

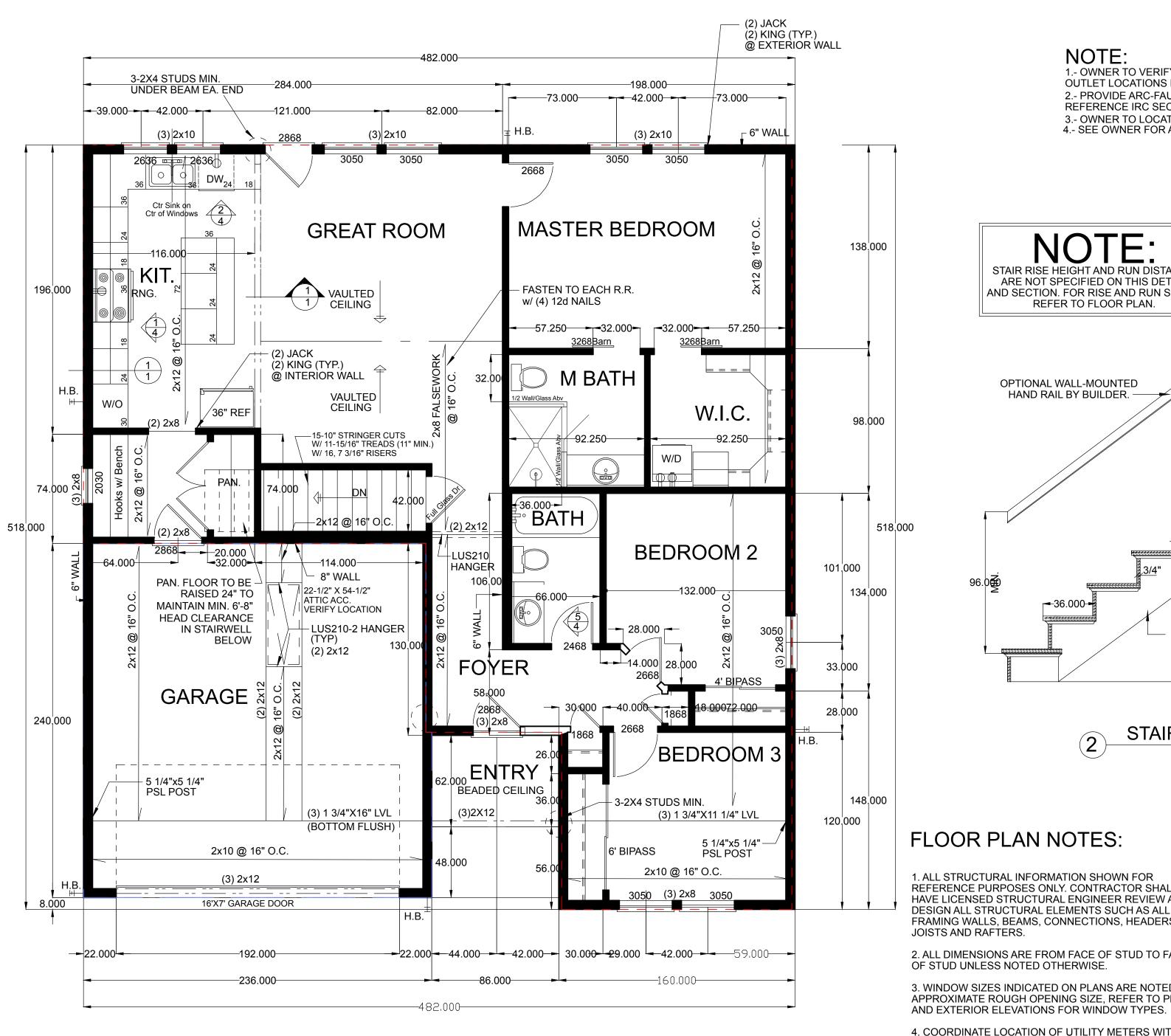
architecture JMS Architecture P.O. Box 791

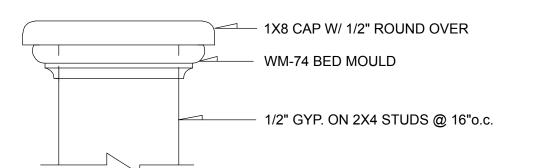
Consultants:

Ardmore, PA P: (215) 200-3269

DE 0 -OUND, NOTES

03.28.23 Revisions: Scale: 1/4" = 1'-0' Drawn By: JMS Project No.: File Name: A-2.0





WALL CAP DETAIL

# FLOOR PLAN SPECIFICATIONS

HEAT/COOLED: GARAGE, STORAGE: PORCHES: TOTAL:

1.- ALL CEILINGS TO BE 8' UNLESS NOTED. 2.- BUILDER TO APPROVE & VERIFY ALL PLANS BEFORE

CONSTRUCTION. 3.- VERIFY ALL PLANS W/ LOCAL BUILDING CODES. 4.- HVAC & W.H. TO BE IN ATTIC UNLESS OTHERWISE NOTED. 5.- PROVIDE SHUT-OFF VALVE FOR ALL GAS APPLIANCES.

1250 SQ. FT.

1679 SQ. FT.

390 SQ. FT.

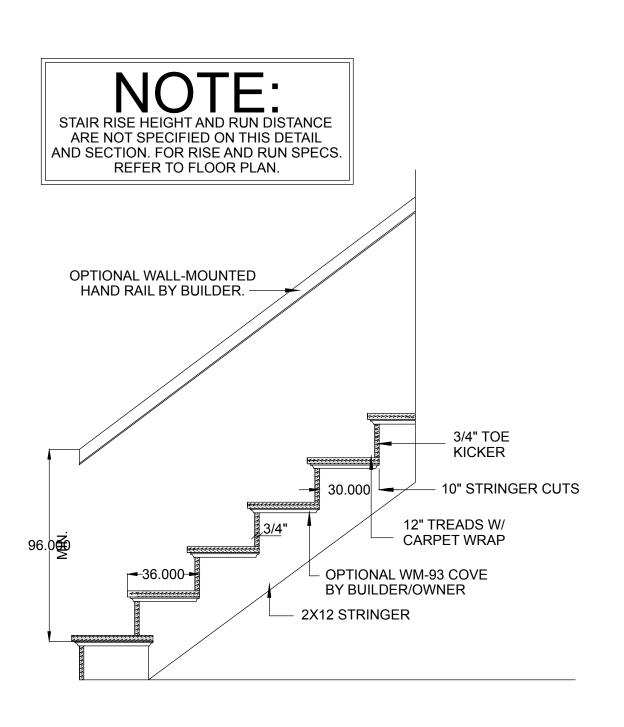
39 SQ. FT.

REFERENCE IRC SECTION G2419 6.- ALL GLASS LOCATED WITHIN 18" OF FLOOR, 12" OF A DOOR OR LOCATED WITHIN 60" OF FLOOR AT BATHTUBS, WHIRLPOOLS, SHOWERS, SAUNAS, STEAM ROOMS OR HOT TUBS SHALL BE TEMPERED TO COMPLY WITH IRC SECTION R308.4.8

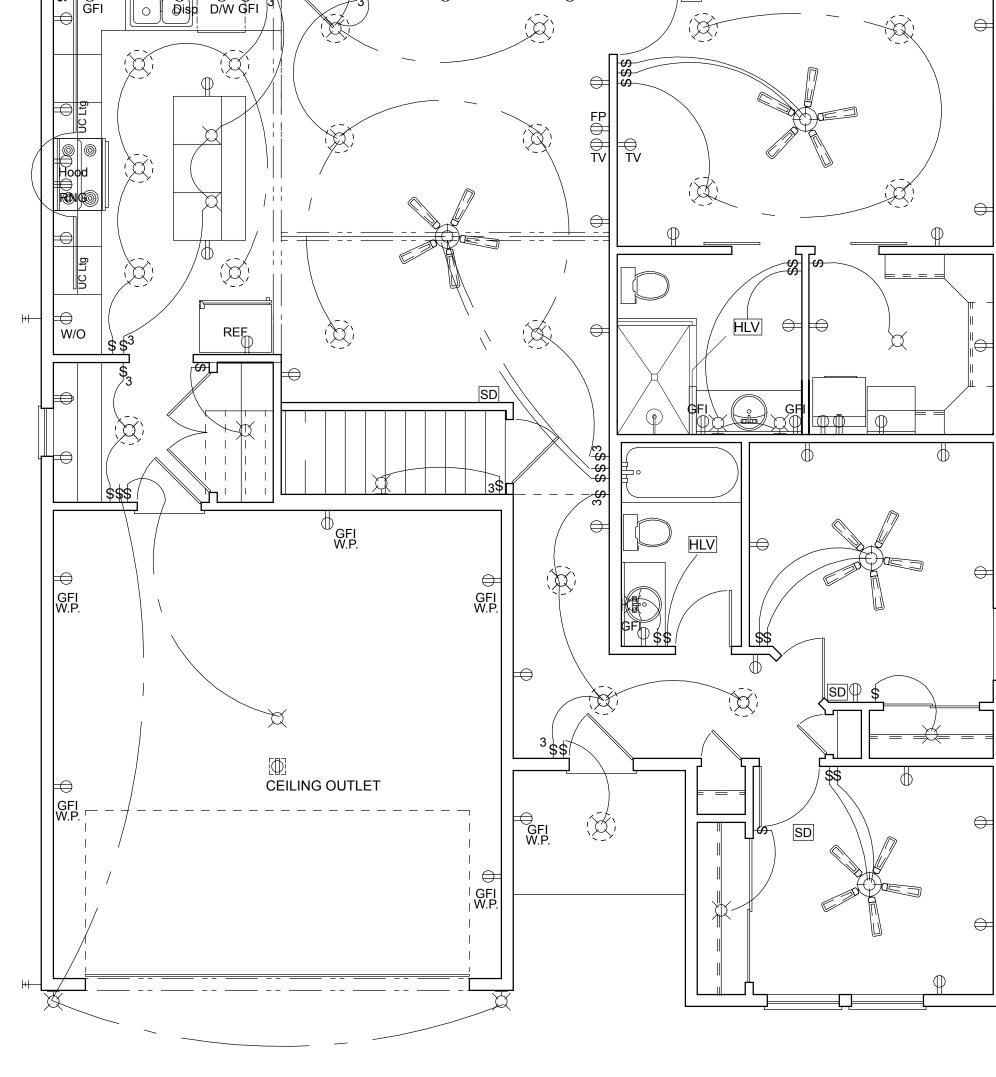
# NOTE:

1.- OWNER TO VERIFY & APPROVE ALL ELECTRICAL & POSSIBLE FLOOR OUTLET LOCATIONS NOT NOTED. 2.- PROVIDE ARC-FAULT INTERRUPTER PROTECTION FOR ALL BEDROOMS.

REFERENCE IRC SECTION E3802 3.- OWNER TO LOCATE AND VERIFY PHONE & CABLE JACKS. 4.- SEE OWNER FOR ALL OUTDOOR ELECTRICAL NEEDS AND LIGHTING.



STAIR SECTIONAL



# FLOOR PLAN NOTES:

1. ALL STRUCTURAL INFORMATION SHOWN FOR REFERENCE PURPOSES ONLY. CONTRACTOR SHALL HAVE LICENSED STRUCTURAL ENGINEER REVIEW AND DESIGN ALL STRUCTURAL ELEMENTS SUCH AS ALL FRAMING WALLS, BEAMS, CONNECTIONS, HEADERS, JOISTS AND RAFTERS.

