

**GENERAL NOTES:**

- The notes on the drawings are not intended to replace specifications. In addition to general notes, see specifications for equipment.
- Structural drawings shall be used in conjunction with job notes, specifications, and site drawings. Consult, openings, chases, piers, relets, sleeves, depressions, and other details not shown on 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.
- Do not scale plans.
- Sections and details shown on any structural drawings shall be considered typical for similar conditions.
- All proprietary products shall be installed in accordance with the manufacturers written instructions.
- The structure is designed to be self supporting and stable after the erection is complete. It is the contractor's sole responsibility to ensure the safety of the building and its occupants during erection. This includes the addition of necessary shoring, steeling temporary bracing, guys or tiebacks. 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.

**DESIGN LOADS:**

- Building code: IRC (2015) International Residential Building Code.
- Design Live Loads: (Ground Snow Load = 50 psf)  
Roof: ..... 40 psf + drift as applicable  
Living areas: ..... 40 psf
- Design wind loads are based on exposure C using 100 mph basic wind speed.
- Seismic Design Utilizes a Bearing wall system; Light frame walls with shear panels - wood structure panels/sheet steel panels; Analysis Procedure shall be equivalent Lateral Force Procedure per IRC 2015.

**FOUNDATION NOTES:**

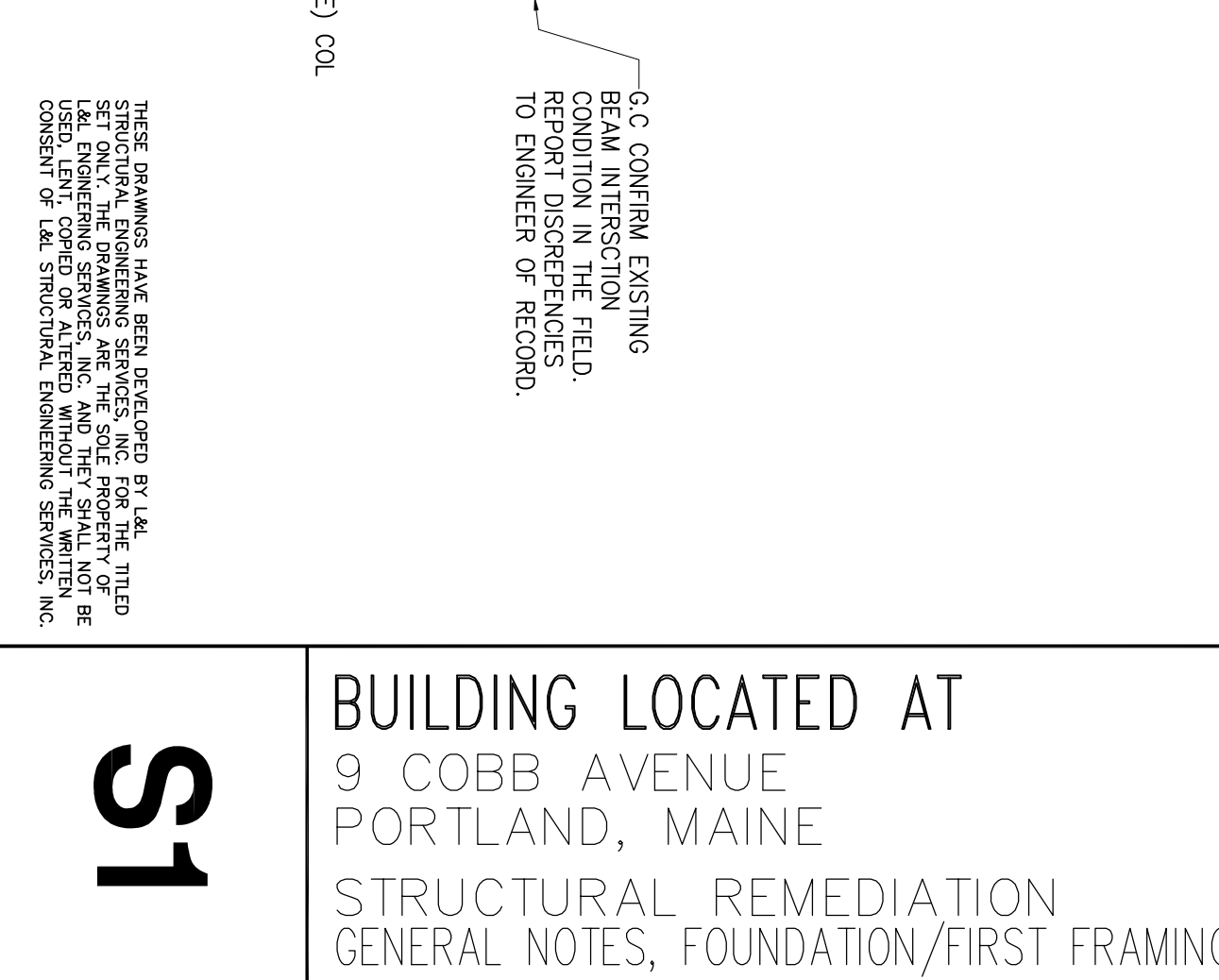
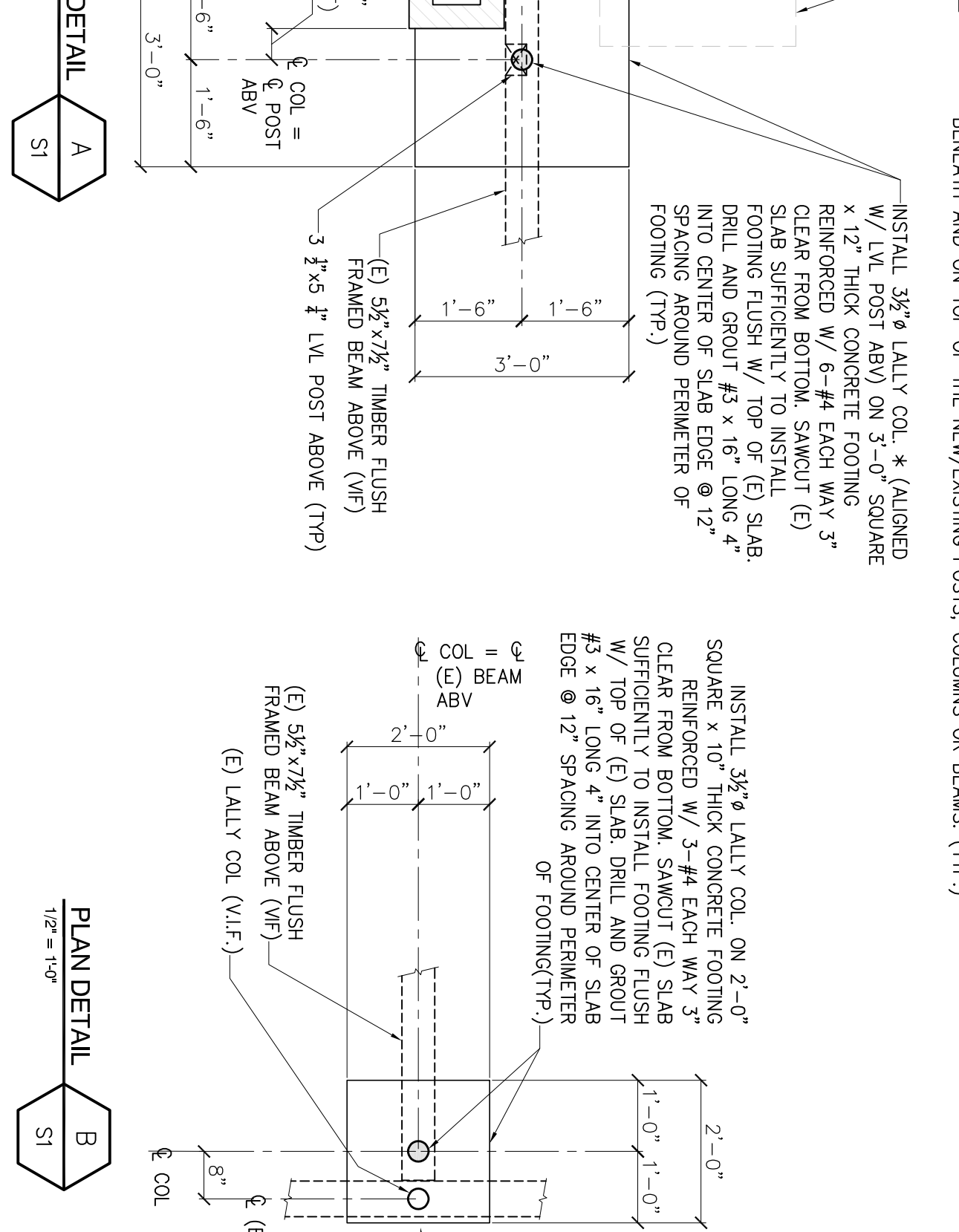
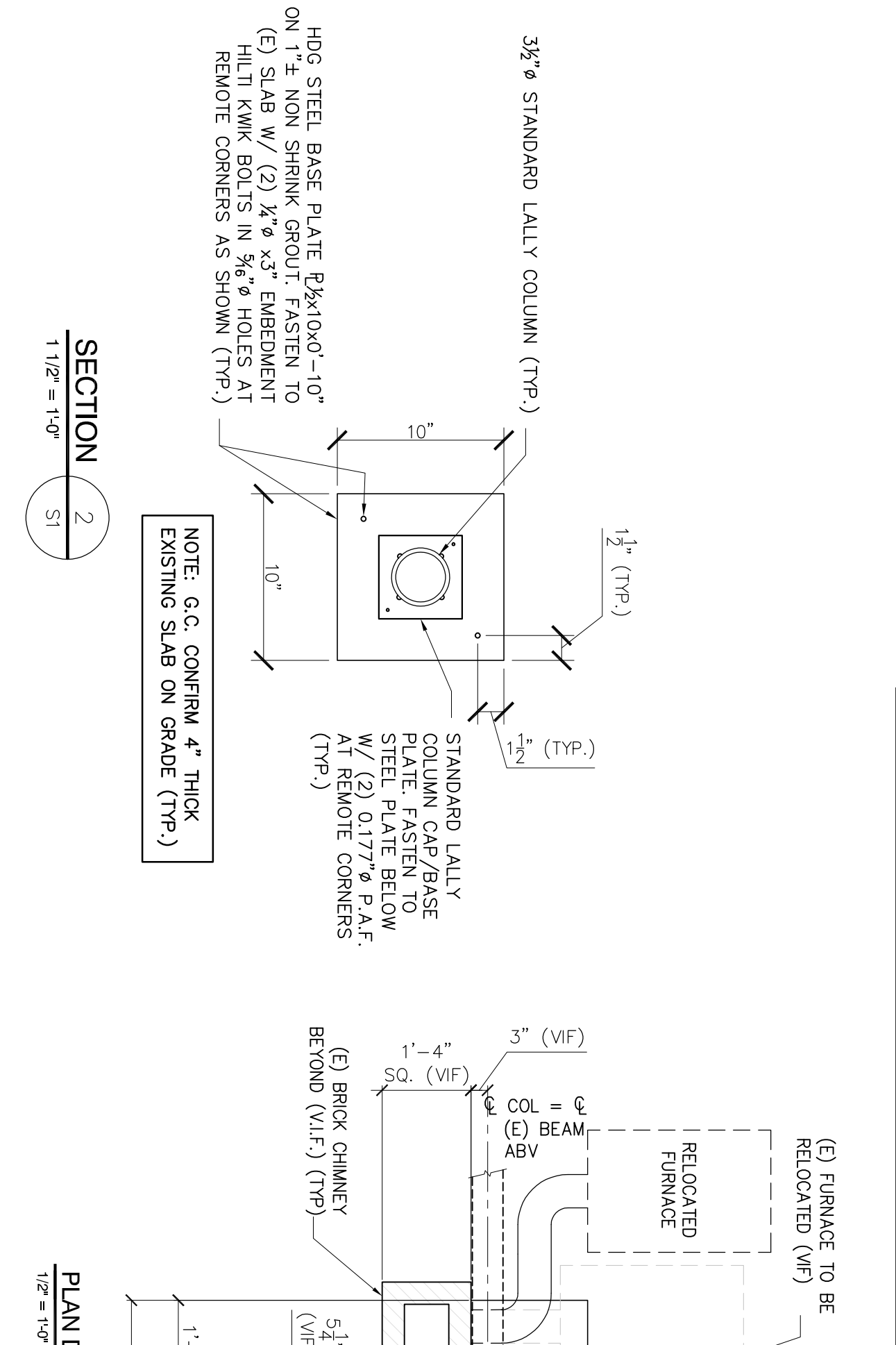
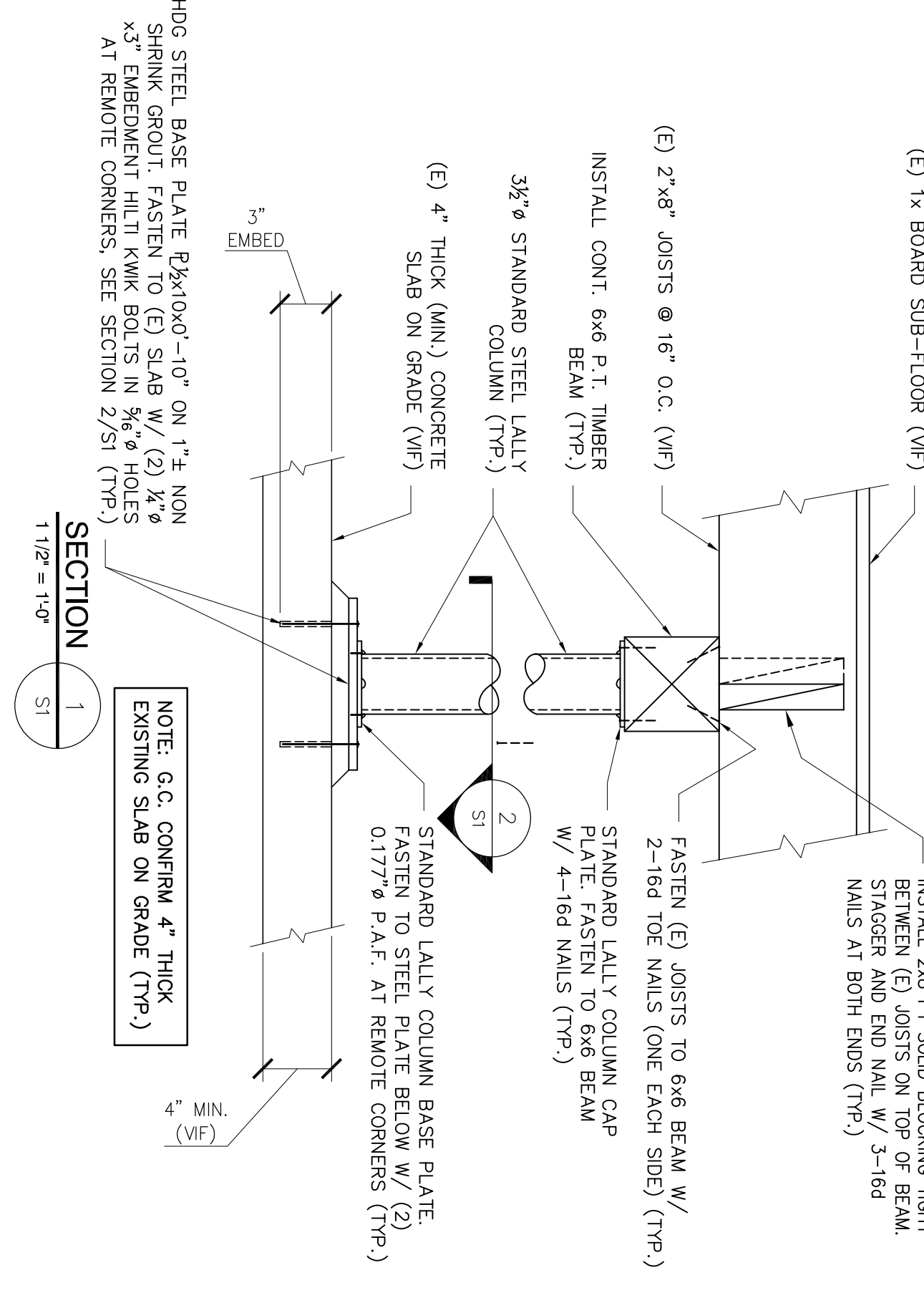
