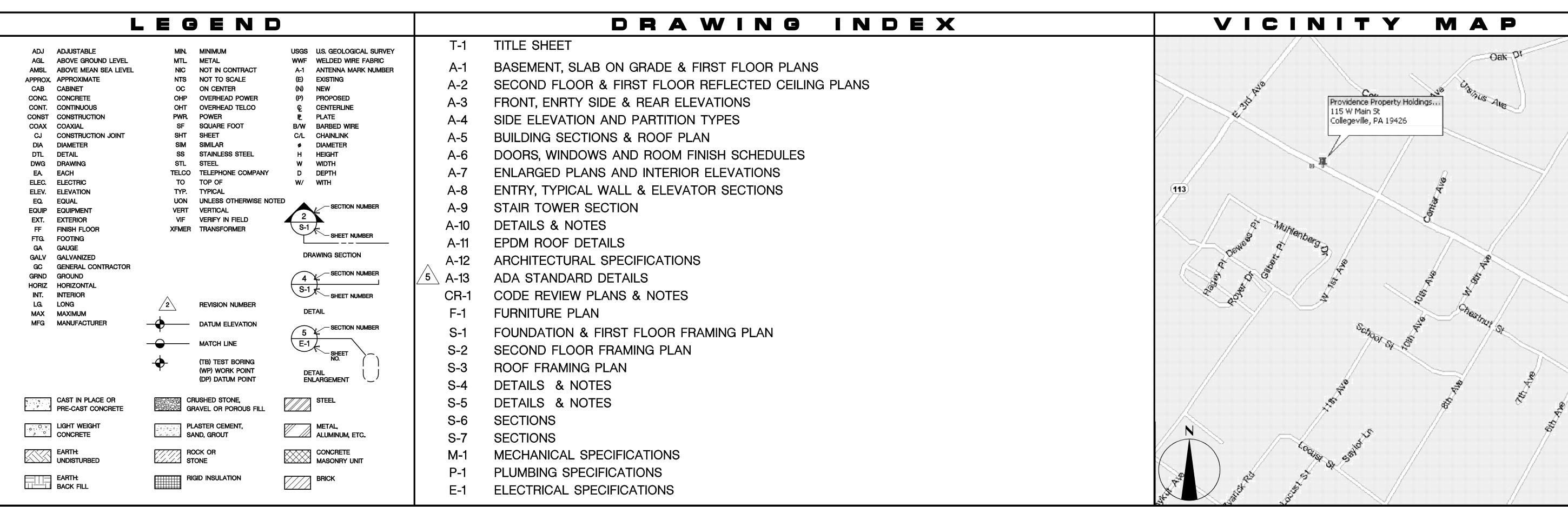
115 WEST MAIN STREET

PROVIDENCE PROPERTY HOLDINGS, LLC

115 WEST MAIN STREET TRAPPE, PA 19426

TRAPPE BOROUGH - MONTGOMERY COUNTY

NEW OFFICE BUILDING



1. FIELD CONDITIONS - CONTRACTOR SHALL VERIFY ALL CONDITIONS, AS WELL AS ALL DIMENSIONS AND CONDITIONS INDICATED IN THE DRAWINGS, PRIOR TO ACTUAL CONSTRUCTION. ANY VARIATIONS FROM CONDITIONS INDICATED IN THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND OWNER'S REPRESENTATIVE PRIOR TO COMMENCING WORK.

- 2. COORDINATION OF WORK THE CHARACTER AND SCOPE OF THE WORK ARE ILLUSTRATED BY THE WORKING DRAWINGS. CONTRACTOR SHALL CAREFULLY EXAMINE THE DRAWING AND SHALL BE RESPONSIBLE FOR THE PROPER INSTALLATION OF HIS WORK AND PROPER CONSIDERATION FOR THE WORK OF OTHERS AND EXISTING CONSTRUCTION. DO NOT PLACE DUCTS, PIPING, CONDUIT OR ANY OBSTRUCTION SO AS TO IMPAIR REQUIRED CEILING HEIGHTS AND CLEARANCE FOR LIGHTING FIXTURE, ETC.
- 3. BUILDING CODES AND REGULATIONS ALL WORK SHALL CONFORM TO ALL GOVERNING CODES AND REGULATIONS. CONTRACTOR SHALL FILE, PAY AND OBTAIN ALL REQUIRED PERMITS TO PERFORM THE WORK. UPON COMPLETION OF THE WORK, CONTRACTOR SHALL OBTAIN ALL REQUIRED APPROVALS FORM GOVERNMENTAL AGENCIES INVOLVED PRIOR TO FINAL PAYMENT. APPROVALS TO OCCUPY THE SPACE BY LOCAL BUILDING OFFICIALS SHALL BE OBTAINED PRIOR TO OCCUPANCY.
- A. CONTRACTOR SHALL SECURE, PAY FOR AND MAINTAIN, DURING CONSTRUCTION AND FIXTURE WORK WITHIN PREMISE, ALL OF THE INSURANCE POLICIES REQUIRED AND IN THE AMOUNT AS SET FORTH HEREIN. CONTRACTOR SHALL NOT COMMENCE ANY WORK UNTIL ALL REQUIRED CERTIFICATES OF SUCH INSURANCE HAVE BEEN DELIVERED TO THE OWNER. OWNER MUST BE NAMED AS "ADDITIONAL INSURED". CERTIFICATES OF INSURANCE SHALL COVER ALL WORK PERFORMED BY HIM AND EACH OF HIS SUBCONTRACTORS AND ALL MAJOR SUPPLIERS.
- B. GENERAL CONTRACTOR'S AND SUBCONTRACTOR'S REQUIRE MINIMUM COVERAGE AND LIMITS OF LIABILITY:
- 1) WORKMEN'S COMPENSATION INSURANCE IN ACCORDANCE WITH THE GOVERNING LAWS WITH A LIMIT OF NOT LESS THAN \$1,000,000. AND ANY INSURANCE REQUIRED BY ANY EMPLOYEE. BENEFITS ACTS, ETC., AS WILL PROTECT THE CONTRACTOR AND SUBCONTRACTORS FROM ANY AND ALL
- 2) CONTRACTOR SHALL PAY FOR AND FURNISH TO OWNER CERTIFICATES OF INSURANCE WHICH WILL PROTECT SAID CONTRACTOR FROM CLAIMS (1) UNDER WORKMEN'S COMPENSATION ACTS AND OTHER EMPLOYEE BENEFIT ACTS, WITH LIMIT OF NOT LESS THAN \$1,000,000, (2) FOR DAMAGES BECAUSE OF BODILY INJURY, (INCLUDING DEATH) TO HIS EMPLOYEES AND ALL OTHERS, WITH THE LIMITS OF \$1,000,000 PER PERSON AND \$3,000,000 per occurrence and (3) for damages to property with limits to contractor's work under this contract whether SUCH WORK (INCLUDING OPERATION OF AUTOMOBILE VEHICLES) BE BY HIMSELF OR OTHERS DIRECTLY OR INDIRECTLY EMPLOYED BY EITHER AND BUILDER'S RISK INSURANCE IN THE FULL AMOUNT OF THE CONTRACT SUM.
- . INDEMNIFICATION TO THE FULLEST EXTENT PERMITTED BY LAW, THE CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS THE OWNER, PROJECT MANAGER AND THE ARCHITECT AND THEIR AGENTS AND EMPLOYEES FROM AND AGAINST ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES INCLUDING. BUT NOT LIMITED TO, ATTORNEY'S FEES, ARISING OUT OF OR RESULTING FROM THE PERFORMANCE OF THE WORK, PROVIDED THAT ANY SUCH CLAIM, DAMAGE, LOSS OR EXPENSE (1) IS ATTRIBUTABLE TO BODILY INJURY OR TO DISTRUCTION OF TANGIBLE PROPERTY (OTHER THAN THE

WORK ITSELF) INCLUDING THE LOSS OF USE RESULTING THEREFROM, AND (2) IS CAUSED IN WHOLE OR IN PART BY THE NEGLIGENT ACT OR OMISSION OF THE CONTRACTOR, AND SUBCONTRACTOR, ANYONE DIRECTLY OR INDIRECTLY EMPLOYED BY ANY OF THEM OR ANYONE FOR WHOSE ACTS ANY OF THEM MAY BE LIABLE, REGARDLESS OF WHETHER OR NOT IS IS CAUSED IN PART BY A PARTY INDEMNIFIED HEREUNDER.

NOTES

5. LIEN WAIVERS AND SWORN AFFIDAVITS - CONTRACTOR SHALL FURNISH TO OWNER WITHIN 30 DAYS AFTER COMPLETION, FINAL WAIVERS OF LIEN FOR ALL WORK FOR ALL WORK PERFORMED AND FROM ALL SUBCONTRACTORS AND MAJOR SUPPLIERS.

6. CERTIFICATE OF OCCUPANCY - CONTRACTOR WILL PROVIDE A COPY OF THE CERTIFICATE PRIOR TO TURNING SPACE OVER TO THE OWNER.

GENERAL

7. QUALITY STANDARDS - ALL SUCH WORK SHALL BE PERFORMED IN A FIRST-CLASS WORKMAN-LIKE MANNER AND SHALL BE IN GOOD AND USEABLE

CONDITION AT THE DATE OF COMPLETION. CONTRACTOR SHALL GUARANTEE ALL WORK PERFORMED TO BE FREE FROM ANY AND ALL DEFECTS IN WORKMANSHIP AND MATERIALS FOR ONE (1) YEAR FROM THE DATE ALL CONSTRUCTION PUNCH LIST ITEMS HAVE BEEN COMPLETED AND ACCEPTANCE HAS BEEN CONFIRMED IN WRITING BY THE OWNER REPRESENTATIVE.

CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPLACEMENT OR REPAIR WITHOUT ANY ADDITIONAL CHARGE FOR ANY AND ALL WORK DONE OR FURNISHED WHICH SHALL BECOME DEFECTIVE WITHIN THIS ONE (1) YEAR PERIOD. THE CORRECTION OF SUCH WORK AND DAMAGES IN CONNECTION WITH SUCH REMOVAL, REPLACEMENT OR REPAIR OF ANY PART OF THE WORK WHICH MAY BE DAMAGED OR DISTURBED THEREBY

ALL WARRANTIES OR GUARANTEES AS TO MATERIALS OR WORKMANSHIP ON OR WITH RESPECT TO OWNER'S WORK SHALL BE CONTAINED IN THE CONTRACT OR SUBCONTRACT WHICH SHALL BE SO WRITTEN THAT SUCH GUARANTEE OR WARRANTEES SHALL INSURE TO THE BENEFIT OF THE OWNER, AS THEIR RESPECTIVE INTEREST APPEAR AND CAN DIRECTLY BE ENFORCED BY EITHER.

- 8. RUBBER WHEEL CARTS CONTRACTOR CARTS, EQUIPMENT BOXES, ETC., MUST BE EQUIPPED WITH RUBBER WHEELS.
- AND (I) IN THE KITCHENETTE AREA. CONTRACTOR TO VERIFY WITH FIRE DEPARTMENT

10. RUBBISH REMOVAL - CONTRACTOR SHALL BE RESPONSIBLE FOR DAILY REMOVAL FROM THE PROJECT, ALL TRASH, RUBBISH AND SURPLUS MATERIALS RESULTING FROM CONSTRUCTION, FIXTURING AND MERCHANDISING OF THE DEMISED PREMISES. COORDINATE REMOVAL OF DEBRIS WITH OWNER'S REPRESENTATIVE.

9. FIRE EXTINGUISHERS - FURNISHED AND INSTALLED BY CONTRACTOR - 4A / 60BC: (1) AT ELECTRIC PANELS, (1) ON EACH COMMON AREA LEVEL

II. TEMPORARY UTILITIES - CONTRACTOR SHALL ARRANGE FOR TEMPORARY UTILITIES, AS REQUIRED, AND SHALL PAY THE UTILITY CHARGES.

12. ALL WORK THAT IS EITHER IMPLIED OR REASONABLY INFERRABLE FROM THE CONTRACT DOCUMENTS, DRAWINGS AND SPECIFICATIONS, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. ALL DRAWINGS AND SPECIFICATIONS ARE DIRECTED TO THE ATTENTION OF THE CONTRACTOR AND THE INCLUSION OF ANY WORK BY MENTION, NOTE, DETAIL, ITEMIZATION OR IMPLICATION, HOWEVER BRIEF, MEANS THAT THE CONTRACTOR SHALL PROVIDE AND INSTALL SAME. ALL WORK PERFORMED SHALL INCLUDE ALL APPURTENANCES AND APPARATUS NORMALLY DEEMED TO BE PART OF A COMPLETE PACKAGE WITHIN THE DEFINITIONS OF NORMAL INDUSTRY STANDARDS.

<u>Building Information:</u> PROVIDENCE PROPERTY HOLDINGS, LLC.

115 WEST MAIN STREET TRAPPE, PA 19426

OWNER CONTACT INFO: JACOB MALIKKAL 215 272 - 3960

ARCHITECT INFORMATION: BETZWOOD ASSOCIATES PC ARCHITECTS & ENGINEERS 523 KIMBERTON ROAD, STE. 11B

PHOENIXVILLE, PA 19460

ARCHITECT CONTACT INFO: EDWARD (KIPP) HAPP (PROJECT MANAGER) 610 917-8831 EXT. 17

STRUCTURAL ENGINEER CONTACT INFO: JEFFREY M. THOMS, P.E. (PROJECT ENGINEER) 610 917-8831 EXT. 25

BUILDING INFORMATION:

- IBC USE GROUP - B

- PRIMARY BUILDING CODE UNIFORM CONSTRUCTION CODE / PENNSYLVANIA IBC 2006
- TRAPPE BOROUGH ZONED VC (VILLAGE COMMERCIAL) - BUILDING HEIGHT - 2 STORY
- TYPE OF CONSTRUCTION PER IBC 5B
- TENANT SQUARE FOOTAGE BASEMENT LEVEL = 225 G.S.F. FIRST FLOOR = 2,541 G.S.F. SECOND FLOOR = 2,475 G.S.F.

TOTAL = 5.241 G.S.F.- BUILDING ALLOWABLE AREA PER TABLE 503 - B 9,500 G.S.F.

- FIRE RESISTANCE RATING FOR BUILDING TYPE - 5B (IBC TABLE 601) - STRUCTURAL FRAME - 0 HR - BEARING WALLS EXTERIOR - 0 HR

- FLOOR CONSTRUCTION - 0 HR - ROOF CONSTRUCTION - 0 HR - INTERIOR WALLS & FINISH CLASSIFICATIONS (TABLE 803.5)
- B USE (OFFICES) - ENCLOSURES & PASSAGEWAYS

- BEARING WALLS INTERIOR - 0 HR

- CORRIDORS - ROOM AND ENCLOSED SPACES - MINIMUM EGRESS WIDTH
 - STAIRWAYS 48 INCHES (0.3 × OCCUPANT LOAD = 15 TABLE 1005.1) - 36 INCHES $(0.2 \times OCCUPANT LOAD = 10 - TABLE 1005.1)$ /5
 - AUTOMATIC SPRINKLERS ARE NOT REQUIRED IN USE GROUPS B - IBC OCCUPANCY LOAD - B = 52 (PER IBC TABLE 1004.1.1)
 - TRAPPE BORO OCCUPANT LOAD = 20 (14 IST FLR.) | PER 200 SQ.FT. BSMT / IST FLOOR (6 2ND FLR.) I PER 400 SQ.FT. EA. ADDITIONAL FLRS. - MAXIMUM EGRESS TRAVEL DISTANCE - LESS THAN 75 FT. (ALLOWED 200 FT. PER TABLE 1016.1)

- MEANS OF EGRESS REQUIRED - I (PER TABLE 1019.1) PROVIDED - 2 ON FIRST FLOOR

Betzwood

Note: Certification not valid unless original stamp and signature appear on the project title sheet fax (610) 917-8836 email mail@betzwood.com http://www.betzwood.com

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

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

BY ISSUE REVISED / REISSUED FOR APPROVAL 06-09-09 3 09-24-09 EMH NOT FOR CONSTRUCTION 4 10-08-09 11-12-09 EMH 6 | 11-24-09 | EMH **CURRENT DATE** APPROVED BY November 12, 2009

