

**BRITISH COLUMBIA  
 ARCHAEOLOGICAL IMPACT ASSESSMENT  
 INTERIM REPORT FORM**



**1. REPORT TITLE**

2014-0108-11469	Title: <i>Archaeological Impact Assessment of Improvements to the Mile 28 Crossing, Terrace BC; MOTI LKI Segment 1508 from Km 103.10 to Km 106.50 (R)</i>
-----------------	--

**2. MANAGEMENT SUMMARY**

2.1	<b>Protected HCA Sites:</b>	<i>GcTg-22; GcTg-24; GcTg-25; GcTg-26 GcTg-27; GcTg-28; GcTg-29; GcTg-30; GcTg-31; GcTg-32</i>
2.2	<b>Brief Overview of Study:</b>	<i>ARCHER CRM Partnership (ARCHER) conducted an AIA on the subject project (approximately 52.12 ha) located 39.9 km southwest of the town of Terrace, BC at the request of Brad Pollard of McElhanney Consulting Services Ltd. (McElhanney) on behalf of MoTI.</i>
2.3	<b>Results:</b>	<i>Fifty-four (54) subsurface tests were placed at four (4) locations exhibiting archaeological potential. Two (2) were for cultural remains resulting in the extension of previously recorded site GcTg-27. An Area of Potential (AOP1) exists along the northwest boundary of this site and will require field assessment if the project boundaries change to include this area. Four (4) previously unrecorded pre-AD 1846 Culturally Modified Tree (CMT) sites were identified during survey of the eastern and northern project areas. These cedar trees are protected under the HCA. The boundaries of GcTg-24 were also extended through the identification of eight (8) more CMTs. In addition two previously identified archaeological sites, GcTg-25 and GcTg-26, are also located inside the proposed improvement corridor. Two field verified AOPs remain outside of the proposed project area.</i>
2.4	<b>Management Recommendations:</b>	<i>One subsurface archaeological site (GcTg-27), and seven protected CMT sites (GcTg-22; GcTg-24; GcTg-25; GcTg-26; GcTg-28; GcTg-29; GcTg-30; GcTg-31; GcTg-32) are located within or overlap with the proposed improvement corridor for the Mile 28 Crossing. It is recommended that McElhanney Consulting Services Ltd. avoid these sites wherever possible. If avoidance is not feasible the proponent will be required to obtain a Section 12 Site Alteration Permit.</i>  <i>With respect to the remainder of the assessed project area, our visual and subsurface testing program did not result in the identification of additional archaeological or other cultural heritage remains. As such, and with respect to these latter areas, it is recommended that no further archaeological concerns be expressed with respect to the proposed project footprint as illustrated in the attached (Figure 1 and 2). It is recommended that if <u>any</u> further development activities are to occur within areas of archaeological potential not surveyed, additional archaeological assessment should take place.</i>

### 3. ADMINISTRATIVE INFORMATION

3.1	Permit Holder:	Frank Craig	3.2	Permit Holder Affiliation:	ARCHER CRM Partnership 117 E Columbia Street, Vanderhoof, BC, V0J 3A0
3.3	Proponent Contact:	Brad Pollard	3.4	Proponent Affiliation:	McElhanney Consulting Services Ltd. Suite 1 – 5008 Pohle Avenue, Terrace BC V8G 4S8
3.5	Interim Report Author(s):	Alice Storey			
3.6	Interim Report Date & Version:	10 June 2016			
3.7	Notification of Work Date:	2 April 2015			
3.8	OGC Ref No.:	n/a			

### 4. PROPOSED DEVELOPMENT

4.1	Description:	MOTI has proposed to realign Highway 16 at Mile 28 (approximately 3.4 km in length, 52.12 ha) to improve the section of the Highway at the Railway Crossing (MOTI LKI Segment 1508 from Km 103.10 to Km 106.50).
4.2	Location:	NAD 83 Zone 9 UTM Coordinates: P.O.C: 489340 E, 6023897 N (MOTI Landmark Kilometer Inventory location description: ~Km 103.10 on Segment 1505 Prince Rupert to Terrace); P.O.T: 491722 E, 6025747 N (MOTI Landmark Kilometer Inventory location description: ~km 106.50 on Segment 1505 Prince Rupert to Terrace)  To access the study area point of commencement (POC) travel 39.9 km west from Terrace BC on Highway 16. Parking is available at the Andesite Creek Boat Launch 300 m southwest of the POC, on the south side of Highway 16.

