



SURFACE TRANSPORTATION BOARD

Washington, DC 20423

Office of Environmental Analysis

Ms. Judith Bittner
State Historic Preservation Officer
Alaska Department of Natural Resources
Office of History and Archaeology
550 W. 7th Avenue, Suite 1310
Anchorage, AK 99501-3565

January 14, 2014

Re: **Section 106 Consultation** - Request for Concurrence on Determination of Effect, Bridge 174.3, Little Susitna River Railroad Bridge (ANC-00085), PMRE Segment 6
Finance Docket No. 35095, Alaska Railroad Corporation – Petition to Construct and Operate a Rail Line to Port MacKenzie, Alaska

Dear Ms. Bittner:

During the cultural resources survey conducted within Segment 6 of the project area, we found that the above project would result in indirect impacts to the existing National Register-eligible Little Susitna River Railroad Bridge due to the construction of an adjacent bridge but that this action did not constitute an adverse effect. Recently, the Alaska Railroad Corporation (ARRC) has informed us that the Little Susitna River Railroad Bridge itself needs to be upgraded for safety reasons – a direct impact. However, after careful review of the proposed bridge strengthening activities we find that the planned upgrades are in keeping with the regular maintenance cycles of the bridge and would not result in adverse effects. We seek your concurrence regarding our findings and describe the proposed action in more detail below.

Background

In 2011, the STB approved a license allowing ARRC to construct and operate approximately 35 miles of new rail line connecting the Port MacKenzie District to a point on ARRC's existing main line near Houston, Alaska using the Mac East Variant-Connector 3 Variant-Houston-Houston South alignment. That authorization was issued after completion of an Environmental Impact Statement (EIS), and is subject to environmental mitigation conditions including a Programmatic Agreement (PA), which required additional investigations once the final Area of Potential Effect(s) (APE) was identified. A Memorandum of Understanding (MOU), developed by the Working Group with input from the STB and the State Historic Preservation Officer (SHPO), details the approach for the additional cultural resources investigations and reporting activities.

A report completed in August 2012 addressed Segment 6, including the Little Susitna River Railroad Bridge. After reviewing the report and consulting with you, we determined the Susitna River Railroad Bridge eligible for listing in the National Register. At that time no direct effects to the bridge

were proposed - the bridge would remain in place and continue to be used by ARRC. Though a new bridge would be constructed adjacent to the older structure, the resulting minor indirect (visual) impact was considered consistent with the character and use of the existing bridge and not determined to constitute an adverse effect. However, since that time it has become apparent that the bridge itself requires upgrades in order to ensure it can continue to operate safely.

Proposed Upgrades to the Little Susitna River Railroad Bridge (ANC-00085)

The original timber trestle bridge at Mile 174.3 was constructed in 1917 from standard plans. The railroad changed the alignment of the track over the river, and the American Bridge Company fabricated and erected the existing one-span open deck 80-foot thru-girder bridge in 1925 and 1927, respectively. When the north pier washed out in 1943, repairs included driving steel sheet piling south of the pier and filling with rock. The girder was also reset and painted. In 1952, the deck was renewed with secondhand materials from the Healy River Bridge and elsewhere. Additional work since that time included replacing the deck (1979) and resetting the roller nests (1993).

ARRC has recently identified the need to strengthen the bridge by converting the existing open deck to a ballast deck. (Please refer to the attached figure.) Currently, the open deck is fixed in elevation and prevents the addition of new ballast in the track adjacent to the bridge, resulting in poor track geometry in the bridge approaches. The poor geometry is cumulative with the abrupt change in track support stiffness occurring directly off each end of the open deck bridge. This in turn increases load impact factors experienced by the bridge structure and track components. The proposed replacement of the open deck with a ballasted deck would eliminate the abrupt change in track support stiffness, thereby reducing track maintenance cycles and increasing bridge component life. There would be no change to the steel girder, floor beams, stringers, or lateral braces. The designed ties on the existing deck are set between the floor beams and connected to the stringers. These ties would be removed and replaced with a steel pan with side panels, which would be connected to the stringers. Standard railroad ties and ballast would be placed in the pans.

These above changes would strengthen the bridge and increase its longevity but not result in adverse effects to the National Register-eligible resource since the changes are consistent with expected maintenance activities needed to keep the bridge in safe working order.