- Foundations have been designed with a presumptive soil bearing capacity of 2000 psf to be verified by the general contractor. If the soil is found to be less than 2000 psf, the excessive soil bearing pressure could result in foundation settlement and movement of the building structure. L&L Structural Engineering shall not be responsible and held harmless for damages resulting from foundation settlement and movement of the structure resulting from inadequate soil bearing capacity.
- Interior spread footings and exterior strip footings shall be founded on undisturbed native soil or compacted structural fill.
- Exterior strip and spread footings shall be founded a minimum of 4'-0" below finished site grade.
- Slabs on grade shall bear on a minimum of 12" of compacted structural fill or compacted ¾" crushed stone. If loose or undesirable fills are encountered at the slab subgrade level, they shall be over excavated to the surface of the natural soil and replaced with structural fill. Refer to drawings and specifications for vapor barrier requirements. Most cure slabs in accordance with ACI.
- Structural fill shall be used at all locations below footings and slabs and adjacent to the foundation walls. Prior to placement of structural fill, remove all topsoil and other undesirable material. Compacted structural fill shall consist of ¾" crushed stone or ¾" crushed stone with 10% fines. If structural fill or frozen soil or any other objectionable material, it shall be well graded within the following limits:  
SCREEN OR  
SIEVE SIZE BY WEIGHT  
6 INCH 100  
3 INCH 70-100  
NO. 40 35-45  
NO. 20 0-5
- Structural fill (or ¾" crushed stone) beneath slabs shall be placed in layers not exceeding 6 inches in loose measure and compacted by self-propelled compaction equipment at approximate optimum moisture content to a dry density of at least 95% of the maximum in place dry density as determined by the modified proctor test (ASTM D-1557). For structural fill or 100% of the proctor unit weight as determined by ASTM C-29 for ¾" crushed stone.

