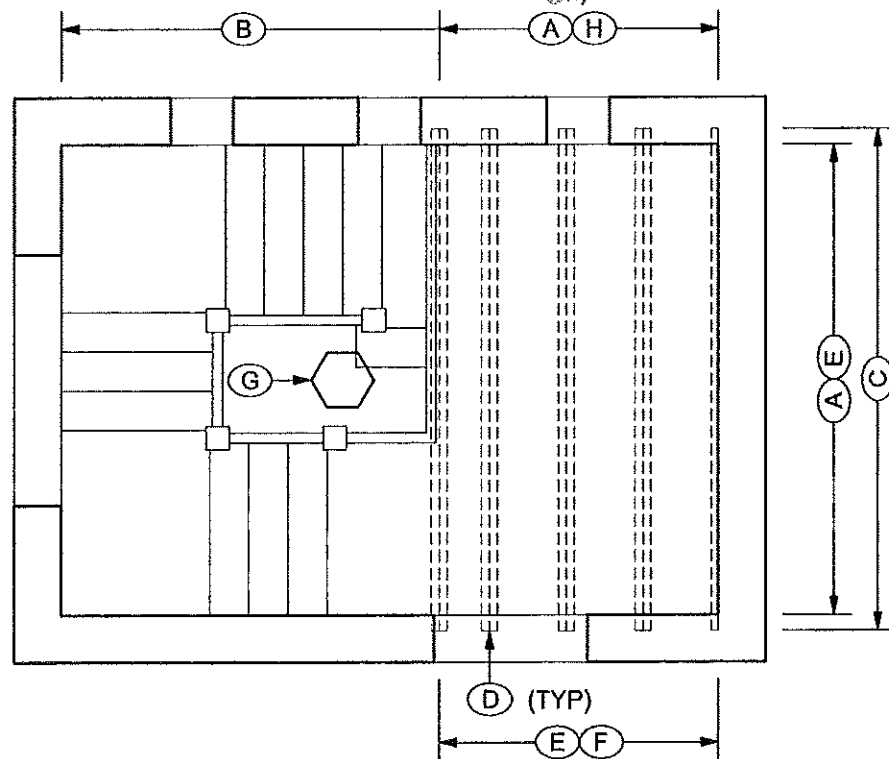


**1** BELL TOWER FIRST FLOOR PLAN  
 1/4" = 1'-0"  
 FEB 24 2012  
 Dept. of Building Inspections  
 City of Portland Maine



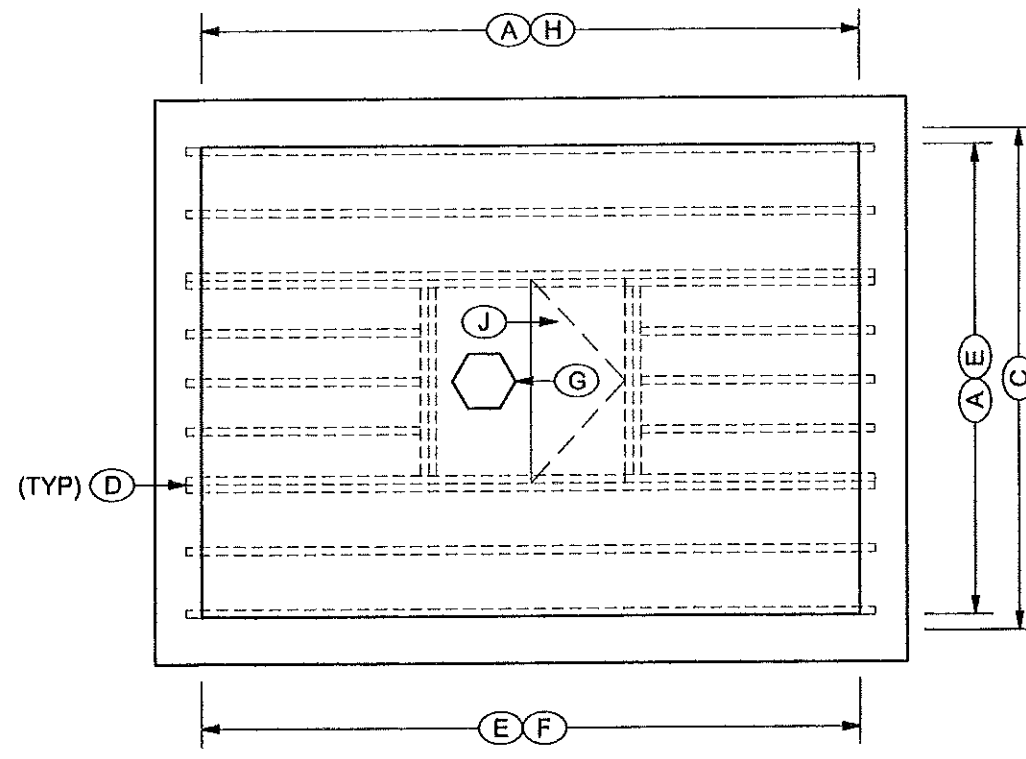
**2** BELL TOWER SECOND FLOOR PLAN  
 1/4" = 1'-0"

