Macaulay Point, Esquimalt: Archaeological Inventory

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on behalf to the Department of Defence

Submitted to:
Formation Environment, CFB Esquimalt
The Esquimalt Nation
The Songhees First Nation
and
The Archaeology & Registry Services Branch

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- Dale Mumford of Parks Canada provided information regarding the British and Canadian forts at Macaulay Point.

Executive Summary

Millennia Research Limited was contracted by Public Works and Government Services (PWGSC) to conduct an archaeological inventory of the Department of National Defence's (DND) Macaulay Point property in Esquimalt, west of Victoria, BC, on behalf of the Department of Defense. The goal of the archaeological inventory was to locate and assess the significance of archaeological resources on this property. The inventory was conducted as part of a larger initiative by CFB Esquimalt to obtain baseline archaeological studies on all of its properties. The project was not initiated in response to any proposed development.

Macaulay Point is within the traditional territory of the Lekwammen represented by two modern aboriginal political entities – the Songhees and Esquimalt Nations. Both nations are amalgamations of largely independent groups that occupied numerous villages between Cowichan Head and Parry Bay. Lekwammen informants Jimmy Fraser and Sophie Misheal identified Macaulay Point as *Mukwuks*, one of five reef-net locations on Vancouver Island (Duff 1969: 30, 45).

The property was owned by the Hudson's Bay Company in the mid 1850s and was first developed by the military – the Royal Navy – and local militia in 1878. The Macaulay Point Earthwork Battery was one of four batteries built by civilian labour between May and August of 1878 (Lovatt 1993). The exact location of the battery is unknown. In 1894 construction of the larger, updated Fort Macaulay was initiated at Macaulay Point. The earth and concrete battery was constructed under the supervision of Royal Engineer Sappers from the 18th Company of Halifax, Nova Scotia.

Prior to the current inventory project, two previously recorded archaeological sites, both with trench embankment features, are recorded on Macaulay Point: DcRu-21 and DcRu-22. Inventory of Macaulay Point identified additional cultural deposits at both previously recorded archaeological sites although the trench embankment features were not located at either. The findings suggest that the origin of the existing trench at DcRu-22 is questionable and should be investigated further. Three historical sites (MP-H1, H2, and H3) were recorded and two areas of previously unrecorded historical debris were identified near DcRu-21 and DcRu-22. The trench embankment features (if present at DcRu-22) and associated midden deposits are of high archaeological significance. The historical significance of the historic sites is unknown but is likely high if found to be associated with either the 1878 or 1894/95 batteries.

Both general and site specific recommendations are presented. The general recommendations stemming from the findings of this inventory project are:

- 1. DND, CFB Esquimalt should advise the Municipality of Esquimalt of its operational policies with respect to archaeological resources on the Macaulay Point property;
- 2. Archaeological Awareness Training should be required for base, municipal, and private landscape or excavation contractors working outside the boundaries of recorded sites; and
- An AIA should precede any future development on the property in the vicinity of recorded archaeological sites or areas which retain potential for archaeological sites.

Table of Contents

CREDITS	D
ACKNOWLEDGEMENTS	II
EXECUTIVE SUMMARY	III
INTRODUCTION	1
STUDY AREA	1
BACKGROUND	3
MILITARY AND MUNICIPAL HISTORY	3
ETHNOGRAPHY	11
Previous Archaeology	11
METHODS	15
RESULTS	16
HISTORICAL FINDINGS	16
ARCHAEOLOGICAL FINDINGS	
DcRu-21	
DcRu-22	26
DISCUSSION	27
RECOMMENDATIONS	28
REFERENCES	30
APPENDIX 1. GLOSSARY OF TERMS	32
List of Plates	
Plate 1. Macaulay Point revetments ca. 1878 (BC Archives, A00791)	5
Plate 2. Inner trench of 1894/95 battery from westernmost gun emplacement	
Plate 3. Tunnel from the keep with construction completion date 1895	
Plate 4. British Military Exercises, Macaulay Point (BC Archives, A)	
Plate 5. Macaulay Point Camp ca 1900. (BC Archives, E04394)	
Plate 6. Photo of trench at the west side of Fleming Bay, DcRu-20 looking east toward Macaulay Point.	
(Newcombe photo ca. 1928 in Keddie 1997)	
Plate 7. MP-H1, tumbled courses of brick	18
Plate 8. MP-H2, 1894/95 keep embankment s. At left, tunnel leads away from 1942 bunker; note horizontal	
courses of rock in background.	
Plate 9. MP-H3, historical depressions	21
Plate 10. MP-H3, semi-subterranean timber – "shadow" to left of arrow	
Plate 12. Hillocks and blast rock west of DcRu-22.	
Plate 13. DcRu-21, area of reported trench from west.	
Plate 14. DcRu-21, area of erosion from Buxton Green	
Plate 15. DcRu-21, example of surficial midden exposure near breakwater.	25
Plate 16. DcRu-21, shell midden in "riser" of step along trail to Buxton Green.	26

List of Figures

Figure 1. Macaulay Point regional area (NTS 92B/6 1:50 000).	2
Figure 2. Macaulay Point embankments 1878 plan.	
Figure 3. Macaulay Point of States 1676 Plan by Major RCE).	
Figure 4. Previously known historical and archaeological features at Macaulay Point.	
Figure 5. Trenches at DcRu-22 from 1979 siteform.	
Figure 6. Archaeological Inventory Results with Test Locations	1 /

Introduction

Millennia Research Limited was contracted by Public Works and Government Services (PWGSC) to conduct an archaeological inventory of the Department of National Defence's (DND) Macaulay Point property in Esquimalt, west of Victoria, BC. The goal of the archaeological inventory was to locate and assess the significance of archaeological resources on this property. The inventory was conducted as part of a larger initiative by CFB Esquimalt to obtain baseline archaeological studies on all of its properties. The project was not initiated in response to any proposed development.

The objectives of the study were threefold:

- 1. to compile information on the post-contact¹ military history of the property;
- 2. to identify any previously unidentified archaeological resources; and
- 3. to gather additional information regarding two previously recorded archaeological sites (DcRu-21 and DcRu-22) on the property.

As the study area falls on federal land, the inventory was not conducted under a provincial *Heritage Conservation Act Section 14*, *Site Inspection Permit*. The Songhees First Nation and the Esquimalt Nation were contacted regarding the project and provided an opportunity to express any concerns they had regarding the study.

Study Area

Macaulay Point is a series of four projections of land over-looking the Strait of Juan de Fuca on the south coast of Esquimalt, BC (Figure 1). The shoreline is crenulated and rocky with small pebble beaches. The point has numerous rocky outcrops and is covered in grasses, with large dense patches of thick scotch broom, blackberry, wild rose and deciduous hedges. Major vegetation includes Gary Oak and cottonwood; a few fir and cherry are also present.

Macaulay Point was named for Donald Macaulay, the Bailiff of Viewfield Farm, one of four farms established in the 1850s in the Esquimalt District by the Puget Sound Agriculture Company, a subsidiary of the Hudson's Bay Company (Municipality of Esquimalt 1998). The point was not developed although it was included in the 600 acres surveyed for the farm; the farm discontinued operation in 1860 (Golder Associates 1998).

As discussed in detail below, the Royal Navy established a battery at Macaulay Point in 1878 and a subsequent battery was constructed on the site by the Canadian and British governments in 1894. The Canadian government assumed responsibility for the site in 1906. Fort Macaulay was decommissioned in 1956 and subsequently many of the features were dismantled, filled, or barricaded, however, numerous buildings and features from the 1895 to 1956 period remain. In 1957, the National Historic Sites Advisory Board recognized the Victoria-Esquimalt Coast Artillery Defences, including the Macaulay battery, a place of National Historic Significance (Mumford, Business and Community Relations Officer for Ft. Rodd Hill and Fisgard Lighthouse National Historic Site of Canada, personal communication 2004). The

A glossary of terms is included in Appendix 1.

Municipality of Esquimalt currently maintains the site for recreational purposes (Municipality of Esquimalt 1998).

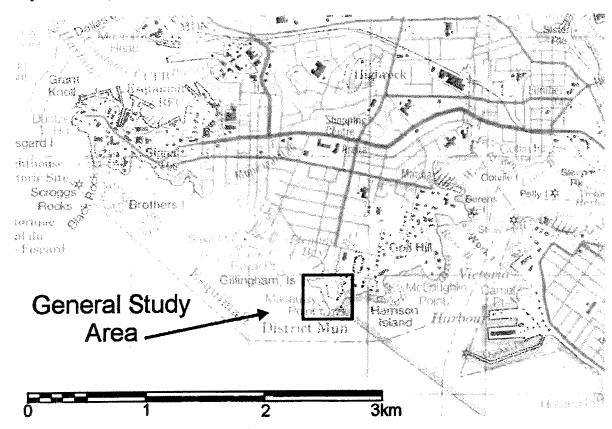


Figure 1. Macaulay Point regional area (NTS 92B/6 1:50 000).

Background

Military and Municipal History

The military history of Macaulay Point starts in the late 1870's; the municipal history not until approximately 100 years later. As noted above, the Victoria-Esquimalt batteries, of which Macaulay Point is one, were recognized places of National Historic Significance in 1957 (Mumford personal communication 2004).

The first naval warship entered Esquimalt Harbour in 1848. The British naval presence grew in the harbour as the colony of Victoria grew, with ships of the Royal British Navy using the harbour while patrolling the coast. Log huts, constructed for use as a hospital (although never used as such) during the Crimean War of 1854-56, became the first permanent buildings of the new naval base. The base gained importance with warships and armed forces policing the influx of American gold seekers in 1858 and following the Pig War with the Americans in 1959. Although not much of a war, the threat of annexation by the Americans spurred the British government to increase the naval presence at Esquimalt, including transfer of the headquarters for the Admiral of the Pacific Squadron to Esquimalt (Lovatt 1993).

When British Columbia joined the Canadian Federation in 1871, those negotiating for the province sought assurances from the Dominion that it would encourage a continued British naval presence in Esquimalt (Lovatt 1993). In 1877 Russia declared war on Turkey and concern was raised that the Russians might attack the BC coast. By early 1878 a volunteer militia was raised and the Royal Navy store at dockyard provided guns on-loan to the Dominion (Lovatt 1993). In May 1878, Lt. Col. Irwin of the Royal Artillery arrived in Victoria to organize the defensive response. The Macaulay Point Earthwork Battery (Figure 2, Plate 1) was one of four batteries built by civilian labour between May and August of 1878 (Finlayson Point, Brothers Island, and Victoria Point were the locations of the other batteries) (Lovatt 1993). The exact location of the battery is unknown as Irwin's plan is not tied to a fixed reference point. The battery plan shows major features of the battery including revetments, three gun emplacements, a semi-subterranean keep and magazine, and an artillery store. The battery was armed with three 7" rifle muzzle-loading (RML) guns (Lovatt 1993).

The Dominion Government and the Colonial Office concluded protracted negotiations for the establishment of permanent forces at Esquimalt in 1893. It was agreed that the Dominion and Imperial Governments would share the costs for the development and maintenance of facilities and supplies for the force, and that the British would supply a garrison of 75 marine artillerymen. The force was housed at the Work Point Barracks (Lovatt 1993).

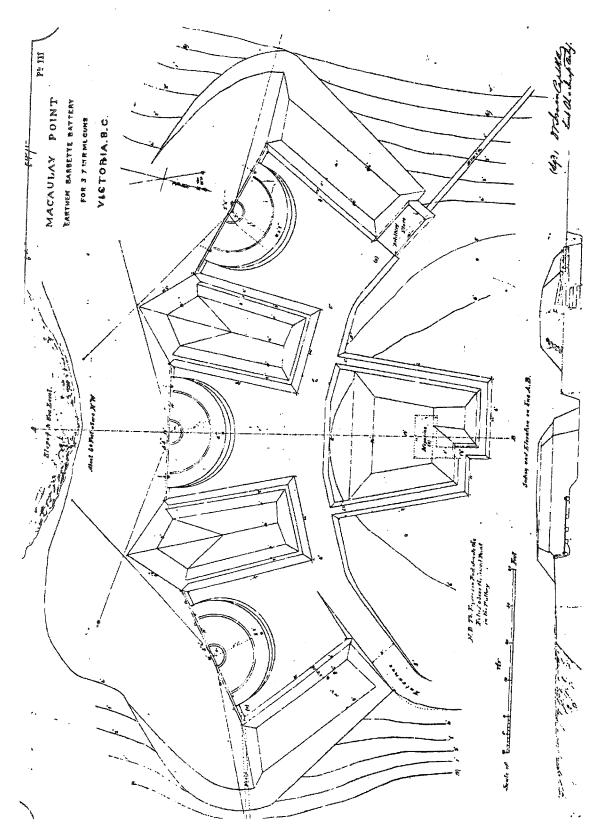


Figure 2. Macaulay Point embankments 1878 plan

(Plan III of a series by Lt. Col, Irwin. Public Record Office, Great Britain. On file with Ft. Rodd Hill and Fisgard Lighthouse National Historic Site.)

