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May 15th, 1997

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MINISTRY OF FORESTS
CASTLEGAR, B.C.

To: Mr. Warren Holoboff - Woodlot Forester (Arrow Forest District)
845 Columbia Ave., Castlegar, BC, V1N 1H3
Tel: 1-250-365-8600 Fax: 1-250-365-8568

Re: An Archaeological Overview Re-Assessment of Woodlots in the Arrow Forest District

Dear Mr. Holoboff:

As per contract file 19100-30-97-02, we have conducted an archaeological overview re-assessment (AOA) evaluating the 17 woodlot zones and proposed expansions within the Arrow Forest District. These areas were assessed for archaeological site potential in order to identify areas that may require detailed archaeological impact assessment (AIA) studies prior to the commencement of land-altering developments. This AOA supercedes the polygons on the 1:50,000 scale NTS maps defined during the 1996 AFD-AOA (Handly et al. 1996). Using the 1:20,000 scale TRIM maps provided, we have indicated the specific zones we believe to have archaeological potential at a finer scale than that available on the 1:50,000 NTS maps. The objectives, methodology, and results of our evaluation are stated below.

Objectives

Specific objectives of the AOA included (see Archaeology Branch 1995:8-10, 20-22):

- ◆ assessing the archaeological site potential of Woodlots 400, 402, 403, 405, 407, 408, 496, 498, 1700, 1702, GAL, WIN and SILV, using the criteria described below; and,
- ◆ preparing this letter report with recommendations concerning any need for AIA studies with respect to future land-altering activities in the above areas.

Methods

1:20,000 scale TRIM maps, containing information on the location and size of the woodlots and expansion areas (see attached) were assessed for areas of archaeological site potential using criteria modified from the Arrow Forest District AOA (see Handly et al. 1996:6). Specific polygons were then defined for areas of medium or greater archaeological site potential.

Physiographic characteristics and inferred cultural practices we consider useful indicators of high archaeological site potential locations in the above areas include:

- ◆ alluvial, glaciolacustrine, glaciofluvial, and kame terraces, particularly those terraces at the confluence of two or more large fluvial systems; and,
- ◆ concentrations of previously recorded archaeological sites, contemporary aboriginal transportation corridors, and landforms associated with known aboriginal use.

Physiographic characteristics and inferred cultural practices we consider indicators of medium archaeological site potential locations in the above areas include:

- ◆ strandlines, deltas, and beaches associated with proglacial and periglacial lake levels;
- ◆ alluvial terraces, glaciolacustrine terraces, glaciofluvial terraces, and kame terraces;
- ◆ talus slopes and bedrock exposures within geological areas of possible quarrying materials;
- ◆ old-growth forest (for potential culturally-modified trees); and,
- ◆ flat to gently sloping (0-10%) landforms in close proximity to (0-200m), or 'overlooking' extinct and/or extant water courses, marshes, talus slopes, ponds, and lakes, contemporary or precontact ungulate grazing, browsing, and/or migration areas, and contemporary floral exploitation areas.

Environmental and Archaeological Setting

The examined areas are located at the following elevational settings, and mainly include variants of the Interior-Cedar Hemlock (ICH) and Engelmann Spruce - Subalpine Fir (ESSF) biogeoclimatic subzones within the Moist Climatic Region (see Braumandl et al. 1992).

<u>Woodlot</u>	<u>Min Elevation</u>	<u>Max Elevation</u>	<u>Aspect</u>
400 a	880	1460	Northeast
400 b	860	1240	North
402	800	1100	Flat
403	760	1499	South
405	480	1380	Southwest, Flat
407	540	1000	South
408 a	760	1400	South
408 b	760	1140	Northeast, Southwest
496	740	1240	North
498	740	960	Flat, Southeast, East
1700	520	1080	South
1702	520	1620	East
GAL a	440	620	Flat
GAL b	460	560	Flat
WIN	640	1600	West
SILV a	540	940	West, North
SILV b	540	1080	Flat, Northwest

Previous Archaeological Research

Little in the way of systematic archaeological research has been conducted within the Arrow Forest District except for the valley bottom zones at the Arrow Lakes and Slocan Lake (see detailed description of previous research in Handy et al. 1996:32-50). Since the publication of the AFD-AOA, several archaeological impact assessments have been performed within the region. No archaeological sites have been recorded within any of the proposed or existing woodlot boundaries. Three lithic scatter sites (DiQI-16 to DiQI-18) were located and recorded at elevated terraces near Cayuse and Little Cayuse Creeks, adjacent to the area encompassed by Woodlot 0407 (Lackowicz and Handy 1997). One faunal scatter site (DiQm-20) was located and recorded near Doe and Deer Creeks (Handly and Lackowicz 1996). An AIA was also performed at Standard-Hartney Flats near New Denver (Handly, Lackowicz and Zibauer 1996), with no cultural materials encountered within the evaluated cutblocks.

