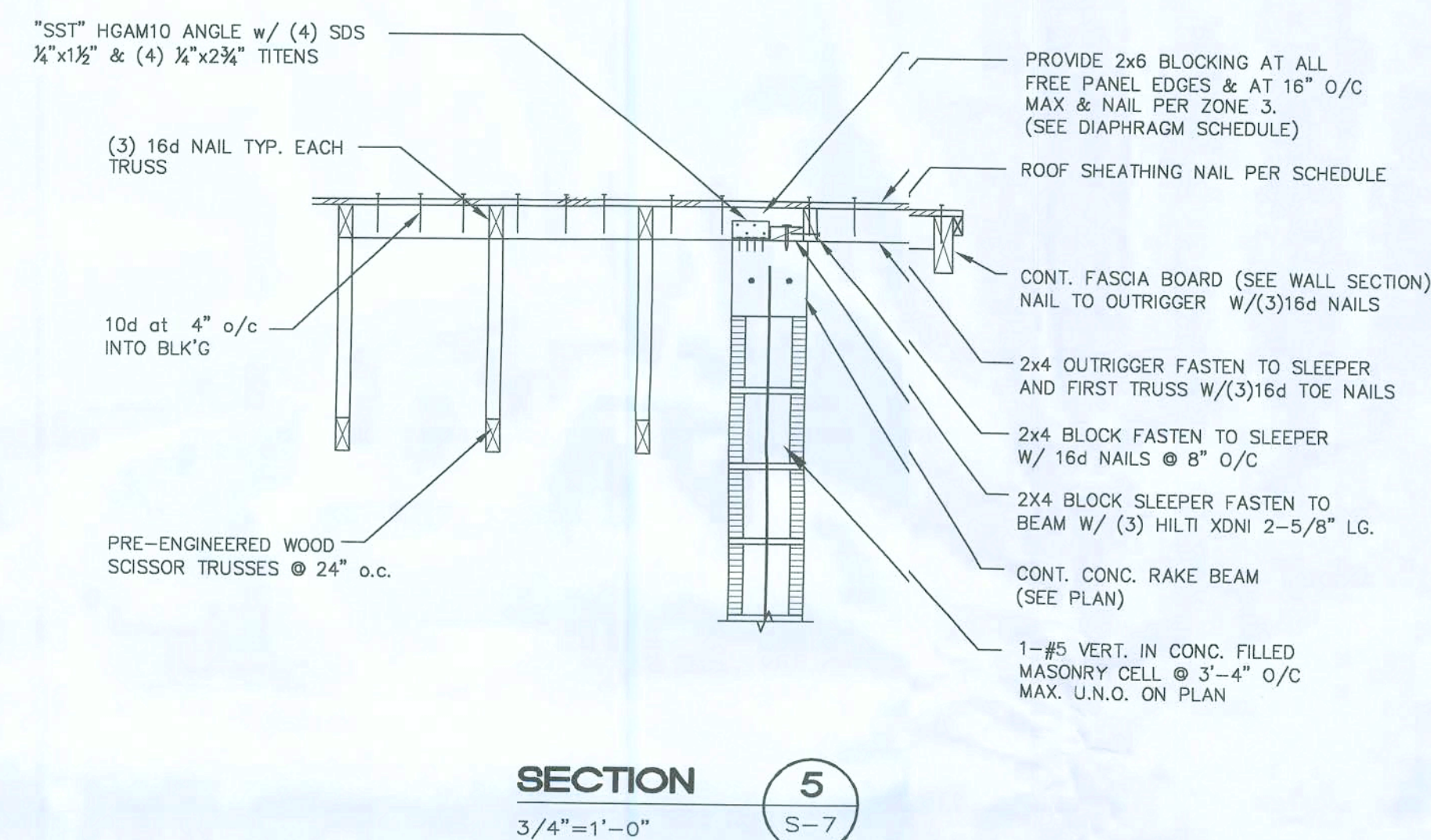
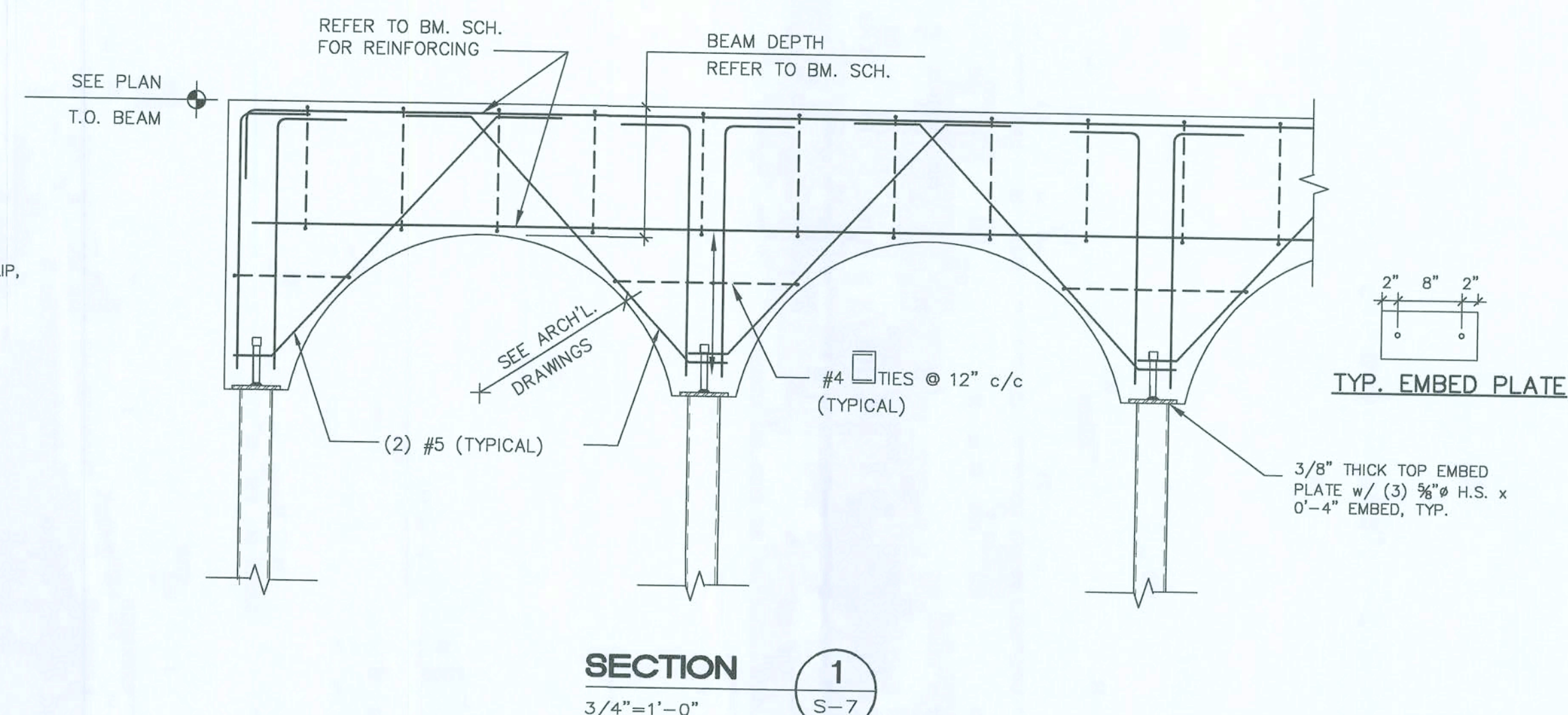
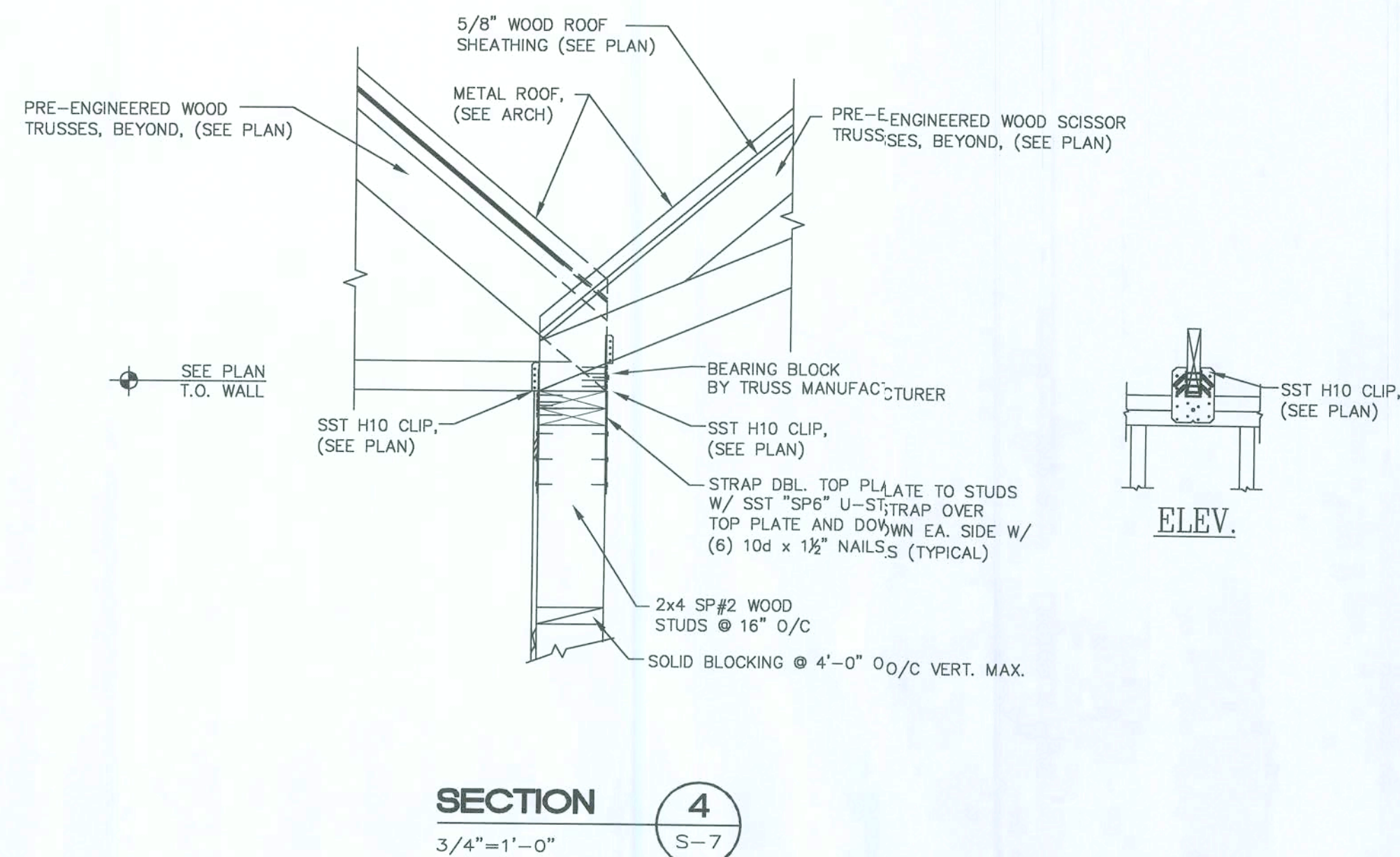
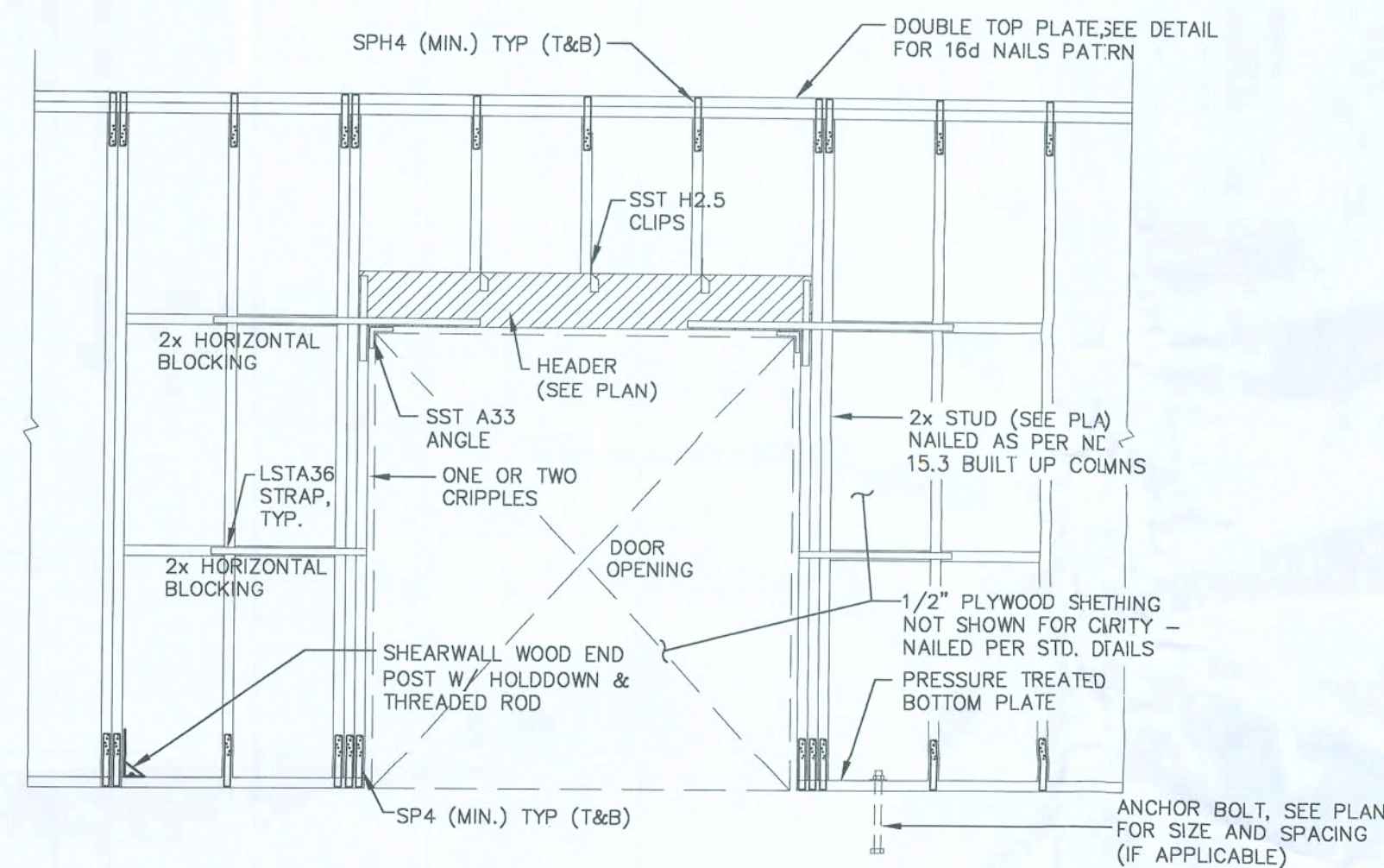
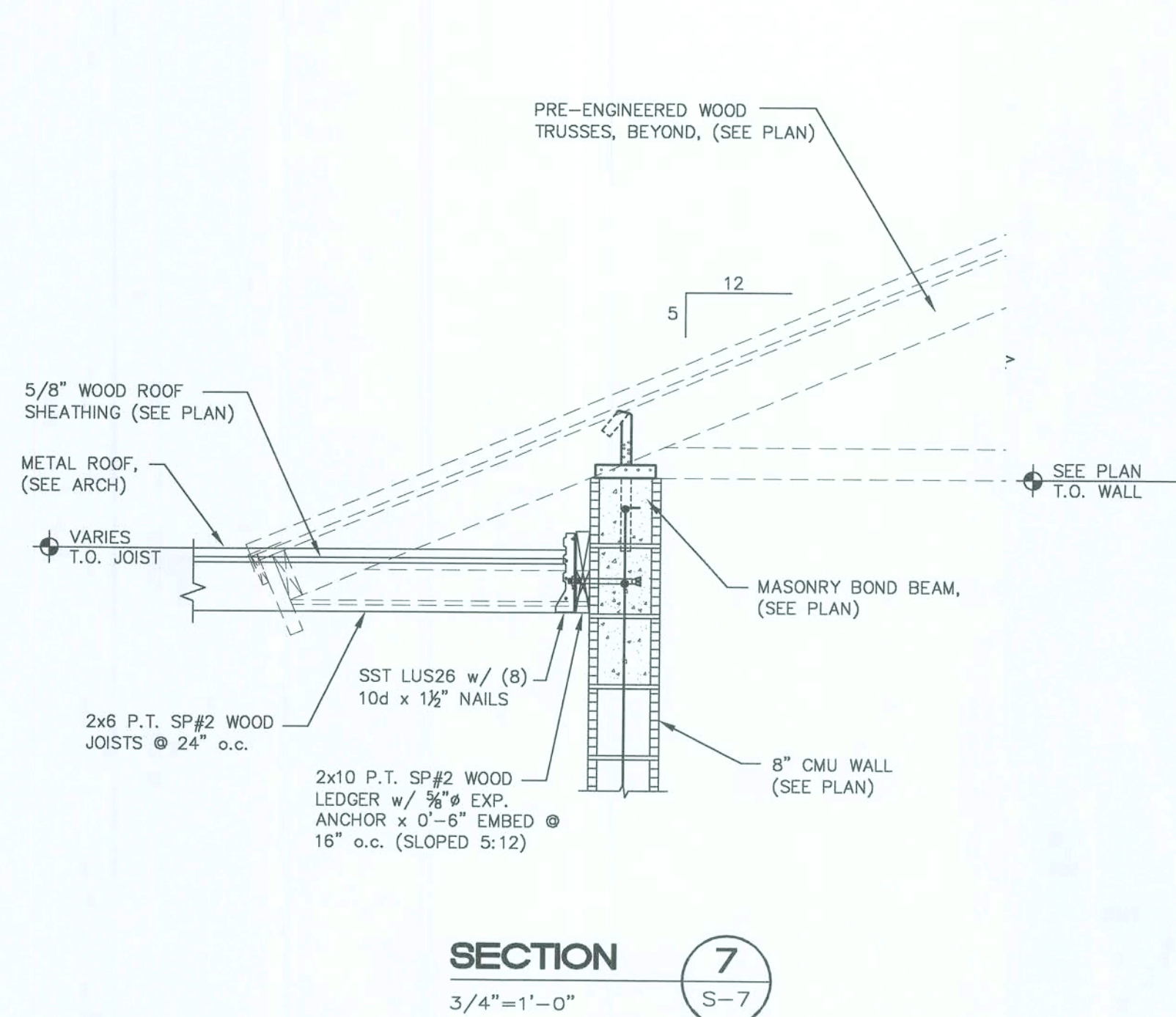
DAVID L. HUSTAD, P.E.

