

SITE NUMBER AND NAME: <b>S014 Bellevue Mine Sinkholes</b>		HIGHWAY & KM: 3:02, 27.203	PREVIOUS INSPECTION DATE: June 1, 2017	INSPECTION DATE: <b>May 10, 2019</b>
LEGAL DESCRIPTION: 04-21-007-03 W5M and 13-16-007-03 W5M	NAD 83 COORDINATES: UTM Northing Easting 11 5659724 614296		RISK ASSESMENT: PF: 2 CF: 3 TOTAL: 6	
AVERAGE ANNUAL DAILY TRAFFIC (AADT): 8020 (west), 6320 (east) (Ref. No. 70000008)			CONTRACTOR MAINTENANCE AREA (CMA): 26	

SUMMARY OF SITE INSTRUMENTATION:  None  LAST READING DATE: N/A	INSPECTED BY: Chris Gräpel (KCB) Chris Morgan (KCB) Roger Skirrow (AT) Alex Frotten (AT) Nicolas Ropchan (AT)
PRIMARY SITE ISSUE: Sinkholes formed after heavy rainfall in 2002 due to collapse of old coal mine workings.	
APPROXIMATE DIMENSIONS: Sinkholes formed in a line approximately 280 m long along highway and were located between 5 and 35 m from west edge of pavement. Sinkholes varied in depth from 9 to 25 m.	
DATE OF ANY REMEDIAL ACTION: Sinkholes were excavated to 9 m depth and backfilled with rock fill in 2002, a few days after the sinkholes developed.	

ITEM	CONDITION EXISTS		DESCRIPTION AND LOCATION	NOTICABLE CHANGE FROM LAST INSPECTION	
	YES	NO		YES	NO
Pavement Distress		X			X
Slope Movement		X			X
Erosion		X			X
Seepage		X			X
Culvert Distress		X			X
<b>COMMENTS</b>					
No change since previous inspection and no impact to road. Remove from GRMP.					
Possible sinkhole at waypoint 811, near to conifer. Small depression noted away from highway, possibly infilled previously.					
Previous review of site geology indicates that bedrock and coal seams are steeply dipping which indicates coal mining voids are also steeply dipping. Coal mine maps are unavailable and rogue mining (unlicensed and/or unreported mining) may have resulted in workings extending beyond the limits of mines shown on maps.					

**Photo 1**      **Area of 2002 sinkholes west of the highway – no evidence of new sinkholes or pavement distress. Photo taken facing south on May 10, 2019.**



**Photo 2**      **Area of 2002 sinkholes west of the highway – no evidence of new sinkholes or pavement distress. Photo taken facing northwest on May 10, 2019.**



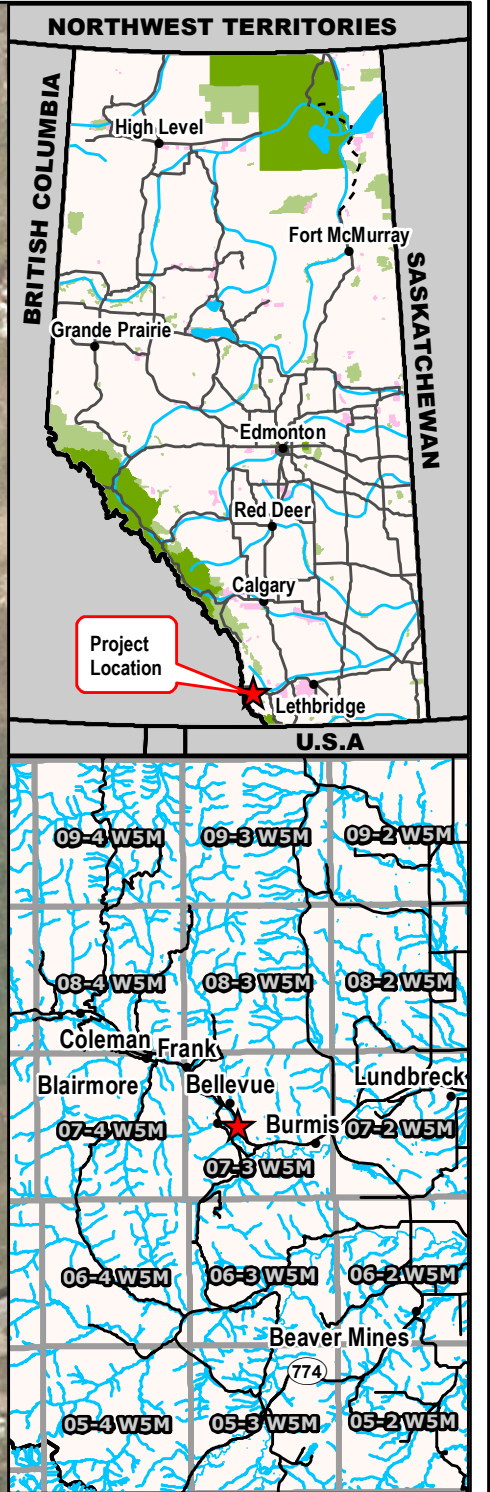


**Photo 3**      **Shallow depression at waypoint 811 (red circle). Possible sinkhole away from the road. Photo taken facing east on May 10, 2019.**











Time: 17:18:33 PM  
Date: May 29, 2019  
File: Z:\A\EDM\A05115A03 ABT Southern Region GRM\PA00 Drawings\2019\2 Section BIM\XDS014\_190528.mxd



### Legend

-  GPS Waypoint (May 10, 2019)
-  GPS Track (May 10, 2019)
-  Edge of Rock Slope
-  Fence

0 100 Metres

NOTES: 1. HORIZONTAL DATUM: NAD83 2. GRID ZONE: UTM Zone 11N 3. IMAGE SOURCE: World Imagery from ESRI ArcGIS Online. Source date October 16, 2014	CLIENT 	PROJECT SOUTHERN REGION GEOHAZARD RISK MANAGEMENT PROGRAM
		TITLE Site Plan S014 - Bellevue Sinkholes Hwy 3:02, km 27.203
SCALE 1:1,500	PROJECT No. A05115A03	FIG No. 1