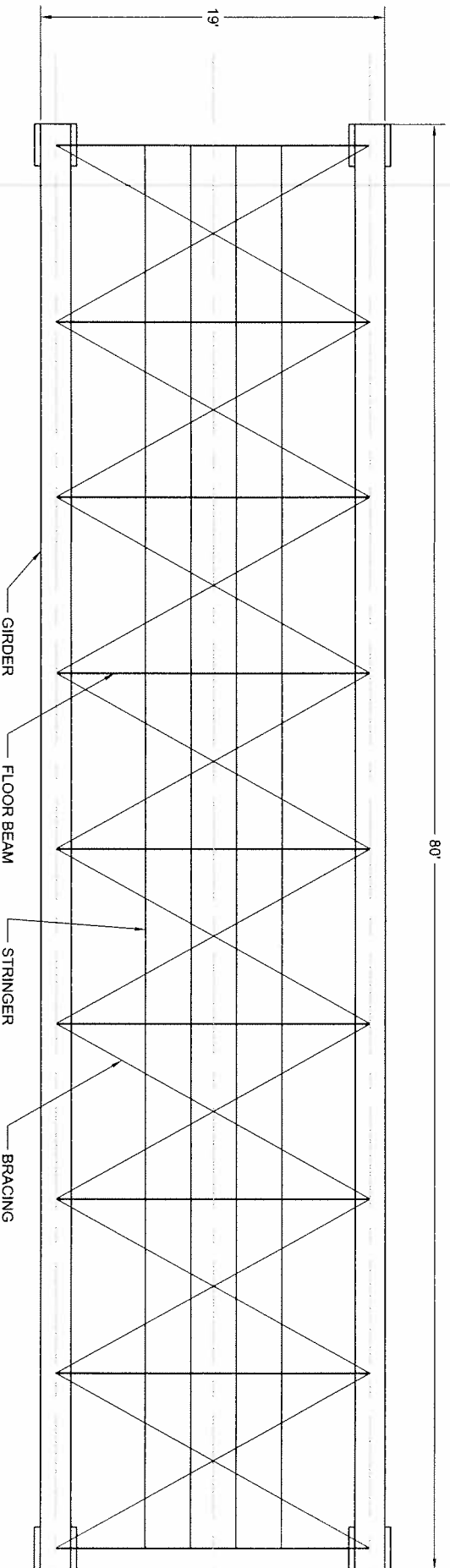
STB Determination of Effect

We believe that the proposed modifications to the Little Susitna River Railroad Bridge described herein would not affect its integrity nor result in adverse effects. Please provide us with your opinion regarding the proposed bridge modifications within 30 days of receipt of this letter. If you have any questions about the project, please do not hesitate to contact me at (202) 245-0293.

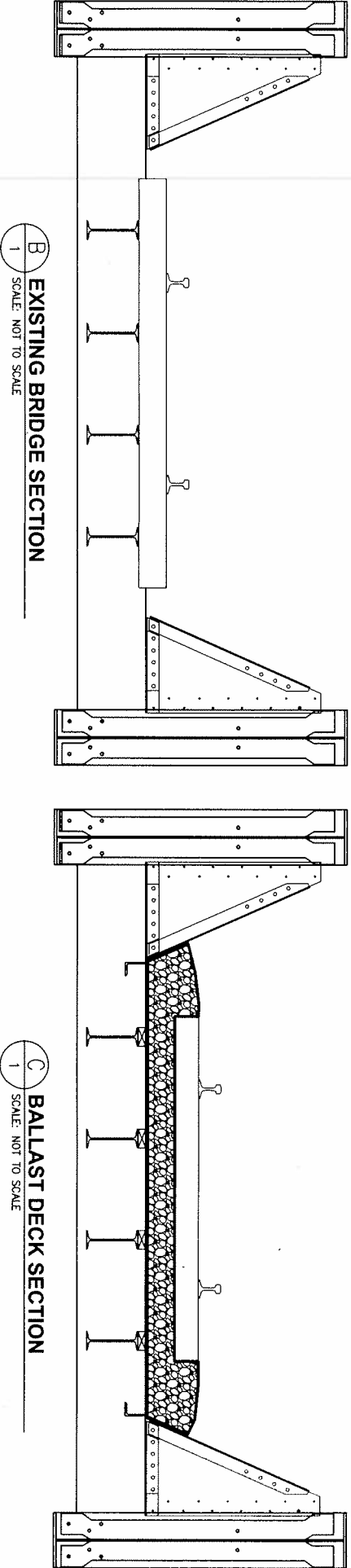
Sincerely,

A handwritten signature in dark ink, appearing to read 'Catherine Nadals', with a long horizontal flourish extending to the right.

Catherine Nadals
Office of Environmental Analysis



A STRUCTURE PLAN VIEW
SCALE: NOT TO SCALE



B EXISTING BRIDGE SECTION
SCALE: NOT TO SCALE

C BALLAST DECK SECTION
SCALE: NOT TO SCALE



ALASKA RAILROAD CORPORATION
ENGINEERING SERVICES
P.O. BOX 107500, ANCHORAGE, ALASKA 99510-7500

PROJECT :

**80 FOOT THRU GIRDER
BRIDGE 174.3**

TITLE:

**MODIFICATIONS FOR BALLAST DECK
PLAN AND SECTIONS**

DESIGNED BY: ARRC	SCALE : NTS	DATE NO. 1
DRAWN BY: ARRC		
CHECKED BY: ARRC	DATE : 12/13/13	
APPROVED BY: ARRC		