

The Building Standards Branch is making a change to the building permit application review process for products or components outside the scope of Part 9 of the National Building Code (NBC).

Products or components outside the scope of Part 9 must be designed and sealed by a professional engineer or architect. Examples include floor/roof trusses, dimensional components with non-uniform loads, and engineered wood products such as i-joists, laminated veneer lumber (LVL), and laminated strand lumber (LSL). The change demonstrates compliance with the Uniform Building and Accessibility Standards Act (UBAS Act) and the National Building Code (NBC) and helps to ensure the construction of safe, healthy and habitable buildings. This information package focuses on the process for floor/roof trusses; however, the process extends to any product or component outside the scope of Part 9.

The review process provides direction on:

- a) what documentation must be submitted to the Building Standards Branch and when;
- b) information that must be onsite when inspections occur; and
- c) documents that will remain on file with Building Standards.

A complete process outline along with sample documents is provided further in this information package.

Extensive consultation and communication with a working group of three manufacturers and five builders put together by the Regina & Region Home Builders' Association (RRHBA) in collaboration with the City of Regina has occurred, and June 1, 2018 has been designated as the effective date for this new process.

## Frequently Asked Questions

### ***Why is the review process changing?***

The City is changing its process to address industry concerns, ensure consistency across projects, align with industry best practices, provide a clear mechanism for owners to show adherence to the *UBAS Act*, the NBC and bylaw requirements, and the City to demonstrate due diligence in administering and enforcing the *UBAS Act* and the *NBC*.

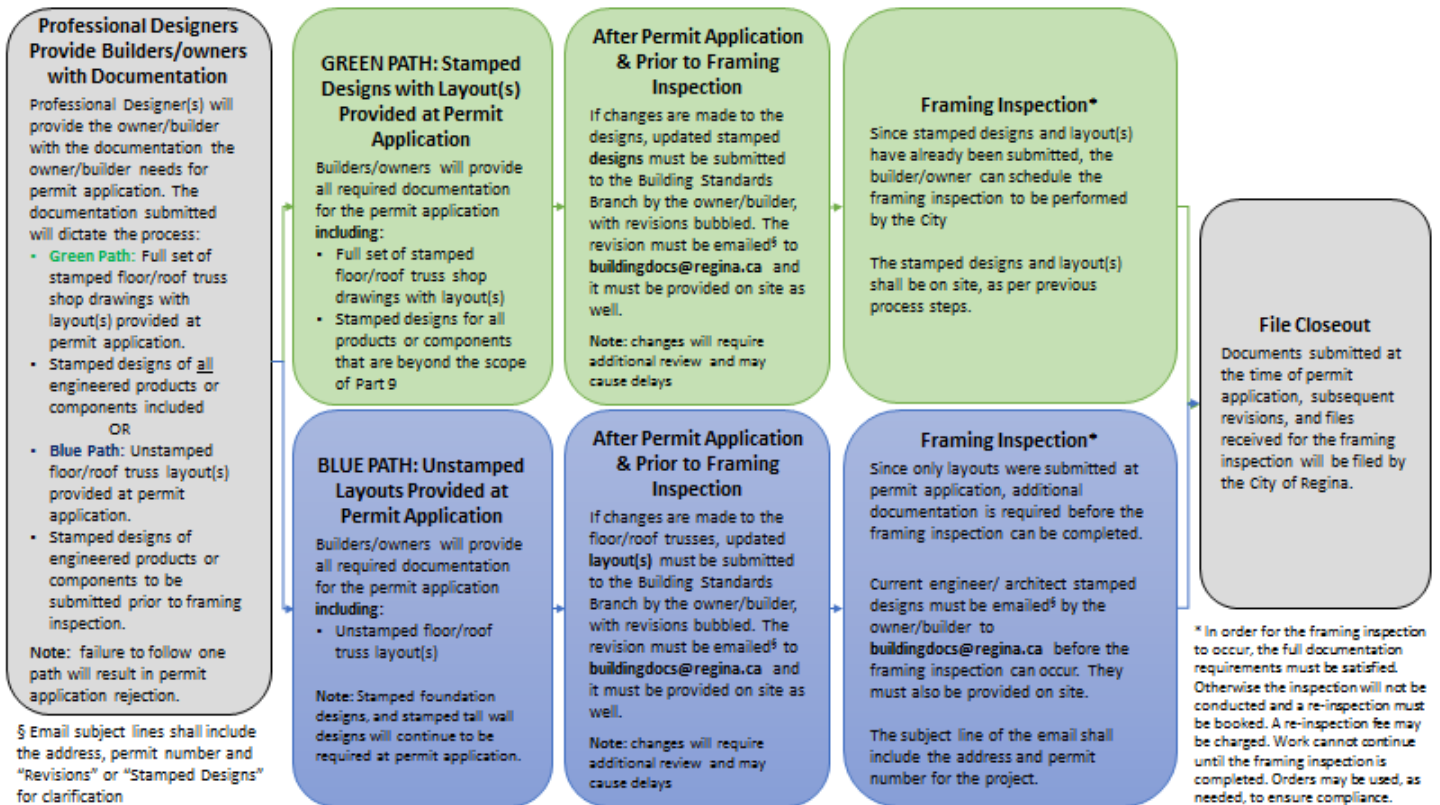
### ***Why change the process right now?***