**CONCRETE NOTES:**

- All concrete work shall conform to ACI 318-Latest Edition.
- Concrete strength of 28 days shall be 3000 psf for footings & piers.
- All concrete shall be air-entrained 4% to 6% per the specifications.
- Concrete shall not be placed in water or on frozen ground.
- Concrete materials:  
A. Portland Cement: ASTM C 150, Type I or Type II unless otherwise acceptable to Architect. Use one brand of cement throughout project, unless otherwise acceptable to Architect.  
B. Normal Weight Aggregates: ASTM C 33. Provide from a single source for exposed concrete. Do not use aggregates containing soluble salts or other substances such as iron sulfides, pyrite, marcasite, or ochre which can cause stains on exposed concrete surfaces.  
C. Light Weight Aggregates: ASTM C 330.  
D. Water: Potable.  
E. Air-Entraining Admixtures: ASTM C 260.  
F. High-Range Water-Reducing Admixtures (Super Plasticizer): Type F or Type G containing not more than 1% chloride ions.  
1. Fiber reinforcement shall be added and distributed prior to incorporation of Super Plasticizer.  
G. Normal range water-reducing admixture: ASTM C 494 Type A containing no calcium chloride.  
H. Accelerating Admixtures: ASTM C 494 Type C or E.  
I. Calcium Chloride not permitted.
- Reinforcing bars shall conform to ASTM A615 Grade 60 in accordance with ACI 318-Latest Edition.  
8. Welded wire fabric shall be provided in flat sheets.  
9. Fiber reinforced concrete shall conform to ASTM C-1116.  
10. Splices of reinforcing bars shall be in accordance with ACI 318. Splices of WWF shall be 6" minimum.  
11. Concrete finishes:  
• Slabs: Steel trowel and light broom (non-slip)  
• Anchor bolts shall conform to ASTM A307 or A36 hot dipped galvanized unless noted otherwise on plan.
- Anchor bolts shall conform to ASTM A307 or A36 hot dipped galvanized unless noted otherwise on plan.