2. ALL DIMENSIONS ARE FROM FACE OF STUD TO FACE OF STUD UNLESS NOTED OTHERWISE.

3. WINDOW SIZES INDICATED ON PLANS ARE NOTED BY APPROXIMATE ROUGH OPENING SIZE, REFER TO PLANS

4. COORDINATE LOCATION OF UTILITY METERS WITH SITE PLAN AND LOCATE AWAY FROM PUBLIC VIEW. VISUAL IMPACT SHALL BE MINIMIZED, I.E. MOUNT AS LOW AS POSSIBLE.

5. PREFABRICATED FIREPLACE CONSTRUCTION SHALL MEET OR EXCEED ALL APPLICABLE CODES REGARDING USE OF FIRE SEPARATIONS, CLEARANCES, ETC. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ALL ITEMS AND CONSTRUCTION MEET OR EXCEED CODE. OVERALL FLUE HEIGHT SHALL BE COORDINATED TO MATCH HEIGHT SHOWN ON PLANS AND SHALL NOT EXCEED THE TOP OF CHIMNEY CHASE AS

6. CONTRACTOR SHALL COORDINATE ALL CLOSET SHELVING REQUIREMENTS.

CONSTRUCTED.

7. DO NOT SCALE DRAWINGS, FOLLOW DIMENSIONS

8. CONTRACTOR SHALL FIELD VERIFY ALL CABINET DIMENSIONS BEFORE FABRICATION.

9. BEDROOM WINDOWS SHALL HAVE A MINIMUM NET CLEAR OPENING OF 5.7 SQ.FT., A MINIMUM NET CLEAR OPENABLE WIDTH OF 20", A MINIMUM NET CLEAR OPENABLE HEIGHT OF 24" AND HAVE A MAXIMUM FINISH SILL HEIGHT OF 43" FROM FINISH FLOOR.

10. ALL GLASS LOCATED WITHIN 18" OF FLOOR, 12" OF A DOOR OR LOCATED WITHIN 60" OF FLOOR AT BATHTUBS, WHIRLPOOLS, SHOWERS, SAUNAS, STEAM ROOMS OR HOT TUBS SHALL BE TEMPERED.

11. ALL EXPOSED INSULATION SHALL HAVE A FLAME SPREAD RATING OF LESS THAN 25 AND A SMOKE DENSITY RATING OF LESS THAN 450.

12. PROVIDE COMBUSTION AIR VENTS, WITH SCREEN AND BACK DAMPER, FOR FIREPLACES, WOOD STOVES AND ANY APPLIANCE WITH AN OPEN FLAME.

13. BATHROOMS AND UTILITY ROOMS SHALL BE VENTED TO THE OUTSIDE WITH A MINIMUM OF A 90 CFM FAN. RANGE HOODS SHALL ALSO BE VENTED TO OUTSIDE.

14. ATTIC HVAC UNITS SHALL BE LOCATED WITHIN 20' OF ITS SERVICE OPENING. RETURN AIR GRILLES SHALL NOT BE LOCATED WITHIN 10 FEET OF A GAS FIRED APPLIANCE.

15. ALL WALLS AND CEILINGS IN GARAGE AND GARAGE STORAGE AREAS TO HAVE 5/8" TYPE-X GYP. BOARD W/ 1-HOUR FIRE RATING. ALL EXT. DOORS IN GARAGE TO BE METAL OR SOLID CORE DOORS INCLUDING DOORS ENTERING HEAT/COOLED PORTION OF RESIDENCE.

16. ALL FIREPLACE CHASE WALLS SHALL BE INSULATED INSIDE AND OUTSIDE. PROVIDE HORIZONTAL "DRAFT STOPS" AT EACH FLOOR LEVEL BY PACKING 6" (R-19) INSULATION BETWEEN 2X4 JOISTS.

17. ALL INTERIOR WALLS SHALL BE COVERED WITH 1/2" GYPSUM BOARD, WITH METAL CORNER REINFORCING, TAPE FLOAT AND SAND. (3 COATS) USE 5/8" GYPSUM BOARD ON CEILINGS WHEN SUPPORTING MEMBERS ARE 24" O.C. OR GREATER. USE 1/2" GYPSUM BOARD ON CEILING MEMBERS LESS THAN 24" O.C.

18. ALL BATH AND TOILET AREA WALLS AND CEILINGS SHALL HAVE WATER RESISTANT GYPSUM BOARD.

ELECTRICAL L	EGEND

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
		×	FLOOD LIGHT
F	EXHAUST FAN	X	WALL MOUNTED LIGHT
		Ф	ELECTRICAL OUTLET
	CEILING FAN	$\bigoplus$	220V ELECTRICAL OUTLET
			CEILING MOUNTED OUTLET
		Ф	FLOOR MOUNTED OUTLET
		$\oplus$	HIDDEN OUTLET
	CEILING FAN W/ LIGHT		SWITCHED OUTLET
			BREAKER BOX
			PHONE
FL	EXHAUST FAN W/ LIGHT	SD	SMOKE DETECTOR
HLV	HEAT, LIGHT AND VENT	\$	SWITCH
X	LIGHT	\$	STACKED SWITCHES
	4' FLORESCENT LIGHT	3	THREE WAY
= = =		4	FOUR WAY
	2' X 4' FLORESCENT LIGHT	GFI	GROUND FAULT INTERRUPTER
		W.P.	WATERPROOF
	6" RECESSED CAN LIGHT		ELECTRICAL WIRE
<b>B</b>	3" RECESSED CAN LIGHT	C	CABLE TV
Ψ.	O RECEOUD ON RELIGITI		TRACK LIGHTING

architecture

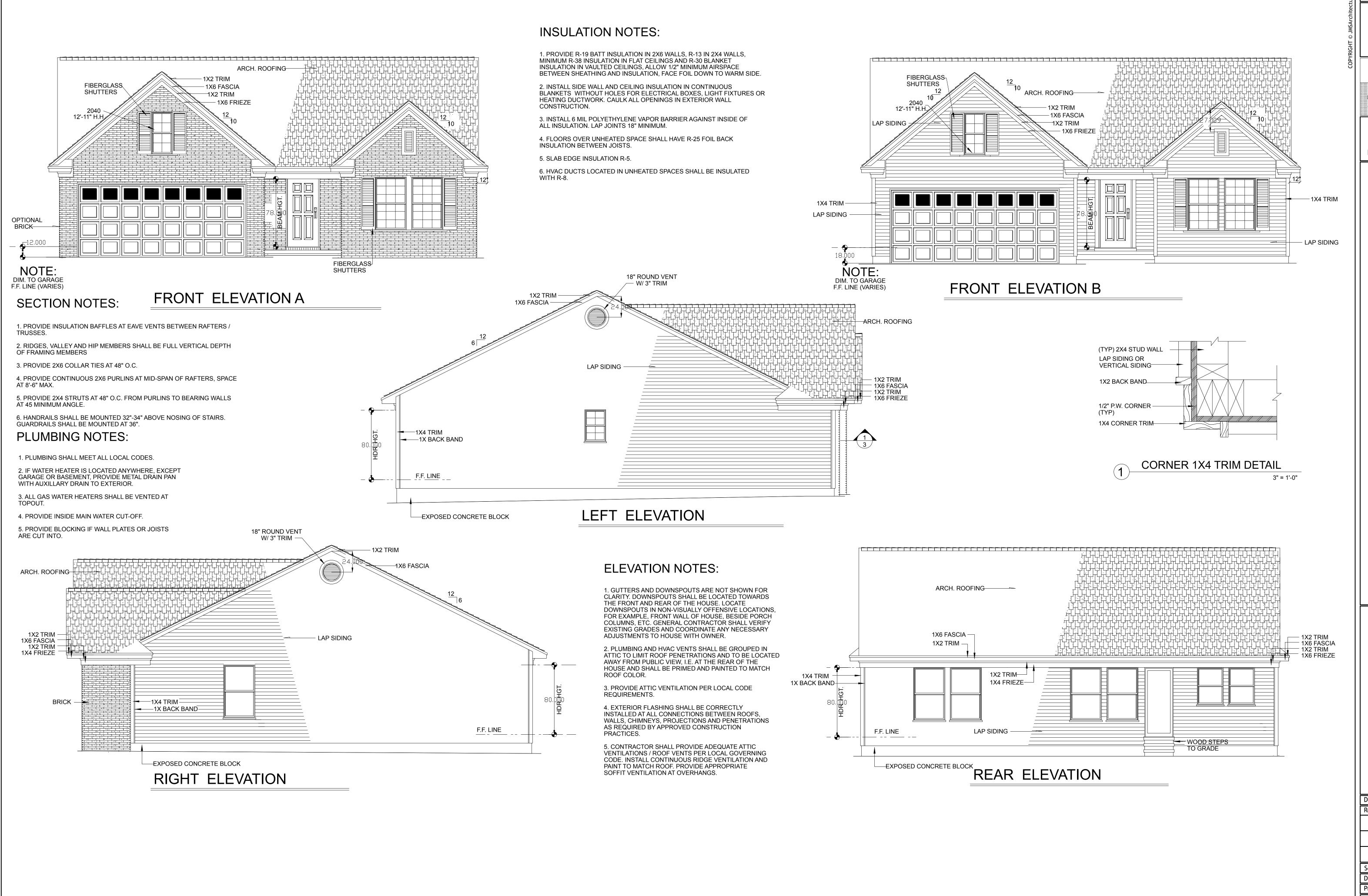
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3 Point Construction

ELEVATIONS R NOTES

Date: 03.28.23

Revisions:

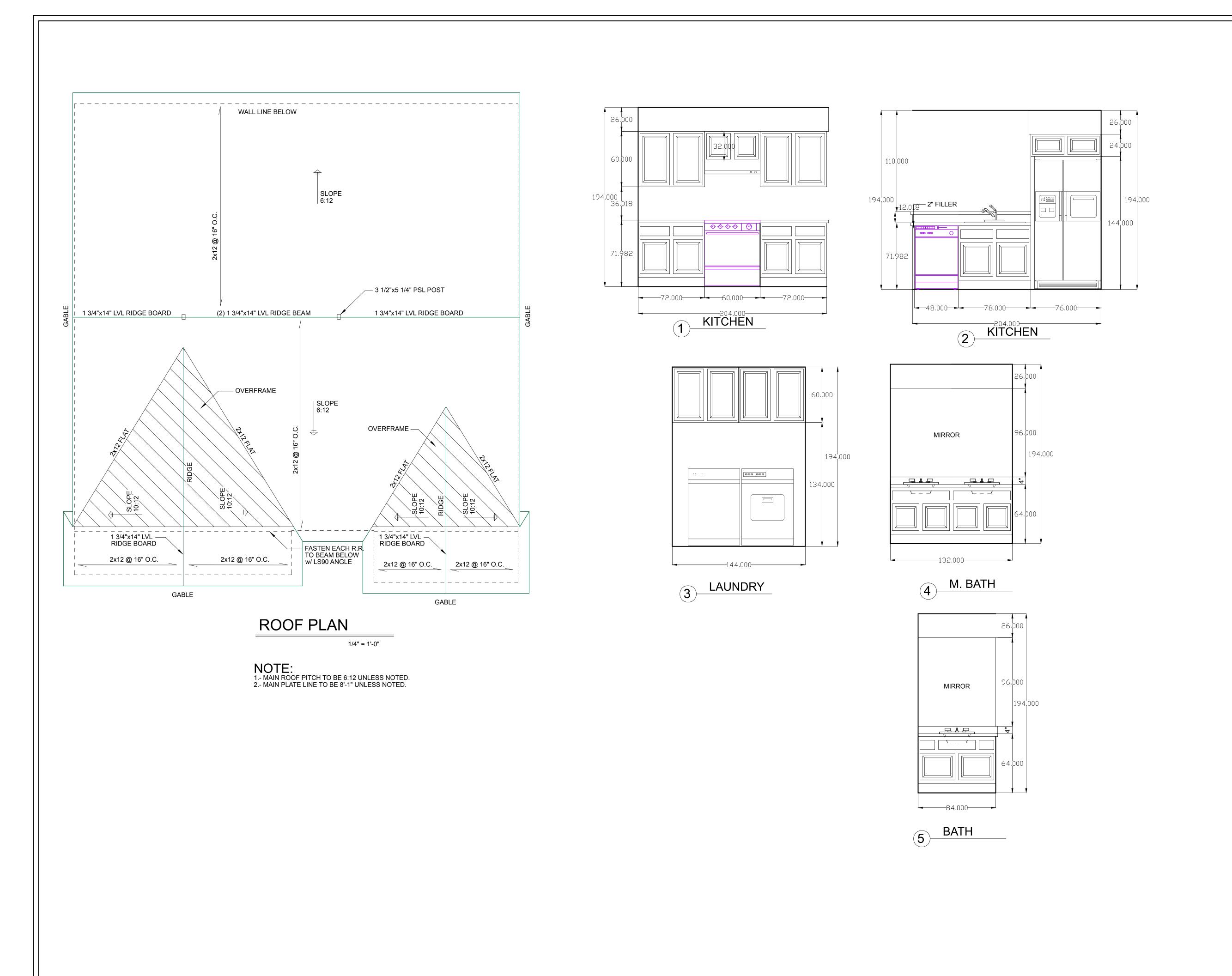
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ULC Old Churc Harleysvil

