## Appendix C

## EXCERPT FROM LIBBY HI-LEVEL HIGHWAY BRIDGE, A PAPER SIGNED ABOUT JULY 1953 BY MAJOR WILLIAM C. CARTER, JR., OPERATIONS OFFICER, 84TH ENGINEER BATTALION

## LIBBY HI-LEVEL HIGHWAY BRIDGE

**General Description** 

- Length and Spans: 1074.2 feet, with eight spans 121 feet and one span 104 feet.
  - Height: 49 feet to bottom of I-beams at mean low tide. 79 feet from bottom of caissons to top of deck.
  - Roadway: 22-foot traveled way; 25-foot overall.
  - Piers: Eight piers made of Yawata sheet pile, type #3—5 piles wide by 19 piles long, driven to bed rock (average elevation— 15 feet) and cut off at elevation + 15.00 feet. Caisson mucked to firm bed rock and filled with concrete. Reinforcing temperature steel placed in the top 10 feet of caisson. Above elevation + 15.00 feet the piers rise 44 feet consisting of two reinforced concrete columns 4 feet wide by 5 feet long spaced 10 feet apart with an intermediate stiffener 4 feet wide by 3 feet deep, and a cap 4 feet wide, 4 feet deep, by 22 feet long.
  - Beams: Five 48-inch built-up beams spaced on 57-inch centers from bridge centerline.
  - Decking: <sup>5</sup>/<sub>32</sub>-inch corrugated sheet metal **subdeck**, 25 feet wide, welded to beams, covered with 7<sup>1</sup>/<sub>4</sub> inches of reinforced concrete from top of **3**-inch corrugation.
  - Approach roads: 30 feet wide covered with 12 inches of crushed basalt base and 4 inches of crushed one-inch aggregate.

Class: 60 ton two-way.