RESEARCH BULLETIN

No. 178 August 1982

Archaeological Investigations at Cape Merry Battery, Manitoba, 1980.

Linda Sears, Prairie Region, Winnipeg.

Introduction

The Hudson's Bay Company first established itself on the west shores of Hudson Bay in the late 17th century with the construction of York Fort. During the ensuing decades there existed strong competition between British and French interests for control of the resource-rich environs of the Bay. In addition to fur and ores, the area was attractive for its accessibility to the much-sought North West Passage. Following years of battles, captures and recaptures on the part of both the British and French, hostilities were ended by the Treaty of Utrecht in 1713 which gave sole jurisdiction of the shores of Hudson Bay to the Hudson's Bay Company.

In 1717 the first Prince of Wales' Fort was built on the north shore of the Churchill River, several miles upriver of the mouth. Its establishment was for multifold purposes: to tap the northern fur resources, to undertake whaling in the Bay on a commercial scale, and to provide a base from which exploration of the northern areas could continue. The wooden fort successfully conducted fur trade operations and provisioned whaling and exploration voyages in the few years of its existence.

In an effort to strengthen its defense at Bayside in the face of a threatened war between England and France, a decision was made by the Company in 1731 to construct a stone fort at Eskimo Point, a promontory at the mouth of the Churchill River (Luchak 1978: 40-41). Construction of the second Fort Prince of Wales began that same year and continued until 1782 when it was captured and partially destroyed by the French naval leader, the Compte de la Perouse. Although the fort was ostensibly well-equipped for defense, the London Committee of the Hudson's Bay Company in 1734 ordered the construction of a defensive battery across the river from the fort, on a peninsula of land called Cape Merry (Figure 1).

Nothing was done at the site for nearly a decade, no doubt because all available men and resources were occupied with the construction of the fort. Under the direction of James Isham, governor of Fort Prince of Wales from 1741-1745, the battery was finally completed in the early 1740s. In 1744 a barracks was built and transported across the river to the site and the six 24 pounder guns arrived from England. The instructions of the London Committee were to build a triangular battery to accommodate 6 guns; the battery was to be 10 feet high and have a flat roof (Luchak 1978: 63). However, the battery was apparently placed incorrectly, the guns being in such a position that some could be trained on the fort by enemy hands. In 1749 the chief engineer at the fort, Robert Evison, recommended the removal of the battery to the north side of the river to provide a better defense of the fort. His suggestion was over-ridden by the London Committee who ordered the construction of a new battery on the cape, 100 yards west-southwest of the first battery. The new 6 gun battery, slightly upriver of the old, was completed in 1749. Materials from the earlier battery were evidently utilized in the construction of the second structure, resulting in dismantlement of most of the original battery.

Cape Merry, the site of the two 18th century batteries, was delegated a National Historic Site in 1929. An area of 21.5 acres on which the batteries and a memorial cairn (erected in 1931) are situated is maintained by Parks Canada as an interpretive adjunct to Fort Prince of Wales. Reconstruction of the second battery was effected in the 1950s; it now houses one of the historic cannon. The ruins of the first battery (Figure 2) consist of portions of the parapets and the powder magazine; the latter has been partially restored and capped with concrete. Deterioration of the remains has been extensive due to the severe climate of the area. Plans for reconstruction/ stabilization by Parks Canada, originally scheduled for 1980-81, were postponed until archaeological work could be done at the site.

Excavations

To provide the required archaeological input, a small crew conducted excavations at the first Cape Merry Battery during June of 1980. The V-shaped battery consisted of a powder magazine flanked by two parapets (Figure 3). The parapet facing Hudson Bay is termed 'north' in this report; the parapet facing the Churchill River, the 'west'.

The extent, location and dimensions of both parapets were confirmed by test excavations. However, due to the negligible amount of breastwork remaining no information was garnered on embrasures. The remains of a built-up stone and earth foundation containing wooden posts which at one time apparently supported a wooden gun platform were located inside the west parapet. Inside the other parapet similar post patterning was found which indicated the existence of a platform abutting the interior. Investigations on the powder magazine were limited to clearing of stone rubble which revealed the asymmetrical outline of the magazine.