PROVIDENCE PROPERTY HOLDINGS, LLC

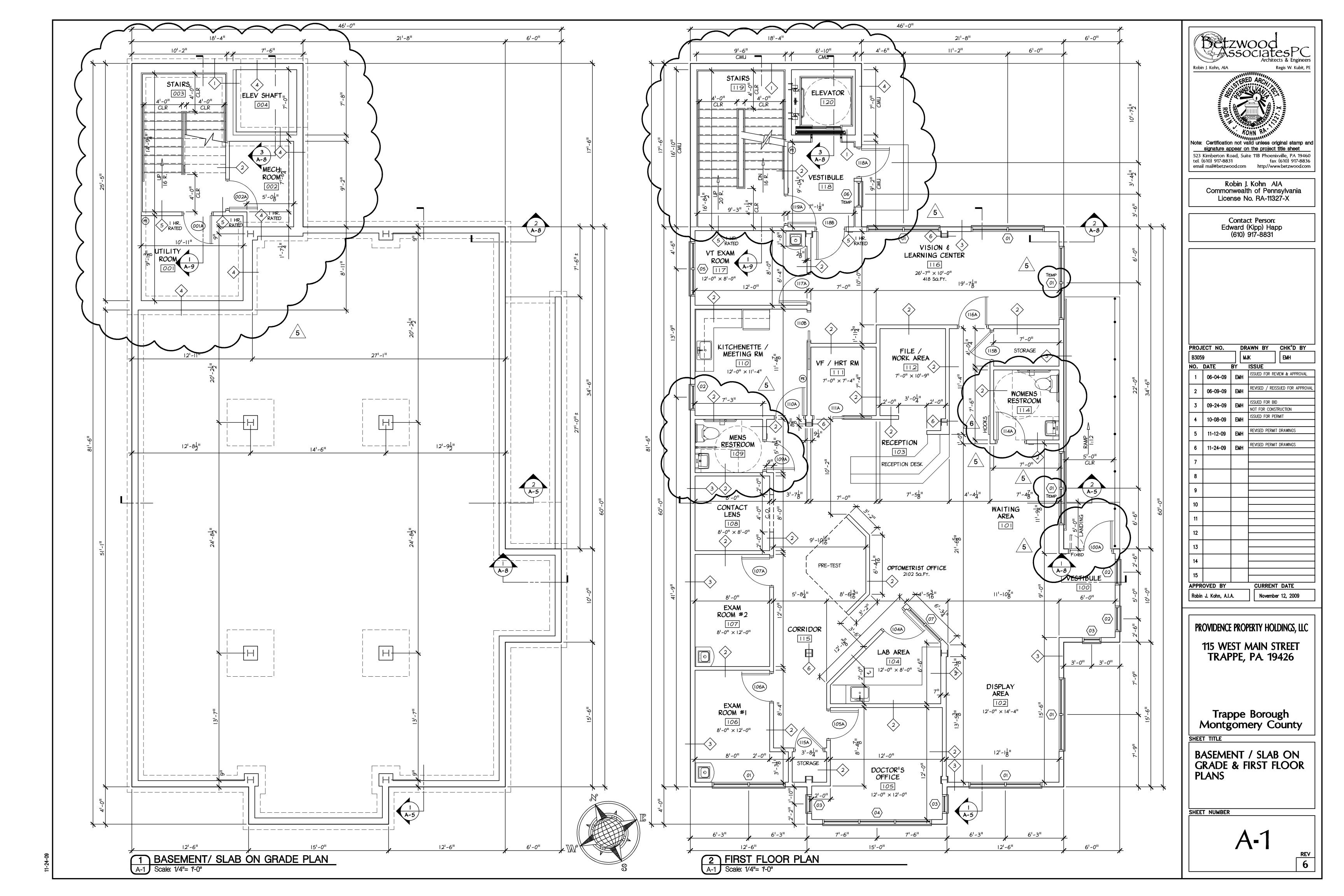
115 WEST MAIN STREET TRAPPE, PA. 19426

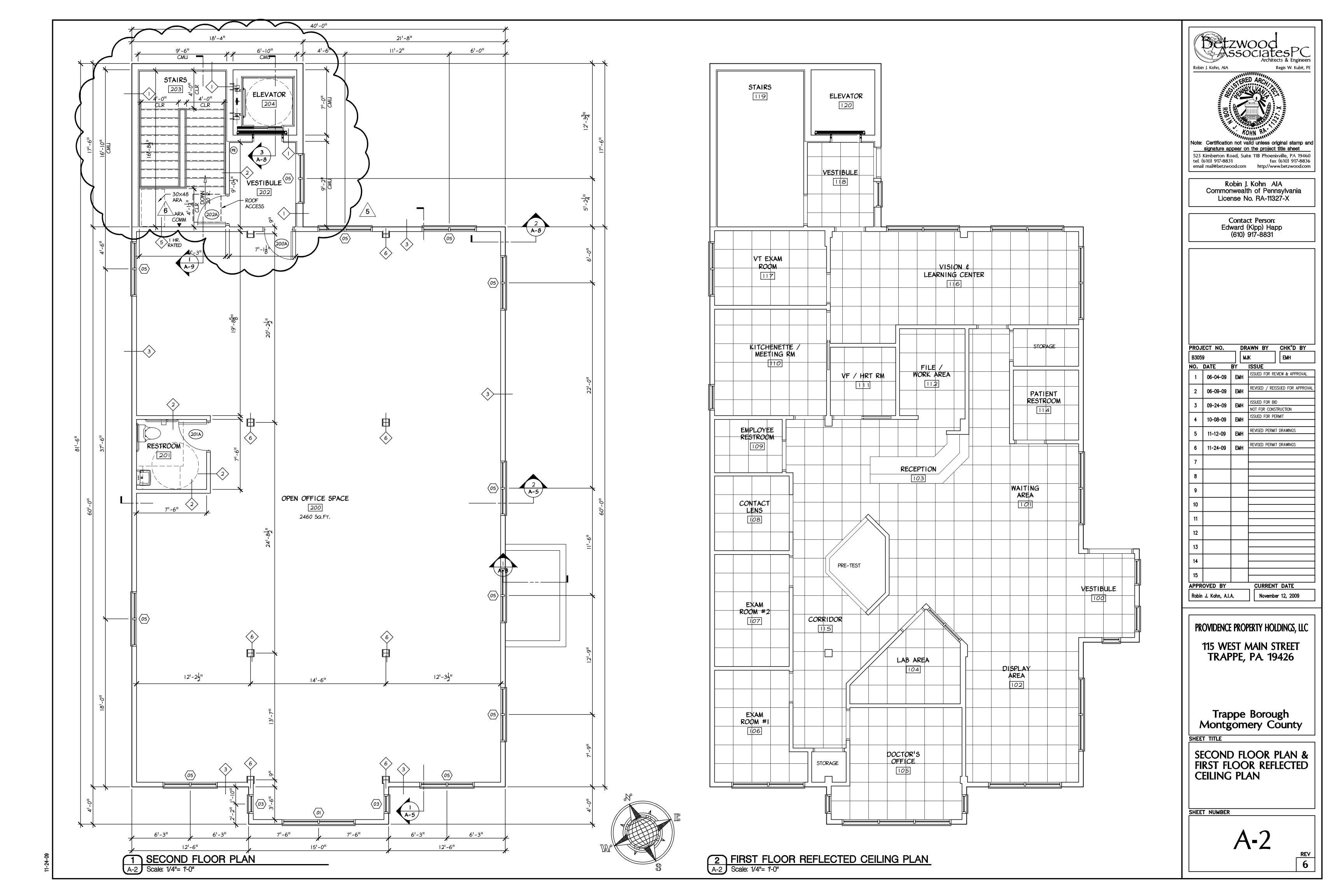
Trappe Borough Montgomery County

SHEET TITLE

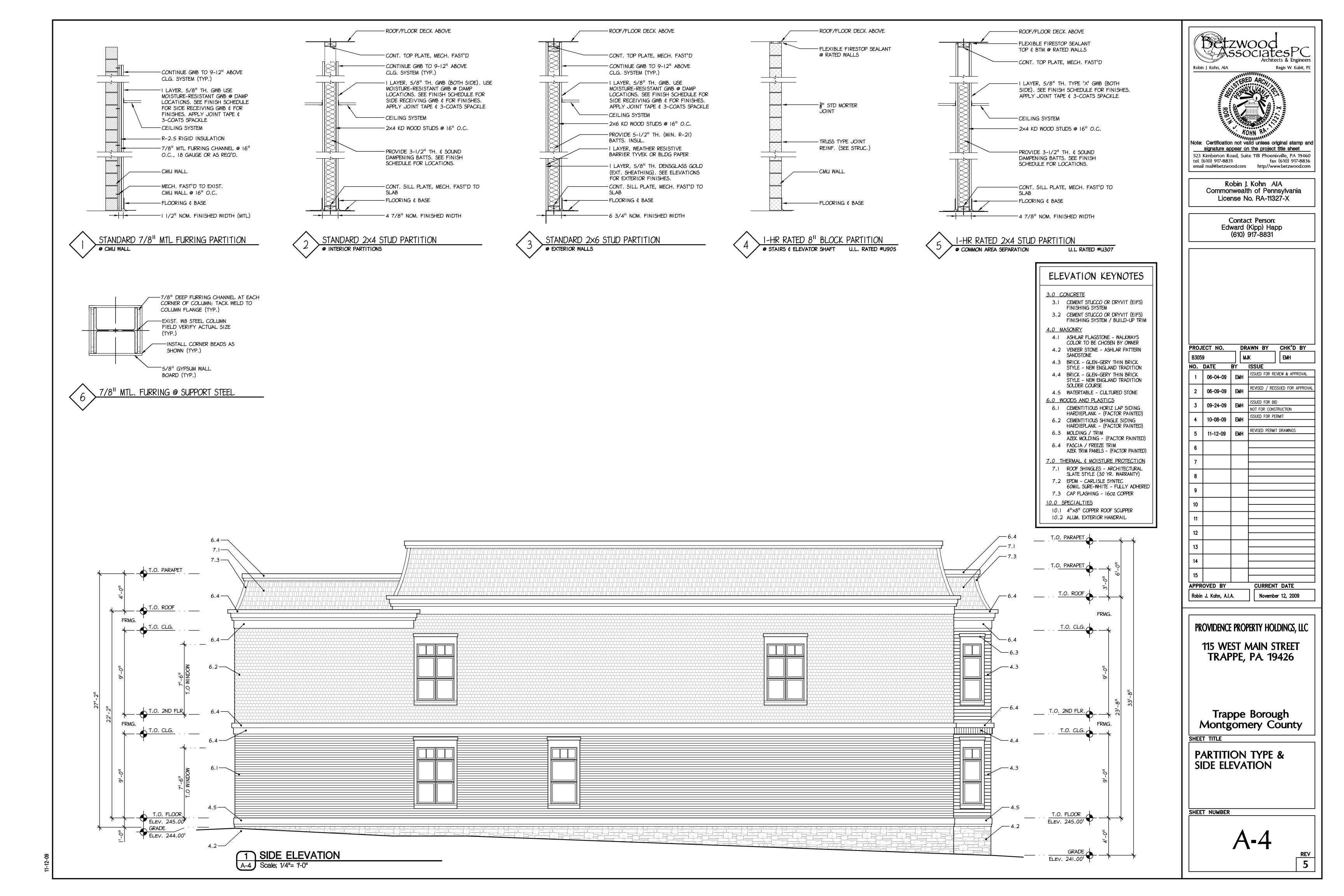
TITLE SHEET

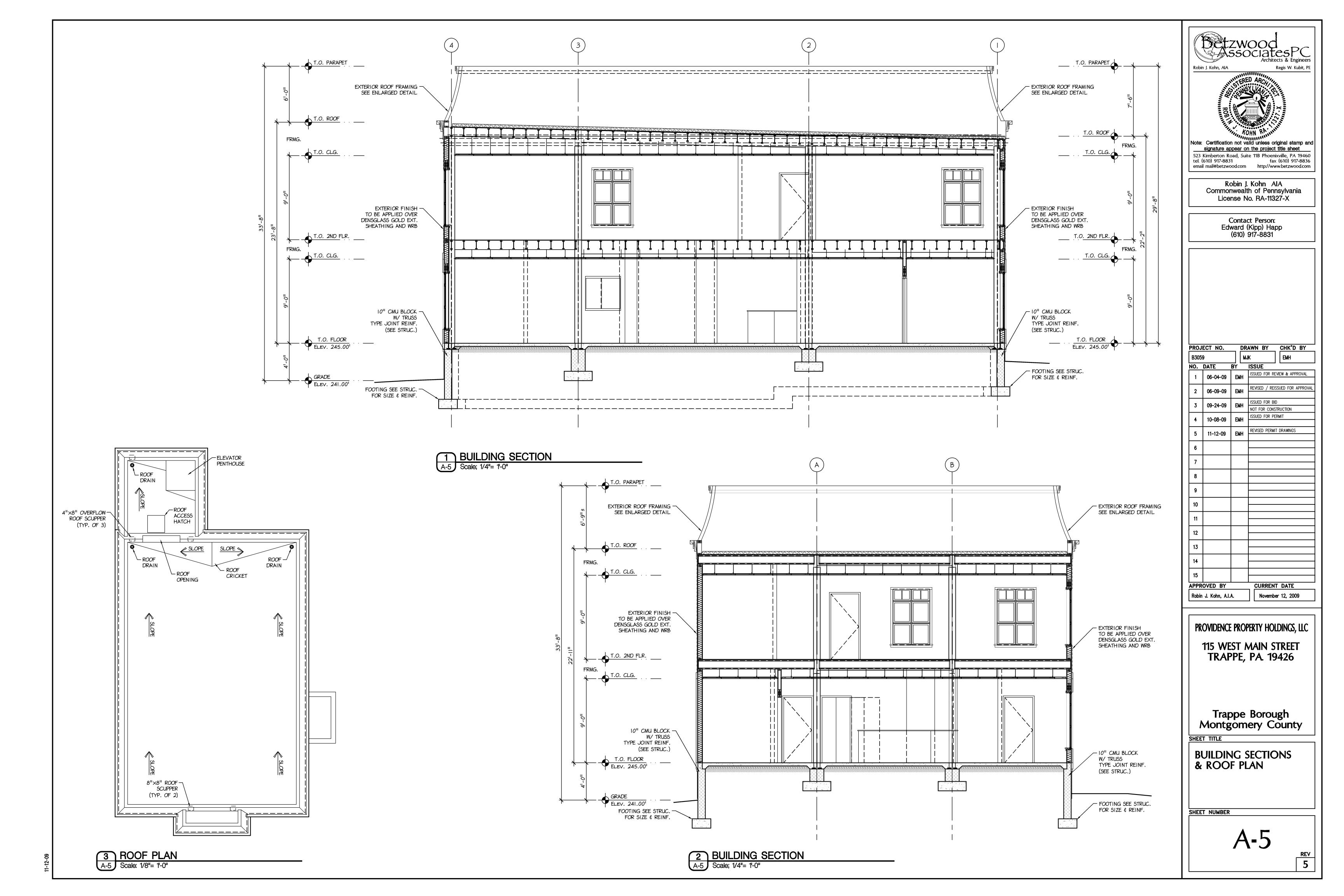
SHEET NUMBER

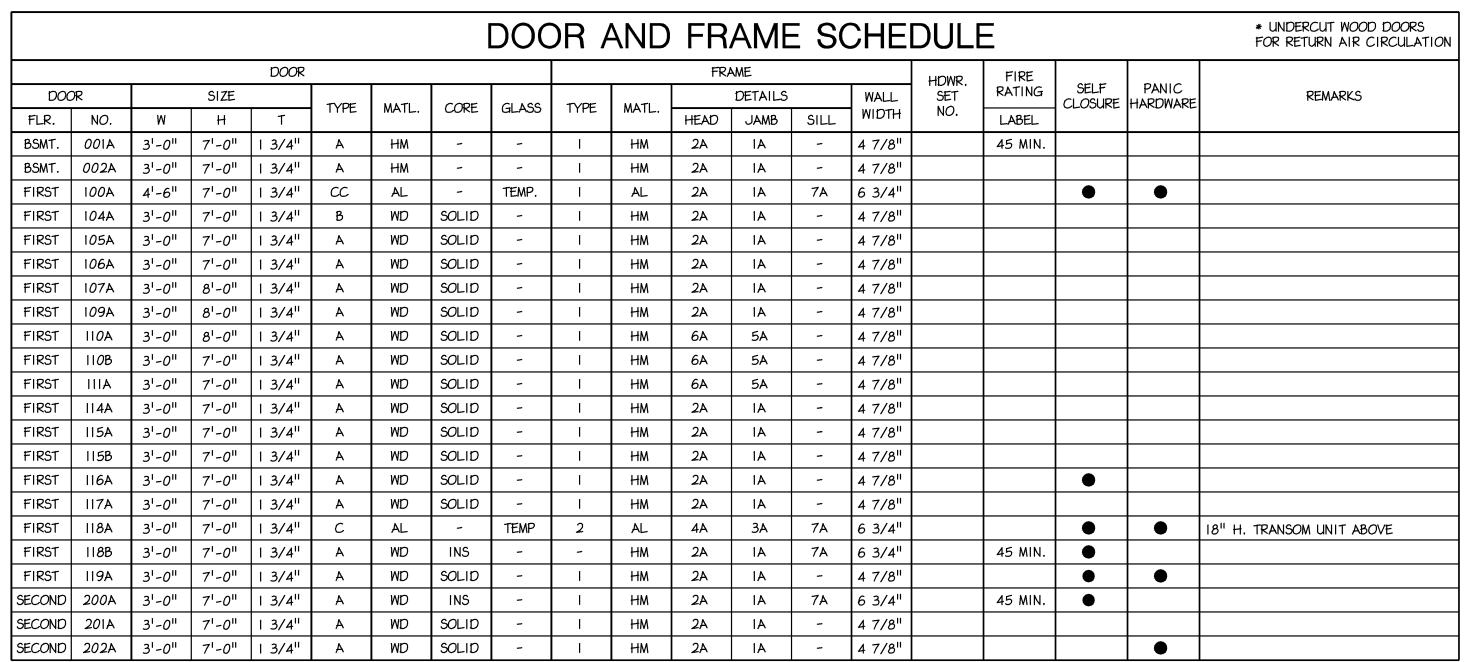












ROOM FINISH SCHEDULE

WALLS

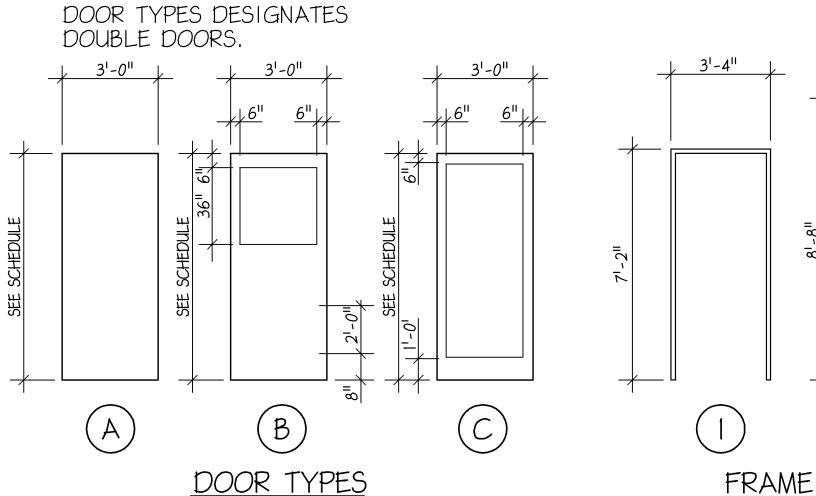
MATERIALS

• • •

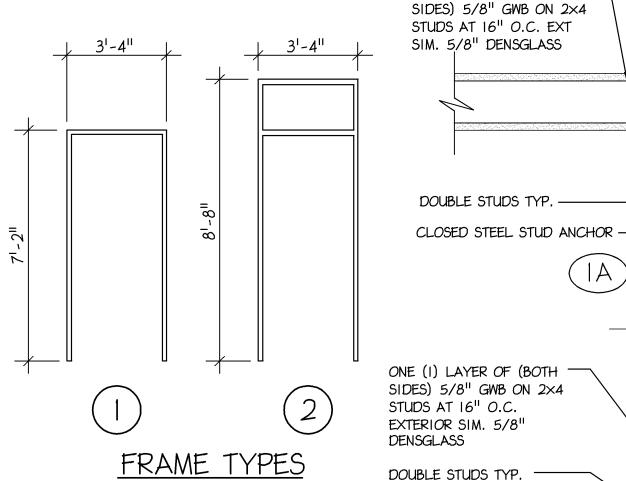
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WAINSCOTS

MATERIALS HGT.

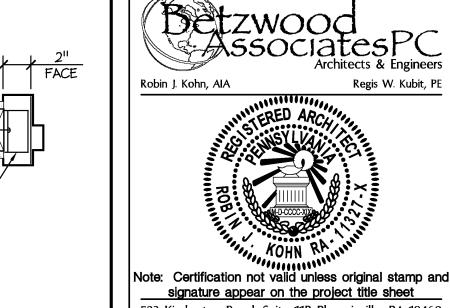


* DOUBLE LETTERS FOR



ONE (I) LAYER OF (BOTH

CLOSED STEEL STUD ANCHOR -



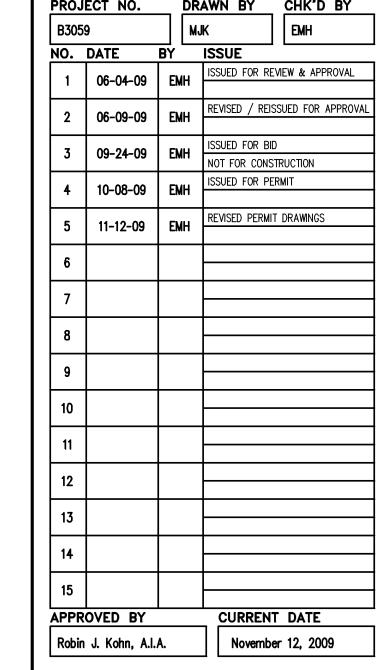
523 Kimberton Road, Suite 11B Phoenixville, PA 19460 tel. (610) 917-8831 fax (610) 917-8836 email mail@betzwood.com http://www.betzwood.com

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

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

RETURN

B305	9	M	JK	EMH	
NO.	DATE	ᇠᆫ	ISSUE	l L	
1	06-04-09	EMH	ISSUED FOR R	EVIEW & APPROVAL	
2	06-09-09	EMH	REVISED / REISSUED FOR APPROV		
3	09-24-09	EMH	EMH ISSUED FOR BID NOT FOR CONSTRUCTION		
4	10-08-09	EMH	ISSUED FOR P		
5	11-12-09	EMH	REVISED PERM	IT DRAWINGS	
6					
7					
8					
9					
10					
11					
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14					
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APPR	OVED BY		CURREN	T DATE	
	OVED BY J. Kohn, A.I.	A.	7	T DATE er 12, 2009	



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	PROVIDENCE PROPERTY HOLDINGS, LLC
	,
	115 WEST MAIN STREET
	TRAPPE, PA. 19426
	.,
	Trappe Borough
	Montgomeny County

orough Montgomery County

SHEET TITLE

DOOR, WINDOW AND ROOM FINISH SCHEDULES

SHEET NUMBER

REV 5

	* VERIFY ALL DIMENSIONS IN FIELD WINDOW SCHEDULE											
WINDOW FRAME												
WIN	MOC	SIZ	生	TYPE	INT. DTL		MATL	I	DETAILS		MOUNTING	REMARKS
NO.	QTY.	W	H	11176	EXT.	DIL	IVIAIL	HEAD	JAMB	SILL	HEIGHT	
01	8	72"	72 ^{II}	OPER	EXT	WI	AL	6	7	8	7'-6"AFF	FIRST FLOOR DBL WINDOW
02	3	34"	72"	OPER	EXT	W2	AL	6	7	8	7'-6"AFF	SINGLE WINDOW
03	5	24"	72"	OPER	EXT	W3	AL	6	7	8	7'-6"AFF	SIDE WINDOWS
04	1	96"	72"	OPER	EXT	W4	AL	6	7	8	7'-6"AFF	TRIPLE FRONT WINDOW
05	12	48"	72"	OPER	EXT	W5	AL	6	7	8	7'-6"AFF	DOUBLE WINDOW
06	1	34"	72"	FIXED	EXT	W6	AL	6	7	8	7'-6"AFF	DOOR SIDE LITE / TEMP.
07	1	58 ¹¹	39"	FIXED	INT	W7	СW	6	7	8	7'-0"AFF	INTERIOR WINDOW IN LAB

FLOORS

MATERIALS

BASES

MATERIALS

ROOM

UTILITY ROOM

STAIRS

VESTIBULE

WAITING ROOM

DISPLAY AREA

DOCTOR'S OFFICE

RECEPTION

LAB AREA

EXAM RM #1

EXAM RM #2

CONTACT LENS

VF / HRT ROOM

STORAGE

CORRIDOR

VT EXAM RM.

VESTIBULE

OPEN SPACE

RESTROOM

VESTIBULE

STAIRS

ELEVATOR SHAFT

ELEVATOR SHAFT

STAIRS

FILE / WORK AREA

PATIENT RESTROOM

EMPLOYEE RESTROOM

KITCHENETTE / MEETING RM.

VISION & LEARNING CENTER

MECHANICAL ROOM

BSMT 001

BSMT 002

FIRST 100

FIRST 104

003

102

103

105

106

107

108

110

BSMT

FIRST

FIRST | 112

FIRST 114

FIRST | 116

FIRST | 118

FIRST | 120

SECOND 200

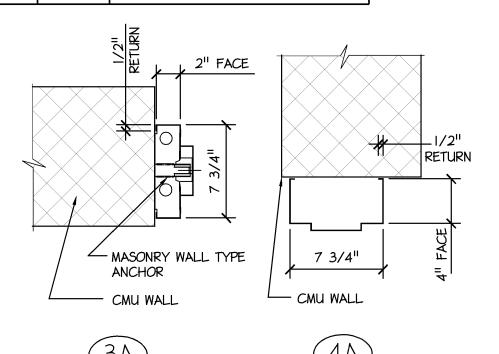
SECOND 201

SECOND 202

SECOND 203

SECOND 204

ROOM NAME



CEILINGS

MTG.

● 9'-0"

● 9'-0"

● 9'-0"

● 9'-0"

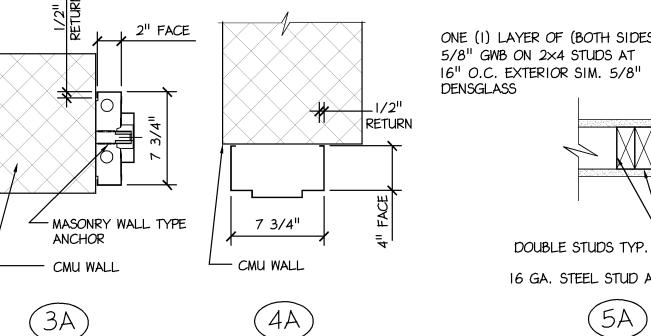
● 8'-0"

● 9'-0"

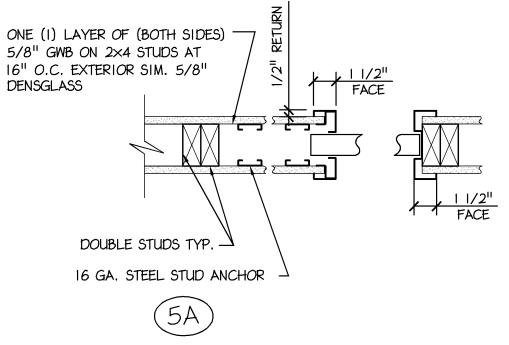
● 9'-0"

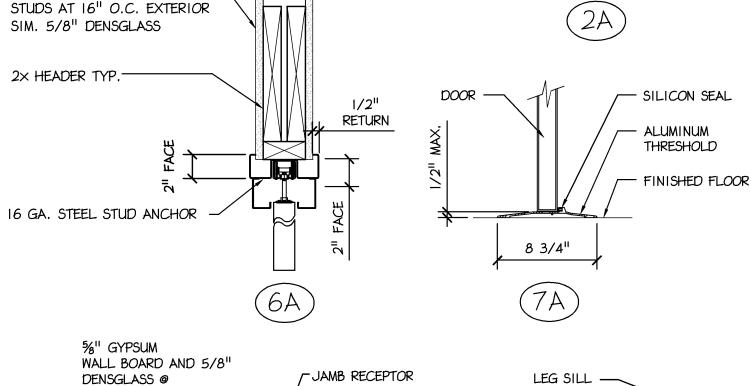
● 9'-0"

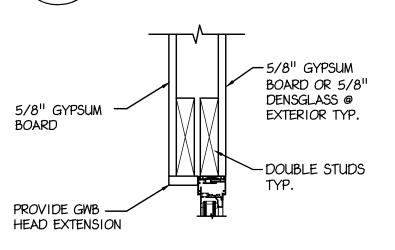
MATERIALS

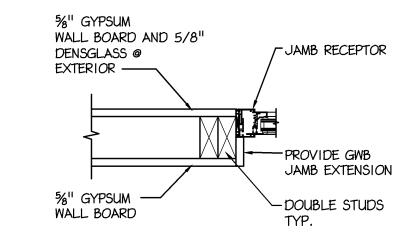


REMARKS

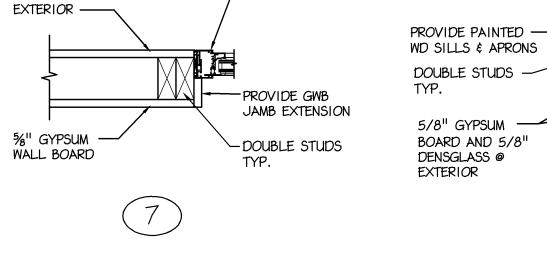




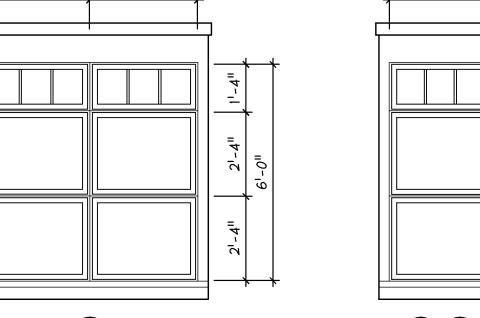


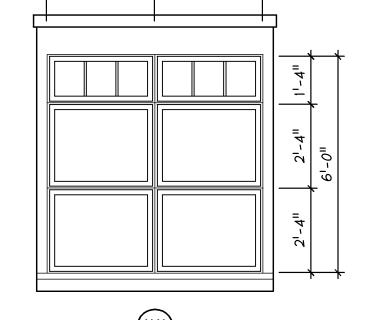


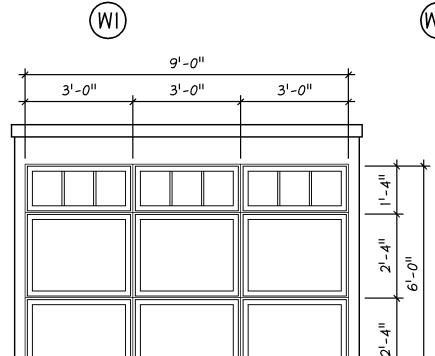
ONE (1) LAYER OF (BOTH -SIDES) 5/8" GWB ON 2×4



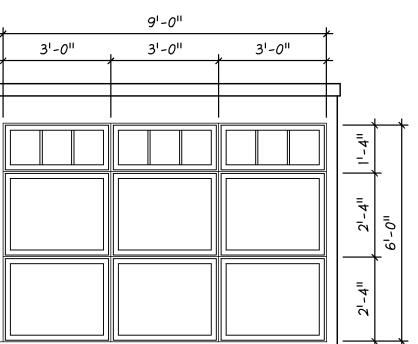
6'-0"	<u> </u>	
3'-0"	3'-0"	
1 1	1	1
<u> </u>	·	J
		= 4 - 1
		21-4"
		21-4"
		2'-4

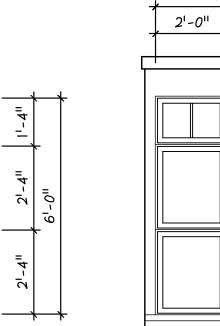


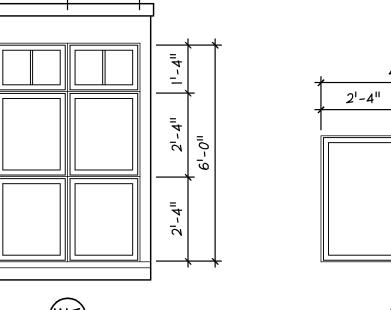




W4)







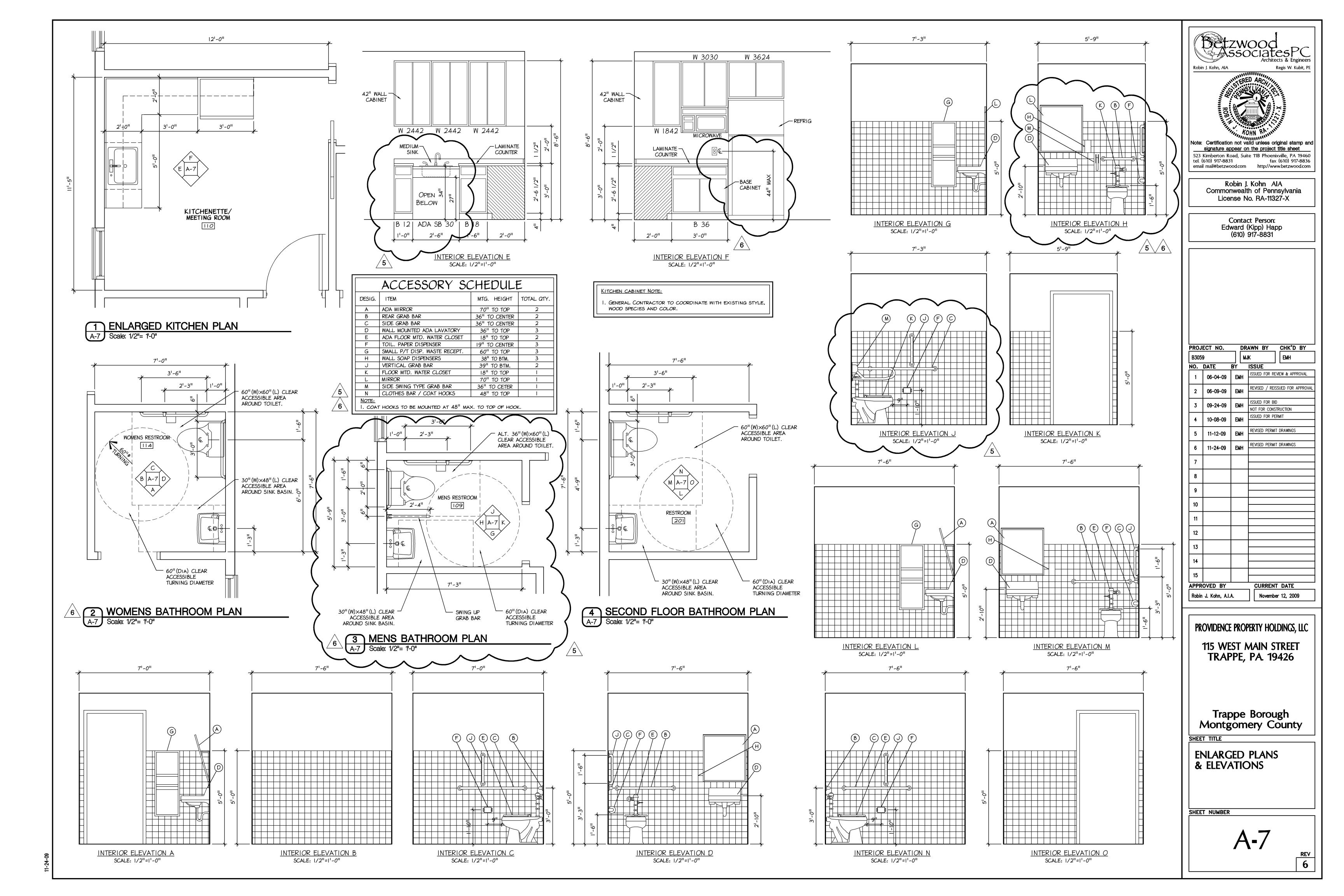
4'-10"

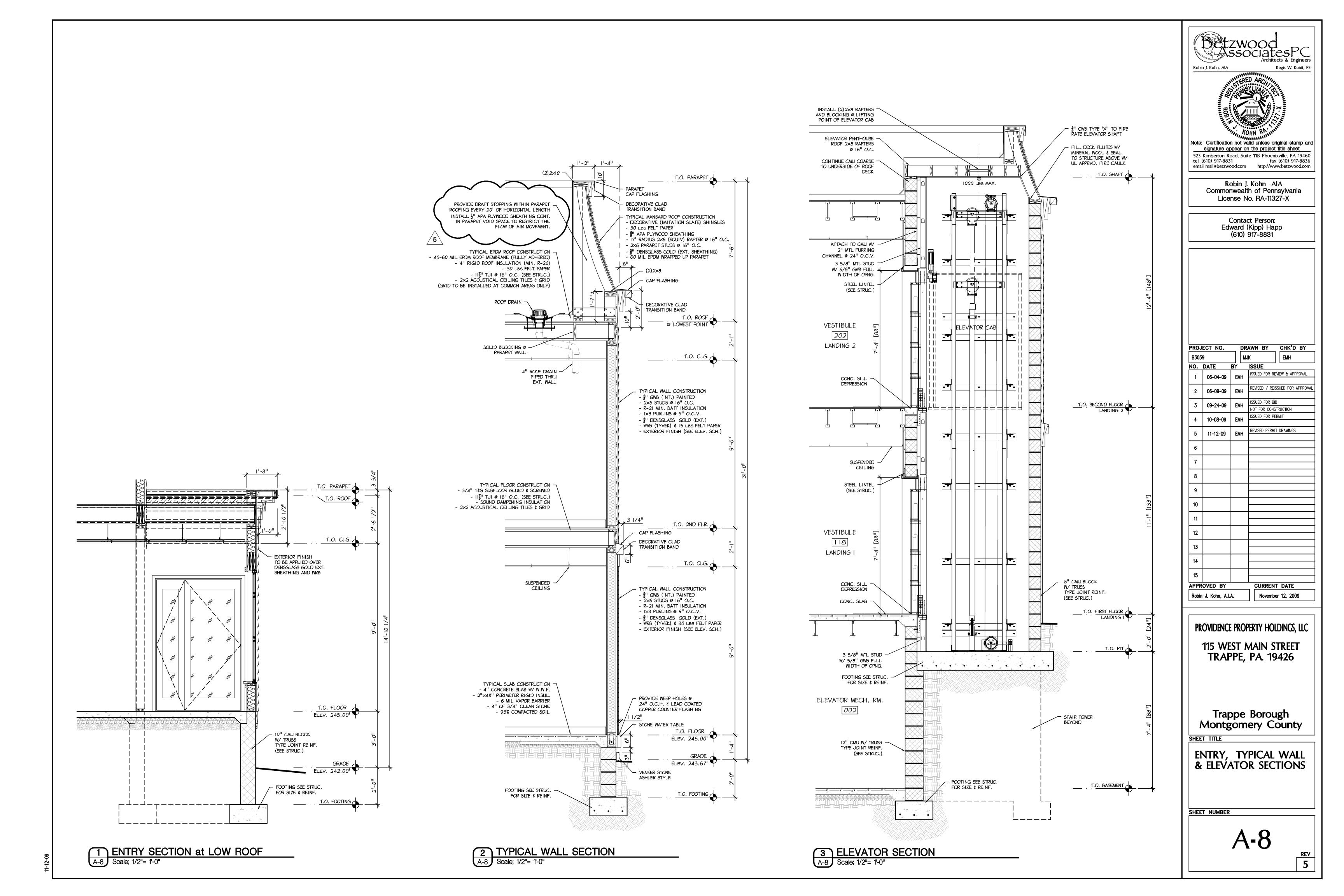
W7)

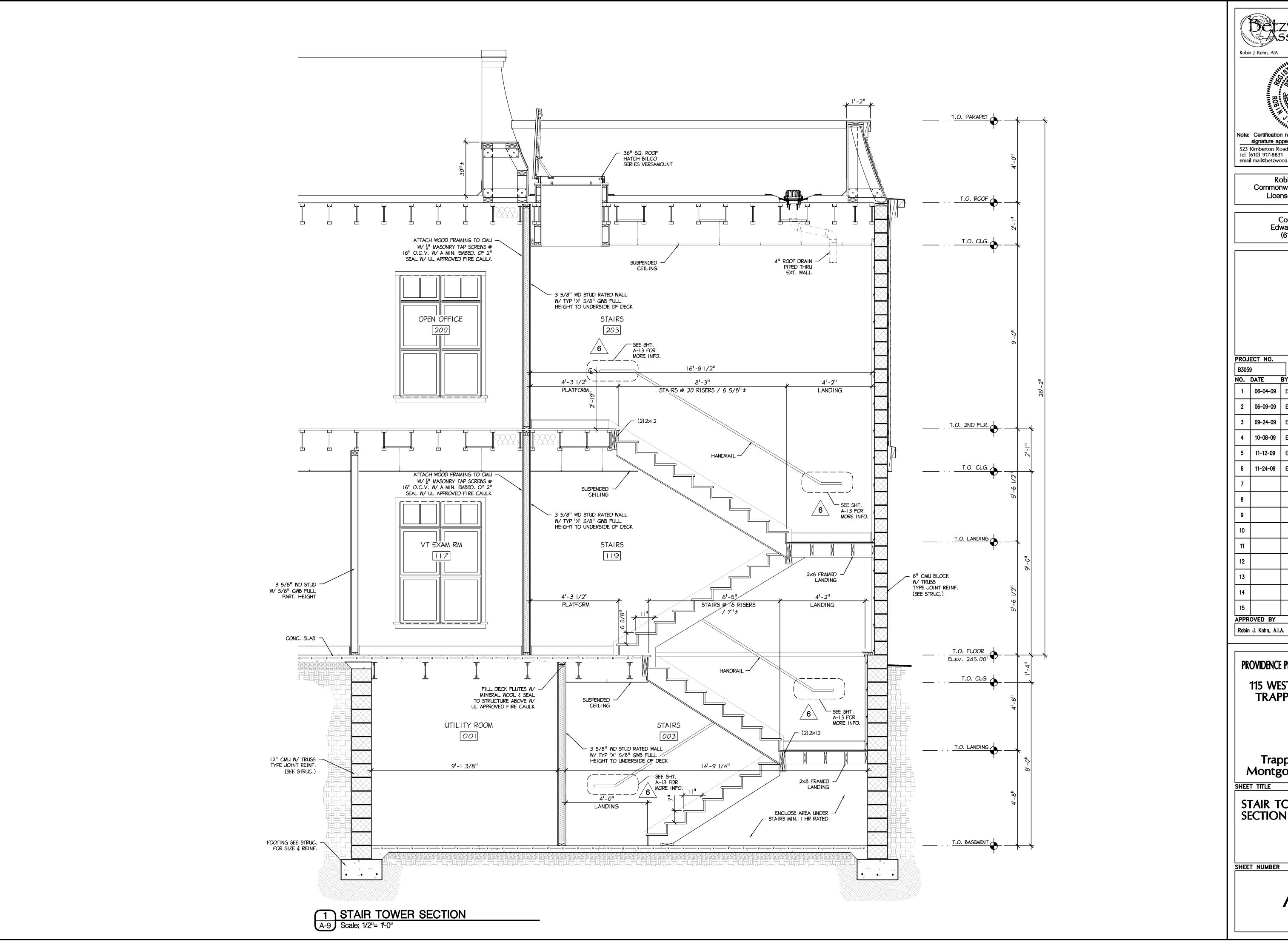
2'-4"

W5)

, 21-011







AssociatesPC Robin J. Kohn, AIA Regis W. Kubit, PE

signature appear on the project title sheet 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

DRAWN BY CHK'D BY NO. DATE BY ISSUE ISSUED FOR REVIEW & APPROVAL REVISED / REISSUED FOR APPROVAL 2 06-09-09 EMH 3 09-24-09 EMH NOT FOR CONSTRUCTION ISSUED FOR PERMIT 4 | 10-08-09 | EMH REVISED PERMIT DRAWINGS 5 | 11-12-09 | EMH 6 11-24-09 EMH APPROVED BY CURRENT DATE November 12, 2009