### 5. FIELD CREW

Table 1. Field Crew

Date (dd/mm/yy)	Field Director (on site? Y/N)	Field Supervisor	Other Field Personnel
21/04/16	Rémi Farvacque (Y)	Julie Williams	Mark Bolton, Matthew Shaw, Wesley Worsick
22/04/16	Rémi Farvacque (Available)	Julie Williams	Mark Bolton, Matthew Shaw, Wesley Worsick
23/04/16	Rémi Farvacque (Y)	Julie Williams	Mark Bolton, Matthew Shaw, Wesley Worsick
24/04/16	Rémi Farvacque (Y)	Julie Williams	Mark Bolton, Matthew Shaw, Wesley Worsick

## 6. ARCHAEOLOGICAL METHODS & RESULTS

### 6.1. Pre-field Methodology

- Archaeological potential and sites are indicated on the Study Area Map
- An AOA and /or archaeological predictive model exists for the study area  
Details: *An AOA was undertaken in 2006 (Big Pine Heritage Consulting and Research Limited 2006)*
- Previous field studies influenced this assessment  
Details: *Two AIAs (ARCHER CRM Partnership 2016; Matrix Research Limited, 2007), and a PFR (ARCHER CRM Partnership 2015) preceded this assessment.*
- Review of Provincial Heritage Register  
Date Accessed: *15 April 2016*
- Other  
Details:

**Table 2. Archaeological Sites in the Vicinity of the Study Area**

<i>Borden No.</i>	<i>Distance &amp; Direction from the Proposed Development</i>	<i>Site Type</i>	<i>Permit No. of Previous Visits</i>	<i>Site in Conflict (Y/N)</i>
<i>GcTg-22</i>	<i>Overlaps with boundary</i>	<i>CMT</i>	<i>2009-386</i>	<i>Y</i>
<i>GcTg-23</i>	<i>Overlaps with boundary</i>	<i>CMT</i>	<i>2014-108</i>	<i>Y</i>
<i>GcTg-24</i>	<i>Overlaps with boundary</i>	<i>CMT</i>	<i>2014-108</i>	<i>Y</i>
<i>GcTg-25</i>	<i>Inside project boundary</i>	<i>CMT</i>	<i>2014-108</i>	<i>Y</i>
<i>GcTg-26</i>	<i>Overlaps with boundary</i>	<i>CMT</i>	<i>2014-108</i>	<i>Y</i>
<i>GcTg-27</i>	<i>Overlaps with boundary</i>	<i>Lithic</i>	<i>2014-108</i>	<i>Y</i>
<i>GcTg-28</i>	<i>Overlaps with boundary</i>	<i>CMT</i>	<i>n/a</i>	<i>Y</i>
<i>GcTg-29</i>	<i>Overlaps with boundary</i>	<i>CMT</i>	<i>n/a</i>	<i>Y</i>
<i>GcTg-30</i>	<i>Overlaps with boundary</i>	<i>CMT</i>	<i>n/a</i>	<i>Y</i>
<i>GcTg-11469-C6</i>	<i>Inside project boundary</i>	<i>CMT</i>	<i>n/a</i>	<i>Y</i>
<i>GcTg-11469-C7</i>	<i>Inside project boundary</i>	<i>CMT</i>	<i>n/a</i>	<i>Y</i>

### 6.2. In-field Methodology

- Subsurface test measurements are a minimum of 35 x 35 cm
- Date Accessed: *21-24 April 2016*

Describe if other: *Augers were used to extend the depth of tests where the potential for deep deposits exists.*

6.2.1	Number of Crew Members:	3-4	6.2.2	Crew Spacing:	20-50 m
6.2.3	Other:				

### 6.3. In-field Observations

*North of Highway 16, study area terrain is generally well drained and moderate to steeply south and east sloping. A number of well defined unnamed streams bisect the project footprint. Stream beds are deeply incised in the northern sections of the project area, becoming broader as slope gradient lessens nearer to Highway 16. Forest cover consists of mature western hemlock, Western redcedar, Sitka spruce and an understory of thimbleberry, assorted ferns, mosses and skunk cabbage. Devil's club and Douglas maple are present at more poorly drained locales.*

*An area associated with the Andesite Gravel Pit was surveyed in the northern portion of the project area. It had previously been identified as having high archaeological potential by Kleanza (2013). In the western portion of this area the slopes range from 10-85° and are generally east facing. In the southern portion many seepages exist, and at the base of the slopes these result in low poorly drained areas. Vegetation ranges from mature to young Western redcedar, hemlock, and Douglas fir. The understory includes blueberry and huckleberry, bracken and sworn ferns, fairy bells and in low lying areas devil's club.*

*TL1 was placed on a rise along a cliff face that was south of CMT site GcTg-24. Testing revealed this is a relatively recent push pile. TL2 is located on a terrace overlooking the Skeena River to the east and is very close to CMT site GcTg-24. TL3 is comprised of a series of auger tests located on a terrace east of the railway tracks and just west of the Skeena River. No cultural strata or remains were observed in these test locations. Twenty six (26) additional tests were placed along the northern and western boundaries of the established lithic site GcTg-27, which resulted in two positive tests, and the extension of the site to the north.*

