

October 21, 2014

Bridge Rating Lake County - Village of Barrington Hills SN 049-6049

Cuba Road over Flint Creek

Mr. Martin L. McLaughlin Village President Village of Barrington Hills 112 Algonquin Road Barrington Hills, Illinois 60010

Dear Mr. McLaughlin:

In accordance with Section 15-317 of the Illinois Vehicle Code and the bridge rerating policy as described in Structural Services Manual Section 3.3.9.1, we have completed the rating of the subject structure. The inspection was performed by Mr. Jeff Wood and Mr. Pat Rebbe of this office. The results are:

GOVERNING MEMBER	INVENTORY RATING FACTOR	OPERATING RATING FACTOR	REQUIRED POSTING	METHOD OF ANALYSIS
PPC Deck Beam	0.13	0.22	WEIGHT LIMIT 5 TONS	LFR

All of the precast prestressed concrete deck beams show extensive deterioration, which significantly affects the load-carrying capacity of the structure. **Until the structure is replaced, a Special Inspection must be reduced to 3 month intervals to monitor the condition of the structure.** The current 6 month Special Feature Inspection will be revised to reflect the new interval. Any additional distress observed from existing conditions must be reported to our office for evaluation.

Please notify the appropriate school district and emergency service agencies of <u>all</u> required load restrictions so they may alter any bus service or emergency access procedures affected by the required bridge posting. Only buses or emergency vehicles with a gross weight equal to or less than the required posting level may safely utilize a structure at any time. However, it is recommended that no school buses use this structure. Mr. Martin L. McLaughlin Page 2 October 21, 2014

The postings must be done as soon as possible to ensure the safety of the traveling public, and must be done in accordance with the Manual on Uniform Traffic Control Devices (MUTCD) for Streets and Highways. The 2009 Illinois Supplement to the National MUTCD provides further guidance in Chapter 2B.59 on weight limit signs and is available on the IDOT website - http://www.idot.illinois.gov/home/resources/Manuals/Manuals-and-Guides

When the postings have been completed, please notify the IDOT District office in <u>Schaumburg</u> in writing within 30 days of the receipt of this letter. They will then enter the actual field postings in the Illinois Structure Information System (ISIS) and verify the accuracy of the bridge status codes. We have entered the Inventory and Operating Ratings and the required postings in the ISIS.

Special Inspections: Included is a Special Inspection Report form (BBS SI-1) for this structure. After the SI has been completed, please fill in the appropriate information and submit to the IDOT District Office in <u>Schaumburg</u> so they can update the ISIS. Failure to perform any Special Inspection may result in posting, reduced posting, or closure of the bridge.

The rating notes and photographs are attached for your files. Any inquiries regarding this rating may be directed to Mr. William Beisner of the Local Bridge Unit at 217/785-8668.

Sincerely,

D. Carl Puzey Acting Engineer of Bridges and Structures

Towny A. Alt

By: Timothy A. Armbrecht Acting Engineer of Structural Services

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cc: Wiss, Janney, Elstner Assoc., Inc. / Attn: Brian Santosuosso (NBIS PM) John A. Fortmann, District 1 / Attn: Christopher J. Holt