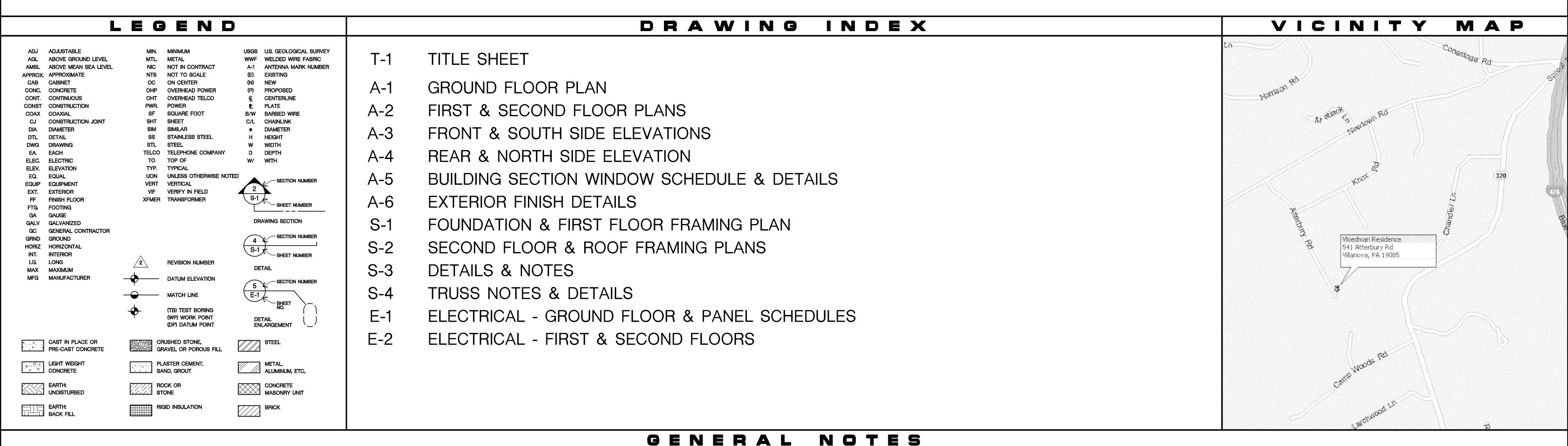
VLOEDMAN RESIDENCE

Peter & Deborah Vloedman

541 Atterbury Road Villanova, PA 19085

Radnor Township, Delaware County

ADDITION AND RENOVATIONS



- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITION OF THE IBC CODE ADOPTED BY RADNOR TOWNSHIP, DELAWARE COUNTY IN THE COMMONWEALTH OF PENNSYLVANIA.
- 2) GENERAL CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS, STRUCTURE AND MATERIALS. AND SHALL BRING ANY DISCREPANCIES TO THE IMMEDIATE ATTENTION OF THE ARCHITECT
- 3) ALL FOOTING EXCAVATION SHALL BE CARRIED A MINIMUM OF 18" INTO SOLID UNDISTURBED SOIL HAVING A MINIMUM BEARING CAPACITY OF 3,000 PSF. BOTTOMS OF ALL FOOTINGS SHALL BE A MINIMUM OF 3'-0" BELOW FINISHED GRADE.
- 4) ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,500 PSI AFTER 28 DAYS.
- 5) 4" DIAMETER PVC PERFORATED FOOTING DRAINS SHALL BE INSTALLED IN GRAVEL BEDS WITH FABRIC WRAP PROTECTION AT OWNERS / CONTRACTOR'S OPTION.
- 6) STRUCTURAL BEAMS AND COLUMNS SHALL BE WPA SELECT STRUCTURAL HEM/FIR NO. I HAVING A FB OF 975 PSI. FLOOR AND CEILING JOISTS AND RAFTERS SHALL BE WPA #2 GRADE HEM/FIR HAVING A FB OF 850 PSI. WALL STUDS SHALL BE WPA #2 GRADE HEM/FIR HAVING A FB OF 675 PSI.
- ALL EXTERIOR DECKING, POSTS, AND JOISTS SHALL BE PRESSURE-TREATED U.N.O.
- PROVIDED WITH TERMITE SHIELDS AT ALL FOUNDATION WALLS.

WOOD SILLS ON CONCRETE OR CMU SHALL BE PRESSURE-TREATED AND

DOUBLE FLOOR JOISTS SHALL BE INSTALLED UNDER ALL PARTITIONS

6.3) ALL EXTERIOR NAILS, BOLTS, ANCHORS, AND HANGERS SHALL BE STAINLESS STEEL OR TRIPLE HOT DIPPED GALVANIZED.

WHICH ARE PARALLEL TO JOISTS.

ALL JOISTS SHALL HAVE SOLID BRIDGED AT 6'-0" O.C. (MAX.). JOISTS SPANNING LESS THAT 12'-0" SHALL BE BRIDGED AT MIDSPAN.

- 6.6) SHADED PARTITIONS INDICATE 2X6 STUDS.
- 6.7) DARKENED POSTS INDICATE 2 STUD MINIMUM, UNLESS NOTED OTHERWISE,
- 7) ALL CORNERS OF THE STRUCTURE SHALL BE SHEATHED WITH 1/2" APA RATED SHEATHING, EXPOSURE I NAILED WITH 6D COMMON NAILS 6" O.C. (MAX.) AT PANEL EDGES AND 12" O.C. (MAX.) AT INTERMEDIATE SUPPORTS. BALANCE OF SHEATHING SHALL BE AT OWNER / BUILDER'S OPTION
- 8) BUILDING SHALL BE SHEATHED WITH (MIN.) 30# ASPHALT-IMPREGNATED FELT OR TYVEK HOUSE WRAP.
- WINDOW SIZES ARE BASED UPON ANDERSON 400 SERIES WINDOWS. ALL GLAZING OVER 9 SQUARE FEET AND/OR WITHIN 18" OF FLOOR AND IN HAZARDOUS LOCATIONS SHALL BE TEMPERED.
- 10) ALL STUD FRAMED WALLS GREATER THAN 8'-6" VERTICALLY SHALL BE LATERIALLY BRACED AT THE MIDPOINT WITH SOLID BLOCKING.
- 11) INTERIOR PARTITIONS SHALL RECEIVE 1/2" (MIN.) GYPSUM DRYWALL.
- 12) NO BACKFILLING OR ROUGH GRADING SHALL BE DONE UNTIL THE CONCRETE FOUNDATION AND SLAB HAS CURED FOR A MINIMUM OF 14 DAYS.
- 13) ALL DIMENSIONS ARE TO FINISH FACE, CONCRETE OR C.M.U. FACE, AND EXTERIOR SHEATHING FACE.
- 14) MASONRY AND STONE VENEERS SHALL BE ANCHORED TO SHEATHING WITH GALVANIZED CORRUGATED METAL TIES AT 32" O.C. HORIZONTALLY AND 16" O.C. VERTICALLY. FLASHING SHALL EXTEND BELOW MASONRY OR STONE AT ALL SILLS; WEEP HOLES SHALL BE PROVIDED AT 4'-0" O.C. AT BASE OF CAVITY.
- 15) METAL HEAD FLASHING SHALL BE INSTALLED IN ALL WINDOWS THAT ARE NOT LOCATED IMMEDIATELY BELOW AN 8" (MINIMUM) EAVE PROJECTION. MINIMUM 6" WIDE 30# BUILDING PAPER FLASHING SHALL BE INSTALLED AROUND ALL PRIMED WOOD WINDOWS.

- 16) ALLOW A MINIMUM OF 8" BETWEEN THE TOP OF FOUNDATION AND GRADE AND A MINIMUM OF 6" BETWEEN FINISH GRADE AND SHEATHING OR SIDING.
- 17) ALL SMOKE DETECTORS SHALL BE INTERCONNECTED. ALL DETECTORS SHALL HAVE A PRIMARY 120 VOLT SUPPLY AND A SECONDARY SYSTEM CONSISTING OF A BATTERY BACK-UP.
- 18) CONSULT MANUFACTURER SPECIFICATIONS OF ENGINEERED LUMBER. PAY PARTICULAR ATTENTION TO ASSEMBLY OF MULTIPLE MEMBER BEAMS, NAILING PROCEDURES & CUT OUTS FOR UTILITIES.
- 19) GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION AND ACCOMMODATION OF HVAC, PLUMBING, AND ELECTRICAL SYSTEMS. NO STRUCTURAL OR ARCHITECTURAL CHANGES SHALL BE MADE WITHOUT PRIOR APPROVAL BY THE ARCHITECT.

Commonwealth of Pennsylvania

Contact Person Edward (Kipp) Happ (610) 917-8831 DRAWN BY CHK'D BY RJK NO. DATE ISSUED FOR CLIENT REVIEW REVISED PLAN LAYOUT & 2 | 06-10-08 | EMH REVISED PLAN - REDUCED SQ.FT. 3 | 07-01-08 | ISSUED FOR PREMIT & 4 09-19-08 EMH APPROVED BY **CURRENT DATE** Sept 19, 2008

Radnor Township

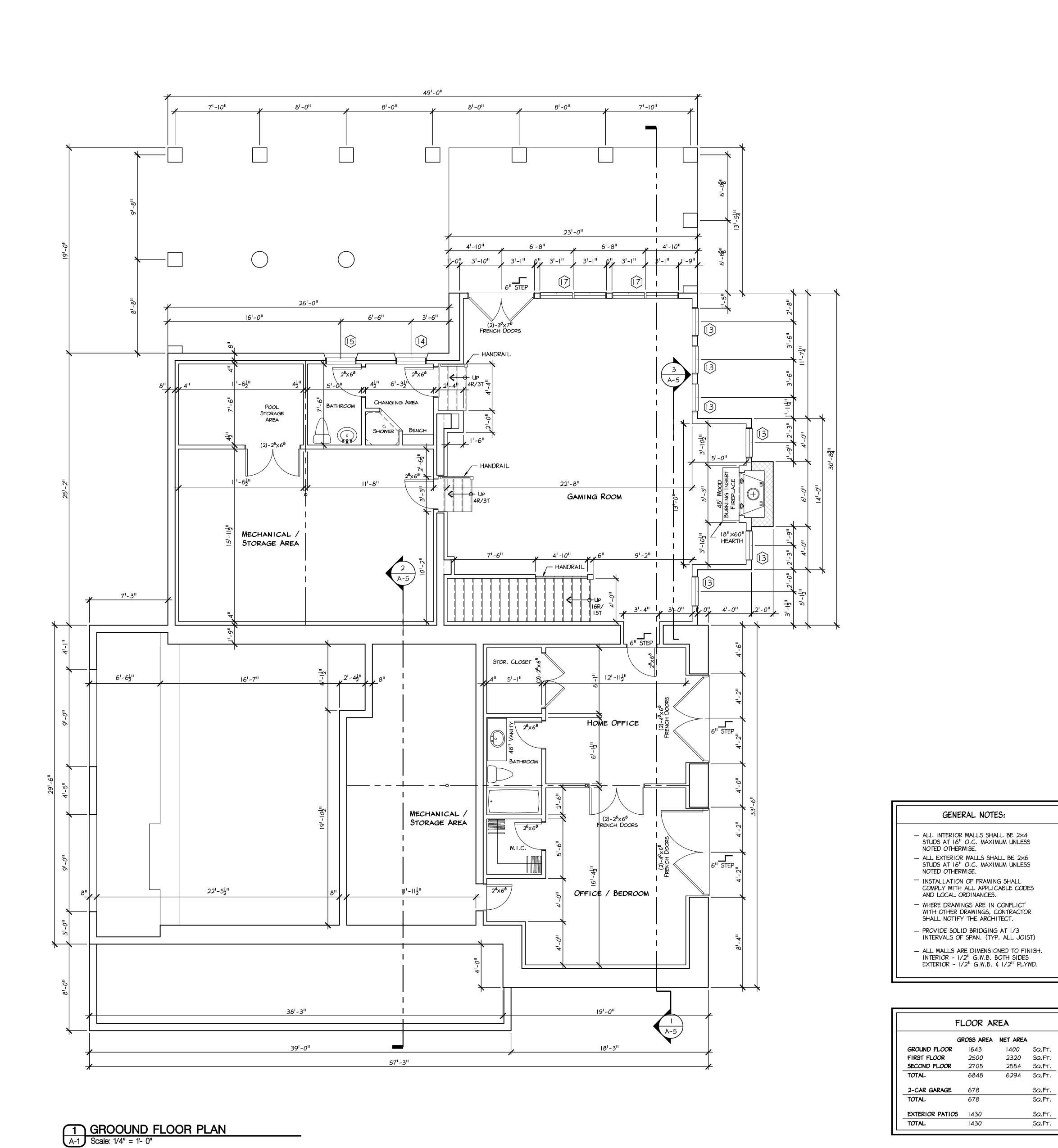
VLOEDMAN RESIDENCE

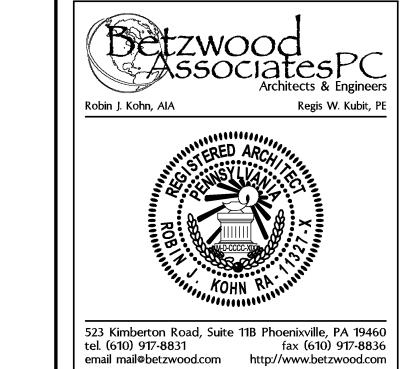
541 Atterbury Road

Villanova, PA 19085

Delaware County SHEET TITLE

TITLE SHEET





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

Contact Person: Edward (Kipp) Happ (610) 917-8831

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NO.	DATE	ᇠᆫ	ISSUE				
1	06/05/08		ISSUED FOR CLIENT REVIEW				
2	06-10-08	ЕМН	REVISED PLAN LAYOUT & FURNITURE LAYOUT				
3	07-01-08	ЕМН	REVISED PLAN - REDUCED SQ.FT				
4	09-19-08	ЕМН	ISSUED FOR PREMIT & CONSTRUCTION				
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	J. Kohn, AIA		Sept 19, 2008				

VLOEDMAN RESIDENCE 541 Atterbury Road Villanova, PA 19085

Radnor Township Delaware County

SHEET TITLE

GENERAL NOTES:

ALL INTERIOR WALLS SHALL BE 2×4 STUDS AT 16" O.C. MAXIMUM UNLESS NOTED OTHERWISE.

ALL EXTERIOR WALLS SHALL BE 2×6 STUDS AT 16" O.C. MAXIMUM UNLESS NOTED OTHERWISE.

INSTALLATION OF FRAMING SHALL COMPLY WITH ALL APPLICABLE CODES AND LOCAL ORDINANCES.

WHERE DRAWINGS ARE IN CONFLICT WITH OTHER DRAWINGS, CONTRACTOR SHALL NOTIFY THE ARCHITECT.