**TIMBER FRAMING:**

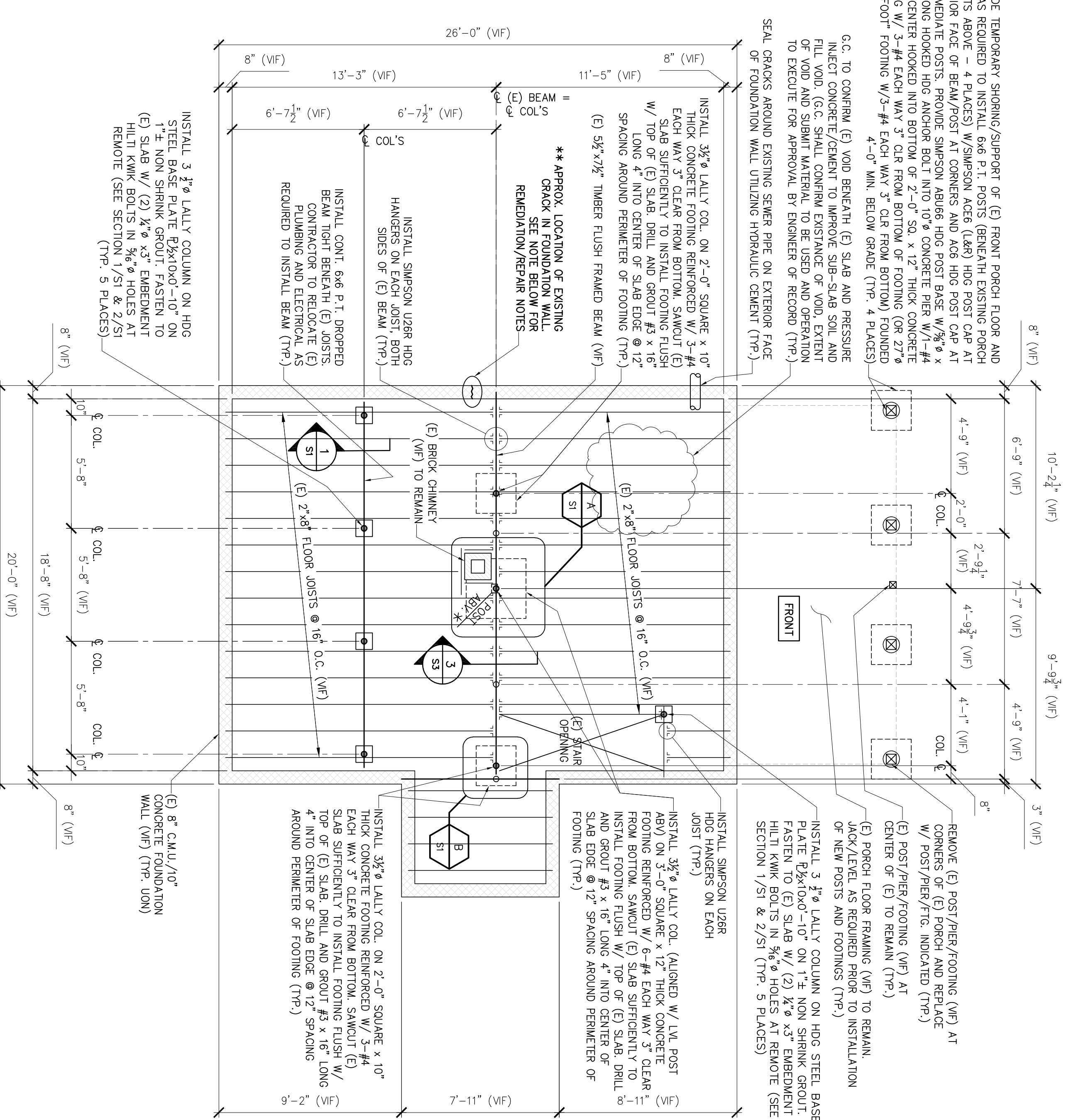
- All Timber framing shall be in accordance with the ATC timber construction manual or the national design specification (NDS) - latest edition.
- Individual timber framing members shall be visually graded, minimum grade #2 Spruce-Pine-Fir (SPF). Kin dried to 19% maximum moisture content.
- Timber shall be southern yellow pine treated with ACQ water borne preservative in accordance with APMA treatment C1 with 0.40 PCF rebar for items in contact with roofing, masonry or concrete with 0.60 PCF rebar for items in contact with earth.
- Metal connectors shall be used at all timber to timber connections or as noted on the design drawings. All metal connectors in contact with pressure treated timber shall be not-dipped galvanized.
- Provide Simpson H25A hurricane anchors where timber framing on/nd/or trusses bear on bearing walls and structural beams.
- Nails and screws not specified shall conform with IRC 2015. All nails and screws in contact with pressure treated timber shall be stainless steel.
- Provide ½" thick APA rated exterior wall sheathing fastened w/ 10d nails @ 4" o.c. at panel edges and 6" o.c. intermediate. Lap sheathing 1'-0" minimum over existing structure (where applicable).
- Provide ¾" thick APA rated roof sheathing fastened w/ 10d nails @ 6" o.c. at panel edges and intermediate.
- Provide ½" thick APA rated floor sheathing fastened w/ construction adhesive and 10d ring shank nails @ 6" o.c. at panel edges and intermediate.
- LVL indicates laminated veneer lumber beams (Fb = 3100 psi & E = 2.0 x 10<sup>6</sup> psi)



**\*\* NOTE: THE EXISTING CRACK THRU THE CMU FOUNDATION WALL SHALL BE REPAIRED BY FILLING CMU CORES SOLID WITH CONCRETE. REMOVE LOOSE CONCRETE, CLEAN SURFACES FREE OF DIRT, DUST, DEBRIS, GREASE, OIL, ETC. AND SEAL CRACKS WITH HYDRAULIC CEMENT. THE EXISTING CRACK THRU THE CONCRETE/STONE FOUNDATION WALL SHALL BE REPAIRED BY MECHANICALLY REMOVING LOOSE CONCRETE, CLEAN SURFACES FREE OF DIRT, DUST, DEBRIS, GREASE, OIL, ETC. AND INJECT SIKADUR 35, HI-MOD LV PER MANUFACTURERS' INSTRUCTIONS AND DETAILS. (TYP.)**

**EXISTING FOUNDATION/FIRST FLOOR FRAMING PLAN**

1/4" = 1'-0"

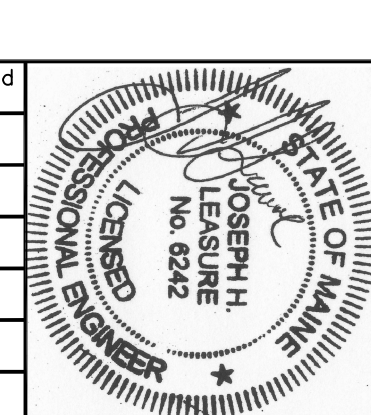


Permitting and Inspections @department  
Approved with Conditions  
11/01/2018



designed by:	rev.	date	description	appr'd
JHL				
PJM				
JHL				
AS NOTED				
08/03/2018				
08/23/2018				
2018-089				

designed by:	rev.	date	description	appr'd
JHL				
PJM				
JHL				
AS NOTED				
08/03/2018				
08/23/2018				
2018-089				



