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May 14, 2020

United States Coast Guard – 8<sup>th</sup> District  
Rob McCaskey  
1222 Spruce Street, Suite 2.102D  
St. Louis, Missouri 63103-2832

Re: **BNSF Bridge 196.6 Replacement**  
**Missouri River Crossing – Bismarck / Mandan, ND**  
**Request for HEC-RAS Model Information**

Dear Mr. McCaskey:

Ackerman-Estvold is working on behalf of the Friends of the Rail Bridge (FORB) of Bismarck-Mandan, North Dakota. FORB is a not-for-profit organization interested in preserving the existing BNSF Railway bridge over the Missouri River in Bismarck-Mandan, North Dakota. While FORB is sensitive to the desires of BNSF Railway to move forward with its proposed alternative – which would demolish the existing bridge – the FORB wishes to develop a better understanding of the technical challenges being faced by BNSF with regard to the Missouri River hydraulics. Additionally, FORB aims to be a productive stakeholder that would be able to suggest alternative means to meet BNSF's objectives while preserving the iconic, historic structure across the Missouri River. To that end, FORB has asked that Ackerman-Estvold review some of the technical data that has been produced to date by BNSF Railway for the replacement of BNSF Bridge 196.6 over the Missouri River.

In order to develop a better understanding of the Missouri River hydraulics at the structure location and to be able to evaluate alternatives that could meet the needs of BNSF while preserving the existing structure, Ackerman-Estvold, on behalf of the FORB, respectfully requests that the following information be shared:

1. HEC-RAS models for the following alternatives:
  - a. Existing conditions. This is the existing conditions model that would have been used by BNSF as a baseline for comparison to any of the concepts evaluated. Based on correspondence, this model has been modified to include updated cross section information for the area around the bridge. This would also be considered the 'corrected effective model' for purposes of BNSF's submittal to FEMA for a Conditional Letter of Map Revision (CLOMR).
  - b. BNSF Concept 1 (as identified in November 6, 2019 'BNSF Br. 196.6 Replacement Design Concepts Considered' presentation). This would include two scenarios (keeping existing bridge and removing existing bridge) as identified in the table on Page 38 of the BNSF presentation.
  - c. BNSF Concept 2 (as identified in November 6, 2019 'BNSF Br. 196.6 Replacement Design Concepts Considered' presentation). This would include one scenario (removing existing bridge) as identified in the table on Page 38 of the BNSF presentation.
  - d. BNSF Concept 3 (as identified in November 6, 2019 'BNSF Br. 196.6 Replacement Design Concepts Considered' presentation). This would include two scenarios (keeping existing bridge and removing existing bridge) as identified in the table on Page 38 of the BNSF presentation.
  - e. BNSF Concept 4 (as identified in November 6, 2019 'BNSF Br. 196.6 Replacement Design Concepts Considered' presentation). This would include two scenarios (keeping existing bridge and removing existing bridge) as identified in the table on Page 38 of the BNSF presentation.
2. Preliminary plans for each alternative and concept considered. These plans would include pier configurations, dimensions and spacing.
3. The full CLOMR submittal made to FEMA, including all reports, model data, work maps, etc. as well as any correspondence received from FEMA on the submittal.
4. Lists or Geographic Information System (GIS) files of properties affected-by Base Flood Elevation increases of 0.02' and 0.03', as identified in BNSF's June 10, 2019 "Br. 196.6 Hydraulic Modeling (Bismarck, ND)" presentation. Based on the presentation, up to 500 upstream structures could be impacted by a Base Flood Elevation increase of 0.02' and 550 structures could be impacted by a Base Flood Elevation increase of 0.03'.

Based on a review of correspondence and presentations made by BNSF to stakeholders, it is assumed that this information is readily available.

The most efficient means of sharing this information would be via email. If the data set is too large to email, the preferred and efficient means of sharing the data would be through setting up a file share through Google Drive, Microsoft OneDrive or something similar. Please coordinate the sharing of electronic information with Thomas Johnson at [REDACTED]

The Friends of the Rail Bridge sincerely appreciates your timely response to our request for information. Please reach out with any questions.

Sincerely,

ACKERMAN-ESTVOLD



Ryan Ackerman, PE

Cc: Susan Wefald – Friends of the Rail Bridge  
Mike Herzog – BNSF Railway Company  
Claudia Berg – ND State Historic Preservation Officer  
Ryan Pietramali – Federal Emergency Management Agency  
Toni Erhardt – USACE ND Regulatory Office  
Aaron Carranza – ND Office of the State Engineer