PROVIDE SOLID BRIDGING AT 1/3 INTERVALS OF SPAN. (TYP. ALL JOIST)

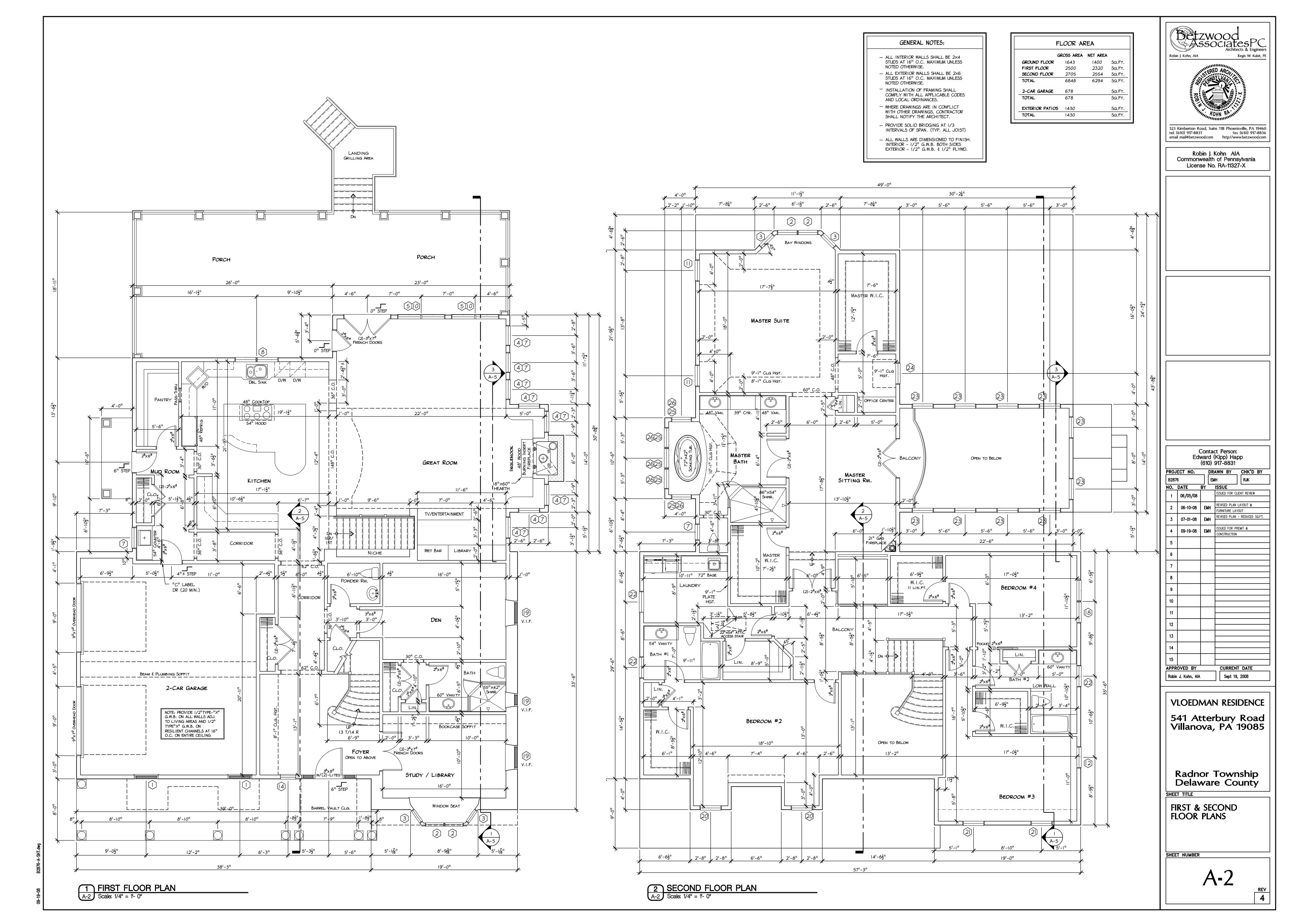
ALL WALLS ARE DIMENSIONED TO FINISH.
 INTERIOR - 1/2" G.W.B. BOTH SIDES
 EXTERIOR - 1/2" G.W.B. \$ 1/2" PLYWD.

FLOOR AREA

GROSS AREA NET AREA

6294 Sa.Ft.

Sa.Ft. Sa.Ft. GROUND FLOOR PLAN

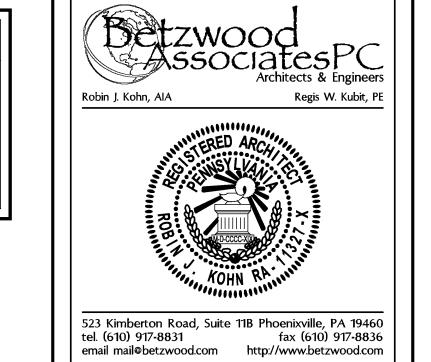


ATTIC VENTILATION

REQUIRED PROVIDED

MAIN ROOF 14.34 25.00 SQ.FT.
FAMILY RM ROOF 4.64 6.34 SQ.FT.
MASTER STE. ROOF 6.94 16.00 SQ.FT.

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



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

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



1 FRONT ELEVATION

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

ELEVATION KEYNOTES

3.0 CONCRETE

3.1 CONCRETE PAVERS
EP HENERY - OLD TOWNE COBBLE
3.2 CEMENT STUCCO OR
DRYVIT FINISHING SYSTEM
3.3 CEMENT STUCCO OR DRYVIT
FINISHING SYSTEM / BUILD-UP TRIM

4.0 MASONRY

4.1 ASHLAR FLAGSTONE - PATIO
COLOR TO BE CHOSEN BY OWNER

4.1 ASHLAR FLAGSTONE - PATTO
COLOR TO BE CHOSEN BY OWNER
4.2 STONE - ASHLAR SCHIST
VENEER STONE

4.3 CAP STONE - SCHIST
WATERTABLE CAP STONE
6.0 WOODS AND PLASTICS
6.1 CEMENTITIOUS HORIZONTAL SIDING

HARDIEPLANK - LAP SIDING
6.2 CEMENTITIOUS SIDING
HARDIEPLANK - SIDING
6.3 GABLE END / BARGEBOARD TRIM
AZEK TRIM PANELS

6.4 GABLE END / FREEZE TRIM
AZEK TRIM PANELS
6.5 FASCIA TRIM
AZEK TRIM PANELS

6.6 FASCIA / FREEZE TRIM
AZEK TRIM PANELS
6.7 BAY / DORMER FASCIA TRIM
AZEK TRIM PANELS
6.8 BAY / DORMER GABLE END TRIM
AZEK TRIM PANELS

AZEK TRIM PANELS

6.9 WINDOW / DOOR HEADER

AZEK TRIM

6.10 DORMER HEAD TRIM

AZEK TRIM
6.11 WINDOW / DOOR SIDE TRIM
AZEK TRIM
6.12 WINDOW SHUTTERS

6.12 WINDOW SHUTTERS
FYPON - RAISED PANEL
6.13 WINDOW SILL EXTENSIONS
FYPON - MOLDING
6.14 WINDOW PANELS

FYPON - RAISED PANEL
6.15 COLUMN - PLAIN TAPERED
12" DIA. ROUND - RED CEDAR
6.16 LATTICE

6.16 LATTICE
FIBERGLASS OR CEMENTITIOUS
6.17 2x8 JOIST - DECORATIVE
RED CEDAR

RED CEDAR
6.18 2×2 PURLIN
RED CEDAR

6.19 RAILING, BALUSTERS & POSTS
CERETAINTEED - COMPOSITE RAILING
6.20 IPE DECKING OR COMPOSITE
5/4× DECKING MATERIAL
6.21 FYPON MOLDING / I X TRIM

7.0 THERMAL & MOISTURE PROTECTION

7.1 ROOF SHINGLES - ARCHITECTURAL STYLE (30 YR. WARRANTY)

7.2 RIDGE VENT - BENJAMIN OBDYKE

7.2 RIDGE VENT - BENJAMIN OBDYKE XTRACTOR VENT - SERIES: XI8
7.3 FLASHING - 160z COPPER
7.4 BARREL ROOF - 160z COPPER

7.4 BARREL ROOF - 160Z COPPER STANDING METAL ROOF 7.5 LOW SLOPED METAL ROOF STANDING SEAM METAL ROOF

STANDING SEAM METAL ROOF

10.0 SPECIALTIES

10.1 GABLE END LOUVER

10.1 GABLE END LOUVER
FYPON - OPEN W/ SCREEN (U.N.O.)
10.2 GARAGE DOORS
HOWELL-DOR - CUSTOM

10.3 FIBERGLASS SCREENING
SET IN ALUM. OR WOOD FRAME
10.4 FIREPLACE CHIMNEY POTS
16"W × 39"H

		ward	ct Person: (Kipp) Ha 917-8831					
PROJ	ECT NO.	DR	AWN BY	CHK'D BY				
B287	6	E)	AH	RJK				
NO.	DATE	BY _	ISSUE					
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VLOEDMAN RESIDENCE 541 Atterbury Road Villanova, PA 19085

Sept 19, 2008

Radnor Township Delaware County

SHEET TITLE

Robin J. Kohn, AIA

FRONT & SOUTH SIDE ELEVATIONS

SHEET NUMBER

A-3

REV 4

NOTE: AREAS ARE CALCULATED BY 1/150 OF THE ATTIC FLOOR AREA. 50% OF AREA AT THE RIDGE, 50% OF AREA AT THE SOFFIT. FLR. FRAMING FLR. FRAMING 10" COL 士 SQUARE

10.2

SIDE ELEVATION (NORTH)

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

1 REAR ELEVATION
A-4 Scale: 1/4" = 1'- 0"



3.0 CONCRETE 3.1 CONCRETE PAVERS EP HENERY - OLD TOWNE COBBLE 3.2 CEMENT STUCCO OR DRYVIT FINISHING SYSTEM

ELEVATION KEYNOTES

ATTIC VENTILATION

FAMILY RM ROOF 4.64 6.34 SQ.FT.

MASTER STE. ROOF 6.94

REQUIRED PROVIDED

14.34 25.00 Sq.FT.

16.00 Sa.Ft.

3.3 CEMENT STUCCO OR DRYVIT FINISHING SYSTEM / BUILD-UP TRIM

4.1 ASHLAR FLAGSTONE - PATIO

COLOR TO BE CHOSEN BY OWNER

4.2 STONE - ASHLAR SCHIST VENEER STONE

4.3 CAP STONE - SCHIST WATERTABLE CAP STONE

6.0 WOODS AND PLASTICS

6.1 CEMENTITIOUS HORIZONTAL SIDING HARDIEPLANK - LAP SIDING

6.2 CEMENTITIOUS SIDING HARDIEPLANK - SIDING

6.3 GABLE END / BARGEBOARD TRIM

AZEK TRIM PANELS

6.4 GABLE END / FREEZE TRIM AZEK TRIM PANELS

6.5 FASCIA TRIM AZEK TRIM PANELS

6.6 FASCIA / FREEZE TRIM

AZEK TRIM PANELS 6.7 BAY / DORMER FASCIA TRIM

AZEK TRIM PANELS 6.8 BAY / DORMER GABLE END TRIM AZEK TRIM PANELS

6.9 WINDOW / DOOR HEADER AZEK TRIM 6.10 DORMER HEAD TRIM

AZEK TRIM 6.11 WINDOW / DOOR SIDE TRIM

AZEK TRIM

6.12 WINDOW SHUTTERS FYPON - RAISED PANEL 6.13 WINDOW SILL EXTENSIONS

FYPON - MOLDING 6.14 WINDOW PANELS

FYPON - RAISED PANEL

6.15 COLUMN - PLAIN TAPERED 12" DIA, ROUND - RED CEDAR

6.16 LATTICE FIBERGLASS OR CEMENTITIOUS

6.17 2x8 JOIST - DECORATIVE RED CEDAR 6.18 2×2 PURLIN

RED CEDAR 6.19 RAILING, BALUSTERS & POSTS

CERETAINTEED - COMPOSITE RAILING 6.20 IPE DECKING OR COMPOSITE

5/4× DECKING MATERIAL 6.21 FYPON MOLDING / 1 X TRIM

7.0 THERMAL & MOISTURE PROTECTION

7.1 ROOF SHINGLES - ARCHITECTURAL STYLE (30 YR. WARRANTY)

7.2 RIDGE VENT - BENJAMIN OBDYKE XTRACTOR VENT - SERIES: X18

7.3 FLASHING - 160z COPPER 7.4 BARREL ROOF - 160Z COPPER

STANDING METAL ROOF

7.5 LOW SLOPED METAL ROOF STANDING SEAM METAL ROOF

10.0 SPECIALTIES

10.1 GABLE END LOUVER FYPON - OPEN W/ SCREEN (U.N.O.)

10.2 GARAGE DOORS HOWELL-DOR - CUSTOM

10.3 FIBERGLASS SCREENING SET IN ALUM. OR WOOD FRAME

10.4 FIREPLACE CHIMNEY POTS $16"W \times 39"H$

Detzwood AssociatesPC Architects & Engineers Robin J. Kohn, AIA Regis W. Kubit, PE 523 Kimberton Road, Suite 11B Phoenixville, PA 19460 tel. (610) 917-8831 fax (610) 917-8836 email mail@betzwood.com http://www.betzwood.com Robin J. Kohn AIA Commonwealth of Pennsylvania License No. RA-11327-X

Contact Person: Edward (Kipp) Happ (610) 917-8831 PROJECT NO. DRAWN BY CHK'D BY NO. DATE ISSUED FOR CLIENT REVIEW REVISED PLAN LAYOUT & 2 | 06-10-08 | EMH | FURNITURE LAYOUT 3 07-01-08 EMH REVISED PLAN - REDUCED SQ.FT. 4 09-19-08 EMH ISSUED FOR PREMIT & CONSTRUCTION APPROVED BY CURRENT DATE Sept 19, 2008 Robin J. Kohn, AIA