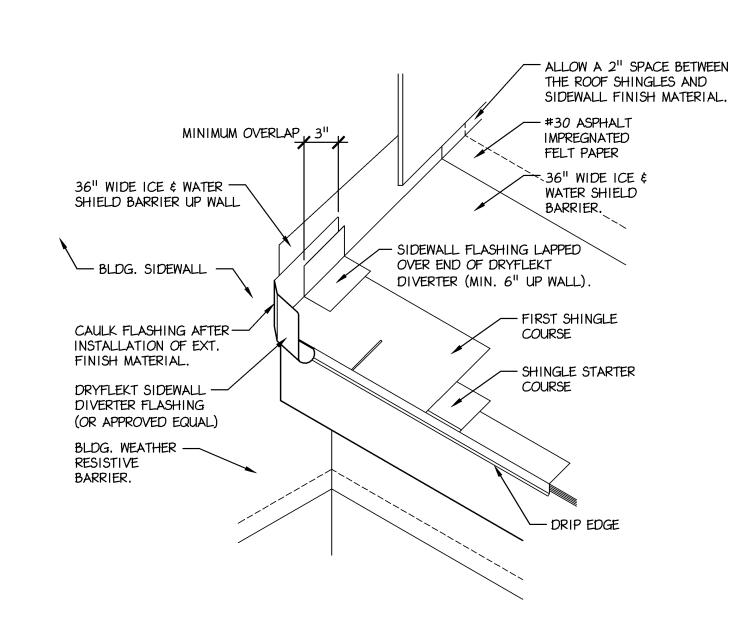
PROVIDENCE PROPERTY HOLDINGS, LLC

115 WEST MAIN STREET TRAPPE, PA. 19426

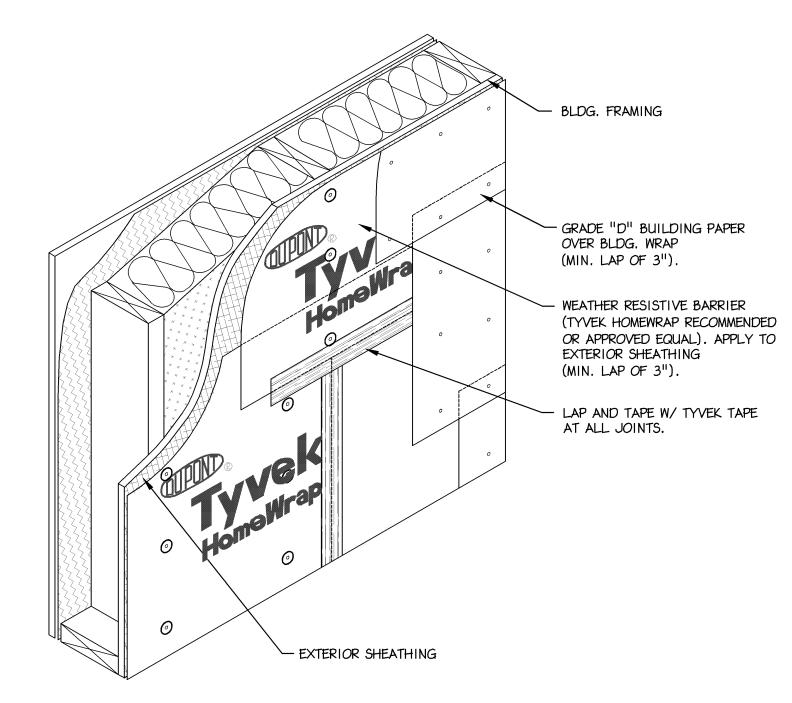
Trappe Borough
Montgomery County

STAIR TOWER **SECTION**

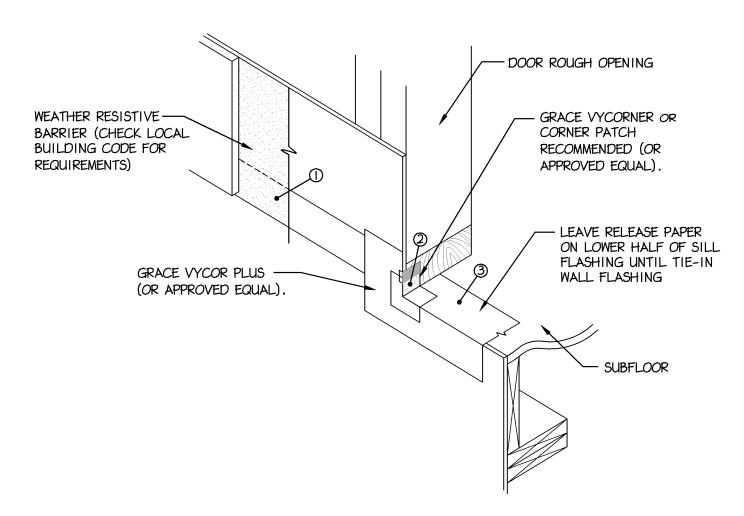
REV 6



1 TYP. DIVERTER FLASHING A-10 Scale: 3/4" = 1'- 0"

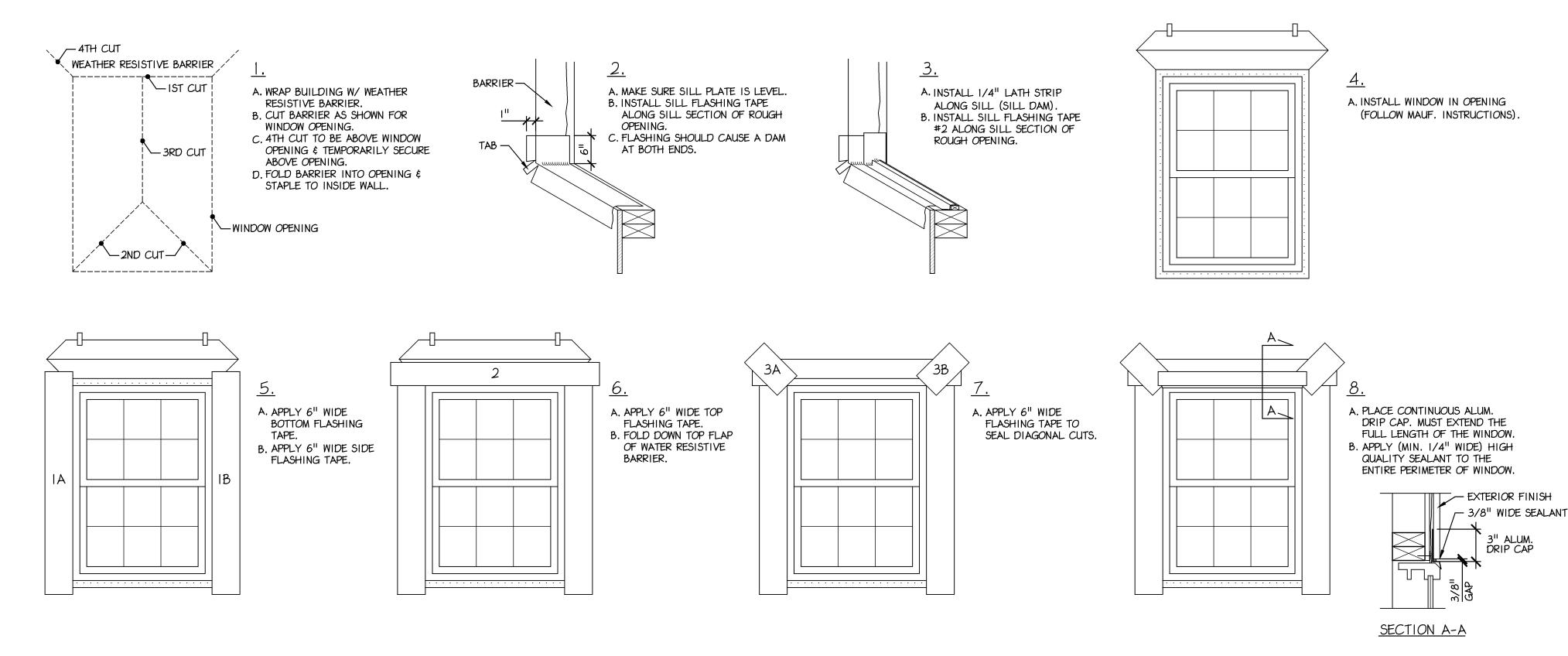


2 TYP. WEATHER BARRIER WRAP A-10 Scale: 3/4" = 1'- 0"

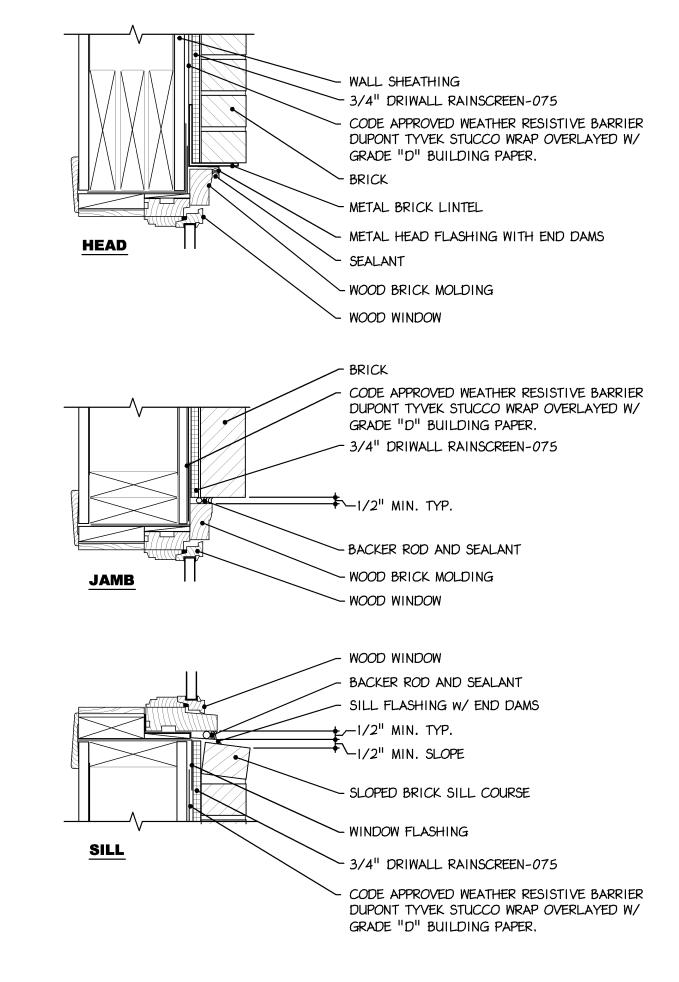


3 TYP. DOOR SILL FLASHING DETAIL

A-10 Scale: 3/4" = 1'- 0"

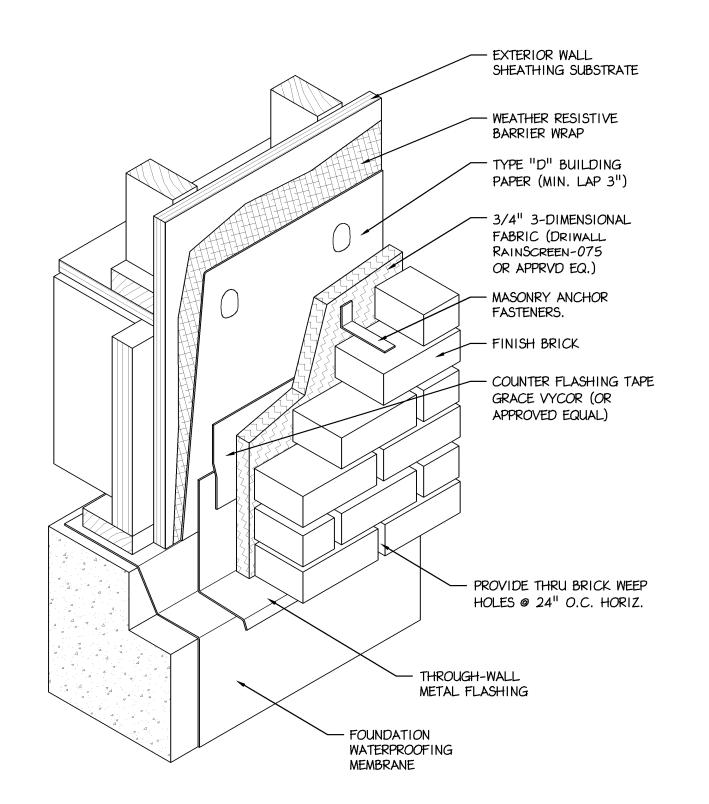


4 TYP. WINDOW FLASHING & SEALING (A-10) Scale: N.T.S.



5 TYP. BRICK DETAILS AT WINDOWS

A-10 Scale: 3/4" = 1'- 0"



6 TYP. BRICK VENEER DETAIL A-10 Scale: 3/4" = 1'- 0"

##SsociatesPC Robin J. Kohn, AIA Regis W. Kubit, PE Note: Certification not valid unless original stamp and signature appear on the project title sheet

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 AlA 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 BY ISSUE ISSUED FOR REVIEW & APPROVAL REVISED / REISSUED FOR APPROVAL 2 | 06-09-09 | EMH SSUED FOR BID 3 | 09-24-09 | EMH NOT FOR CONSTRUCTION ISSUED FOR PERMIT 10-08-09 REVISED PERMIT DRAWINGS 11-12-09 EMH APPROVED BY **CURRENT DATE** Robin J. Kohn, A.I.A. November 12, 2009

PROVIDENCE PROPERTY HOLDINGS, LLC

115 WEST MAIN STREET TRAPPE, PA. 19426

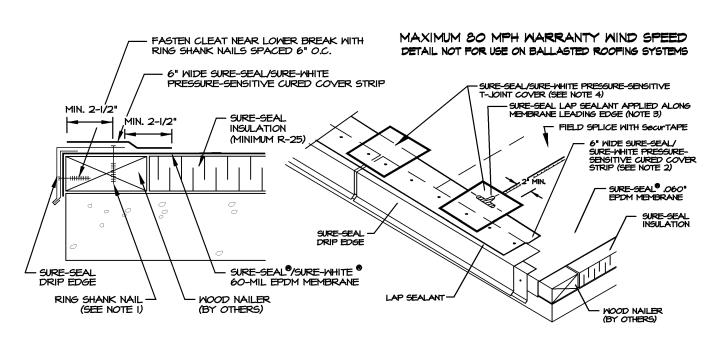
Trappe Borough
Montgomery County

SHEET TITLE

DETAILS & NOTES

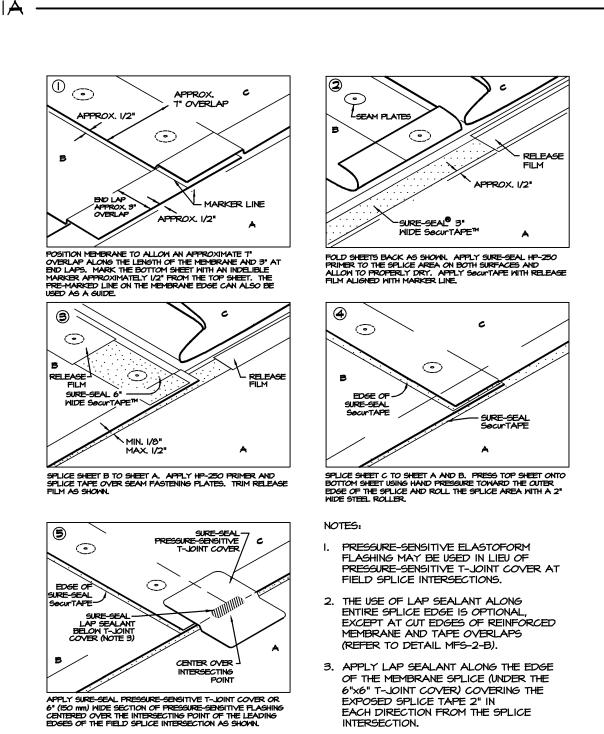
SHEET NUMBER

A-10

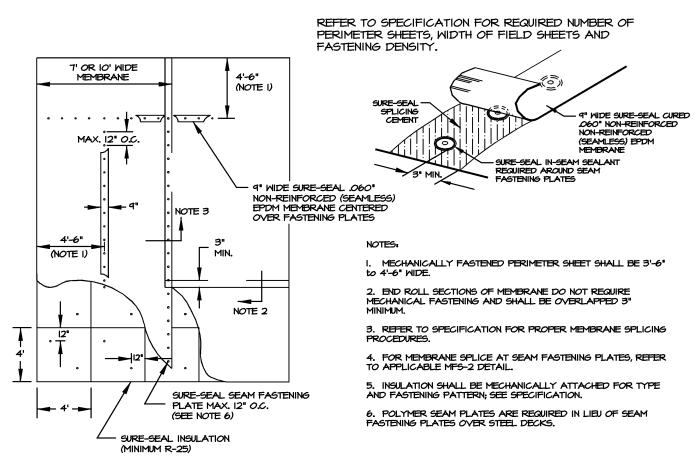


- I. STABILIZE METAL DRIP EDGE BY SECURING WITH RING SHANK NAILS SPACED 3" O.C.; PENETRATE WOOD NAILER I-I/4" MINIMUM. 2. FLASH METAL DRIP EDGE WITH 6" WIDE PRESSURE-SENSITIVE CURED COVER STRIP, IN CONJUNCTION WITH PRIMER. EXTEND FLASHING
- TO TOTALLY COVER THE FLANGE (MAXIMUM EXPOSED METAL SHALL NOT EXCEED 1/4", FROM EDGE). 3. APPLY LAP SEALANT ALONG THE LEADING EDGE OF THE MEMBRANE SPLICE (UNDER THE 6" x 6" T-JOINT COVER) COVERING THE EXPOSED SPLICE TAPE 2" IN ALL DIRECTIONS FROM THE SPLICE INTERSECTION.
- 4. OVERLAY DRIP EDGE FLASHING WITH PRESSURE-SENSITIVE T-JOINT COVERS OR 6" WIDE PRESSURE-SENSITIVE ELASTOFORM FLASHING (IN CONJUNCTION WITH PRIMER) AT FIELD SPLICE INTERSECTIONS AND AT JOINTS BETWEEN SECTIONS OF METAL EDGING AS SHOWN.

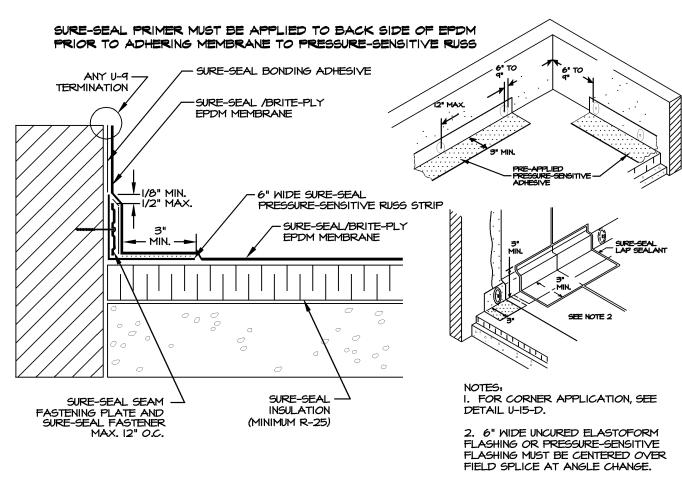
SURE-SEAL DRIP EDGE



SecurTAPE SPLICE INTERSECTION



MEMBRANE ATTACHMENT



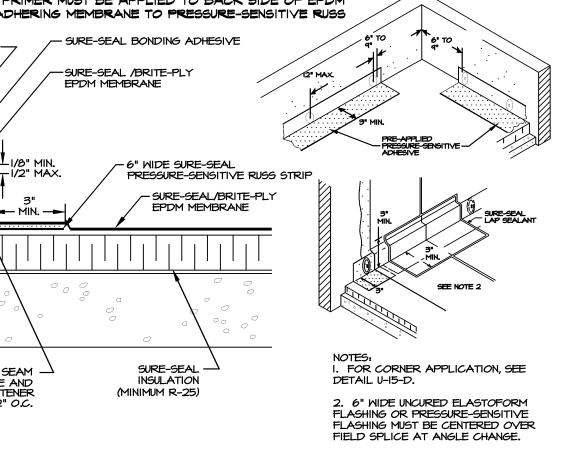
WALL FLASHING

SURE-SEAL WATER -CUT-OFF MASTIC

CLAMPING -

RING (BY

OTHERS)



WHEN A SQUARE OR RECTANGULAR SECTION OF

MEMBRANE FOR PROPER SPLICE.

I. REINFORCED EPDM MEMBRANE MUST BE

FASTENED WITH SEAM FASTENING PLATES

NO MORE THAN 12" ON CENTER WHEN THE

TAPERED INSULATION AT THE DRAIN SUMP IS GREATER THAN 3" TO THE HORIZONTAL

FOOT, CUT REINFORCED MEMBRANE EVEN

WHEN TAPERED INSULATION AT THE DRAIN

2. USE NON-REINFORCED EPDM MEMBRANE AS

HORIZONTAL FOOT, REFER TO U-6-B DETAIL.

A SURFACE SPLICE AND EXTEND INTO DRAIN CLAMPING RING.

ROOF DRAIN WITH SUMP

WITH TOP EDGE OF THE DRAIN SUMP.

SUMP IS LESS THAN 3" TO THE

NON-REINFORCED EPDM MEMBRANE IS USED AS A SURFACE

SPLICE, ROUND THE CORNERS OF THE NON-REINFORCED

FOR DRAINS WITH TAPERED INSULATION AT DRAIN

SURE-SEAL NON-REINFORCED EPDM MEMBRANE AND

(SEE NOTES)

SURE-SEAL REINFORCED -

3. LOCATE EDGE OF THE SURFACE

SPLICE OUT OF THE DRAIN SUMP

4. INSULATION TAPER SHALL NOT BE

STEEPER THAN 6" (VERTICAL) IN

FASTENING PLATES OVER STEEL

REQUIRED IN LIEU OF SEAM

12" (HORIZONTAL).

DECKS.

AT LEAST 6" IN ALL DIRECTIONS ONTO THE HORIZONTAL MEMBRANE.

— SURE-SEAL SEAM FASTENING

PLATE MAX. 12" O.C.

MEMBRANE SPLICE

- SURE-SEAL 6"

SUMP GREATER THAN 3" TO ONE HORIZONTAL FOOT

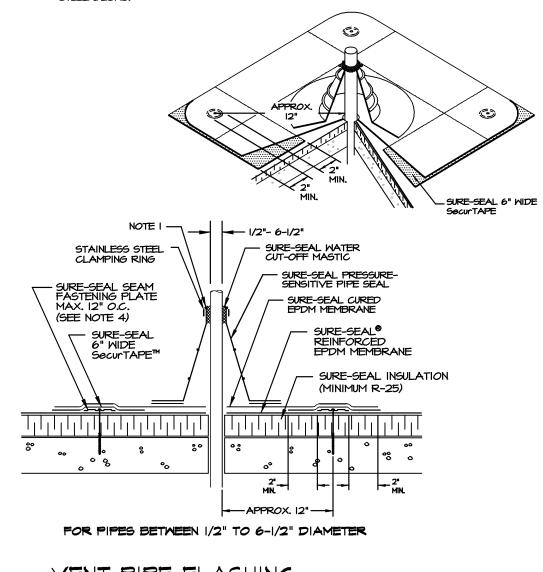
SURE-SEAL BONDING ADHESIVE -U-9-D DETAIL SURE-SEAL/BRITE-PLY UNCURED ELASTOFORM FLASHING WITH MEMBRANE SPLICE (SEE NOTE 4) - SURE-SEAL SEAM FASTENING PLATE (MAX. 12" O.C.) . UNCURED ELASTOFORM FLASHING MUST EXTEND OVER DECK MEMBRANE 3" MINIMUM. 2. FOR PROPER DRAINAGE ON BALLASTED ROOFING SYSTEMS CONSULT SPECIFIER OR APPLICABLE CODES FOR ADEQUATE BALLAST RETAINER AT SCUPPER TO AVOID PONDING WATER; DO NOT RESTRICT WATER FLOW. 3. HP LOCKING SEAM PLATES OR POLYMER SEAM PLATES ARE REQUIRED IN LIEU OF SEAM FASTENING PLATES FOR MECHANICALLY-FASTENED ROOFING SYSTEMS OVER STEEL DECKS. 4. SURE-SEAL PRESSURE-SENSITIVE <u>UNCURED</u> FLASHING IN CONJUNCTION WITH PRIMER CAN BE 6" WIDE RUSS OR PRESSURE- -SENSITIVE RUSS (IN CONJUNCTION WITH PRIMER) USED IN LIEU OF ELASTOFORM FLASHING.

SCUPPER AT DECK

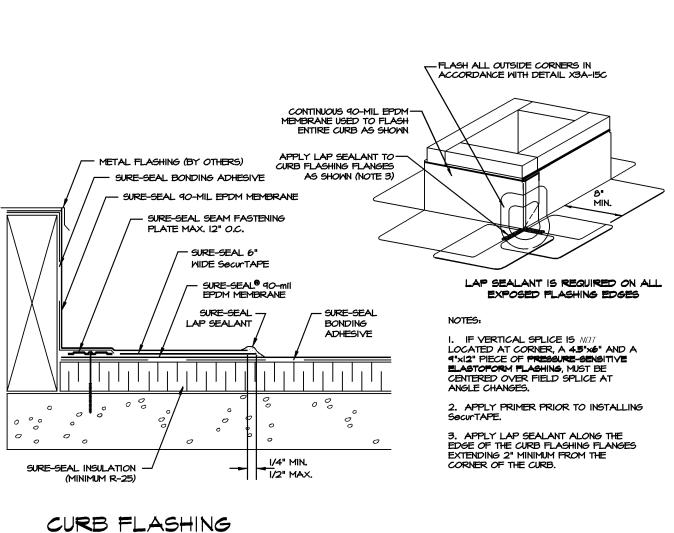
SURE-SEAL/BRITE-PLY EPDM MEMBRANE ---CURED MEMBRANE OR . WALKWAY BOARD SURE-SEAL INSULATION (MINIMUM R-25) -TREATED WOOD NAILER (BY OTHERS) -CURB OR SLEEPER (BY OTHERS)

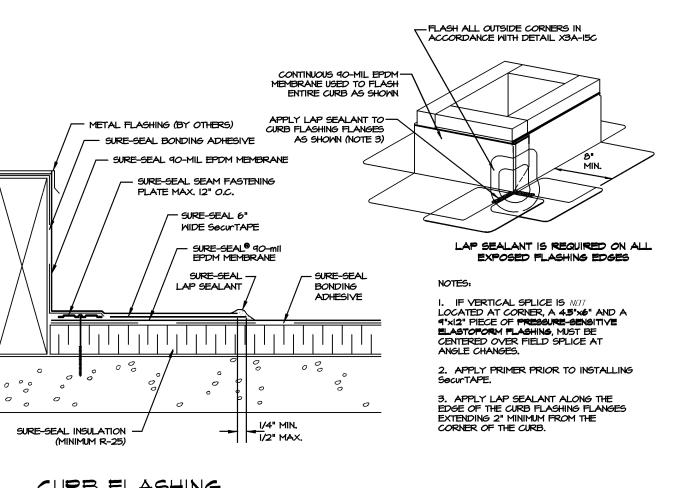
. SLEEPER MUST BE LARGE ENOUGH TO SUPPORT WEIGHT OF EQUIPMENT WITHOUT INDENTING INSULATION. 2. WOOD NAILERS NOT REQUIRED UNDER PIPE SUPPORTS.

- . PRE-MOLDED PIPE SEAL MUST HAVE INTACT RIB AT TOP EDGE REGARDLESS OF
- 2. SEAM FASTENING PLATES ARE ALSO REQUIRED AROUND FIELD FABRICATED PIPE
- 3. INSTALL A MINIMUM OF 4 SEAM FASTENING PLATES FOR PIPES WITH A DIAMETER UP TO 6". ADDITIONAL SEAM FASTENING PLATES WILL BE REQUIRED FOR GREATER THAN 6" IN DIAMETER AND SHALL BE SPACED 12" ON CENTER MAXIMUM.
- 4. POLYMER SEAM PLATES ARE REQUIRED IN LIEU OF SEAM FASTENING PLATES OVER



VENT PIPE FLASHING





PROVIDENCE PROPERTY HOLDINGS, LLC

Betzwood

Robin J. Kohn, AIA

tel. (610) 917-8831

PROJECT NO.

NO. DATE

06-09-09

10-08-09

09-24-09 EMH

11-12-09 EMH

S Associates

Note: Certification not valid unless original stamp and signature appear on the project title sheet 523 Kimberton Road, Suite 11B Phoenixville, PA 19460

email mail@betzwood.com http://www.betzwood.com

Robin J. Kohn AlA

Commonwealth of Pennsylvania

License No. RA-11327-X

Contact Person:

Edward (Kipp) Happ

(610) 917-8831

DRAWN BY

BY ISSUE

CHK'D BY

SSUED FOR REVIEW & APPROVAL

REVISED / REISSUED FOR APPROVAL

NOT FOR CONSTRUCTION SSUED FOR PERMIT

REVISED PERMIT DRAWINGS

CURRENT DATE

November 12, 2009

Regis W. Kubit, PE

fax (610) 917-8836

115 WEST MAIN STREET TRAPPE, PA. 19426

Trappe Borough Montgomery County

SHEET TITLE

APPROVED BY

Robin J. Kohn, A.I.A.

EPDM ROOF DETAILS

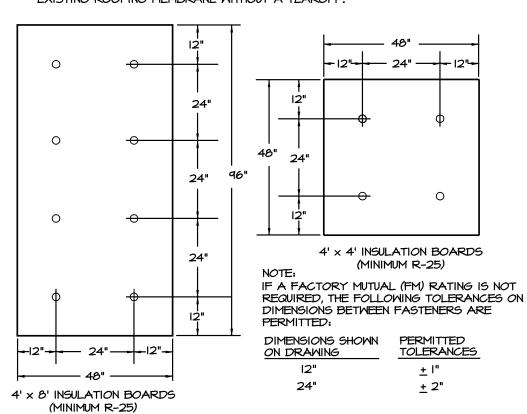
SHEET NUMBER

A-11

REV 5

1 EPDM ROOF DETAILS
A-11 Scale: 3/4" = 1'- 0"

INSULATION FASTENING REQUIREMENTS FOR SURE-SEAL POLYISOCYANURATE INSULATION WITH A THICKNESS LESS THAN 1.5" WHEN INSTALLED OVER EXISTING ROOFING MEMBRANE WITHOUT A TEAROFF.



INSULATION ATTACHMENT

OUTLINE SPECIFICATIONS

DIVISION I: GENERAL REQUIREMENTS

1. SUMMARY OF WORK

1. THE PROJECT CONSISTS OF GENERAL CONSTRUCTION, MECHANICAL, ELECTRICAL AND PLUMBING TO CREATE A NEW MEDICAL OFFICE AND GENERAL OFFICE SPACE(S).

2. OWNER: PROVIDENCE PROPERTY HOLDINGS, LLC 115 W. MAIN ST.

COLLEGEVILLE, PA 19426

3. PHASING: THE PROJECT WILL BE BUILT AS A SINGLE PHASE.

- ALL GENERAL CONDITIONS 201 SHALL GOVERN THE WORK. FOR GENERAL REQUIREMENTS, REFER TO THE SUPPLEMENTAL GENERAL CONDITIONS REQUIREMENTS FOR THE PROJECT.
- 3. ALL WORK SHALL BE DONE IN ACCORDANCE WITH PROJECT SPECIFICATIONS AND CONTRACT DOCUMENTS.
- 4. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND SAMPLES TO THE ARCHITECT IN ACCORDANCE WITH SECTION 01330 OF THE SUPPLEMENTAL GENERAL CONDITIONS REQUIREMENTS:

LIST OF SUBMITTALS (INCLUDING BUT NOT LIMITED TO)
STEEL ERECTION
WOOD DOORS AND FRAMES
DOOR HARDWARE
EXTERIOR STONE

PAINT COLOR SAMPLES
CARPETING SAMPLES
TILE FLOORING
SUSPENDED CEILING SYSTEM
VINYL COMPOSITION TILE SAMPLES
VINYL WALL BASE SAMPLES

5. THE OWNER SHALL PROVIDE THE FOLLOWING ITEMS OR ASSEMBLIES FOR THE PROJECT:
FURNITURE

OPTOMETRIST EQUIPMENT

GENERAL CONSTRUCTION NOTES

- I. THE BUILDING SHALL COMPLY WITH THE INTERNATIONAL BUILDING CODE (IBC) 2006 AND ANSI AII7.I-2003, AMERICAN DISABILITIES ACT (ADA) WITH ALL ADDITIONAL CODES AND SAFETY REGULATIONS PERTAINING TO COMMONWEALTH OF PENNSYLVANIA AND THE LOCAL MUNICIPALITY, INCLUDING ANY MODIFICATIONS MADE BY ORDINANCES BY THE LOCAL MUNICIPALITY. THE PROJECT CODE SUMMARY IS INTENDED TO HIGHLIGHT GENERAL CODE REQUIREMENTS ONLY. GENERAL CONTRACTOR AND SUBCONTRACTORS ARE RESPONSIBLE FOR CONFORMING TO ALL APPLICABLE CODE REQUIRED AND REFERRING TO THE ICC CODE.
- ALL BUILDING PERMITS SHALL BE OBTAINED BY THE CONTRACTOR PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
- 3. BEFORE SUBMITTING PROPOSAL AND BEGINNING WORK, CAREFULLY EXAMINE CONSTRUCTION DOCUMENTS, VISIT THE SITE, AND BECOME FULLY INFORMED CONCERNING ALL EXISTING CONDITIONS, LAW, ORDINANCES, AND REGULATIONS OF JURISDICTIONAL BODIES WHICH MAY EFFECT THE WORK.
- 4. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO CONSTRUCTION. ANY DISCREPANCIES SHOULD BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND OWNER PRIOR TO CONSTRUCTION.
- 5. TYPICAL DIMENSIONS ARE TO CENTER LINE OF COLUMN OR FACE OF FINISHED WALL, REFER TO PLAN DETAILS FOR DIMENSIONAL OFFSETS.
- 6. ALL FINISHES SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND INSTRUCTIONS. REFER TO PROJECT LITERATURE OF EACH SPECIFIED FINISH FOR SPECIFIC REQUIREMENTS
- 7. ANY NEW FINISHES REQUIRED BECAUSE OF DEMOLITION OR NEW CONSTRUCTION SHALL MATCH EXISTING ADJACENT FINISHES.
- AFTER COMPLETION OF ALL WORK, THE AREA WITHIN CONSTRUCTION LIMITS SHALL BE CLEARED OF ALL EXCESS MATERIALS, DEBRIS AND TRASH. ALL NEW FINISHES SHALL BE CLEANED PRIOR TO OCCUPANCY BY OWNER.