1t Construction LL 243 N Hellertown Ave, Quakertown, PA]

ROOF PLAN
INTERIOR ELEVATIONS
& FRAMING DETAILS

Date: 03.28.23

Revisions:

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

Drawn By: JMS

Project No.:

File Name: A-4.0 **A-4.0** 

- a. SHOP DRAWINGS FOR MATERIALS SHALL BE SUBMITTED TO THE ARCHITECT FOR REVIEW PRIOR TO THE START OF FABRICATION OR COMMENCEMENT OF WORK.
- b. NO PORTION OF THE STRUCTURAL CONTRACT DRAWINGS MAY BE REPRODUCED FOR SUBMITTAL AS SHOP DRAWINGS UNLESS AUTHORIZED BY INNOVATIVE STRUCTURAL ENGINEERS IN WRITING. VIOLATION OF THIS PROVISION WILL RESULT IN THE REJECTION OF THE SHOP DRAWINGS AND WILL BE RETURNED NOT REVIEWED BY THE STRUCTURAL ENGINEER.
- c. SHOP DRAWINGS SHALL BEAR THE GENERA CONTRACTOR'S STAMP OF APPROVAL, WHICH SHALI CONSTITUTE CERTIFICATION THAT HE HAS VERIFIED ALL FIELD MEASUREMENTS, CONSTRUCTION CRITERIA MATERIALS AND SIMILAR DATA AND HAS CHECKED EACH DRAWING FOR COMPLETENESS, COORDINATION, AND COMPLIANCE WITH THE CONTRACT DOCUMENTS. SHOP DRAWINGS NOT REVIEWED BY THE GENERAL CONTRACTOR PRIOR TO SUBMITTAL WILL BE REJECTED.
- d. CHANGES TO SHOP DRAWINGS THAT ARE RE-SUBMITTED MUST BE CLOUDED OR OTHERWISE CLEARLY INDICATE THE CHANGES THAT HAVE BEEN MADE TO A PREVIOUSLY ISSUED AND REVIEWED DRAWING
- e THE CONTRACTOR SHALL PROVIDE THE STRUCTURAL ENGINEER WITH WRITTEN NOTICE OF DEVIATIONS OF ANY TYPE FROM THE REQUIREMENTS OF THE CONSTRUCTION DOCUMENTS. THE NOTICE MUST BE RECEIVED PRIOR TO SHOP DRAWING SUBMITTAL THE CONTRACTOR REMAINS LIABLE FOR ANY DEVIATION UNLESS REVIEWED BY THE STRUCTURAL ENGINEER AND ACKNOWLEDGED IN WRITING, PRIOR TO RECEIPT OF THE SHOP DRAWINGS.
- f. SHOP DRAWINGS WILL BE RETURNED NOT LATER THAN 10 WORKING DAYS AFTER RECEIPT BY THE STRUCTURAL
- g. SHOP DRAWINGS SUBMITTED FOR STRUCTURAL REVIEW SHALL CONSIST OF TWO (2) SETS OF PRINTS AND ONE (1) SET OF REPRODUCIBLE. ONE (1) MARKED UP PRINT AND ONE MARKED UP REPRODUCIBLE WITH THE STRUCTURA ENGINEER'S COMMENTS WILL BE RETURNED TO THE CONTRACTOR. THIS REQUIREMENT APPLIES TO SHOP DRAWINGS FOR STRUCTURAL REVIEW ONLY AND IT SUPERCEDES ANY OTHER REQUIREMENTS INDICATED ON ANY OTHER DRAWINGS OR IN ANY SECTION OF THE SPECIFICATIONS.
- 1.2 THE STRUCTURAL DRAWINGS SHALL GOVERN THE WORK FOR STRUCTURAL FEATURES, UNLESS OTHERWISE NOTED. DISCREPANCIES BETWEEN THE ARCHITECTURAL AND STRUCTURAL DRAWINGS SHALL BE REPORTED TO THE ARCHITECT AND ENGINEER FOR REVIEW AND CLARIFICATION BEFORE PROCEEDING WITH RELATED WORK.
- IN CASE OF CONFLICT BETWEEN THE GENERAL NOTES, SPECIFICATIONS, AND DRAWINGS REGARDING STRUCTURAL ISSUES, THE MOST STRINGENT REQUIREMENTS SHALL
- 1.4 WORK NOT INDICATED ON A PART OF THE DRAWINGS, BU REASONABLY IMPLIED TO BE SIMILAR TO THAT SHOWN AT CORRESPONDING PLACES, SHALL BE REPEATED.
- 1.5 THE CONTRACTOR IS RESPONSIBLE FOR MEANS AND METHODS OF CONSTRUCTION AND CONSTRUCTION PROCEDURES, FABRICATION PROCESSES, COORDINATION OF WORK WITH OTHER TRADES AND JOB SITE SAFETY.
- THE CONTRACTOR SHALL INFORM THE ARCHITECT/ENGINEER OF ANY FABRICATION AND/OR ERECTION ERRORS OR DEVIATIONS. NO CORRECTIVE ACTION SHALL BE TAKEN WITHOUT THE ARCHITECT'S/ENGINEER'S APPROVAL.
- **FXISTING BUILDING INFORMATION SHOWN IS AS INDICATED** ON EXISTING BUILDING DRAWINGS AND FROM FIELD OBSERVATION. INFORMATION SHOWN MAY NOT NECESSARII Y REFLECT ACTUAL CONDITIONS. THI CONTRACTOR SHALL FIELD VERIFY EXISTING BUILDING INFORMATION SHOWN (DIMENSIONS, ELEVATIONS, ETC.) AND NOTIFY THE ARCHITECT OF ANY DISCREPANCIES PRIOR TO FABRICATION OF ANY STRUCTURAL COMPONENT. IF THE EXISTING FIELD CONDITIONS DO NOT PERMIT THE INSTALLATION OF THE WORK IN ACCORDANCE WITH THE DETAILS SHOWN. THE CONTRACTOR SHALL PROVIDE A SKETCH OF THE CONDITION WITH HIS PROPOSED MODIFICATION OF THE DETAILS GIVEN ON THE CONTRACT
- TEMPORARY BRACING, SHEETING, SHORING, ETC., REQUIRED TO ENSURE THE STRUCTURAL INTEGRITY/STABILITY OF THE EXISTING BUILDINGS, SIDEWALKS, UTILITIES, ETC., DURING CONSTRUCTION IS THE CONTRACTOR'S RESPONSIBILITY AND SHALL BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER EMPLOYED BY THE CONTRACTOR.
- 1.9 THE CONTRACTOR SHALL REFER TO ARCHITECTURAL MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS FOR SIZE AND LOCATIONS OF OPENINGS, SLEEVES, CONCRETE HOUSEKEEPING PADS, INSERTS AND DEPRESSIONS. ANY OPENINGS OUTSIDE THE PARAMETERS OF THOSE DETAILED AND ALLOWED BY CODE SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT & STRUCTURAL ENGINEER OF RECORD FOR REVIEW AND APPROVAL PRIOR TO IMPLEMENTATION.
- 1.10 ANY AND ALL PROPOSED SUBSTITUTIONS FOR MATERIALS OR ASSEMBLIES AS SPECIFIED WITHIN THESE NOTES AND/OR THE DRAWINGS AND DETAILS APPROVED FOR CONSTRUCTION SHALL BE REVIEWED AND APPROVED IN WRITING BY THE ARCHITECT & STRUCTURAL ENGINEER OF RECORD PRIOR TO ACQUIRING THE MATERIAL OR DELIVERY TO THE SITE.
- 1.11 ANY INCONSISTENCIES BETWEEN THE ARCHITECTURAL MECHANICAL, ELECTRICAL, AND/OR CIVIL DRAWINGS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ARCHITECT FOR RESOLUTION OR VERIFICATION. THE CONTRACTOR IS RESPONSIBLE FOR NOTIFYING THE ARCHITECT OF ANY INCONSISTENCIES BETWEEN THESE PLANS AND GOVERNING BUILDING CODES AND/OR ORDINANCES.
- 1.12 INFORMATION CONTAINED ON THE HARD COPY OF THIS DRAWING RETAINED BY INNOVATIVE STRUCTURAL ENGINEERS CONTROLS OVER VARIANCES OR CHANGES THAT MIGHT BE INTRODUCED DUE TO PLOTTING BY OTHERS VIA ELECTRONIC DOCUMENT TRANSFER.
- 1.13 THE DISTRIBUTION AND/OR USE OF THE ELECTRONIC FILES OF THE STRUCTURAL DRAWINGS IS STRICTLY PROHIBITED UNLESS WRITTEN AUTHORIZATION IS PROVIDED BY INNOVATIVE STRUCTURAL ENGINEERS.
- 1.14 THE STRUCTURAL CONSTRUCTION DOCUMENTS ARE INSTRUMENTS OF PROFESSIONAL SERVICES AND SHALL REMAIN THE PROPERTY OF INNOVATIVE STRUCTURAL ENGINEERS. THE DOCUMENTS ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY THE CLIENT OR OTHERS ON EXTENSIONS OF THIS PROJECT OR ON ANY OTHER PROJECT.