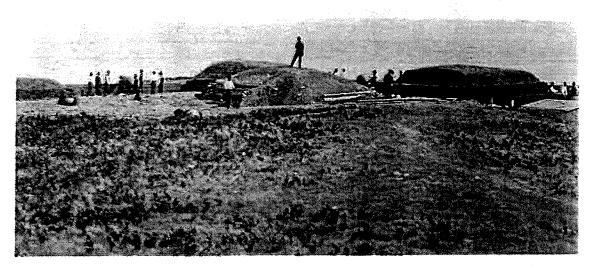


Plate 1. Macaulay Point revetments ca. 1878 (BC Archives, A00791)

The first battery constructed following the 1893 agreement was the fixed-defences battery at Macaulay Point. Construction of the earth and concrete Fort Macaulay began in 1894 using day labour working under the supervision of Royal Engineer Sappers from the 18th Company of Halifax, Nova Scotia; construction was completed in 1895 (Figure 3). Originally estimated to require more than £11000 to construct, the actual cost was approximately £9000 (Macaulay Point Battery Plan by Major RCE). Major features of the battery included an outer trench, three gun emplacements, two machine gun emplacements between the keep and the main emplacements, an inner trench (Plate 2) linking the guns with supply and outbuildings, a central earthen keep, tunnels linking the guns to the keep, and a tunnel (murder-hole) leading from the keep (Plate 3). The battery was armed with two Maxim machine guns (Mumford 2004 personal communication) and three 6" guns with disappearing mountings that remained in place until the 1920s (Lovatt 1993). A seven-foot picket fence that originally ran around the perimeter of the fort was replaced at a later date by barbed wire laid in the outer trench (Municipality of Esquimalt 1998). The barbed wire remained in place until at least 1975; when the area was developed by the Municipality of Esquimalt as a park it was removed for safety reasons (Mumford personal communication 2004).

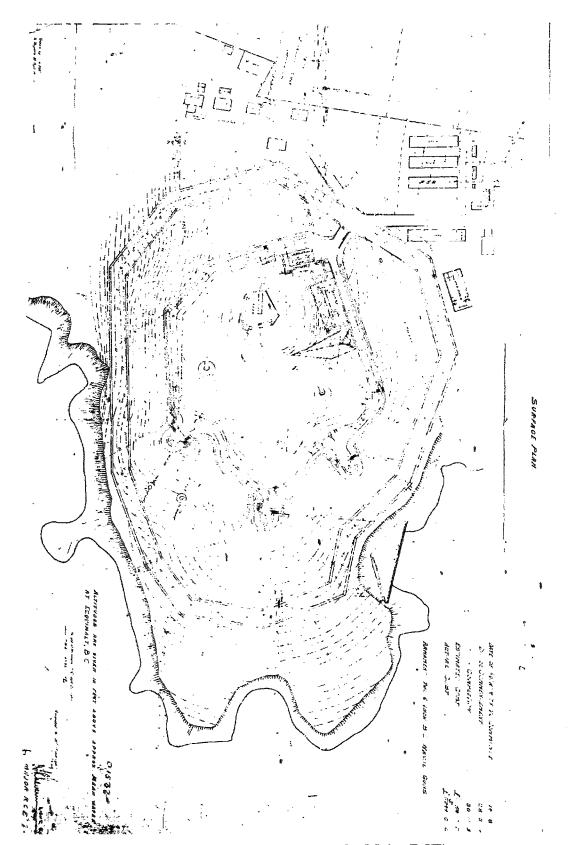


Figure 3. Macaulay Point battery ca 1895 (Plan by Major RCE).

(On file with Ft. Rodd Hill and Fisgard Lighthouse National Historic Site.)



Plate 2. Inner trench of 1894/95 battery from westernmost gun emplacement



Plate 3. Tunnel from the keep with construction completion date 1895.

In 1924, two of the 6" disappearing guns were removed from Macaulay Point and replaced with two 6" naval quick firing guns. The third disappearing gun remained in place until 1938 when the emplacements were modified; the 6" disappearing gun from the third emplacement was removed (Lovatt 1993) and the placement was used for storage (Municipality of Esquimalt 1998). The central emplacement is structurally different from those to the west and east, and comparison with the 1894/95 plan indicates that much of the original structure has been removed (Figure 4, Figure 3).

During the British garrison occupation of the site and in the years following when the local militia maintained the battery, tent camps and mock battles were occasionally staged on the "Macaulay Plain" between the battery and Work Point Barracks (Plate 4, Plate 5). It is possible that isolated artifacts relating to these camps may be present in the field (Mumford personal communication 2004).

In 1906, the British garrison left Esquimalt and Canada assumed responsibility for the defence establishments, which were subsequently manned by an artillery militia (Lovatt 1993). After Fort Macaulay was staffed during both World Wars and, following WWII, was manned full time until 1946 (personal communication Ret. Co Nelson 2003). During WWII members of the Royal Canadian Army constructed the first natural seawater swimming pool in the capital area at Macaulay Point (Municipality of Esquimalt 1998). In 1956 the Federal Government of Canada declared the coastal batteries, including Macaulay Point, obsolete. Many of the features of the battery were demolished although some, including portions of both trenches and the gun emplacements, remain (Figure 4).

The Esquimalt Angler's Association was founded in July 1952 on Fleming Beach, to the west of the Macaulay Point property. The Association constructed the breakwater on Macaulay Point in 1965 and in 1983 opened Buxton Green Park adjacent to and west of the breakwater; the park is constructed over the salt-water pool noted above. The park is named for a well-known and respected Esquimalt family; Tich Buxton and several of his sons were members of the Royal Canadian Army (Municipality of Esquimalt 1998).

The Municipality of Esquimalt acquired leave to trespass on the DND Macaulay Point lands for recreational purposes in the mid 1980s. Subsequently, trails were developed, benches were installed, the cliffs were stabilised and the remaining military structures were made safe for the public (Municipality of Esquimalt 1998).



Plate 4. British Military Exercises, Macaulay Point (BC Archives, A).

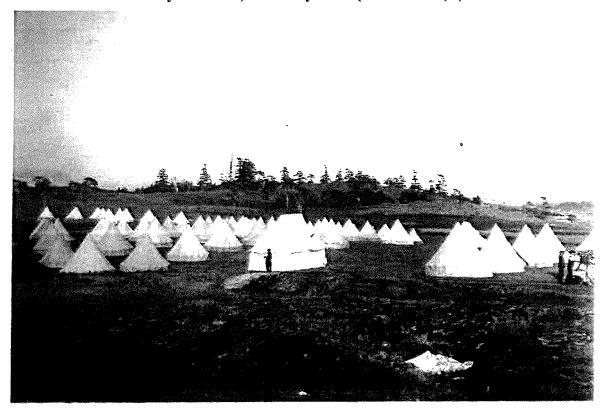


Plate 5. Macaulay Point Camp ca 1900. (BC Archives, E04394)

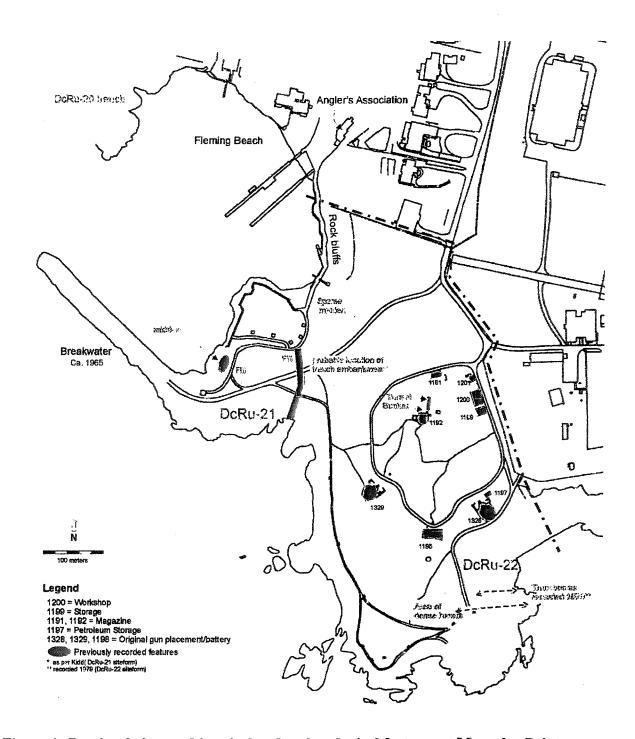


Figure 4. Previously known historical and archaeological features at Macaulay Point.

Ethnography

Macaulay Point is within the traditional territory of two modern aboriginal political entities – the Songhees and Esquimalt Nations. Both nations are amalgamations of largely independent groups that occupied numerous villages between Cowichan Head and Parry Bay. These independent groups are commonly referred to in ethnographic literature as the Lekwammen. Duff (1969:31) notes that the Lekwammen²

were never in any political sense a single tribe. They were comprised of a large number of more or less autonomous household groups, whose sprawling plank houses were clustered in a number of winter villages, and who moved regularly from place to place in the course of their annual round of activities. Specific resource areas and house sites were owned and used by specific households; other places... were utilized more or less in common.

In the 1850s, several of these autonomous groups, including the Kosampson, signed a treaty with James Douglas, Chief Factor of the Hudson's Bay Company and later governor of Vancouver Island. The treaty recognized the land "...between the Island of the Dead in the Arm or Islet of Camoson [Portage Inlet] and the head of said inlet embracing the lands, on the west side and north of that line to Esquimalt, beyond the Inlet 3 miles of the Colquits valley and the land on the east side of the arm enclosing Christmas Hill and Lake and the lands west of them" as that of the Kosampson (Duff 1969:9).

Lekwammen informants Jimmy Fraser and Sophie Misheal identified Macaulay Point as *Mukwuks*, one of five reef-net locations on Vancouver Island (Duff 1969: 30, 45). Reef-nets were used to harvest salmon migrating to the Fraser River to spawn. The nets were used near points of land where the salmon had to pass over shallow reefs. A significant investment of labour was required to operate the net and process the catch (Duff 1969; Suttles 1950).

Previous Archaeology

Three previously recorded archaeological sites are recorded on or in close proximity to Macaulay Point (Figure 4). DcRu-20 is located at Fleming Beach, west of the DND property; DcRu-21 and DcRu-22 are located on the DND property at Macaulay Point. DcRu-21 and DcRu-22 have recorded trench embankment features; DcRu-20 is comprised of both shell midden deposits and a trench embankment feature. The relationship between the sites is not understood; in fact the relationship between defensive sites, and between defensive sites and non-defensive sites is generally poorly defined. DcRu-20 is discussed below for the purposes of general context given the possible relationship between it and DcRu-21 and 22.

Trench embankment and other defensive sites represent 15% to 20% of shoreline sites in the Victoria area (Keddie 1991). The sites are generally situated on points of land with difficult access from the water; one or more trenches excavated across the neck of the point restrict land access. Most defensive sites are in areas without fresh water (Mitchell 1990). Historical records indicate that material excavated from the trenches formed embankments into which single or double rows of post were inserted (Keddie 1991).

Oral histories and historical documents indicate that aboriginal defensive sites were common between the late AD 1700s and mid-1800s in the Strait of Georgia area.

² Duff (1969) refers to the people of this area as the Songish or Songhees

Archaeological evidence suggests that 1,200 to 1,000 years ago defensive sites were established both in areas previously unoccupied and adjacent to existing village sites (Keddie 1991, 1997). Midden deposits found at trench embankment sites are generally shallow, suggesting that the sites are "better viewed as refuges than fortified villages" established in response to "opportunistic raids rather than siege" (Mitchell 1990:348). Ten of the 19 defensive sites in the area are stand-alone – not found adjacent to large shell midden sites. The other nine adjoin or are part of a larger midden (likely village sites), but do not necessarily date to the same period as the main midden deposits (Keddie 1997).

DcRu-20, located on Fleming Beach immediately west of the DND Macaulay Point property, is an example of the latter site type. The site is comprised of both extensive shell midden deposits and a trench embankment feature. Grant Keddie (1997), Curator of Archaeology, Royal BC Museum (RBCM) notes:

In 1985...I extracted a charcoal sample and dated the deepest deposits of the midden to 4,151 years ago... Two defensive sites adjoin this large midden. Near the eastern end of this site, separated only by a rock outcrop and a small area of midden, there was a trench which today is mostly destroyed [a reference to DcRu-21]. At the western end of the main shell midden is a small peninsula that once had a visible trench across it.... Charcoal samples... dated to the period 1287 to 1333 A.D.... It is clear that this part of the site was used after or at a late time period in the history of the larger shell midden.



Plate 6. Photo of trench at the west side of Fleming Bay, DcRu-20 looking east toward Macaulay Point. (Newcombe photo ca. 1928 in Keddie 1997)

Of the 19 recorded defensive sites, the trenches of five remain visible on the ground surface; archaeological investigations have confirmed that six others once had trenches that have been subsequently filled. The remainder, including DcRu-21 and 22, is known from brief historical accounts. DcRu-21 and DcRu-22 have been revisited by archaeologists since they were first reported in the early twentieth century. Harlan Smith (1907) records defensive features on Macaulay Point in *Archaeology of the Gulf of Georgia and Puget*. Referencing a Victoria resident, O.C. Hastings, Smith (1907) wrote that at "Macaulay's Point there is an embankment and a ditch....The oldest Hudson's Bay men say that these were here when they came [in the 1850s]." The trenches then most certainly predate the British military activities on

the site. C.F. Newcombe and W.A. Newcombe also recorded defensive sites at or near MacCaulay Point based on Hastings' information (Keddie, personal communication 2004). Keddie (1997) argues that one of these sites is DcRu-20, the other is DcRu-21.