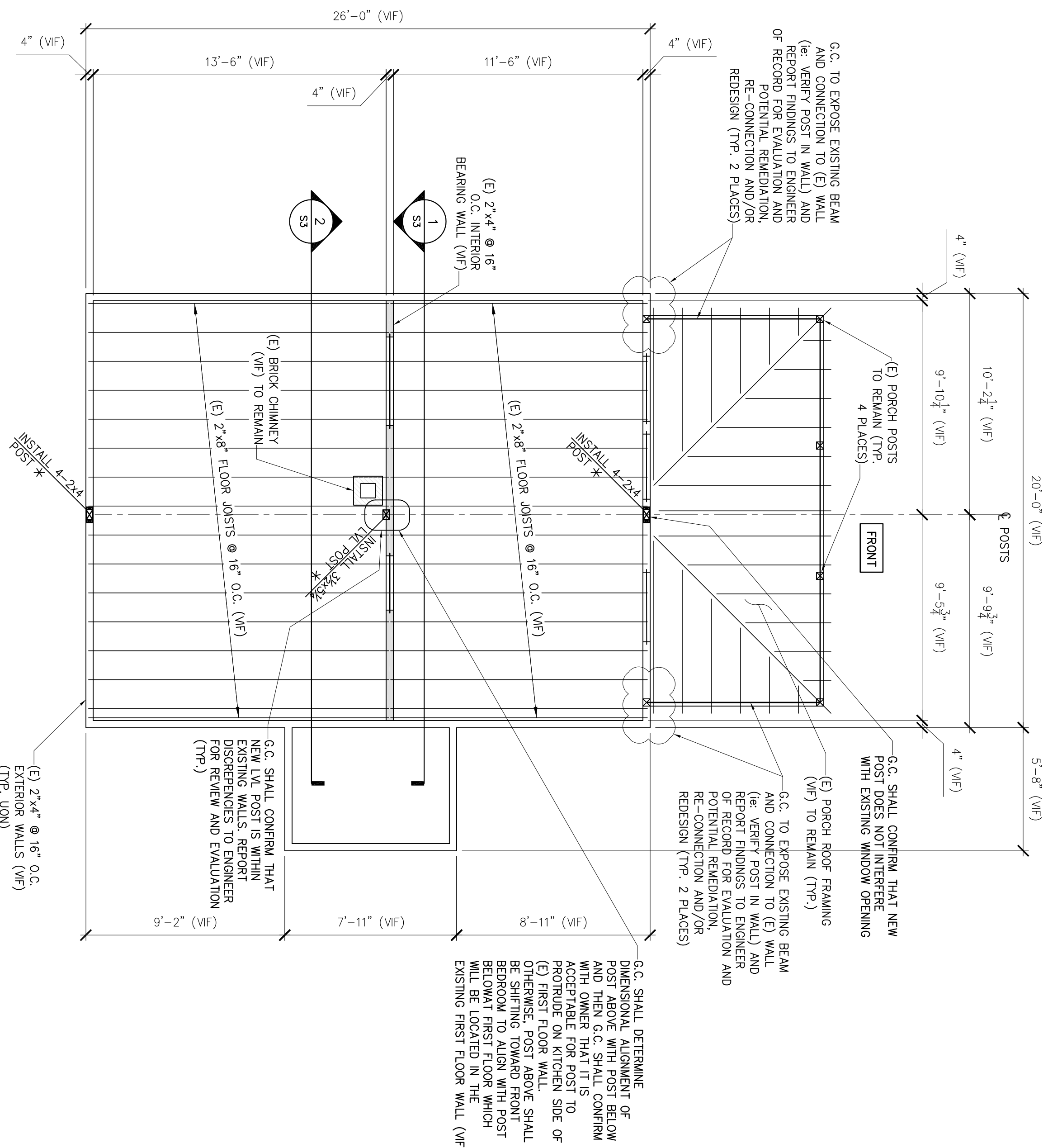
**L & L STRUCTURAL ENGINEERING SERVICES, INC.**  
SIX O STREET  
SOUTH PORTLAND, MAINE 04106  
PHONE: (207) 767-4830  
FAX: (207) 799-5432  
EMAIL: JLEASURE@LL-ENG.COM

**BUILDING LOCATED AT**  
9 COBB AVENUE  
PORTLAND, MAINE  
STRUCTURAL REMEDIATION  
GENERAL NOTES, FOUNDATION/FIRST FRAMING PLAN, &

**S1**

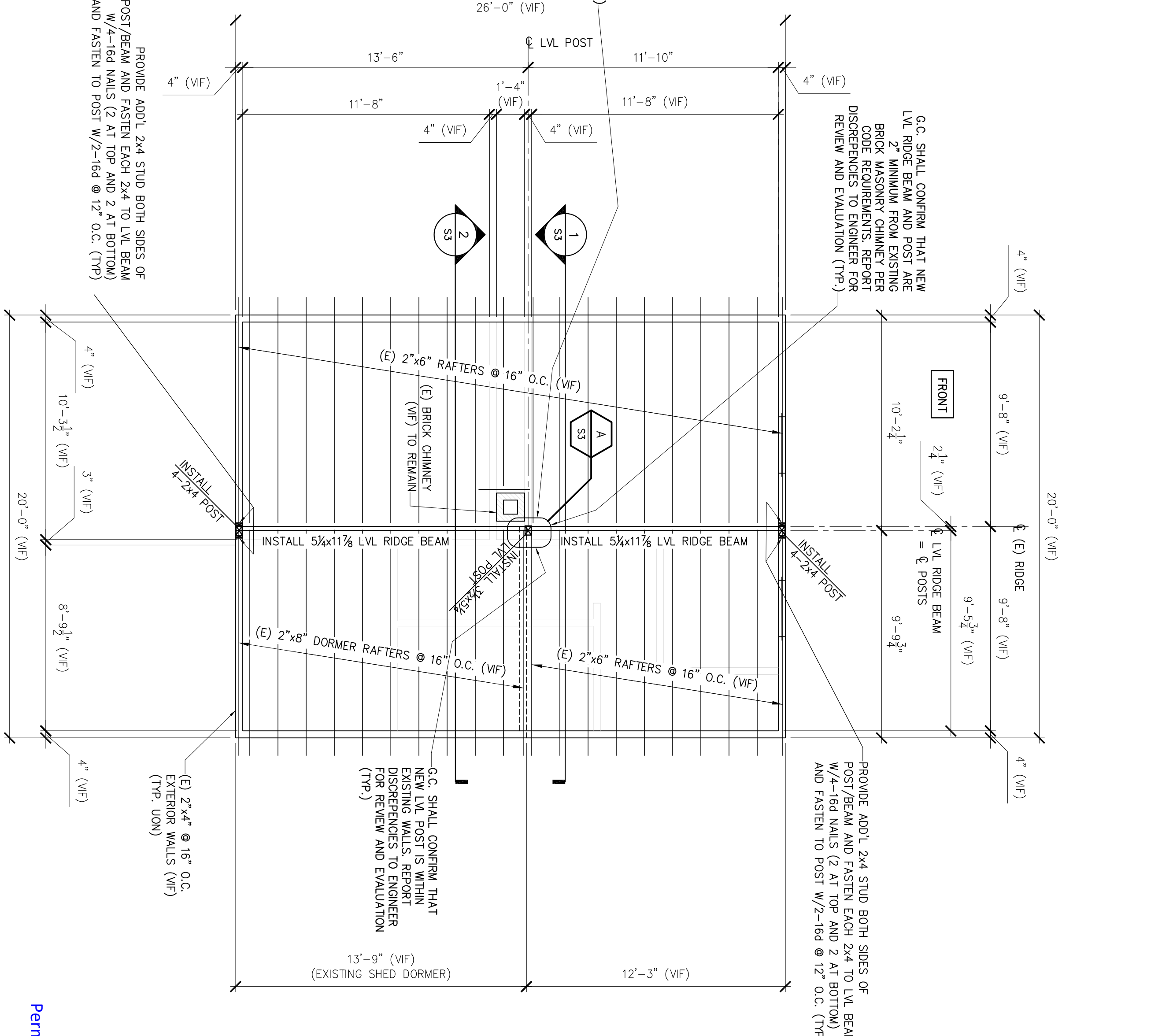
THESE DIMENSIONS HAVE BEEN PROVIDED FOR THE L&L STRUCTURAL ENGINEERING SERVICES, INC. FOR THE THEO L&L ENGINEERING SERVICES, INC. AND THE SHEET MAY BE USED FOR ANY OTHER STRUCTURAL CONSTRUCTION SERVICES.





**EXISTING SECOND FLOOR FRAMING PLAN**  
1/4" = 1'-0"

- NOTES:
1. SEE GENERAL NOTES ON DWG S1.
  2. "E" INDICATES EXISTING CONDITIONS, OR MEMBERS.
  3. "TYP." INDICATES TYPICAL (ALSO SEE GENERAL NOTE #5).
  4. "U.D.N." INDICATES UNLESS OTHERWISE NOTED.
  5. "U.O.N." INDICATES UNLESS OTHERWISE NOTED.
  6. "\*" INDICATES PROVIDE SOLID 2x VERTICAL BLOCKING WITHIN FLOOR SYSTEM TIGHT BENEATH AND ON TOP OF THE NEW/EXISTING POSTS. (TYP.)



**EXISTING ROOF FRAMING PLAN**  
1/4" = 1'-0"

- NOTES:
1. SEE GENERAL NOTES ON DWG S1.
  2. "E" INDICATES EXISTING CONDITIONS, OR MEMBERS.
  3. "TYP." INDICATES TYPICAL (ALSO SEE GENERAL NOTE #5).
  4. "U.O.N." INDICATES UNLESS OTHERWISE NOTED.
  5. "U.O.N." INDICATES UNLESS OTHERWISE NOTED.

THESE DIMENSIONS HAVE BEEN OBTAINED BY L&L STRUCTURAL ENGINEERING SERVICES, INC. FOR THE TYPED L&L ENGINEERING SERVICES, INC. NO OTHER PARTY OR USER SHALL BE HELD RESPONSIBLE FOR ANY DISCREPANCIES OR OMISSIONS OF THE STRUCTURAL DIMENSION SERVICES, INC.

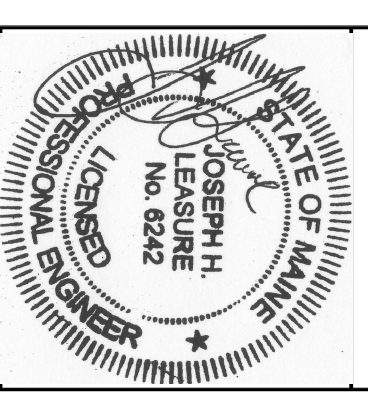
**S2**

**BUILDING LOCATED AT**  
9 COBB AVENUE  
PORTLAND, MAINE

**STRUCTURAL REMEDIATION  
SECOND FLOOR FRAMING AND ROOF F**

Permitting and Inspections Department  
Approved with Conditions  
**11/01/2018**

designed by:	rev.	date	description	app'd
JHL				
drawn by:				
PJM				
checked by:				
JHL				
scale:				
AS NOTED				
date:				
08/03/2018				
plot date:				
08/23/2018				
project #:				
2018-089				