# 2.0 <u>DESIGN CRITERIA</u> \*\*\* MODIFY BELOW TO SUIT PROJECT \*\*\*

- DESIGN CODES
- a. IRC 2018 b. ANSI/ASCE-7 2016
- 2.2 LIVE LOADS: a. ROOF LIVE LOAD b. FLOORS 40 PSF

25 PSF

21 PSF

SNOW LOAD: GROUND SNOW LOAD (PG) b. FLAT-ROOF SNOW LOAD (PF) C EXPOSURE FACTOR (CE) d. THERMAL FACTOR (CT)

- e. SNOW IMPORTANCE FACTOR (IS) 1.0 f. ADDITIONAL DRIFT LOAD AT CONDITIONS PER ASCE-7
- WIND LOAD: a. BASIC WIND SPEED (3 SEC. GUST) b. WIND IMPORTANCE FACTOR (IW) c. WIND EXPOSURE CATEGORY d. INTERNAL PRESSURE COEFFICIENT +/- 0.18
- 2.5 SEISMIC LOAD: \*\*\*PHILADELPHIA DEFAULT\*\*\* a. SEISMIC OCCUPANCY CATEGORY b. SEISMIC IMPORTANCE FACTOR (IE) c. SPECTRAL RESPONSE ACCEL. – SHORT (SS) 0.2 d. SPECTRAL RESPONSE ACCEL. – 1 SEC.(S1) e. SITE CLASS (S) D (ASSUMED) . SPECTRAL RESPONSE COEFF. - SHORT (SDS) 0.213 g. SPECTRAL RESPONSE COEFF. – 1 SEC. (SD1) 0.096 h. SEISMIC DESIGN CATEGORY
- i. BASIC SEISMIC FORCE RESISITING SYSTEM: • MOMENT RESISTING FRAME, BUILDING FRAME SYSTEM, LOAD BEARING WALL SYSTEM SEISMIC-RESPONSE COEFFICIENT (CS) 0.048 k. RESPONSE MODIFICATION FACTOR (R) 3.5 I. ANALYSIS PROCEDURE: EQUIVALENT LATERAL
- 3.0 EARTHWORK AND FOUNDATIONS
- \*\*\* CHOOSE ONE OF THE FOLLOWING NOTES \*\*\* 3.1 EXCAVATION SHALL BE PERFORMED WITHIN OSHA GUIDELINES, SO AS NOT TO DISTURB EXISTING ADJACENT BUILDINGS, STREETS, AND UTILITY LINES. VERIFY LOCATION OF ALL UTILITIES PRIOR TO COMMENCEMENT OF WORK. HAND EXCAVATE AROUND UTILITIES, AS REQUIRED.
- 3.2 ENGINEERED (CONTROLLED COMPACTED) FILL WITHIN THE BUILDING FOOTPRINT SHALL BE CONSTRUCTED PRIOR TO FOOTING EXCAVATION.
- 3.3 SATISFACTORY FILL MATERILAS ARE THOSE COMPLYING WITH ASTM D2487, GROUPS GW, GP, GM, SM, SW, AND SP. ON SITE BORROW MATERIAL SHALL BE TESTED TO DETERMINE SUITABLILITY FOR USE AS FILL MATERIAL.
- 3.4 COMPACT SOIL TO NOT LESS THAN THE FOLLOWING PERCENTAGES OF MAXIMUM DENSITY OF MODIFIED PROCTOR (ASTM D1557): UNDER BUILDING FOUNDATIONS: 98%
- UNDER BUILDING SLABS, STEPS, PAVEMENT: 95% 3.5 FOUNDATIONS HAVE BEEN DESIGNED AND SHALL BE CONSTRUCTED IN ACCORDANCE WITH CRITERIA
- ESTABLISHED BY GEOTECHNICAL ENGINEERING COMPANY THEIR REPORT PREPARED FOR THIS PROJECT DATED REPORT DATE. THE CONTRACTOR SHALL BE THOROUGHLY FAMILIAR WITH THE REQUIREMENTS OF THIS REPORT. 3.6 NO SUBSURFACE INVESTIGATION REPORT HAS BEEN PROVIDED FOR THIS PROJECT. FOUNDATIONS HAVE BEEN
- DESIGNED IN ACCORDANCE WITH THE INFORMATION SHOWN ON EXISTING BUILDING DRAWINGS (IF APPLICABLE), SPREAD FOOTINGS HAVE BEEN DESIGNED FOR AN ASSUMED ALLOWABLE BEARING CAPACITY OF 2,000 PSF. CONCRETE SLABS ON GRADE HAVE BEEN DESIGNED TO BEAR ON PROPERLY COMPACTED SUBGRADE SOILS. PROVIDE 6" (MIN GRANULAR SUBBASE BENEATH SLABS ON GRADE, PENN DOT 2B OR #57 GRADING. THE ASSUMED AT REST LATERAL EARTH PRESSURE IS 55 PSF PER FOOT AND THE ASSUMED ACTIVE LATERAL EARTH PRESSUE IS 45 PSF PER FOOT
- ELEVATIONS SHOWN ON THE DRAWINGS AT WHICH FOUNDATIONS BEAR ARE APPROXIMATE. STEP-IN FOOTING LOCATIONS AND ELEVATIONS SHOWN ON THE DRAWINGS SHALL BE FIELD VERIFIED AND ADJUSTED AS REQUIRED SO FOUNDATIONS BEAR ON MATERIAL OF AT LEAST THE CAPACITY NOTED ABOVE. BOTTOM OF EXTERIOR FOOTINGS SHALL BE A MINIMUM OF 3'-0" BELOW FINISHED GRADE. IF CONDITIONS PROVE TO BE UNACCEPTABLE AT ELEVATIONS SHOWN, FOOTING BOTTOMS SHALL BE LOWERED TO ACCEPTABLE SUBGRADE MATERIAL AS DETERMINED BY THE GEOTECHNICAL ENGINEER. FILL OVER-EXCAVATION WITH LEAN CONCRETE (F'C = 2,500 PSI) OR PROPERLY COMPACTED
- 3.8 THE CONTRACTOR SHALL RETAIN THE SERVICES OF A PROFESSIONAL GEOTECHNICAL ENGINEER TO VERIFY THAT THE MATERIAL ON WHICH FOUNDATIONS BEAR HAS AT LEAST THE ABOVE NOTED CAPACITY.

**ENGINEERED FILL** 

- 3.9 CONCRETE SLABS ON GRADE HAVE BEEN DESIGNED TO BEAR ON PROPERLY COMPACTED SUBGRADE SOILS CAPABLE OF SUPPORTING 500 PSF. DRAINAGE FILL UNDER SLABS SHALL BE COMPACTED SAND AND GRAVEL OR CRUSHED STONE.
- 3.10 DIVIDE FLOOR SLABS ON GRADE INTO SEGMENTS BY MEANS OF CONTRACTION AND CONSTRUCTION JOINTS AS INDICATED ON THE DRAWINGS. POSITION OF JOINTS OTHER THAN THOSE SHOWN ON THE DRAWINGS SHALL BE SUBMITTED TO THE ARCHITECT FOR APPROVAL.
- 3.11 NO BACKFILLING AGAINST WALLS SHALL BE DONE UNTIL THE BASEMENT SLAB ON GRADE AND THE FIRST FLOOR FRAMING AND SHEATHING ARE IN PLACE OR TEMPORARY SHORING HAS BEEN INSTALLED TO BRACE THE WALL. WALLS HAVING BACKFILL AGAINST BOTH SIDES SHALL HAVE THE BACKFILL PLACED ON BOTH SIDES WITH A MAXIMUM DIFFERENTIAL HEIGHT OF 8 INCHES.
- 3.12 COORDINATE FOUNDATION DRAIN LOCATIONS WITH ARCHITECTURAL, MECHANICAL AND/OR CIVIL DRAWINGS.
- 3.13 COORDINATE SITE RETAINING WALL DRAIN LOCATIONS WITH ARCHITECTURAL, MECHANICAL AND/OR CIVIL DRAWINGS OR PLACE 4" WEEP HOLES AT 10 FT. O.C."
- 3.14 COLD WEATHER PROTECTION: PROTECT BOTTOM OF EXCAVATIONS AGAINST FREEZING WHEN ATMOSPHERIC TEMPERATURE IS LESS THAN 35°F. COMPLY WITH THE REQUIREMENTS OF THE LATEST EDITION OF ACI 306R AND IN PARTICULAR, CHAPTER 4, PREPARATION BEFORE PLACING

# 4.0 REINFORCED CONCRETE

- 4.1 REINFORCED CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" AND "GUIDE TO SHOTCRETE" (ACI 318, AND 506 LATEST EDITION) AND THE SPECIFICATIONS FOR STRUCTURAL CONCRETE (ACI 301, LATEST EDITION) OF THE AMERICAN CONCRETE INSTITUTE.
- 4.2 CAST-IN-PLACE CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH (F'C) AS FOLLOWS. THE STRENGTH REQUIREMENTS PERTAIN TO BOTH CAST IN PLACE CONCRETE
- AND WET MIX SHOTCRETE. a. FOOTINGS b. UNDERPINNING 5000 PSI c. PILE CAPS 3000 PSI d. LEAN CONCRETE FILL 2500 PSI e. PIERS 3000 PSI f. GRADE BEAMS 3000 PSI a. WALLS 4000 PSI h. SLABS-ON-GRADE 3000 PSI i. SLABS-ON-METAL DECK 4000 PSI REINFORCED SLABS 4000 PSI k. REINFORCED BEAMS 4000 PSI I. COLUMNS 4000 PSI
- 4.3 CAST IN PLACE CONCRETE SHALL HAVE A MINIMUM 7-DAY COMPRESSIVE STRENGTH (F'C) OF 2250 PSI PRIOR TO APPLICATION OF CONSTRUCTION LOADS. BACKFILLING SHALL NOT OCCUR UNTIL THE COMPRESSIVE STRENGTH ACHIEVES

5000 PSI

- 4.4 AIR ENTRAINMENT: 6% (+/-1.5%) IN ALL CONCRETE EXPOSED TO FREEZE/THAW.
- 4.5 SLUMP: 3" (+/- ½")

m. TOPPING SLABS

4.6 CONCRETE SHALL BE NORMAL WEIGHT CONCRETE (144 PCF) WITH CEMENT CONFORMING TO ASTM C150, TYPE L FLY ASH SLAG, OR OTHER POZZOLANS SHALL NOT CONSTITUTE MORE

