

Appendix 20-B

*Archaeological Overview Assessment Report: Transmission
Lines and Mine Access Road*

HARPER CREEK PROJECT

**Application for an Environmental Assessment Certificate /
Environmental Impact Statement**

Client & Project

PROPONENT Yellowhead Mining Inc.		DEVELOPMENT TYPE Transmission lines and mine access road		
CONTACT Charlene Higgins, Vice President, Environment, Community & First Nations Relations		LOCATION Vavenby	NTS MAP 82M/12	
ADDRESS 6416 Chukar Drive Kamloops BC V2C 4T7		SCHEDULE Unknown	REGION Headwaters	
PHONE 604-681-1709 ext. 210		OTHER I.D. Harper Creek Mine power and access facilities		
FAX 604-608-3524	LENGTH Transmission: 17.7 km Access Road: 16.5 km	ELEVATION (a.s.l.) 435-1855 m	BIOGEO ZONE(S) ESSFwc2, ICHdw3, IDFmw2	

Assessment Summary

REPORT AUTHOR Ewan Anderson	SENIOR REVIEW			
REASON FOR ASSESSMENT Client request	# OF AREAS OF ARCH POTENTIAL 5			
DOCUMENTED ARCHAEOLOGICAL SITES IN VICINITY (AND TYPES) EiQw-2, EjQw-2 (cairns)	NON PROTECTED CULTURAL HERITAGE SITES IN VICINITY (AND TYPES) Culturally modified trees and trail			

Additional Archaeological Work Recommended? Yes

Project Description

The proposed development includes construction of one of two transmission lines and an access road from the Harper Creek Mine property, north to the North Thompson River. The two transmission line options cover a combined distance of approximately 17.7 km, mostly crossing undeveloped lands. The proposed access road is located primarily on existing road rights-of-way and covers a distance of approximately 16.5 km. Construction of these developments may include tree falling, vegetation clearing, and grading and excavation, all of which have the potential to disturb undocumented archaeological sites within the proposed rights-of-way.

Both the transmission line and the access road are components of Yellowhead Mining Inc.'s Harper Creek Mine project. The proponent requests overview assessments of all proposed project facilities.

The proposed developments are located between the subalpine zone near the sources of the Barriere River and Harper Creek, west of Vavenby Mountain and west and south of the community of Vavenby (Figure 1). Two archaeological sites are documented within 2 km of the proposed transmission line options and road right-of-way: EiQw-2 and EjQw-2 both consist of a single rock cairn.

Methodology

This archaeological overview assessment (AOA) consisted of a desk-based review of proposed development locations identified by the proponent. The desk-based review involved a search for previously recorded archaeological sites located in proximity to the proposed development using the Archaeology Branch's Remote Access to Archaeological Data (RAAD). The Provincial Archaeological Report Library (PARL), which contains reports for all archaeological studies conducted under *Heritage Conservation Act* permits, was also searched for previous assessments that may have been conducted in the vicinity of the community of Vavenby.

The review also utilized aerial imagery and terrain mapping to identify terrain features, water bodies, water courses, and lands disturbed by past commercial, industrial, or agricultural activities. Lastly, the results of previous archaeological studies in the vicinity of the proposed developments were considered when assessing the likelihood that undocumented archaeological sites are present within the proposed development locations.

In general, archaeological potential was assessed based on: proximity to water, food resources, slope, drainage, forest cover, and known archaeological sites.

Results and Discussion

A RAAD search indicates that only two archaeological sites are located within 2 km of the proposed developments. EiQw-2 and EjQw-2 are single cairn features. Both sites were recorded during an impact assessment of the Harper Creek Mine property conducted by Terra Archaeology in the summer and fall of 2011 and 2012 (HCA Permit 2011-0209). Two historic-period culturally modified trees (CMTs) dating to 1951 and 1970, and a blazed trail were also identified on the mine property south of the proposed transmission line and access road.

No other archaeological studies conducted in the vicinity of the proposed developments were identified in searches of PARL and RAAD.

The proposed developments are located primarily on moderate to steep, north aspect slopes, south of the North Thompson River. In addition, small portions of the proposed transmission line rights-of-way and the entire proposed access road are located on lands that have been significantly altered by past logging and road-building activities. The proposed transmission line rights-of-way also pass through or near the site of Canfor's Vavenby sawmill and several agricultural properties. Land alterations would have likely destroyed any above ground features such as cairns, culturally modified trees and trail blazes, and disturbed any buried archaeological material, if they were present in these locations.

Although development lands are either sloping or disturbed, there are five locations with moderate to high potential for buried archaeological remains. The results of the 2011/2012 mine footprint AIA indicate that isolated moderate potential landforms may be present at the south end of the proposed transmission line and access road (Area of Archaeological Potential 1 [AAP 1], Figure 2).

In addition, terraces on either bank of the North Thompson River are considered to have moderate to high archaeological potential (Figure 3). South of the River, Power Line Option 1 crosses two terraces on either side of Birch Island Lost Creek Rd (AAP 2) which are considered to have high archaeological potential. Power Line Option 2 crosses a slide fan north of Birch Island Lost Creek Rd, but small sections of remnant terrace may be present here, so this location (AAP 3) is considered to have moderate archaeological potential. Both transmission line options cross the broad terrace on the north bank of the River (AAP 4), which is considered to have only moderate archaeological potential due to significant disturbance from road-building and mill-construction activities. The broad, level terrace south of Highway 5 (AAP 5) is considered to have high archaeological potential.

Recommendations

An archaeological impact assessment (AIA) should be conducted at the five locations considered to have moderate to high archaeological potential. No further work is recommended for the remainder of proposed development lands provided the boundaries of proposed developments do not change.