STRUCTURAL ENGINEER

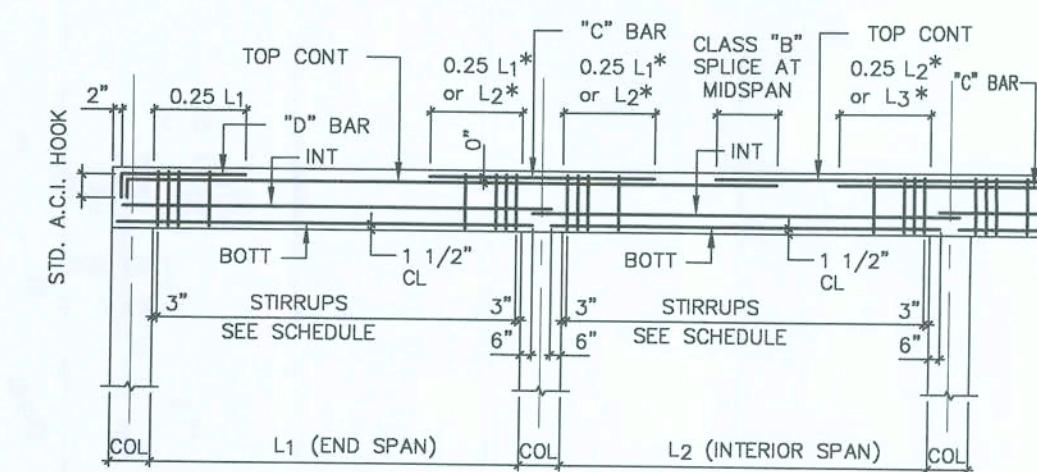
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01/02/08



TYPICAL WOOD SHEARWALL FRAMING AT OPENING
N.T.S.



NOTES:

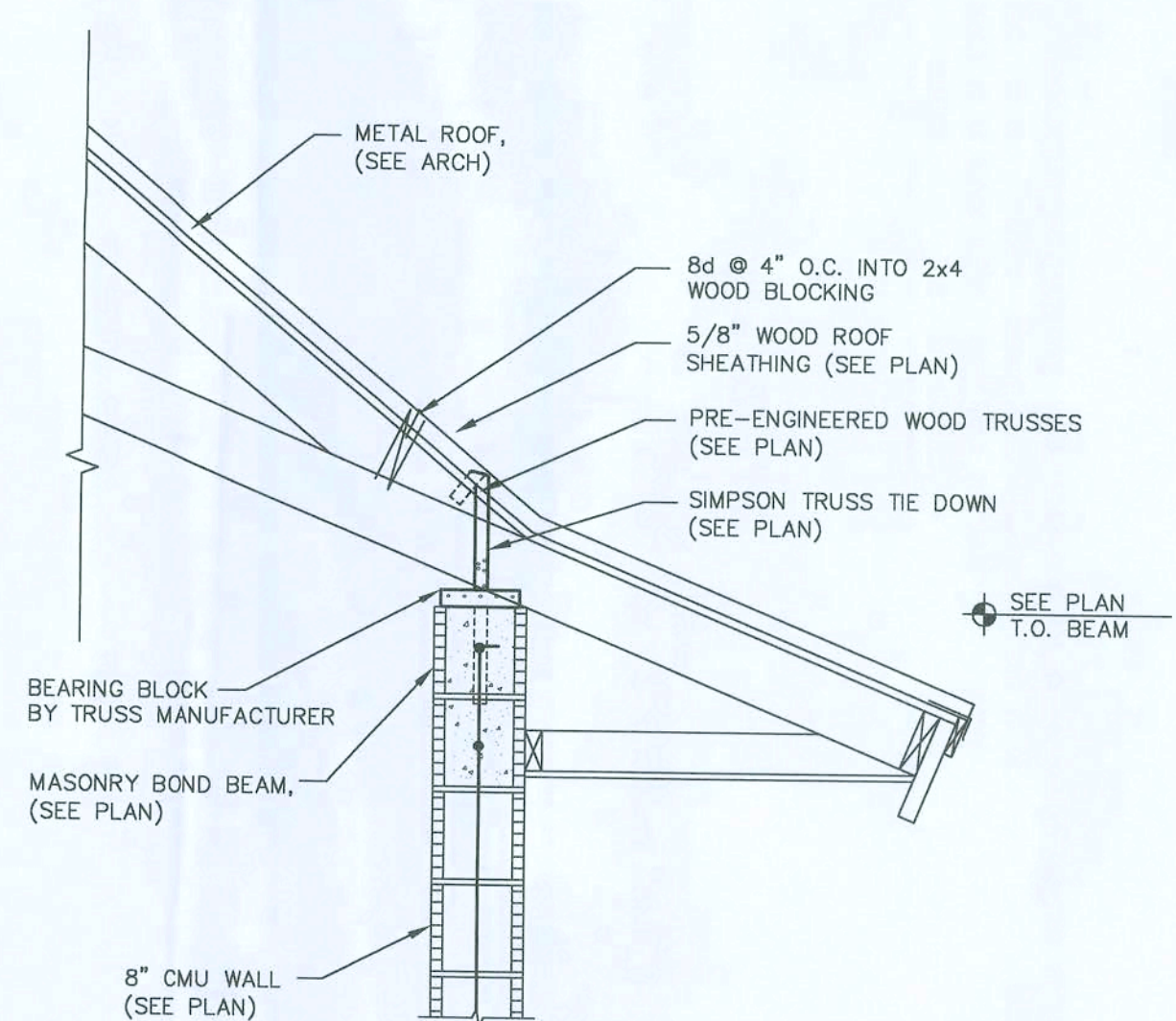
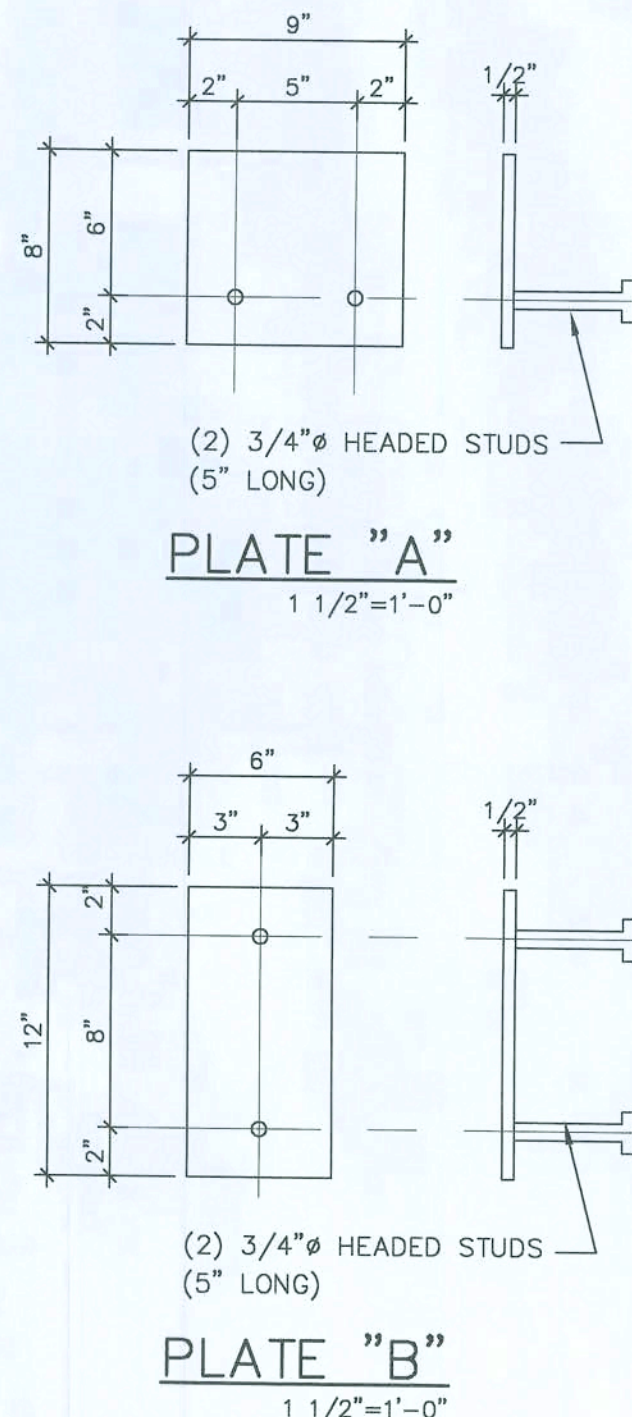
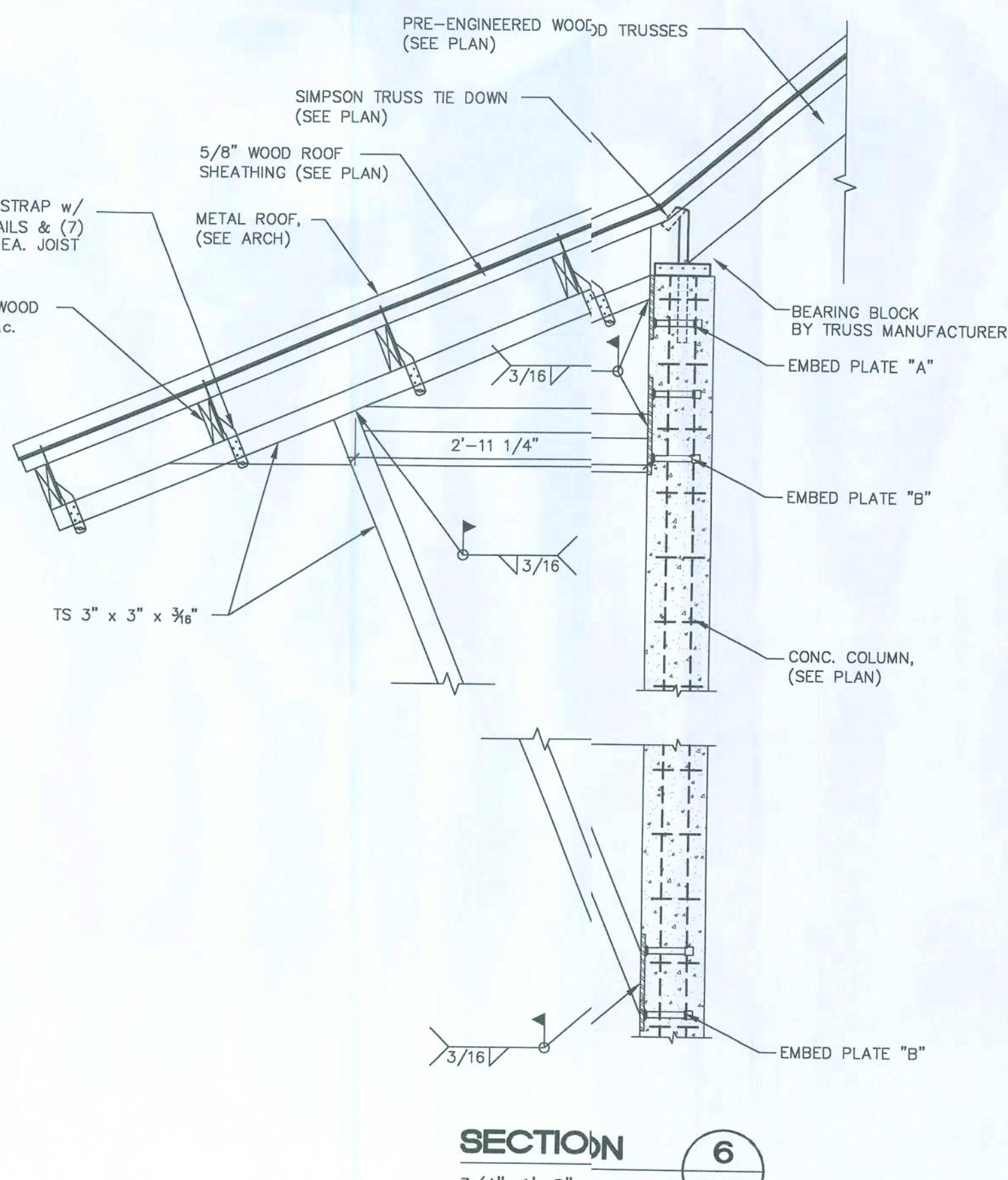
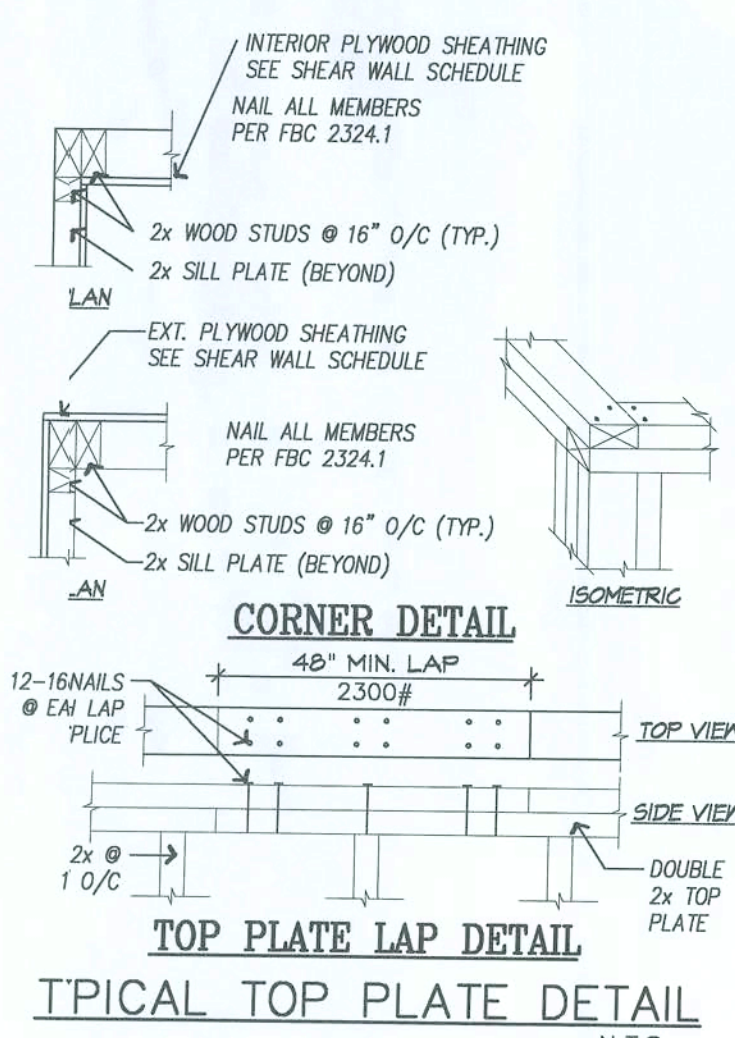
WHEN ADJACENT BEAMS OR THE BEAMS HAVE TOP CONT BARS OF DIFFERENT SIZE, THE TRANSITION SHOULD BE MADE AT MIDSPAN OF THE BEAM WITH SMALLER SCHEDULED BARS. USE LAP SPICE LENGTH OF SMALLER SIZE BAR.

(2) - INDICATES BARS PLACED IN TWO LAYERS. WHERE BARS ARE PLACED IN TWO LAYERS, THE SECOND LAYER BARS MUST BE PLACED DIRECTLY UNDER BARS IN THE FIRST LAYER (IF TOP BAR) OR DIRECTLY OVER BAR IN THE FIRST LAYER (IF BOTT BAR). PROVIDE 1" CLEAR DISTANCE BETWEEN LAYERS OR ONE BAR DIAMETER, WHICHEVER IS THE GREATER DISTANCE.

SCHEDULED BEAM SIZES : [SEE DIAGRAM A]

"B" INDICATES BEAM WIDTH DIMENSION. WHEN BEAM IS OVER A BLOCK WALL, USE ACTUAL BLOCK WIDTH (2' 5/8" or 11' 5/8").

"H" INDICATES BEAM DEPTH DIMENSION. LESS 1 1/2" FOR RECESS FOR BLOCK WALL. DEDUCTED WHERE APPLICABLE, OR MINIMUM DEPTH IN A VARIABLE DEPTH BEAM. COORDINATE BEAM CONFIGURATION WITH ARCHITECTURAL DRAWINGS.



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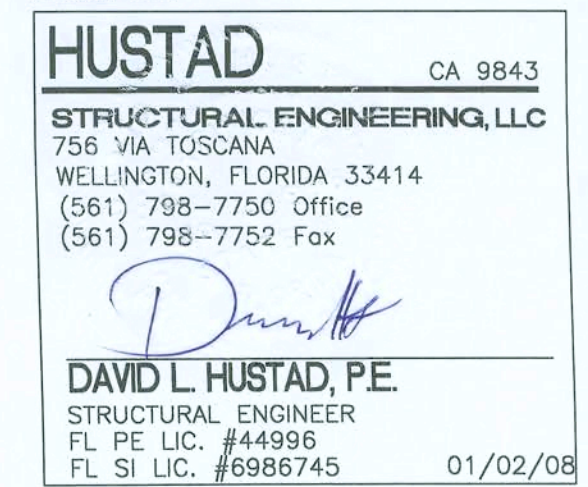
DAVID L. HUSTAD, P.E.