- THAN 25% OF THE TOTAL CEMENTITIOUS WEIGHT AGGREGATE SHALL CONFORM TO ASTM C33. WATER SHALL CONFORM TO ASTM C1602 AND THE MAXIMUM WATER TO CEMENT RATIO SHALL BE 0.45.
- 4.7 ADMIXTURES CONTAINING CALCIUM CHLORIDE SHALL NOT BE USED IN THE CONCRETE MIX DESIGN. ADMIXTURES SHALL BE USED AND MISED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS
- 4.8 PRIOR TO CONCRETE PLACEMENT, THE CONTRACTOR SHALL SUBMIT TO THE ARCHITECT FOR REVIEW, A CONCRETE MIX DESIGN FOR EACH TYPE OF CONCRETE, PREPARED IN
- 4.9 REINFORCEMENT: a. DEFORMED BARS: ASTM A615, GRADE 60. b. WELDED WIRE FABRIC: ASTM A185
- 4.10 REINFORCEMENT SHALL BE DETAILED, FABRICATED, AND PLACED IN ACCORDANCE WITH THE A.C.I. "DETAILING MANUAL NO. SP-66", LATEST EDITION.
- 4.11 REINFORCEMENT SHALL BE SECURELY HELD IN PLACE WHILE PLACING CONCRETE. IF REQUIRED, ADDITIONAL BARS, STIRRUPS, OR CHAIRS SHALL BE PROVIDED BY THE CONTRACTOR TO FURNISH SUPPORT FOR BARS.
- 4.12 REINFORCING BARS SHALL HAVE THE FOLLOWING MINIMUM CONCRETE COVER: a. CAST AGAINST EARTH h EXPOSED TO EARTH OR WEATHER (NO. 5 OR SMALLER): (NO. 6 OR LARGER): c. CONCRETE NOT EXPOSED TO WEATHER SLABS, WALLS, JOISTS: • BEAMS AND COLUMNS:
- 4.13 REINFORCING BAR SPLICES SHALL BE CLASS 'B' TENSION LAP PER ACI 318 U.N.O. LAP WELDED WIRE FABRIC TWO FULL MESH LENGTHS AT SPLICES AND WIRE TIE TOGETHER.
- 4.14 WELDED WIRE FABRIC SHALL BE PLACED 2" FROM THE TOP OF SLABS OR WITHIN THE UPPER THIRD OF THE SLAB THICKNESS, WHICHEVER IS CLOSEST TO THE SURFACE,
- 4.15 LEVELING GROUT SHALL BE NON-SHRINK, NON-METALLIC. FACTORY PRE-MIXED GROUT IN ACCORDANCE WITH ASTM C109, WITH F'C OF NOT LESS THAN 5000 PSI.
- 4.16 ANCHOR RODS SHALL BE ASTM F1554, GRADE 36, U.N.O.
- 4.17 CONTRACTOR SHALL VERIFY DIMENSIONS AND LOCATIONS OF SLOTS, PIPE SLEEVES, ETC., AS REQUIRED FOR MECHANICAL RADES BEFORE CONCRETE IS PLACED.
- a. PLACEMENT OF ALL PIPES, PASSAGES AND VOIDS SHALL NOT INTERRUPT REQUIRED VERTICAL OR HORIZONTAL REINFORCING STEEL TO BE PLACED.
- b. IF STEEL MUST BE RELOCATED TO PERMIT PASSAGE @ A SPECIFIC LOCATION CONSULT THE ARCHITECT & STRUCTURAL ENGINEER OF RECORD PRIOR TO FINAL PREPARATIONS FOR THE CONCRETE PLACEMENT FOR ADDITIONAL INSTRUCTIONS.
- 4.18 COLD WEATHER PROTECTION: A PERIOD WHEN FOR MORE THAN THREE SUCCESSIVE DAYS, THE AVERAGE DAILY AIR TEMPERATURE DROPS BELOW 40 DEGREES FAHRENHEIT AND STAYS BELOW 50 DEGREES FAHRENHEIT FOR MORE THAN ONE-HALF OF ANY 24 HOUR PERIOD. IF EXCAVATION OR CONCRETE PLACEMENT OCCURS DURING THIS PERIOD. THE CONTRACTOR SHALL STRICTLY ADHERE TO THE GUIDELINES EXPRESSED IN ACI 306 - LATEST EDITION.
- 4.19 HOT WEATHER CONCRETING SHALL BE IN ACCORDANCE WITH
- 4.20 BONDING AGENT SHALL BE USED WHERE NEW CONCRETE IS PLACED AGAINST EXISTING CONCRETE.
- 4.21 EPOXY ADHESIVE SHALL BE USED WHERE DOWELS ARE TO BE INSTALLED INTO EXISTING CONCRETE. HILTI HIT-HY 200 IS THE BASIS OF DESIGN EPOXY ADHESIVE FOR CONCRETE APPLICATIONS. THE CONTRACTOR SHALL TAKE MEASURES TO AVOID DRILLING OR CUTTING ANY EXISTING REINFORCEMENT WHEN INSTALLING POST INSTALLED ANCHORS. HOLES SHALL BE BLOWN CLEAN PRIOR TO INSTALLING POST INSTALLED ANCHORS OR EPOXY. FOLLOW ALL MANUFACTURER'S GUIDELINES AND RECOMMENDATIONS WHILE INSTALLING POST INSTALLED ANCHORS.
- 4.22 FOR CAST IN PLACE CONCRETE, CAST SIX (6) TEST CYLINDERS FOR EACH DAY'S POUR OR EACH 50 CUBIC YARDS OF CONCRETE PLACED, WHICHEVER RESULTS IN MORE TEST CYLINDERS, IN ACCORDANCE WITH ASTM C31. FOR WET MIX SHOTCRETE, SHOOT ONE (1) 24 INCH X 24 INCH X 5 INCH THICK TEST PANEL FOR EACH 50 CUBIC YARDS OF SHOTCRETE PLACED. SHOOT ONE (1) ADDITIONAL TEST PANEL FOR EACH NOZZLEMAN. THE PANELS AND TESTING SHOULD BE IN ACCORDANCE WITH ASTM C1140.
- 4.23 FOR CAST IN PLACE CONCRETE TEST TWO LAB-CURED TEST CYLINDERS FOR COMPRESSIVE STRENGTH AT THREE DAYS SEVEN DAYS AND 28 DAYS IN ACCORDANCE WITH ASTM C39. FOR WET MIX SHOTCRETE. TEST TWO THREE (3) INCH MINIMUM DIAMETER CORES FOR COMPRESSIVE STRENGTH AT THREE (3), SEVEN (7), AND TWENTY-EIGHT (28) DAYS IN ACCORDANCE WITH ASTM C1604.

### 5.0 UNDERPINNING NOTES

- 5.1 UNDERPINNING OF EXISTING FOUNDATION WALLS IS REQUIRED. THE EXTENT OF UNDERPINNING IS SHOWN ON FOUNDATION PLAN AND REFERENCED ELEVATIONS. CONTRACTOR SHALL EXPOSE AND CONFIRM ALL EXISTING FOUNDATION CONDITIONS AND INFORM ARCHITECT AND ENGINEER IF CONDITIONS VARY WITH THOSE SHOWN ON THE
- \*\*\*PICK ONE OF THE FOLLOWING WIDTHS:\*\*\*
- 5.2 THE WIDTH OF UNDERPINNING SECTIONS ARE LIMITED TO INGS IN ORDER TO MAINTAIN INTEGRITY OF EXISTING CONSTRUCTION. BOTTOM OF UNDERPINNING IS NOTED IN SECTIONS. EXCAVATE AND INSTALL UNDERPINNING IN CONFORMANCE WITH THE LOCAL CODES AND OTHER APPLICABLE REGULATIONS.
- 5.3 UNDERPINNING SECTIONS ARE TO BE INSTALLED BY THE "APPROACH PIT" METHOD, WITH AN ALTERNATE SEQUENCED PROCEDURE THAT PERMITS UNIFORM TRANSFER OF WALL LOADS TO NEW BEARING ELEVATIONS.
- 5.4 CONTRACTOR SHALL ENSURE STABILITY AND BEARING OF EXISTING FOUNDATION DURING UNDERPINNING, DO NOT UNDERMINE THE EXISTING FOUNDATION, ALL APPROACH PITS TO BEGIN AT LEAST AT A ONE HORIZONTAL TO ONE VERTICAL SLOPE FROM THE BEARING LEVEL OF THE EXISTING FOUNDATION.
- 5.5 APPROACH PITS MAY NEED TO BE LAGGED AND BRACED. DEPENDING ON THE STABILITY OF THE SOIL. TIMBER LAGGING OF PITS THAT WILL REMAIN IN PLACE FOLLOWING COMPLETION OF UNDERPINNING SHALL BE PRESSURE-TREATED.
- 5.6 THE CONTRACTOR SHALL RETAIN THE SERVICES OF A GEOTECHNICAL ENGINEER TO VERIFY THE BEARING VALUE AT THE BOTTOM OF EACH SECTION OF UNDERPINNING. UNDERPINNING SHALL BEAR ON UNDISTURBED STRATUM WITH A MINIMUM BEARING CAPACITY OF 3000 PSF.
- 5.7 STEEL WEDGE DRIVING AND DRY PACKING OF NEWLY CONCRETED UNDERPINNING SECTIONS SHALL BE DONE AFTER 24 HOURS HAVE ELAPSED FOLLOWING PLACEMENT OF CONCRETE. DRY PACK UNDERSIDE OF EXISTING FOUNDATION WITH NON-SHRINK, NON-METALLIC GROUT WITH F'C = 5000 PSI.

- 5.8 BRACING, LAGGING, ETC. REQUIRED TO INSURE THE STRUCTURAL INTEGRITY/STABILITY OF THE EXISTING BUILDINGS SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF THE PROJECT LOCATION AND ENGAGED BY THE CONTRACTOR.
- 5.9 CONCRETE FOR UNDERPINNING SHALL ATTAIN 4000 PSI MINIMUM IN 72 HOURS. USE TYPE III CEMENT TO PERMIT DRY PACKING (LOAD TRANSFER) IN 24 HOURS TYPE LOEMENT MAY BE USED PROVIDED THAT INCREASED CEMENT FACTOR IS EMPLOYED TO PRODUCE EQUIVALENT STRENGTH GIVEN. CONCRETE SHALL OBTAIN AT LEAST 75% OF ITS DESIGN. STRENGTH PRIOR TO EXCAVATING ADJACENT PITS.
- 5.10 CONTRACTOR SHALL DEVELOP AND SUBMIT A PROPOSED SCHEDULE OF UNDERPINNING SEQUENCE FOR REVIEW BY THE ARCHITECT AND ENGINEER. COMPLETE RECORDS OF ALL UNDERPINNING PROCEDURES WILL BE MADE BY THE CONTRACTOR ON A DAILY BASIS.
- 5.11 THE CONTRACTOR SHALL ENGAGE A TESTING AGENCY TO MONITOR ALL UNDERPINNING CONCRETE PLACEMENT FOR CONFORMANCE WITH APPLICABLE ACI REQUIREMENTS.
- 6.1 MASONRY WORK SHALL BE IN CONFORMANCE WITH THE LATEST EDITION OF THE "BUILDING CODE FOR MASONRY STRUCTURES" (ACI 530) AND THE "SPECIFICATIONS FOR MASONRY STRUCTURES" (ACI 530.1) OF THE AMERICAN CONCRETE INSTITUTE.
- 6.2 MORTAR FOR STRUCTURAL MASONRY SHALL CONFORM TO ASTM C270 MATERIALS INCLUDE: PORTLAND CEMENT - ASTM C150. TYPE I. LIME - ASTM C207. TYPE S MORTAR SHALL BE USED FOR MASONRY. TYPE M MORTAR SHALL BE USED FOR IVANY BLOCK. TYPE N MORTAR SHALL BE USED FOR
- 6.3 GROUT SHALL CONFORM TO ASTM C476 AND HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI. U.N.O. SLUMP SHALL BE 8 TO 10 INCHES. MAXIMUM AGGREGATE SIZE SHALL BE
- 6.4 CONCRETE MASONRY UNITS: HOLLOW BLOCK SHAL CONFORM TO ASTM C90, TYPE 1, HAVING A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 1,900 PSI ON THE NET AREA (UNIT STRENGTH). SOLID BLOCKS SHALL CONFORM TO ASTM C145. MINIMUM 28 DAY COMPRESSIVE STRENGTH OF MASONRY (F'M) SHALL BE 1,500 PSI. U.N.O.
- 6.5 IVANY (OPEN END BLOCK) UNITS SHALL CONFORM TO ASTM C90. TYPE 1. HAVING A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3,000 PSI ON THE NET AREA (UNIT STRENGTH) MINIMUM 28 DAY COMPRESSIVE STRENGTH OF MASONRY (F'M) USING IVANY UNITS SHALL BE 2,800 PSI.
- 6.6 DEFORMED BAR REINFORCEMENT SHALL CONFORM TO ASTM A615, GRADE 60, PROVIDE LAP SPLICES OF 48 BAR DIAMETERS MINIMUM, U.N.O. PROVIDE BAR SPACERS AS REQUIRED TO PROPERLY LOCATE REINFORCING WITHIN CMU
- 6.7 HORIZONTAL JOINT REINFORCING FOR VERTICALLY REINFORCED WALLS SHALL BE GALVANIZED, STANDARD CLASS, LADUR TYPE DUR-O-WAL (OR EQUAL), CONFORMING TO ASTM A82 AND ASTM A951, SPACED AT 16" O.C. U.N.O. SIDE RODS SHALL BE NO. 9 WITH NO. 9 CROSS RODS U.N.O. LADDER TYPE OR TRUSS TYPE MAY BE USED FOR WALLS WITHOUT VERTICAL REINFORCING. PROVIDE ONE-PIECE PREFABRICATED UNITS AT 8" O.C. AT ALL WALL CORNERS ANI INTERSECTIONS. PROVIDE ADDITIONAL JOINT REINFORCING IN THE FIRST TWO COURSES ABOVE AND BELOW MASONRY OPENINGS. EXTEND AT LEAST 2'-0" BEYOND EACH SIDE OF THE OPENING. PROVIDE LAP AS RECOMMENDED BY THE MANUFACTURER WITH A MINIMUM OF 6". DISCONTINUE REINFORCING AT CONTROL JOINTS.
- 6.8 PROVIDE FULL BED AND HEAD JOINTS.
- 6.9 GROUT CELLS OF CMU SOLID FOR MASONRY BELOW GRADE, CMU LINTELS. BOND BEAMS. CELLS WITH VERTICAL REINFORCEMENT AND AT LEAST TWO COURSES, 24" WIDE BELOW BEAM BEARING PLATES.
- 6.10 GROUT PLACEMENT SHALL NOT BEGIN UNTIL THE PLACEMENT OF REINFORCING HAS BEEN INSPECTED.
- 6.11 ALLOW GROUT IN REINFORCED CMU WALLS TO CURE A MINIMUM OF FORTY-EIGHT (48) HOURS BEFORE IMPOSING CONCENTRATED OR OTHER LOADS FROM ABOVE.