DIVISION 2 - SITE CONSTRUCTION

1. REFER TO CIVIL DRAWINGS.

I. REFER TO CIVIL DRAW

DIVISION 3 - CONCRETE
SECTION 03300 - CAST-IN-PLACE CONCRETE

1. COMPLY WITH ACT 301, "SPECIFICATION FOR STRUCTURAL CONCRETE," UNLESS MODIFIED BY THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.N

- 2. Installation, General
- I. FORMWORK: DESIGN, CONSTRUCT, ERECT, SHORE, BRACE, AND MAINTAIN FORMWORK ACCORDING TO ACI
- VAPOR RETARDER: INSTALL, PROTECT, AND REPAIR VAPOR-RETARDER SHEETS ACCORDING TO ASTM E 1643; PLACE SHEETS IN POSITION WITH LONGEST DIMENSION PARALLEL WITH DIRECTION OF POUR.
- STEEL REINFORCEMENT: COMPLY WITH CRSL'S "MANUAL OF STANDARD PRACTICE" FOR FABRICATING, PLACING, AND SUPPORTING REINFORCEMENT.
- AND MATERIALS."

4. TOLERANCES: COMPLY WITH ACLII7, "SPECIFICATIONS FOR TOLERANCES FOR CONCRETE CONSTRUCTION

- 5. COMPLY WITH RECOMMENDATIONS IN ACL 304R FOR MEASURING, MIXING, TRANSPORTING, AND PLACING CONCRETE.
- Unformed Finish: Comply with ACI 302.IR for screeding, restraightening, and finishing operations for concrete surfaces. Do not wet concrete surfaces.
- 7. CONCRETE PROTECTION AND CURING: PROTECT FRESHLY PLACED CONCRETE FROM PREMATURE DRYING AND EXCESSIVE COLD OR HOT TEMPERATURES. COMPLY WITH ACI 306.1 FOR COLD-WEATHER PROTECTION, AND FOLLOW RECOMMENDATIONS IN ACI 30SR FOR HOT-WEATHER PROTECTION DURING
- 3. TOLERANCES: COMPLY WITH ACI 227, "SPECIFICATIONS FOR TOLERANCES FOR CONCRETE CONSTRUCTION AND MATERIALS."

DIVISION 4 - MASONRY

I. REFER TO STRUCTURAL DRAWINGS.

DIVISION 5 - METALS

SECTION 05120 - STRUCTURAL STEEL

1. REFER TO STRUCTURAL DRAWINGS.

DIVISION 6 - WOOD AND PLASTICS

DIVISION 6 - WOOD AND PLASTICS
SECTION 06100 - ROUGH CARPENTRY

- 1. LUMBER: COMPLY WITH DOC PS 20 AND WITH APPLICABLE GRADING RULES OF INSPECTION AGENCIES CERTIFIED BY THE AMERICAN LUMBER STANDARDS COMMITTEE'S (ALSC) BOARD OF REVIEW. PROVIDE DRESSED LUMBER, S4S, WITH EACH PIECE FACTORY MARKED WITH GRADE STAMP OF INSPECTION AGENCY.
- 2. WOOD-PRESERVATIVE-TREATED MATERIAL: COMPLY WITH APPLICABLE REQUIREMENTS OF AWPA C2 (LUMBER) AND A WP A C9 (PLYWOOD). MARK EACH TREATED ITEM WITH THE QUALITY MARK REQUIREMENTS OF AN INSPECTION AGENCY APPROVED BY ALSC'S BOARD OF REVIEW.
- 3. FIRE-RETARDANT TREATED MATERIAL: COMPLY WITH APPLICABLE REQUIREMENTS OF AWPA C20 (LUMBER) AND AWPA C27 (PLYWOOD). IDENTIFY FIRE-RETARDANT-TREATED WOOD WITH APPROPRIATE CLASSIFICATION MARKING OF UL U.S. TESTING; TIMBER PRODUCTS INSPECTION, INC.; OR ANOTHER TESTING AND INSPECTING AGENCY ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION.
- 4. HEAT-TREATED FLOAT GLASS: ASTM C 1048; TYPE I; QUALITY Q3 CLASS, KIND, AND CONDITION AS INDICATED IN DRAWINGS AND SCHEDULES.
- 5. COMPLY WITH COMBINED WRITTEN INSTRUCTIONS OF MANUFACTURERS OF GLASS, SEALANTS, GASKETS, AND OTHER GLAZING MATERIALS, INCLUDING THOSE IN REFERENCED GLAZING PUBLICATIONS. DRYING 5. CONCEALED BOARDS: PROVIDE LUMBER WITH 19 PERCENT MAXIMUM MOISTURE CONTENT.
- 6. MISCELLANEOUS LUMBER: PROVIDE NO. 3 OR STANDARD GRADE LUMBER OF ANY SPECIES FOR SUPPORT OR ATTACHMENT OF OTHER CONSTRUCTION, INCLUDING ROOFTOP EQUIPMENT CURBS AND SUPPORT BASES, CANT STRIPS, BUCKS, NAILERS, BLOCKING AND SIMILAR MEMBERS.

DIVISION 7 - THERMAL AND MOISTURE PROTECTIONS

SECTION 07901 - JOINT SEALANTS

- 1. COMPATIBILITY: PROVIDE JOINT SEALANTS, JOINT FILLERS, AND OTHER RELATED MATERIALS THAT ARE COMPATIBLE WITH ONE ANOTHER AND WITH JOINT SUBSTRATES UNDER SERVICE AND APPLICATION CONDITIONS, AS DEMONSTRATED BY TESTING AND FIELD EXPERIENCE.
- 2. ELASTOMERIC SEALANT STANDARD: ONE-PART, MILDEW RESISTANT SILICONE SEALANT: TYPE S; GRADE NS; CLASS 25; USES NT, G,A, AND 0; FORMULATED WITH FUNGICIDE; INTENDED FOR SEALING INTERIOR JOINTS WITH NONPOROUS SUBSTRATES EXPOSED TO HIGH HUMIDITY AND TEMPERATURE EXTREMES.
- 3. ACRYLIC SEALANT: ONE-PART, NON SAG, SOLVENT-RELEASE CURING ACRYLIC TERPOLYMER SEALANT COMPLYING WITH AAMA 808.3 OR FS TT-S-00230, OR BOTH, WITH CAPABILITY, WHEN TESTED PER ASTM C 719, TO WITHSTAND 7.5 PERCENT CHANGE IN JOINT WIDTH EXISTING AT TIME OF APPLICATION WITHOUT FAILING ADHESIVELY OR COHESIVELY.
- ACOUSTICAL SEALANT FOR CONCEALED JOINTS: NONDRYING, NONHARDENING, NONSKINNING, NONSTAINING, GUMABLE, SYNTHETIC RUBBER SEALANT RECOMMENDED FOR SEALING INTERIOR CONCEALED JOINT TO REDUCE TRANSMISSION OF AIRBORNE SOUND.
- 5. SEALANT BACKINGS: NONSTAINING; COMPATIBLE WITH JOINT SUBSTRATES, SEALANTS, PRIMERS, AND OTHER JOINT FILLERS; APPROVED FOR APPLICATIONS INDICATED BY SEALANT MANUFACTURER BASED ON FIELD EXPERIENCE AND LABORATORY TESTING.

1 ARCHITECTURAL SPECIFICATIONS

- 6. PRIMER: AS RECOMMENDED BY JOINT SEALANT MANUFACTURER WHERE REQUIRED FOR ADHESION OF SEALANT TO JOINT SUBSTRATES INDICATED.
- 7. SEALANT INSTALLATION STANDARD: COMPLY WITH ASTM C 1193.
- 8. ACOUSTICAL SEALANT APPLICATION STANDARD: COMPLY WITH ASMT C 919 FOR USE OF JOINT SEALANTS IN ACOUSTICAL APPLICATIONS,

DIVISION 8 - DOORS AND WINDOWS

1. SEE DRAWINGS FOR NEW WINDOW SPECIFICATIONS AND DETAILS.

SECTION 08211 - FLUSH WOOD DOORS

- I. NWWDA QUALITY STANDARD FOR FLUSH WOOD DOORS: NWWDA I.S. I-A, "ARCHITECTURAL WOOD FLUSH
- 2. DOORS FOR OPAQUE FINISH: GRADE -CUSTOM; FACES -HARDBOARD.
- 3. INTERIOR SOLID-CORE VENEER-FACED DOORS:
- 1. CORE: SOLID PARTICLE CORE
- CONSTRUCTION: FIVE OR SEVEN PLIES WITH STILES AND RAILS BONDED TO CORE. THEN ENTIRE UNIT ABRASIVE PLANED BEFORE VENEERING.
- 4. INSTALL WOOD DOORS TO COMPLY WITH MANUFACTURER SWRITTEN INSTRUCTIONS, REFERENCED QUALITY STANDARD, AND AS INDICATED.

SECTION 08710 - DOOR HARDWARE

I. HARDWARE TO COMPLY WITH ADA (ANSI AII7.1-2003).

- 2. PROVIDE THE FOLLOWING DOOR HARDWARE, OR APPROVED EQUAL:
- 1. LOCKSET DESIGNS: SCHLAGE HEAVY DUTY D-SERIES, CYLINDRICAL LOCKSET.
- 2. LEVER DESIGN: SCHLAGE, D-SERIES, ATHENS
- 1. STANLEY, 4-1/2" STANDARD WEIGHT HINGE, FBB179 FOR 3'-0" WIDE DOORS.
- 2. STANLEY "S" HEAVY DUTY FBB168 FOR 3'-6" WIDE DOORS.
- 4. Wall Mounted Door Stop: IVES #407 (CONVEX) OR #407-1/2 (CONCAVE, WALL TYPE FLUSH BUMPER CONCEALED SCREWS, CONVEX DESIGN TYPICAL (CONCAVE DESIGN FOR DOORS WITH PUSH BUTTON
- 5. Door Closer: LCN Super Stock Closer Inon-Hazard, non-sized, for interior or exterior use, 1460/1461 Series.
- 6. FLOOR MOUNTED DOOR STOP: IVES #438 DOME TYPE FLOOR BUMPER.
- 7. PROTECTION PLATE: IVES 8400 SERIES PROTECTION PLATES.
- 7. PROTECTION PLATE: IVES 8400 SERIES PROTECTION PLATES.
- THERMAL WEATHER-STRIPPING (FIRE RATED): NATIONAL GUARD PRODUCTS #152 SILICONE GASKET.
 DOOR SWEEP (FIRE RATED): NATIONAL GUARD PRODUCTS #C607.
- REFER TO DOOR SCHEDULE FOR HARDWARE REQUIREMENTS AND HARDWARE SETS. IF FINISHES ARE NOT NOTED, FINISHES SHALL BE SELECTED FROM FULL RANGE OF FINISH OPTIONS TO BE PROVIDED WITH HARDWARE SUBMITTAL.

SECTION 08800 - GLAZING

- 1. GLASS THICKNESSES: SELECT MINIMUM GLASS THICKNESSES TO COMPLY WITH ASTME 1300.
- 2. SAFETY GLASS: CATEGORY I MATERIALS COMPLYING WITH TESTING REQUIREMENTS IN 16 CFR 1201 AND ANSI 797 I
- 3. GLAZING PUBLICATIONS: COMPLY WITH SIGMA PUBLICATIONS: SIGMA TM-3000, "VERTICAL GLAZING GUIDELINES."
- 4. HEAT-TREATED FLOAT GLASS; ASTM C 1048; TYPE 1; QUALITY Q3 CLASS, KIND, AND CONDITION AS INDICATED IN DRAWINGS AND SCHEDULES.
- 5. COMPLY WITH COMBINED WRITTEN INSTRUCTIONS OF MANUFACTURERS OF GLASS, SEALANTS, GASKETS, AND OTHER GLAZING MATERIALS, INCLUDING THOSE IN REFERNECED GLAZING PUBLICATIONS.

SECTION 09255 - GYPSUM BOARD ASSEMBLIES

- 1. STEEL FRAMING FOR WALLS AND PARTITIONS: PROVIDE STEEL FRAMING MEMBERS COMPLYING WITH THE FOLLOWING REQUIREMENTS:
- 1. PROTECTIVE COATING: ASTM A 653, 640 (ASTM A653M, Z 90) HOT-DIP GALVANIZED COATING FOR FRAMING MEMBERS ATTACHED TO AND WITHIN 10 FEET (3M) OF EXTERIOR WALLS.
- 2. STEEL STUDS AND RUNNERS: ASTM C 645, IN DEPTH INDICATED AND WITH 0.0179-INCH (0.1.5-MM)
 MINIMUM BASE METAL THICKNESS, UNLESS OTHERWISE INDICATED.
- 1. Provide 0.0329-inch (0.84-mm) minimum base metal thickness for head runner, sill runner, Jamb, and cripple studs at door and other openings.

3. ACCESSORIES FOR INTERIOR INSTALLATION: CORNERBEAD, EDGE TRIM, AND CONTROL JOINTS COMPLYING

WITH ASTM C 101. 7, FORMED METAL WITH STEEL SHEET ZINC COATED BY HOT-DIP PROCESS OR ROLLED

2. GYPSUM WALLBOARD: ASTM C36, IN THICKNESS INDICATED.

SECTION 09511 - ACOUSTICAL PANEL CEILINGS

- 4. JOINT TREATMENT MATERIALS: PROVIDE JOINT TREATMENT MATERIALS COMPLYING WITH AS TM C 475.
- 5. SOUND ATTENUATION BLANKETS: ASTM C 665, TYPE I, UNFACED MINERAL FIBER BLANKET INSULATION.
- 6. INSTALL STEEL FRAMING TO COMPLY WITH ASTM C 754 AND WITH ASTM C 81.0 REQUIREMENTS THAT APPLY
- 7. GYPSUM BOARD APPLICATION AND FINISHING STANDARDS: INSTALL AND FINISH GYPSUM PANELS TO COMPLY WITH ASTM C 840 AND GA-216.
- 1. METAL SUSPENSION SYSTEM: MANUFACTURER'S STANDARD DIRECT-HUNG SUSPENSION SYSTEM COMPLYING WITH APPLICABLE ASTM C 635 REQUIREMENTS.
- Install acoustical panel ceilings to comply with ASTM C636 per manufacturer's written instructions an CISCA's "Ceiling Systems Handbook."
 SECTION 09651 - RESILIENT TILE FLOORING
- VINYL COMPOSITION FLOOR TILE: PRODUCTS COMPLYING WITH ASTM F 1066 AND WITH REQUIREMENTS
 SPECIFIED IN THE RESILIENT TILE FLOORING SCHEDULE.
 VINYL WALL BASE: PRODUCTS COMPLYING WITH FS SS-W-1.0, TYPE II AND WITH REQUIREMENTS SPECIFIED
- IN THE RESILIENT TILE FLOORING SCHEDULE.

 3. TROWELABLE LEVELING AND PATCHING COMPOUNDS: LATEX-MODIFIED, PORTLAND-CEMENT-BASED
- FORMULATION PROVIDED OR APPROVED BY FLOORING MANUFACTURER FOR APPLICATIONS INDICATED.

 4. ADHESIVES: WEATER-RESISTANT TYPE RECOMMENDED BY MANUFACTURER TO SUITE RESILIENT PRODUCTS
- 5. TILE INSTALLATION: COMPLY WITH TILE MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS.
- 6. RESILIENT ACCESSORY INSTALLATION: INSTALL RESILIENT ACCESSORIES ACCORDING TO MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS.
- SECTION 09652 SHEET VINYL FLOORING

 1. SELECT AN INSTALLER WHO IS COMPETENT IN THE INSTALLATION OF RESILIENT SHEET FLOORING USING HEAT-WELDED SEAMS.
- 2. VINYL SHEET FLOORING SHALL CONFORM TO THE REQUIREMENTS OF AS TM F 1913.
- 3. PROVIDE SOLID COLOR VINYL WELD ROD AS PRODUCED BY THE MANUFACTURER OF THE RESILIENT FLOORING AND INTENDED FOR HEAT WELDING OF SEAMS. COLOR SHALL BE COMPATIBLE WITH FIELD COLOR OF FLOORING.
- 4. Integrate flash cove base: Provide Integral flash cove wall base by extending sheet flooring 4 in. up the wall using adhesive, welding rod, and accessories recommended and approved by the flooring manufacturer.
- 5. PROVIDE A WATER-BASED/RESIN ADHESIVE FOR FIELD AREAS AND [PRESSURE-SENSITIVE WATER-BASED/RESIN ADHESIVE AT FLASH COVING] [A LATEX WALL BASE ADHESIVE AT THE WALL BASE AS D SCHEULES RECOMMENDED BY THE RESILIENT FLOORING MANUFACTURER.
- 6. EXAMINE SUB FLOORS PRIOR TO INSTALLATION TO DETERMINE THAT SURFACES ARE SMOOTH AND FREE N FROM CRACKS, HOLES, RIDGES, AND OTHER DEFECTS THAT MIGHT PREVENT ADHESIVE BOND OR IMPAIR DURABILITY OR APPEARANCE OF THE FLOORING MATERIAL.
- 7. INSTALL FLOORING IN STRICT ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS.
- 8. LAY FLOORING TO PROVIDE A MINIMUM NUMBER OF SEAMS. AVOID CROSS SEAMS, FILLER PIECES, AND STRIPS. MATCH EDGES FOR COLOR SHADING AND PATTERN AT THE SEAMS IN COMPLIANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- INSTALL FLOORING WITH ADHESIVES, TOOLS, AND PROCEDURES IN STRICT ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS. OBSERVE THE RECOMMENDED ADHESIVE TROWEL NOTCHING, OPEN TIMES, AND WORKING TIMES.

- 10. FINISH ALL SEAMS FLUSH AND FREE FROM VOIDS, RECESSES, AND RAISED AREAS.

 SECTION 09680 CARPET
- I. PROJECT CONDITIONS: COMPLY WITH CRII04, SECTION 6: "SITE CONDITIONS."

2. CARPET: PRODUCTS AS SPECIFIED IN THE CARPET SCHEDULE.

- 3. CONCRETE-SLAB PRIMER: NONSTAINING TYPE AS RECOMMENDED BY THE CARPET MANUFACTURER.
- 4. TROWELABLE UNDERLAYMENTS AND PATCHING COMPOUNDS: AS RECOMMENDED BY THE CARPET MANUFACTURER.
- 5. ADHESIVES: WATER-RESISTANT, NONSTAINING TYPE TO SUIT PRODUCTS AND SUBFLOOR CONDITIONS INDICATED AND TO COMPLY WITH FLAMMABILITY REQUIREMENTS FOR INSTALLED CARPET AS RECOMMENDED BY THE CARPET MANUFACTURER.
- 6. SEAMING CEMENT: HOT-MELT ADHESIVE TAPE OR SIMILAR PRODUCT RECOMMENDED BY CARPET MANUFACTURER FOR TAPING SEAMS AND BUTTING CUT EDGES AT BACKING TO FORM SECURE SEAMS AND TO PREVENT PILE LOSS AT SEAMS.
- 7. CONCRETE-SUBFLOOR PREPARATION: APPLY CONCRETE-SLAB PRIMER, ACCORDING TO MANUFACTURER S DIRECTIONS, WHERE RECOMMENDED BY THE CARPET MANUFACTURER.
- 8. DIRECT GLUE-DOWN INSTALLATION: COMPLY WITH CRII04, SECTION 8: "DIRECT GLUE-DOWN".
- SECTION 09800 SPECIAL COATINGS N/A

ECTION 09900 - PAINTING

- I. MATERIAL QUALITY: PROVIDE MANUFACTURER'S BEST-QUALITY PAINT MATERIAL OF THE VARIOUS COATING TYPES SPECIFIED. PAINT-MATERIAL CONTAINERS NOT DISPLAYING MANUFACTURER'S PRODUCT IDENTIFICATION WILL NOT BE ACCEPTABLE.
- 2. LATEX-BASED INTERIOR FLAT PAINT OVER GYPSUM WALLBOARD AND WOOD DOORS: READY-MIXED, LATEX-
- 1. BASE COAT PRIMER: MAB RICH LUX LATEX ENAMEL UNDERCOATER (037-154).

BASED PAINT FOR USE AS A FLAT FINISH OVER PRIME-COATED GYPSUM DRYWALL AND WOOD DOORS.

- SECOND AND THIRD COATS: MAB RICH LUX ACRYLIC LUSTER LITE (041 LINE).
 LATEX-BASED INTERIOR SEMI-GLOSS PAINT OVER GYPSUM WALLBOARD: READY-MIXED, LATEX-BASED PAINT
- FOR USE AS A SEMI-GLOSS FINISH OVER PRIME-COATED GYPSUM DRYWALL.
- 1. BASE COAT PRIMER: MAB RICH LUX LATEX ENAMEL UNDERCOATER (037-154).
- 2. SECOND AND THIRD COATS: MAB RICH LUX LOW LUSTER ACRYLIC ENAMEL (028 LINE!.
- 4. INTERIOR SEMI-GLOSS ODORLESS ALKYD ENAMEL OVER FERROUS METAL SURFACES: LOW-ODOR, SEMI-GLOSS, ALKYD ENAMEL FOR USE OVER A PRIMER AND UNDERCOAT ON BOTH FERROUS AND ZINC-COATED (GALVANIZED! METAL SURFACES.
- I. BASE COAT PRIMER: MAB RUST-O-LASTIC NYDRO PRIMER (073-9801.
- 2. SECOND AND THIRD COATS: MAB RICH LUX LOW LUSTRE ALKYD ENAMEL (021 LINE).
- 5. PAINTING APPLICATION: PREPARE SUBSTRATES AND APPLY SPECIAL COATINGS IN ACCORDANCE WITH MANUFACTURER'S WRITTEN APPLICATION INSTRUCTIONS.
- DIVISION 10 SPECIALTIES

SECTION 10520 - FIRE-PROTECTION SPECIALTIES

- 1. PORTABLE FIRE EXTINGUISHERS: PROVIDE FIRE EXTINGUISHERS OF TYPE, SIZE, AND CAPACITY FOR EACH CABINET AND OTHER LOCATIONS INDICATED.
- MULTIPURPOSE DRY-CHEMICAL TYPE: UL-RATED 4-A:60-B:C, 10-LB (4.S-KG) NOMINAL CAPACITY, IN ENAMELED-STEEL CONTAINER.CRAC

 2. FIRE-PROTECTION CABINETS: PROVIDE MANUFACTURER'S STANDARD BOX (TUB), WITH TRIM, FRAME,
- DOOR, AND HARDWARE TO SUIT CABINET TYPE, TRIM, STYLE, AND DOOR STYLE INDICATED. WELD JOINTS AND GRIND SMOOTH. MITER AND WELD PERIMETER DOOR FRAMES.
- FIRE-RATED CABINETS: LISTED AND LABELED TO MEET REQUIREMENTS OF ASTM E 814 FOR FIRE-RESISTANCE RATING OF WALL WHERE IT IS INSTALLED.
- CABINET METAL: ENAMELED-STEEL SHEET.
 Install in locations and at mounting heights indicated or ,if not indicated, at heights
- ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION.

 1. PREPARE RECESSES FOR CABINETS AS REQUIRED BY TYPE AND SIZE OF CABINET AND TRIM STYLE.
- 2. FASTEN MOUNTING BRACKETS TO STRUCTURE AND CABINETS, SQUARE AND PLUMB
- 4. BASIS OF DESIGN

2. FIRE EXTINGUISHER

- 1. Cabinet design is based on Larsen #FS 2409-R4 (semi-recessed cabinet -R.O. 26-1/8" \times 11-5/8" \times 4") Vertical Duo trim and door style with stainless steel finish and recessed handle or approved equal.
- PROVIDE MULTI-PURPOSE, DRY CHEMICAL 10 LB. FIRE EXTINGUISHERS. LARSEN #MPIO OR APPROVED EQUAL IN ALT LOCATIONS INDICATED ON THE PLANS.
- 2. EXTINGUISHERS NOT LOCATED IN CABINETS SHALL BE EQUIPPED WITH MANUFACTURER'S STANDARD

DIVISION II - EQUIPMENT

- 1. SUPPLIED BY OWNER.
- DIVISION 12 FURNISHINGS

 SECTION 12345 CASEWORK AND FIXTURES
- I. CASEWORK SHALL BE COMPRISED FROM NEW AND EXISTING, REFER TO DRAWINGS FOR RELOCATED
- 2. WORK INCLUDES THE FABRICATION AND INSTALLATION OF STANDARD FURNITURE COMPONENTS OF BASE CABINETS, STORAGE CABINETS, TABLES, CABINET UNDERSTRUCTURES, SHELF UNITS, END AND BACK PANELS, APRONS, SUPPORT LEGS, AND OTHER UNITS AS INDICATED. PROJECT
- CONSISTS OF WOOD CABINETS AS INDICATED ON DRAWINGS.

 DIVISION 13 SPECIAL CONSTRUCTION N/A
- DIVISION 14 CONVEYING SYSTEMS

 1. ALL ELEVATOR WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF THE
- LOCAL MUNICIPALITY, THE 2006 INTERNATIONAL CODES, AND ALL OTHER AUTHORITIES HAVING JURISDICTION.

 2. ELEVATOR SYSTEMS AND DESIGN SHALL BE DONE ON A DESIGN-BUILD BASIS AND WILT BE CONTRACTED DIRECTLY TO THE OWNER. THE CONTRACTOR SHALL COORDINATE WITH THEIR WORK. THE DESIGN-BUILD
- SHOULD INCLUDE SYSTEMS DESIGN DRAWINGS, EQUIPMENT PRODUCT AND WARRANTY INFORMATION.

 DIVISION 15 MECHANICAL

 I. ALL HVAC WORK SHALL BE MODIFIED AND INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF THE

CONTRACTOR SHALL PROVIDE COMPLETE SUBMITTAL TO THE OWNER AND/OR ARCHITECT. THE SUBMITTAL

LOCAL MUNICIPALITY, THE 2006 INTERNATIONAL MECHANICAL CODE, AND ALL OTHER AUTHORITIES HAVING JURISDICTION.

2. ANY PLUMBING WORK SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH THE REGULATIONS OF THE LOCAL MUNICIPALITY, THE 2006 INTERNATIONAL PLUMBING CODE, AND ALL OTHER AUTHORITIES HAVING

3. SYSTEMS ENGINEERING AND DESIGN SHALL BE DONE ON A DESIGN-BUILD BASIS AND WILT BE CONTRACTED

DIRECTLY TO THE OWNER, THE CONTRACTOR SHALL COORDINATE WITH THEIR WORK, THE DESIGN-BUILD

- CONTRACTOR SHALL PROVIDE COMPLETE SUBMITTAL TO THE OWNER AND/OR ARCHITECT. THE SUBMITTAL SHOULD INCLUDE SYSTEMS DESIGN DRAWINGS, EQUIPMENT PRODUCT AND WARRANTY INFORMATION.
- DIVISION 16 ELECTRICAL

 I. ALL ELECTRICAL SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF THE LOCAL
- MUNICIPALITY, THE NATIONAL ELECTRIC CODE. AND ALL OTHER AUTHORITIES HAVING JURISDICTION.

 2. WHERE REQUIRED, FIRE ALARM SYSTEMS SHALL BE INSTALLED OR MODIFIED IN ACCORDANCE WITH NFPA THE IBC CODE, AND THE COMMONWEALTH OF PENNSYLVANIA. REQUIREMENTS FOR AUDIBLE AND VISUAL ALARMS. MANUAL FIRE ALARMS AND VISUAL ALARMS ARE SUBJECT TO CODE REQUIREMENTS.
- 3. BUILDING SECURITY AND ACCESS SYSTEMS REQUIREMENTS AS INDICATED ON DESIGN DRAWINGS OR AS DIRECTED BY OWNER.
- 4. PROVIDE SWITCHING AND OUTLET LOCATIONS AS REQUIRED BY CODE, AS SHOWN ON THE PLANS OR AS DIRECTED BY OWNER. STYLE OF SWITCHES, PLATES, ETC., SHALL BE APPROVED BY ARCHITECT. PROVIDE OUTLETS REQUIRED FOR ALL APPLIANCES.

5. SYSTEMS ENGINEERING AND DESIGN SHALL BE DONE ON A DESIGN-BUILD BASIS AND WILL BE CONTRACTED

DIRECTLY TO THE OWNER. THE CONTRACTOR SHALL COORDINATE WITH THEIR WORK. THE DESIGN-BUILD CONTRACTOR SHALL PROVIDE A COMPLETE SUBMITTAL TO THE OWNER AND/OR ARCHITECT. THE SUBMITTAL SHOULD INCLUDE SYSTEMS DESIGN DRAWINGS, EQUIPMENT PRODUCT AND WARRANTY INFORMATION.

Robin J. Kohn, AIA

Regis W. Kubit, PE

Note: Certification not valid unless original stamp and signature appear on the project title sheet

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PROJECT NO DRAWN BY CHK'D BY NO. DATE ISSUE SSUED FOR REVIEW & APPROVAL REVISED / REISSUED FOR APPROVAL 2 | 06-09-09 | SUED FOR BID 09-24-09 EMH NOT FOR CONSTRUCTION SSUED FOR PERMIT 10-08-09 REVISED PERMIT DRAWINGS 11-12-09 EMH **CURRENT DATE** APPROVED BY November 12, 2009 Robin J. Kohn, A.I.A.