The City retained the services of a consultant to analyze the current state of the truss review process, review the proposal submitted by industry and provide recommendations. The new review procedure results from the consultant's report and a review of best practices in similar jurisdictions. The City is

working with stakeholders over the winter season to finalize the new process in preparation for implementation during the 2018 construction season. This review process will extend to any product or component outside the scope of Part 9 of the NBC.

### What is the new process?

The new review process for products and components beyond the scope of Part 9 is displayed below, and a larger version is provided at the end of this document. Please note that the City of Regina will be implementing software within the next year that allows permits and documentation to be applied for and submitted through the customer portal. The process below will remain, but communication and document submissions will be performed through the software upon its implementation.



**Note:** A larger process diagram and examples of a roof truss layout and floor truss layout are included at the end of this document.

### Who will be responsible to submit the documentation?

The owner/builder will be responsible to submit all required documentation to the City of Regina. The owner/builder will obtain all required documentation from the professional designer and will submit the documentation for permit application and subsequent submissions.

### ***Will I need to submit shop drawings for floor/roof trusses at time of permit application?***

It will be your decision. The minimum amount of truss documentation required at permit application are the unstamped floor/roof truss layouts. You may choose to submit the full set of stamped floor/roof truss shop drawings with the layout(s) at permit application as well.

### ***What will happen if the floor/roof truss layouts are not provided with the building permit application?***

If the unstamped layouts are not provided with the building permit application, the permit application will be rejected.

### ***When will I be required to submit the stamped design drawings?***

Stamped designs for all products or components outside the scope of Part 9 will be required before the framing inspection can be conducted. Inspectors will confirm that they have the required stamped designs prior to finalizing the requested inspection.

**Note: Stamped foundation designs and stamped tall wall designs will continue to be required at permit application.**

### ***How can the stamped designs be submitted?***

Stamped designs must be emailed by the owner/builder only to **buildingdocs@regina.ca** before the framing inspection can occur. The subject line of the email shall include the address and permit number and the phrase “Stamped Designs” for clarification. Inspectors will confirm that they have the required stamped designs prior to finalizing the requested inspection.

**Note:** the City of Regina will be implementing software within the next year that allows permits and documentation to be applied for and submitted through the customer portal. This process will remain, but communication and document submissions will be performed through the software upon its implementation.

### ***Why does the City require the stamped designs to be emailed in by the owner/builder and not the manufacturer?***

As the owner/builder is the one calling for the framing inspection, It is the owner/builder's responsibility to ensure that the documents are handed in to the City prior to requesting the framing inspection. Framing inspection will be refused by the Building Official should the City not have record of being in receipt of the appropriate documents. The inspection will have to be re-booked by the applicant.