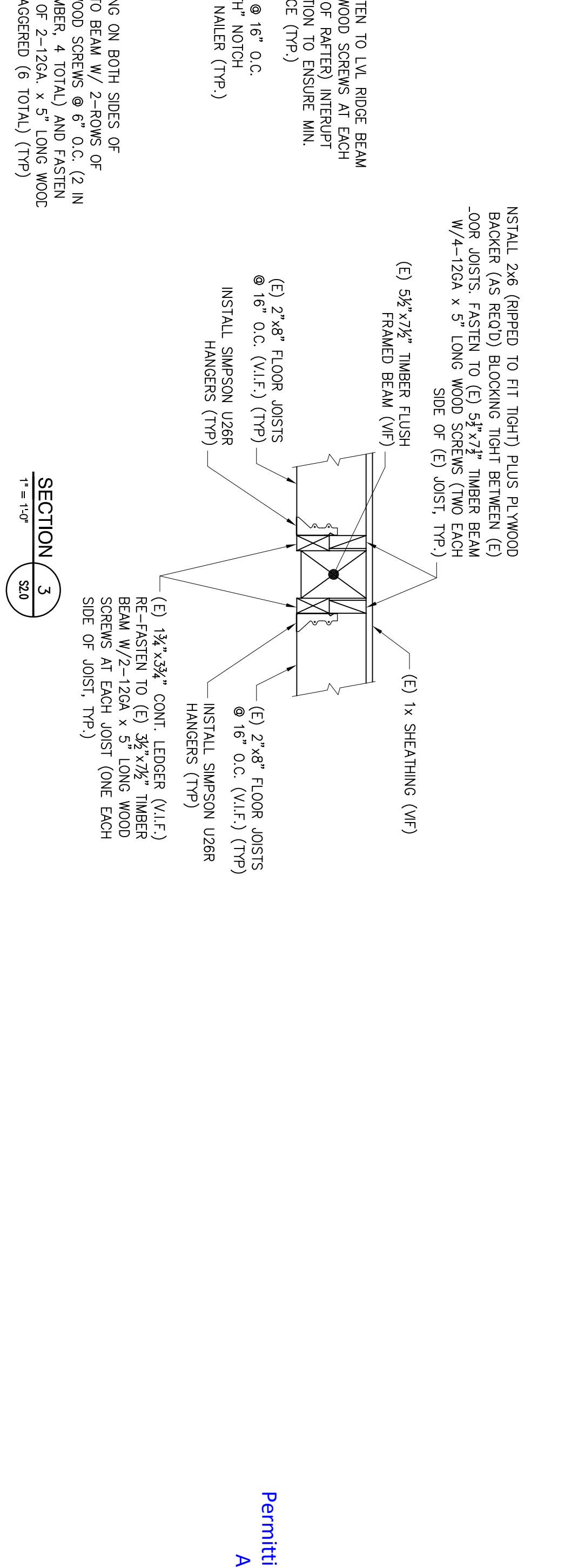
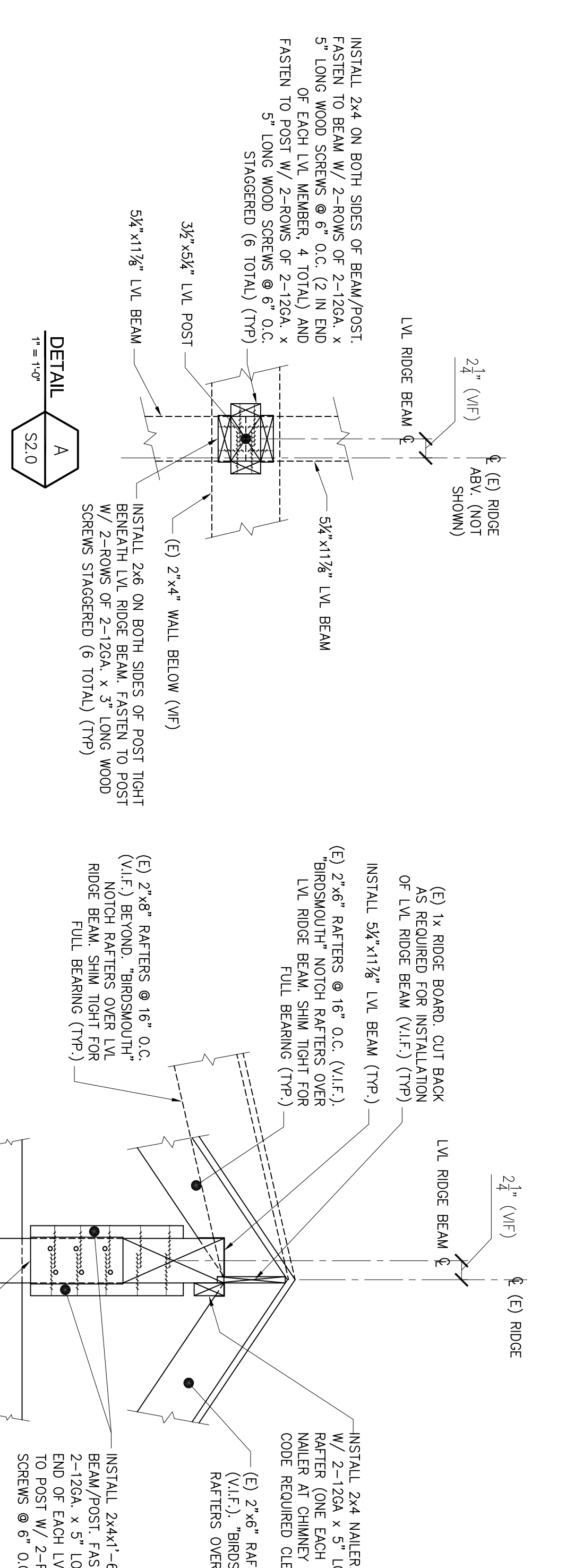
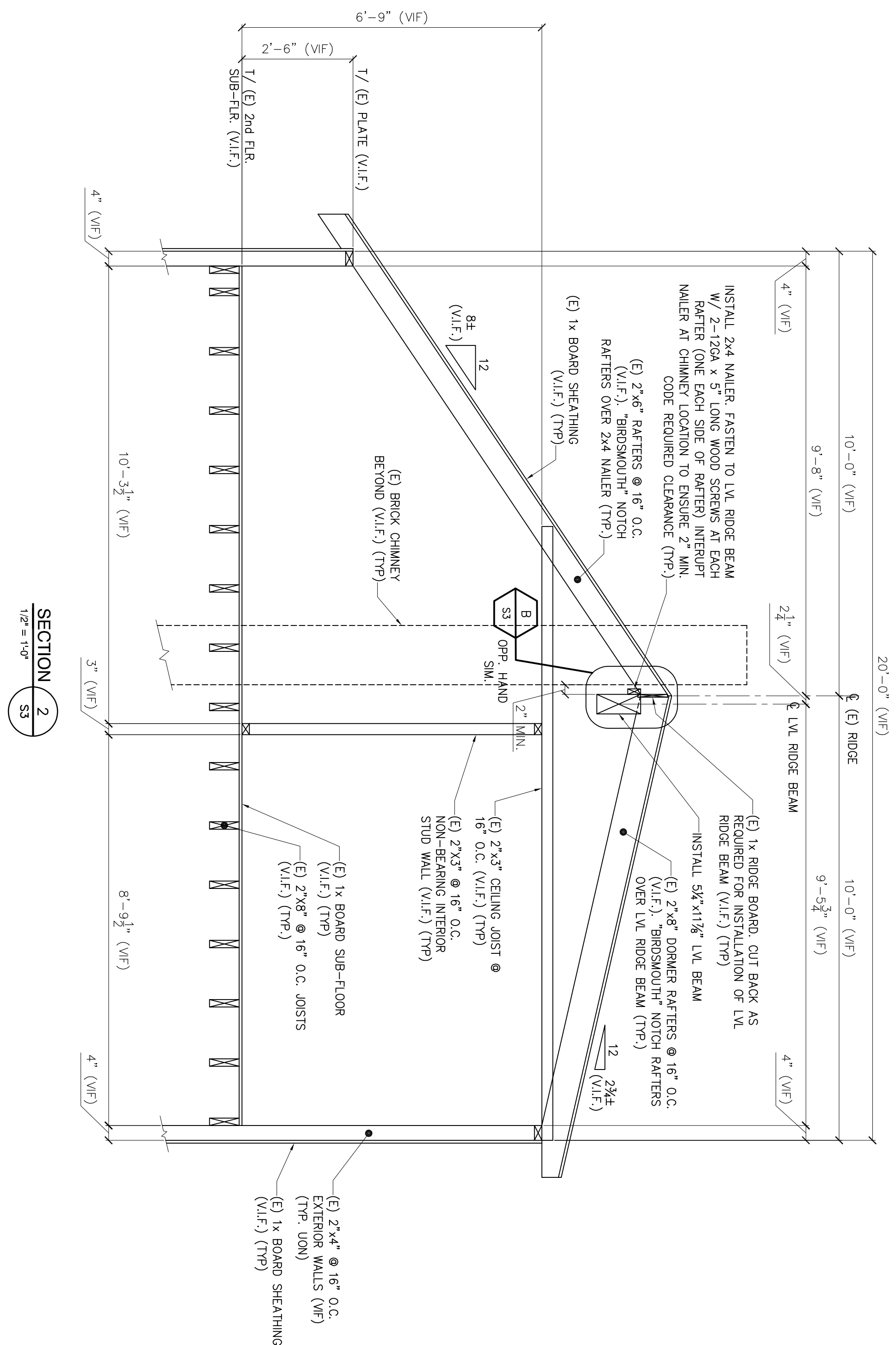
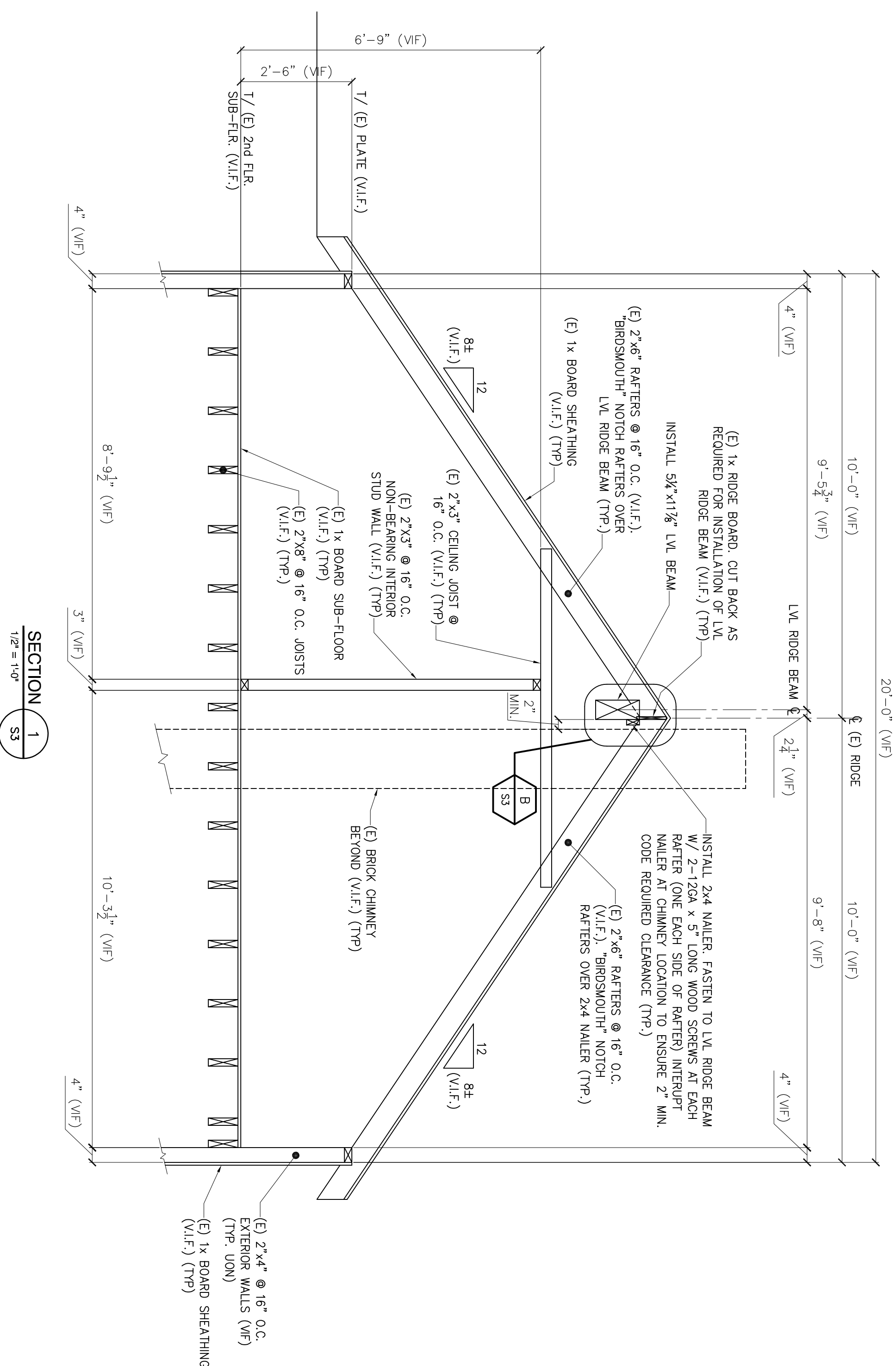