Archaeological Borden Blocks Included within Woodlot Boundaries

<u>Woodlot</u>	<u>Borden Block(s)</u>	<u>Woodlot</u>	<u>Borden Block(s)</u>
400 a	DhQj, DhQk	498	DkQi, DkQj
400 b	DhQj	1700	DIQm, DIQn
402	DgQh, DgQi	1702	DkQj
403	DhQj	GAL a	DjQk, DjQl
405	DIQl	GAL b	DjQk, DjQl, DkQk, DkQl
407	DiQl, DiQm	WIN	DjQi, DjQj
408 a	DhQh, DhQi	SILV a	DIQi
408 b	DhQh, DhQi	SILV b	DIQi
496	DkQj		

Previously Recorded Archaeological (Precontact) Site Types by Borden Block

Borden Number	Lithic Scatter	Cultural Depression	Pictograph	Burial	Fire Broken Rock	Cairn/Petroform	Faunal Scatter	Total
DgQh	01	01						002
DgQi	06							006
DhQh								000
DhQi								000
DhQj	09	10		05	03	01		028
DhQk	01	02		01				004
DiQl	11	05	01					017
DiQm	05	11					01	017
DjQi		02						002
DjQj		04						004
DjQk								000
DkQi	01	11	06					018
DkQj	02							002
DkQk								000
DkQl								000
DIQi	03	02	07					012
DIQl	04	02	01	01				008
DIQm	20	17		03				040
DIQn	01							001
	64	67	15	10	03	01	01	161
%age	40.0	41.6	9.3	6.2	1.9	0.6	0.6	100.2

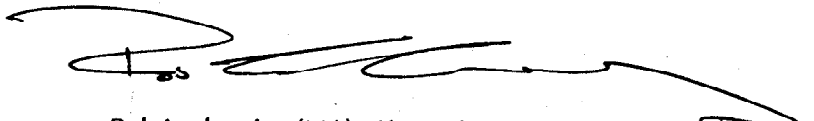
Recommendations for the Woodlots and Expansion Areas

Upon our evaluation of these woodlots, we **recommend** that detailed AIA studies be conducted in those site-specific polygons delineated on the attached maps. These areas are summarized in Table 1, below. We also **recommend** that archaeological impact assessment studies are not required outside of these polygons, as in our opinion they do not have sufficient potential for archaeological site placement.

Two exceptions exist for this latter recommendation. The first relates to potential pictograph panels at rock faces on the Slocan and the Arrow Lakes shorelines for woodlot maps GAL(a), SILV(a), and SILV(b). As we considered it unlikely that harvesting would occur at these locations, we have not assessed them as requiring an AIA. However, if harvesting or other land-altering activities are to occur at the shoreline, we **recommend** that an AIA study examine the rock faces for evidence of such panels. The second is that large areas of woodlots 0402, 0405, GAL(a), GAL(b), and SILV(b) are noted as flat on the 1:20,000 scale topographic maps used in this evaluation. We have assessed what we believe to be the most likely areas to contain archaeological sites within these woodlots. However, field inspections during an AIA study may observe additional variables that may exclude portions assessed as requiring an AIA, or add portions not assessed in this report. We **recommend** that final evaluation of these five woodlots be assessed during actual field studies.

We hope this information is sufficient for your present needs. Please do not hesitate to contact us at (250) 368-6442 if you have any questions or concerns.

Sincerely,



Rob Lackowicz (MA) - Kutenai West Heritage Consulting Ltd.
pc: Archaeology Branch

References Cited

Archaeology Branch

1995 **British Columbia Archaeological Impact Assessment Guidelines.** Archaeology Branch, Ministry of Small Business, Tourism, and Culture, Victoria.