PROVIDENCE PROPERTY HOLDINGS, LLC

115 WEST MAIN STREET TRAPPE, PA. 19426

Trappe Borough
Montgomery County

ARCHITECTURAL SPECIFICATIONS

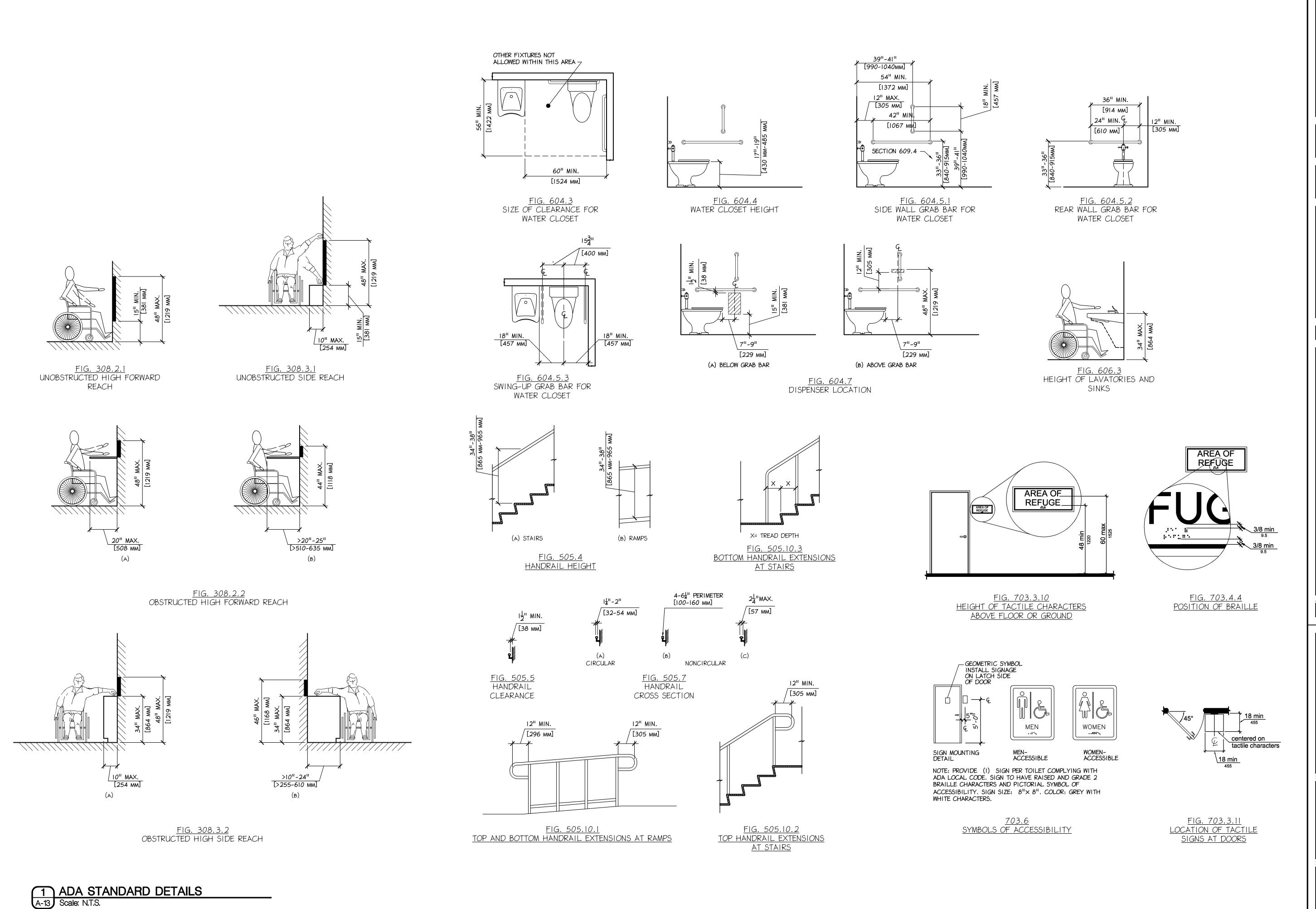
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SHEET TITLE

A-12

5

11-12-



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DRAWN BY CHK'D BY B3059 NO. DATE BY ISSUE ISSUED FOR REVIEW & APPROVAL REVISED / REISSUED FOR APPROVAL 2 | 06-09-09 | EMH SSUED FOR BID 3 09-24-09 EMH NOT FOR CONSTRUCTION ISSUED FOR PERMIT 4 10-08-09 EMH REVISED PERMIT DRAWINGS 5 | 11-12-09 | EMH APPROVED BY CURRENT DATE Robin J. Kohn, A.I.A. November 12, 2009

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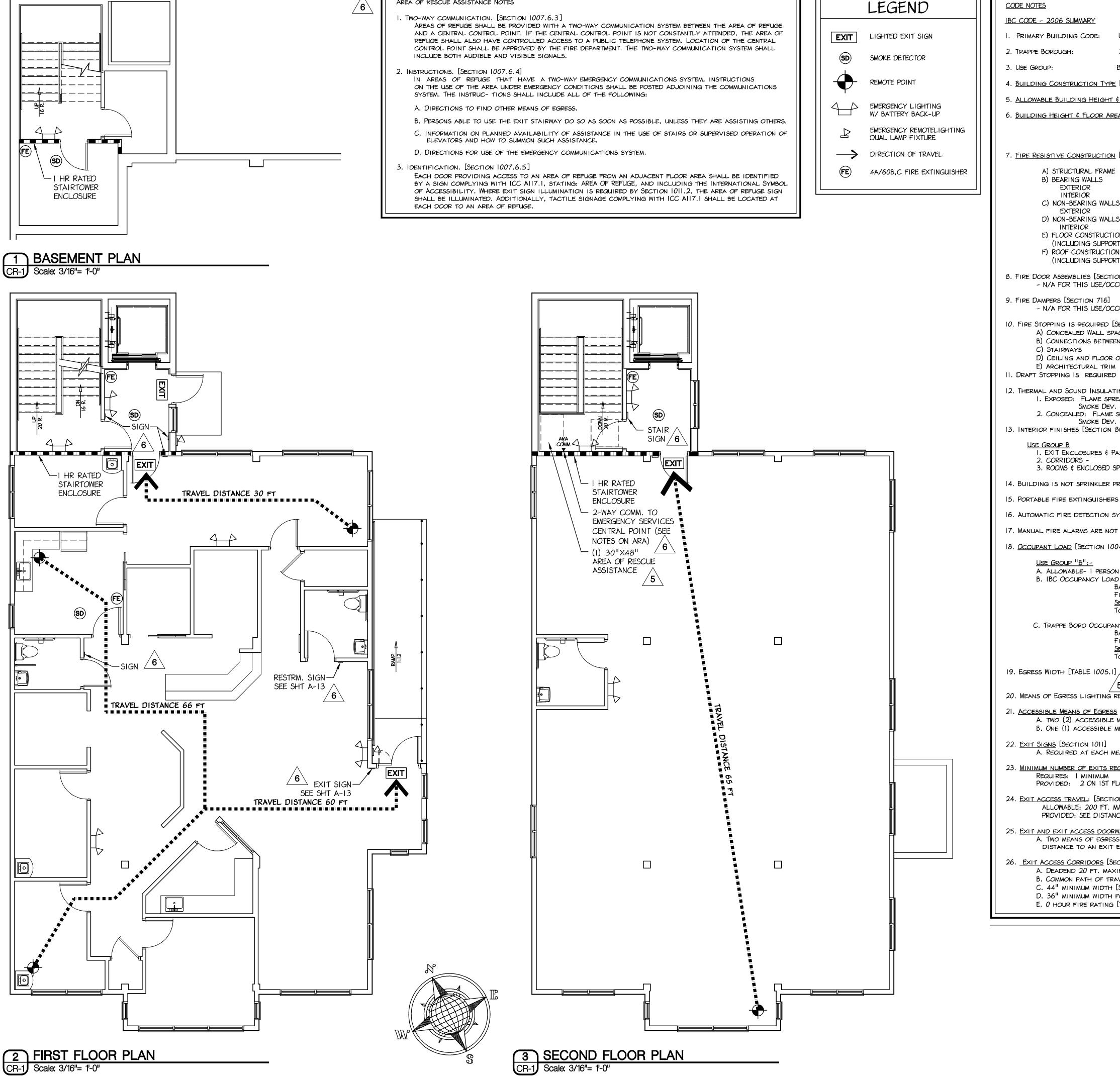
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ADA STANDARD DETAILS

SHEET NUMBER

A-13

REV 5



AREA OF RESCUE ASSISTANCE NOTES

CODE NOTES

IBC CODE - 2006 SUMMARY

1. PRIMARY BUILDING CODE: UNIFORM CONSTRUCTION CODE / PENNSYLVANIA IBC 2006

2. TRAPPE BOROUGH: ZONED VC (VILLAGE COMMERCIAL)

BUILDING USE (B) BUSINESS 3. USE GROUP:

4. <u>BUILDING CONSTRUCTION TYPE</u> [SECT 602]: TYPE 5B, COMBUSTIBLE, UNPROTECTED

5. ALLOWABLE BUILDING HEIGHT & FLOOR AREA [TABLE 503]: USE "B" TYPE 5B = MAX - 2 STORIES (40 FT); 9,000 S.F.

TYPE 5B HOUR RATING

6. <u>BUILDING HEIGHT & FLOOR AREAS:</u> BUILDING SHELL - 5,241 SQUARE FEET

-BASEMENT LEVEL - 225 GSF -FIRST FLOOR "B" - 2,541 GSF -SECOND FLOOR "B" - 2,475 GS

7. FIRE RESISTIVE CONSTRUCTION [TABLE 601]

A) STRUCTURAL FRAME B) BEARING WALLS EXTERIOR INTERIOR C) NON-BEARING WALLS & PARTITIONS

D) NON-BEARING WALLS & PARTITIONS INTERIOR E) FLOOR CONSTRUCTION (INCLUDING SUPPORTING BEAMS & JOISTS)

F) ROOF CONSTRUCTION (INCLUDING SUPPORTING BEAMS & JOISTS)

8. FIRE DOOR ASSEMBLIES [SECTION 715] - N/A FOR THIS USE/OCCUPANCY

9. FIRE DAMPERS [SECTION 716] - N/A FOR THIS USE/OCCUPANCY

10. FIRE STOPPING IS REQUIRED [SECTION 717]

A) CONCEALED WALL SPACES B) CONNECTIONS BETWEEN HORIZONTAL AND VERTICAL SPACES

C) STAIRWAYS D) CEILING AND FLOOR OPENINGS

E) ARCHITECTURAL TRIM

11. DRAFT STOPPING IS REQUIRED [SECTION 717.3]

12. THERMAL AND SOUND INSULATING MATERIAL [SECTION 719]

1. EXPOSED: FLAME SPREAD OF 25 OR LESS SMOKE DEV. OF 450 OR LESS 2. CONCEALED: FLAME SPREAD OF 15 OR LESS SMOKE DEV. OF 450 OR LESS

13. INTERIOR FINISHES [SECTION 803]:

<u>USE GROUP B</u> 1. EXIT ENCLOSURES & PASSAGEWAYS - A

3. ROOMS & ENCLOSED SPACES -

14. BUILDING IS NOT SPRINKLER PROTECTED [SECTION 903] - NOT REQUIRED

15. PORTABLE FIRE EXTINGUISHERS SHALL BE PROVIDED IN ACCORDANCE WITH SECTION 906.

16. AUTOMATIC FIRE DETECTION SYSTEM IS NOT REQUIRED [SECTION 907]

17. MANUAL FIRE ALARMS ARE NOT REQUIRED IN GROUPS "B" OCCUPANCY AREAS [SECTION 907.2.2]

18. OCCUPANT LOAD [SECTION 1004]

USE GROUP "B":-A. ALLOWABLE- | PERSON / 100 GSF [1004.1.1]

B. IBC OCCUPANCY LOAD

BASEMENT LEVEL - 225 GSF / 100 GSF = 2 PEOPLE FIRST FLOOR - 2541 GSF / 100 GSF = 25 PEOPLE SECOND FLOOR - 2475 GSF / 100 GSF = 25 PEOPLE TOTAL OCCUPANT LOAD

C. TRAPPE BORO OCCUPANT LOAD

BASEMENT LEVEL - 225 GSF / 200 GSF = 1 PEOPLE FIRST FLOOR - 2541 GSF / 200 GSF = 13 PEOPLE SECOND FLOOR - 2475 GSF / 400 GSF = 6 PEOPLE TOTAL OCCUPANT LOAD

STAIRWAYS / PROVIDED

OTHER EGRESS COMPONENTS / PROVIDED

20. MEANS OF EGRESS LIGHTING REQUIRED IN CONFORMANCE WITH SECTION 1006.

21. ACCESSIBLE MEANS OF EGRESS [SECTION 1007] A. TWO (2) ACCESSIBLE MEANS OF EGRESS ON FIRST FLOOR

B. ONE (1) ACCESSIBLE MEANS OF EGRESS ON SECOND FLOOR

22. EXIT SIGNS [SECTION 1011] A. REQUIRED AT EACH MEANS OF EGRESS AND FOR SPACES REQUIRING MORE THAN ONE EXIT.

23. MINIMUM NUMBER OF EXITS REQUIRED: [SECTION 1015]

REQUIRES: | MINIMUM PROVIDED: 2 ON 1ST FLOOR AND 1 ON 2ND FLOOR

24. EXIT ACCESS TRAVEL: [SECTION 1016]

ALLOWABLE: 200 FT. MAXIMUM WITHIN GROUP "B" AREA PROVIDED: SEE DISTANCES SHOWN ON DRAWINGS CS-1 & CS-2

25. EXIT AND EXIT ACCESS DOORWAYS [SECTION 1015]

A. TWO MEANS OF EGRESS IN ROOMS WITH OCCUPANCIES GREATER THAN 49 PEOPLE OR WHERE MAXIMUM TRAVEL DISTANCE TO AN EXIT EXCEED 100 FT; THE LAYOUT COMPLIES WITH THIS REQUIREMENT.

26. EXIT ACCESS CORRIDORS [SECTION 1017]

A. DEADEND 20 FT. MAXIMUM (WITHOUT AUTOMATIC SPRINKLERS) IN GROUPS "B" [SECTION 1017.3] B. COMMON PATH OF TRAVEL: 75 FT. MAXIMUM [SECTION 1014.3 EXCEPTION 1]

C. 44" MINIMUM WIDTH [SECTION 1017.2]

D. 36" MINIMUM WIDTH FOR OCCUPANCY LESS THAN 50 [SECTION 1017.2 EXCEPTION 2]

E. O HOUR FIRE RATING [TABLE 1017.1]

Betzwood S-AssociatesPC Robin J. Kohn, AIA Regis W. Kubit, PE

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

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November 12, 2009

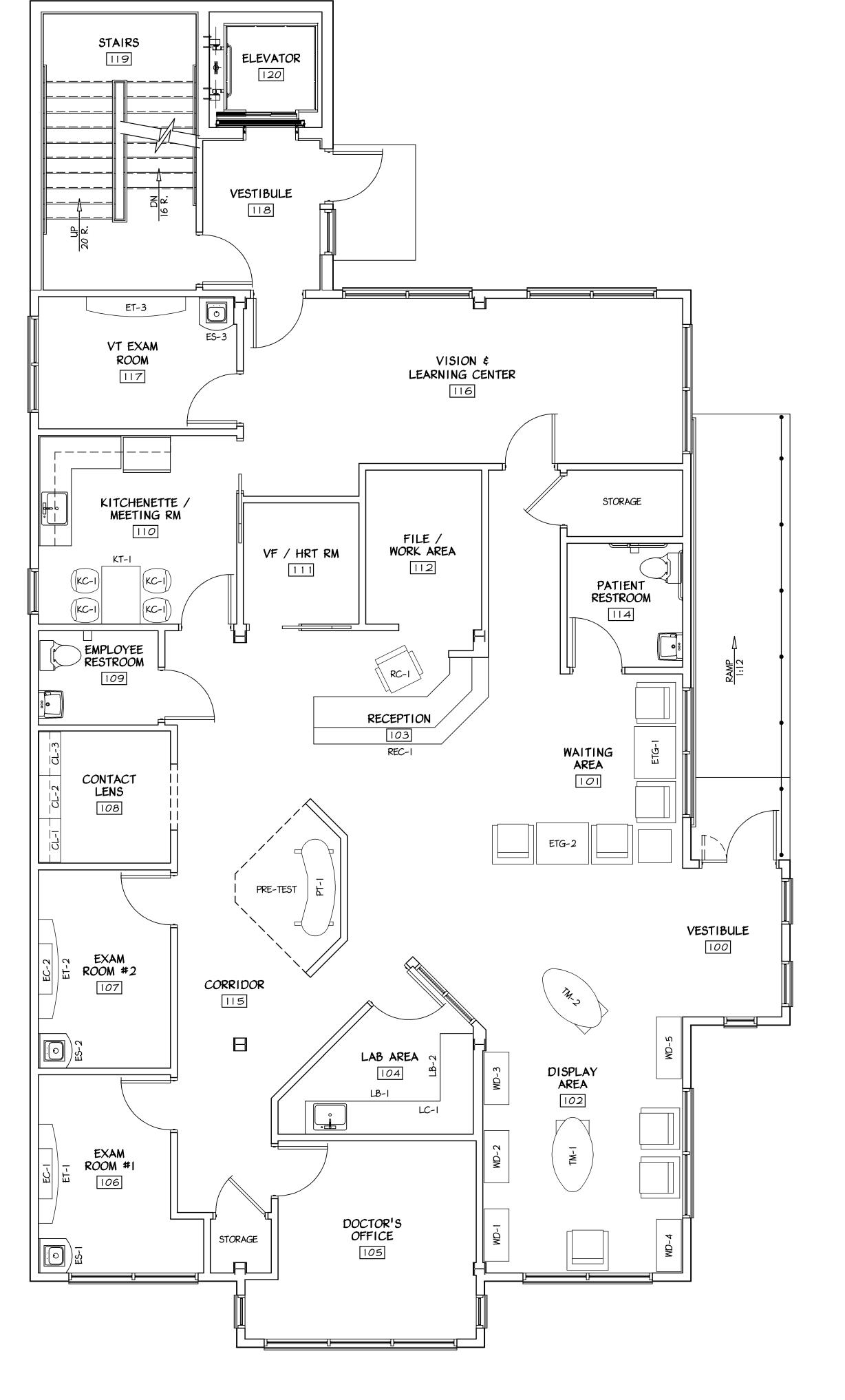
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SHEET TITLE

CODE REVIEW PLANS AND NOTES

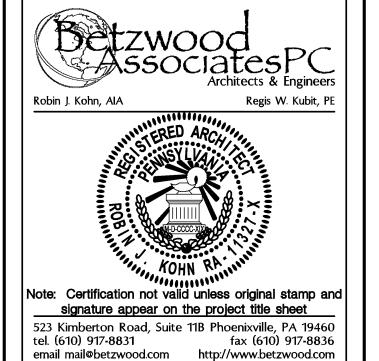
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FURNITURE LIST						
AREA	QUANTITY	AREA	QUANTITY			
WAITING AREA (101)		EXAM ROOM #1 (106)				
ETG-I DISPLAY CASE	(I) 38"×30"	ES-1 EXAM SINK	(1) 25"×20"			
ETG-2 DISPLAY CASE	(1) 38"×30"	ET-1 EXAM TABLE	(1) 25"×72"			
CHAIRS	(4)	EC-I EXAM CABINET	(1) 20"×36"			
DISPLAY AREA (102)		EXAM ROOM #2 (107)				
WD-I WALL DISPLAY	(I)38"×I8"	ES-2 EXAM SINK	(1) 25"×20"			
WD-2 WALL DISPLAY	(1)38"×18"	ET-2 EXAM TABLE	(1) 25"×72"			
WD-3 WALL DISPLAY	(1)38"×18"	EC-2 EXAM CABINET	(1) 20"×36"			
WD-4 WALL DISPLAY	(I)38"×18"	CONTACT LENS (108)				
WD-5 WALL DISPLAY	(1)45"×18"	CL-1 CONTACT LENS CABINET	(I)31.5"×I5"			
TM-1 TABLE	(1)54"×30"	CL-2 CONTACT LENS CABINET	(i) 31.5"×15"			
TM-2 TABLE	(1)54"×30"	CL-3 CONTACT LENS CABINET	(i)31.5"×15"			
CHAIRS	(3)	KITCHENETTE / MTG RM (110)				
RECEPTION AREA (103)		KT-I TABLE	(I) 28"×42"			
REC-I RECEPTION COUNTER	SEE DRWGS.	KC-1 CHAIRS	(4)			
RC-I CHAIR	(1)	NEW BASE CABINETS	SEE DRWGS			
PRE-TESTING		NEW WALL CABINET	SEE DRWGS			
PT-1 PRE-TESTING TABLE	(1)	NEW COUNTER TOP	SEE DRWGS			
LAB AREA (104)	1	VT EXAM ROOM (117)				
LB-I LAB BASE CABINET	(I)122"×24"	ES-3 EXAM SINK	(1) 25"×20"			
LB-2 LAB BASE CABINET	(1)49"×24"	ET-3 EXAM TABLE	(1) 25"×20"			
LC-I LAB COUNTER TOP	(1)					

FURNITURE NOTES:

- 1. FURNITURE IS NOT PART OF THE GENERAL CONTRACTORS CONTRACT.
 2. ALL CABINETRY AND FURNITURE IS TO BE RELOCATED UNLESS NOTED OTHERWISE.
 OWNER WILL COORDINATE WITH GENERAL CONTRACTOR AND VENDOR.
 3. THE FURNITURE AND CABINET MANUFACTURER(S) SHALL MEET THE ANSI AII7.1 2003 ACCESSIBILITY AND USE STANDARDS.



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

DRAWN BY

CHK'D BY

NO.	DATE	BY	ISSUE
1	06-04-09	EMH	ISSUED FOR REVIEW & APPROVAL
2	06-09-09	EMH	REVISED / REISSUED FOR APPROVAL
3	09-24-09	EMH	ISSUED FOR BID NOT FOR CONSTRUCTION
4	10-08-09	EMH	ISSUED FOR PERMIT
5	11-12-09	EMH	REVISED PERMIT DRAWINGS
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
APPR	OVED BY		CURRENT DATE
Robin	J. Kohn, A.I.	Α.	November 12, 2009

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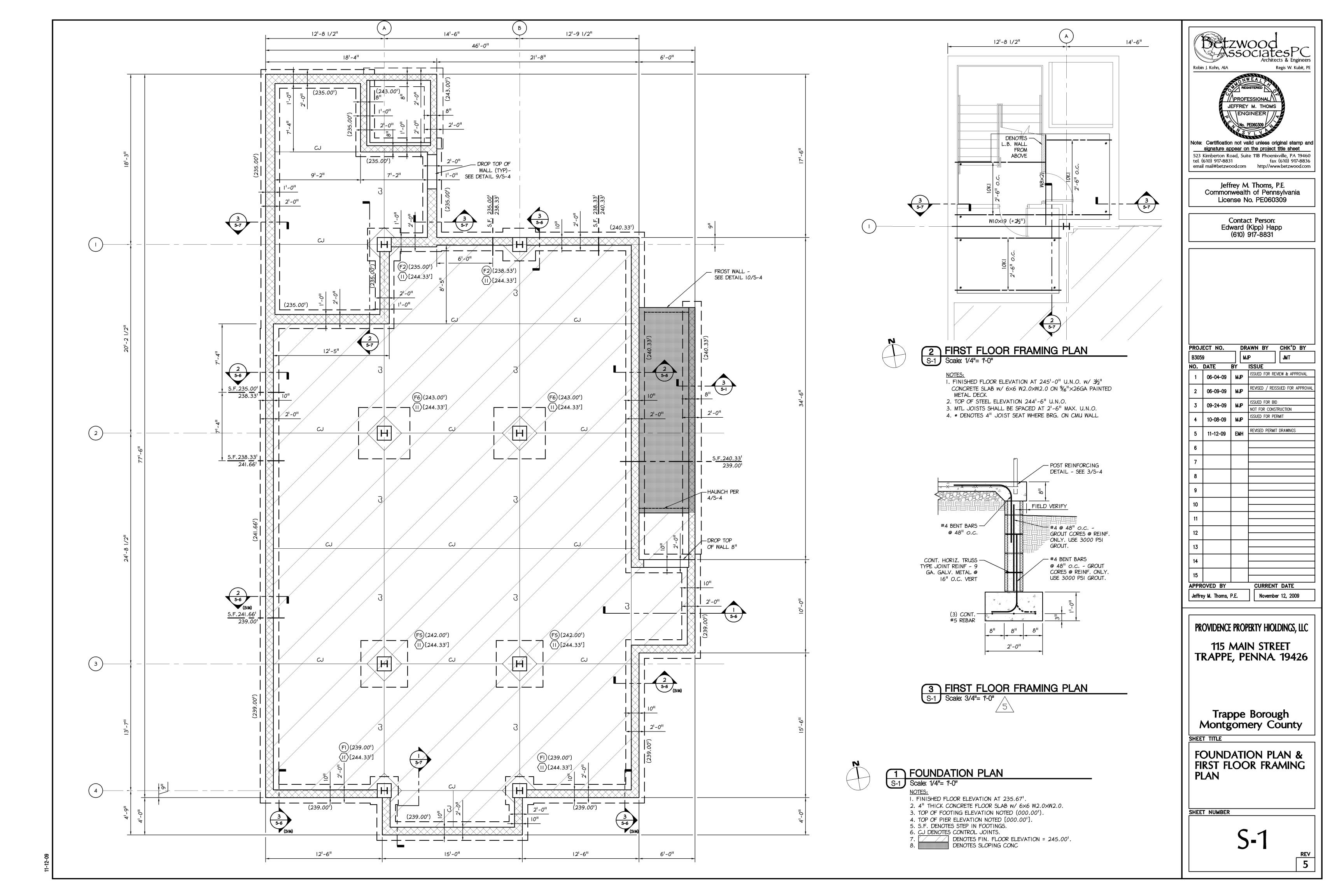
FURNITURE PLAN

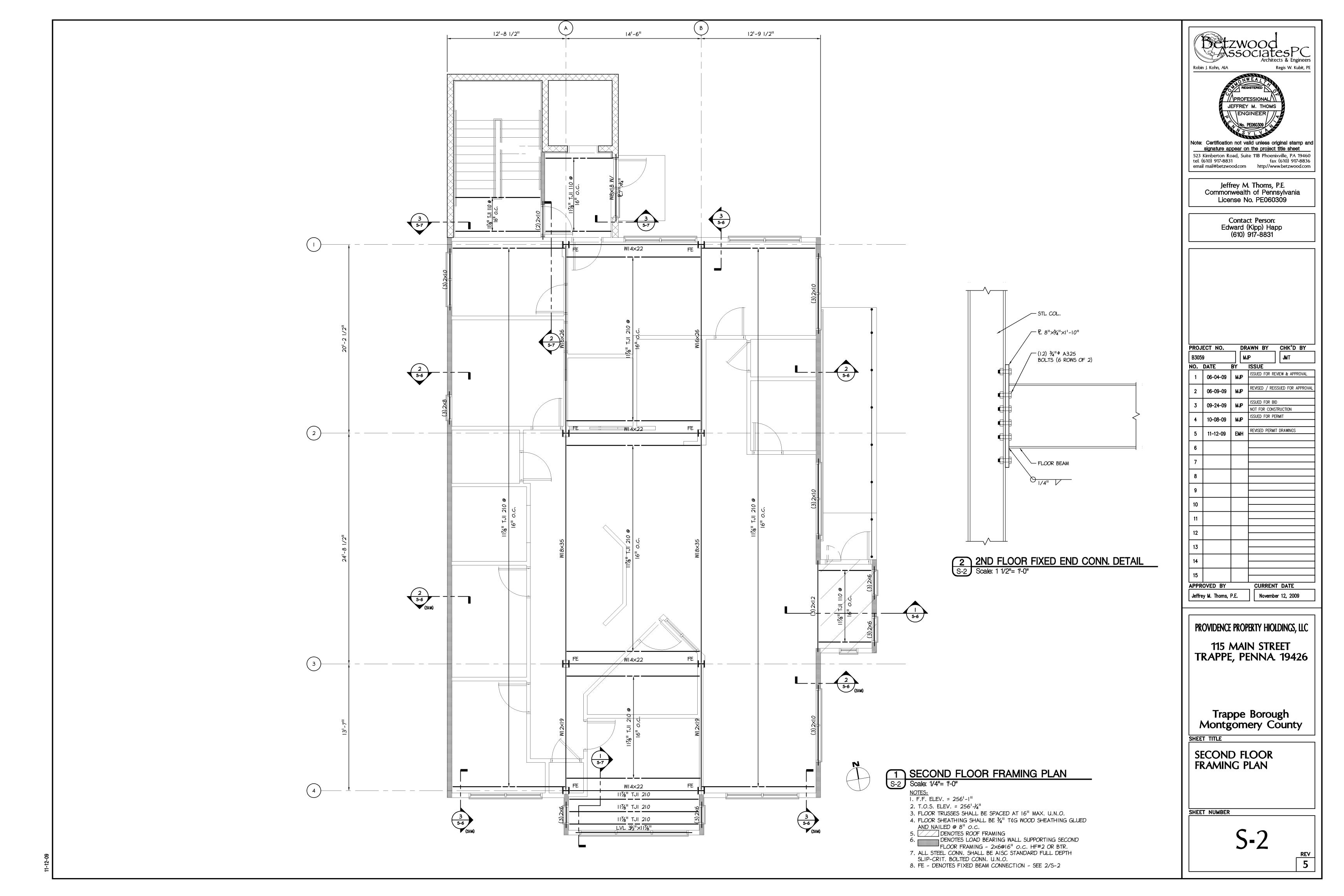
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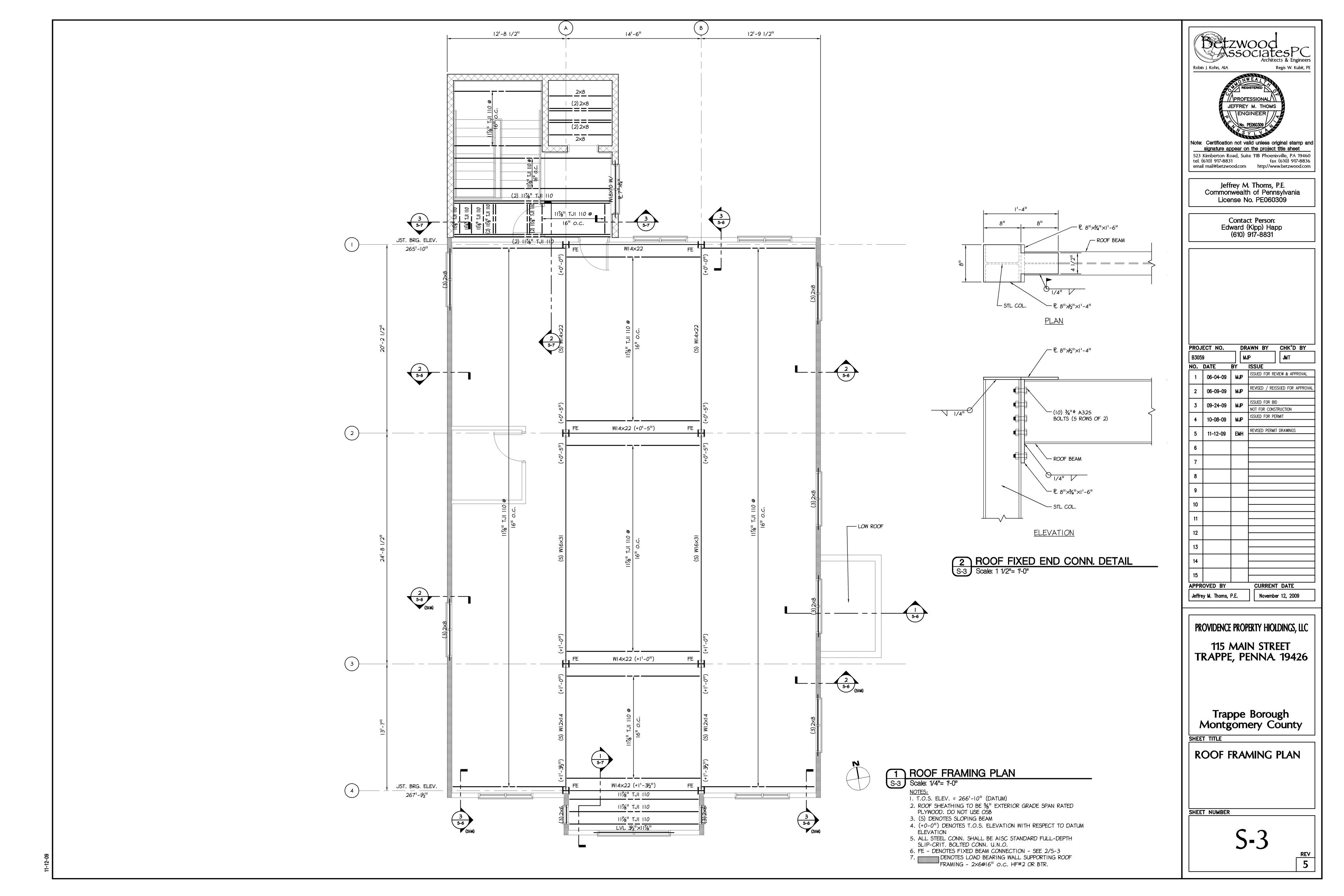
F-1