Powder Magazine

Possibly during the 1930s (when the memorial cairn was erected) or the 1950s (when the second battery was reconstructed) the powder magazine was reconstructed and capped with concrete. Extant portions of the magazine include part of the vault and exterior walls. Clearing of the rubble from the east side of the magazine revealed an identifiable, although badly deteriorated, course of stonework forming the junction with the north parapet. The powder magazine was notably asymmetrical in plan view; the outside wall measured 4.5 m from corner to corner whereas the inside wall (containing the vault opening) spanned 5.5 m. No explanation can be provided at this time for the imbalance in construction.

West Parapet

The west parapet was 2 m wide at ground surface and measured 20 m from corner to corner along the face. The southern flank, not as essential for defense, was 1 m wide and 9 m long. The northern end of the parapet, closest to the magazine, was the most intact portion remaining. Nine metres south of the magazine it abutted a bedrock outcropping, continued over the bedrock, then extended east at a right angle to form a flank along the edge of the outcropping. Although masonry was extant in places, along the greater portion of the parapet there were only loose boulders and concentrations of loose gravel and mortar to indicate the original location. Dimensions and extent were determined by excavation along the lines of the face and interior of the parapet. Excavation to a depth of 1 m on the face uncovered a portion of a masonry foundation of mortar and partially-dressed stones (Figure 4). Where the face angled to join the magazine, the cornerstone was a large, dressed fieldstone. With the exposed foundation as an alignment, the southern end of the face was estimated over the bedrock outcrop. On the latter, mortar stains have leached down over the surface, thereby partially obliterating the original mortar (parapet) line. The outside corner was located south of the outcrop where fieldstones retaining traces of mortar were situated.

The interior line of the parapet was represented in part by heavily mortared foundation stones abutting the north side of the bedrock outcrop. Excavations between that area and the magazine revealed foundation stones surrounded by soil and small amounts of sand. These lower courses were apparently not mortared. The southern flank was evident from partially collapsed masonry. At the inside corner a post approximately 16 cm in diameter and well preserved by mortar was found (Figures 3b, 5). Still *in situ* atop the post were wood fragments representing "shims". This substantial post had apparently provided support for the platform at the inside corner.

Clearing of the bedrock surface inside the west parapet revealed a plank fragment at right angles to the parapet. It was fitted against a rock mortared to the bedrock surface and contained a wrought iron spike, suggesting that wooden construction had existed in this area. Wood fragments located

further in on the bedrock surface aligned well with both the parapet and the support posts in the foundation area.

The raised foundation was evident along the interior, extending from the southern flank to approximately 4 m from the parapet/powder magazine junction. Boulders on the perimeter of the foundation were loosely placed, without mortar, on bedrock and surrounded with stones, gravel and earth fill. Within the foundation area several posts were located in a loosely regular pattern (approximately 1.3 m from centre to centre) as well as remnants of wood planking. Test pitting throughout the area revealed a pattern of support posts, varying in diameter from 10 to 16 cm. In addition to the posts several large, strategically placed rocks may have provided additional support for the wooden platform (Fig. 3c).

North Parapet

The north parapet measured 19.3 by 2 m; the flank was 2.2 m by 6.2 m. Structural remains inside the parapet indicated the former existence of a wooden gun support platform which extended from the flank to within 5 m of the magazine. Compared to the west parapet, a greater portion of the north parapet was extant adjacent to the magazine. In addition, rock, gravel and mortar debris on the surface provided a clear demarcation of dimensions and location. Unlike the relatively flat bedrock area inside the west parapet, bedrock here ranged from surface level to a point 0.4 m lower, with sharp rises, slopes and level areas. Hence, support post patterning was less consistent.

The interior parapet line existed as extant masonry (next to the magazine), *in situ* stones and mortar stains. Exterior corners at the eastern flank were located by surface features. Excavations were made along the interior parapet line from the flank to a point 2.5 m from the magazine. At the latter point the parapet consisted of mortared stones set on bedrock, near the ground surface. Approximately 10 m west of the magazine bedrock rose to the surface for 1.5 m, dipped, then resurfaced for a 1 m span. On either side of these bedrock outcroppings were posts and wood fragments. Between a point 5 m from the magazine and the first bedrock outcrop, seven 14 cm^2 posts were located (Fig. 3d, Fig. 6). Spaced approximately 0.5 m apart they were set immediately next to the parapet and surrounded by sand and gravel. Further along, east of another outcrop and immediately next to the parapet, horizontal plank fragments were located. As the plank appeared to have been cut to fit against the bedrock, it may represent a sill fragment. Between the plank fragment and the corner, other wood/post remains were located. The inside cornerpost was 17 cm in diameter and well preserved by mortar (Fig. 3e). At other areas inside the north parapet posts and wood fragments were located. Patterning was erratic; in some areas large boulders appear to have been used as supports, as in the west parapet platform area.