VLOEDMAN RESIDENCE 541 Atterbury Road Villanova, PA 19085

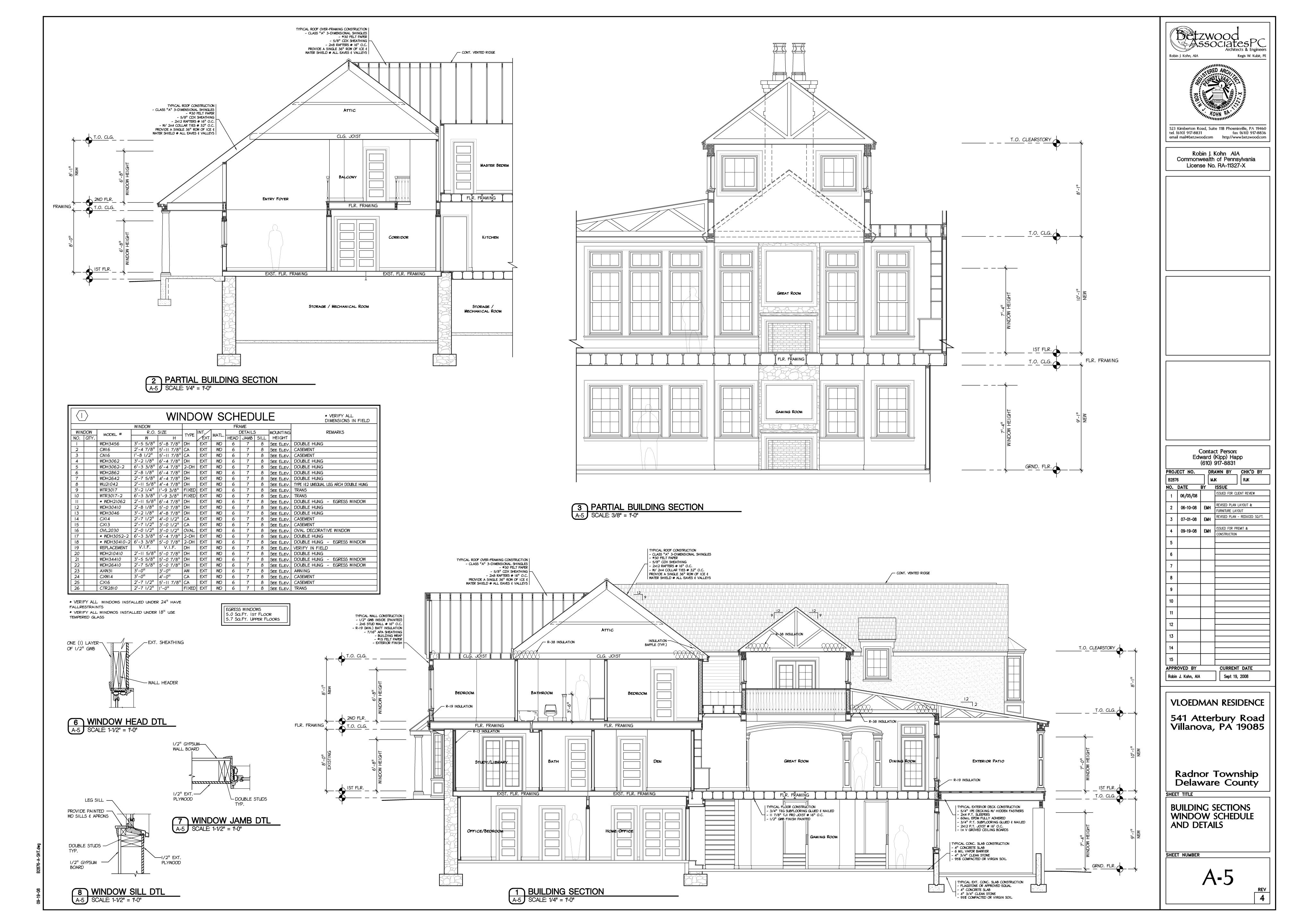
Radnor Township Delaware County

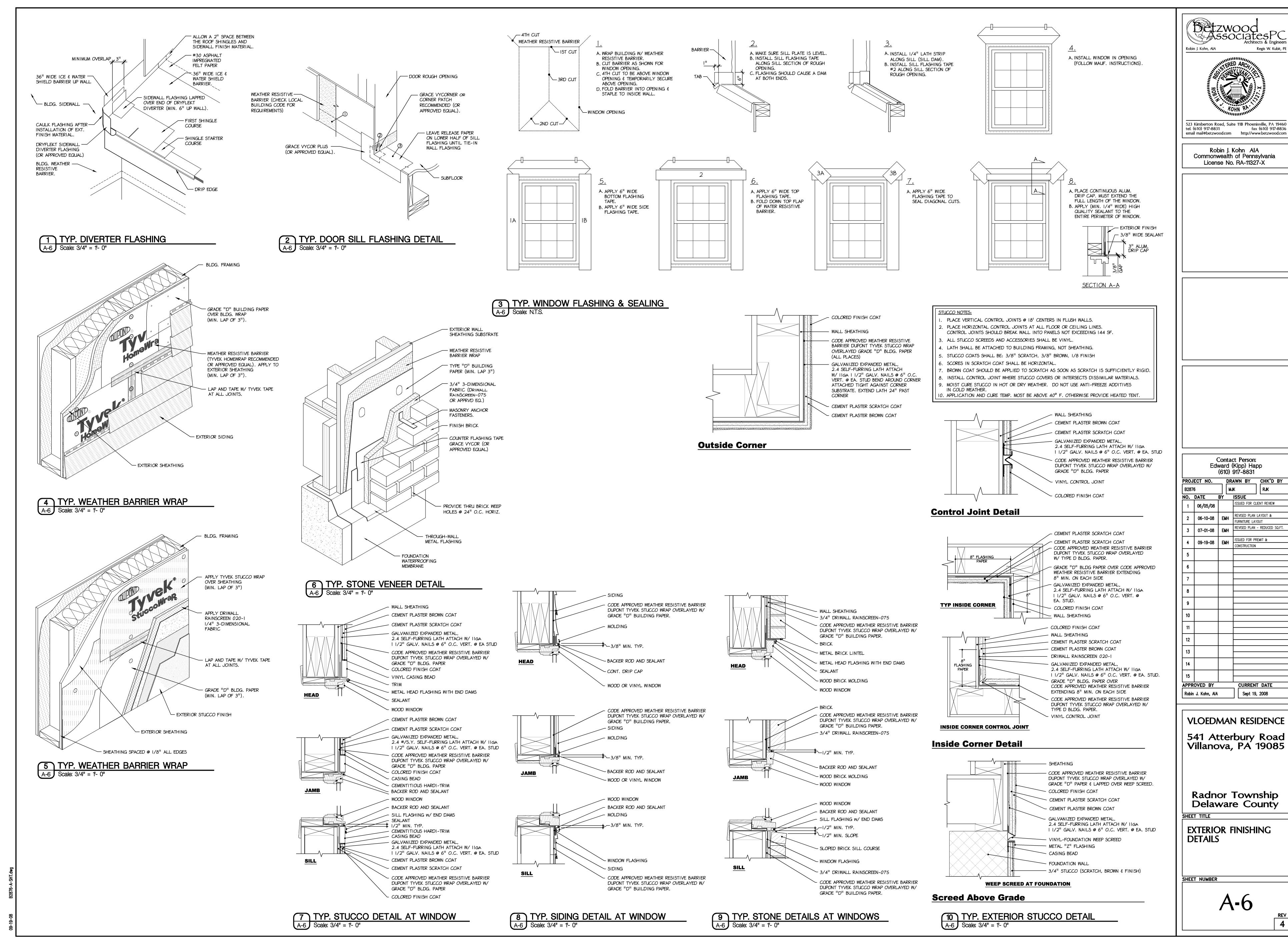
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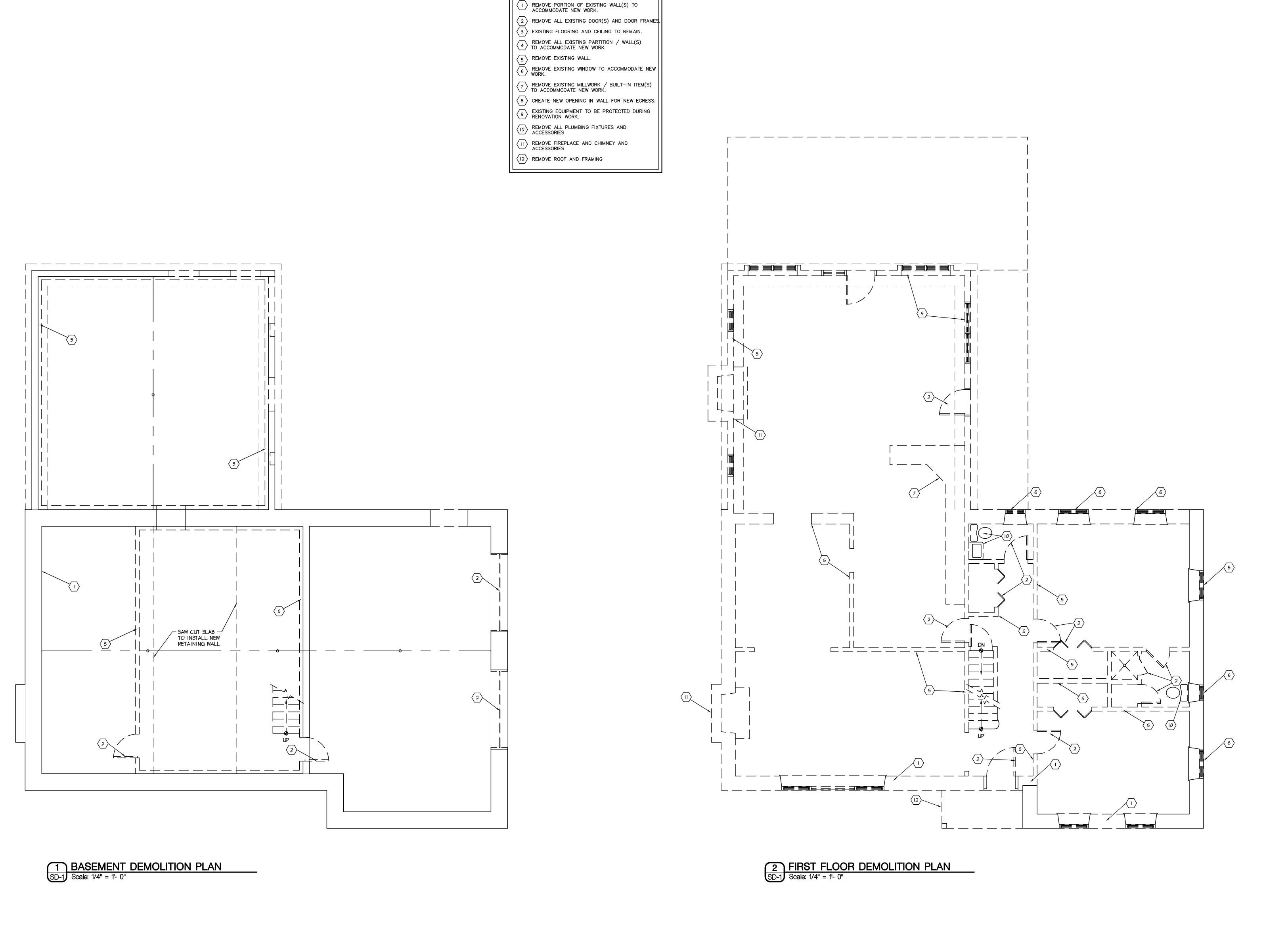
REAR & NORTH SIDE ELEVATIONS

SHEET NUMBER

A-4







DEMOLITION NOTES

Robin J. Kohn, AIA

Regis W. Kubit, PE



523 Kimberton Road, Suite 11B Phoenixville, PA 19460 tel. (610) 917-8831 fax (610) 917-8836 email mail@betzwood.com http://www.betzwood.com

Jeffrey M. Thoms, P.E. Commonwealth of Pennsylvania License No. PE060309

PROJECT NO.

B2876

MJK

RJK

NO. DATE

BY

ISSUE

1 06/05/08

FMH

REVISED PLAN LAYOUT &

Contact Person: Edward (Kipp) Happ (610) 917-8831

VLOEDMAN RESIDENCE 541 Atterbury Road Villanova, PA 19085

CURRENT DATE

Radnor Township Delaware County

SHEET TITLE

APPROVED BY

Robin J. Kohn, AIA

BASEMENT & FIRST FLOOR DEMOLITION PLANS

SHEET NUMBER

SD-

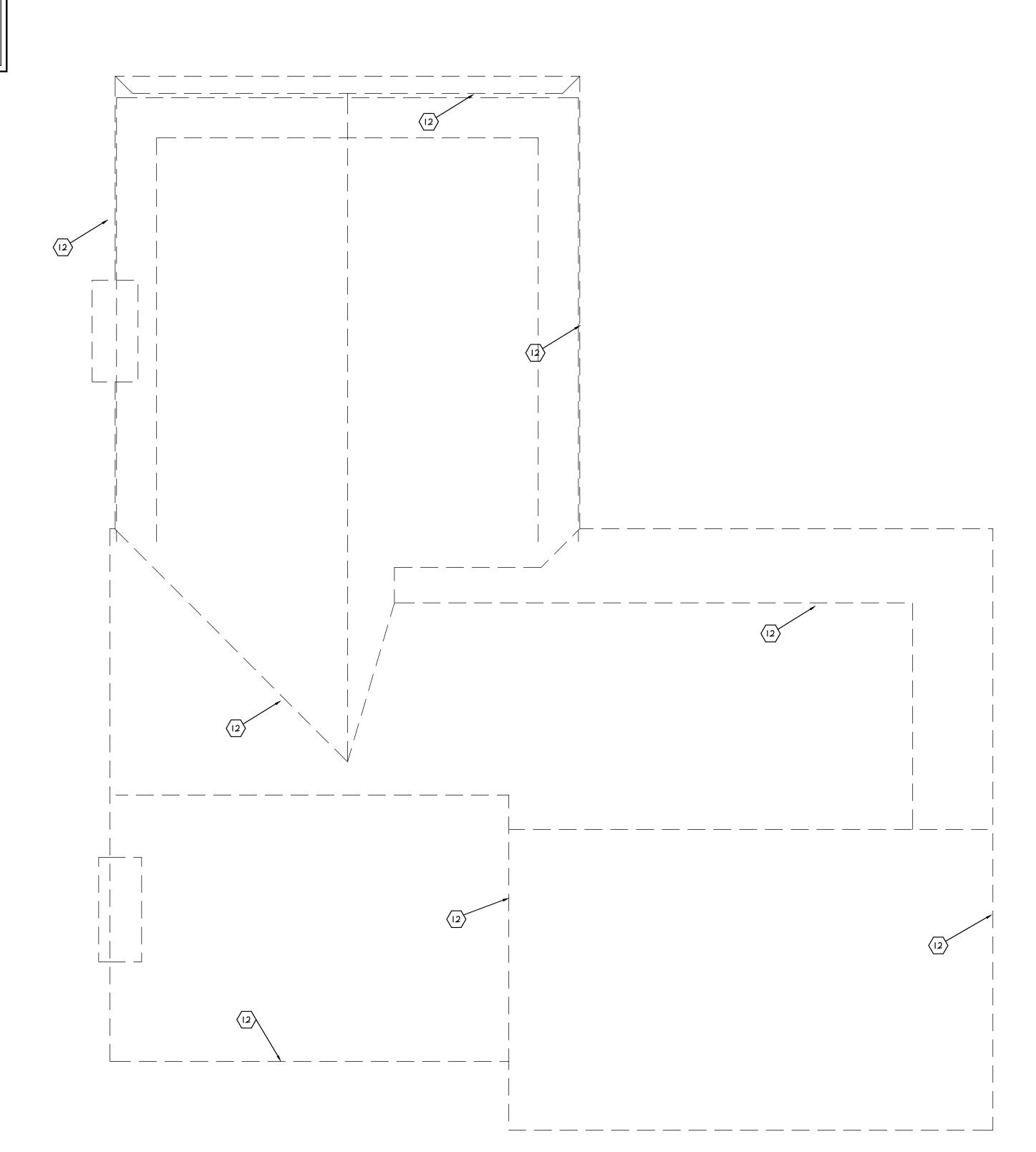
REV 4

DEMOLITION NOTES

- REMOVE PORTION OF EXISTING WALL(S) TO ACCOMMODATE NEW WORK.
- 2 REMOVE ALL EXISTING DOOR(S) AND DOOR FRAMES.