### ***How can revisions be submitted?***

Revisions must be emailed by the owner/builder to **buildingdocs@regina.ca**. The subject line of the email shall include the address and permit number and the word “Revisions” for clarification. Revisions shall be bubbled in red. Revisions must also be provided on site. Revisions will require additional review and may cause delays. It is the responsibility of the owner/builder to provide the revisions in enough time for the City to review the changes to the NBC and the construction drawings. Should the revisions of these documents require new construction drawings, it is the owner/builder’s responsibility to remit these at the same time as the revisions to the stamped designs.

**Note:** the City of Regina will be implementing software within the next year that allows permits and documentation to be applied for and submitted through the customer portal. This process will remain, but communication and document submissions will be performed through the software upon its implementation.

### ***What will happen if the stamped designs are not provided prior to the framing inspection?***

If the proper documentation is not provided, as required for the framing inspection to occur, the inspection will not be conducted and a re-inspection must be booked by the applicant. A re-inspection fee may be charged. Work cannot continue until the framing inspection is completed.

### ***How does this change benefit me?***

As a customer, this change will result in:

1. A simplified and consistent process for each project and customer:
  - Stamped shop drawings will NOT be required at the time of permit application. Rather, unstamped layout(s) will be the minimum amount of truss documentation required when applying for a permit. This will simplify the documentation required at the time of permit application and allow final design and analysis of truss systems to be performed just prior to fabrication.
2. Clear requirements from permit application to file closeout, reducing confusion and delays with the review and inspection of floor and roof trusses, and other products and components beyond the scope of Part 9.
  - Adequate detail will be available during the plan review stage, as well as during inspections. This will ensure that both the owner and City of Regina are meeting the requirements of *The UBAS Act* and the NBC.
3. Faster turn-around times with fewer permit applications placed on hold.
4. Demonstrates conformance to the *UBAS Act* and the NBC.

***Why is the City of Regina focusing on the process for evaluating trusses? What about other engineered products?***

Structural designs that are beyond the scope of Part 9 of Division B of the National Building Code are required to be designed in accordance with Part 4 of Division B. This includes trusses, engineered wood products such as i-joists, laminated veneer lumber (LVL), and laminated strand lumber (LSL), engineered beams, engineered joists, lintels supporting non-uniform loads, and lintels not covered by the span tables. Products designed in accordance with Part 4 of Division B must be designed by a professional engineer or architect skilled in the work concerned, and the design shall bear the authorized professional seal and signature of the designer.

The City has been working with stakeholders to identify a process that works for trusses and any product or component outside the scope of Part 9. However, please note that stamped foundation designs, and stamped tall wall designs will continue to be required at permit application.

***Who is responsible for the design of connections to supporting members or for products that are not being provided by the truss manufacturer?***

This is a question between the truss designer and the client. The information is required to be on either the architectural drawings or the truss shop drawings, but it will be up to the truss designer and the client to determine who takes responsibility for and provides that portion of the design.

***Who is responsible for the dropped bottom chord details on plans where trusses are to be designed to support the load from the foundation, but the load from the foundation has not been provided?***

This must be worked out between the truss designer and the foundation designer, but shall be coordinated by the owner/builder.

***What about modifications or repairs to trusses performed on site?***

Any deviation from plans requires documentation to be submitted to the City of Regina. Repairs to engineered products are required to be engineered. Therefore stamped documentation from a professional designer is required to show that the repair will perform as well as the original design. The owner/builder is required to obtain and submit all documentation to the City of Regina.

***What is the process for site-framed portions? There are times when a set of plans shows something that cannot be done with trusses, so it is noted that it must be stick-framed on site.***

The site framed portions can be covered under Part 9 of the NBC. Therefore, it does not have to be engineered but must be shown either on the architectural drawings and sized by the designer or it must be included with the truss plans. Either the truss designer or the owner/builder must provide the information for the site-framed portions.