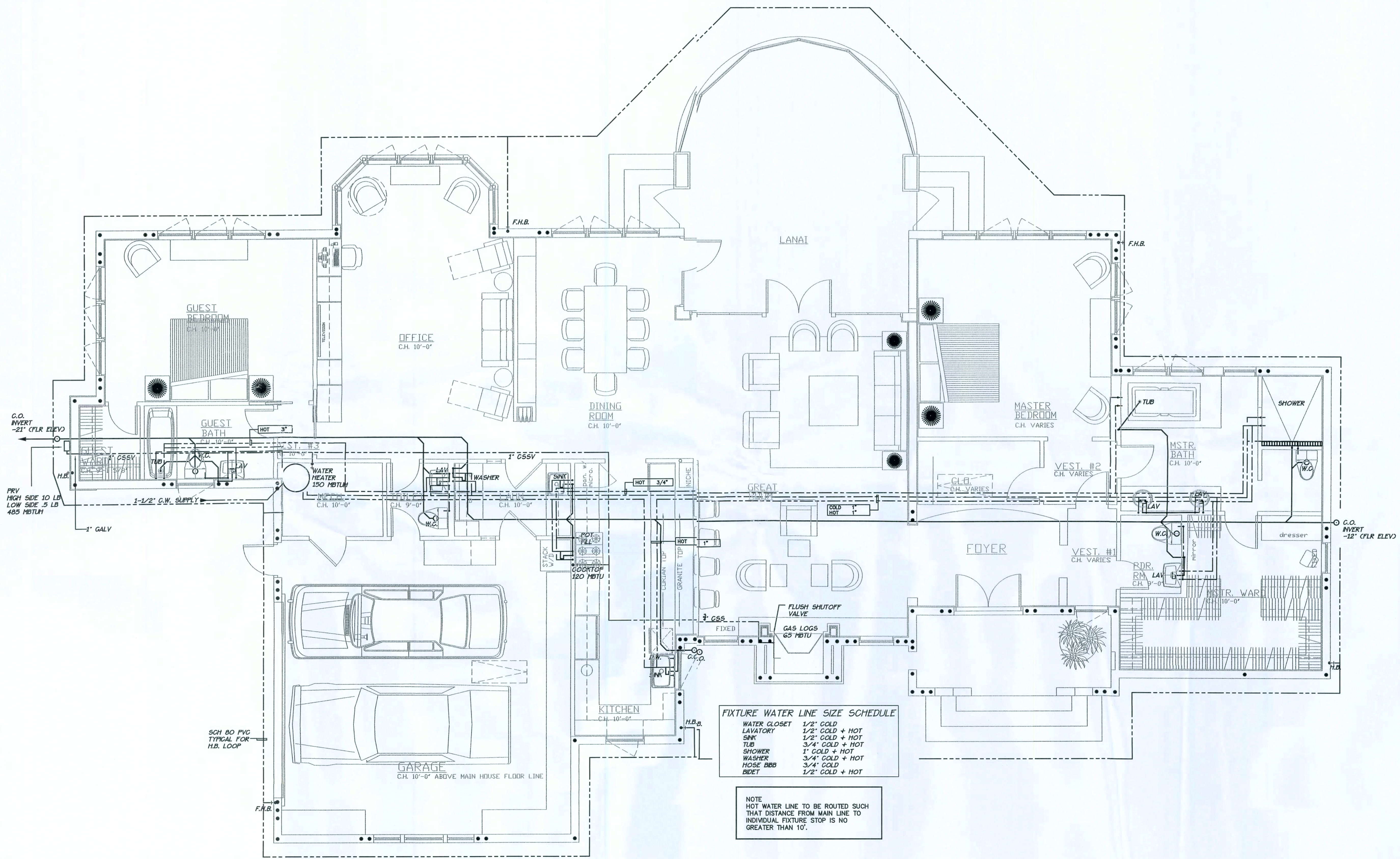
STRUCTURAL ENGINEER

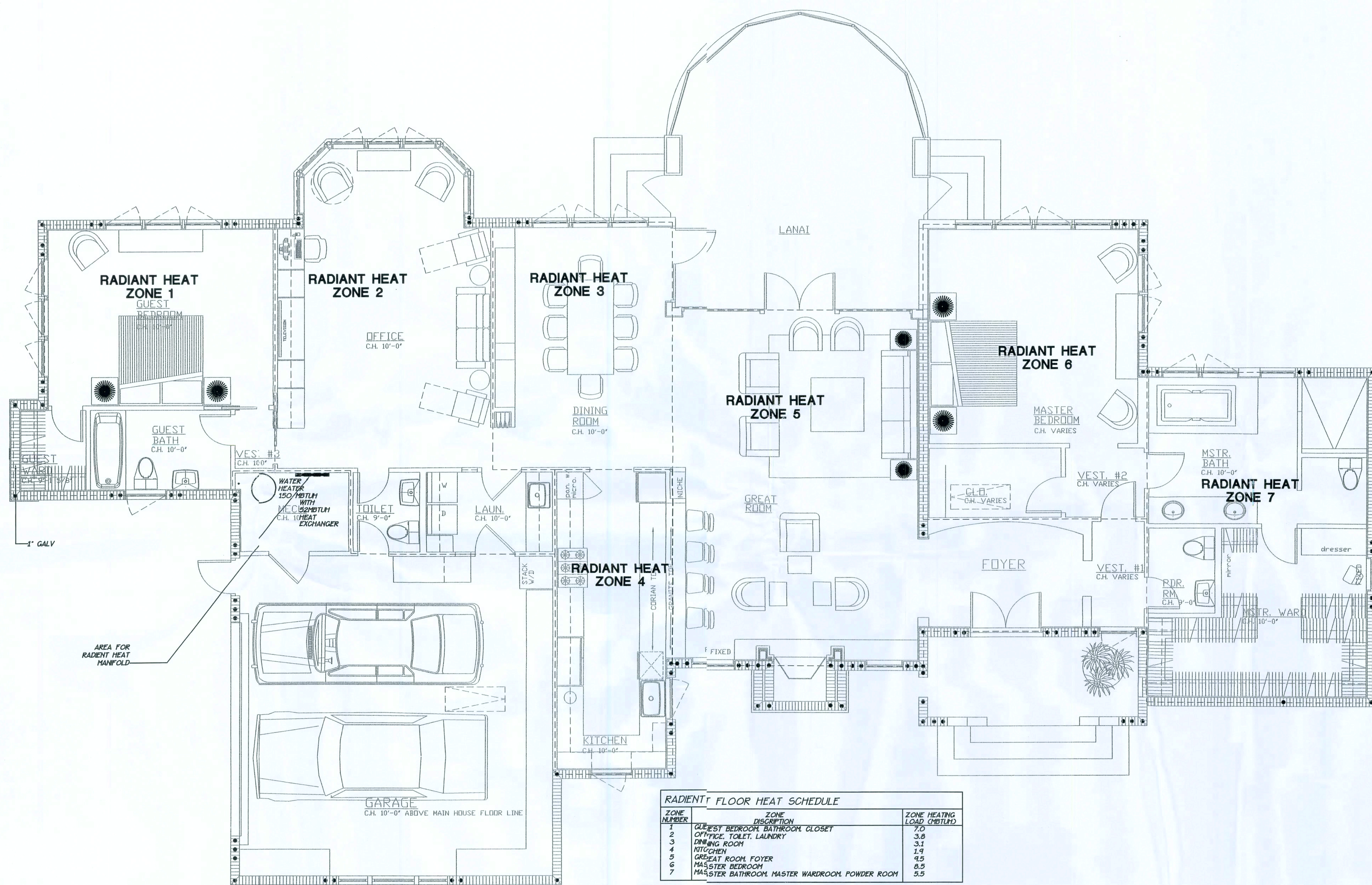
FL PE LIC. #44996

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01/02/08







RADIANT FLOOR HEAT SCHEDULE		
ZONE NUMBER	ZONE DESCRIPTION	ZONE HEATING LOAD (MBTUH)
1	GUEST BEDROOM, BATHROOM, CLOSET	7.0
2	OFFICE, TOILET, LAUNDRY	3.8
3	DINING ROOM	3.1
4	KITCHEN	1.9
5	GREAT ROOM, FOYER	4.5
6	MASTER BEDROOM	8.5
7	MASTER BATHROOM, MASTER WARDROOM, POWDER ROOM	5.5

PLUMBING SPECIFICATIONS

1. SCOPE
- A. Plumbing contractor shall furnish all labor, materials and equipment necessary for the complete installation of the sanitary sewer system (including soil and vent piping), water service, connection to water meter, tap valves, boxes, cold and hot water supply system, plumbing fittings, fixtures and trim; and all related fittings and controls. Water meter and fees by owner.
- B. All excavation and backfill as required for this phase of construction, shall be part of this contract.
2. CODES AND STANDARDS
- A. All work, materials and equipment supplied and installed under this division shall comply with the latest edition of the following codes as amended by the governing body:
- Standard Building Code, including all appendices
 - Local County & City Codes and Regulations
 - 2004 Florida Building Code (Plumbing)
3. SUBMITTALS
- A. See schedule on drawings.
4. PERMITS AND INSPECTIONS
- A. All permits and fees for permits and inspections shall be paid for by this contractor.
5. MATERIALS
- A. Sanitary waste
- a) Below grade - Schedule 40 PVC.
 - b) Above grade - Cast Iron No Hub
 - c) Vent System - Schedule 40 PVC.
- Schedule 40 PVC-Foam Core or CPVC is an unacceptable substitute.
- B. Domestic Water Piping
- a) Below grade - Soft copper type "K"
 - b) Above grade - Type "L" copper sweated or flanged
- Joint to be wrought or cast bronze. Lead Free solder is to be used on all joints.
- C. Provide and install Plumbing Fixtures as scheduled on drawings. Complete system (fixturs and equipment) shall be given an in-service test after completion of installation.
- D. Underground valves shall be installed in precast concrete boxes.
- F. Furnish and install approved air chamber or shock absorbers & shutoff valves with accesspanels at each fixture group.
6. INSTALLATION
- A. Use manufacturers templates. Caulk where required. Provide blocking for all fixtures as aquired. All water piping within the building shall be copper and run continuous above the ceiling. No jointbelow slab. All piping shall be properly supported with hangers of compatible material and all water pipes pass through concrete shall be sleeved to prevent chemical reactions.
- B. All Hot water piping to be insulated. Material to be 1" sectional armatex. All compones are to be of the same manufacturer. (taps, adhesive, and exterior finishes) Install as per manufacturers recommendations.
- C. Verify inverts of sewer and drainage connections before installing sewer lines. Building drainage system is based on 1/8" / ft. min. slope.
- D. All work shall be coordinated with other trades to avoid interference with the progress of construction.
- E. Hose bibbs shall be installed where indicated on the drawings and shall have separate 3/4" main feed. Hose bibbs shall have a removable key handle with hose connection vacuum breaker. Fastn securely to wall. Install 18" above finish slab.
7. CLEAN-UP
- A. On completion of work, remove all excess material, equipment and debris. Polish all plat or polished fittings. Leave work in clean condition per General Conditions.
8. GUARANTEE
- A. The Plumbing contractor shall deliver to owner a written guarantee that the plumbing work is free from defects in materials and workmanship for a period of one year, from the date of final acceptance and will repair or replace all work which becomes defective (not due to ordinary use) at no expense to the owner.

PLUMBING LEGEND

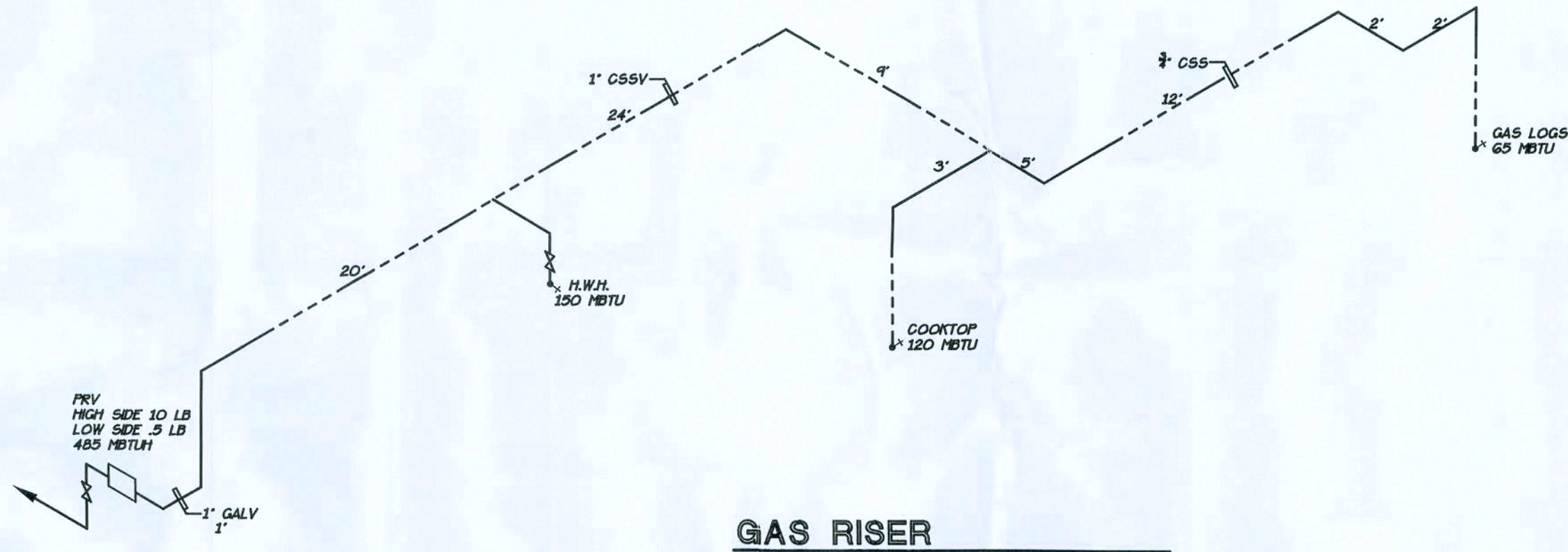
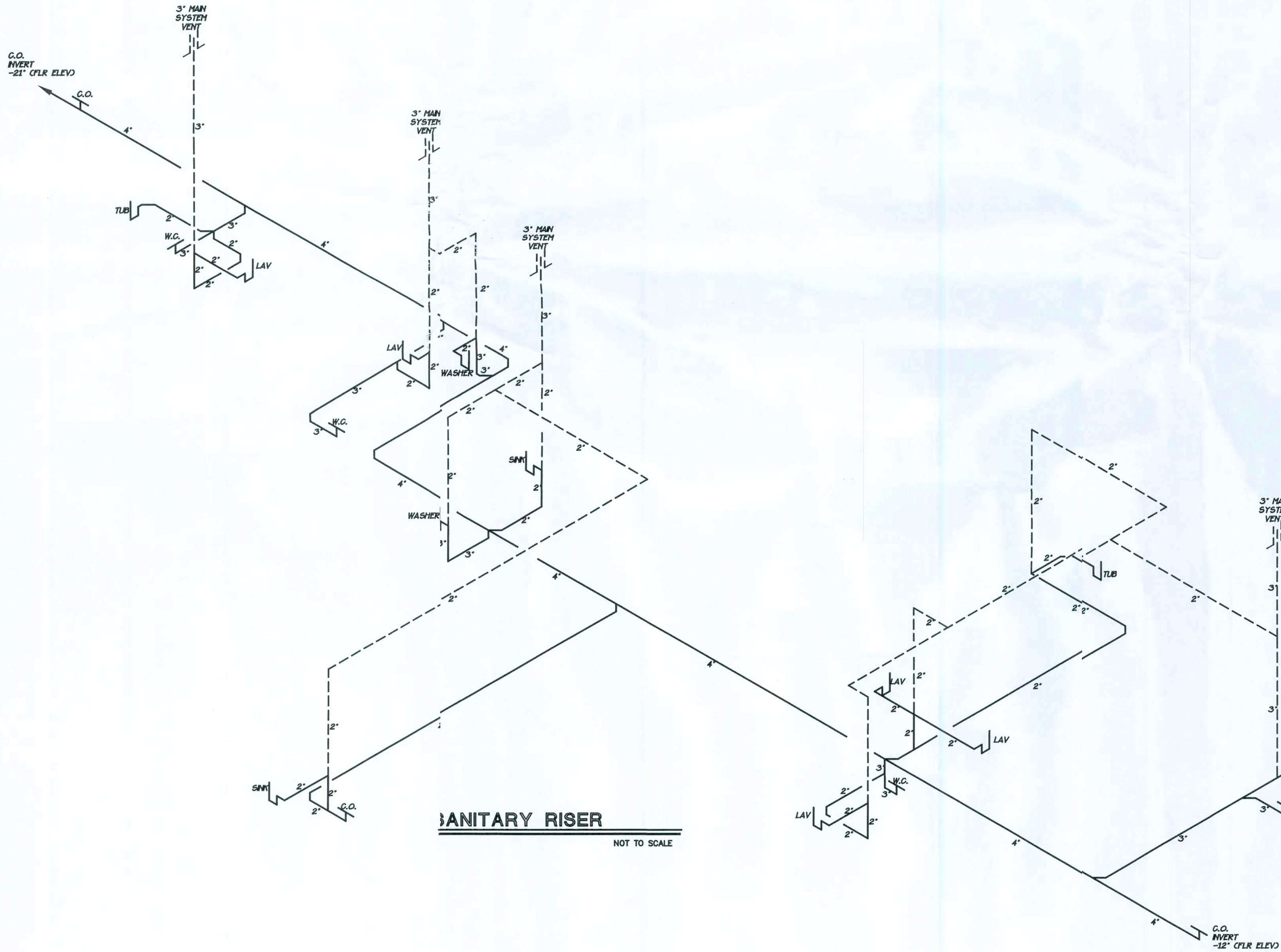
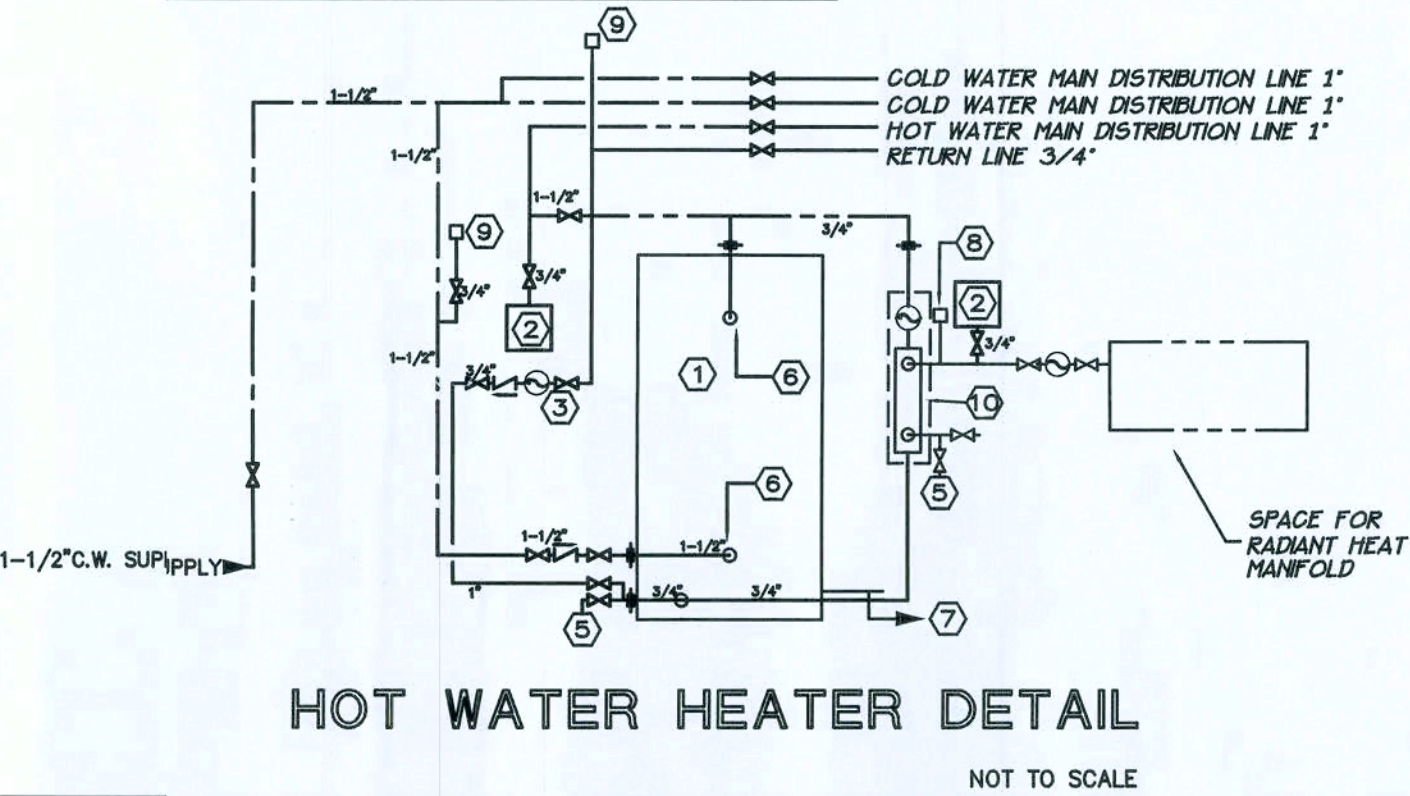
ABBREVIATION	DESCRIPTION
W.C.	WATER CLOSET
LAV	LAVATORY
SH.	SHOWER
W	WASHER
D.W.	DISH WASHER
GCO	GRADE CLEAN-OUT
WCO	WALL CLEAN-OUT
VTR	VENT THRU ROOF
H.B.	HOSE BIBB
F.H.B.	FLUSH HOSE BIBB -WOODFORD #B24P-3/4
SITE H.B.	SITE HOSE BIBB -WOODFORD #Y24-3/4"

PLUMBING PIPING LEGEND

LINE TYPE	DESCRIPTION
---	COLD WATER
---	HOT WATER
---	HOT WATER RETURN
---	SANITARY SEWER
---	VENT
---	GAS

- NOTES
- 1) AO SMITH BTH-150 WITH MUFFLER.
 - 2) AMTROL 1 WX-200.
 - 3) GRUNDFOS UP-15-18-FLANGED END CIRCULATOR PUMP.
 - 4) UNCH-TYPICAL AS NECESSARY FOR FUTURE TANK REMOVAL.
 - 5) 3/4" TO 5/8" HOSE ADAPTON WITH 3/4" BALL VALVE.
 - 6) 1-1/2" DTH-ELECTRIC FITTING TYPICAL OF 4.
 - 7) 1/2" CLEAR TUBE TO FLOOR DRAIN OR CONDENSATE COLLECTION SYSTEM
 - 8) AUTO AIR VENT-GRUNDFUSYGE079T
 - 9) VACUUM BREAKER 12" ABOVE TANK LEVEL.
 - 10) CIRCULATING LOOP DOUBLE WALL HEAT EXCHANGER RATED FOR 35 MBTUH COMPLETE WITH PRIMARY LOOP CIRCULATOR AND 24V CONTROL RELAY. A.O SMITH MODEL BRILD-32.