 3 EXISTING FLOORING AND CEILING TO REMAIN.
- REMOVE ALL EXISTING PARTITION / WALL(S) TO ACCOMMODATE NEW WORK.
- 5 REMOVE EXISTING WALL.
- REMOVE EXISTING WINDOW TO ACCOMMODATE NEW WORK.
- 7 REMOVE EXISTING MILLWORK / BUILT-IN ITEM(S) TO ACCOMMODATE NEW WORK.
- 8 CREATE NEW OPENING IN WALL FOR NEW EGRESS.

 9 EXISTING EQUIPMENT TO BE PROTECTED DURING RENOVATION WORK.
- REMOVE ALL PLUMBING FIXTURES AND ACCESSORIES
- REMOVE FIREPLACE AND CHIMNEY AND ACCESSORIES
- (12) REMOVE ROOF AND FRAMING



1 SECOND FLOOR DEMOLITION PLAN
SD-2 Scale: 1/4" = 1'- 0"

ROOF FRAMING DEMOLITION PLAN

SD-2 Scale: 1/4" = 1'- 0"

Robin J. Kohn, AIA

Regis W. Kubit, F

PROFESSIONAL

JEFFREY M. THOMS

ENGINEER

No. PE060309

523 Kimberton Road, Suite 11B Phoenixville, PA 19460 tel. (610) 917-8831 fax (610) 917-8836 email mail@betzwood.com http://www.betzwood.com

Jeffrey M. Thoms, P.E. Commonwealth of Pennsylvania License No. PE060309

MJK	RJK	
DATE	BY	ISSUE
06/05/08		ISSUED FOR CLIENT REVIEW
06-10-08	EMH	REVISED PLAN LAYOUT & FURNITURE LAYOUT
07-01-08	EMH	REVISED PLAN - REDUCED SQ.FT
09-19-08	EMH	ISSUED FOR PERMIT & CONSTRUCTION

Contact Person: Edward (Kipp) Happ (610) 917-8831

VLOEDMAN RESIDENCE

CURRENT DATE

541 Atterbury Road Villanova, PA 19085

> Radnor Township Delaware County

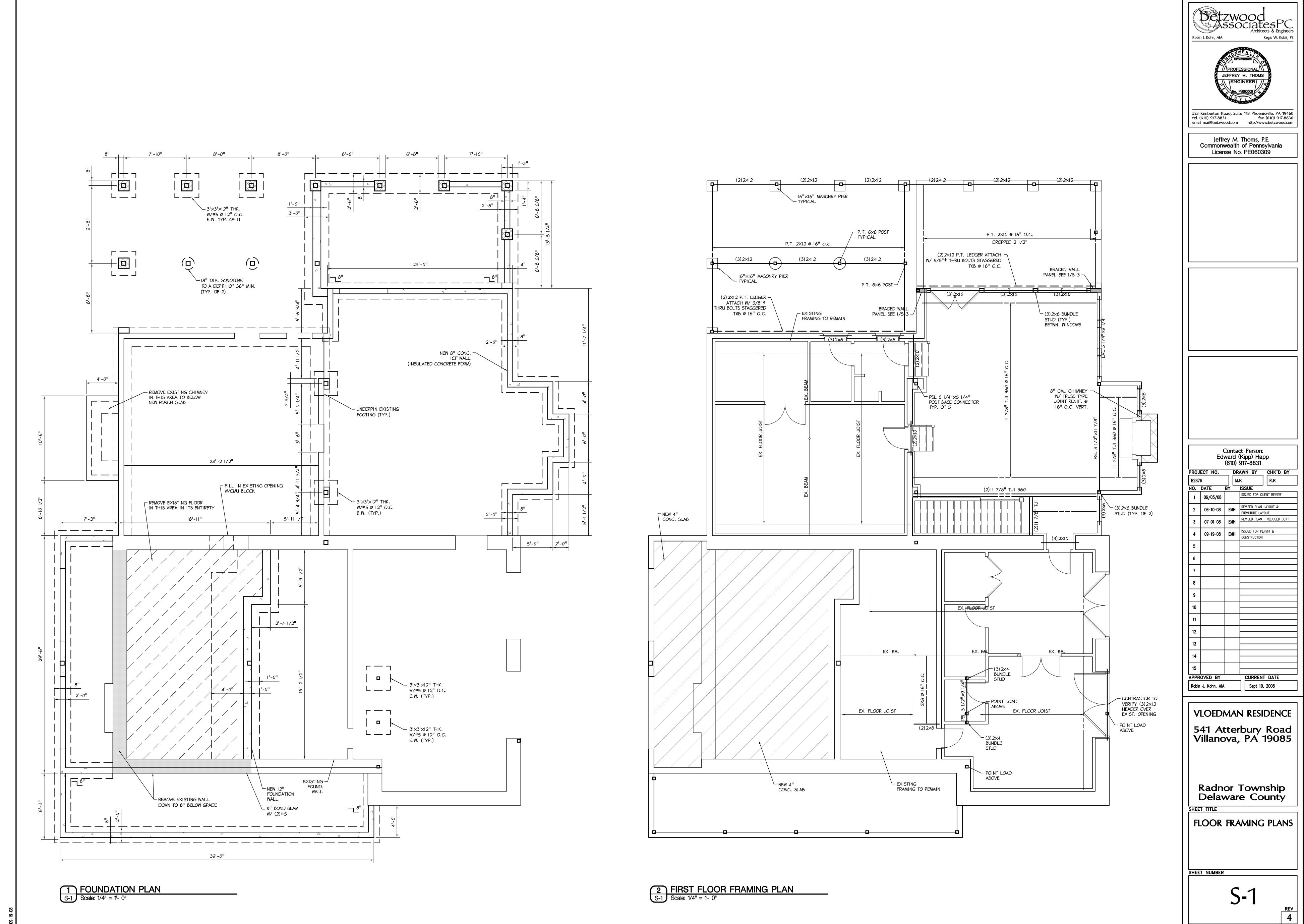
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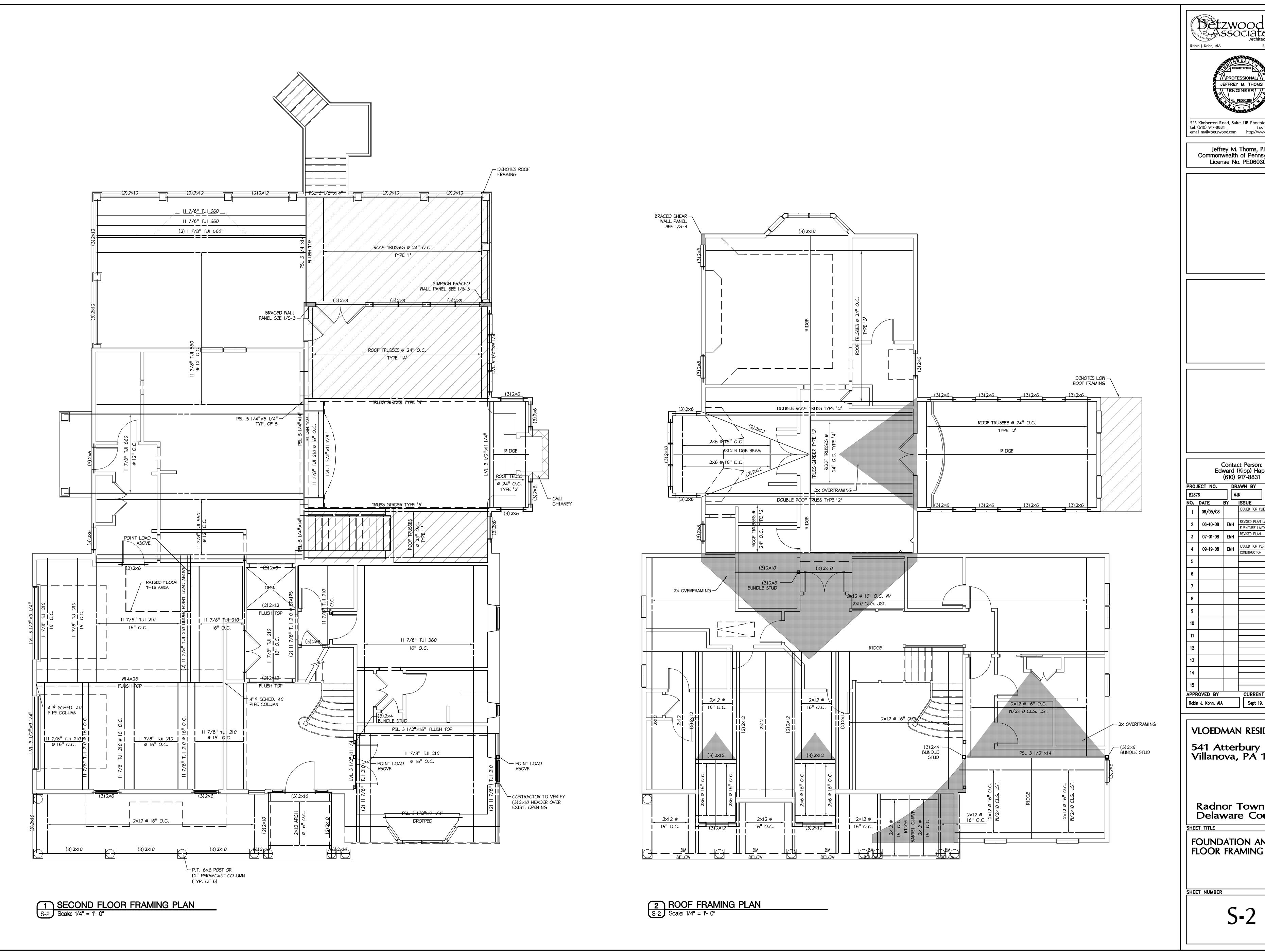
SECOND FLOOR & ROOF DEMOLITION PLANS

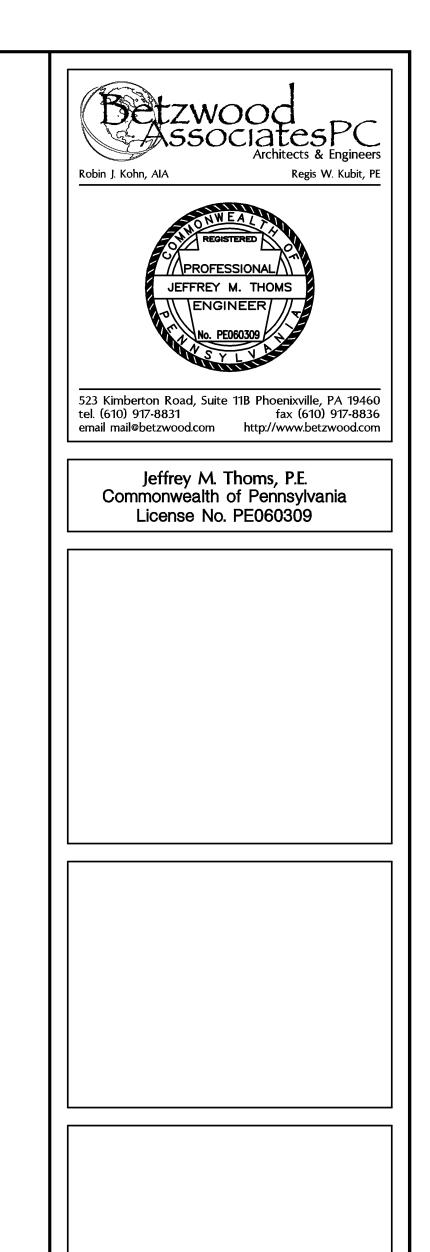
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SD-2

REV 4





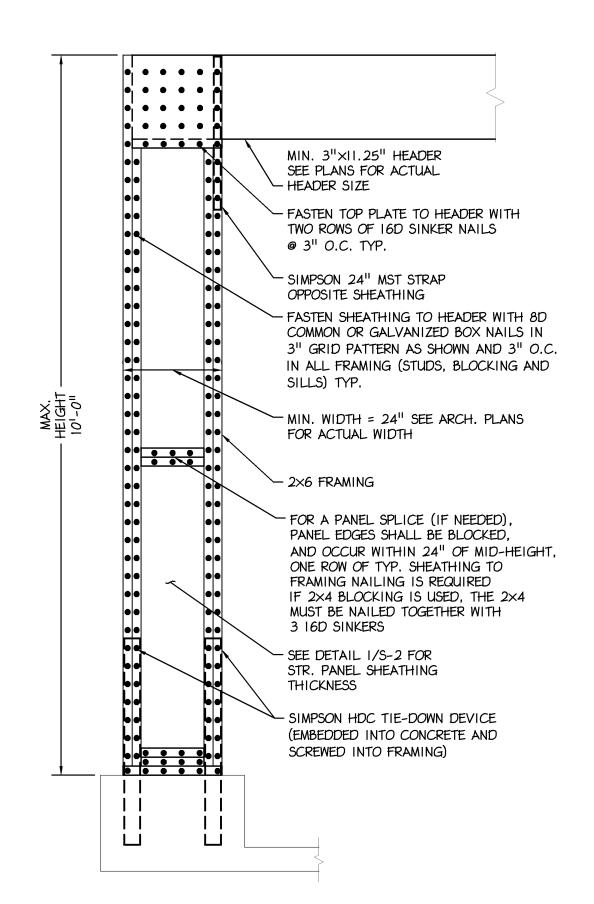


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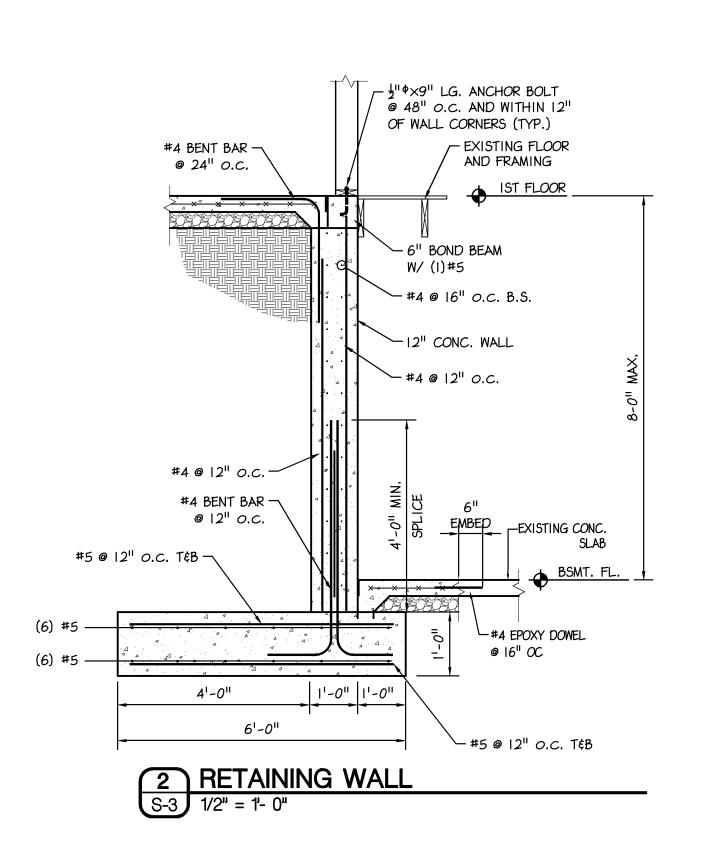
VLOEDMAN RESIDENCE 541 Atterbury Road Villanova, PA 19085