6.12 CONTROL JOINTS IN MASONRY WALLS SHALL BE PROVIDED

- WHERE AS INDICATED ON THE ARCHITECTURAL DRAWINGS. OR A MAXIMUM OF 28'-0" O.C. 6.13 MASONRY WALLS SHALL BE SECURELY BRACED UNTIL FLOOR
- AND/OR ROOF SYSTEMS HAVE BEEN INSTALLED AND ARE CAPABLE OF STABILIZING THE WALLS. 6.14 BRICK VENEER ANCHORS SHALL BE SPACED NOT MORE THAN 16" O.C. VERTICALLY AND 24" O.C. HORIZONTALLY. PROVIDE
- ADDITIONAL ANCHORS AT 8" O.C. AROUND OPENINGS. 6.15 ANCHOR RODS SHALL BE ASTM F1554, GRADE 36, U.N.O.
- 6.16 RELIEF ANGLES SHALL BE INSTALLED IN BRICK VENEER THAT IS STACKED GREATER THAN THIRTY (30) FEET HIGH ABOVE TOP OF FOUNDATION WALL. SEE DETAILS ON DRAWINGS FOR MORE INFORMATION OR CONTACT ENGINEER FOR DETAIL.

### 7.0 STRUCTURAL STEEL

- STRUCTURAL STEEL WORK SHALL BE IN ACCORDANCE WITH THE AISC "SPECIFICATIONS FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS" (ASD - THIRTEENTH EDITION) AND THE "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES" EXCEPT SECTION 4.2 OF THE CODE WHICH SHALL NOT BE APPLICABLE TO THIS PROJECT.
- 7.2 STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING a. WIDE FLANGE SHAPES AND WT SHAPES: ASTM A992 WITH A MINIMUM YIELD STRENGTH OF 50,000 PSI.
- b. CHANNELS, ANGLES, PLATES AND MISCELLANEOUS CONNECTION MATERIAL: ASTM A36 WITH A MINIMUM YIELD STRENGTH OF 36,000 PSI, U.N.O.
- c. PIPES: ASTM A53, TYPES E OR S, WITH MINIMUM YIELD STRENGTH OF 35,000 PSI. d. STEEL TUBING: ASTM A500, GRADE B, WITH A MINIMUM
- 7.3 BOLTS SHALL BE 3/4" DIAMETER ASTM A325 H.S. U.N.O. CONNECTIONS SHALL BE TYPE N FOR FRAMED CONNECTIONS AND TYPE SC CLASS A FOR WIND MOMENT, BRACING AND

YIELD STRENGTH OF 46,000 PSI.

STEEL CONNECTIONS.

- 7.4 ANCHOR RODS SHALL BE ASTM F1554, GRADE 36, U.N.O.
- 7.5 UNLESS ALTERNATE CONNECTIONS ARE APPROVED BY THE STRUCTURAL ENGINEER, BOLTED CONNECTIONS SHALL BE MADE ACCORDING TO AISC TABLE 10-1 OR 10-2 FRAMED BEAM CONNECTIONS. THE MINIMUM DEPTH OF THE CONNECTION MUST BE MORE THAN 67% OF THE BEAM DEPTH EXCEPT THAT BEAMS FRAMING TO COLUMNS SHALL HAVE FULL DEPTH CONNECTIONS USING MINIMUM 5/16" DOUBLE ANGLE CONNECTIONS; MINIMUM 5/16" SINGLE CONNECTION PLATES MAY BE USED AT WIND MOMENT CONNECTIONS AT HSS COLUMNS AND SKEWED CONNECTIONS, U.N.O. NON-COMPOSITE BEAM CONNECTIONS SHALL BE DESIGNED FOR LOADS INDICATED ON THE DRAWINGS. OR A MINIMUM OF ONE HALF THE UNIFORM LOAD CAPACITY OF THE BEAM AS INDICATED IN THE AISC MANUAL 13<sup>TH</sup> EDITION, ALLOWABLE LOADS ON BEAMS TABLES P. 3-33 THRU 3-95. THE STEEL FABRICATOR IS RESPONSIBLE FOR THE CONNECTION DESIGN UTILIZING THE ABOVE CRITERIA. FABRICATOR'S RESPONSIBILITIES INCLUDE USING A REGISTERED PROFESSIONAL ENGINEER TO DESIGN THE STRUCTURAL-

#### \*\*\* DELETE BELOW IF NO COMPOSITE BEAMS \*\*\*

7.6 WELDING SHALL BE PERFORMED BY CERTIFIED WLDERS AND IN ACCORDANCE WITH THE "STRUCTURAL WELDING CODE ANSI/AWS D1.1". AMERICAN WELDING SOCIETY, LATEST EDITION. USE E70XX ELECTRODES

SMOOTH, AND COATED WITH APPROPRIATE PRIMER/PAINT AS

- 7.7 EXISTING STEEL SHALL BE THOROUGHLY CLEANED PRIOR TO FIELD WELDING AND/OR PAINTING WITH SPECIFIED COATINGS. 7.8 FIELD WELDED SURFACES SHALL BE CLEANED, GROUND
- 7.9 HEADED SHEAR STUDS CONNECTORS SHALL CONFORM TO ASTM A108, GRADE 1015 OR 1020, COLD FINISHED CARBON
- 7.10 ALL INTERIOR STEEL SHALL BE PAINTED WITH RUST INHIBITIVE PRIMER.
- 7.11 STEEL EXPOSED TO THE EXTERIOR SHALL BE HOT DIPPED GALVANIZED ACCORDING TO ASTM A-123. WHEN GALVANIZED STEEL IS FIELD WELDED PROVIDE APPROPRIATE VENTILATION MEASURES. WELDED SURFACES SHALL BE GROUND SMOOTH AND COATED WITH GALVANIZING REPAIR PAINT. GALVANIZING REPAIR PAINT SHALL BE A HIGH ZINC DUST CONTENT PAINT COMPLYING WITH MILITARY SPECIFICATIONS MIL-P-21035 (SHIPS) OR SSPC-PAINT-20.
- 7.12 DO NOT PAINT STEEL WHERE ENCASED WITH CONCRETE, TO RECEIVE SPRAY-ON FIREPROOFING, AT FIELD WELD AREAS, AT THE TOP FLANGE OF COMPOSITE BEAMS OR AT S.C. BOLT
- 7.13 STRUCTURAL STEEL FABRICATOR SHALL PROVIDE FOR VERTICAL AND HORIZONTAL FIELD ADJUSTMENT OF SUPPORT
- 7.14 THE STRUCTURAL STEEL FABRICATOR, AND/OR GENERAL CONTRACTOR, SHALL VERIFY EXISTING DIMENSIONS AND CONDITIONS AT THE SITE. ANY DISCREPANCY FOUND SHALL E REPORTED TO THE ARCHITECT PRIOR TO PREPARATION OF SHOP DRAWINGS. SHOP DRAWINGS SHALL INCLUDE FIELD
- 7.15 CUTS, HOLES, COPING, ETC. REQUIRED FOR OTHER TRADES SHALL BE SHOWN ON THE SHOP DRAWINGS AND MADE IN THE SHOP. CUTS OR BURNING OF HOLES IN THE FIELD WILL NOT
- a. CUTS, BURNING OF HOLES IN THE FIELD & OTHER DEVIATIONS OR MODIFICATIONS FROM ALL APPROVED CONDITIONS REPRESENTED ON THE FINAL APPROVED SHOP DRAWINGS SHALL NOT BE PERMITTED: UNLESS SPECIFICALLY ALLOWED IN WRITING BY THE ARCHITECT OWNER & STRUCTURAL ENGINEER OF RECORD.
- b. ADDITIONAL TESTING SHALL BE REQUIRED TO VERIFY JOINTS, FULL PENETRATION WELDS, ETC, ARE FULLY EXECUTED AND MEET ALL REQUIRED LOAD BEARING CHARACTERISTICS.
- c. ANY TESTS REQUIRED SHALL BE EXECUTED PRIOR TO THE MEMBERS BEING OBSCURED BY ADDITIONAL MATERIAL, ASSEMBLIES OR FURTHER CONSTRUCTION.
- 7.16 THE CONTRACTOR SHALL PROVIDE SIX (6) INCH MINIMUM BEARING AT ENDS OF STEEL BEAMS ON CONCRETE OR CMU WALLS, UNLESS NOTED OTHERWISE. STEEL BEAMS SHALL BE PREVENTED FROM ROTATING OR SLIDING BY GROUTING THE

8.1 METAL DECK SHALL BE DESIGNED, DETAILED AND INSTALLED

IN ACCORDANCE WITH THE "DESIGN MANUAL FOR FLOOR

#### DECKS AND ROOF DECKS" OF THE STEEL DECK INSTITUTE, LATEST EDITION.

ADJACENT FASTENER PATTERNS.

