



EGBC South Central Branch
&
Thompson Rivers University

Present

**The 18th Annual Popsicle Stick
Bridge Contest!**
2023 April 29



THOMPSON RIVERS
UNIVERSITY

This year's 18th Annual EGBC TRU Popsicle Stick Bridge Contest is a continuation our Annual EGBC TRU Popsicle Stick Bridge Contest in its original format that has been on hiatus since our 17th Annual EGBC TRU Popsicle Stick Bridge Contest held in March 2020.

Popsicle Stick Bridges will be tested to destruction 'live' in person using our Popsicle Stick Bridge Testing Machine on **Saturday 2023 April 29**. For those uncomfortable or unable to attend the live event, Popsicle Stick Bridges may be tested *in absentia*. We will be recording the testing on video and provide a link for viewing; however, we will not be able to broadcast the testing live. (Note that we cannot guarantee the completeness and success of video recording and editing.)

Participants are encouraged – but not required - to pre-register this year by submitting an email PopsicleStickBridge2023@gmail.com.

Otherwise, the rules, requirements and prizes for the 18th Annual EGBC TRU Popsicle-Stick Bridge Contest are the same as ever!

Location: TRU Trades & Technology Building Room
Carpentry Lab Room TT203
Date: Saturday 2023 April 29
Time: 09:30 Onwards

Entries will be accepted in the following categories:

- **Elementary** - Grades 7 and Under
- **Secondary** - Grades 8 to 12
- **Open** - Public, mixed-category teams, university students (except P.Eng's).
- **Corporate** - Open to professional engineers or engineering firms only.

Prizes:

<u>CATEGORY</u>	<u>1ST PRIZE</u>	<u>2ND PRIZE</u>	<u>3RD PRIZE</u>
Elementary	\$150	\$100	\$75
Secondary	\$150	\$100	\$75
Open and Corporate	\$150	\$100	\$75
Corporate	Corporate Cup	--	--

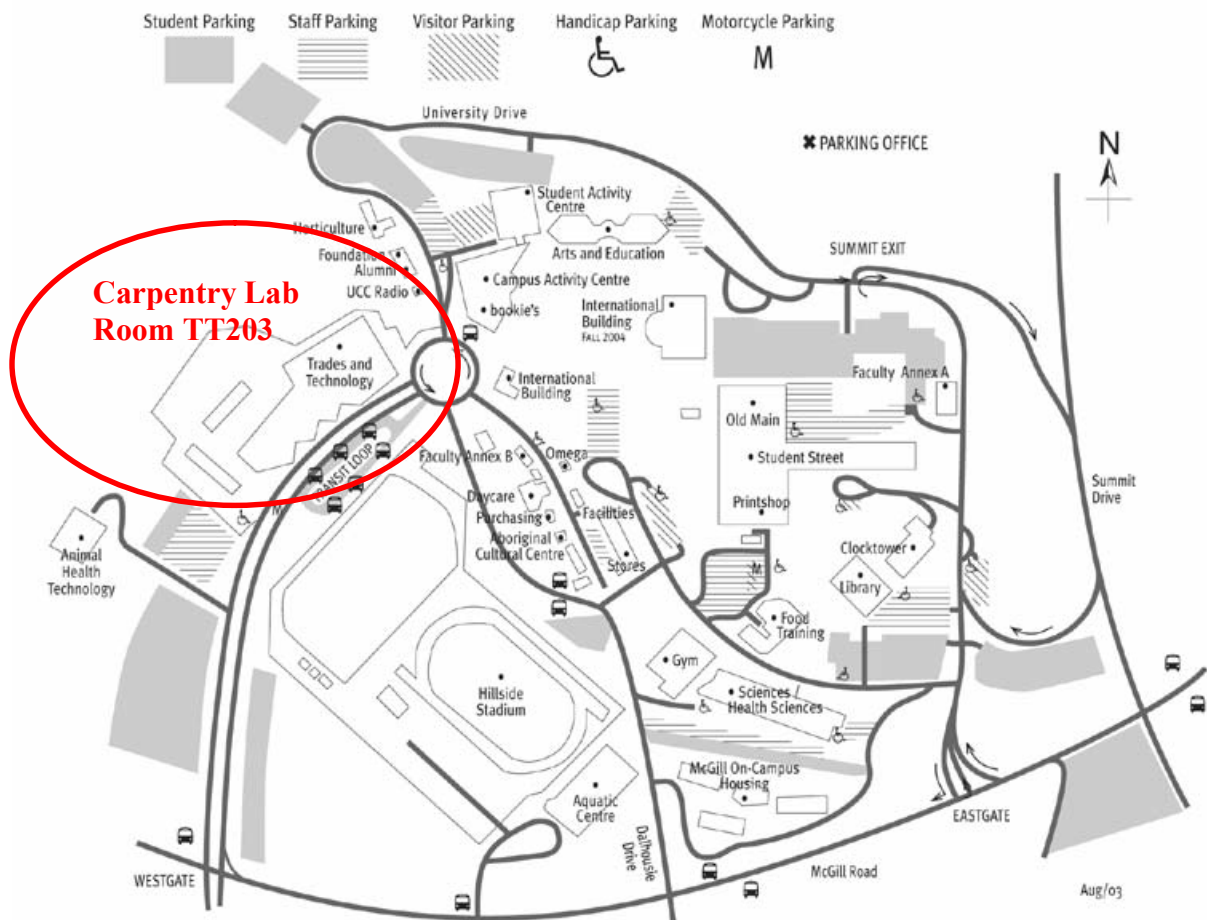
The Contest:

The goal of the contest is to construct the strongest bridge possible with 100 Popsicle sticks and white glue. The bridge must span a 500 mm gap; otherwise, the design of the bridge is left up to the competitor. Specifications are included on the following pages.

Anyone is welcome to participate. You are encouraged to register early, but you can register on site the day of the competition. Contestants may enter bridges individually or as a team.

TRU Campus Map

www.tru.ca



Official 2021 Popsicle Stick Bridge Contest Rules

Registration:

1. Each bridge built by a team or an individual contestant is considered 1 entry.
2. Please print legibly. Bridges may be pre-registered or registered on site the day of the completion.
3. Start early, as you will have to build the bridge in steps. It would be difficult to build it in one go due to the varying orientations of surfaces to be glued.

Construction:

1. The bridge must be built with a maximum of 100 Popsicle sticks and **white all purpose glue, white wood glue or white/yellow carpenters glue. No other glues are acceptable.**
2. Popsicle sticks must be left whole. They must not be cut, split, or otherwise altered.
3. The bridge must span a 500mm gap and fit within the attached clearance envelope. We recommend that the bridge be at least 550mm long to ensure that the bridge does not fall through the 500mm gap when the load is applied.
4. The highest centre portion of the bridge must be designed to contact a 100mm wide loading plate through which the “Bridge Buster” will apply loading to the bridge.
5. Bridges will be inspected at registration. Any violations of the rules outlined above will result in disqualification from the official results, but the contestant(s) will still be allowed to have their bridge tested unofficially.

Testing the Bridges:

1. Bridges will be weighed before being loaded. In the event of a tie, the lightest bridge wins.
2. Bridges will be loaded from the top with a loading plate as described in 4 above and shown in the diagram below. Loading will be increased and measured electronically until the bridge fails.
3. For the safety of all involved, bridge loading will be done behind a protective screen. Contestants and spectators will be expected to stand clear of the loading area and follow directions of officials at all times during the event.

- The winner is the bridge that holds the largest load prior to failure.
- All bridges will be loaded to the point of failure unless the contestant decides not to continue with incremental loads in order to save their bridge!

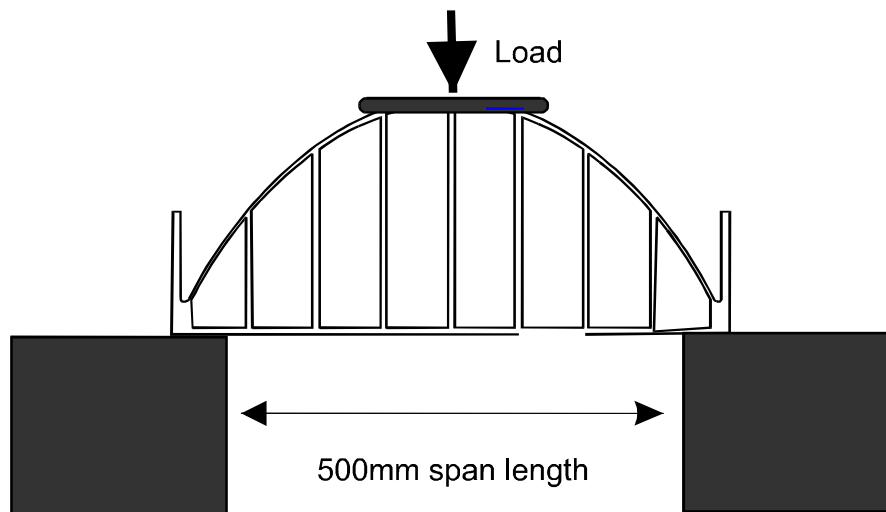
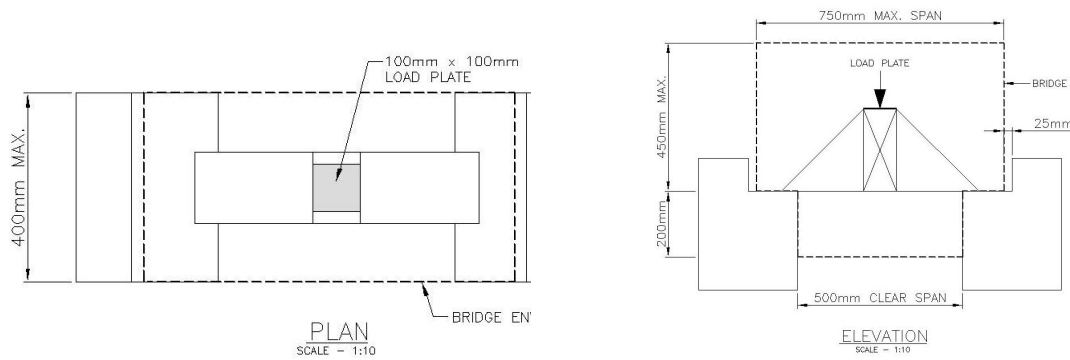
Teams:

- The oldest team member will determine the team's entrance category.

Registration Package:

The Contest Rules and Information will be posted on the TRU Website.

Dimensional Specifications:





**The 18th Annual
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Contest
Saturday 2023 April 29**

Entry Form



THOMPSON RIVERS
UNIVERSITY

REGISTRATION No:

Contest Judging Date: 202 April 29

Please email a copy of this entry form (or the information required) to complete it to PopsicleStickBridge2023@gmail.com prior to the date of the Popsicle-Stick Bridge Competition – or bring a copy to the TRU Trades and Technology Building **Carpentry Lab Room TT203** on the morning of 2023 April 29 between 0930 and 1030 when you drop off your Popsicle Stick Bridge.

Team Name (optional): _____

School, Business or Corporation Name: _____

Phone Number of Member / Team Contact: _____

Team member’s names and birth dates (please print legibly):

Last name: _____	First name: _____	Birth Date: _____
Last name: _____	First name: _____	Birth Date: _____
Last name: _____	First name: _____	Birth Date: _____
Last name: _____	First name: _____	Birth Date: _____

- Category:**
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 - Secondary (grades 8 to 12)
 - Open (public, mixed-category teams, university students, except PEngs.)
 - Corporate Cup (Professional Engineers or Engineering Firms only)
