

**GENERAL NOTES:**

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

- THIS BUILDING IS DESIGNED TO COMPLY WITH THE 2009 EDITION OF THE INTERNATIONAL BUILDING CODE.
- SNOW LOAD
  - GROUND SNOW LOAD = 60 PSF
  - FLAT ROOF SNOW LOAD = 42 PSF
  - SNOW LOAD IMPORTANCE FACTOR  $I = 1.0$
  - SNOW EXPOSURE FACTOR  $C_e = 1.0$
  - SNOW THERMAL FACTOR  $C_t = 1.0$
  - BALANCE AND UNBALANCED SNOW LOADS IN ACCORDANCE WITH ASCE 7/05
- WIND LOADS:
  - BASIC WIND SPEED  $V = 99$  MPH
  - WIND LOAD IMPORTANCE FACTOR  $I = 1.0$
  - WIND INTERNAL PRESSURE COEFFICIENT  $GCP_i = \pm 1.8$
  - Wind Exposure = B
- ROOF LOADS
  - DEAD LOAD = 10.0 PSF
  - LIVE LOAD = 20.0 PSF
- LIVE LOADS
  - DEAD LOAD = 10.0 PSF
  - LIVE LOAD = 40 PSF
- EARTHQUAKE LOAD:
  - DESIGN OF EARTHQUAKE LOAD IN ACCORDANCE WITH ASCE 7/05
  - SEISMIC IMPORTANCE FACTOR  $I = 1.0$
  - 0.2s MAPPED SPECTRAL RESPONSE ACCELERATION  $S_s =$  per code
  - 1.0s MAPPED SPECTRAL RESPONSE ACCELERATION  $S_1 =$  per code
  - SITE CLASS = CLASS D.
  - SPECTRAL RESPONSE COEFFICIENT  $SDS =$  per code
  - SPECTRAL RESPONSE COEFFICIENT  $SD_1 =$  per code
  - SEISMIC DESIGN CATEGORY = CATEGORY B
  - BASIC SEISMIC FORCE RESISTING SYSTEM: BEARING WALL SYSTEM = LIGHT FRAMED WALL SYSTEMS SHEATHED WITH WOOD STRUCTURAL PANELS RATED FOR SHEAR RESISTANCE
  - RESPONSE MODIFICATION FACTOR  $R = 6$
  - DEFLECTION AMPLIFICATION FACTOR  $CD = 4$
  - ANALYSIS PROCEDURE = EQUIVALENT LATERAL FORCE PROCEDURE
- DEFLECTION CRITERIA
  - ROOF (LIVE) =  $L/360$
  - ROOF (TOTAL) =  $L/240$

**WOOD FRAMING NOTES:**

- STRUCTURAL LUMBER:
  - SPRUCE PINE FIR N01/N02 OR BETTER
  - $F_b = 875$  PSI       $F_v = 125$  PSI
  - $F_c = 1150$  PSI       $E = 1400000$  PSI
- MANUFACTURED LUMBER:
  - BOISE CASCADE VERSA-LAM 2.0 3100
  - $F_b = 3100$  PSI       $F_v = 285$  PSI
  - $F_c = 3000$  PSI       $E = 2000000$  PSI
- DESIGN CODE:
  - IBC 2009 / NATIONAL DESIGN SPECIFICATIONS FOR WOOD CONSTRUCTION BY THE NATIONAL FOREST PRODUCTS ASSOCIATION.
- NAILING REQUIREMENTS FOR PLYWOOD SHEATHING:
  - SEE DETAILS FOR NAILING AND SPACING REQUIREMENTS.
- SPIKE TOGETHER ALL FRAMING MEMBERS WHICH ARE BUILT-UP USING MULTIPLE 2x LUMBER.
- PROVIDE GALVANIZED METAL TIES EQUAL TO SIMPSON H2.5 HURRICANE TIES BETWEEN ROOF RAFTERS OR TRUSSES AND SUPPORTING WALL MEMBERS, UNLESS SHOWN OTHERWISE. PROVIDE GALVANIZED METAL CONNECTORS EQUAL TO SIMPSON TC26 TRUSS CONNECTOR BETWEEN ALL ROOF SCISSOR TRUSSES AND SUPPORTING WALL MEMBERS, UNLESS SHOWN OTHERWISE.
- PROVIDE PRESSURE TREATED LUMBER FOR ALL LUMBER IN CONTACT WITH MASONRY OR CONCRETE.
- ROOF SHEATHING: 5/8" APA RATED SHEATHING, EXTERIOR OR STRUCTURAL I OR II RATED SHEATHING, SPAN RATING 32/16 (TRUSSES), 24/12 (JOISTS). INSTALL SHEETS WITH FACE GRAIN DIRECTION PERPENDICULAR TO SUPPORTING MEMBERS.
- PROVIDE 1/2"Ø THRU BOLTS STAGGERED @ 24" O.C. FOR ATTACHEMENT OF 2x NAILER AT TOP OR BOTTOM OF WF BEAM (COORDINATE w/ PLANS)
- WALL CONSTRUCTION – FIRST FLOOR
  - FRAMING AS SHOWN ON PLANS
  - P.T. 2x6 SILL PLATE
  - 7/16" APA SHEATHING
- ROOF CONSTRUCTION
  - FRAMING AS SHOWN ON PLANS
  - 5/8" APA RATED PLYWOOD SHEATHING (REFER TO NOTE #7)
  - PROVIDE 8d NAILS @ 12" o.c. ALONG FRAMING MEMBERS.
- ALL NAILS, SPIKES, BOLTS ETC. FASTENING MEMBERS TO PRESSURE TREATED LUMBER SHALL BE EITHER STAINLESS STEEL OR HEAVY GALVANIZED.