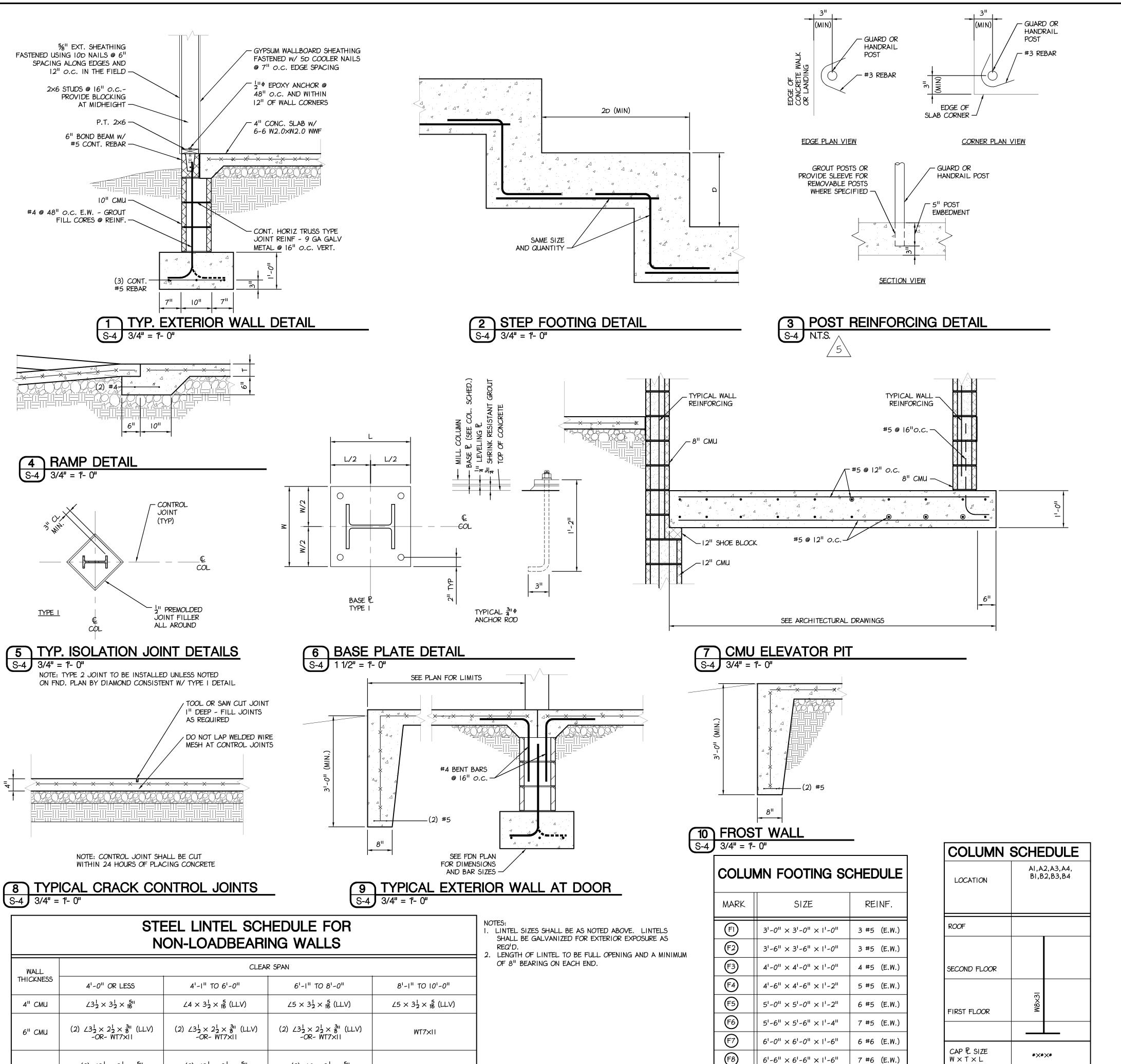
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F-1 Scale: 1/4"= 1'-0"









 $7'-0'' \times 7'-0'' \times 1'-8''$

 $7'-6'' \times 7'-6'' \times 1'-10''$

 $8'-0'' \times 8'-0'' \times 2'-0''$

7 #6 (E.W.)

8 #6 (E.W.)

8 #6 (E.W.)

BASE P.

ANCHOR BOLTS

DXLXH

 $W \times T \times L$

 $16'' \times_{4}^{3}'' \times 1' - 4''$

(4) ¾^{''}¢

(SEE DETAIL)

LIVE LOADS APPLICABLE CODE: IBC 2006 FLOOR LIVE LOADS LIVE LOAD 50 PSF (OFFICE)+15 PSF PARTITIONS 80 PSF (CORRIDORS) 15 PSF (PARTITIONS) STAIRWAY LIVE LOAD 100 PSF MECHANICAL UNIT LOAD SEE DRAWINGS ROOF LOADS ROOF LIVE LOAD 20 PSF (MIN) ROOF SNOW LOAD 30 PSF + SNOW DRIFT GROUND SNOW LOAD - PG: 30 PSF FLAT ROOF SNOW LOAD - PF: 25 PSF SNOW EXPOSURE FACTOR - CE: 1.0 SNOW LOAD IMPORTANCE FACTOR - I: THERMAL FACTOR - CT: COLLATERAL LOADING: 20 PSF (FUTURE SOLAR ARRAY) WIND LOAD BASIC WIND SPEED - V (3-SEC. GUST): WIND LOAD IMPORTANCE FACTOR 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: 0.291 SPECTRAL RESPONSE COEFFICIENT - SDI: 0.098 SITE CLASS: LIGHT FRAME WALLS BASIC SEISMIC FORCE RESISTING SYSTEM: W/ SHEAR PANELS ANALYSIS PROCEDURE: **EQUIVALENT LATERAL** FORCE PROCEDURE

WIND LOAD CONTROLS DESIGNS FOR LATERAL FORCES

FOUNDATION NOTES

I. FOUNDATION SOIL BEARING PRESSURE

2000 PSF 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 [000.001]

6. ALL TOPSOIL, SOIL FILL, AND SOFT SOUBSOIL SHALL BE REMOVED AND, IF NECESSARY, REPOLACED WITH COMPACTED LOAD-BEARING FILL MATERIALS. TEST PITS OR SOIL BORINGS SHALL BE CONDUCTED TO DETERMINE THE LOCATION OF

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

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 BARRIER SIZE, TYPE AND LOCATION

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.

CONCRETE NOTES

AGGREGATE: ASTM C33

I. REINFORCED CONCRETE CONSTRUCTION SHALL BE IN ACCORDANCE WITH ACI 318,

LATEST EDITION 2. CONCRETE MATERIALS: FC = 4000 PSI FOR SLABS, ALL OTHER CONCRETE: FC = 3000 PSI CEMENT: ASTM C150, TYPE I

WATER: ASTM C94 EXTERIOR CONCRETE MIX: WATER CEMENT RATIO, 0.45 (AIR-ENTRAINED TO 4.5 % MIN) INTERIOR CONCRETE MIX: WATER CEMENT RATIO, 0.50

REINFORCING MATERIALS: REINFORCING BARS: ASTM A615, GRADE 60, DEFORMED

4. REINFORCING BARS SHALL BE LAPPED A MINIMUM OF 36 BAR DIAMETERS. 5. MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCEMENT AS FOLLOWS: CAST AGAINST EARTH: 3" CLEAR

CONCRETE EXPOSED TO EARTH OR WATER: 2" CLEAR ALL OTHER CONCRETE: 劃 CLEAR

6. MINIMUM CONCRETE SLAB REINFORCEMENT SHALL BE AS FOLLOWS: 32" 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.

COLUMN PIER SCHEDULE							
MARK	SIZE	REINF.	TIES				
	16" × 16"	8 #6	(2) #3 @ 12"				
	18" × 18"	8 #6	(2) #3 @ 12"				
	20" × 20"	8 #7	(2) #3 @ 12"				
⟨ I ∨ ⟩	22" × 22"	8 #8	(2) #3 @ 12"				
$\langle \nabla \rangle$	24" × 24"	8 #8	(2) #3 @ 12"				

Betzwood S Associates P Robin J. Kohn, AIA Regis W. Kubit, Pl JEFFREY M. THOMS

Note: Certification not valid unless original stamp and signature appear on the project title sheet 523 Kimberton Road, Suite 11B Phoenixville, PA 19460 fax (610) 917-8836 tel. (610) 917-8831 email mail@betzwood.com http://www.betzwood.com

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

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

> > > DRAWN BY

CHK'D BY

JMT NO. DATE BY ISSUE ISSUED FOR REVIEW & APPROVAL REVISED / REISSUED FOR APPROVAL 2 | 06-09-09 SSUED FOR BID 09-24-09 MJP NOT FOR CONSTRUCTION ISSUED FOR PERMIT 10-08-09 REVISED PERMIT DRAWINGS 11-12-09 EMH APPROVED BY CURRENT DATE Jeffrey M. Thoms, P.E. November 12, 2009

PROJECT NO.

PROVIDENCE PROPERTY HIOLDINGS, LLC

115 MAIN STREET TRAPPE, PENNA. 19426

Trappe Borough **Montgomery County**

SHEET TITLE

DETAILS & NOTES

SHEET NUMBER

8" CMU

12" CMU

(2) $\angle 3\frac{1}{2} \times 3\frac{1}{2} \times \frac{5}{10}$ -OR- WT7×15

(3) $\angle 4 \times 3\frac{1}{2} \times \frac{3}{8}$

(2) $\angle 3\frac{1}{2} \times 3\frac{1}{2} \times \frac{511}{15}$

-OR- WT7×15

(3) $\angle 4 \times 3^{1}_{2} \times 3^{11}_{8}$

-OR- W8×10 W/ ¼"×0'-11" P2 | -OR- W8×10 W/ ¼"×0'-11" P2 |

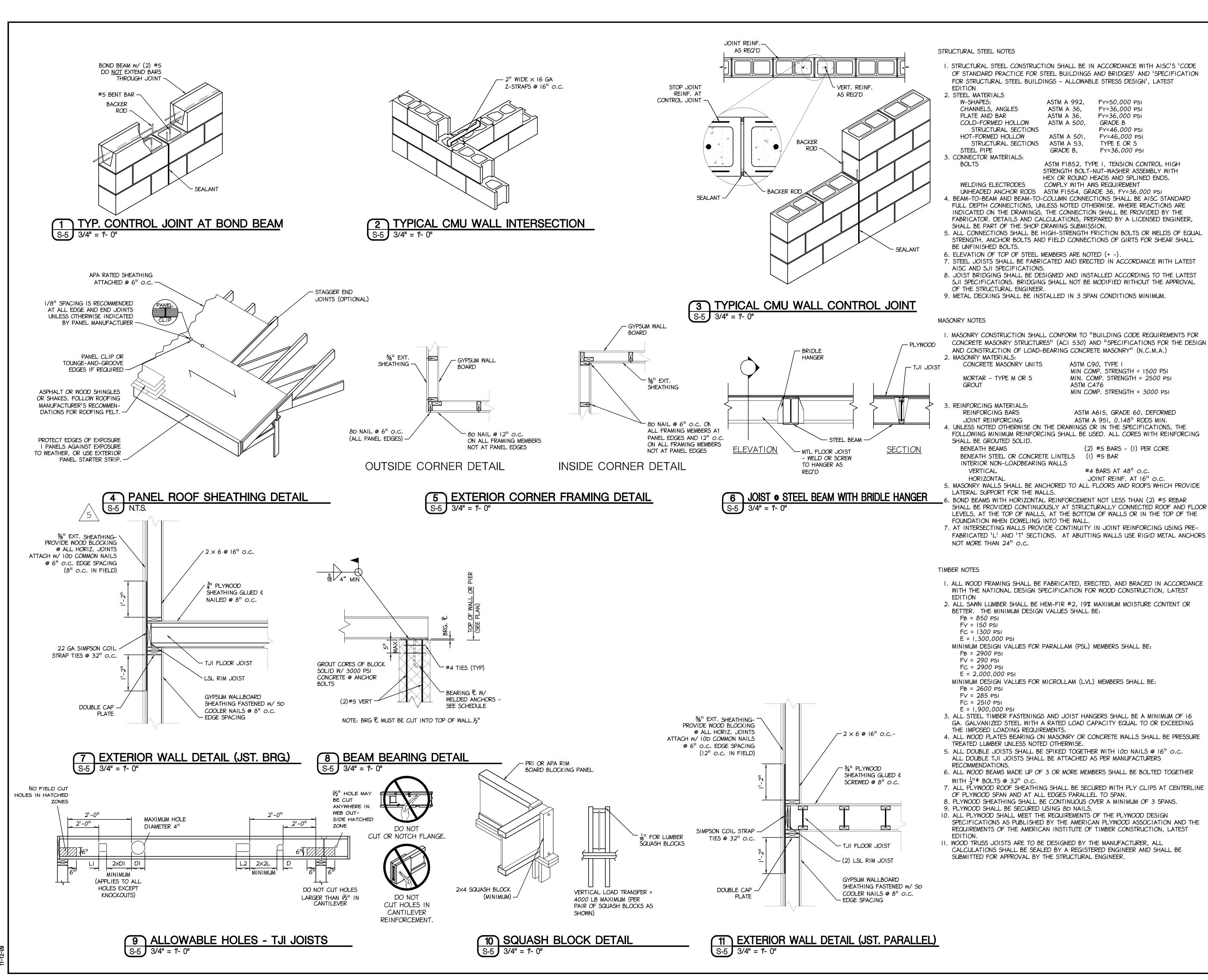
(2) $\angle 5 \times 3\frac{1}{2} \times \frac{50}{15}$ -OR- WT7×15

 $(3) L5 \times 3\frac{1}{2} \times \frac{1}{6}$

-OR- W8×10 W/ 1"×0'-11" P

W8×10 W/ 4"×0'-7" ₽

W8×10 W/ 4"×0'-11" PL



Betzwood * Associates Robin J. Kohn, AIA Regis W. Kubit, Pl

JEFFREY M. THOMS

email mail@betzwood.com

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115 MAIN STREET TRAPPE, PENNA. 19426

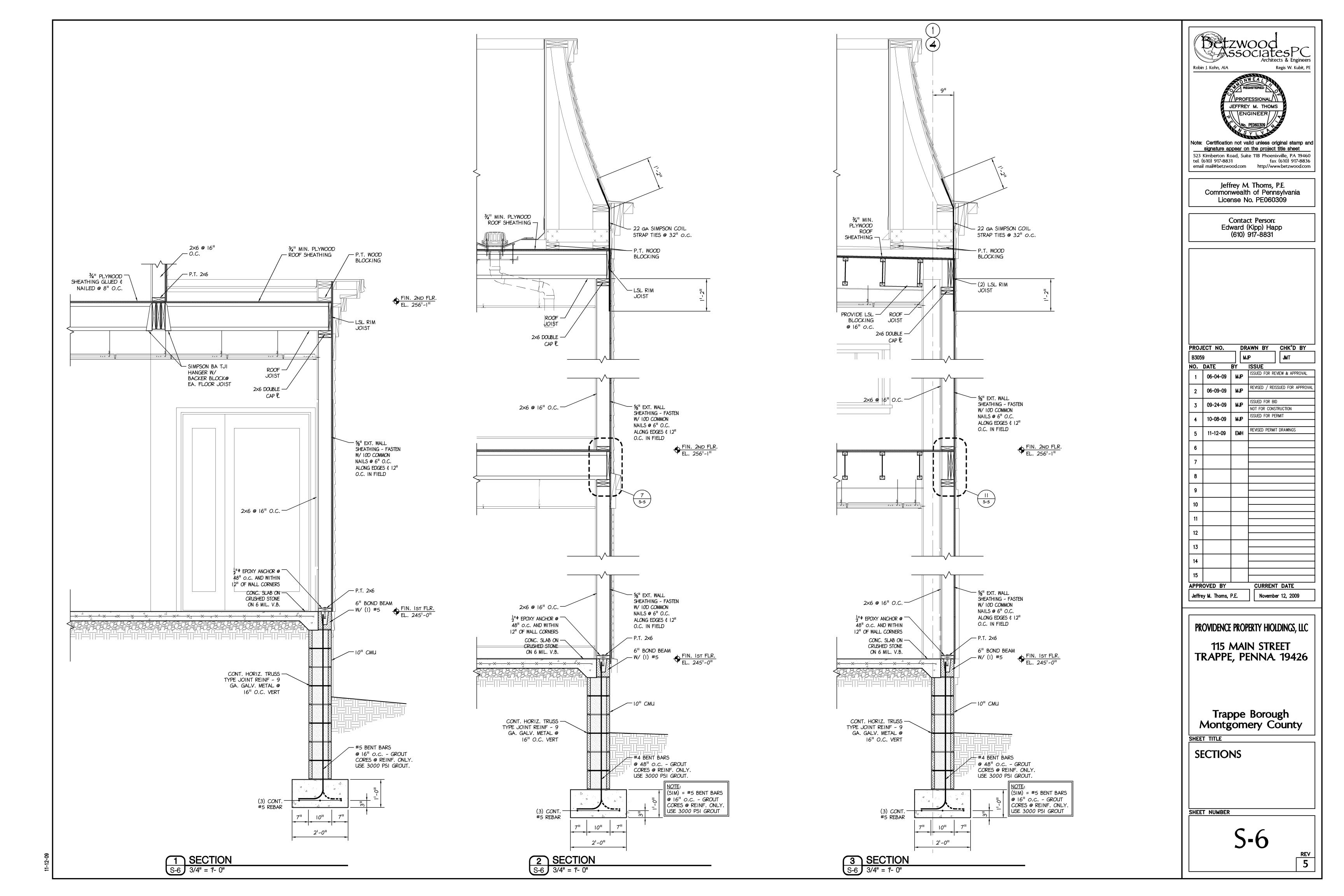
Trappe Borough **Montgomery County**

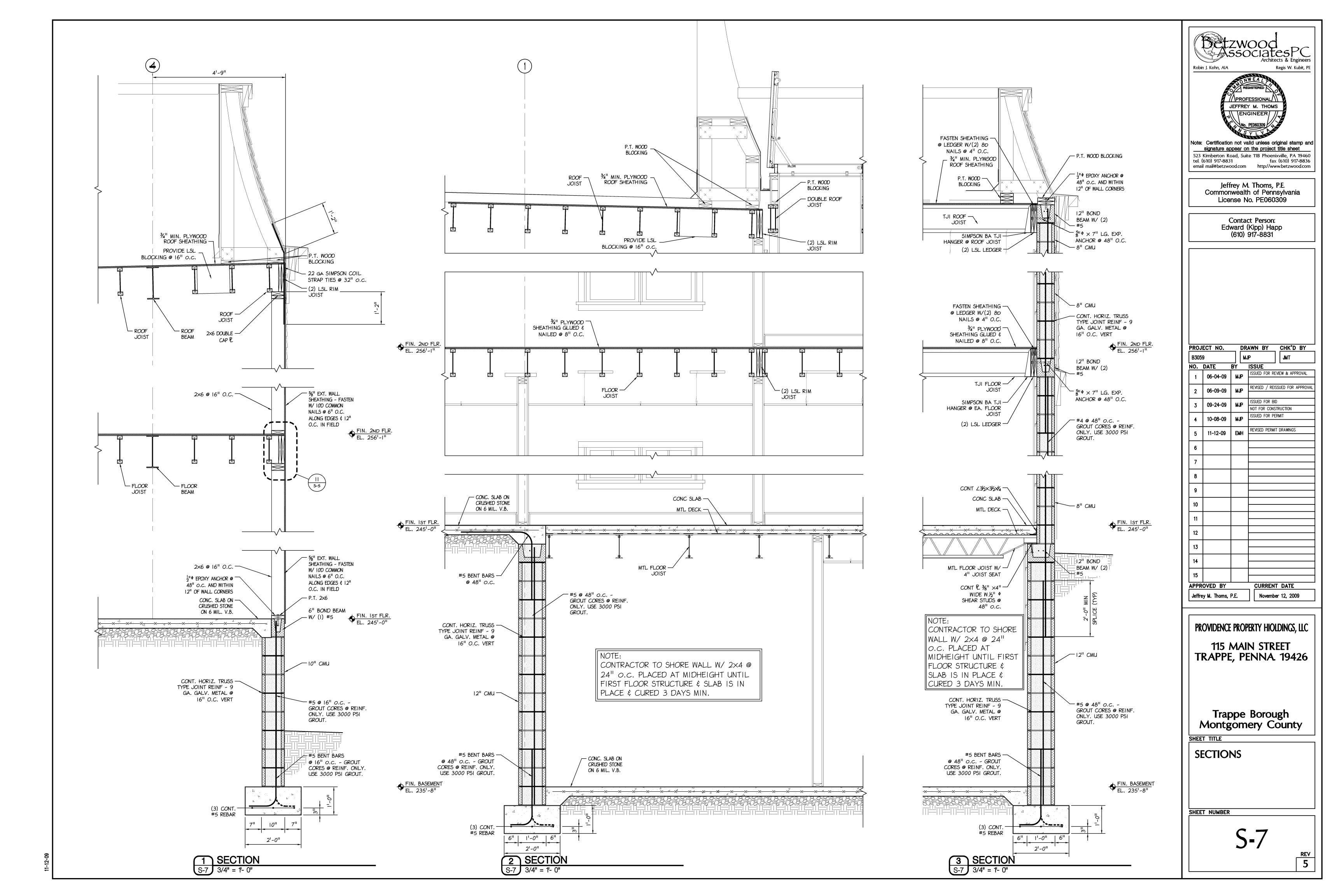
SHEET TITLE

DETAILS & NOTES

SHEET NUMBER

5





GENERAL

1.1 THE CONTRACTOR SHALL EMPLOY HIGH STANDARDS OF GOOD WORKMANSHIP AND SHALL PAY SPECIAL ATTENTION TO THE SAFETY OF THE EQUIPMENT. THE INSTALLATION OF MATERIAL AND EQUIPMENT SHALL BE IN CONFORMANCE WITH THE CODES AND STANDARDS.

1.2 THE CONTRACTOR SHALL MAKE A THOROUGH EXAMINATION OF THE SITE AND SHALL MAKE DUE ALLOWANCES FOR DIFFICULTIES AND CONTINGENCIES TO BE ENCOUNTERED. ALL DIMENSIONS SHALL BE CHECKED AND VERIFIED BY THE CONTRACTOR AT THE SITE.

1.3 THE CONTRACTOR AND ALL SUB-CONTRACTORS SHALL HAVE A MINIMUM OF THREE YEARS PROVEN EXPERIENCE ON PROJECTS WITH SIMILAR LEVELS OF COMPLEXITY AND MAGNITUDE. EXPERIENCE SHALL BE BASED ON THE EXPERIENCE AS A COMPANY AND NOT ON THE EXPERIENCE AS INDIVIDUALS.

2. <u>SCOPE</u>

2.1 THE WORK COVERED BY AND INCLUDED IN THESE SPECIFICATIONS CONSISTS OF THE FURNISHING OF ALL MATERIALS, ALL EQUIPMENT, LABOR, TOOLS AND SUPERVISION AND PERFORMING ALL OPERATIONS NECESSARY FOR THE PROPER AND COMPLETE EXECUTION OF THE HEATING, VENTULATING AND AIR CONDITIONING WORK IN STRICT ACCORDANCE WITH THE SPECIFICATIONS AND SUBJECT TO THE TERMS AND CONDITIONS OF THE CONTRACT.

2.2 THE HVAC SYSTEM SHALL BE DESIGNED TO COMPLY WITH THE INTERNATIONAL BUILDING CODE AND THE INTERNATIONAL MECHANICAL CODE.

2.3 THE OUTSIDE AND INSIDE DESIGN CONDITIONS SHALL BE PER THE CODE. THE OFFICE(S) SHALL BE MAINTAINED AT 72 DEGREES F UNDER NORMAL CONDITIONS.

2.4 THE MINIMUM PEOPLE AND VENTILATION RATES ARE AS FOLLOWS: OFFICE AREA 15 PEOPLE 300 CFM OUTSIDE AIR 10 PEOPLE 200 CFM OUTSIDE AIR EXAM ROOMS

2.5.1 SYSTEM SHALL CONSIST OF CONSTANT VOLUME ROOFTOP UNITS WITH ELECTRIC COOLING, GAS HEAT AND ECONOMIZER (ENTHALPY) CONTROLS. UNITS SHALL HAVE BAROMETRIC RELIEFS. MANUFACTURER SHALL BE TRANE, YORK, CARRIER OR MCQUAY.

2.5.2 A MINIMUM OF THREE UNITS SHALL BE PROVIDED, ONE UNIT FOR THE FIRST FLOOR, ONE FOR THE SECOND AND ONE FOR THE COMMON AREAS.

2.5.3 TOILET EXHAUSTS SHALL BE 75 CFM PER FIXTURE AND THE FAN SHALL BE INTERLOCKED TO RUN DURING OCCUPIED MODE.

2.5.4 LAB EXHAUSTS SHALL BE 75 CFM PER FIXTURE AND THE FAN SHALL BE INTERLOCKED TO RUN DURING OCCUPIED MODE.

STANDARDS

3.1 MEET REQUIREMENTS AND RECOMMENDATIONS OF APPLICABLE PORTIONS OF THE LATEST EDITION OF ALL CODES AND STANDARDS, AS ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION, INCLUDING THOSE LISTED.

3.1.1 AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR CONDITIONING ENGINEERS, INC. (ASHRAE)

3.1.2 90-1 1989 ENERGY EFFICIENT DESIGN FOR NEW BUILDING

3.1.3 AMERICAN NATIONAL STANDARDS INSTITUTE STANDARDS (ANSI)

ANSI/ASME B16.22 WROUGHT COPPER AND COPPER ALLOY SOLDER-JOINT PRESSURE FITTINGS

3.1.4 INTERNATIONAL MECHANICAL CODE, 2006

3.1.5 NATIONAL FIRE PROTECTION ASSOCIATION STANDARDS (NFPA)

70 NATIONAL ELECTRICAL CODE (NEC)

90A INSTALLATION OF AIR CONDITIONING AND VENTILATING SYSTEMS

96 VENTILATION CONTROL AND FIRE PROTECTION OF COMMERCIAL COOKING OPERATIONS

255 SURFACE BURNING CHARACTERISTICS OF BUILDING MATERIALS

3.1.6 OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA)

3.1.7 PUBLIC LAW 101-336, THE AMERICANS WITH DISABILITIES ACT OF 1990

3.1.8 SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION, INC., PUBLICATION (SMACNA)

HVAC DUCT CONSTRUCTION STANDARDS: METAL AND FLEXIBLE, SECOND EDITION SEISMIC RESTRAINT MANUAL: GUIDELINES FOR MECHANICAL SYSTEMS, SECOND EDITION

3.1.9 AIR CONDITIONING AND REFRIGERATION INSTITUTE (ARI)

ANSI/ARI 410 FORCED CIRCULATION AIR-COOLING AND AIR-HEATING

3.1.10 UNDERWRITERS LABORATORIES PUBLICATION (UL)

1995 HEATING AND COOLING EQUIPMENT

3.1.11 PENNSYLVANIA DEPARTMENT OF LABOR AND INDUSTRY, FIRE AND PANIC

4. SHOP DRAWINGS/PRODUCT DATA

4.1 SUBMIT MANUFACTURER'S INSTALLATION INSTRUCTIONS.

4.2 SUBMIT SHOP DRAWINGS AND/OR CATALOG CUTS FOR ALL SPECIFIED MATERIALS AND EQUIPMENT, PIPING LAYOUTS AND DUCTWORK LAYOUTS.

4.3 SUBMIT SHOP DRAWINGS AND PRODUCT DATA GROUPED TO INCLUDE COMPLETE SUBMITTALS OF RELATED SYSTEMS, PRODUCTS AND ACCESSORIES IN A SINGLE SUBMITTAL.

4.4 MARK DIMENSIONS AND VALUES IN UNITS TO MATCH THOSE SPECIFIED.

4.5 SHOW EQUIPMENT SIZES AND LOCATIONS, BY DIMENSIONS, OF DUCTS, EQUIPMENT AND OTHER ITEMS.

4.6 INCLUDE WIRING DIAGRAMS, HOLE LOCATION AND SIZES AND OTHER DATA THAT COULD AFFECT WORK BY OTHER TRADES.

4.7 SHOW MANUFACTURER'S NAMES, TRADE NAMES, CATALOG NUMBERS, ACCESSORIES, SPECIAL FEATURES AND RATING DATA.

4.8 INDICATE REQUIRED CLEARANCES FOR OPERATING PARTS, FOR REMOVAL AND FOR SERVICING.

4.9 SHOW PERFORMANCE DATA, INCLUDING FAN CURVES.

4.10 SHOW SOUND POWER LEVELS OF ALL ROTATING EQUIPMENT.

4.11 INDICATE EFFICIENCIES AND AIR LEAKAGE RATES FOR FILTERS AND FILTER HOUSINGS.

CUTTING AND PATCHING

5.1 ALL CUTTING AND PATCHING OF EVERY NATURE REQUIRED IN CONNECTION WITH THIS CONTRACT SHALL BE DONE BY THE CONTRACTOR WITH MECHANICS EXPERIENCED IN THEIR RESPECTIVE LINES OF WORK. ALL PATCHING SHALL MATCH ADJACENT FINISHES.

5.2 ALL CUTTING IN THE BUILDING SHALL BE DONE WITH GREAT CARE SO AS NOT TO LEAVE AN UNSIGHTLY SURFACE, WHICH MAY NOT BE CONCEALED BY PLATES, ESCUTCHEONS OR OTHER NORMAL CONCEALING CONSTRUCTION. IF SUCH UNSIGHTLY CONDITIONS OCCUR, THE CONTRACTOR SHALL BE REQUIRED, AT HIS OWN EXPENSE, TO ENGAGE THE GENERAL CONTRACTOR TO REPLACE THE DAMAGED MATERIALS WITH NEW MATERIALS.

6. <u>MATERIALS</u>

6.1 ALL MATERIALS AND EQUIPMENT PROVIDED BY THIS CONTRACTOR SHALL BE NEW, WITHOUT IMPERFECTIONS AND BLEMISHES AND SHALL BE PROTECTED FROM THE ELEMENTS PRIOR TO INSTALLATION IN BUILDING.

6.2 ALL EQUIPMENT SHALL BE TESTED, LISTED AND LABELED BY AN APPROVED AUTHORITY (UL. AGA, ETL) AND SHALL BE INSTALLED IN ACCORDANCE WITH ITS LISTING. INSTALLATION INSTRUCTIONS SHALL BE AVAILABLE AT THE JOB SITE.

6.3 ALL EQUIPMENT SUBJECT TO SPECIFIC REQUIREMENTS OF THE OWNER'S INSURANCE COMPANY (GAS TRAINS, ETC.) SHALL MEET THE INSURANCE COMPANIES REQUIREMENTS.