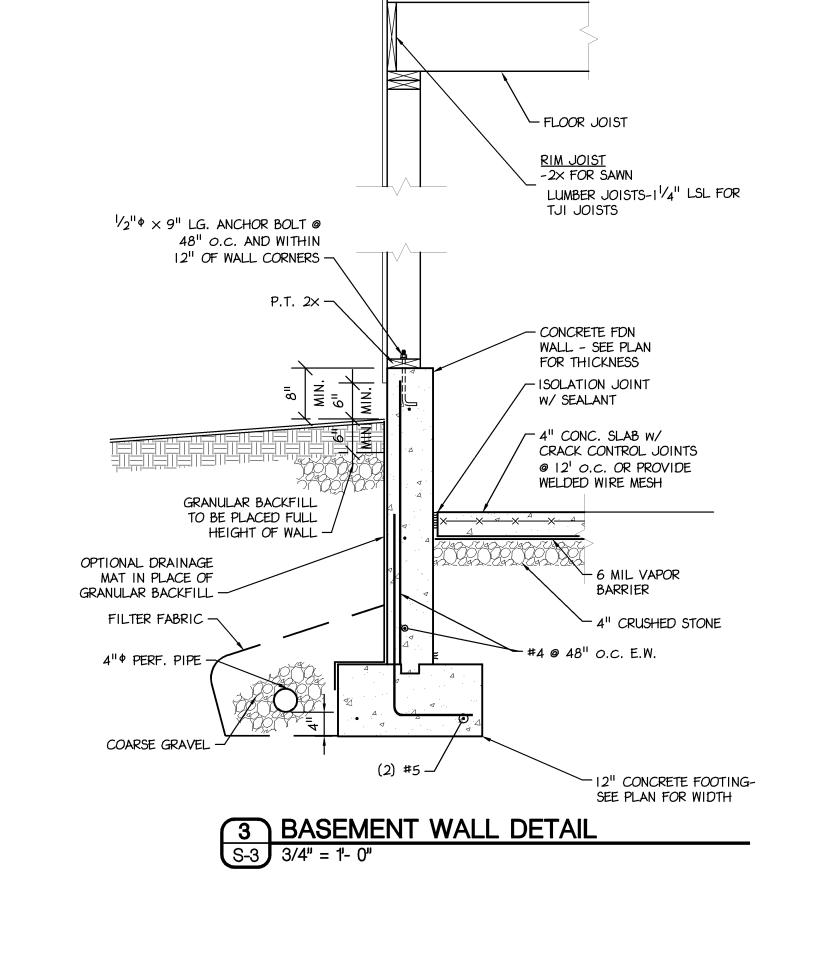
Radnor Township Delaware County

FOUNDATION AND FLOOR FRAMING PLANS



SHEAR WALL PANEL ELEVATION S-3 3/4" = 1'- 0"





INSULATION -

PROVIDE ICE DAM UNDERLAYMENT

PAST LINE OF EXTERIOR WALL

- SIMPSON HI

@ EA. RAFTER

- 2×6 @ 16" o.c.

HURRICANE ANCHOR

EDGE SPACING TYP.

SHEATHING GLUED \$

1/2" GYPSUM WALLBOARD

DRYWALL SCREWS @ 6" O.C.

- EDGE SPACING TYP.

- 3/4" MIN. FLOOR

SHEATHING GLUED AND

NAILED TO FRAMING

SHEATHING FASTENED W/ 1 5/8"

NAILED @ 8" O.C.

 $-\frac{1}{2}$ " GYPSUM WALLBOARD

SHEATHING FASTENED W/ 1 5/8"

DRYWALL SCREWS @ 6" O.C.

FROM EDGE OF EAVE TO 24" MIN

5/8" MIN. ROOF

SHEATHING SEE DETAIL -

PROVIDE SOFFIT -

ARCH. ELEVATIONS

IF REQ^ID ON

SOFFIT VENT -

WEATHER RESISTIVE

EXTERIOR FINISH -

1/2" PLYWOOD SHEATHING-

PROVIDE WOOD BLOCKING

@ 6" O.C. EDGE SPACING

ATTACH W/ 100 COMMON NAILS

@ ALL HORIZ. JOINTS

(12" O.C. IN FIELD)

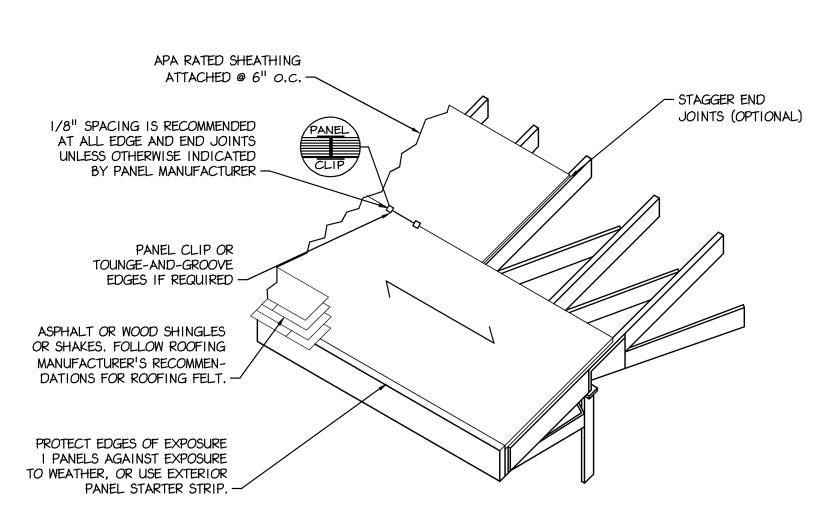
22 GA SIMPSON COIL -

STRAP TIES @ 32" O.C.

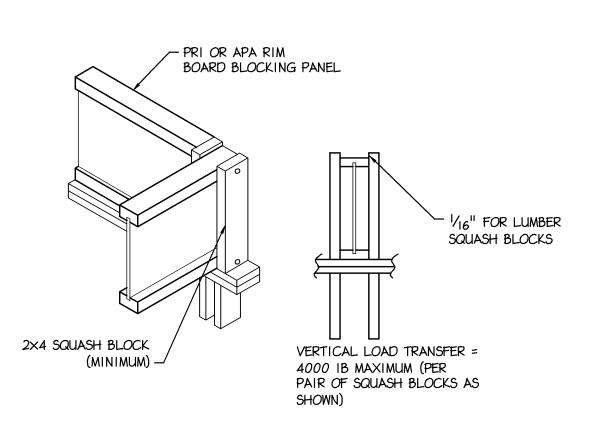
SEE ARCH.

BARRIER

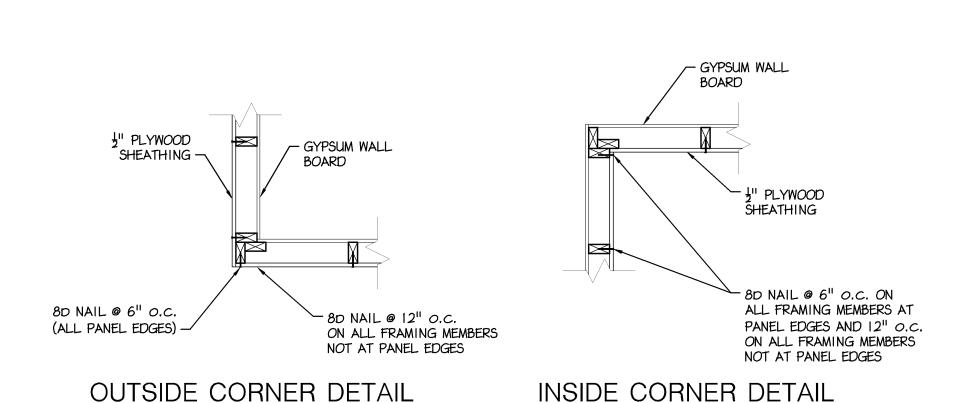
4/S-3 FOR NAILING



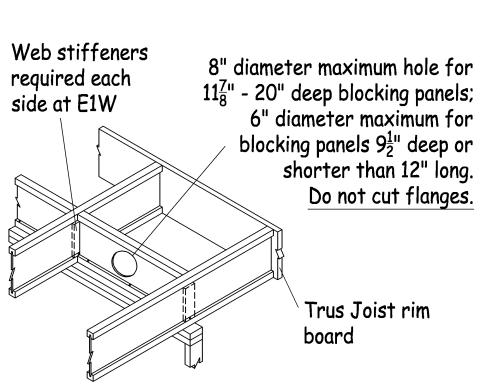
4 PANEL ROOF SHEATHING DETAIL



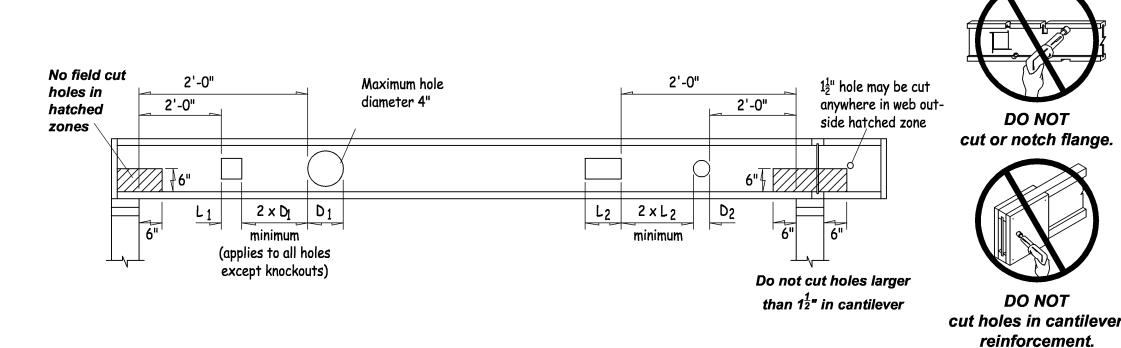
5 SQUASH BLOCK DETAIL
S*-3 3/4" = 1'- 0"



X EXTERIOR CORNER FRAMING DETAIL



7 TJI WEB STIFFNERS S-3 SCALE: N.T.S.



ALLOWABLE HOLES - TJI® Joists

8 TJI ALLOWABLE HOLES
S-3 SCALE: N.T.S.

CONCRETE NOTES

LATEST EDITION

- 1. REINFORCED CONCRETE CONSTRUCTION SHALL BE IN ACCORDANCE WITH ACI 318,
- 2. CONCRETE MATERIALS: FC = 4000 PSI FOR SLABS, ALL OTHER CONCRETE: FC = 3000 PSI CEMENT: ASTM C150, TYPE I AGGREGATE: ASTM C33
- WATER: ASTM C94 EXTERIOR CONCRETE MIX: WATER CEMENT RATIO, 0.45 (AIR-ENTRAINED TO 4.5 % MIN) INTERIOR CONCRETE MIX: WATER CEMENT RATIO, 0.50
- 3. REINFORCING MATERIALS: REINFORCING BARS: ASTM A615, GRADE 60, DEFORMED 4. REINFORCING BARS SHALL BE LAPPED A MINIMUM OF 36 BAR DIAMETERS. 5. MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCEMENT AS FOLLOWS:
- CAST AGAINST EARTH: 3" CLEAR CONCRETE EXPOSED TO EARTH OR WATER: 2" CLEAR 3/4" CLEAR ALL OTHER CONCRETE:
- 6. MINIMUM CONCRETE SLAB REINFORCEMENT SHALL BE AS FOLLOWS: 31/2" FLOOR SLAB ON METAL DECK 66-W2.9×W2.9 4" FLOOR SLAB ON GRADE 66-W2.9×W2.9 5" FLOOR SLAB ON GRADE 44-W4.0×W4.0
- 6" FLOOR SLAB ON GRADE #4 REBAR @ 12" O.C. E.W. 7. COLD-WEATHER PLACING SHALL COMPLY WITH THE PROVISIONS OF ACI-306R. THE USE OF CALCIUM CHLORIDE, SALT, AND OTHER MATERIALS CONTAINING ANTI FREEZE AGENTS OR CHEMICAL ACCELERATORS SHALL NOT BE PERMITTED UNLESS OTHERWISE ACCEPTED IN THE MIX DESIGN.
- 8. HOT-WEATHER PLACING SHALL COMPLY WITH THE PROVISIONS OF ACI-305.

FOUNDATION NOTES

- 1. FOUNDATION SOIL BEARING PRESSURE 3000 PSI 2. FOUNDATION SHALL BE PLACED ON VIRGIN SOIL AT ELEVATIONS INDICATED ON
- 3. THE ENGINEER SHALL APPROVE ALL BEARING STRATA PRIOR TO PLACEMENT OF
- THE CONCRETE FOOTINGS.
- 4. INSTALL CRACK CONTROL OR CONSTRUCTION JOINTS AT 30-FOOT MAXIMUM CENTERS
- IN WALLS. LOCATIONS SHALL BE APPROVED BY ENGINEER. 5. TOP OF FOOTING ELEVATIONS ARE NOTED (000.00')
- TOP OF PIER OR WALL ELEVATIONS ARE NOTED [000.00'] 6. ALL TOPSOIL, SOIL FILL, AND SOFT SOUBSOIL SHALL BE REMOVED AND, IF NECESSARY, REPOLACED WITH COMPACTED LOAD-BEARING FILL MATERIALS. TEST
- THE VIRGIN SOIL. 7. ANY UNDERCUT AND REPLACEMENT WITH COMPACTED LOAD-BEARING FILL SHALL EXTEND LATERALLY BEYOND FOOTINGS A DISTANCE AT LEAST EQUAL TO THE DEPTH OF THE

PITS OR SOIL BORINGS SHALL BE CONDUCTED TO DETERMINE THE LOCATION OF

- UNDERCUT. 8. AFTER UNDERCUTTING AND REMOVAL OF UNSUITABLE SOIL, THE EXPOSED UNDERLYING RESIDUAL SOILS IN THE PROPOSED BUILDING AREA SHALL BE PROOFROLLED AND COMPACTED. SOFT AND/OR UNSTABLE AREAS DISCLOSED BY THE PROOFROLLING SHALL BE ROLLED UNTIL STABILITY IS OBTAINED OR UNTIL FURTHER UNDERCUT TO FIRM MATERIAL IS REACHED.
- 9. FOOTINGS SHALL BE BASED ON STIFF SUBSOIL OR LOAD-BEARING FILL MATERIALS WITH A MINIMUM DEPTH OF AT LEAST TWO FEET OR ONE-HALF THE FOOTING WIDTH,
- WHICHEVER IS GREATER, BELOW THE FOUNDATION BEARING LEVEL 10. PLACE LOAD-BEARING FILL MATERIALS IN LAYERS NOT MORE THAN EIGHT INCHES IN LOOSE THICKNESS FOR MATERIAL COMPACTED BY HEAVY COMPACTION EQUIPMENT, AND
- NOT MORE THAN FOUR INCHES IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HAND-OPERATED TAMPERS. FILL MATERIAL SHALL BE MOISTENED OR AERATED AS NECESSARY. II. EACH LIFT SHALL BE COMPACTED TO AN AVERAGE DRY DENSITY OF NOT LESS THAN 98% OF THE MAXIMUM DRY DENSITY ACCORDING TO ASTM D698 (STANDARD PROCTOR) FOR ALL
- FOOTING AND FLOOR SUBGRADES. 12. THE SUB-FLOOR MATERIALS SHALL CONSIST OF AT LEAST FOUR TO SIX INCHES OF GRAVEL OR CRUSHED STONE. THE SUB-FLOOR MATERIALS SHALL BE COMPACTED BY AT LEAST FOUR COVERAGES OF A HEAVY-DUTY VIBRATORY ROLLER OR UNTIL NO FURTHER COMPACTION IS OBSERVED. SEE THE DRAWINGS AND SPECIFICATIONS FOR THE VAPOR
- 13. IN AREAS WHERE SOFT/LOOSE ZONES OR POSSIBLE VOIDS EXIST AT DEPTH, NOTIFY THE STRUCTURAL ENGINEER IMMEDIATELY. SUCH AREAS SHOULD BE UNDERCUT AND REPLACED WITH COMPACTED LOAD-BEARING FILL, OR FLOWABLE CONCRETE FILL AS DIRECTED BY THE DESIGN PROFESSIONAL. IN ADDITION, FOOTINGS SHOULD BE OVERSIZED AND PROPORTIONED FOR A REDUCED ALLOWABLE BEARING CAPACITY, AS DETERMINED BY THE STRUCTURAL ENGINEER, TO BETTER DISTRIBUTE FOUNDATION LOADS AND SPAN ANY LOCALIZED SOFT/LOOSE ZONE OR VOID AREAS.