LEGEND
⊕ BOOSTER PUMP
⊞ SHUTOFF VALVE
⊞ CHECK VALVE



SANITARY RISER

NOT TO SCALE

GAS RISER

NOT TO SCALE

TEELE & ASSOCIATES
CONSULTING ENGINEERS
2103 CORPORATE DRIVE
BOYNTON BEACH, FLORIDA 33426 (561) 738-4747
CERT. OF AUTH. NO. 4659

MICHAEL A. TEELE, P.E.
ENGINEER OF RECORD
FLORIDA REGISTRATION
P.E. 32066

DATE:

DEC 20 2007

NEW RESIDENCE FOR

MR. AND MRS. WADE HORNSBY

HIGH SPRINGS,

FLORIDA

SANITARY & GAS
RISER

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

P-3

the lawrence group

ARCHITECTS 205 WORTH AVENUE, PALM BEACH, FLORIDA 33480 P.H. (561) 855-0870

8-3-07

NOTE:
FOR LOCATION OF CONDENSING UNIT CU-2,3
SEE SITE PLAN, LOCATION BY ARCHITECT.

NOTE:
FOR LOCATION OF CONDENSING UNIT CU-1
SEE SITE PLAN, LOCATION BY ARCHITECT.

EXHAUST FAN DETAIL

NOT TO SCALE

NOTE:
10'-0" REQ'D. PER CODE BETWEEN OUTSIDE
AIR INTAKE AND ALL EXH. OP'GS.
MECH. CONTR. TO VERIFY ALL DUCT SIZES IN
FIELD PASSING THRU & BETWEEN JOIST

EXHAUST FAN DETAIL

NOT TO SCALE

MICHAEL A. TEELE, P.E.
ENGINEER OF RECORD
FLORIDA REGISTRATION
P.E. 32066

DATE: DEC 20 2007

TEELE & ASSOCIATES
CONSULTING ENGINEERS
2903 CORPORATE DRIVE
BOYNTON BEACH, FLORIDA 33426 (561) 738-4747
CERT. OF AUTH. NO. 4689

MECHANICAL SPECIFICATIONS

1. SCOPE

- A. The work covered in this section of the specifications consists of furnishing all labor, equipment, and material and in performing all operations in connection with the installation of the complete air conditioning and heating system. All work will be complete and in accordance with this section of the specifications and applicable drawings, and will be subject to the terms and conditions of the contract.

2. SPECIFICATIONS AND DRAWINGS

- A. The mechanical drawings indicate the general arrangement of the air conditioning and heating system. These specifications and drawings shall supplement each other. Equipment, ductwork and piping shall fit into the space allocated and shall provide all necessary clearance for servicing and maintenance.

3. CODES AND STANDARDS

- A. The work shall comply with the latest applicable requirements of the NFPA and all local codes governing this installation as a minimum standard unless specifications listed herein or shown on the plans require a higher minimum standard.

4. PERMITS AND FEES

- A. The HVAC Contractor shall procure all permits and pay all fees associated with the permitting and inspection process. The HVAC Contractor shall also arrange for all inspections.

5. ELECTRICAL

- A. The Electrical Contractor shall furnish and install all conduit, wire, seal-tight, and disconnects. Unless otherwise stipulated, the Electrical Contractor shall connect the air conditioning units. The HVAC Contractor will furnish all materials, wire and connect the thermostat.

6. VIBRATION AND ISOLATION

- A. Both the air handler unit and condensing unit shall be placed on vibration isolators. The HVAC contractor shall take all necessary steps to eliminate all excessive vibration and objectional noise projected by any equipment installed under this contract.

7. INSTALLATION

- A. The HVAC contractor shall supply one thermostat per air system. Staging of heating and cooling shall be indicated on the drawings.
- B. All refrigeration piping to be of Type "L" copper with wrought copper fittings. Joints shall be made with silver solder.
- C. The refrigeration suction lines shall be insulated as follows: above ground with 1/2" "Armstrong Armaflex" below ground/slab with same encased in P.V.C. conduit. Insulation shall be slipped on piping prior to connection. All butt joints to be sealed with an approved adhesive. Installation of condensate line is by the HVAC contractor. Insulate all lines run above ceiling. See detail for underground piping.
- D. The supply and return air duct system shall be fabricated of Johns Manville "Superduct Type 800, 1.5" thick. All fabrication shall be in accordance with the manufacturers written fabrication manual and follow NAIMA Fibrous Glass Duct Construction Standards. Turning vanes shall be provided in duct at all changes in direction. Vanes shall be Johns Manville "Supervane". All joints shall be stapled approximately 2" on center with outward clinching steel staples and Fortifiber "Therm-Lock" closure with automatic bond indicator. Tape shall have minimum 1" overlap on each side of seam.
- E. Supply and return air registers shall be Titus or their Metal Aire equivalent as indicated on the drawings. All supply registers are to be equipped with manual dampers.
- F. Extractors and turning vanes shall be installed where indicated on the drawings in addition to all bends over 45 degrees.
- G. Filters to be 2" Fiberbond Dustlok with Sporex antimicrobial agent and dual ply construction, or its equivalent. Furnish two additional filters for each size of filter used.

8. TESTING AND BALANCING

- A. Upon completion of work the HVAC Contractor shall use accurate meters, instruments of type and size as required to determine proper air flow and distributions. Confirm that all fuse sizes are in accordance to the motor nameplate data.
- B. Air quantities: Check each blower and diffuser as indicated on drawings for correct and adequate diffusion. Outside air quantities to be checked and adjusted as required. After spaces have been brought up to design temperatures and equipment is functioning properly, re-balance, if necessary, by means of calibrated thermometers placed in each room and in open spaces, not over 20' apart. Thermostats: No deviation in temperature of more than 3 degrees Fahrenheit throughout conditioned space. Contractor shall submit complete data report regarding balancing, in addition to various control settings for approval of Architect.

FAN SCHEDULE

UNIT NO.	MFGR. MODEL NUMBER	CFM	SP	RPM MAX.	AMPS/ WATTS	ELECTRIC REQ. VOLT PHASE	REMARKS
EF-1	PANASONIC FV-20NLF1	150	0.20"	VARIES	.46A	120 1	1, 3, 4
EF-2	PANASONIC FV-10NLF1	50	0.20"	VARIES	.31A	120 1	1, 3, 4
EF-3	PANASONIC FV-10NLF1	75	0.20"	VARIES	.31A	120 1	1, 3, 4
EF-4	PANASONIC FV-10NLF1	75	0.20"	VARIES	.31A	120 1	1, 3, 4
EF-5	PANASONIC FV-10NLF1	75	0.20"	VARIES	.31A	120 1	1, 3, 4
EF-6	THERMADOR VTRI000Q	1000	—	VARIES	7.8	120 1	1, CURB

1. FURNISH WITH SPEED CONTROLLER TO ELEC. CONTR. FOR INSTALLATION
2. HANGING VIBRATION ISOLATORS
3. FLEXIBLE CONNECTIONS
4. BACKDRAFT DPR.

GRILLE AND DIFFUSER SCHEDULE

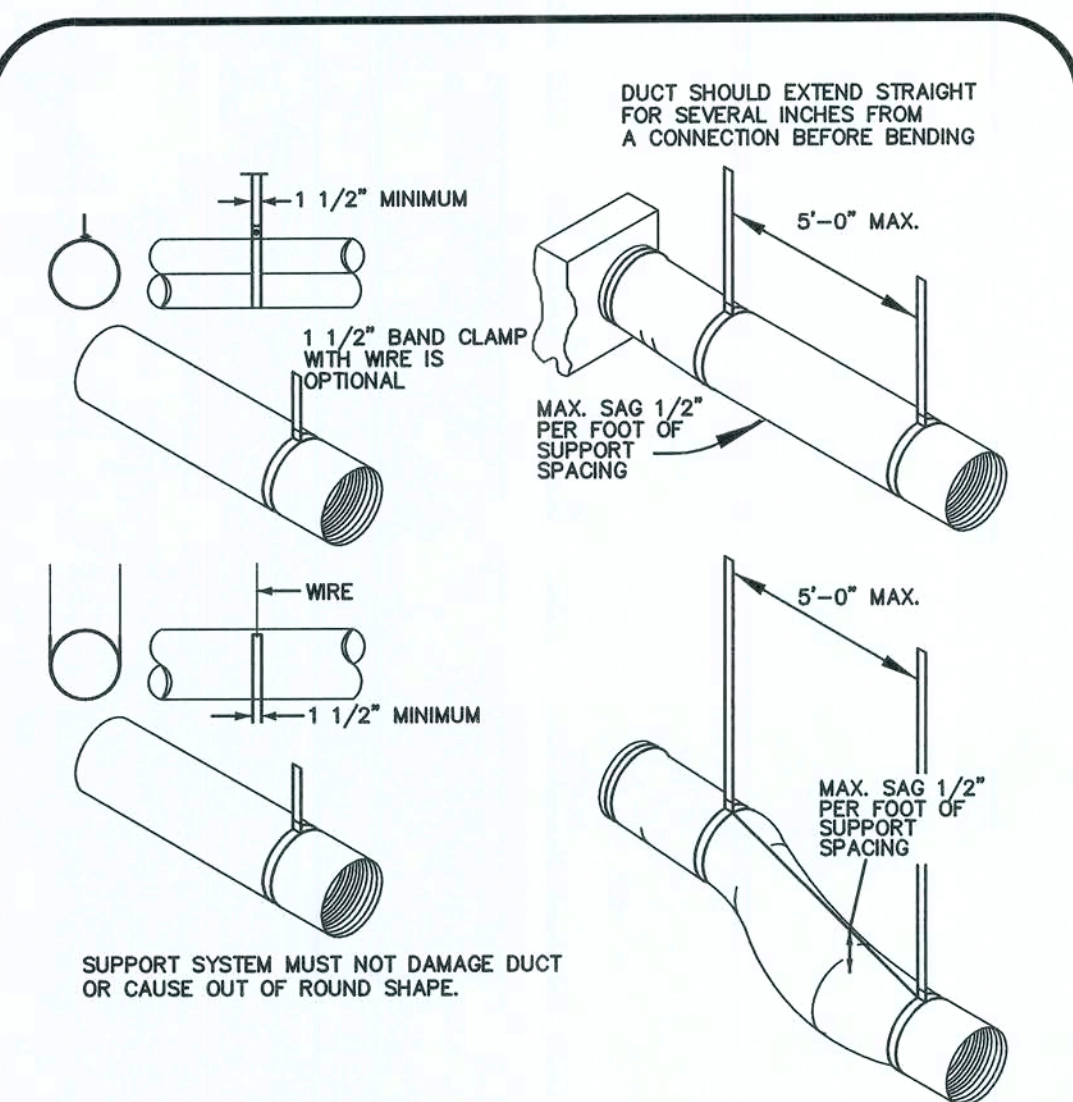
DESIGN	MFGR. MODEL NUMBER	SIZE	DIRECTION	CFM	TYPE	MNT. TYPE	FINISH	REMARKS
1	TITUS / CT-481	SEE PLAN	SEE PLAN	SEE PLAN	SUP/RET/EXH	—	WHITE	CEILING / SIDEWALL

- NOTE
- DIFFUSER TYPE 1 INSTALLATIONS TO HAVE HIDDEN FLANGES
- CONTRACTOR TO PROVIDE FIELD BUILT PLENUMS.
- AIR HORIZON ACCEPTABLE EQUAL.

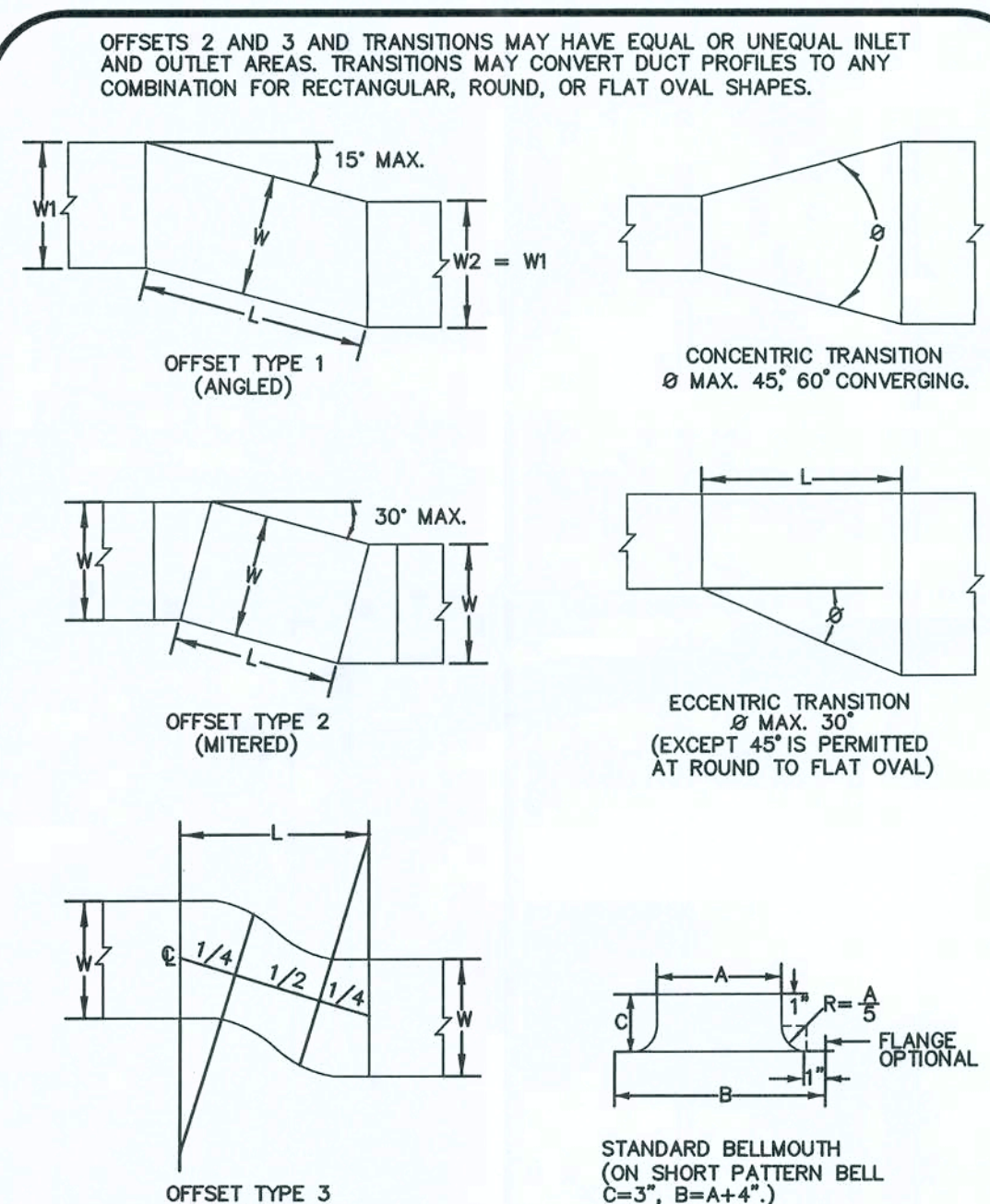
DEHUMIDIFIER UNIT SCHEDULE

UNIT NO.	MANUFACTURER	MODEL NO.	CFM	S.P.	VOLTAGE	AMPS	REMARKS
DH-1	ULTRA-AIRE	UA-100V	240	0.10"	120	6.8	17" x 24" x 48"

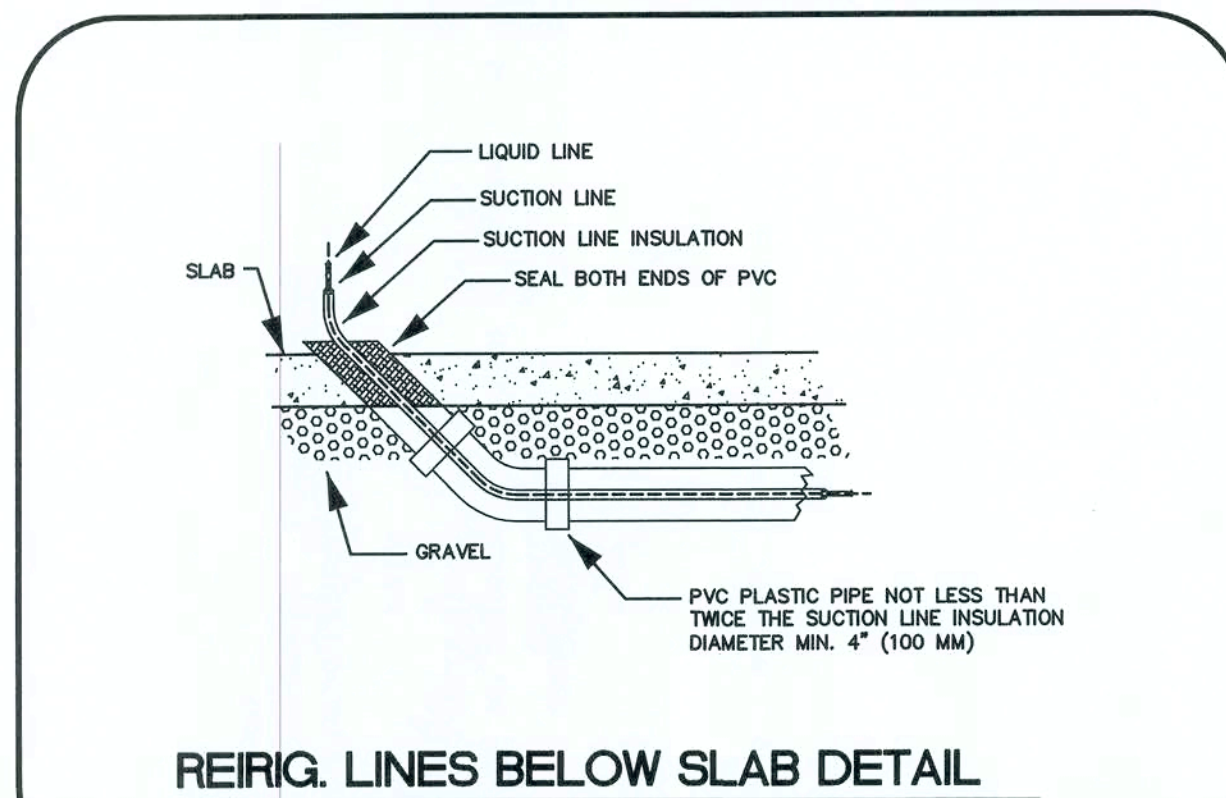
REMARKS:



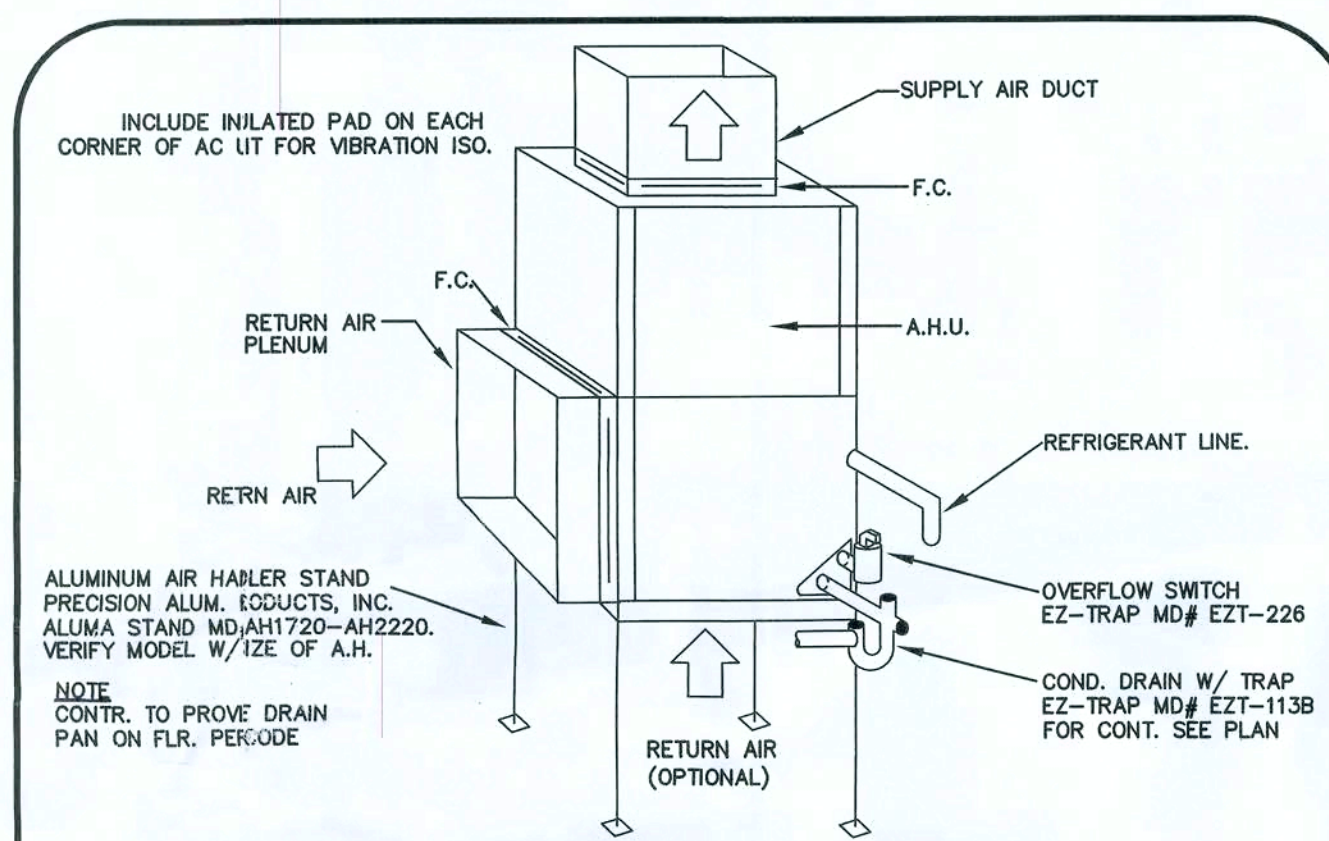
FLEXIBLE DUCT SUPPORT



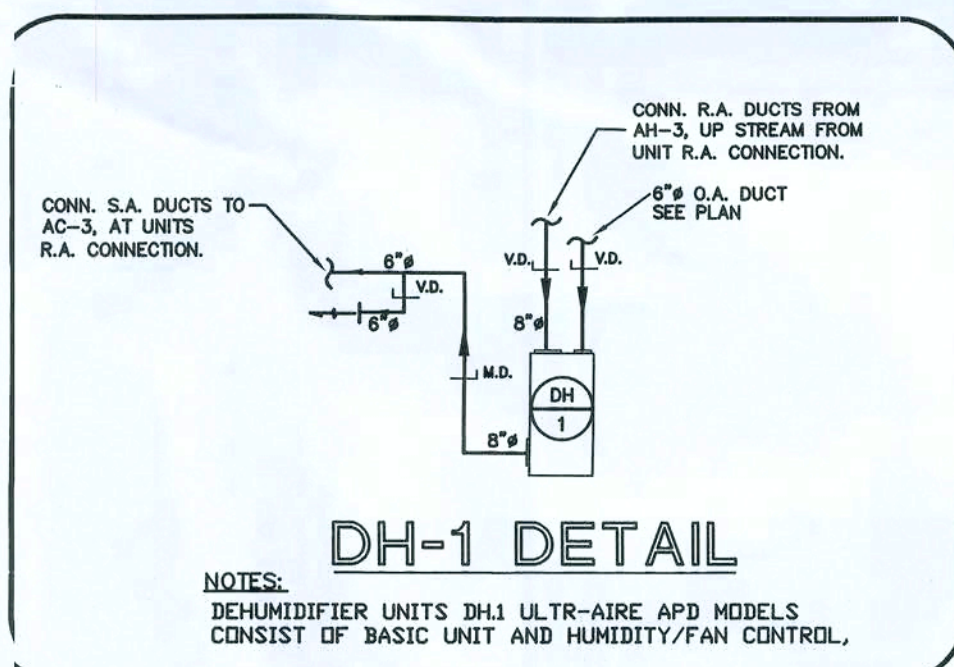
TRANSITION DETAILS



REIRG. LINES BELOW SLAB DETAIL



VERTICAL AC DETAIL

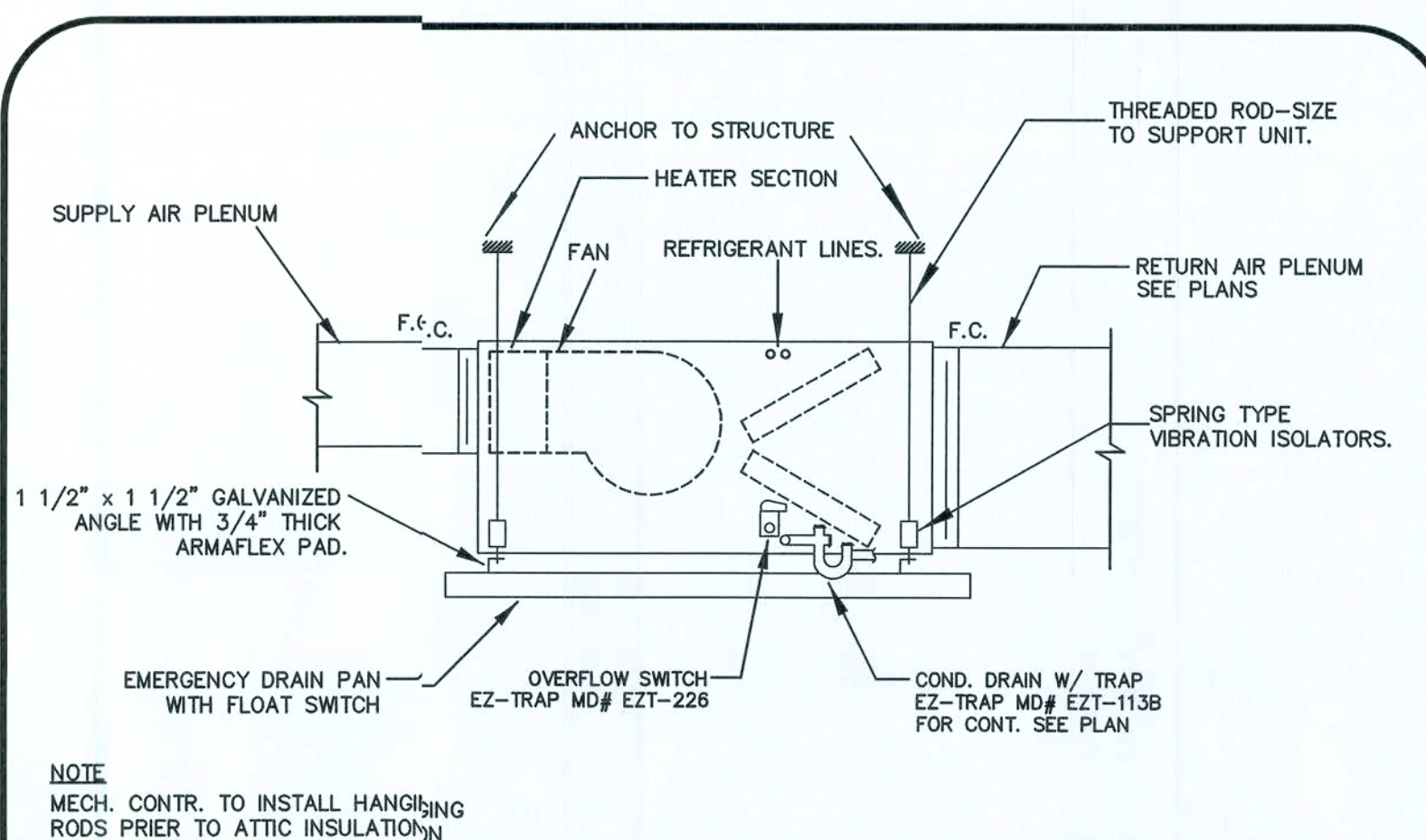


DH-1 DETAIL

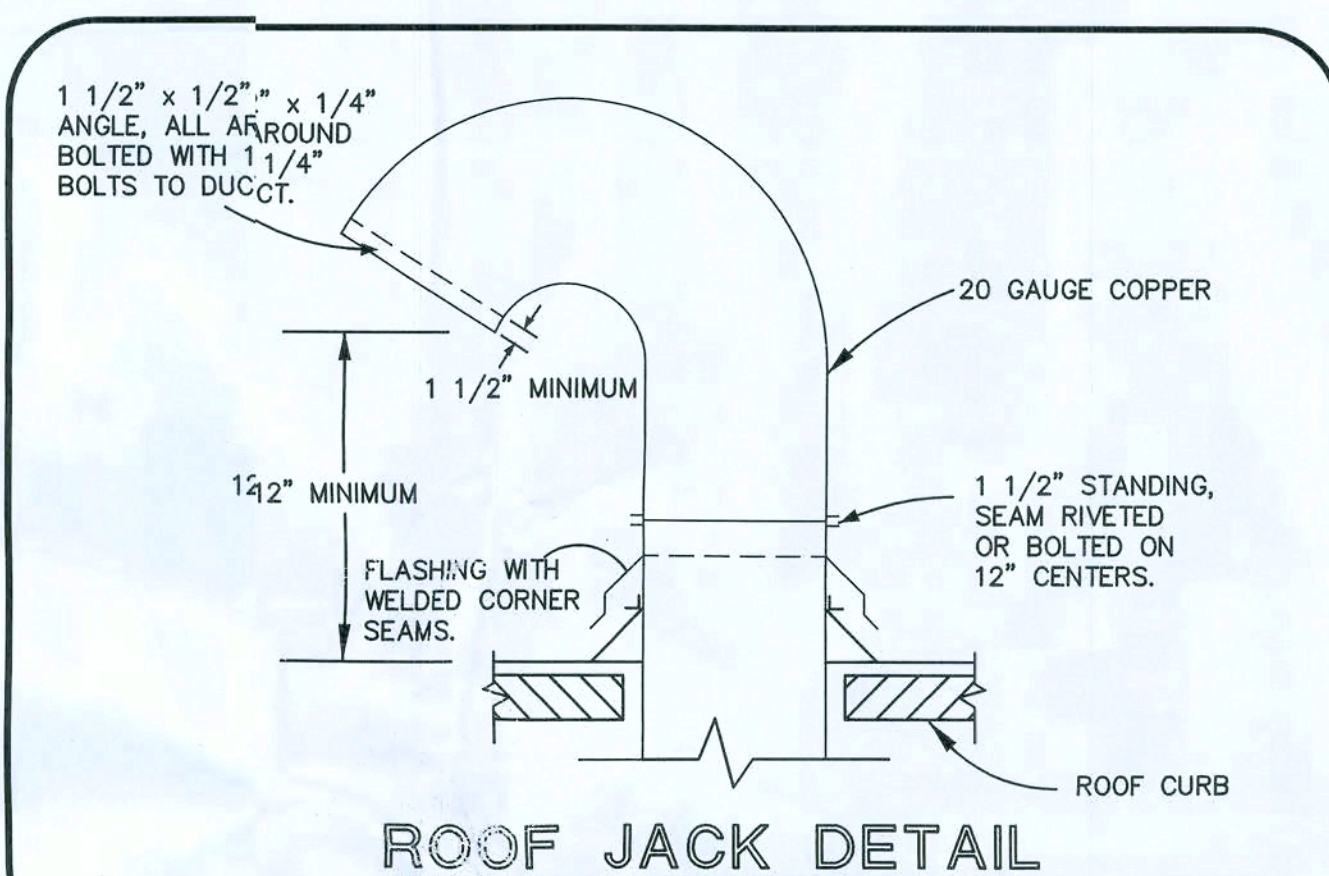
NOTES:

DEHUMIDIFIER UNITS DH1 ULTRA-AIRE APD MODELS

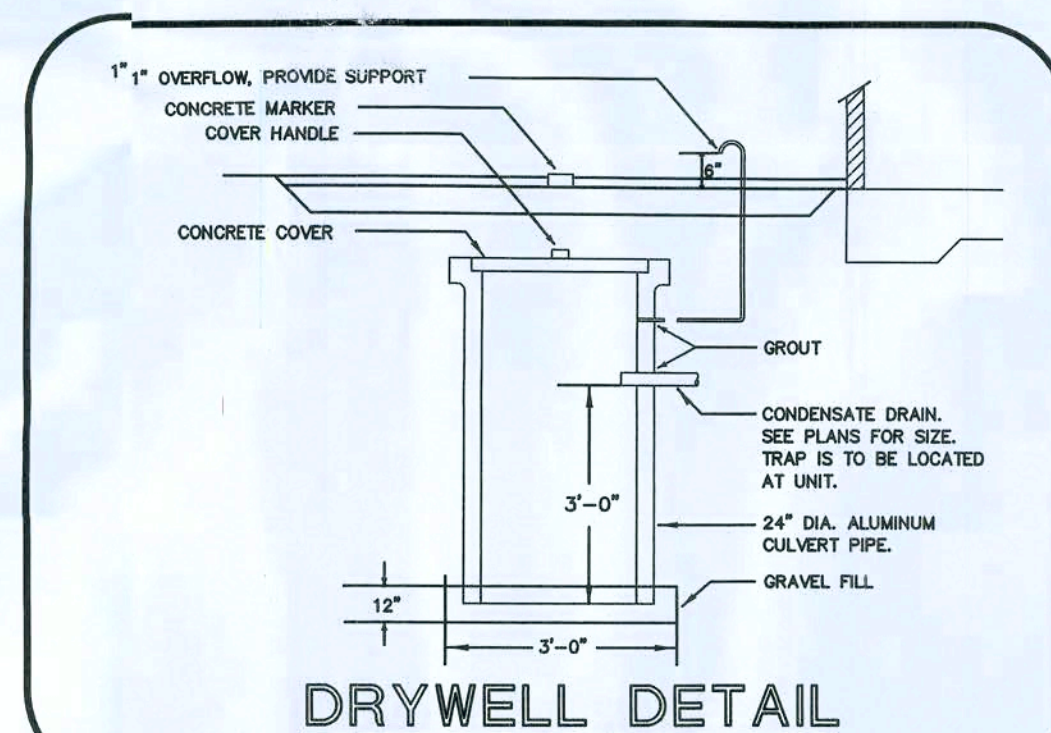
CONSIST OF BASIC UNIT AND HUMIDITY/FAN CONTROL.



HORIZONTAL AC DETAIL



ROOF JACK DETAIL



DRYWELL DETAIL

SUPPLY AIR UNIT SCHEDULE

SYS NO.	CU NO.	MFGR. MODEL NUMBER	CAPACITY		FAN		HEAT		ELECTRIC R ₁		EER (SEER)	DIMENSIONS W / D / H	LOCATION
			TOTAL	SENS	CFM	H.P.	KW	VOLT	PHA ¹				
AC1	CU1	CARRIER – FE5ANB004	26.6	19.9	800	1/2	notes	240	1	21.0		21 X 22 X 53	ATTIC
AC2	CU2	CARRIER – FE5ANB006	38.0	28.5	1200	1/2	notes	240	1	20.0		21 X 22 X 53	M.E.R.
AC3	CU3	CARRIER – FE5ANB004	26.6	19.9	800	1/2	notes	240	1	21.0		21 X 22 X 53	M.E.R.

AC-1,2,3, PROVIDED W/ 10 KW ELEC. STRIP HEAT, FIELD INSTALLED, PROVIDED BY MF.

PROVIDE INFINITY CONTROL THERMOSTAT, MODEL SYSTXCCUID01-A

ALL SUPPLY AIR UNITS TO BE FURNISHED WITH A EMERGENCY DRAIN PAN. FURNISH TH FILTER HOUSING EQUAL TO AMERICAN AIR FILTER "ACCESSAIR" COMPLETE WITH 2" PLEATED AIR FILTER AS SPED.

SIZE TO BE AS REQUIRED TO PROVIDE A MINIMUM OF 360 SQUARE INCHES OF FACE AREA. PROVIDE 6 SPARE FILTERS OF EACH SIZE USED TO OWNER AT TIME OF SYSTEM ACCEPTANCE.

ALL SUPPLY AIR UNITS TO HAVE ONE (1) POINT ELECTRICAL CONNECTION AND INTEGRL DISCONNECTS.