Clearing of surface debris on the largest bedrock outcrop revealed two mortar stains averaging 4 cm in width and spaced approximately 10 cm apart, at right angles to the parapet (Figures 3f, 7). Clearing in a straight line back from the parapet exposed a continuation of the lines in the form of compacted sand on the gravel surface atop bedrock. The lines continued for 4.5 m, then converged. They appear to provide a clear outline of a plank used in the platform floor, the sand and stains having resulted from fallout of debris between floorboards.

Battery Construction

As previously described, the parapets were built of partially-dressed fieldstones set either on bedrock or in trenches. Evidence for total height is lacking, although it may be assumed to have approached 10 feet if the original construction directions were followed. Similarly, the locations and numbers of embrasures cannot be determined archaeologically although there were apparently six guns in the first Cape Merry Battery. A flat plank roof may have capped the breast-work and magazine. The reconstructed shape of the powder magazine vault is probably close to that of the original; original mortar is still apparent on both interior and exterior walls. However, its former height is not known.

Elevation readings taken on posts, wood fragments, presumed support rocks and bedrock indicate that the two gun platforms were built at the same level. Bedrock inside the west parapet, on which plank fragments were located (Fig. 3a), was 21.04 m above sea level; inside the north parapet bedrock containing the parallel mortar lines (Fig. 3f) was 21.06 m asl. Top-of-post elevations as indicated in Figure 8 are within centimetres for both platforms. Differences can be accounted for by slight deterioration of post surfaces and/or slight inaccuracies at time of construction.

A preliminary and speculative summation of platform construction follows, based on the evidence revealed by archaeology. For a distance of 4.5 m inside each parapet (possibly 6 m inside the west) foundation support posts were set into/onto the ground in rows parallel to the parapets. Posts were surrounded by large stones and gravel/sand fill. In at least a few instances, large stones with relatively flat upper surfaces were substituted for posts. Some posts were square-cut lumber, possibly salvaged from existing timber, while others were cut tree lengths with bark left on. Atop the posts a sleeper was placed, also parallel to the parapet, as a base for floor planks. In the areas where bedrock was highest the sleeper may not have been used, the planks having been set on bedrock. Floor planks were likely laid on the sleepers at right angles to the parapet and secured with nails. Using the mortar/sand outline mentioned earlier as a guide, we can suggest a plank size of 10 cm by 4.42-4.5 m. Planks probably extended from the inside corners of both flanks to

approximately 5 m from the magazine on the north parapet and 4 m on the west. If the wood fragment found next to the north parapet represents a floor plank remain, an estimated thickness of 8 cm can be given for floorboards. Samples of post and plank fragments have been identified as Spruce (*Picea* spp.). Wood may have been salvaged from previous structures in the area for use in construction of the battery. Following dismantlement wood, a precious commodity in the Churchill area, was likely reused in the construction of the second battery. This would account for the almost complete lack of flooring remains.

The Artifacts

The six 24 pounder cannon which arrived at Fort Prince of Wales in 1744 were accompanied by carriages and instructions from the London Committee that they be placed immediately at the Cape Merry Battery (Luchak 1978: 63). The battery was to be manned during the summer months by 12 men who were to keep the guns loaded at all times in preparation for firing on an enemy ship. A barracks to house the men was to be built behind the battery.

Evidence for a barracks was not found archaeologically. Its semi-portable nature (built at the fort originally and transported to the battery site) suggests that it may have been easily moved to the site of the second battery. Despite the lack of an identified living floor at the first battery, a small assemblage of artifacts and faunal material was recovered, chiefly from the gun platform areas.