Braumandl, T. F., M. P. Curran, G. D. Davis, H. J. Quesnel, G. P. Woods, D. L. DeLong, and M. V. Ketcheson

1992 **Biogeoclimatic Subzones and Variants of the Nelson Forest Region.** In **A Field Guide for the Identification and Interpretation for the Nelson Forest Region**, pp. 44-199. Nelson Forest Region, BC Ministry of Forests.

Handly, M. J. and R. J. Lackowicz

1996 **An Archaeological Impact Assessment of Six Cutblocks for Kalesnikoff Lumber Co. Ltd. Near Castlegar, Southeastern BC.** Report on file, Archaeology Branch, Victoria.

Handly, M. J., R. J. Lackowicz and D. P. Zibauer

1996 **An Archaeological Impact Assessment of Cutting Permit 130 for Slocan Forest Products' Ltd., Between New Denver and Silverton, Arrow Forest District.** Report on file, Archaeology Branch, Victoria.

Handly, M. J., D. P. Zibauer, and R. J. Lackowicz:

1996 **An Archaeological Overview Assessment of the Arrow Forest District, Southeastern B. C. (1995-1999).** Report on file, Archaeology Branch, Victoria.

Lackowicz, R. J. and M. J. Handly

1997 **Archaeological Investigations for Pope and Talbot Ltd. on the East Side of the Columbia River, Southeastern BC (1996).** Report on file, Archaeology Branch, Victoria.

Table 1: Archaeological Potential Re-Assessments, Arrow Forest District Woodlots (cont.)

Woodlot	TRIM	Polygon Numbr	Arch. Potential	Rationale
GAL (a)	82K061	1	Medium	Proximity to opening, water
		2	Medium	Proximity to water
		3	Medium	Terrace edge, proximity to water
		4	Medium	Knolls overlooking flat landform
		5	Medium	Terrace edge overlooking lake
GAL (b)	82K061	1	High	Proximity to water, at confluence, slope under 10%
		2	Medium	Pass/draw, pos. bench overlooking pass
		3	Medium	Road exposures
		4	Medium	Proximity to openings
		5	Medium	Proximity to trail and opening
		6	Medium	Terrace margin
WIN	82F063	1	Medium	Draw/pass on bench
		2	Medium	Knolls overlooking pass/draw
		3	Medium	Proximity to openings
		4	Medium	Knoll overlooking flat landform
SILV (a)	82F083/84/94	1	Medium	Proximity water, knolls, bench overlooking lake
		2	Medium	Knolls, pass, draw, slope <10%
		3	Medium	Knoll, bench overlooking draw
		4	Medium	Bench overlooking lake
SILV (b)	82F083/84/94	1	Medium	Proximity creek, slope <10%
		2	Medium	Bench overlooking lake
		3	Medium	Bench overlooking creek/draw
		4	Medium	Knoll overlooking lake
		5	Medium	Bench, knoll overlooking lake