*Terrain south of Highway 16 is heavily disturbed and vegetation regeneration is limited to scattered juvenile poplar, Western redcedar, red alder, moss, and mixed grasses. Along Andesite Creek the study area is forested with mature poplar, Douglas maple and scattered western hemlock and Western redcedar. The area is a steeply southern sloping area (up to 43°) with notable bedrock outcrops, large boulders, and old growth cedar. Evidence for logging 40-50 years ago is observed across the forested portion of the project area. In addition scattered hand logging is present throughout the study area north of Highway 16.*

*The Skeena River and Andesite Creek banks have been disturbed by bank stabilization measures implemented in order to mitigate against weathering and erosion. Ground visibility throughout the study area is generally poor due to the presence of a well developed herbaceous layer. Scattered tree throws and anthropogenic exposures associated with Highway 16 and the railway were inspected by crews in the field.*

## 6.4. Results

**Table 3. Assessment Results**

Subsurface Test Area	Description	Dimensions (L x W)	Subsurface Tests		
			Total	Positive	Negative
TL1-4	Push pile along cliff	4 x 8	4	0	4
TL2-8	Terrace	9 x 6	8	0	8
TL3-16	Terrace	150 x 3	16	0	16
TL4-26 (GcTg-27)	Terrace	50 x 20	26	2	24

## 7. ARCHAEOLOGICAL SITE SUMMARY

For each newly identified or revisited site, include the following:

7.A	Borden No.	GcTg-28 (Fig. 3)	7.A1	New/Revisited:	new
7.A2	Site Type:	CMT; barkstrip; taper and rectangular stripped western redcedar (9 trees)			
7.A3	Impact Assessment:	The trees <b>overlap</b> the project area as defined for assessment.			
7.A4	Management Recommendations:	1. Site avoidance. The site may be avoided by excluding the site boundaries from the harvest area and leaving a 30 m wind-firm buffer of standing trees around the boundary of the site area, or; 2. Site Alteration Permit (SAP). Because the CMTs constitute a protected site under the Heritage Conservation Act, a Section 12 Site Alteration Permit (SAP) must be obtained from the Archaeology Branch if CMTs are to be impacted by construction activities.			
7.A5	Significance Evaluation:	Low scientific significance based on a score of 10/36 using the Eldridge 1997 Individual Tree Scale.			

7.A	Borden No.	GcTg-29 (Fig. 4)	7.A1	New/Revisited:	new
7.A2	Site Type:	CMT; barkstrip; taper stripped western redcedar (18 trees)			
7.A3	Impact Assessment:	The trees <b>overlap</b> the project area as defined for assessment.			
7.A4	Management Recommendations:	1. Site avoidance. The site may be avoided by excluding the site boundaries from the harvest area and leaving a 30 m wind-firm buffer of standing trees around the boundary of the site area, or; 2. Site Alteration Permit (SAP). Because the CMTs constitute a protected site under the Heritage Conservation Act, a Section 12 Site Alteration Permit (SAP) must be obtained from the Archaeology Branch if CMTs are to be impacted by construction activities.			
7.A5	Significance Evaluation:	Low scientific significance based on a score of 13/36 using the Eldridge 1997 Individual Tree Scale.			

7.A	Borden No.	GcTg-30 (Fig. 5)	7.A1	New/Revisited:	new
-----	------------	---------------------	------	----------------	-----

7.A2	<b>Site Type:</b>	CMT; barkstrip; taper stripped western redcedar (6 trees)
7.A3	<b>Impact Assessment:</b>	The trees <u>overlap</u> the project area as defined for assessment.
7.A4	<b>Management Recommendations:</b>	1. Site avoidance. The site may be avoided by excluding the site boundaries from the harvest area and leaving a 30 m wind-firm buffer of standing trees around the boundary of the site area, or; 2. Site Alteration Permit (SAP). Because the CMTs constitute a protected site under the Heritage Conservation Act, a Section 12 Site Alteration Permit (SAP) must be obtained from the Archaeology Branch if CMTs are to be impacted by construction activities.
7.A5	<b>Significance Evaluation:</b>	Low scientific significance based on a score of 7/36 using the Eldridge 1997 Individual Tree Scale.

7.A	<b>Borden No.</b>	GcTg-31 (Fig. 6)	7.A1	<b>New/Revisited:</b>	new
7.A2	<b>Site Type:</b>	CMT; barkstrip; taper stripped western redcedar (2 trees)			
7.A3	<b>Impact Assessment:</b>	The site is located <u>inside</u> the impact zone for improvements to Highway 16.			
7.A4	<b>Management Recommendations:</b>	1. Site avoidance. The site may be avoided by excluding the site boundaries from the harvest area and leaving a 30 m wind-firm buffer of standing trees around the boundary of the site area, or; 2. Site Alteration Permit (SAP). Because the CMTs constitute a protected site under the Heritage Conservation Act, a Section 12 Site Alteration Permit (SAP) must be obtained from the Archaeology Branch if CMTs are to be impacted by construction activities.			
7.A5	<b>Significance Evaluation:</b>	Low scientific significance based on a score of 10/36 using the Eldridge 1997 Individual Tree Scale.			