STRUCTURAL STEEL NOTES

BOLTS

BARRIER SIZE, TYPE AND LOCATION.

- 1. STRUCTURAL STEEL CONSTRUCTION SHALL BE IN ACCORDANCE WITH AISC'S 'CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES' AND 'SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS - ALLOWABLE STRESS DESIGN', LATEST EDITION
- 2. STEEL MATERIALS W-SHAPES: ASTM A 992, FY=50,000 PSI CHANNELS, ANGLES FY=36,000 PSI ASTM A 36, PLATE AND BAR ASTM A 36, FY=36,000 PSI COLD-FORMED HOLLOW ASTM A 500, GRADE B FY=46,000 PSI STRUCTURAL SECTIONS
- HOT-FORMED HOLLOW ASTM A 501, STRUCTURAL SECTIONS ASTM A 53, STEEL PIPE GRADE B, 3. CONNECTOR MATERIALS:
 - FY=36,000 PSI ASTM F1852, TYPE 1, TENSION CONTROL HIGH STRENGTH BOLT-NUT-WASHER ASSEMBLY WITH HEX OR ROUND HEADS AND SPLINED ENDS.

FY=46,000 PSI

TYPE E OR S

- WELDING ELECTRODES COMPLY WITH AWS REQUIREMENT UNHEADED ANCHOR RODS ASTM F1554, GRADE 36, FY=36,000 PS 4. BEAM-TO-BEAM AND BEAM-TO-COLUMN CONNECTIONS SHALL BE AISC STANDARD FULL DEPTH CONNECTIONS, UNLESS NOTED OTHERWISE. WHERE REACTIONS ARE INDICATED ON THE DRAWINGS, THE CONNECTION SHALL BE PROVIDED BY THE FABRICATOR. DETAILS AND CALCULATIONS, PREPARED BY A LICENSED ENGINEER,
- SHALL BE PART OF THE SHOP DRAWING SUBMISSION. 5. ALL CONNECTIONS SHALL BE HIGH-STRENGTH FRICTION BOLTS OR WELDS OF EQUAL STRENGTH. ANCHOR BOLTS AND FIELD CONNECTIONS OF GIRTS FOR SHEAR SHALL BE UNFINISHED BOLTS.
- 6. ELEVATION OF TOP OF STEEL MEMBERS ARE NOTED (+ -). 7. STEEL JOISTS SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH LATEST AISC AND SJI SPECIFICATIONS.
- 8. JOIST BRIDGING SHALL BE DESIGNED AND INSTALLED ACCORDING TO THE LATEST SJI SPECIFICATIONS. BRIDGING SHALL NOT BE MODIFIED WITHOUT THE APPROVAL OF THE STRUCTURAL ENGINEER.
- 9. METAL DECKING SHALL BE INSTALLED IN 3 SPAN CONDITIONS MINIMUM.

MASONRY NOTES

- 1. MASONRY CONSTRUCTION SHALL CONFORM TO "BUILDING CODE REQUIREMENTS FOR CONCRETE MASONRY STRUCTURES" (ACI 530) AND "SPECIFICATIONS FOR THE DESIGN AND CONSTRUCTION OF LOAD-BEARING CONCRETE MASONRY" (N.C.M.A.)
- 2. MASONRY MATERIALS: CONCRETE MASONRY UNITS

MORTAR - TYPE M OR S MIN. COMP. STRENGTH = 2500 PSI GROUT ASTM C476 MIN COMP. STRENGTH = 3000 PSI

3. REINFORCING MATERIALS: REINFORCING BARS ASTM A615, GRADE 60, DEFORMED JOINT REINFORCING ASTM A 951, 0.148" RODS MIN. 4. UNLESS NOTED OTHERWISE ON THE DRAWINGS OR IN THE SPECIFICATIONS, THE

FOLLOWING MINIMUM REINFORCING SHALL BE USED. ALL CORES WITH REINFORCING SHALL BE GROUTED SOLID. BENEATH BEAMS (2) #5 BARS - (1) PER CORE BENEATH STEEL OR CONCRETE LINTELS (1) #5 BAR

INTERIOR NON-LOADBEARING WALLS

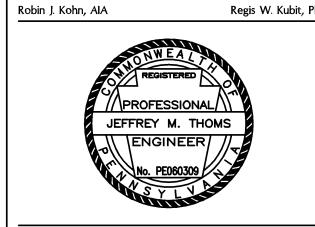
#4 BARS AT 48" O.C. HORIZONTAL JOINT REINF. AT 16" O.C. 5. MASONRY WALLS SHALL BE ANCHORED TO ALL FLOORS AND ROOFS WHICH PROVIDE

ASTM C90, TYPE I

MIN COMP. STRENGTH = 1500 PSI

LATERAL SUPPORT FOR THE WALLS. 6. BOND BEAMS WITH HORIZONTAL REINFORCEMENT NOT LESS THAN (2) #5 REBAR SHALL BE PROVIDED CONTINUOUSLY AT STRUCTURALLY CONNECTED ROOF AND FLOOR LEVELS, AT THE TOP OF WALLS, AT THE BOTTOM OF WALLS OR IN THE TOP OF THE

FOUNDATION WHEN DOWELING INTO THE WALL. 7. AT INTERSECTING WALLS PROVIDE CONTINUITY IN JOINT REINFORCING USING PRE-FABRICATED 'L' AND 'T' SECTIONS. AT ABUTTING WALLS USE RIGID METAL ANCHORS NOT MORE THAN 24" O.C.



523 Kimberton Road, Suite 11B Phoenixville, PA 19460 tel. (610) 917-8831 fax (610) 917-8836 email mail@betzwood.com http://www.betzwood.com

\$ Associates PC

Jeffrey M. Thoms, P.E. Commonwealth of Pennsylvania License No. PE060309

Contact Person: Edward (Kipp) Happ (610) 917-8831 DRAWN BY CHK'D BY NO. DATE SUED FOR CLIENT REVIEW REVISED PLAN LAYOUT & 2 | 06-10-08 | EMH FURNITURE LAYOUT REVISED PLAN - REDUCED SQ.FT. 4 09-19-08 EMH ISSUED FOR PERMIT & CONSTRUCTION

CURRENT DATE APPROVED BY Sept 19, 2008 Robin J. Kohn, AIA

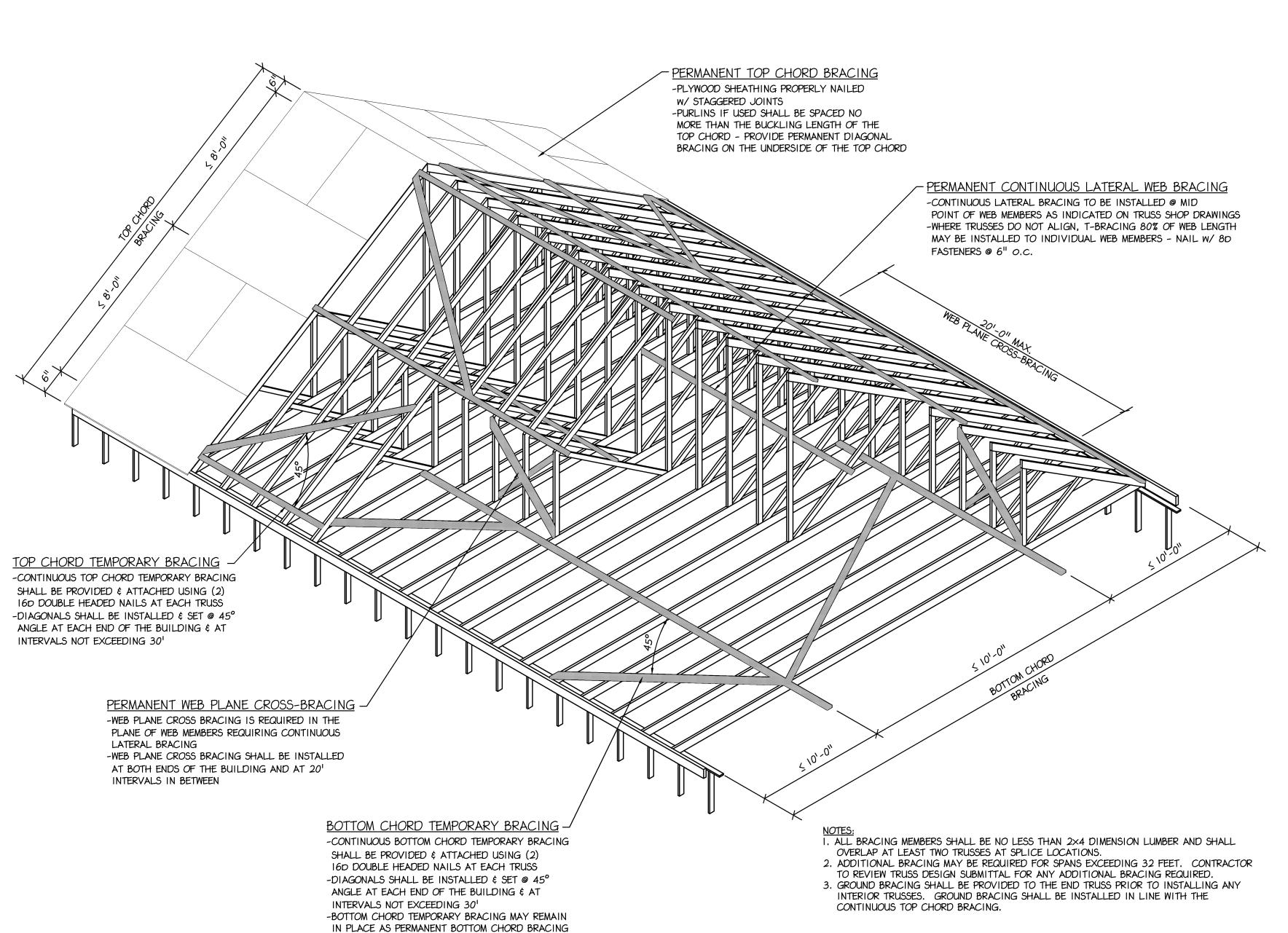
VLOEDMAN RESIDENCE

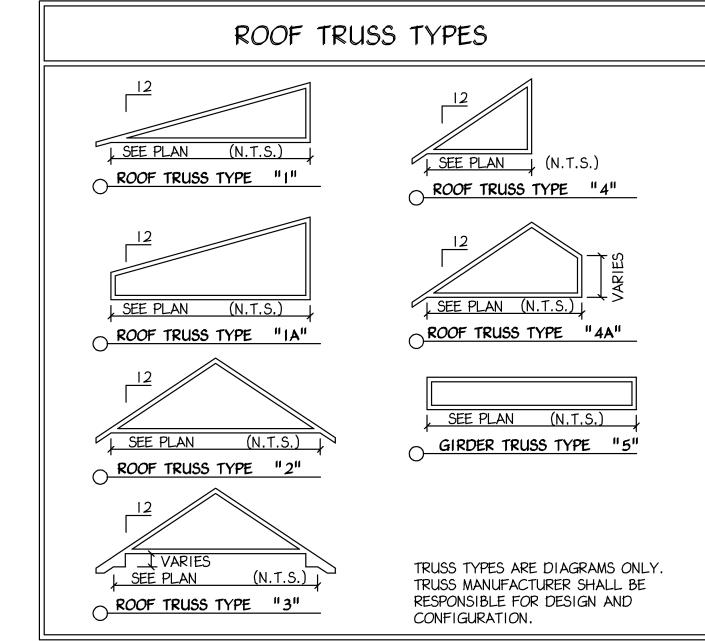
541 Atterbury Road Villanova, PA 19085

Radnor Township **Delaware County**

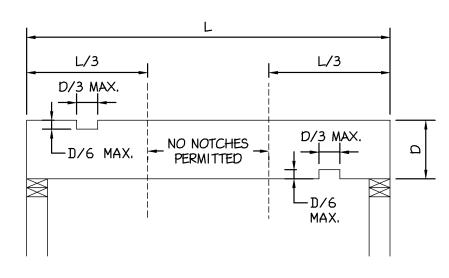
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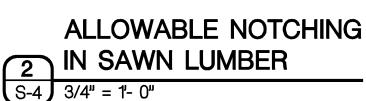
NOTES AND DETAILS