**FOUNDATION NOTES:**

- 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.
- DESIGN OF EXTERIOR FOUNDATIONS IS BASED ON A FROST DEPTH OF 4'-6" BELOW FINISHED GRADE.
- NO HORIZONTAL JOINT WILL BE PERMITTED IN THE WALLS UNLESS NOTED OTHERWISE.
- PROVIDE CONTROL JOINTS IN SLABS AT 12 FT O.C. MAX.
- 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.
- CONTRACTOR SHALL BE RESPONSIBLE FOR DESIGN, INSTALLATION, AND FINAL CLEARANCE OF ANY NEEDLING, SHORING, OR BRACING OF EXISTING STRUCTURES.
- VAPOR BARRIER BENEATH SLAB SHALL BE 10 mil "STEGO WRAP" OR APPROVED EQUAL. POLYETHYLENE IS NOT AN ALTERNATE PRODUCT.

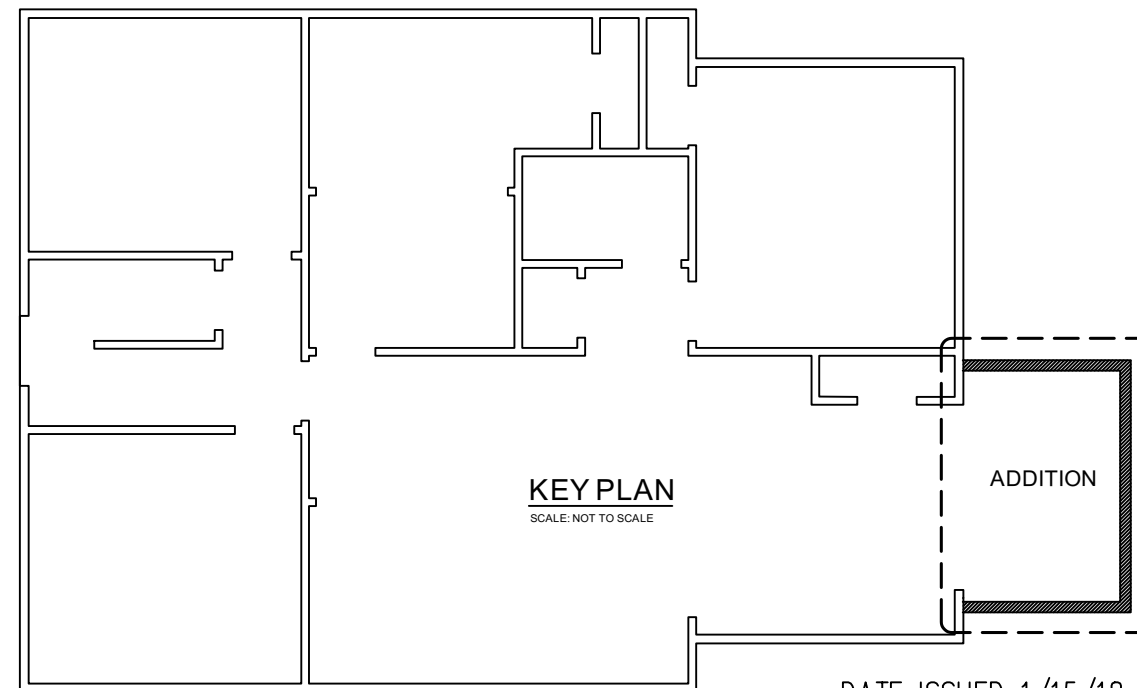
**CONCRETE NOTES:**

- ALL CONCRETE WORK SHALL CONFORM TO A
- ALL CONCRETE EXCEPT INTERIOR AND EXTERIOR MAXIMUM SLUMP OF 4". ALL INTERIOR AND EXTERIOR MAXIMUM SLUMP OF 4". MAXIMUM SIZE AGGREGATE (GROUND).
- CONCRETE TO REMAIN EXPOSED TO WEATHER CONCRETE SLABS.
- CONCRETE SHALL NOT BE PLACED IN WATER
- REINFORCING BARS SHALL CONFORM TO ASTM FABRICATED IN ACCORDANCE TO ACI-315 LATEST EDITION
- SPLICES OF REINFORCING BARS SHALL BE IN ACCORDANCE WITH ACI-315 LATEST EDITION
- ANCHOR RODS SHALL CONFORM TO ASTM F1554
- HOOKS NOT DIMENSIONED SHALL BE ACI 318
- CONCRETE COVER OVER REINFORCEMENT SHALL BE:
  - CONCRETE CAST AGAINST EARTH OR CONCRETE EXPOSED TO EARTH OR CONCRETE NOT EXPOSED TO EARTH
- PROVIDE CONTROL JOINTS IN STRUCTURAL MEMBERS:
  - STRENGTH: 4000psi @ 28 DAYS,
  - W/C RATIO: 0.46
  - ENTRAINED AIR: 6% ±1%
  - SLUMP: 3" ± 1"

