

Instructions for completing the
Interior Bridge Cost Tracking Template

The template includes the costs for materials and installation of *all* single span bridges, constructed according to pre-determined (stock) design specifications rather than a site specific bridge design. Record all costs life to date. Do NOT include in-house salary cost - report these in Schedule 3 of the ILCR (Interior Log Cost Report). Complete a separate row for each bridge installation

Copies of supporting documentation (invoices, contracts, General Ledger entries, etc) must be retained and available for audit.

Description:

1. **Date:** Enter the date (month and year) the installation completed
2. **Name/Location of Bridge:** enter licensee contract identity, name, or brief location description
3. **New/Used Construction:** Select from the drop down list that will activate when you click on the cell as follows;
 - **NN** - New installation with a **New** structure
 - **NU** - New installation with a **Used** structure
 - **RN** - Replacement installation with a **New** structure
 - **RU** - Replacement installation with a **Used** structure

If the bridge sample involves the installation of a used span, note the details in the Comments box. Was this span moved from a previous licensee installation (i.e., the span material costs were capitalized to the licensee's original installation and not reported here) or was a used span purchased for this installation, with the cost included in the reported Total Cost? Did this installation replace a previous structure at this location? What, if any, costs for the removal of the pre-existing structure are included in the reported Total Cost? Was any part of the pre-existing structure retained for use in the current installation (e.g., abutments/footings, approach works, etc. re-used)?

4. **Expected Life Span:** Enter the expected number of years of use for this bridge in that location.
5. **Superstructure Type:** Select from the drop down list that will activate when you click on the cell as follows;
 - Concrete
 - Logs
 - Steel
 - Other - Note specifics in comments

6. **Abutment Type:** Select from the drop down list that will activate when you click on the cell as follows;
- Log Sill
 - Log Crib
 - Bin Wall
 - Lock Block
 - Post & Pile
 - Other – Note specifics in comments

The primary material types for abutments/footings have been revised for this template to more adequately reflect the structure, rather than the composition. For more detailed descriptions see *Abutments* in the *Forest Service Bridge Design and Construction Manual*. The manual can be downloaded from the Ministry of Forests Lands and Natural Resource Operations public website at the above link.

7. **Abutment Height (m):** enter the average abutment/footing height, to the nearest 0.1 m, measured from the base of the abutment/footing to the point where the stringer (or superstructure) rests on the abutment/footing at the centre line of the bridge.
8. **Load Rating:** Select from the drop down list that will activate when you click on the cell as follows;
- BCL625
 - L100
 - L150
 - L165
 - Other - Note specifics in comments

Load rating = Design Vehicle Configuration: The specific vehicle design configuration (specific axle spacing and axle loads) used to define design loads for engineering analysis, design and sizing of the structure. One of: BCL625, L100, L150, L165, Other (describe).

9. **Bridge Length (m):** This is the length of the bridge deck measured between two end points along the bridge centerline to the nearest 0.1 m.
10. **Deck Width (m):** enter width of deck (outside to outside) to the nearest 0.1 m
11. **Decking Type:** Select from the drop down list that will activate when you click on the cell as follows;
- Treated
 - Untreated
 - Steel
 - Concrete
 - Composite
 - Other - Note specifics in comments

12. **Distance (km):** record the distance in kilometers from licensee storage area or from the supplier to the install site. If being moved from an existing site, enter the distance of the move, and indicate it is a move in the comments.

COSTS (\$):

Total cost includes abutment/footing back-fills and all site preparation and protection features such as rip rap; as well as material and equipment supply, delivery, and installation. Rip rap costs only to protect the bridge; do **not** include costs for channel protection.

Cost should be as-built actual costs. If you do not have a complete cost for the component please indicate that it is an estimate in the comments column beginning with the column letter that it applies to e.g. *P, Q & R – couldn't split out abutment components total in "Other" column.*

13. **Site Plan / Gen. Arr:** record cost of site survey, site plans, and bridge general arrangement drawings

14. **Superstructure Cost:** record cost for each of the following separated

- Material
- Delivery – FOB licensee storage. If used enter cost to uninstall at the previous location as well as the cost of moving to the new location.
- Install – On site costs

15. **Abutments Cost:** record costs for each of the following separately

- Material
- Delivery – FOB licensee storage.
- Install – On site costs

16. **Approach Works:** - Generally 15m either side of bridge.

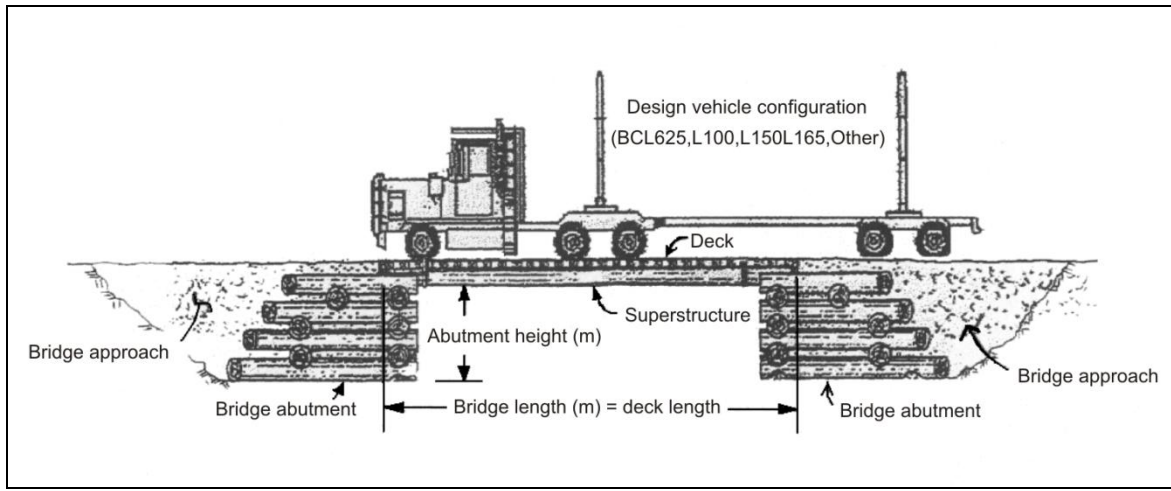
Bridge approaches (The bridge approach is the part of the bridge that carries traffic from the land to the start of the superstructure part of the bridge. Typically, the bridge approaches for forestry bridges are comprised of compacted backfill zones located immediately behind and adjacent to each bridge abutment extending from the base level of the abutments to road level).

17. **Certification after install:** - Includes any site visits necessary to certify

18. **Other Costs:** - Other non forestry equipment not already on site for tabular road construction. Note specifics in comments.

19. **Total Costs:** Calculated by the template

20. Bridge Diagram:



Examples of cost that should be included are:

- Site survey, site plans, and bridge general arrangement drawings
- Professional assessments (e.g., geotechnical, hydraulic, environmental assessments) and reports
- Detailed bridge engineering design, and cost of preparing all bridge engineering drawings and specifications.
- Substructure materials cost.
- Superstructure materials cost (superstructure, deck, guardrail, etc.).
- Other materials such as erosion protection for the foundation elements such as rip rap (do not include costs for channel protection).
- Transportation delivery costs.
- Quality Control (e.g., Engineering in-plant inspections during superstructure fabrication).
- Site mobilization and demobilization.
- Equipment, labour and site supervision to install the substructure (bridge abutments) and superstructure and erosion protection as per the approved construction drawings
- Bridge approaches
- Professional field reviews and sign-off of completed bridge structure, including any additional environmental monitoring costs, not been reported elsewhere such as forest management administration in the ILCR, required during the period of installation