REGION: Nelson - RNE

DISTRICT: Arrow - DAR

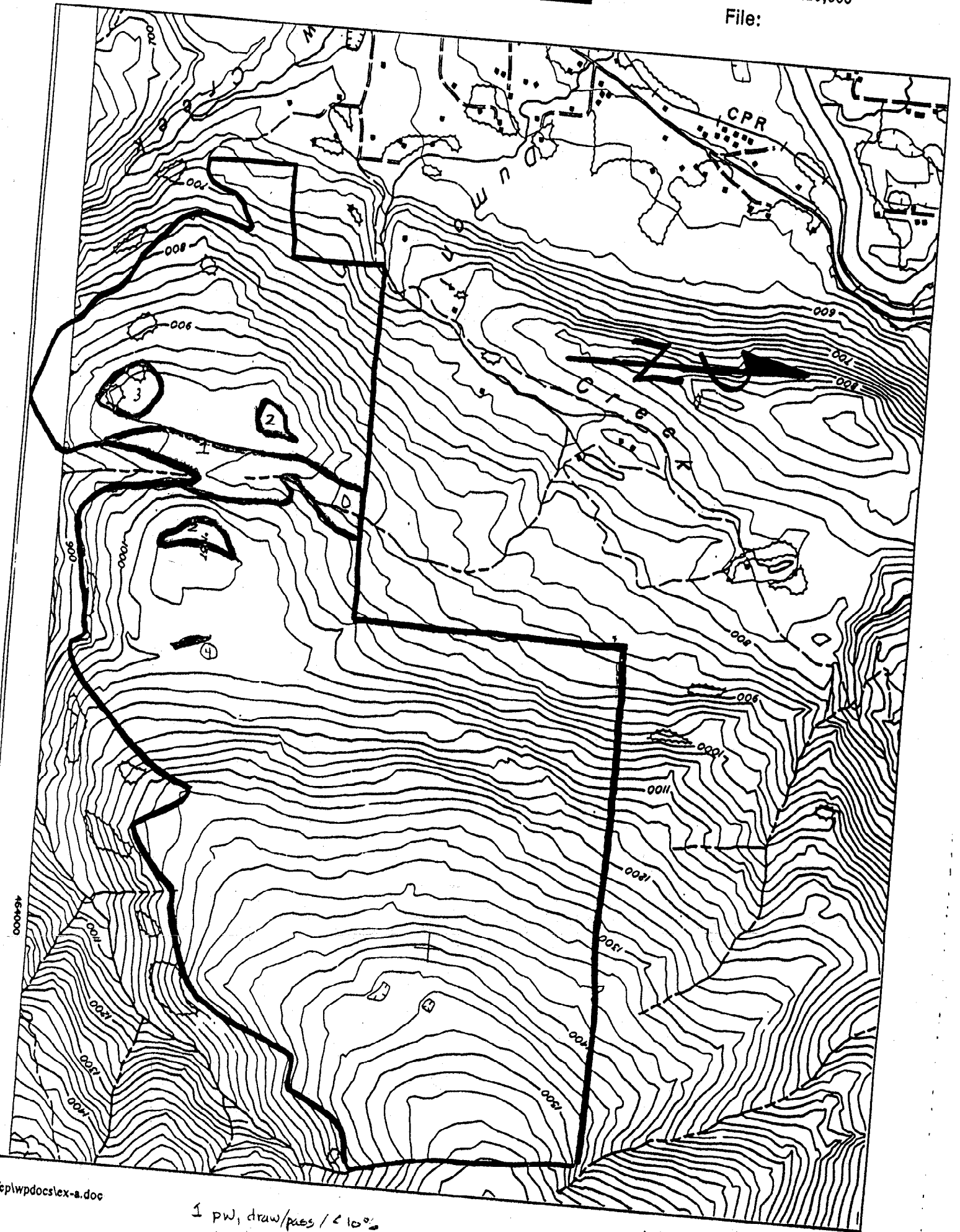
Area: hectares ±

Base Map: 82F063

Scale: 1:20,000

File:

SHOWN AS SOLID BOLD LINE:



Administrative Information

Heritage Inspection Permit: 1998-142

Licensee: Arrow Forest District Small Business Forest Enterprise Program, 845 Columbia Ave., Castlegar, BC, V1N 1H3
 Forest District: Arrow Forest Region: Nelson
 Contact Person: Warren Holoboff Phone: 250-365-8600 Fax: 250-365-8568
 Project Officer: Al Mackie Phone: 250-356-2080 Fax: 250-387-4420
 Survey Date(s): September 10, 1998 Field Supervisor: Robert Lackowicz (MA)
 Field Crew: Robert Watt (Sinixt-Arrow Lake First Nation)

Development, Locational and Biophysical Information

Harvest Area/Road: Woodlot 1832 Size/Length: ~600 ha
 General Location: Approximately 35km north-northeast of Castlegar and 4 km east of Winlaw.
 NTS: 82F/12 BGC Zone: ICHdw
 TRIM: 82F063 Forest Cover: Lodgepole pine, fir, larch Age Class: 4-5
 Elevation Range (m): 640-1500 Aspect: West Min. Slope (%): 0-5
 Disturbance Factors: Numerous old roads, forest fire, mining activities, small-scale hand-logging

Methodology

Reason for Evaluation: Selected by archaeological re-assessment due to saddle and bedrock openings
 Area(s) Evaluated: West-central and west-northwestern portions. Traverse width (m): 10-30 m
 Shovel Tests (n): 12 Screen Mesh Size: 1/4" Depth of Shovel Tests (cm): 35 cm
 Placement: Four ST's at small bench on eastern side of access road leading into saddle; six ST's on two elevated landforms within 30m of small pond in southwestern portion; two ST's in central portion of saddle
 Matrices Descriptions: Stratum 1: 0-6cm; humic
 Stratum 2: 6-30cm; light grey-brown sandy-silt with angular and rounded gravels
 Stratum 3: >30cm; as above with increased gravels, cobbles, boulders