DcRu-021 is a shell midden and trench embankment site recorded in 1959 on the basis of Harlan Smith's records and some small scale excavations conducted by archaeologist R.S. Kidd (Kidd's Macaulay Point Site #2). Kidd records a "thin mostly surface layer of midden material scattered over a wide area in the end of the point nowhere very deep but thicker on the SE slope. Possible trench embankment" (Golder Associates 1998). In 1979, provincial archaeologists visited DcRu-21 and reported that the trench feature had been filled (DcRu-21 siteform). The 1979 provincial site form shows shell midden measuring approximately 30m by 17m east of the base of the breakwater and, based on information provided by Keddie, an area of sparse midden along the shoreline to the north of the point proper. The map also shows the 'probable location of destroyed trench embankment' at the constriction of the point to the east of the midden; the 1979 crew did not observe the trench. The condition of the site in 1979 was assessed as 30% intact (DcRu-21 siteform). Ten artifacts from DcRu-21 are in the private "collection of Wayne Westby" according to the site inventory form; nothing else is known of them.

As recorded, DcRu-22 (Kidd's Macaulay Point Site #1) consists of two parallel trenches and a general activity area. The trenches were recorded in 1972 on the basis of R.S. Kidd's 1959 notes; human skeletal material was also recorded for the site at this time (Acc. No. 70-2, Orig no. 70-79). Martina Steffen, Collections Manager, RBCM, could find no record of skeletal remains from this site or DcRu-21 in the skeletal accession log. The accession numbers on the siteform relate to a site in Metchosin in the case of the former and to previously recorded site DcRt-8 in the case of the latter (Steffen personal communication 2004). Given that the site was recorded on the basis of historical references it is likely that the reference is an error. Alternately, the accession number may be from another repository, although this possibility seems less likely.

DcRu-22 was visited by provincial archaeologists in 1979; Powell et al reported:

No visible evidence of prehistoric occupation (trench embankment or other wise) [was] seen by 1979 crew. Trenches seen are definitely related to historic (DND) component.... There is some confusion as to exactly where the trench embankments mentioned in the literature were. There were at least two in the vicinity of Macaulay Point. One of these definitely was part of DcRu-20. DcRu-21 is likely another. While Macaulay Pt. proper may have had a trench embankment, the term was most likely a reference to the general area than the point proper (DcRu-22 siteform 1979).

The crew mapped the location of two trenches on the point, one 1m wide by 0.5m deep, the other 10m wide by 1.5m deep (Figure 5). Both trenches run generally east to west across the point at DcRu-22.

Keddie (personal communication 2004) believes that the trenches at DcRu-22 are related to historical military activity on the property. Keddie (1998) states: "Kidd recorded the only defensive site he observed directly on the main part of the Macaulay Point peninsula as DcRu-22. His photograph of this site clearly shows the large historic military trench... Kidd then accurately recorded DcRu-21 and DcRu-20." Although Keddie (1998) acknowledges that Kidd may have believed that the trench was aboriginal and subsequently reused by the military, he states that the 1979 archaeological crew "clearly understood at this time that this was a historic non-aboriginal trench."

In 1985, archaeologist Norm Easton (1985) wrote that a series of scuba "dives at McCauley [sic] Point in Esquimalt have discovered possible anchor stones accumulations" suggesting that the point was a potential reef netting location. This finding is consistent with the ethnographic information provided by elders Fraser and Misheal (Duff 1969).

Keddie (1984) has previously suggested an association between burial cairns and "defensive earthworks". Although there are no recorded cairn features at Macaulay and none are visible in early historic photographs, Keddie (personal communication 2004) suggests they may have been present in the area. In his 1998 comments on Macaulay Point sites, Keddie makes reference to early "general comments about burial cairns around the 'Macaulay Point' or 'Macaulay Plains' [which] are difficult to place". The comments indicate that Keddie (1998) does not know of cairns on either the point or plains, however he suggests that if once present, relatively undisturbed areas have the potential for subsurface burials "that have had much of their associated rock piles removed earlier."

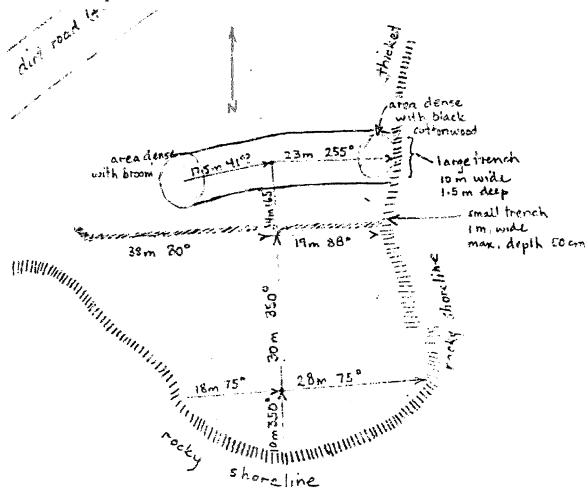


Figure 5. Trenches at DcRu-22 from 1979 siteform.

Methods

Research relating to the military history of Macaulay Point included record searches at the DND Property Resources Office, the BC Archives, DND Online Historic references, the CFB Esquimalt and Naval History Museum at Naden, Parks Canada offices at Ft. Rodd Hill, and the Municipality of Esquimalt Archives. Both published and unpublished references were consulted, including Parks Canada interpretative material and a building inventory report for Macaulay Point (Stevenson and Kellogg Limited *et al.* 1974). Interviews were conducted with Dale Mumford, Parks Canada and retired Col. Nelson who was stationed at Fort Macaulay.

An 1895 plan of the Macaulay battery was scanned. As scanned maps don't contain adequate information with reference to their location on the surface of the earth for spatial analysis, it was necessary to align (georeference) the scanned plan with the ArcView shapefiles for Macaulay Point provided by DND. This transformation "stretches" the scanned map to correspond with the georeferenced ArcView map. The rectified map was used to assist with the in-field locates of some of post-contact features, for comparison of extant buildings with the historical plan, and to identify areas of previous disturbance.

Field investigations took place over two days in 2003. The survey was initiated with a walkover to relocate the 1979 mapped locations of archaeological sites, features and military structures. Survey continued with a program of subsurface tests using both shovel and auger to locate cultural deposits and determine the condition and approximate boundaries of the recorded sites. Detailed notes and a photographic record were maintained and the provenience of test and feature locations was maintained using readily available concrete datums. Evaluative units were not conducted.

The proposed methodology was for subsurface testing in systematic 20 m intervals over Macaulay Point with the exception of areas of obvious disturbances, buildings and rock. Once in the field it was immediately apparent that the program would be inefficient and time consuming. The ground in general was extremely difficult to penetrate with hand tools; in many places the ground surface was covered with clay fill, pavement and compacted rock crush. Testing was also impeded by the presence of rip-rap and fill at the shoreline.

Test methods were amended to a judgemental program that concentrated efforts at the reported aboriginal trench locations, midden exposures and areas where the surface was penetrable. Natural exposures were examined and in the absence of natural exposures, auger and/or shovel testing were conducted where possible. Shovel tests measured approximately 30 x 30 cm and were excavated to sterile materials. All sediments from the sub-surface tests were trowel sorted and backfilled into the hole. Trenches relating to the Macaulay Point battery provided exposures that were shovel shaved and examined for pre-contact deposits.

Surficial survey was conducted over much of the northern portion of the property. In the extreme north of the property, north of the path leading to the breakwater, the ground is characterised by bedrock outcrops with shallow soil development and is largely covered in wildrose and thicket. Much of the berm between the inner and outer military trenches was walked, with the trenches providing opportunities for examination of subsurface deposits, although survey was somewhat limited by the degree of brush present.

As per CFB Esquimalt operational policy, significant features relating to the post-contact,

non-Native use of the land which are thought to be over 50 years old (excluding infrastructure currently in use today), were noted in the field. For this report, such sites have been assigned a site number. However, the BC Archaeology and Registry Services Branch does not recognize sites which post-date 1846, and as such, siteforms were not completed.

Results

Inventory of Macaulay Point identified additional cultural deposits at both previously recorded archaeological sites DcRu-21 and DcRu-22 although the previously recorded trench embankment features were not located at either. Three historical sites (MP-H1, H2, and H3) were recorded and two areas of previously unrecorded historical debris were identified near DcRu-21 and DcRu-22 (Figure 6). Information on these sites is included below in Table 1.

Table 1. The Macaulay Point archaeological sites.

Site #	Site Type/Features	2003 Site Significance ³
DcRu-21	Refuge, earthworks, midden, historic debris	aboriginal component - high, historic component - unknown
DcRu-22	Refuge, earthworks, midden, historic debris	aboriginal component - high, historic component - unknown
MP-H1	depression, structural remains	unknown
МР-Н2	1894/95 keep, structural remains	high
МР-Н3	depression, structural remains (1894/95?)	unknown

Historical Findings

Survey of the property revealed many of the features associated with the 1894/95 battery, two areas of post contact refuse, depressions and a semi-subterranean timber in an area known to have structures in 1895, and two unidentified depressions within the battery proper (Figure 6). The 1878 battery was not relocated. The 1878 plan indicates that the battery was oriented roughly north-south, located about forty feet above the high water mark and north of the shoreline. The best fit for the battery's location appears to be the vicinity of DcRu-22. A shallow ditch runs across the projection of land at DcRu-22 (see discussion below); a ditch also appears on the 1878 battery plan near the magazine (Figure 2). Attempts to rectify the above noted depressions and the ditch with features on the 1878 plan and the modern orthophoto of the property were unsuccessful.

An historical cultural depression is located south of the central gun emplacement. The depression is generally square in shape and measures between 2-2.5 m long. No features are evident in this location on the 1894/95 battery plan or on the GIS files provided by DND. This feature was not recorded as a historical site.

³ As noted in the Methodology section, evaluative testing was not conducted. The significant assessment of subsurface deposits is preliminary in nature.

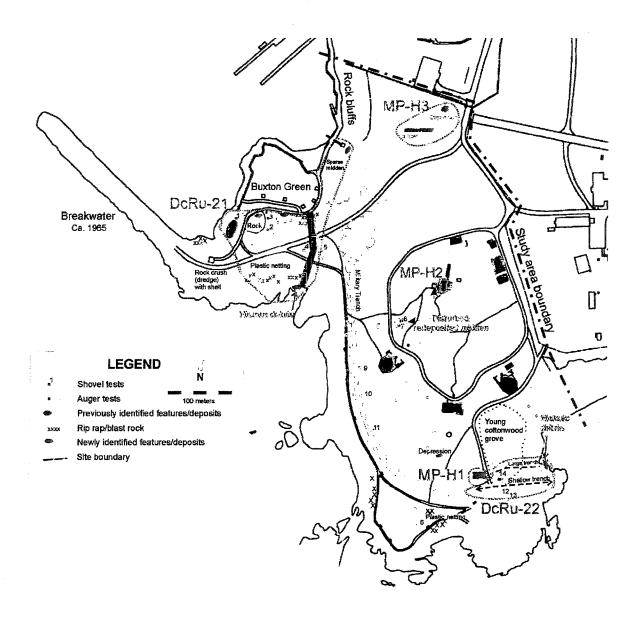


Figure 6. Archaeological Inventory Results with Test Locations

A roughly rectangular historical depression located within the outer trench of the 1894/95 battery was recorded as MP-H1). The site is located on the west side of the paved path leading south toward the easternmost of the points on the Macaulay property. The depression is approximately 7m long by 2.5m wide. One vertical board is visible in the southern wall of the depression and courses of tumbled bricks are present near the western end (Plate 7). It is possible that some of the bricks remain *in-situ*. The narrow, shallow trench recorded on the 1979 siteform for DcRu-22 runs roughly east-west to the south of this feature. The feature may be associated with the original 1878 battery as it does not appear on either the 1894/95 battery plan or on the GIS files for the property. If so, the site would have high historical significance.



Plate 7. MP-H1, tumbled courses of brick.

Many of the structures originally constructed in 1894/95 remain standing within the battery itself, including several buildings and the "murderhole" tunnel (Plate 3) leading out of the keep, although they have been modified by later upgrades (Figure 6). Both machine gun emplacements were relocated. Although Steveson and Kellogg (1974) indicate that the extant gun emplacements (Buildings 1198, 1328 and 1329) date to 1895, they have been modified to such a degree it is unclear if any of the original structures remain. The guardhouse shown on the 1894/95 plan (Figure 3) has subsequently been demolished but the foundation is clearly visible outside the tunnel. The keep of the 1894/95 battery has been largely removed although the depression and earth embankments between the 1942 bunker and the 1895 tunnel are remnants of this feature (Mumford 2004 personal communication). Horizontal courses of cobbles also remain in the keep walls (Plate 8); the depression and the cobble wall were recorded as MP-H2. As noted in the Study Area section, the Macaulay Point Battery is recognised as a site of National Historic Significance.

Stevenson and Kellogg *et al.* (1974) date the extant buildings 1191, 1197, and 1199 to 1885, a time when the original 1878 earthwork battery was in existence, and Building 1200 to 1902 (Figure 4). No direct reference to construction at the battery was found for either of these time periods. It is possible that the buildings were erected as part of heightened security in response to Russian expansion in Asia in late 1884, which seemed to threaten Britain's interests in India. A report submitted to the British Admiralty recommended additions to the batteries however, the Anglo-Russian crisis was resolved before the Admiralty responded (Lovatt 1993).

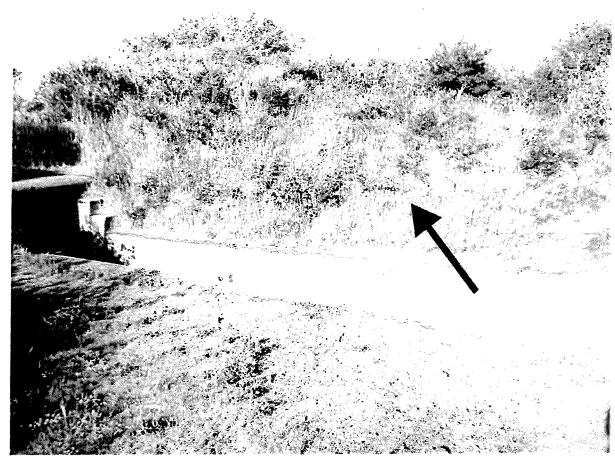


Plate 8. MP-H2, 1894/95 keep embankment s. At left, tunnel leads away from 1942 bunker; note horizontal courses of rock in background.