CONDENSING UNIT SCHEDULE

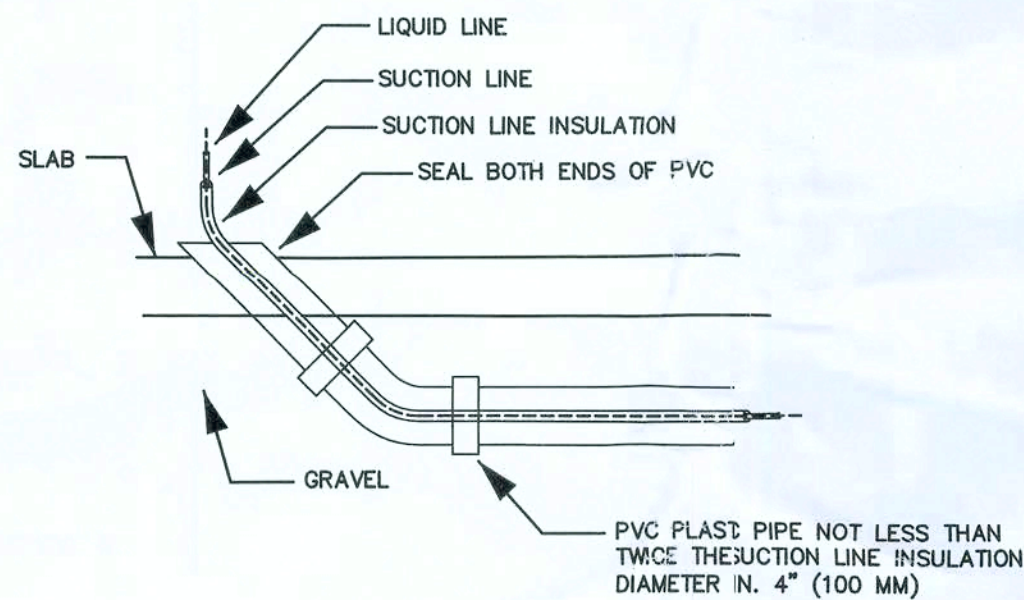
SYS. NO.	CU. NO.	MFGR. MODEL NUMBER	COMP. NO.	COMPRESSOR	COND. FAN	BRANCH CIR.	ELECTRIC REQ.	SIZE	DIMENSIONS W / D / H		
				FLA (EA)	NO.	FLA (EA)	MAX. AMPS			VOLT	PHASE
AC1	CU1	CARRIER – 24ANA124A	1	10.3	1	1.1	35	240	1	2.0 T	40 X 35 X 47
AC2	CU2	CARRIER – 24ANA136A	1	16.6	1	2.2	35	240	1	2.0 T	35 X 40 X 47
AC3	CU3	CARRIER – 24ANA124A	1	10.3	1	1.1	35	240	1	2.0 T	40 X 35 X 47

CONTRACTOR TO SUBMIT FOR ENGINEER REVIEW, REFRIGERANT LINE SIZING CALCULATIONS BASED ON MANUFACTURES PUBLISHED CRITERIA.

CONTRACTOR TO VERIFY LOCATION FROM HOUSE OF CONDENSING UNITS ON SITE PLAN.

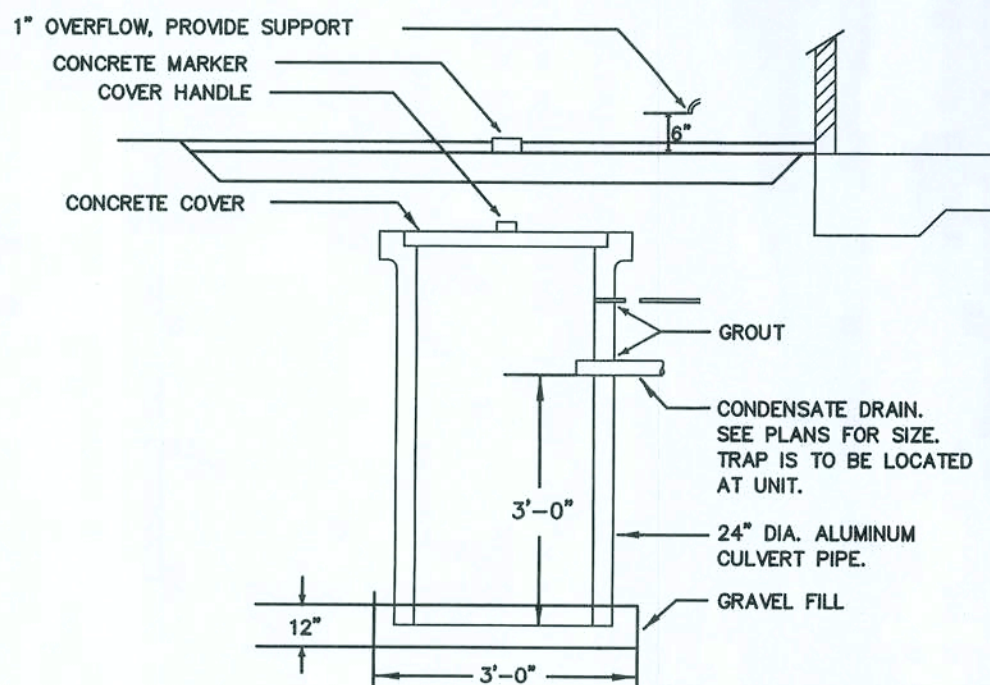
MECHANICAL SPECIFICATIONS

1. SCOPE
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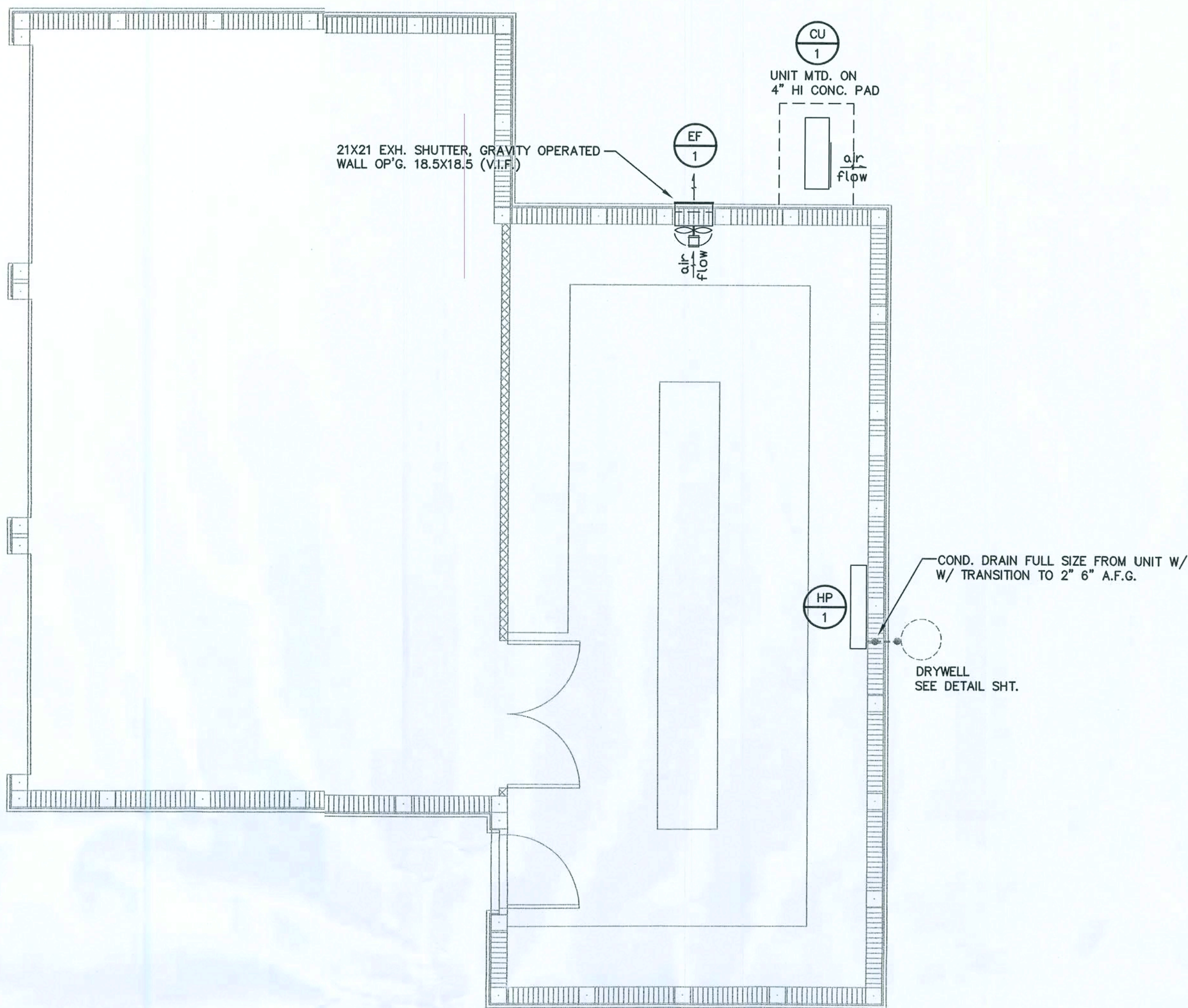
REFRIG. LINES BELOW SLAB DETAIL

N.T.S.



DRYWELL DETAIL

N.T.S.



GUEST HOUSE MECHANICAL PLAN

SCALE: NONE

FAN SCHEDULE

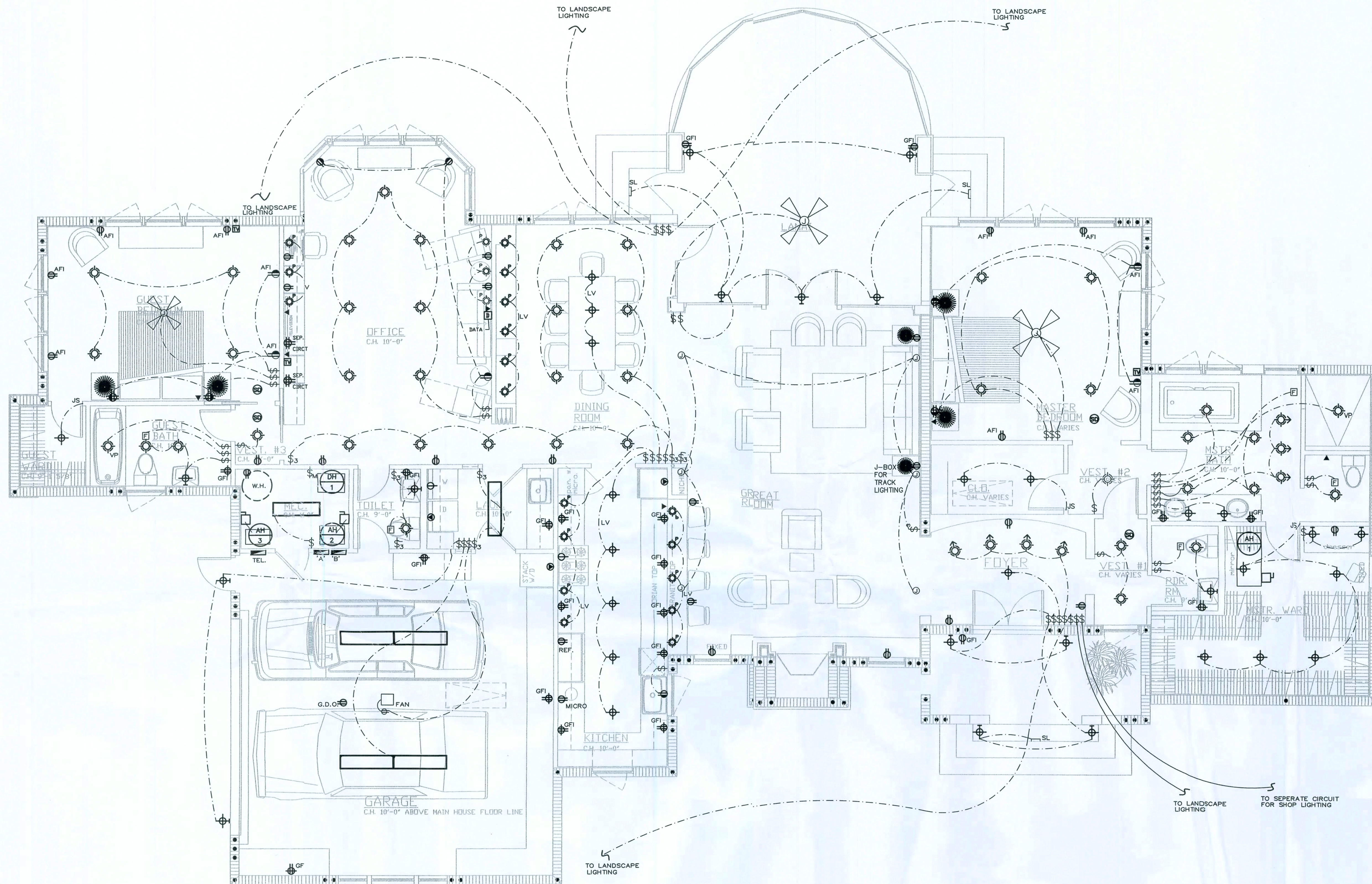
UNIT NO.	MFGR. MODEL NUMBER	CFM	SP	RPM MAX.	AMPS OR HP	ELECTRIC REQ. VOLT PHASE	REMARKS
EF-1	GRANGER - 4C007	885	0.125	-	1/20	120 1	
1. FURNISH WITH SPEED CONTROLLER TO ELEC. CONTR. FOR INSTALLATION 2. HANGING VIBRATION ISOLATORS 3. FLEXIBLE CONNECTIONS 4. BACKDRAFT DPR.							

SUPPLY AIR UNIT SCHEDULE

SYS. NO.	CU. NO.	MFGR. MODEL NUMBER	CAPACITY TOTAL	FAN SENS	HEAT CFM	ELECTRIC REQ. H.P.	EER (SEER)	DIMENSIONS	LOCATION
HP1	CU1	SANYO - KHS2472	24.2	-	500	2.5	208 1	16.0	41 X 11 X 8
HP-1 PROVIDED W/ WIRELESS REMOTE CONTROLLER									

CONDENSING UNIT SCHEDULE

SYS. NO.	CU. NO.	MFGR. MODEL NUMBER	COMPRESSOR NO.	COND. FAN FLA (EA)	BRANCH CIR. MAX. AMPS	ELECTRIC REQ. VOLT PHASE	SIZE	DIMENSIONS
HP1	CU1	SANYO - CH2472	1	1.3	1	20	208 1	2.0 T 35 X 12 X 29
CONTRACTOR TO SUBMIT FOR ENGINEER REVIEW, REFRIGERANT LINE SIZING CALCULATIONS BASED ON MANUFACTURER'S PUBLISHED CRITERIA.								



ELECTRIC KEYNOTES:

- ① PROVIDE WIRELESS MODEM THROUGHOUT ENTIRE HOUSE.
- ② PROVIDE ELECTRICAL TO CONDENSE UNITS AS SHOWN. COORDINATE WITH HVAC CONTRACTOR AND FIELD VERIFY EXACT LOCATIONS.

MICHAEL A. TEELE, P.E.
ENGINEER OF RECORD
FLORIDA REGISTRATION
P.E. 32065

DATE: DEC 20 2007

TEELE & ASSOCIATES
CONSULTING ENGINEERS
285 CORPORATE DRIVE
BOYNTON BEACH, FLORIDA 33426 15611 738-4747
CENT. OF AUTH. NO. 4659

GENERAL SPECIFICATIONS

A. GENERAL:
The requirements of the general, supplementary and special conditions of the contract specifications and drawings are hereby made a part of this section of the specifications. It is the intent of the plans and specifications to provide a complete and operating installation including all obviously necessary items even though items are not indicated on the drawings or specifications.

C. PERMITS, SALES TAX, ETC.:
The contractor shall secure and pay for all permits, State Sales Tax, Federal Excise Tax, royalties and other taxes or fees as required for installation of a complete system as outlined herein and as shown on the plans. The contractor shall secure all necessary licenses and insurance.

D. CODES:
The work shall comply with the following code cycles, applicable requirements of the NFPA-72 2002, 2004 FBC, 2004 Residential Building Code, 2005 NEC, and all local codes governing this installation as a minimum standard unless specifications listed herein or shown on the plans require a higher minimum standard.

E. BRANDS OF EQUIPMENT:
Where one manufacturer only is named, the bids shall be based on furnishing equipment or materials by this manufacturer. Products of other manufacturers will be considered for use if in the engineer's opinion the item requested for substitution is equal to that specified. Where no manufacturers are named, the contractor shall select equipment or material which meets the specifications.

F. DEPARTURES FROM DRAWINGS:
The contract drawings indicate the extent and general arrangements of equipment and systems. If any departures from the contract drawings are deemed necessary by the contractor, details of such departures and reasons therefore shall be submitted to the engineer for approval. No such departures shall be made without the prior written approval of the engineer.

G. CHANGES:
The contractor shall conform to all reasonable changes without additional cost.

H. ERRORS AND OMISSIONS:
All obvious errors and/or omissions in the above mentioned documents shall be called to the attention of the engineer at least four days prior to the bid date. If notification is not received, no extras to the original drawings and specifications will be authorized.

I. GUARANTEE:
The contractor shall provide a guarantee against defective workmanship, materials or equipment for a period of one year from the date of acceptance. This guarantee shall include all costs encountered in the replacing of defective work or materials. The contractor shall convey to the owner any additional warranties or warranties provided by the manufacturer of an individual item, equipment or material.

2. RACEWAY

A. ENT:
May be used for all branch circuit wiring in areas above grade and within the building where allowed by code.. All ENT fittings shall be glued.

B. PVC:
Shall be schedule 40 high impact, UL approved, and shall be installed underground or below the slab. Exposed PVC shall be schedule 80.

C. RIGID CONDUIT:
Shall not be used.

D. ROMEK:
Shall not be used.

3. WIRE AND CABLE

A. CONDUCTORS:
Shall be copper. Insulation shall be type THHN/THWN for ALL sizes. Minimum size shall No. 12, Conductors No. 10 and larger are to be stranded. Branch conduit outlets shall be connected as indicated.

B. COLOR CODES:
Conductors shall be color coded throughout. Same color shall be used for branch circuit wiring of a given phase. Grounded conductors No. 4 AWG and larger may be Black, But shall be identified with colored tape in junction boxes, pull boxes, panels, and service equipment.
(a) 277/480V or 120/208V systems
(1) Three wire circuits – one black, one red and one white
(2) Four wire circuits – one black, one red, one white, one blue.
(b) 277/480V systems – one brown, one orange, one yellow, one gray
(c) Continuity of neutrals of multi-wired branch circuits shall not be made on terminals of any device. This will assure no opening of neutral in replacement of device.

C. SPLICES:
(a) #10 and below – Scotchlok or equal
(b) #8 and larger – Not allowed

4. BOXES

A. OUTLET BOXES:
Section welded galvanized stamped steel for gang sizes required. Sectional boxes will not be acceptable. Boxes larger than standard shall be provided in accordance with the National Electrical Code where necessary to prevent crowding of wires.

B. FLOOR BOXES:
To be Carlson E971FB with E97ABR adapter for cast Bronze cover plates as manufactured by Steel City.

5. WIRING DEVICES

A. MOUNTING HEIGHTS:
(a) Switches at 4'0" or as noted
(b) Receptacles at 18" or as noted
(c) Telephone outlets at 18" or as noted

B. WALL SWITCHES:
Shall be intermediate grade, quiet-type, high performance switches rated at 15A/277V. Color and switch plates as directed by the Architect and Interior Decorator.

C. RECEPTACLES:
See general notes on this sheet for requirements.

D. POWER OUTLETS:
Leviton or Slater, type and size as noted.

E. DIMMER SWITCHES:
Shall be equal to Lutron #N – 1500 ML slide dimmer with touch – button on/off switch with Lutron #N – SML for three way control. Low voltage dimmers shall be Nova Series, load coordinated as required.