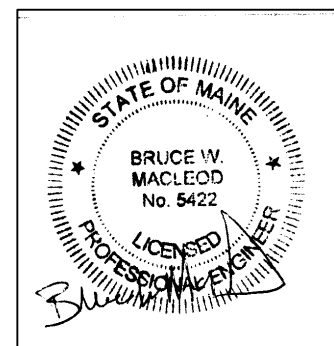


Reviewed for Code Compliance  
Inspections Division  
Approved with Conditions

Date: 03/01/18



DATE ISSUED 1/15/18



JASON LANDRY CONSULTING, LLC  
17 NASON ROAD GORHAM, MAINE 04038 207-632-3111  
PROPOSED BASEMENT ADDITION  
STRUCTURAL DESIGN  
95 CONGRESS STREET, PORTLAND, MAINE

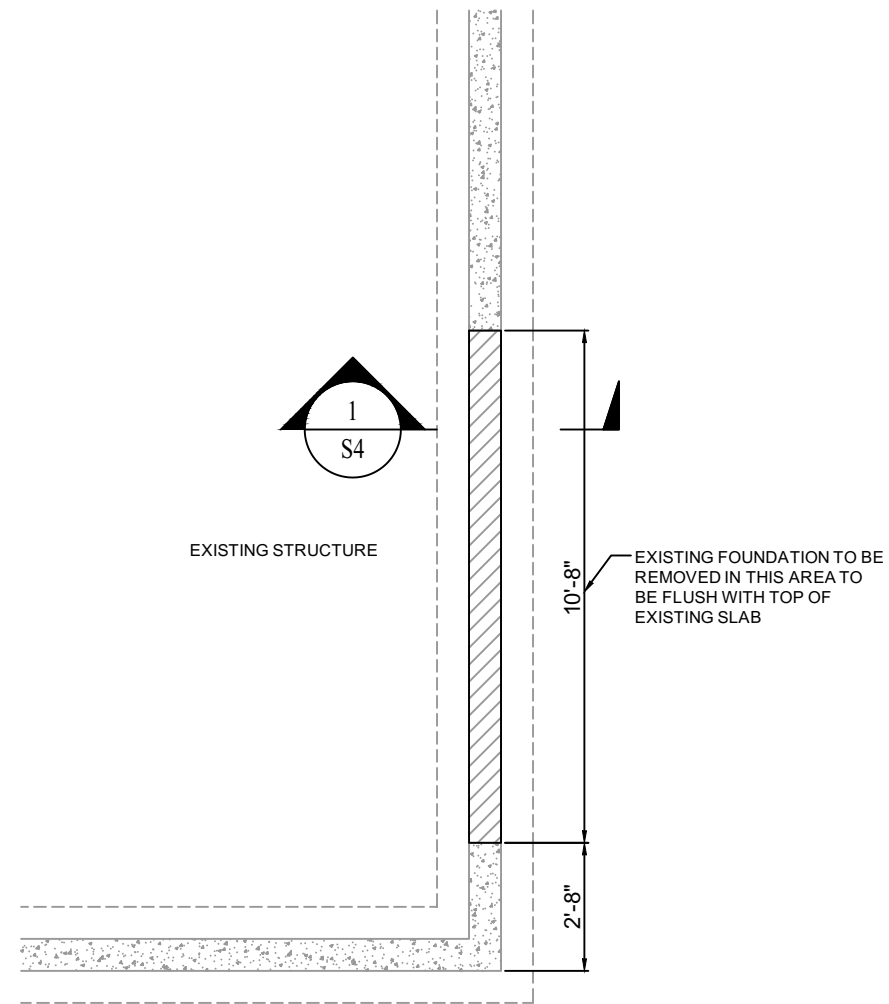
TITLE: NOTES & KEYPLAN