**L & L STRUCTURAL  
ENGINEERING SERVICES, INC.**

SIX O STREET  
SOUTH PORTLAND, MAINE 04106

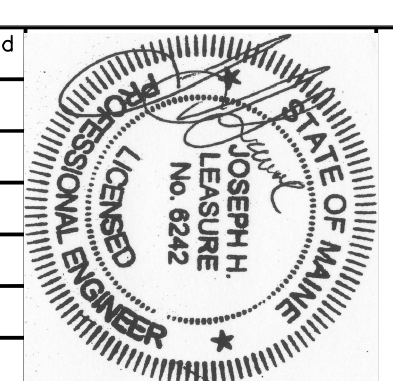
PHONE: (207) 767-4830  
FAX: (207) 799-5432  
EMAIL: JLEASURE@LL-ENG.COM





designed by:	rev.	date	description	appr'd
JHL				
PJM				
JHL				
AS NOTED				
08/03/2018				
08/23/2018				
2018-089				

Permitting and Inspections Department  
Approved with Conditions  
11/01/2018

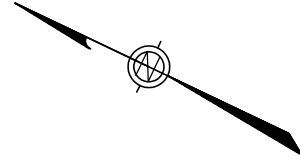


**L & L STRUCTURAL ENGINEERING SERVICES, INC.**  
SIX O STREET  
SOUTH PORTLAND, MAINE 04106  
PHONE: (207) 767-4830  
FAX: (207) 799-5432  
EMAIL: JLEASURE@LL-ENG.COM

**BUILDING LOCATED AT**  
9 COBB AVENUE  
PORTLAND, MAINE  
**STRUCTURAL REMEDIATION**  
FRAMING PLAN SECTIONS AND DETAILS



THESE DRAWINGS HAVE BEEN PREPARED BY L&L STRUCTURAL ENGINEERING SERVICES, INC. FOR THE TITLE L&L ENGINEERING SERVICES, INC. AND THE SHEET MAY BE USED, LEFT CORNER OR ALTERED WITHOUT THE WRITTEN CONSENT OF L&L STRUCTURAL ENGINEERING SERVICES, INC.



LOT 2

LOT 1

98' ±

± 5'-8" \*

± 29'-0"

61' ±

LOT 3

DECK

DWELLING

PORCH

50' ±

COBB AVENUE

TO WESTBROOK ST.

± 19'-0" \*

PAVED

133' ±

LOT 4

HUNT

Permitting and Inspections Department  
Approved with Conditions  
11/01/2018



### SITE PLAN - 9 COBB AVENUE, PORTLAND MAINE

1/16" = 1'-0"

NOTE:

- 1. " \*" INDICATES: DIMENSIONS AS PROVIDED BY OWNER ON 8/29/18