6. DISCONNECT SWITCHES

A. Shall be furnished with enclosures as required by exposures either NEMA 1 or 3R and shall be horsepower rated, heavy duty with fuses as noted.

B. NON-FUSIBLE DISCONNECT SWITCHES:
Shall be provided for all motors located out of sight of motor controller and where indicated on the drawings. Disconnect switches shall disconnect all ungrounded conductors.

C. FUSES:
To be furnished for fusible equipment. Motor fuses shall be bus fusetrons rated between 125 and 150 percent of motor name plate rating. Furnish extra set of spare fuses for each fused disconnect installed. Spare fuses to be placed within a fuse cabinet located in the electric room.

7. PANELBOARD, LOADCENTER

A. Loadcenters shall be as noted on plans with cover and typewritten directory inside of cover. Panelboards shall be the product of Cutler-Hammer or Square D.

8. LIGHTING FIXTURES

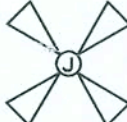
A. Unless otherwise noted, Light Fixtures will be furnished by others for installation by the electrical contractor.

9. IDENTIFICATION

A. Tag all conductors and identify major conduits in or at wireways, panels, pullboxes, switchboards, motor controllers, cabinets and similar items to assist in future circuit tracing. Conductor tags shall be nonconductive. Identify all circuits and equipment to correspond with the plans and specifications.

10. CLEAN-UP

A. On completion of work, remove all excess material, equipment and debris. Leave workspace in clean condition.

LIGHTING FIXTURE LEGEND:	
SYMBOL	DESCRIPTION
	1 SINGLE TUBE FLUORESCENT LIGHT FIXTURE - NO LENS
	2 TUBE FLUORESCENT LIGHT FIXTURE ASSEMBLY WRAP AROUND LENS.
	COMBINATION FAN LIGHT
	FAN
	RECESSED DOWN LIGHT
	RECESSED WALL WASHER
	FLUSH MOUNTED LIGHT FIXTURE (CEILING)
	SURFACE MOUNTED LIGHT FIXTURE (WALL)
	SURFACE MOUNTED DUAL FLOOD LIGHTS
	FLOOR RECEPTACLE 120 V

TOTAL AREA OF AIR CONDITIONED SPACE	2,882	
TOTAL AREA OF UNCONDITIONED SPACE	909	
GENERAL LIGHTING AND RECEPTLES		LINE
CONDITIONED SPACE @3 WATTS PER SQUARE FOOT		NEUTRAL
UNCONDITIONED SPACE @ 1 WATT PER SQUARE FOOT	8,678	8,678
SMALL APPLANCE CIRCUIT (2)	909	909
LAUNDRY CIRCUIT	3,000	3,000
WASHER (2)	1,500	1,500
DRYER (2)	3,000	3,000
KIT. REFRIGERATOR	11,000	7,700
DISHWASHER	1,500	1,500
DISPOSAL	1,500	1,500
COOKTOP (GAS)	1,200	1,200
DOUBLE OVEN	360	360
MICROWAVE	8,000	5,600
EXHAUST FAN HOOD	1,500	1,500
W.H. RECIRC PUMP	1,200	1,200
GARAGE DOOR OPENER	360	360
LAWNSCAPE LIGHTING (ALLOWANCE)	1,200	1,200
MISC. MOTOR LOADS	5,000	5,000
	2,500	1,500
TOTAL (OTHER LOADS)	52,405	45,705
FIRST 10 KW @ 100%		
BALANCE @ 40%	10,000	10,000
	18,962	14,282
LARGEST OF THE FOLLOWING		
AIR CONDITIONING	8.2 KW @ 100%	
HEATING	30.0 KW @ 65%	
	19,500	
TOTAL LOAD (WATTS)		
LOAD AMPS @ 120/240, 1 PHASE, 3 WIRE	46,462	24,262
	194	101
SERVICE AMPACITY AT 120/240V, 1PHASE 3WIRE	400	400

[illegible]

MICHAEL A. TEELE, P.E.
ENGINEER OF RECORD
FLORIDA REGISTRATION
P.E. 32066

DATE: ~~DEC 20 2007~~

ELECTRICAL SPECIFICATIONS

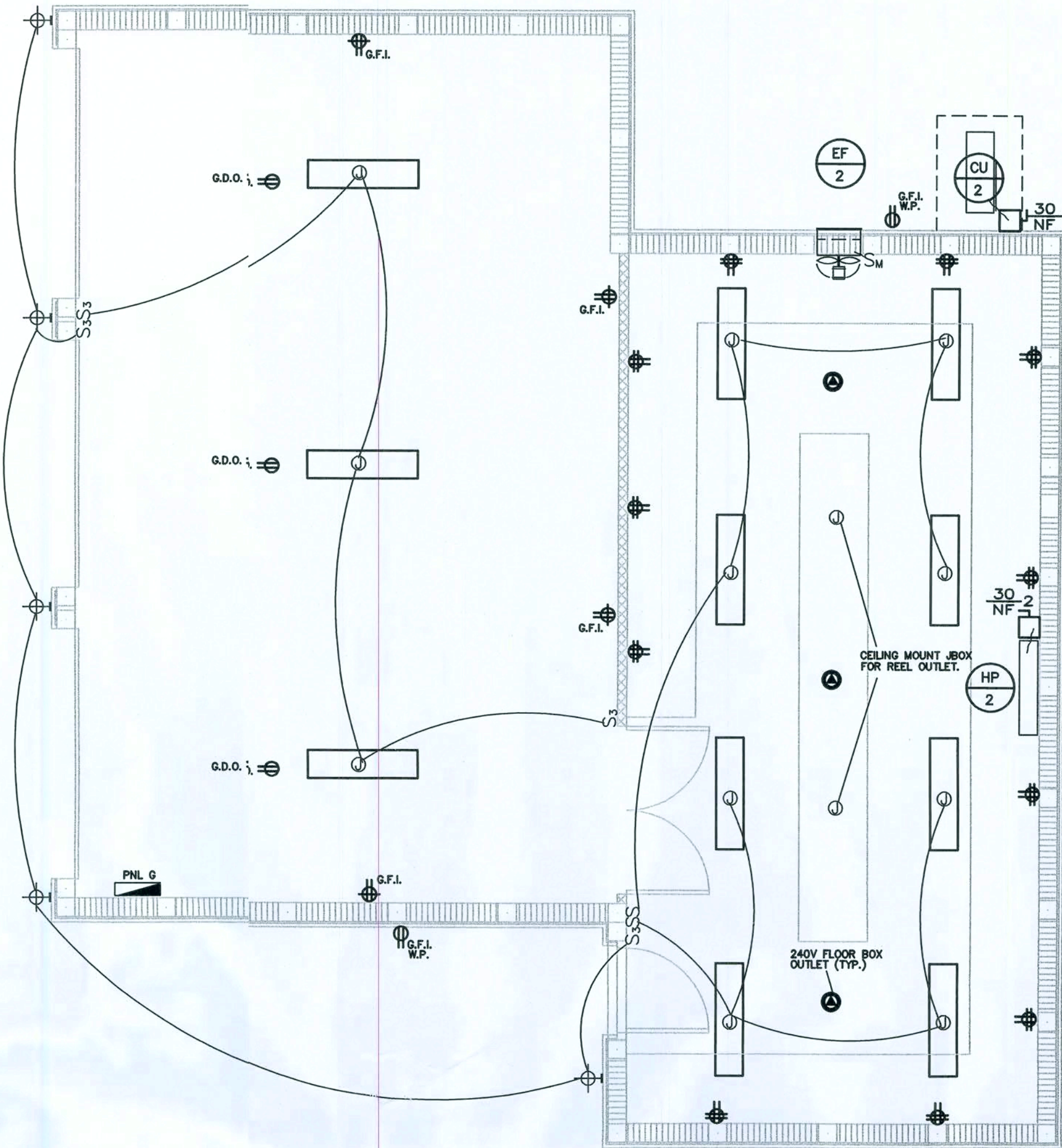
1. GENERAL SPECIFICATIONS
- A. GENERAL:
- The requirements of the general, supplementary and special conditions of the contract specifications and drawings are hereby made a part of this section of the specifications. It is the intent of the plans and specifications to provide a complete and operating installation including all obviously necessary items even though items are not indicated on the drawings or specifications.
- C. PERMITS, SALES TAX, ETC.:
- The contractor shall secure and pay for all permits, State Sales Tax, Federal Excise Tax, royalties and other taxes or fees as required for installation of a complete system as outlined herein and as shown on the plans. The contractor shall secure all necessary licenses and insurance.
- D. CODES:
- The work shall comply with latest applicable requirements of the NFPA and all local codes governing this installation as a minimum standard unless specifications listed herein or shown on the plans require a higher minimum standard.
- E. BRANDS OF EQUIPMENT:
- Where one manufacturer only is named, the bids shall be based on furnishing equipment or materials by this manufacturer. Products of other manufacturers will be considered for use if in the engineer's opinion the item requested for substitution is equal to that specified. Where no manufacturers are named, the contractor shall select equipment or material which meets the specifications.
- F. DEPARTURES FROM DRAWINGS:
- The contract drawings indicate the extent and general arrangements of equipment and systems. If any departures from the contract drawings are deemed necessary by the contractor, details of such departures and reasons therefor shall be submitted to the engineer for approval. No such departures shall be made without the prior written approval of the engineer.
- G. CHANGES:
- The contractor shall conform to all reasonable changes without additional cost.
- H. ERRORS AND OMISSIONS:
- All obvious errors and/or omissions in the above mentioned documents shall be called to the attention of the engineer at least four days prior to the bid date. If notification is not received, no extras to the original drawings and specifications will be authorized.
- I. GUARANTEE:
- The contractor shall provide a guarantee against defective workmanship, materials or equipment for a period of one year from the date of acceptance. This guarantee shall include all costs encountered in the replacing of defective work or materials. The contractor shall convey to the owner any additional guarantees or warranties provided by the manufacturer of an individual item, equipment or material.
2. RACEWAY
- A. EMT:
- May be used for all branch circuit wiring in areas above grade and within the building. All EMT shall be galvanized. All EMT fittings shall be steel with set screws.
- B. PVC:
- Shall be schedule 40 high impact, UL approved, and shall be installed underground or in the slab.
- C. RIGID CONDUIT:
- Shall be used for all exterior installation where mechanical damage is possible.
3. WIRE AND CABLE
- A. CONDUCTORS:
- Shall be copper. Insulation shall be type THHN/THWN for ALL sizes. Minimum size wire No. 12. Conductors No. 10 and larger are to be stranded. Branch conduit outlets shall be connected as indicated.
- B. COLOR CODES:
- Conductors shall be color coded throughout. Same color shall be used for branch circuit wiring of a given phase. Grounded conductors No. 4 AWG and larger may be black, but shall be identified with colored tape in junction boxes, pull boxes, panels and service equipment.
- (a) 120/240V or 120/208V systems
- (1) Three wire circuits - one black, one red and one white
- (2) Four wire circuits - one black, one red, one white, one blue.
- (b) 277/480V systems - one brown, one orange, one yellow, one gray
- (c) Continuity of neutrals of multi-wired branch circuits shall not be made on terminals of any device. This will assure no opening of neutral in replacement of device.
- C. SPLICES:
- (a) #10 and below - Scotchlok or equal
- (b) #8 and larger - Not allowed
4. BOXES
- A. OUTLET BOXES:
- Section welded galvanized stamped steel for gang sizes required. Sectional boxes will not be acceptable. Boxes larger than standard shall be provided in accordance with the National Electrical Code where necessary to prevent crowding of wires.
- B. FLOOR BOXES:
- To be Carlon E971FB with E97ABR adapter for cast Bronze cover plates as manufactured by Steel City.
5. WIRING DEVICES
- A. MOUNTING HEIGHTS:
- (a) Switches at 4'0" or as noted
- (b) Receptacles at 18" or as noted
- (c) Telephone outlets at 18" or as noted
- B. WALL SWITCHES:
- Shall be intermediate grade, quiet-type, high performance switches rated at 15A, 277v. Color and switch plates as directed by the Architect and Interior Decorator.
- C. RECEPTACLES:
- See general notes on this sheet for requirements.
- D. POWER OUTLETS:
- Leviton or Slater, type and size as noted.
- E. DIMMER SWITCHES:
- Shall be equal to Lutron #N - 1500 ML slide dimmer with touch - button on/off switch with Lutron #N - SML for three way control. Low voltage dimmers shall be Nova Series, load coordinated as required.
6. DISCONNECT SWITCHES
- Shall be furnished with enclosures as required by exposures either NEMA 1 or 3R and shall be horsepower rated, heavy duty with fuses as noted.
- B. NON-FUSIBLE DISCONNECT SWITCHES:
- Shall be provided for all motors located out of sight of motor controller and where indicated on the drawings. Disconnect switches shall disconnect all ungrounded conductors.
- C. FUSES:
- To be furnished for fusible equipment. Motor fuses shall be bus fuses rated between 125 and 150 percent of motor name plate rating. Furnish extra set of spare fuses for each fused disconnect installed. Spare fuses to be placed within a fuse cabinet located in the electric room.
7. PANELBOARD, LOADCENTER
- A. Loadcenters shall be as noted on plans with cover and typewritten directory inside of cover. Panelboards shall be the product of Cutler-Hammer or Square D.
8. LIGHTING FIXTURES
- Unless otherwise noted, Light Fixtures will be furnished and installed as indicated on the lighting fixture schedule for installation by the electrical contractor.
9. IDENTIFICATION
- Tag all conductors and identify major conduits in or at wireways, panels, pullboxes, switchboards, motor controllers, cabinets and similar items to assist in future circuit tracing. Conductor tags shall be nonconductive.
- B. Identify all circuits and equipment to correspond with the plans and specifications.
10. CLEAN-UP
- A. On completion of work, remove all excess material, equipment and debris. Leave workspace in clean condition.

ELECTRICAL LEGEND:

SYMBOL	DESCRIPTION
\$	SINGLE POLE SWITCH - 20A/120V.
\$	3 - WAY SWITCH - 20A/120V.
\$	4 - WAY SWITCH - 20A/120V
S	DOOR JAMB SWITCH FOR CLOSET LIGHTS
\$	DIMMER SWITCH
\$	3 - WAY DIMMER SWITCH
S	MOTOR SWITCH
H	HALF-SWITCHED DUPLEX RECEPTACLE - 20A/125V
H	DUPLEX RECEPTACLE - 20A/125V
H	DUPLEX RECEPTACLE - 20A/125V
H	QUADRAPLEX RECEPTACLE - 20A/125V
H	DUPLEX RECEPTACLE - 20A/125V ISOLATED GROUND.
H	DUPLEX RECEPTACLE - 20A/125V GROUND FAULT INTERRUPTER.
H	OUTLET - WEATHERPROOF.
H	POWER OUTLET - VOLTAGE & SIZE AS NOTED.
H	FLOORBOX WITH DUPLEX RECEPTACLE 20A/125V.
H	DISCONNECT, VOLTAGE & SIZE AS NOTED.
H	JUNCTION BOX
H	TELEPHONE OUTLET-WALL MOUNTED. EACH OUTLET TO HAVE 3/4" C W/PULL STRING ROUTED BACK TO TELEPHONE BOARD.
H	FAX OUTLET-WALL MOUNTED. EACH OUTLET TO HAVE 3/4" C W/PULL STRING ROUTED BACK TO TELEPHONE BOARD.
H	PANEL, SIZE & VOLTAGE - SEE PANEL SCHEDULE.
H	TELEVISION OUTLET. EACH OUTLET TO HAVE 1" C W/PULL STRING ROUTED BACK TO TELEPHONE BOARD.
H	COMPUTER TERMINAL. EACH OUTLET TO HAVE 3/4" C W/PULL STRING ROUTED BACK TO TELEPHONE BOARD.
H	SMOKE DETECTOR

LIGHTING FIXTURE LEGEND:

SYMBOL	DESCRIPTION
H	RECESSED DOWN LIGHT
H	RECESSED WALL WASHER
H	SURFACE MOUNTED LIGHT FIXTURE (CEILING)
H	SURFACE MOUNTED PENDANT LIGHT FIXTURE (CEILING)
H	SURFACE MOUNTED LIGHT FIXTURE (WALL)
H	SURFACE MOUNTED DUAL FLOOD LIGHTS
H	SINGLE TUBE FLUORESCENT LIGHT FIXTURE - NO LENS
H	2 TUBE SURFACE MOUNT FLUORESCENT LIGHT FIXTURE
H	CEILING FAN

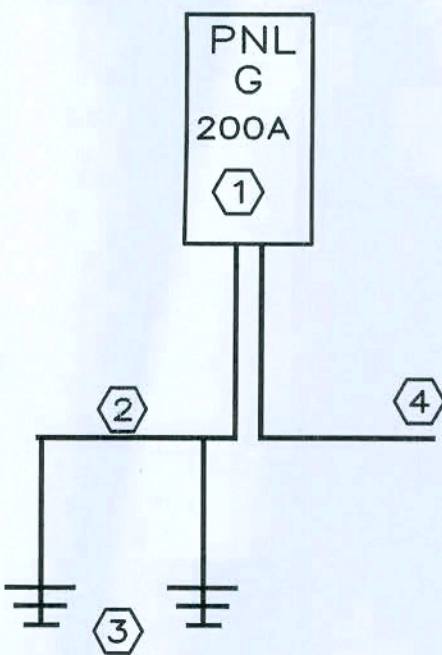


ELECTRICAL FLOOR PLAN

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

ELECTRIC RISER KEYNOTES

- BRANCH CIRCUIT PANELS. SEE PANEL SCHEDULES FOR FEEDER, PANEL, AND BRANCH CIRCUIT SPECIFICATIONS.
- #4 CU GROUNDING ELECTRODE CONDUCTOR BONDED TO MADE ELECTRODES (GROUND RODS). WATER PIPE AND BLDG. STEEL PER N.E.C.
- (2) 3/4" X 20' CU GROUND RODS THERMALLY CONNECTED TO GROUNDING CONDUCTOR AND SPACED A MINIMUM 6 FEET APART.
- 2' CONDUIT WITH C3-3/0 THHN CU. CONDUCTOR FROM SERVICE RACK MAIN SERVICE PANEL.