DATE: 12/27/17	DRAWN BY: J.J.L.	DRAWING NUMBER:
SCALE: as noted	PROJ NO: 2017-103	S-1



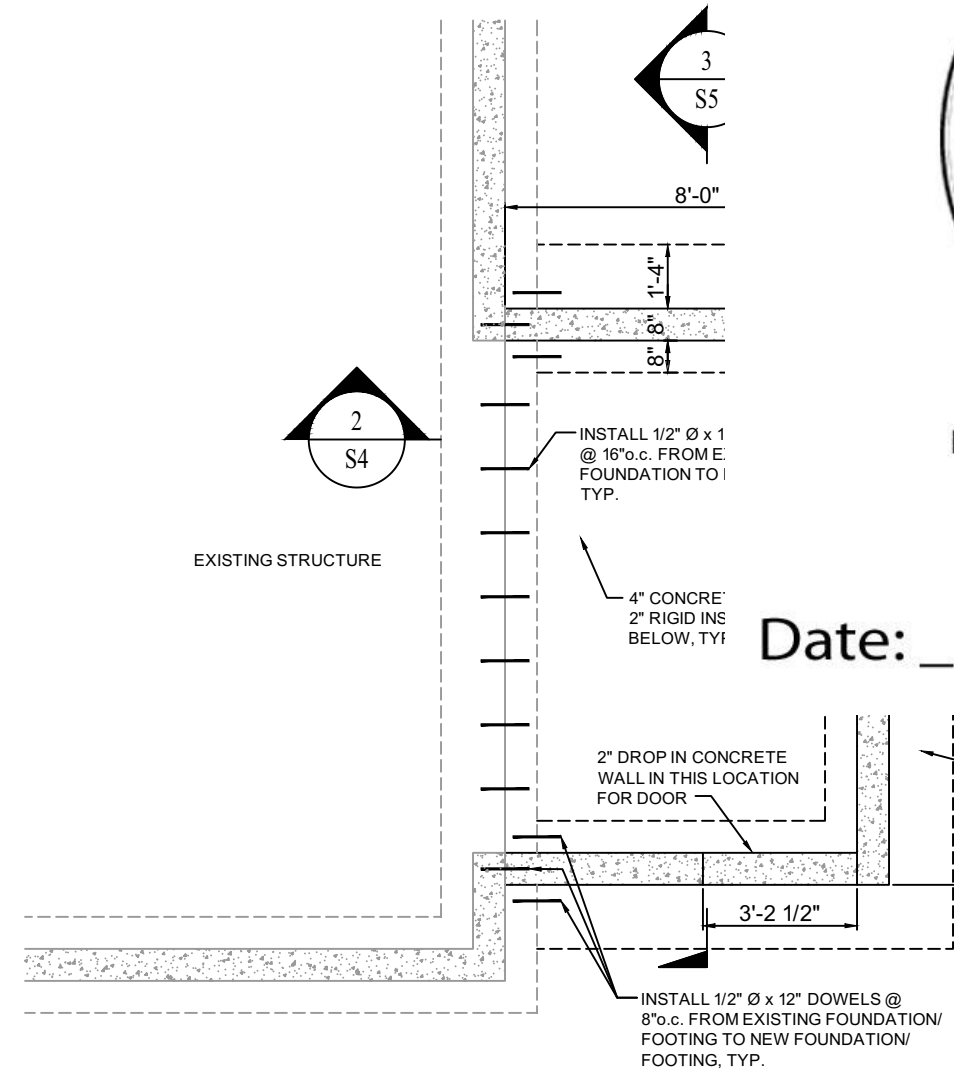
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## EXISTING FOUNDATION PLAN

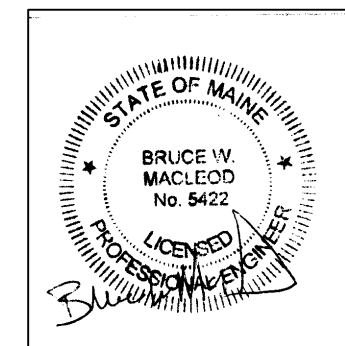
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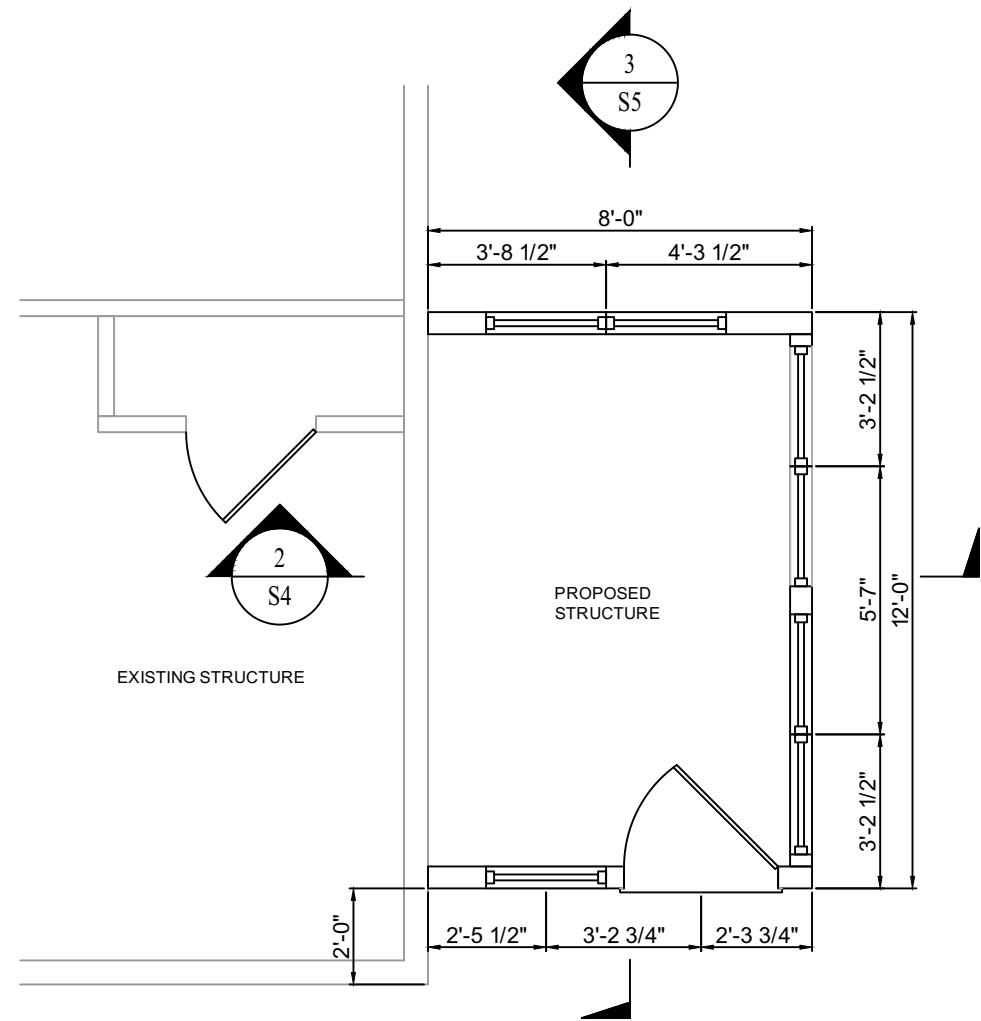
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SCALE: 1/4" = 1'-0"

