

FHBRO Number 96-51

Fort Henry

West Branch Ditch Tower

Kingston, Ontario

FINAL DRAFT

The West Branch Ditch Tower was constructed between 1845 and 1848 for the Master General of the Board of Ordnance. The self-defensible stone tower (a modified Martello tower), was built at the lower extremity of the west branch ditch to flank the ditch, defend the dead ground in front of the Advanced Sea Battery, lessen the chance of a surprise attack from the shoreline and function as a self-contained strong-point. The tower was designed by the Corps of Royal Engineers. External modifications have included the placing of a 32 pdr. carronade barrel on the tower and the addition of a conical shaped but faceted snow roof of wood with an iron covering (1849); the mounting of a short 24 pdr. SBML gun on a central pivot dwarf wooden traversing platform (1861); the replacement of the original snow roof by a demountable design (c. 1867); the removal of the snow roof (c. 1902); and the re-construction of the snow roof (c. 1938). Internal modifications have included the addition of berths, magazine, stores and a cistern for permanent barrack accommodation (c. 1859); and the restoration of the timber floor framing, stairs and ladders (c. 1938). The restored tower is not currently open to the general public. Fort Henry is owned by Parks Canada, a federal government agency and is leased to the St. Lawrence Parks Commission, an agency of the Government of Ontario. Fort Henry was declared a National Historic Site in 1923. See FHBRO Building Report 96-51.

Reasons for Designation

The West Branch Ditch Tower has been designated Classified because of its important historical associations, the qualities of its architectural design and the important role it plays within the site as a whole.

The theme identified for the structure is the defence of Canada from the ongoing threat of the United States, particularly during the Oregon Crises of 1844-46 which precipitated its construction.

The modified Martello tower compares favourably with two of the most developed and elegant Martello towers erected in Canada, Murney and Fort Frederick. The functional design of the tower, dictated by a particularly complex program, is excellent.

The skill of the masons is demonstrated particularly in the ashlar facing of the truncated cone-shaped main tower, the cut stone walling of the caponier which joins the tower in distinctive ogival arches, and the stone voussoired dome supporting the terreplein.

The work undertaken as part of the 1936-38 restoration has largely recovered the appearance of the West Branch Ditch Tower in the 19th century. As an integral component of the Fort Henry defense complex, the work has a strong, reinforcing influence on the military character of the Fort. Because of its distinctive form, the West

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Branch Ditch Tower has a high recognition factor both for its obvious connection to the Fort Henry defence complex and its place in the line of Martello towers along the Kingston waterfront.

Character Defining Elements

The heritage character of the West Branch Ditch Tower resides in its status as a specialized military structure for musketry defence of the shoreline, the mounting of artillery for the flank defence of the ditch, shore and dead ground in front of the Advanced Sea Battery and from 1859, its role as permanent barrack accommodation.

Externally, one of the more notable features of this specialized defensive structure is the irregular plan comprising a circular main tower cornered into the extremity of the ditch, an attached loopholed wall closing the ditch, a rectangular musketry gallery on the opposite flank and a semi-circular caponier projecting from the front. Also prominent is the strategic grouping and placement of musketry loopholes: oblique loopholes in the ditch wall, gallery and caponier at ground level to flank the base of the tower; regular loopholes in the exterior face of the tower and caponier at ground level to fire directly out upon an enemy; groups of loopholes at the middle floor to command the roofs of the gallery and caponier; and groups of loopholes at the third floor to fire laterally along the shore. Distinguishing this tower are the faceting of the ground floor exterior face of the tower to improve the sight lines for flanking fire, and the mode of access (two single iron sheathed doors on the landward face of the main tower, one at the middle floor level accessed by a timber landing and stair bridging the gap between the door and the coping of the ditch, and another at ground floor level accessed by a stair and landing in the base of the ditch). Also notable are the thick slightly battered 45' high masonry walls of the tower (an irregular coursed ashlar facing, rubble hearting and brick backing, 8' thick at the base and 6' thick at the terreplein), the batter/sloping plinth on the water side (to prevent damage from lake ice) and the snow roof (a conical shaped but faceted sheet metal, standing seam roof). The plan, configuration of loopholes, faceted face, character of access, masonry construction and snow roof are all important character defining features that merit protection and should not be modified.

The heritage character of the exterior would be best protected by regular repointing of the limestone ashlar walling, maintenance of the bird screens and the timely repair or replacement of defective roofing, lightning protection and roof penetration flashings.

Internally the more notable features of this specialized defensive structure is the design of the top armed gun platform. It has a circular terreplein of solid masonry secured by a parapet and banquette all round. The single piece of artillery is mounted on a centre pivot dwarf traversing platform. The front of the platform is supported on hollow-soled

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trucks moving on a raised racer set in the banquette. Also notable is the bomb-proof roof of the third floor (a voussoired stone segmental profile dome supported entirely by the exterior wall), the cut stone trimmed recesses created for the operation of the musketry loopholes and the reduction of the tower in case of its capture (segmental arch voussoirs and jamb quoins), the heavy timber framing of the middle and third floors and the flight of steps with winders serving the terreplein (cut into the exterior wall of the tower). The internal features described above, relate directly to the military defensive function of the tower and merit continuous care and protection.

The heritage character of the interior would be best protected by the timely repair of the heavy timber floor joists pocketed into the brick backing of the escarp walls and the installation of louvres in a number of the embrasures/shuttered window openings and loopholes to air the tower and prevent mildew and the fungal decay of wood elements.

The historic relationship between the West Branch Ditch Tower and its associated landscape was enhanced by the restoration work carried out in 1936-38 which included the repair of stone wing walls facing the shoreline. The cutting back of trees and shrubs in the area of the tower and the grooming of the turf grass would recover the historic field-of-fire (generally a 600-yard clear fire arc in front of works) and enhance the military character of the area.

1999.11.09