The information gathered by this study suggests that Building 1201 and three of the above noted buildings (1191, 1199, and 1200) were probably constructed in 1894/95. All four buildings are associated with structures built as part of the 1894/95 battery and all four appear on the 1894/95 plan (i.e. the extant building locations provided by DND in the ArcGIS shapefiles are in the same location as those shown on the georeferenced battery plan (Table 2, Figure 3, Figure 4). Building 1197 does not appear on the 1894/95 plan, suggesting it may be a later addition to the battery. As all other buildings associated with the earlier battery were apparently demolished it is unlikely that the building predates 1894/95 as indicated by Stevenson and Kellogg *et al.* (1974). The building is recorded as petroleum storage (Stevenson and Kellogg *et al.* (1974), an improbable use in the late 1800s, however it may have been subsequently used for this purpose. Mumford (2004 personal communication) suggests that the structure could have stored flammables such as lamp oils and oil for the guns in the early part of its existence.

Table 2. Extant 1894/95 Buildings - Functions.

Building	1894/95 Plan	Stevenson & Kellogg et al. (1974)
1191	store	magazine
1197	not shown on plan	petroleum storage
1199	no function indicated	storage
1200	workshop	workshop
1201	magazine	no function indicated

A number of buildings were constructed outside the area of the battery proper as part of the 1894/95 development. Several buildings and a garden were located in the northwest corner of the property, north of the outer trench and bounded on the west by cliffs dropping to Flemming Beach (Figure 3). The survey showed the area to be levelled and largely covered in grasses with tulips, daffodils and hyacinth bluebells. Two shallow depressions and semi-subterranean timbers were located (Figure 6). The larger of the two depressions is approximately 4m east-west by 2m north-south. The smaller depression is offset from the first and oriented perpendicular to it; it measures roughly 1.5m north-south by 1m east-west (Plate 9). The timber is visible on the ground surface as an approximately 14m long line of wood chips oriented east-southeast (Plate 10). The depressions and timber are recorded as site MP-H3; the historical significance of these features is unknown, but may be high if associated with the 1894/95 battery.

On the southern shoreline east of the breakwater near DcRu-21, the crew observed a dark soil horizon. The small deposit (less than 3 m long, 10 cm thick) slumps out from the bottom of the steep cut bank that is covered by blast rock and a short rose ground cover. The exposure is a black brown loam with historic debris, including fragments of porcelain, glass and burnt cut bone. The crew concluded that this exposure is not *in-situ* as it is at the base of the steep cut bank, directly overlays bedrock and is less than 2m from the high-tide line. The exposure is likely slumpage from further up the cut bank that was either washed to the bottom of the slope or was pushed by the dumping of blast rock as part of the cliff stabilisation strategy. The deposit was recorded as an historic component of DcRu-21.

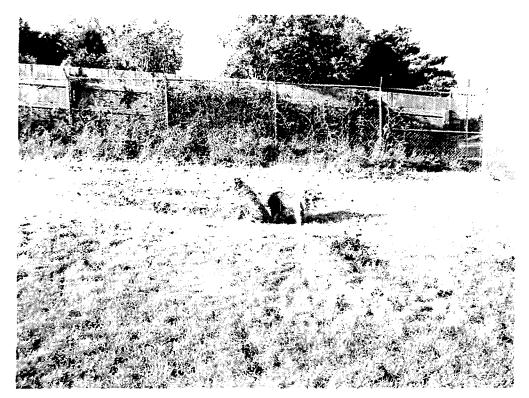


Plate 9. MP-H3, historical depressions.

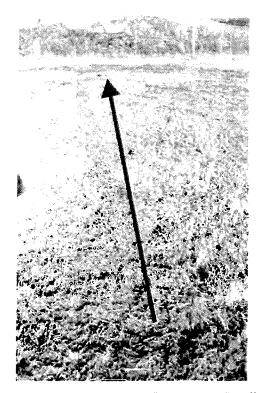


Plate 10. MP-H3, semi-subterranean timber – "shadow" to left of arrow.

Archaeological Findings

In total, 50 auger tests and 13 shovel tests were conducted on the DND Macaulay Point property, primarily in the area of the previously recorded trench-embankment sites and between the outer and inner trenches of the 1894/95 battery (Figure 6). Cultural deposits were identified in shovel tests conducted within DcRu-21. Three shovel tests (ST # 7, 8, 14) revealed cultural deposits outside the boundaries of DcRu-21 and DcRu-22. A non-cultural, very shallow exposure of crushed, weathered, sun bleached shell in ubiquitous tan clayey silt is located 45 m from the westernmost gun placement. The exposure covers 5 square meters at the top of one of the constructed hillocks.

Dark shell-bearing soil was identified in two shovel tests (ST 7 & 8) and one exposure outside the boundary of DcRu-21, northeast of the westernmost gun placement (Figure 6). Shell and fire-cracked rock concentrations are high compared to the other deposits/exposures. The deposit is shallow (less than 10 cm deep) and over lays angular bedrock in an area not greater than 7 m wide (east-west) by 3 m (north-south). ST 8 was placed at the edge of the deposit (as determined by auger) and showed disturbance including cement and glass. Auger tests and examination of numerous exposures along the inner militarily trench and the surrounding informal trail system failed to locate additional cultural deposits. Shell was also noted in an exposure on the northern side of the central 1942 bunker. These deposits have been obviously disturbed and is not likely *in-situ*.

No evidence of burial cairns or mounds was identified. Most of the large rocks along the shore and paralleling paths have fresh faces, and holes drilled for explosives clearly indicate they are blast materials (Plate 11). Hillocks identified on the point west of DcRu-22 are the result of recent landscaping and in several cases the hillocks have a few blast rocks placed on them (Plate 12). In the future, with the accumulation of natural deposits, these features may assume the appearance of burial cairns or mounds; future researchers should consider this possibility.

DcRu-21

Compact crushed rock overlays much of the area of DcRu-21 with the exception of a small grassy area north of the trail to the breakwater where the 1979 crew mapped midden (DcRu-21 siteform – see Figure 6, Plate 13). Rip-rap and netting for cliff stabilisation and erosion control are placed along the narrow constriction of the point at DcRu-21, in essentially the same place where Kidd, Keddie and the 1979 crew mapped the trench. Tests were conducted east the small grassy patch in an attempt to locate the reported trench. Slumpage at the cut banks on either end of the trench was anticipated and together with foot traffic may account for the erosion noted on the northern bank (Plate 14). The trench feature was not relocated.

Numerous auger tests were conducted in the area of previously identified shell midden deposits (Figure 6). Three shovel tests (No. 1-3) and one auger test were positive for intact subsurface cultural deposits. The tests revealed midden capped by up to 30cm of mottled fills, blue and tan clay, inorganic light brown sandy silt, roots and rock crush. The midden is approximately 5-10cm thick and is characterised by loose dark brown loam with fragmented shell and fire altered rock in low concentrations. A yellow to orange glacial till/hardpan under lays the midden. The location of this deposit generally corresponds to the 30 x 17m area of midden recorded in 1979 (DcRu-21 siteform).

Midden was noted in scattered pockets over the eastern end of the breakwater and over rock outcrops at the base of the breakwater (Plate 15). These deposits are shallow and intermittent, but do not appear to the same as dredge materials that are also present (consisting of bleached crushed shell in grey blast rock crush and clay). This finding is consistent with the information recorded by Kidd in the original site description (Golder Associates 1998).

Other cultural exposures include intermittent lenses of midden along the original northern shore of the point proper (Figure 6). The northernmost of these exposures appears in the naturally formed "riser" of a step along an informal trail leading through a thicket downslope toward Buxton Green. The deposit is approximately 5 cm below the ground surface and measures 5 cm thick (Plate 16).

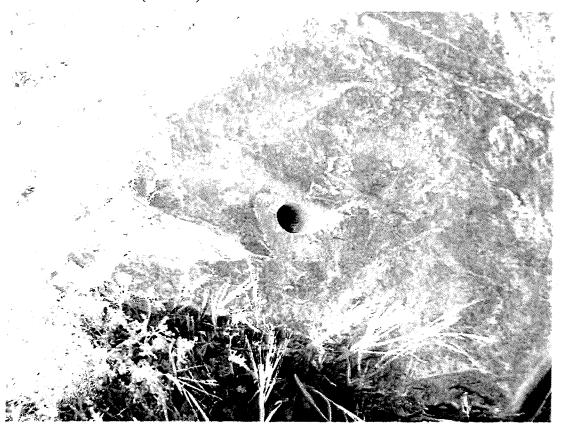


Plate 11. Blast rock with drill hole, near DcRu-22.



Plate 12. Hillocks and blast rock west of DcRu-22.

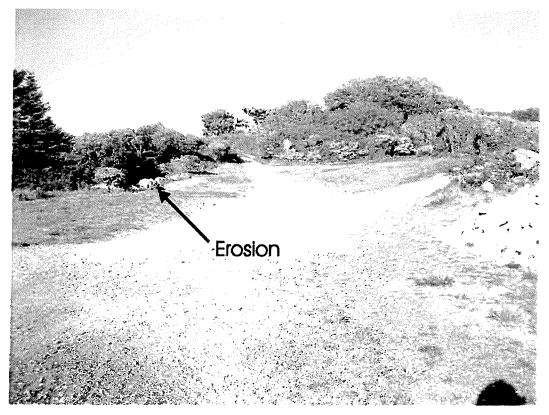


Plate 13. DcRu-21, area of reported trench from west.



Plate 14. DcRu-21, area of erosion from Buxton Green.



Plate 15. DcRu-21, example of surficial midden exposure near breakwater.



Plate 16. DcRu-21, shell midden in "riser" of step along trail to Buxton Green.

DcRu-22

The two previously recorded trench features at DcRu-22 were relocated. The southern most 'trench' is shallow, 80-90 cm deep, narrow, and approximately 12 m long. Tests were placed inside the trench and along the associated berm. None of the tests were excavated beyond 30 cm below surface due to the presence of rock. The size of the trench, the absence of aboriginal cultural material in the shovel tests, and the military presence on the property suggest the feature is not associated with the reported aboriginal trench embankment feature (see discussion of MP-H1 above). The northern trench runs roughly eastward, opening to a steep slope to the beach. It was not thoroughly investigated.

The 1894/95 plan of the battery does not show a trench running in this direction; rather the outer trench of the battery forms a continuous barrier surrounding the battery. If an aboriginal trench had been present it likely would have been at least partially filled or modified during construction of the 1894/95. A passer-by informed the crew that sometime following decommissioning in the 1950s, rubble from the battery was pushed over the bank in the area of the trench; historic debris was noted on the beach at the base of the slope (Figure 6). It may be that the trench was excavated following de-commissioning as part of site clean-up or drainage works.

Shovel and auger tests were placed in the cottonwood grove where natural forest soil horizons were revealed. A small exposure of shell bearing soils was observed in the grove, on the side of a berm in a tree throw. The deposit is approximately 23 cm below ground surface. A shovel test was conducted; no animal bone, fire cracked rock or other cultural remains were observed (ST 14 - Figure 6). The exposure was approximately 7 cm thick, and 34 cm long. It is

believed to have been excavated in its entirety.

Two shovel tests were excavated on a small flat above the midden exposure. No midden was found in either of the tests that were excavated to 70 cm below surface. Testing in the lower portion of the grove revealed dark brown, water-saturated clays. Auger and shovel tests outside of the grove were excavated through brown silts and sand with pebbles to yellow clay (up to 60 cm below surface).

The possibility of an aboriginal trench on the point, as recorded by Kidd (DcRu-22 siteform), cannot be ruled out on the basis of the field results. In fact, the identification of a small shell midden deposit in the general area would be consistent with a trench embankment site. The size and orientation of the existing trench and the steep drop to the beach are also consistent with aboriginal trench embankment features. The trench is somewhat far north of the "ideal" spot for a trench embankment, as it would enclose a relatively large area of the point however, large enclosed areas are found at other nearby trench-embankment sites (at Finlayson and Holland Points, for example).

Discussion

The condition of DcRu-21 and DcRu-22 appears to have changed little from the 1979 site visit (neither trench was visible in 1979). The DcRu-21 trench embankment feature was not relocated although intact subsurface deposits were identified. The feature was filled sometime between the occupation of the property by the Hudson's Bay Company in the 1850's and the recording of DcRu-21 as an archaeological site by Kidd in 1959. Although surface and subsurface cultural deposits associated with the site have been impacted by military activity dating back to the occupation of the property by the Royal Navy in the late 1800s, intact deposits remain.

Although interpretation of the historical information suggests that DcRu-22 may have been mis-recorded, the possibility of an aboriginal trench embankment feature cannot be discounted based on the field data gathered by this project. The 10 m wide trench first recorded in 1979 (DcRu-22 siteform) may be military in origin however, as noted above, it breaches the known military trench. A very small subsurface shell midden deposit was identified near DcRu-22.

Although the trench features of DcRu-21 and DcRu-22 are not visible on the surface, it is possible that they have been filled but remain essentially intact. The outline of either trench may be identifiable either through machine excavation or by remote sensing such as ground penetrating radar. The filled prehistoric trench features could provide significant archaeological data, including materials for absolute dating, about the sites as well as the broader relationship between fortified sites and nearby habitation sites such as DcRu-20.

Shallow, low density, scattered midden deposits are found on Macaulay Point outside the boundaries of DcRu-21 and DcRu-22. This finding may be a reflection of sporadic or short-term prehistoric use of the area, whether for seasonal resource extraction or processing, or for refuge purposes. Alternately, considering the amount of land alteration on the property since the mid-1800s, deposits could have been scattered by construction of the batteries, however, nowhere did testing or exposures indicate that a large volume of dense cultural material was ever present.

As subsurface testing in the vicinity of both previously recorded sites was hindered by the presence of fill, the areas proximal to both DcRu-21 and DcRu-22 retain the potential for unidentified subsurface cultural deposits. Subsurface tests and examination of the existing military trench profiles elsewhere suggest the potential for areas of large unidentified cultural deposits is low.

As noted in the Introduction, the battery at Macaulay Point has been recognized at the national level for its significance. Both standing buildings and archaeological evidence of the 1894/95 battery remain at Macaulay Point. Features associated or likely associated with the battery include the keep (MP-H2), the depression and timber recorded as MP-H3, and the historical debris scatters recorded as part of DcRu-21 and DcRu-22.

The 1878 battery was not located. However, it is possible that features of the battery have been filled but remain essentially intact. Identification of the battery features, if present, may be possible either through machine excavation or remote sensing. The most likely location for the battery, based on the information obtained during this study, is in the vicinity of DcRu-22. The orthophoto of the area shows several areas with differential vegetation between the central gun emplacement and the outer ditch. This is the same general area in which the narrow ditch feature of DcRu-22 and the depression recorded as MP-H1 are situated. If relocated, the remains of the battery would be highly historically significant.

Recommendations

Three general recommendations stem from the findings of this inventory project:

- 1. DND, CFB Esquimalt should advise the Municipality of Esquimalt of its operational policies with respect to archaeological resources on the Macaulay Point property;
- 2. Archaeological Awareness Training should be required for base, municipal, and private landscape or excavation contractors working outside the boundaries of recorded sites; and
- 3. an archaeological impact assessment (AIA) should precede any future development on the property in the vicinity of recorded archaeological sites or areas which retain potential for archaeological sites

As the property owner, DND retains ultimate responsibility for the archaeological resources on Macaulay Point and should ensure that the Municipality of Esquimalt accords these the same level of consideration as at other CFB Esquimalt properties. In addition to the precontact sites, the historical sites should be a focus of discussion. Such sites are not generally managed on a provincial level and it is possible that Municipal personnel may not consider them in planning.

Currently there is no DND development planned for the Macaulay Point property. Away from site boundaries, base, municipal and/or private contractors working on future projects on the property should attend the contractor session of the DND Archaeological Awareness Training. Small areas of scattered, redeposited midden may be present and unrecorded, as evident by the recording of shell midden near the bunker. If previously unrecorded

archaeological remains, whether aboriginal or military, are encountered, crews should stop work immediately, the contract supervisor should be notified, and an archaeologist should assess the situation.

Avoidance is the preferred option if any future ground-altering activity is proposed in or near archaeological sites. If avoidance is not an option, the development should be preceded by an AIA. The purpose of an impact assessment is to identify archaeological resources in the immediate project area, evaluate their significance and provide project specific management recommendations. Site or area specific recommendations should development be planned in the future are for:

- use of remote sensing equipment such as ground penetrating radar or electroresistivity testing to identify trench features at DcRu-21 or DcRu-22, or features associated with the 1878 battery;
- collection of samples for radio-carbon dating from either of the aboriginal trench features if present and accessible;
- detailed recording of the historical debris noted on the beach near DcRu-21 and DcRu-22 and examination, with subsurface testing, of the 10m wide trench located within the DcRu-22 site boundary;
- subsurface testing and clearing of the walls to reveal additional information about depression recorded as MP-H1 and the 1894/95 keep (MP-H2);
- subsurface testing and detailed recording of MPH-3, the location of two depressions and a semi-subterranean timber. These features are likely associated with the 1894/95 battery. Subsurface testing in the vicinity may reveal additional historic features and deposits;

Further archival research may reveal additional documents relating to the location of the 1878 battery. Obtaining this information may require requests for retrieval of documents held in British archives.

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References

British Columbia Archaeology Branch

1998 British Columbia Archaeological Impact Assessment Guidelines. Archaeology Branch Ministry of Municipal Affairs, Recreation, and Culture. Revised from 1987, Victoria, B.C.

Dady, P. and T. Christensen

2000 Archaeological Inventories at Select Department of National Defence Properties, C.F.B. Esquimalt - VOLUME 2: Heals Rifle Range (Saanich), Nanaimo Rifle Range, C.F.M.E.T.R. Nanoose Bay, C.F.S. Masset. Report on file at Formation Environment, CFB Esquimalt, and the Archaeology and Registry Services Branch.

Duff, W.

1969 The Fort Victoria Treaties. B.C. Studies 3:3-57.

Easton, N.

1985 The Underwater Archaeology of Straits Salish Reefnetting I. *The Midden* 17(1):9-11.

Golder Associates

1998 Results of March 1998 Investigation, Macaulay Point, CFB Esquimalt. Report on file with Base Construction Engineering Office, CFB Esquimalt.

Keddie, G.

- 1984 Fortified Defensive Sites and Burial Cairns of the Songhees Indians. *The Midden* XVI(No.4):7-9.
- 1991 Notes on Defensive Sites on the Southern Coast of BC. Victoria, BC.
- 1997 Aboriginal Defensive Sites. Part 4: Local Sites are Dated; Final Conclusions. In *Discovery Magazine*.
- 1998 Comments in the Macaulay Point area sites. DcRu-20 and DcRu-21. Letter on file with Base Construction Engineering Office, CFB Esquimalt.

Lovatt

1993 Shoot, Shoot, Shoot. Fort Rodd Hill and Fisgard Lighthouse National Historic Site of Canada, Victoria, BC.

Mitchell, D.

1990 Prehistory of the Coasts of Southern British Columbia and Northern Washington. In *The Northwest Coast*, edited by W. Suttles, pp. 340-358. Handbook of North American Indians. vol. 7, W. C. Sturtevant, general editor. Smithsonian Institution Press, Washington, D.C.

Municipality of Esquimalt

1998 Walking Tour #7, Fleming Beach/Buxton Green/Macaulay Point. www.esquimalt.ca/Recreation/esq-p&r/tour7f.htm

Mason, A., P. Dady, M. Karpiak, J. Bailey, J. Lindberg, J. Maxwell and R. Vincent

1999 Archaeological Inventory at Select Department of National Defence Properties, CFB

Esquimalt. Prepared by Millennia Research and Golder Associates, for Public Works and Government Services Canada, and CFB Esquimalt. Non-permit Report on file at the Archaeology and Registry Services Branch.

Smith, H. I.

1907 Archaeology of the Gulf of Georgia and Puget Sound. In *Jesup North Pacific Expedition Publications*, pp. 303-441. vol. 2(6); 4(6). American Museum of Natural History, New York, N.Y.

Stevenson and Kellogg Limit in association HB Maynard & Co. Swan Engineering Limited and Wade Stockdale, Armour & Blewett.

1974 Building survey, CFB Esquimalt. Document 3 Work Point. Report on file with Properties Office, BCEO, CFB Esquimalt.

Appendix 1. Glossary of Terms

Archaeology: The discipline concerned with the recovery, analysis, description and

explanation of material remains left by humans. The remains can include artifacts, features, human skeletons, plant and animal food

refuse, etc. Can be post-contact or precontact.

Artifact: Any manually portable product of human workmanship. In its broadest

sense includes tools, weapons, ceremonial items, art objects, all industrial waste, and all floral and faunal remains modified by human activity.

Cairn: Rocks piled by humans for marking various areas, such as burials,

landmarks, ceremonial areas, etc.

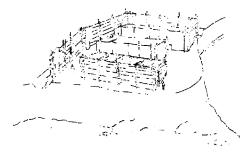


Fire Broken Rock (FBR) or Fire Cracked Rock (FCR): Rocks which crack in a characteristic way resulting from exposure to fire; fairly uniformly sized cobbles were heated in the fire and subsequently used to heat water in water-tight baskets or boxes. Fire cracked rocks are commonly found in aboriginal habitation, camping, and processing sites.



Fortification/Fortified:

An area that is defended by a palisade or trench embankment.



Midden:

A deposit of human habitation refuse. Many middens on the coast contain high concentrations of shell and are hence called "shell middens".

Post-contact:

Refers to the period following the first arrival of Europeans.

Precontact:

Refers to the period before the first arrival of Europeans in a given

area.

Shell Midden:

A type of archaeological site that contains large quantities of shell deposited

as refuse. Shell middens often contain artifacts, burials, and features.

Survey(ing):

In archaeology, the process of locating and inventorying

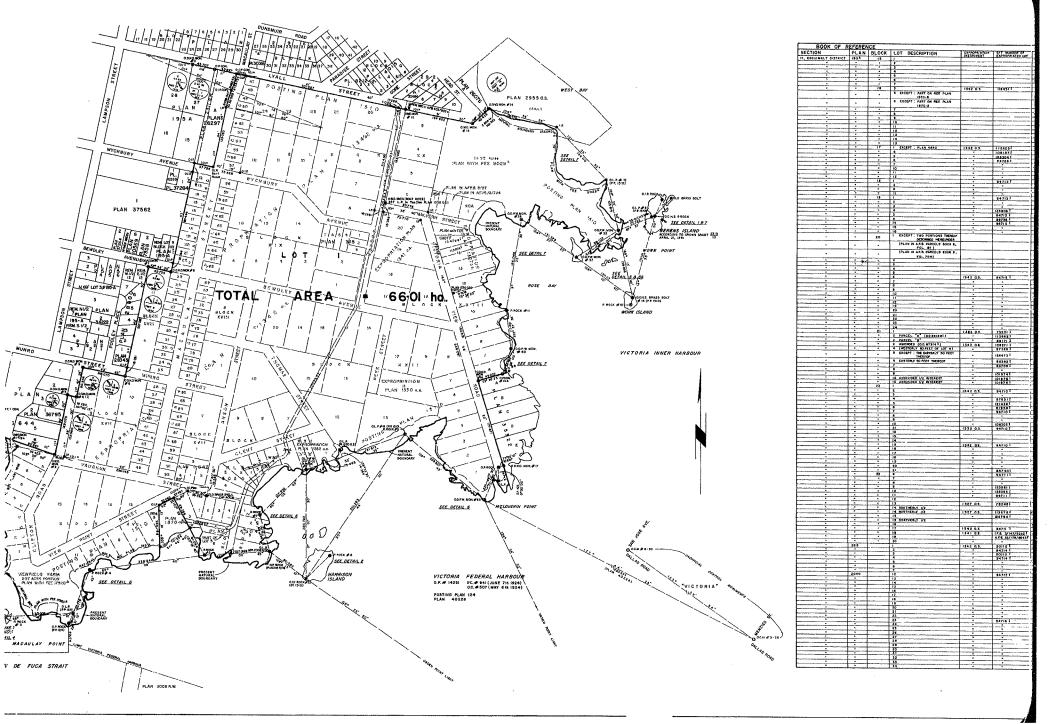
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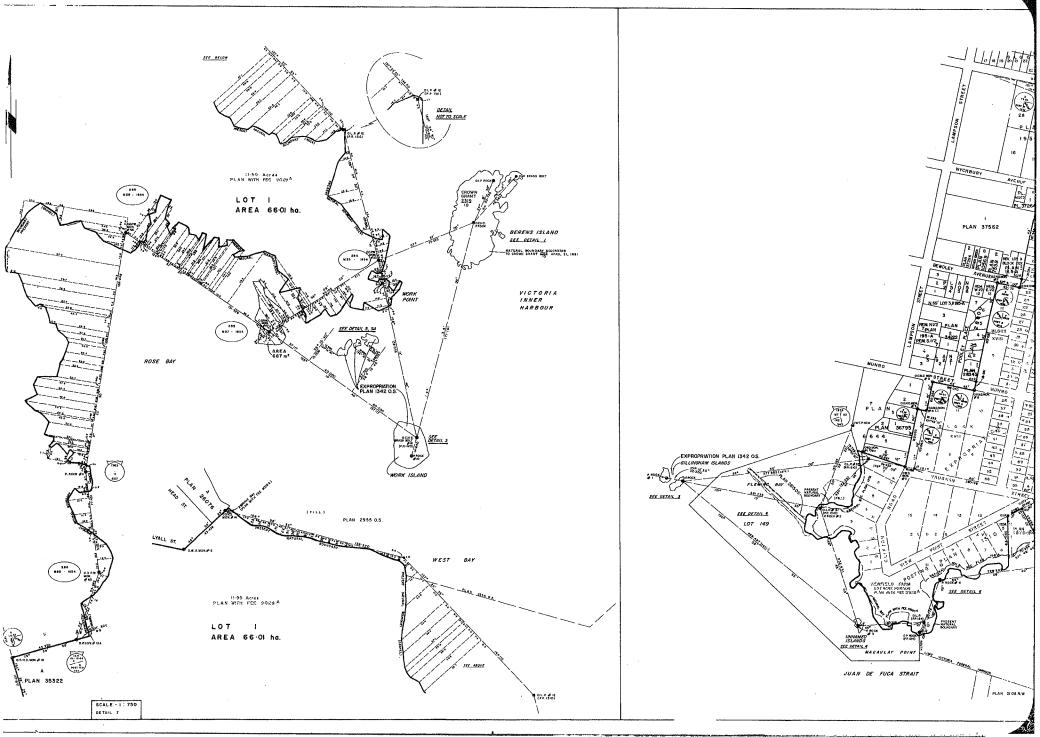
Trench embankment:

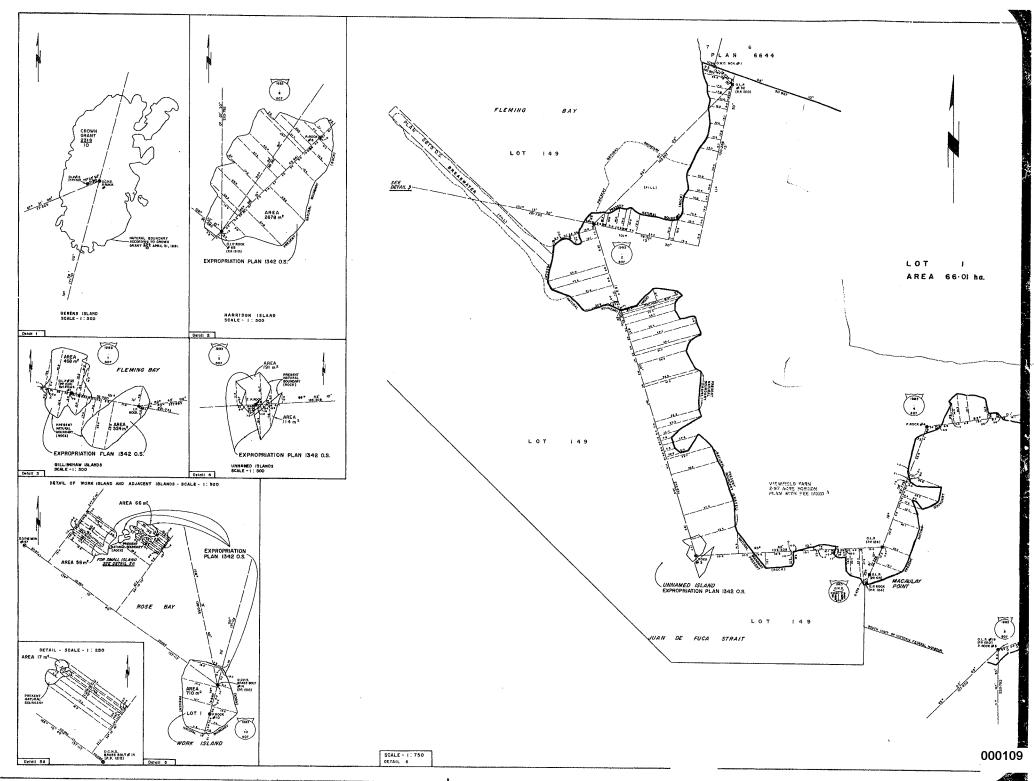
A fortified site characterized by one or more trench features. Often the

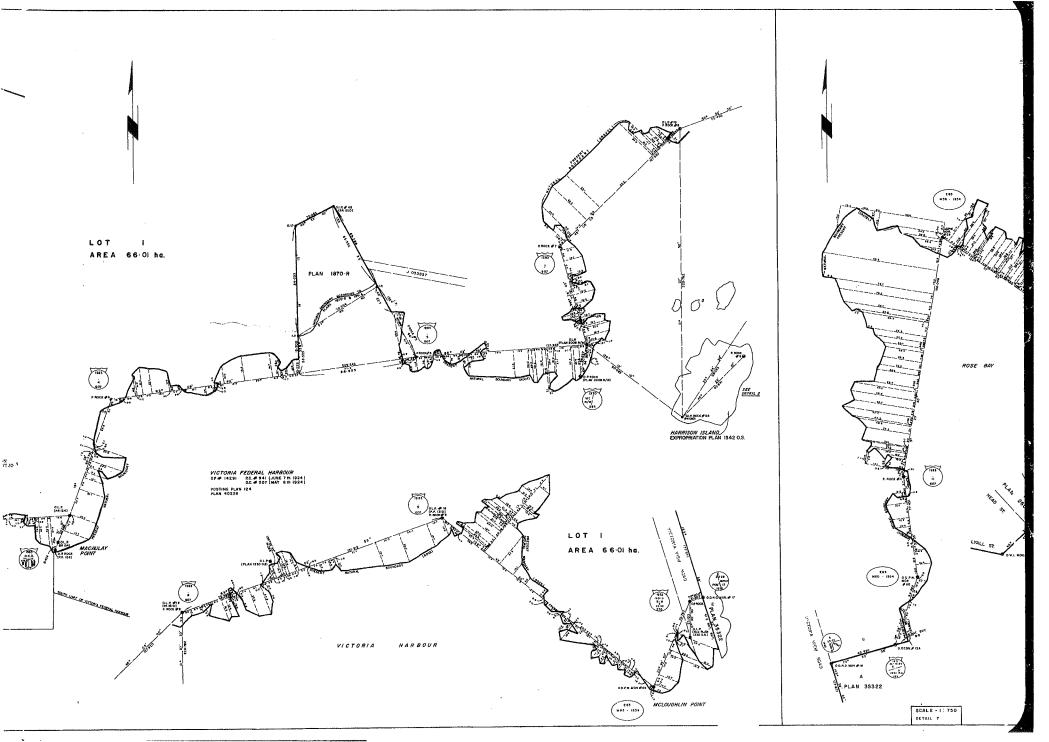
trenches cut off a point or peninsula.

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SECTION	PLAN 2040	BLOCK	LOT DESCRIPTION	EXPANSALATION METRUMENT 13.42 0.5	CAT NUMBER OF EXPROPRIATED LOT 97810 I	C/T NUMBER A.F.B. (CROWN)	CACHA
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-	t	·	2-97 AC PORTION VEWFIELD FARM (PLAN MITH FEE DEPOSITED 17520 A)	 		12/242/1246	t
<u> </u>	ļ	 	(PLAN WITH FEE DEPOSITED 17520 A)		ļ	13/755/17520 A	
		and the second	ROADS SPORM OF EDPHOPRIATION PLAN 1842 CB.; CLIPTON TERRACE (STEPPERSON ST), VIEW POINT ST SOUTH, CLEAR ST (SEY ST), THOMAS ST, PEER AT, VICTORA WISE OF, DATE OF MALVERS ST (FEAN ST), PETERS ST (SHITS ST), SEVECE WELF, (ROGGET ST), MACMALAY ST, WYCHROLY ANS. (CHRISTS ST), SEVENDAY WASTON ST				
	T		HOAD SHOWN ON EXPROPRIETION PLAN 1327 C.S.; MALVERN ST.	1327 0.5.	T	T	
		+	1327 0.5. : MALVERH ST.	1827 0.3.	 	 -	
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REFERENCE PLAN OF PARTS OF SECTION II ALL IN ESQUIMALT DISTRICT

"PURSUANT TO SECTION 100(1)(0) and 100(1)(6) LAND FITLE ACT."
THIS PLAN LIES WITHIN THE CAPITAL REGIONAL DISTRICT.

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THE PARTY OF THE PARTY CONTINUE THE FLAX FOLIET.

AND ALMONS SHE CENTER ROPE CONTINUE THE FLAX FOLIET.

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B. A.D. CONTINUE THE PARTY CONTINUE THE PA

OURTIFICATE UNDER LAND TITLE ACT, section 94 (1) 14)
THE MACE BOUNDARY SHOWN MERCON IS DESIGN TO SEE THE
MATURAL BOUNDARY AS DEFINED IN THE LAND ACT.

MAISTER OF LINES, MANS AND HOOLING, WETGRIA, B.C.

OWNER - NO MAKENY THE OWNER HEAVY OF EMANA.

CENTANTING OF ANY OFFICE AND UTILITIES

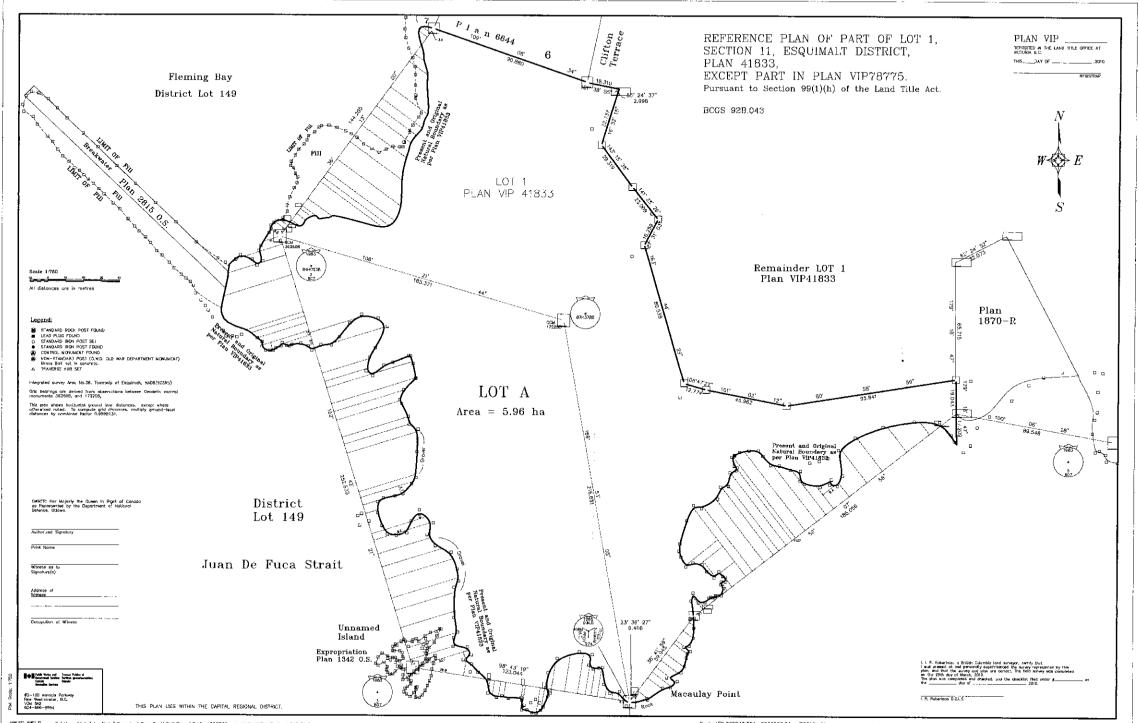
CHAPMAND OF ANY OFFICE AND UTILITIES

I, RICHARD KACATI, A BRITISH COLUMBA LAND SURVEYOR, OF BURNADY, BY SMITSH COLUMBIA, CERTURY THAT I HAS PRESCHY AT MOP PERSONALLY SPEARINFED THE SURVEY PREPARENCE OF HIS PLAN, AND THAT THE SURVEY MAY PLAN HAR CORRECT, THE SURVEY MAY PLAN HAR CORRECT, THE SURVEY MAY DEAD HAR CORRECT, THE SURVEY MAY DEAD HAR CORRECT, THE