DATE ISSUED 1/15/18

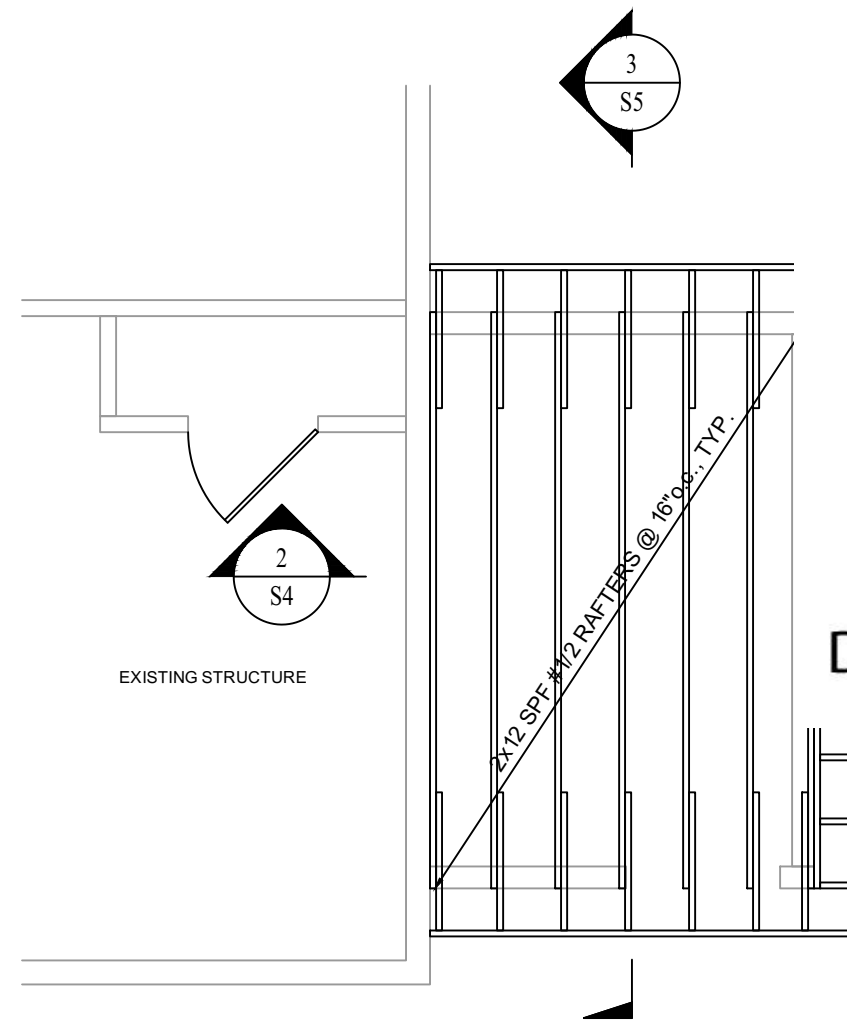


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PROPOSED BASEMENT ADDITION STRUCTURAL DESIGN 95 CONGRESS STREET, PORTLAND, MAINE		
TITLE: <b>FOUNDATION PLANS</b>		
DATE: 12/27/17	DRAWN BY: JLL	DRAWING NUMBER:
SCALE: as noted	PROJ NO: 2017-103	S-2



## PROPOSED FLOOR PLAN

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



## PROPOSED ROOF FRAMING PLAN

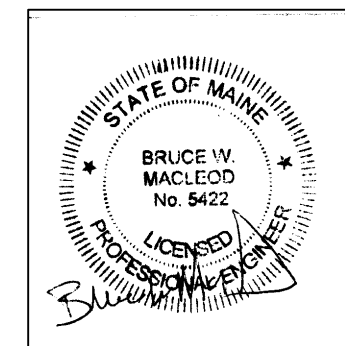
SCALE: 1/4" = 1'-0"



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PROPOSED BASEMENT ADDITION  
STRUCTURAL DESIGN  
95 CONGRESS STREET, PORTLAND, MAINE