7.A	<b>Borden No.</b>	GcTg-32 (Fig. 7)	7.A1	<b>New/Revisited:</b>	new
7.A2	<b>Site Type:</b>	CMT; barkstrip; taper stripped western redcedar (3 trees)			
7.A3	<b>Impact Assessment:</b>	The site is located <u>inside</u> the impact zone for improvements to Highway 16.			
7.A4	<b>Management Recommendations:</b>	1. Site avoidance. The site may be avoided by excluding the site boundaries from the harvest area and leaving a 30 m wind-firm buffer of standing trees around the boundary of the site area, or; 2. Site Alteration Permit (SAP). Because the CMTs constitute a protected site under the Heritage Conservation Act, a Section 12 Site Alteration Permit (SAP) must be obtained from the Archaeology Branch if CMTs are to be impacted by construction activities.			
7.A5	<b>Significance Evaluation:</b>	Low scientific significance based on a score of 10/36 using the Eldridge 1997 Individual Tree Scale.			

7.A	<b>Borden No.</b>	GcTg-24 (Fig. 8)	7.A1	<b>New/Revisited:</b>	Revisit
7.A2	<b>Site Type:</b>	CMT; barkstrip; taper scar (6 additional CMTs); western redcedar			
7.A3	<b>Impact Assessment:</b>	The site is located <u>inside</u> the impact zone for improvements to Highway 16.			
7.A4	<b>Management</b>	1. Site avoidance. The site may be avoided by excluding the site			

	<b>Recommendations:</b>	boundaries from the project area and leaving a 30 m wind-firm buffer of standing trees around the boundary of the site area, or; 2. Site Alteration Permit (SAP). Because the CMTs constitute a protected site under the Heritage Conservation Act, a Section 12 Site Alteration Permit (SAP) must be obtained from the Archaeology Branch if protected CMTs are to be impacted by construction activities.
7.A5	<b>Significance Evaluation:</b>	Kleanza originally identified the site but the report has not yet been made available. Based on the site form Government of BC (n.d.) the significance is considered low based on a score of 19/39 using the Eldridge 1997 CMT Sites Scale.

7.A	<b>Borden No.</b>	GcTg-27 (Fig. 9)	7.A1	<b>New/Revisited:</b>	revisited
7.A2	<b>Site Type:</b>	Subsurface; lithic			
7.A3	<b>Impact Assessment:</b>	The site is located <b>inside</b> the impact zone for improvements to Highway 16.			
7.A4	<b>Management Recommendations:</b>	1. Site avoidance. The site may be avoided by excluding the site boundaries from the project area, or; 2. Site Alteration Permit (SAP). A Section 12 Site Alteration Permit (SAP) must be obtained from the Archaeology Branch if archaeological site is to be impacted by construction activities.			
7.A5	<b>Significance Evaluation:</b>	Scientific significance Low: This is a low density lithic site with no diagnostic remains identified. The site has been thoroughly assessed.  Ethnic significance Unknown: Socio-cultural significance will be evaluated based on whether suitable input from concerned First Nations is received.  Public significance Low: Site location would likely hold minimal interest for the general public.			

7.A	<b>Borden No.</b>	GcTg-22	7.A1	<b>New/Revisited:</b>	Revisit
7.A2	<b>Site Type:</b>	CMT; bark strip; taper scar, western redcedar (12 trees) CMT; bark strip; rectangular scar, western redcedar (2 trees) CMT; aboriginally-logged; tested, western redcedar (2 trees)			
7.A3	<b>Impact Assessment:</b>	The site is located <b>inside</b> the impact zone for improvements to Highway 16.			
7.A4	<b>Management Recommendations:</b>	1. Site avoidance. The site may be avoided by excluding the site boundaries from the project area and leaving a 30 m wind-firm buffer of standing trees around the boundary of the site area, or; 2. Site Alteration Permit (SAP). Because the CMTs constitute a protected site under the Heritage Conservation Act, a Section 12 Site Alteration Permit (SAP) must be obtained from the Archaeology Branch if protected CMTs are to be impacted by construction activities.			
7.A5	<b>Significance Evaluation:</b>	Kleanza originally identified the site but the report has not yet been made available. Based on the site form Government of BC (n.d.) the significance is considered low based on a score of 19/39 using the			

		<i>Eldridge 1997 CMT Sites Scale.</i>
--	--	---------------------------------------