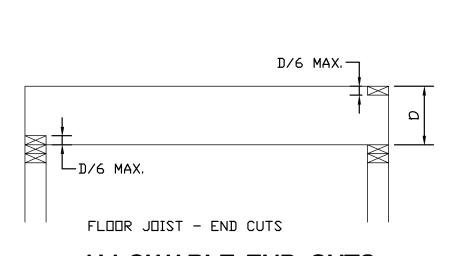




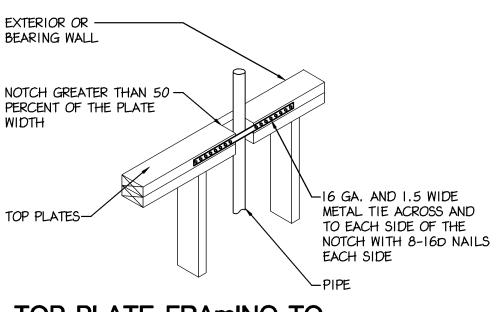




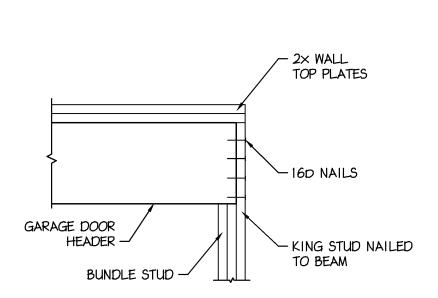




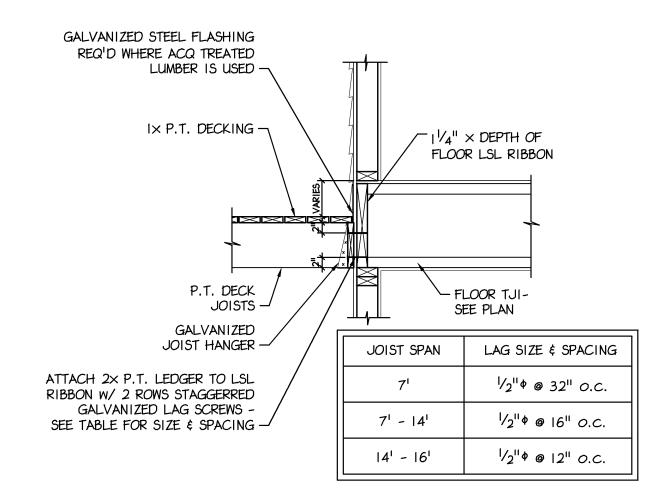
ALLOWABLE END CUTS 3 IN SAWN LUMBER 8-4 $3/4^{"} = 1'-0"$



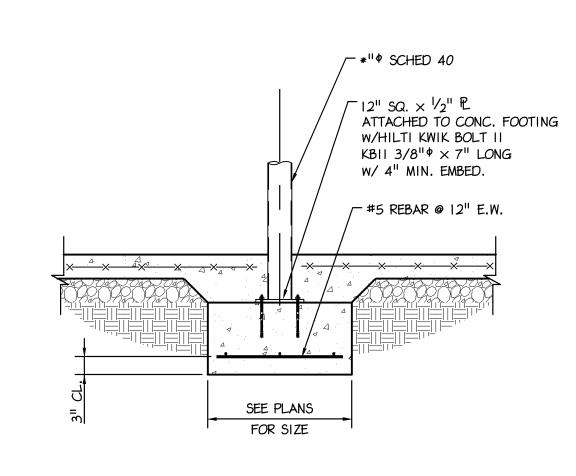
TOP PLATE FRAMING TO ACCOMMODATE PIPING S-4 3/4" = 1'- 0"



HEADER TO END 5 WALL & KING STUD DETAIL S-4 3/4" = 1'- 0"



6 DECK ATTACHMENT DETAIL



7 POST ON FOOTING DETAIL

LOADING/DEFLECTION DEFLECTION LIMIT: L/360 LIVE: 30 PSF + DRIFT DEAD: 15 PSF + OVERFRAMING <u>BOTTOM CHORD:</u> LIVE: SEE TRUSS CONFIGURATION DEAD: 10 PSF

TRUSS DIMENSIONS SHOWN ARE ONLY APPROXIMATE FOR DESIGN PURPOSES - CONTRACTOR IS RESPONSIBLE FOR EXACT DIMENSIONS OF BEARING LOCATIONS

TRUSS CONFIGURATIONS SHOWN ARE APPROXIMATE. ACTUAL DESIGN OF WOOD TRUSSES TO BE BY THE TRUSS MFG. SUBMIT CALCULATIONS BEARING THE SEAL OF A REGISTERED ENGINEER

TRUSS NOTES

- I. SUBMITTALS -SUBMIT STRUCTURAL CALCULATIONS FOR TRUSS DESIGNS PREPARED BY THE MANUFACTURER BEARING THE SEAL OF A REGISTERED ENGINEER FOR APPROVAL BY THE STRUCTURAL ENGINEER. CALCULATIONS SHALL INCLUDE, BUT ARE NOT LIMITED TO:
- -DESCRIPTION OF THE DESIGN CRITERIA -ENGINEERING ANALYSIS DEPICTING STRESS AND DEFLECTION REQUIREMENTS FOR EACH TRUSS APPLICATION
 - -SELECTION OF TRUSS COMPONENETS AND ACCESSORIES -VERIFICATION OF ATTACHMENTS TO STRUCTURE AND/OR ADJACENT
- FRAMING COMPONENTS NOTE: TRUSS CONFIGURATIONS SHOWN ON PLANS ARE APPROXIMATE 2. ERECTION
- -CUTTING, DRILLING, OR NOTCHING ANY OF THE TRUSS MEMBERS IS NOT PERMITTED WITHOUT DESIGNER APPROVAL. -ERECTOR SHALL NOT ALTER TRUSS SPACING WITHOUT RECEIVING WRITTEN APPROVAL FROM THE TRUSS DESIGNER.
- OF ROOFING GRAVEL, BRICKS, AIR CONDITIONING UNITS, ETC. SHALL NEVER BE PLACED ON TRUSSES BEFORE THEY ARE PROPERLY BRACED. SUCH LOADS SHALL BE LIMITED TO EIGHT SHEETS AND LOCATED AS CLOSE TO A SUPPORT AS POSSIBLE. -MECHANICAL EQUIPMENT SHOULD BE LOCATED ONLY ON THE TRUSSES SPECIFICALLY DESIGNED TO SUPPORT IT. THE UNITS SHALL NOT BE SET ON ANY OTHER TRUSSES TEMPORARILY UNLESS PROPERLY SHORED. -WHEN ERECTING BY HAND, TRUSSES ARE SLID INTO POSITION OVER THE SIDE WALL AND ROTATED INTO POSITION. THE TRUSS SHALL BE SUPPORTED AT THE PEAK, OR AT THE QUARTER POINTS.

-HEAVY CONSTRUCTION LOADS SUCH AS STACKS OF PLYWOOD, GYPSUM WALLBOARD, PILES

- -TRUSSES LARGE ENOUGH TO BE ERECTED BY MECHANICAL MEANS MUST EMPLOY ADEQUATE SLINGS, TAG LINES, BOOMS AND/OR SPREADER BARS TO CONTROL MOVEMENT OF THE TRUSS AND PREVENT LATERAL BENDING.
- -FOR LIFTING TRUSSES WITH SPANS IN EXCESS OF SIXTY (60) FEET, IT IS RECOMMENDED THAT A STRONG-BACK BE USED. THE STRONG-BACK SHOULD BE ATTACHED TO THE TOP CHORD AND WEB MEMBERS AT INTERVALS OF APPROXIMATELY TEN (10) FEET, AND SHALL BE AT OR ABOVE MID-HEIGHT OF THE TRUSS SO AS TO PREVENT OVERTURNING. -TRUSSES MAY BE ERECTED SINGLY OR BANDED TOGETHER.
- -TRUSSES THAT DO NOT MEET INTERIOR LOAD BEARING WALLS SHOULD BE SHIMMED. 3. CONTINUOUS LATERAL BRACING
- -BRACING MATERIALS SHALL BE FURNISHED BY THE BUILDER OR ERECTION CONTRACTOR. -CONTINUOUS LATERAL BRACING IS DEFINED AS BRACING REQUIRED TO REDUCE THE BUCKLING LENGTH OF THE INDIVIDUAL TRUSS MEMBERS. LATERAL BRACING IS A PART OF THE TRUSS DESIGN AND SHALL BE SPECIFIED ON THE TRUSS DESIGN DRAWINGS.
- 4. TEMPORARY BRACING -FOR WOOD TRUSSES TEMPORARY BRACING SHALL BE NOT LESS THAN 2×4 DIMENSION LUMBER AND SHALL BE NAILED WITH TWO DOUBLE HEADED 16D NAILS.
- -FOR METAL TRUSSES TEMPORARY BRACING SHALL BE NOT LESS THAN 3-5/8" × 16 GA METAL -ALL TEMPORARY BRACING SHALL BE AS LONG AS PRACTICAL FOR HANDLING. THE USE OF
- SHORT SPACER PIECES BETWEEN ADJACENT TRUSSES AS TEMPORARY BRACING IS NOT -DIAGONAL CROSS BRACING SHALL BE IN THE PLANE FORMED BY THE TOP CHORDS, IN THE PLANE OF THE BOTTOM CHORDS, & PERPENDICULAR TO THE TRUSS WEB MEMBERS. -DIAGONAL BRACING SHALL BE ATTACHED TO ALL WEB MEMBERS REQUIRING LATERAL BRACING. THE DIAGONAL BRACING SHALL BE INSTALLED AT APPROXIMATELY A 45 DEGREE ANGLE TO THE
- SAME MEMBER REQUIRING LATERAL BRACING. -THE END TRUSS MUST BE ADEQUATELY BRACED TO THE GROUND BEFORE THE SETTING OF ANY INTERIOR TRUSSES. THE GROUND BRACES SHALL BE LOCATED DIRECTLY IN LINE WITH ALL OF THE ROWS OF TOP CHORD CONTINUOUS LATERAL BRACING. -ERECTOR SHALL INSTALL SUFFICIENT TEMPORARY BRACING TO HOLD THE TRUSSES PLUMB, IN

LATERAL BRACING. DIAGONAL BRACING SHALL BE ATTACHED TO THE OPPOSITE SIDE OF THE

- ALIGNMENT, & IN A SAFE CONDITION UNTIL THE PERMANENT BRACING, DECKING, AND/OR SHEATHING CAN BE INSTALLED. -TOP CHORD PLANE - SEE TRUSS BRACING DETAIL
- -WEB MEMBER PLANE SEE TRUSS BRACING DETAIL -BOTTOM CHORD PLANE - SEE TRUSS BRACING DETAIL 5. PERMANENT BRACING
- -TOP CHORD PLANE SEE TRUSS BRACING DETAIL -WEB MEMBER PLANE - THE TEMPORARY BRACING SHALL REMAIN IN PLACE AS THE PERMANENT BRACING. -BOTTOM CHORD PLANE - THE TEMPORARY BRACING SHALL REMAIN IN PLACE AS THE PERMANENT BRACING.

LIVE LOADS	APPLICABLE CODE: IBC 2006
FLOOR LIVE LOADS LIVE LOAD	40 PSF (LIVING AREAS) 30 PSF (SLEEPING AREAS)
STAIRWAY LIVE LOAD MECHANICAL UNIT LOAD	60 PSF (DECK) 100 PSF SEE DRAWINGS
ROOF LOADS ROOF LIVE LOAD ROOF SNOW LOAD GROUND SNOW LOAD - PG: FLAT ROOF SNOW LOAD - PF: SNOW EXPOSURE FACTOR - CE: SNOW LOAD IMPORTANCE FACTOR - I: THERMAL FACTOR - CT:	20 PSF (MIN) 30 PSF + SNOW DRIFT 30 PSF 25 PSF 1.0 1.0
WIND LOAD BASIC WIND SPEED - V (3-SEC. GUST): WIND LOAD IMPORTANCE FACTOR	90 MPH 1.0

WIND LOAD EXPOSURE CATEGORY ± 0.25 INTERNAL PRESSURE COEFFICIENT 25 PSF WIND DESIGN PRESSURE SEISMIC LOAD

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

ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE PROCEDURE WIND LOAD CONTROLS DESIGNS FOR LATERAL FORCES

TIMBER NOTES

- 1. ALL WOOD FRAMING SHALL BE FABRICATED, ERECTED, AND BRACED IN ACCORDANCE WITH THE NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION, LATEST
- 2. ALL SAWN LUMBER SHALL BE HEM-FIR #2, 19% MAXIMUM MOISTURE CONTENT OR BETTER. THE MINIMUM DESIGN VALUES SHALL BE: FB = 850 PSI
- FV = 150 PSIFC = 1300 PSI E = 1.300,000 PSIMINIMUM DESIGN VALUES FOR PARALLAM (PSL) MEMBERS SHALL BE:

FC = 2510 PSI

- FB = 2900 PSIFV = 290 PSI FC = 2900 PSI
- E = 2,000,000 PSIMINIMUM DESIGN VALUES FOR MICROLLAM (LVL) MEMBERS SHALL BE: FB = 2600 PSIFV = 285 PSI
- E = 1,900,000 PSI3. ALL STEEL TIMBER FASTENINGS AND JOIST HANGERS SHALL BE A MINIMUM OF 16 GA. GALVANIZED STEEL WITH A RATED LOAD CAPACITY EQUAL TO OR EXCEEDING THE IMPOSED LOADING REQUIREMENTS.
- 4. ALL WOOD PLATES BEARING ON MASONRY OR CONCRETE WALLS SHALL BE PRESSURE TREATED LUMBER UNLESS NOTED OTHERWISE. 5. ALL DOUBLE JOISTS SHALL BE SPIKED TOGETHER WITH 10D NAILS @ 16" O.C.
- ALL DOUBLE TJI JOISTS SHALL BE ATTACHED AS PER MANUFACTURERS RECOMMENDATIONS. 6. ALL WOOD BEAMS MADE UP OF 3 OR MORE MEMBERS SHALL BE BOLTED TOGETHER
- WITH $\frac{1}{2}$ ϕ BOLTS @ 32" O.C. 7. ALL PLYWOOD ROOF SHEATHING SHALL BE SECURED WITH PLY CLIPS AT CENTERLINE OF PLYWOOD SPAN AND AT ALL EDGES PARALLEL TO SPAN.
- 8. PLYWOOD SHEATHING SHALL BE CONTINUOUS OVER A MINIMUM OF 3 SPANS. 9. PLYWOOD SHALL BE SECURED USING 8D NAILS. 10. ALL PLYWOOD SHALL MEET THE REQUIREMENTS OF THE PLYWOOD DESIGN SPECIFICATIONS AS PUBLISHED BY THE AMERICAN PLYWOOD ASSOCIATION AND THE REQUIREMENTS OF THE AMERICAN INSTITUTE OF TIMBER CONSTRUCTION, LATEST
- EDITION. 11. WOOD TRUSS JOISTS ARE TO BE DESIGNED BY THE MANUFACTURER, ALL CALCULATIONS SHALL BE SEALED BY A REGISTERED ENGINEER AND SHALL BE SUBMITTED FOR APPROVAL BY THE STRUCTURAL ENGINEER.

\$ AssociatesP(Robin J. Kohn, AIA Regis W. Kubit, PE /\PROFESSIONA JEFFREY M. THOMS \ \ENGINEER/

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Jeffrey M. Thoms, P.E. Commonwealth of Pennsylvania License No. PE060309

PROJ	ECT NO.	DR	AWN BY CHK'D B					
B287	76	M	JK	RJK				
NO.	DATE	BY	ISSUE					
1	06/05/08		ISSUED FOR CL	LIENT REVIEW				
2	06-10-08	EMH	REVISED PLAN					
3	07-01-08	EMH	FURNITURE LAYOUT REVISED PLAN - REDUCED SQ.FT					
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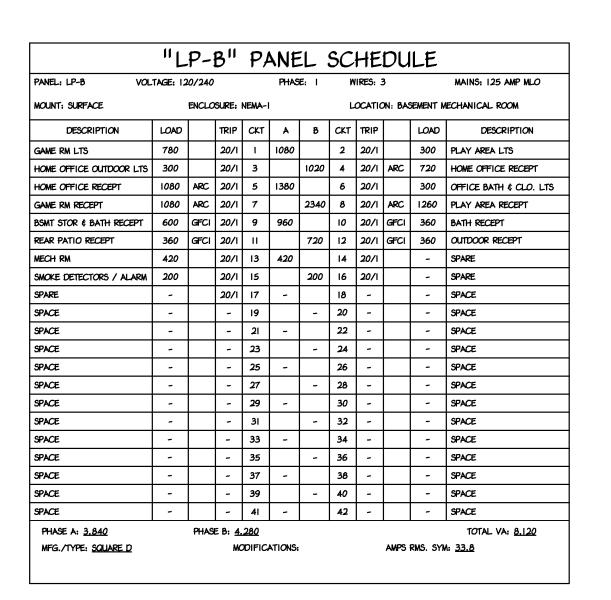
VLOEDMAN RESIDENCE 541 Atterbury Road Villanova, PA 19085

Radnor Township **Delaware County**

NOTES AND DETAILS

SHEET NUMBER

SHEET TITLE



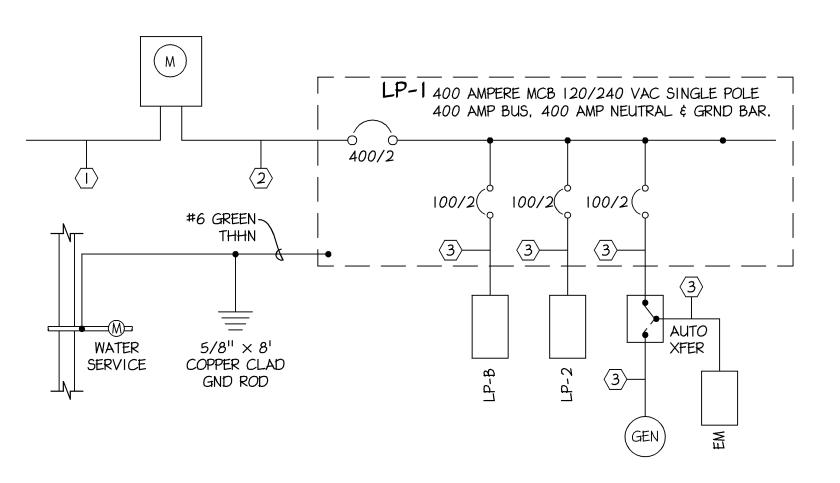
PANEL: LP-I VO	LTAGE: 12	0/240		PHASE: I WIRES: 3							MAINS: 400 AMP MCB
MOUNT: SURFACE		SURE:	NEMA-	I		LOCATION: GARAGE					
DESCRIPTION	LOAD		TRIP	СКТ	A	В	CKT	TRIP		LOAD	DESCRIPTION
PANEL LP-B	3840		100/2	1	20380		2	100/2		16540	PANEL EM
	4280			3		20850	4			16570	
PANEL LP-2	11830		100/2	5	12550		6	20/1		720	KITCHEN RECEPT
	9040			7		9820	8	20/1		780	DINING RM LTS
MUD RM - KIT RECEPT	900	GFCI	20/1	9	2340		10	20/1		1440	GREAT RM RECEPT
KIT RECESSED LTS / SINK	420		20/1	11		720	12	20/1		300	WET BAR / ALCOVE LTS
DINING RM RECEPT	900	ARC	20/1	13	1400		14	20/1		500	STUDY LTS
GREAT RM ENTERTAINMENT	360	SURGE	20/1	15		860	16	20/1		500	GUEST, BATH & HALL LTS
FRONT ENTRY RECEPT	720	ARC	20/1	17	1320		18	20/1		600	REAR PORCH LTS
STUDY RECEPT	900	ARC	20/1	19		1260	20	20/1	GFCI	360	FRONT OUTDOOR RECEPT
HOME OFFICE RECEPT	1080	ARC	20/1	21	1080		22	20/1		-	SPARE
REAR PORCH RECEPT	1080	GFCI	20/1	23		1080	24	20/1		1	SPARE
IST FLR WINDOWS	300		20/1	25	300		26	20/1		-	SPARE
GREAT RM WINDOWS	500		20/1	27		500	28	-		-	SPACE
GREAT RM WALL LTS	900		20/1	29	900		30	-		-	SPACE
SPARE	-		20/1	31		-	32	-		-	SPACE
SPACE	-		1	33	-		34	-		-	SPACE
SPACE	-		1	35		1	36	-		-	SPACE
SPACE			1	37	-		38	-		-	SPACE
SPACE	-		1	39		1	40	-		-	SPACE
SPACE	-		1	41	-		42	-		-	SPACE
PHASE A: 40.270 PHASE B:				35.090						RMS. SYN	TOTAL VA: 75,360

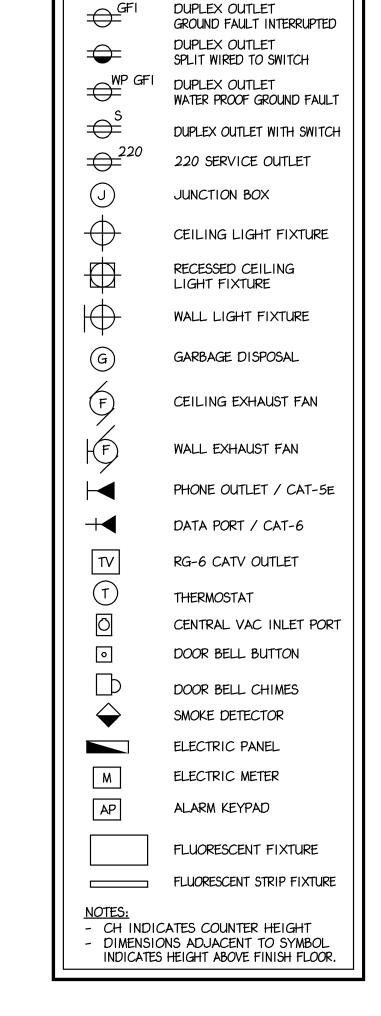
PANEL: LP-2 VO	OLTAGE: 12	0/240			PHAS	E: I	W	IRES: 3	3		MAINS: 125 AMP MLO
MOUNT: SURFACE		ENCLO	SURE:	NEMA-I	I		L	OCATIO	N: 2N1) FLOOR	LAUNDRY RM
DESCRIPTION	LOAD		TRIP	CKT	А	В	CKT	TRIP		LOAD	DESCRIPTION
MASTER BEDRM RECEPT	1260	ARC	20/1	1	3060		2	20/1	ARC	1800	MASTER SITTING RM
MASTER BAT LTS	700		20/1	3		1180	4	20/1		480	LAUNDRY & UTILITY LTS
WASHER	700		20/1	5	5200		6	30/2		4500	DRYER
LAUNDRY RECEPT	720	GFCI	20/1	7		5220	8				
BEDRM #2 RECEPT	1800	ARC	20/1	9	2880		10	20/1	ARC	1080	BEDRM #3 RECEPT
BATHROOM LTS	1560		20/1	П		2640	12	20/1	ARC	1080	BEDRM #4 RECEPT
BATHRM RECEPT	540	GFCI	20/1	13	690		14	20/1		150	2ND FLR WINDOW RECEPT
SPARE	-		20/1	15		1	16	20/1		-	SPARE
SPARE	-		20/1	17	-		18	-		-	SPACE
SPACE	-		-	19		1	20	-		1	SPACE
SPACE	-		-	21	-		22	-		1	SPACE
SPACE	-		-	23		1	24	-		1	SPACE
SPACE	-		-	25	-		26	-		1	SPACE
SPACE	-		-	27		1	28	-		-	SPACE
SPACE	-		-	29	-		30	-		1	SPACE
SPACE	-		-	31		1	32	-		-	SPACE
SPACE	-		-	33	-		34	-		-	SPACE
SPACE	-		-	35		1	36	-		-	SPACE
SPACE	-		-	37	-		38	-		-	SPACE
SPACE	-		1	39		-	40	-		-	SPACE
SPACE	-		-	41	-		42	-		-	SPACE
PHASE A: 11.830		PHAS	E B: 9.	040							TOTAL VA: 20.870

LOAD 4920	7240 ICLOSURE: TRIP 60/2	СКТ	l	E: 1			•	MAINS: 125 AMP MLO
LOAD 4920	TRIP	СКТ			L			
4920					_	OCATIO	n: garage	
	60/2		^	В	CKT	TRIP	LOAD	DESCRIPTION
900	$\overline{}$	1	9840		2	60/2	4920	CHILLER #2
900		3		9840	4			1
	20/1	5	1800		6	20/1	900	AH-3
900	20/1	7		2100	8	20/1	1200	BOILER
1800	30/2	9	2800		10	30/2	2000	сооктор
$\overline{}$		Ш		2800	12			
900	20/1	13	1740		14	20/1	840	REFRIG
780	20/1	15		1830	16	20/1	1050	KITCHEN LTS
-	20/1	17	360		18	-	360	UPSTAIRS HALL LTS
-	-	19		-	20	-	-	SPACE
-	-	21	-		22	-	-	SPACE
-	-	23		-	24	-	-	SPACE
-	-	25	-		26	-	-	SPACE
-	-	27		-	28	-	-	SPACE
-	-	29	-		30	-	-	SPACE
-	-	31		-	32	-	-	SPACE
-	-	33	-		34	-	-	SPACE
-	-	35		-	36	-	-	SPACE
-	-	37	-		38	-	-	SPACE
-	-	39		-	40	-	-	SPACE
-	_	41	-		42	-	-	SPACE
	780	780 20/1 - 20/1	900	900	900	900	900 20/1 13 1740 14 20/1 780 20/1 15 1830 16 20/1 - 20/1 17 360 18 - - 20 -	900

CONDUIT & CABLE SCHEDULE

- (1) (3)-#500 MCM ξ (1)-#1/0 GND. XHHW IN (1)-3" SCH 40 PVC. CONDUIT (3)-#500 MCM \$ (1)-#2/0 GND. XHHW IN (1)-3 GHW CONDUIT.
- (3) (3)-#2 ξ (1)-#8 GND. THHN IN (1)-1 1/2" EMT. OR CABLE





ELECTRICAL SYMBOLS

SINGLE POLE SWITCH

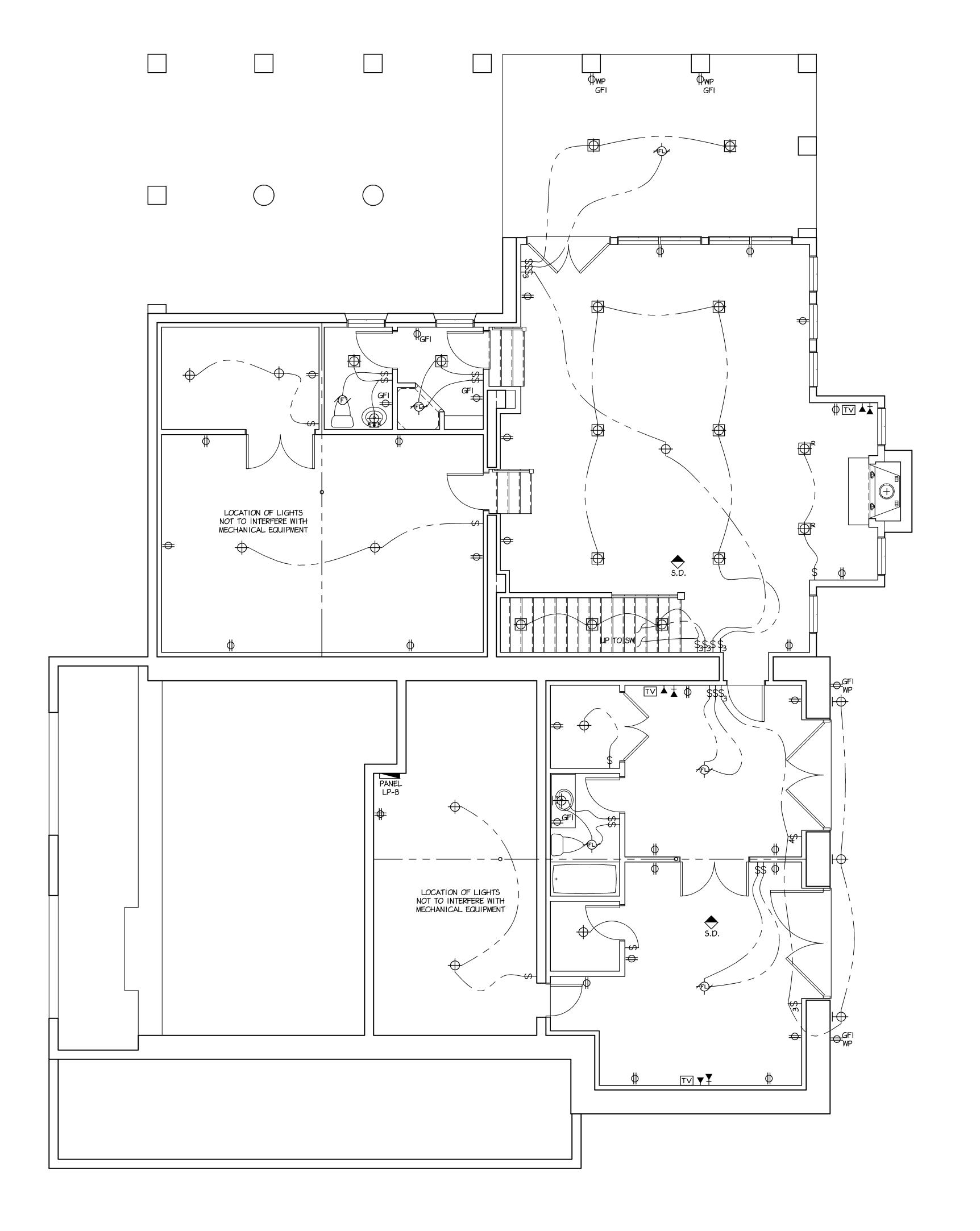
REOSTAT SWITCH

DUPLEX OUTLET

THREE (3) POLE SWITCH FOUR (4) POLE SWITCH

ALL SMOKE DETECTORS SHALL BE INTERCONNECTED. ALL DETECTORS SHALL HAVE A PRIMARY 120 VOLT SUPPLY AND A SECONDARY SYSTEM CONSISTING OF A BATTERY BACK-UP.

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



Regis W. Kubit, PE REGIS WILLIAM KUBIT \\ \ENGINEER/

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> Regis W. Kubit, P.E. Commonwealth of Pennsylvania License No. PE-6968-E

PROJECT NO. DRAWN BY CHK'D BY NO. DATE BY ISSUE ISSUED FOR CLIENT REVIEW 2 06-10-08 EMH REVISED PLAN LAYOUT & FURNITURE LAYOUT 3 07-01-08 EMH REVISED PLAN - REDUCED SQ.FT. 4 09-19-08 EMH ISSUED FOR PERMIT & CONSTRUCTION

Contact Person: Edward (Kipp) Happ (610) 917-8831

VLOEDMAN RESIDENCE 541 Atterbury Road Villanova, PA 19085

CURRENT DATE

Sept 19, 2008

Radnor Township Delaware County

SHEET TITLE

APPROVED BY

Robin J. Kohn, AIA

LIGHTING & POWER PLAN