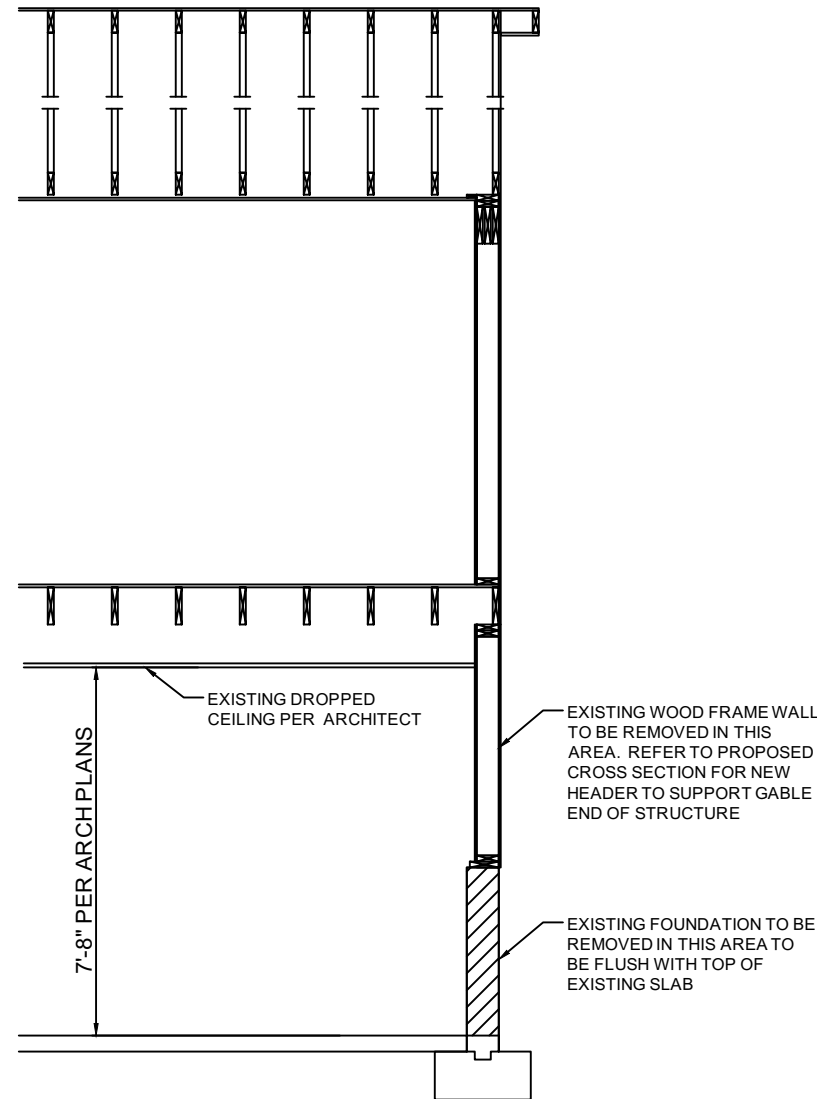
TITLE: **FLOOR PLAN &  
FRAMING PLAN**

DATE: 12/27/17	DRAWN BY: J.J.L.	DRAWING NUMBER:
SCALE: as noted	PROJ NO: 2017-103	S-3



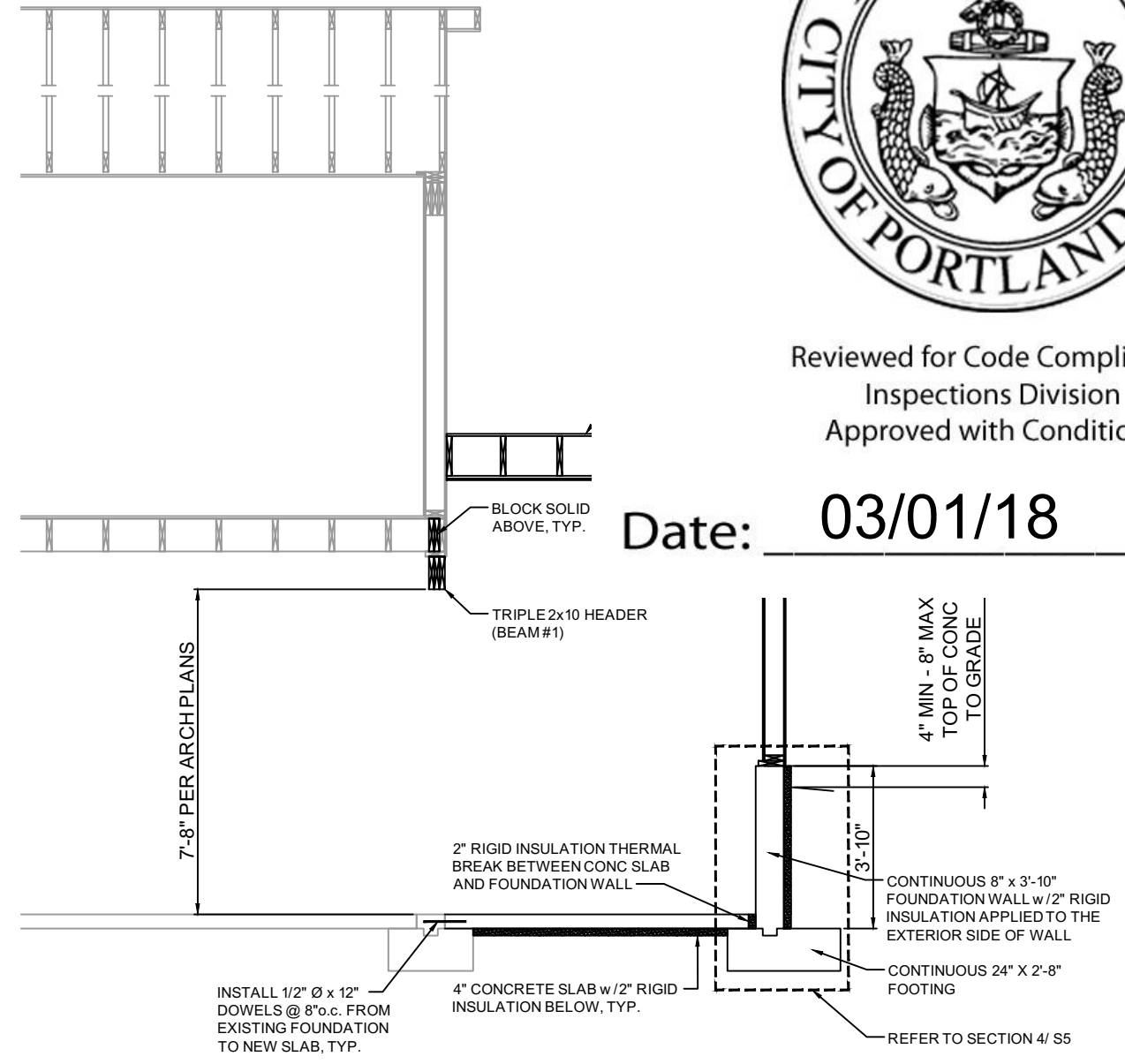
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### EXISTING - CROSS SECTION (1)

