



FIELD REPORT #005

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Date:	July 23, 2020	Project #:	2018-046	Page 1 of 4
To:	Michael Cahalane Town of Effingham 68 School St. Effingham, NH 03882	Project:	Elm Street Bridge Preservation	
Email:	effingham@roadrunner.com	Location:	Effingham, NH	
Prepared By:	Jonathan K. MacDougall, PE	Owner:	Town of Effingham	
Reviewed & Approved By:	Christopher R. Fournier, PE	Contractor:	Hansen Construction	
		Weather Conditions:	Overcast 60's°F	

SITE VISIT

Arrived at site: 7:50 AM

Left site at: 9:10 AM

Personnel & Equipment on site:

- HEB Engineers, Inc. (HEB): Jonathan MacDougall, PE; Chris Fournier, PE
- Michael Hansen Construction Ltd. (Contractor): Carl, Dan, Mike
- Michael Hansen Construction Ltd. Equipment:
 - Volvo Excavator
 - Diesel Air Compressor
 - Dump Truck

Visitors to site:

- Michael Cahalane – Town of Effingham.

Purpose of Site Visit:

- To observe construction progress.
- To review options for backwall demolition and deck surface.

Work Performed by Contractor since last site visit:

- Contractor completed chipping concrete for partial depth repairs at the center of the bridge (see Photo 1).
- Contractor began chipping deck concrete along the east curb line (see Photo 2).

Work Performed by Contractor during HEB site visit:

- Contractor was preparing to continue chipping concrete along the east curb line.

Items discussed and observed:

- The newly exposed deck reinforcement appears to have minimal section lost due to rust. There are some rust locations that will require cleaning for placing the deck concrete.
- Contractor asked if they could use a chipping hammer on a skid-steer to demo concrete at the backwall because it was taking a long time to remove with hand equipment (see Photo 3). Engineer expressed concern about damaging the reinforcing within the backwall with the larger hammer. Contractor and Engineer agree to try it with the small skid steer hammer (250-lbs) and see how it works. The equipment is expected to arrive on site Friday morning (July 24, 2020). Engineer will be on site to observe.
- Contractor, Engineer, and Mike Cahalane discussed options for the deck surface. There are advantages to both of the preferred options. A full concrete deck versus pavement and new membrane over the partial depth repairs. It does not appear there will be any full depth deck repairs beyond what is required to remove the expansion joint. Based on the current quantities in the field it appears the concrete overlay would cost about

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\$25,000 more to construct. Contractor prefers the membrane and pave approach. Engineer noted it will be easier to inspect the deck in the future with the full concrete overlay, but the pavement is simpler and more frequent to maintain.. However, both options can produce a long-lasting reliable bridge. All parties agreed to move forward with the membrane and pave option. Contractor will immediately coordinate with membrane and paving to minimize lead times.

- Contractor estimated 2-3 weeks until the bridge will be reopened if everything goes smoothly.
- Contractor said they will use wood or tarp barriers along the guardrail moving forward to prevent debris from falling in the river below.
- Contractor said they will likely use hand tools and needle scalers to remove the loose material on the girders and other steel under the bridge. Contractor will have to develop a containment plan to prevent material from going in the water below.

Work Scheduled:

- Contractor will likely complete the preparation for partial depth repairs today (July 23, 2020) and begin demolition at the back wall tomorrow (July 24, 2020).

Outstanding Construction Issues:

- None.

Next Observation:

- Friday, July 24, 2020.

Photos:

- Taken by CRF July 23, 2020.



Photo 1: Deck along the east curb prepared for partial depth repairs.



Photo 2: Deck along the east curb prepared for partial depth repairs.



Photo 3: Expansion joint and backwall.

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Copy: Michael Hansen Construction Ltd.
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