Any ground altering activities within the boundaries of either EiQw-2 or EjQw-2 can only proceed under the terms of an HCA, Section 12 Alteration Permit issued by the Archaeology Branch. Property owners and developers should also be aware that known and undocumented sites and objects located on public or private land and associated with human habitation or use that might pre-date 1846 AD are automatically protected under Section 13 (2) of the *Act* and cannot be altered without a permit issued pursuant to Sections 12 or 14 of the *Act*.

This assessment addresses the potential for the existence of physical evidence of past human activity and does not encompass traditional use or other heritage concerns of the First Nation communities. This information should be solicited directly from the First Nations.

This figure has been removed from this Application for an Environmental Assessment Certificate/Environmental Impact Statement, as it contains archaeological site locational information protected under the *Heritage Conservation Act* (1996).

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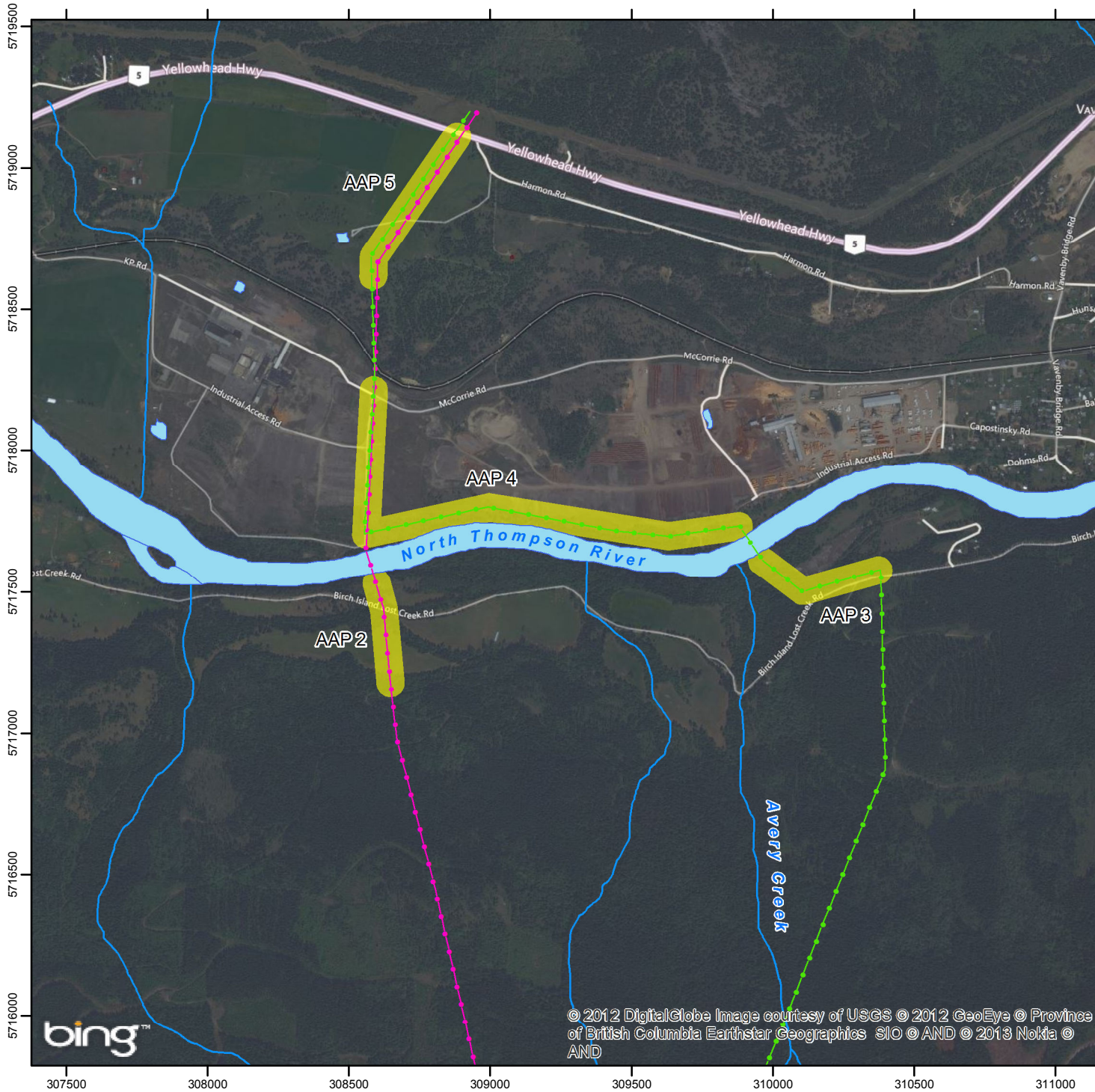
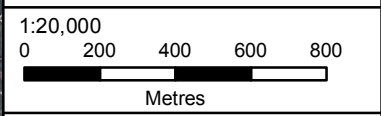


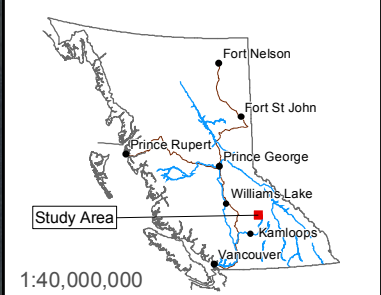
Figure 3. North Portion of Proposed Transmission Line Options and Mine Access Road

Terra ID: 11-0609-009
 Client: Yellowhead Mines

NTS 1:50,000 Mapsheet: 82M/12
 BCGS 1:20,000 Mapsheet: 82M.052
 Datum: NAD 1983 UTM Zone 11N



- Power Line Option 1
- Power Line Option 2
- Mine Access Road
- Archaeological Site
- Area of Archaeological Potential
- River/Creek
- Waterbody



1:40,000,000
TERRAARCHAEOLOGY

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