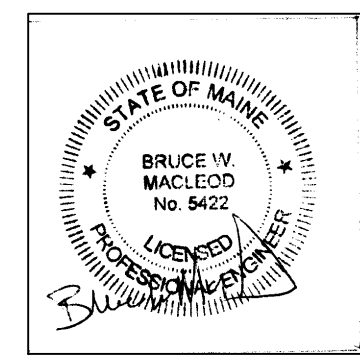
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### PROPOSED - CROSS SECTION (2)

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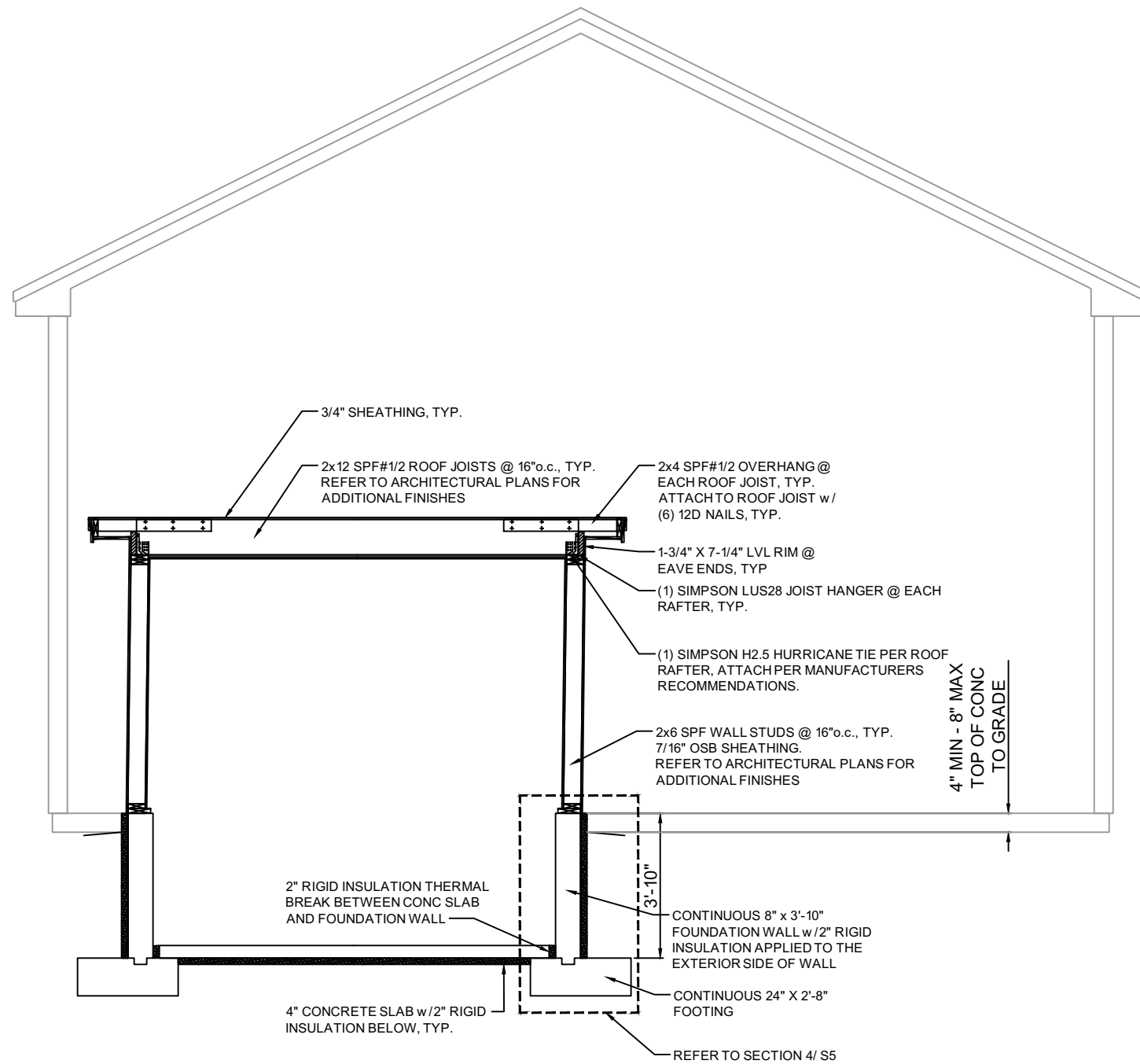