- \*\*\* MODIFY BELOW FOR TYPES OF DECK REQUIRED \*\*\* 8.2 COMPOSITE FLOOR DECK SHALL BE IN CONFORMANCE WITH THE. "SPECIFICATIONS FOR COMPOSITE STEEL FLOOR DECK"
- OF THE STEEL DECK INSTITUTE, LATEST EDITION. 8.3 ROOF DECK SHALL BE FASTENED TO THE SUPPORTING STEEL AT THE ENDS OF THE UNITS AND AT ALL INTERMEDIATE SUPPORTS WITH POWDER ACTUATED FASTENERS AT 12" O.C. IN A 36/4 PATTERN. DECK SIDE LAPS SHALL BE CONNECTED WITH #10 TEK SCREWS AT QUARTER POINTS BETWEEN THE SUPPORTS. FASTEN PERIMETER EDGES OF DECK PANELS WITH POWDER ACTUATED FASTENERS AT 12" O.C. ANY SPLIT OR PARTIAL PANELS SHALL BE FASTENED TO THE SUPPORTING STRUCTURE IN EVERY VALLEY REGARDLESS OF
- 8.4 NON-COMPOSITE FLOOR DECK SHALL BE FASTENED TO THE SUPPORTING STEEL AT THE ENDS OF THE UNITS AND AT ALL INTERMEDIATE SUPPORTS WITH POWDER ACTUATED FASTENERS IN A 30/4 PATTERN. DECK SIDE LAPS SHALL BE CONNECTED WITH #10 TEK SCREWS AT THE MIDPOINT BETWEEN SUPPORTS. FASTEN PERIMETER EDGES OF DECK PANELS WITH POWDER ACTUATED FASTENERS AT 12" O.C. ANY SPLIT OR PARTIAL PANELS SHALL BE FASTENED TO THE SUPPORTING STRUCTURE IN EVERY VALLEY REGARDLESS OF
- ADJACENT FASTENER PATTERNS. 8.5 COMPOSITE STEEL FLOOR DECK SHALL BE FASTENED TO SUPPORTING STEEL FLEMENTS WITH POWDER ACTUATED FASTENERS IN A 36/4 PATTERN WHERE NO SHEAR STUDS ARE USED FASTEN SIDE LAPS AND PERIMETER EDGES OF PANELS BETWEEN SUPPORTS USING #10 TEK SCREWS AT
- INTERVALS NOT EXCEEDING THE LESSER OF 1/2 OF THE SPAN OR 12 INCHES. 8.6 VERIFY ACTUAL BASE MATERIAL THICKNESS ON-SITE PRIOR TO PURCHASING ON INSTALLING POWDER ACTUATED FASTENERS. CONSULT MANUFACTURER FOR CORRECT

FASTENER FOR CORRESPONDING BASE MATERIAL

- THICKNESS. 8.7 DECK INSTALLER MAY SUBSTITUTE ALTERNATE MEANS OF WELDING IN LIEU OF MECHANICAL FASTENING IF CONNECTION
- AND DIAPHRAGM CAPACITY IS MAINTAINED. 8.8 DECK UNITS SHALL BE A MINIMUM OF THREE (3) SPANS CONTINUOUS, IF POSSIBLE. ENDS OF ADJACENT DECK UNITS SHALL MEET, EITHER LAPPED OR BUTTED AS APPROPRIATE,
- 8.9 METAL DECK SUPPLIER SHALL PROVIDE LIGHT GAGE METAL CONCRETE POUR STOPS, DECK CLOSURE PIECES AND SHALL REINFORCE OR SUPPORT DECK AT OPENINGS AND COLUMN AREAS AS REQUIRED, IN ACCORDANCE WITH THE STEEL DECK INSTITUTE.

## 9.0 STRUCTURAL WOOD

9.1 DESIGN, FABRICATION AND CONSTRUCTION OF WOOD

FRAMING SHALL CONFORM WITH:

- a. "TIMBER CONSTRUCTION MANUAL", LATEST EDITION, AS ADOPTED BY THE AMERICAN INSTITUTE OF TIMBER CONSTRUCTION (AITC), INCLUDING THE "CODE OF STANDARD PRACTICE". AITC 106. b. "NATIONAL DESIGN SPECIFICATIONS FOR WOOD
- CONSTRUCTION" (NDS), LATEST EDITION. 9.2 BASE DESIGN VALUES FOR VISUALLY GRADED DIMENSION LUMBER SHALL BE SPRUCE-PINE-FIR NO.1/NO.2 WITH THE FOLLOWING MINIMUM BASE DESIGN VALUES:
- b. TENSION PARALLEL TO GRAIN: FT = 450 PSI SHEAR PARALLEL TO GRAIN: Fv = 135 PS d. COMPRESSION PERP. TO GRAIN: FCPERP = 425 PSI . COMPRESSION PARALLEL TO GRAIN: F<sub>CPARALLEL</sub> = 1,150 PSI f. MODULUS OF ELASTICITY: E = 1,400,000 PSI
- 9.3 TRUSJOIST BY WEYERHAEUSER STRUCTURAL COMPOSITE LUMBER WAS USED AS THE BASIS OF DESIGN FOR MEMBERS MARKED PSL (PARALLEL STRAND LUMBER), LVL (LAMINATED

VENEER LUMBER), LSL (LAMINATED STRAND LUMBER), AND TJ (WOOD I JOISTS). THE FOLLOWING ARE THE BASE DESIGN VALUES FOR THESE PRODUCTS:

- BENDING:  $F_B = 2.900 PSI$ HORIZONTAL SHEAR: F<sub>V</sub> = 290 PSI MODULUS OF ELASTICITY: E = 2,000,000 PSI
- HORIZONTAL SHEAR: F<sub>V</sub> = 285 PSI
- BENDING: F<sub>B</sub> = 2325 PS HORIZONTAL SHEAR: F<sub>V</sub> = 310 PSI
- MODULUS OF ELASTICITY: E= 1,550,000 PSI d. TJI: SEE MANUFACTURER'S INFORMATION FOR SPECIFIC

MODULUS OF ELASTICITY: E = 2,000,000 PSI

- STRESS INFORMATION OF THE VARIOUS TJI SERIES. 9.4 REFER TO THE MANUFACTURER'S REQUIREMENTS FOR FASTENING MULTIPLE PSLS, LVLS, OR LSLS TOGETHER.
- REFER TO MANUFACTURER'S REQUIREMENTS FOR FRAMING DETAILS, INSTALLATION, HANDLING, AND CONNECTION INFORMATION. THE CONTRACTOR SHALL FOLLOW ALI MANUFACTURER'S RECOMMENDATIONS AND DIRECTIONS DURING ERECTION, ALL BLOCKING, WEB REINFORCING. HANGERS. RIM BOARDS. RIM JOISTS. AND NAILING SHALL BE PER MANUFACTURER'S RECOMMENDATIONS, UNLESS NOTED OTHERWISE ON THE STRUCTURAL DRAWINGS.
- a. ALL HOLES AND PENETRATIONS AT ENGINEERED JOISTS, BEAMS AND GIRDERS SHALL BE THOSE ALLOWED BY THE MANUFACTURER'S 'HOLE' CHARTS, ATTACHED TO THESE DRAWINGS. ANY ADDITIONAL OPENINGS OR REINFORCEMENT NECESSARY TO PERMIT PASSAGE SHALL BE REVIEWED & APPROVED IN WRITING BY THE STRUCTURAL ENGINEER OF RECORD ON A CASE BY CASE
- 9.6 PARALLEL CHORD WOOD FLOOR TRUSSES SHALL BE DESIGNED BY THE MANUFACTURER. TRUSS CALCULATIONS AND SHOP DRAWINGS MUST BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER IN THE STATE OF THE PROJECT AND SUBMITTED FOR REVIEW BY THE ENGINEER OF RECORD
- ERECTION OF WOOD I-BEAMS, AND WOOD FLOOR TRUSSES INCLUDING PROPER HANDLING, SAFETY PRECAUTIONS, AND TEMPORARY BRACING ARE THE RESPONSIBILITY OF THE CONTRACTOR. EXERCISE CARE AND PROVIDE ERECTION BRACING REQUIRED TO PREVENT TOPPLING OF JOISTS DURING ERECTION.
- ALL PLYWOOD SHEATHING SHALL CONFORM TO THE AMERICAN PLYWOOD ASSOCIATION'S STANDARDS AND RECOMMENDATIONS. ALL PLYWOOD SHALL BE APA EXTERIOR GRADE CDX. ENGINEERED GRADE SIZES OR BETTER PLACEMENT OF SHEETS SHALL BE STAGGERED USING THE MINIMUM NUMBER OF JOINTS. ALL SHEATHING SHALL BE STAMPED IN ACCORDANCE WITH AMERICAN PLYWOOD ASSOCIATION AND INSTALLED AS FOLLOWS:
  - a. ROOF SHEATHING: FIR GRADE, 5/8" THICK (NOMINAL) T&G., LAID PERPENDICULAR TO ROOF RAFTERS. DIAPHRAGM NAILING: 8D NAILS AT 6" O.C. AT ALL EDGES, 12" O.C.
  - b. WALL SHEATHING: FIR GRADE, 1/2" THICK (NOMINAL) 32/16, LAID HORIZONTALLY TO WALL STUDS AND LAP FLOOR SYSTEM MIN. 12". DIAPHRAGM NAILING: 8D NAILS AT 6" D.C. AT ALL EDGES, 12" O.C. ELSEWHERE, MINIMUM. PROVIDE 2X4 (MINIMUM) FLAT AT HORIZONTAL PANEL EDGES TO PROVIDE SHEAR WALL CONTINUITY.
  - c. SUB-FLOOR SHEATHING: 3/4" THICK (NOMINAL) T&G OSB SHEATHING BY ADVANTECH OR EQUAL WITH 24" SPAN RATING OR BETTER. DIAPHRAGM NAILING: 8D NAILS AT 6" O.C. AT ALL EDGES, 10" O.C. ELSEWHERE, MINIMUM. SUB-FLOOR SHALL BE GLUED TO FLOOR FRAMING MEMBERS WITH CONTECH PL 400 OR EQUAL. CONTRACTOR TO ENSURE THAT WATER DOES NOT COLLECT/POND ON SUBELOOR DURING CONSTRUCTION CONTRACTOR TO REPLACE ANY SUBFLOOR THAT HAS DELAMINATED. BUCKLED OR SAGGED DUE TO WATER DAMAGE.
- MAXIMUM STUD SPACING FOR INTERIOR BEARING WALLS IS 16 9.10 HEADERS IN BEARING WALLS: ALL HEADERS IN 2X6 BEARING WALLS SHALL CONSIST OF (3)-2X10 PLUS (2) LAYERS OF 1/2" PLYWOOD, MINIMUM, UNLESS NOTED OTHERWISE. ALL

9.9 BEARING WALLS: ALL EXTERIOR BEARING WALLS SHALL BE

2X6 AT 16 INCHES ON CENTER. SEE ARCHITECTURAL

DRAWINGS FOR INTERIOR BEARING WALL THICKNESS

- PLUS (1) LAYER OF 1/2" PLYWOOD, MINIMUM, UNLESS NOTED 9.11 JAMBS IN BEARING WALLS: (KEEP A-D FOR PA ADOPTION OF
- a. ALL JAMB POSTS FOR EXTERIOR WALLS SHALL BE FOUR (4) 2X STUDS, CONSISTING OF TWO (2) JACK STUDS AND

TWO (2) KING STUDS, UNLESS NOTED OTHERWISE.