7. <u>METHODS</u>

7.1 THE HVAC CONTRACTOR SHALL CONFER WITH ALL OTHER CONTRACTORS AND SHALL APPLY FOR DETAILED AND SPECIFIC INFORMATION REGARDING THE LOCATION OF ALL EQUIPMENT AS THE FINAL LOCATION MAY DIFFER FROM THAT INDICATED ON THE DRAWINGS, DUCTWORK, PIPING OR EQUIPMENT IMPROPERLY PLACED BECAUSE OF THE HVAC CONTRACTOR'S FAILURE TO OBTAIN THIS INFORMATION SHALL BE RELOCATED AND REINSTALLED BY THE HVAC CONTRACTOR WITHOUT ADDITIONAL EXPENSE TO THE OWNER.

7.2 ALL DUCTWORK, PIPING, ACCESSORIES AND EQUIPMENT SHALL BE INSTALLED IN SUCH A MANNER AS TO PRESERVE ACCESS WITH SUFFICIENT SPACE PROVIDED FOR PROPER OPERATION AND MAINTENANCE TO ANY EXISTING EQUIPMENT OR TO ANY NEW EQUIPMENT INSTALLED UNDER THIS SPECIFICATION OR UNDER OTHER SPECIFICATIONS OR CONTRACTS FOR THIS BUILDING.

7.3 THIS CONTRACTOR SHALL COORDINATE HIS WORK WITH THAT OF OTHER TRADES SO THAT ALL WORK MAY BE INSTALLED IN THE MOST DIRECT MANNER AND SO THAT INTERFERENCE BETWEEN PIPING, DUCTS, EQUIPMENT, ARCHITECTURAL OR STRUCTURAL FEATURES WILL BE AVOIDED. IN THE CASE INTERFERENCE RESULTS, THE OWNER'S REPRESENTATIVE SHALL DECIDE WHICH WORK IS TO BE RELOCATED, REGARDLESS OF WHICH IS FIRST INSTALLED. SUCH RELOCATION SHALL BE AT NO ADDITIONAL COST TO THE OWNER,

7.4 ALL MATERIALS AND EQUIPMENT INSTALLED BY THE CONTRACTOR SHALL BE FIRMLY SUPPORTED AND SECURED TO THE BUILDING STRUCTURE WHERE REQUIRED.

7.5 THE CONTRACTOR SHALL PROVIDE ISOLATION VALVES AND UNIONS OR FLANGES AT ALL PIECES OF EQUIPMENT AND AT ALL BRANCH TAKE-OFFS SERVING FIVE OR MORE PIECES OF EQUIPMENT (WHETHER INDICATED OR NOT) TO FACILITATE REPLACEMENT OR SERVICE OF THE EQUIPMENT.

7.6 ALL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND INSTALLATION INSTRUCTIONS. THE MANUFACTURER'S INSTALLATION INSTRUCTIONS SHALL BE CONSIDERED PART OF THIS CONTRACT.

8. RUBBISH REMOVAL AND CLEANUP

8.1 EACH CONTRACTOR IS RESPONSIBLE FOR PERIODIC REMOVAL OF ALL RUBBISH RESULTING FROM HIS WORK. ALL SURPLUS MATERIAL, REFUSE, RUBBISH, ETC., SHALL BE REMOVED FROM THE JOB SITE AT COMPLETION OF CONTRACT. THE OWNER'S REPRESENTATIVE MUST BE SATISFIED WITH THE REMOVAL AND CLEANUP.

9. DELIVERING AND STORAGE OF MATERIALS AND EQUIPMENT

9.1 DELIVER ACCESSORIES, SMALL-UNMARKED PARTS, ADHESIVES AND INCIDENTAL ITEMS TO THE SITE IN MANUFACTURER'S ORIGINAL, UNOPENED, LABELED CONTAINERS.

9.2 STORE MATERIALS AND EQUIPMENT TO PREVENT DAMAGE AND INJURY. STORE FERROUS MATERIALS TO PREVENT RUSTING. STORE EQUIPMENT TO PREVENT STAINING AND DISCOLORING.

10. AS-BUILT DRAWINGS 10.1 DURING CONSTRUCTION, THE CONTRACTOR SHALL MAINTAIN A RECORD SET OF RED LINED INSTALLATION PRINTS. HE SHALL RECORD ON THESE PRINTS. ALL DEVIATIONS FROM THE CONTRACT DRAWINGS IN PIPE SIZING, DUCT SIZING, EQUIPMENT, PIPE OR DUCT LOCATION, DEPTH OF PIPE COVER AND DETAILS.

10.2 AT THE COMPLETION OF THE WORK, THE CONTRACTOR SHALL TRANSFER THIS INFORMATION NEATLY ONTO SEPIAS AND FORWARD THESE SEPIAS AND THE AS-BUILT PRINTS TO THE OWNER'S REPRESENTATIVE.

11. OPERATION AND MAINTENANCE INSTRUCTIONS

11.1 PRIOR TO COMPLETION OF THIS PROJECT, THE CONTRACTOR SHALL DELIVER TO THE OWNER'S REPRESENTATIVE FOR APPROVAL THREE COPIES OF AN OPERATING AND MAINTENANCE MANUAL CONSISTING OF ITEMS OUTLINED HEREINAFTER.

11.2 THE PURPOSE OF THIS MANUAL IS TO ASSIST THE OWNER IN ROUTINE OPERATION, MAINTENANCE, SERVICING, TROUBLESHOOTING AND PROCUREMENT OF REPLACEMENT PARTS. ALL INFORMATION IN THE MANUAL SHALL BE AS-BUILT AND ONLY MATERIAL PERTINENT TO THE PROJECT SHALL BE INCLUDED.

11.3 THE MANUAL SHALL INCLUDE THE FOLLOWING:

11.3.1 MANUALS SHALL BE BOUND, 8-1/2 X 11 INCH TEXT PAGES AND SET IN THREE-RING BINDERS WITH DURABLE COVERS.

11.3.2 PREPARE BINDER COVERS WITH PRINTED TITLE "OPERATION AND MAINTENANCE INSTRUCTIONS," TITLE OF PROJECT AND SUBJECT MATTER OF BINDER WHEN MULTIPLE BINDERS ARE REQUIRED. ALL SUBJECT MATTER SHALL BE IN TYPEWRITTEN FORMAT.

11.3.3 INTERNALLY SUBDIVIDE THE BINDER CONTENTS WITH PERMANENT PAGE DIVIDERS, LOGICALLY ORGANIZED AS DESCRIBED BELOW; WITH TAB LABELING CLEARLY PRINTED UNDER REINFORCED LAMINATED PLASTIC TABS.

11.3.3.1 CONTENTS: PREPARE A TABLE OF CONTENTS FOR EACH VOLUME WITH PRODUCT OR SYSTEM DESCRIPTION IDENTIFIED. TYPE ON WHITE PAPER

11.3.3.2 PART 1: DIRECTORY, LISTING NAMES, ADDRESSES AND TELEPHONE NUMBERS OF OWNER'S REPRESENTATIVE, CONTRACTOR, SUB-CONTRACTORS AND MAJOR EQUIPMENT SUPPLIERS.

11.3.3.3 PART 2: OPERATION AND MAINTENANCE INSTRUCTIONS, ARRANGED BY SYSTEM AND SUBDIVIDED BY SPECIFICATION SECTION. FOR EACH CATEGORY, IDENTIFY NAMES. ADDRESSES AND TELEPHONE NUMBERS OF SUB-CONTRACTORS AND SUPPLIERS. OPERATING AND START-UP INSTRUCTIONS SHALL BE WRITTEN IN A CONCISE STEP-BY-STEP MANNER, MAINTENANCE INSTRUCTIONS SHALL INCLUDE MAINTENANCE SCHEDULES, PROCEDURES, ADJUSTMENTS AND TROUBLESHOOTING TECHNIQUES, ALL NON-PERTINENT INFORMATION IN THE MANUALS SHALL BE EITHER ELIMINATED OR CROSSED OUT IN A NEAT AND THOROUGH MANNER. IDENTIFY THE FOLLOWING:

- A. LIST OF EQUIPMENT B. PARTS LIST FOR EACH COMPONENT
- OPERATING INSTRUCTIONS

B. CONTROL WIRING DIAGRAMS

D. MAINTENANCE INSTRUCTIONS FOR EQUIPMENT AND SYSTEMS

11.3.3.4 PART 3: PROJECT DOCUMENTS AND CERTIFICATES, INCLUDING THE

- A. CORRECTED SHOP DRAWINGS AND PRODUCT DATA
- CERTIFICATES PHOTOCOPIES OF WARRANTIES

11.3.3.5 SUBMIT ONE COPY OF COMPLETED VOLUMES IN FINAL FORM 30 DAYS PRIOR TO FINAL INSPECTION. THIS COPY WILL BE RETURNED AFTER FINAL INSPECTION, WITH THE OWNER'S REPRESENTATIVE'S COMMENTS. REVISE CONTENT OF DOCUMENTS AS REQUIRED PRIOR TO FINAL SUBMITTAL.

11.3.3.6 SUBMIT FINAL VOLUMES REVISED, WITHIN TEN DAYS AFTER OWNER'S

12.1 WHERE FACTORY FINISHES ARE PROVIDED AND NO ADDITIONAL FIELD PAINTING IS SPECIFIED; ALL MARRED OR DAMAGED SURFACES SHALL BE TOUCHED UP OR REFINISHED TO A SMOOTH AND UNIFORM FINISH.

12.2 ALL EXPOSED FERROUS METALWORK, PIPE, SUPPORTS, HANGERS, INSULATION, EXTERIOR EQUIPMENT INCLUDING ALUMINUM AND OTHER SURFACES NOT FACTORY PAINTED SHALL BE PAINTED WITH ONE PRIME AND TWO FINISH COATS. PAINT. SURFACE PREPARATION AND APPLICATION SHALL BE AS SPECIFIED IN SECTION: PAINTING. COLORS SHALL MATCH EXISTING WORK OR SHALL BE AS SELECTED BY THE OWNER'S REPRESENTATIVE.

13. LAWS, ORDINANCES AND REGULATIONS

13.1 ALL SYSTEMS IN ALL AND/OR PART SHALL CONFORM TO ALL PERTINENT LAWS, ORDINANCES AND REGULATIONS OF ALL BODIES HAVING JURISDICTION, AT ALL GOVERNING LEVELS. IN CASE OF CONFLICT BETWEEN GOVERNING LEVELS, THE MORE STRINGENT LAW SHALL APPLY. AS A MINIMUM, ALL WORK SHALL COMPLY WITH BOCA MECHANICAL CODE, NFPA, OSHA, SMACNA AND PENNSYLVANIA LABOR \$ INDUSTRY REQUIREMENTS.

13.2 THE CONTRACTOR SHALL PAY ALL FEES, PREPARE AND SUBMIT ALL UTILITY APPLICATIONS AND OBTAIN AND PAY FOR ALL PERMITS AND INSPECTIONS REQUIRED FOR HIS WORK INCLUDING LET BOILER ROOM PLANS AND LET INSPECTIONS AND

14. <u>BUILDING EXPANSION JOINTS AND FIRE RATED ASSEMBLIES</u>

14.1 PROVIDE EXPANSION JOINTS IN DUCTWORK AND PIPING WHERE THEY CROSS BUILDING EXPANSION JOINTS.

14.2 PROVIDE FIRE DAMPERS IN ALL PENETRATIONS THROUGH FIRE RATED FLOORS. WALLS AND PARTITIONS AND PROVIDE CEILING RADIATION DAMPERS IN PENETRATIONS THROUGH FIRE RATED CEILING ASSEMBLIES AS REQUIRED TO MAINTAIN THE NECESSARY FIRE RATING AND/OR UL RATING OF THE ASSEMBLY.

14.3 MEET ALL REQUIREMENTS OF UNDERWRITER'S LABORATORIES AND ALL APPLICABLE CODES FOR MAINTAINING THE INTEGRITY OF ALL FIRE RATED

14.4 SEAL SPACE AROUND DUCTS, PIPES OR CONDUITS WITH APPROVED FIREPROOF MATERIAL WHERE THEY PASS THROUGH FIRE RATED ASSEMBLIES.

AUXILIARY DRAIN PANS

15.1 PROVIDE AUXILIARY DRAIN PANS AT ALL CEILING MOUNTED EQUIPMENT THAT IS ABLE TO GENERATE CONDENSATE.

16. ACCESS DOORS

16.1 THE CONTRACTOR SHALL PROVIDE ACCESS PANELS/ACCESS DOORS FOR ACCESS TO DAMPERS, VALVES, CONTROLLERS OR ANY OTHER EQUIPMENT OR COMPONENT REQUIRING ACCESS FOR MAINTENANCE, ADJUSTMENT OR SERVICE WHEREVER THESE ITEMS ARE CONCEALED IN BUILDING WALLS, PARTITIONS OR CEILINGS. FRAMES SHALL BE ANCHORED IN WALLS, PARTITIONS OR CEILINGS AND SHALL BE SET TRUE TO LINES OF THE BUILDING AND FLUSH WITH THE FINISHED SURFACES, ACCESS PANELS/ACCESS DOORS SHALL BE AS SPECIFIED IN THE GENERAL CONSTRUCTION SECTIONS OF THE SPECIFICATIONS.

FASTENING, SUPPORTS AND HANGERS

17.1 ALL FASTENINGS, SUPPORTS, HANGERS, MISCELLANEOUS STEEL, CLAMPS AND ANCHORS SHALL BE OF THE TYPE MADE FOR THE SPECIFIC PURPOSE FOR WHICH THEY ARE TO BE USED. TOGGLE BOLTS OR MACHINE BOLT FASTENINGS SHALL BE USED FOR HOLLOW TILE, TERRA COTTA OR LATH CONSTRUCTION. MACHINE SCREWS SHALL BE USED FOR STRUCTURAL STEEL FASTENINGS. LEAD EXPANSION SHIELD AND MACHINE SCREWS OR LAG SCREWS SHALL BE USED FOR SOLID MASONRY FASTENING. LAG SCREWS SHALL BE USED FOR WOOD FASTENING. ALL EQUIPMENT, PIPING AND DUCTWORK SHALL BE RIGIDLY AND FIRMLY INSTALLED TO PREVENT SWAYING, VIBRATING OR SAGGING BY MALLEABLE OR WROUGHT STEEL HANGERS OF STANDARD DESIGN, PIPE CLAMPS OR FABRICATED STEEL SUPPORTS OF APPROVED DESIGN. HANGERS OF HORIZONTAL PIPING RUNS SHALL BE ADJUSTABLE CLEVIS-TYPE. PERFORATED STRAP IRON HANGERS AND CADDY CLIPS ARE NOT PERMISSIBLE.

18. <u>WARRANTY</u>

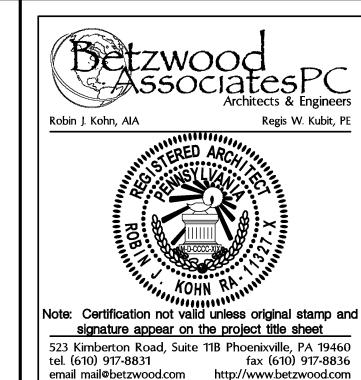
18.1 THE SYSTEMS SPECIFIED HEREIN SHALL BE GUARANTEED TO BE FREE FROM DEFECTS IN WORKMANSHIP AND MATERIAL UNDER NORMAL USE AND SERVICE FOR A PERIOD OF ONE YEAR (FIVE YEARS FOR ALL COMPRESSORS) FROM DATE OF SUBSTANTIAL COMPLETION.

18.2 IF, WITHIN THE AFOREMENTIONED WARRANTY PERIOD, ANY MATERIAL SPECIFIED HEREIN IS PROVEN TO BE DEFECTIVE IN ANY WAY, IT SHALL BE REPLACED OR REPAIRED AT NO ADDITIONAL COST TO THE OWNER. WARRANTY SHALL INCLUDE PROVIDING OF ALL LABOR AND MATERIALS NECESSARY FOR REPAIR OR REPLACEMENT OF ANY DEFECTIVE COMPONENTS. THE CONTRACTOR IS RESPONSIBLE FOR COSTS OF ANY SERVICES REQUIRED BY EQUIPMENT SUPPLIERS THAT ARE NOT INCLUDED IN SUPPLIERS WARRANTIES.

18.3 THE CONTRACTOR SHALL, AFTER ACCEPTANCE OF THE INSTALLATION BY THE OWNER OR THE OWNER'S REPRESENTATIVE, PROVIDE ANY SERVICE INCIDENTAL TO THE PROPER PERFORMANCE OF THE SYSTEMS UNDER THE WARRANTIES OUTLINED ABOVE FOR THE TIME PERIODS LISTED ABOVE.

19. <u>BALANCING</u>

19.1 AT COMPLETION OF THE PROJECT, THE SYSTEMS SHALL BE BALANCED TO WITHIN ±5 PERCENT OF THE DESIGN QUANTITIES. THE RESULTS SHALL BE SUBMITTED IN THE FORM OF A BALANCING REPORT PREPARED BY A BALANCER WITH A MINIMUM OF FIVE YEARS EXPERIENCE ON PROJECTS OF THIS SIZE.



Robin J. Kohn AlA 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 BY ISSUE ISSUED FOR REVIEW & APPROVAL 06-04-09 REVISED / REISSUED FOR APPROVAL 2 | 06-09-09 | EMH SSUED FOR BID 3 | 09-24-09 | EMH NOT FOR CONSTRUCTION ISSUED FOR PERMIT 10-08-09 REVISED PERMIT DRAWINGS 11-12-09 EMH CURRENT DATE APPROVED BY Robin J. Kohn, A.I.A. November 12, 2009

PROVIDENCE PROPERTY HOLDINGS, LLC

115 WEST MAIN STREET TRAPPE, PA. 19426

Trappe Borough **Montgomery County**

MECHANICAL **SPECIFICATIONS**

SHEET NUMBER

SHEET TITLE

1 MECHANICAL SPECIFICATIONS

PLUMBING

1. THE GENERAL CONDITIONS SHALL APPLY TO AND FORM A PART OF THIS SECTION OF THESE SPECIFICATION.

2. PROVIDE ALL MATERIALS, LABOR, EQUIPMENT, TOOLS AND SUPERVISION AND PERFORM ALL OPERATIONS NECESSARY FOR THE PROPER AND COMPLETE EXECUTION OF ALL PLUMBING WORK IN STRICT ACCORDANCE WITH THE SPECIFICATIONS AND DRAWINGS.



3. ALL WORK SHALL BE IN ACCORDANCE WITH ALL APPLICABLE SECTIONS OF THE NATIONAL FIRE PROTECTION ASSOCIATION, NATIONAL ELECTRIC CODE, OSHA, 2006 IPC INTERNATIONAL PLUMBING CODE AND ALL OTHER STATE AND LOCAL AUTHORITIES HAVING JURISDICTION AND APPLICABLE MANUFACTURER'S RECOMMENDATIONS.

4. THE CONTRACTOR SHALL VISIT THE SITE, EXAMINE ALL CONDITIONS AND MAKE ALLOWANCES FOR DIFFICULTIES AND CONTINGENCIES AFFECTING THE PROPER EXECUTION OF THIS CONTRACT.

5. THE CONTRACTOR SHALL OBTAIN AND PAY ALL FEES NECESSARY FOR PERMITS AND INSPECTIONS REQUIRED WITH HIS WORK.

6. THE CONTRACTOR SHALL VERIFY ALL UTILITY SERVICE INFORMATION SHOWN ON THE DRAWINGS WITH THE LOCAL UTILITY COMPANY PRIOR TO SUBMITTING A BID. ANY CHANGES OR SERVICE CHARGES IMPOSED BY THE UTILITY COMPANY SHALL BE QUALIFIED AND INCLUDED IN THE BID.

7. ALL EQUIPMENT SHALL BE TESTED, LISTED AND LABELED BY AN APPROVED AUTHORITY (UL, AGA, ETL) AND SHALL BE INSTALLED IN ACCORDANCE WITH ITS LISTING.

8. ALL EQUIPMENT, MATERIALS AND WORKMANSHIP SHALL BE GUARANTEED FOR A MINIMUM OF ONE YEAR FROM THE DATE OF ACCEPTANCE BY THE OWNER.

9. WHERE PRODUCTS ARE SPECIFIED BY BRAND NAME, CATALOG NUMBERS OR BY NAMES OF MANUFACTURERS, THE REFERENCE IS INTENDED TO BE DESCRIPTIVE AND NOT RESTRICTIVE, AND IS SOLELY FOR THE PURPOSE OF INDICATING THE TYPE OF QUALITY OF ITEM THAT WILL BE ACCEPTABLE. AN APPROVED EQUAL WILL BE ACCEPTED UNLESS INDICATED OTHERWISE.

10. THE CONTRACTOR RESPONSIBLE FOR WORK COVERED BY THESE
SPECIFICATIONS SHALL COORDINATE AND COOPERATE WITH ALL OTHER TRADES. TRADES THAT
HAVE WORK CONNECTED WITH THE PLUMBING WORK SHALL BE NOTIFIED FOR INSTALLATION
REQUIREMENTS AND SCHEDULING. THE CONTRACTOR SHALL SCHEDULE HIS WORK TO AVOID
ANY INTERRUPTION OF ANY UTILITY SERVICES TO THE OPERATION AREAS OF THE BUILDING
DURING NORMAL WORKING HOURS. INTERRUPTION OF SERVICES SHALL BE DONE DURING OFF
HOURS AT NO ADDITIONAL COST TO THE OWNER.

11. THE CONTRACTOR SHALL PERFORM ANY DEMOLITION REQUIRED FOR CONNECTION OF NEW WORK. ALL CUTTING AND PATCHING OF EVERY NATURE REQUIRED IN CONNECTION WITH THIS CONTRACT SHALL BE DONE BY THIS CONTRACTOR WITH MECHANICS EXPERIENCED IN THEIR RESPECTIVE TRADES. ALL PATCHING SHALL MATCH ADJACENT FINISHES. ALL WORK SHALL BE COORDINATED TO AVOID CUTTING OF WORK IN PLACE AND INTERFERING WITH OTHER OPERATIONS.

12. ALL EXCAVATIONS REQUIRED FOR INSTALLATION OF PIPE SHALL
HAVE SOLID, UNDISTURBED BOTTOMS, AND SHALL BE SUBJECT TO APPROVAL BY THE OWNER'S
REPRESENTATIVE PRIOR TO PIPING PLACEMENT. SHOULD BOTTOMS BECOME SOFT OR WET
BEFORE PIPING IS PLACED, ALL SUCH UNSUITABLE BOTTOMS SHALL BE REMOVED AT NO COST
TO THE OWNER AND FILLED WITH CONCRETE.

13. BACKFILL ALL EXCAVATIONS PERFORMED UNDER THIS CONTRACT AS REQUIRED TO SATISFY FINISHED GRADE REQUIREMENTS.

14. FURNISH AND INSTALL ALL NECESSARY HANGERS, INSERTS, SUPPORTS SUPPLEMENTARY STEEL, ETC., TO PROPERLY SUPPORT ALL EQUIPMENT AND PIPING IN AN APPROVED MANNER AND IN FULL ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

15. ALL HOT AND COLD WATER PIPING WITHIN THE BUILDING SHALL
BE HARD DRAWN TYPE "L" COPPER TUBING IN ACCORDANCE WITH ASTM—B88. FITTINGS
SHALL BE WROUGHT COPPER OR CAST BRASS. VALVES SHALL BE CAST BRASS UNLESS
NOTED OTHERWISE. HANGERS FOR SUPPORTING COPPER TUBING SHALL BE COPPERIZED.
ALL WATER SERVICE PIPING OUTSIDE OF THE BUILDING SHALL BE TYPE "K" COPPER ASTM
B—88. FITTINGS SHALL BE WROUGHT COPPER. ALL JOINTS SHALL BE MADE WITH SOLDER
AND FLUX HAVING A LEAD CONTENT OF NOT MORE THAN 0.2 PERCENT.

16. ALL SANITARY AND VENT PIPING UNLESS NOTED OTHERWISE SHALL BE NO—HUB SERVICE WEIGHT CAST IRON IN ACCORDANCE WITH ASTM A74; JOINTS SHALL BE A NEOPRENE GASKET WITH STAINLESS STEEL CLAMP AND SHIELD ASSEMBLY, INSTALL IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. IF PERMITTED BY THE LOCAL AUTHORITY ALL SANITARY AND VENT PIPING SHALL BE SCHEDULE 40 PVC, ASTM D2665, D2949, WITH PVC FITTINGS (DWV TYPE) AND SOLVENT WELD JOINTS. PVC PIPING SHALL NOT BE USED IN RETURN AIR PLENUM TYPE CEILINGS OR IN FIRE—RATED CEILING ASSEMBLIES (CONTRACTOR TO VERIFY THESE AREAS WITH ARCHITECT). PVC PIPING SHALL NOT BE USED WITHOUT WRITTEN AUTHORIZATION FROM THE LOCAL AUTHORITY HAVING JURISDICTION AND THE LOCAL FIRE

17. ALL FUEL GAS PIPING MATERIALS, JOINTS AND INSTALLATION
REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE NATIONAL FUEL GAS CODE AND ALL
LOCAL REQUIREMENTS. ALL GAS PIPING SIZES LISTED ON THE DRAWINGS ARE PIPING I.D.
ALL HANGERS AND SUPPORTS FOR GAS PIPING SHALL BE IN ACCORDANCE WITH NATIONAL
FUEL GAS CODE (NFPA 54).

17.1 ALL FUEL GAS PIPING ABOVE FINISHED GRADE, OUTSIDE THE BUILDING SHALL BE GALVANIZED STEEL, SCHEDULE 40 IN ACCORDANCE WITH ASTM A53. FITTINGS SHALL BE GALVANIZED MALLEABLE IRON IN ACCORDANCE WITH ASME B16.3. JOINTS SHALL BE SCREWED FOR PIPE SIZES UP TO THREE INCHES I.D. FLANGED AND BOLTED FOR PIPE SIZES GREATER THAN THREE INCHES I.D. AND WELDED. ALL JOINTS ON EXTERIOR FUEL GAS PIPING SHALL BE PAINTED TO PREVENT CORROSION.

17.2 ALL FUEL GAS PIPING INSIDE THE BUILDING (ABOVE FINISHED FLOOR/GRADE) SHALL BE SCHEDULE 40 BLACK STEEL IN ACCORDANCE WITH ASTM A53. FITTINGS SHALL BE MALLEABLE IRON IN ACCORDANCE WITH ASME B16.3. JOINTS SHALL BE SCREWED UP TO THREE INCHES I.D., FLANGED FOR PIPING LARGER THAN THREE INCHES I.D. AND WELDED; BRAZED IN CONCEALED AREAS.

18. WHERE PIPING PASSES THROUGH FIRE RESISTING PORTIONS OF THE STRUCTURE AN APPROVED FIRE—STOPPING DEVICE SHALL BE INSTALLED TO MAINTAIN THE FIRE RATING OF THAT PORTION OF THE STRUCTURE. "FIRESTOP PENETRATOR" OR "PROSEAL PLUG DEVICES" AS MANUFACTURED BY PROSET SYSTEMS (OR APPROVED EQUAL) SHALL BE USED AT THESE LOCATIONS.

19. SHUTOFF VALVES ARE REQUIRED AND EVERY FIXTURE AND SHALL BE FULL PORT BALL VALVES. ALL BALL, GATE, GLOBE AND CHECK VALVES SHALL BE ALL BRONZE, SWEATED PATTERN SUITABLE FOR 125 PSI WORKING PRESSURE. ALL BACKFLOW PREVENTERS SHALL BE AS REQUIRED BY THE LOCAL AUTHORITY. ALL VALVES AND PIPING EXPOSED TO VIEW SHALL BE CHROME

P-1 Scale: N.T.S.

19.1 HW RECIRC BALANCING VALVE SHALL BE AN IN-LINE BALANCING VALVE WITH A VISUAL FLOW INDICATOR AND ADJUSTMENT SCREW FOR SYSTEM FLOW CALIBRATION; MODEL TB-3/4 MANUFACTURED BY BELL & GOSSETT. INSTALL IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. CALIBRATE TO FLOW 1 TO 2 GPM.

19.2 GAS SHUTOFF VALVES SHALL HAVE A QUARTER—TURN OPERATION AND SHALL BE AGA APPROVED FOR SYSTEM PRESSURE. INSTALL IN ACCORDANCE WITH THE NATIONAL FUEL GAS CODE REQUIREMENTS.

19.3 GAS PRESSURE REGULATING VALVES SHALL BE THE SIZE AND TYPE REQUIRED BY THE APPLIANCE AND THE LOCAL GAS SUPPLIER. VALVES SHALL BE AGA APPROVED.

19.4 WATER HAMMER ARRESTORS SHALL BE ZURN, SHOCKTROLL OR EQUAL AND SHALL BE INSTALLED WHERE INDICATED ON THE DRAWINGS AND SIZED PER MANUFACTURER'S RECOMMENDATIONS.

20. INSULATION

20.1 ALL COLD WATER, HOT WATER, FITTINGS AND VALVES SHALL BE INSULATED WITH MATERIALS HAVING A "K" FACTOR OF 0.27 AT 75 DEGREES F MEAN TEMPERATURE, A FLAME SPREAD RATING OF 25 OR LESS AND SMOKE DEVELOPED RATING OF 50 OR LESS.

THICKNESS:

- COLD WATER AND HOT WATER RUNOUTS UP TO 1" = 1/2" THICK

- COLD WATER MAINS = 1" THICK - HOT WATER MAINS = 1" THICK

MATERIALS:

— VAPOR BARRIER ALL

- VAPOR BARRIER ALL SERVICE JACKETED FIBERGLASS WITH FITTINGS COVERED WITH PRE-SHAPED PLASTIC COVERS.

MANUFACTURERS:

— CERTAINEED, MANVILLE, OWENS, KNAUF OR APPROVED EQUAL.

MINIMUM PIPE TEMPERATURE.

FIXTURE SCHEDULE AND ON THE DRAWINGS.

ALL PIPING IN UNHEATED PORTIONS OF THE BUILDING (CRAWL SPACES, BASEMENT, ATTICS) SHALL BE HEAT TRACED (7W/LF) AND INSULATED WITH ONE INCH ARMSTRONG AP ARMAFLEX.

HEAT TRACING SHALL BE THERMOSTATICALLY CONTROLLED TO MAINTAIN 45 DEGREES F

21. FIXTURES AND FIXTURE TRIMMINGS SHALL BE FURNISHED AND INSTALLED AS SPECIFIED HEREIN. FIXTURES SHALL BE COMPLETE WITH ALL NECESSARY WALL HANGERS AND SUPPORTS, SUPPLY VALVES, DRAINAGE FITTINGS AND ESCUTCHEONS. THE FOLLOWING ITEM NUMBERS CORRESPOND WITH THE "P" NUMBERS NOTED ON THE PLUMBING

P-1 WATER CLOSET - SHALL BE AMERICAN STANDARD "CADET EL

1.6 PA" MODEL 2292.100, ELONGATED BOWL, PRESSURE ASSISTED TANK TYPE WITH COVER
LOCKING DEVICE, WHITE VITREOUS CHINA, TWO BOLT CAPS, CHROME PLATED ANGLE STOP,
WITH 3/8 INCH FLEXIBLE WALL SUPPLY AND ESCUTCHEON, WITH OPEN FRONT PLASTIC SEAT.