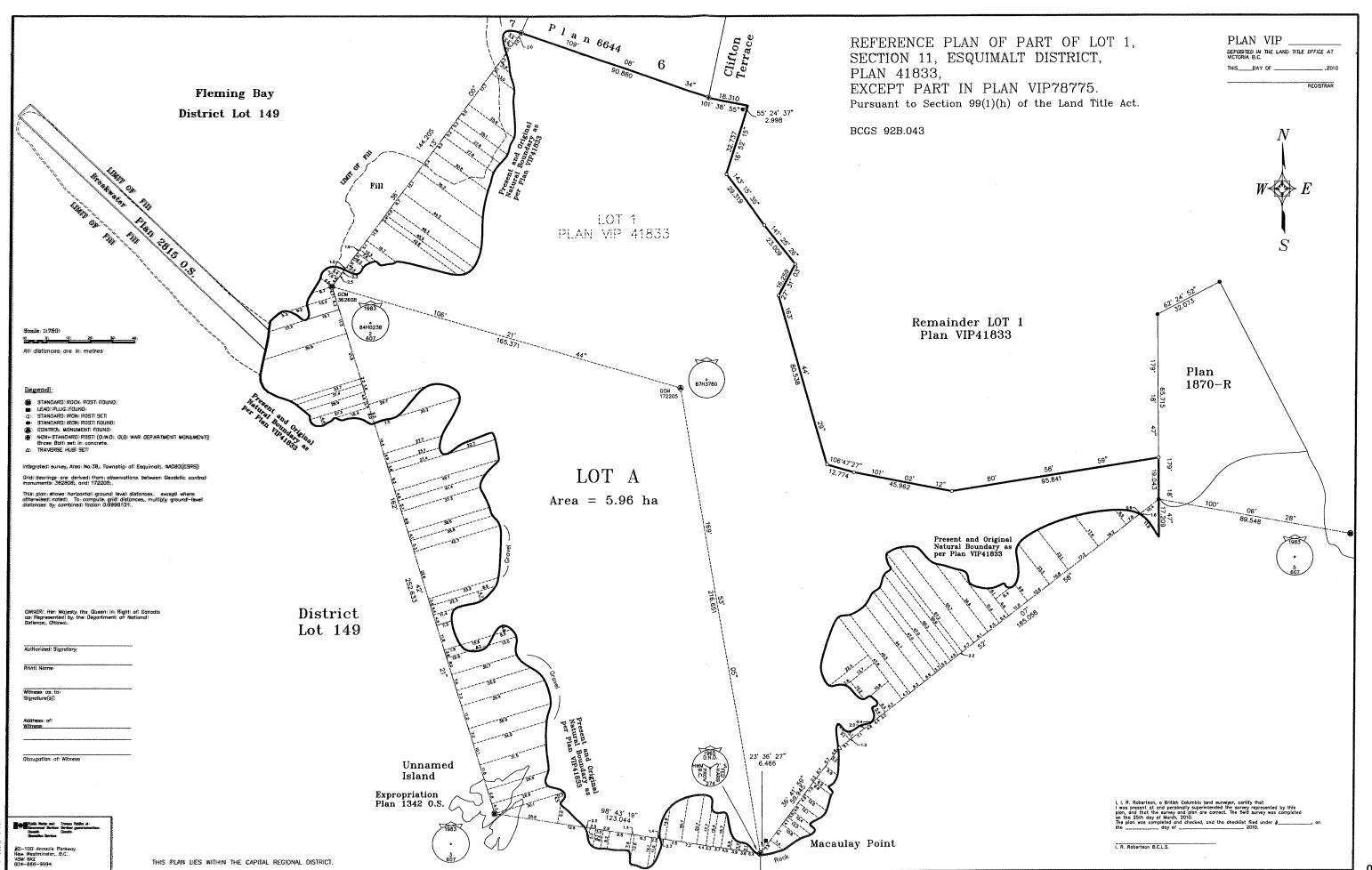
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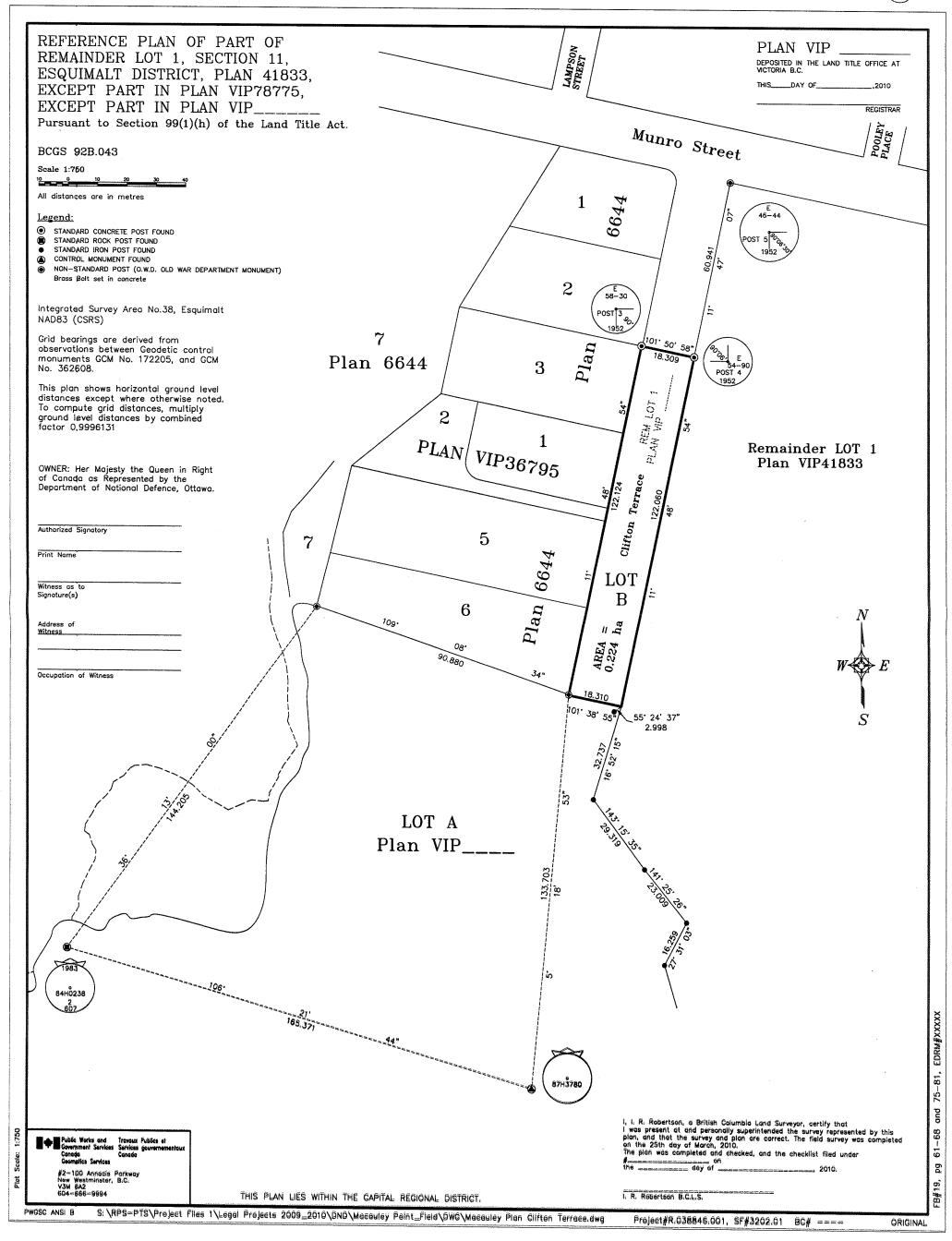
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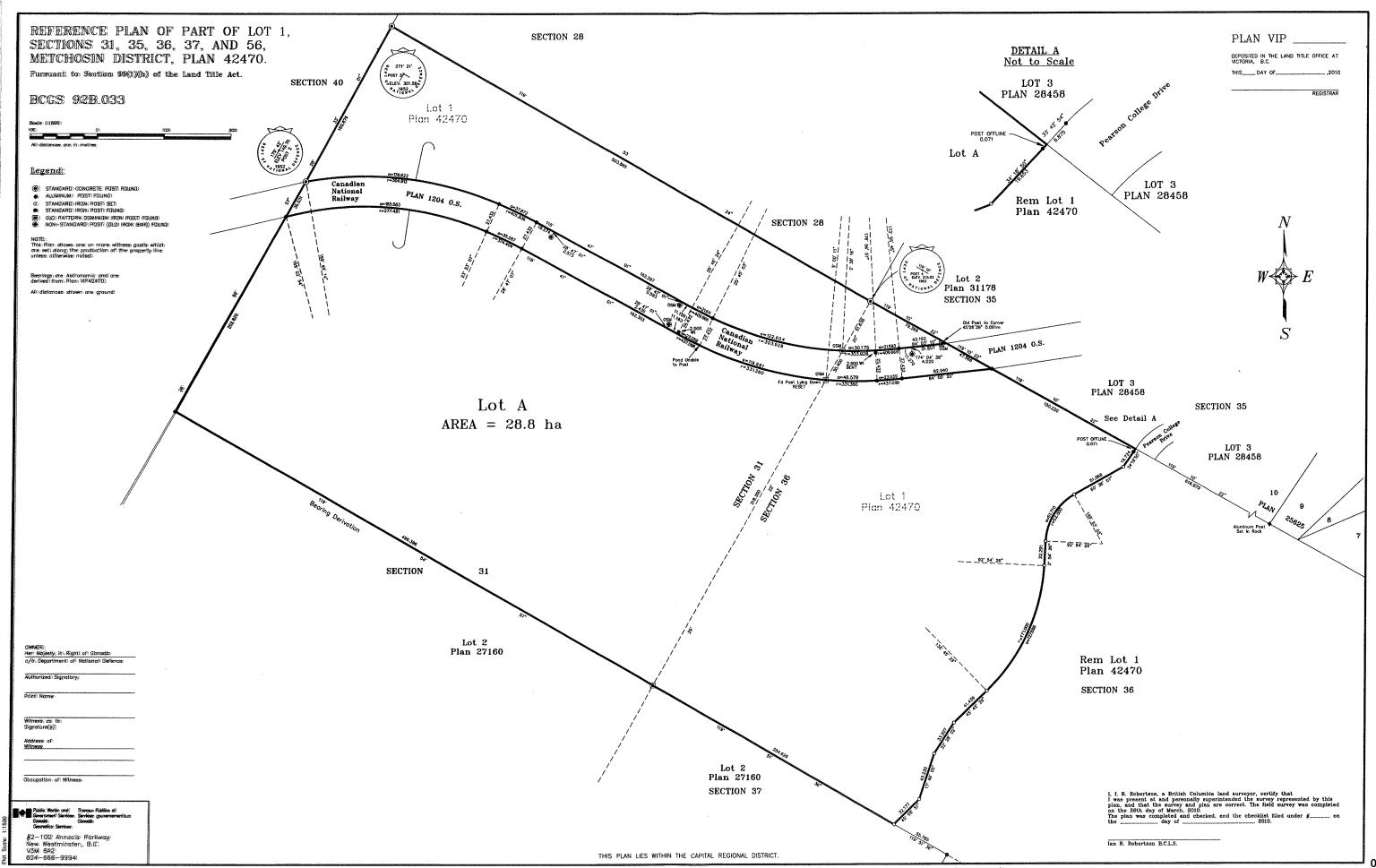
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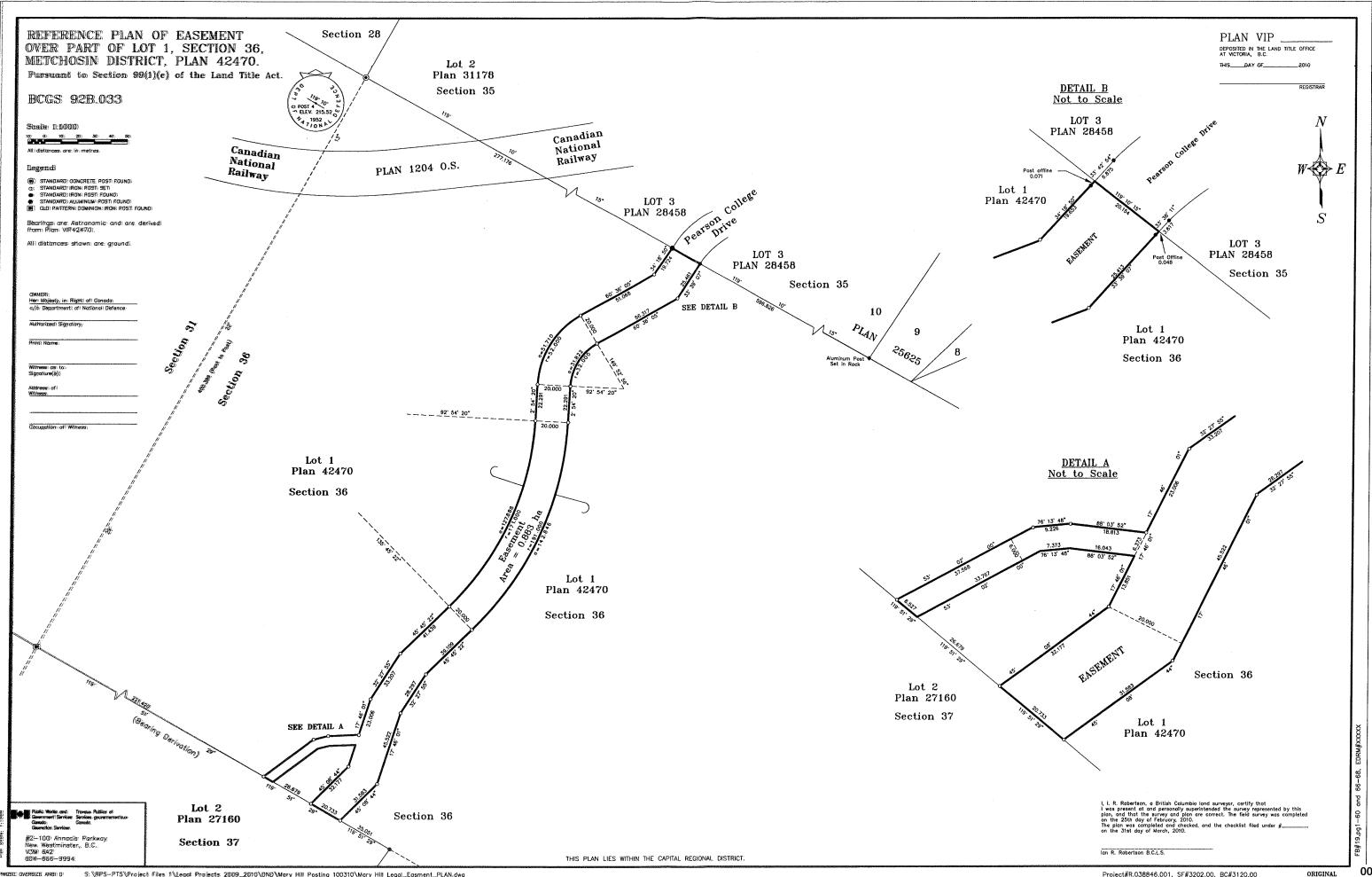