**ARCHITECTURAL KEY NOTES**

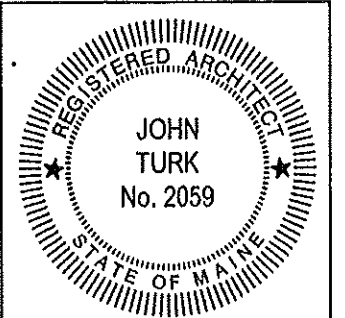
- (A) REMOVE AND SALVAGE EXISTING HARDWOOD FLOORING FOR REUSE.
- (B) EXISTING STAIRS AND BALUSTRADES TO REMAIN IN PLACE. SHORE AS REQUIRED.
- (C) REMOVE EXISTING ROTTED 2X10 FRAMING AS INDICATED. PRIOR TO REMOVAL, GENERAL CONTRACTOR SHALL MEASURE AND RECORD EXISTING DIMENSIONAL RELATIONSHIPS BETWEEN STRUCTURE AND FINISHES. POSITION NEW FRAMING IN SUCH A WAY AS TO PROVIDE FOR REASSEMBLY OF FLOOR FINISH, BALUSTRADE, BASEBOARDS, FLOOR HATCH, ETC. IN PRECISE, ORIGINAL LOCATIONS.
- (D) EXISTING MASONRY POCKETS TO REMAIN OPEN. GC TO VERIFY THAT ALL NEW TAPCON LEDGER SCREWS ARE MIN. 4" TO EITHER SIDE OF EACH POCKET EDGE.
- (E) CUT AND POINT 2' HIGH SWATH OF MASONRY AT FLOOR FRAMING. ASSUME 35% BRICK REPLACEMENT. RESTORATION MORTAR SHALL MEET REQUIREMENTS OF ASTM C 270 AND SHALL CONSIST OF 1 PART HYDRATED TYPE N LIME (CODEX HIGH-CALCIUM); 1 PART WHITE PORTLAND CEMENT; AND 6 PARTS SAND TO BE MATCH EXIST. REMOVE MORTAR FROM JOINTS TO 1 INCH OR TO SOUND MORTAR, WHICHEVER IS GREATER, DO NOT DAMAGE BRICK. USING A LONG, THIN POINTING TROWEL, TIGHTLY PACK MORTAR INTO JOINTS IN 1/4" LAYERS. ALLOW EACH LIFT TO REACH THUMBPRINT HARDNESS BEFORE APPLYING SUCCEEDING LAYER. AT THE END OF EACH WORK PERIOD, STAGGER LAYERS IN JOINTS MIN. 3" APART.
- (F) INSTALL NEW WOOD FRAMING AS PER STRUCTURAL DRAWINGS.
- (G) EXISTING BUILT-UP WOOD COLUMN TO REMAIN IN PLACE. SHORE AS REQUIRED.
- (H) REINSTALL SALVAGED HARDWOOD FLOORING AND ANY ASSOCIATED WOOD FINISHES REQUIRED TO BE REMOVED TO FACILITATE INSTALLATION OF NEW FRAMING AND RE-POINTING WORK.
- (J) REINSTALL SALVAGED HATCH CASING. FABRICATE NEW OPERABLE WOOD DOOR HATCH TO MATCH EXISTING. INSTALL 4 NEW 6" MARINE GRADE STAINLESS STEEL STRAP HINGES.

**GENERAL NOTES**

1. PRIOR TO CONSTRUCTION, GC GENERAL SHALL SUBMIT PRODUCT DATA TO ARCHITECT FOR REVIEW AND COMMENT.
2. ALL WORK SHALL CONFORM TO CITY OF PORTLAND, STATE, AND FEDERAL REGULATIONS.
3. THIS PROPERTY IS LISTED ON THE NATIONAL REGISTER OF HISTORIC PLACES AND ALL WORK IS REQUIRED TO CONFORM TO THE SECRETARY OF THE INTERIOR'S STANDARDS FOR THE TREATMENT OF HISTORIC PROPERTIES.



**3** BELL TOWER THIRD FLOOR PLAN  
 1/4" = 1'-0"



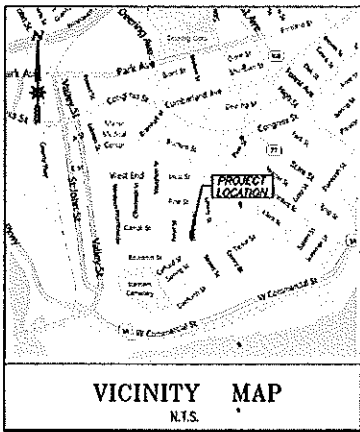
ftl-architects,  
 28 Danforth Street, Suite 213  
 Portland, Maine 04101  
 ph: 207.761.9662

WILLISTON WEST - BELL TOWER  
 FLOOR REPAIR  
 PORTLAND, MAINE

OWNER:  
 32 THOMAS STREET, LLC

DATE:  
 22 FEBRUARY 2012  
 PROJECT NO.:  
 1120

**A-1**



**LEGEND**

- #5 REBAR WITH PLASTIC CAP STAMPED "NCS, INC. PLS 1314" SET ON 12/22/11
- FOUND IRON PIPE (AS NOTED)
- FOUND MONUMENT (AS NOTED)
- FOUND DRILL HOLE
- FOUND IRON ROD
- UTILITY POLE
- GUY WIRE ANCHOR
- FOUND DECIDUOUS TREE
- BOUNDARY LINE
- EASEMENT LINE
- EDGE OF PAVEMENT
- RIGHT-OF-WAY LINE
- ABUTTER LINE
- OVERHEAD UTILITY
- CHU
- N/F
- 1234/567
- 12-3-45
- (123.45)
- NOW OR FORMERLY OWNED BY DEED BOOK AND PAGE (CCRD)
- TAX MAP-BLOCK-LOT
- PARENTHESIS DENOTE RECORD DATA

