GENERAL NOTES

1. THE FOLLOWING NOTES ARE INTENDED TO BE USED AS OUTLINED SPECIFICATIONS FOR THIS PROJECT. THE REFERENCED STANDARDS ARE CONSIDERED TO BE PART OF THE WORK.

2. ALL DIMENSIONS AND CONDITIONS MUST BE VERIFIED IN THE FIELD, ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH THE AFFECTED PART OF THE WORK.

DESIGN LOADS

1. BUILDING CODE: MAINE UNIFORM BUILDING AND ENERGY CODE, INTERNATIONAL RESIDENTIAL CODE, 2009 EDITION, ASCE 7-05 MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES.

| 2. DESIGN FLOOR LIVE LOADS: | |
|-----------------------------|--------|
| SLEEPING ROOMS | 30 PSF |
| ALL OTHER AREAS | 40 PSF |
| | |

| 3. DESIGN ROOF SNOW LOAD: | |
|-----------------------------------|----------------|
| GROUND SNOW LOAD (Pg): | 60 PSF |
| SNOW EXPOSURE FACTOR (Ce): | 1.0 |
| SNOW LOAD IMPORTANCE FACTOR (Is): | 1.0 |
| SNOW LOAD THERMAL FACTOR (Ct): | 1.1 |
| FLAT ROOF SNOW LOAD (Pf): | 46 PSF + DRIFT |
| | |

4. DESIGN WIND LOAD:

| BASIC WIND SPEED: | 100 MPH |
|-------------------------------------|---------|
| WIND LOAD IMPORTANCE FACTOR (Iw): | 1.0 |
| WIND EXPOSURE: | В |
| INTERNAL PRESSURE COEFFICIENT: | ±0.18 |
| COMPONENTS & CLADDING LOADS PER ASC | E 7-05 |

CONCRETE NOTES

1. CONCRETE WORK SHALL CONFORM TO "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318 LATEST)," AND "SPECIFICATIONS FOR STRUCTURAL CONCRETE (ACI 301-LATEST)". THESE PUBLICATIONS ARE AVAILABLE THROUGH THE AMERICAN CONCRETE INSTITUTE (248) 848-3800.

2. CONCRETE SHALL BE CONTROLLED CONCRETE, PROPORTIONED, MIXED, AND PLACED IN ACCORDANCE WITH THE PROVISIONS SET FORTH IN ACI 318-LATEST.

3. CONCRETE MIX DESIGN:

FOOTINGS AND FOUNDATION WALLS: A.STRENGTH: 3,500 PSI @ 28 DAYS B.AGGREGATE: 3/4" C.W/C RATIO: 0.55 MAX D.ENTRAINED AIR: 6% ± 1 1/2% E.SLUMP: 4" MAX INTERIOR SLABS ON GRADE: A.STRENGTH: 3,000 PSI @ 28 DAYS B.AGGREGATE: 3/4" C.W/C RATIO: 0.55 MAX D.ENTRAPPED AIR ONLY (NO ENTRAINMENT) E.SLUMP: 4" MAX

4. REINFORCING BARS SHALL CONFORM TO ASTM A615 GRADE 60 DEFORMED BARS AND SHALL BE DETAILED. FABRICATED AND PLACED IN ACCORDANCE WITH ACI 315. I ATEST EDITION

5. FIBER REINFORCEMENT SHALL BE TYPE II SYNTHETIC VIRGIN HOMOPOLYMER POLYPROPYLENE FIBERS CONFORMING TO ASTM C1116.

6. MINIMUM CONCRETE PROTECTIVE COVERING FOR REINFORCEMENT, UNLESS NOTED OTHERWISE, SHALL BE AS FOLLOWS:

- A. SURFACES CAST AGAINST AND PERMANENTLY IN CONTACT WITH EARTH, 3.0"
- B. FORMED SURFACES IN CONTACT WITH EARTH OF EXPOSED TO WEATHER
 - #5 BARS, 5/8" DIAMETER WIRE, AND SMALLER, 1.5'

FOUNDATION NOTES (SOIL SUPPORTED)

1. FOUNDATION DESIGN IS BASED ON SHALLOW SPREAD FOOTINGS BEARING ON SUITABLE UNDISTURBED NATIVE SOILS AND/OR NEW COMPACTED STRUCTURAL FILL EXTENDING TO UNDISTURBED NATIVE SOIL.

2. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO VERIFY EXISTING SOIL CONDITIONS AND TO BRING ANY DISCREPANCIES TO THE ATTENTION OF THE ENGINEER PRIOR TO COMMENCING PLACEMENT OF FOUNDATIONS.