P-1A HANDICAP WATER CLOSET - SHALL BE AMERICAN STANDARD
"CADET 17 INCH 1.6 PA" MODEL 2168.100, ELONGATED BOWL, PRESSURE ASSISTED TANK
TYPE WITH COVER LOCKING DEVICE, WHITE VITREOUS CHINA, TWO BOLT CAPS, CHROME PLATED
ANGLE STOP, WITH 3/8 INCH FLEXIBLE WALL SUPPLY AND ESCUTCHEON, WITH OPEN FRONT
PLASTIC SEAT.

P-2 URINAL - NOT USED

P-3 LAVATORY - SHALL BE AMERICAN STANDARD "AQUALYN COUNTERTOP LAVATORY," MODEL 0476.028, WHITE VITREOUS CHINA WITH FAUCET HOLES ON FOUR INCH CENTERS. FAUCET SHALL BE "HERITAGE" MODEL 5402.172 WITH WRIST BLADE HANDLES. PROVIDE CHROME PLATED P-TRAP AND ARM, ANGLE STOPS VALVES AND 3/8 INCH FLEXIBLE WALL SUPPLIES AND ESCUTCHEONS. DRAIN SHALL BE AN OFFSET GRID TYPE, MODEL 7723.018. INSULATE EXPOSED WATER AND DRAIN PIPING WITH TRUBRO "HANDI-LAV-GUARD" PIPE INSULATION.

P-4 FLOOR DRAIN - NOT USED

P-5 NOT USED

P-6 NOT USED.

NOTE: (1) ALL DRAINS SHALL HAVE VANDAL PROOF SCREWS.

(2) ALL DRAINS SHALL BE EQUIPPED WITH OUTLETS TO SUIT THE JOINTS IN THE PIPE TO WHICH THEY ARE CONNECTED. SIDE OUTLET DRAINS SHALL BE PROVIDED WHERE REQUIRED. EACH DRAIN SHALL BE CONNECTED TO THE DRAINAGE SYSTEM THROUGH A DEEP SEAL PTRAP.

(3) DRAINS INSTALLED IN AREAS HAVING WATERPROOF
MEMBRANE SHALL BE PROVIDED WITH FLASHING AS
HEREINBEFORE SPECIFIED AND FLASHING CLAMP DEVICE.

22. GAS FIRED OR ELECTRIC WATER HEATERS — TWO (ON PER EACH FLOOR LEVEL) TAKAGI FLASH TK-3 GAS FIRED UNIT OR EEMEX ET95T ELECTRIC WATER HEATER FACTORY ASSEMBLED TO SUPPLY DOMESTIC HOT WATER WITHIN 5 DEGREES F OF THE SELECTED TEMPERATURE, WHEN SUPPLIED WITH NATURAL GAS OR ELECTRICITY AND VENTED PROPERLY. THE HEATERS SHALL BE SUITABLE FOR SEALED COMBUSTION DIRECT VENTING USING A FOUR INCH S.S DIAMETER 'B' VENT EXHAUST PIPE FOR A TOTAL DISTANCE OF 20 EQUIVALENT FEET OF VENT. THE HEATER SHALL BE FACTORY ASSEMBLED AND TESTED. THE POWER BURNER SHALL BE OF A DESIGN THAT REQUIRES NO SPECIAL CALIBRATIONS ON START-UP. THE HEATERS SHALL BE APPROVED FOR MINIMAL CLEARANCES TO COMBUSTIBLES. THE CONTROL SHALL BE AN INTEGRATED SOLID STATE TEMPERATURE AND IGNITION CONTROL DEVICE WITH INTEGRAL DIAGNOSTICS, LED FAULT DISPLAY CAPABILITY AND A DIGITAL DISPLAY OF TEMPERATURE SETTINGS. THE UNITS SHALL BE EQUIPPED WITH AN ASME RATED TEMPERATURE PRESSURE RELIEF VALVE. THE WATER HEATER SHALL BE UL LISTED AND EXCEED THE MINIMUM EFFICIENCY REQUIREMENTS OF ASHRAE/IES 90.1B-1992. THIS HEATER SHALL BE LISTED BY SCAQMD RULE 1146.2 LOW NOX. EACH WATER HEATER SHALL HAVE AN INPUT RATING OF 199,000 BTUH / 9.5kW. EACH UNIT SHALL BE CAPABLE OF SUPPLYING 4.0 GALLONS OF HOT WATER PER MINUTE AT A TEMPERATURE RISE OF 100 DEGREES F.

23. EXPANSION TANK

23.1 WELDED STEEL, TESTED AND STAMPED IN ACCORDANCE WITH ASME SPECIFICATIONS, RATE FOR WORKING PRESSURE 125 PSIG, WITH FLEXIBLE DIAPHRAGM SEALED INTO TANK, INLINE MODEL (PROVIDE SUPPORT PER MANUFACTURER'S RECOMMENDATIONS). FOR USE WITH POTABLE WATER SYSTEMS. MODEL ST-60-C MANUFACTURED BY AMTROL.

24. STERILIZATION OF DOMESTIC WATER SYSTEM

24.1 BEFORE BEING PLACED IN SERVICE, ALL DOMESTIC WATER LINES SHALL BE CHLORINATED USING A METHOD THAT IS SATISFACTORY TO THE WATER AUTHORITY OR THE AUTHORITY HAVING JURISDICTION. IN THE ABSENCE OF A PRESCRIBED METHOD, THE PROCEDURE LISTED IN AWWA C651 OR AWWA C652 OR AS DESCRIBED BELOW SHALL BE USED.

24.2 PRIOR TO CHLORINATION, ALL DIRT AND FOREIGN MATTER SHALL BE REMOVED BY A THOROUGH FLUSHING. THIS SHALL BE DONE AFTER THE PRESSURE TEST AND LEAKAGE TEST.

24.3 A CHLORINE HYPOCHLORITE SOLUTION SHALL BE APPLIED BY MEANS OF A SOLUTION FEED DEVICE OR THE GAS SHALL BE FED DIRECTLY FROM A CHLORINE CYLINDER EQUIPPED WITH PROPER DEVICES FOR REGULATING THE RATE OF FLOW AND THE EFFECTIVE DIFFUSE OF GAS WITHIN THE PIPE.

24.4 WATER SHALL BE CONTROLLED TO FLOW SLOWLY INTO THE SYSTEM DURING THE APPLICATION OF CHLORINE IN SUCH PROPORTIONS THAT THE CHLORINE DOSE APPLIED TO THE WATER ENTERING THE PIPE SHALL BE AT LEAST 40 TO 50 PARTS PER MILLION.

24.5 TREATED WATER SHALL BE RETAINED IN THE SYSTEM LONG ENOUGH TO DESTROY ALL NON—SPORE FORMING BACTERIA. THIS PERIOD SHALL BE AT LEAST THREE HOURS. A LONGER CHLORINE CONTACT TIME MAY BE REQUESTED BY THE OWNER'S REPRESENTATIVE AT NO ADDITIONAL COST TO THE OWNER.

24.6 AFTER THE CHLORINE TREATED WATER HAS BEEN RETAINED FOR THE REQUIRED TIME, THE CHLORINE RESIDUAL AT THE PIPE EXTREMITIES AND AT OTHER REPRESENTATIVE POINTS SHALL BE AT LEAST FIVE PARTS PER MILLIONS.

24.7 FOLLOWING CHLORINATION, ALL TREATED WATER SHALL BE THOROUGHLY FLUSHED FROM THE SYSTEM AT ITS EXTREMITIES UNTIL THE REPLACEMENT WATER THROUGHOUT ITS LENGTH SHALL, UPON TEST, BE EQUAL TO THE WATER QUALITY SERVED FROM THE WATER SUPPLY SYSTEM.

24.8 SHOULD THE INITIAL TREATMENT IN THE OPINION OF THE OWNER'S REPRESENTATIVE PROVE INEFFECTIVE, THE CHLORINATION PROCEDURE SHALL BE REPEATED UNTIL CONFIRMED TESTS SHOW THAT WATER SAMPLED FROM THE SYSTEM CONFORMS TO THE REQUIREMENTS.

24.9 THE "START-UP" OF THE WATER HEATER SYSTEM SHALL BE CARRIED OUT BY THE CONTRACTOR AND MANUFACTURE'S REPRESENTATIVE.

24.10 IN ADDITION TO THE ABOVE WORK, THE CONTRACTOR SHALL CHECK THE OPERATION OF ALL WATER HEATER THERMOSTAT SETPOINTS AND OPERATIONS.

25. TEST OF DRAINAGE SYSTEM

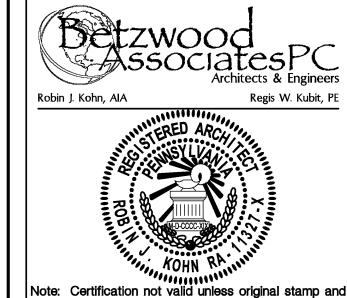
25.1 ALL PLUMBING AND DRAINAGE PIPING SHALL BE TESTED BY PLUGGING ALL OPENINGS AND FILL SYSTEM WITH WATER TO THE TOP OF ALL VENT PIPES. THE WATER SHALL STAND FOR 30 MINUTES FOR INSPECTION. ALL TESTS MUST COMPLY WITH LOCAL AUTHORITY REQUIREMENTS.

26. TEST OF DOMESTIC WATER PIPING

26.1 ALL WATER LINES SHALL BE TESTED TO A HYDROSTATIC PRESSURE EQUAL TO 1-1/2 TIMES THE MAXIMUM OPERATING PRESSURE. THE SYSTEM SHALL BE LEAK—FREE FOR 24 HOURS AT THIS PRESSURE.

27. WATER METERS AND SERVICE

27.1 PROVIDE MEANS FOR SEPARATE METERING AND SHUT-OFF OF WATER SERVICE TO EACH FLOOR LEVEL.



Note: Certification not valid unless original stamp and signature appear on the project title sheet

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PROJECT NO. DRAWN BY CHK'D BY NO. DATE BY ISSUE ISSUED FOR REVIEW & APPROVAL 06-04-09 REVISED / REISSUED FOR APPROVAL 2 | 06-09-09 | EMH SSUED FOR BID 3 09-24-09 EMH NOT FOR CONSTRUCTION ISSUED FOR PERMIT 10-08-09 REVISED PERMIT DRAWINGS 11-12-09 EMH CURRENT DATE APPROVED BY Robin J. Kohn, A.I.A. November 12, 2009

PROVIDENCE PROPERTY HOLDINGS, LLC

115 WEST MAIN STREET TRAPPE, PA. 19426

Trappe Borough
Montgomery County

PLUMBING SPECIFICATIONS

SHEET NUMBER

SHEET TITLE

P-1

5

9

PART I - GENERAL

1.1 GENERAL

A. PROVIDE ALL LABOR AND MATERIAL REQUIRED, INCLUDING SUPPORTS AND OTHER APPURTENANCES, FOR A COMPLETE AND OPERATING INSTALLATION.

B. ALL MATERIALS SHALL BE NEW AND SHALL BE FURNISHED, INSTALLED, AND WIRED AS PART OF THIS CONTRACT, UNLESS OTHERWISE NOTED.

C. THE WORK SHALL CONFORM TO ALL APPLICABLE RULES, CODES AND REGULATIONS, INCLUDING BUT NOT LIMITED TO THE NATIONAL ELECTRIC CODE. IEC, ADA, AND ANY OTHER AUTHORITIES HAVING JURISDICTION.

D. ALL MATERIALS AND WORKMANSHIP SHALL BE GUARANTEED FOR A MINIMUM OF ONE YEAR FOLLOWING THE DATE OF OWNER ACCEPTANCE UNLESS OTHERWISE

E. PROVIDE AND PAY FOR TEMPORARY SERVICES AS REQUIRED, TEMPORARY LIGHTING AND POWER SHALL COMPLY WITH THE REQUIREMENTS OF OSHA.

F. ALL EQUIPMENT FURNISHED SHALL BEAR THE "UL" LABEL.

G. ALL WIRING SHALL BE INSTALLED IN CONDUIT OR MC CABLE UNLESS OTHERWISE

H. NO WIRING SHALL BE SMALLER THAN #12 AWG. EXCEPT CONTROL WIRING SHALL BE #14 AWG. UNLESS OTHERWISE NOTED.

I. PROVIDE CERTIFIED ELECTRICAL INSPECTION OF ALL WORK.

INSTALL A PULL STRING AND PVC END CAPS.

J. PROVIDE SERVICE ENTRANCE EQUIPMENT APPROVED BY THE SERVING UTILITY COMPANY AND MARKED AS SUCH.

K. CONTRACT LIMITS: WHERE "LIMITS OF CONTRACT" DESIGNATIONS ARE INDICATED OR IMPLIED ON PLANS, THEY SHALL NOT APPLY TO ELECTRICAL SERVICE WORK NECESSARY TO SERVE THE PROJECT AND OCCURRING OUTSIDE OF THE "LIMITS OF CONTRACT" DESIGNATIONS.

L. CONTRACTOR TO PROVIDE THREE (3) SEPERATE METERING SERVICES FOR FIRST FLOOR TENANT, SECOND FLOOR TENANT AND COMMON AREAS.

M. CONTRACTOR TO PROVIDE AND INSTALL A 4" PVC CONDUIT FROM THE BASEMENT UTILITY ROOM TO JUST BELOW THE ROOF FOR FUTURE OWNER NEEDS.

1.2 COORDINATION

A. CONFIRM ALL EQUIPMENT WIRING WITH THE MANUFACTURER, PROVIDE MATERIALS AND LABOR DUE TO DISCREPANCIES AT NO ADDITIONAL COST TO OWNER.

B. COORDINATE ELECTRICAL WORK WITH THAT OF OTHER TRADES, PROVIDE OFFSETS, FITTINGS, AND SIMILAR ITEMS NECESSARY TO ACCOMPLISH THE REQUIREMENTS OF COORDINATION AT NO ADDITIONAL COST TO OWNER.

C. COORDINATE ALL EQUIPMENT AND CONTROLS WITH THE MECHANICAL DRAWINGS

D. DRAWINGS ARE DIAGRAMMATIC AND CERTAIN SPECIALTIES ARE NOT SHOWN. HOWEVER, THEY SHALL BE PROVIDED AS REQUIRED.

E. COMPLY WITH THE REQUIREMENTS OF THE SERVING ELECTRIC UTILITY,

TELEPHONE AND DATA COMPANIES. 1.3 PRODUCT CONDITIONS

A. THE INSTALLATION OF ALL ELECTRICAL EQUIPMENT SHALL COMPLY WITH THE REQUIREMENTS OF THE APPROPRIATE SEISMIC ZONE.

B. PROVIDE SELECTIVE DEMOLITION AS INDICATED OR IMPLIED. ALL EQUIPMENT INDICATED TO BE REMOVED SHALL BE OFFERED TO THE OWNER PRIOR TO DISPOSAL PROTECT ADJACENT AREAS AGAINST DUST MIGRATION. ACCESS TO AND EQUIPMENT TRANSPORTATION TO RENOVATED AREA SHALL BE COORDINATED WITH OWNER. COORDINATE UTILITY SHUTDOWN WITH OWNER AND UTILITY COMPANY. COORDINATE POWER SHUTDOWN WITH OWNER,

1.4 SUBMITTALS

- A. SUBMIT MANUFACTURERS PRODUCT DATA FOR: 1. WIRE AND CONDUIT.
- 2. MOTOR STARTERS / VARIABLE FREQUENCY DRIVES. 3. CABLES.
- 4. SWITCHES AND RECEPTACLES. 5. METER SOCKETS.

FEATURES OF EQUIPMENT TO BE FURNISHED.

- B. SUBMIT SHOP DRAWINGS FOR: 1. PANELBOARDS.
- 2. LIGHTING FIXTURES. 3. COMBINATION STARTERS / VARIABLE FREQUENCY DRIVES.

C. MANUFACTURERS DATA SHALL INDICATE SPECIFIC TYPES AND FEATURES OF EQUIPMENT TO BE FURNISHED.

D. SHOP DRAWINGS SHALL INDICATE DIMENSIONS, EQUIPMENT LAYOUT, AND

E. SUBMITTALS SHALL BE APPROVED PRIOR TO PURCHASING OF EQUIPMENT.

PART 2 - PRODUCT AND EQUIPMENT

2.1 GENERAL

I TYPE THWN/THHN, COPPER FOR BRANCH CIRCUIT AND FEEDER WIRING.

2. METAL CLAD CABLE: TYPE MC, PER UL1569 USE IN DRY LOCATIONS WHERE CONCEALED AND WHERE NOT SUBJECT TO PHYSICAL DAMAGE. 3. SOLID CONDUCTOR FOR #10 AWG. AND SMALLER: STRANDED CONDUCTOR FOR #8 AWG. AND LARGER. CONTROL CONDUCTORS #12 AWG.

B. CONDUIT:

. EMT: PER UL797 AND C80.1.

AND #14 AWG. SHALL BE STRANDED.

2. FLEXIBLE METAL CONDUIT: PER ULI. 3. LIQUID TIGHT FLEXIBLE METAL CONDUIT: PER UL1660. 4. RIGID NON-METALLIC CONDUIT: PVC SCHEDULE 40 PER NEMA TC2, UL651.

5. RIGID STEEL: PER UL6, 1242, ANSI C80.01.

C. MANUAL MOTOR STARTERS: MANUAL CONTRACTOR WITH THERMAL OVERLOAD ELEMENTS COORDINATED WITH MOTOR REQUIREMENTS. PILOT LIGHT, PAD LOCKABLE IN THE "OFF" POSITION.

D. PANELS: PER UL67 AND UL50, COPPER BUS WITH FULL SIZED NEUTRAL AND GROUND BUS, BOLT-ON TYPE CIRCUIT BREAKERS PER UL489, OVER CURRENT DEVICES SHALL BE TRIP FREE OF HANDLE AND PROVIDE OPENING OF ALL POLES SIMULTANEOUSLY. THE BARS TO CONVERT SINGLE POLE DEVICES TO MULTI-POLE DEVICES WILL NOT BE ACCEPTABLE.

E. SAFETY SWITCHES: 600 VAC NON-FUSABLE, NEMA TYPE KS-1, NEMA I ENCLOSURE FOR DRY LOCATIONS, NEMA 4 FOR WET LOCATIONS, NEMA 3R FOR OUTDOOR LOCATIONS. SIZE AND NUMBER OF POLES AS INDICATED, LOCKABLE IN THE "OFF" POSITION. RATED FOR SERVICE DISCONNECT WHERE REQUIRED. SQUARE 'D' CLASS 3110 OR APPROVED EQUAL BY GENERAL ELECTRIC, CUTLER HAMMER, AND SIEMENS.

F. GROUNDING: PROVIDE A COMPLETE GROUNDING SYSTEM PER NEC PROVIDE AN INSULATED GROUND CONDUCTOR IN EACH CONDUIT, RACEWAY, AND CABLE SIZED PER NEC TABLE 250.122 INCLUDING LIGHTING CIRCUITS. PROVIDE A MAXIMUM OF 10 OHMS RESISTANCE FOR SERVICE GROUND.

G. BOXES: PROVIDE JUNCTION, OUTLETS AND SWITCH BOXES OF STAMPED GALVANIZED STEEL FOR CONCEALED AREAS, PROVIDE CAST ALUMINUM TYPE FOR SURFACE MOUNTED DEVICES. PROVIDE CAST ALUMINUM, GASKETED, NEMA 4 FOR OUTDOOR OR WET LOCATIONS.

H. WIRING DEVICES:

1. SWITCHES (LIGHTING): 120-277 VAC, 20 AMP.

2. SWITCHES (MOTOR RATED): 120-277 VAC. 1 HP @ 120V. 3. ADAPTIVE OCCUPANT SENSOR SWITCH: 120-277 VAC 20 AMP.

4. ADAPTIVE OCCUPANT SENSORS: 24 VAC & CONTROL UNIT: 277 VAC / 24 VAC 5. RECEPTACLE: 125 VAC, 20 AMP, GROUNDING TYPE

6. RECEPTACLE (GFCI): 125 VAC, 20 AMP, GROUNDING TYPE, GROUND FAULT INTERRUPTER.

7. RECEPTACLE (IG): 125 VAC, 20 AMP GROUNDING TYPE, ISOLATED GROUND 8. RECEPTACLE (250 V): 250 VAC, 20 AMP GROUNDING TYPE SINGLE

RECEPTACLE. 9. RECEPTACLE (480 V): 480 VAC, 20 AMP GROUNDING TYPE SINGLE TWIST

LOCK RECEPTACLE. 10. DEVICE PLATES: IN FINISHED AREAS PROVIDE METAL DEVICE PLATES,

TYPE TO MATCH DEVICES. IN UNFINISHED AREAS PROVIDE GALVANIZED STEEL DEVICE PLATES. 11. MULTI-OUTLET ASSEMBLY: PER UL5, FOR USE AS INDICATED, SYSTEM SHALL BE PRE-WIRED AND PRE-CUT TO LENGTH AS REQUIRED.

RECEPTACLES AND PLATES HALL BE SPECIFIED HEREIN. WIREMOLD TYPE 3000 OR EQUAL FINISH TO MATCH INTERIOR SURFACES.

JACKETED CATEGORY "6" PERFORMANCE LEVEL CONNECTIONS.

12. COMMUNICATION TERMINATIONS: MODULAR 110 TYPE FOR DATA CONNECTIONS, TYPE 66 FOR TELEPHONE. 13. COMMUNICATION CABLING: UNSHIELDED TWISTED PAIR #24 AWG., PVC

2.2 LIGHTING

PROVIDE A COMPLETE LUMINAIRE INSTALLATION INCLUDING, LAMPS, BALLASTS, ENCLOSURES, ETC. AS REQUIRED. COORDINATE MOUNTING HEIGHTS AND INSTALLATION METHODS WITH FIELD CONDITIONS AND EQUIPMENT LAYOUT. REFER TO LIGHTING FIXTURE SCHEDULE FOR TYPES.

A. NEW LIGHTING FIXTURES: PROVIDE NEW LIGHTING FIXTURES AS INDICATED IN LIGHTING FIXTURE SCHEDULE

I. METAL PARTS SHALL BE FREE FROM BURRS AND SHARP CORNERS. DOOR FRAMES SHALL BE FREE FROM LIGHT LEAKAGE. 2. PROVIDE LAMPS.

B. EXIT SIGNS: PROVIDE SELF POWERED EXIT SIGNS AS INDICATED, INTEGRAL AUTO-TRICKLE CHARGER IN SELF CONTAINED POWER PACK 90 MINUTE SUPPLY CAPABLE OF SUPPORTING REMOTE LAMPS HEADS.

PART 3 - EXECUTION

3.1 GENERAL

A. INSTALL ALL EQUIPMENT PER MANUFACTURERS RECOMMENDATIONS.

B. KEEP PREMISES FREE FROM RUBBISH. REMOVE ALL RUBBISH FROM SITE.

C. ALL WIRING SHALL BE RUN IN CONDUIT, SURFACE RACEWAY, OR AS MC CABLE FOR USES PERMITTED AS SPECIFIED HEREIN. #12 AWG

D. WHERE CONDUIT RUNS, FROM GENERAL POWER AND LIGHTING BRANCH CIRCUITS, EXCEED A DEVELOPED LENGTH OF 60 FEET (120V) OR 120 FEET (277V) TO CENTER OF LOAD, USE #10 AWG. WIRE TO THAT POINT, VOLTAGE DROP SHALL NOT EXCEED NEC ALLOWABLE VALUES FOR BRANCH CIRCUITS AND FEEDERS.

E. WHERE COMMON NEUTRAL CONDUCTORS ARE USED FOR 480/277 AND 208/120 VOLT MULTI-WIRE BRACH CIRCUIT WIRING, NEUTRAL CONDUCTOR SHALL HAVE AMPACITY OF AL LEAST 1.73 TIMES PHASE CONDUCTOR.

F. HOME RUNS MAY BE COMBINED INTO A SINGLE CONDUIT, HOWEVER, MAXIMUM NUMBER OF CONDUCTORS SHALL MEET CONDUIT FILL AND DERATING REQUIREMENTS OF NEC ARTICLE 310. SEPARATE NEUTRALS SHALL BE PULLED AND CLASSIFIED AS CURRENT CARRYING CONDUCTORS, DIVERSITY FACTOR FOR EACH BRANCH CIRCUIT IS 100%.

G. COORDINATE ALL EQUIPMENT AND CONDUIT ROUTING WITH EXISTING CONDITIONS. ALL WIRING IN FINISHED SPACES SHALL BE CONCEALED. PROVIDE THREE (3) I INCH SPARE CONDUITS FROM PANEL TO ABOVE CEILING FOR RECESSED

H. COORDINATE LIGHTING FIXTURE LOCATIONS WITH ARCHITECTURAL REFLECTED CEILING PLANS. SUPPORT FIXTURES INDEPENDENTLY FROM CEILING GRID. MAINTAIN MINIMUM 6 CLEARANCE BETWEEN CEILING FIXTURES AND WALLS.

I. PROVIDE MULTI-GANG BOXES AND DEVICES PLATES FOR SWITCHES OR CONTROLS LOCATED IN CLOSE PROXIMITY

J. PROVIDE HEAVY DUTY TYPE CORD AND MATCHING PLUG FOR EQUIPMENT REQUIRING RECEPTACLE TYPE POWER CONNECTIONS.

K. ALL DEVICES SHALL BE INSTALLED LEVEL AND PLUMB. SIZE ALL JUNCTION BOXES AND ELECTRICAL ENCLOSURES AS REQUIRED BY THE NEC.

L. TELEPHONE AND SWITCHING EQUIPMENT SHALL BE FURNISHED BY OTHERS.

A. OUTDOORS: USE THE FOLLOWING WIRING METHODS:

3.2 WIRING METHODS

. EXPOSED: RIGID METAL CONDUIT.

2. CONCEALED: RIGID METAL CONDUIT. 3. UNDERGROUND: RIGID NON-METALLIC CONDUIT 4. CONCRETE ENCASED: RIGID NON-METALLIC CONDUIT.

5. CONNECTION TO VIBRATING EQUIPMENT (INCLUDING TRANSFORMERS AND HYDRAULIC, PNEUMATIC, OR ELECTRIC SOLENOID OR MOTOR-DRIVEN EQUIPMENT): LIQUID-TIGHT FLEXIBLE METAL CONDUIT

6. BOXES AND ENCLOSURES: NEMA TYPE 3R OR TYPE 4 EXCEPT IN HAZARDOUS LOCATIONS USE NEMA TYPE 7.

B. INDOORS: USE THE FOLLOWING WIRING METHODS:

1. CONNECTION TO VIBRATING EQUIPMENT (INCLUDING TRANSFORMERS AND HYDRAULIC, PNEUMATIC, OR ELECTRIC SOLENOID OR MOTOR-DRIVEN EQUIPMENT): FLEXIBLE METAL CONDUIT, EXCEPT IN WET / DAMP LOCATIONS USE LIQUID-TIGHT FLEXIBLE METAL CONDUIT. MAXIMUM OF 6 FEET OF FLEXIBLE CONDUIT FOR LIGHTING FIXTURES.

2. DAMP OR WET LOCATIONS: RIGID METAL CONDUIT. 3. EXPOSED: ELECTRICAL METALLIC TUBING OR RIGID METAL CONDUIT. 4. CONCEALED: ABOVE CEILINGS - ELECTRICAL METALLIC TUBING; IN CMU WALLS - ELECTRICAL METALLIC TUBING; IN STUD WALLS - ELECTRICAL METALLIC TUBING OR MC-TYPE FLEXIBLE METALLIC CONDUIT.

C. CORROSIVE: USE RIGID ALUMINUM CONDUIT.

D. MINIMUM CONDUIT SIZE SHALL BE 3/4 INCH FOR POWER; 1/2 INCH FOR

3.3 PAINTING AND FINISHES

A. DAMAGE AND TOUCH-UP: REPAIR ALL MARRED OR DAMAGED FACTORY PAINTED FINISHES WITH MATERIALS AND PROCEDURES TO MATCH ORIGINAL FACTORY FINISH.

3.4 IDENTIFICATION A. PROVIDE PANEL AND CIRCUIT DESIGNATION LABELS ON ALL RECEPTACLE

COVERS PLATES. FOR OUTLETS OTHER THAN 120V, PROVIDE VOLTAGE, PHASE AND B. IDENTIFY ALL EQUIPMENT PROVIDED UNDER THIS CONTRACT WITH ENGRAVED,

PHENOLIC, LAMINATED NAMEPLATES. C. PROVIDE TYPEWRITTEN DIRECTIONS FOR ALL PANELBOARDS AND LIGHTING

D. IDENTIFY CONDUCTORS WITH THE FOLLOWING COLOR CODE:

208/120V PHASE BLACK A RED BLUE WHITE NEUTRAL

GREEN GROUND

CONTROLLERS AND/OR TIMERS.

3.5 CERTIFICATION

A. GENERAL: PROVIDE CERTIFICATION THAT THE INSTALLATION MEETS NFPA 70. MANUFACTURER'S RECOMMENDATIONS, AND OTHER AUTHORITIES AS INDICATED.

3.6 CUTTING AND PATCHING

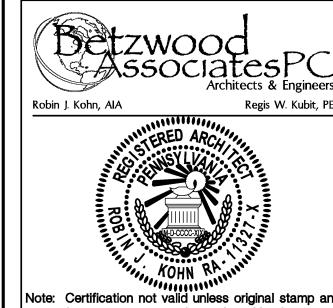
A. CUTTING PROVIDE CUTTING, CHANNELING, CHASING AND DRILLING OF FLOORS, WALLS, PARTITIONS, CEILINGS AND OTHER SURFACES NECESSARY FOR INSTALLATION OF ELECTRICAL WORK. ALL CUTTING SHALL BE PERFORMED BY SKILLED MECHANICS OF THE TRADES INVOLVED.

B. PATCHING: REPAIR CUT SURFACES OR OPENINGS RESULTING FROM DEMOLITION TO MATCH ADJACENT SURFACES.

3.7 CLOSING OF OPENINGS

A. SEALING: UNUSED SLOTS, SLEEVES AND OTHER PENETRATIONS IN FLOOR, WALLS OR OTHER GENERAL CONSTRUCTION SHALL BE CLOSED AND SEALED WITH AN APPROVED MATERIAL.

1. CONDUIT: THE ANNULUS BETWEEN EXPOSED CONDUIT AND WALLS OR FLOORS IN FINISHED SPACES SHALL BE FILLED SEALED, AN PAINTED TO MATCH ADJACENT SURFACE.



Note: Certification not valid unless original stamp and signature appear on the project title sheet 523 Kimberton Road, Suite 11B Phoenixville, PA 19460 tel. (610) 917-8831 fax (610) 917-8836 email mail@betzwood.com http://www.betzwood.com

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PROJECT NO.

CHK'D BY NO. DATE BY ISSUE ISSUED FOR REVIEW & APPROVAL 06-04-09 REVISED / REISSUED FOR APPROVAL 2 | 06-09-09 | EMH SSUED FOR BID 09-24-09 EMH NOT FOR CONSTRUCTION ISSUED FOR PERMIT 10-08-09 REVISED PERMIT DRAWINGS 11-12-09 EMH **CURRENT DATE** APPROVED BY Robin J. Kohn, A.I.A. November 12, 2009

PROVIDENCE PROPERTY HOLDINGS, LLC

115 WEST MAIN STREET TRAPPE, PA. 19426

Trappe Borough **Montgomery County**

ELECTRICAL SPECIFICATIONS

SHEET NUMBER

SHEET TITLE

1 ELECTRICAL SPECIFICATIONS E-1 Scale: N.T.S.