

SITE NUMBER AND NAME <b>S018-IV Rocky Creek</b>		HIGHWAY & KM 40:12, 15.88	PREVIOUS INSPECTION DATE May 17, 2022	INSPECTION DATE <b>May 27, 2024</b>
LEGAL DESCRIPTION NW 3-22-9-WM5	NAD 83 COORDINATES UTM Northing Easting 11 5634403 629029		RISK ASSESSMENT <b>S018-IV: PF: 5 CF: 6 TOTAL: 30</b>	
Average Annual Daily Traffic (AADT): 1220 (north) & 1120 (south), (Reference No. 52170)			Contractor Maintenance Area (CMA): 28	

SUMMARY OF SITE INSTRUMENTATION:  There is no instrumentation at the S018-IV site.  LAST READING DATE: N/A		INSPECTED BY: Chris Grapel (KCB) Peter Roy (KCB) Renato Macciotta (U of A) Alex Frotten (TEC) Kristen Tappenden (TEC) Syed Siddique (TEC)
PRIMARY SITE ISSUE: Rocky Creek Bridge is potentially at risk of being damage by debris flow, ice damage, and high-water events.		
APPROXIMATE DIMENSIONS: The Rocky Creek Bridge is a two-lane paved bridge approximately 25 m long.		
DATE OF ANY REMEDIAL ACTION: Road and bridge repairs conducted following 2013 flood damage. Repairs appear to have included riprap armoring along the banks, including the outside of the bends.		

ITEM	CONDITION EXISTS		DESCRIPTION AND LOCATION	NOTICABLE CHANGE FROM LAST INSPECTION	
	YES	NO		YES	NO
Pavement Distress		X	Pavement leading up to and over Rocky Creek Bridge appears in good condition.		X
Slope Movement		X	Creek banks appear stable and in good condition.		X
Erosion		X	N/A – none observed		X
Seepage		X	N/A – none observed		X
Culvert Distress		X	N/A – none observed		X

<b>COMMENTS</b>
The Rocky Creek Bridge was previous damaged during a flood event and was repaired in 2013.
The creek channel is well defined, and the creek banks have been armoured with riprap. The riprap appears to be in good condition.
The previous bridge and highway alignment is approximately 140 m west (downstream) of the current highway alignment.
There was low flow observed during the 2024 inspection
The upstream H-pile bridge piers appear to have been partially displaced, most likely due to debris (e.g., ice, logs) moving at a high rate of speed during a high-water event (Photo 3).
The pavement and guardrails leading up to and over the bridge appear to be in good condition.

Maintenance/Repair/Monitoring Recommendations:

- The site should be regularly inspected by the MCI and as part of the Southern Region GRMP Section B inspections.
- The bridge piers should be monitored to assess if they continue to deflect. If the displacement of the upstream H-pile piers continues they should be repaired/reinforced. Given the previous damage to the foundation and structure, AT's bridge branch should inspect this bridge and foundation.

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Peter Roy, P.Eng.  
Civil Engineer



**Photo 1** Downstream side of Rocky Creek Bridge. The creek channel is well defined and the creek banks are armoured with riprap. Photo taken May 27, 2024, facing west.



**Photo 2** Upstream side of Rocky Creek Bridge. The upstream H-piles appear partially displaced from a suspected high-water event. Photo taken May 27, 2024, facing north.



**Photo 3** Upstream pile on north side of bridge. Pile looks to be displaced, but also could have been installed with some batter due to an obstruction during installation. Photo taken May 27, 2024, facing north.