3. PRESUMPTIVE BEARING CAPACITY OF 3000 PSF.

4. EXTEND BOTTOM OF EXTERIOR FOOTINGS AT LEAST 4.5 FEET BELOW THE FINAL EXTERIOR GRADE FOR PROTECTION AGAINST FROST.

5. COMPACTED STRUCTURAL FILL SHALL BE USED TO BACKFILL TO THE DESIGN FOOTING SUBGRADE AND BENEATH ALL SLABS ON GRADE. STRUCTURAL FILL SHALL BE A CLEAN SAND-GRAVEL MIXTURE MEETING THE FOLLOWING GRADATION:

| SCREEN OR SIEVE SIZE | PERCENT PASSING |
|----------------------|-----------------|
| 6 INCH | 100 |
| 3 INCH | 90-100 |
| 1/4 INCH | 25-90 |
| NO. 40 | 0-30 |
| NO. 200 | 0-5 |
| | |

6. STRUCTURAL FILL SHALL BE PLACED IN UNIFORM LIFTS NOT EXCEEDING 8 INCHES IN LOOSE THICKNESS AND SHALL BE COMPACTED TO 95 PERCENT OF MAXIMUM DRY DENSITY PER ASTM D1557, MODIFIED PROCTOR TEST. COMPACT ADJACENT TO FOUNDATION WALLS SUPPORTING UNBALANCED FILL (RETAINING WALLS) TO 94 TO 96 PERCENT OF MAXIMUM DRY DENSITY PER ASTM D1557. HAND OPERATED EQUIPMENT SHALL BE USED FOR COMPACTION WITHIN 8 FEET OF NEW FOUNDATION WALL.

7. PROVIDE PVC DRAINPIPE AROUND THE PERIMETER OF THE STRUCTURE. LOCATE AT THE BOTTOM OF THE FOUNDATION WALLS AND PROVIDE POSITIVE GRAVITY FLOW TO PROPERLY DESIGNED OUTLET. REFER TO SITE DRAWINGS FOR ADDITIONAL INFORMATION.

8. SOILS EXPOSED AT THE BASE OF ALL SATISFACTORY FOUNDATION EXCAVATIONS SHALL BE PROTECTED AGAINST ANY DETRIMENTAL CHANGE IN CONDITION, SUCH AS DISTURBANCE FROM RAIN OR FROST. SURFACE RUNOFF SHALL BE DRAINED AWAY FROM THE EXCAVATIONS SHALL BE ADEQUATELY PROTECTED FROM RAINFALL OR FREEZING CONDITIONS. GROUNDWATER SHALL BE ANTICIPATED FOR EXCAVATIONS AND APPROPRIATE DEWATERING MEASURES SHALL BE EMPLOYED.

9. SLOPE FOOTING EXCAVATIONS AS REQUIRED FOR STABILITY AND SAFETY IN ACCORDANCE WITH OSHA REQUIREMENTS, PROVIDE SHEETING OR SHORING IN ACCORDANCE WITH OSHA GUIDELINES. BRACED EXCAVATIONS SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF MAINE.

Head

H1

H2

H3

H4

| REBAR LAP SPLICE TABLE | | |
|------------------------|------------------|--|
| BAR SIZE | LAP LENGTH | |
| | 3000 PSI CONCRET | |
| #4 | 36" | |
| #5 | 48" | |

| REBAR LAP SPLICE TABLE | | |
|------------------------|-------------------|--|
| | LAP LENGTH | |
| BAR SIZE | 3000 PSI CONCRETE | |
| #4 | 36" | |
| #5 | 48" | |

TIMBER CONSTRUCTION MANU PA NATIONAL DESIGN SPECIFI (NDS) LATEST EDITION.

| TRUS-JOIST: | I-JOIST (TJI |
|-------------|--------------|
| | TIMBERSTR |
| BOISE: | I-JOIST (BC |

| | Simpson Hanger Schedule | | |
|---------------------------|---|--|--|
| er Schedule | Framing Size 9 1/2" TJI 230 11 7/8" TJI 230 14" TJI 230 3 1/2"x 11 7/8" LVL 3 1/2" x 14"LVL 5 1/4" x 14" LVL (1) 2X6 | Top Flange Ha ITS2.37/11.8 ITS2.37/14 ITS 3.56/11 ITS 3.56/14 HGLTV5.37 | |
| (3)2x6 | (3) 2X10 | | |
| (3)2x8 w/ 3" Jamb | (4) 2X10 | | |
| (2) 9 1/2" LVL w/ 3" Jamb | 2X12 SLEEPER | | |
| (3) 9 1/2" LVL w/ 3" Jamb | | | |

| TIMBER NOTES | | | |
|---|---|-----------------------|--|
| 1. ALL TIMBER FRAMING SHALL BE IN ACCORDANCE WITH THE AITC TIMBER CONSTRUCTION MANUAL- LATEST EDITION, AND THE AF & PA NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION (NDS) LATEST EDITION. | | B 75 207 | STRUCTURAL ENGINEERS Vork Street, Portland, Maine 04101 .879.1838 • beckerstructural.com |
| 2. INDIVIDUAL TIMBER FRAMING MEMBERS SHALL BE VISUALLY GRADED. MINIMUM GRADE NO1/NO2 SPRUCE-PINE-FIR KILN DRIED TO 19% MAXIMUM MOISTURE CONTENT UNLESS OTHERWISE INDICATED ON THE DRAWINGS. | | | OF MAINE |
| 3. ENGINEERED WOOD PRODUCTS SHALL BE AS SPECIFIED ON THE DRAWINGS. REFER TO MANUFACTURER'S LITERATURE FOR PROPER HANDLING AND INSTALLATION GUIDELINES. MANUFACTURER AND PRODUCT SHALL BE: | | | ANIEL S |
| TRUS-JOIST: I-JOIST (TJI), PARALLAM (PSL), MICROLAM (LVL) TIMBERSTRAND (LSL) BOISE: I-JOIST (BCI), VERSALAM (LVL) | | APR LI | CENSED CENSED |
| 4. SUBSTITUTIONS OF ENGINEERED WOOD MATERIALS OTHER THAN THOSE SPECIFIED WILL BE PERMITTED ONLY WITH WRITTEN CERTIFICATION FROM THE MANUFACTURER THAT SUBSTITUTED ITEMS "MEETS OR EXCEED" ALL PROPERTIES OF SPECIFIED PRODUCT, INCLUDING ENGINEERING AND DURABILITY CHARACTERISTICS. SUBSTITUTIONS ARE SUBJECT TO APPROVAL BY THE ARCHITECT AND ENGINEER. | | , mm | Annin Million . |
| 5. PRESSURE TREATED LUMBER SHALL BE USED FOR SILL MEMBERS, EXTERIOR EXPOSURE, OR WHERE SHOWN ON THE DRAWINGS. TIMBER SHALL BE SOUTHERN YELLOW PINE TREATED WITH CCA OR ACQ TO 0.4 #/CF IN ACCORDANCE WITH AWPA C-18. ACZA IS STRICTLY PROHIBITED. | | | |
| 6. ALL ROOF AND WALL SHEATHING SHALL BE APA PERFORMANCE-RATED. PROVIDE 5/8" THICK CD-X ROOF SHEATHING AND 1/2" THICK WALL SHEATHING (U.N.O.) SEE SHEARWALL SCHEDULE FOR NAILING REQUIREMENTS EXCLUSIVE TO SHEARWALLS. SHEATHING SHALL BE NAILED TO THE FRAMING AS FOLLOWS, U.N.O.: | | | |
| TYPICAL PANEL FASTENING (U.N.O.) A.ROOFS: 8d NAILS AT 6" O.C. AT SUPPORTED PANEL EDGES AND 12"O.C. AT INTERMEDIATE SUPPORTS. B.WALLS (EXCEPT AT SHEARWALLS): 8d NAILS AT 6" O.C. AT SUPPORTED PANEL EDGES AND 12" O.C. AT INTERMEDIATE SUPPORTS. | | | |
| 7. FLOOR SHEATHING SHALL BE 3/4", APA RATED TONGUE AND GROOVE PANELS. GLUE AND NAIL TO FLOOR FRAMING WITH 8d RING SHANK NAILS AT 6" O.C. AT SUPPORTED PANEL EDGES AND 12" O.C. AT INTERMEDI | | | |
| NOTE: ALL LVL CARRYING BEAMS ARE REQUIRED TO BEAR DIRECTLY ON COLUMNS. BEAMS ARE $\underline{\rm NOT}$ TO BEAR ON TOP PLATES | | HOW RES | ARD ST. |
| son Hanger Schedule | | | |
| ning Size <u>Top Flange Hanger</u> <u>Face Mount Hanger</u> 2" TJI 230 U3510/14 8" TJI 230 ITS2.37/11.88 'JI 230 ITS2.37/14 | | PORT | LAND, ME |
| "x 11 7/8" LVL ITS 3.56/11.88 " x 14"LVL ITS 3.56/14 " x 14" LVL HGLTV5.37 X6 LU26 X10 LUS210-3 X10 HHUS210-4 2 SLEEPER LU210 | | GENEF | RAL NOTES |
| | Ī | DATE: | 12/20/2016 |
| | | SHEET: | S0.0 |