**NOTES**

1. THE BASIS OF BEARING FOR THIS SURVEY MAGNETIC 1980 AND FROM PLAN REFERENCED IN NOTE 4.a.
2. DEED AND PLAN BOOK REFERENCES ARE TO THE CUMBERLAND COUNTY REGISTRY OF DEEDS.
3. RECORD OWNERSHIP OF THE PARCELS SURVEYED CAN BE FOUND IN THE FOLLOWING DEEDS OF RECORD:
  - a. DEED FROM ABBY STEEL TO WILLISTON CHURCH DATED APRIL 13, 1888 AND RECORDED IN DEED BOOK 525, PAGE 221.
  - b. DEED FROM EDWARD CHASE TO WILLISTON CHURCH DATED SEPTEMBER 9, 1897 AND RECORDED IN DEED BOOK 652, PAGE 480.
4. REFERENCE IS MADE TO THE FOLLOWING PLANS:
  - a. PLAN OF LAND ON NEAL AND CARROLL STREETS PORTLAND, MAINE FOR McLELLAN SCHOOL HOUSES, BY OWEN HASKELL, INC., DATED DECEMBER 15, 1982 AND RECORDED IN PLAN BOOK 37, PAGE 1.
  - b. CLIFFORD STREET CONDOMINIUM AT 15 CLIFFORD STREET PORTLAND, MAINE FOR WILLIAM HAVILL, BY OWEN HASKELL, INC. DATED SEPTEMBER 10, 1980 AND RECORDED IN PLAN BOOK 37, PAGE 1.
  - c. PLAN OF REVALUATION PLAN OF PORTLAND, DATED OCTOBER 24, 1984 AND RECORDED IN PLAN BOOK 5, PAGE 62.
  - d. VARIOUS RIGHT-OF-WAY PLANS OBTAINED FROM THE CITY OF PORTLAND ENGINEERING DEPARTMENT.
5. THE PARCEL SURVEYED IS IDENTIFIED ON THE CITY OF PORTLAND TAX ASSESSOR'S MAP 62, BLOCK E, PARCEL 5.
6. THE PARCEL SURVEYED IS LOCATED IN THE R-4 ZONE/DISTRICT. PORTIONS OF BULK AND SPACE REQUIREMENTS ARE AS FOLLOWS:
  - MINIMUM STREET FRONTAGE.....50'
  - MINIMUM FRONT YARD.....25'
  - MINIMUM SIDE YARD.....10'
  - MINIMUM REAR YARD.....25'
  - \*SIDE YARD IS DETERMINED BY HEIGHT OF STRUCTURE AND CAN INCREASE TO 16'
7. THE WIDTH AND LAYOUT OF CARROLL AND THOMAS STREETS IS 60' AND FROM PLANS REFERENCED IN NOTES 4.d
8. REFERENCE IS MADE TO THE FOLLOWING EASEMENTS OF RECORD:
  - a. SUBJECT TO THE RIGHT OF CENTRAL MAINE POWER AND NEW ENGLAND TELEPHONE AND TELEGRAPH COMPANY TO CONSTRUCT, ERECT, REBUILD, OPERATE, MAINTAIN AND REMOVE ELECTRIC DISTRIBUTION AND COMMUNICATION LINES AS DESCRIBED IN DEED BOOK 3157, PAGE 51.
9. THE UTILITIES SHOWN ON THIS PLAN WERE FROM FIELD OBSERVATION ONLY. THERE MAY BE OTHER UTILITIES EXISTING THAT ARE NOT SHOWN. CONTACT DIG-SAFE (888)DIG-SAFE PRIOR TO ANY EXCAVATION WORK.
10. THERE IS MENTION OF AN UNDERGROUND OIL STORAGE FACILITY IN DEED BOOK 9824, PAGE 156. THE LOCATION OF THIS FACILITY IS UNKNOWN.

Number	By	Date	Change
1	ADA	12/21/11	ISSUED FOR WORK/REVISION

PROJECT: 33078	DRAWING NAME: 33078.DWG
DATE: DECEMBER 13, 2011	SCALE: 1"=20'
FIELD BY: ADA	DRAWN BY: ADA

**BOUNDARY SURVEY**  
26 THOMAS STREET, PORTLAND, MAINE

**WILLISTON CHURCH**  
26 THOMAS STREET, PORTLAND, MAINE

Prepared For:  
**MAJELLA GLOBAL TECHNOLOGY DEVELOPMENT**  
1200 MIDDLE STREET, PORTLAND, MAINE

SURVEYING ENGINEERING LAND PLANNING  
**Northeast Civil Solutions**  
INCORPORATED  
153 US ROUTE 1, SCARBOROUGH, MAINE 04074

14 207.683.1000 fax 207.683.1001 e-mail info@northeastcivilsolutions.com  
603.682.2227

**STAMP AND SIGNATURE**

*[Signature]* 12-21-11  
JOHANN BUSHMAN DATE

IF THIS PLAN DOES NOT CONTAIN AN EMBOSSED SEAL, IT IS NOT AN ORIGINAL AND MAY BE VOID.

12-0007  
 Bell Tower Repairs  
 Wilston-West Church  
 Portland, ME

**DESIGN LIVE LOADS:** 2009 IBC/MUEBC, U.O.N.  
 \* Floors and Landings 100 psf

**STRUCTURAL STEEL:**

- \* Angles, misc: ASTM A36
- \* Expansion Anchors shall be ICC-ES approved, installed in accordance with manufacturers specifications.  
 In concrete: Wedge Type  
 In solid masonry: Sleeve Type
- \* Non-shrink grout beneath column base and beam bearing plates shall be non-metallic with minimum compressive strength 5000psi.