Nails used in the construction of the platforms varied in size and type according to the areas of use. Large (10.7 to 19.4 cm long) hand-forged rosehead spikes were located at the perimeters of the platforms, presumably having been used to anchor sleepers to the foundation posts. Clasphead nails, approximately 6 cm in length, were found in the areas beneath the former platforms. The slanted claspheads, when driven well into the wood, left no projecting metal to pose a threat to footing. Thus, their use on a gun platform surface is quite appropriate. Most of the nails recovered from the site were incomplete, bent or otherwise not reusable. If the wooden gun platforms were removed from the site for use at the second battery, which was very likely the case, then the removal of all reusable nails was also likely. Like wood, nails would have been valuable commodities at the isolated Bayside, and undoubtedly were subjected to extensive recycling.

Other metals recovered from the platform areas included hoop iron scraps and a concentration of lead shot. The latter averaged 6 mm in diameter, were mould-cast and retained varying amounts of mould sprue. They were probably used by the men at the battery in hunting local fowl and fauna.

There were other artifacts recovered which reflect some of the non-defensive activities of the men stationed at the battery. Several clay pipe stem and bowl fragments were

located in the platform areas and scattered on the site surface. The two bowl fragments have the ubiquitous "TD" mark on the heels; one bowl has a 13 mm diameter circular stamp containing the letters "TD". Bottle glass found at the site was all dark olive-green glass exhibiting finishes typical of the period 1740-60 (Kevin Lunn: pers. comm.). Fragments were too small and few to permit identification of specific shapes but the latter appear to be generally of the era. A small lead shot was wedged between the base and kickup of one bottle fragment; it may have been part of the original contents. Also found was a spall gunflint. In general, the artifacts were typical of the period. Only modern bottle glass and a Curtis door key were anomalous; these were surface finds.

The small faunal collection was examined and identified by Dana-Mae Grainger of Parks Canada, Prairie Region. The deteriorated condition of the material made species identification difficult; however, of the 105 bone fragments in the sample 91 were identified as bird and the remainder as sea and land mammal (Tables 1, 2). The 56 Canada/Snow Goose bone fragments represent a minimum number of individuals of six. Butchering marks on two of the goose and two of the mammal bones indicate human utilization. Specific identification of the non-goose long bone was not possible; in size and shape it is similar to herons and cranes. Most of the faunal material was retrieved from the west platform area and some may be remnants of an earlier, pre-battery occupation. All species recovered were native to the region (Grainger 1980).

Interpretation

Although there is little doubt that deterioration of the Cape Merry Battery remains will continue by natural and human means, stabilization and partial restoration can ameliorate the situation and enhance the significance of the site for the visitor. On-site interpretation to supplement the remains can be done with graphics and written commentaries; a scale drawing of known features similar to Figure 9 could be mounted at the site and protected from the elements. Off-site interpretation to provide site history and cultural information through artifact displays and audio-visual means would complete the story of the short-lived battery and its association with Fort Prince of Wales.

References Cited

Grainger, Dana-Mae
1980
"Faunal Report for Cape Merry." Report on file, Parks Canada, Prairie Region, Winnipeg.

Luchak, Orysia
1978
Prince of Wales's Fort in the 18th Century: an Analysis of

Trade, Construction, and Sloop Voyages Northward. Manuscript Report Series No. 243, National Historic Parks and Sites Branch, Ottawa.

Table 1. Cape Merry Battery. Recovered Bird (Aves) Remains.

Faunal Identification	Element Identification: Humerus	Scapula	Coracoid	Furcula	Rib	Sternum	Femur	Tibio-tarsus	Phalanx	Pelvis/ Sternum	Long Bone	Fragments	Total
Goose (Anser caerulescens/Branta canadensis)	4	10	12	8		7	8	7					56
Goose (?) (Anser caerulescens/Branta canadensis)									1				1
Large bird (non-goose)	1												1
Med. to large bird					1			1		5	16	10	33
TOTAL	5	10	12	8	1	7	8	8	1	5	16	10	91

Table 2. Cape Merry Battery. Recovered Mammal (Mammalia) Remains.