7.A	<i>Borden No.</i>	<i>GcTg-25</i>	7.A1	<i>New/Revisited:</i>	<i>Revisit</i>
7.A2	<i>Site Type:</i>		<i>CMT; bark strip; tapered scar; western redcedar (1 tree)</i>		
7.A3	<i>Impact Assessment:</i>		<i>The site is located <b>inside</b> the impact zone for improvements to Highway 16.</i>		
7.A4	<i>Management Recommendations:</i>		<i>1. Site avoidance. The site may be avoided by excluding the site boundaries from the project area and leaving a 30 m wind-firm buffer of standing trees around the boundary of the site area, or;</i> <i>2. Site Alteration Permit (SAP). Because the CMTs constitute a protected site under the Heritage Conservation Act, a Section 12 Site Alteration Permit (SAP) must be obtained from the Archaeology Branch if protected CMTs are to be impacted by construction activities.</i>		
7.A5	<i>Significance Evaluation:</i>		<i>Low scientific significance based on a score of 12/36 using the Eldridge 1997 Individual Tree Scale.</i>		

7.A	<i>Borden No.</i>	<i>GcTg-26</i>	7.A1	<i>New/Revisited:</i>	<i>Revisited</i>
7.A2	<i>Site Type:</i>		<i>CMT; Aboriginally logged; tested (1 tree) CMT; other modified tree; blazed (1 tree)</i>		
7.A3	<i>Impact Assessment:</i>		<i>The site is located <b>inside</b> the impact zone for improvements to Highway 16.</i>		
7.A4	<i>Management Recommendations:</i>		<i>1. Site avoidance. The site may be avoided by excluding the site boundaries from the project area and leaving a 30 m wind-firm buffer of standing trees around the boundary of the site area, or;</i> <i>2. Site Alteration Permit (SAP). Because the CMTs constitute a protected site under the Heritage Conservation Act, a Section 12 Site Alteration Permit (SAP) must be obtained from the Archaeology Branch if protected CMTs are to be impacted by construction activities.</i>		
7.A5	<i>Significance Evaluation:</i>		<i>Low scientific significance based on a score of 18/36 using the Eldridge 1997 Individual Tree Scale.</i>		

## 8. DISCLOSURE STATEMENT & SIGNATURE

*Project footprint boundaries illustrated on the attached map(s) indicate those areas subject to the archaeological assessment described in this report, unless otherwise noted. If future or final construction and development plans differ from those presented here, the results of this assessment may not be applicable in part or in whole.*

*To address the prospect of unanticipated archaeological remains being discovered, it is recommended that the proponent inform its employees and contractors of this possibility. If archaeological materials or other heritage remains are uncovered during construction, work in the area of the find must immediately cease and the Archaeology Branch and/or ARCHER informed. It is recommended that*



*the proponent also promptly inform the relevant First Nations concerning any unanticipated archaeological findings.*

*It was not the intent of this study to identify, evaluate, or comment on the presence or absence of Aboriginal Rights in the study area. Completion of this study does not “abrogate or derogate from aboriginal treaty rights” (Heritage Conservation Act Sec. 8). The study was conducted without prejudice to First Nations Treaty Negotiations, aboriginal rights or aboriginal title.*

*It is my opinion that the reported fieldwork and this corresponding report were completed in agreement with the requirements of the relevant Heritage Inspection Permit issued by the Archaeology Branch. I concur that the above information is true given available information.*

*Sincerely,*

**ORIGINAL DOCUMENT SIGNED**

*Alice Storey, PhD.*

*on behalf of*

*Frank Craig, B.A. RPCA*

*Permit holder*

## 9. REFERENCES CITED

---

### ARCHER CRM Partnership

*2015 Preliminary Field Reconnaissance of Ministry of Transportation and Infrastructure Highway 16 – Mile 28 Level Crossing.* Prepared for Ministry of Transportation and Infrastructure, Prince George, BC. Consultant file # 10944. Copies Available from ARCHER CRM Partnership.

*2016 Archaeological Impact Assessment of Improvements to the Mile 28 Crossing, Terrace BC; MOTI LKI Segment 1508 from Km 103.81 to Km 107.1.* Prepared for Ministry of Transportation and Infrastructure, Prince George, BC. Consultant file # 11313. Copies available from the Archaeology Branch of British Columbia, Victoria, BC..

### Big Pine Heritage Consulting and Research Limited

*2006 Archaeological Overview Assessment of Ministry of Transportation and Infrastructure Yellowhead Highway 16, Polywog Creek to Breccia Creek.* Prepared for Ministry of Transportation and Infrastructure, Prince George, BC. Consultant file # 6714. Copies available from ARCHER CRM Partnership.

### Eldridge, Morley

*1997 The Significance and Management of Culturally Modified Trees.* Final report prepared for the Vancouver Forest Region and the Culturally Modified Standards Steering Committee.

### Government of British Columbia

No date *GcTg-22.* Victoria, BC; Remote Access to Archaeological Data (RAAD).

### Kleanza Consulting Ltd.

*2013 Archaeological Overview Assessment of the Proposed Improvements to Highway 16, Kasiks River to Andesite Creek, West of Terrace, BC.* Prepared for the Ministry of Transportation and Infrastructure. Copies available from Kleanza Consulting. Ltd.