**WOOD FRAMING:**

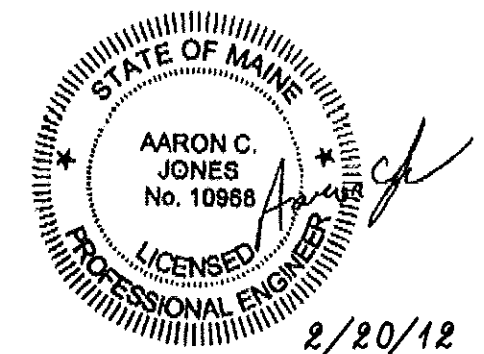
- \* Dimension Lumber is designed and shall be supplied using BASE VALUES Design Criteria.
- \* SPF #2 and better (Maximum Moisture Content 19%) U.O.N.  
 Plates: Sill plates: Pressure Treated SPF or Southern Pine:  
 "Pressure treated lumber" shall be framing material of the specified species which has been pressure treated with a decay and insect resistant solution, meeting all current standards for wood in contact with concrete or earth.  
 Sill plates in contact with masonry or concrete foundations, footings or slabs may be treated Timber Strand LSL (zinc borate treatment). Sodium borate treatment may also be acceptable for sill plate applications when protected from weather.  
 Acceptable treatment mediums for wood in contact with earth or in exterior applications include ACQ-C and ACQ-D (Alkaline Copper Quaternary) and copper azole (CBA-A and CBA-B).  
**DO NOT USE WOODS WHICH HAVE BEEN TREATED WITH AMMONIA BASED CARRIERS.**  
 All connectors shall meet the recommendations of the pressure treated wood manufacturer, but shall be not less than Hot Dipped Galvanized meeting requirements of ASTM A653, such as Simpson ZMAX (G185). All screws, nails and bolts shall match hangers and other connectors, and shall meet ASTM A123 for individual connectors and ASTM A153 for fasteners.  
 For durability, it is our recommendation that connectors used in exposed conditions with treated lumber be stainless steel.  
 Do not mix galvanized and stainless products.  
 Do not allow aluminum to contact treated wood.

- \* All plywood and oriented strand board (OSB) sheathing shall be engineered grades with APA grade stamp indicating appropriate maximum spacing of supports.  
 Floor sheathing: nominal 3/4", OSB T+G Sturd-I Floor 24 span rating glued and nailed.
- \* Minimum nailing shall comply with IBC Table 2304.9.1 except where more or larger nailing shown on drawings.
- \* Cross bridge all dimension lumber floor joists at midspan and provide solid blocking or rim joists at all joist supports and joist ends.
- \* Metal connectors: Simpson Strong Tie unless otherwise noted, installed with number and type of nails to achieve maximum rated capacity. Note that heavy duty and skewed hangers may require special order.
- \* All beams shall be braced against rotation at points of bearing.
- \* Drypack grout all beam pockets full after beams are set
- \* Unless otherwise indicated, install two lengths of solid blocking x joist depth x 12 inches long in floor framing under column loads. Columns must have a continuous load path to foundation.
- \* Lead holes for lag bolts shall be 60% to 70% of lag shank diameter in compliance with AITC criteria.

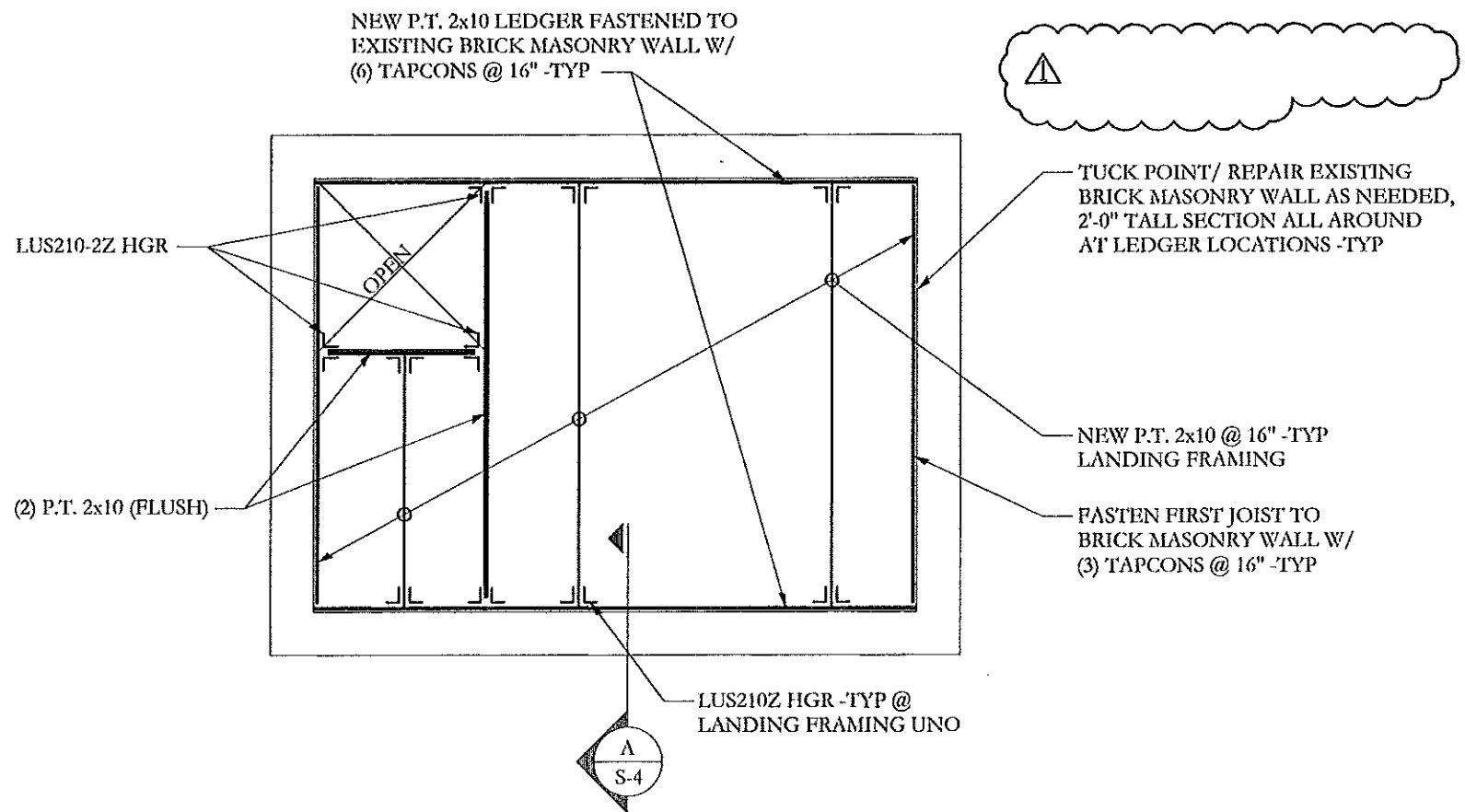
**STRUCTURAL ERECTION AND BRACING REQUIREMENTS**

- \* The structural drawings illustrate the completed structure with all elements in their final positions, properly supported and braced. The contractor, in the proper sequence, shall provide proper shoring and bracing as may be required to achieve the final completed structure.
- \* These plans have been engineered for construction at one specific building site. Builder assumes ALL responsibility for use of these plans at Any Other building site. Plans shall not be used for construction at any other building site without specific review by the engineer.
- \* Observations of framing required by the owner, lender, insurer, building department or any other party will be accomplished by the engineer at the owner's expense. At least 24 hours advance notice is requested.