Faunal Identification	Element Identification: Skull	Metatarsal	Phalanx	Metatarsal/ Metacarpal	Rib	Long Bone	Fragment	Total
LAND								
Fisher (Martes pennanti)	1							1
Med. to large mammal					2	7	1	10
SEA								
Seal (Phocidae)		1	1	1				3
TOTAL	1	1	1	1	2	7	1	14

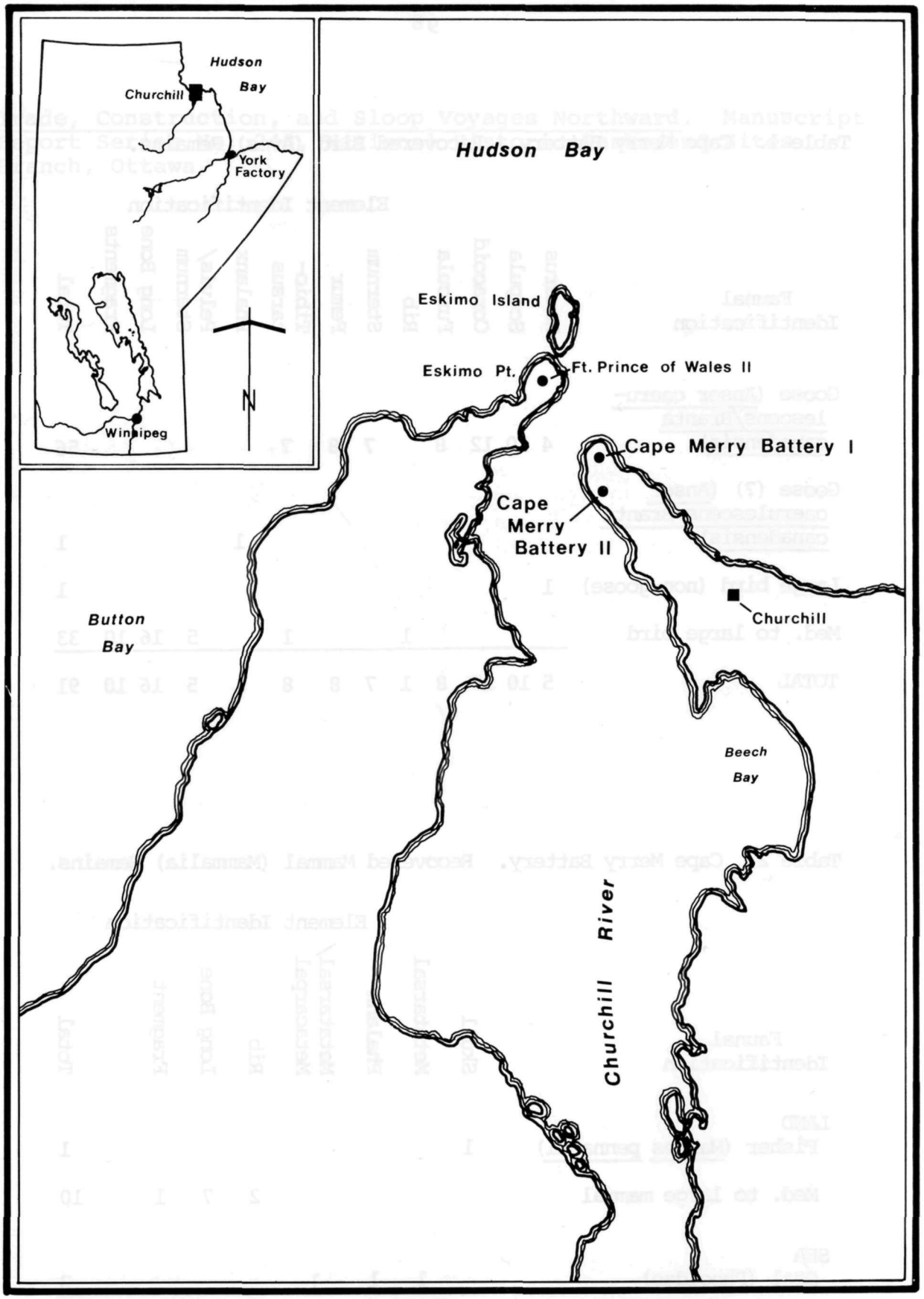

Figure 1. Map showing Fort Prince of Wales II, Cape Merry Batteries I and II and modern-day Churchill locations. (Drawn by K. Graham-Stevenson).