### Matrix Research Limited

*2007 Archaeological Impact Assessment of Ministry of Transportation and Infrastructure Highway 16 – Polywog to Breccia Realignment.* Prepared for Ministry of Transportation and Infrastructure, Prince George, BC. Consultant file # M07-132. Copies available from the Archaeology Branch of British Columbia, Victoria, BC.

## 10. REPORT DISTRIBUTION

---

Contact	Affiliation
Brad Pollard	McElhanney Consulting Services Ltd. Suite 1 – 5008 Pohle Avenue, Terrace, BC V8G 4S8 P: 250-631-4097 bpollard@mcelhanney.com
Margret Rogers	Archaeology Branch Ministry of Forests, Lands and Natural Resource Operations PO Box 9816, Stn Prov Govt, Victoria BC, V8W 9W3
Rina Gemeinhardt	Kitsumkalum First Nation 3514 West Kalum Road, Terrace, BC V8G 0C8 P: 250-635-5000 ext. 6
Diane Lukasser	Kitsumkalum Fish and Wildlife Department PO Box 544, Terrace, BC, V8G 4B5 P: 250-635-5000 ext. 115 F: 250-635-6613 dlukasser@kitsumkalum.bc.ca
Paul Harrison	Khtada Environmental Services 3210 Apsley Street, Terrace, BC V8G 0J2

## 11. SHAPE FILES

---

- Study area shape files have been sent to [archsitereform@gov.bc.ca](mailto:archsitereform@gov.bc.ca)

## 12. APPENDICES

---

### Required:

- General Area Map  
 Study Area Map  
 Photo Plate(s): **Appendix A**

### If Applicable:

- Detailed Development Map  
 Subsurface Test Log: **Appendix B**  
 Site Forms, Site Maps and Related Documents  
 Other Details: CMT Table: **Appendix C**; Artifact Catalogue: **Appendix D**



Plate 1 View of the creek and east side of the development from the potential rock spoil area north of Hwy 16.



Plate 2 TL1. View east.



Plate 3 View to TL2. Note evidence for historical logging represented by the large stump.



Plate 4 Exposed bedrock observed across the project area.



Plate 5 View of Andesite Gravel pit from the adjacent cut block.

*The location maps associated with this document contain confidential information regarding the location of protected Archaeological resources. To obtain a copy of the location maps please forward your request to: [bill.rose@wdrprojects.ca](mailto:bill.rose@wdrprojects.ca)*

Test Location	Test Id.	Stratigraphy Observed (measurements in cm)	Comments
TL1-4	PR1	0-1 needle/leaf mat; 1-56 wet brown silty-sand with rounded/sub-rounded and angular gravels. Wire, cable, plastic wrapping, glass, a pocket watch and other historic debris was noted throughout.	The entire location was highly disturbed and likely represents a push-pile from the construction of the road.
TL2-8	PR1	0-1 littermat; 1-255 brown silt with lenses of dark brown and red-brown silts. Lenses of fine sand were observed at 205 and 252.	All tests revealed a similar set of sediments, some of which are detailed in the rows that follow PR8.
	PR4	0-1 littermat; 1-62 grey-brown silt with some rounded and subangular pebbles and cobbles and occasional lenses of reddish-brown silt with flecks of charcoal; 62-370 grey-brown silt.	
	PR5	0-1 littermat; 1-48 grey-brown silt with occasional tan/red-brown silt lenses; 48-52 reddish-brown silt with charcoal chunks; 52-61 grey-brown silt with red/brown silt lenses; 61-66 dark red-brown silt with charcoal inclusions; 66-178 grey-brown silt.	
	PR6	0-1 littermat; 1-65 grey-brown silt with occasional lenses of reddish-brown silts; 65-69 reddish-brown silt with charcoal inclusions; 69-114 grey silt.	
	PR8	0-1 littermat; 1-31 grey-brown silt; 31-59 reddish-brown silt with charcoal inclusions; 59-203 grey-brown silt with lenses of reddish silt and charcoal inclusions.	
TL3-16	A1	0-1 leaves; 1-162 damp grey silty-sand; 162-258 sediments become increasingly silty and increasing saturated to water table at 263 cm.	Testing at TL3 was done with augers to assess the potential for dep deposits.
	A2	0-1 leaves; 1-226 grey sandy silt.	Stratum descriptions
GcTg-27	PR1	0-14 littermat; 14-22 grey-brown sandy silt with charcoal inclusions; 22-60 orange silt with angular gravel and cobbles; 60+ bedrock.	Similar stratum across the tested extensions. Bedrock was encountered at 45 cm dbb in several tests.
	ST2	0-7 littermat; 7-13 dark brown silt with charcoal inclusions; <b>CULTURAL LAYER</b> 13-94 orange silt with angular cobbles and charcoal associated with buried roots; 94+ bedrock.	

