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|                                    |  |                            |  |                    |
|------------------------------------|--|----------------------------|--|--------------------|
| <b>Date:</b>                       | September 22, 2022   | <b>Project #:</b>          | 2021-083   | <b>Page 1 of 4</b> |
| <b>To:</b>                         | Town of Effingham<br>68 School Street<br>Effingham, NH 03882 | <b>Project:</b>            | Bailey Road Culvert Replacement                  |                    |
| <b>Email:</b>                      | townofeffingham@effinghamnh.net                              | <b>Location:</b>           | Effingham, NH                                    |                    |
| <b>Prepared By:</b>                | Eric Schroeder   | <b>Owner:</b>              | Town of Effingham                                |                    |
| <b>Reviewed &amp; Approved By:</b> | Christopher Fournier, PE                                     | <b>Contractor:</b>         | Jake Dawson's Excavation & Utility Services, LLC |                    |
|                                    |  | <b>Weather Conditions:</b> | 56° Rainy  |                    |

### **SITE VISIT**

**Arrived at site:** 1:00 PM

**Left site at:** 3:00 PM

#### **Personnel & Equipment on site:**

- » HEB Engineers, Inc. (HEB): Eric Schroeder
- » Jake Dawson's Excavation & Utility Services, LLC (Dawson's): Owner (Jake Dawson), Foreman (Andy), 2 Laborers
- » Dawson's Equipment:
  - 1 Case Loader, 621F (idle)
  - 1 Case Excavator, CX145DSR idle
  - 1 Case Excavator, CX245DSR (idle)

#### **Visitors to site:**

- » None.

#### **Purpose of Site Visit:**

- » To observe temporary bypass failure.

#### **Work Performed by Contractor since last site visit:**

- » Due to the storm event that started on Wednesday night (09/21/22) and continued throughout the day on Thursday (09/22/22) the temporary culvert bypass had failed. The Contractor called the Engineer and informed him of the situation.
- » The Contractor had stabilized the north side of the road with riprap. The Contractor stated that this side was the first to show signs of erosion and was quickly stabilized to prevent the road from collapsing. The Contractor then stabilized the excavation side because the 2–3-foot buffer of roadway material had eroded away.
- » After the roadway was stabilized the Contractor added fill and riprap over the bypass culvert. At the inlet, the Contractor use two lard sandbags in an attempt the seal the inlet.

#### **Work Performed by Contractor during HEB site visit:**

- » The Contractor continued to stabilize the sides of the excavation with riprap.

#### **Items discussed/observed:**

- » Contractor stated that the current bypass was no longer acceptable for safely diverting the South River away from the work zone because of the quality of the surrounding material. Contractor proposed installing a barrier

of sheet pile across the entire roadway to control the water. The Engineer replied that HEB would review the revised water diversion submittal after it is available. Contractor notified the Engineer that they would be requesting more time in the schedule due to this setback and would not progress work at the site until that submittal was approved.

- » The Engineer observed the water had risen and had flowed around the sheet pile cofferdam into excavation. In addition, the Engineer suspects the water observed flowing outside of the bypass culvert's outlet (FR 003), had eroded the backfill material holding the culvert in place due to improper sealing of the inlet. The Contractor had placed sandbags and roadway materials over top of the inlet to secure it back into place. The Engineer observed sinkholes directly over the culvert becoming enlarged, demonstrating that water was continuing to flow around the bypass culvert.
- » The Contractor asked the Engineer if HEB would design the new water diversion system. The Engineer replied that it would have to be designed by a third party and then submitted to HEB for approval as it was previously.

**Work Scheduled:**

- » None.

**Outstanding Construction Issues:**

- » Erection plan submittal is needed to demonstrate the capability of roadway shoring (FR #002, 09/15/22).
- » Stabilize site in accordance with erosion control requirements.

**Next Observation:**

- » Friday, September 23, 2022 – To observe site stabilization.

**Photos:**

- » Taken by Eric Schroeder on September 22, 2022.



Photo 1: North side of roadway is stabilized with riprap.



Photo 2: The excavation is completely flooded.



Photo 3: The inlet of the bypass culvert is being held in place by sandbags and roadway material.

Copy: Jake Dawson's Excavation & Utility Services, LLC  
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