Figure 2. Cape Merry Battery I ruins, 1980. West parapet remains are in left foreground (photo 17K-9M).

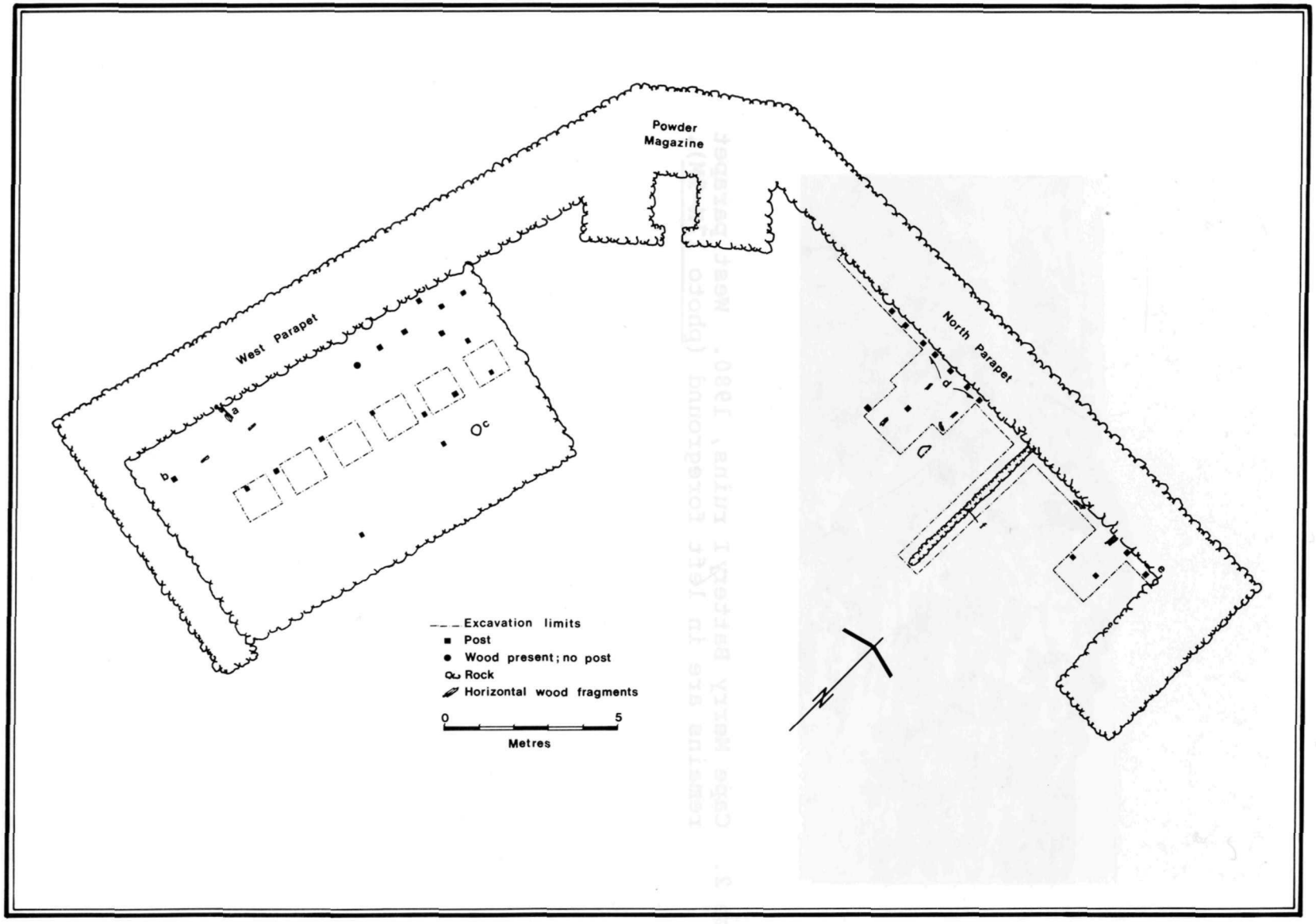

Figure 3. Plan of Cape Merry Battery I showing features and parapet outlines. a: plank fragments; b: corner post; c: foundation rock; d: foundation posts; e: corner post; f: mortar stains. (Drawing by K. Graham-Stevenson).