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PROPOSED BASEMENT ADDITION STRUCTURAL DESIGN 95 CONGRESS STREET, PORTLAND, MAINE		
TITLE: SECTIONS		
DATE: 12/27/17	DRAWN BY: J.J.L.	DRAWING NUMBER:
SCALE: as noted	PROJ NO: 2017-103	S-4



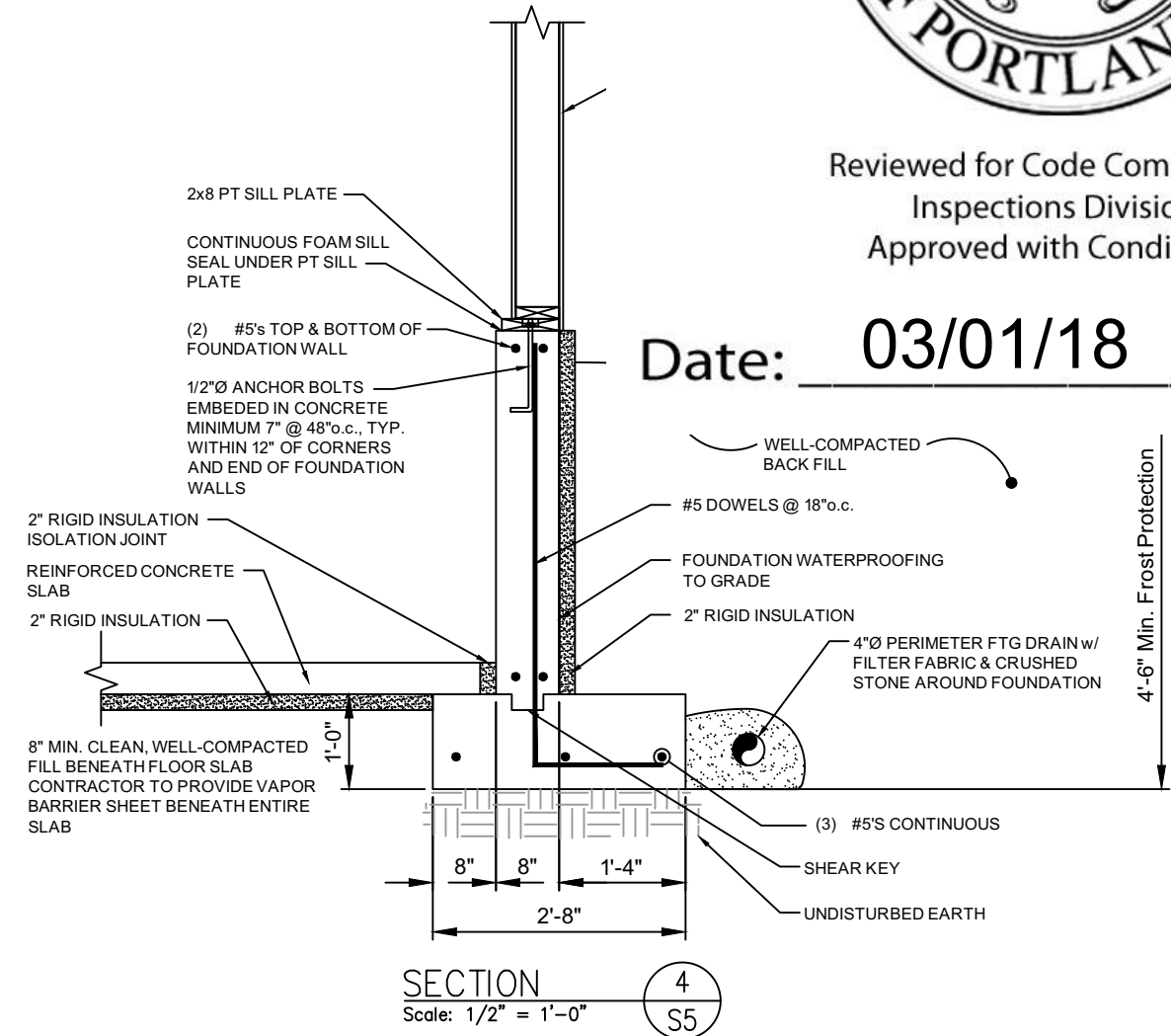
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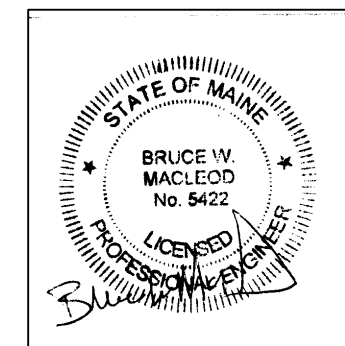
### PROPOSED - CROSS SECTION (3)

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



SECTION 4 / S5  
Scale: 1/2" = 1'-0"

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PROPOSED BASEMENT ADDITION STRUCTURAL DESIGN 95 CONGRESS STREET, PORTLAND, MAINE		
TITLE: SECTIONS		
DATE: 12/27/17	DRAWN BY: JLL	DRAWING NUMBER:
SCALE: as noted	PROJ NO: 2017-103	S-5