### ***Can stamped layouts be used in lieu of stamped shop drawings?***

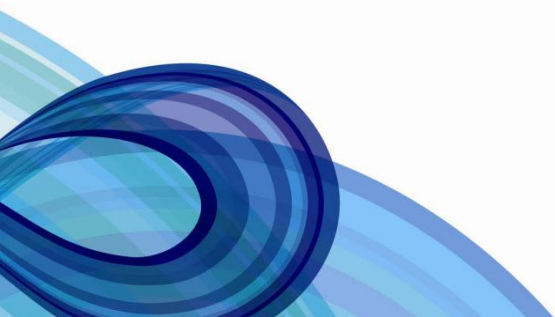
If specific products or components are provided on a sealed layout with sufficient design detail provided, this seal can cover the designs for those components. It must be clearly noted what designs the seal is applied to on the layout. Stamped shop drawings for the trusses will still be required, but certain components (eg. LVL lintels, beams, etc.) may be sealed on the layout when sufficient design detail is provided on the layout for that component.

It is important to remember that all structural designs that are beyond the scope of Part 9 of Division B of the National Building Code are required to be designed in accordance with Part 4 of Division B. This requires a design professional skilled in the work to carry out the design, and the design shall bear the authorized professional seal and signature of the designer. The City of Regina must receive sealed designs for all products or components beyond the scope of Part 9 either at permit application (green path), or prior to framing inspection if only layouts are provided at permit application (blue path). Stamped foundation designs, and stamped tall wall designs will continue to be required at permit application.

### ***What is the targeted start date for this change?***

**The City will implement this** change starting June 1, 2018. However, from April 1 to May 31, 2018 stakeholders will have the opportunity to voluntarily adapt to the new process prior to full implementation on June 1, 2018.

**Note:** the City of Regina will be implementing software within the next year that allows permits and documentation to be applied for and submitted through the customer portal. This process will remain, but communication and document submissions will be performed through the software upon its implementation.



## **UBAS Act, UBAS Regulations and NBC 2010 Supporting Documentation**

Subsection 4(1) of the *UBAS Act*:

### **“Administration by local authority**

**4(1)** Subject to the other provisions of this section, each local authority shall administer and enforce this Act, the regulations and orders and decisions of the appeal board pursuant to sections 12 and 18.”

Subsection 7(1) of the *UBAS Act*:

### **“Application of Part**

**7(1)** Subject to subsections (2) and (3), the owner of each building in Saskatchewan shall

ensure that the building is designed, constructed, erected, placed, altered, repaired, renovated, demolished, relocated, removed, used or occupied in accordance with the building standards”

Subsection 3(1) of the *UBAS Regulations*:

### **“Code**

**3(1)** The National Building Code of Canada 2010, with the amendments set out in the Appendix to these regulations incorporated into it, is declared to be in force except for clause d) of sentence 3.1.2.5(2) of Division B.”

Section 4 of the *UBAS Regulations*:

### **“No relief of obligation to comply with Code**

**4** An owner of a building or an owner’s contractor or employee is not relieved from the obligation to carry out any work that is within the scope of sections 7 and 10 of the Act in accordance with the Code by reason only of:

- (a) the granting of a permit;
- (b) the review of drawings and specifications;
- (c) the making of inspections; or
- (d) the absence or omission of any of the things mentioned in clauses (a) to (c).”

Division B, Sentence 9.23.14.11.(2) of NBC 2010:

**“2)** The joint connections used in trusses described in Sentence (1) shall be designed in conformance with the requirements in Subsection 4.3.1. (See Appendix A.)”

Division B, A-9.23.14.11.(2) of NBC 2010:

### **“A-9.23.14.11.(2) Wood Roof Truss Connections.**

Sentence 9.23.14.11.(2) requires that the connections used in wood roof trusses be designed in conformance with Subsection 4.3.1. and Sentence 2.2.1.2.(1) of Division C, which applies to all of Part 4, requires that the designer be a professional engineer or architect skilled in the work concerned. This has the effect of requiring that the trusses themselves be designed by professional engineers or architects. Although this is a departure from the usual practice in Part 9, it is appropriate, since wood roof trusses are complex structures which depend on a number of components (chord members, web members, cross-bracing, connectors) working together to function safely. This complexity precludes the standardization of truss design into tables comprehensive enough to satisfy the variety of roof designs required by the housing industry.”