PR = profile, indicates non-cultural shovel test, ST = shovel test, cultural bearing stratum encountered, A - Auger test



Site Number	CMT No.	Species	Alive?	Scar No.	Class	Type	Feature	DBH (cm)	Slope (°)	LEN (cm)	WID (cm)	Lobe Thickness(cm)		HAG (cm)	Side	Tool Marks	Nursing Tree
												L	R				
GcTg-28	1	C	Y	1	BS	T		65	0	500	36	14			34°	N	N
	2	C	Y	1	BS	T		57	0	200	7	14		156	280°	N	N
	3	C	Y	1	BS	T		32	35	350	17	13		122	314°	N	N
	4	C	Y	1	BS	T		20		450	12	9		78	280°	N	N
	5	C	Y	1	BS	T		23	0	500	17	7		64	100°	N	N
	6	C	Y	1	BS	R		23		218	50	10		134	20°	N	N
	7	C	Y	1	BS	T		13		250	3	14		44	236°	N	N
	8	C	Y	1	BS	T		14		350	6	18		88	280°	N	N
	9	C	Y	1	BS	T		32		250	6	10		65	236°	N	N
GcTg-29	10	C	Y	1	BS	T		85		250	17	3.5		46	20°	N	N
	11	C	Y	1	BS	T		246		650	5	26		93	336°	N	N
	12a	C	Y	1	BS	T		175		500	12	15		77	46°	N	N
	12b			2	BS	T		175		450	13	16		85	314°	N	N
	13	C	Y	1	BS	T		180		700	36	11			352°	N	N
	14	C	Y	1	BS	T		171		500	70	16		70	280°	N	N
	15	C	Y	1	BS	T		150		750	21	17		85	20°	N	N
	16	C	Y	1	BS	T		203		700	12	24		126	314°	N	N
	17	C	Y	1	BS	T		126			13	9		65	352°	N	N
	18	C	Y	1	BS	T		270		650	18	30		73	290°	N	N
	19	C	Y	1	BS	T		125		450	12	9			314°	N	N
	105	C	Y	1	BS	T		150		200	13	15		86	230°	N	N
	106	C	Y	1	BS	T		60.5		300	9	18		123	326°	N	N
	107	C	Y	1	BS	T		48		400	1	18		93	338°	N	N
	108	C	Y	1	BS	T		34		300	16	6		53	337°	N	N
109	C	Y	1	BS	T		57.5		400	19	12		68	338°	N	N	
110	C	Y	1	BS	T		111.5		500	30	17.5		41	320°	N	N	
111	C	Y	1	BS	T		69.5		400	11	18		86	119°	N	N	
GcTg-30	20	C	N	1	BS	T		43		458	17	12		46		N	N
	21	C	N	1	BS	T		27		27	7	8		50		N	N
	22	C	N	1	BS	T		38		525	16	7		20		N	N
	23	C	N	1	BS	T		27		550	24	4		44		N	N
	24	C	N	1	BS	T		25		500	23	3		56		N	N
25	C	N	1	BS	T		32		550	30	6		50		N	N	
GcTg-24	26	C	Y	1	BS	T		59		450	35	9		40		N	N
	27	C	Y	1	BS	R		53		203	14	12		110		N	N
	28	C	Y	1	BS	T		54		550	21	13		56		N	N
	29	C	Y	1	BS	T		40		500	25	9		50		N	N
	30	C	Y	1	BS	T		46		525	26	10		45		N	N
	31	C	Y	1	BS	T		69		650	37	12		40		N	N
	32	C	Y	1	BS	R		66		214	50	11		110		N	N
33	C	Y	1	BS	T		66		500	17	13		140		N	N	
GcTg-31	1	C	N	1	BS	T		42	50	450	19	7		50	274	N	N
	2	C	Y	1	BS	T		62	62	400	11	12		62	250	N	N
GcTg-22	3	C	Y	1	BS	T		106	82	400	25	31		50	268	N	N

Appendix C: Culturally Modified Trees  
 Mile 28 Crossing



Site #	CMT No.	Species	Alive?	Scar #	Class	Type	Feature	DBH (in)	Slope (°)	LEN (in)	WID (in)	Lobe Thickness(cm)		HAG (in)	Side	Tool Marks	Nursing Tree
	4	C	Y	1	BS	T		102	82	600	60	20		60	263	N	N
	5	C	Y	1	BS	T		107	10	650	15	28		70		N	N

Catalogue	Artifact Category	ArtifactType	Lengthmm	Widthmm	Thicknessmm	Weightg	Color	Material	Opacity	Patterning	Location:	DBScm	count
5714	Historic	Metal, Ferrous	0.00	0.00	0.00	0.00		Metal, Ferrous			ST 1	15-20	11
5713	Historic	Nail	0.00	0.00	0.00	0.00		Metal, Ferrous			ST 1	15	3
5716	Other	FAR	0.00	0.00	0.00	276.00	Grey	Unknown,	Opaque	Solid	ST 2	30-40	1
5715	Ground Stone / Cobble Tools	Cortical Spall Tool	117.00	88.50	27.00	354.00	Grey	Unknown, Volcanic	Opaque	Solid	ST 2	30-40	1