AIA Discussion

Forest cover is generally open within the assessed portions of the woodlot, with ground visibility minimal due to the forest littermat. The channels of the two creeks are poorly defined and consist mainly of surface water. Topography within the saddle is flat in the section southwest of the access road, undulating with rock exposures to the west-northwest and between the creeks, and slopes between 10% and 25% to the north and south within the respective drainages. Several old roads branch through the saddle from the southern access road, leading to the west-southwest, as well as to the north toward Dumont Creek. Four shovel tests excavated on the only small flat bench overlooking the southern creek gully (adjacent to the access road) were negative for cultural materials. The northern old road follows along the eastern side of the unnamed creek headwaters and contains corduroy sections, which appear from their condition to have been laid down within the past fifty years. Two shovel tests were excavated within the flattest area between the two creeks, with negative results. Six additional negative tests were excavated at three slightly elevated landforms overlooking a small (~40m diameter) marsh/pond about 400m southwest of the saddle. The bedrock exposures near the southwestern corner were examined, but did not contain lithics suitable for artifact production. One hard-rock mining test pit was encountered on the knoll about 400m northwest of the saddle point. An iron pick was present at the location, with its condition also suggesting the activity occurred within fifty years and is not historically significant. No other cultural features or areas suitable for shovel testing were encountered during the traverses of the saddle area of Woodlot 1832. The western section of the woodlot closest to Dumont creek was assessed by vehicular reconnaissance. This portion of the woodlot is moderately to greatly sloping (30-50%), with no areas suitable for archaeological site placement.

Results of Investigation

Archaeological / Heritage Site: Absent

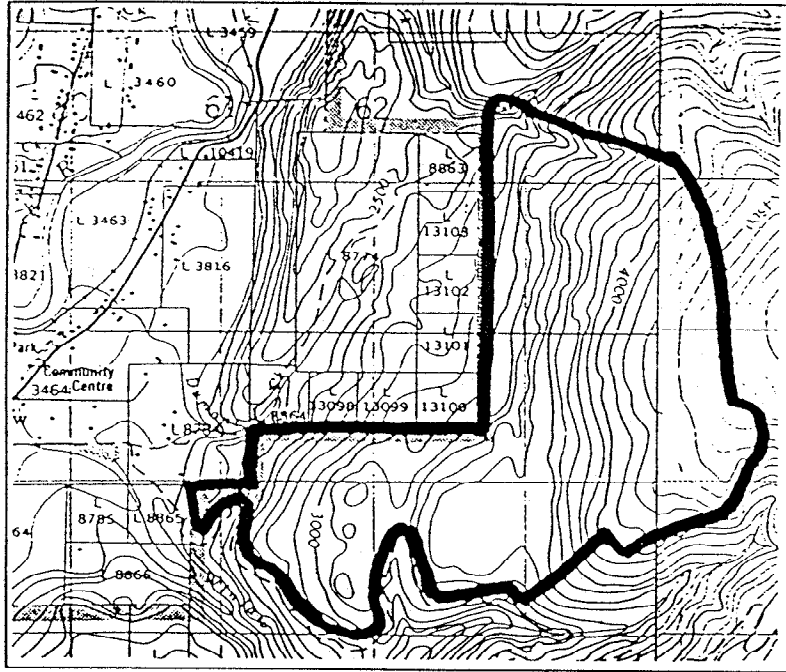
Recommendation:

Our ground surface inspection and shovel testing program of Woodlot 1832 provided no evidence of precontact cultural remains or significant postcontact cultural features. We believe this area has been adequately inspected for archaeological / heritage sites and recommend that no further archaeological mitigative actions are required.

Please Note: Documented and undocumented archaeological (pre-AD 1846) sites are protected under provisions of the Heritage Conservation Act and Section 51 of the Forest Practices Code Act. In the event that unexpected archaeological features or remains are encountered during forestry operations, all land-altering activities in the immediate vicinity must be suspended immediately and the Archaeology Branch contacted.