Structural Drawing Index	
S-0	General Notes
S-1	Bell Tower First Floor Landing Framing Plan
S-2	Bell Tower Second Floor Landing Framing Plan
S-3	Bell Tower Third Floor Landing Framing Plan
S-4	Sections



Drawing:  <h2 style="margin: 0;">General Notes</h2>	Date: 2/20/12	Scale:	Project:  <h2 style="margin: 0;">Bell Tower Framing Repairs</h2> Portland, ME		77 Oak Street Portland, ME, 04101 p. 207-774-4614 f. 866-793-7835 <a href="http://www.structuralinteg.com">www.structuralinteg.com</a>	<h1 style="font-size: 48px; margin: 0;">S-0</h1>
	Issued: <h2 style="margin: 0;">FOR CONSTRUCTION</h2>		BUILD WITH CONFIDENCE <small>© 2012 Structural Integrity Consulting Engineers, Inc.</small> SI # 12-0007			

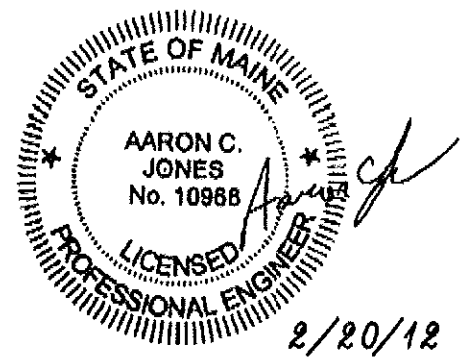


### BELL TOWER FIRST FLOOR LANDING FRAMING PLAN

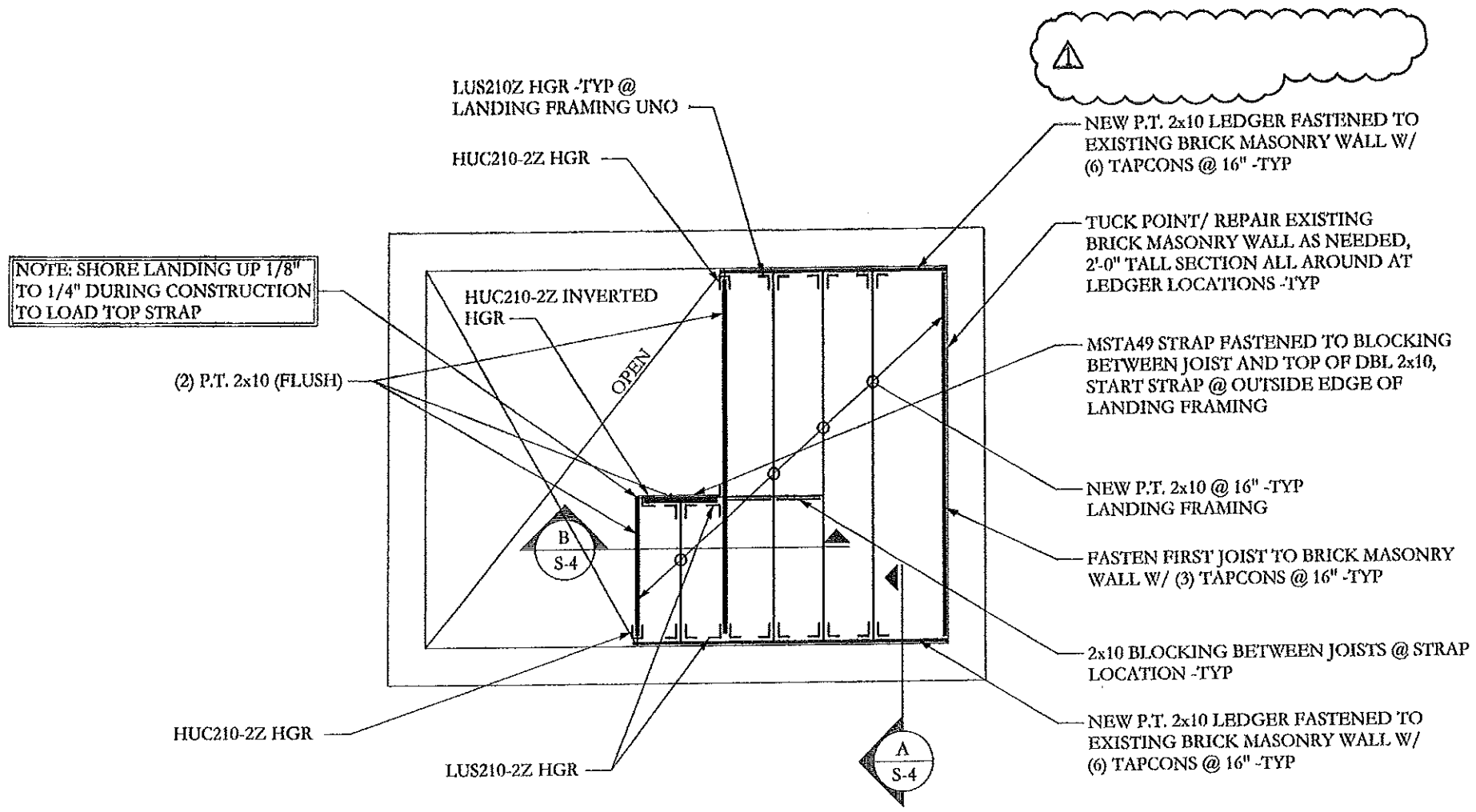
NOTES:

SCALE 1/4"=1'-0"

1. ALL FRAMING TO BE PRESSURE TREATED SOUTHERN YELLOW PINE
2. ALL CONNECTORS TO BE GALVANIZED -TYP
3. ALL BEAMS ARE FLUSH, UNO
4. ALL FLOOR JOIST TO BE 2x10's @ 16" -TYP
5. FLOOR SHEATHING TO BE 3/4" T+G, SEE GENERAL NOTES FOR ADDITIONAL INFORMATION -TYP



Drawing: Bell Tower First Floor Landing Framing Plan	Date: 2/20/12	Scale: 1/4"=1'-0"	Project: Bell Tower Framing Repairs Portland, ME		77 Oak Street Portland, ME, 04101 p. 207-774-4614 f. 866-793-7835 <a href="http://www.structuralinteg.com">www.structuralinteg.com</a>	S-1
	Issued: <b>FOR CONSTRUCTION</b>					
	Revision: 2/23/12					



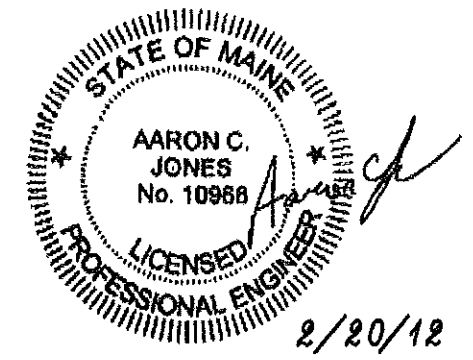
NOTE: SHORE LANDING UP 1/8" TO 1/4" DURING CONSTRUCTION TO LOAD TOP STRAP

### BELL TOWER SECOND FLOOR LANDING FRAMING PLAN

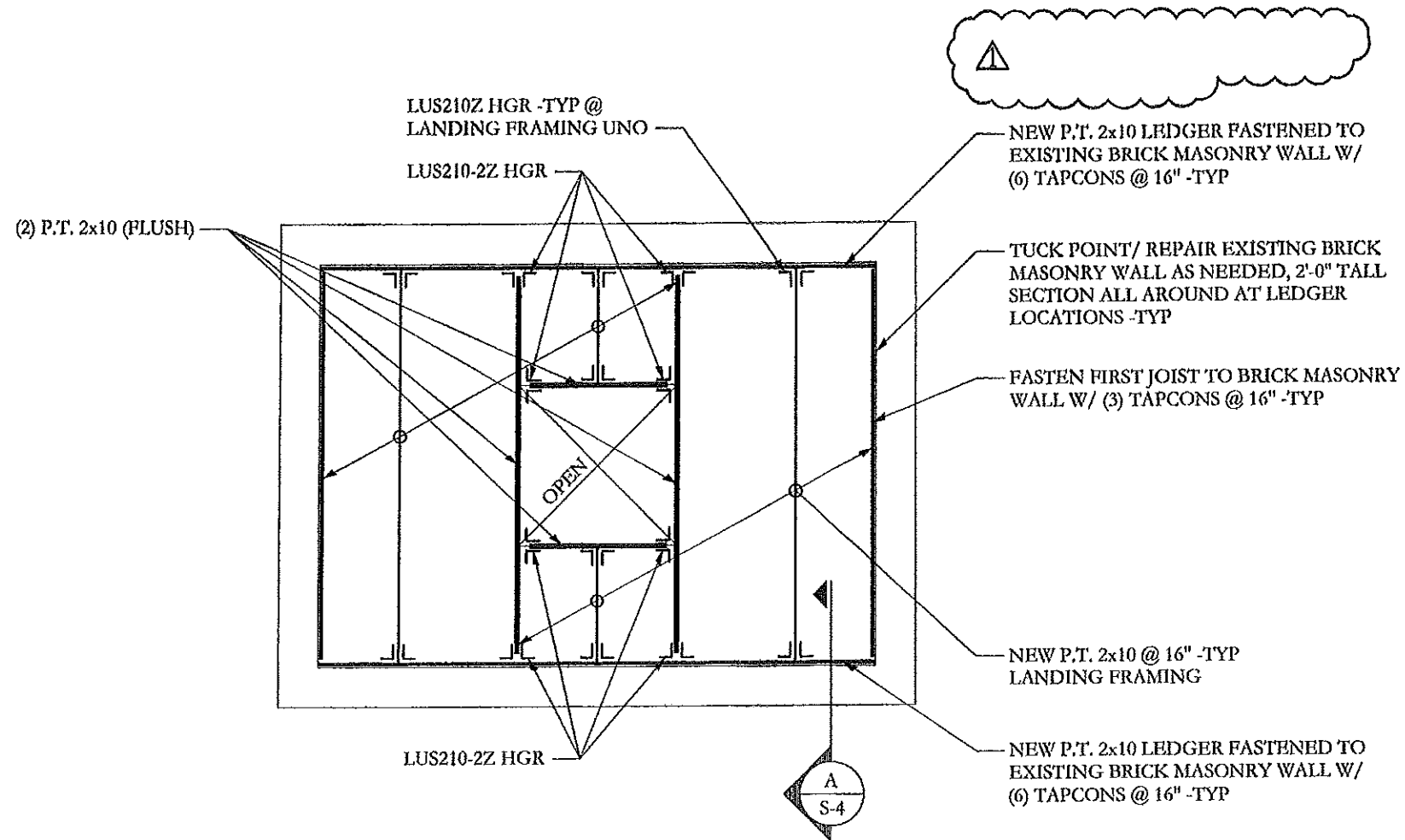
SCALE 1/4"=1'-0"

NOTES:

1. ALL FRAMING TO BE PRESSURE TREATED SOUTHERN YELLOW PINE
2. ALL CONNECTORS TO BE GALVANIZED -TYP
3. ALL BEAMS ARE FLUSH, UNO
4. ALL FLOOR JOIST TO BE 2x10's @ 16" -TYP
5. FLOOR SHEATHING TO BE 3/4" T+G, SEE GENERAL NOTES FOR ADDITIONAL INFORMATION -TYP



Drawing: <b>Bell Tower Second Floor Landing Framing Plan</b>	Date: 2/20/12	Scale: 1/4"=1'-0"	Project: <b>Bell Tower Framing Repairs</b> Portland, ME		77 Oak Street Portland, ME, 04101 p. 207-774-4614 f. 866-793-7835 <a href="http://www.structuralinteg.com">www.structuralinteg.com</a>	<h1 style="font-size: 2em;">S-2</h1>
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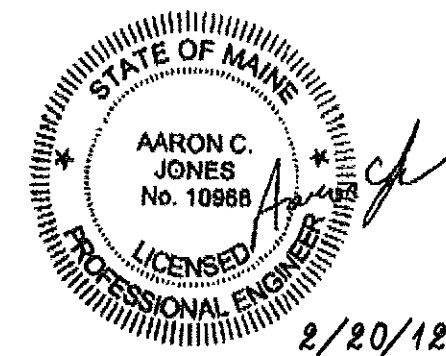


## BELL TOWER THIRD FLOOR LANDING FRAMING PLAN

SCALE 1/4"=1'-0"

NOTES:

1. ALL FRAMING TO BE PRESSURE TREATED SOUTHERN YELLOW PINE
2. ALL CONNECTORS TO BE GALVANIZED -TYP
3. ALL BEAMS ARE FLUSH, UNO
4. ALL FLOOR JOIST TO BE 2x10's @ 16" -TYP
5. FLOOR SHEATHING TO BE 3/4" T+G, SEE GENERAL NOTES FOR ADDITIONAL INFORMATION -TYP



Drawing:  
Bell Tower Third Floor  
Landing Framing Plan

Date:  
2/20/12

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

Project:

Bell Tower Framing Repairs  
Portland, ME

**Structural  
Integrity**  
Consulting Engineers, Inc.

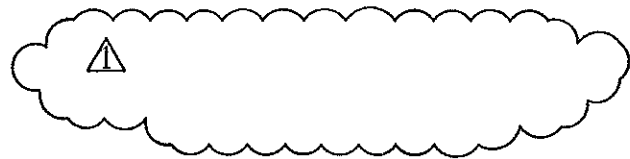
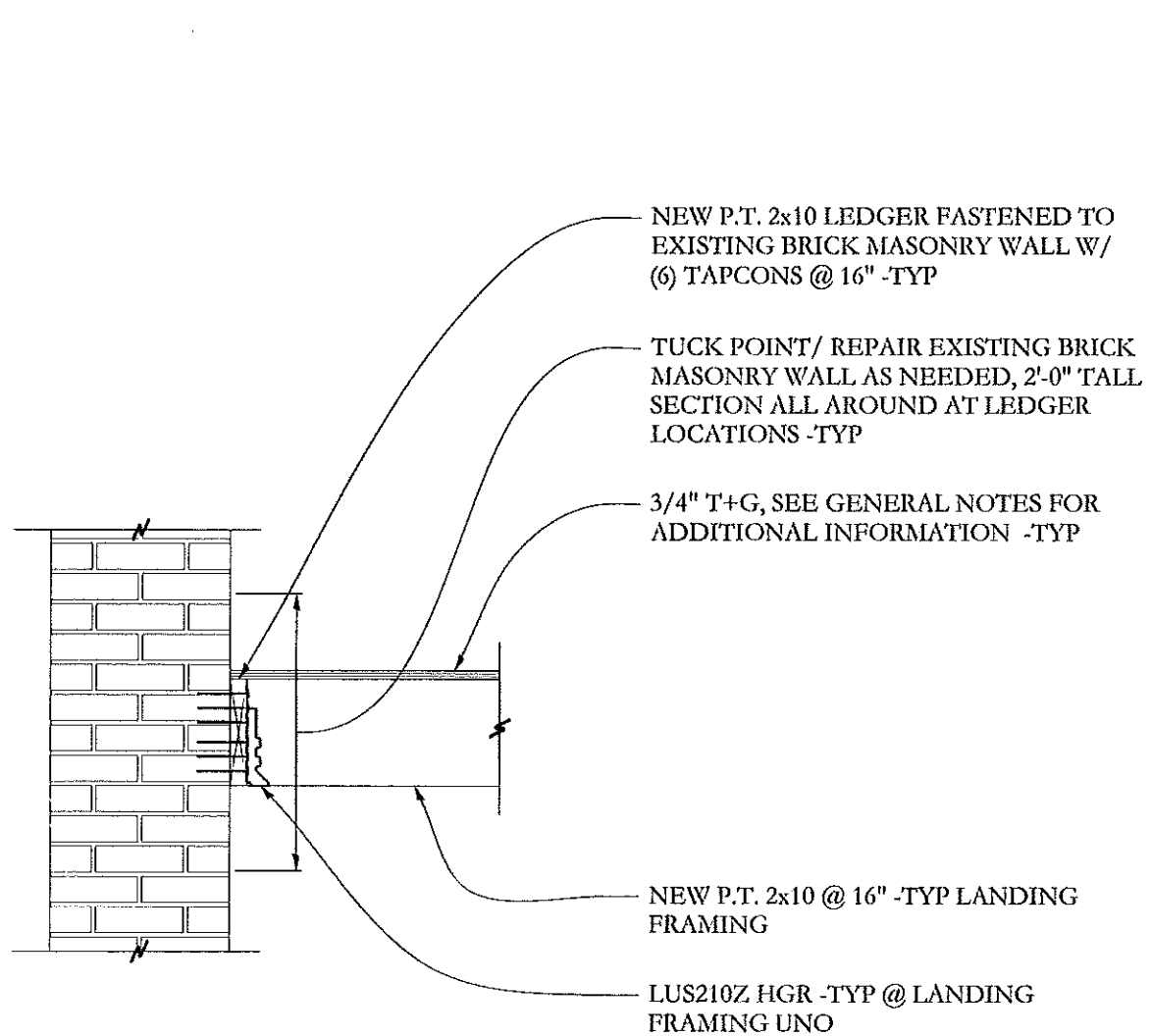
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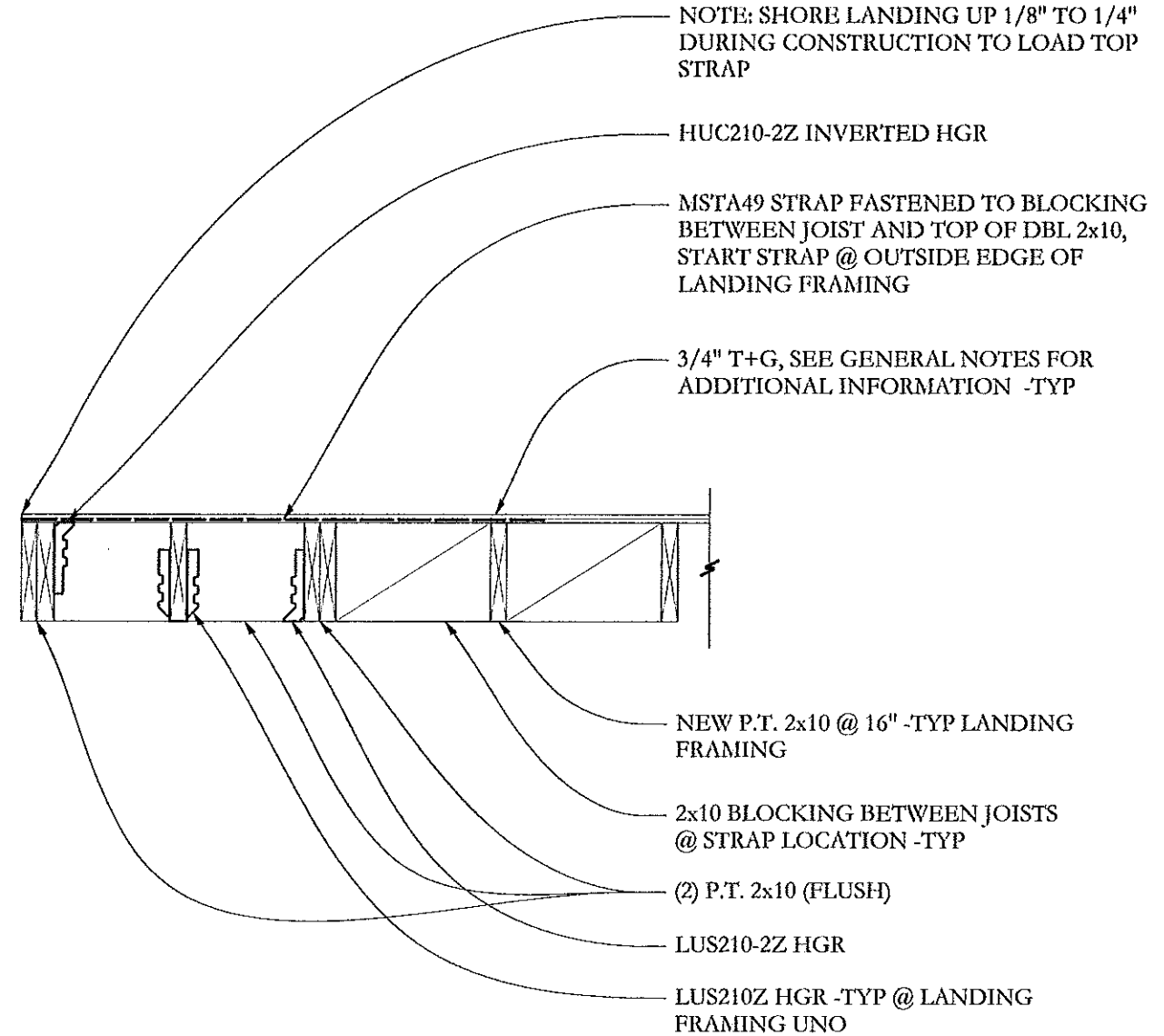
Issued:  
**FOR CONSTRUCTION**

Revision: 2/23/12

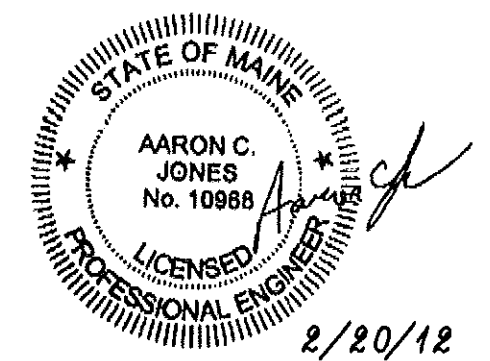
S-3




SECTION A  
S-4 3/4"=1'-0



SECTION B  
S-4 3/4"=1'-0



Drawing: <b>Sections</b>	Date: 2/20/12	Scale: 3/4"=1'-0"	Project: <b>Bell Tower Framing Repairs</b> Portland, ME	 <b>Structural Integrity</b> Consulting Engineers, Inc.	77 Oak Street Portland, ME, 04101 p. 207-774-4614 f. 866-793-7835 <a href="http://www.structuralinteg.com">www.structuralinteg.com</a>	<b>S-4</b>
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