HEADERS IN 2X4 BEARING WALLS SHALL CONSIST OF (2)-2X10

- b. ALL JAMB POSTS FOR INTERIOR WALLS SHALL BE THREE (3) 2X STUDS, CONSISTING OF TWO (2) JACK STUDS AND ONE (1) KING STUD, UNLESS NOTED OTHERWISE.
- HEADERS IN EXTERIOR WALLS SHALL CONSIST OF A 31/2"X31/2" PSL JACK STUD AND TWO (2) 2X KING STUDS, UNLESS NOTED OTHERWISE. d. ALL PSL JAMB POSTS FOR 51/4" PSL OR (3)-13/4" LVL

c. ALL PSL JAMB POSTS FOR 3½" PSL OR (2)-1¾" LVL

AND TWO (2) 2X KING STUDS, UNLESS NOTED OTHERWISE. e. JAMB POSTS FOR OPENINGS IN EXTERIOR WALLS LESS THAN OR EQUAL TO 4'-0" SHALL BE FOUR (4) 2X STUDS. CONSISTING OF TWO (2) JACK STUDS AND TWO (2) KING

STUDS, UNLESS NOTED OTHERWISE,

UNLESS NOTED OTHERWISE.

HEADERS SHALL CONSIST OF 51/2"X51/2" PSI JACK STUD

JAMB POSTS FOR OPENINGS IN EXTERIOR WALLS FROM 4'-1" TO 8'-0" SHALL BE FIVE (5) 2X STUDS, CONSISTING OF TWO (2) JACK STUDS AND THREE (3) KING STUDS, UNLESS NOTED OTHERWISE.

JAMB POSTS FOR OPENINGS IN EXTERIOR WALLS FROM 8'-

- "TO 12'-0" SHALL BE SEVEN (7) 2X STUDS, CONSISTING OF TWO (2) JACK STUDS AND FIVE (5) KING STUDS, UNLESS NOTED OTHERWISE h. JAMB POSTS FOR OPENINGS IN EXTERIOR WALLS FROM 12'-1" TO 16'-0" SHALL BE EIGHT (8) 2X STUDS, CONSISTING
- NOTED OTHERWISE. i. JAMB POSTS FOR 3½" PSL OR (2)-1¾" LVL HEADERS OVER OPFNINGS LESS THAN OR EQUAL TO 4'-0" SHALL BE A 31/2"X31/2" PSL JACK STUD AND TWO (2) KING STUDS,

OF TWO (2) JACK STUDS AND SIX (6) KING STUDS, UNLESS

JAMB POSTS FOR 3½" PSL OR (2)-1¾" LVL HEADERS OVER OPENINGS FROM 4'-1" TO 8'-0" SHALL BE A 31/"X31/" PSL JACK STUD AND THREE (3) KING STUDS, UNLESS NOTED

k. JAMB POSTS FOR 3½" PSL OR (2)-1¾" LVL HEADERS OVER

OPENINGS FROM 8'-1" TO 12'-0" SHALL BE A 31/2"X31/2" PSL

JACK STUD AND FIVE (5) KING STUDS, UNLESS NOTED OTHERWISE. I. JAMB POSTS FOR 3½" PSL OR (2)-1¾" LVL HEADERS OVER OPENINGS FROM 12'-1" TO 16'-0" SHALL BE A 31/2"X31/2" PSL

JACK STUD AND SIX (6) KING STUDS, UNLESS NOTED

. JAMB POSTS FOR 51/4" PSL OR (3)-13/4" LVL HEADERS OVER OPENINGS LESS THAN OR EQUAL TO 4'-0" SHALL BE A 3½"X5¼" PSL JACK STUD AND TWO (2) KING STUDS, UNLESS NOTED OTHERWISE.

- n JAMB POSTS FOR 51/2" PSL OR (3)-13/2" LVL HEADERS OVER OPENINGS FROM 4'-1" TO 8'-0" SHALL BE A 31/2"X51/4"" PSL JACK STUD AND THREE (3) KING STUDS, UNLESS NOTED
- o. JAMB POSTS FOR 51/4" PSL OR (3)-13/4" LVL HEADERS OVER OPENINGS FROM 8'-1" TO 12'-0" SHALL BE A 51/4"X51/4" PSL JACK STUD AND FIVE (5) KING STUDS, UNLESS NOTED
- p. JAMB POSTS FOR 51/4" PSL OR (3)-13/4" LVL HEADERS OVER OPENINGS FROM 12'-1" TO 16'-0" SHALL BE A 51/4"X51/4" PSL JACK STUD AND SIX (6) KING STUDS, UNLESS NOTED
- 9.12 ALL PSL POSTS AT PSL AND LVL BEAMS SHALL BE A MINIMUM SIZE OF 3-1/2X WIDTH OF BEAMS FOR 2X4 INTERIOR OR EXTERIOR WALLS AND 5-1/4X WIDTH OF BEAM FOR 2X6 INTERIOR OR EXTERIOR WALLS AND BE ONE SOLID PSI MEMBER AS A MINIMUM, UNLESS NOTED OTHERWISE.
- 9.13 EXTEND WOOD POST CONTINUOUS FULL HEIGHT FROM FOUNDATION OR TRANSFER BEAMS. EXTEND THRU FLOOR OR PROVIDE SOLID BLOCKING OF THE SAME SIZE AND MATERIAL AS THE POST. PROVIDE SEATED CONNECTIONS FOR ALL BEAMS AT TOP OF POSTS.
- 9.14 HANGER CONNECTIONS FOR JOISTS, BEAMS, MANUFACTURED WOOD FRAMING, MEMBERS FRAMING TO BEAMS, HEADERS, ETC. SHALL BE TOP FLANGE OR FACE MOUNT HANGERS BY SIMPSON STRONG-TIE OR APPROVED EQUAL UNLESS OTHERWISE NOTED OR SHOWN. ALL WOOD CONNECTIONS SHALL BE MADE WITH GALVANIZED METAL HANGERS. DO NOT TOE NAIL. ALL CONNECTIONS SHALL BE MADE WITH THE REQUIRED NUMBER, TYPE, LENGTH AND GRADE OF FASTENER AS SPECIFIED BY THE MANUFACTURER FOR THE LOAD(S) SPECIFIED.
- 9.15 THE CONTRACTOR SHALL PROVIDE DOUBLE STUDS AT ALL CORNERS, UNO.
- 9.16 THE CONTRACTOR SHALL PROVIDE SOLID BLOCKING UNDER ALL PARTITIONS. THE CONTRACTOR SHALL PROVIDE DOUBLE FLOOR JOISTS UNDER ALL NON-LOAD BEARING PARTITIONS THAT RUN PARALLEL TO THE FLOOR FRAMING.
- 9.17 SEE REFERENCED ICC CODE FOR MINIMUM FASTENING REQUIREMENTS.
- 9.18 NO STRUCTURAL MEMBER SHALL BE CUT OR NOTCHED WITHOUT APPROVAL BY THE STRUCTURAL ENGINEER, EXCEPT AS NOTED AT THE 'HOLE' CHART AND DETAILS PLACED AT THE DRAWINGS.
- 9.19 MEMBERS SHALL BE SET WITH CROWN UP AND HAVE A MINIMUM OF 3" BEARING.
- 9.20 ALL JOISTS SHALL BE RIGIDLY BRIDGED AT INTERVALS NOT EXCEEDING 8'-0".

9.21 SPLICE DOUBLE SOLE PLATES DIRECTLY OVER STUD.

STAGGER SPLICE OF EACH PLATE.

- 9.22 SUFFICIENTLY JOIN MULTIPLE 2X BEAMS, GIRDERS, AND POSTS SO THAT LOAD DISTRIBUTES EQUALLY. THE MINIMUM CONNECTION SHALL BE (2)-10D NAILS SPACED AT 16" ON CENTER, STAGGERED VERTICALLY & HORIZONTALLY ACROSS THE NEUTRAL AXIS OF THE MEMBER FOR ITS ENTIRE LENGTH.
- FILLED CMU OR CONCRETE FOUNDATIONS WITH 5/8" DIAMETER ANCHORS AT 2'-0" ON-CENTER OR TWO (2) ANCHORS MINIMUM PER LENGTH OF WALL. ANCHÒR BOLTS SHALL BE EMBEDDED A MINIMUM OF 15" INTO MORTAR GROUT OR 9" INTO CAST-IN-PLACE CONCRETE FOUNDATIONS.

9.23 ALL P.T. WOOD SILL PLATES SHALL BE ANCHORED TO GROU

9.25 INSTALL ROOF SHEATHING ON ENTIRE LOWER ROOF PRIOR TO INSTALLING OVERBUILD FRAMING & SHEATHING @ AREAS

9.24 ANCHOR BOLTS SHALL BE ASTM F1554, GRADE 36 AND SHALL

BE GALVANIZED PER ASTM A153 OR ASTM B695, CLASS 55 OR

- DESIGNATED ON THE DRAWINGS. 9.26 ALL RIM BOARDS AND PLATES SHALL BE CONTINUOUS OVER
- 9.27 PROVIDE SIMPSON H2.5A TIE FOR ALL ROOF RAFTERS TO TOP OF WALL PLATE CONNECTION AND (2) SIMPSON A35 TIES FOR ALL HIP AND VALLEY TO TOP OF WALL PLATE CONNECTIONS. 9.28 ALL LUMBER, INCLUDING KILN DRIED PRESSURE TREATED

ALL OPENINGS IN THE WALL BELOW.

LUMBER, SHALL BE SEASONED WITH A MOISTURE CONTENT OF 19% MAX AT TIME OF CONSTRUCTION/ERECTION. 9.29 ALL WOOD INDICATED AS "PT" ON THE DOCUMENTS. INCLUDING BUT NOT LIMITED TO WOOD PLATES IN DIRECT CONTACT WITH CMU AND/OR CONCRETE, SHALL BE

BENDING:  $F_B = 750 PSI$ 

- PRESSURE TREATED. PRESSURE TREATED LUMBER AND ACCESSORIES SHALL CONFORM TO THE FOLLOWING: a. LUMBER SHALL BE SOUTHERN PINE NO. 2 WITH THE FOLLOWING MINIMUM BASE DESIGN VALUES:
- COMPRESSION PERP. TO GRAIN: FCPERP = 565 PSI 5. COMPRESSION PARALLEL TO GRAIN: F<sub>CPARALLEL</sub> = 1,250 6. MODULUS OF ELASTICITY: E = 1,400,000

TENSION PARALLEL TO GRAIN: FT = 450 PSI

SHEAR PARALLEL TO GRAIN: Fv = 175 PSI

FXPRESSED ABOVE PRIOR TO FABRICATION AND PLACEMENT WITHIN THE STRUCTURE. c. PRESSURE TREATED WOOD SHALL COMPLY WITH THE REQUIREMENTS OF THE AMERICAN WOOD PRESERVERS ASSOCIATION (AWPA) USE CATEGORY SYSTEM STANDARD U1. THE WOOD SHOULD ALSO BE MARKED WITH A

TREATMENT QUALITY MARK OF AN ALSC BOARD OF

REVIEW APPROVED INSPECTION AGENCY.

b. ALL PRESSURE TREATED LUMBER WHETHER KII N DRIFD

OR OTHERWISE SHALL MEET THE MOISTURE CRITERIA

d. ALL METAL HANGERS, TIES, STRAPS, FASTENERS, CONNECTORS, AND MECHANICAL ANCHORS (BOLTS, NAILS) IN CONTACT WITH PRESSURE-TREATED WOODS SHALL BE HOT-DIPPED, ZINC-COATED GALVANIZED STEEL, STAINLESS STEEL, SILICON BRONZE, OR COPPER. COATINGS SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS OR A MINIMUM OF ASTM A653 TYPE G185 ZINC-COATED GALVANIZED STEEL, OR EQUIVALENT.

architecture

Consultants

03.28.23 Revisions: Scale: 1/4" = 1'-( Drawn By: JMS

File Name: A-5.0

Project No.: