Reviewed for Code Compliance
Inspection Division
Department of Building Safety
Date: 10/05/17

GENERAL NOTES:

1. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH JOB SPECIFICATIONS AND ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, AND SITE DRAWINGS. CONSULT THESE DRAWINGS FOR LOCATIONS AND DIMENSIONS OF OPENINGS, CHASES, INSERTS, REGLETS, SLEEVES, DEPRESSIONS, AND OTHER DETAILS NOT SHOWN ON THE STRUCTURAL DRAWINGS.

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.

3. THE STRUCTURE IS DESIGNED TO BE SELF SUPPORTING AND STABLE AFTER THE BUILDING IS COMPLETE. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE ERECTION PROCEDURES AND SEQUENCE TO ENSURE SAFETY OF THE STRUCTURE AND PERSONNEL DURING ERECTION. THIS INCLUDES THE ADDITION OF THE NECESSARY SHORING, SHEETING, TEMPORARY BRACING, GUYS OR TIEDOWNS. SUCH MATERIAL SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AFTER COMPLETION OF THE PROJECT.

4. ALL APPLICABLE FEDERAL, STATE, AND MUNICIPAL REGULATIONS SHALL BE FOLLOWED, INCLUDING THE FEDERAL DEPARTMENT OF LABOR OCCUPATIONAL SAFETY AND HEALTH ACT.

5. IT IS THE OWNER'S SOLE RESPONSIBILITY TO EMPLOY ONE OR MORE SPECIAL INSPECTORS (IF REQUIRED) TO PROVIDE INSPECTIONS IN COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS OF IBC 2006.

DESIGN NOTES:

1. THIS BUILDING IS DESIGNED TO COMPLY WITH THE 2009 EDITION OF THE INTERNATIONAL BUILDING CODE.

2. SNOW LOAD
   a. GROUND SNOW LOAD = 60 PSF
   b. FLAT ROOF SNOW LOAD = 42 PSF
   c. SNOW LOAD IMPORTANCE FACTOR I = 1.0
   d. SNOW EXPOSURE FACTOR Ce = 1.0
   e. SNOW THERMAL FACTOR Ct= 1.0
   f. BALANCE AND UNBALANCED SNOW LOADS IN ACCORDANCE WITH ASCE 7/05

3. WIND LOADS:
   a. BASIC WIND SPEED V = 95 MPH
   b. WIND LOAD IMPORTANCE FACTOR I = 1.0
   c. WIND INTERNAL PRESSURE COEFFICIENT GCPi = ±.18
   d. Wind Exposure = B

4. ROOF DEAD LOAD
   a. TOP RAFTER = 15.0 PSF
   b. SUB-CEILING = 5.0 PSF WHERE OCCURS)
   c. HVAC UNIT(S) = TO BE DETERMINED

5. LIVE LOADS
   a. ROOF = 20.0 PSF
   b. FLOORS - 40 PSF

6. EARTHQUAKE LOAD:
   a. DESIGN OF EARTHQUAKE LOAD IN ACCORDANCE WITH ASCE 7/05
   b. SEISMIC IMPORTANCE FACTOR I = 1.0
   c. 0.2s MAPPED SPECTRAL RESPONSE ACCELERATION Ss = per code
   d. 1.0s MAPPED SPECTRAL RESPONSE ACCELERATION S1 = per code
   e. SITE CLASS = CLASS D.
   f. SPECTRAL RESPONSE COEFFICIENT SDS = per code
   g. SPECTRAL RESPONSE COEFFICIENT SD1 = per code
   h. SEISMIC DESIGN CATEGORY = CATEGORY B
   i. BASIC SEISMIC FORCE RESISTING SYSTEM: BEARING WALL SYSTEM = LIGHT FRAMED WALL SYSTEMS SHEATHED WITH WOOD STRUCTURAL PANELS RATED FOR SHEAR RESISTANCE
   j. RESPONSE MODIFICATION FACTOR R = 6
   k. DEFLECTION AMPLIFICATION FACTOR CD = 4
   l. ANALYSIS PROCEDURE = EQUIVALENT LATERAL FORCE PROCEDURE

7. DEFLECTION CRITERIA
   a. ROOF (LIVE) = L/360
   b. ROOF (TOTAL) = L/240
   c. FLOORS (LIVE) = L/360

CONCRETE NOTES:

1. ALL CONCRETE WORK SHALL CONFORM TO ACI-318.

2. ALL CONCRETE EXCEPT INTERIOR AND EXTERIOR SLABS ON GROUND SHALL BE 3000 PSI AT 28 DAYS AND A MAXIMUM SLUMP OF 4". ALL INTERIOR AND EXTERIOR SLABS ON GROUND SHALL BE 4000 PSI AT 28 DAYS AND A MAXIMUM SLUMP OF 4". MAXIMUM SIZE AGGREGATE SHALL BE ¾" (WALL/FOOTINGS) AND ¾" (SLABS ON GROUND).

3. CONCRETE TO REMAIN EXPOSED TO WEATHER SHALL BE AIR ENTRAINED. NO AIR ENTRAINMENT IN INTERIOR CONCRETE SLABS.

4. CONCRETE SHALL NOT BE PLACED IN WATER OR ON FROZEN GROUND.

5. REINFORCING BARS SHALL CONFORM TO ASTM A615 GRADE 60. DEFORMED BARS SHALL BE DETAILED AND FABRICATED IN ACCORDANCE TO ACI-315 LATEST EDITION, AND PLACED IN ACCORDANCE WITH ACI-318.

6. SPLICES OF REINFORCING BARS SHALL BE IN ACCORDANCE WITH ACI-318.

7. ANCHOR RODS SHALL CONFORM TO ASTM F1554-36.

8. HOOKS NOT DIMENSIONED SHALL BE ACI STANDARD HOOKS.

9. CONCRETE COVER OVER REINFORCEMENT SHALL BE AS FOLLOWS:
   CONCRETE CAST AGAINST EARTH = 3"
   CONCRETE EXPOSED TO EARTH OR WEATHER = 1½"
   CONCRETE NOT EXPOSED TO EARTH OR WEATHER = ¾"

10. PROVIDE CONTROL JOINTS IN STRUCTURAL SLAB AT 12-0" ON CENTER MAX.

11. PROPORTION DESIGN MIXES TO PROVIDE CONCRETE FOR INTERIOR AND EXTERIOR SLABS-ON-GRADE WITH THE FOLLOWING PROPERTIES:
    a. STRENGTH; 4000psi @ 28 DAYS, 3/4" AGGREGATE
    b. W/C RATIO: 0.46
    c. ENTRAINED AIR: 6% ±1%
    d. SLUMP: 3"± 1"

FOUNDATION NOTES:

1. FOUNDATION DESIGNED BASED ON AN ASSUMED MAXIMUM ALLOWABLE BEARING PRESSURE OF 2500 PSF. IT IS THE RESPONSIBILITY OF THE OWNER/CONTRACTOR TO VERIFY THE SOIL BEARING CAPACITY. NOTIFY THE ENGINEER AND STOP WORK IF CLAY, WET SOILS, FILL, OR OTHER DELETERIOUS MATERIALS ARE ENCOUNTERED.

2. DESIGN OF EXTERIOR FOUNDATIONS IS BASED ON A FROST DEPTH OF 4'-6" BELOW FINISHED GRADE.

3. NO HORIZONTAL JOINT WILL BE PERMITTED IN THE WALLS UNLESS NOTED OTHERWISE.

4. PROVIDE CONTROL JOINTS IN SLABS AT 12 FT O.C. MAX.

5. EXCAVATING AND BACK FILLING AT NEW FOUNDATION WALLS SHALL BE DONE SUCH THAT SYMMETRICAL LOADING SHALL BE MAINTAINED ON BOTH SIDES. WHERE DESIGN CONDITIONS REQUIRE DIFFERENT BACK FILL HEIGHTS, WALLS SHALL BE FIRMLY SHORED IN POSITION, AND SHORES SHALL REMAIN UNTIL FLOORS ARE PLACED AND PROPERLY SET, TO PROVIDE FULL SUPPORT.

6. CONTRACTOR SHALL BE RESPONSIBLE FOR DESIGN, INSTALLATION, AND FINAL CLEARANCE OF ANY NEEDLING, SHORING, OR BRACING OF EXISTING STRUCTURES.

7. VAPOR BARRIER BENEATH SLAB SHALL BE 10 Mil "STEGO WRAP" OR APPROVED EQUAL.
   POLYETHYLENE IS NOT AN ALTERNATE PRODUCT.

DECK FOUNDATION PLAN
Scale: 3/8" = 1'-0"

FRONT DECK FOUNDATION PLAN
Scale: 3/8" = 1'-0"

STATE OF MAINE
BRUCE W. MACLEOD
No. 5422
LICENSED
PROFESSIONAL ENGINEER

MacLeod
Structural Engineers, PA
90 Bridge Street Ste252 Westbrook, Maine 04038 207.839.0980

732 Forest Ave.
Portland, Maine

TITLE: FOUNDATION PLAN

DATE: 4/25/17	DRAWN BY: BWM	DRAWING NUMBER:
SCALE: as noted	PROJ NO: 2017-031	S-1.0