# BRITISH COLUMBIA ARCHAEOLOGICAL SITE INVENTORY FORM



## 1. IDENTIFICATION

Temporary Number (new site):  
 Borden Number (site revisit): **GcTg-27**  
 Site Name(s):

**Branch Use Only**  
 Form Received: **yyyy/mm/dd**

## 4. SITE VISIT INFORMATION

Permit Number: **2014-0108**  
 Issuing Agency: **Archaeology Branch**  
 Permit Type: **Inspection (S.14)**

Last Date of Visit: **2016/04/23**  
 Site Visit Type: **Recording (with testing)**  
 Archaeological Project Description: **Archaeological Impact  
 Assessment of Improvements to the Mile 28 Crossing, Terrace BC;  
 MOTI LKI Segment 1508 from Km 103.10 to Km 106.50**

Team Member Role	Full Name(s) and Affiliation(s)	On Site?
<b>Permit Holder(s)</b>	<b>Frank Craig, ARCHER CRM Partnership</b>	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>
<b>Field Director(s)</b>	<b>Remi Farvacque, ARCHER CRM Partnership</b>	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>
<b>Field Supervisor(s)</b>	<b>Julie Williams, ARCHER CRM Partnership</b>	Y
<b>Other</b>	<b>Matthew Shaw, ARCHER CRM Partnership; Wesley Worsick, ARCHER CRM Partnership; Mark Bolton, Kitsumkalum First Nation.</b>	Y

## 11. SITE DIMENSIONS AND BOUNDARIES

Length: **48 m**      Direction **NE-SW**      Site Boundary Type: **Observed and Arbitrary**  
 Width: **20 m**      Direction **NW-SE**

Site Boundary Comments (describe in detail the methods and buffers applied to define site boundaries in all directions):  
**2014-0108: The dimensions of the site are defined by a 5 m buffer around the positive shovel tests to the northeast and by the landform in the southwest. Yellow and Black "No Work Zone" Flagging was hung 10 m from the site boundary where it overlapped with the project area.**

## 12. STRATIGRAPHY

Summarize stratigraphy for subsurface sites. Additional details may be attached.

Depth of Cultural Strata:      Minimum **0.13 m**      Maximum **0.94 m**

Stratigraphy Description: **0-7 cm littermat, 7-13 cm dark brown silt with charcoal chunks and flecks; 13-94 cm (cultural layer) orange silt with angular cobbles; 94+ cm bedrock.**

### 13. CONDITION

Disturbance	When	Cause of Disturbance	Condition Remarks
	Present	Arch Investigation	Site is largely intact, however, sub-surface historic debris was observed in NE section of the site.
	Future	Road Construction	

### 15. REFERENCES

Report Title(s)	Year	Author(s)
Archaeological Impact Assessment of Improvements to the Mile 28 Crossing, Terrace BC; MOTI LKI Segment 1508 from Km 103.10 to Km 106.50	2016	Alice Storey

### 16. RECORDER’S RECOMMENDATIONS

2014-0108: Proponent has been advised to avoid the site. If the site cannot be avoided a Section 12 Site Alteration permit will be required.

### 17. GENERAL REMARKS

2014-0108: An area to the northwest of the site boundary has been designated as an Area of Potential (see appended site map). This area is currently outside of the project area but must be more fully assessed if the plans for the project change in the future. The site is flagged with yellow and black flagging tape cleared marked with "No Work Zone". This has been placed around the site boundaries 10 m north of positive shovel tests.

**PRIOR TO SUBMITTING YOUR SITE FORM, ENSURE THAT:**

- Site boundaries have been established in accordance with *Defining Archaeological Site Boundaries*.
- Maps have been completed in accordance with *Archaeology Branch Mapping and Shapefile Requirements*
- Site form has been completed in accordance with the *Site Form Guide*

**REQUIREMENTS FOR ATTACHMENTS:**

- The following mandatory documents must be attached:
  - Detailed site map
  - Midrange location map
  - ESRI shapefiles (site boundary)
  - Minimum one captioned photo plate showing site location
- The following mandatory documents must be attached when applicable:
  - CMT table (for CMT sites recorded to Level II standard)
  - Subsurface test log (for tested sites)
  - Stratigraphic tables and profile drawings (if EUs excavated)
  - Archaeological features table (if metrics recorded and data too numerous for site form)
  - Captioned photo plate(s) of all diagnostic artifacts and rock art

- Captioned photo plate(s) of a representative sample of non-diagnostic artifacts
- The following mandatory documents must be attached when applicable (or may be submitted at a later date prior to final report submission):
  - Artifact catalogue (if artifacts collected and data too numerous for site form)
  - Faunal analysis (if fauna analysed and data too numerous for site form)
  - Dating lab report (if dates obtained)
- ALL attachment pages include: temp#, Borden #, permit #, affiliation, site visit date