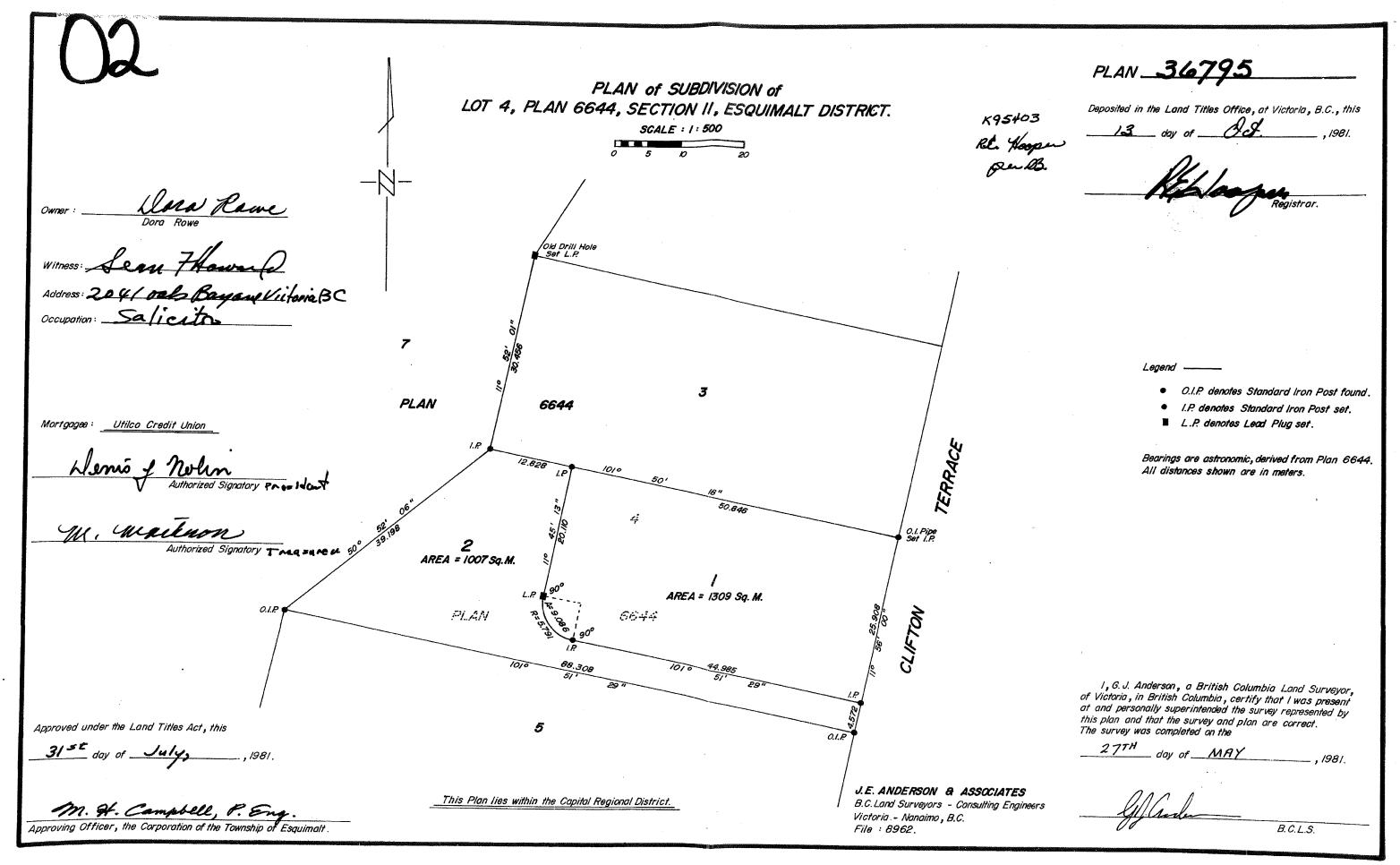
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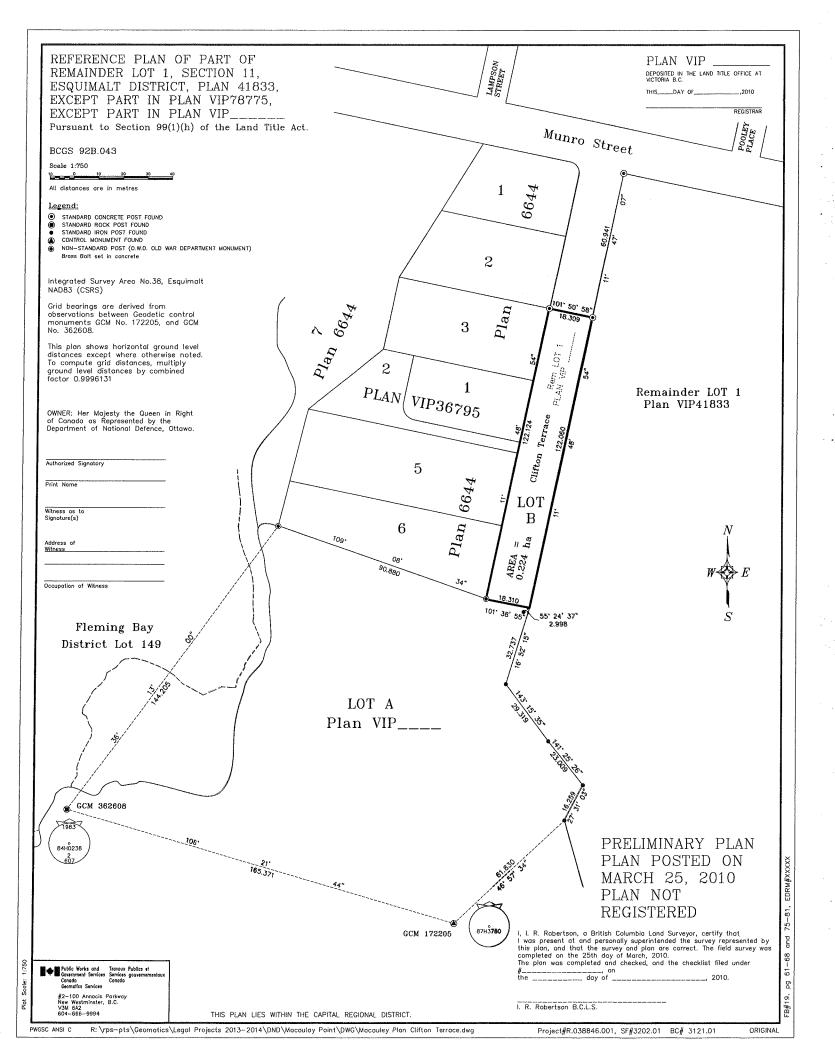


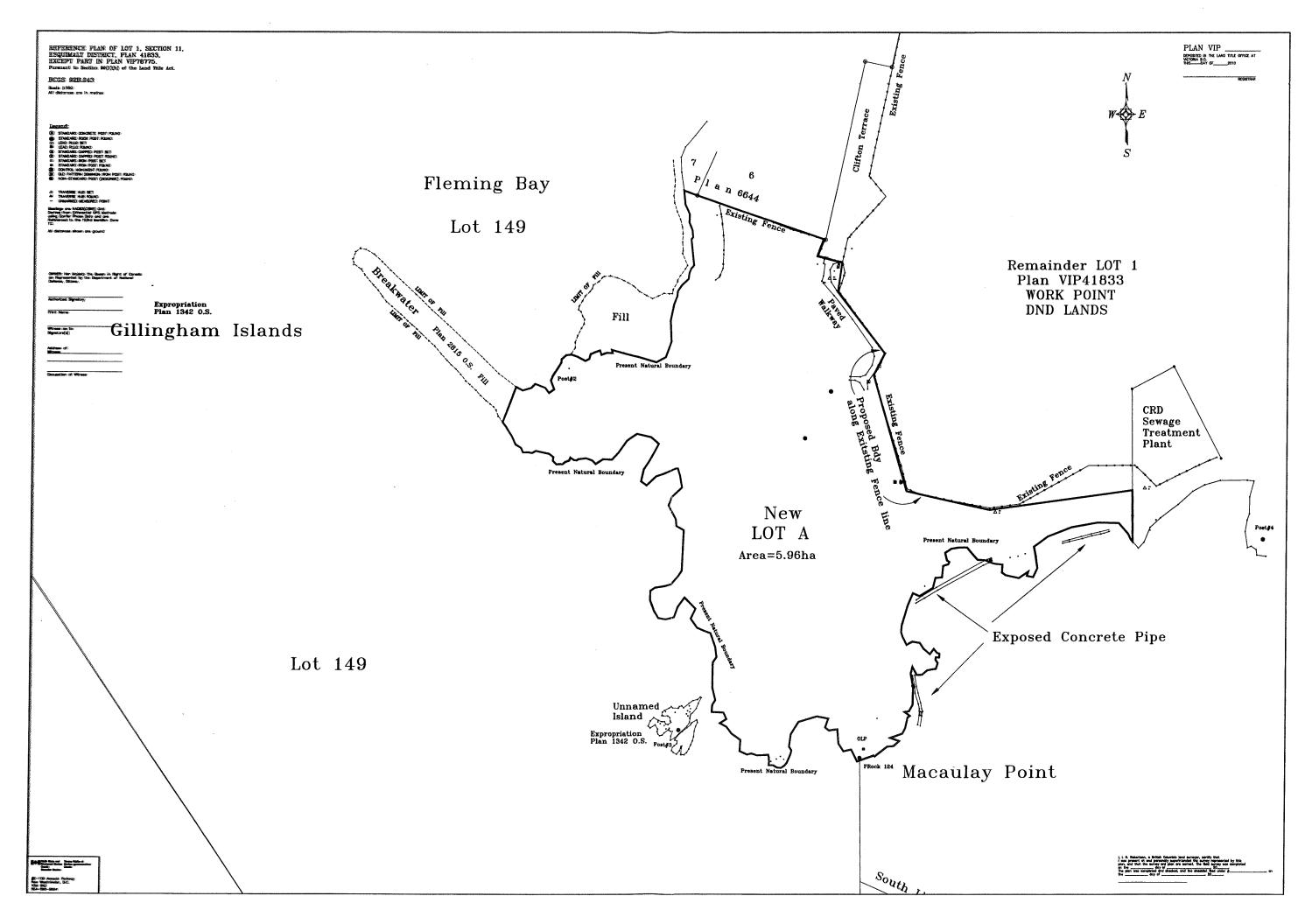


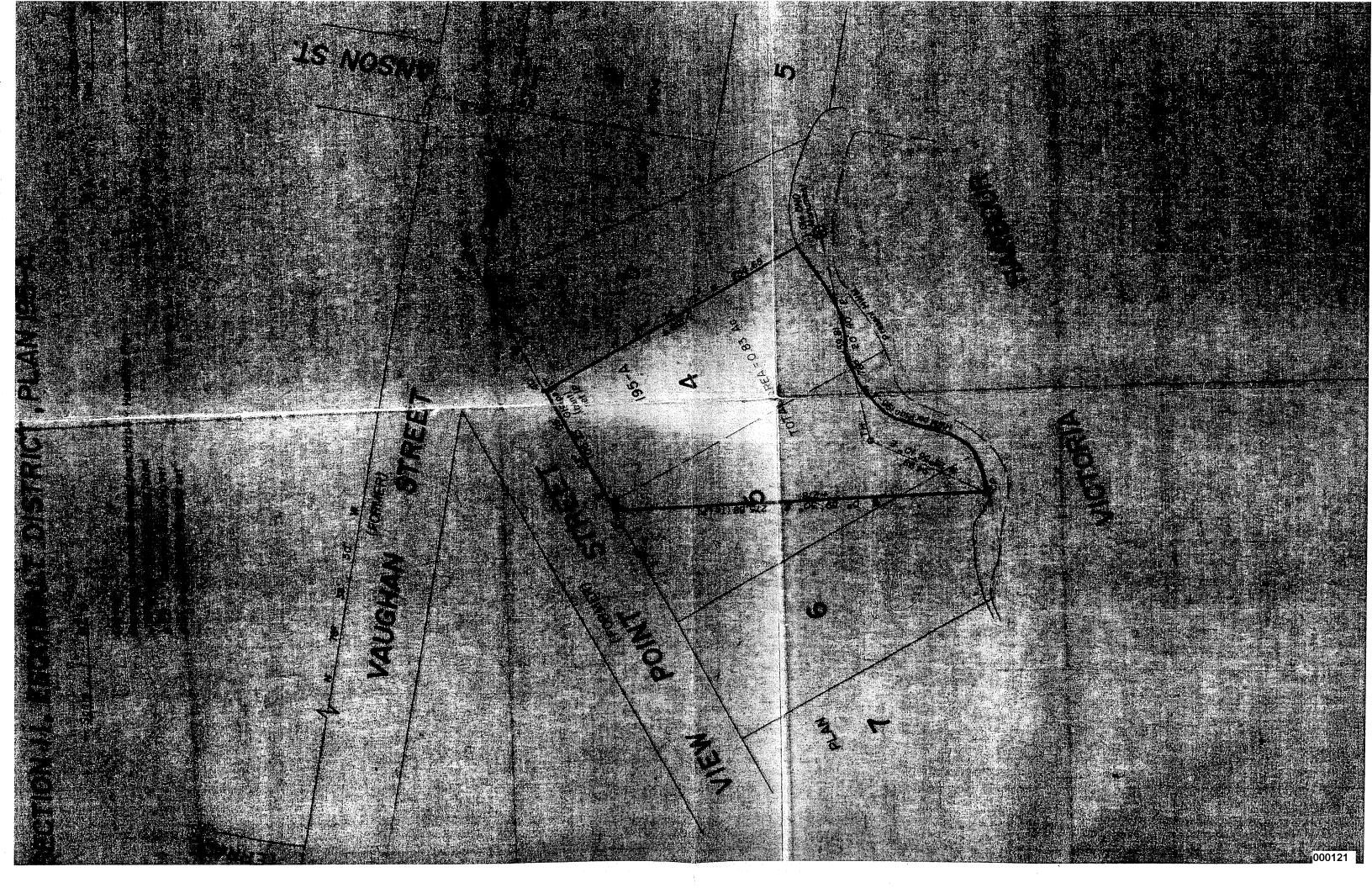












PROJECT REF. SHEET TITLE 010026RF3

IRMIDINO