Subsection 8(2) of the *UBAS Regulations*:

- (2) An owner who undertakes to construct or have constructed a building with a structure within the scope of Part 4 of the Code shall have an architect or engineer complete:
- (a) the design or design review of the structure;
  - (b) an inspection of construction of the structure to ensure compliance with the design; and
  - (c) the reviews required by the Code.

Division C, Sentence 2.2.1.2.(1) of NBC 2010:

**“2.2.1.2. Structural Design**

- 1) For design carried out in accordance with Part 4 of Division B, the *designer* shall be a professional engineer or architect skilled in the work concerned. (See Appendix A.)”

Division C, Sentence 2.2.4.2.(1) of NBC 2010:

**“2.2.4.2. Professional Seal and Signature of Designer**

- 1) Structural drawings and related documents submitted with the application to build shall be dated and shall bear the authorized professional seal and signature of the *designer* as defined in Sentence 2.2.1.2.(1).”

Division C, Sentence 2.2.7.2.(1) of NBC 2010:

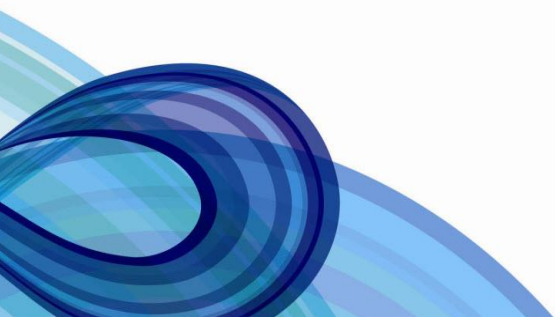
**“2.2.7.2. Review of Construction**

- 1) The *designer* or another suitably qualified person shall review the construction of any *building* or part thereof to determine conformance with the design.”

Division C, Sentence 2.2.7.3.(1) of NBC 2010:

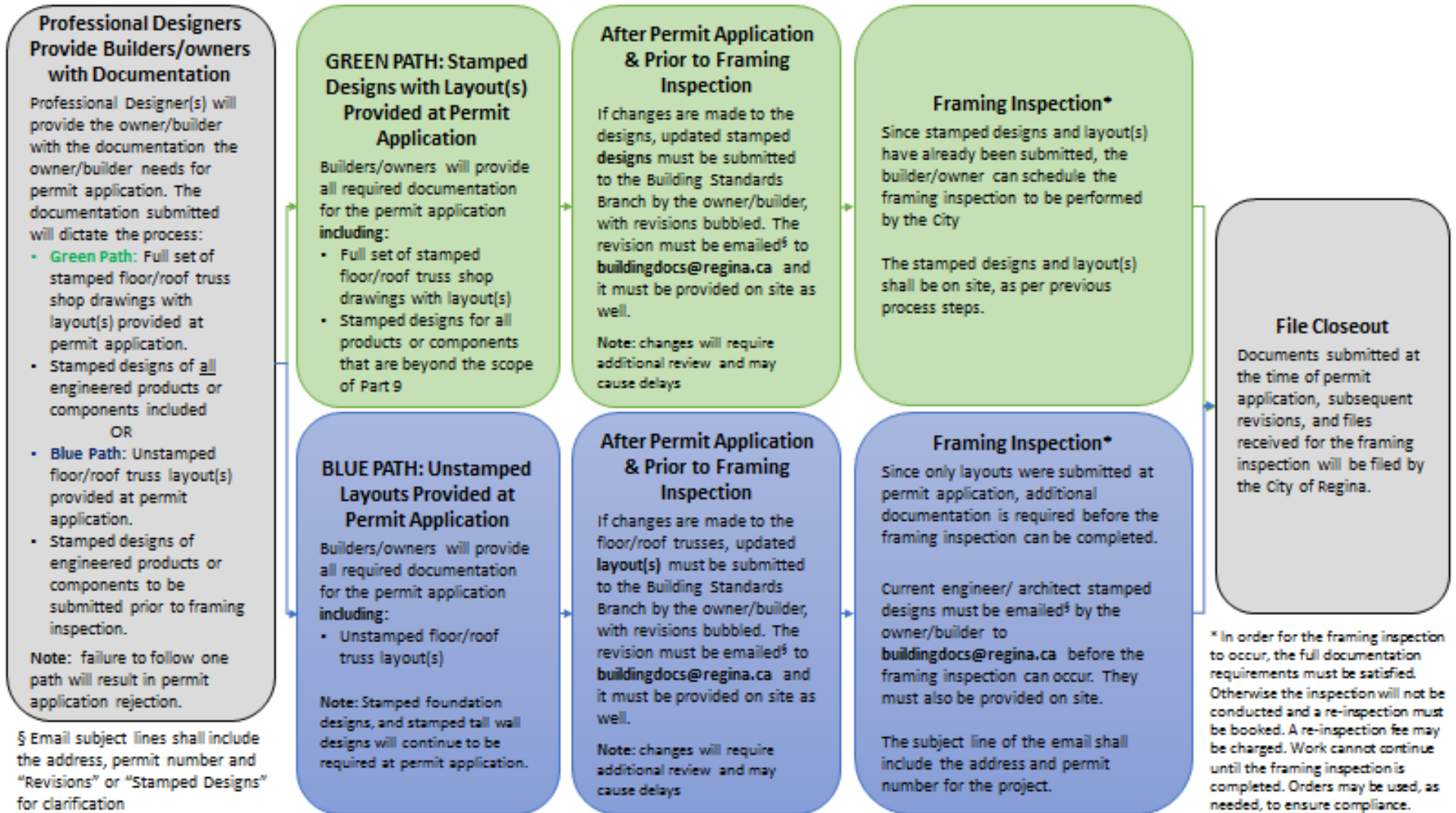
**“2.2.7.3. Review of Shop Drawings**

- 1) The *designer* or another suitably qualified person shall review all shop drawings and other related documents relevant to the design to determine conformance with the design.”