ELECTRICAL RISER DIAGRAM

NOT TO SCALE

ELECTRICAL KEYNOTES

- ALL QUAD OUTLETS SHOWN IS TO BE 44" AFF.
- FURNISH AND INSTALL C3-3/0V FLOOR BOX OUTLETS FOR FUTURE USES. COORDINATE WITH OWNER AND FIELD VERIFY LOCATIONS. SPECIFY CARLON E971FB

PANELBOARD G											
RATED VOLTAGE		120/240, 1PH, 3WIRE				LOCATION		SEE PLAN			
RATED AMPS		200				MOUNTING		FLUSH			
MAIN		MAIN BREAKER				FEEDER CONDUCTORS		(3)-3/0 THHN CU.			
BRANCH POLES		42				FEEDING CONDUIT		2"			
BRANCH DEVICES		PLUG-ON				MANUF. CAT. NO.		S.Q.D. "QD"			
WIRE SIZE	DESCRIPTION	APPLN KVA	HVAC KVA	BREAKER TRIP	CIRCUIT POLE	BREAKER TRIP	HVAC KVA	APPLN KVA	DESCRIPTION	WIRE SIZE	
#12	GARAGE DOOR OPENER	1.0		20	1	2					
#12	GARAGE DOOR OPENER	1.0		20	1	3	4		HP	#12	
#12	GARAGE DOOR OPENER	1.0		20	1	5	6				
#12	GARAGE G.F.I.'S			20	1	7	8	2.4	COND. UNIT	#12	
#12	SHOP QUADS / APPL. OUTLETS	1.5		20	1	9	10				
#12	SHOP QUADS / APPL. OUTLETS	1.5		20	1	11	12	5.0	240V FLOOR BOX/ EQUIP. OUTLET	#10	
#12	SHOP QUADS / APPL. OUTLETS	1.5		20	1	13	14				
#12	SHOP QUADS / APPL. OUTLETS	1.5		21	2	15	16	5.0	240V FLOOR BOX/ EQUIP. OUTLET	#10	
#12	SHOP QUADS / APPL. OUTLETS	1.5		22	2	17	18				
#12	SHOP QUADS / APPL. OUTLETS	1.5		20	1	19	20	5.0	240V FLOOR BOX/ EQUIP. OUTLET	#10	
#12	GENERAL LIGHTING			20	1	21	22				
#12	GENERAL LIGHTING			20	1	23	24	4.5	INSTA HOT (FUTURE)	#10	
	SPARE			20	1	25	26	0.5	SHOP EXHAUST FAN	#12	
	SPARE			20	1	27	28		SPARE		
	SPARE			20	1	29	30		SPARE		
	SPARE			20	1	31	32		SPARE		
	SPARE			20	1	33	34		SPARE		
	SPARE			20	1	35	36		SPARE		
	SPARE			20	1	37	38		SPARE		
	SPARE			39	40				SPARE		
	SPARE			41	42				SPARE		
SUBTOTAL CONNECTED LOADS		12.0	0.0	0.0			2.4	3	20.0		
TOTAL CONNECTED KVA= 36.8											
APPLNCE LOAD @ 1% = 32,000											
LTS & RECEPT. LOAD @ 3/4" = 3,528											
TOTAL OTHER LOADS= 35,528											
FIRST 10KW @ 100% = 10,000											
BALANCE @ 40% = 10,211											
LARGEST OF THE FOLLOWING											
A/C LOAD 2.4 KW @ 100% = 2,400											
HEAT LOAD 2.5 KW @ 65% = -											
GROUND BUS IS REQUIRED											
KEYED DOOR LATCH IS NOT REQUIRED											
TOTAL DEMAND KVA = 22.8											
TOTAL DEMAND AMPS = 94.2											
INTERLUPTING RATING 22,000 RMS											

the lawrence group

ARCHITECTS 205 WORTH AVENUE, PALM BEACH, FLORIDA 33480 P.H. (601) 665-0670

MR. AND MRS. WADE HORNSBY

COLUMBIA COUNTY FLORIDA

SHOP

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

E-3

8004

MICHAEL A. TEELE, P.E.
ENGINEER OF RECORD
FLORIDA REGISTRATION
P.E. 32866

DATE:

9/28/2007

TEELE & ASSOCIATES
CONSULTING ENGINEERS
6363 CORPORATE DRIVE
BOYNTON BEACH, FLORIDA 33426 (561) 738-4747
CERT. OF AUTH. NO. 4658

MAIN SERVICE PANEL						
RATED VOLTAGE	120/240V, 1 PHASE, 3 WIRE	LOCATION		SERVICE RACK		
RATED AMPS	400	MOUNTING SURFACE		NEMA 3R		
MAIN LUGS ONLY		FEEDER CONDUCTORS		(3)-4/0 THHN U		
BRANCH POLES	16	FEEDING CONDUIT		1 1/2"		
BRANCH DEVICES	PLUG-ON	MANUF. CAT. NO.		SQ. D "HOM"		
WIRE SIZE	DESCRIPTION	BREAKER TRIP POLE	CIR. NUM.	BREAKER POLE/TRIP	DESCRIPTION	WIRE SIZE
3/0	GUEST HOUSE	200 2	1 2	2 200	TEMP POWER PANEL	3/0
3/0	SHOP	200 2	3 4		SPACE	
4/0	MAIN HOUSE PNL "A"	200 2	5 6		SPACE	
4/0	MAIN HOUSE PNL "B"	200 2	7 8		SPACE	
			9 10		SPACE	
			11 12		SPACE	
			13 14	2 60	SURGE SUPPRESSION MODUL	#6
			15 16			
DEMAND KVA -						
INTER interrupting RATING 10,000 RMS SYM.						
GROUND BUS IS REQUIRED						
KEYED DOOR LATCH IS NOT REQUIRED						
FEED TO BE BOTTOM						

TEMP SITE PANEL						
RATED VOLTAGE	120/240V, 1 PHASE, 3 WIRE	LOCATION		SERVICE RACK		
RATED AMPS	200	MOUNTING SURFACE		NEMA 3R		
MAIN LUGS ONLY		FEEDER CONDUCTORS		(3)-3/0 THHN U		
BRANCH POLES	50	FEEDING CONDUIT		1 1/2"		
BRANCH DEVICES	PLUG-ON	MANUF. CAT. NO.		SQ. D "Q0130LDGRB"		
WIRE SIZE	DESCRIPTION	BREAKER TRIP POLE	CIR. NUM.	BREAKER POLE/TRIP	DESCRIPTION	WIRE SIZE
#12	SERVICE RECEPTACLE	20 1	1 2	2 80	IRRIGATION PANEL	#4
#12	SERVICE RECEPTACLE	20 1	3 4			
		20 1	5 6	1 20		
		20 1	7 8	1 20		
		20 1	9 10	1 20		
		20 1	11 12	1 20		
		20 1	13 14	1 20		
		20 1	15 16	1 20		
		20 1	17 18	1 20		
		20 1	19 20	1 20		
		20 1	21 22	1 20		
		20 1	23 24	1 20		
		20 1	25 26	1 20		
		20 1	27 28	1 20		
		20 1	29 30	1 20		
DEMAND KVA -						
INTER interrupting RATING 10,000 RMS SYM.						
GROUND BUS IS REQUIRED						
KEYED DOOR LATCH IS NOT REQUIRED						
FEED TO BE BOTTOM						

IRRIGATION PANEL						
RATED VOLTAGE	120/240V, 1 PHASE, 3 WIRE	LOCATION		SEE PLAN		
RATED AMPS	100	MOUNTING SURFACE		(3)-#6 THWN C		
MAIN LUGS ONLY		FEEDER CONDUCTORS		1 1/2"		
BRANCH POLES	20	FEEDING CONDUIT		SQ. D "Q01162425GRB"		
BRANCH DEVICES	PLUG-ON	MANUF. CAT. NO.				
WIRE SIZE	DESCRIPTION	BREAKER TRIP POLE	CIR. NUM.	BREAKER POLE/TRIP	DESCRIPTION	WIRE SIZE
#12	CONST. SITE RECEPTACLE	GFI 20 1	1 2	2 60	SHP IRRIGATION PUMP	#8
#12	CONST. SITE RECEPTACLE	GFI 20 1	3 4			
#12	CONST. SITE RECEPTACLE	GFI 20 1	5 6	1 20		
#12	CONST. SITE RECEPTACLE	GFI 20 1	7 8	1 20		
		20 1	9 10	1 20		
		20 1	11 12	1 20		
		20 1	13 14	1 20		
		20 1	15 16	1 20		
DEMAND KVA -						
INTER interrupting RATING 10,000 RMS SYM.						
GROUND BUS IS REQUIRED						
KEYED DOOR LATCH IS NOT REQUIRED						
FEED TO BE BOTTOM						

ALL NUMBERS ARE SQUARE D

MAIN POWER PANEL
(1) HCM4484
(1) HC3648WP
(1) HC45N
(1) HNM4BL
(1) HNM4BL
(1) PG32DGT
(1) Q842200A8
(1) FA222060A8

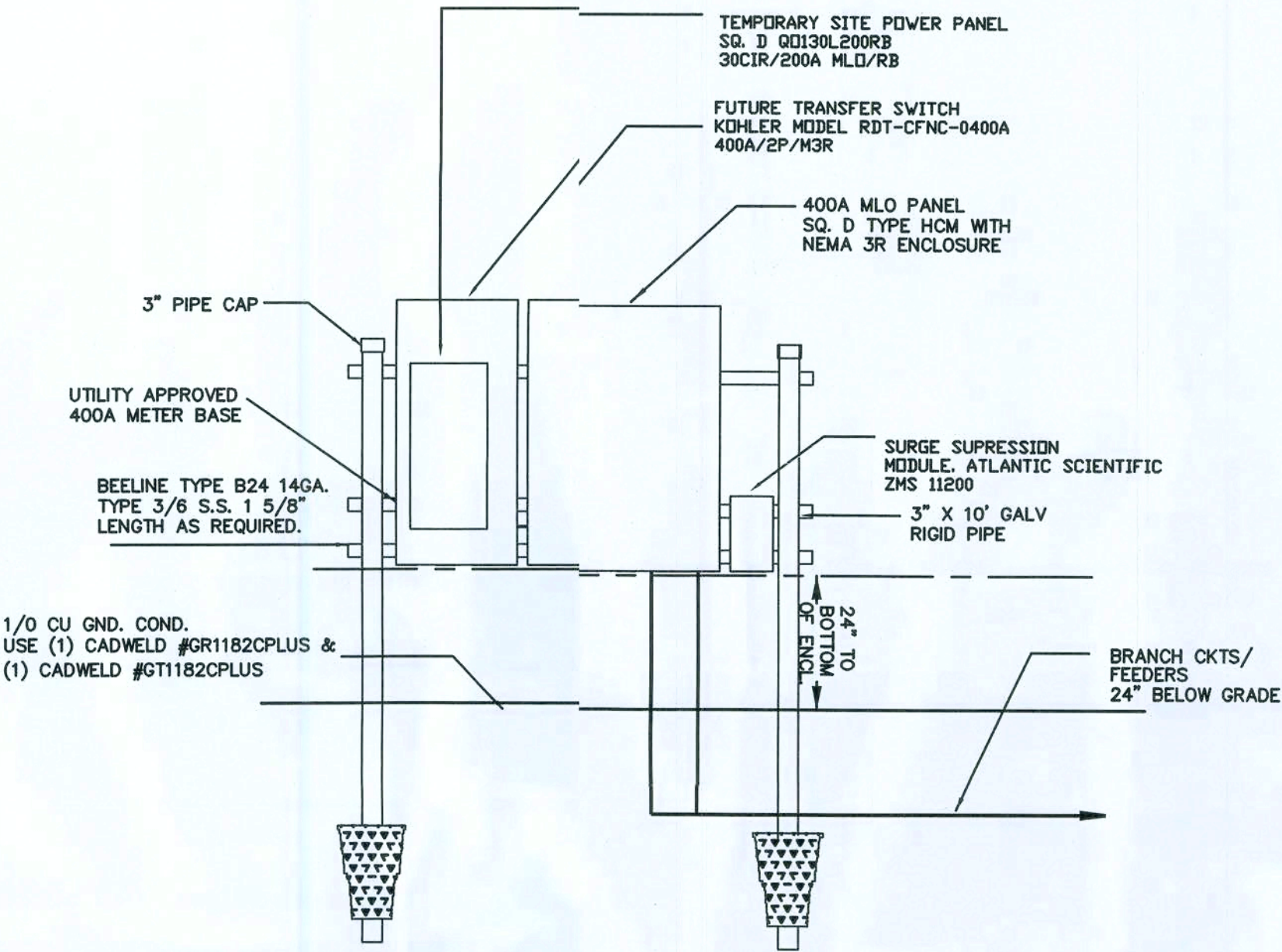
TEMPORARY SITE PANEL
(1) Q0130L200GRB
(1) Q0280
(2) Q0120GFI

IRRIGATION PANEL
(1) Q011624LIESGRB
(1) Q0260
(4) Q0120GFI

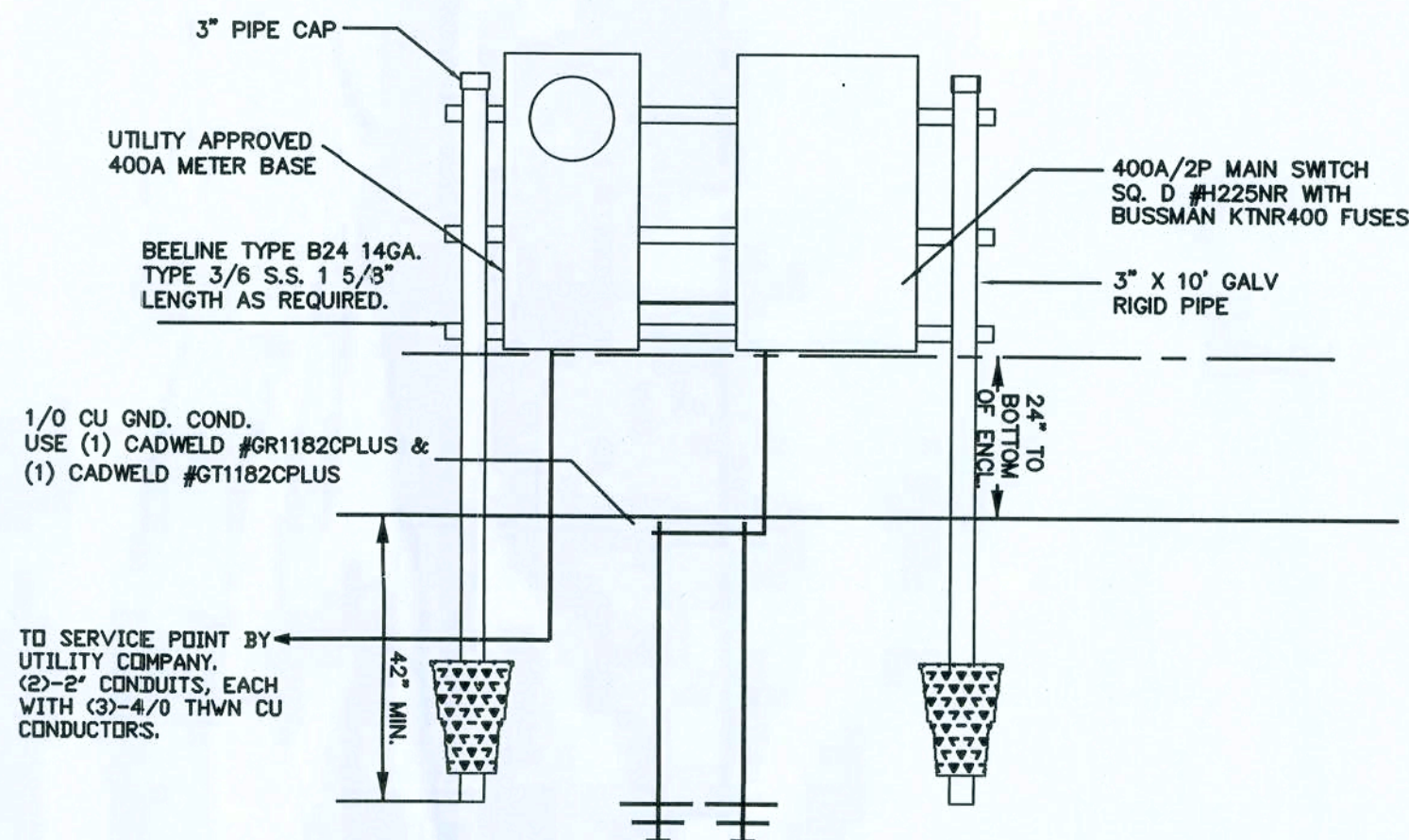
MAIN DISCONNECT
(1) H225NR
(2) PK001A2
(1) HRK4060
(2) KTR400 (BUSSMAN)

GROUNDING
(4) 3/4" X 10' GROUND RODS
USE (1) CADWELD #G1182CPLUS &
(1) CADWELD #G1182CPLUS
(2) CADWELD #G1182CPLUS
(2) CADWELD #G1182CPLUS

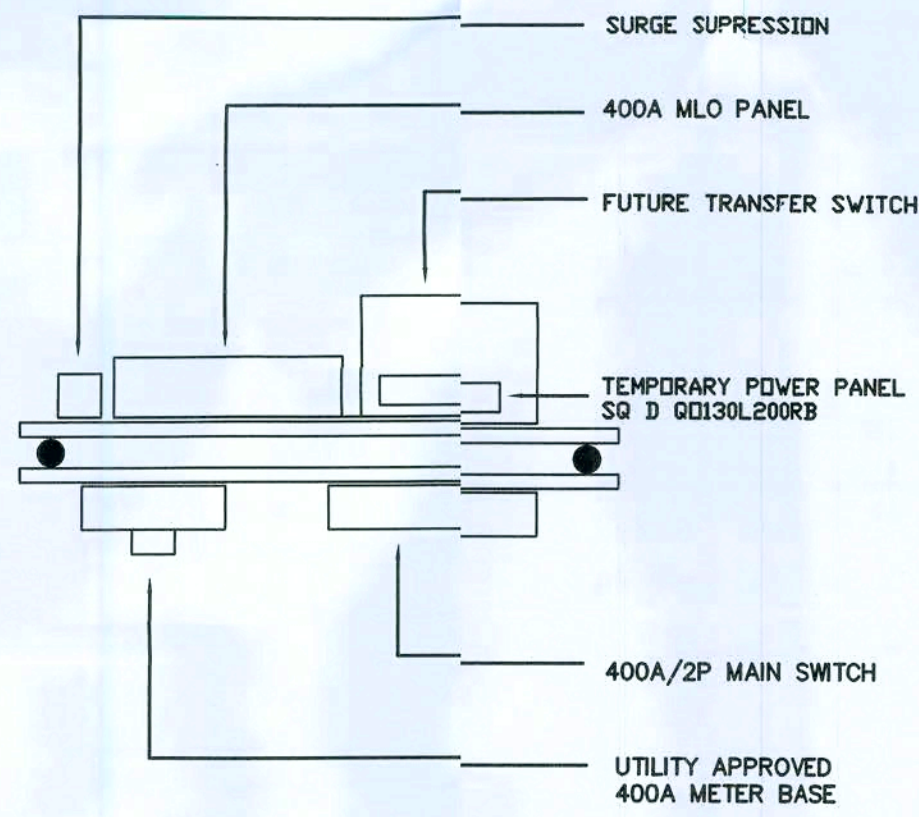
SURGE SPRESSION MODULE
ATLANTIC SCIENTIFIC ZMS-150 (CAT#11200)



SERVICE RACK - FRONT SIDE
NOT TO SCALE



SERVICE RACK - BACK SIDE
NOT TO SCALE



SERVICE RACK -- TOP VIEW
NOT TO SCALE

TEELE & ASSOCIATES
CONSULTING ENGINEERS
2003 CORPORATE DRIVE
BOYNTON BEACH, FLORIDA 33426 (561) 738-4747
CERT. OF AUTH. NO. 4689

MICHAEL A. TEELE, P.E.
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P.E. 32066

DATE: DEC 20 2007

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MR. AND MRS. WADE HORNSBY
FLORIDA
COLUMBIA COUNTY

SERVICE RACK DETAIL
SCALE: NONE

E-4
6004