Figure 4. West parapet, exterior parapet line, showing mortared foundation stones. Facing north-northeast. (Photo 17K-33M)

Figure 5. Corner post inside west parapet (refer to Figure 3b). (Photo 17K-43M).

Figure 6. Interior of north parapet, showing row of well-preserved posts. Facing east. (Photo 17K-24M).

Figure 7. Mortar stains on bedrock, extending onto gravel (refer to Figure 3f). Facing south (Photo 17K-28M).

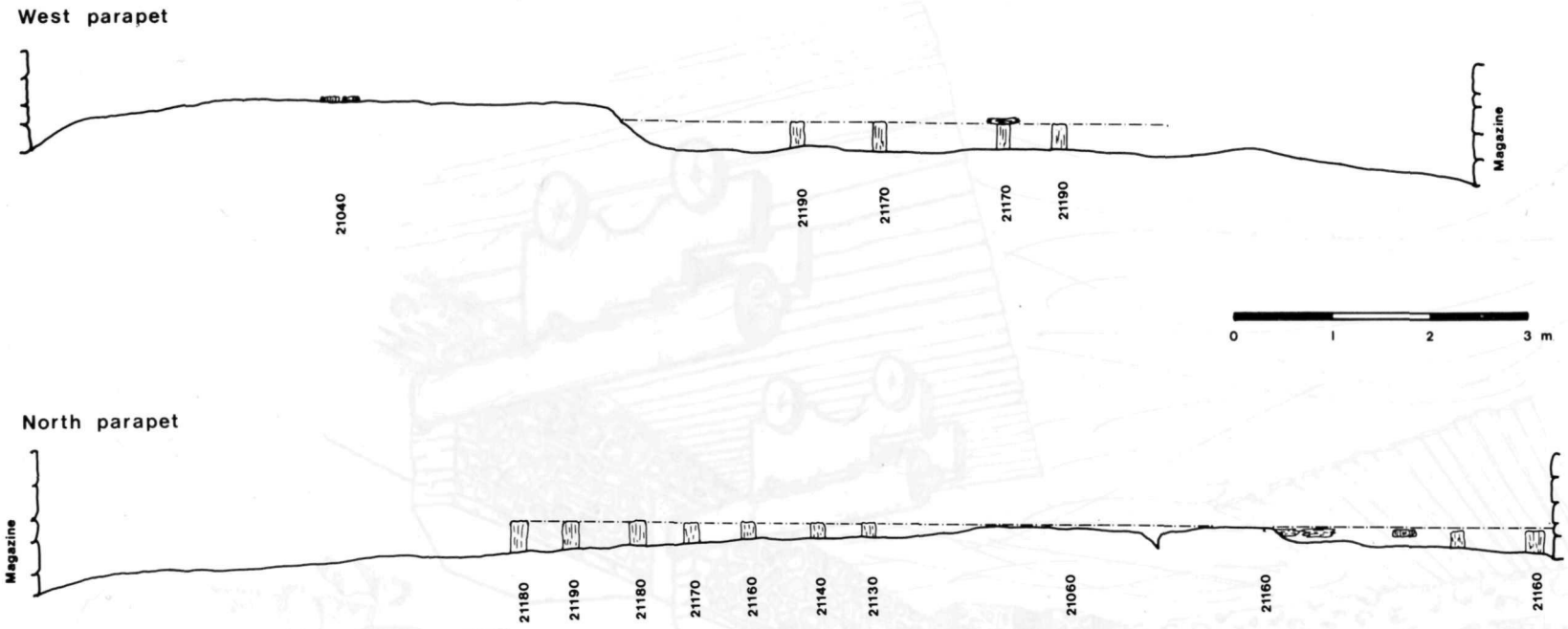

Figure 8. Views inside west and north parapets, facing west and north respectively, showing top-of-post and bedrock elevation readings in mm above sea level. Broken line (·--·) indicates postulated line of sills. Solid line represents bedrock. (Drawn by L. Sears).

ISSN 0228-1228
Published by authority of
the Minister of the Environment
© Minister of Supply and
Services Canada 1982

Canada

Figure 9 Artist's illustration of first Cape Merry Battery, showing portions of gun platforms and parapets. Fort Prince of Wales shown in left background. (Drawing by K. Graham-Stevenson)