# Process Diagram



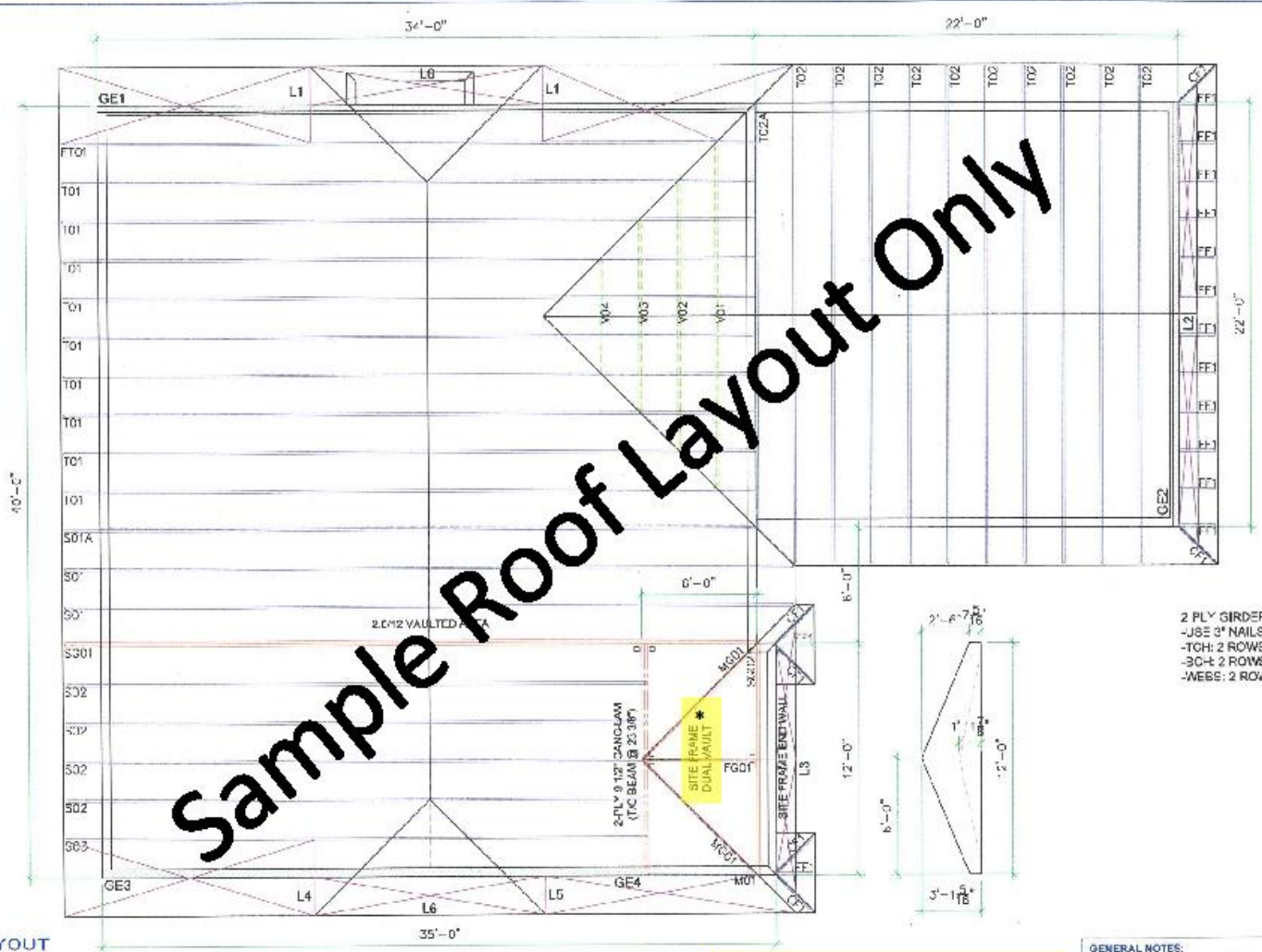


**GENERAL NOTES**  
**MAIN FLOOR**

CUSTOMER	
PROJECT	
LOCATION	
<b>REGINA, SK</b>	
DESIGN CRITERIA	
DEPTH	8'
SPACING	24'
PRODUCT	OWALU
FOOTING WALLS	2x6
LOADING	
TOP LL	60PSF
TOP DL	10PSF
BOT LL	0PSF
BOT DL	15PSF
JOB #	
DRAWN	
DATE	
SCALE	

Note: if site framed portions are not detailed on this drawing, they must be shown on the architectural drawings

Sample Roof Layout Only



2 PLY GIRDER NAILING  
-JSE 3" NAILS  
-TCH: 2 ROWS @ 12" o.c.  
-3C: 2 ROWS @ 12" o.c.  
-WEBB: 2 ROWS @ 6" o.c.

GENERAL NOTES:  
• ALL TRUSS HANGERS INDICATED ON THIS LAYOUT ARE LUS250S.  
• ALL BEAMS INDICATED ON THIS LAYOUT ARE DROPTED.  
• ALL TRUSS TO GIRDER CONNECTIONS WHERE A HANGER IS NOT INDICATED REQUIRE A 2X4 LEDGER NAILED TO SUPPORTING GIRDER WITH 2 ROWS OF 3 1/2" NAIL-S @ 6" o.c.

ROOF LAYOUT  
SCALE 3/16"=1'-0"

RECINA, SK

DESIGN BY:  
DATE:  
JOB NO.

PITCH: 5/12  
TAILS: 22 1/2"  
HEELS: 3 1/2"

\* Note: if site framed portions are not detailed on this drawing, they must be shown on the architectural drawings