Report Author(s): Robert Lackowicz
 Date: September 18th, 1998

 Signature



Kutenai West Heritage Consulting Ltd.
AIA Location Maps
Arrow Forest District SBFEP
Woodlot 1832

Legend for 1:30,000 map



Traversed Area



Subsurface Testing Location

Figure 1: (NTS 82F/12; 1:50,000) (North to top of page).

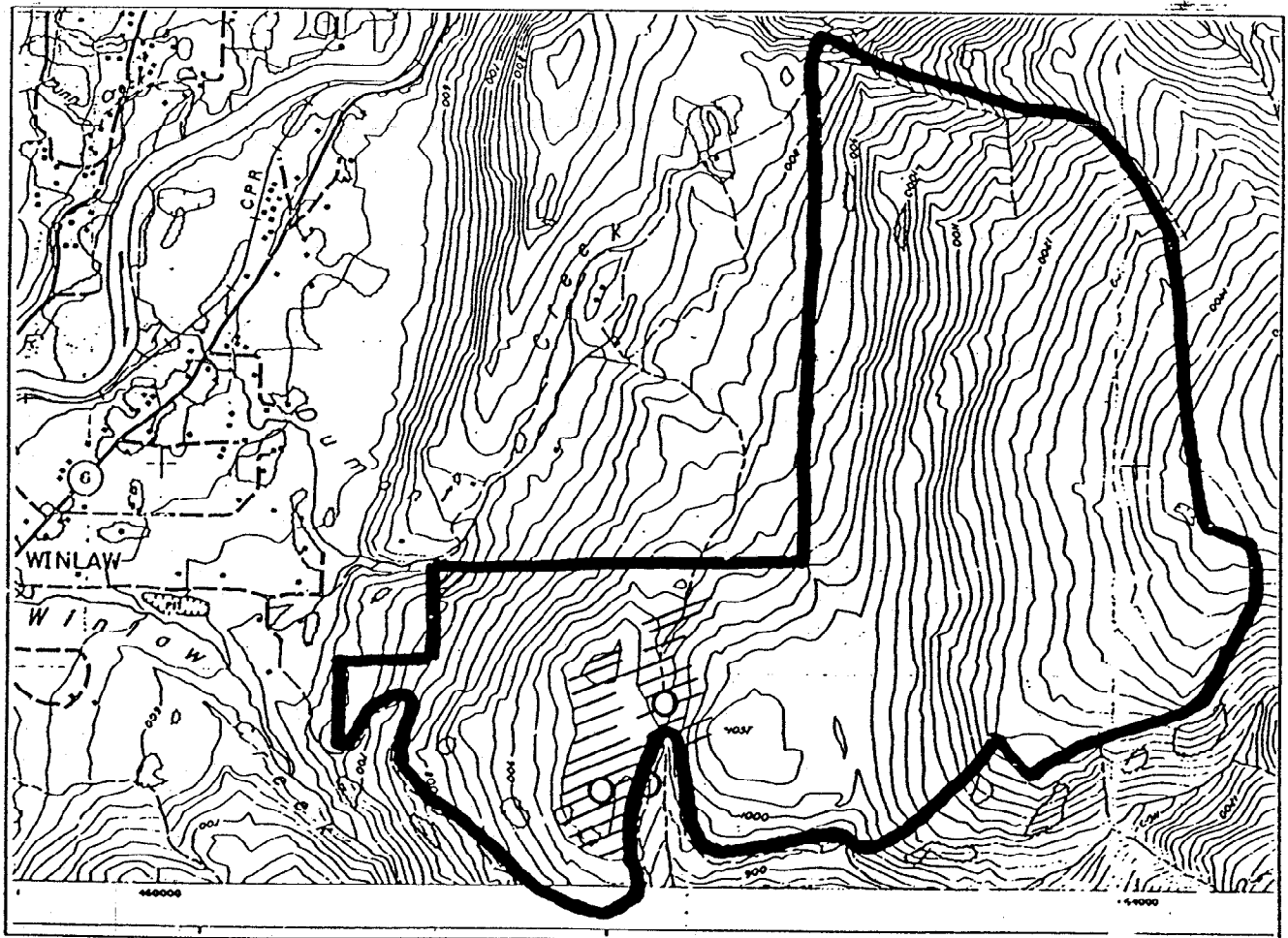


Figure 2: (TRIM 82F063; 1:30,000) (North to top of page).